



Appendix RF Test Data for 5.5G WIFI

Product Name: AI Translator Earbuds

Test Model: A9

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Zoey Cao
Supervised by:	Eric Wang

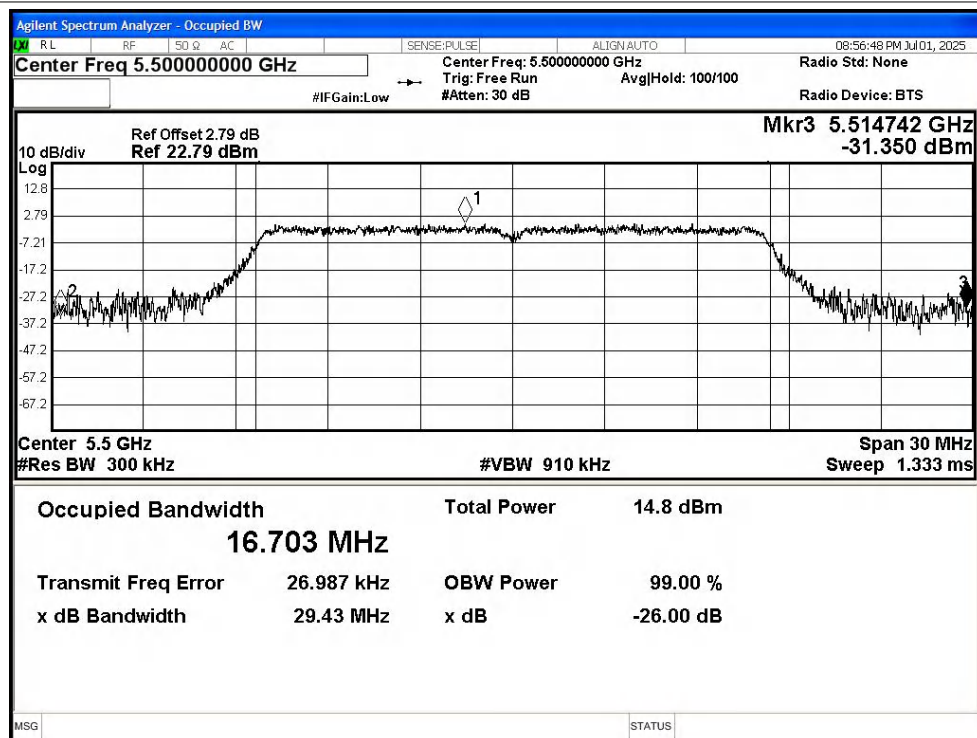


1. -26dB Bandwidth

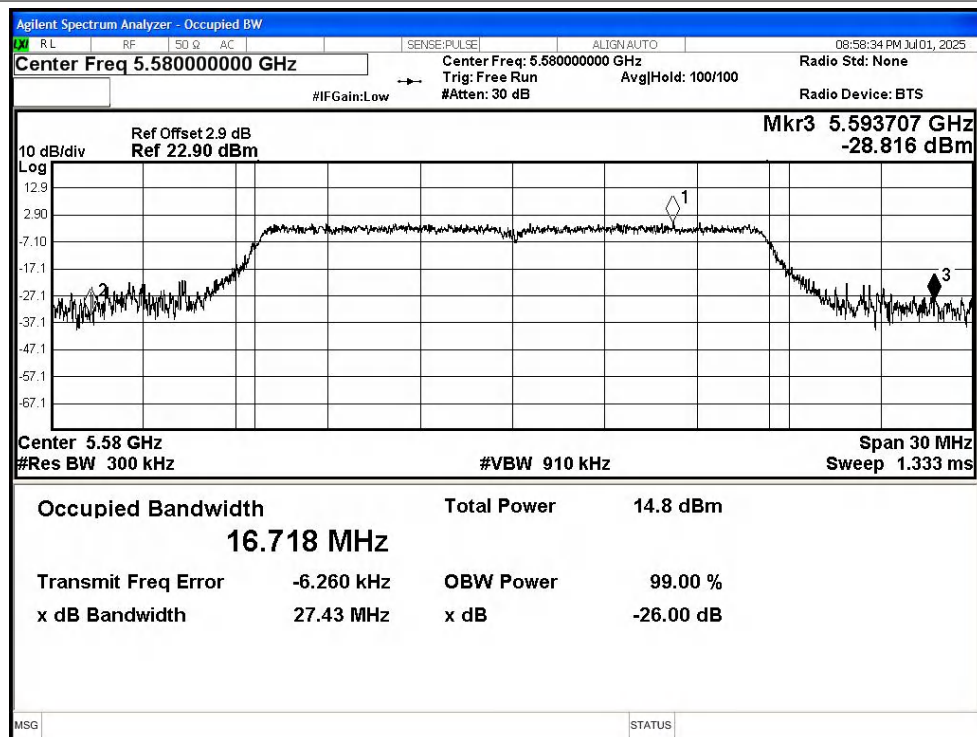
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5500	Ant1	29.43	---	Pass
NVNT	a	5580	Ant1	27.426	---	Pass
NVNT	a	5700	Ant1	29.354	---	Pass
NVNT	n20	5500	Ant1	29.584	---	Pass
NVNT	n20	5580	Ant1	26.698	---	Pass
NVNT	n20	5700	Ant1	27.936	---	Pass
NVNT	n40	5510	Ant1	51.844	---	Pass
NVNT	n40	5550	Ant1	50.858	---	Pass
NVNT	n40	5670	Ant1	44.231	---	Pass

Test Graphs

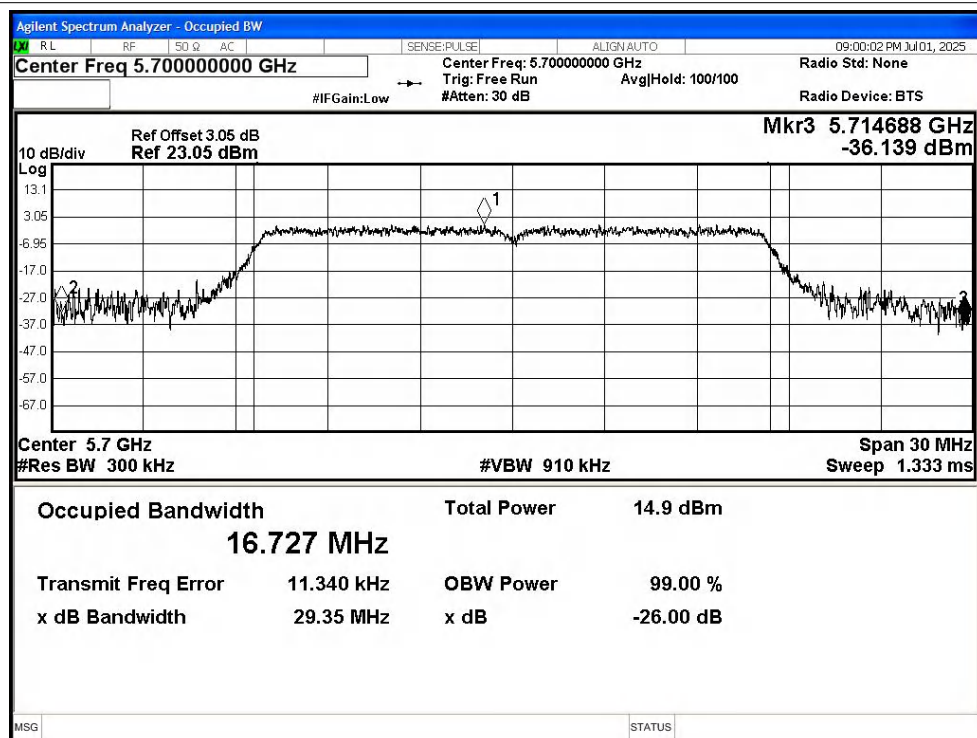
-26dB Bandwidth NVNT a 5500MHz Ant1



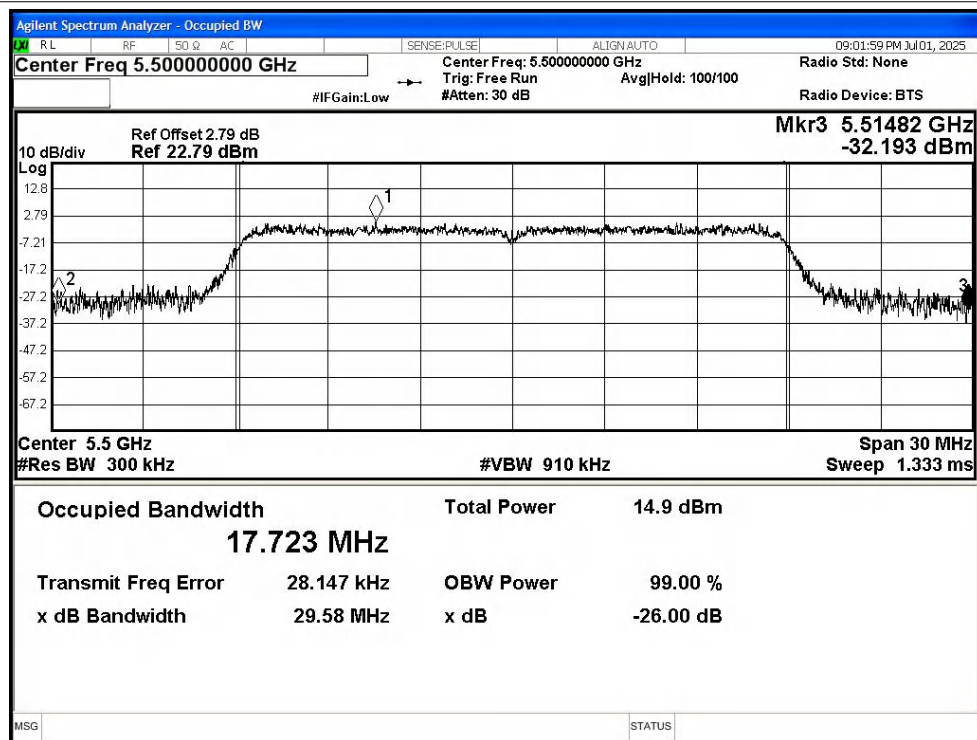
-26dB Bandwidth NVNT a 5580MHz Ant1



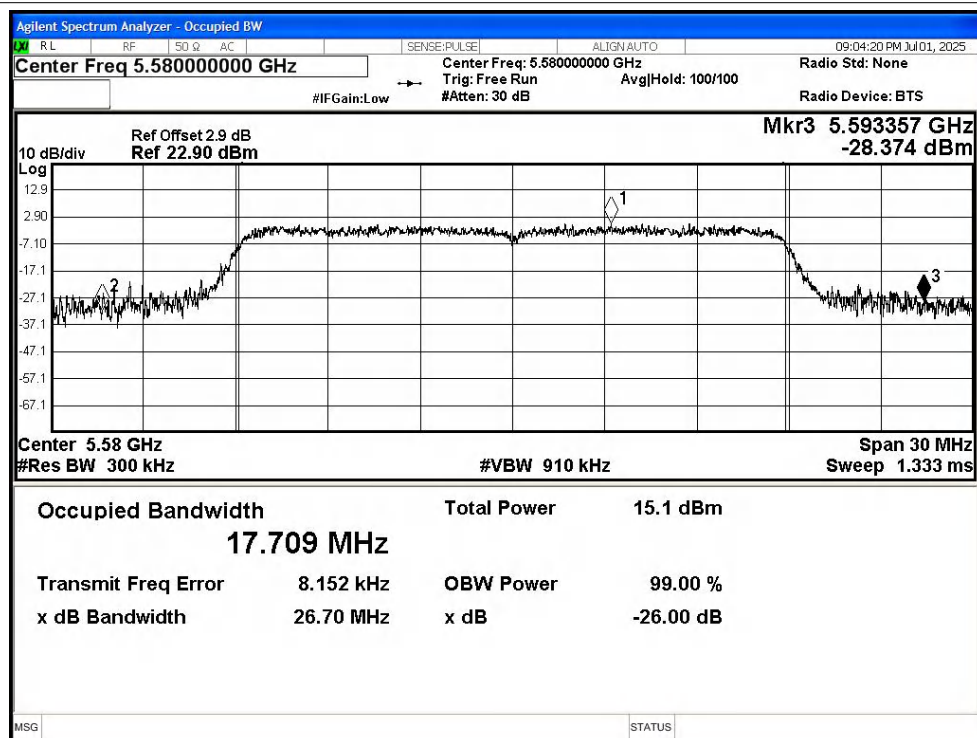
-26dB Bandwidth NVNT a 5700MHz Ant1



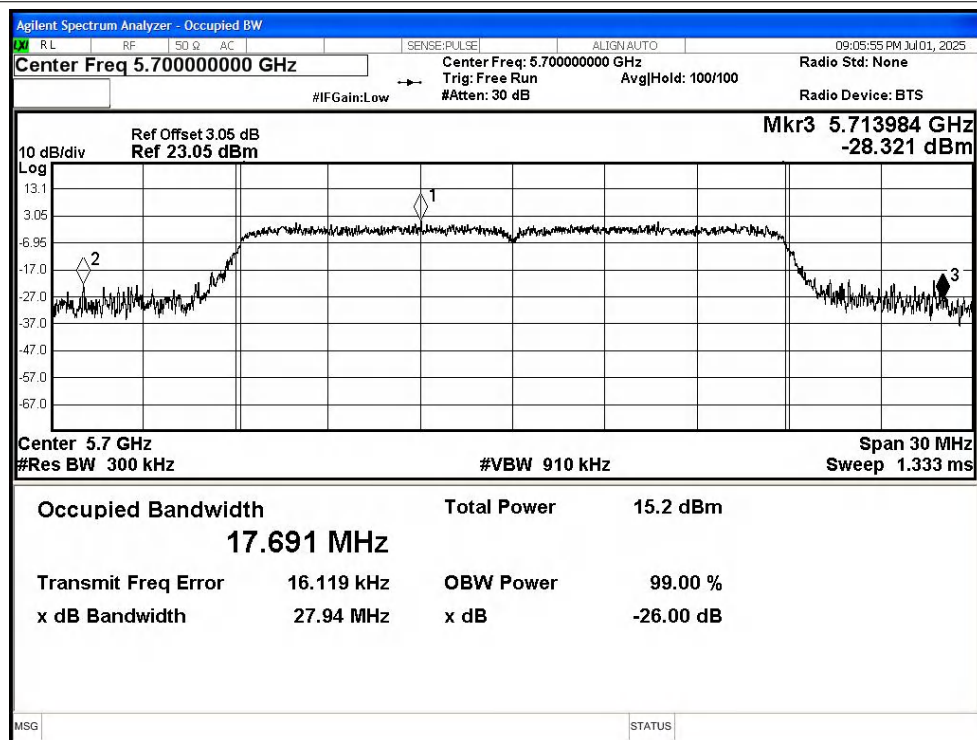
-26dB Bandwidth NVNT n20 5500MHz Ant1



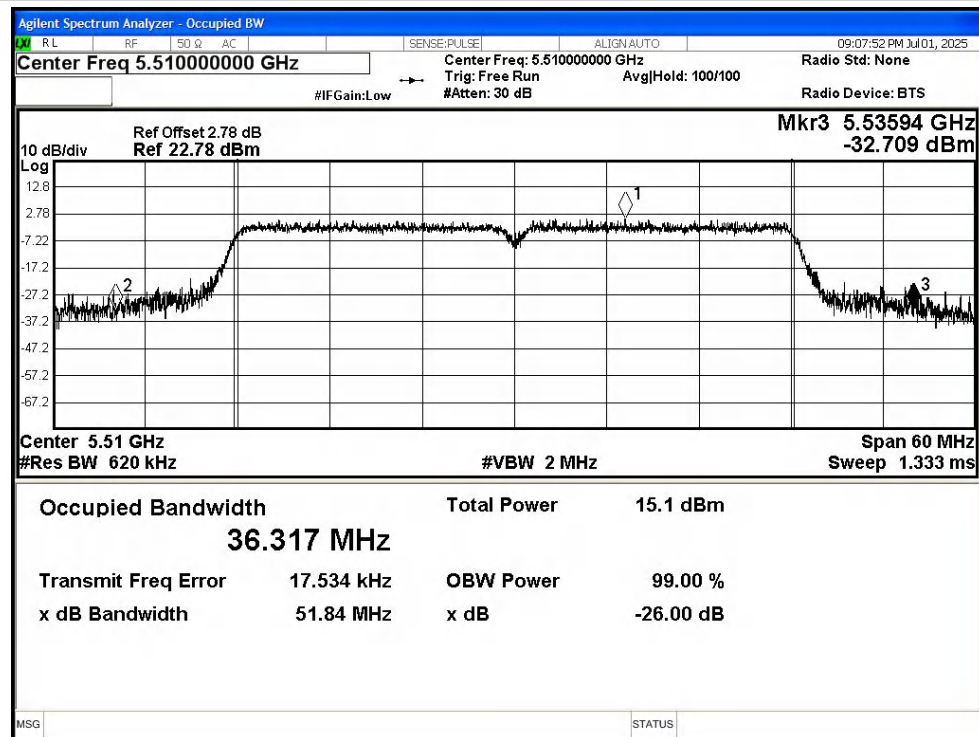
-26dB Bandwidth NVNT n20 5580MHz Ant1



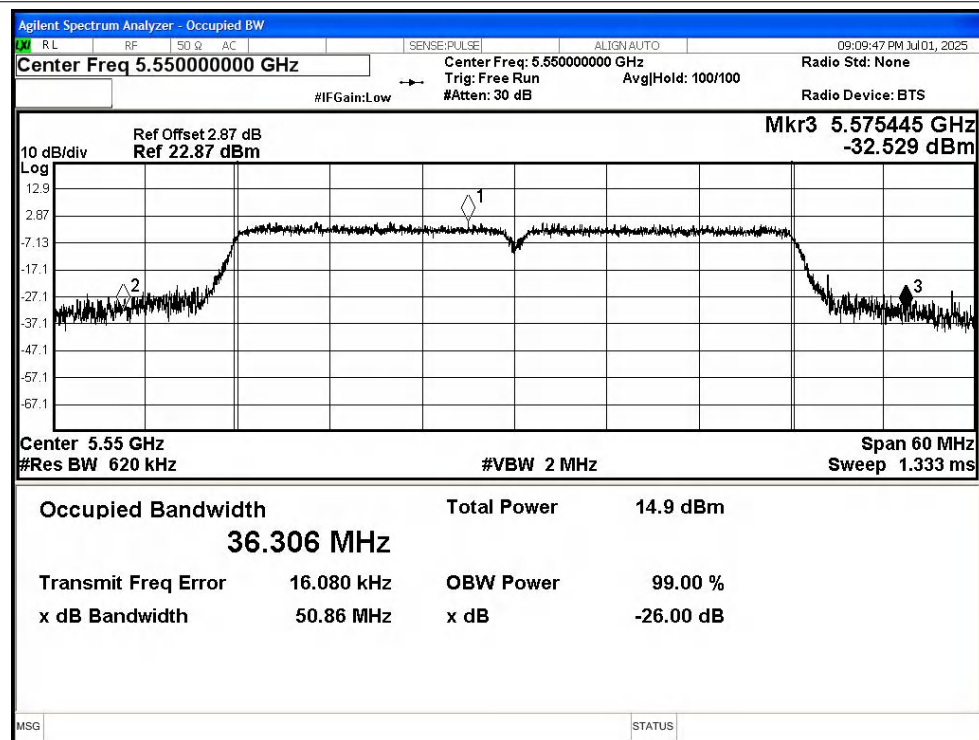
-26dB Bandwidth NVNT n20 5700MHz Ant1

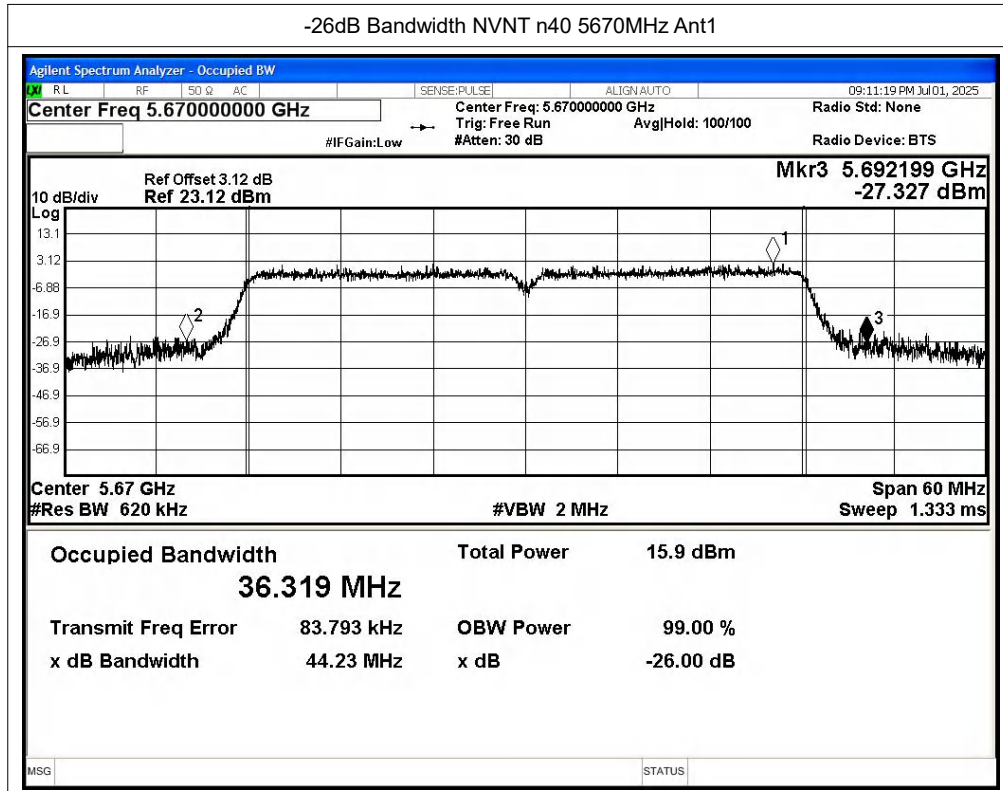


-26dB Bandwidth NVNT n40 5510MHz Ant1



-26dB Bandwidth NVNT n40 5550MHz Ant1





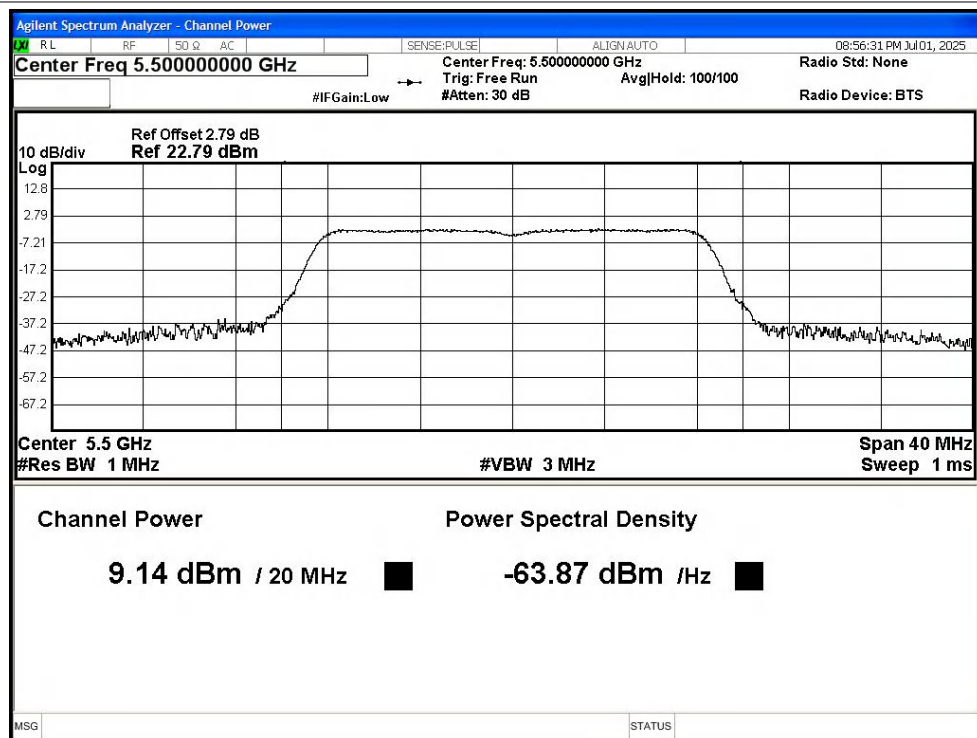


2. Maximum Conducted Output Power

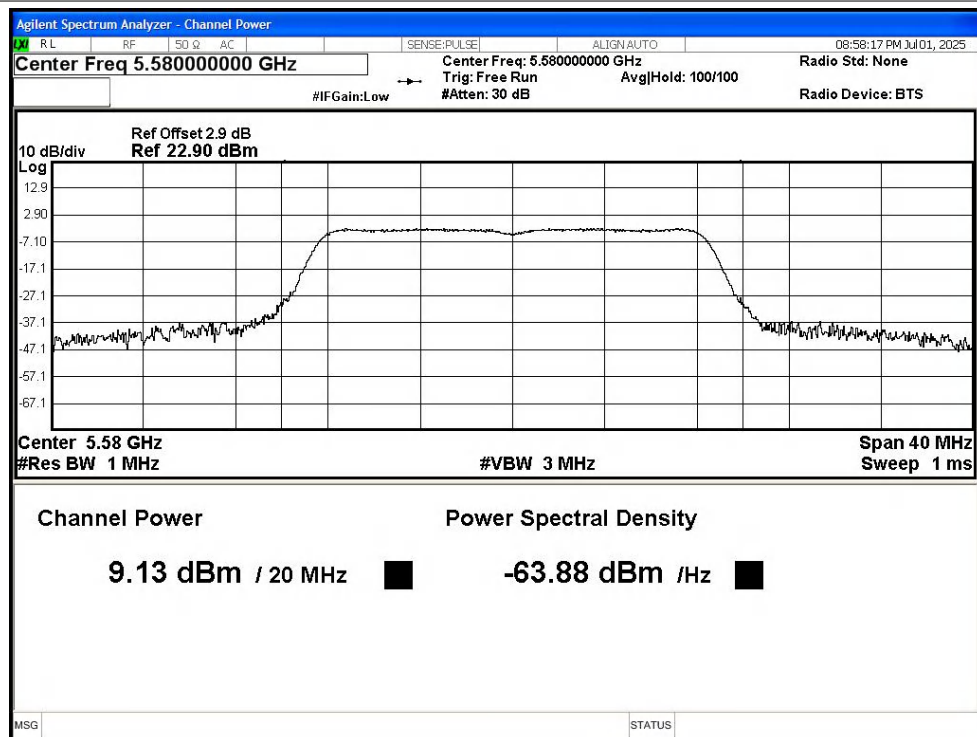
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	9.14	0.24	9.38	24	Pass
NVNT	a	5580	Ant1	9.13	0.24	9.37	24	Pass
NVNT	a	5700	Ant1	9.24	0.24	9.48	24	Pass
NVNT	n20	5500	Ant1	9.29	0.28	9.57	24	Pass
NVNT	n20	5580	Ant1	9.38	0.28	9.66	24	Pass
NVNT	n20	5700	Ant1	9.54	0.28	9.82	24	Pass
NVNT	n40	5510	Ant1	8.56	0.54	9.1	24	Pass
NVNT	n40	5550	Ant1	8.41	0.55	8.96	24	Pass
NVNT	n40	5670	Ant1	9.34	0.55	9.89	24	Pass

Test Graphs

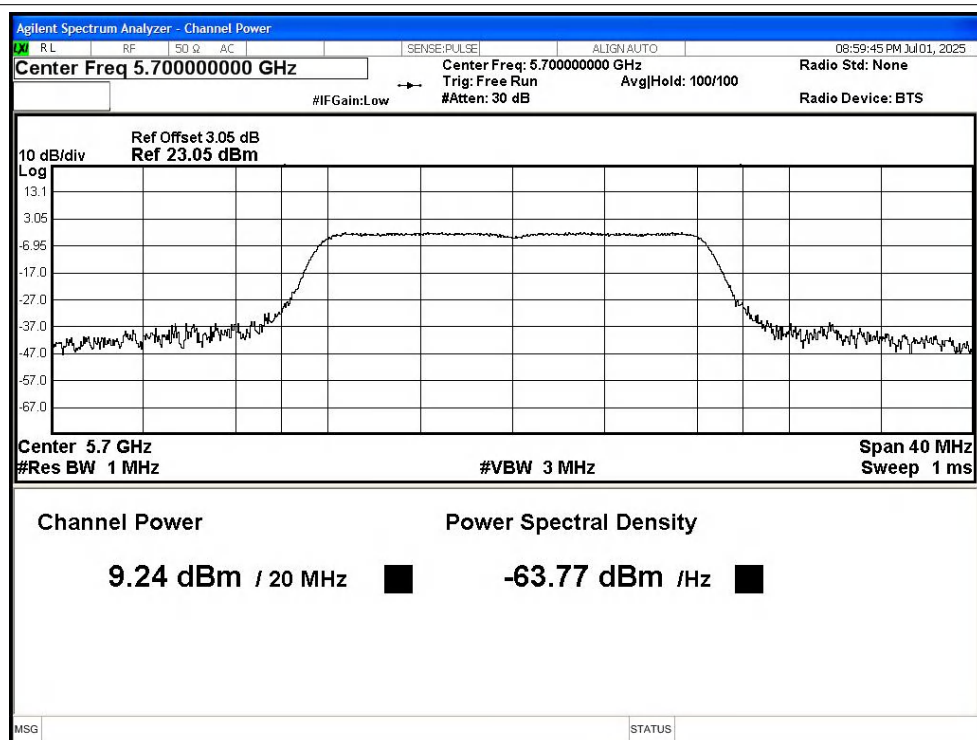
Power NVNT a 5500MHz Ant1



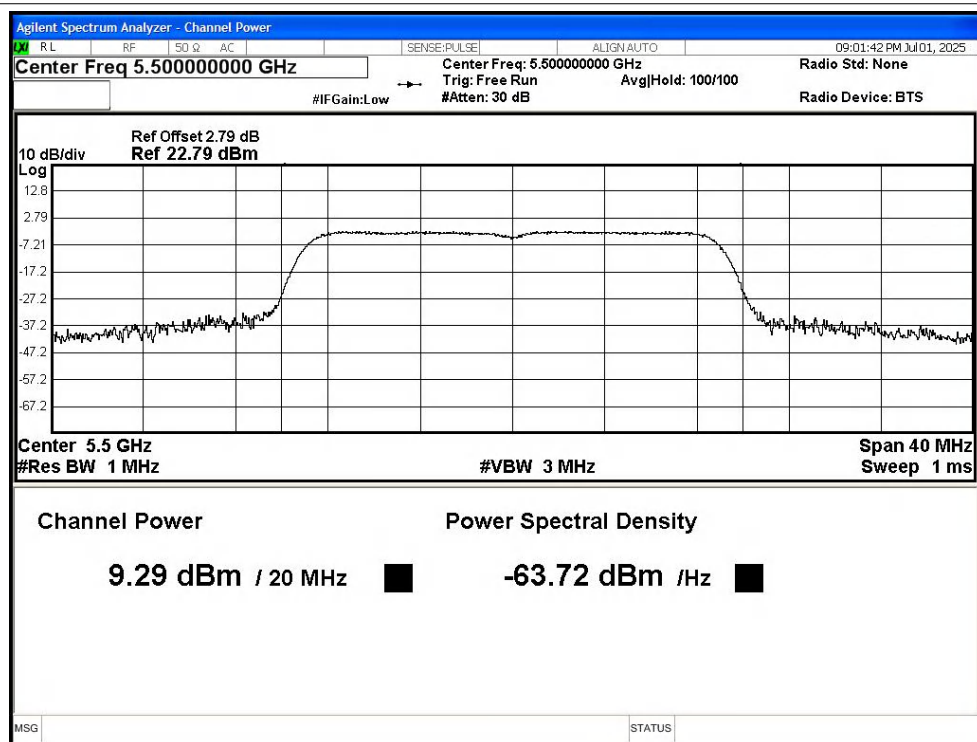
Power NVNT a 5580MHz Ant1



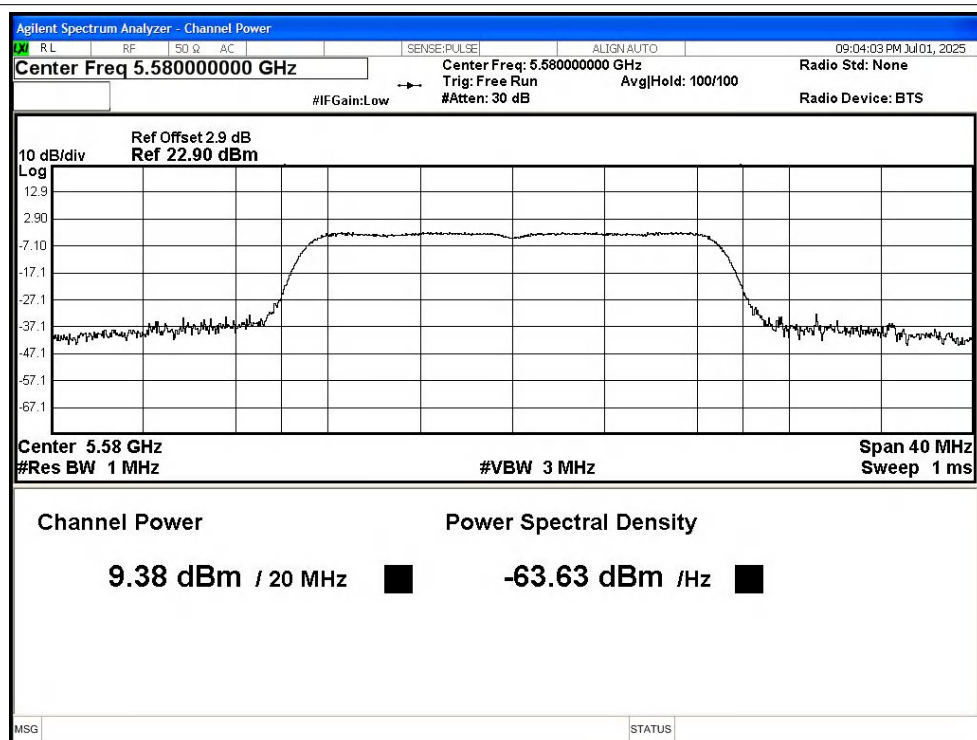
Power NVNT a 5700MHz Ant1



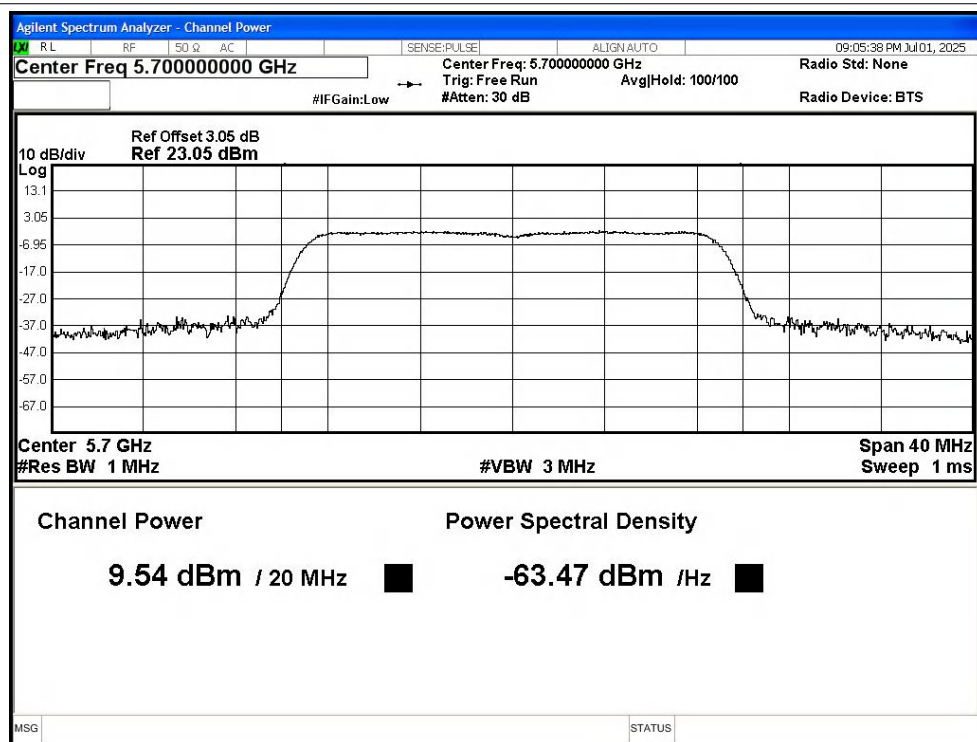
Power NVNT n20 5500MHz Ant1



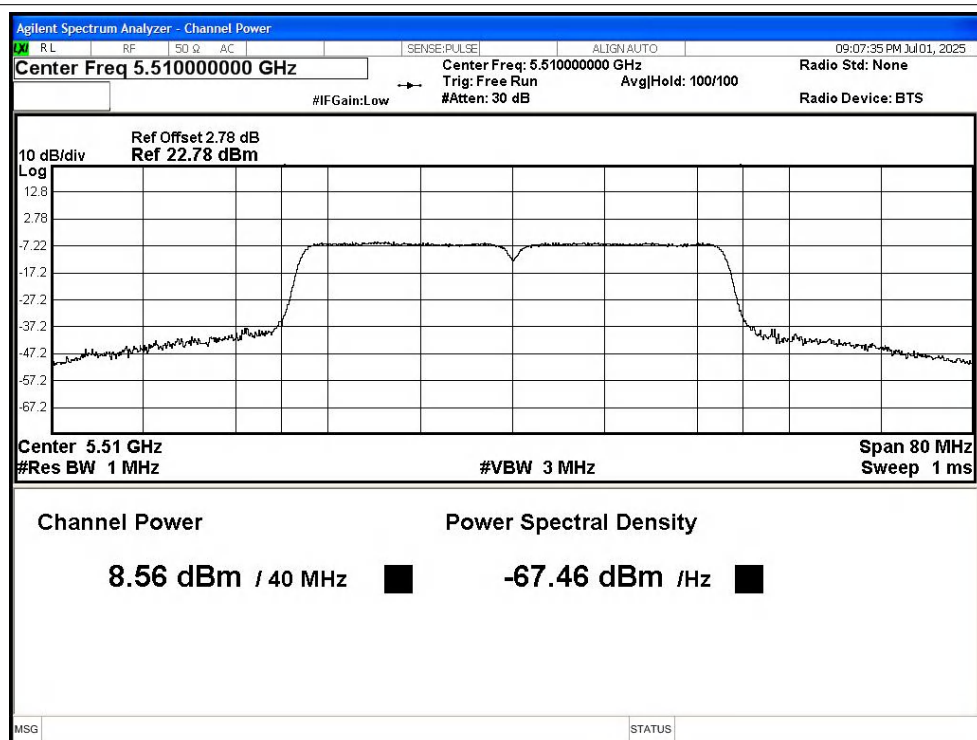
Power NVNT n20 5580MHz Ant1



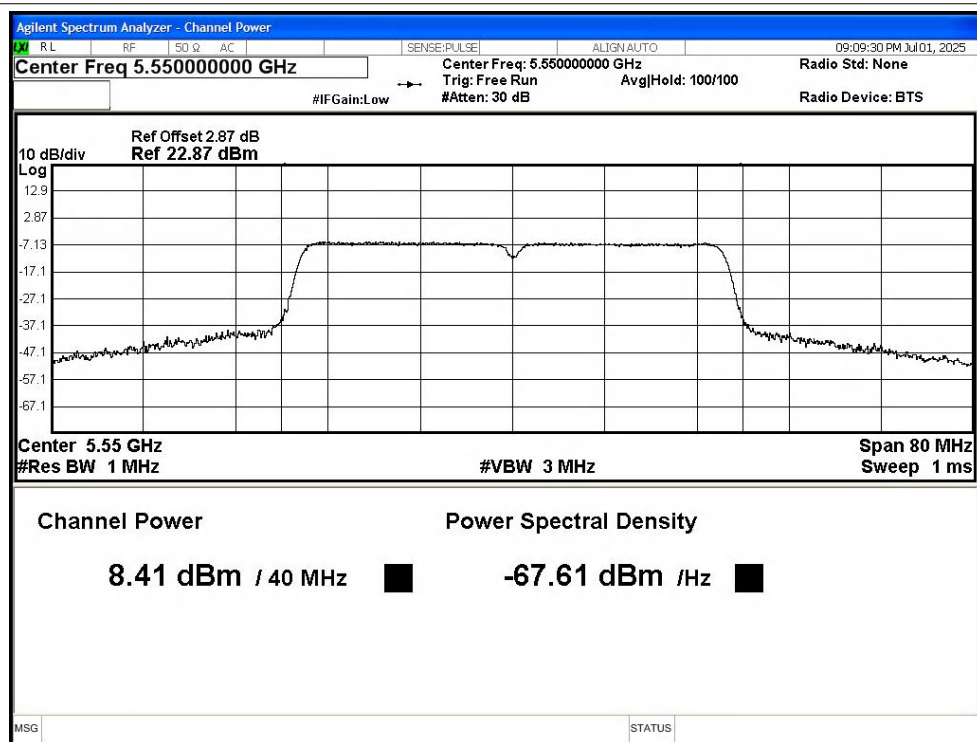
Power NVNT n20 5700MHz Ant1

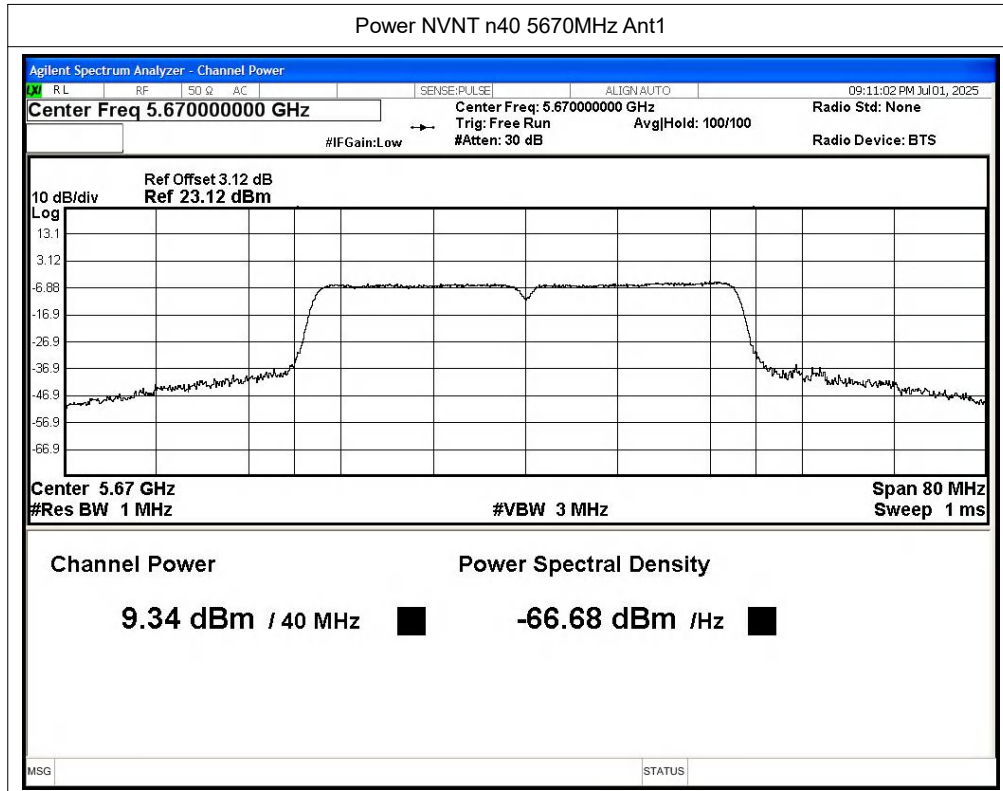


Power NVNT n40 5510MHz Ant1



Power NVNT n40 5550MHz Ant1





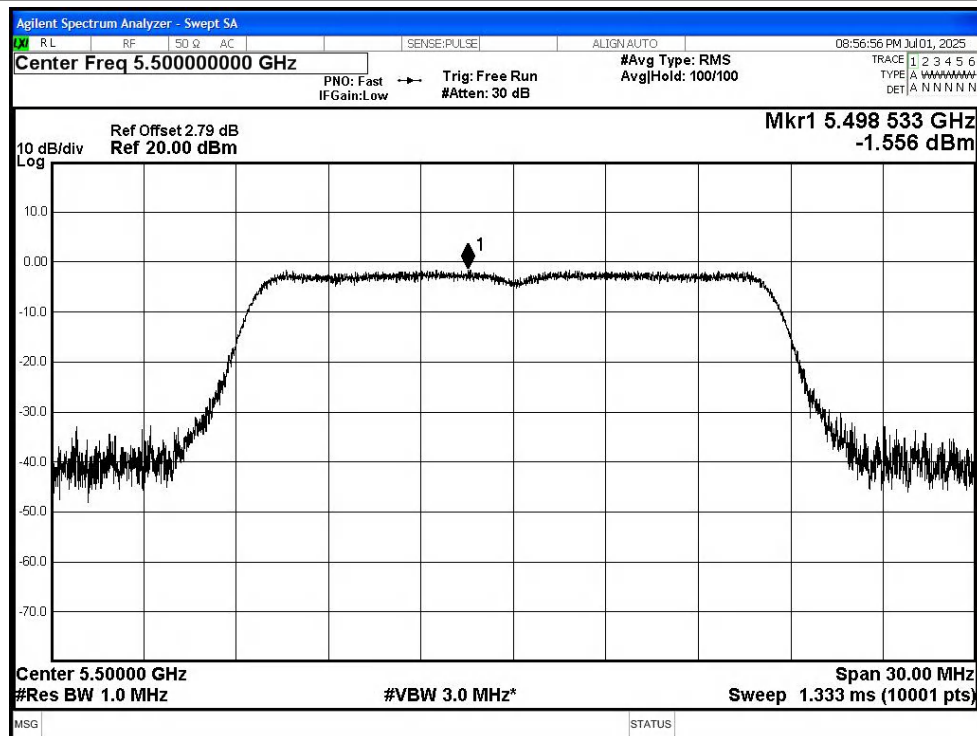


3. Maximum Power Spectral Density Level

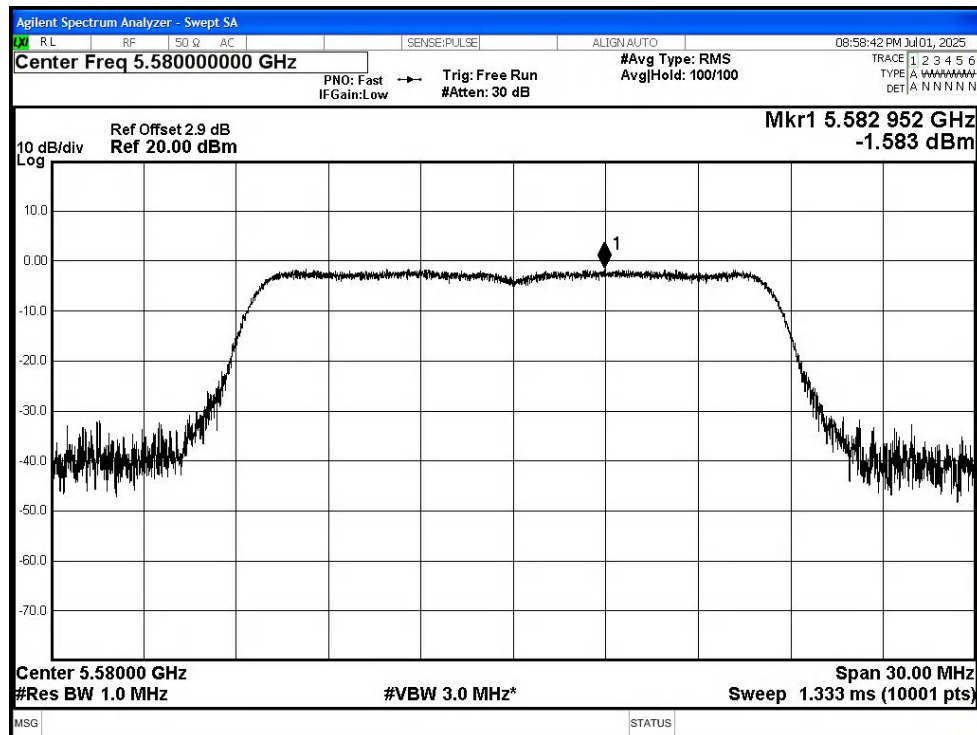
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD(dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5500	Ant1	-1.56	0.24	-1.32	11	Pass
NVNT	a	5580	Ant1	-1.58	0.24	-1.34	11	Pass
NVNT	a	5700	Ant1	-1.37	0.24	-1.13	11	Pass
NVNT	n20	5500	Ant1	-1.43	0.28	-1.15	11	Pass
NVNT	n20	5580	Ant1	-1.5	0.28	-1.22	11	Pass
NVNT	n20	5700	Ant1	-1.24	0.28	-0.96	11	Pass
NVNT	n40	5510	Ant1	-5.12	0.54	-4.58	11	Pass
NVNT	n40	5550	Ant1	-5.04	0.55	-4.49	11	Pass
NVNT	n40	5670	Ant1	-4.21	0.55	-3.66	11	Pass

Test Graphs

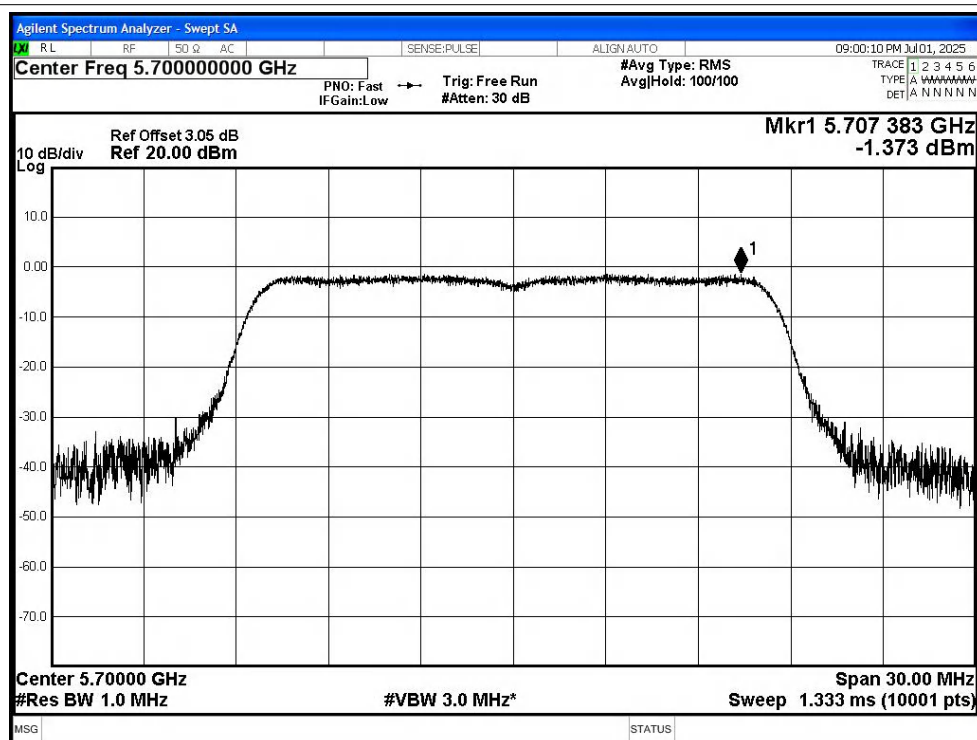
PSD NVNT a 5500MHz Ant1



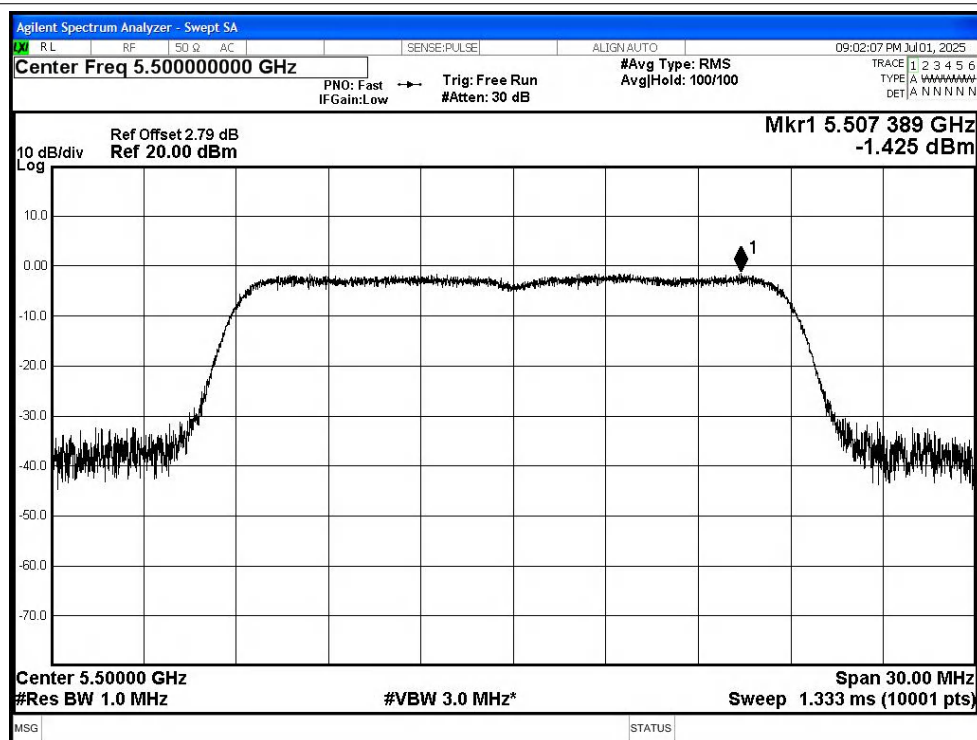
PSD NVNT a 5580MHz Ant1

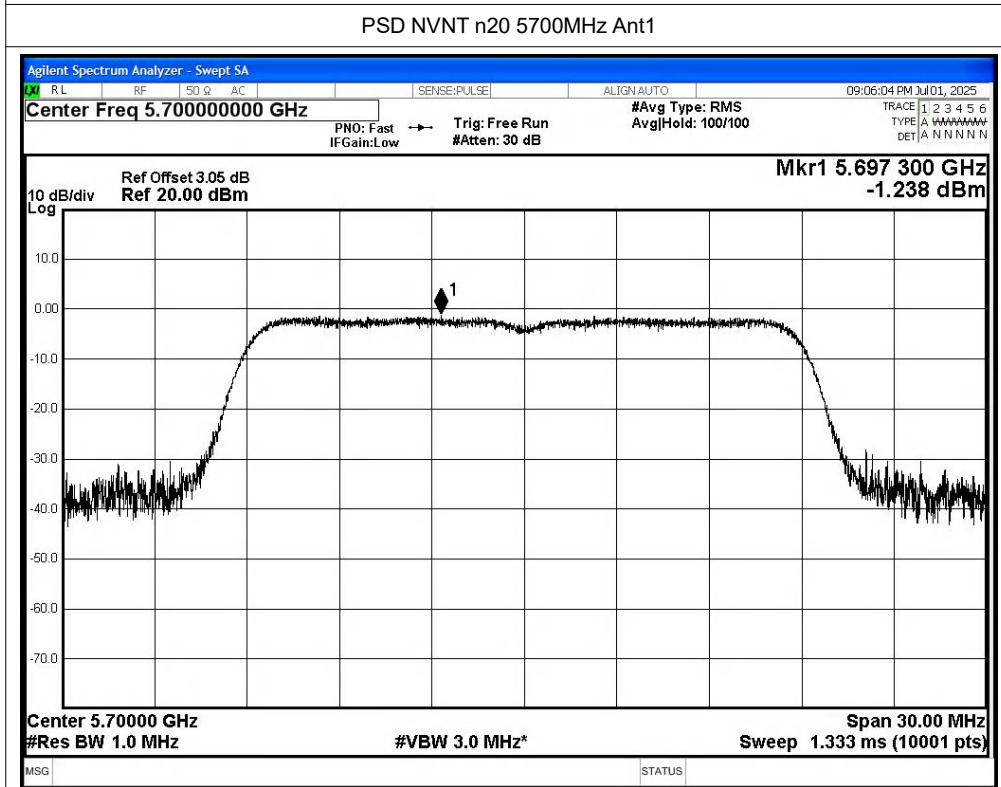
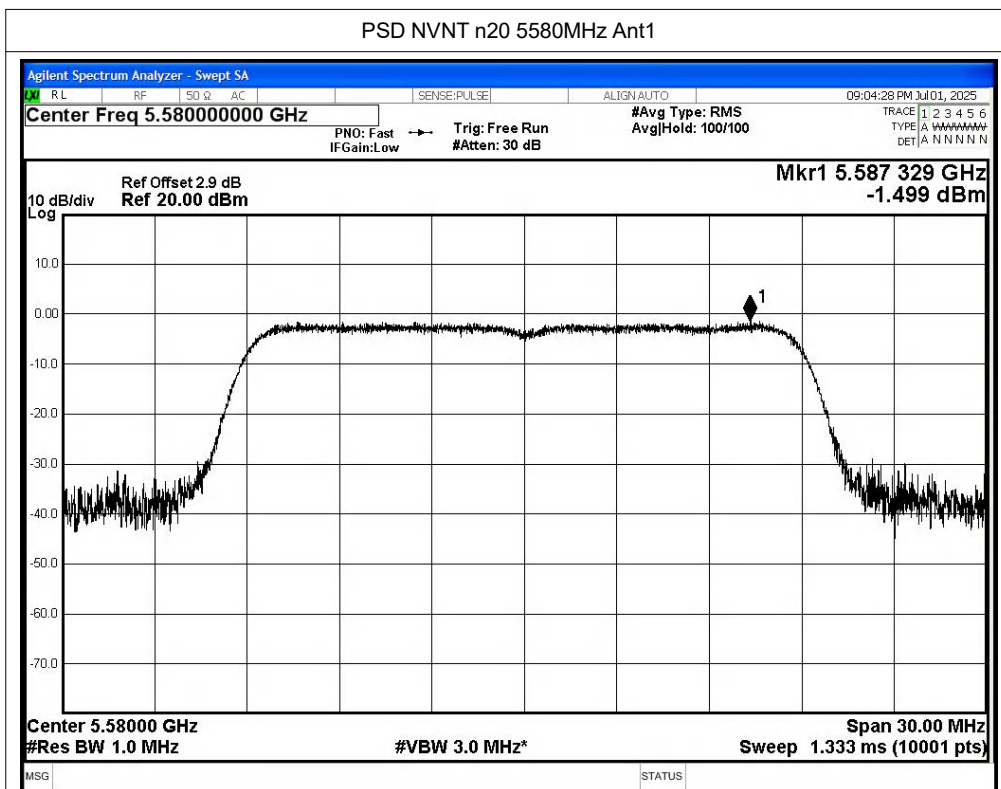


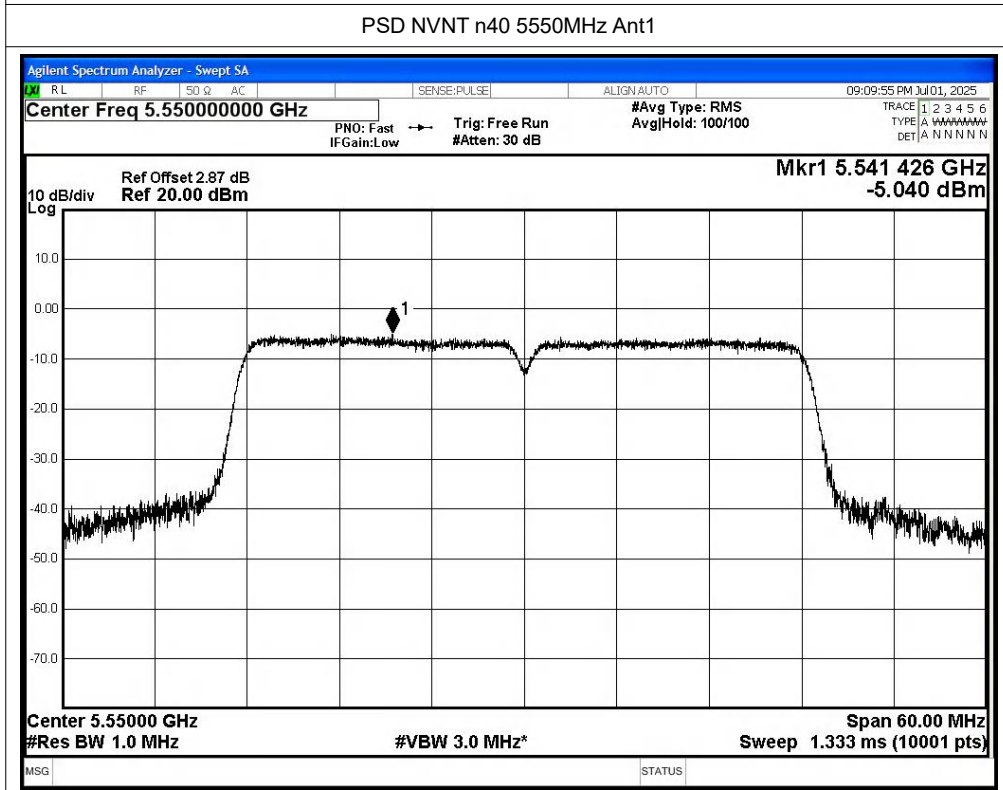
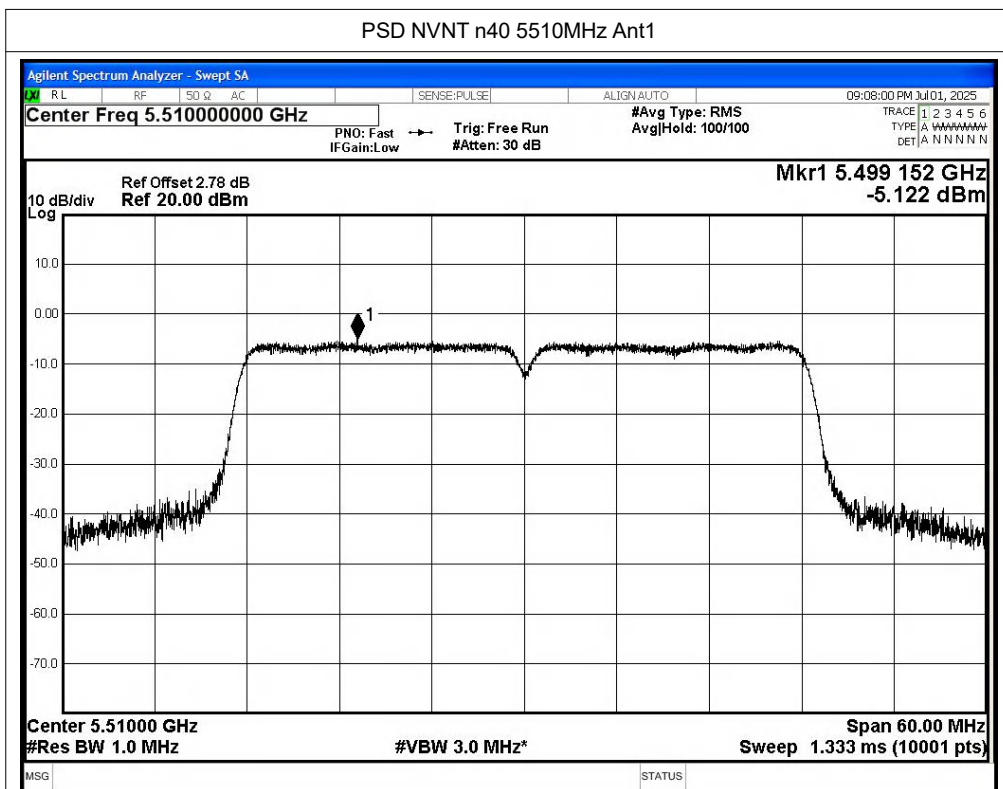
PSD NVNT a 5700MHz Ant1

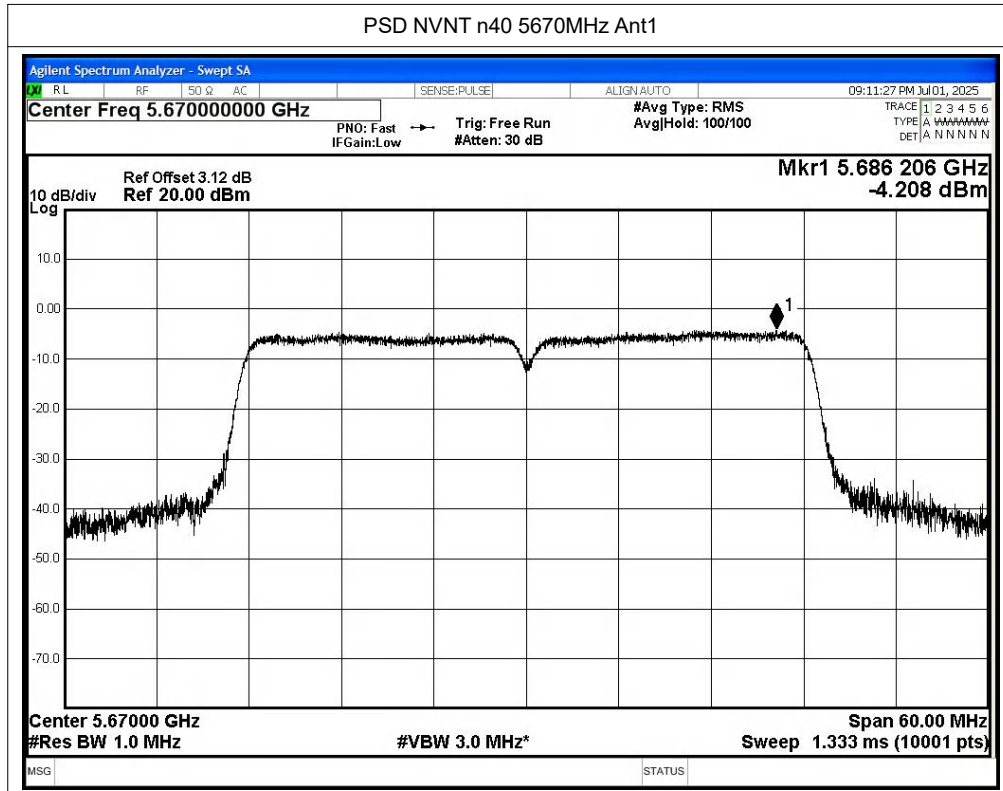


PSD NVNT n20 5500MHz Ant1









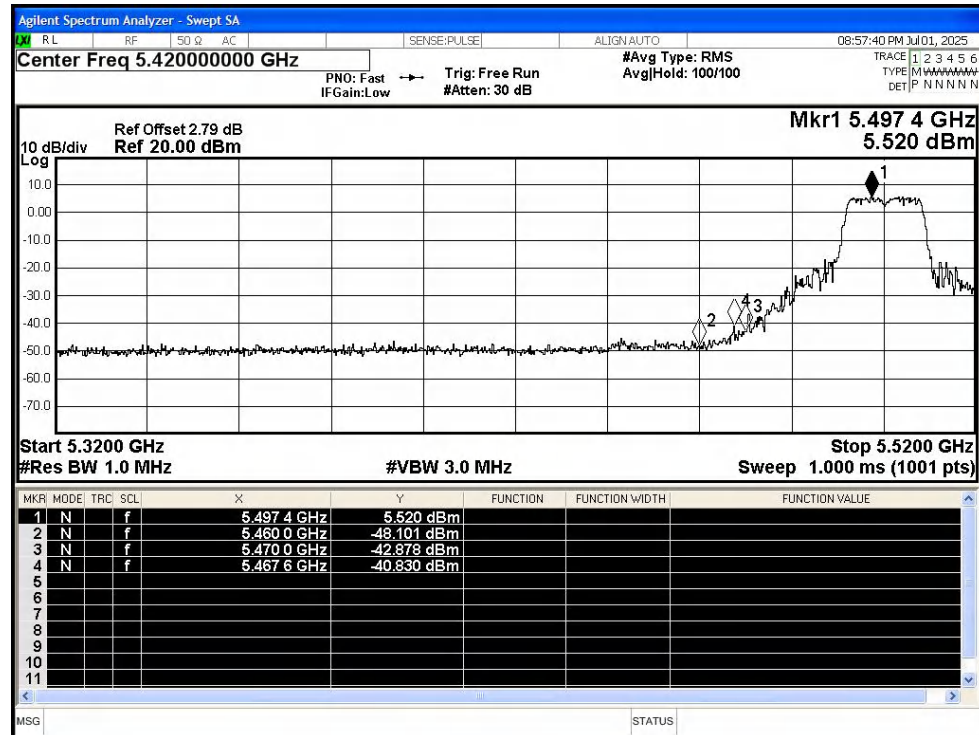


4. Restrict Band

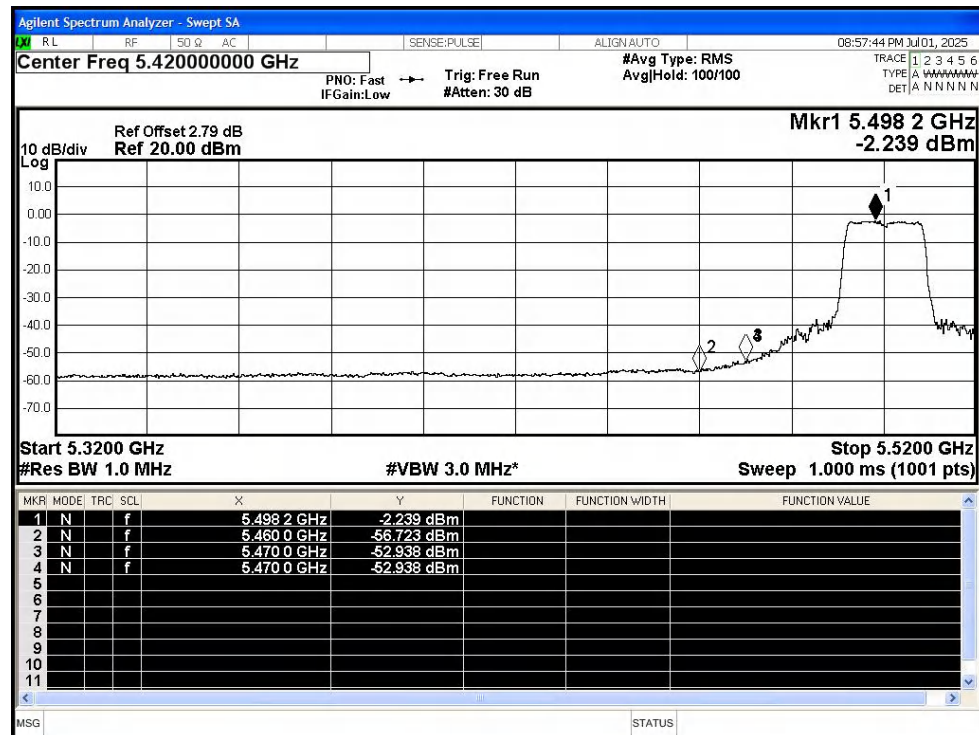
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	a	5500	Ant1	5460	-48.1	2	-	49.13	Peak	68.2	Pass
NVNT	a	5500	Ant1	5460	-56.72	2	0.24	40.75	Average	54	Pass
NVNT	a	5500	Ant1	5467.6	-40.83	2	-	56.4	Peak	68.2	Pass
NVNT	a	5500	Ant1	5470	-52.94	2	0.24	44.53	Average	54	Pass
NVNT	a	5500	Ant1	5470	-42.88	2	-	54.35	Peak	68.2	Pass
NVNT	a	5700	Ant1	5725	-36.78	2	-	60.45	Peak	68.2	Pass
NVNT	a	5700	Ant1	5725	-51.3	2	0.24	46.17	Average	54	Pass
NVNT	a	5700	Ant1	5725.8	-35.25	2	-	61.98	Peak	68.2	Pass
NVNT	a	5700	Ant1	5735	-46.56	2	-	50.67	Peak	68.2	Pass
NVNT	a	5700	Ant1	5735	-57.22	2	0.24	40.25	Average	54	Pass
NVNT	n20	5500	Ant1	5460	-45.06	2	-	52.17	Peak	68.2	Pass
NVNT	n20	5500	Ant1	5460	-56.32	2	0.28	41.19	Average	54	Pass
NVNT	n20	5500	Ant1	5468.8	-37.62	2	-	59.61	Peak	68.2	Pass
NVNT	n20	5500	Ant1	5470	-51.71	2	0.28	45.8	Average	54	Pass
NVNT	n20	5500	Ant1	5470	-40.95	2	-	56.28	Peak	68.2	Pass
NVNT	n20	5700	Ant1	5725	-39.6	2	-	57.63	Peak	68.2	Pass
NVNT	n20	5700	Ant1	5725	-52.21	2	0.28	45.3	Average	54	Pass
NVNT	n20	5700	Ant1	5727.6	-39.07	2	-	58.16	Peak	68.2	Pass
NVNT	n20	5700	Ant1	5725.2	-51.45	2	0.28	46.06	Average	54	Pass
NVNT	n20	5700	Ant1	5735	-48.44	2	-	48.79	Peak	68.2	Pass
NVNT	n20	5700	Ant1	5735	-56.99	2	0.28	40.52	Average	54	Pass
NVNT	n40	5510	Ant1	5460	-44.82	2	-	52.41	Peak	68.2	Pass
NVNT	n40	5510	Ant1	5460	-54.65	2	0.54	43.12	Average	54	Pass
NVNT	n40	5510	Ant1	5468.2	-34.52	2	-	62.71	Peak	68.2	Pass
NVNT	n40	5510	Ant1	5469.2	-50.97	2	0.54	46.8	Average	54	Pass
NVNT	n40	5510	Ant1	5470	-36.15	2	-	61.08	Peak	68.2	Pass
NVNT	n40	5510	Ant1	5470	-51.62	2	0.54	46.15	Average	54	Pass
NVNT	n40	5670	Ant1	5725	-47.23	2	-	50	Peak	68.2	Pass
NVNT	n40	5670	Ant1	5725	-55.84	2	0.55	41.94	Average	54	Pass
NVNT	n40	5670	Ant1	5726.2	-46.93	2	-	50.3	Peak	68.2	Pass
NVNT	n40	5670	Ant1	5735	-48.62	2	-	48.61	Peak	68.2	Pass
NVNT	n40	5670	Ant1	5735	-56.92	2	0.55	40.86	Average	54	Pass

Test Graphs

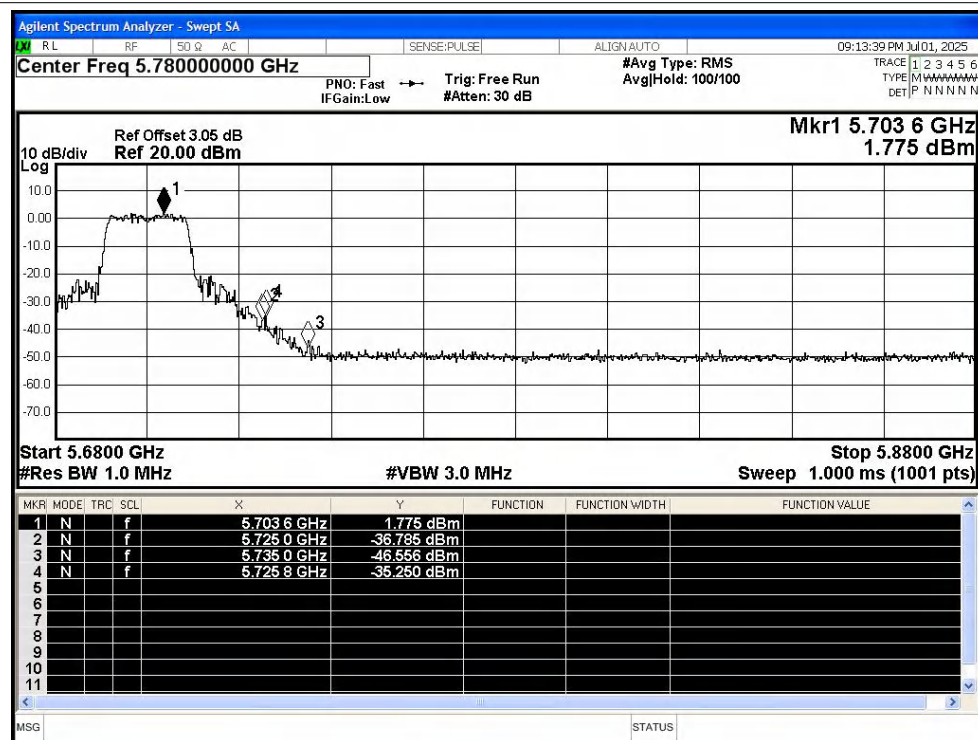
Restrict Band NVNT a 5500MHz Ant1 Peak



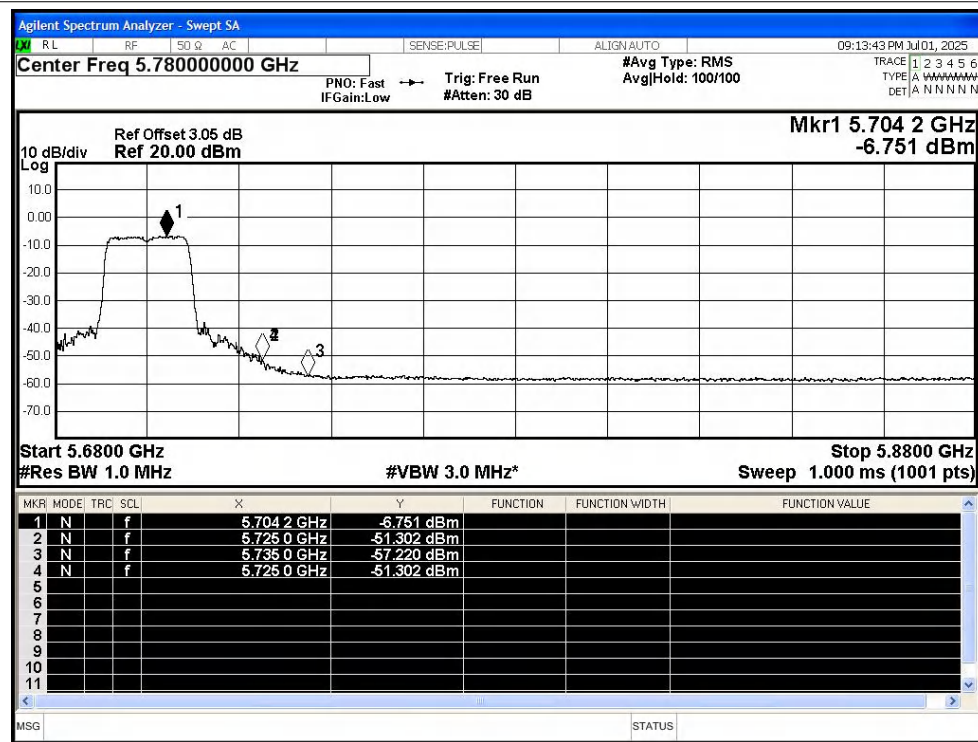
Restrict Band NVNT a 5500MHz Ant1 Average



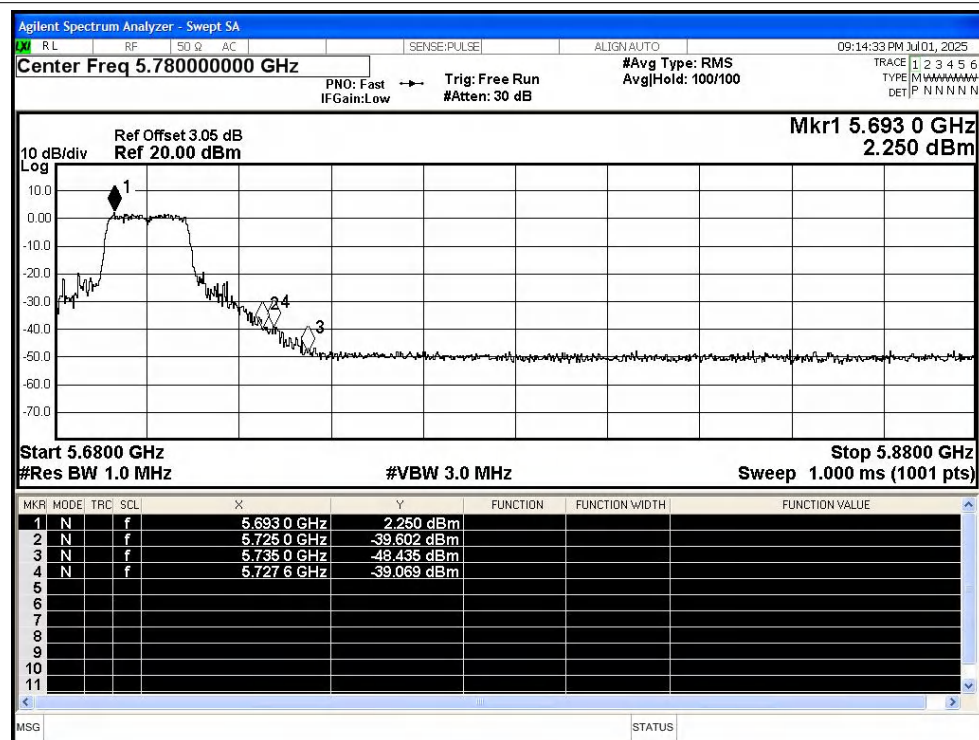
Restrict Band NVNT a 5700MHz Ant1 Peak



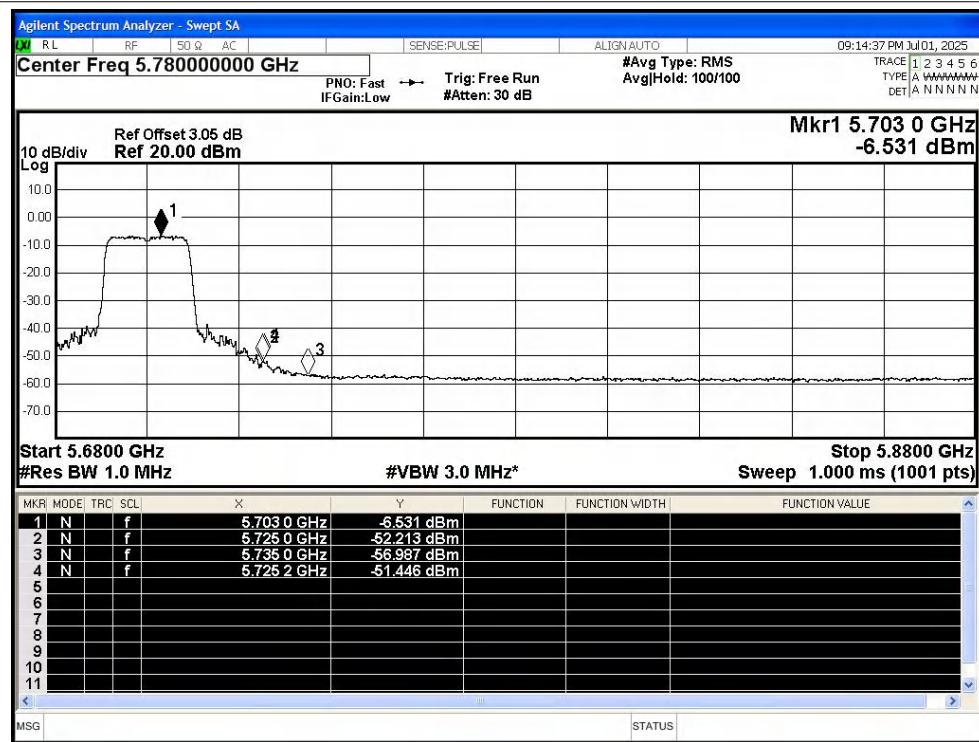
Restrict Band NVNT a 5700MHz Ant1 Average

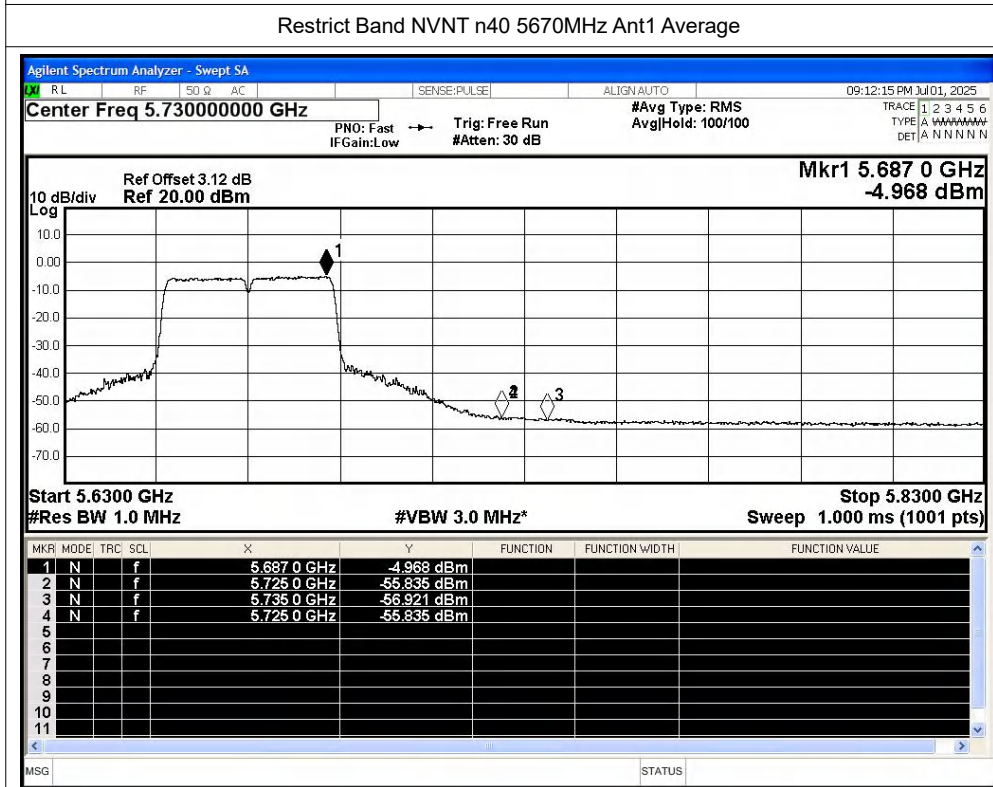
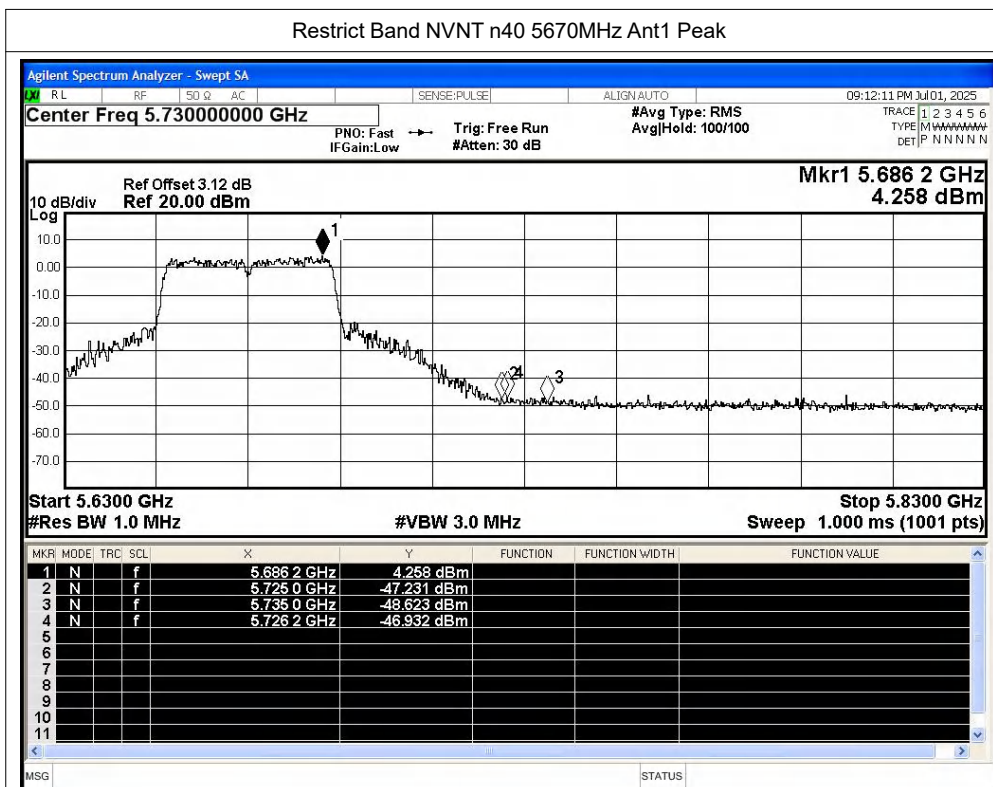


Restrict Band NVNT n20 5700MHz Ant1 Peak



Restrict Band NVNT n20 5700MHz Ant1 Average



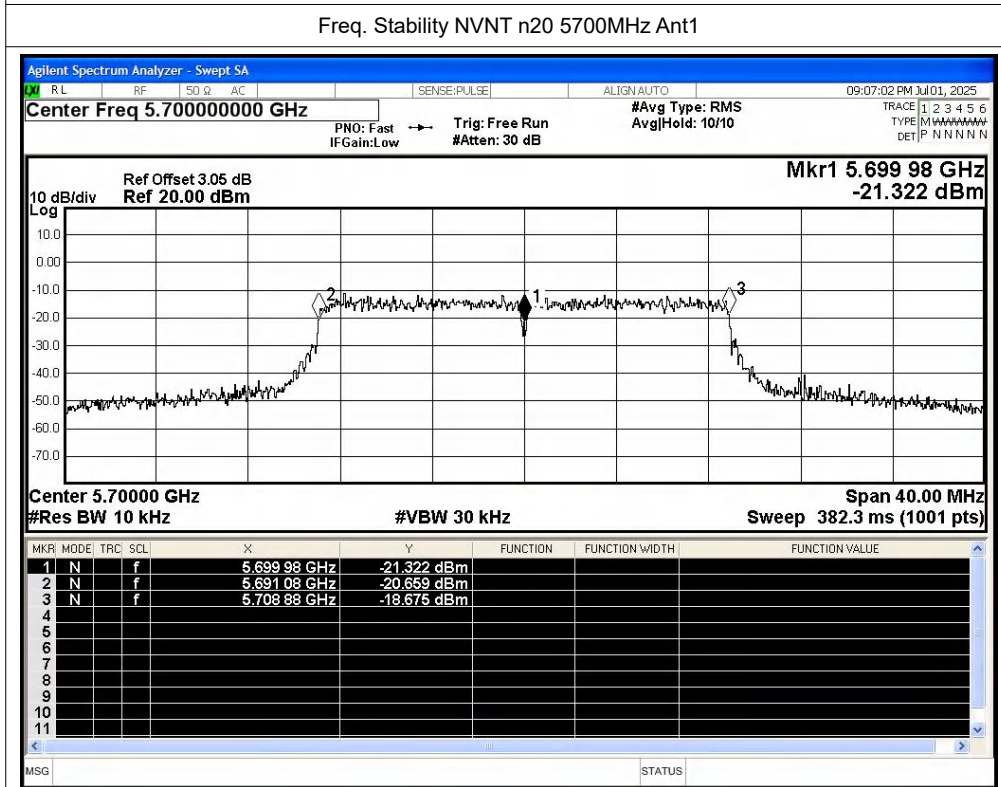


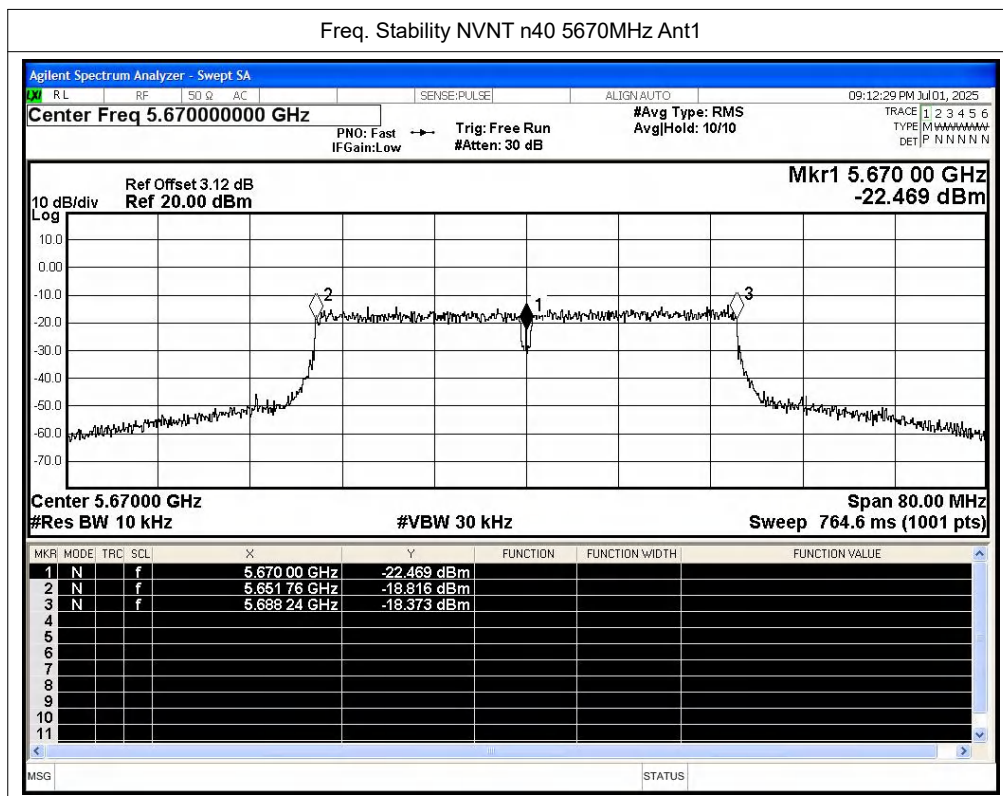


5. Frequency Stability

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5500	Ant1	5500	0	0	25	Pass
NVNT	a	5580	Ant1	5580	0	0	25	Pass
NVNT	a	5700	Ant1	5700	0	0	25	Pass
NVNT	n20	5500	Ant1	5499.98	-20000	-3.64	25	Pass
NVNT	n20	5580	Ant1	5579.98	-20000	-3.58	25	Pass
NVNT	n20	5700	Ant1	5699.98	-20000	-3.51	25	Pass
NVNT	n40	5510	Ant1	5509.96	-40000	-7.26	25	Pass
NVNT	n40	5550	Ant1	5549.96	-40000	-7.21	25	Pass
NVNT	n40	5670	Ant1	5670	0	0	25	Pass

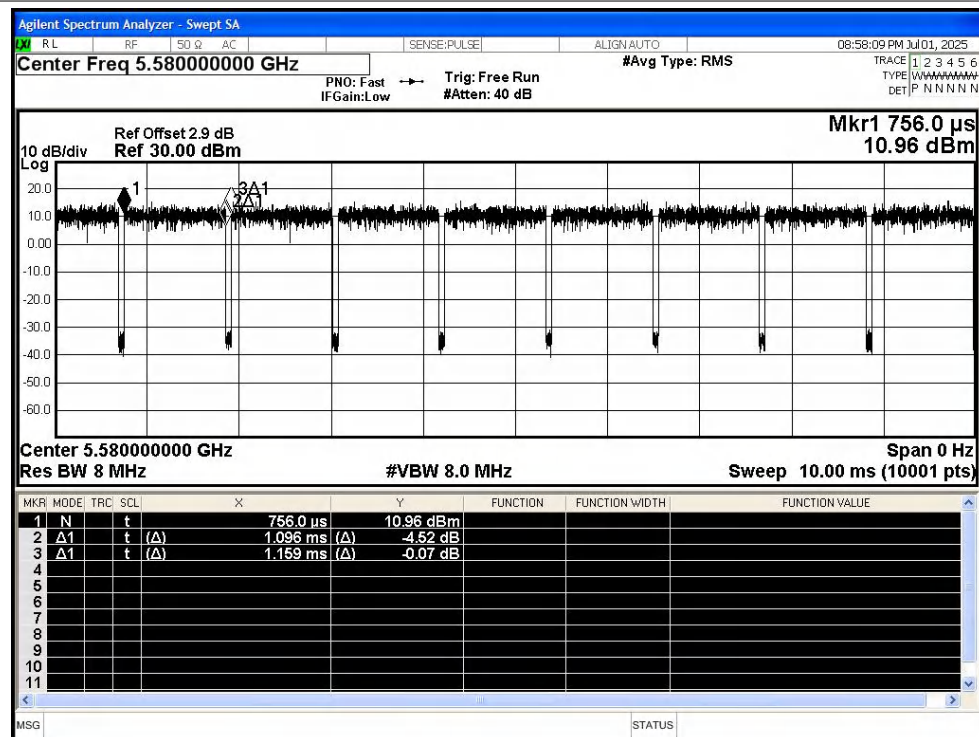
Page 28 of 38





6. Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5500	Ant1	94.65	0.24	0.91
NVNT	a	5580	Ant1	94.56	0.24	0.91
NVNT	a	5700	Ant1	94.65	0.24	0.91
NVNT	n20	5500	Ant1	93.77	0.28	1.07
NVNT	n20	5580	Ant1	93.77	0.28	1.07
NVNT	n20	5700	Ant1	93.77	0.28	1.07
NVNT	n40	5510	Ant1	88.32	0.54	2.13
NVNT	n40	5550	Ant1	88.14	0.55	2.14
NVNT	n40	5670	Ant1	88.14	0.55	2.14



Report No.: CTA25062001511

