

RF Test Data

Duty Cycle 2

Maximum Conducted Output Power 13

-26dB Bandwidth 14

Occupied Channel Bandwidth 25

Maximum Power Spectral Density Level 36

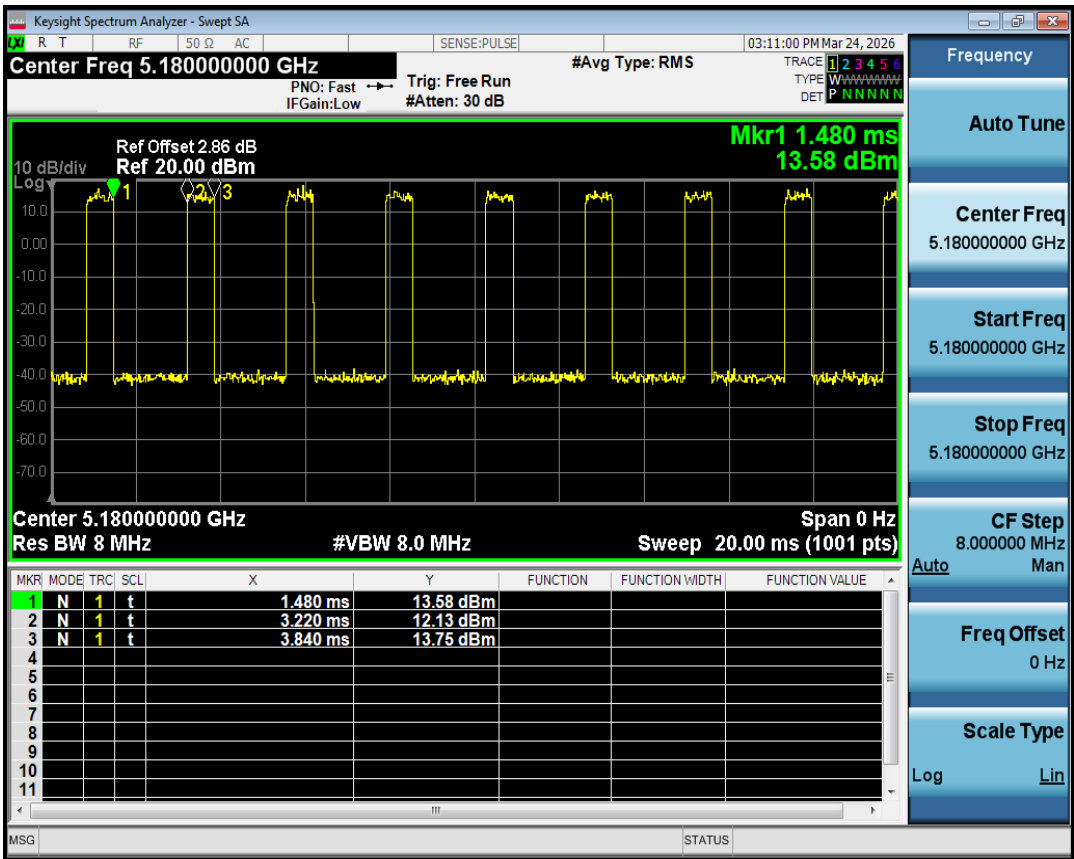
Band Edge 47

Frequency Stability 56

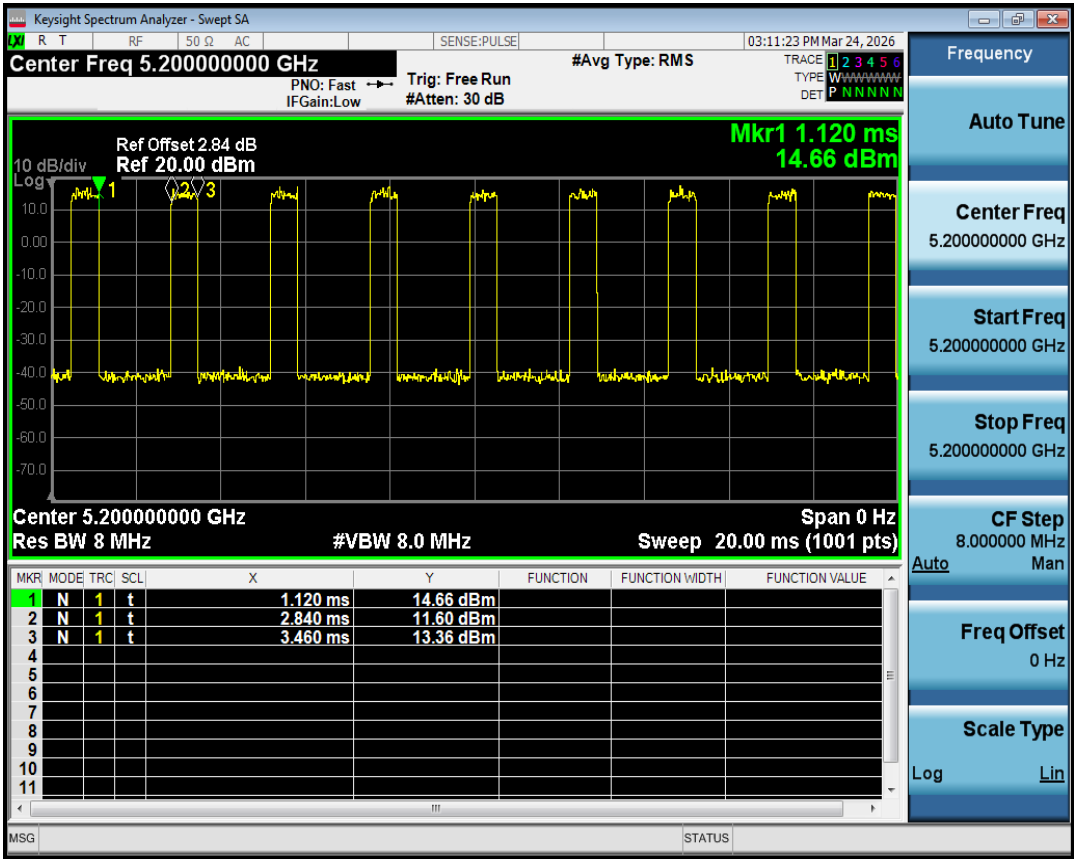
Conducted RF Spurious Emission 67

Duty Cycle

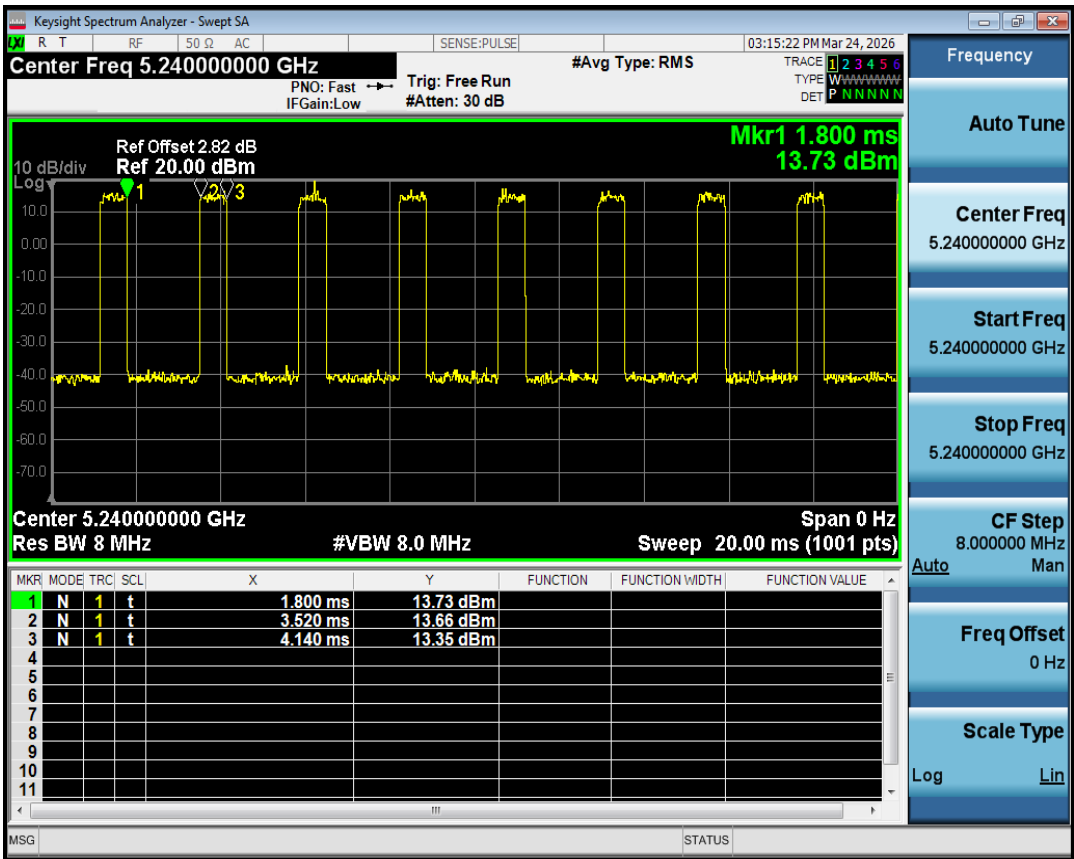
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	26.27	5.81	1.61
NVNT	a	5200	Ant1	26.5	5.77	1.61
NVNT	a	5240	Ant1	26.5	5.77	1.61
NVNT	n20	5180	Ant1	28.21	5.5	1.52
NVNT	n20	5200	Ant1	28.21	5.5	1.52
NVNT	n20	5240	Ant1	27.97	5.53	1.52
NVNT	n40	5190	Ant1	13.68	8.64	3.13
NVNT	n40	5230	Ant1	14.41	8.41	2.94
NVNT	ac20	5180	Ant1	62.28	2.06	0.48
NVNT	ac20	5200	Ant1	62.5	2.04	0.48
NVNT	ac20	5240	Ant1	62.5	2.04	0.48
NVNT	ac40	5190	Ant1	39.83	4	1.06
NVNT	ac40	5230	Ant1	39.32	4.05	1.09
NVNT	ac80	5210	Ant1	18.8	7.26	2.27
NVNT	ax20	5180	Ant1	50	3.01	0.85
NVNT	ax20	5200	Ant1	50	3.01	0.85
NVNT	ax20	5240	Ant1	50	3.01	0.85
NVNT	ax40	5190	Ant1	26.27	5.81	1.61
NVNT	ax40	5230	Ant1	26.27	5.81	1.61
NVNT	ax80	5210	Ant1	14.41	8.41	2.94



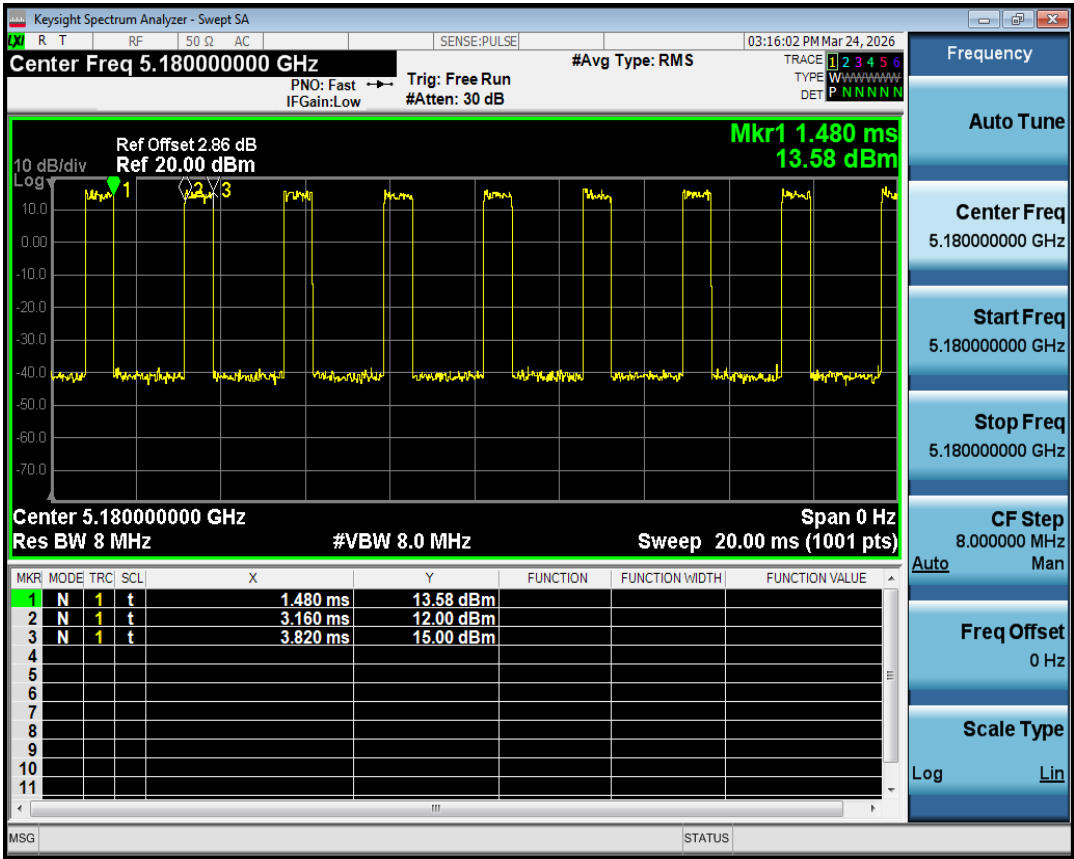
Duty Cycle NVNT a 5180MHz Ant1



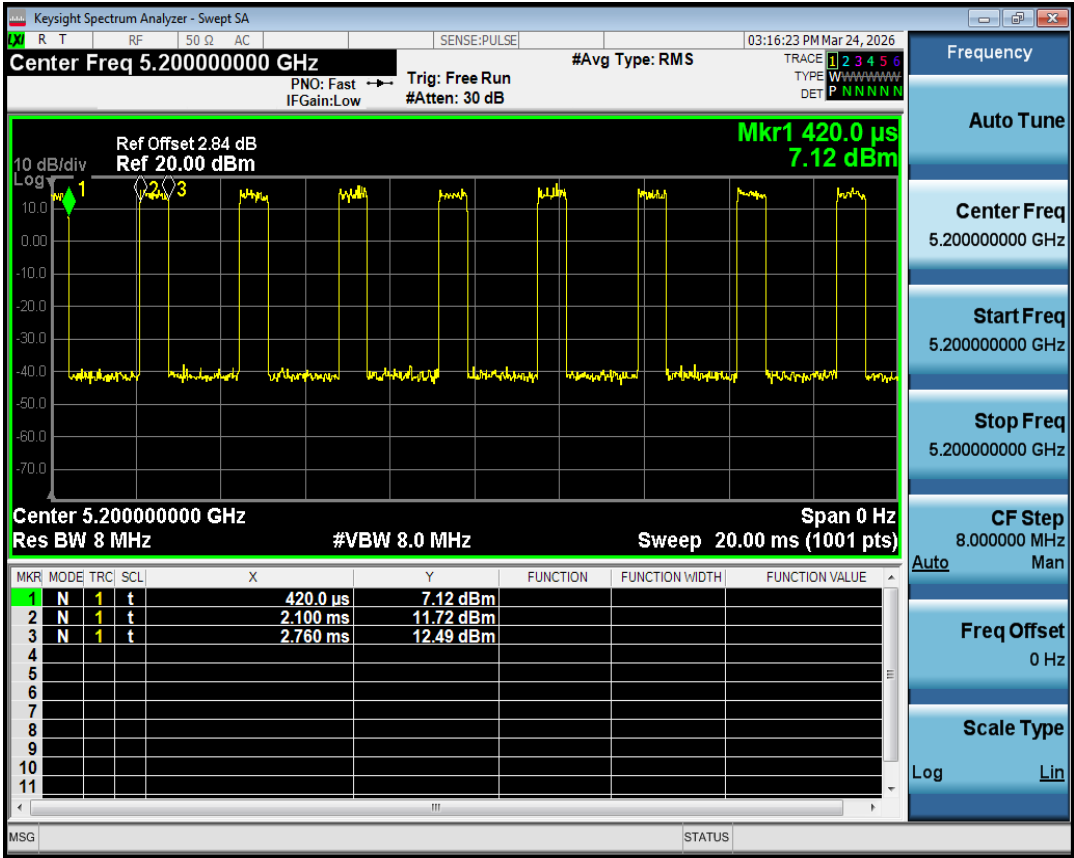
Duty Cycle NVNT a 5200MHz Ant1



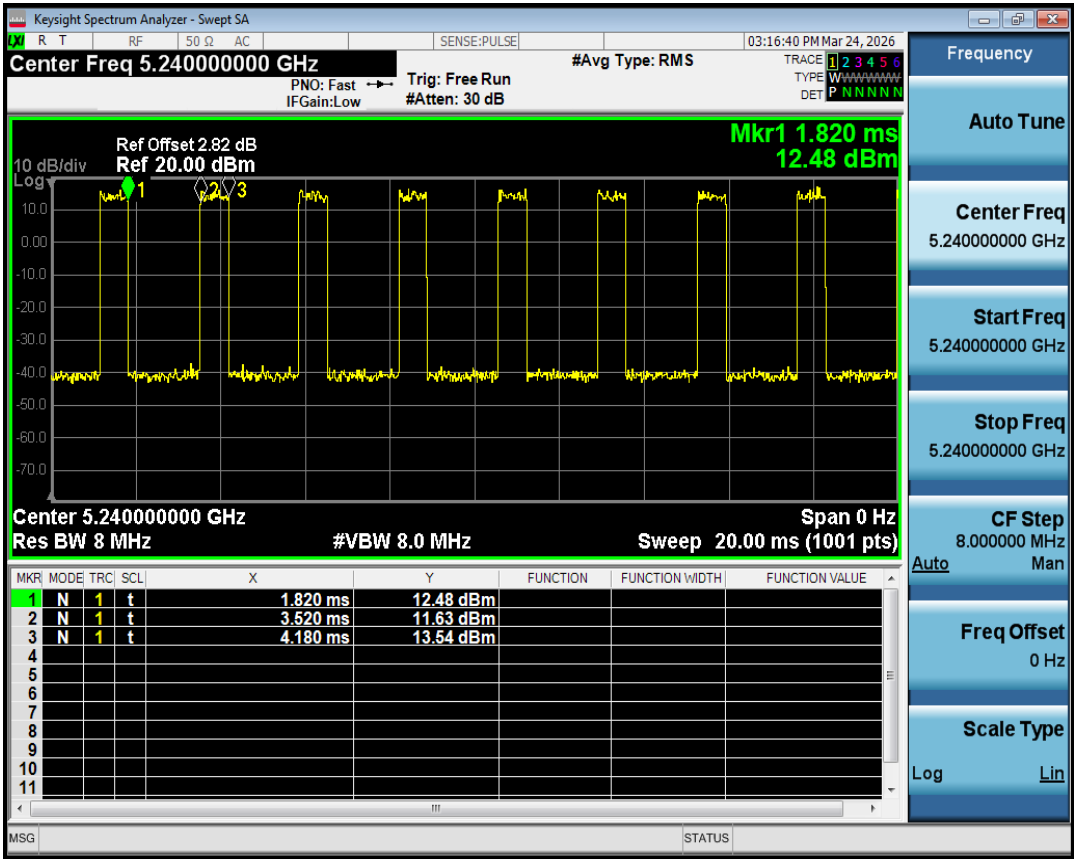
Duty Cycle NVNT a 5240MHz Ant1



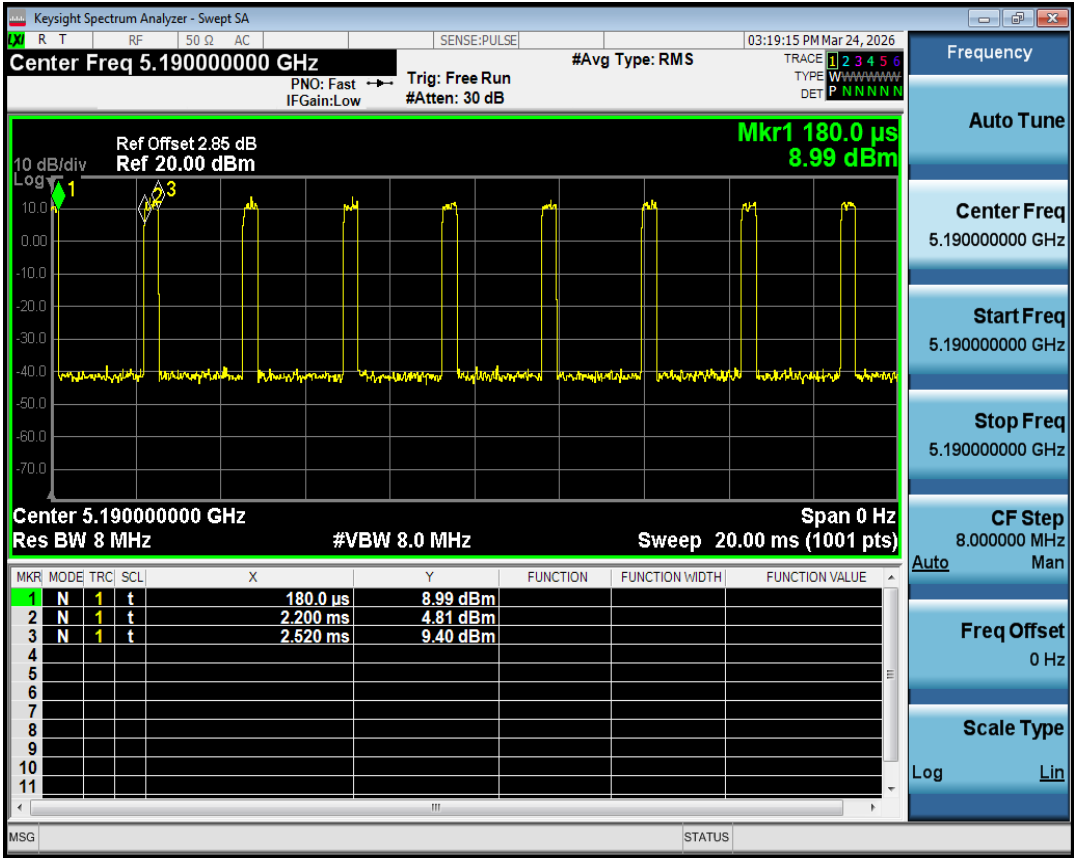
Duty Cycle NVNT n20 5180MHz Ant1



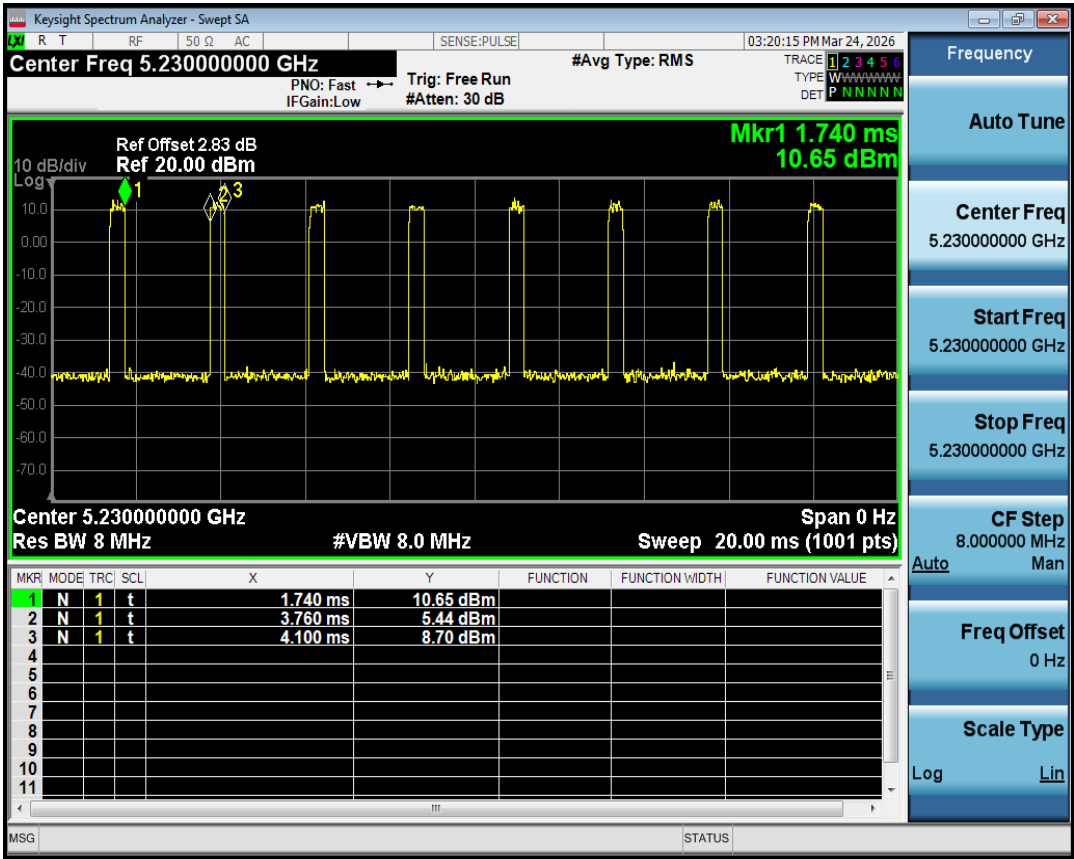
Duty Cycle NVNT n20 5200MHz Ant1



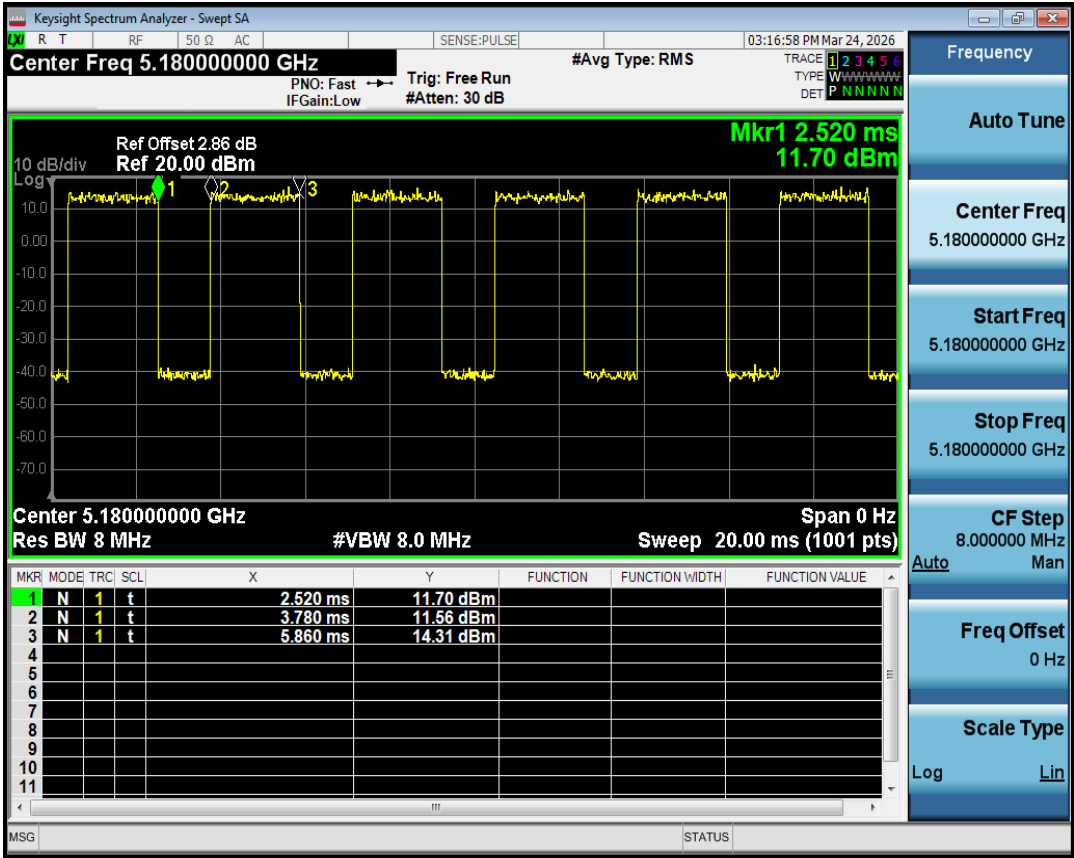
Duty Cycle NVNT n20 5240MHz Ant1



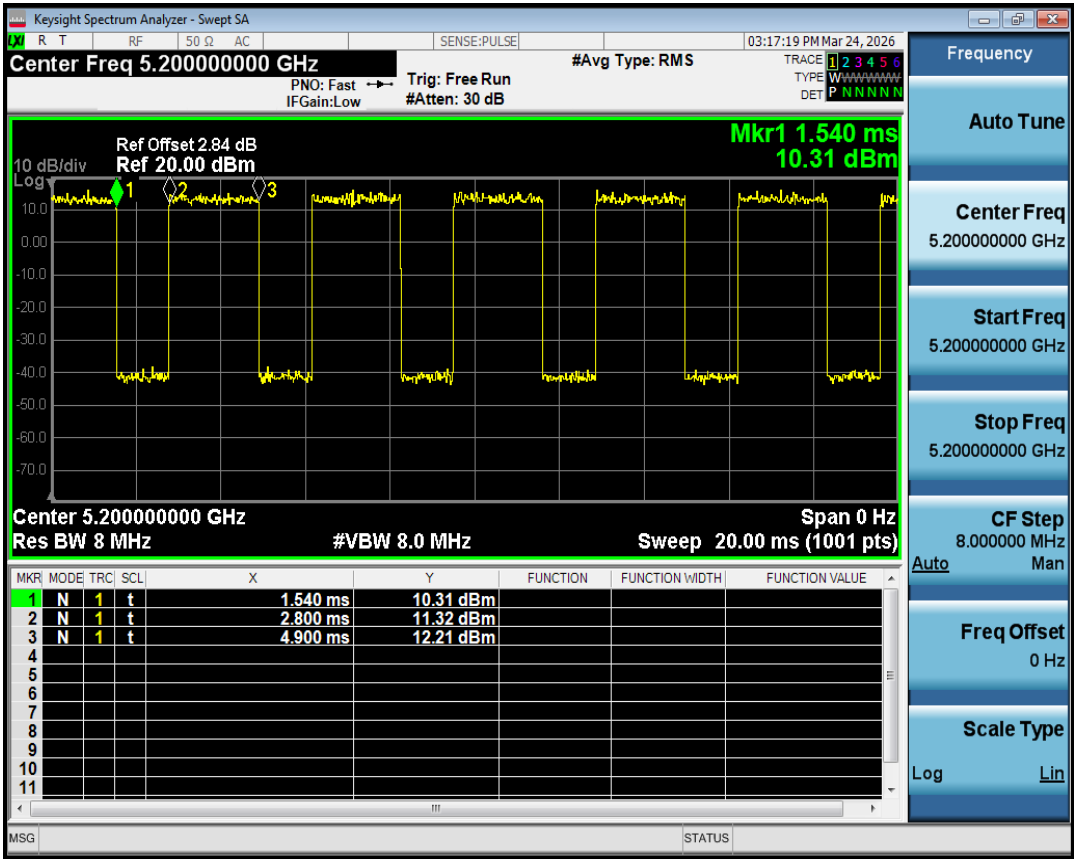
Duty Cycle NVNT n40 5190MHz Ant1



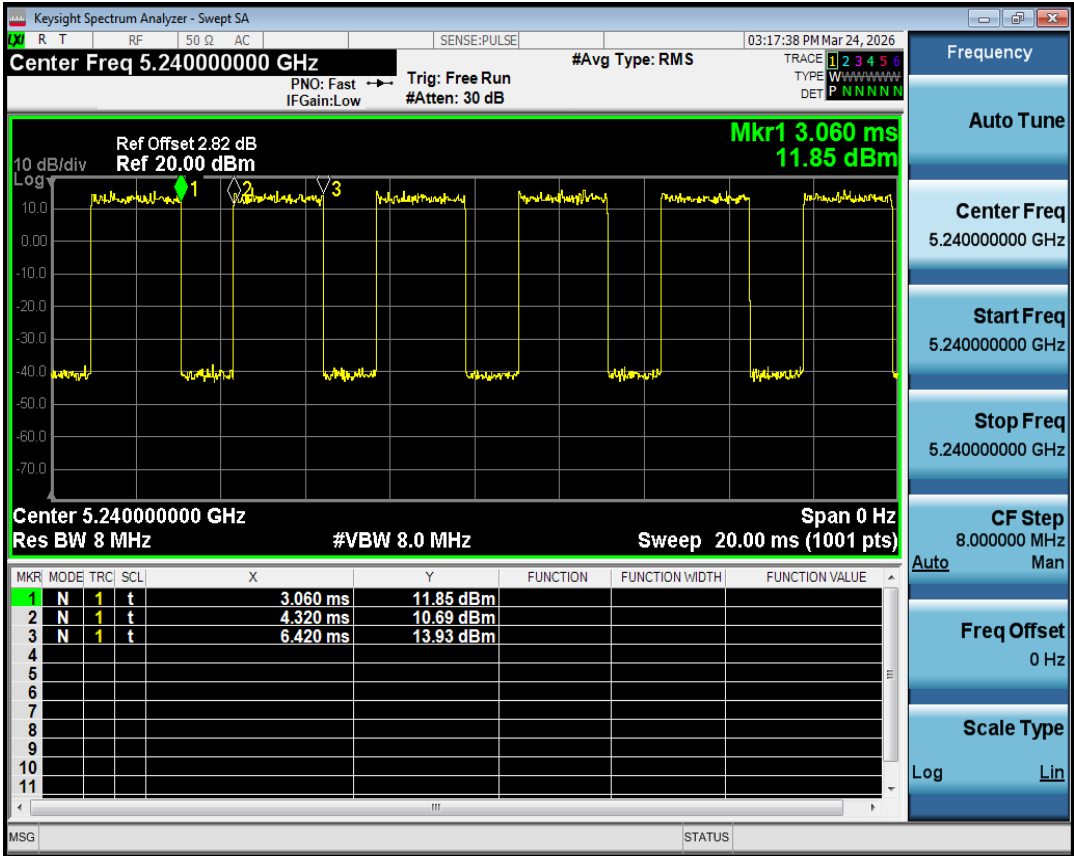
Duty Cycle NVNT n40 5230MHz Ant1



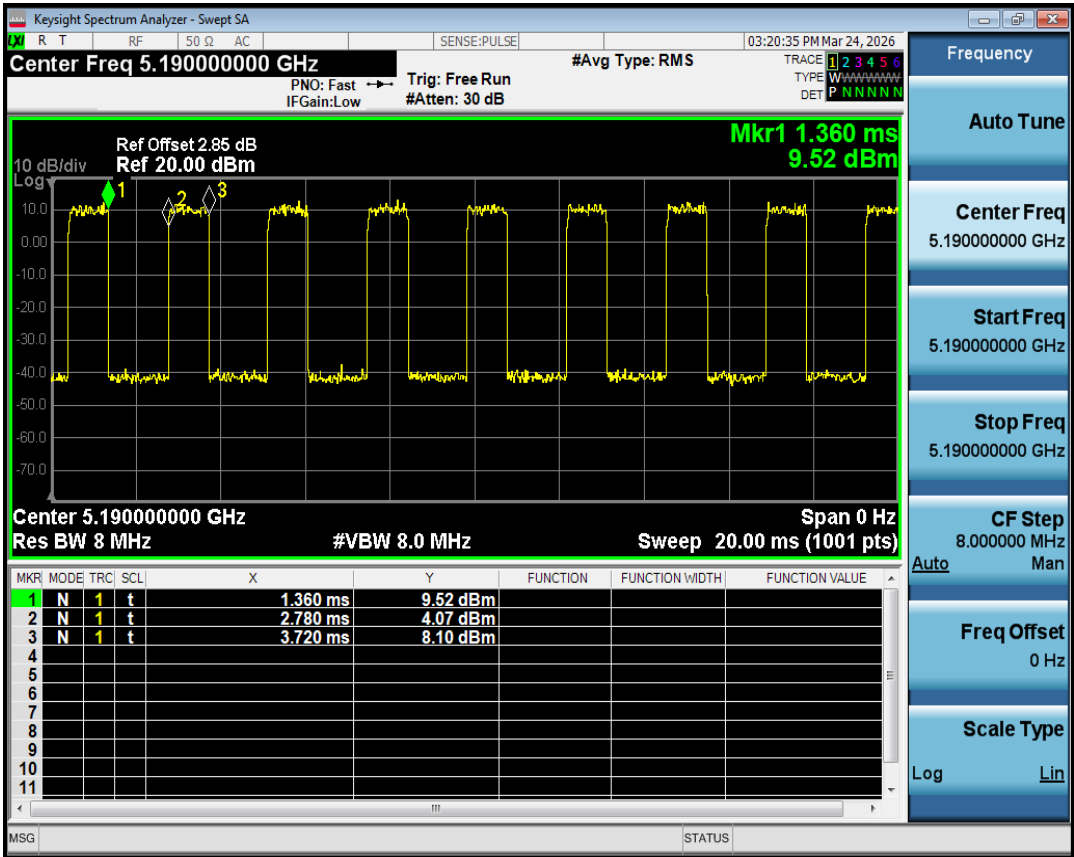
Duty Cycle NVNT ac20 5180MHz Ant1



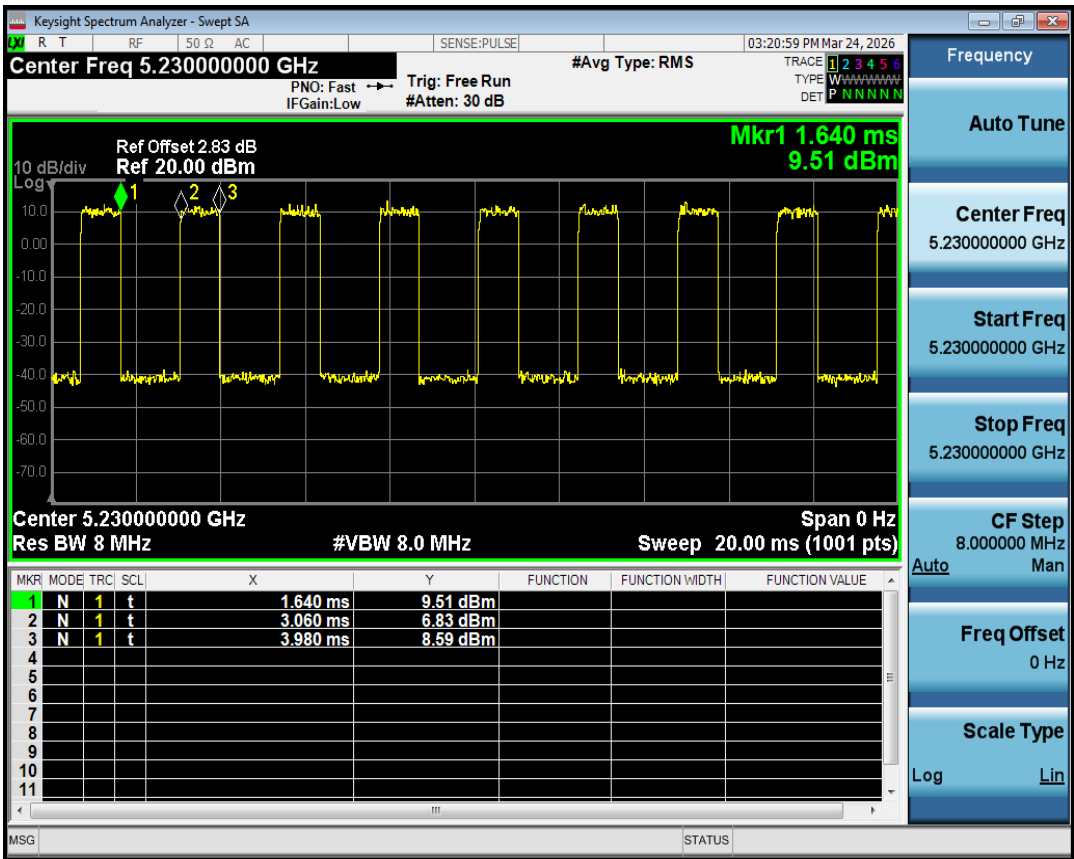
Duty Cycle NVNT ac20 5200MHz Ant1



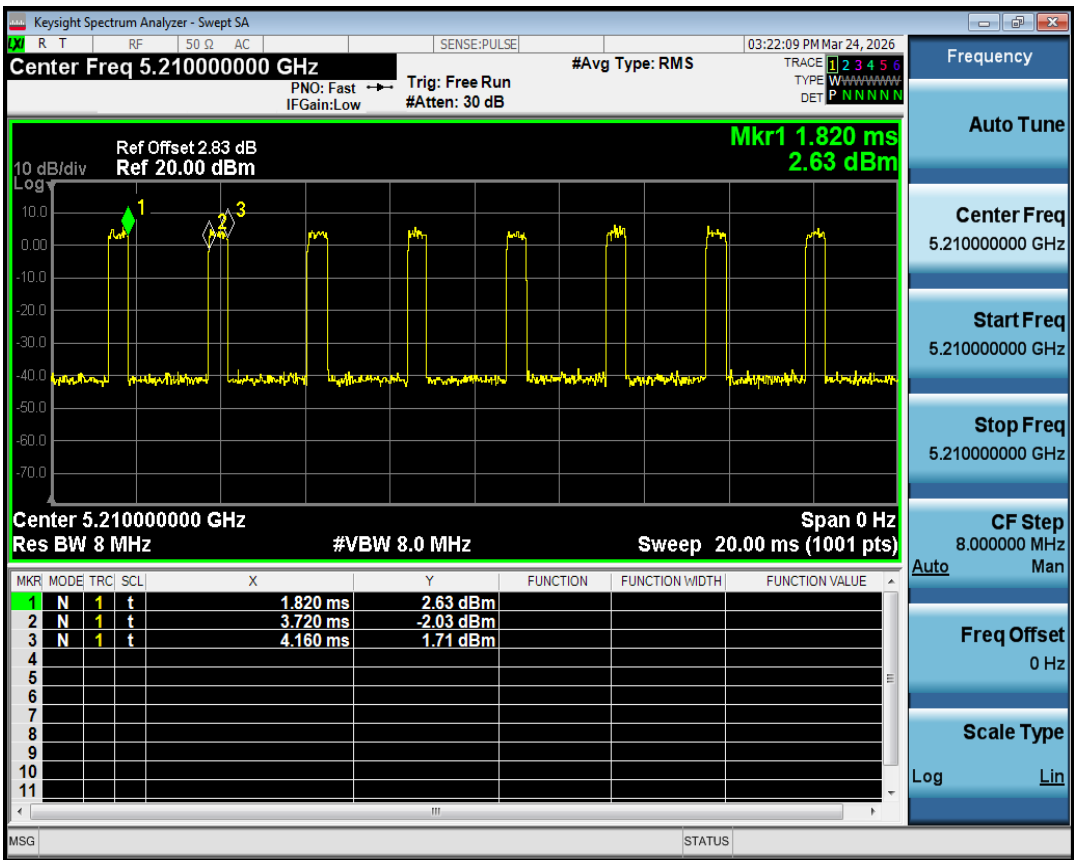
Duty Cycle NVNT ac20 5240MHz Ant1



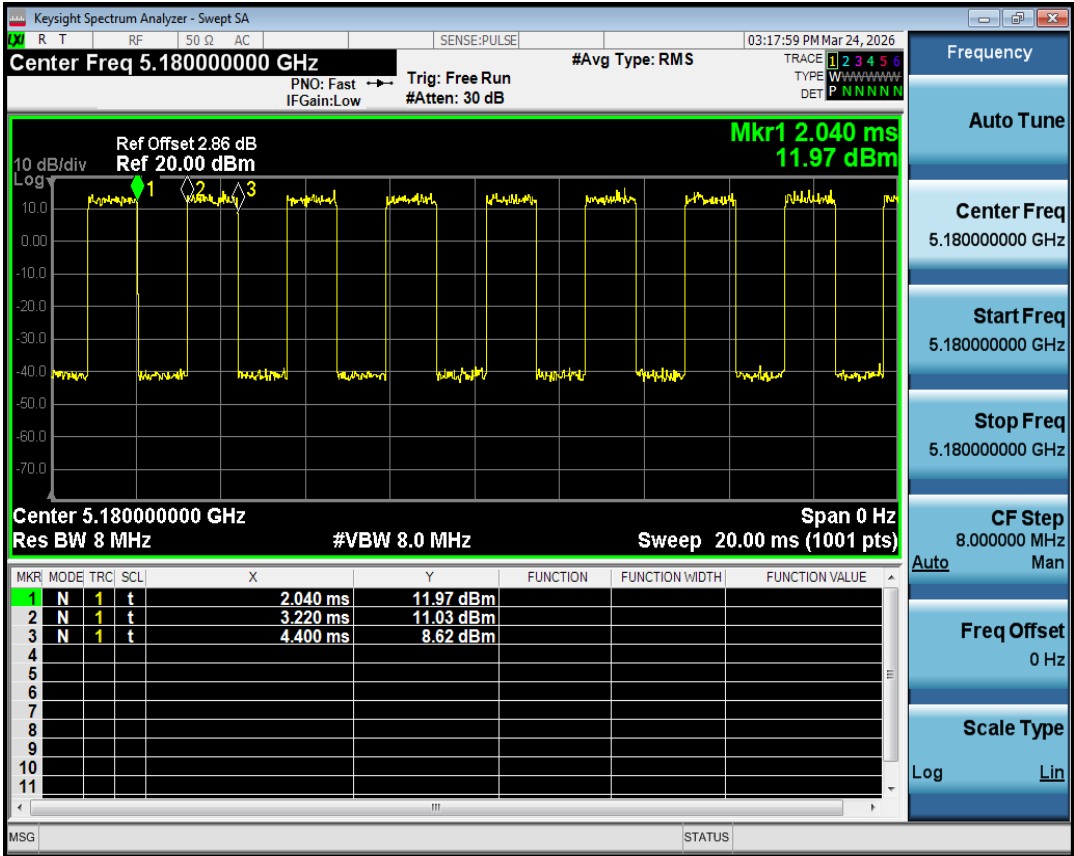
Duty Cycle NVNT ac40 5190MHz Ant1



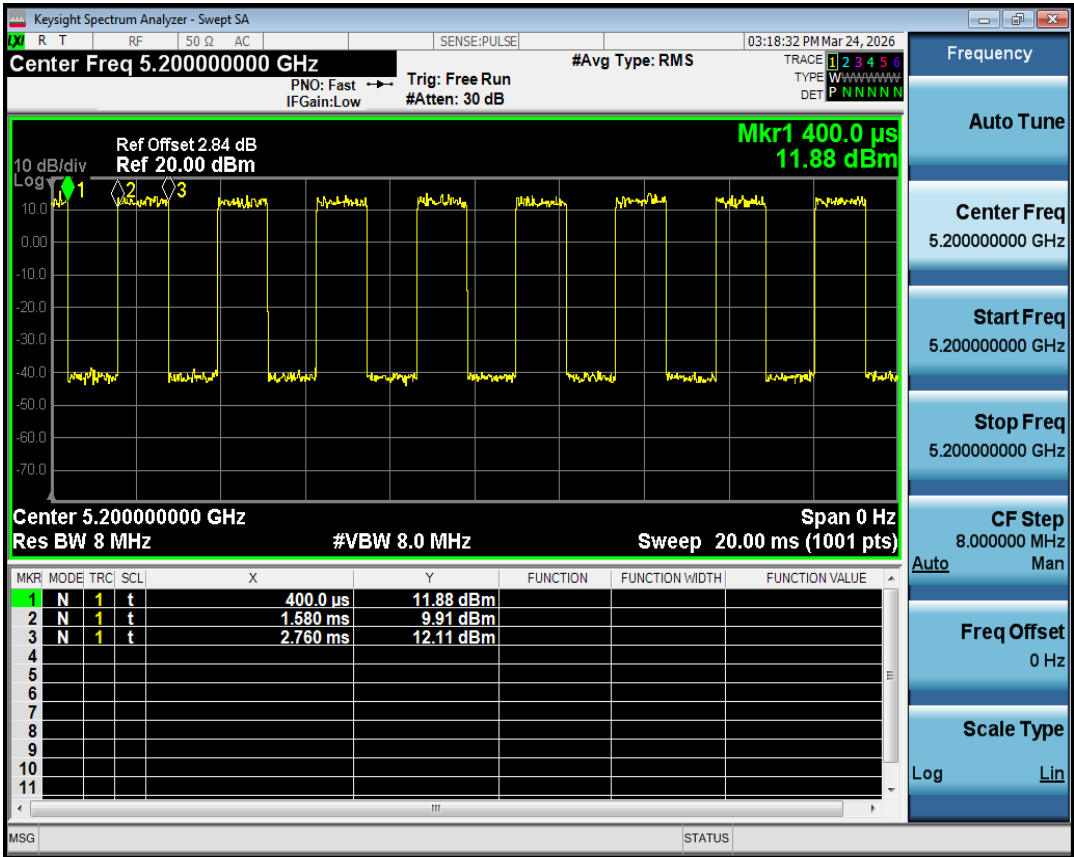
Duty Cycle NVNT ac40 5230MHz Ant1



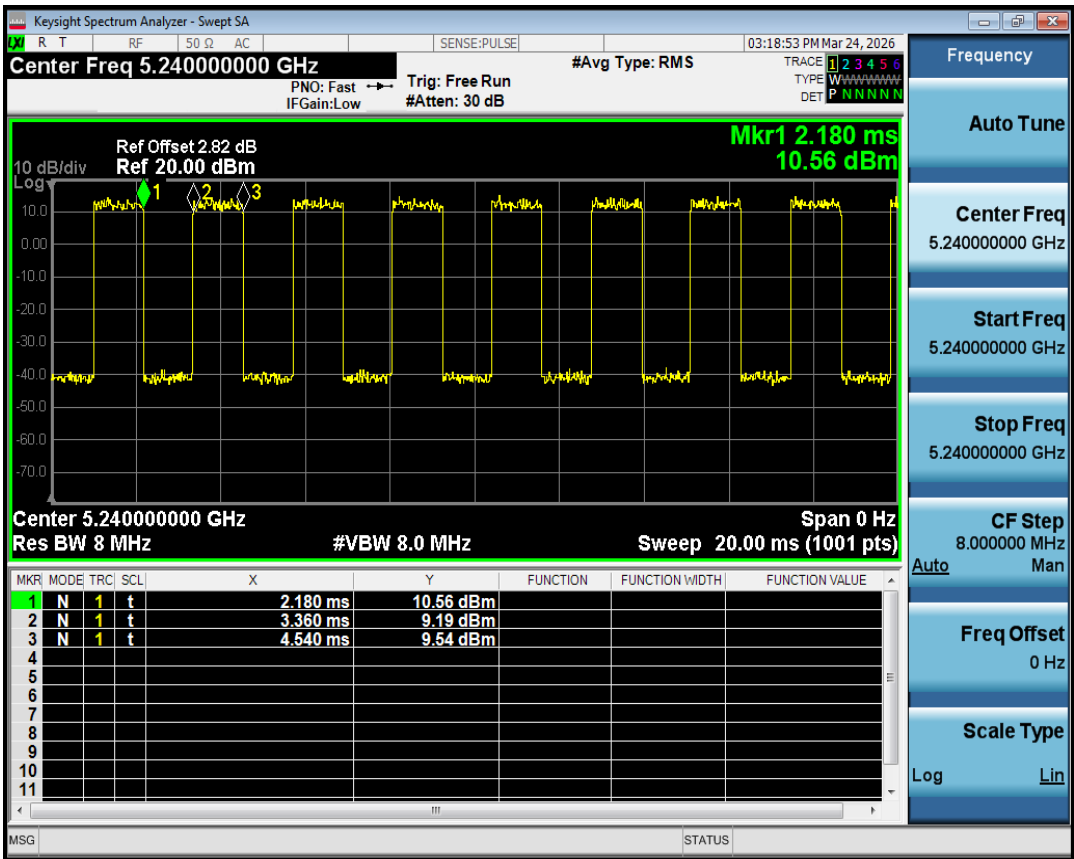
Duty Cycle NVNT ac80 5210MHz Ant1



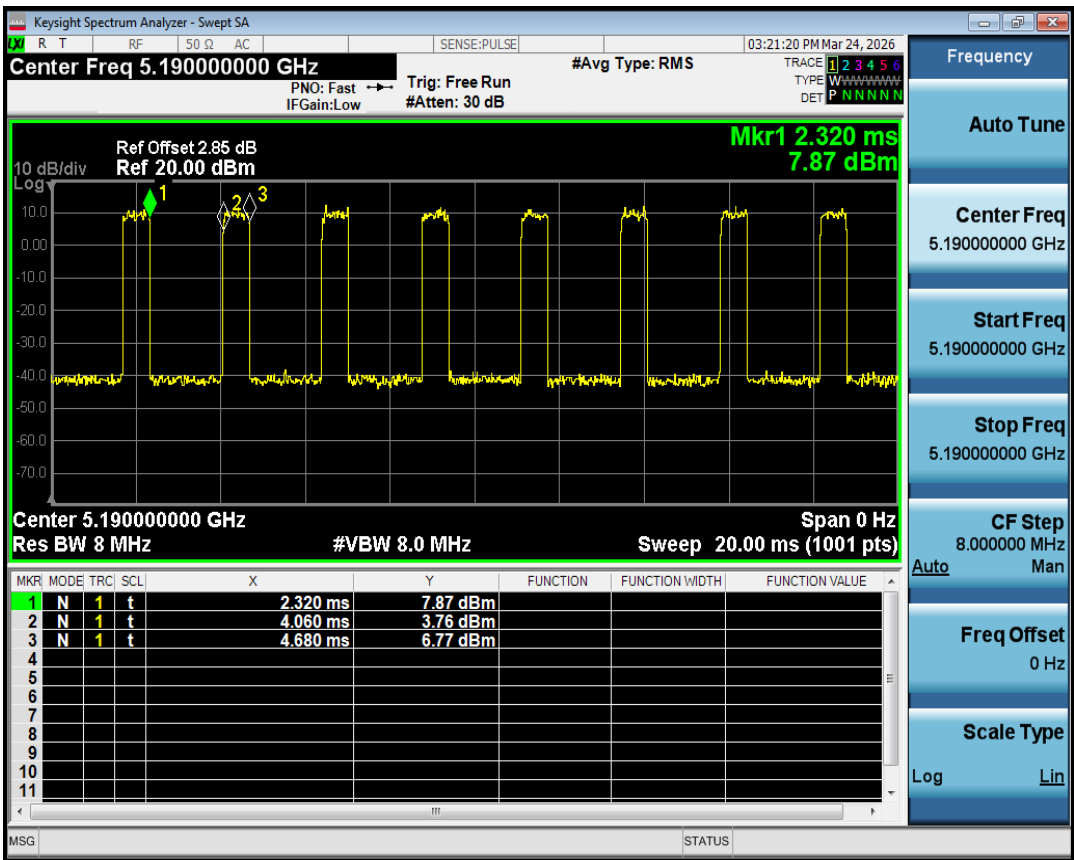
Duty Cycle NVNT ax20 5180MHz Ant1



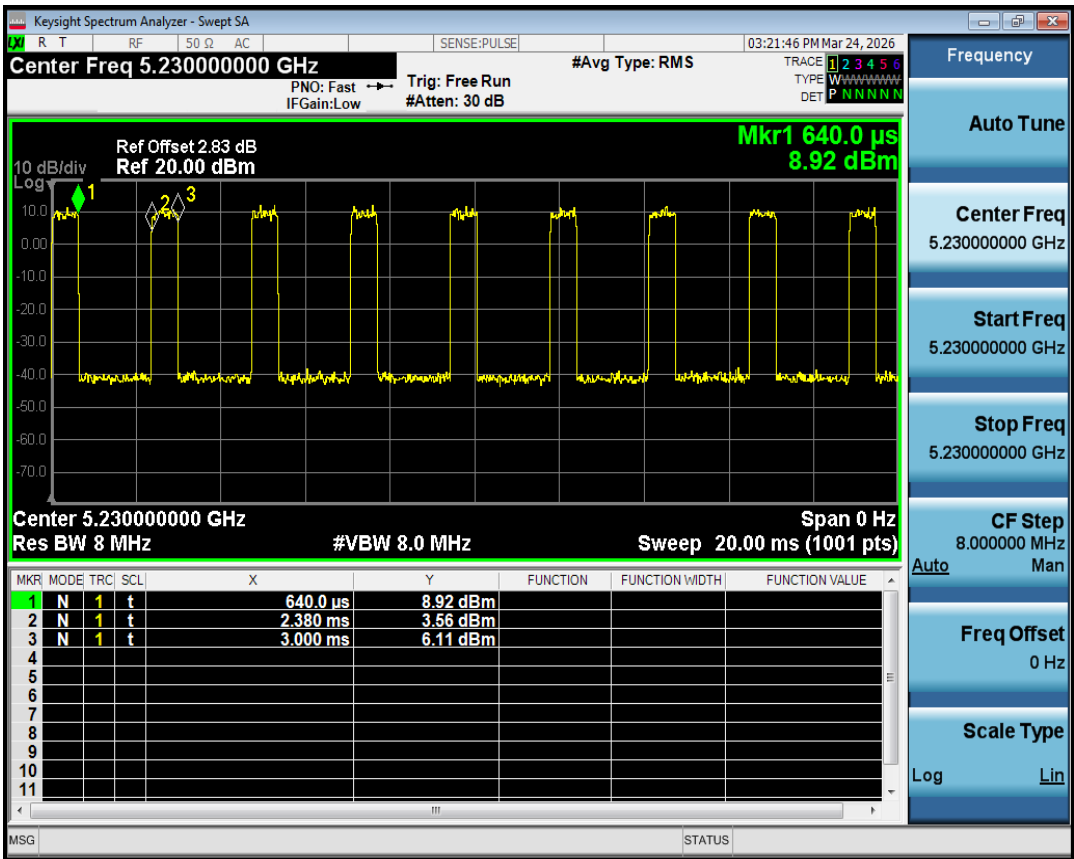
Duty Cycle NVNT ax20 5200MHz Ant1



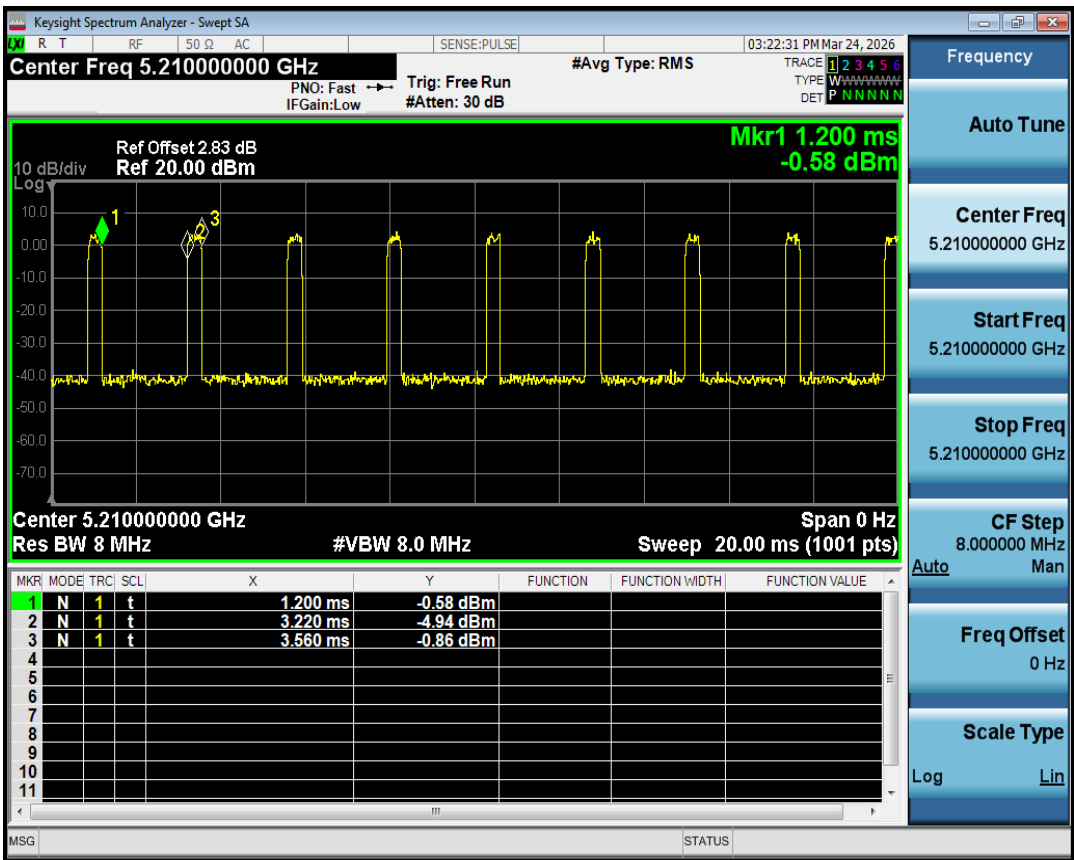
Duty Cycle NVNT ax20 5240MHz Ant1



Duty Cycle NVNT ax40 5190MHz Ant1



Duty Cycle NVNT ax40 5230MHz Ant1



Duty Cycle NVNT ax80 5210MHz Ant1

Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted(dBm)	Verdict
NVNT	a	5180	Ant1	NaN	NaN	12.91	0.01954	24	Pass
NVNT	a	5200	Ant1	NaN	NaN	10.82	0.01208	24	Pass
NVNT	a	5240	Ant1	NaN	NaN	10.49	0.01119	24	Pass
NVNT	n20	5180	Ant1	NaN	NaN	11.22	0.01324	24	Pass
NVNT	n20	5200	Ant1	NaN	NaN	12.71	0.01866	24	Pass
NVNT	n20	5240	Ant1	NaN	NaN	12.6	0.0182	24	Pass
NVNT	n40	5190	Ant1	NaN	NaN	11.06	0.01276	24	Pass
NVNT	n40	5230	Ant1	NaN	NaN	10.94	0.01242	24	Pass
NVNT	ac20	5180	Ant1	NaN	NaN	10.19	0.01045	24	Pass
NVNT	ac20	5200	Ant1	NaN	NaN	9.91	0.00979	24	Pass
NVNT	ac20	5240	Ant1	NaN	NaN	9.56	0.00904	24	Pass
NVNT	ac40	5190	Ant1	NaN	NaN	10.07	0.01016	24	Pass
NVNT	ac40	5230	Ant1	NaN	NaN	9.85	0.00966	24	Pass
NVNT	ac80	5210	Ant1	NaN	NaN	7.37	0.00546	24	Pass
NVNT	ax20	5180	Ant1	NaN	NaN	13.02	0.02004	24	Pass
NVNT	ax20	5200	Ant1	NaN	NaN	12.75	0.01884	24	Pass
NVNT	ax20	5240	Ant1	NaN	NaN	12.65	0.01841	24	Pass
NVNT	ax40	5190	Ant1	NaN	NaN	9.33	0.00857	24	Pass
NVNT	ax40	5230	Ant1	NaN	NaN	12.72	0.01871	24	Pass
NVNT	ax80	5210	Ant1	NaN	NaN	5.3	0.00339	24	Pass

-26dB Bandwidth

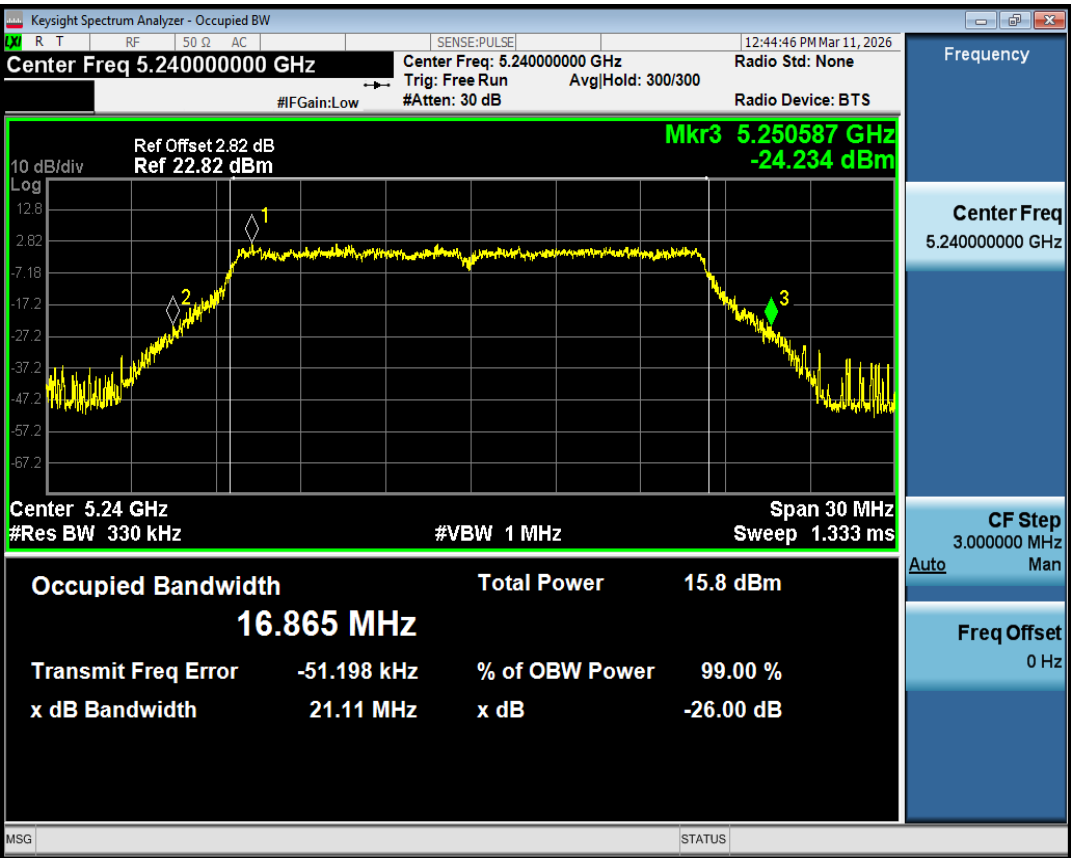
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5180	Ant1	21.24
NVNT	a	5200	Ant1	20.79
NVNT	a	5240	Ant1	21.11
NVNT	n20	5180	Ant1	21.2
NVNT	n20	5200	Ant1	21.69
NVNT	n20	5240	Ant1	21.92
NVNT	n40	5190	Ant1	41.25
NVNT	n40	5230	Ant1	40.46
NVNT	ac20	5180	Ant1	21.48
NVNT	ac20	5200	Ant1	21.48
NVNT	ac20	5240	Ant1	21.62
NVNT	ac40	5190	Ant1	40.88
NVNT	ac40	5230	Ant1	40.38
NVNT	ac80	5210	Ant1	80.93
NVNT	ax20	5180	Ant1	22.3
NVNT	ax20	5200	Ant1	22.29
NVNT	ax20	5240	Ant1	21.88
NVNT	ax40	5190	Ant1	41.37
NVNT	ax40	5230	Ant1	41.17
NVNT	ax80	5210	Ant1	81.83



-26dB Bandwidth NVNT a 5180MHz Ant1



-26dB Bandwidth NVNT a 5200MHz Ant1



-26dB Bandwidth NVNT a 5240MHz Ant1



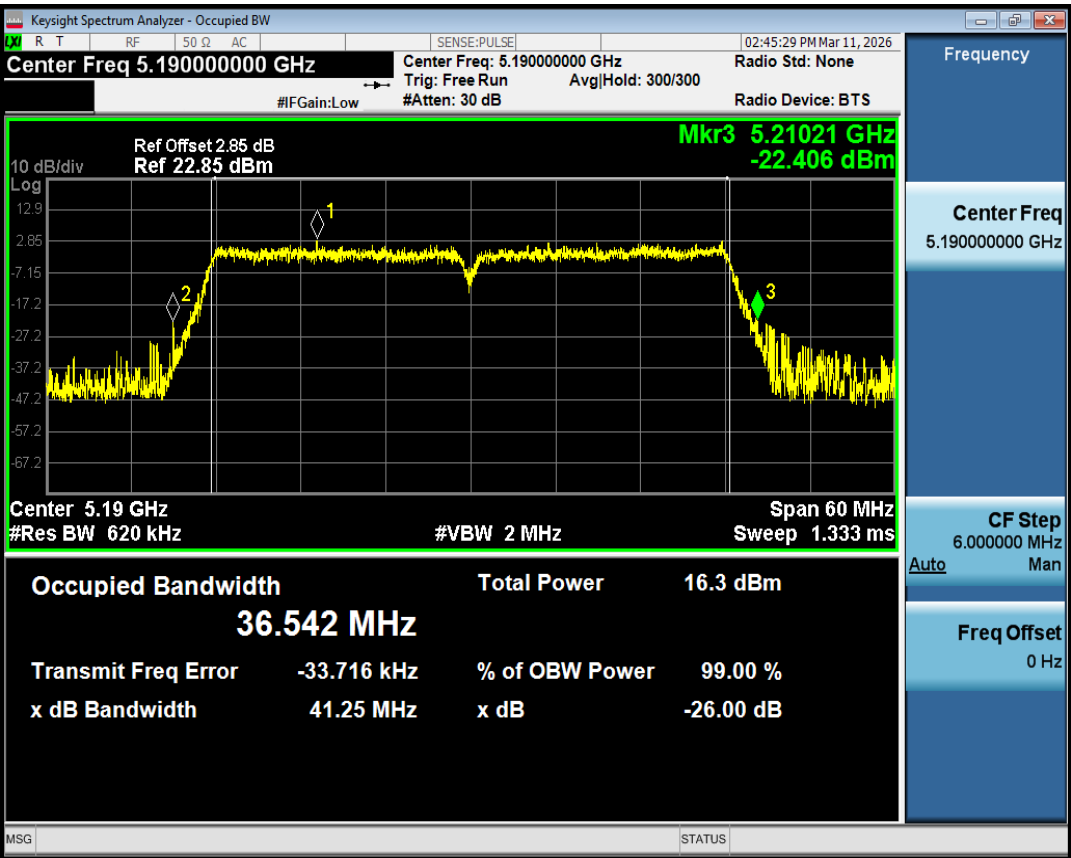
-26dB Bandwidth NVNT n20 5180MHz Ant1



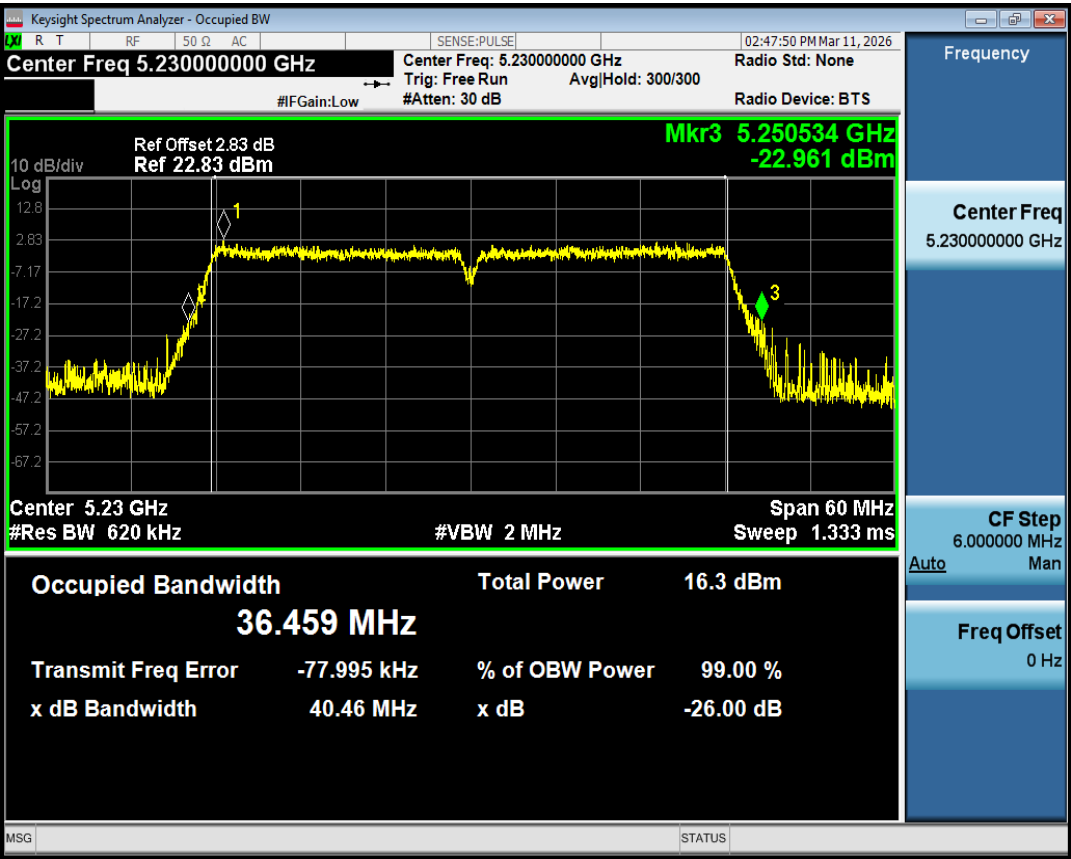
-26dB Bandwidth NVNT n20 5200MHz Ant1



-26dB Bandwidth NVNT n20 5240MHz Ant1



-26dB Bandwidth NVNT n40 5190MHz Ant1



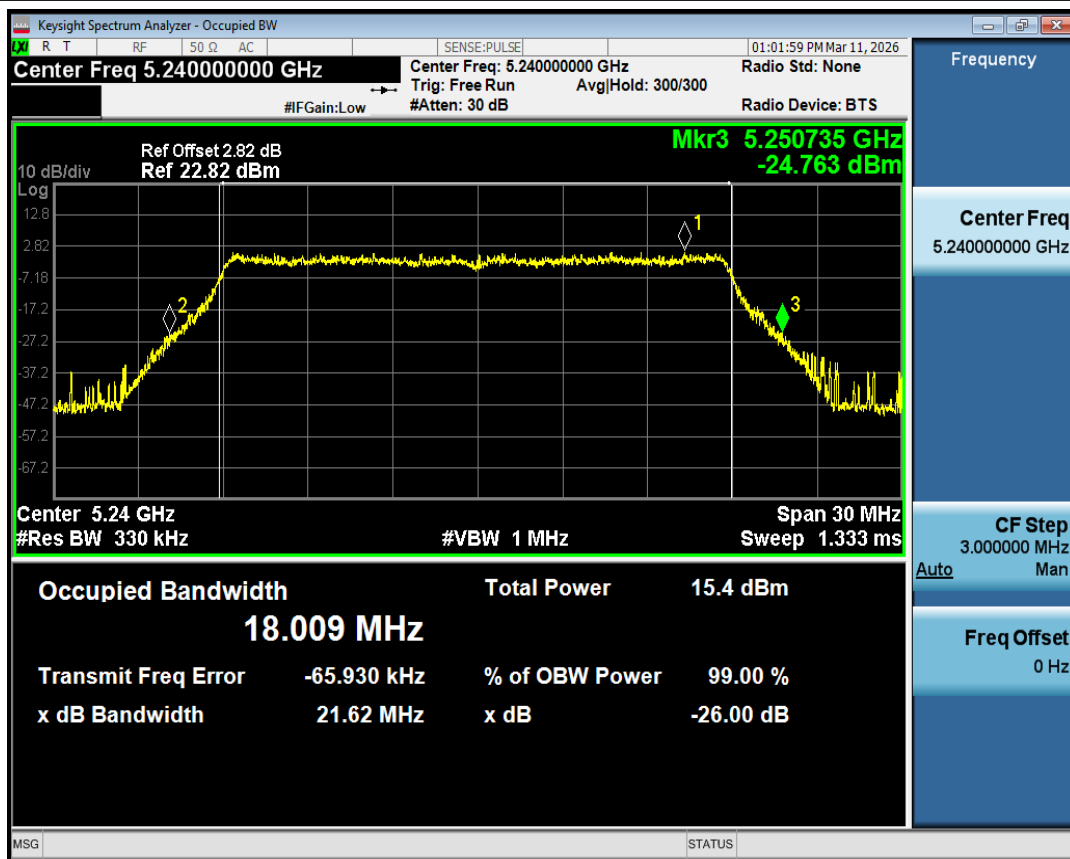
-26dB Bandwidth NVNT n40 5230MHz Ant1



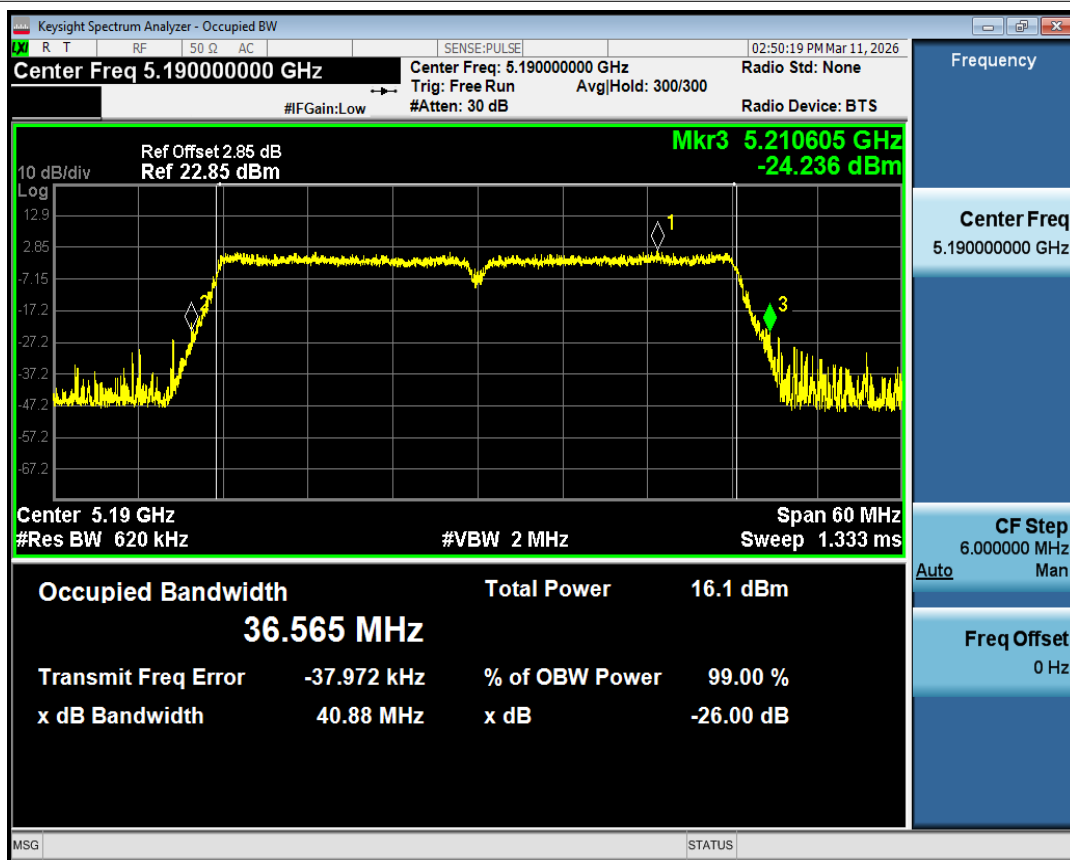
-26dB Bandwidth NVNT ac20 5180MHz Ant1



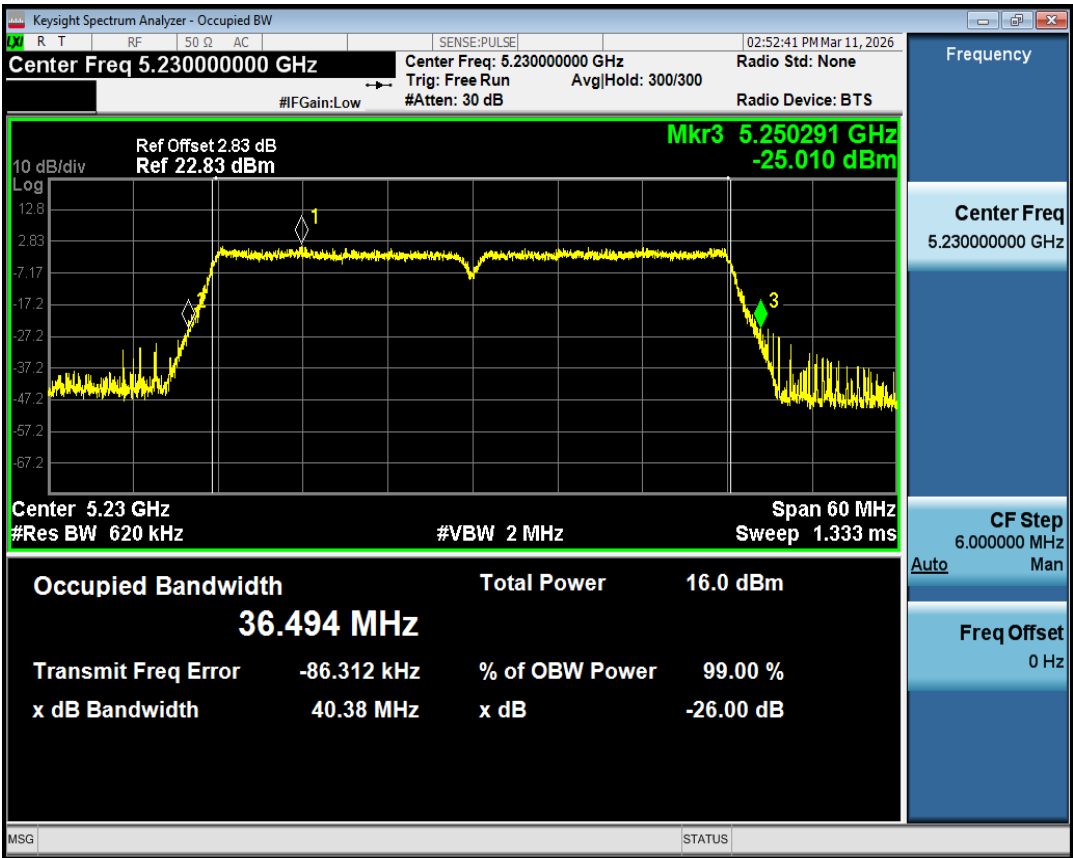
-26dB Bandwidth NVNT ac20 5200MHz Ant1



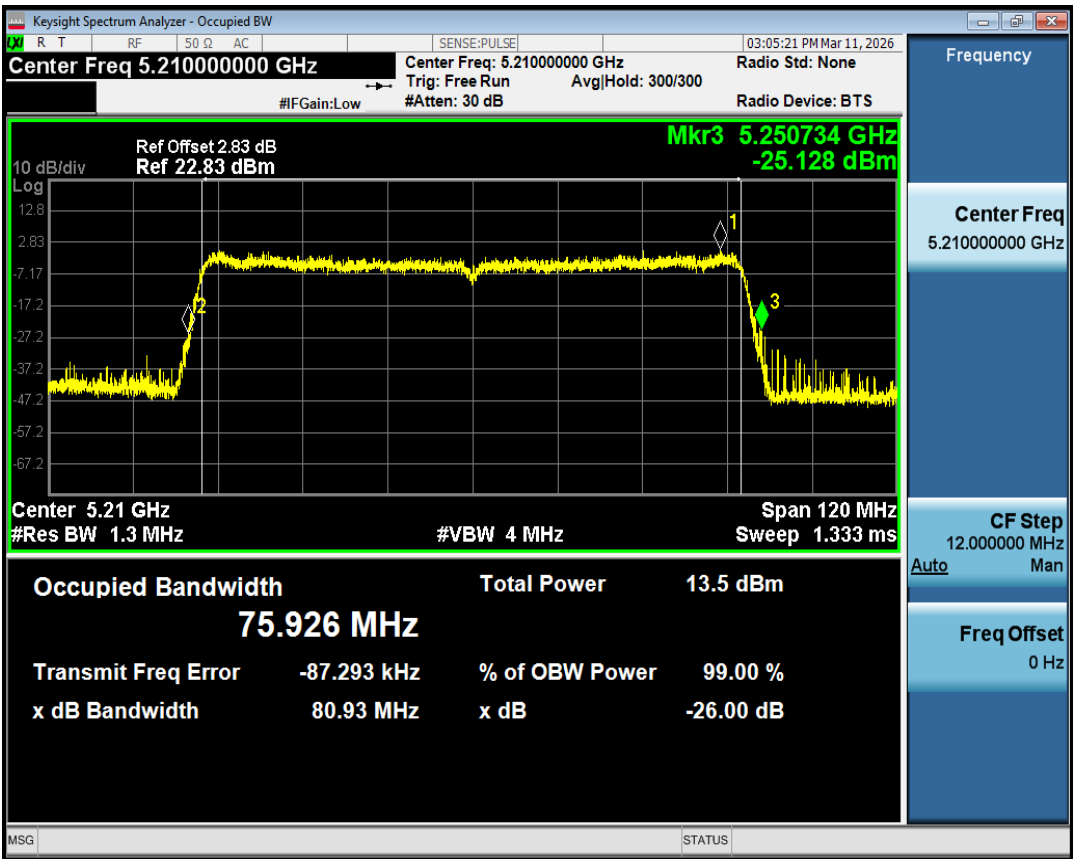
-26dB Bandwidth NVNT ac20 5240MHz Ant1



-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



-26dB Bandwidth NVNT ac80 5210MHz Ant1



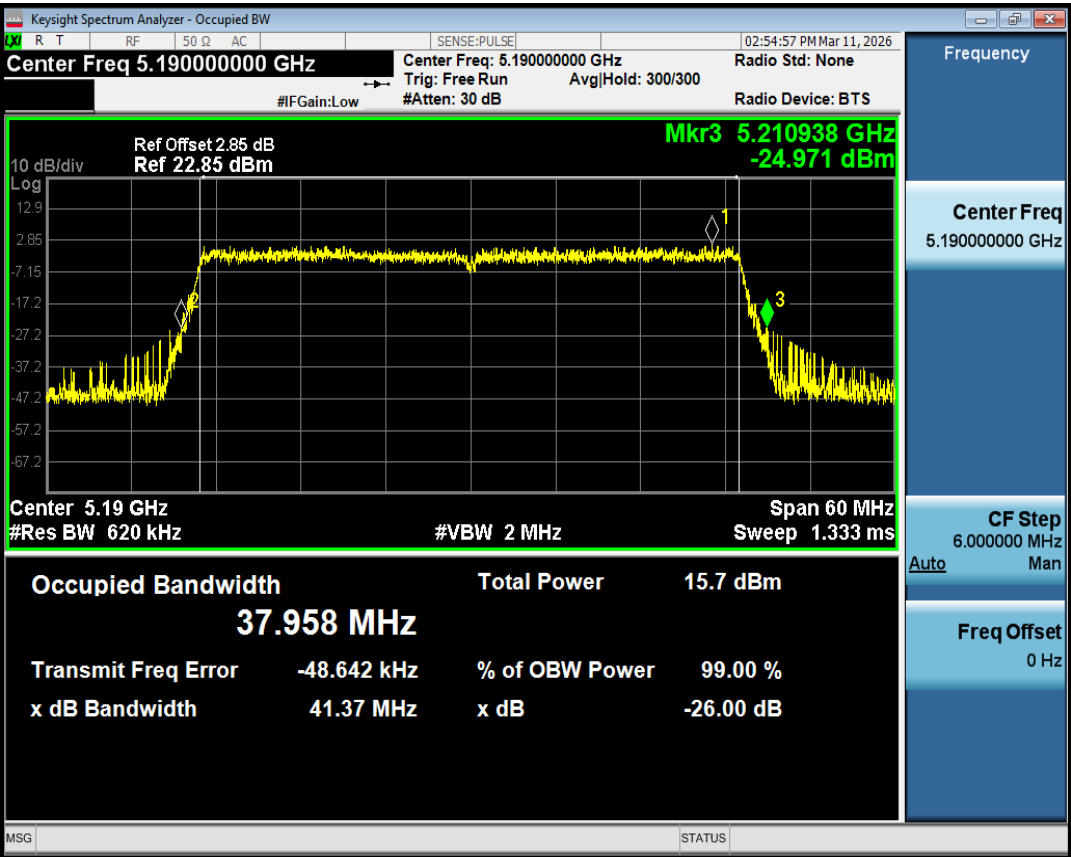
-26dB Bandwidth NVNT ax20 5180MHz Ant1



-26dB Bandwidth NVNT ax20 5200MHz Ant1



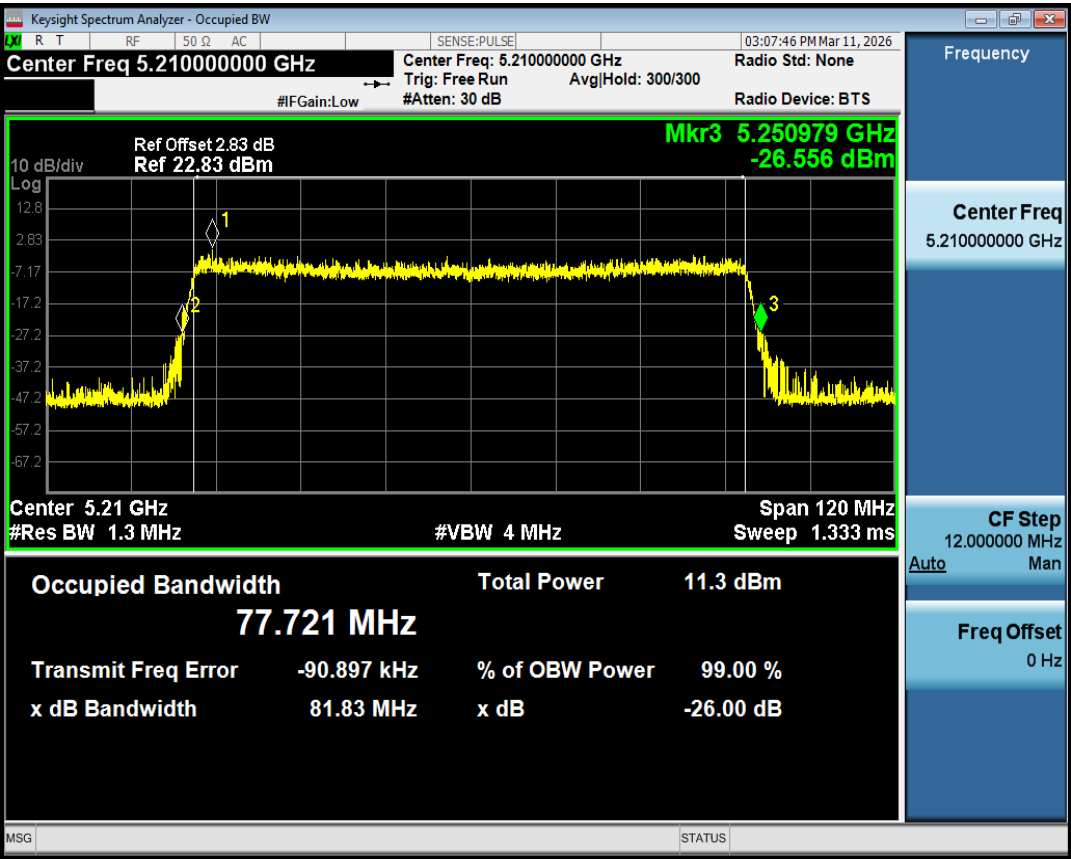
-26dB Bandwidth NVNT ax20 5240MHz Ant1



-26dB Bandwidth NVNT ax40 5190MHz Ant1



-26dB Bandwidth NVNT ax40 5230MHz Ant1



-26dB Bandwidth NVNT ax80 5210MHz Ant1

Occupied Channel Bandwidth

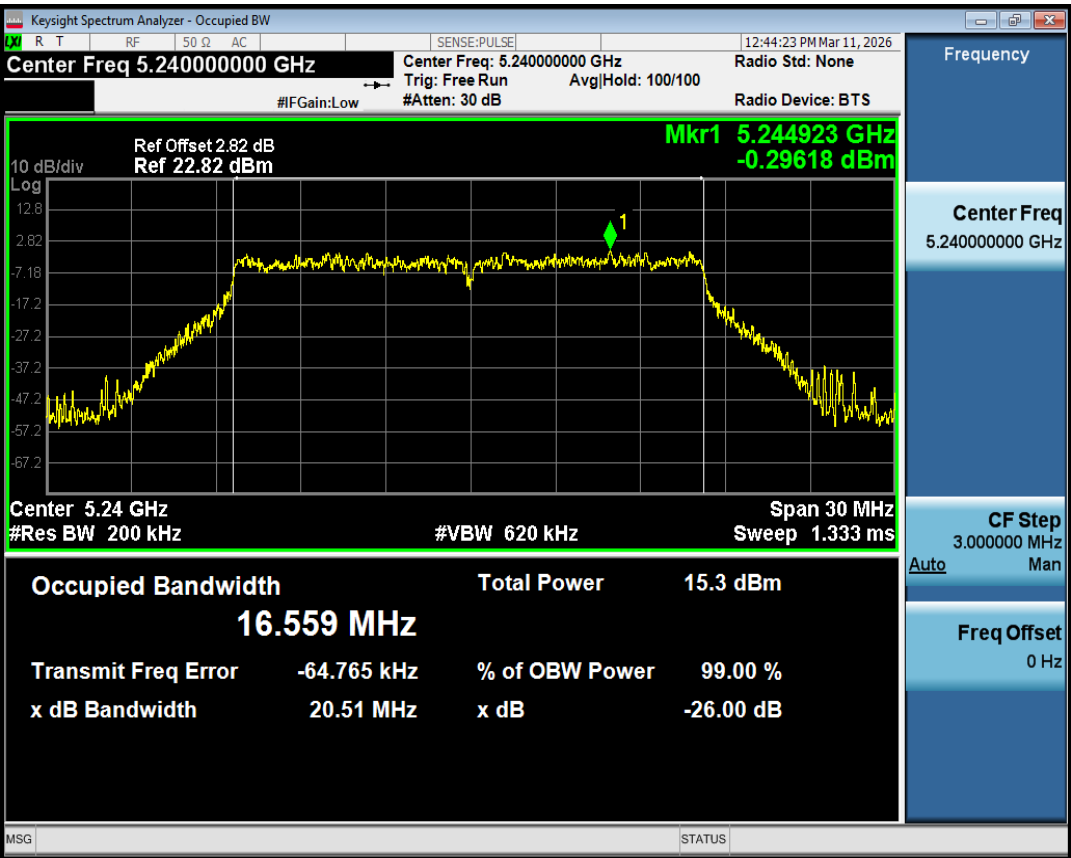
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.7
NVNT	a	5200	Ant1	16.525
NVNT	a	5240	Ant1	16.559
NVNT	n20	5180	Ant1	17.757
NVNT	n20	5200	Ant1	17.875
NVNT	n20	5240	Ant1	17.872
NVNT	n40	5190	Ant1	36.287
NVNT	n40	5230	Ant1	36.342
NVNT	ac20	5180	Ant1	17.828
NVNT	ac20	5200	Ant1	17.83
NVNT	ac20	5240	Ant1	17.797
NVNT	ac40	5190	Ant1	36.377
NVNT	ac40	5230	Ant1	36.393
NVNT	ac80	5210	Ant1	75.796
NVNT	ax20	5180	Ant1	19.056
NVNT	ax20	5200	Ant1	19.053
NVNT	ax20	5240	Ant1	19.091
NVNT	ax40	5190	Ant1	37.858
NVNT	ax40	5230	Ant1	37.913
NVNT	ax80	5210	Ant1	77.56



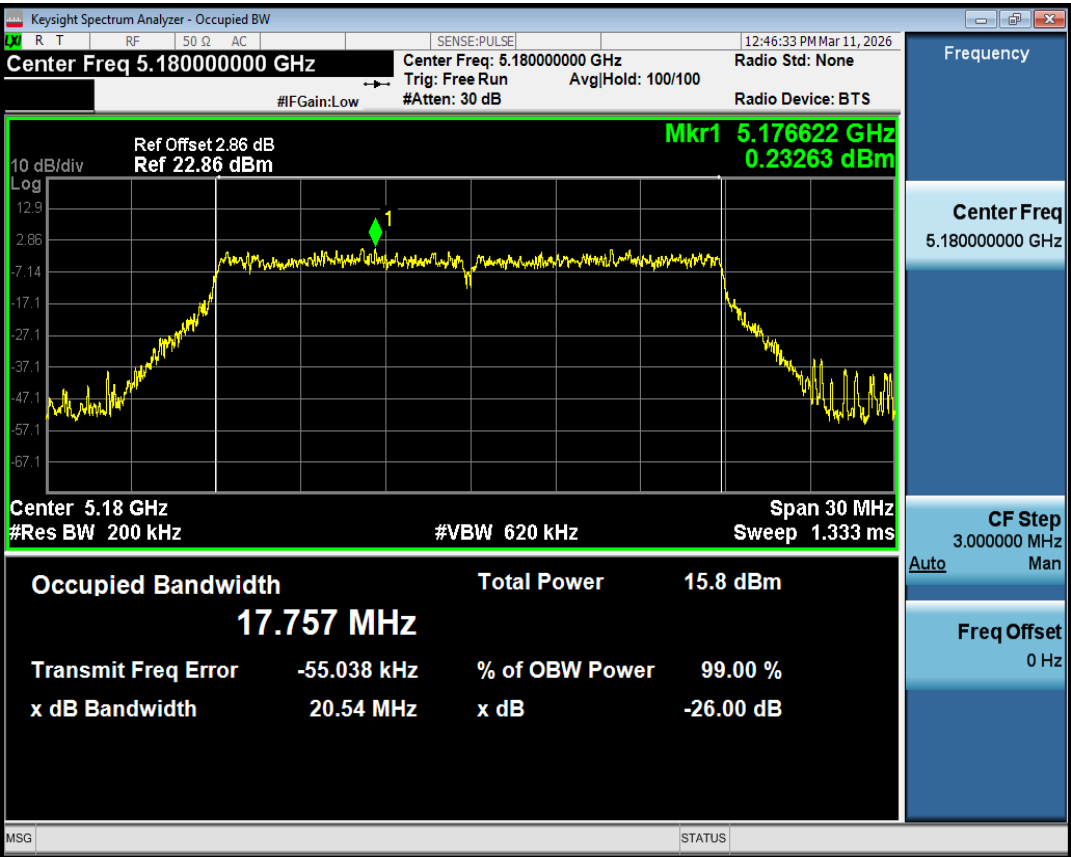
OBW NVNT a 5180MHz Ant1



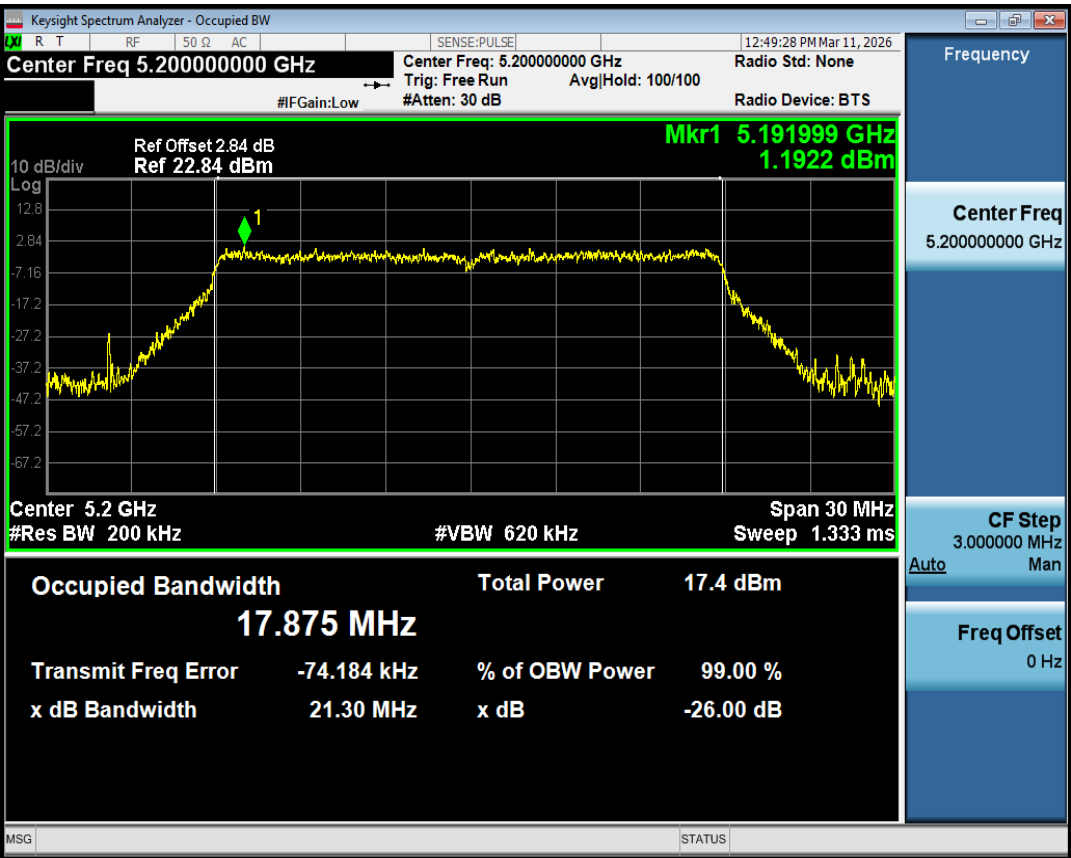
OBW NVNT a 5200MHz Ant1



OBW NVNT a 5240MHz Ant1



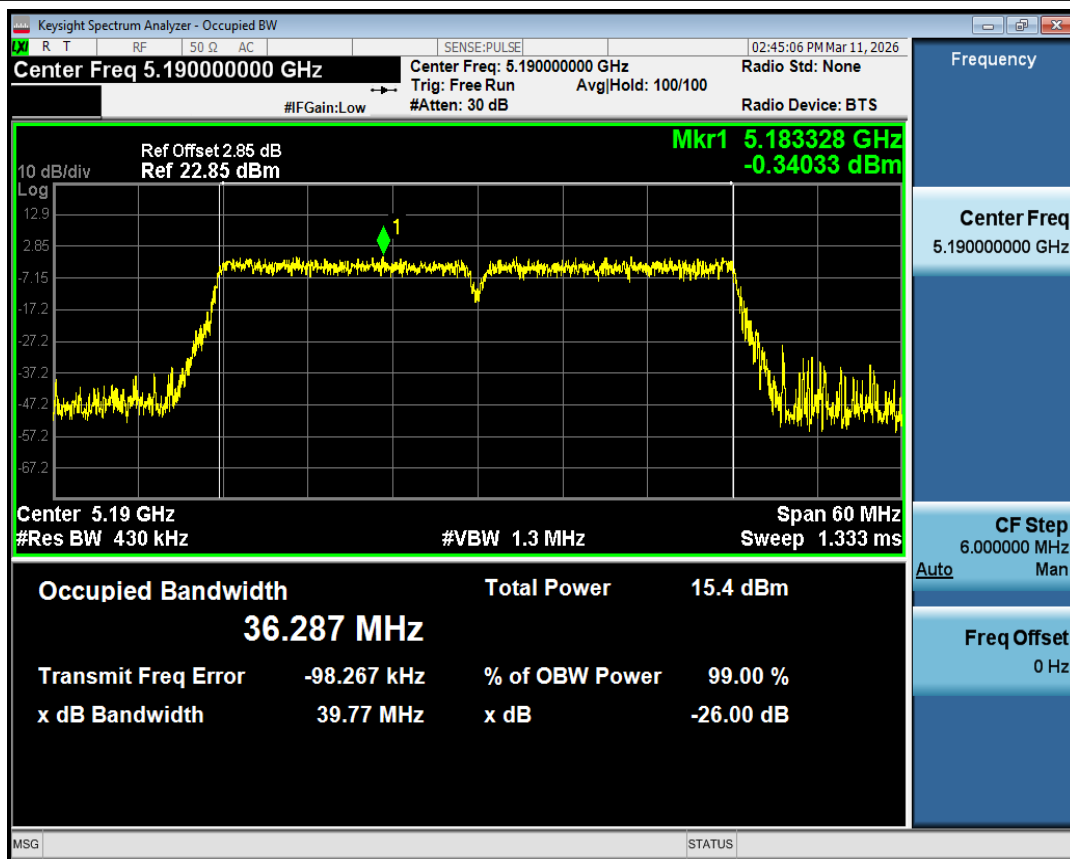
OBW NVNT n20 5180MHz Ant1



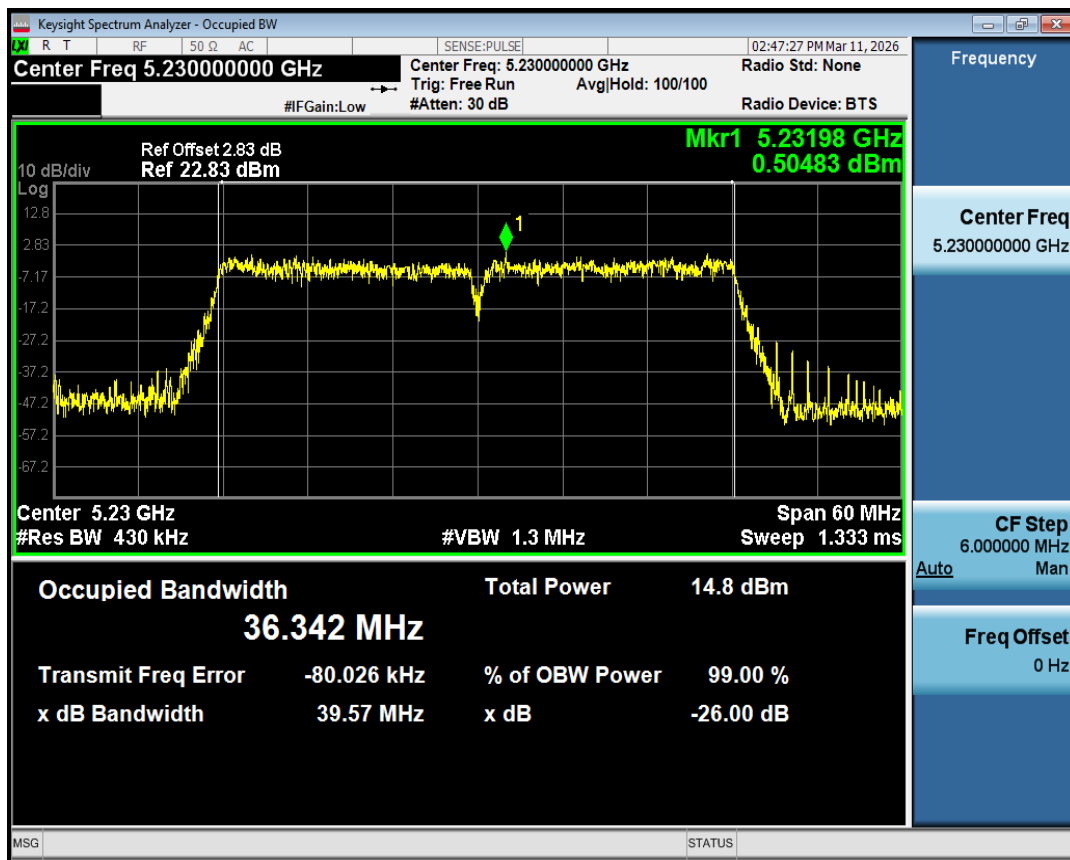
OBW NVNT n20 5200MHz Ant1



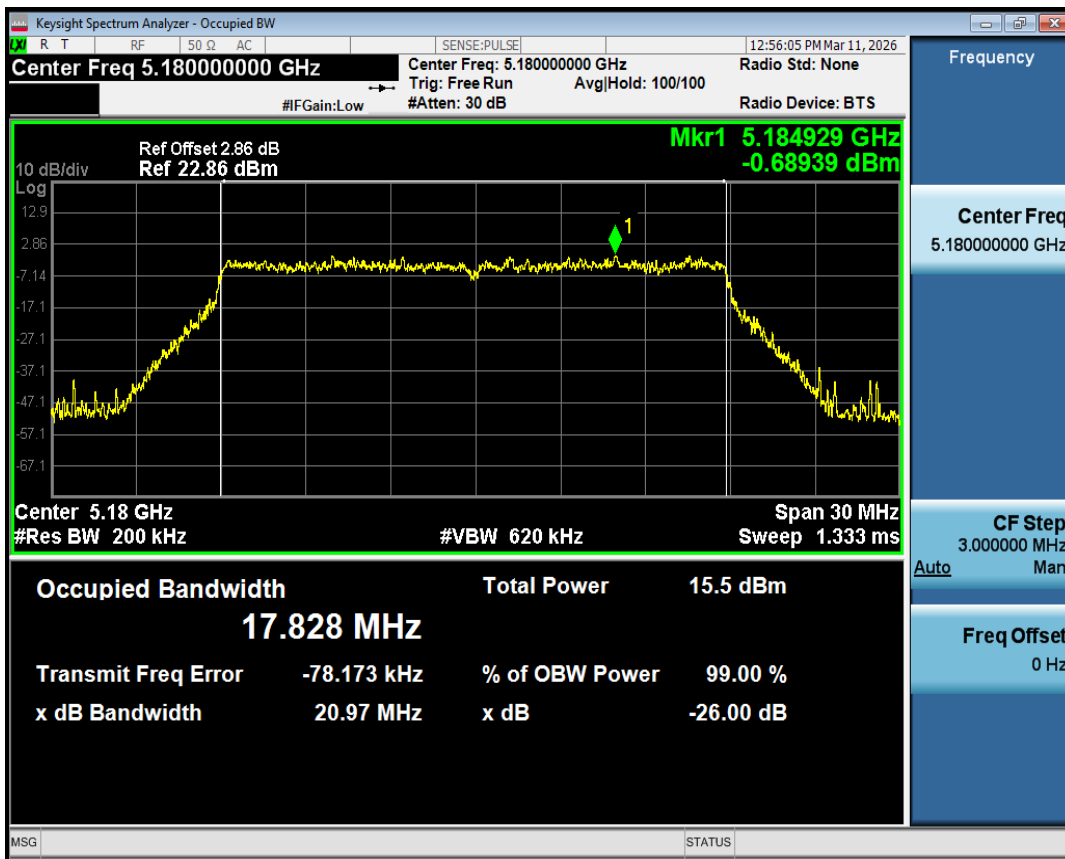
OBW NVNT n20 5240MHz Ant1



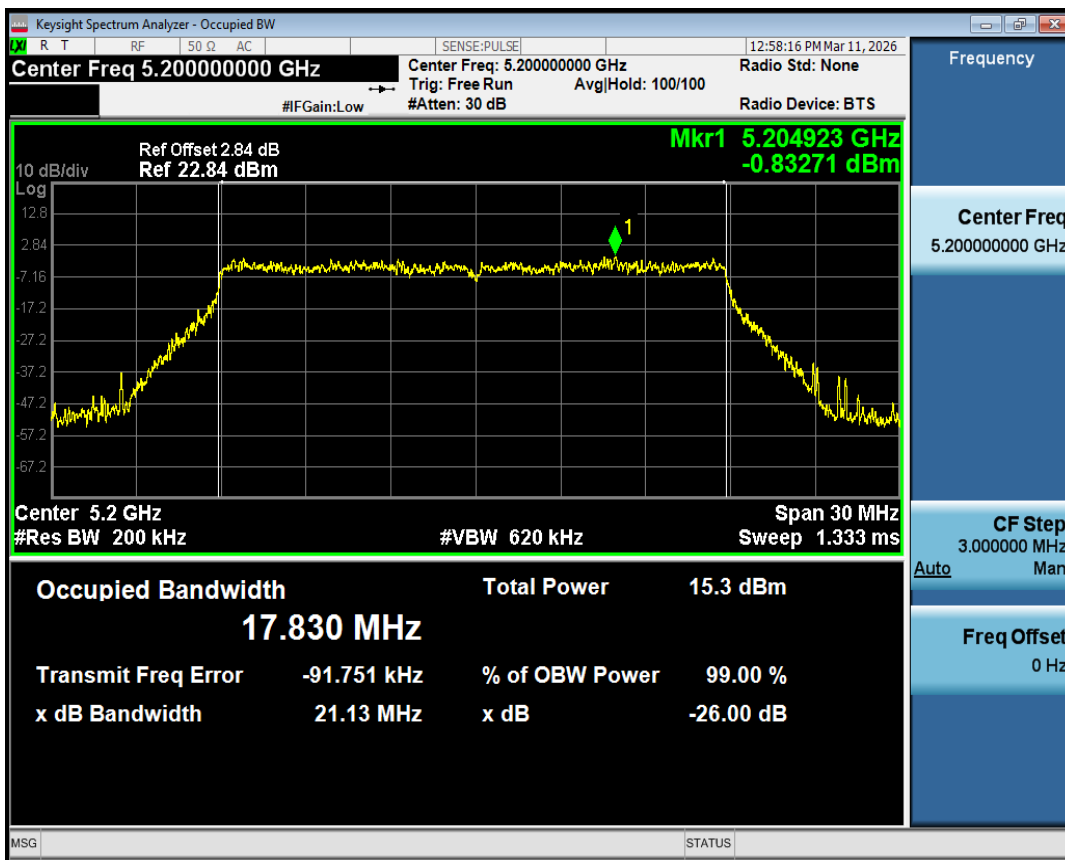
OBW NVNT n40 5190MHz Ant1



OBW NVNT n40 5230MHz Ant1



OBW NVNT ac20 5180MHz Ant1



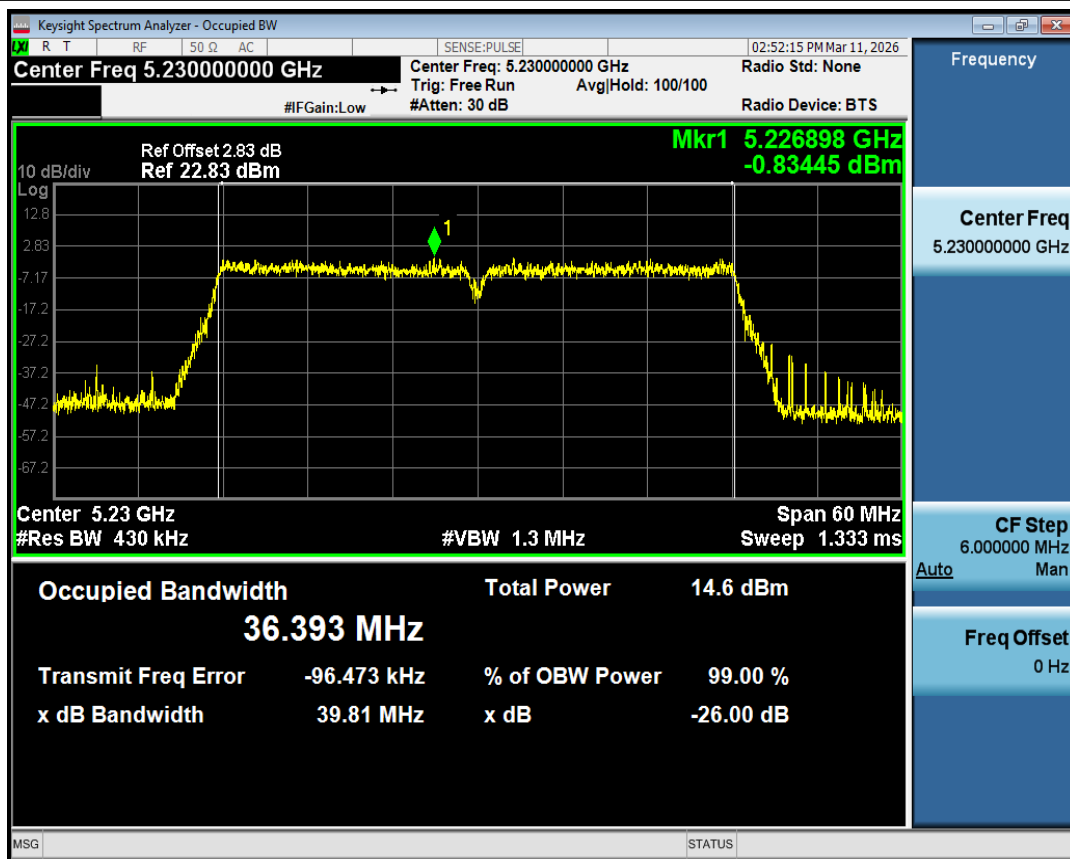
OBW NVNT ac20 5200MHz Ant1



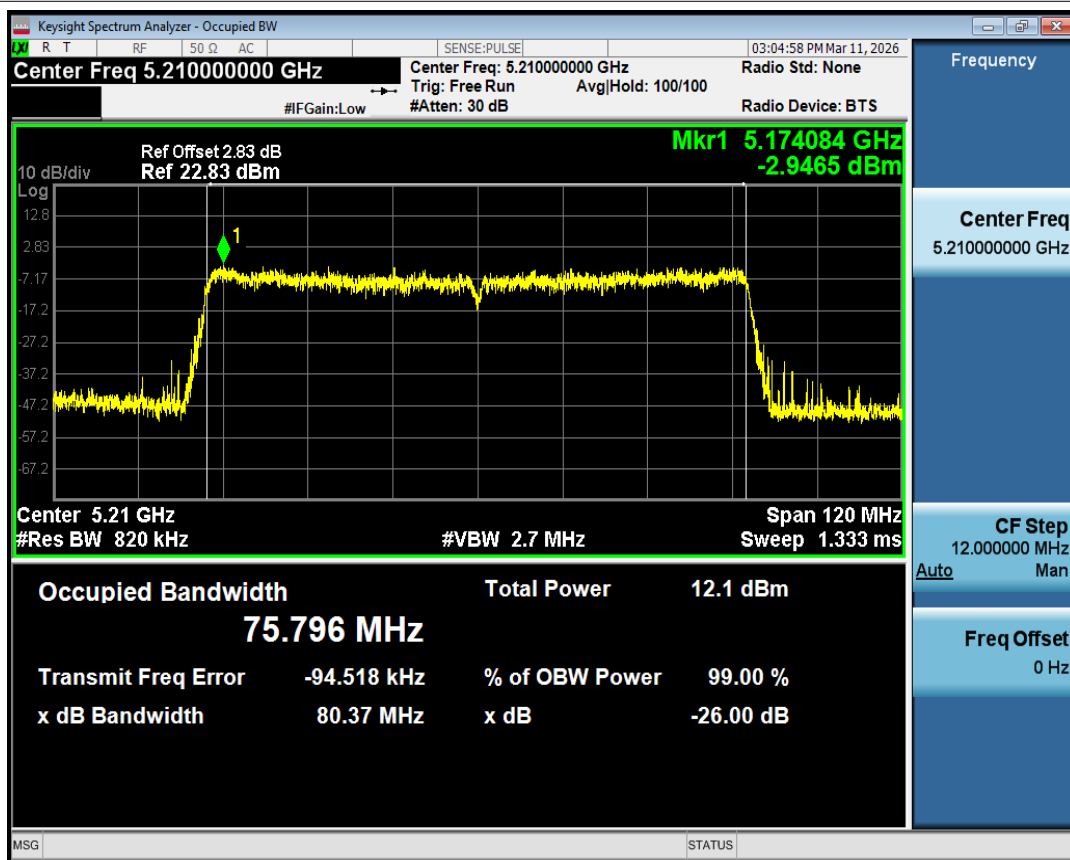
OBW NVNT ac20 5240MHz Ant1



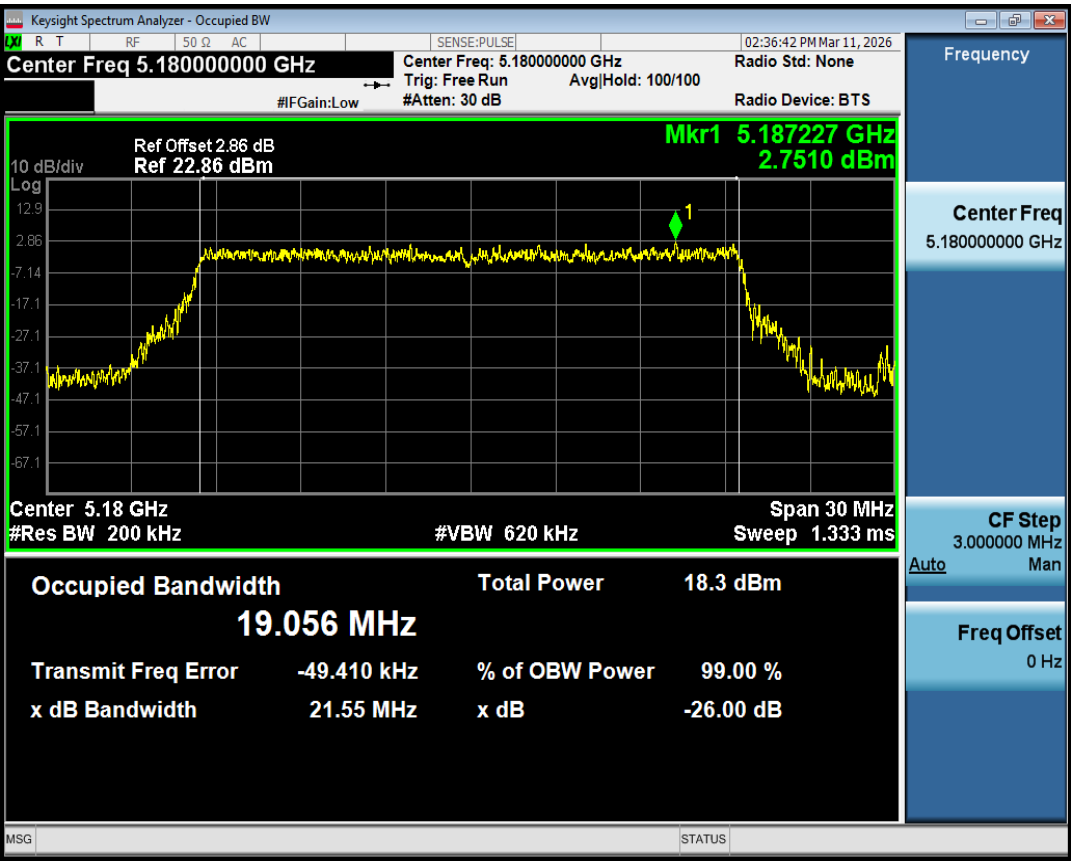
OBW NVNT ac40 5190MHz Ant1



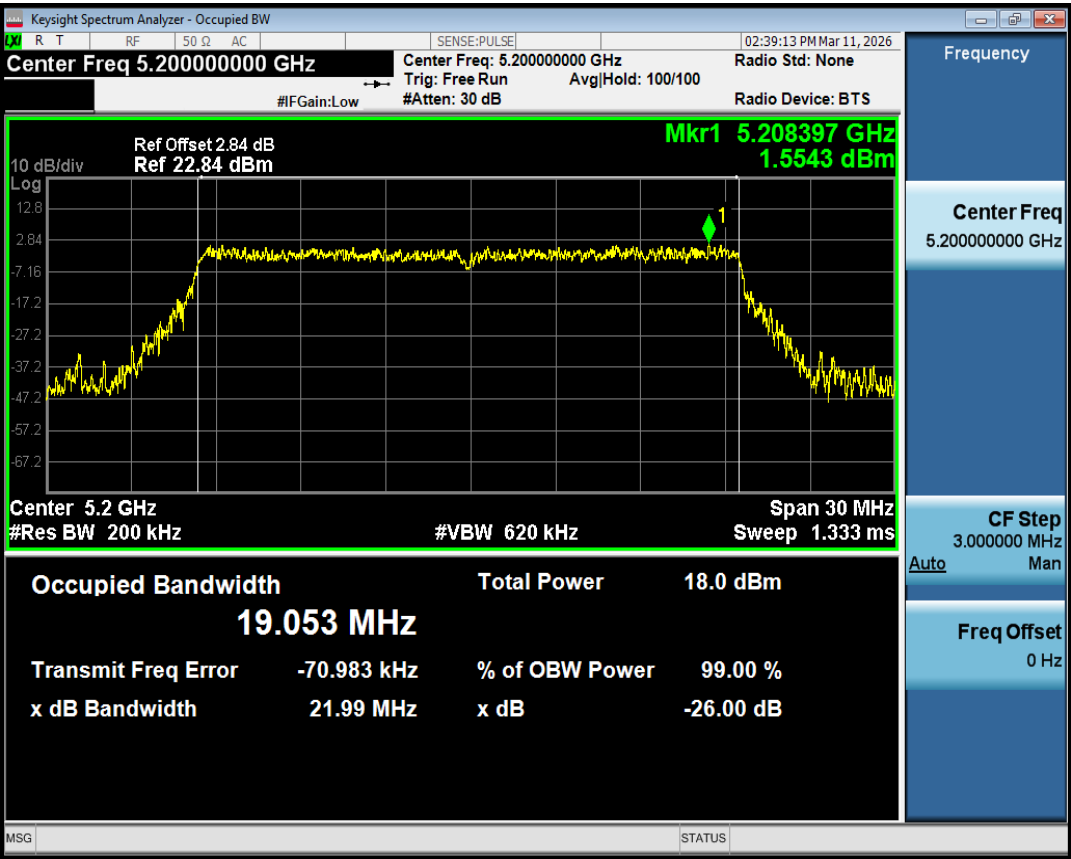
OBW NVNT ac40 5230MHz Ant1



OBW NVNT ac80 5210MHz Ant1



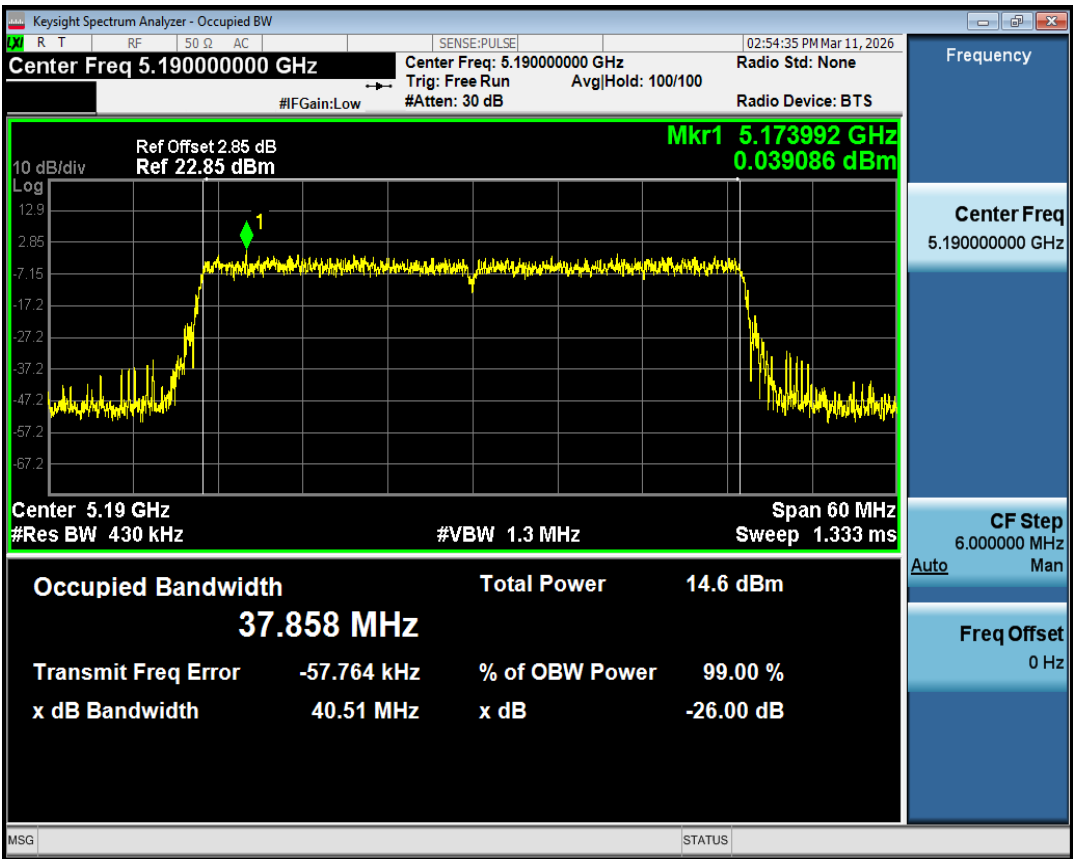
OBW NVNT ax20 5180MHz Ant1



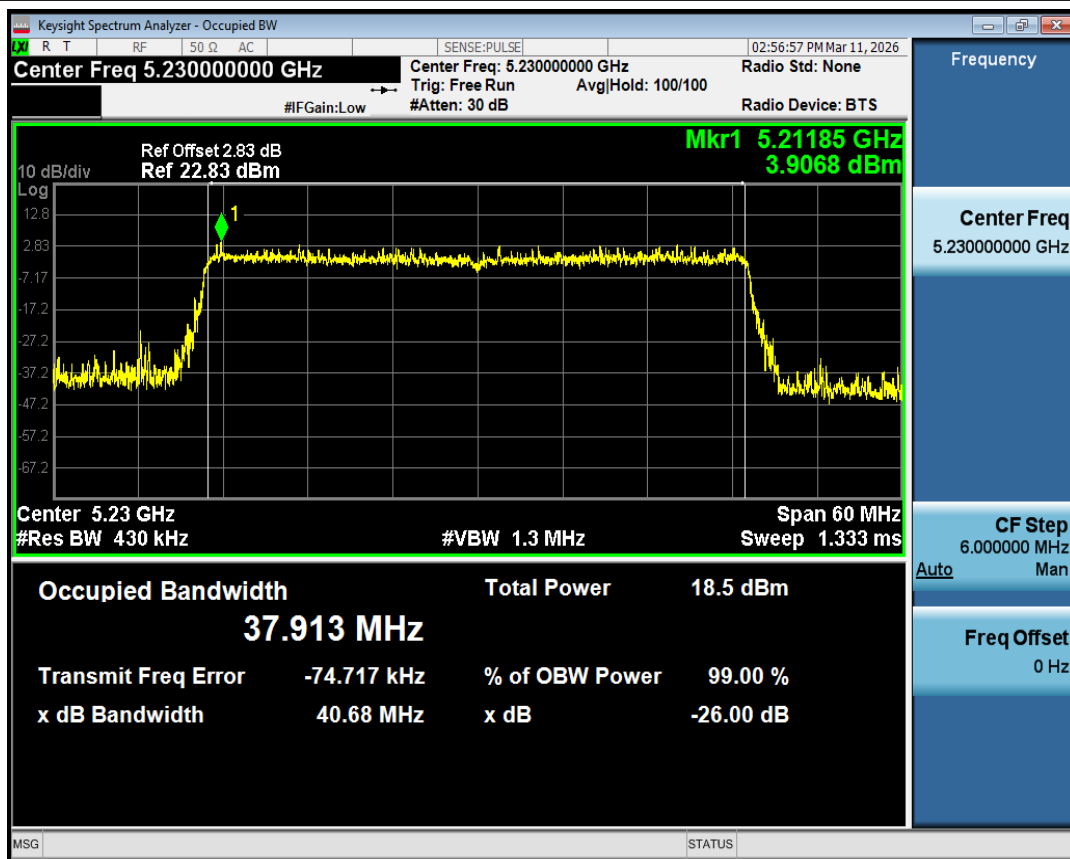
OBW NVNT ax20 5200MHz Ant1



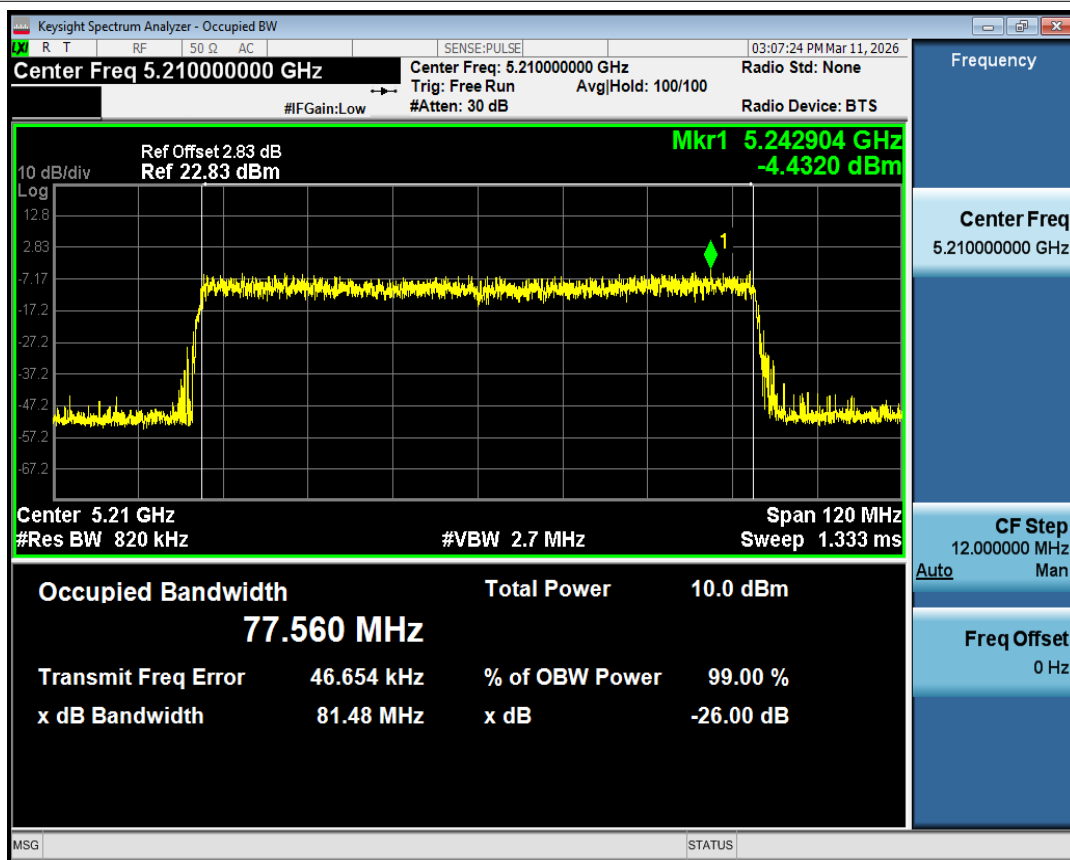
OBW NVNT ax20 5240MHz Ant1



OBW NVNT ax40 5190MHz Ant1



OBW NVNT ax40 5230MHz Ant1



OBW NVNT ax80 5210MHz Ant1

Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total Conducted PSD (dBm)	Limit Conducted(dBm)	Verdict
NVNT	a	5180	Ant1	-1.08	5.81	4.73	11	Pass
NVNT	a	5200	Ant1	-6.15	5.77	-0.38	11	Pass
NVNT	a	5240	Ant1	-6.54	5.77	-0.77	11	Pass
NVNT	n20	5180	Ant1	-6.18	5.5	-0.68	11	Pass
NVNT	n20	5200	Ant1	-1.29	5.5	4.21	11	Pass
NVNT	n20	5240	Ant1	-1.51	5.53	4.02	11	Pass
NVNT	n40	5190	Ant1	-10.55	8.64	-1.91	11	Pass
NVNT	n40	5230	Ant1	-11.31	8.41	-2.9	11	Pass
NVNT	ac20	5180	Ant1	-3.73	2.06	-1.67	11	Pass
NVNT	ac20	5200	Ant1	-4.16	2.04	-2.12	11	Pass
NVNT	ac20	5240	Ant1	-4.31	2.04	-2.27	11	Pass
NVNT	ac40	5190	Ant1	-8.3	4	-4.3	11	Pass
NVNT	ac40	5230	Ant1	-8.68	4.05	-4.63	11	Pass
NVNT	ac80	5210	Ant1	-16.94	7.26	-9.68	11	Pass
NVNT	ax20	5180	Ant1	-2.39	3.01	0.62	11	Pass
NVNT	ax20	5200	Ant1	-2.52	3.01	0.49	11	Pass
NVNT	ax20	5240	Ant1	-2.55	3.01	0.46	11	Pass
NVNT	ax40	5190	Ant1	-11.51	5.81	-5.7	11	Pass
NVNT	ax40	5230	Ant1	-4.98	5.81	0.83	11	Pass
NVNT	ax80	5210	Ant1	-19.14	8.41	-10.73	11	Pass



PSD NVNT a 5180MHz Ant1



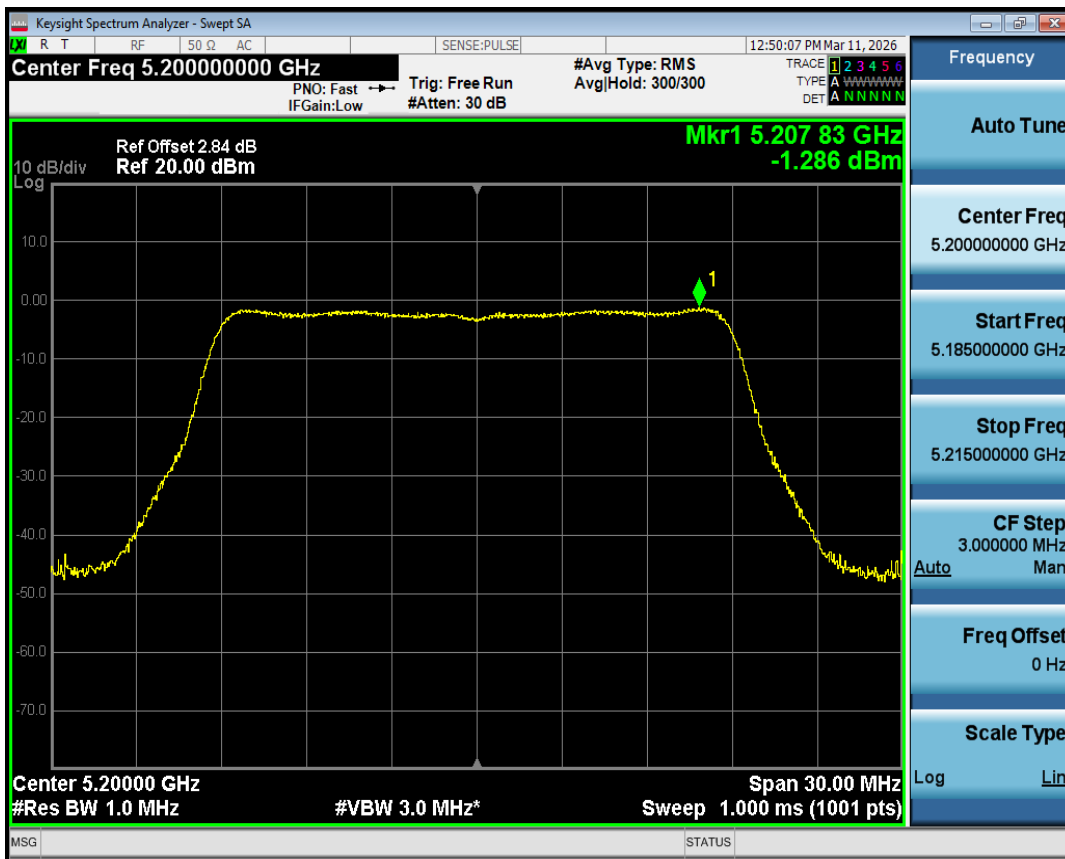
PSD NVNT a 5200MHz Ant1



PSD NVNT a 5240MHz Ant1



PSD NVNT n20 5180MHz Ant1



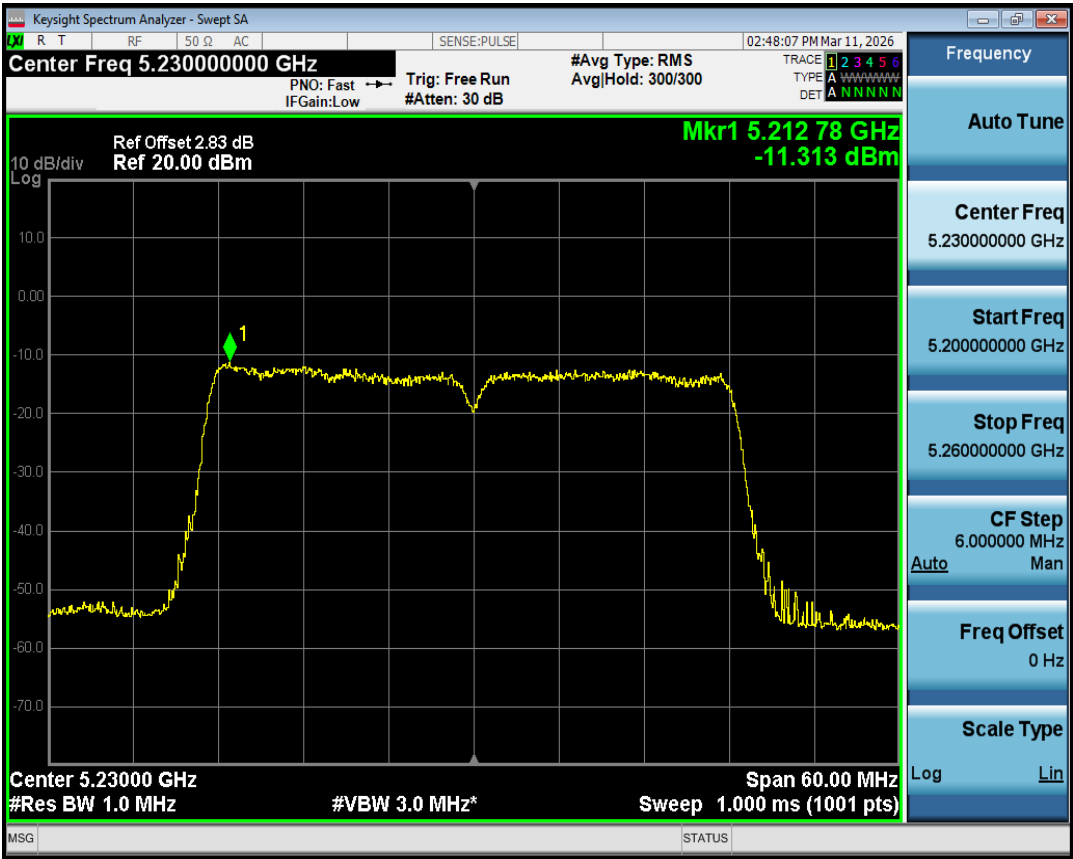
PSD NVNT n20 5200MHz Ant1



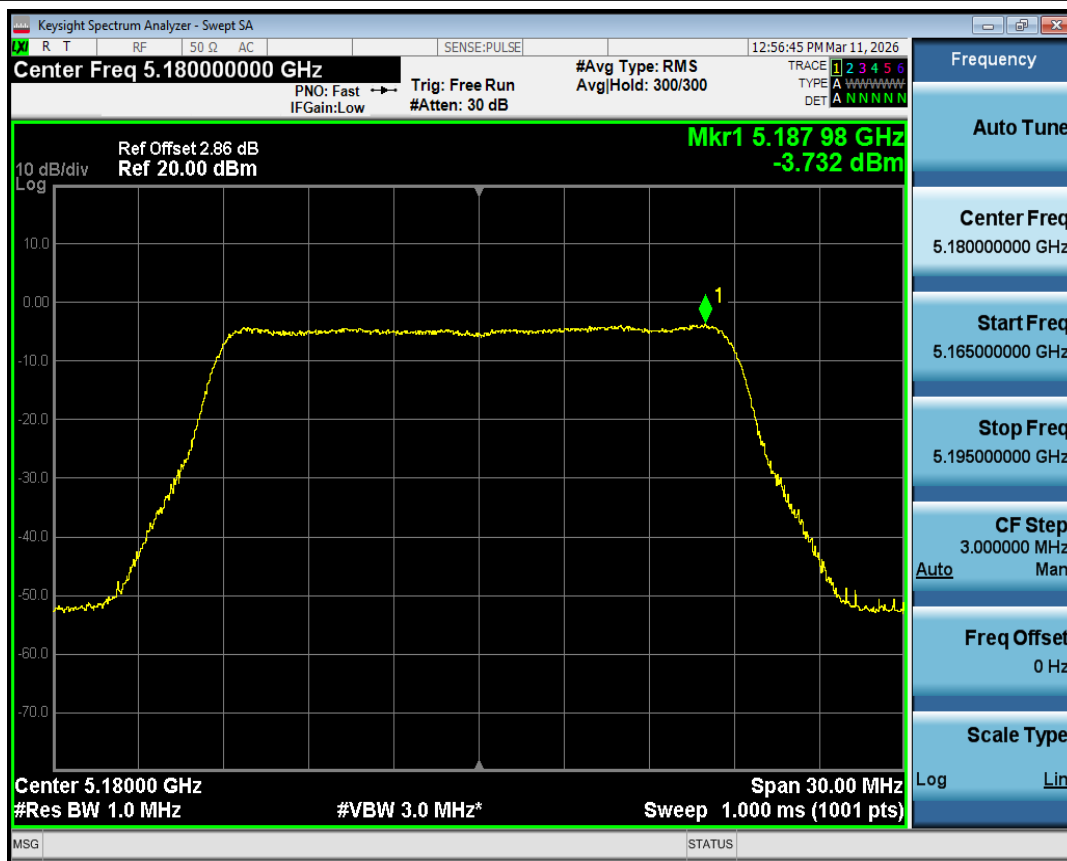
PSD NVNT n20 5240MHz Ant1



PSD NVNT n40 5190MHz Ant1



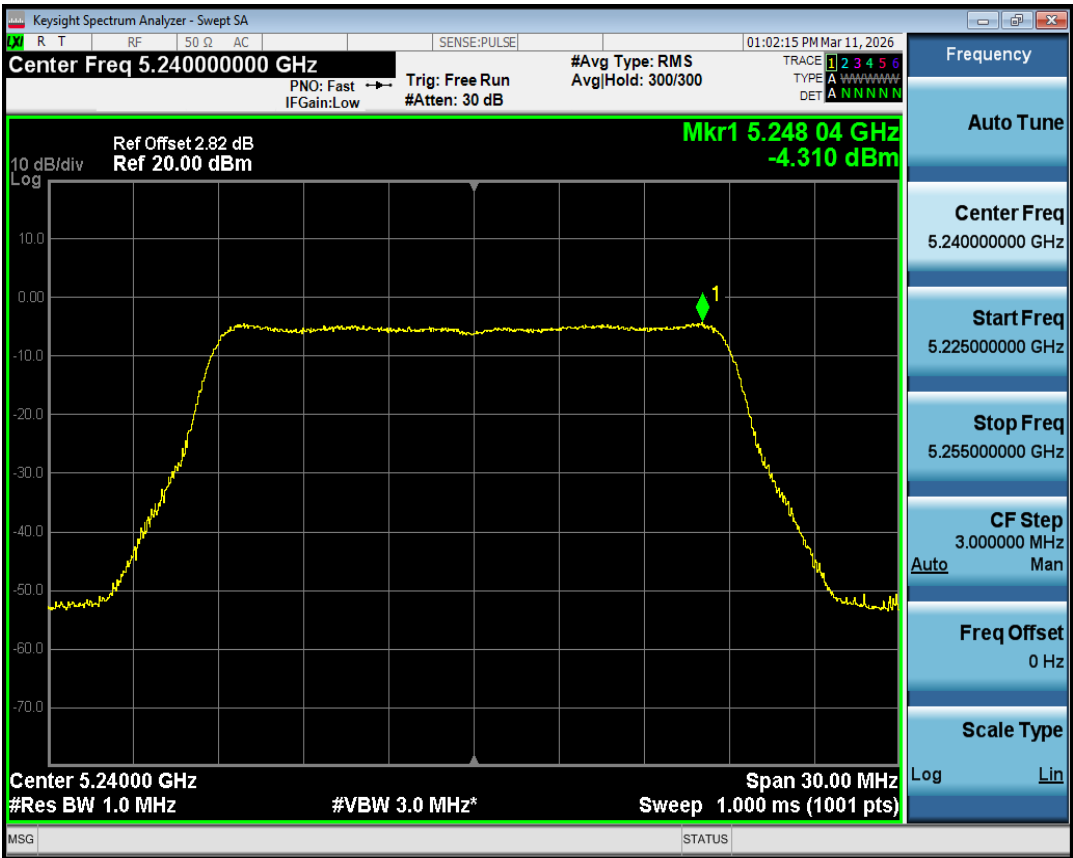
PSD NVNT n40 5230MHz Ant1



PSD NVNT ac20 5180MHz Ant1



PSD NVNT ac20 5200MHz Ant1



PSD NVNT ac20 5240MHz Ant1



PSD NVNT ac40 5190MHz Ant1



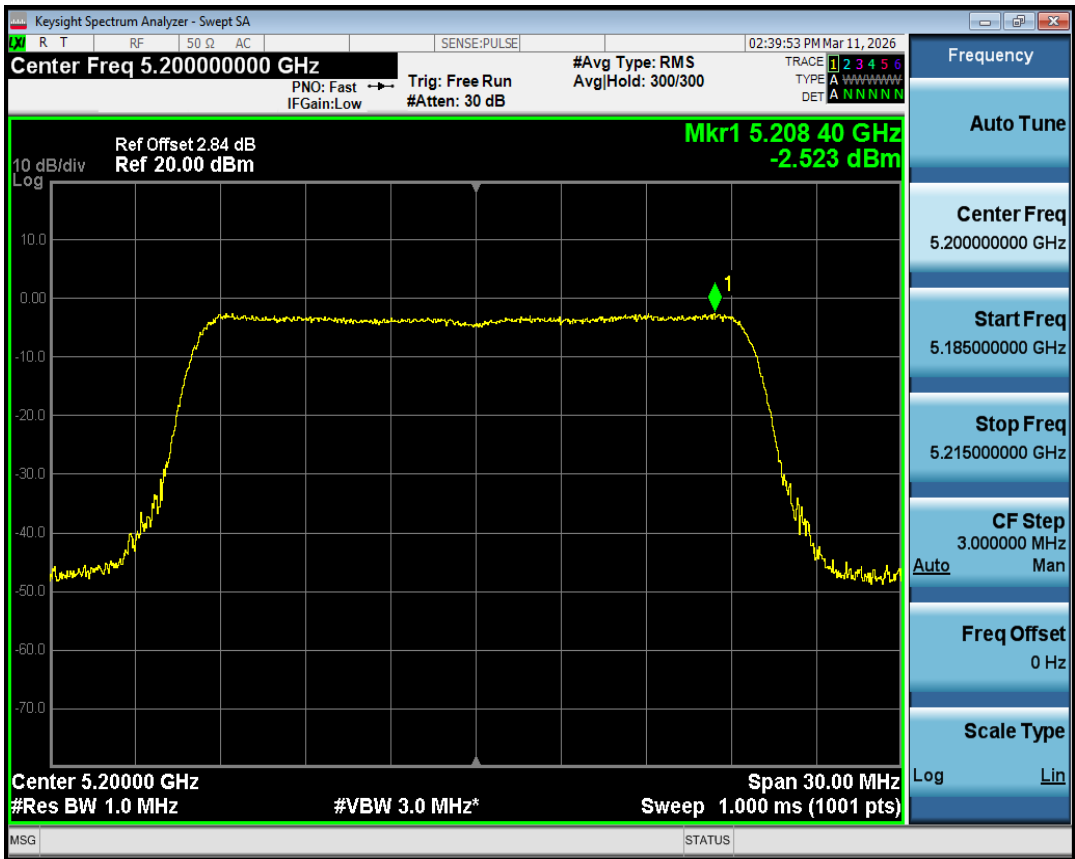
PSD NVNT ac40 5230MHz Ant1



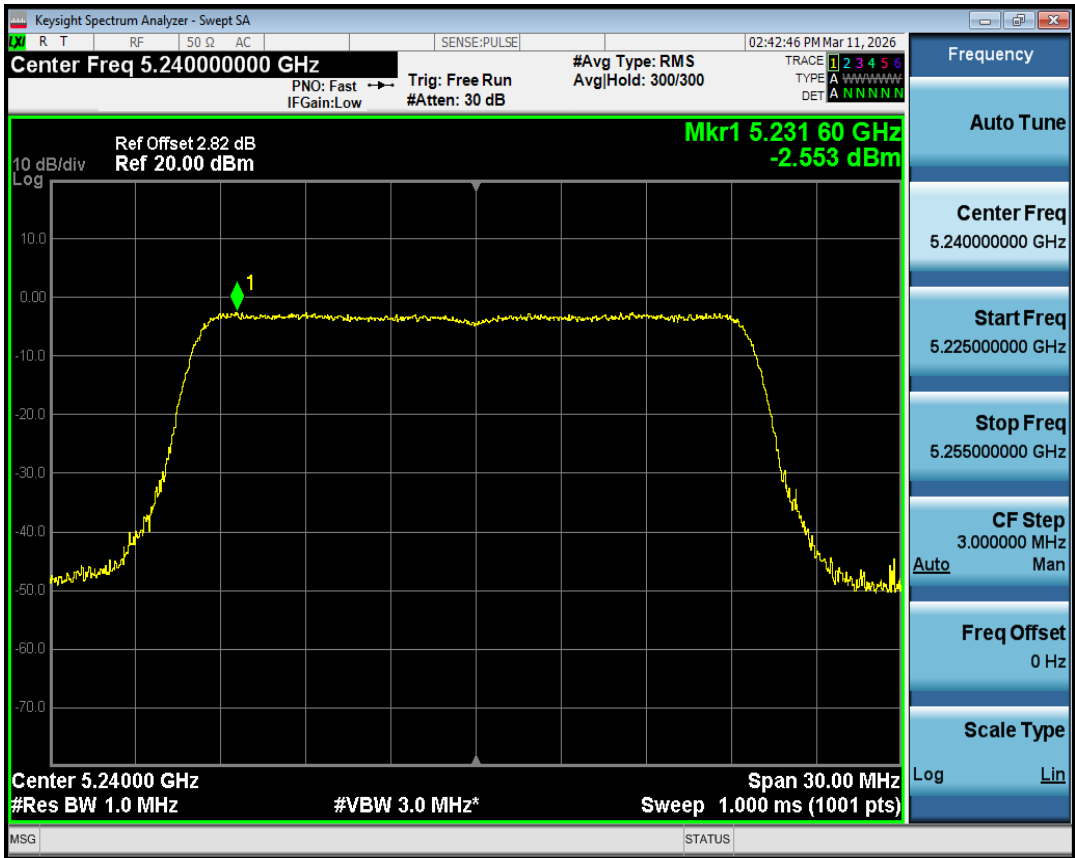
PSD NVNT ac80 5210MHz Ant1



PSD NVNT ax20 5180MHz Ant1



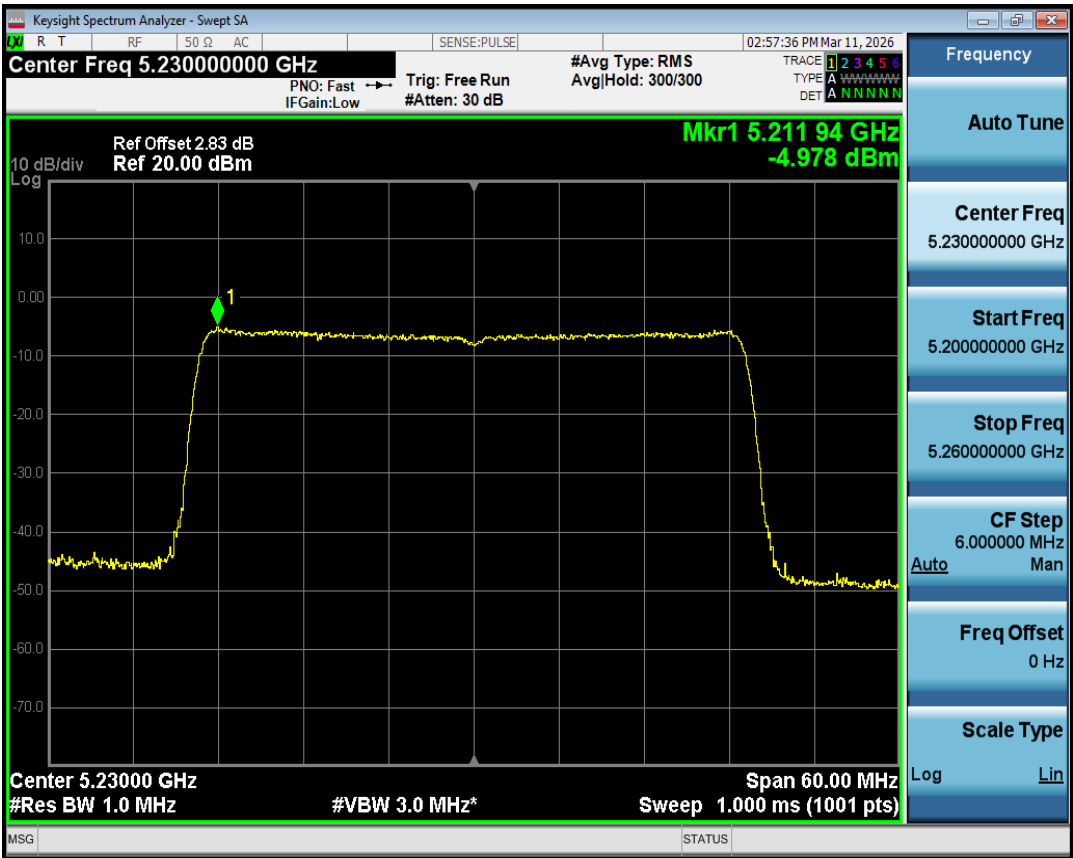
PSD NVNT ax20 5200MHz Ant1



PSD NVNT ax20 5240MHz Ant1



PSD NVNT ax40 5190MHz Ant1



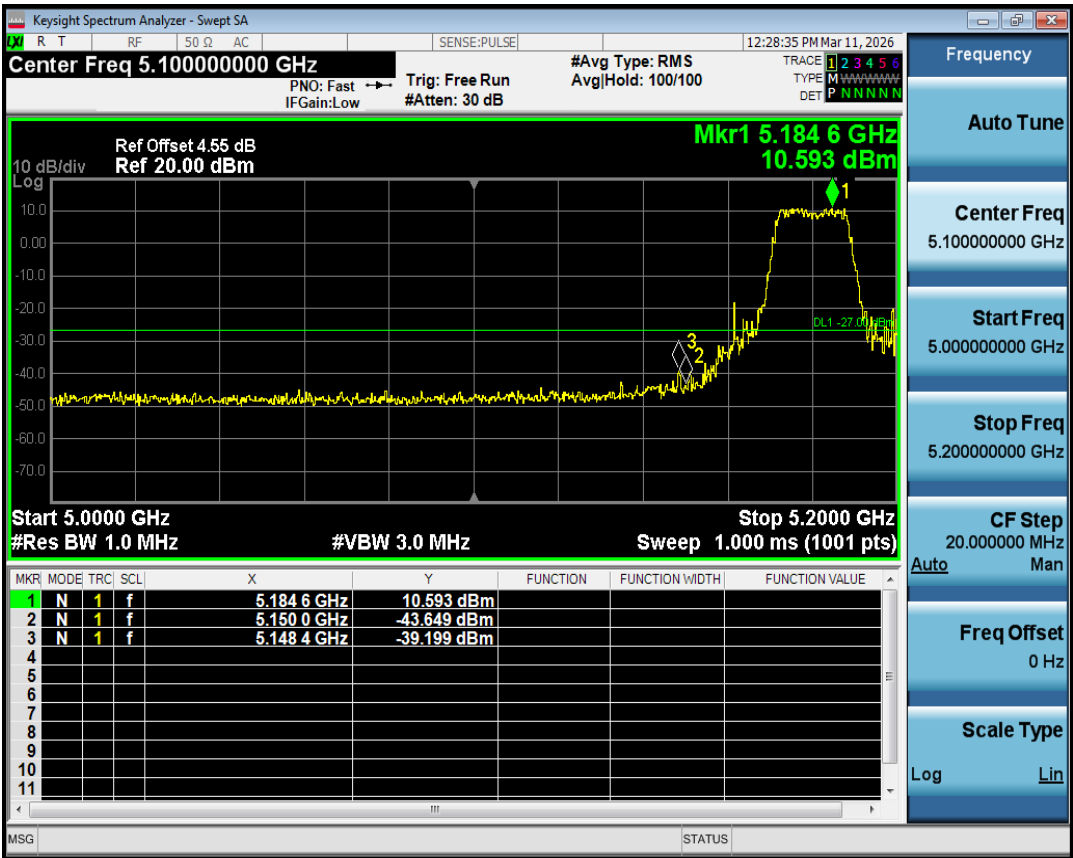
PSD NVNT ax40 5230MHz Ant1



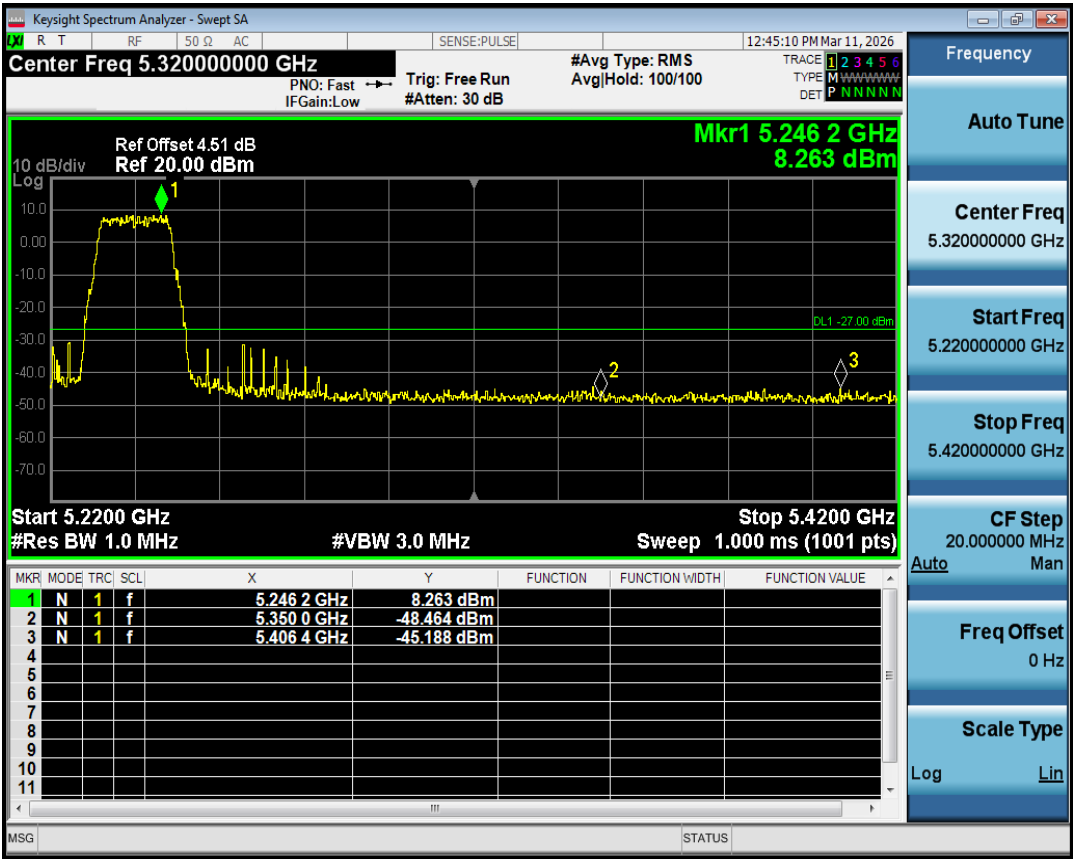
PSD NVNT ax80 5210MHz Ant1

Band Edge

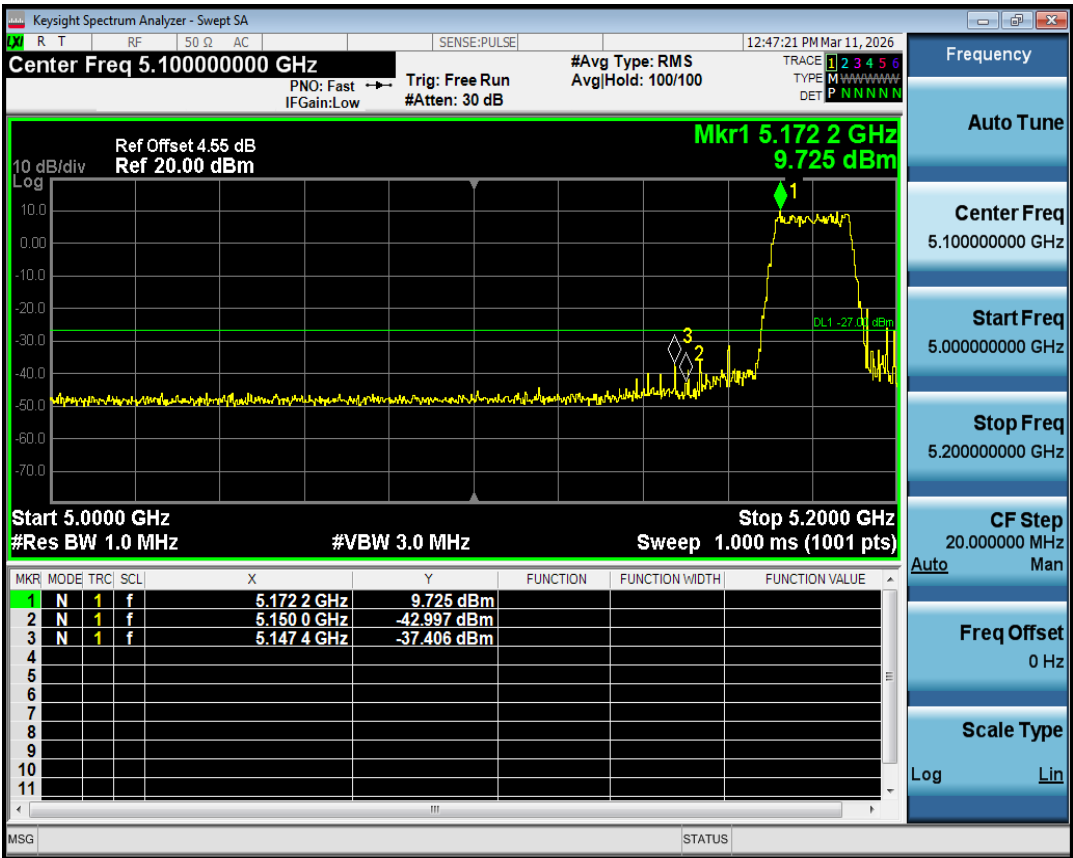
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-39.19	-27	Pass
NVNT	a	5240	Ant1	-45.18	-27	Pass
NVNT	n20	5180	Ant1	-37.4	-27	Pass
NVNT	n20	5240	Ant1	-44.97	-27	Pass
NVNT	n40	5190	Ant1	-33.54	-27	Pass
NVNT	n40	5230	Ant1	-45.1	-27	Pass
NVNT	ac20	5180	Ant1	-41.7	-27	Pass
NVNT	ac20	5240	Ant1	-44.98	-27	Pass
NVNT	ac40	5190	Ant1	-38.29	-27	Pass
NVNT	ac40	5230	Ant1	-45.33	-27	Pass
NVNT	ac80	5210	Ant1	-35.73	-27	Pass
NVNT	ax20	5180	Ant1	-35.79	-27	Pass
NVNT	ax20	5240	Ant1	-45.1	-27	Pass
NVNT	ax40	5190	Ant1	-37.08	-27	Pass
NVNT	ax40	5230	Ant1	-44.24	-27	Pass
NVNT	ax80	5210	Ant1	-42.18	-27	Pass



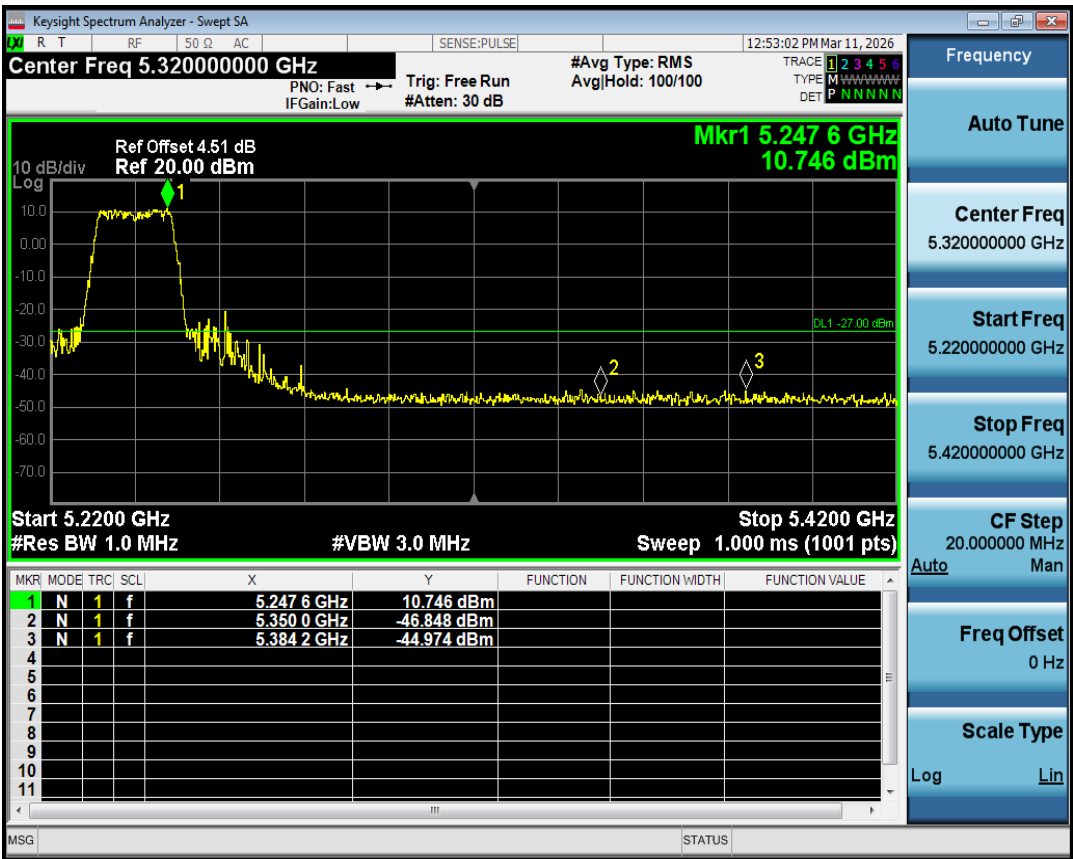
Band Edge NVNT a 5180MHz Low Ant1



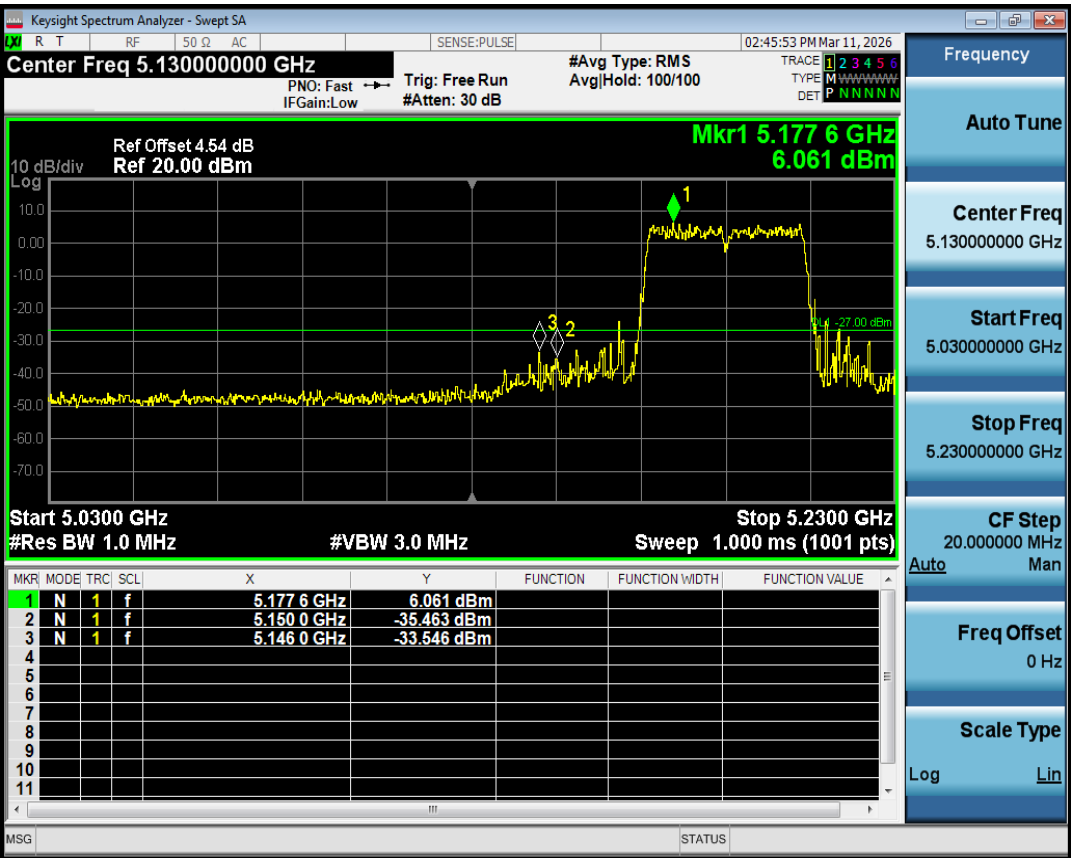
Band Edge NVNT a 5240MHz High Ant1



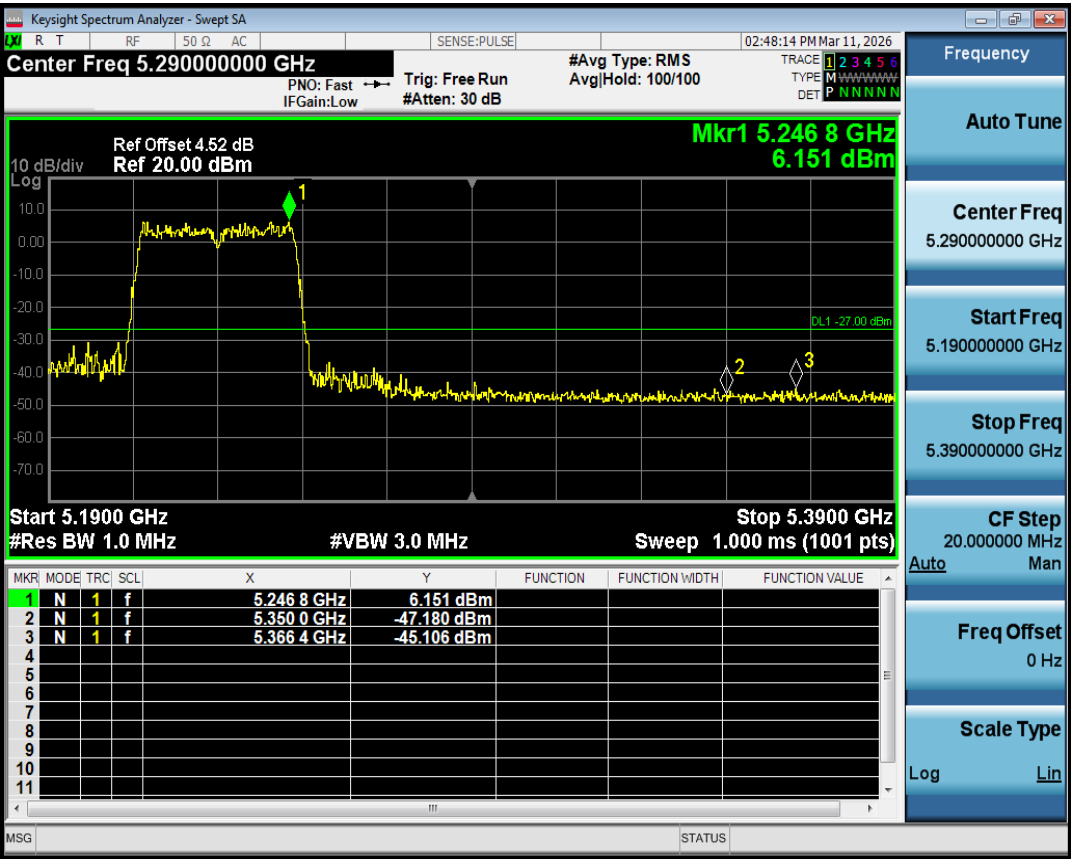
Band Edge NVNT n20 5180MHz Low Ant1



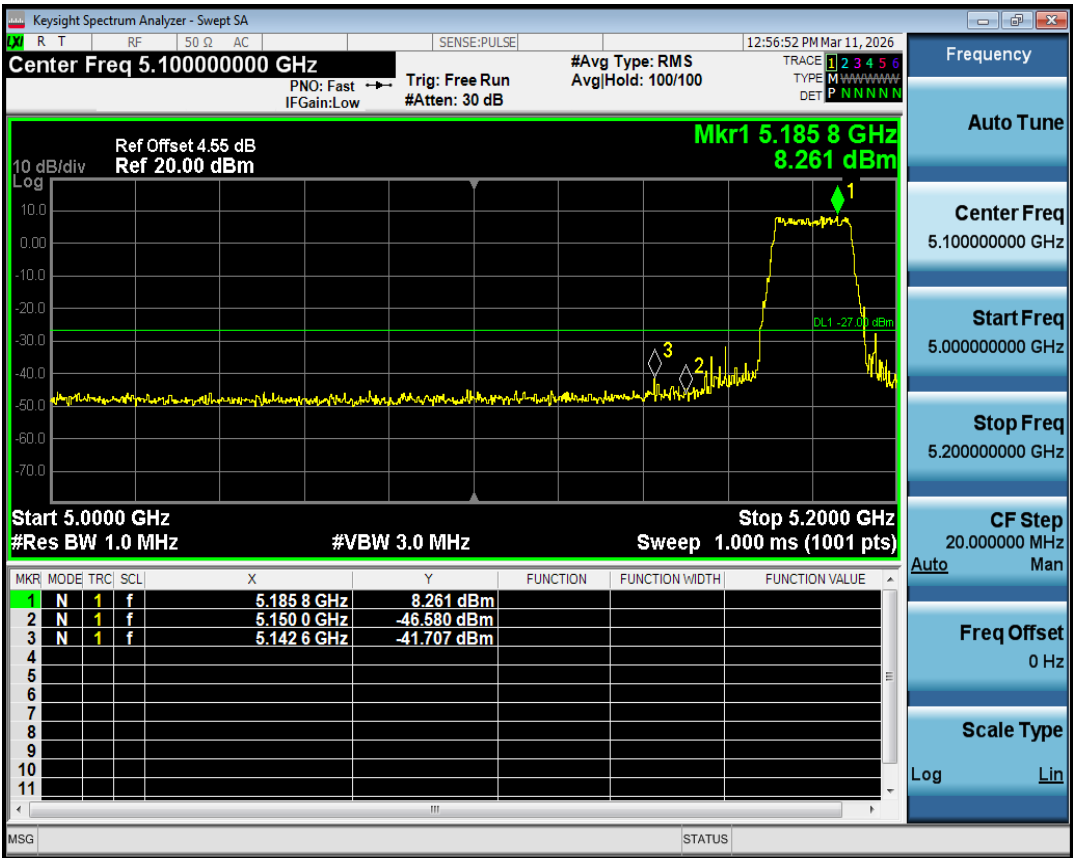
Band Edge NVNT n20 5240MHz High Ant1



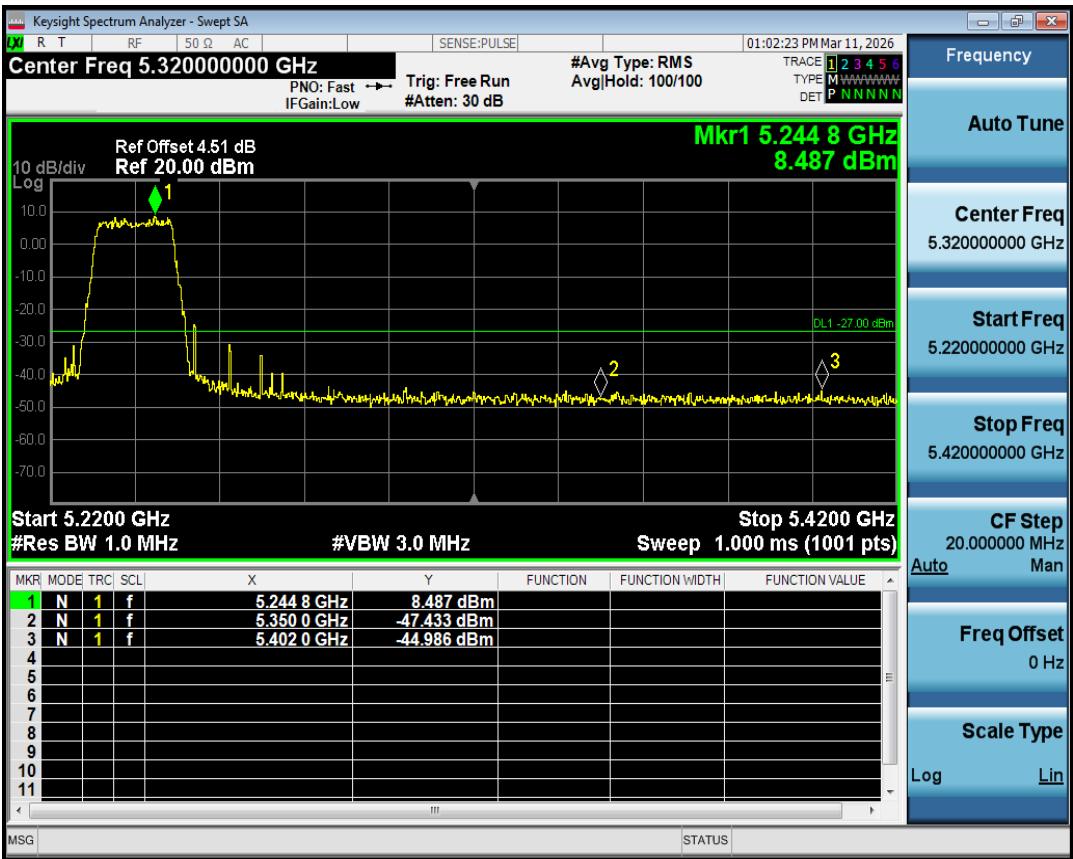
Band Edge NVNT n40 5190MHz Low Ant1



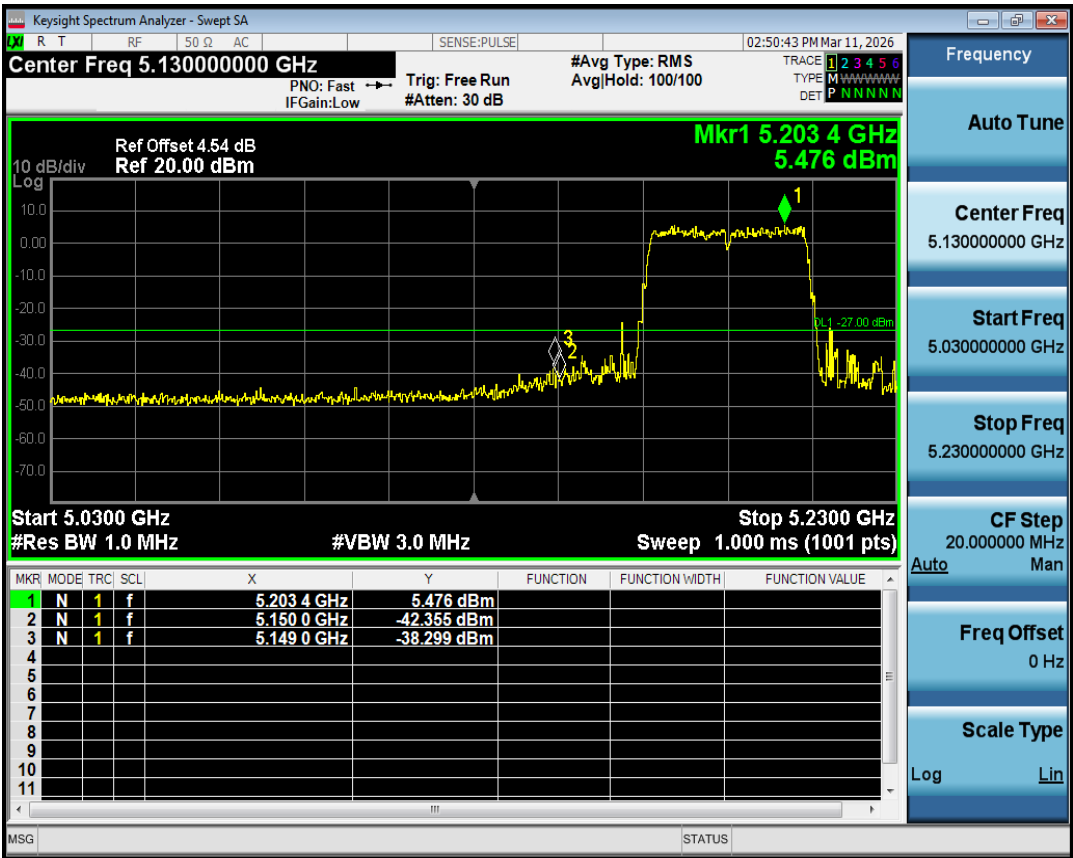
Band Edge NVNT n40 5230MHz High Ant1



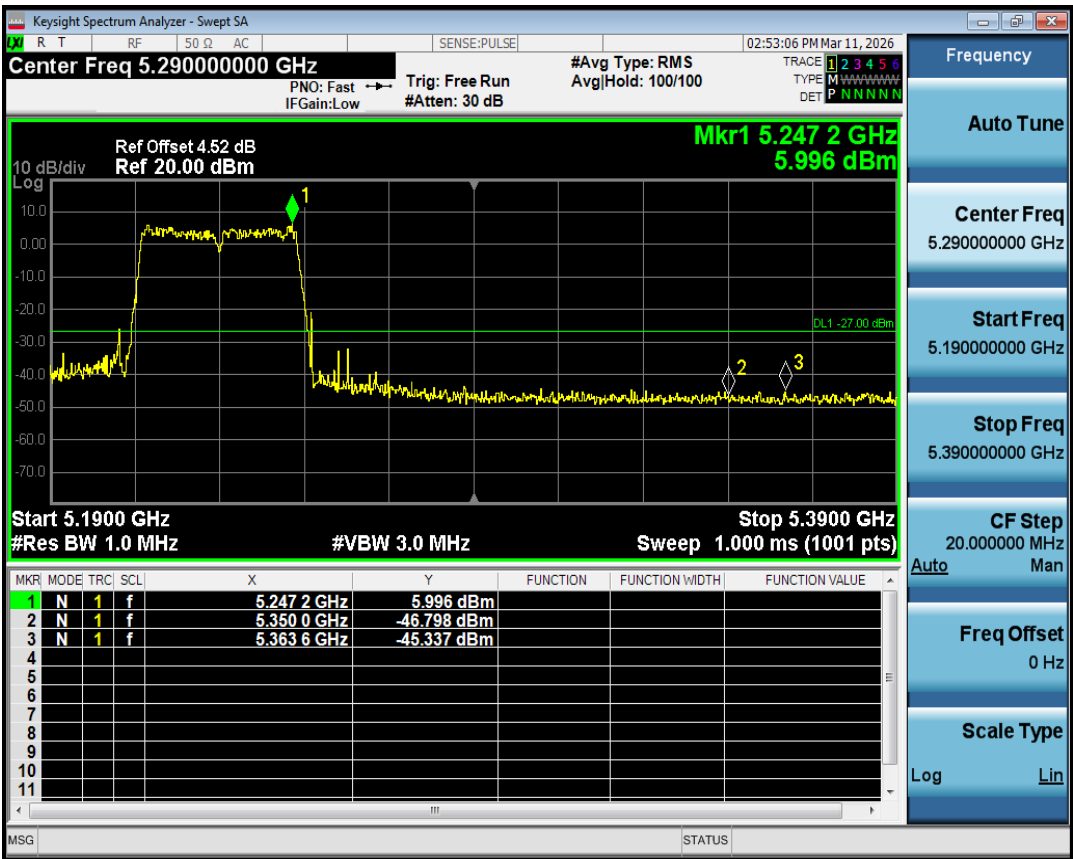
Band Edge NVNT ac20 5180MHz Low Ant1



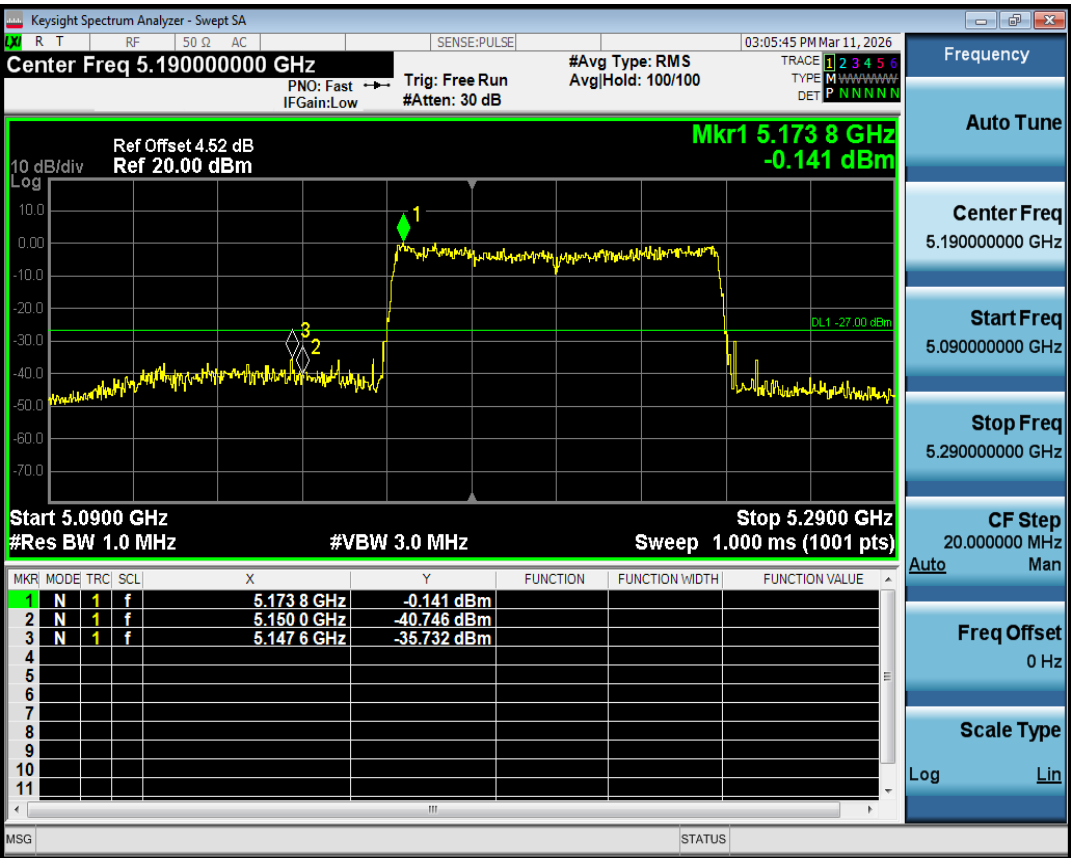
Band Edge NVNT ac20 5240MHz High Ant1



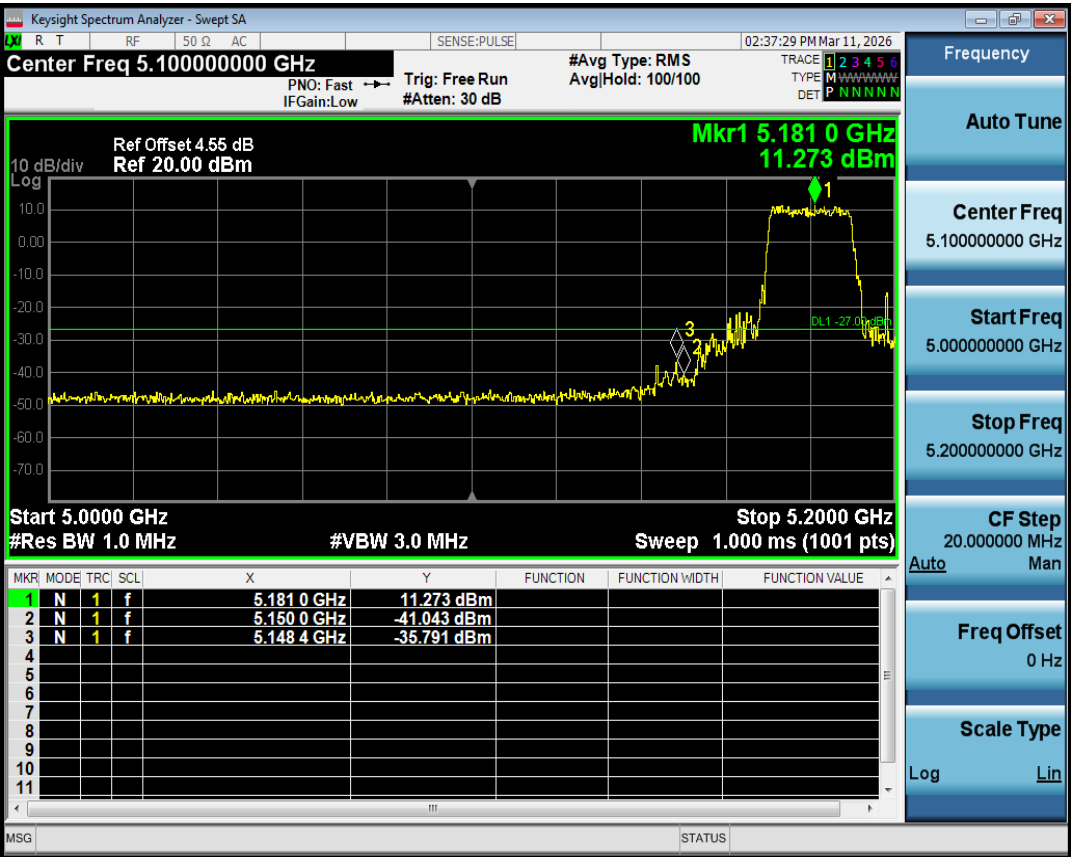
Band Edge NVNT ac40 5190MHz Low Ant1



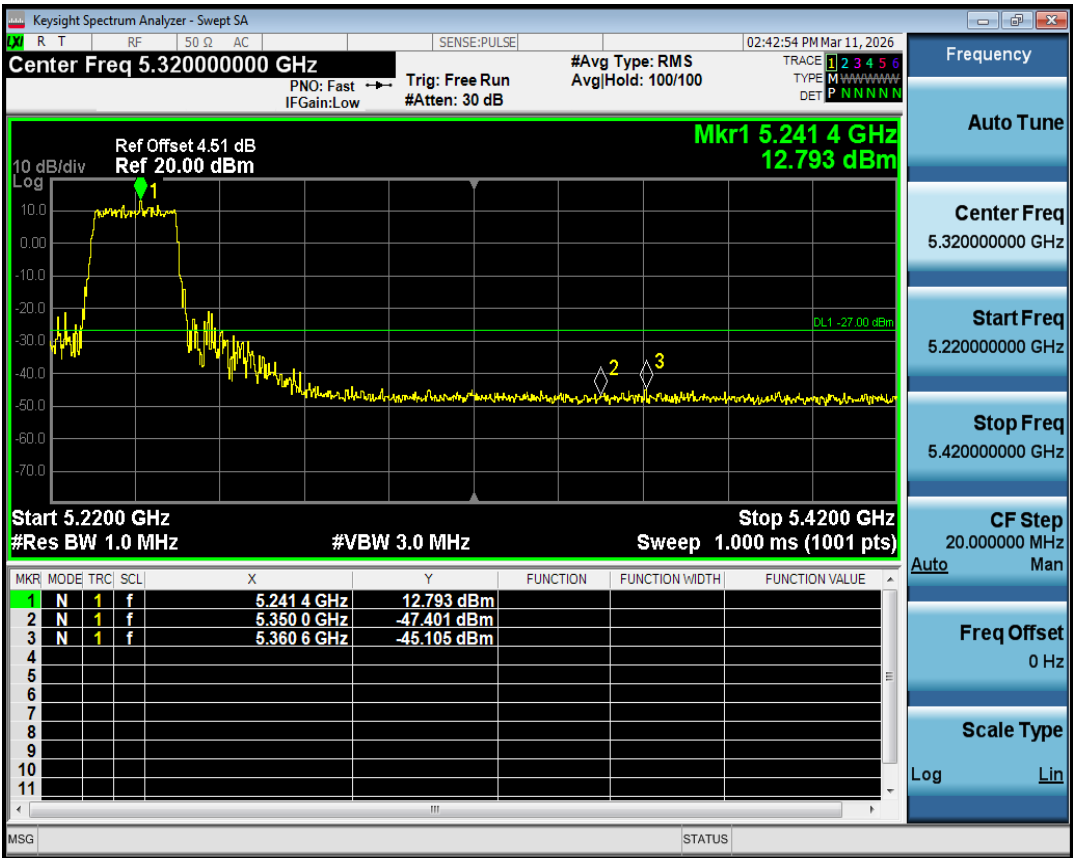
Band Edge NVNT ac40 5230MHz High Ant1



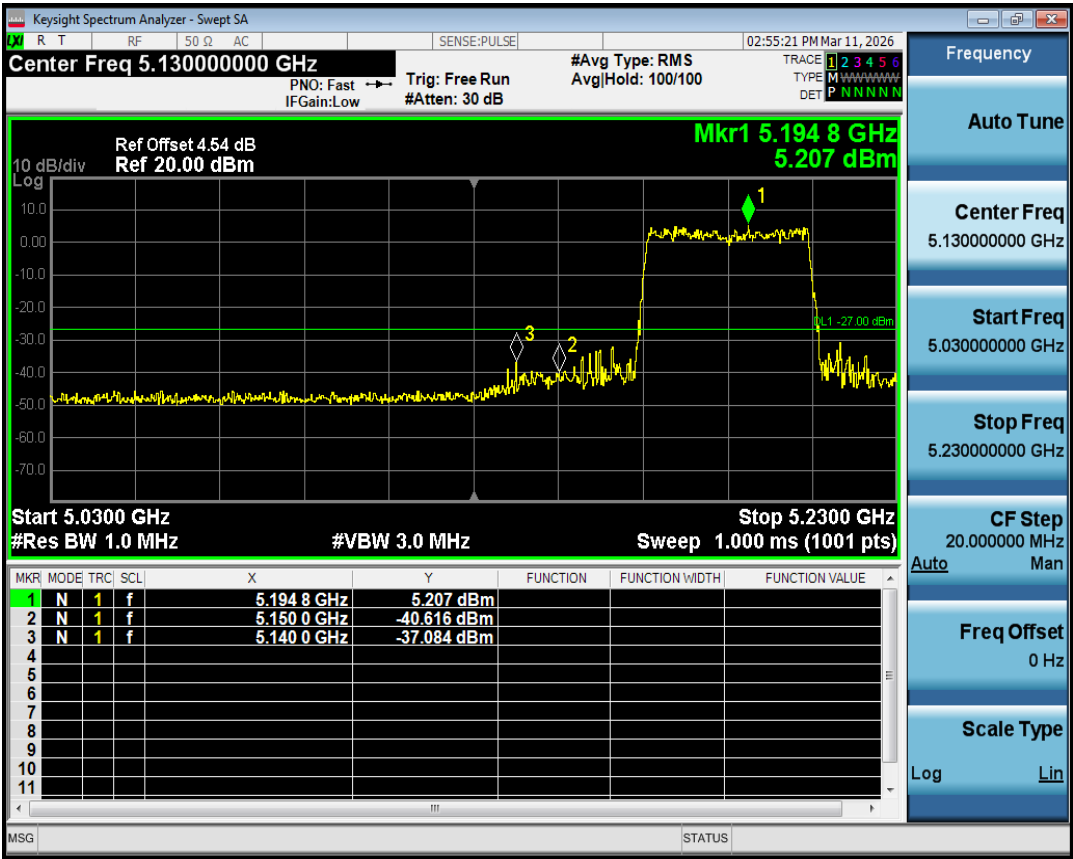
Band Edge NVNT ac80 5210MHz Low Ant1



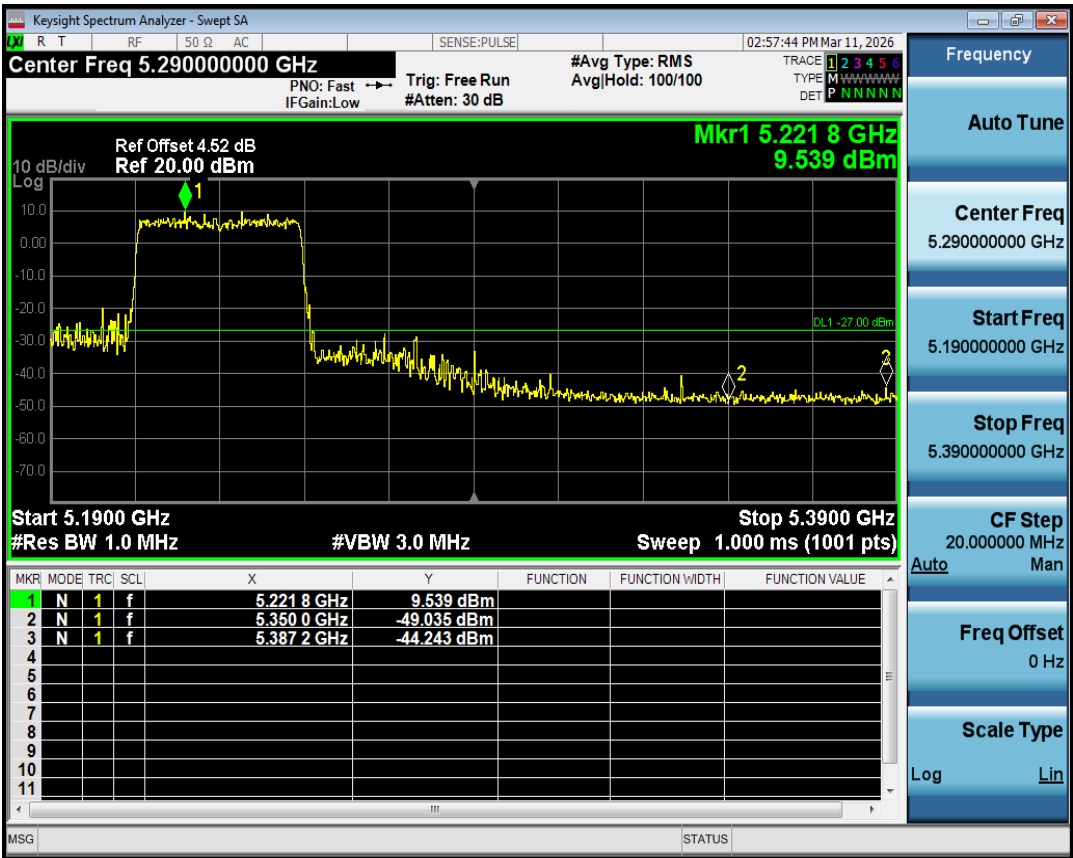
Band Edge NVNT ax20 5180MHz Low Ant1



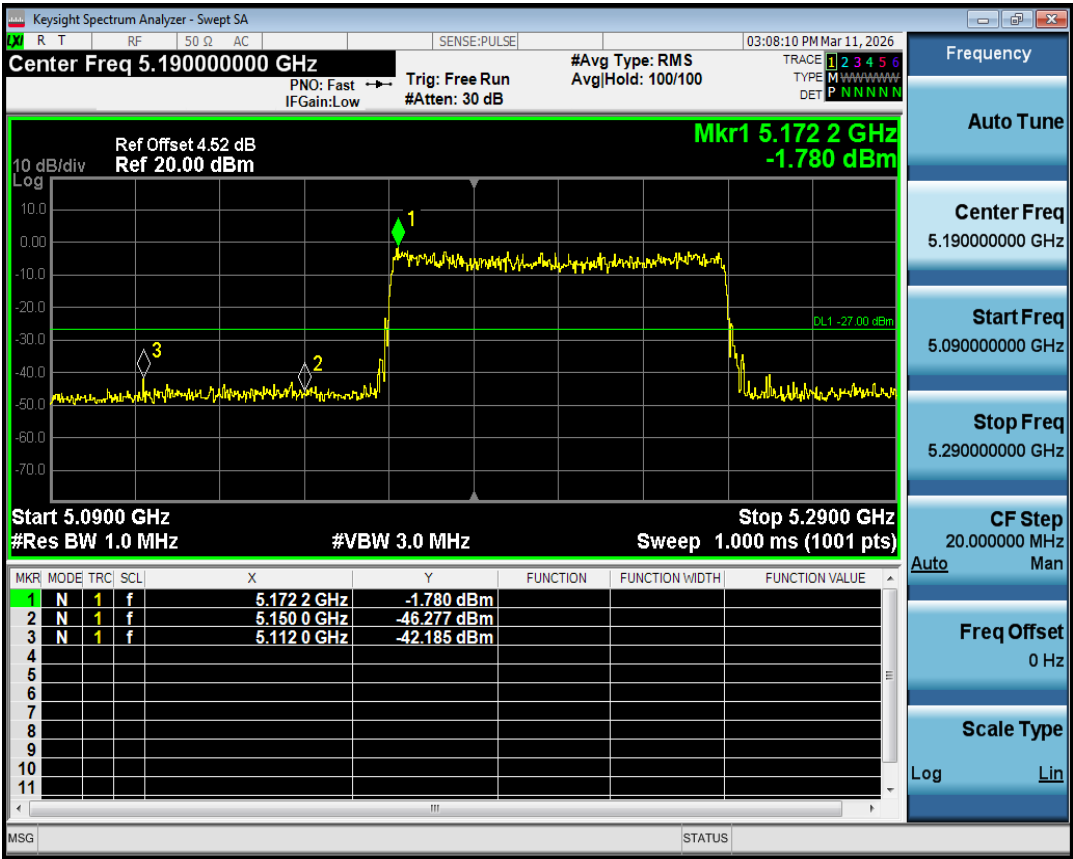
Band Edge NVNT ax20 5240MHz High Ant1



Band Edge NVNT ax40 5190MHz Low Ant1



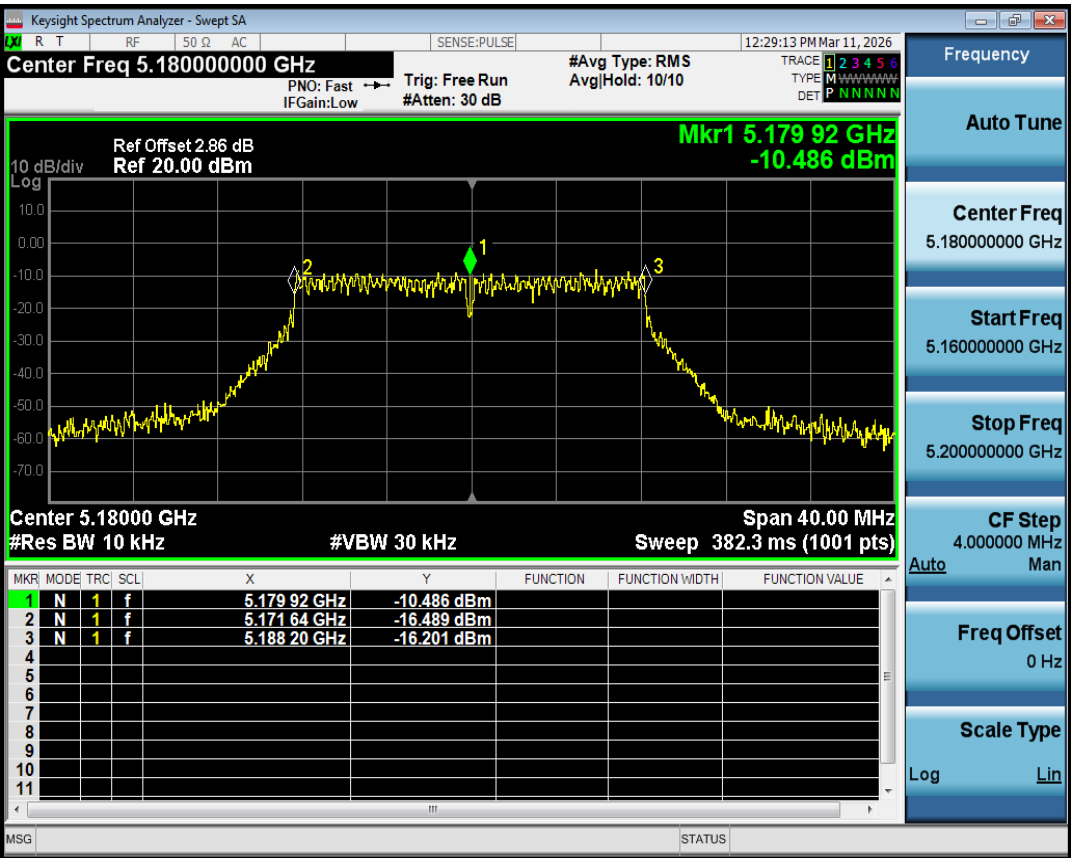
Band Edge NVNT ax40 5230MHz High Ant1



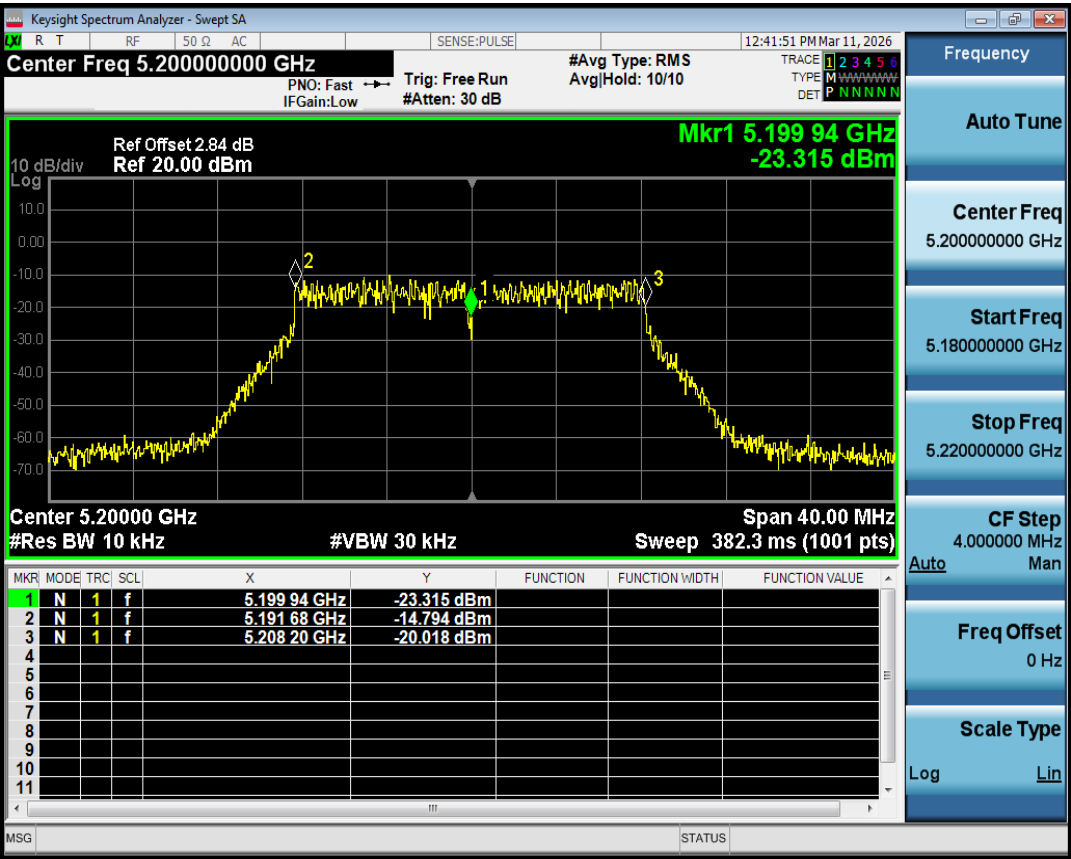
Band Edge NVNT ax80 5210MHz Low Ant1

Frequency Stability

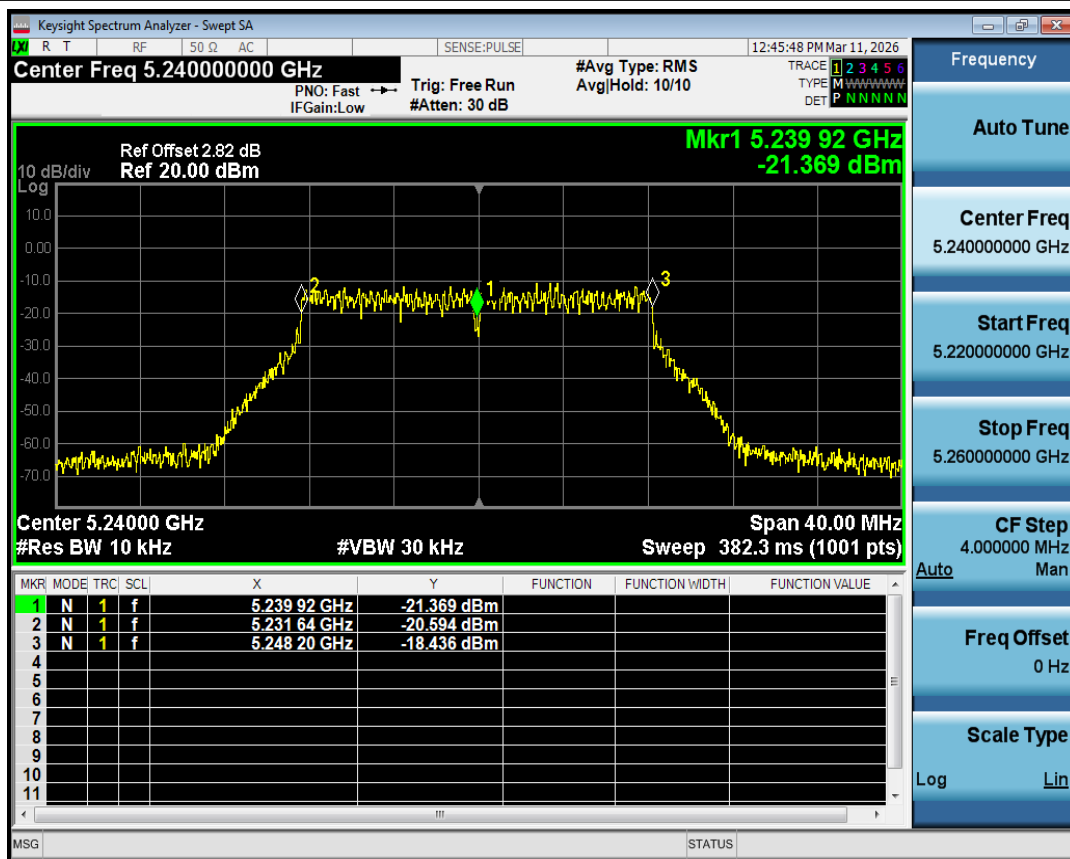
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5180	Ant1	5179.92	-80000	-15.44	25	Pass
NVNT	a	5200	Ant1	5199.94	-60000	-11.54	25	Pass
NVNT	a	5240	Ant1	5239.92	-80000	-15.27	25	Pass
NVNT	n20	5180	Ant1	5179.92	-80000	-15.44	25	Pass
NVNT	n20	5200	Ant1	5199.92	-80000	-15.38	25	Pass
NVNT	n20	5240	Ant1	5239.92	-80000	-15.27	25	Pass
NVNT	n40	5190	Ant1	5190	0	0	25	Pass
NVNT	n40	5230	Ant1	5229.92	-80000	-15.3	25	Pass
NVNT	ac20	5180	Ant1	5179.92	-80000	-15.44	25	Pass
NVNT	ac20	5200	Ant1	5199.94	-60000	-11.54	25	Pass
NVNT	ac20	5240	Ant1	5239.94	-60000	-11.45	25	Pass
NVNT	ac40	5190	Ant1	5189.92	-80000	-15.41	25	Pass
NVNT	ac40	5230	Ant1	5229.92	-80000	-15.3	25	Pass
NVNT	ac80	5210	Ant1	5209.92	-80000	-15.36	25	Pass
NVNT	ax20	5180	Ant1	5179.92	-80000	-15.44	25	Pass
NVNT	ax20	5200	Ant1	5199.92	-80000	-15.38	25	Pass
NVNT	ax20	5240	Ant1	5239.92	-80000	-15.27	25	Pass
NVNT	ax40	5190	Ant1	5189.92	-80000	-15.41	25	Pass
NVNT	ax40	5230	Ant1	5229.92	-80000	-15.3	25	Pass
NVNT	ax80	5210	Ant1	5209.92	-80000	-15.36	25	Pass



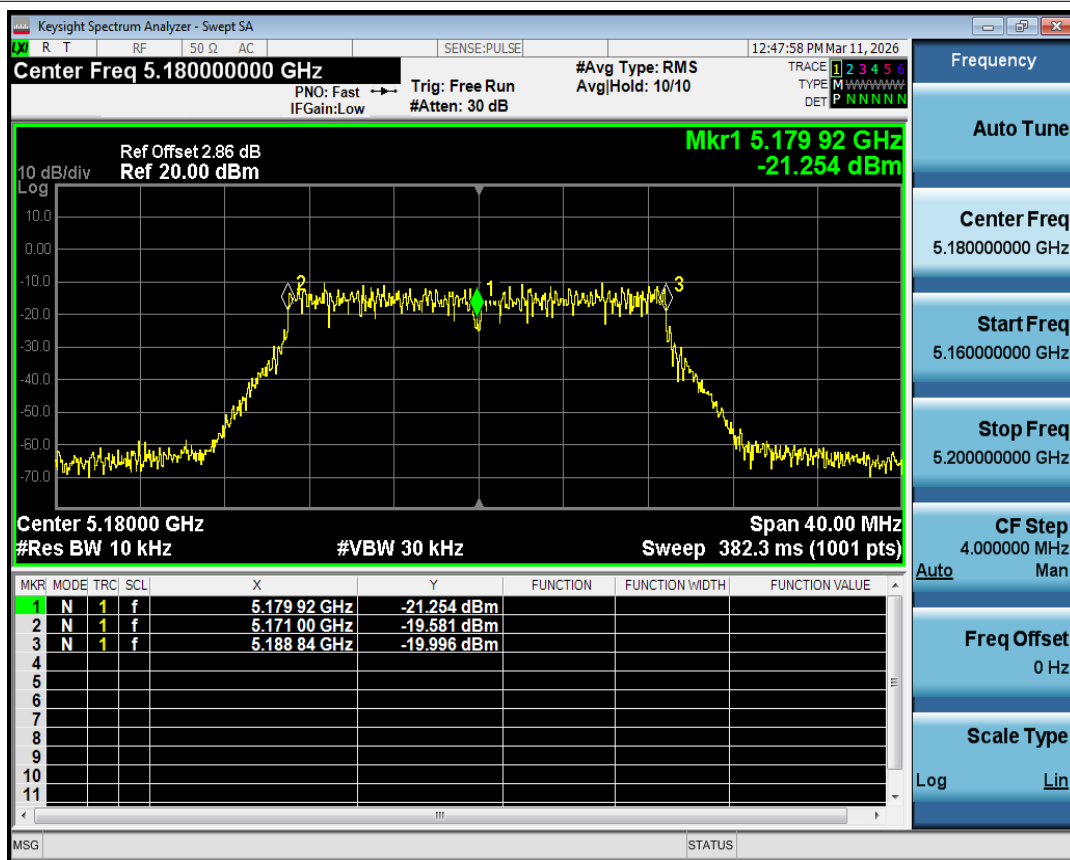
Freq. Stability NVNT a 5180MHz Ant1



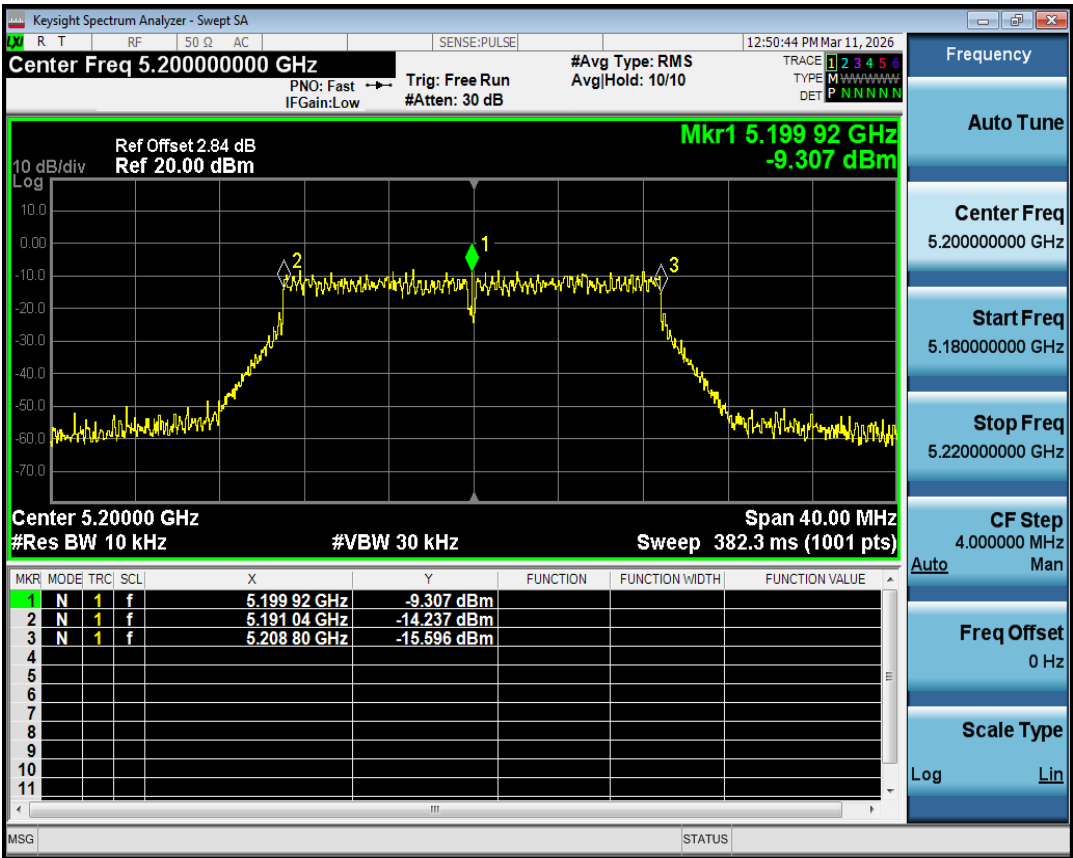
Freq. Stability NVNT a 5200MHz Ant1



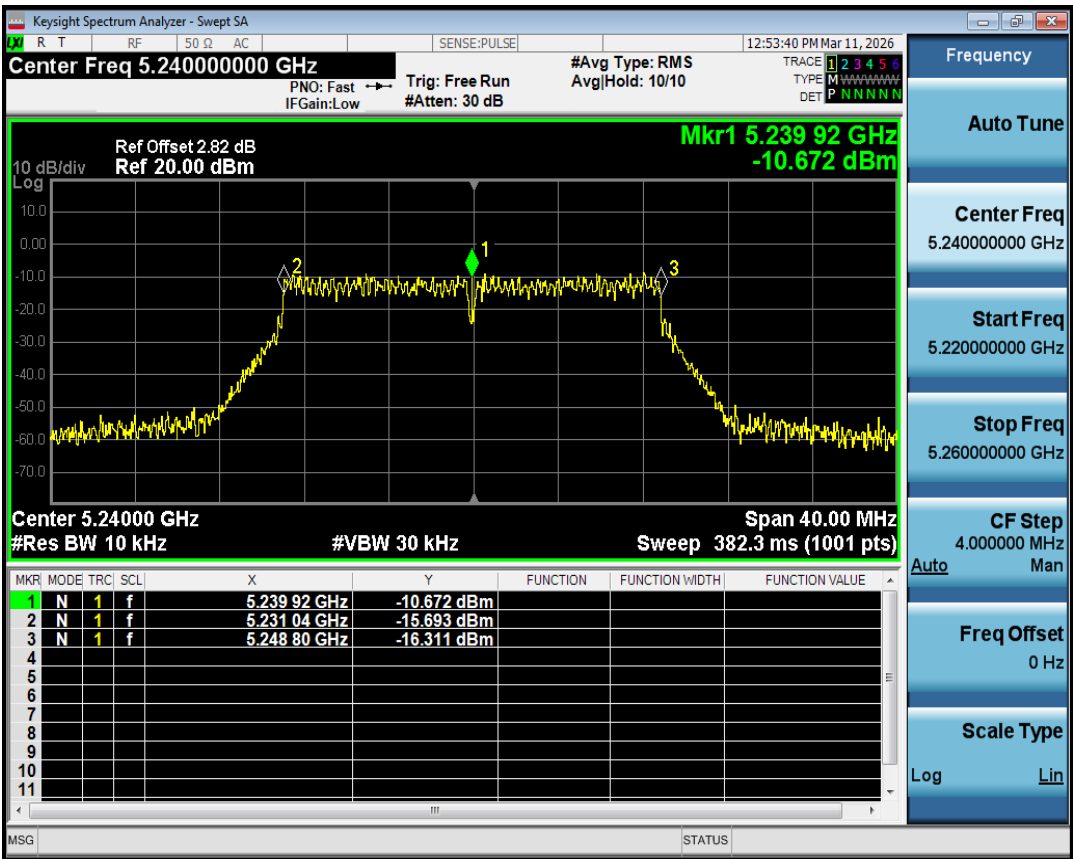
Freq. Stability NVNT a 5240MHz Ant1



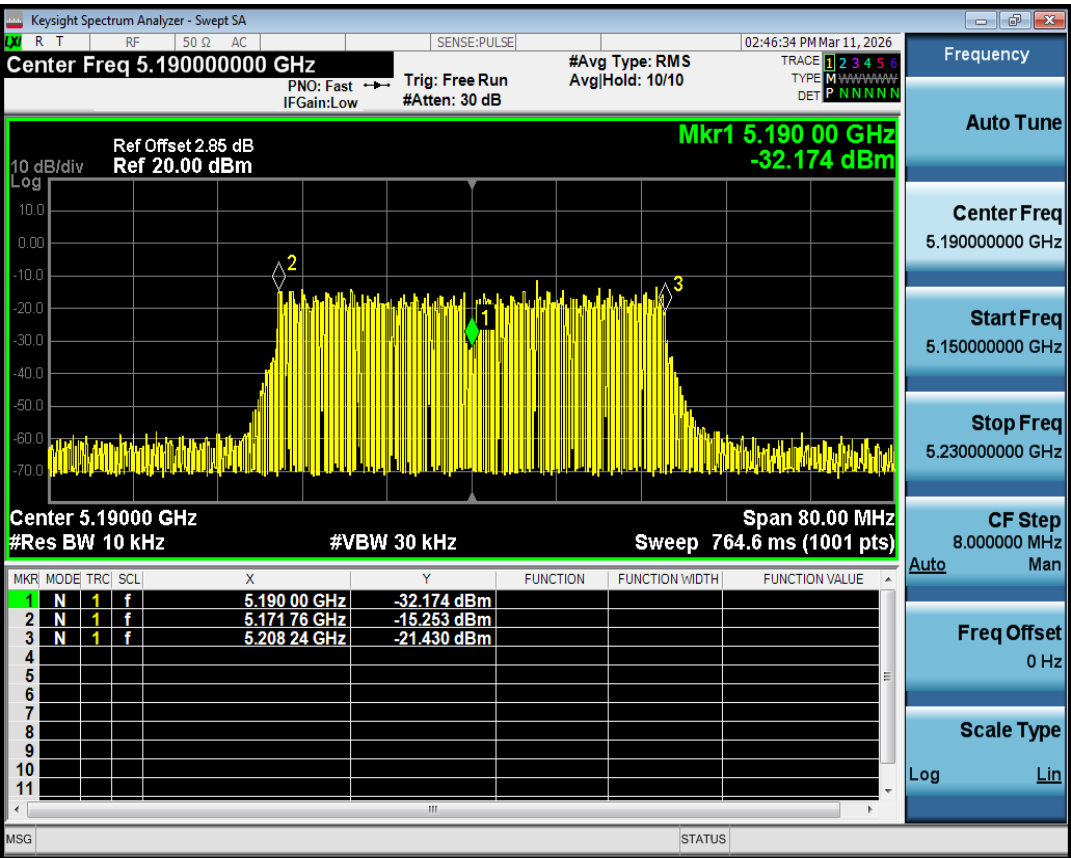
Freq. Stability NVNT n20 5180MHz Ant1



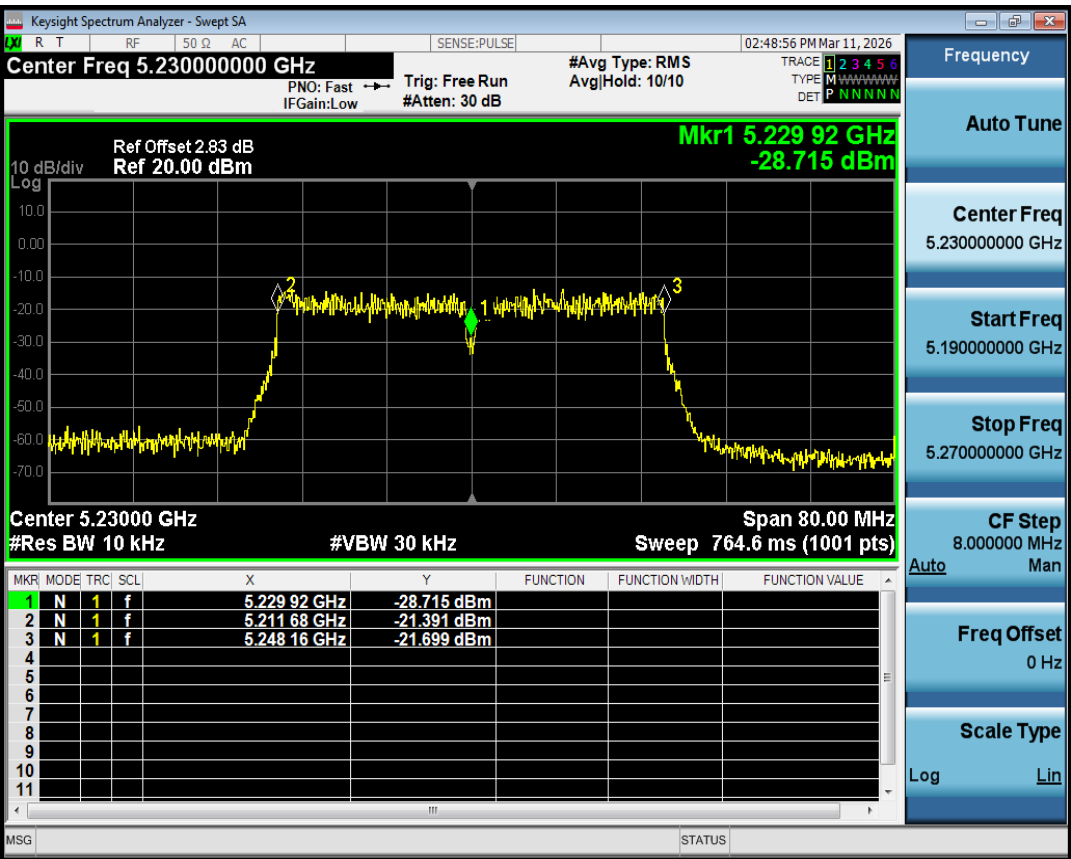
Freq. Stability NVNT n20 5200MHz Ant1



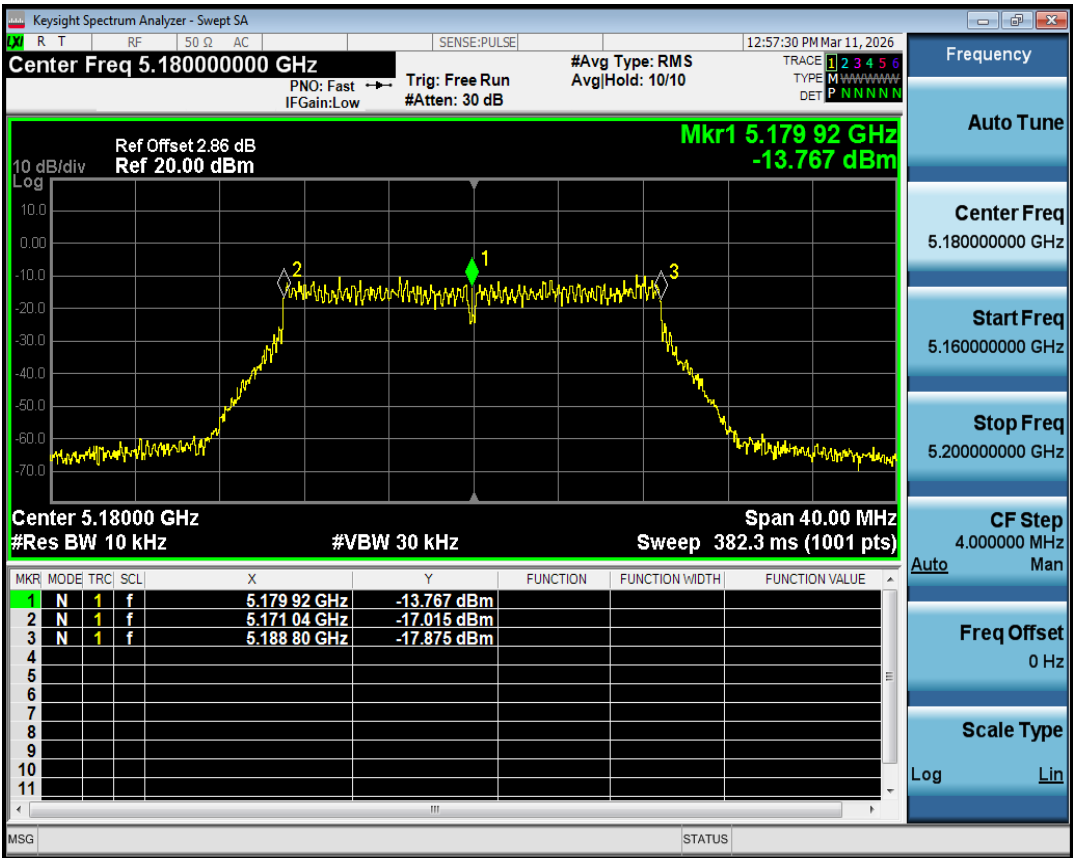
Freq. Stability NVNT n20 5240MHz Ant1



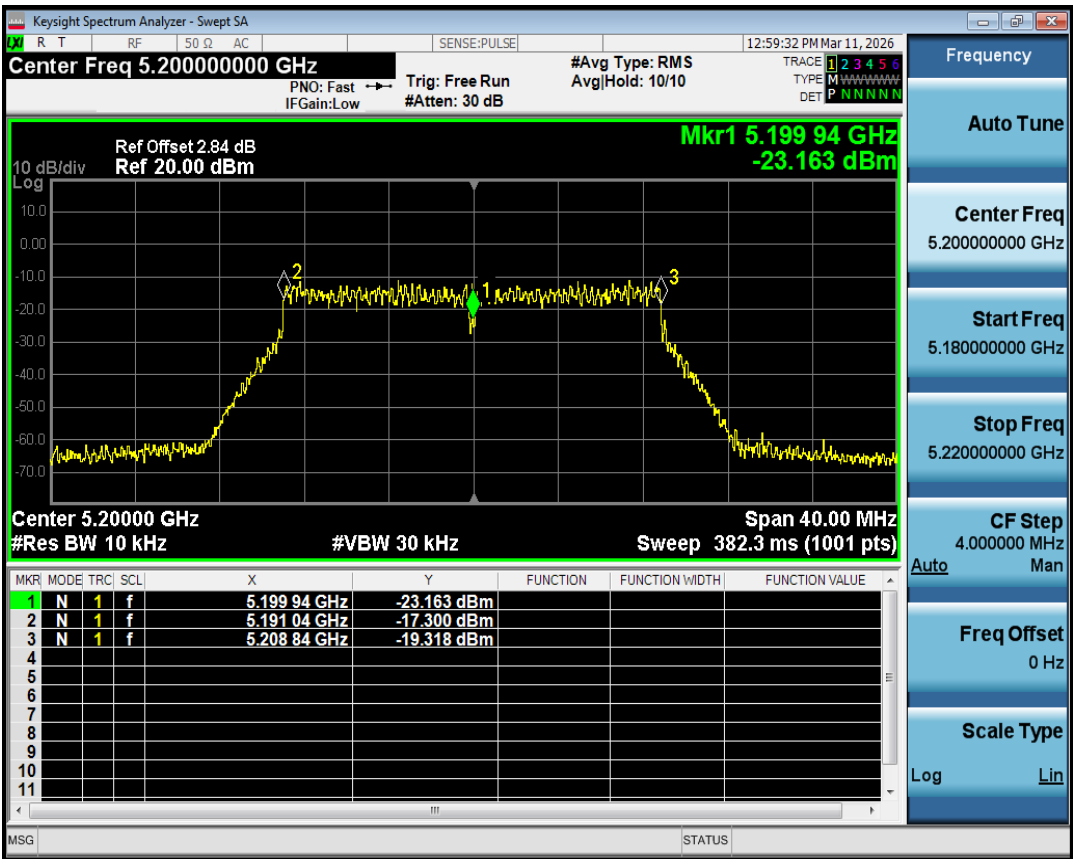
Freq. Stability NVNT n40 5190MHz Ant1



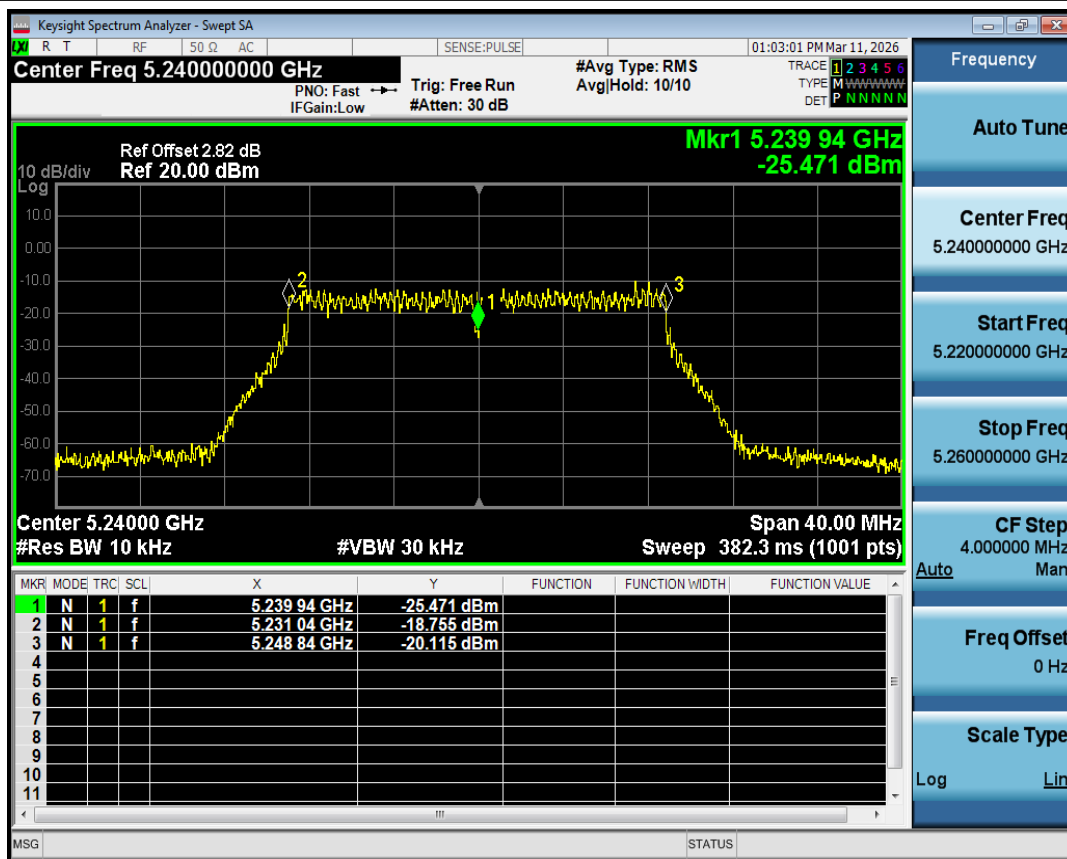
Freq. Stability NVNT n40 5230MHz Ant1



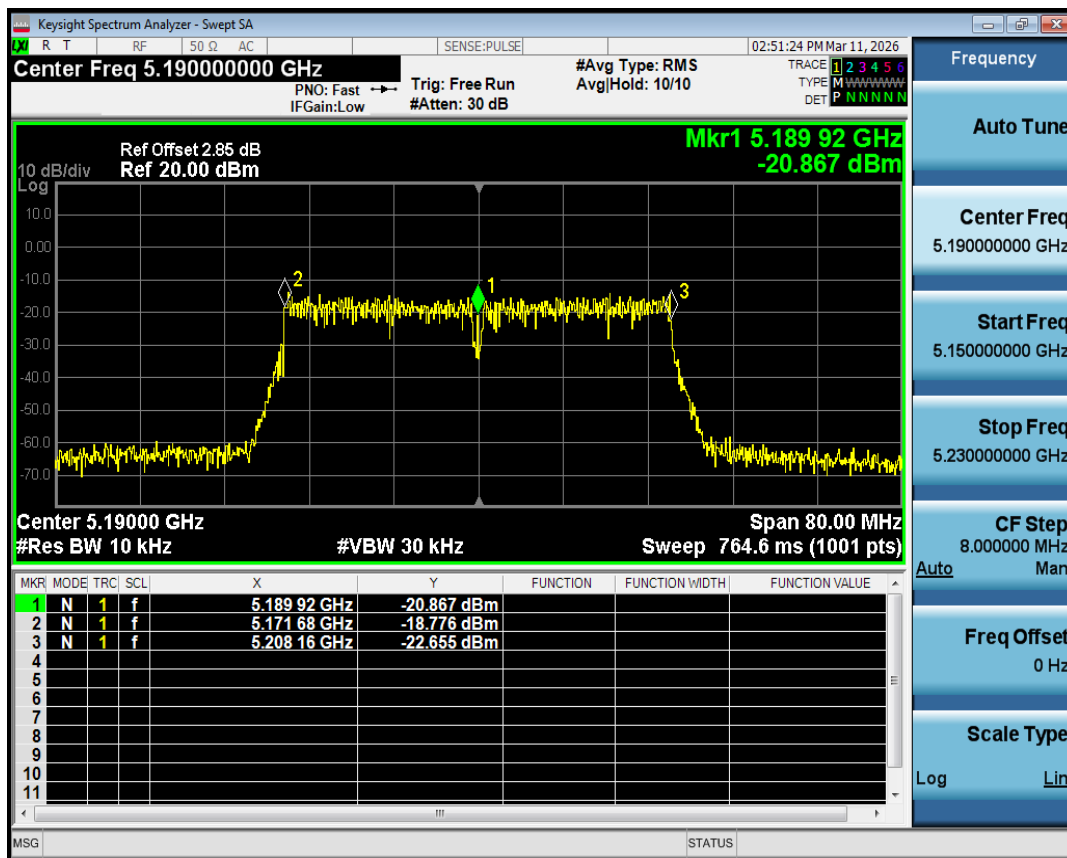
Freq. Stability NVNT ac20 5180MHz Ant1



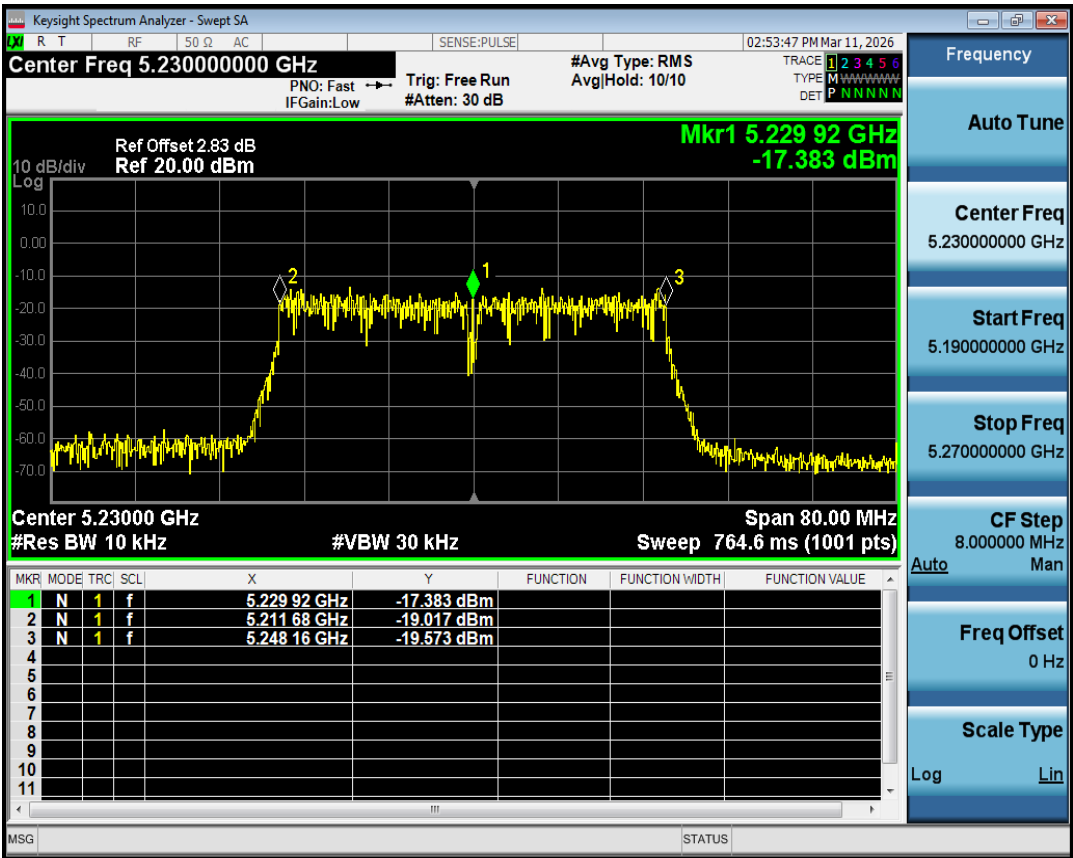
Freq. Stability NVNT ac20 5200MHz Ant1



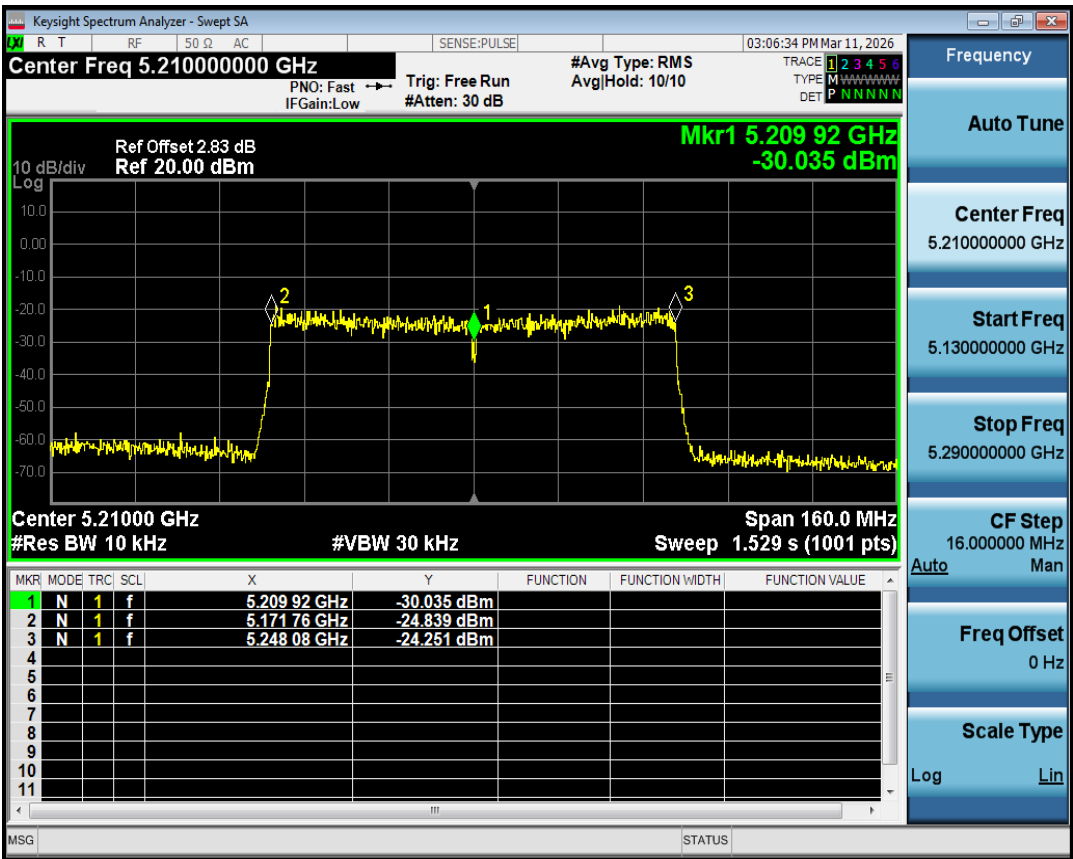
Freq. Stability NVNT ac20 5240MHz Ant1



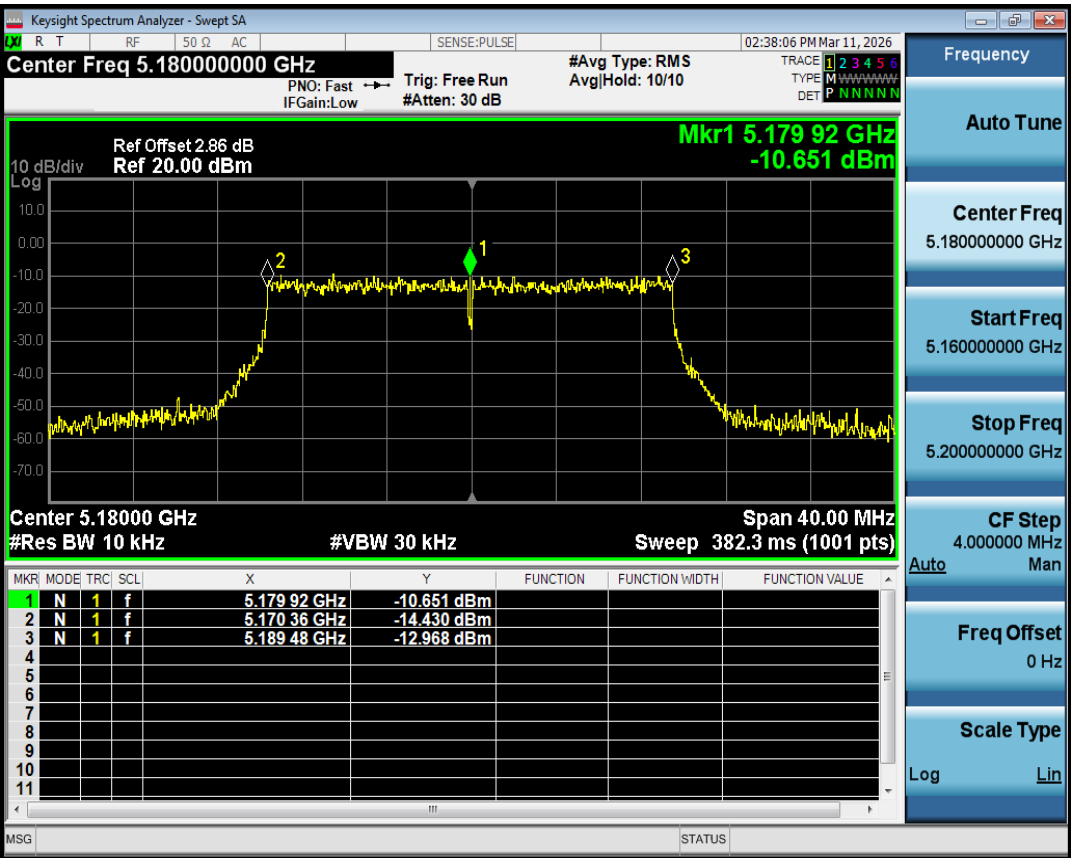
Freq. Stability NVNT ac40 5190MHz Ant1



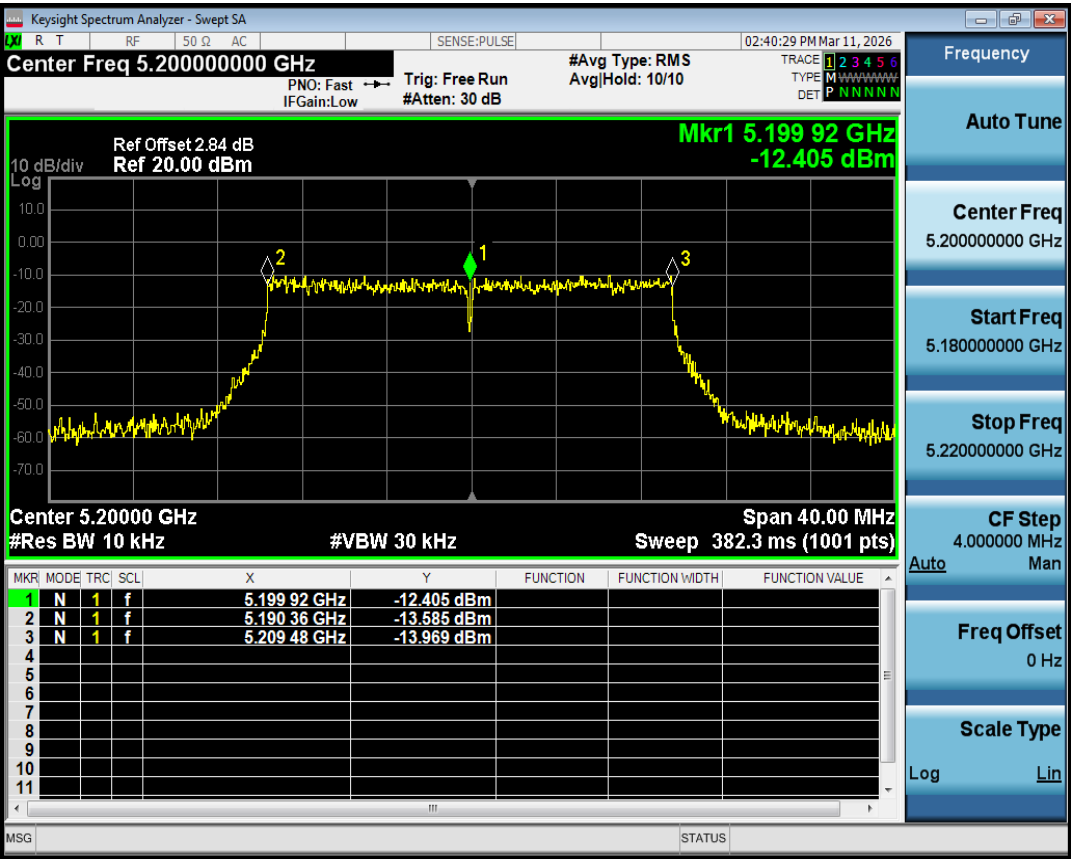
Freq. Stability NVNT ac40 5230MHz Ant1



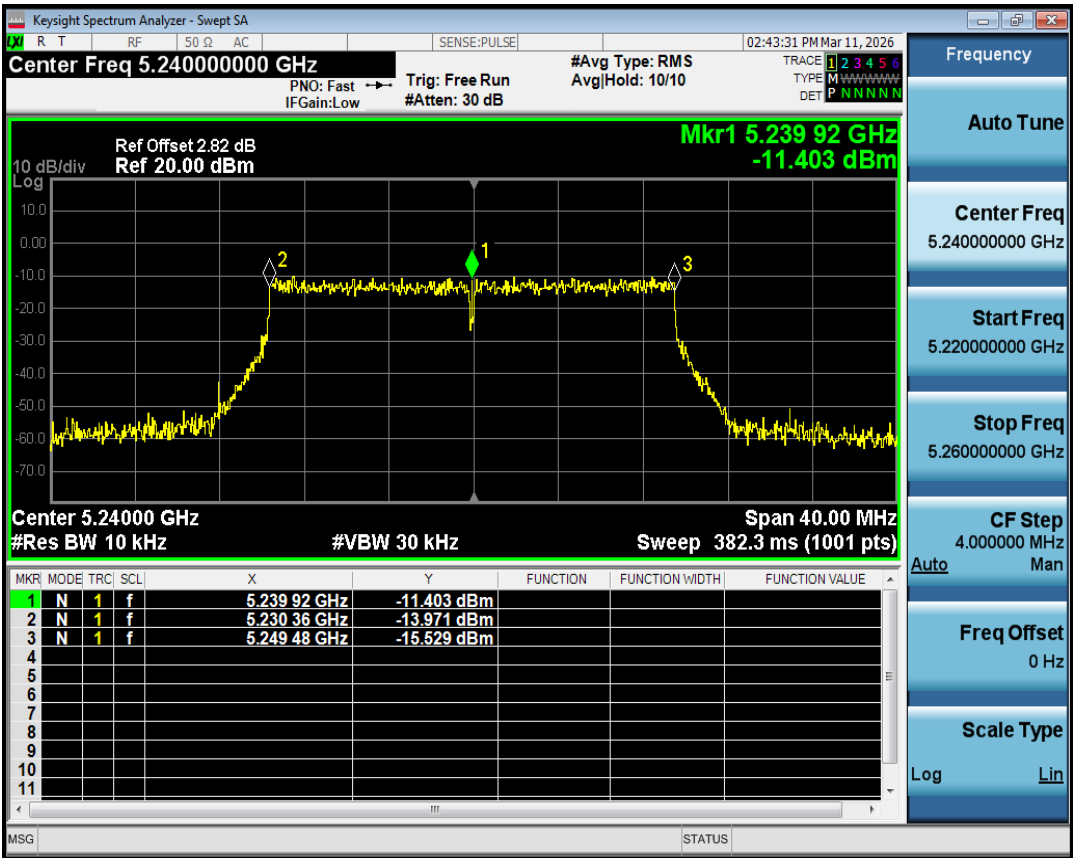
Freq. Stability NVNT ac80 5210MHz Ant1



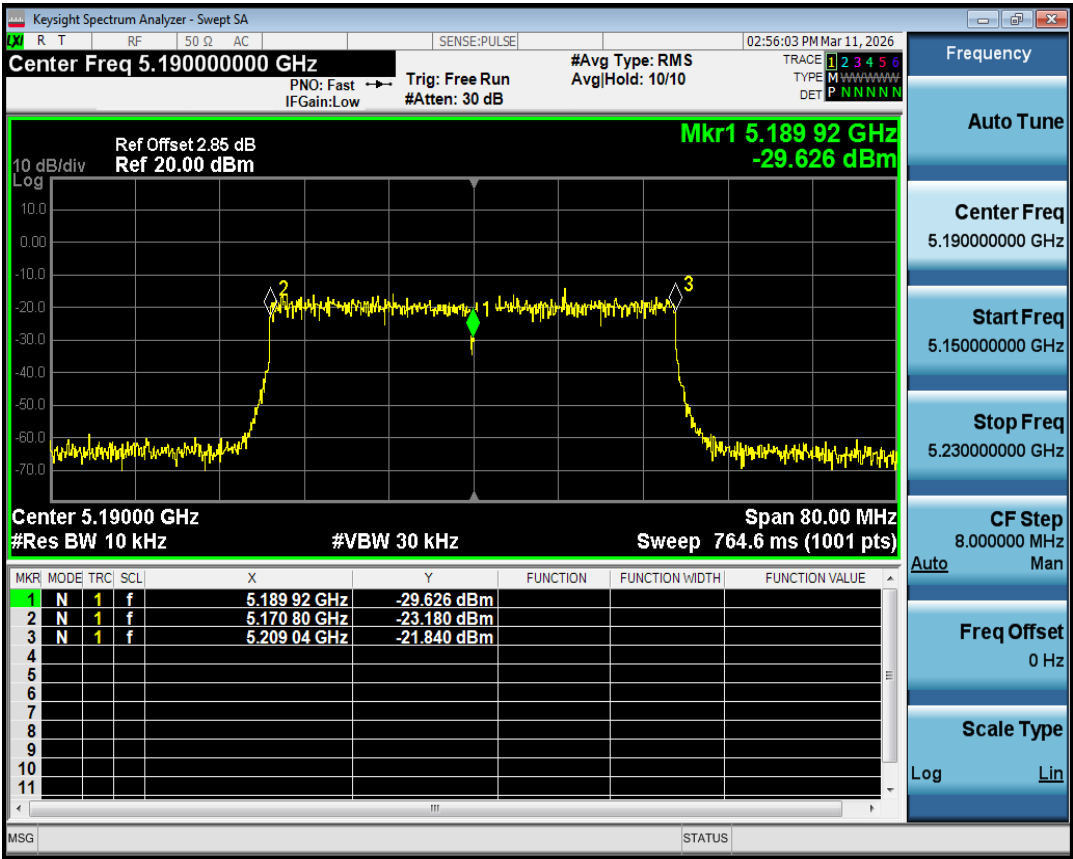
Freq. Stability NVNT ax20 5180MHz Ant1



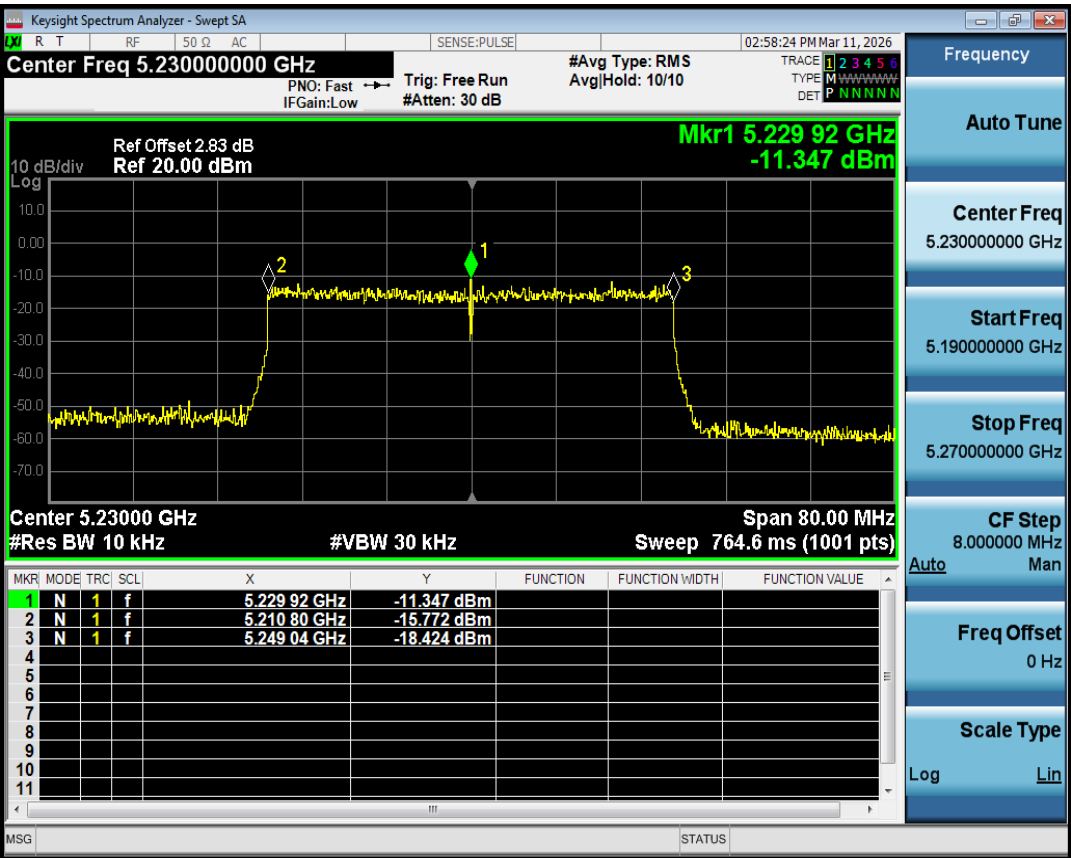
Freq. Stability NVNT ax20 5200MHz Ant1



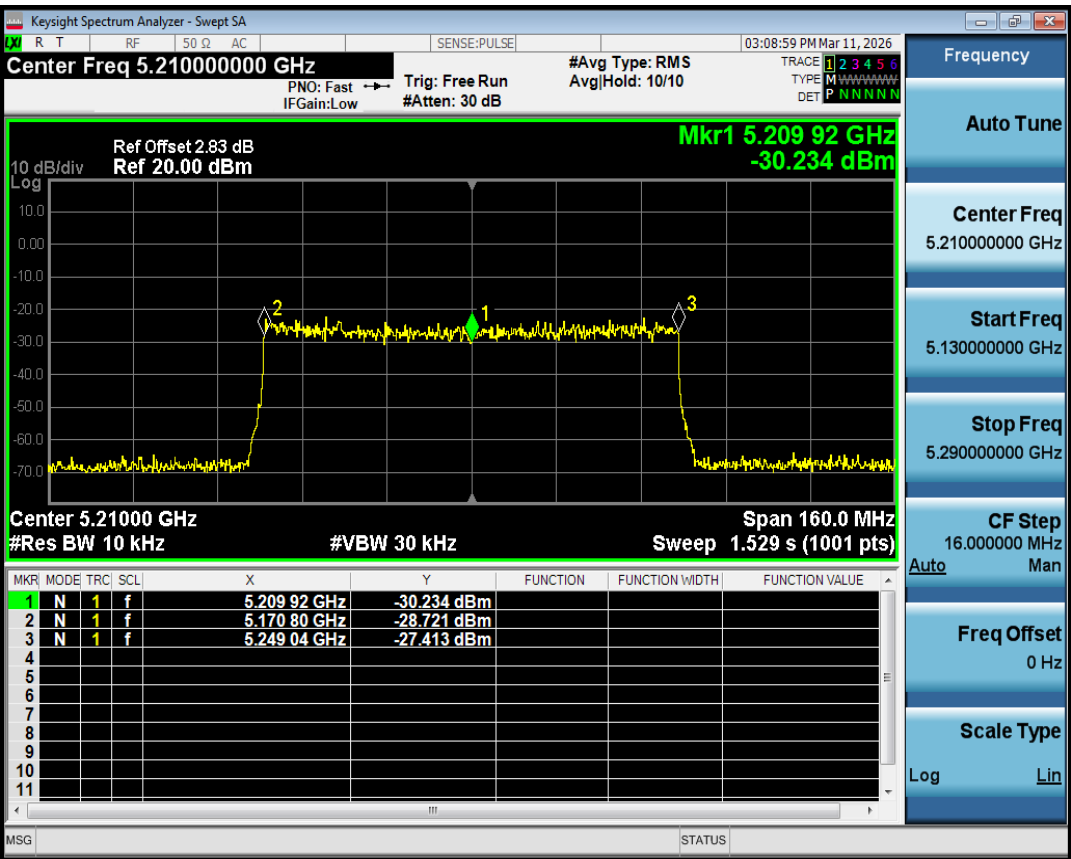
Freq. Stability NVNT ax20 5240MHz Ant1



Freq. Stability NVNT ax40 5190MHz Ant1



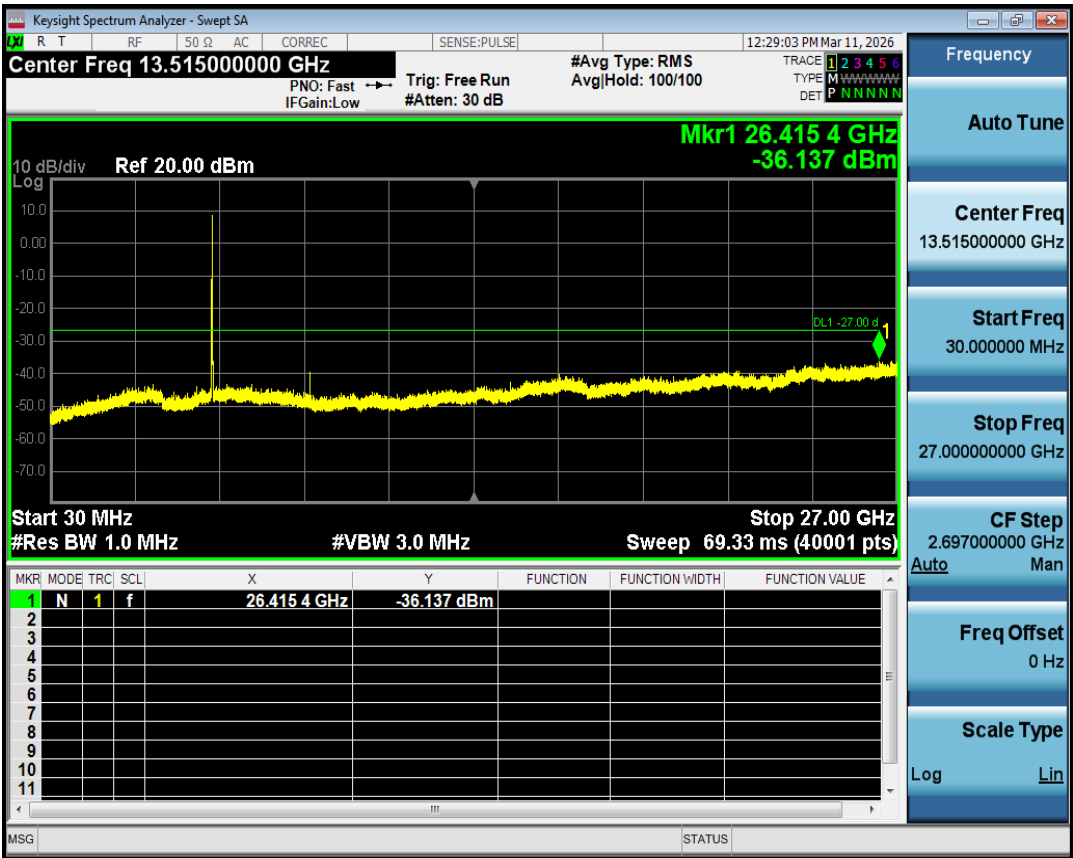
Freq. Stability NVNT ax40 5230MHz Ant1



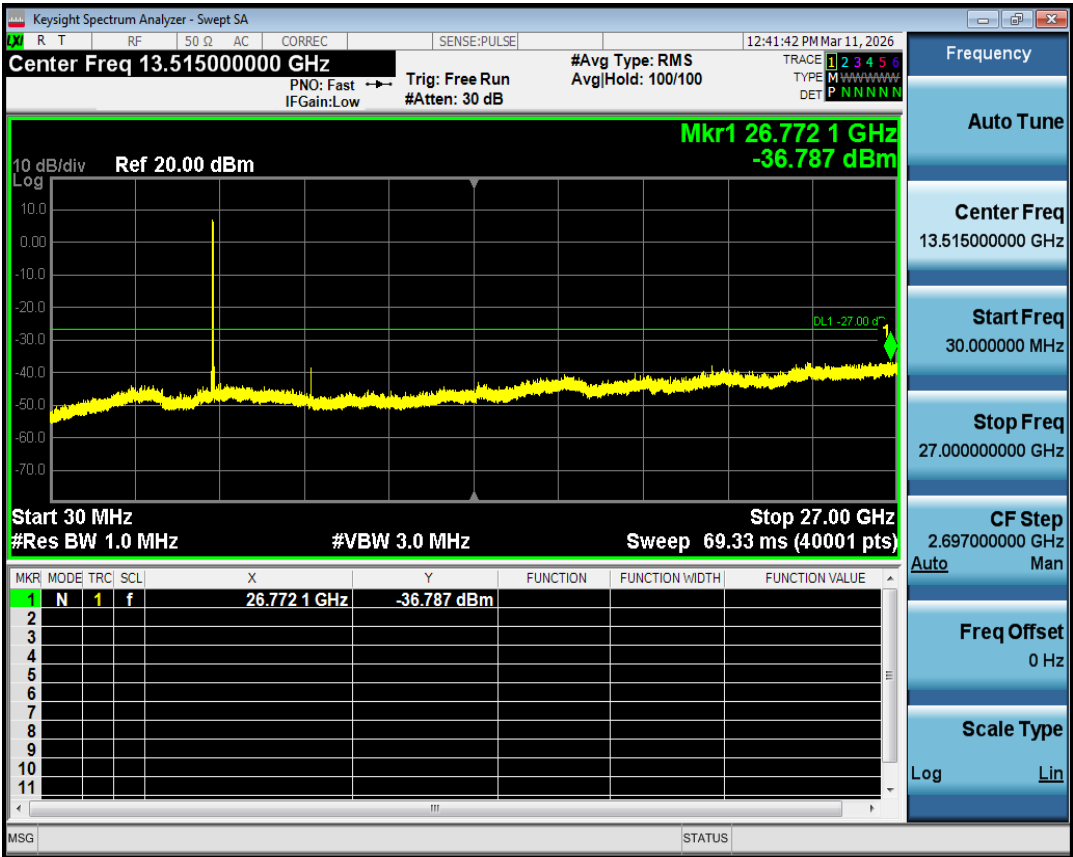
Freq. Stability NVNT ax80 5210MHz Ant1

Conducted RF Spurious Emission

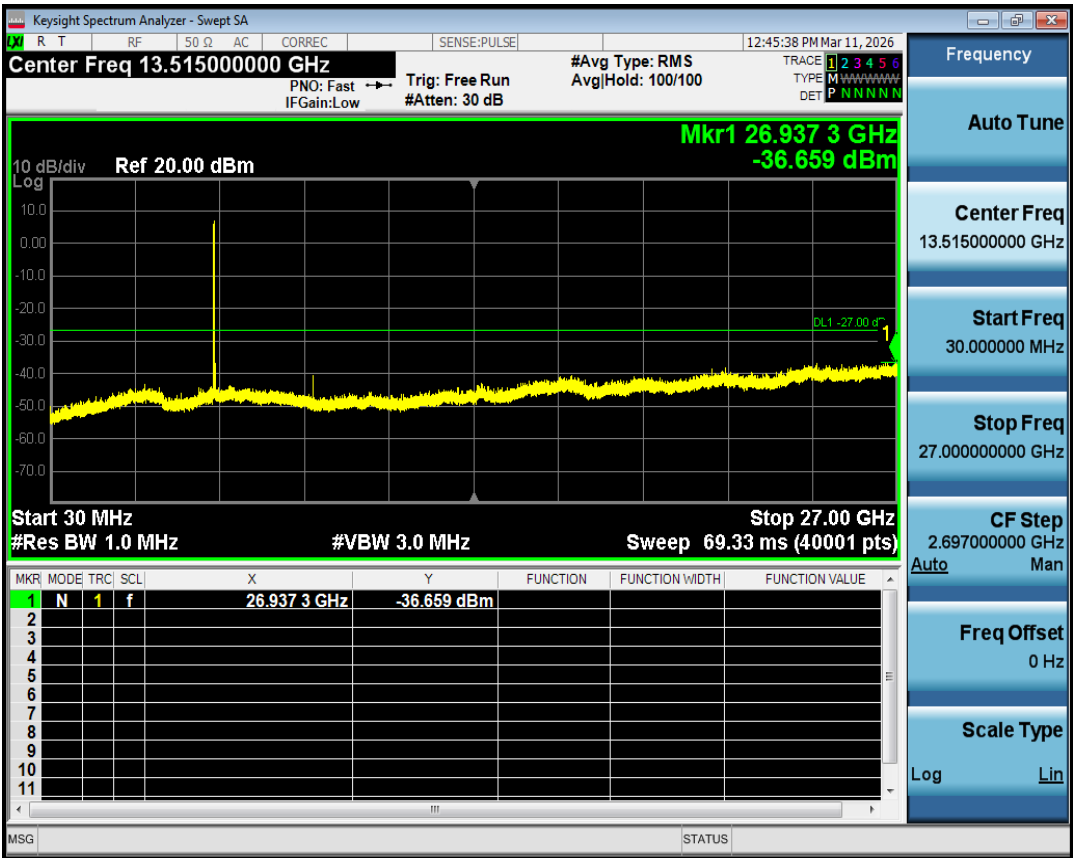
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-36.13	-27	Pass
NVNT	a	5200	Ant1	-36.78	-27	Pass
NVNT	a	5240	Ant1	-36.65	-27	Pass
NVNT	n20	5180	Ant1	-36.7	-27	Pass
NVNT	n20	5200	Ant1	-36.35	-27	Pass
NVNT	n20	5240	Ant1	-36.21	-27	Pass
NVNT	n40	5190	Ant1	-35.82	-27	Pass
NVNT	n40	5230	Ant1	-36.5	-27	Pass
NVNT	ac20	5180	Ant1	-36.31	-27	Pass
NVNT	ac20	5200	Ant1	-36.57	-27	Pass
NVNT	ac20	5240	Ant1	-35.76	-27	Pass
NVNT	ac40	5190	Ant1	-36.54	-27	Pass
NVNT	ac40	5230	Ant1	-35.89	-27	Pass
NVNT	ac80	5210	Ant1	-36.12	-27	Pass
NVNT	ax20	5180	Ant1	-36.58	-27	Pass
NVNT	ax20	5200	Ant1	-36.17	-27	Pass
NVNT	ax20	5240	Ant1	-36.02	-27	Pass
NVNT	ax40	5190	Ant1	-36.08	-27	Pass
NVNT	ax40	5230	Ant1	-36.29	-27	Pass
NVNT	ax80	5210	Ant1	-36.12	-27	Pass
Note: 27GHz-40GHz the Spurious leve margin is the largest, so the test data only reflects 30MHz-27GHz.						



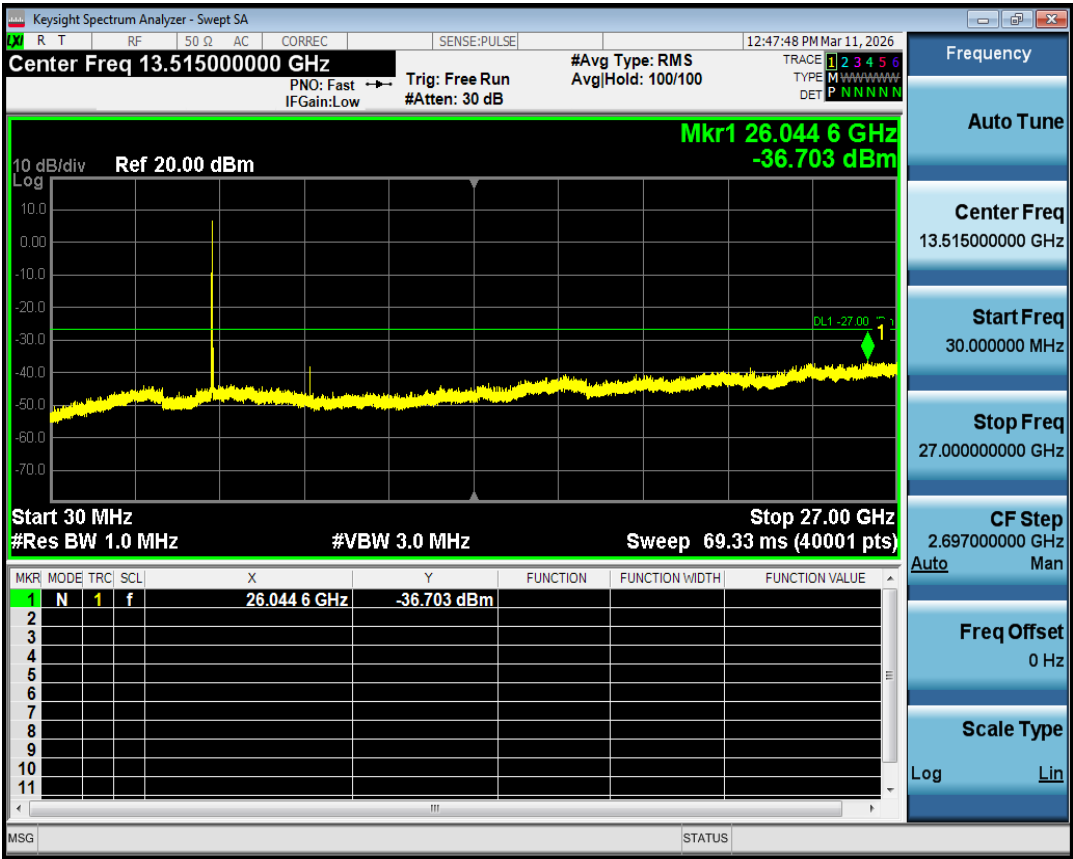
Tx. Spurious NVNT a 5180MHz Ant1 Emission



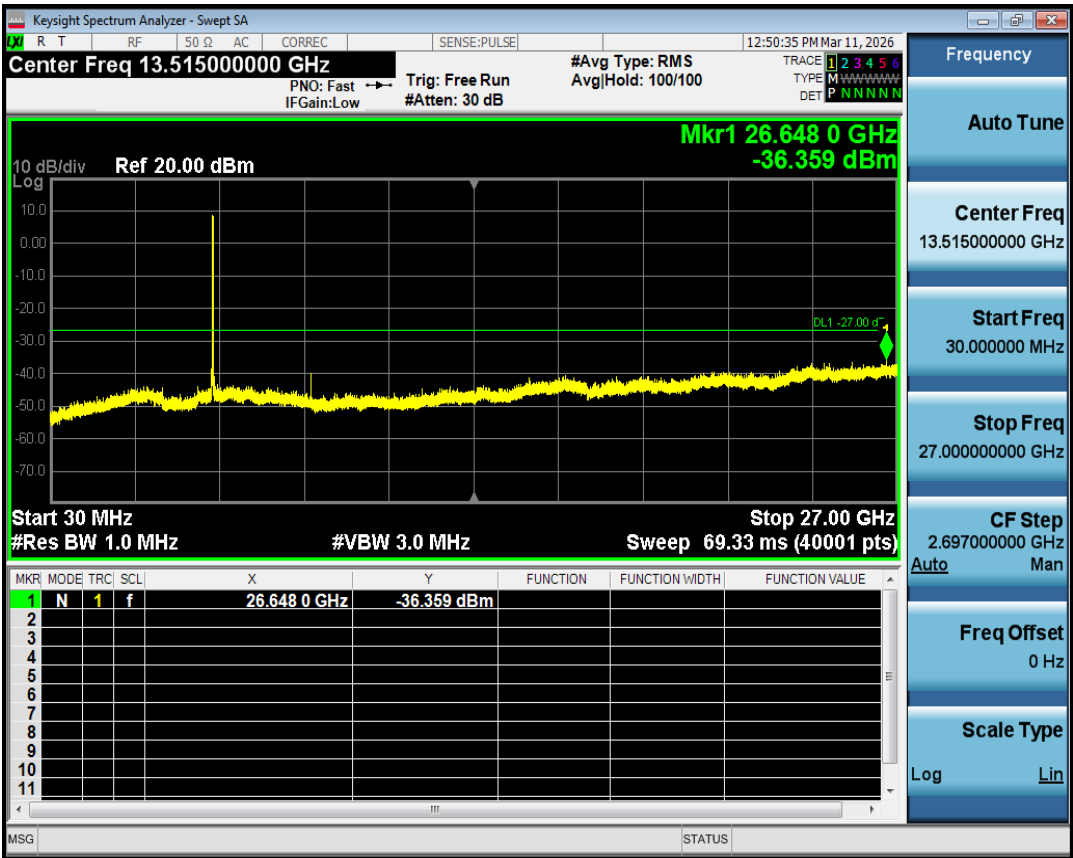
Tx. Spurious NVNT a 5200MHz Ant1 Emission



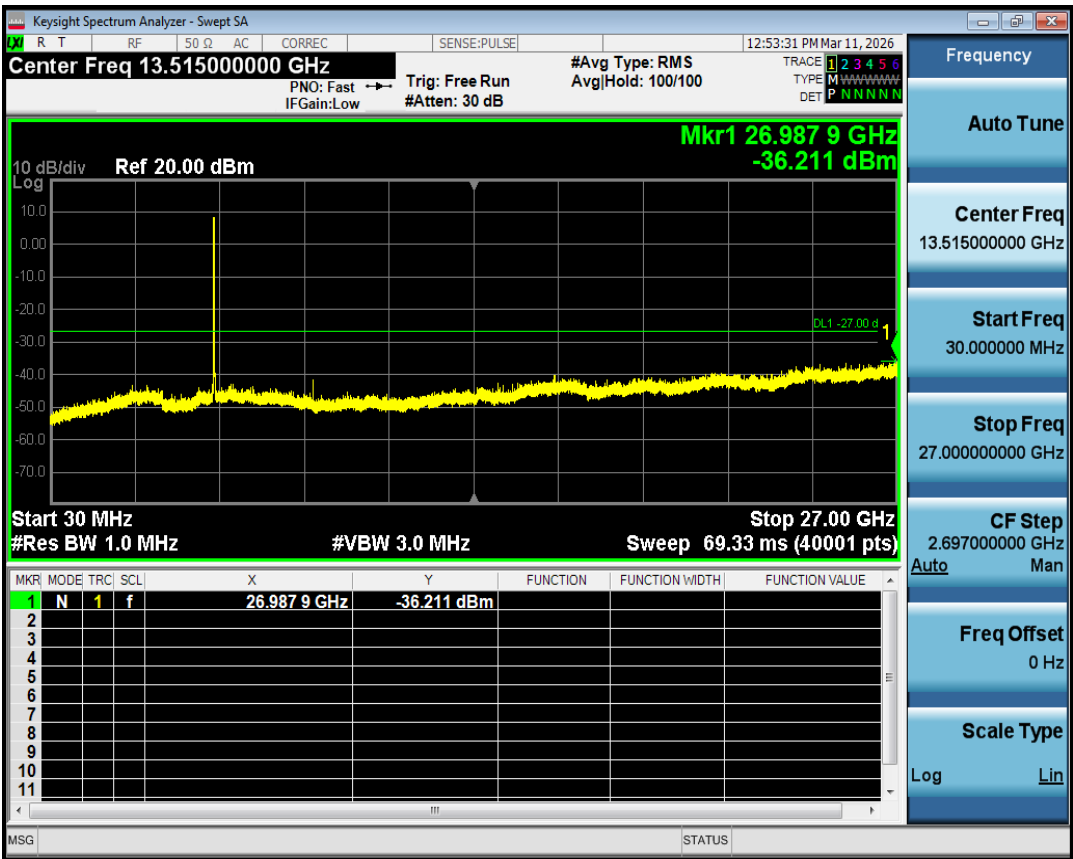
Tx. Spurious NVNT a 5240MHz Ant1 Emission



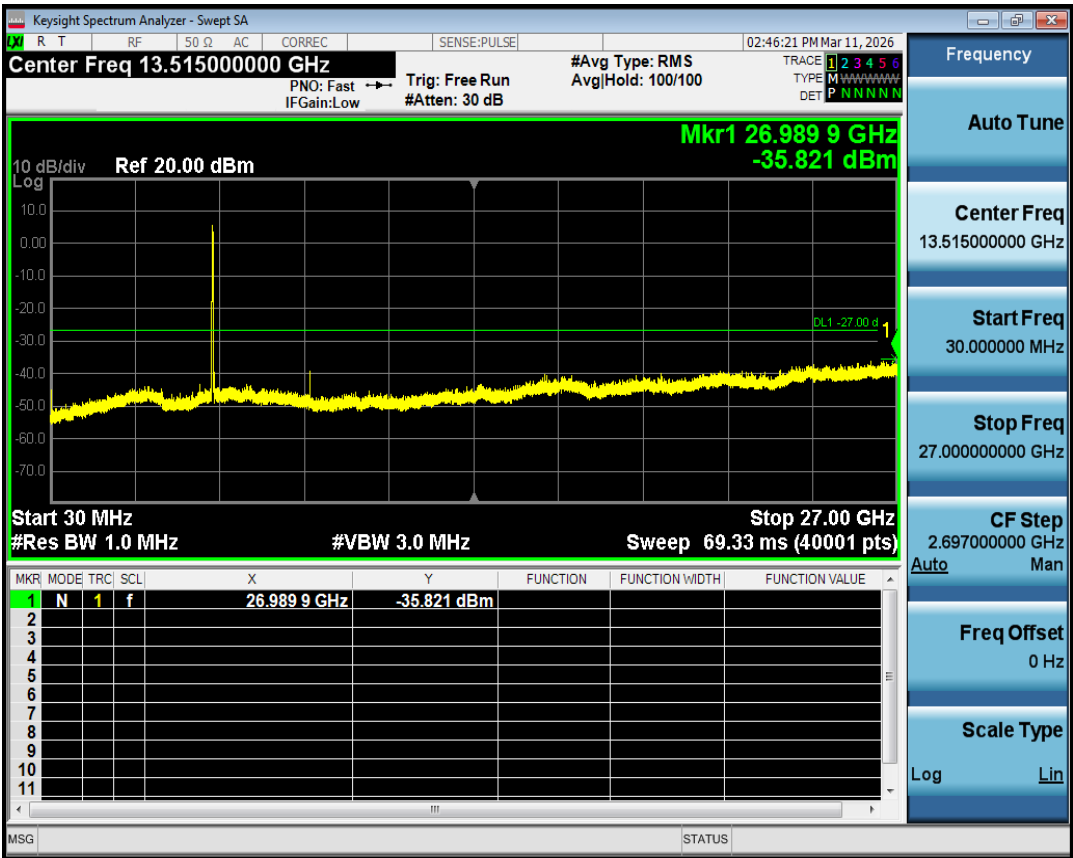
Tx. Spurious NVNT n20 5180MHz Ant1 Emission



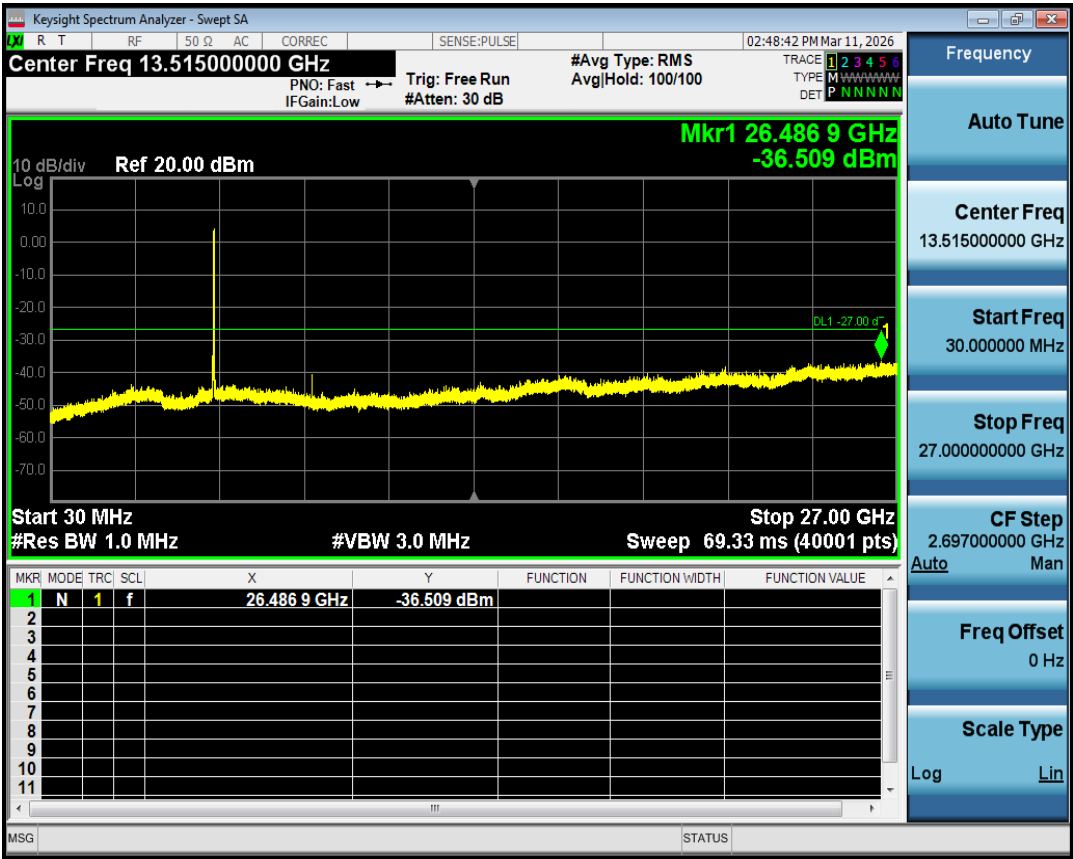
Tx. Spurious NVNT n20 5200MHz Ant1 Emission



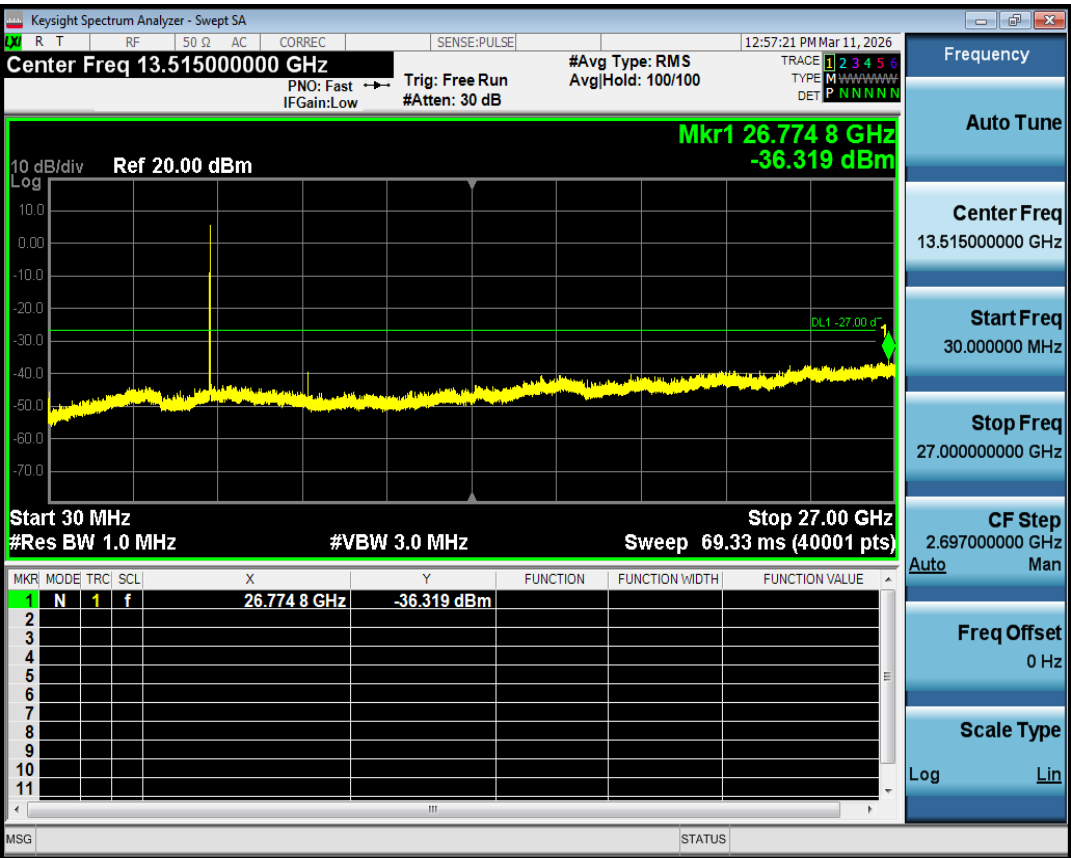
Tx. Spurious NVNT n20 5240MHz Ant1 Emission



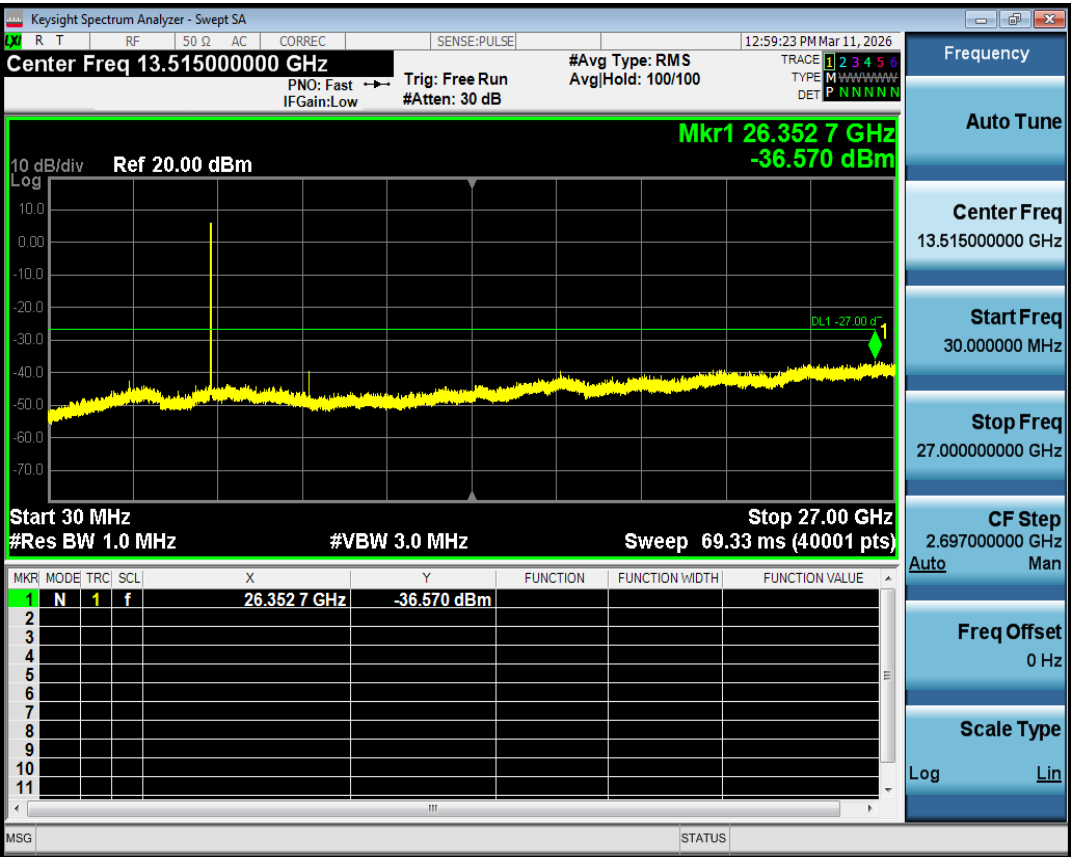
Tx. Spurious NVNT n40 5190MHz Ant1 Emission



Tx. Spurious NVNT n40 5230MHz Ant1 Emission



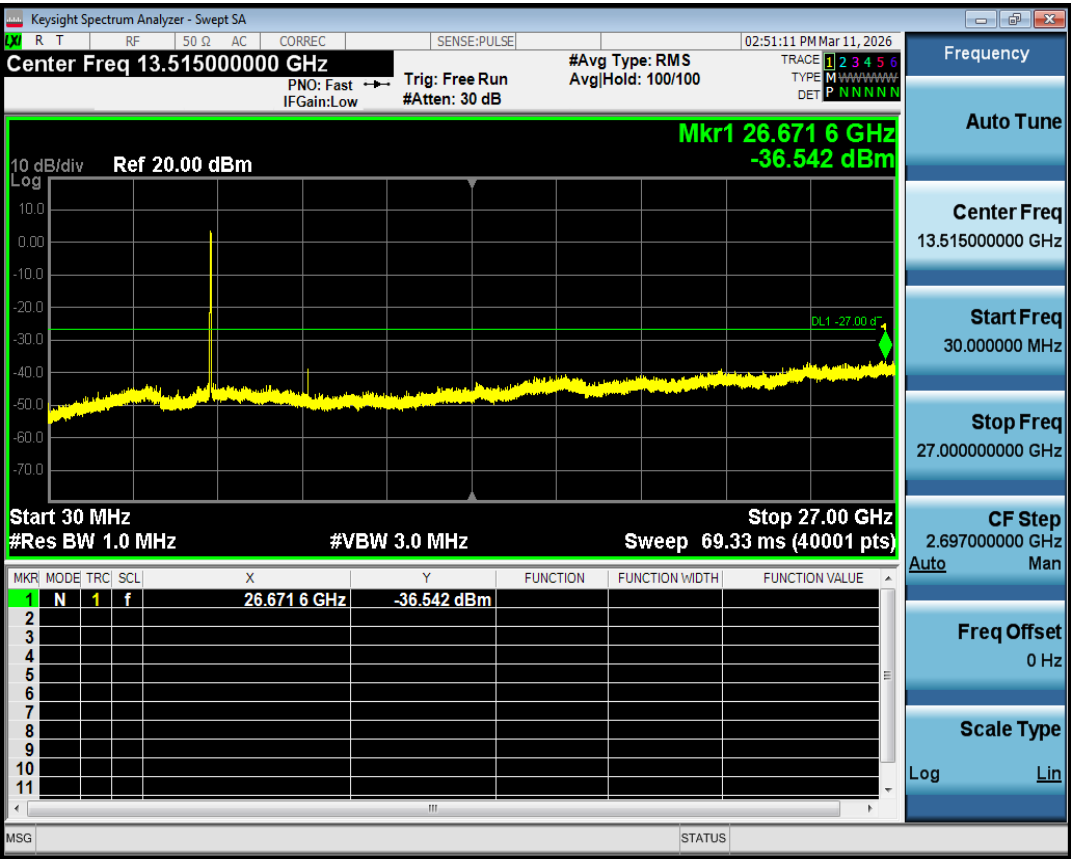
Tx. Spurious NVNT ac20 5180MHz Ant1 Emission



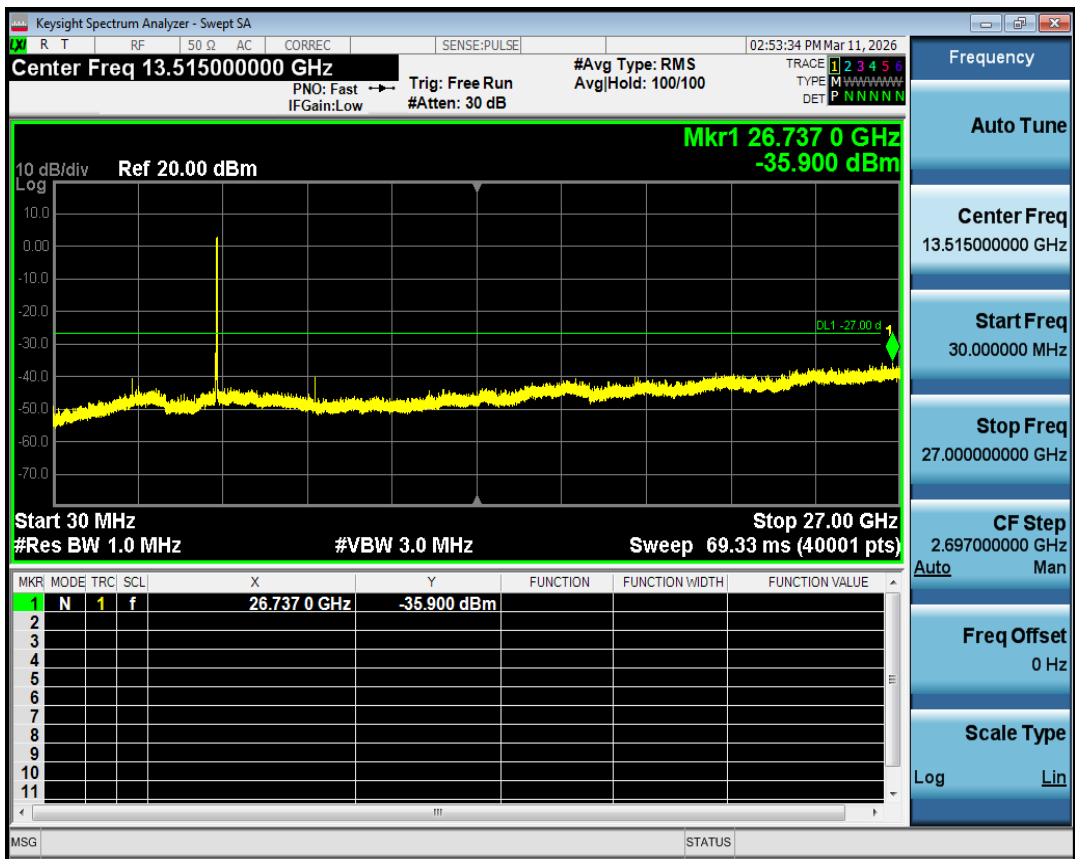
Tx. Spurious NVNT ac20 5200MHz Ant1 Emission



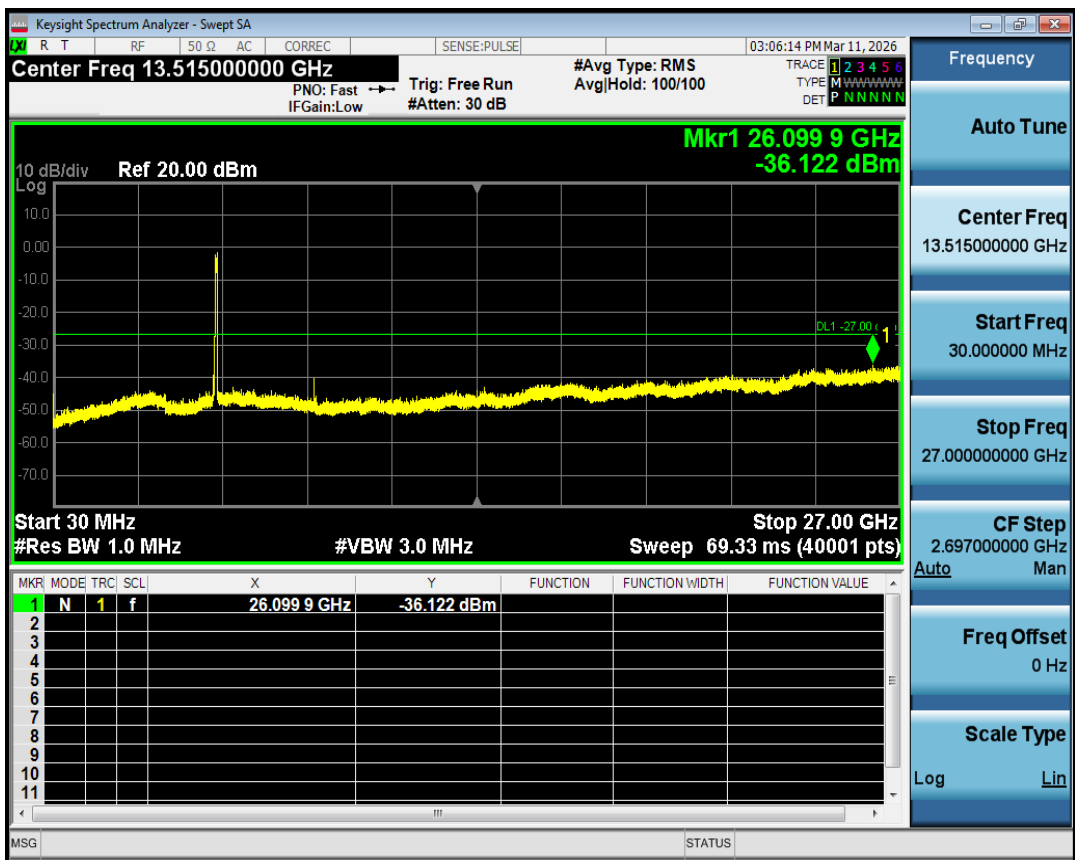
Tx. Spurious NVNT ac20 5240MHz Ant1 Emission



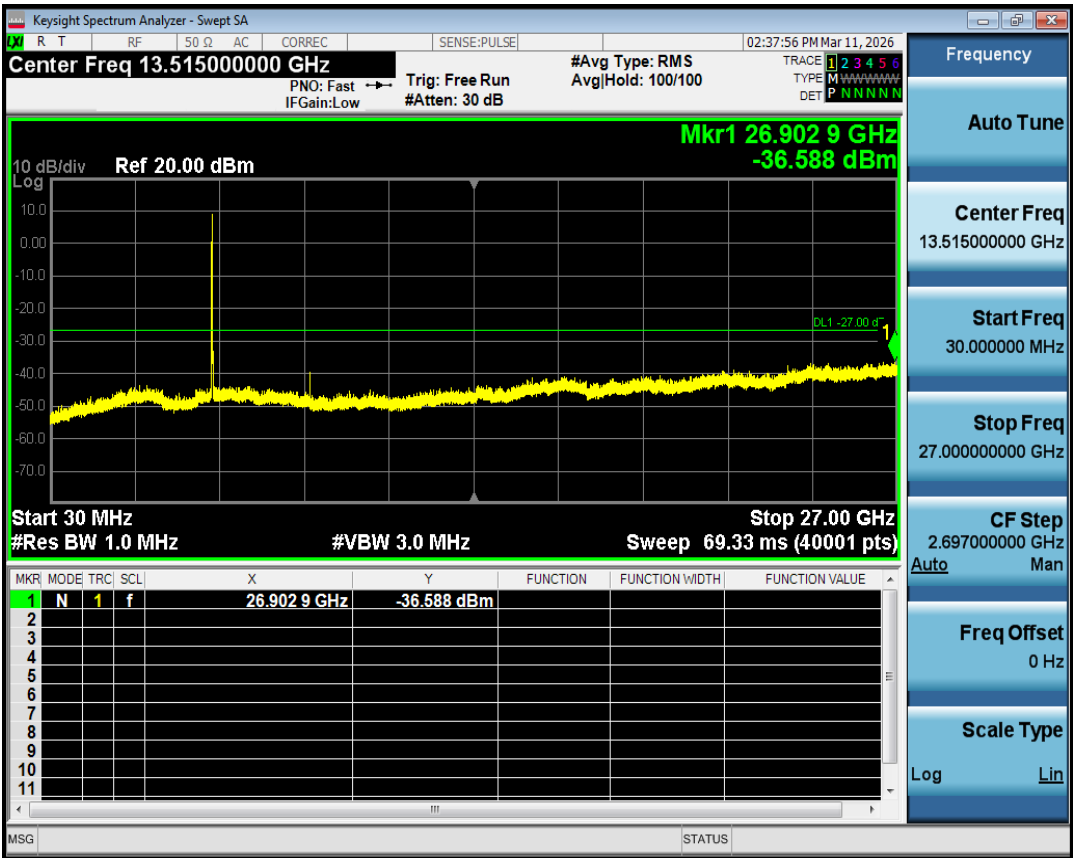
Tx. Spurious NVNT ac40 5190MHz Ant1 Emission



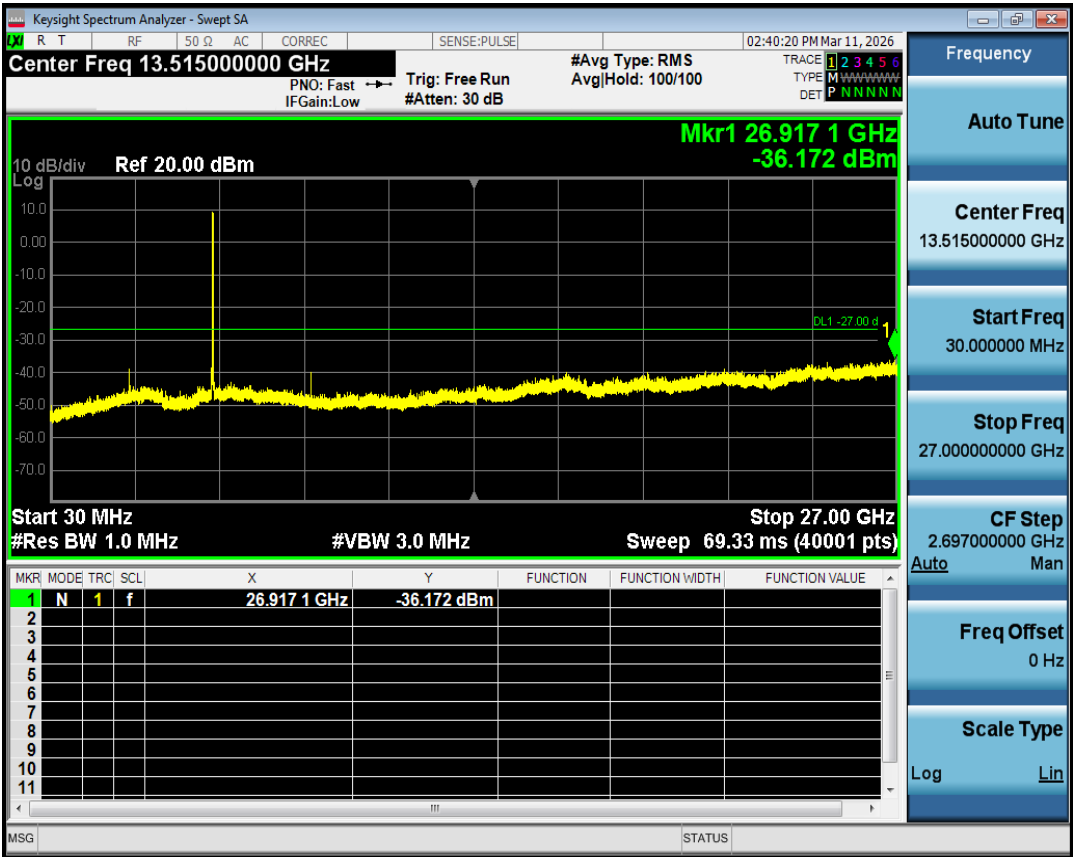
Tx. Spurious NVNT ac40 5230MHz Ant1 Emission



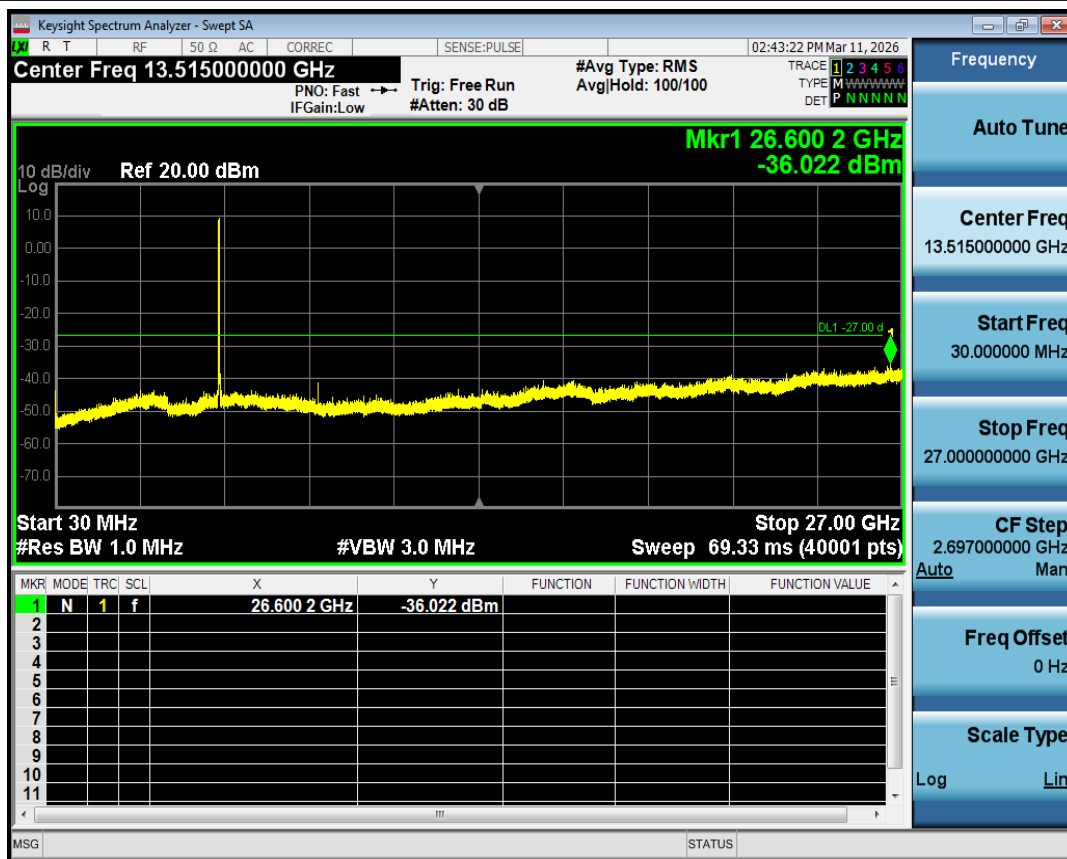
Tx. Spurious NVNT ac80 5210MHz Ant1 Emission



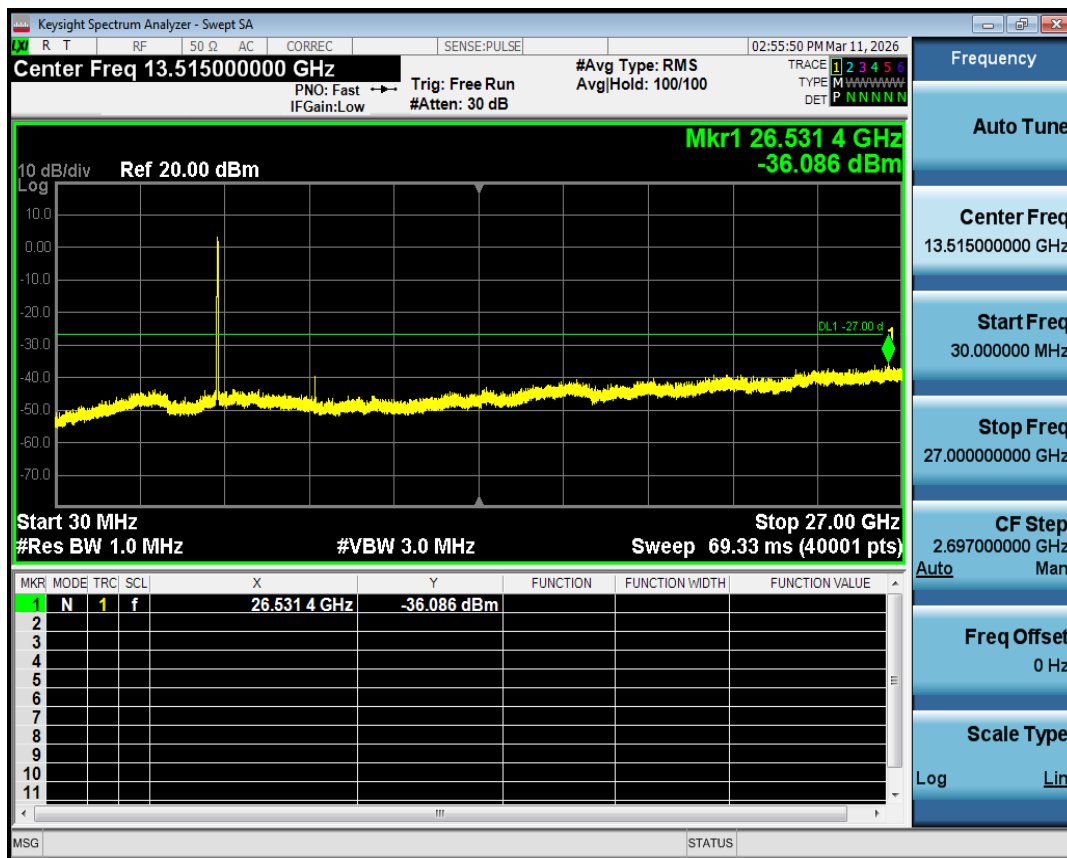
Tx. Spurious NVNT ax20 5180MHz Ant1 Emission



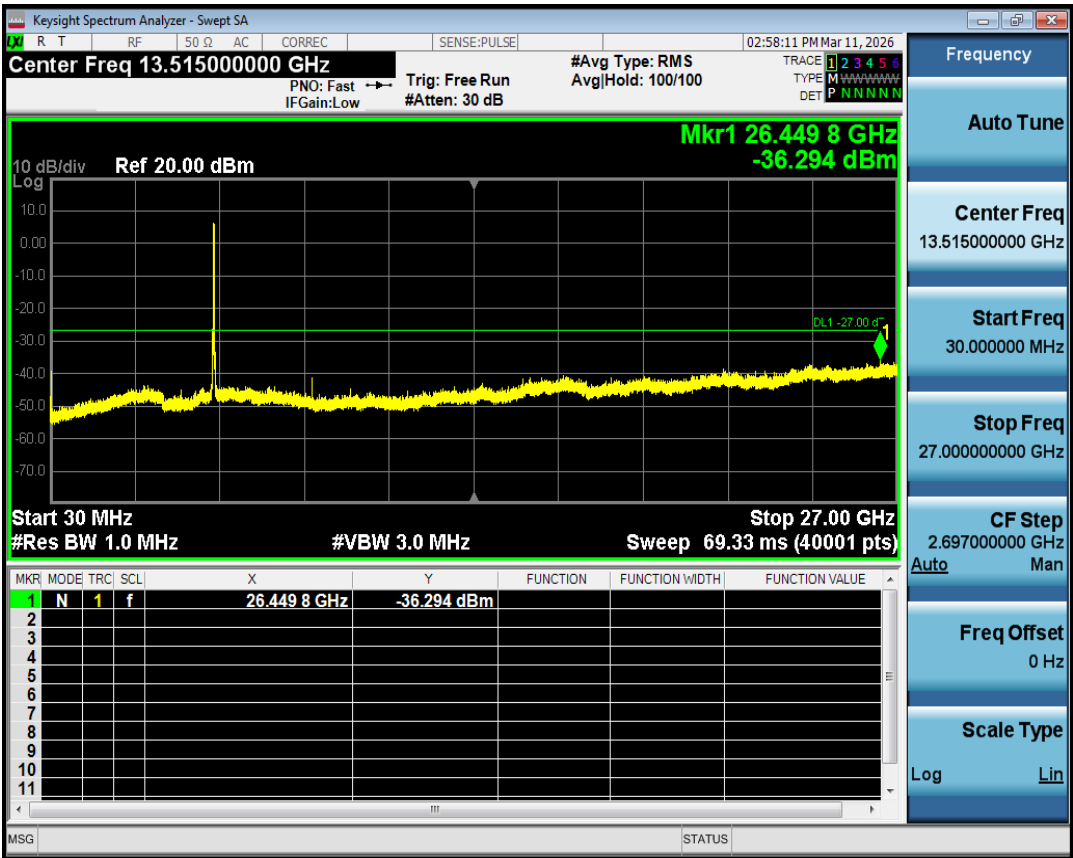
Tx. Spurious NVNT ax20 5200MHz Ant1 Emission



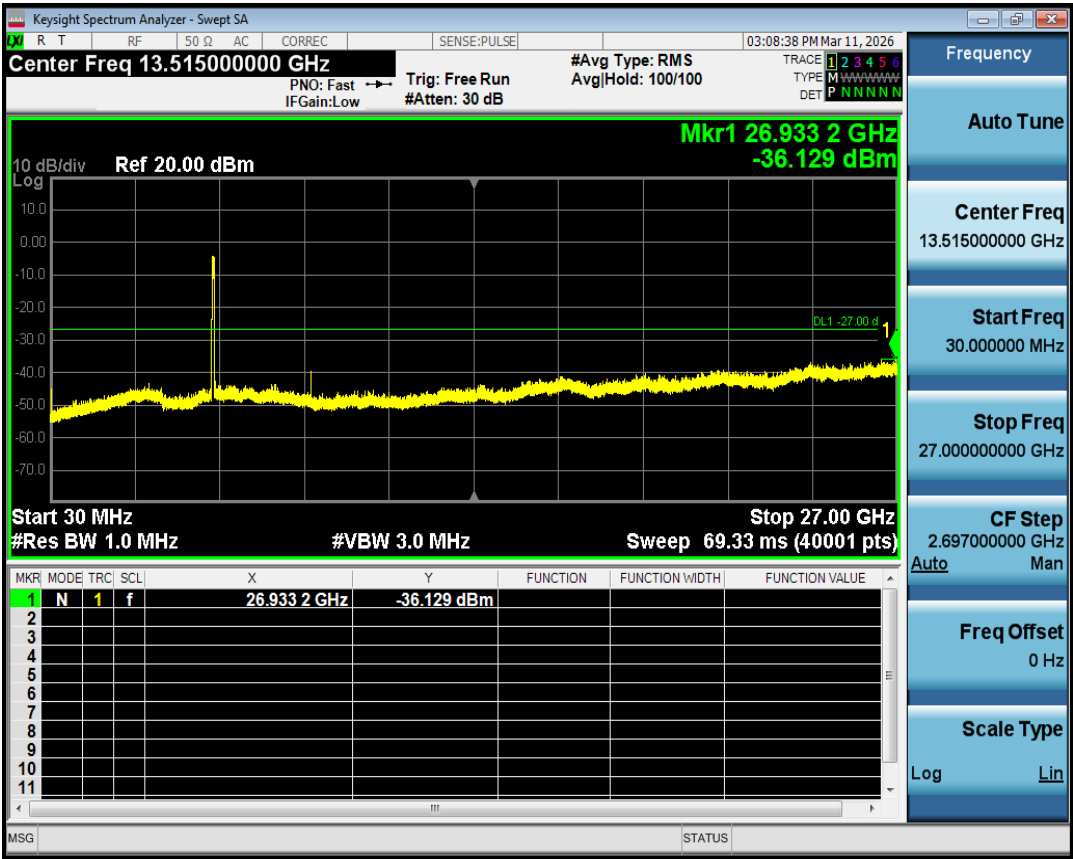
Tx. Spurious NVNT ax20 5240MHz Ant1 Emission



Tx. Spurious NVNT ax40 5190MHz Ant1 Emission



Tx. Spurious NVNT ax40 5230MHz Ant1 Emission



Tx. Spurious NVNT ax80 5210MHz Ant1 Emission

