



Appendix D

RF Test Data for 5.5G WIFI (Conducted Measurement)

Product Name: NETWORK PLAYER

Test Model: 9000N

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng
Supervised by:	Ling Zhu





D.1 -26dB Bandwidth

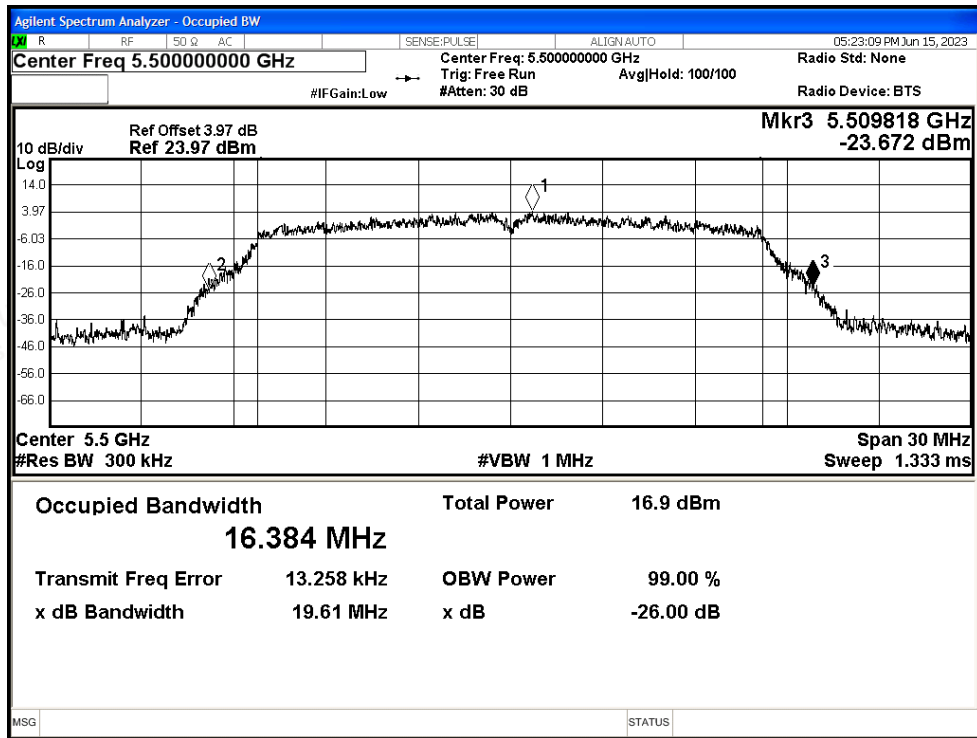
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5500	Ant1	19.609	N/A	Pass
NVNT	a	5580	Ant1	19.791	N/A	Pass
NVNT	a	5700	Ant1	19.64	N/A	Pass
NVNT	n20	5500	Ant1	19.717	N/A	Pass
NVNT	n20	5580	Ant1	19.885	N/A	Pass
NVNT	n20	5700	Ant1	19.704	N/A	Pass
NVNT	n40	5510	Ant1	39.305	N/A	Pass
NVNT	n40	5550	Ant1	38.87	N/A	Pass
NVNT	n40	5670	Ant1	38.848	N/A	Pass
NVNT	ac20	5500	Ant1	19.77	N/A	Pass
NVNT	ac20	5580	Ant1	19.975	N/A	Pass
NVNT	ac20	5700	Ant1	19.723	N/A	Pass
NVNT	ac40	5510	Ant1	39.363	N/A	Pass
NVNT	ac40	5550	Ant1	39.048	N/A	Pass
NVNT	ac40	5670	Ant1	38.879	N/A	Pass
NVNT	ac80	5530	Ant1	78.375	N/A	Pass
NVNT	ac80	5610	Ant1	78.522	N/A	Pass



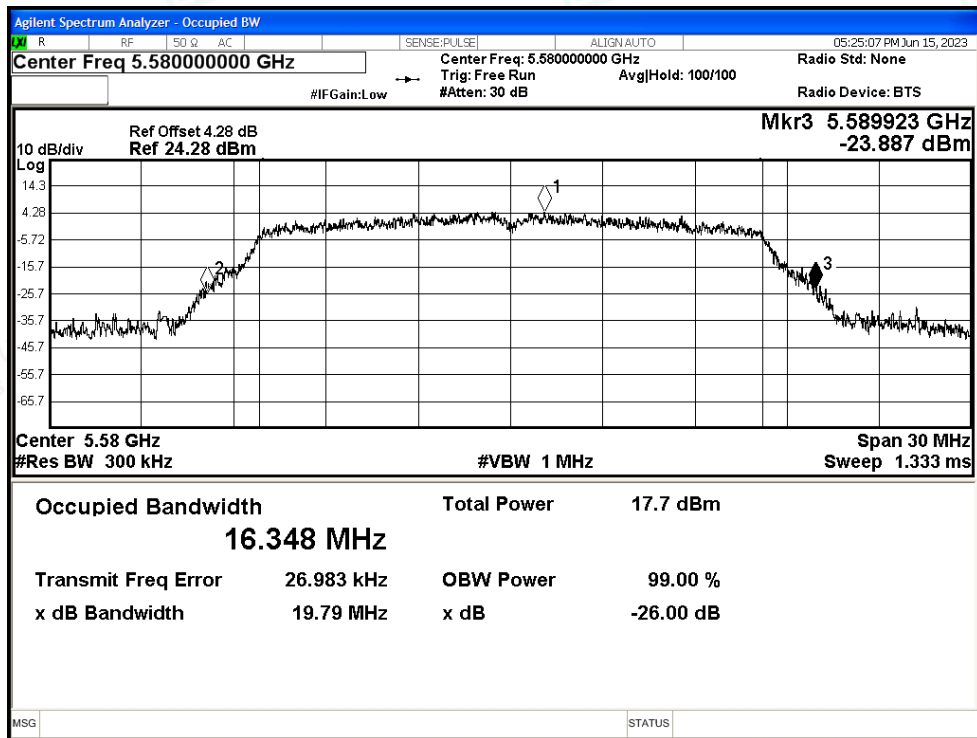


Test Graphs

-26dB Bandwidth NVNT a 5500MHz Ant1

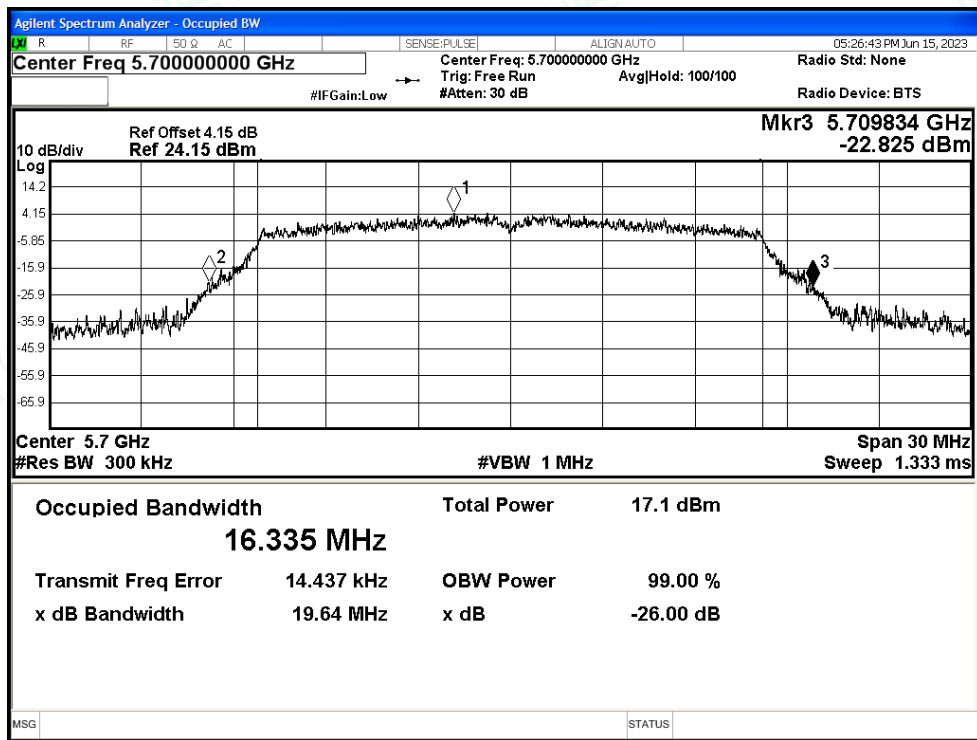


-26dB Bandwidth NVNT a 5580MHz Ant1

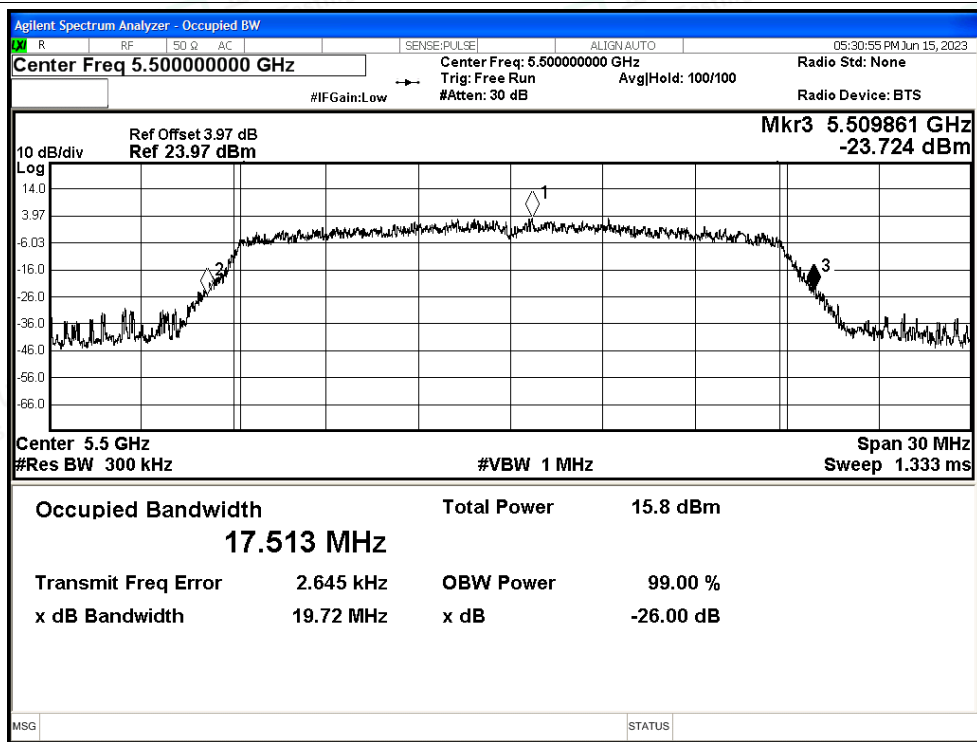




-26dB Bandwidth NVNT a 5700MHz Ant1

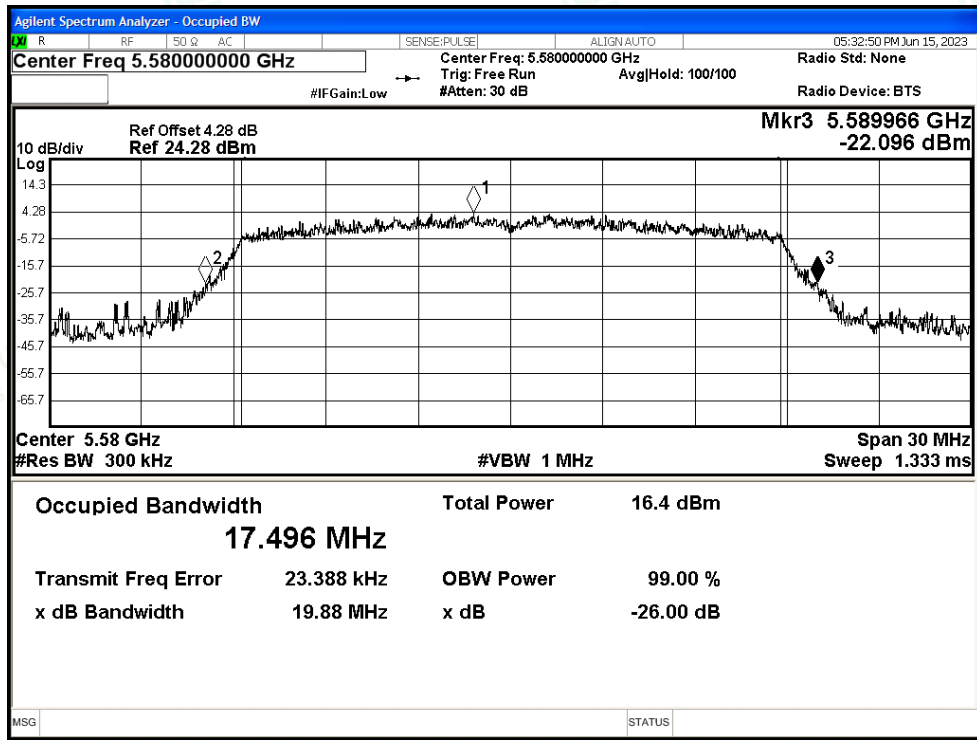


-26dB Bandwidth NVNT n20 5500MHz Ant1

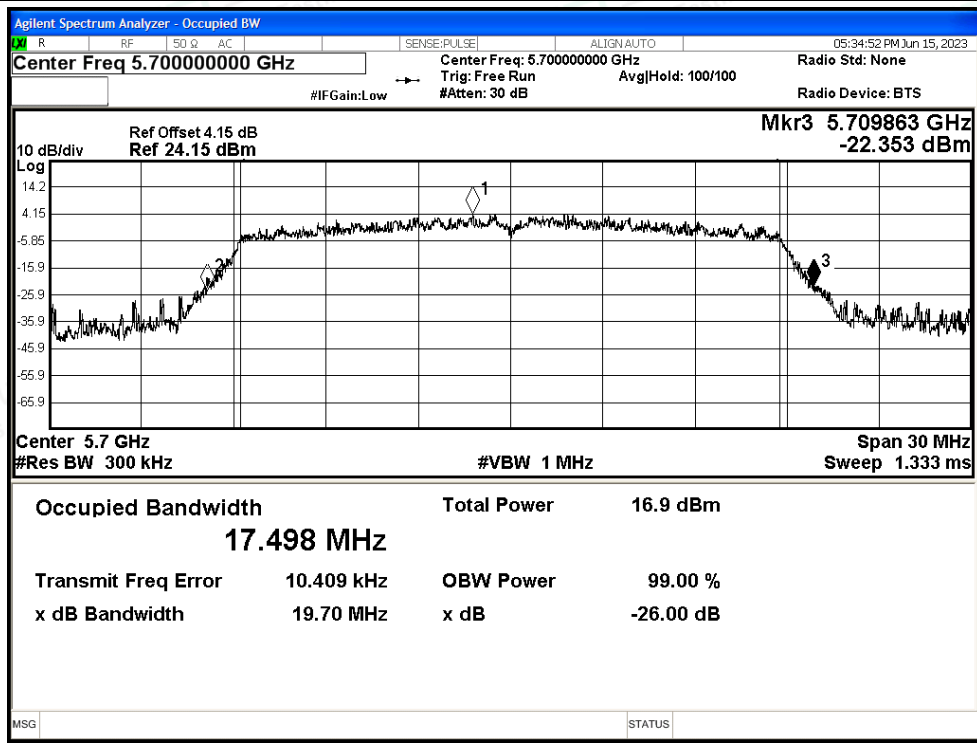




-26dB Bandwidth NVNT n20 5580MHz Ant1

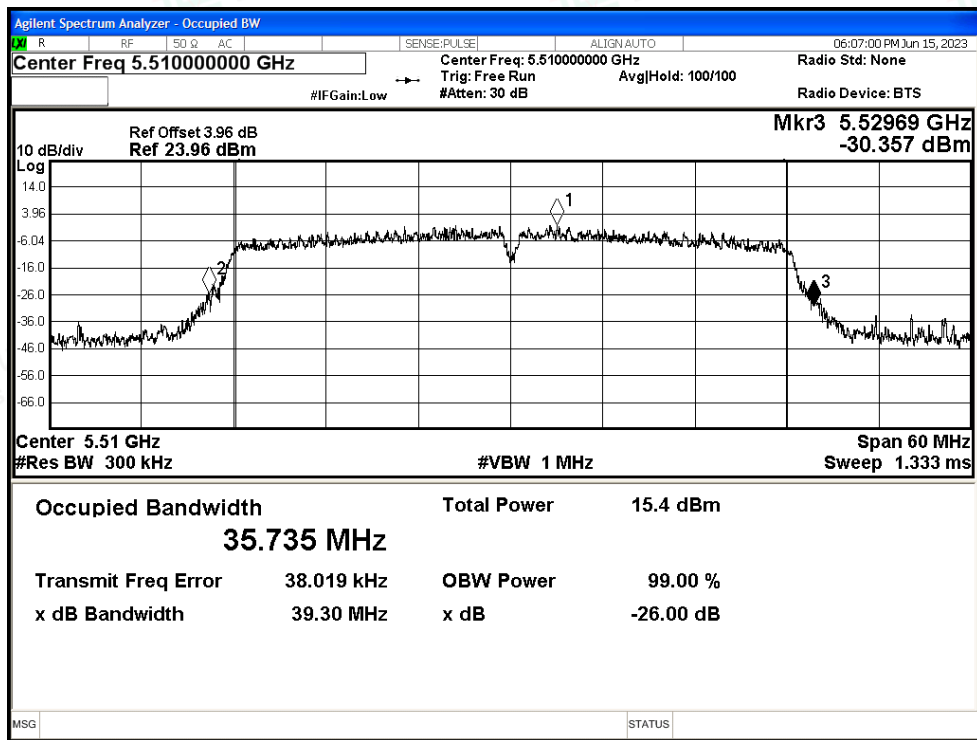


-26dB Bandwidth NVNT n20 5700MHz Ant1

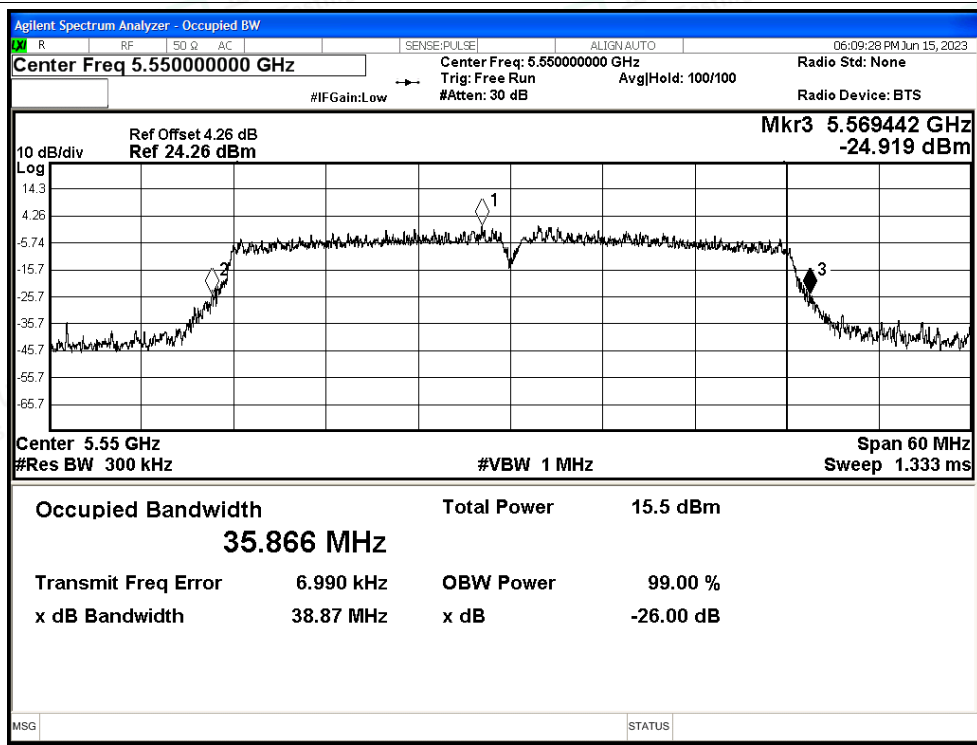




-26dB Bandwidth NVNT n40 5510MHz Ant1

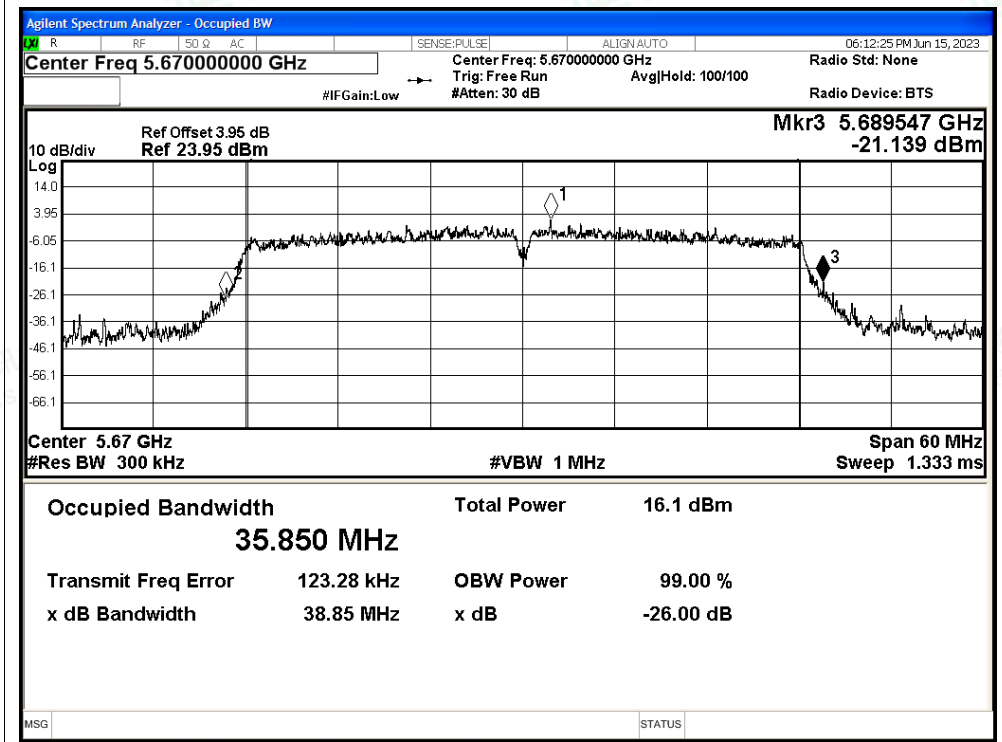


-26dB Bandwidth NVNT n40 5550MHz Ant1

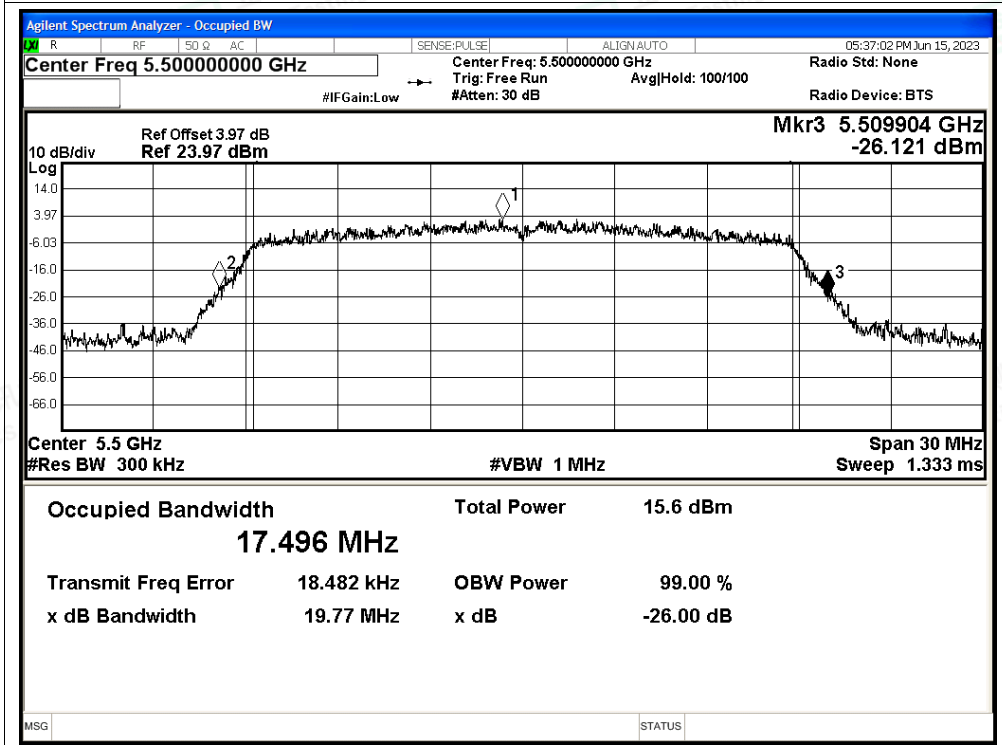




-26dB Bandwidth NVNT n40 5670MHz Ant1

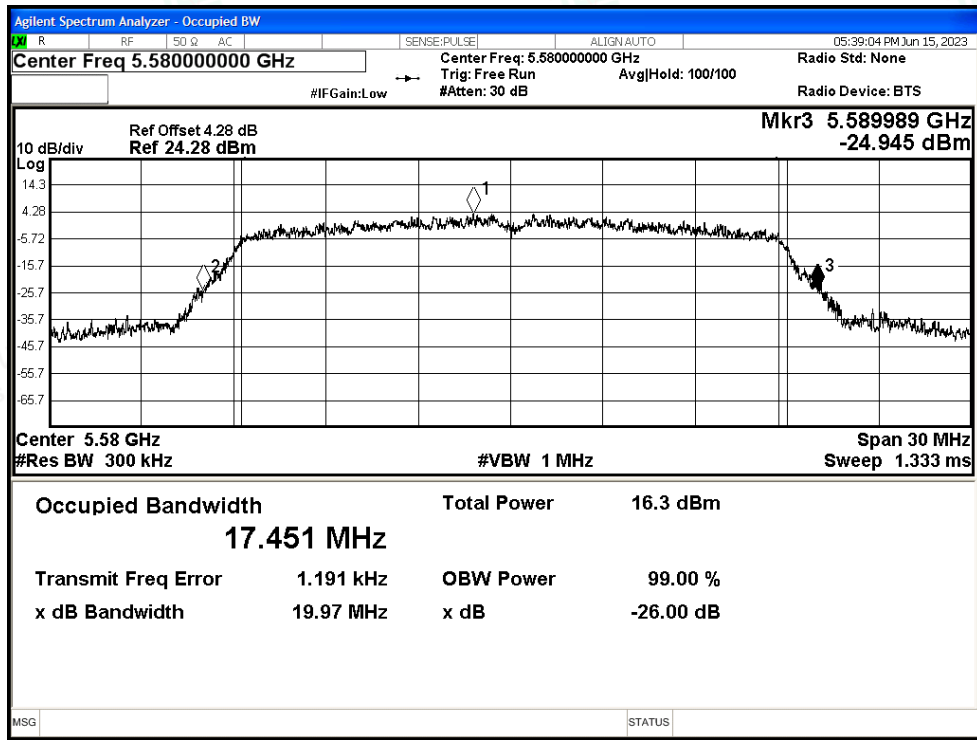


-26dB Bandwidth NVNT ac20 5500MHz Ant1

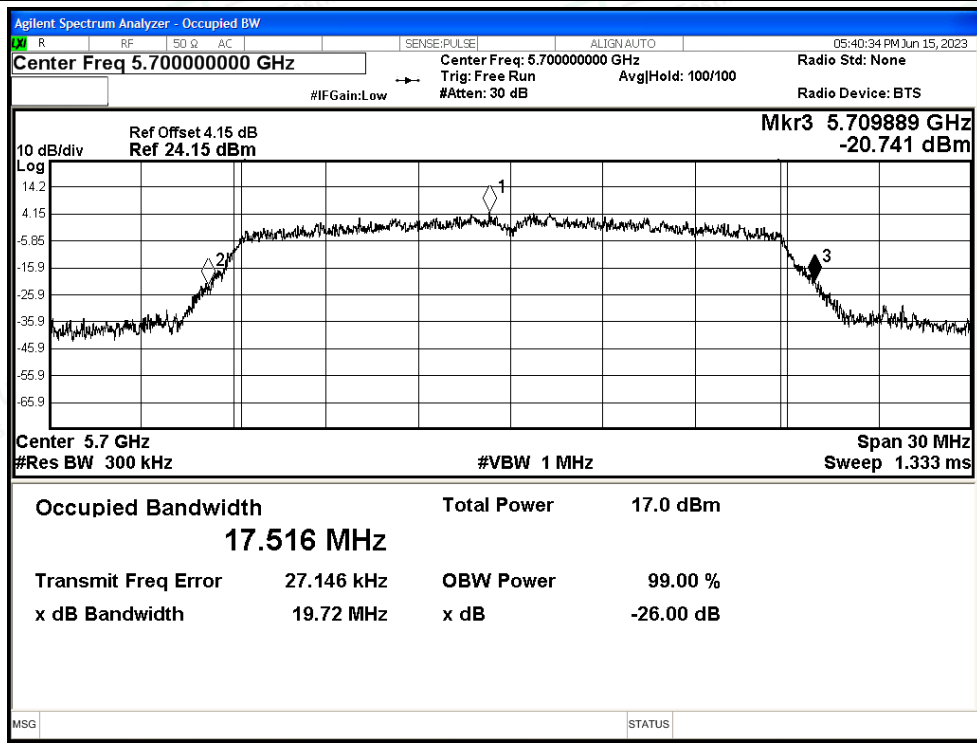




-26dB Bandwidth NVNT ac20 5580MHz Ant1

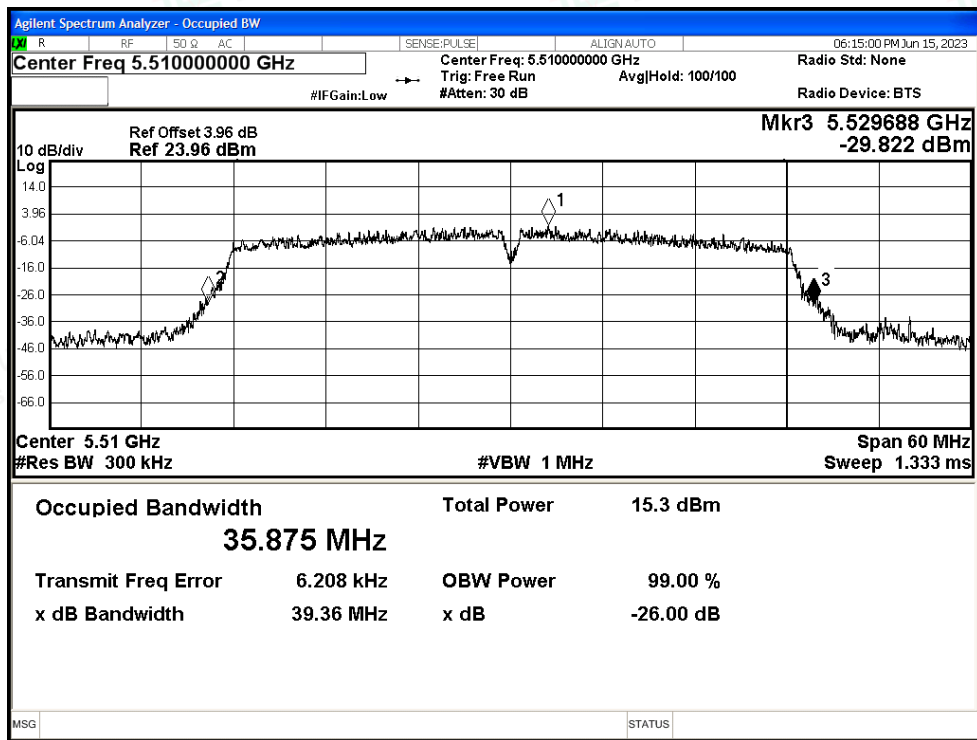


-26dB Bandwidth NVNT ac20 5700MHz Ant1

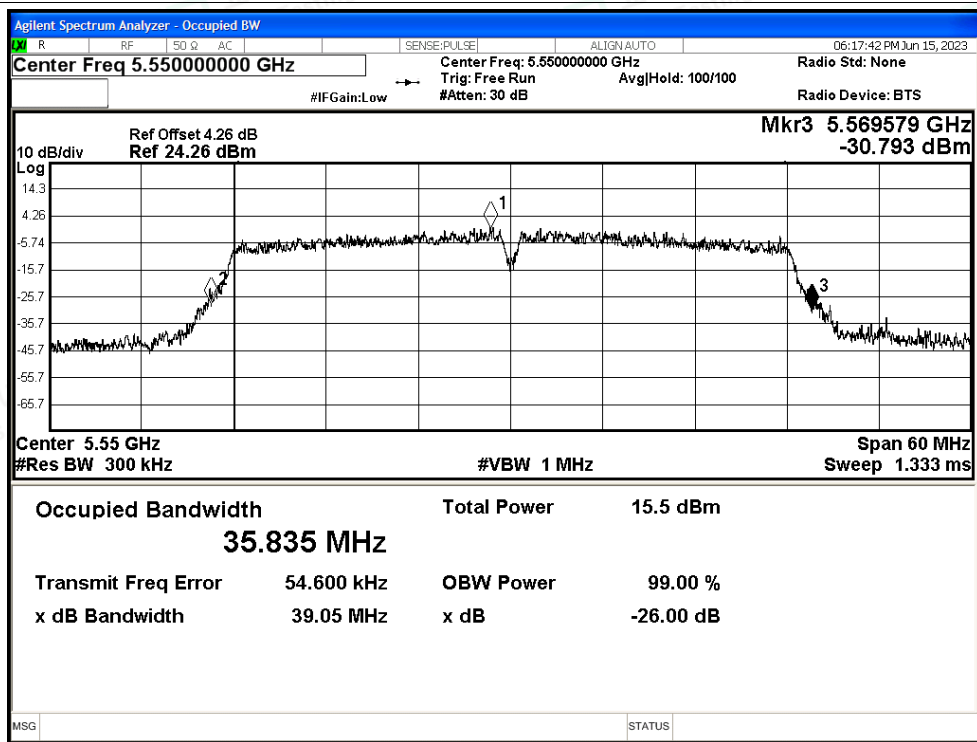




-26dB Bandwidth NVNT ac40 5510MHz Ant1

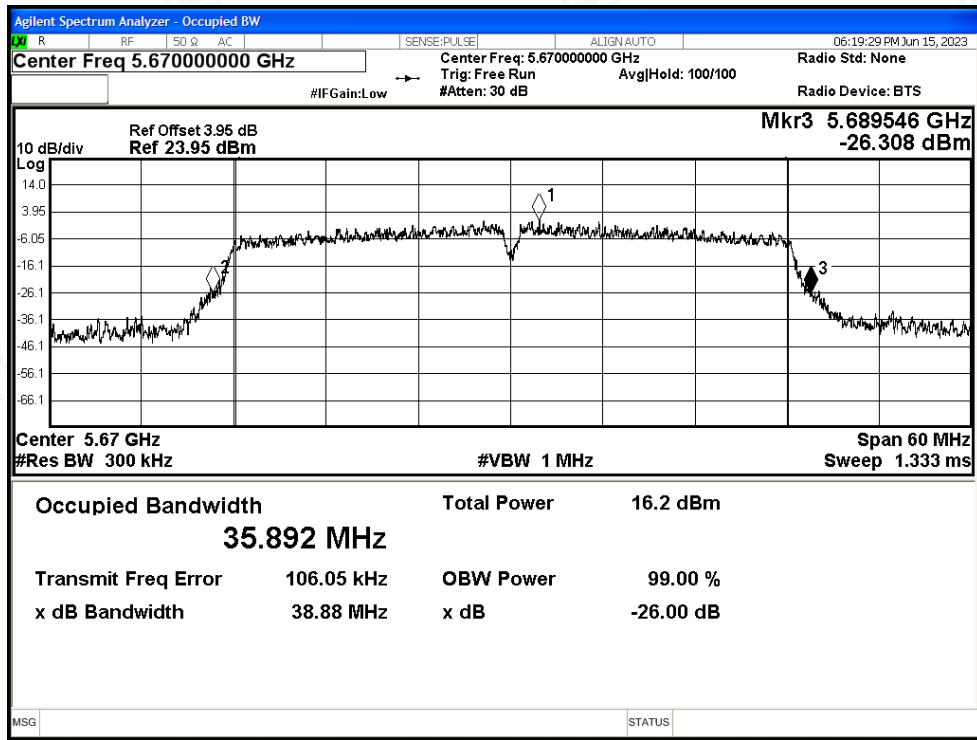


-26dB Bandwidth NVNT ac40 5550MHz Ant1

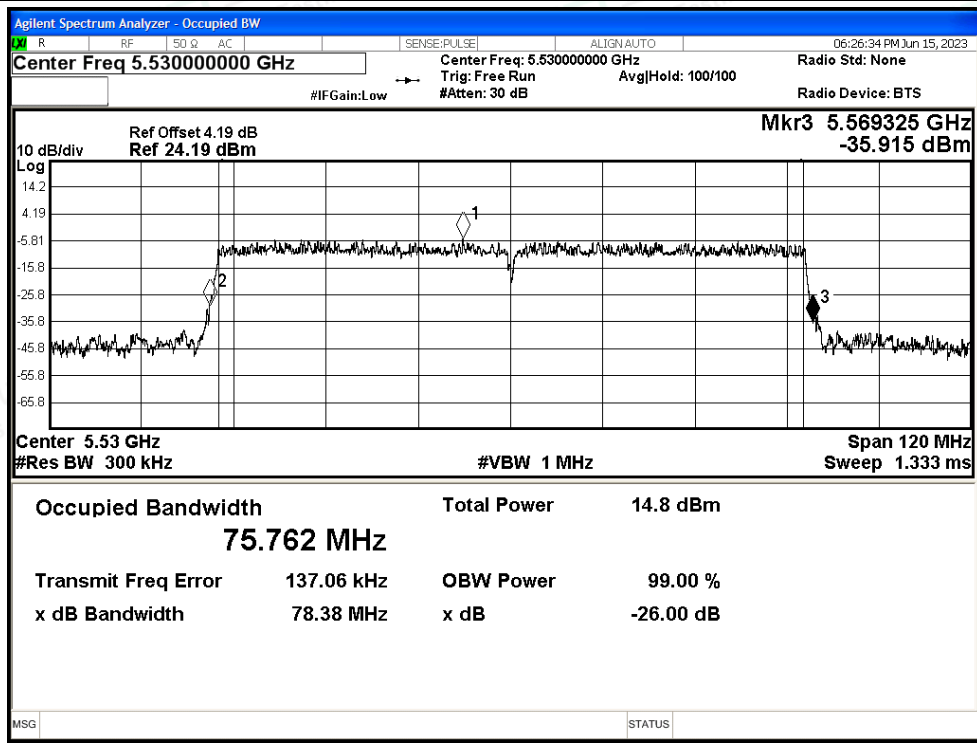


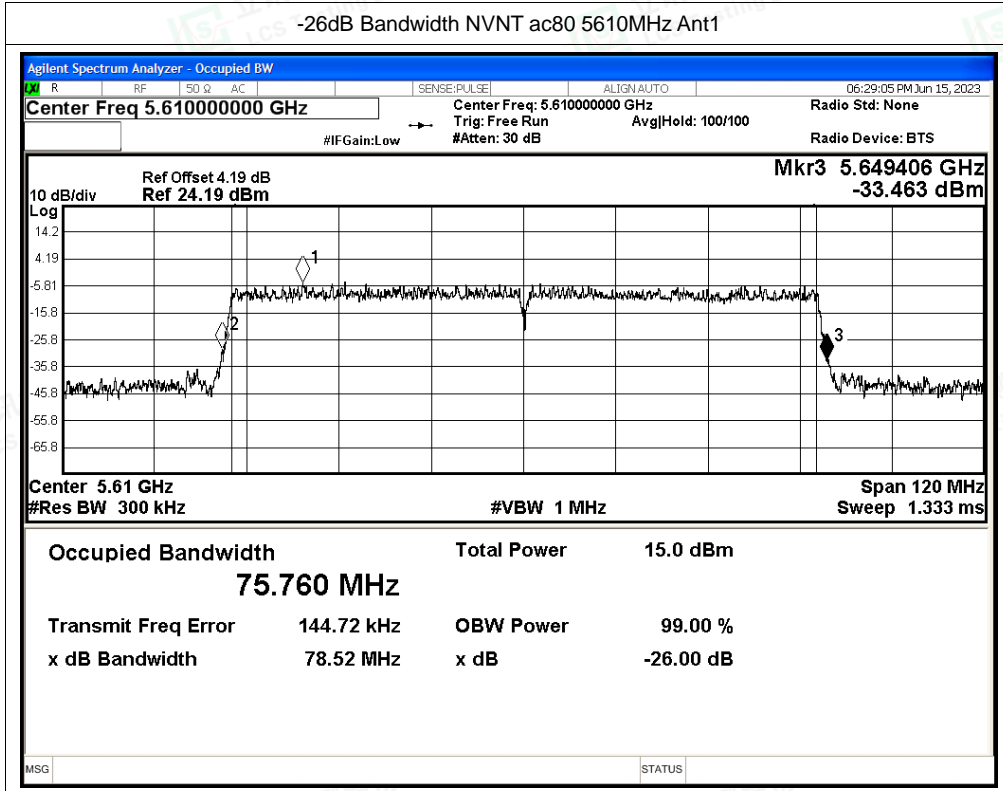


-26dB Bandwidth NVNT ac40 5670MHz Ant1



-26dB Bandwidth NVNT ac80 5530MHz Ant1







D.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	9.36	2.46	11.82	24	Pass
NVNT	a	5580	Ant1	10.17	2.33	12.50	24	Pass
NVNT	a	5700	Ant1	9.96	2.58	12.54	24	Pass
NVNT	n20	5500	Ant1	8.73	2.59	11.32	24	Pass
NVNT	n20	5580	Ant1	9.17	2.45	11.62	24	Pass
NVNT	n20	5700	Ant1	9.58	2.61	12.19	24	Pass
NVNT	n40	5510	Ant1	6.41	4.24	10.65	24	Pass
NVNT	n40	5550	Ant1	6.92	4.22	11.14	24	Pass
NVNT	n40	5670	Ant1	7.06	4.04	11.10	24	Pass
NVNT	ac20	5500	Ant1	7.94	2.45	10.39	24	Pass
NVNT	ac20	5580	Ant1	8.43	2.59	11.02	24	Pass
NVNT	ac20	5700	Ant1	8.52	2.58	11.10	24	Pass
NVNT	ac40	5510	Ant1	7.07	4.1	11.17	24	Pass
NVNT	ac40	5550	Ant1	6.61	4.22	10.83	24	Pass
NVNT	ac40	5670	Ant1	9.08	2.45	11.53	24	Pass
NVNT	ac80	5530	Ant1	5.11	6.31	11.42	24	Pass
NVNT	ac80	5610	Ant1	3.98	6.19	10.17	24	Pass





D.3 Maximum Power Spectral Density Level

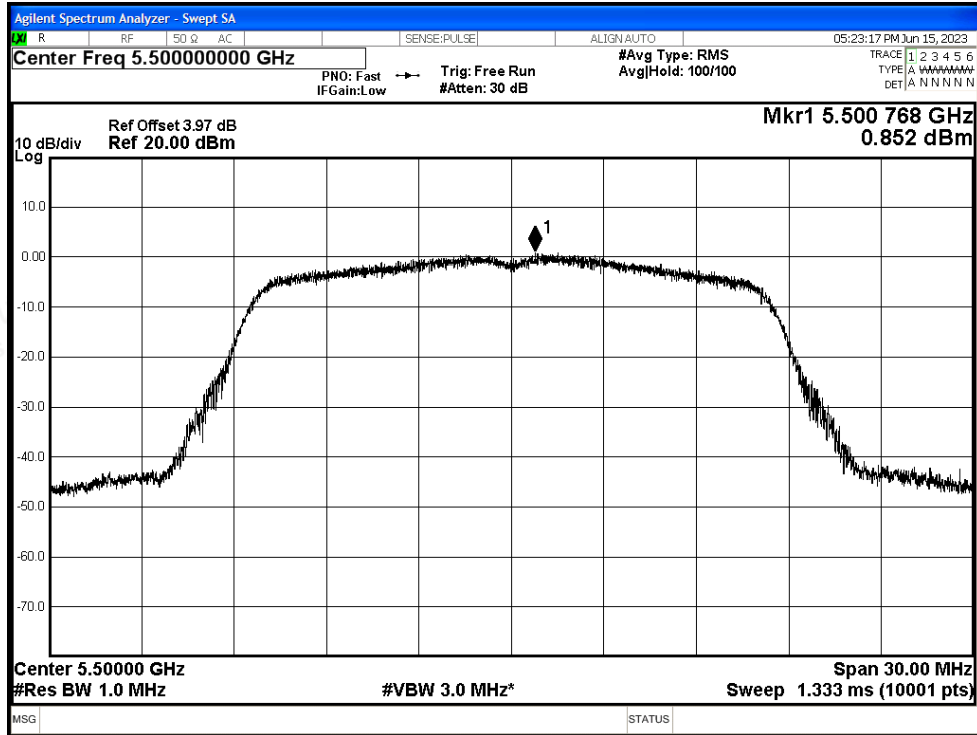
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	0.85	2.46	3.31	11	Pass
NVNT	a	5580	Ant1	0.9	2.33	3.23	11	Pass
NVNT	a	5700	Ant1	0.73	2.58	3.31	11	Pass
NVNT	n20	5500	Ant1	-1.1	2.59	1.49	11	Pass
NVNT	n20	5580	Ant1	-0.54	2.45	1.91	11	Pass
NVNT	n20	5700	Ant1	0.88	2.61	3.49	11	Pass
NVNT	n40	5510	Ant1	-5.4	4.24	-1.16	11	Pass
NVNT	n40	5550	Ant1	-5.88	4.22	-1.66	11	Pass
NVNT	n40	5670	Ant1	-3.97	4.04	0.07	11	Pass
NVNT	ac20	5500	Ant1	-0.94	2.45	1.51	11	Pass
NVNT	ac20	5580	Ant1	-0.68	2.59	1.91	11	Pass
NVNT	ac20	5700	Ant1	-0.16	2.58	2.42	11	Pass
NVNT	ac40	5510	Ant1	-6.04	4.1	-1.94	11	Pass
NVNT	ac40	5550	Ant1	-5.32	4.22	-1.10	11	Pass
NVNT	ac40	5670	Ant1	-4.67	2.45	-2.22	11	Pass
NVNT	ac80	5530	Ant1	-10.79	6.31	-4.48	11	Pass
NVNT	ac80	5610	Ant1	-10.56	6.19	-4.37	11	Pass



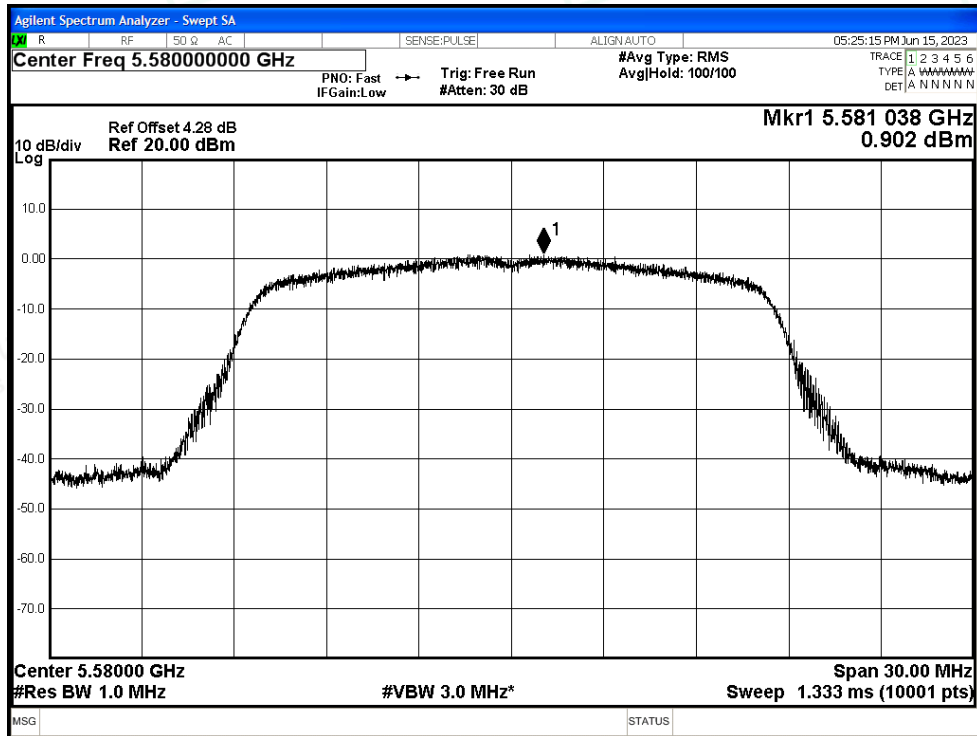


Test Graphs

PSD NVNT a 5500MHz Ant1

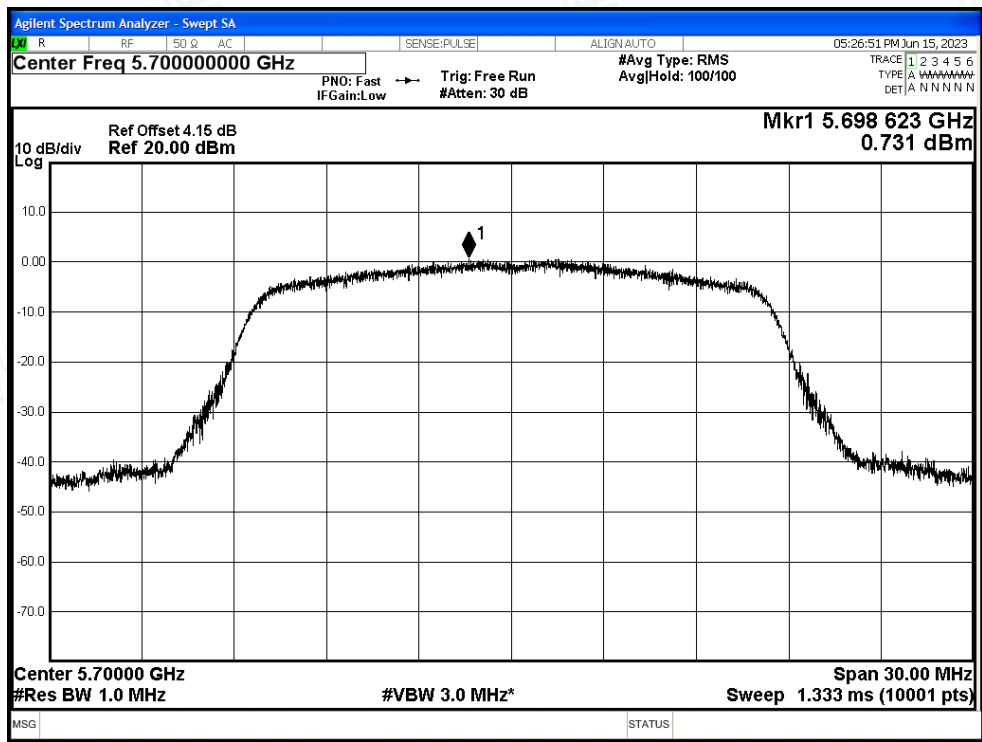


PSD NVNT a 5580MHz Ant1

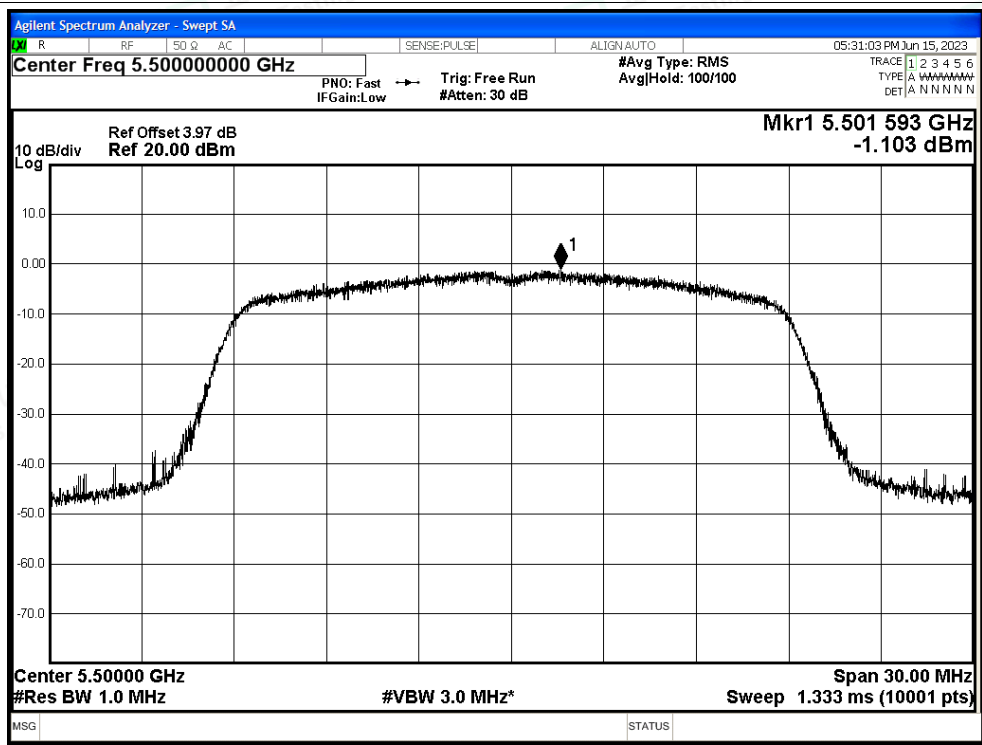


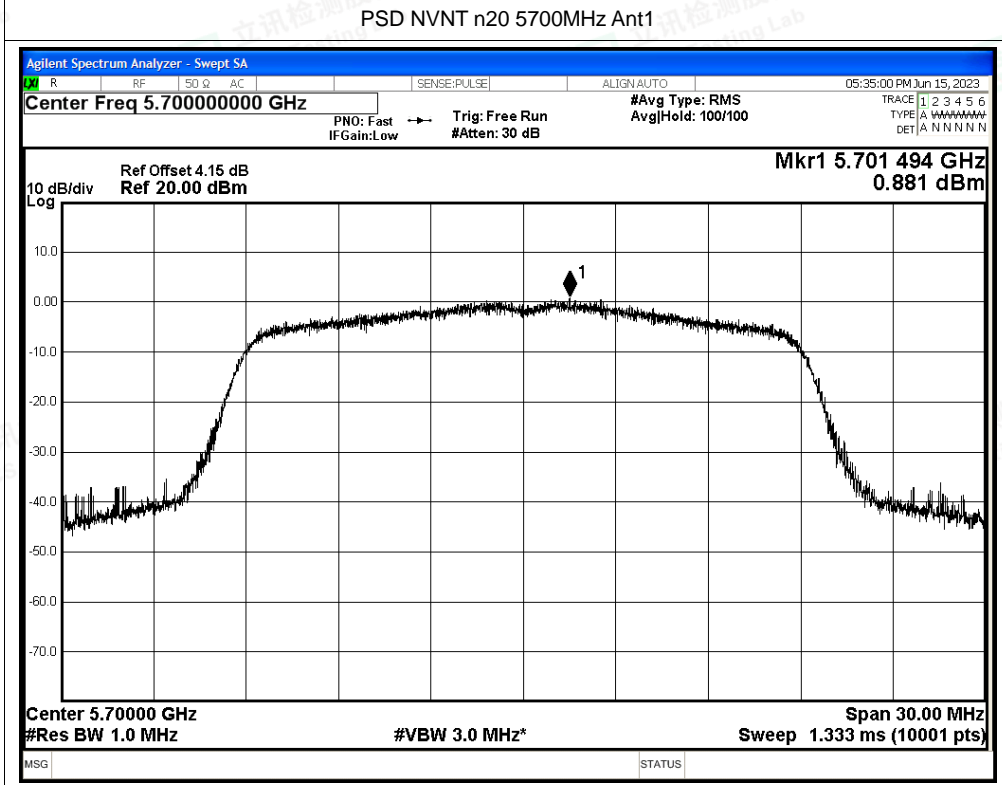
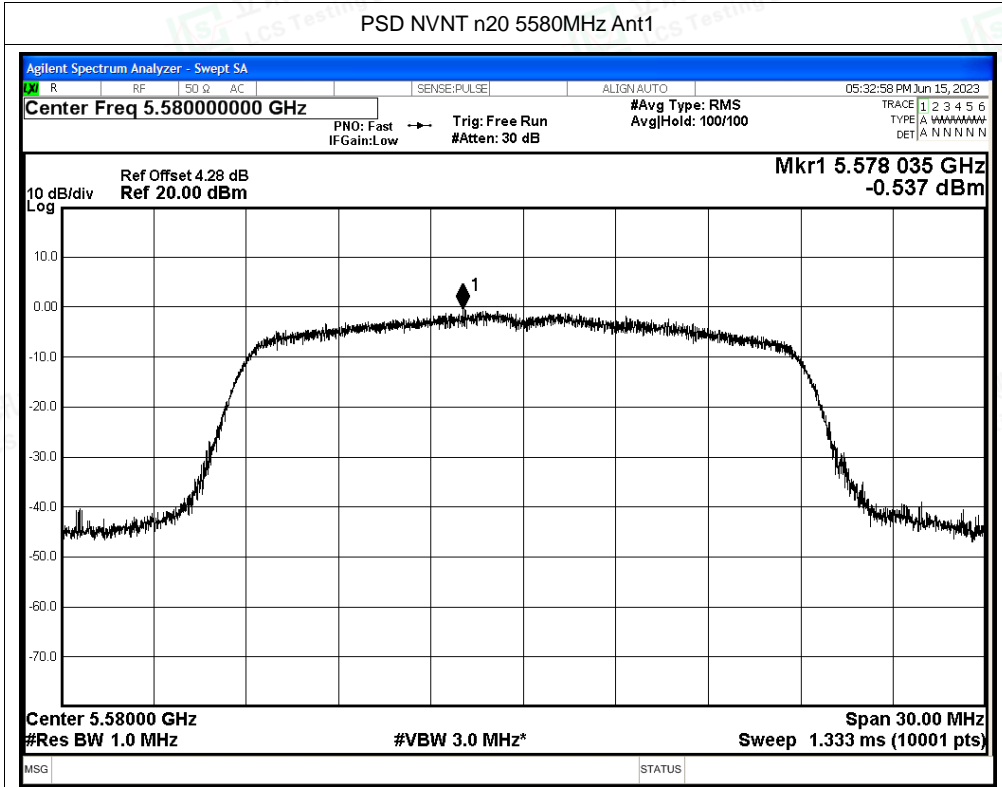


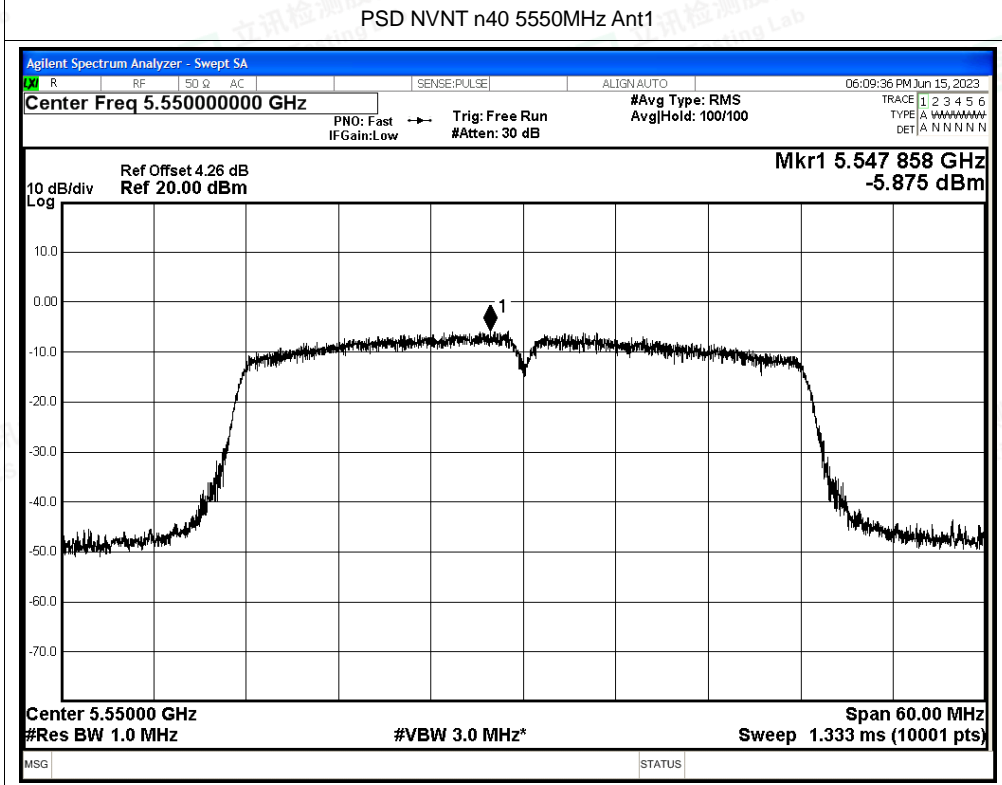
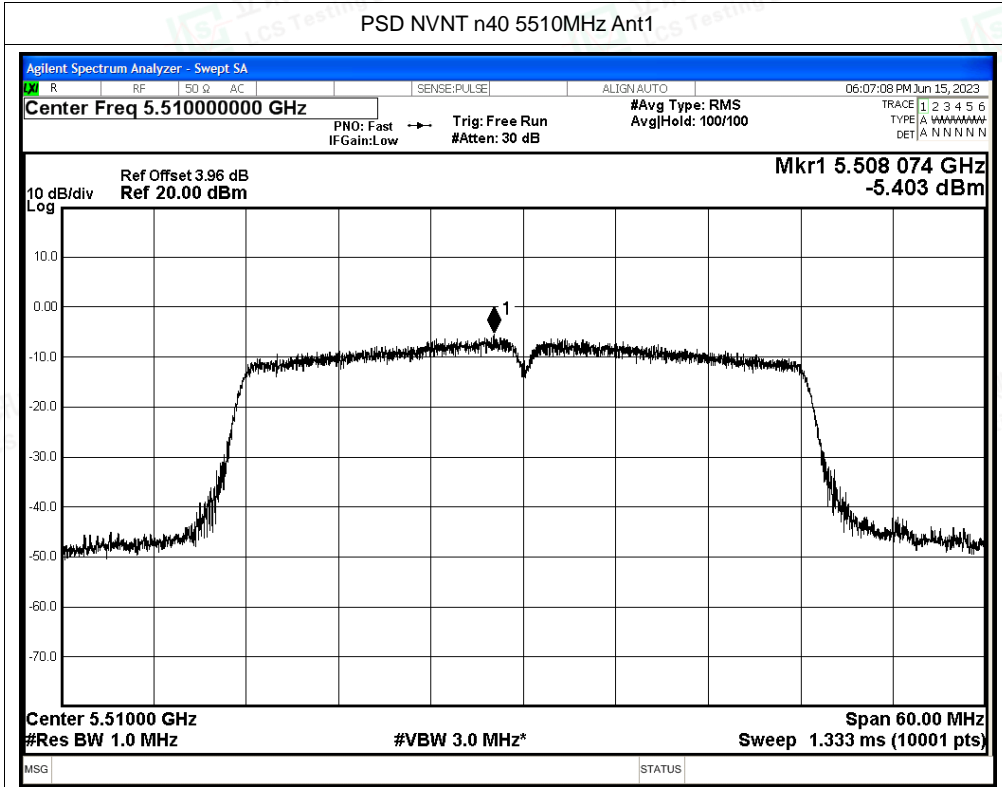
PSD NVNT a 5700MHz Ant1

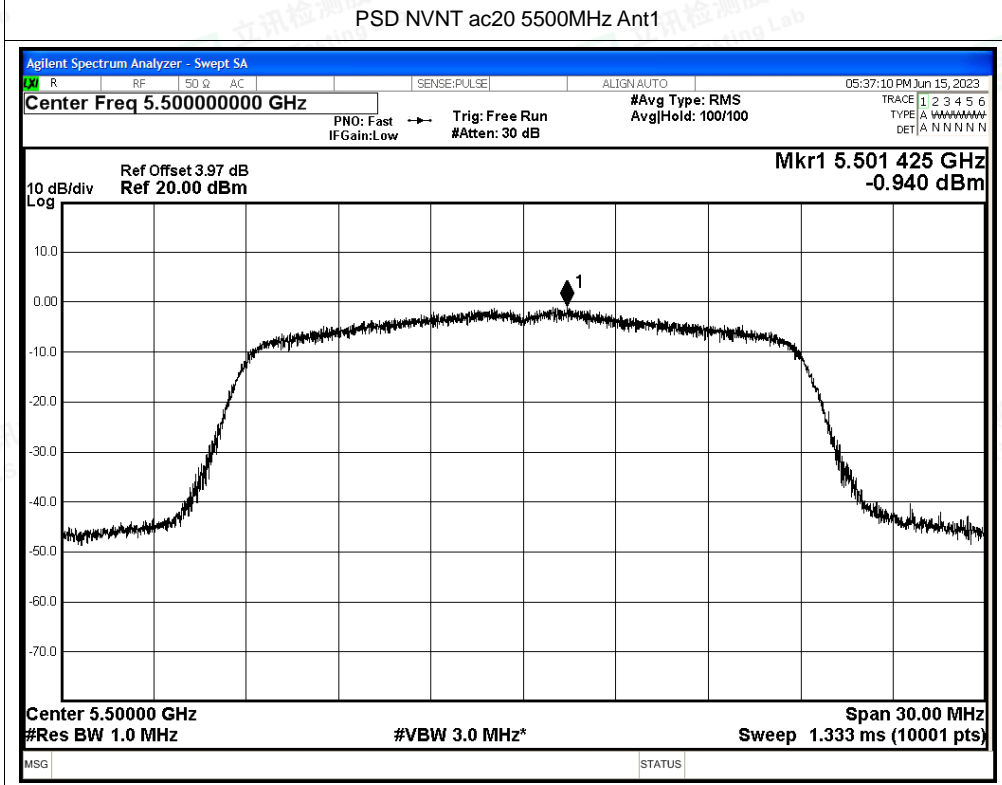
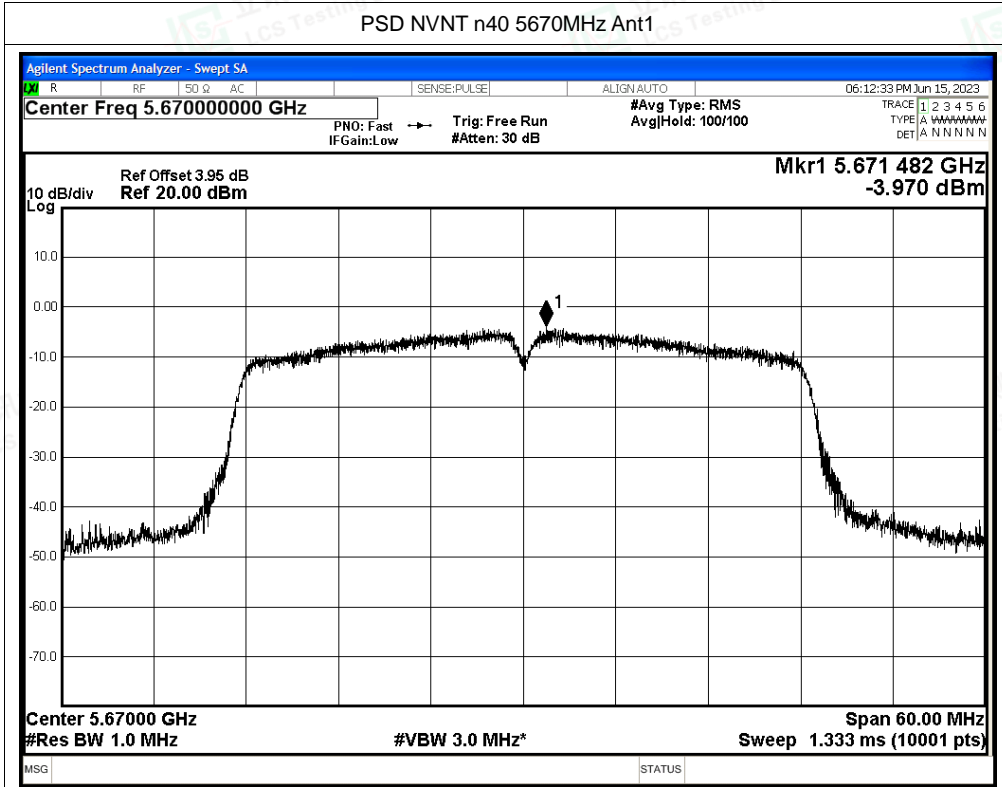


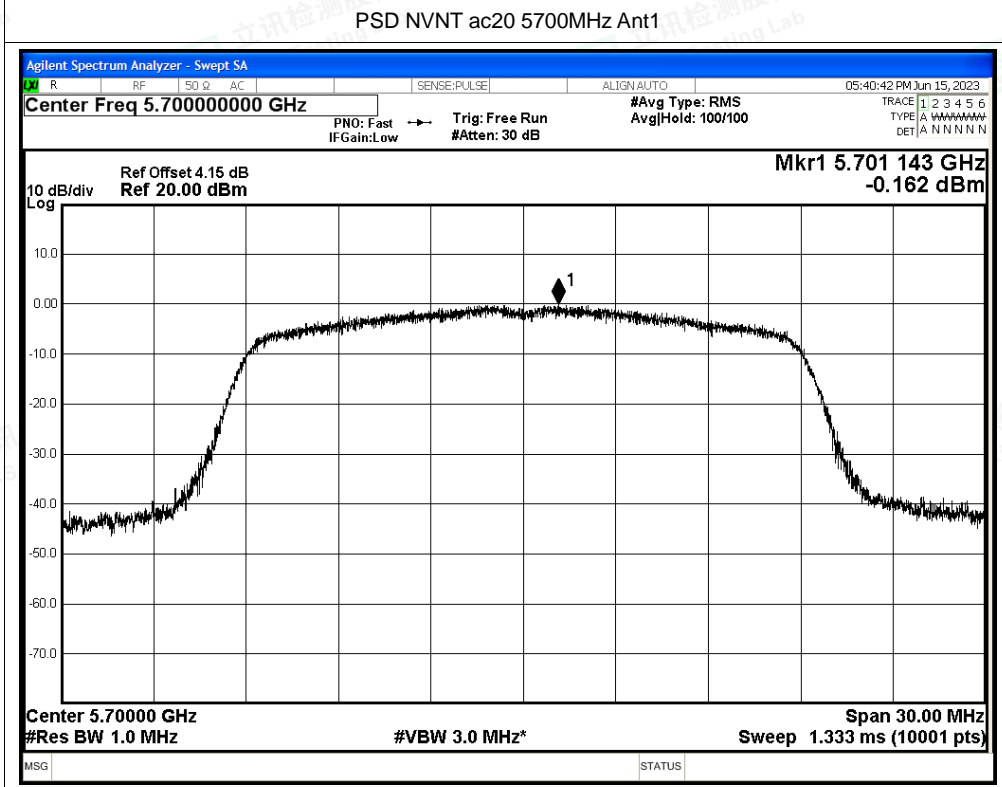
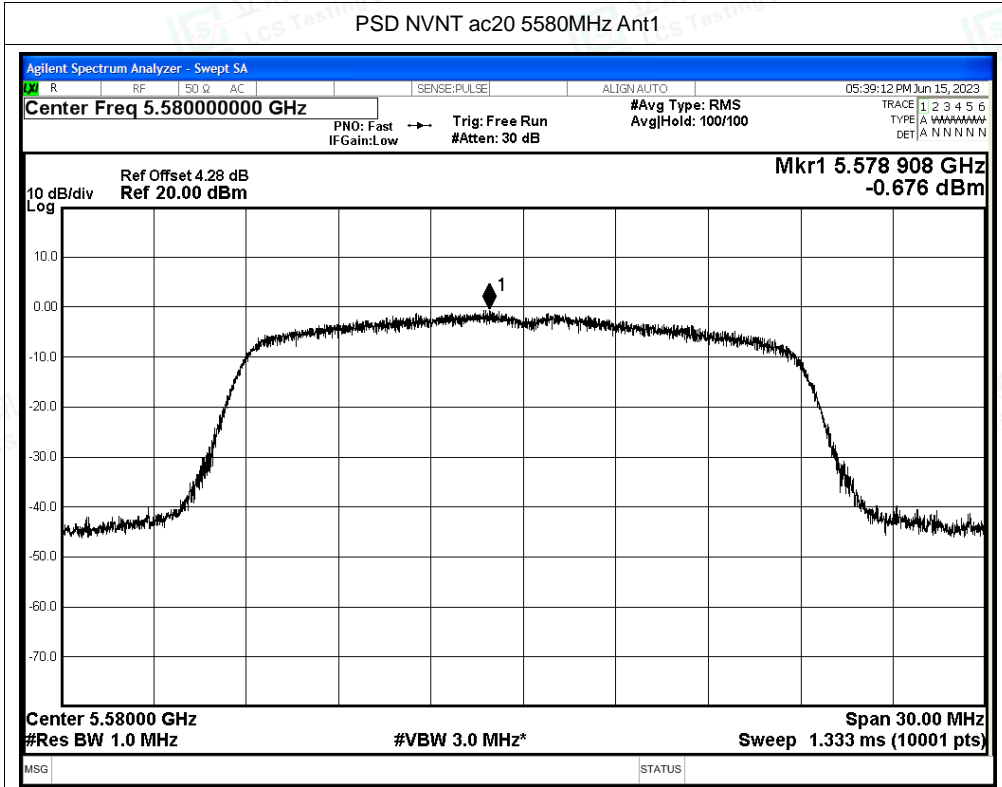
PSD NVNT n20 5500MHz Ant1





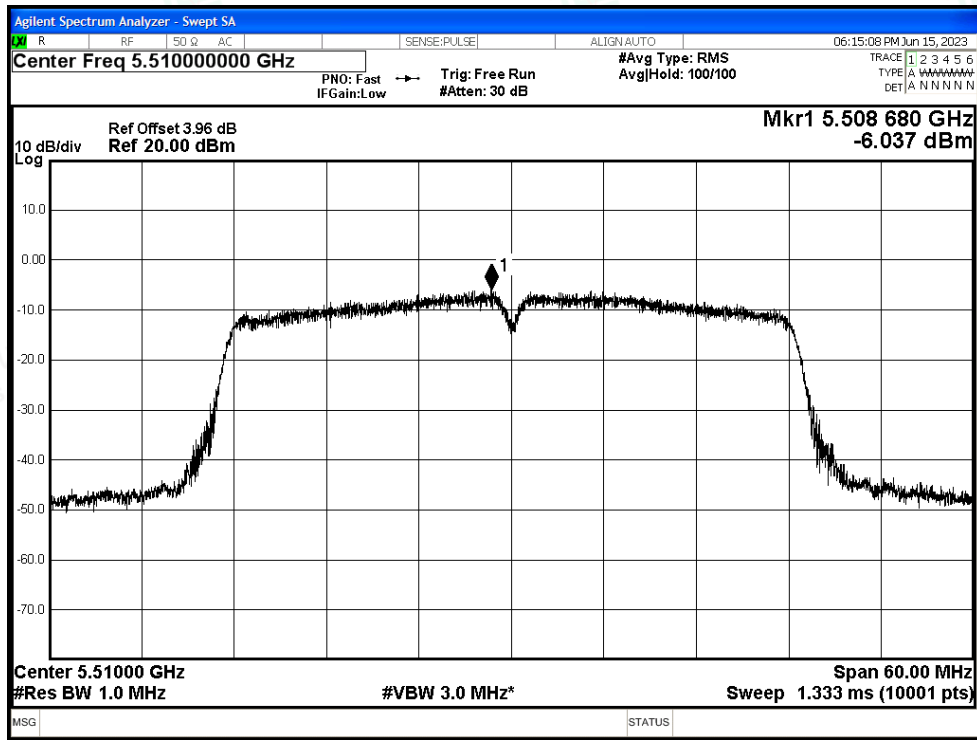




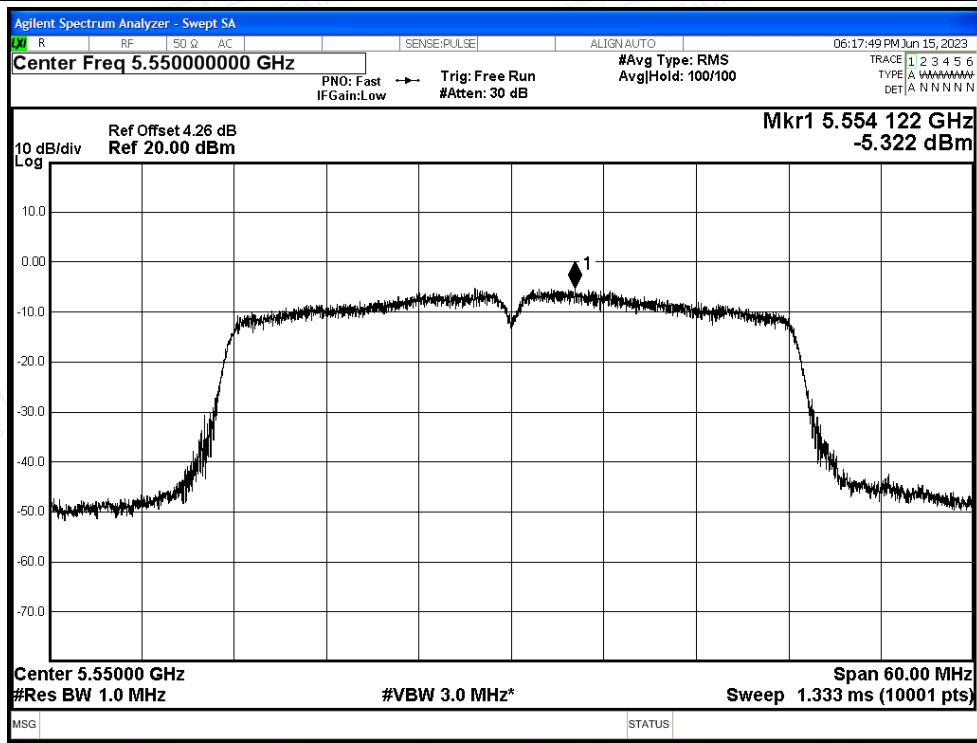


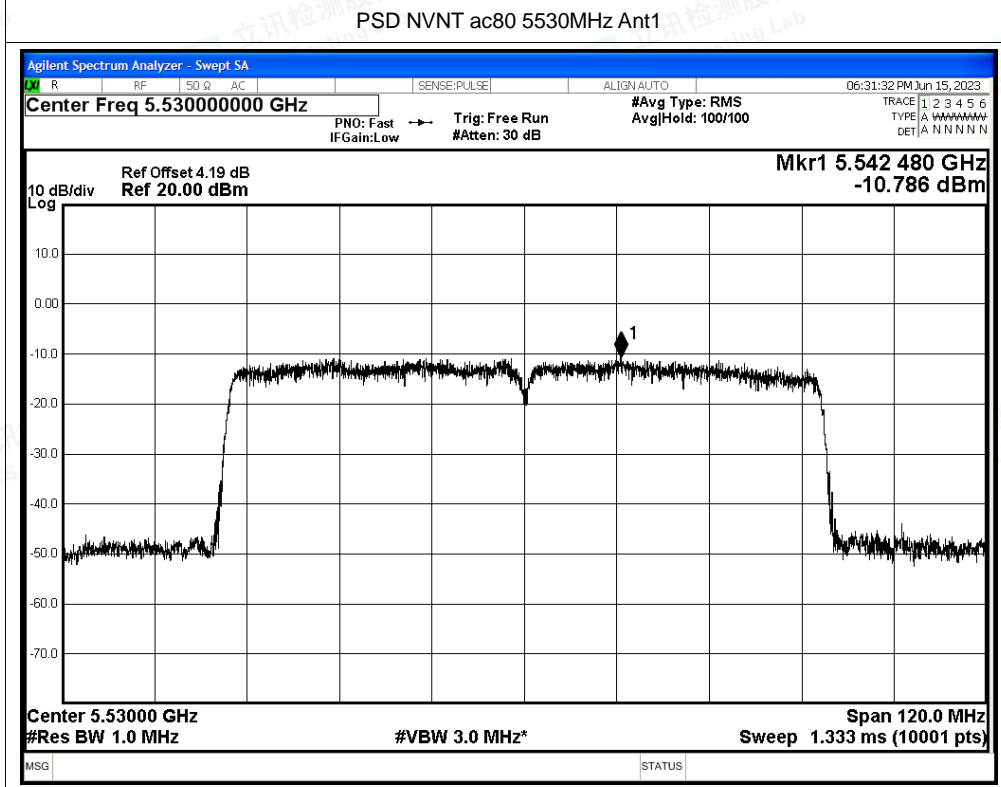
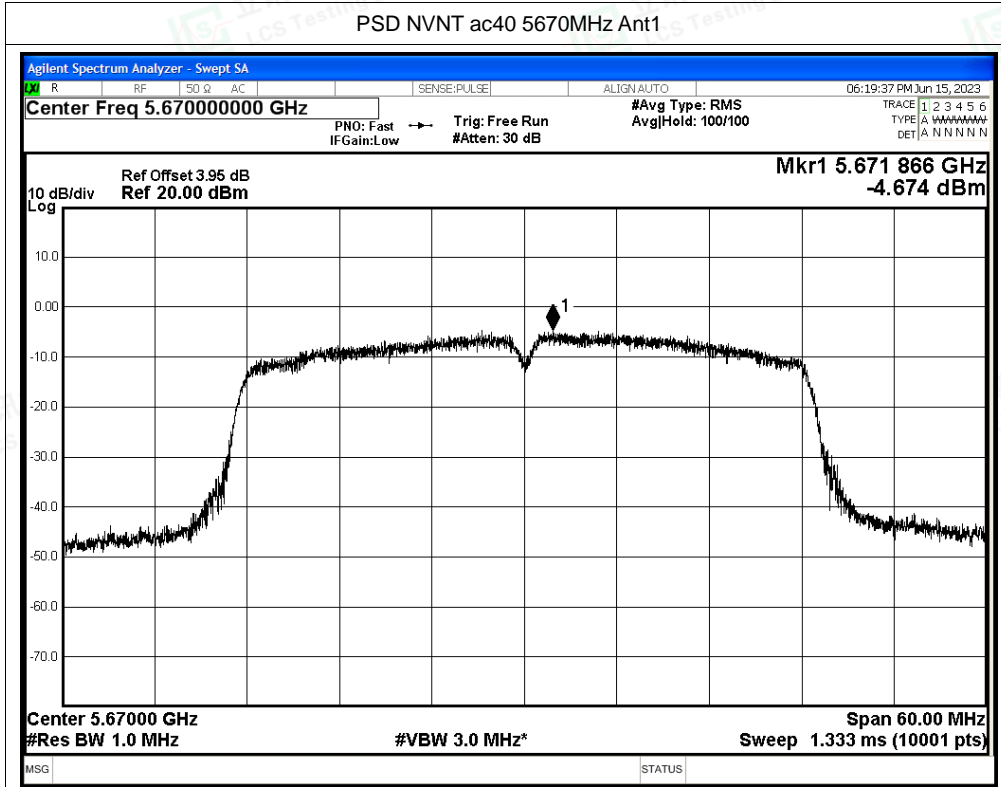


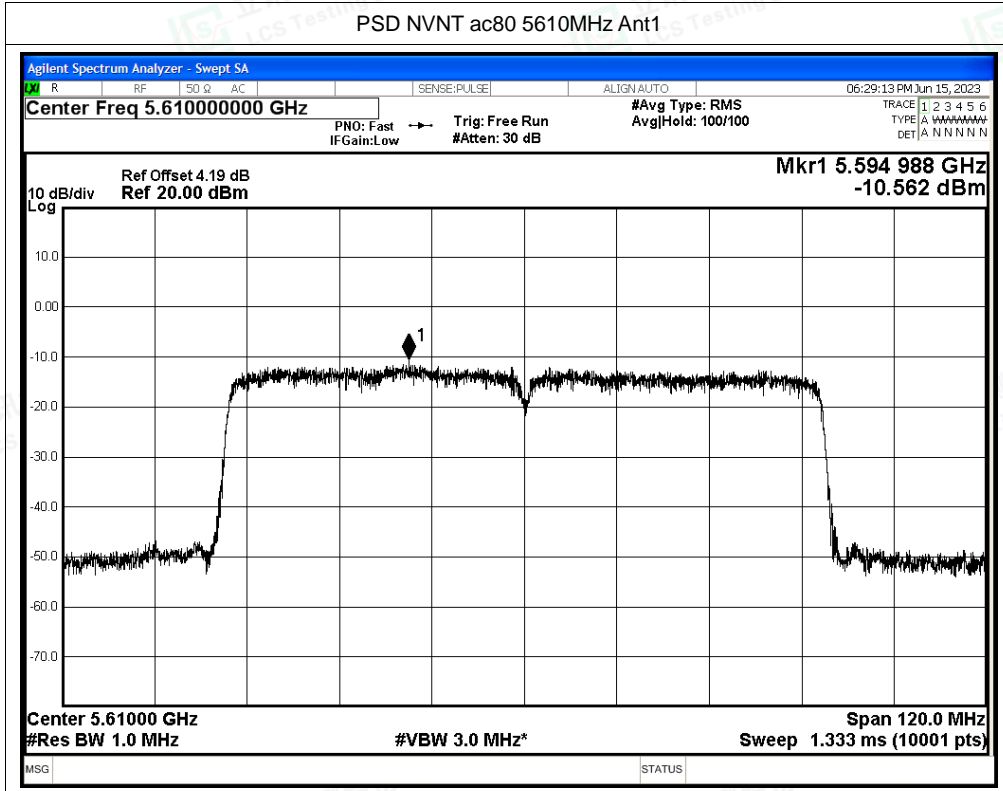
PSD NVNT ac40 5510MHz Ant1



PSD NVNT ac40 5550MHz 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	5500	Ant1	5460	-48.59	3.71	50.35	Peak	68.2	Pass
NVNT	a	5500	Ant1	5460	-56.17	3.71	42.77	Average	54	Pass
NVNT	a	5500	Ant1	5465.2	-47.33	3.71	51.61	Peak	68.2	Pass
NVNT	a	5500	Ant1	5464.6	-55.92	3.71	43.02	Average	54	Pass
NVNT	a	5500	Ant1	5470	-49.1	3.71	49.84	Peak	68.2	Pass
NVNT	a	5500	Ant1	5470	-55.97	3.71	42.97	Average	54	Pass
NVNT	a	5700	Ant1	5725	-46.85	3.71	52.09	Peak	68.2	Pass
NVNT	a	5700	Ant1	5725	-55.5	3.71	43.44	Average	54	Pass
NVNT	a	5700	Ant1	5726.8	-55.11	3.71	43.83	Average	54	Pass
NVNT	a	5700	Ant1	5735	-48.68	3.71	50.26	Peak	68.2	Pass
NVNT	a	5700	Ant1	5735	-55.91	3.71	43.03	Average	54	Pass
NVNT	n20	5500	Ant1	5460	-48.88	3.71	50.06	Peak	68.2	Pass
NVNT	n20	5500	Ant1	5460	-56.2	3.71	42.74	Average	54	Pass
NVNT	n20	5500	Ant1	5462.6	-45.47	3.71	53.47	Peak	68.2	Pass
NVNT	n20	5500	Ant1	5468.4	-55.79	3.71	43.15	Average	54	Pass
NVNT	n20	5500	Ant1	5470	-48.79	3.71	50.15	Peak	68.2	Pass
NVNT	n20	5500	Ant1	5470	-55.99	3.71	42.95	Average	54	Pass
NVNT	n20	5700	Ant1	5725	-48.44	3.71	50.50	Peak	68.2	Pass
NVNT	n20	5700	Ant1	5725	-55.38	3.71	43.56	Average	54	Pass
NVNT	n20	5700	Ant1	5729.4	-47.49	3.71	51.45	Peak	68.2	Pass
NVNT	n20	5700	Ant1	5725.2	-55.33	3.71	43.61	Average	54	Pass
NVNT	n20	5700	Ant1	5735	-48.01	3.71	50.93	Peak	68.2	Pass
NVNT	n20	5700	Ant1	5735	-55.86	3.71	43.08	Average	54	Pass
NVNT	n40	5510	Ant1	5460	-48.87	3.71	50.07	Peak	68.2	Pass
NVNT	n40	5510	Ant1	5460	-56.1	3.71	42.84	Average	54	Pass
NVNT	n40	5510	Ant1	5464	-47.35	3.71	51.59	Peak	68.2	Pass
NVNT	n40	5510	Ant1	5469.2	-55.52	3.71	43.42	Average	54	Pass
NVNT	n40	5510	Ant1	5470	-49.96	3.71	48.98	Peak	68.2	Pass
NVNT	n40	5510	Ant1	5470	-55.61	3.71	43.33	Average	54	Pass
NVNT	n40	5670	Ant1	5725	-48.28	3.71	50.66	Peak	68.2	Pass
NVNT	n40	5670	Ant1	5725	-55.98	3.71	42.96	Average	54	Pass
NVNT	n40	5670	Ant1	5726.2	-48.09	3.71	50.85	Peak	68.2	Pass
NVNT	n40	5670	Ant1	5727.8	-55.8	3.71	43.14	Average	54	Pass
NVNT	n40	5670	Ant1	5735	-48.98	3.71	49.96	Peak	68.2	Pass
NVNT	n40	5670	Ant1	5735	-56.21	3.71	42.73	Average	54	Pass
NVNT	ac20	5500	Ant1	5460	-49.43	3.71	49.51	Peak	68.2	Pass
NVNT	ac20	5500	Ant1	5460	-56.05	3.71	42.89	Average	54	Pass



Shenzhen LCS Compliance Testing Laboratory Ltd.
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
 Scan code to check authenticity



NVNT	ac20	5500	Ant1	5465	-47.45	3.71	51.49	Peak	68.2	Pass
NVNT	ac20	5500	Ant1	5466	-55.73	3.71	43.21	Average	54	Pass
NVNT	ac20	5500	Ant1	5470	-48.75	3.71	50.19	Peak	68.2	Pass
NVNT	ac20	5500	Ant1	5470	-55.84	3.71	43.10	Average	54	Pass
NVNT	ac20	5700	Ant1	5725	-47.99	3.71	50.95	Peak	68.2	Pass
NVNT	ac20	5700	Ant1	5725	-55.63	3.71	43.31	Average	54	Pass
NVNT	ac20	5700	Ant1	5729.4	-46.92	3.71	52.02	Peak	68.2	Pass
NVNT	ac20	5700	Ant1	5729.2	-55.3	3.71	43.64	Average	54	Pass
NVNT	ac20	5700	Ant1	5735	-48.91	3.71	50.03	Peak	68.2	Pass
NVNT	ac20	5700	Ant1	5735	-55.73	3.71	43.21	Average	54	Pass
NVNT	ac40	5510	Ant1	5460	-48.72	3.71	50.22	Peak	68.2	Pass
NVNT	ac40	5510	Ant1	5460	-56.04	3.71	42.90	Average	54	Pass
NVNT	ac40	5510	Ant1	5468.8	-47.54	3.71	51.40	Peak	68.2	Pass
NVNT	ac40	5510	Ant1	5468.8	-55.5	3.71	43.44	Average	54	Pass
NVNT	ac40	5510	Ant1	5470	-49.04	3.71	49.90	Peak	68.2	Pass
NVNT	ac40	5510	Ant1	5470	-55.97	3.71	42.97	Average	54	Pass
NVNT	ac40	5670	Ant1	5725	-50.39	3.71	48.55	Peak	68.2	Pass
NVNT	ac40	5670	Ant1	5725	-55.99	3.71	42.95	Average	54	Pass
NVNT	ac40	5670	Ant1	5728.8	-47.2	3.71	51.74	Peak	68.2	Pass
NVNT	ac40	5670	Ant1	5732.6	-55.6	3.71	43.34	Average	54	Pass
NVNT	ac40	5670	Ant1	5735	-50.43	3.71	48.51	Peak	68.2	Pass
NVNT	ac40	5670	Ant1	5735	-56.24	3.71	42.70	Average	54	Pass
NVNT	ac80	5530	Ant1	5460	-48.36	3.71	50.58	Peak	68.2	Pass
NVNT	ac80	5530	Ant1	5460	-56.07	3.71	42.87	Average	54	Pass
NVNT	ac80	5530	Ant1	5463	-47.65	3.71	51.29	Peak	68.2	Pass
NVNT	ac80	5530	Ant1	5469.2	-54.25	3.71	44.69	Average	54	Pass
NVNT	ac80	5530	Ant1	5470	-48.82	3.71	50.12	Peak	68.2	Pass
NVNT	ac80	5530	Ant1	5470	-55.2	3.71	43.74	Average	54	Pass
NVNT	ac80	5610	Ant1	5725	-49.39	3.71	49.55	Peak	68.2	Pass
NVNT	ac80	5610	Ant1	5725	-56.14	3.71	42.80	Average	54	Pass
NVNT	ac80	5610	Ant1	5726.39	-46.65	3.71	52.29	Peak	68.2	Pass
NVNT	ac80	5610	Ant1	5733.36	-55.52	3.71	43.42	Average	54	Pass
NVNT	ac80	5610	Ant1	5735	-49.14	3.71	49.80	Peak	68.2	Pass
NVNT	ac80	5610	Ant1	5735	-56.39	3.71	42.55	Average	54	Pass

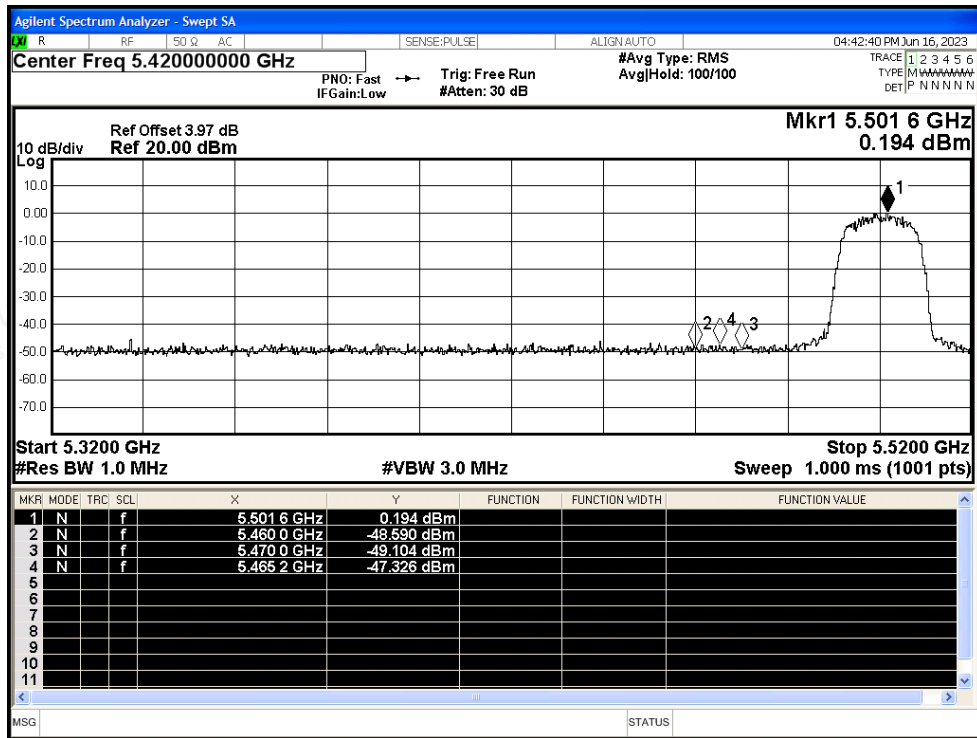


Shenzhen LCS Compliance Testing Laboratory Ltd.
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
 Scan code to check authenticity

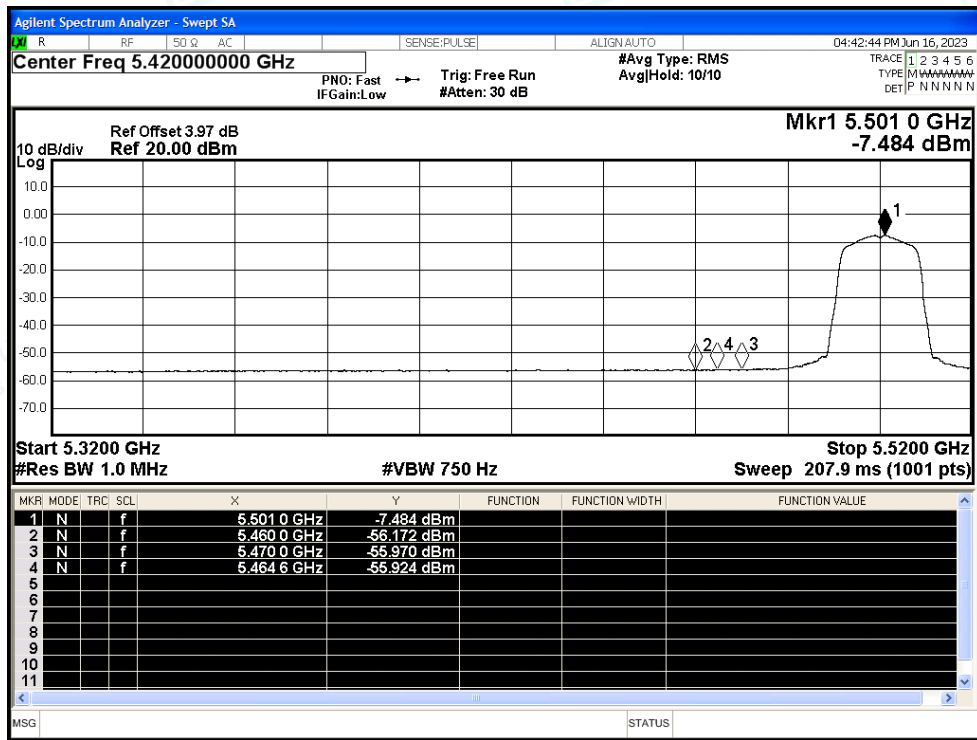


Test Graphs

Restrict Band NVNT a 5500MHz Ant1 Peak

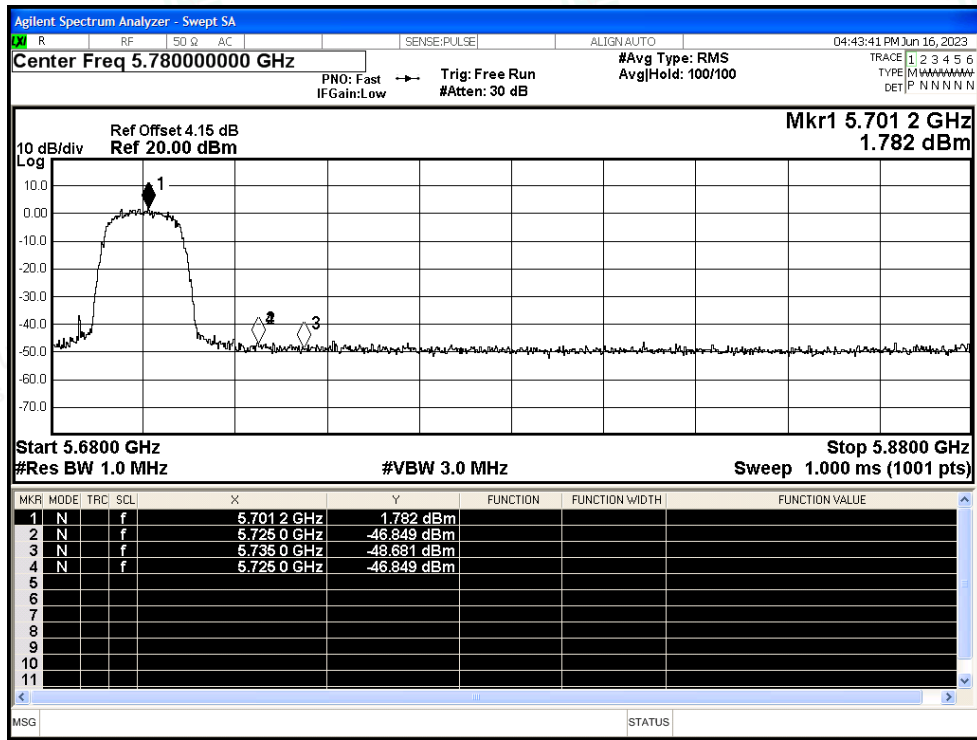


Restrict Band NVNT a 5500MHz Ant1 Average

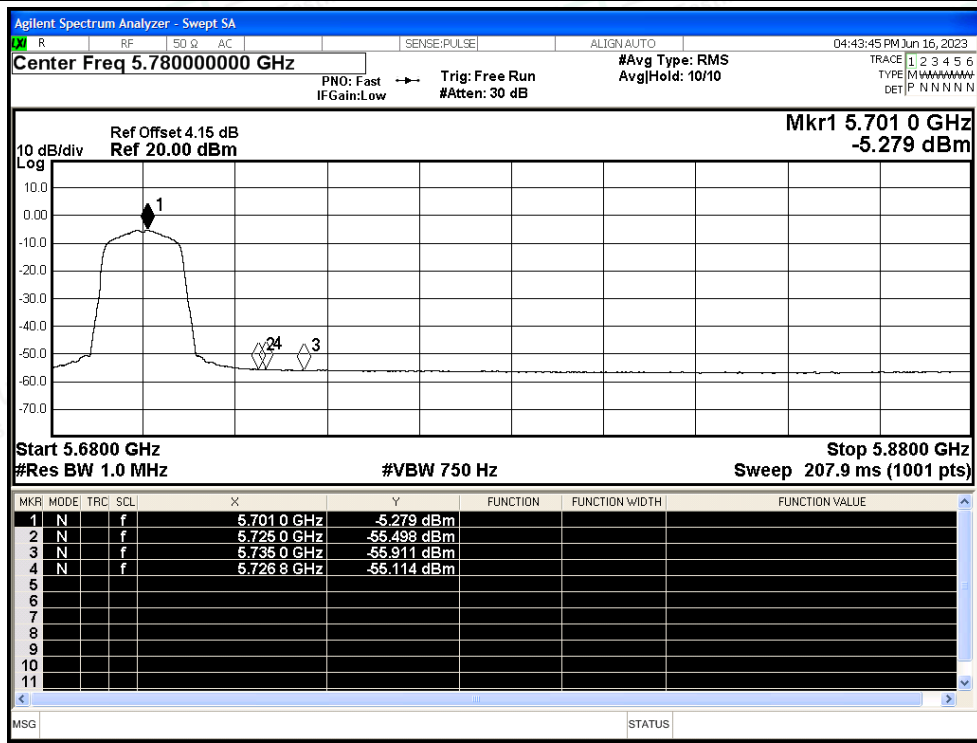




Restrict Band NVNT a 5700MHz Ant1 Peak

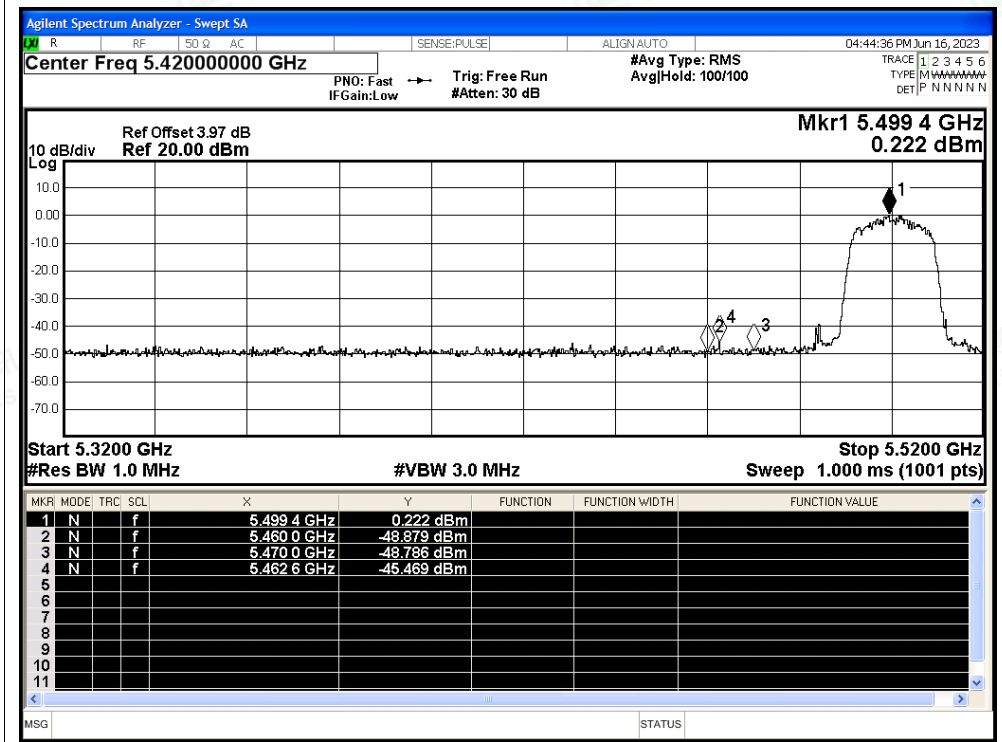


Restrict Band NVNT a 5700MHz Ant1 Average

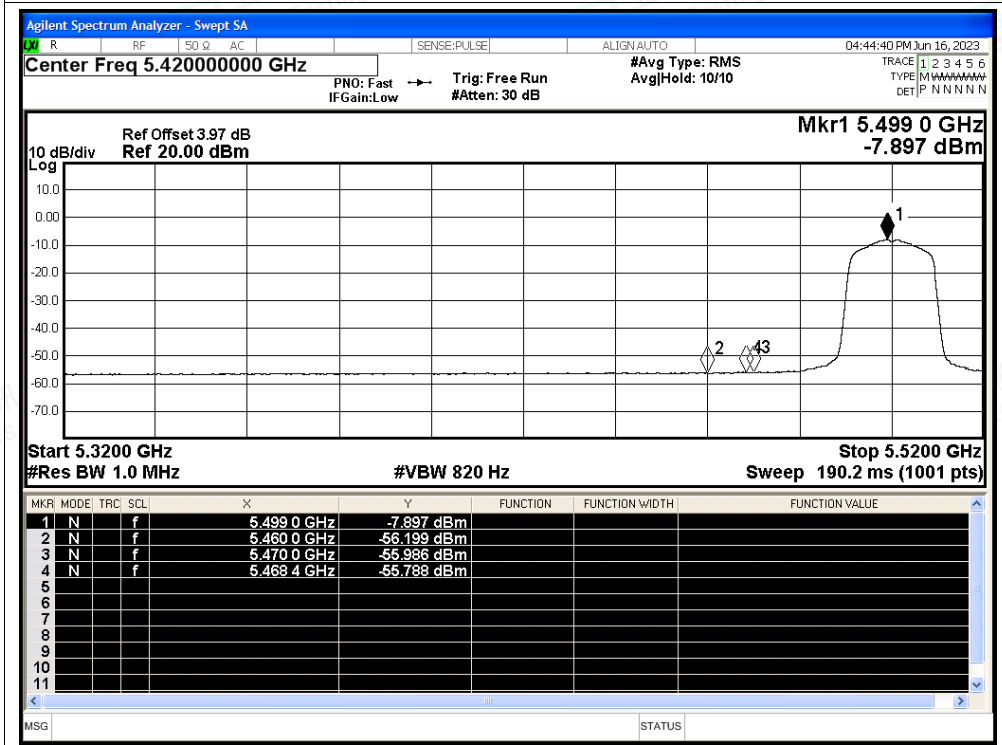




Restrict Band NVNT n20 5500MHz Ant1 Peak

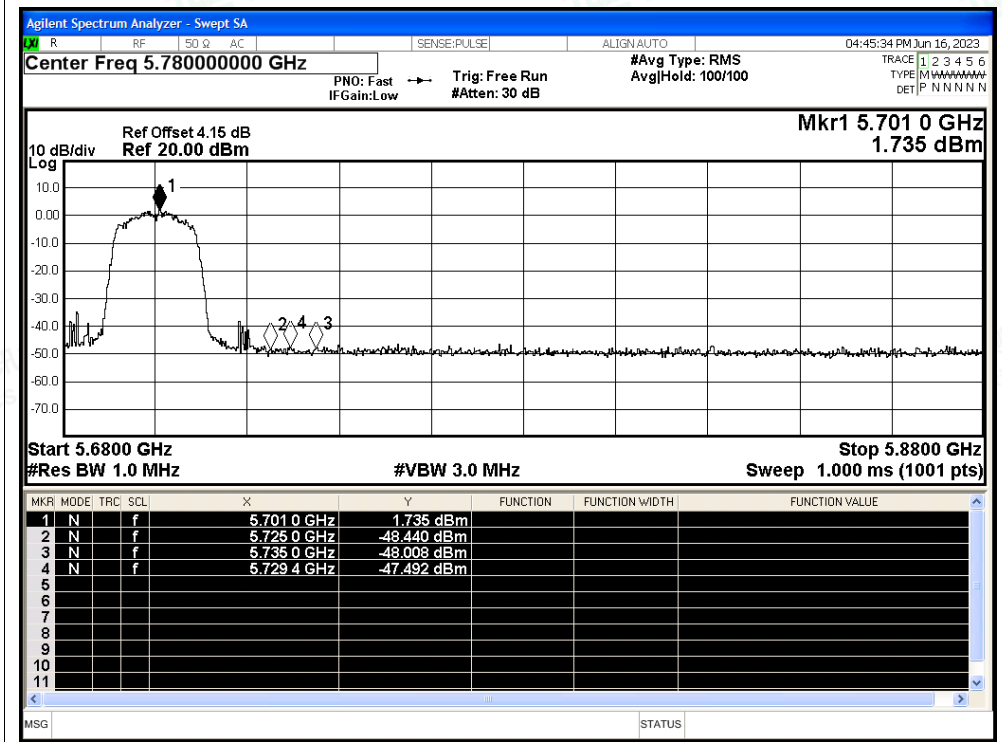


Restrict Band NVNT n20 5500MHz Ant1 Average

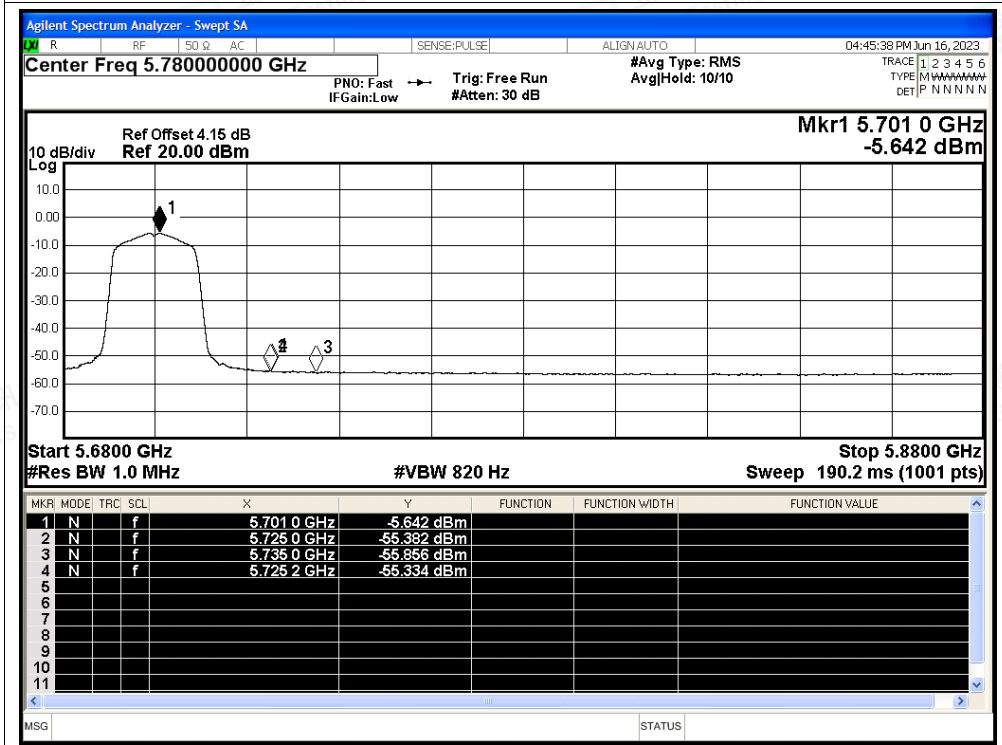




Restrict Band NVNT n20 5700MHz Ant1 Peak

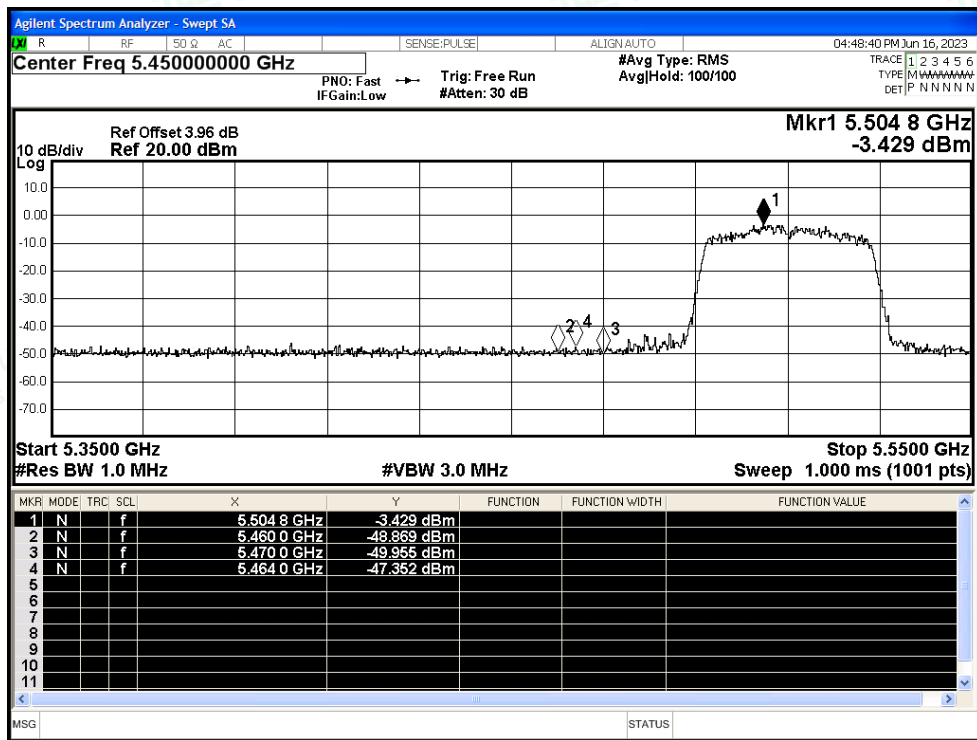


Restrict Band NVNT n20 5700MHz Ant1 Average

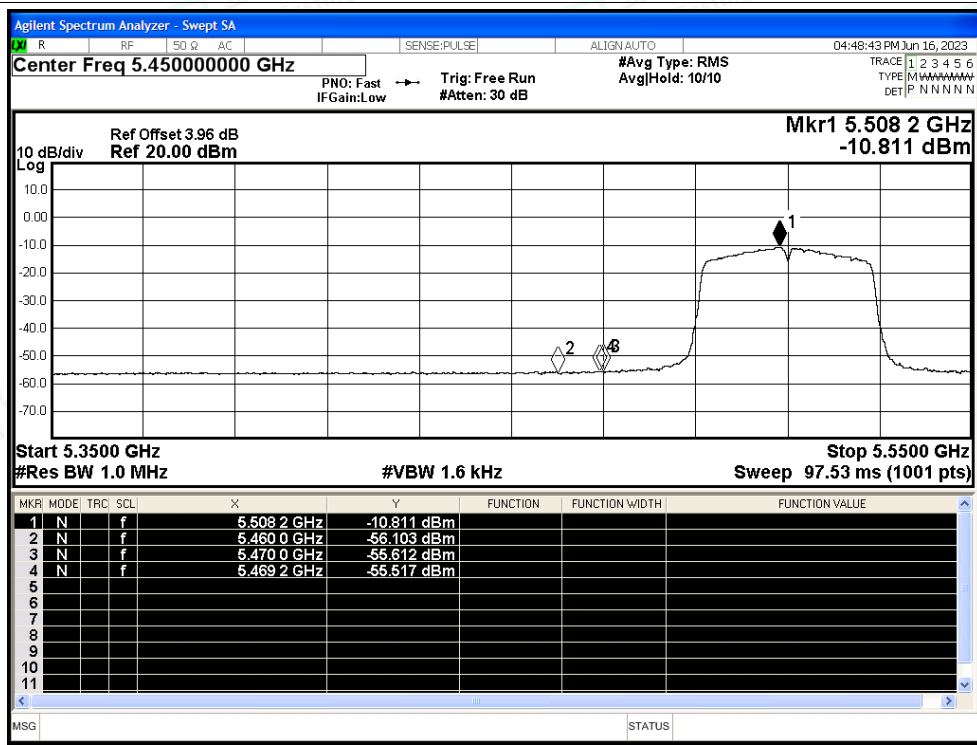




Restrict Band NVNT n40 5510MHz Ant1 Peak

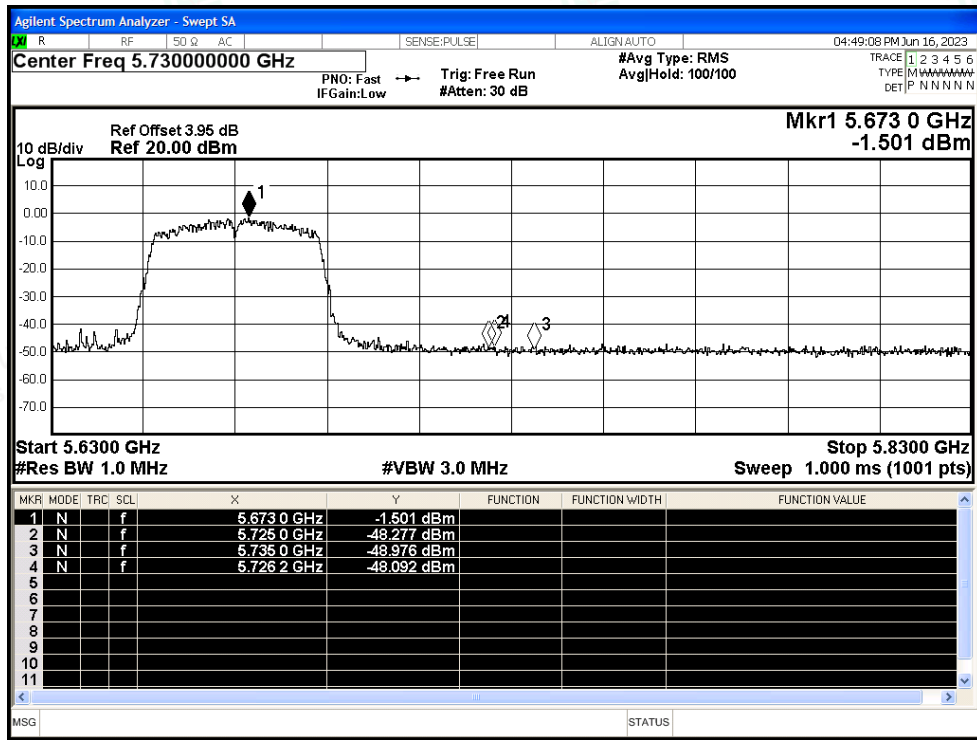


Restrict Band NVNT n40 5510MHz Ant1 Average

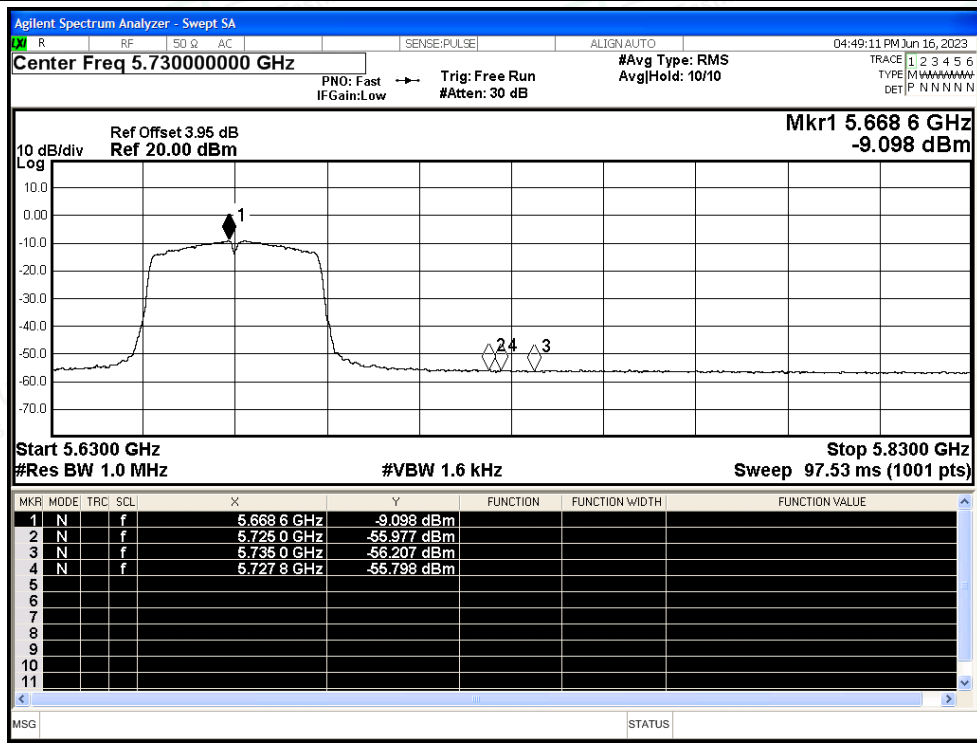




Restrict Band NVNT n40 5670MHz Ant1 Peak

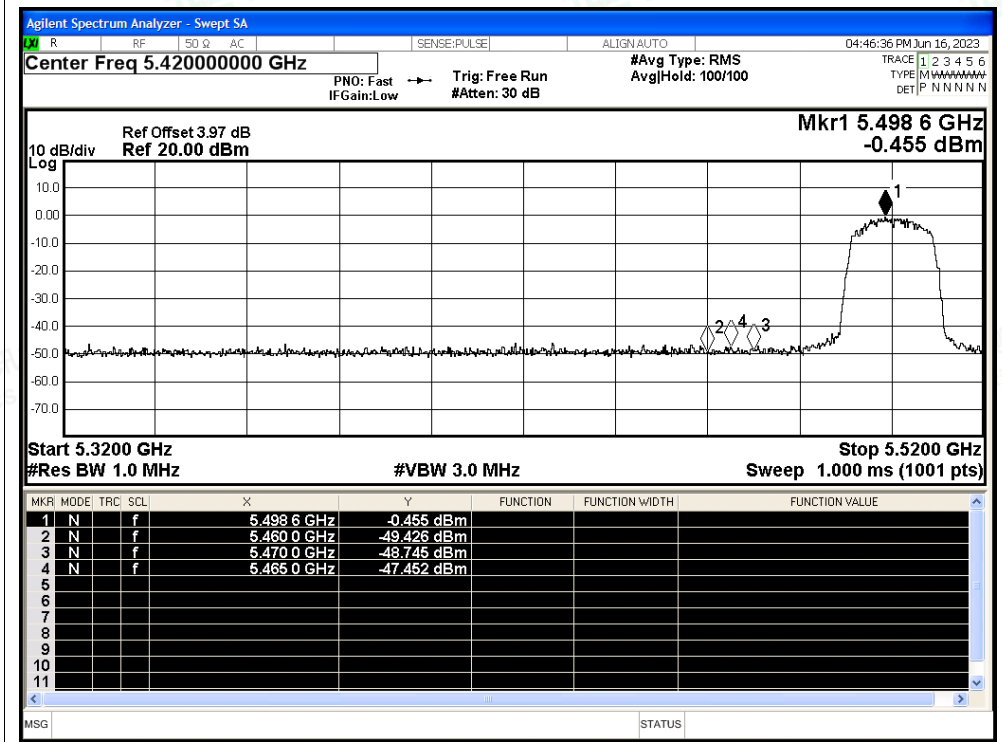


Restrict Band NVNT n40 5670MHz Ant1 Average

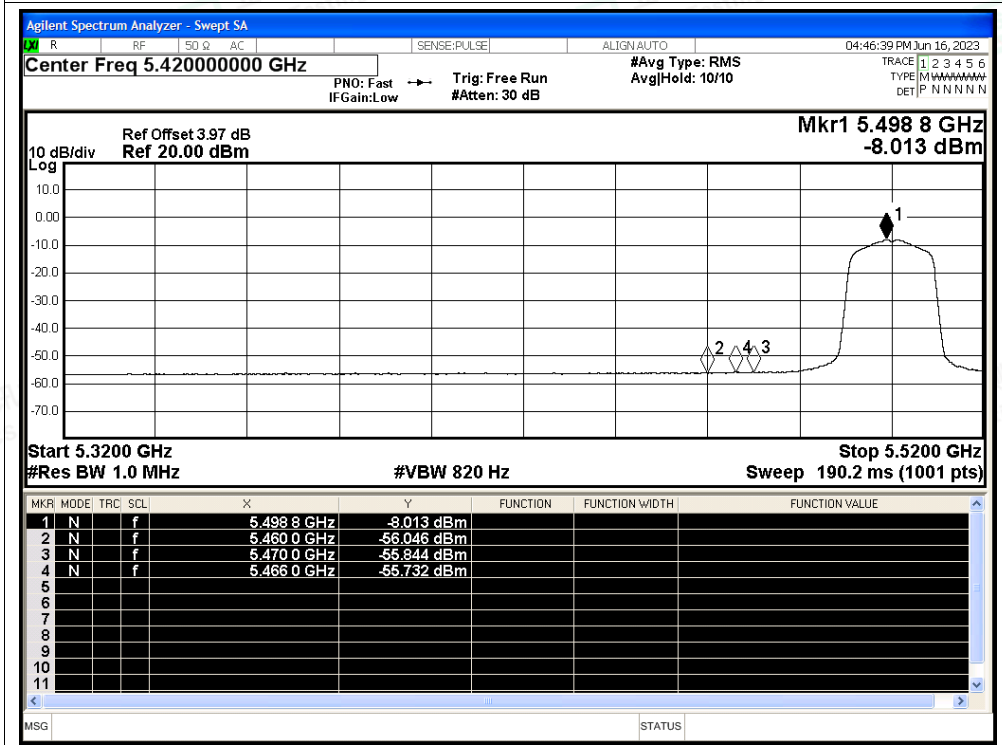




Restrict Band NVNT ac20 5500MHz Ant1 Peak

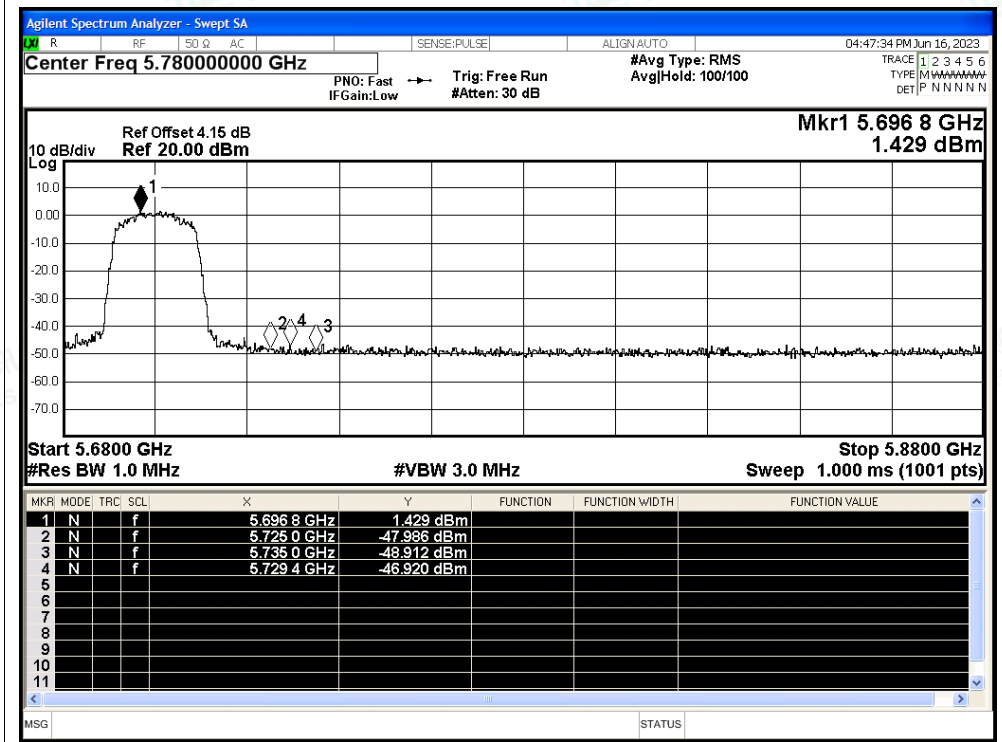


Restrict Band NVNT ac20 5500MHz Ant1 Average

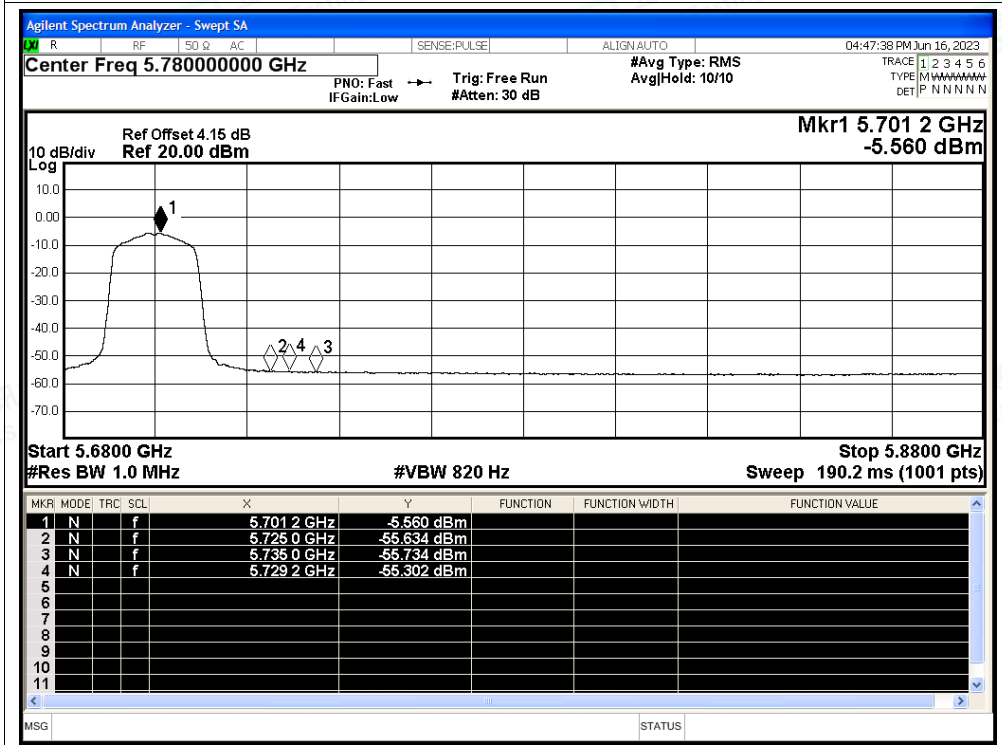




Restrict Band NVNT ac20 5700MHz Ant1 Peak

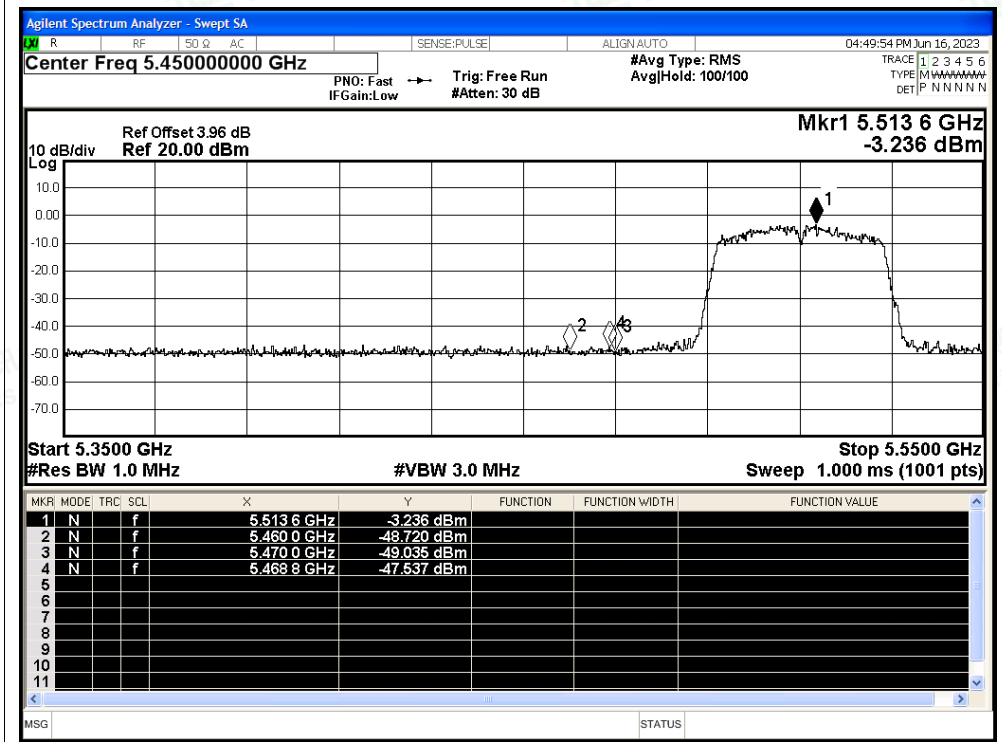


Restrict Band NVNT ac20 5700MHz Ant1 Average

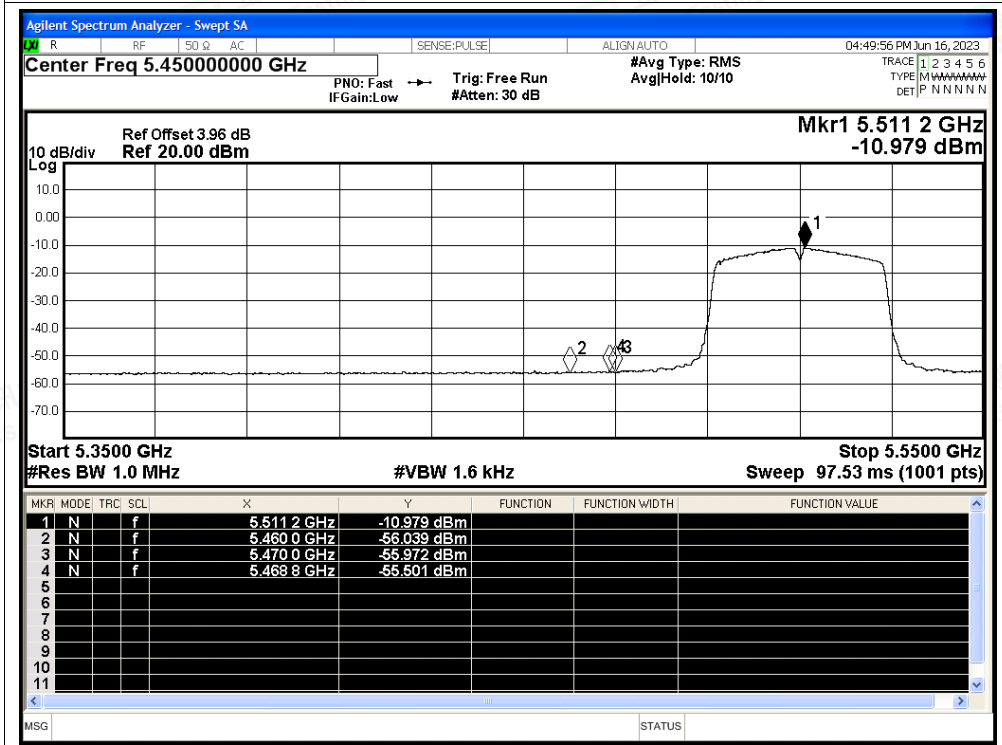




Restrict Band NVNT ac40 5510MHz Ant1 Peak

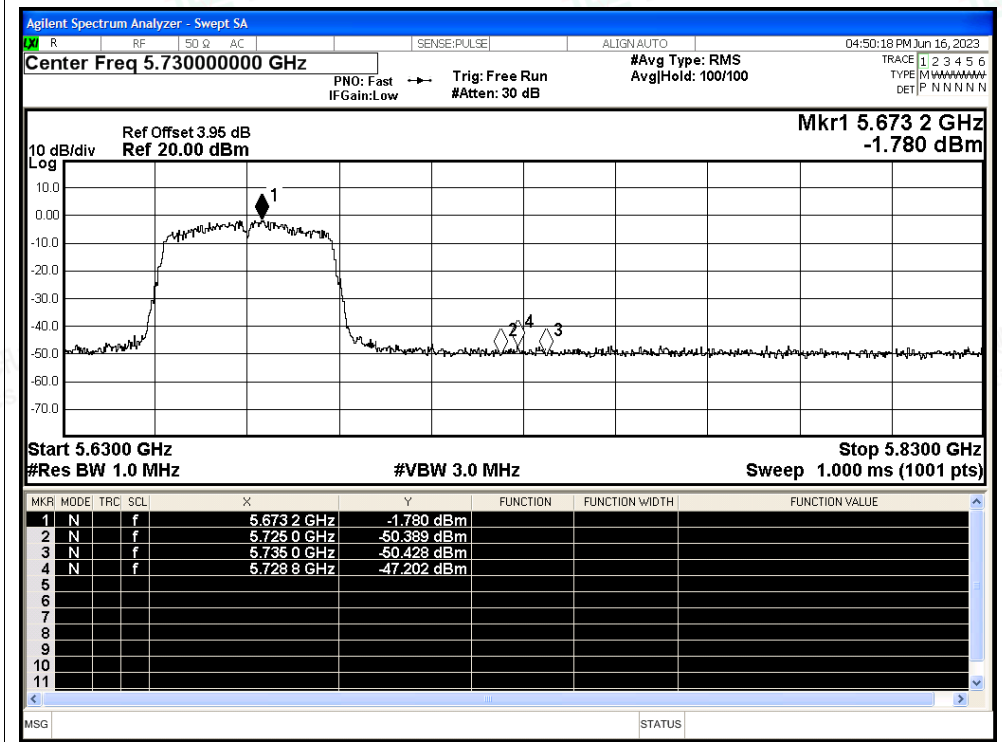


Restrict Band NVNT ac40 5510MHz Ant1 Average

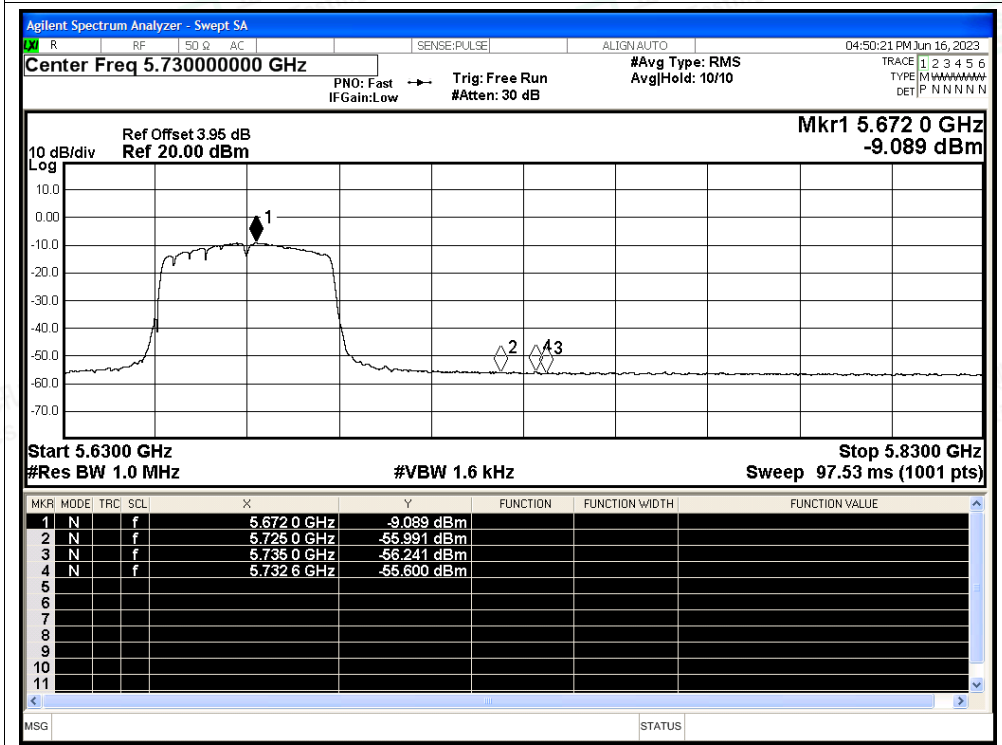




Restrict Band NVNT ac40 5670MHz Ant1 Peak

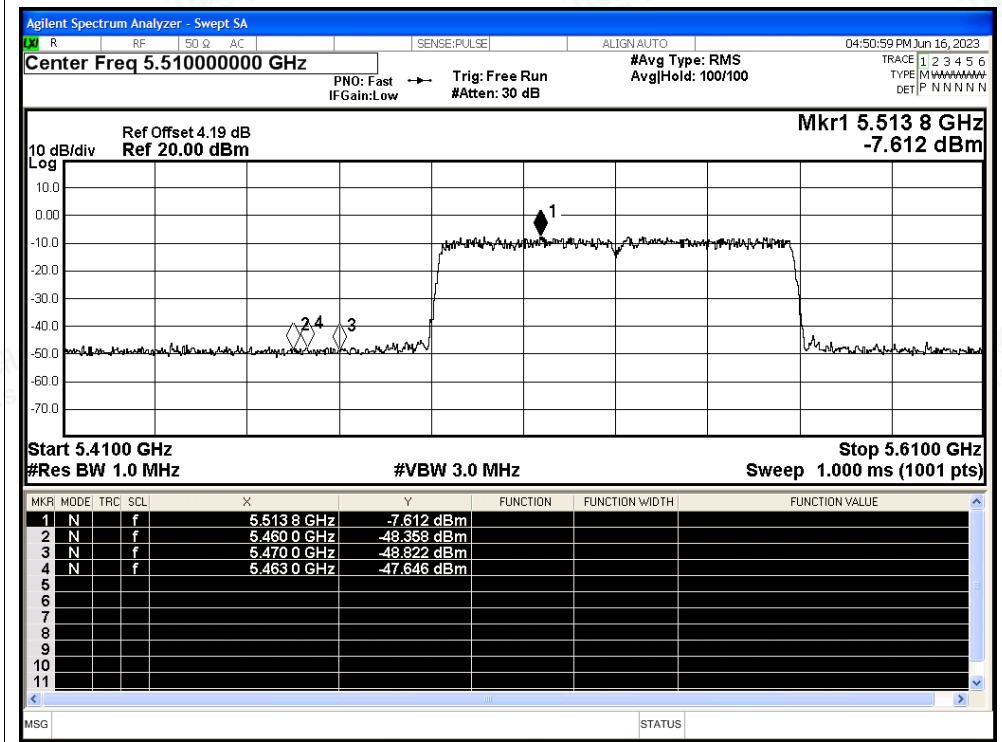


Restrict Band NVNT ac40 5670MHz Ant1 Average

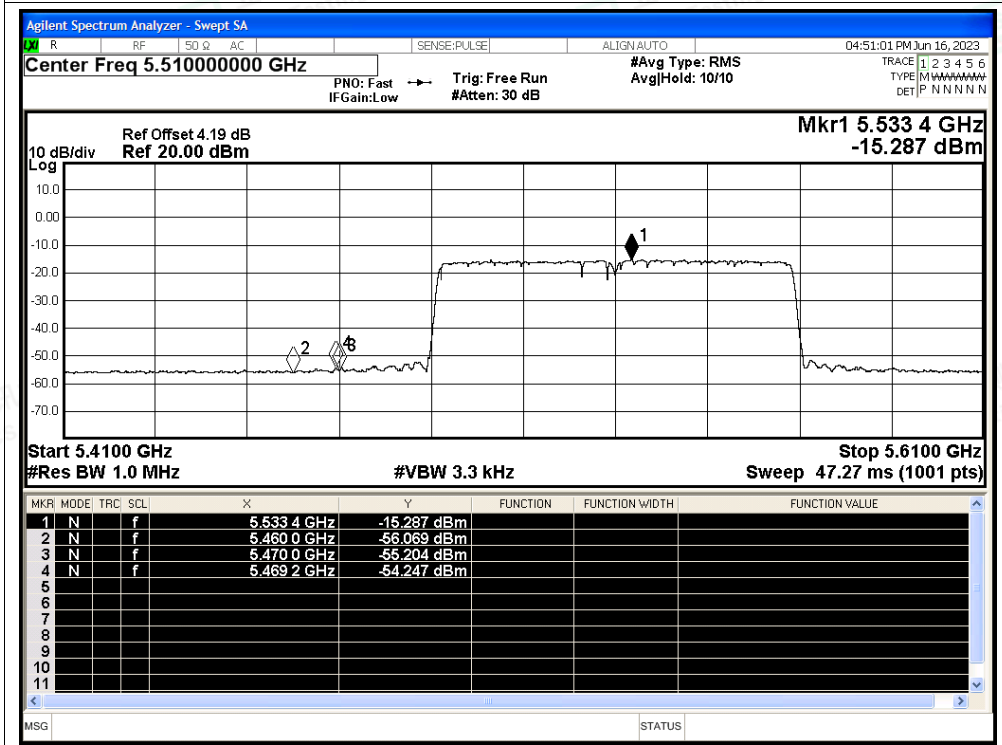




Restrict Band NVNT ac80 5530MHz Ant1 Peak

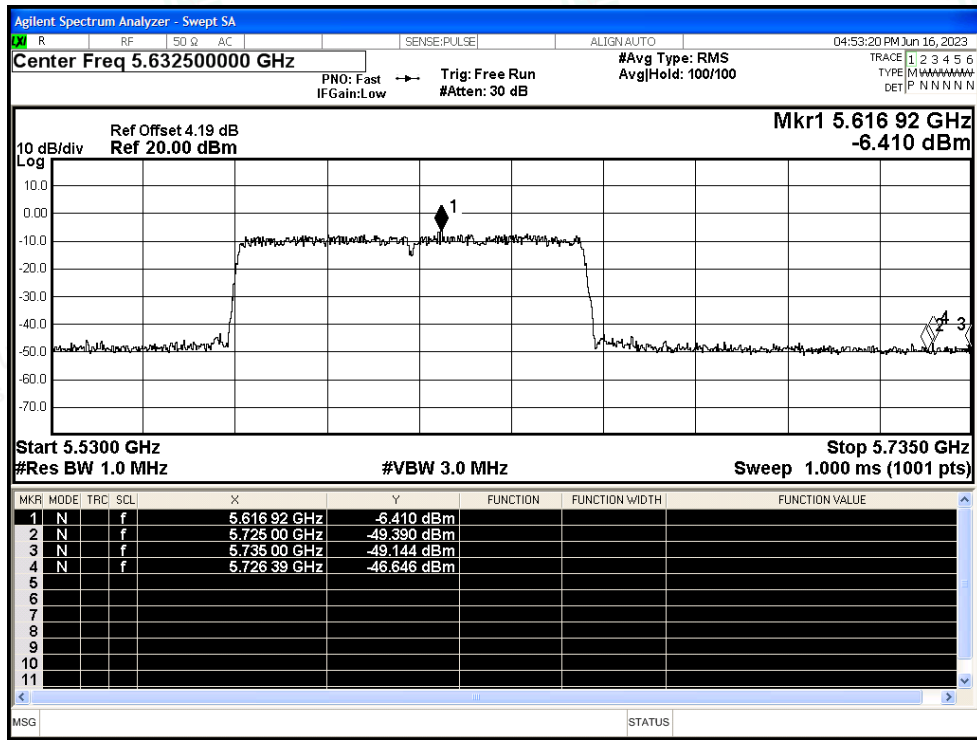


Restrict Band NVNT ac80 5530MHz Ant1 Average

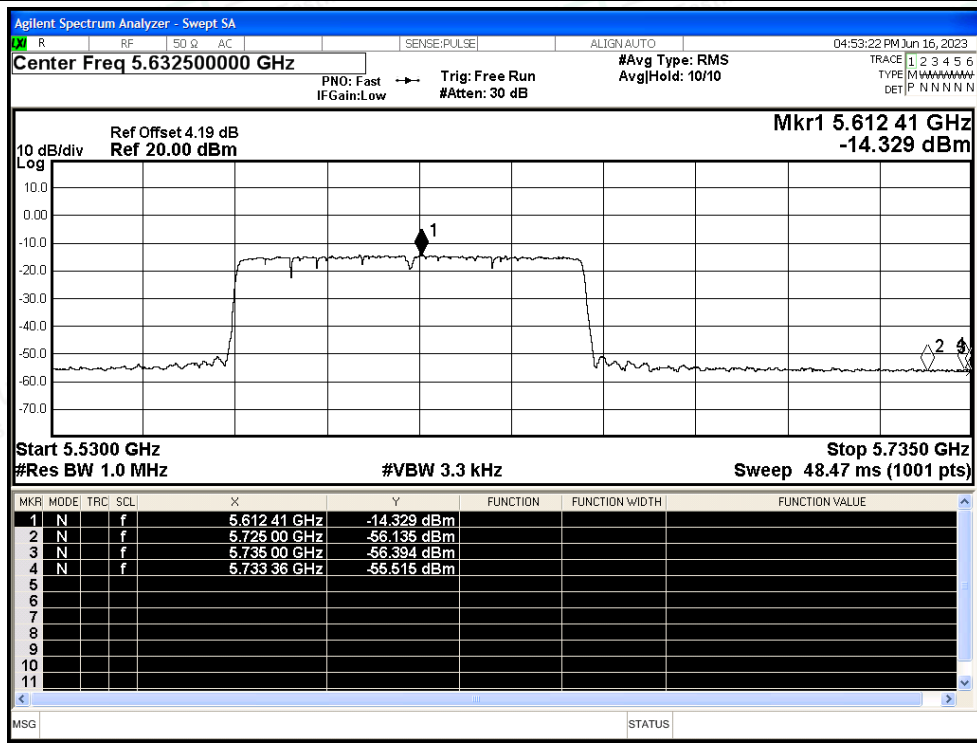




Restrict Band NVNT ac80 5610MHz Ant1 Peak



Restrict Band NVNT ac80 5610MHz Ant1 Average





D.5 Frequency Stability

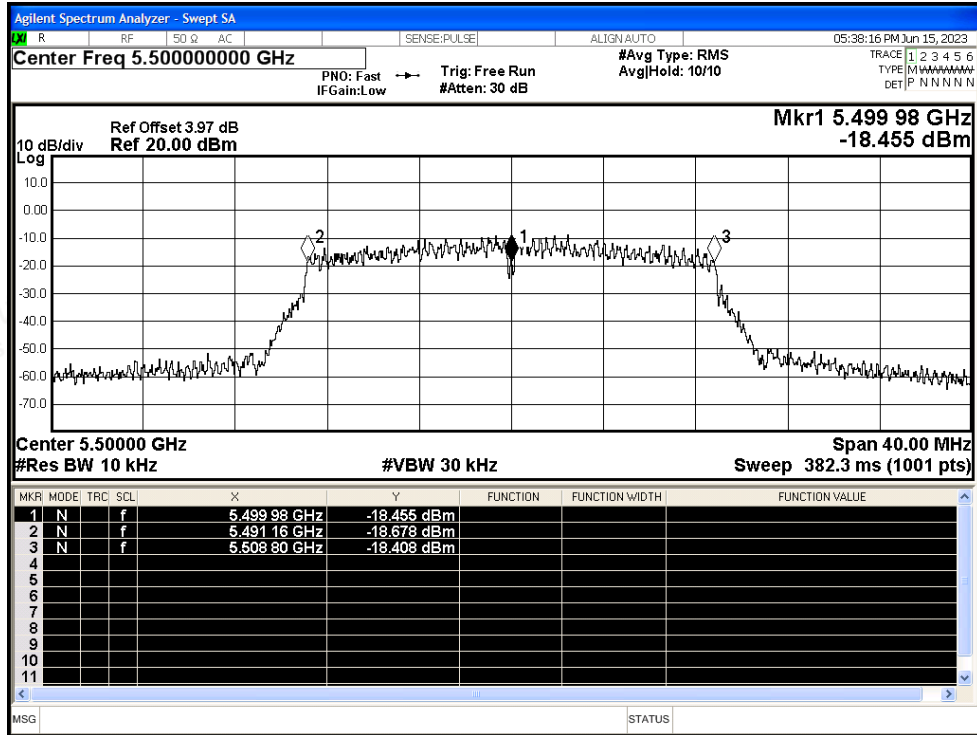
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	ac20	5500	Ant1	5499.98	-20000	-3.64	25	Pass
NVNT	ac20	5580	Ant1	5580.02	20000	3.58	25	Pass
NVNT	ac20	5700	Ant1	5700	0	0	25	Pass
NVNT	ac40	5510	Ant1	5510	0	0	25	Pass
NVNT	ac40	5550	Ant1	5550	0	0	25	Pass
NVNT	ac40	5670	Ant1	5669.96	-40000	-7.05	25	Pass
NVNT	ac80	5530	Ant1	5530	0	0	25	Pass
NVNT	ac80	5610	Ant1	5610	0	0	25	Pass



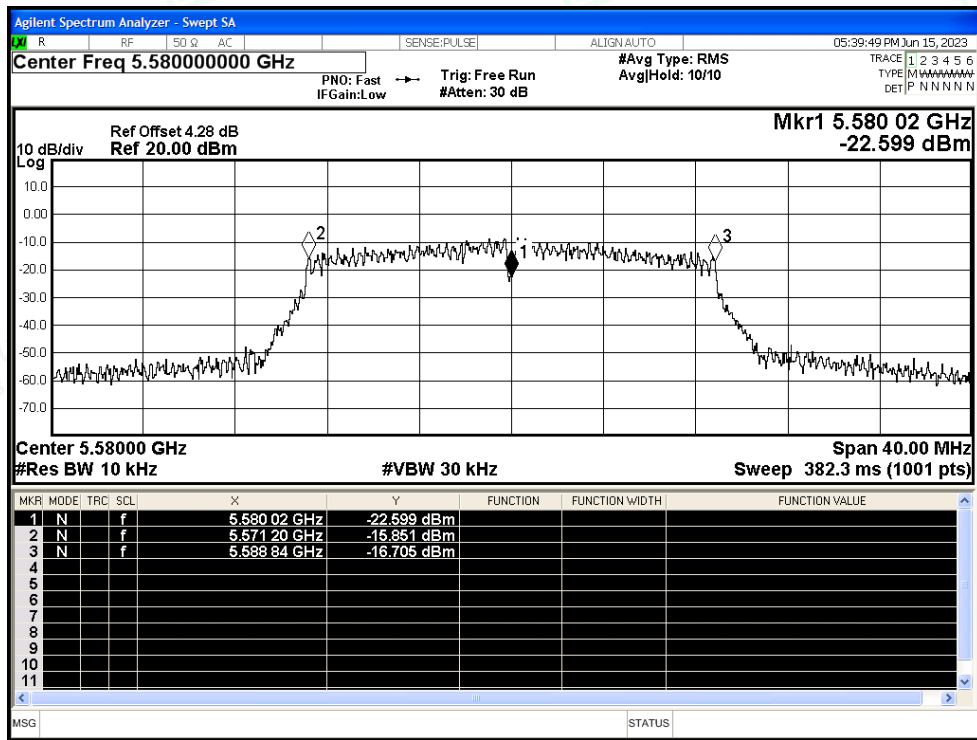


Test Graphs

Freq. Stability NVNT ac20 5500MHz Ant1

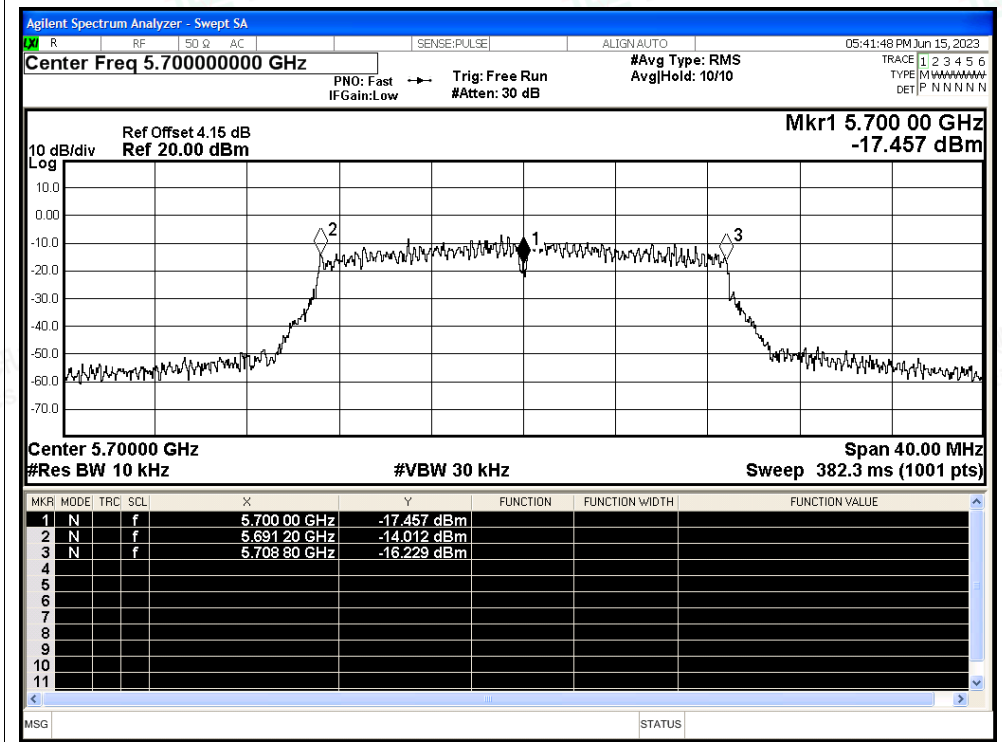


Freq. Stability NVNT ac20 5580MHz Ant1

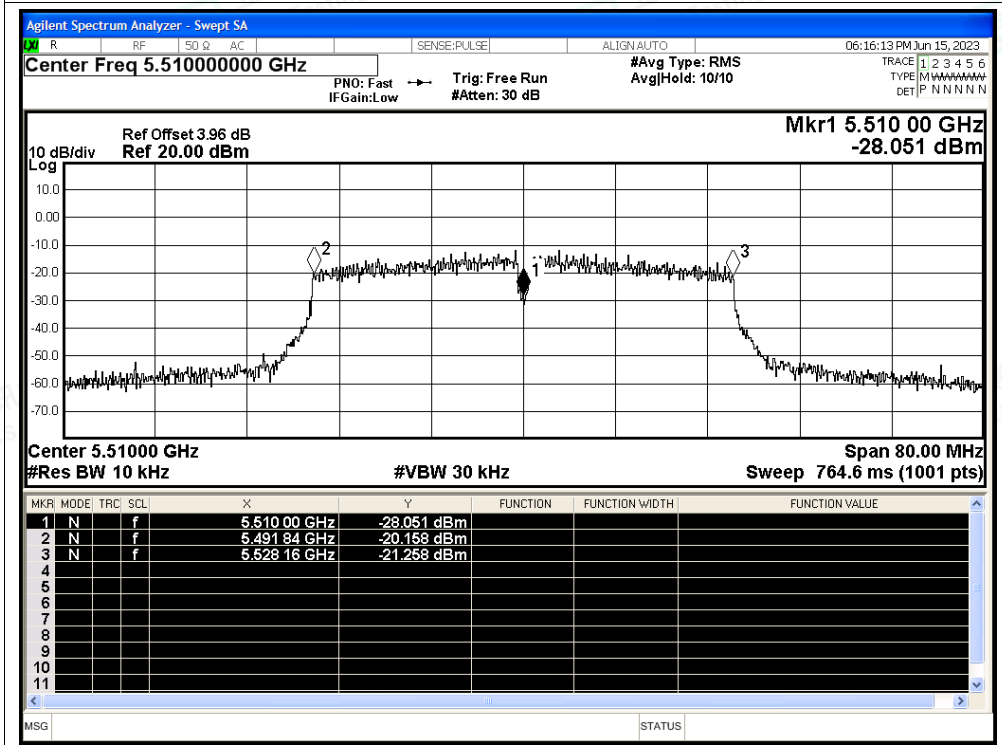




Freq. Stability NVNT ac20 5700MHz Ant1

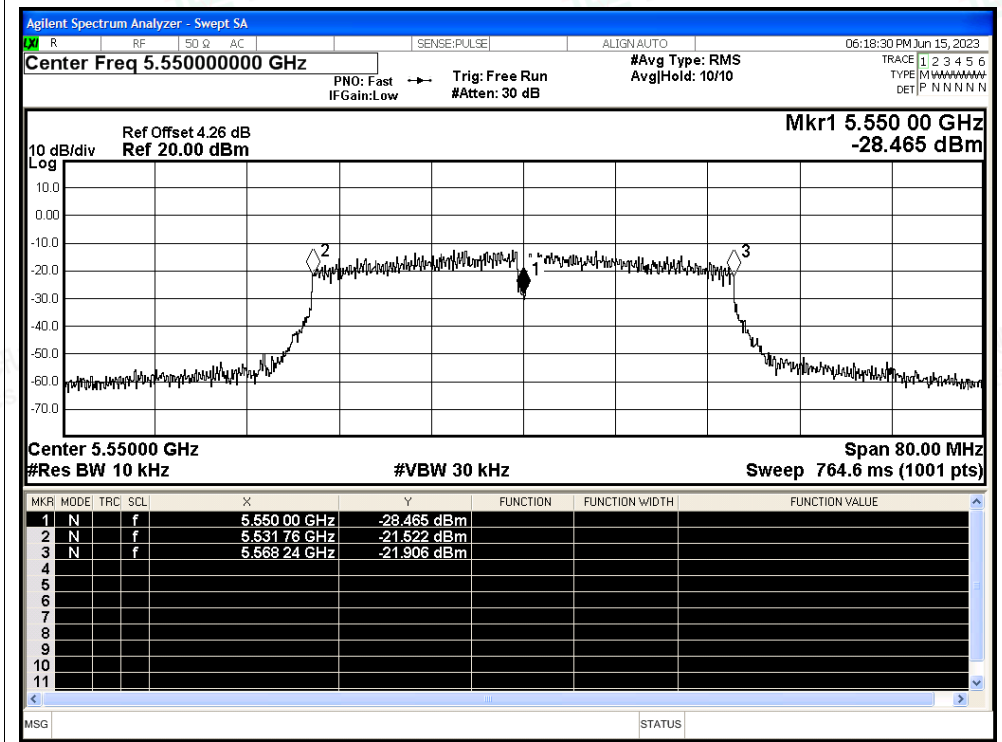


Freq. Stability NVNT ac40 5510MHz Ant1

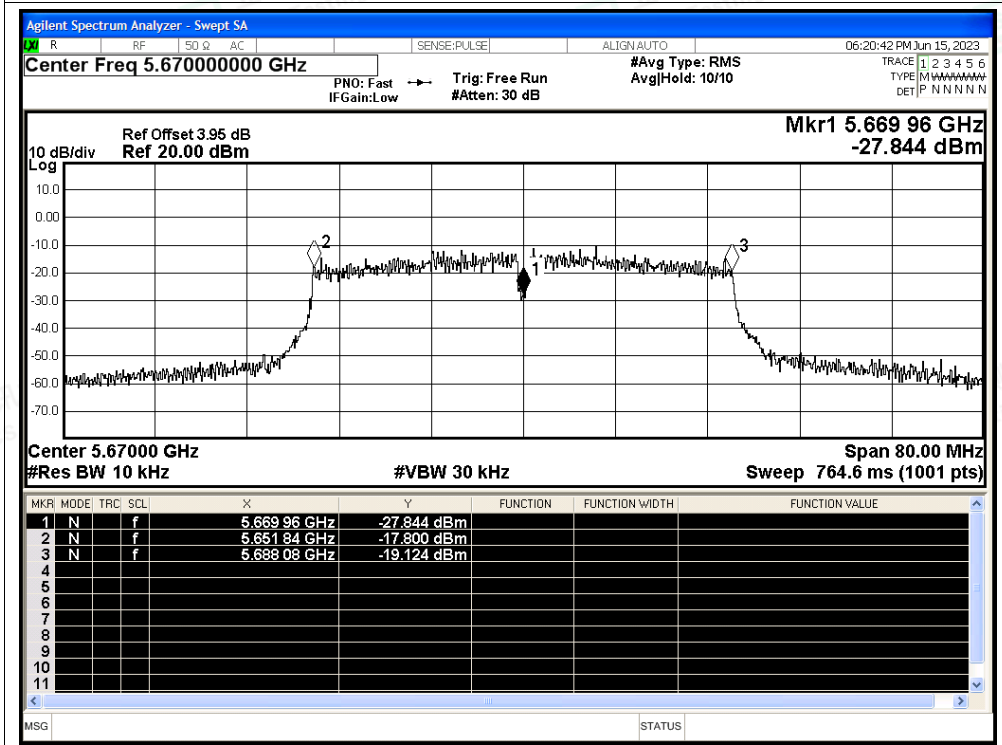




Freq. Stability NVNT ac40 5550MHz Ant1

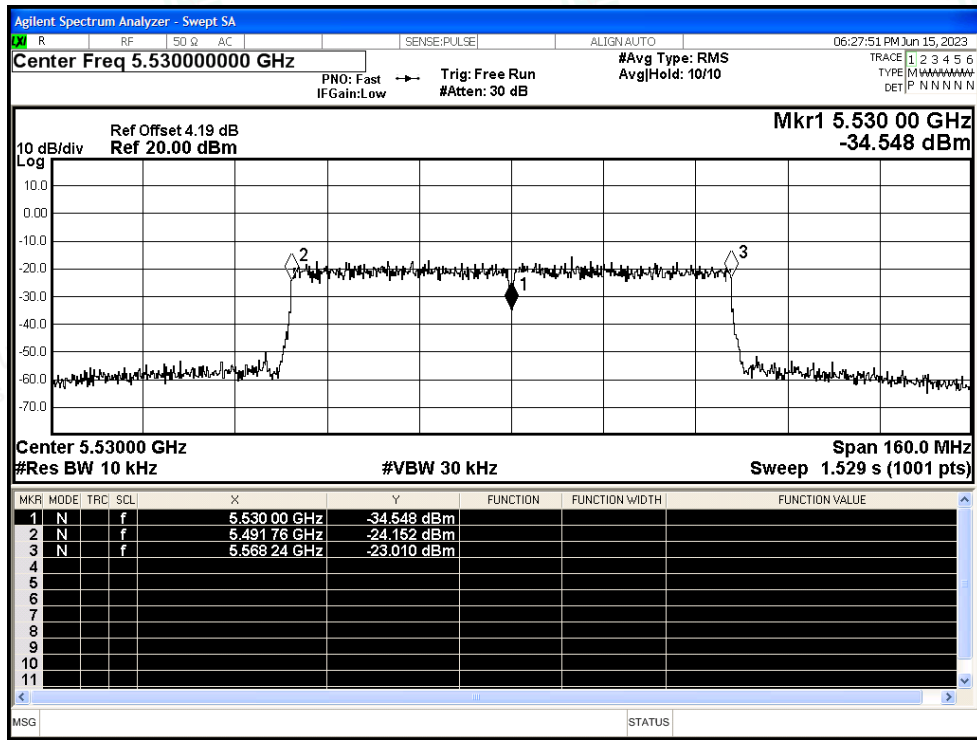


Freq. Stability NVNT ac40 5670MHz Ant1

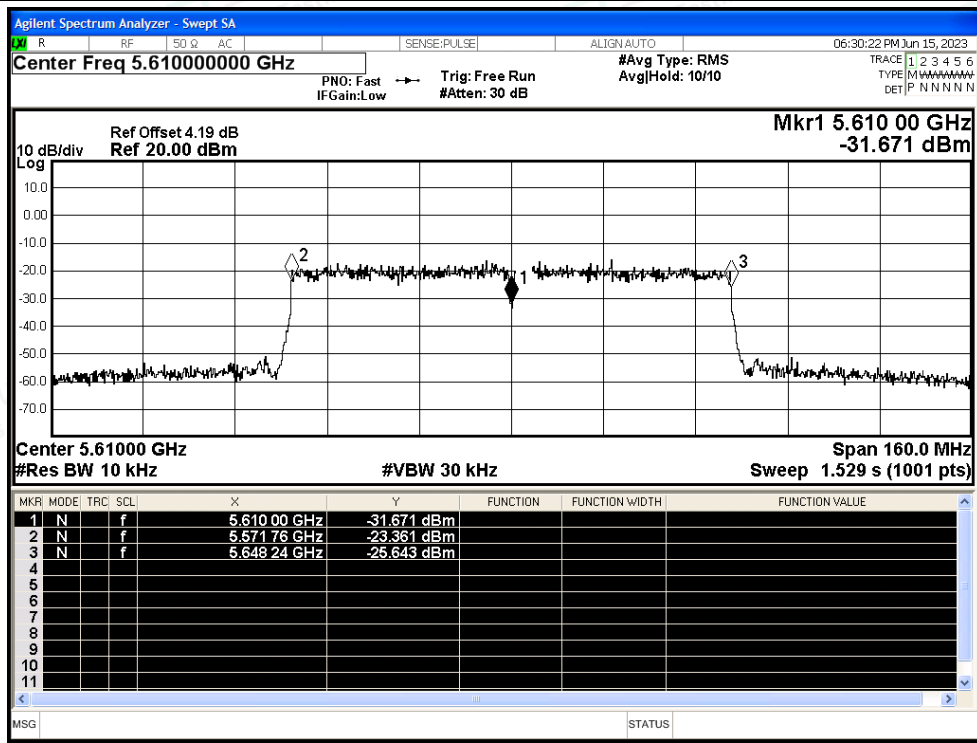




Freq. Stability NVNT ac80 5530MHz Ant1



Freq. Stability NVNT ac80 5610MHz Ant1





D.6 Duty Cycle

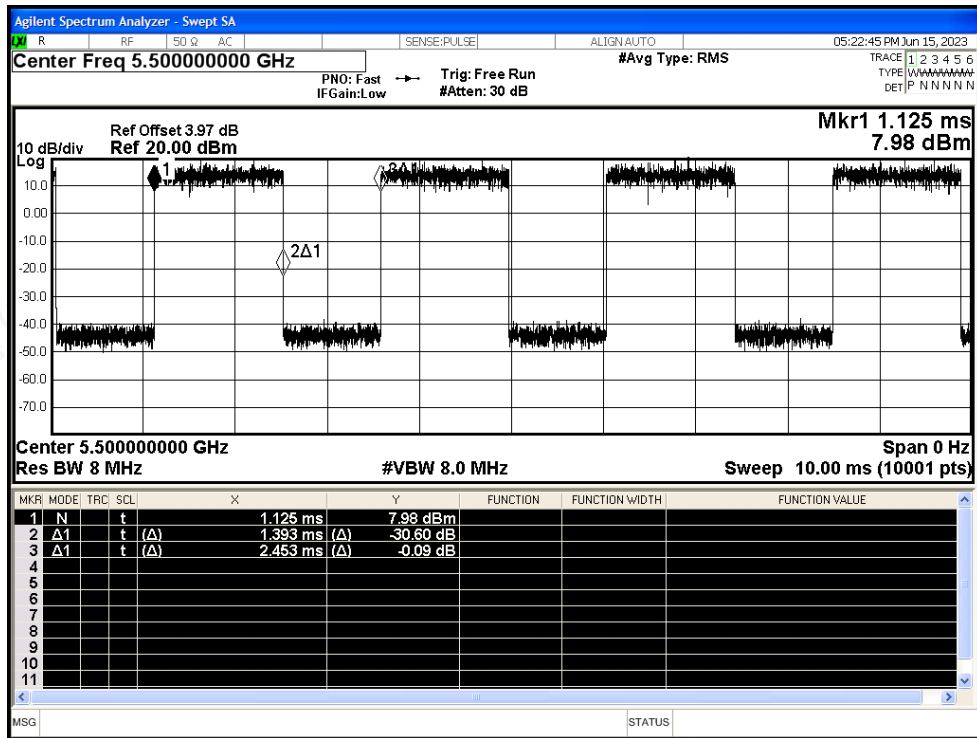
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5500	Ant1	56.79	2.46	0.72
NVNT	a	5580	Ant1	58.5	2.33	0.72
NVNT	a	5700	Ant1	55.17	2.58	0.72
NVNT	n20	5500	Ant1	55.1	2.59	0.77
NVNT	n20	5580	Ant1	56.84	2.45	0.77
NVNT	n20	5700	Ant1	54.89	2.61	0.77
NVNT	n40	5510	Ant1	37.63	4.24	1.55
NVNT	n40	5550	Ant1	37.83	4.22	1.55
NVNT	n40	5670	Ant1	39.44	4.04	1.55
NVNT	ac20	5500	Ant1	56.94	2.45	0.76
NVNT	ac20	5580	Ant1	55.02	2.59	0.76
NVNT	ac20	5700	Ant1	55.21	2.58	0.76
NVNT	ac40	5510	Ant1	38.88	4.1	1.53
NVNT	ac40	5550	Ant1	37.86	4.22	1.53
NVNT	ac40	5670	Ant1	56.89	2.45	1.53
NVNT	ac80	5530	Ant1	23.41	6.31	3.09
NVNT	ac80	5610	Ant1	24.04	6.19	3.09



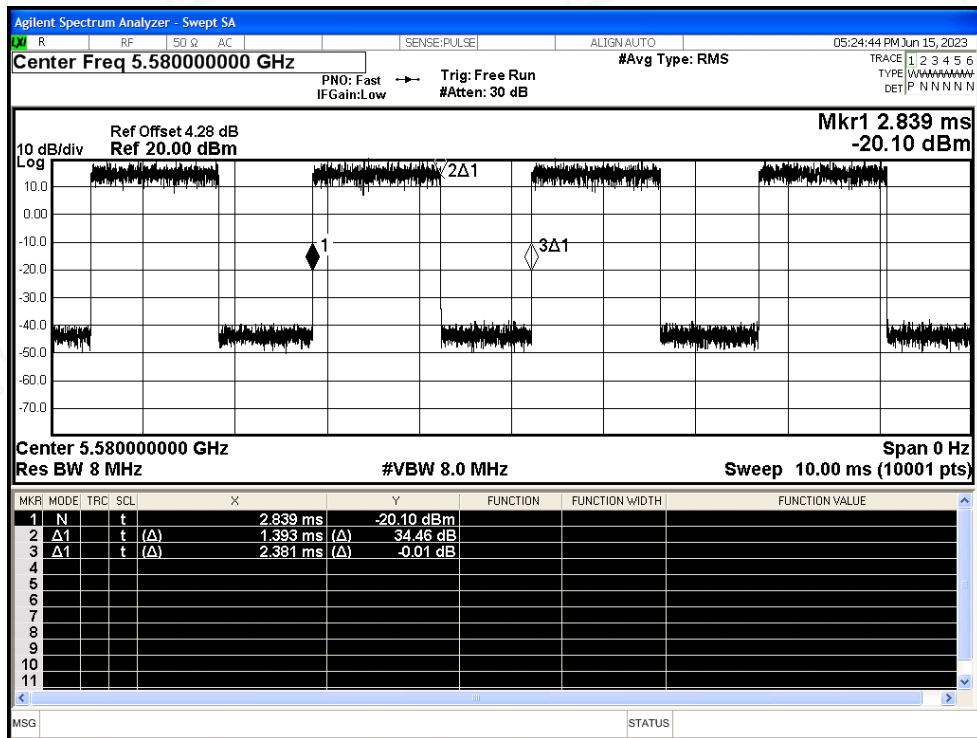


Test Graphs

Duty Cycle NVNT a 5500MHz Ant1

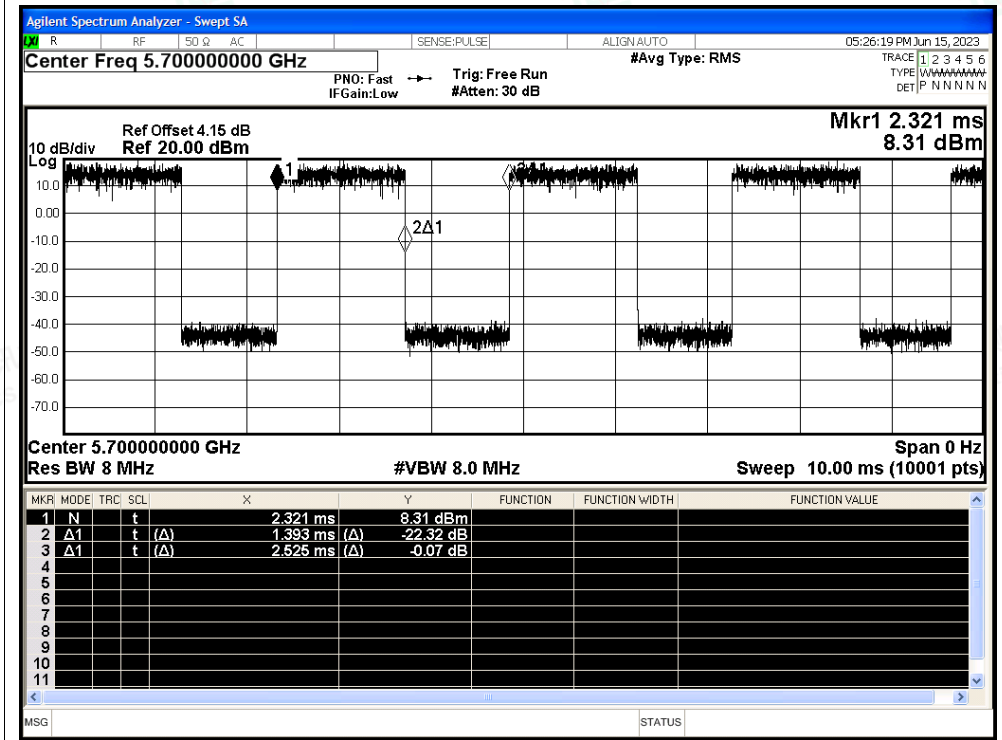


Duty Cycle NVNT a 5580MHz Ant1

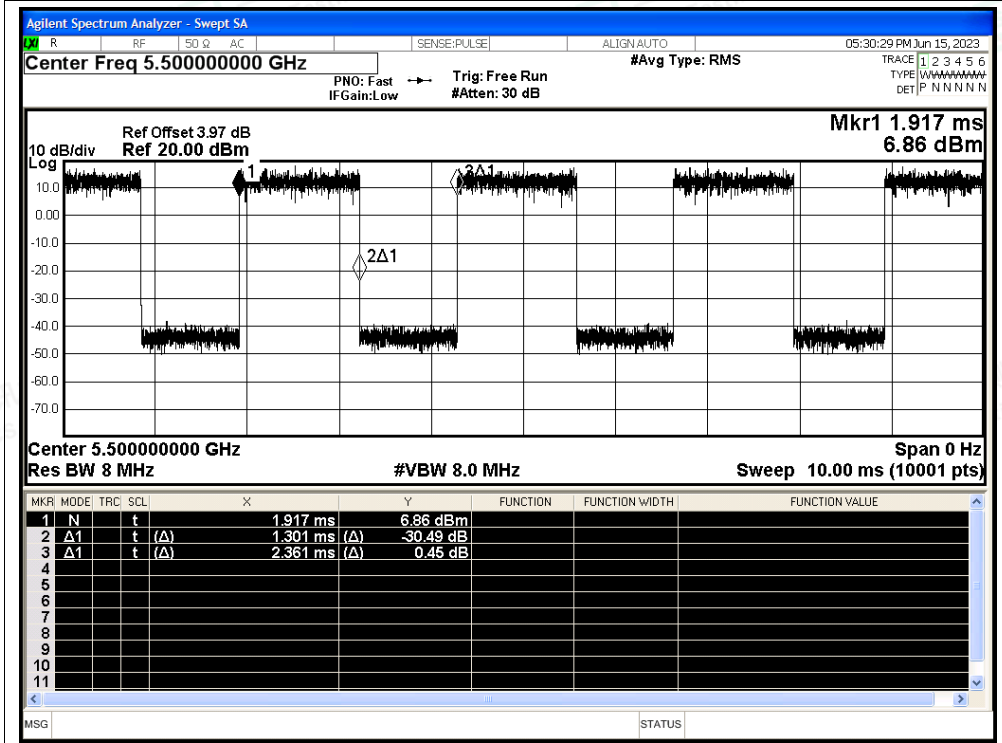




Duty Cycle NVNT a 5700MHz Ant1

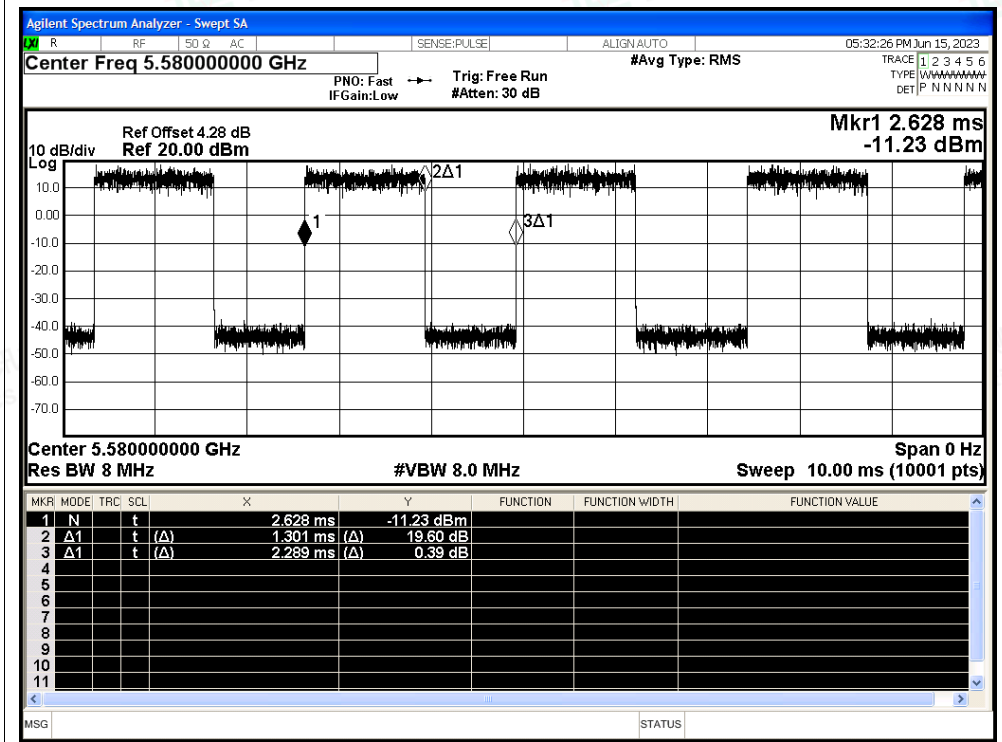


Duty Cycle NVNT n20 5500MHz Ant1

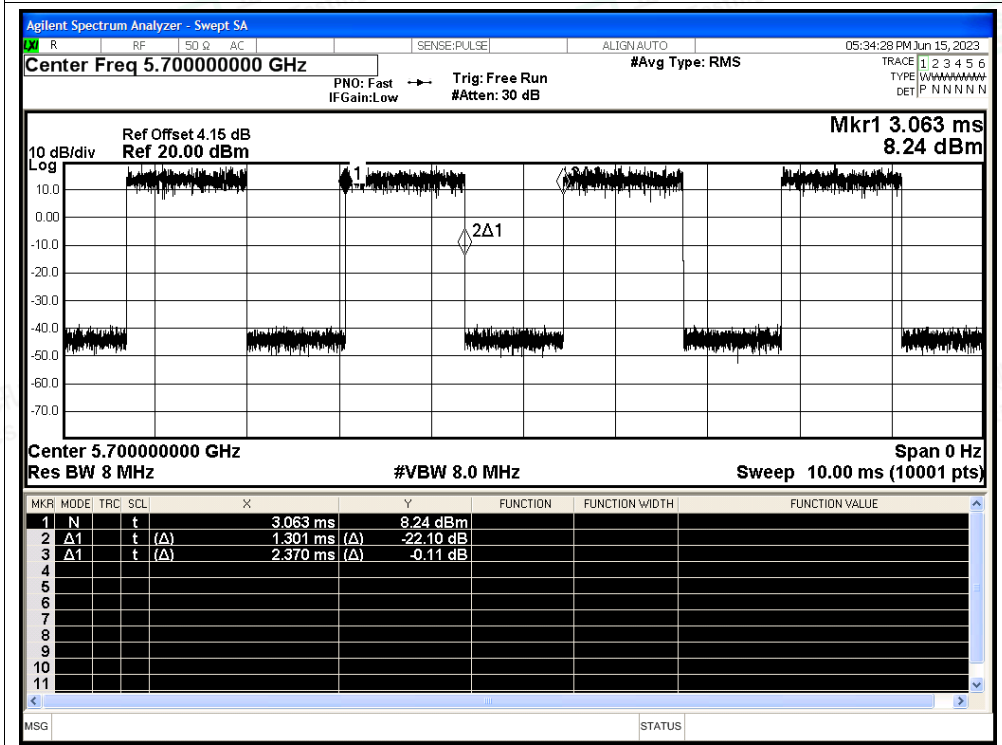




Duty Cycle NVNT n20 5580MHz Ant1

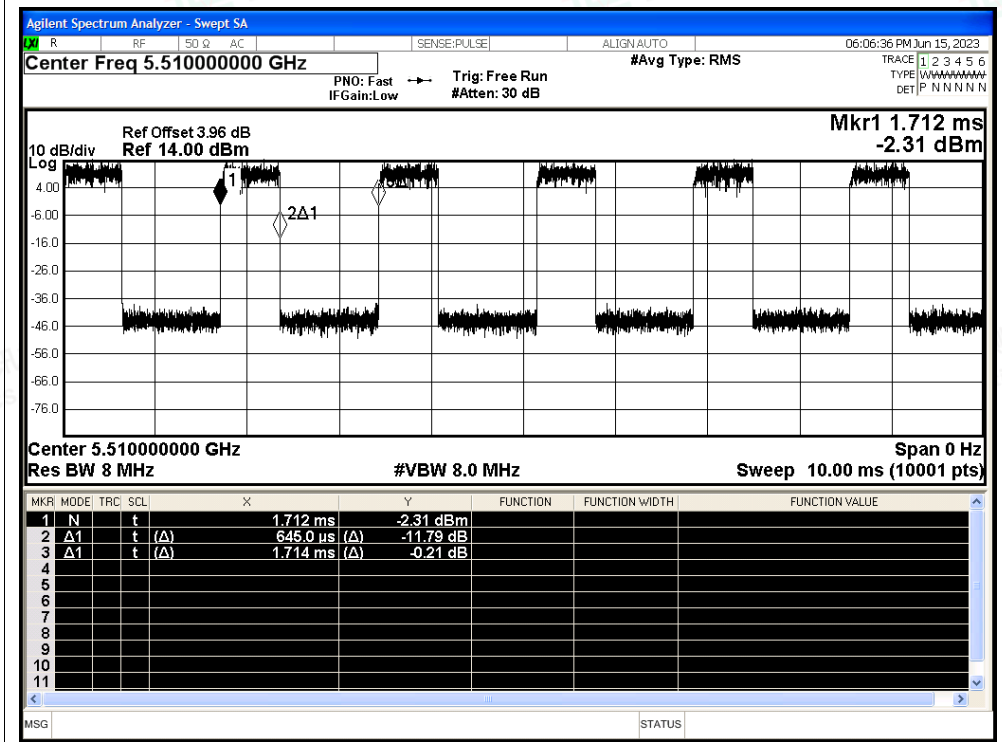


Duty Cycle NVNT n20 5700MHz Ant1

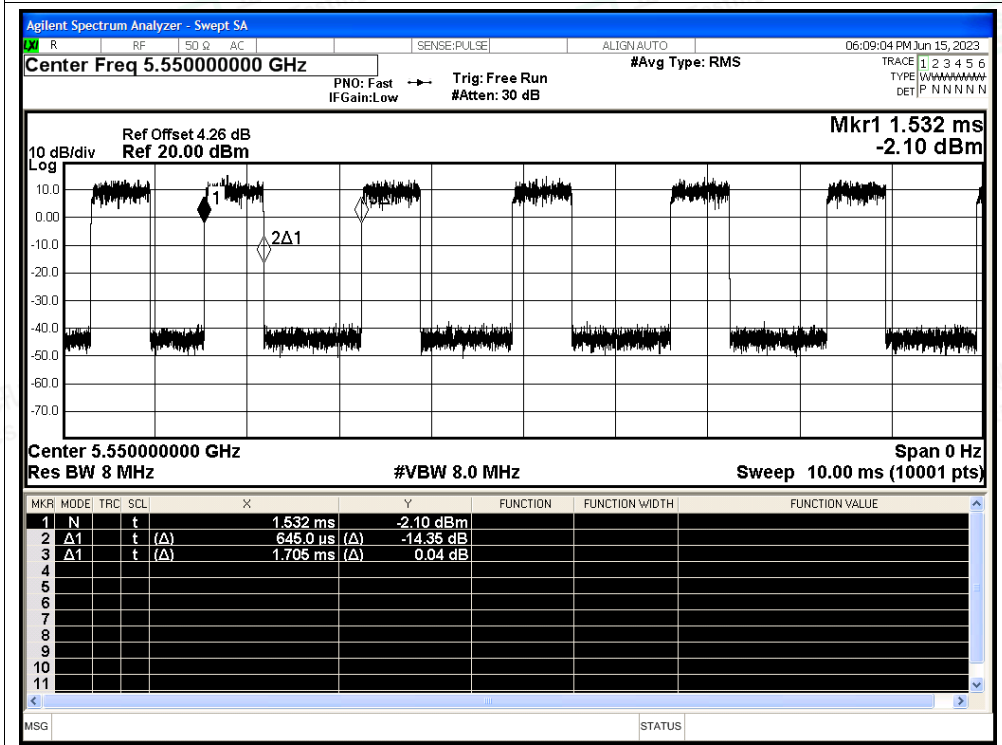




Duty Cycle NVNT n40 5510MHz Ant1

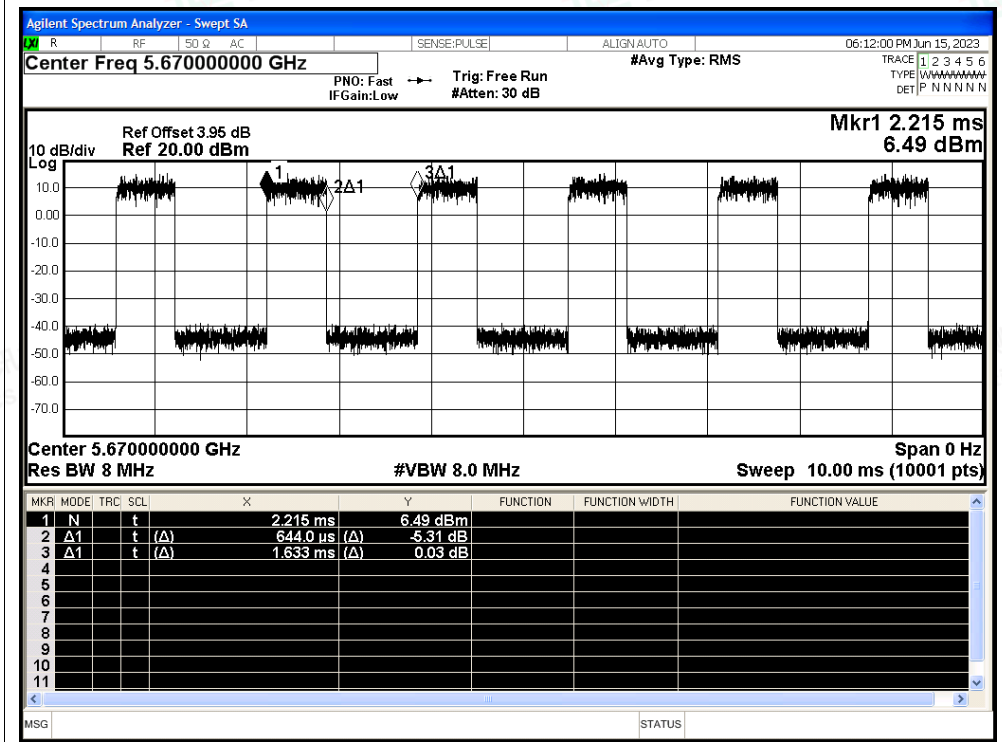


Duty Cycle NVNT n40 5550MHz Ant1

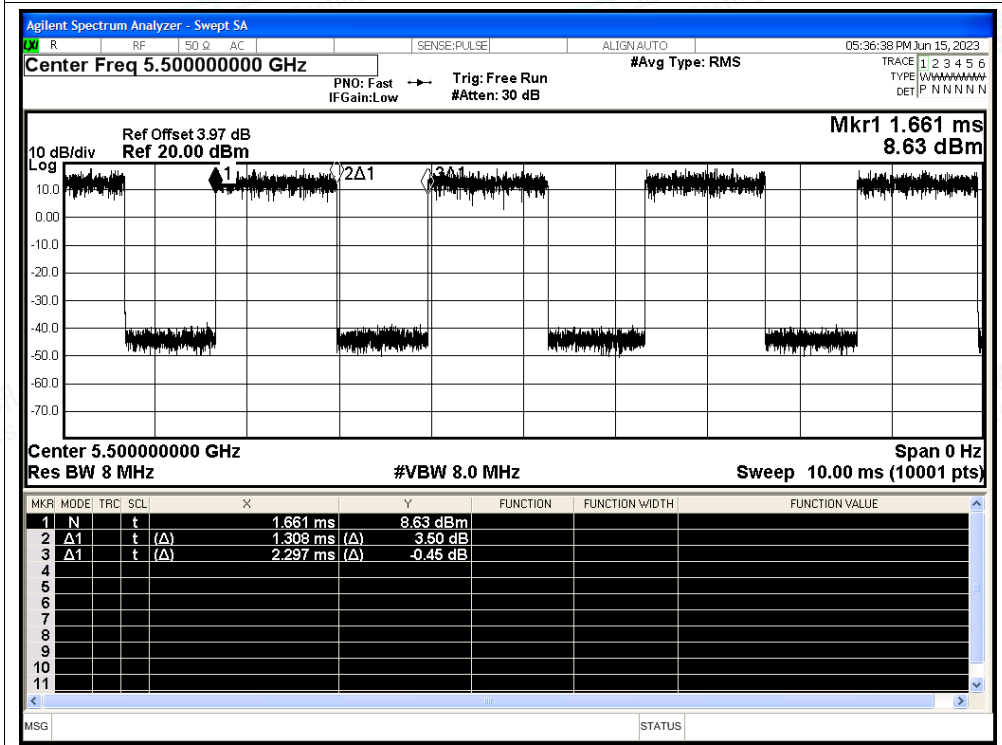




Duty Cycle NVNT n40 5670MHz Ant1

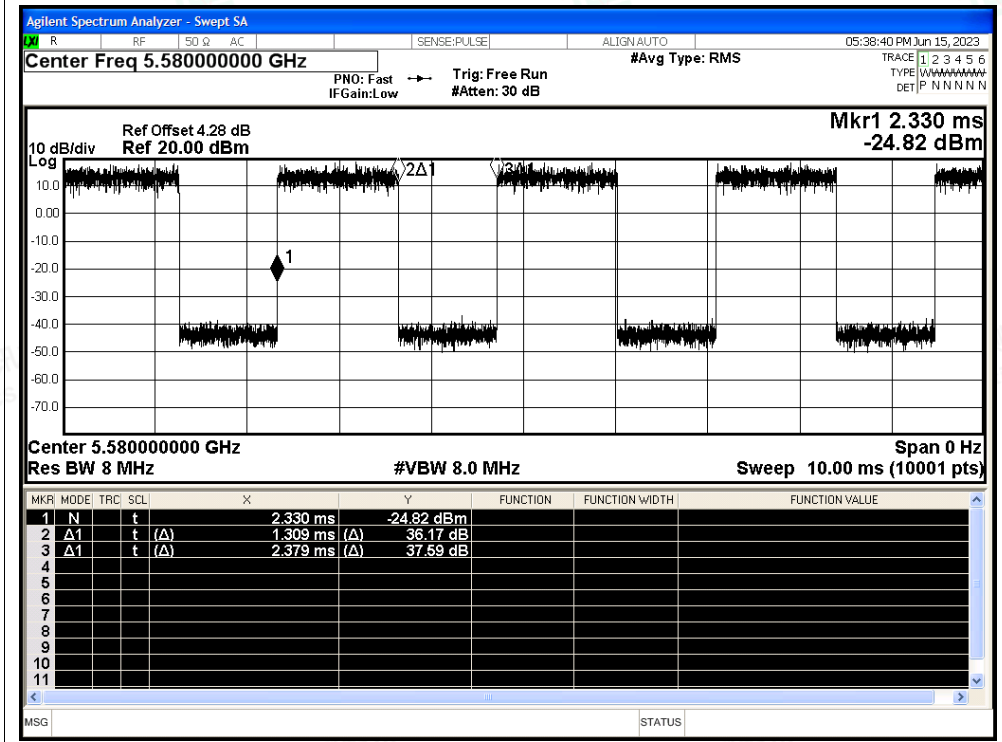


Duty Cycle NVNT ac20 5500MHz Ant1

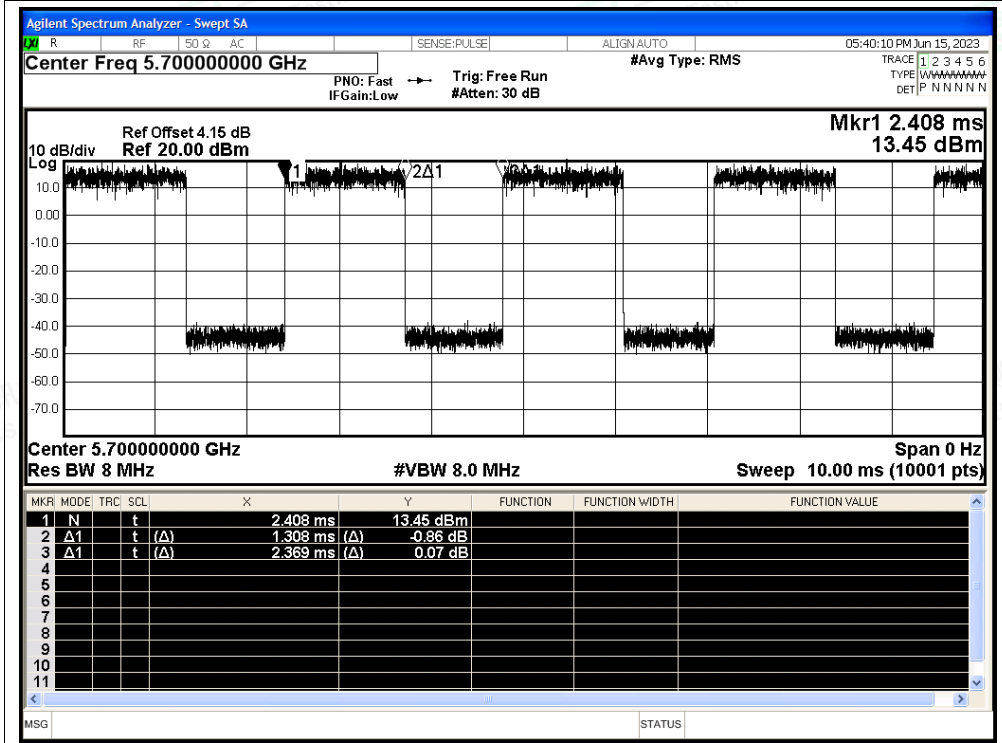




Duty Cycle NVNT ac20 5580MHz Ant1

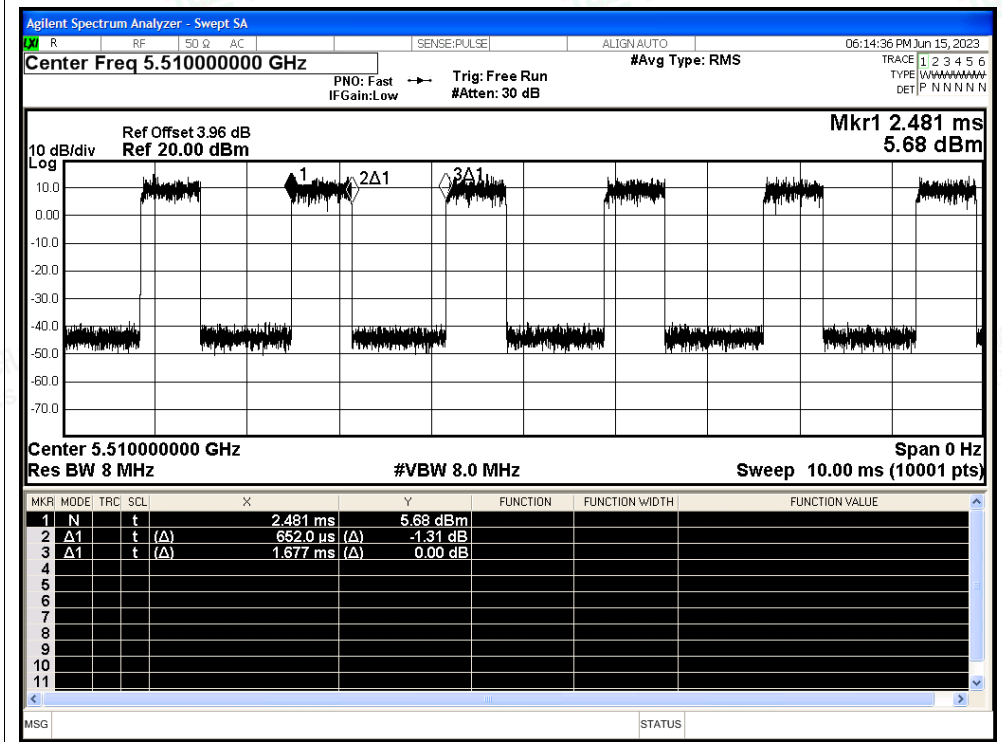


Duty Cycle NVNT ac20 5700MHz Ant1

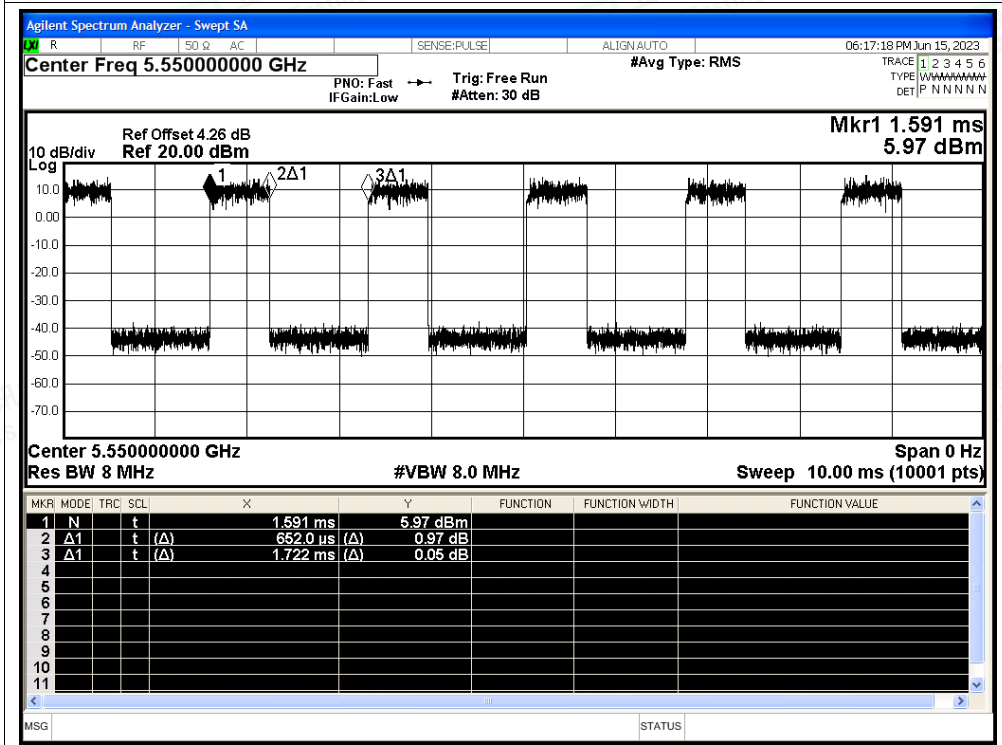




Duty Cycle NVNT ac40 5510MHz Ant1

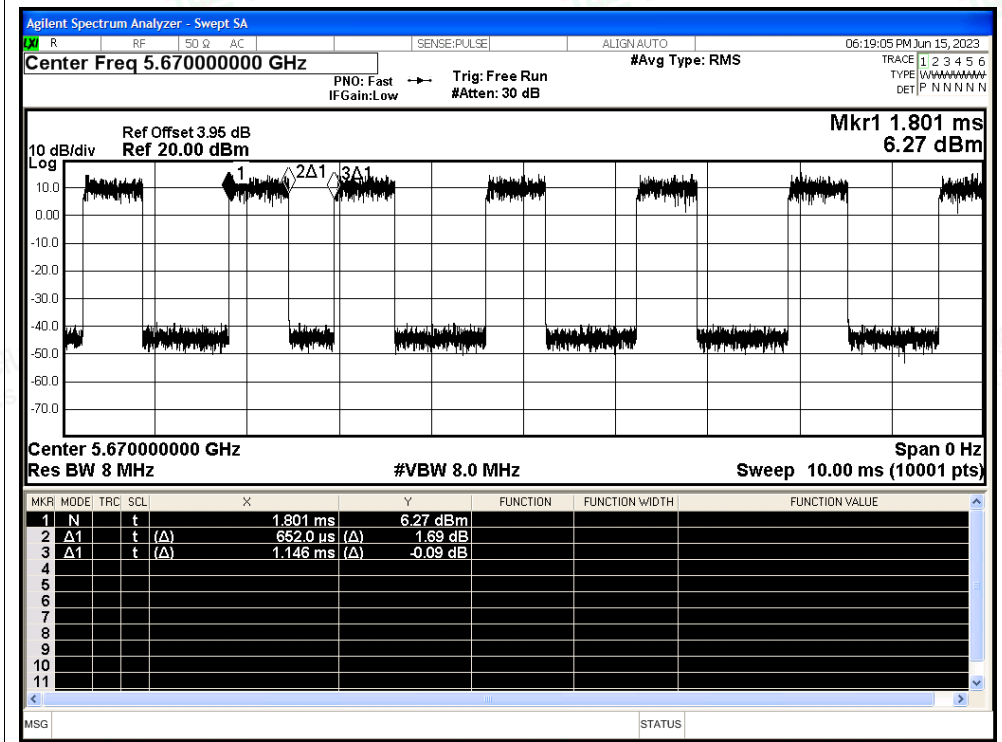


Duty Cycle NVNT ac40 5550MHz Ant1

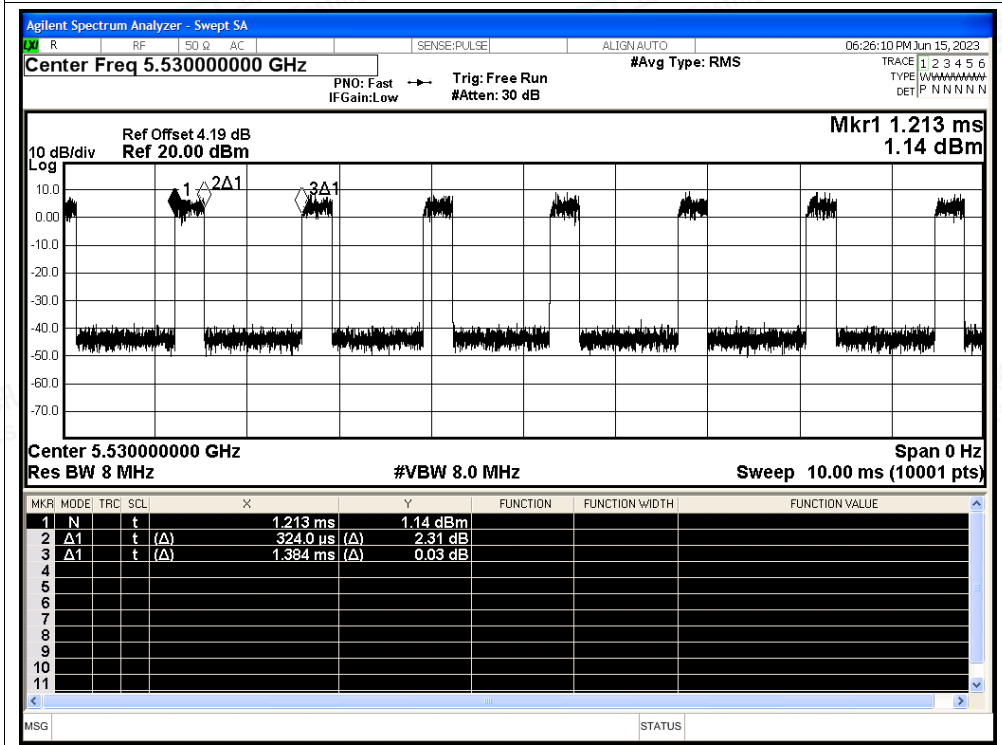




Duty Cycle NVNT ac40 5670MHz Ant1



Duty Cycle NVNT ac80 5530MHz Ant1





Duty Cycle NVNT ac80 5610MHz Ant1

