

Appendix D

RF Test Data for 5.3GWIFI(Conducted Measurement)

Product Name: GNSS Receiver

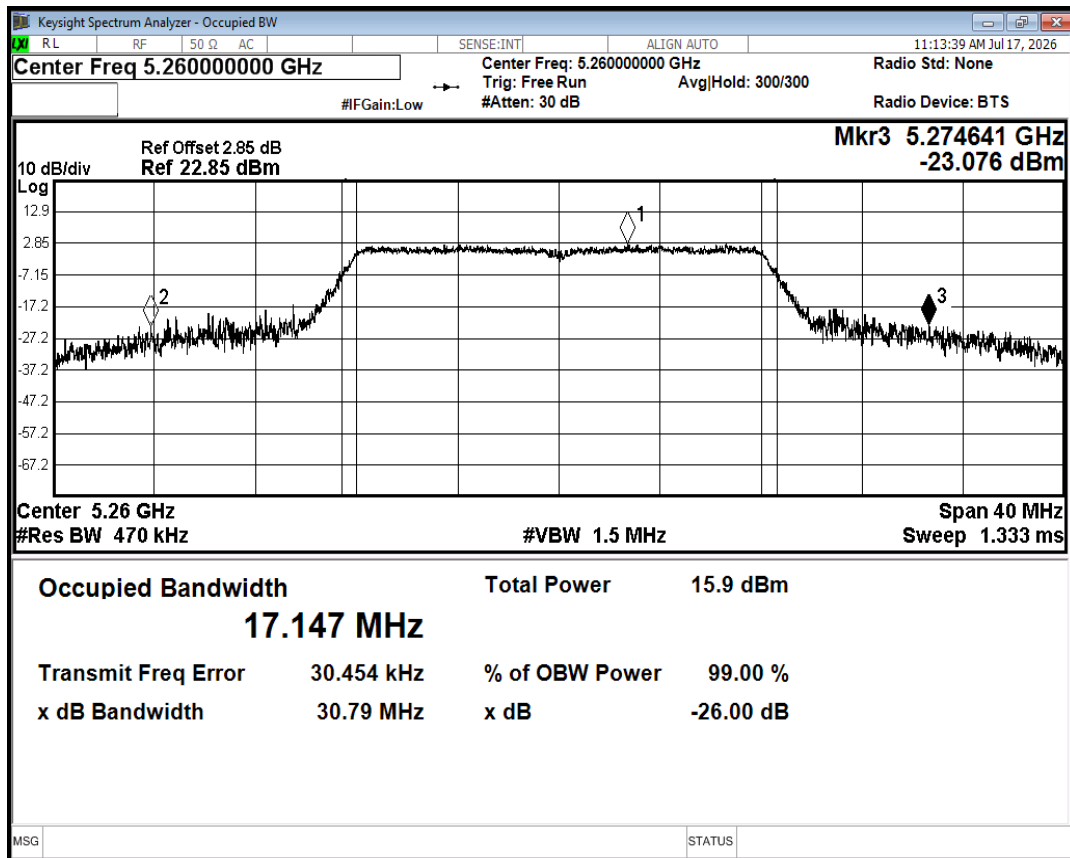
Test Model: Horus

Environmental Conditions

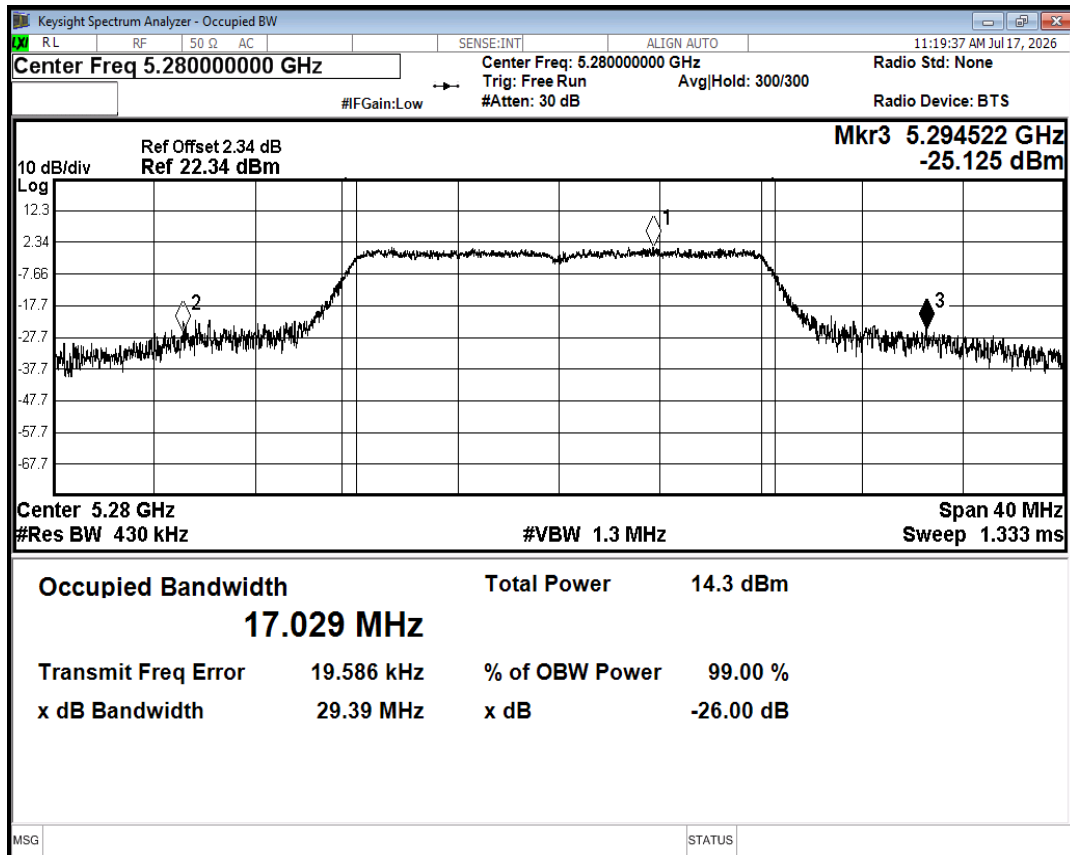
Temperature:	24.6°C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

D.1 -26dB Bandwidth

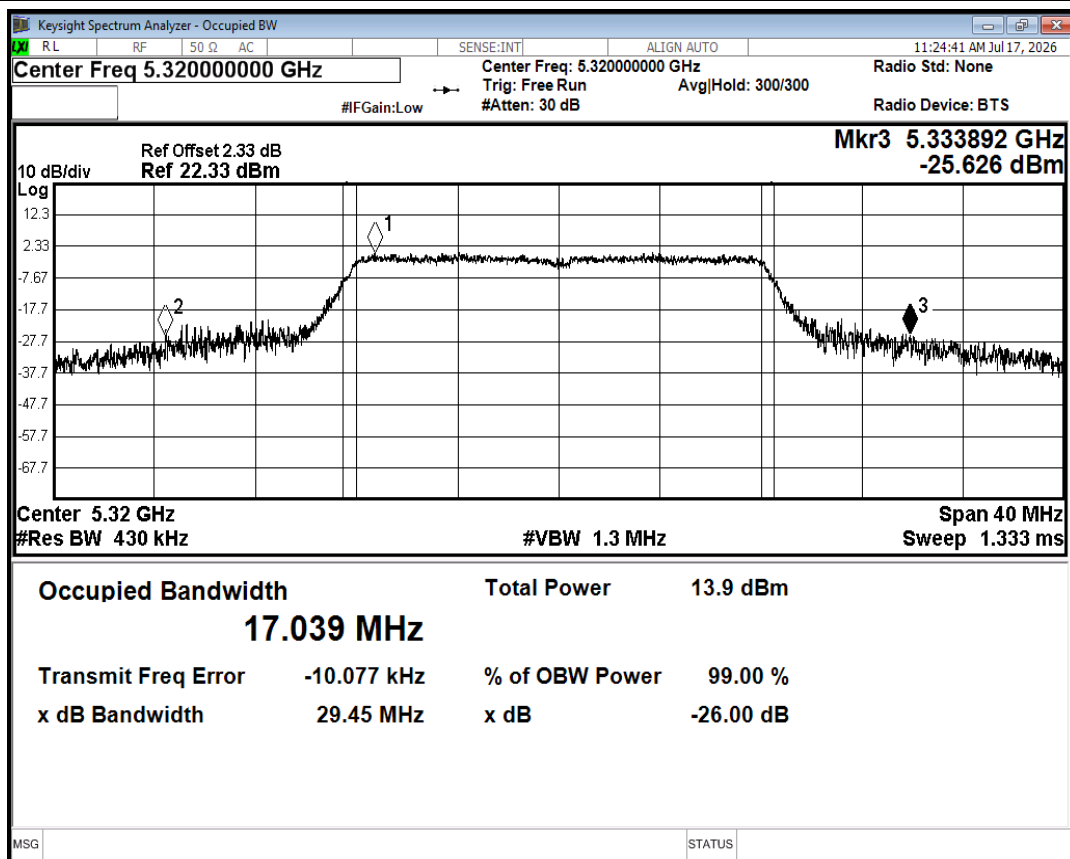
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5260	Ant1	30.79
NVNT	a	5280	Ant1	29.39
NVNT	a	5320	Ant1	29.45
NVNT	n20	5260	Ant1	33.23
NVNT	n20	5280	Ant1	34.63
NVNT	n20	5320	Ant1	34.12
NVNT	n40	5270	Ant1	51.76
NVNT	n40	5310	Ant1	49.12
NVNT	ac20	5260	Ant1	34.29
NVNT	ac20	5280	Ant1	33.82
NVNT	ac20	5320	Ant1	30.27
NVNT	ac40	5270	Ant1	58.74
NVNT	ac40	5310	Ant1	51.97
NVNT	ac80	5290	Ant1	89.04



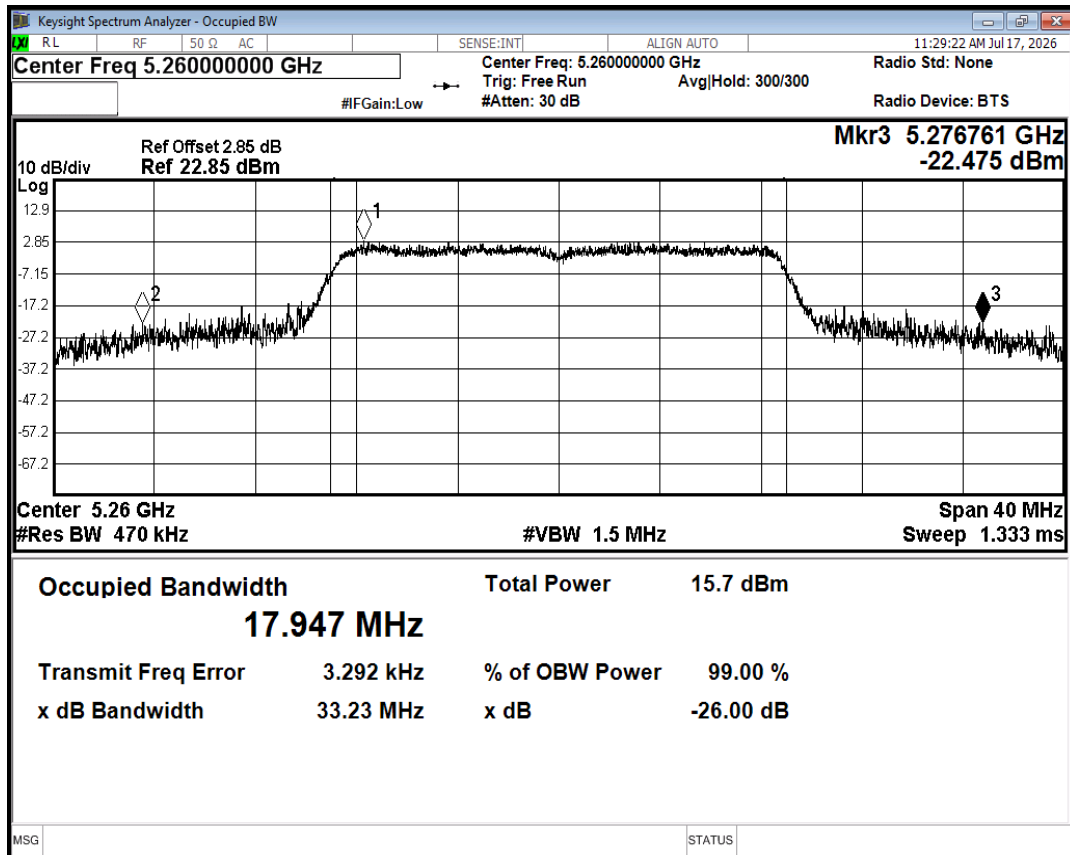
-26dB Bandwidth NVNT a 5260MHz Ant1



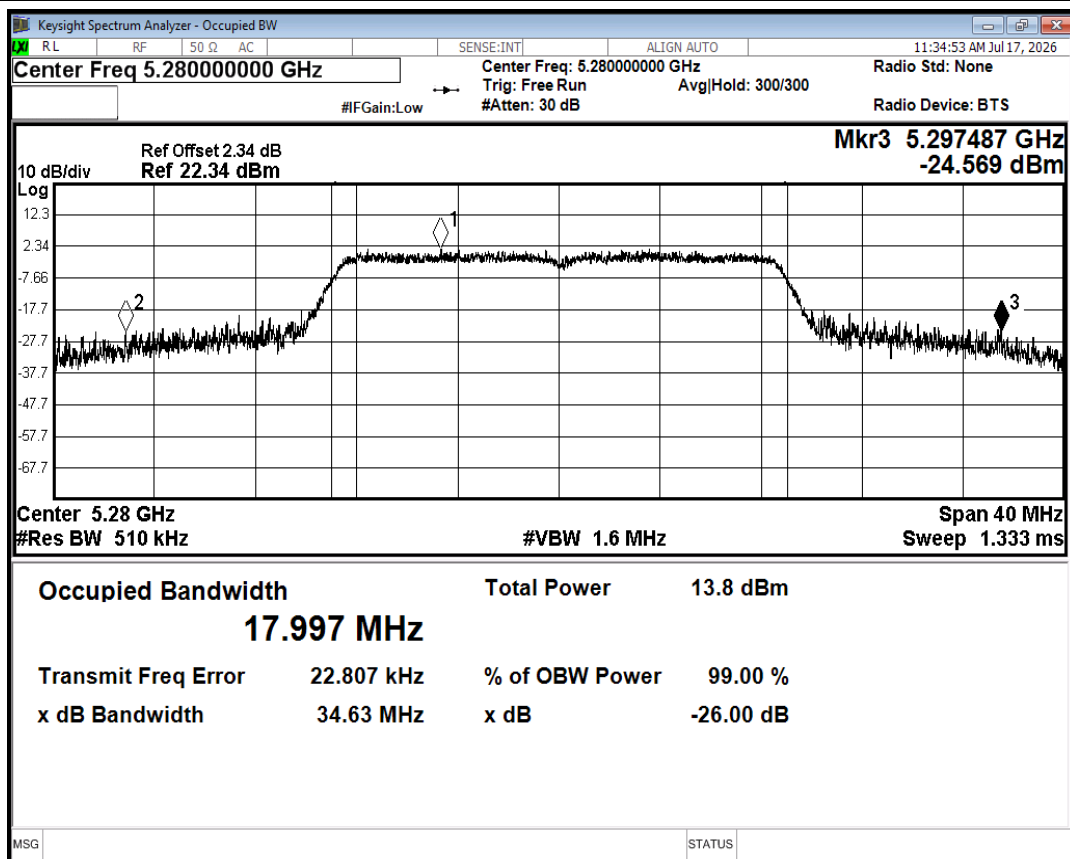
-26dB Bandwidth NVNT a 5280MHz Ant1



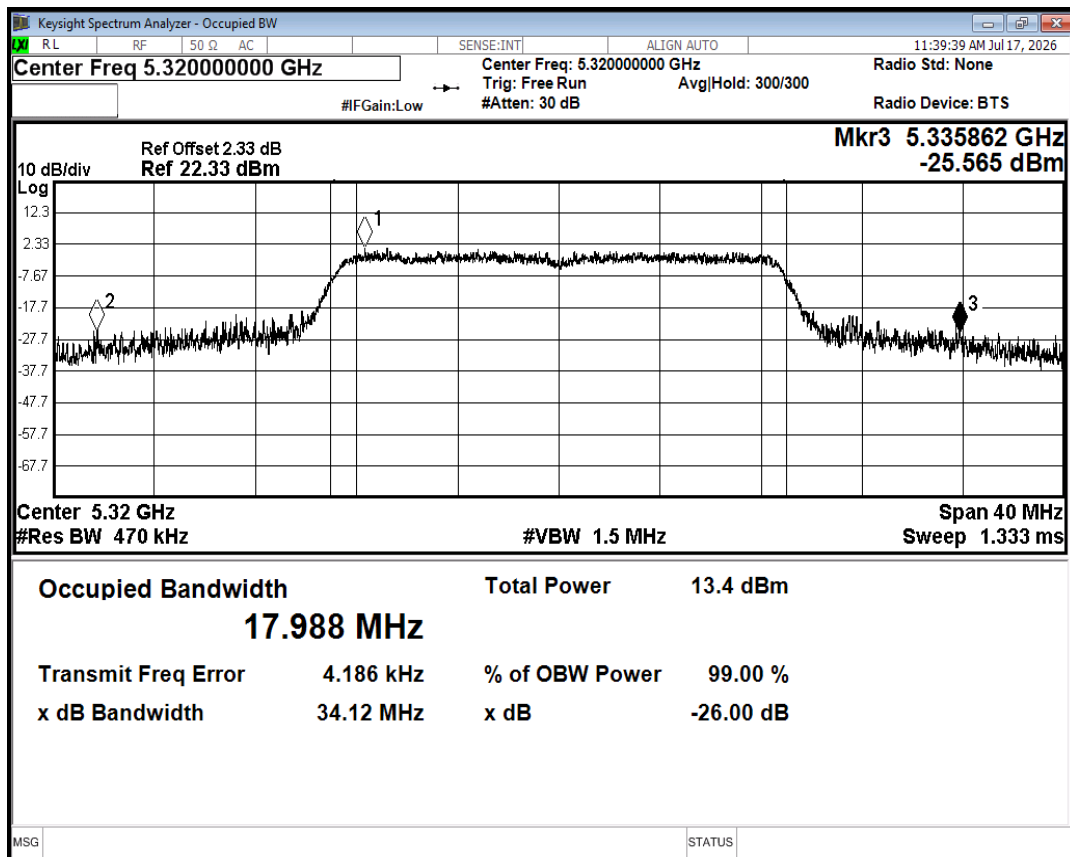
-26dB Bandwidth NVNT a 5320MHz Ant1



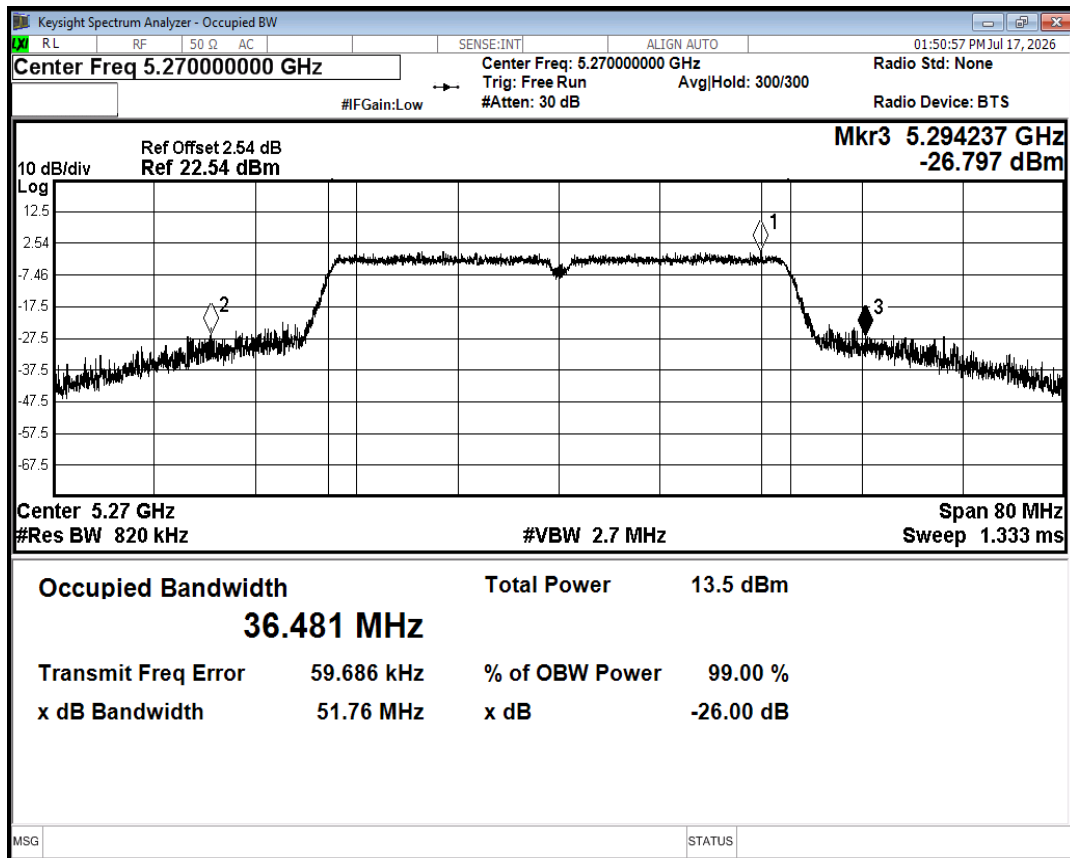
-26dB Bandwidth NVNT n20 5260MHz Ant1



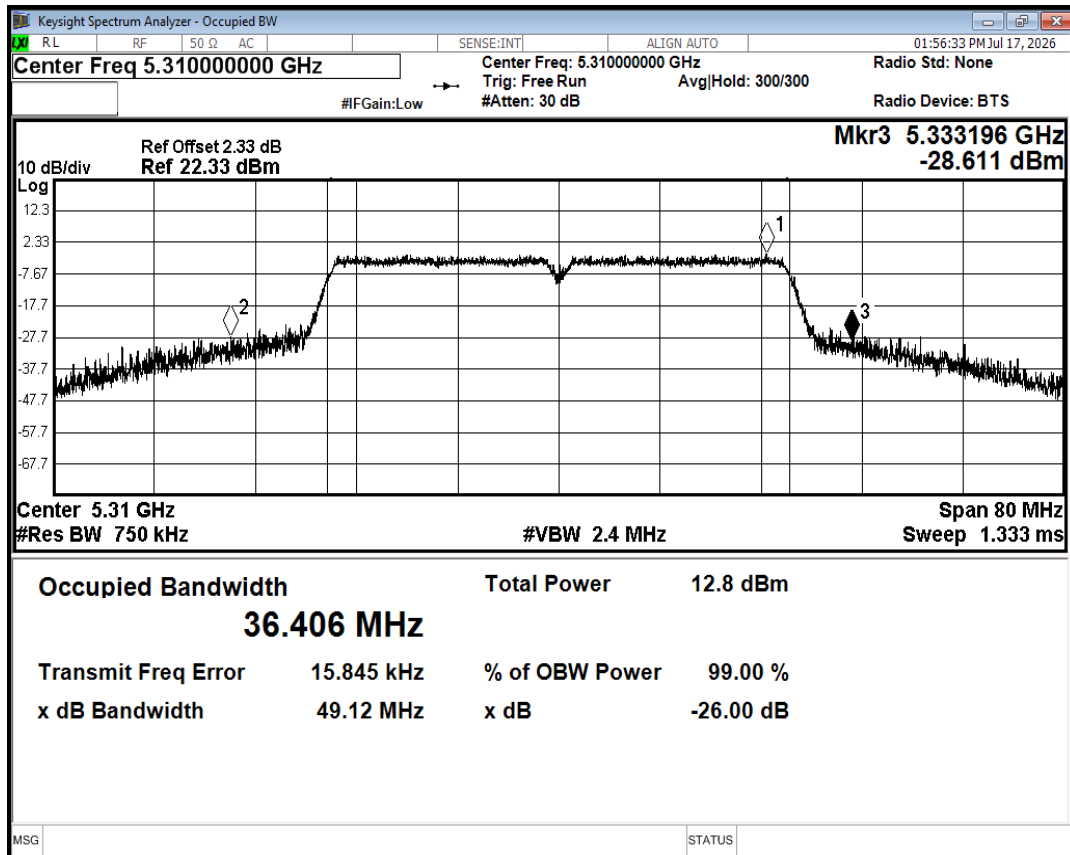
-26dB Bandwidth NVNT n20 5280MHz Ant1



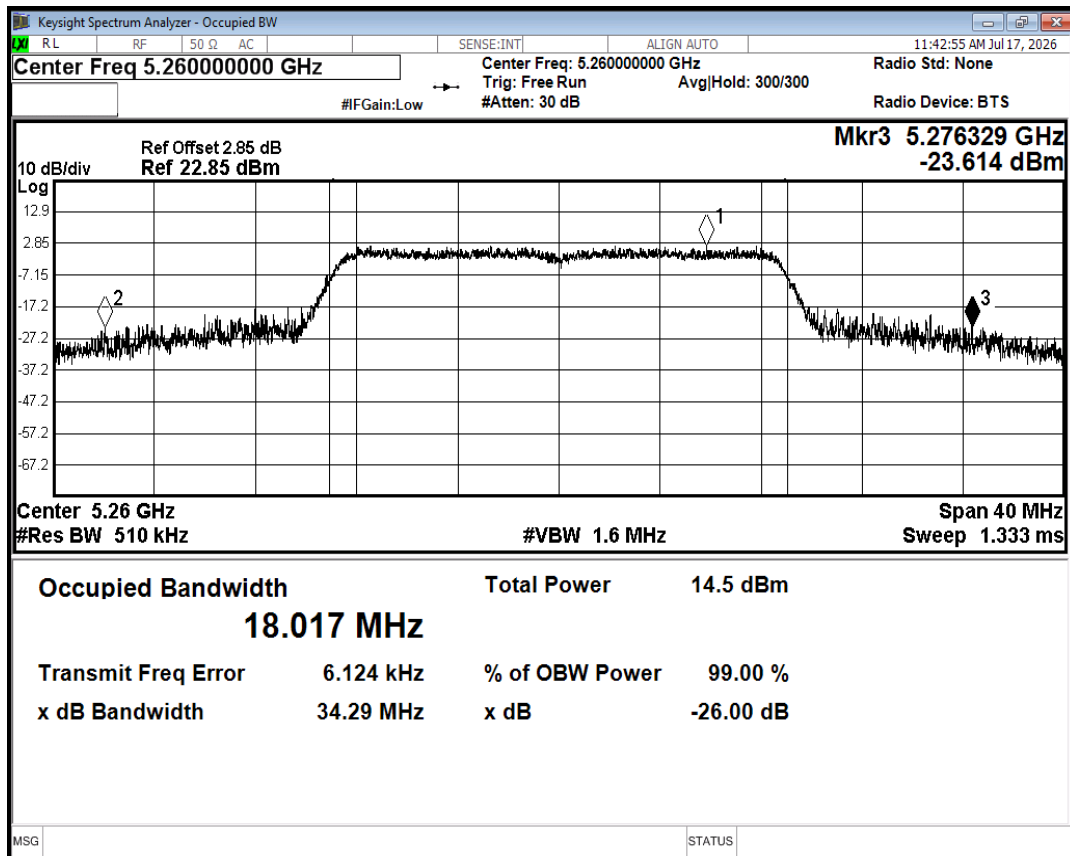
-26dB Bandwidth NVNT n20 5320MHz Ant1



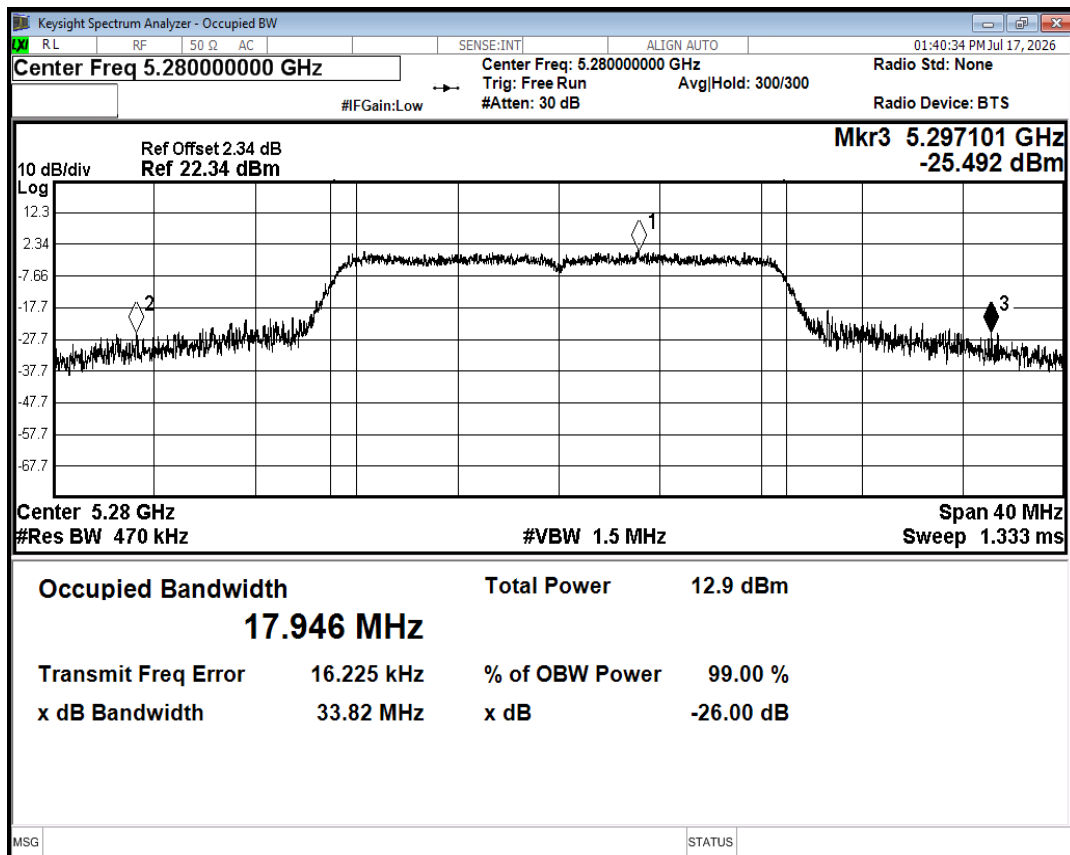
-26dB Bandwidth NVNT n40 5270MHz Ant1



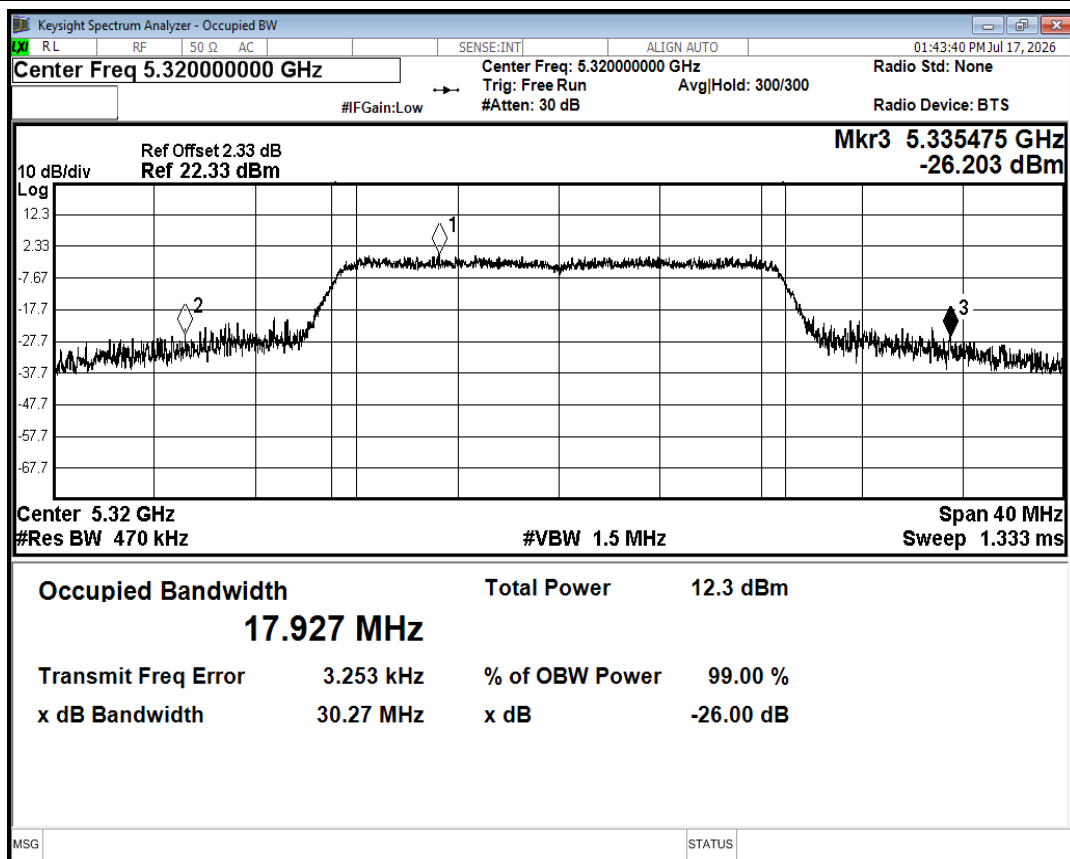
-26dB Bandwidth NVNT n40 5310MHz Ant1



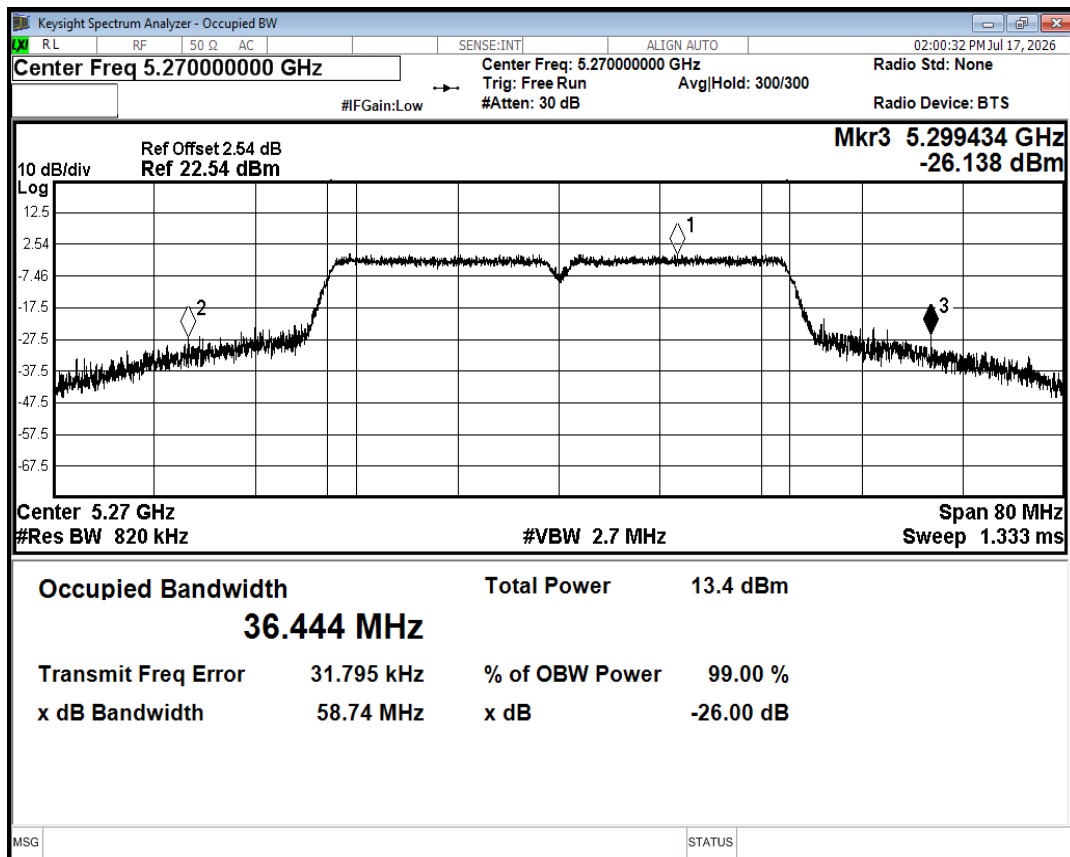
-26dB Bandwidth NVNT ac20 5260MHz Ant1



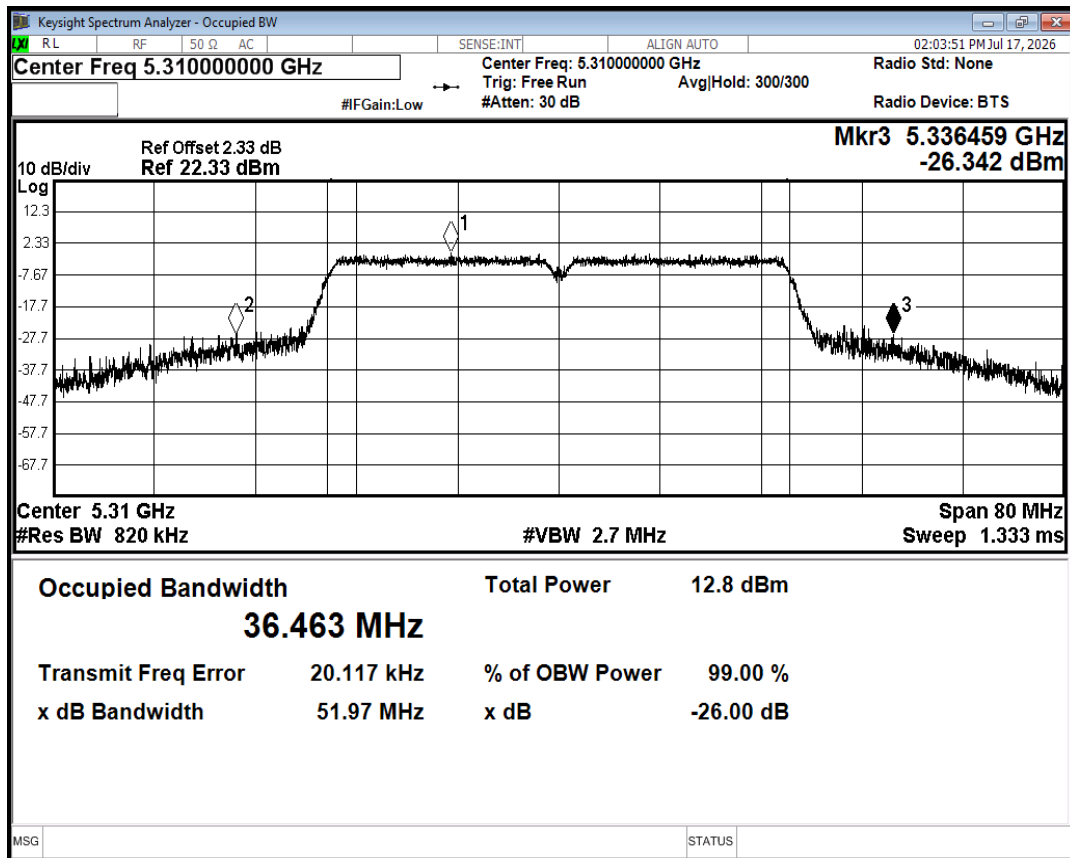
-26dB Bandwidth NVNT ac20 5280MHz Ant1



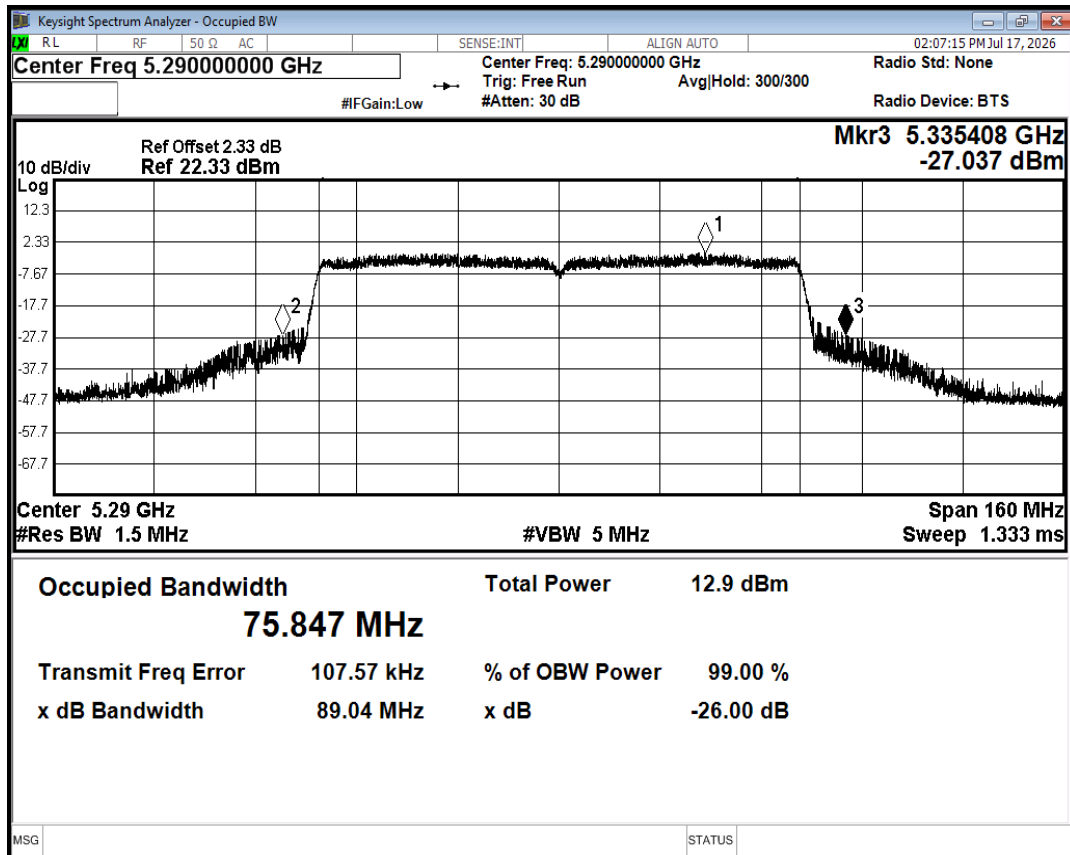
-26dB Bandwidth NVNT ac20 5320MHz Ant1



-26dB Bandwidth NVNT ac40 5270MHz Ant1



-26dB Bandwidth NVNT ac40 5310MHz Ant1



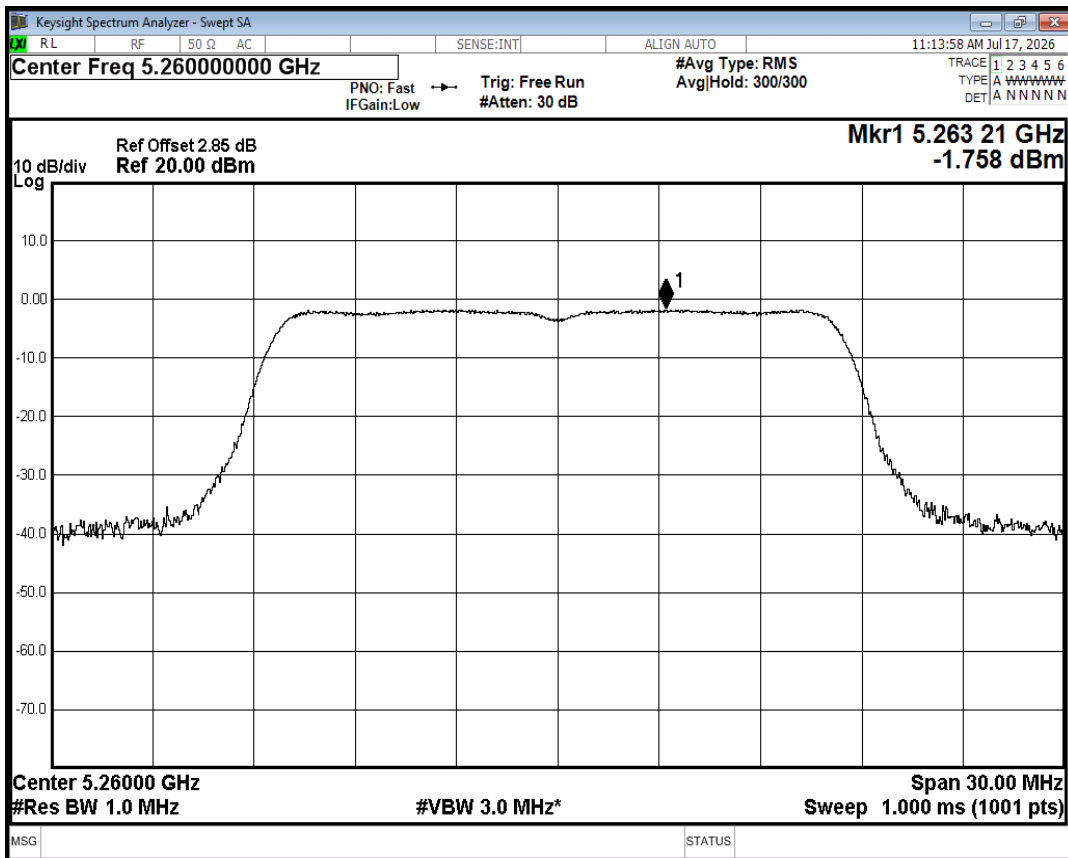
-26dB Bandwidth NVNT ac80 5290MHz Ant1

D.2 Maximum Conducted Output Power

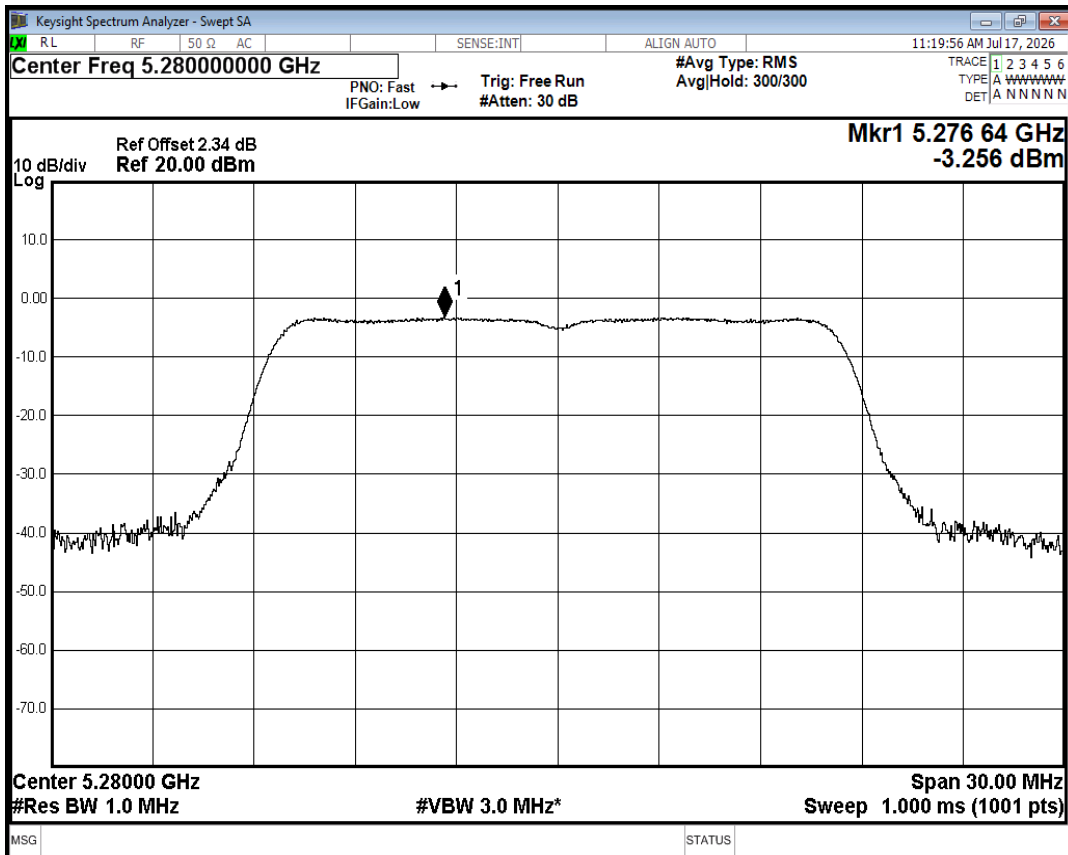
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Limit Conducted(dBm)	Verdict
NVNT	a	5260	Ant1	18.31	0.1	18.41	24	Pass
NVNT	a	5280	Ant1	18.21	0.11	18.32	24	Pass
NVNT	a	5320	Ant1	17.69	0.1	17.79	24	Pass
NVNT	n20	5260	Ant1	18.17	0.11	18.28	24	Pass
NVNT	n20	5280	Ant1	18.55	0.13	18.68	24	Pass
NVNT	n20	5320	Ant1	18.22	0.13	18.35	24	Pass
NVNT	n40	5270	Ant1	17.22	0.23	17.45	24	Pass
NVNT	n40	5310	Ant1	16.7	0.23	16.93	24	Pass
NVNT	ac20	5260	Ant1	17.62	0.11	17.73	24	Pass
NVNT	ac20	5280	Ant1	17.09	0.11	17.2	24	Pass
NVNT	ac20	5320	Ant1	16.71	0.11	16.82	24	Pass
NVNT	ac40	5270	Ant1	17.73	0.23	17.96	24	Pass
NVNT	ac40	5310	Ant1	16.69	0.23	16.92	24	Pass
NVNT	ac80	5290	Ant1	17.36	0.47	17.83	24	Pass

D.3 Maximum Power Spectral Density Level

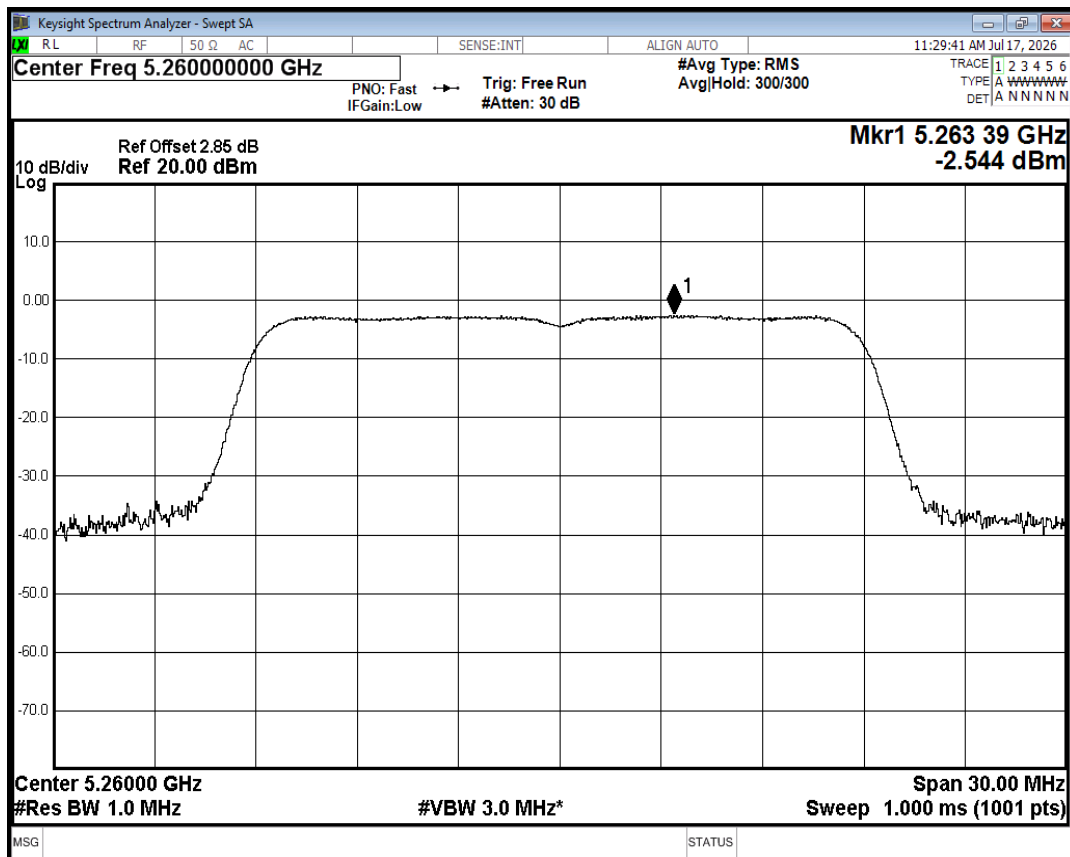
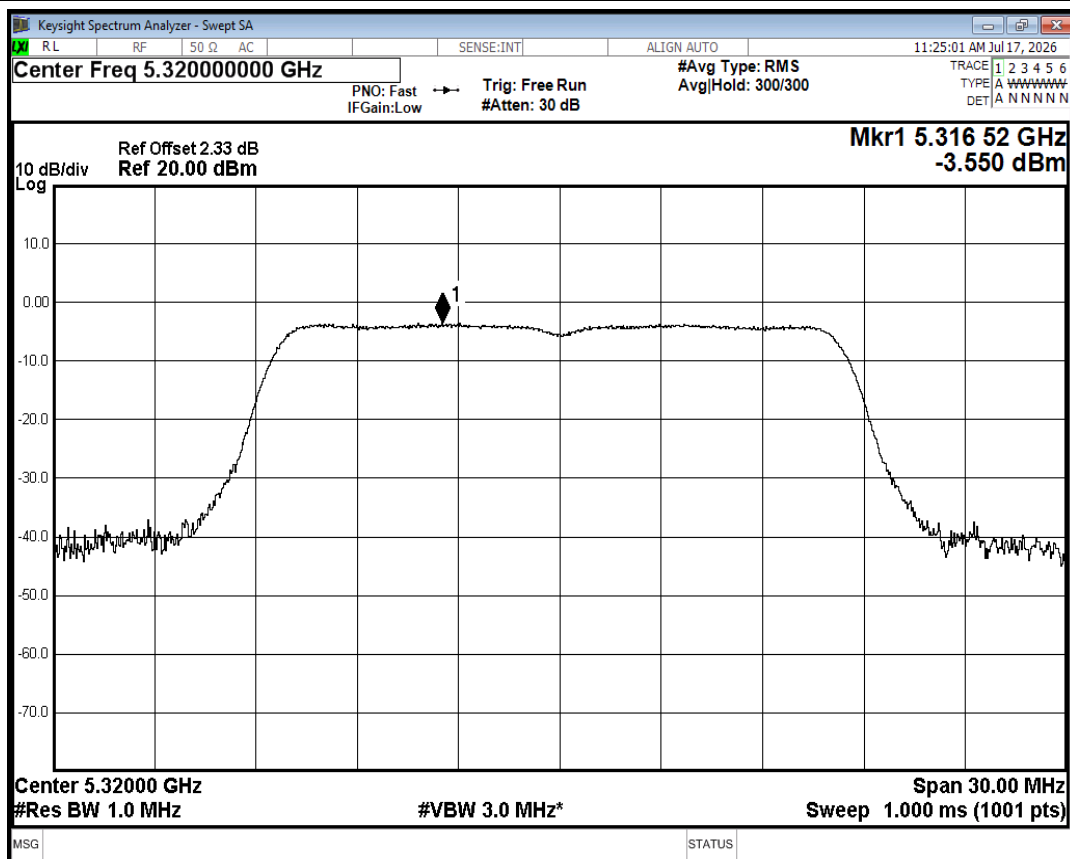
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total Conducted PSD (dBm/MHz)	Limit Conducted(dBm/MHz)	Verdict
NVNT	a	5260	Ant1	-1.76	0.1	-1.66	11	Pass
NVNT	a	5280	Ant1	-3.26	0.11	-3.15	11	Pass
NVNT	a	5320	Ant1	-3.55	0.1	-3.45	11	Pass
NVNT	n20	5260	Ant1	-2.54	0.11	-2.43	11	Pass
NVNT	n20	5280	Ant1	-4.47	0.13	-4.34	11	Pass
NVNT	n20	5320	Ant1	-4.73	0.13	-4.6	11	Pass
NVNT	n40	5270	Ant1	-8.41	0.23	-8.18	11	Pass
NVNT	n40	5310	Ant1	-9.05	0.23	-8.82	11	Pass
NVNT	ac20	5260	Ant1	-3.86	0.11	-3.75	11	Pass
NVNT	ac20	5280	Ant1	-5.27	0.11	-5.16	11	Pass
NVNT	ac20	5320	Ant1	-5.78	0.11	-5.67	11	Pass
NVNT	ac40	5270	Ant1	-8.34	0.23	-8.11	11	Pass
NVNT	ac40	5310	Ant1	-9.08	0.23	-8.85	11	Pass
NVNT	ac80	5290	Ant1	-12.69	0.47	-12.22	11	Pass

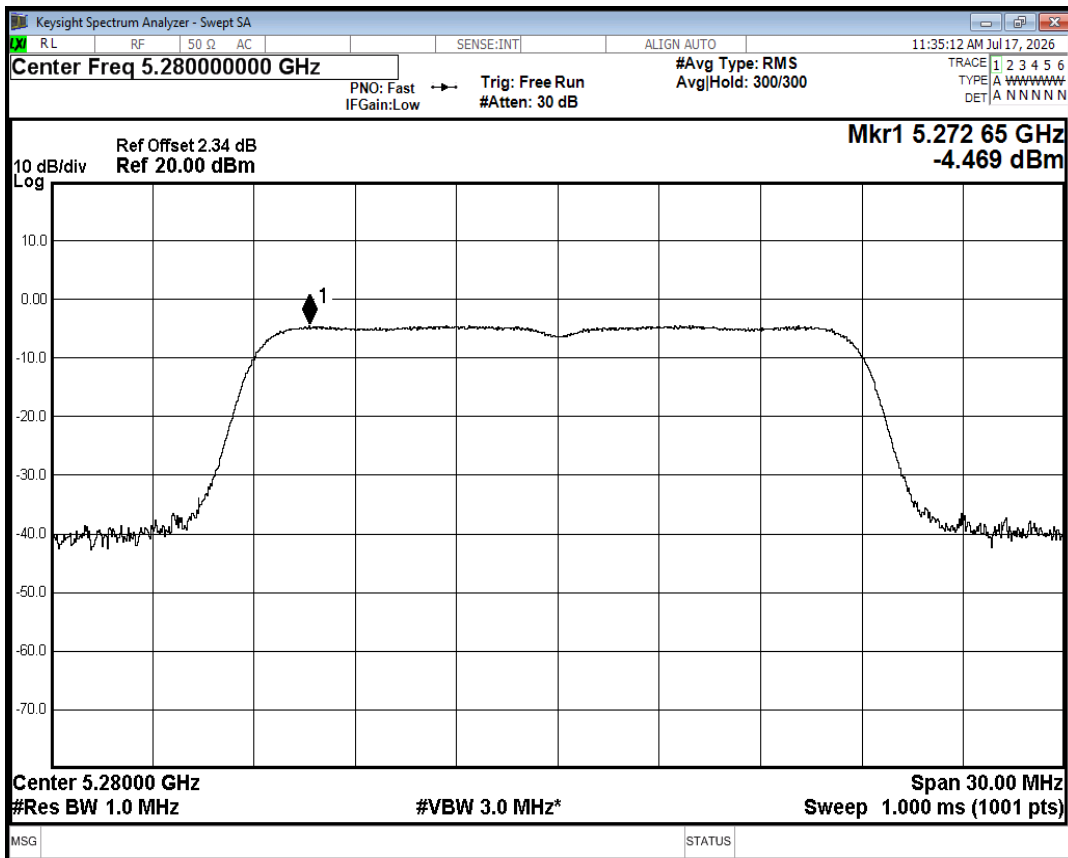


PSD NVNT a 5260MHz Ant1

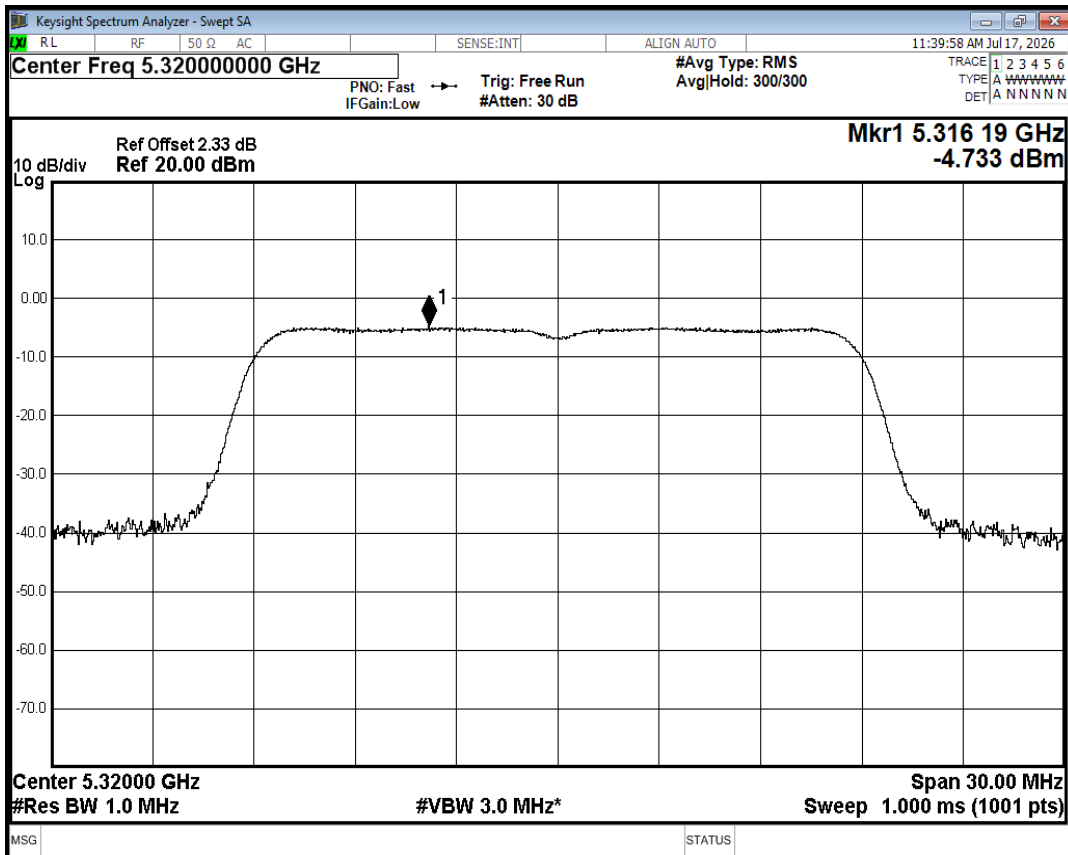


PSD NVNT a 5280MHz Ant1

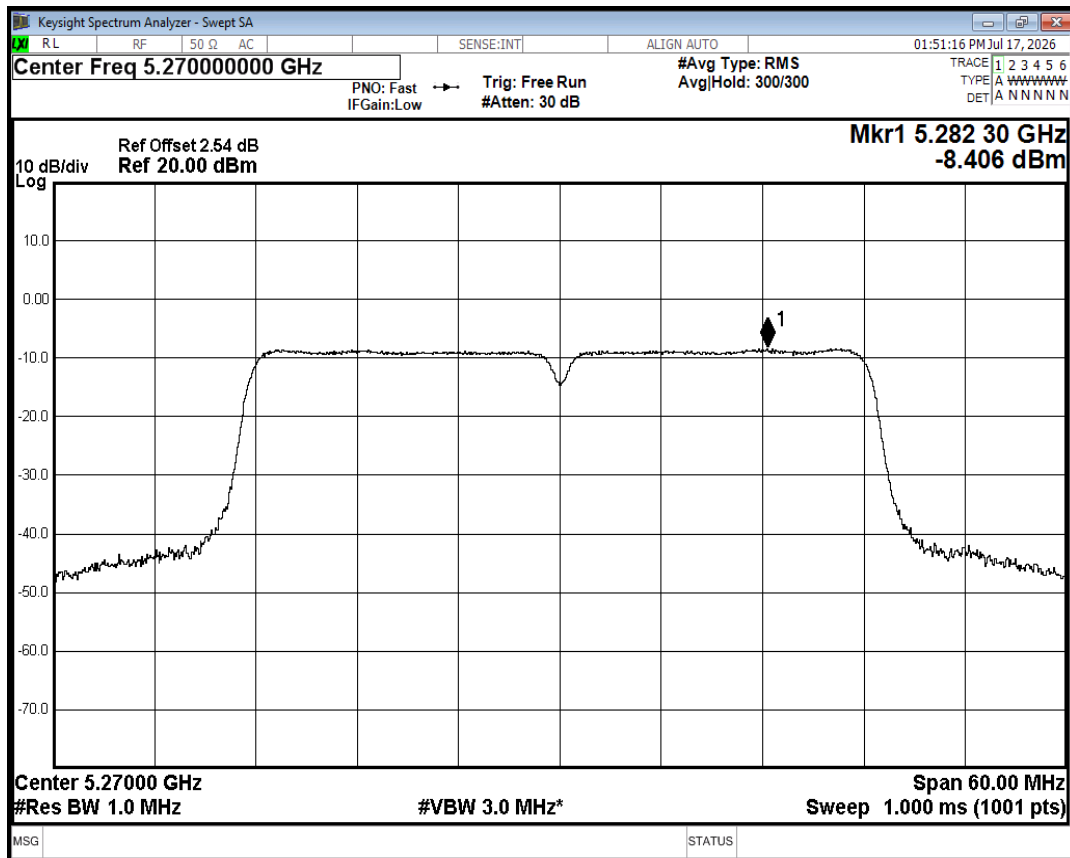




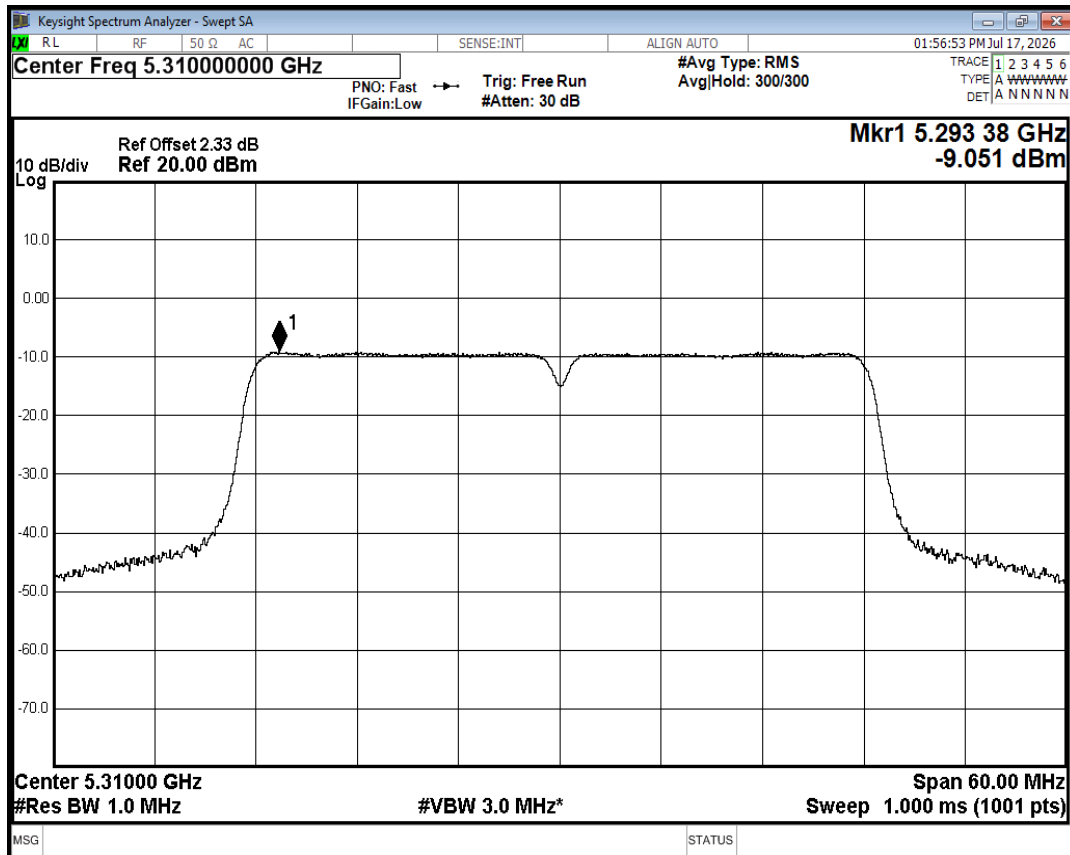
PSD NVNT n20 5280MHz Ant1



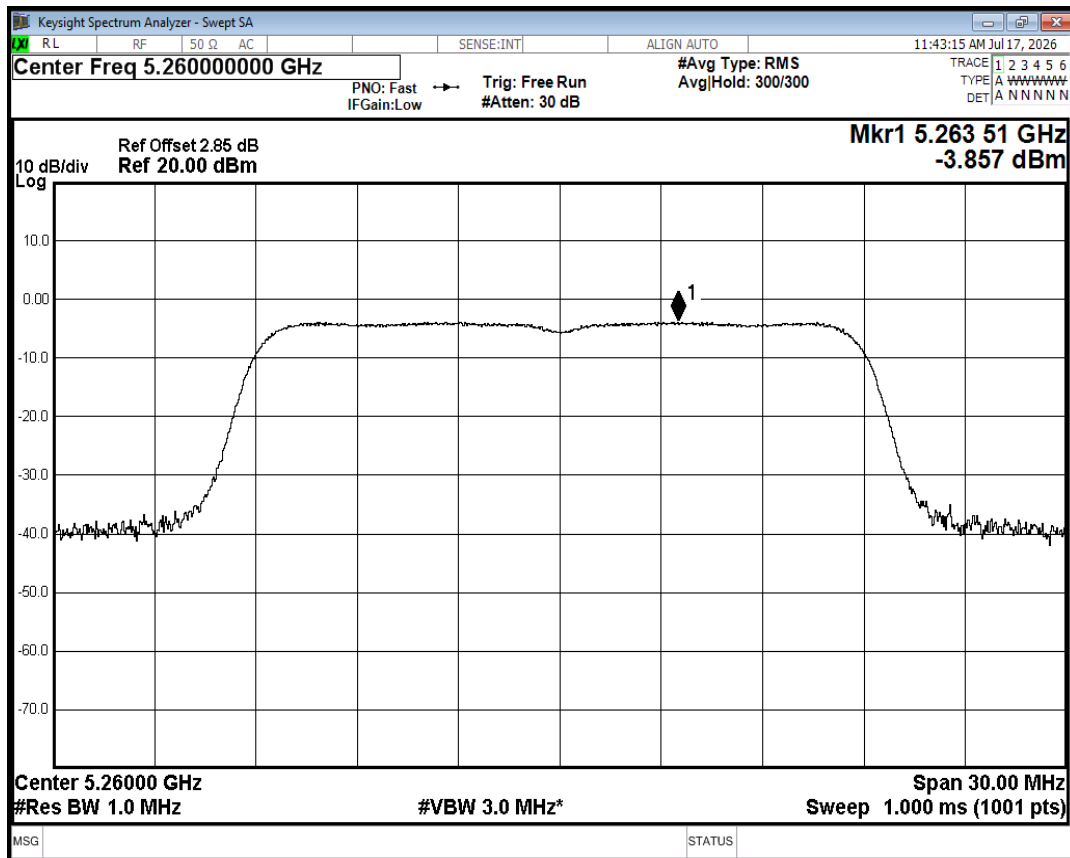
PSD NVNT n20 5320MHz Ant1



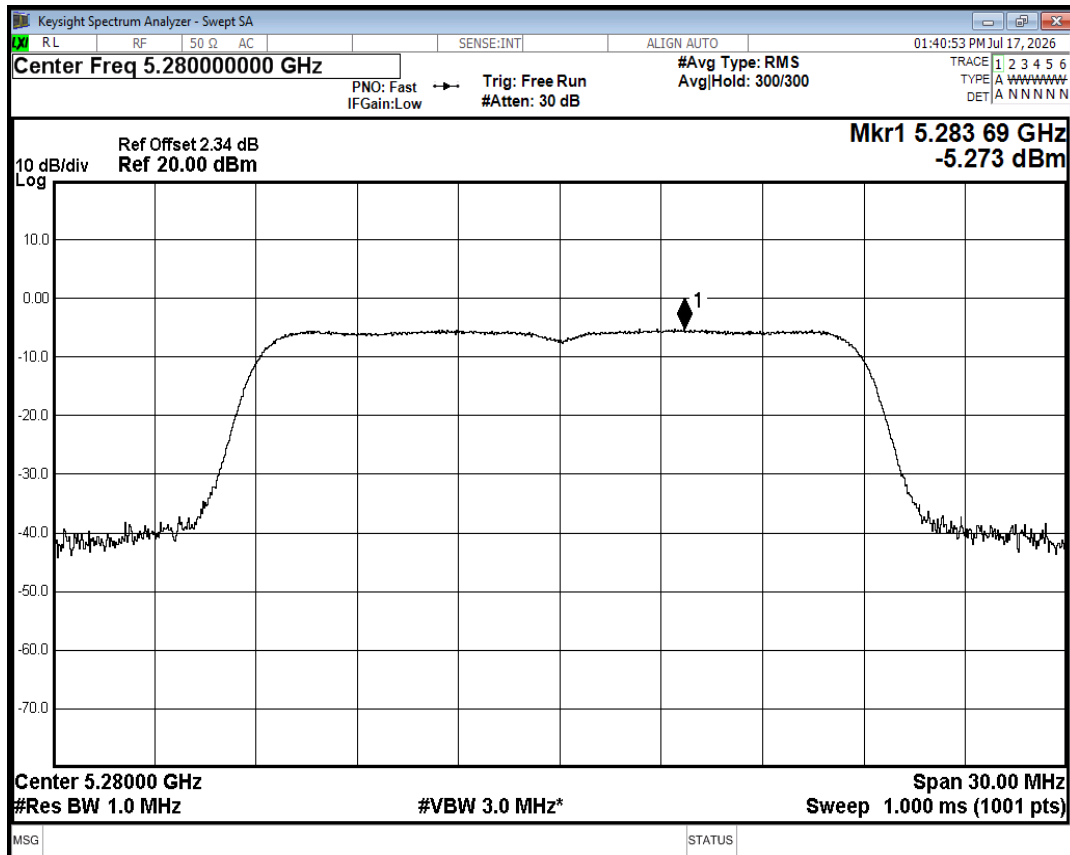
PSD NVNT n40 5270MHz Ant1



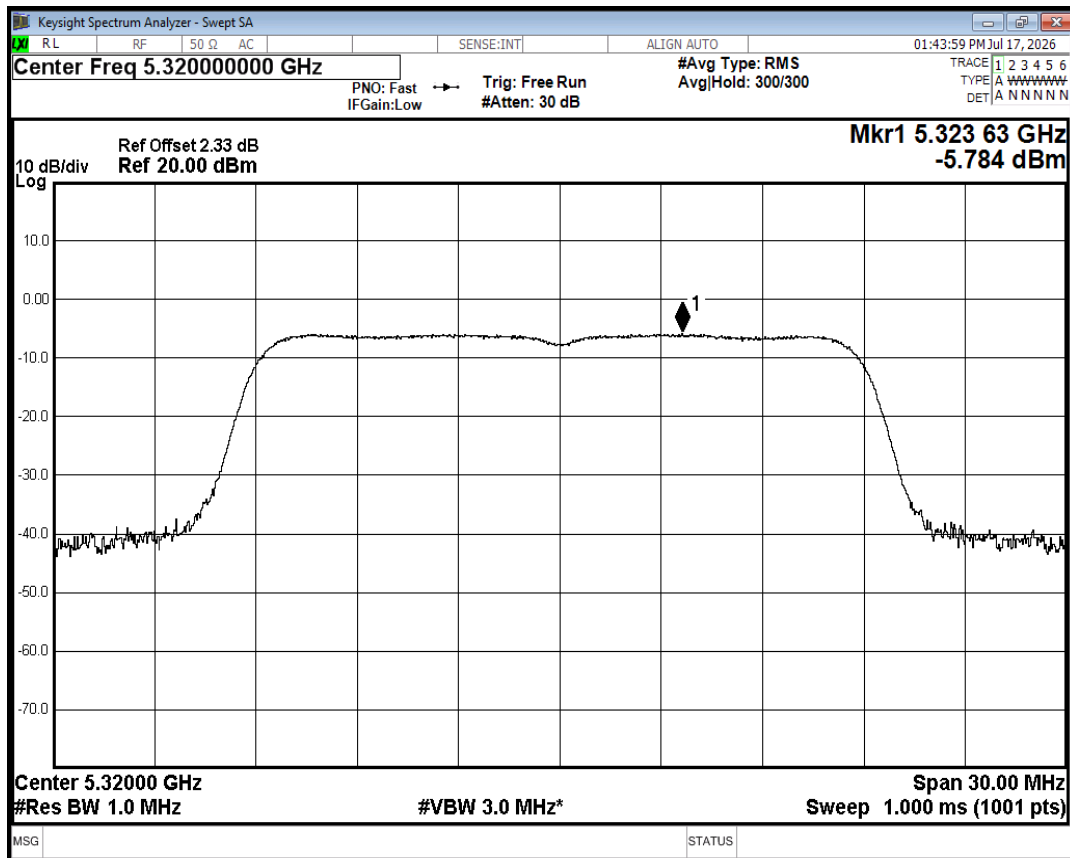
PSD NVNT n40 5310MHz Ant1



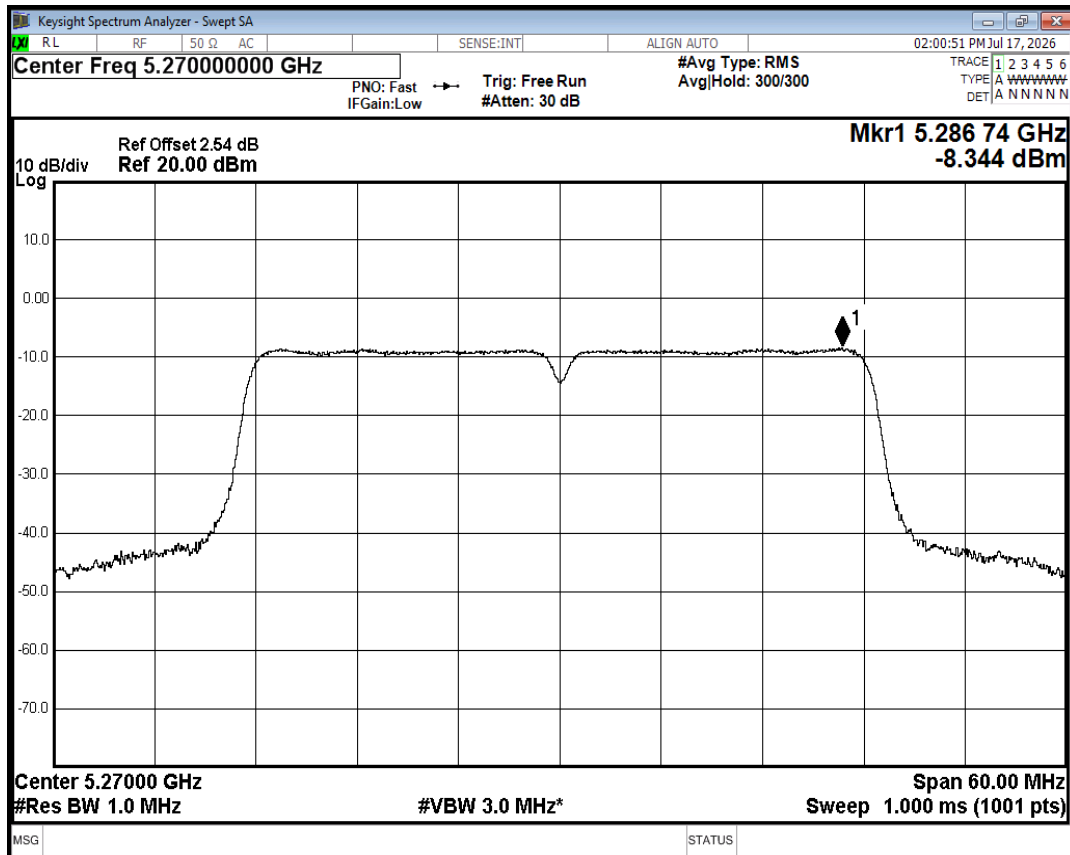
PSD NVNT ac20 5260MHz Ant1



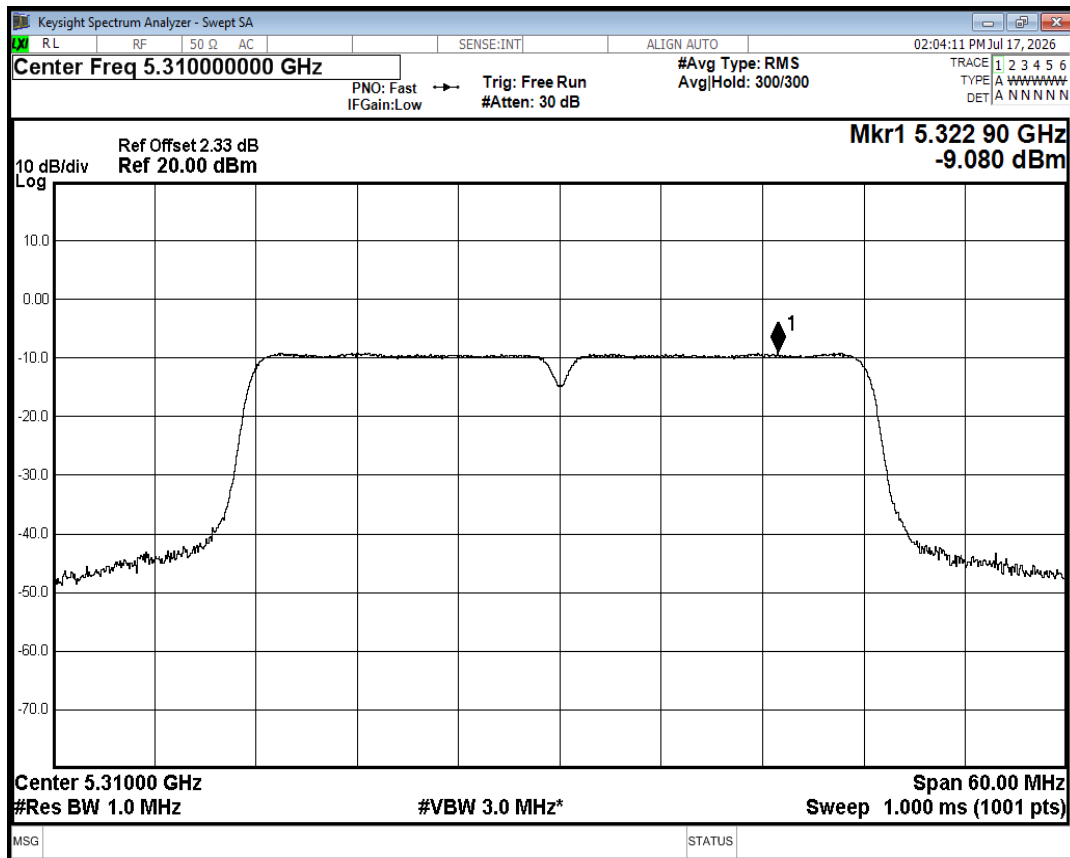
PSD NVNT ac20 5280MHz Ant1



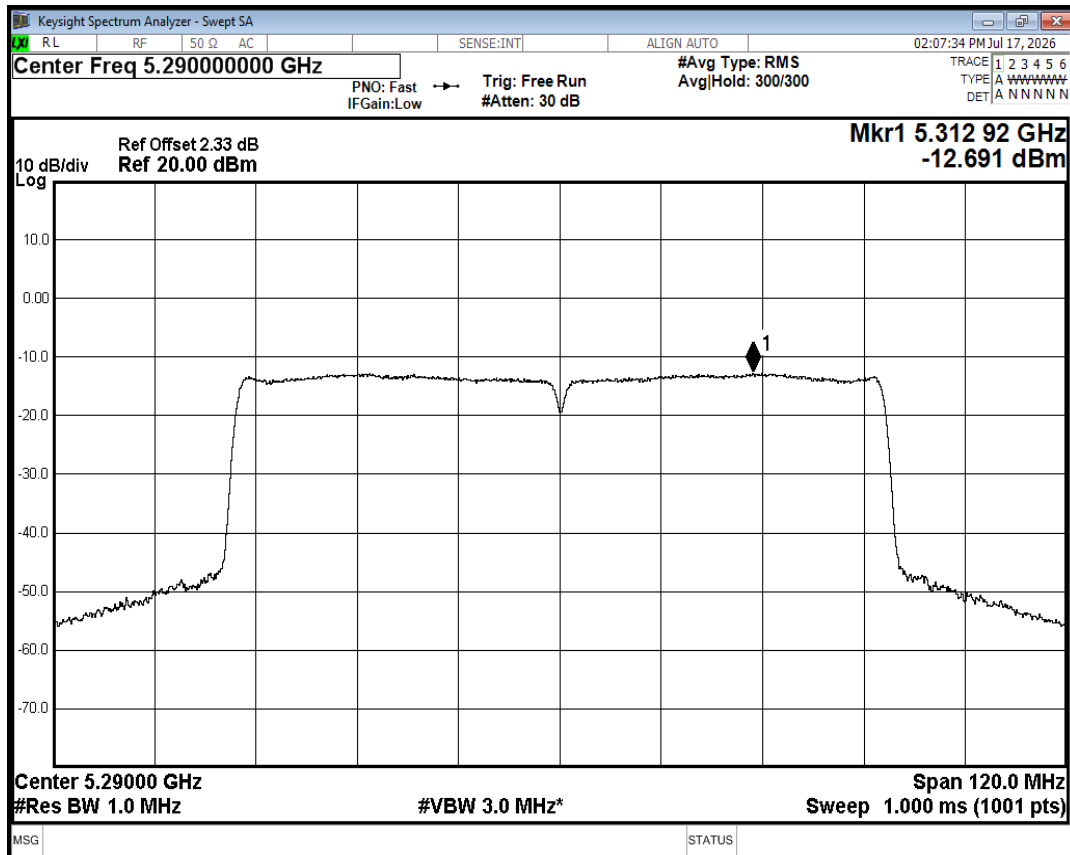
PSD NVNT ac20 5320MHz Ant1



PSD NVNT ac40 5270MHz Ant1



PSD NVNT ac40 5310MHz Ant1

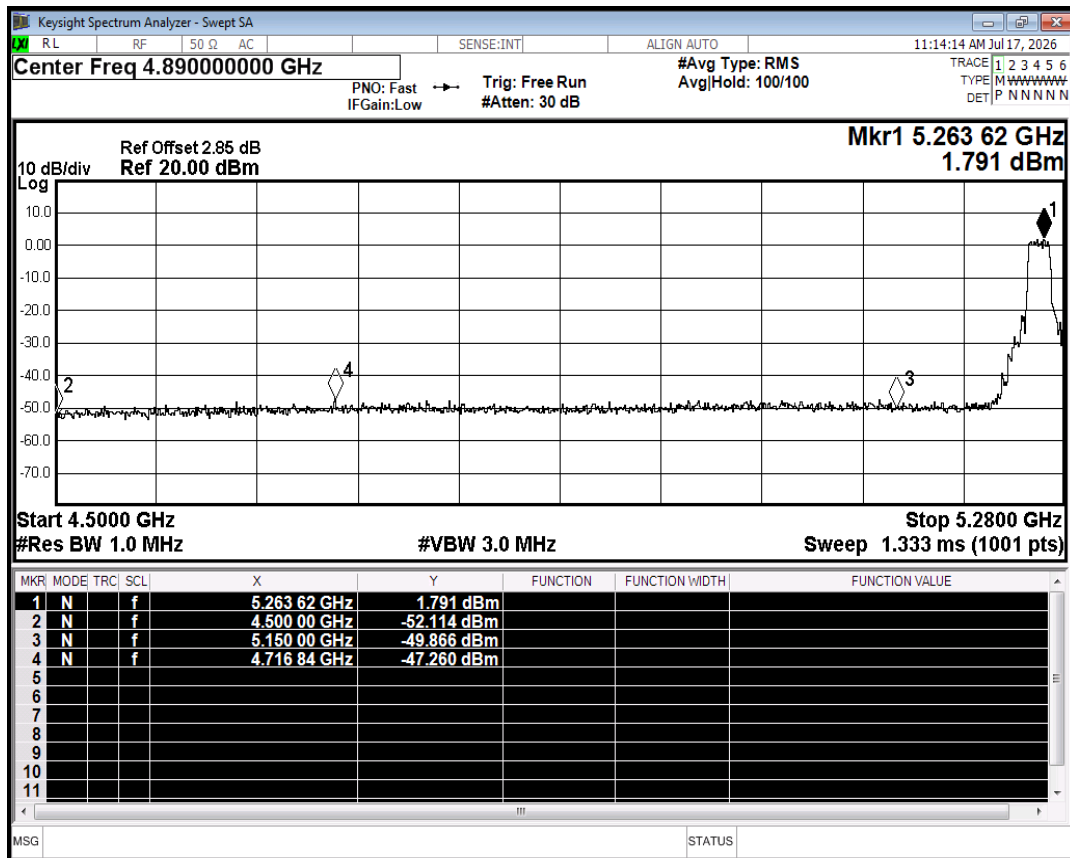


PSD NVNT ac80 5290MHz Ant1

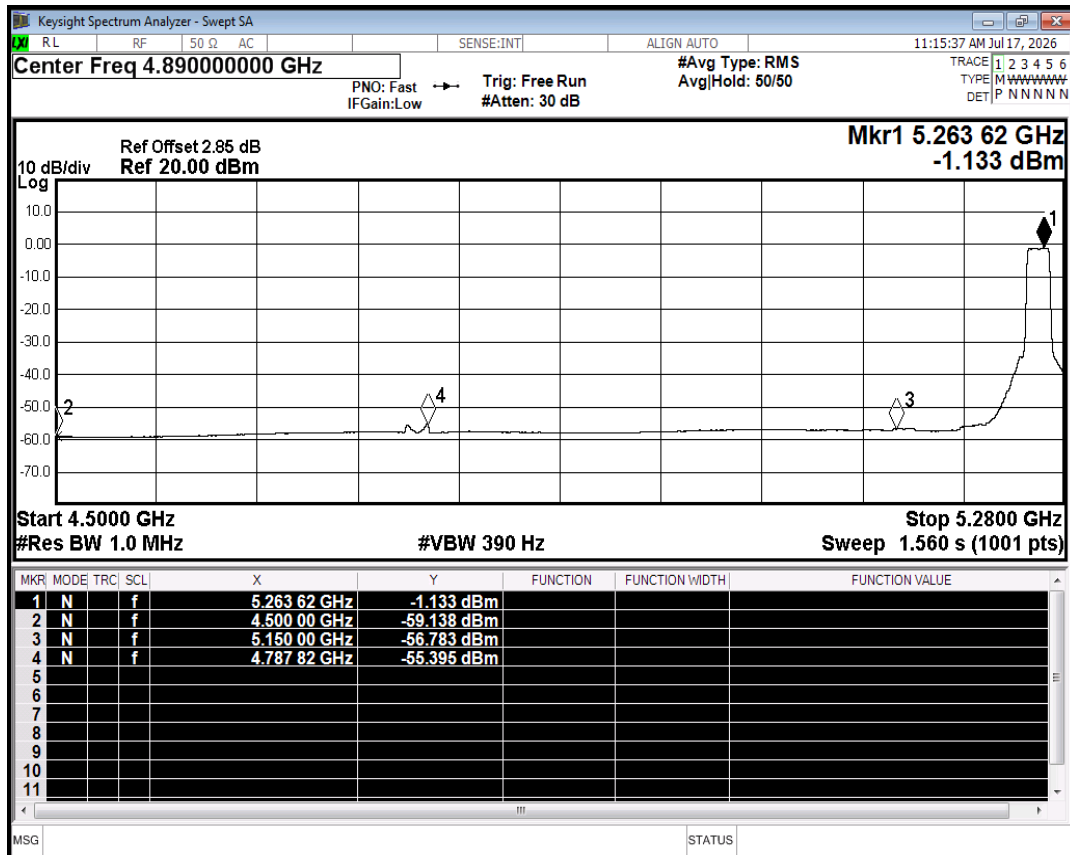
D.4 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	a	5260	Ant1	4500	-52.11	2	45.12	Peak	68.2	Pass
NVNT	a	5260	Ant1	4500	-59.13	2	38.1	Average	54	Pass
NVNT	a	5260	Ant1	4716.84	-47.25	2	49.98	Peak	68.2	Pass
NVNT	a	5260	Ant1	4787.82	-55.39	2	41.84	Average	54	Pass
NVNT	a	5260	Ant1	5150	-49.82	2	47.41	Peak	68.2	Pass
NVNT	a	5260	Ant1	5150	-56.72	2	40.51	Average	54	Pass
NVNT	a	5320	Ant1	5350	-40.8	2	56.43	Peak	68.2	Pass
NVNT	a	5320	Ant1	5350	-52.34	2	44.89	Average	54	Pass
NVNT	a	5320	Ant1	5353.2	-38.69	2	58.54	Peak	68.2	Pass
NVNT	a	5320	Ant1	5350	-52.34	2	44.89	Average	54	Pass
NVNT	a	5320	Ant1	5460	-49.97	2	47.26	Peak	68.2	Pass
NVNT	a	5320	Ant1	5460	-58	2	39.23	Average	54	Pass
NVNT	n20	5260	Ant1	4500	-51.28	2	45.95	Peak	68.2	Pass
NVNT	n20	5260	Ant1	4500	-59.16	2	38.07	Average	54	Pass
NVNT	n20	5260	Ant1	5081.88	-47.34	2	49.89	Peak	68.2	Pass
NVNT	n20	5260	Ant1	4787.82	-55.66	2	41.57	Average	54	Pass
NVNT	n20	5260	Ant1	5150	-49.56	2	47.67	Peak	68.2	Pass
NVNT	n20	5260	Ant1	5150	-56.81	2	40.42	Average	54	Pass
NVNT	n20	5320	Ant1	5350	-35.83	2	61.4	Peak	68.2	Pass
NVNT	n20	5320	Ant1	5350	-50.42	2	46.81	Average	54	Pass
NVNT	n20	5320	Ant1	5350.8	-34.25	2	62.98	Peak	68.2	Pass
NVNT	n20	5320	Ant1	5350	-50.42	2	46.81	Average	54	Pass
NVNT	n20	5320	Ant1	5460	-51.23	2	46	Peak	68.2	Pass
NVNT	n20	5320	Ant1	5460	-57.98	2	39.25	Average	54	Pass
NVNT	n40	5270	Ant1	4500	-51.24	2	45.99	Peak	68.2	Pass
NVNT	n40	5270	Ant1	4500	-59.32	2	37.91	Average	54	Pass
NVNT	n40	5270	Ant1	5090.49	-46.34	2	50.89	Peak	68.2	Pass
NVNT	n40	5270	Ant1	4807.8	-54.34	2	42.89	Average	54	Pass
NVNT	n40	5270	Ant1	5150	-49.37	2	47.86	Peak	68.2	Pass
NVNT	n40	5270	Ant1	5150	-57.31	2	39.92	Average	54	Pass
NVNT	n40	5310	Ant1	5350	-44.6	2	52.63	Peak	68.2	Pass
NVNT	n40	5310	Ant1	5350	-52.55	2	44.68	Average	54	Pass
NVNT	n40	5310	Ant1	5351.2	-37.76	2	59.47	Peak	68.2	Pass
NVNT	n40	5310	Ant1	5350	-52.55	2	44.68	Average	54	Pass
NVNT	n40	5310	Ant1	5460	-51.94	2	45.29	Peak	68.2	Pass
NVNT	n40	5310	Ant1	5460	-57.7	2	39.53	Average	54	Pass
NVNT	ac20	5260	Ant1	4500	-51.8	2	45.43	Peak	68.2	Pass
NVNT	ac20	5260	Ant1	4500	-59.18	2	38.05	Average	54	Pass
NVNT	ac20	5260	Ant1	5094.36	-46.38	2	50.85	Peak	68.2	Pass
NVNT	ac20	5260	Ant1	4787.82	-56.13	2	41.1	Average	54	Pass
NVNT	ac20	5260	Ant1	5150	-50.32	2	46.91	Peak	68.2	Pass

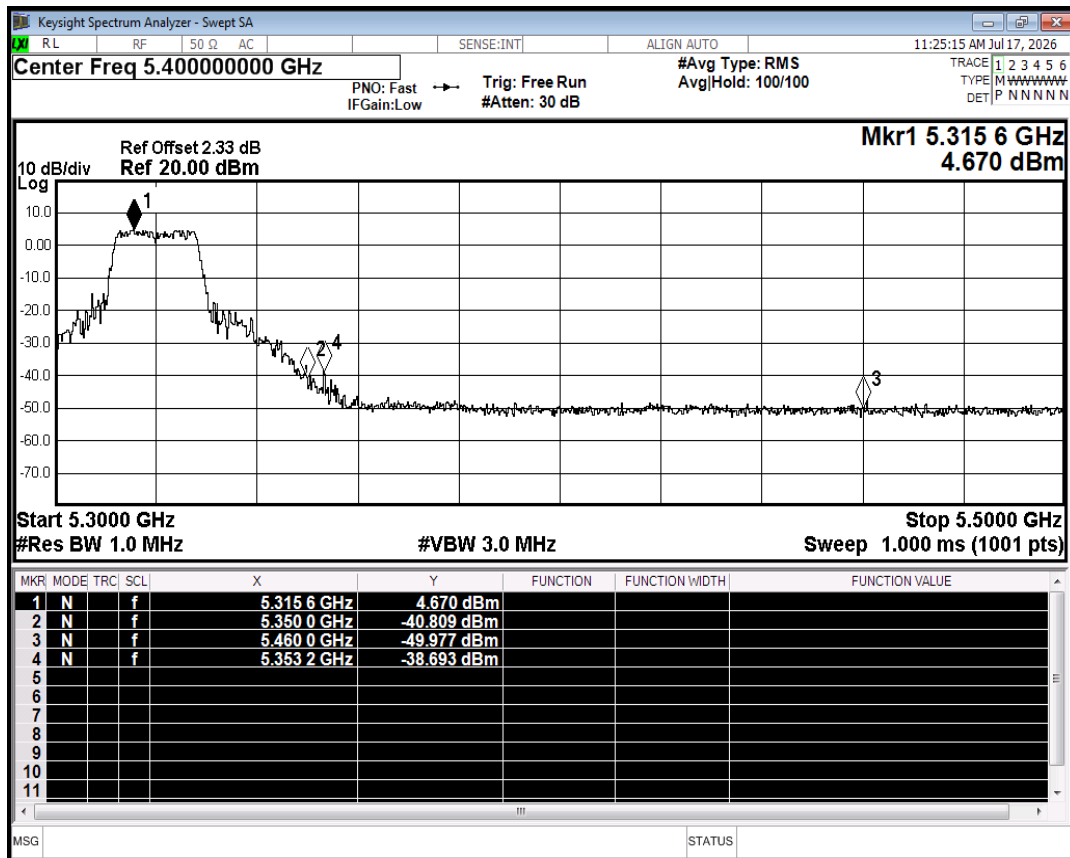
NVNT	ac20	5260	Ant1	5150	-57.05	2	40.18	Average	54	Pass
NVNT	ac20	5320	Ant1	5350	-41.09	2	56.14	Peak	68.2	Pass
NVNT	ac20	5320	Ant1	5350	-52.62	2	44.61	Average	54	Pass
NVNT	ac20	5320	Ant1	5350.8	-37.72	2	59.51	Peak	68.2	Pass
NVNT	ac20	5320	Ant1	5350	-52.62	2	44.61	Average	54	Pass
NVNT	ac20	5320	Ant1	5460	-50.16	2	47.07	Peak	68.2	Pass
NVNT	ac20	5320	Ant1	5460	-57.85	2	39.38	Average	54	Pass
NVNT	ac40	5270	Ant1	4500	-51.81	2	45.42	Peak	68.2	Pass
NVNT	ac40	5270	Ant1	4500	-59.22	2	38.01	Average	54	Pass
NVNT	ac40	5270	Ant1	5023.26	-47.16	2	50.07	Peak	68.2	Pass
NVNT	ac40	5270	Ant1	4806.99	-54.36	2	42.87	Average	54	Pass
NVNT	ac40	5270	Ant1	5150	-51.34	2	45.89	Peak	68.2	Pass
NVNT	ac40	5270	Ant1	5150	-57.4	2	39.83	Average	54	Pass
NVNT	ac40	5310	Ant1	5350	-42.58	2	54.65	Peak	68.2	Pass
NVNT	ac40	5310	Ant1	5350	-52.67	2	44.56	Average	54	Pass
NVNT	ac40	5310	Ant1	5350.6	-40.33	2	56.9	Peak	68.2	Pass
NVNT	ac40	5310	Ant1	5350	-52.67	2	44.56	Average	54	Pass
NVNT	ac40	5310	Ant1	5460	-50.88	2	46.35	Peak	68.2	Pass
NVNT	ac40	5310	Ant1	5460	-57.61	2	39.62	Average	54	Pass
NVNT	ac80	5290	Ant1	5350	-45.63	2	51.6	Peak	68.2	Pass
NVNT	ac80	5290	Ant1	5350	-53.52	2	43.71	Average	54	Pass
NVNT	ac80	5290	Ant1	5350.75	-40.66	2	56.57	Peak	68.2	Pass
NVNT	ac80	5290	Ant1	5350.25	-52.86	2	44.37	Average	54	Pass
NVNT	ac80	5290	Ant1	5460	-52.4	2	44.83	Peak	68.2	Pass
NVNT	ac80	5290	Ant1	5460	-57.36	2	39.87	Average	54	Pass
NVNT	ac80	5290	Ant1	4500	-52.73	2	44.5	Peak	68.2	Pass
NVNT	ac80	5290	Ant1	4500	-59.09	2	38.14	Average	54	Pass
NVNT	ac80	5290	Ant1	4989.81	-47.72	2	49.51	Peak	68.2	Pass
NVNT	ac80	5290	Ant1	5053.32	-56.62	2	40.61	Average	54	Pass
NVNT	ac80	5290	Ant1	5150	-49.8	2	47.43	Peak	68.2	Pass
NVNT	ac80	5290	Ant1	5150	-57.11	2	40.12	Average	54	Pass



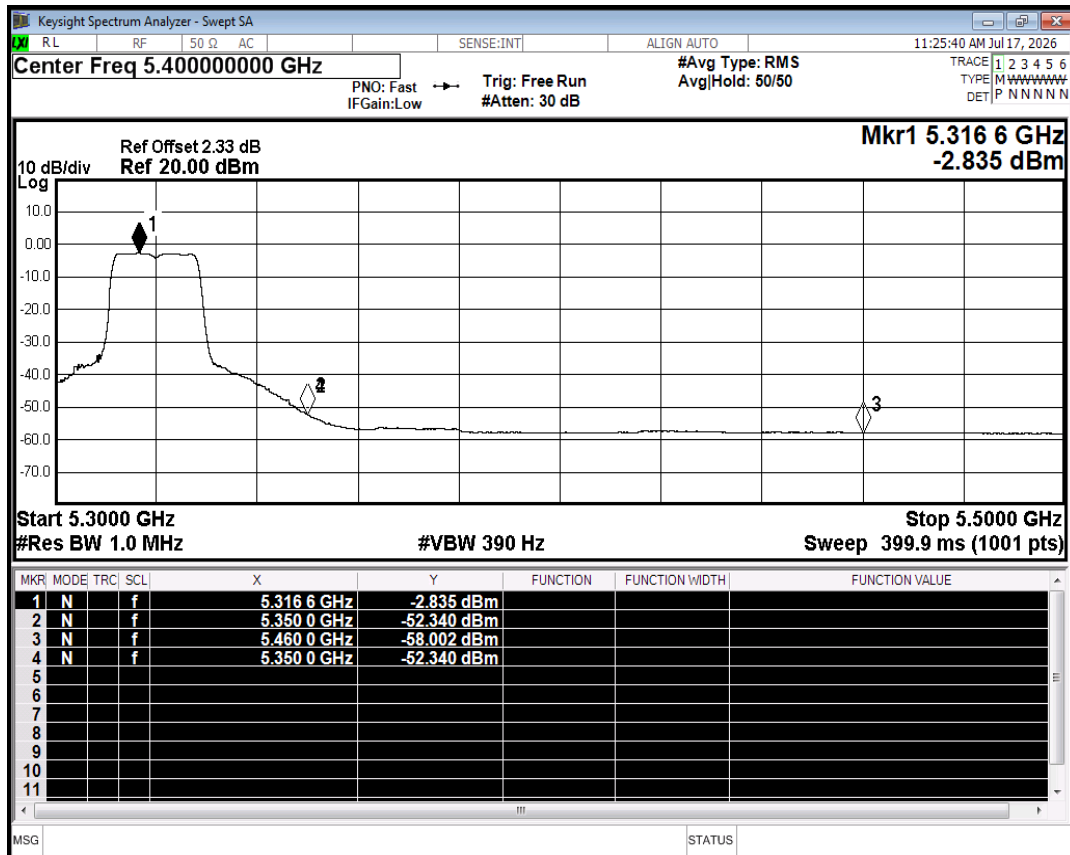
Restrict Band NVNT a 5260MHz Ant1 Peak



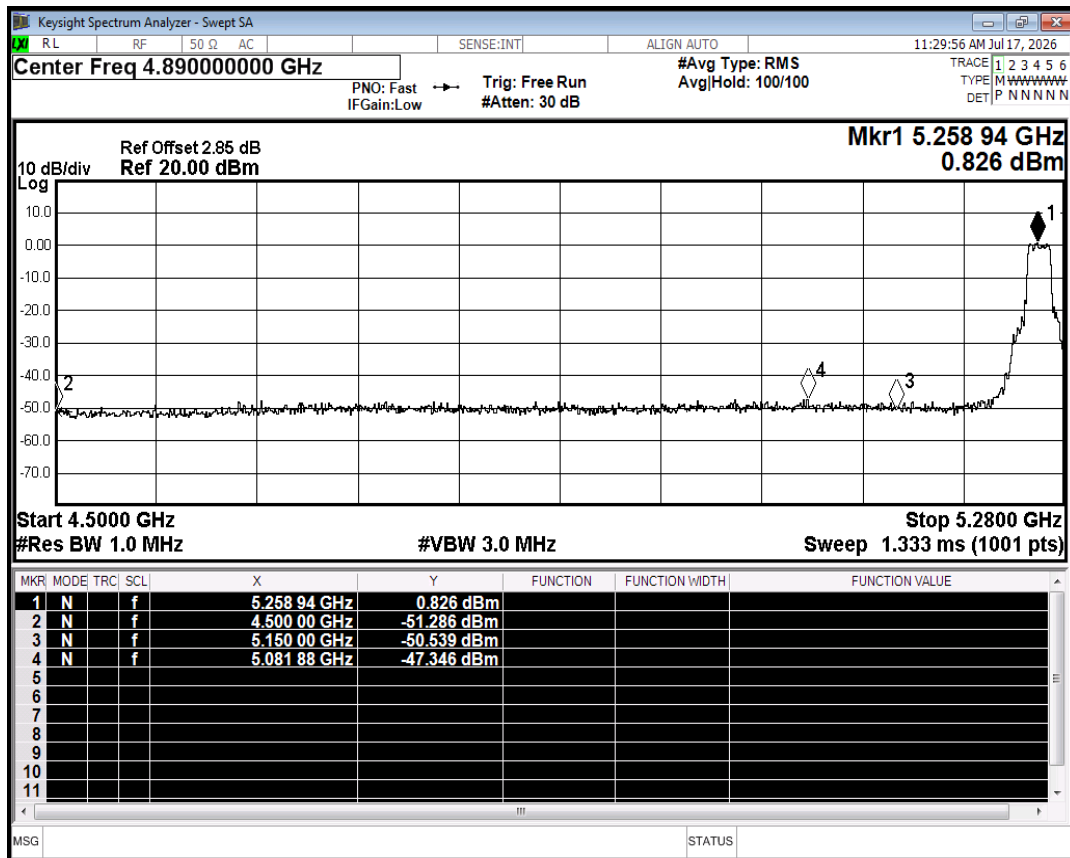
Restrict Band NVNT a 5260MHz Ant1 Average



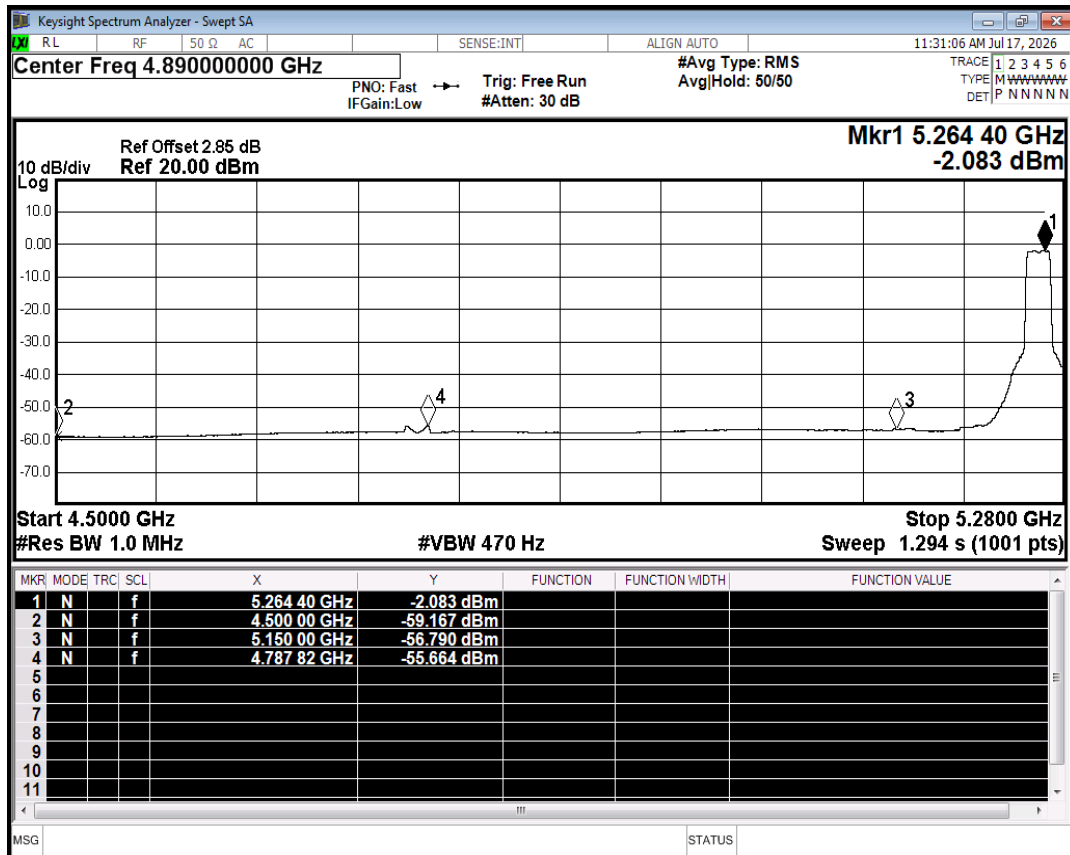
Restrict Band NVNT a 5320MHz Ant1 Peak



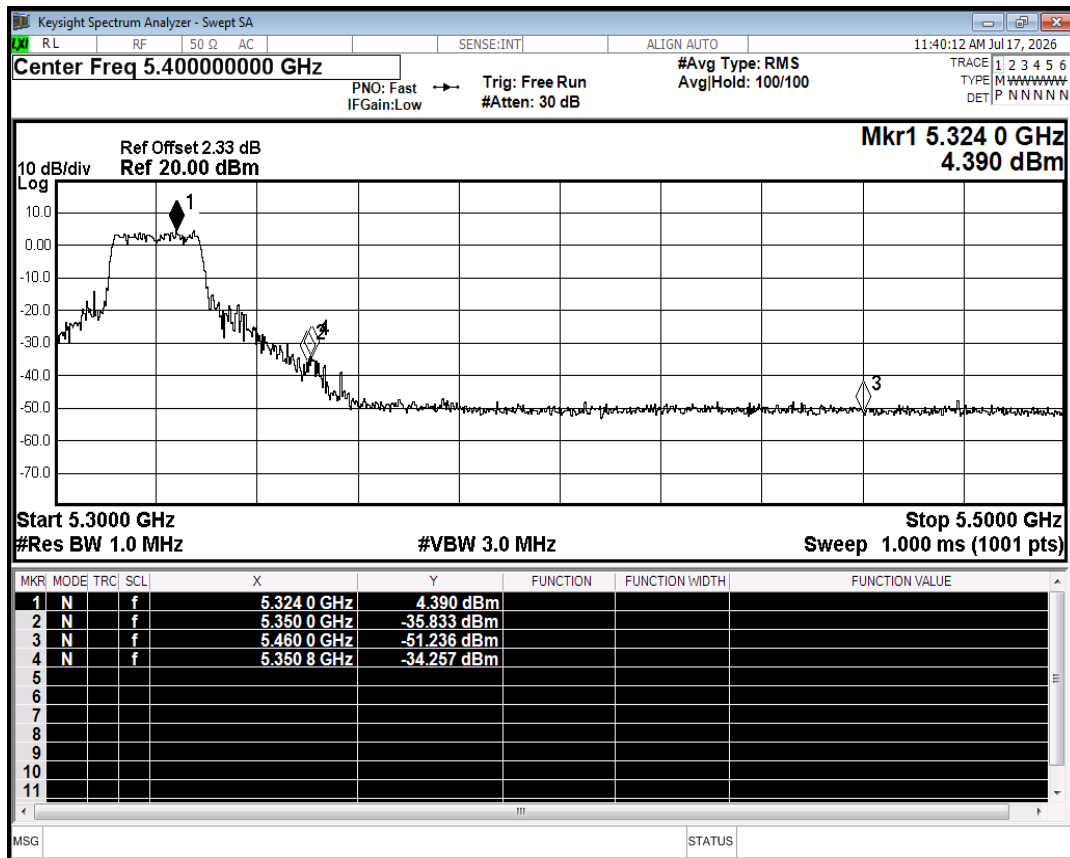
Restrict Band NVNT a 5320MHz Ant1 Average



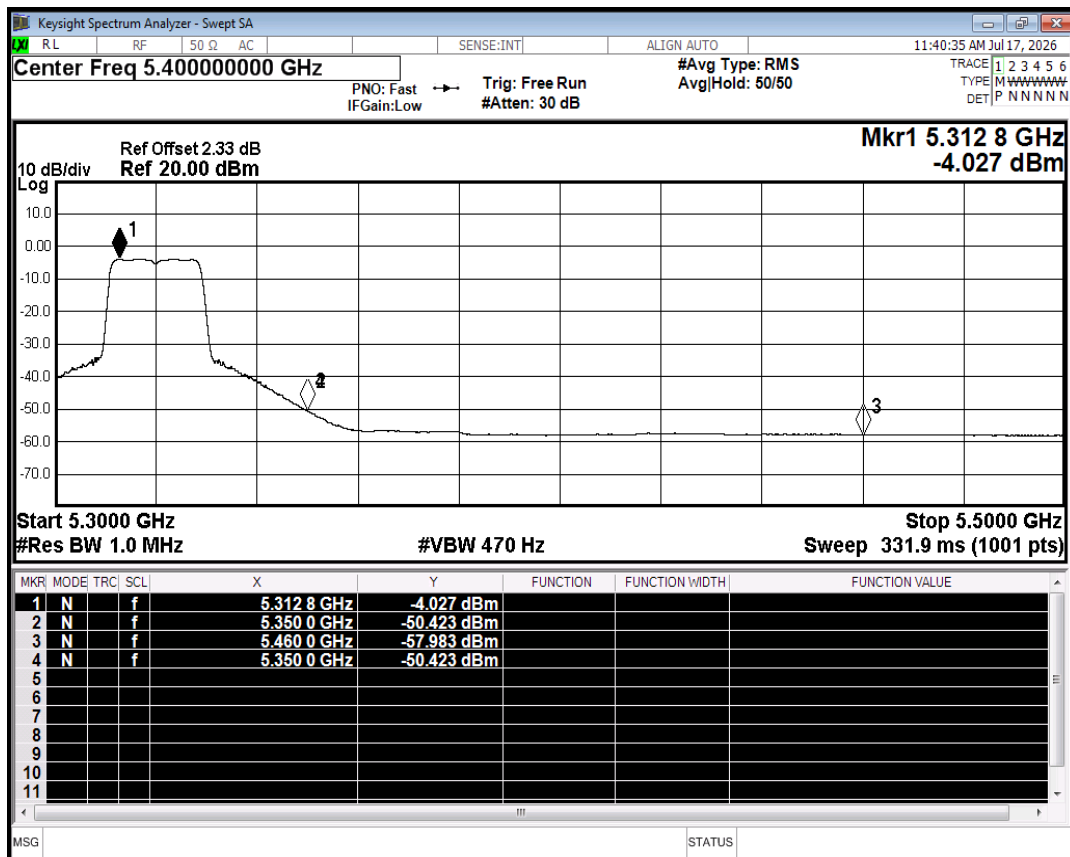
Restrict Band NVNT n20 5260MHz Ant1 Peak



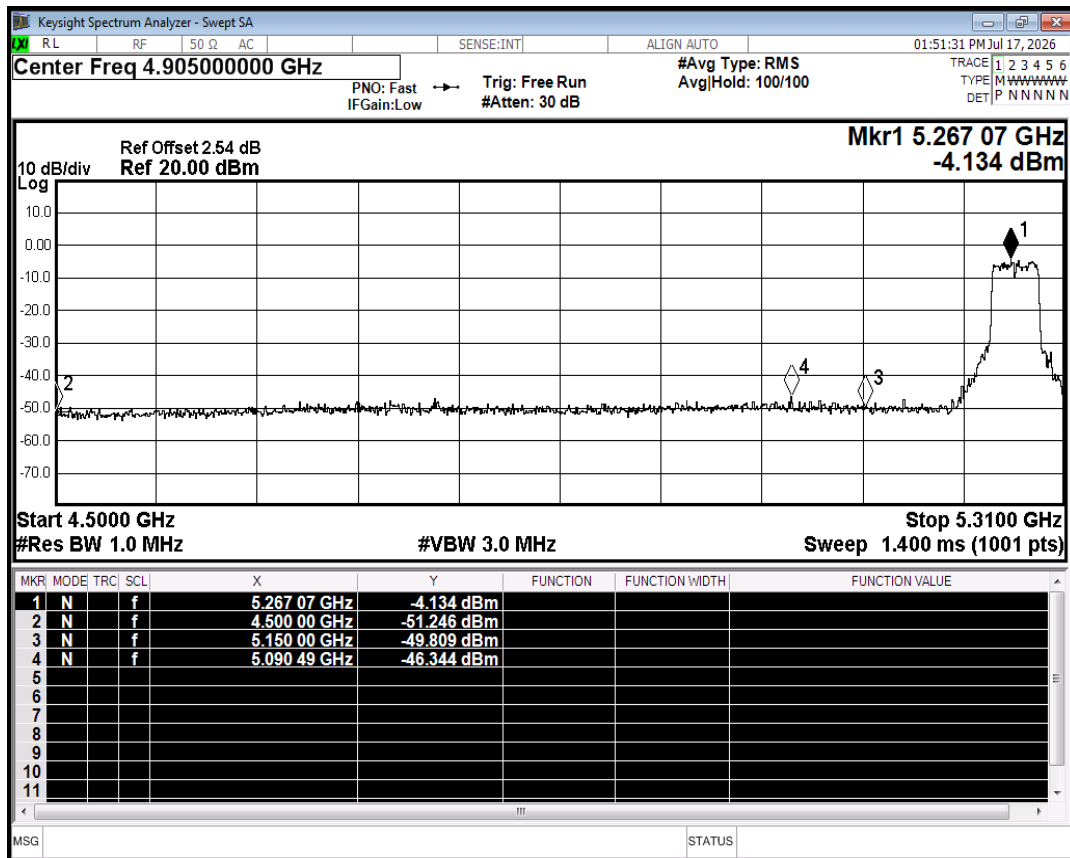
Restrict Band NVNT n20 5260MHz Ant1 Average



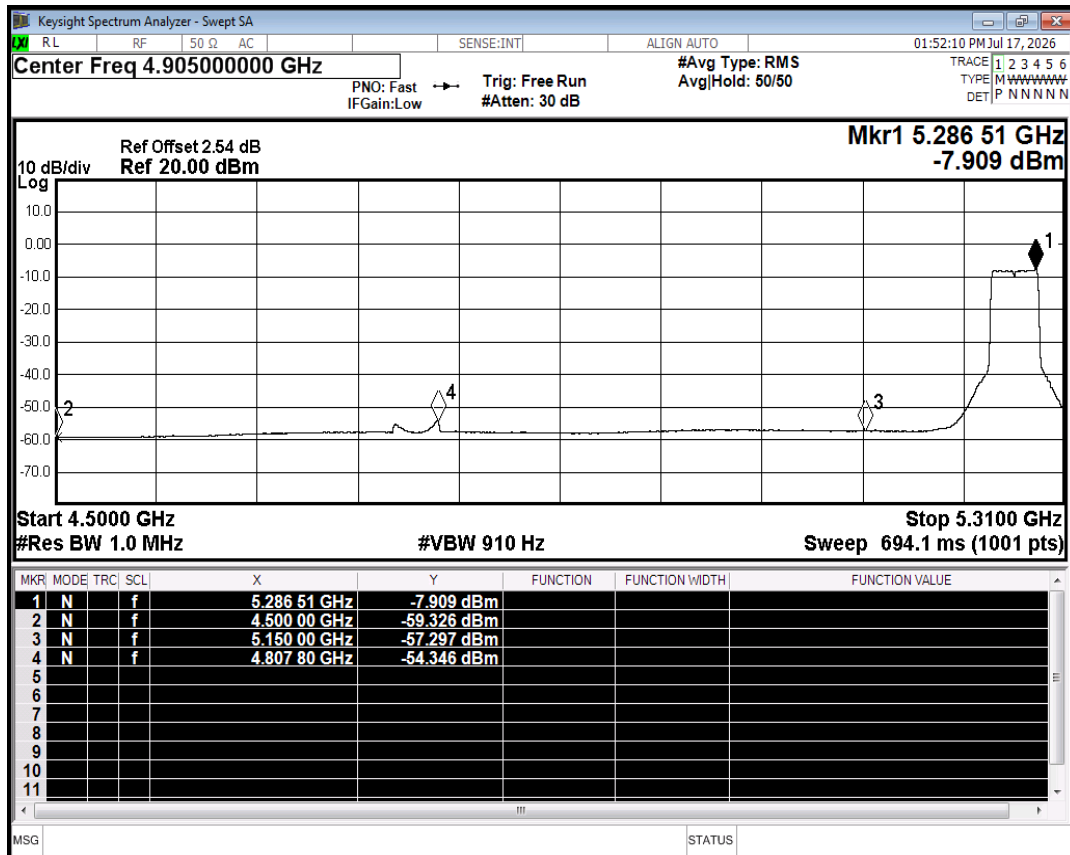
Restrict Band NVNT n20 5320MHz Ant1 Peak



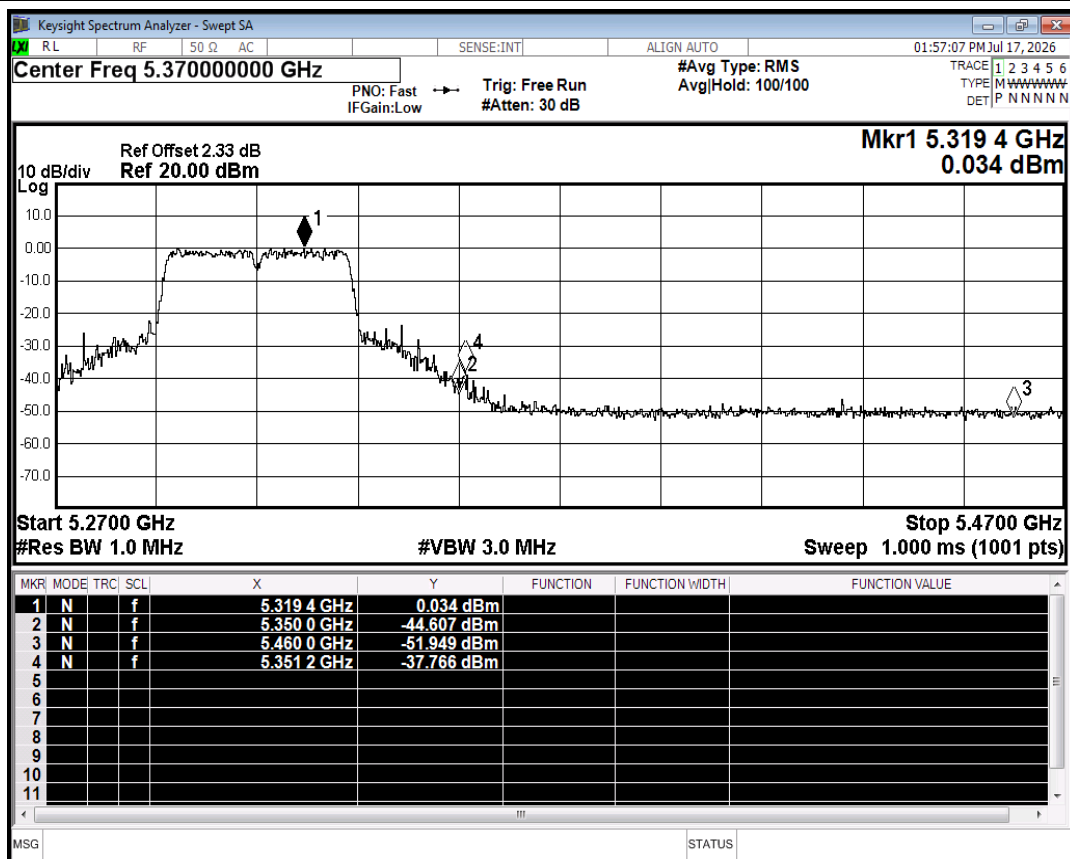
Restrict Band NVNT n20 5320MHz Ant1 Average



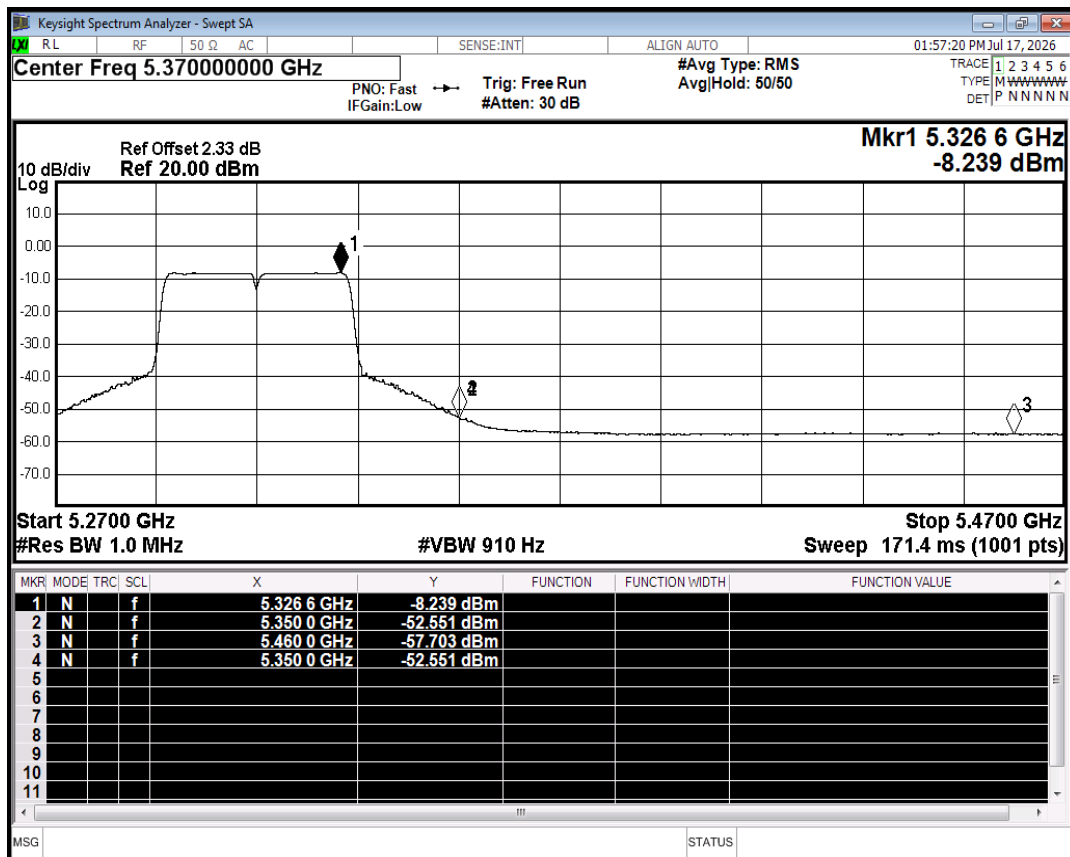
Restrict Band NVNT n40 5270MHz Ant1 Peak



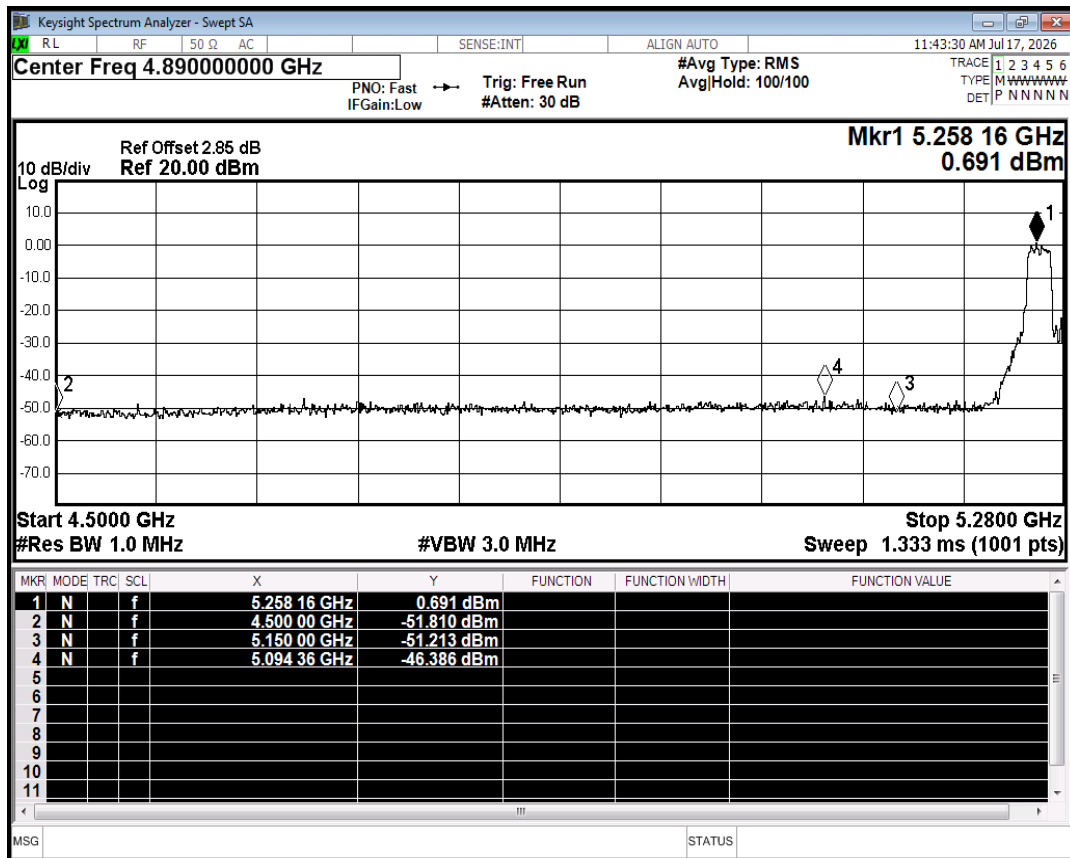
Restrict Band NVNT n40 5270MHz Ant1 Average



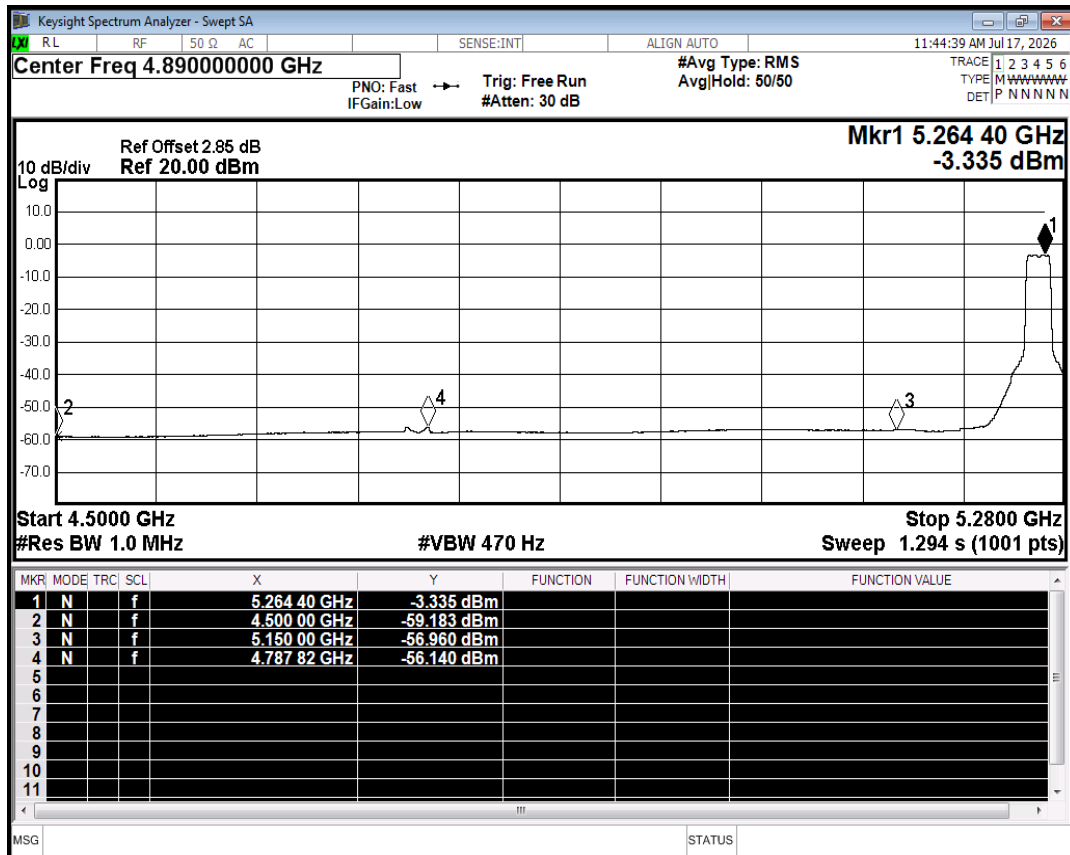
Restrict Band NVNT n40 5310MHz Ant1 Peak



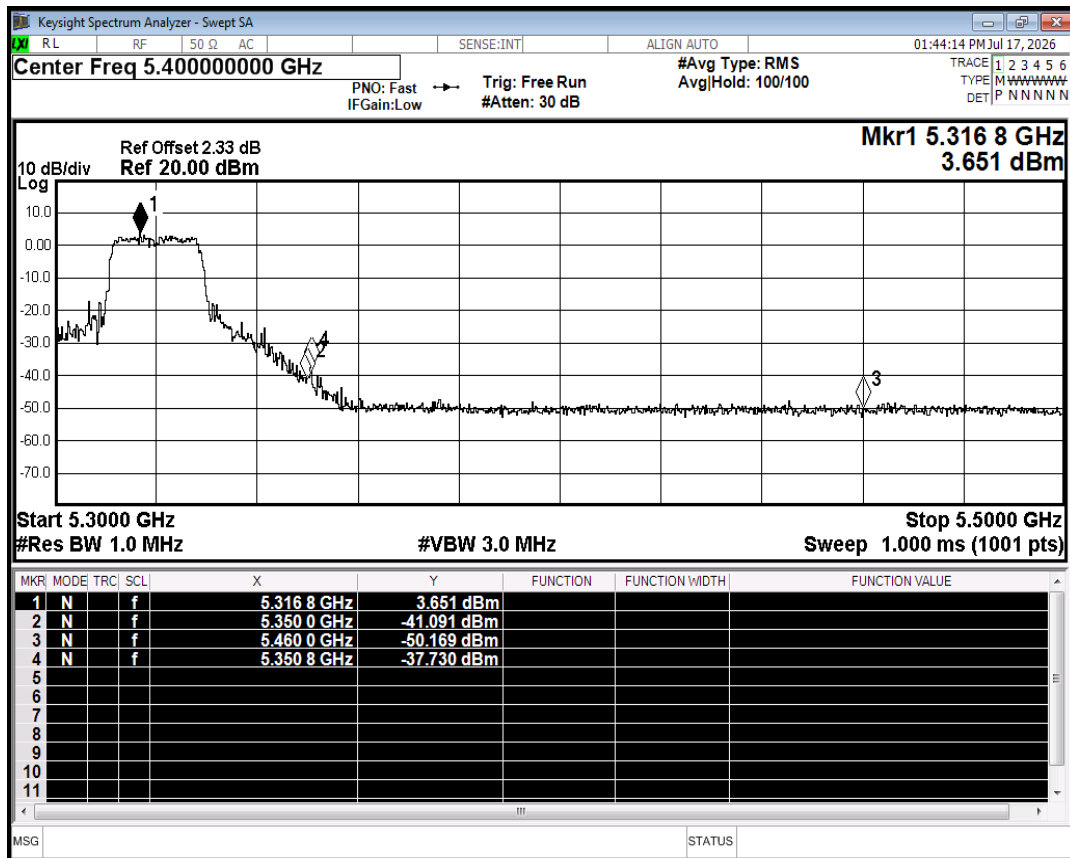
Restrict Band NVNT n40 5310MHz Ant1 Average



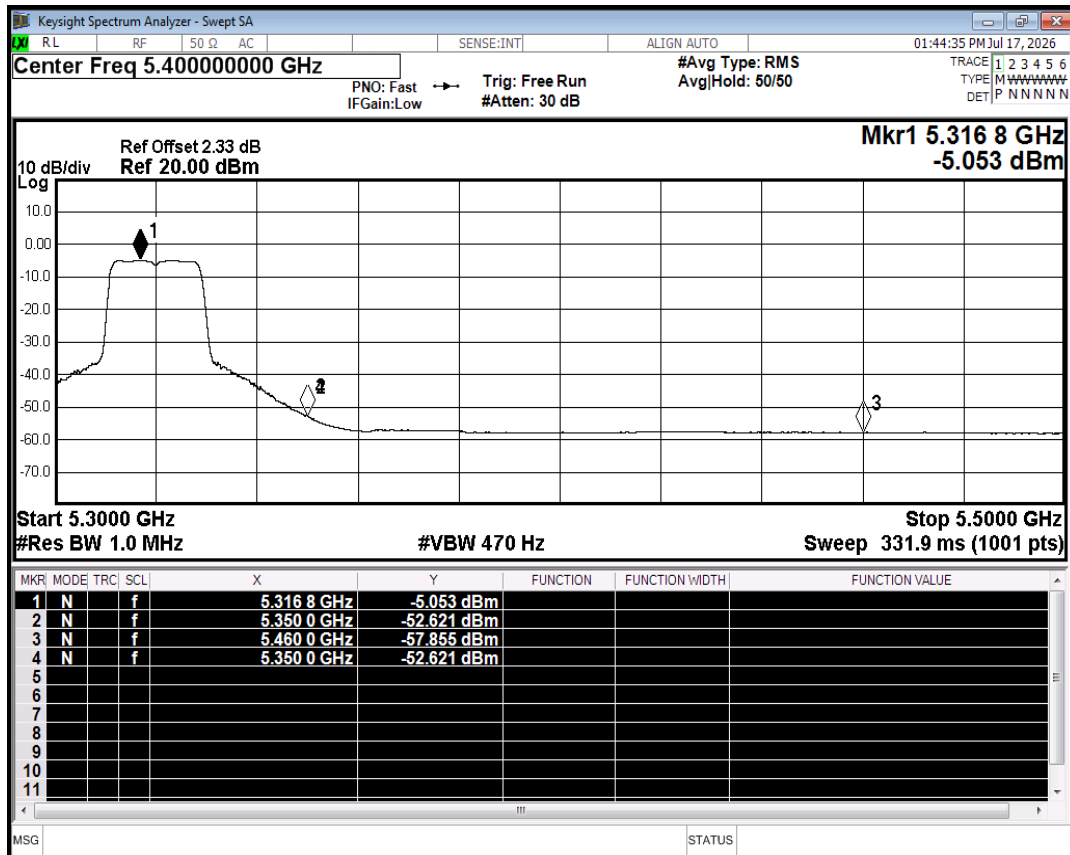
Restrict Band NVNT ac20 5260MHz Ant1 Peak



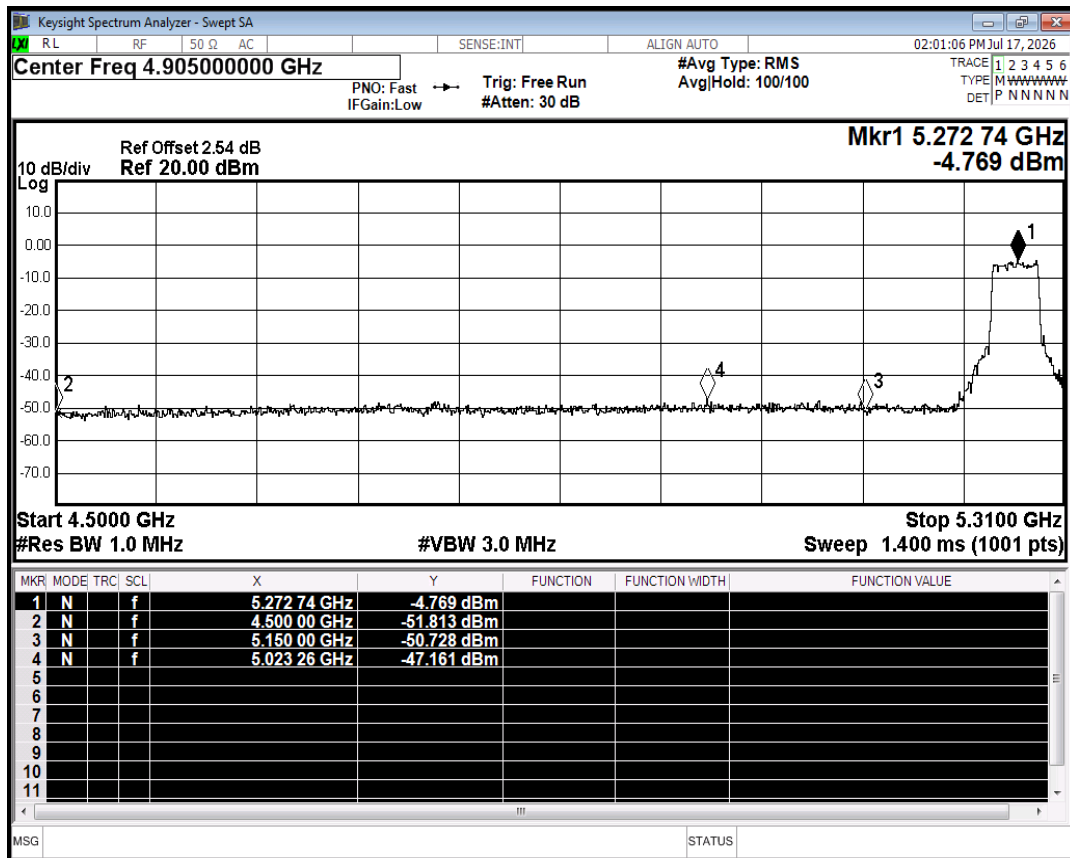
Restrict Band NVNT ac20 5260MHz Ant1 Average



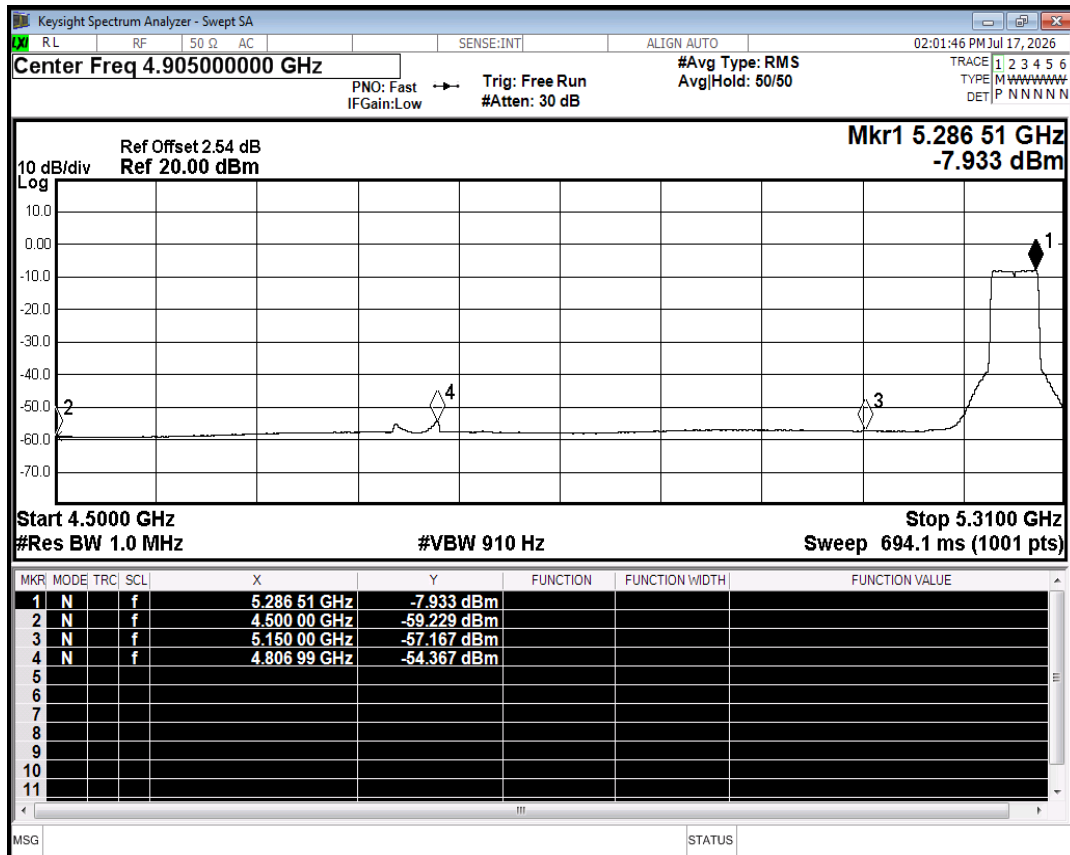
Restrict Band NVNT ac20 5320MHz Ant1 Peak



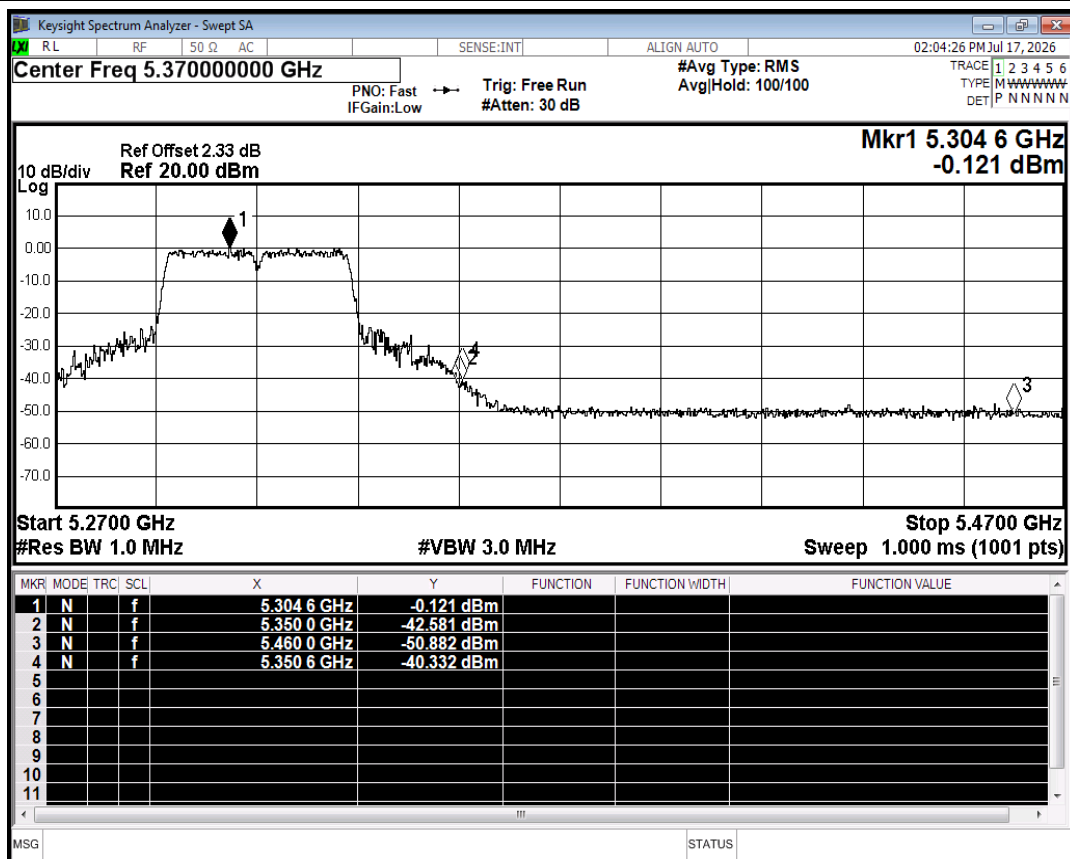
Restrict Band NVNT ac20 5320MHz Ant1 Average



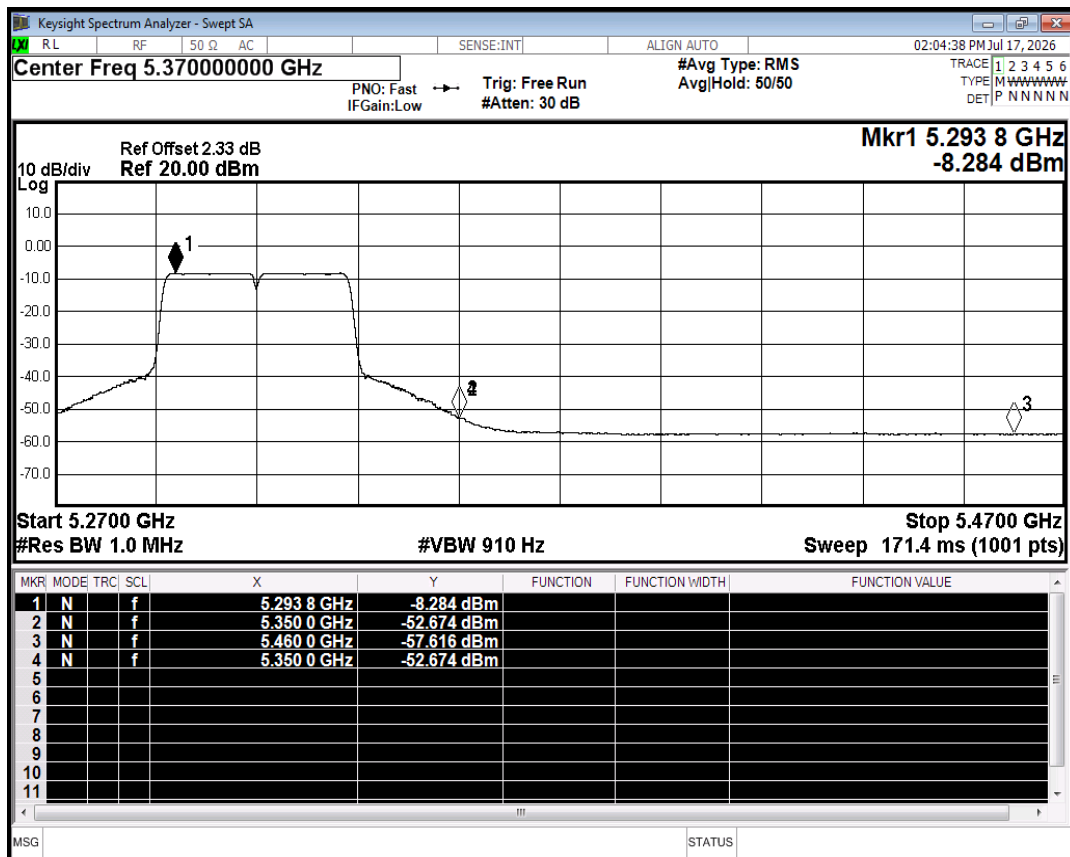
Restrict Band NVNT ac40 5270MHz Ant1 Peak



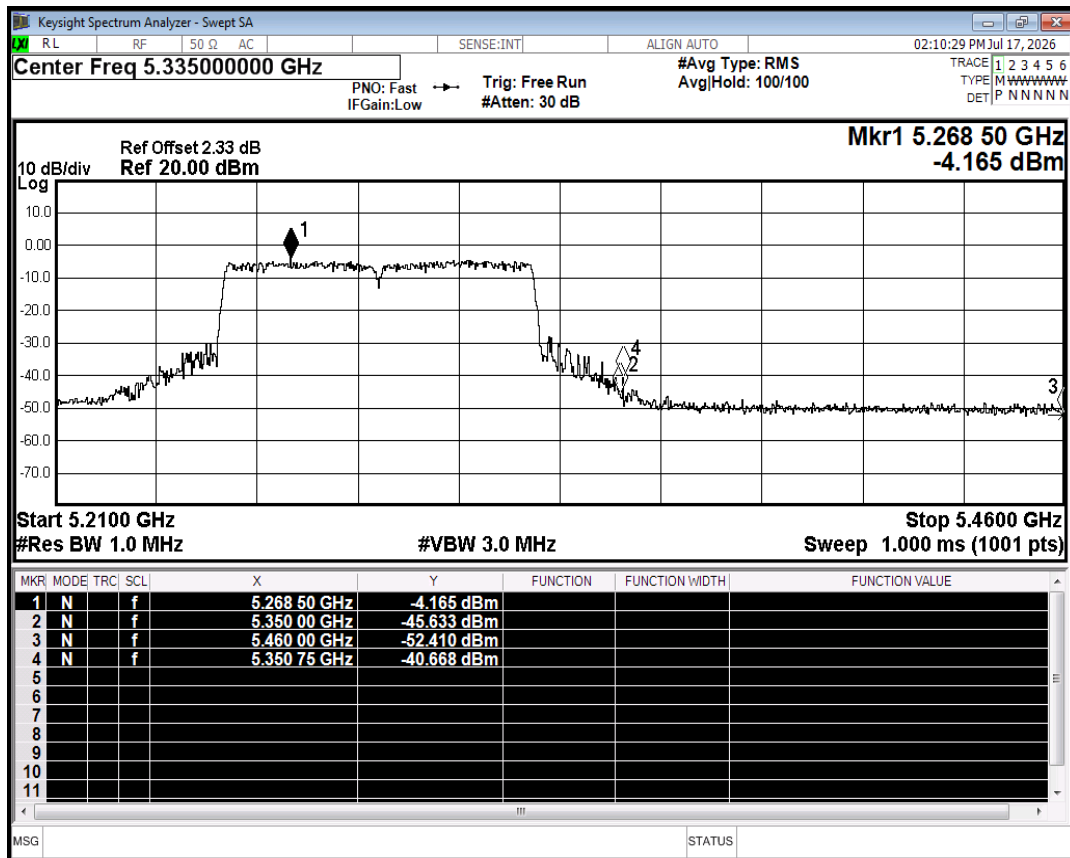
Restrict Band NVNT ac40 5270MHz Ant1 Average



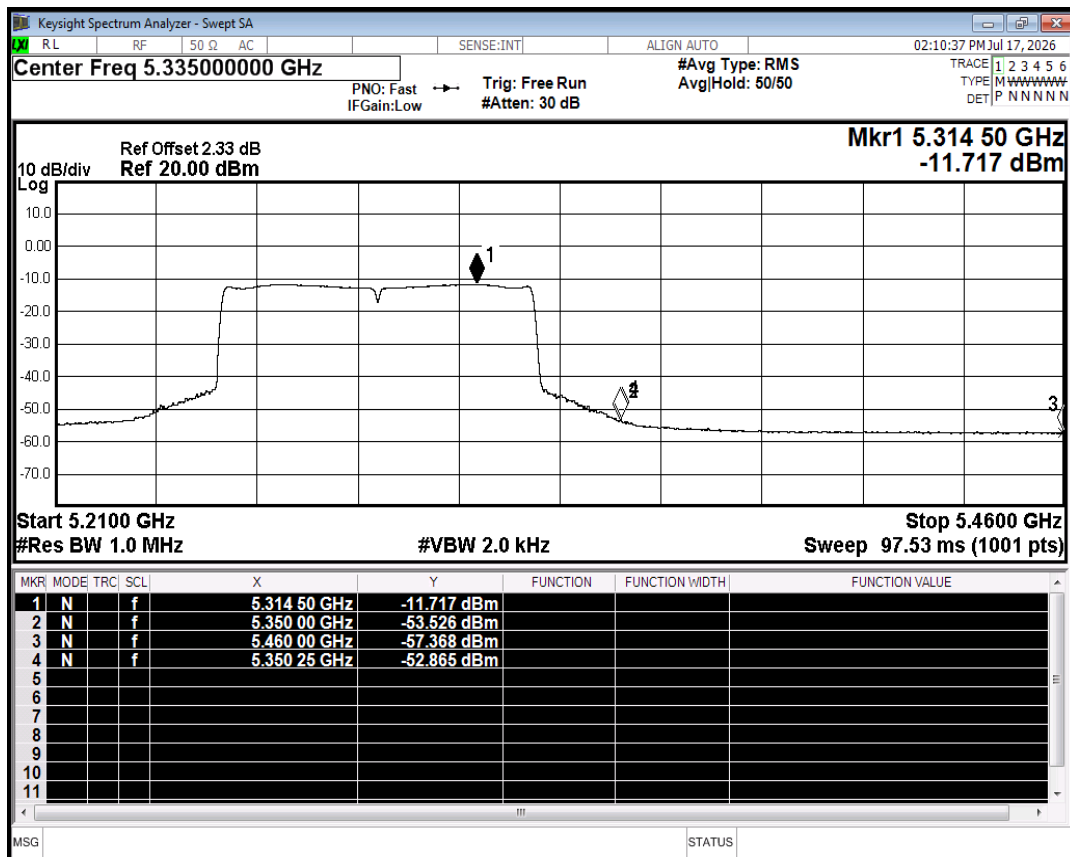
Restrict Band NVNT ac40 5310MHz Ant1 Peak



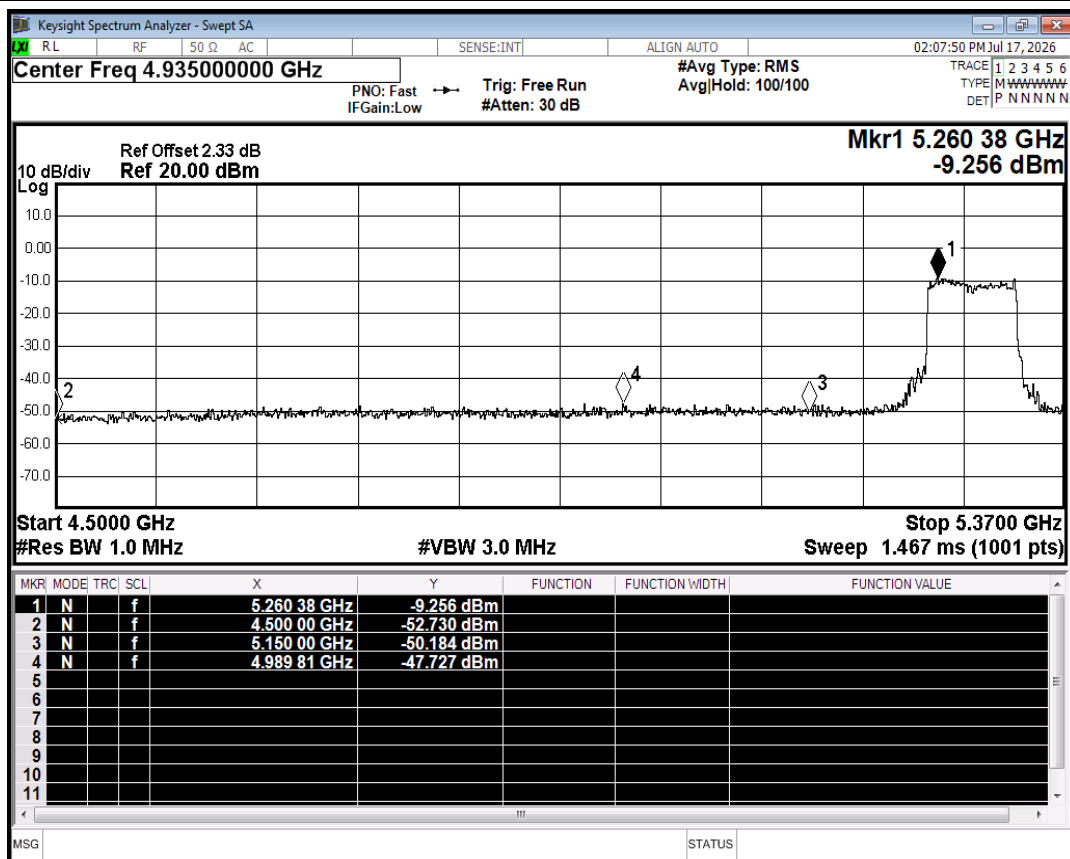
Restrict Band NVNT ac40 5310MHz Ant1 Average



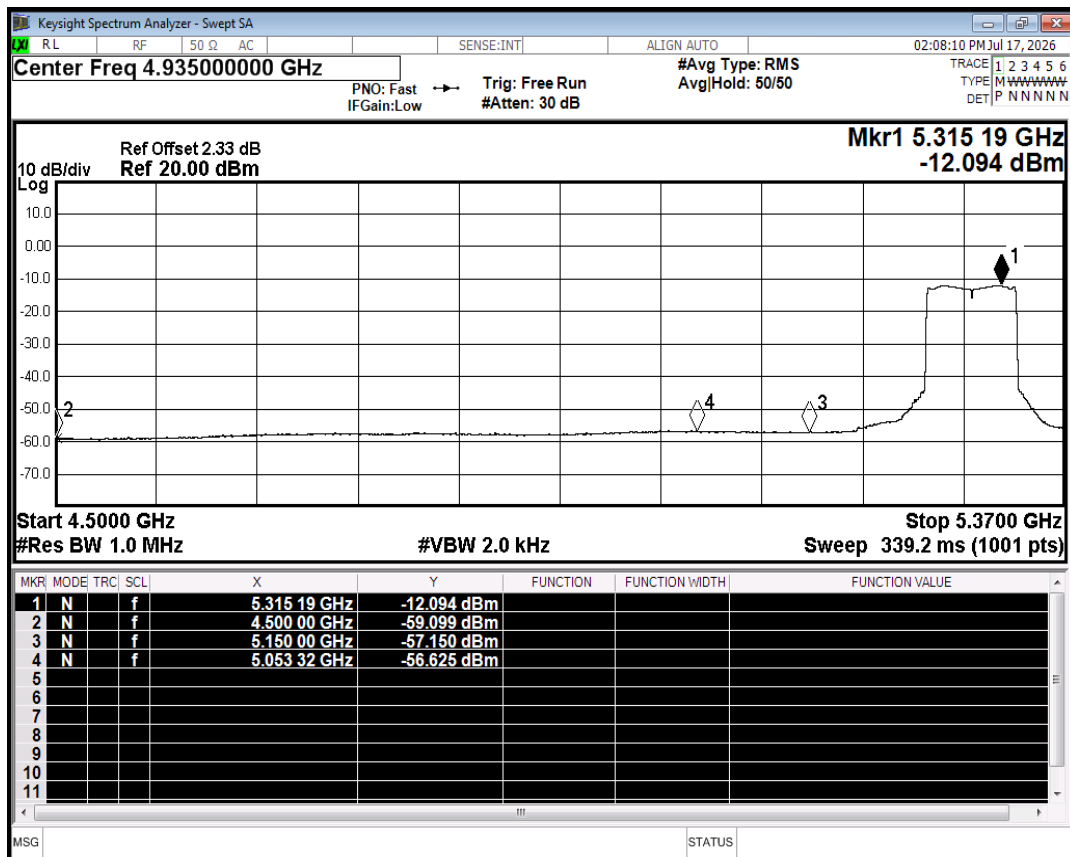
Restrict Band NVNT ac80 5290MHz Ant1 Peak



Restrict Band NVNT ac80 5290MHz Ant1 Average



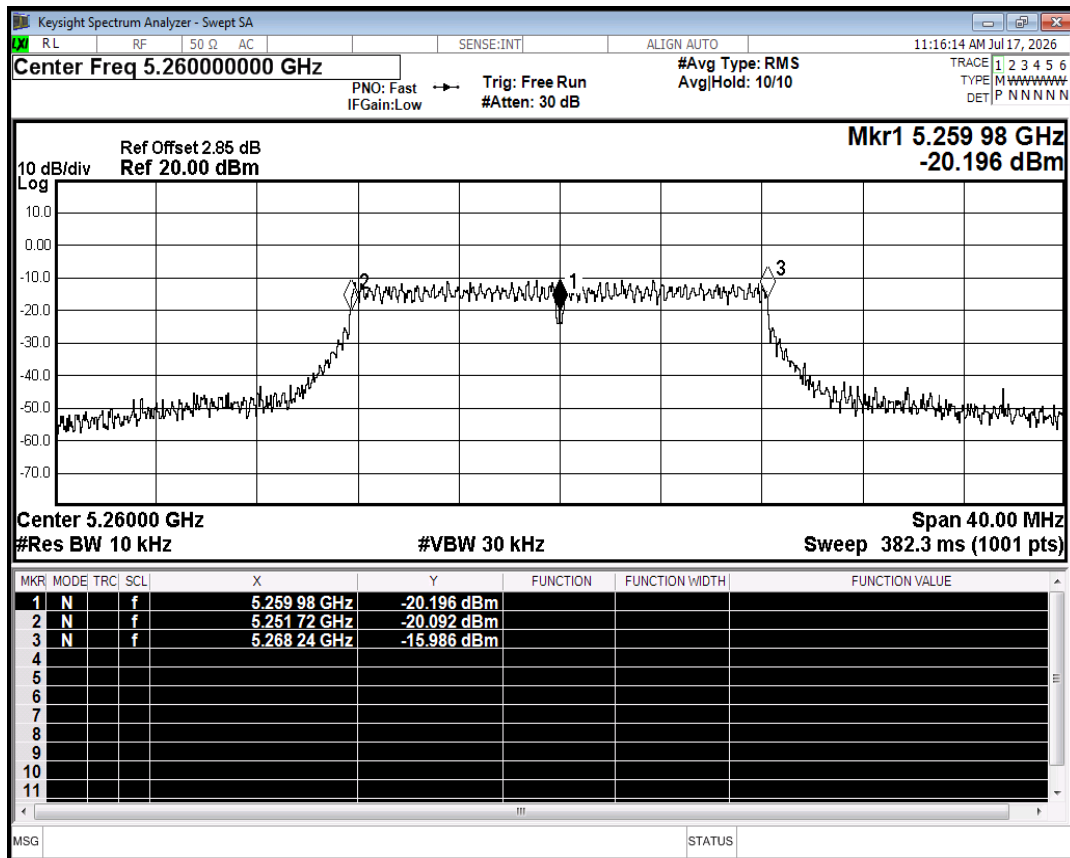
Restrict Band NVNT ac80 5290MHz Ant1 Peak



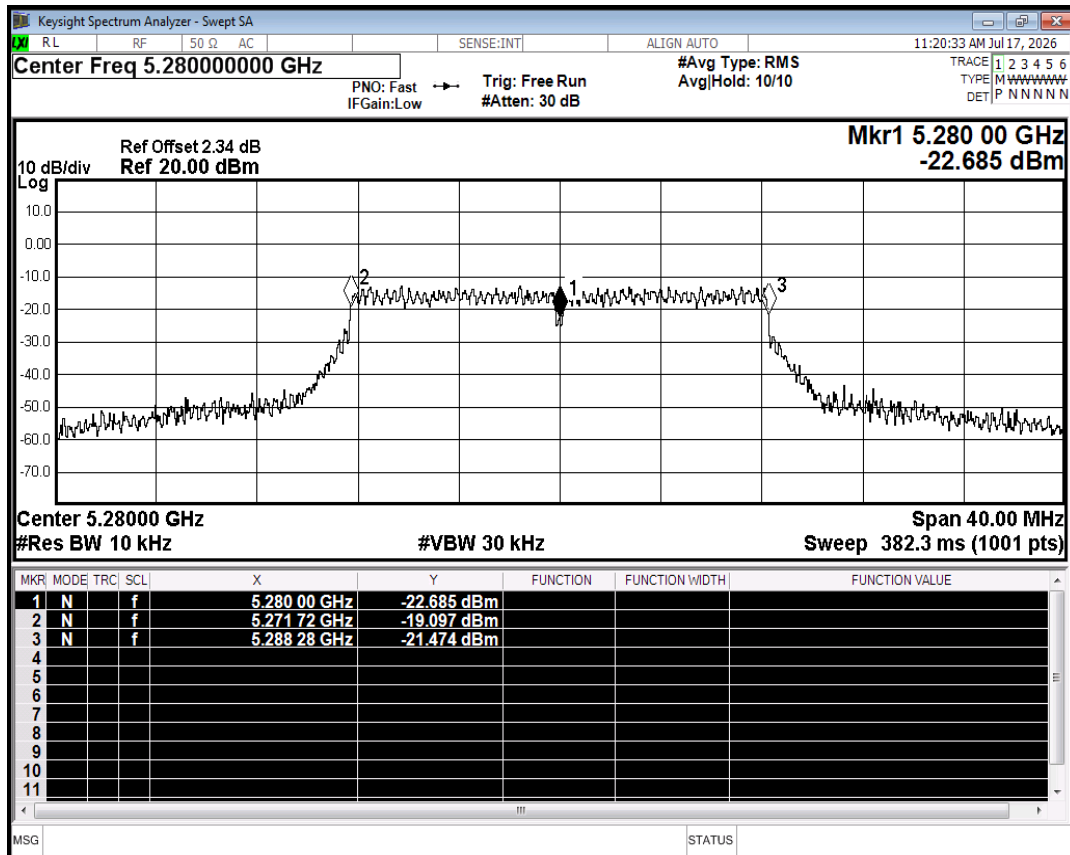
Restrict Band NVNT ac80 5290MHz Ant1 Average

D.5 Frequency Stability

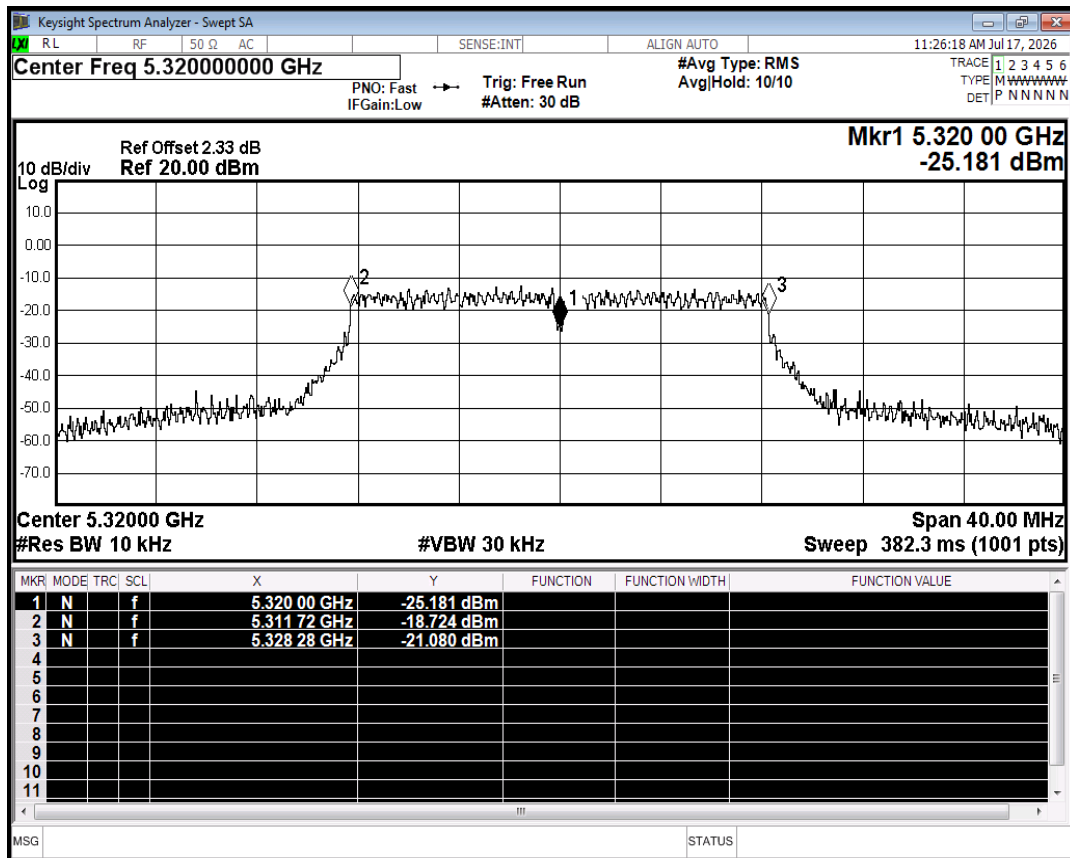
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5260	Ant1	5259.98	-20000	-3.8	25	Pass
NVNT	a	5280	Ant1	5280	0	0	25	Pass
NVNT	a	5320	Ant1	5320	0	0	25	Pass
NVNT	n20	5260	Ant1	5259.98	-20000	-3.8	25	Pass
NVNT	n20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
NVNT	n20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
NVNT	n40	5270	Ant1	5269.96	-40000	-7.59	25	Pass
NVNT	n40	5310	Ant1	5309.96	-40000	-7.53	25	Pass
NVNT	ac20	5260	Ant1	5260	0	0	25	Pass
NVNT	ac20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
NVNT	ac20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
NVNT	ac40	5270	Ant1	5270	0	0	25	Pass
NVNT	ac40	5310	Ant1	5309.96	-40000	-7.53	25	Pass
NVNT	ac80	5290	Ant1	5290	0	0	25	Pass



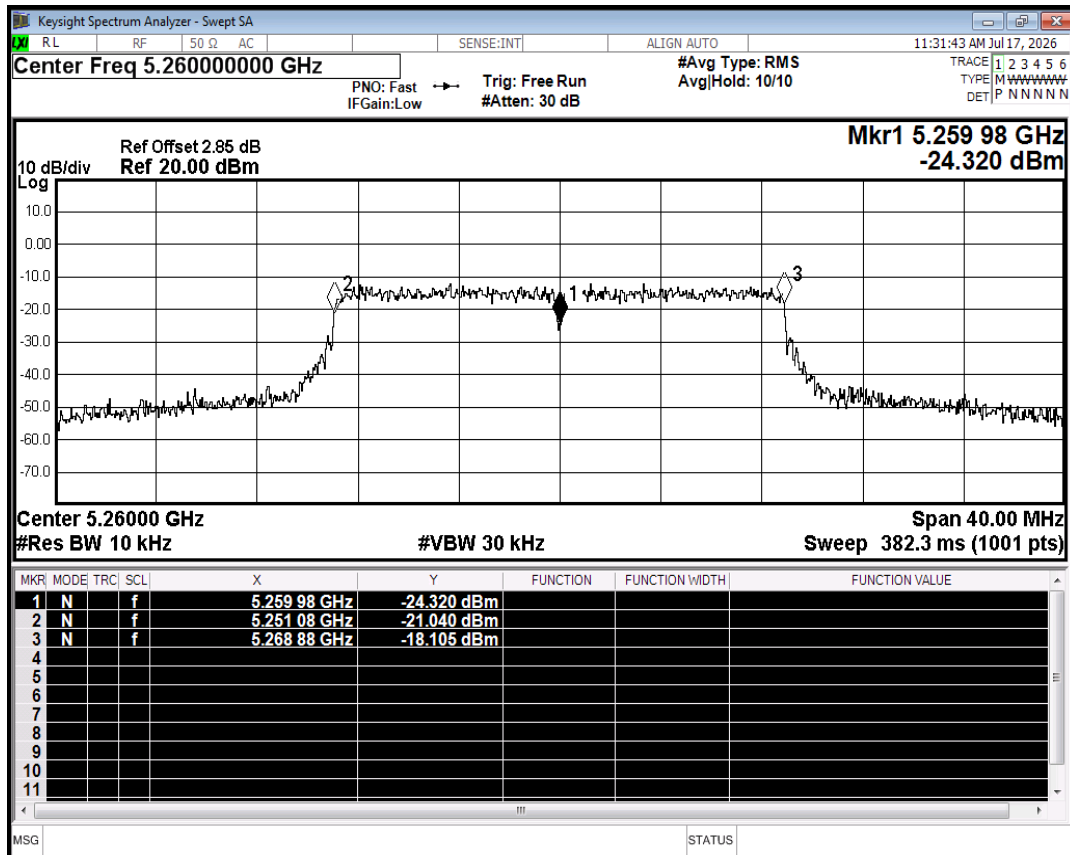
Freq. Stability NVNT a 5260MHz Ant1



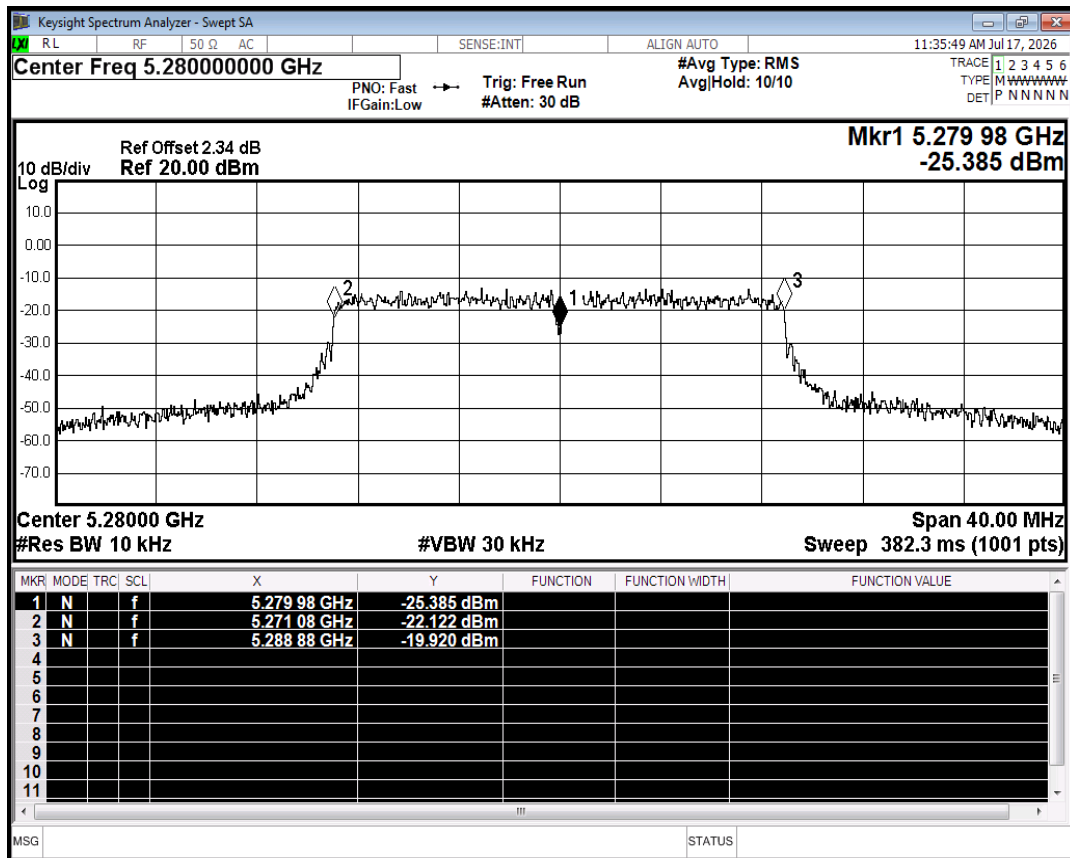
Freq. Stability NVNT a 5280MHz Ant1



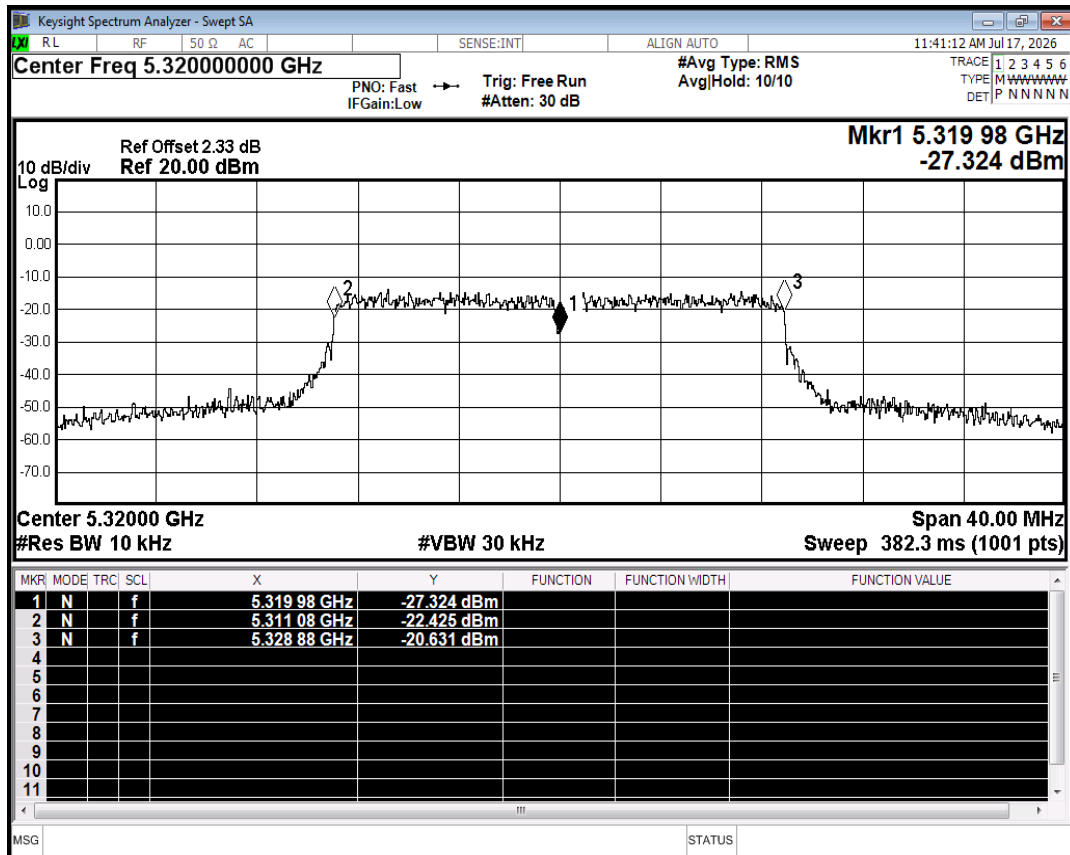
Freq. Stability NVNT a 5320MHz Ant1



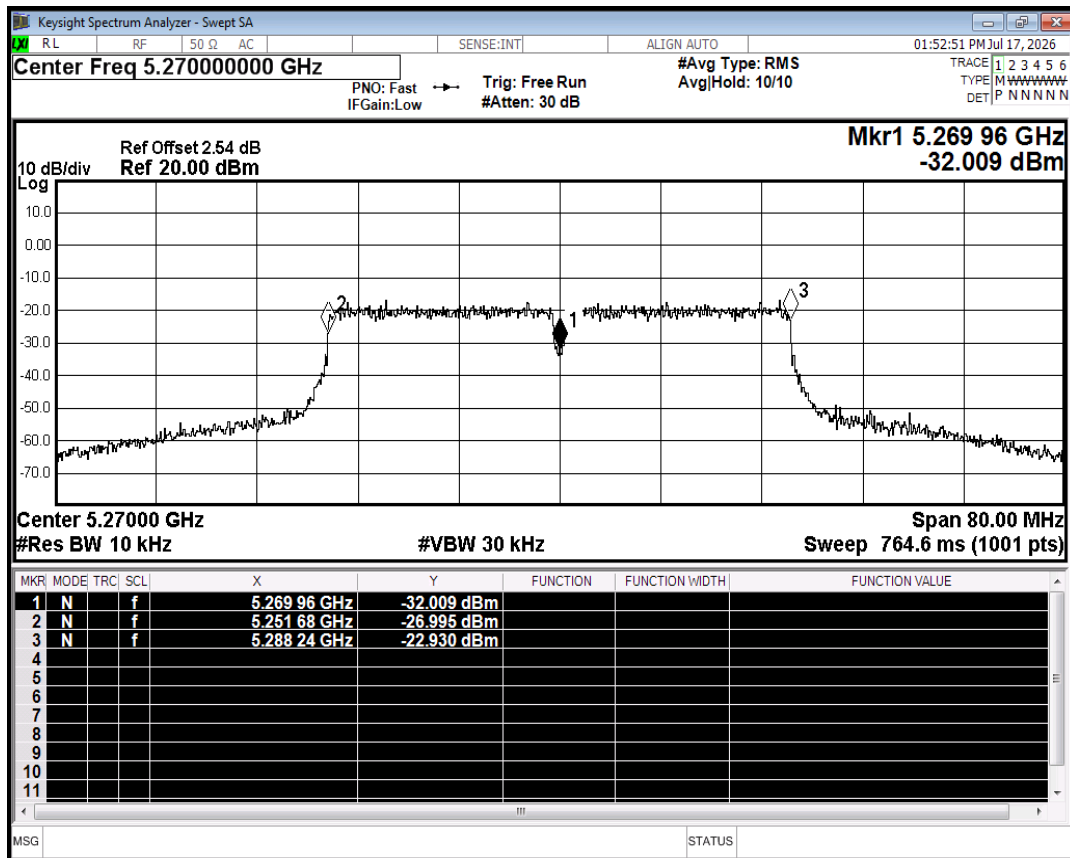
Freq. Stability NVNT n20 5260MHz Ant1



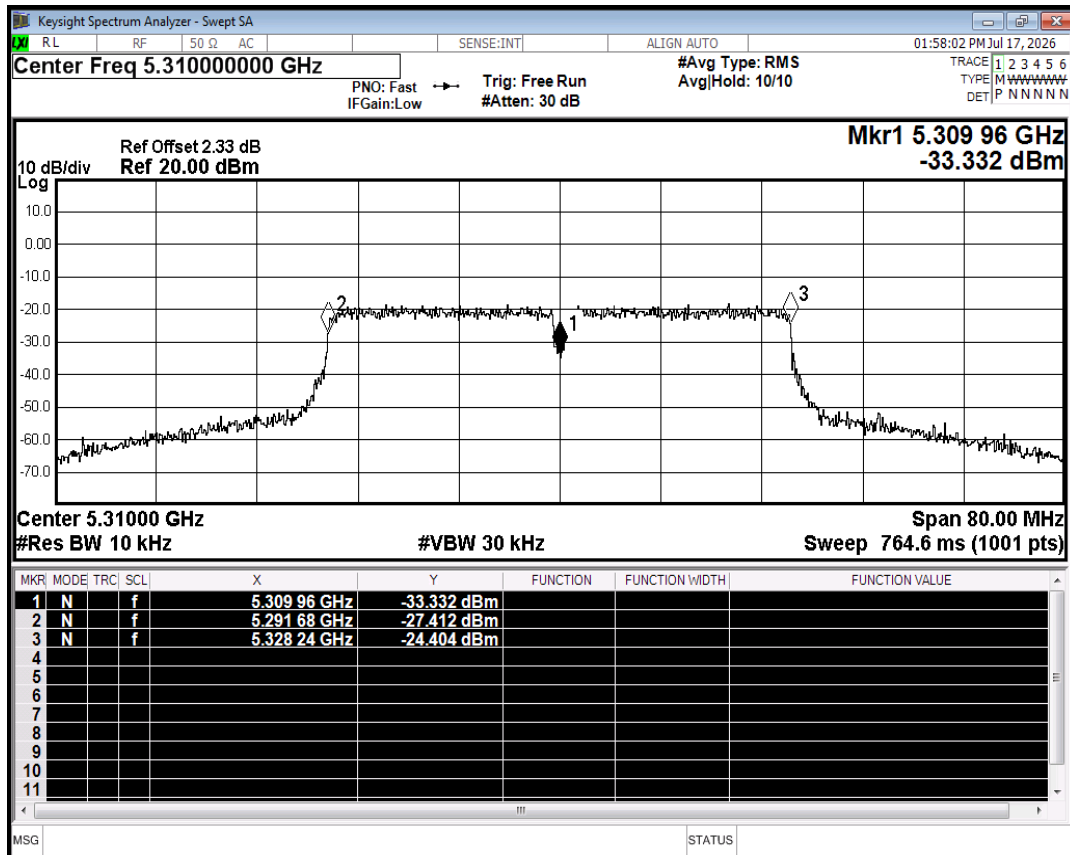
Freq. Stability NVNT n20 5280MHz Ant1



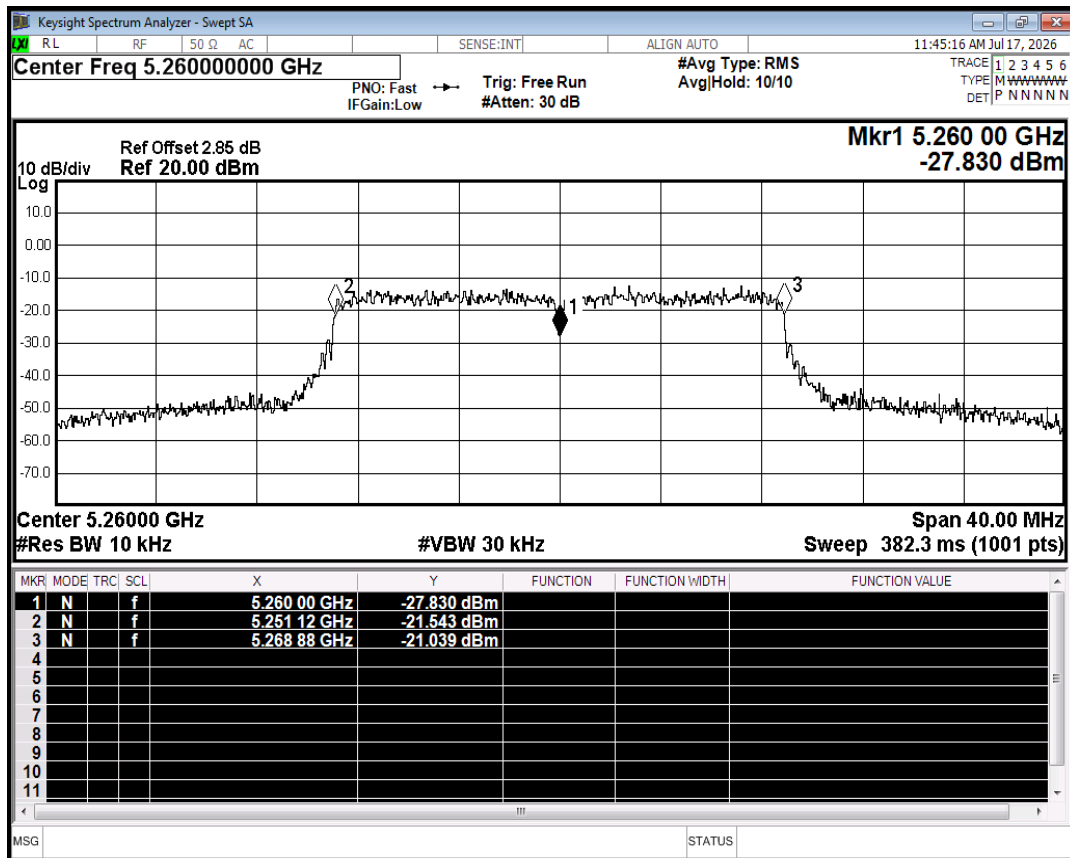
Freq. Stability NVNT n20 5320MHz Ant1



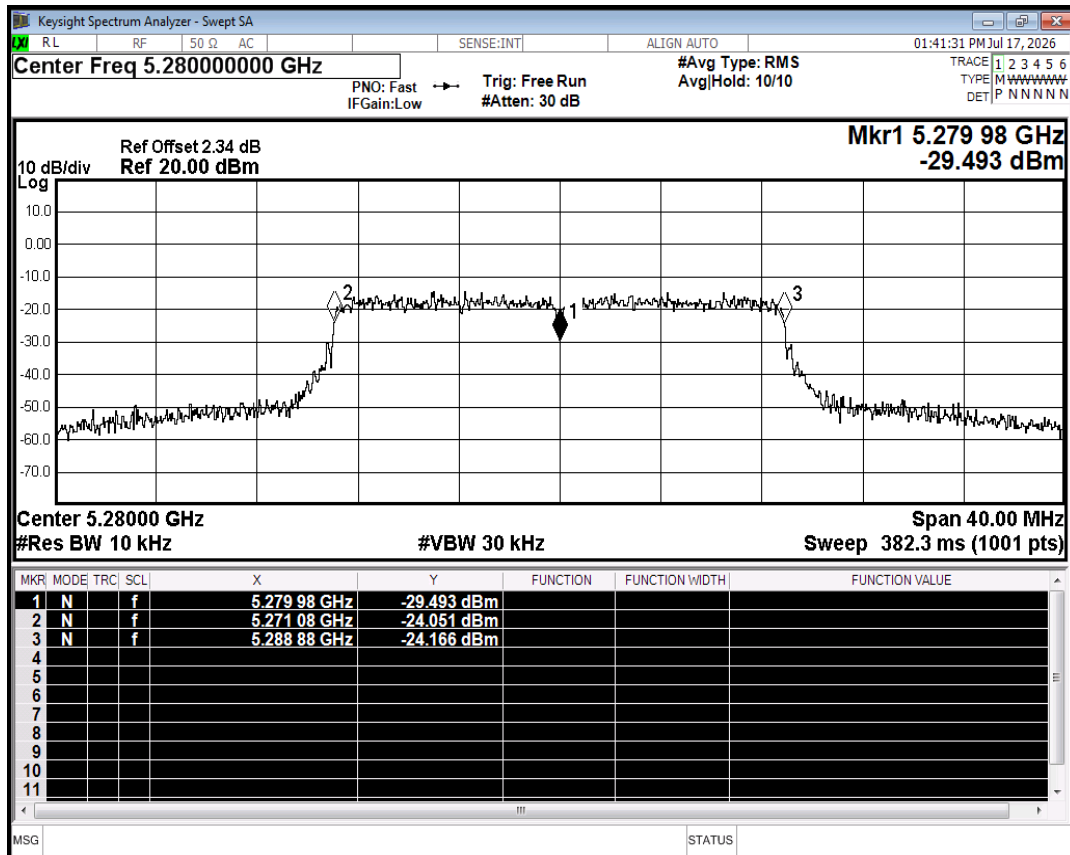
Freq. Stability NVNT n40 5270MHz Ant1



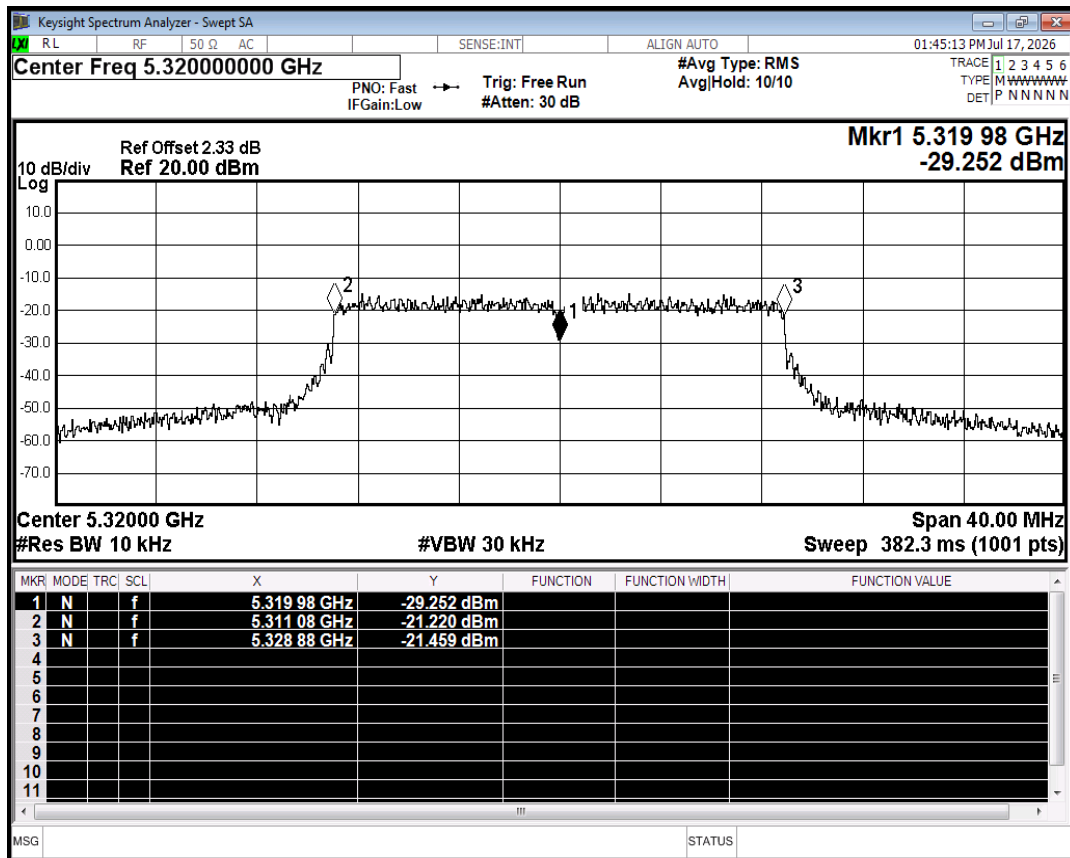
Freq. Stability NVNT n40 5310MHz Ant1



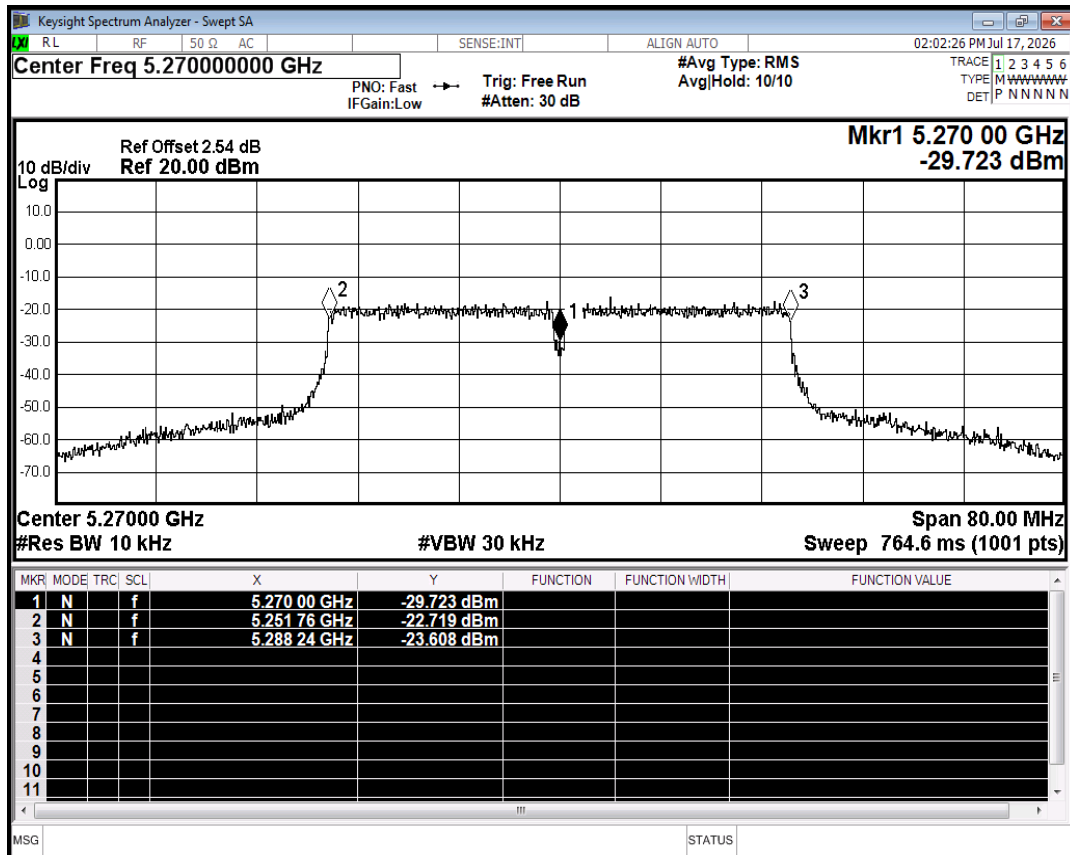
Freq. Stability NVNT ac20 5260MHz Ant1



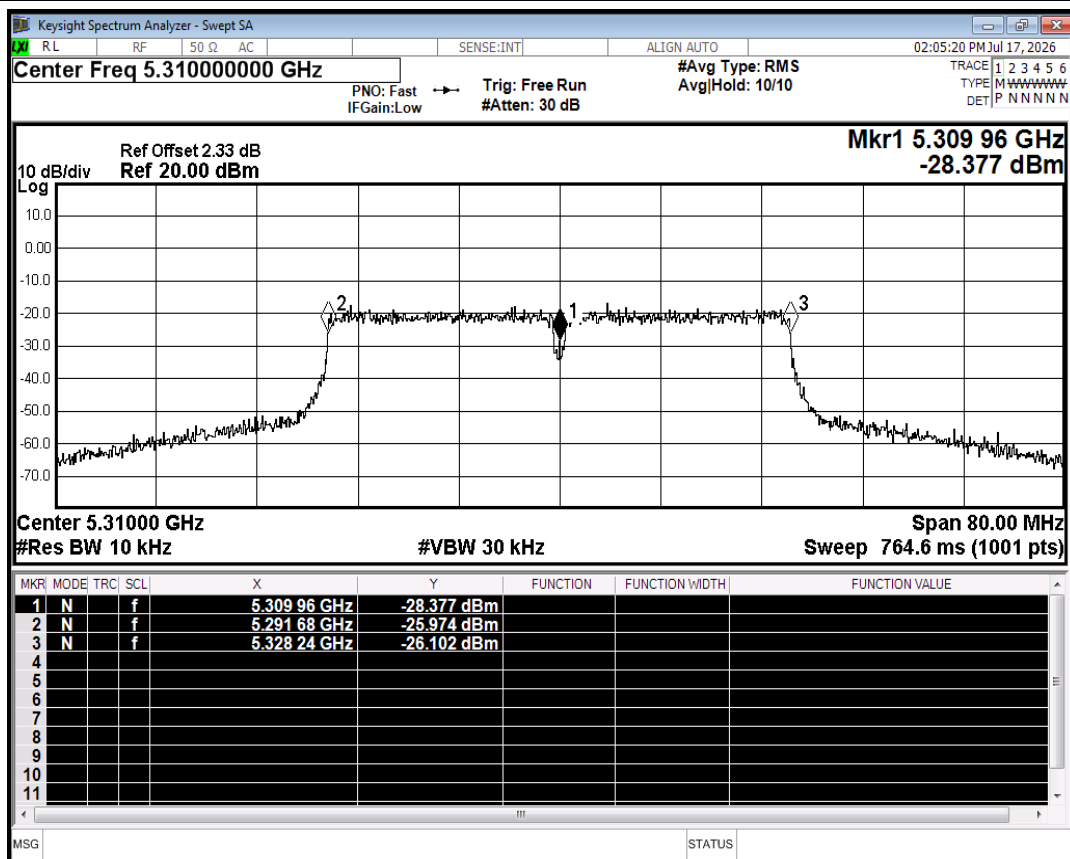
Freq. Stability NVNT ac20 5280MHz Ant1



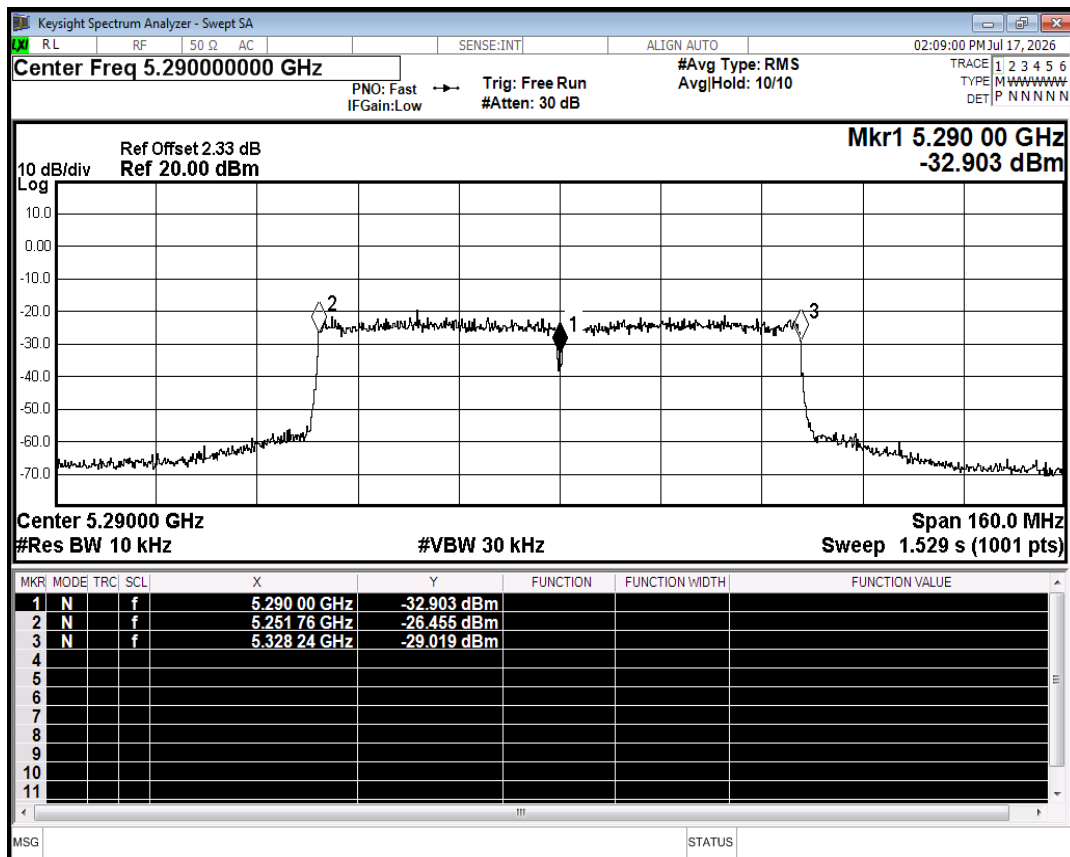
Freq. Stability NVNT ac20 5320MHz Ant1



Freq. Stability NVNT ac40 5270MHz Ant1



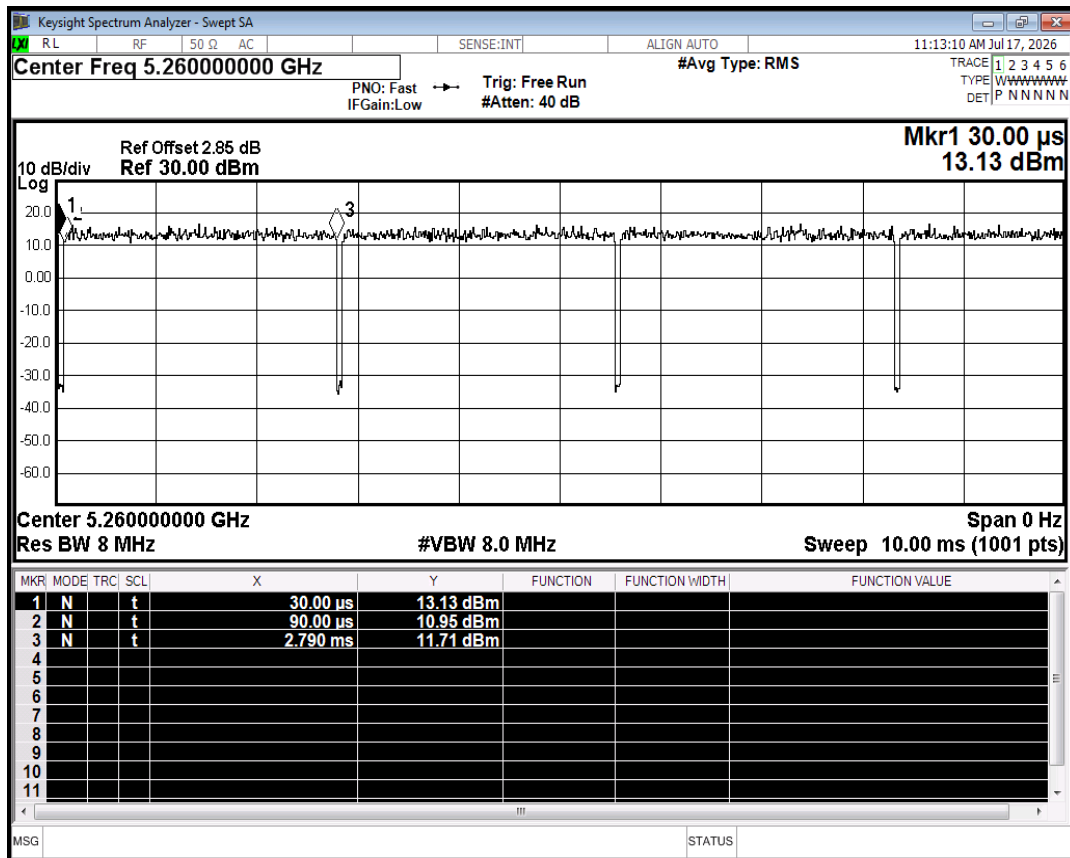
Freq. Stability NVNT ac40 5310MHz Ant1



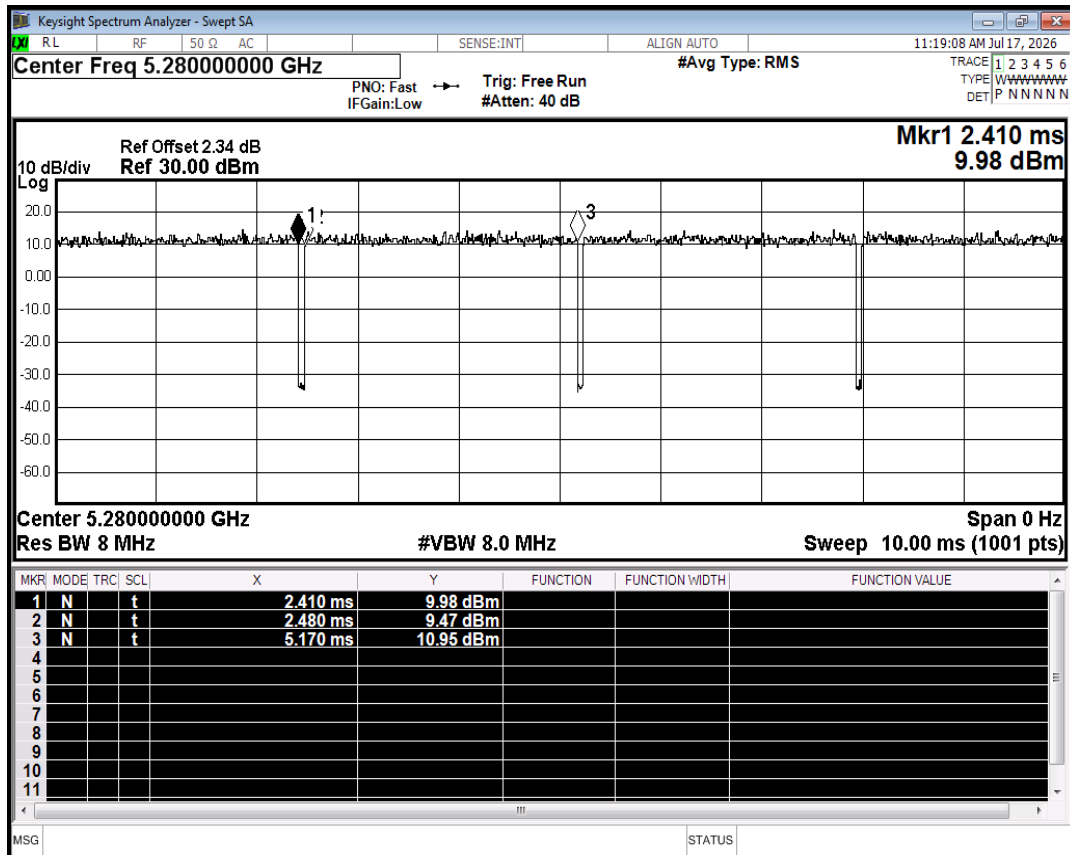
Freq. Stability NVNT ac80 5290MHz Ant1

D.6 Duty Cycle

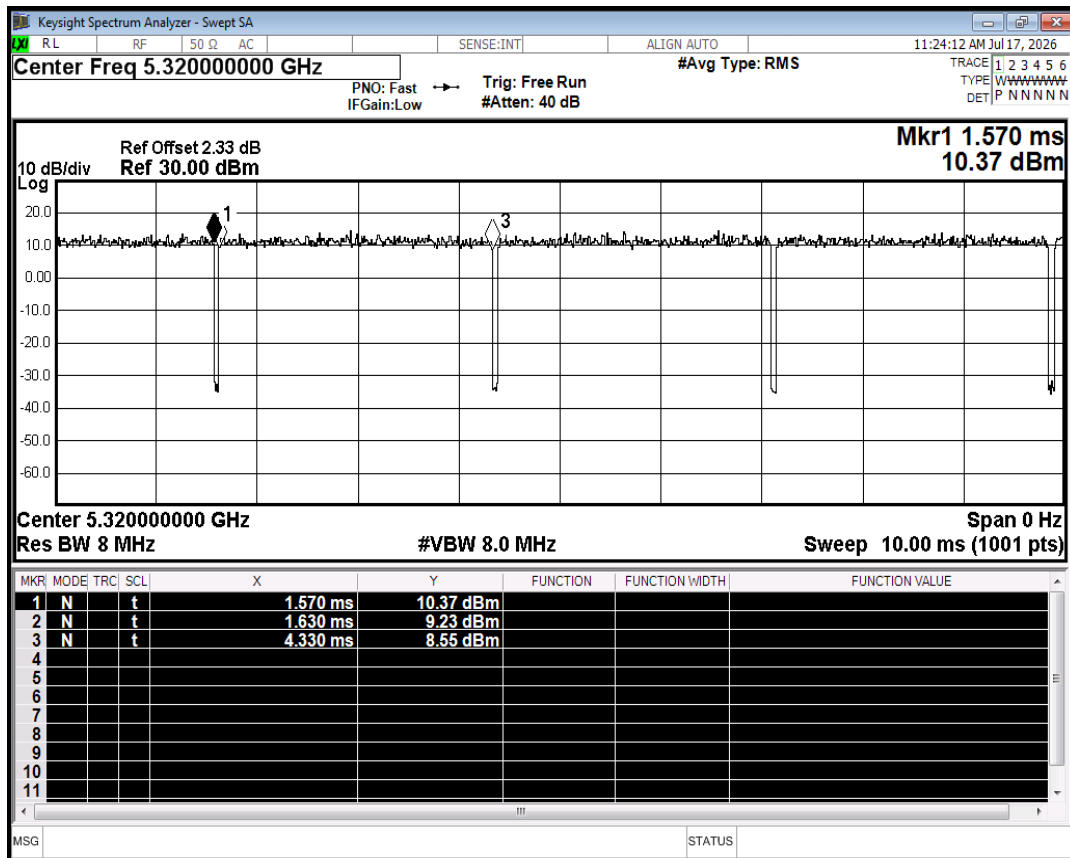
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5260	Ant1	97.83	0.1	0.37
NVNT	a	5280	Ant1	97.46	0.11	0.37
NVNT	a	5320	Ant1	97.83	0.1	0.37
NVNT	n20	5260	Ant1	97.41	0.11	0.44
NVNT	n20	5280	Ant1	97	0.13	0.44
NVNT	n20	5320	Ant1	97	0.13	0.44
NVNT	n40	5270	Ant1	94.87	0.23	0.9
NVNT	n40	5310	Ant1	94.87	0.23	0.9
NVNT	ac20	5260	Ant1	97.42	0.11	0.44
NVNT	ac20	5280	Ant1	97.42	0.11	0.44
NVNT	ac20	5320	Ant1	97.42	0.11	0.44
NVNT	ac40	5270	Ant1	94.87	0.23	0.9
NVNT	ac40	5310	Ant1	94.87	0.23	0.9
NVNT	ac80	5290	Ant1	89.83	0.47	1.89



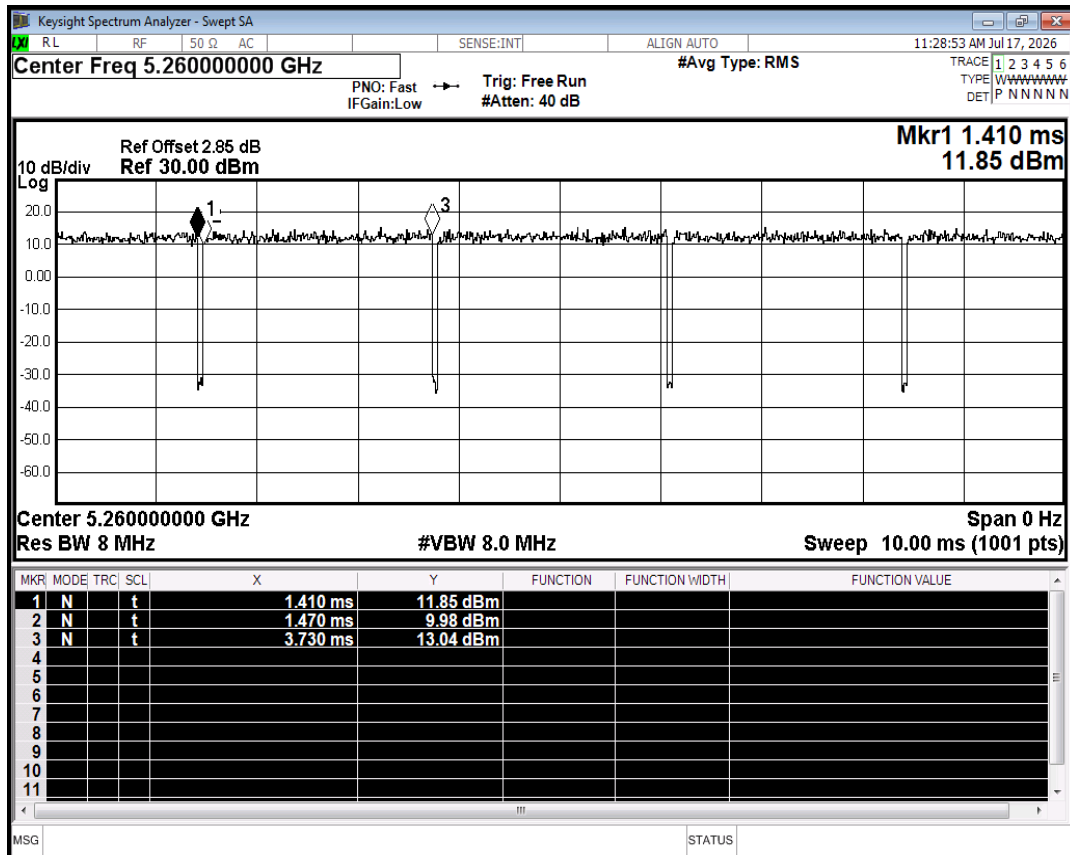
Duty Cycle NVNT a 5260MHz Ant1



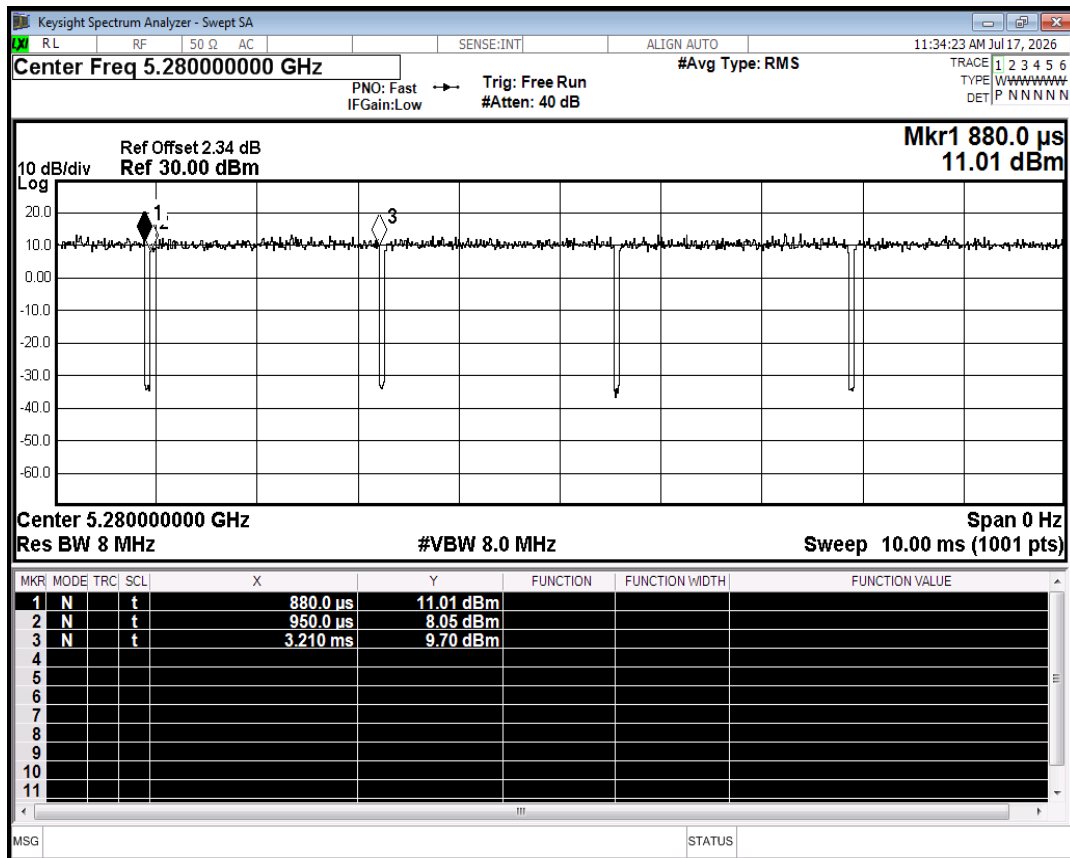
Duty Cycle NVNT a 5280MHz Ant1



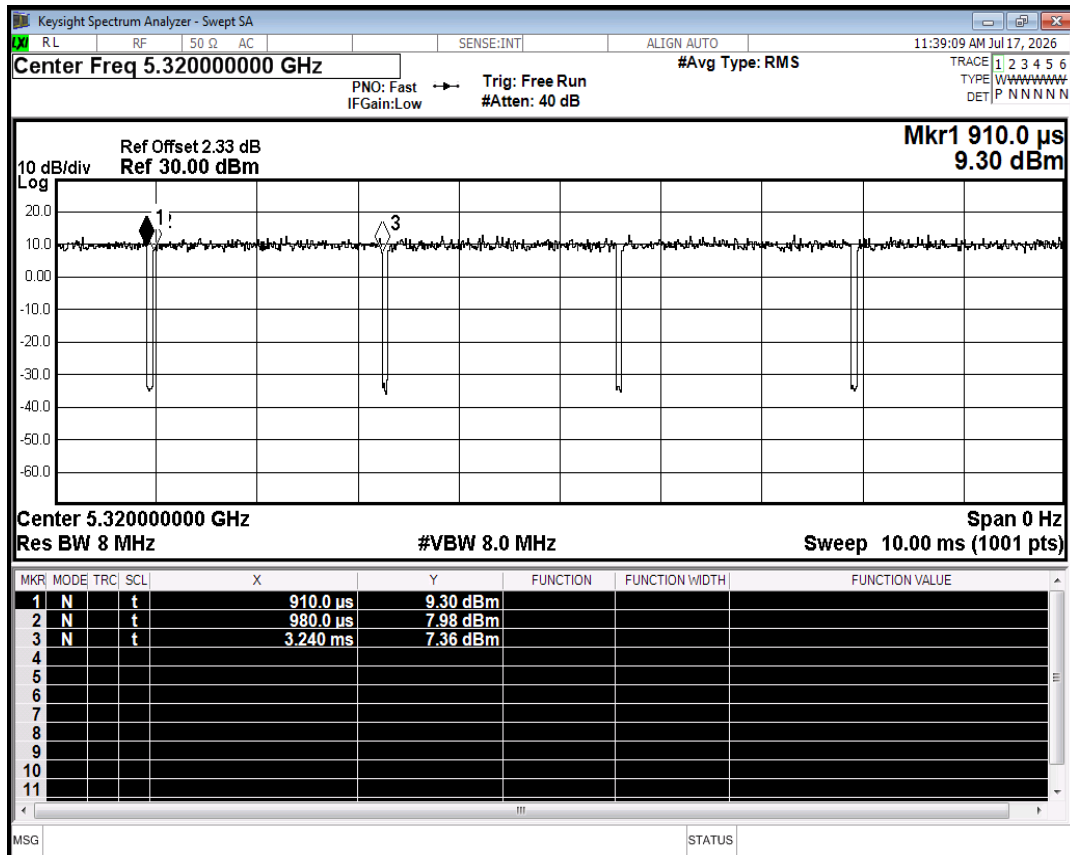
Duty Cycle NVNT a 5320MHz Ant1



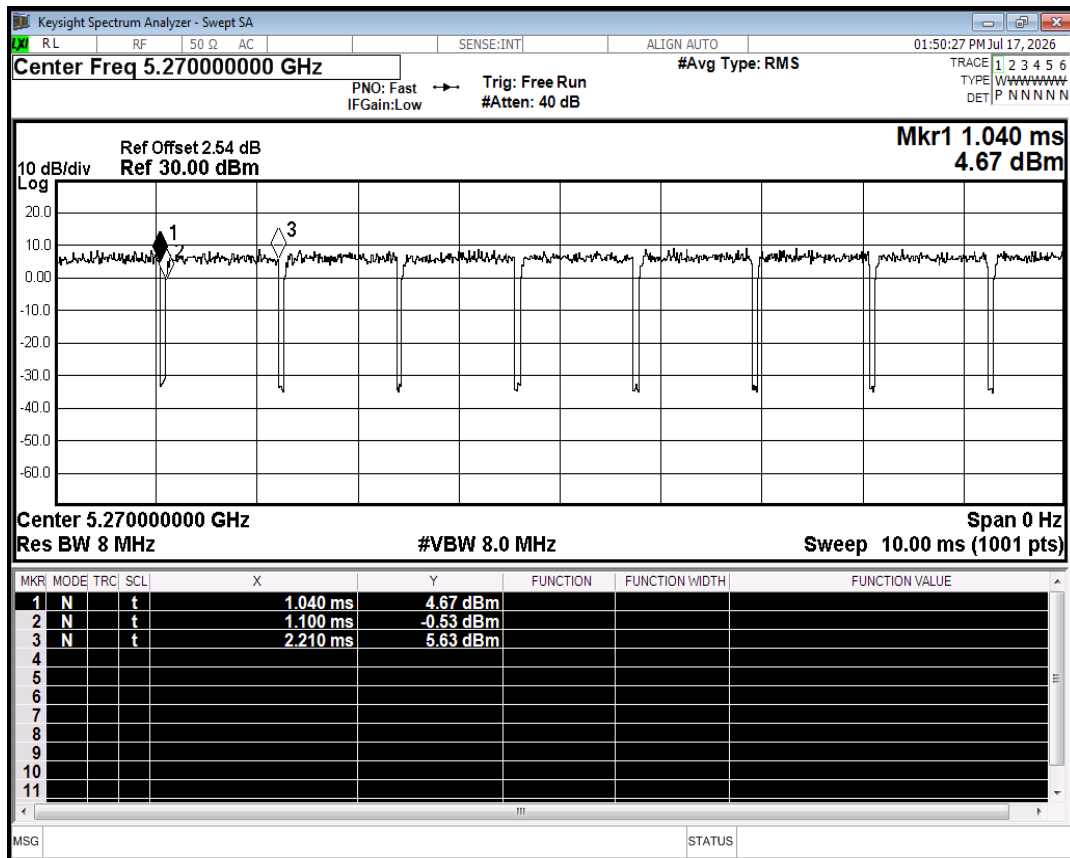
Duty Cycle NVNT n20 5260MHz Ant1



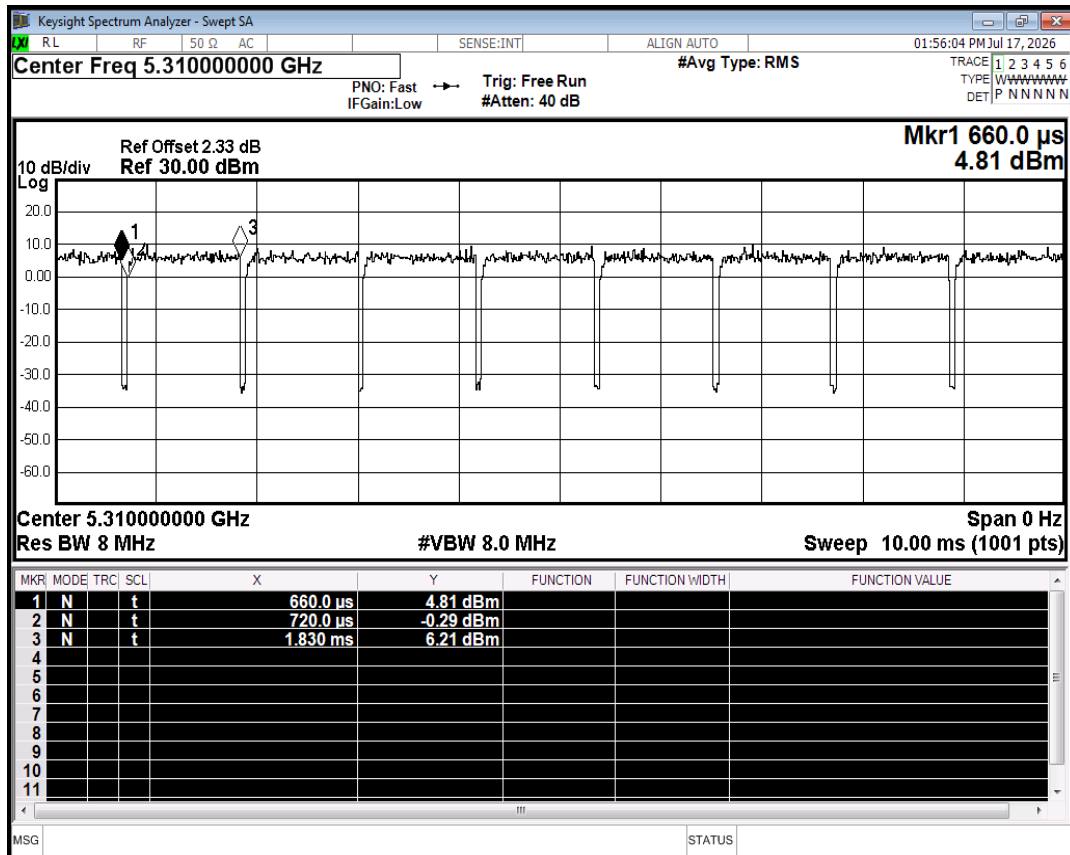
Duty Cycle NVNT n20 5280MHz Ant1



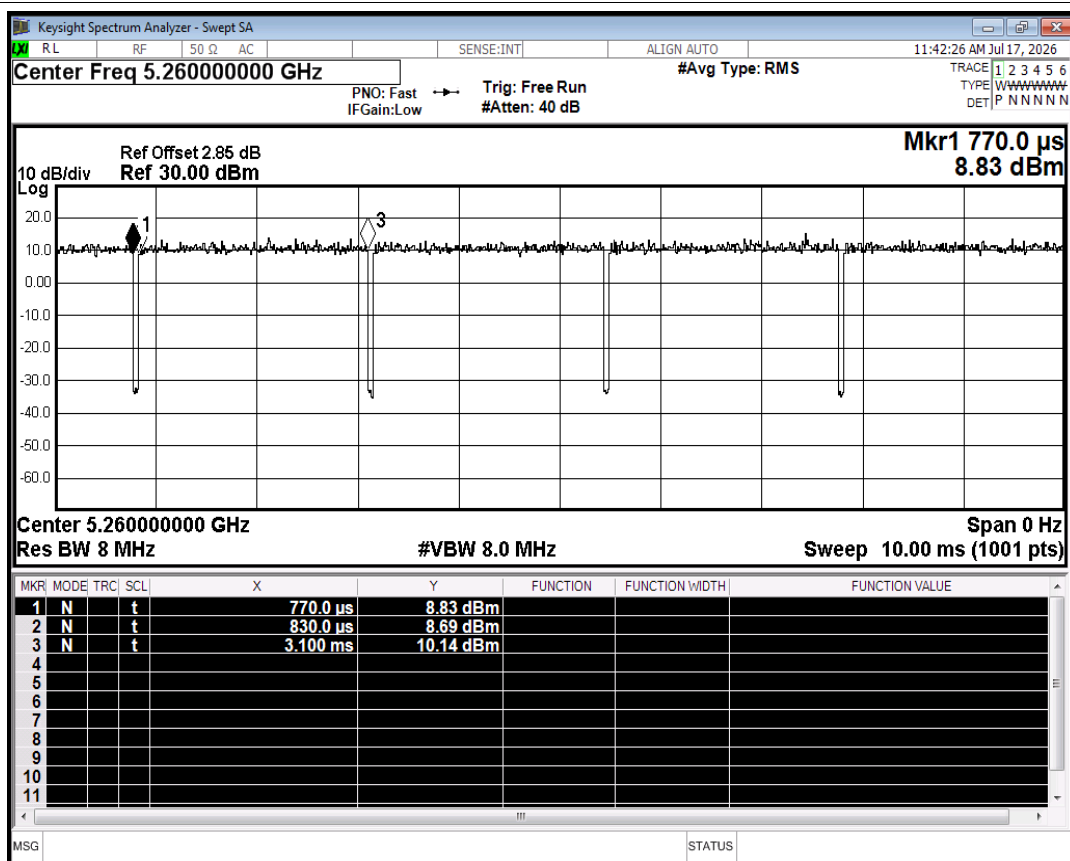
Duty Cycle NVNT n20 5320MHz Ant1



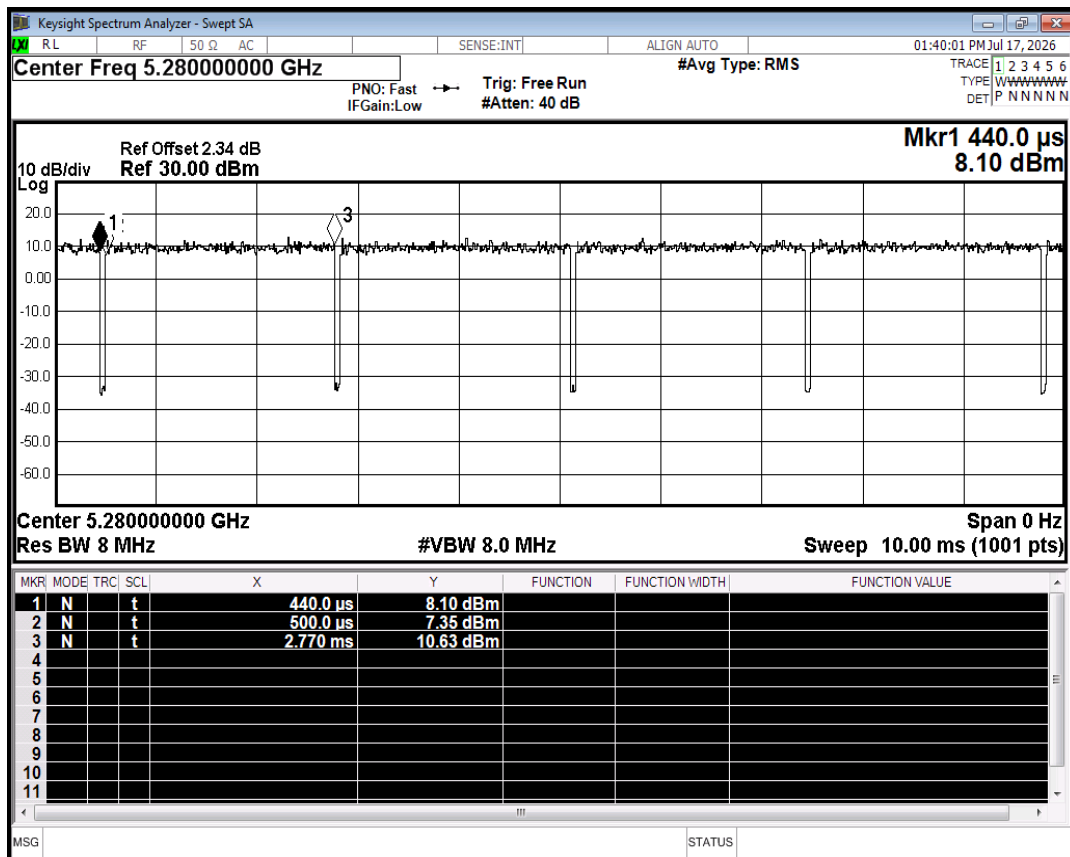
Duty Cycle NVNT n40 5270MHz Ant1



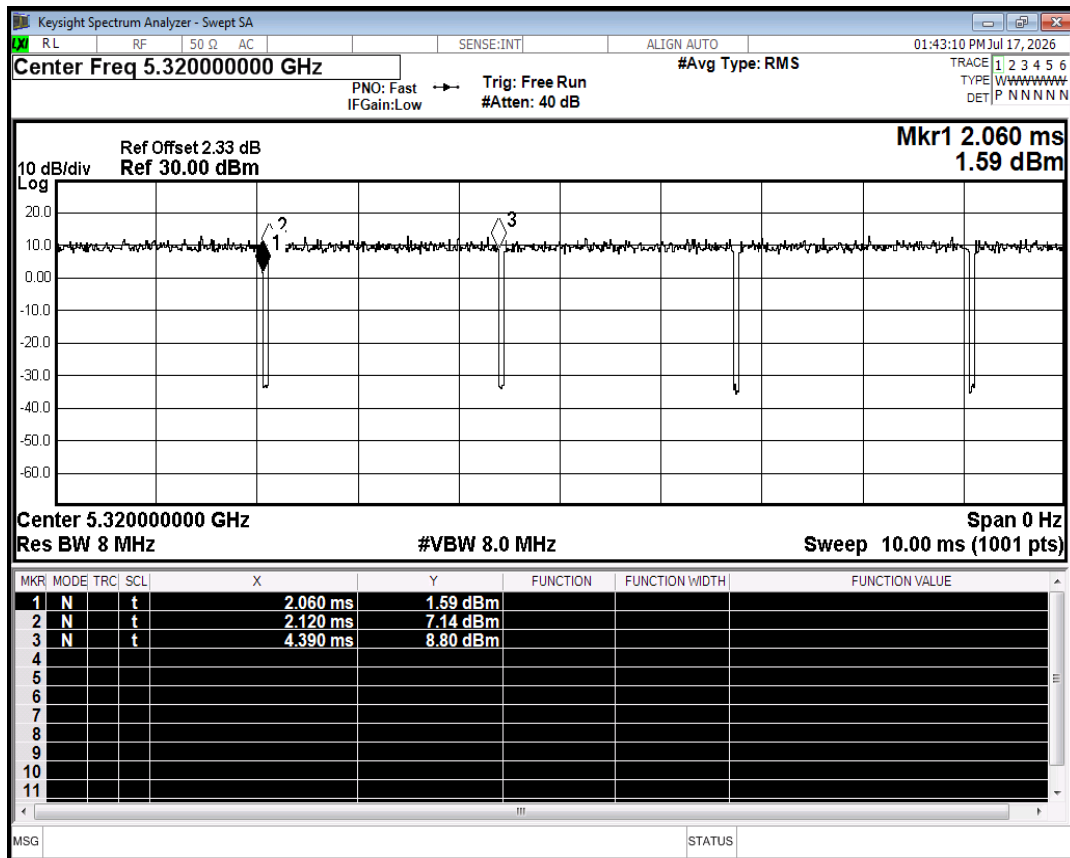
Duty Cycle NVNT n40 5310MHz Ant1



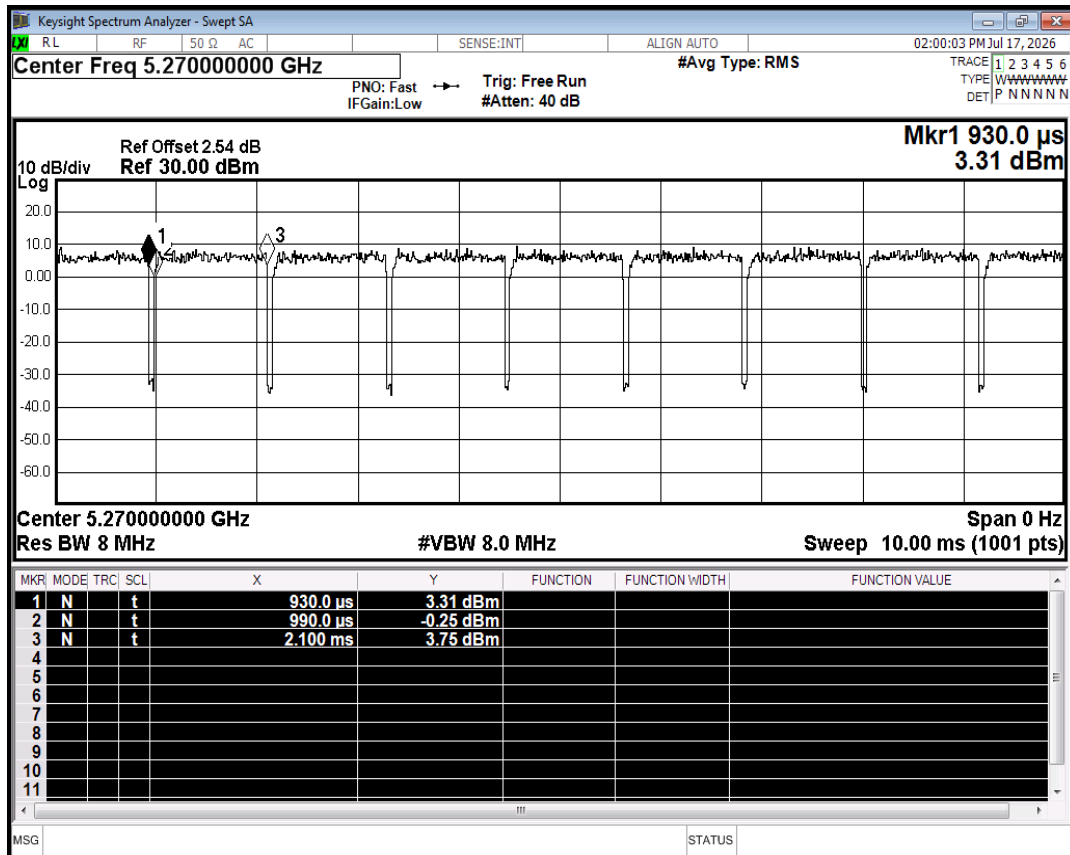
Duty Cycle NVNT ac20 5260MHz Ant1



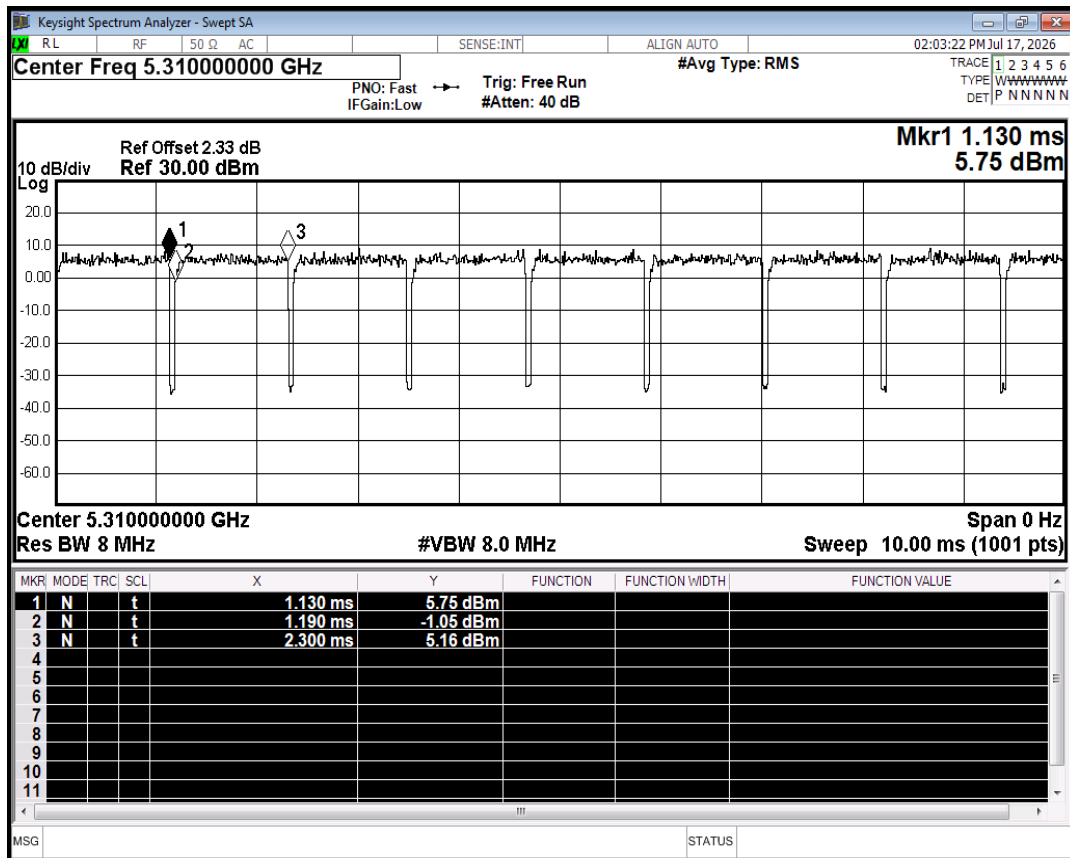
Duty Cycle NVNT ac20 5280MHz Ant1



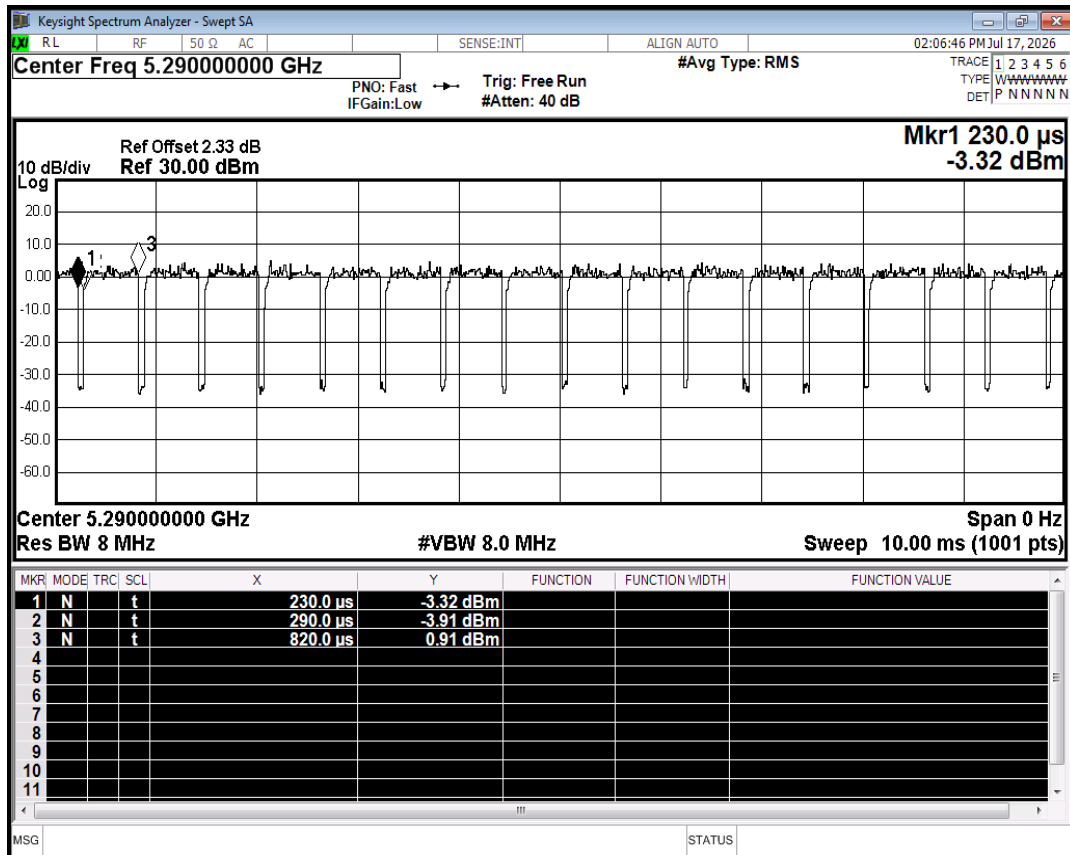
Duty Cycle NVNT ac20 5320MHz Ant1



Duty Cycle NVNT ac40 5270MHz Ant1



Duty Cycle NVNT ac40 5310MHz Ant1



Duty Cycle NVNT ac80 5290MHz Ant1