

Appendix C

RF Test Data for 5.2GWIFI (Conducted Measurement)

Product Name: GNSS Receiver

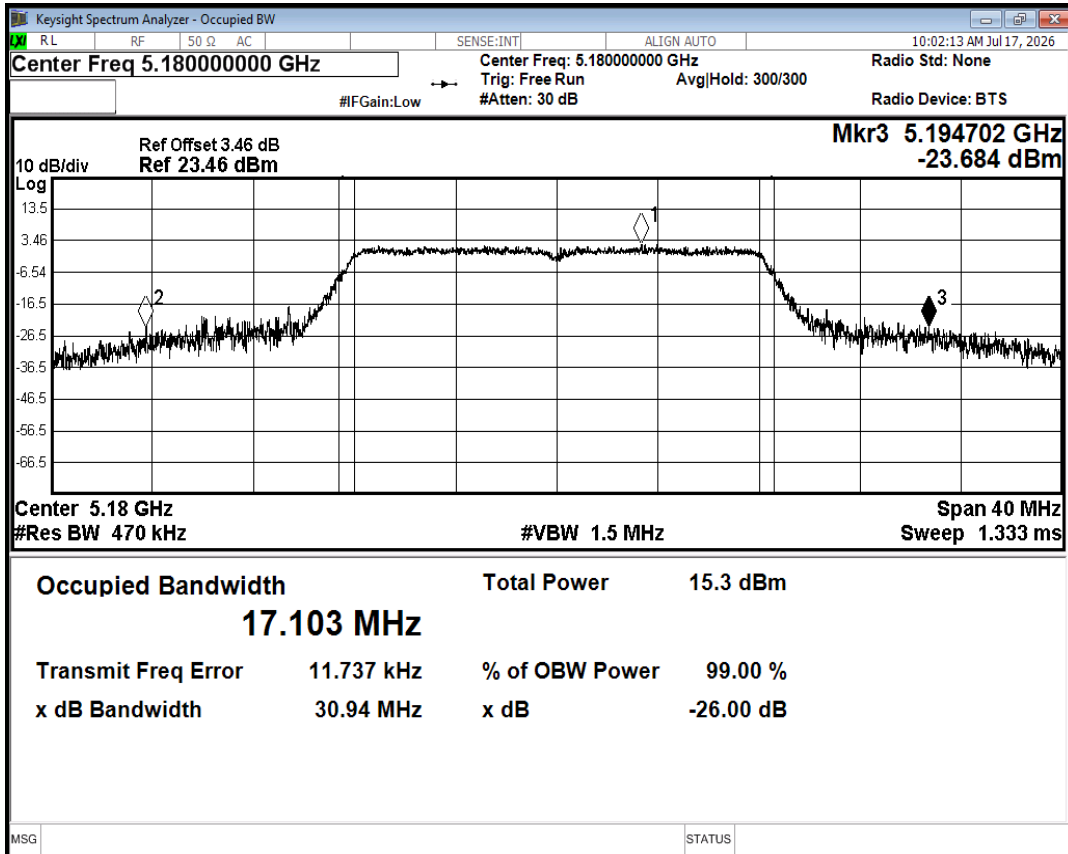
Test Model: Horus

Environmental Conditions

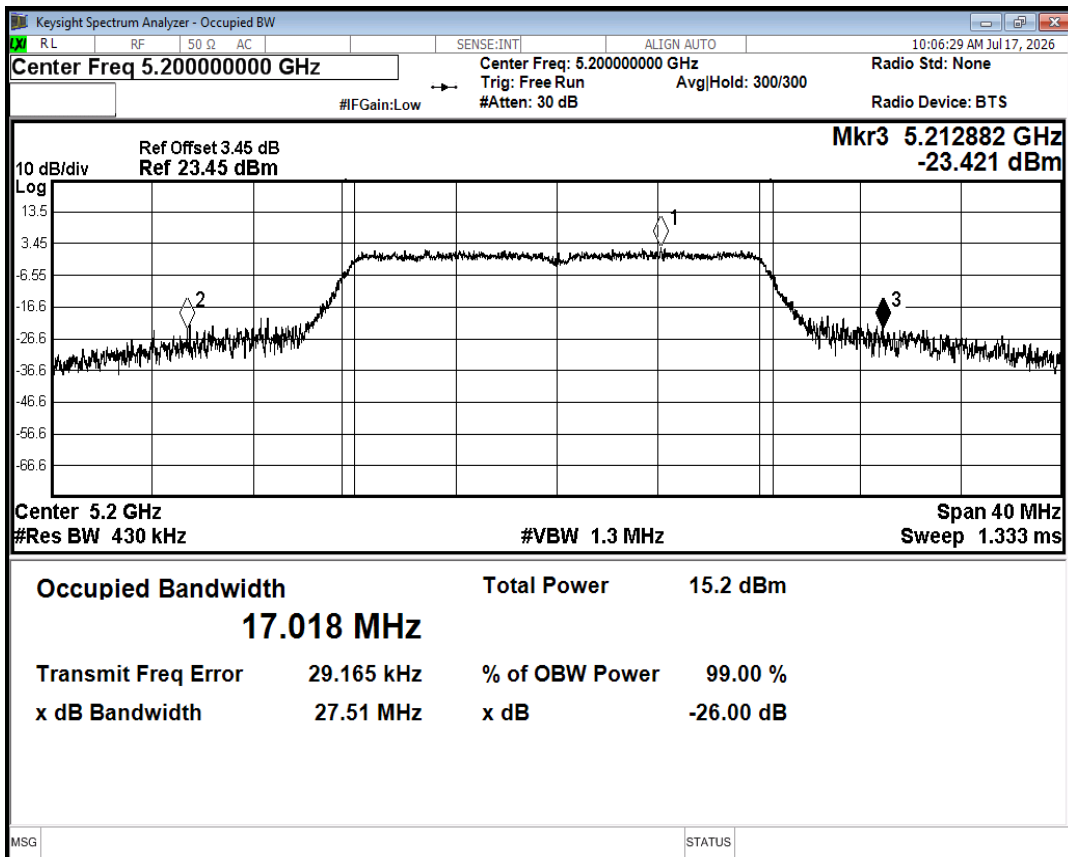
Temperature:	24.6°C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

C.1 -26dB Bandwidth

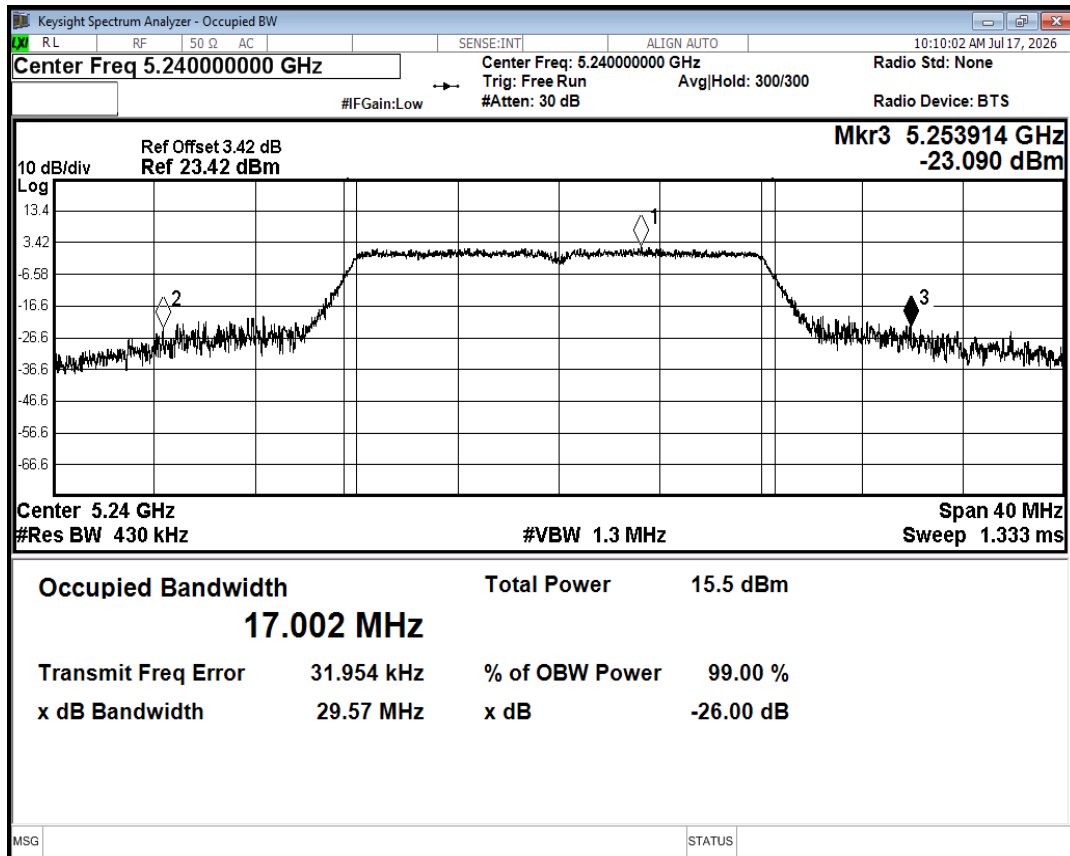
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5180	Ant1	30.94
NVNT	a	5200	Ant1	27.51
NVNT	a	5240	Ant1	29.57
NVNT	n20	5180	Ant1	36.15
NVNT	n20	5200	Ant1	33.43
NVNT	n20	5240	Ant1	31.82
NVNT	n40	5190	Ant1	50.06
NVNT	n40	5230	Ant1	55.09
NVNT	ac20	5180	Ant1	34.57
NVNT	ac20	5200	Ant1	31.39
NVNT	ac20	5240	Ant1	34.72
NVNT	ac40	5190	Ant1	54.58
NVNT	ac40	5230	Ant1	53.21
NVNT	ac80	5210	Ant1	85.41



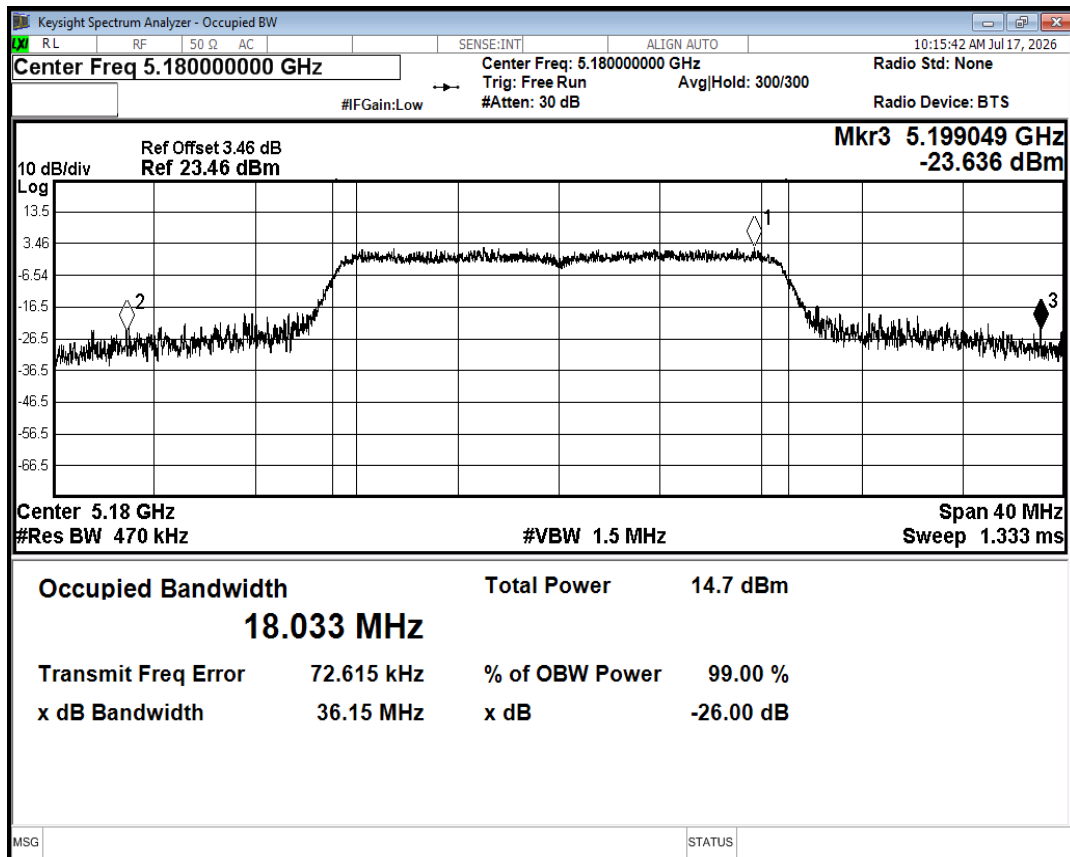
-26dB Bandwidth NVNT a 5180MHz Ant1



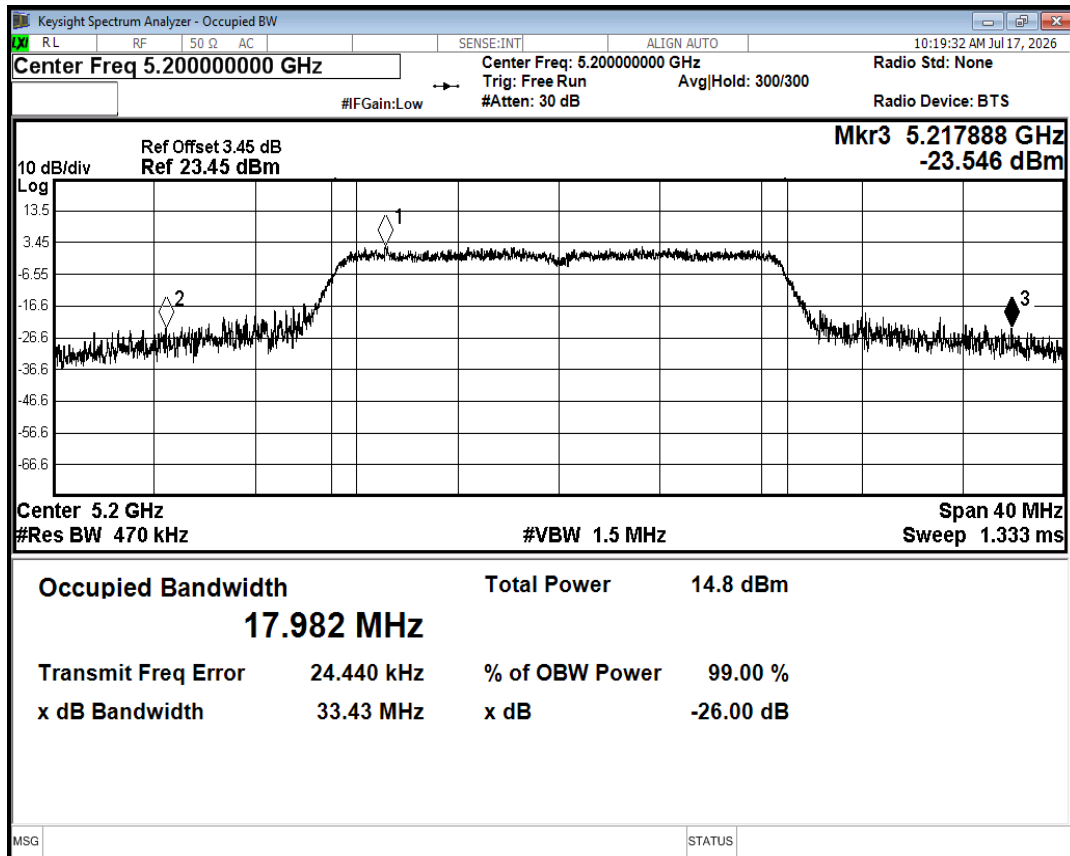
-26dB Bandwidth NVNT a 5200MHz Ant1



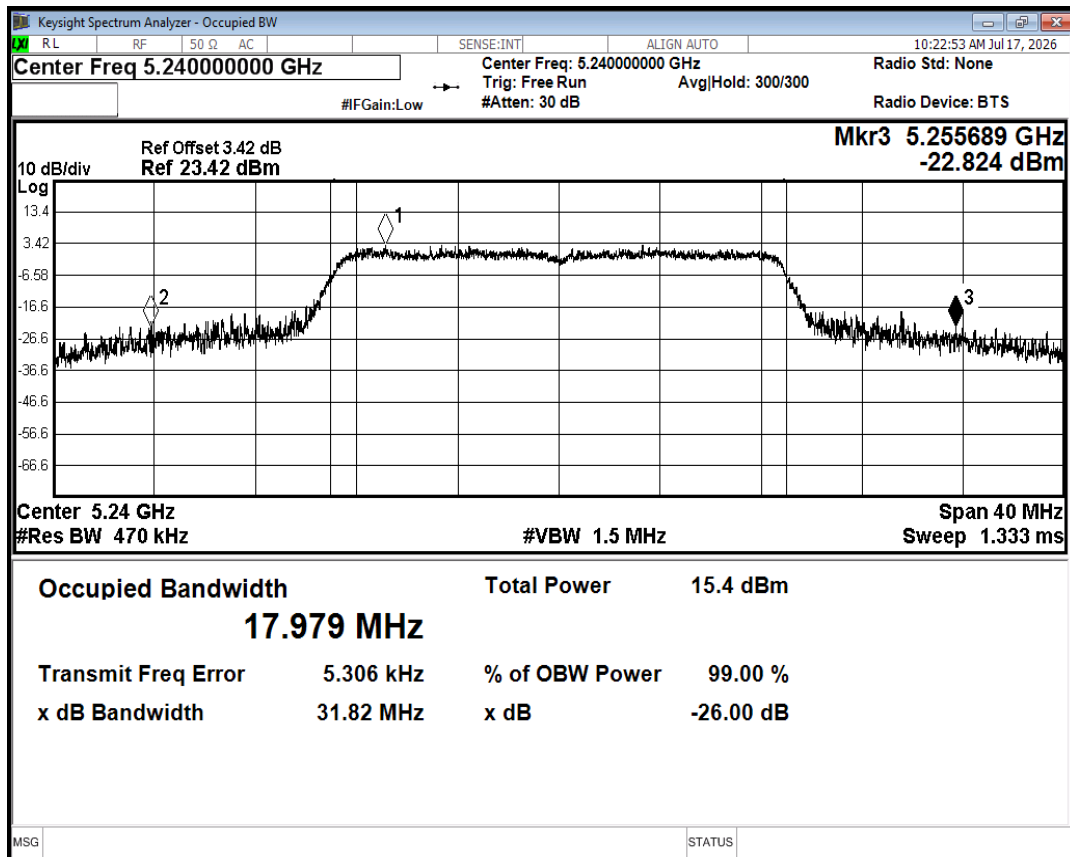
-26dB Bandwidth NVNT a 5240MHz Ant1



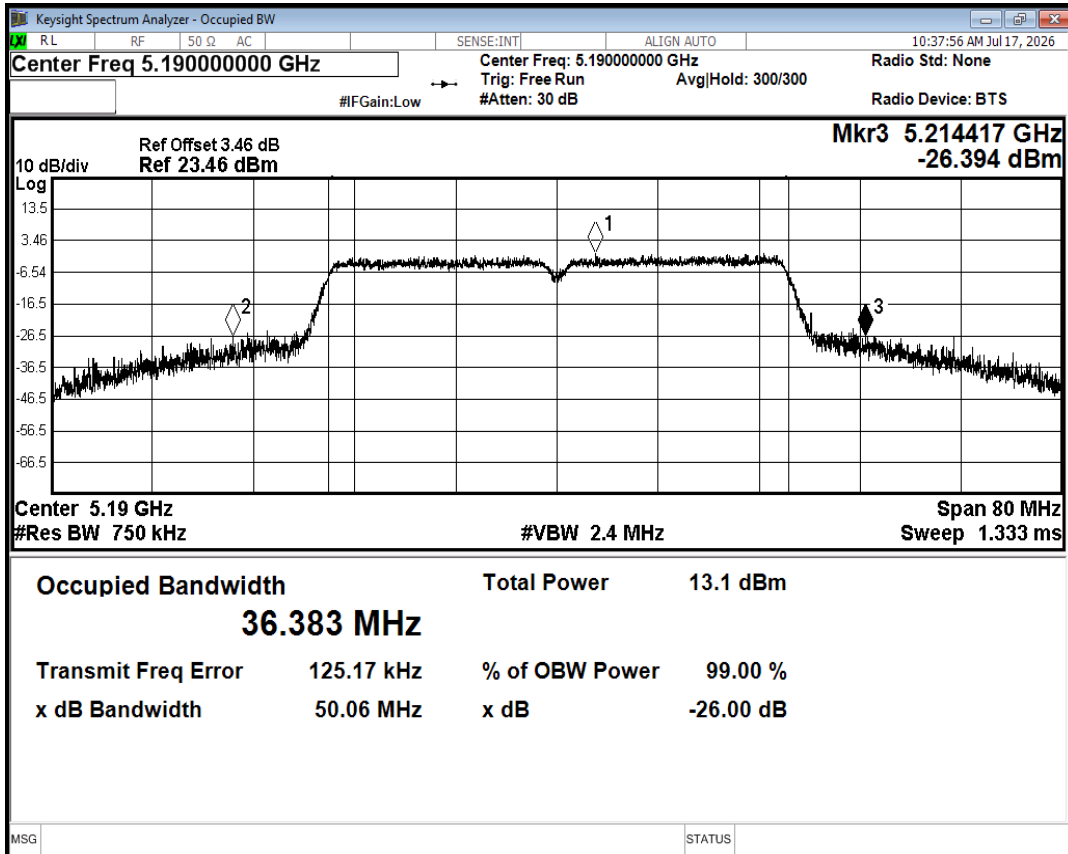
-26dB Bandwidth NVNT n20 5180MHz Ant1



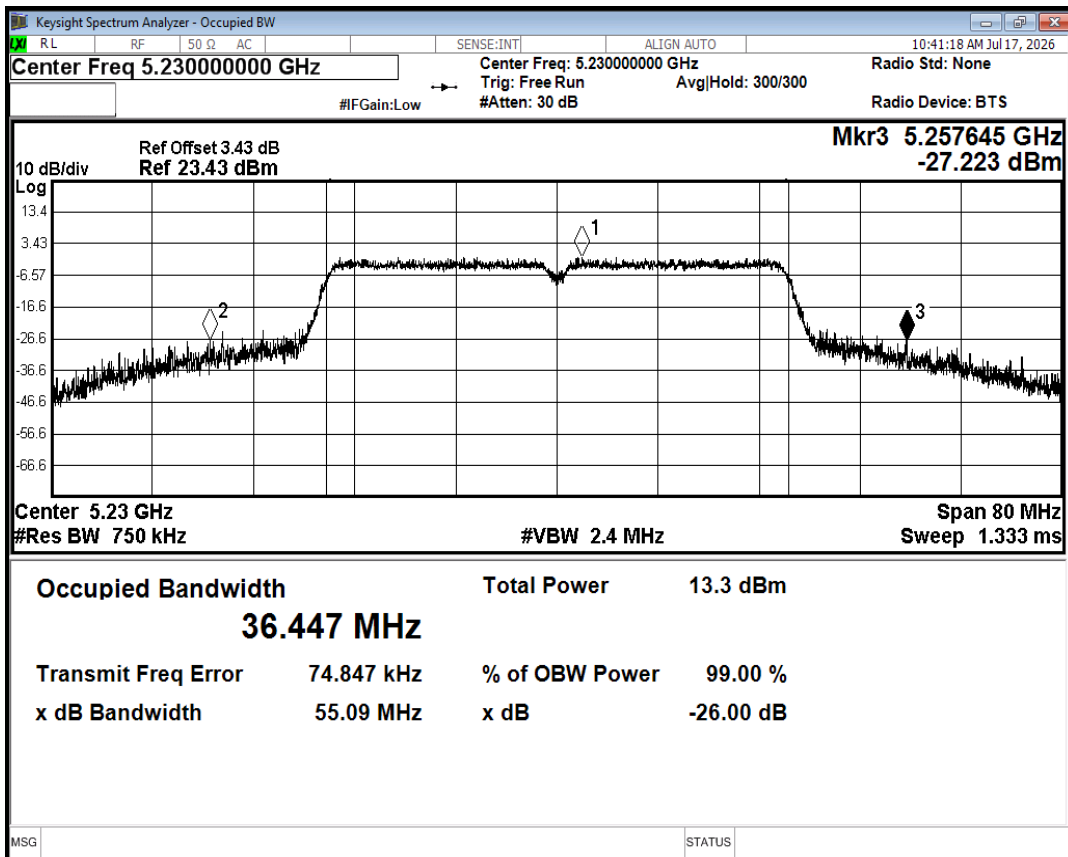
-26dB Bandwidth NVNT n20 5200MHz Ant1



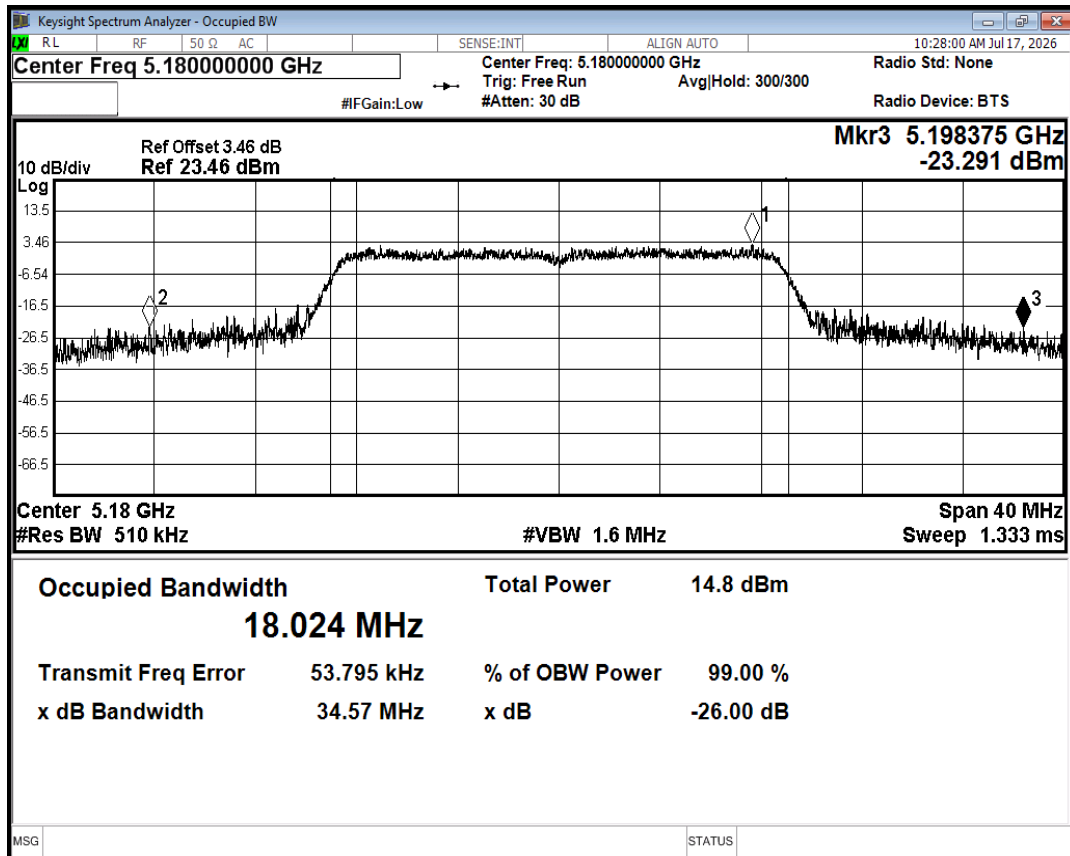
-26dB Bandwidth NVNT n20 5240MHz Ant1



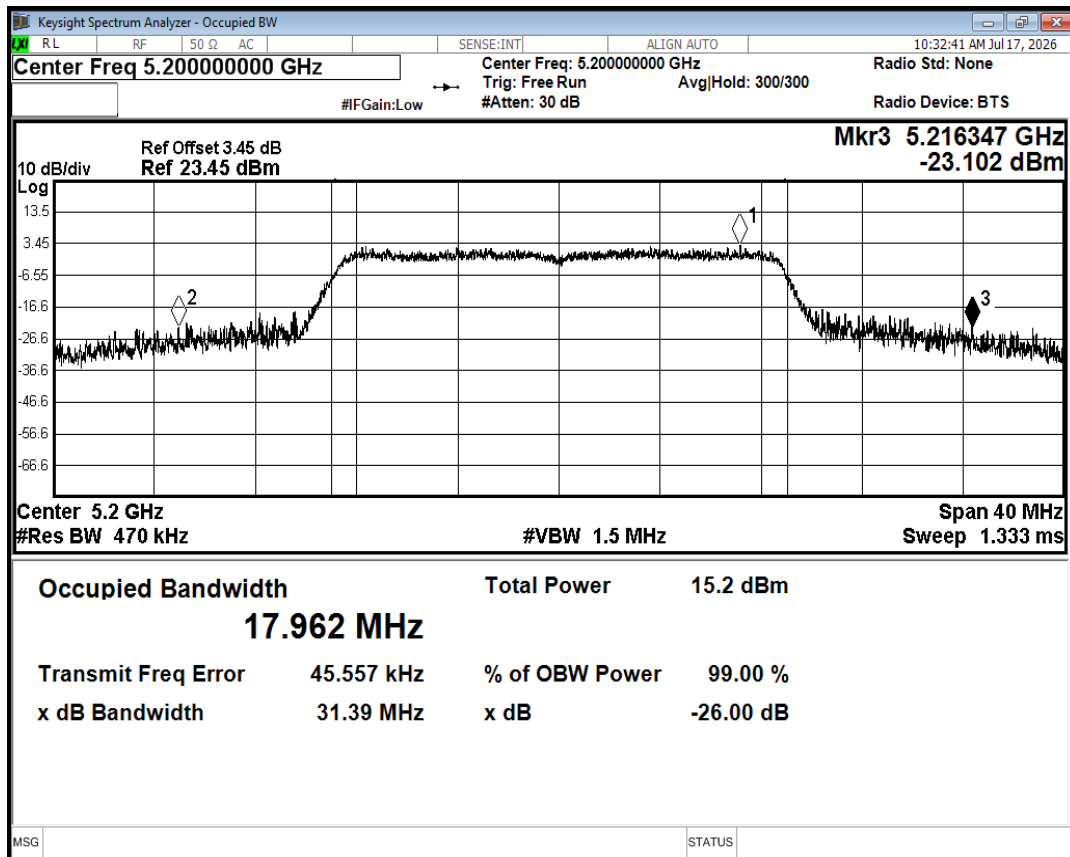
-26dB Bandwidth NVNT n40 5190MHz Ant1



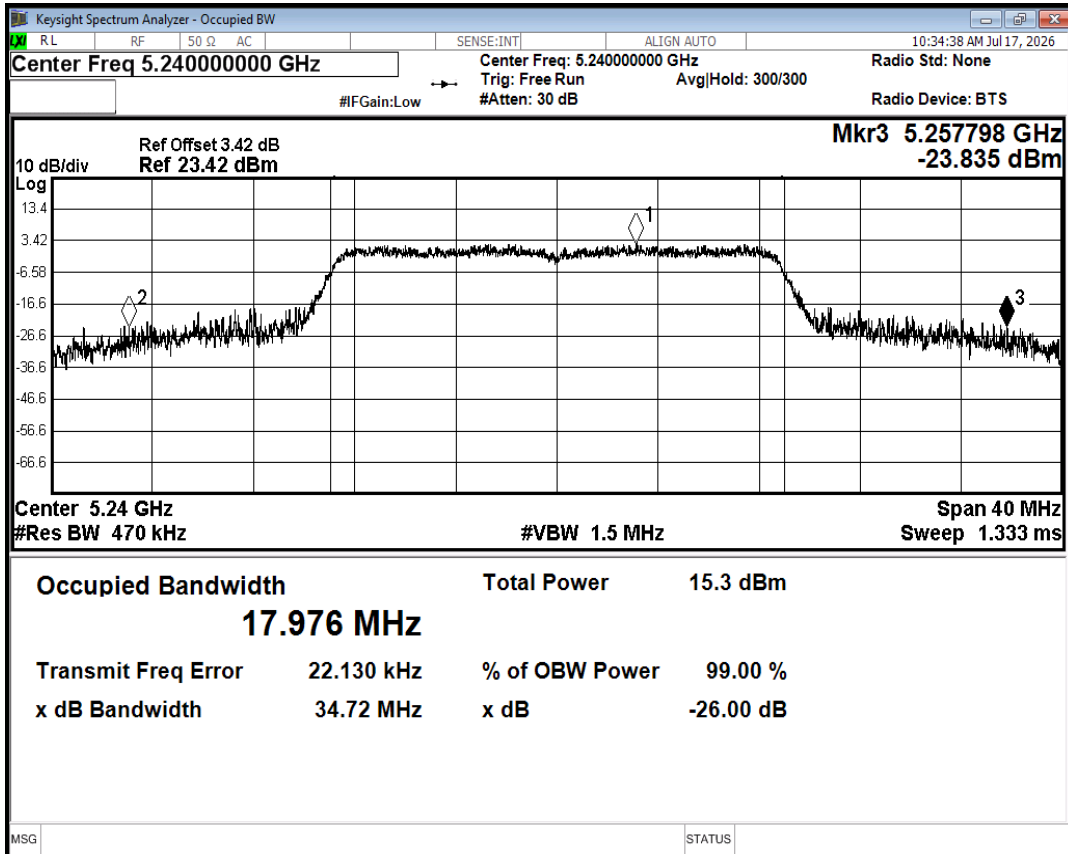
-26dB Bandwidth NVNT n40 5230MHz Ant1



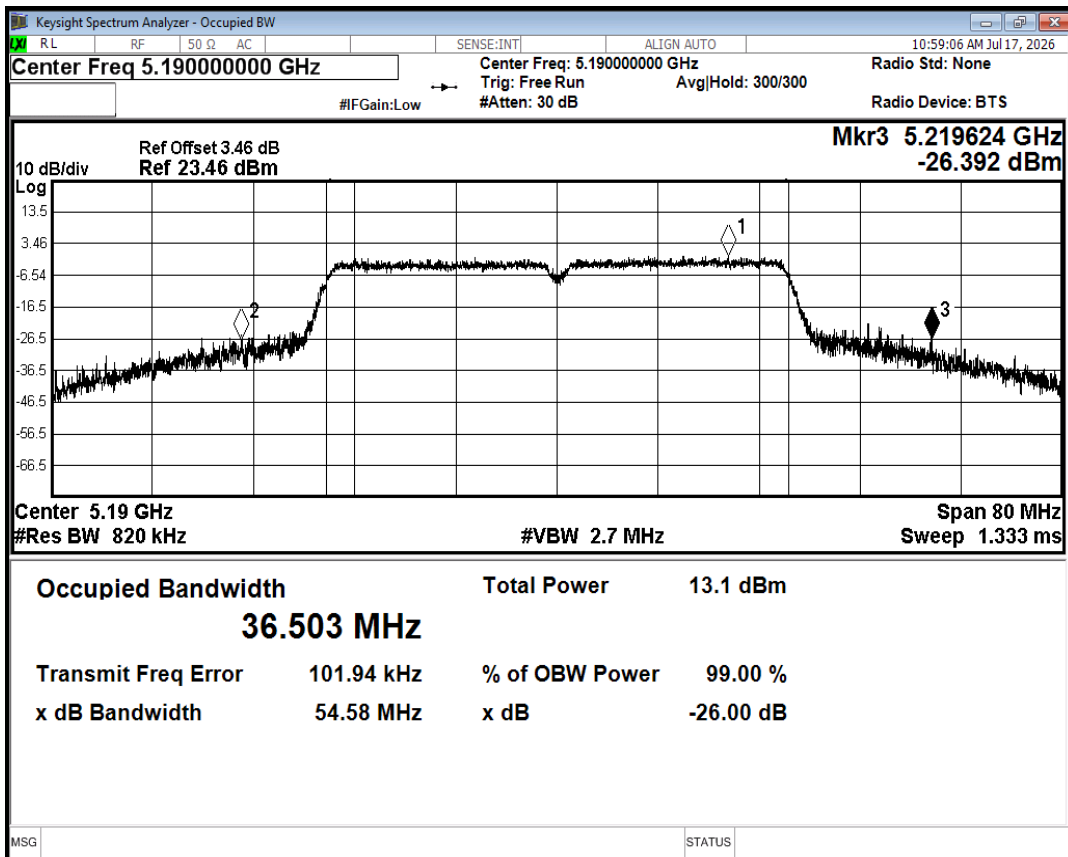
-26dB Bandwidth NVNT ac20 5180MHz Ant1



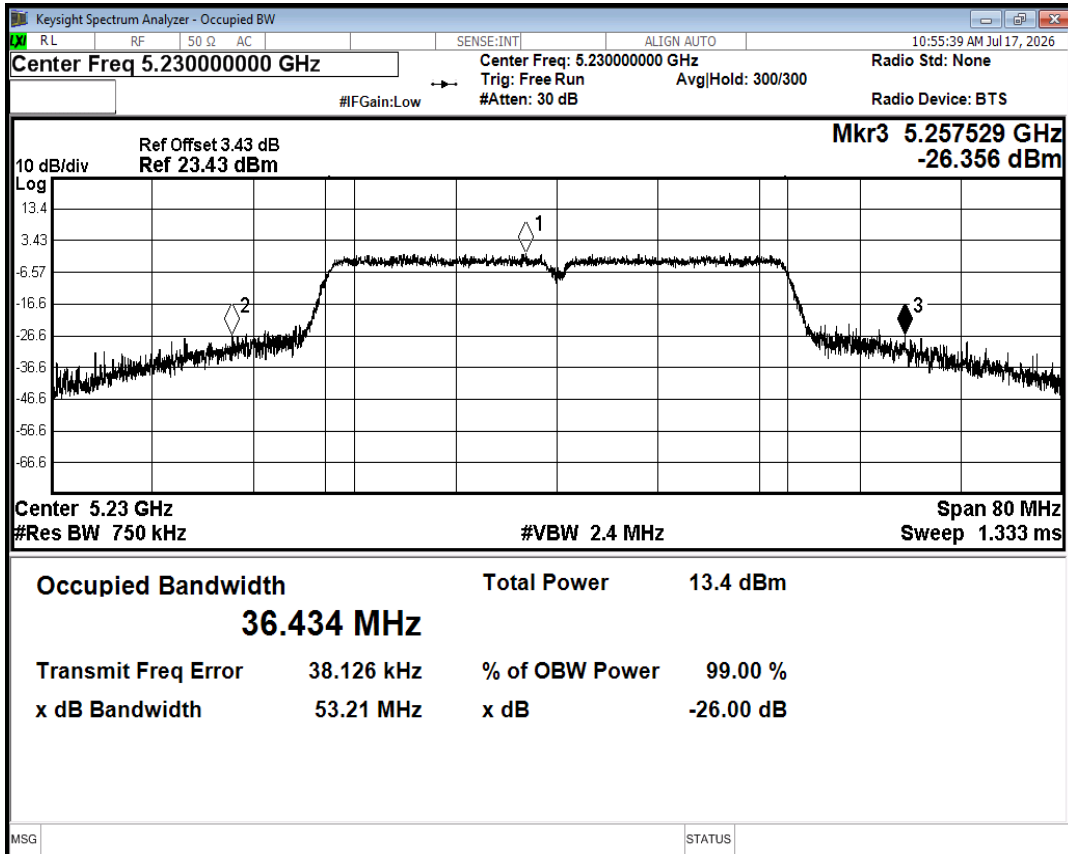
-26dB Bandwidth NVNT ac20 5200MHz Ant1



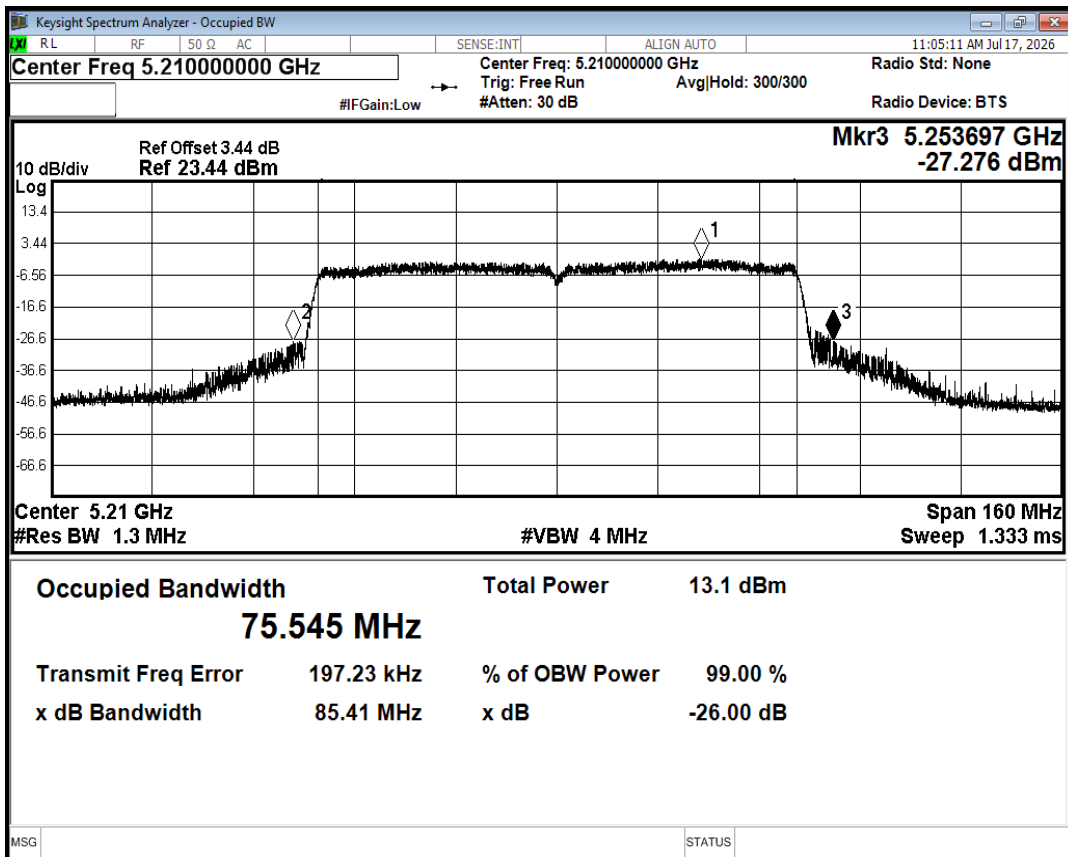
-26dB Bandwidth NVNT ac20 5240MHz Ant1



-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



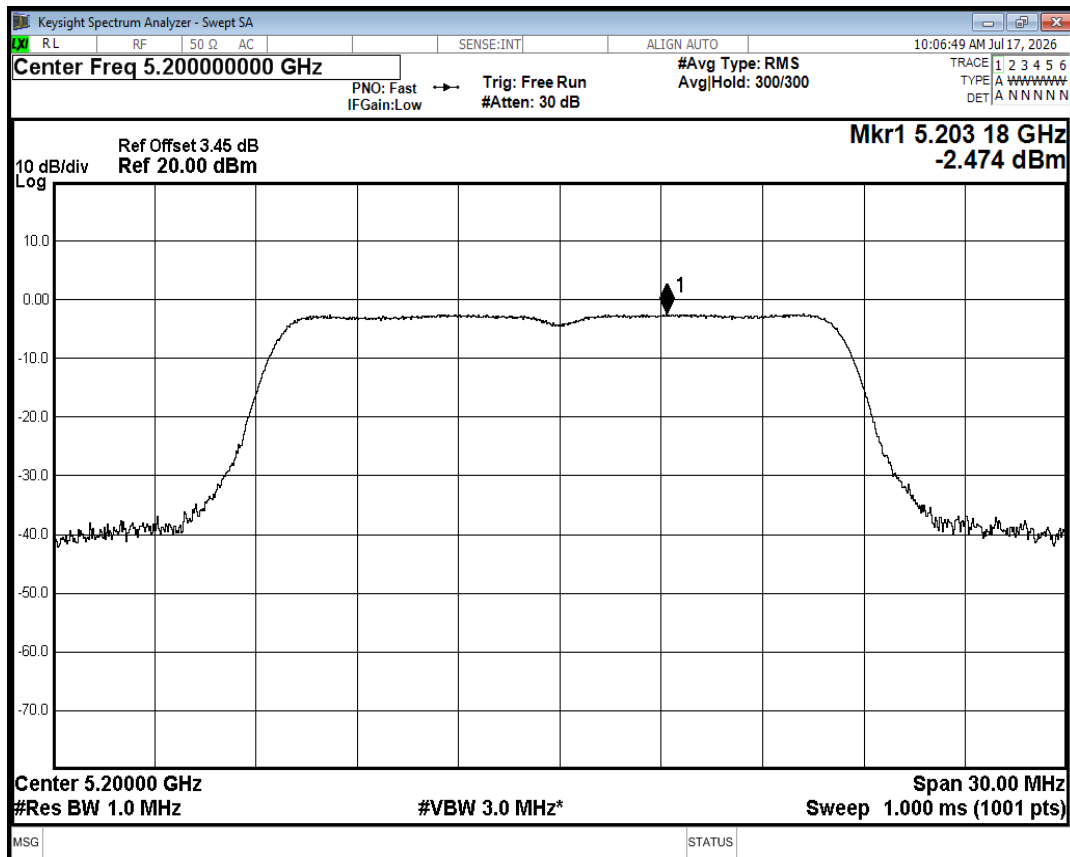
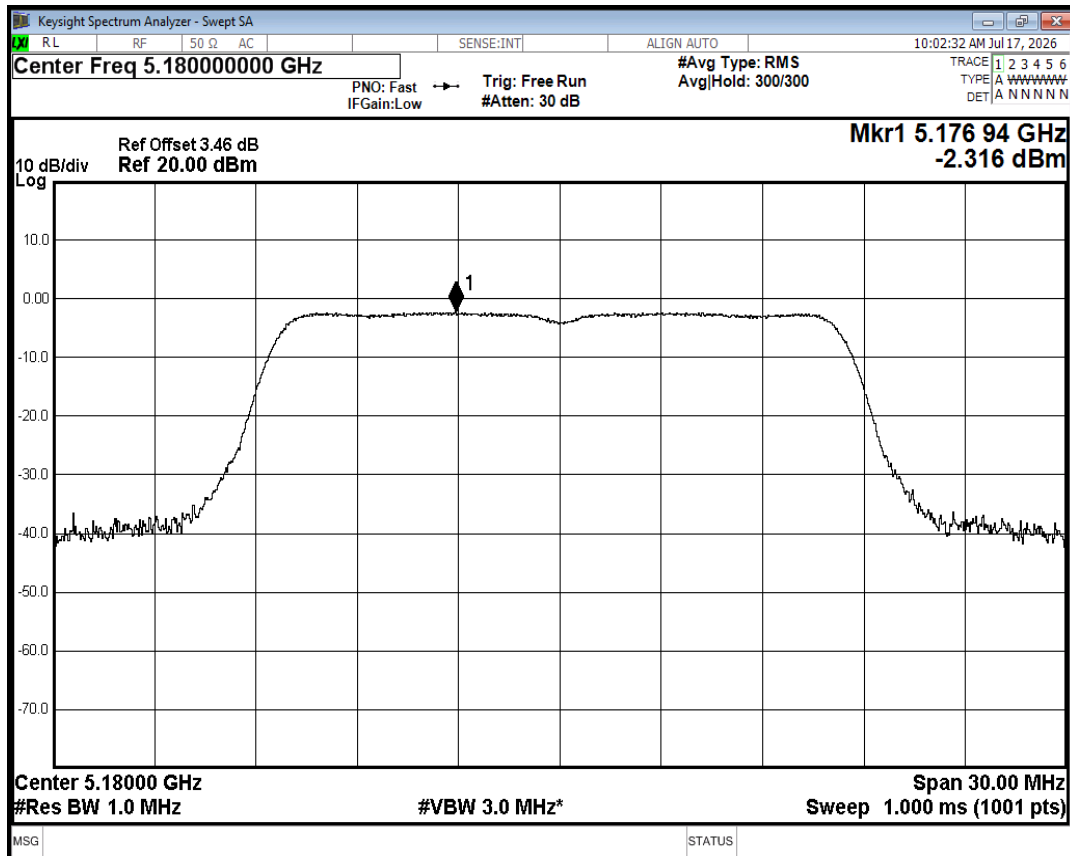
-26dB Bandwidth NVNT ac80 5210MHz Ant1

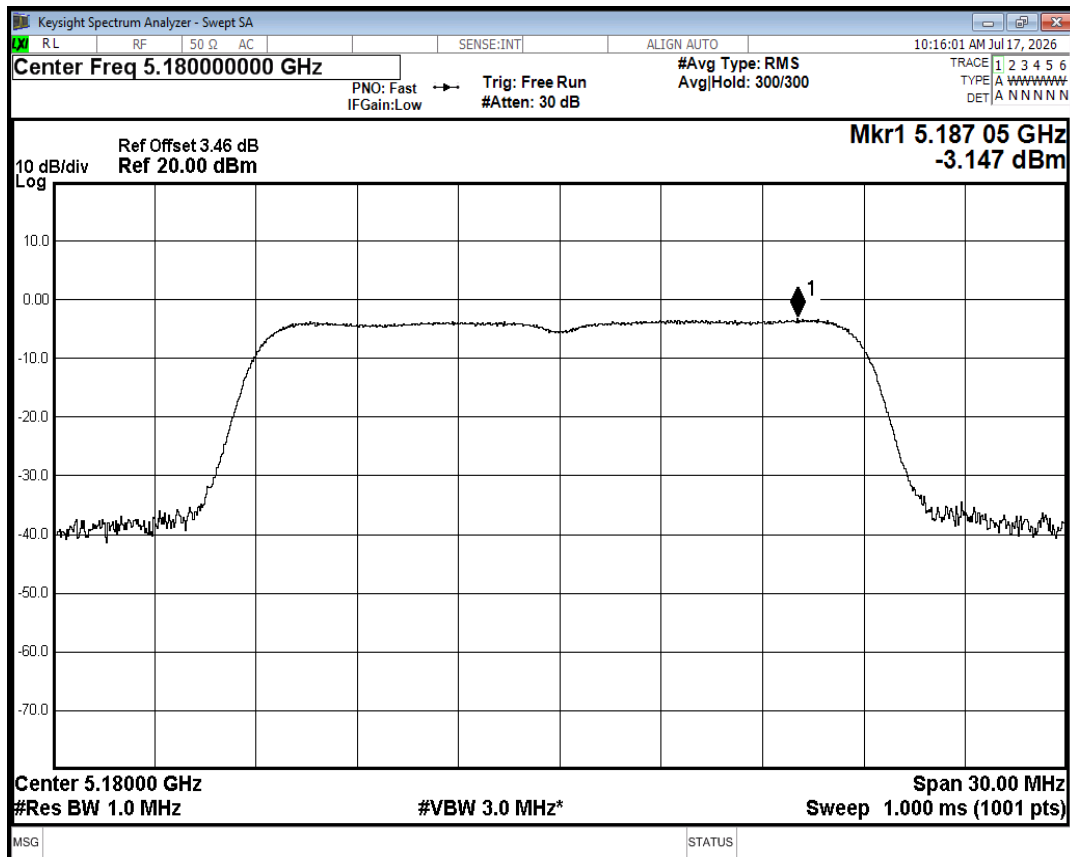
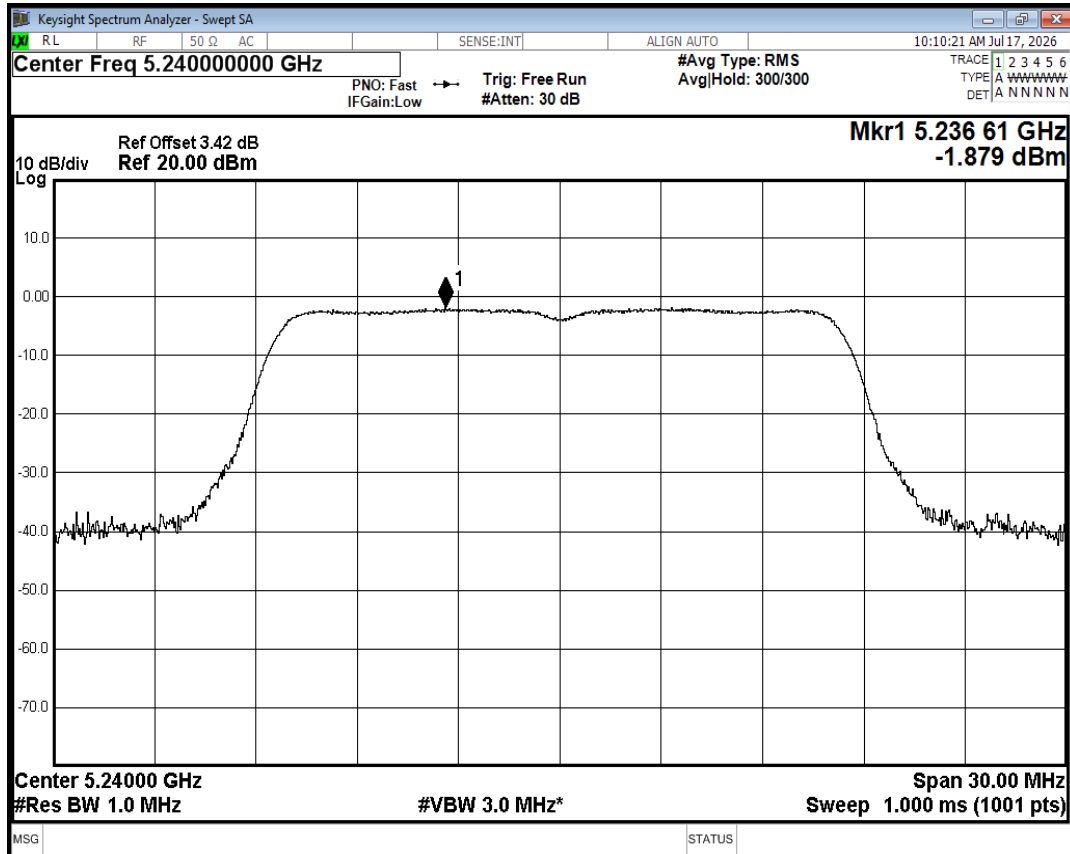
C.2 Maximum Conducted Output Power

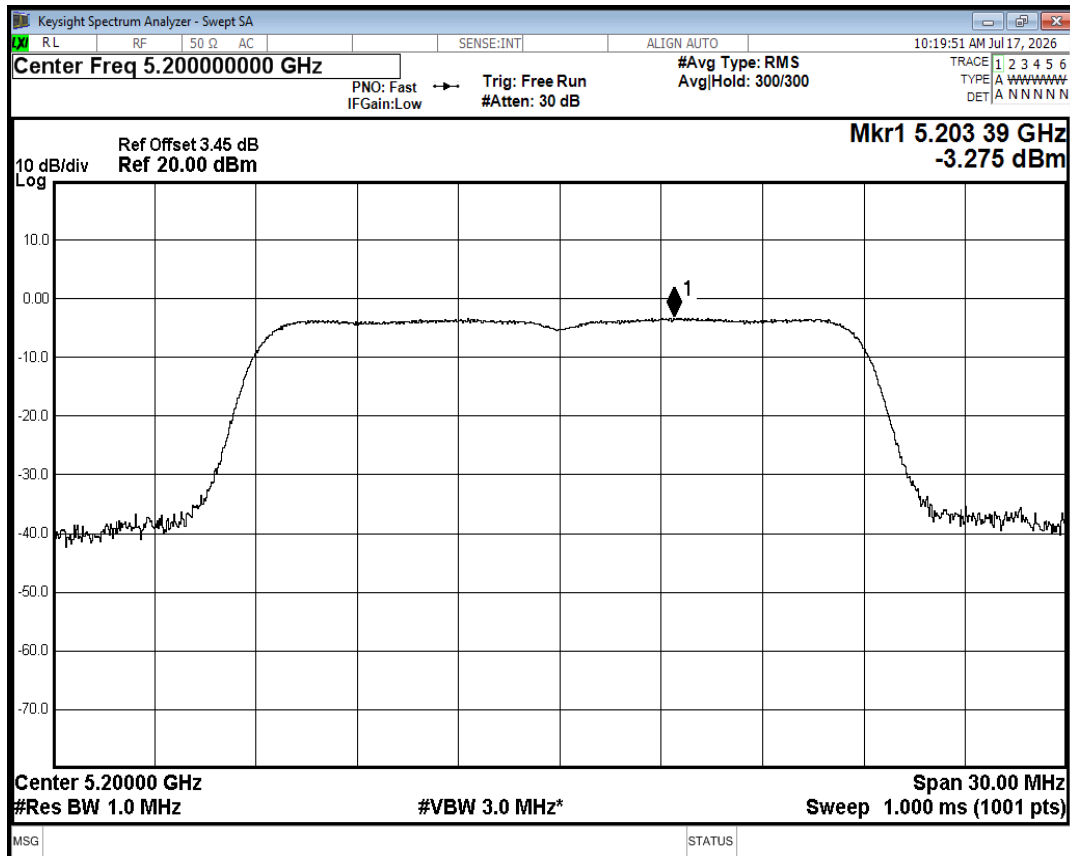
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Limit Conducted(dBm)	Verdict
NVNT	a	5180	Ant1	18.88	0.11	18.99	24	Pass
NVNT	a	5200	Ant1	18.95	0.11	19.06	24	Pass
NVNT	a	5240	Ant1	19.48	0.1	19.58	24	Pass
NVNT	n20	5180	Ant1	18.4	0.11	18.51	24	Pass
NVNT	n20	5200	Ant1	18.65	0.11	18.76	24	Pass
NVNT	n20	5240	Ant1	18.99	0.11	19.1	24	Pass
NVNT	n40	5190	Ant1	16.56	0.23	16.79	24	Pass
NVNT	n40	5230	Ant1	16.98	0.27	17.25	24	Pass
NVNT	ac20	5180	Ant1	18.64	0.13	18.77	24	Pass
NVNT	ac20	5200	Ant1	19.12	0.11	19.23	24	Pass
NVNT	ac20	5240	Ant1	19.09	0.11	19.2	24	Pass
NVNT	ac40	5190	Ant1	16.74	0.23	16.97	24	Pass
NVNT	ac40	5230	Ant1	16.77	0.23	17.0	24	Pass
NVNT	ac80	5210	Ant1	15.96	0.46	16.42	24	Pass

C.3 Maximum Power Spectral Density Level

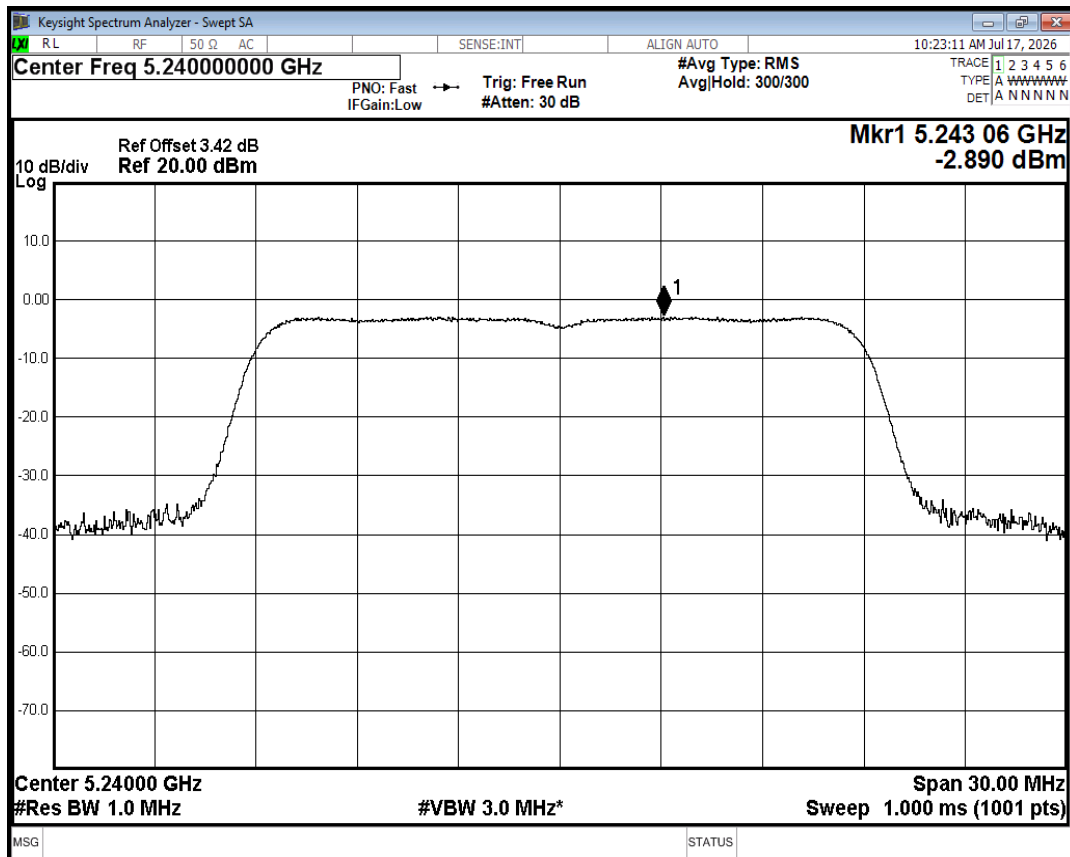
Condition	Mode	Frequency (MHz)	Antenna	Raw Data [dBm/MHz]	DC Factor	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
NVNT	a	5180	Ant1	-2.32	0.11	-2.21	11	Pass
NVNT	a	5200	Ant1	-2.47	0.11	-2.36	11	Pass
NVNT	a	5240	Ant1	-1.88	0.1	-1.78	11	Pass
NVNT	n20	5180	Ant1	-3.15	0.11	-3.04	11	Pass
NVNT	n20	5200	Ant1	-3.28	0.11	-3.17	11	Pass
NVNT	n20	5240	Ant1	-2.89	0.11	-2.78	11	Pass
NVNT	n40	5190	Ant1	-8.53	0.23	-8.3	11	Pass
NVNT	n40	5230	Ant1	-8.41	0.27	-8.14	11	Pass
NVNT	ac20	5180	Ant1	-3.32	0.13	-3.19	11	Pass
NVNT	ac20	5200	Ant1	-2.74	0.11	-2.63	11	Pass
NVNT	ac20	5240	Ant1	-2.81	0.11	-2.7	11	Pass
NVNT	ac40	5190	Ant1	-8.49	0.23	-8.26	11	Pass
NVNT	ac40	5230	Ant1	-8.39	0.23	-8.16	11	Pass
NVNT	ac80	5210	Ant1	-12.18	0.46	-11.72	11	Pass



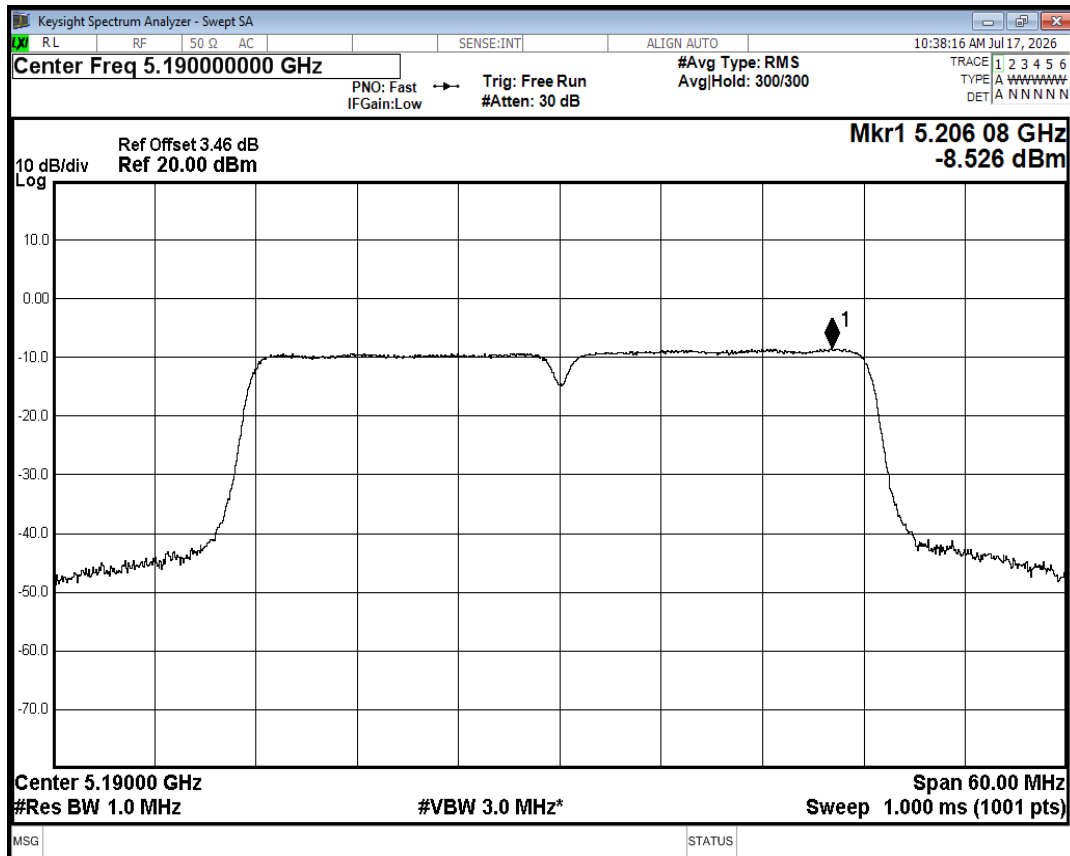




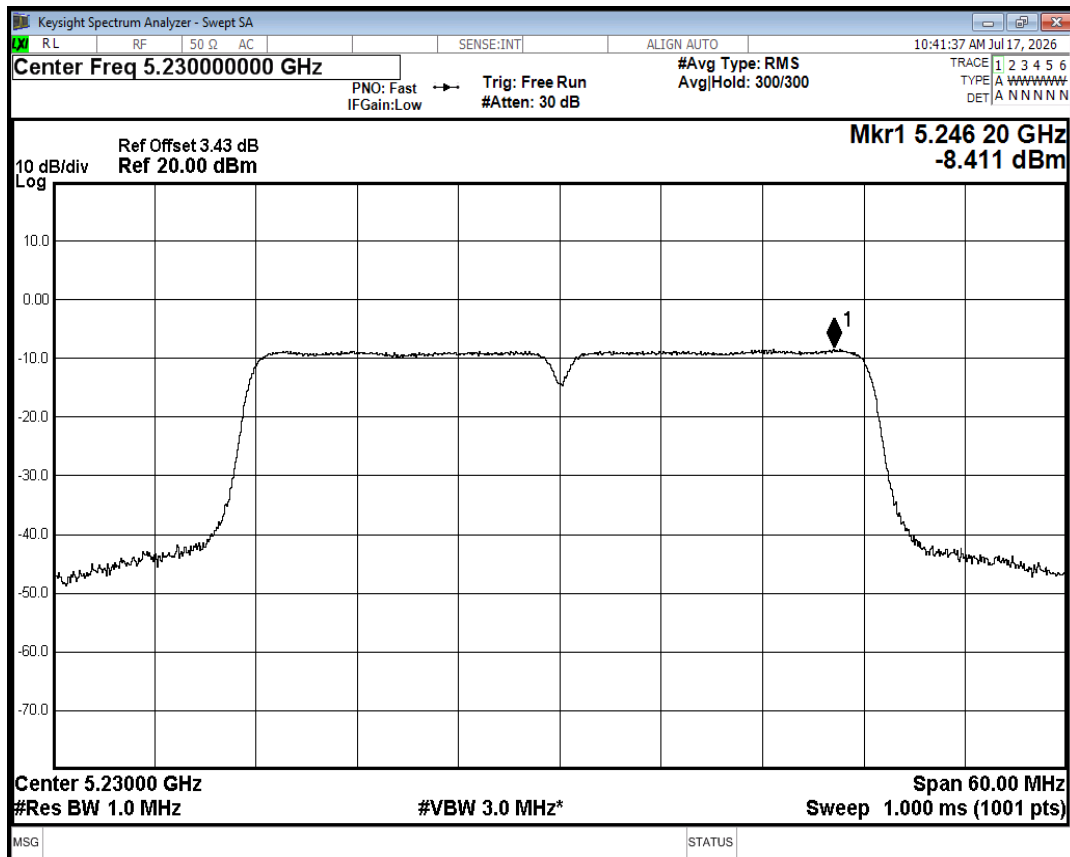
PSD NVNT n20 5200MHz Ant1



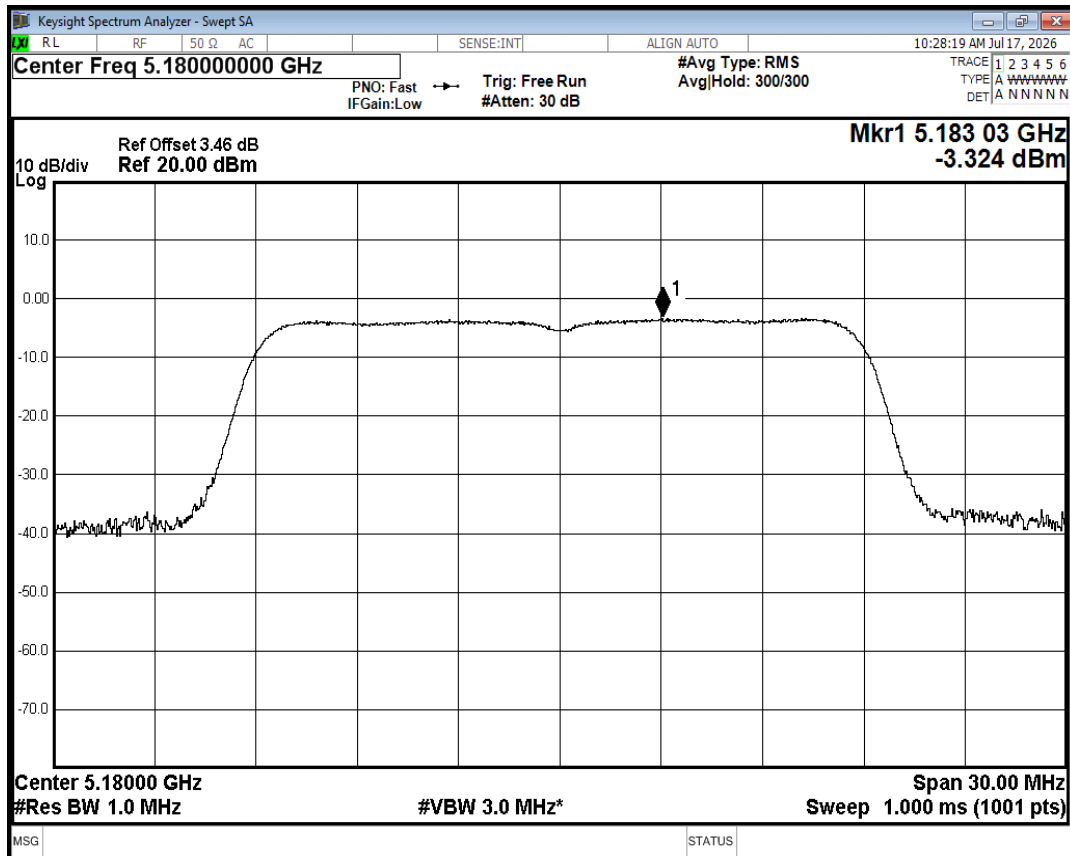
PSD NVNT n20 5240MHz Ant1



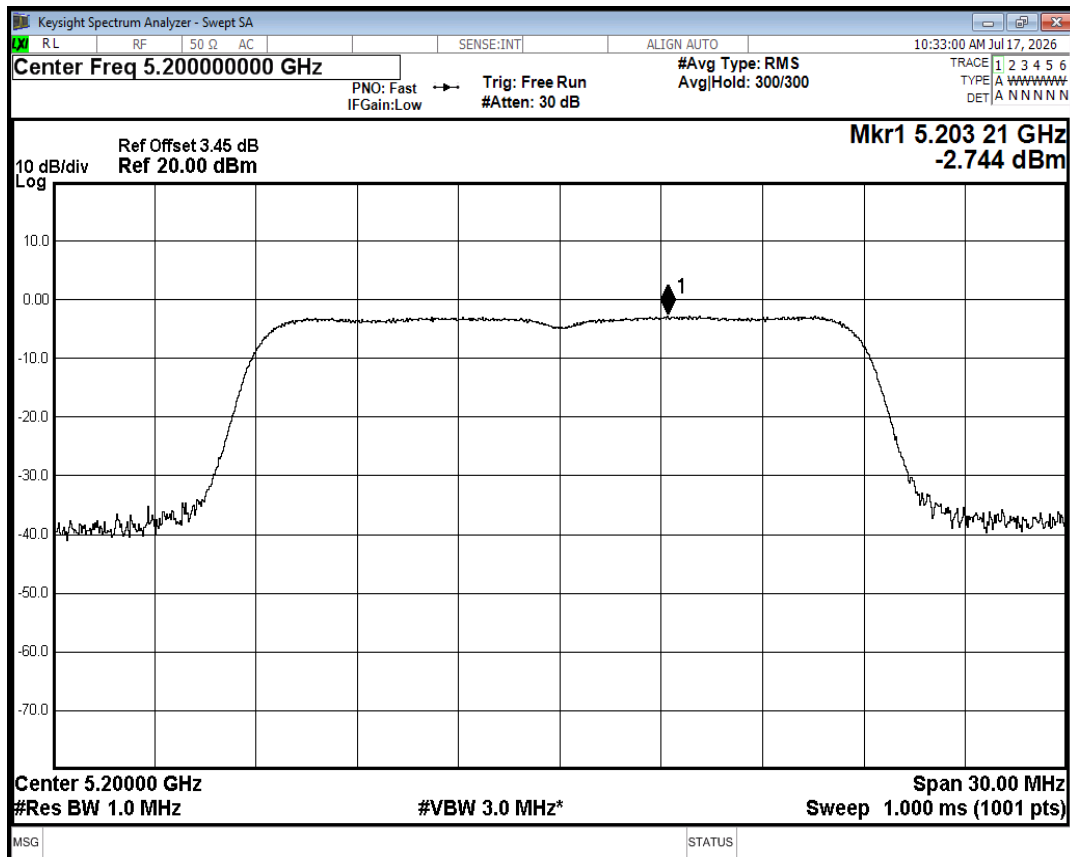
PSD NVNT n40 5190MHz Ant1



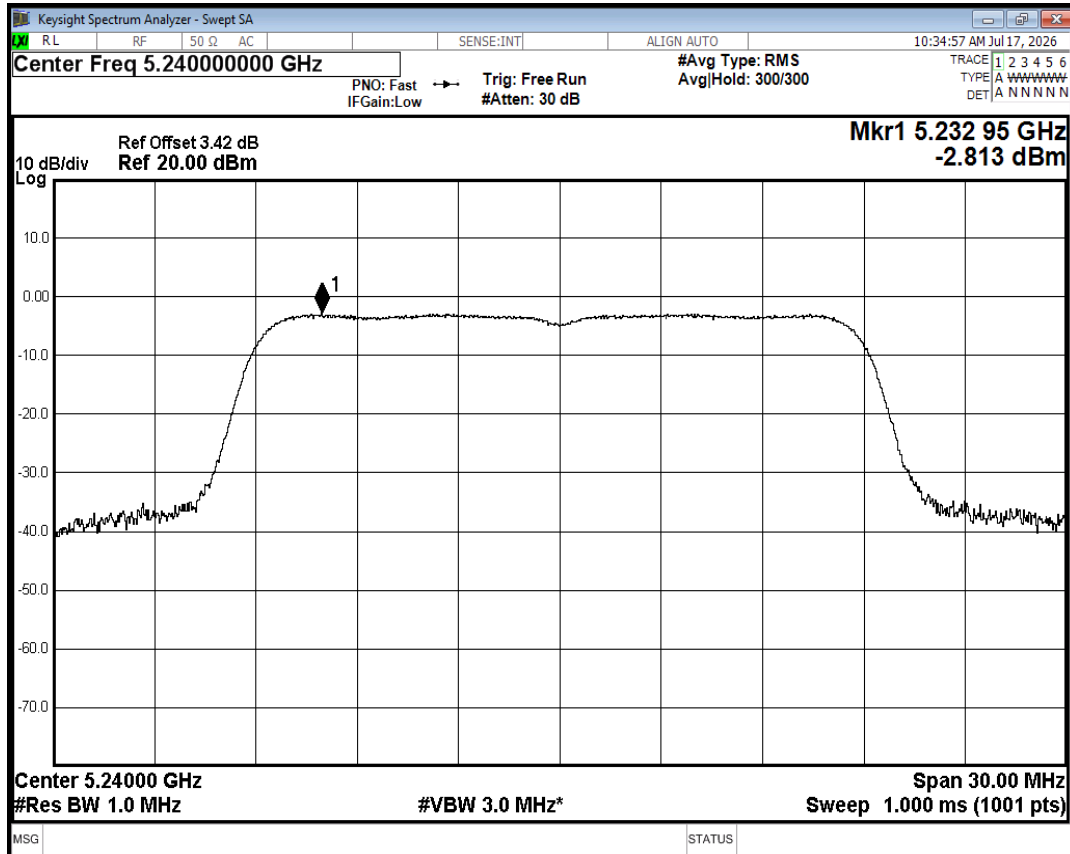
PSD NVNT n40 5230MHz Ant1



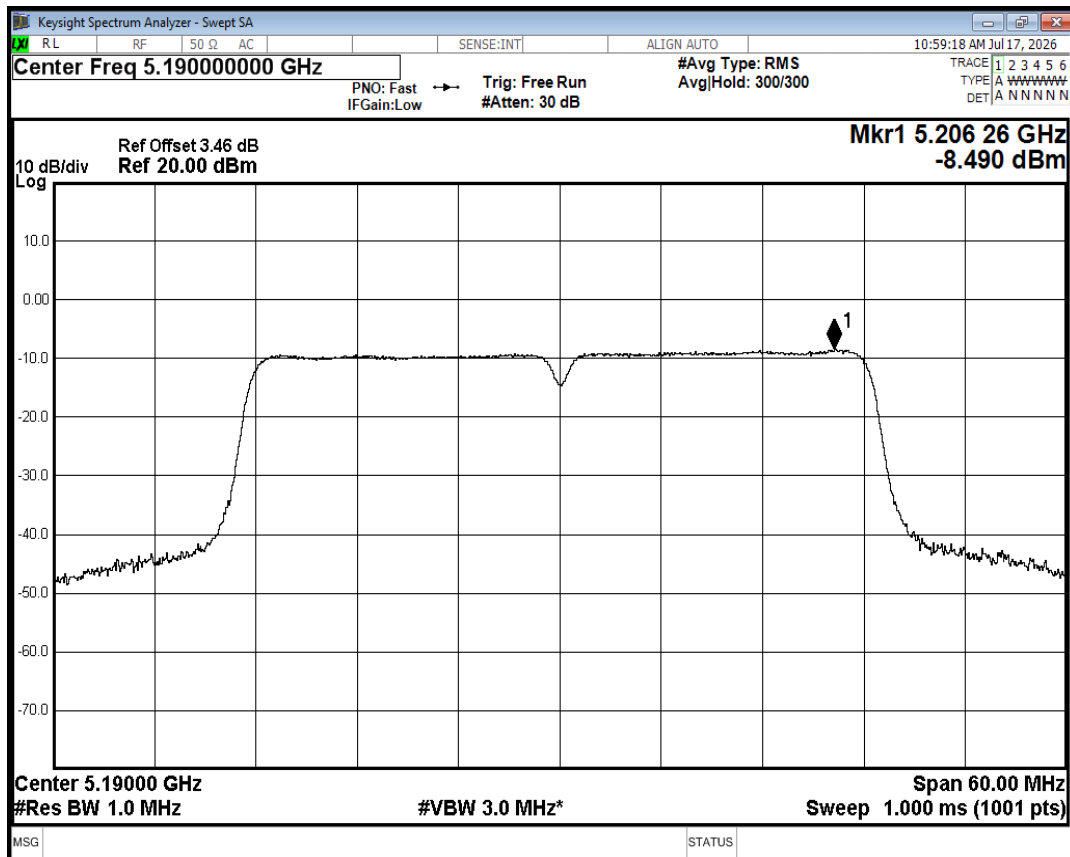
PSD NVNT ac20 5180MHz Ant1



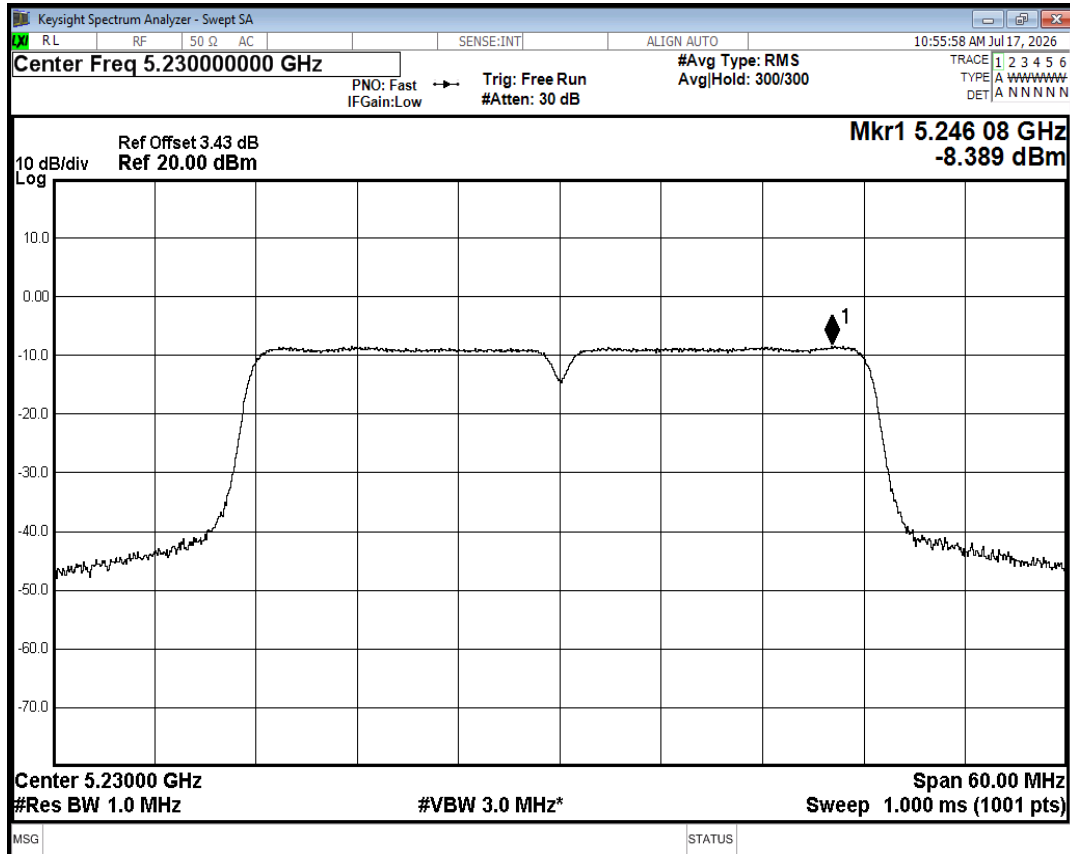
PSD NVNT ac20 5200MHz Ant1



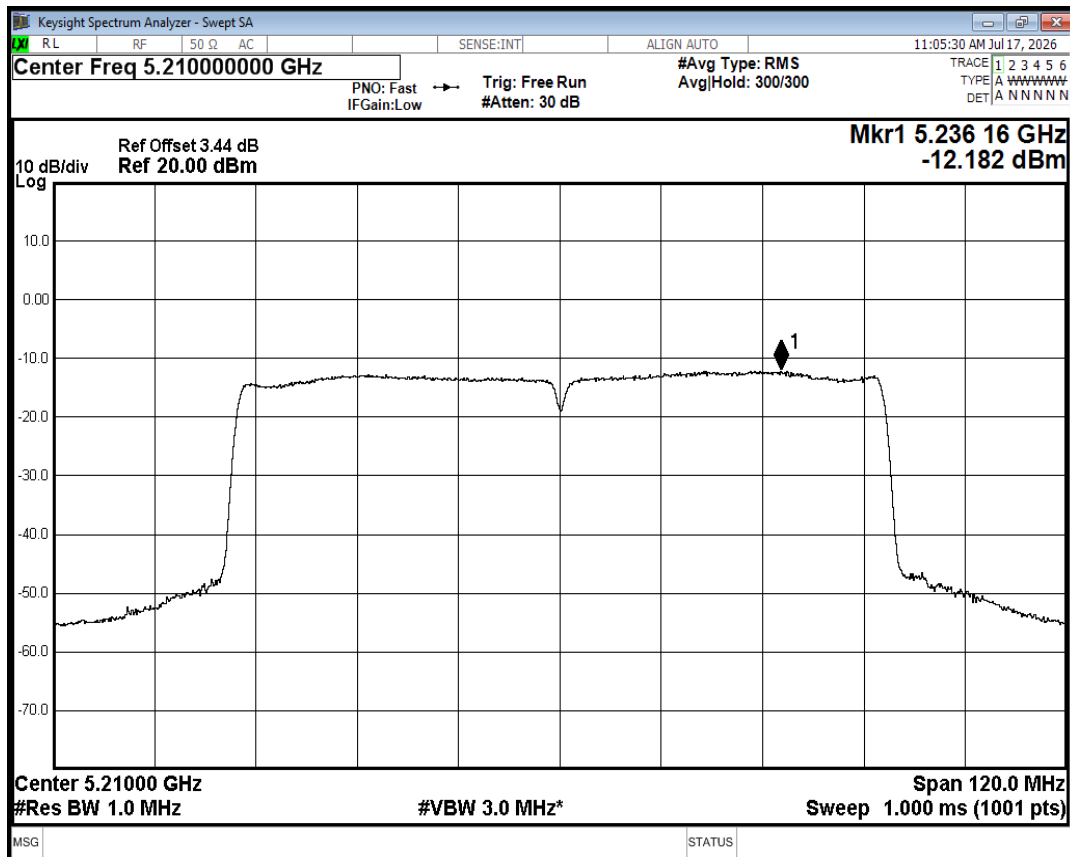
PSD NVNT ac20 5240MHz Ant1



PSD NVNT ac40 5190MHz Ant1



PSD NVNT ac40 5230MHz Ant1

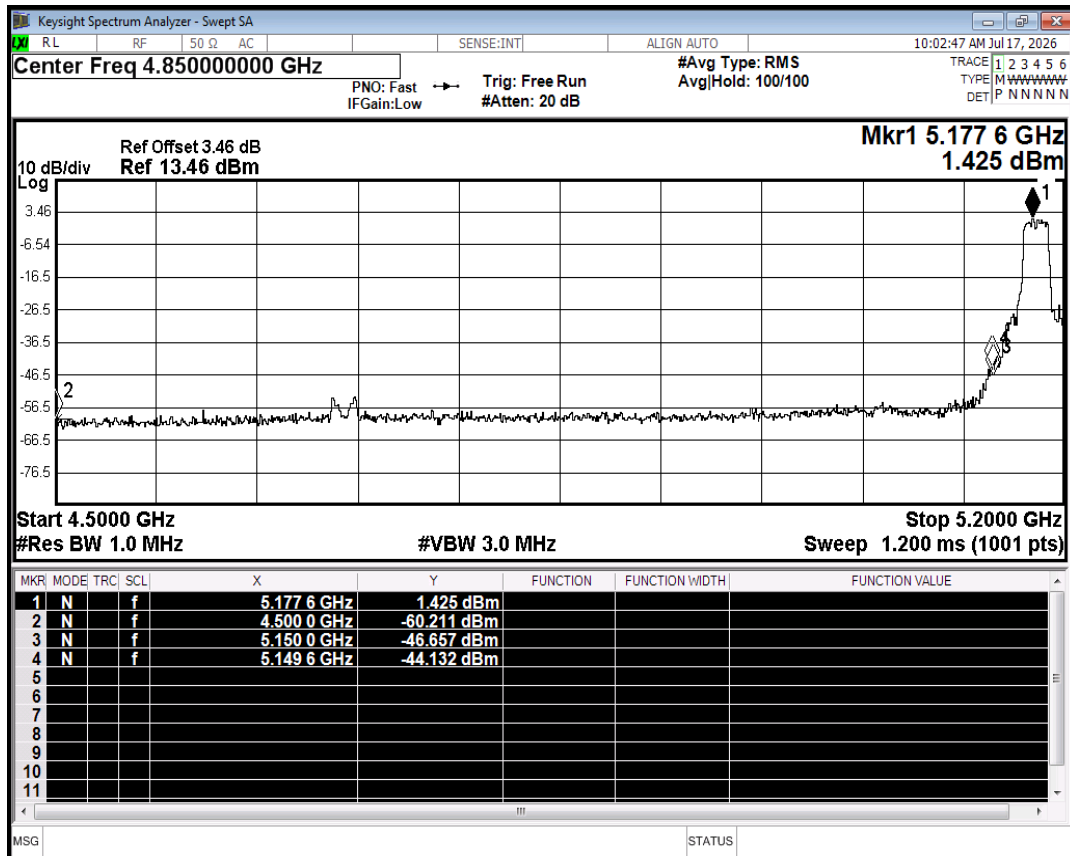


PSD NVNT ac80 5210MHz Ant1

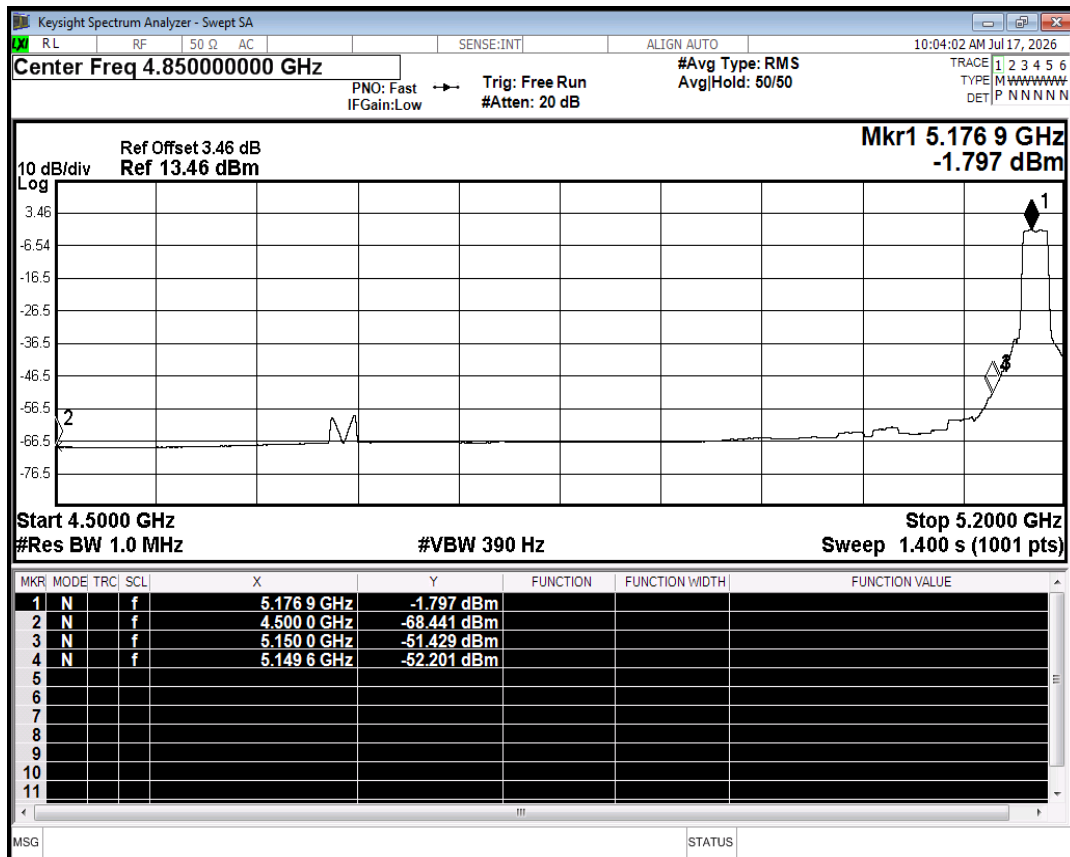
C.4 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	a	5180	Ant1	4500	-60.21	2	37.02	Peak	68.2	Pass
NVNT	a	5180	Ant1	4500	-68.44	2	28.79	Average	54	Pass
NVNT	a	5180	Ant1	5149.6	-44.13	2	53.1	Peak	68.2	Pass
NVNT	a	5180	Ant1	5149.6	-52.2	2	45.03	Average	54	Pass
NVNT	a	5180	Ant1	5150	-46.65	2	50.58	Peak	68.2	Pass
NVNT	a	5180	Ant1	5150	-51.42	2	45.81	Average	54	Pass
NVNT	a	5240	Ant1	5350	-50.23	2	47	Peak	68.2	Pass
NVNT	a	5240	Ant1	5350	-56.72	2	40.51	Average	54	Pass
NVNT	a	5240	Ant1	5426.4	-47.39	2	49.84	Peak	68.2	Pass
NVNT	a	5240	Ant1	5350.08	-56.72	2	40.51	Average	54	Pass
NVNT	a	5240	Ant1	5460	-49.21	2	48.02	Peak	68.2	Pass
NVNT	a	5240	Ant1	5460	-56.87	2	40.36	Average	54	Pass
NVNT	n20	5180	Ant1	4500	-53.22	2	44.01	Peak	68.2	Pass
NVNT	n20	5180	Ant1	4500	-58.58	2	38.65	Average	54	Pass
NVNT	n20	5180	Ant1	5149.6	-39.75	2	57.48	Peak	68.2	Pass
NVNT	n20	5180	Ant1	5149.6	-48.98	2	48.25	Average	54	Pass
NVNT	n20	5180	Ant1	5150	-36.77	2	60.46	Peak	68.2	Pass
NVNT	n20	5180	Ant1	5150	-48.7	2	48.53	Average	54	Pass
NVNT	n20	5240	Ant1	5350	-49.67	2	47.56	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5350	-56.83	2	40.4	Average	54	Pass
NVNT	n20	5240	Ant1	5370.24	-46.49	2	50.74	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5450.88	-56.69	2	40.54	Average	54	Pass
NVNT	n20	5240	Ant1	5460	-50.52	2	46.71	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5460	-56.92	2	40.31	Average	54	Pass
NVNT	n40	5190	Ant1	4500	-61.7	2	35.53	Peak	68.2	Pass
NVNT	n40	5190	Ant1	4500	-68.3	2	28.93	Average	54	Pass
NVNT	n40	5190	Ant1	5148.97	-47.37	2	49.86	Peak	68.2	Pass
NVNT	n40	5190	Ant1	5149.7	-53.54	2	43.69	Average	54	Pass
NVNT	n40	5190	Ant1	5150	-47.99	2	49.24	Peak	68.2	Pass
NVNT	n40	5190	Ant1	5150	-52.37	2	44.86	Average	54	Pass
NVNT	n40	5230	Ant1	5350	-49.94	2	47.29	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5350	-57.03	2	40.2	Average	54	Pass
NVNT	n40	5230	Ant1	5409.78	-47.13	2	50.1	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5458.65	-56.4	2	40.83	Average	54	Pass
NVNT	n40	5230	Ant1	5460	-50.7	2	46.53	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5460	-56.66	2	40.57	Average	54	Pass
NVNT	ac20	5180	Ant1	4500	-52.62	2	44.61	Peak	68.2	Pass
NVNT	ac20	5180	Ant1	4500	-58.6	2	38.63	Average	54	Pass
NVNT	ac20	5180	Ant1	5149.6	-42.97	2	54.26	Peak	68.2	Pass
NVNT	ac20	5180	Ant1	5149.6	-49.97	2	47.26	Average	54	Pass
NVNT	ac20	5180	Ant1	5150	-40.41	2	56.82	Peak	68.2	Pass

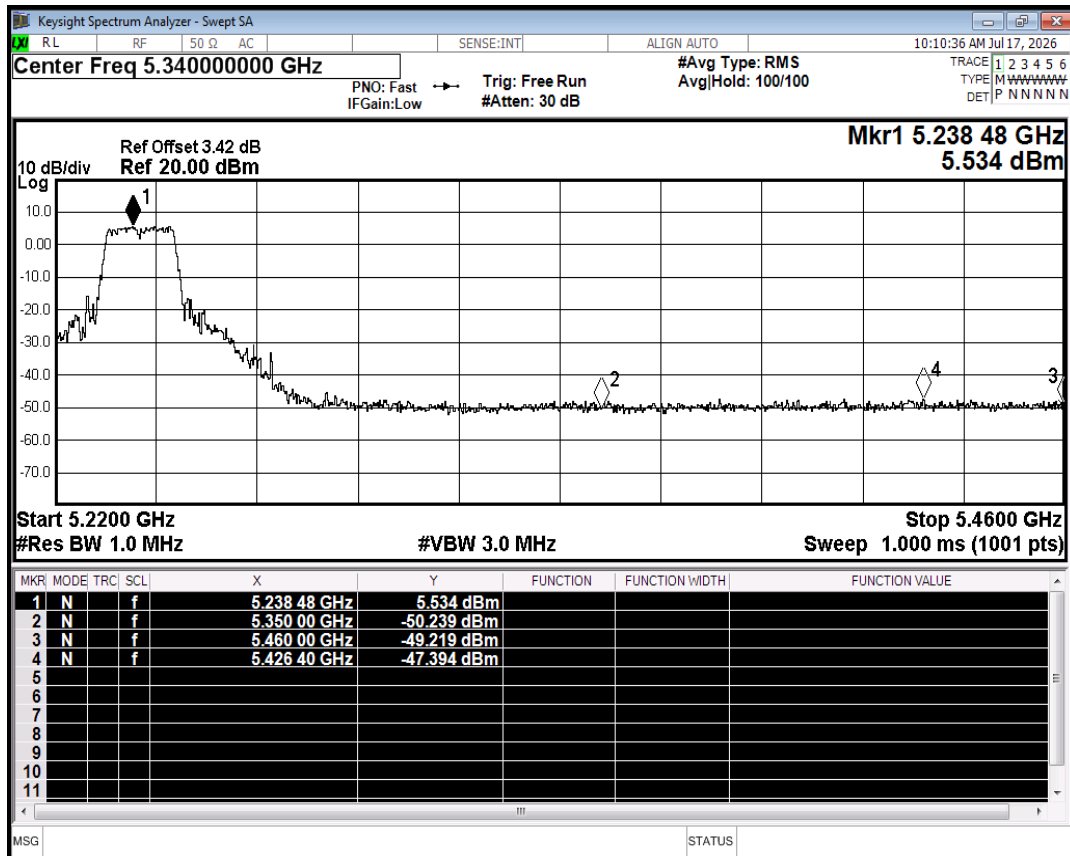
NVNT	ac20	5180	Ant1	5150	-49.49	2	47.74	Average	54	Pass
NVNT	ac20	5240	Ant1	5350	-47.5	2	49.73	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5350	-56.85	2	40.38	Average	54	Pass
NVNT	ac20	5240	Ant1	5423.76	-46.94	2	50.29	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5450.64	-56.7	2	40.53	Average	54	Pass
NVNT	ac20	5240	Ant1	5460	-49.84	2	47.39	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5460	-56.93	2	40.3	Average	54	Pass
NVNT	ac40	5190	Ant1	4500	-51.2	2	46.03	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	4500	-58.28	2	38.95	Average	54	Pass
NVNT	ac40	5190	Ant1	5019.03	-46.33	2	50.9	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	5149.7	-52.37	2	44.86	Average	54	Pass
NVNT	ac40	5190	Ant1	5150	-45.35	2	51.88	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	5150	-51.09	2	46.14	Average	54	Pass
NVNT	ac40	5230	Ant1	5350	-49.02	2	48.21	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5350	-57.1	2	40.13	Average	54	Pass
NVNT	ac40	5230	Ant1	5447.04	-47.07	2	50.16	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5444.88	-56.37	2	40.86	Average	54	Pass
NVNT	ac40	5230	Ant1	5460	-48.89	2	48.34	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5460	-56.69	2	40.54	Average	54	Pass
NVNT	ac80	5210	Ant1	5350	-51.28	2	45.95	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5350	-56.72	2	40.51	Average	54	Pass
NVNT	ac80	5210	Ant1	5449.77	-47.59	2	49.64	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5450.76	-55.96	2	41.27	Average	54	Pass
NVNT	ac80	5210	Ant1	5460	-50.29	2	46.94	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5460	-56.29	2	40.94	Average	54	Pass
NVNT	ac80	5210	Ant1	4500	-52.21	2	45.02	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	4500	-58.23	2	39	Average	54	Pass
NVNT	ac80	5210	Ant1	5064.85	-46.09	2	51.14	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5137.53	-52.77	2	44.46	Average	54	Pass
NVNT	ac80	5210	Ant1	5150	-46.66	2	50.57	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5150	-53.09	2	44.14	Average	54	Pass



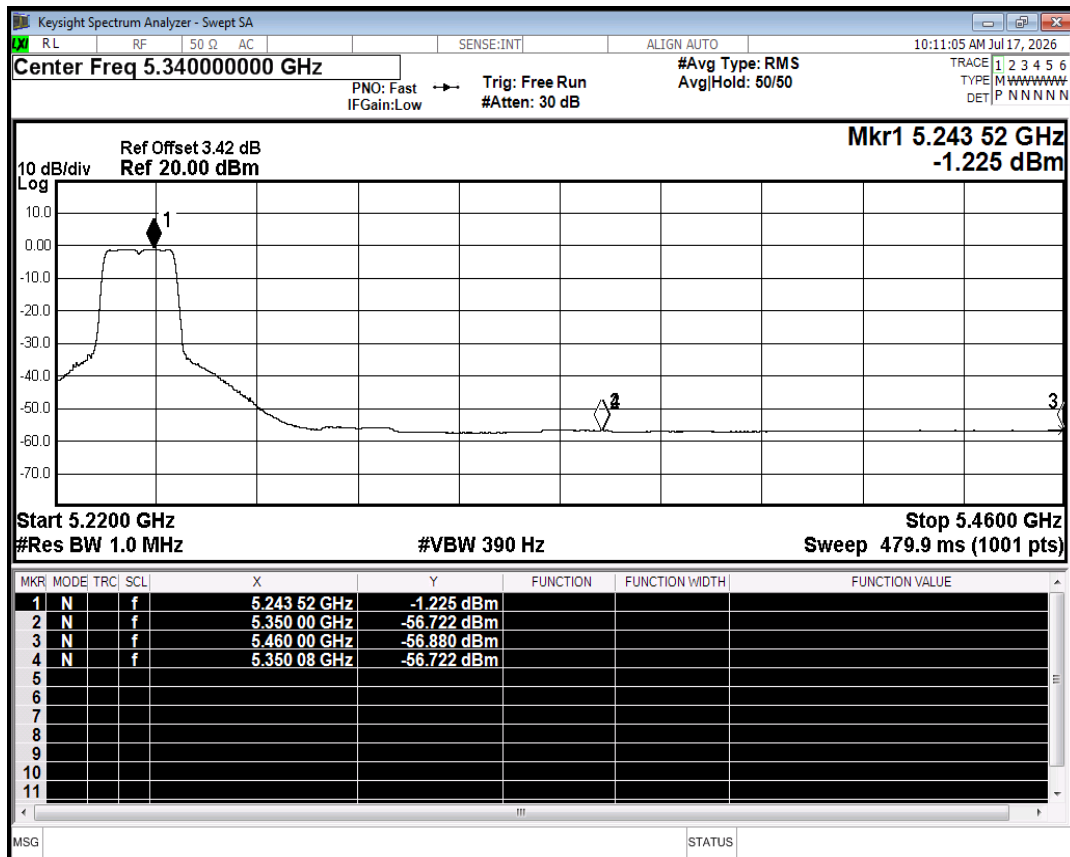
Restrict Band NVNT a 5180MHz Ant1 Peak



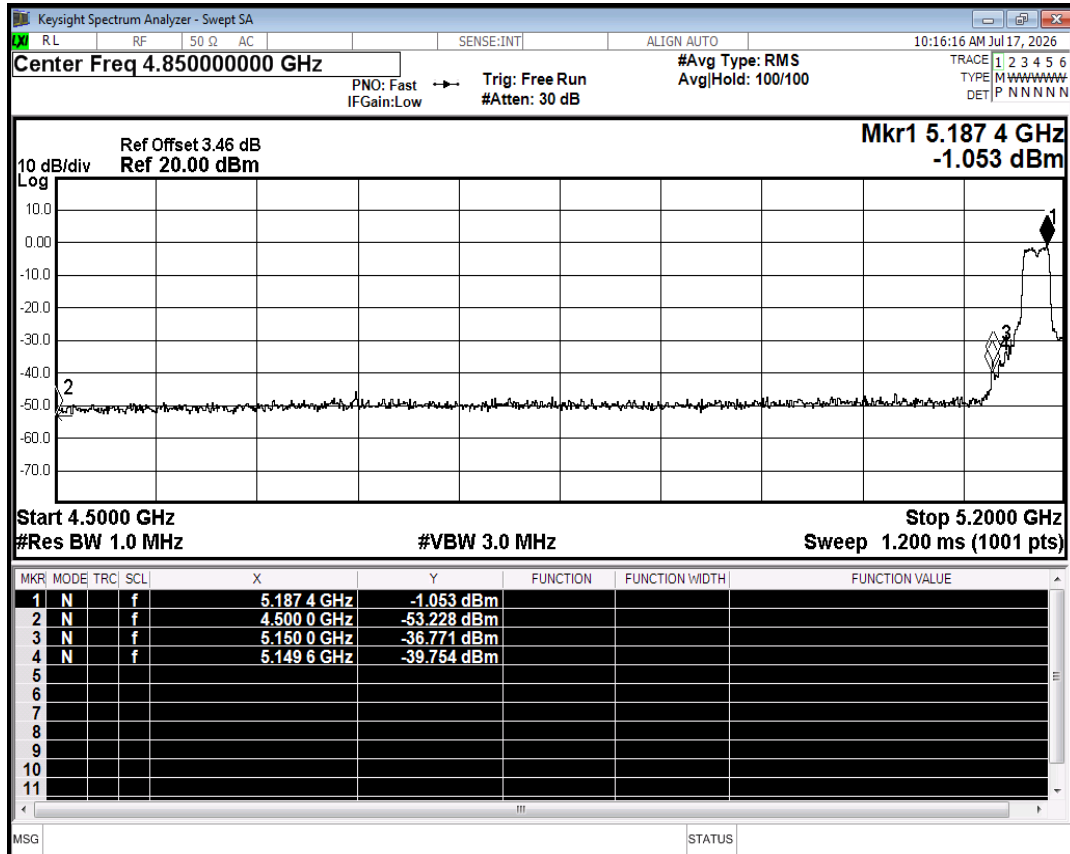
Restrict Band NVNT a 5180MHz Ant1 Average



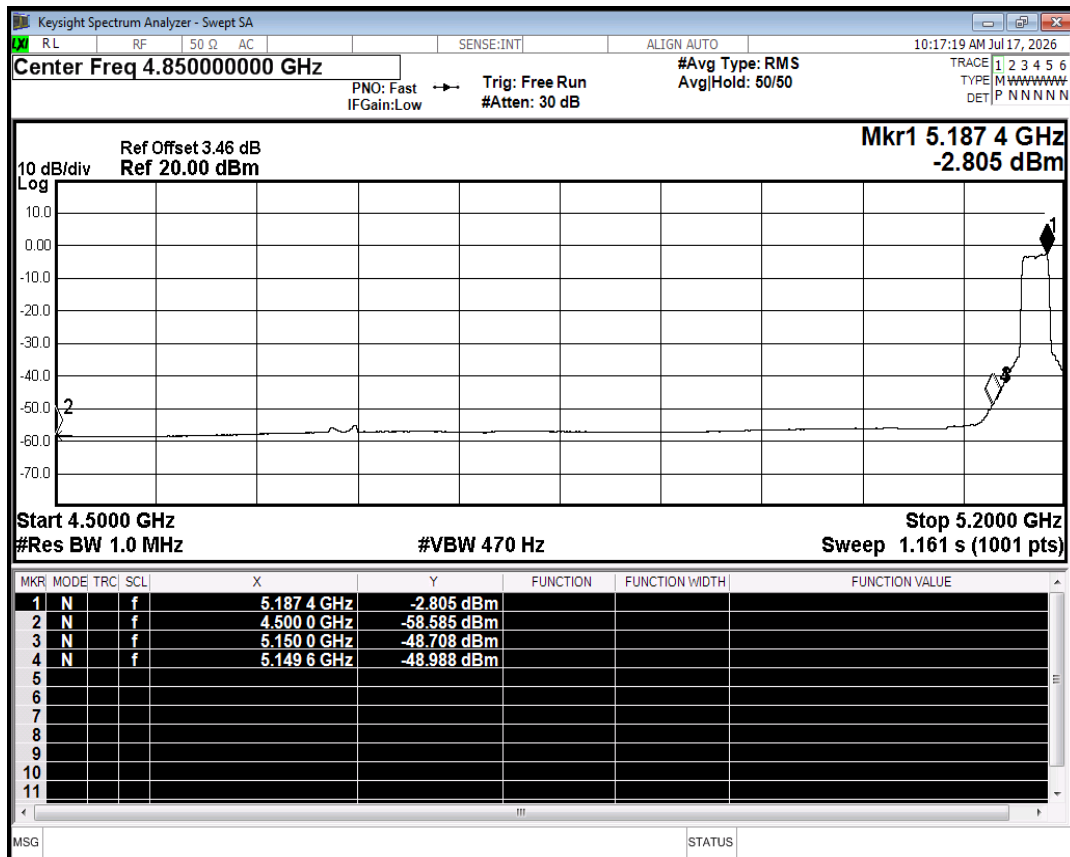
Restrict Band NVNT a 5240MHz Ant1 Peak



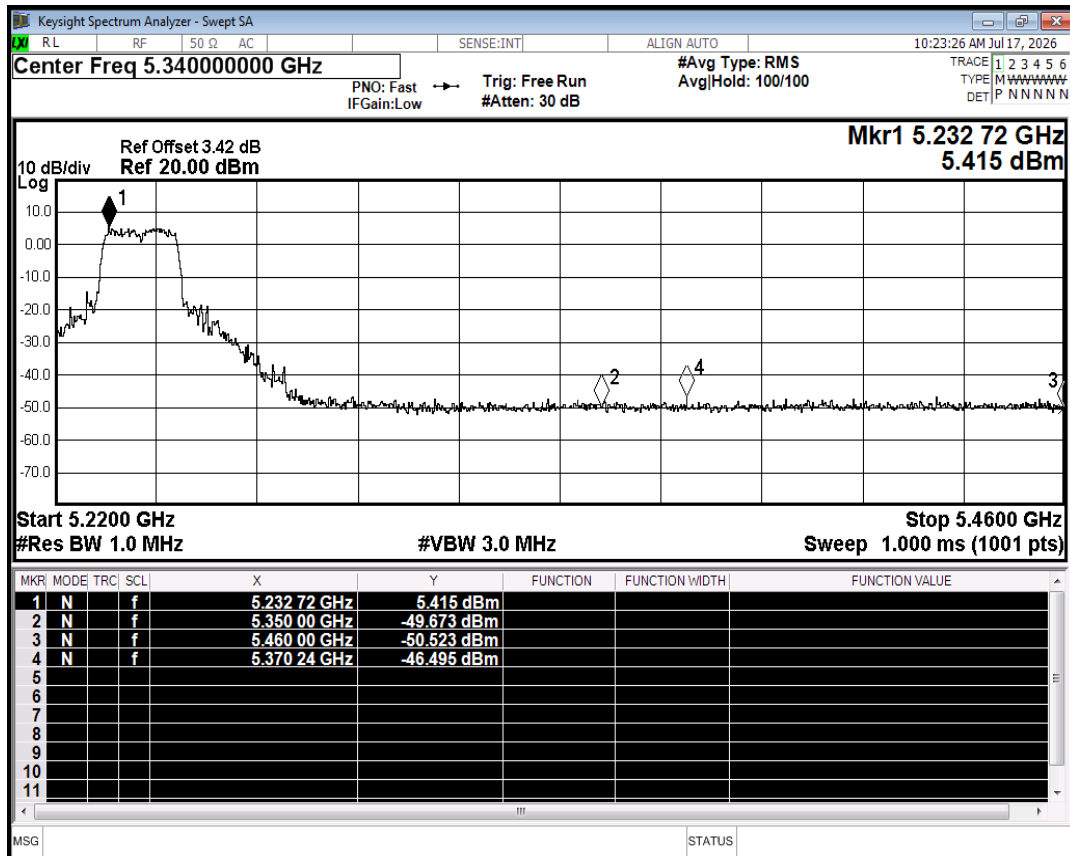
Restrict Band NVNT a 5240MHz Ant1 Average



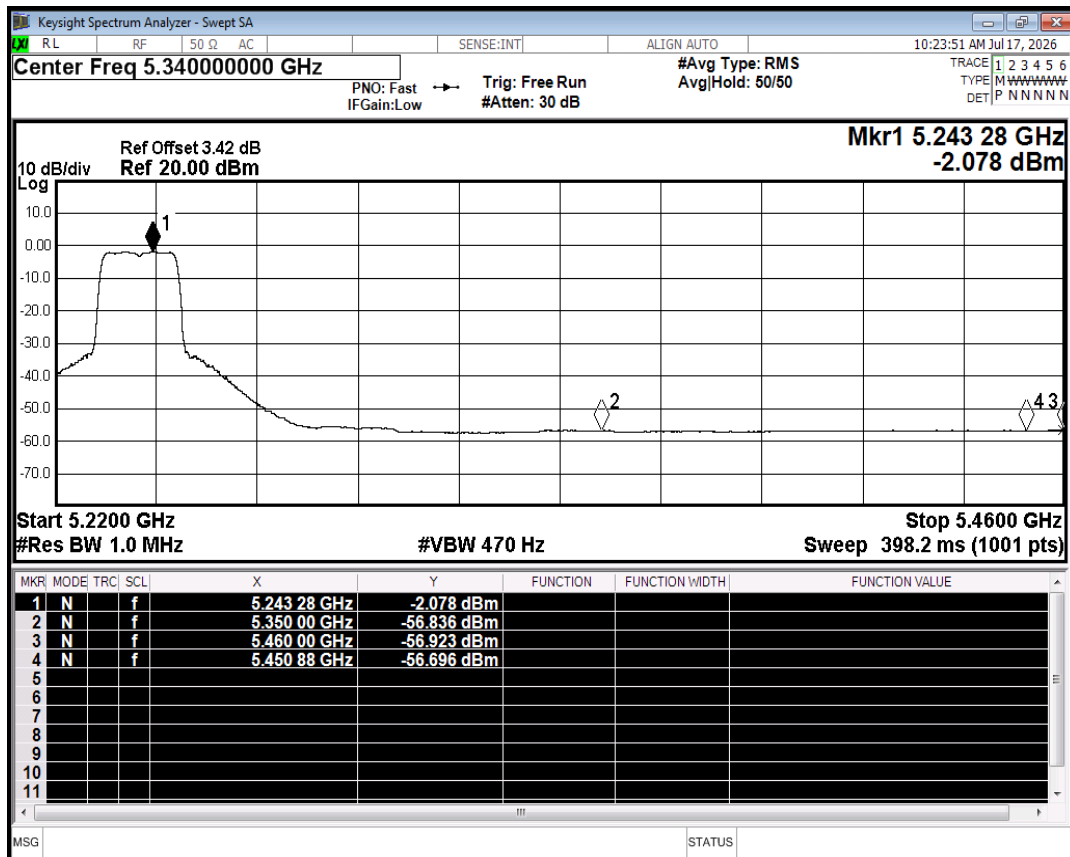
Restrict Band NVNT n20 5180MHz Ant1 Peak



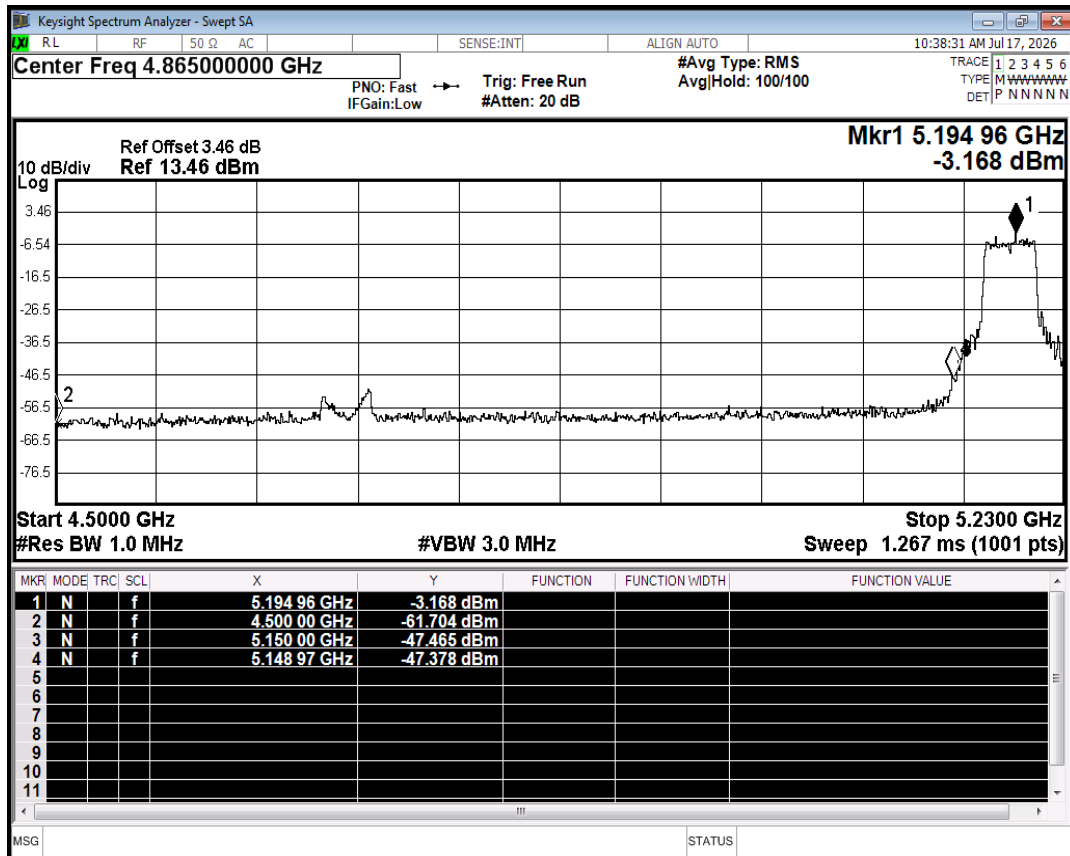
Restrict Band NVNT n20 5180MHz Ant1 Average



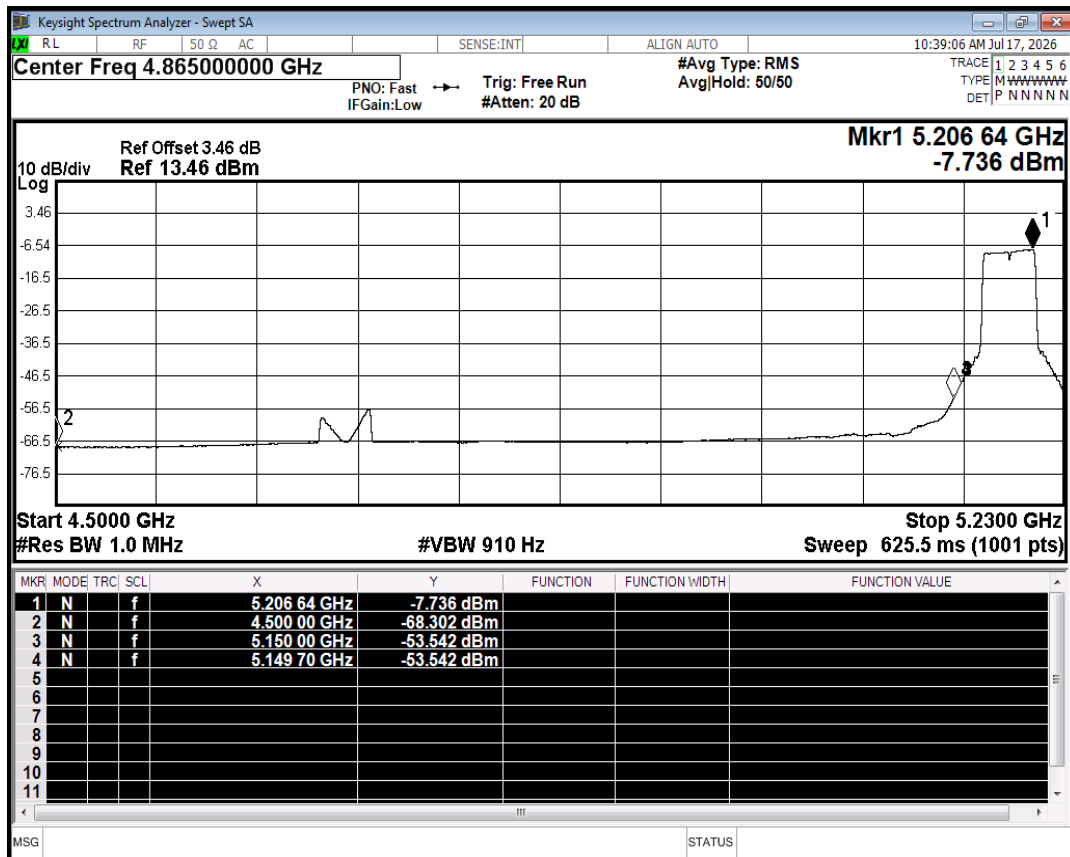
Restrict Band NVNT n20 5240MHz Ant1 Peak



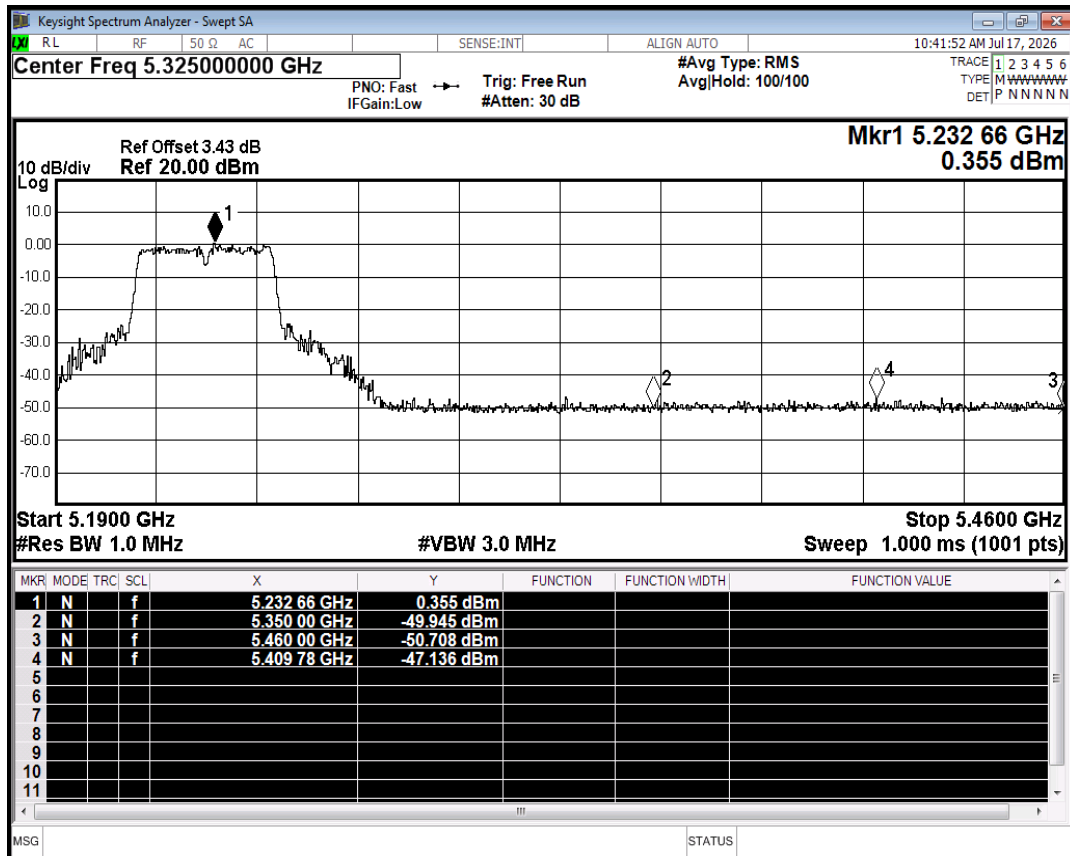
Restrict Band NVNT n20 5240MHz Ant1 Average



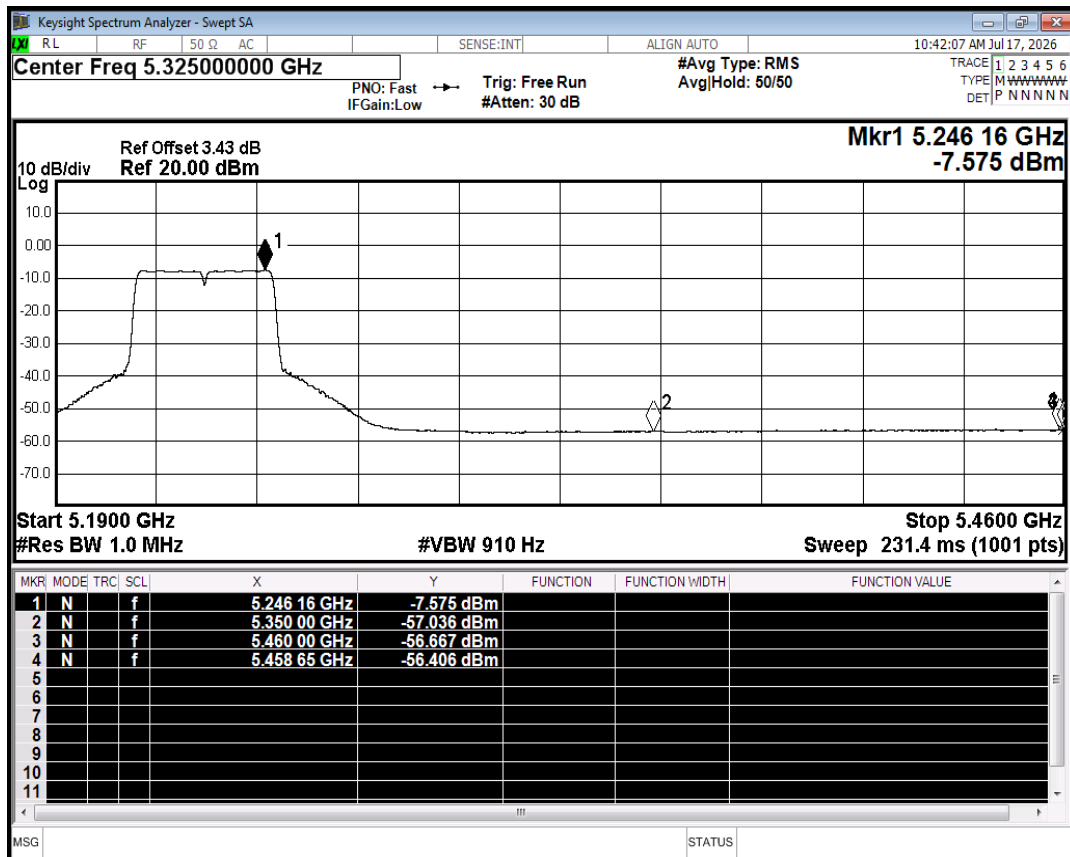
Restrict Band NVNT n40 5190MHz Ant1 Peak



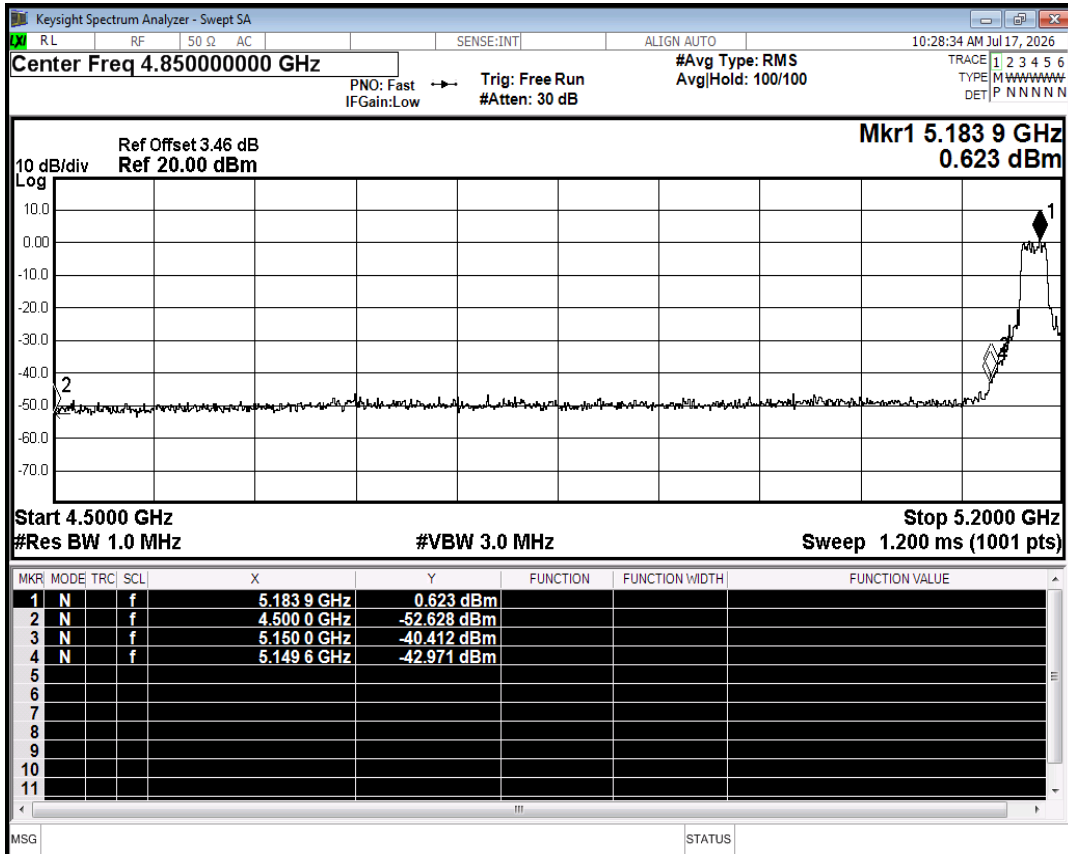
Restrict Band NVNT n40 5190MHz Ant1 Average



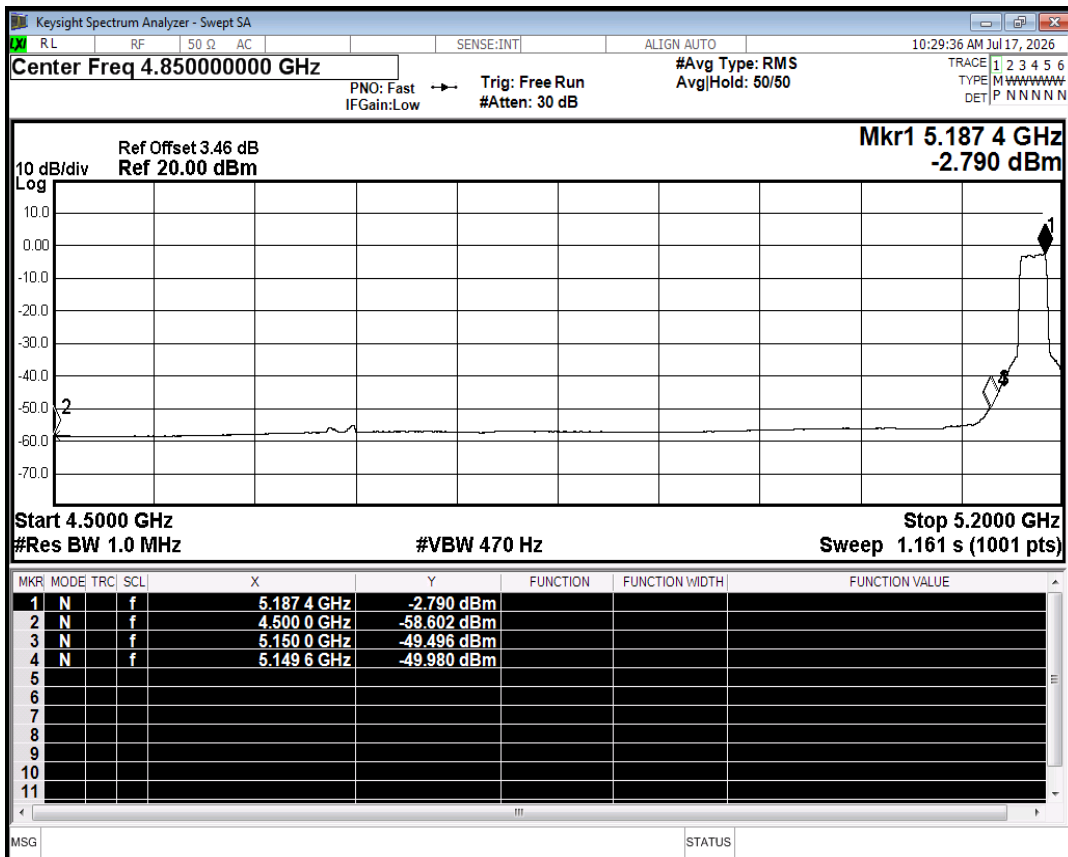
Restrict Band NVNT n40 5230MHz Ant1 Peak



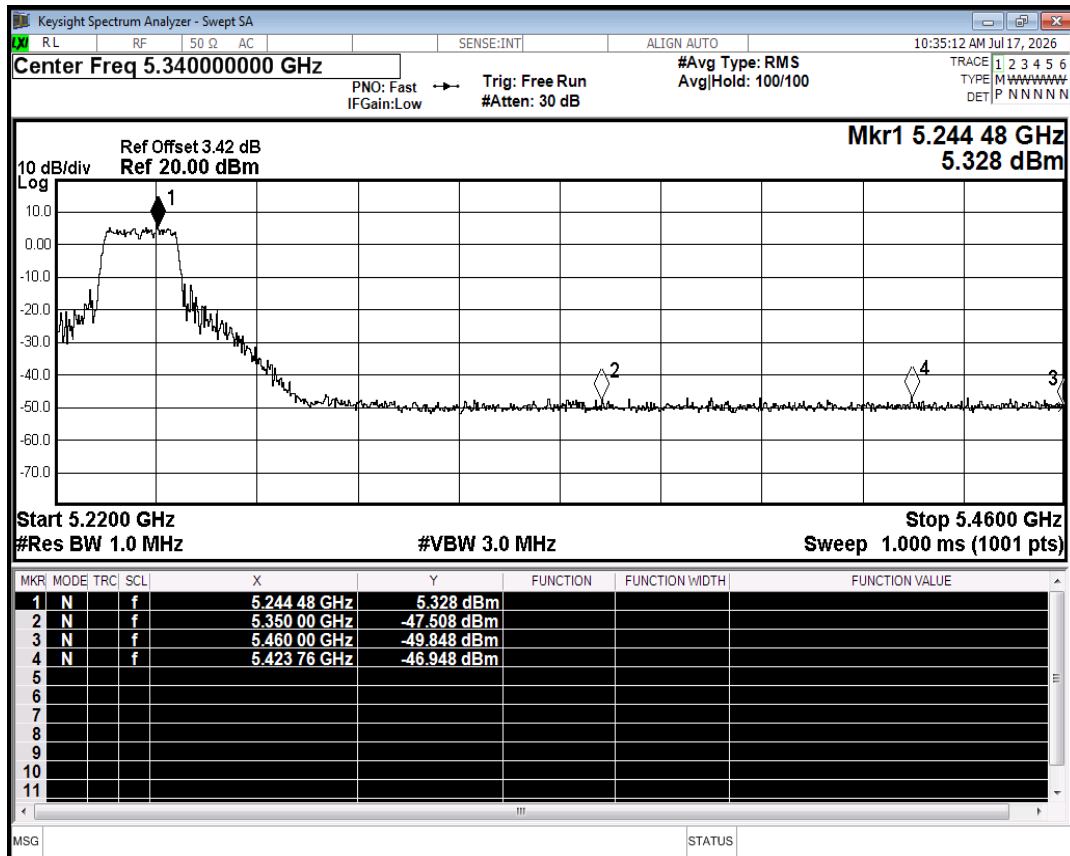
Restrict Band NVNT n40 5230MHz Ant1 Average



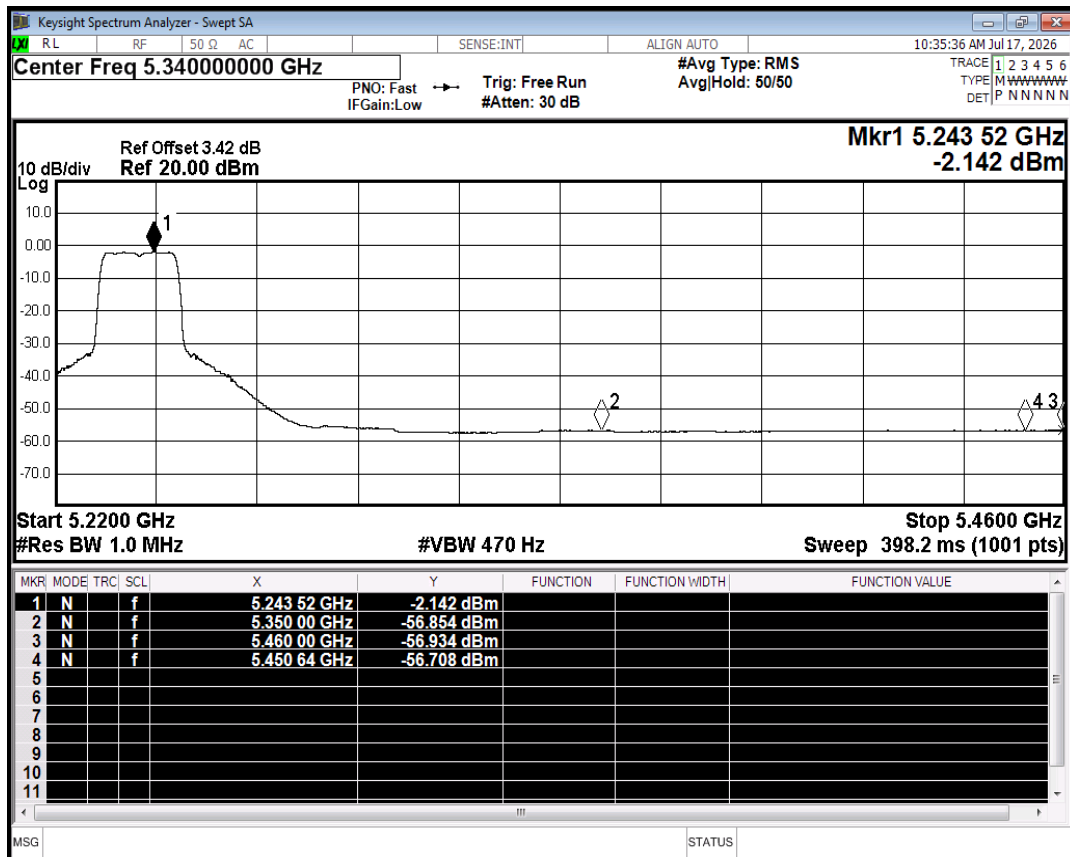
Restrict Band NVNT ac20 5180MHz Ant1 Peak



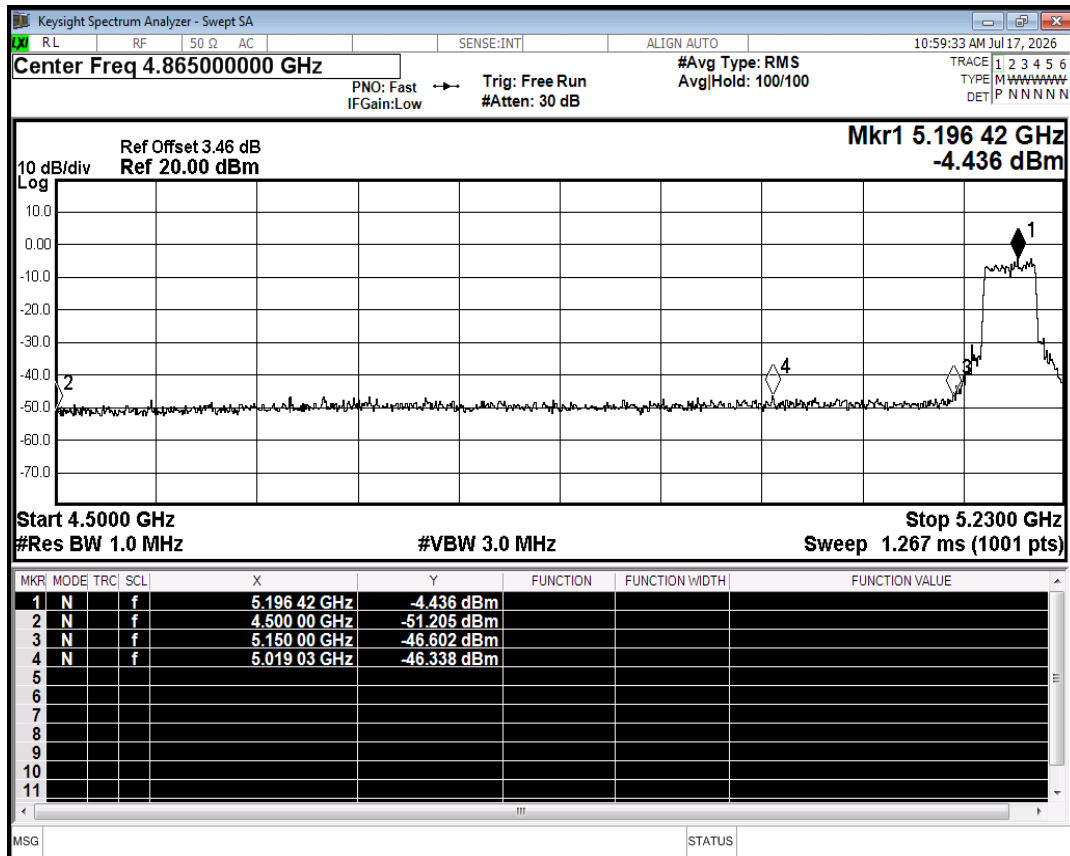
Restrict Band NVNT ac20 5180MHz Ant1 Average



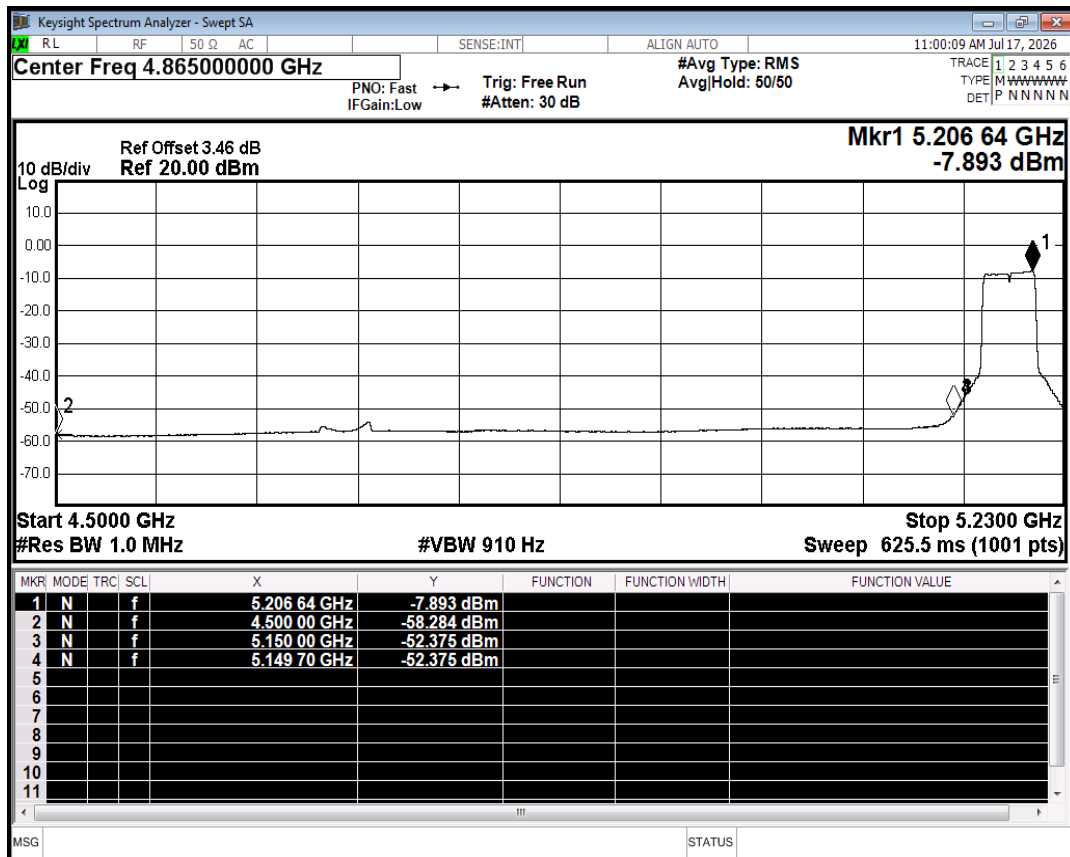
Restrict Band NVNT ac20 5240MHz Ant1 Peak



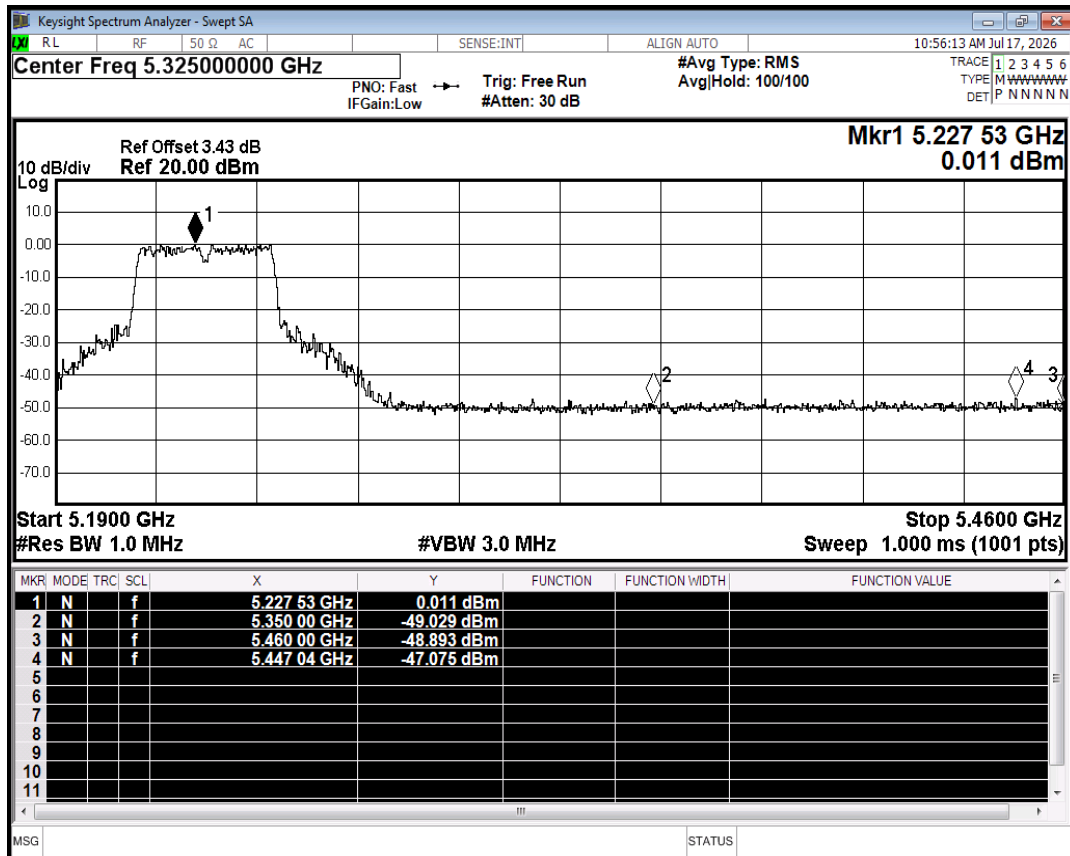
Restrict Band NVNT ac20 5240MHz Ant1 Average



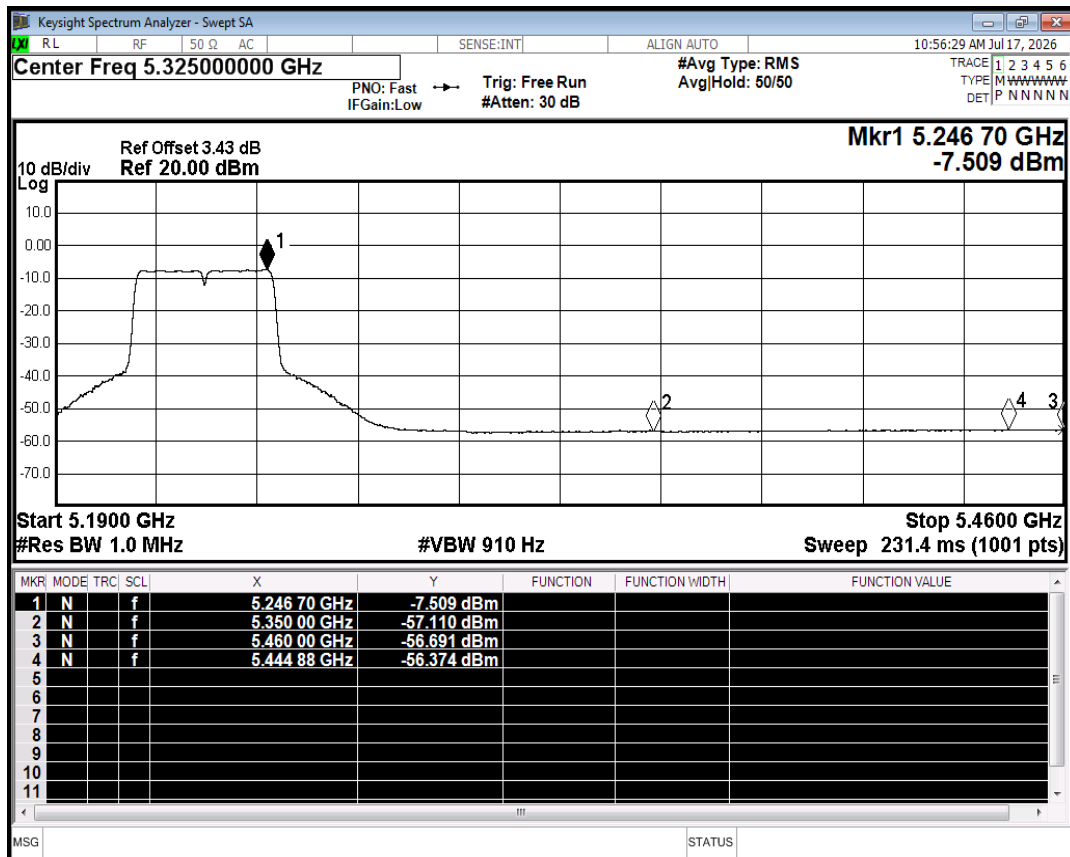
Restrict Band NVNT ac40 5190MHz Ant1 Peak



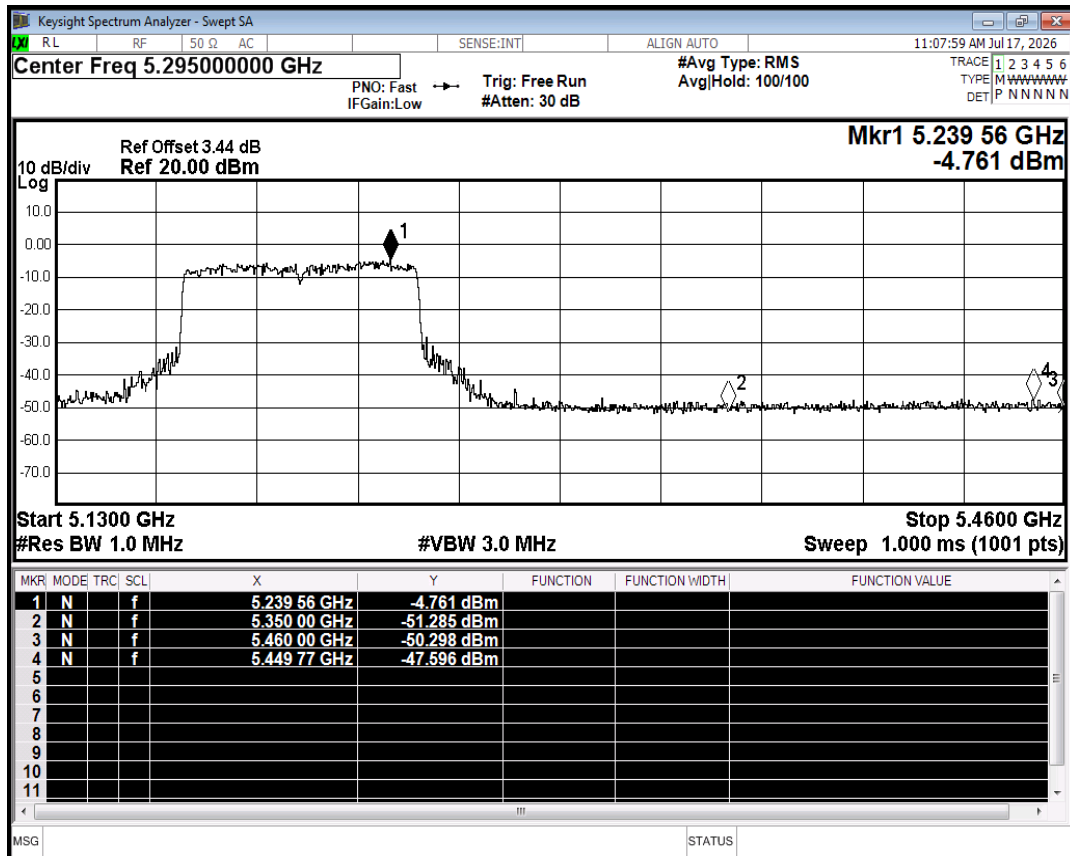
Restrict Band NVNT ac40 5190MHz Ant1 Average



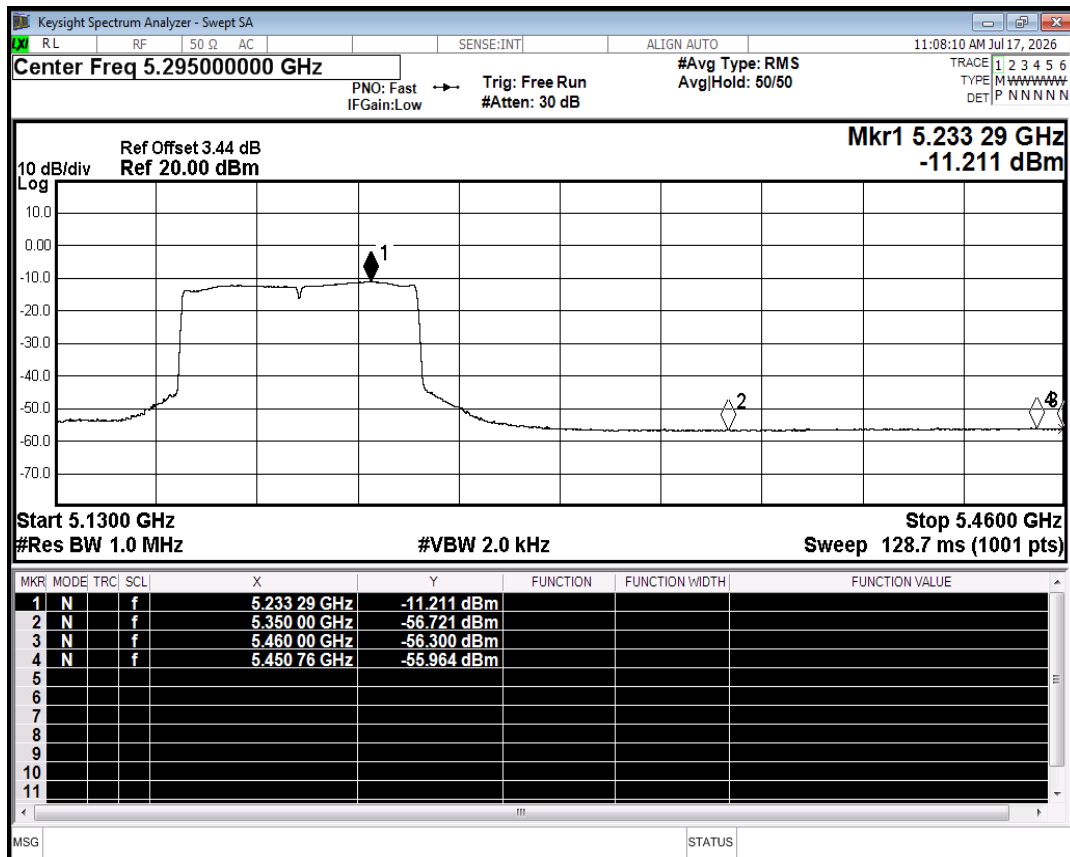
Restrict Band NVNT ac40 5230MHz Ant1 Peak



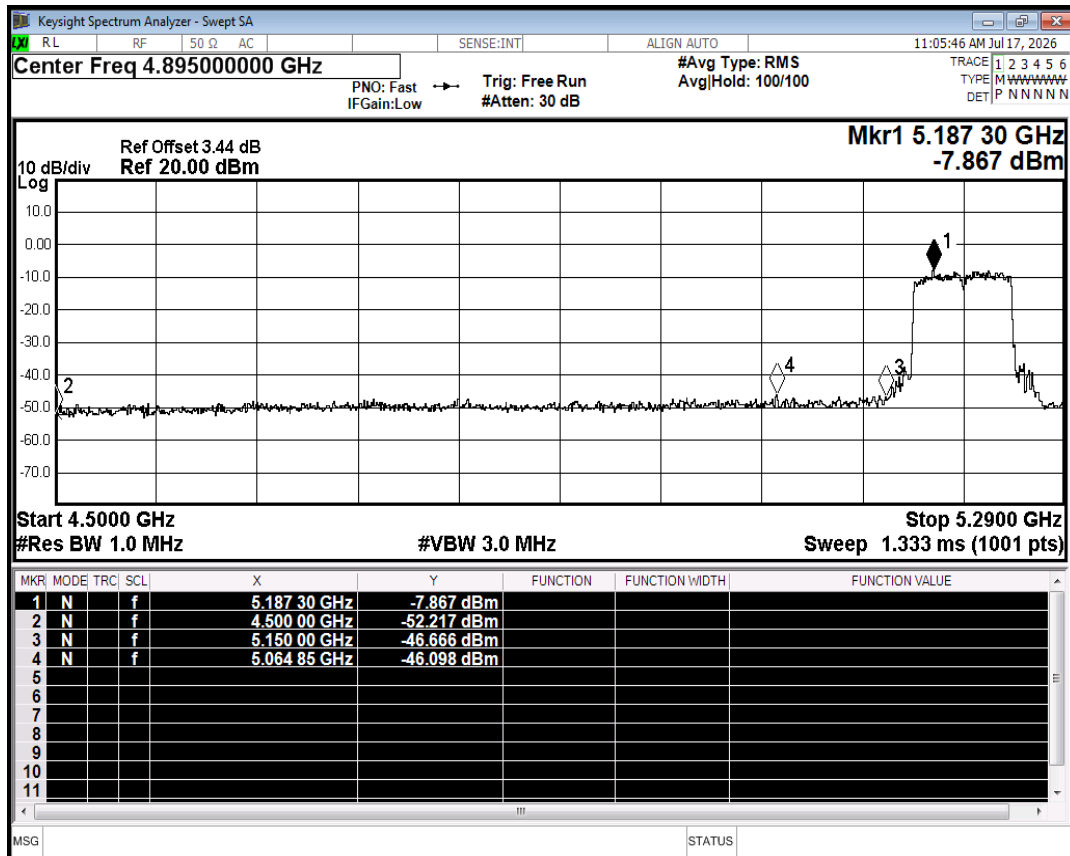
Restrict Band NVNT ac40 5230MHz Ant1 Average



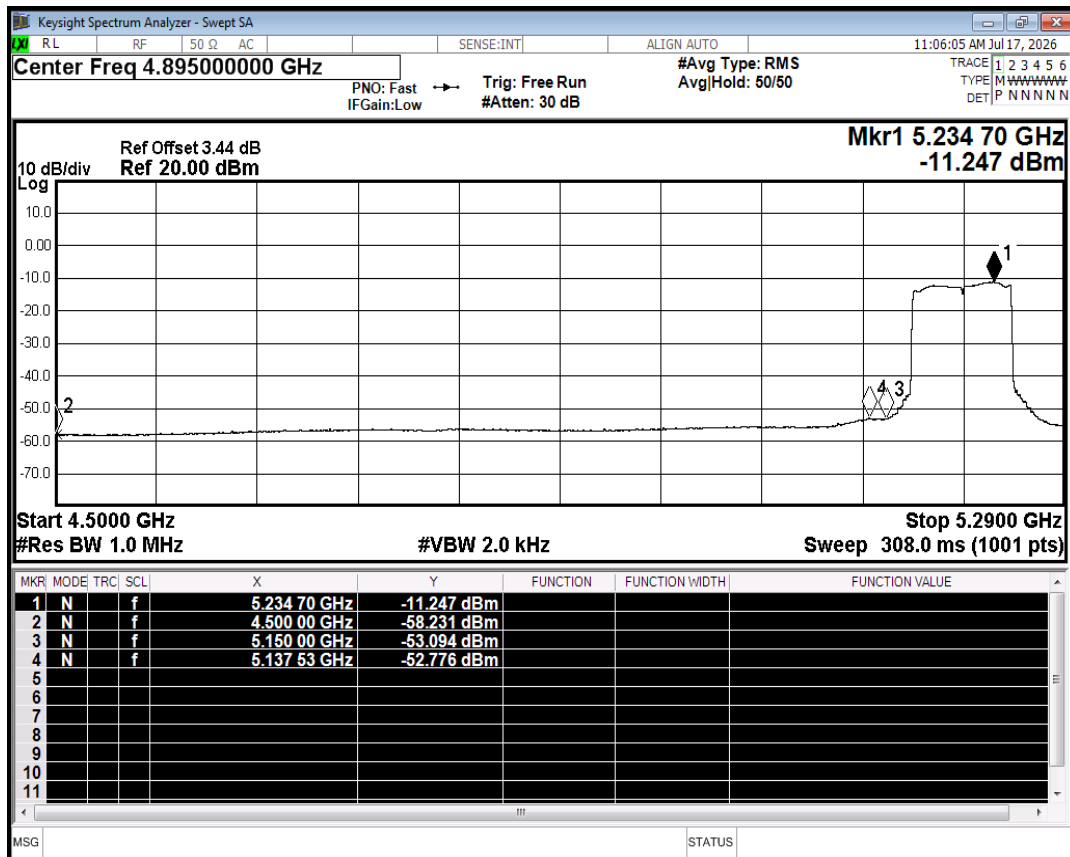
Restrict Band NVNT ac80 5210MHz Ant1 Peak



Restrict Band NVNT ac80 5210MHz Ant1 Average



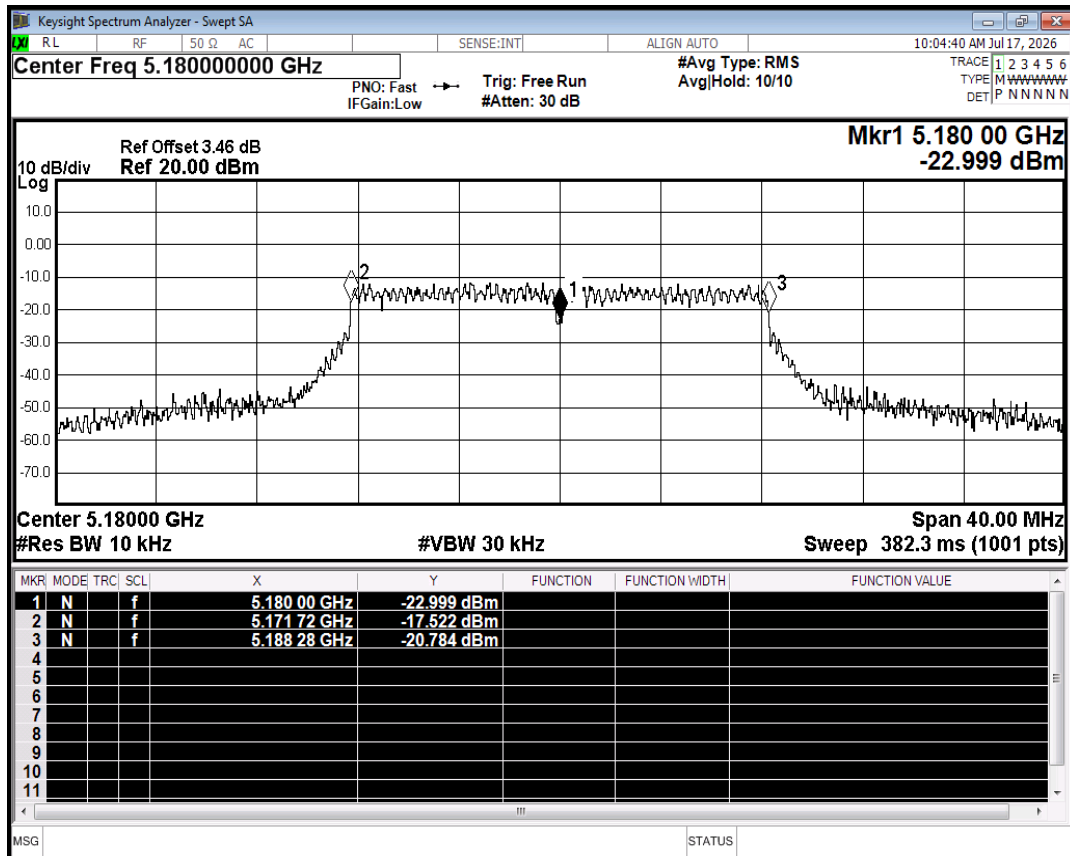
Restrict Band NVNT ac80 5210MHz Ant1 Peak



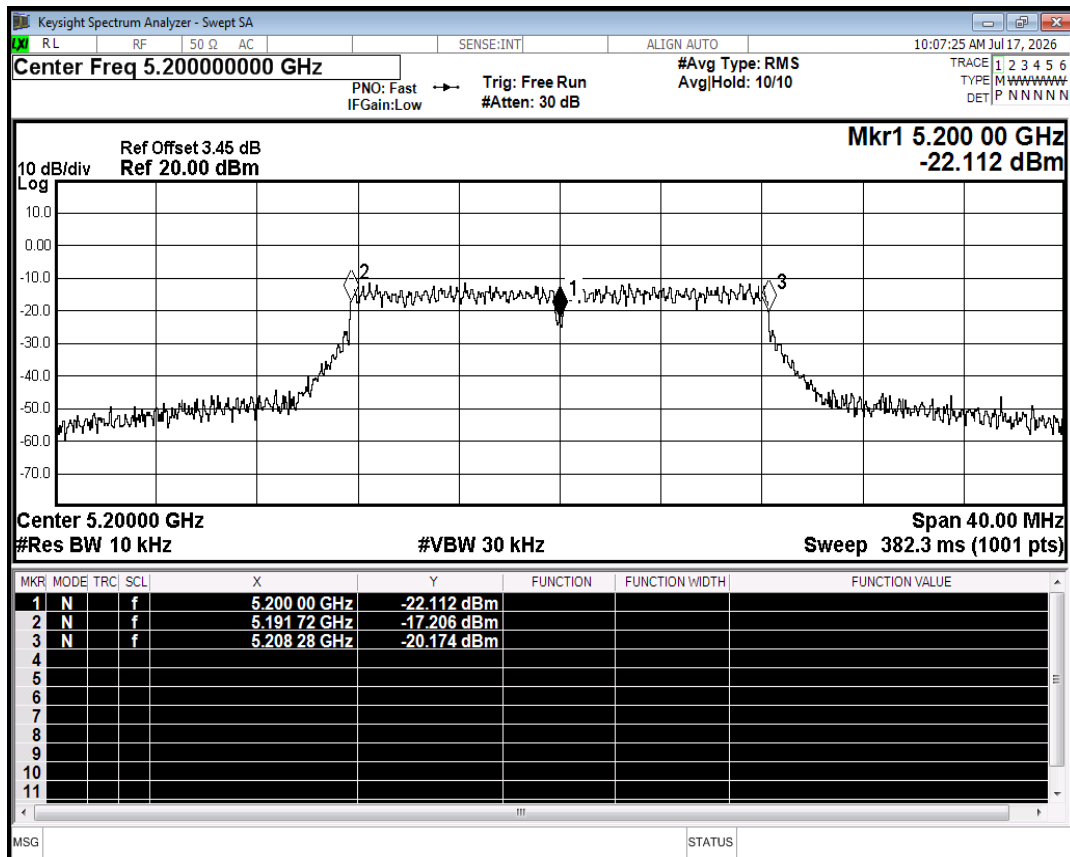
Restrict Band NVNT ac80 5210MHz Ant1 Average

C.5 Frequency Stability

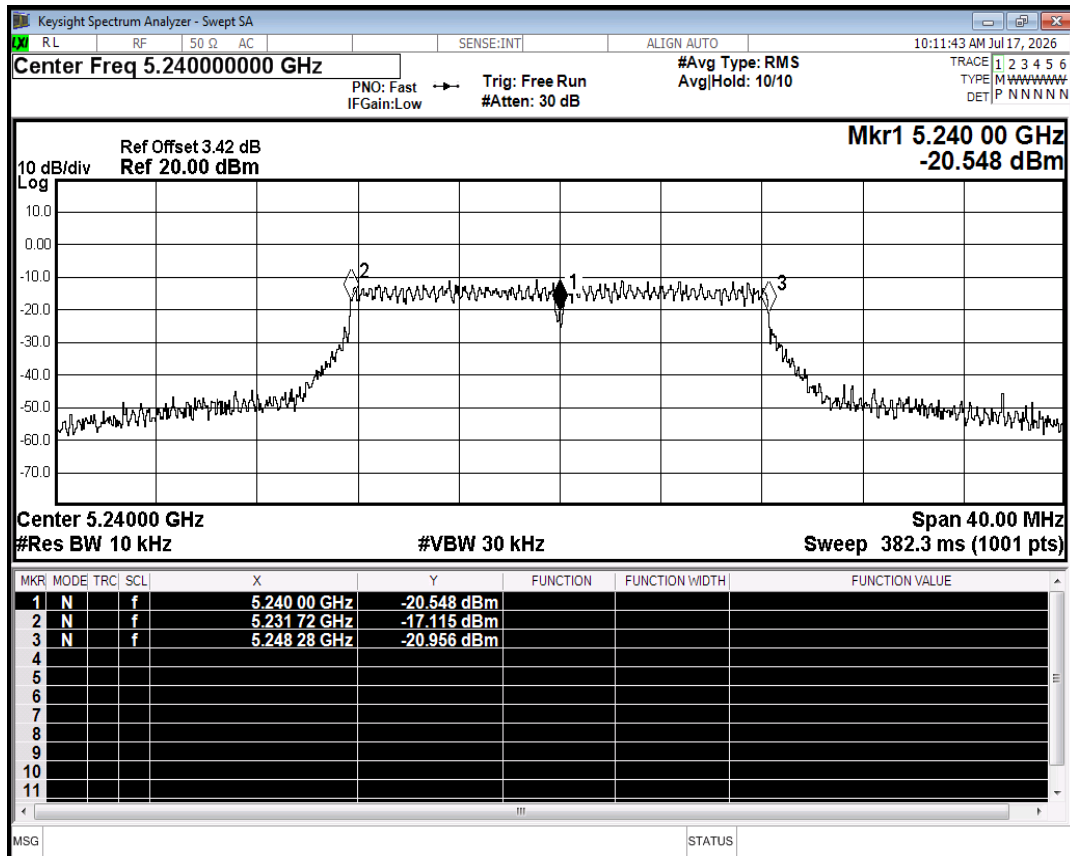
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5180	Ant1	5180	0	0	25	Pass
NVNT	a	5200	Ant1	5200	0	0	25	Pass
NVNT	a	5240	Ant1	5240	0	0	25	Pass
NVNT	n20	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NVNT	n20	5200	Ant1	5200.02	20000	3.85	25	Pass
NVNT	n20	5240	Ant1	5240	0	0	25	Pass
NVNT	n40	5190	Ant1	5190	0	0	25	Pass
NVNT	n40	5230	Ant1	5229.96	-40000	-7.65	25	Pass
NVNT	ac20	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NVNT	ac20	5200	Ant1	5200	0	0	25	Pass
NVNT	ac20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NVNT	ac40	5190	Ant1	5189.96	-40000	-7.71	25	Pass
NVNT	ac40	5230	Ant1	5230	0	0	25	Pass
NVNT	ac80	5210	Ant1	5210	0	0	25	Pass



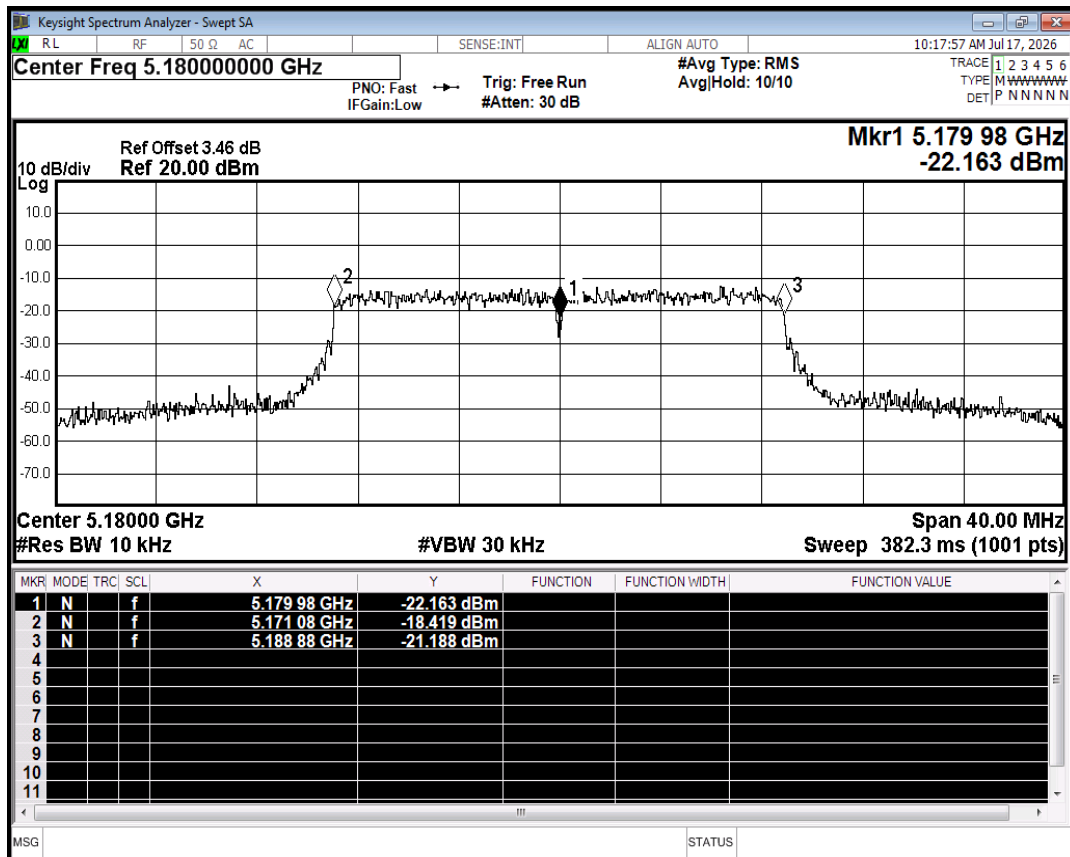
Freq. Stability NVNT a 5180MHz Ant1



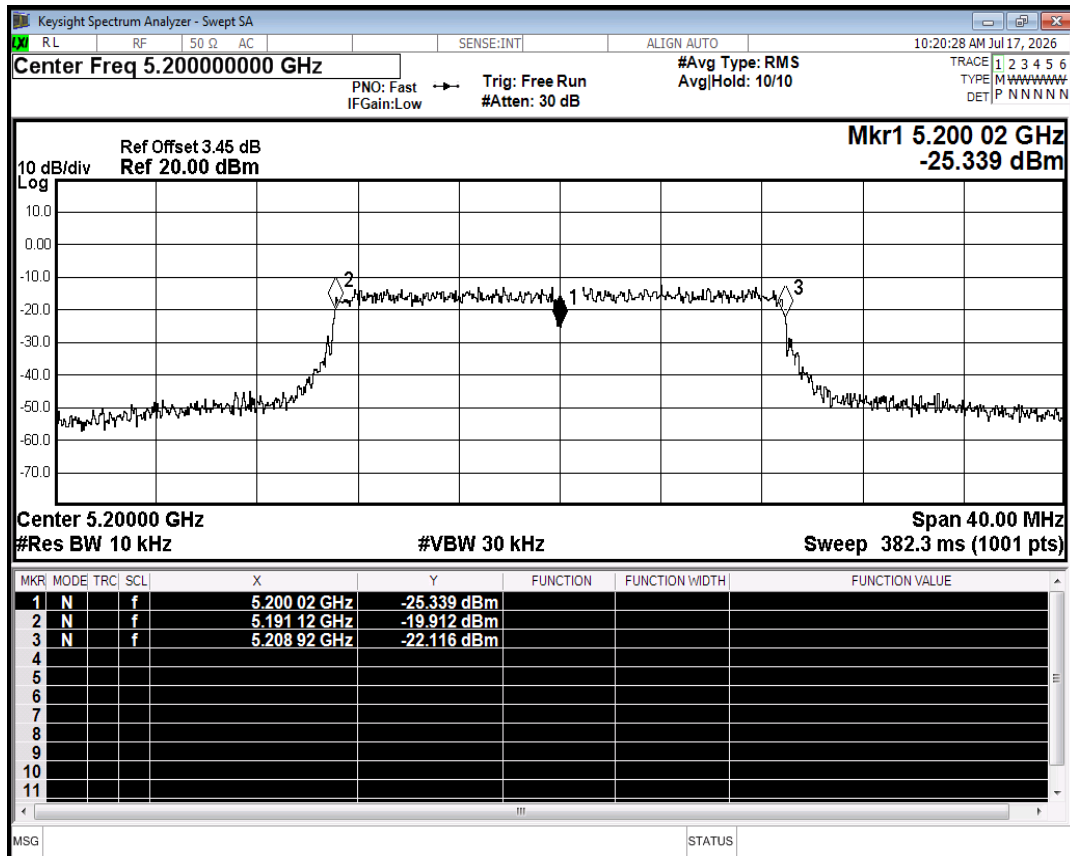
Freq. Stability NVNT a 5200MHz Ant1



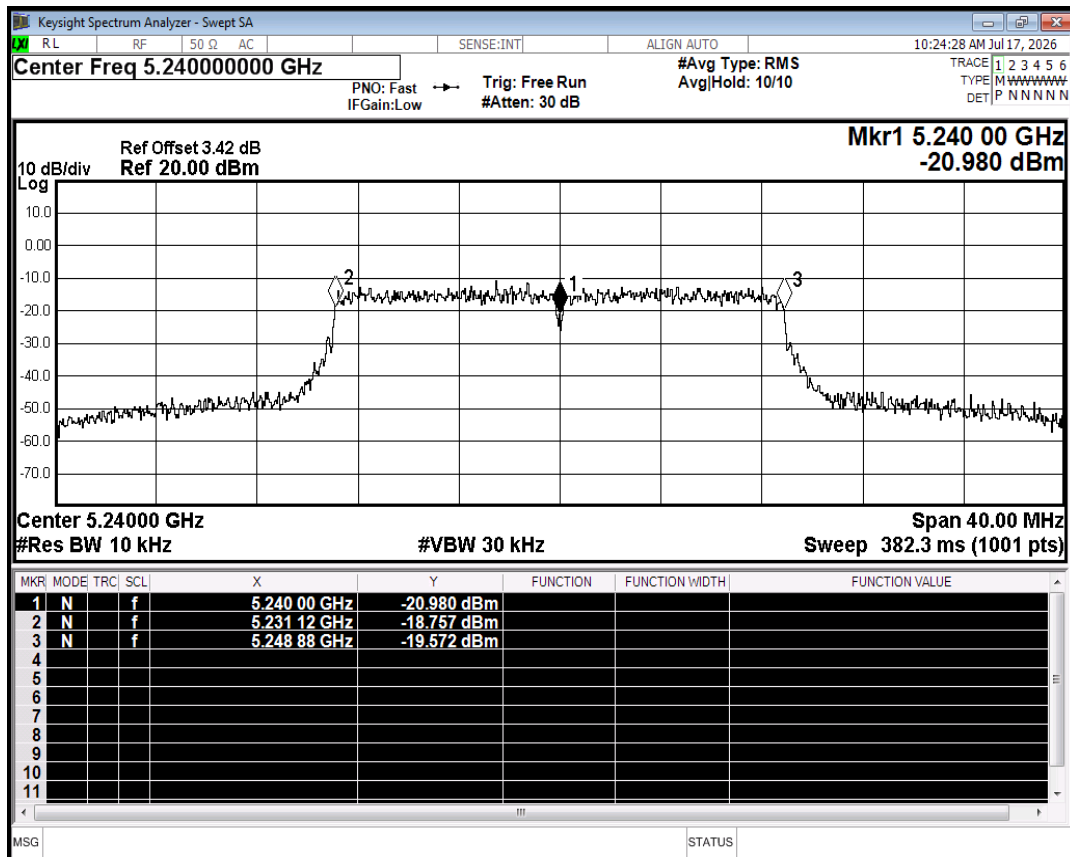
Freq. Stability NVNT a 5240MHz Ant1



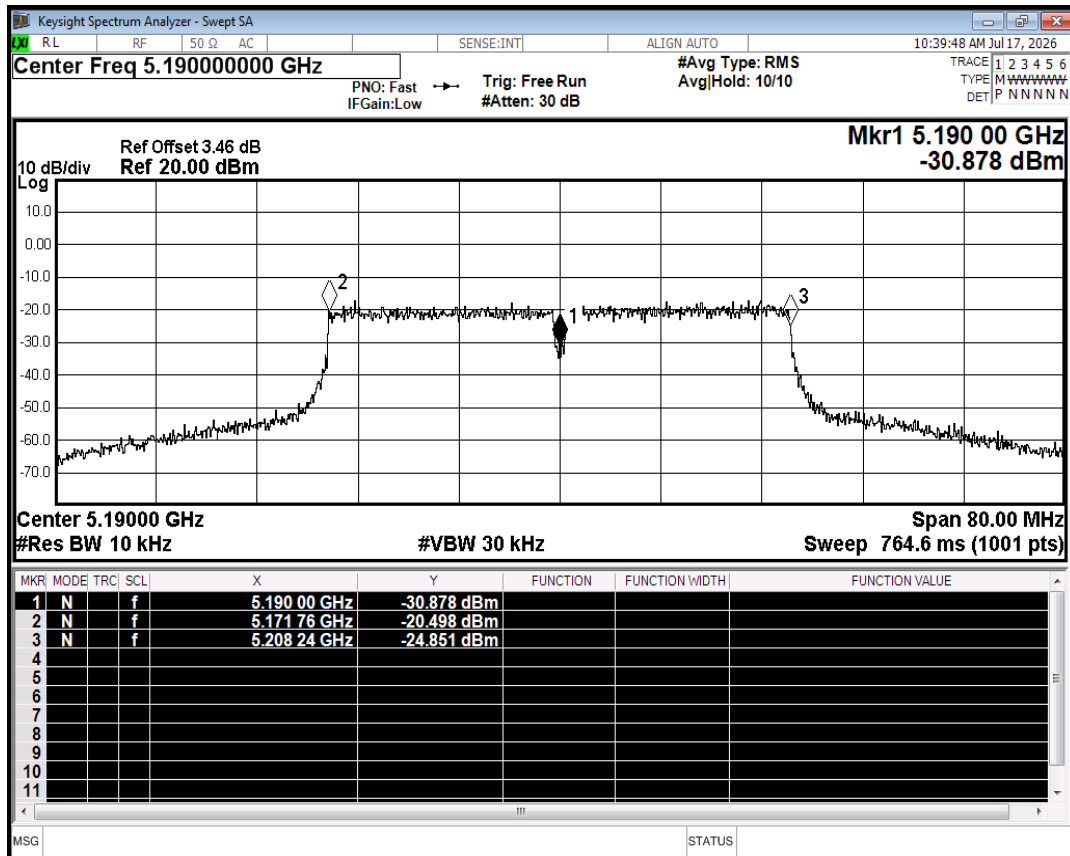
Freq. Stability NVNT n20 5180MHz Ant1



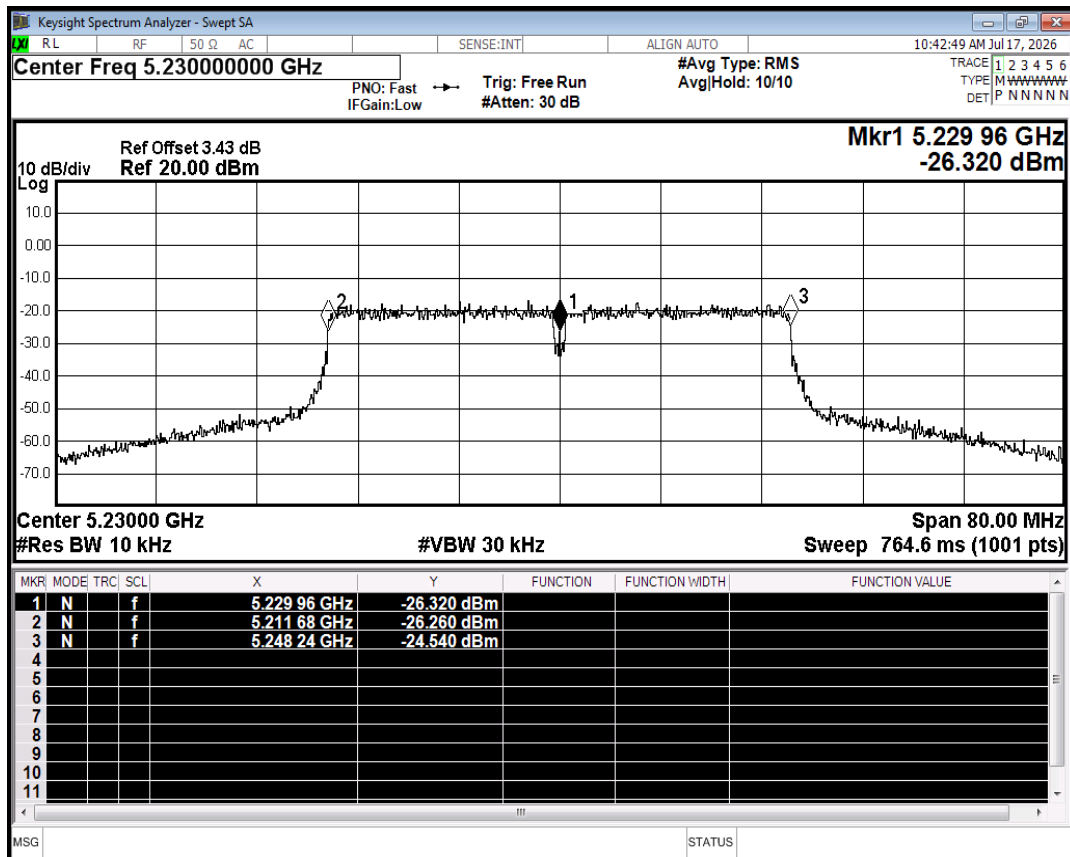
Freq. Stability NVNT n20 5200MHz Ant1



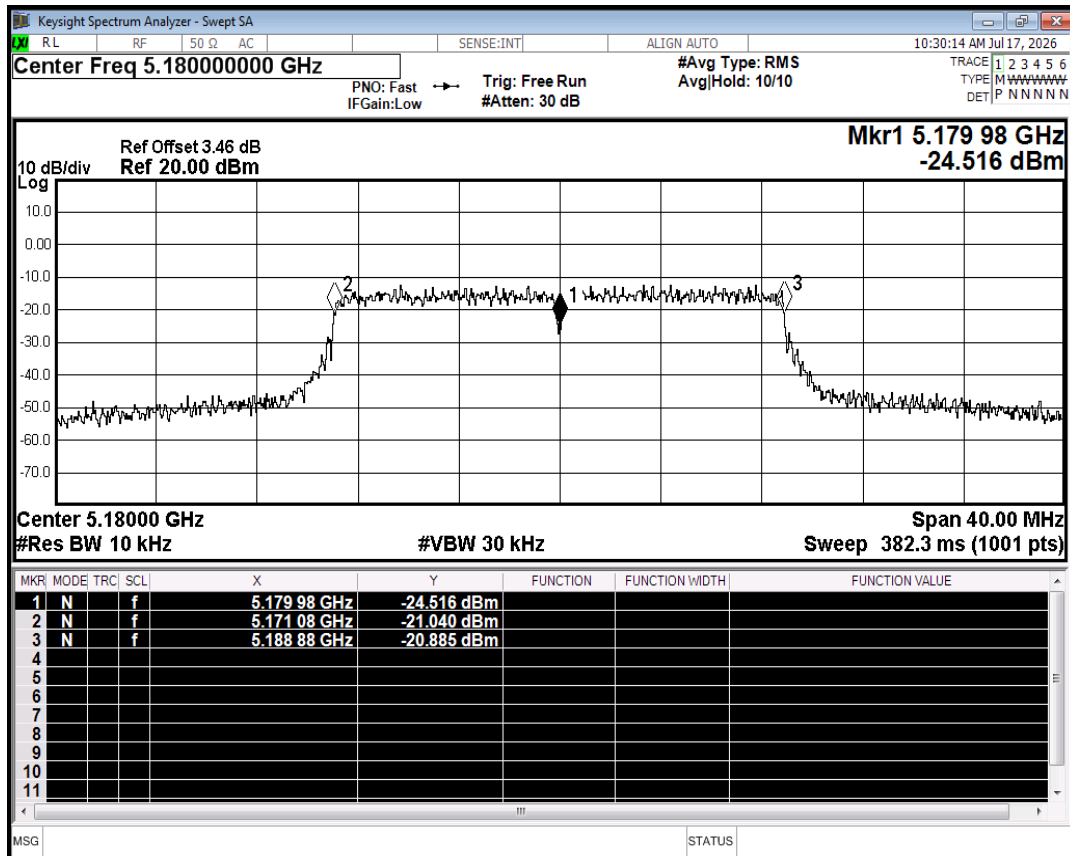
Freq. Stability NVNT n20 5240MHz Ant1



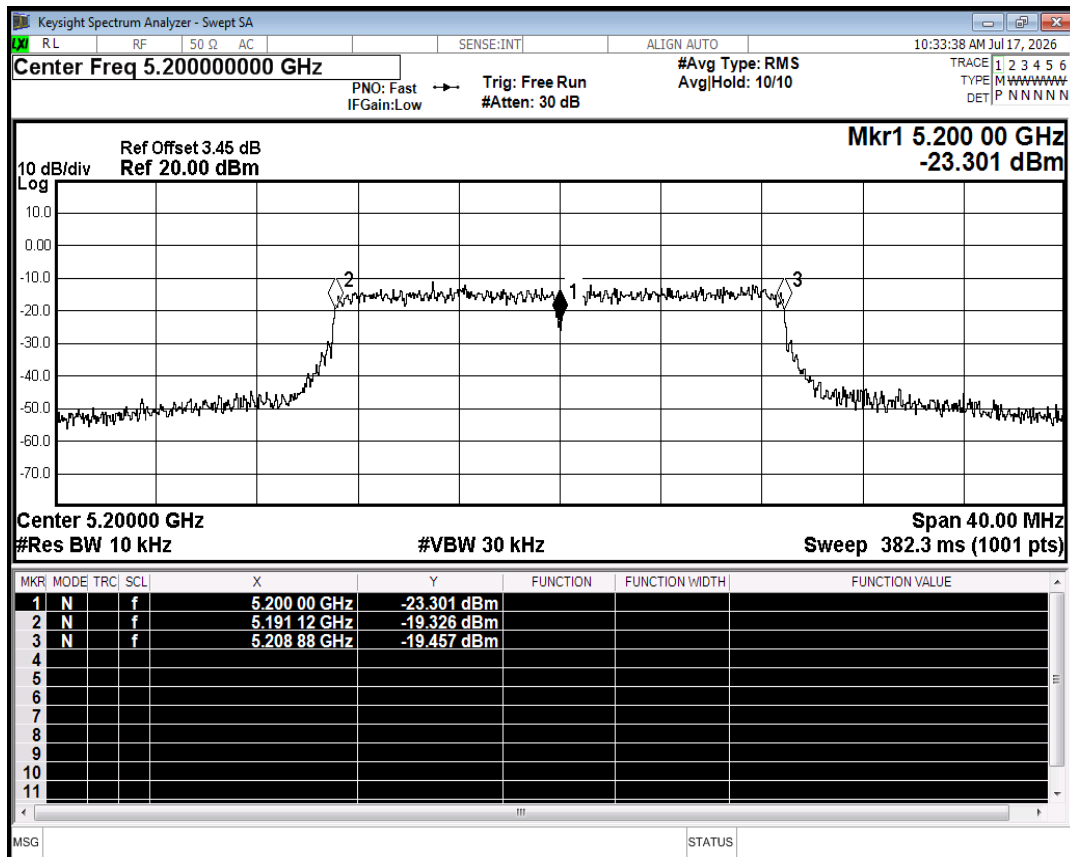
Freq. Stability NVNT n40 5190MHz Ant1



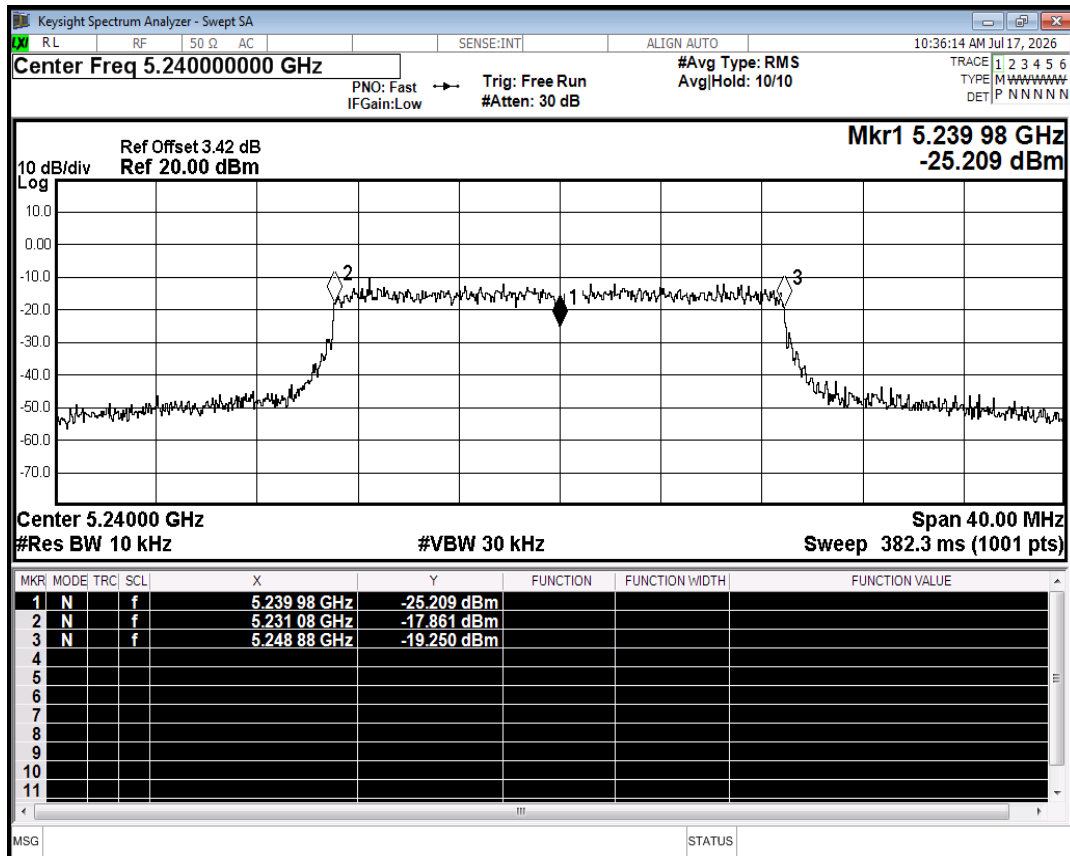
Freq. Stability NVNT n40 5230MHz Ant1



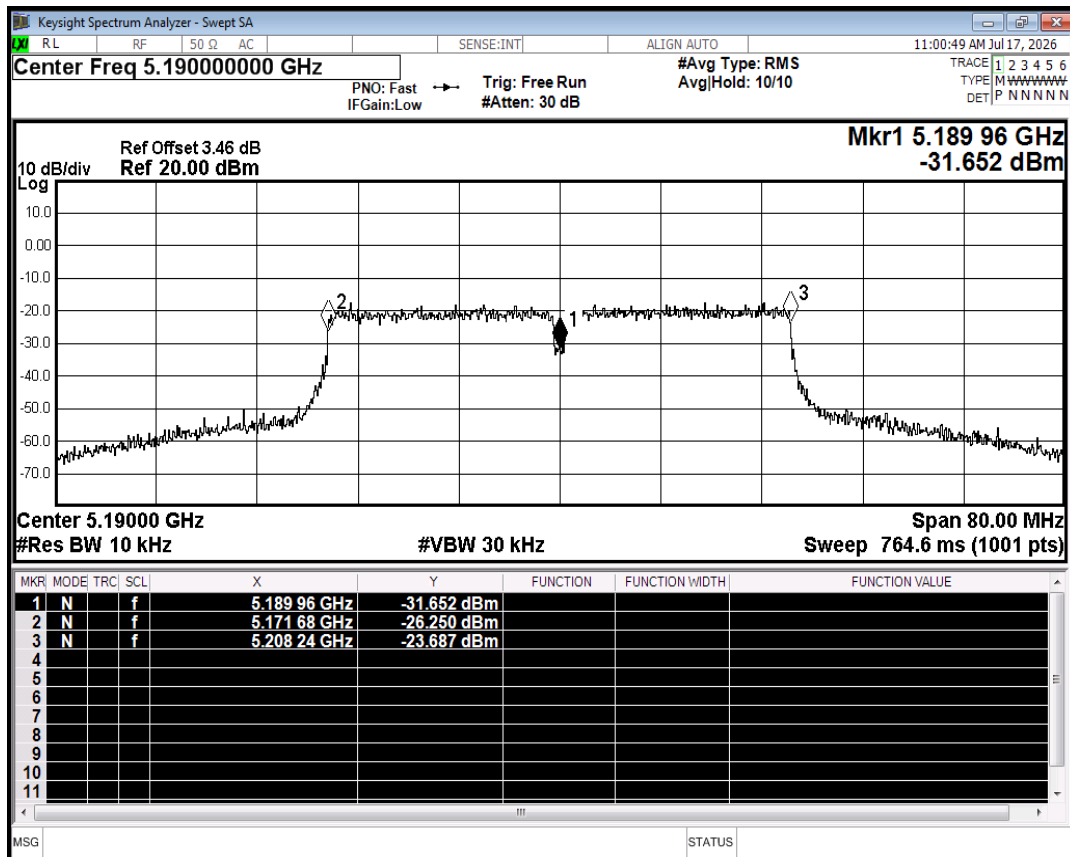
Freq. Stability NVNT ac20 5180MHz Ant1



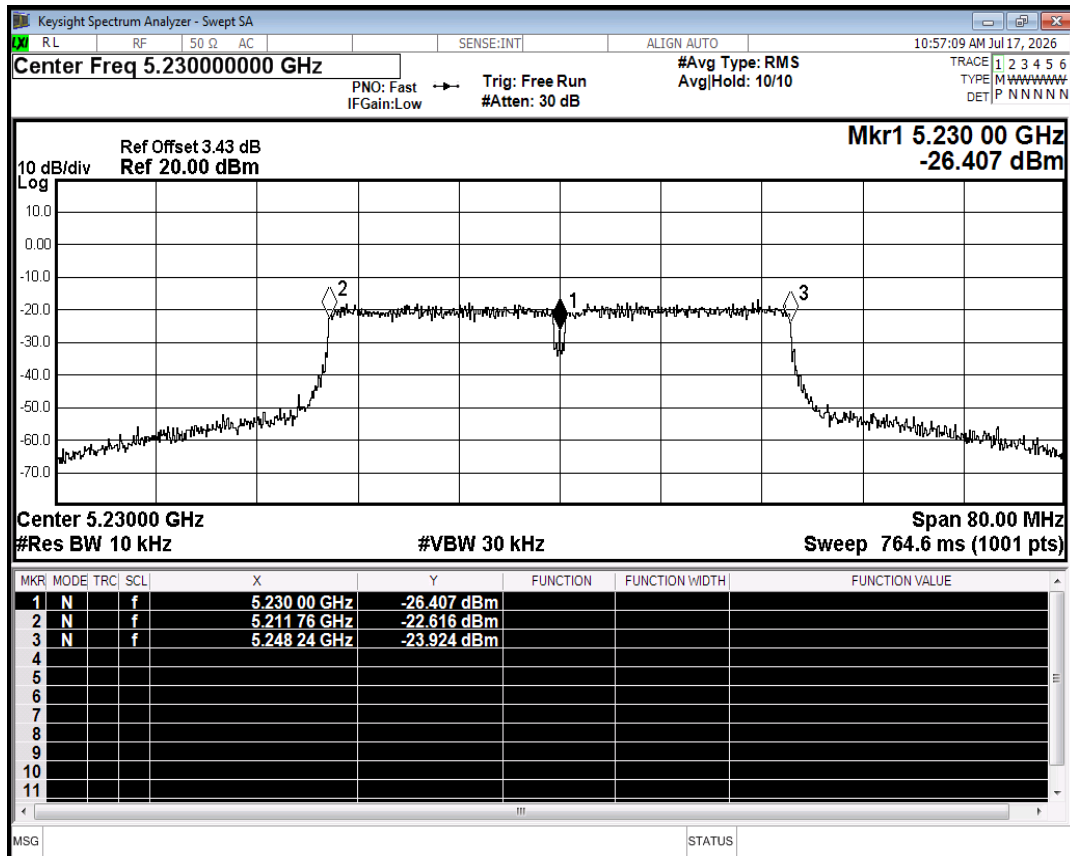
Freq. Stability NVNT ac20 5200MHz Ant1



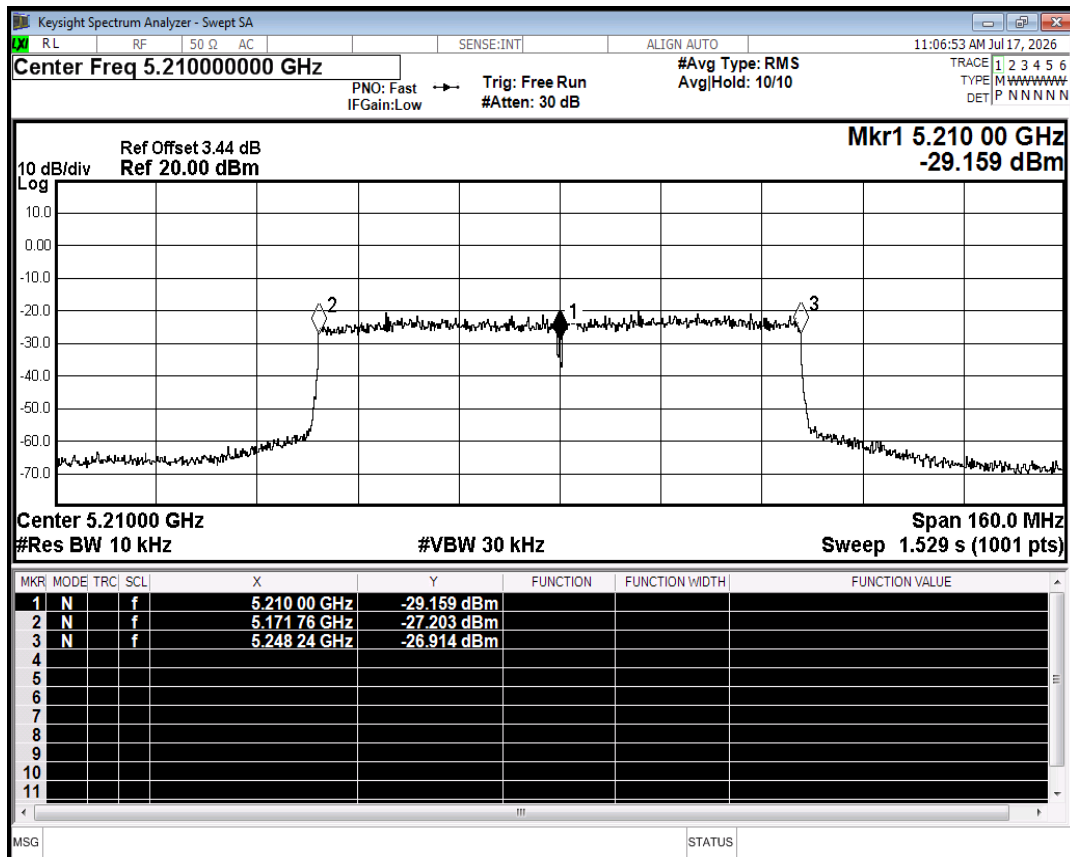
Freq. Stability NVNT ac20 5240MHz Ant1



Freq. Stability NVNT ac40 5190MHz Ant1



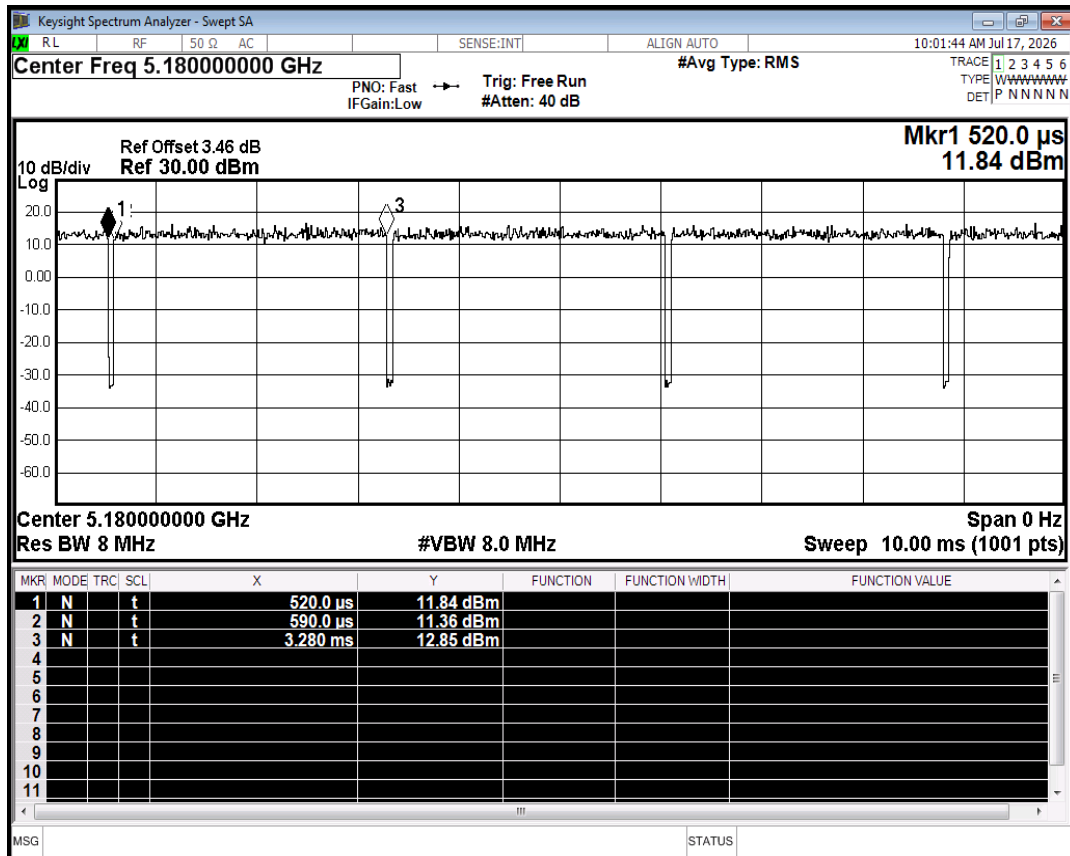
Freq. Stability NVNT ac40 5230MHz Ant1



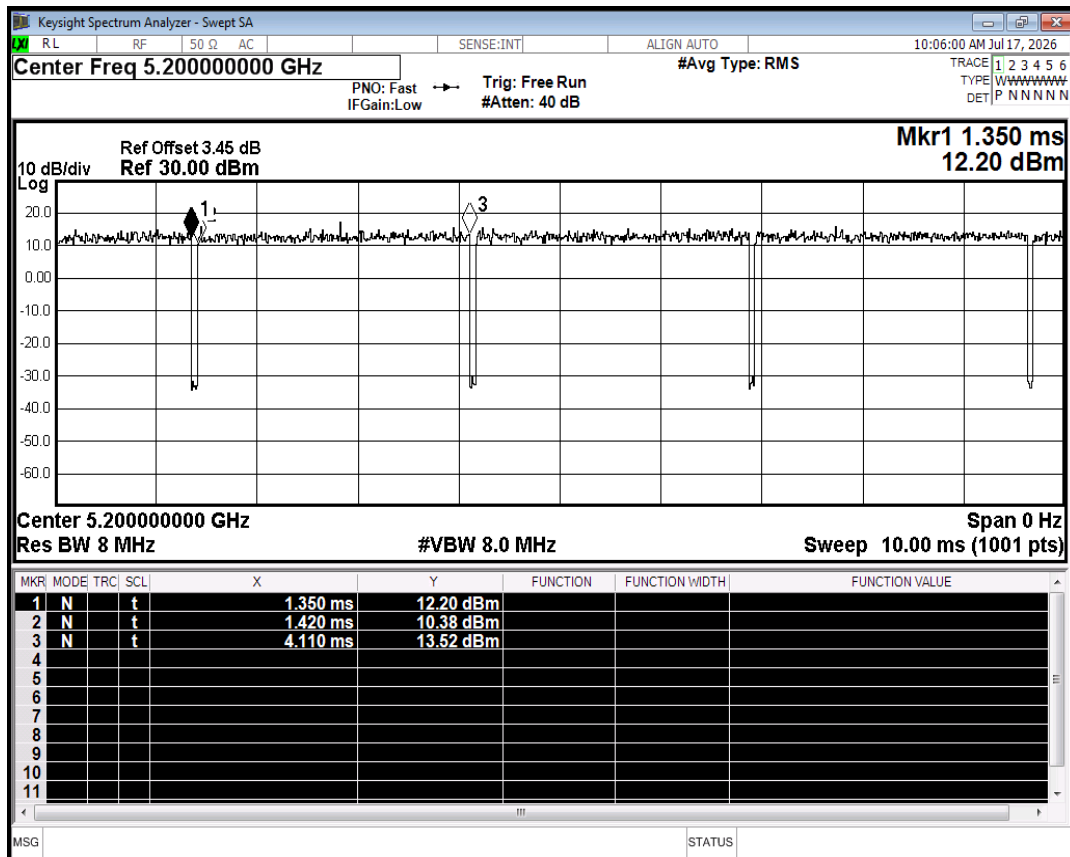
Freq. Stability NVNT ac80 5210MHz Ant1

C.6 Duty Cycle

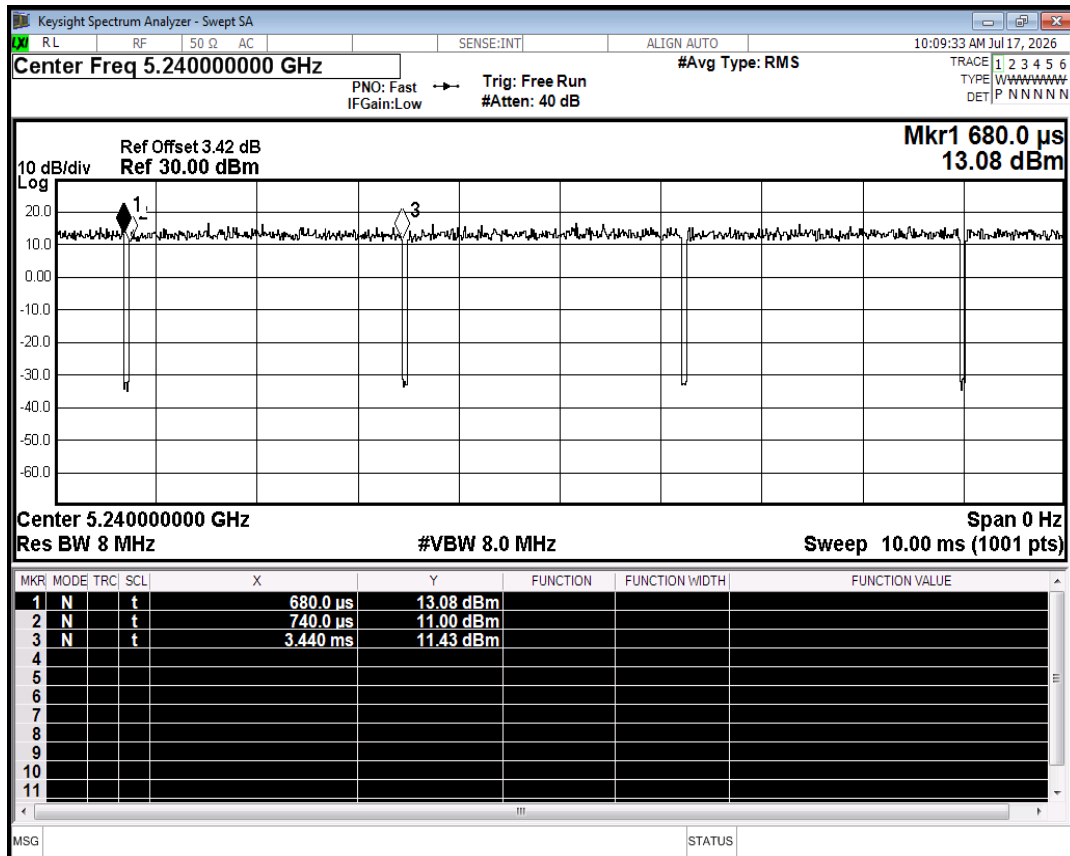
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	97.46	0.11	0.37
NVNT	a	5200	Ant1	97.46	0.11	0.37
NVNT	a	5240	Ant1	97.83	0.1	0.37
NVNT	n20	5180	Ant1	97.41	0.11	0.44
NVNT	n20	5200	Ant1	97.42	0.11	0.44
NVNT	n20	5240	Ant1	97.42	0.11	0.44
NVNT	n40	5190	Ant1	94.87	0.23	0.9
NVNT	n40	5230	Ant1	94.02	0.27	0.91
NVNT	ac20	5180	Ant1	97	0.13	0.44
NVNT	ac20	5200	Ant1	97.42	0.11	0.44
NVNT	ac20	5240	Ant1	97.42	0.11	0.44
NVNT	ac40	5190	Ant1	94.92	0.23	0.89
NVNT	ac40	5230	Ant1	94.92	0.23	0.89
NVNT	ac80	5210	Ant1	90	0.46	1.85



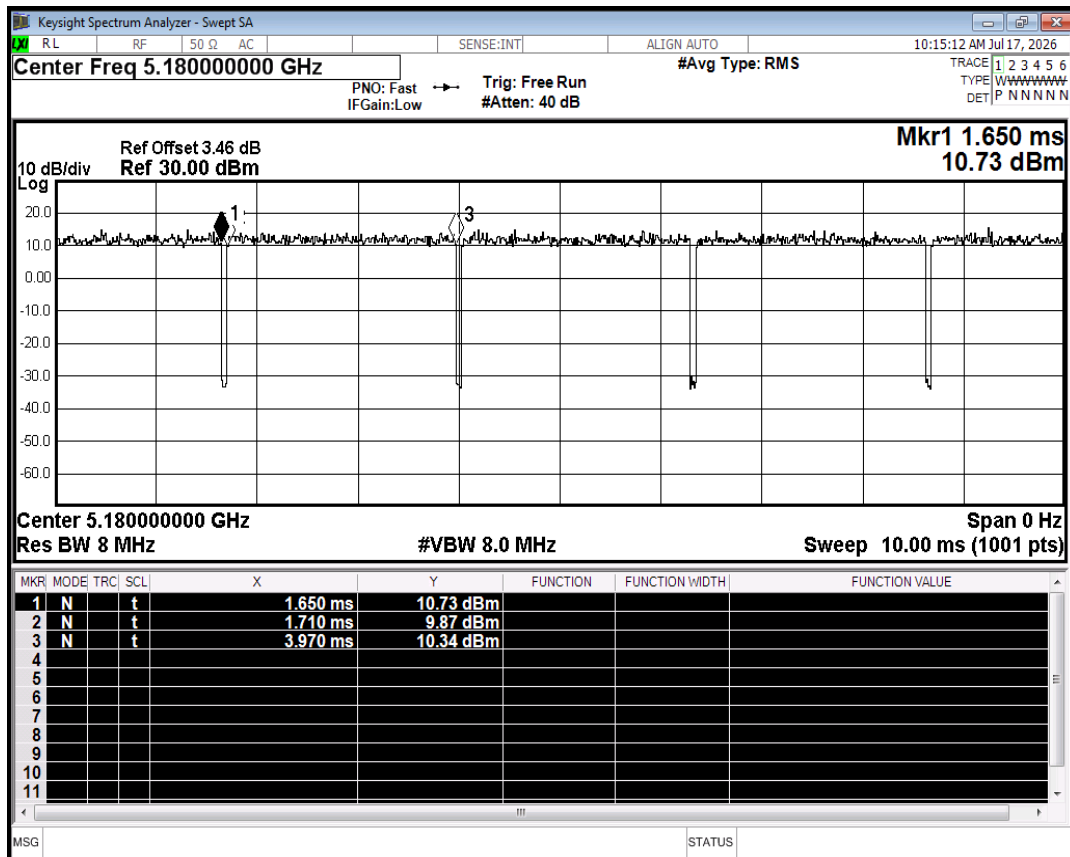
Duty Cycle NVNT a 5180MHz Ant1



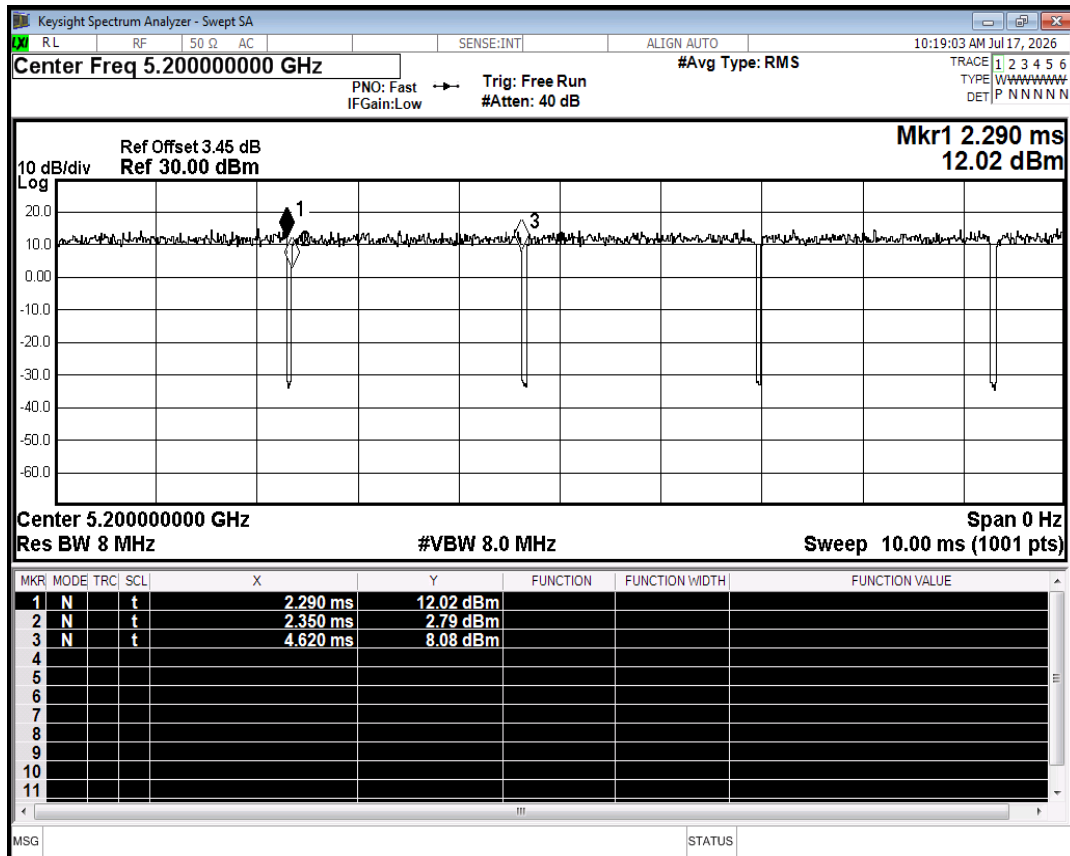
Duty Cycle NVNT a 5200MHz Ant1



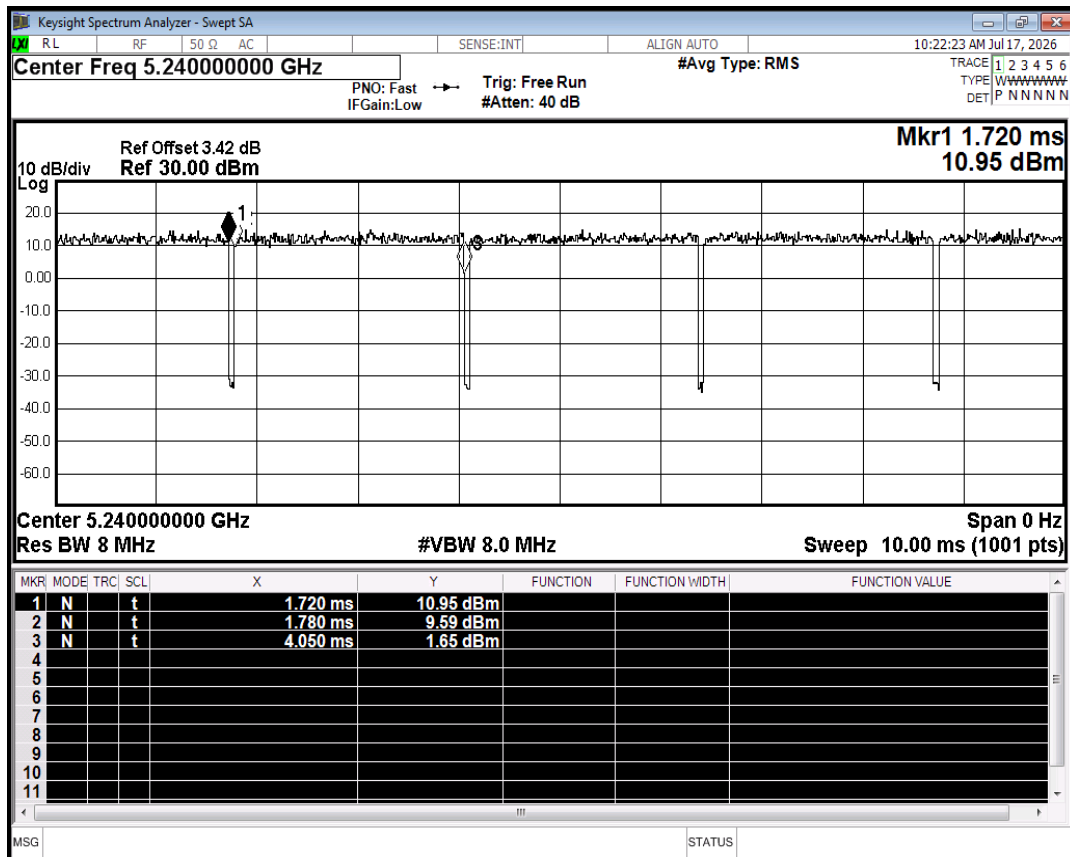
Duty Cycle NVNT a 5240MHz Ant1



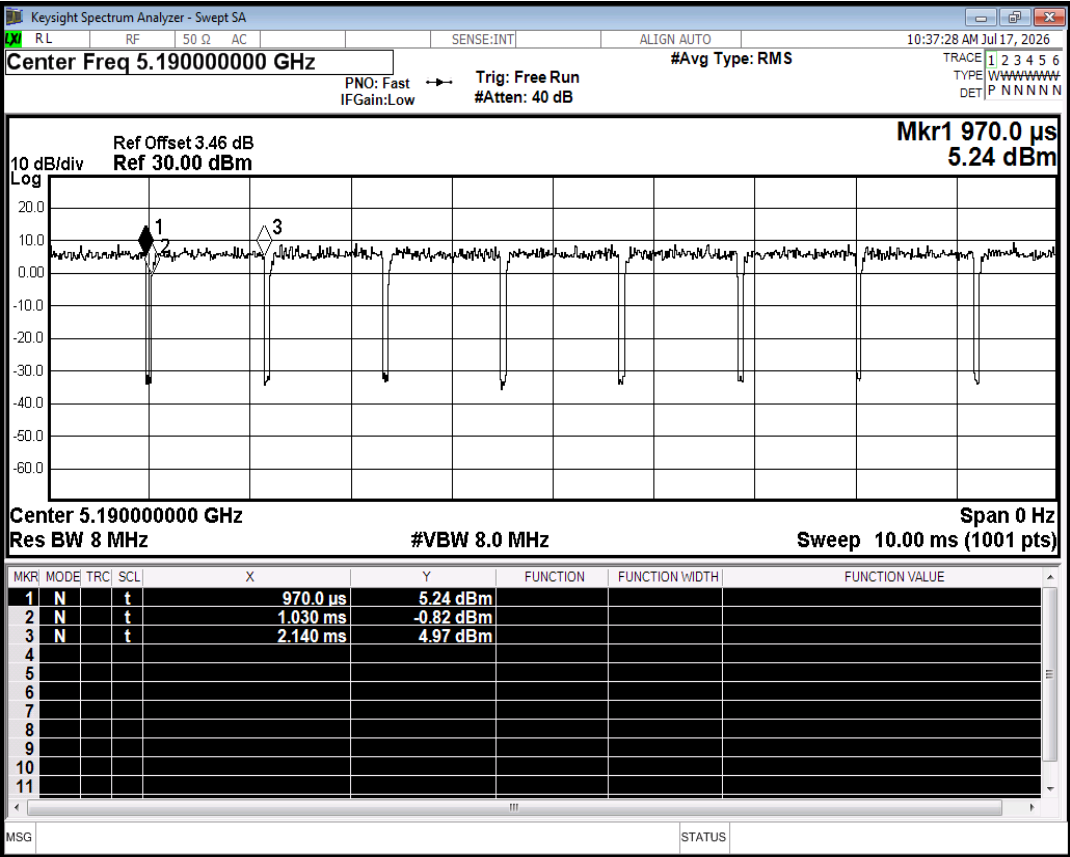
Duty Cycle NVNT n20 5180MHz Ant1



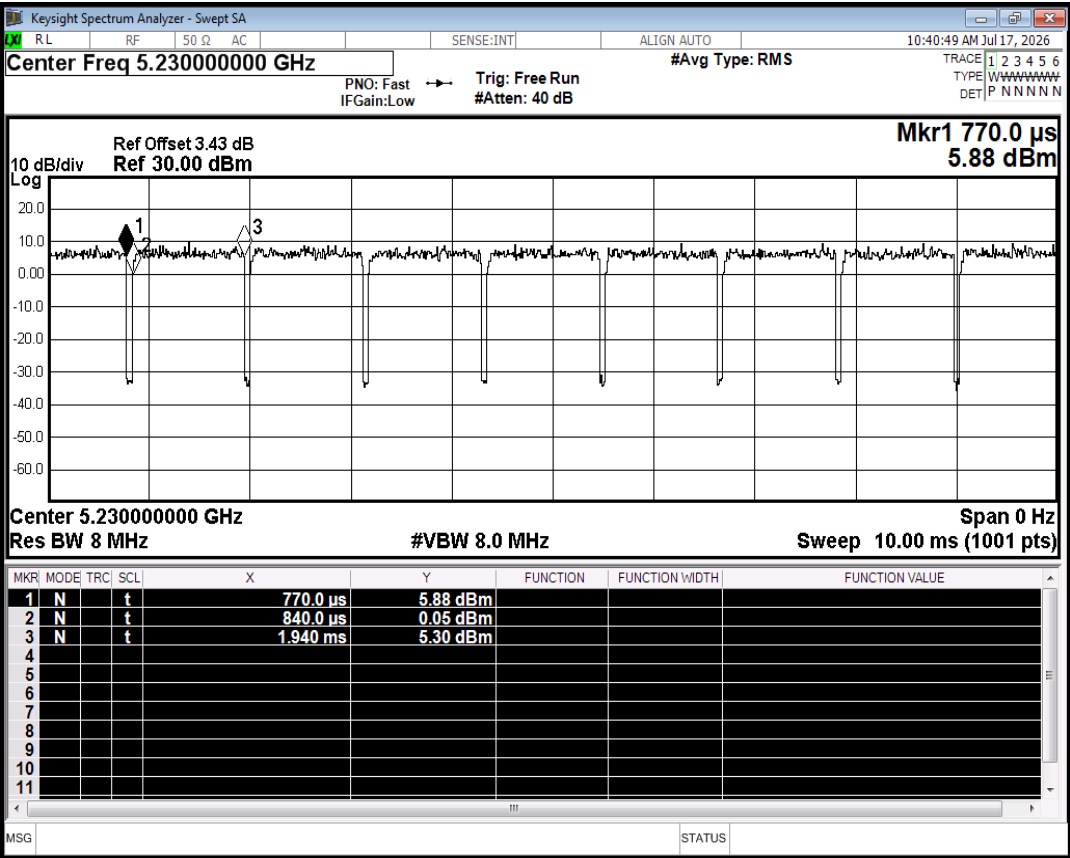
Duty Cycle NVNT n20 5200MHz Ant1



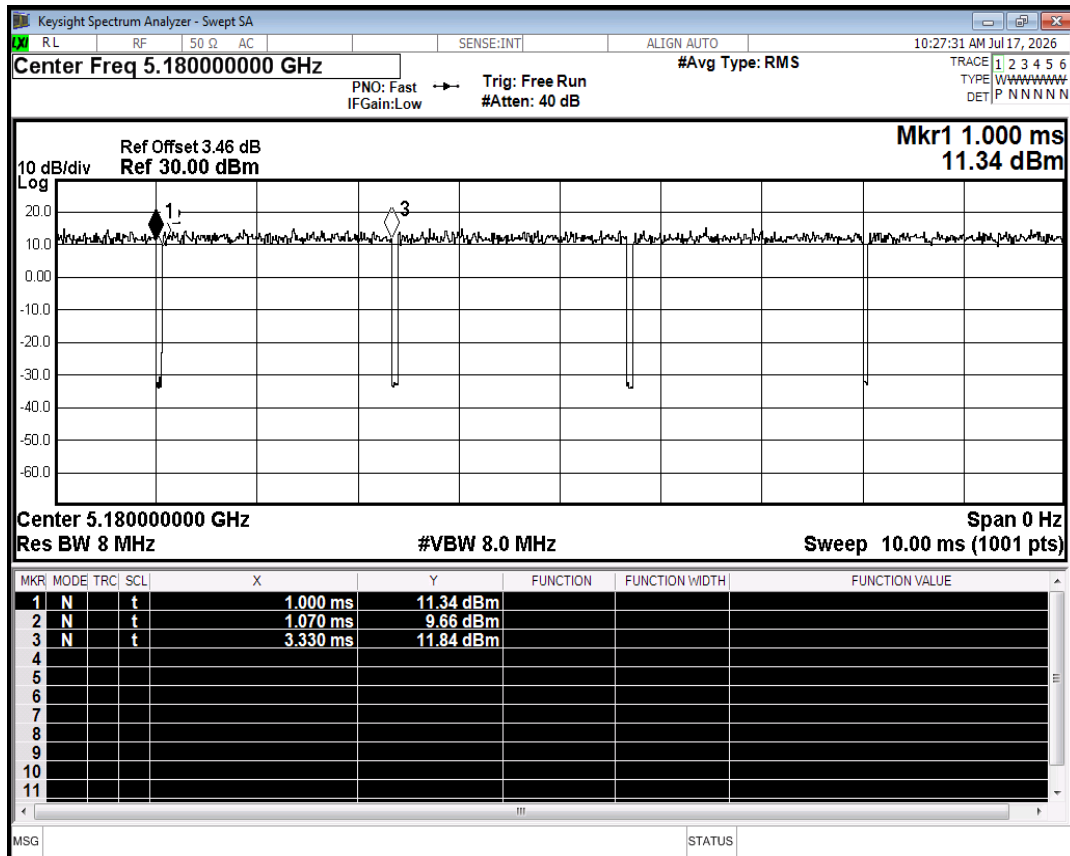
Duty Cycle NVNT n20 5240MHz Ant1



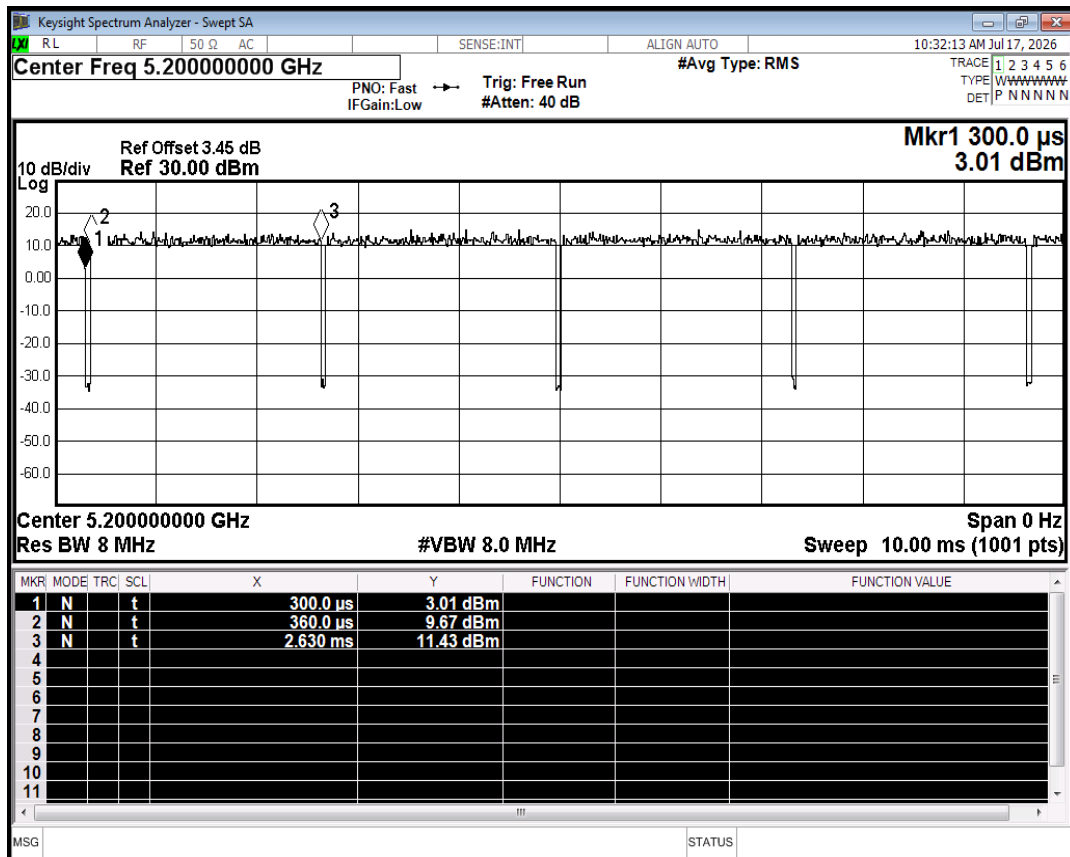
Duty Cycle NVNT n40 5190MHz Ant1



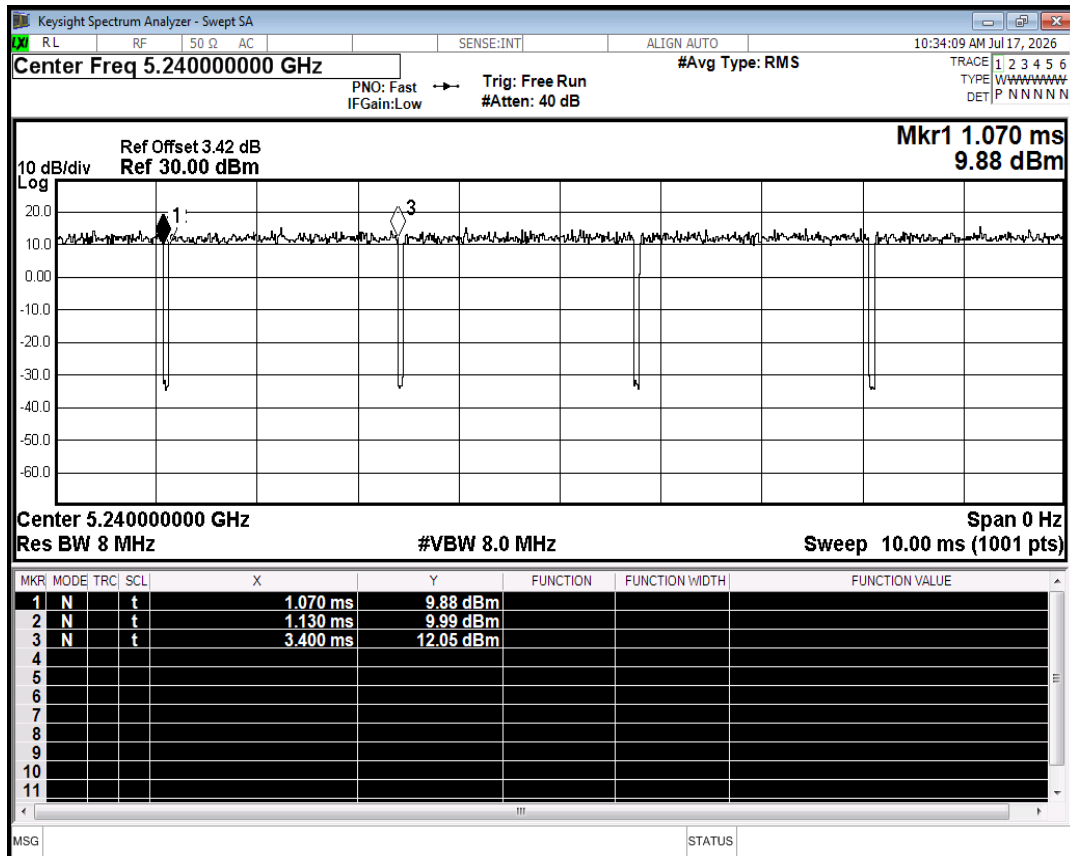
Duty Cycle NVNT n40 5230MHz Ant1



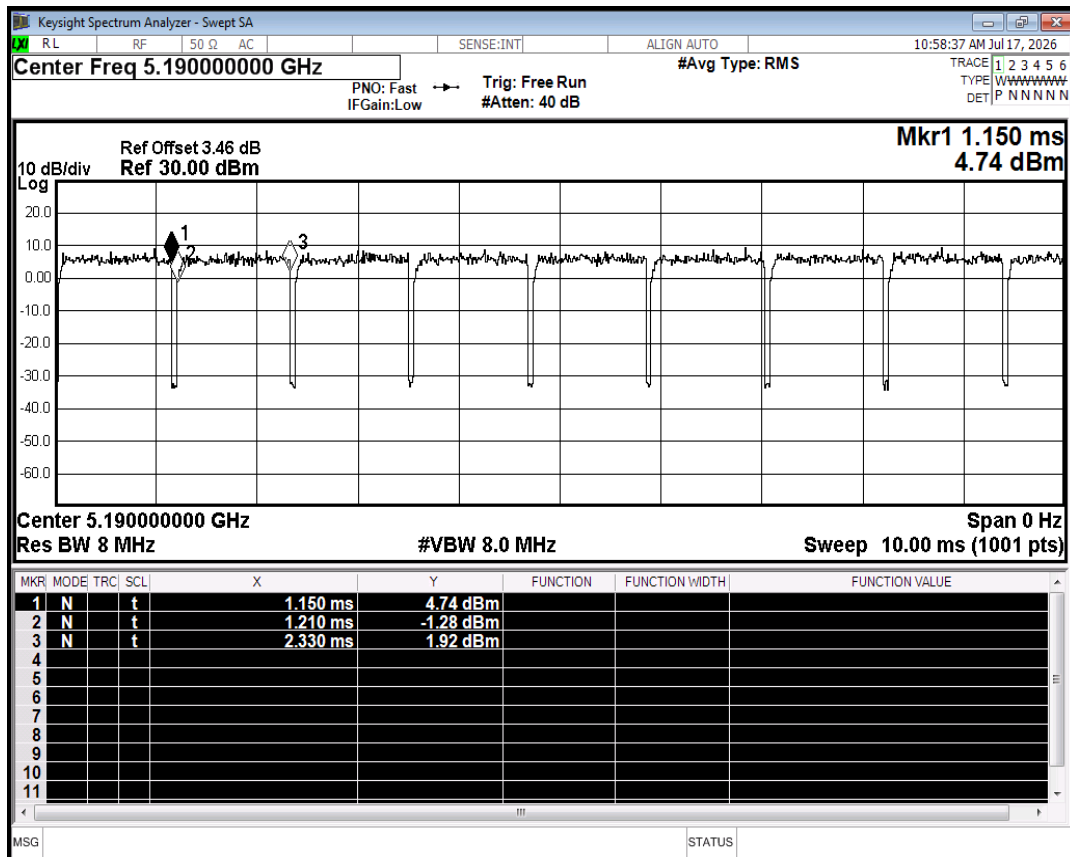
Duty Cycle NVNT ac20 5180MHz Ant1



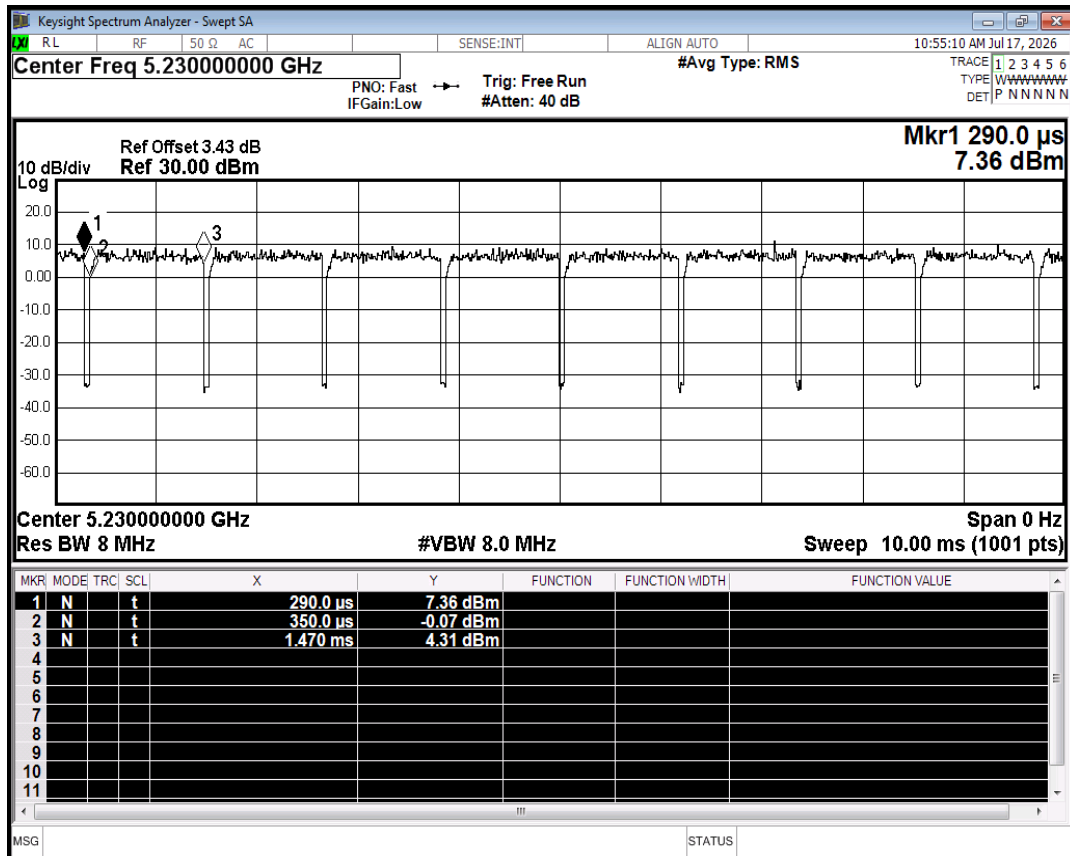
Duty Cycle NVNT ac20 5200MHz Ant1



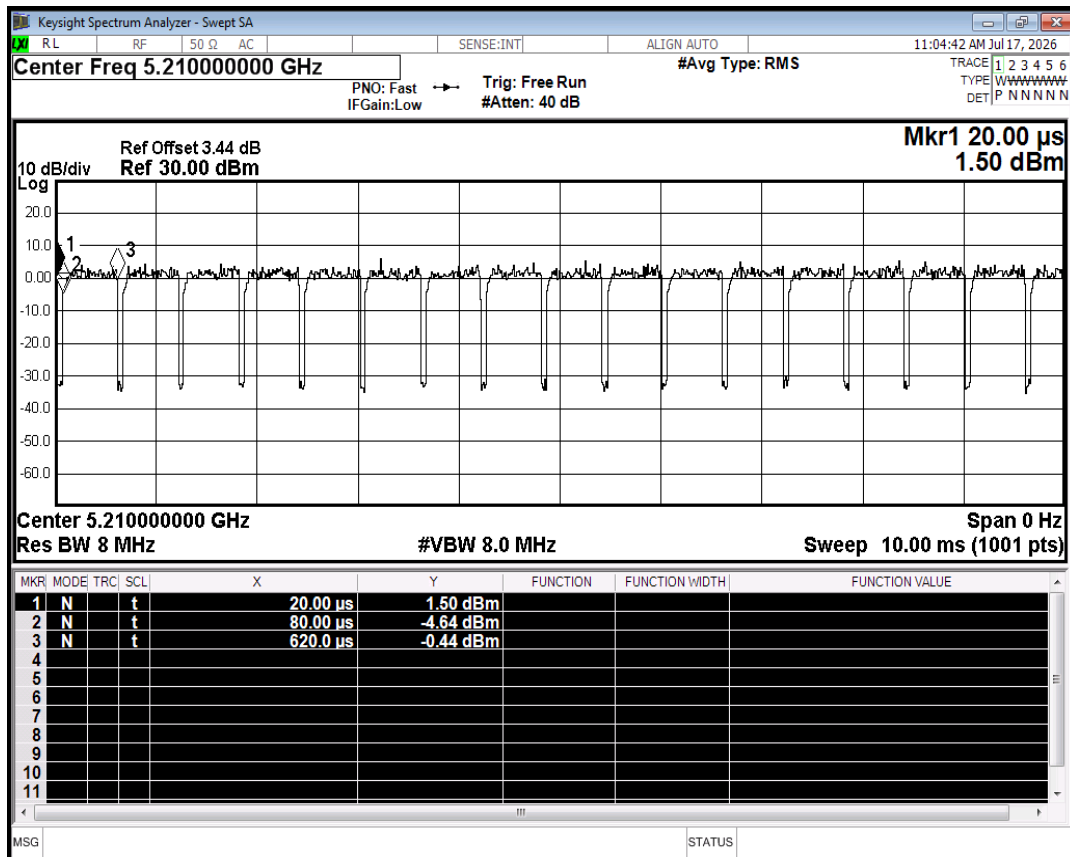
Duty Cycle NVNT ac20 5240MHz Ant1



Duty Cycle NVNT ac40 5190MHz Ant1



Duty Cycle NVNT ac40 5230MHz Ant1



Duty Cycle NVNT ac80 5210MHz Ant1