Appendix C

RF Test Data for 5.3GWIFI(Conducted Measurement)

Product Name: SmartTouch+

Test Model: STP-001

Environmental Conditions

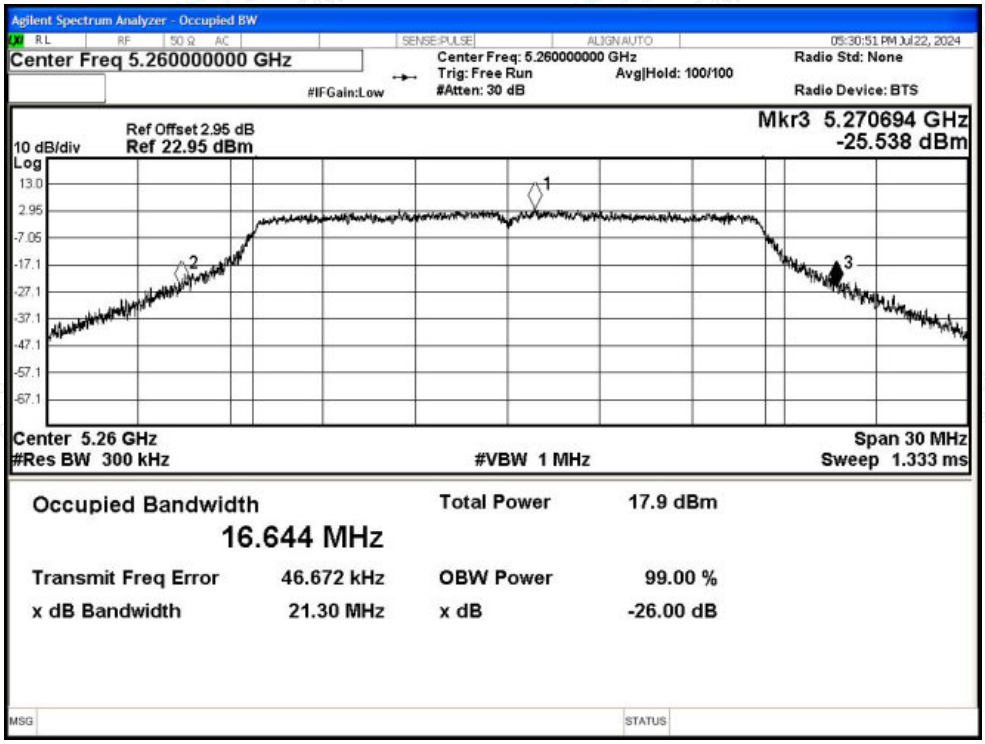
Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Nick Peng

C.1 -26dB Bandwidth

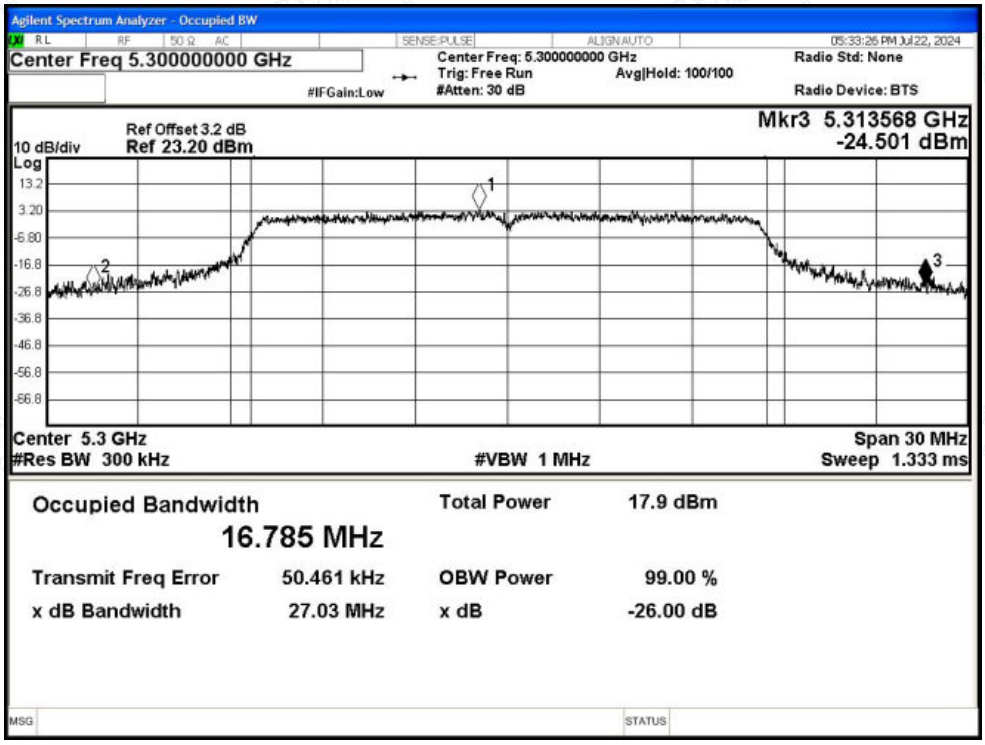
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5260	Ant2	21.295	---	Pass
NVNT	a	5300	Ant2	27.035	---	Pass
NVNT	a	5320	Ant2	27.693	---	Pass
NVNT	n20	5260	Ant2	22.038	---	Pass
NVNT	n20	5300	Ant2	28.621	---	Pass
NVNT	n20	5320	Ant2	29.297	---	Pass
NVNT	n40	5270	Ant2	40.203	---	Pass
NVNT	n40	5310	Ant2	52.023	---	Pass
NVNT	ac20	5260	Ant2	21.56	---	Pass
NVNT	ac20	5300	Ant2	28.696	---	Pass
NVNT	ac20	5320	Ant2	28.293	---	Pass
NVNT	ac40	5270	Ant2	40.115	---	Pass
NVNT	ac40	5310	Ant2	48.274	---	Pass
NVNT	ac80	5290	Ant2	98.947	---	Pass
NVNT	ax20	5260	Ant2	22.427	---	Pass
NVNT	ax20	5300	Ant2	28.637	---	Pass
NVNT	ax20	5320	Ant2	29.995	---	Pass
NVNT	ax40	5270	Ant2	39.248	---	Pass
NVNT	ax40	5310	Ant2	39.42	---	Pass
NVNT	ax80	5290	Ant2	79.259	---	Pass
NVNT	ac160	5250	Ant2	170.849	---	Pass
NVNT	ax160	5250	Ant2	162.371	---	Pass

Test Graphs

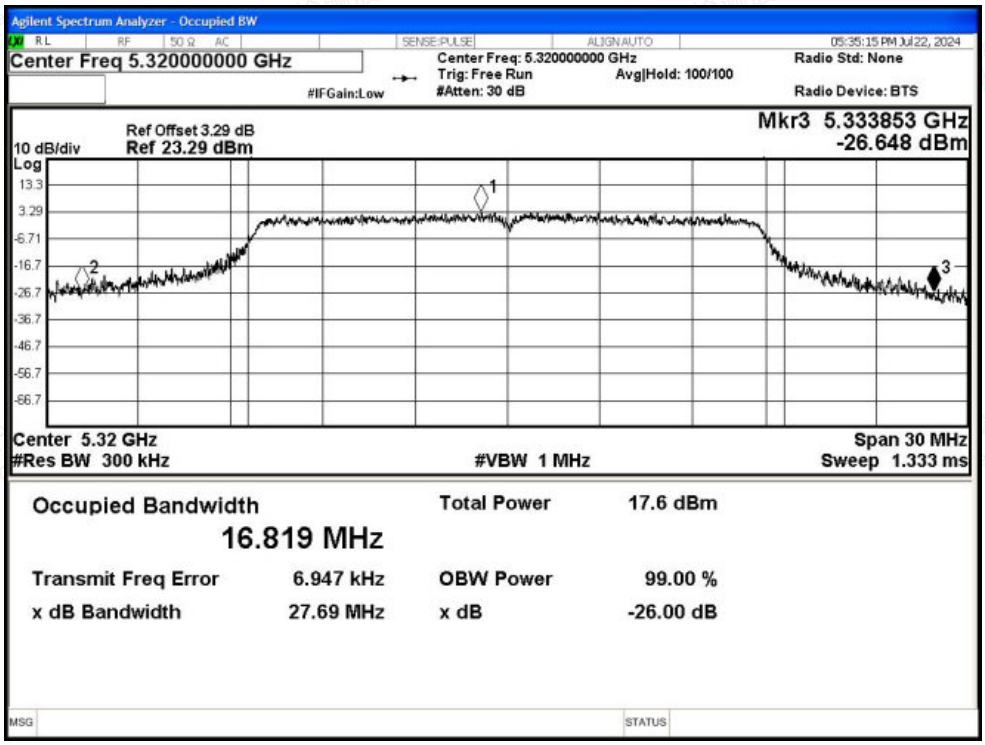
-26dB Bandwidth NVNT a 5260MHz Ant2



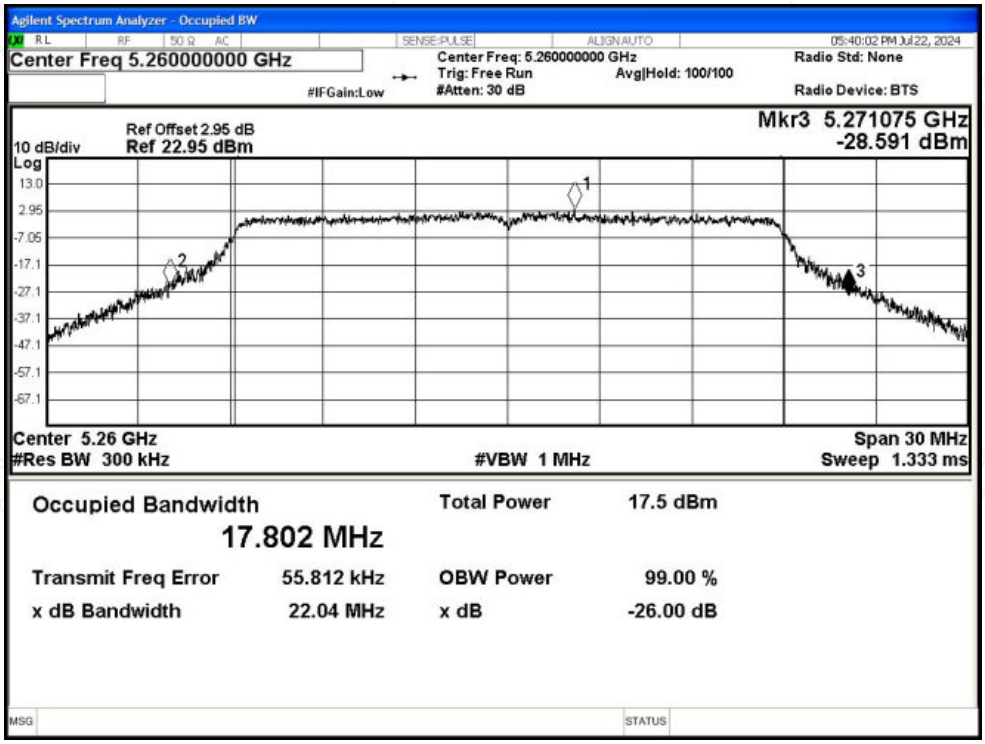
-26dB Bandwidth NVNT a 5300MHz Ant2



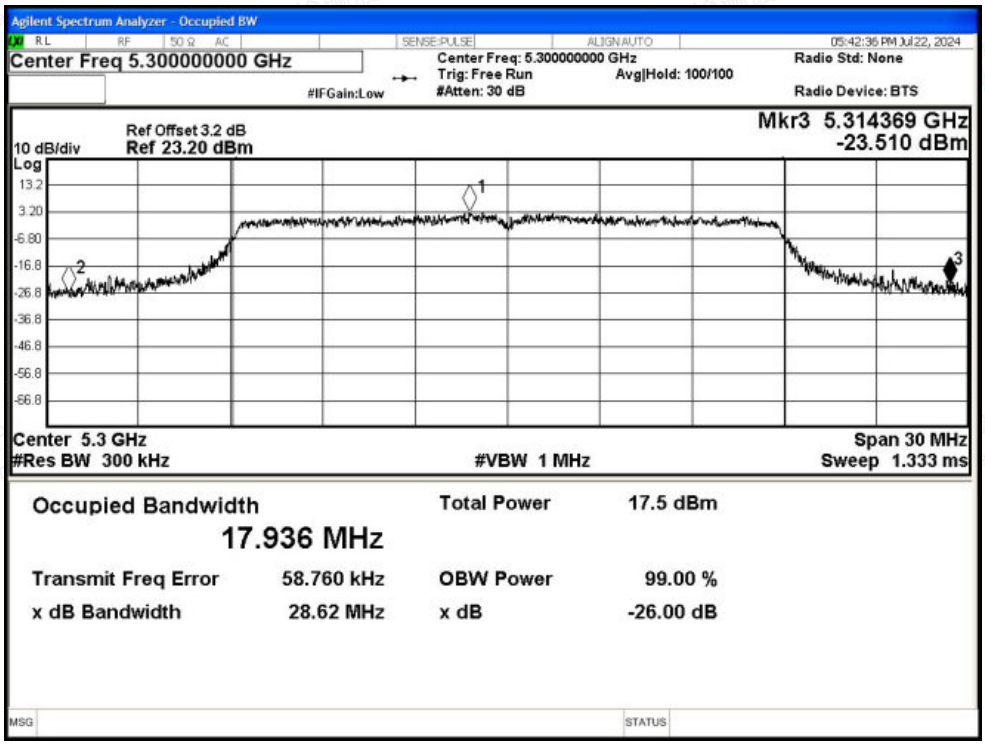
-26dB Bandwidth NVNT a 5320MHz Ant2



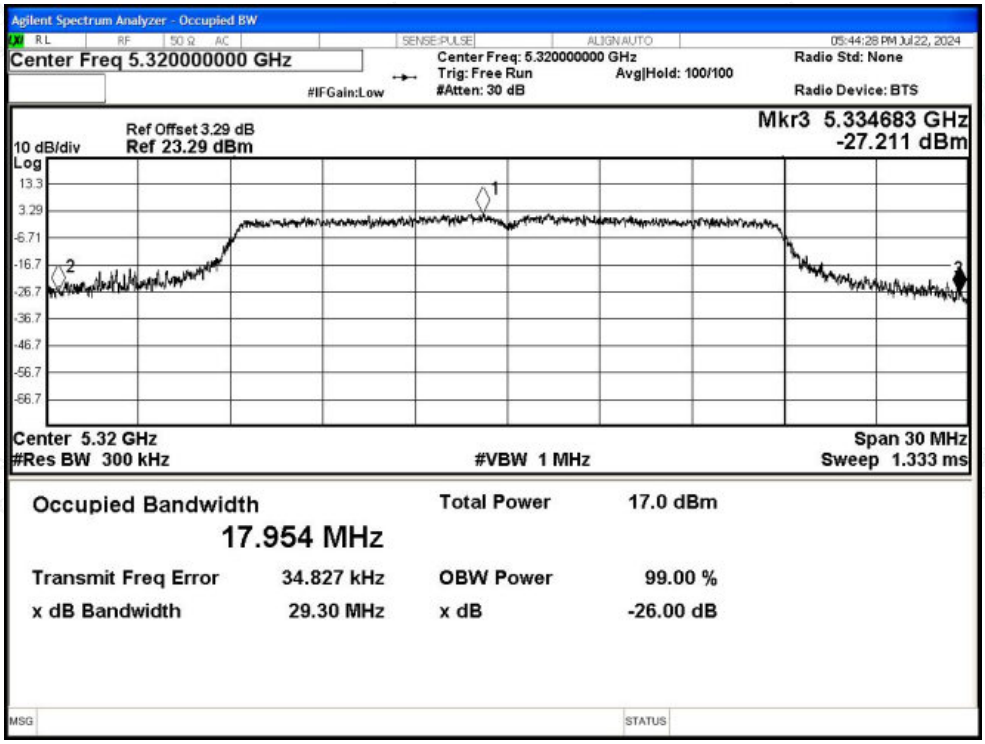
-26dB Bandwidth NVNT n20 5260MHz Ant2



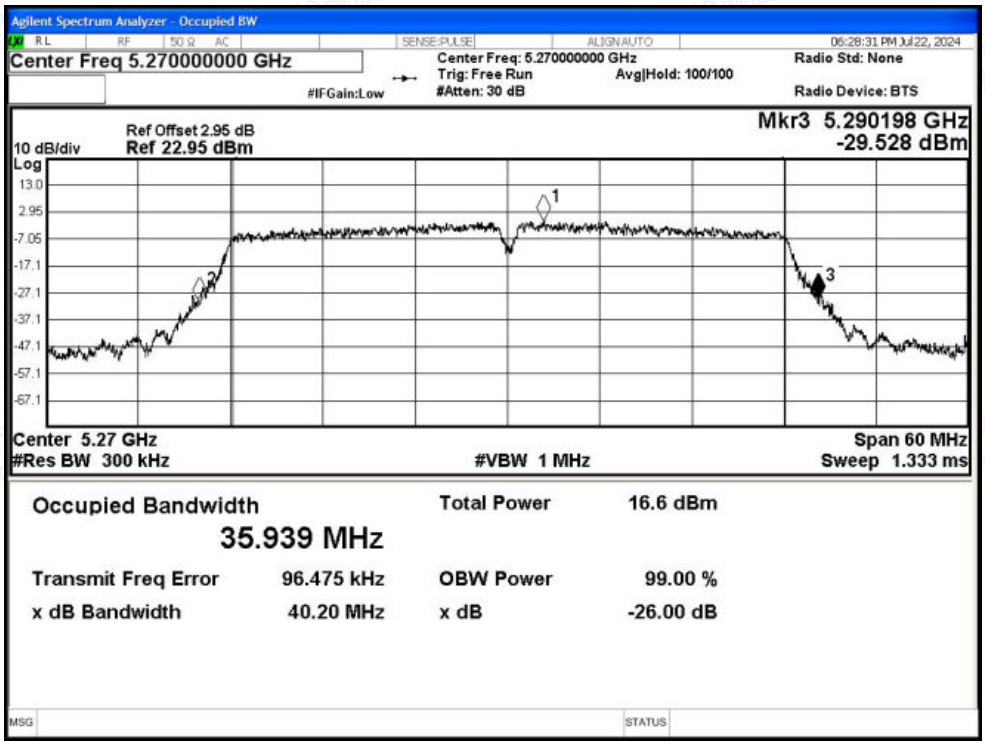
-26dB Bandwidth NVNT n20 5300MHz Ant2



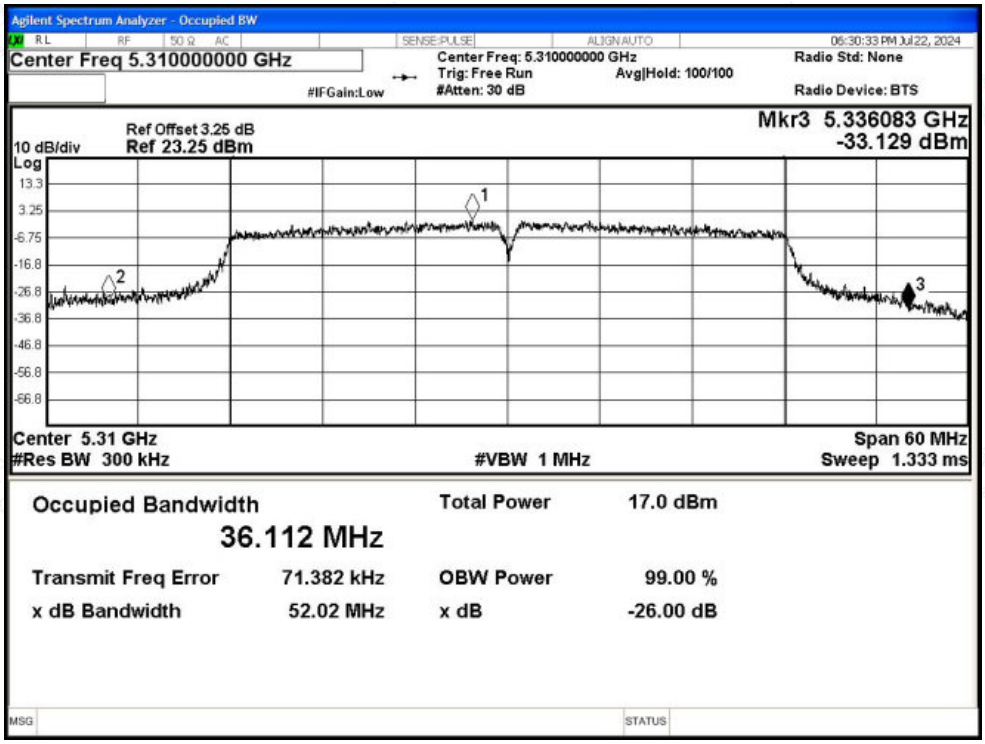
-26dB Bandwidth NVNT n20 5320MHz Ant2



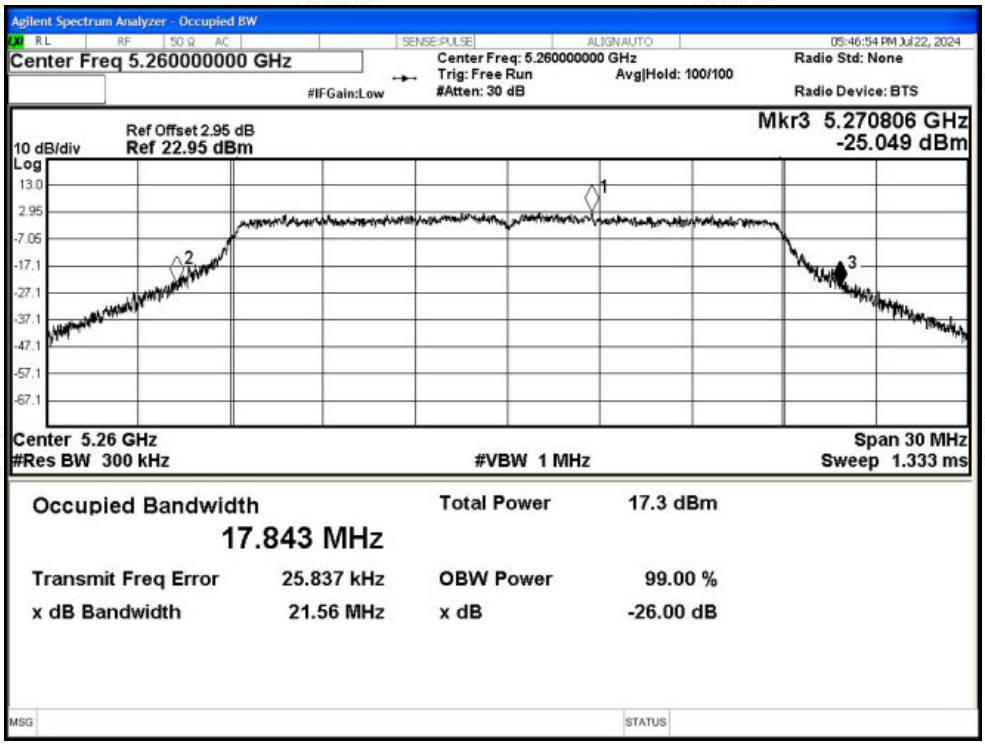
-26dB Bandwidth NVNT n40 5270MHz Ant2



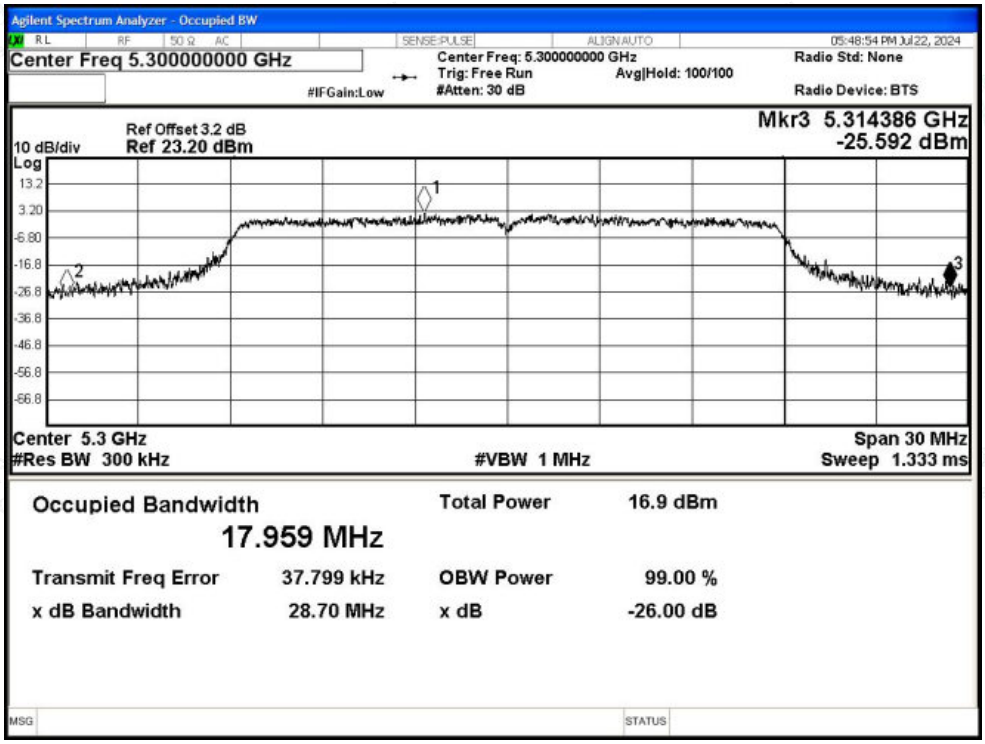
-26dB Bandwidth NVNT n40 5310MHz Ant2



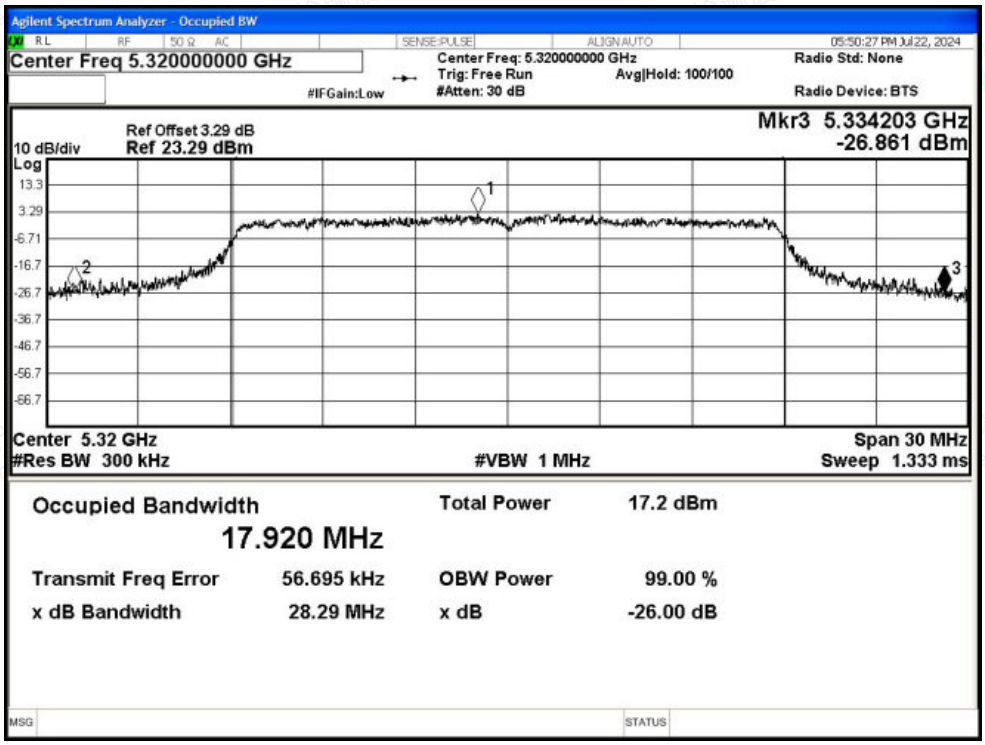
-26dB Bandwidth NVNT ac20 5260MHz Ant2



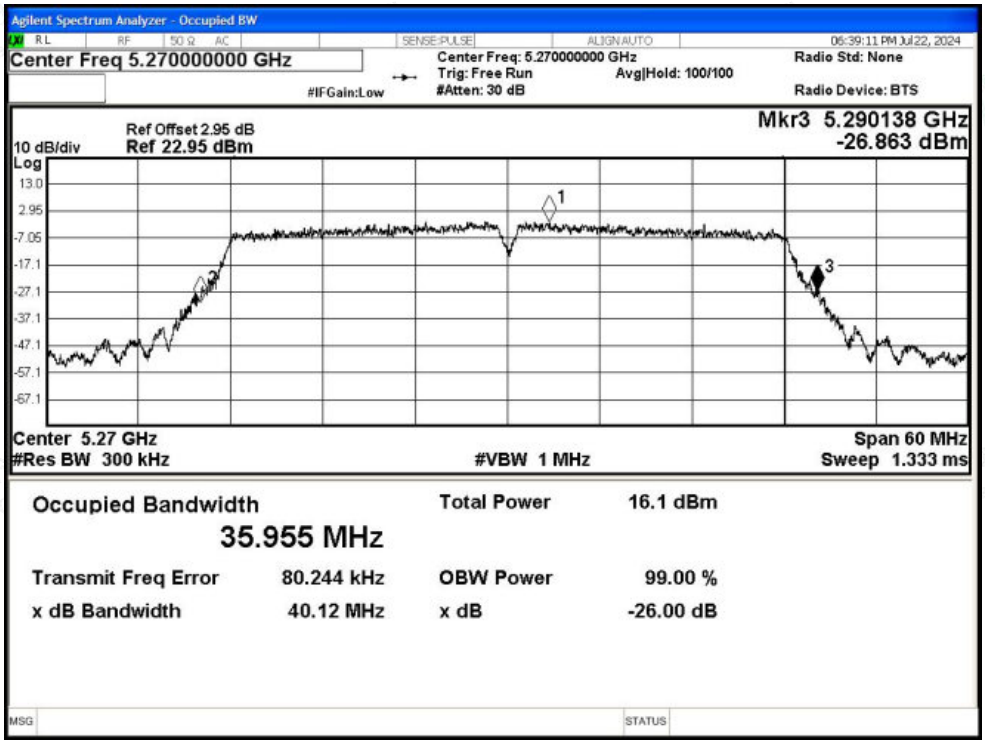
-26dB Bandwidth NVNT ac20 5300MHz Ant2



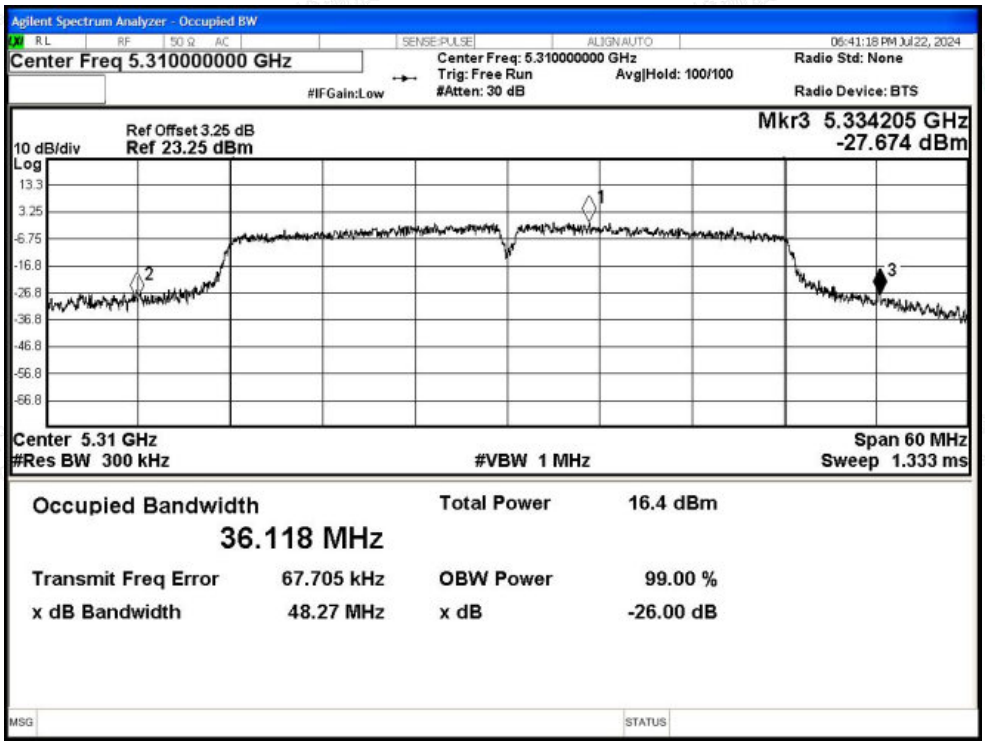
-26dB Bandwidth NVNT ac20 5320MHz Ant2



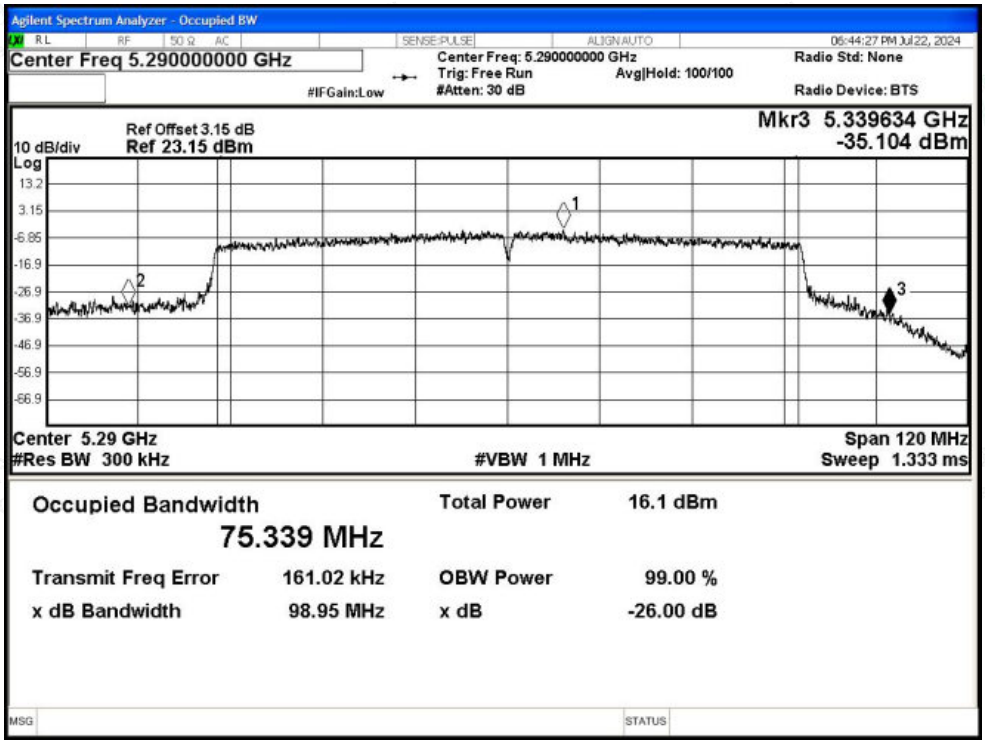
-26dB Bandwidth NVNT ac40 5270MHz Ant2



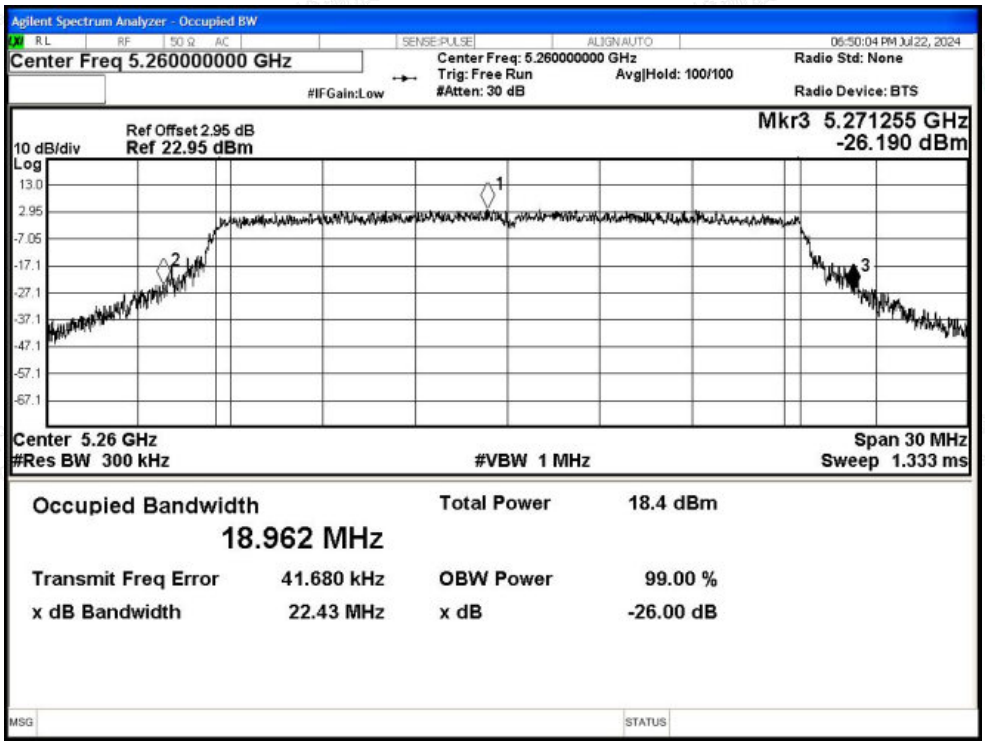
-26dB Bandwidth NVNT ac40 5310MHz Ant2



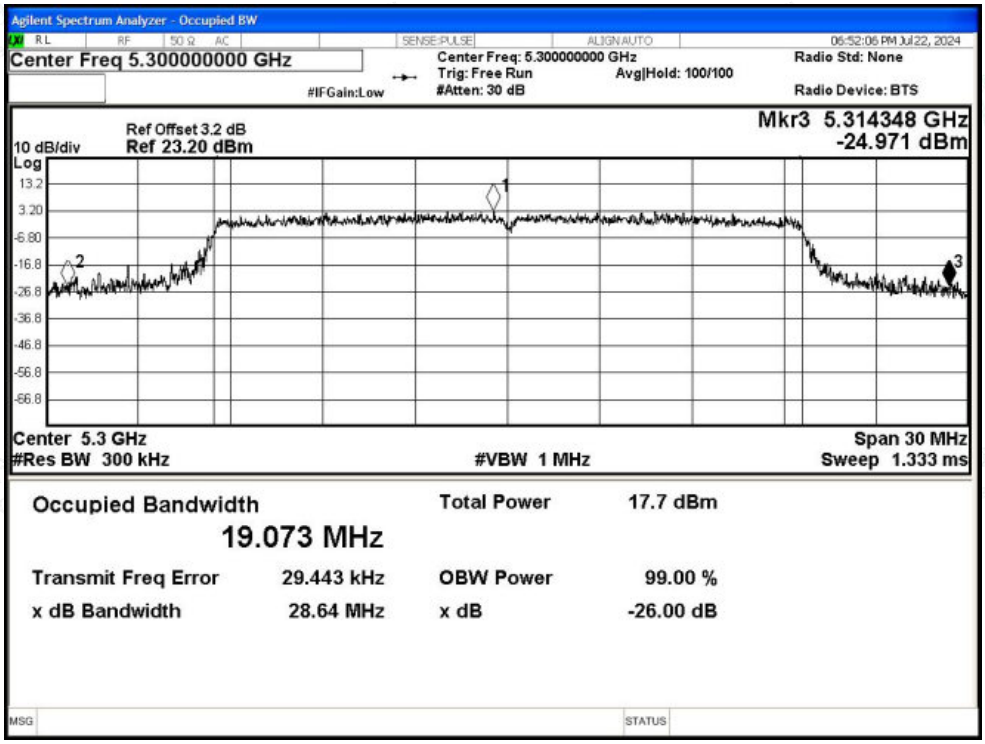
-26dB Bandwidth NVNT ac80 5290MHz Ant2



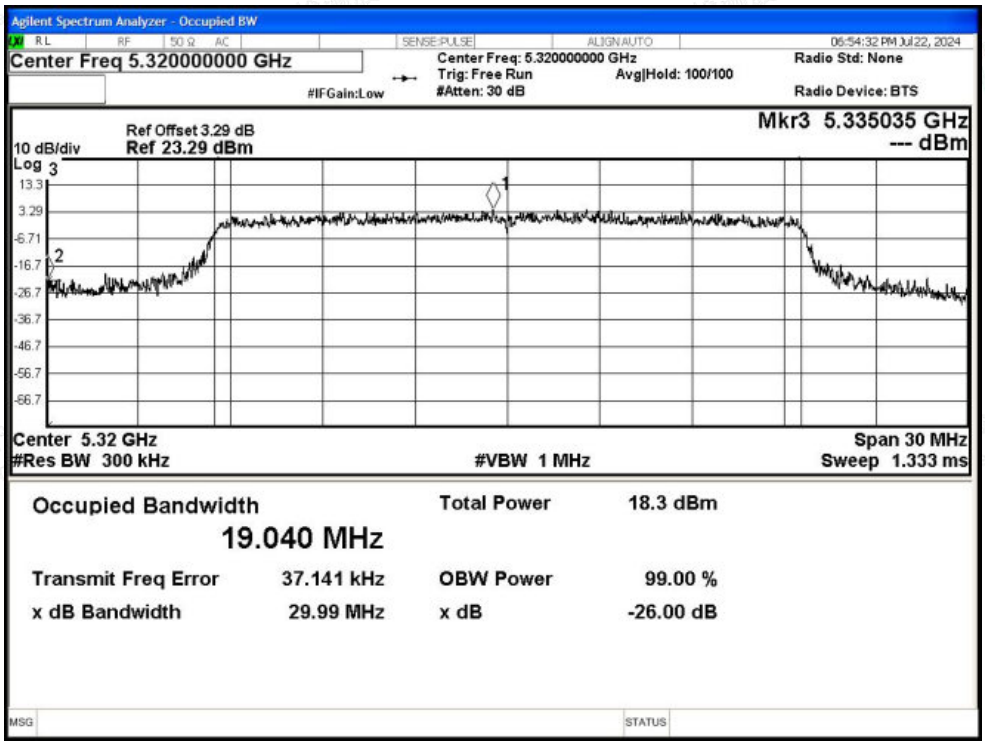
-26dB Bandwidth NVNT ax20 5260MHz Ant2



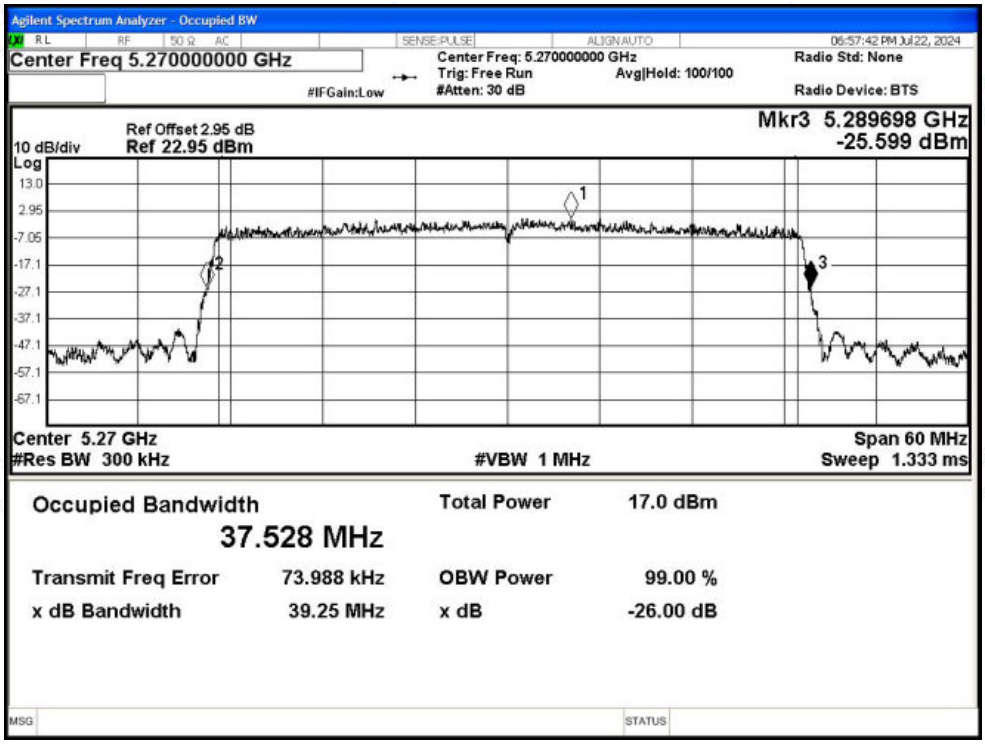
-26dB Bandwidth NVNT ax20 5300MHz Ant2



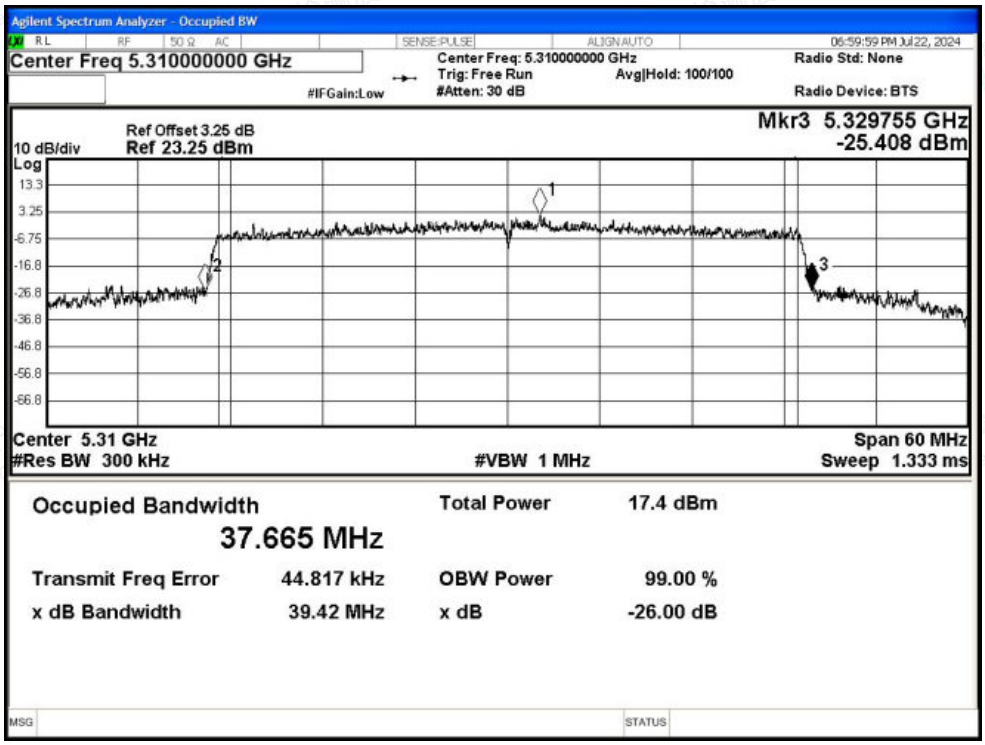
-26dB Bandwidth NVNT ax20 5320MHz Ant2



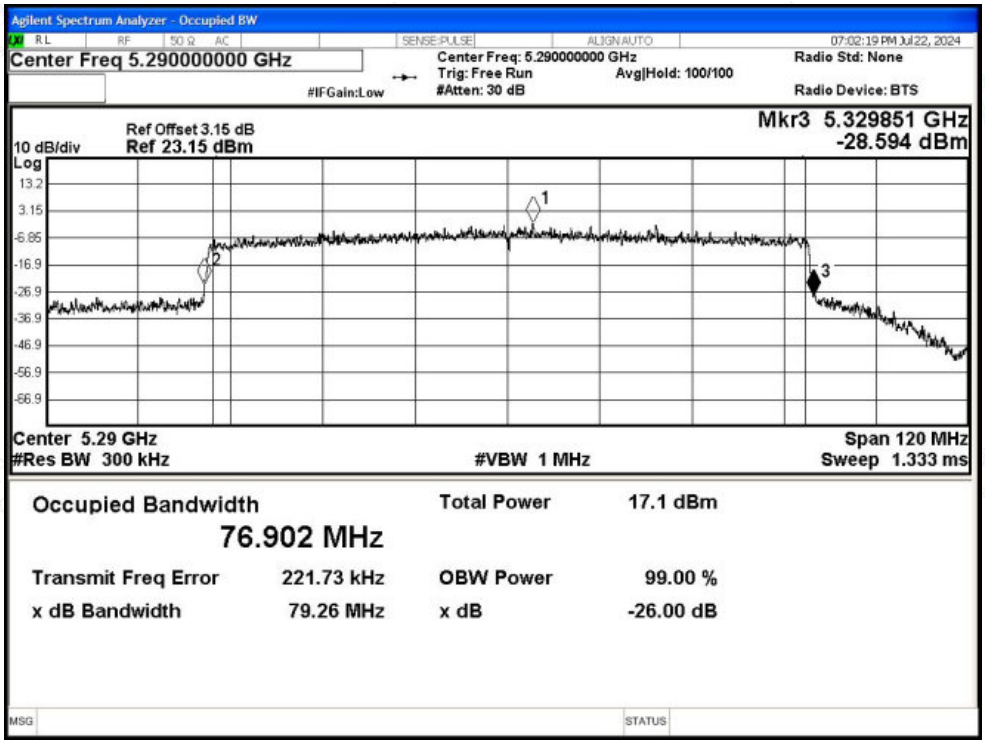
-26dB Bandwidth NVNT ax40 5270MHz Ant2



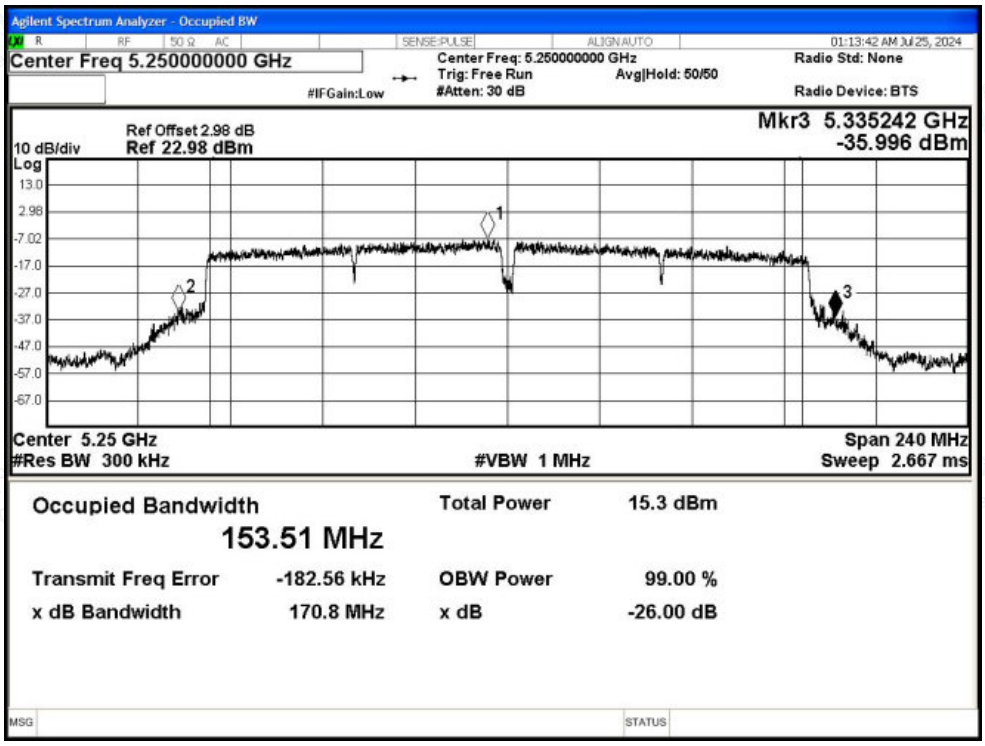
-26dB Bandwidth NVNT ax40 5310MHz Ant2



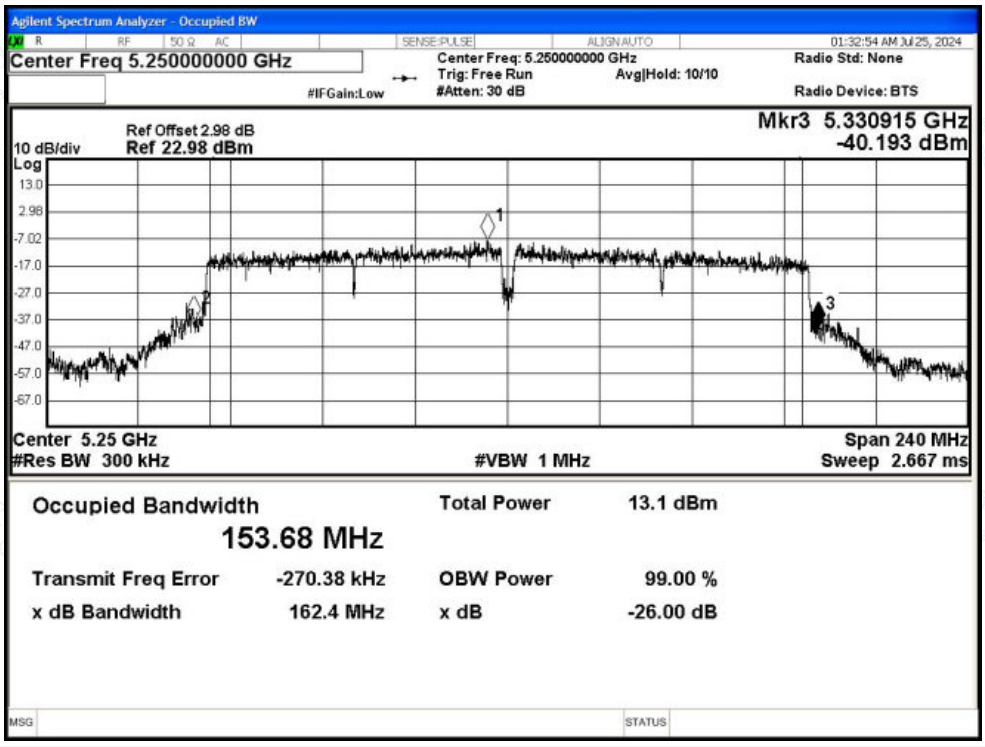
-26dB Bandwidth NVNT ax80 5290MHz Ant2



-26dB Bandwidth NVNT ac160 5250MHz Ant2



-26dB Bandwidth NVNT ax160 5250MHz Ant2



C.2 Maximum Conducted Output Power

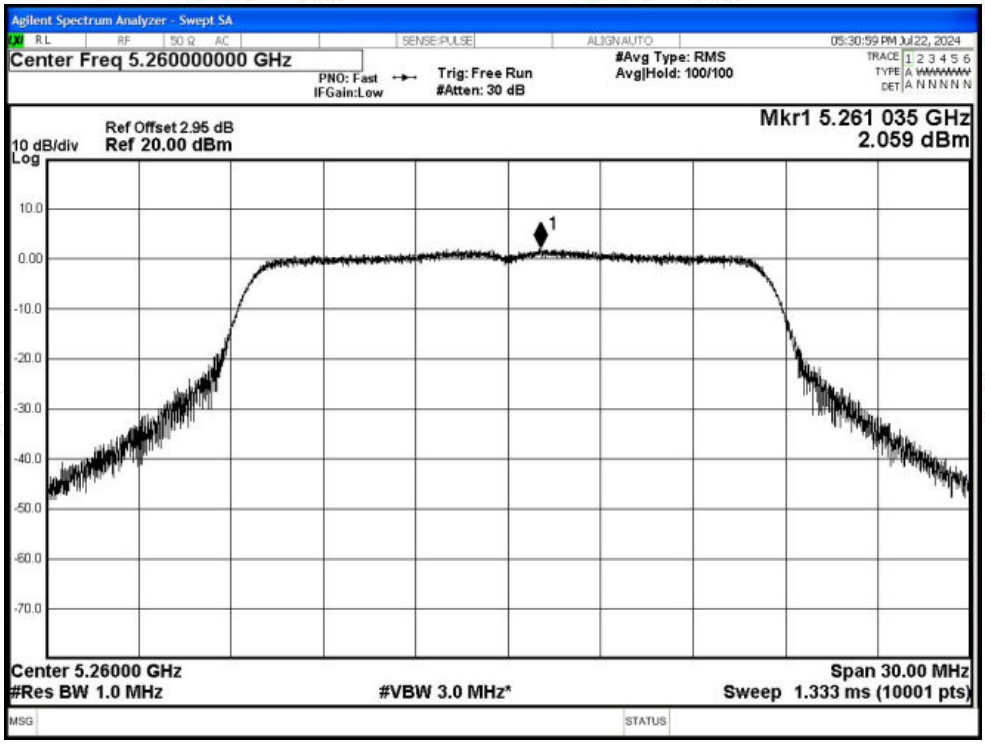
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant2	12.3	0	12.3	24	Pass
NVNT	a	5300	Ant2	12.23	0.09	12.32	24	Pass
NVNT	a	5320	Ant2	12.41	0	12.41	24	Pass
NVNT	n20	5260	Ant2	11.76	0.19	11.95	24	Pass
NVNT	n20	5300	Ant2	11.69	0.19	11.88	24	Pass
NVNT	n20	5320	Ant2	11.22	0.19	11.41	24	Pass
NVNT	n40	5270	Ant2	10.74	0.36	11.1	24	Pass
NVNT	n40	5310	Ant2	10.3	0.36	10.66	24	Pass
NVNT	ac20	5260	Ant2	11.52	0.18	11.7	24	Pass
NVNT	ac20	5300	Ant2	11.11	0.19	11.3	24	Pass
NVNT	ac20	5320	Ant2	11.39	0.19	11.58	24	Pass
NVNT	ac40	5270	Ant2	9.99	0.36	10.35	24	Pass
NVNT	ac40	5310	Ant2	10.45	0.36	10.81	24	Pass
NVNT	ac80	5290	Ant2	9.72	0.45	10.17	24	Pass
NVNT	ax20	5260	Ant2	11.75	0.23	11.98	24	Pass
NVNT	ax20	5300	Ant2	11.17	0.23	11.4	24	Pass
NVNT	ax20	5320	Ant2	11.6	0.23	11.83	24	Pass
NVNT	ax40	5270	Ant2	10.29	0.41	10.7	24	Pass
NVNT	ax40	5310	Ant2	10.68	0.4	11.08	24	Pass
NVNT	ax80	5290	Ant2	9.84	0.56	10.4	24	Pass
NVNT	ac160	5250	Ant2	8.83	0.56	9.39	24	Pass
NVNT	ax160	5250	Ant2	8.83	0.56	9.39	24	Pass

C.3 Maximum Power Spectral Density Level

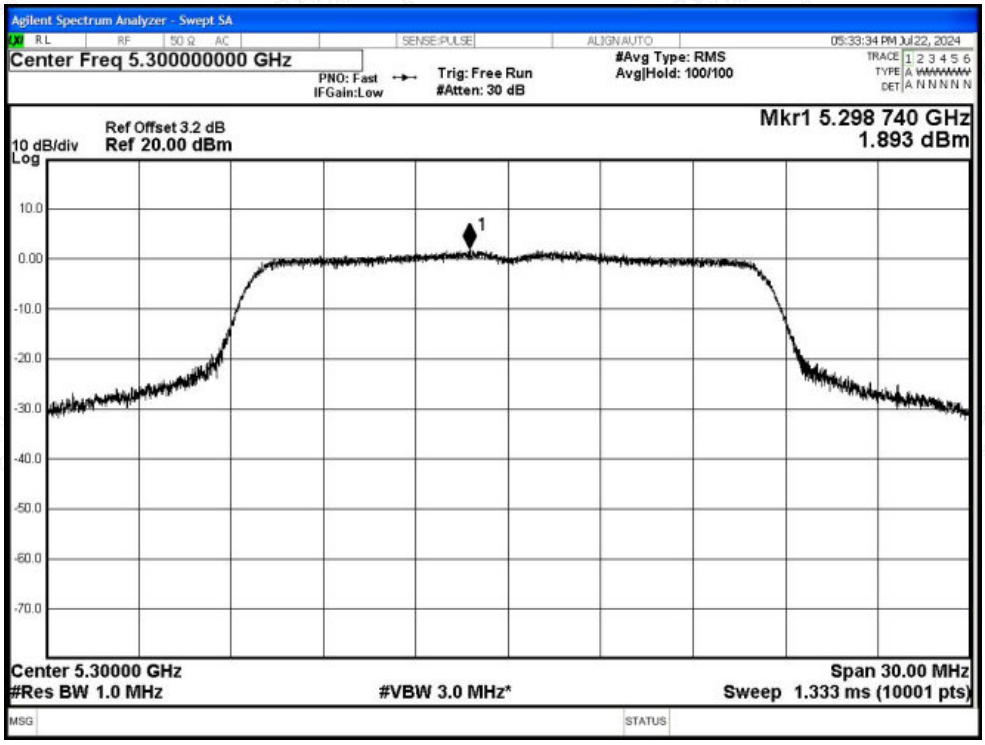
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5260	Ant2	2.06	0	2.06	11	Pass
NVNT	a	5300	Ant2	1.89	0.09	1.98	11	Pass
NVNT	a	5320	Ant2	2.28	0	2.28	11	Pass
NVNT	n20	5260	Ant2	1.35	0.19	1.54	11	Pass
NVNT	n20	5300	Ant2	1.58	0.19	1.77	11	Pass
NVNT	n20	5320	Ant2	1.08	0.19	1.27	11	Pass
NVNT	n40	5270	Ant2	-1.92	0.36	-1.56	11	Pass
NVNT	n40	5310	Ant2	-2.8	0.36	-2.44	11	Pass
NVNT	ac20	5260	Ant2	1.11	0.18	1.29	11	Pass
NVNT	ac20	5300	Ant2	0.73	0.19	0.92	11	Pass
NVNT	ac20	5320	Ant2	1.04	0.19	1.23	11	Pass
NVNT	ac40	5270	Ant2	-2.46	0.36	-2.1	11	Pass
NVNT	ac40	5310	Ant2	-2.51	0.36	-2.15	11	Pass
NVNT	ac80	5290	Ant2	-6.19	0.45	-5.74	11	Pass
NVNT	ax20	5260	Ant2	1.17	0.23	1.4	11	Pass
NVNT	ax20	5300	Ant2	-10.37	0.23	-10.14	11	Pass
NVNT	ax20	5320	Ant2	1.03	0.23	1.26	11	Pass
NVNT	ax40	5270	Ant2	-2.74	0.41	-2.33	11	Pass
NVNT	ax40	5310	Ant2	-2.33	0.4	-1.93	11	Pass
NVNT	ax80	5290	Ant2	-6	0.56	-5.44	11	Pass
NVNT	ac160	5250	Ant2	-9.65	0.56	-9.09	11	Pass
NVNT	ax160	5250	Ant2	-10.57	0.56	-10.01	11	Pass

Test Graphs

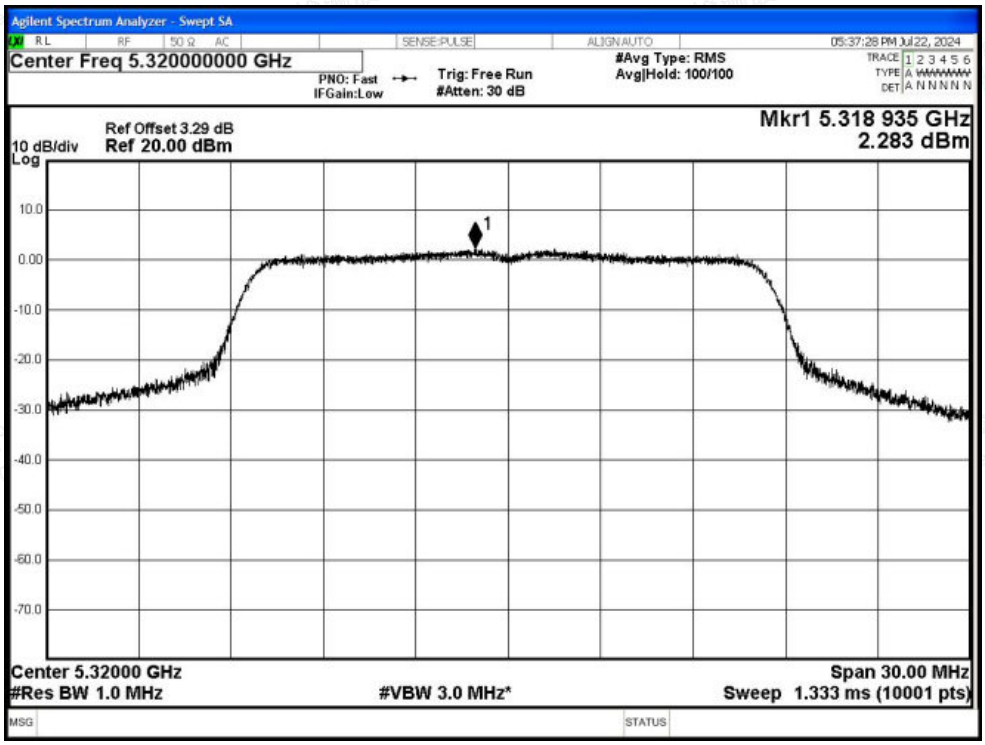
PSD NVNT a 5260MHz Ant2



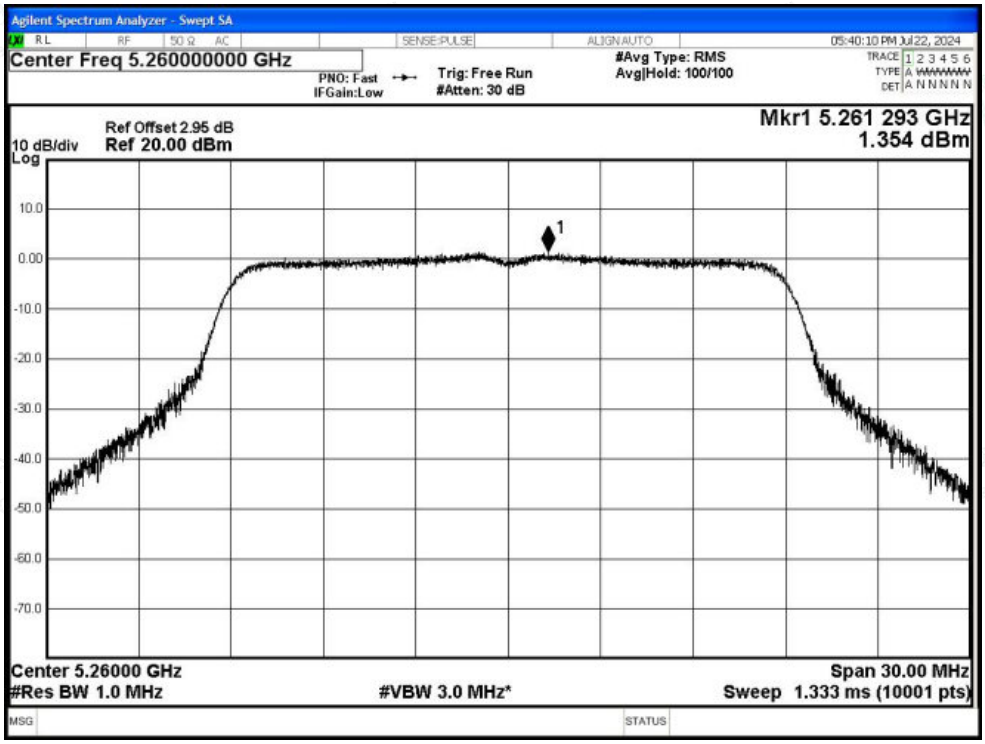
PSD NVNT a 5300MHz Ant2



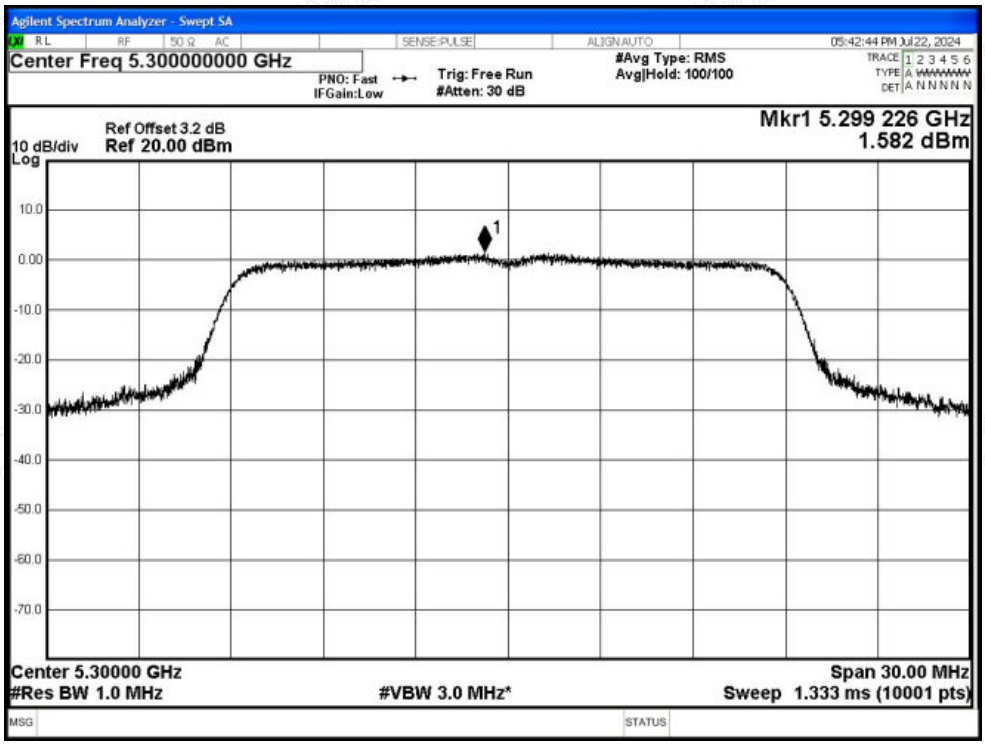
PSD NVNT a 5320MHz Ant2



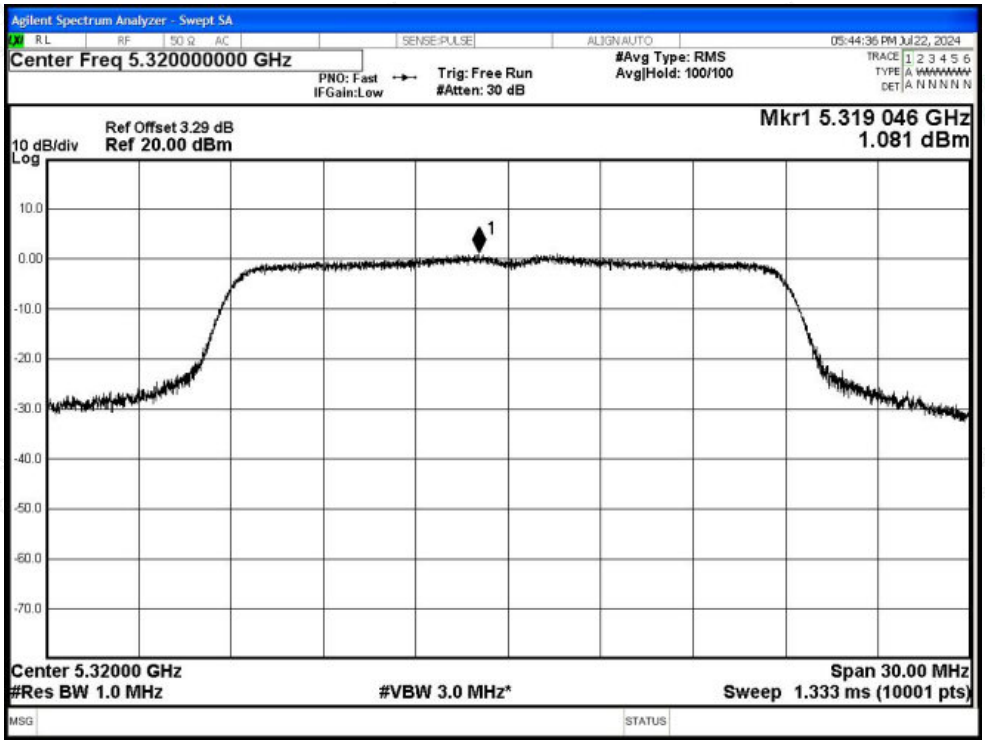
PSD NVNT n20 5260MHz Ant2



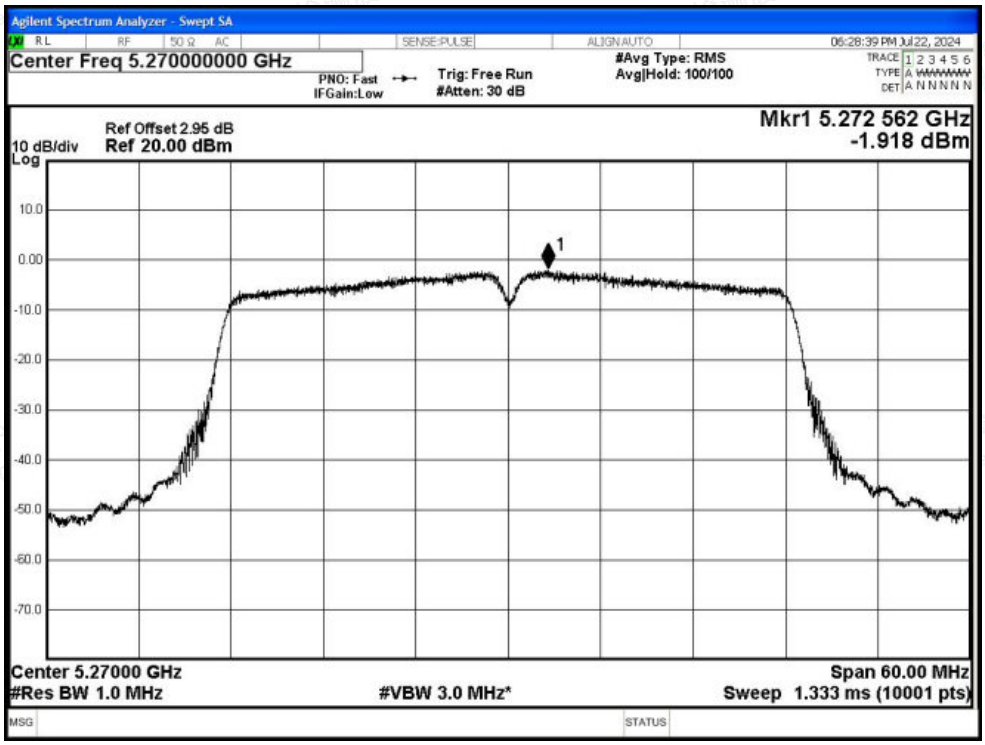
PSD NVNT n20 5300MHz Ant2



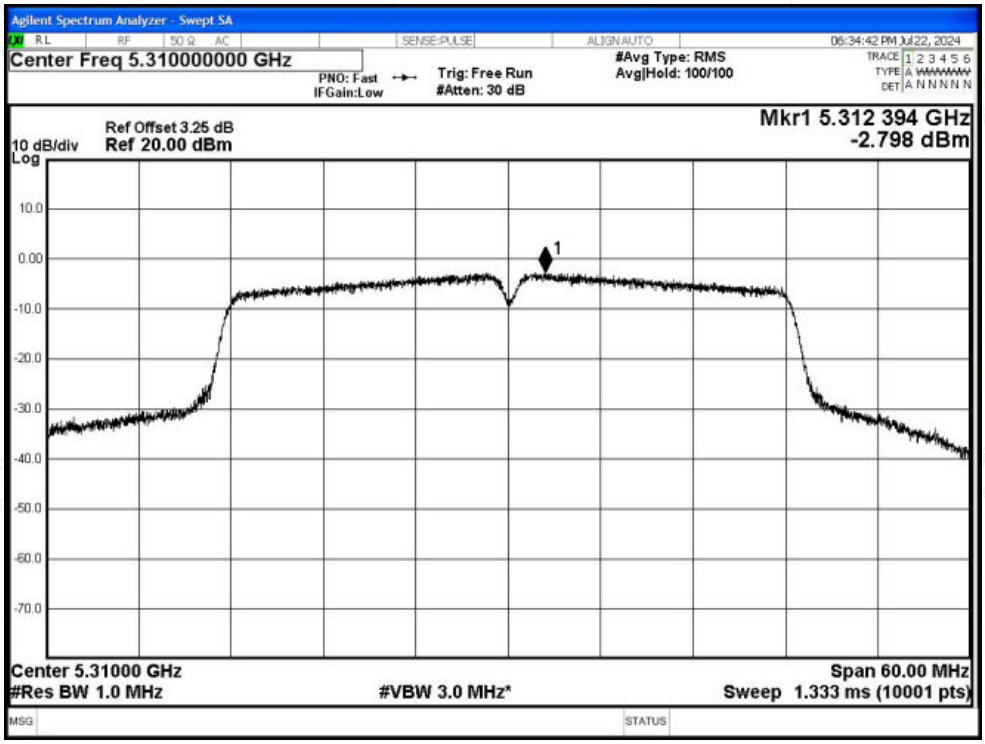
PSD NVNT n20 5320MHz Ant2



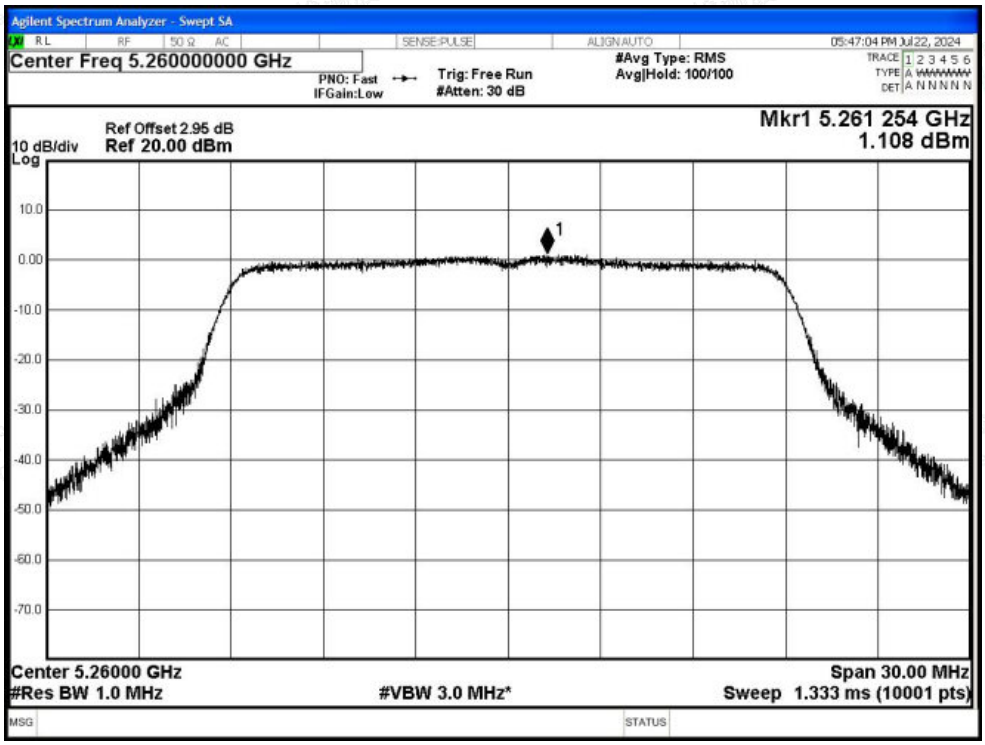
PSD NVNT n40 5270MHz Ant2



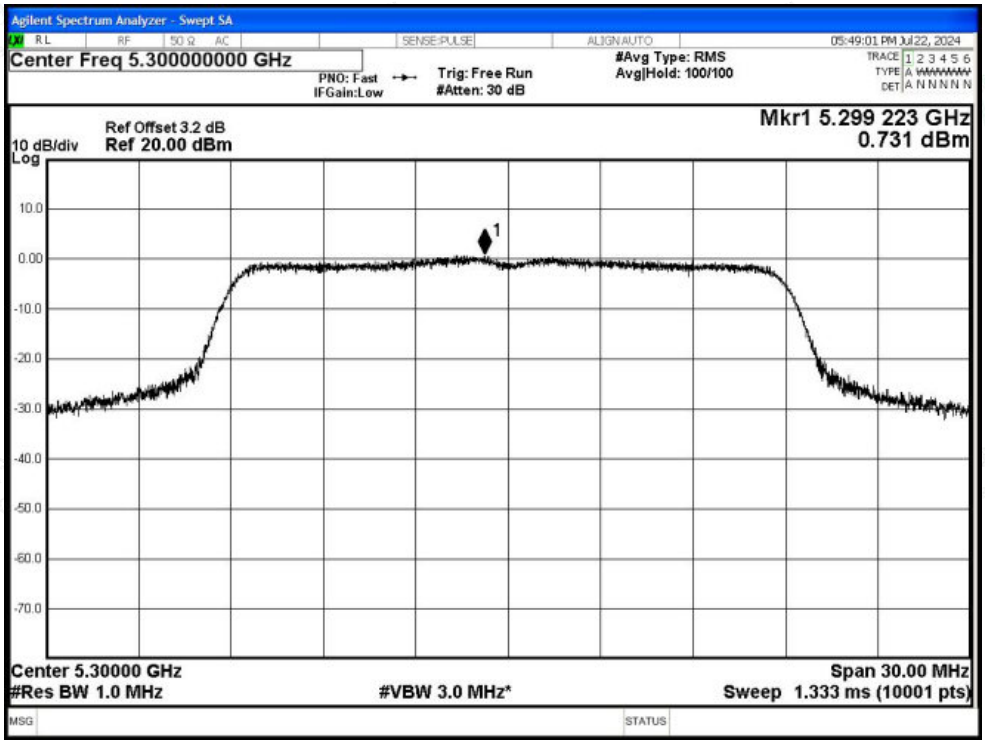
PSD NVNT n40 5310MHz Ant2



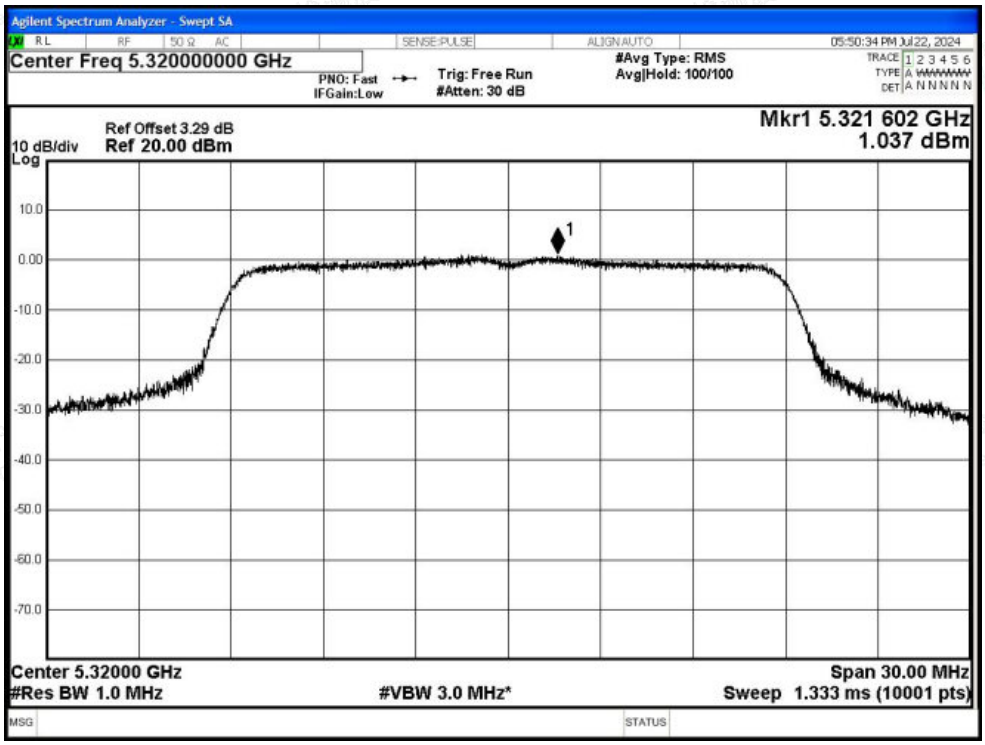
PSD NVNT ac20 5260MHz Ant2



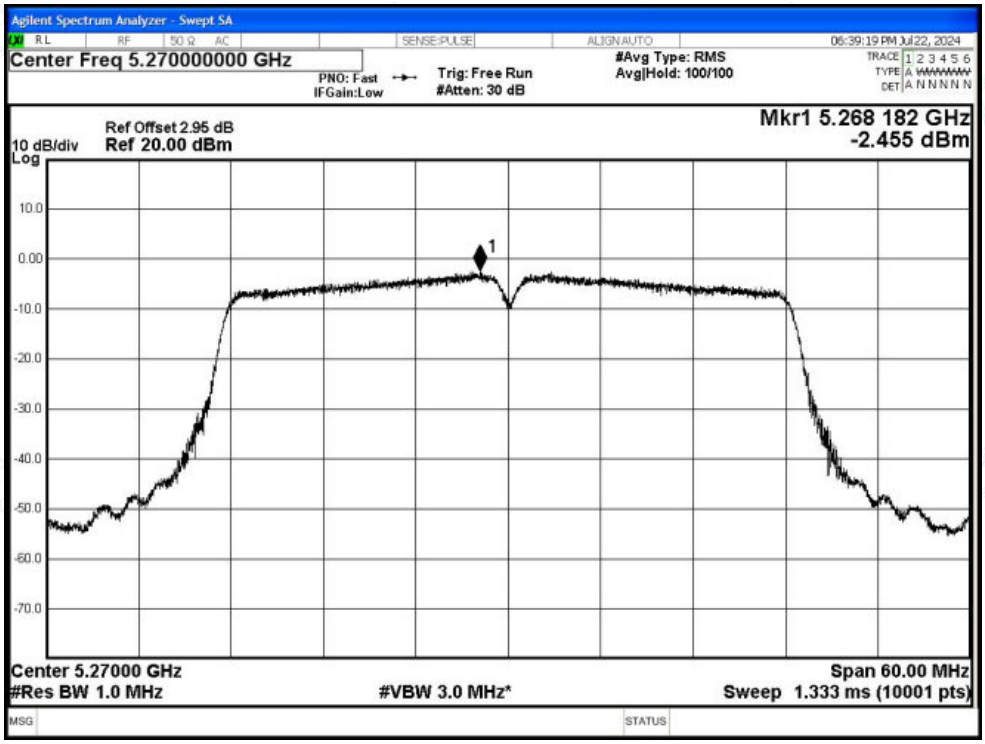
PSD NVNT ac20 5300MHz Ant2



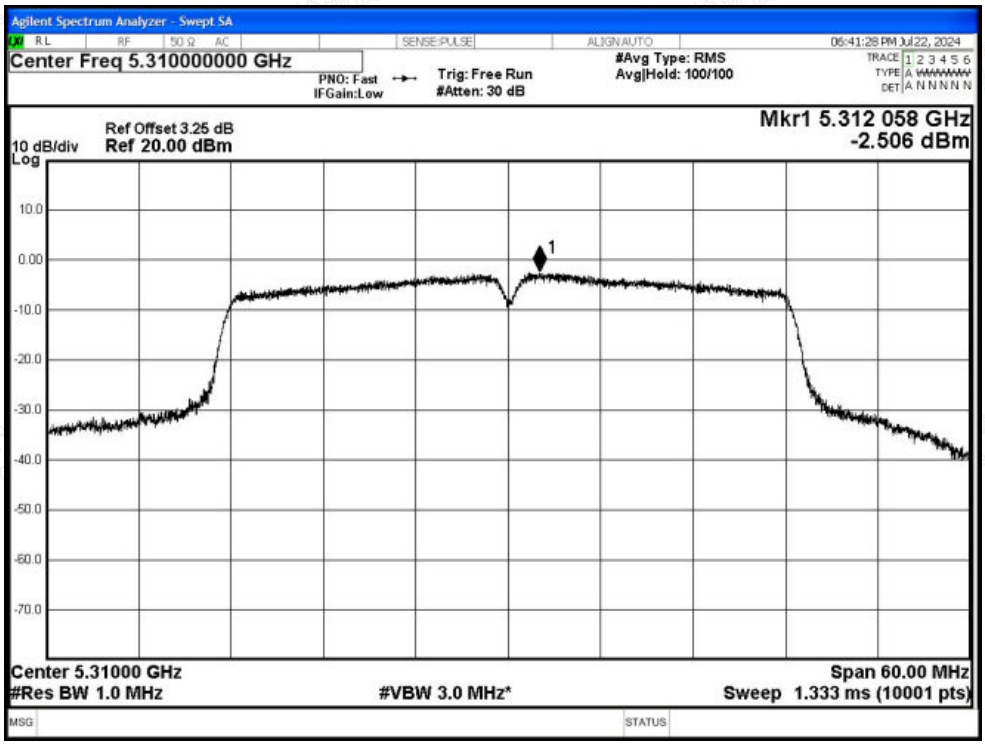
PSD NVNT ac20 5320MHz Ant2



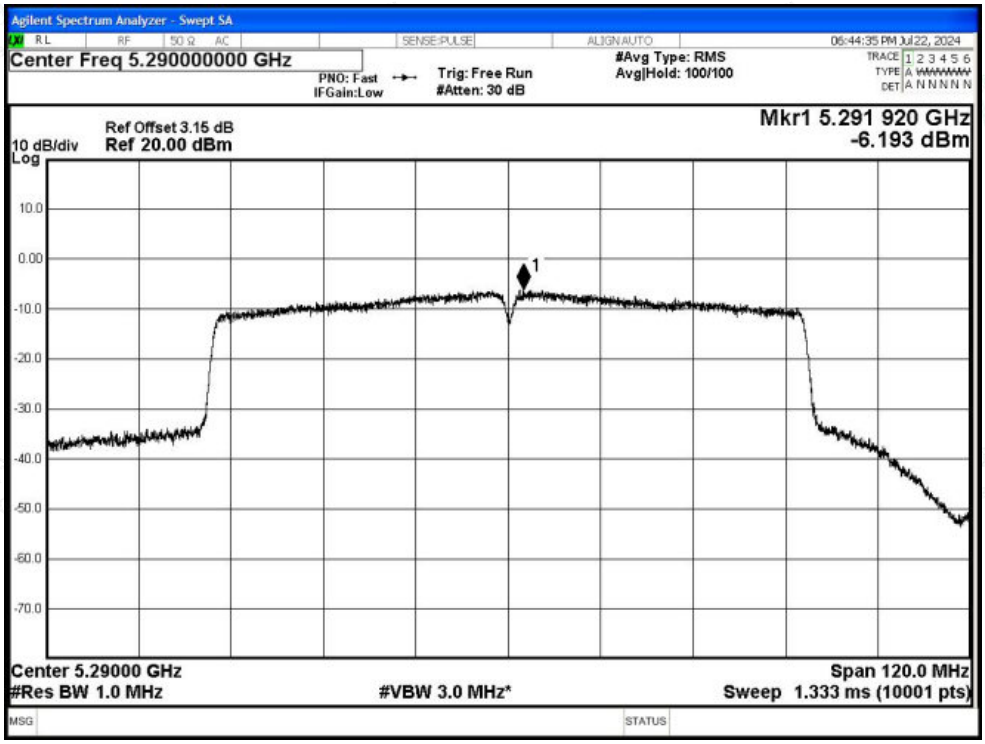
PSD NVNT ac40 5270MHz Ant2



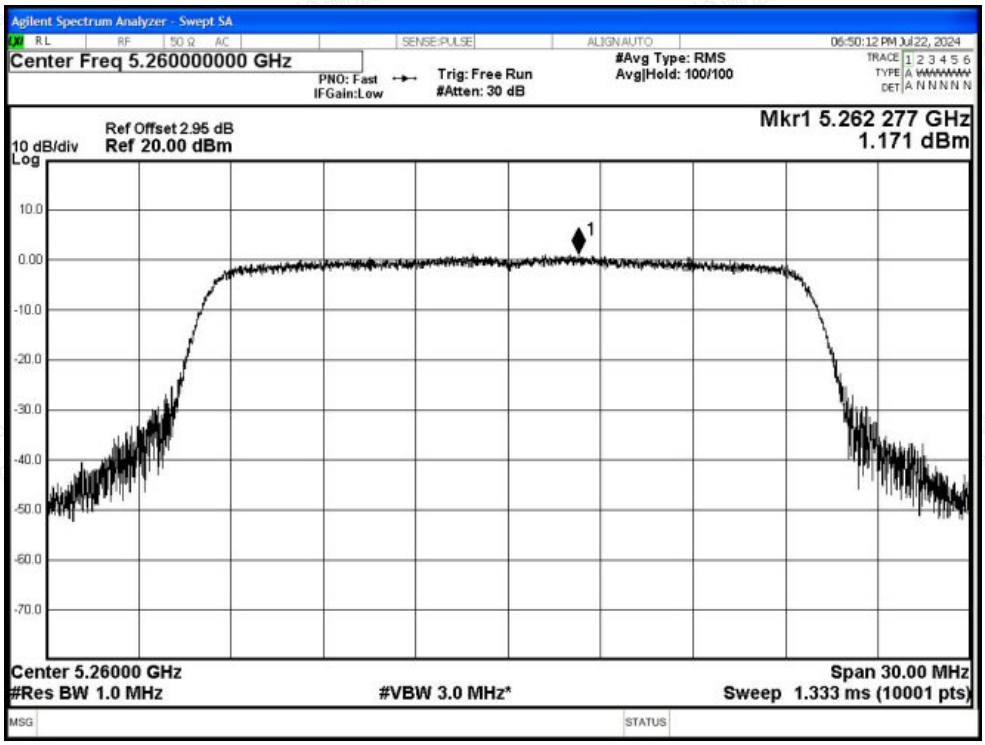
PSD NVNT ac40 5310MHz Ant2



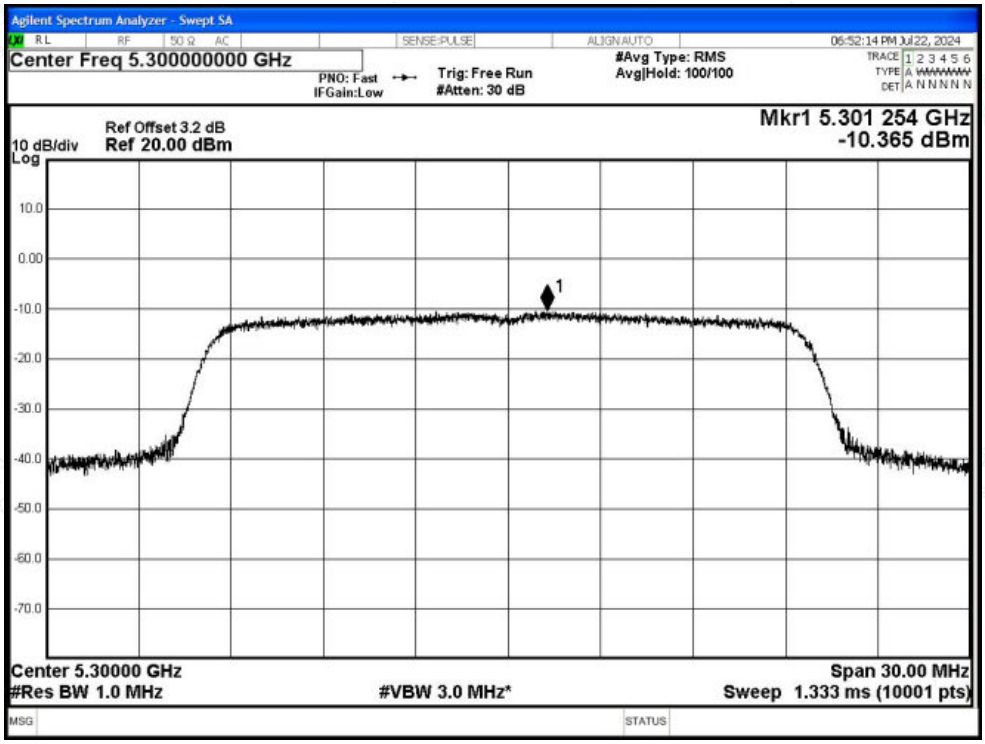
PSD NVNT ac80 5290MHz Ant2



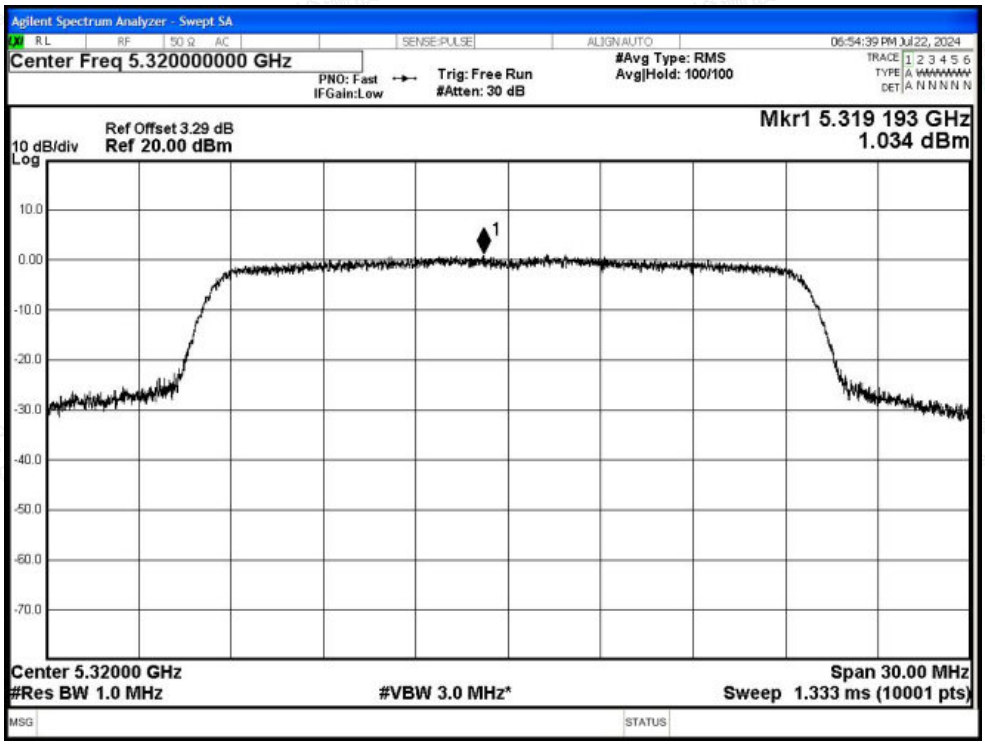
PSD NVNT ax20 5260MHz Ant2



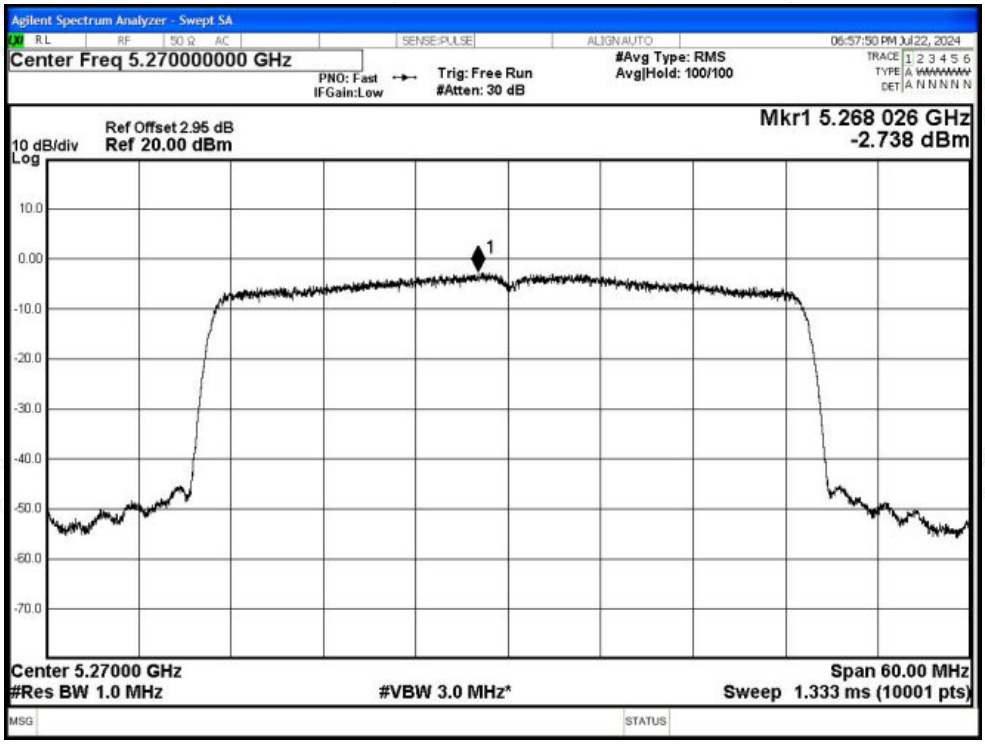
PSD NVNT ax20 5300MHz Ant2



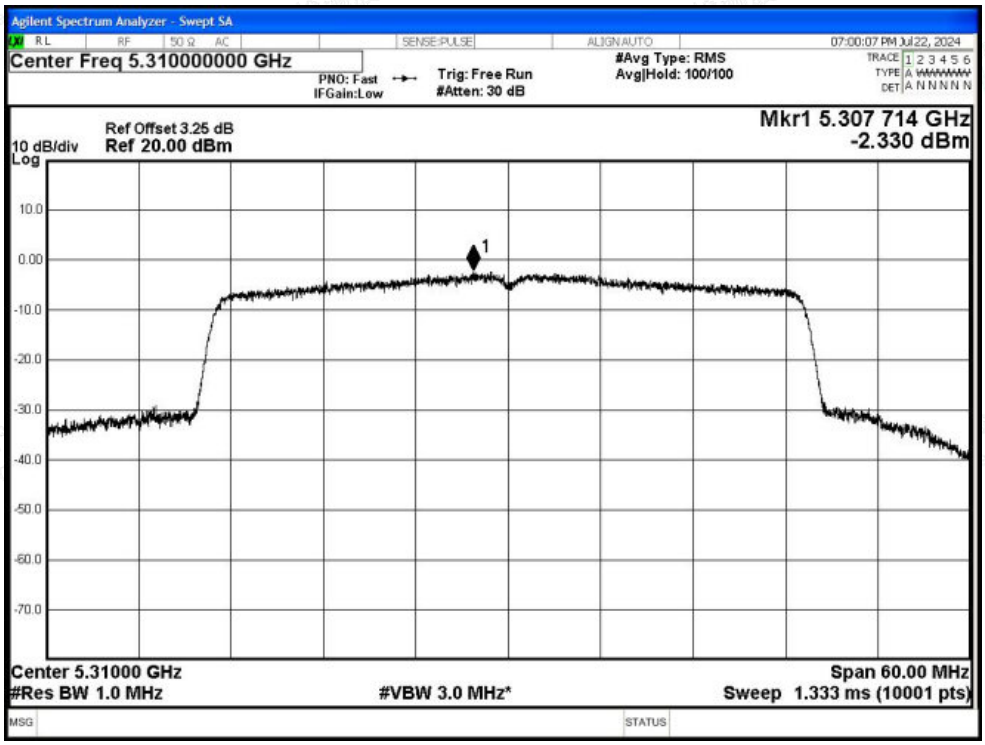
PSD NVNT ax20 5320MHz Ant2



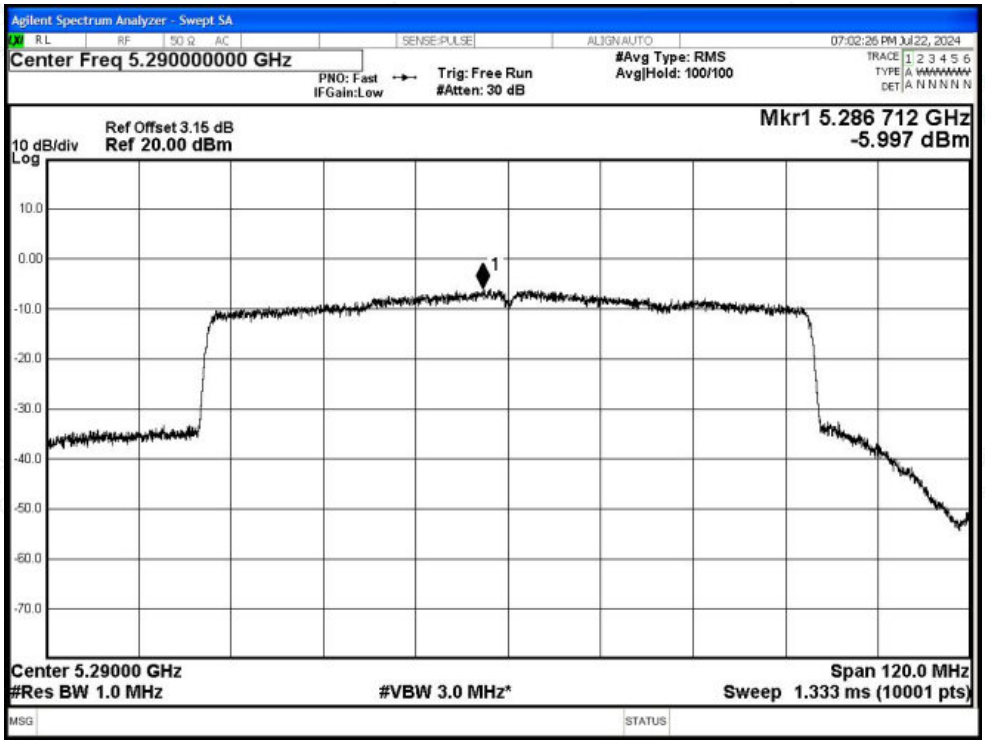
PSD NVNT ax40 5270MHz Ant2



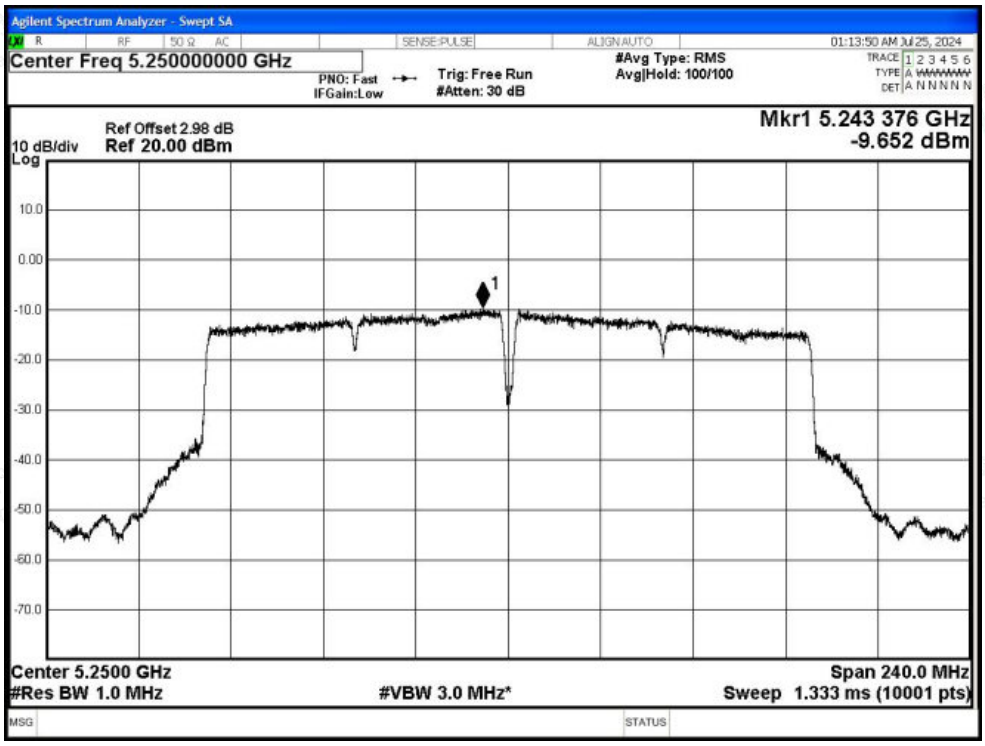
PSD NVNT ax40 5310MHz Ant2



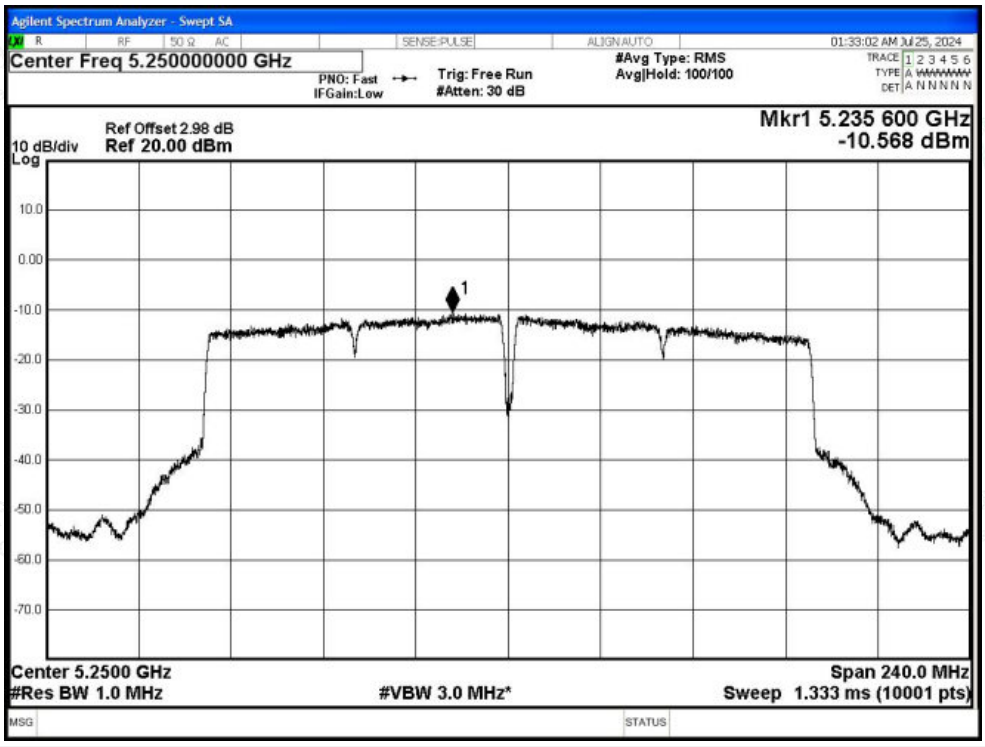
PSD NVNT ax80 5290MHz Ant2



PSD NVNT ac160 5250MHz Ant2



PSD NVNT ax160 5250MHz Ant2



C.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	5260	Ant2	4500	-51.67	2	-	45.56	Peak	68.2	Pass
NVNT	a	5260	Ant2	4500	-59.39	2	0	37.84	Average	54	Pass
NVNT	a	5260	Ant2	5038.98	-46.14	2	-	51.09	Peak	68.2	Pass
NVNT	a	5260	Ant2	5148.18	-55.56	2	0	41.67	Average	54	Pass
NVNT	a	5260	Ant2	5150	-47.91	2	-	49.32	Peak	68.2	Pass
NVNT	a	5260	Ant2	5150	-56.32	2	0	40.91	Average	54	Pass
NVNT	a	5320	Ant2	5350	-47.4	2	-	49.83	Peak	68.2	Pass
NVNT	a	5320	Ant2	5350	-55.81	2	0	41.42	Average	54	Pass
NVNT	a	5320	Ant2	5351.8	-45.19	2	-	52.04	Peak	68.2	Pass
NVNT	a	5320	Ant2	5353	-54.83	2	0	42.4	Average	54	Pass
NVNT	a	5320	Ant2	5460	-47.75	2	-	49.48	Peak	68.2	Pass
NVNT	a	5320	Ant2	5460	-56.84	2	0	40.39	Average	54	Pass
NVNT	n20	5260	Ant2	4500	-49.45	2	-	47.78	Peak	68.2	Pass
NVNT	n20	5260	Ant2	4500	-59.35	2	0.19	38.07	Average	54	Pass
NVNT	n20	5260	Ant2	5124.78	-45.84	2	-	51.39	Peak	68.2	Pass
NVNT	n20	5260	Ant2	5099.82	-55.31	2	0.19	42.11	Average	54	Pass
NVNT	n20	5260	Ant2	5150	-47.64	2	-	49.59	Peak	68.2	Pass
NVNT	n20	5260	Ant2	5150	-56.15	2	0.19	41.27	Average	54	Pass
NVNT	n20	5320	Ant2	5350	-47.2	2	-	50.03	Peak	68.2	Pass
NVNT	n20	5320	Ant2	5350	-55.24	2	0.19	42.18	Average	54	Pass
NVNT	n20	5320	Ant2	5373.2	-45.3	2	-	51.93	Peak	68.2	Pass
NVNT	n20	5320	Ant2	5355.8	-54.86	2	0.19	42.56	Average	54	Pass
NVNT	n20	5320	Ant2	5460	-49.76	2	-	47.47	Peak	68.2	Pass
NVNT	n20	5320	Ant2	5460	-56.7	2	0.19	40.72	Average	54	Pass
NVNT	n40	5270	Ant2	4500	-50.68	2	-	46.55	Peak	68.2	Pass
NVNT	n40	5270	Ant2	4500	-59.71	2	0.36	37.88	Average	54	Pass
NVNT	n40	5270	Ant2	5139.9	-45.23	2	-	52	Peak	68.2	Pass
NVNT	n40	5270	Ant2	4874.22	-55.42	2	0.36	42.17	Average	54	Pass
NVNT	n40	5270	Ant2	5150	-46.6	2	-	50.63	Peak	68.2	Pass
NVNT	n40	5270	Ant2	5150	-56.5	2	0.36	41.09	Average	54	Pass
NVNT	n40	5310	Ant2	5350	-46.65	2	-	50.58	Peak	68.2	Pass
NVNT	n40	5310	Ant2	5350	-55.09	2	0.36	42.5	Average	54	Pass
NVNT	n40	5310	Ant2	5389.4	-44.94	2	-	52.29	Peak	68.2	Pass
NVNT	n40	5310	Ant2	5351.4	-54.67	2	0.36	42.92	Average	54	Pass
NVNT	n40	5310	Ant2	5460	-48.65	2	-	48.58	Peak	68.2	Pass
NVNT	n40	5310	Ant2	5460	-56.98	2	0.36	40.61	Average	54	Pass
NVNT	ac20	5260	Ant2	4500	-50.55	2	-	46.68	Peak	68.2	Pass

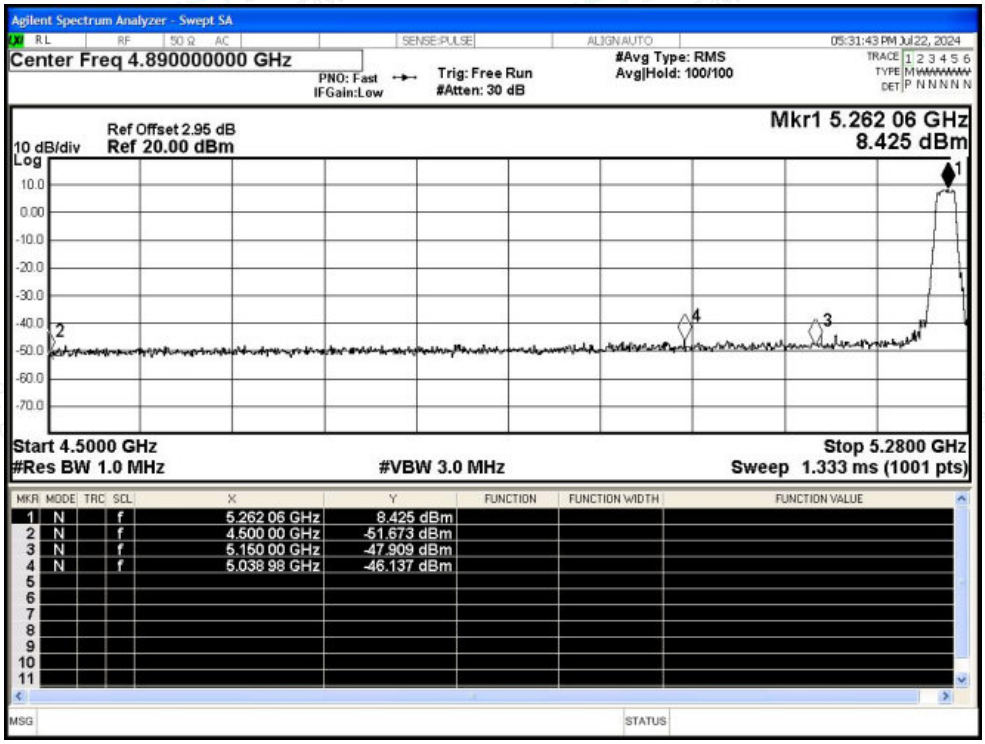
NVNT	ac20	5260	Ant2	4500	-59.46	2	0.18	37.95	Average	54	Pass
NVNT	ac20	5260	Ant2	5009.34	-46.28	2	-	50.95	Peak	68.2	Pass
NVNT	ac20	5260	Ant2	4873.62	-55.42	2	0.18	41.99	Average	54	Pass
NVNT	ac20	5260	Ant2	5150	-48.11	2	-	49.12	Peak	68.2	Pass
NVNT	ac20	5260	Ant2	5150	-56.41	2	0.18	41	Average	54	Pass
NVNT	ac20	5320	Ant2	5350	-47.28	2	-	49.95	Peak	68.2	Pass
NVNT	ac20	5320	Ant2	5350	-55.76	2	0.19	41.66	Average	54	Pass
NVNT	ac20	5320	Ant2	5386.4	-45.5	2	-	51.73	Peak	68.2	Pass
NVNT	ac20	5320	Ant2	5350.6	-54.79	2	0.19	42.63	Average	54	Pass
NVNT	ac20	5320	Ant2	5460	-47.06	2	-	50.17	Peak	68.2	Pass
NVNT	ac20	5320	Ant2	5460	-56.86	2	0.19	40.56	Average	54	Pass
NVNT	ac40	5270	Ant2	4500	-49.31	2	-	47.92	Peak	68.2	Pass
NVNT	ac40	5270	Ant2	4500	-59.15	2	0.36	38.44	Average	54	Pass
NVNT	ac40	5270	Ant2	5146.38	-45.31	2	-	51.92	Peak	68.2	Pass
NVNT	ac40	5270	Ant2	4874.22	-55.32	2	0.36	42.27	Average	54	Pass
NVNT	ac40	5270	Ant2	5150	-47.5	2	-	49.73	Peak	68.2	Pass
NVNT	ac40	5270	Ant2	5150	-56.9	2	0.36	40.69	Average	54	Pass
NVNT	ac40	5310	Ant2	5350	-49.65	2	-	47.58	Peak	68.2	Pass
NVNT	ac40	5310	Ant2	5350	-57.92	2	0.36	39.67	Average	54	Pass
NVNT	ac40	5310	Ant2	5453.8	-46.81	2	-	50.42	Peak	68.2	Pass
NVNT	ac40	5310	Ant2	5453	-56.81	2	0.36	40.78	Average	54	Pass
NVNT	ac40	5310	Ant2	5460	-48.79	2	-	48.44	Peak	68.2	Pass
NVNT	ac40	5310	Ant2	5460	-57.84	2	0.36	39.75	Average	54	Pass
NVNT	ac80	5290	Ant2	4500	-50.49	2	-	46.74	Peak	68.2	Pass
NVNT	ac80	5290	Ant2	4500	-59.37	2	0.45	38.31	Average	54	Pass
NVNT	ac80	5290	Ant2	5079.42	-45.52	2	-	51.71	Peak	68.2	Pass
NVNT	ac80	5290	Ant2	4874.1	-53.33	2	0.45	44.35	Average	54	Pass
NVNT	ac80	5290	Ant2	5150	-48.81	2	-	48.42	Peak	68.2	Pass
NVNT	ac80	5290	Ant2	5150	-56.2	2	0.45	41.48	Average	54	Pass
NVNT	ac80	5290	Ant2	5350	-41.95	2	-	55.28	Peak	68.2	Pass
NVNT	ac80	5290	Ant2	5350	-51.38	2	0.45	46.3	Average	54	Pass
NVNT	ac80	5290	Ant2	5350.5	-51.16	2	0.45	46.52	Average	54	Pass
NVNT	ac80	5290	Ant2	5460	-48.91	2	-	48.32	Peak	68.2	Pass
NVNT	ac80	5290	Ant2	5460	-57.09	2	0.45	40.59	Average	54	Pass
NVNT	ax20	5260	Ant2	4500	-51.23	2	-	46	Peak	68.2	Pass
NVNT	ax20	5260	Ant2	4500	-59.02	2	0.23	38.44	Average	54	Pass
NVNT	ax20	5260	Ant2	5042.88	-45.47	2	-	51.76	Peak	68.2	Pass
NVNT	ax20	5260	Ant2	4873.62	-55.42	2	0.23	42.04	Average	54	Pass
NVNT	ax20	5260	Ant2	5150	-49.1	2	-	48.13	Peak	68.2	Pass
NVNT	ax20	5260	Ant2	5150	-56.69	2	0.23	40.77	Average	54	Pass
NVNT	ax20	5320	Ant2	5350	-48.41	2	-	48.82	Peak	68.2	Pass
NVNT	ax20	5320	Ant2	5350	-55.69	2	0.23	41.77	Average	54	Pass

NVNT	ax20	5320	Ant2	5358.2	-44.77	2	-	52.46	Peak	68.2	Pass
NVNT	ax20	5320	Ant2	5350.4	-54.69	2	0.23	42.77	Average	54	Pass
NVNT	ax20	5320	Ant2	5460	-49.53	2	-	47.7	Peak	68.2	Pass
NVNT	ax20	5320	Ant2	5460	-56.37	2	0.23	41.09	Average	54	Pass
NVNT	ax40	5270	Ant2	4500	-50.87	2	-	46.36	Peak	68.2	Pass
NVNT	ax40	5270	Ant2	4500	-59.13	2	0.41	38.51	Average	54	Pass
NVNT	ax40	5270	Ant2	5143.95	-46.4	2	-	50.83	Peak	68.2	Pass
NVNT	ax40	5270	Ant2	4874.22	-55.46	2	0.41	42.18	Average	54	Pass
NVNT	ax40	5270	Ant2	5150	-48.77	2	-	48.46	Peak	68.2	Pass
NVNT	ax40	5270	Ant2	5150	-56.6	2	0.41	41.04	Average	54	Pass
NVNT	ax40	5310	Ant2	5350	-45.98	2	-	51.25	Peak	68.2	Pass
NVNT	ax40	5310	Ant2	5350	-55.34	2	0.4	42.29	Average	54	Pass
NVNT	ax40	5310	Ant2	5449.4	-45.09	2	-	52.14	Peak	68.2	Pass
NVNT	ax40	5310	Ant2	5350.6	-54.75	2	0.4	42.88	Average	54	Pass
NVNT	ax40	5310	Ant2	5460	-48.82	2	-	48.41	Peak	68.2	Pass
NVNT	ax40	5310	Ant2	5460	-57.19	2	0.4	40.44	Average	54	Pass
NVNT	ax80	5290	Ant2	5350	-43.88	2	-	53.35	Peak	68.2	Pass
NVNT	ax80	5290	Ant2	5350	-52.28	2	0.56	45.51	Average	54	Pass
NVNT	ax80	5290	Ant2	5350.75	-42.98	2	-	54.25	Peak	68.2	Pass
NVNT	ax80	5290	Ant2	5351	-51.79	2	0.56	46	Average	54	Pass
NVNT	ax80	5290	Ant2	5460	-49.54	2	-	47.69	Peak	68.2	Pass
NVNT	ax80	5290	Ant2	5460	-57.19	2	0.56	40.6	Average	54	Pass
NVNT	ax80	5290	Ant2	4500	-48.84	2	-	48.39	Peak	68.2	Pass
NVNT	ax80	5290	Ant2	4500	-59.5	2	0.56	38.29	Average	54	Pass
NVNT	ax80	5290	Ant2	5122.05	-45.91	2	-	51.32	Peak	68.2	Pass
NVNT	ax80	5290	Ant2	4874.1	-53.22	2	0.56	44.57	Average	54	Pass
NVNT	ax80	5290	Ant2	5150	-48.12	2	-	49.11	Peak	68.2	Pass
NVNT	ax80	5290	Ant2	5150	-55.91	2	0.56	41.88	Average	54	Pass
NVNT	ac160	5250	Ant2	5350	-46.43	2	-	50.8	Peak	68.2	Pass
NVNT	ac160	5250	Ant2	5350	-55.38	2	0.56	42.41	Average	54	Pass
NVNT	ac160	5250	Ant2	5355.29	-44.28	2	-	52.95	Peak	68.2	Pass
NVNT	ac160	5250	Ant2	5354.92	-53.18	2	0.56	44.61	Average	54	Pass
NVNT	ac160	5250	Ant2	5460	-53.78	2	-	43.45	Peak	68.2	Pass
NVNT	ac160	5250	Ant2	5460	-61.54	2	0.56	36.25	Average	54	Pass
NVNT	ac160	5250	Ant2	4500	-61.31	2	-	35.92	Peak	68.2	Pass
NVNT	ac160	5250	Ant2	4500	-69.17	2	0.56	28.62	Average	54	Pass
NVNT	ac160	5250	Ant2	5097.87	-43.68	2	-	53.55	Peak	68.2	Pass
NVNT	ac160	5250	Ant2	5144.28	-52.38	2	0.56	45.41	Average	54	Pass
NVNT	ac160	5250	Ant2	5150	-48.1	2	-	49.13	Peak	68.2	Pass
NVNT	ac160	5250	Ant2	5150	-56.62	2	0.56	41.17	Average	54	Pass
NVNT	ax160	5250	Ant2	5350	-47.59	2	-	49.64	Peak	68.2	Pass
NVNT	ax160	5250	Ant2	5350	-56.23	2	0.56	41.56	Average	54	Pass

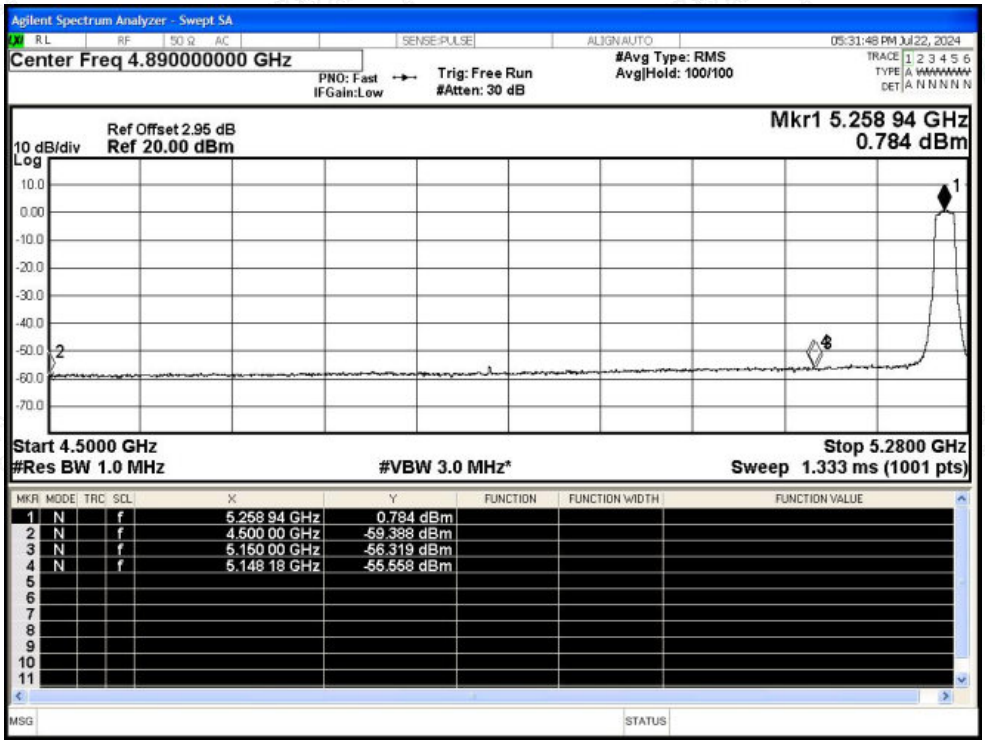
NVNT	ax160	5250	Ant2	5356.77	-45.85	2	-	51.38	Peak	68.2	Pass
NVNT	ax160	5250	Ant2	5356.4	-54.17	2	0.56	43.62	Average	54	Pass
NVNT	ax160	5250	Ant2	5460	-52.3	2	-	44.93	Peak	68.2	Pass
NVNT	ax160	5250	Ant2	5460	-62.22	2	0.56	35.57	Average	54	Pass
NVNT	ax160	5250	Ant2	4500	-59.13	2	-	38.1	Peak	68.2	Pass
NVNT	ax160	5250	Ant2	4500	-68.81	2	0.56	28.98	Average	54	Pass
NVNT	ax160	5250	Ant2	5146.1	-42.16	2	-	55.07	Peak	68.2	Pass
NVNT	ax160	5250	Ant2	5144.28	-52.84	2	0.56	44.95	Average	54	Pass
NVNT	ax160	5250	Ant2	5150	-49	2	-	48.23	Peak	68.2	Pass
NVNT	ax160	5250	Ant2	5150	-56.64	2	0.56	41.15	Average	54	Pass

Test Graphs

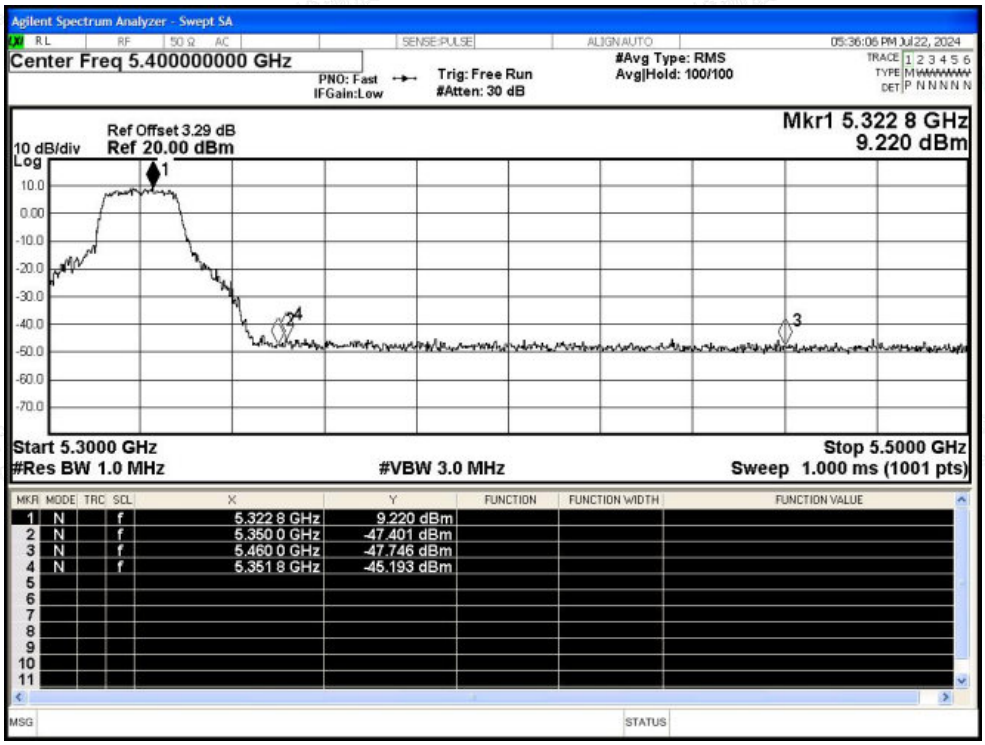
Restrict Band NVNT a 5260MHz Ant2 Peak



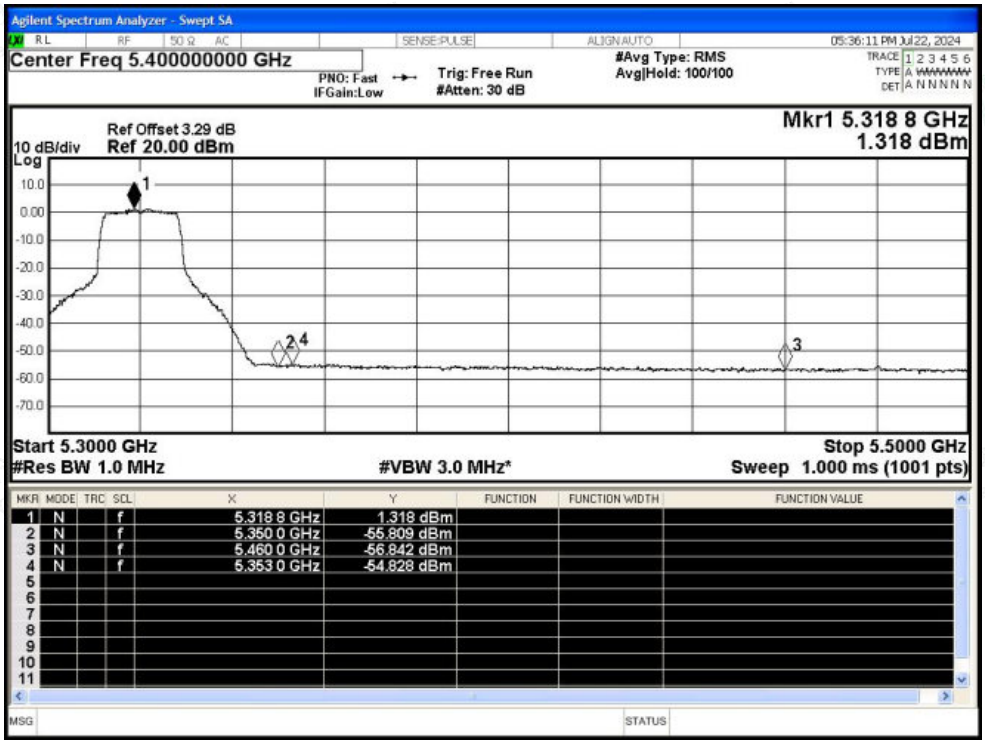
Restrict Band NVNT a 5260MHz Ant2 Average



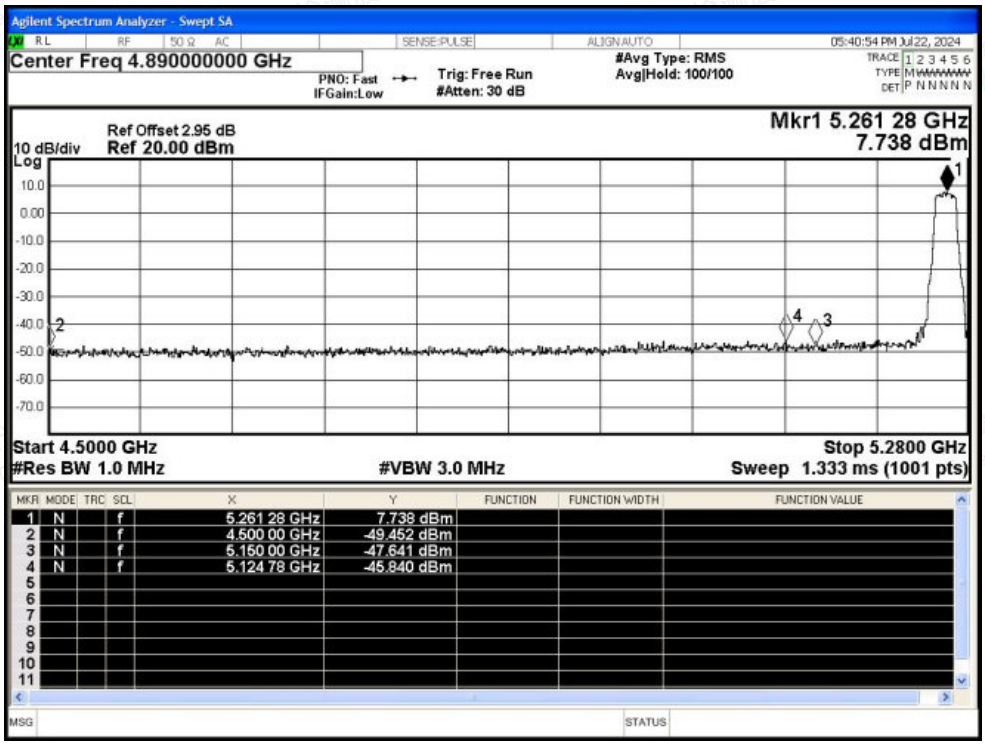
Restrict Band NVNT a 5320MHz Ant2 Peak



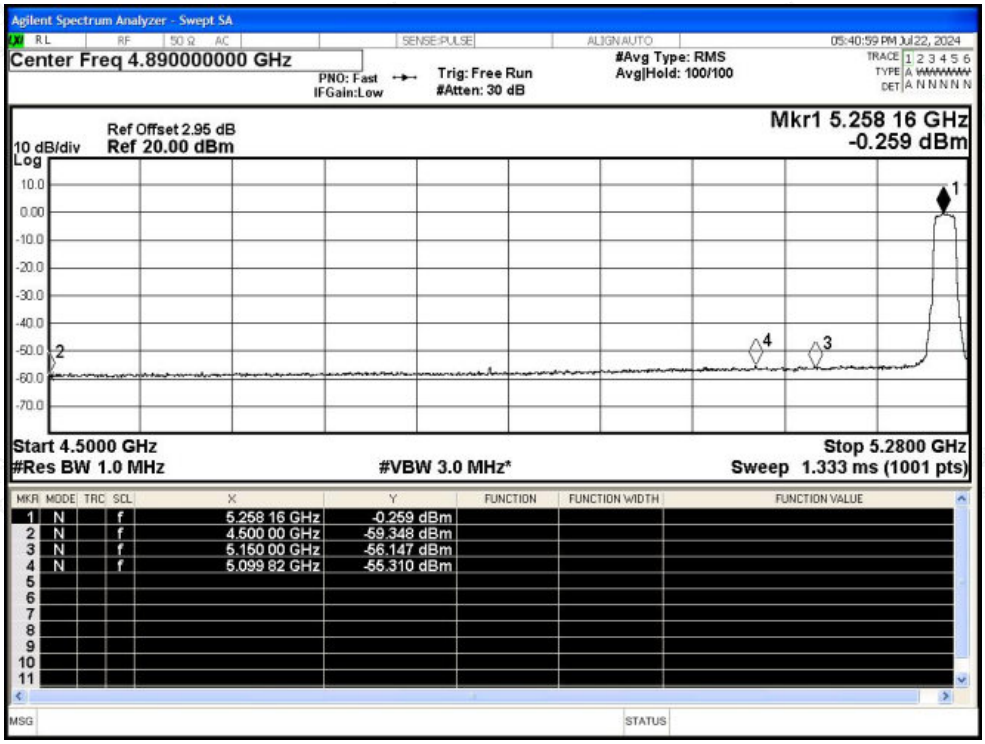
Restrict Band NVNT a 5320MHz Ant2 Average



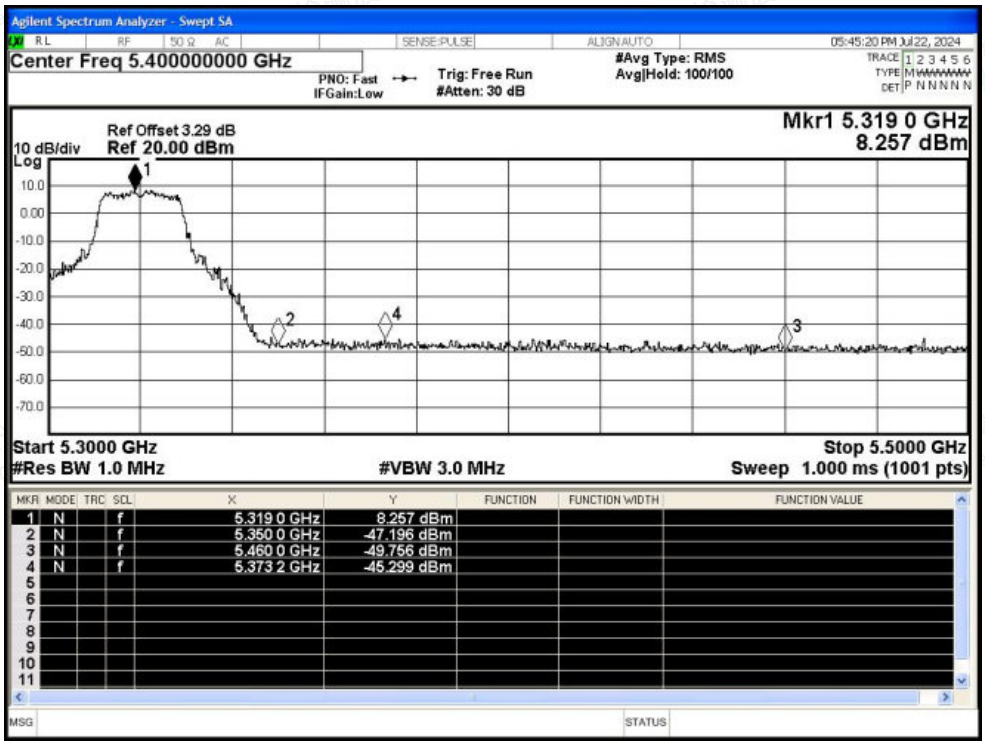
Restrict Band NVNT n20 5260MHz Ant2 Peak



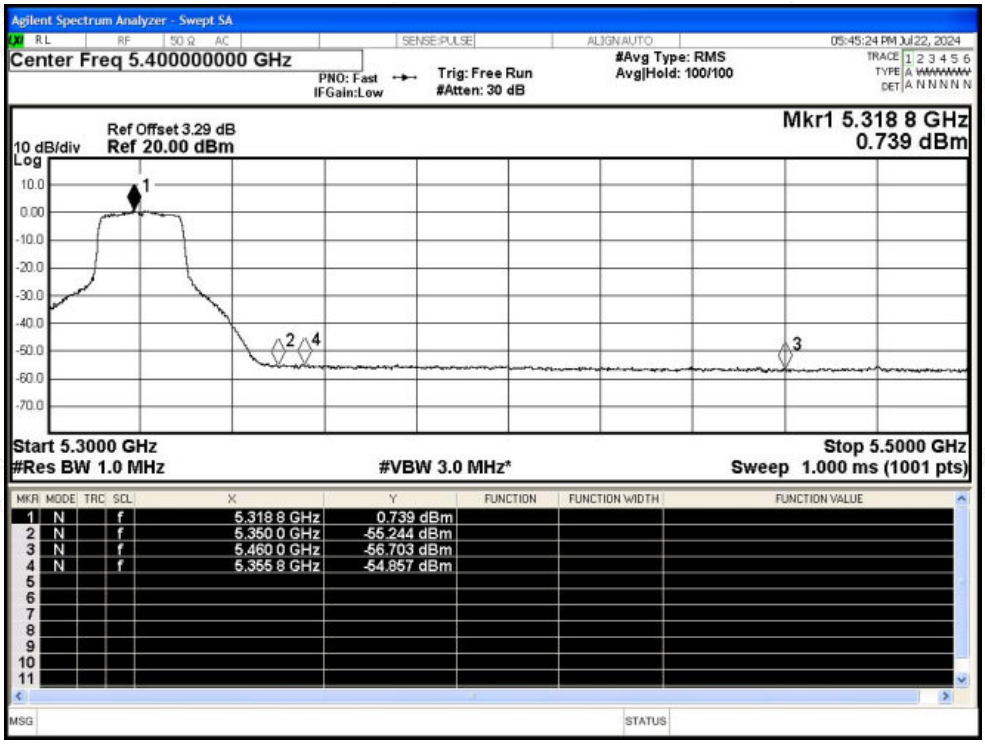
Restrict Band NVNT n20 5260MHz Ant2 Average



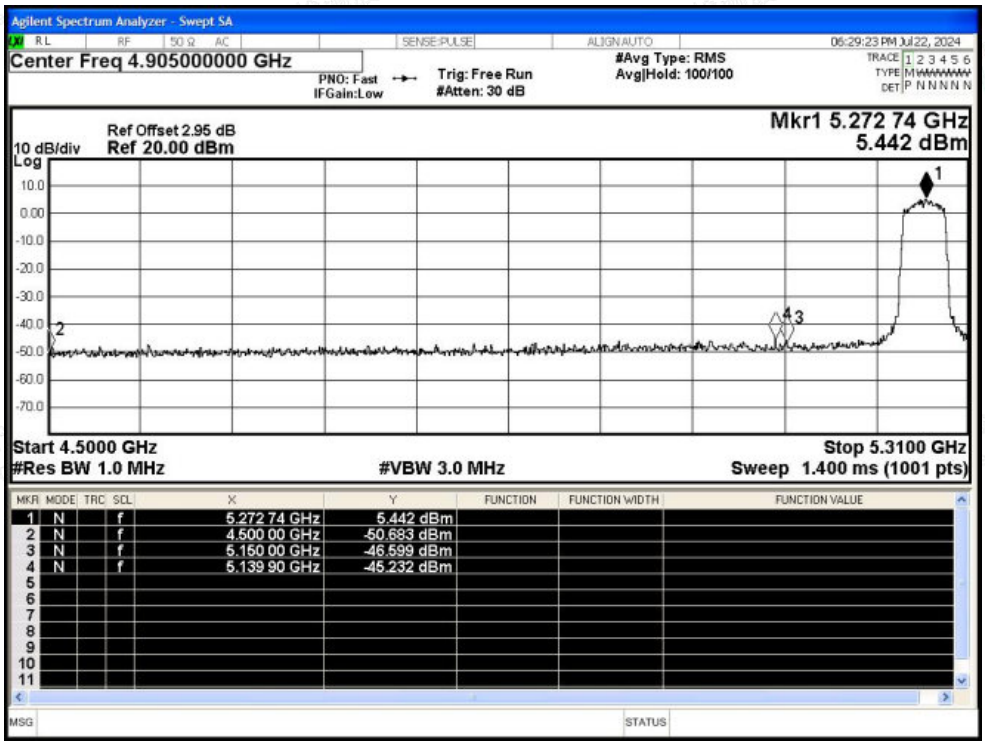
Restrict Band NVNT n20 5320MHz Ant2 Peak



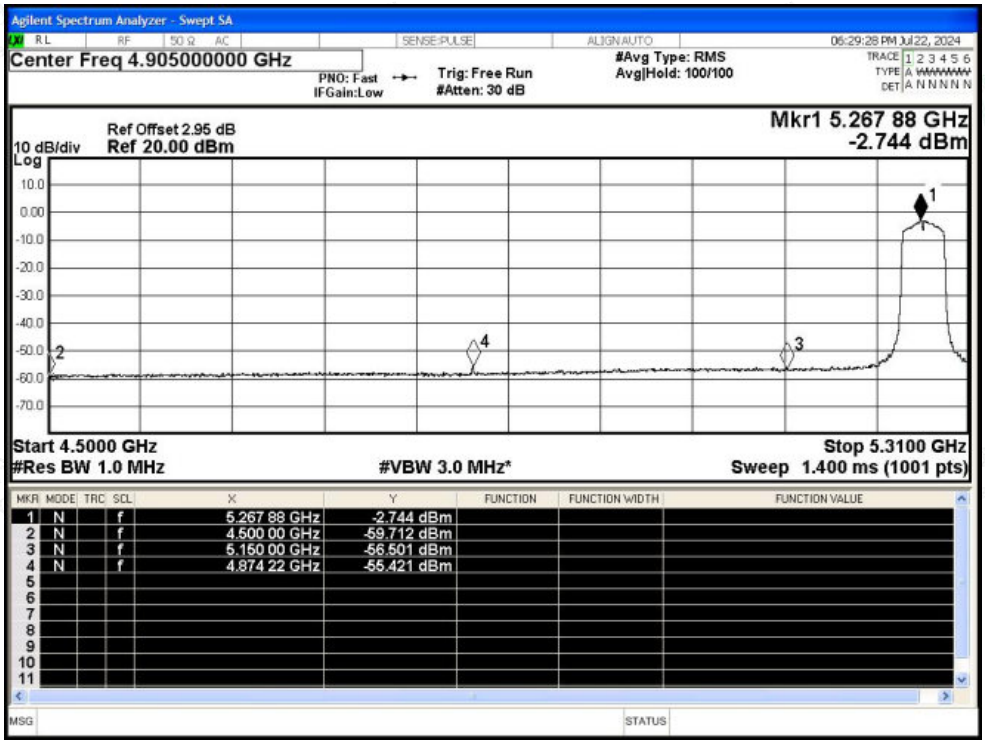
Restrict Band NVNT n20 5320MHz Ant2 Average



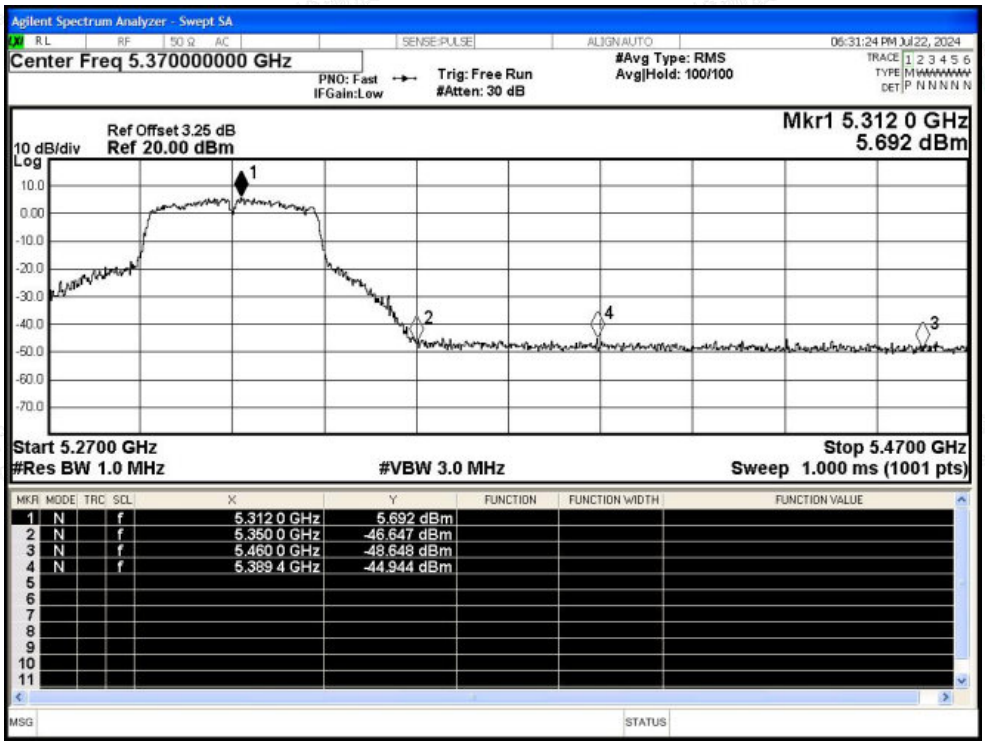
Restrict Band NVNT n40 5270MHz Ant2 Peak



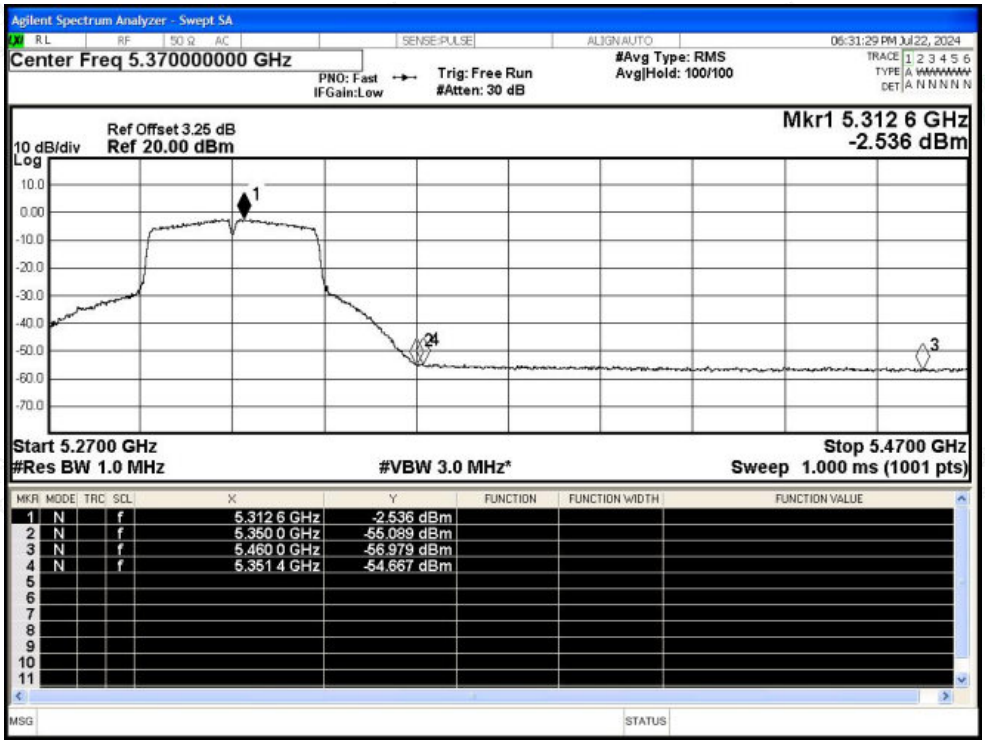
Restrict Band NVNT n40 5270MHz Ant2 Average



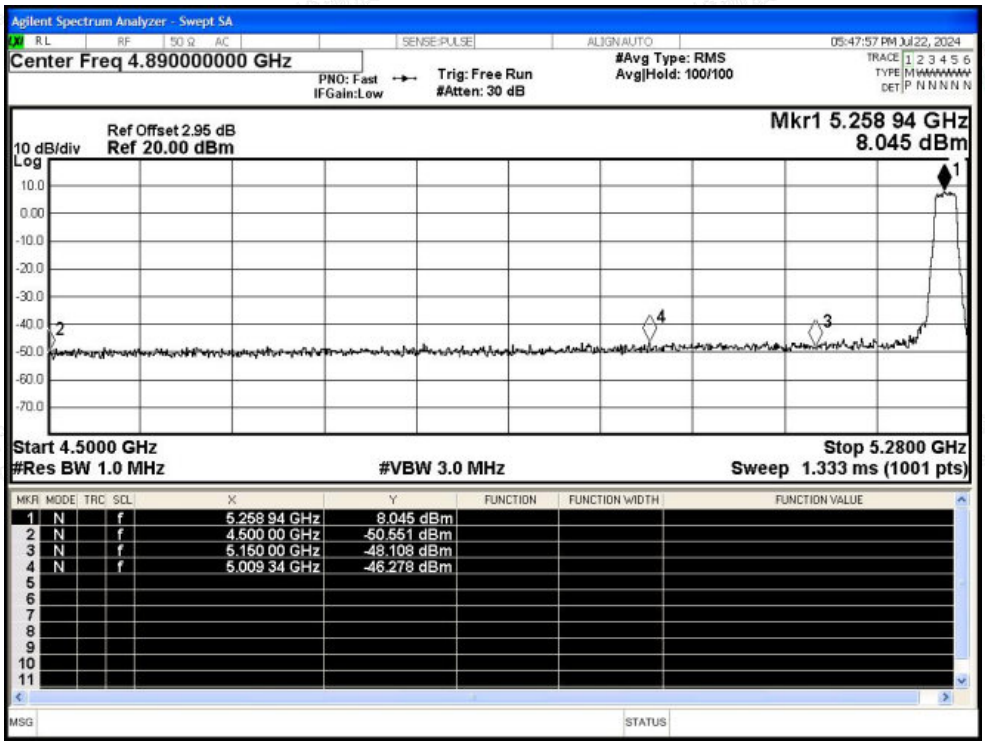
Restrict Band NVNT n40 5310MHz Ant2 Peak



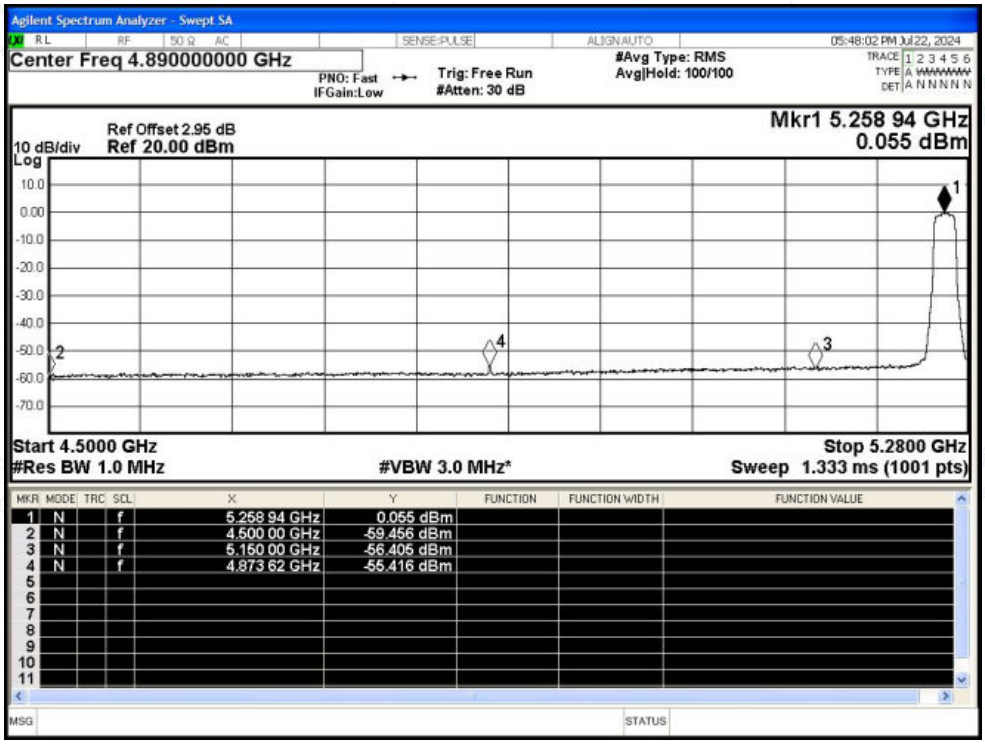
Restrict Band NVNT n40 5310MHz Ant2 Average



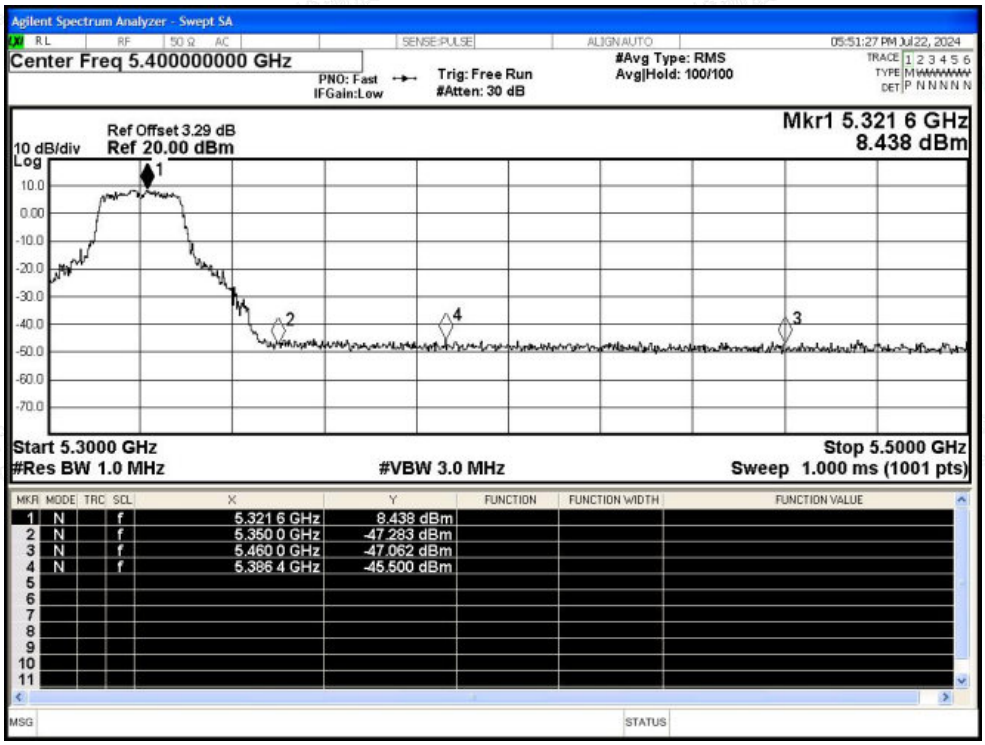
Restrict Band NVNT ac20 5260MHz Ant2 Peak



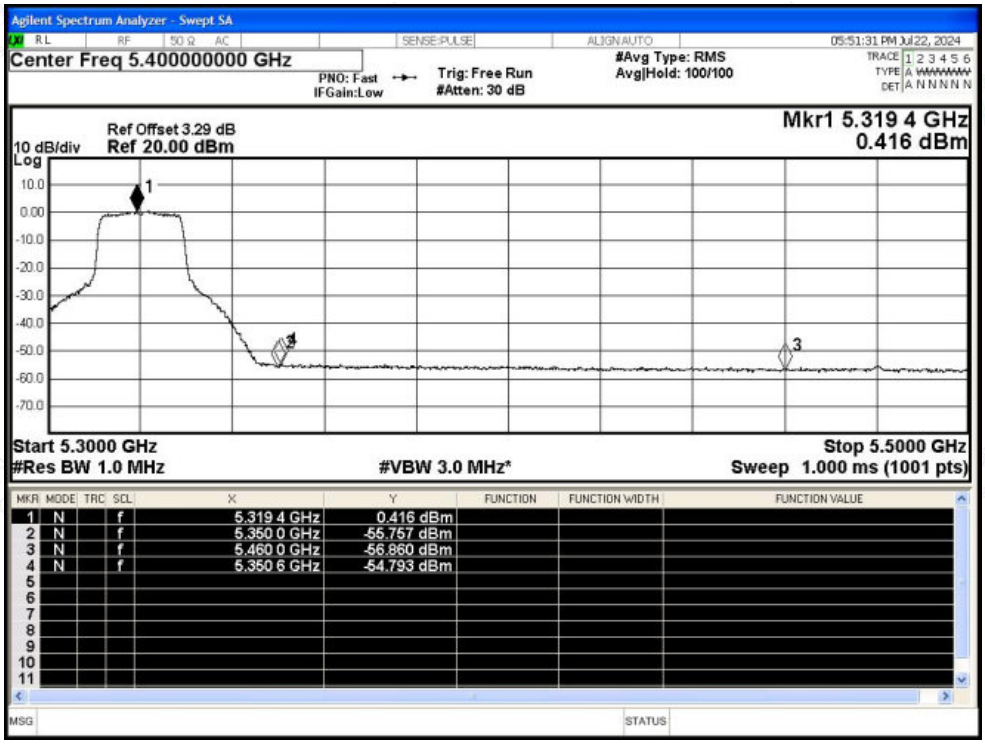
Restrict Band NVNT ac20 5260MHz Ant2 Average



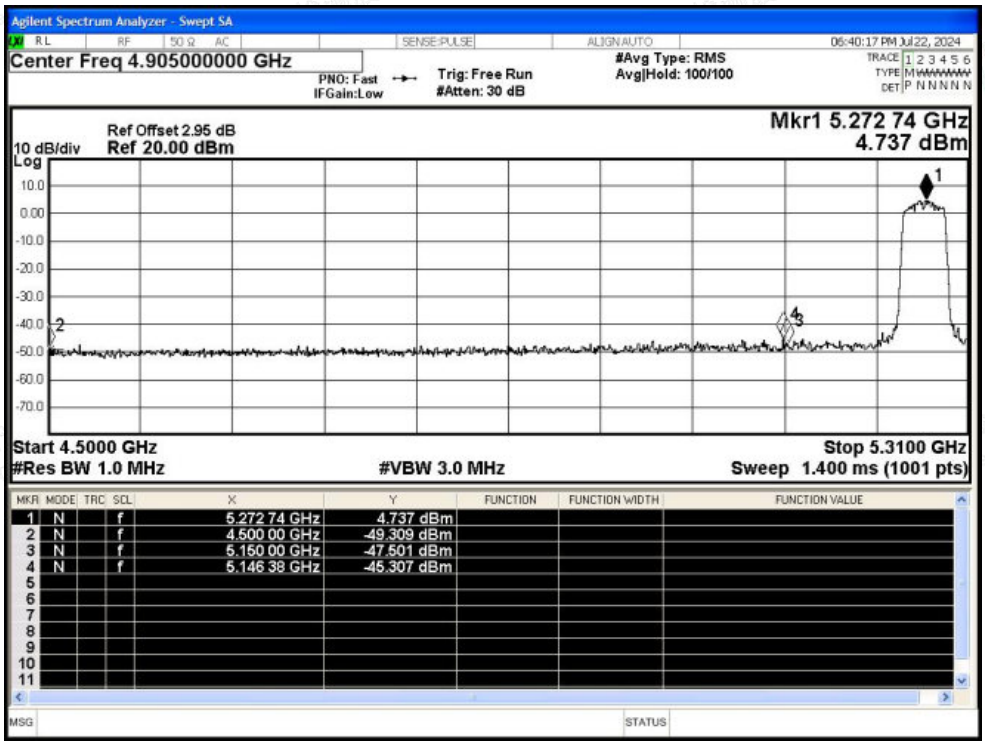
Restrict Band NVNT ac20 5320MHz Ant2 Peak



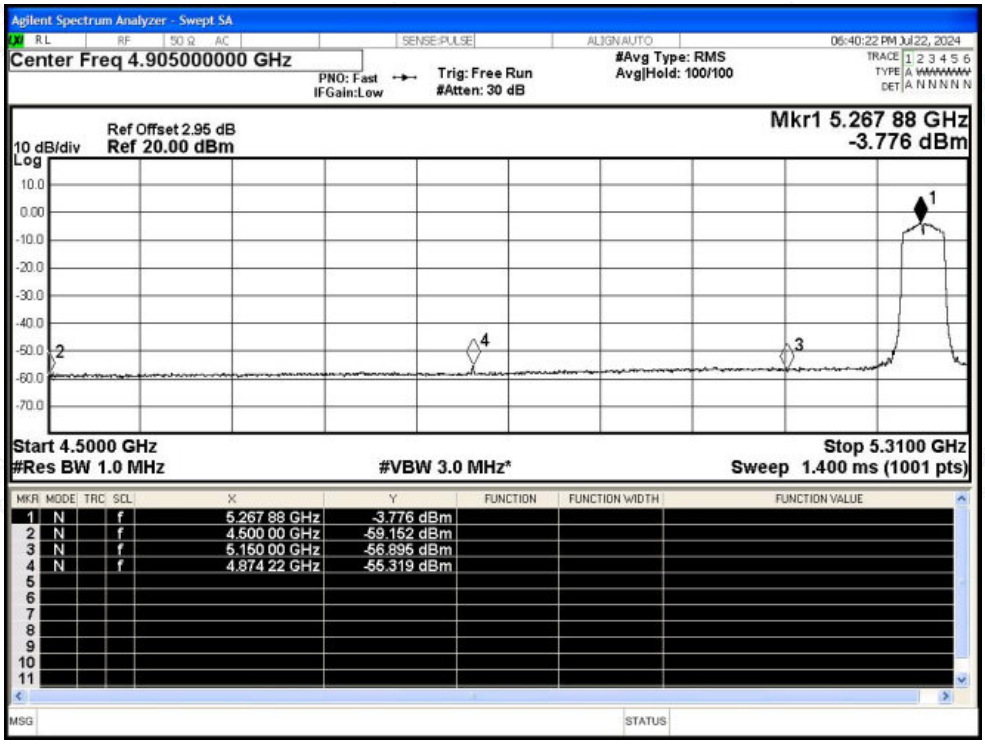
Restrict Band NVNT ac20 5320MHz Ant2 Average



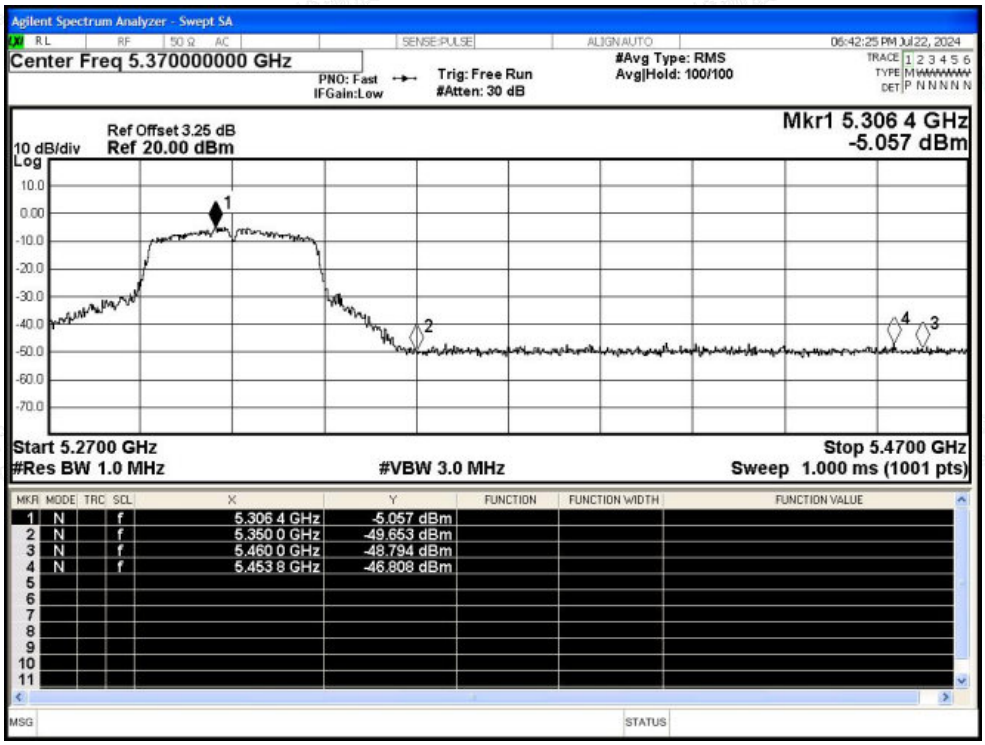
Restrict Band NVNT ac40 5270MHz Ant2 Peak



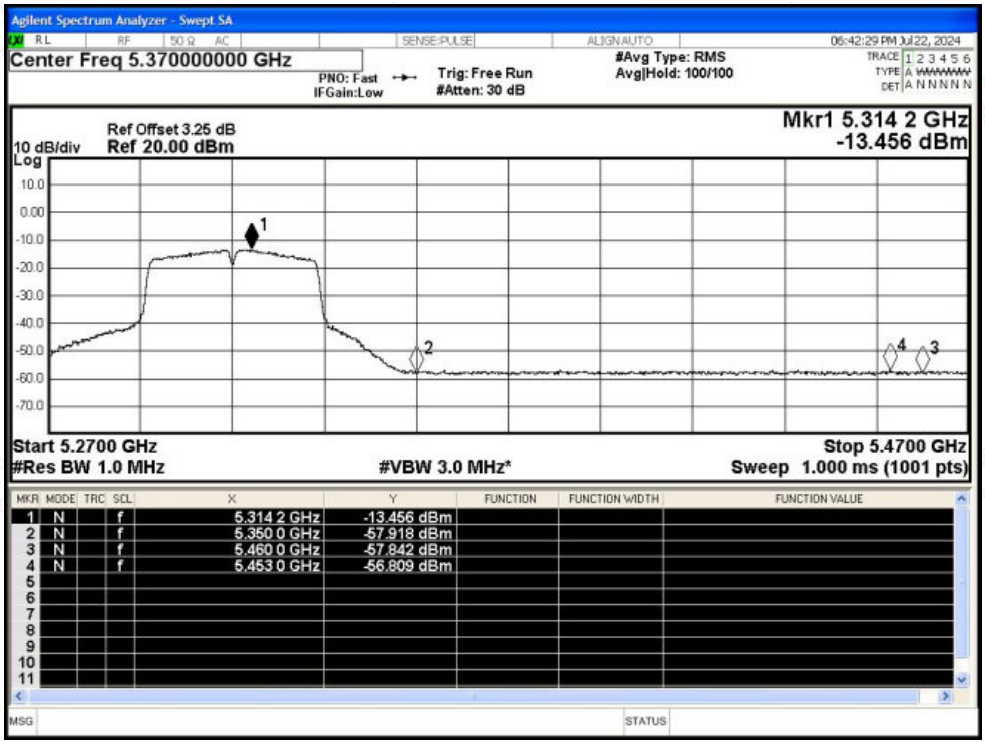
Restrict Band NVNT ac40 5270MHz Ant2 Average



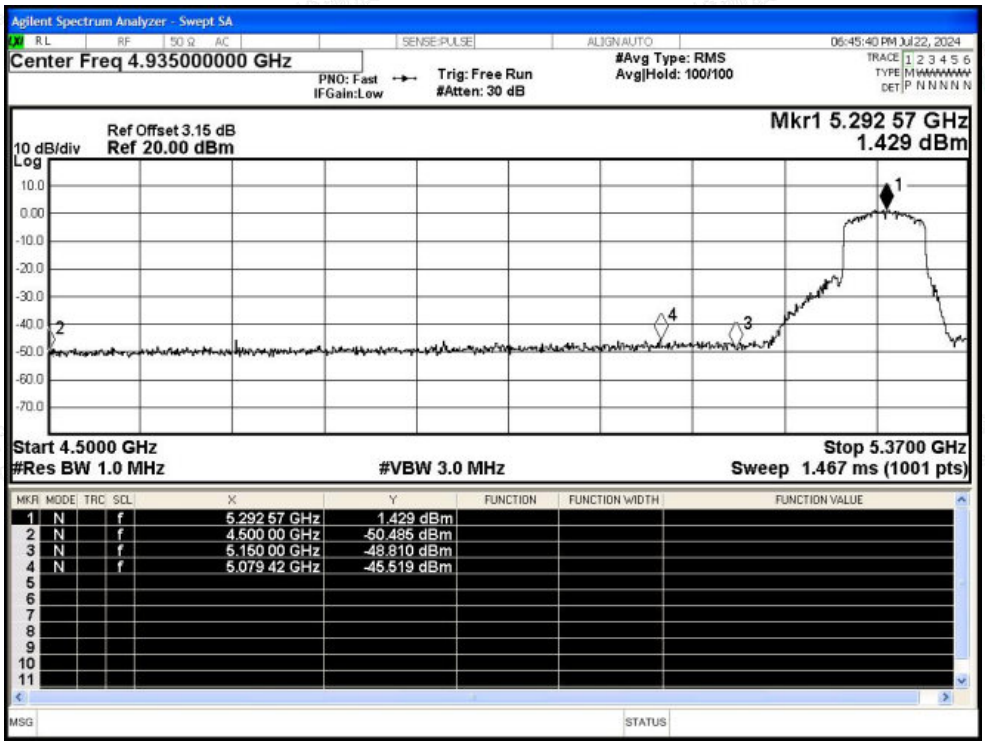
Restrict Band NVNT ac40 5310MHz Ant2 Peak



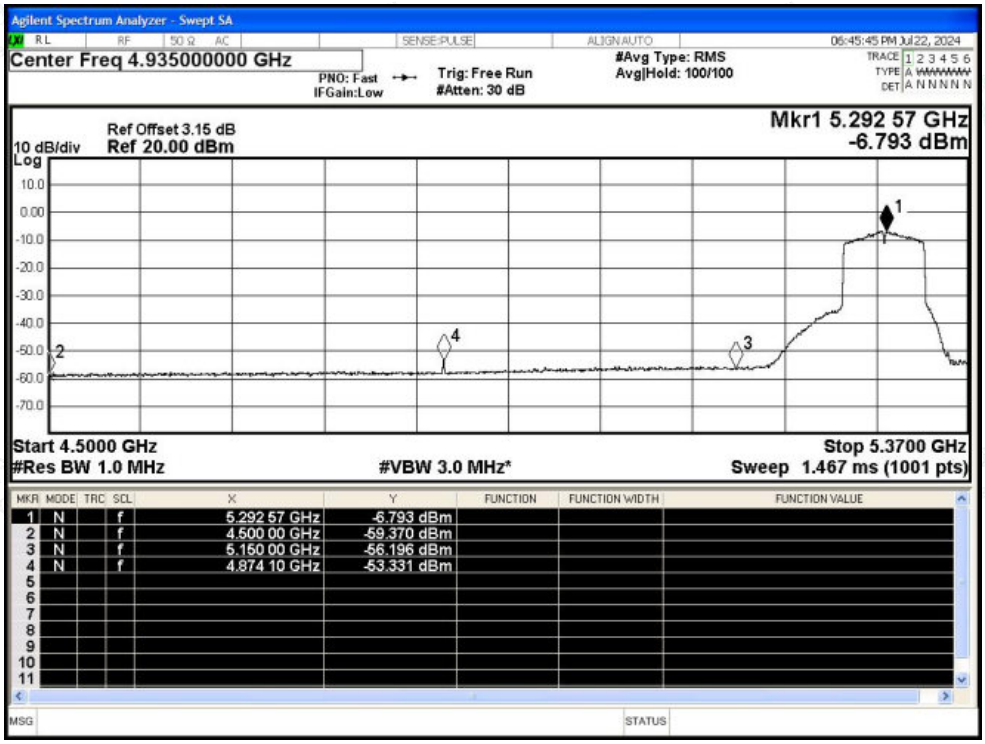
Restrict Band NVNT ac40 5310MHz Ant2 Average



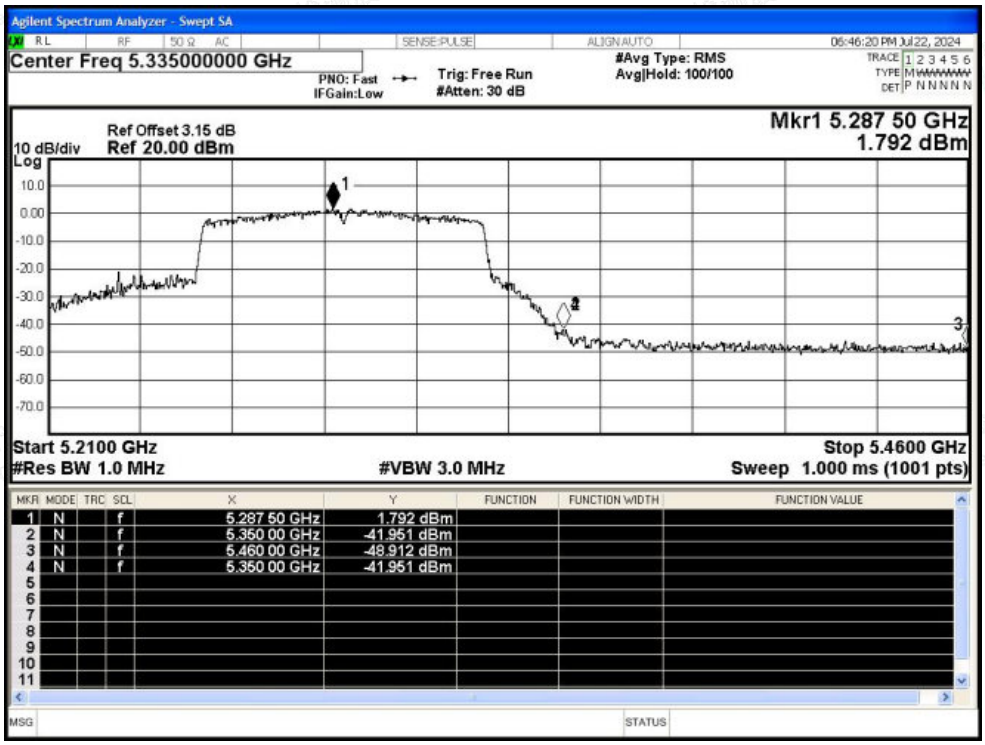
Restrict Band NVNT ac80 5290MHz Ant2 Peak



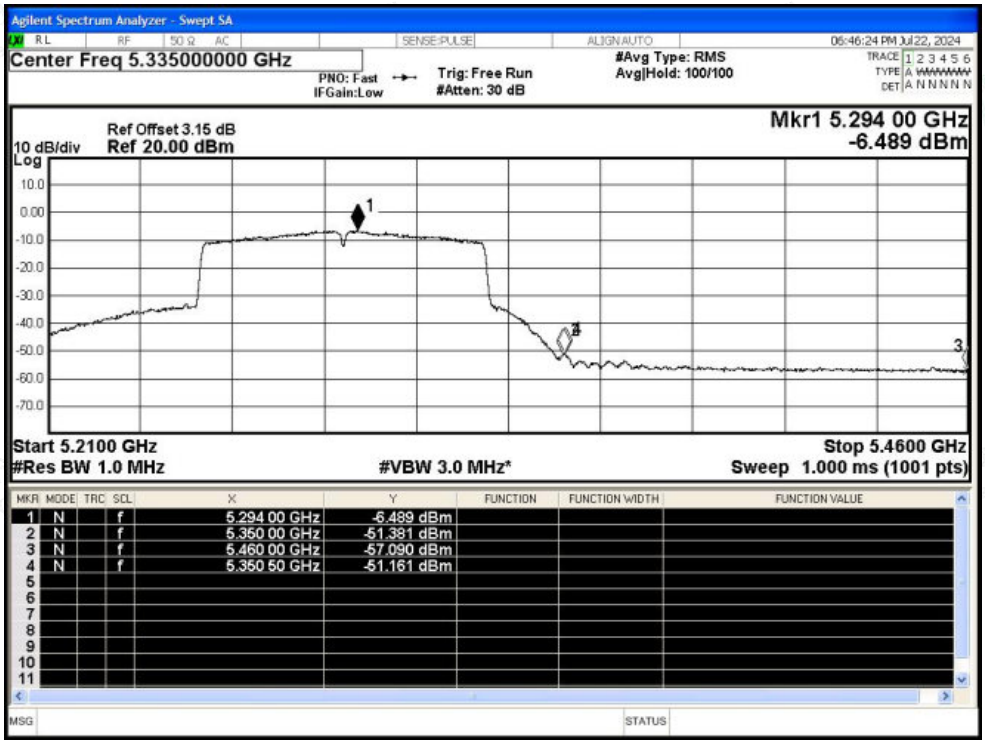
Restrict Band NVNT ac80 5290MHz Ant2 Average



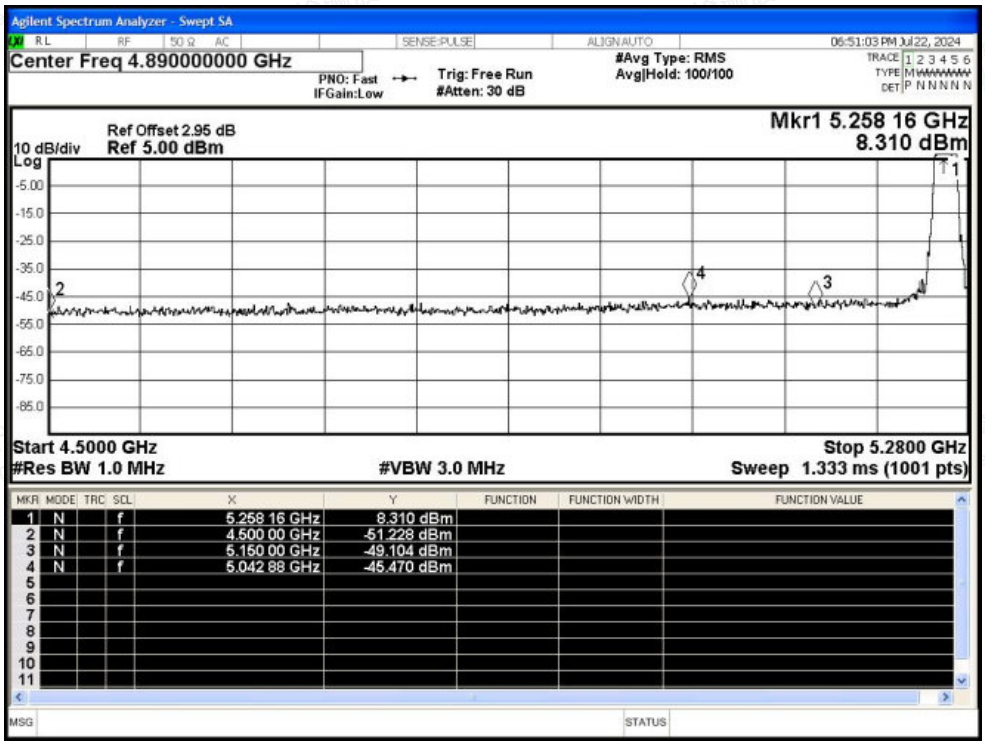
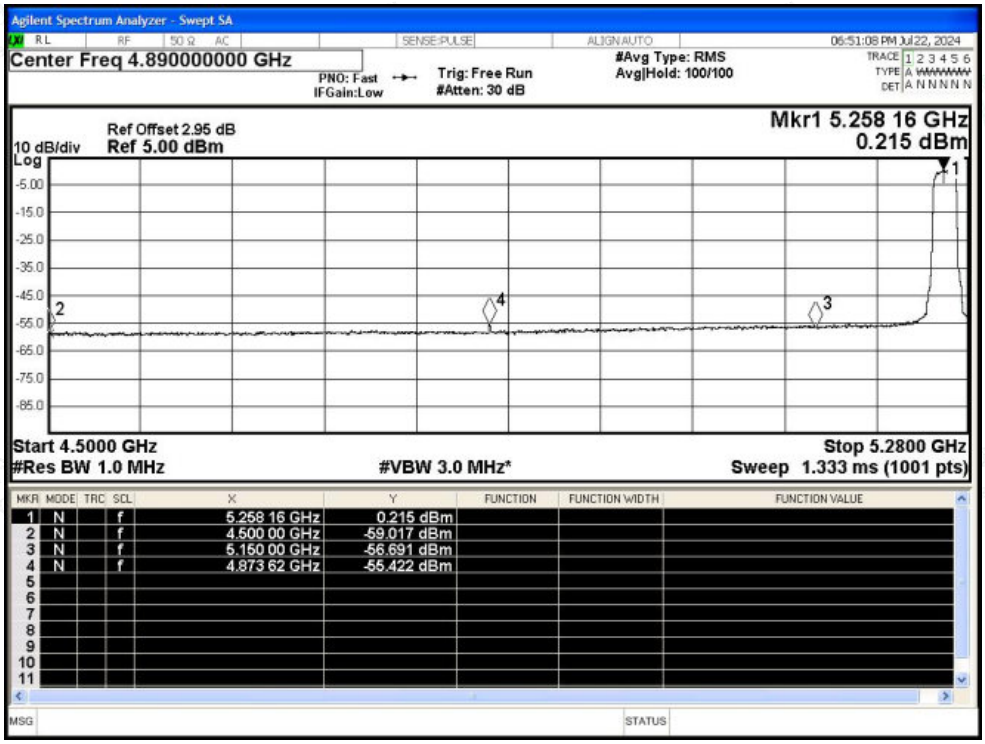
Restrict Band NVNT ac80 5290MHz Ant2 Peak



Restrict Band NVNT ac80 5290MHz Ant2 Average



Restrict Band NVNT ax20 5260MHz Ant2 Peak



Restrict Band NVNT ax20 5260MHz Ant2 Average