



Appendix F

RF Test Data for 5.5GWIFI (Conducted Measurement)

Product Name: Handheld Data Terminal

Test Model: HT330

Environmental Conditions

Temperature:	23.6° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li huan



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
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F.1 -26dB Bandwidth

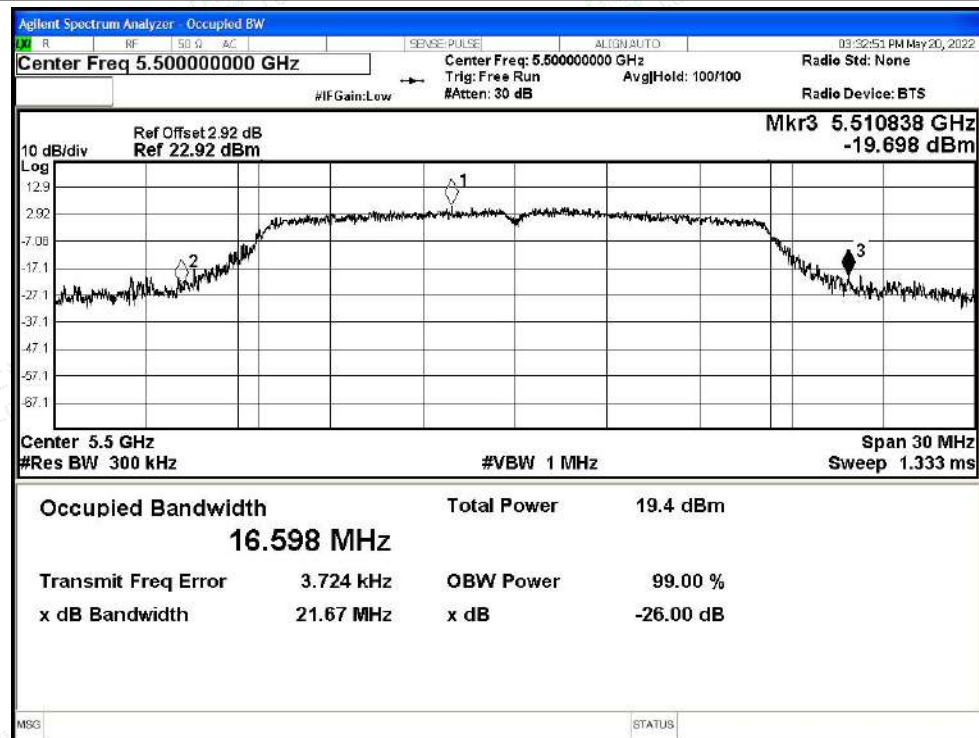
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5500	Ant1	21.668	---	Pass
NVNT	a	5580	Ant1	21.026	---	Pass
NVNT	a	5700	Ant1	20.296	---	Pass
NVNT	n20	5500	Ant1	22.34	---	Pass
NVNT	n20	5580	Ant1	20.915	---	Pass
NVNT	n20	5700	Ant1	21.676	---	Pass
NVNT	n40	5510	Ant1	45.368	---	Pass
NVNT	n40	5550	Ant1	41.826	---	Pass
NVNT	n40	5670	Ant1	41.929	---	Pass
NVNT	ac20	5500	Ant1	20.476	---	Pass
NVNT	ac20	5580	Ant1	20.271	---	Pass
NVNT	ac20	5700	Ant1	20.207	---	Pass
NVNT	ac40	5510	Ant1	39.51	---	Pass
NVNT	ac40	5550	Ant1	39.827	---	Pass
NVNT	ac40	5670	Ant1	39.936	---	Pass
NVNT	ac80	5530	Ant1	84.274	---	Pass
NVNT	ac80	5610	Ant1	84.402	---	Pass



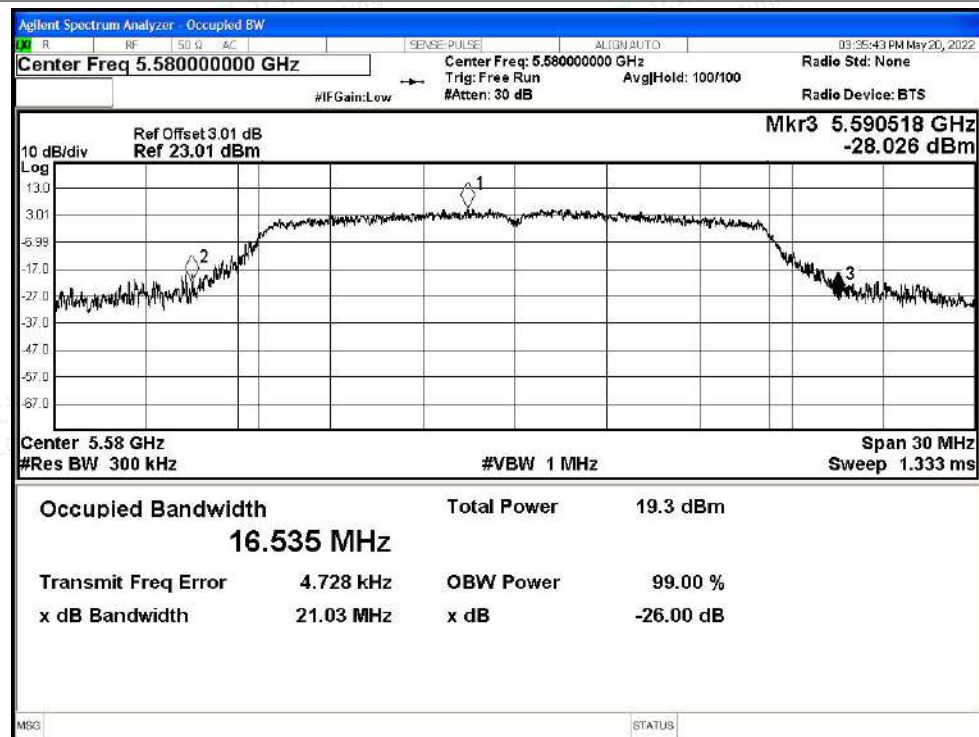


Test Graphs

-26dB Bandwidth NVNT a 5500MHz Ant1



-26dB Bandwidth NVNT a 5580MHz Ant1



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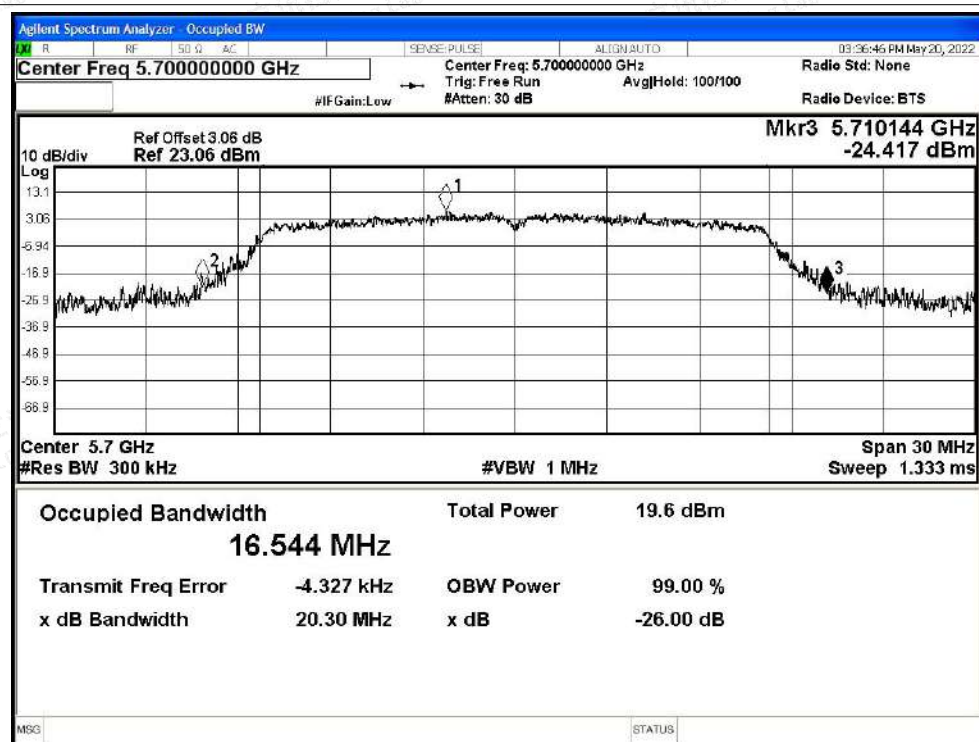
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Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

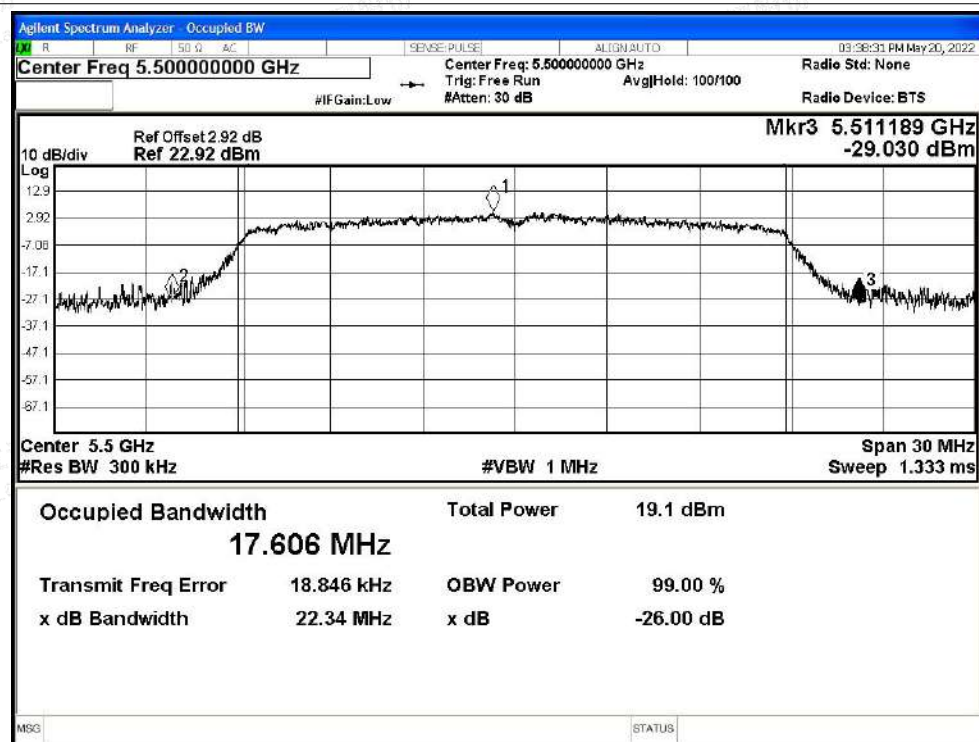
Scan code to check authenticity



-26dB Bandwidth NVNT a 5700MHz Ant1

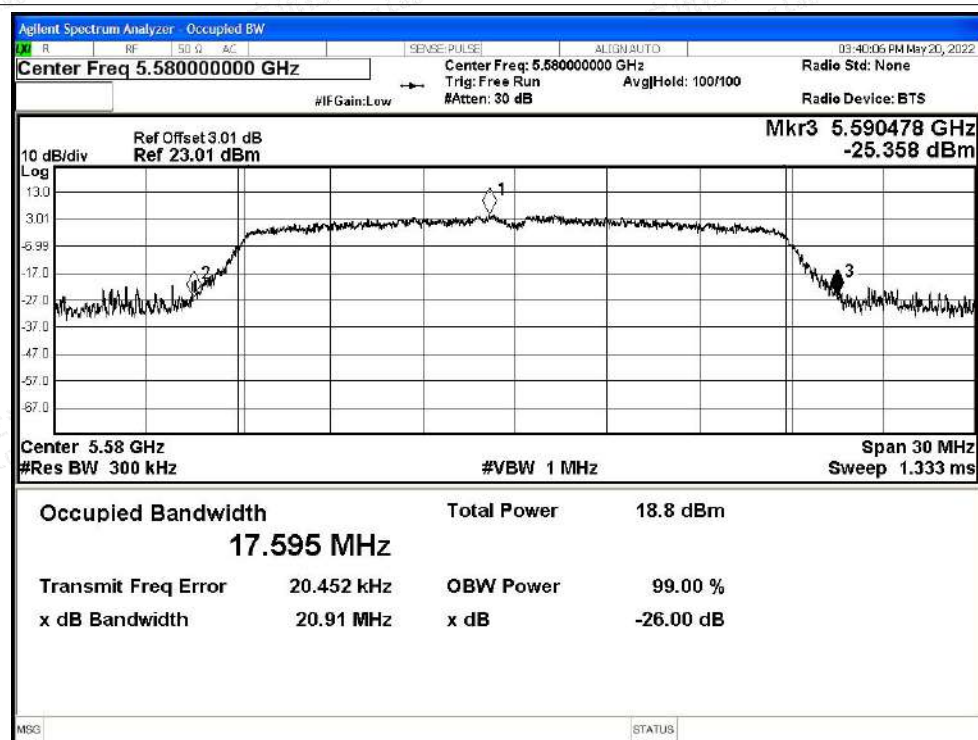


-26dB Bandwidth NVNT n20 5500MHz Ant1





-26dB Bandwidth NVNT n20 5580MHz Ant1

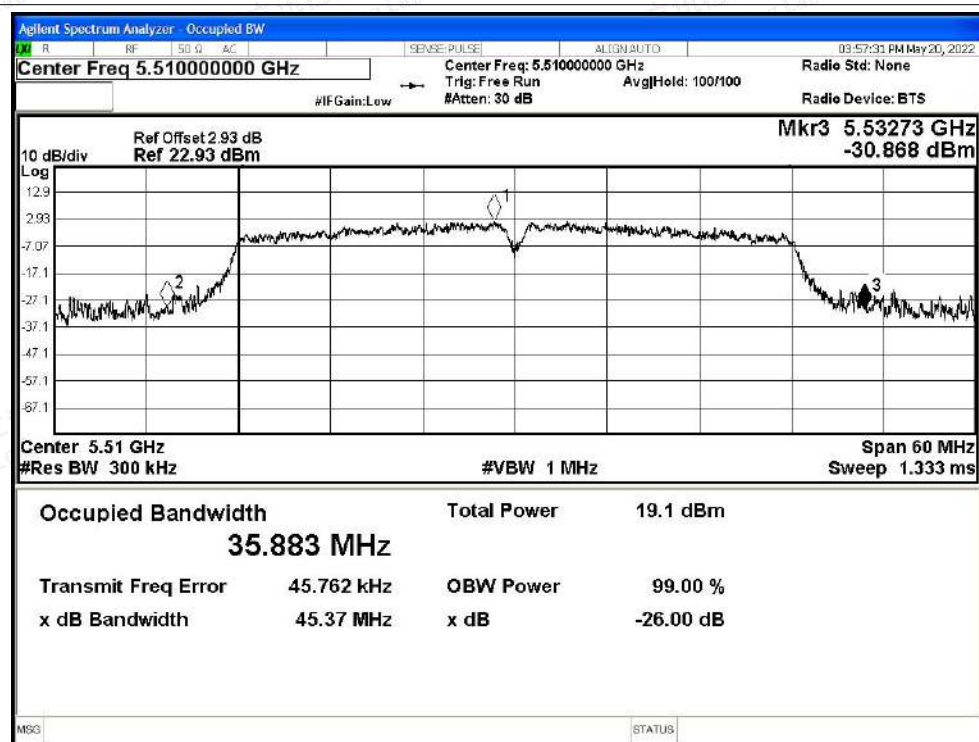


-26dB Bandwidth NVNT n20 5700MHz Ant1

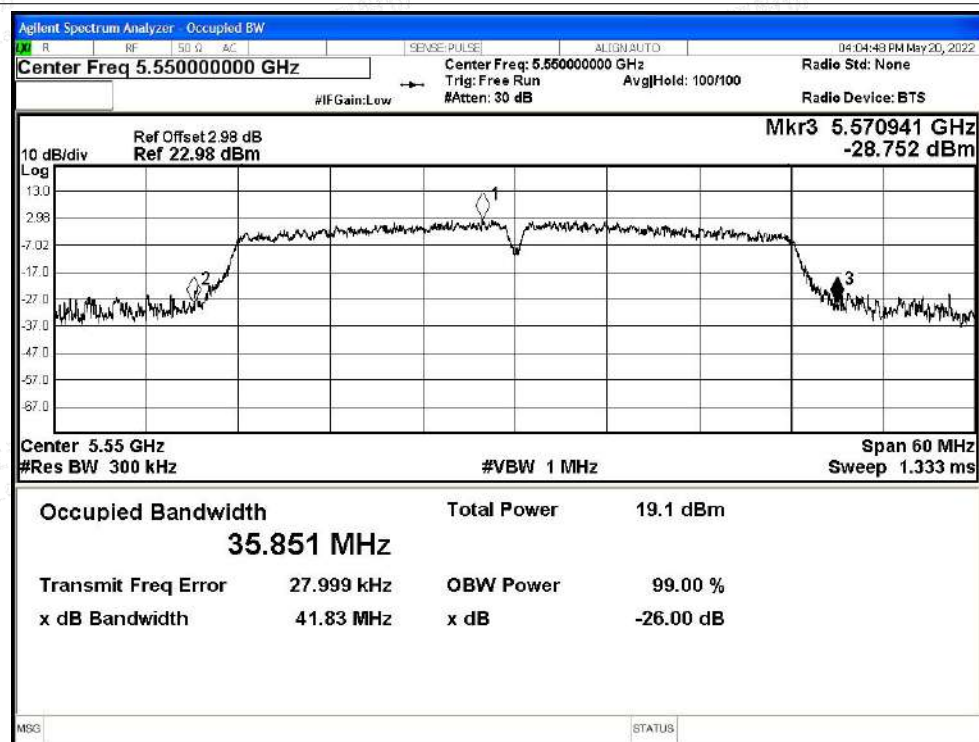




-26dB Bandwidth NVNT n40 5510MHz Ant1

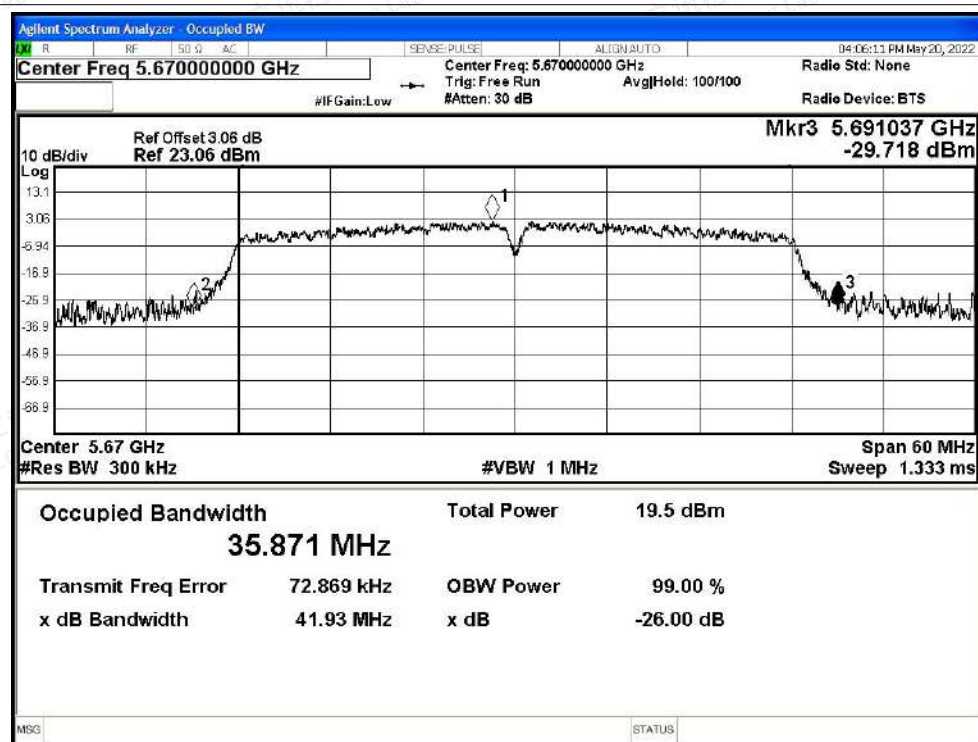


-26dB Bandwidth NVNT n40 5550MHz Ant1





-26dB Bandwidth NVNT n40 5670MHz Ant1



-26dB Bandwidth NVNT ac20 5500MHz Ant1



Shenzhen LCS Compliance Testing Laboratory Ltd.

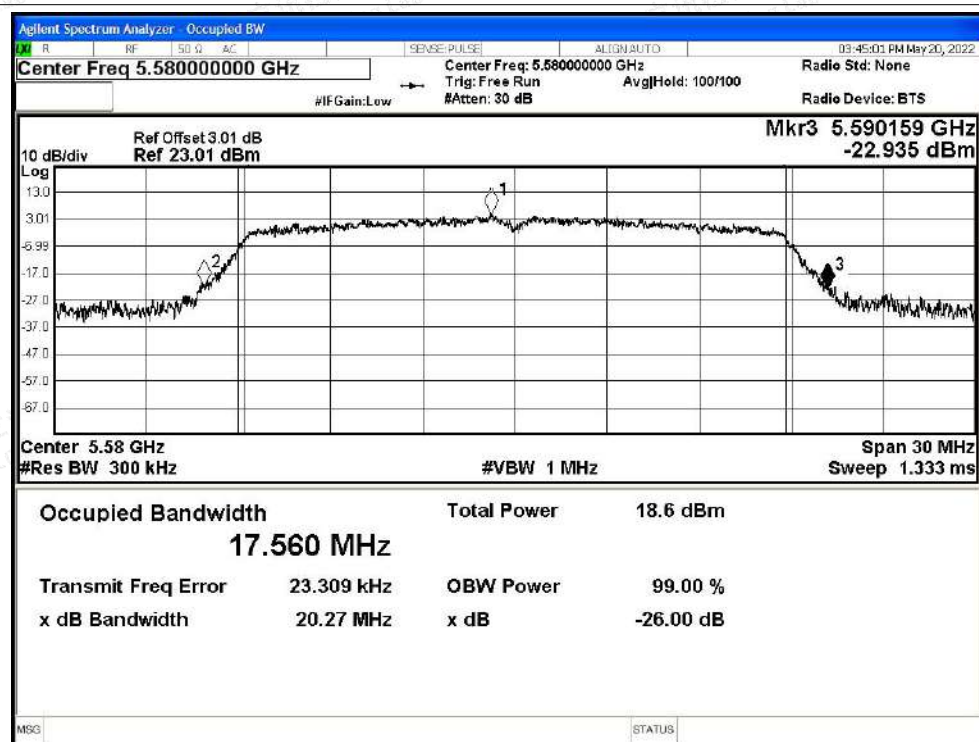
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-26dB Bandwidth NVNT ac20 5580MHz Ant1

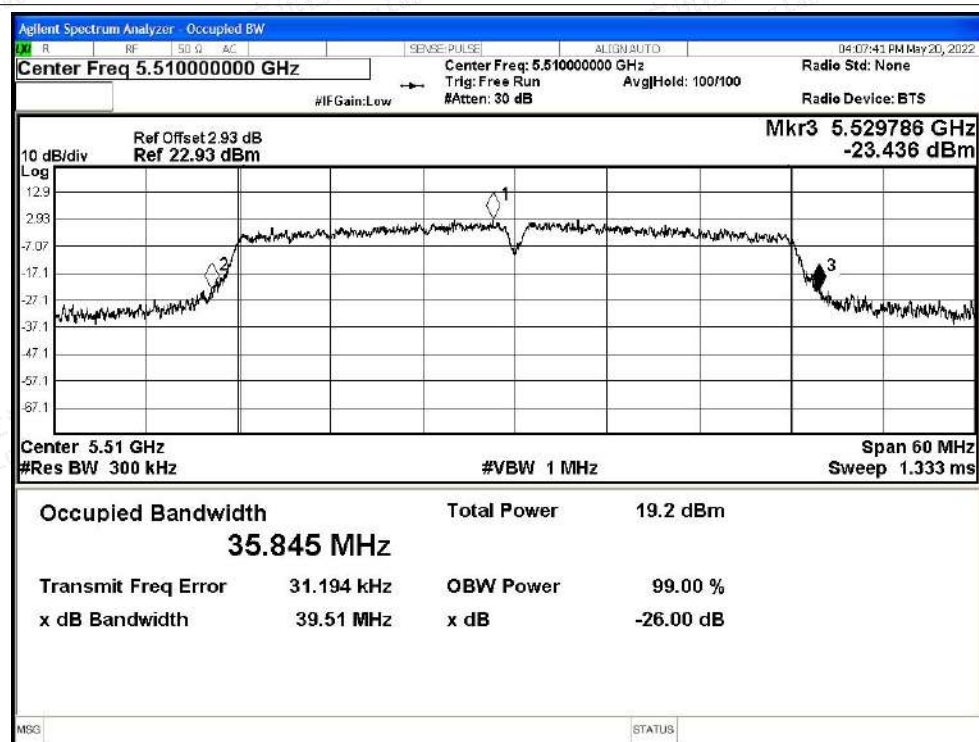


-26dB Bandwidth NVNT ac20 5700MHz Ant1

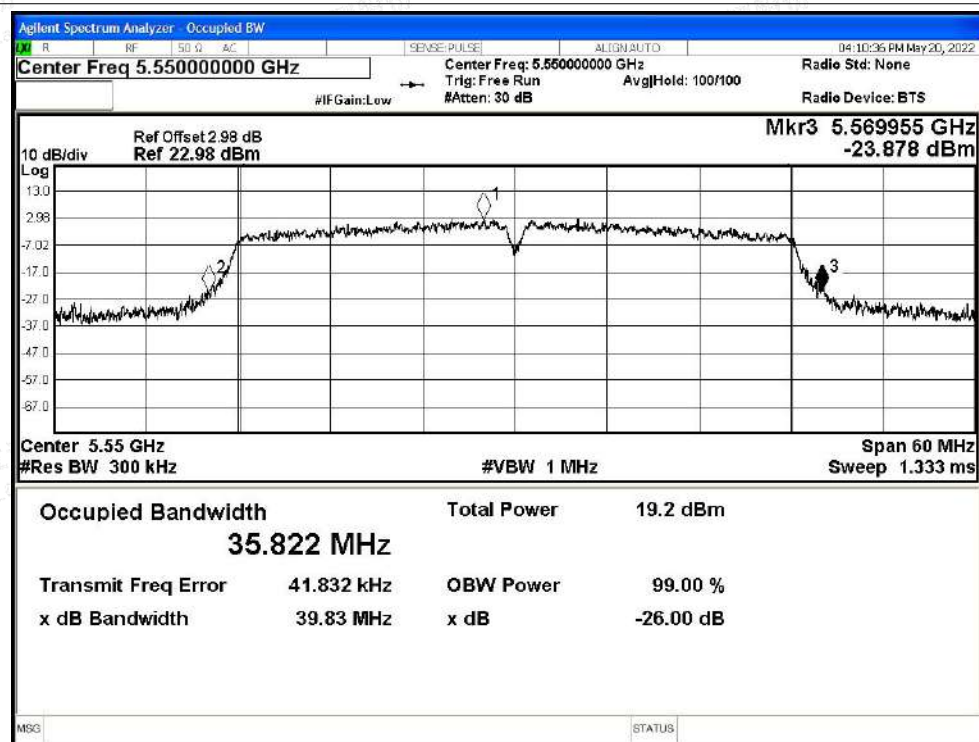




-26dB Bandwidth NVNT ac40 5510MHz Ant1

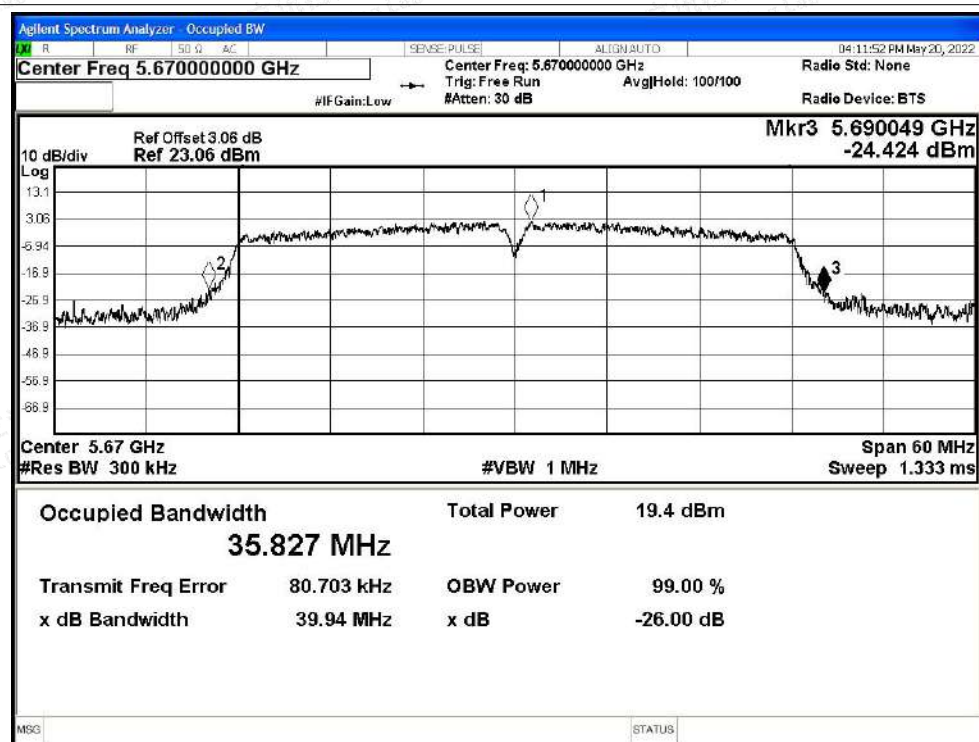


-26dB Bandwidth NVNT ac40 5550MHz Ant1

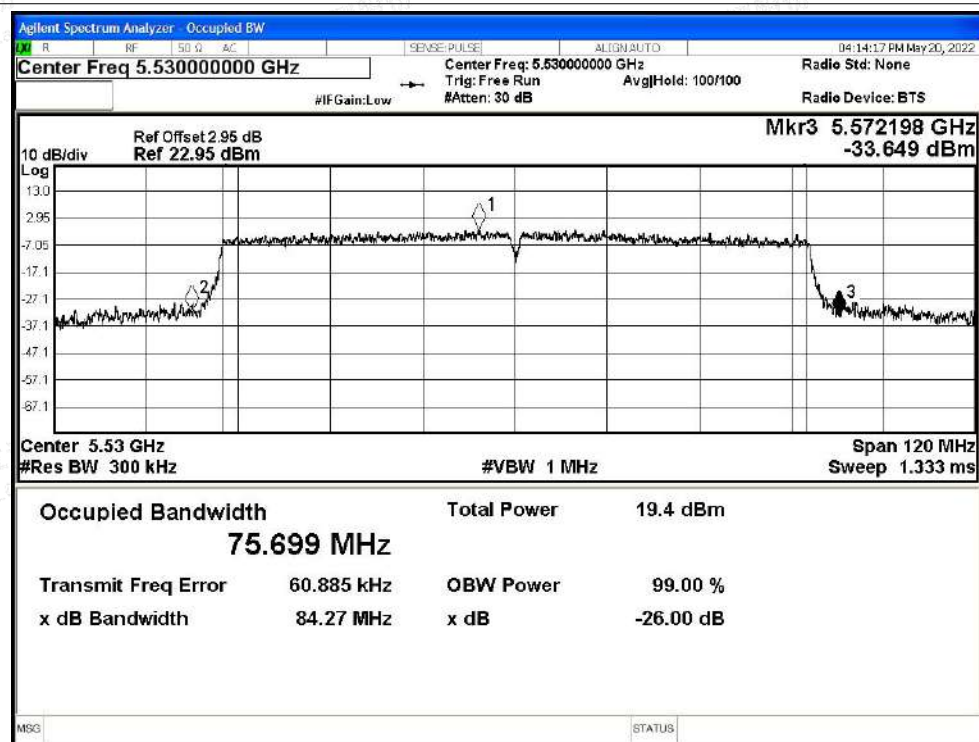


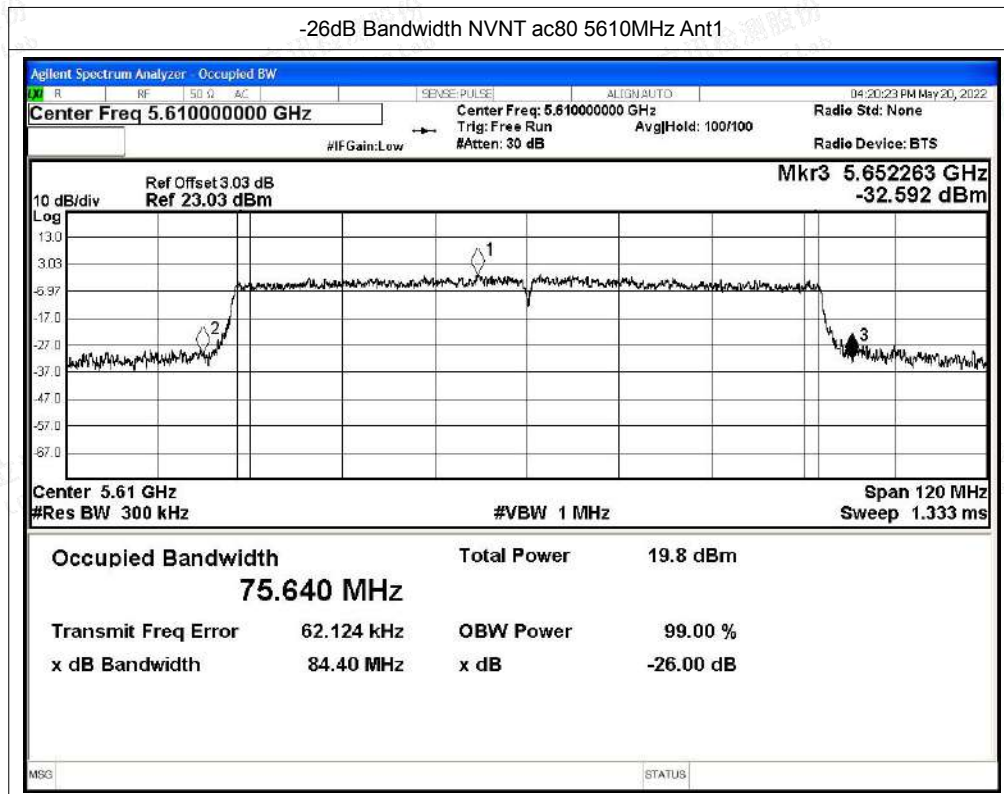


-26dB Bandwidth NVNT ac40 5670MHz Ant1



-26dB Bandwidth NVNT ac80 5530MHz Ant1







F.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	13.76	0.11	13.87	24	Pass
NVNT	a	5580	Ant1	13.44	0.11	13.55	24	Pass
NVNT	a	5700	Ant1	14.06	0.11	14.17	24	Pass
NVNT	n20	5500	Ant1	13.45	0.12	13.57	24	Pass
NVNT	n20	5580	Ant1	13.44	0.12	13.56	24	Pass
NVNT	n20	5700	Ant1	13.75	0.12	13.87	24	Pass
NVNT	n40	5510	Ant1	13.23	0.22	13.45	24	Pass
NVNT	n40	5550	Ant1	12.89	0.22	13.11	24	Pass
NVNT	n40	5670	Ant1	13.68	0.23	13.91	24	Pass
NVNT	ac20	5500	Ant1	13.6	0.11	13.71	24	Pass
NVNT	ac20	5580	Ant1	13.35	0.11	13.46	24	Pass
NVNT	ac20	5700	Ant1	13.69	0.12	13.81	24	Pass
NVNT	ac40	5510	Ant1	13.06	0.22	13.28	24	Pass
NVNT	ac40	5550	Ant1	12.99	0.22	13.21	24	Pass
NVNT	ac40	5670	Ant1	13.67	0.23	13.9	24	Pass
NVNT	ac80	5530	Ant1	12.44	0.43	12.87	24	Pass
NVNT	ac80	5610	Ant1	13.31	0.43	13.74	24	Pass





F.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5500	Ant1	1.99	0.11	2.1	11	Pass
NVNT	a	5580	Ant1	2.1	0.11	2.21	11	Pass
NVNT	a	5700	Ant1	1.74	0.11	1.85	11	Pass
NVNT	n20	5500	Ant1	0.98	0.12	1.1	11	Pass
NVNT	n20	5580	Ant1	0.61	0.12	0.73	11	Pass
NVNT	n20	5700	Ant1	1.49	0.12	1.61	11	Pass
NVNT	n40	5510	Ant1	-2.54	0.22	-2.32	11	Pass
NVNT	n40	5550	Ant1	-2.36	0.22	-2.14	11	Pass
NVNT	n40	5670	Ant1	-2.6	0.23	-2.37	11	Pass
NVNT	ac20	5500	Ant1	1.3	0.11	1.41	11	Pass
NVNT	ac20	5580	Ant1	1.18	0.11	1.29	11	Pass
NVNT	ac20	5700	Ant1	1.4	0.12	1.52	11	Pass
NVNT	ac40	5510	Ant1	-3.12	0.22	-2.9	11	Pass
NVNT	ac40	5550	Ant1	-2.27	0.22	-2.05	11	Pass
NVNT	ac40	5670	Ant1	-1.13	0.23	-0.9	11	Pass
NVNT	ac80	5530	Ant1	-7.81	0.43	-7.38	11	Pass
NVNT	ac80	5610	Ant1	-7.19	0.43	-6.76	11	Pass

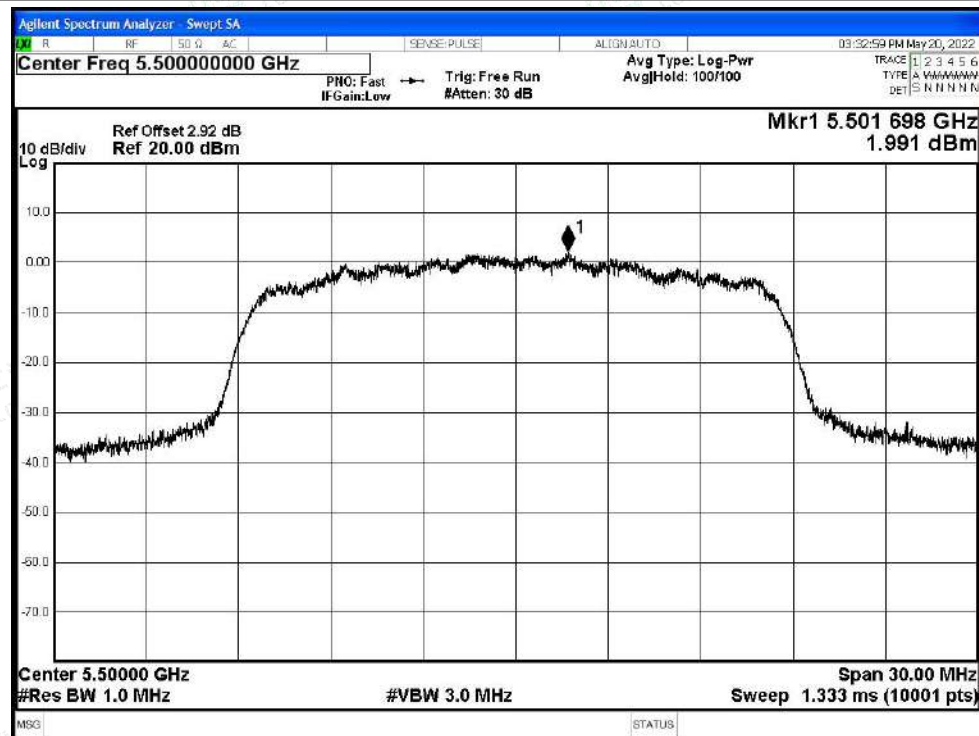


Shenzhen LCS Compliance Testing Laboratory Ltd.
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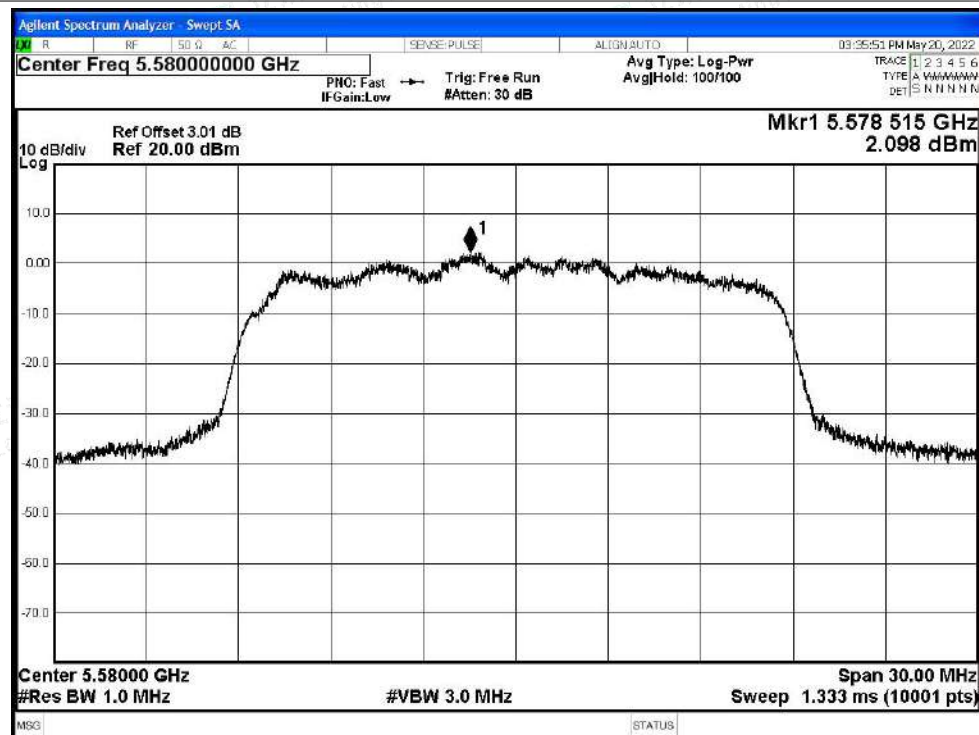


Test Graphs

PSD NVNT a 5500MHz Ant1

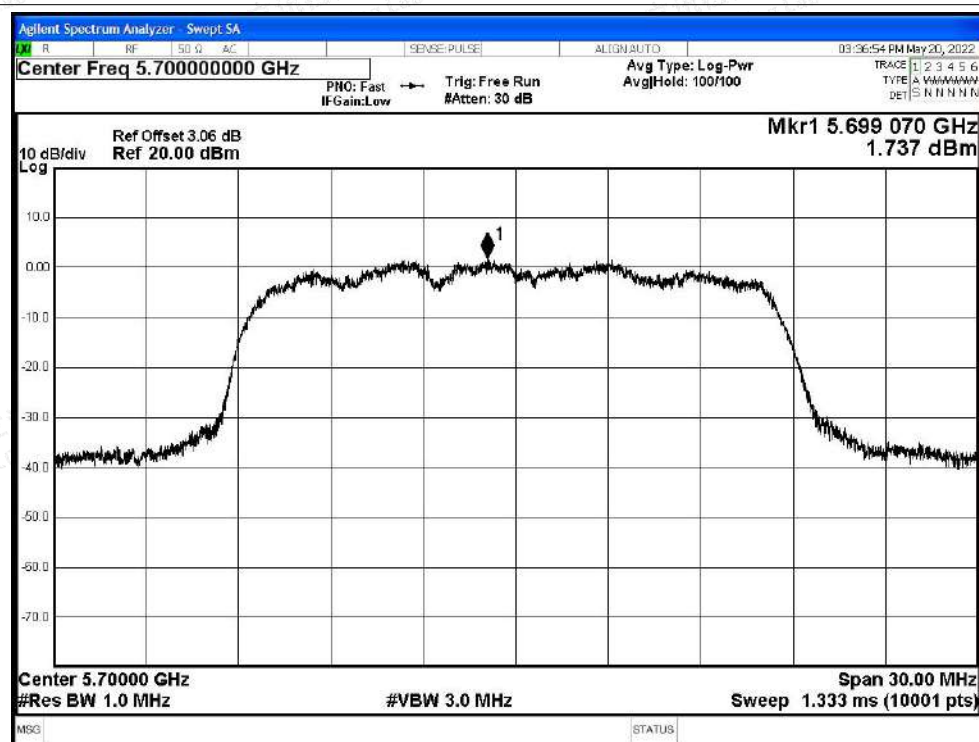


PSD NVNT a 5580MHz Ant1

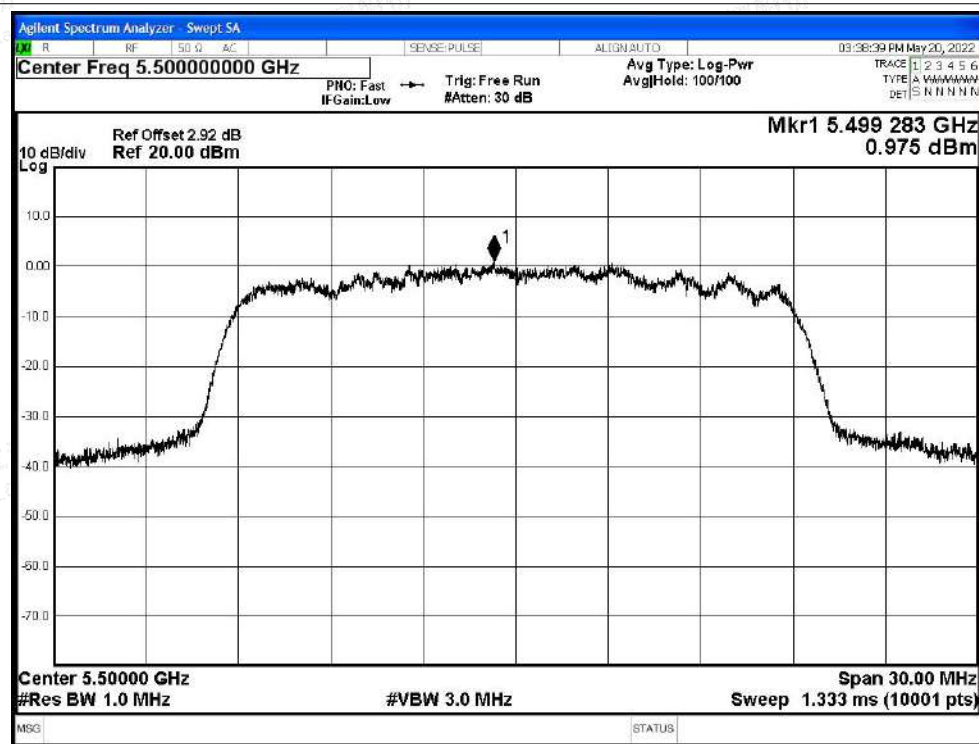


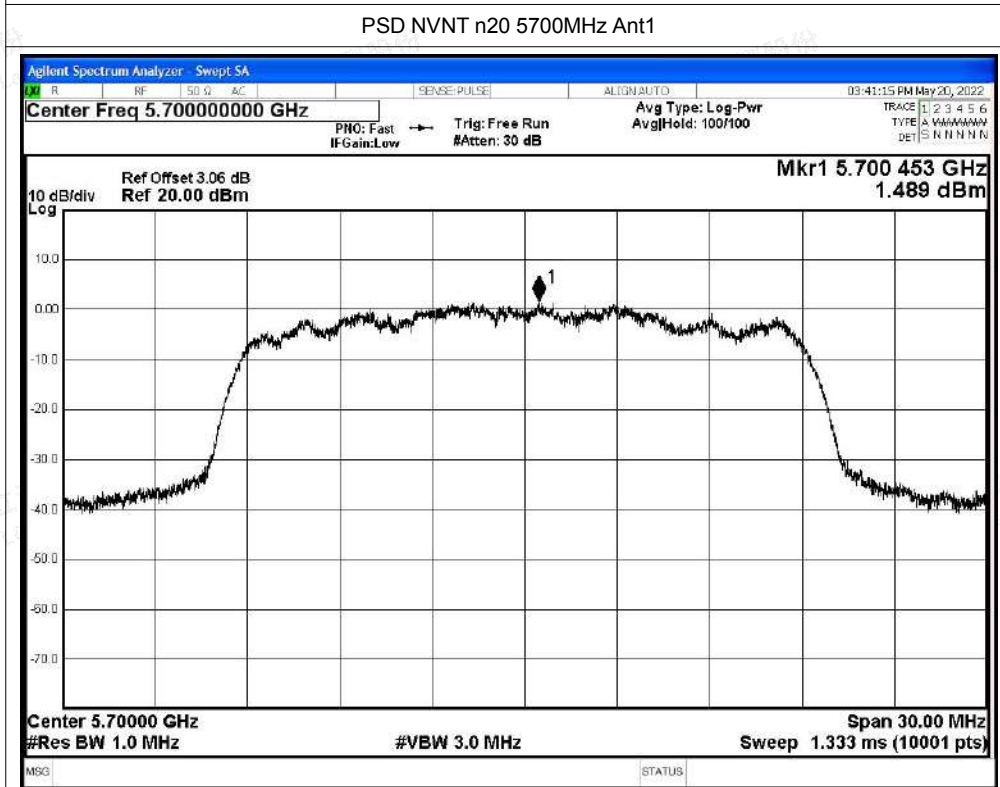
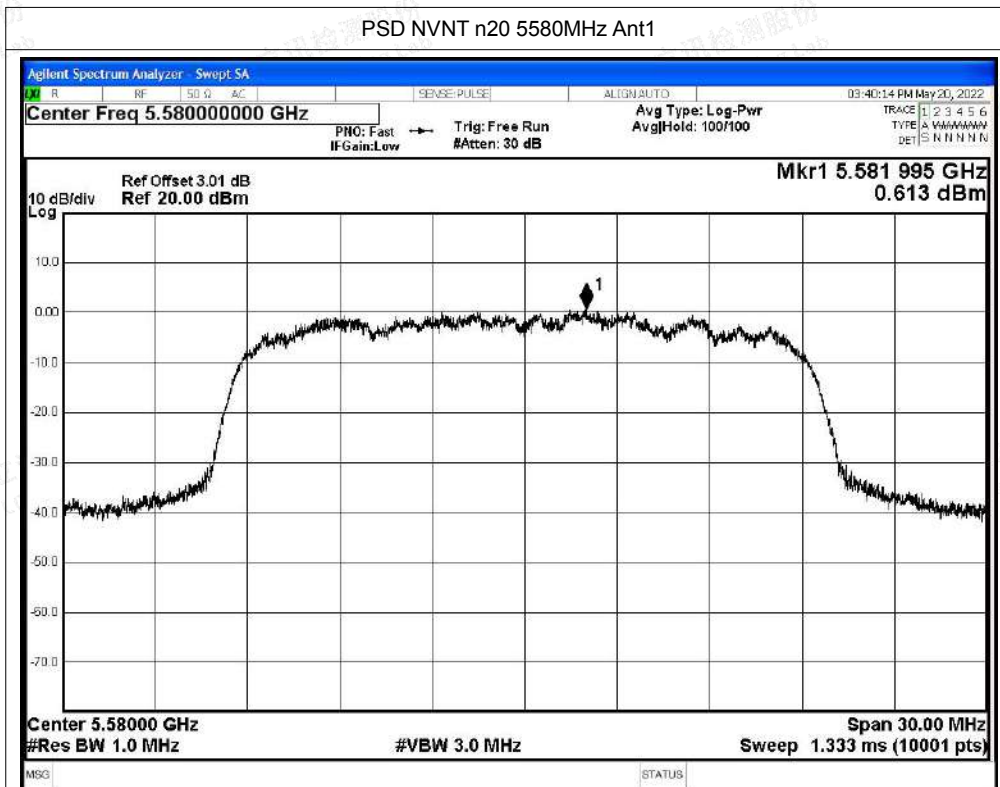


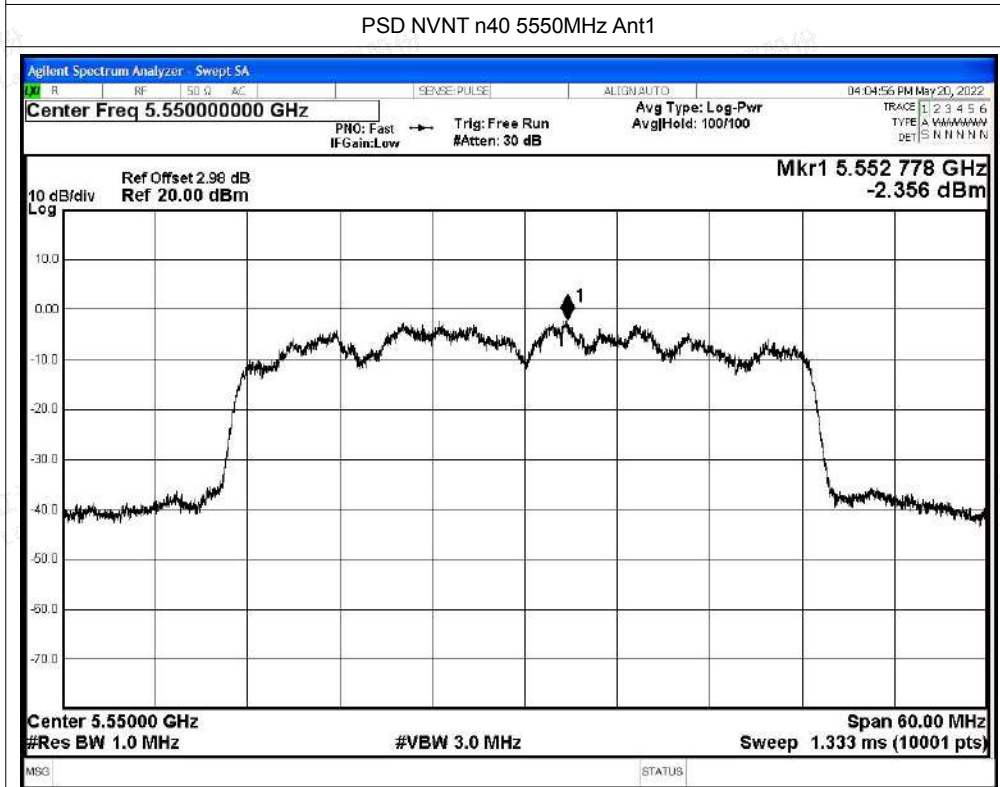
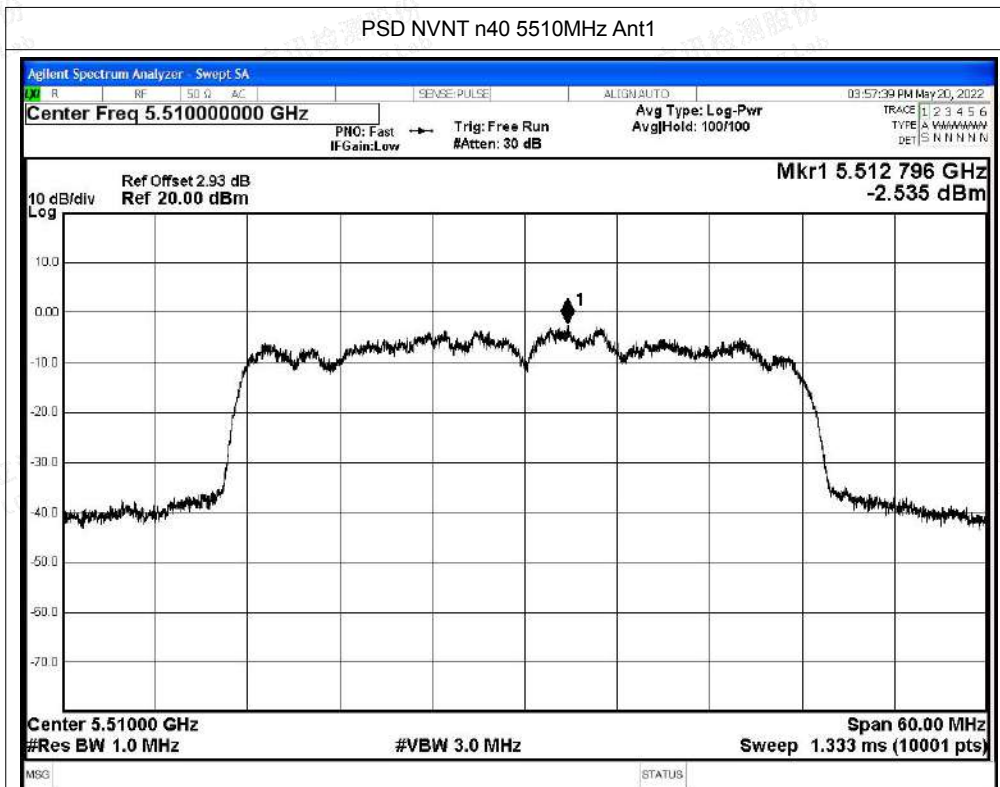
PSD NVNT a 5700MHz Ant1

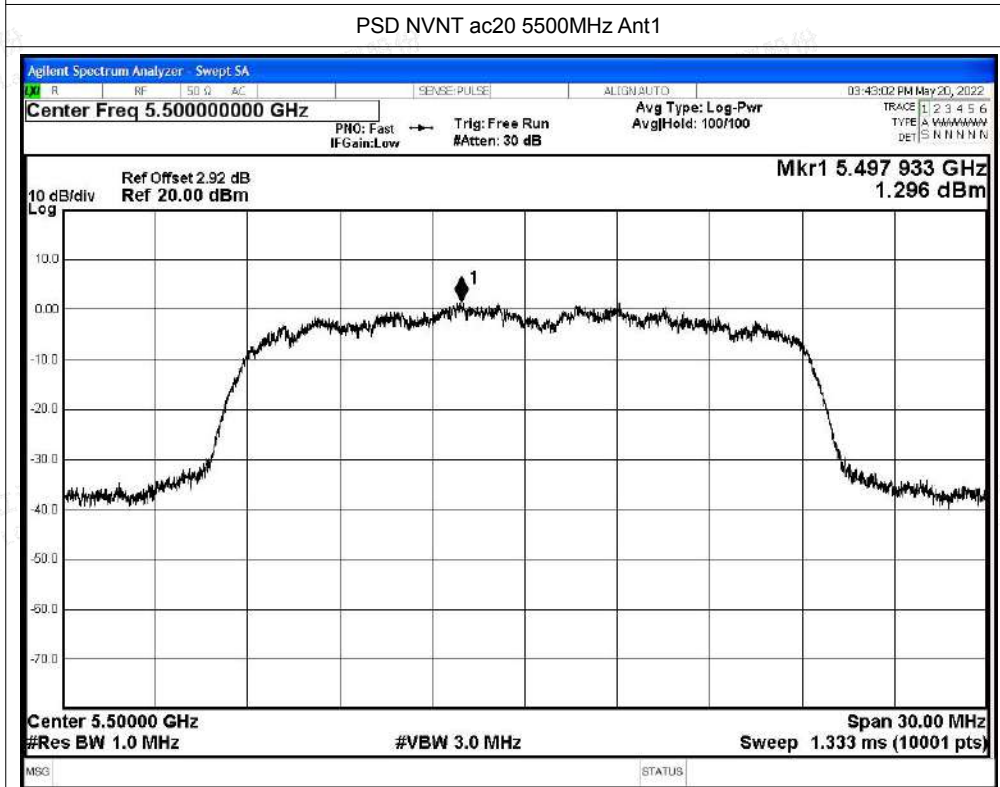
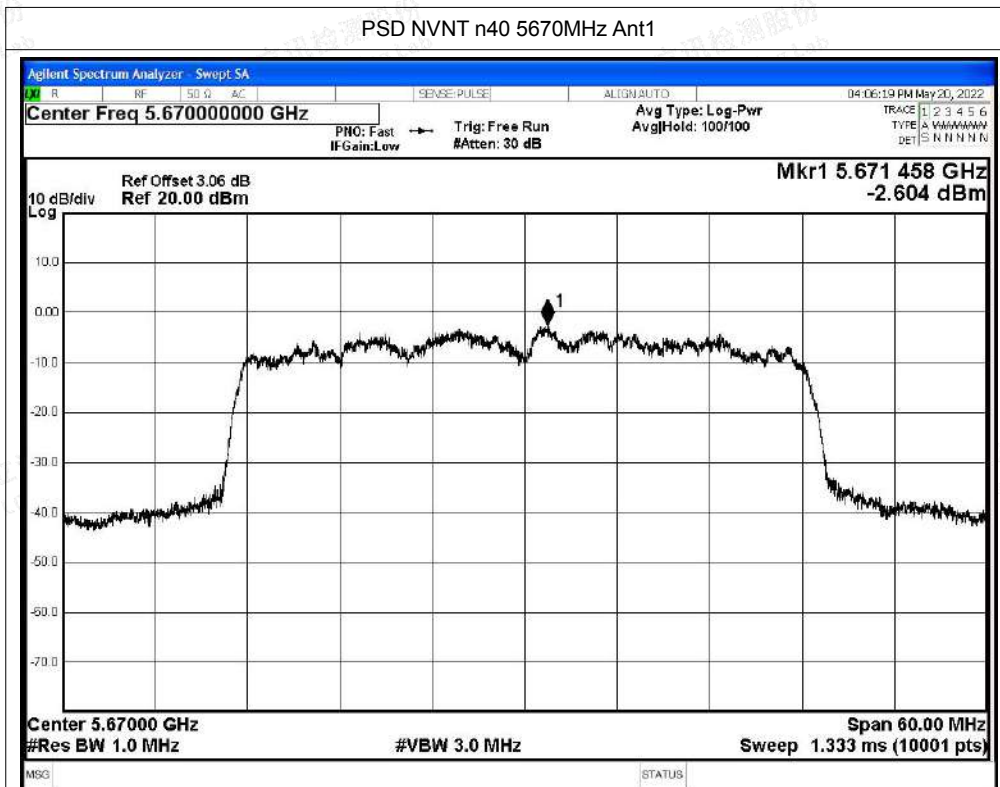


PSD NVNT n20 5500MHz Ant1



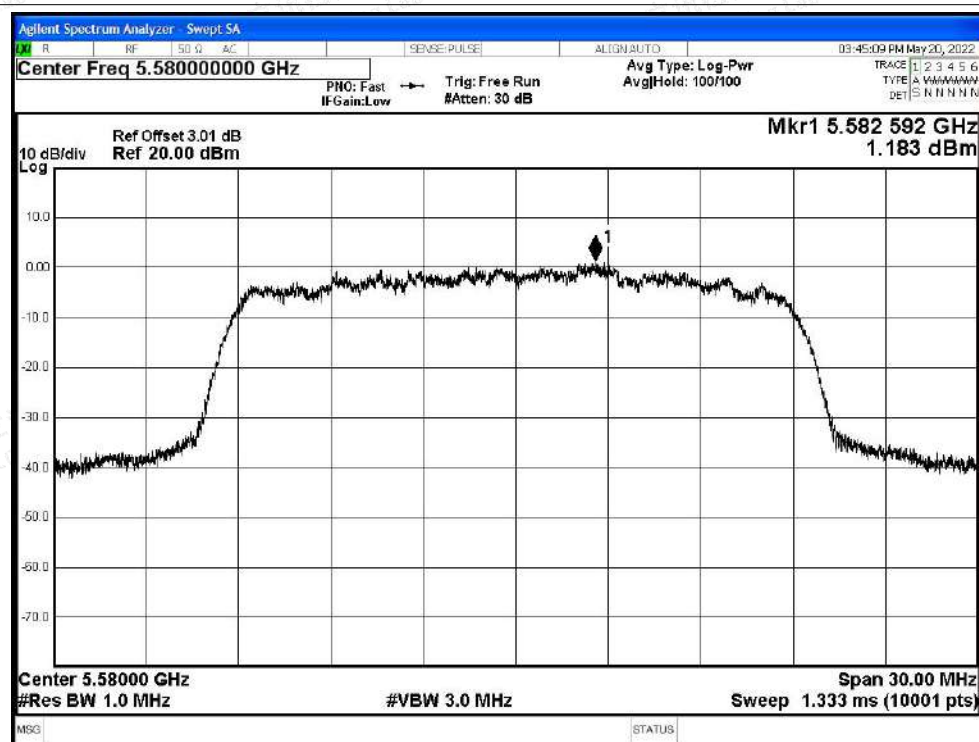




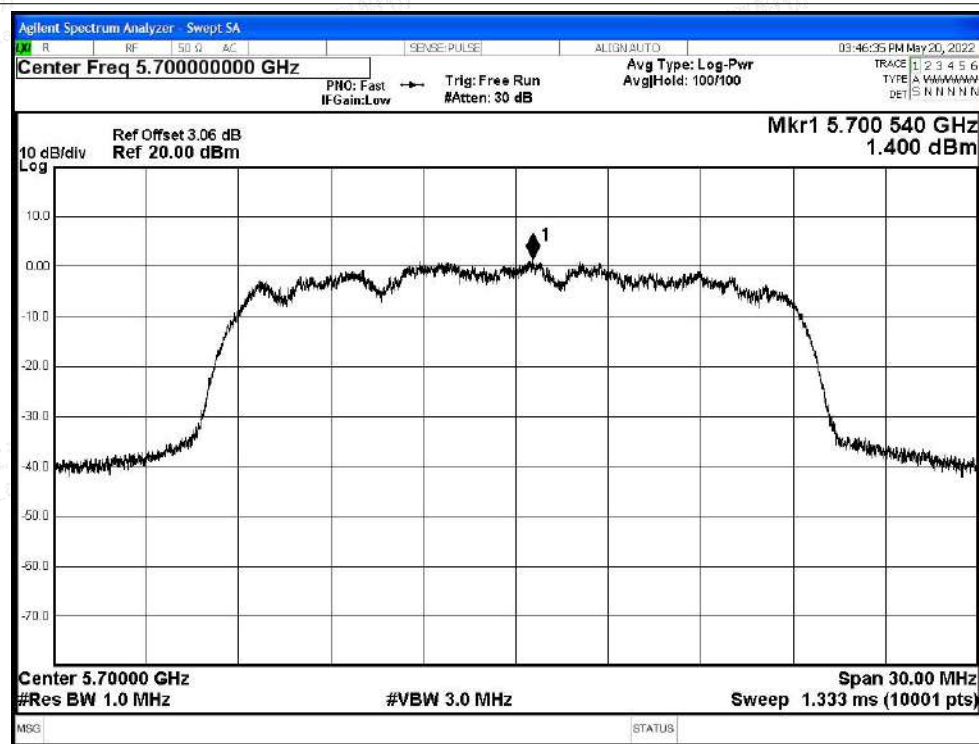




PSD NVNT ac20 5580MHz Ant1

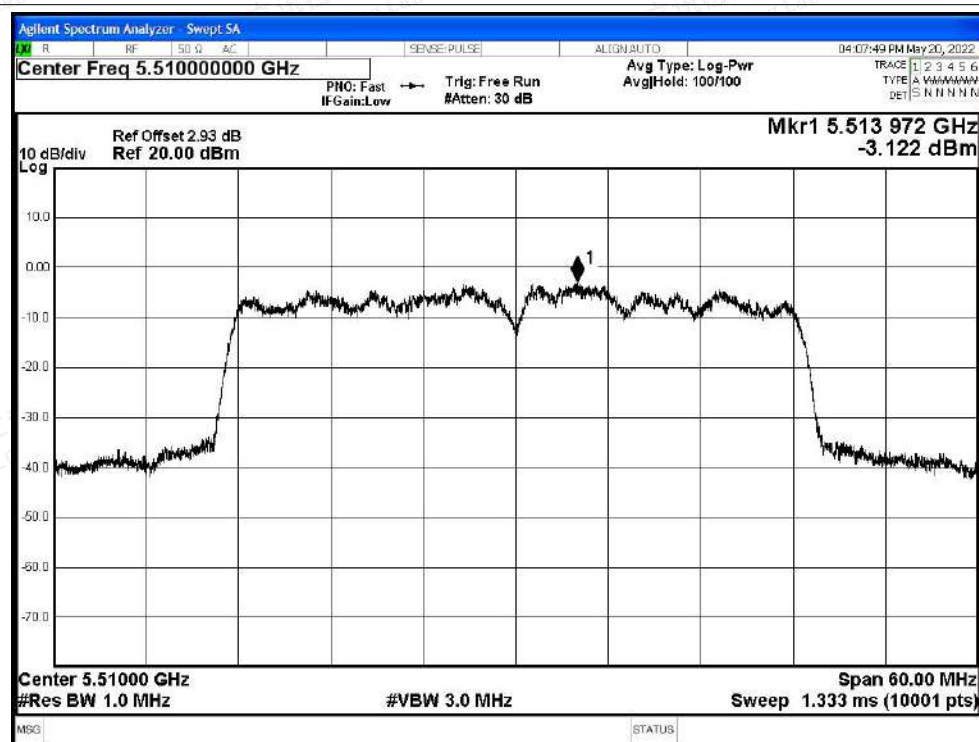


PSD NVNT ac20 5700MHz Ant1

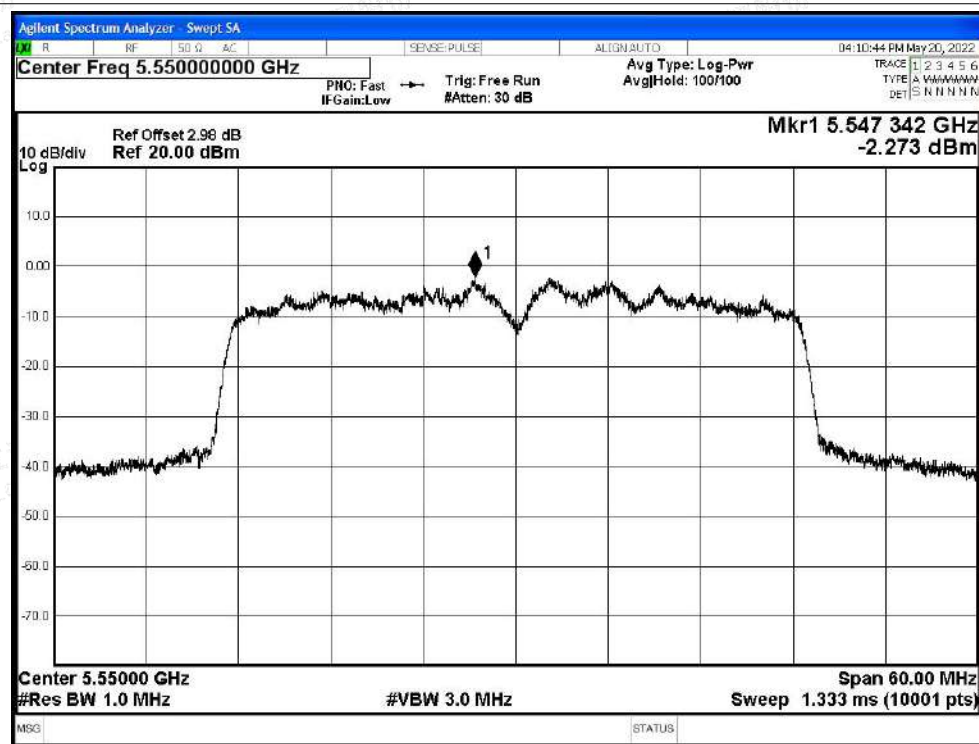




PSD NVNT ac40 5510MHz Ant1

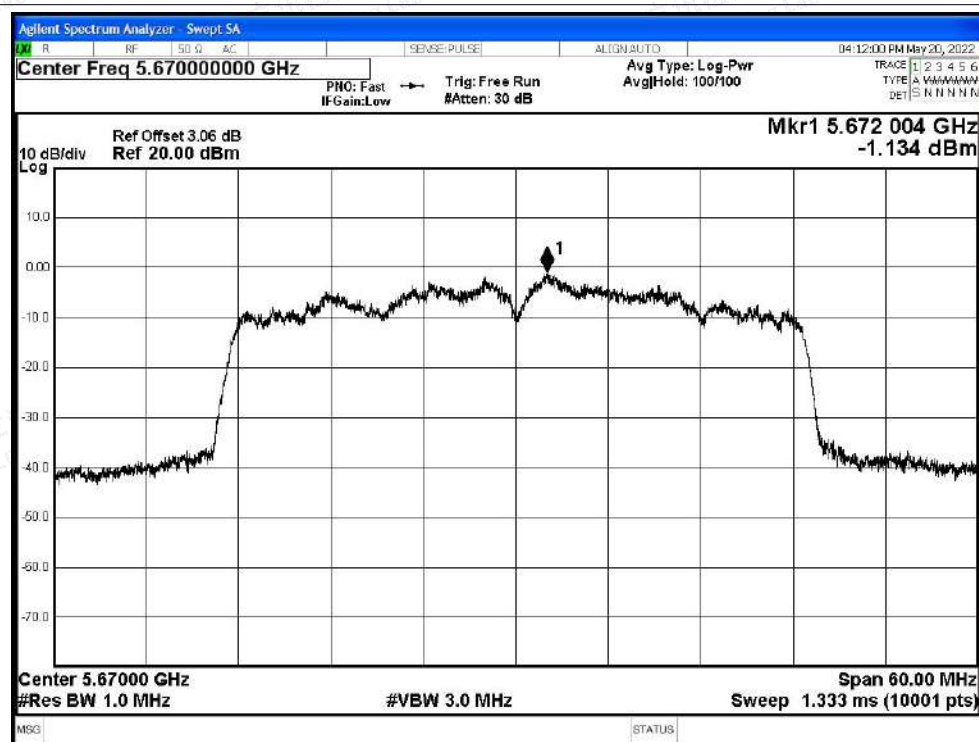


PSD NVNT ac40 5550MHz Ant1

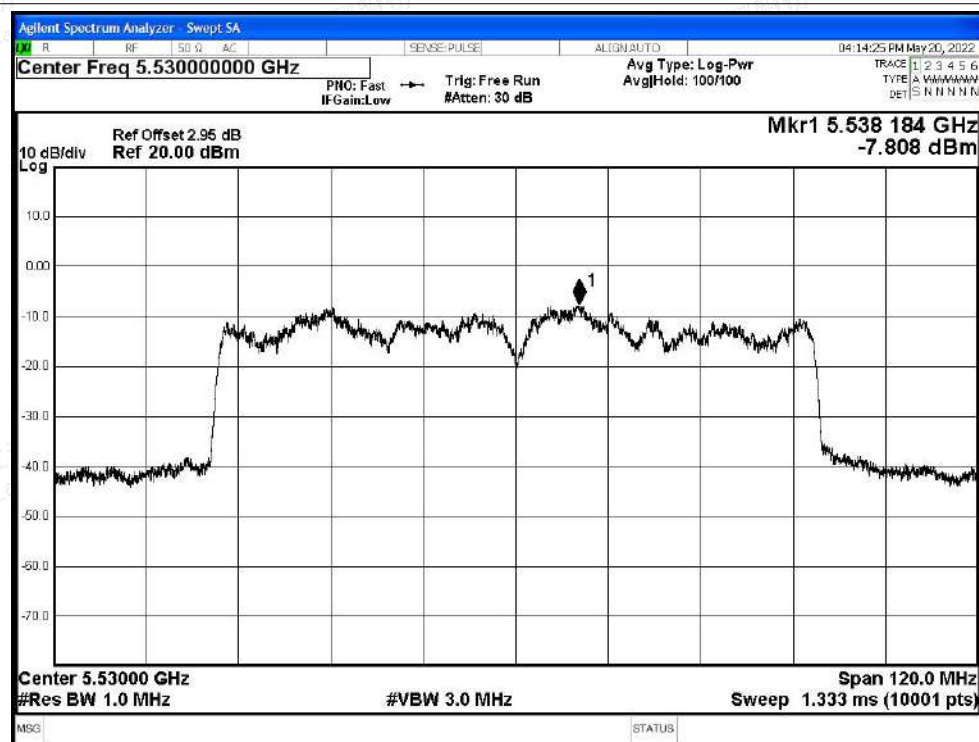


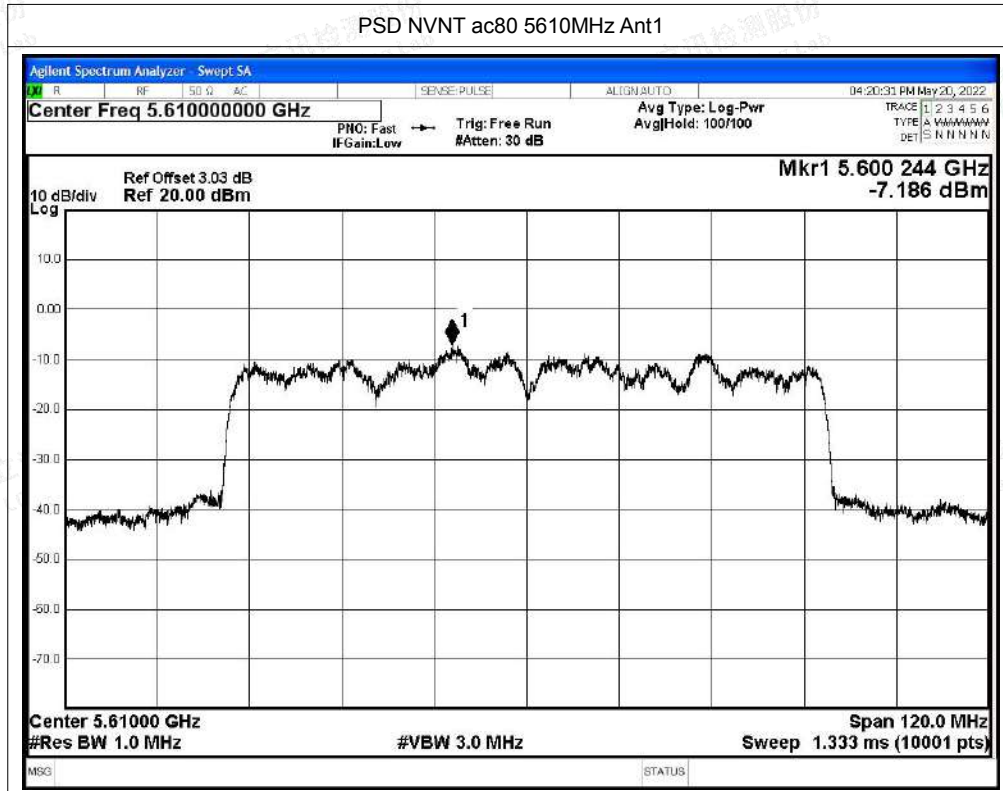


PSD NVNT ac40 5670MHz Ant1



PSD NVNT ac80 5530MHz Ant1







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	Ant1	5460	-47.85	2	49.38	Peak	68.2	Pass
NVNT	a	5500	Ant1	5460	-56.7	2	40.53	Average	54	Pass
NVNT	a	5500	Ant1	5468.8	-45.45	2	51.78	Peak	68.2	Pass
NVNT	a	5500	Ant1	5469.6	-56.14	2	41.09	Average	54	Pass
NVNT	a	5500	Ant1	5470	-48.27	2	48.96	Peak	68.2	Pass
NVNT	a	5500	Ant1	5470	-56.15	2	41.08	Average	54	Pass
NVNT	a	5700	Ant1	5725	-31.92	2	65.31	Peak	68.2	Pass
NVNT	a	5700	Ant1	5725	-46.51	2	50.72	Average	54	Pass
NVNT	a	5700	Ant1	5735	-40.96	2	56.27	Peak	68.2	Pass
NVNT	a	5700	Ant1	5735	-52.95	2	44.28	Average	54	Pass
NVNT	n20	5500	Ant1	5460	-48.43	2	48.8	Peak	68.2	Pass
NVNT	n20	5500	Ant1	5460	-58.25	2	38.98	Average	54	Pass
NVNT	n20	5500	Ant1	5462.6	-46.8	2	50.43	Peak	68.2	Pass
NVNT	n20	5500	Ant1	5468.8	-57.88	2	39.35	Average	54	Pass
NVNT	n20	5500	Ant1	5470	-48.58	2	48.65	Peak	68.2	Pass
NVNT	n20	5500	Ant1	5470	-58.02	2	39.21	Average	54	Pass
NVNT	n20	5700	Ant1	5725	-48.57	2	48.66	Peak	68.2	Pass
NVNT	n20	5700	Ant1	5725	-57.69	2	39.54	Average	54	Pass
NVNT	n20	5700	Ant1	5733.6	-45.73	2	51.5	Peak	68.2	Pass
NVNT	n20	5700	Ant1	5726.2	-57.32	2	39.91	Average	54	Pass
NVNT	n20	5700	Ant1	5735	-48.34	2	48.89	Peak	68.2	Pass
NVNT	n20	5700	Ant1	5735	-58.19	2	39.04	Average	54	Pass
NVNT	n40	5510	Ant1	5460	-37.36	2	59.87	Peak	68.2	Pass
NVNT	n40	5510	Ant1	5460	-52.36	2	44.87	Average	54	Pass
NVNT	n40	5510	Ant1	5466.6	-32.18	2	65.05	Peak	68.2	Pass
NVNT	n40	5510	Ant1	5469.8	-48.91	2	48.32	Average	54	Pass
NVNT	n40	5510	Ant1	5470	-38.15	2	59.08	Peak	68.2	Pass
NVNT	n40	5510	Ant1	5470	-48.95	2	48.28	Average	54	Pass
NVNT	n40	5670	Ant1	5725	-37.36	2	59.87	Peak	68.2	Pass
NVNT	n40	5670	Ant1	5725	-49.5	2	47.73	Average	54	Pass
NVNT	n40	5670	Ant1	5731.6	-35.14	2	62.09	Peak	68.2	Pass
NVNT	n40	5670	Ant1	5725.2	-49.35	2	47.88	Average	54	Pass
NVNT	n40	5670	Ant1	5735	-42.8	2	54.43	Peak	68.2	Pass
NVNT	n40	5670	Ant1	5735	-52.83	2	44.4	Average	54	Pass
NVNT	ac20	5500	Ant1	5460	-46.55	2	50.68	Peak	68.2	Pass
NVNT	ac20	5500	Ant1	5460	-56.7	2	40.53	Average	54	Pass
NVNT	ac20	5500	Ant1	5467.8	-45.3	2	51.93	Peak	68.2	Pass





NVNT	ac20	5500	Ant1	5467.2	-56.03	2	41.2	Average	54	Pass
NVNT	ac20	5500	Ant1	5470	-47.74	2	49.49	Peak	68.2	Pass
NVNT	ac20	5500	Ant1	5470	-56.07	2	41.16	Average	54	Pass
NVNT	ac20	5700	Ant1	5725	-47.21	2	50.02	Peak	68.2	Pass
NVNT	ac20	5700	Ant1	5725	-56.11	2	41.12	Average	54	Pass
NVNT	ac20	5700	Ant1	5725.8	-44.38	2	52.85	Peak	68.2	Pass
NVNT	ac20	5700	Ant1	5726	-55.85	2	41.38	Average	54	Pass
NVNT	ac20	5700	Ant1	5735	-47.13	2	50.1	Peak	68.2	Pass
NVNT	ac20	5700	Ant1	5735	-56.95	2	40.28	Average	54	Pass
NVNT	ac40	5510	Ant1	5460	-43.47	2	53.76	Peak	68.2	Pass
NVNT	ac40	5510	Ant1	5460	-52.89	2	44.34	Average	54	Pass
NVNT	ac40	5510	Ant1	5466.4	-36.15	2	61.08	Peak	68.2	Pass
NVNT	ac40	5510	Ant1	5469.6	-50.29	2	46.94	Average	54	Pass
NVNT	ac40	5510	Ant1	5470	-38.8	2	58.43	Peak	68.2	Pass
NVNT	ac40	5510	Ant1	5470	-50.34	2	46.89	Average	54	Pass
NVNT	ac40	5670	Ant1	5725	-44.92	2	52.31	Peak	68.2	Pass
NVNT	ac40	5670	Ant1	5725	-56.16	2	41.07	Average	54	Pass
NVNT	ac40	5670	Ant1	5732.2	-43.97	2	53.26	Peak	68.2	Pass
NVNT	ac40	5670	Ant1	5734	-55.83	2	41.4	Average	54	Pass
NVNT	ac40	5670	Ant1	5735	-46.09	2	51.14	Peak	68.2	Pass
NVNT	ac40	5670	Ant1	5735	-56.47	2	40.76	Average	54	Pass
NVNT	ac80	5530	Ant1	5460	-48.11	2	49.12	Peak	68.2	Pass
NVNT	ac80	5530	Ant1	5460	-53.48	2	43.75	Average	54	Pass
NVNT	ac80	5530	Ant1	5470	-42.01	2	55.22	Peak	68.2	Pass
NVNT	ac80	5530	Ant1	5469.8	-50.52	2	46.71	Average	54	Pass
NVNT	ac80	5610	Ant1	5725	-47.67	2	49.56	Peak	68.2	Pass
NVNT	ac80	5610	Ant1	5725	-55.09	2	42.14	Average	54	Pass
NVNT	ac80	5610	Ant1	5731.515	-44.22	2	53.01	Peak	68.2	Pass
NVNT	ac80	5610	Ant1	5725.775	-54.83	2	42.4	Average	54	Pass
NVNT	ac80	5610	Ant1	5735	-46.61	2	50.62	Peak	68.2	Pass
NVNT	ac80	5610	Ant1	5735	-56.05	2	41.18	Average	54	Pass



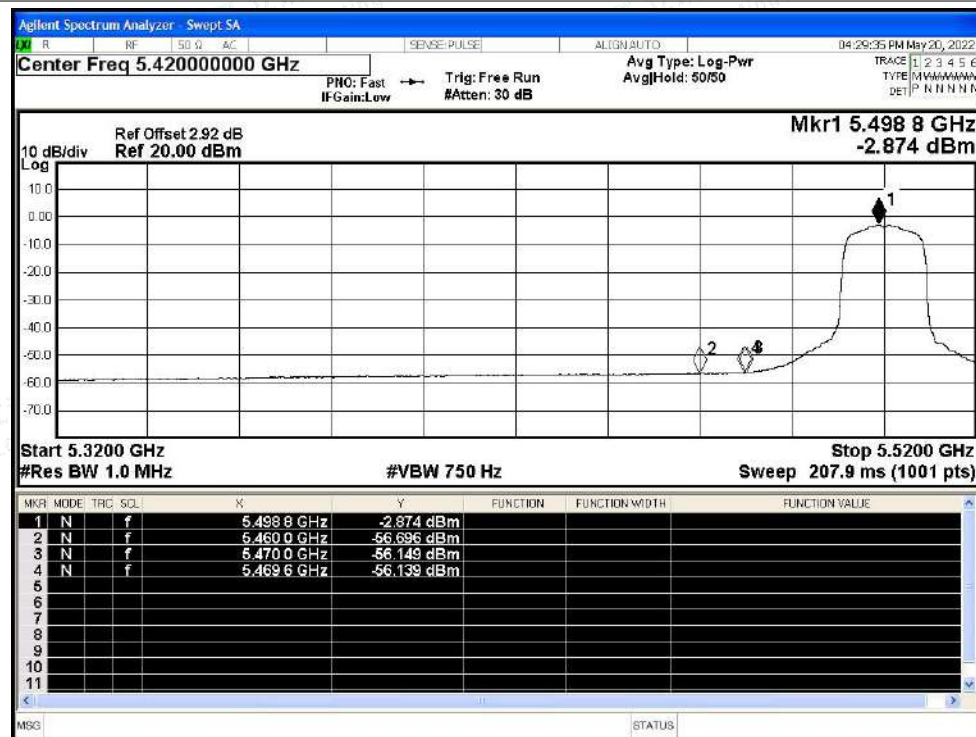


Test Graphs

Restrict Band NVNT a 5500MHz Ant1 Peak

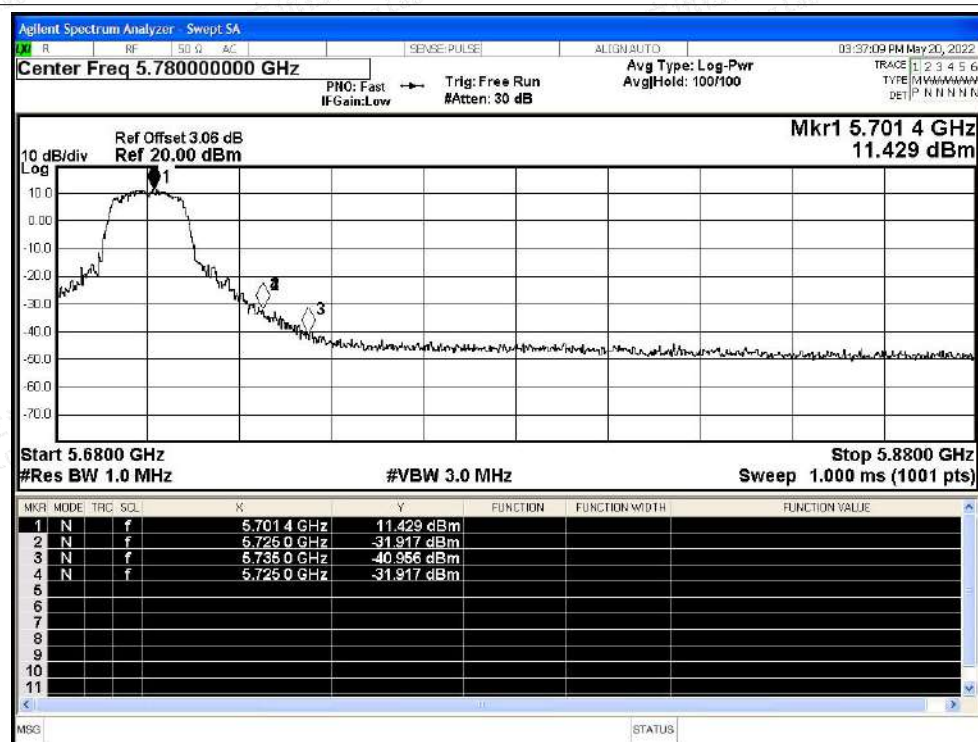


Restrict Band NVNT a 5500MHz Ant1 Average

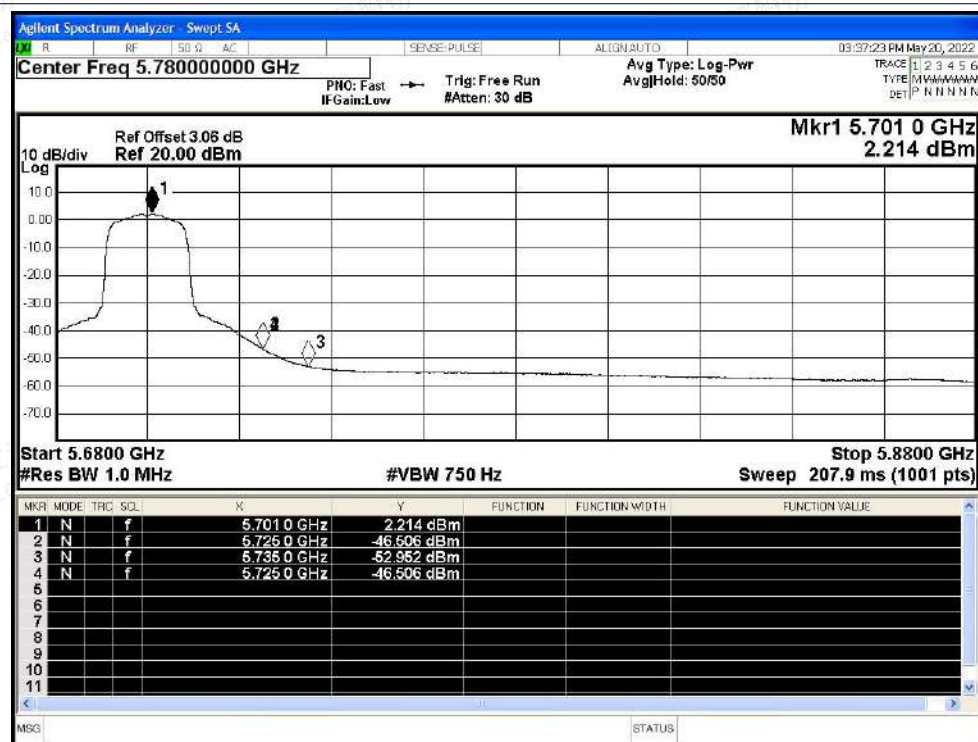




Restrict Band NVNT a 5700MHz Ant1 Peak

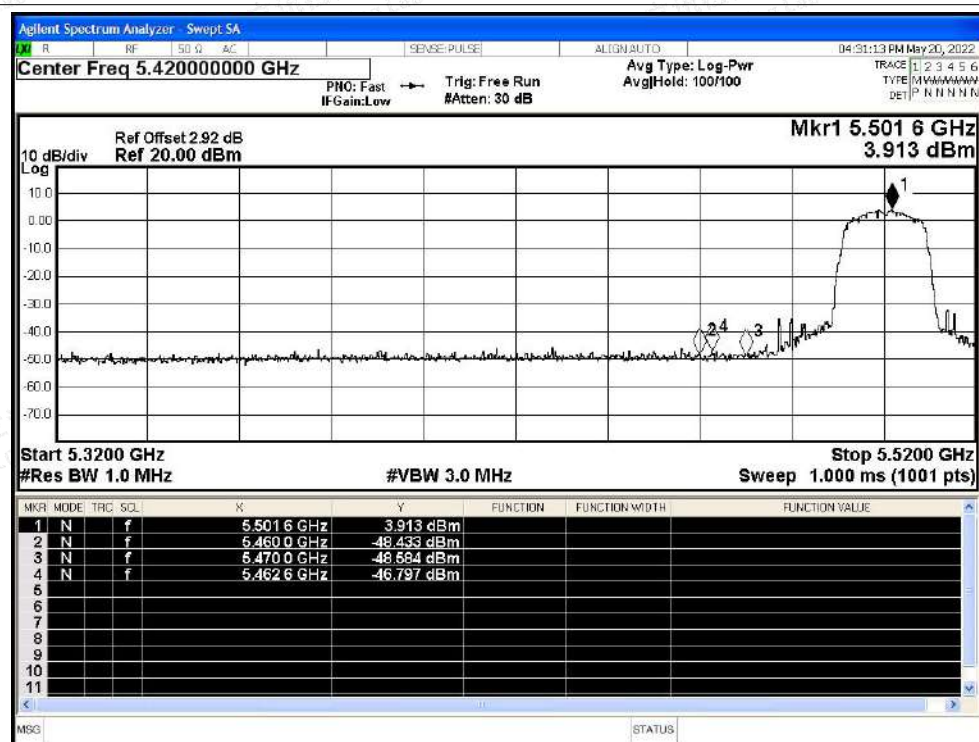


Restrict Band NVNT a 5700MHz Ant1 Average

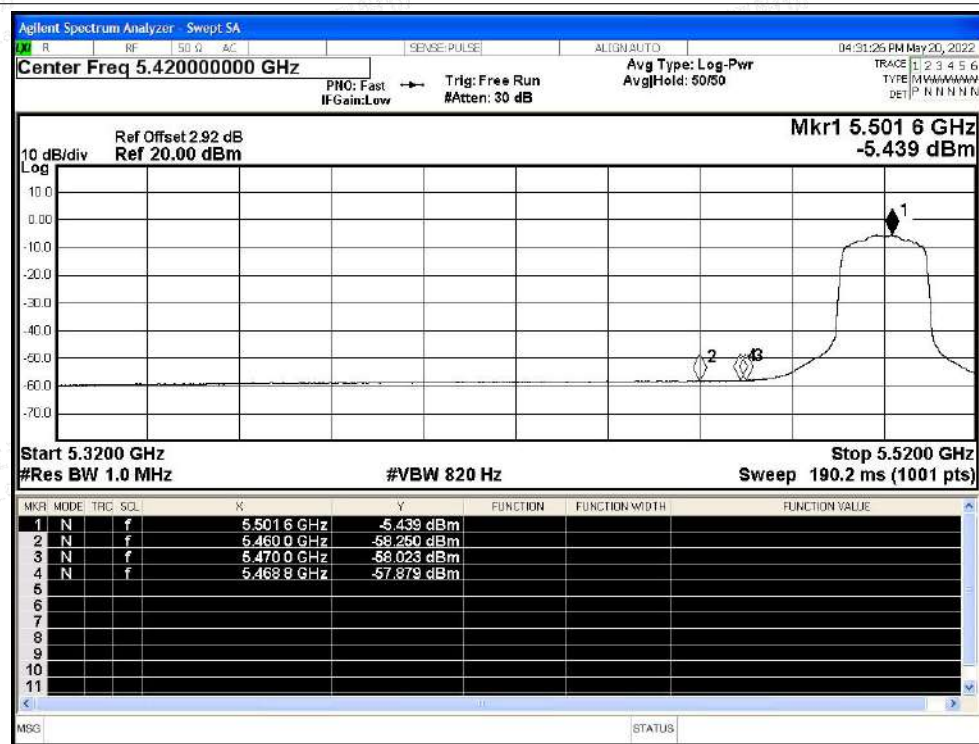




Restrict Band NVNT n20 5500MHz Ant1 Peak

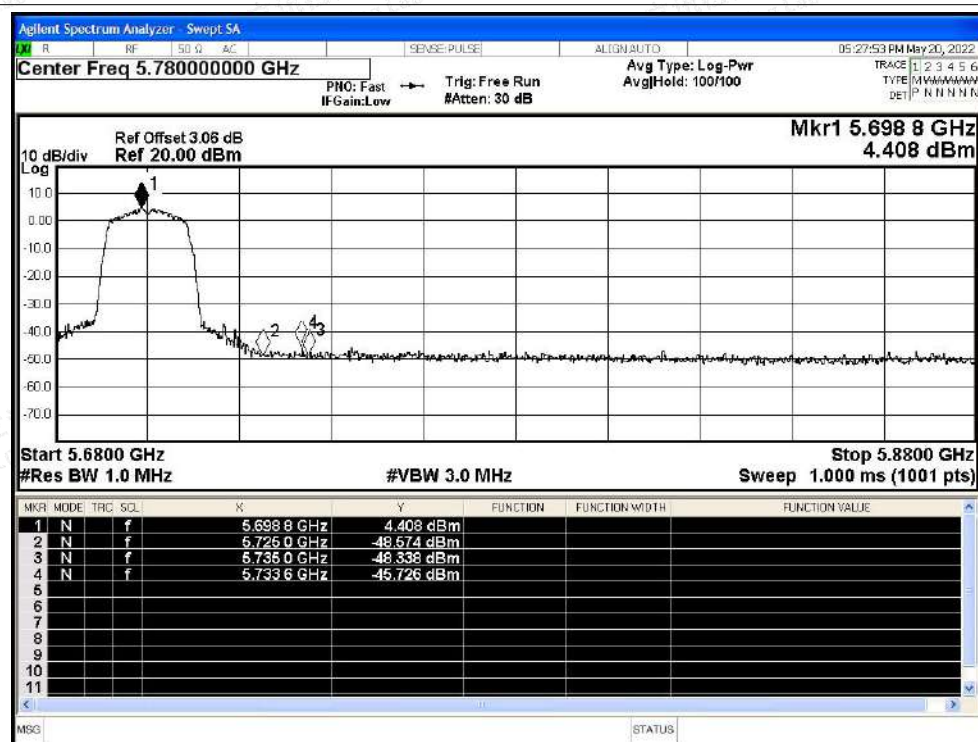


Restrict Band NVNT n20 5500MHz Ant1 Average

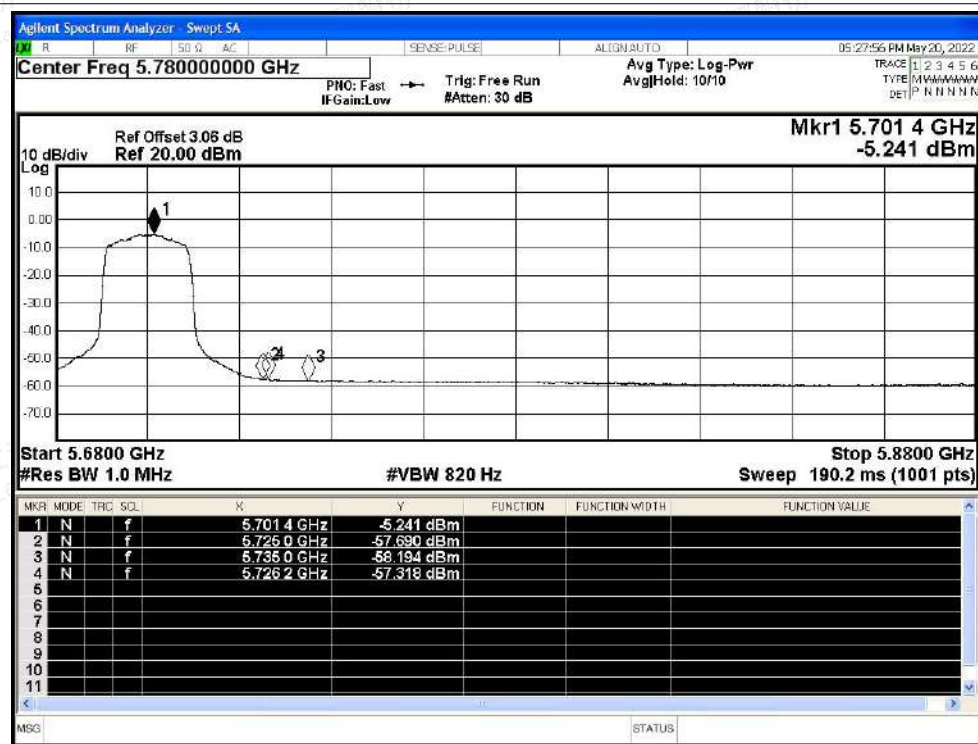




Restrict Band NVNT n20 5700MHz Ant1 Peak

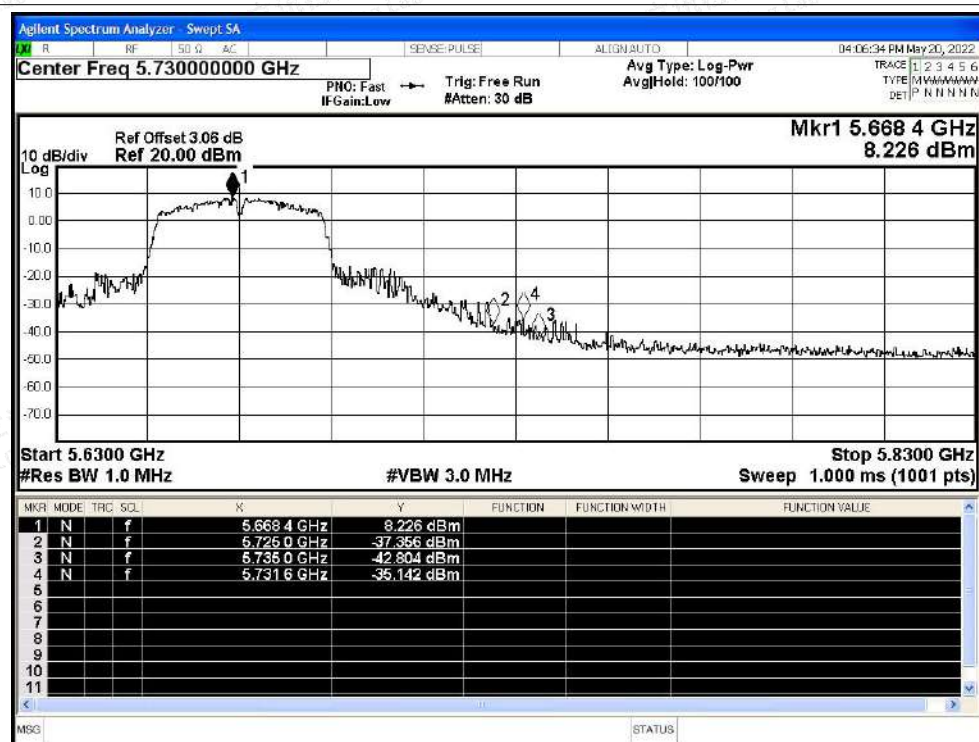


Restrict Band NVNT n20 5700MHz Ant1 Average

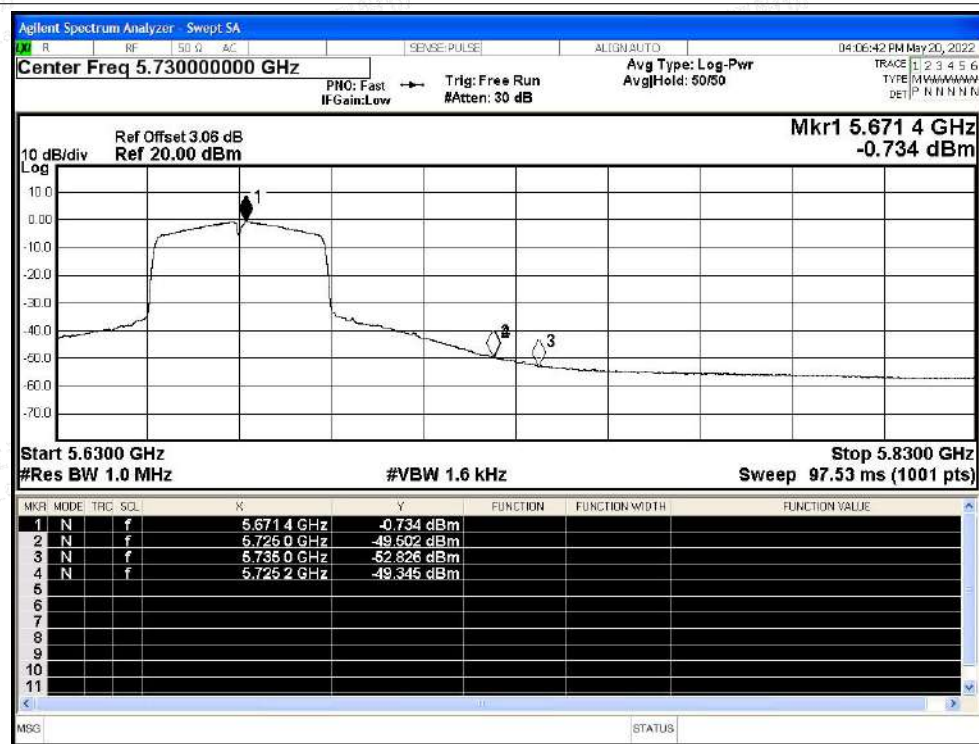


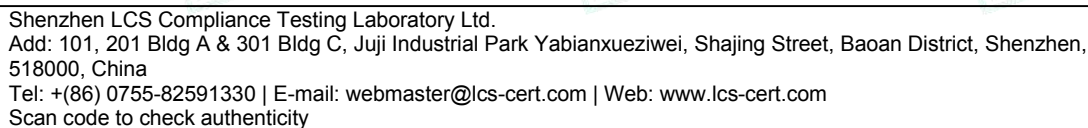
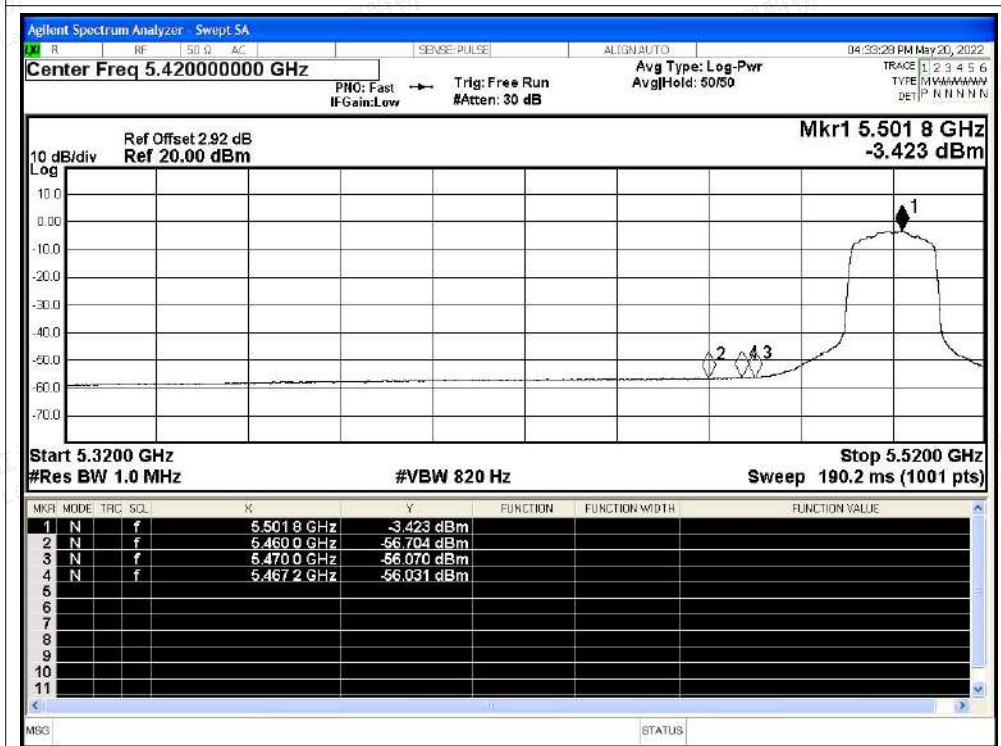
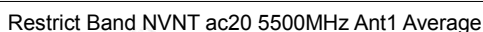


Restrict Band NVNT n40 5670MHz Ant1 Peak



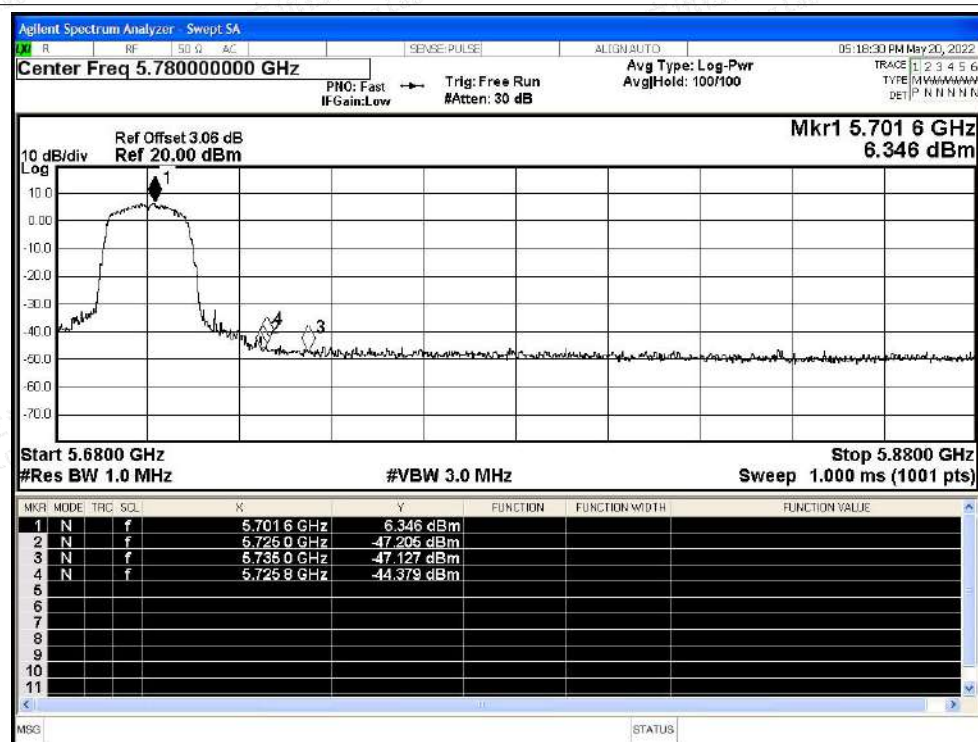
Restrict Band NVNT n40 5670MHz Ant1 Average



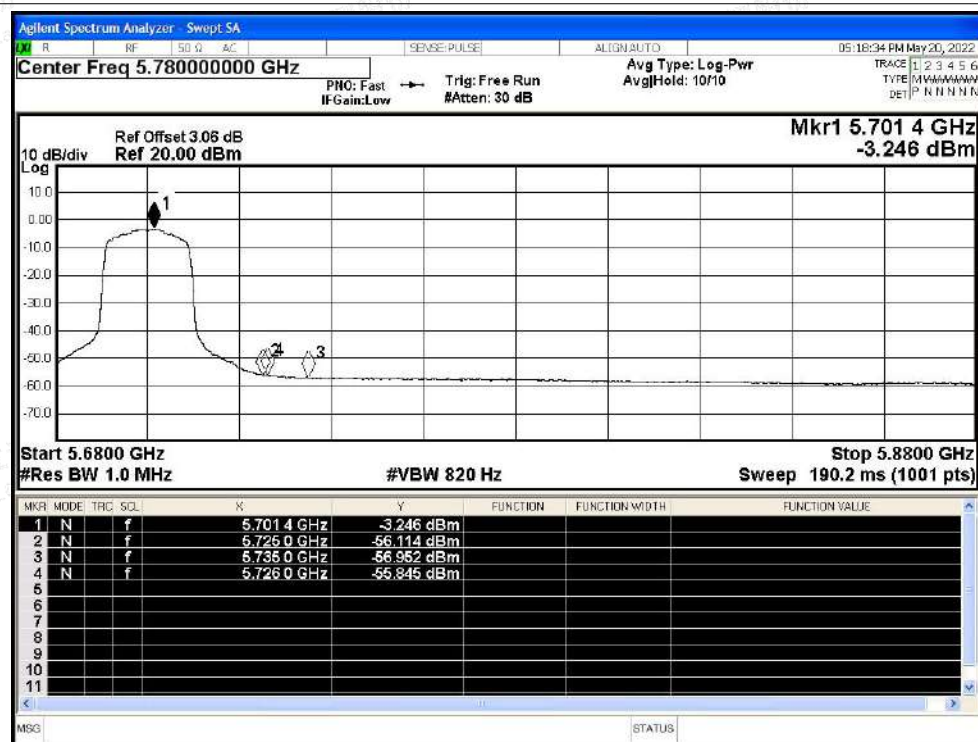




Restrict Band NVNT ac20 5700MHz Ant1 Peak

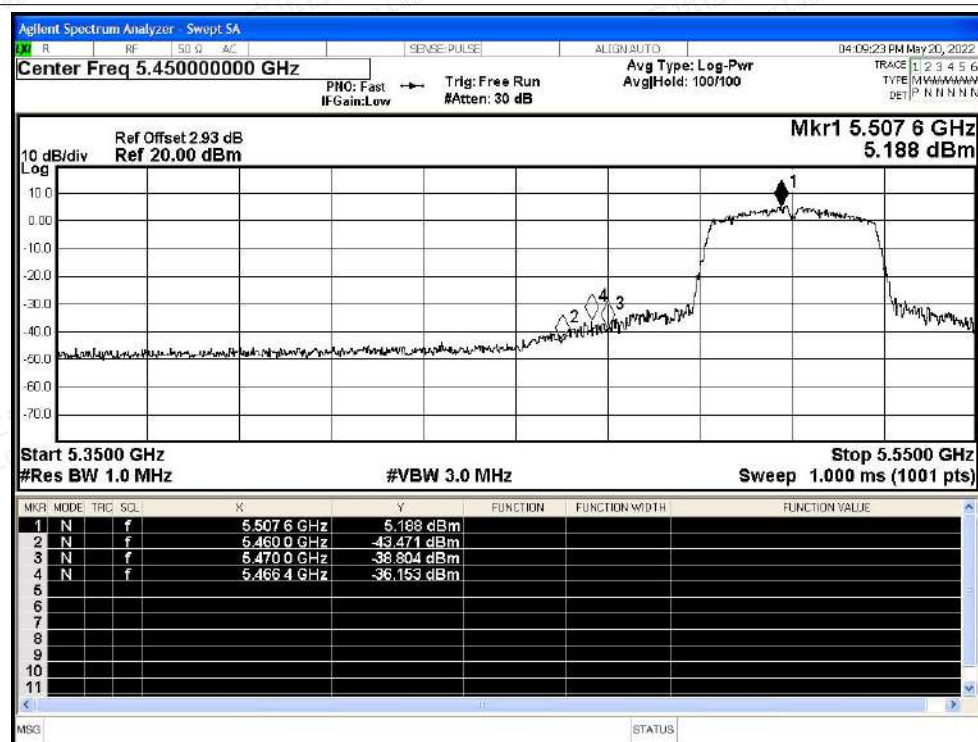


Restrict Band NVNT ac20 5700MHz Ant1 Average

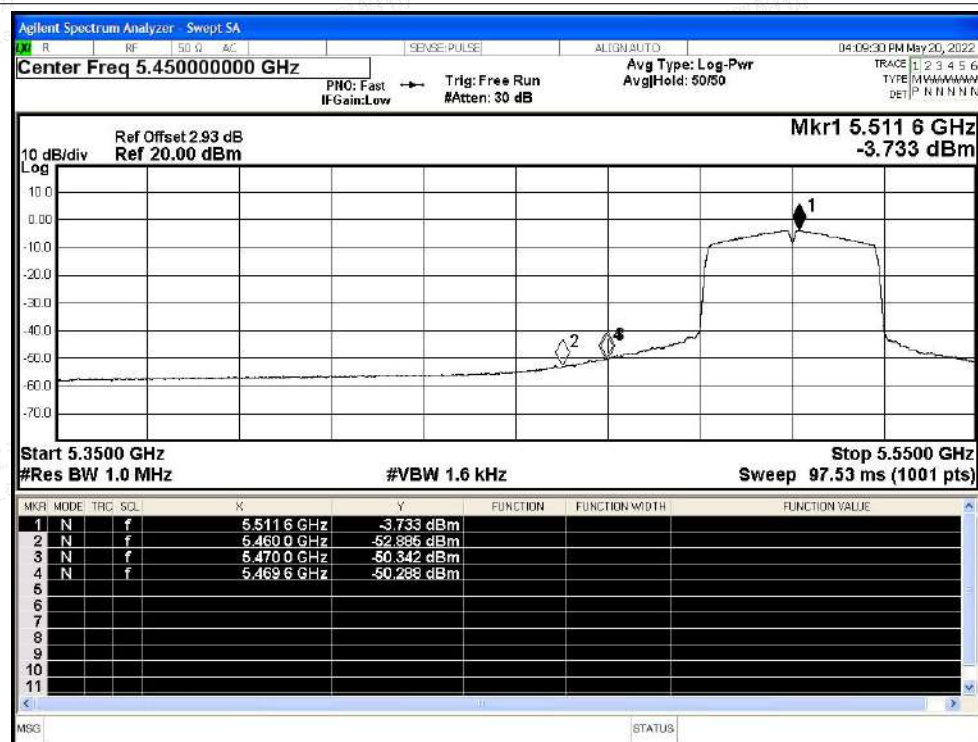




Restrict Band NVNT ac40 5510MHz Ant1 Peak

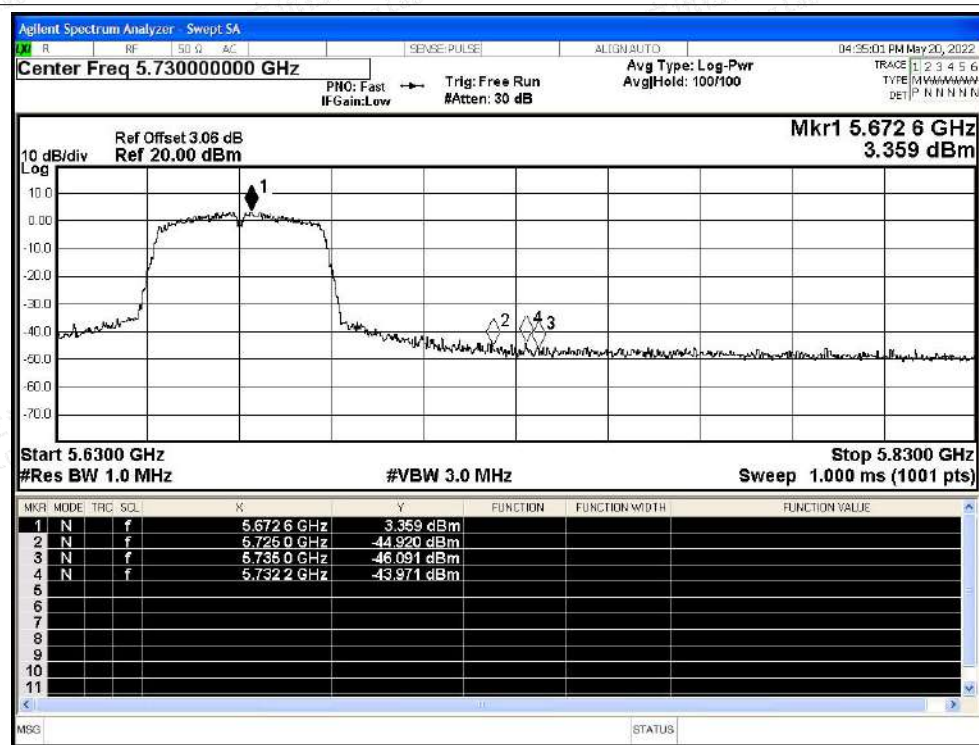


Restrict Band NVNT ac40 5510MHz Ant1 Average

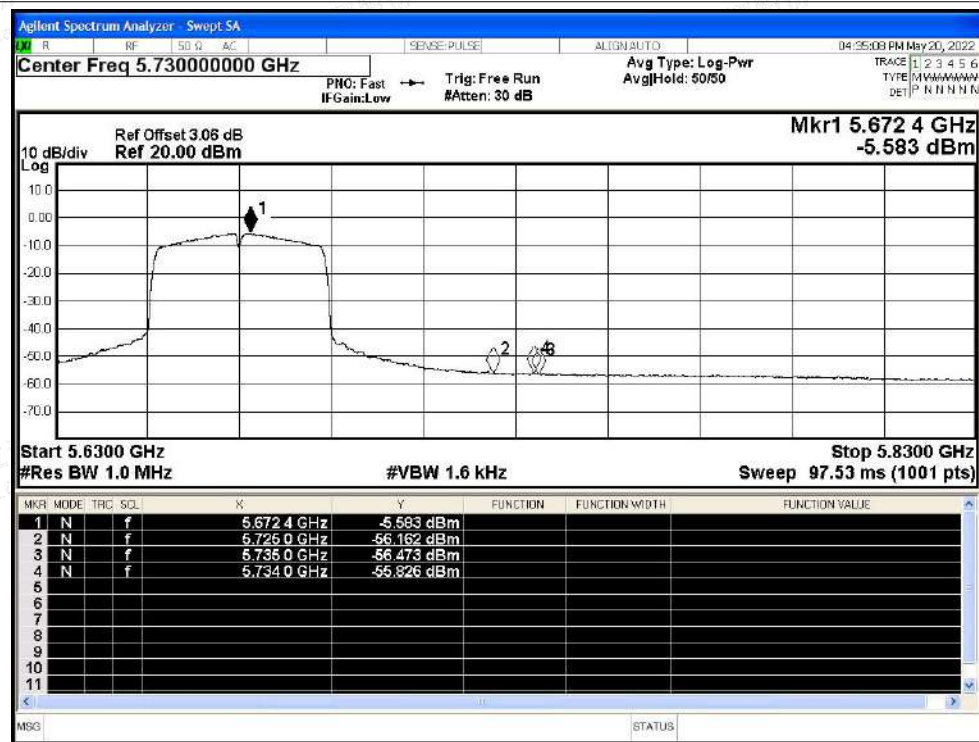




Restrict Band NVNT ac40 5670MHz Ant1 Peak

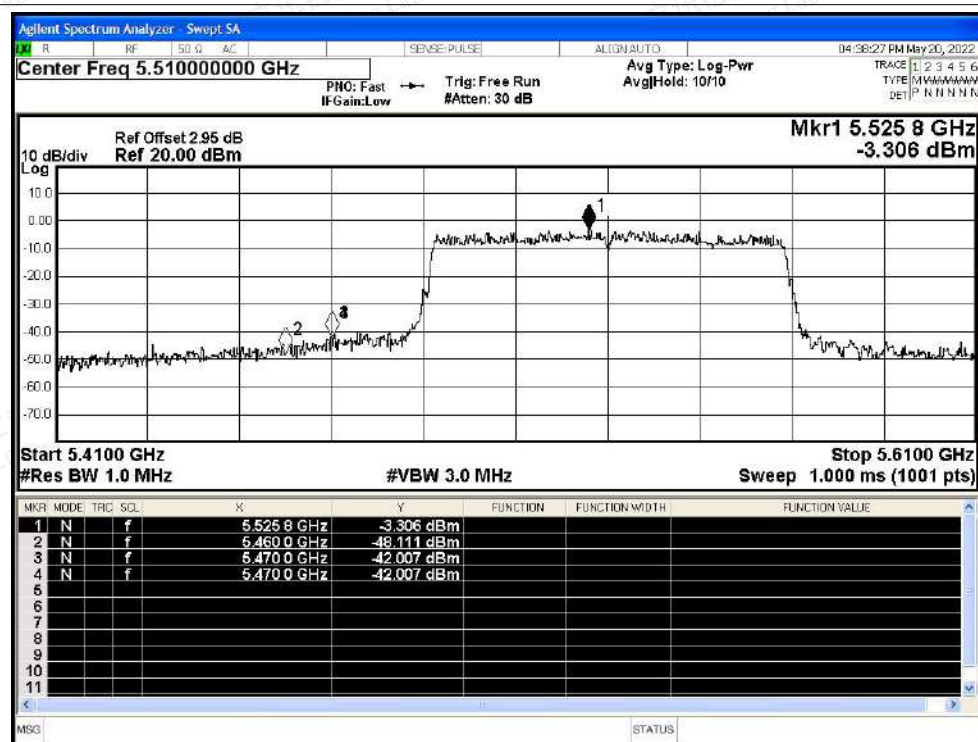


Restrict Band NVNT ac40 5670MHz Ant1 Average

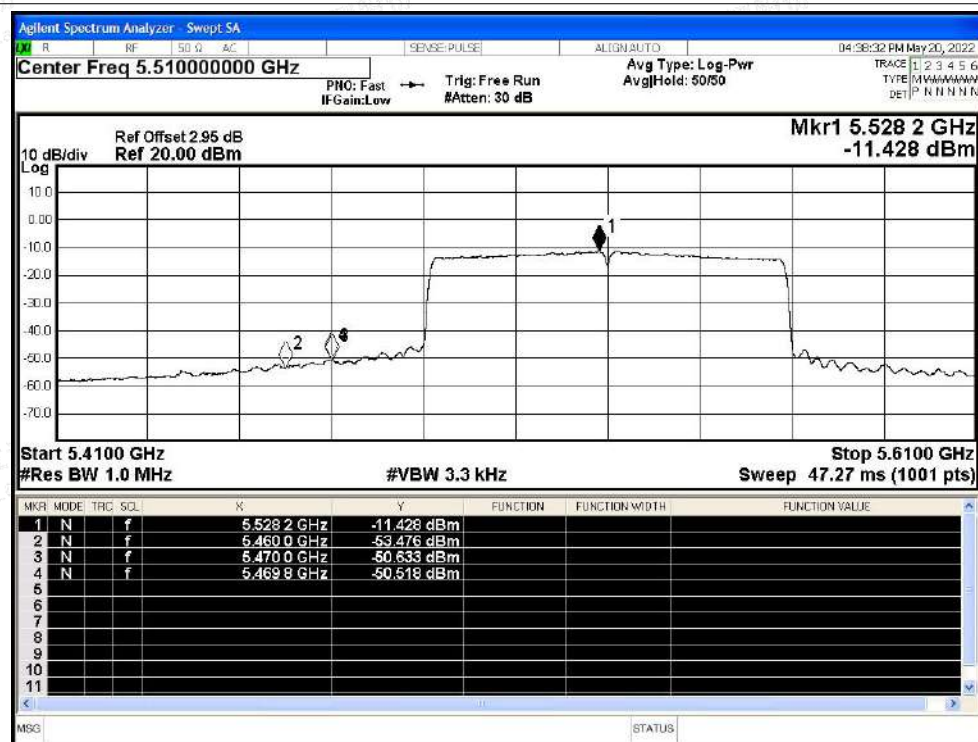




Restrict Band NVNT ac80 5530MHz Ant1 Peak

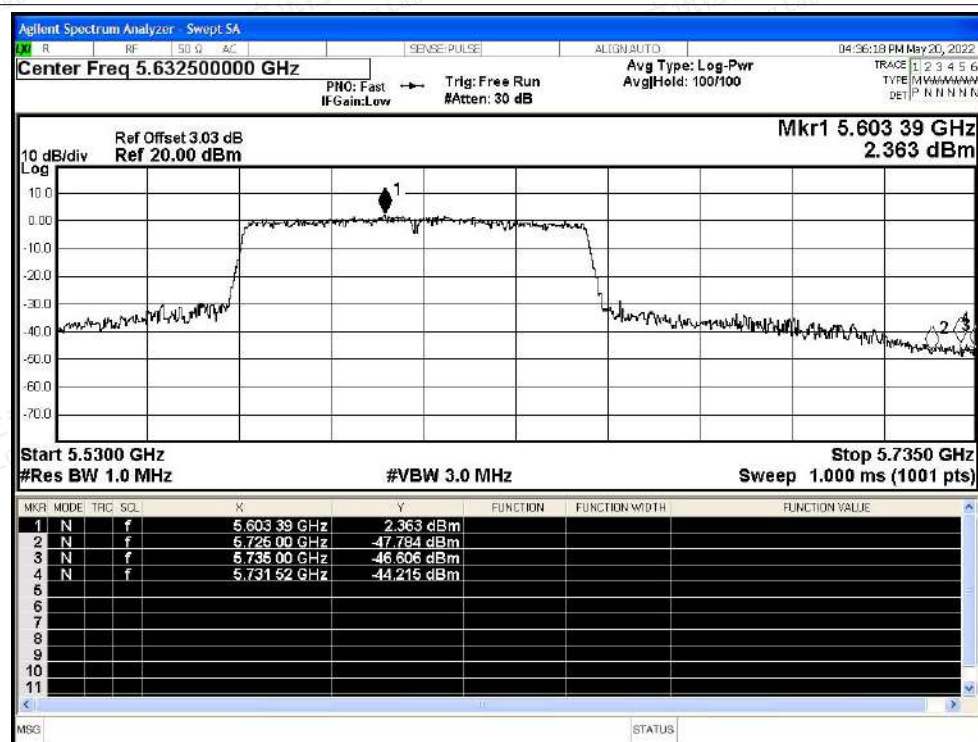


Restrict Band NVNT ac80 5530MHz Ant1 Average

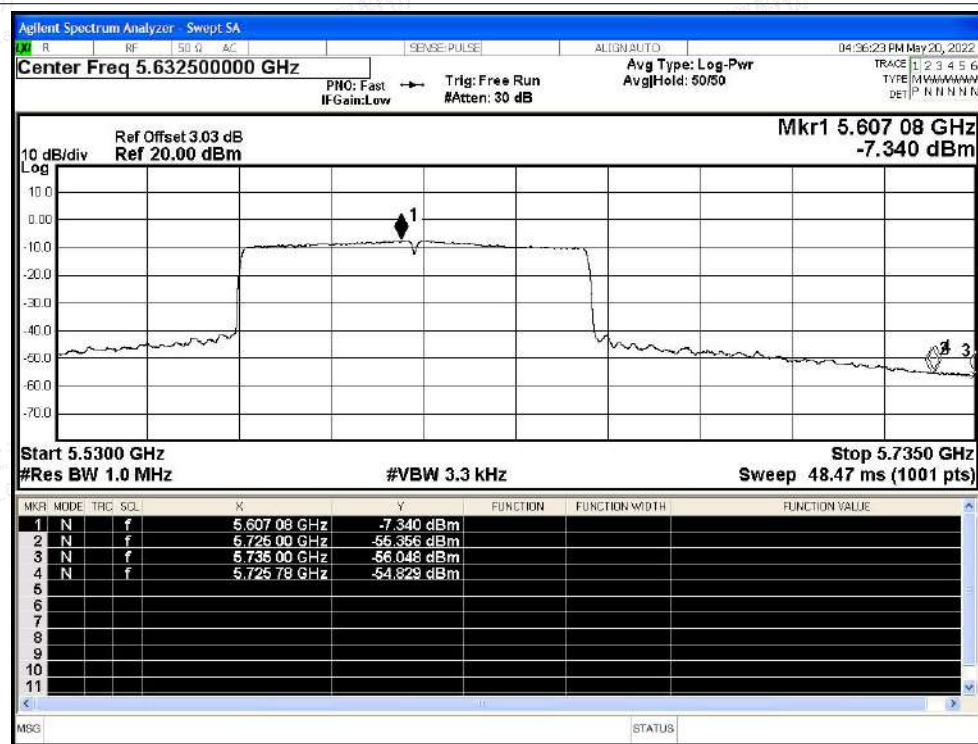




Restrict Band NVNT ac80 5610MHz Ant1 Peak



Restrict Band NVNT ac80 5610MHz Ant1 Average





F.5 Frequency Stability

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	ac20	5500	Ant1	5500.02	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	5670.04	40000	7.05	25	Pass
NVNT	ac80	5530	Ant1	5530	0	0	25	Pass
NVNT	ac80	5610	Ant1	5610	0	0	25	Pass

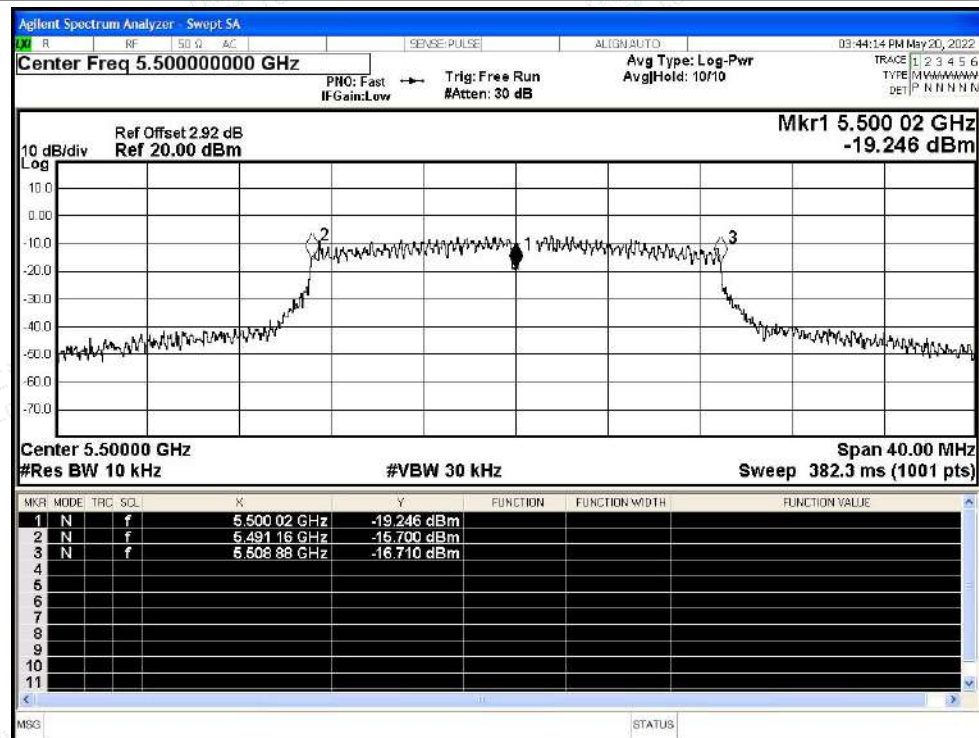


Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

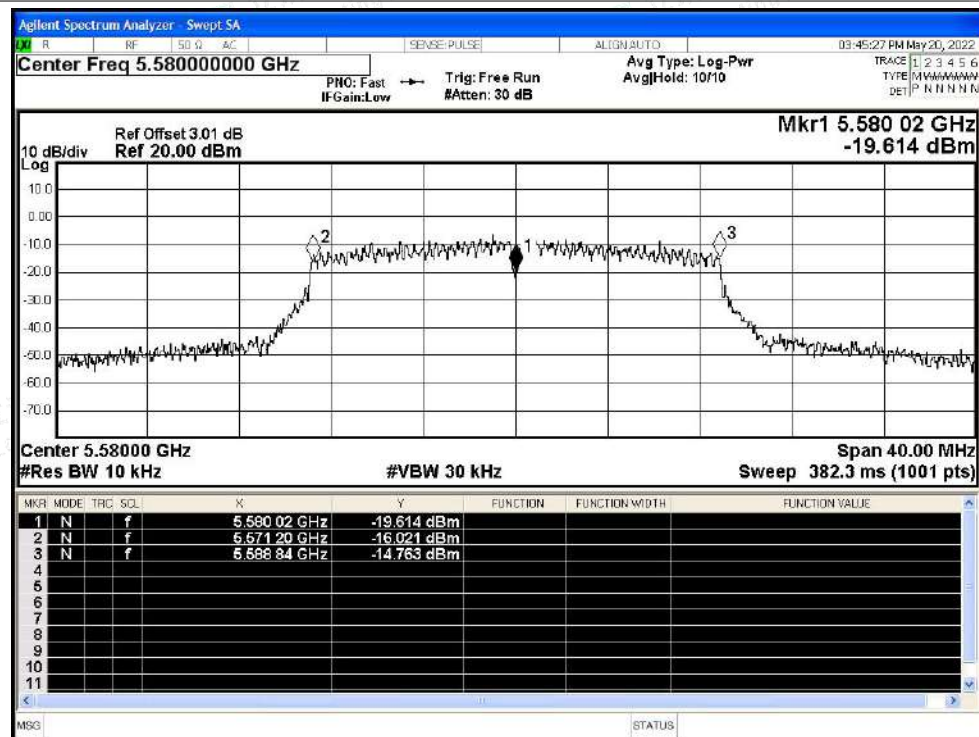


Test Graphs

Freq. Stability NVNT ac20 5500MHz Ant1

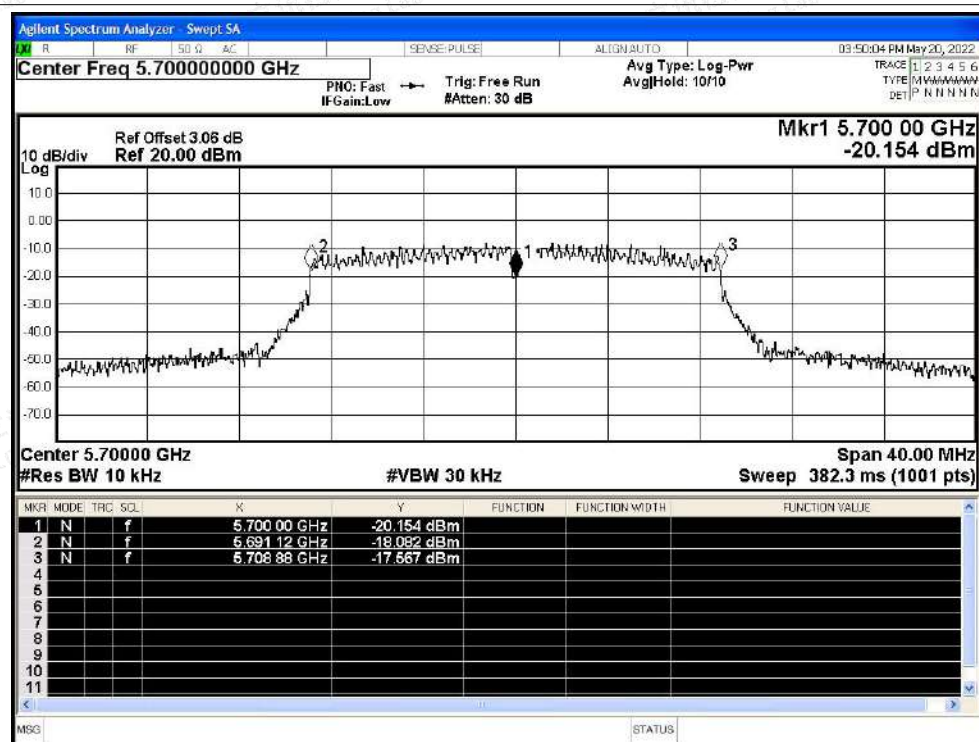


Freq. Stability NVNT ac20 5580MHz Ant1

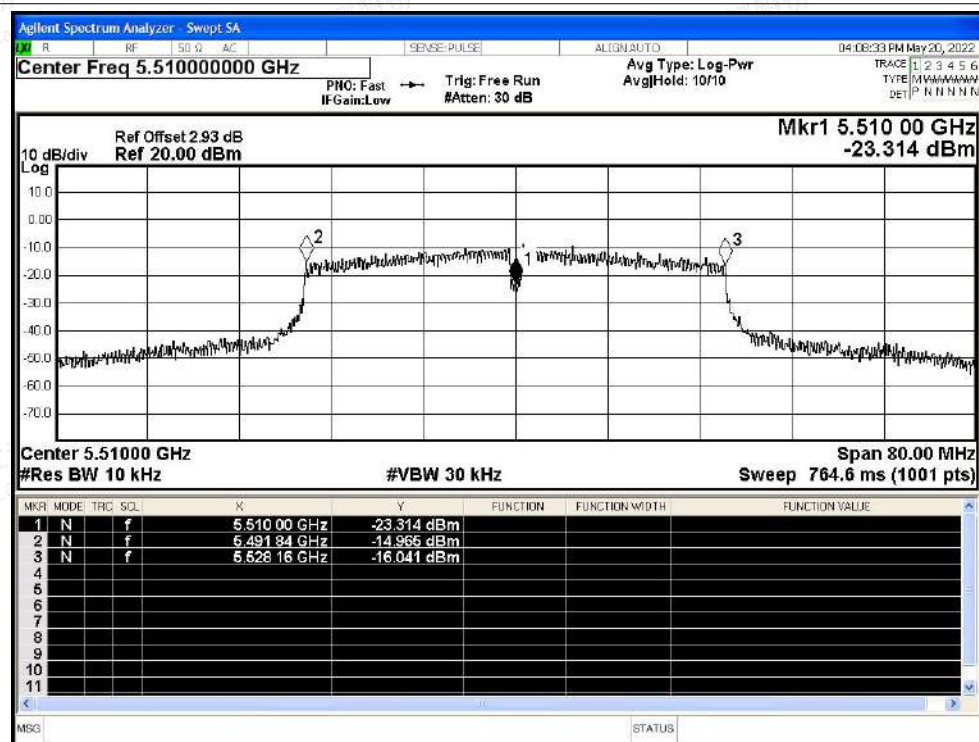




Freq. Stability NVNT ac20 5700MHz Ant1

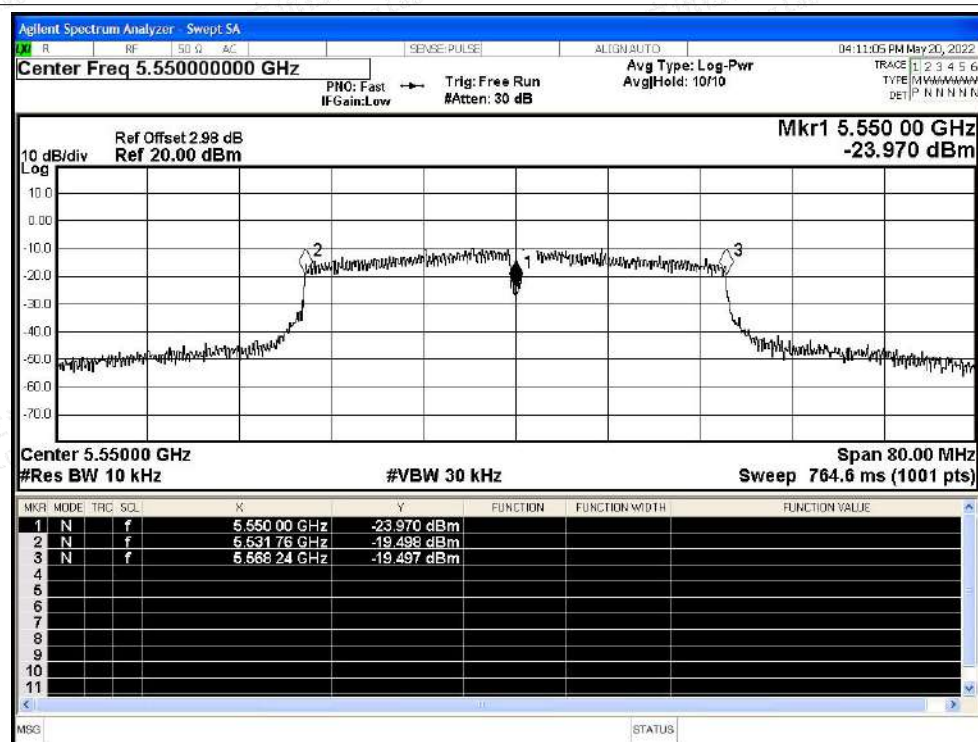


Freq. Stability NVNT ac40 5510MHz Ant1

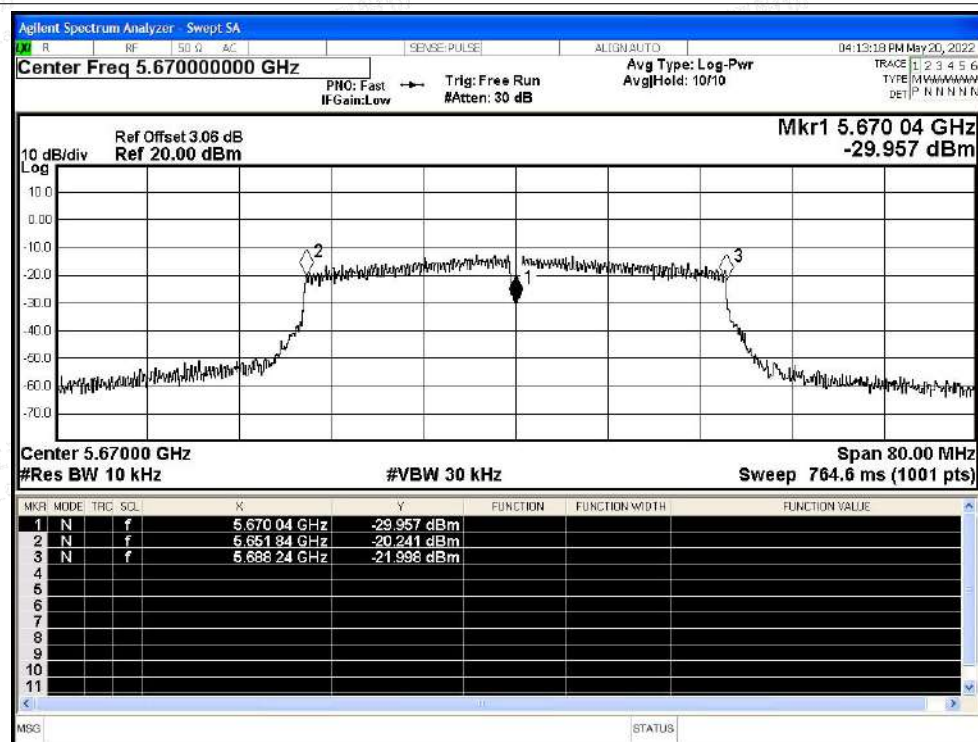




Freq. Stability NVNT ac40 5550MHz Ant1

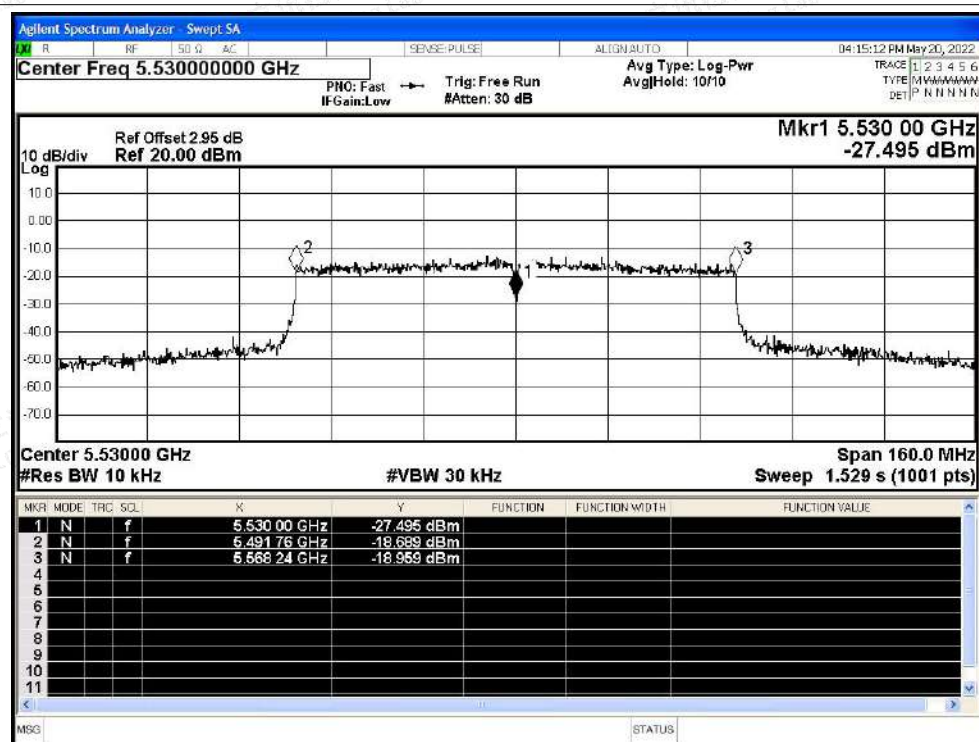


Freq. Stability NVNT ac40 5670MHz Ant1

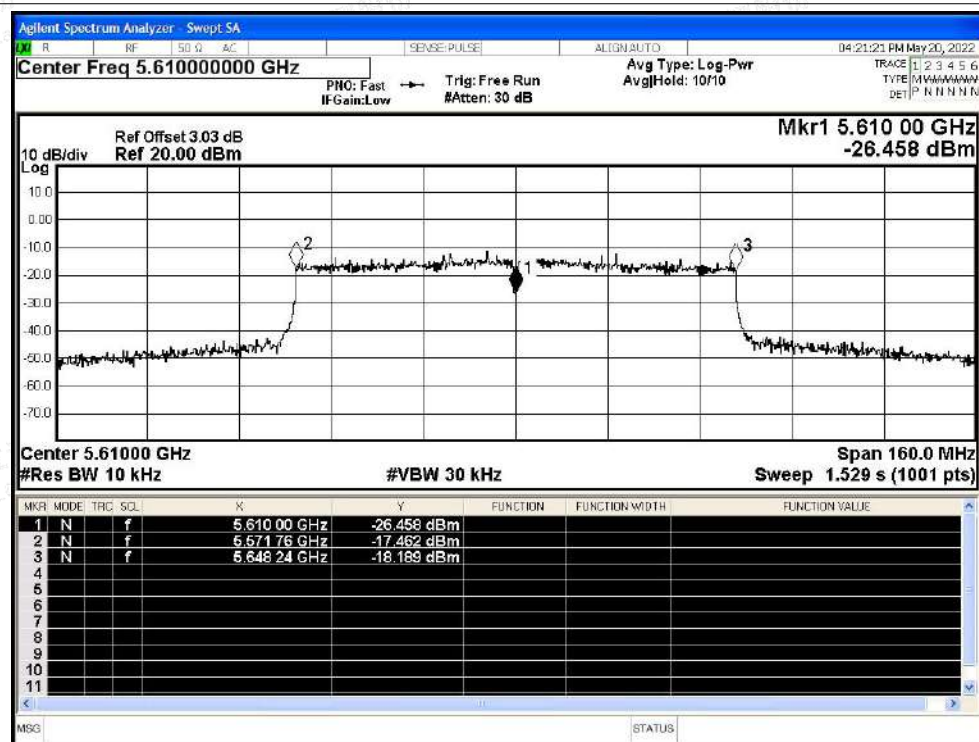




Freq. Stability NVNT ac80 5530MHz Ant1



Freq. Stability NVNT ac80 5610MHz Ant1





F.6 Duty Cycle

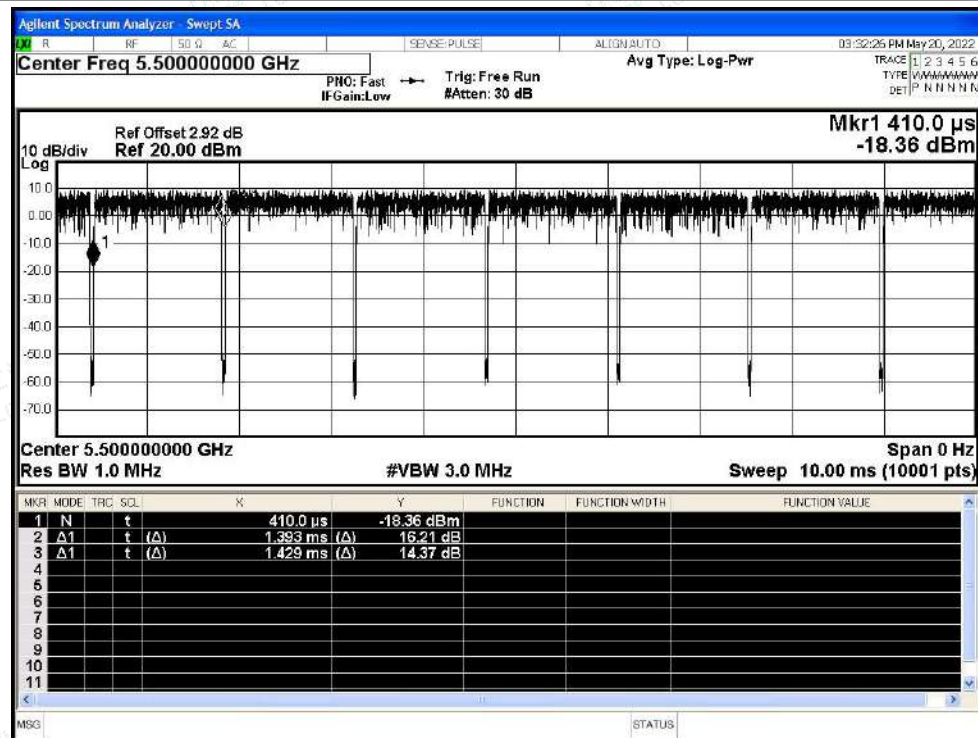
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5500	Ant1	97.48	0.11	0.72
NVNT	a	5580	Ant1	97.55	0.11	0.72
NVNT	a	5700	Ant1	97.55	0.11	0.72
NVNT	n20	5500	Ant1	97.38	0.12	0.77
NVNT	n20	5580	Ant1	97.31	0.12	0.77
NVNT	n20	5700	Ant1	97.38	0.12	0.77
NVNT	n40	5510	Ant1	95.02	0.22	1.54
NVNT	n40	5550	Ant1	95.03	0.22	1.54
NVNT	n40	5670	Ant1	94.88	0.23	1.54
NVNT	ac20	5500	Ant1	97.4	0.11	0.76
NVNT	ac20	5580	Ant1	97.4	0.11	0.76
NVNT	ac20	5700	Ant1	97.33	0.12	0.76
NVNT	ac40	5510	Ant1	95.05	0.22	1.53
NVNT	ac40	5550	Ant1	95.06	0.22	1.53
NVNT	ac40	5670	Ant1	94.91	0.23	1.53
NVNT	ac80	5530	Ant1	90.53	0.43	3.08
NVNT	ac80	5610	Ant1	90.53	0.43	3.08



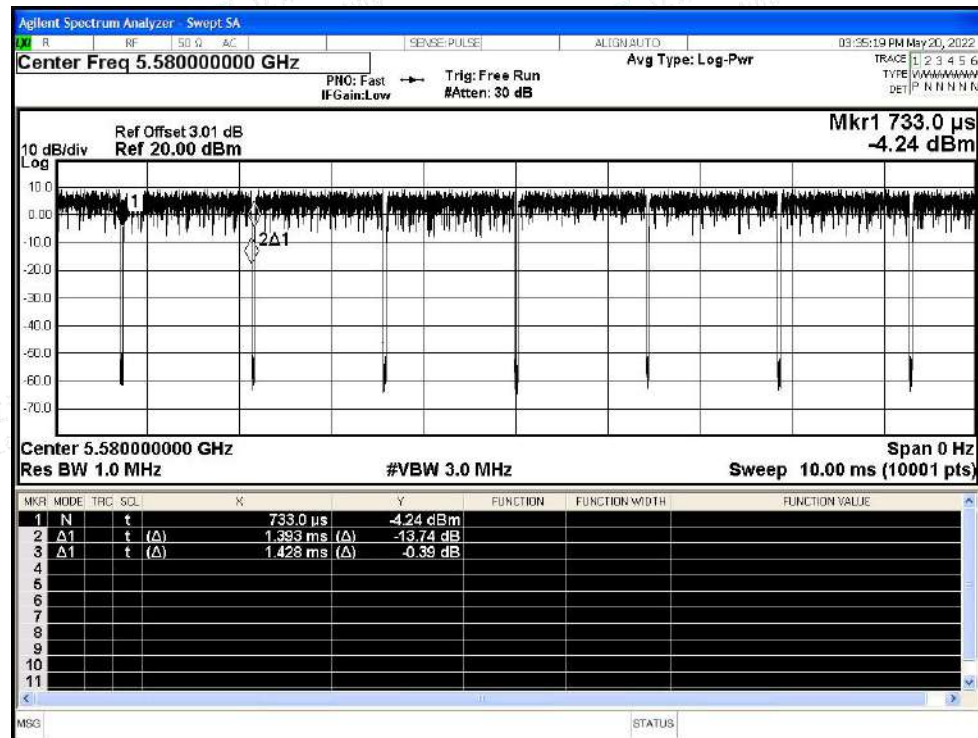


Test Graphs

Duty Cycle NVNT a 5500MHz Ant1

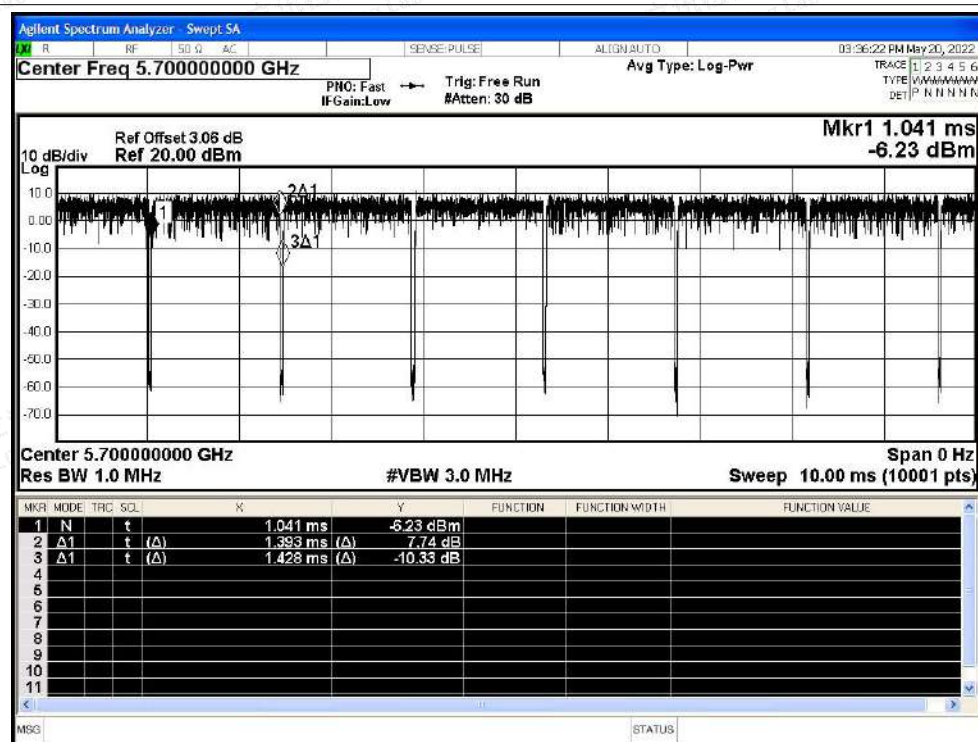


Duty Cycle NVNT a 5580MHz Ant1

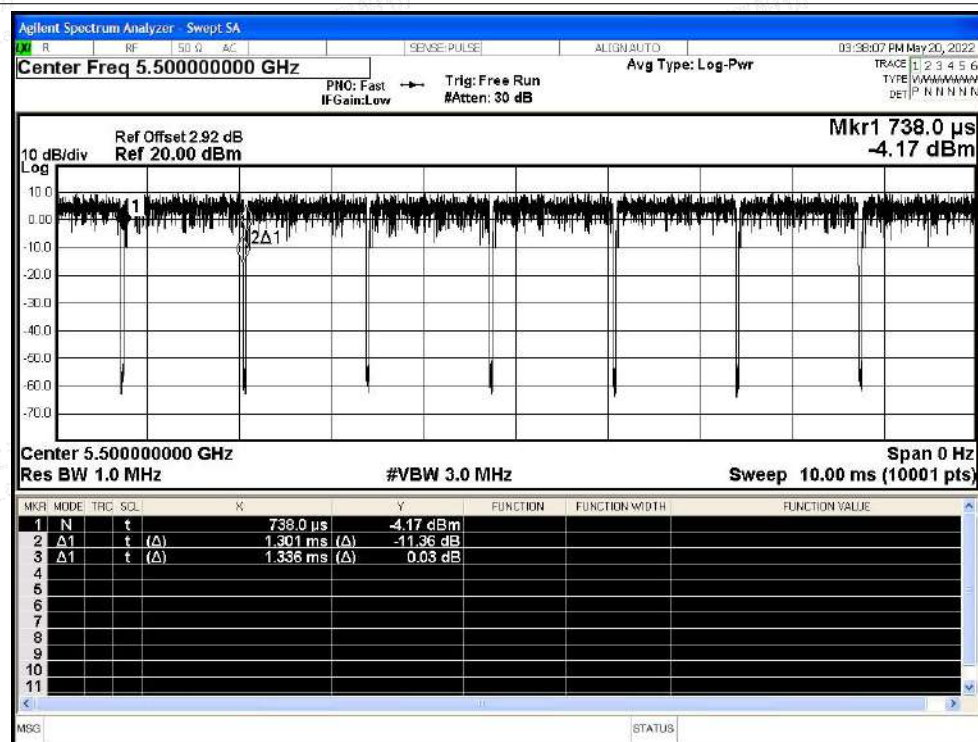




Duty Cycle NVNT a 5700MHz Ant1

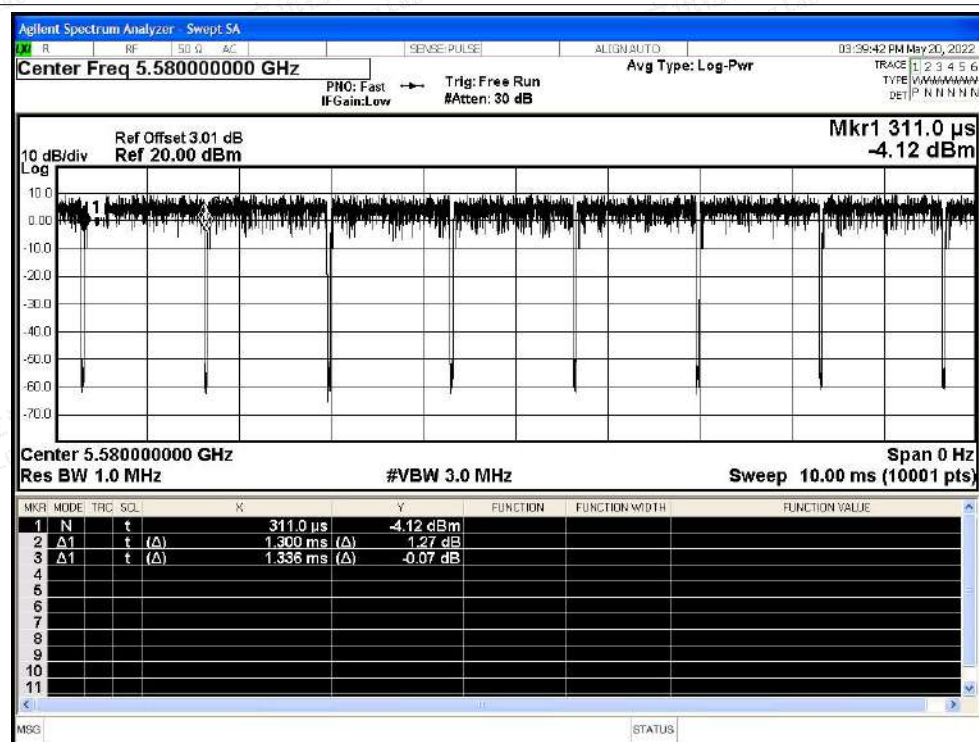


Duty Cycle NVNT n20 5500MHz Ant1

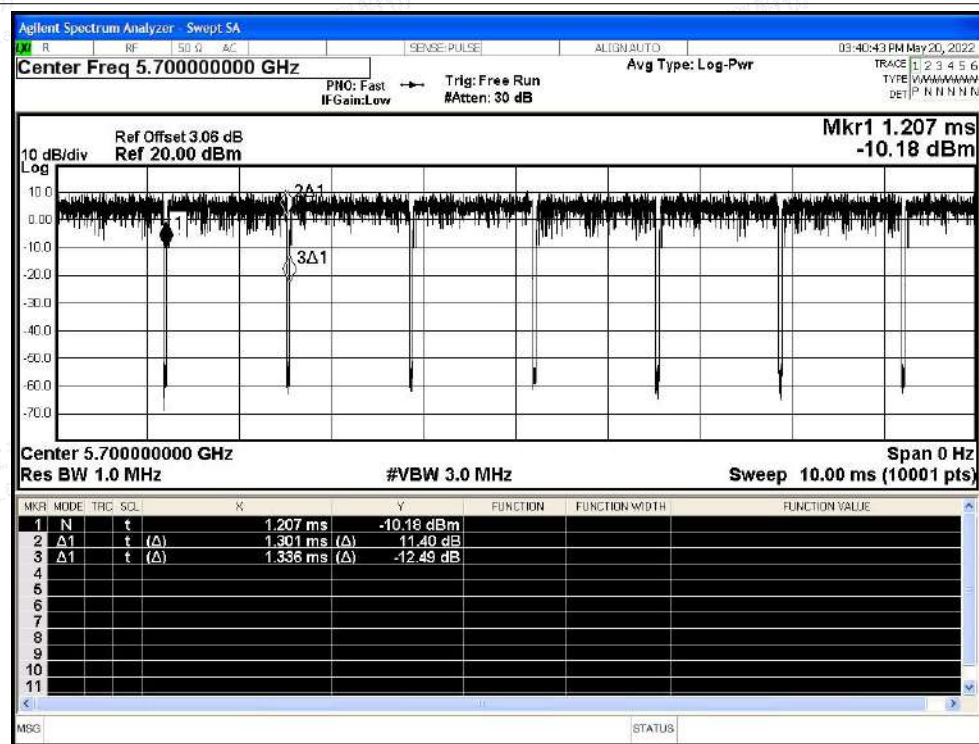




Duty Cycle NVNT n20 5580MHz Ant1

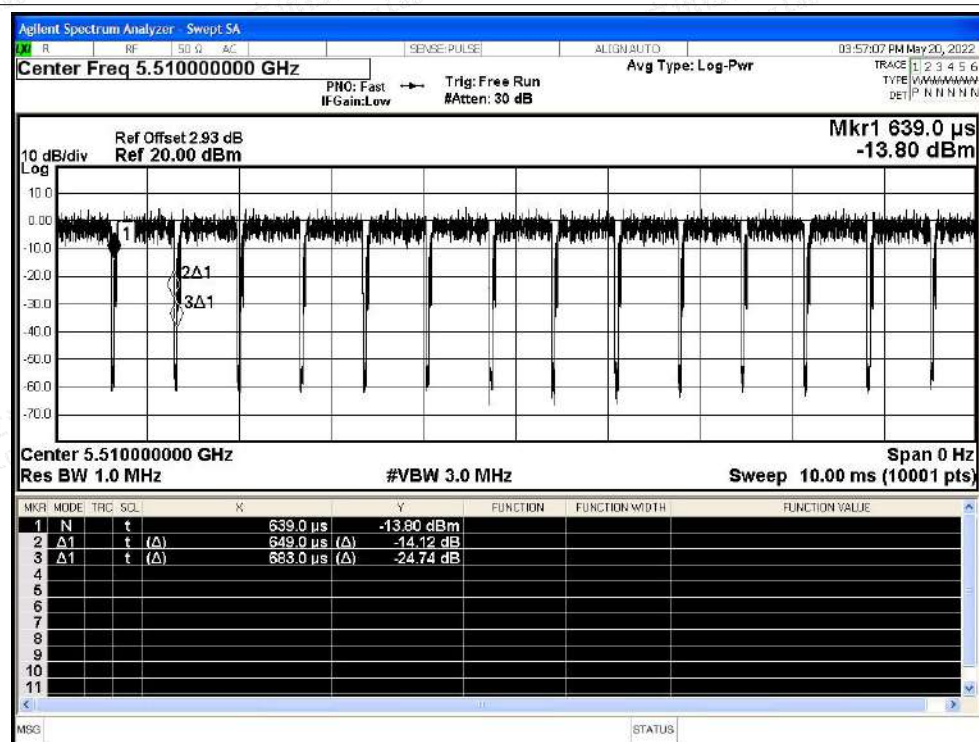


Duty Cycle NVNT n20 5700MHz Ant1

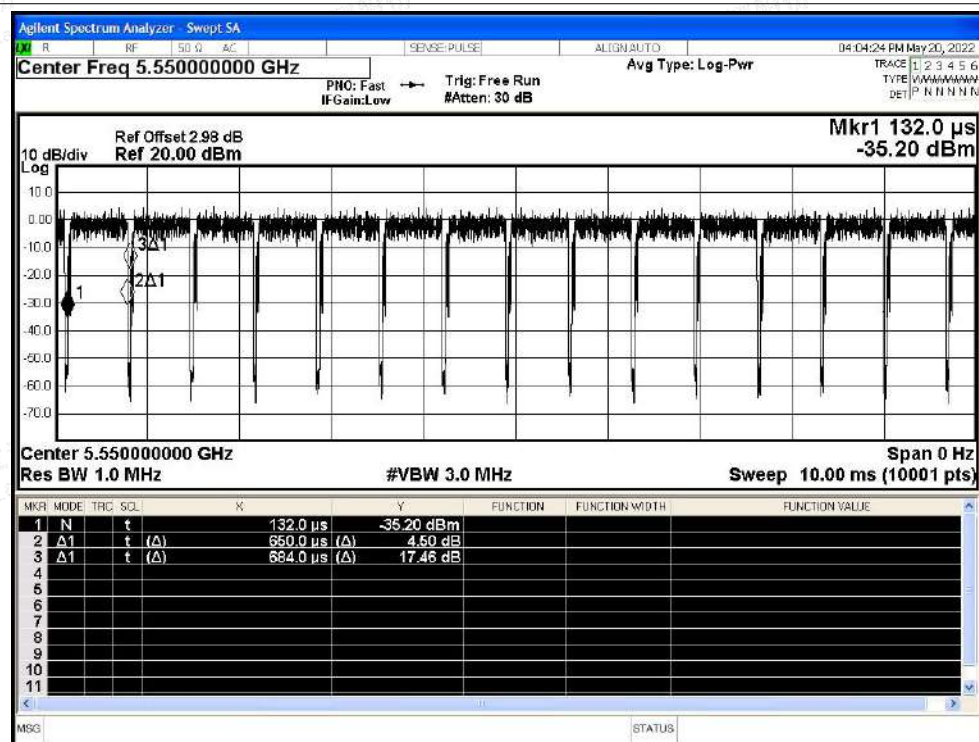




Duty Cycle NVNT n40 5510MHz Ant1

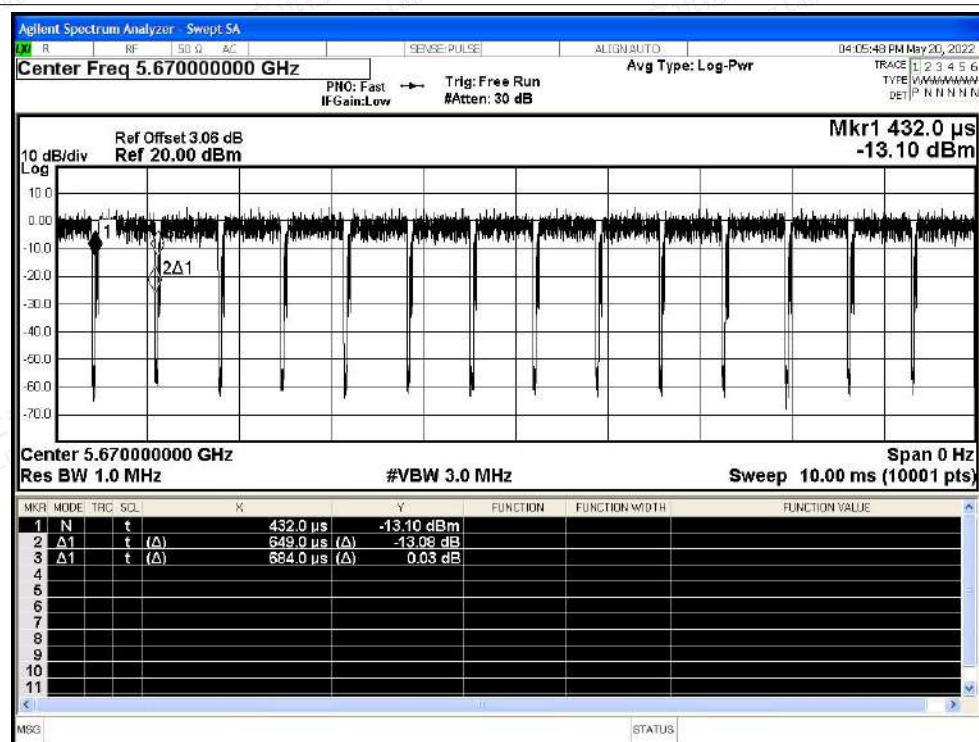


Duty Cycle NVNT n40 5550MHz Ant1

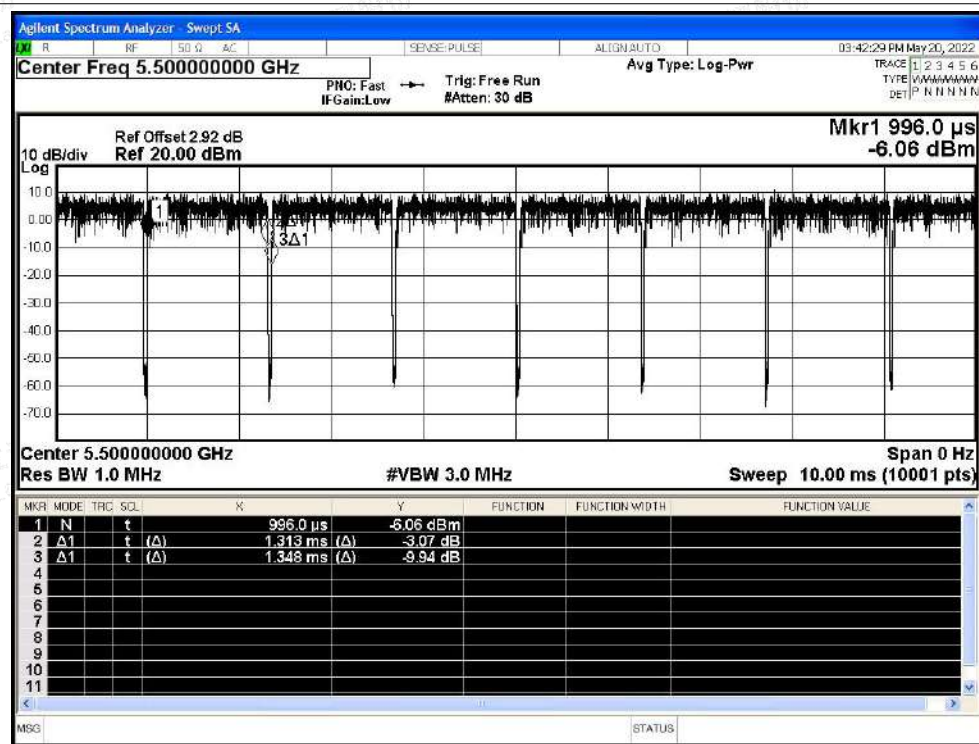




Duty Cycle NVNT n40 5670MHz Ant1

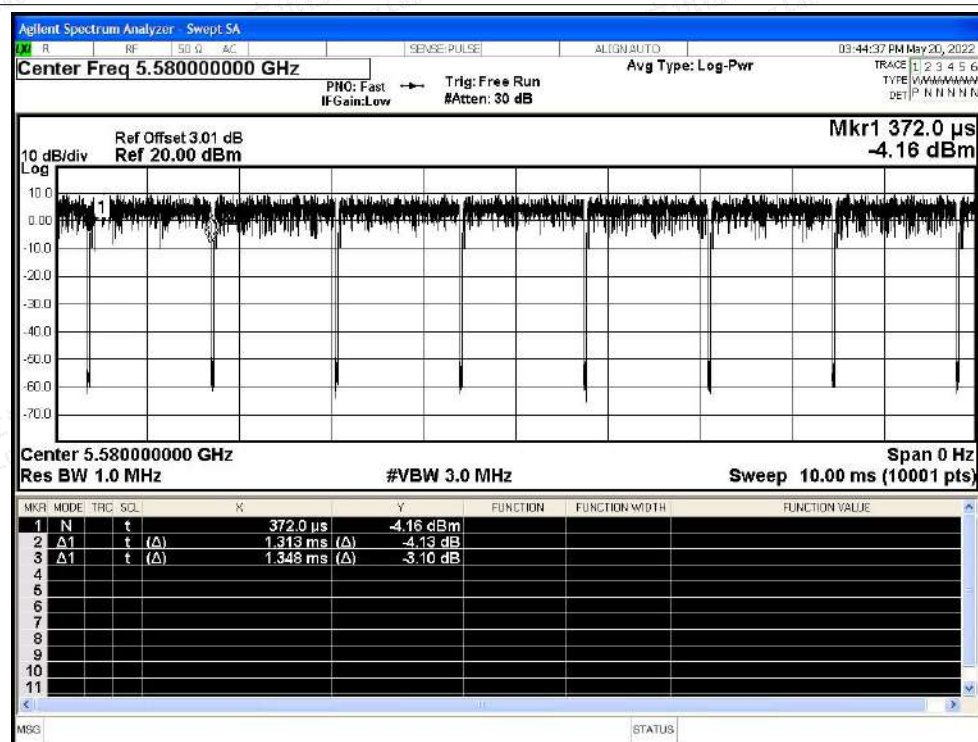


Duty Cycle NVNT ac20 5500MHz Ant1

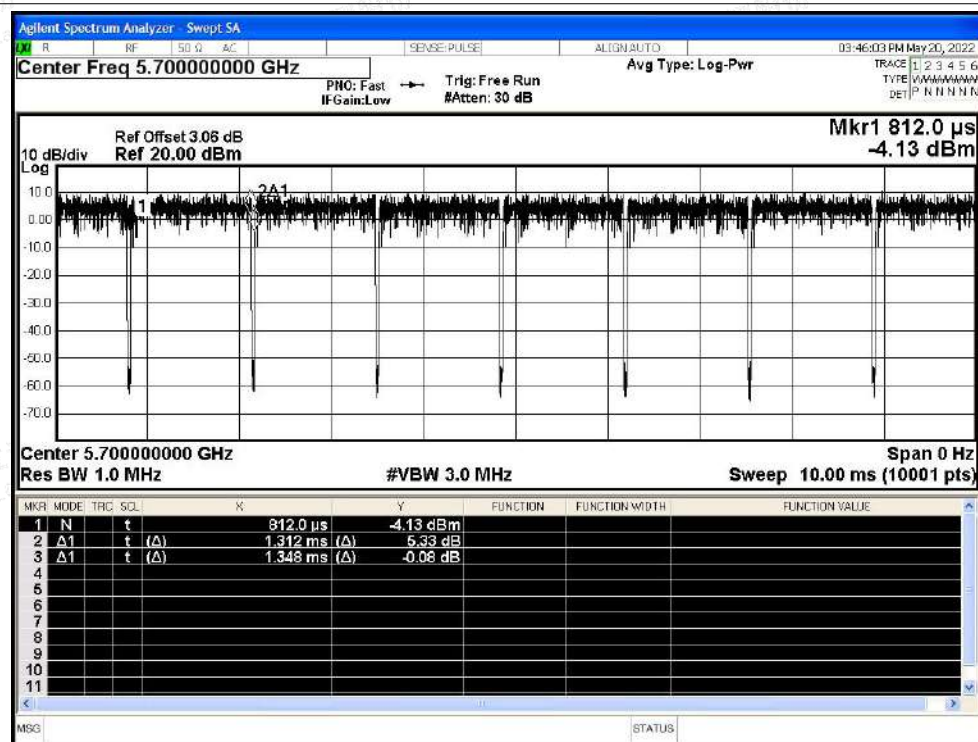




Duty Cycle NVNT ac20 5580MHz Ant1

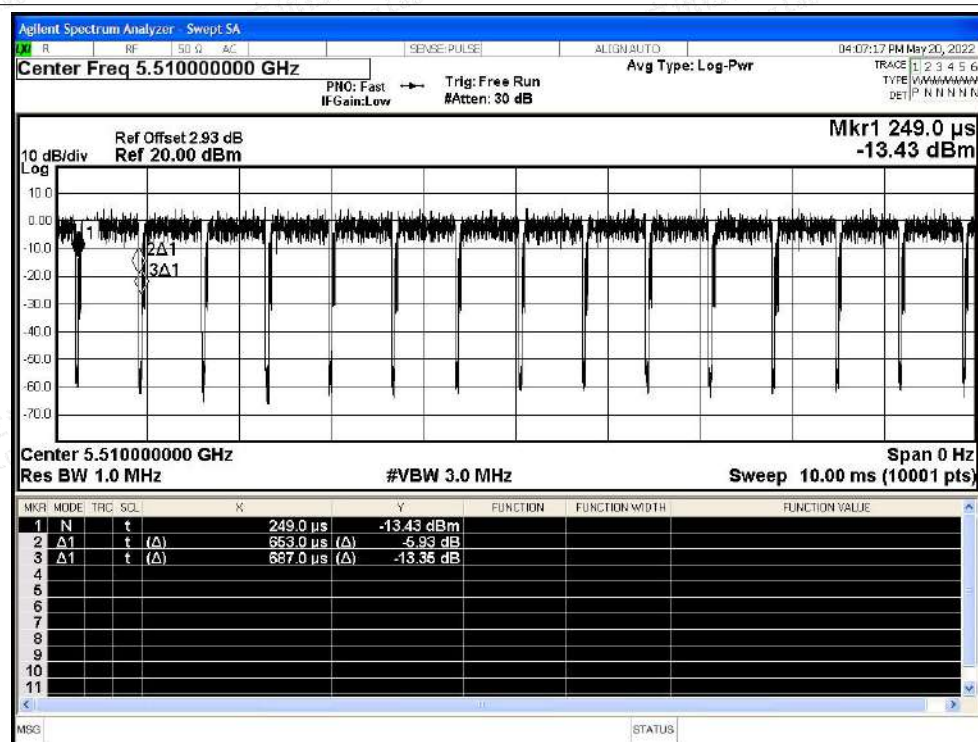


Duty Cycle NVNT ac20 5700MHz Ant1

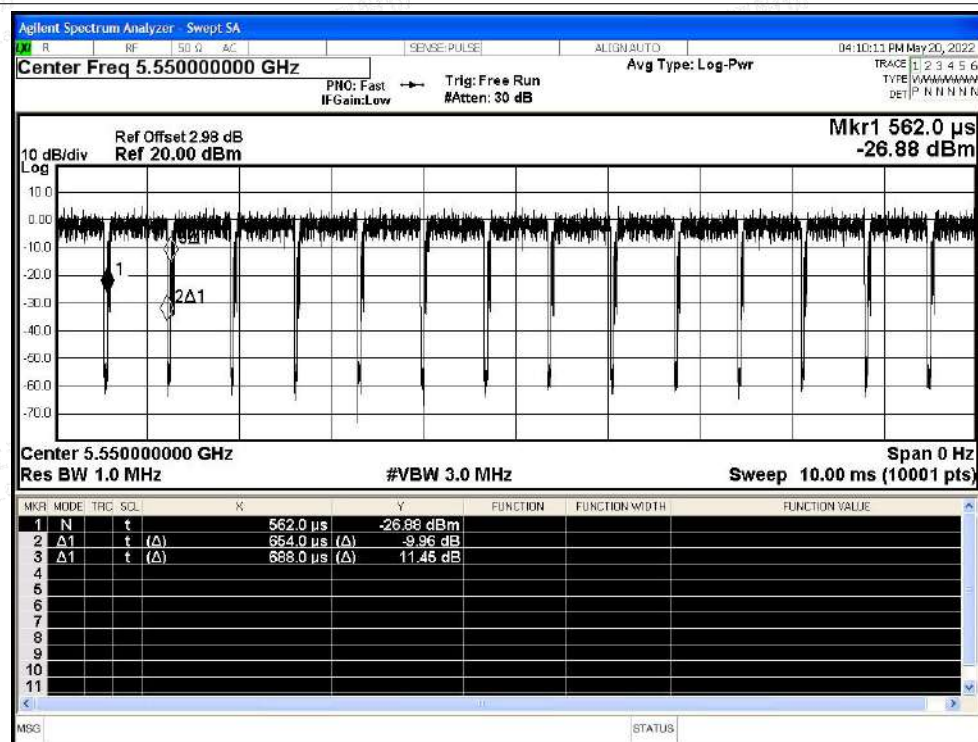




Duty Cycle NVNT ac40 5510MHz Ant1

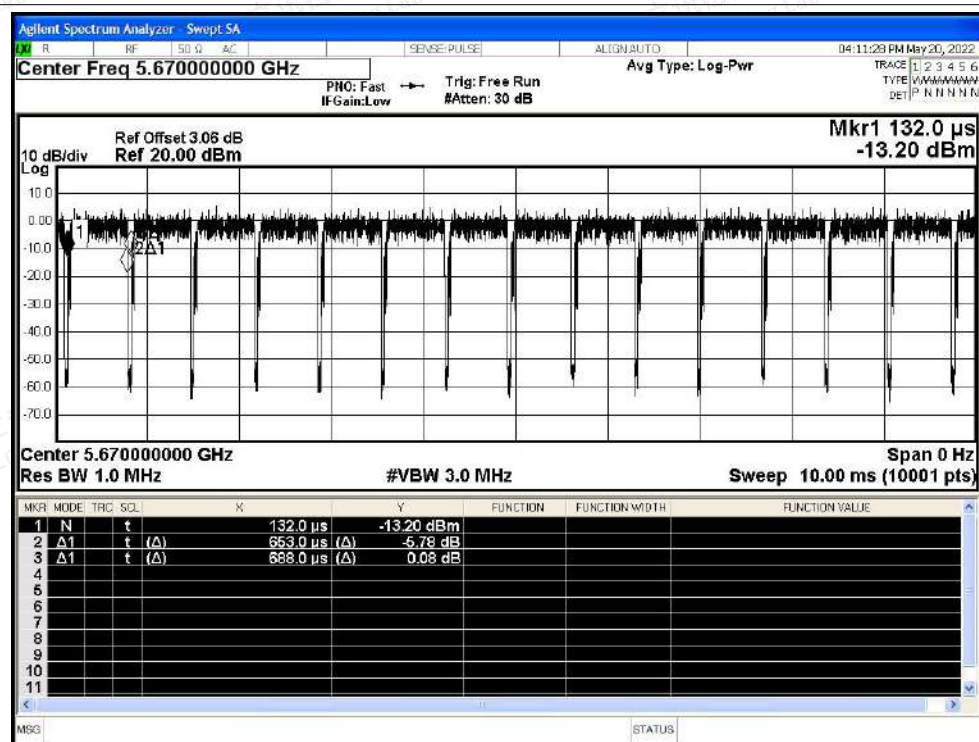


Duty Cycle NVNT ac40 5550MHz Ant1





Duty Cycle NVNT ac40 5670MHz Ant1



Duty Cycle NVNT ac80 5530MHz Ant1

