



Appendix F

RF Test Data for 5.5GWIFI (Conducted Measurement)

Product Name: Smart Diagnostic System

Test Model: P902

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Joker Hu
Supervised by:	Jack Cheng





F.1 -26dB Bandwidth

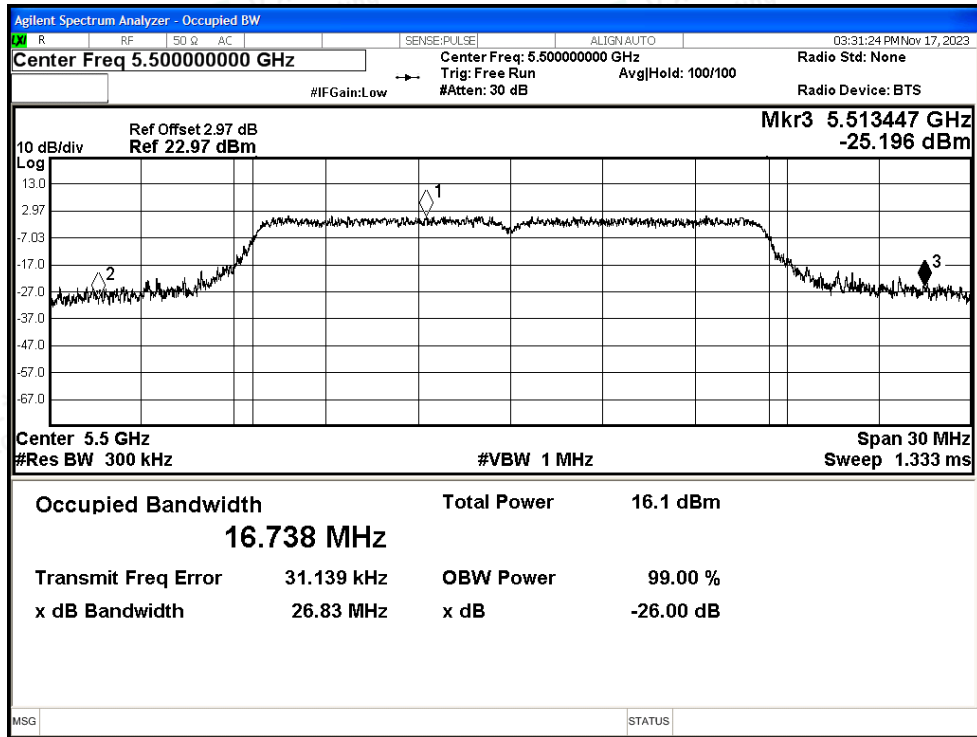
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5500	Ant0	26.831	>=0.5	Pass
NVNT	a	5580	Ant0	28.865	>=0.5	Pass
NVNT	a	5700	Ant0	25.278	>=0.5	Pass
NVNT	n20	5500	Ant0	29.104	>=0.5	Pass
NVNT	n20	5580	Ant0	28.467	>=0.5	Pass
NVNT	n20	5700	Ant0	28.472	>=0.5	Pass
NVNT	n40	5510	Ant0	47.753	>=0.5	Pass
NVNT	n40	5550	Ant0	42.996	>=0.5	Pass
NVNT	n40	5670	Ant0	40.115	>=0.5	Pass
NVNT	ac20	5500	Ant0	27.483	>=0.5	Pass
NVNT	ac20	5580	Ant0	28.759	>=0.5	Pass
NVNT	ac20	5700	Ant0	27.331	>=0.5	Pass
NVNT	ac40	5510	Ant0	43.78	>=0.5	Pass
NVNT	ac40	5550	Ant0	44.636	>=0.5	Pass
NVNT	ac40	5670	Ant0	39.763	>=0.5	Pass
NVNT	ac80	5530	Ant0	81.744	>=0.5	Pass
NVNT	ac80	5610	Ant0	80.24	>=0.5	Pass



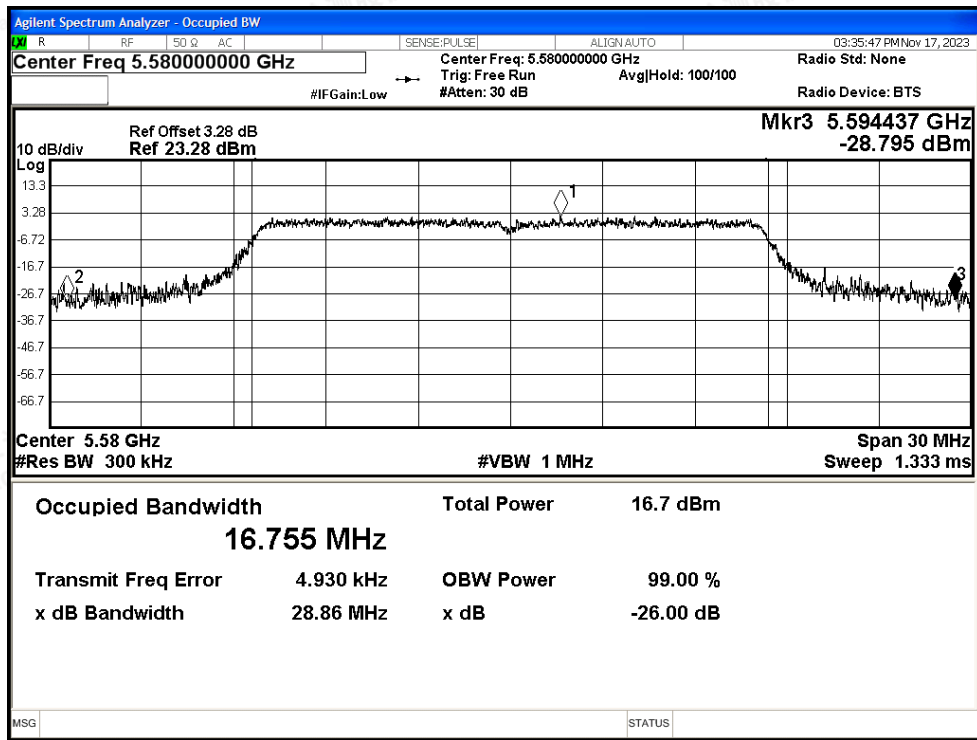


Test Graphs

-26dB Bandwidth NVNT a 5500MHz Ant0

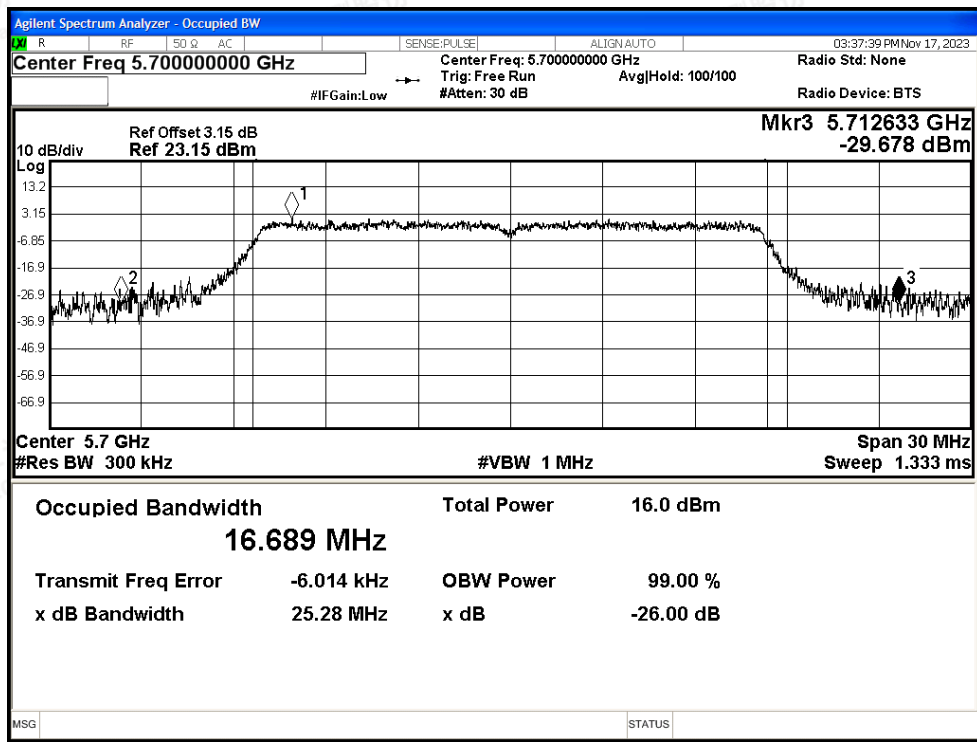


-26dB Bandwidth NVNT a 5580MHz Ant0

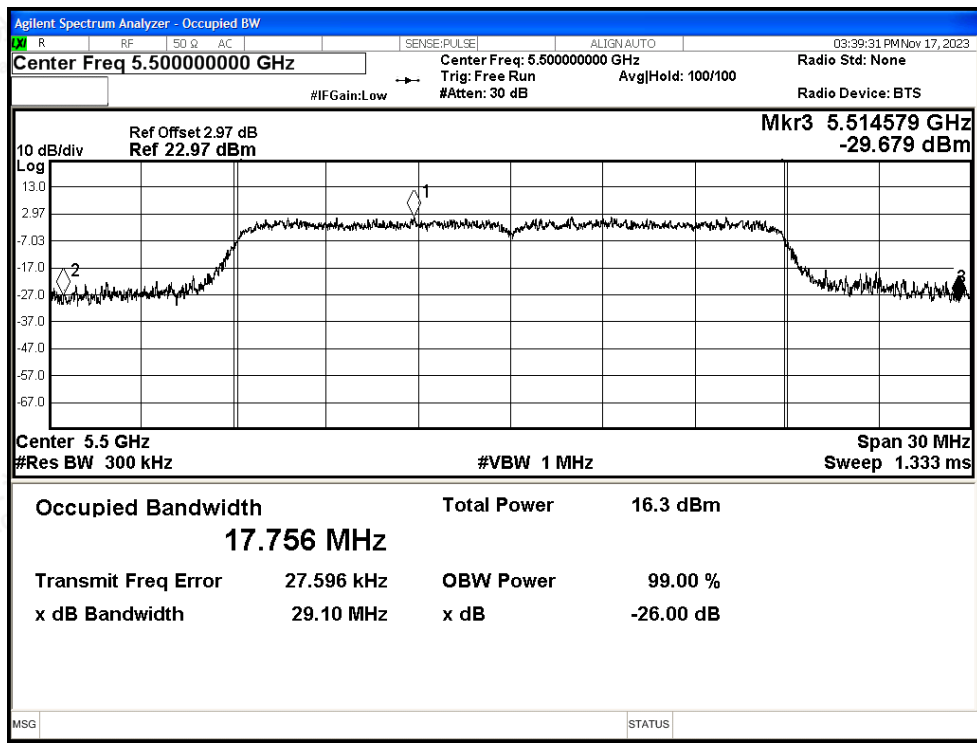




-26dB Bandwidth NVNT a 5700MHz Ant0



-26dB Bandwidth NVNT n20 5500MHz Ant0



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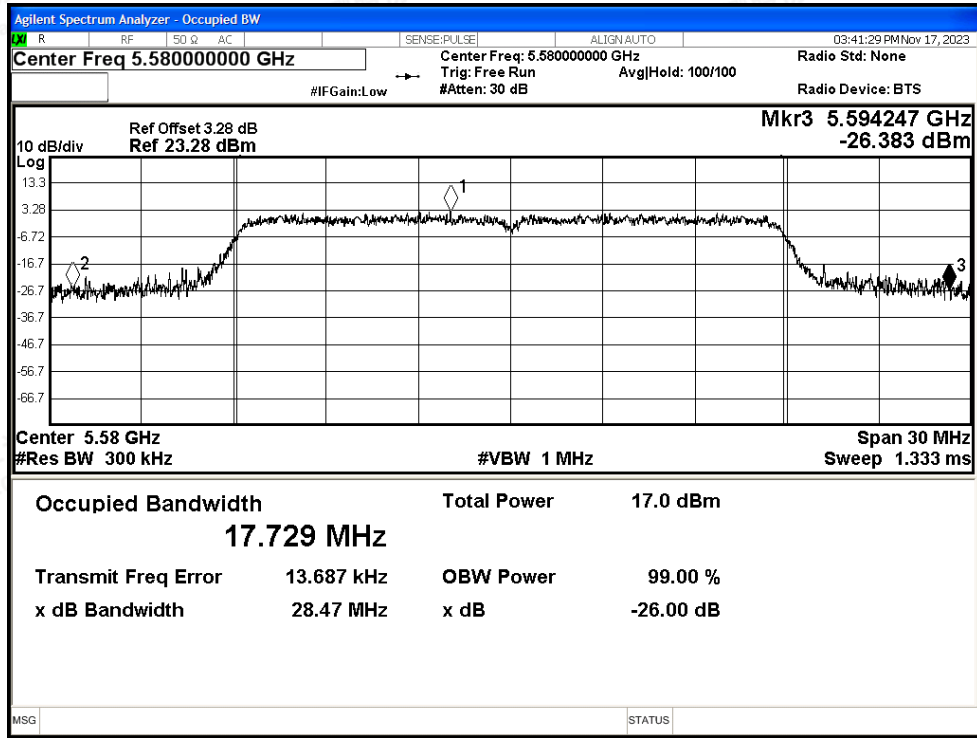
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

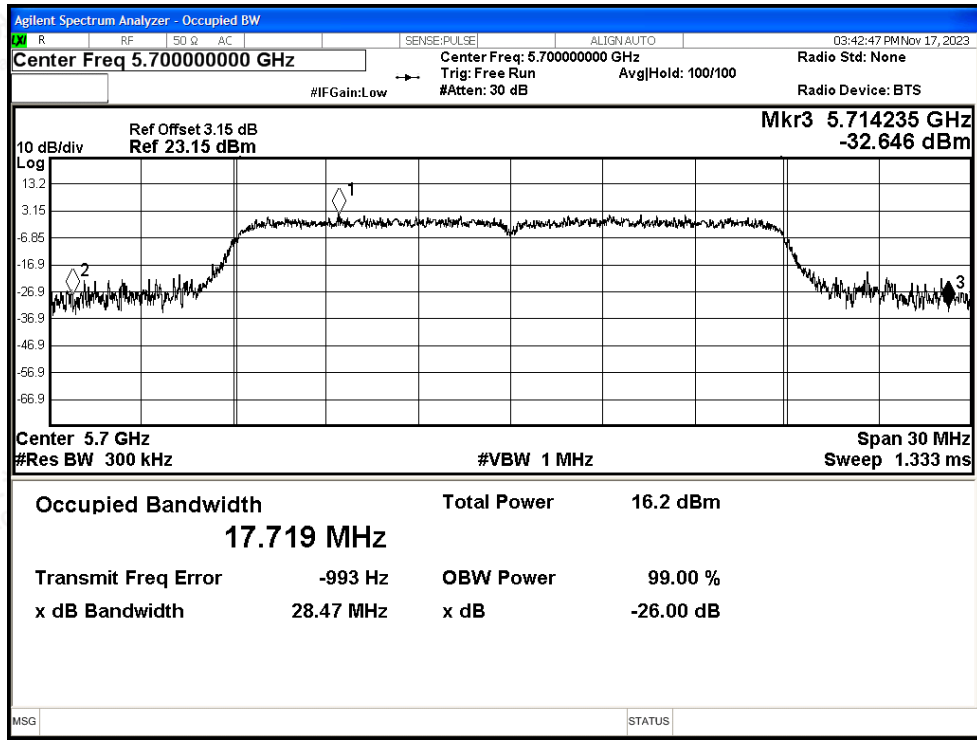
Scan code to check authenticity

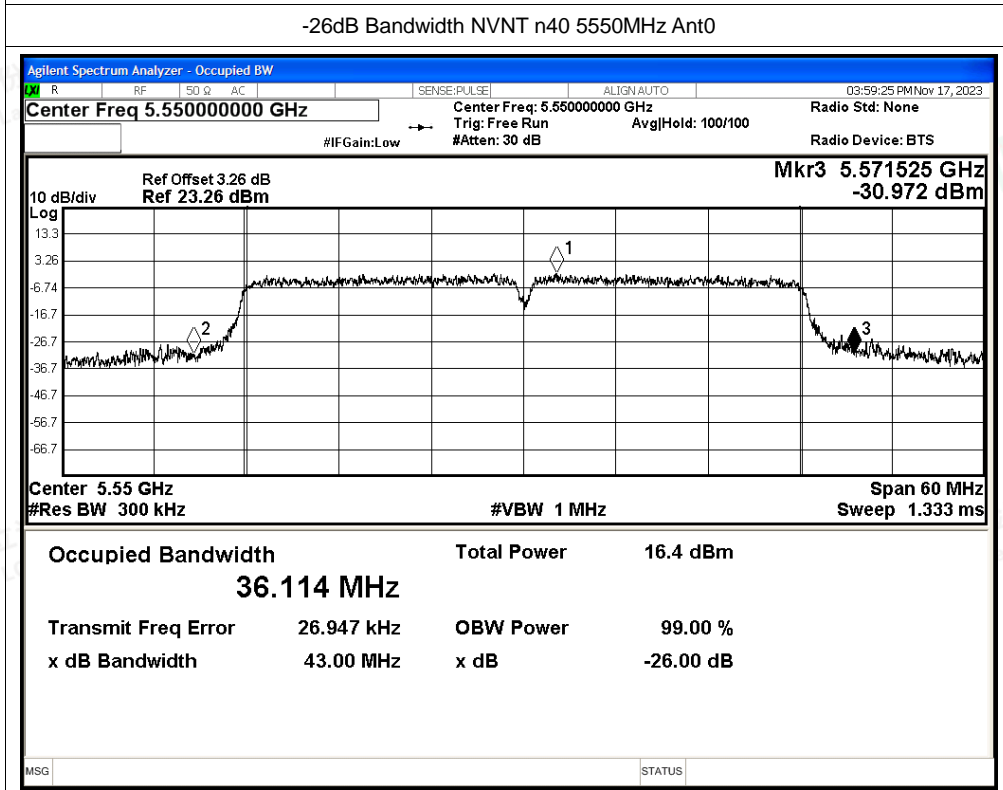
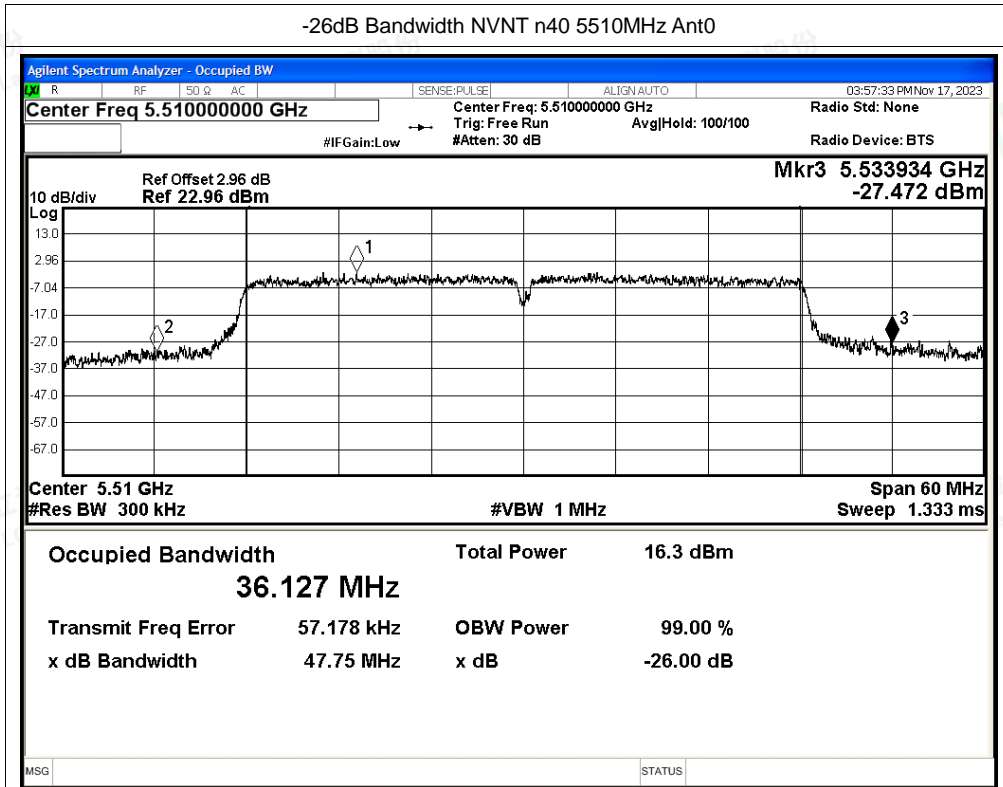


-26dB Bandwidth NVNT n20 5580MHz Ant0



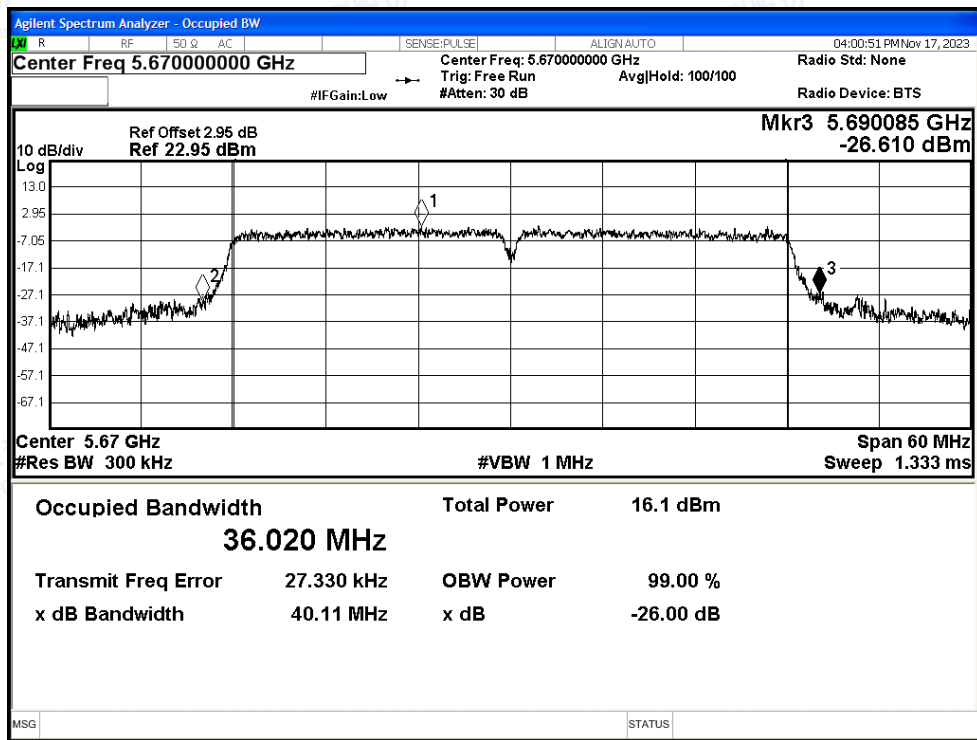
-26dB Bandwidth NVNT n20 5700MHz Ant0



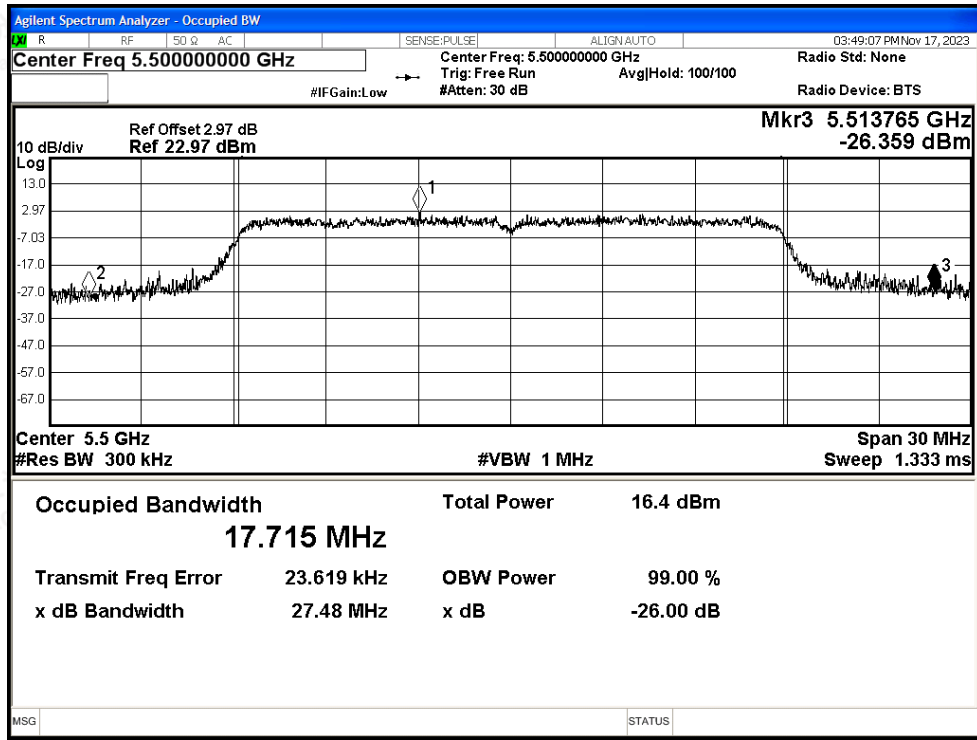




-26dB Bandwidth NVNT n40 5670MHz Ant0



-26dB Bandwidth NVNT ac20 5500MHz Ant0



Shenzhen LCS Compliance Testing Laboratory Ltd.

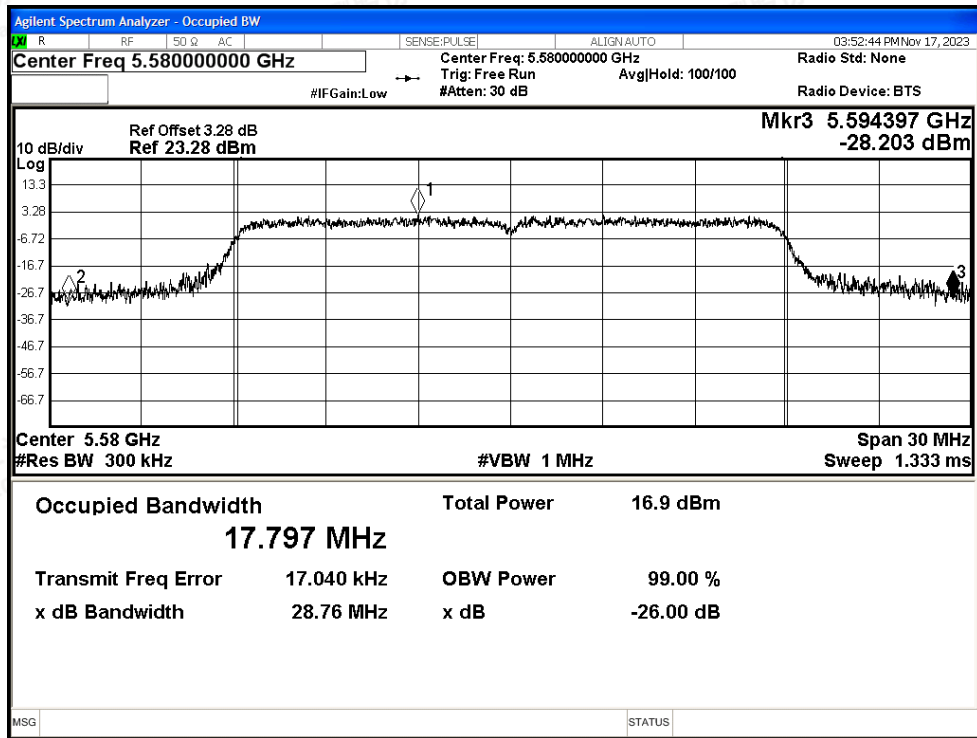
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

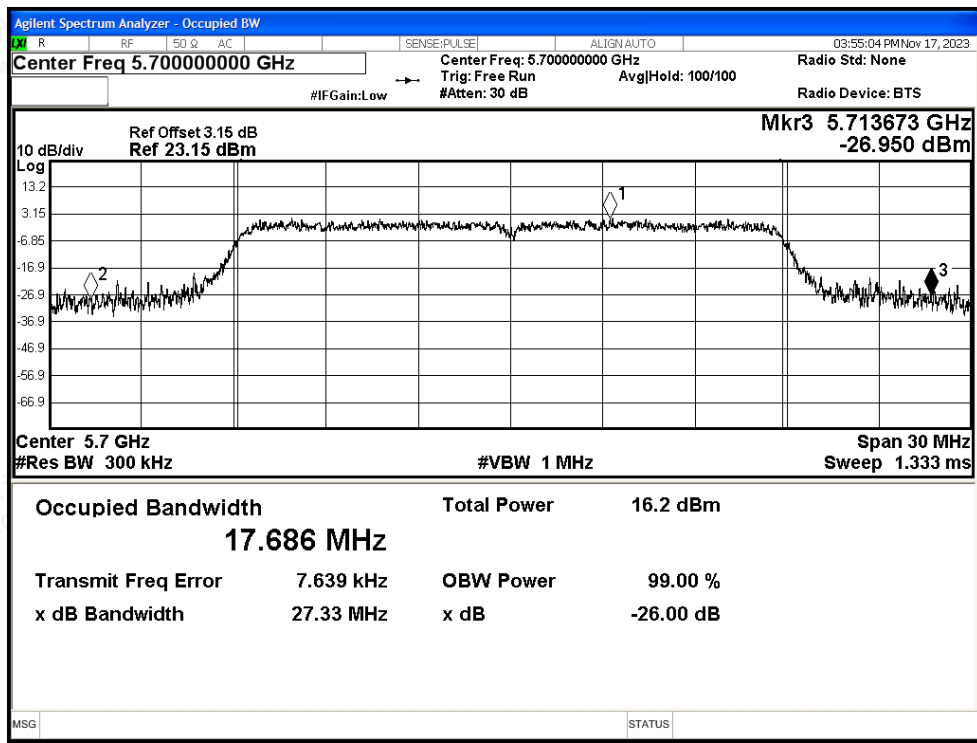
Scan code to check authenticity



-26dB Bandwidth NVNT ac20 5580MHz Ant0



-26dB Bandwidth NVNT ac20 5700MHz Ant0

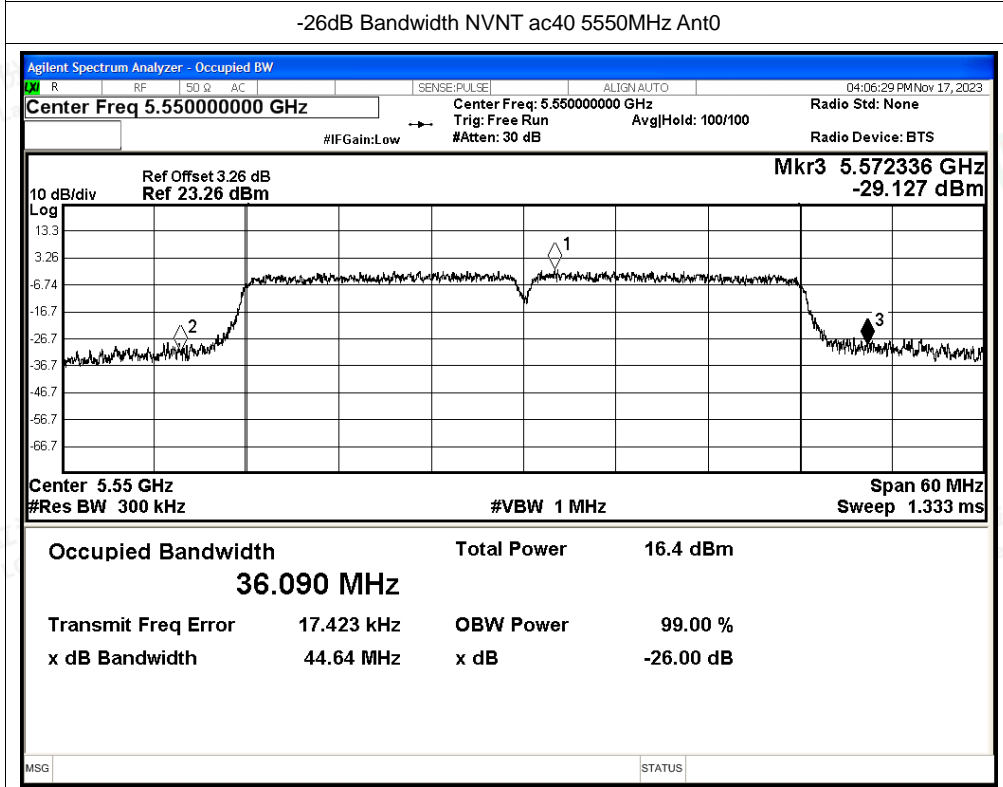
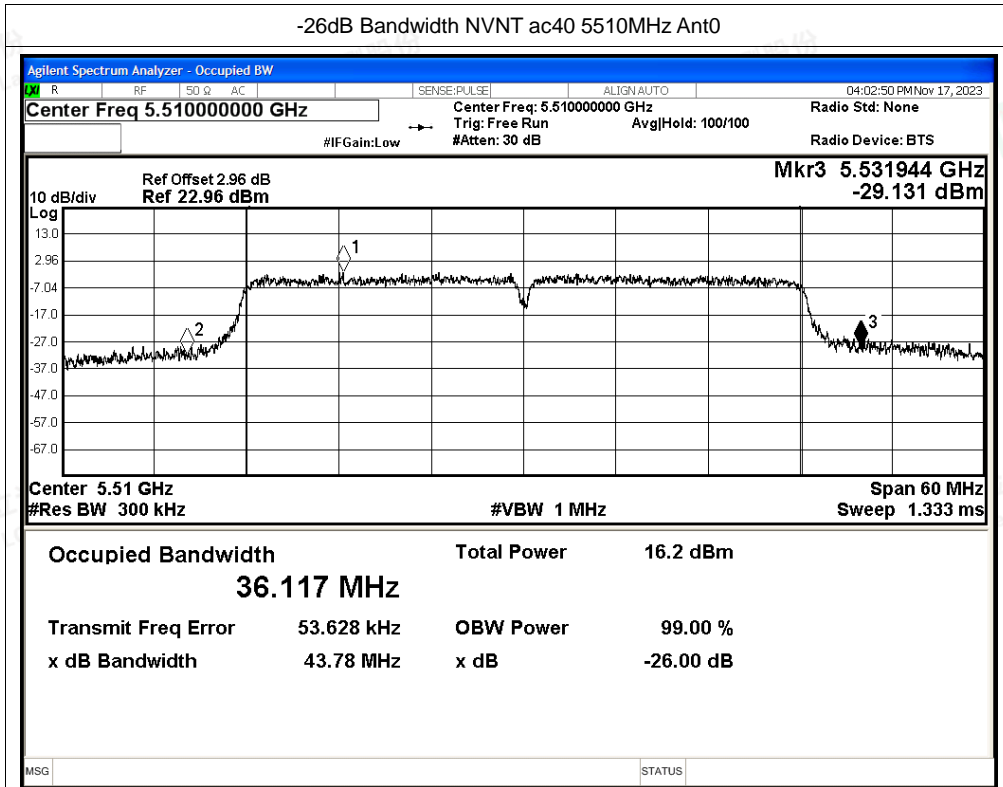


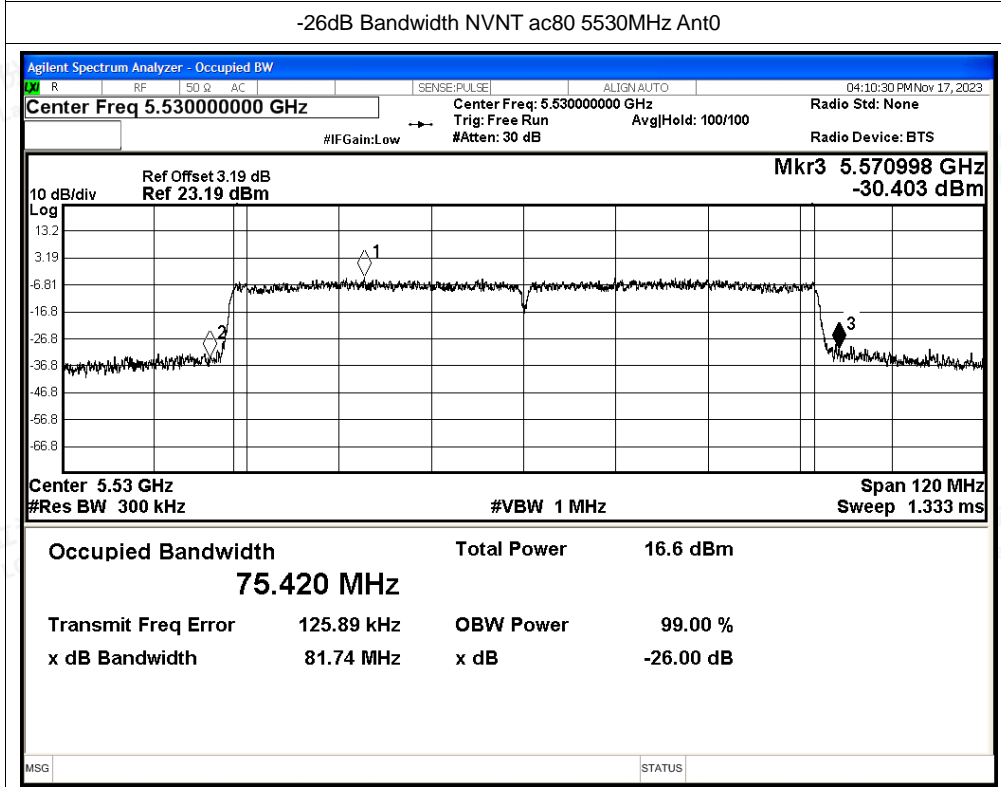
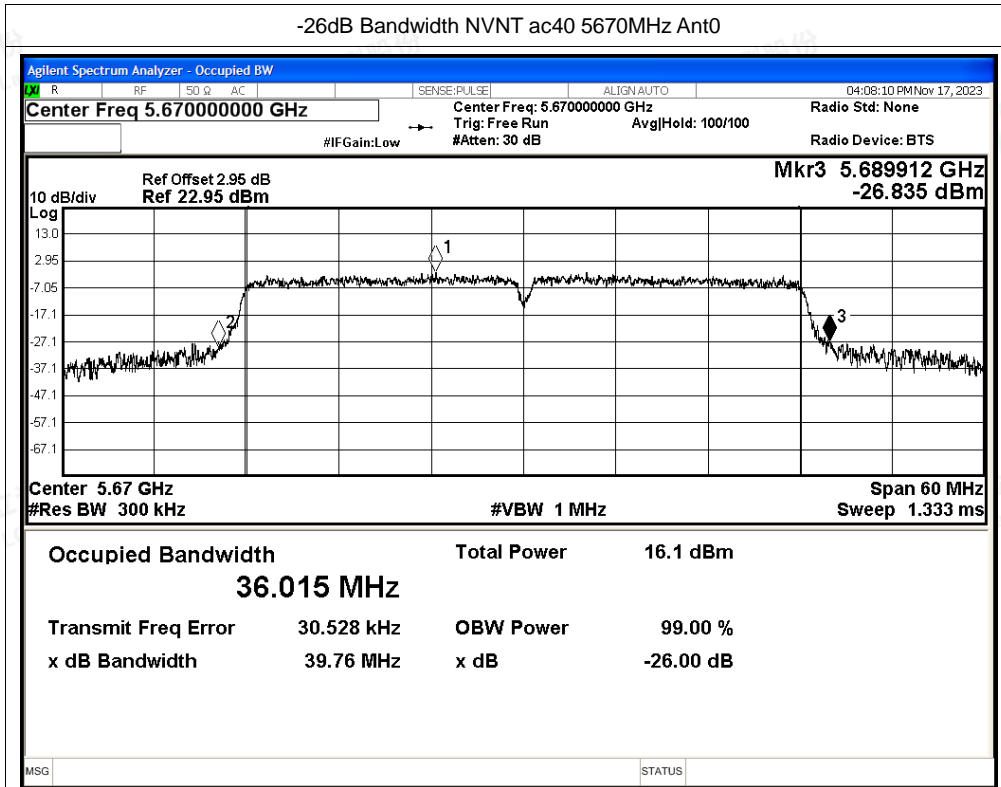
Shenzhen LCS Compliance Testing Laboratory Ltd.

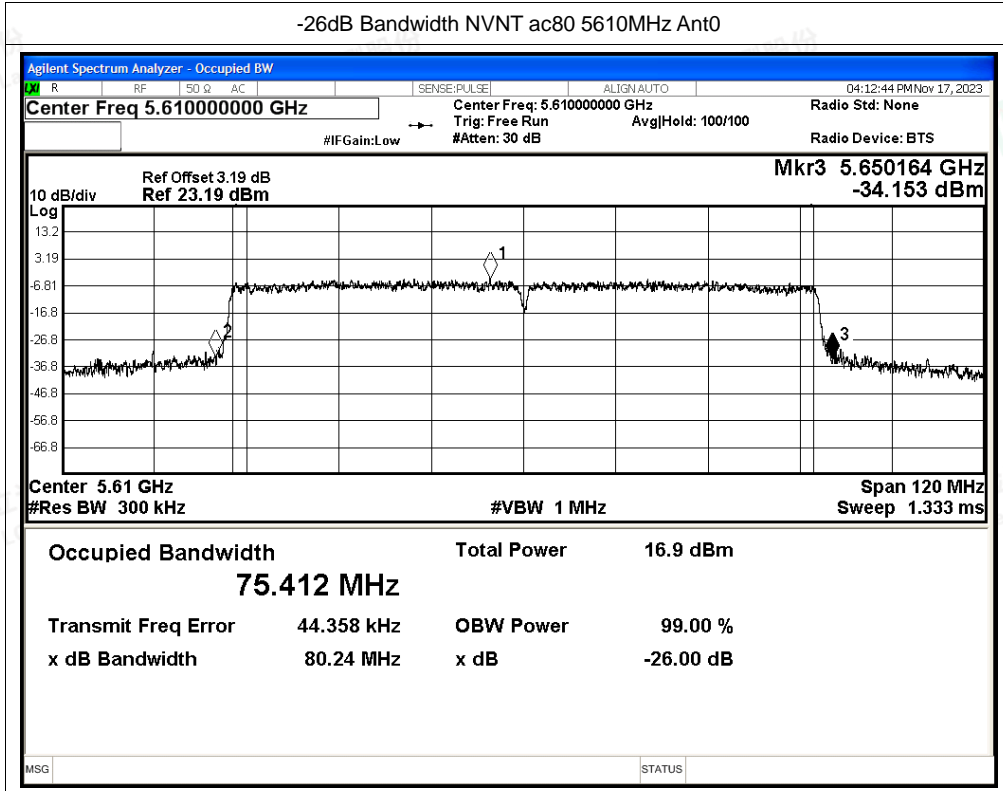
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity









F.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant0	10.7	24	Pass
NVNT	a	5580	Ant0	11.25	24	Pass
NVNT	a	5700	Ant0	10.55	24	Pass
NVNT	n20	5500	Ant0	10.96	24	Pass
NVNT	n20	5580	Ant0	11.55	24	Pass
NVNT	n20	5700	Ant0	10.77	24	Pass
NVNT	n40	5510	Ant0	10.75	24	Pass
NVNT	n40	5550	Ant0	10.92	24	Pass
NVNT	n40	5670	Ant0	10.61	24	Pass
NVNT	ac20	5500	Ant0	10.93	24	Pass
NVNT	ac20	5580	Ant0	11.5	24	Pass
NVNT	ac20	5700	Ant0	10.77	24	Pass
NVNT	ac40	5510	Ant0	10.65	24	Pass
NVNT	ac40	5550	Ant0	10.9	24	Pass
NVNT	ac40	5670	Ant0	10.49	24	Pass
NVNT	ac80	5530	Ant0	10.87	24	Pass
NVNT	ac80	5610	Ant0	11.06	24	Pass





F.3 Maximum Power Spectral Density Level

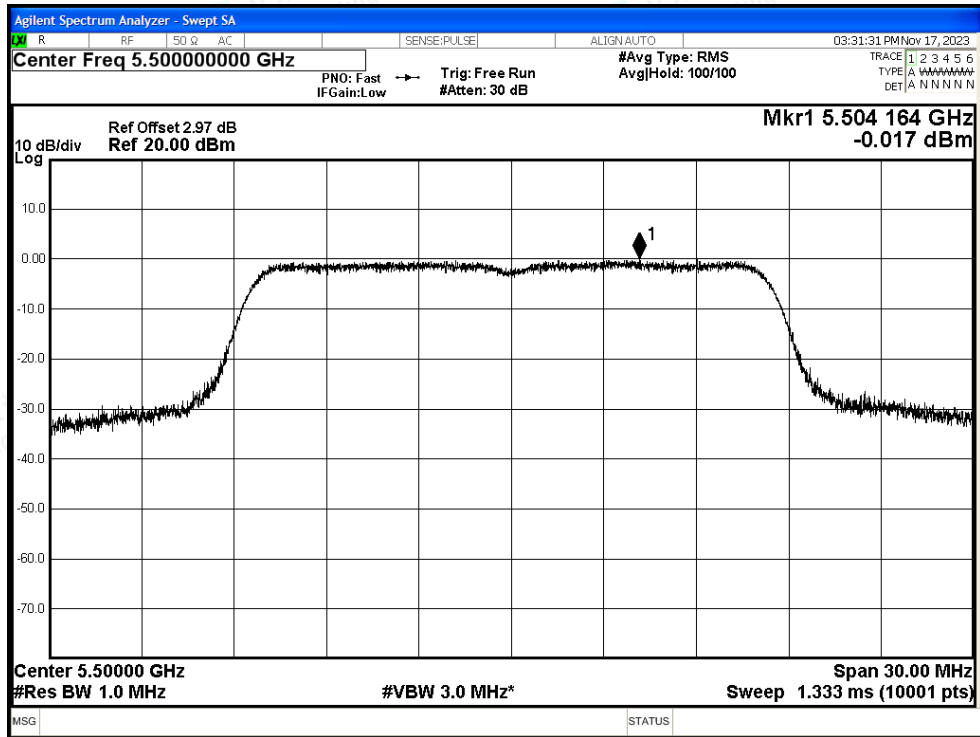
Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant0	0.17	11	Pass
NVNT	a	5580	Ant0	0.7	11	Pass
NVNT	a	5700	Ant0	-0.15	11	Pass
NVNT	n20	5500	Ant0	0.29	11	Pass
NVNT	n20	5580	Ant0	0.88	11	Pass
NVNT	n20	5700	Ant0	-0.08	11	Pass
NVNT	n40	5510	Ant0	-3.05	11	Pass
NVNT	n40	5550	Ant0	-2.63	11	Pass
NVNT	n40	5670	Ant0	-2.98	11	Pass
NVNT	ac20	5500	Ant0	0.35	11	Pass
NVNT	ac20	5580	Ant0	0.9	11	Pass
NVNT	ac20	5700	Ant0	0.12	11	Pass
NVNT	ac40	5510	Ant0	-3.09	11	Pass
NVNT	ac40	5550	Ant0	-2.71	11	Pass
NVNT	ac40	5670	Ant0	-2.95	11	Pass
NVNT	ac80	5530	Ant0	-5.93	11	Pass
NVNT	ac80	5610	Ant0	-5.88	11	Pass



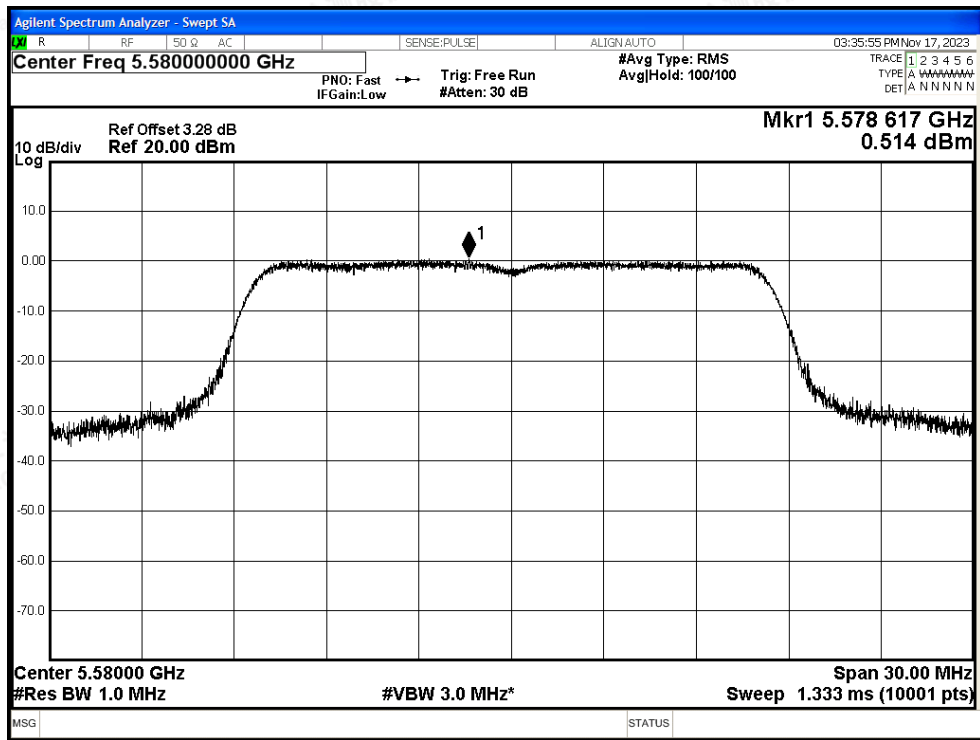


Test Graphs

PSD NVNT a 5500MHz Ant0

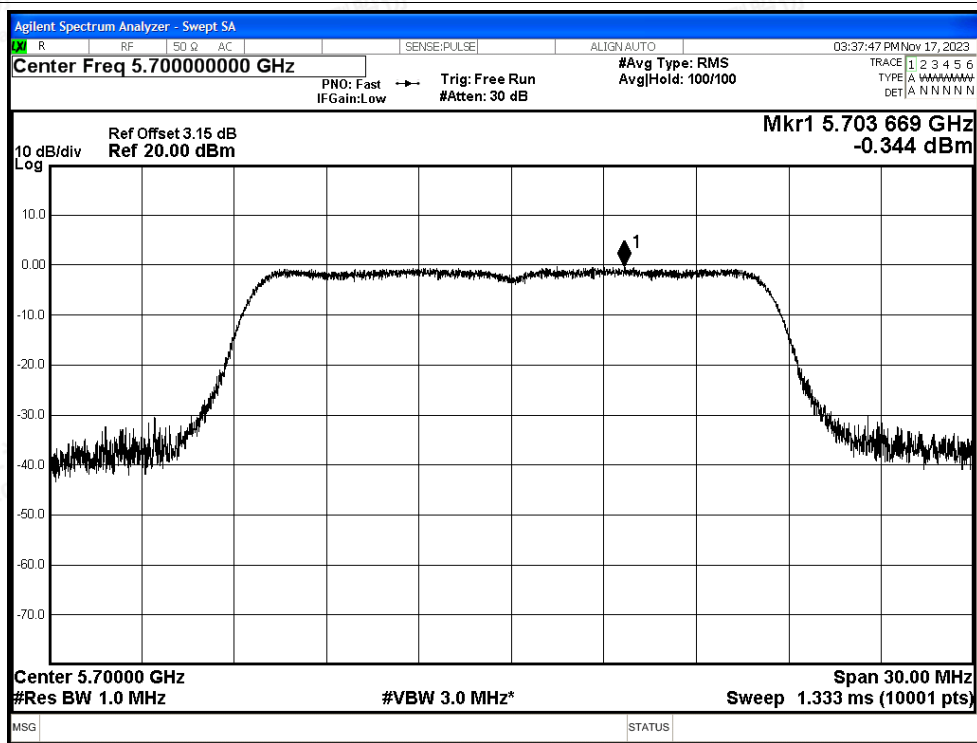


PSD NVNT a 5580MHz Ant0

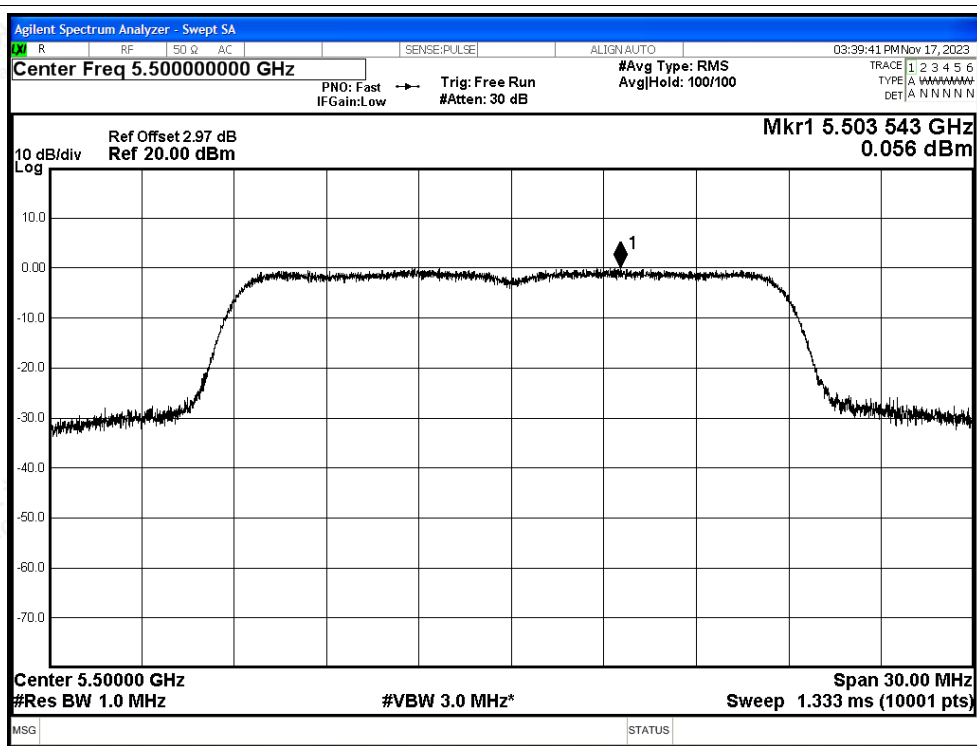


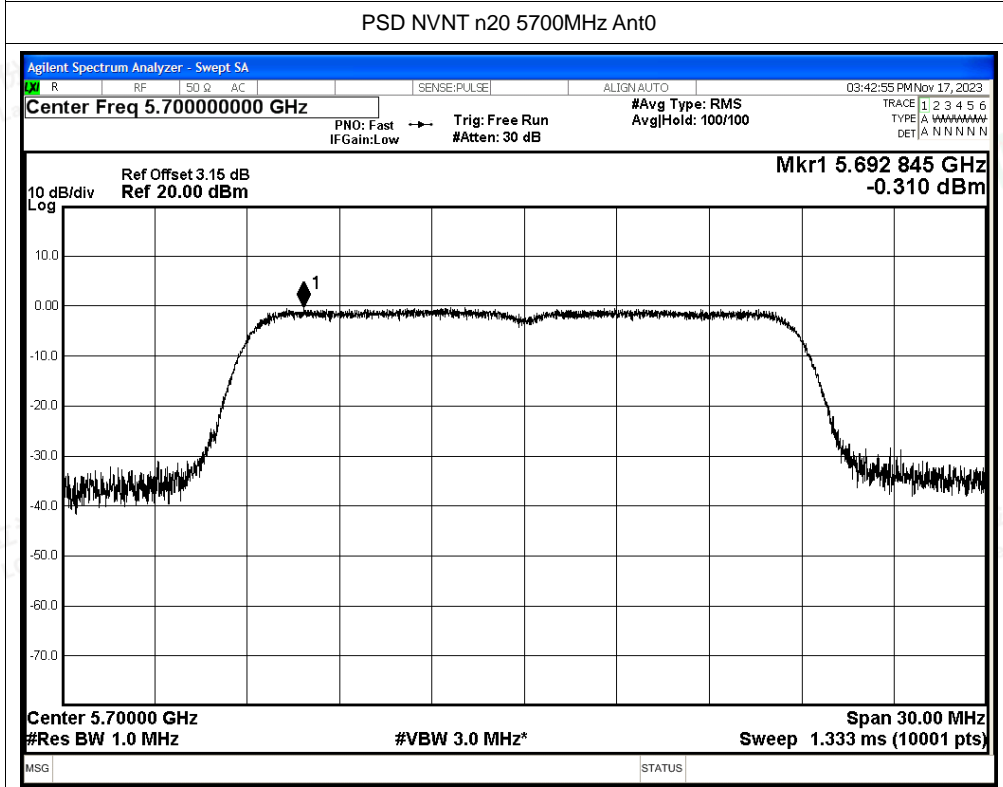
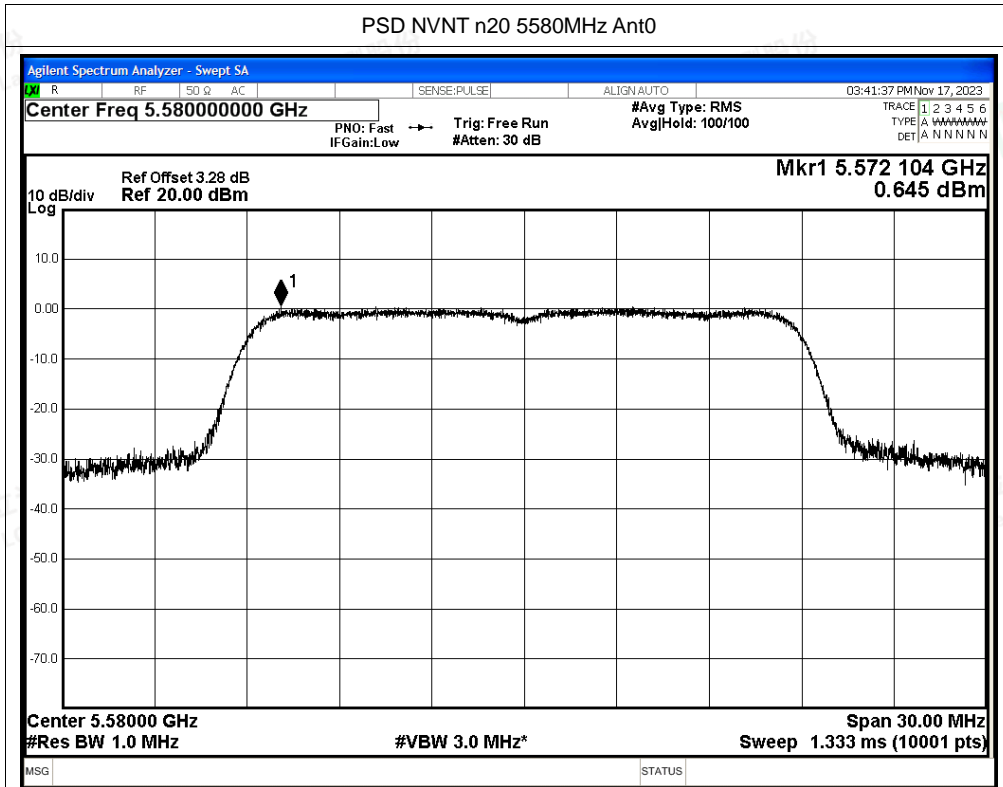


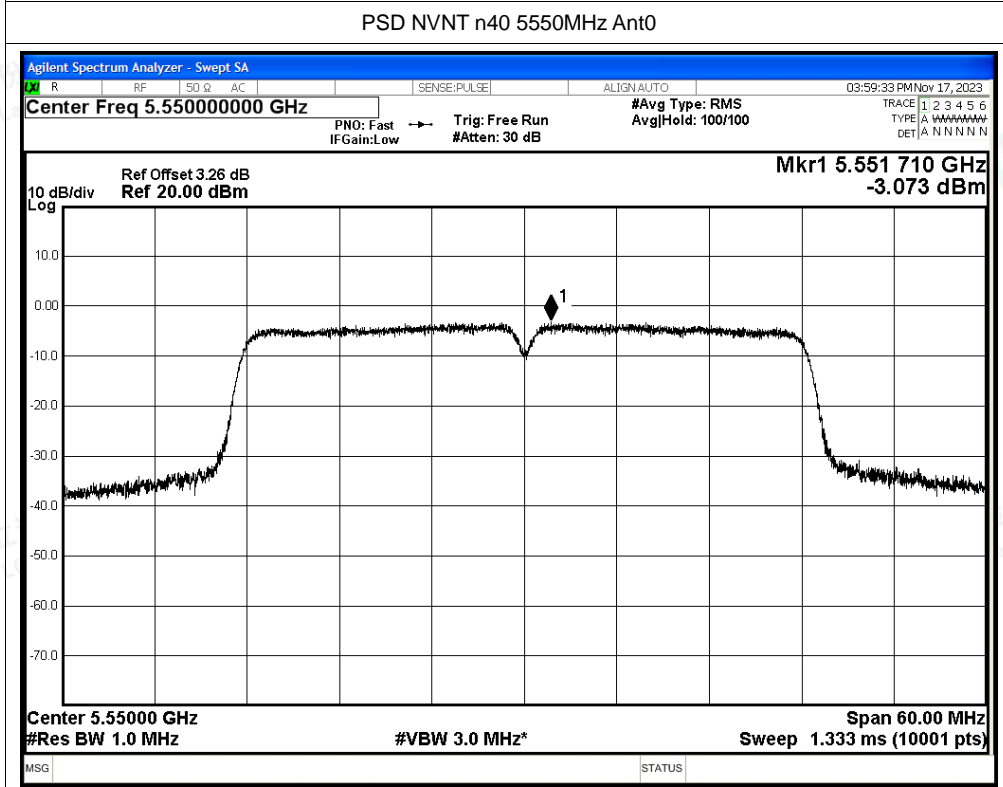
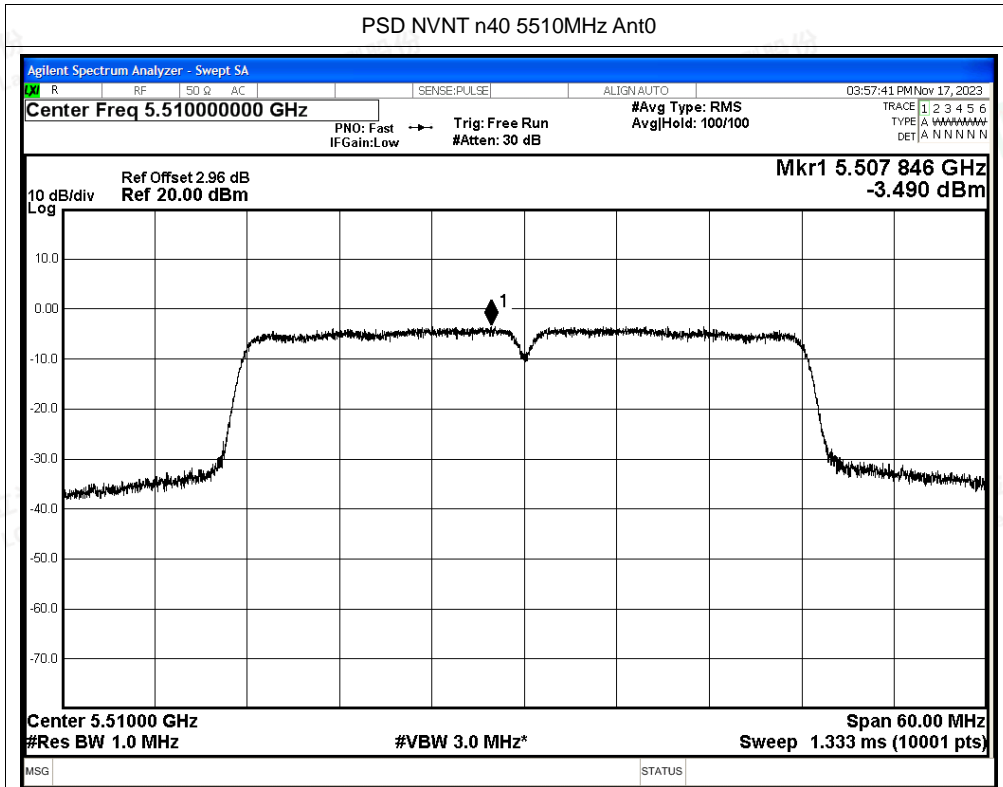
PSD NVNT a 5700MHz Ant0

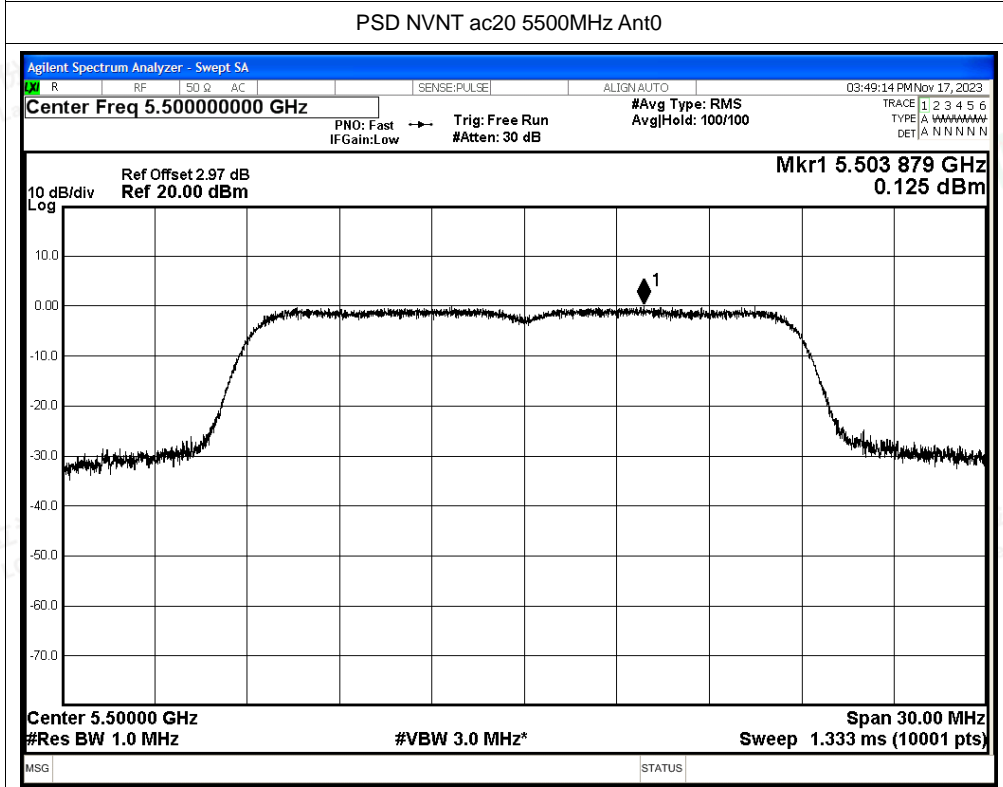
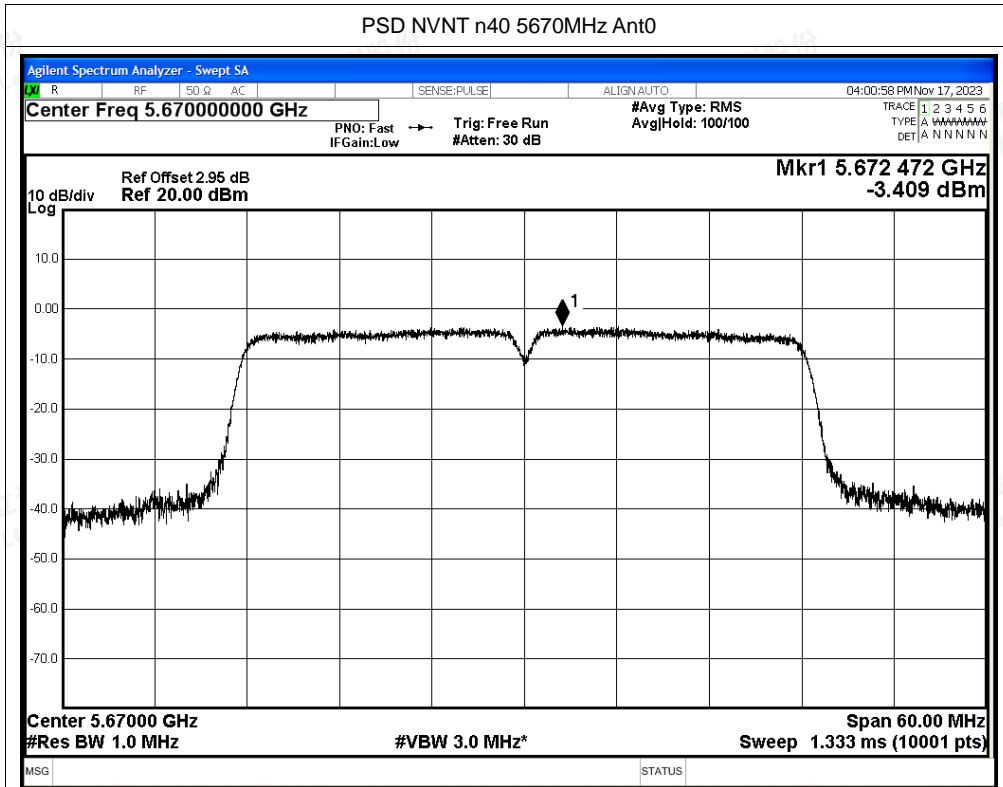


PSD NVNT n20 5500MHz Ant0



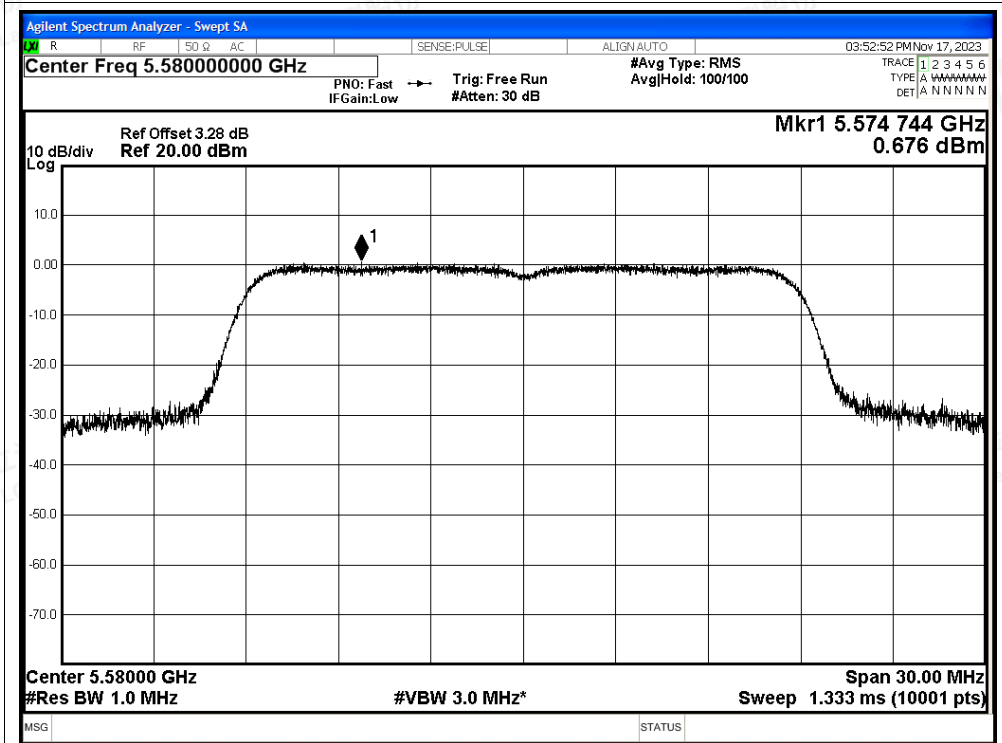




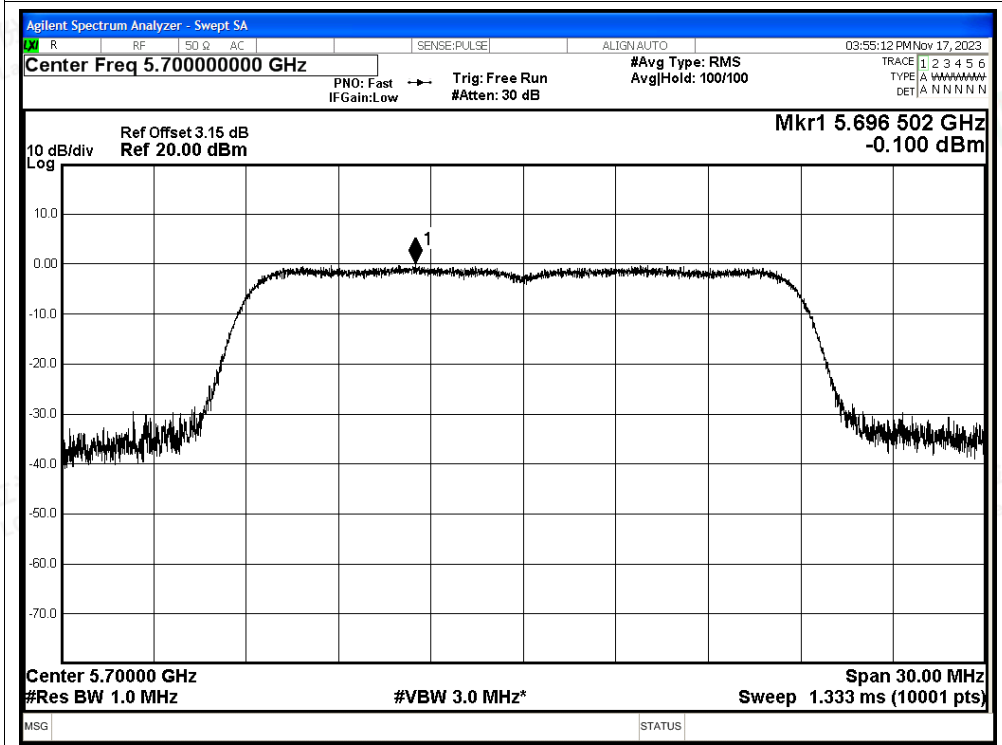


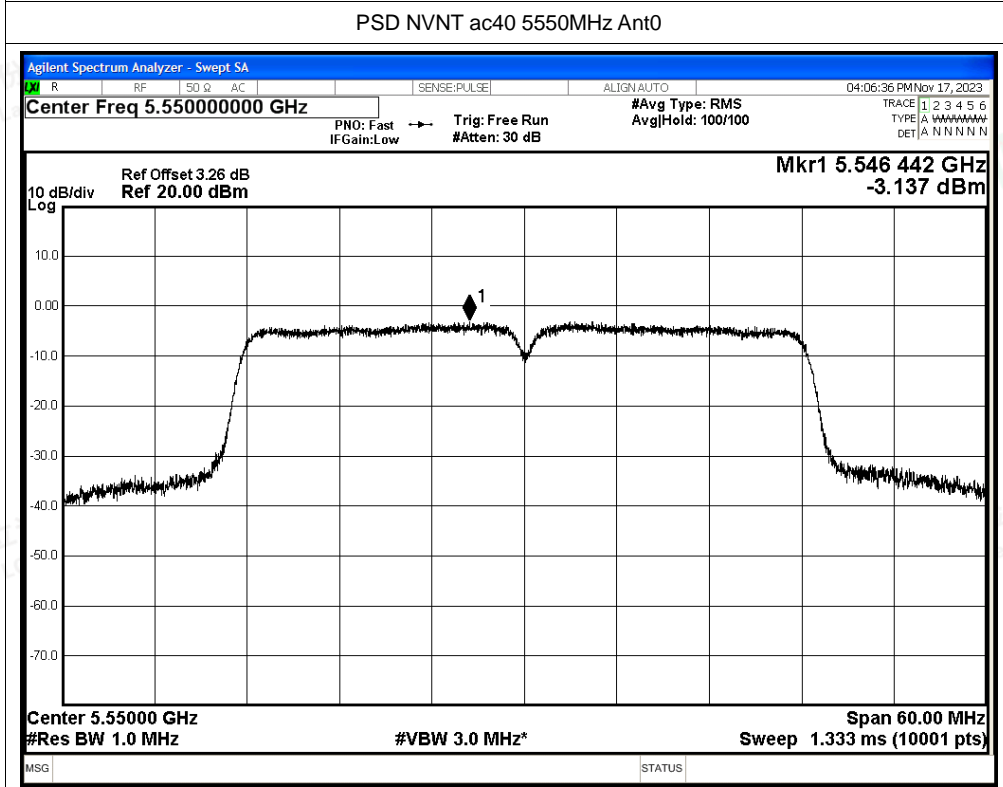
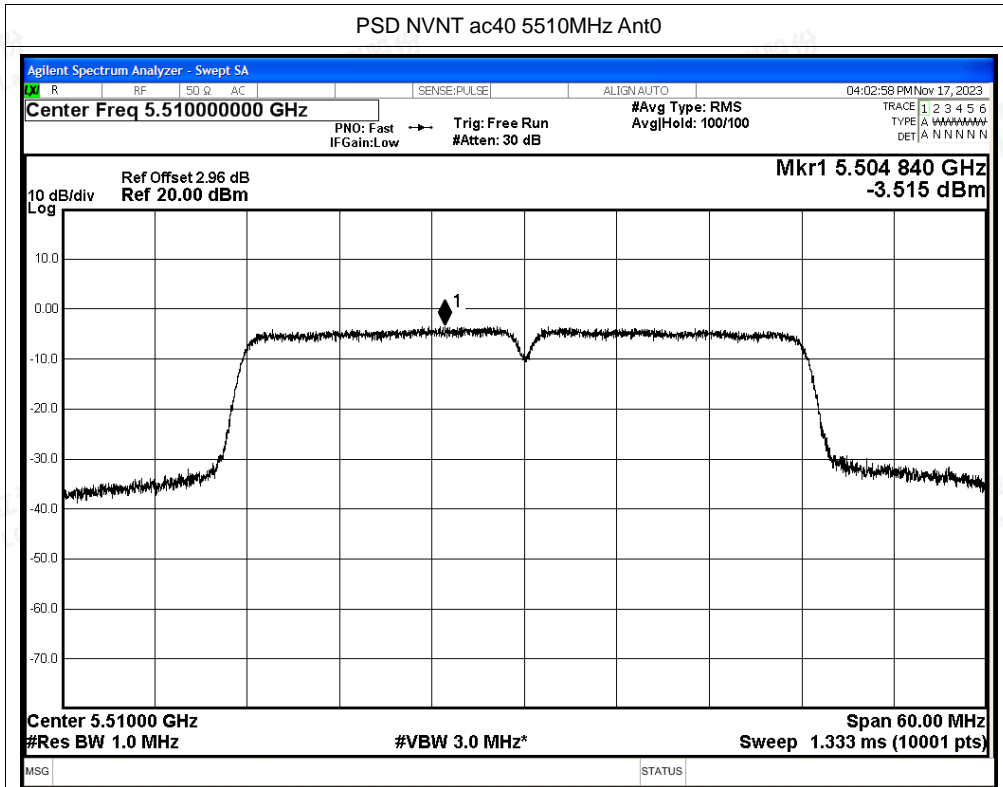


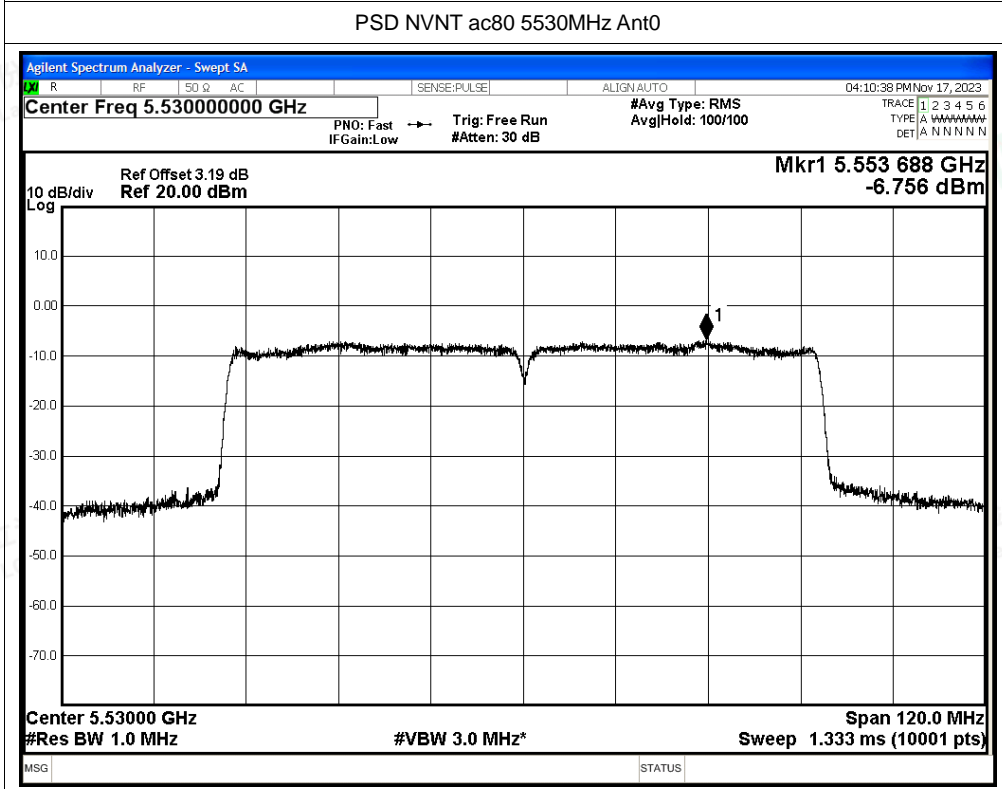
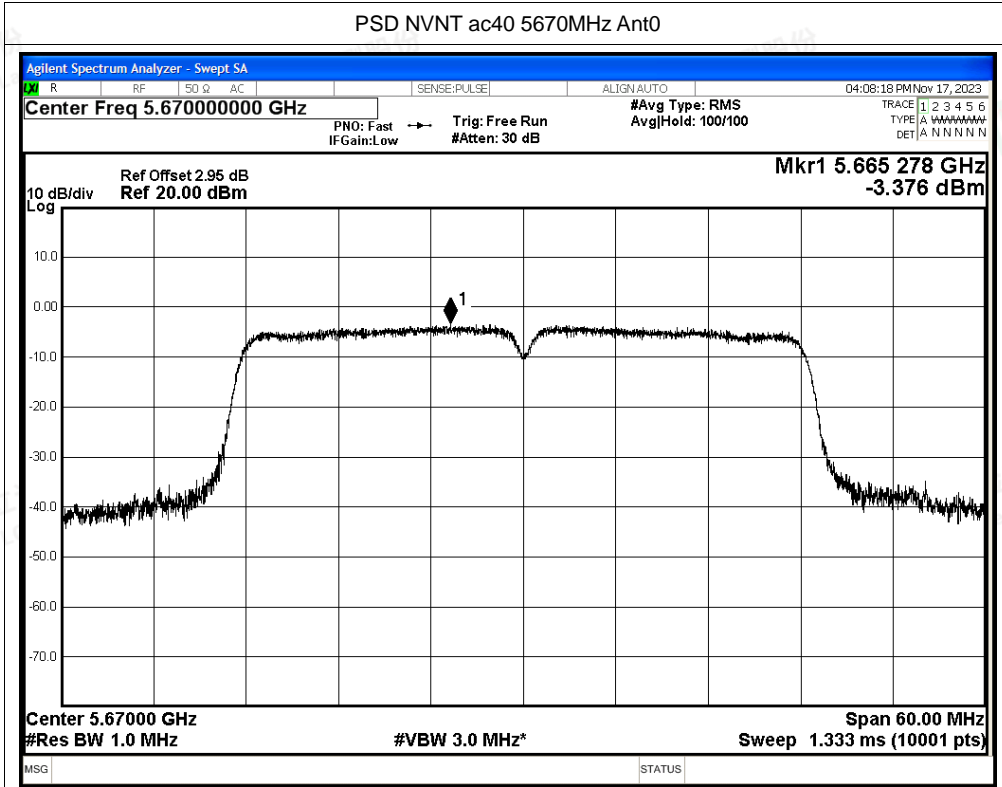
PSD NVNT ac20 5580MHz Ant0

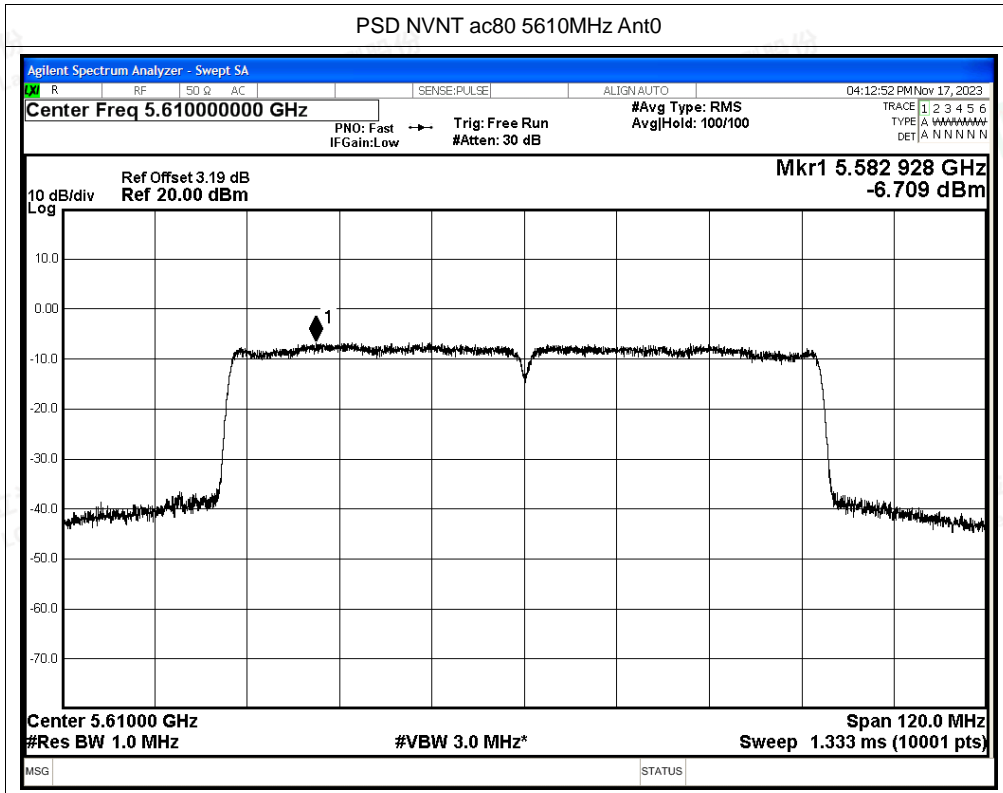


PSD NVNT ac20 5700MHz Ant0











F.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	Ant0	5460	-41.61	2	55.62	Peak	68.2	Pass
NVNT	a	5500	Ant0	5460	-52.25	2	44.98	Average	54	Pass
NVNT	a	5500	Ant0	5469.6	-34.74	2	62.49	Peak	68.2	Pass
NVNT	a	5500	Ant0	5470	-45.01	2	52.22	Average	54	Pass
NVNT	a	5500	Ant0	5470	-35.73	2	61.5	Peak	68.2	Pass
NVNT	a	5700	Ant0	5725	-32.65	2	64.58	Peak	68.2	Pass
NVNT	a	5700	Ant0	5725	-44.73	2	52.5	Average	54	Pass
NVNT	a	5700	Ant0	5725.4	-30.15	2	67.08	Peak	68.2	Pass
NVNT	a	5700	Ant0	5735	-43.96	2	53.27	Peak	68.2	Pass
NVNT	a	5700	Ant0	5735	-53.75	2	43.48	Average	54	Pass
NVNT	n20	5500	Ant0	5460	-39.58	2	57.65	Peak	68.2	Pass
NVNT	n20	5500	Ant0	5460	-50.52	2	46.71	Average	54	Pass
NVNT	n20	5500	Ant0	5467.2	-32.25	2	64.98	Peak	68.2	Pass
NVNT	n20	5500	Ant0	5469.8	-43.54	2	53.69	Average	54	Pass
NVNT	n20	5500	Ant0	5470	-35.9	2	61.33	Peak	68.2	Pass
NVNT	n20	5500	Ant0	5470	-43.55	2	53.68	Average	54	Pass
NVNT	n20	5700	Ant0	5725	-43.2	2	54.03	Peak	68.2	Pass
NVNT	n20	5700	Ant0	5725	-53.35	2	43.88	Average	54	Pass
NVNT	n20	5700	Ant0	5725.2	-41.52	2	55.71	Peak	68.2	Pass
NVNT	n20	5700	Ant0	5735	-50.76	2	46.47	Peak	68.2	Pass
NVNT	n20	5700	Ant0	5735	-56.93	2	40.3	Average	54	Pass
NVNT	n40	5510	Ant0	5460	-51.06	2	46.17	Peak	68.2	Pass
NVNT	n40	5510	Ant0	5460	-56.91	2	40.32	Average	54	Pass
NVNT	n40	5510	Ant0	5469	-44.33	2	52.9	Peak	68.2	Pass
NVNT	n40	5510	Ant0	5470	-54.8	2	42.43	Average	54	Pass
NVNT	n40	5510	Ant0	5470	-45.4	2	51.83	Peak	68.2	Pass
NVNT	n40	5670	Ant0	5725	-41.46	2	55.77	Peak	68.2	Pass
NVNT	n40	5670	Ant0	5725	-51.78	2	45.45	Average	54	Pass
NVNT	n40	5670	Ant0	5725.8	-51.78	2	45.45	Average	54	Pass
NVNT	n40	5670	Ant0	5735	-47.2	2	50.03	Peak	68.2	Pass
NVNT	n40	5670	Ant0	5735	-53.87	2	43.36	Average	54	Pass
NVNT	ac20	5500	Ant0	5460	-40.72	2	56.51	Peak	68.2	Pass
NVNT	ac20	5500	Ant0	5460	-50.4	2	46.83	Average	54	Pass
NVNT	ac20	5500	Ant0	5468.8	-32.59	2	64.64	Peak	68.2	Pass
NVNT	ac20	5500	Ant0	5470	-43.3	2	53.93	Average	54	Pass
NVNT	ac20	5500	Ant0	5470	-35.4	2	61.83	Peak	68.2	Pass
NVNT	ac20	5700	Ant0	5725	-43.32	2	53.91	Peak	68.2	Pass
NVNT	ac20	5700	Ant0	5725	-53.39	2	43.84	Average	54	Pass
NVNT	ac20	5700	Ant0	5726.4	-41.24	2	55.99	Peak	68.2	Pass



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 Scan code to check authenticity



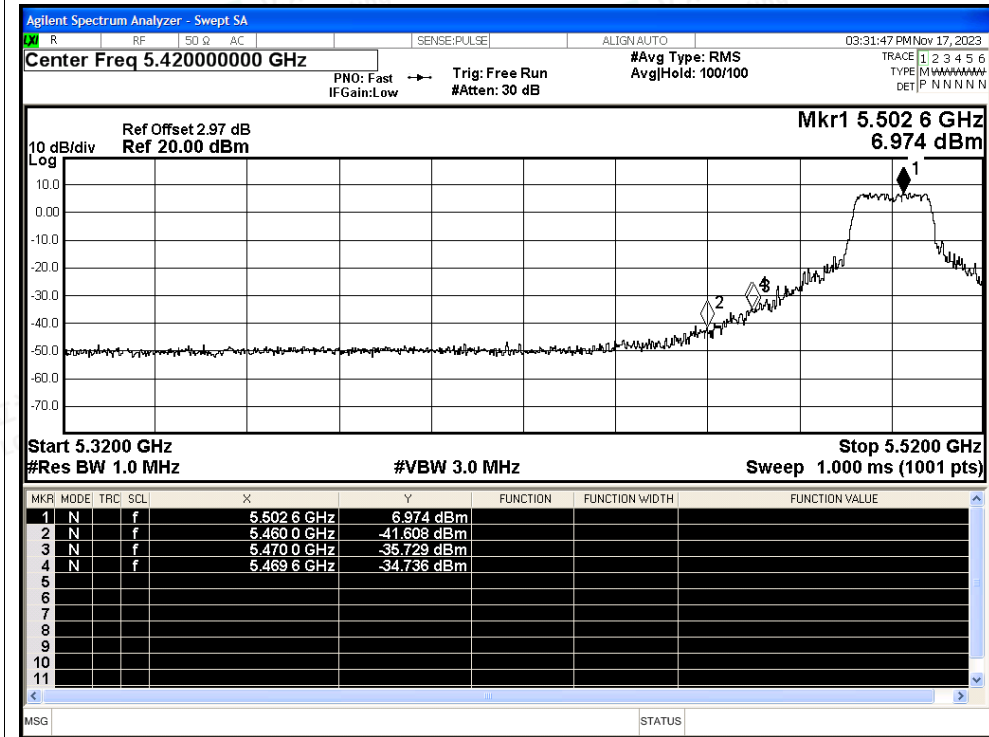
NVNT	ac20	5700	Ant0	5735	-49.41	2	47.82	Peak	68.2	Pass
NVNT	ac20	5700	Ant0	5735	-56.99	2	40.24	Average	54	Pass
NVNT	ac40	5510	Ant0	5460	-50	2	47.23	Peak	68.2	Pass
NVNT	ac40	5510	Ant0	5460	-56.7	2	40.53	Average	54	Pass
NVNT	ac40	5510	Ant0	5469.4	-44.36	2	52.87	Peak	68.2	Pass
NVNT	ac40	5510	Ant0	5469.8	-55.16	2	42.07	Average	54	Pass
NVNT	ac40	5510	Ant0	5470	-47.53	2	49.7	Peak	68.2	Pass
NVNT	ac40	5510	Ant0	5470	-55.28	2	41.95	Average	54	Pass
NVNT	ac40	5670	Ant0	5725	-46.08	2	51.15	Peak	68.2	Pass
NVNT	ac40	5670	Ant0	5725	-51.6	2	45.63	Average	54	Pass
NVNT	ac40	5670	Ant0	5725.8	-42.47	2	54.76	Peak	68.2	Pass
NVNT	ac40	5670	Ant0	5735	-47.29	2	49.94	Peak	68.2	Pass
NVNT	ac40	5670	Ant0	5735	-53.99	2	43.24	Average	54	Pass
NVNT	ac80	5530	Ant0	5460	-49.46	2	47.77	Peak	68.2	Pass
NVNT	ac80	5530	Ant0	5460	-55.99	2	41.24	Average	54	Pass
NVNT	ac80	5530	Ant0	5467.8	-42.8	2	54.43	Peak	68.2	Pass
NVNT	ac80	5530	Ant0	5469.4	-54.83	2	42.4	Average	54	Pass
NVNT	ac80	5530	Ant0	5470	-49.3	2	47.93	Peak	68.2	Pass
NVNT	ac80	5530	Ant0	5470	-55.01	2	42.22	Average	54	Pass
NVNT	ac80	5610	Ant0	5725	-49.5	2	47.73	Peak	68.2	Pass
NVNT	ac80	5610	Ant0	5725	-55.99	2	41.24	Average	54	Pass
NVNT	ac80	5610	Ant0	5725.16	-46.41	2	50.82	Peak	68.2	Pass
NVNT	ac80	5610	Ant0	5730.9	-55.04	2	42.19	Average	54	Pass
NVNT	ac80	5610	Ant0	5735	-50.16	2	47.07	Peak	68.2	Pass
NVNT	ac80	5610	Ant0	5735	-56.09	2	41.14	Average	54	Pass



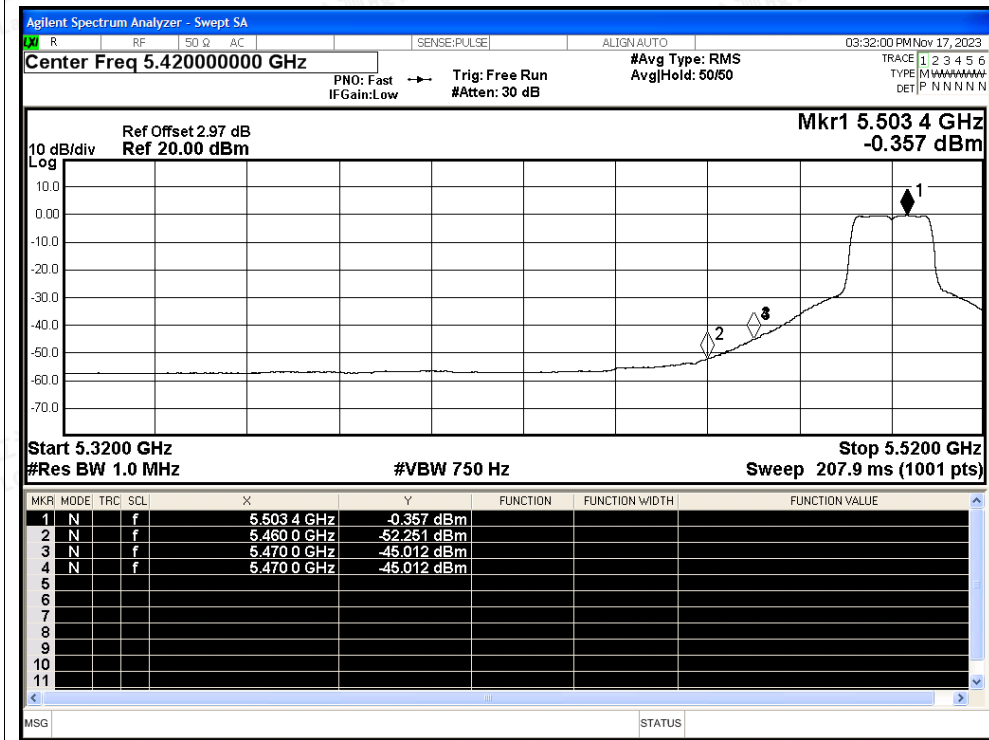


Test Graphs

Restrict Band NVNT a 5500MHz Ant0 Peak

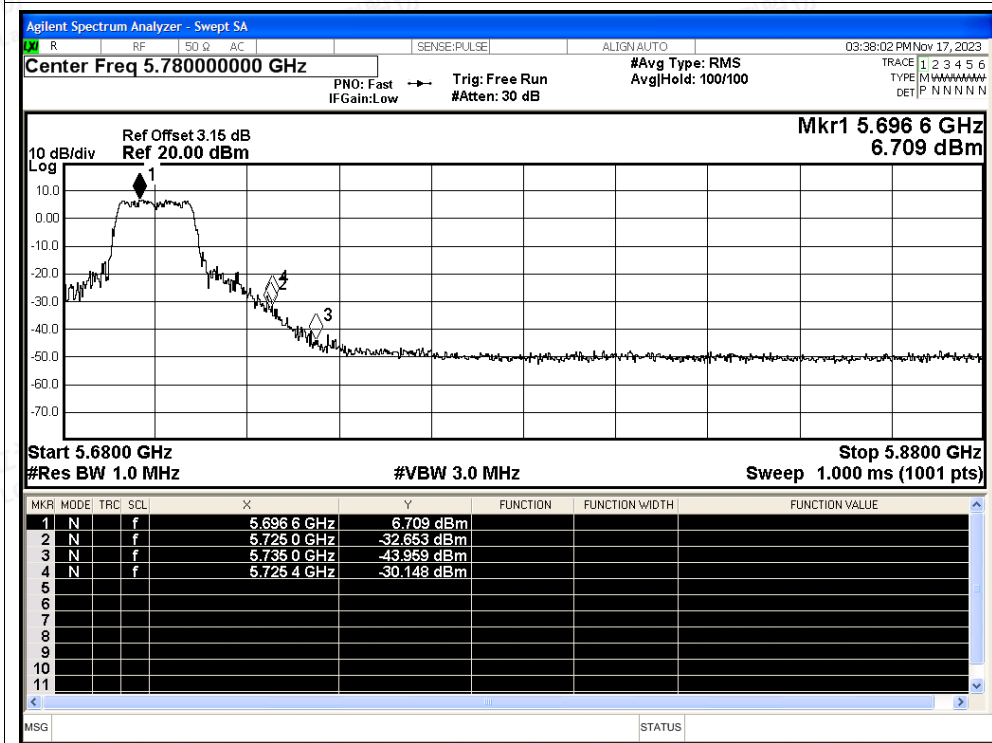


Restrict Band NVNT a 5500MHz Ant0 Average

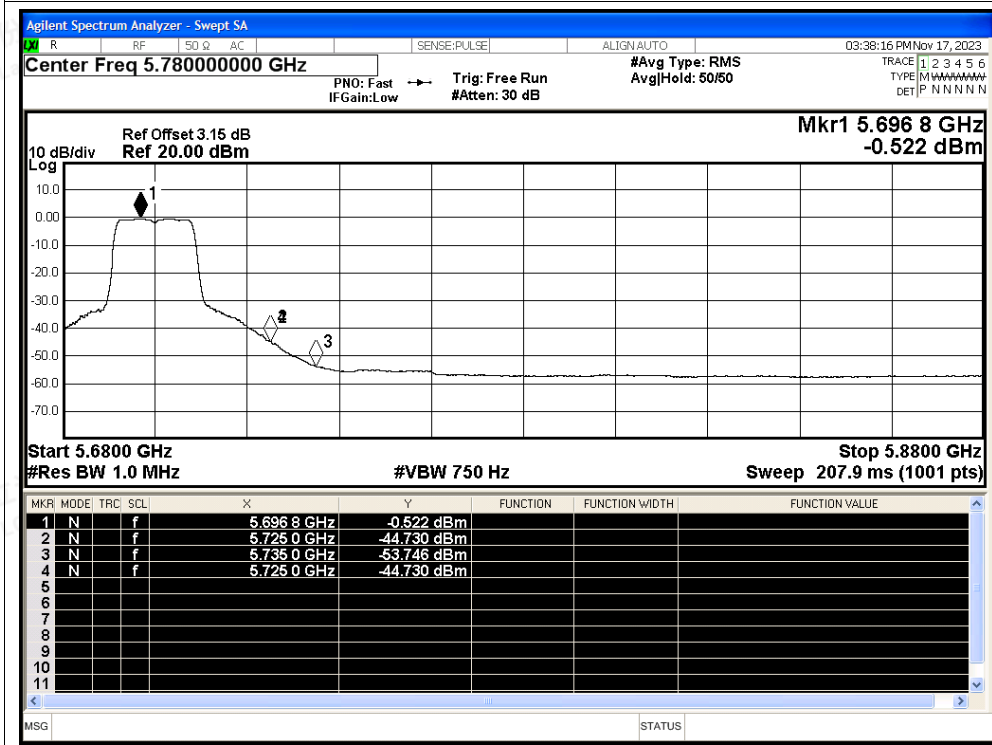




Restrict Band NVNT a 5700MHz Ant0 Peak

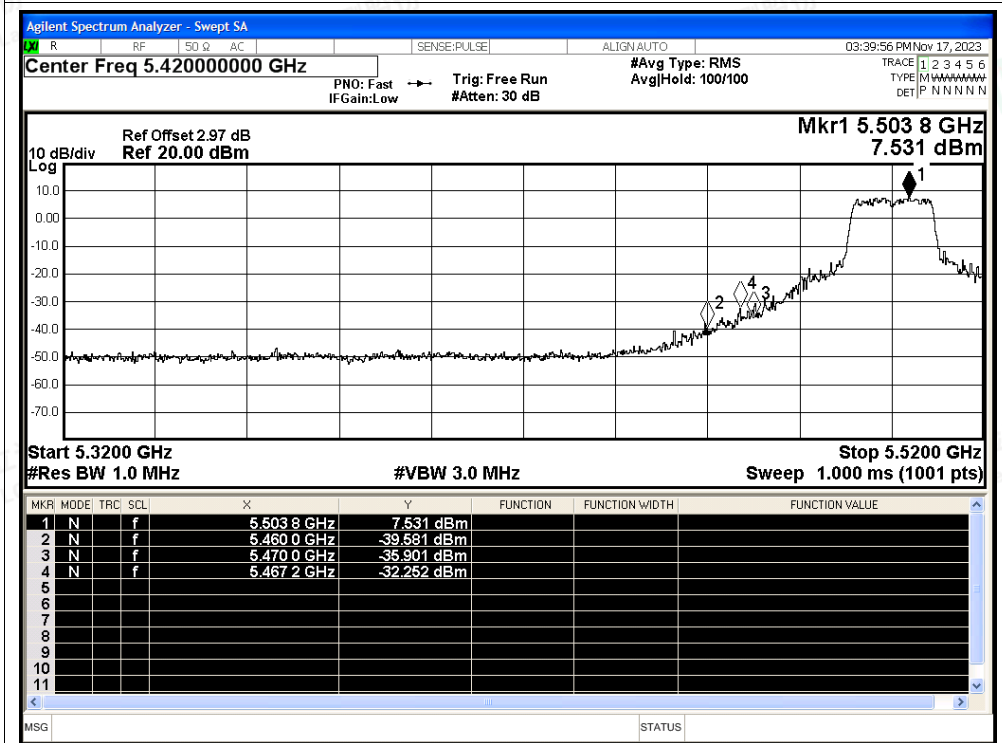


Restrict Band NVNT a 5700MHz Ant0 Average

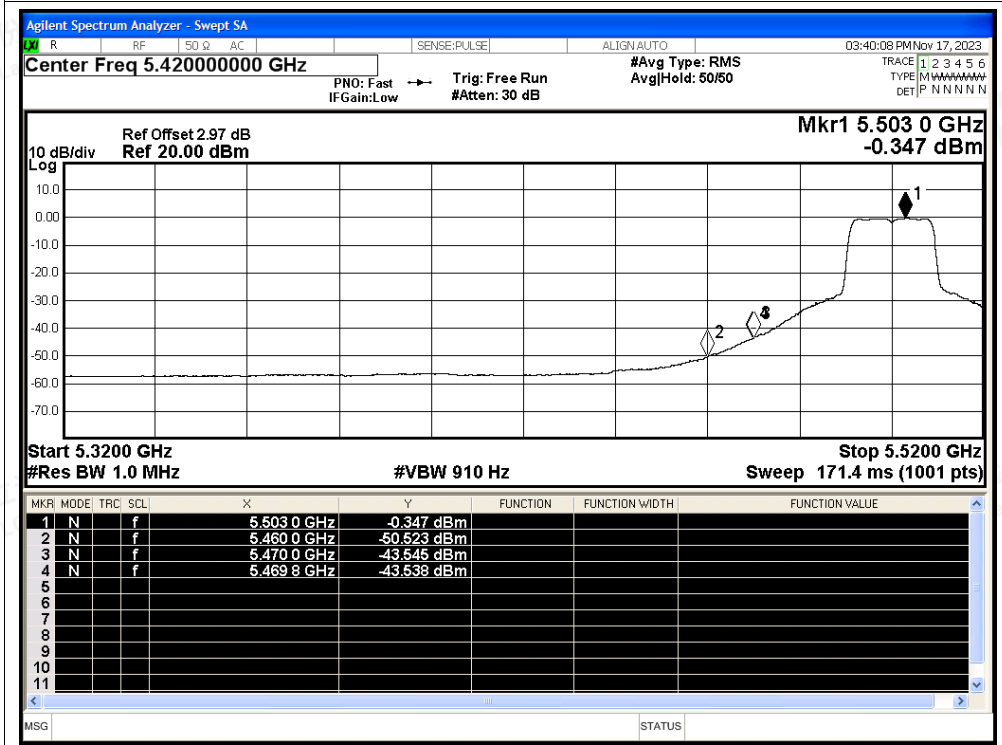




Restrict Band NVNT n20 5500MHz Ant0 Peak

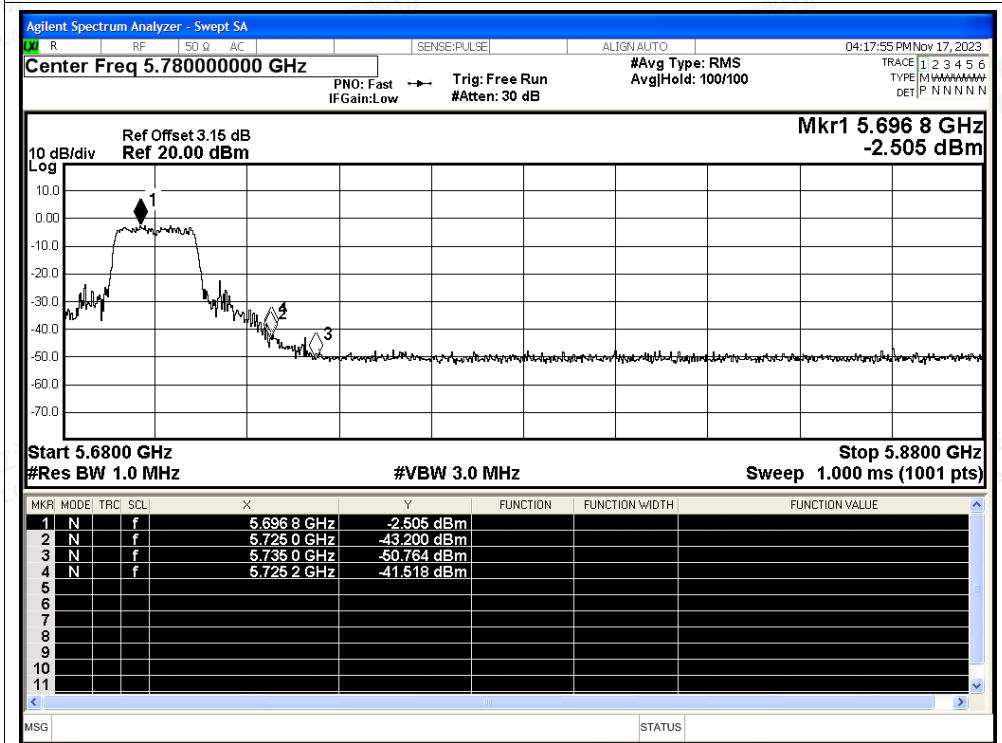


Restrict Band NVNT n20 5500MHz Ant0 Average

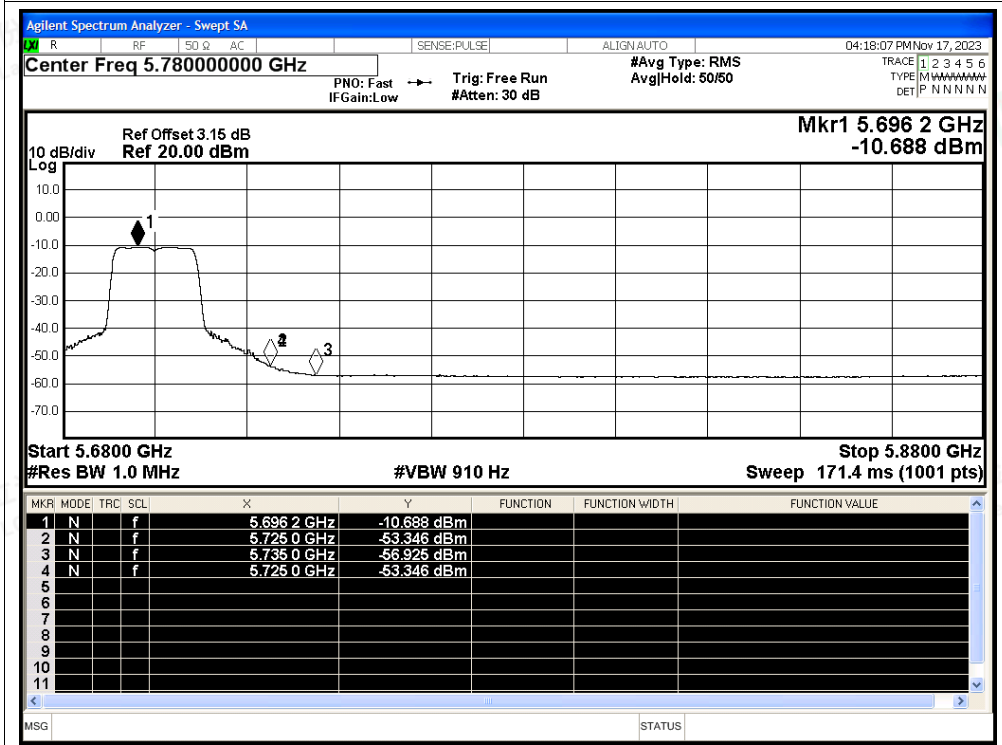




Restrict Band NVNT n20 5700MHz Ant0 Peak

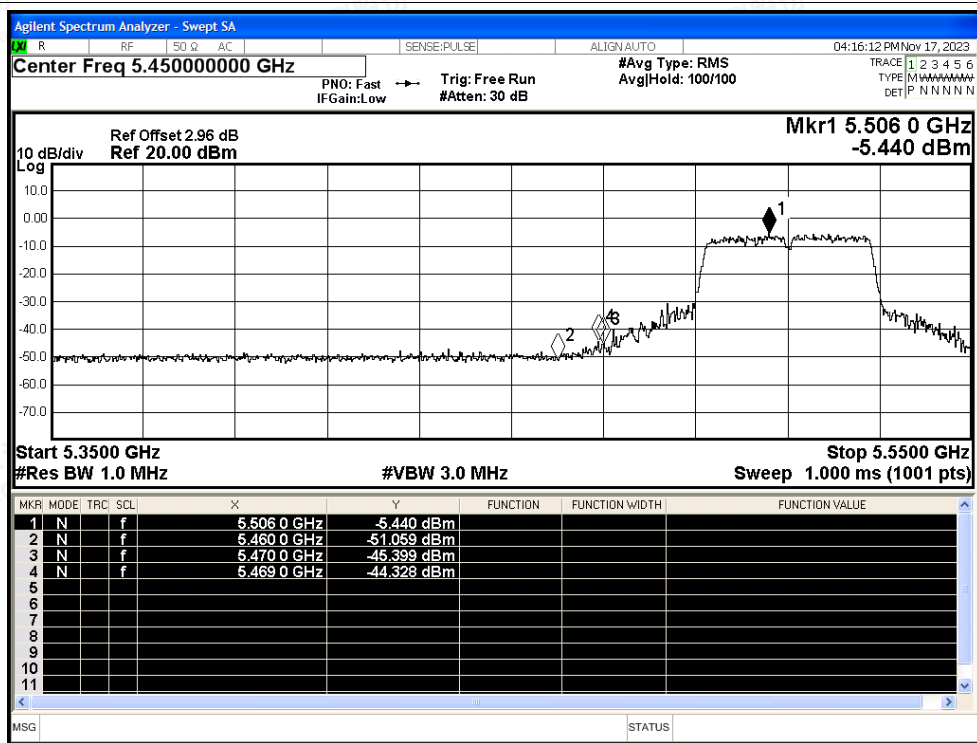


Restrict Band NVNT n20 5700MHz Ant0 Average

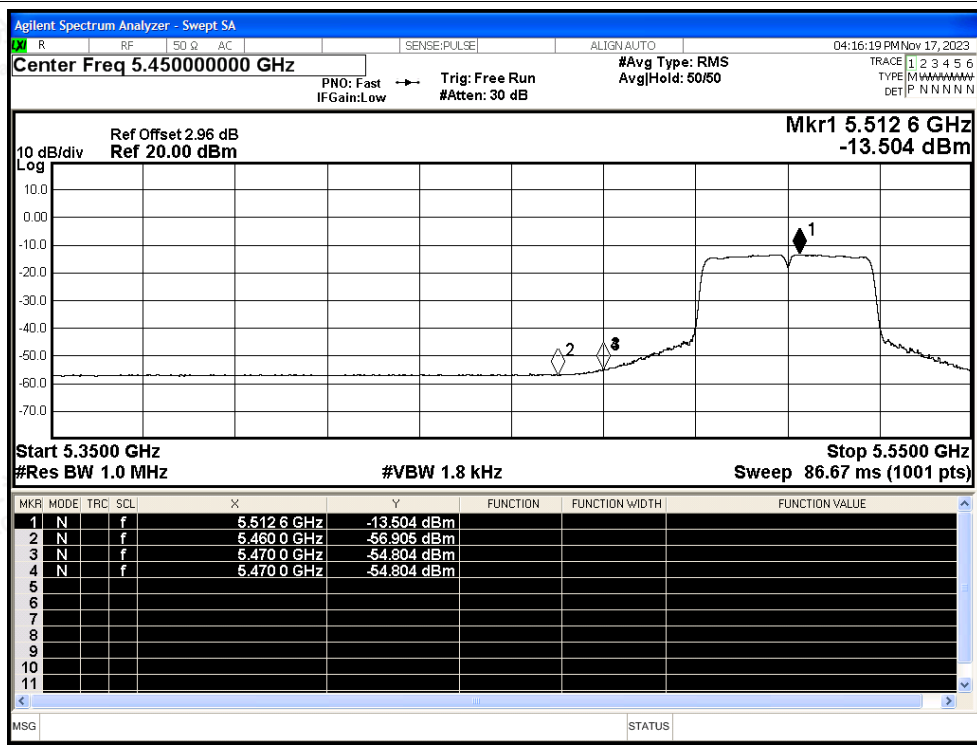




Restrict Band NVNT n40 5510MHz Ant0 Peak

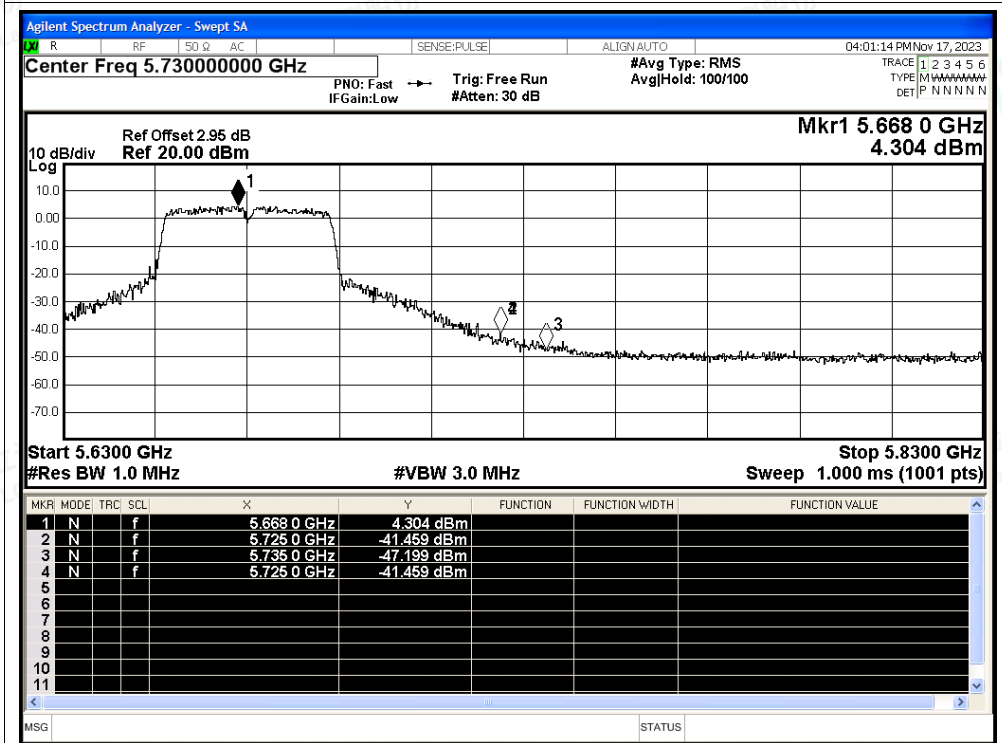


Restrict Band NVNT n40 5510MHz Ant0 Average

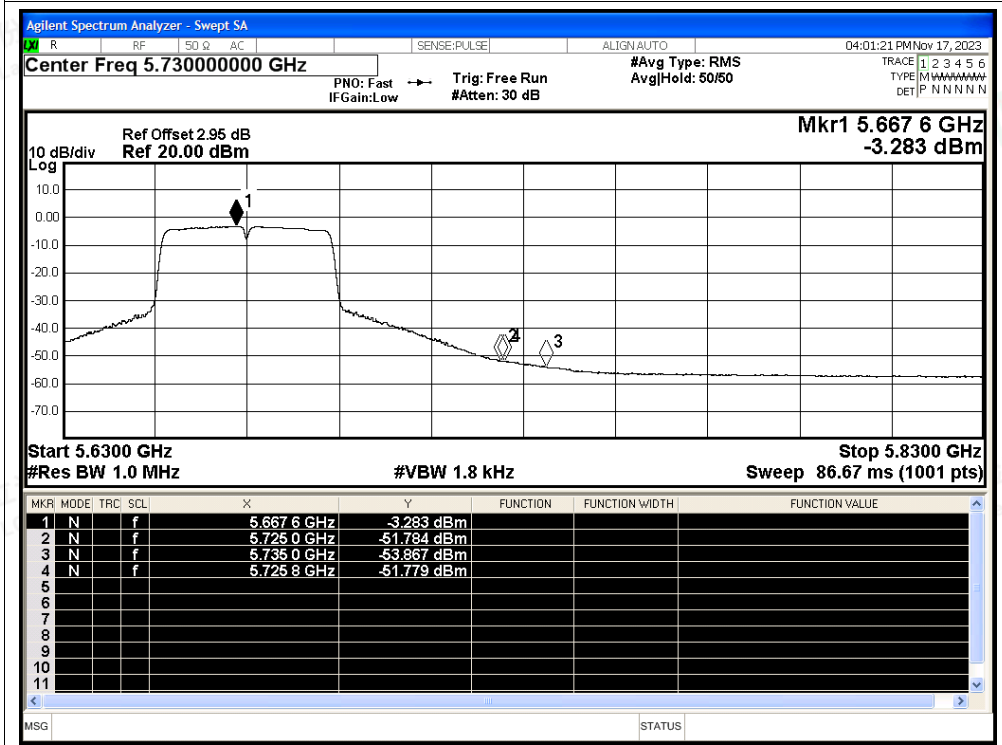




Restrict Band NVNT n40 5670MHz Ant0 Peak

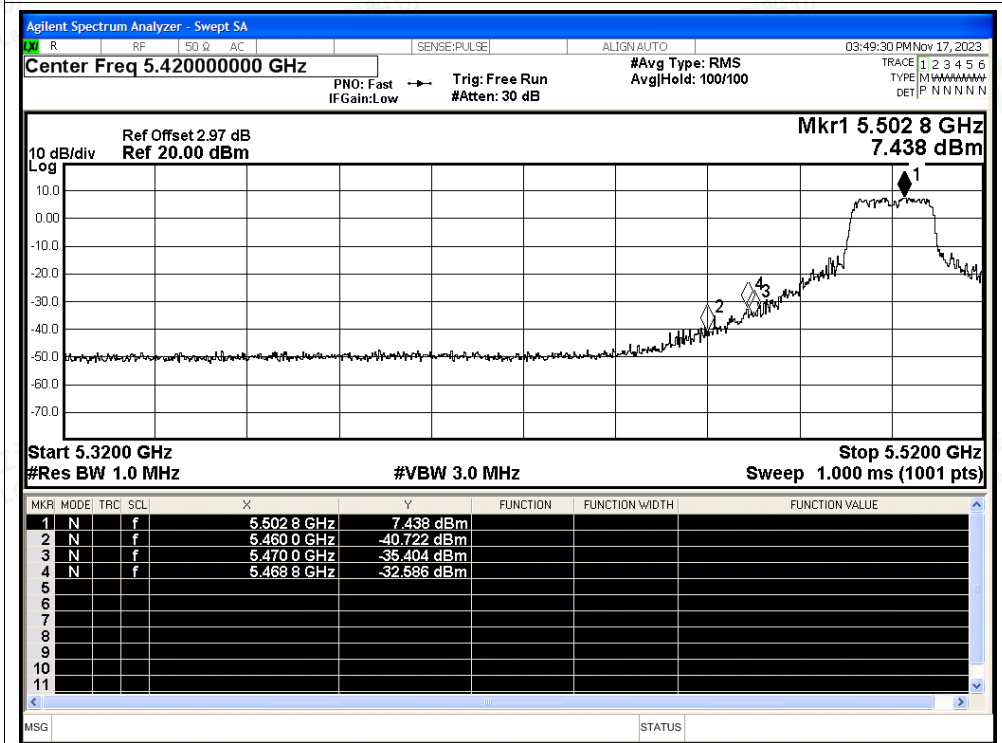


Restrict Band NVNT n40 5670MHz Ant0 Average

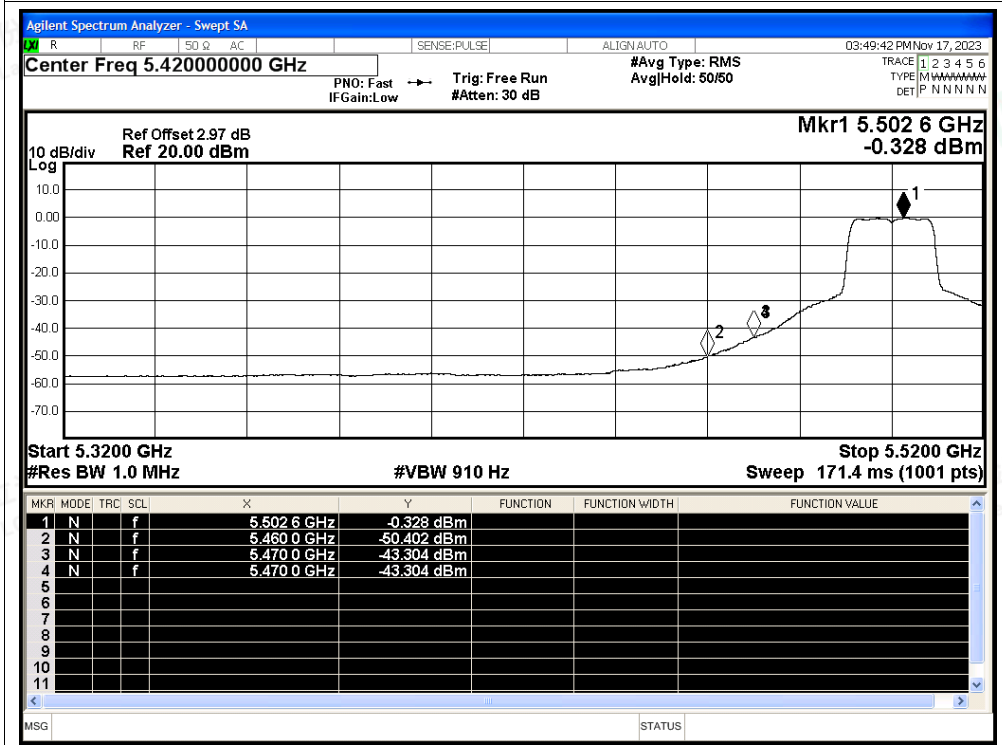




Restrict Band NVNT ac20 5500MHz Ant0 Peak

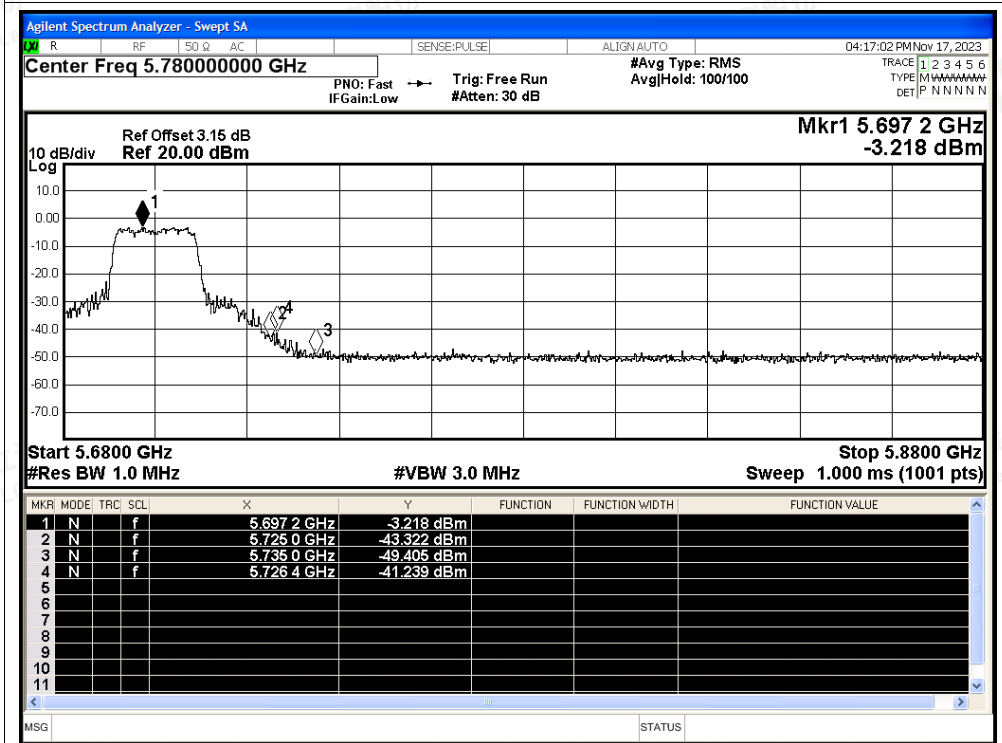


Restrict Band NVNT ac20 5500MHz Ant0 Average

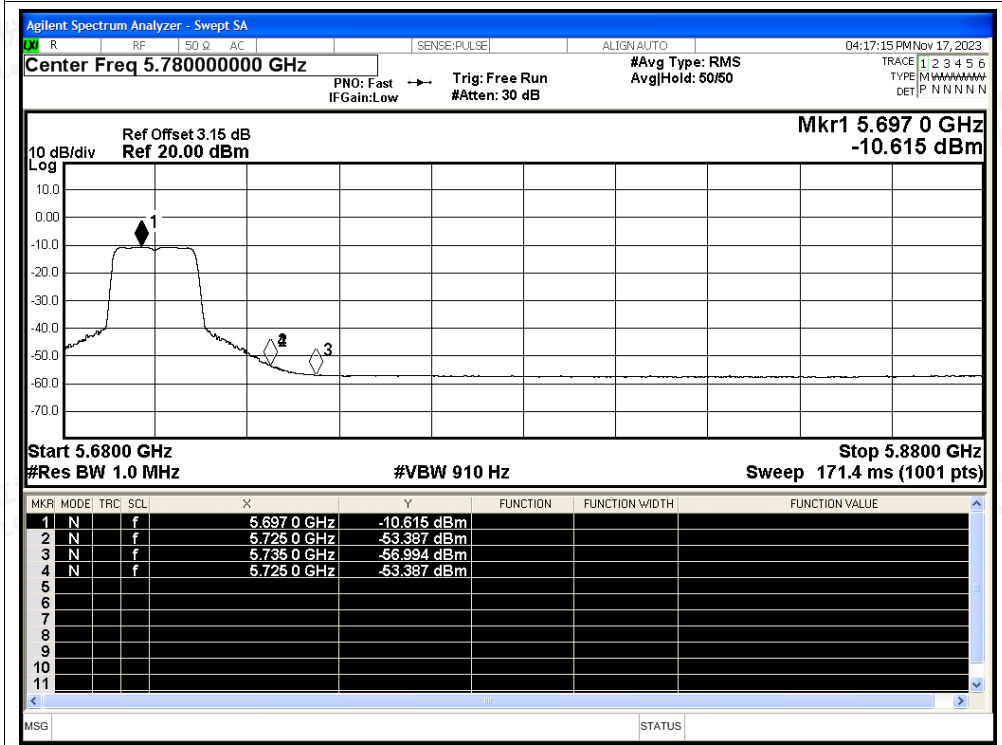




Restrict Band NVNT ac20 5700MHz Ant0 Peak

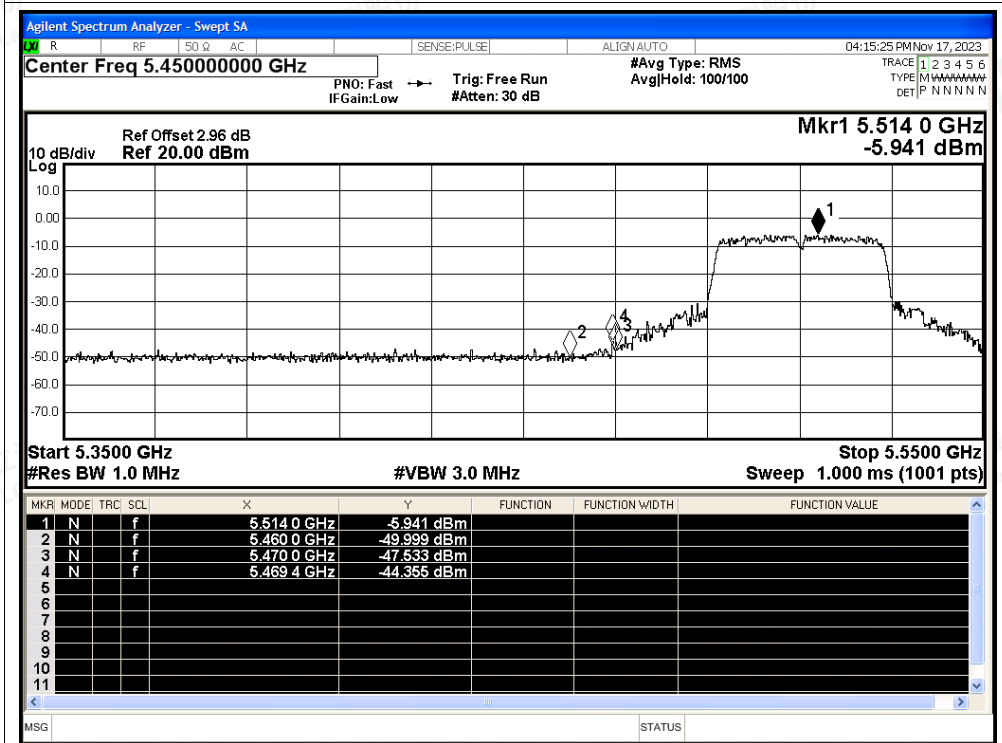


Restrict Band NVNT ac20 5700MHz Ant0 Average

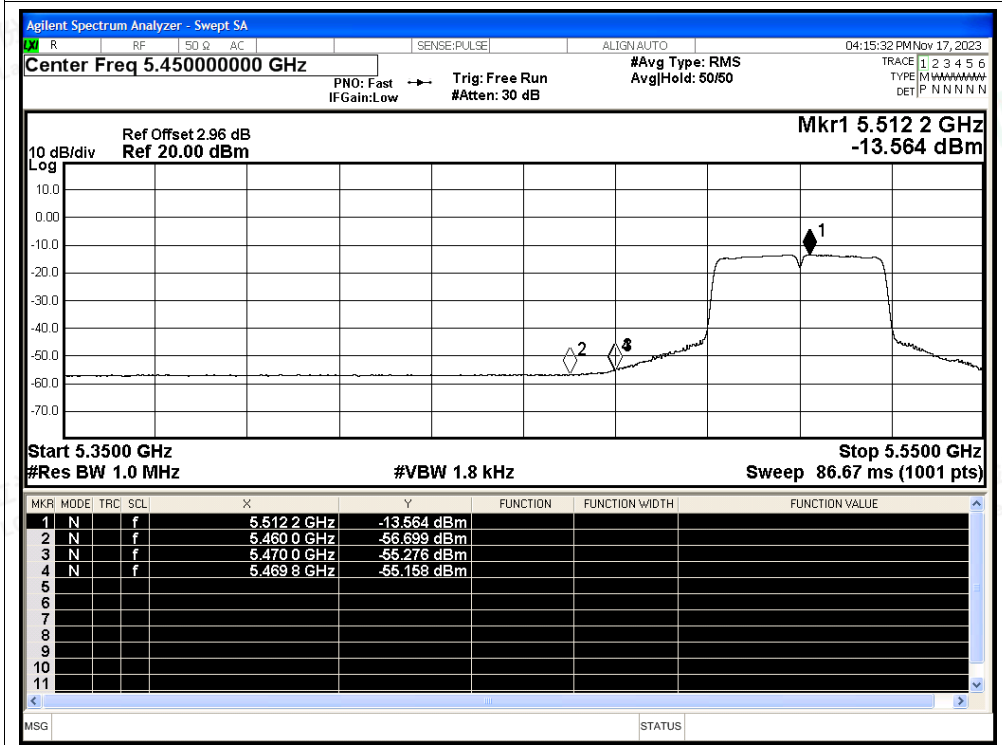




Restrict Band NVNT ac40 5510MHz Ant0 Peak

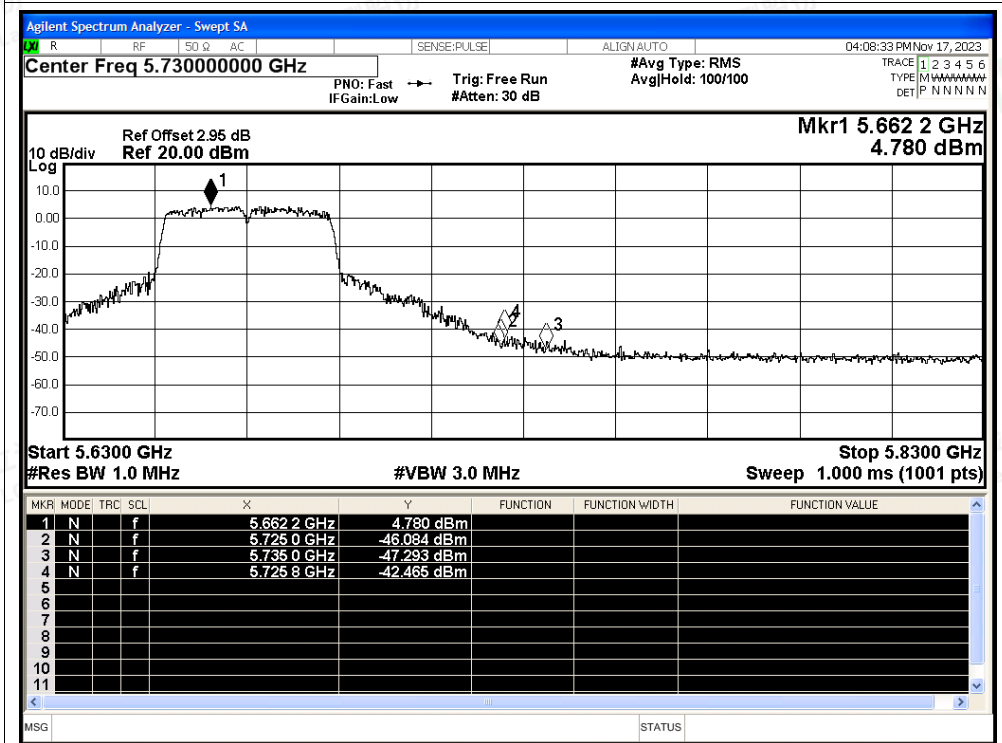


Restrict Band NVNT ac40 5510MHz Ant0 Average

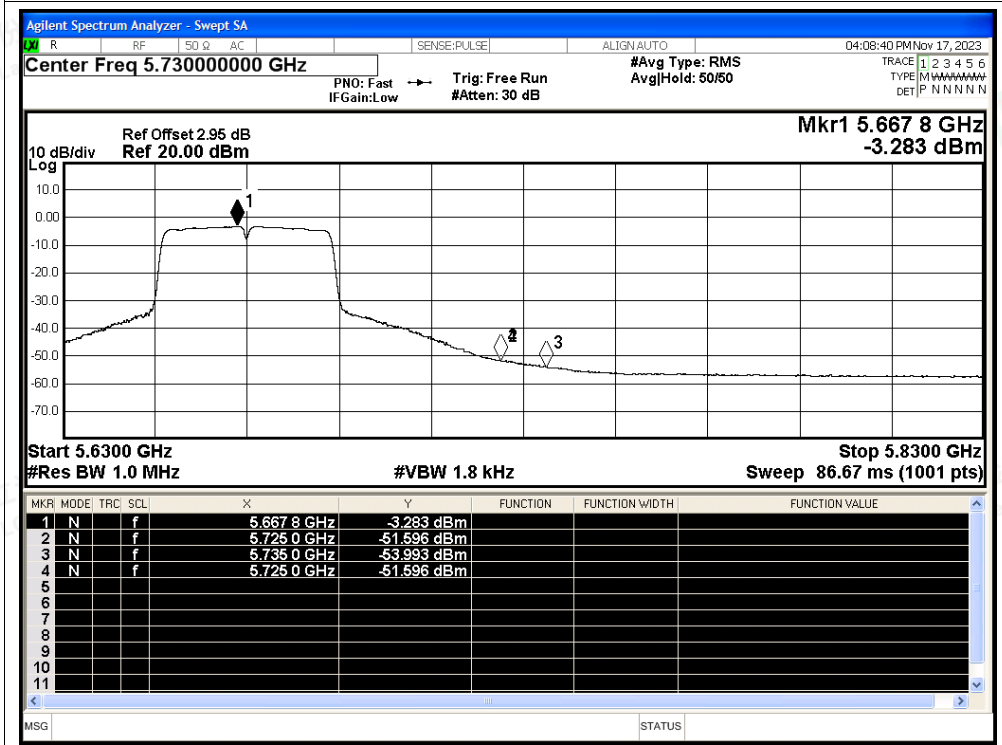




Restrict Band NVNT ac40 5670MHz Ant0 Peak

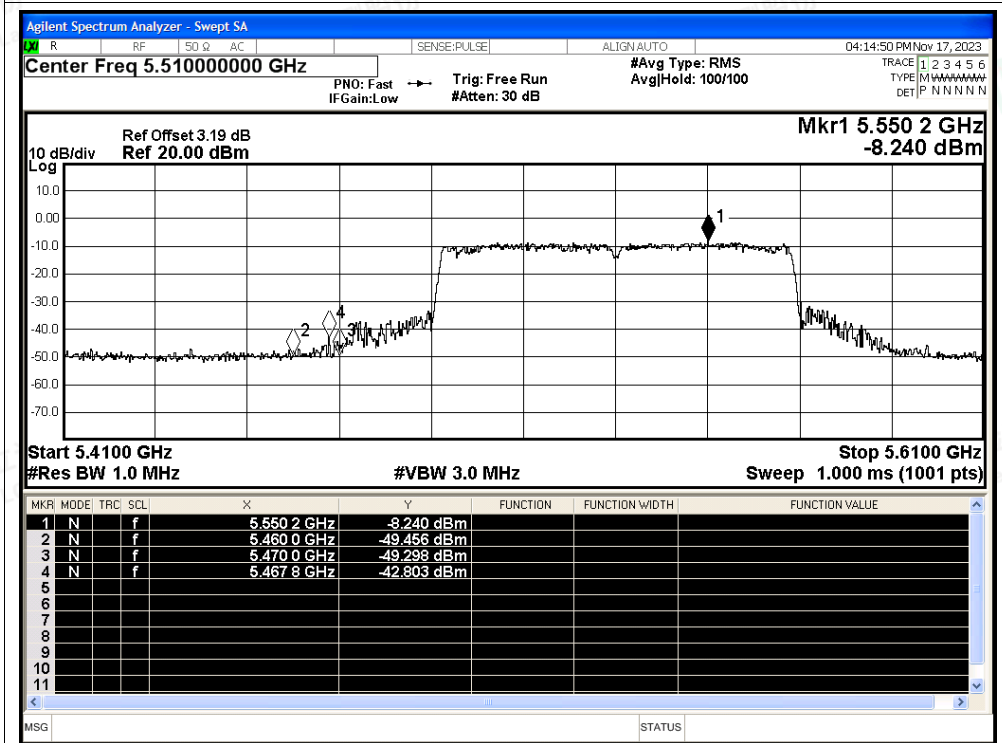


Restrict Band NVNT ac40 5670MHz Ant0 Average

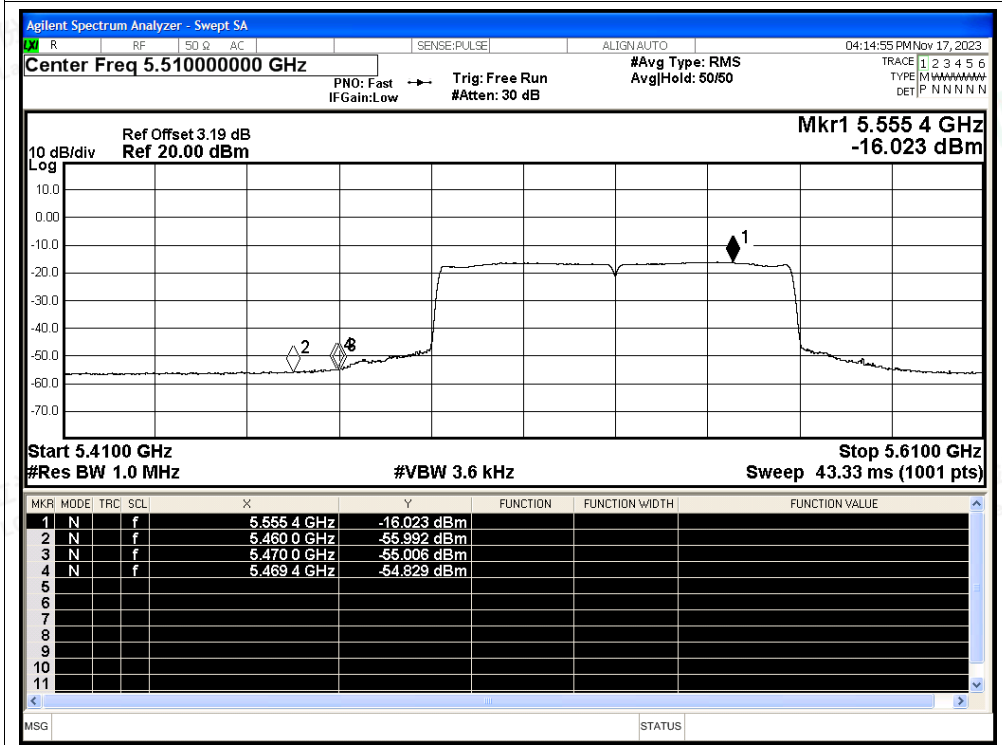




Restrict Band NVNT ac80 5530MHz Ant0 Peak

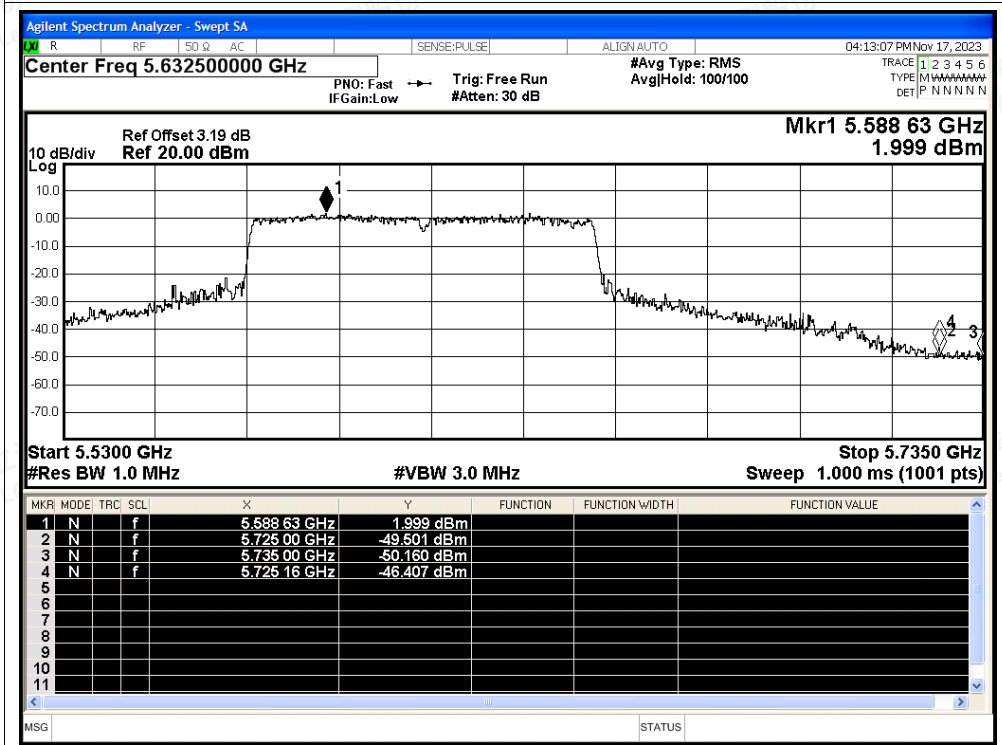


Restrict Band NVNT ac80 5530MHz Ant0 Average

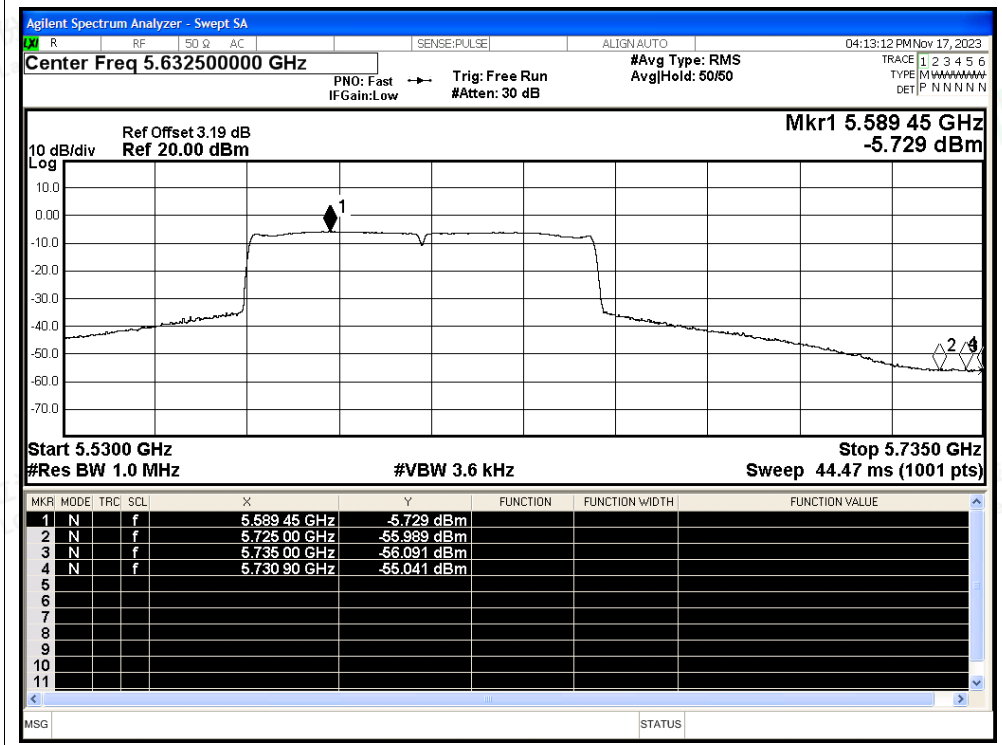




Restrict Band NVNT ac80 5610MHz Ant0 Peak



Restrict Band NVNT ac80 5610MHz Ant0 Average



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Scan code to check authenticity



F.5 Frequency Stability

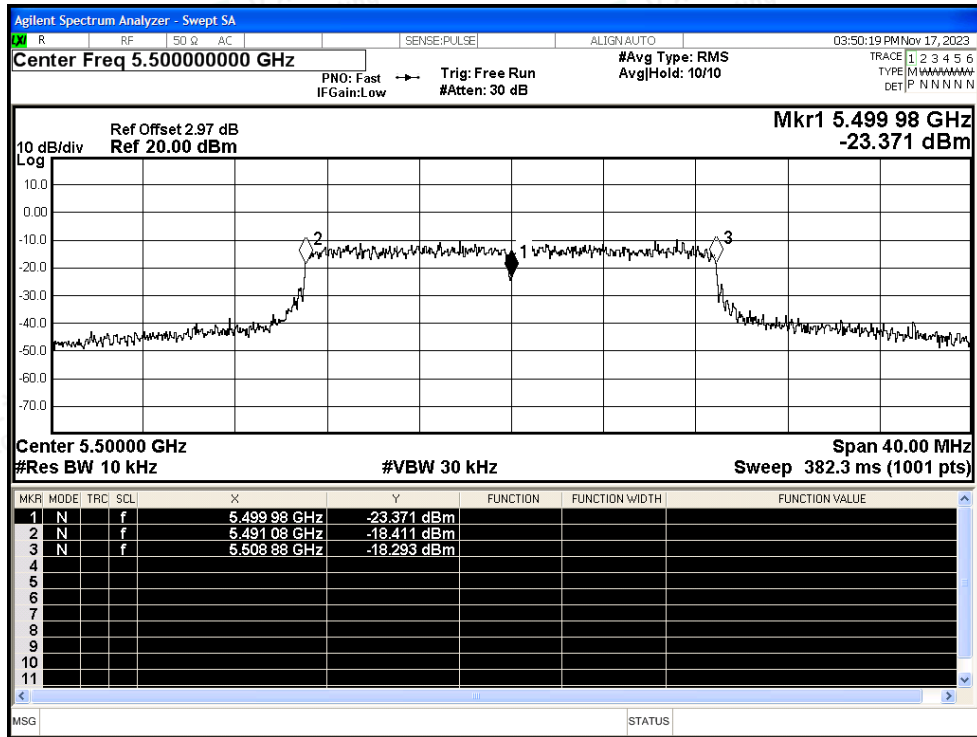
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	ac20	5500	Ant0	5499.98	-20000	-3.64	25	Pass
NVNT	ac20	5580	Ant0	5579.98	-20000	-3.58	25	Pass
NVNT	ac20	5700	Ant0	5699.98	-20000	-3.51	25	Pass
NVNT	ac40	5510	Ant0	5510	0	0	25	Pass
NVNT	ac40	5550	Ant0	5550	0	0	25	Pass
NVNT	ac40	5670	Ant0	5670	0	0	25	Pass
NVNT	ac80	5530	Ant0	5530	0	0	25	Pass
NVNT	ac80	5610	Ant0	5610	0	0	25	Pass



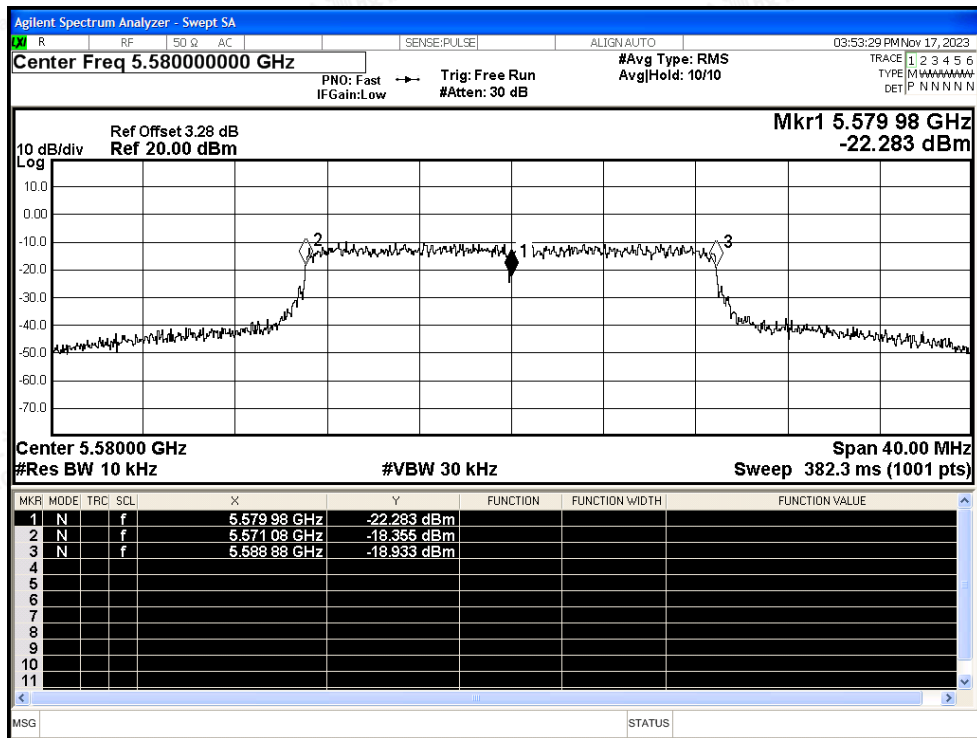


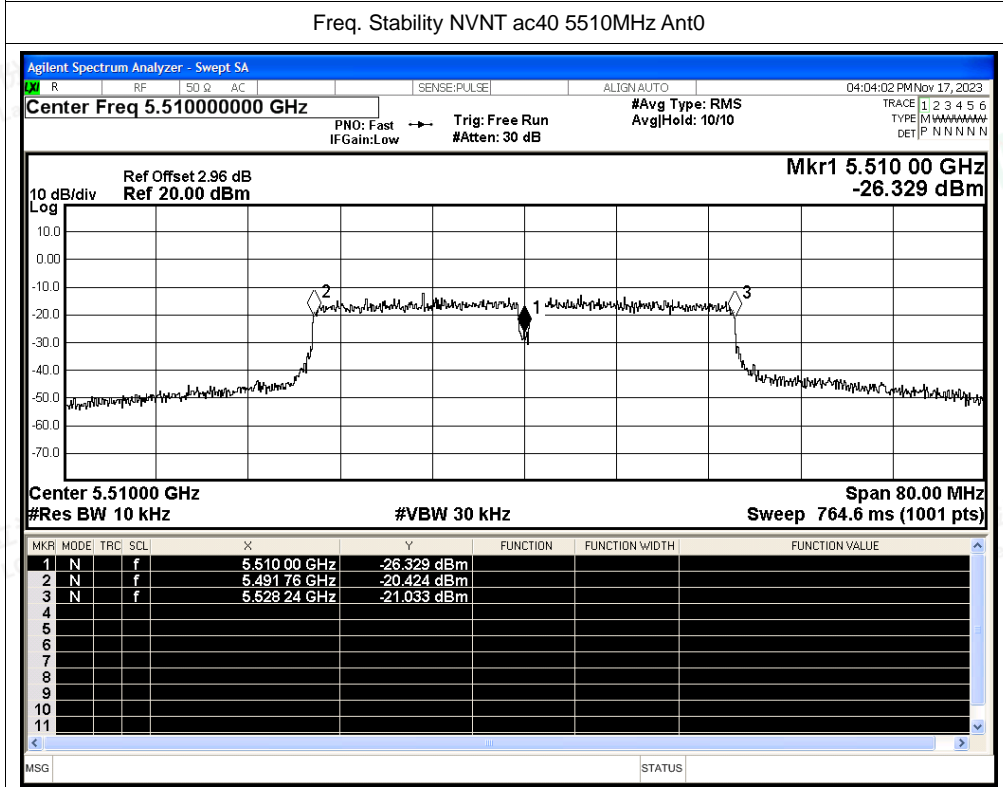
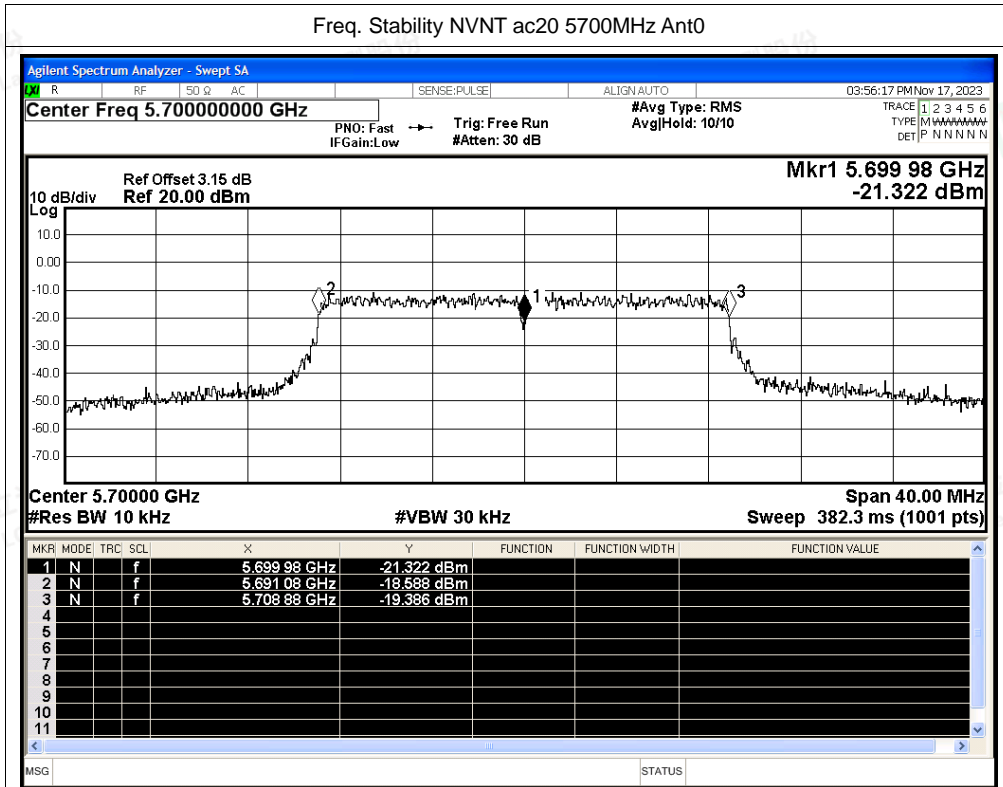
Test Graphs

Freq. Stability NVNT ac20 5500MHz Ant0



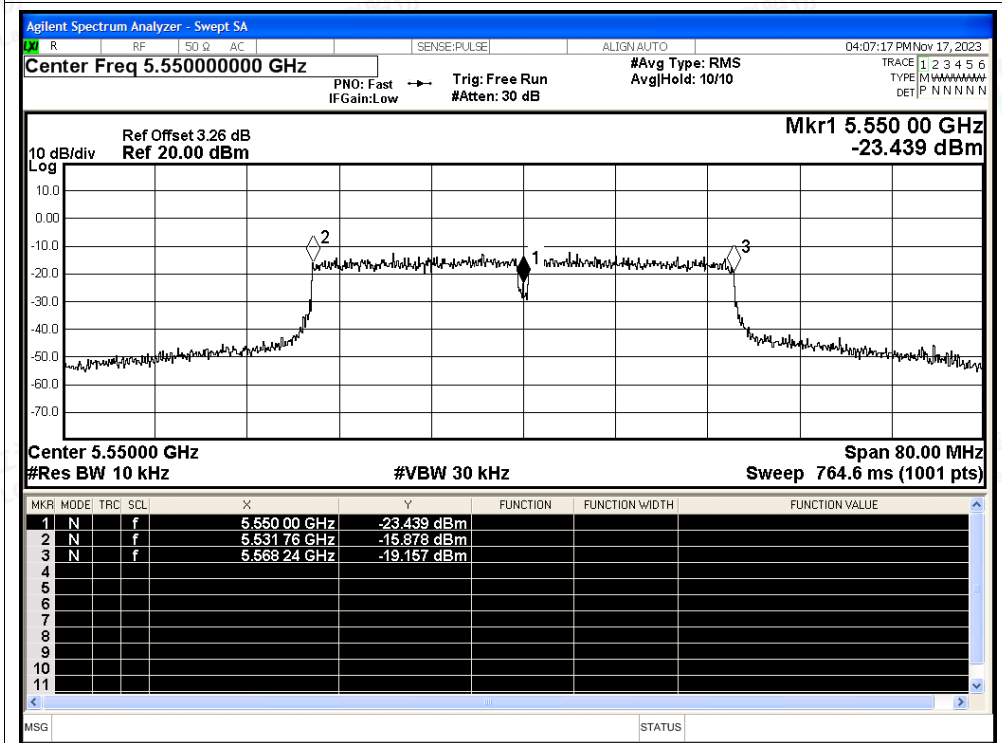
Freq. Stability NVNT ac20 5580MHz Ant0



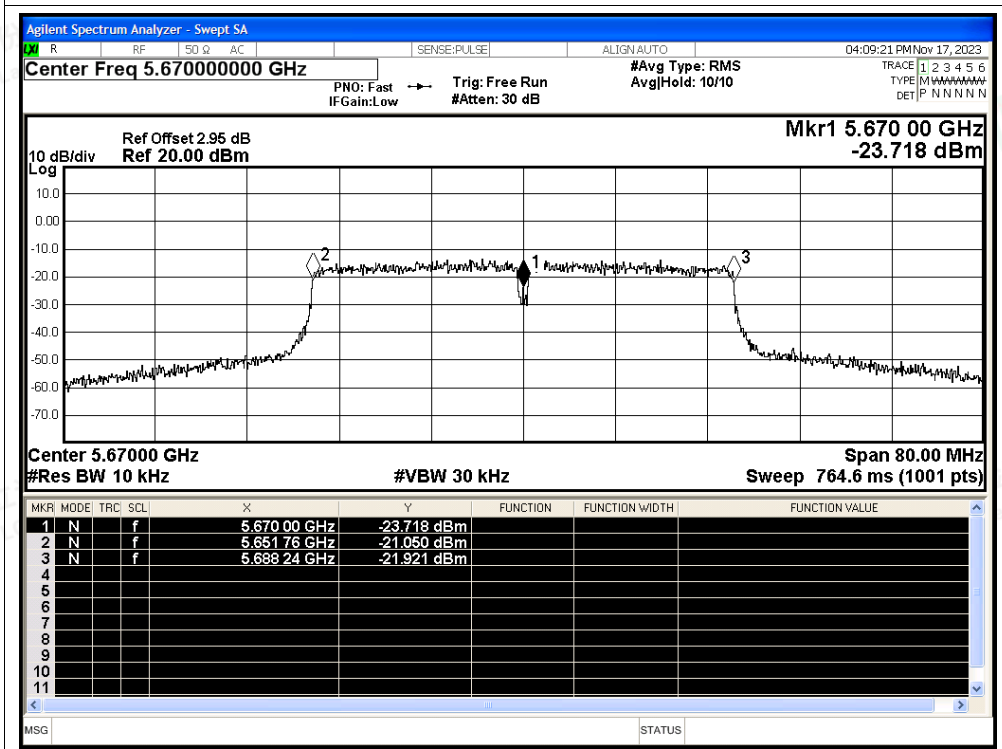


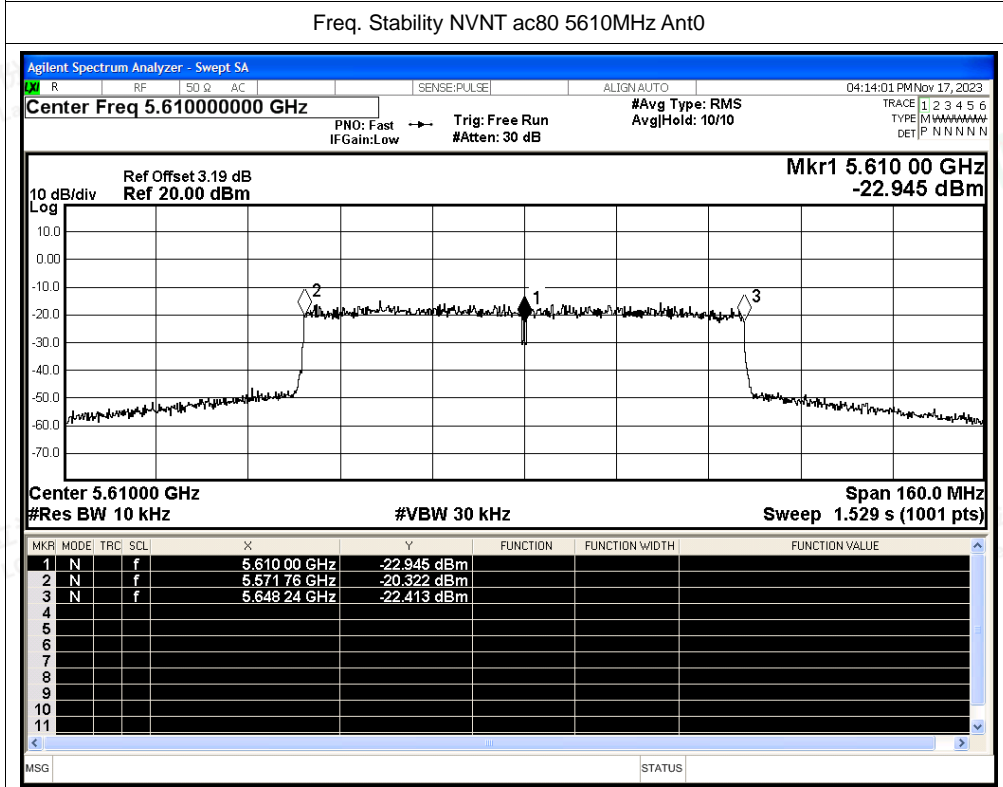
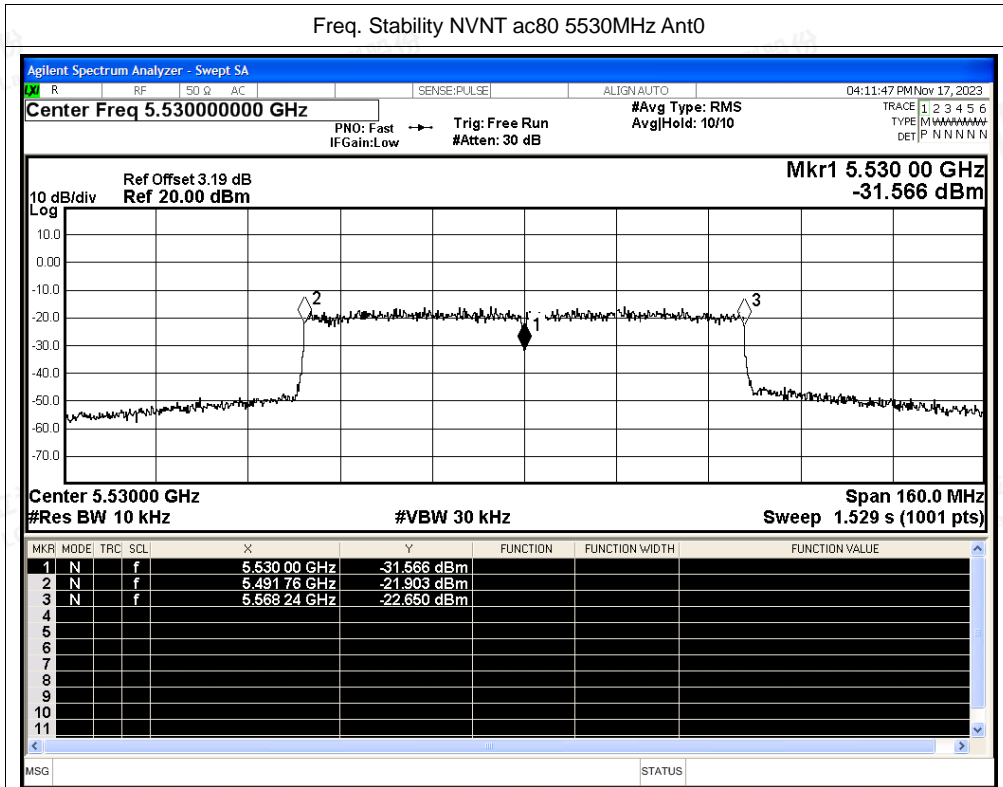


Freq. Stability NVNT ac40 5550MHz Ant0



Freq. Stability NVNT ac40 5670MHz Ant0







F.6 Duty Cycle

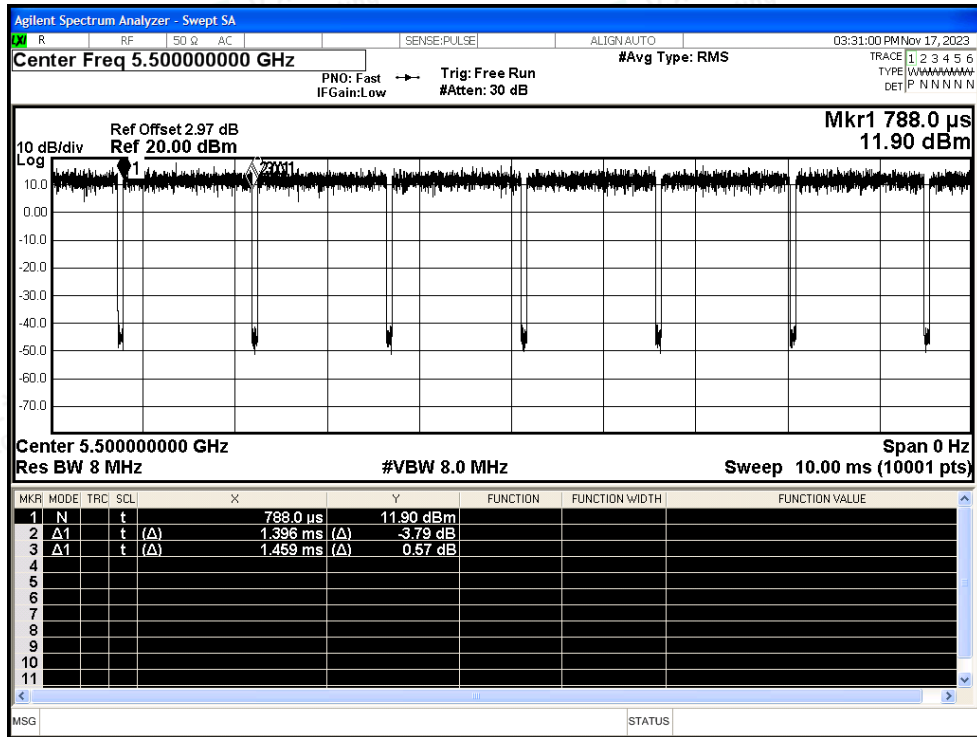
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5500	Ant0	95.68	0.19	0.72
NVNT	a	5580	Ant0	95.68	0.19	0.72
NVNT	a	5700	Ant0	95.68	0.19	0.72
NVNT	n20	5500	Ant0	94.94	0.23	0.85
NVNT	n20	5580	Ant0	94.94	0.23	0.85
NVNT	n20	5700	Ant0	94.94	0.23	0.85
NVNT	n40	5510	Ant0	90.45	0.44	1.7
NVNT	n40	5550	Ant0	90.45	0.44	1.7
NVNT	n40	5670	Ant0	90.6	0.43	1.7
NVNT	ac20	5500	Ant0	95.04	0.22	0.84
NVNT	ac20	5580	Ant0	95.04	0.22	0.84
NVNT	ac20	5700	Ant0	94.96	0.22	0.84
NVNT	ac40	5510	Ant0	90.56	0.43	1.68
NVNT	ac40	5550	Ant0	90.56	0.43	1.68
NVNT	ac40	5670	Ant0	90.56	0.43	1.68
NVNT	ac80	5530	Ant0	82.68	0.83	3.38
NVNT	ac80	5610	Ant0	82.68	0.83	3.38



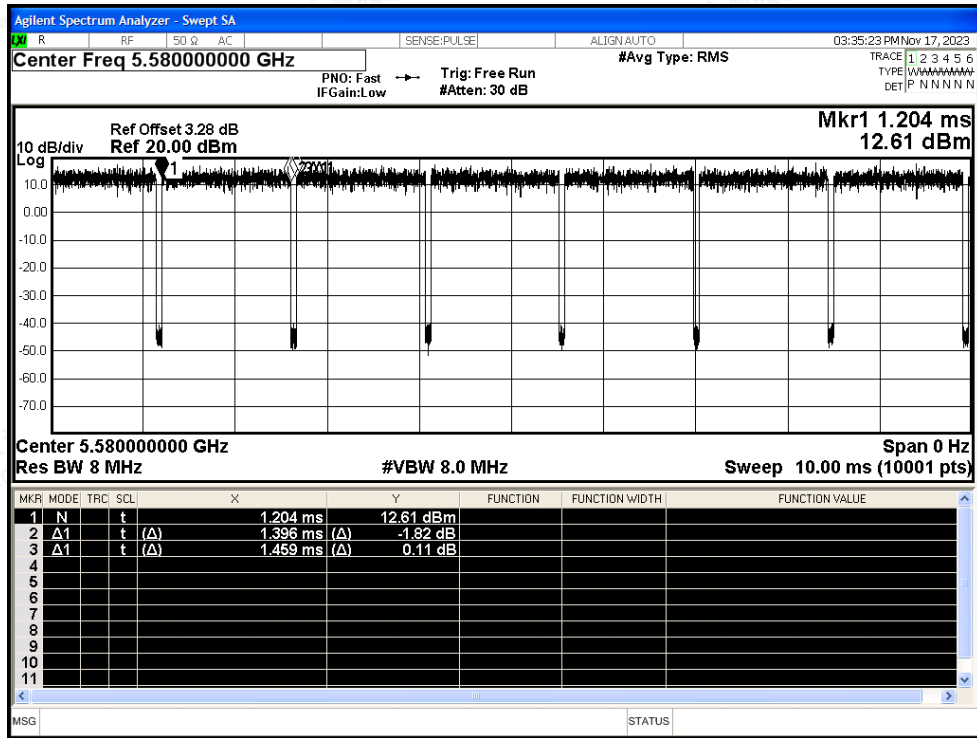


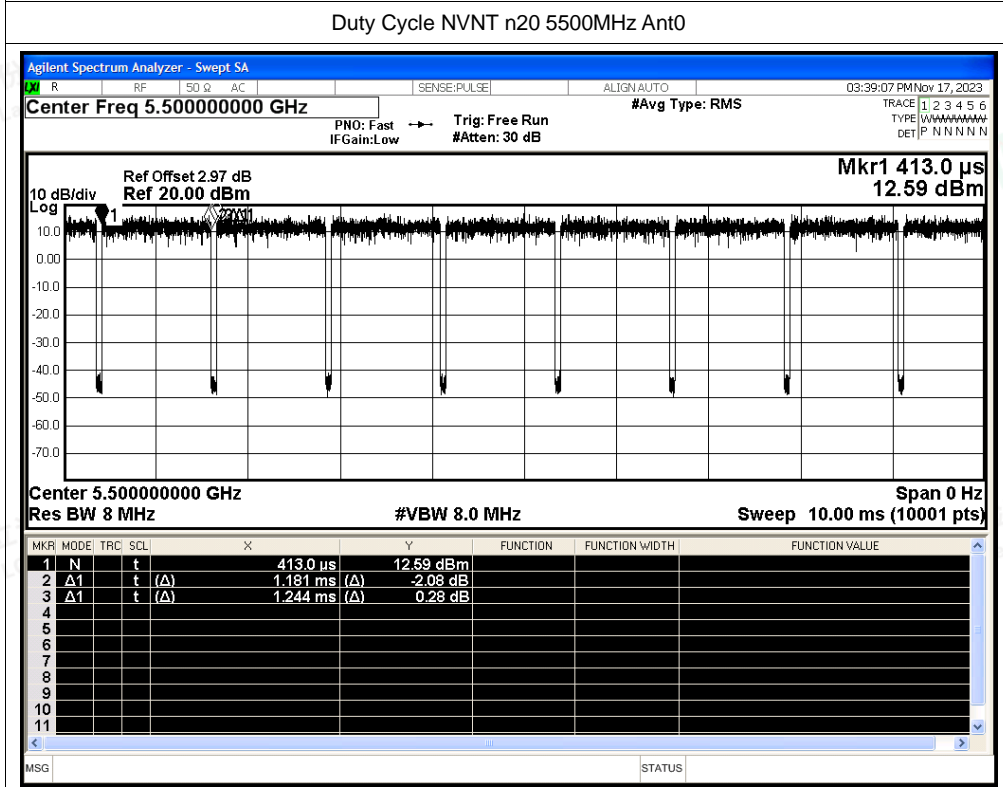
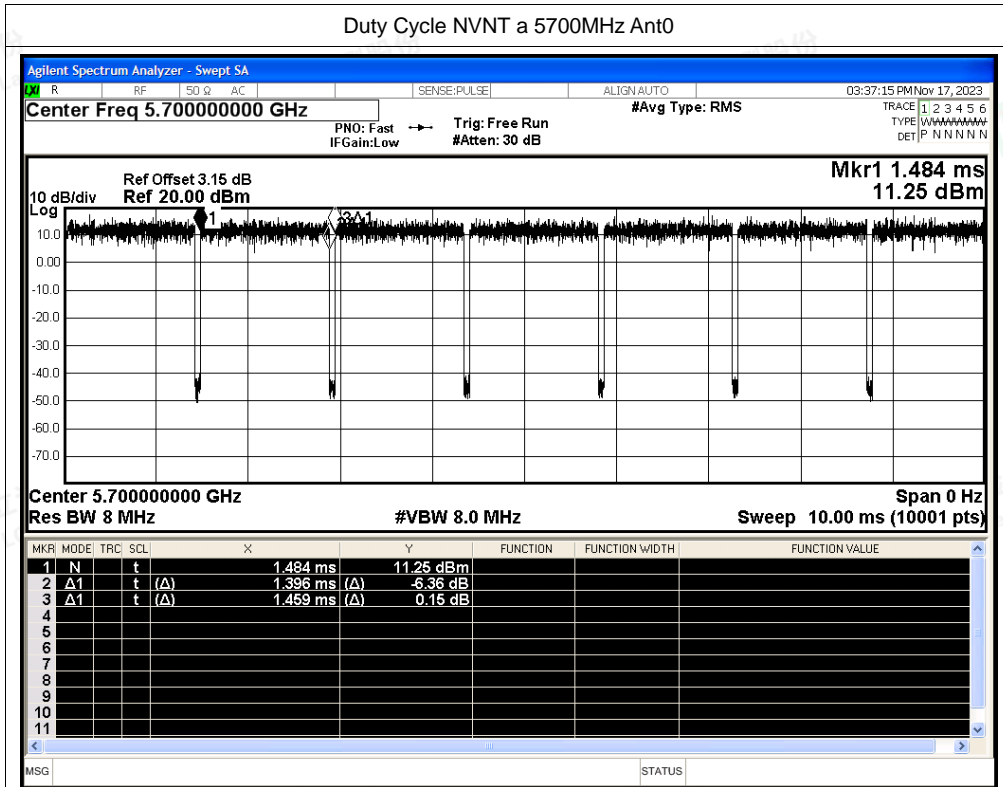
Test Graphs

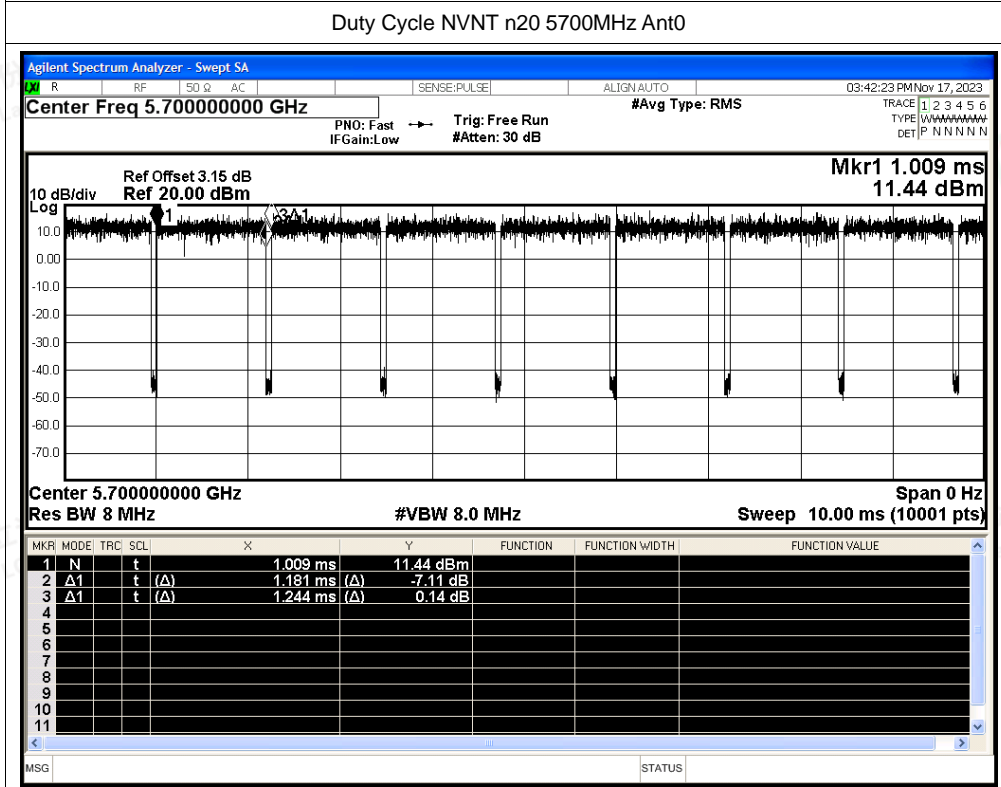
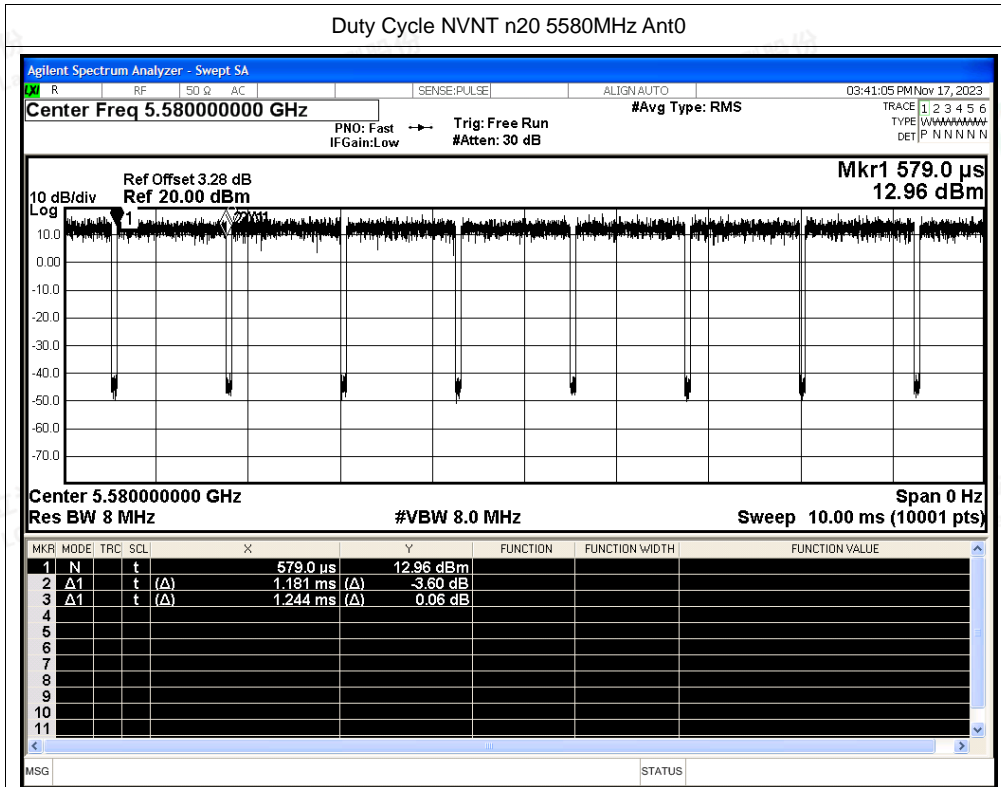
Duty Cycle NVNT a 5500MHz Ant0

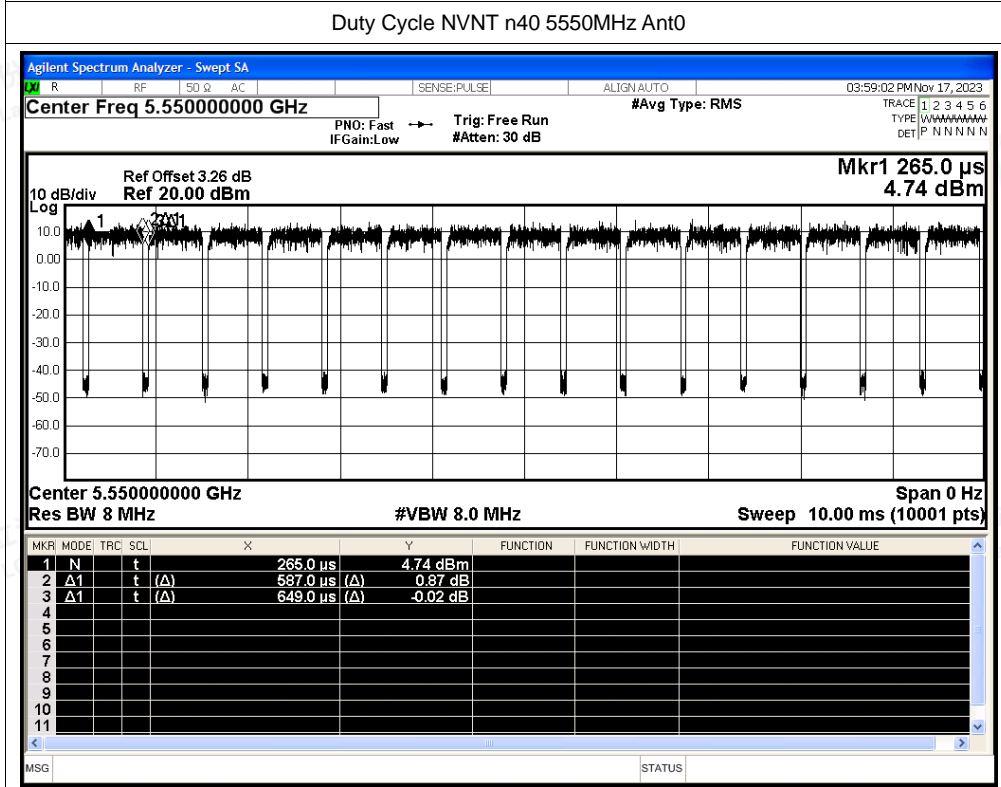
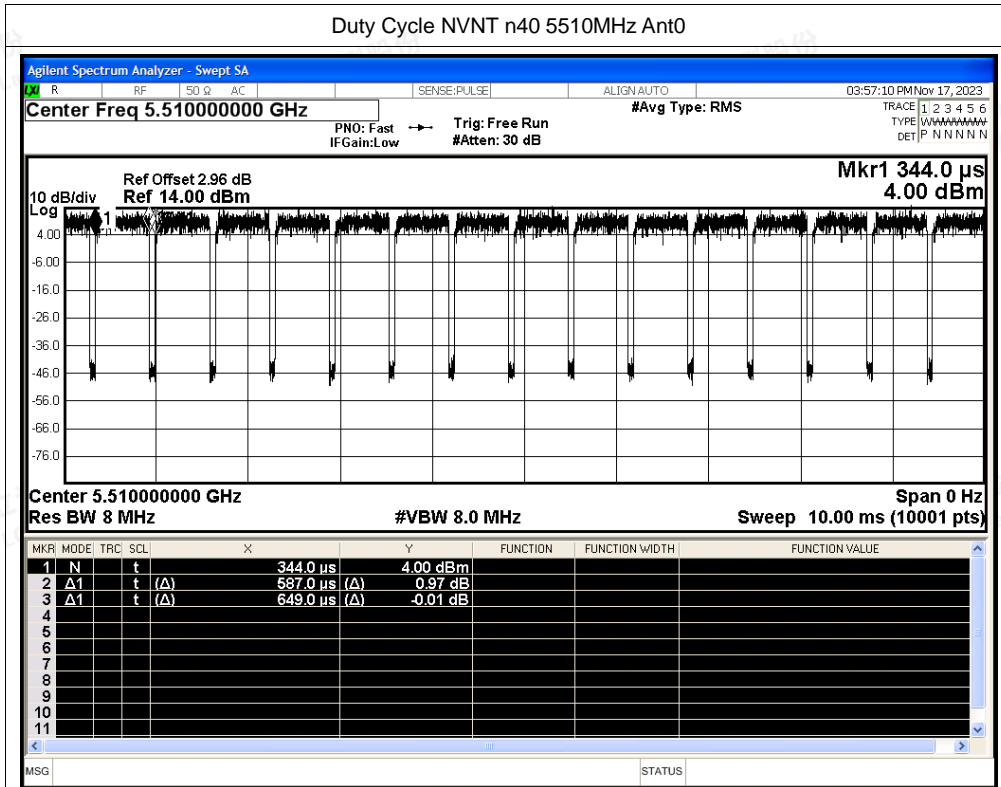


Duty Cycle NVNT a 5580MHz Ant0



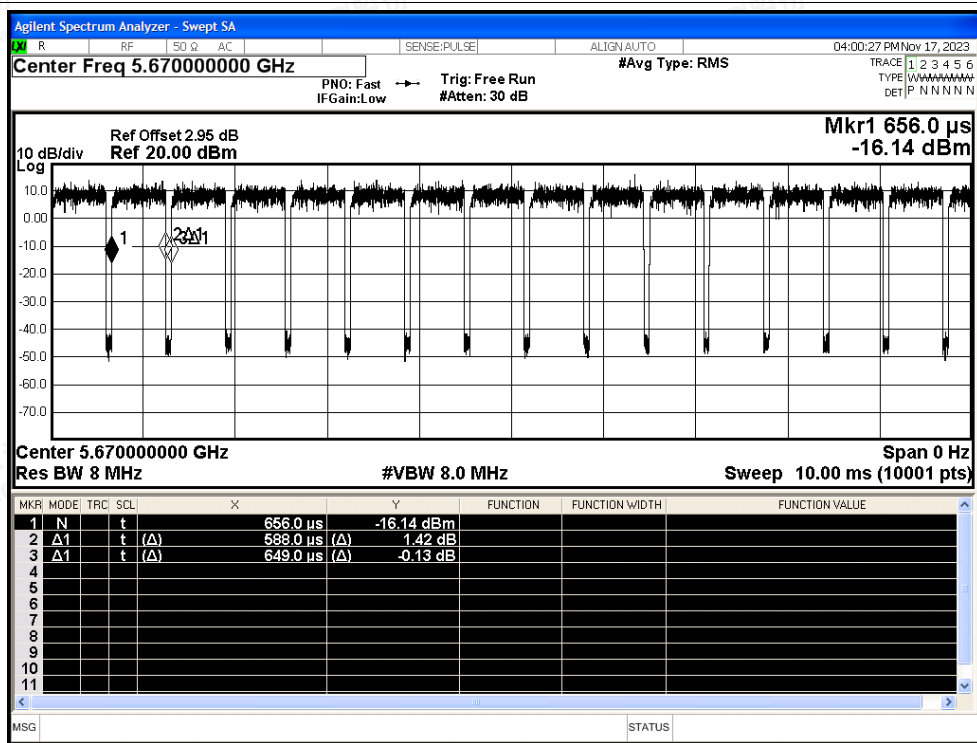




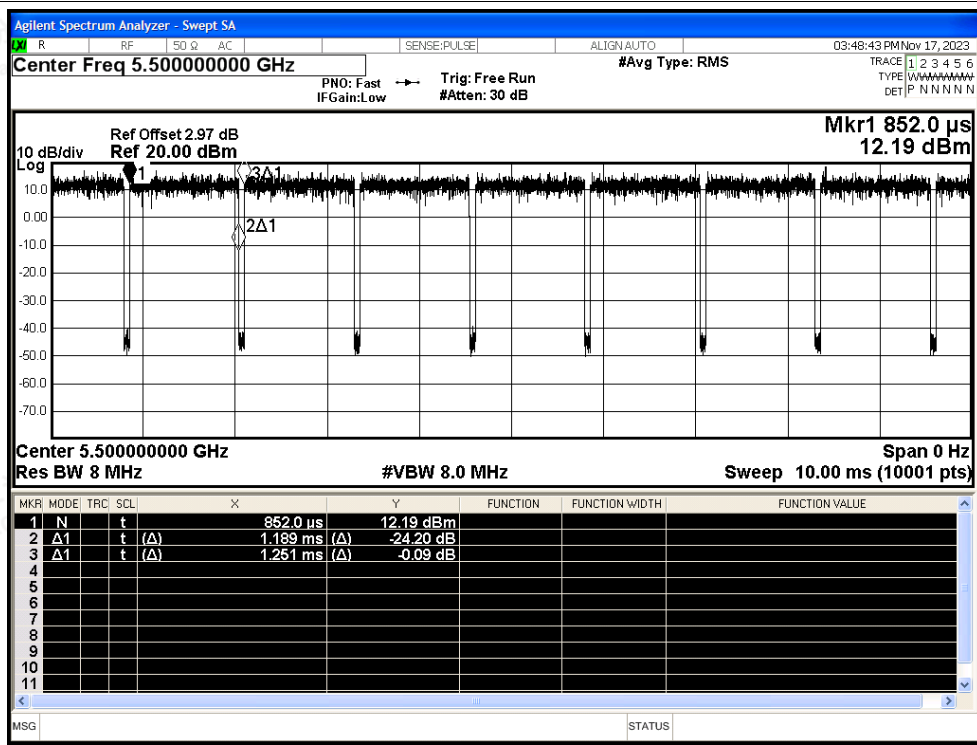




Duty Cycle NVNT n40 5670MHz Ant0

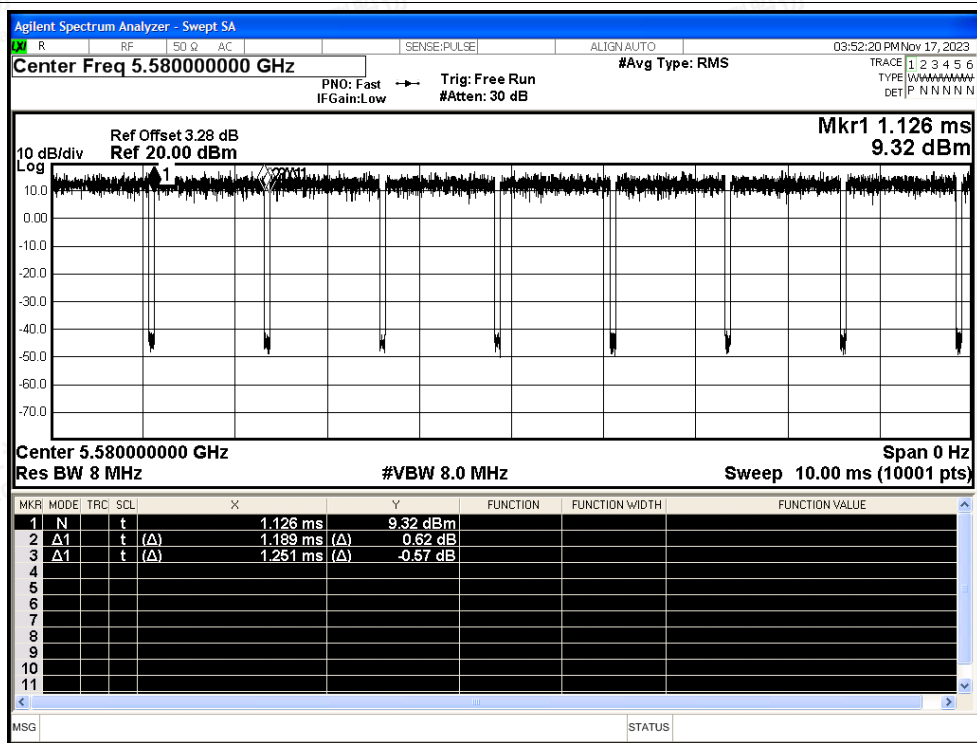


Duty Cycle NVNT ac20 5500MHz Ant0

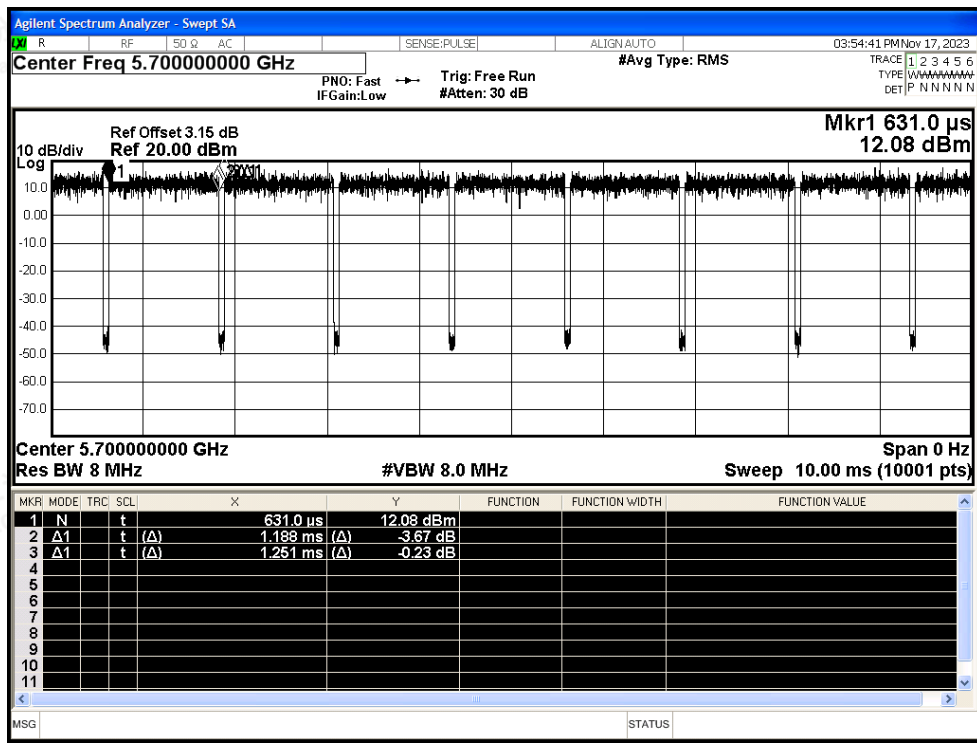


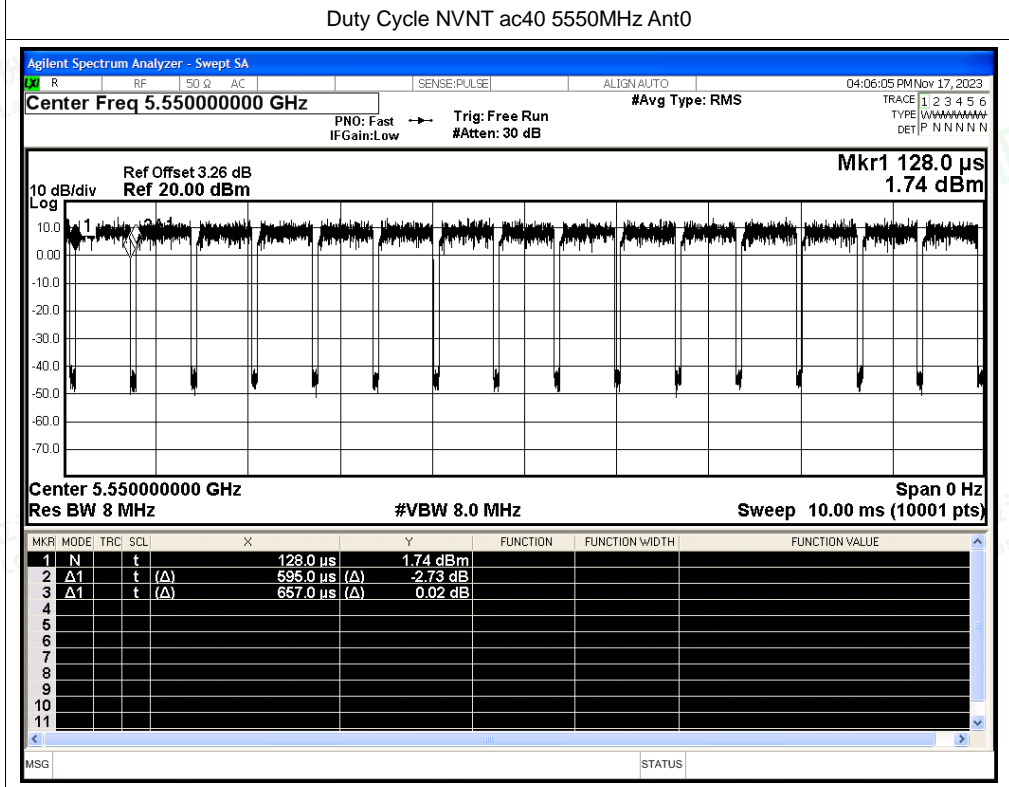
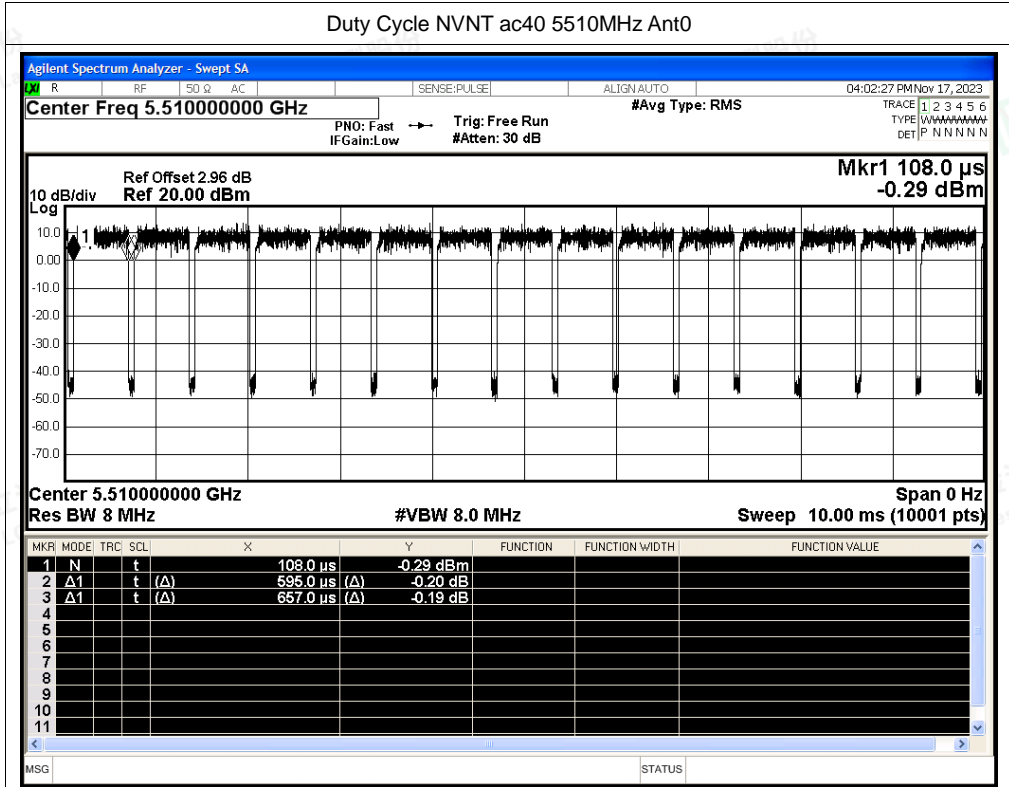


Duty Cycle NVNT ac20 5580MHz Ant0



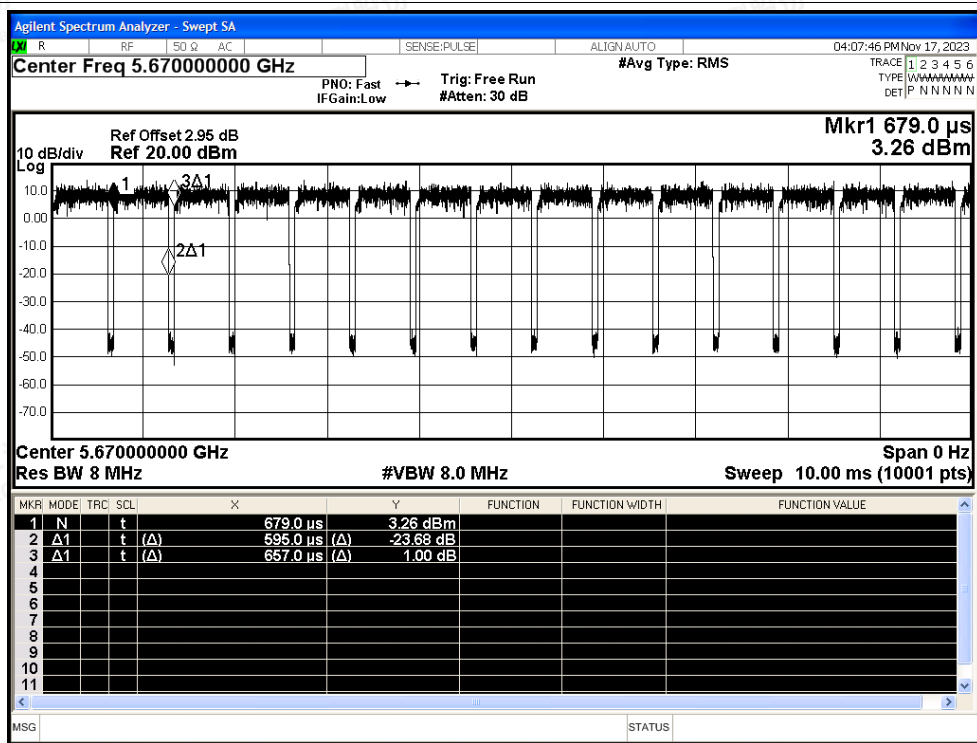
Duty Cycle NVNT ac20 5700MHz Ant0







Duty Cycle NVNT ac40 5670MHz Ant0



Duty Cycle NVNT ac80 5530MHz Ant0

