

FCC Appendix RF Test Data for 5.2G WIFI

FCC ID : 2AYD7-EB2

Company : igloocompany Pte Ltd.

EUT : Bridge 2

Model Number : EB2

Report No. : CTA26070103003

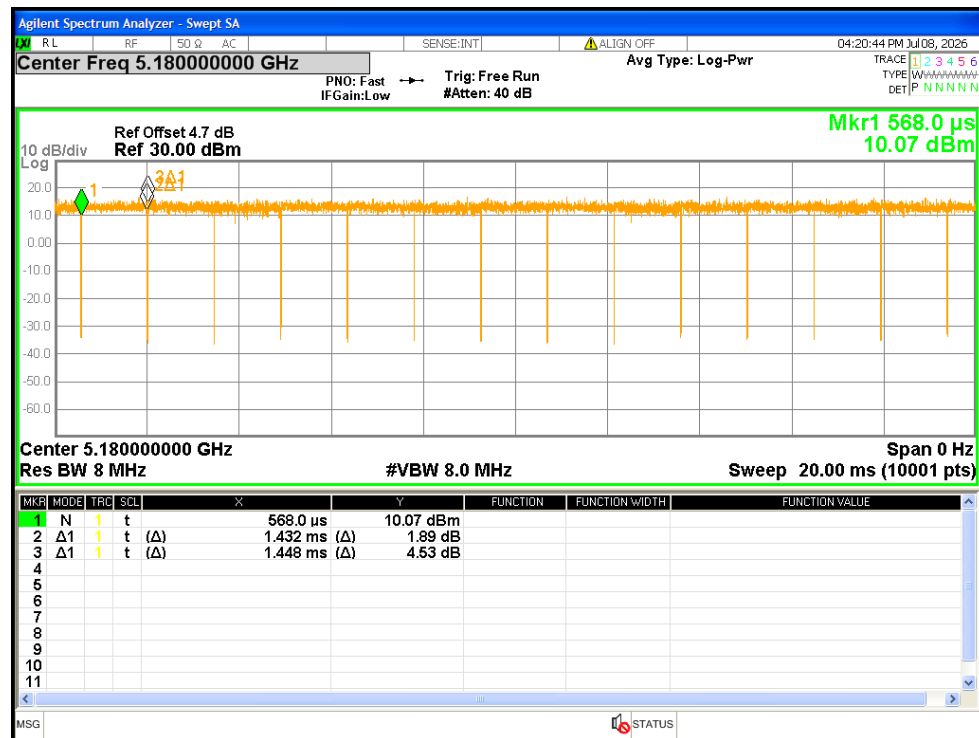
Reviewed By : Eric Wang

Duty Cycle

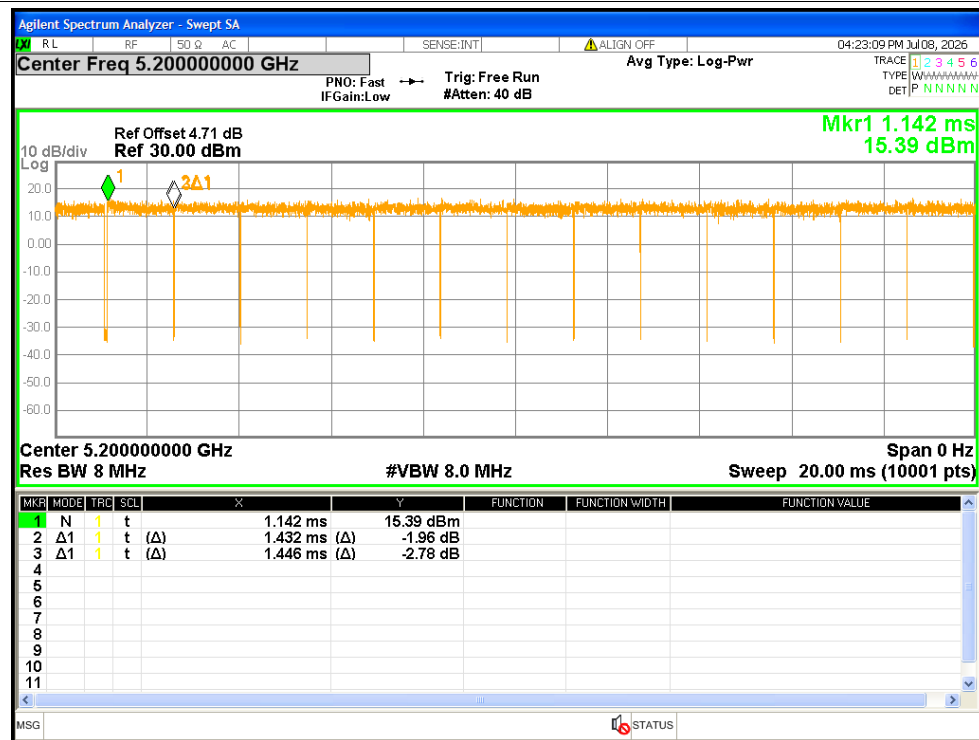
Condition	Mode	Frequency (MHz)	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)	Max Variation (%)
NVNT	a	5180	1.432	1.448	98.9	0.05	0.7	0.21
NVNT	a	5200	1.432	1.446	99.03	0.04	0.7	0.20
NVNT	a	5240	1.432	1.448	98.9	0.05	0.7	0.20
NVNT	n20	5180	1.34	1.356	98.82	0.05	0.75	0.16
NVNT	n20	5200	1.34	1.356	98.82	0.05	0.75	0.20
NVNT	n20	5240	1.34	1.356	98.82	0.05	0.75	0.15
NVNT	ac20	5180	1.348	1.362	98.97	0.04	0.74	0.18
NVNT	ac20	5200	1.348	1.364	98.83	0.05	0.74	0.17
NVNT	ac20	5240	1.348	1.364	98.83	0.05	0.74	0.18
NVNT	ax20	5180	1.046	1.06	98.68	0.06	0.96	0.14
NVNT	ax20	5200	1.046	1.06	98.68	0.06	0.96	0.15
NVNT	ax20	5240	1.044	1.06	98.49	0.07	0.96	0.19

Test Graphs

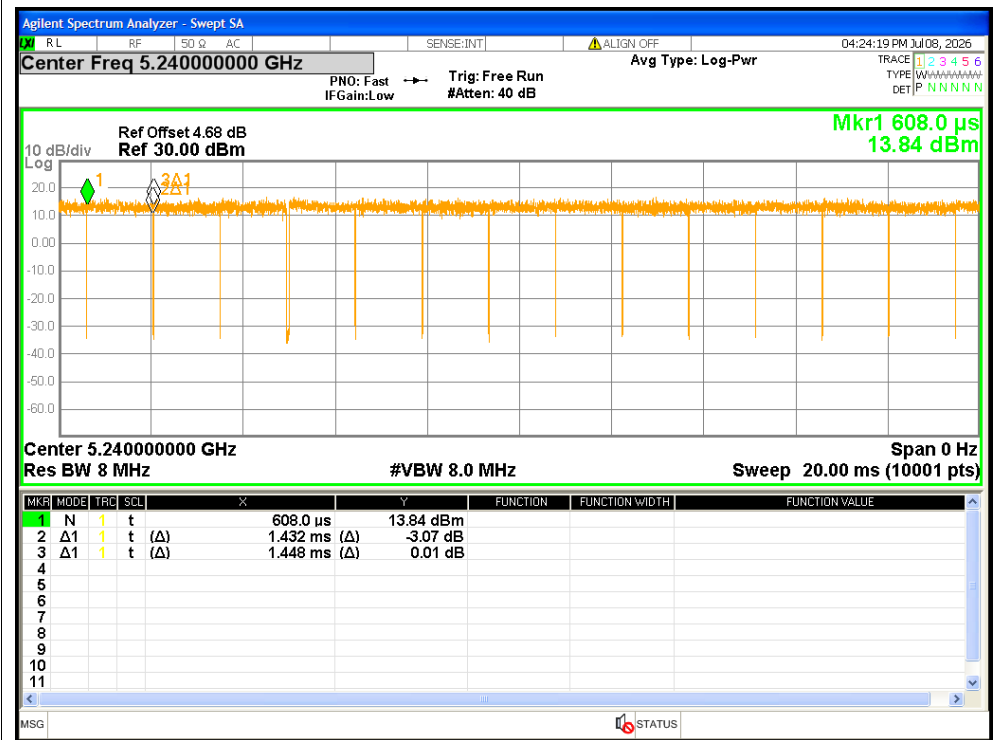
Duty Cycle NVNT a 5180MHz



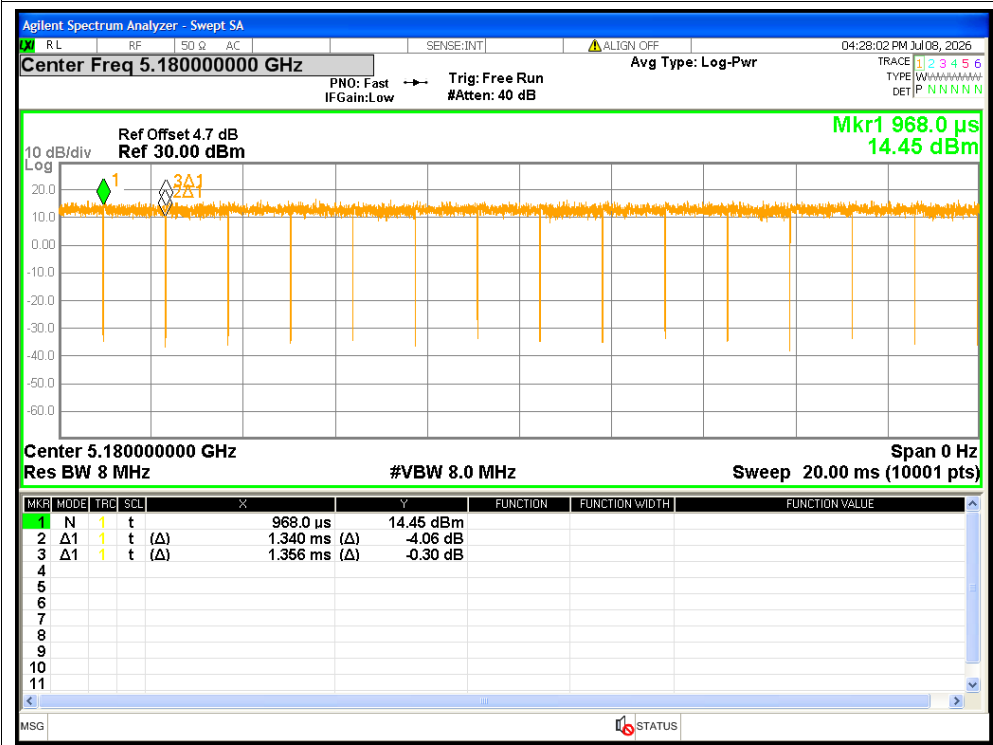
Duty Cycle NVNT a 5200MHz



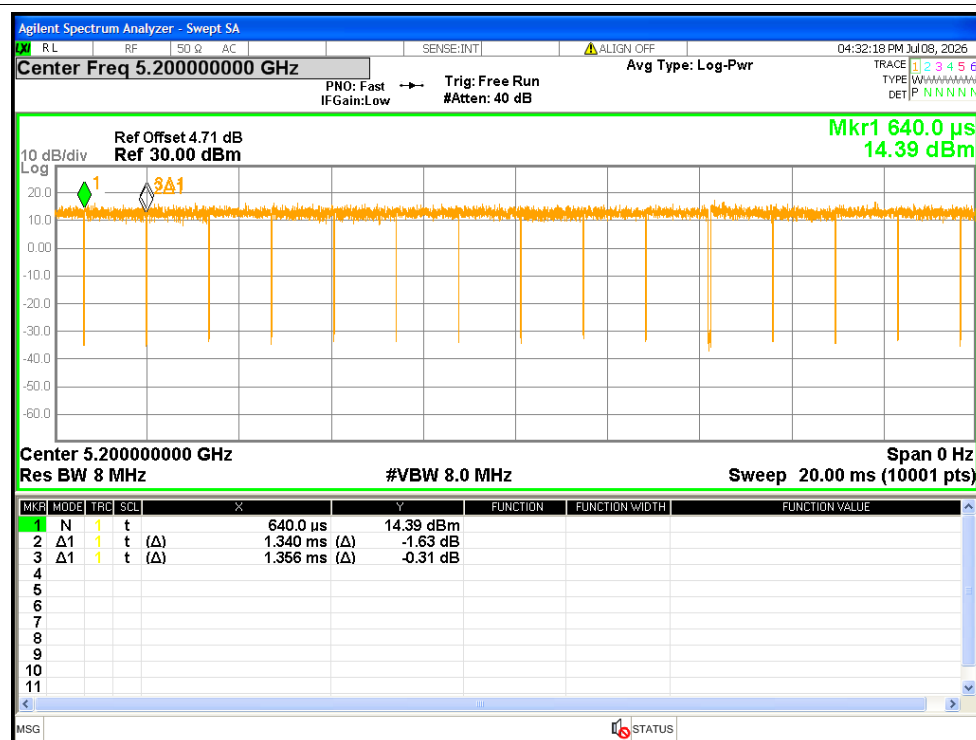
Duty Cycle NVNT a 5240MHz



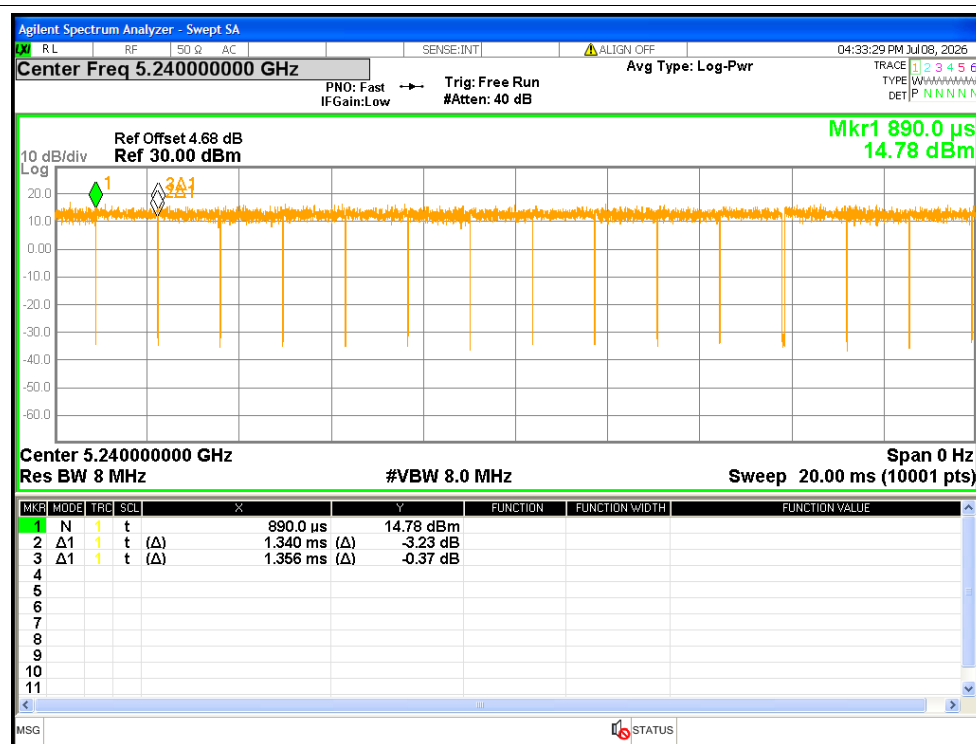
Duty Cycle NVNT n20 5180MHz



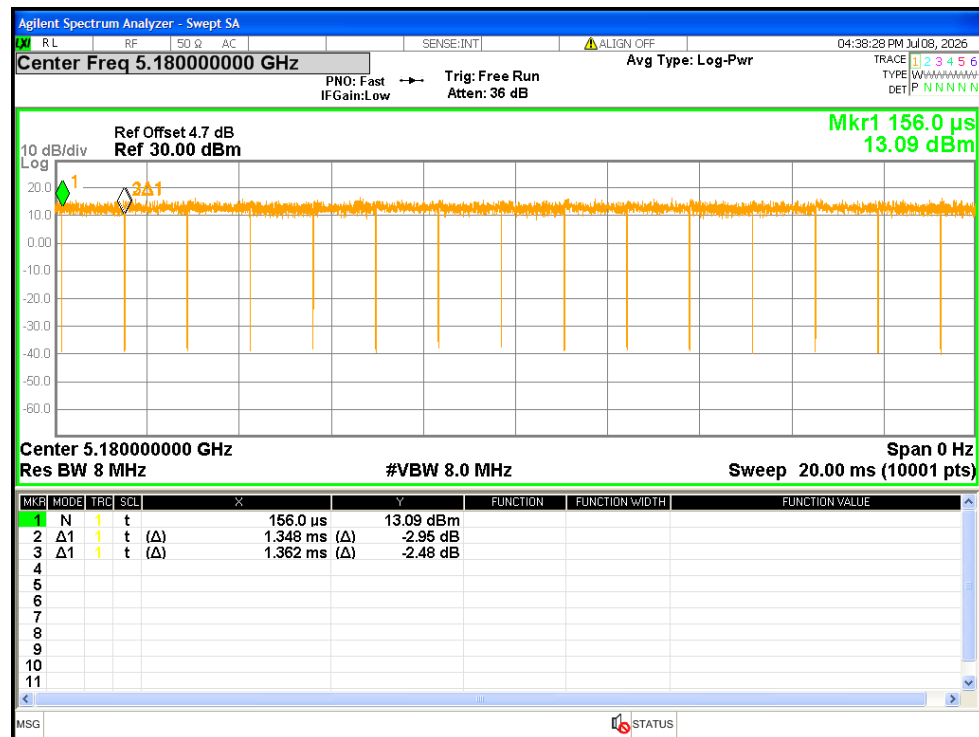
Duty Cycle NVNT n20 5200MHz



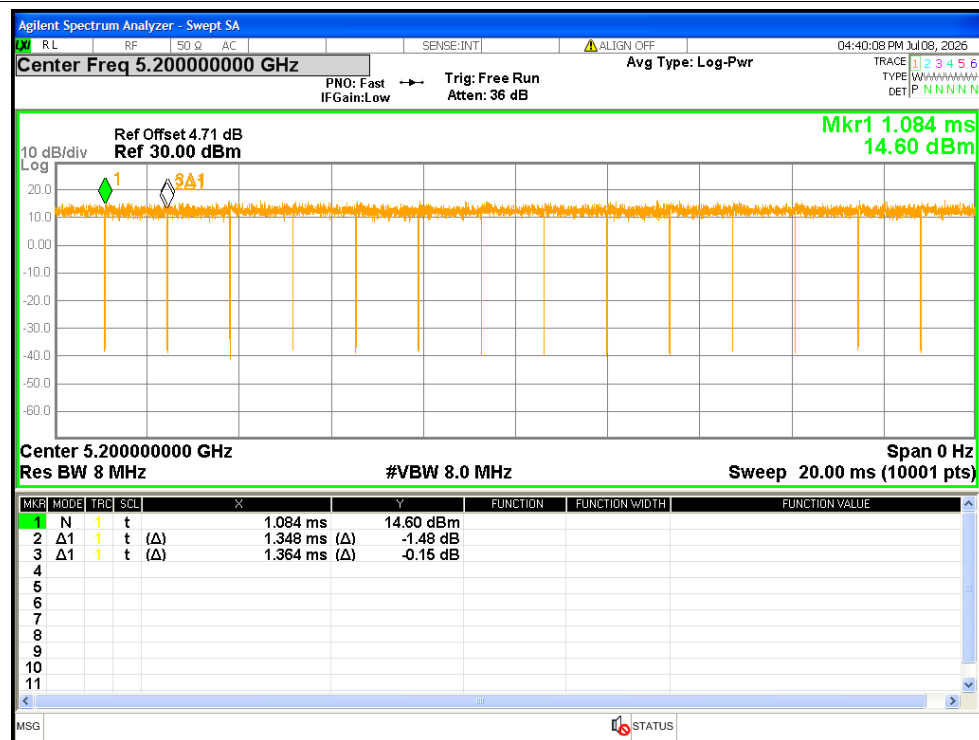
Duty Cycle NVNT n20 5240MHz



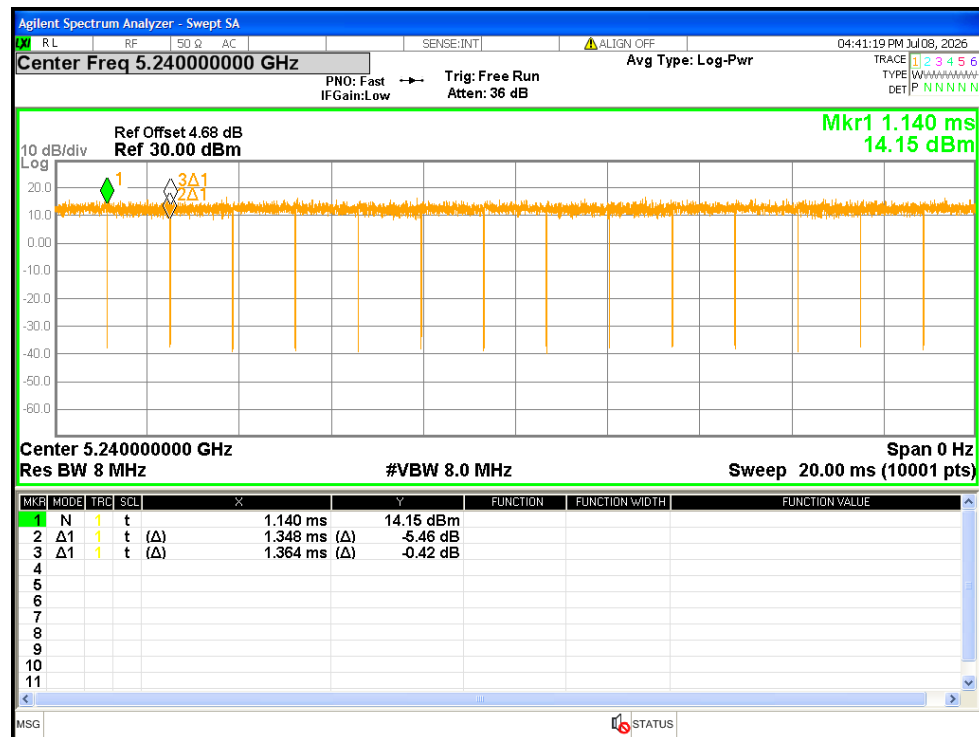
Duty Cycle NVNT ac20 5180MHz



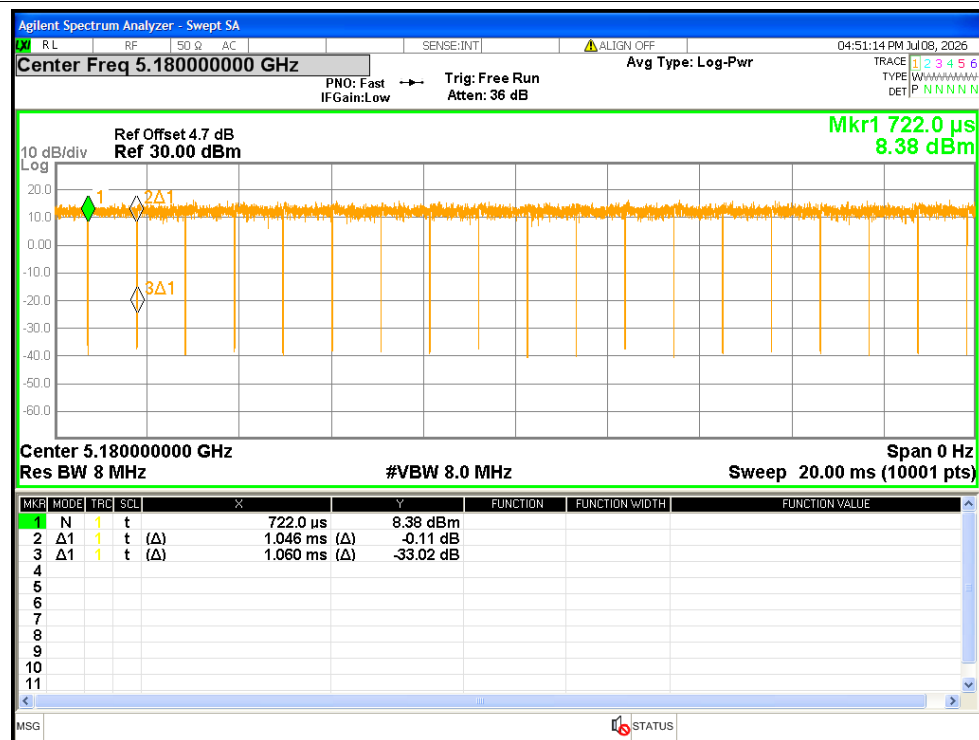
Duty Cycle NVNT ac20 5200MHz



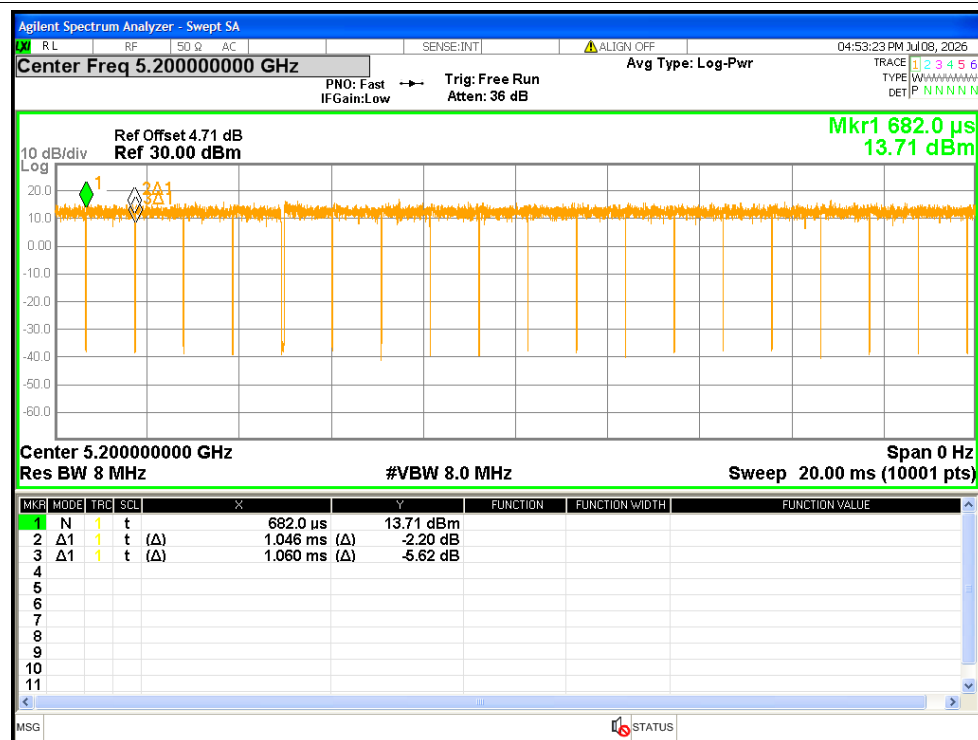
Duty Cycle NVNT ac20 5240MHz



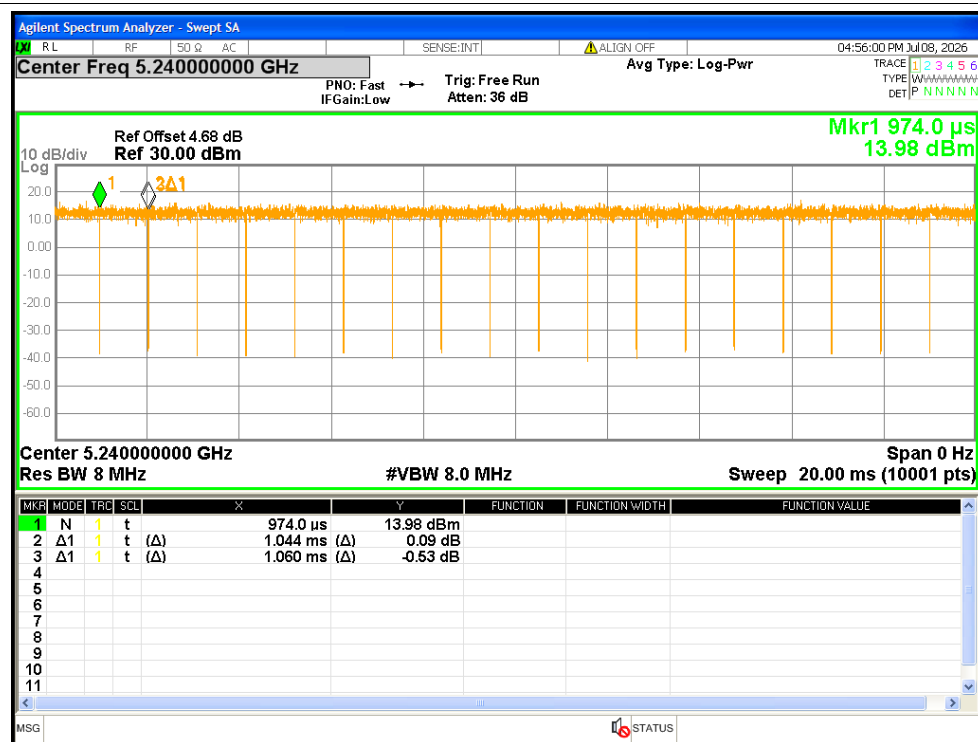
Duty Cycle NVNT ax20 5180MHz



Duty Cycle NVNT ax20 5200MHz



Duty Cycle NVNT ax20 5240MHz



Maximum Output Power

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	10.99	0.05	11.04	<=24	Pass
NVNT	a	5200	10.76	0.04	10.8	<=24	Pass
NVNT	a	5240	10.49	0.05	10.54	<=24	Pass
NVNT	n20	5180	11	0.05	11.05	<=24	Pass
NVNT	n20	5200	10.77	0.05	10.82	<=24	Pass
NVNT	n20	5240	10.51	0.05	10.56	<=24	Pass
NVNT	ac20	5180	11.01	0.04	11.05	<=24	Pass
NVNT	ac20	5200	10.61	0.05	10.66	<=24	Pass
NVNT	ac20	5240	10.43	0.05	10.48	<=24	Pass
NVNT	ax20	5180	10.85	0.06	10.91	<=24	Pass
NVNT	ax20	5200	10.7	0.06	10.76	<=24	Pass
NVNT	ax20	5240	10.56	0.07	10.63	<=24	Pass

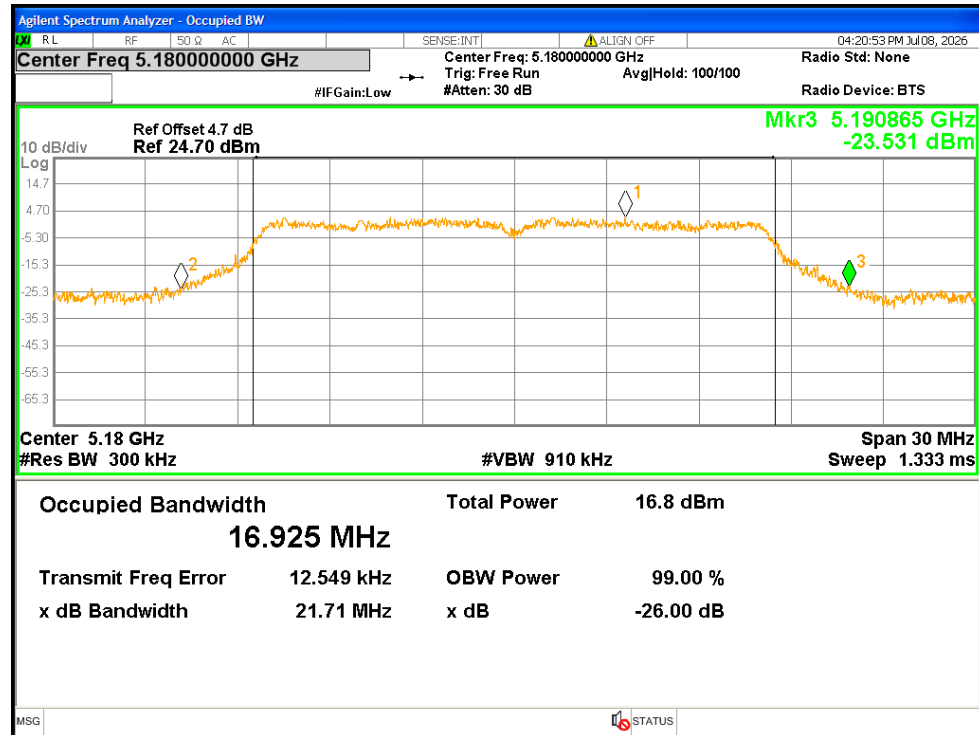
Total Power (dBm)= Conducted Power (dBm)+ Duty Factor (dB)

-26dB Bandwidth

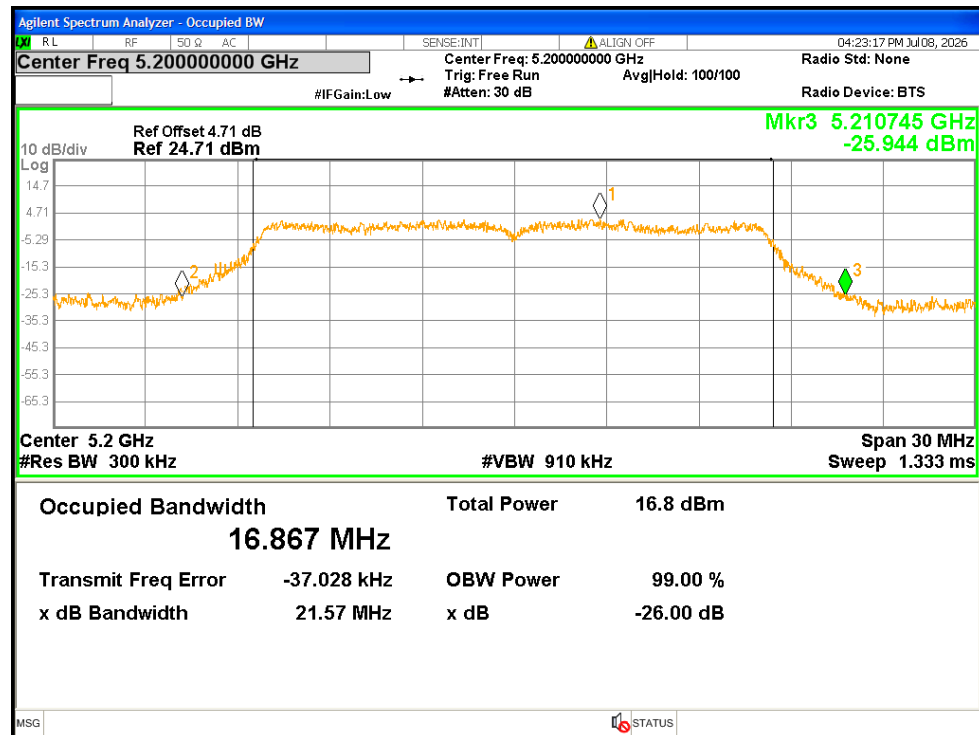
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	21.71	Pass
NVNT	a	5200	21.57	Pass
NVNT	a	5240	20.51	Pass
NVNT	n20	5180	25.53	Pass
NVNT	n20	5200	21.23	Pass
NVNT	n20	5240	20.7	Pass
NVNT	ac20	5180	21.67	Pass
NVNT	ac20	5200	22	Pass
NVNT	ac20	5240	20.72	Pass
NVNT	ax20	5180	20.81	Pass
NVNT	ax20	5200	20.79	Pass
NVNT	ax20	5240	20.97	Pass

Test Graphs

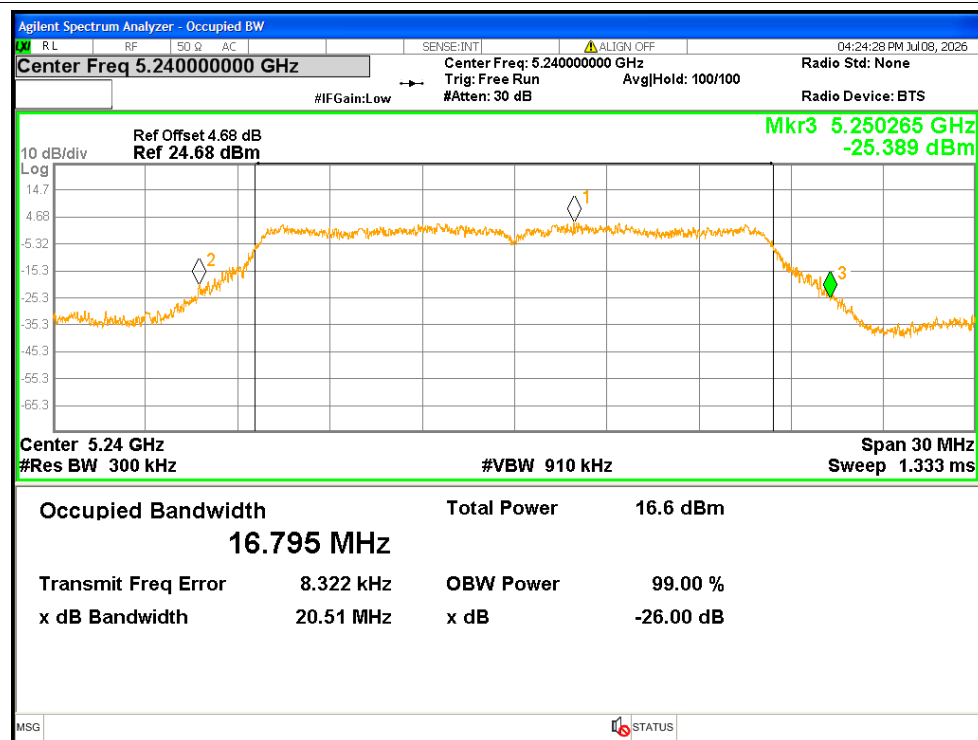
-26dB Bandwidth NVNT a 5180MHz



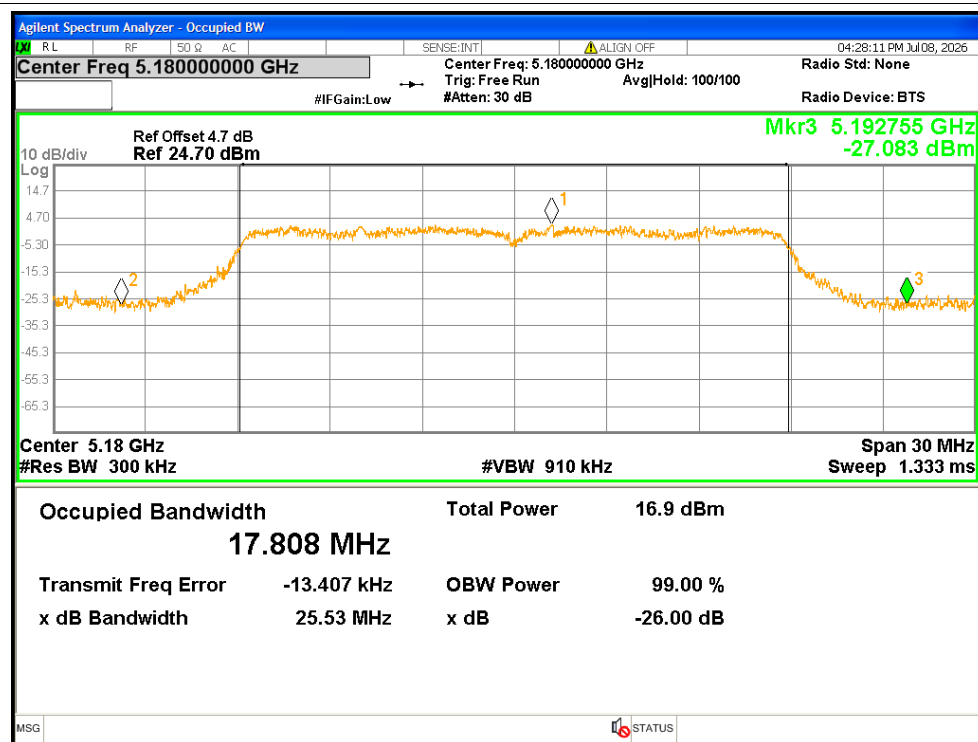
-26dB Bandwidth NVNT a 5200MHz



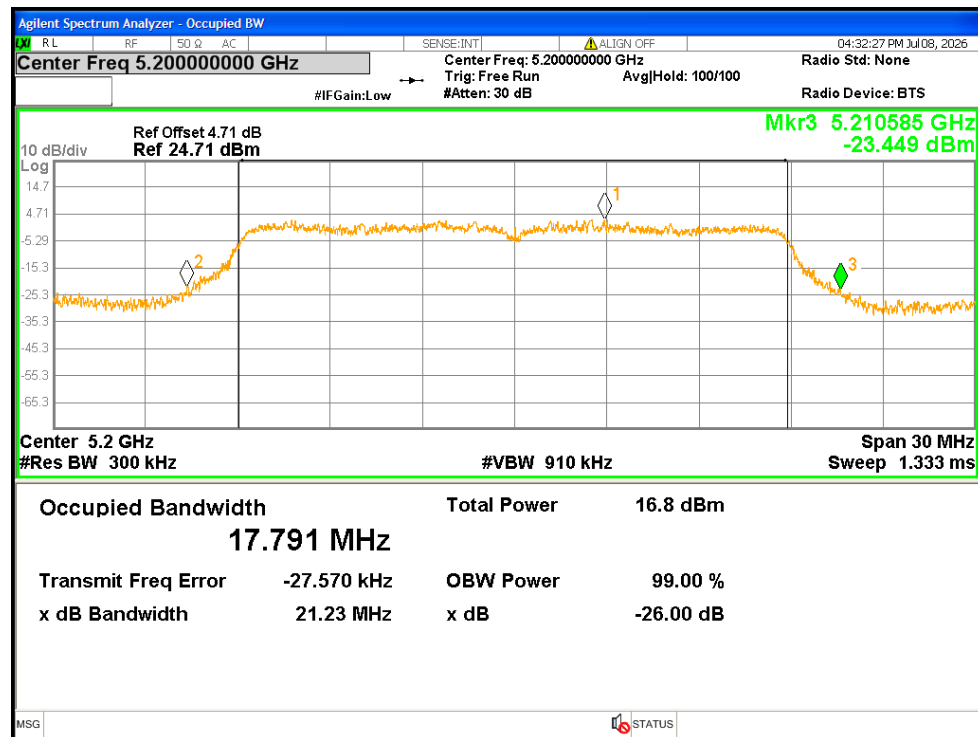
-26dB Bandwidth NVNT a 5240MHz



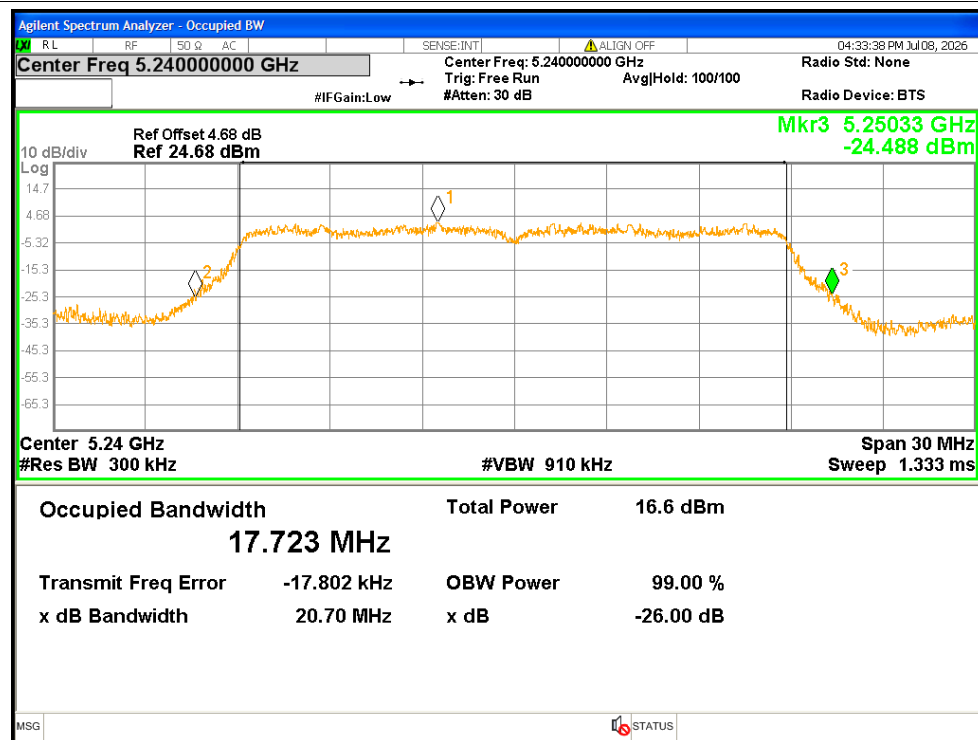
-26dB Bandwidth NVNT n20 5180MHz



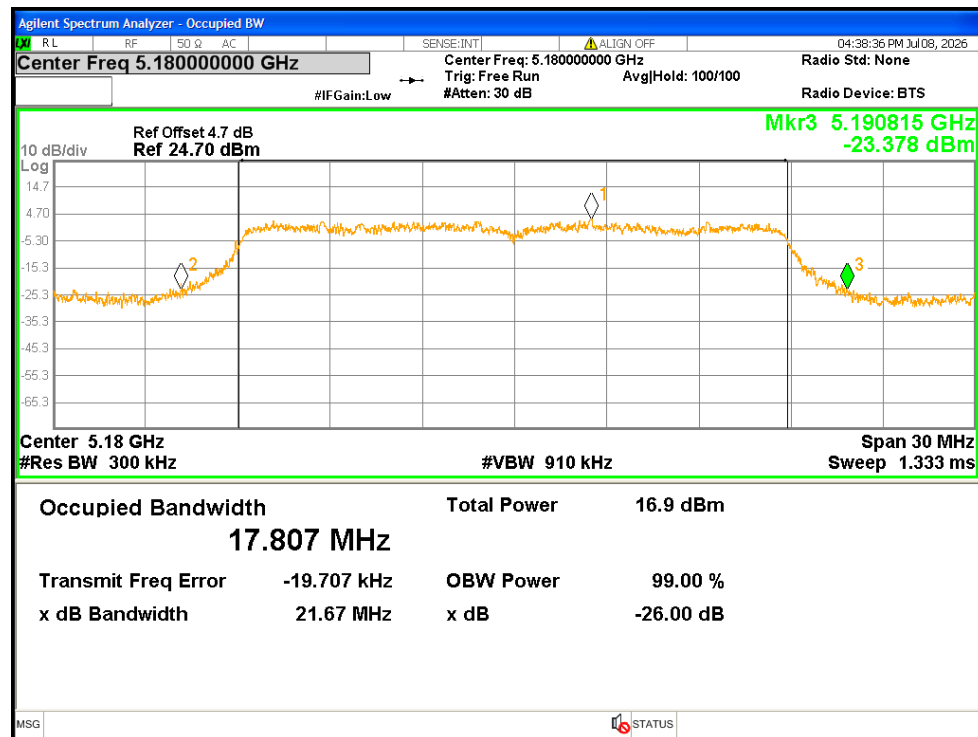
-26dB Bandwidth NVNT n20 5200MHz



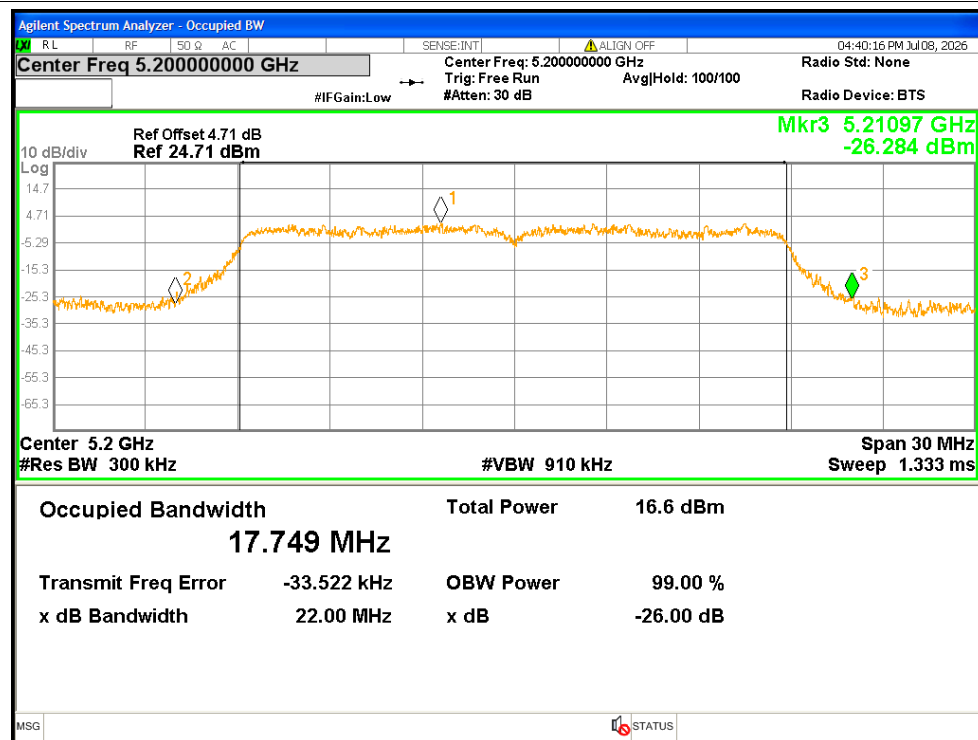
-26dB Bandwidth NVNT n20 5240MHz



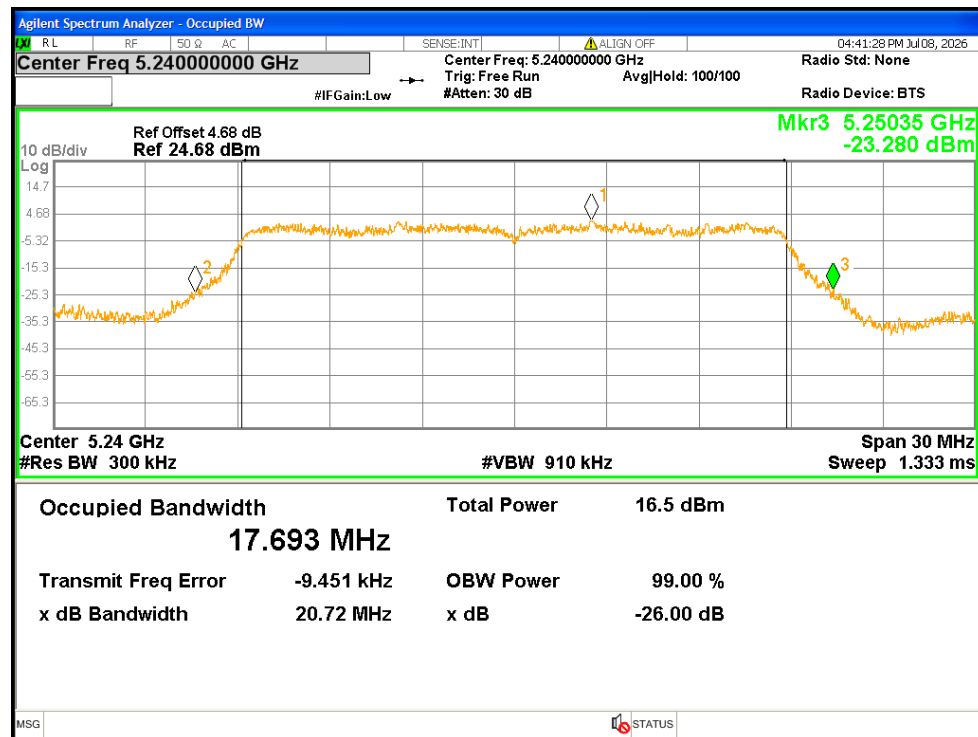
-26dB Bandwidth NVNT ac20 5180MHz



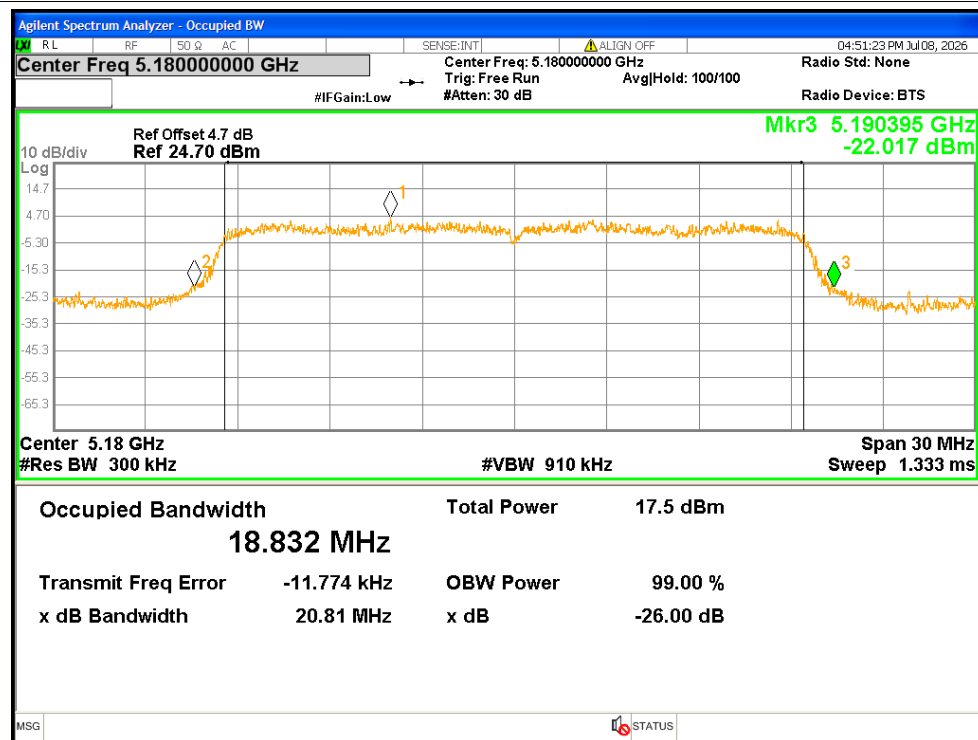
-26dB Bandwidth NVNT ac20 5200MHz



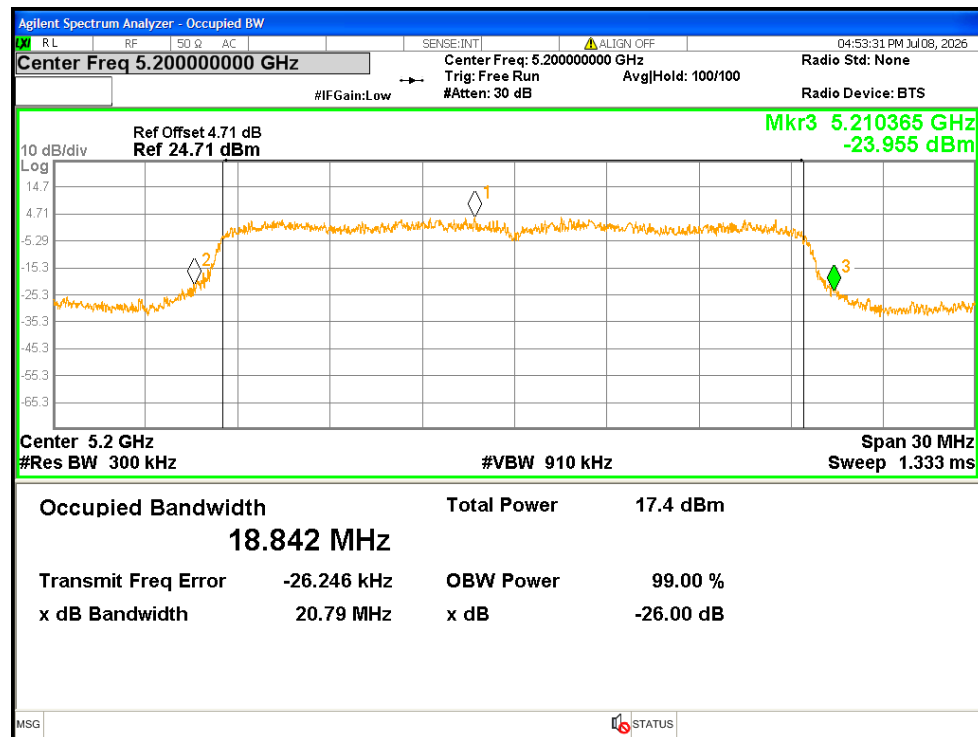
-26dB Bandwidth NVNT ac20 5240MHz



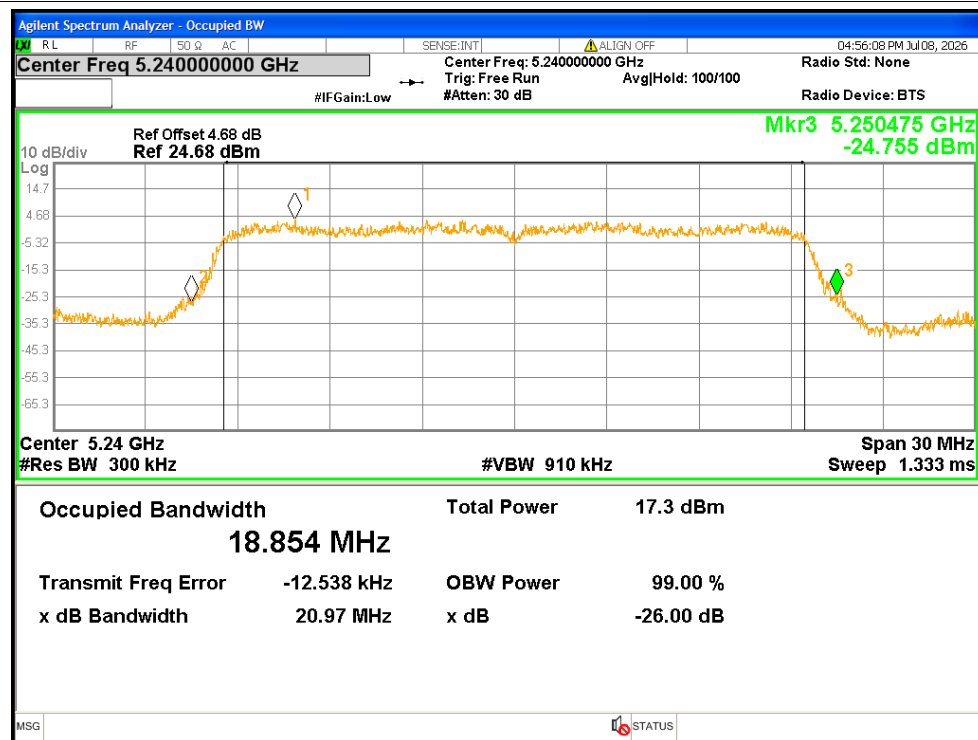
-26dB Bandwidth NVNT ax20 5180MHz



-26dB Bandwidth NVNT ax20 5200MHz



-26dB Bandwidth NVNT ax20 5240MHz

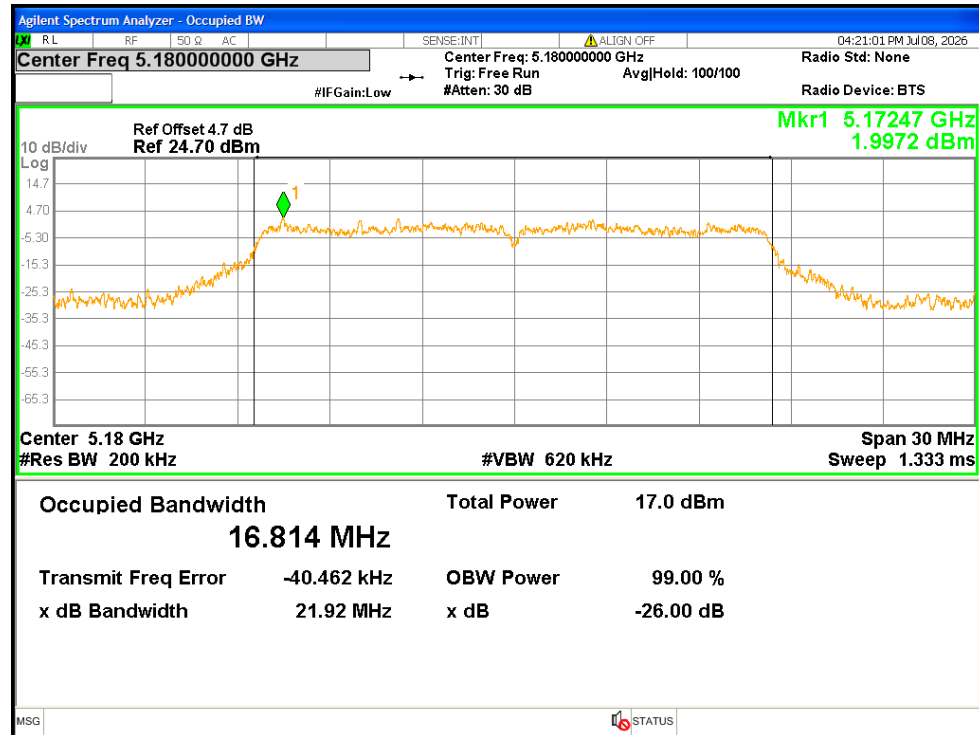


Occupied Channel Bandwidth

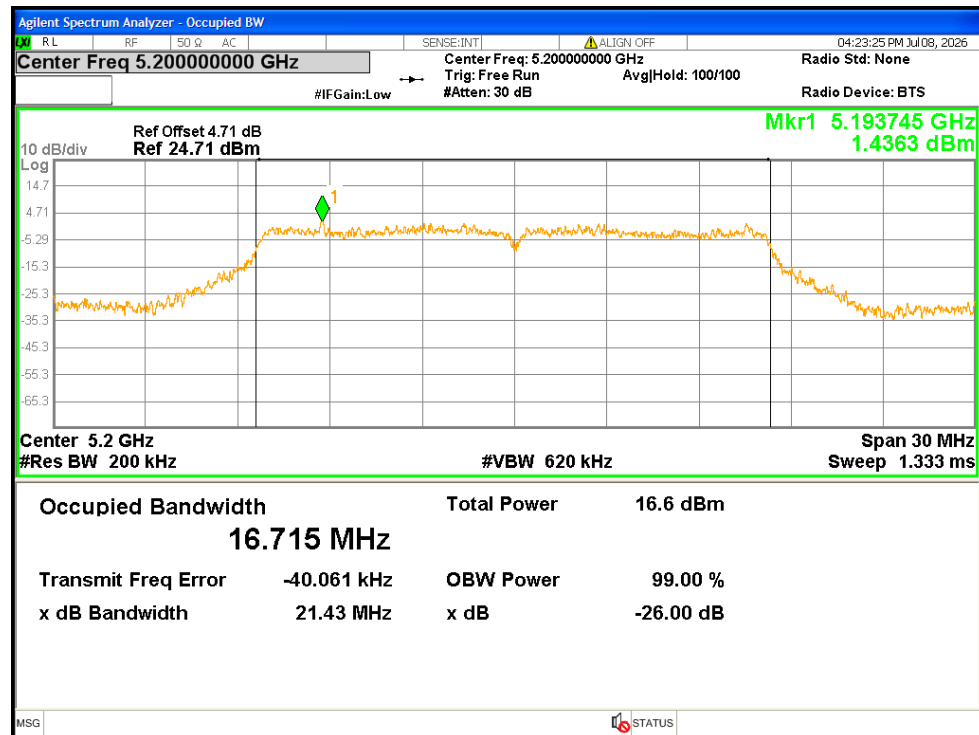
Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5180	16.814
NVNT	a	5200	16.715
NVNT	a	5240	16.607
NVNT	n20	5180	17.738
NVNT	n20	5200	17.694
NVNT	n20	5240	17.643
NVNT	ac20	5180	17.714
NVNT	ac20	5200	17.698
NVNT	ac20	5240	17.618
NVNT	ax20	5180	18.794
NVNT	ax20	5200	18.816
NVNT	ax20	5240	18.763

Test Graphs

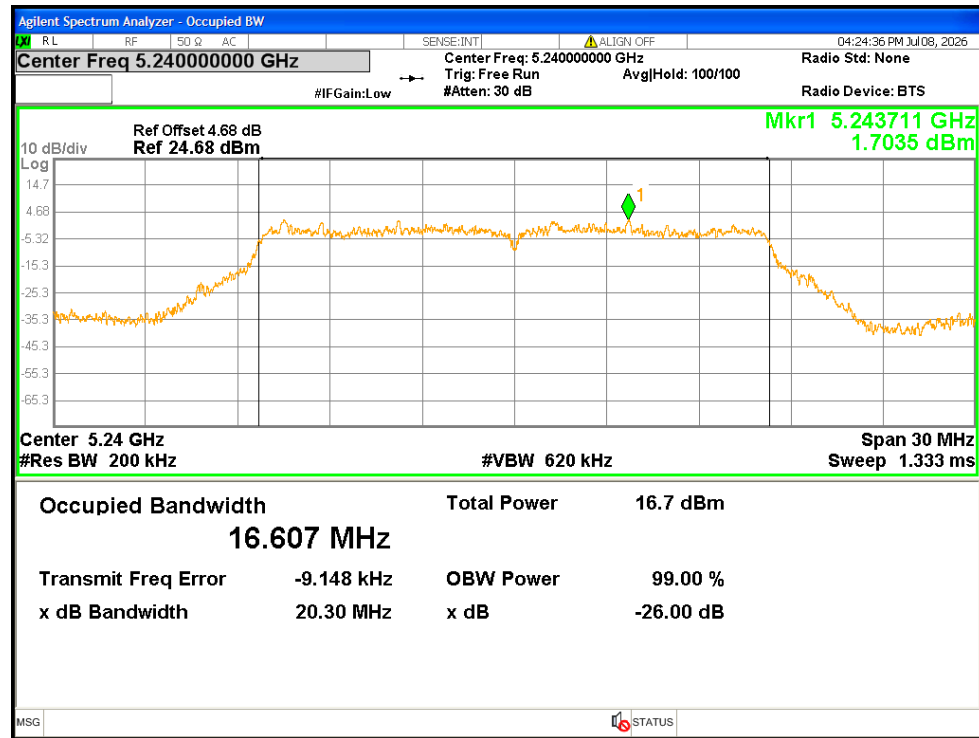
OBW NVNT a 5180MHz



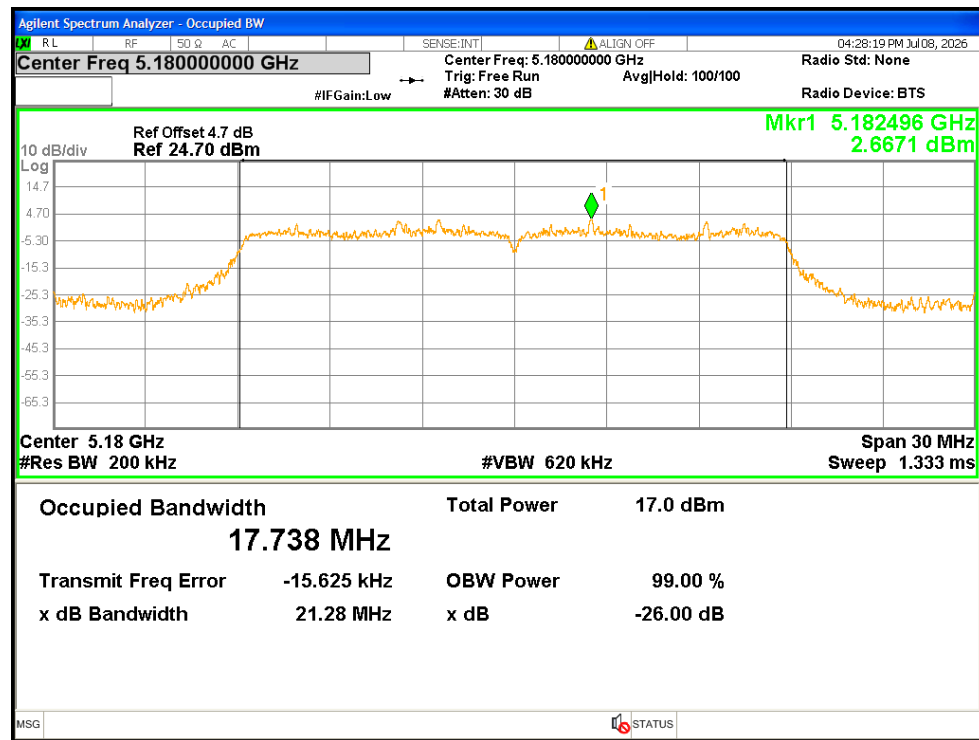
OBW NVNT a 5200MHz



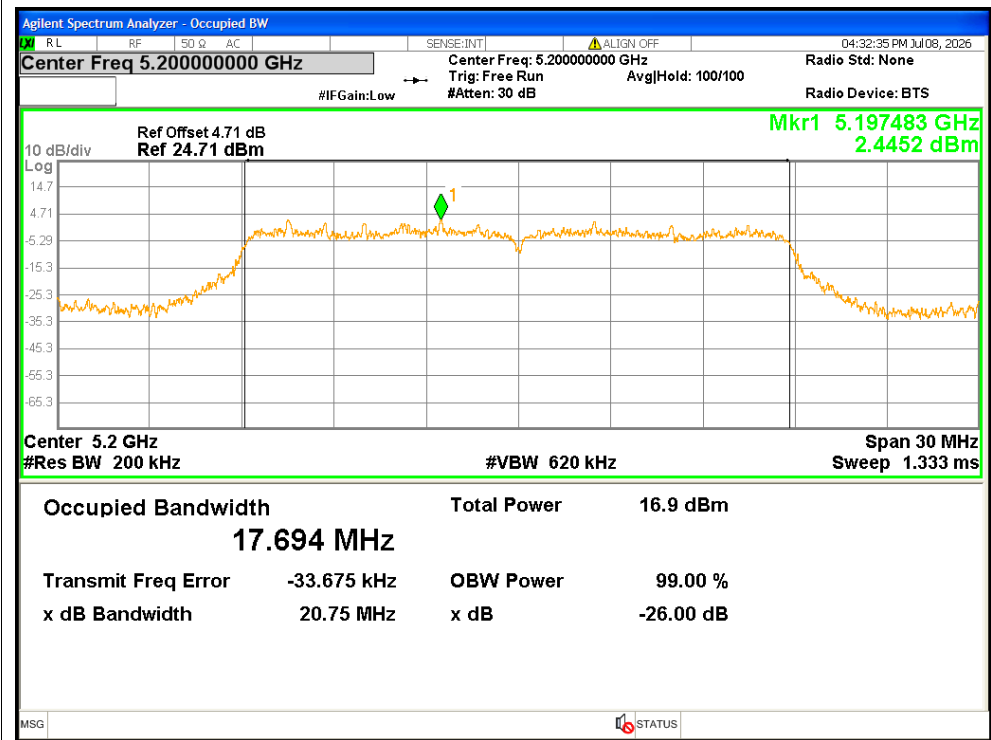
OBW NVNT a 5240MHz



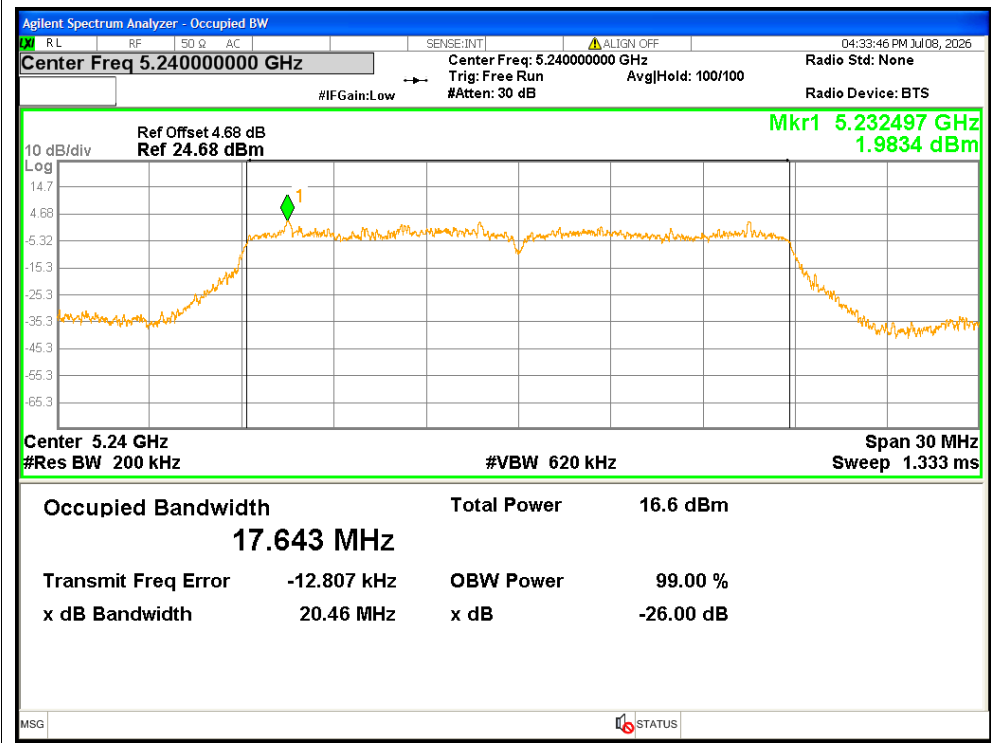
OBW NVNT n20 5180MHz



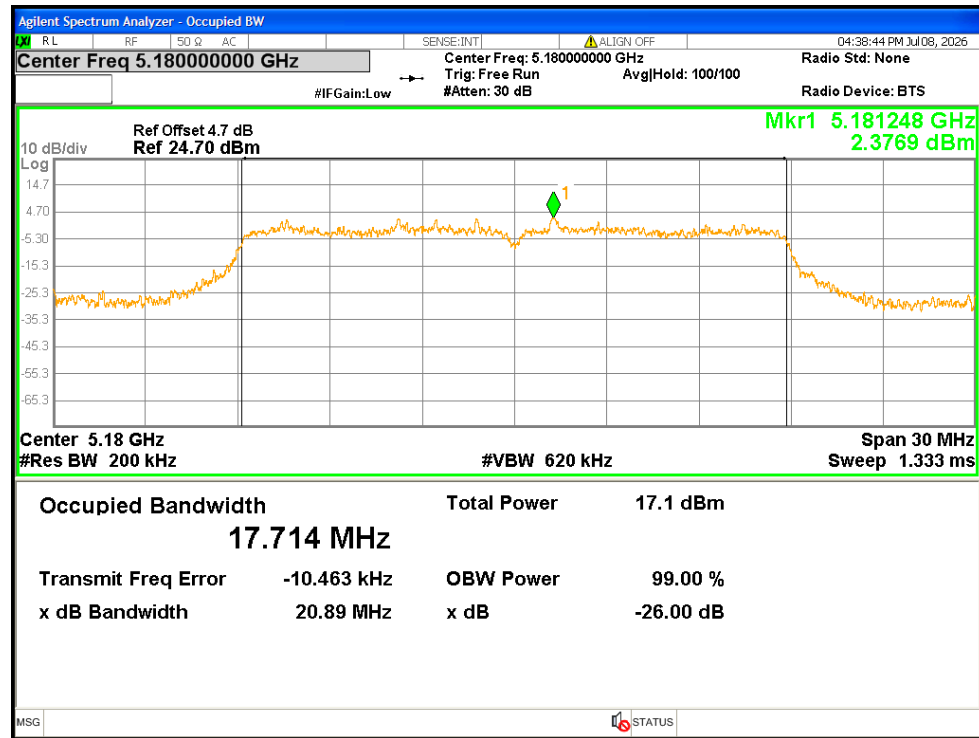
OBW NVNT n20 5200MHz



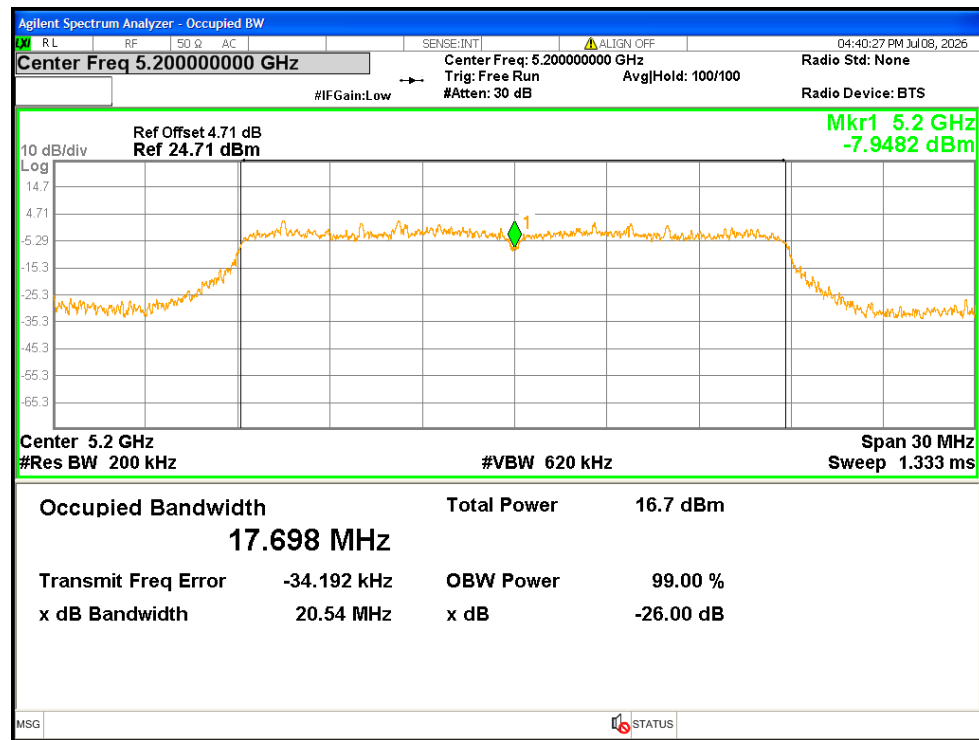
OBW NVNT n20 5240MHz



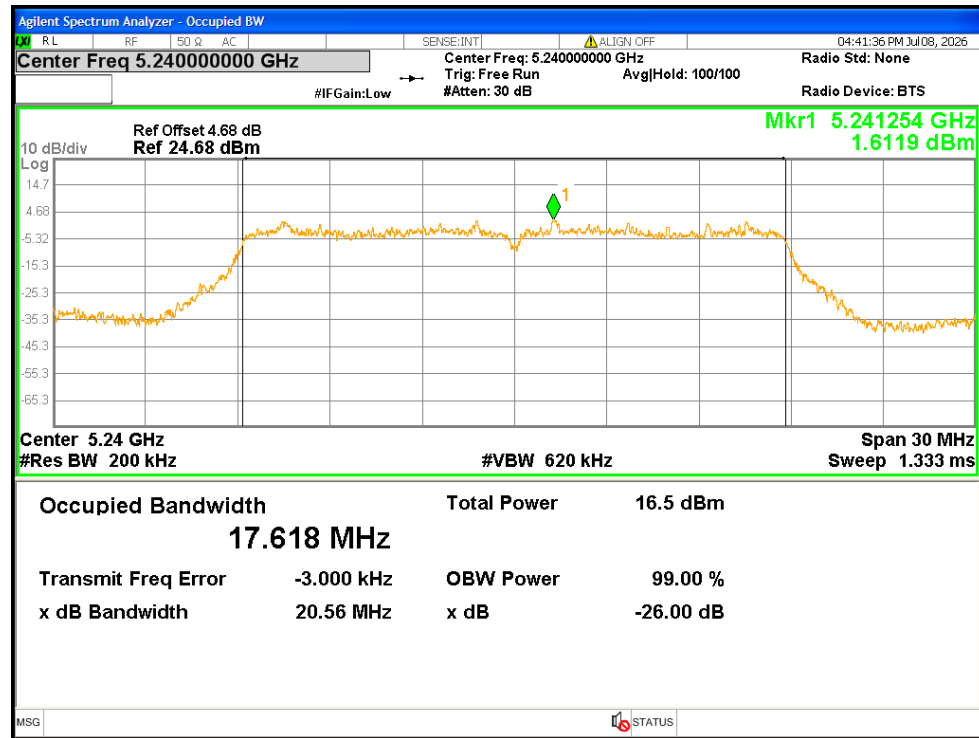
OBW NVNT ac20 5180MHz



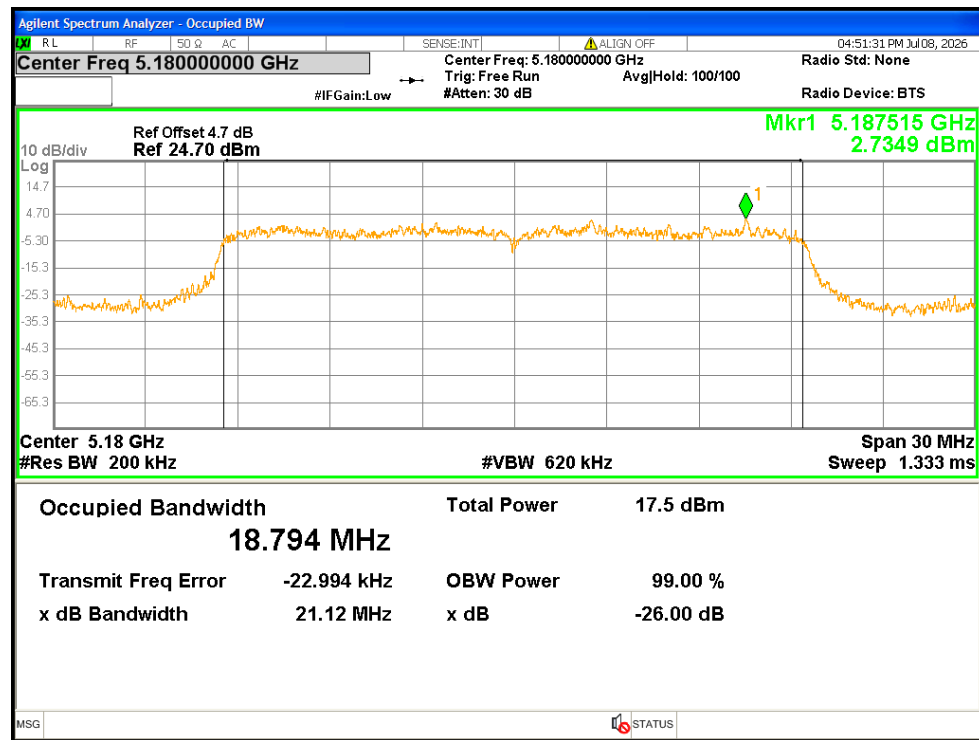
OBW NVNT ac20 5200MHz



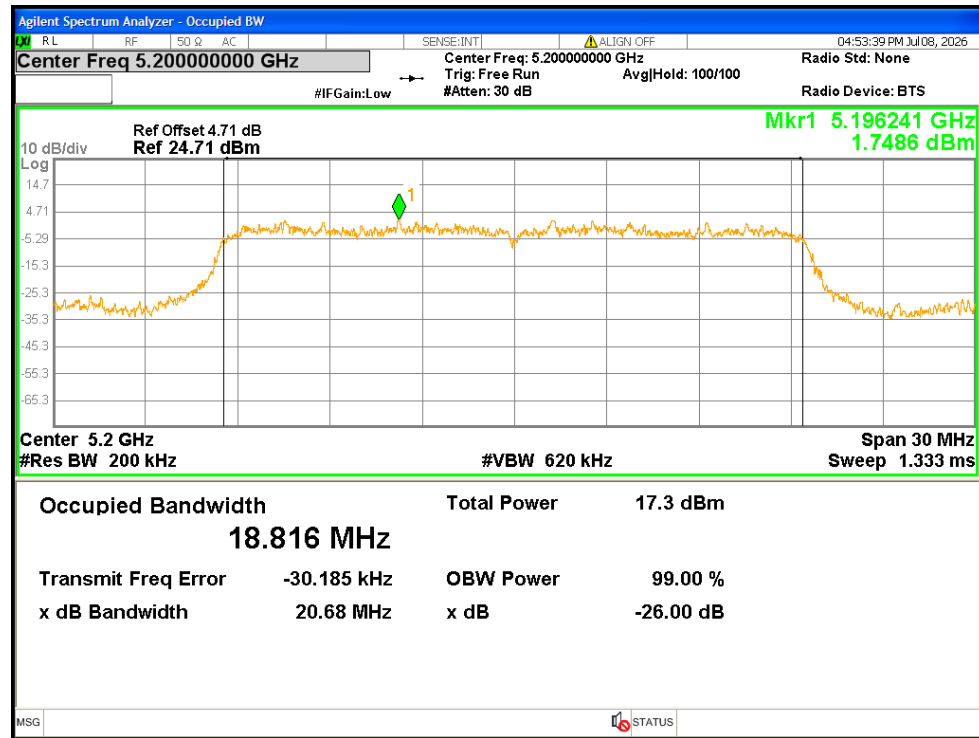
OBW NVNT ac20 5240MHz



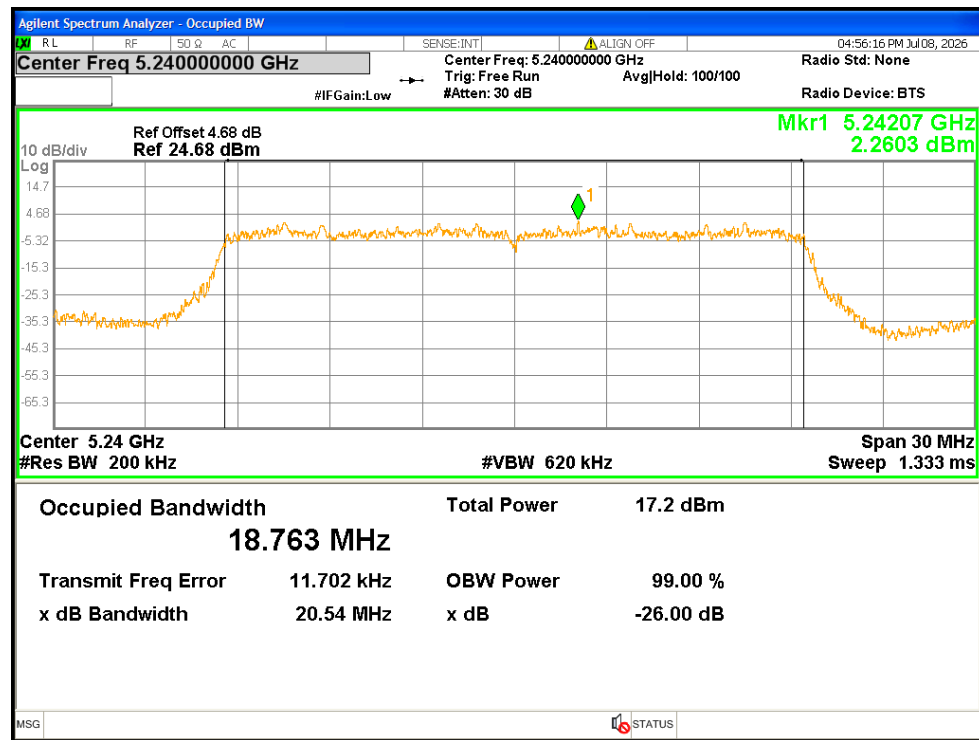
OBW NVNT ax20 5180MHz



OBW NVNT ax20 5200MHz



OBW NVNT ax20 5240MHz

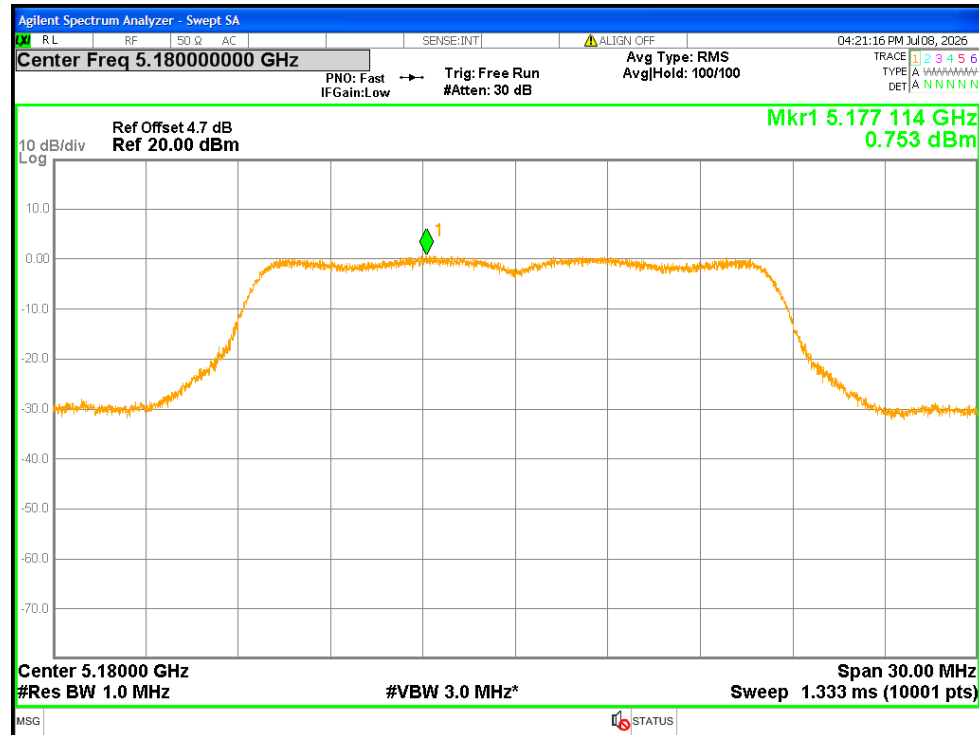


Maximum Power Spectral Density Level

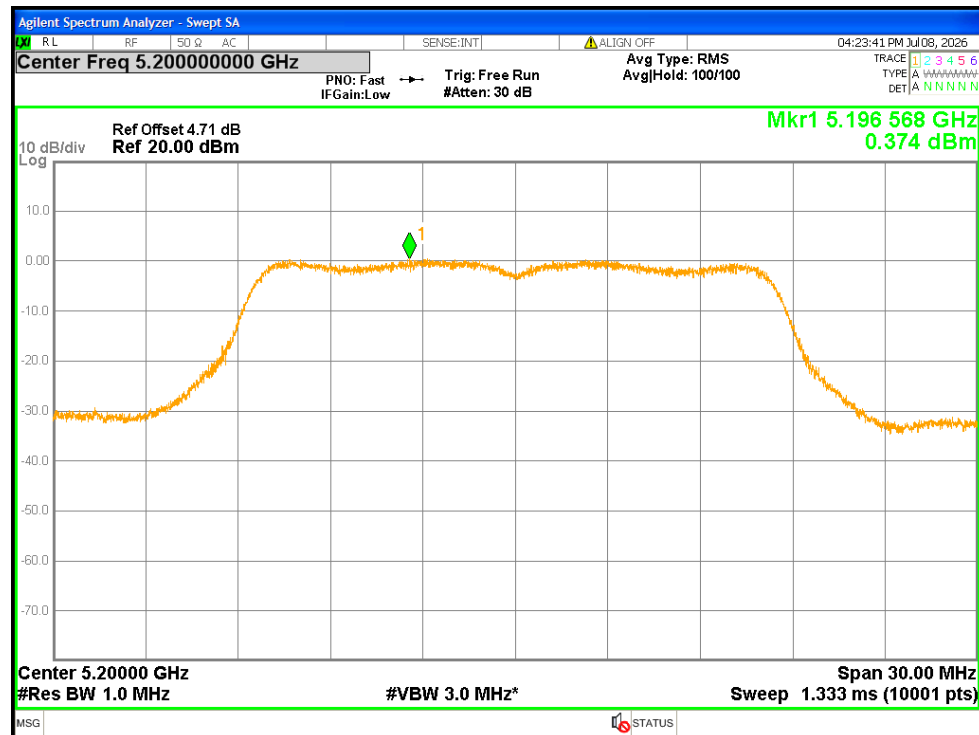
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	0.753	0.05	0.803	<=11	Pass
NVNT	a	5200	0.374	0.04	0.414	<=11	Pass
NVNT	a	5240	0.112	0.05	0.162	<=11	Pass
NVNT	n20	5180	0.365	0.05	0.415	<=11	Pass
NVNT	n20	5200	0.484	0.05	0.534	<=11	Pass
NVNT	n20	5240	0.126	0.05	0.176	<=11	Pass
NVNT	ac20	5180	0.542	0.04	0.582	<=11	Pass
NVNT	ac20	5200	0.375	0.05	0.425	<=11	Pass
NVNT	ac20	5240	0.079	0.05	0.129	<=11	Pass
NVNT	ax20	5180	0.551	0.06	0.611	<=11	Pass
NVNT	ax20	5200	0.024	0.06	0.084	<=11	Pass
NVNT	ax20	5240	-0.018	0.07	0.052	<=11	Pass

Test Graphs

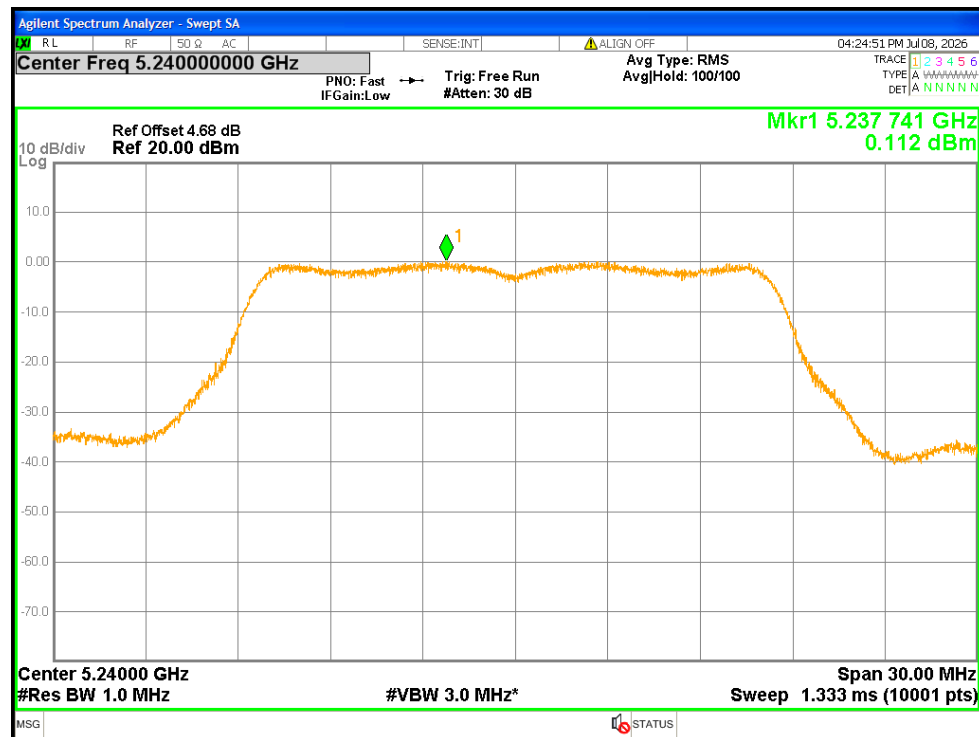
PSD NVNT a 5180MHz



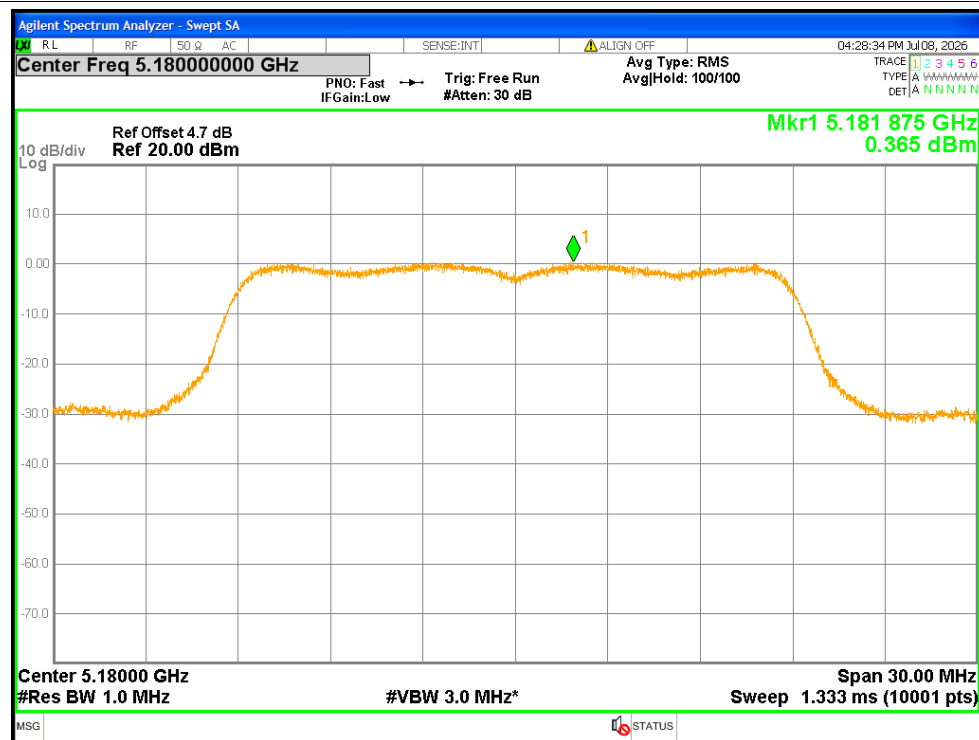
PSD NVNT a 5200MHz



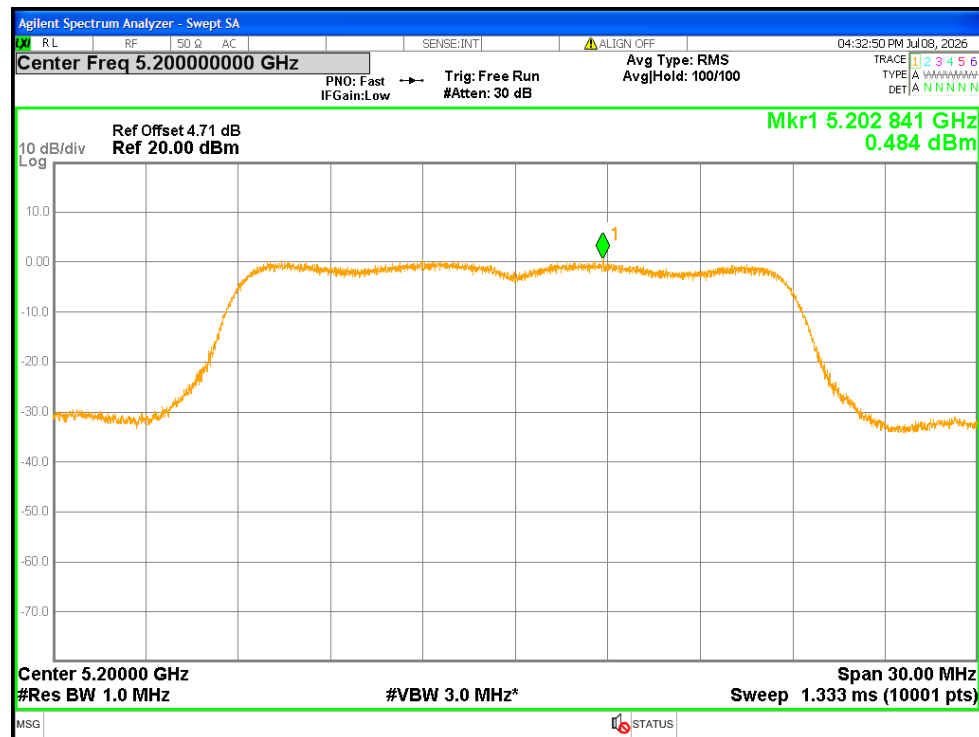
PSD NVNT a 5240MHz



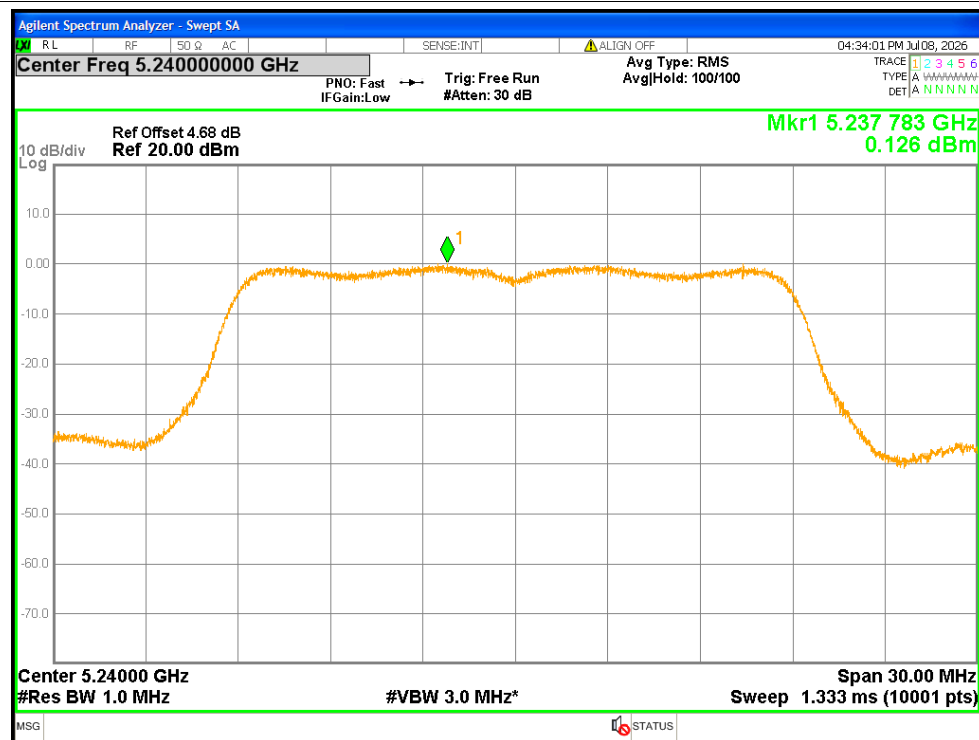
PSD NVNT n20 5180MHz



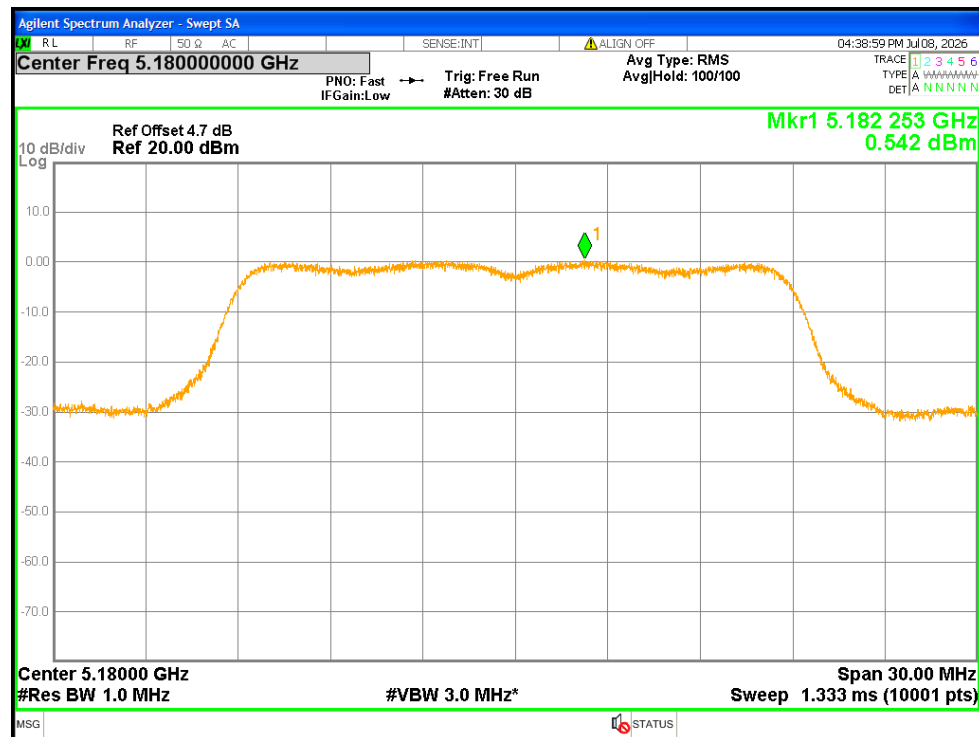
PSD NVNT n20 5200MHz



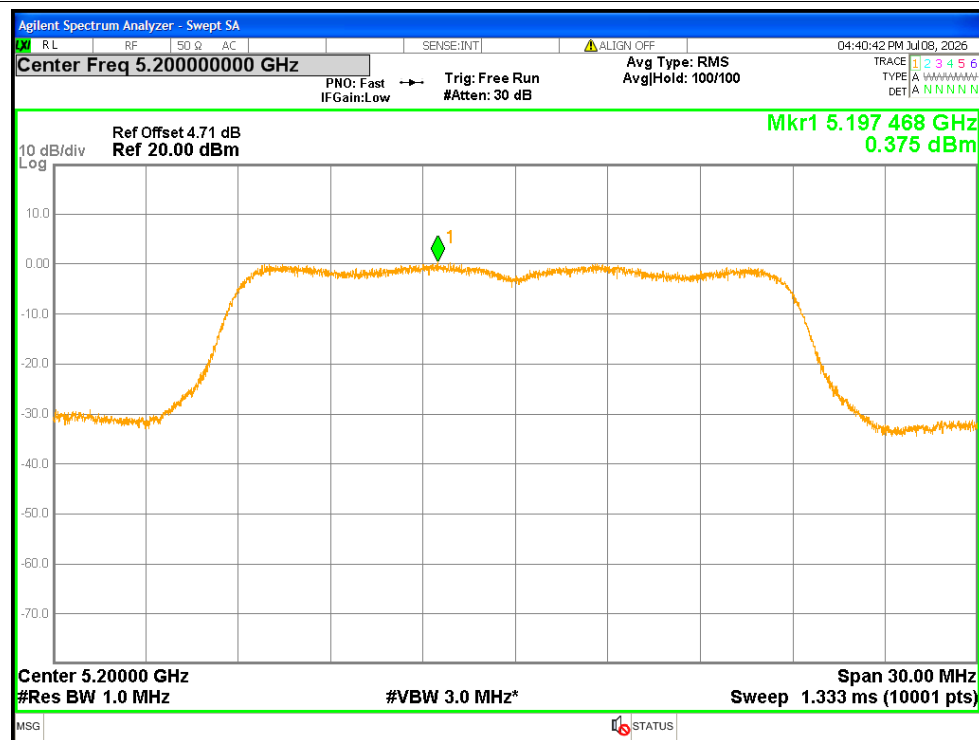
PSD NVNT n20 5240MHz



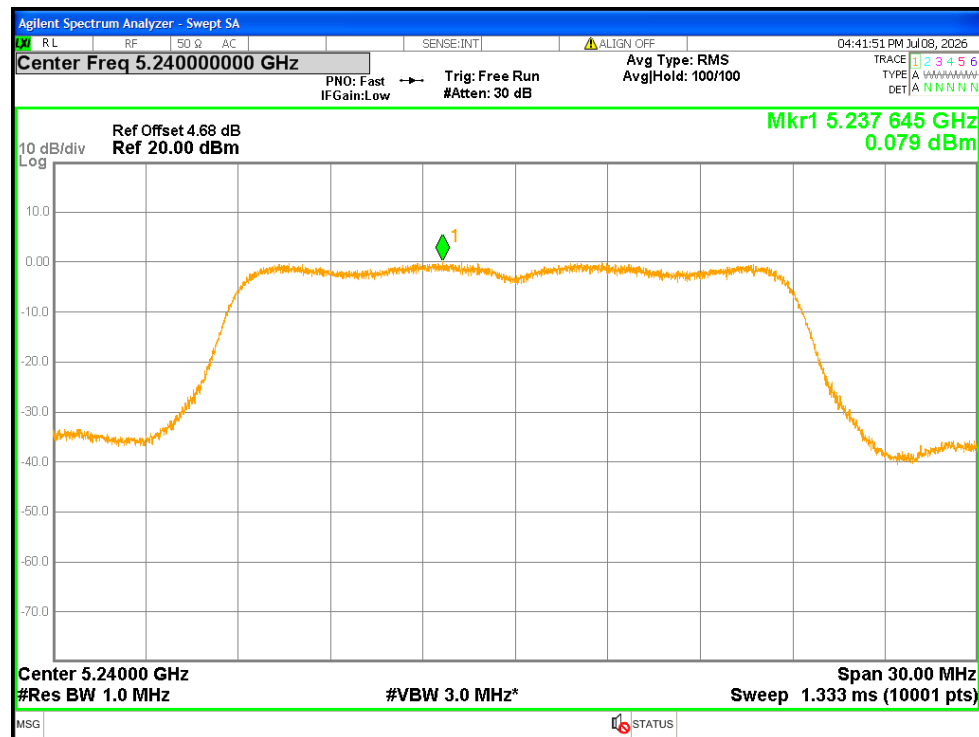
PSD NVNT ac20 5180MHz



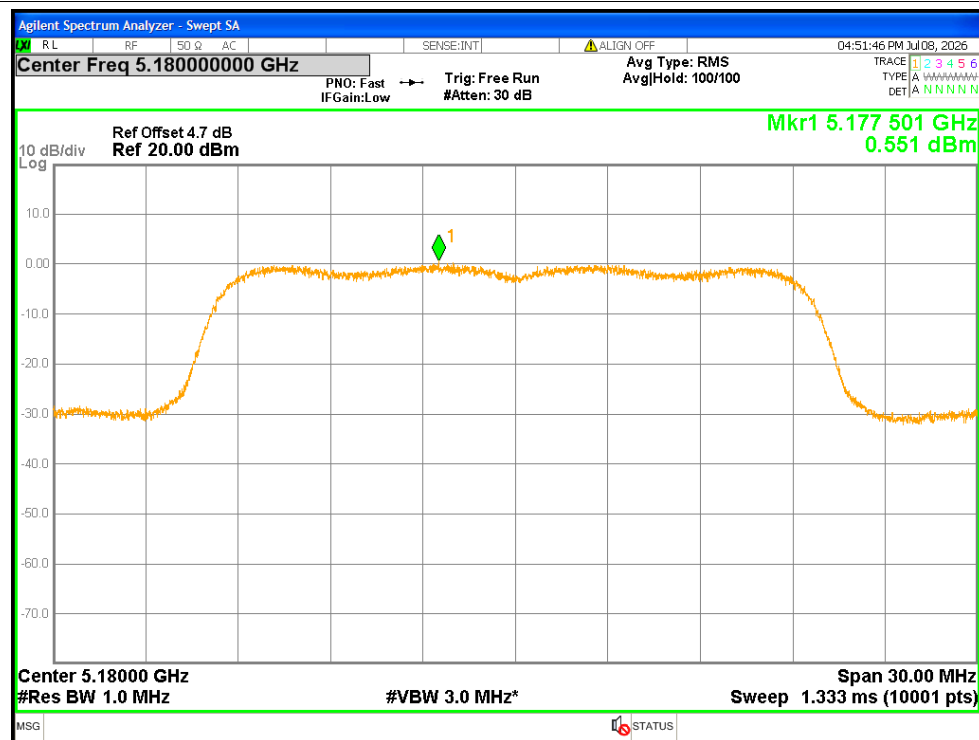
PSD NVNT ac20 5200MHz



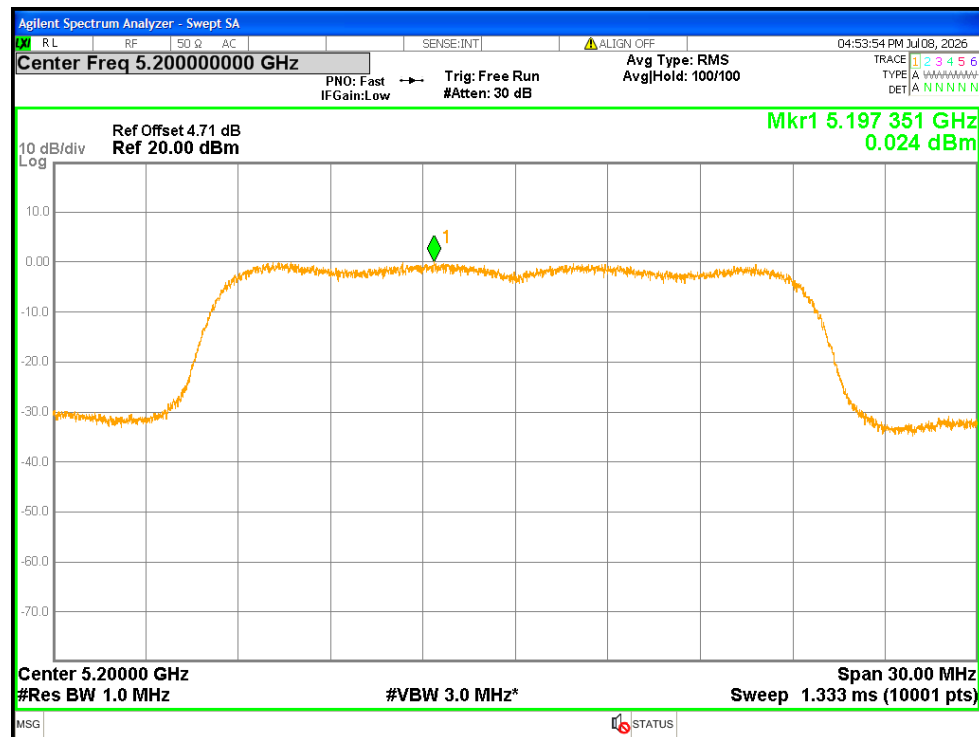
PSD NVNT ac20 5240MHz



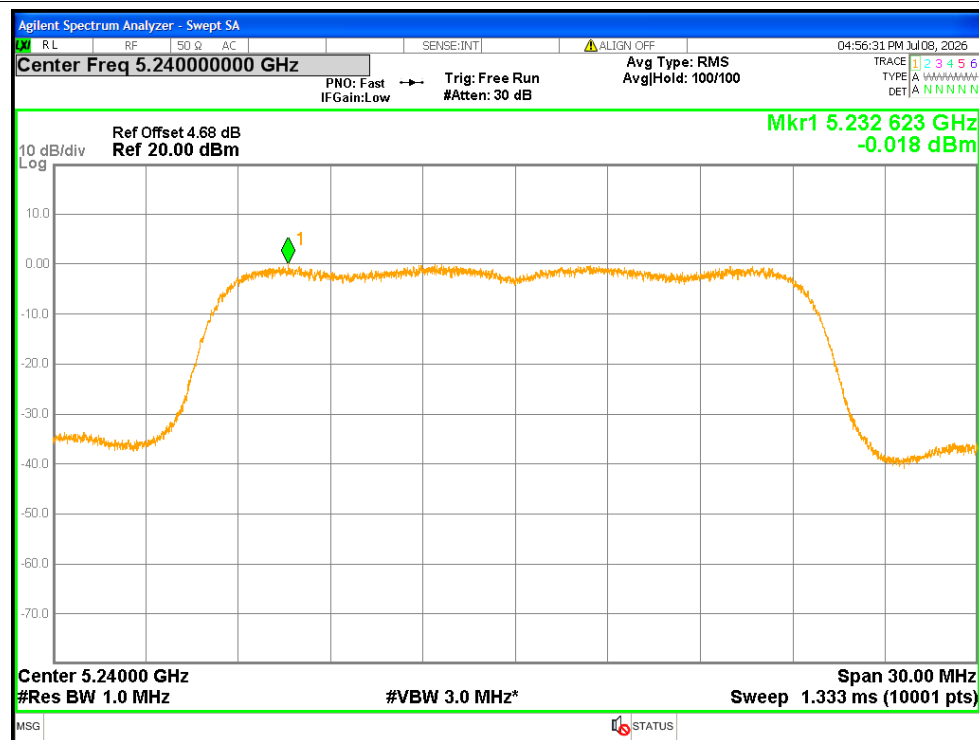
PSD NVNT ax20 5180MHz



PSD NVNT ax20 5200MHz



PSD NVNT ax20 5240MHz

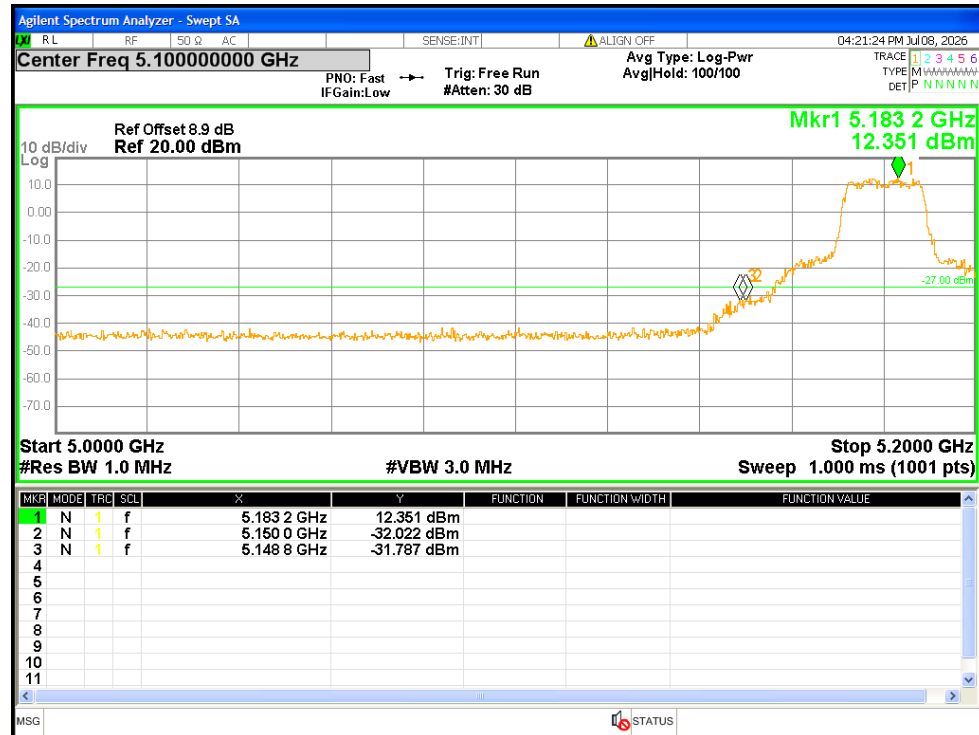


Band Edge

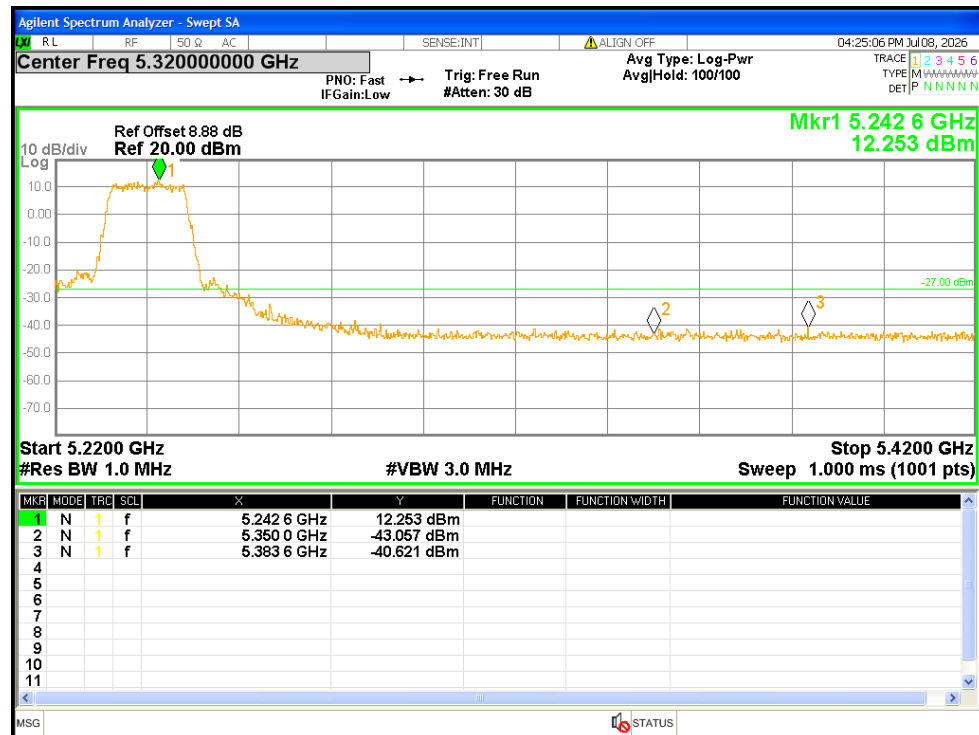
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	-31.78	<=-27	Pass
NVNT	a	5240	-40.62	<=-27	Pass
NVNT	n20	5180	-30.34	<=-27	Pass
NVNT	n20	5240	-41.08	<=-27	Pass
NVNT	ac20	5180	-29.8	<=-27	Pass
NVNT	ac20	5240	-41.74	<=-27	Pass
NVNT	ax20	5180	-30.47	<=-27	Pass
NVNT	ax20	5240	-40.82	<=-27	Pass

Test Graphs

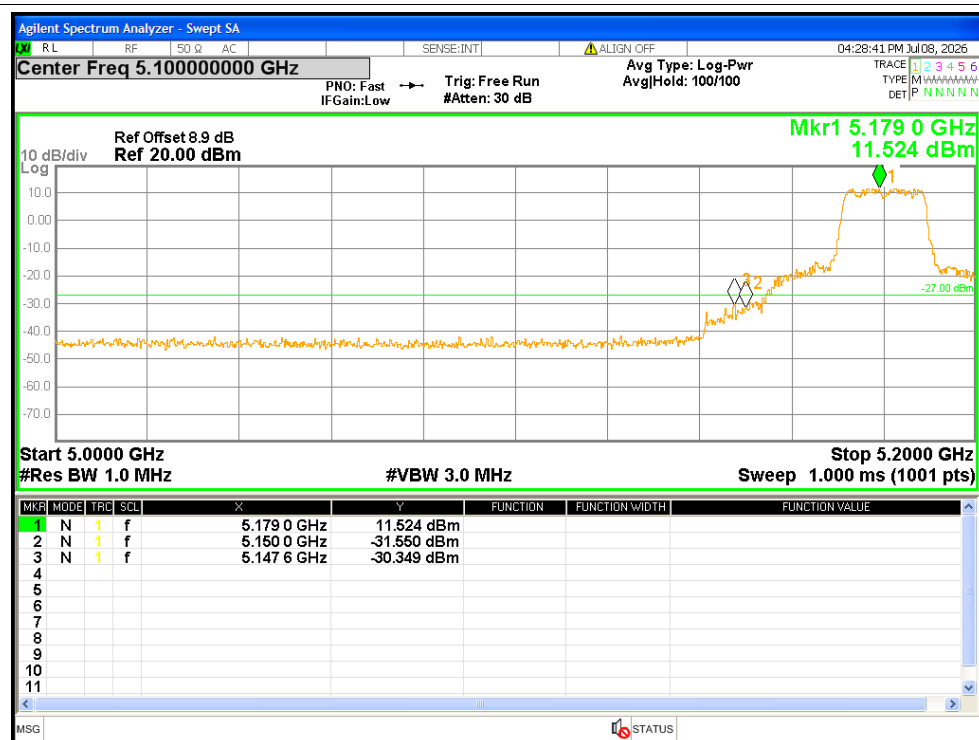
Band Edge NVNT a 5180MHz Low



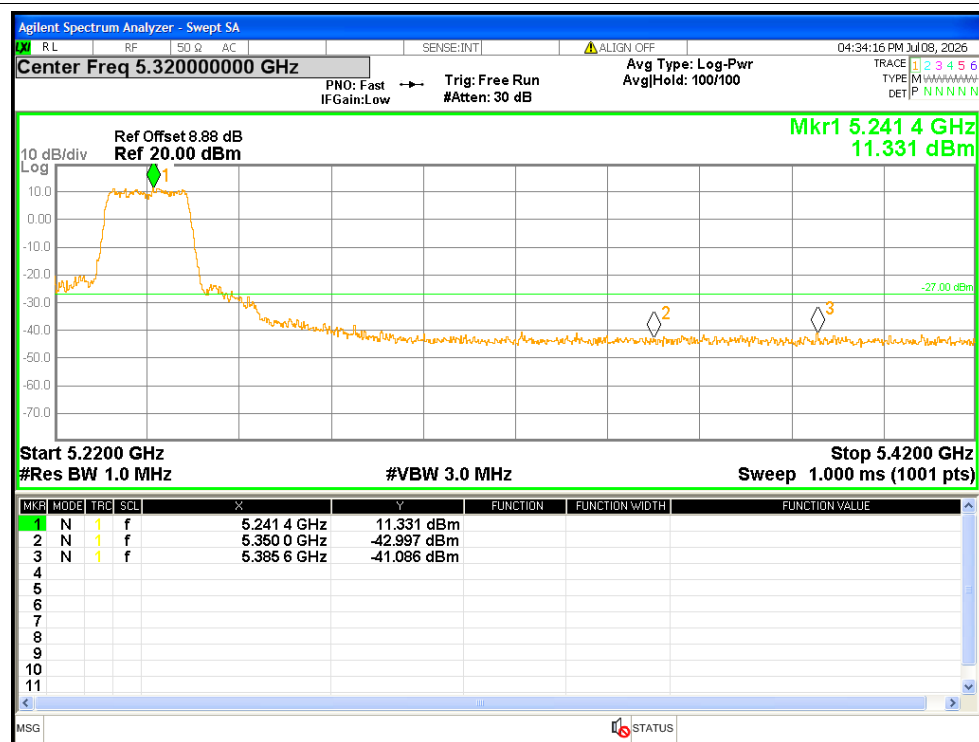
Band Edge NVNT a 5240MHz High



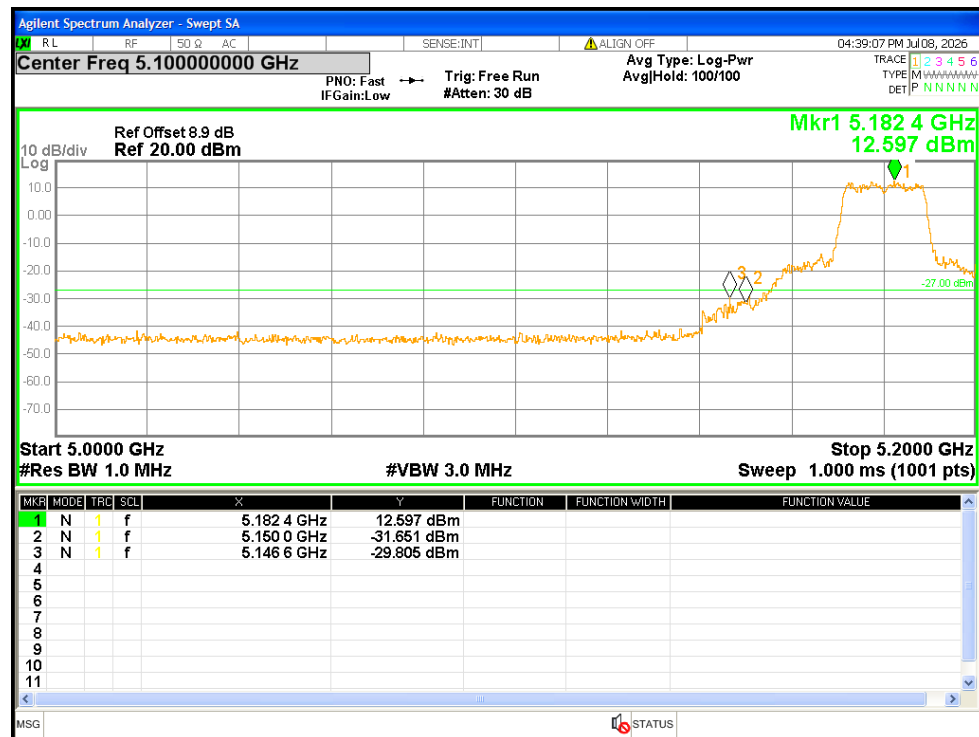
Band Edge NVNT n20 5180MHz Low



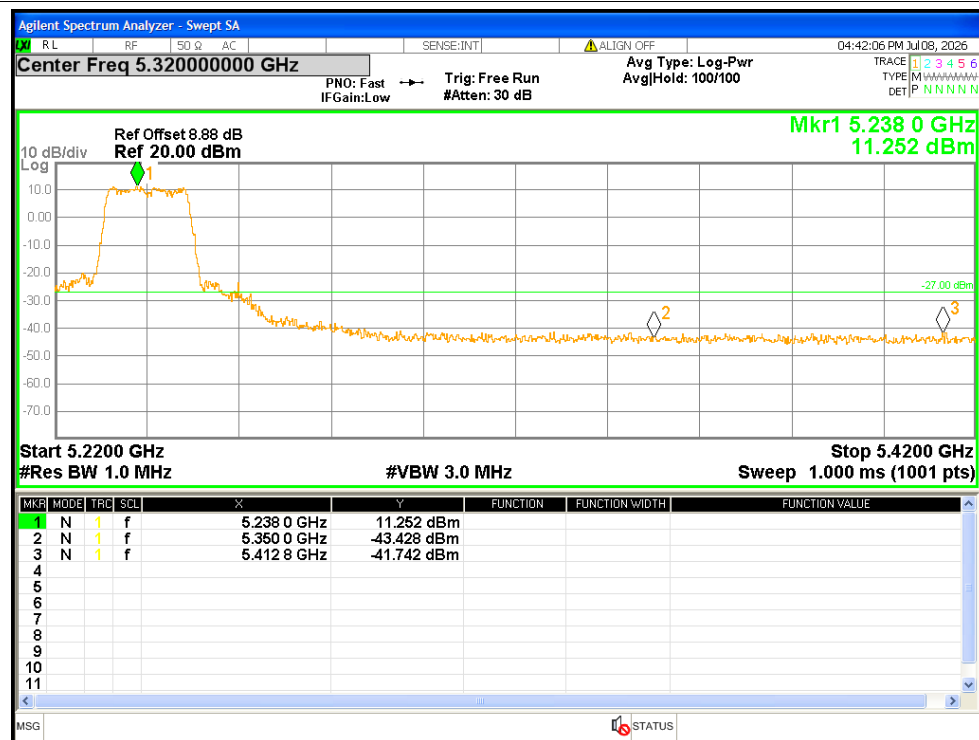
Band Edge NVNT n20 5240MHz High



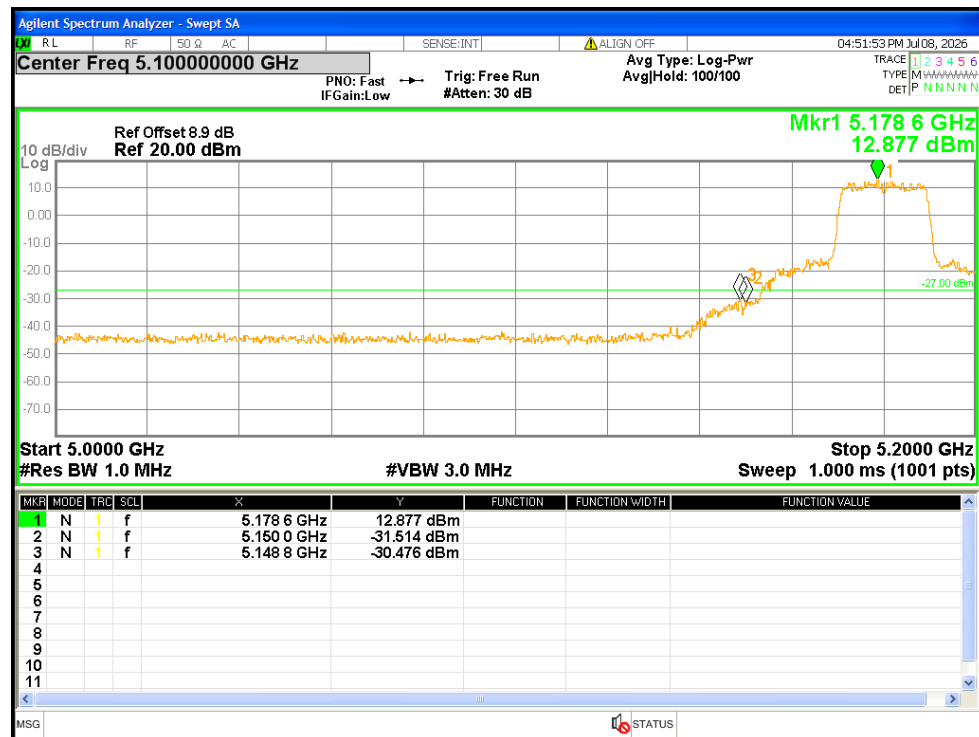
Band Edge NVNT ac20 5180MHz Low



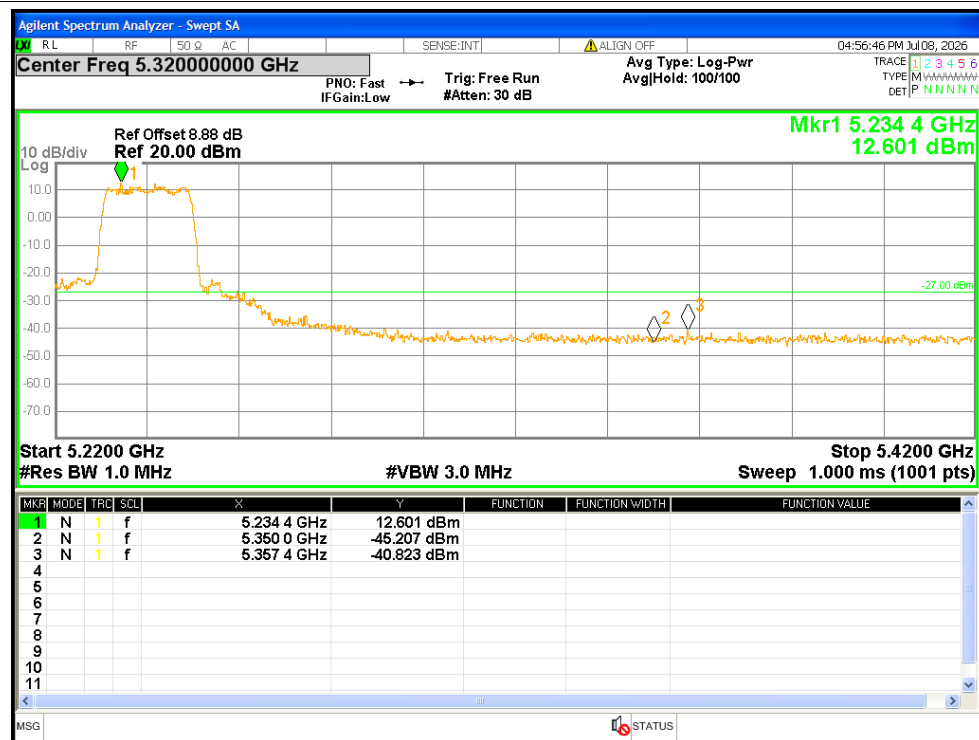
Band Edge NVNT ac20 5240MHz High



Band Edge NVNT ax20 5180MHz Low



Band Edge NVNT ax20 5240MHz High



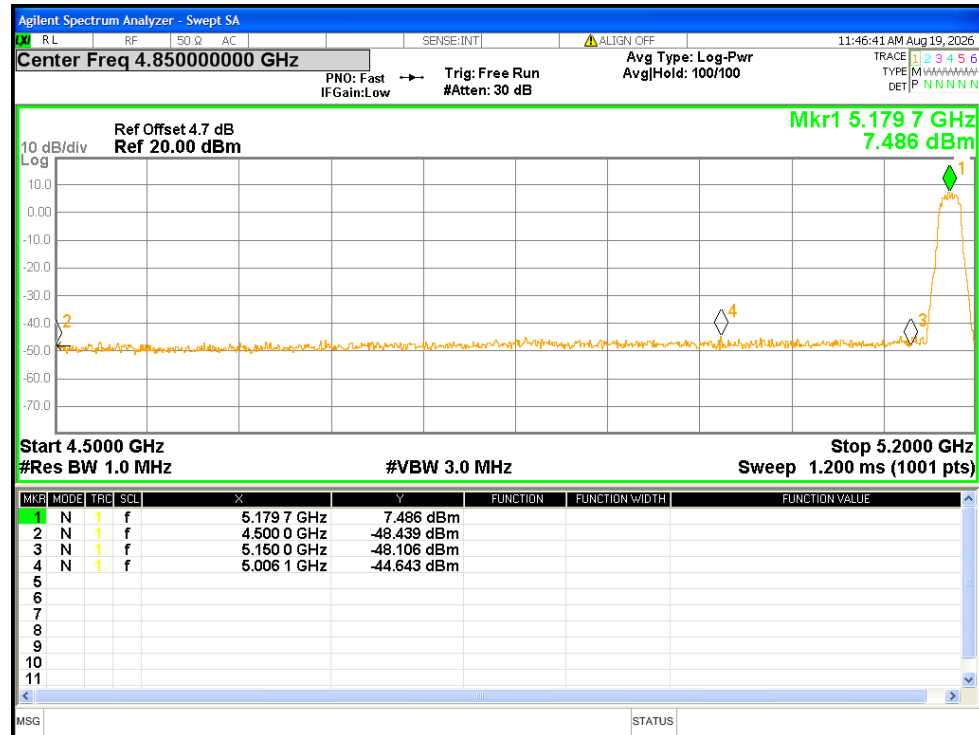
Restrict Band

Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
a	5180	4500	-48.43	4.2	0	51	Peak	<=68.2	Pass
a	5180	4500	-57.39	4.2	0.05	42.09	Average	<=54	Pass
a	5180	5006.1	-44.64	4.2	0	54.79	Peak	<=68.2	Pass
a	5180	4876.6	-54.5	4.2	0.05	44.98	Average	<=54	Pass
a	5180	5150	-48.1	4.2	0	51.33	Peak	<=68.2	Pass
a	5180	5150	-55.59	4.2	0.05	43.89	Average	<=54	Pass
a	5240	5350	-38.24	4.2	0	61.19	Peak	<=68.2	Pass
a	5240	5350	-46.36	4.2	0.05	53.12	Average	<=54	Pass
a	5240	5420.4	-35.83	4.2	0	63.6	Peak	<=68.2	Pass
a	5240	5370.48	-45.64	4.2	0.05	53.84	Average	<=54	Pass
a	5240	5460	-38.21	4.2	0	61.22	Peak	<=68.2	Pass
a	5240	5460	-46.45	4.2	0.05	53.03	Average	<=54	Pass
n20	5180	4500	-49.8	4.2	0	49.63	Peak	<=68.2	Pass
n20	5180	4500	-57.39	4.2	0.05	42.09	Average	<=54	Pass
n20	5180	5069.1	-44.51	4.2	0	54.92	Peak	<=68.2	Pass
n20	5180	5148.2	-54.83	4.2	0.05	44.65	Average	<=54	Pass
n20	5180	5150	-46.95	4.2	0	52.48	Peak	<=68.2	Pass
n20	5180	5150	-54.91	4.2	0.05	44.57	Average	<=54	Pass
n20	5240	5350	-46.53	4.2	0	52.9	Peak	<=68.2	Pass
n20	5240	5350	-55.54	4.2	0.05	43.94	Average	<=54	Pass
n20	5240	5360.16	-44.3	4.2	0	55.13	Peak	<=68.2	Pass
n20	5240	5362.56	-54.71	4.2	0.05	44.77	Average	<=54	Pass
n20	5240	5460	-46.61	4.2	0	52.82	Peak	<=68.2	Pass
n20	5240	5460	-56.14	4.2	0.05	43.34	Average	<=54	Pass
ac20	5180	4500	-49.26	4.2	0	50.17	Peak	<=68.2	Pass
ac20	5180	4500	-57.03	4.2	0.04	42.44	Average	<=54	Pass
ac20	5180	4996.3	-42.94	4.2	0	56.49	Peak	<=68.2	Pass
ac20	5180	4873.8	-54.88	4.2	0.04	44.59	Average	<=54	Pass
ac20	5180	5150	-47.97	4.2	0	51.46	Peak	<=68.2	Pass
ac20	5180	5150	-55.51	4.2	0.04	43.96	Average	<=54	Pass
ac20	5240	5350	-37.58	4.2	0	61.85	Peak	<=68.2	Pass
ac20	5240	5350	-46.35	4.2	0.05	53.13	Average	<=54	Pass
ac20	5240	5354.4	-35.24	4.2	0	64.19	Peak	<=68.2	Pass
ac20	5240	5455.68	-45.69	4.2	0.05	53.79	Average	<=54	Pass
ac20	5240	5460	-36.52	4.2	0	62.91	Peak	<=68.2	Pass
ac20	5240	5460	-46.81	4.2	0.05	52.67	Average	<=54	Pass
ax20	5180	4500	-48.24	4.2	0	51.19	Peak	<=68.2	Pass
ax20	5180	4500	-57.07	4.2	0.06	42.42	Average	<=54	Pass
ax20	5180	5134.2	-44.86	4.2	0	54.57	Peak	<=68.2	Pass

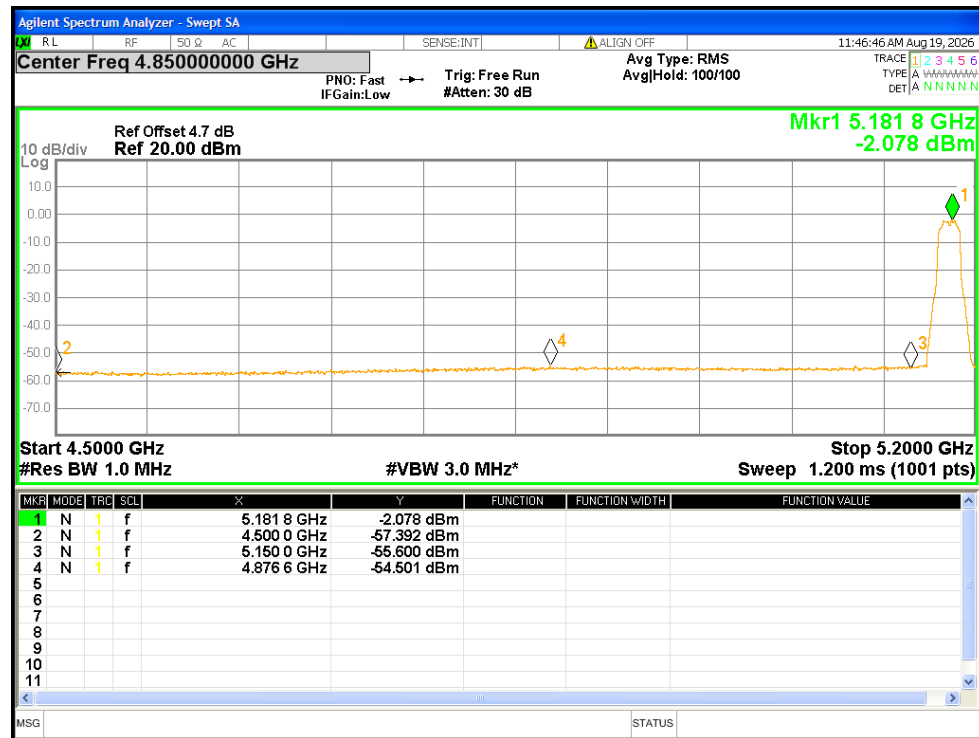
ax20	5180	5144.7	-54.71	4.2	0.06	44.78	Average	<=54	Pass
ax20	5180	5150	-47.24	4.2	0	52.19	Peak	<=68.2	Pass
ax20	5180	5150	-55.1	4.2	0.06	44.39	Average	<=54	Pass
ax20	5240	5350	-38.2	4.2	0	61.23	Peak	<=68.2	Pass
ax20	5240	5350	-46.69	4.2	0.07	52.81	Average	<=54	Pass
ax20	5240	5375.28	-34.46	4.2	0	64.97	Peak	<=68.2	Pass
ax20	5240	5374.56	-45.52	4.2	0.07	53.98	Average	<=54	Pass
ax20	5240	5460	-38.96	4.2	0	60.47	Peak	<=68.2	Pass
ax20	5240	5460	-46.8	4.2	0.07	52.7	Average	<=54	Pass

Test Graphs

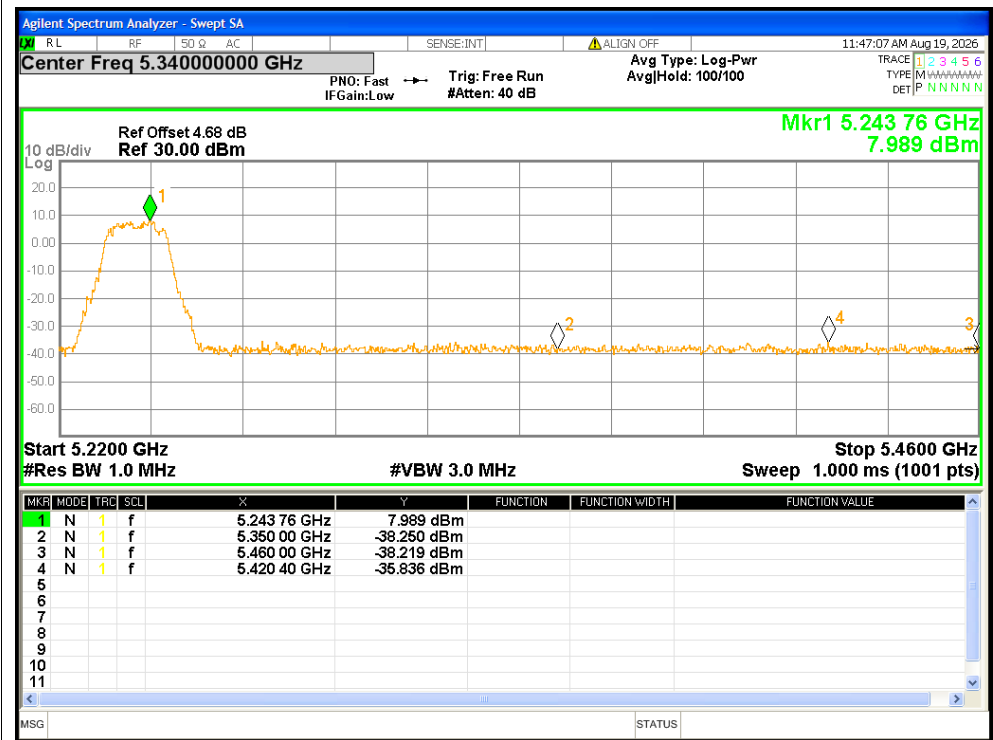
Restrict Band NVNT a 5180MHz Peak



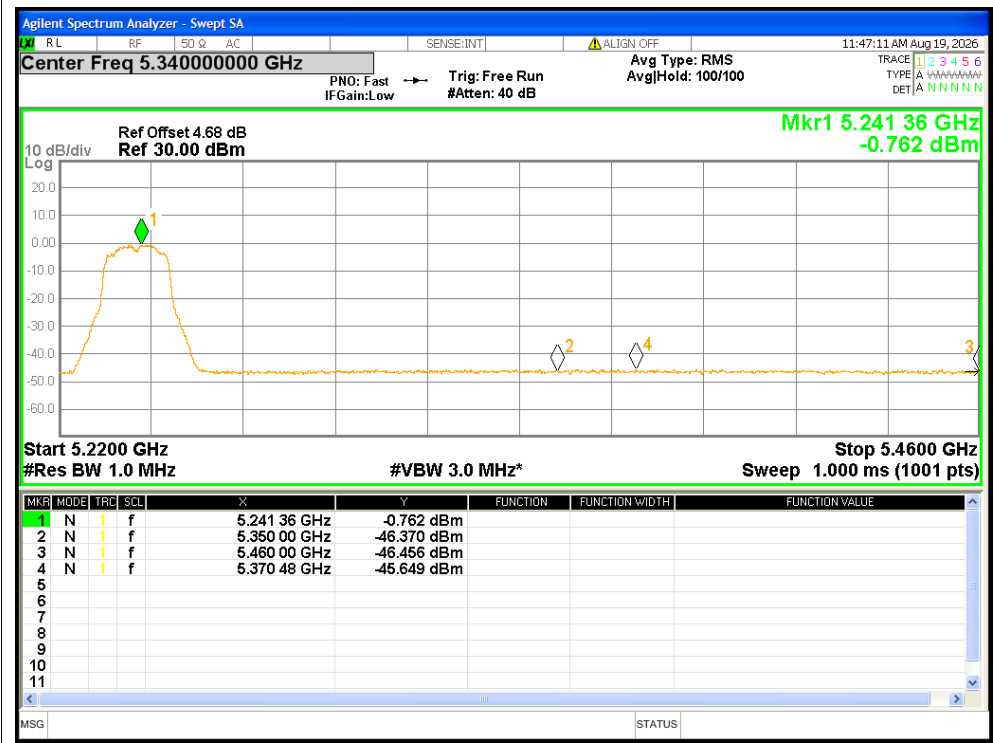
Restrict Band NVNT a 5180MHz Average



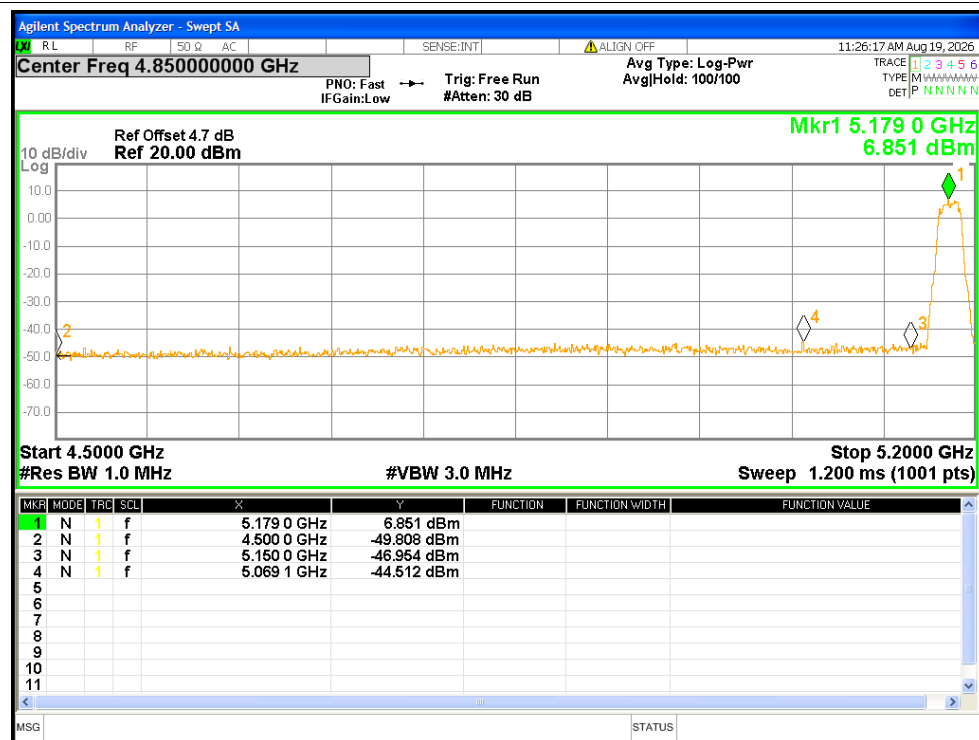
Restrict Band NVNT a 5240MHz Peak



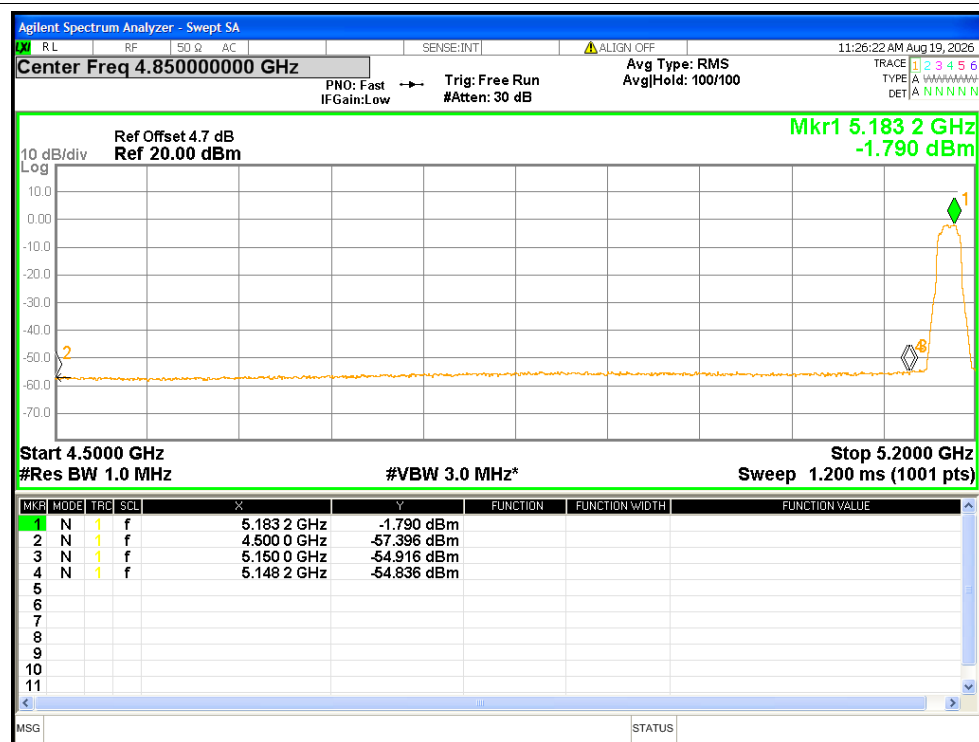
Restrict Band NVNT a 5240MHz Average



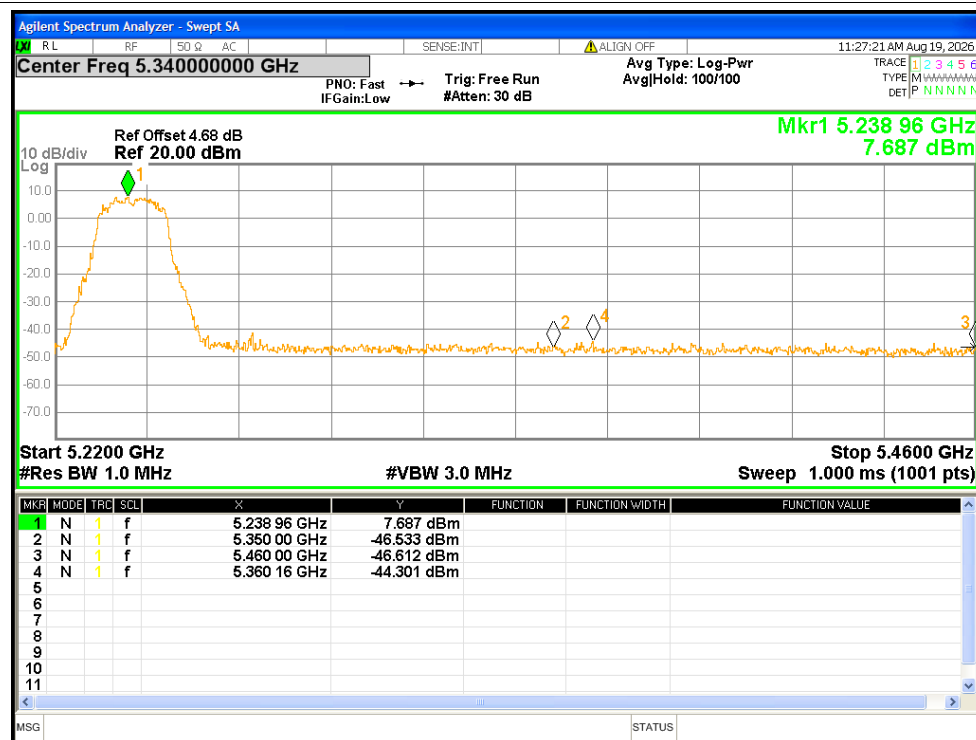
Restrict Band NVNT n20 5180MHz Peak



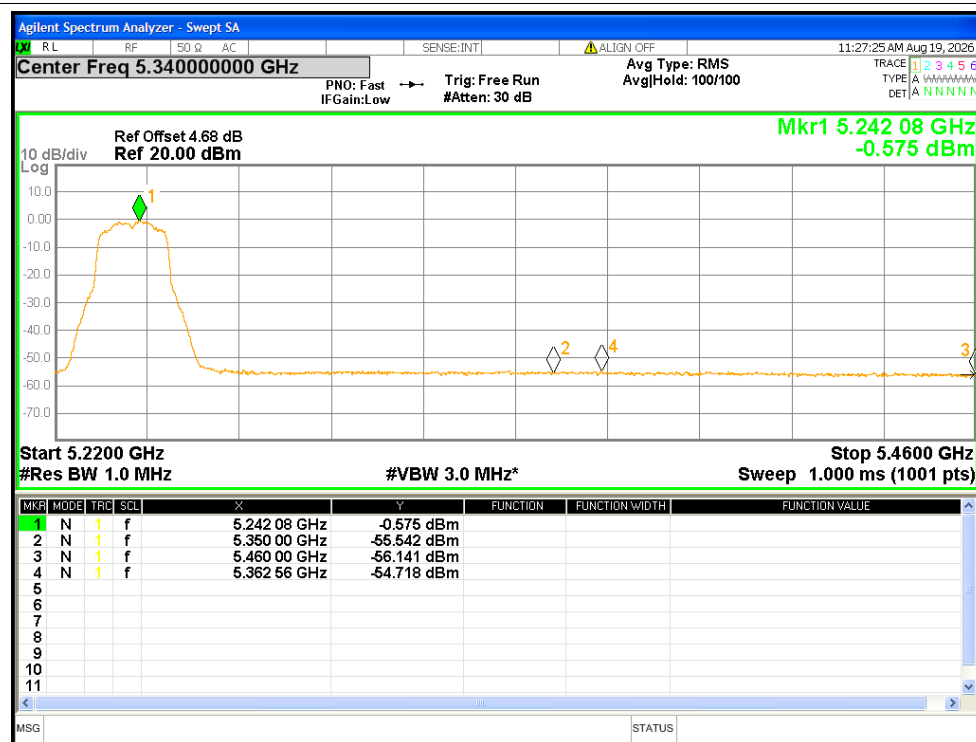
Restrict Band NVNT n20 5180MHz Average



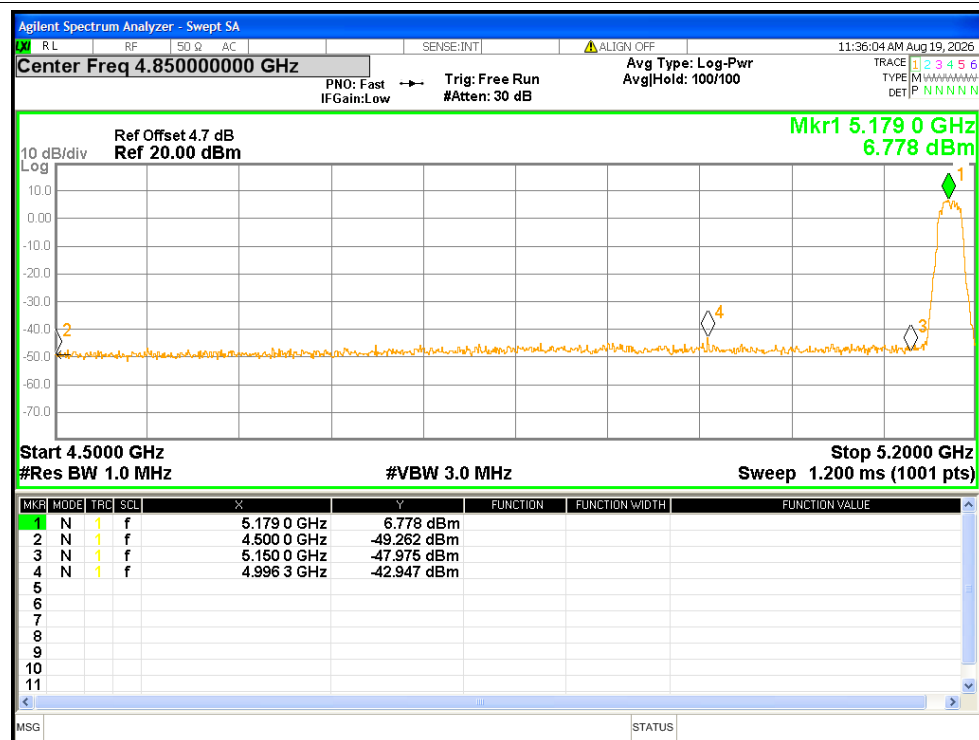
Restrict Band NVNT n20 5240MHz Peak



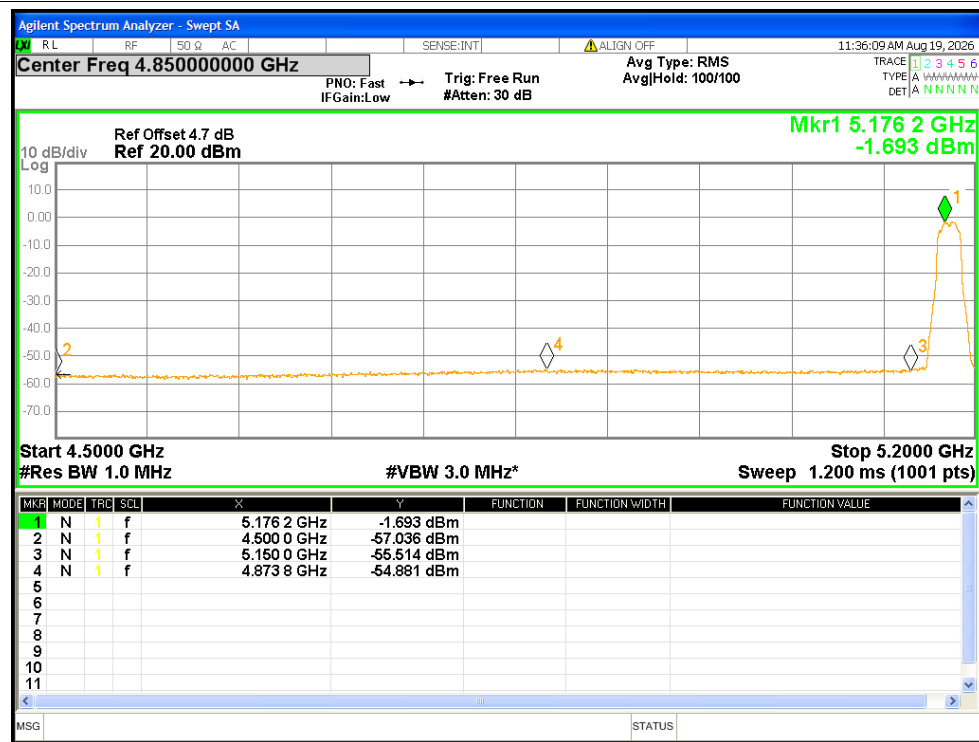
Restrict Band NVNT n20 5240MHz Average



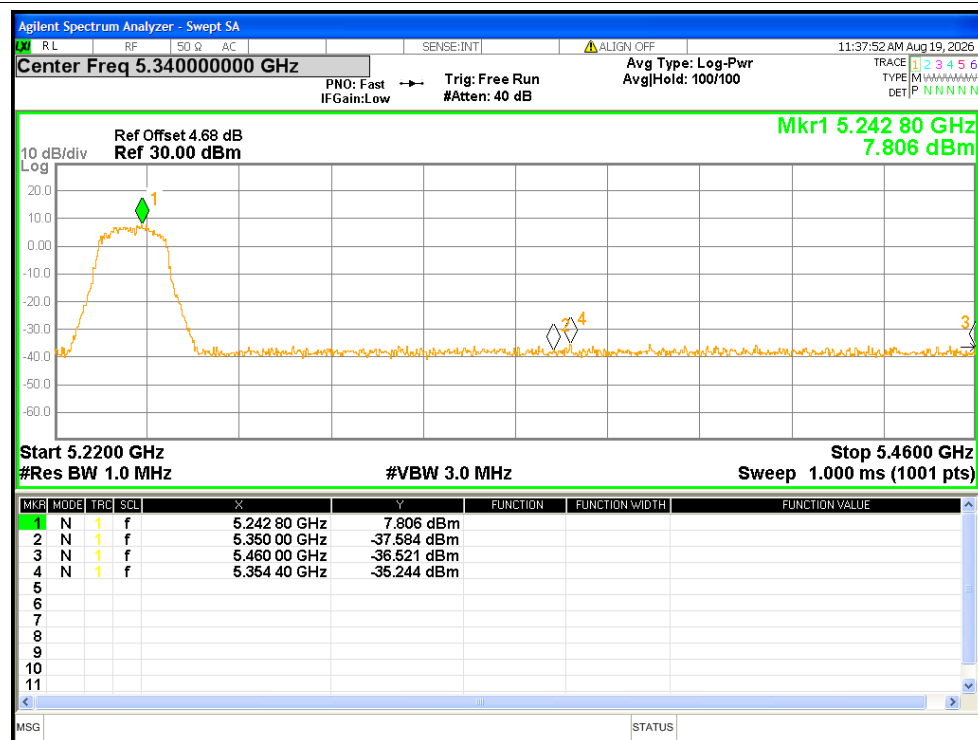
Restrict Band NVNT ac20 5180MHz Peak



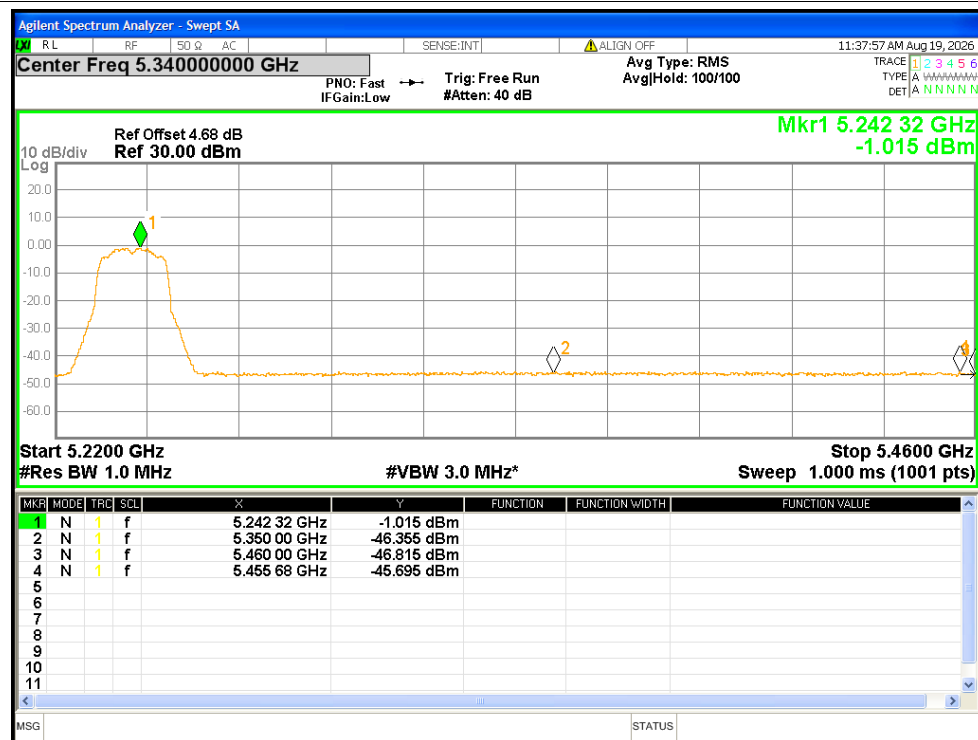
Restrict Band NVNT ac20 5180MHz Average



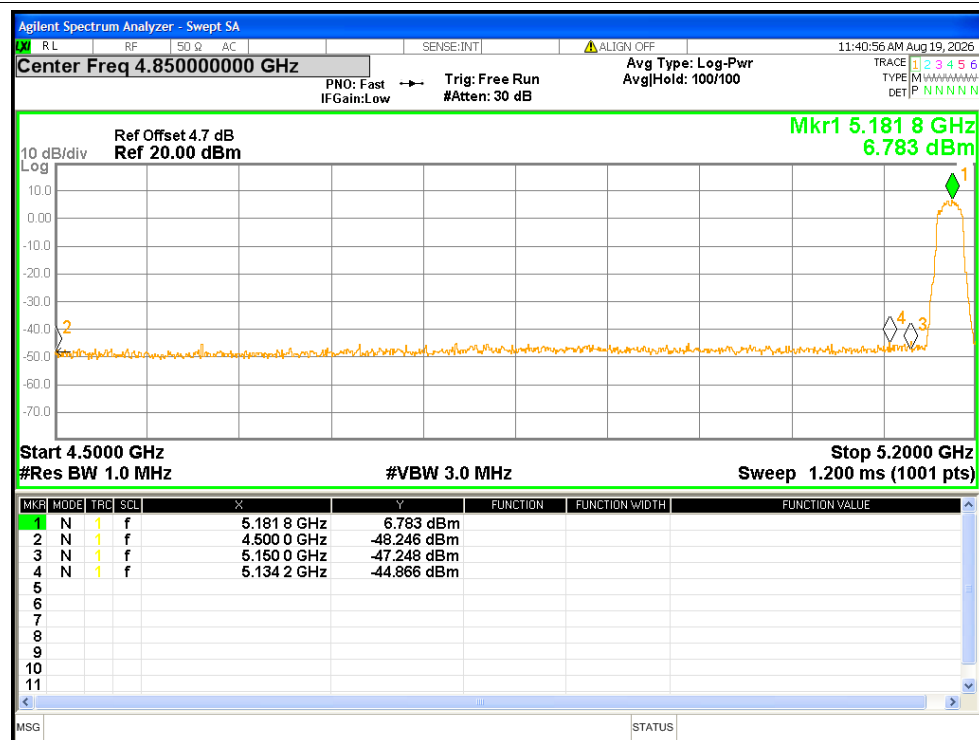
Restrict Band NVNT ac20 5240MHz Peak



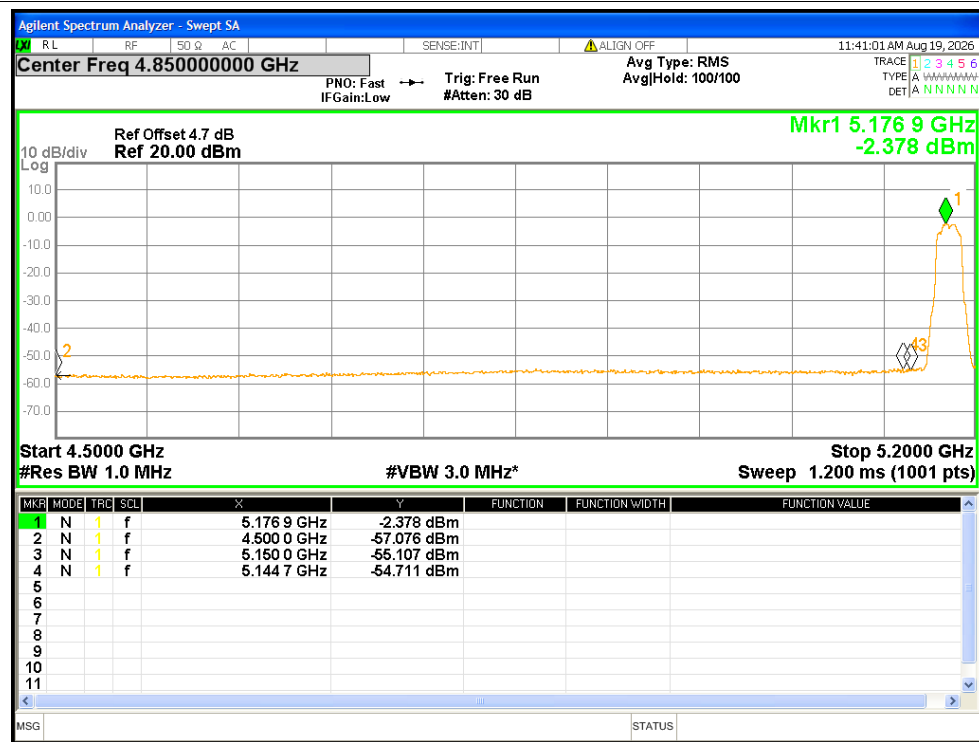
Restrict Band NVNT ac20 5240MHz Average



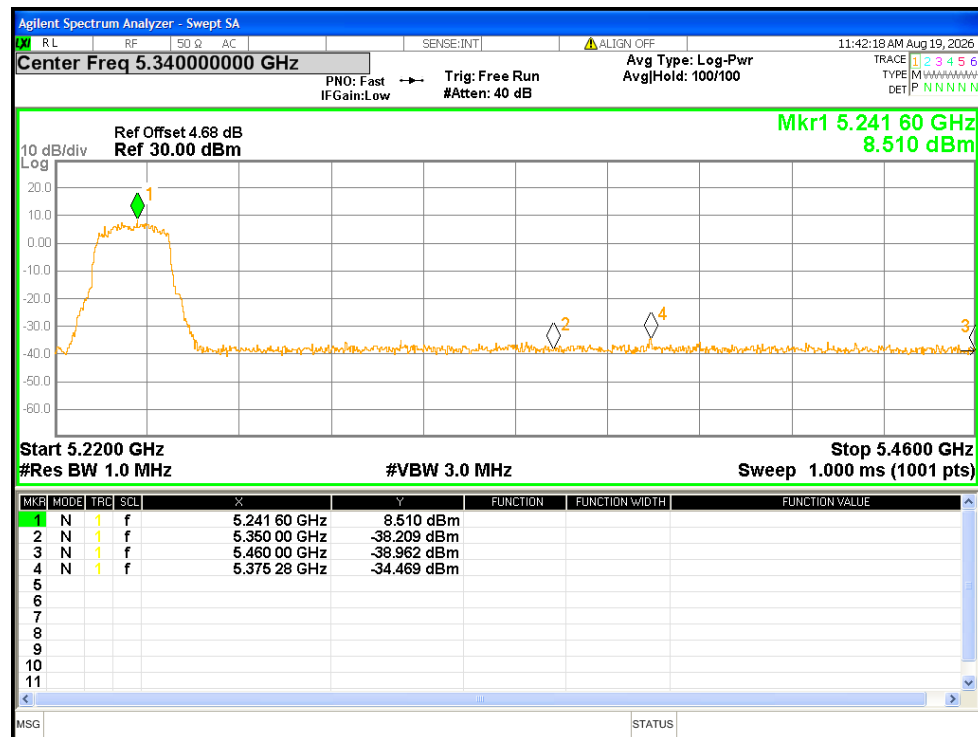
Restrict Band NVNT ax20 5180MHz Peak



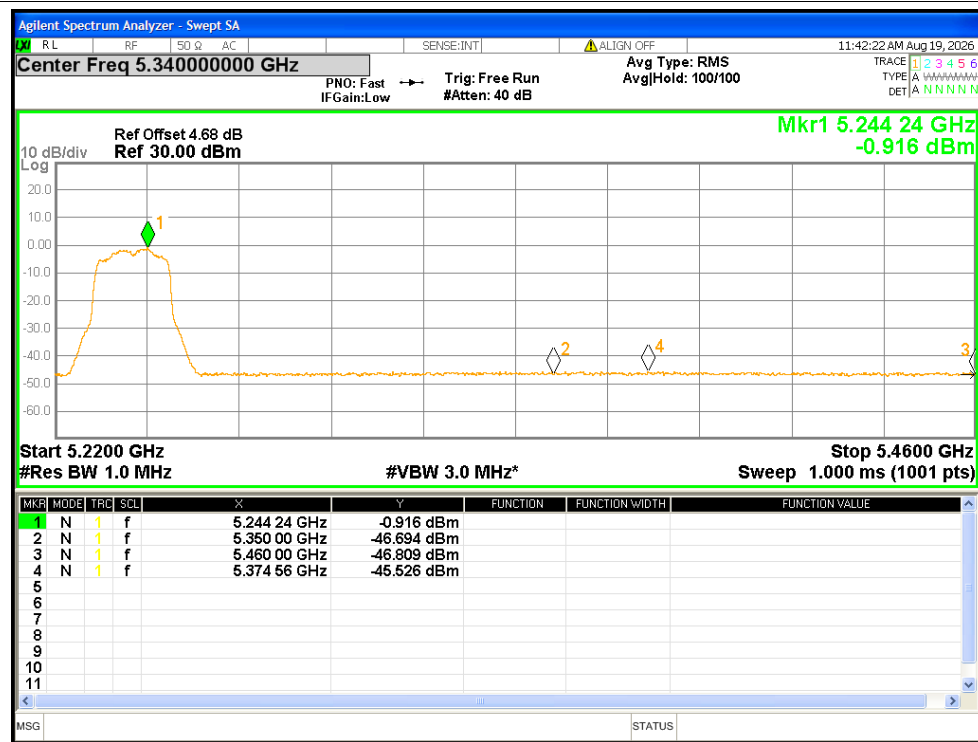
Restrict Band NVNT ax20 5180MHz Average



Restrict Band NVNT ax20 5240MHz Peak



Restrict Band NVNT ax20 5240MHz Average

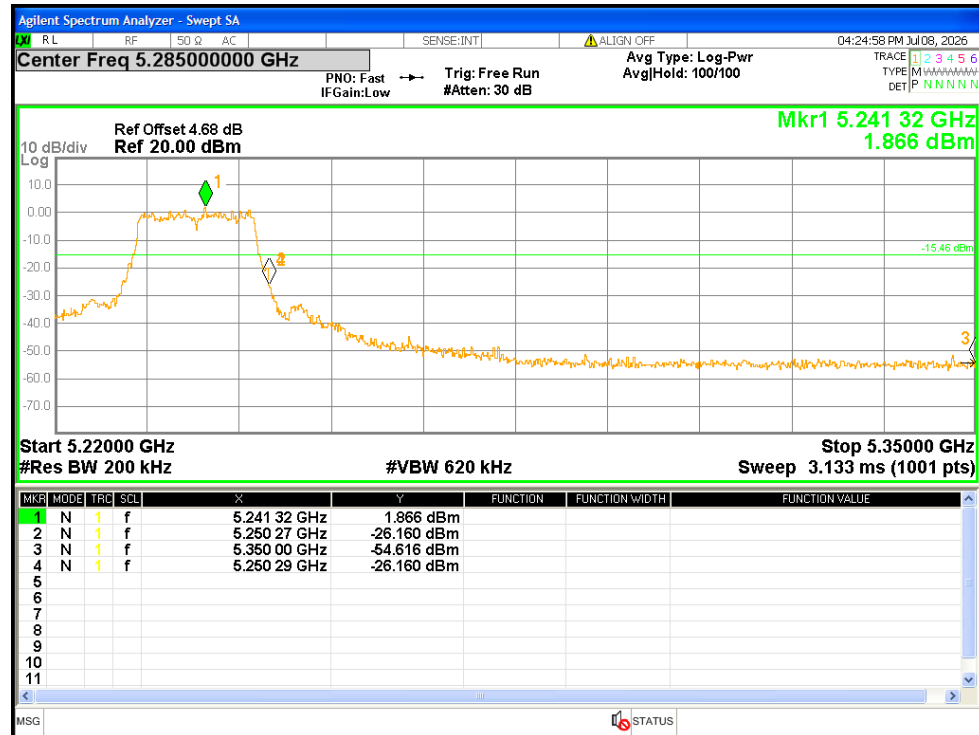


-26dB unwanted emissions

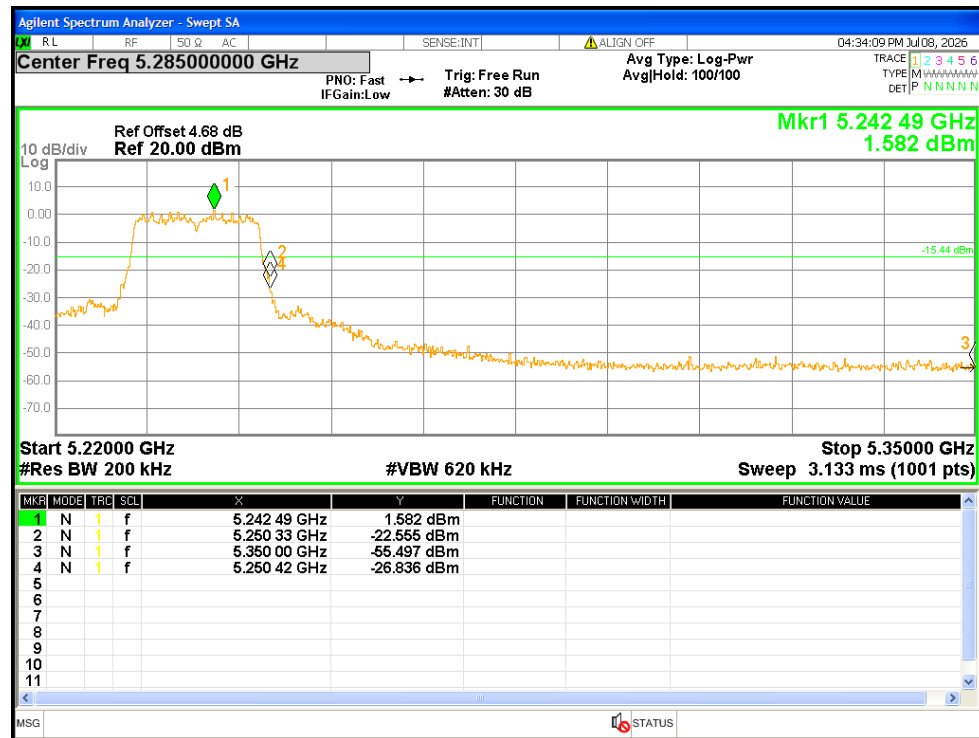
Condition	Mode	Frequency (MHz)	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5240	-26.16	-15.46	Pass
NVNT	n20	5240	-26.83	-15.44	Pass
NVNT	ac20	5240	-25.53	-15.52	Pass
NVNT	ax20	5240	-28.1	-15.37	Pass

Test Graphs

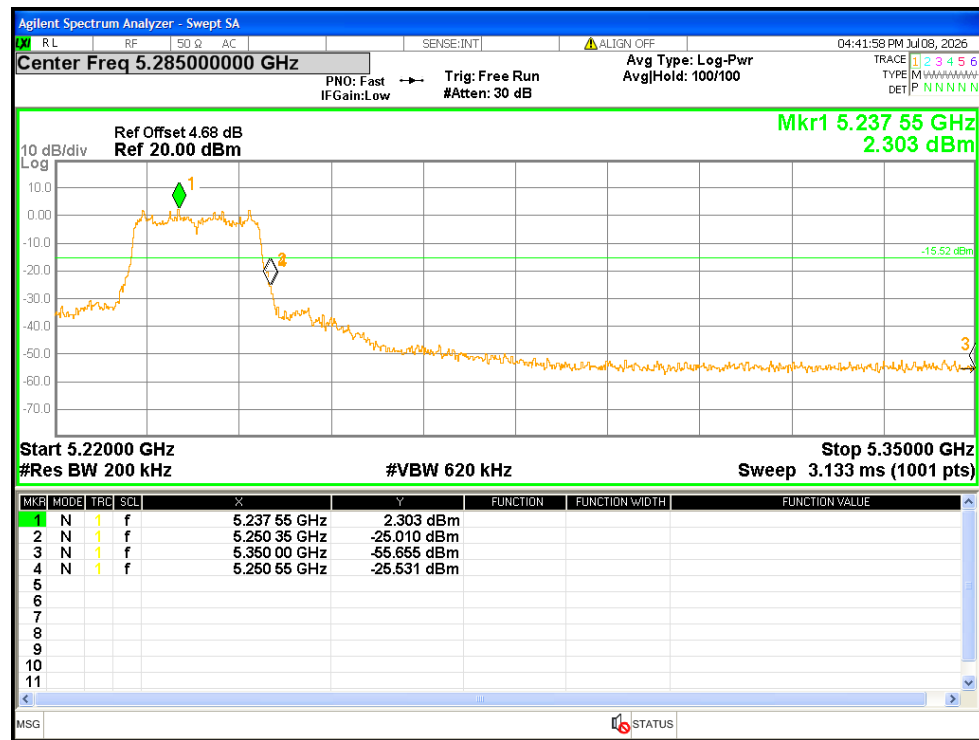
-26dB unwanted emissions NVNT a 5240MHz High



-26dB unwanted emissions NVNT n20 5240MHz High



-26dB unwanted emissions NVNT ac20 5240MHz High



-26dB unwanted emissions NVNT ax20 5240MHz High

