Appendix C

RF Test Data for 5.2G WIFI (Conducted Measurement)

Product Name: Smart TV Box

Test Model: T95ZPLUS

Environmental Conditions

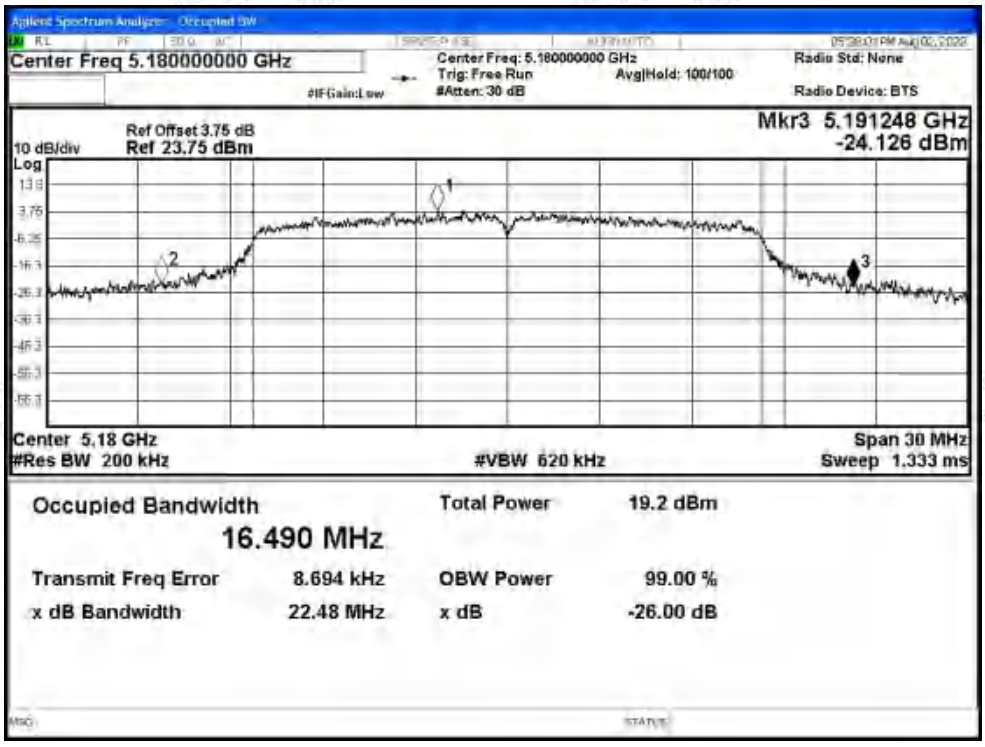
Temperature:	23.5℃
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Monkey Li
Supervised by:	Li Huan

C.1 26dB Bandwidth

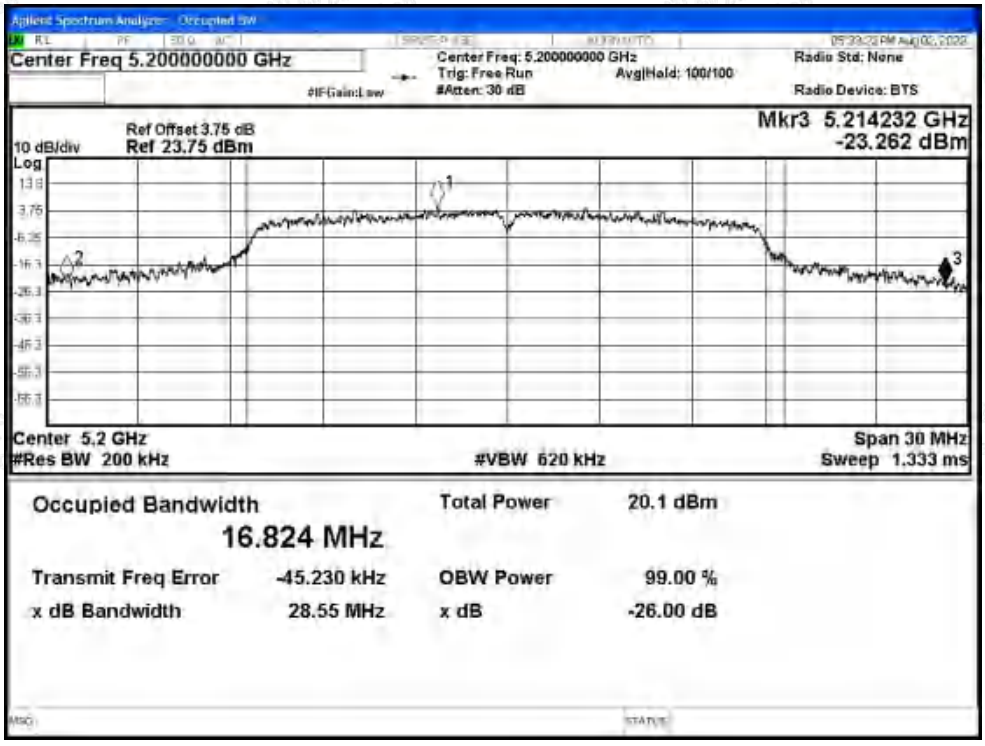
Condition	Mode	Frequency (MHz)	Antenna	26 dB Bandwidth (MHz)	Limit 26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	22.478	>=0.5	Pass
NVNT	a	5200	Ant1	28.555	>=0.5	Pass
NVNT	a	5240	Ant1	29.985	>=0.5	Pass
NVNT	n20	5180	Ant1	29.107	>=0.5	Pass
NVNT	n20	5200	Ant1	28.827	>=0.5	Pass
NVNT	n20	5240	Ant1	26.24	>=0.5	Pass
NVNT	n40	5190	Ant1	59.881	>=0.5	Pass
NVNT	n40	5230	Ant1	60	>=0.5	Pass
NVNT	ac20	5180	Ant1	29.639	>=0.5	Pass
NVNT	ac20	5200	Ant1	30	>=0.5	Pass
NVNT	ac20	5240	Ant1	29.846	>=0.5	Pass
NVNT	ac40	5190	Ant1	48.938	>=0.5	Pass
NVNT	ac40	5230	Ant1	49.626	>=0.5	Pass
NVNT	ax20	5180	Ant1	19.661	>=0.5	Pass
NVNT	ax20	5200	Ant1	19.635	>=0.5	Pass
NVNT	ax20	5240	Ant1	19.538	>=0.5	Pass
NVNT	ax40	5190	Ant1	40.283	>=0.5	Pass
NVNT	ax40	5230	Ant1	40.138	>=0.5	Pass

Test Graphs

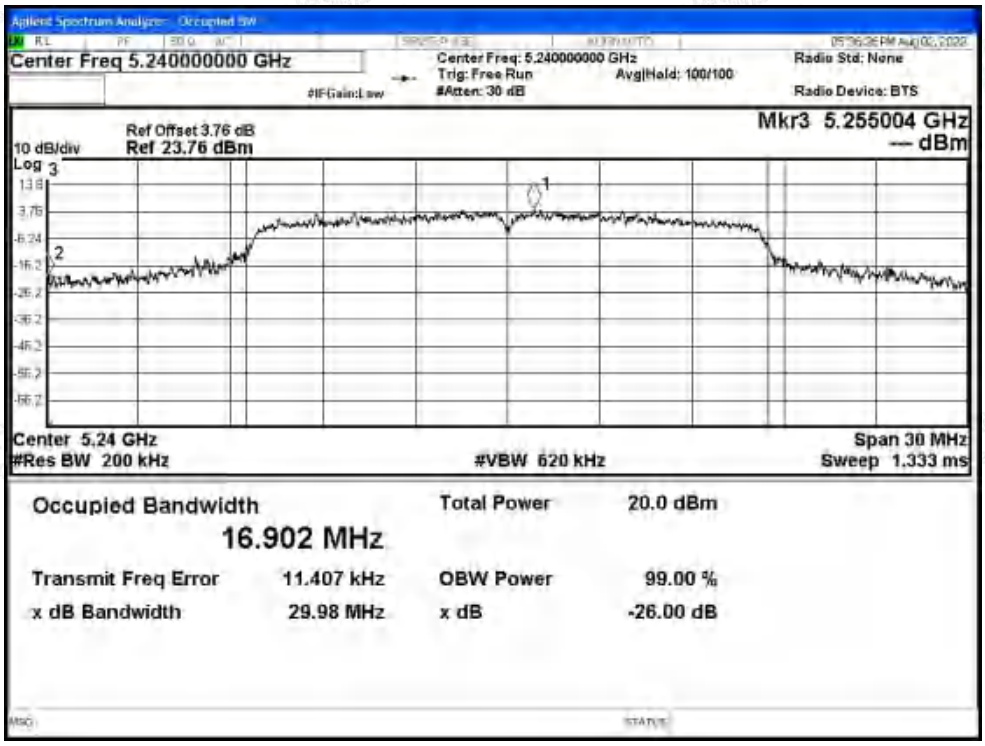
26dB Bandwidth NVNT a 5180MHz Ant1



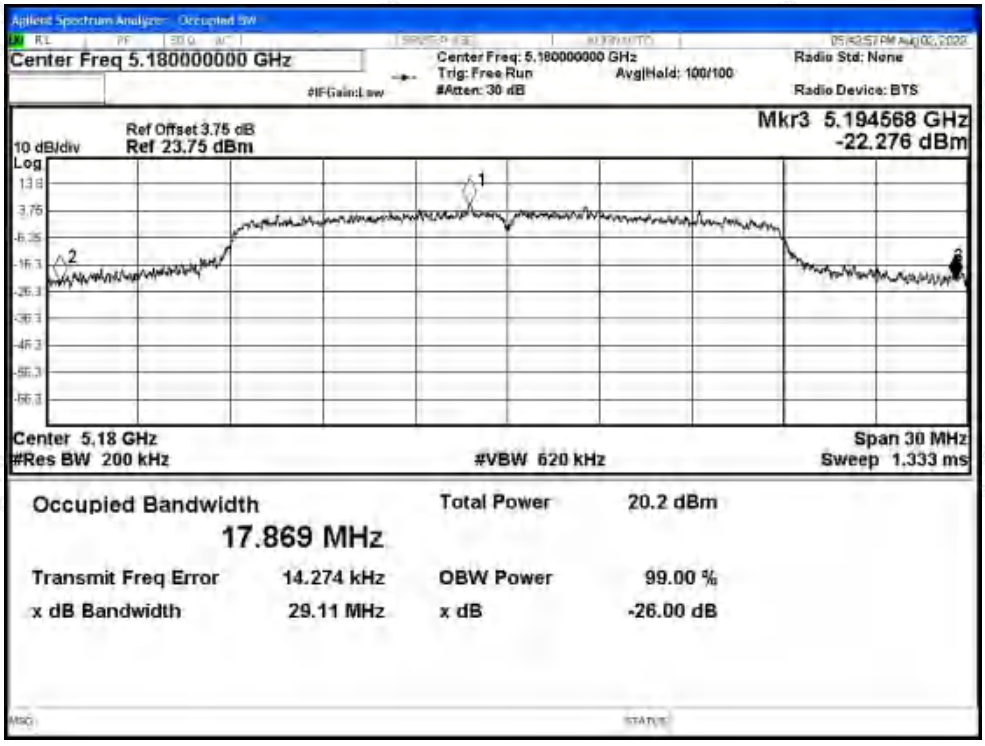
26dB Bandwidth NVNT a 5200MHz Ant1



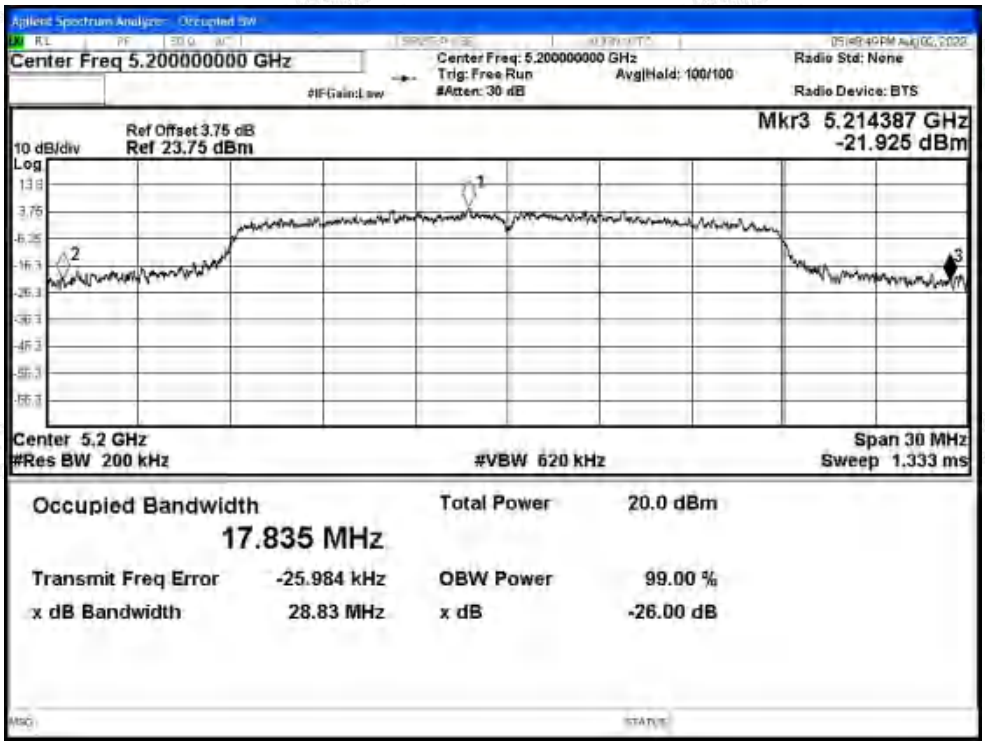
26dB Bandwidth NVNT a 5240MHz Ant1



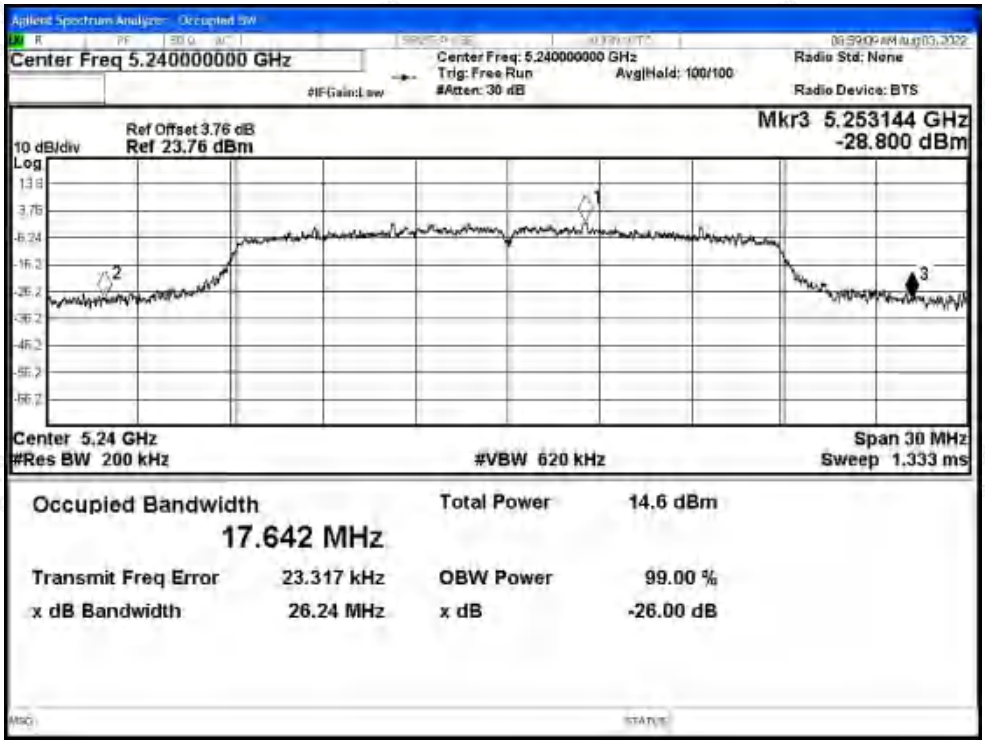
26dB Bandwidth NVNT n20 5180MHz Ant1



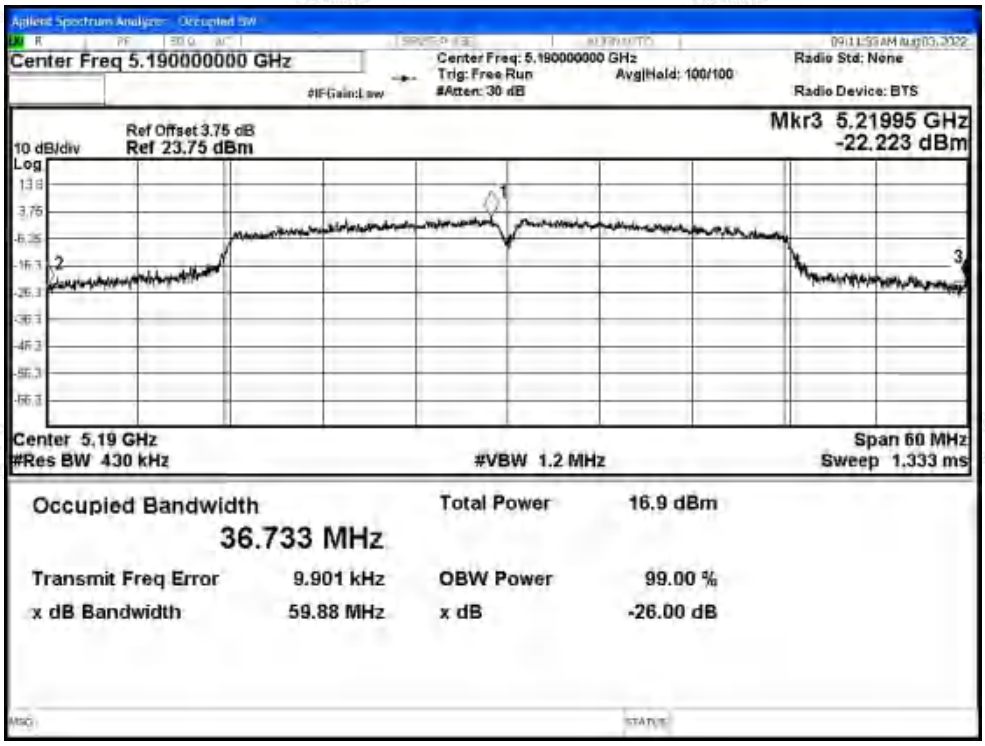
26dB Bandwidth NVNT n20 5200MHz Ant1



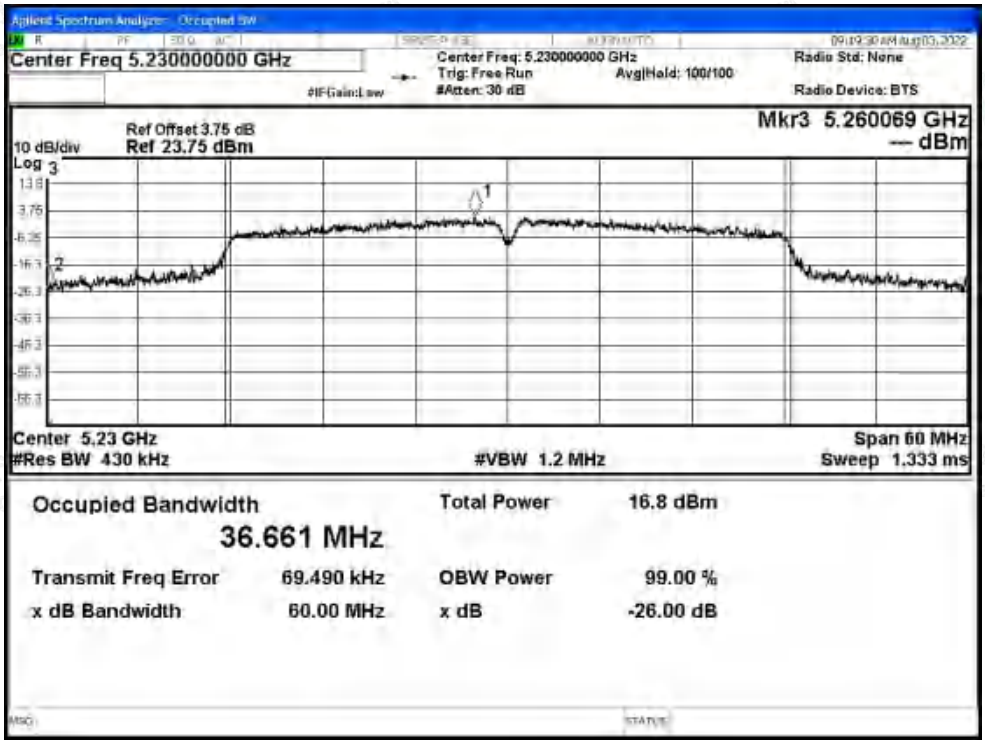
26dB Bandwidth NVNT n20 5240MHz Ant1



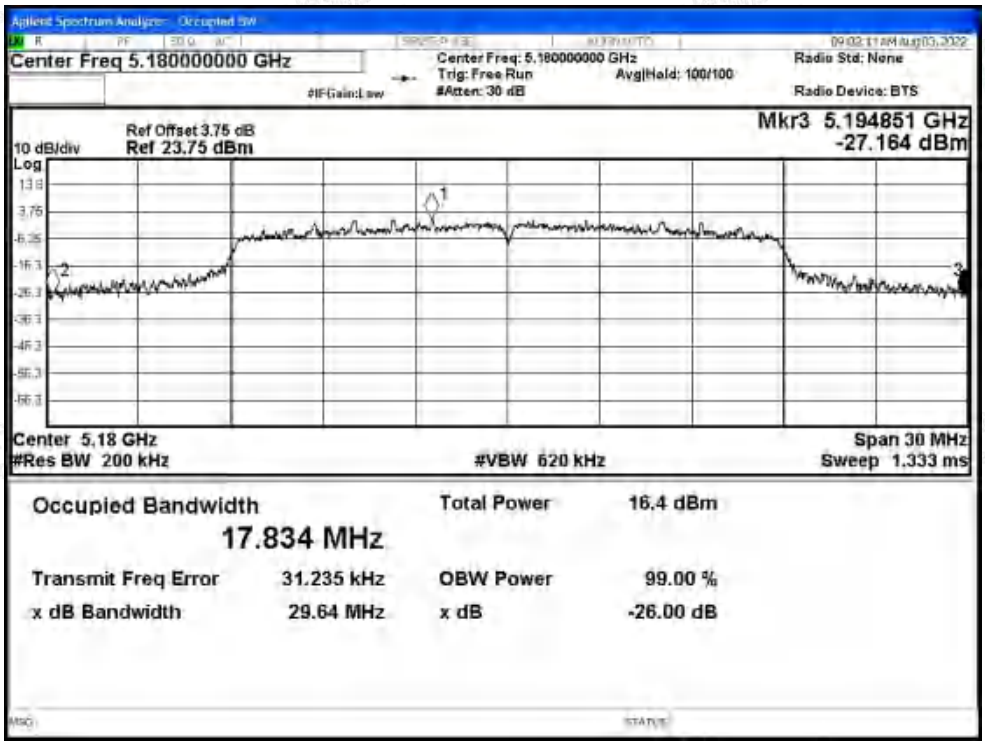
26dB Bandwidth NVNT n40 5190MHz Ant1



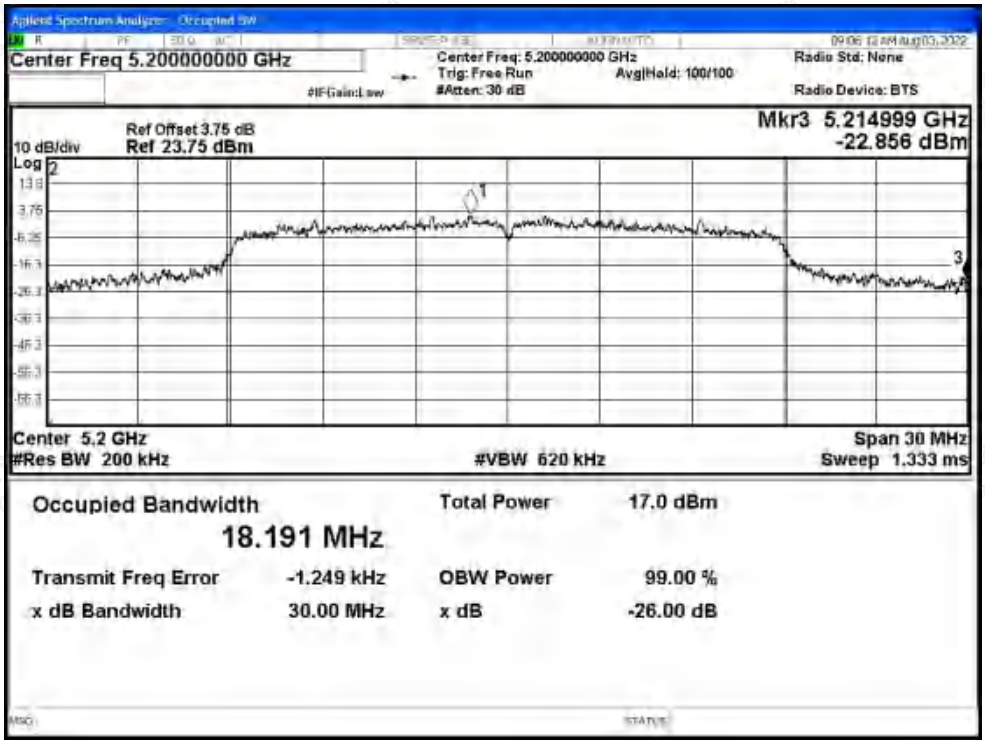
26dB Bandwidth NVNT n40 5230MHz Ant1



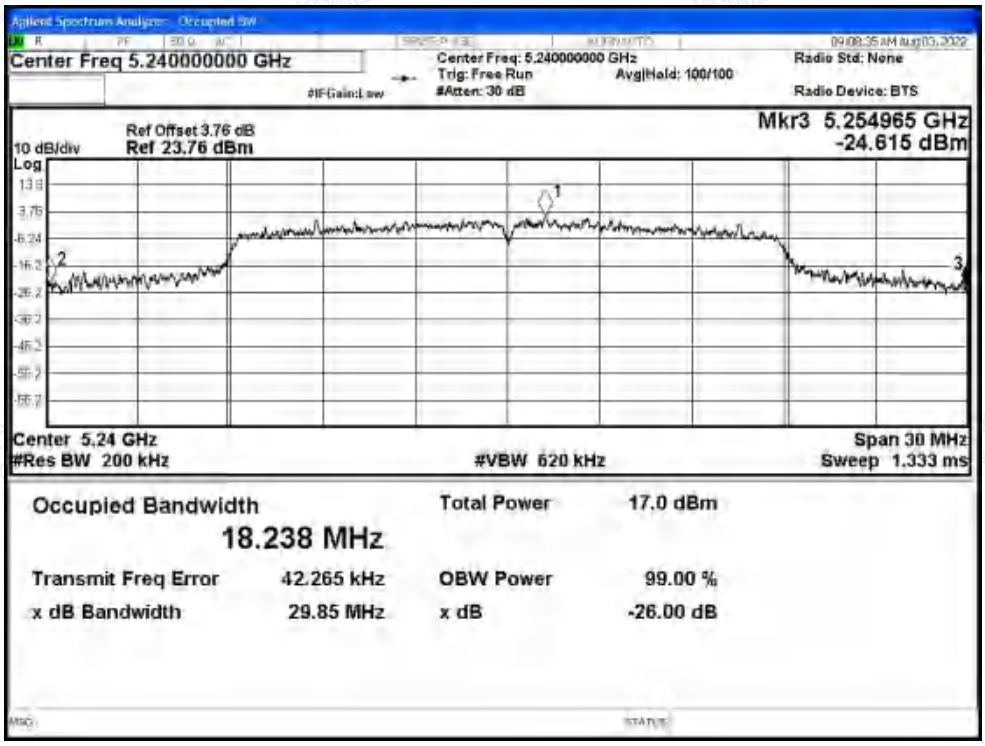
26dB Bandwidth NVNT ac20 5180MHz Ant1



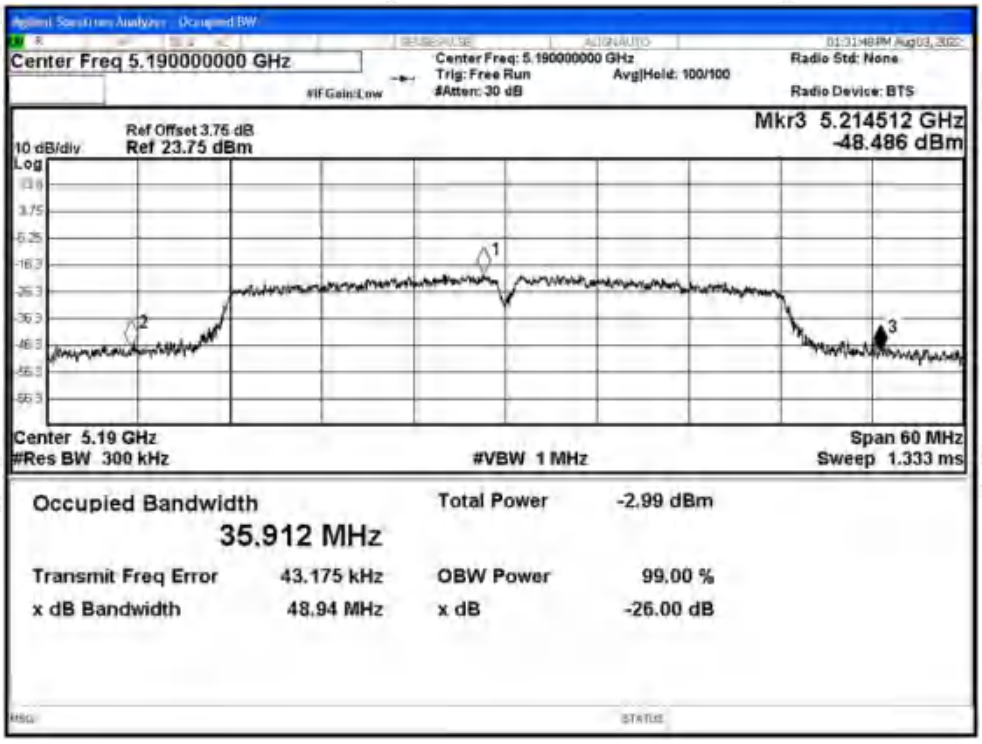
26dB Bandwidth NVNT ac20 5200MHz Ant1



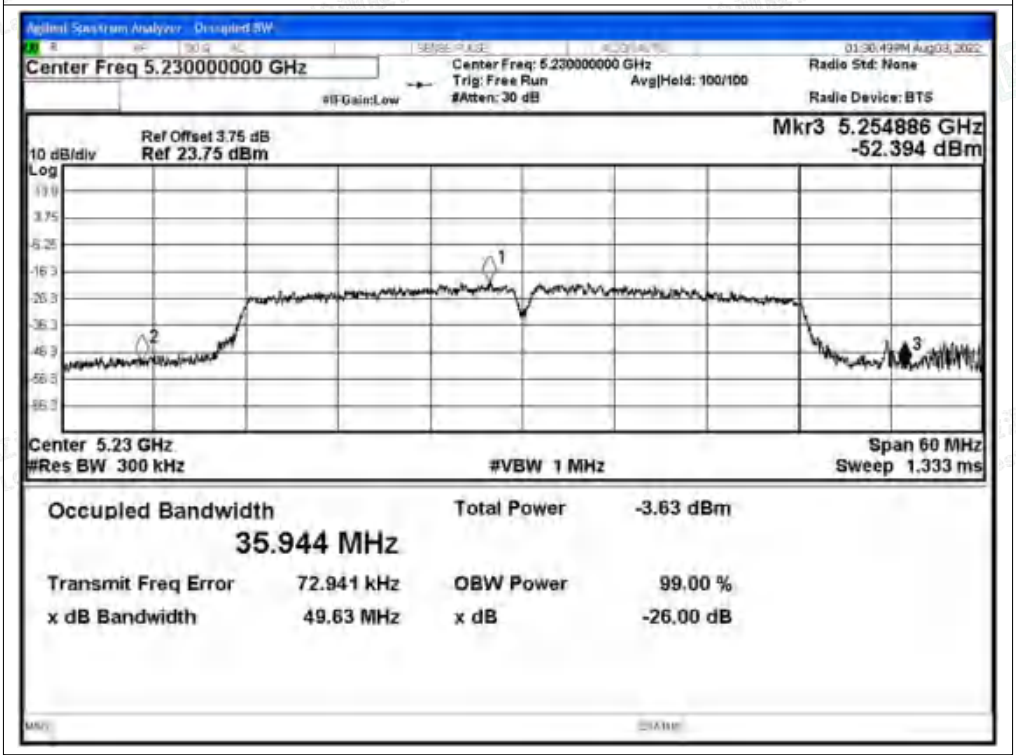
26dB Bandwidth NVNT ac20 5240MHz Ant1



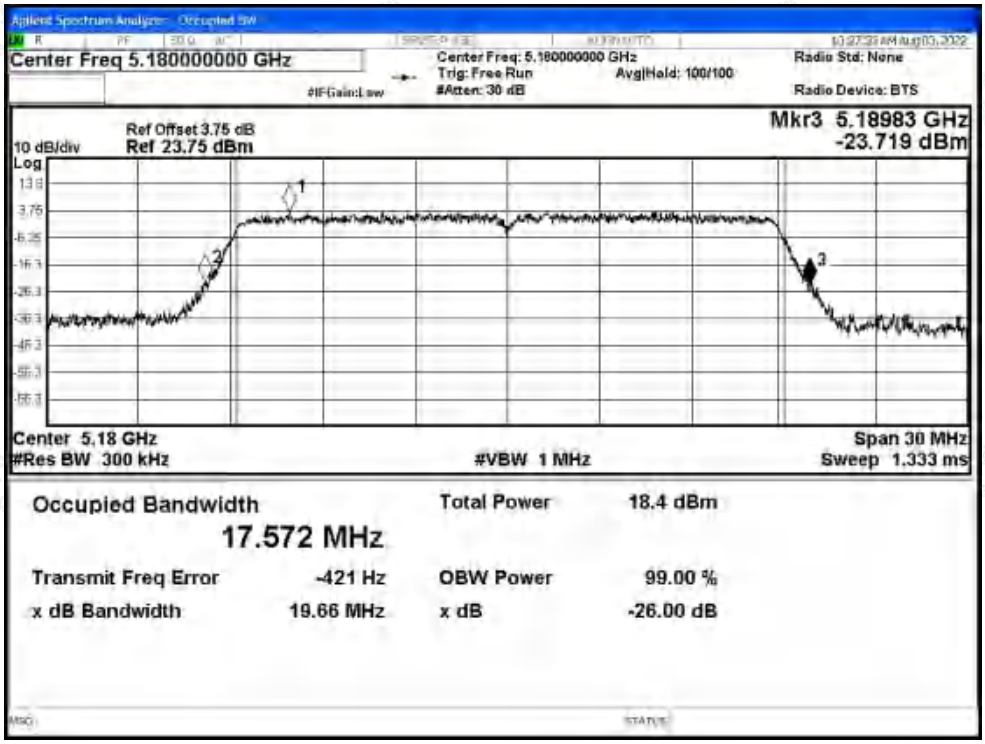
-26dB Bandwidth NVNT ac40 5190MHz Ant1



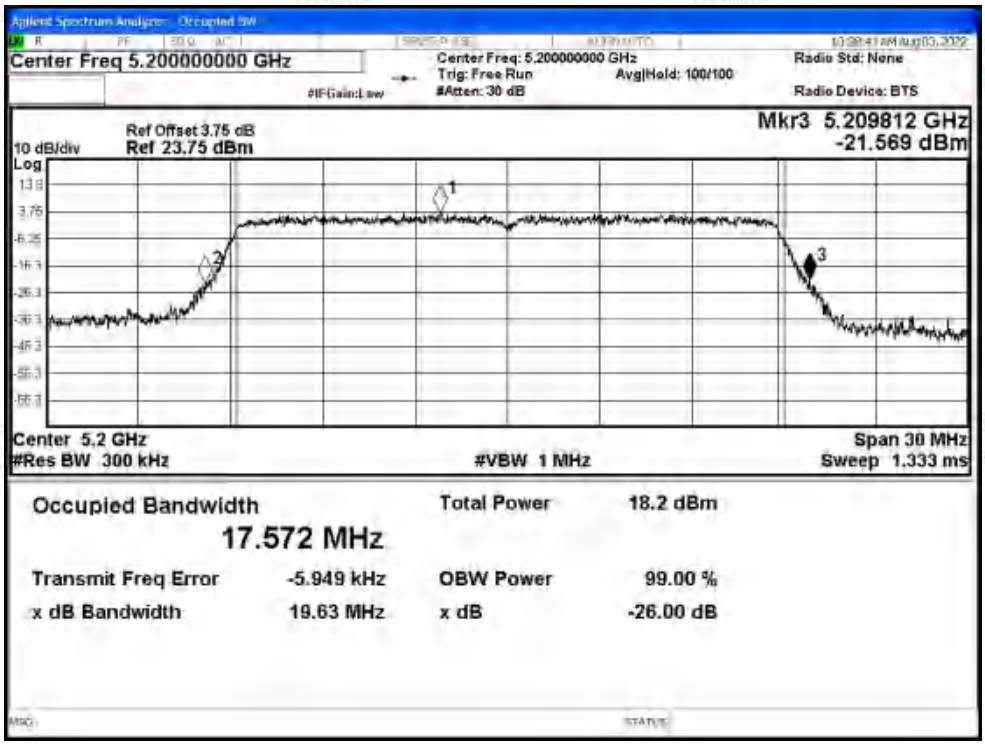
-26dB Bandwidth NVNT ac40 5230MHz Ant1



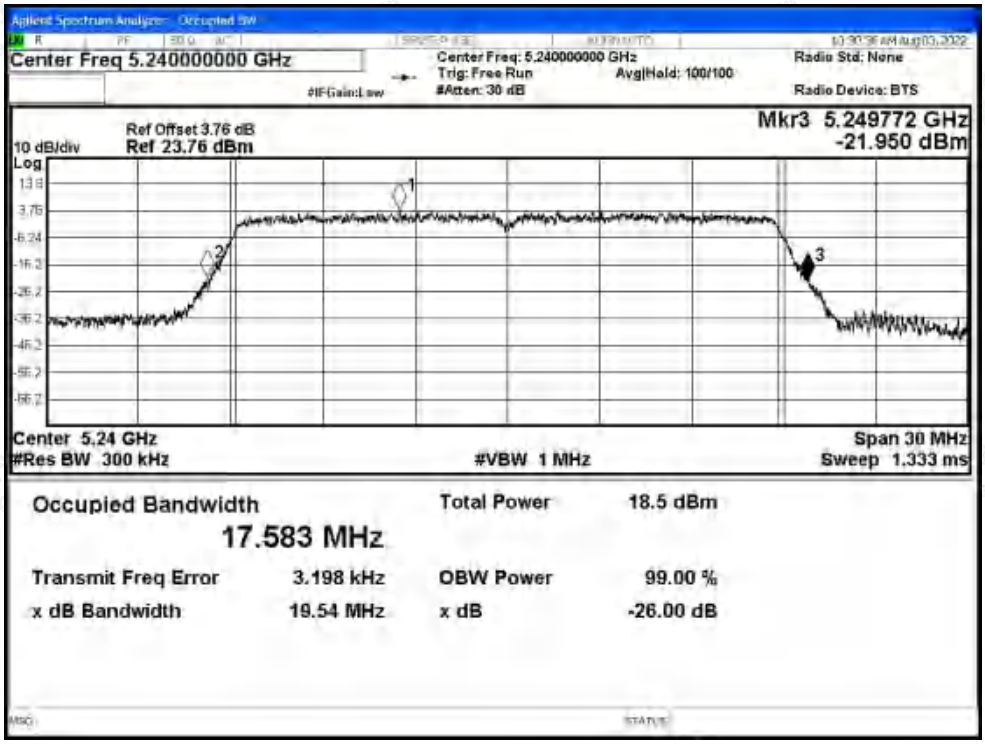
26dB Bandwidth NVNT ax20 5180MHz Ant1



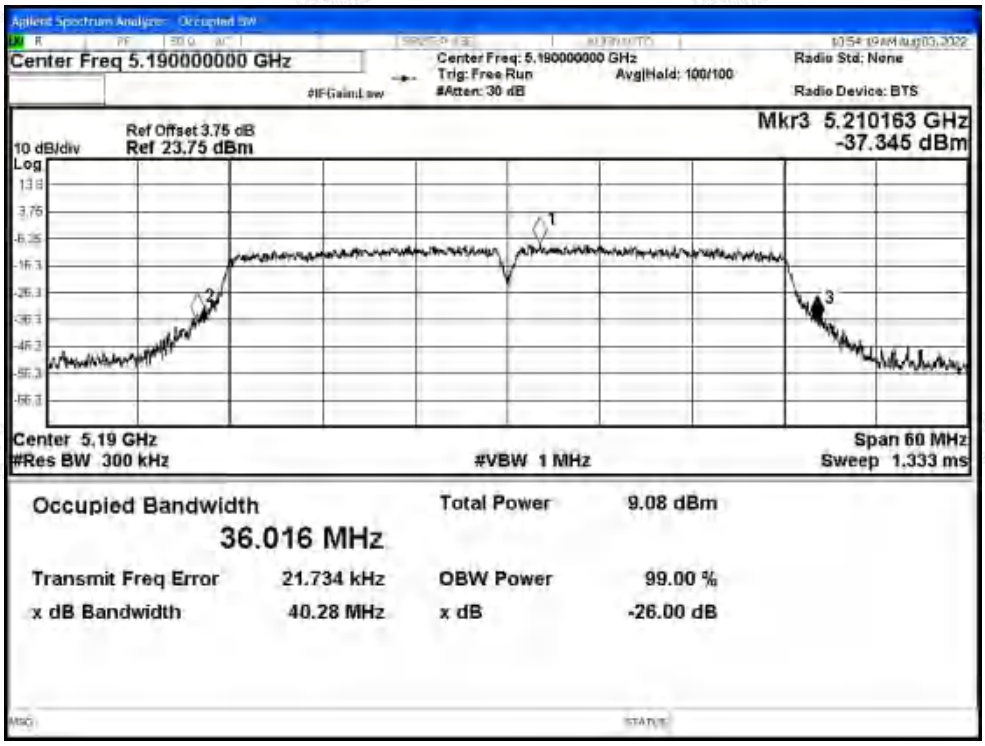
26dB Bandwidth NVNT ax20 5200MHz Ant1



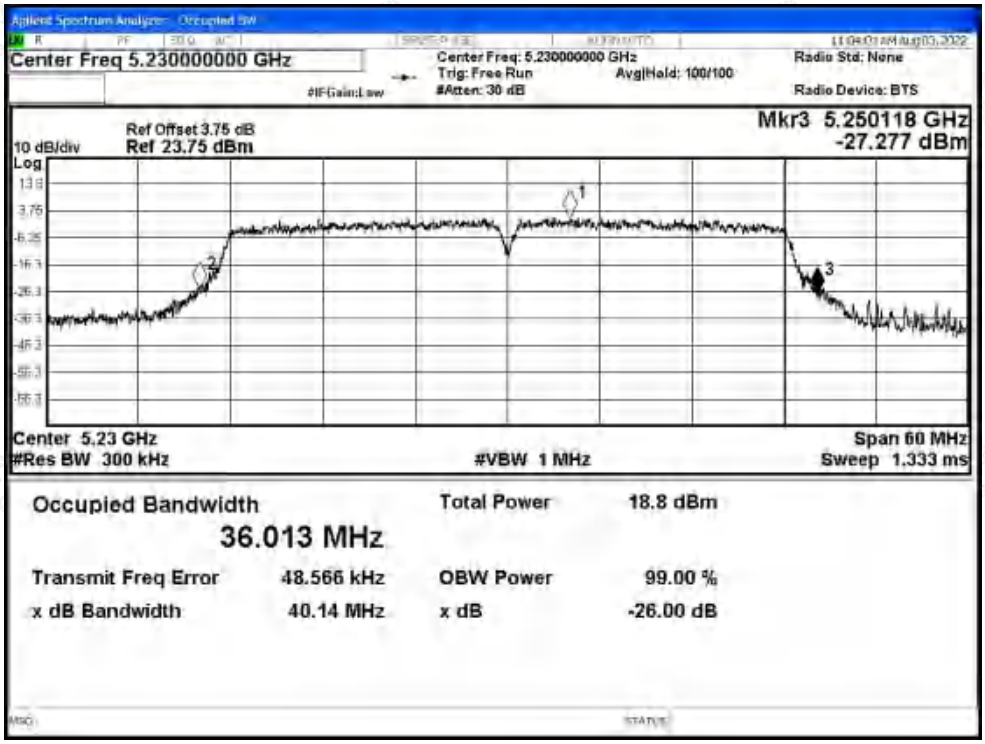
26dB Bandwidth NVNT ax20 5240MHz Ant1



26dB Bandwidth NVNT ax40 5190MHz Ant1



26dB Bandwidth NVNT ax40 5230MHz Ant1



C.2 Maximum Conducted Output Power

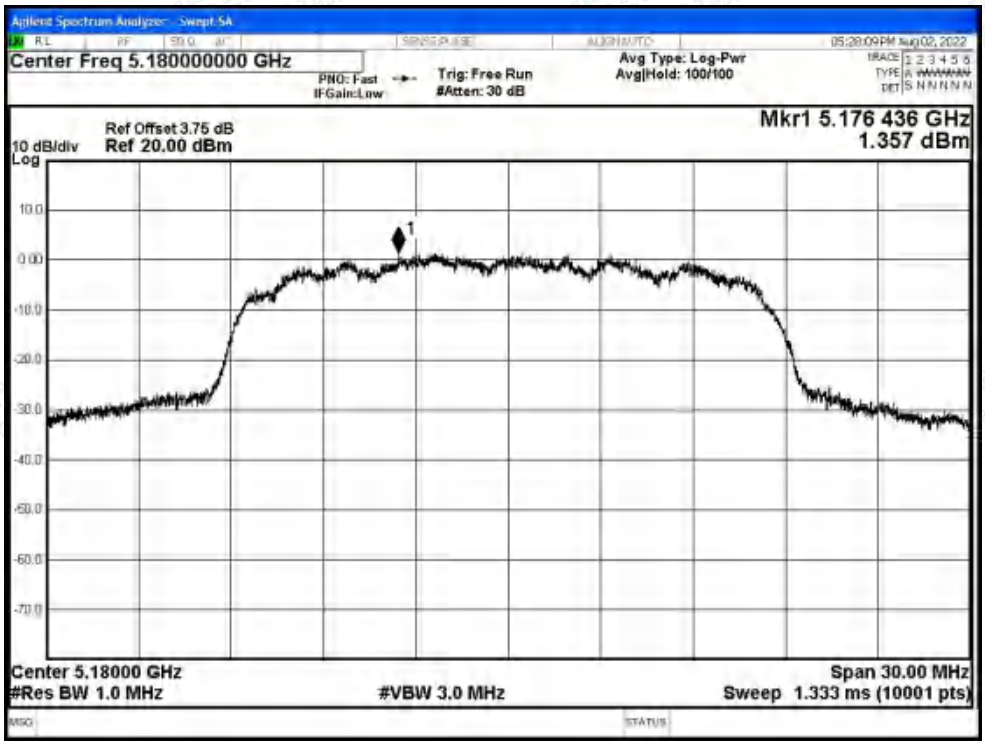
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	13.49	0.11	13.6	24	Pass
NVNT	a	5200	Ant1	14.35	0.11	14.46	24	Pass
NVNT	a	5240	Ant1	14.26	0.11	14.37	24	Pass
NVNT	n20	5180	Ant1	14.61	0.12	14.73	24	Pass
NVNT	n20	5200	Ant1	14.32	0.12	14.44	24	Pass
NVNT	n20	5240	Ant1	11.99	0.12	12.11	24	Pass
NVNT	n40	5190	Ant1	11.09	0.22	11.31	24	Pass
NVNT	n40	5230	Ant1	10.96	0.23	11.19	24	Pass
NVNT	ac20	5180	Ant1	11.41	0.11	11.52	24	Pass
NVNT	ac20	5200	Ant1	11.2	0.11	11.31	24	Pass
NVNT	ac20	5240	Ant1	11.14	0.11	11.25	24	Pass
NVNT	ac40	5190	Ant1	10.97	0.23	11.2	24	Pass
NVNT	ac40	5230	Ant1	10.65	0.23	10.88	24	Pass
NVNT	ax20	5180	Ant1	11.75	1.02	12.77	24	Pass
NVNT	ax20	5200	Ant1	11.79	1.02	12.81	24	Pass
NVNT	ax20	5240	Ant1	12.12	1.02	13.14	24	Pass
NVNT	ax40	5190	Ant1	9.59	1.86	11.45	24	Pass
NVNT	ax40	5230	Ant1	9.63	1.86	11.49	24	Pass

C.3 Maximum Power Spectral Density Level

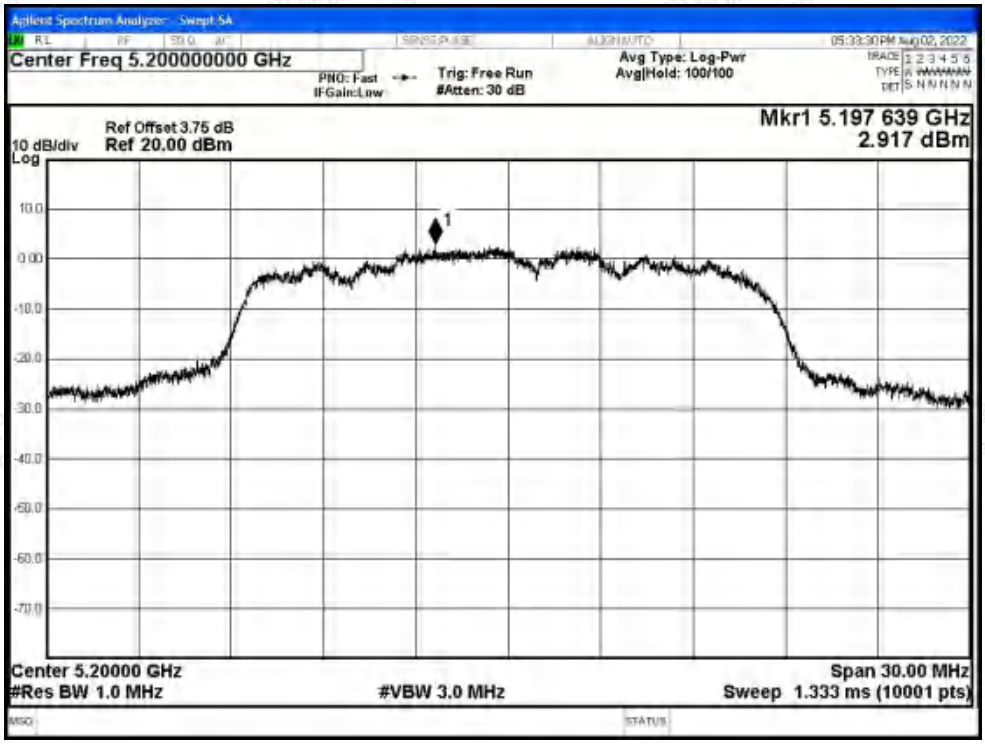
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	1.36	0.11	1.47	11	Pass
NVNT	a	5200	Ant1	2.92	0.11	3.03	11	Pass
NVNT	a	5240	Ant1	1.96	0.11	2.07	11	Pass
NVNT	n20	5180	Ant1	2.03	0.12	2.15	11	Pass
NVNT	n20	5200	Ant1	2.5	0.12	2.62	11	Pass
NVNT	n20	5240	Ant1	0.02	0.12	0.14	11	Pass
NVNT	n40	5190	Ant1	-4.51	0.22	-4.29	11	Pass
NVNT	n40	5230	Ant1	-4.04	0.23	-3.81	11	Pass
NVNT	ac20	5180	Ant1	-0.91	0.11	-0.8	11	Pass
NVNT	ac20	5200	Ant1	-0.47	0.11	-0.36	11	Pass
NVNT	ac20	5240	Ant1	-0.85	0.11	-0.74	11	Pass
NVNT	ac40	5190	Ant1	-4.87	0.23	-4.64	11	Pass
NVNT	ac40	5230	Ant1	-5.16	0.23	-4.93	11	Pass
NVNT	ax20	5180	Ant1	-12.66	1.02	-11.64	11	Pass
NVNT	ax20	5200	Ant1	-9.41	1.02	-8.39	11	Pass
NVNT	ax20	5240	Ant1	-9.29	1.02	-8.27	11	Pass
NVNT	ax40	5190	Ant1	-25.46	1.86	-23.6	11	Pass
NVNT	ax40	5230	Ant1	-19	1.86	-17.14	11	Pass

Test Graphs

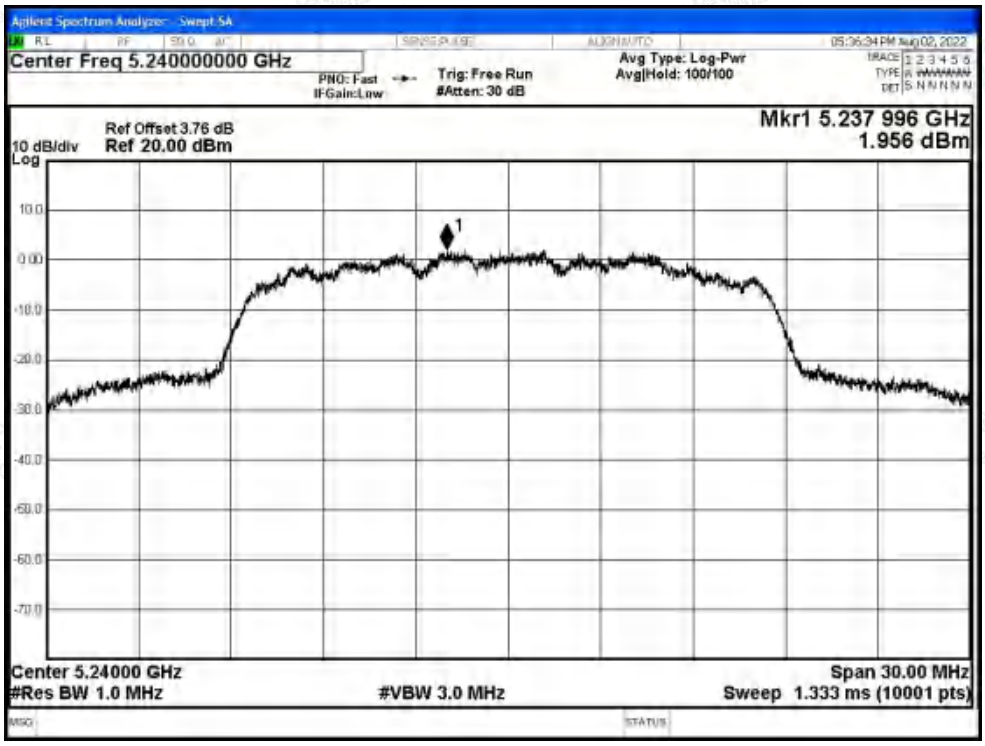
PSD NVNT a 5180MHz Ant1



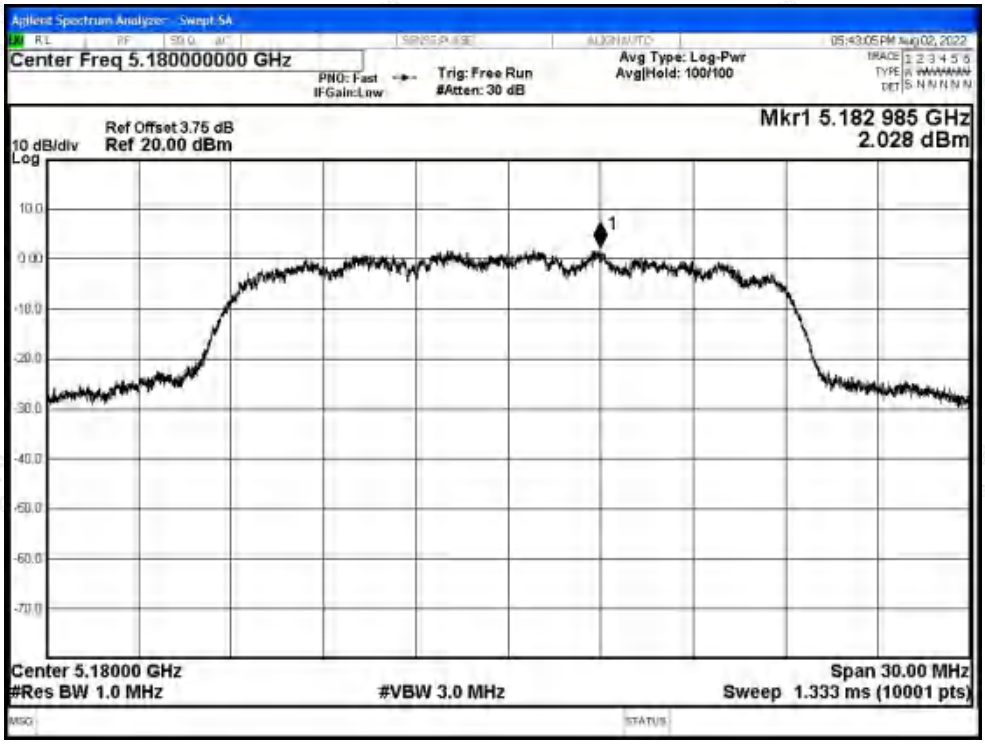
PSD NVNT a 5200MHz Ant1



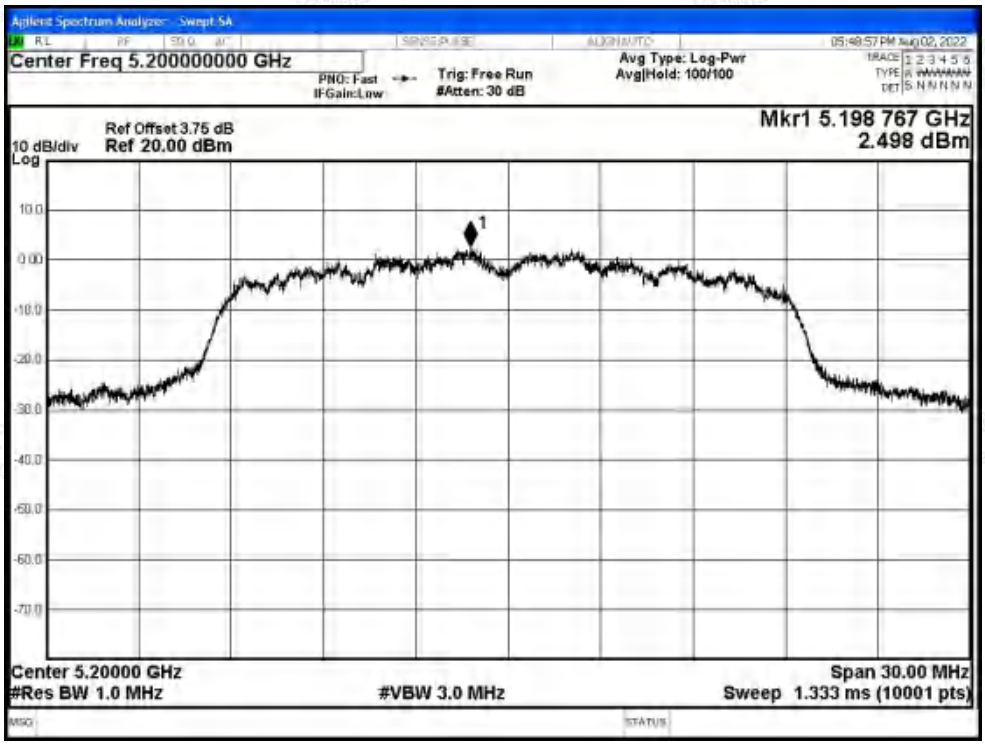
PSD NVNT a 5240MHz Ant1



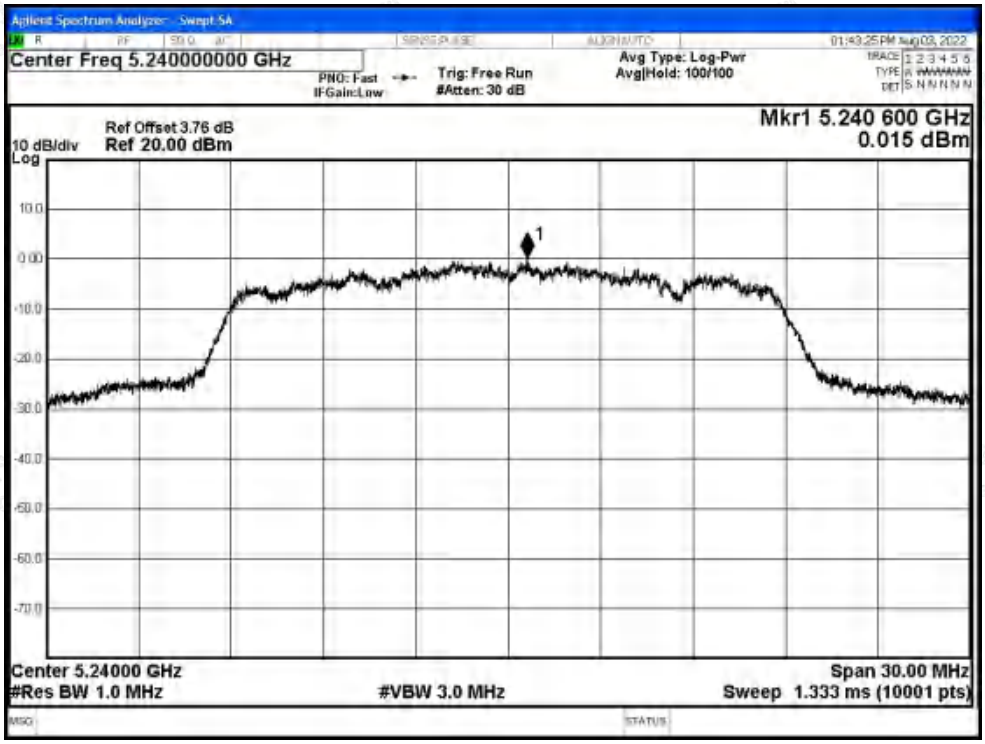
PSD NVNT n20 5180MHz Ant1



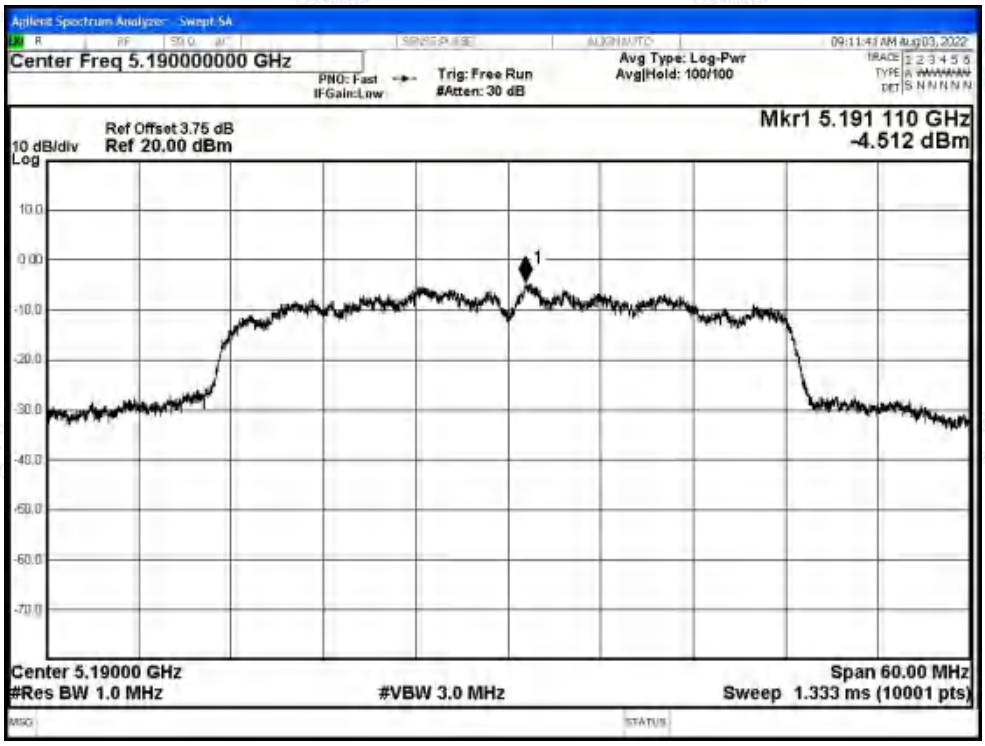
PSD NVNT n20 5200MHz Ant1



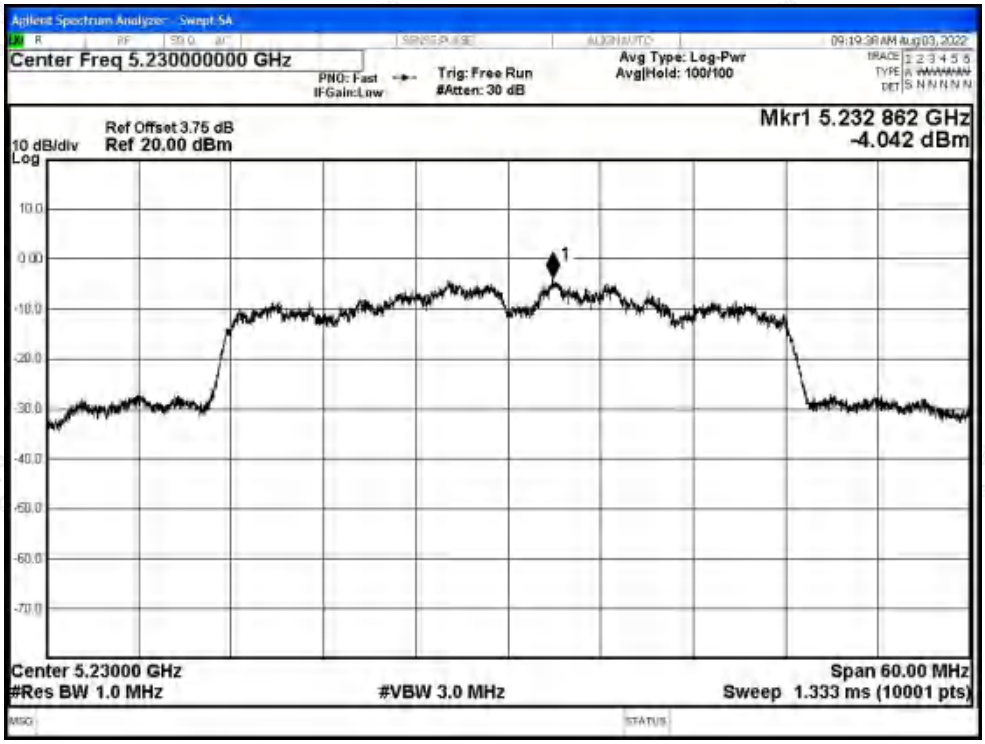
PSD NVNT n20 5240MHz Ant1



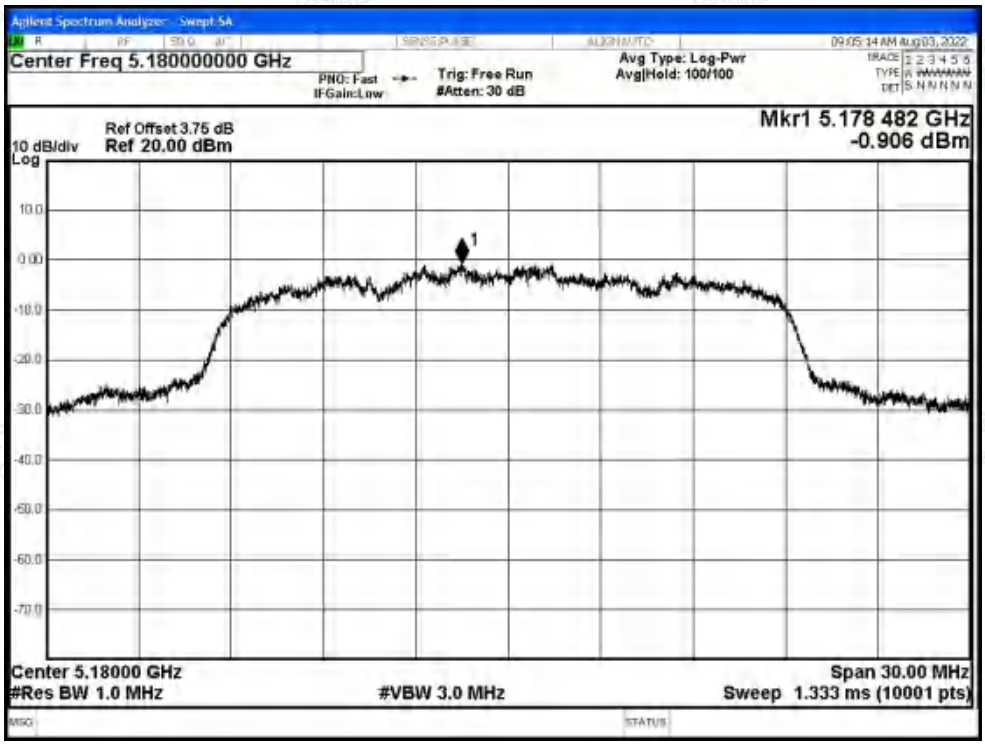
PSD NVNT n40 5190MHz Ant1



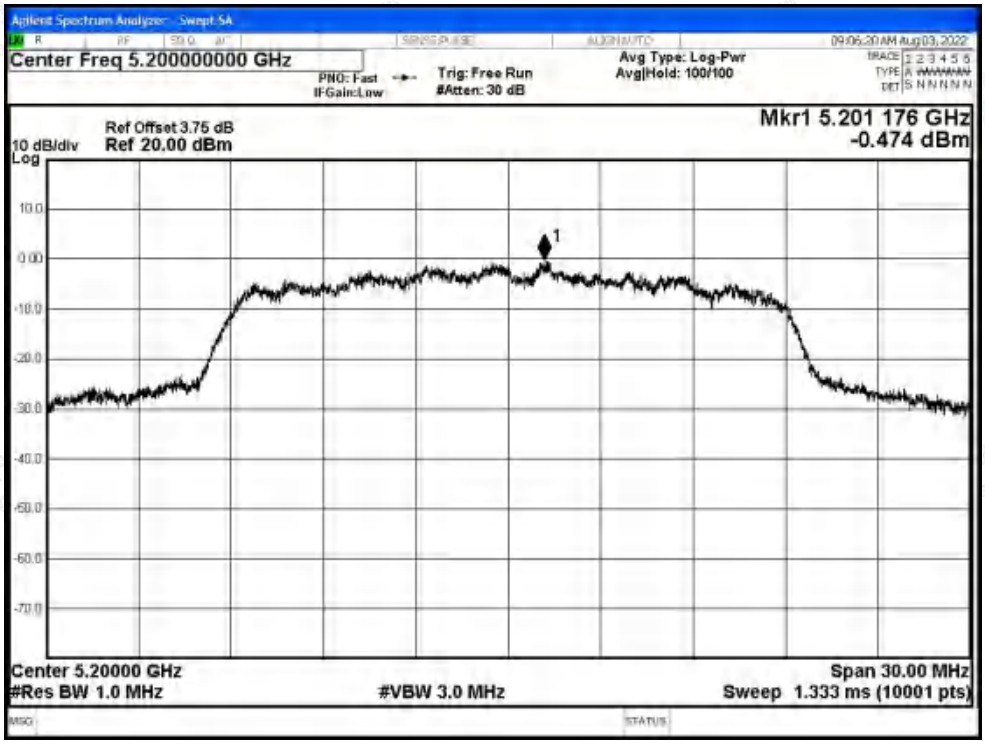
PSD NVNT n40 5230MHz Ant1



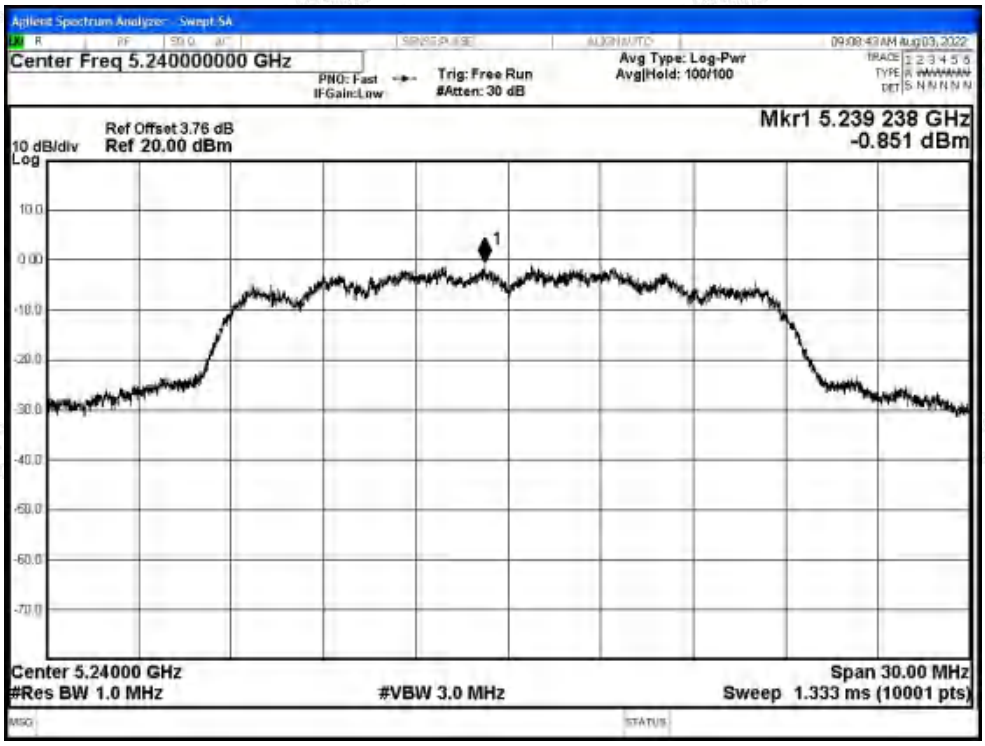
PSD NVNT ac20 5180MHz Ant1



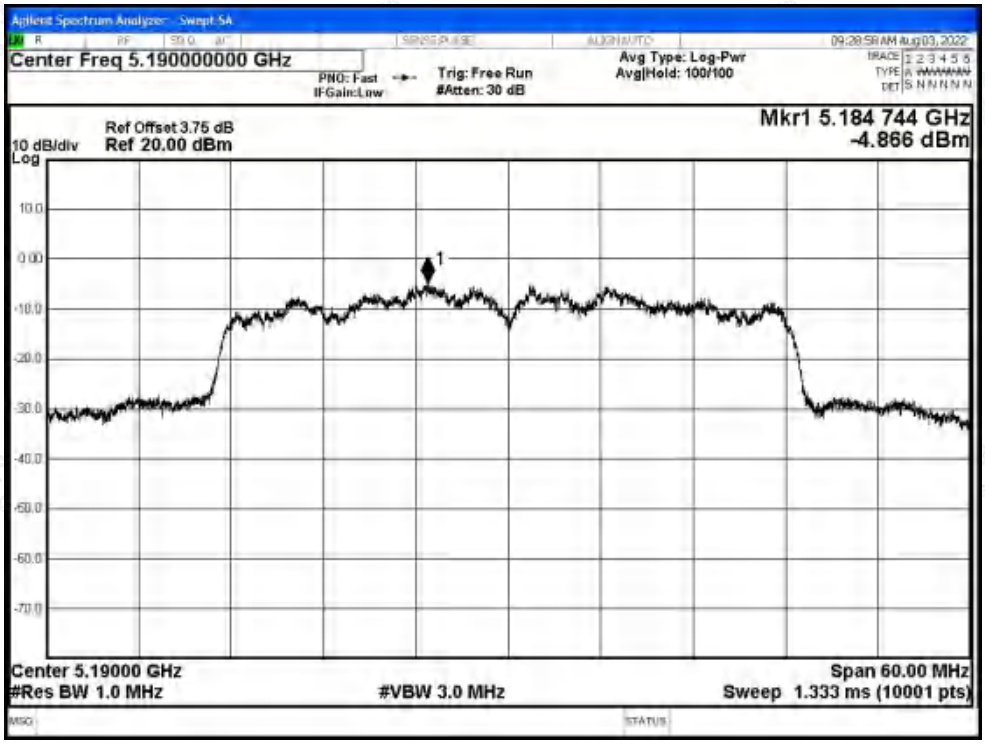
PSD NVNT ac20 5200MHz Ant1



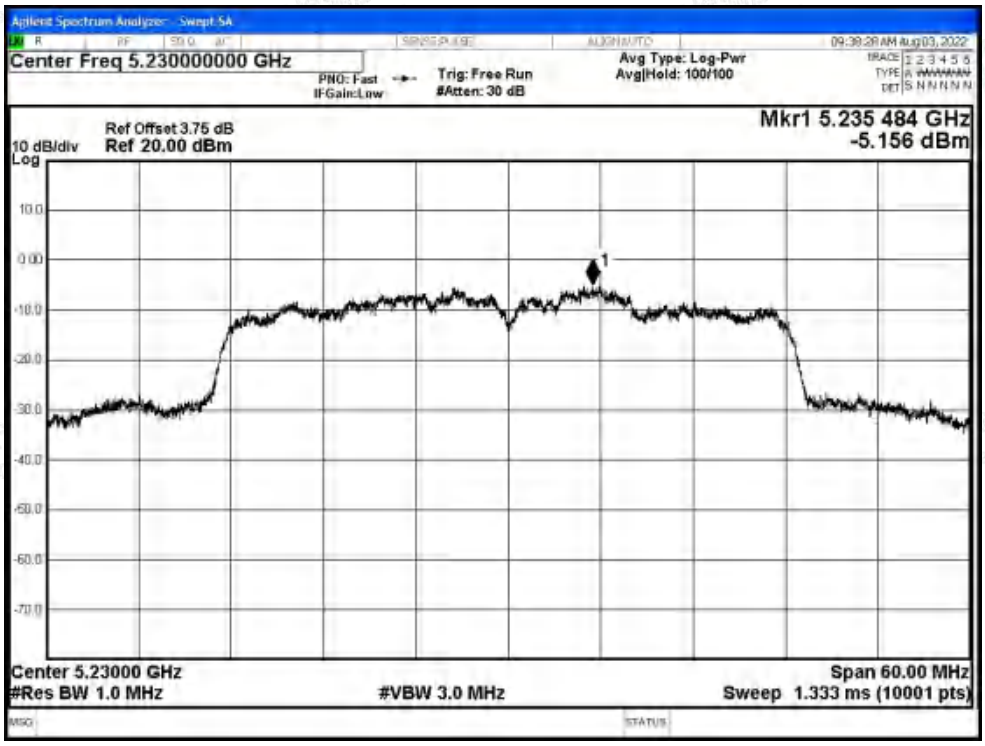
PSD NVNT ac20 5240MHz Ant1



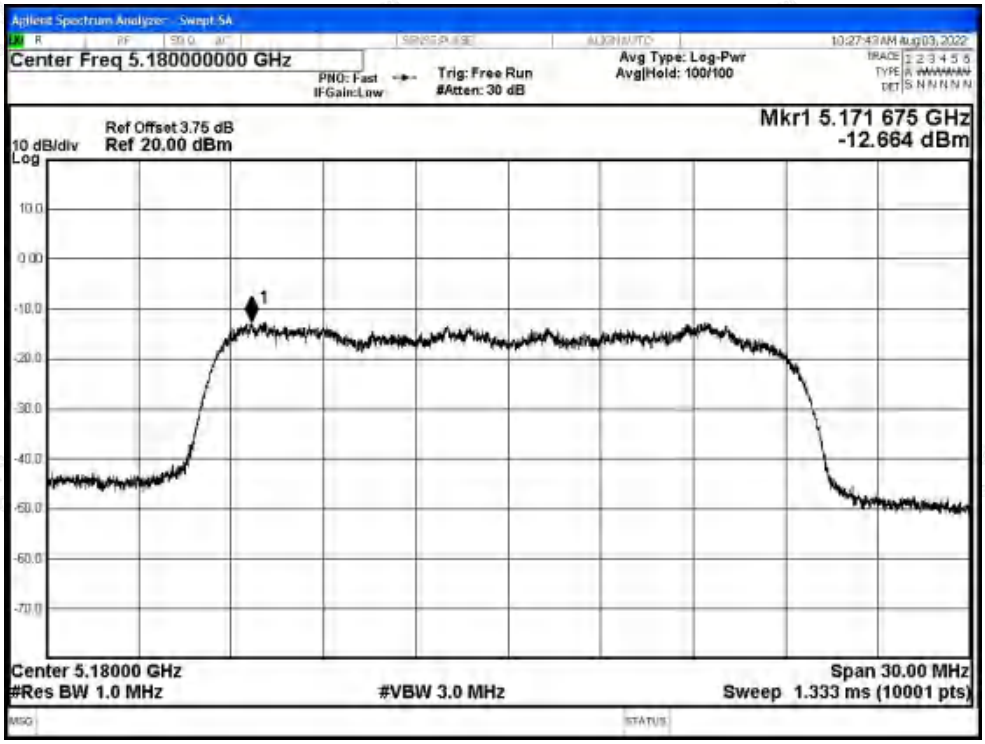
PSD NVNT ac40 5190MHz Ant1



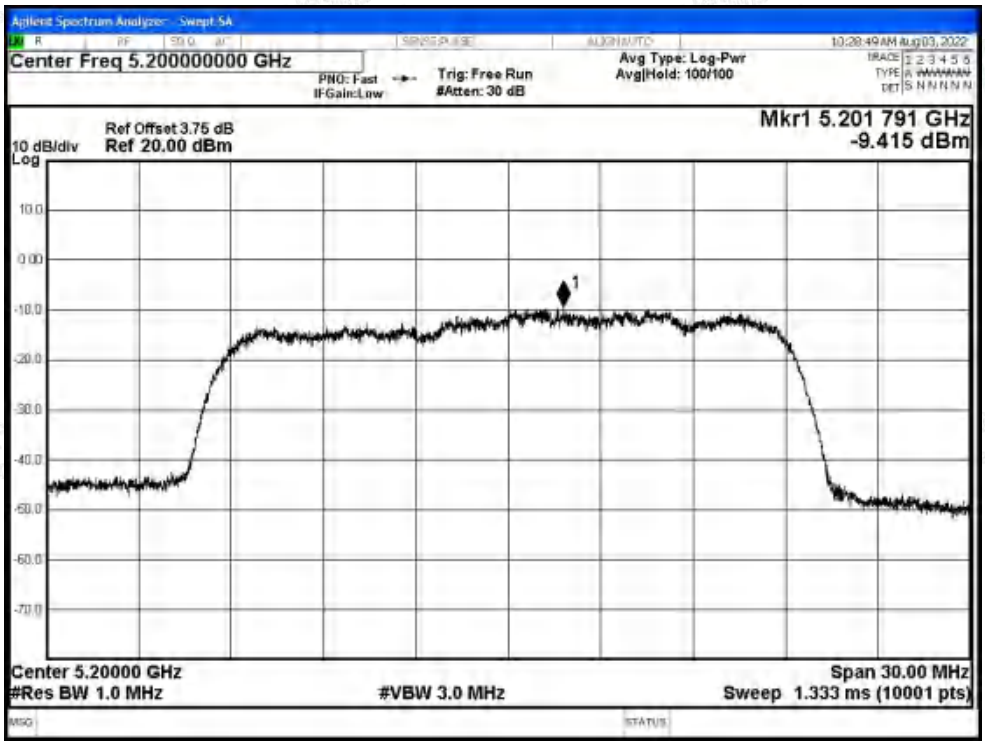
PSD NVNT ac40 5230MHz Ant1



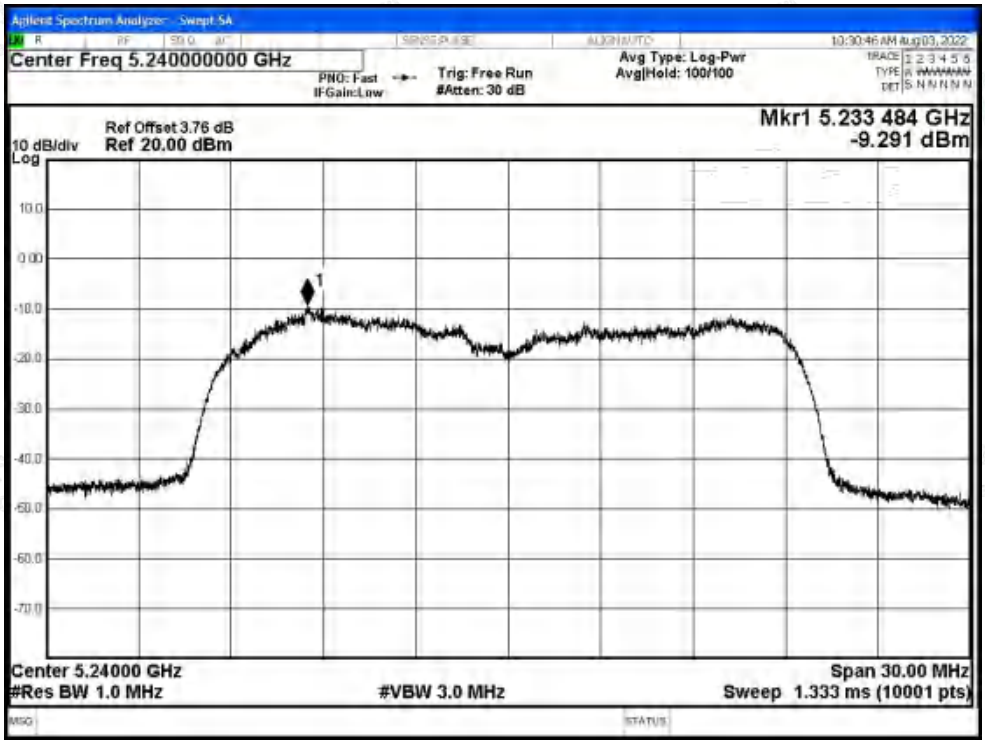
PSD NVNT ax20 5180MHz Ant1



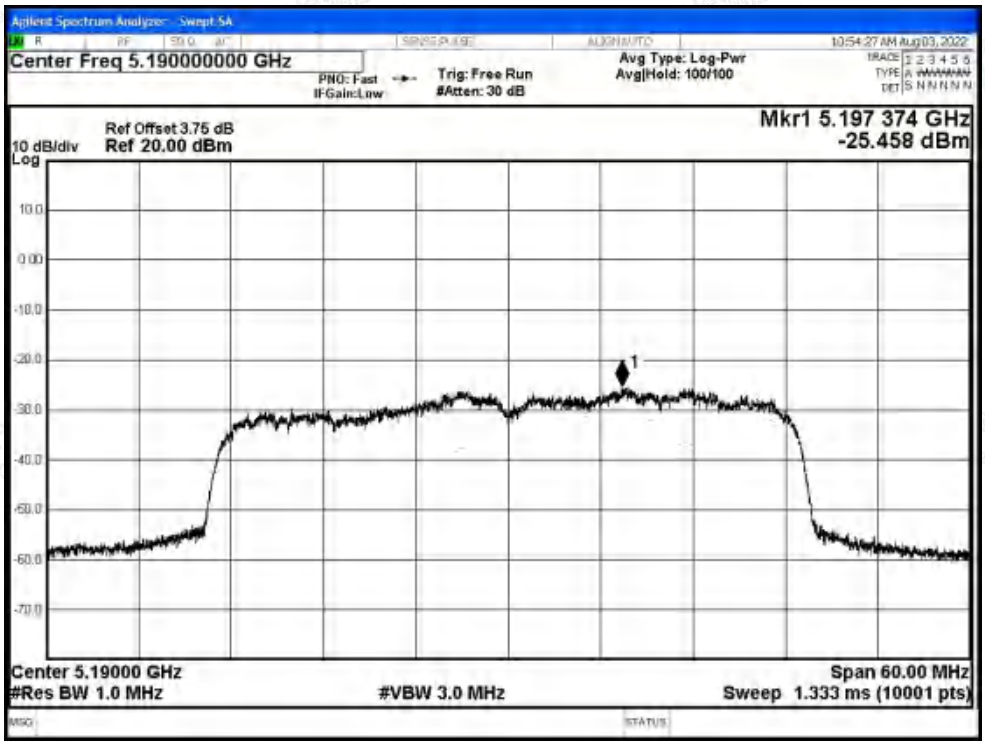
PSD NVNT ax20 5200MHz Ant1



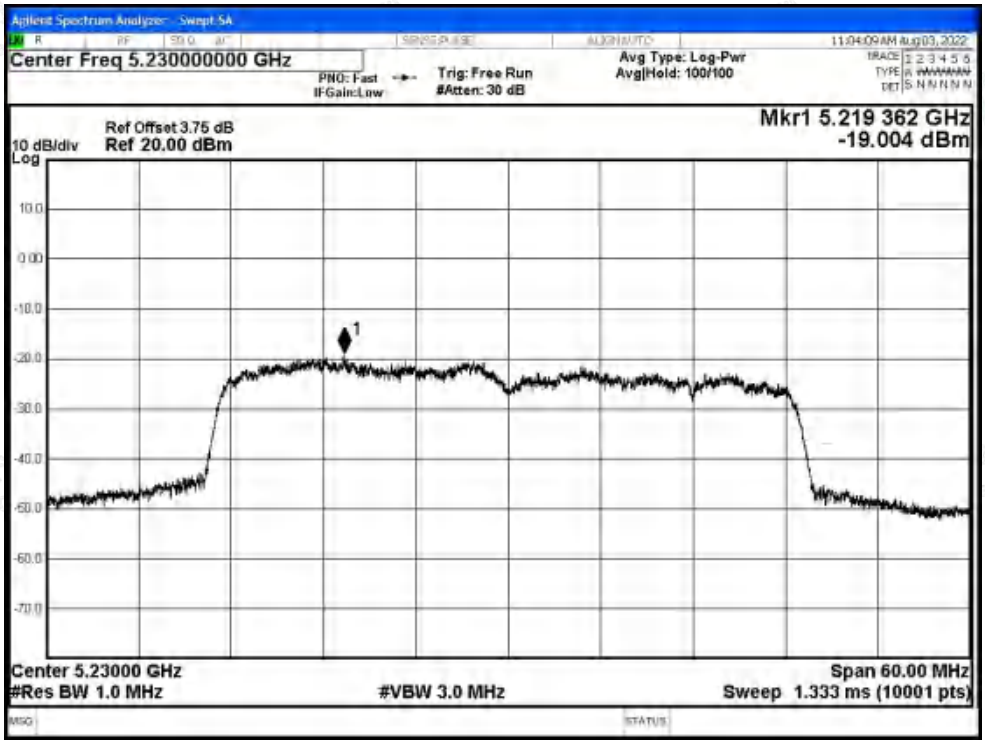
PSD NVNT ax20 5240MHz Ant1



PSD NVNT ax40 5190MHz Ant1



PSD NVNT ax40 5230MHz Ant1



C.4 Restrict Band

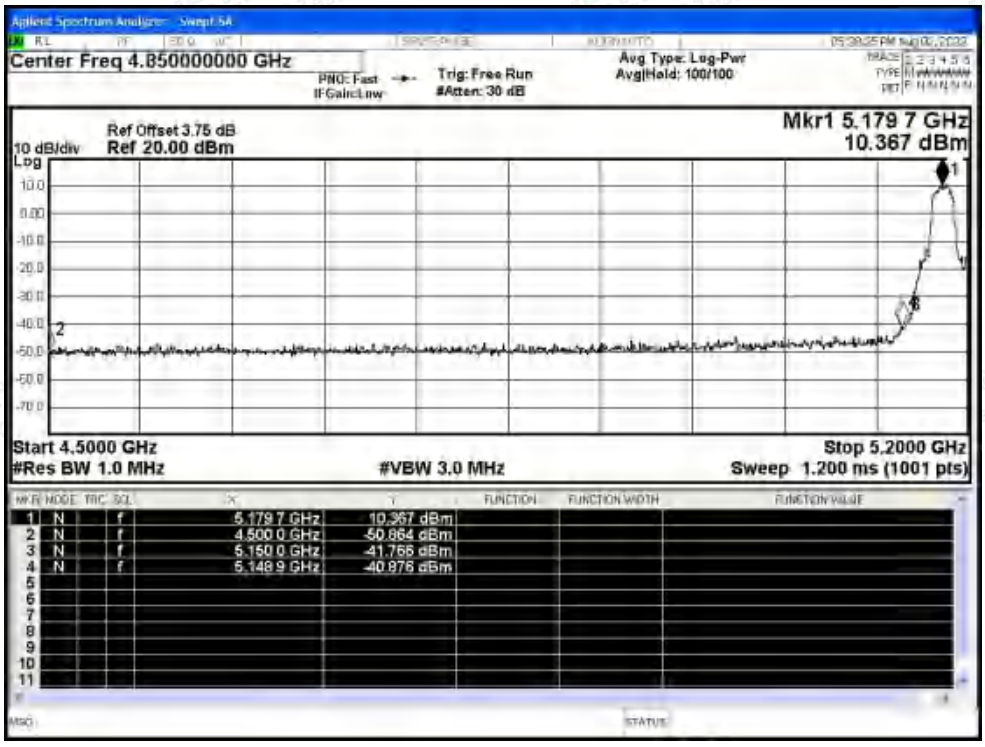
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	a	5180	Ant1	4500	-50.86	2	46.37	Peak	68.2	Pass
NVNT	a	5180	Ant1	4500	-59.69	2	37.54	Average	54	Pass
NVNT	a	5180	Ant1	5148.9	-40.88	2	56.35	Peak	68.2	Pass
NVNT	a	5180	Ant1	5149.6	-52.81	2	44.42	Average	54	Pass
NVNT	a	5180	Ant1	5150	-41.77	2	55.46	Peak	68.2	Pass
NVNT	a	5180	Ant1	5150	-52.31	2	44.92	Average	54	Pass
NVNT	a	5240	Ant1	5350	-48.94	2	48.29	Peak	68.2	Pass
NVNT	a	5240	Ant1	5350	-57.85	2	39.38	Average	54	Pass
NVNT	a	5240	Ant1	5411.52	-45.98	2	51.25	Peak	68.2	Pass
NVNT	a	5240	Ant1	5406.72	-57.1	2	40.13	Average	54	Pass
NVNT	a	5240	Ant1	5460	-49.42	2	47.81	Peak	68.2	Pass
NVNT	a	5240	Ant1	5460	-58.87	2	38.36	Average	54	Pass
NVNT	n20	5180	Ant1	4500	-51.7	2	45.53	Peak	68.2	Pass
NVNT	n20	5180	Ant1	4500	-59.69	2	37.54	Average	54	Pass
NVNT	n20	5180	Ant1	5148.9	-31.67	2	65.56	Peak	68.2	Pass
NVNT	n20	5180	Ant1	5149.6	-49.73	2	47.5	Average	54	Pass
NVNT	n20	5180	Ant1	5150	-37.18	2	60.05	Peak	68.2	Pass
NVNT	n20	5180	Ant1	5150	-49.18	2	48.05	Average	54	Pass
NVNT	n20	5240	Ant1	5350	-50.2	2	47.03	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5350	-58.32	2	38.91	Average	54	Pass
NVNT	n20	5240	Ant1	5354.64	-45.52	2	51.71	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5358.48	-58.07	2	39.16	Average	54	Pass
NVNT	n20	5240	Ant1	5460	-50.24	2	46.99	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5460	-58.86	2	38.37	Average	54	Pass
NVNT	n40	5190	Ant1	4500	-49.11	2	48.12	Peak	68.2	Pass
NVNT	n40	5190	Ant1	4500	-59.3	2	37.93	Average	54	Pass
NVNT	n40	5190	Ant1	5142.4	-36.07	2	61.16	Peak	68.2	Pass
NVNT	n40	5190	Ant1	5149.7	-45.47	2	51.76	Average	54	Pass
NVNT	n40	5190	Ant1	5150	-31.64	2	65.59	Peak	68.2	Pass
NVNT	n40	5190	Ant1	5150	-44.5	2	52.73	Average	54	Pass
NVNT	n40	5230	Ant1	5350	-48.6	2	48.63	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5350	-57.9	2	39.33	Average	54	Pass
NVNT	n40	5230	Ant1	5424.09	-46.9	2	50.33	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5392.77	-57.5	2	39.73	Average	54	Pass
NVNT	n40	5230	Ant1	5460	-48.35	2	48.88	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5460	-58.75	2	38.48	Average	54	Pass
NVNT	ac20	5180	Ant1	4500	-50.22	2	47.01	Peak	68.2	Pass
NVNT	ac20	5180	Ant1	4500	-59.63	2	37.6	Average	54	Pass

NVNT	ac20	5180	Ant1	5149.6	-41.37	2	55.86	Peak	68.2	Pass
NVNT	ac20	5180	Ant1	5149.6	-52.38	2	44.85	Average	54	Pass
NVNT	ac20	5180	Ant1	5150	-39.66	2	57.57	Peak	68.2	Pass
NVNT	ac20	5180	Ant1	5150	-51.94	2	45.29	Average	54	Pass
NVNT	ac20	5240	Ant1	5350	-50.33	2	46.9	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5350	-58.41	2	38.82	Average	54	Pass
NVNT	ac20	5240	Ant1	5396.16	-46.42	2	50.81	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5405.28	-57.78	2	39.45	Average	54	Pass
NVNT	ac20	5240	Ant1	5460	-50.75	2	46.48	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5460	-58.83	2	38.4	Average	54	Pass
NVNT	ac40	5190	Ant1	4500	-51	2	46.23	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	4500	-59.41	2	37.82	Average	54	Pass
NVNT	ac40	5190	Ant1	5146.05	-35.09	2	62.14	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	5149.7	-45.41	2	51.82	Average	54	Pass
NVNT	ac40	5190	Ant1	5150	-34.07	2	63.16	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	5150	-44.68	2	52.55	Average	54	Pass
NVNT	ac40	5230	Ant1	5350	-49.69	2	47.54	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5350	-57.87	2	39.36	Average	54	Pass
NVNT	ac40	5230	Ant1	5448.66	-46.85	2	50.38	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5351.46	-57.86	2	39.37	Average	54	Pass
NVNT	ac40	5230	Ant1	5460	-49.59	2	47.64	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5460	-58.54	2	38.69	Average	54	Pass
NVNT	ax20	5180	Ant1	4500	-50.16	2	47.07	Peak	68.2	Pass
NVNT	ax20	5180	Ant1	4500	-59.82	2	37.41	Average	54	Pass
NVNT	ax20	5180	Ant1	5148.2	-43.74	2	53.49	Peak	68.2	Pass
NVNT	ax20	5180	Ant1	5149.6	-54.8	2	42.43	Average	54	Pass
NVNT	ax20	5180	Ant1	5150	-43.23	2	54	Peak	68.2	Pass
NVNT	ax20	5180	Ant1	5150	-54.54	2	42.69	Average	54	Pass
NVNT	ax20	5240	Ant1	5350	-47.69	2	49.54	Peak	68.2	Pass
NVNT	ax20	5240	Ant1	5350	-56.68	2	40.55	Average	54	Pass
NVNT	ax20	5240	Ant1	5377.2	-44.81	2	52.42	Peak	68.2	Pass
NVNT	ax20	5240	Ant1	5373.36	-56.27	2	40.96	Average	54	Pass
NVNT	ax20	5240	Ant1	5460	-49.92	2	47.31	Peak	68.2	Pass
NVNT	ax20	5240	Ant1	5460	-58.68	2	38.55	Average	54	Pass
NVNT	ax40	5190	Ant1	4500	-49.74	2	47.49	Peak	68.2	Pass
NVNT	ax40	5190	Ant1	4500	-50.96	2	46.27	Average	54	Pass
NVNT	ax40	5190	Ant1	5057.72	-45.76	2	51.47	Peak	68.2	Pass
NVNT	ax40	5190	Ant1	5064.29	-47.74	2	49.49	Average	54	Pass
NVNT	ax40	5190	Ant1	5150	-48.22	2	49.01	Peak	68.2	Pass
NVNT	ax40	5190	Ant1	5150	-51.91	2	45.32	Average	54	Pass
NVNT	ax40	5230	Ant1	5350	-48.06	2	49.17	Peak	68.2	Pass
NVNT	ax40	5230	Ant1	5350	-48.63	2	48.6	Average	54	Pass

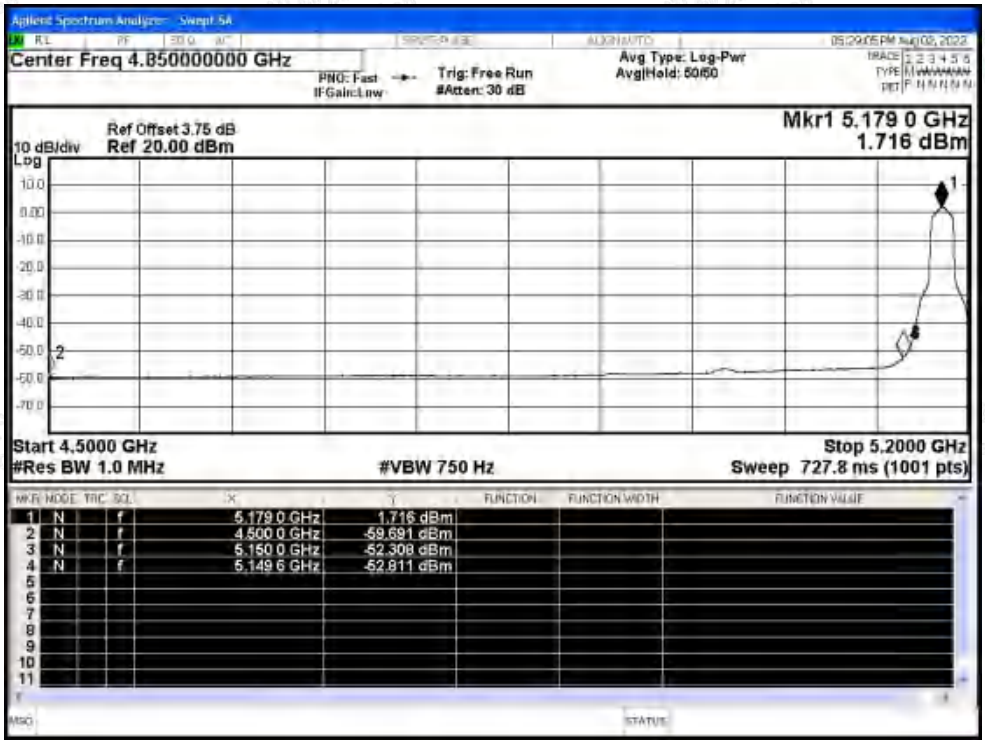
NVNT	ax40	5230	Ant1	5398.17	-43.93	2	53.3	Peak	68.2	Pass
NVNT	ax40	5230	Ant1	5365.23	-46.18	2	51.05	Average	54	Pass
NVNT	ax40	5230	Ant1	5460	-48.97	2	48.26	Peak	68.2	Pass
NVNT	ax40	5230	Ant1	5460	-49.05	2	48.18	Average	54	Pass

Test Graphs

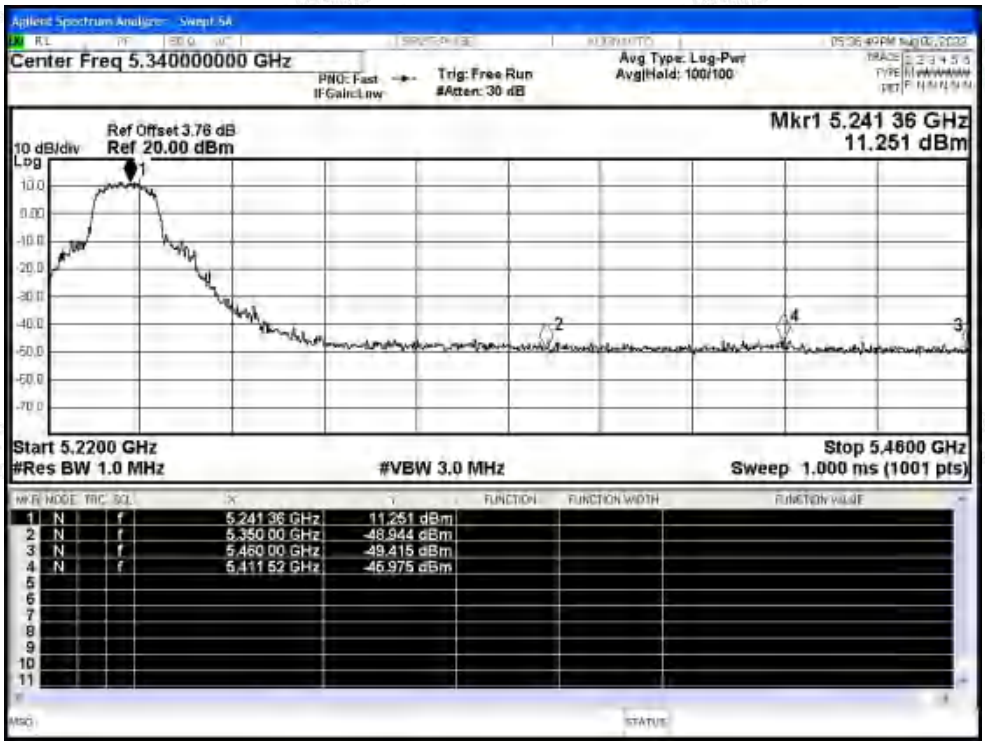
Restrict Band NVNT a 5180MHz Ant1 Peak



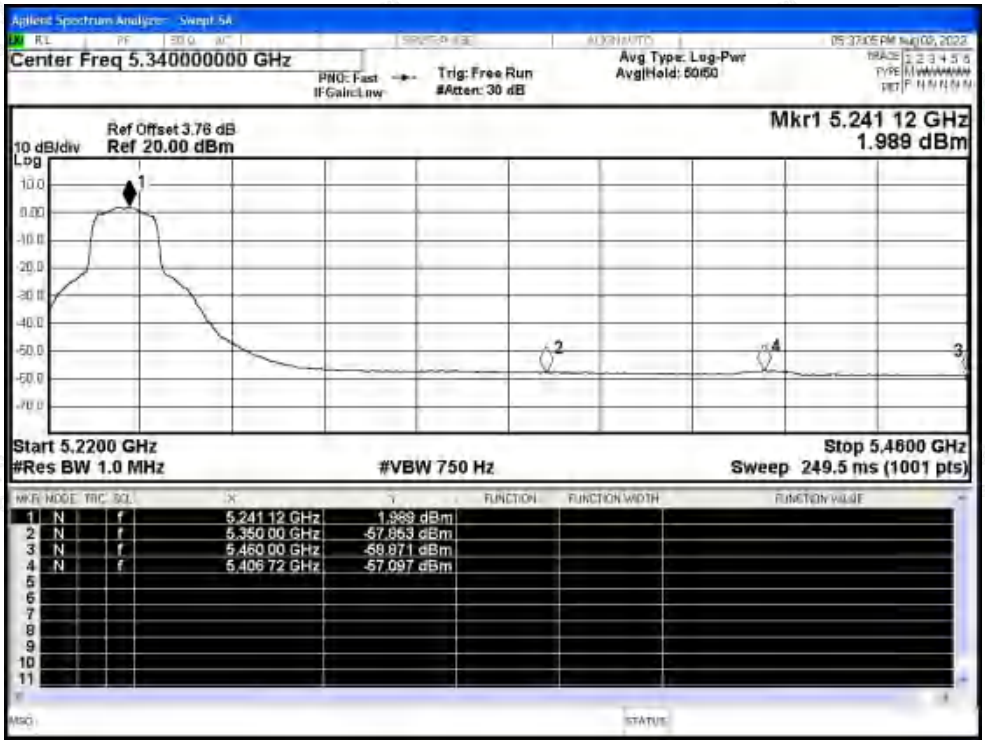
Restrict Band NVNT a 5180MHz Ant1 Average



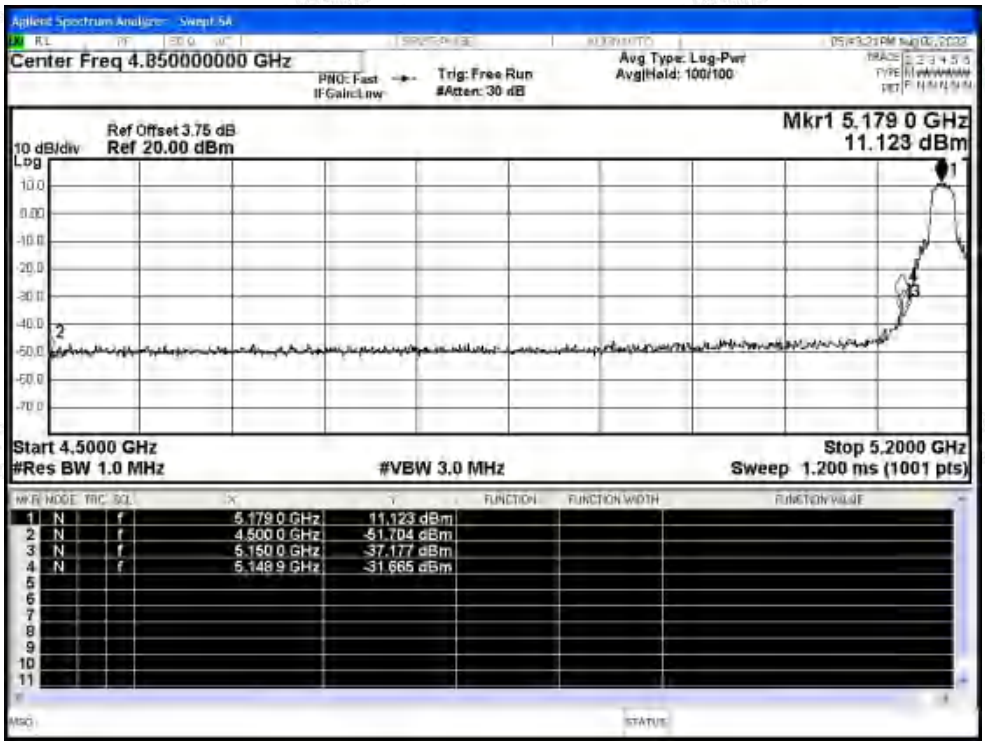
Restrict Band NVNT a 5240MHz Ant1 Peak



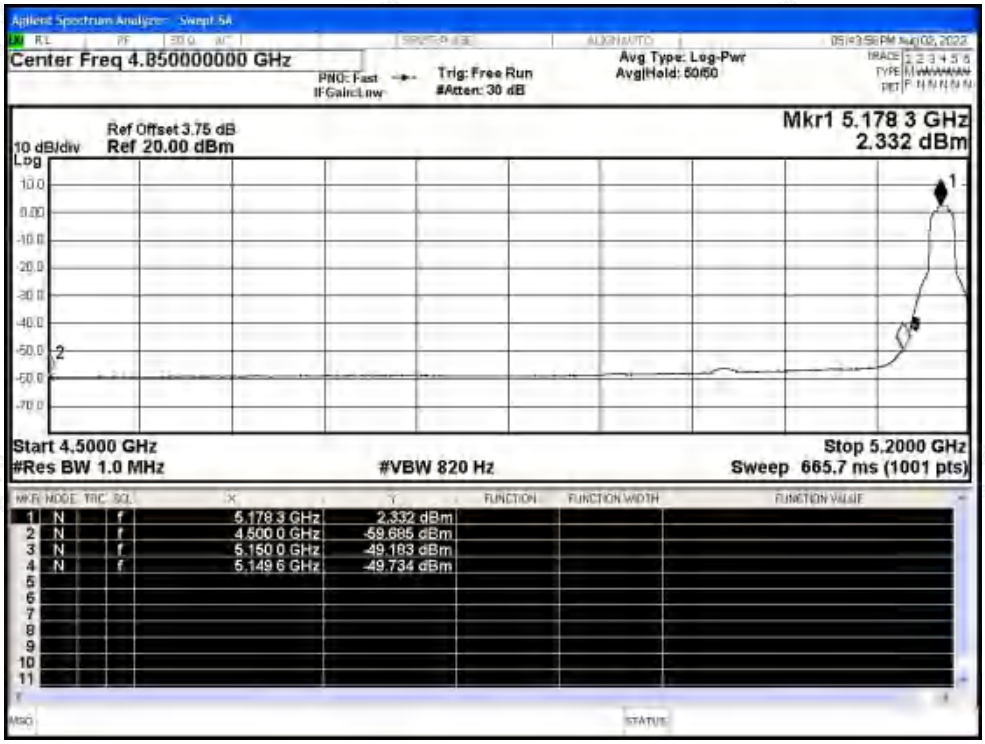
Restrict Band NVNT a 5240MHz Ant1 Average



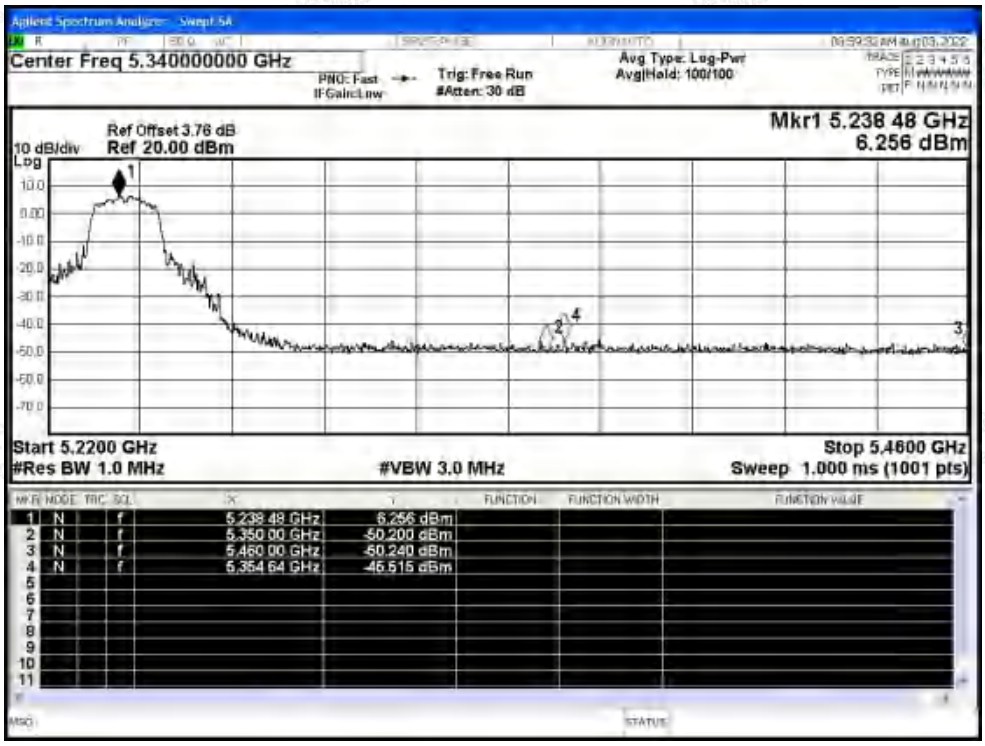
Restrict Band NVNT n20 5180MHz Ant1 Peak



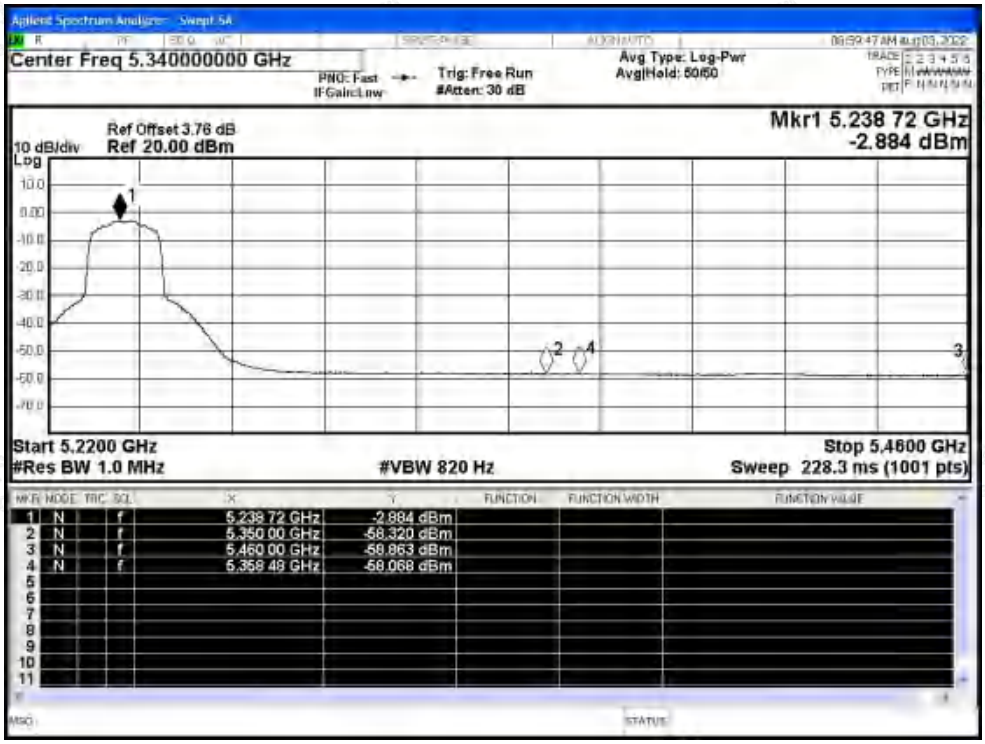
Restrict Band NVNT n20 5180MHz Ant1 Average



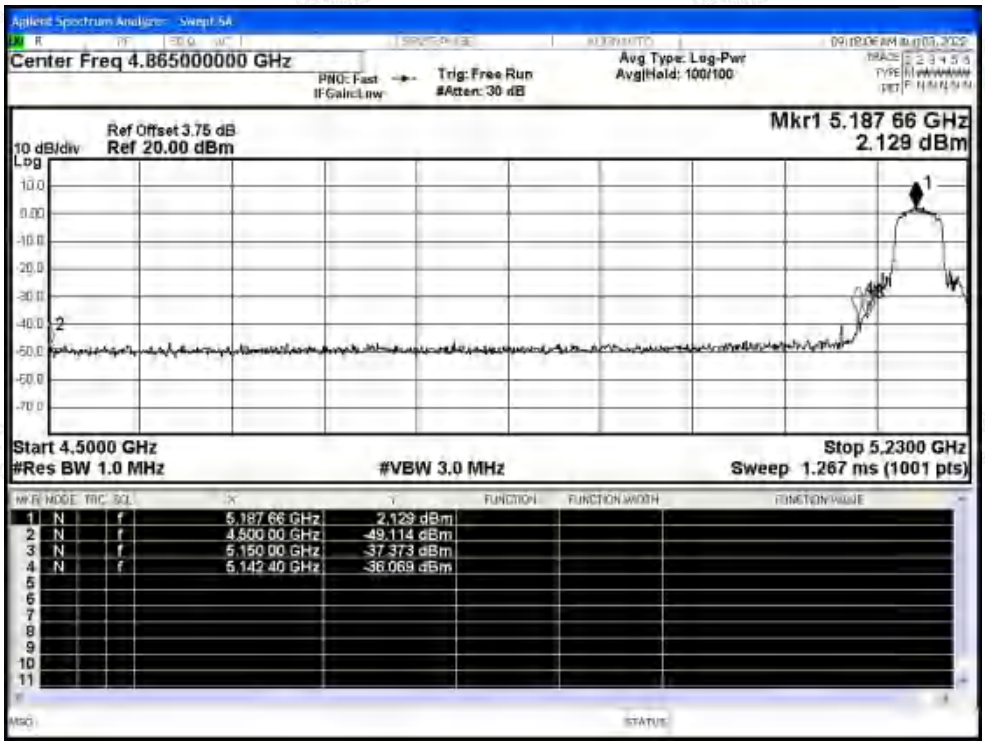
Restrict Band NVNT n20 5240MHz Ant1 Peak



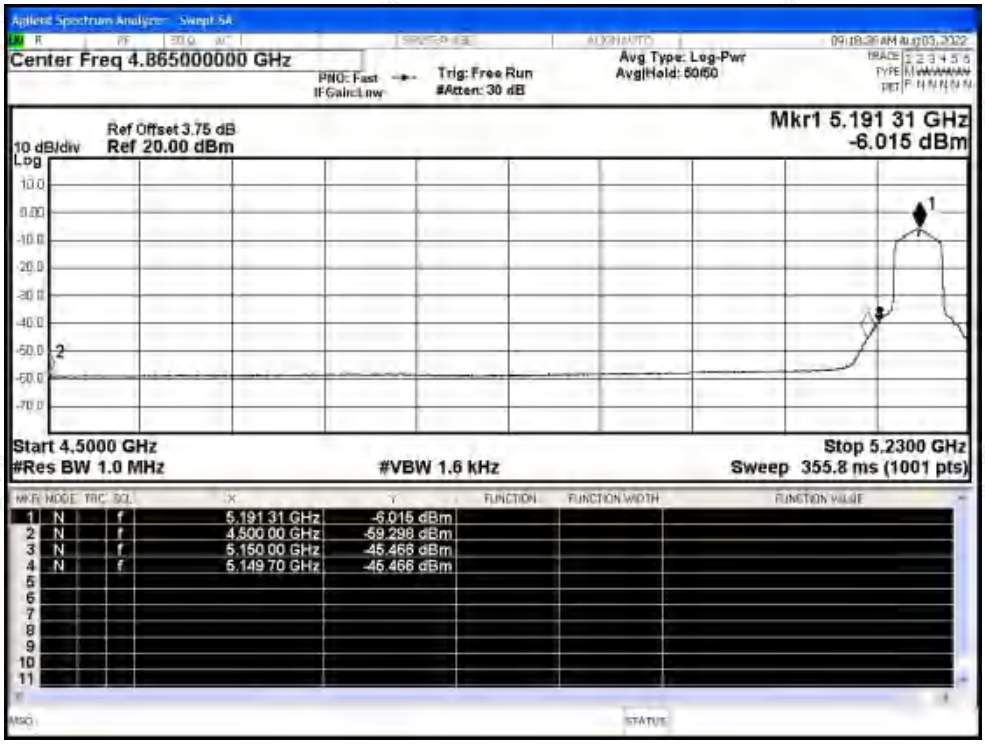
Restrict Band NVNT n20 5240MHz Ant1 Average



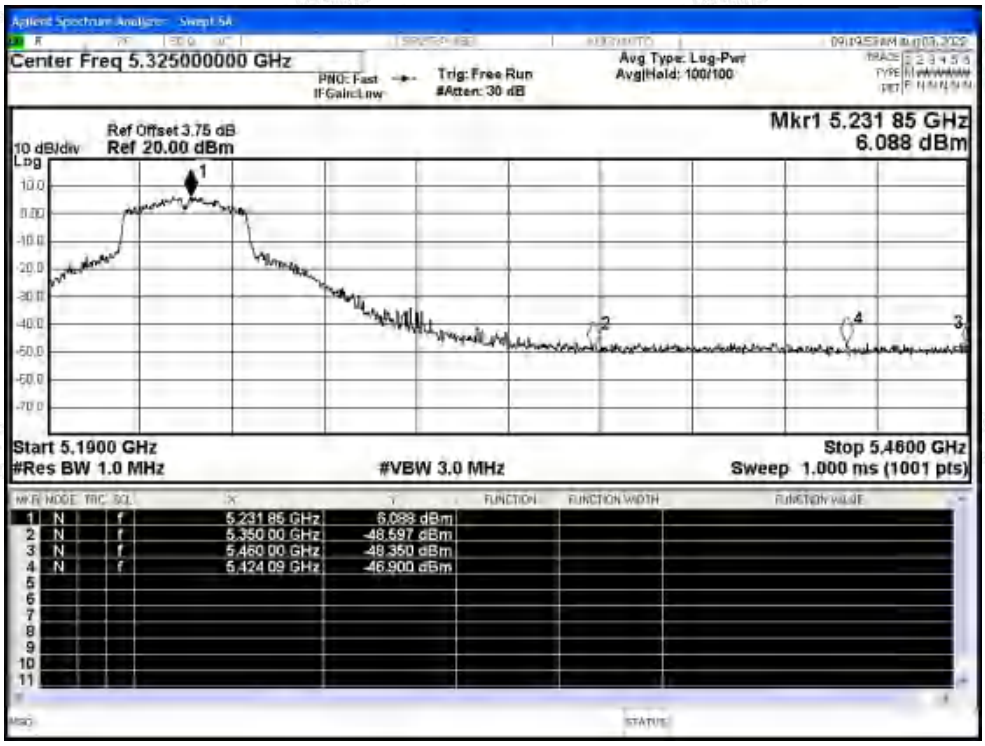
Restrict Band NVNT n40 5190MHz Ant1 Peak



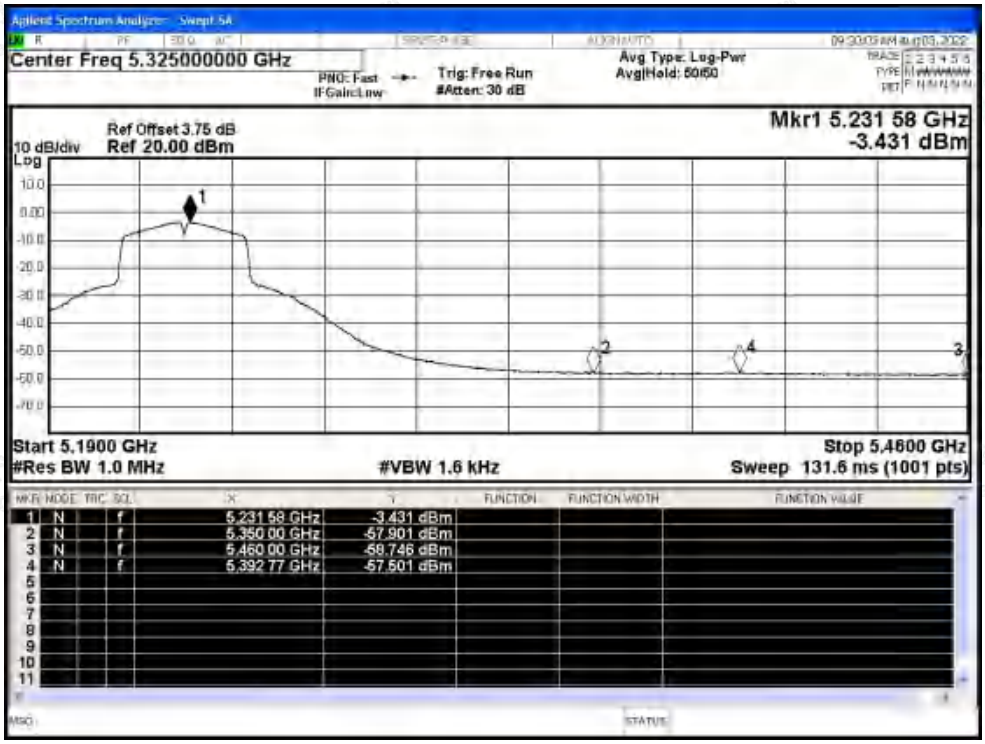
Restrict Band NVNT n40 5190MHz Ant1 Average



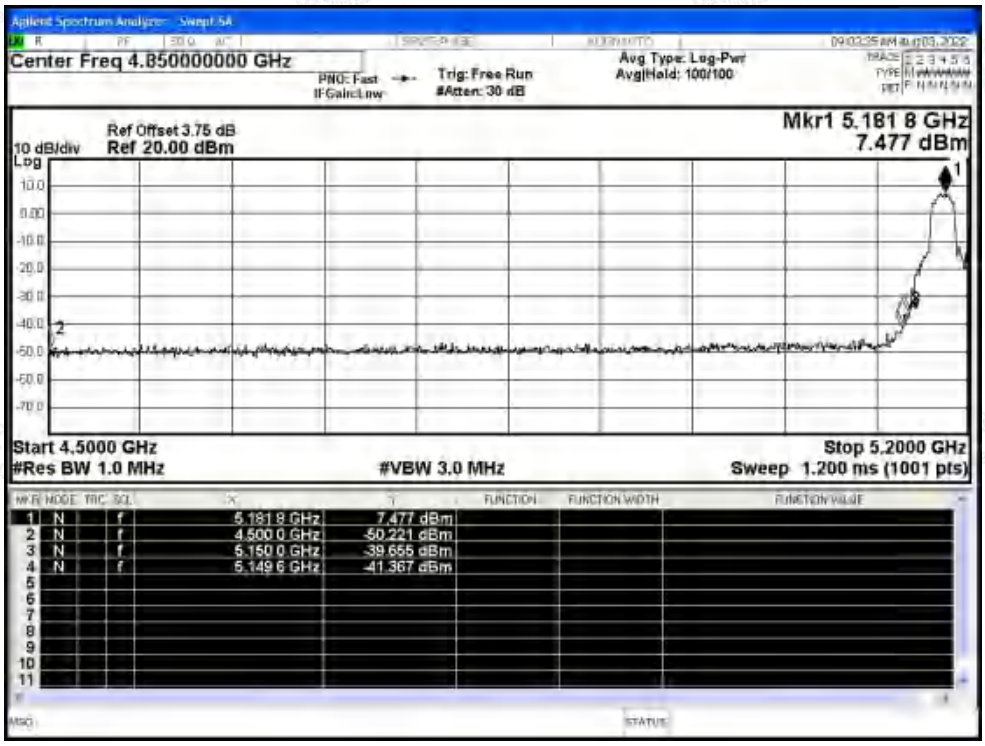
Restrict Band NVNT n40 5230MHz Ant1 Peak



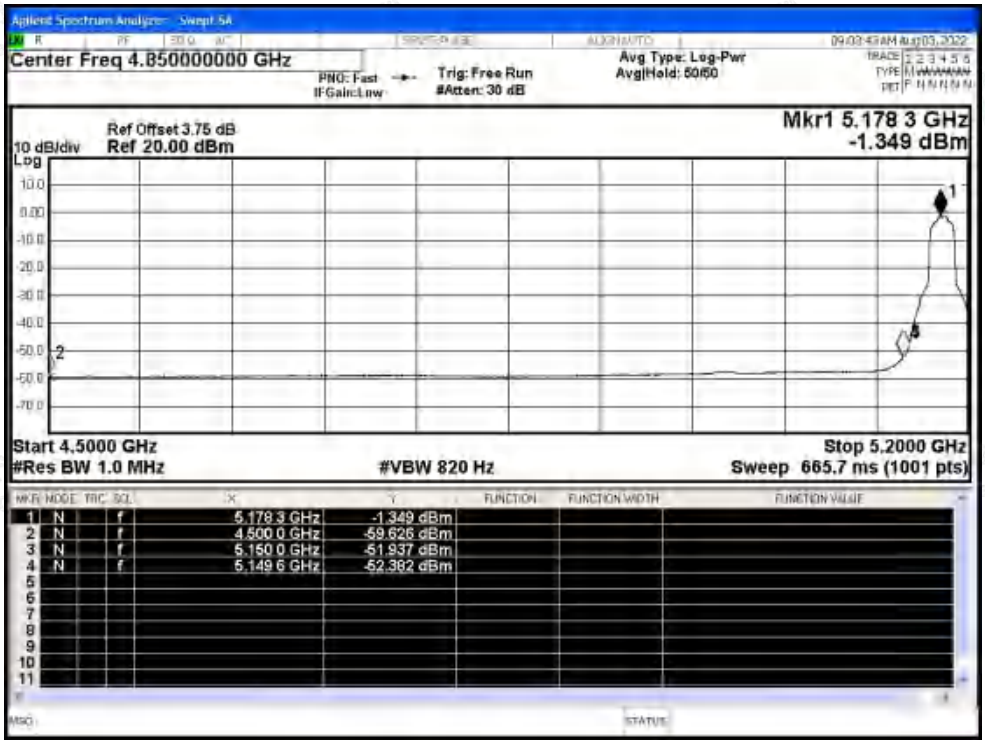
Restrict Band NVNT n40 5230MHz Ant1 Average



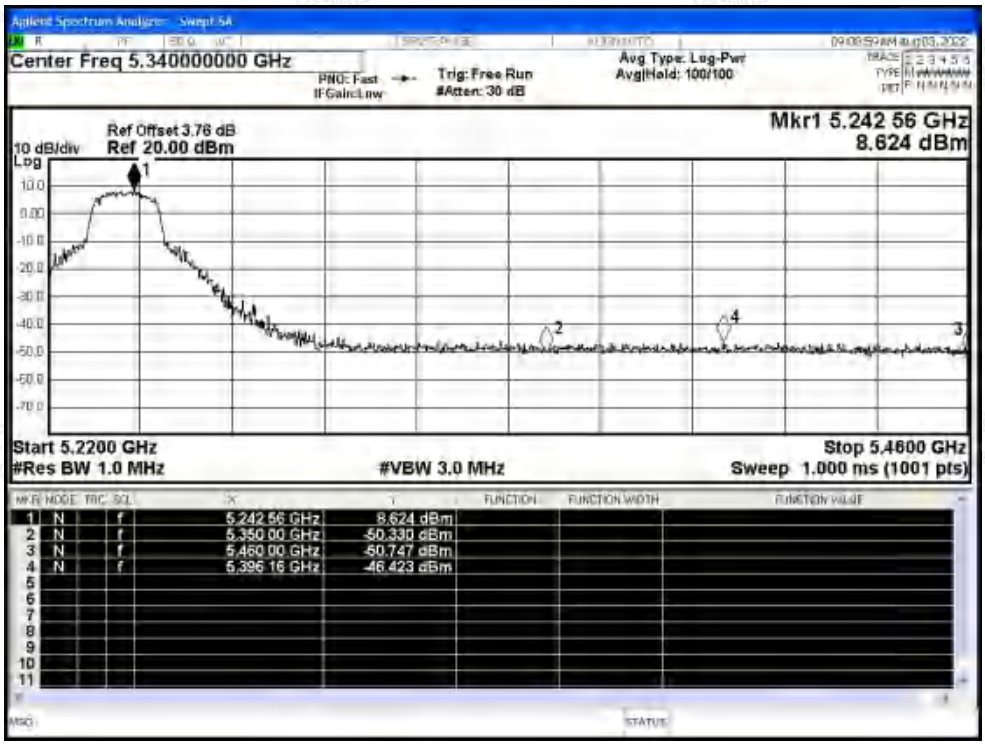
Restrict Band NVNT ac20 5180MHz Ant1 Peak



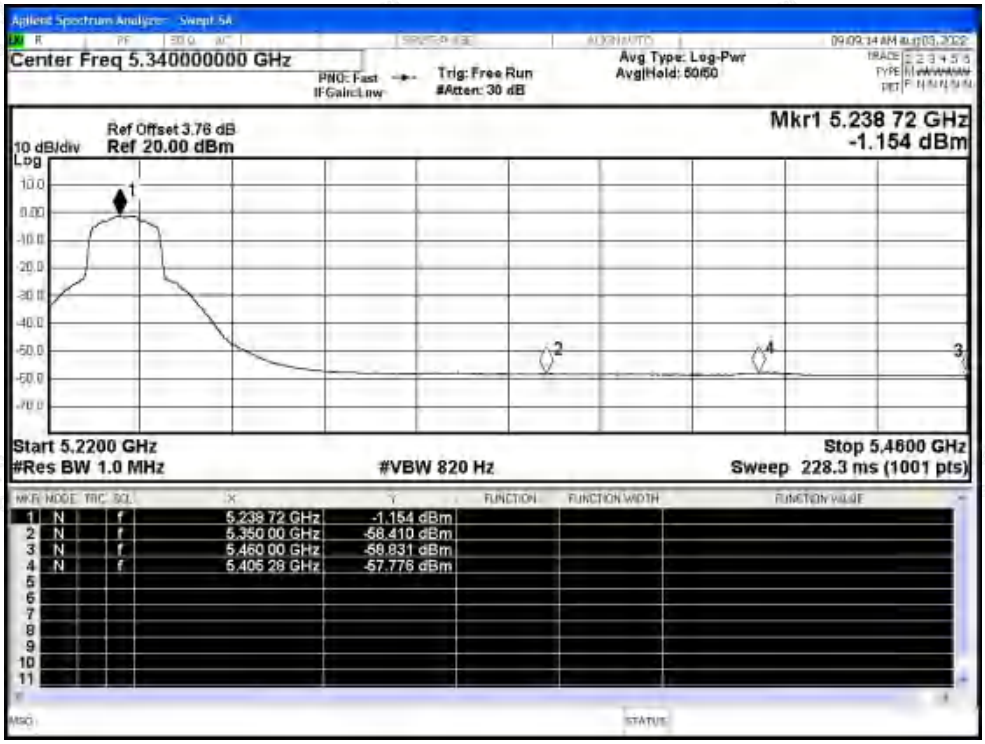
Restrict Band NVNT ac20 5180MHz Ant1 Average



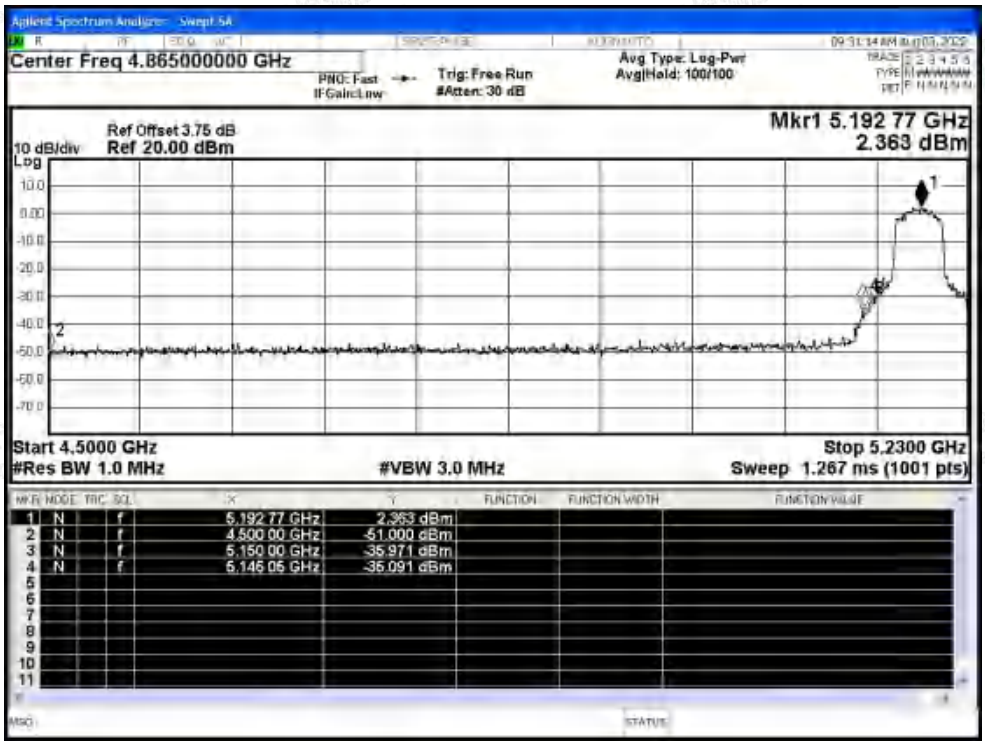
Restrict Band NVNT ac20 5240MHz Ant1 Peak



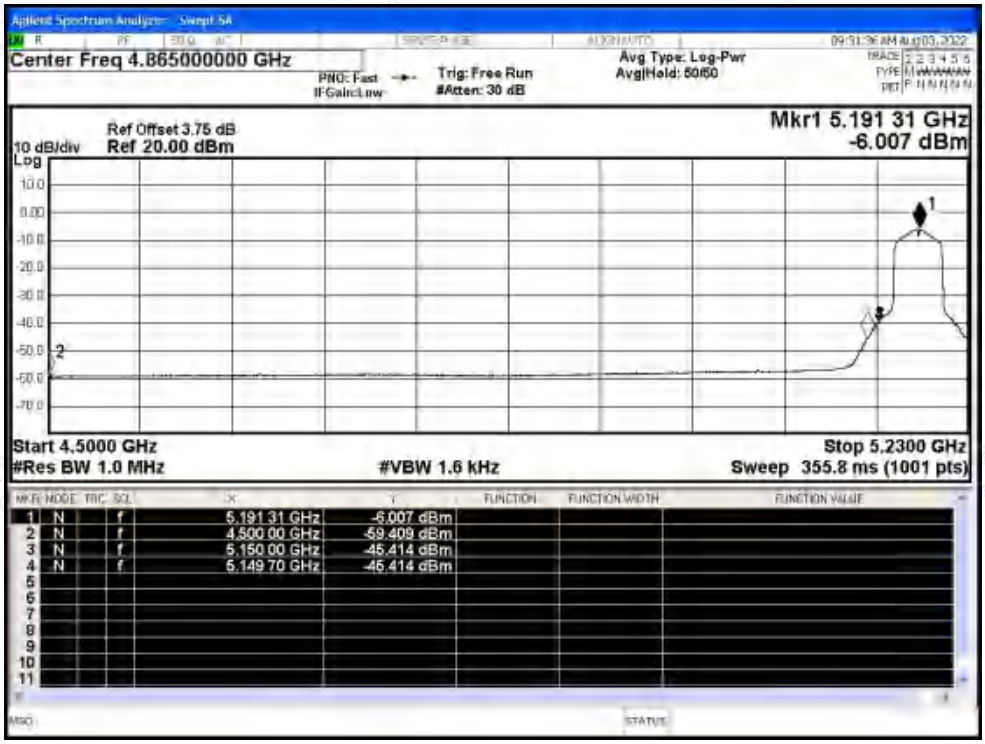
Restrict Band NVNT ac20 5240MHz Ant1 Average



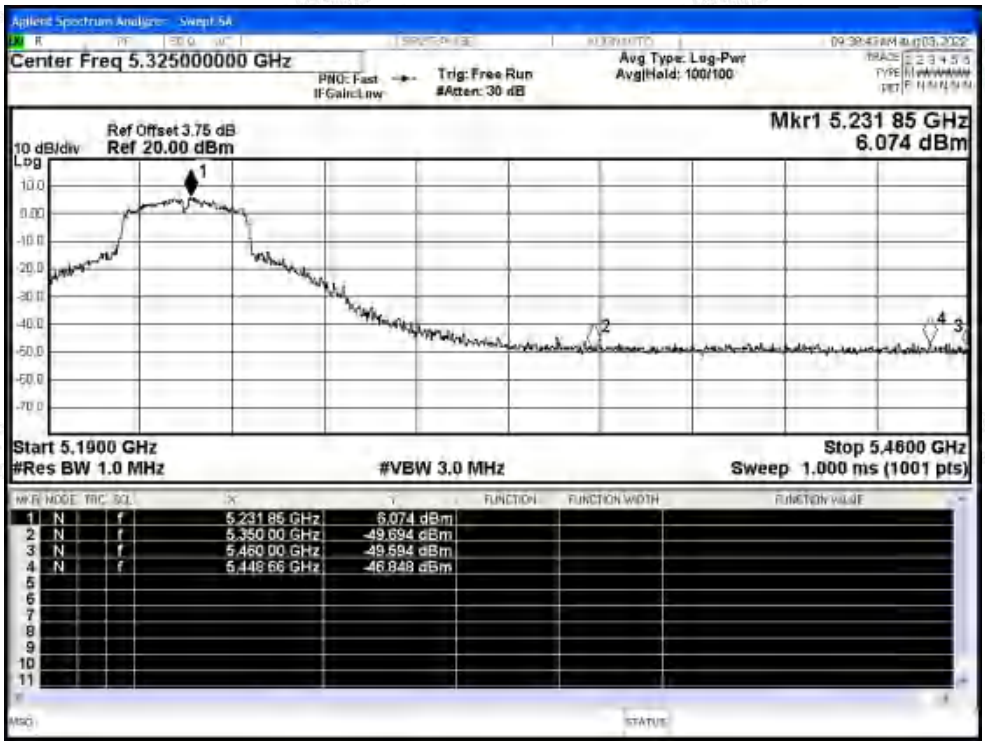
Restrict Band NVNT ac40 5190MHz Ant1 Peak



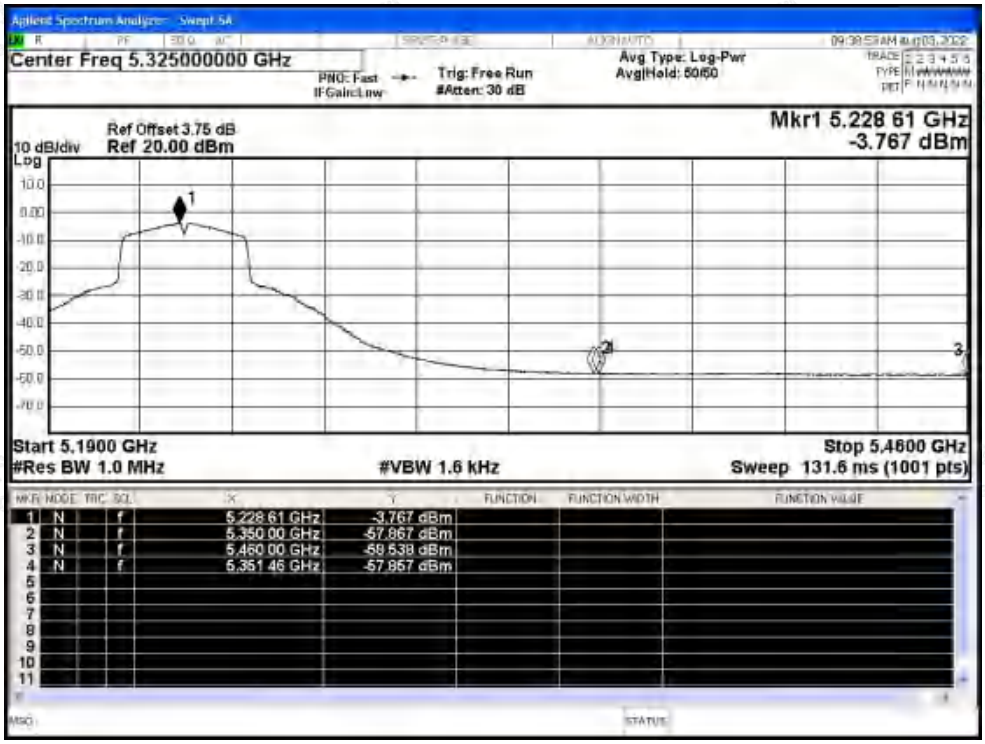
Restrict Band NVNT ac40 5190MHz Ant1 Average



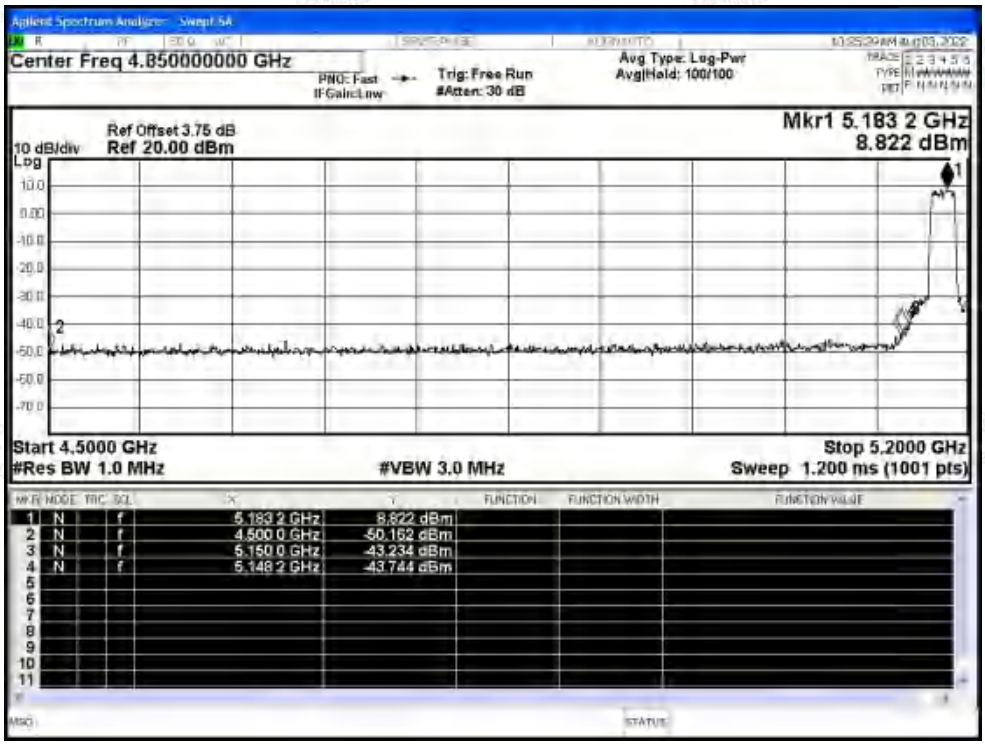
Restrict Band NVNT ac40 5230MHz Ant1 Peak



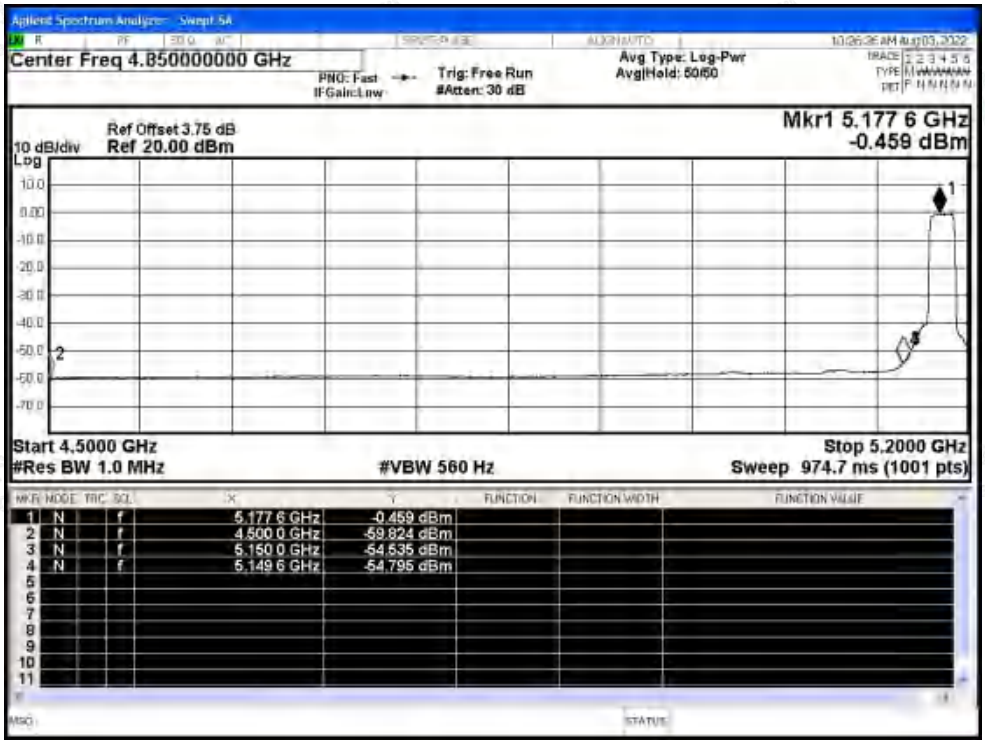
Restrict Band NVNT ac40 5230MHz Ant1 Average



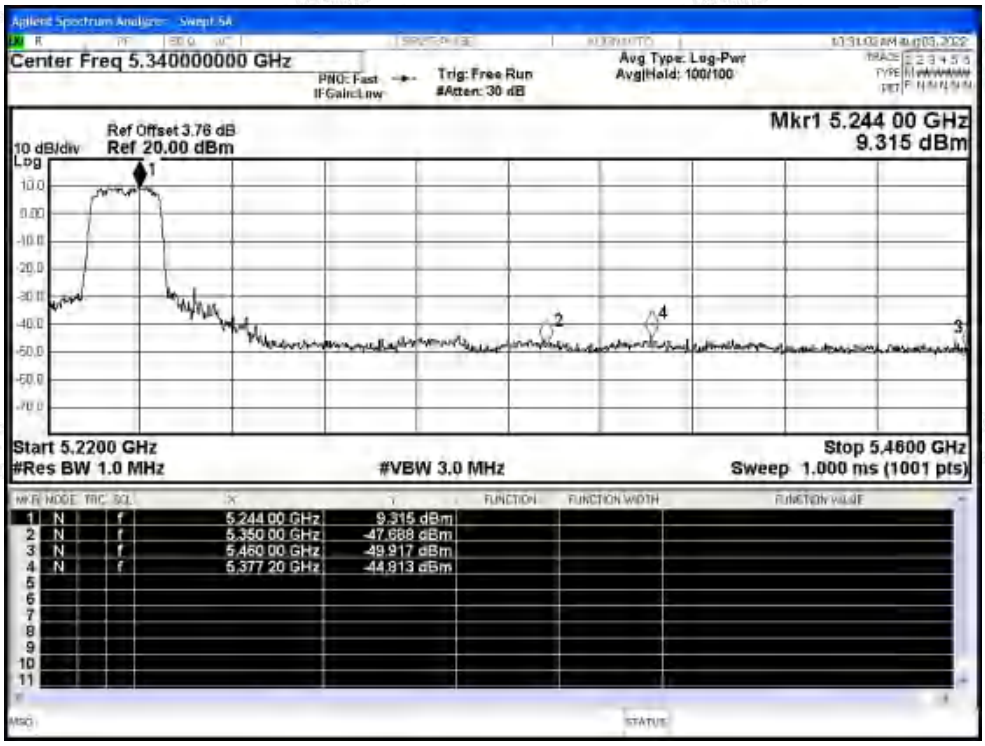
Restrict Band NVNT ax20 5180MHz Ant1 Peak



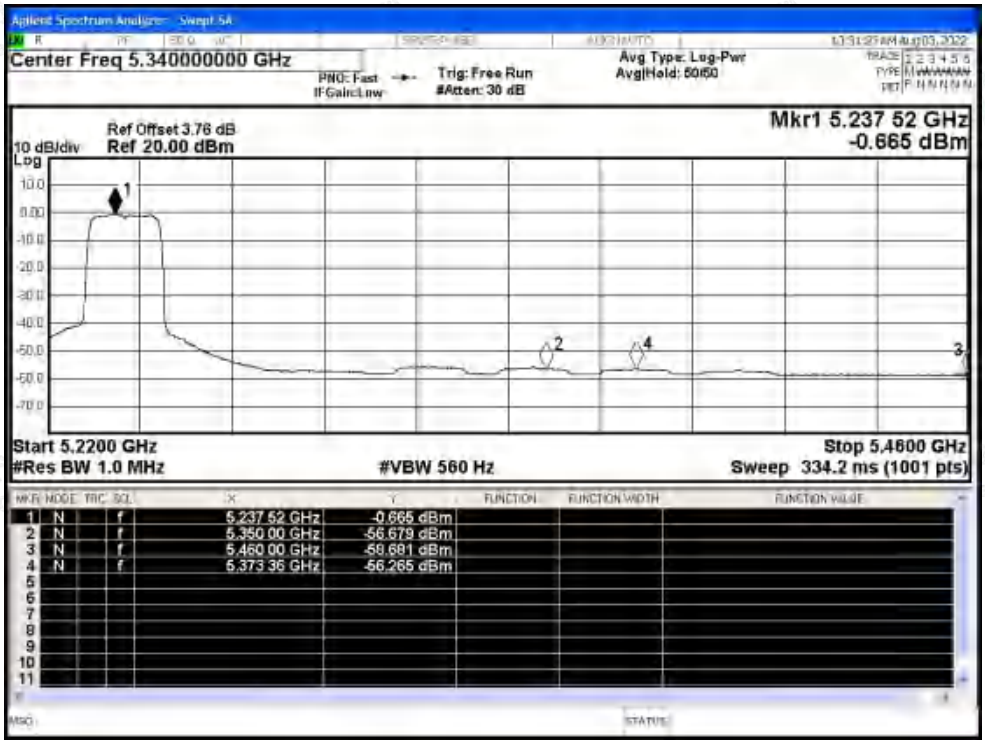
Restrict Band NVNT ax20 5180MHz Ant1 Average



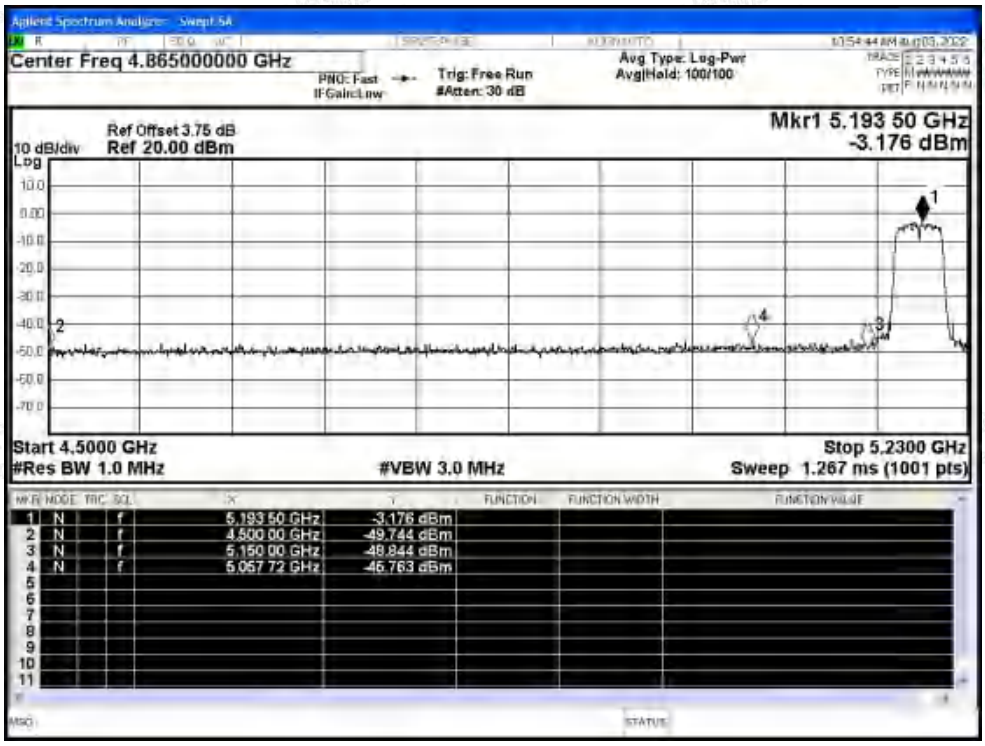
Restrict Band NVNT ax20 5240MHz Ant1 Peak



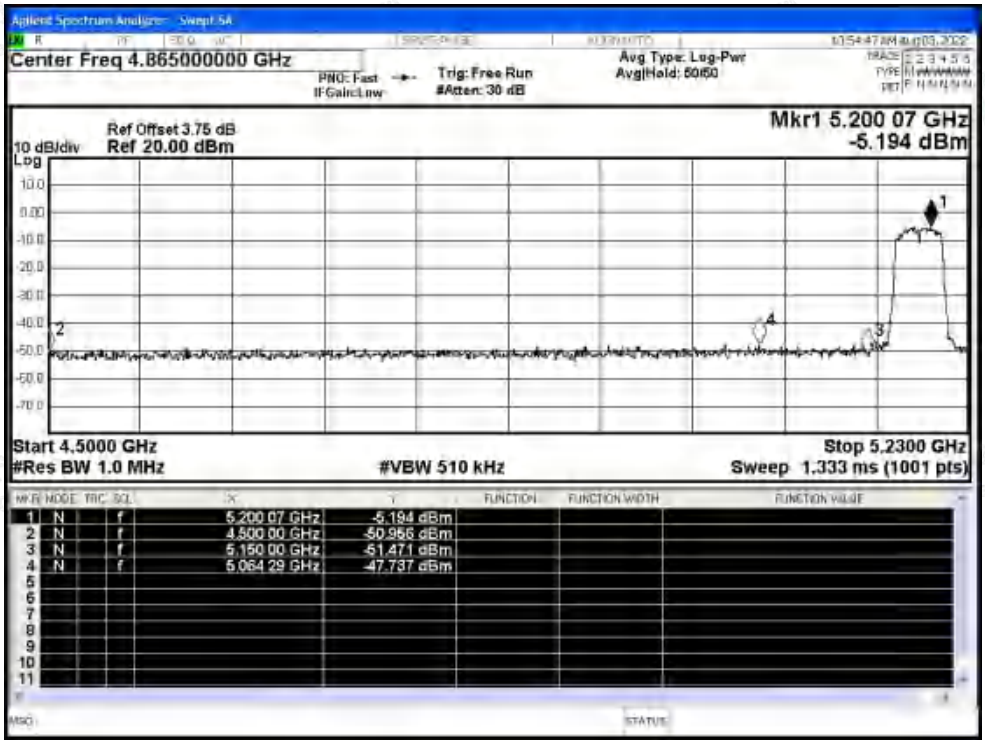
Restrict Band NVNT ax20 5240MHz Ant1 Average



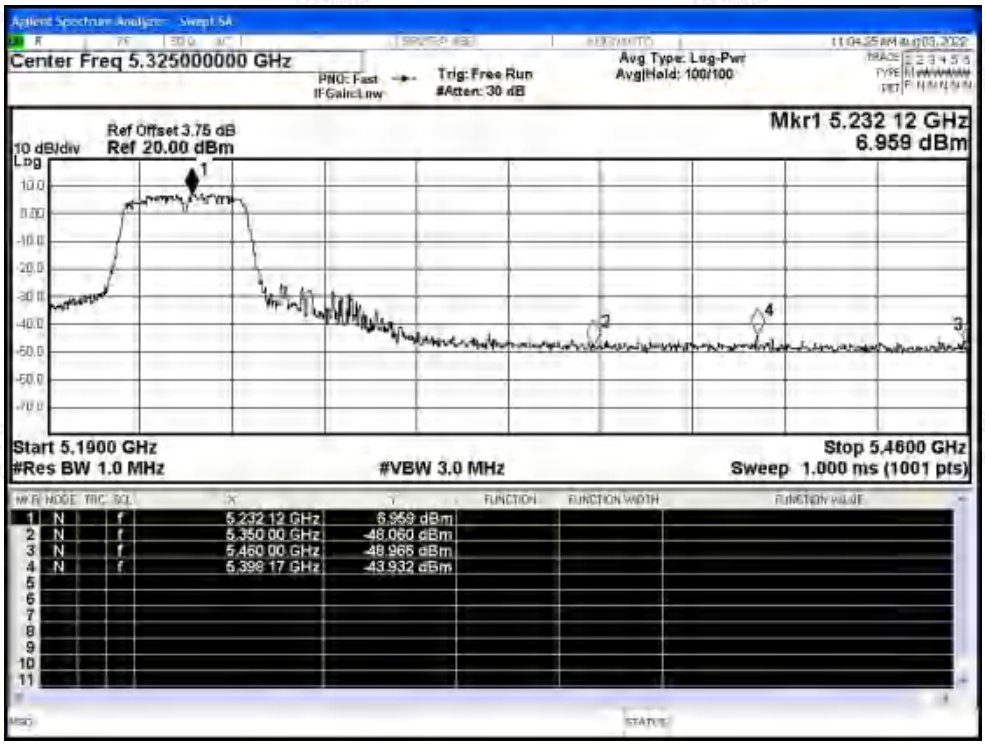
Restrict Band NVNT ax40 5190MHz Ant1 Peak



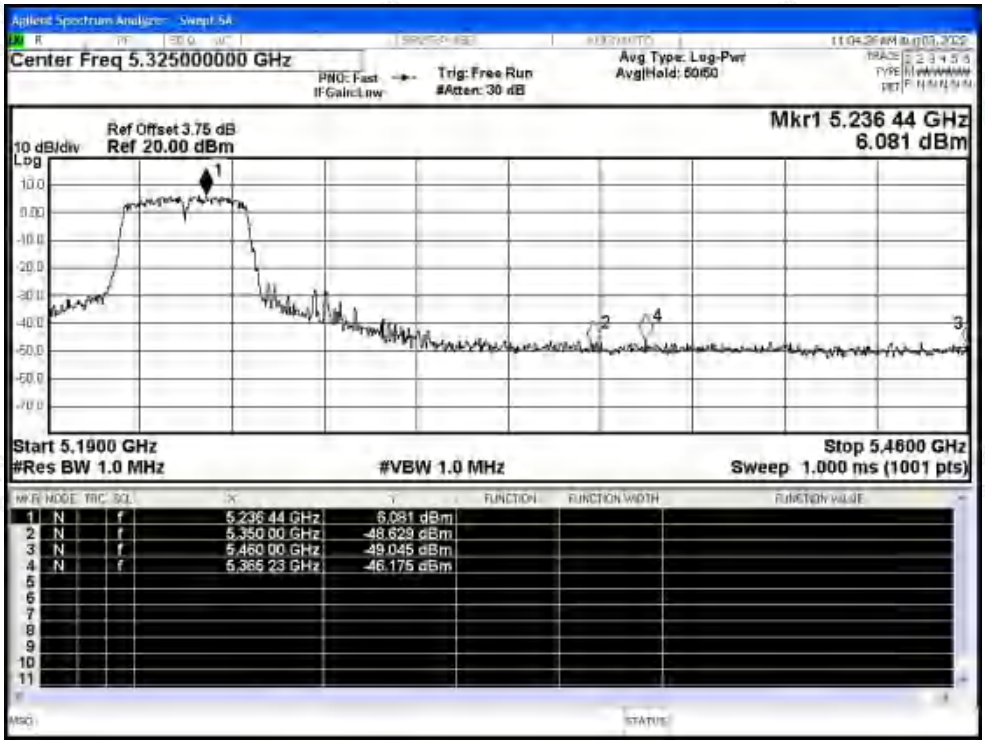
Restrict Band NVNT ax40 5190MHz Ant1 Average



Restrict Band NVNT ax40 5230MHz Ant1 Peak



Restrict Band NVNT ax40 5230MHz Ant1 Average

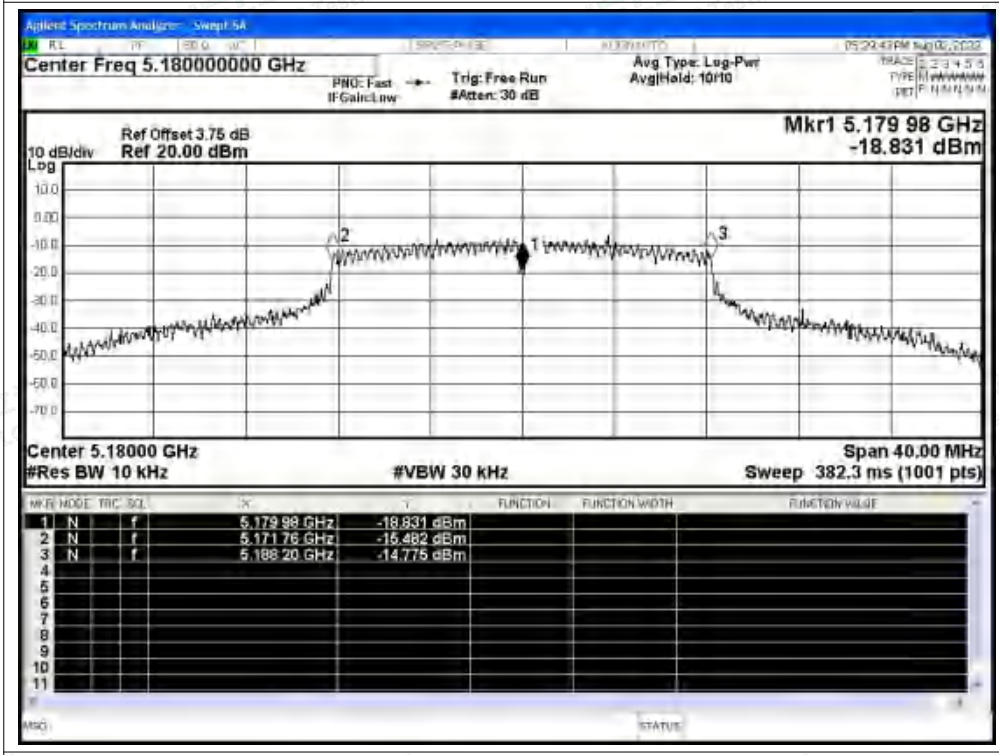


C.5 Frequency Stability

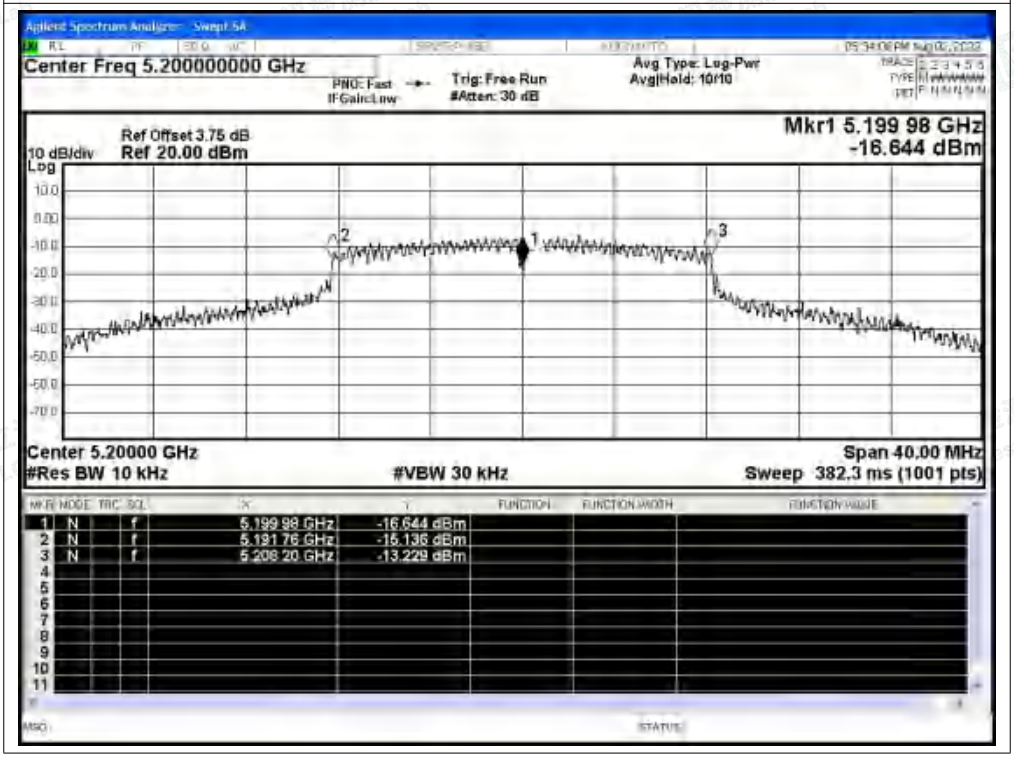
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NVNT	a	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NVNT	a	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NVNT	n20	5180	Ant1	5180	0	0	25	Pass
NVNT	n20	5200	Ant1	5200	0	0	25	Pass
NVNT	n20	5240	Ant1	5240.02	20000	3.82	25	Pass
NVNT	n40	5190	Ant1	5190	0	0	25	Pass
NVNT	n40	5230	Ant1	5230	0	0	25	Pass
NVNT	ac20	5180	Ant1	5180	0	0	25	Pass
NVNT	ac20	5200	Ant1	5200	0	0	25	Pass
NVNT	ac20	5240	Ant1	5240	0	0	25	Pass
NVNT	ac40	5190	Ant1	5190.04	40000	7.71	25	Pass
NVNT	ac40	5230	Ant1	5230	0	0	25	Pass
NVNT	ax20	5180	Ant1	5179.96	-40000	-7.72	25	Pass
NVNT	ax20	5200	Ant1	5199.96	-40000	-7.69	25	Pass
NVNT	ax20	5240	Ant1	5239.96	-40000	-7.63	25	Pass
NVNT	ax40	5190	Ant1	5189.96	-40000	-7.71	25	Pass
NVNT	ax40	5230	Ant1	5229.96	-40000	-7.65	25	Pass

Test Graphs

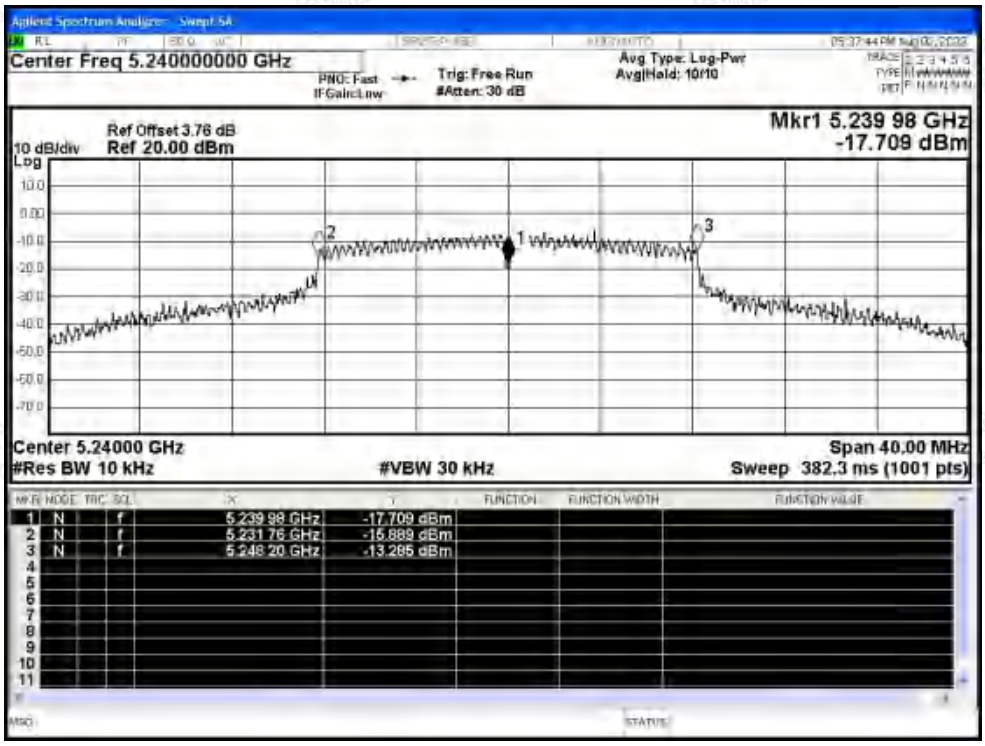
Freq. Stability NVNT a 5180MHz Ant1



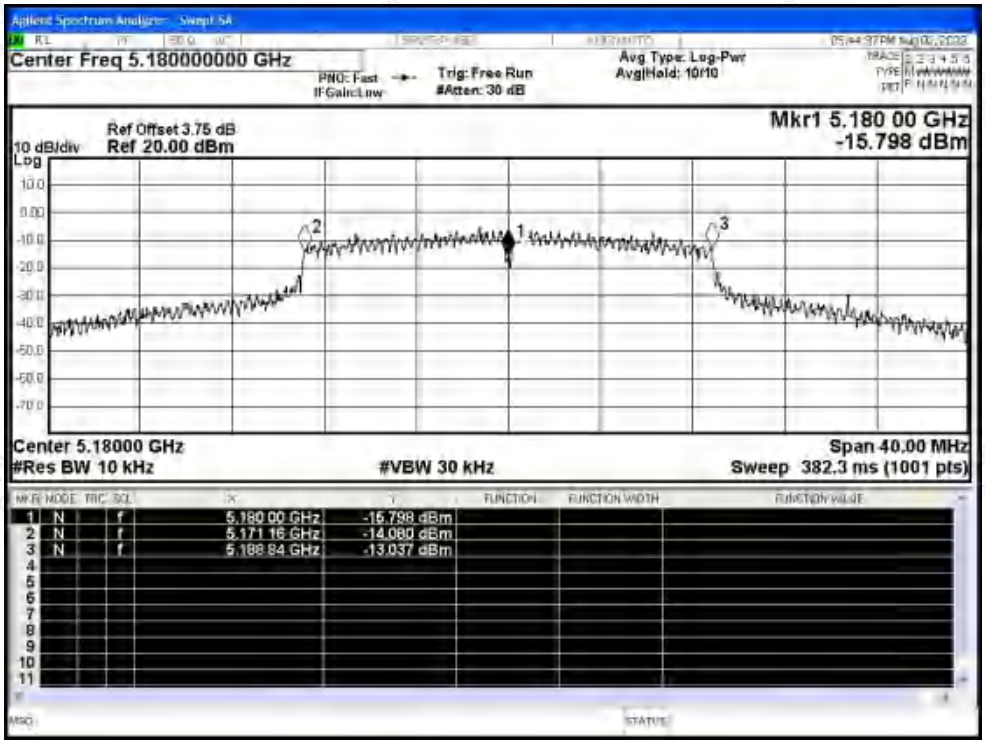
Freq. Stability NVNT a 5200MHz Ant1



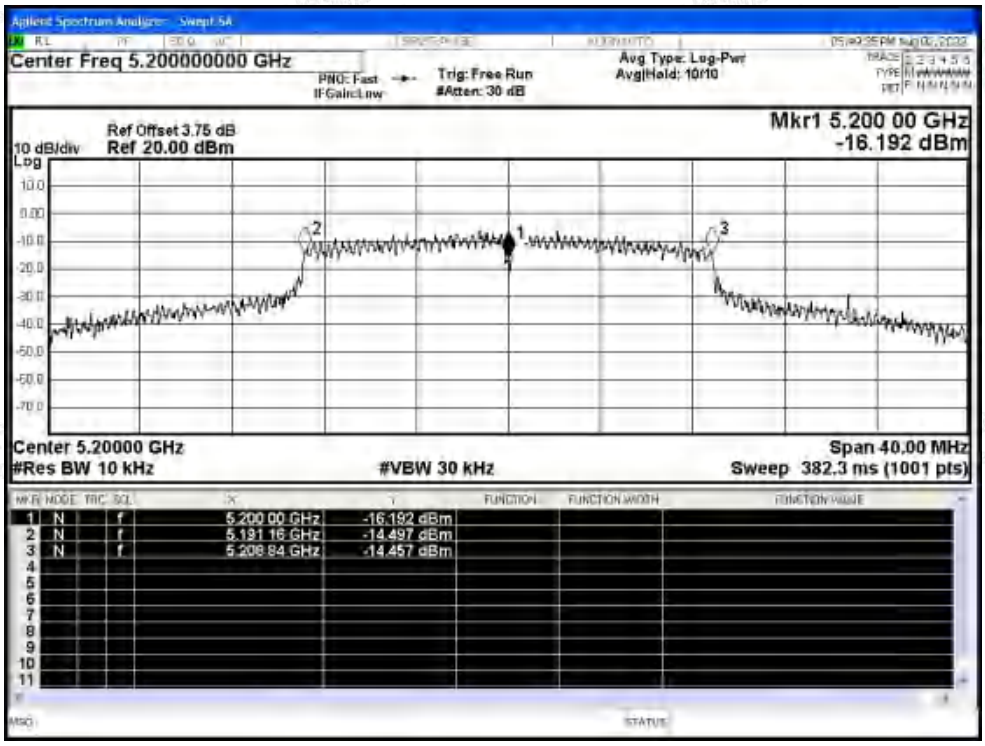
Freq. Stability NVNT a 5240MHz Ant1



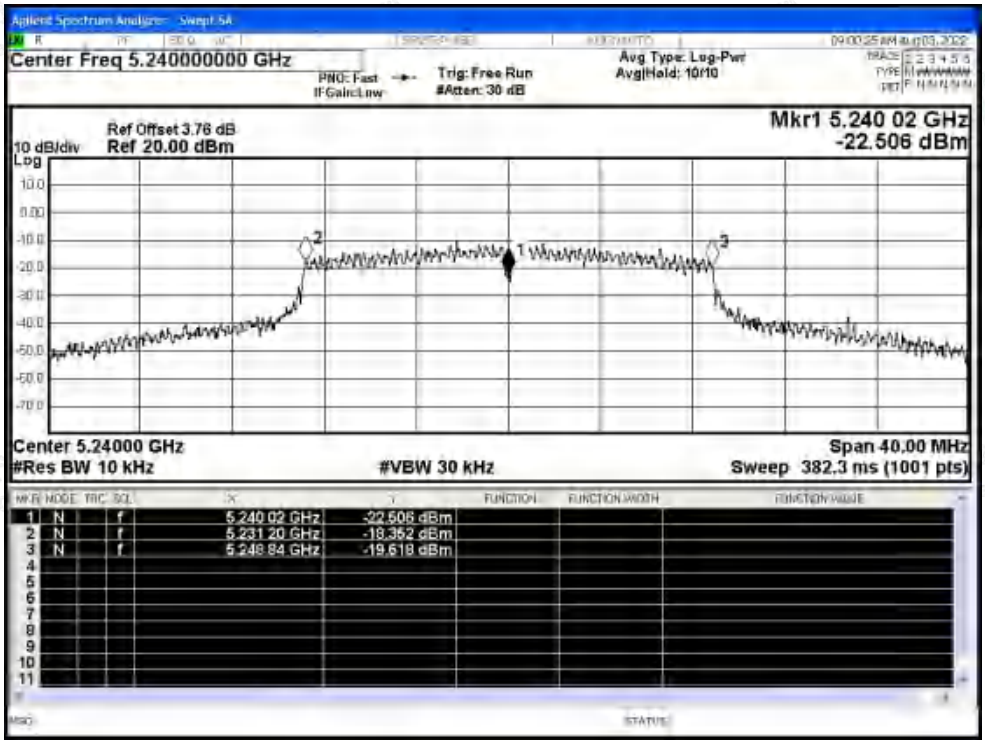
Freq. Stability NVNT n20 5180MHz Ant1



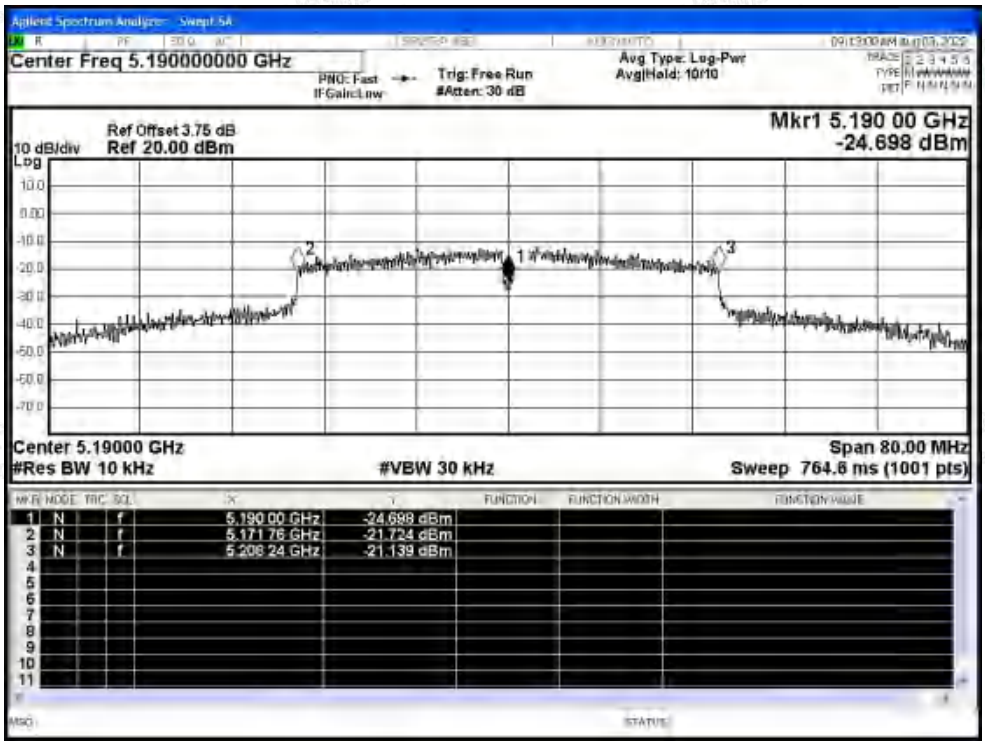
Freq. Stability NVNT n20 5200MHz Ant1



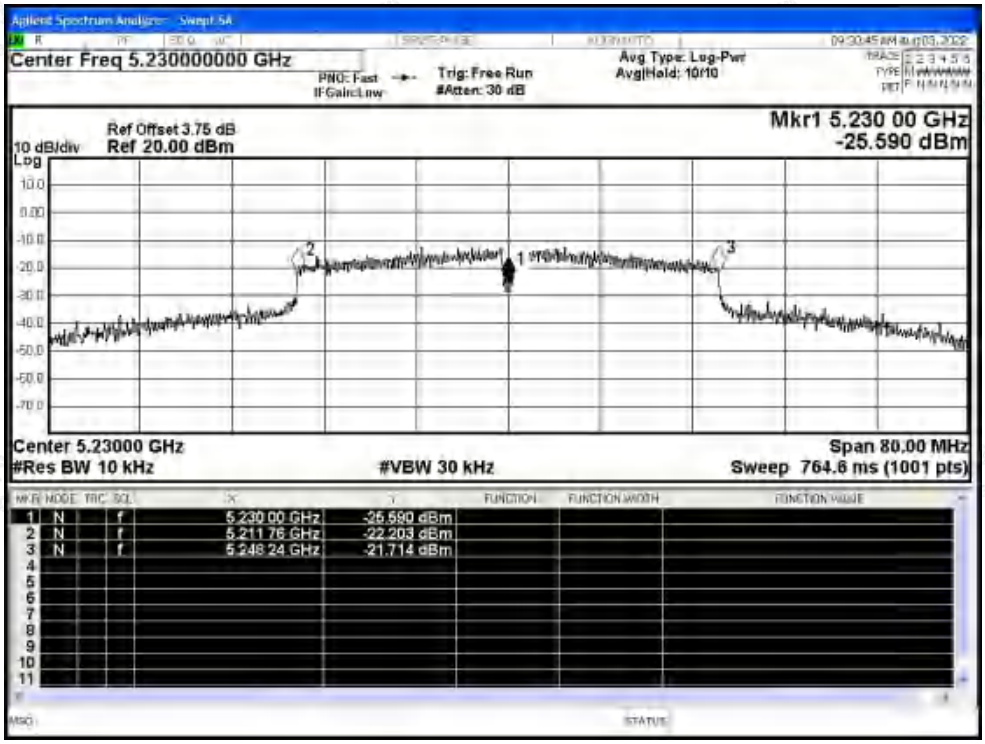
Freq. Stability NVNT n20 5240MHz Ant1



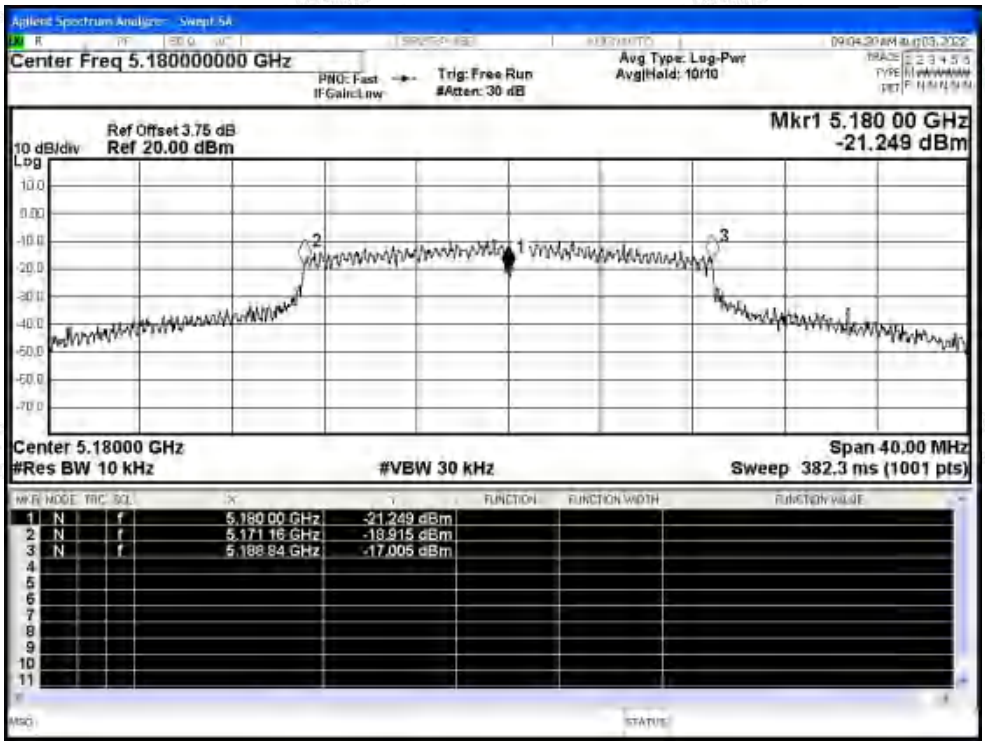
Freq. Stability NVNT n40 5190MHz Ant1



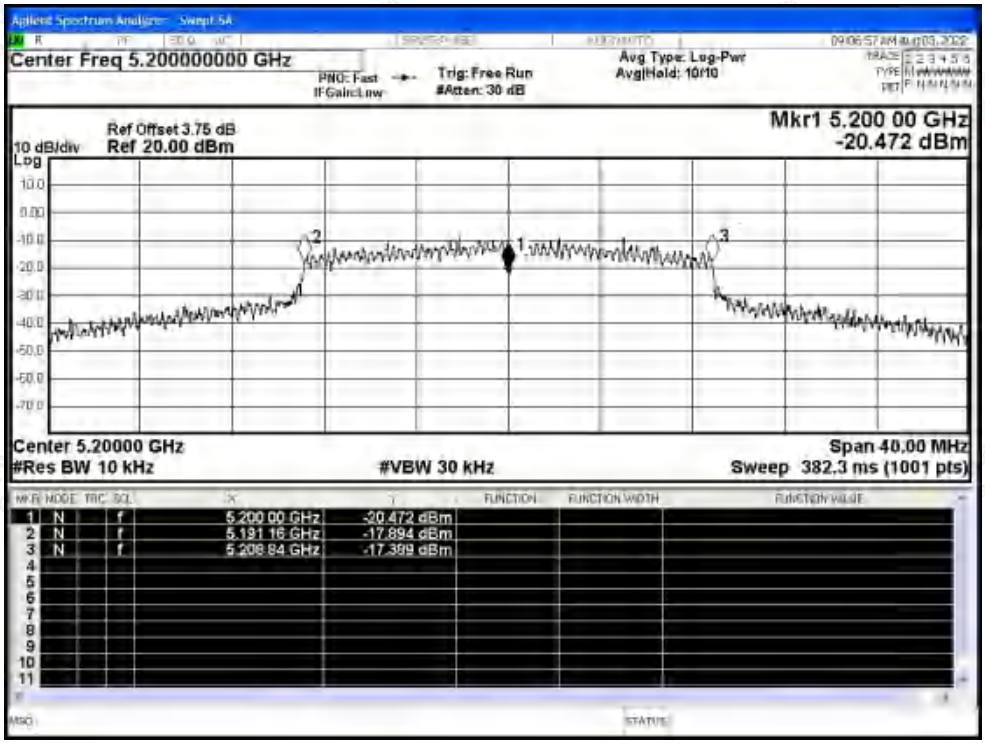
Freq. Stability NVNT n40 5230MHz Ant1



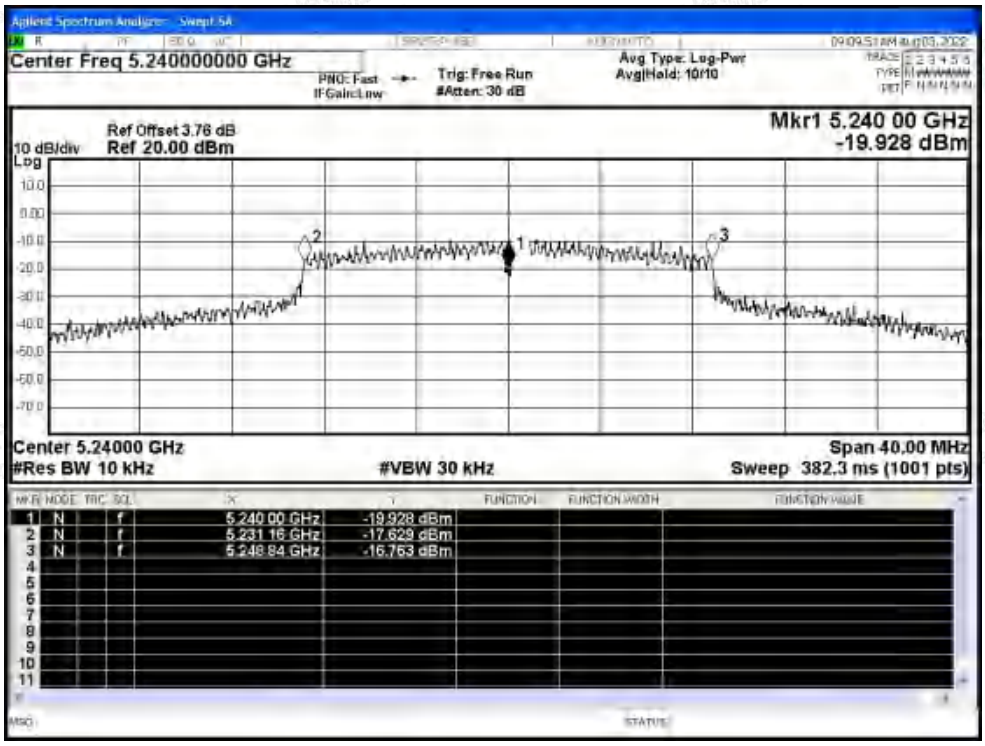
Freq. Stability NVNT ac20 5180MHz Ant1



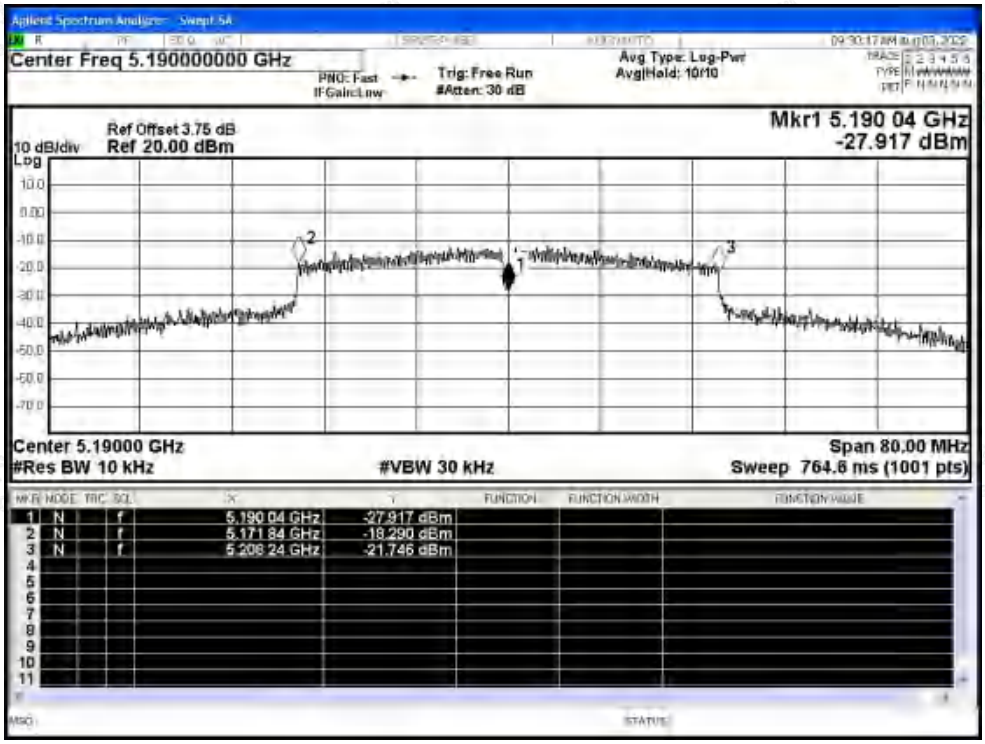
Freq. Stability NVNT ac20 5200MHz Ant1



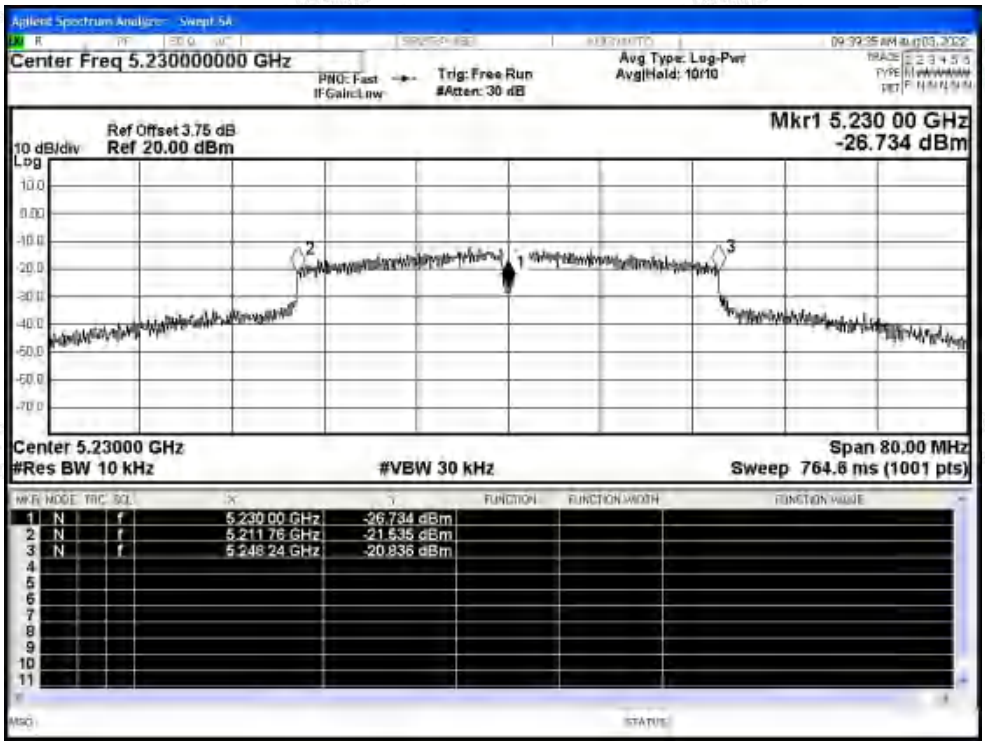
Freq. Stability NVNT ac20 5240MHz Ant1



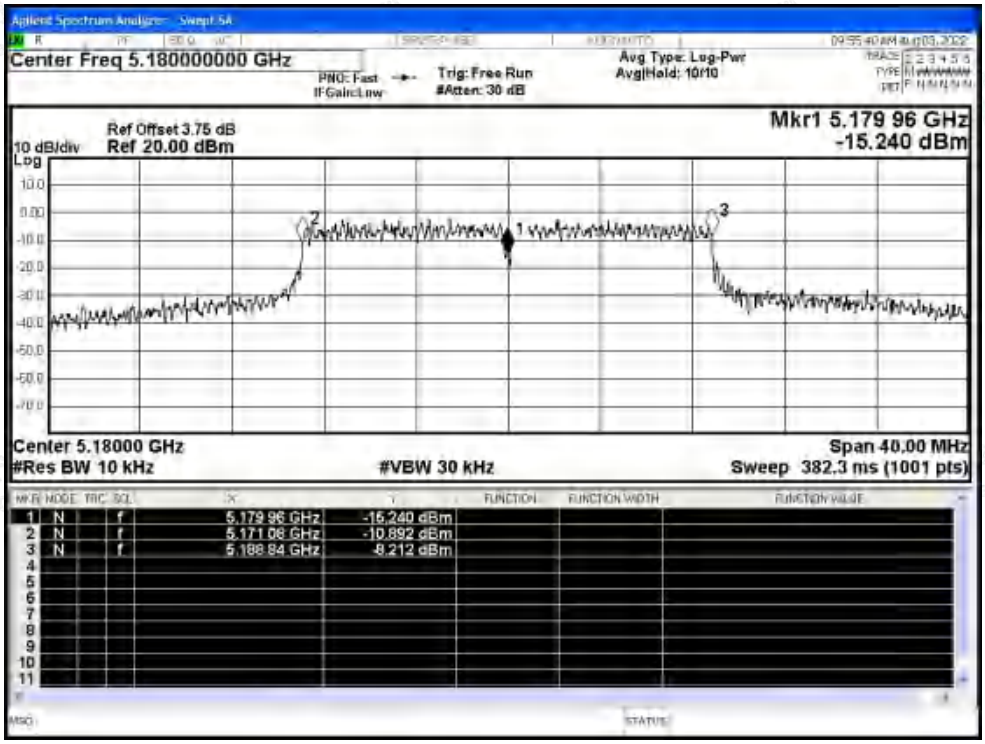
Freq. Stability NVNT ac40 5190MHz Ant1



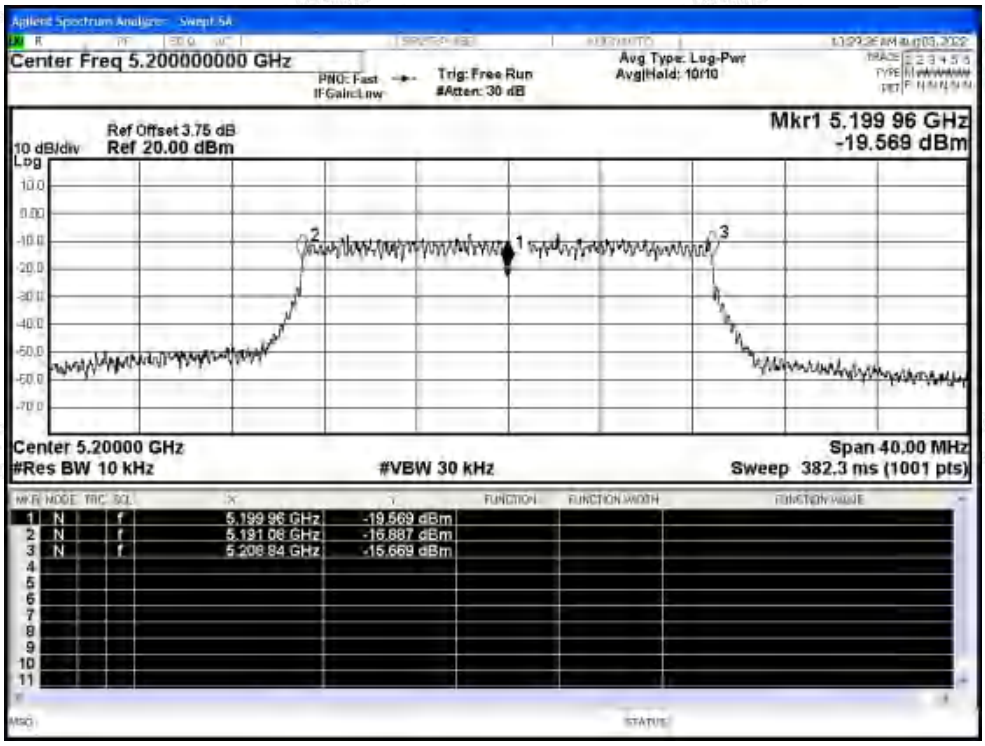
Freq. Stability NVNT ac40 5230MHz Ant1



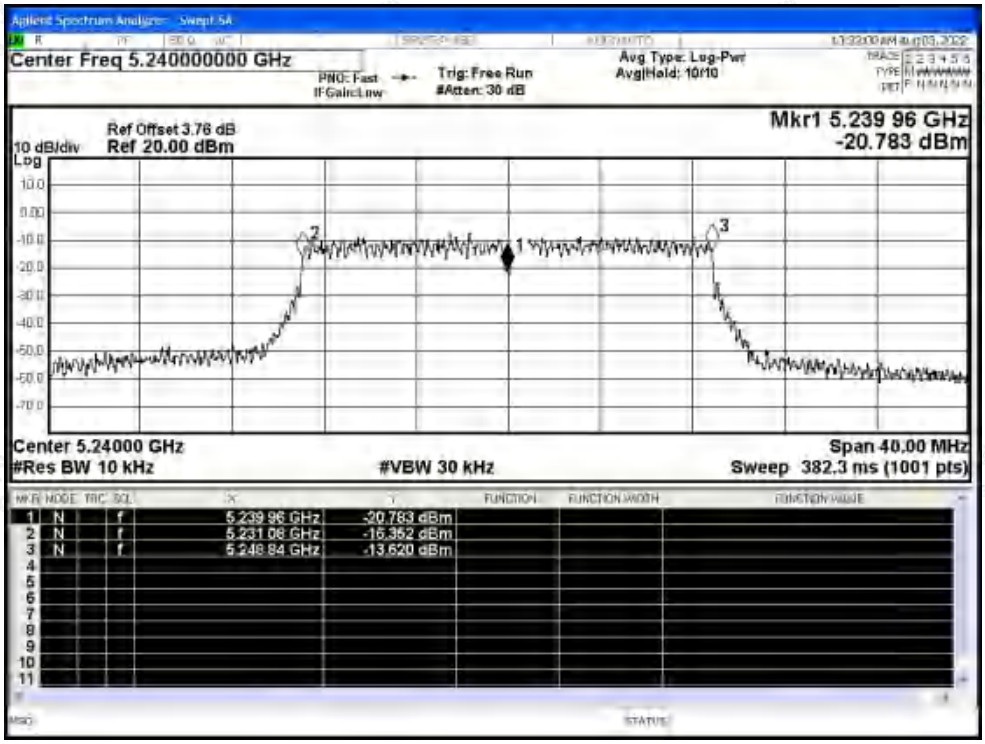
Freq. Stability NVNT ax20 5180MHz Ant1



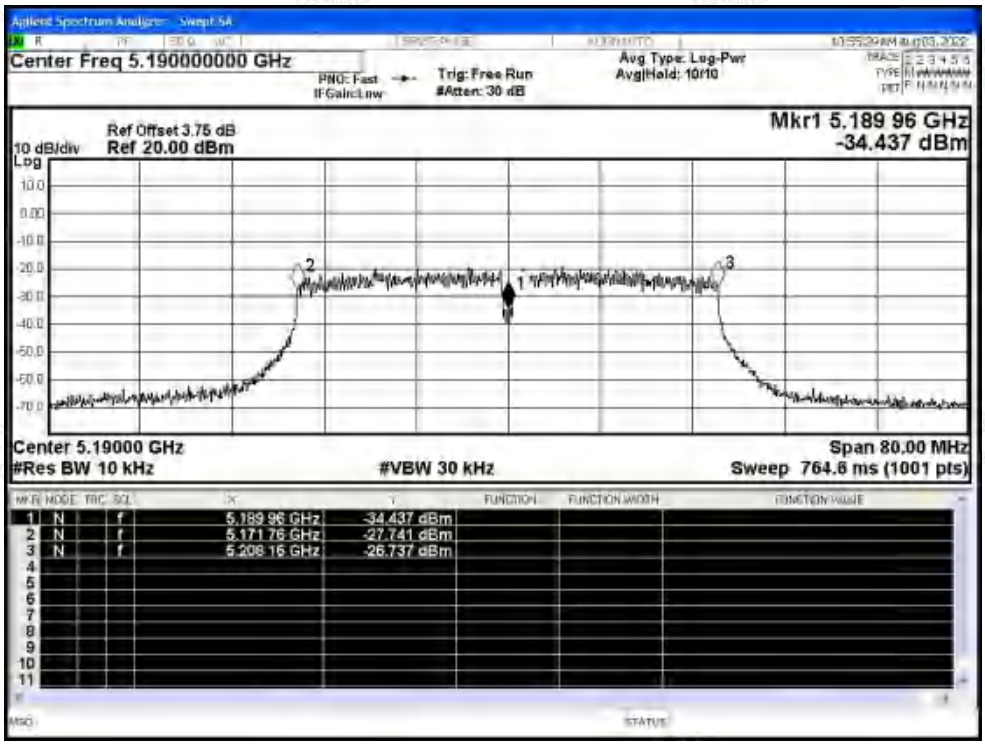
Freq. Stability NVNT ax20 5200MHz Ant1



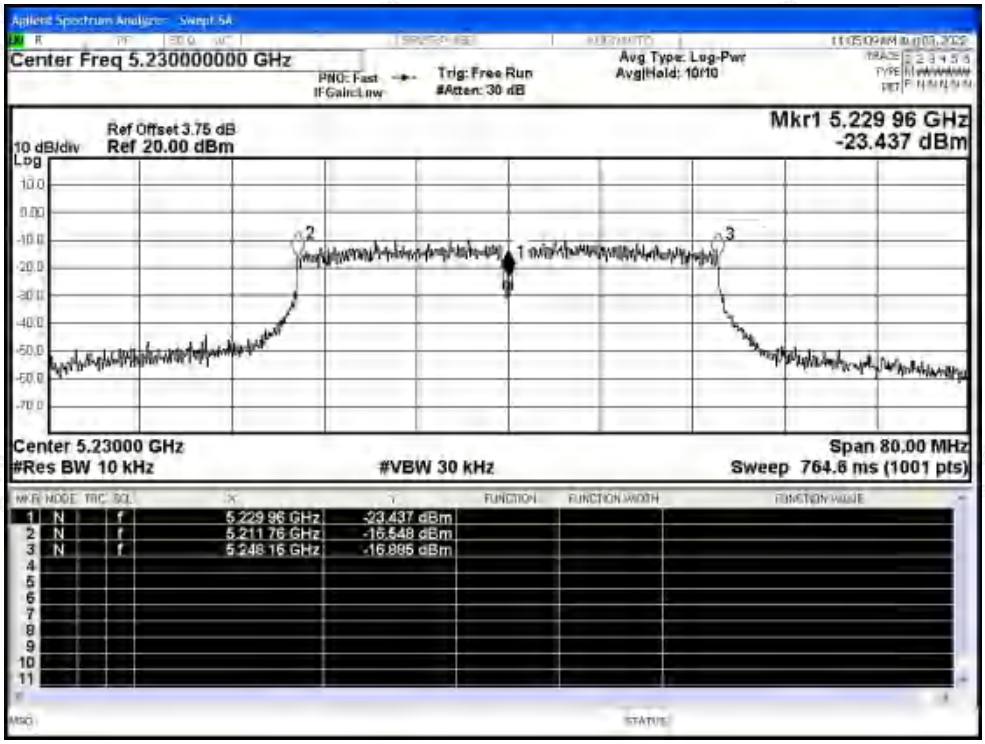
Freq. Stability NVNT ax20 5240MHz Ant1



Freq. Stability NVNT ax40 5190MHz Ant1



Freq. Stability NVNT ax40 5230MHz Ant1

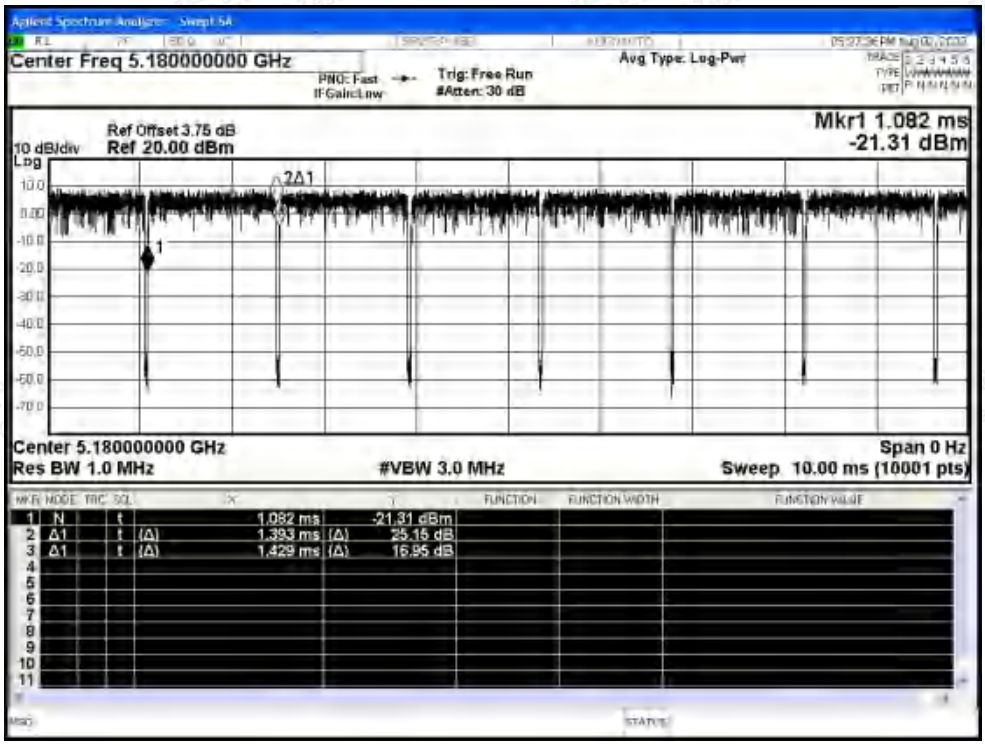


C.6 Duty Cycle

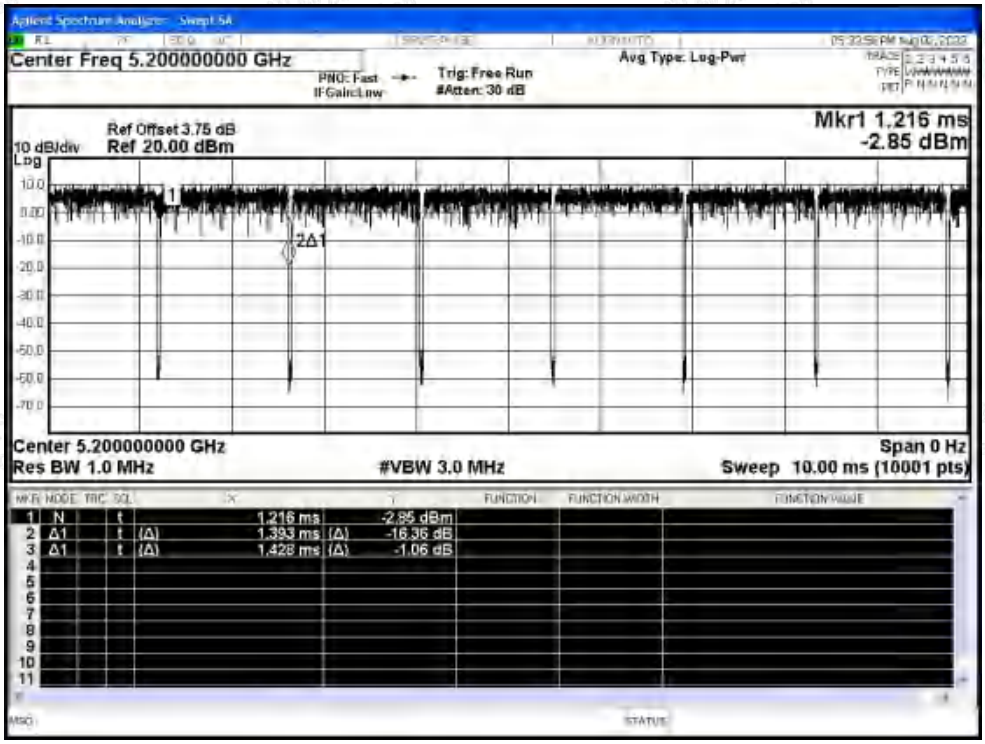
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	97.48	0.11	0.72
NVNT	a	5200	Ant1	97.55	0.11	0.72
NVNT	a	5240	Ant1	97.48	0.11	0.72
NVNT	n20	5180	Ant1	97.38	0.12	0.77
NVNT	n20	5200	Ant1	97.38	0.12	0.77
NVNT	n20	5240	Ant1	97.31	0.12	0.77
NVNT	n40	5190	Ant1	95.02	0.22	1.54
NVNT	n40	5230	Ant1	94.88	0.23	1.54
NVNT	ac20	5180	Ant1	97.4	0.11	0.76
NVNT	ac20	5200	Ant1	97.4	0.11	0.76
NVNT	ac20	5240	Ant1	97.4	0.11	0.76
NVNT	ac40	5190	Ant1	94.91	0.23	1.53
NVNT	ac40	5230	Ant1	94.91	0.23	1.53
NVNT	ax20	5180	Ant1	79.11	1.02	0.53
NVNT	ax20	5200	Ant1	79.11	1.02	0.53
NVNT	ax20	5240	Ant1	79.08	1.02	0.53
NVNT	ax40	5190	Ant1	65.14	1.86	1.07
NVNT	ax40	5230	Ant1	65.14	1.86	1.07

Test Graphs

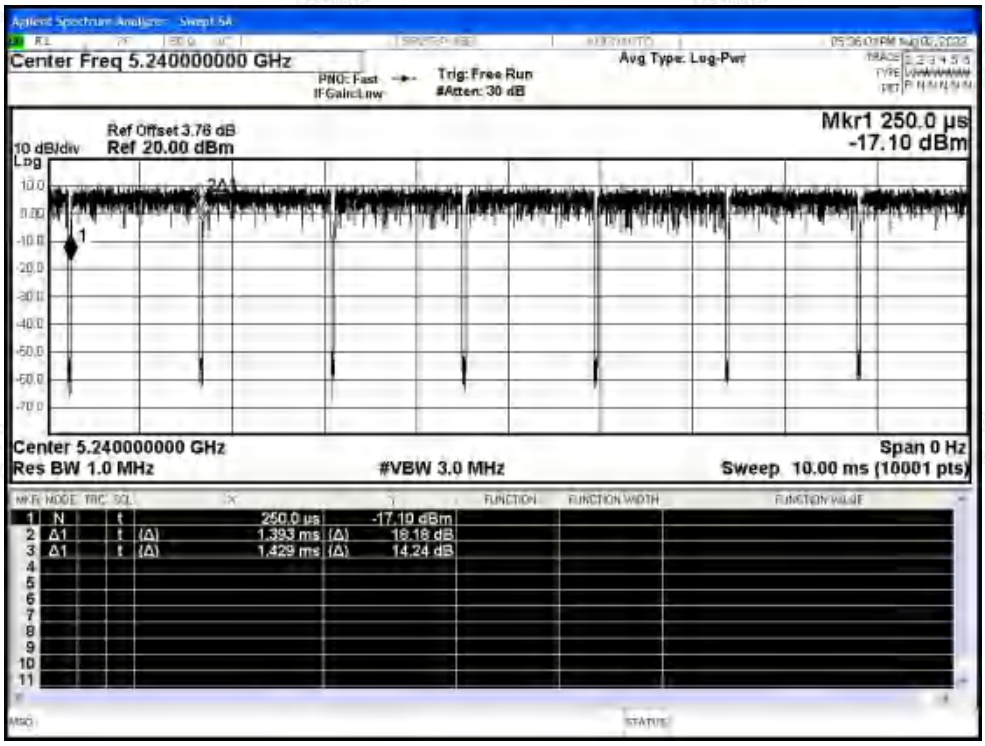
Duty Cycle NVNT a 5180MHz Ant1



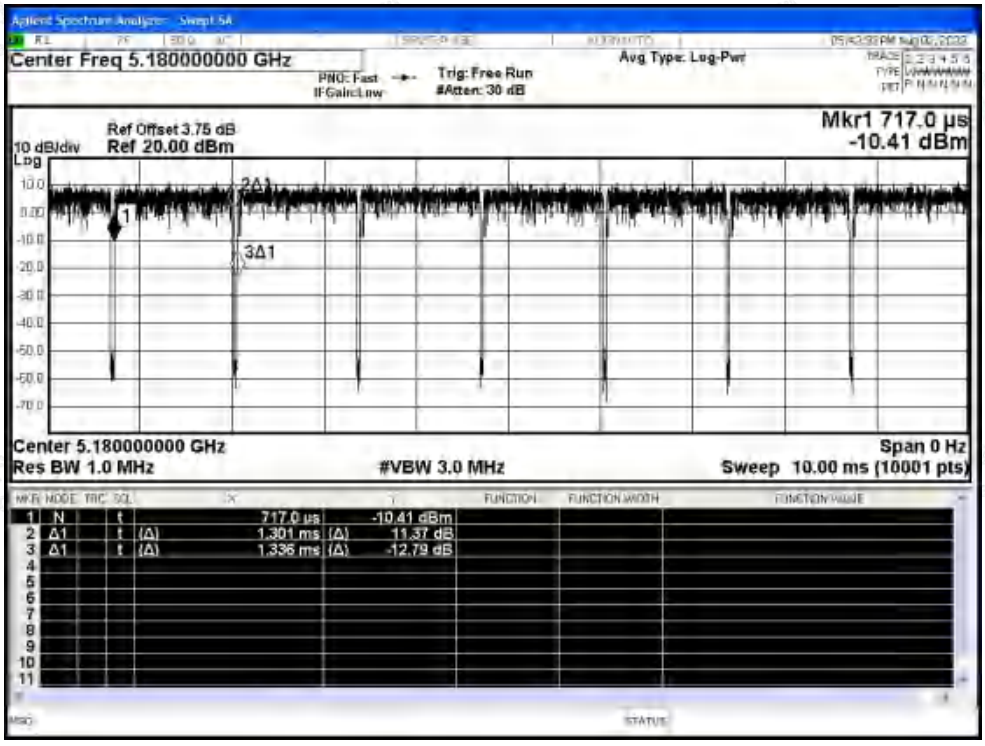
Duty Cycle NVNT a 5200MHz Ant1



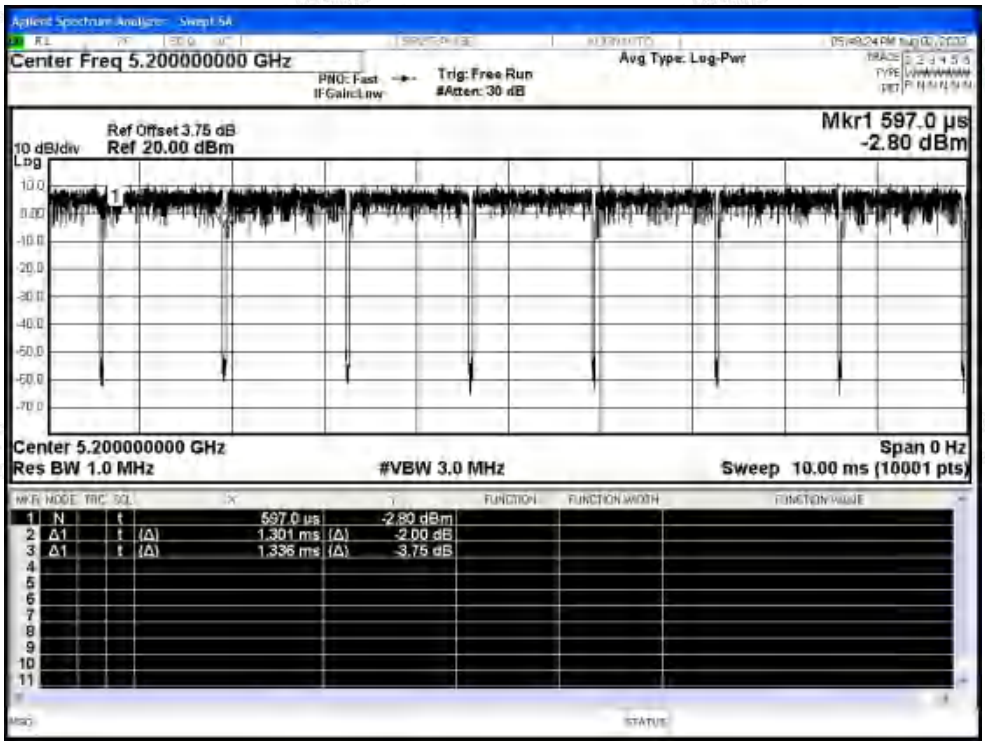
Duty Cycle NVNT a 5240MHz Ant1



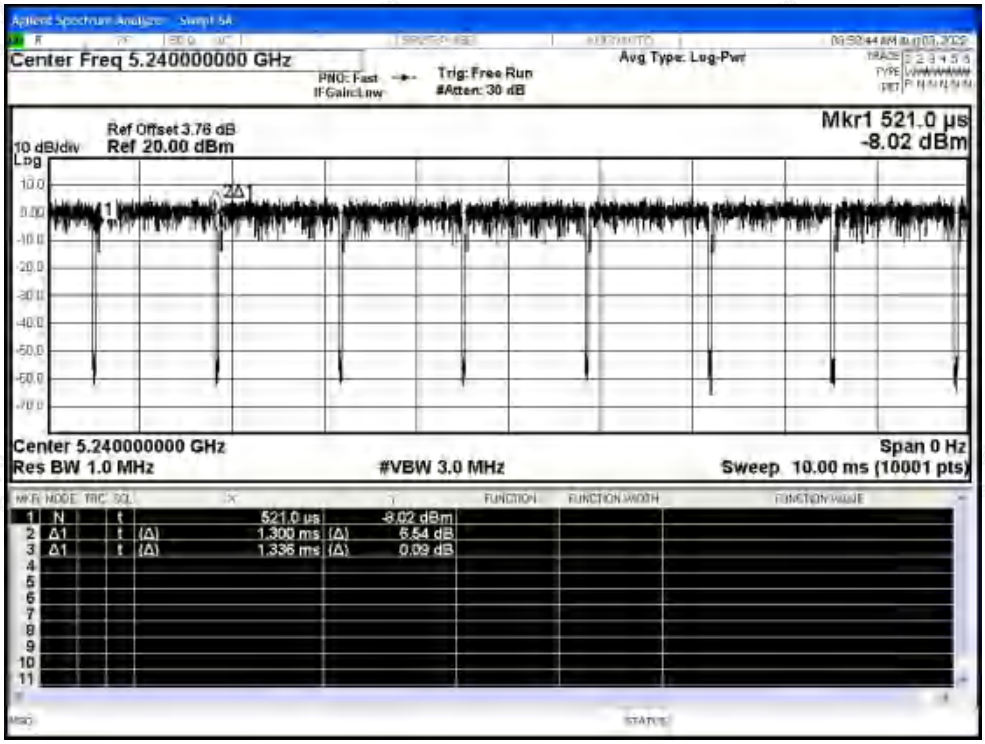
Duty Cycle NVNT n20 5180MHz Ant1



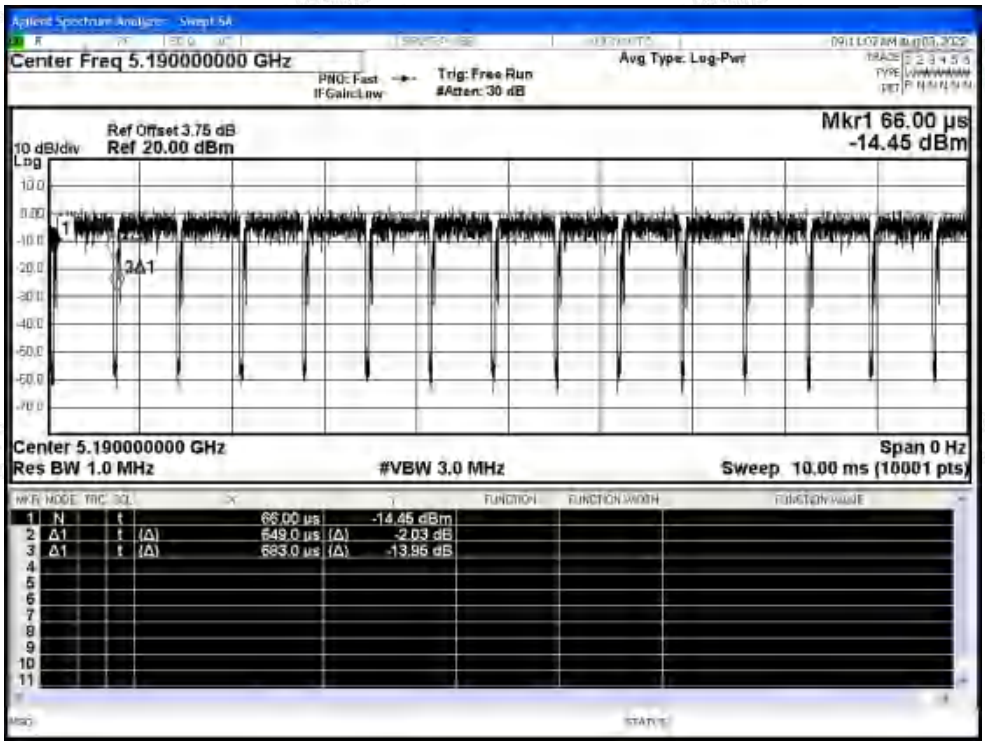
Duty Cycle NVNT n20 5200MHz Ant1



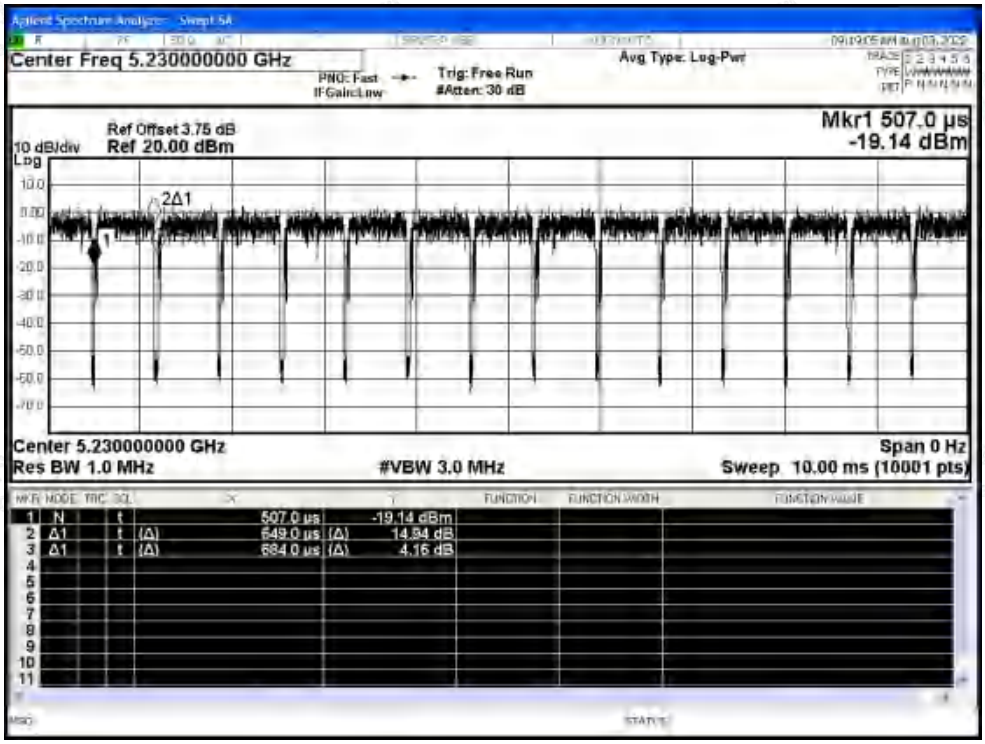
Duty Cycle NVNT n20 5240MHz Ant1



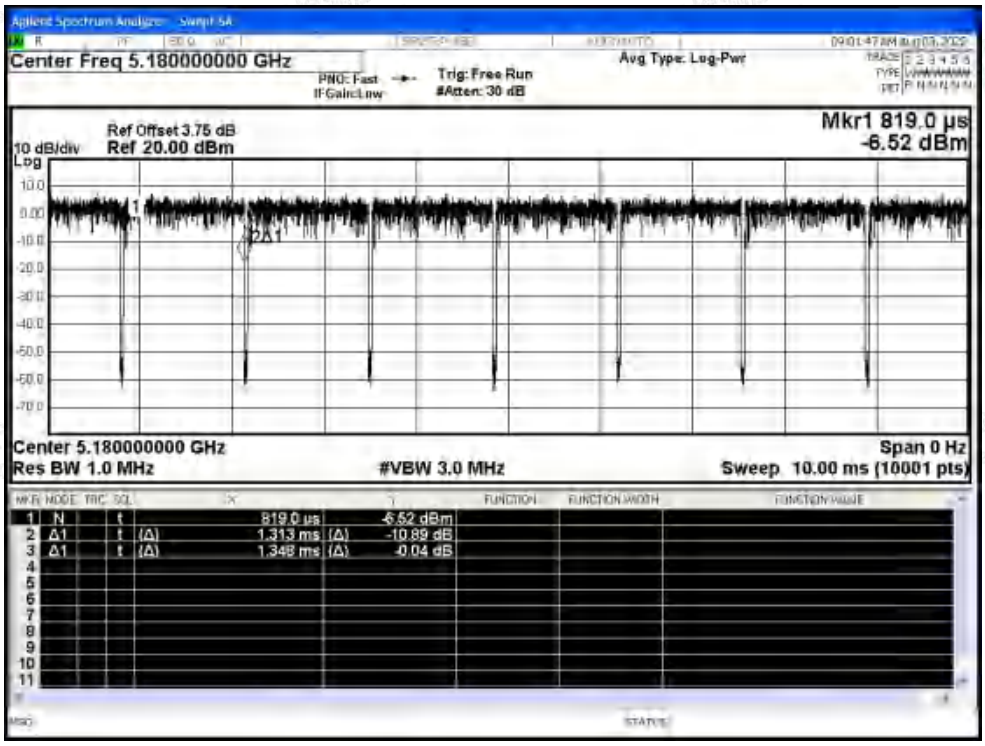
Duty Cycle NVNT n40 5190MHz Ant1



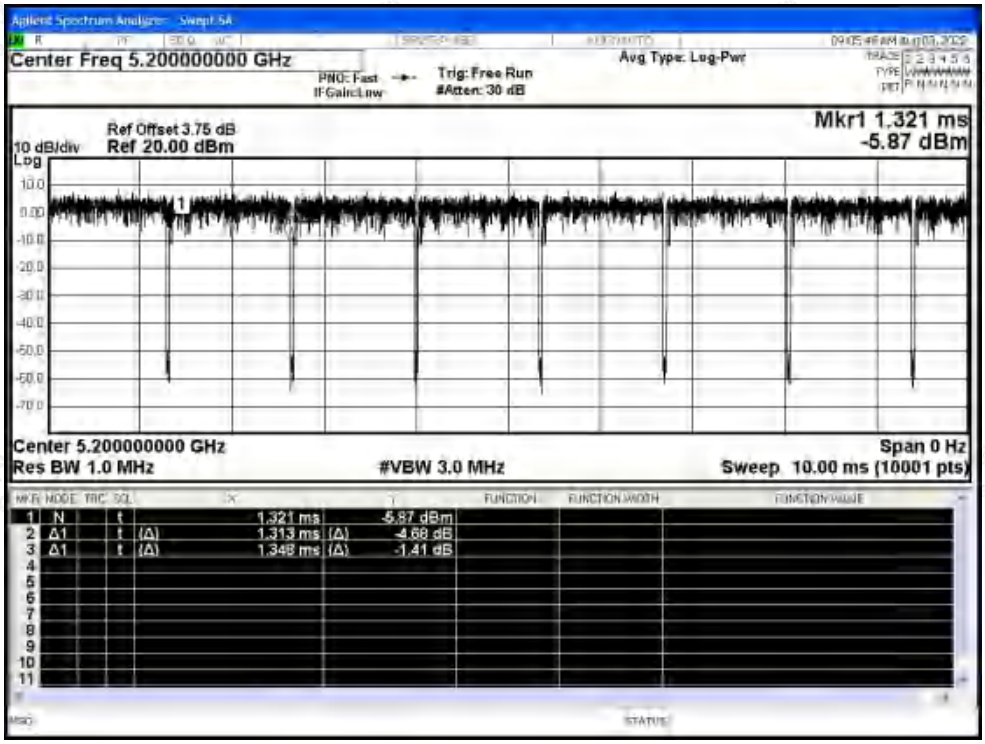
Duty Cycle NVNT n40 5230MHz Ant1



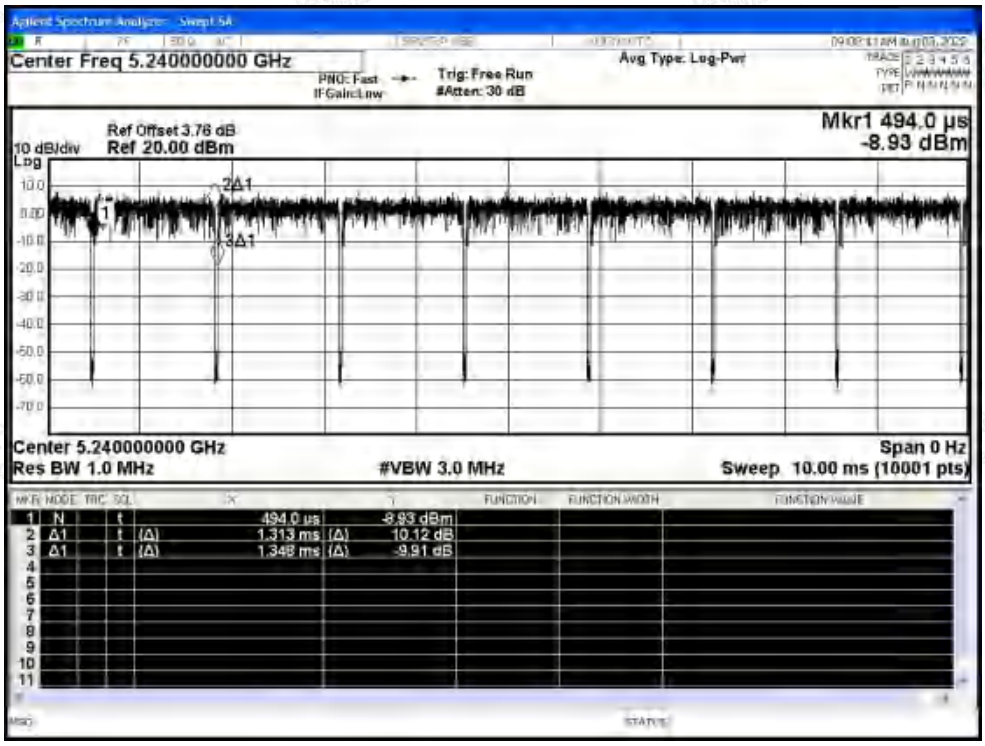
Duty Cycle NVNT ac20 5180MHz Ant1



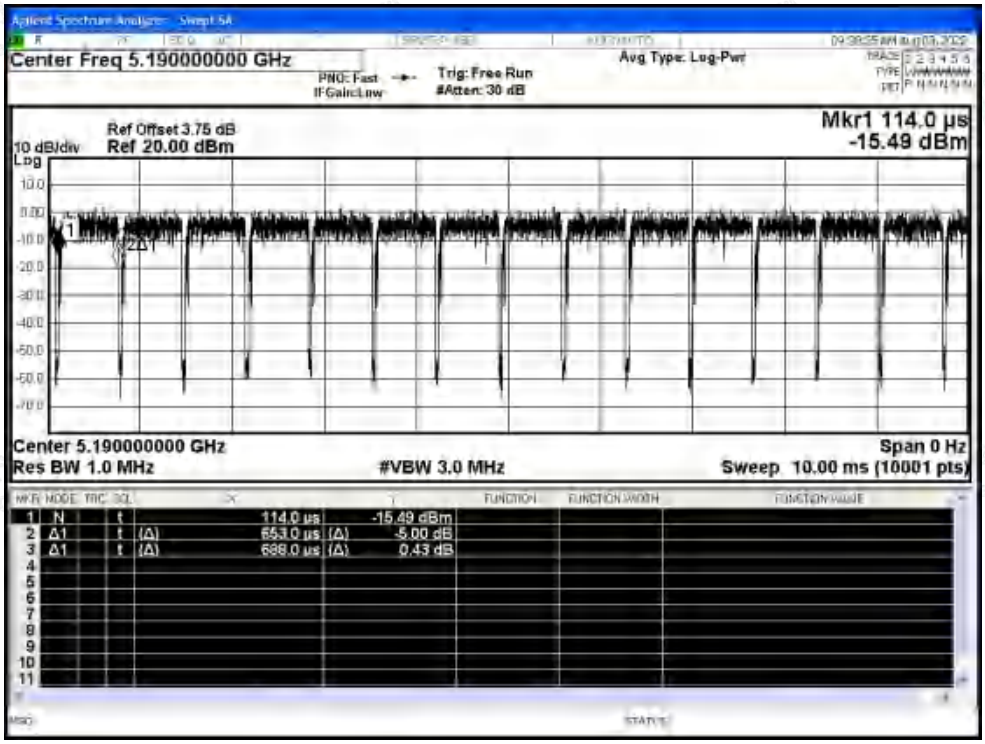
Duty Cycle NVNT ac20 5200MHz Ant1



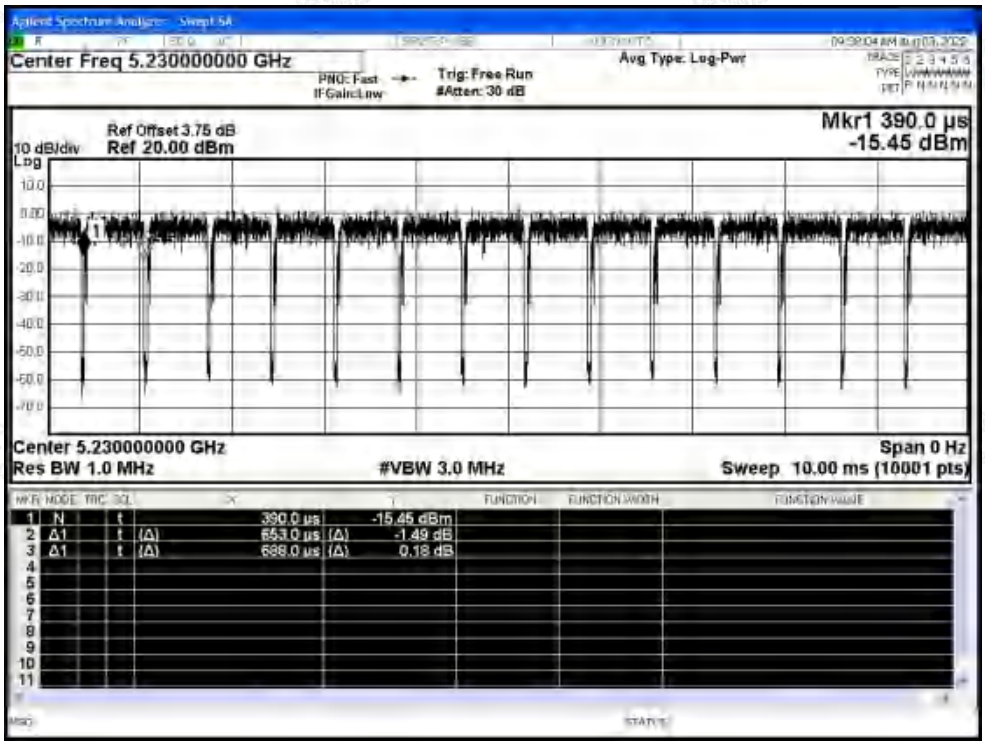
Duty Cycle NVNT ac20 5240MHz Ant1



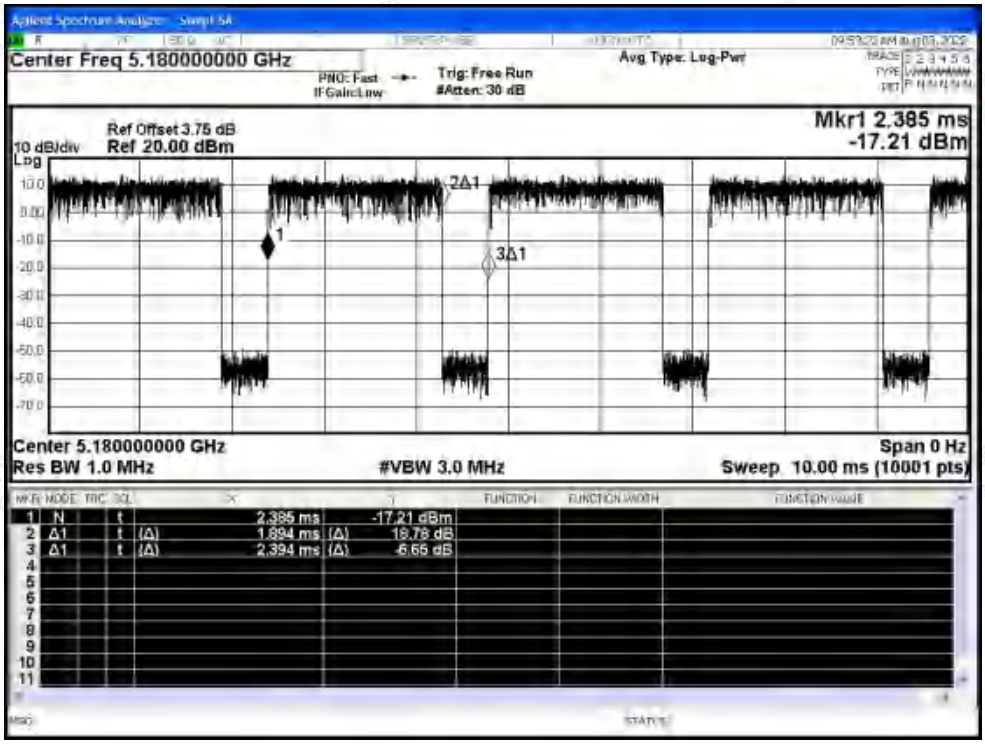
Duty Cycle NVNT ac40 5190MHz Ant1



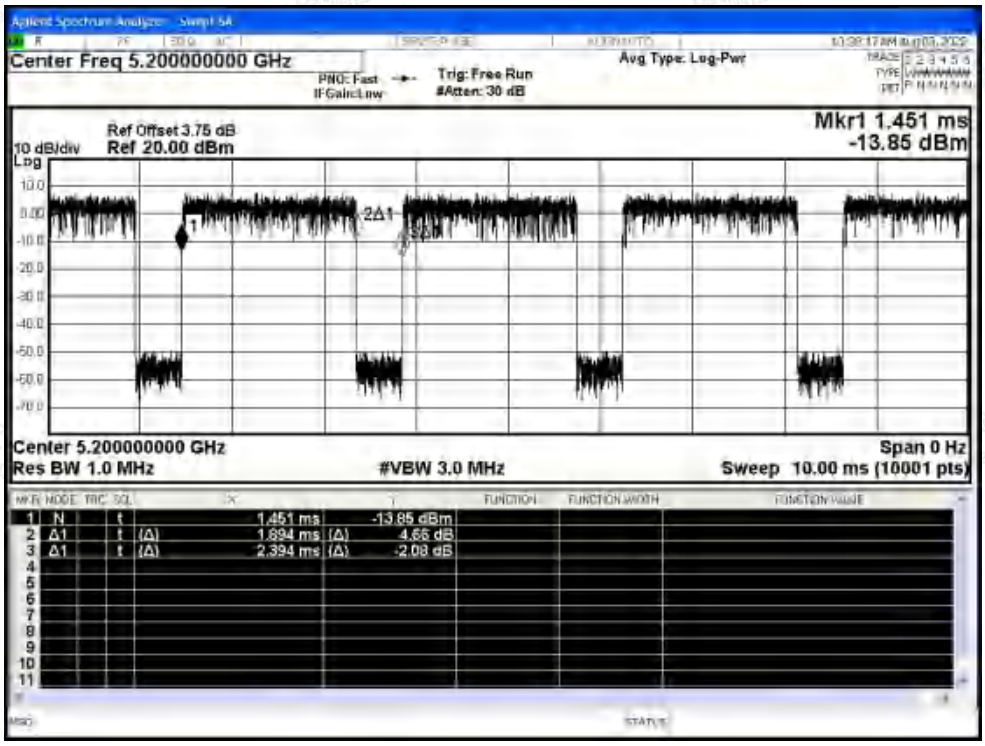
Duty Cycle NVNT ac40 5230MHz Ant1



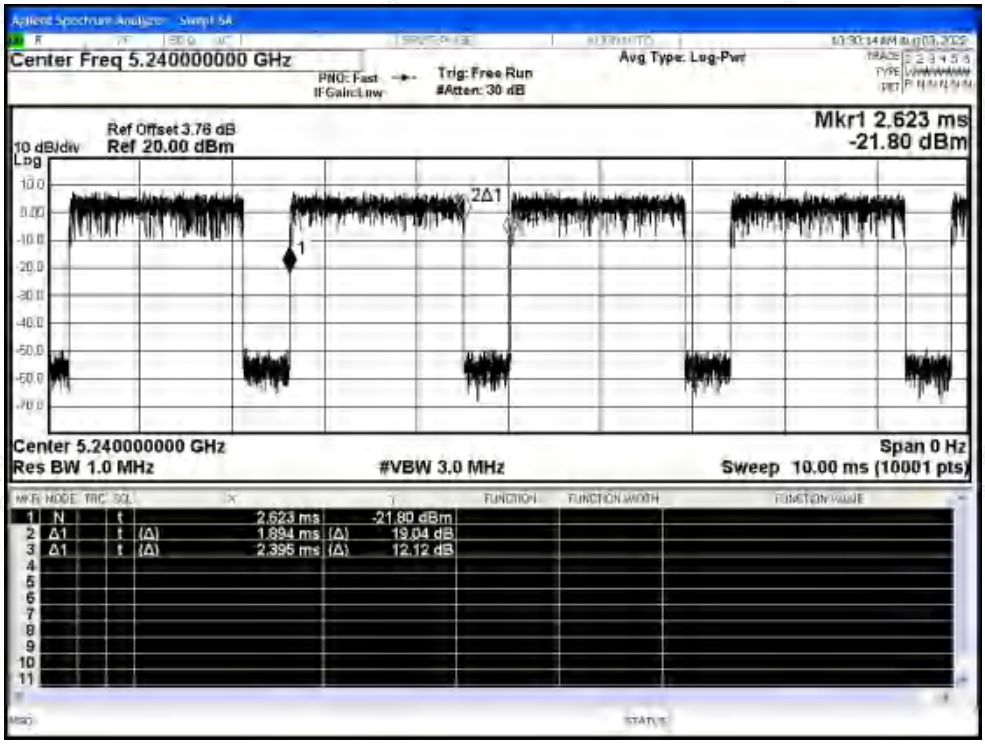
Duty Cycle NVNT ax20 5180MHz Ant1



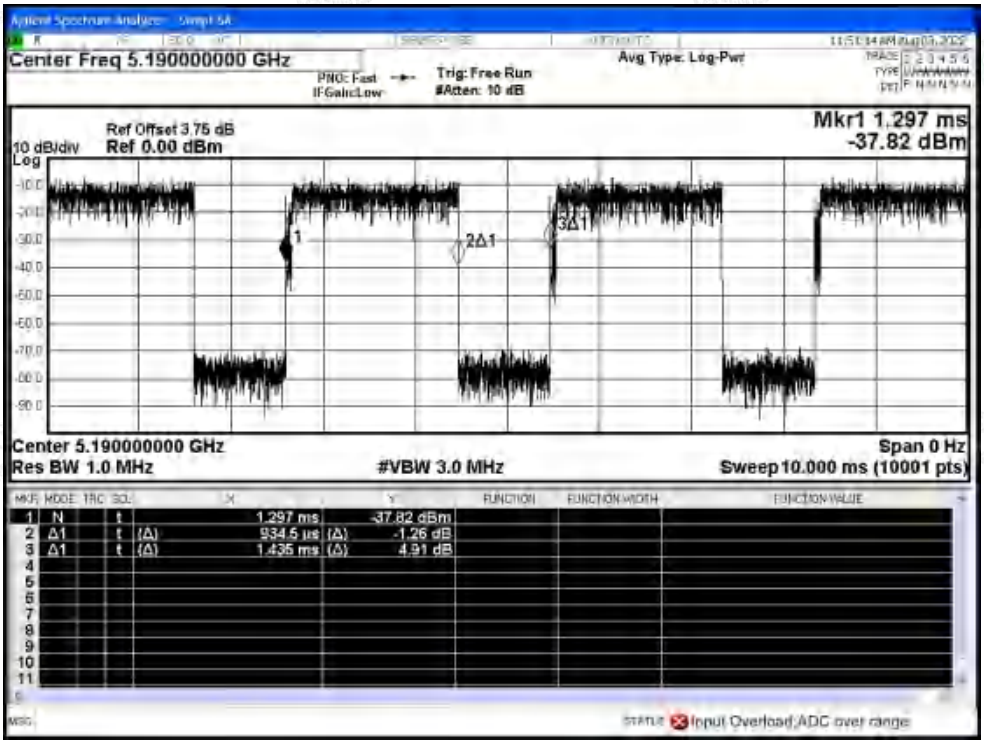
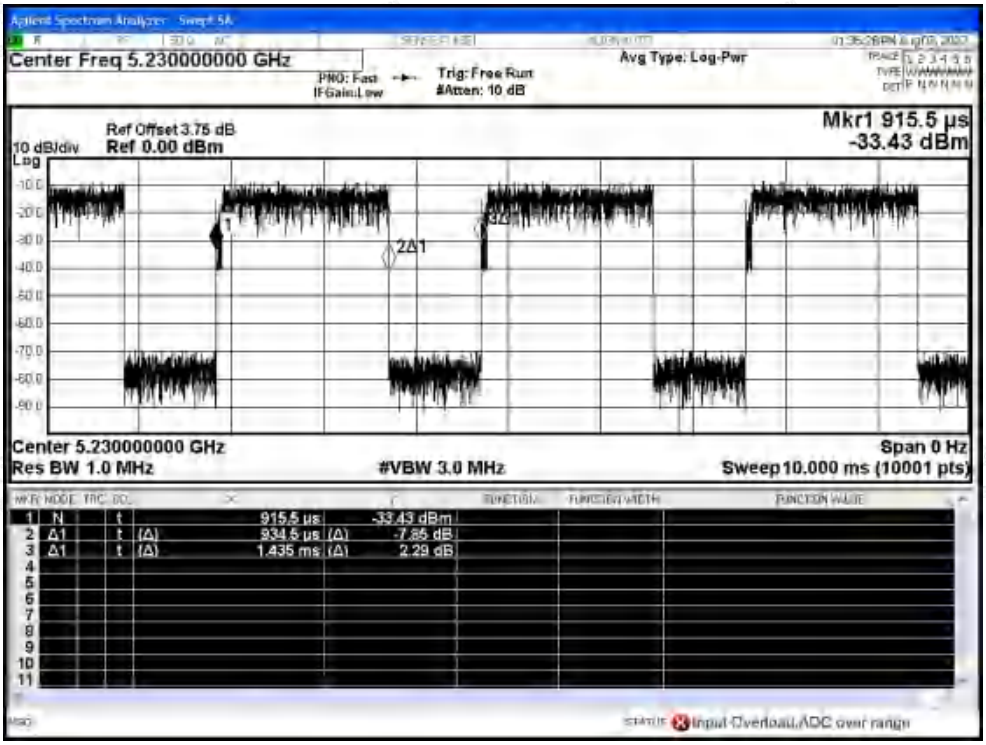
Duty Cycle NVNT ax20 5200MHz Ant1



Duty Cycle NVNT ax20 5240MHz Ant1



Duty Cycle NVNT ax40 5190MHz Ant1



Duty Cycle NVNT ax40 5230MHz Ant1