

FCC Appendix RF Test Data for BT

FCC ID : 2AC8UA2570

Company : Anhui Huami Information Technology Co., Ltd.

EUT : Smart Watch

Model Number : A2570

Report No. : CTA26061300102

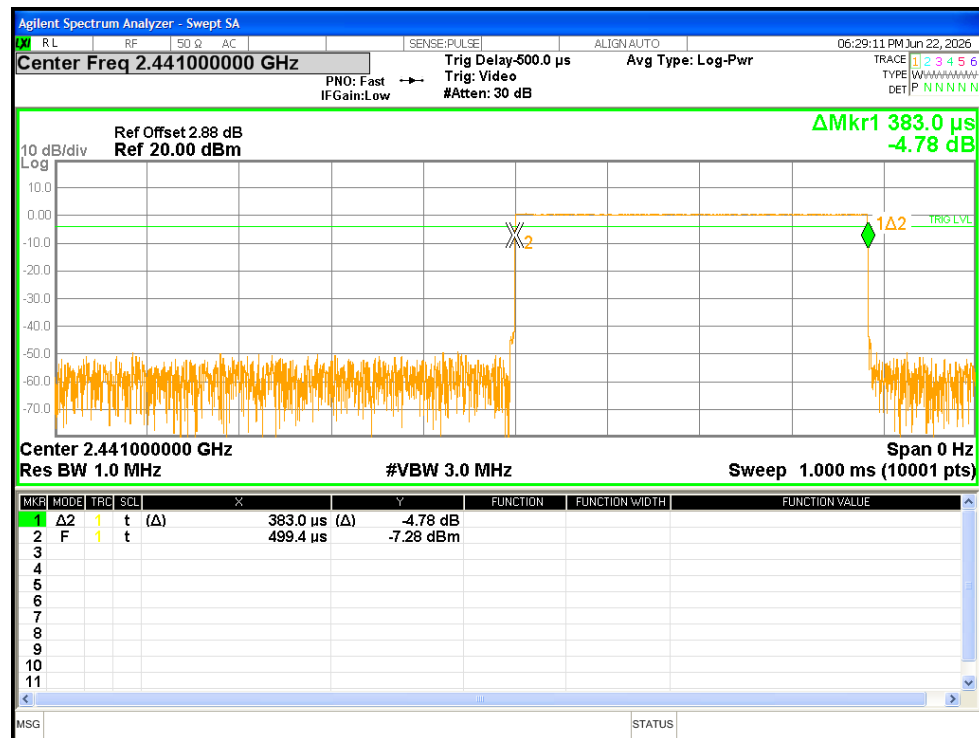
Reviewed By : Eric Wang

Dwell Time

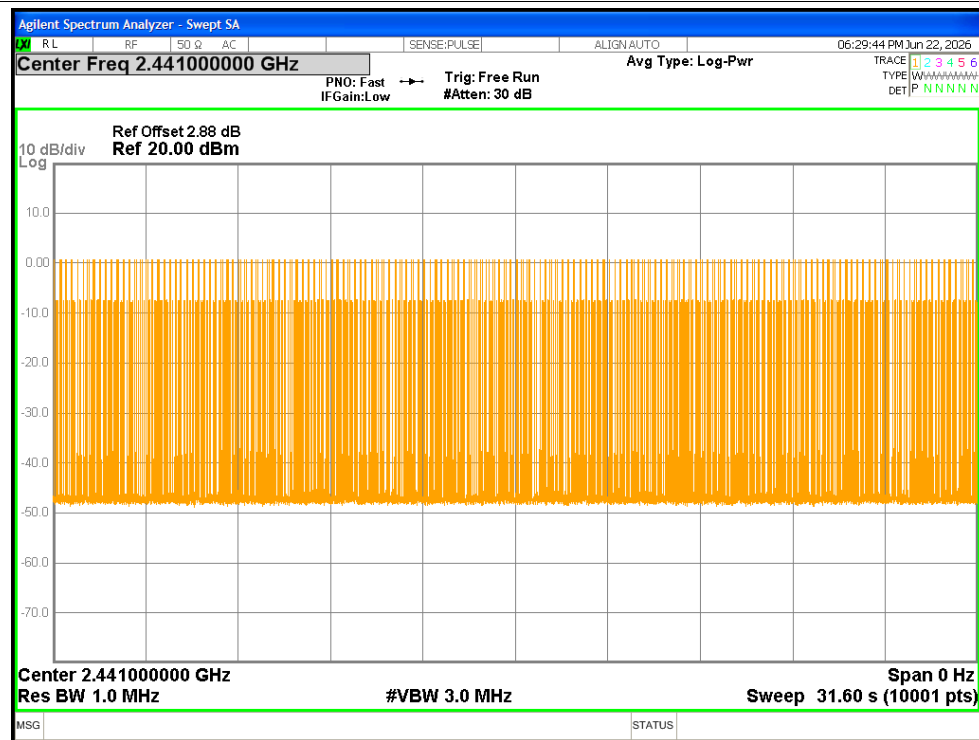
Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	0.383	121.411	317	31600	<=400	Pass
NVNT	1-DH3	2441	1.639	268.796	164	31600	<=400	Pass
NVNT	1-DH5	2441	2.887	329.118	114	31600	<=400	Pass
NVNT	2-DH1	2441	0.391	123.556	316	31600	<=400	Pass
NVNT	2-DH3	2441	1.643	254.665	155	31600	<=400	Pass
NVNT	2-DH5	2441	2.891	318.01	110	31600	<=400	Pass
NVNT	3-DH1	2441	0.391	123.947	317	31600	<=400	Pass
NVNT	3-DH3	2441	1.643	266.166	162	31600	<=400	Pass
NVNT	3-DH5	2441	2.893	309.551	107	31600	<=400	Pass

Test Graphs

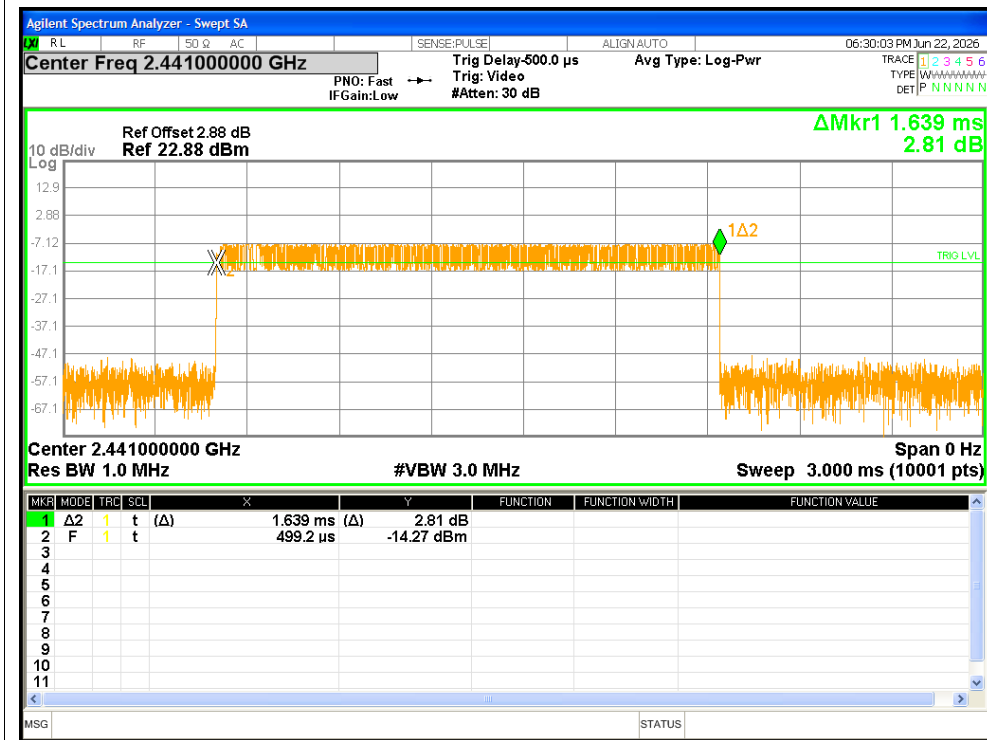
Dwell NVNT 1-DH1 2441MHz One Burst



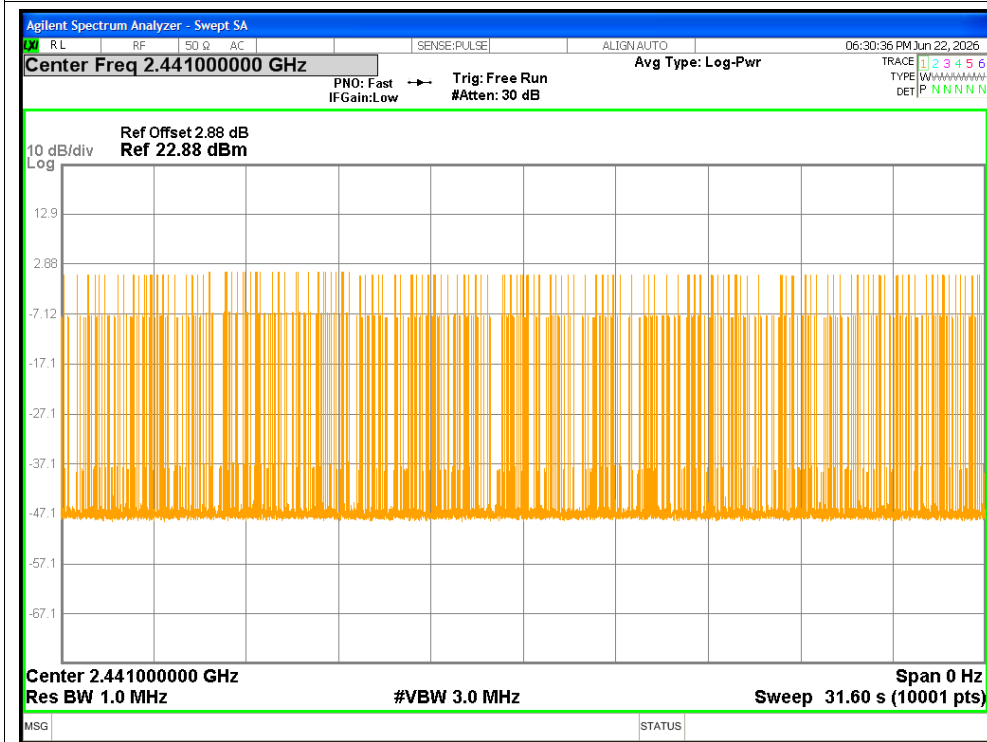
Dwell NVNT 1-DH1 2441MHz Accumulated



Dwell NVNT 1-DH3 2441MHz One Burst



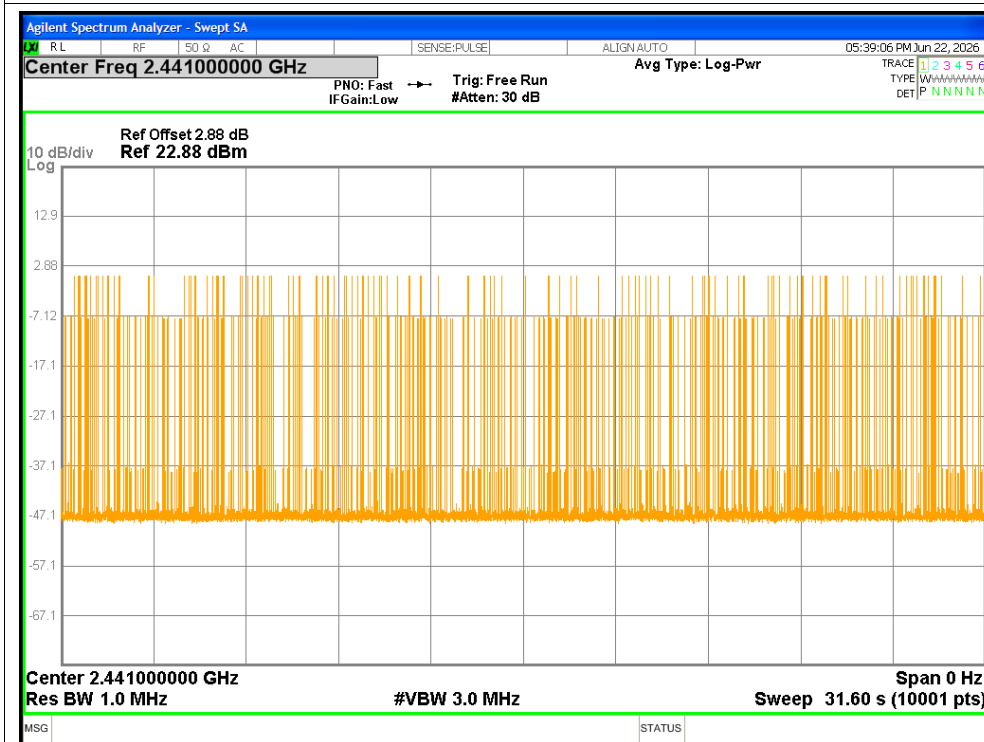
Dwell NVNT 1-DH3 2441MHz Accumulated



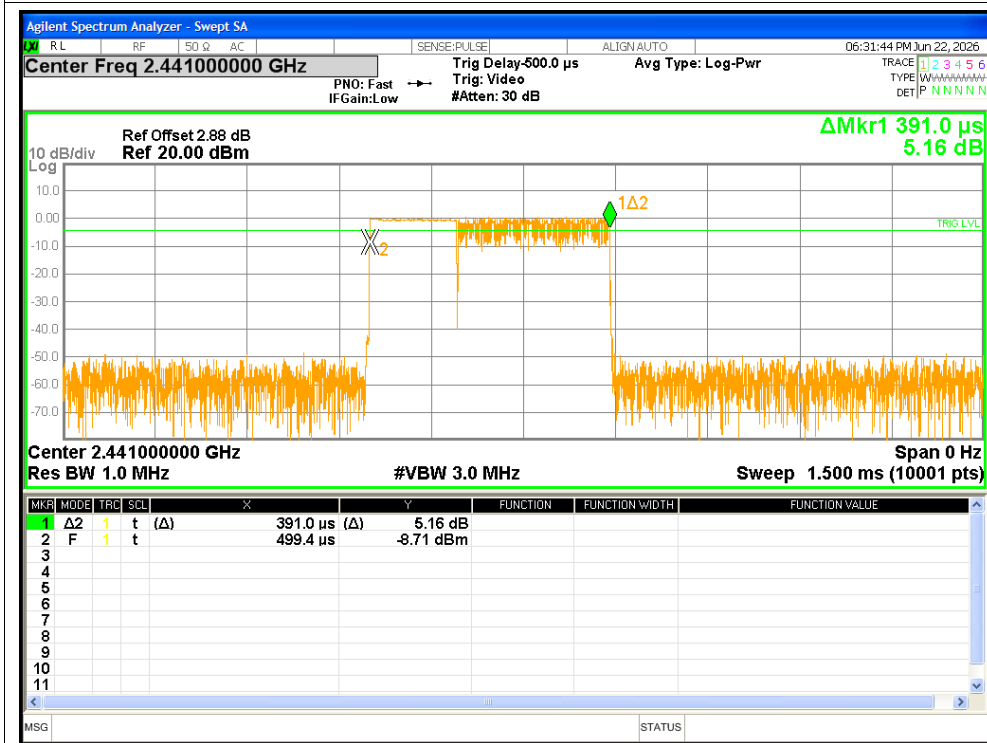
Dwell NVNT 1-DH5 2441MHz One Burst



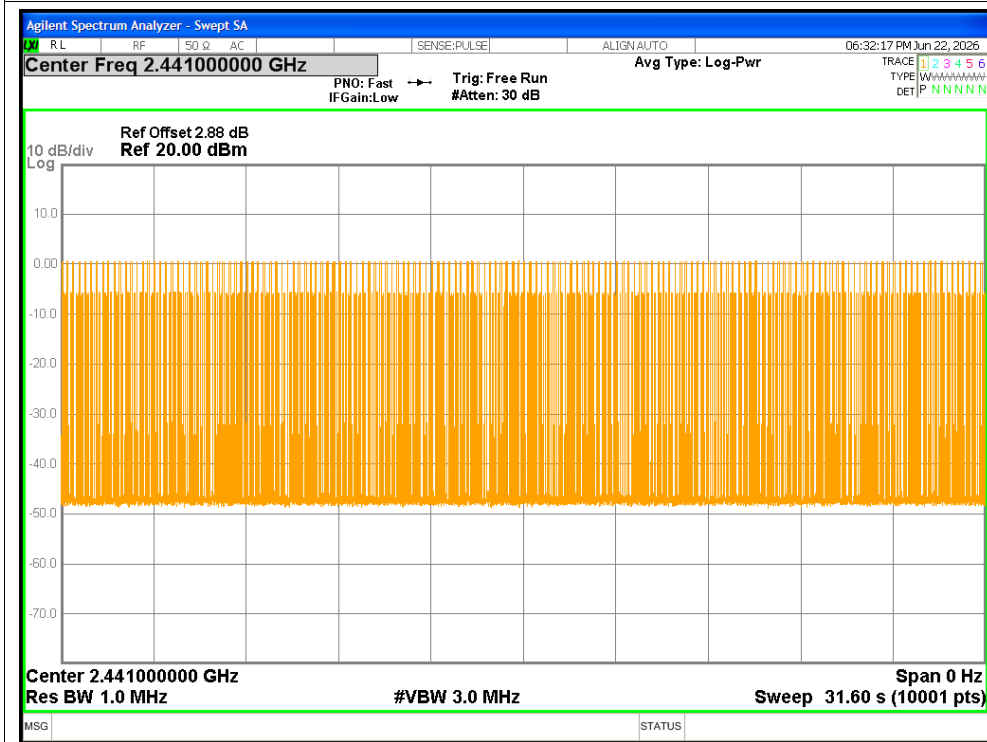
Dwell NVNT 1-DH5 2441MHz Accumulated



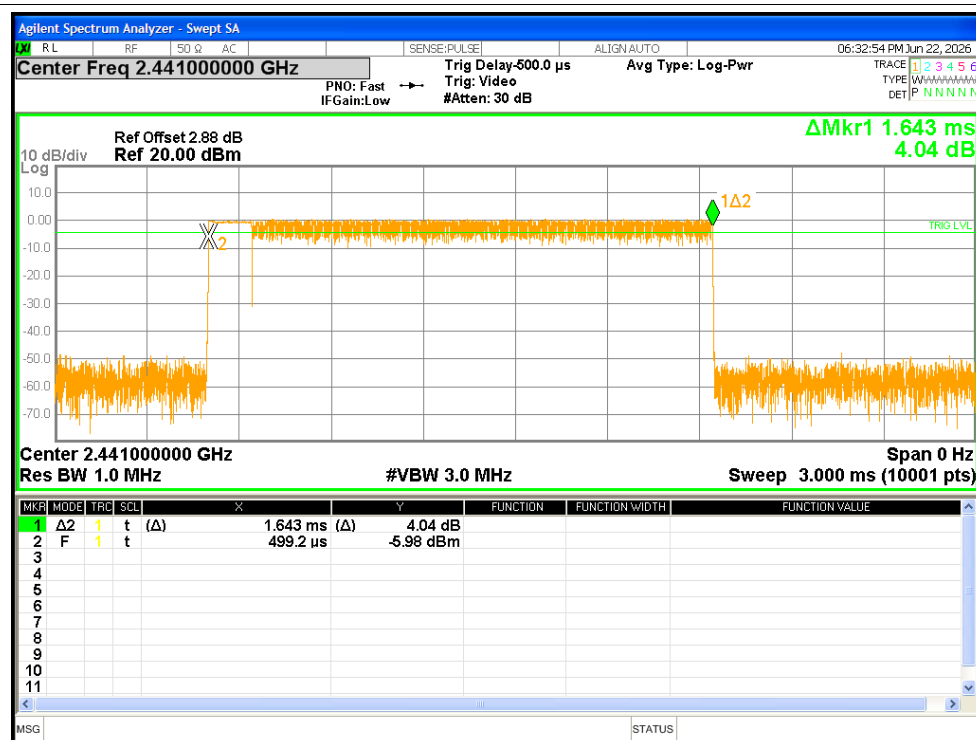
Dwell NVNT 2-DH1 2441MHz One Burst



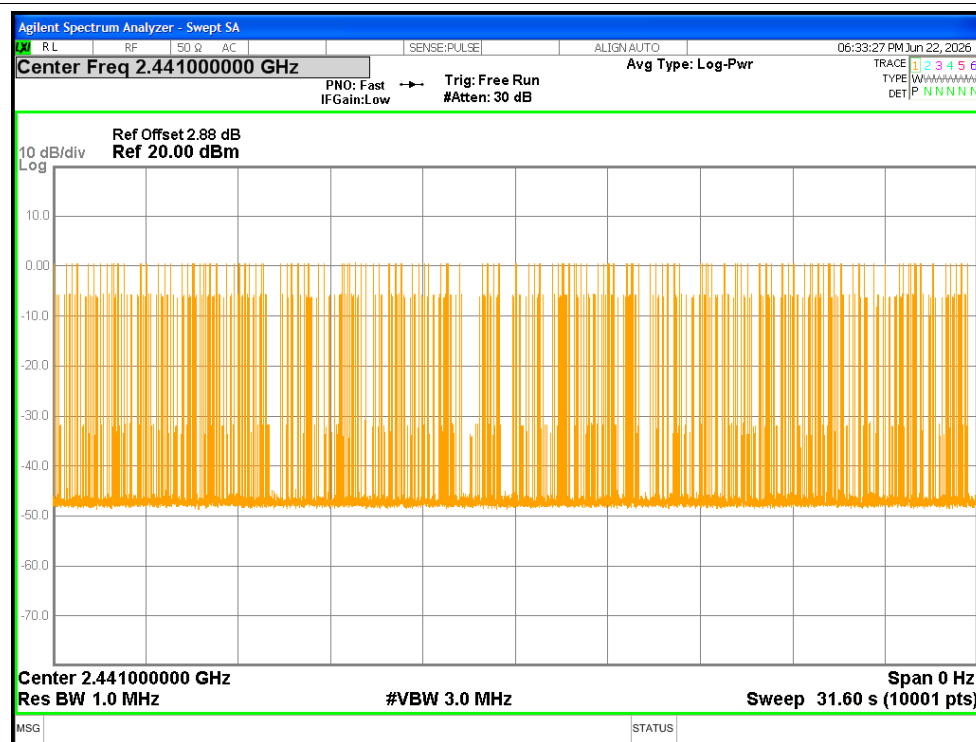
Dwell NVNT 2-DH1 2441MHz Accumulated



Dwell NVNT 2-DH3 2441MHz One Burst



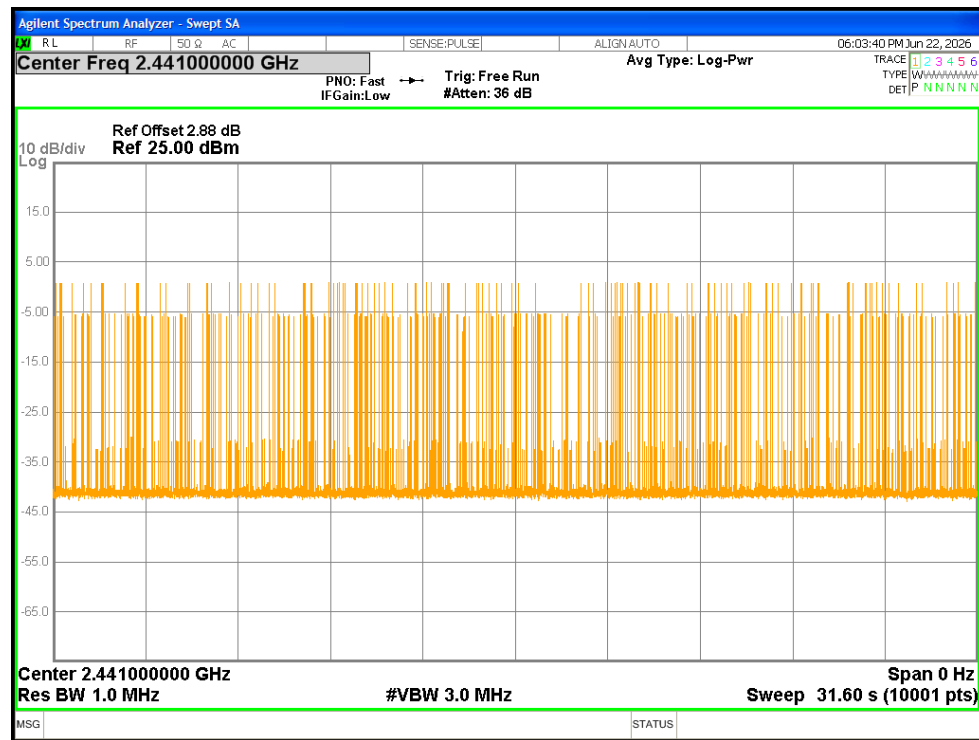
Dwell NVNT 2-DH3 2441MHz Accumulated



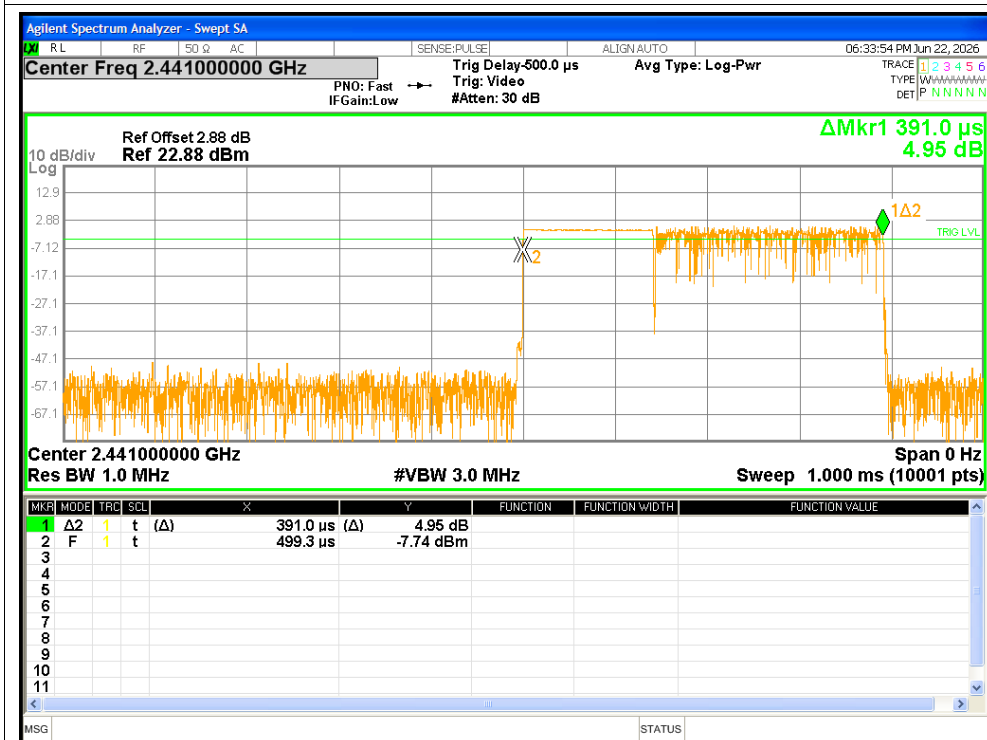
Dwell NVNT 2-DH5 2441MHz One Burst



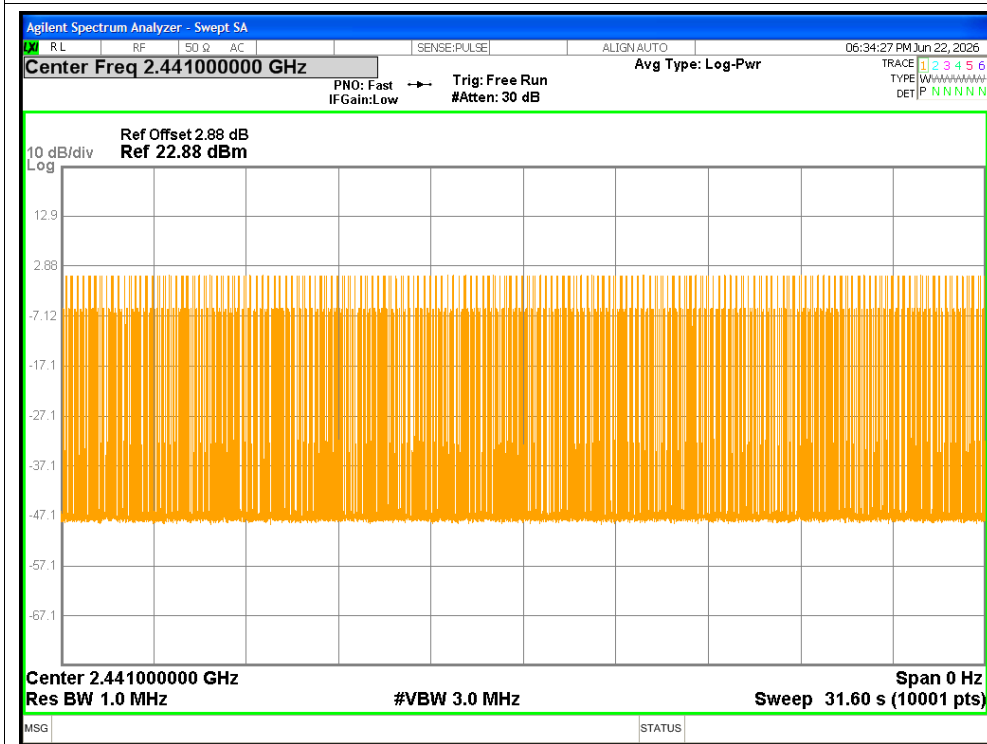
Dwell NVNT 2-DH5 2441MHz Accumulated



Dwell NVNT 3-DH1 2441MHz One Burst



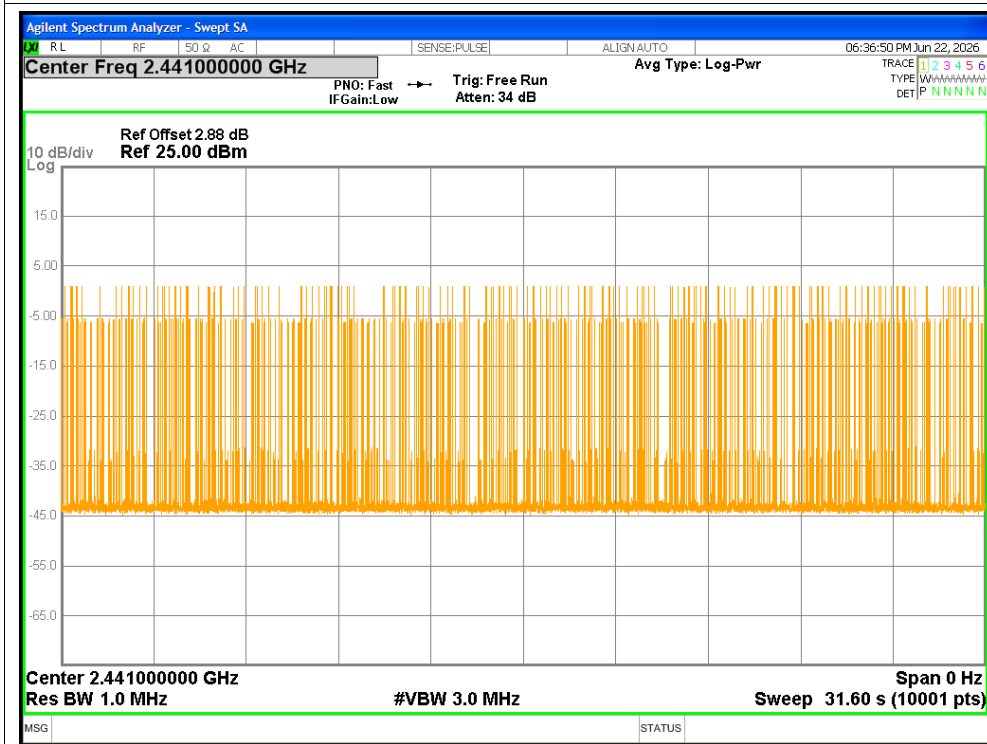
Dwell NVNT 3-DH1 2441MHz Accumulated



Dwell NVNT 3-DH3 2441MHz One Burst



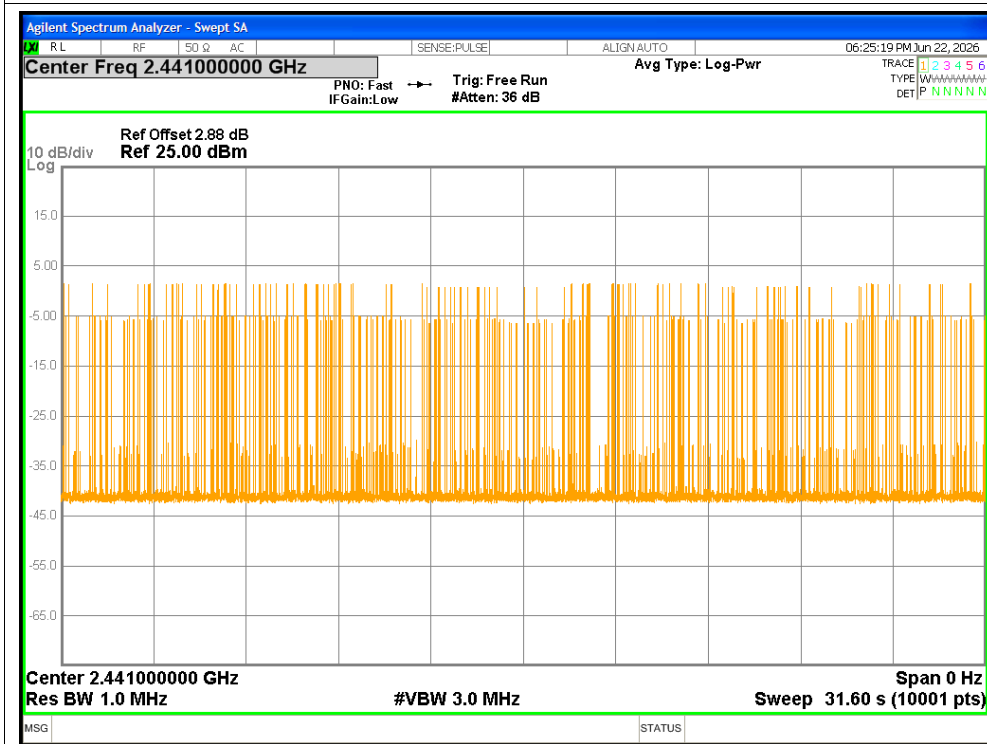
Dwell NVNT 3-DH3 2441MHz Accumulated



Dwell NVNT 3-DH5 2441MHz One Burst



Dwell NVNT 3-DH5 2441MHz Accumulated



Maximum Peak Conducted Output Power

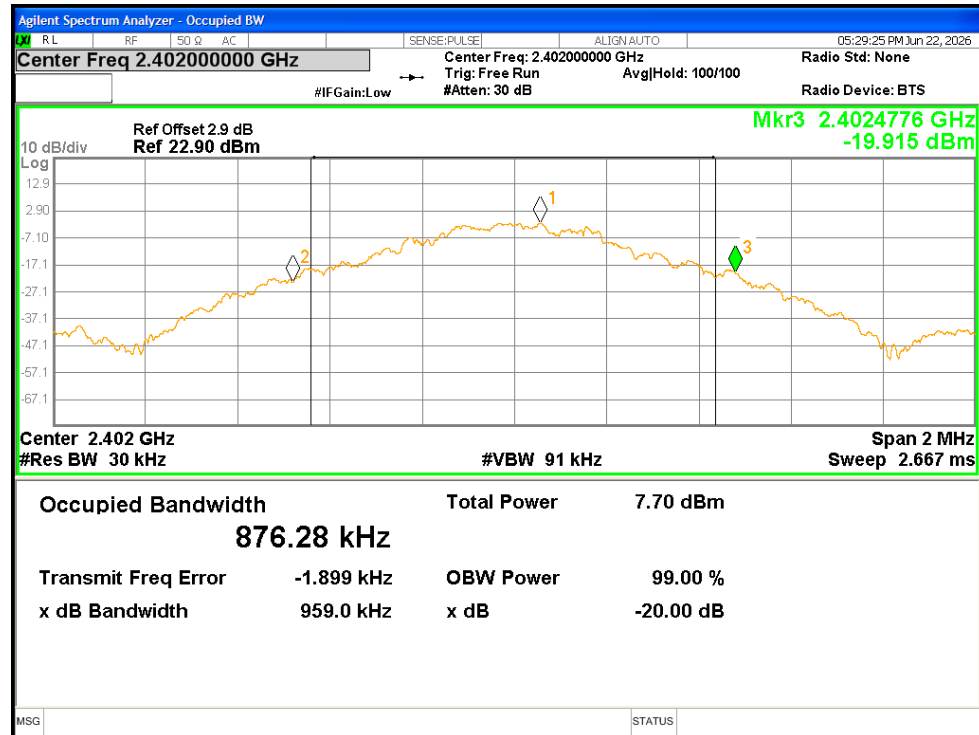
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	1.51	<=30	Pass
NVNT	1-DH5	2441	1.25	<=30	Pass
NVNT	1-DH5	2480	0.95	<=30	Pass
NVNT	2-DH5	2402	1.85	<=21	Pass
NVNT	2-DH5	2441	1.6	<=21	Pass
NVNT	2-DH5	2480	1.37	<=21	Pass
NVNT	3-DH5	2402	2.29	<=21	Pass
NVNT	3-DH5	2441	2.1	<=21	Pass
NVNT	3-DH5	2480	1.8	<=21	Pass

-20dB Bandwidth

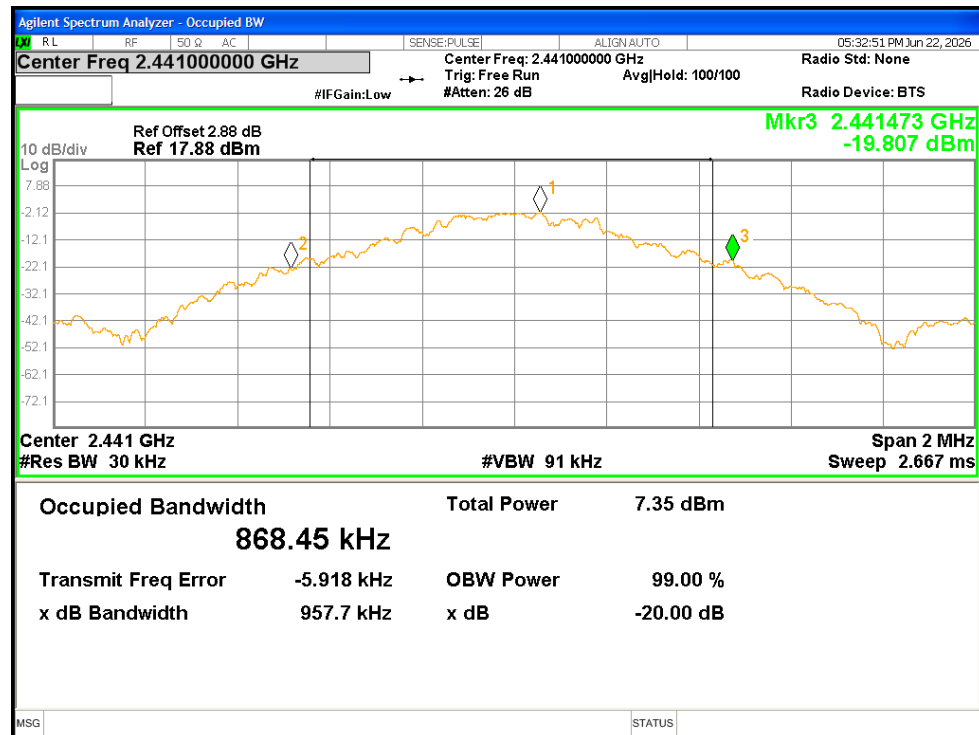
Condition	Mode	Frequency (MHz)	-20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	0.959	Pass
NVNT	1-DH5	2441	0.9577	Pass
NVNT	1-DH5	2480	0.9494	Pass
NVNT	2-DH5	2402	1.307	Pass
NVNT	2-DH5	2441	1.301	Pass
NVNT	2-DH5	2480	1.281	Pass
NVNT	3-DH5	2402	1.313	Pass
NVNT	3-DH5	2441	1.295	Pass
NVNT	3-DH5	2480	1.299	Pass

Test Graphs

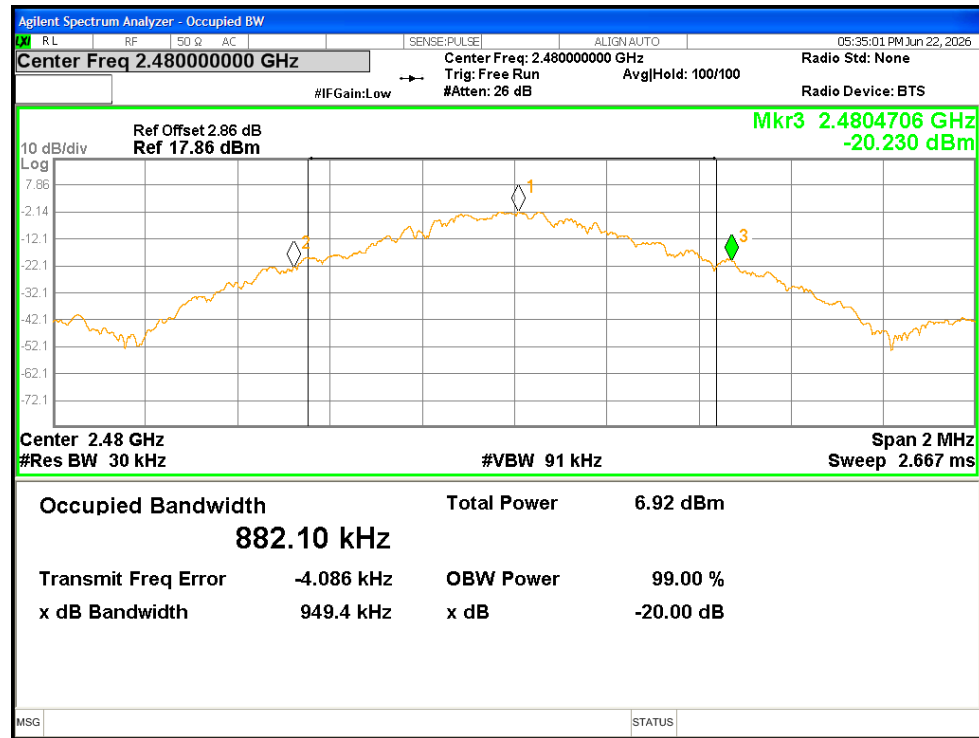
-20dB Bandwidth NVNT 1-DH5 2402MHz



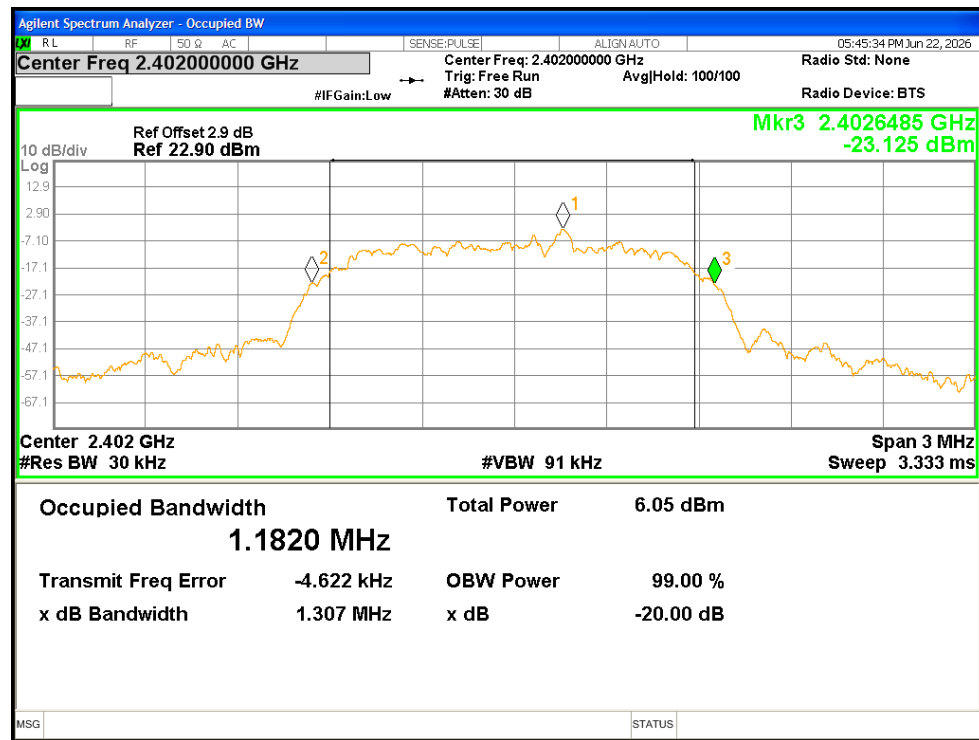
-20dB Bandwidth NVNT 1-DH5 2441MHz



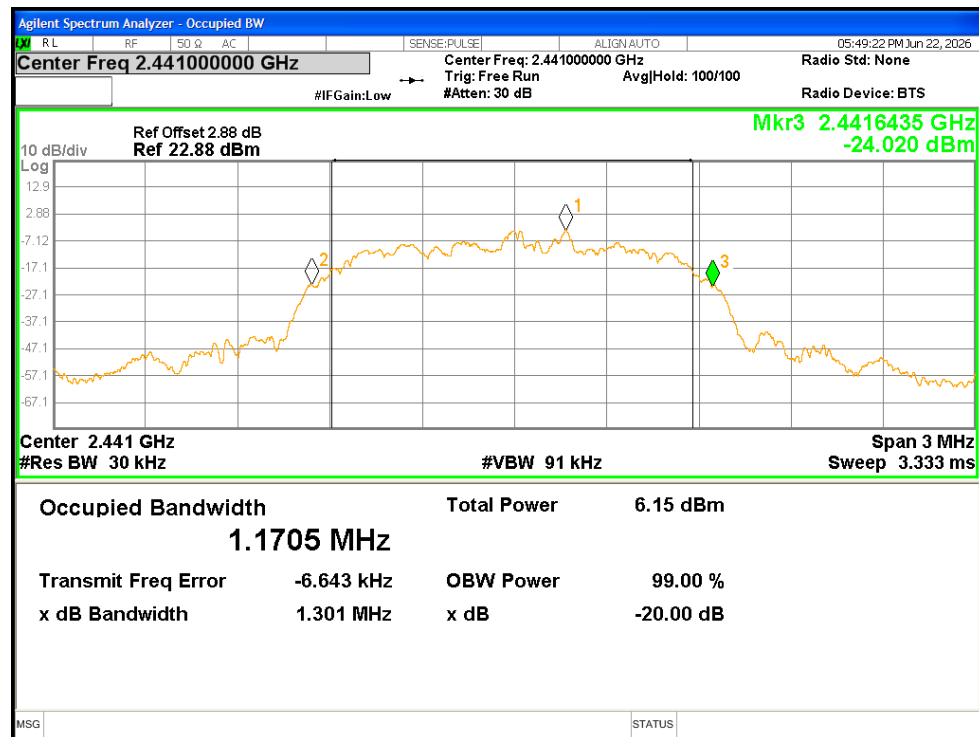
-20dB Bandwidth NVNT 1-DH5 2480MHz



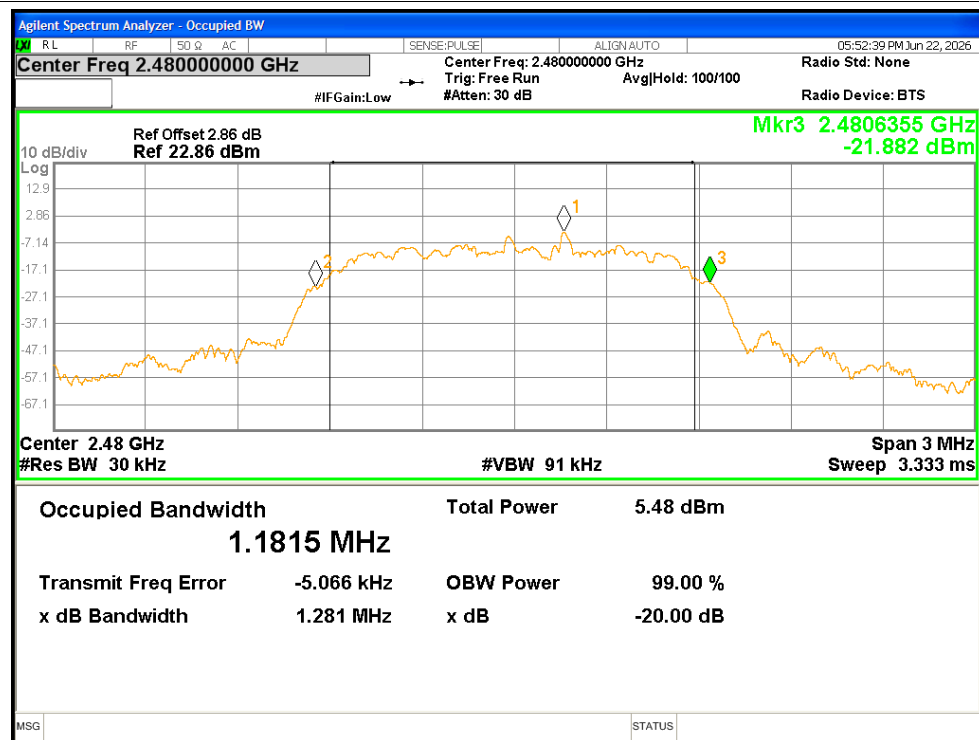
-20dB Bandwidth NVNT 2-DH5 2402MHz



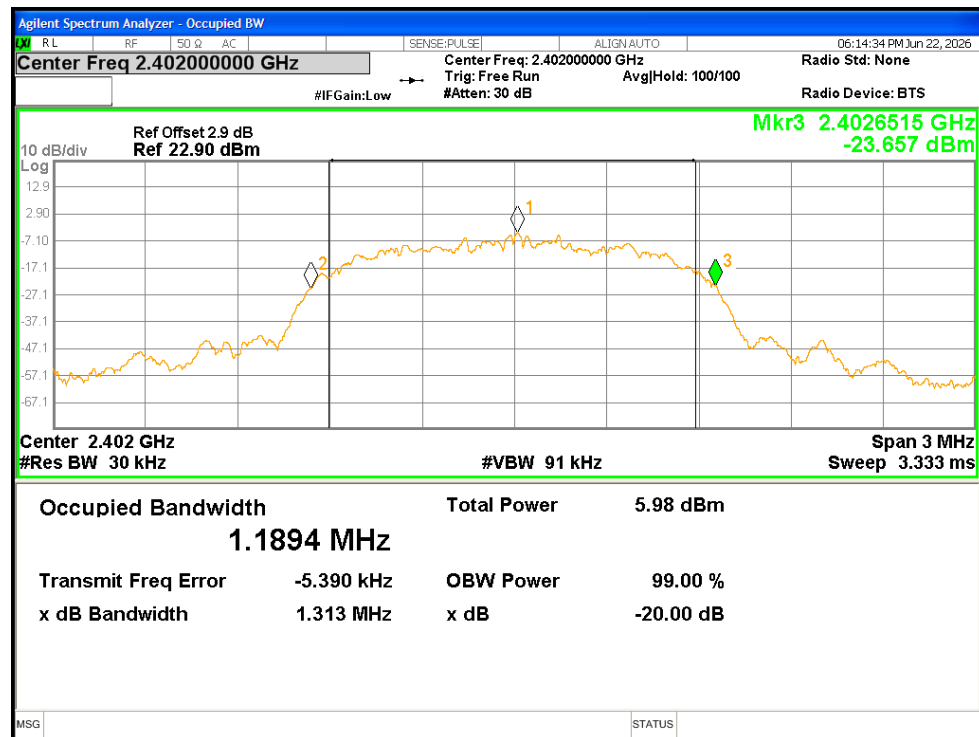
-20dB Bandwidth NVNT 2-DH5 2441MHz



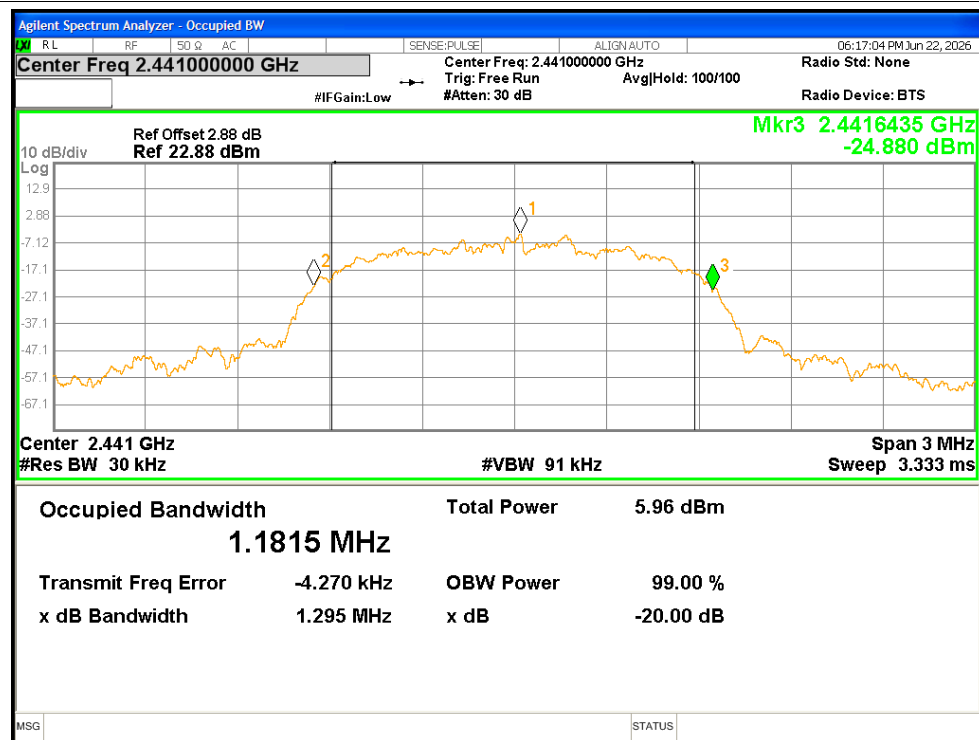
-20dB Bandwidth NVNT 2-DH5 2480MHz



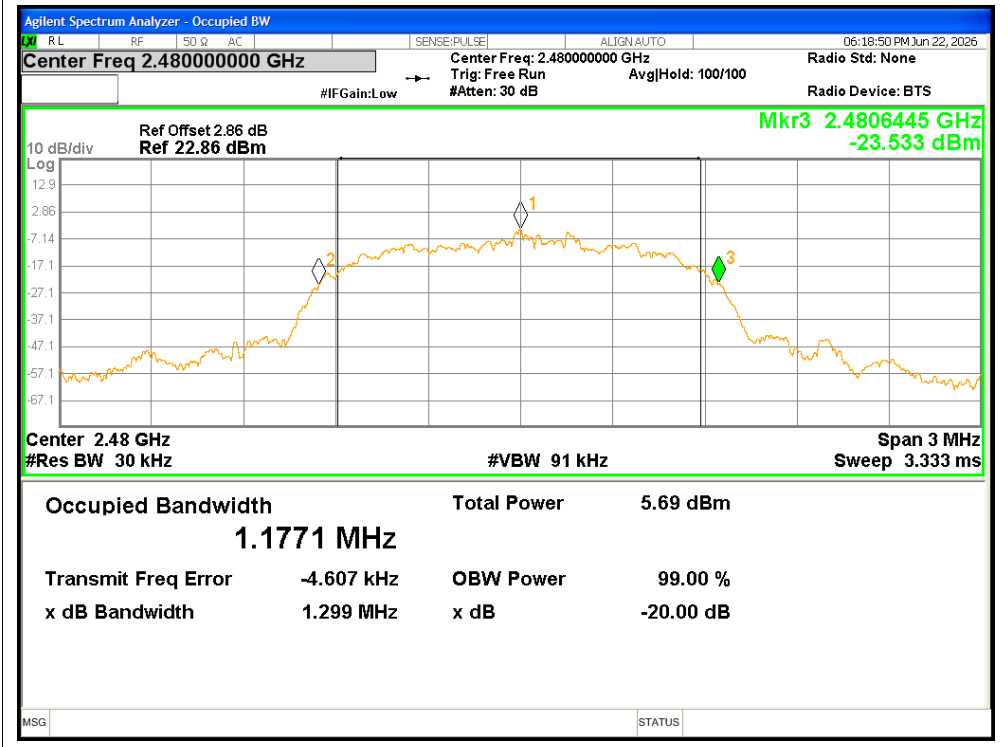
-20dB Bandwidth NVNT 3-DH5 2402MHz



-20dB Bandwidth NVNT 3-DH5 2441MHz



-20dB Bandwidth NVNT 3-DH5 2480MHz

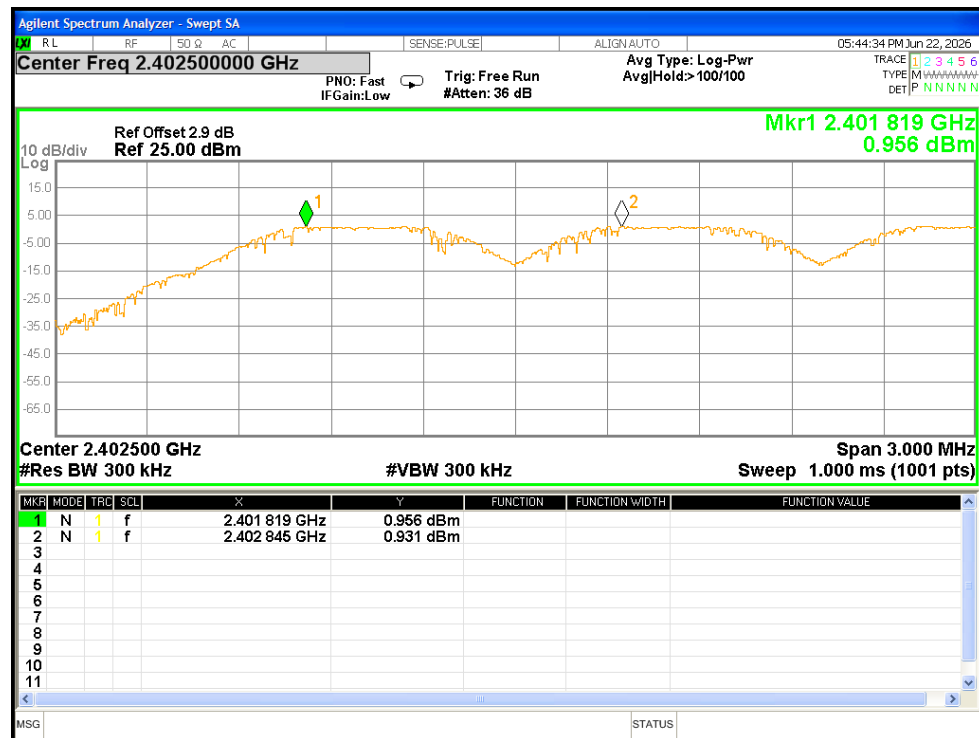


Carrier Frequencies Separation

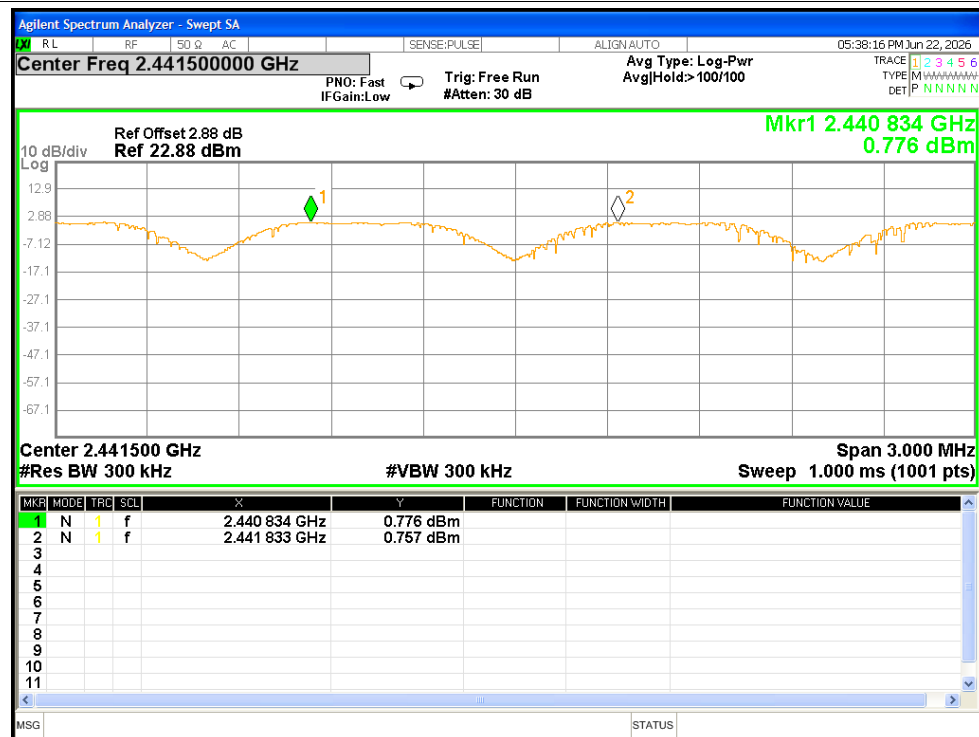
Condition	Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	2401.819	2402.845	1.026	≥ 0.959	Pass
NVNT	1-DH5	2440.834	2441.833	0.999	≥ 0.9577	Pass
NVNT	1-DH5	2479.155	2480.16	1.005	≥ 0.9494	Pass
NVNT	2-DH5	2401.834	2402.854	1.02	≥ 0.871	Pass
NVNT	2-DH5	2440.813	2441.839	1.026	≥ 0.867	Pass
NVNT	2-DH5	2478.801	2480.103	1.302	≥ 0.854	Pass
NVNT	3-DH5	2402.017	2403.127	1.11	≥ 0.875	Pass
NVNT	3-DH5	2441.095	2442.091	0.996	≥ 0.863	Pass
NVNT	3-DH5	2478.858	2480.097	1.239	≥ 0.866	Pass

Test Graphs

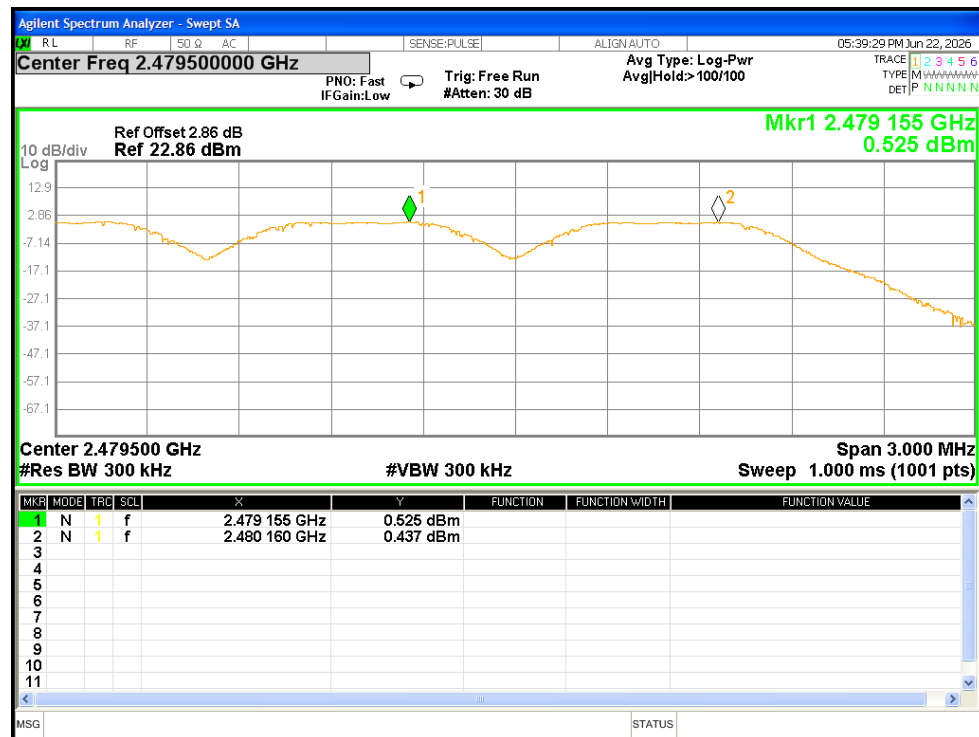
CFS NVNT 1-DH5 2402MHz



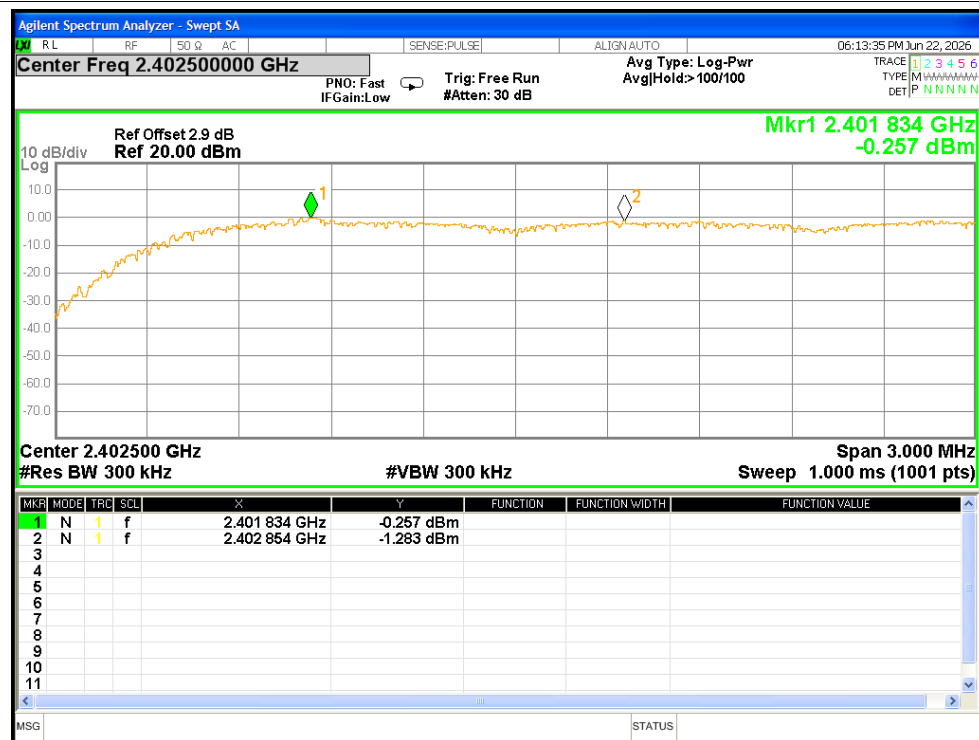
CFS NVNT 1-DH5 2441MHz



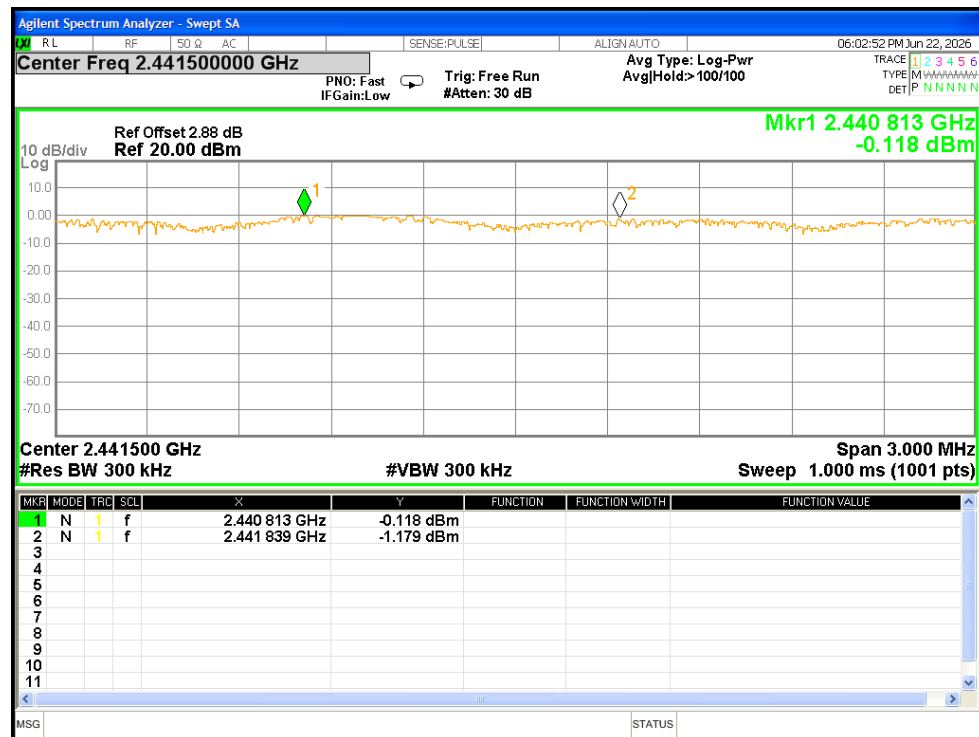
CFS NVNT 1-DH5 2480MHz



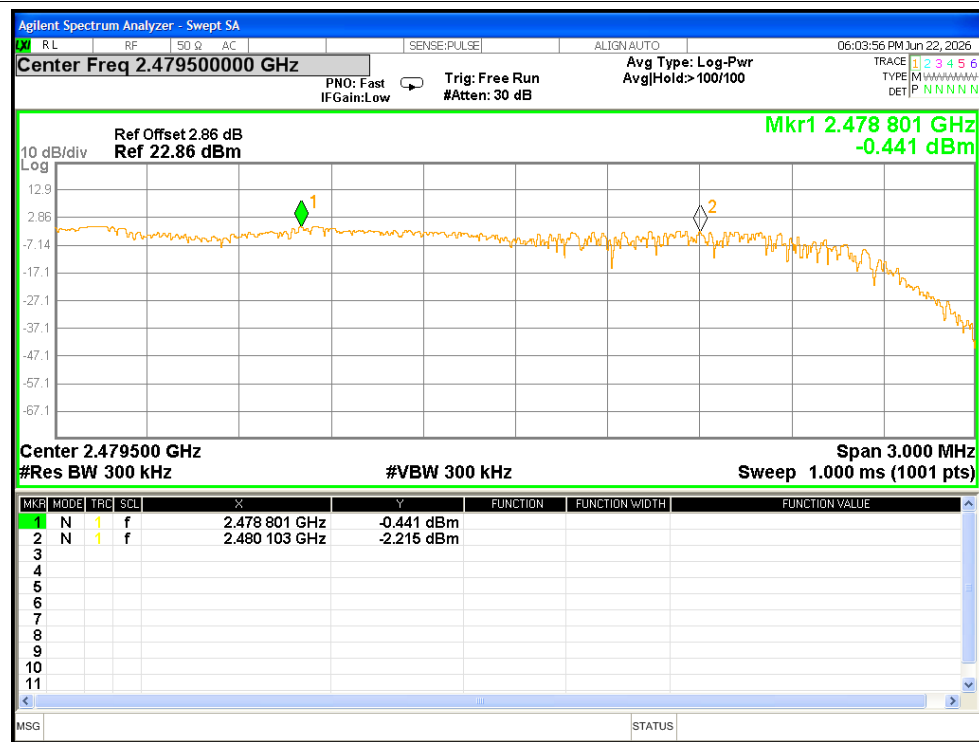
CFS NVNT 2-DH5 2402MHz



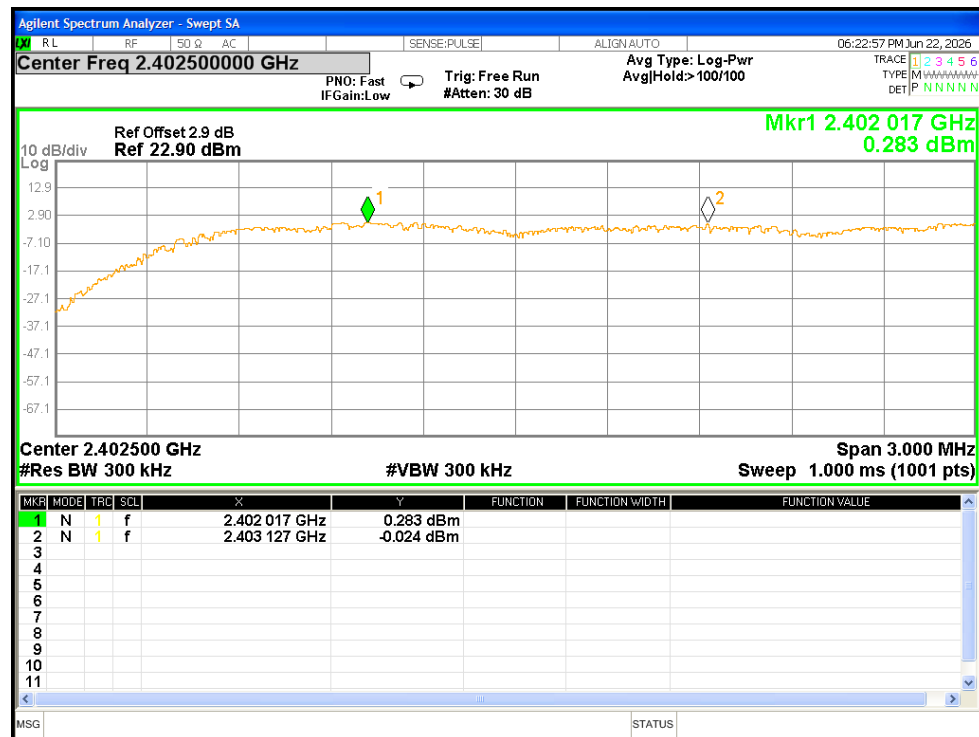
CFS NVNT 2-DH5 2441MHz



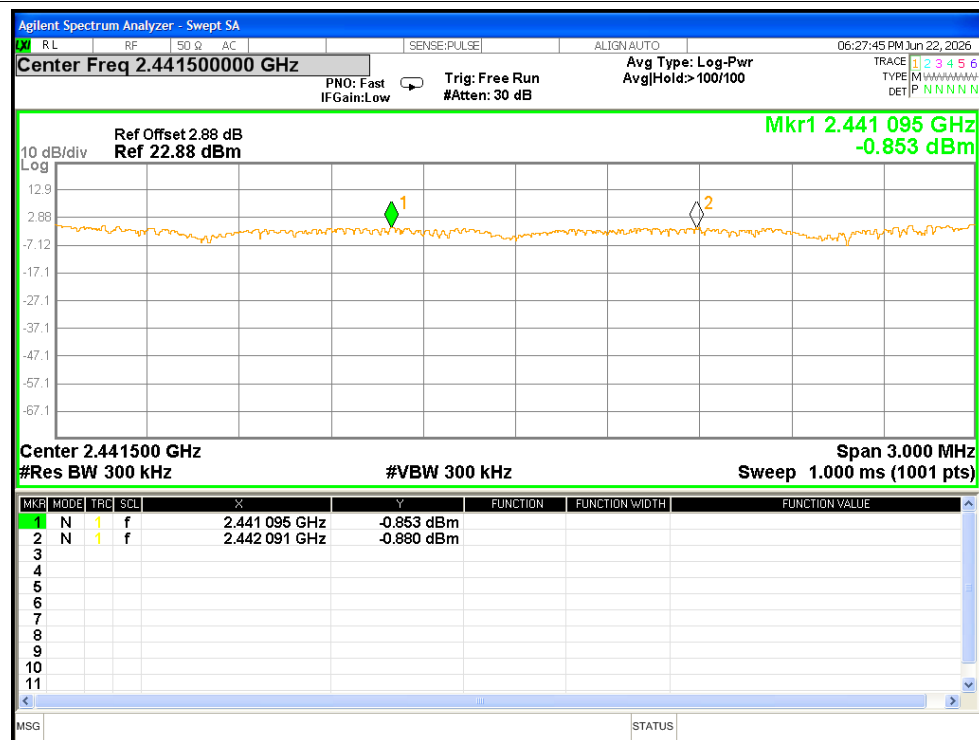
CFS NVNT 2-DH5 2480MHz



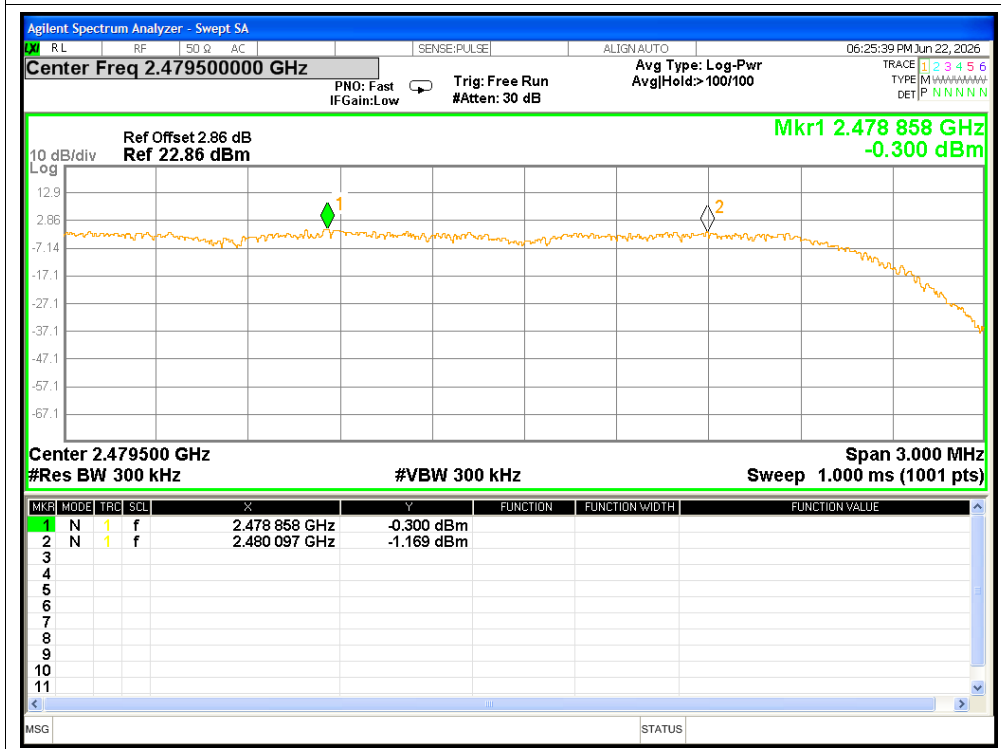
CFS NVNT 3-DH5 2402MHz



CFS NVNT 3-DH5 2441MHz



CFS NVNT 3-DH5 2480MHz

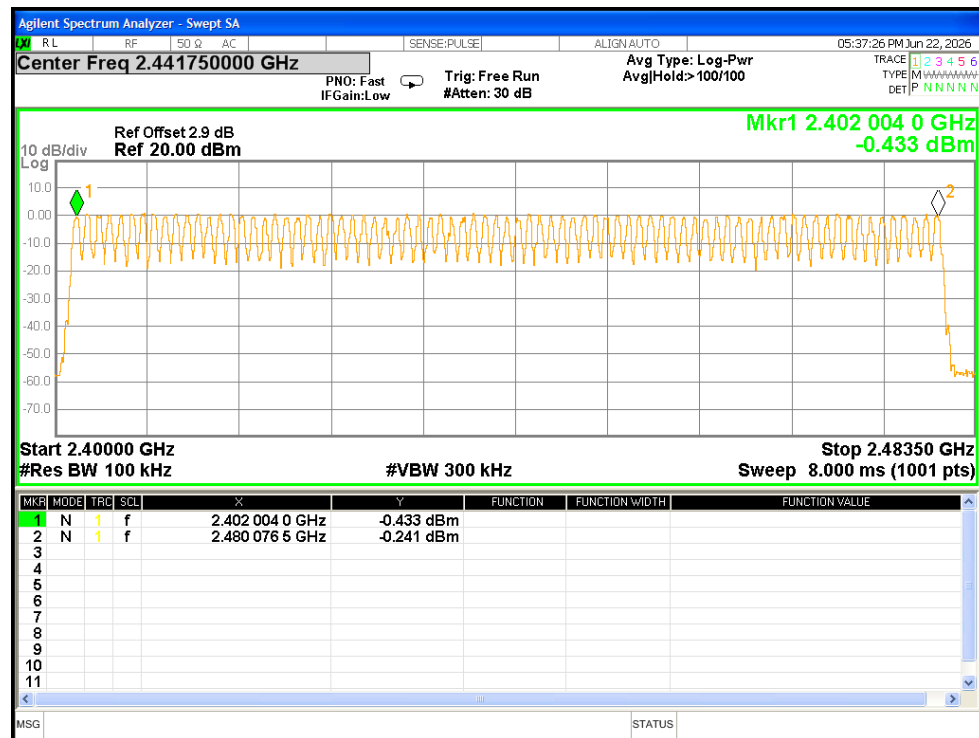


Number of Hopping Channel

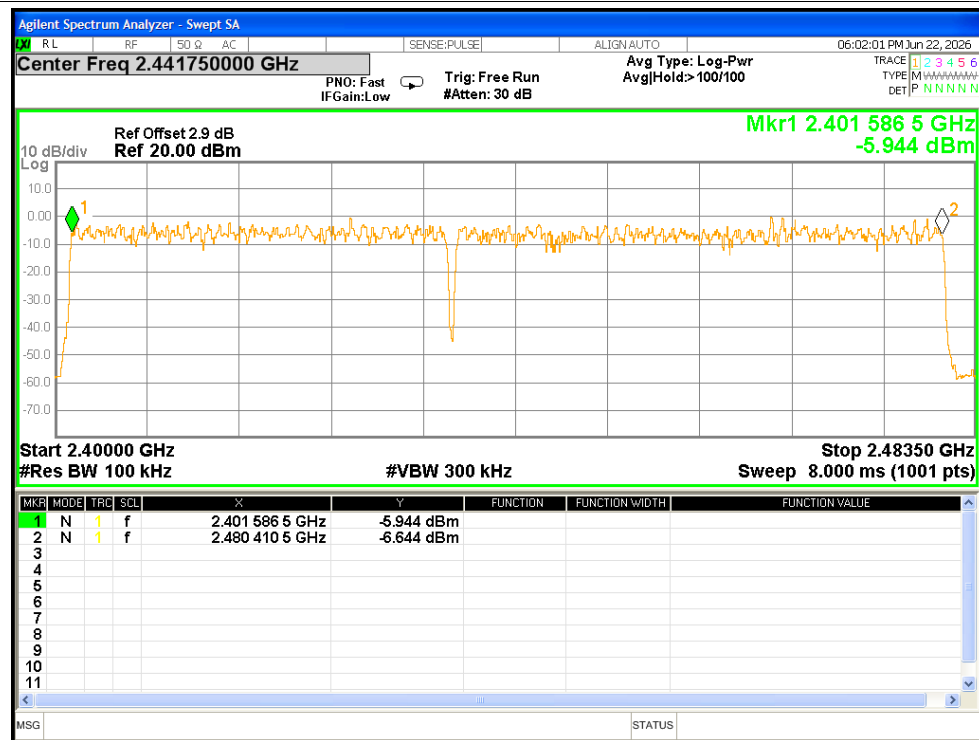
Condition	Mode	Hopping Number	Limit	Verdict
NVNT	1-DH5	79	≥ 15	Pass
NVNT	2-DH5	79	≥ 15	Pass
NVNT	3-DH5	79	≥ 15	Pass

Test Graphs

Hopping No. NVNT 1-DH5 Hopping



Hopping No. NVNT 2-DH5 Hopping

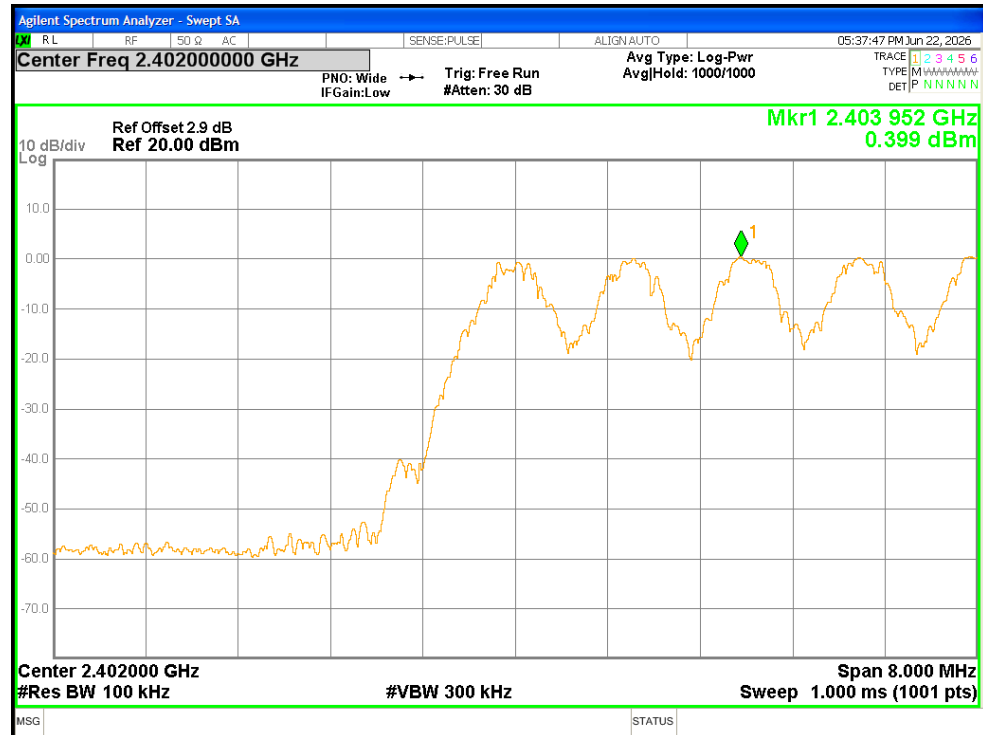


Band Edge(Hopping)

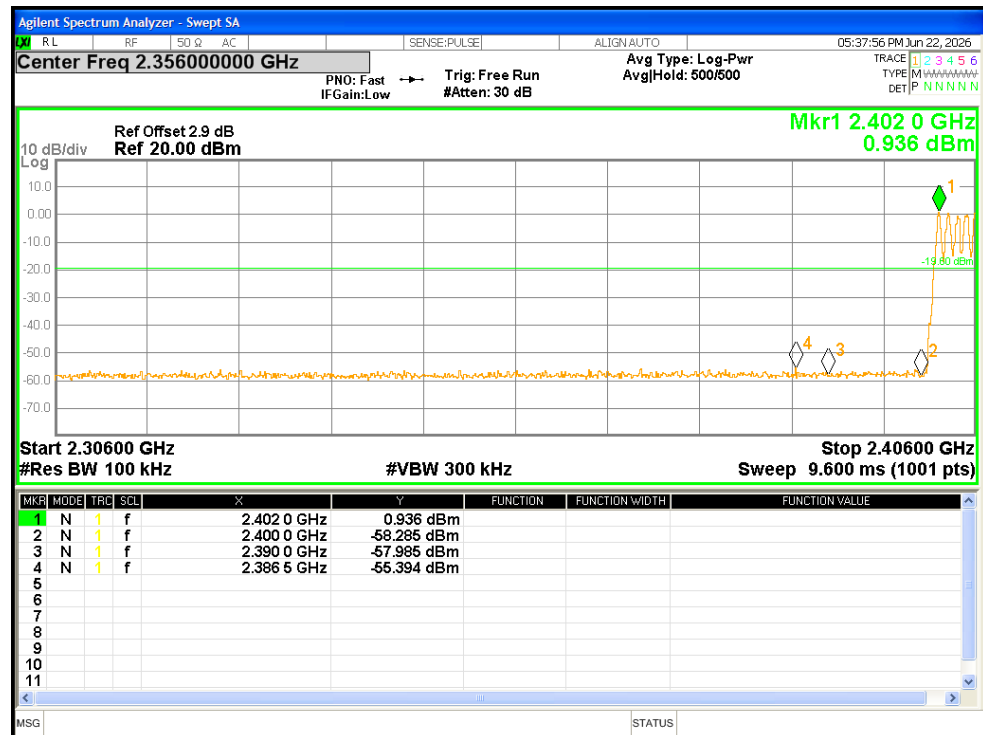
Condition	Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Hopping	-55.79	<=-20	Pass
NVNT	1-DH5	2480	Hopping	-56.51	<=-20	Pass
NVNT	2-DH5	2402	Hopping	-54.42	<=-20	Pass
NVNT	2-DH5	2480	Hopping	-54.59	<=-20	Pass
NVNT	3-DH5	2402	Hopping	-55.75	<=-20	Pass
NVNT	3-DH5	2480	Hopping	-56.89	<=-20	Pass

Test Graphs

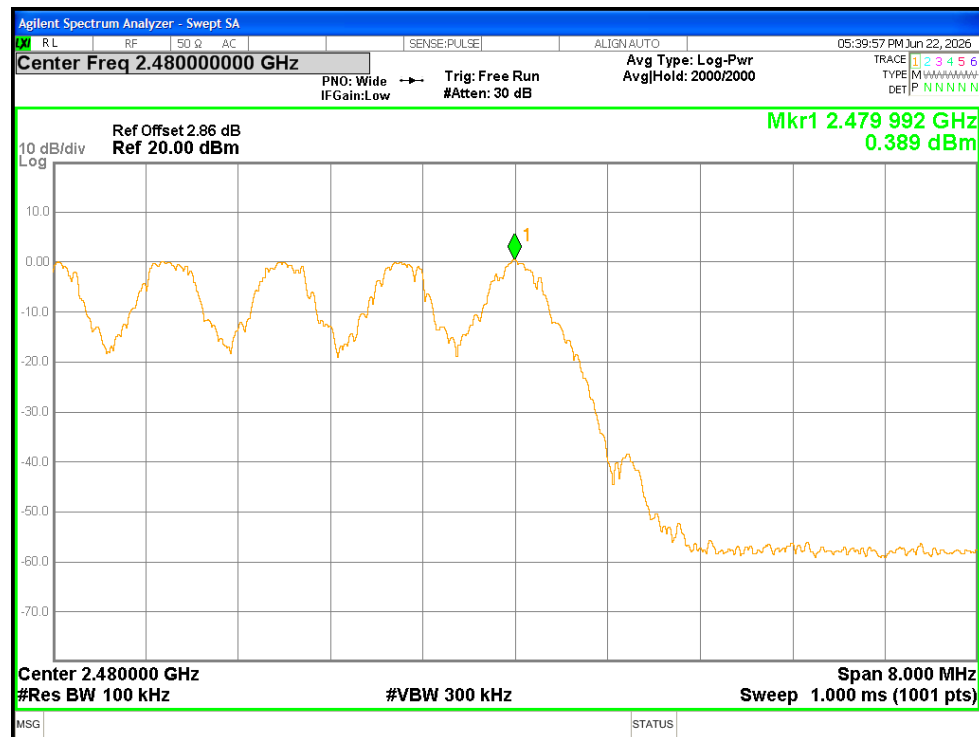
Band Edge(Hopping) NVNT 1-DH5 2402MHz Hopping Ref



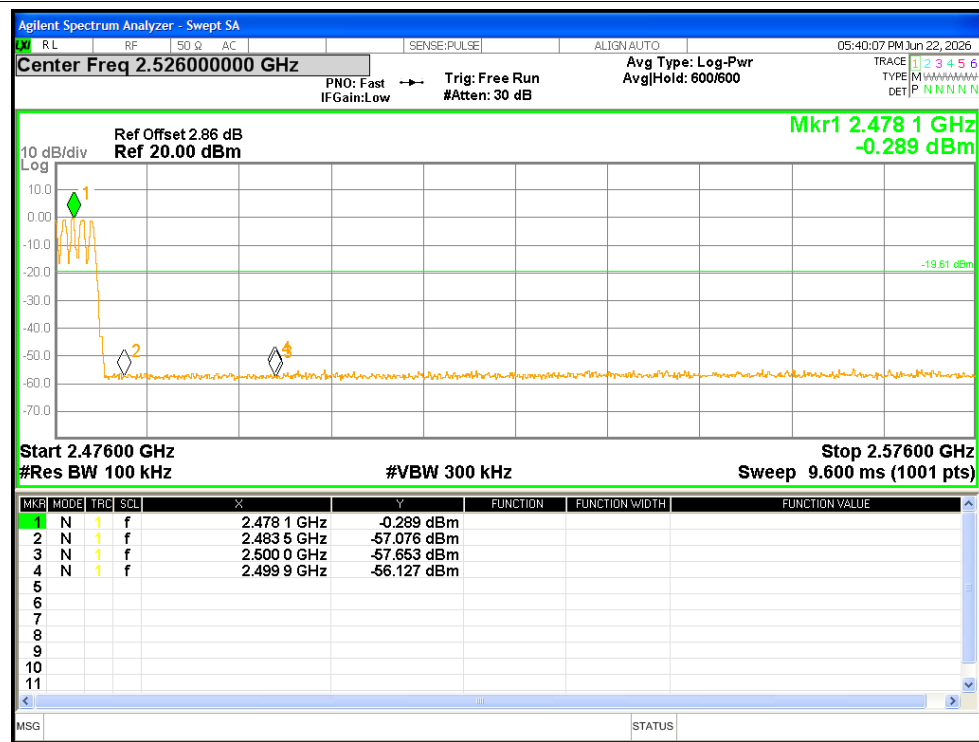
Band Edge(Hopping) NVNT 1-DH5 2402MHz Hopping Emission



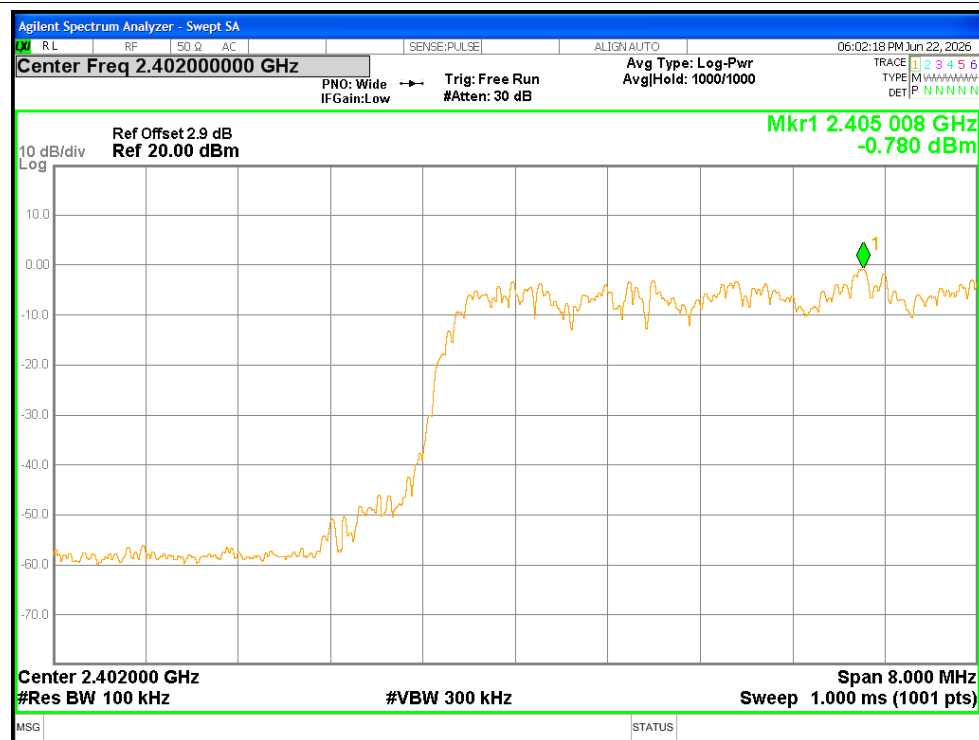
Band Edge(Hopping) NVNT 1-DH5 2480MHz Hopping Ref



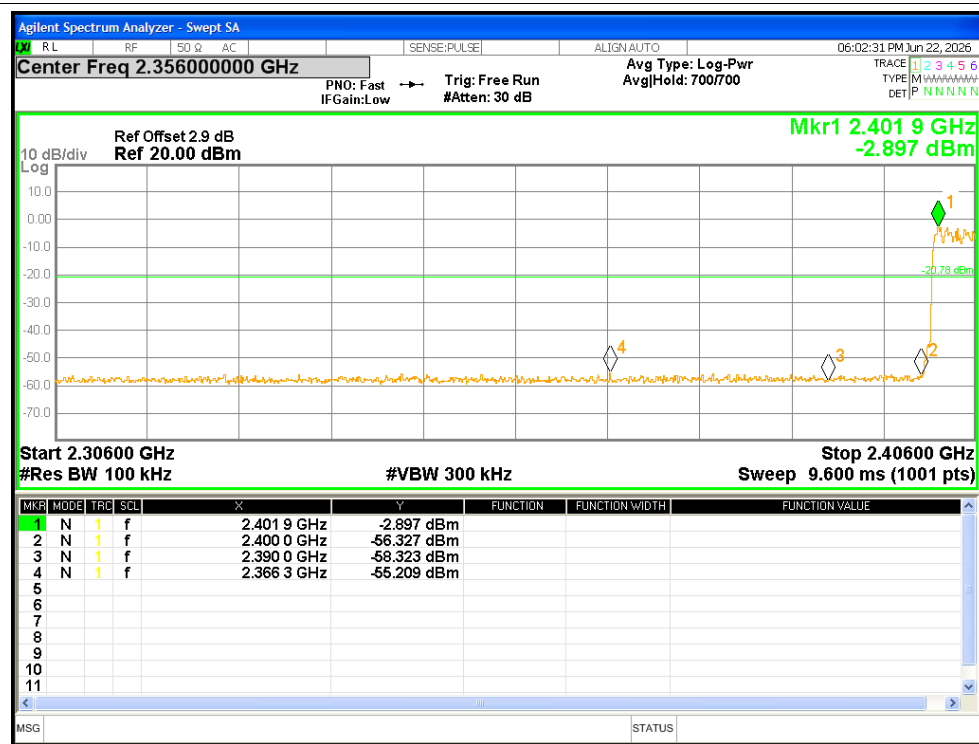
Band Edge(Hopping) NVNT 1-DH5 2480MHz Hopping Emission



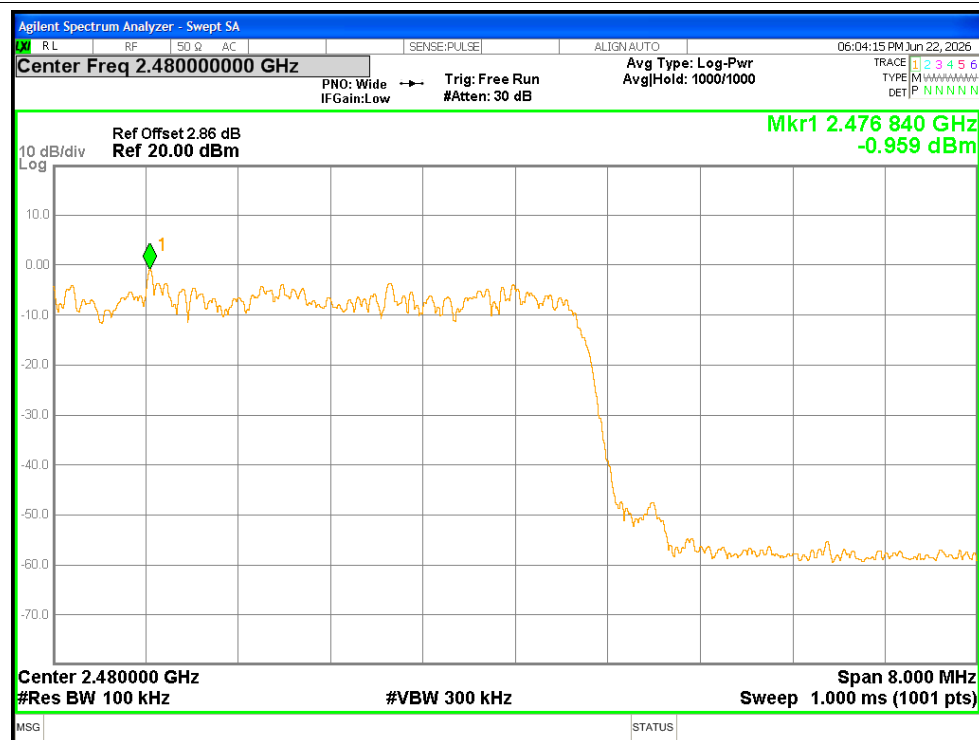
Band Edge(Hopping) NVNT 2-DH5 2402MHz Hopping Ref



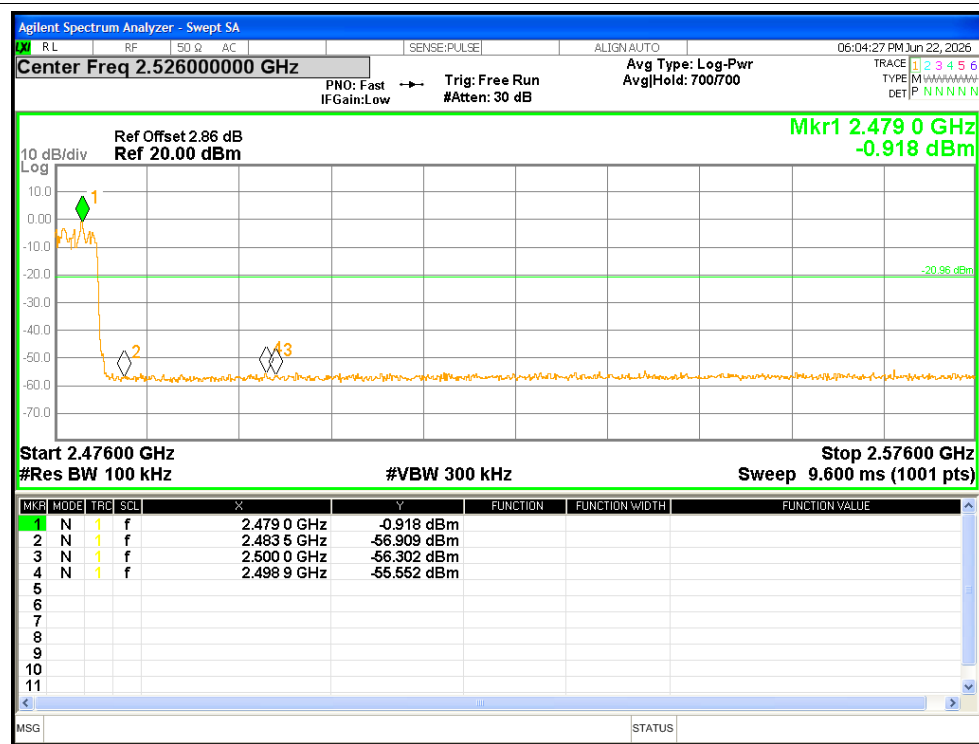
Band Edge(Hopping) NVNT 2-DH5 2402MHz Hopping Emission



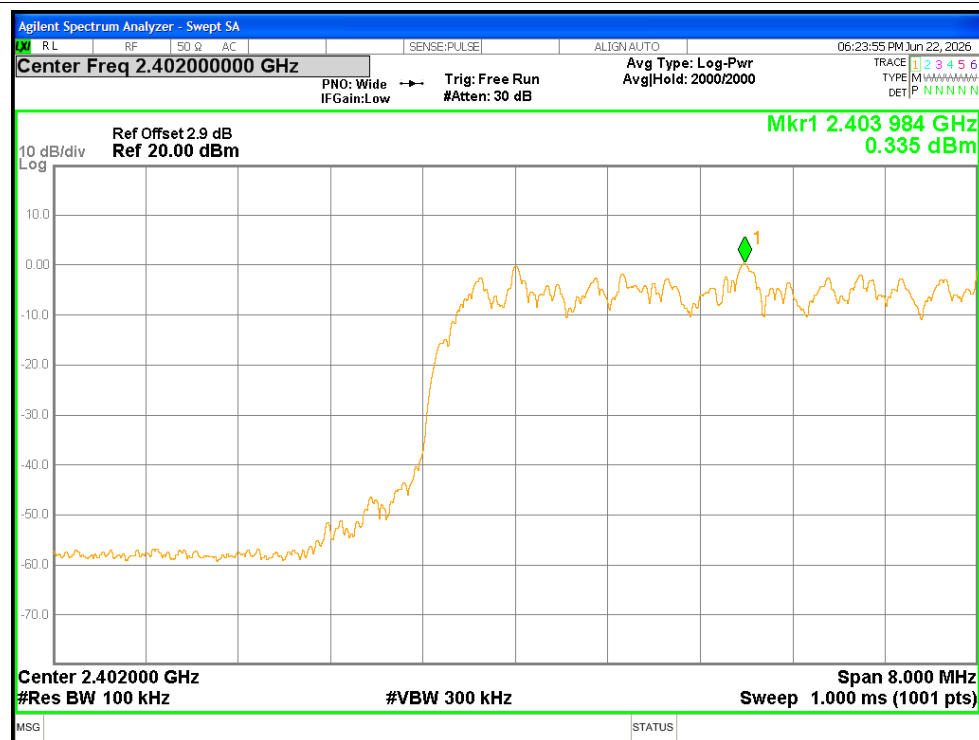
Band Edge(Hopping) NVNT 2-DH5 2480MHz Hopping Ref



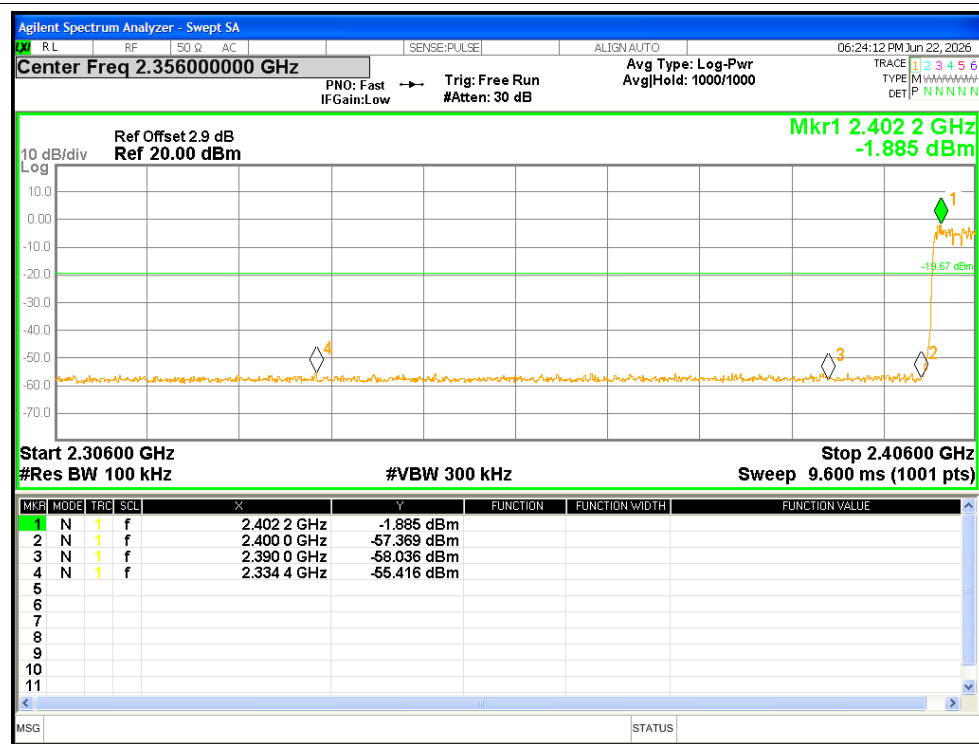
Band Edge(Hopping) NVNT 2-DH5 2480MHz Hopping Emission



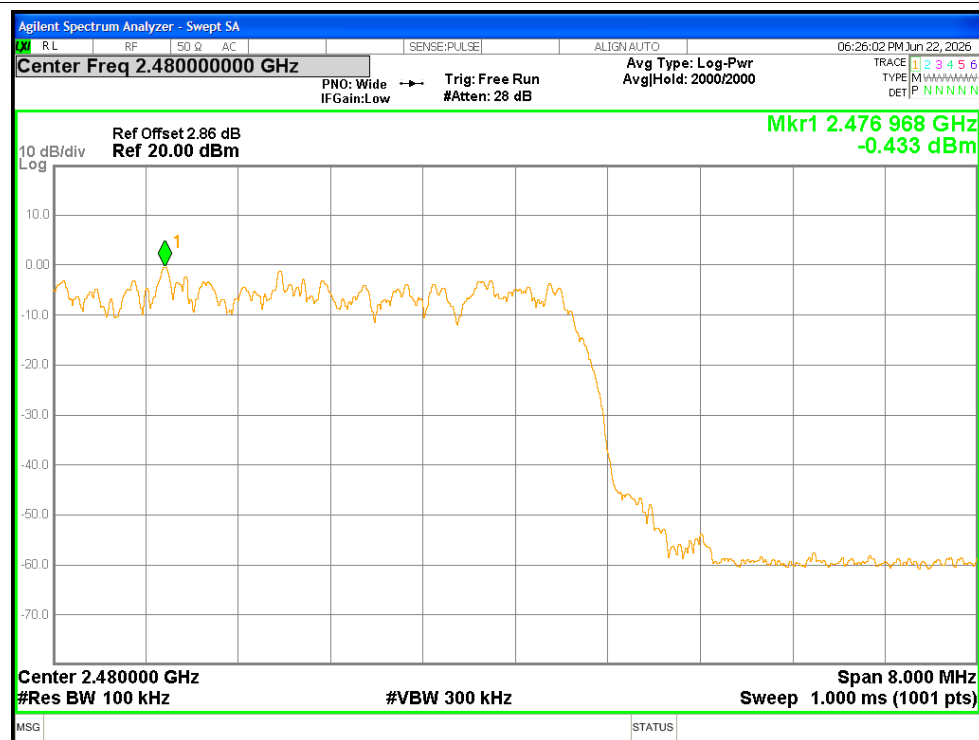
Band Edge(Hopping) NVNT 3-DH5 2402MHz Hopping Ref



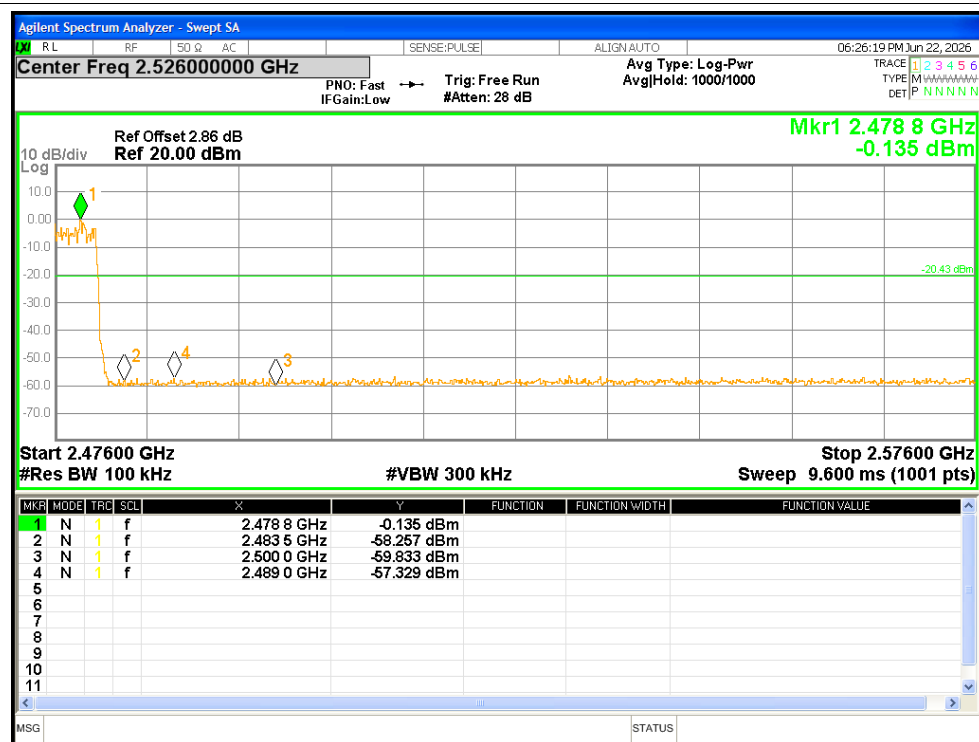
Band Edge(Hopping) NVNT 3-DH5 2402MHz Hopping Emission



Band Edge(Hopping) NVNT 3-DH5 2480MHz Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2480MHz Hopping Emission

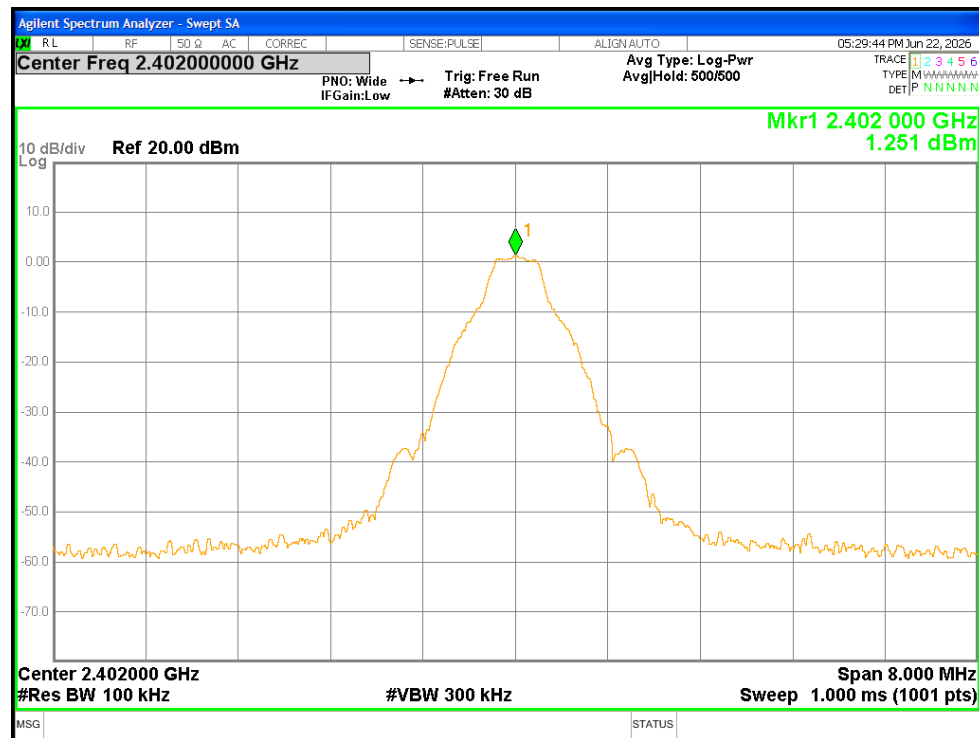


Conducted RF Spurious Emission

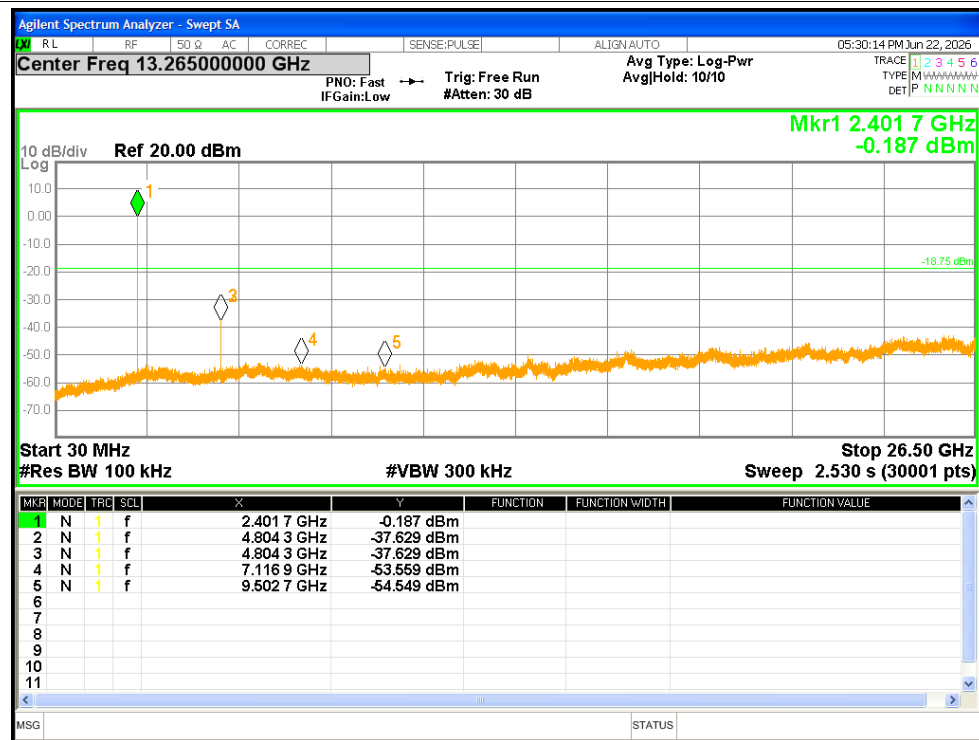
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	-38.87	<=-20	Pass
NVNT	1-DH5	2441	-44.11	<=-20	Pass
NVNT	1-DH5	2480	-43.29	<=-20	Pass
NVNT	2-DH5	2402	-40.78	<=-20	Pass
NVNT	2-DH5	2441	-42.62	<=-20	Pass
NVNT	2-DH5	2480	-42.75	<=-20	Pass
NVNT	3-DH5	2402	-42.36	<=-20	Pass
NVNT	3-DH5	2441	-42.91	<=-20	Pass
NVNT	3-DH5	2480	-42.79	<=-20	Pass

Test Graphs

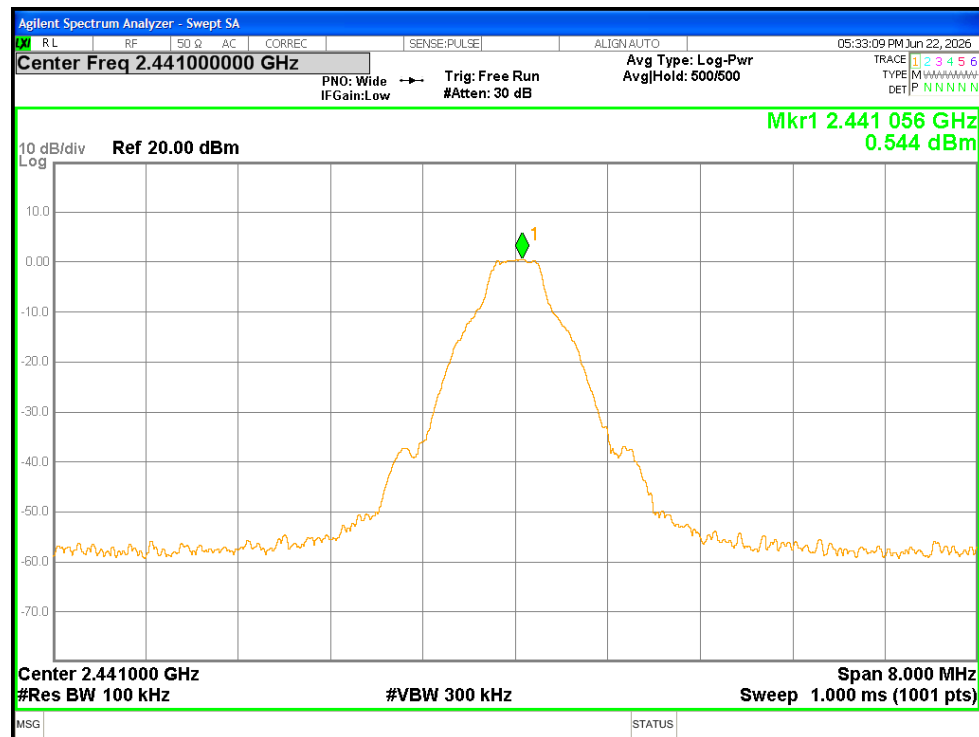
Tx. Spurious NVNT 1-DH5 2402MHz Ref



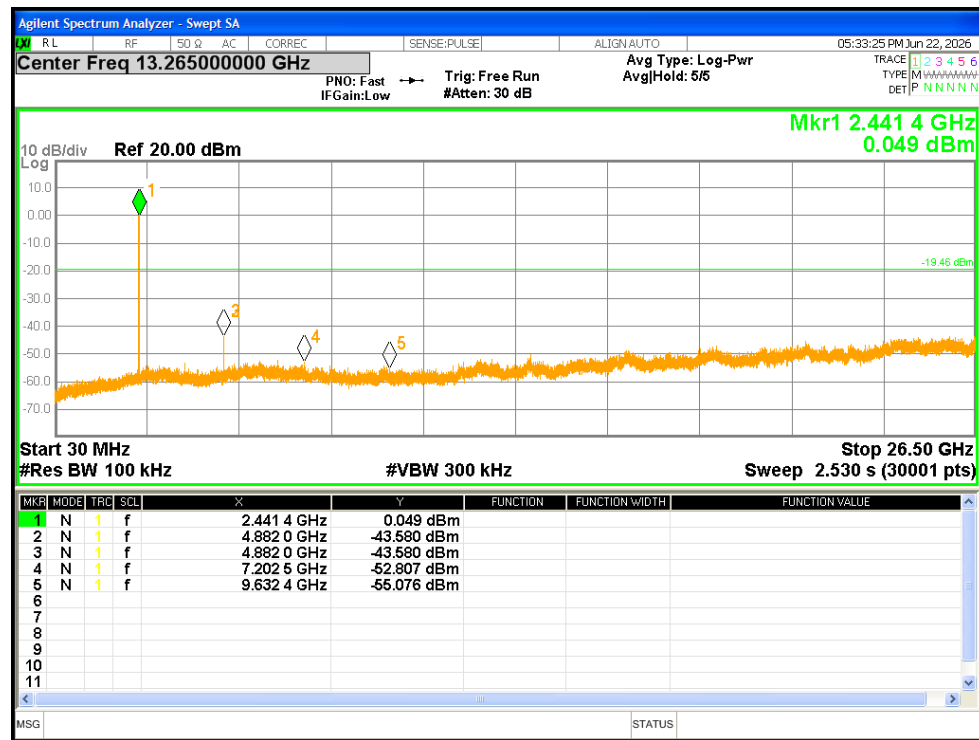
Tx. Spurious NVNT 1-DH5 2402MHz Emission



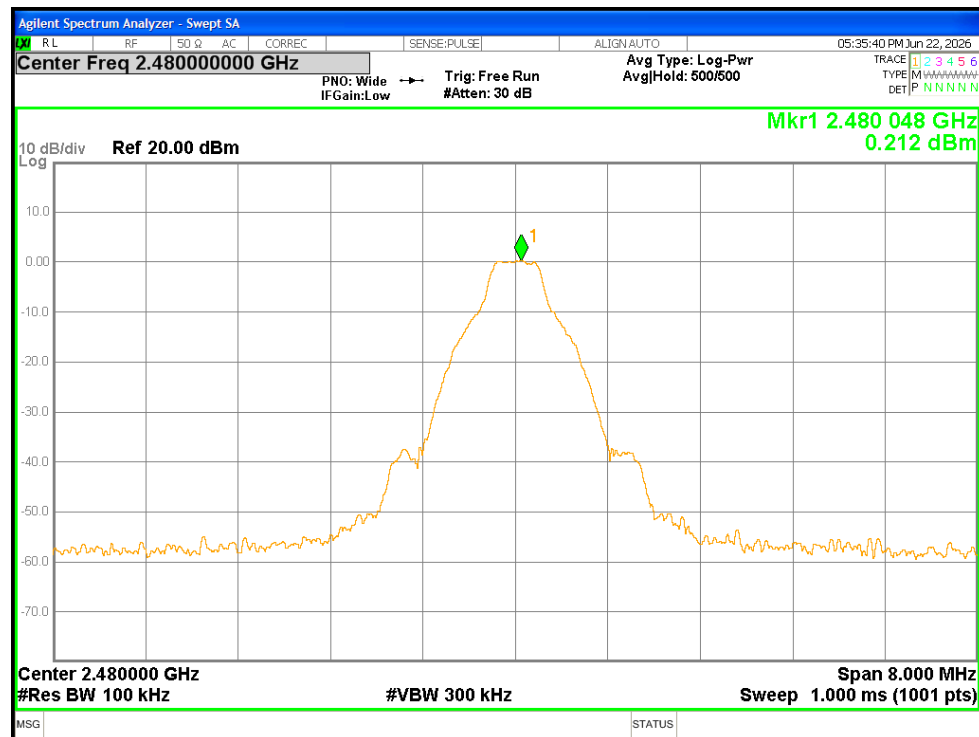
Tx. Spurious NVNT 1-DH5 2441MHz Ref



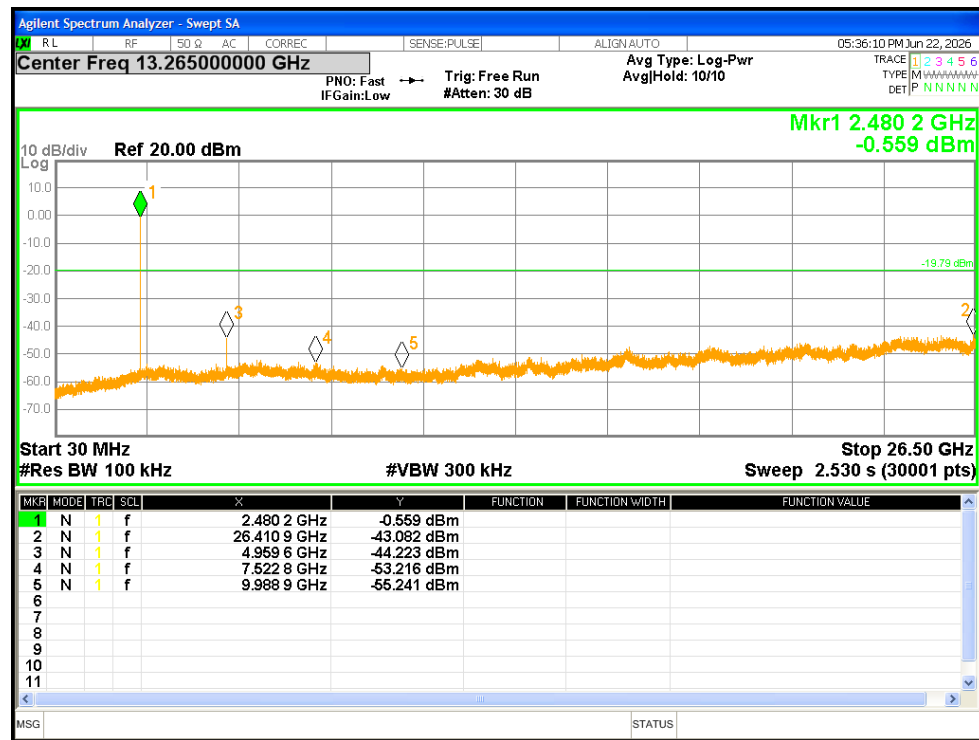
Tx. Spurious NVNT 1-DH5 2441MHz Emission



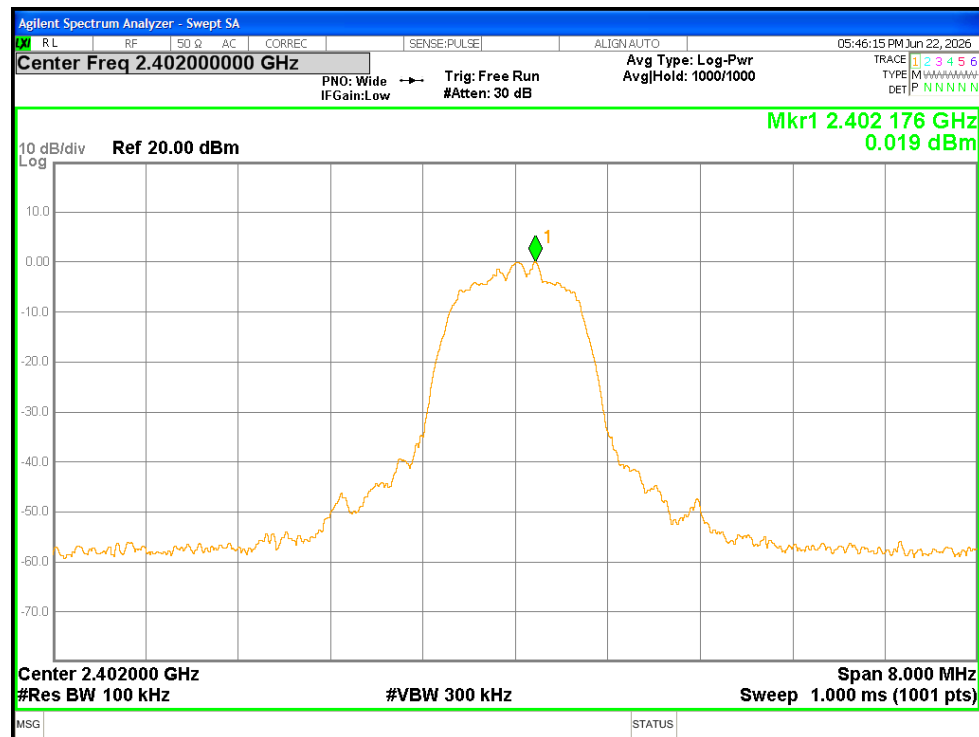
Tx. Spurious NVNT 1-DH5 2480MHz Ref



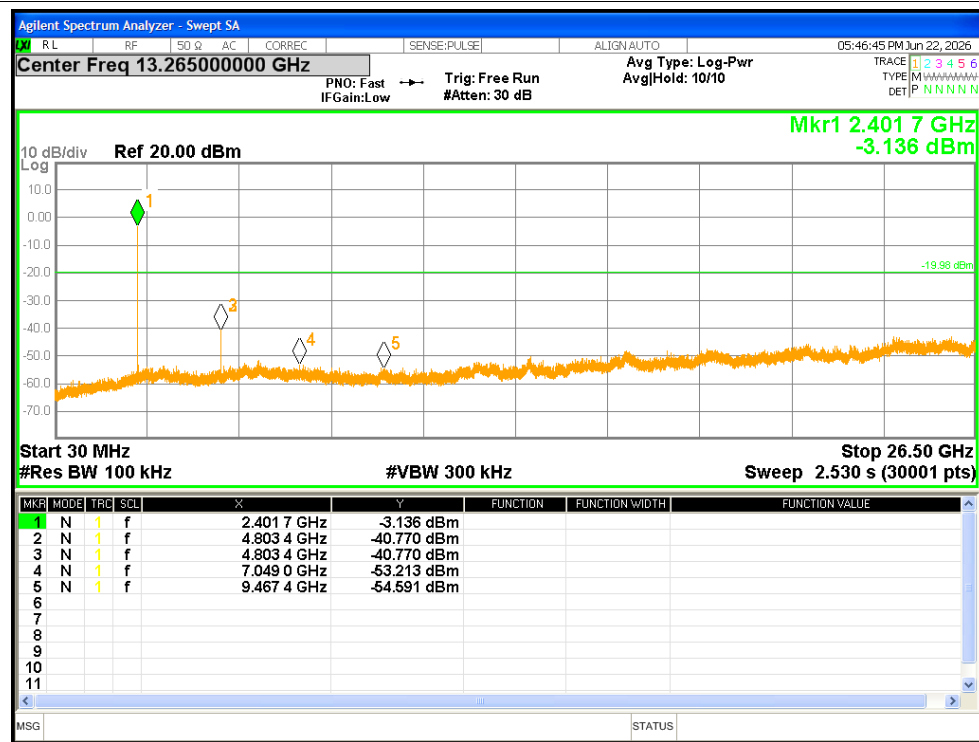
Tx. Spurious NVNT 1-DH5 2480MHz Emission



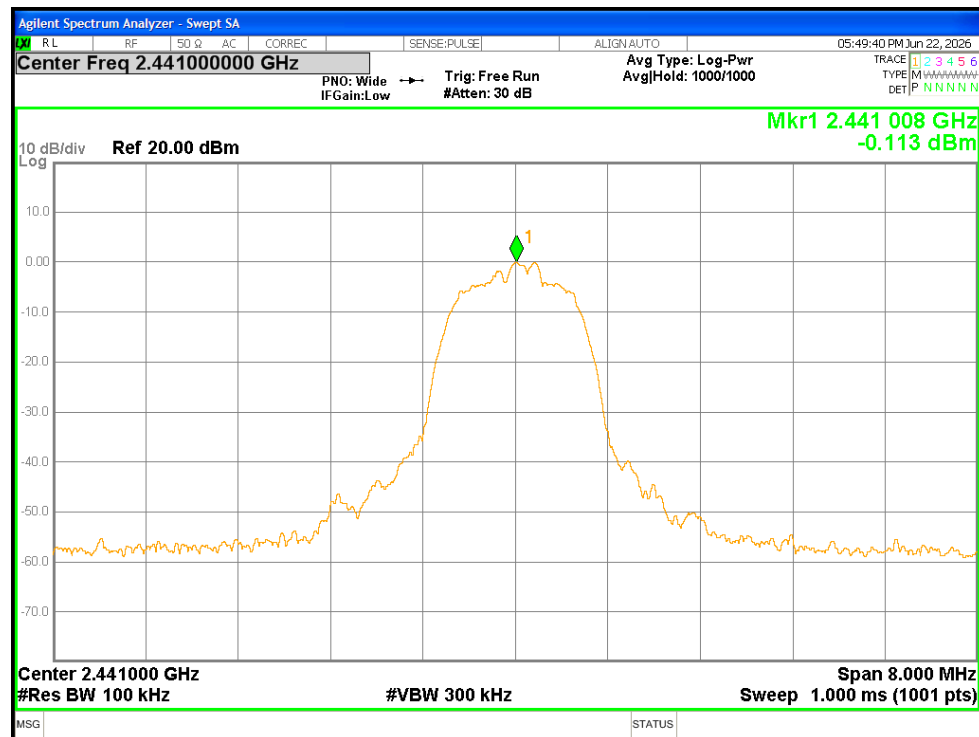
Tx. Spurious NVNT 2-DH5 2402MHz Ref



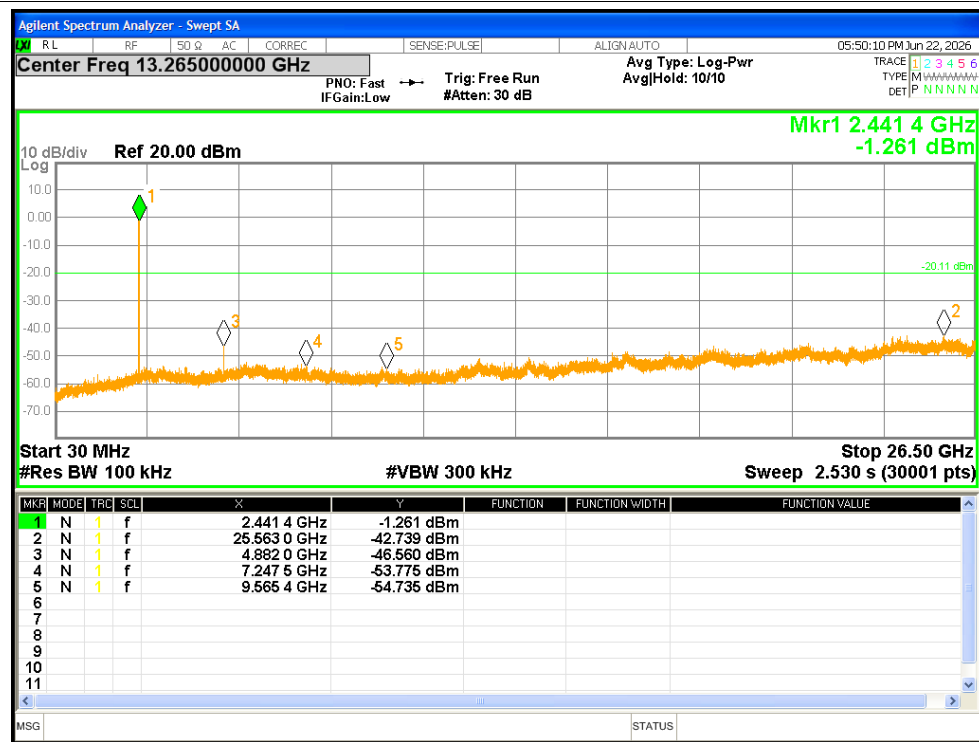
Tx. Spurious NVNT 2-DH5 2402MHz Emission



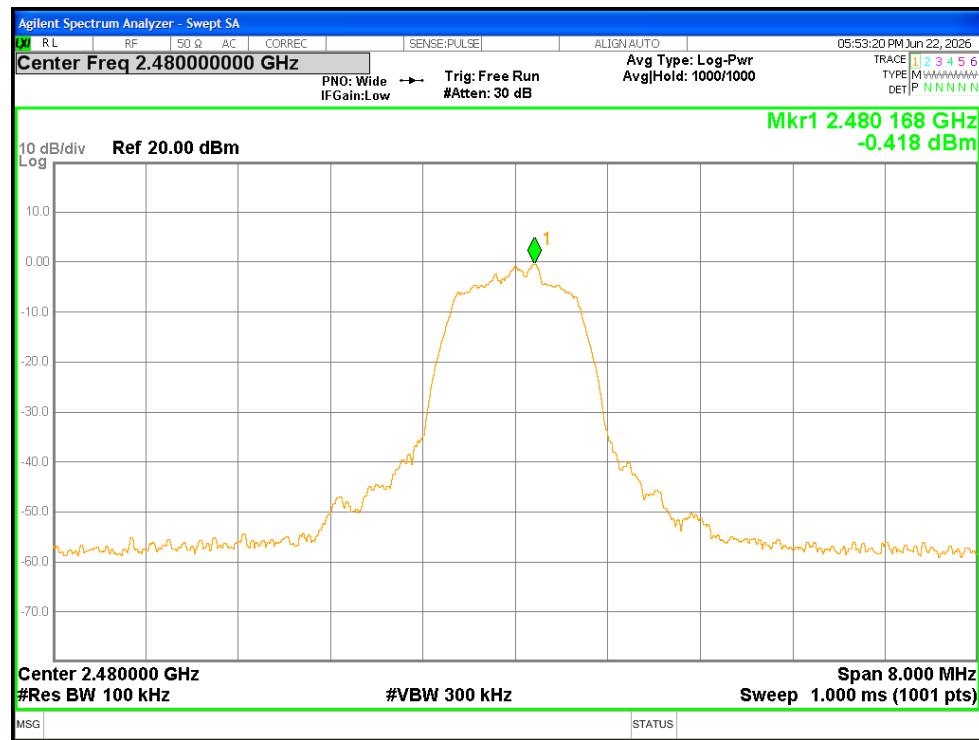
Tx. Spurious NVNT 2-DH5 2441MHz Ref



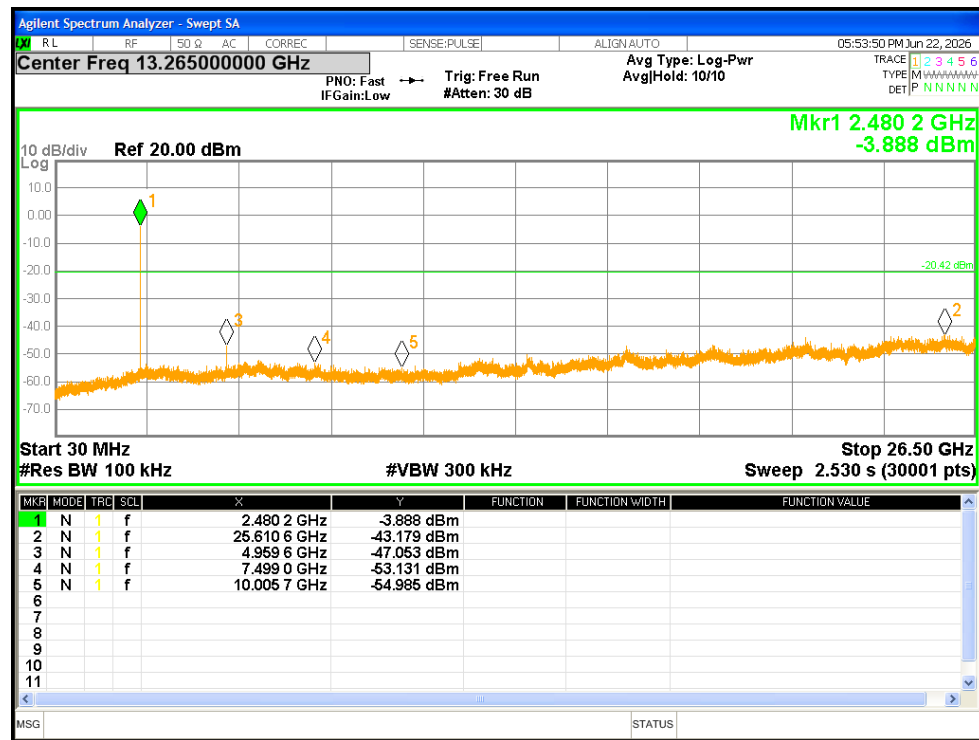
Tx. Spurious NVNT 2-DH5 2441MHz Emission



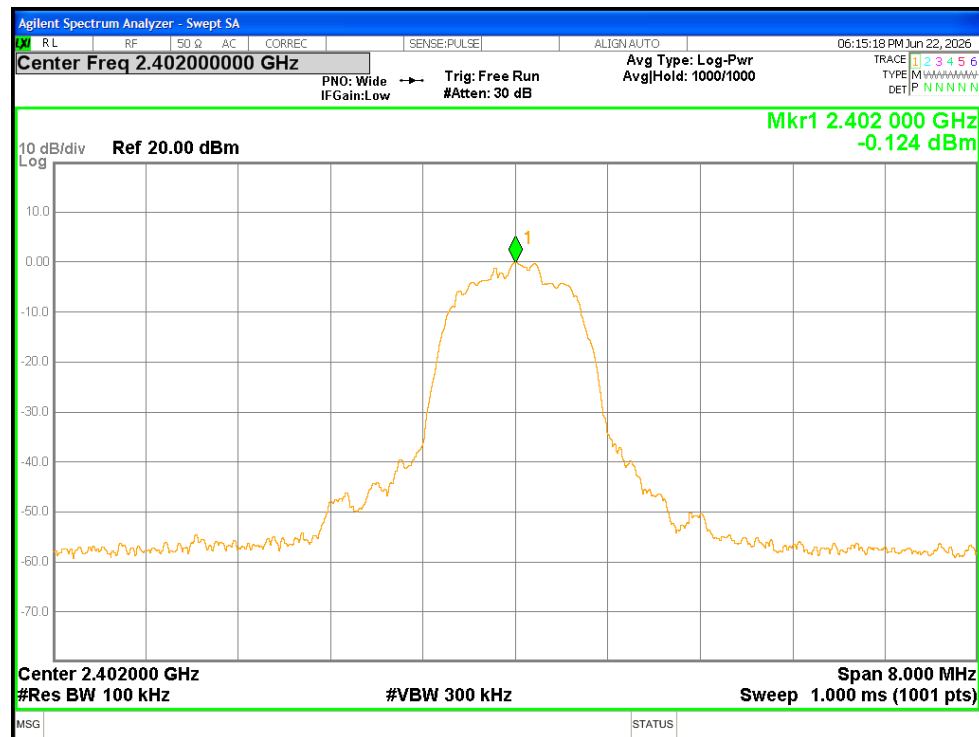
Tx. Spurious NVNT 2-DH5 2480MHz Ref



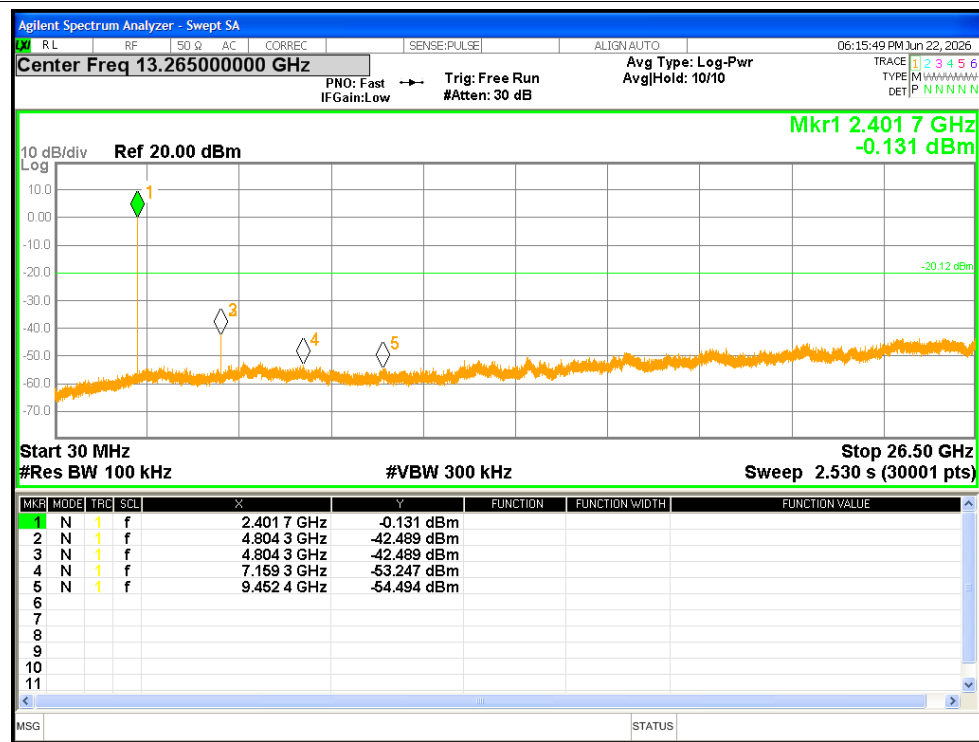
Tx. Spurious NVNT 2-DH5 2480MHz Emission



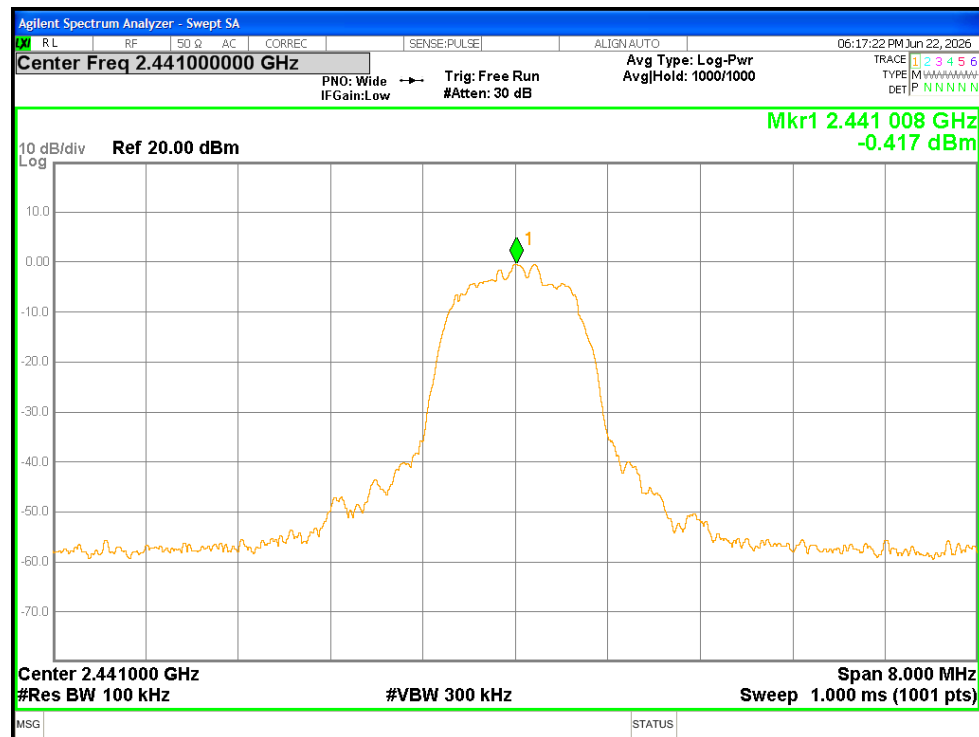
Tx. Spurious NVNT 3-DH5 2402MHz Ref



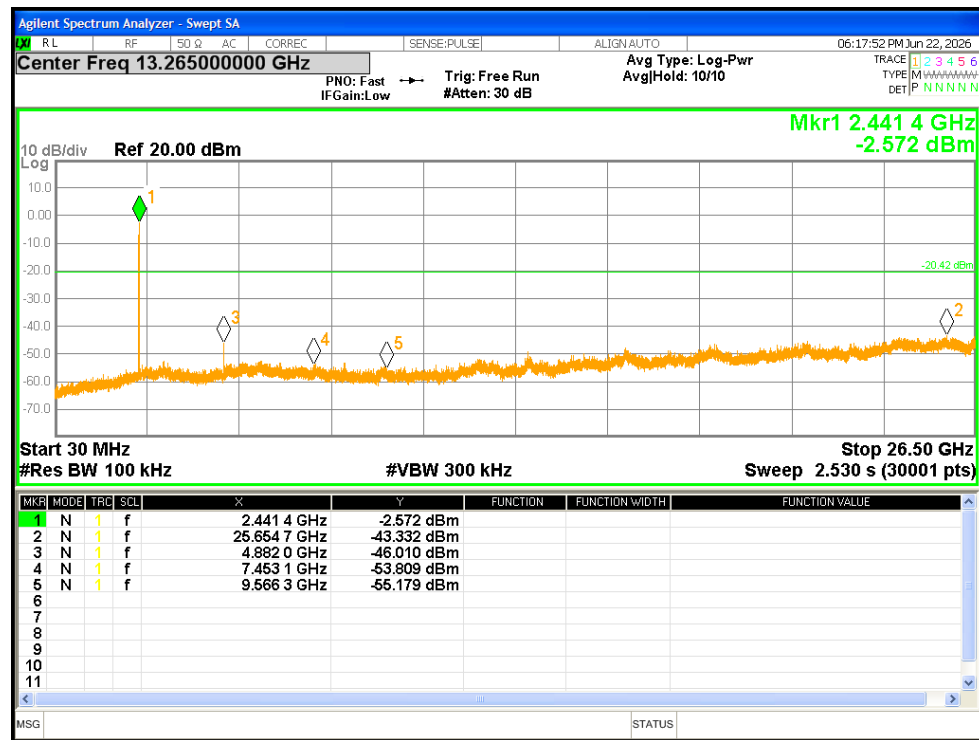
Tx. Spurious NVNT 3-DH5 2402MHz Emission



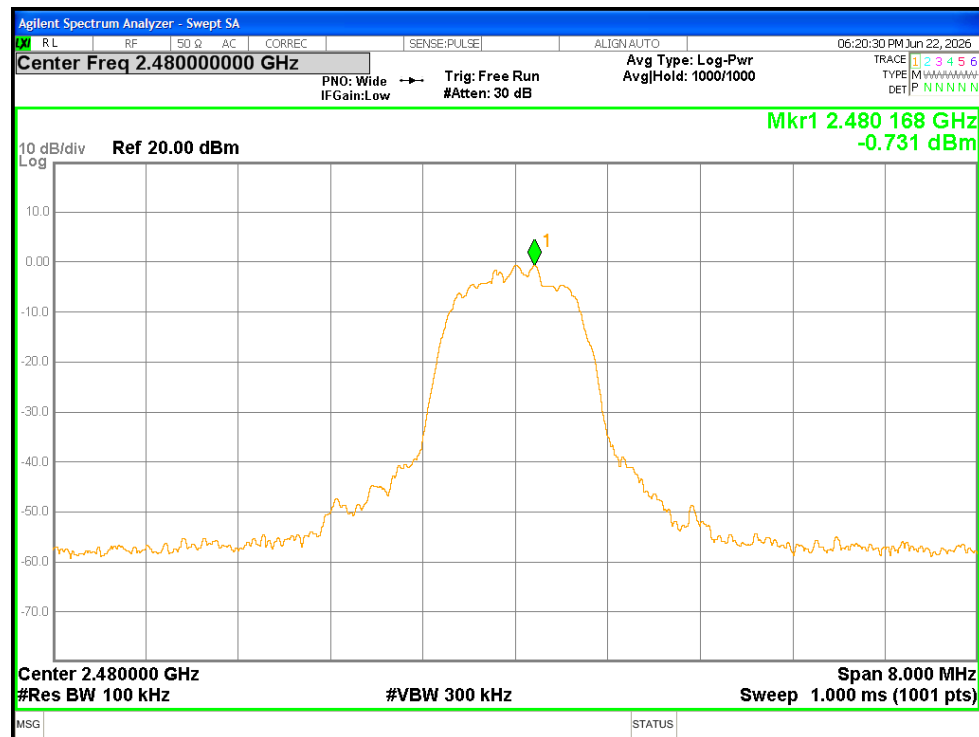
Tx. Spurious NVNT 3-DH5 2441MHz Ref



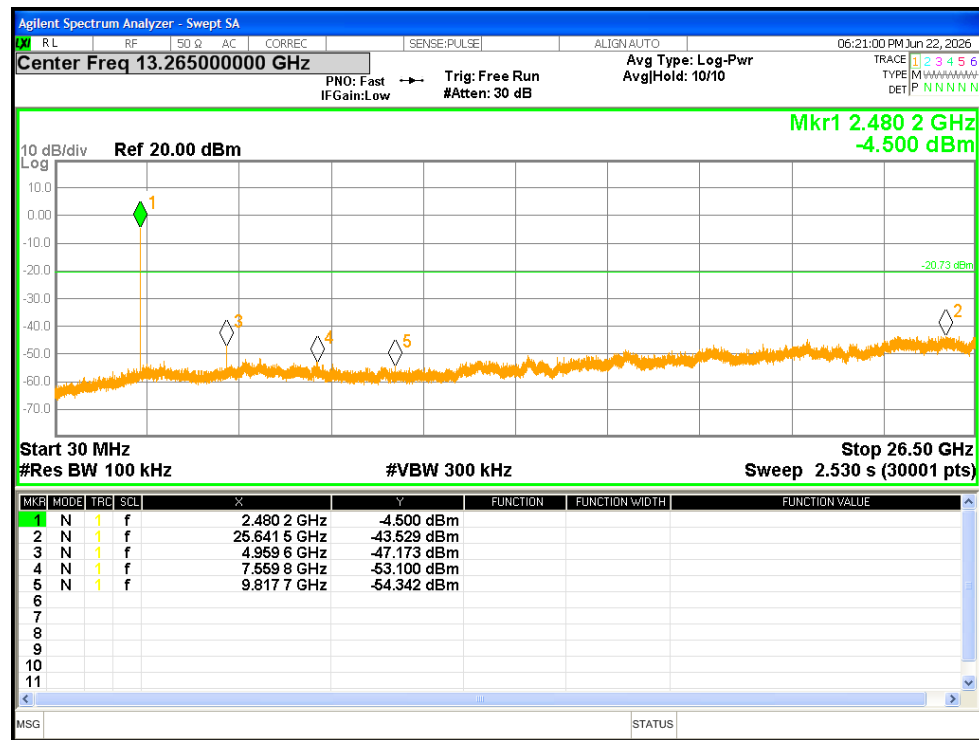
Tx. Spurious NVNT 3-DH5 2441MHz Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ref



Tx. Spurious NVNT 3-DH5 2480MHz Emission

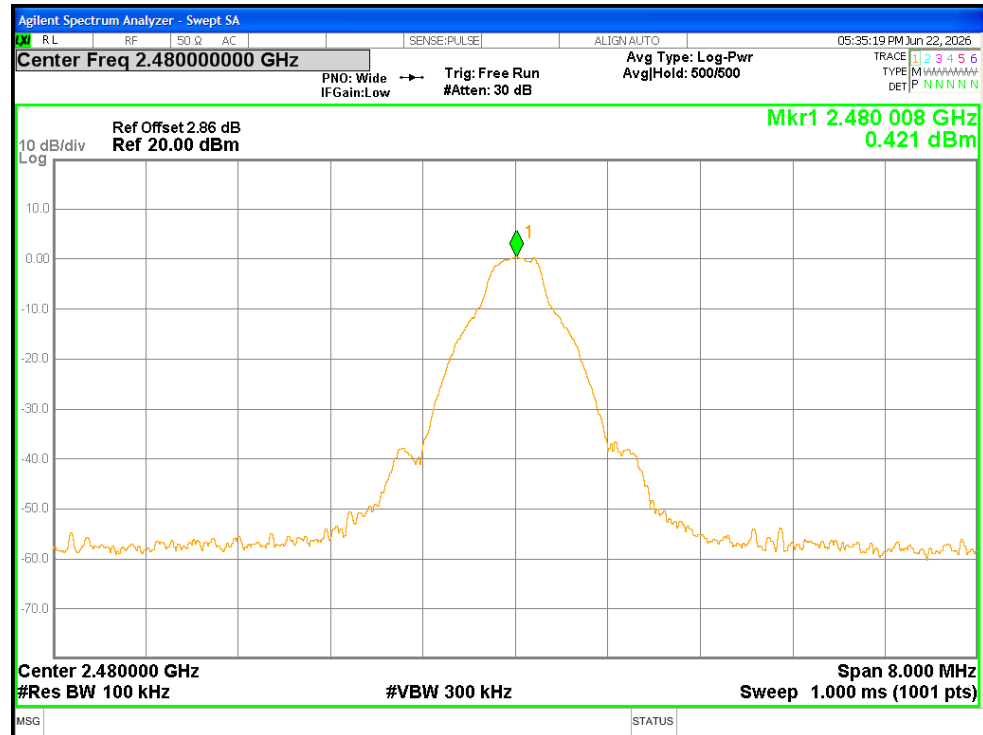


Band Edge

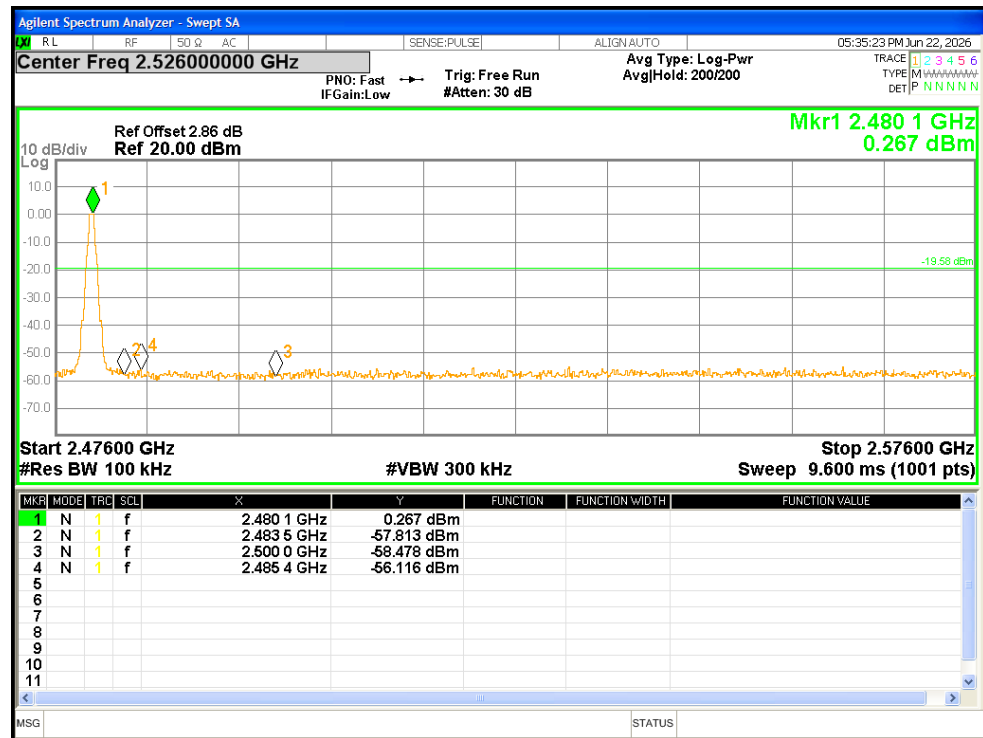
Condition	Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2480	No-Hopping	-56.53	<=-20	Pass
NVNT	2-DH5	2402	No-Hopping	-55.07	<=-20	Pass
NVNT	2-DH5	2480	No-Hopping	-54.5	<=-20	Pass
NVNT	3-DH5	2402	No-Hopping	-54.61	<=-20	Pass
NVNT	3-DH5	2480	No-Hopping	-54.66	<=-20	Pass

Test Graphs

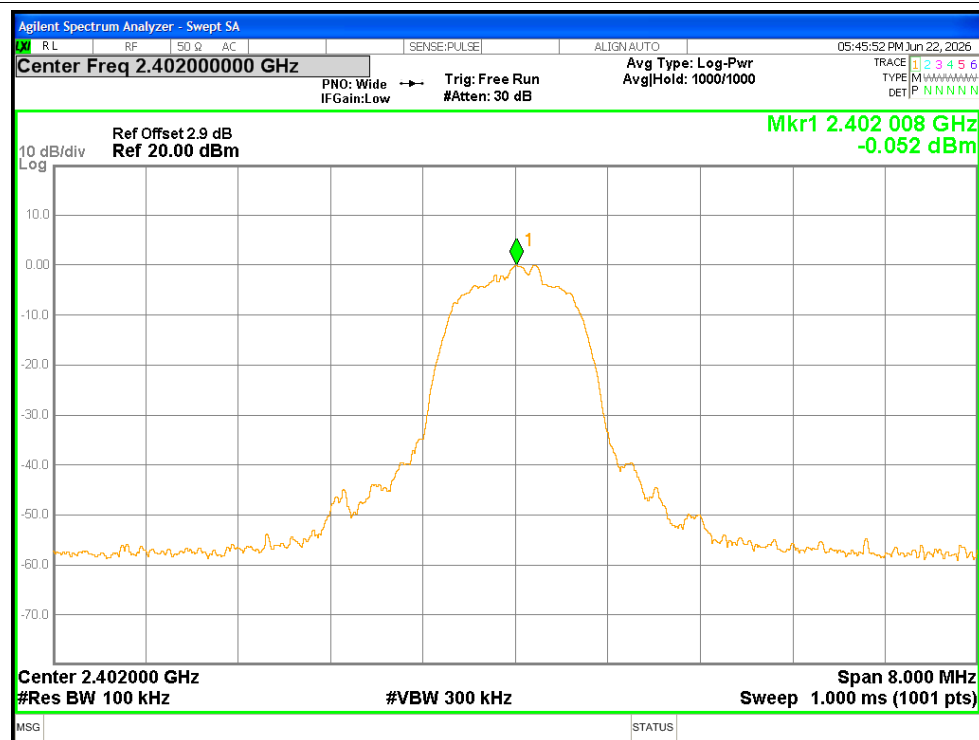
Band Edge NVNT 1-DH5 2480MHz No-Hopping Ref



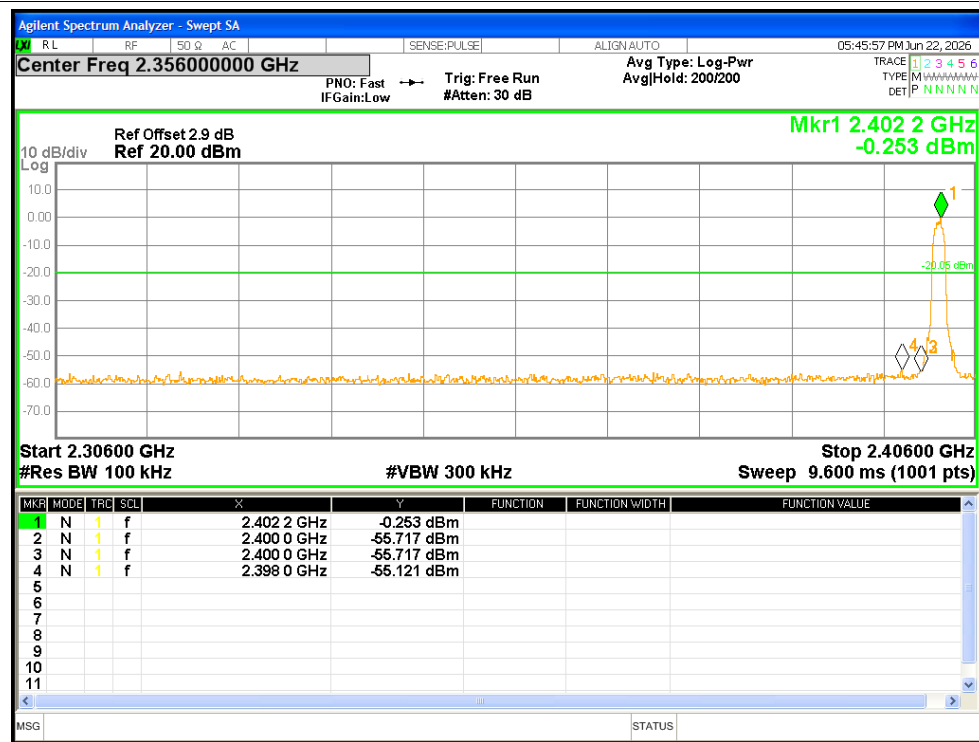
Band Edge NVNT 1-DH5 2480MHz No-Hopping Emission



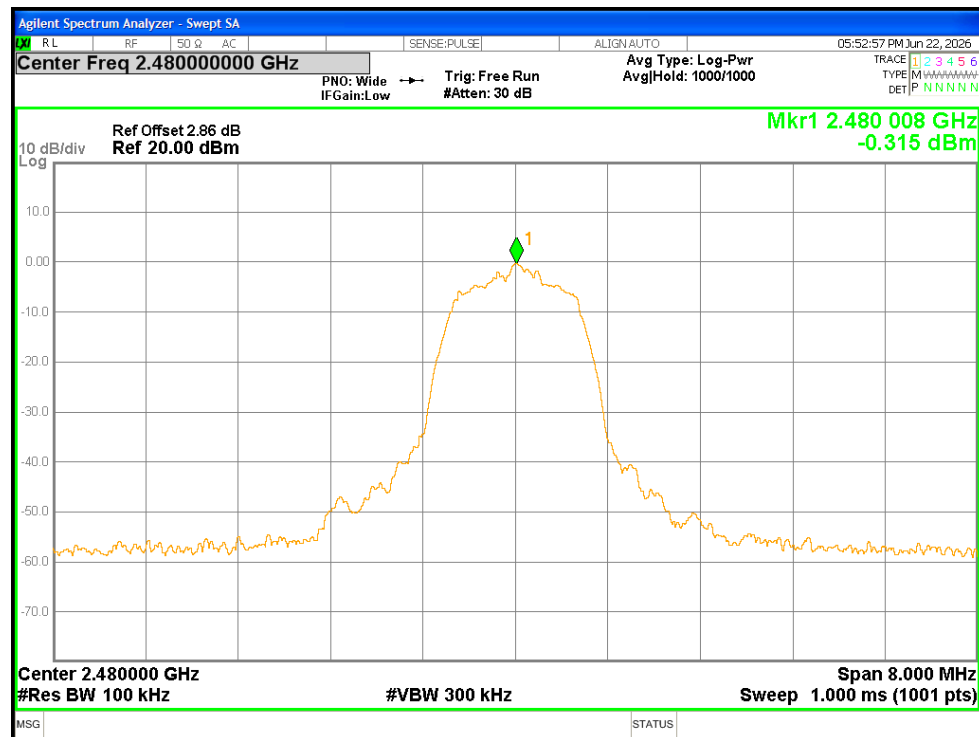
Band Edge NVNT 2-DH5 2402MHz No-Hopping Ref



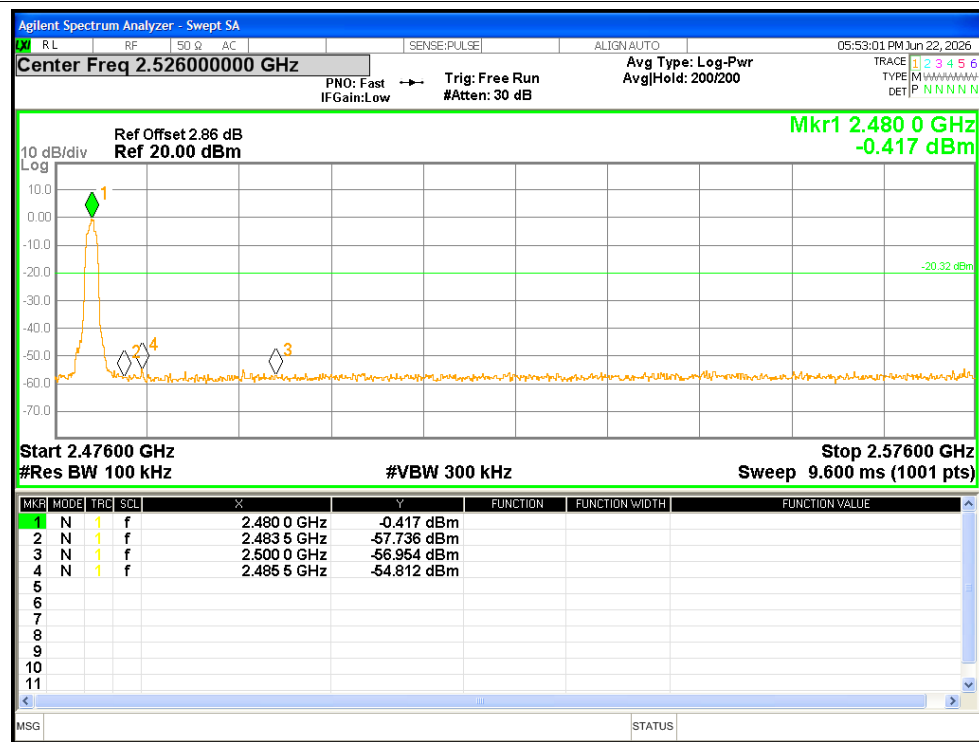
Band Edge NVNT 2-DH5 2402MHz No-Hopping Emission



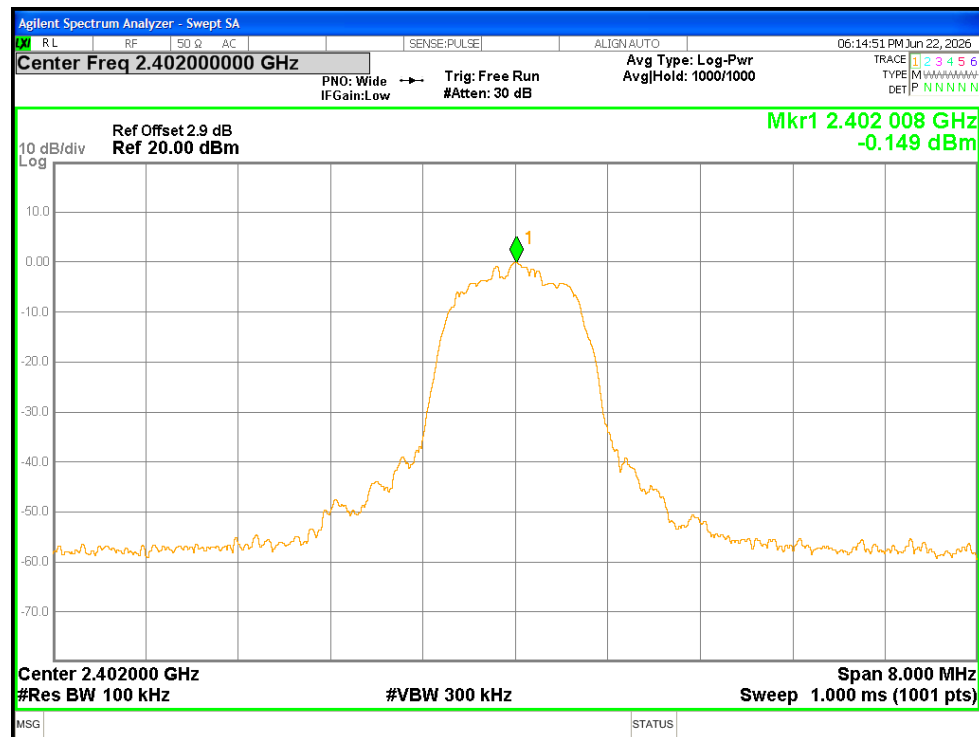
Band Edge NVNT 2-DH5 2480MHz No-Hopping Ref



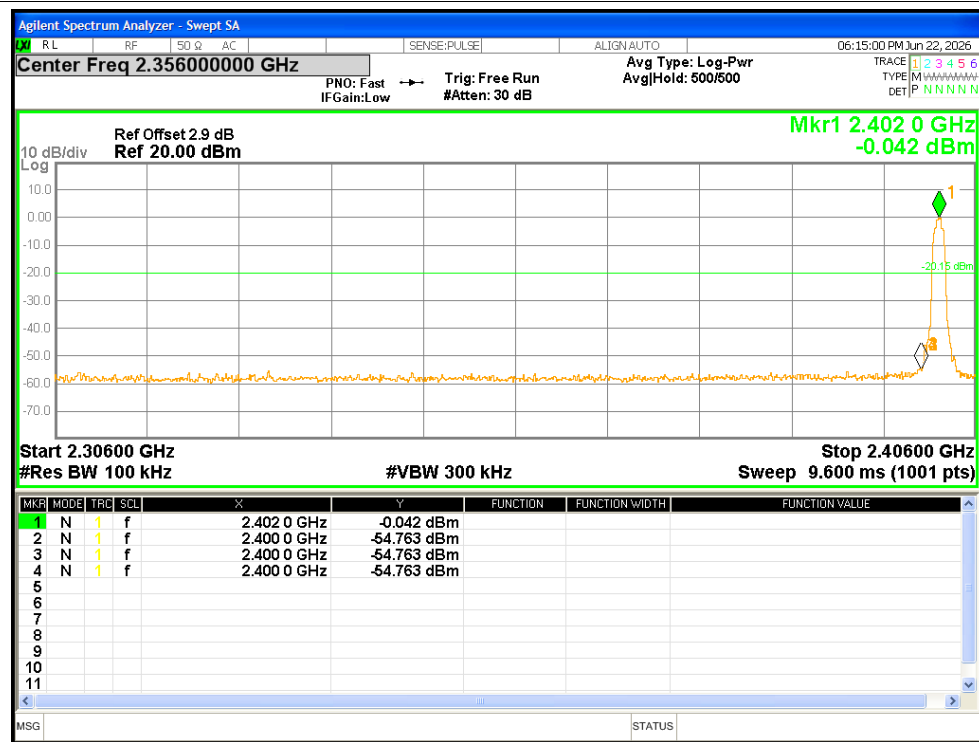
Band Edge NVNT 2-DH5 2480MHz No-Hopping Emission



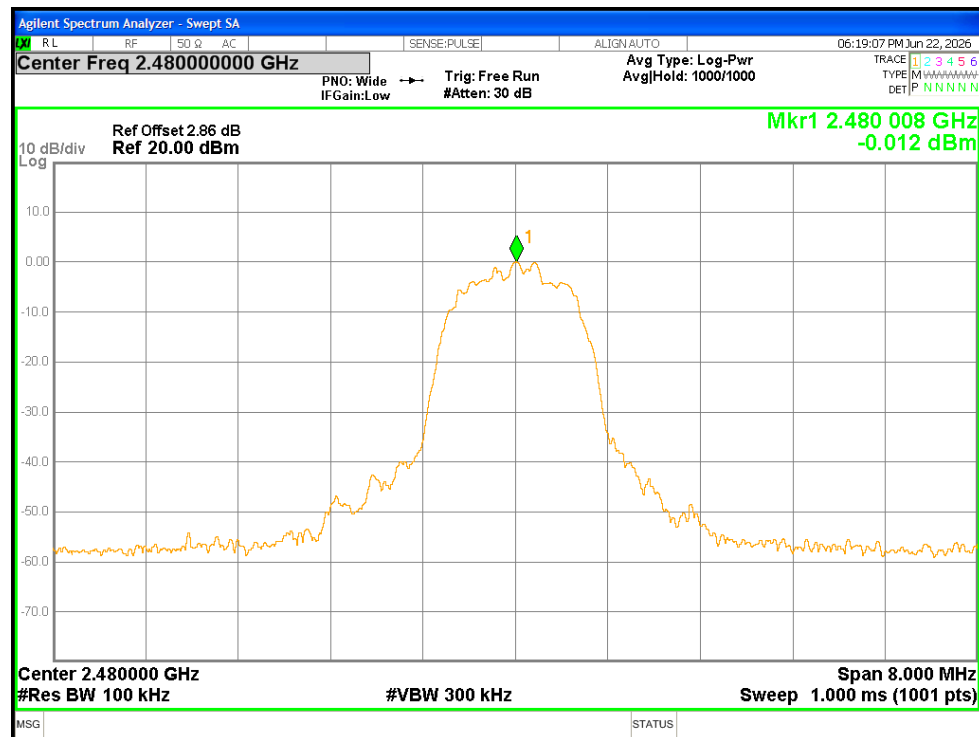
Band Edge NVNT 3-DH5 2402MHz No-Hopping Ref



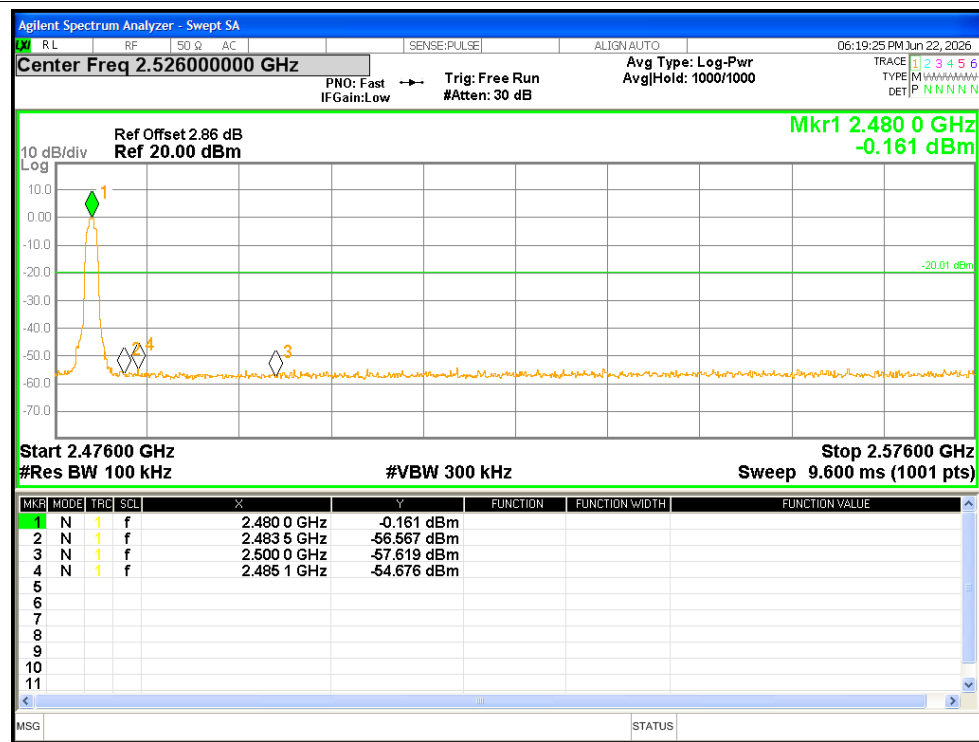
Band Edge NVNT 3-DH5 2402MHz No-Hopping Emission



Band Edge NVNT 3-DH5 2480MHz No-Hopping Ref



Band Edge NVNT 3-DH5 2480MHz No-Hopping Emission

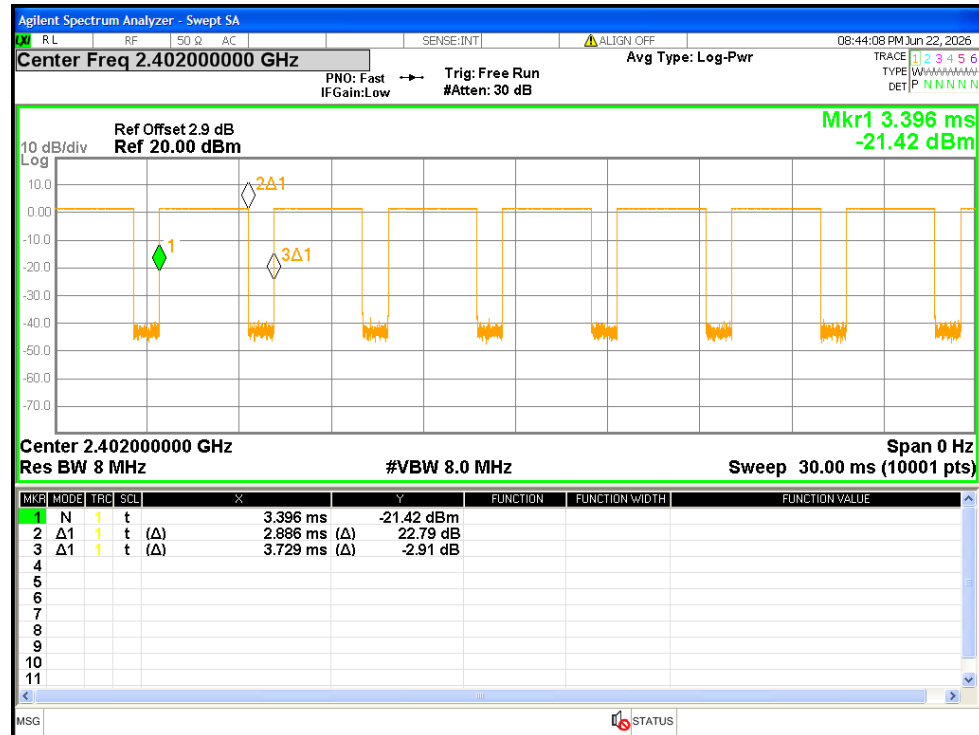


Duty Cycle

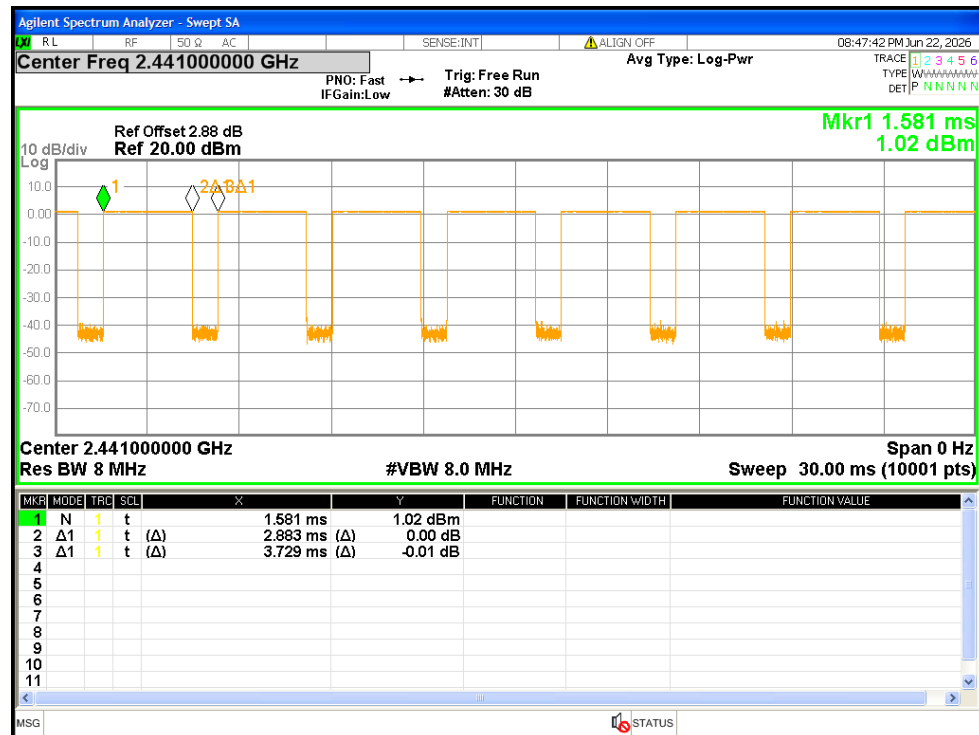
Mode	Frequency (MHz)	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
1-DH5	2402	2.886	3.729	77.39	1.11	0.35
1-DH5	2441	2.883	3.729	77.31	1.12	0.35
1-DH5	2480	2.883	3.729	77.31	1.12	0.35
2-DH5	2402	2.889	3.735	77.35	1.12	0.35
2-DH5	2441	2.889	3.735	77.35	1.12	0.35
2-DH5	2480	2.889	3.735	77.35	1.12	0.35
3-DH5	2402	2.892	3.738	77.37	1.11	0.35
3-DH5	2441	2.892	3.738	77.37	1.11	0.35
3-DH5	2480	2.889	3.735	77.35	1.12	0.35

Test Graphs

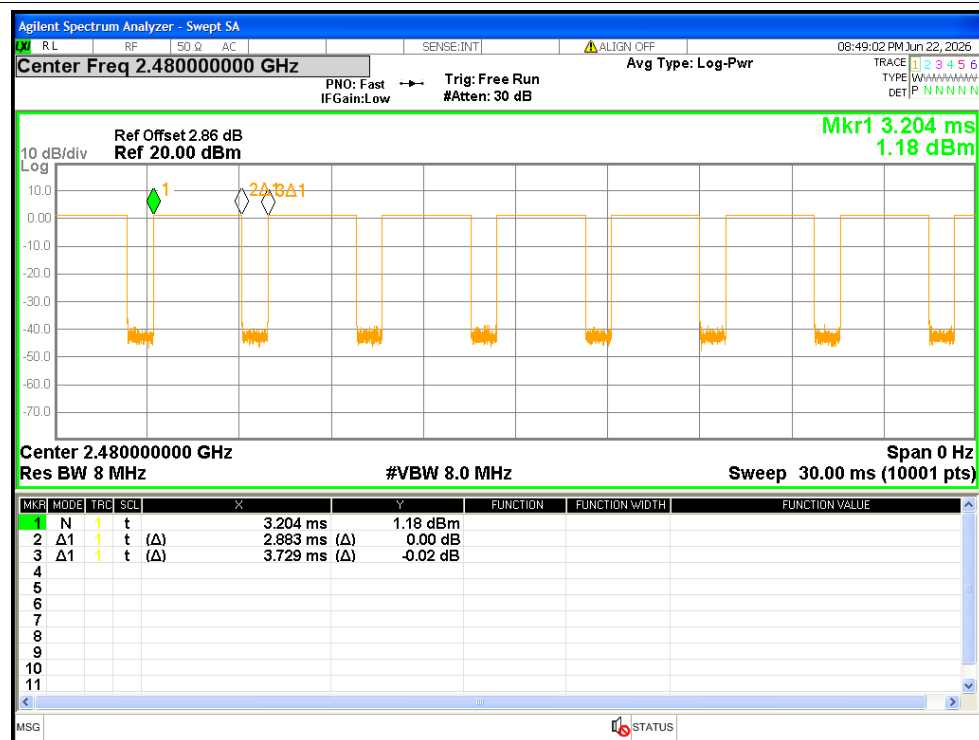
Duty Cycle NVNT 1-DH5 2402MHz



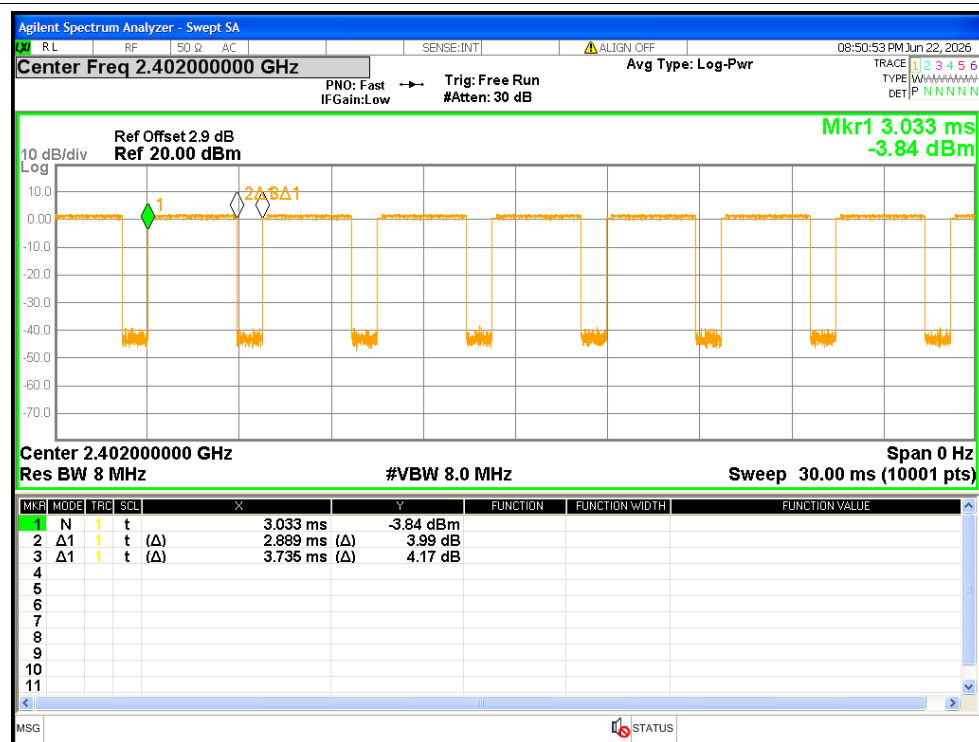
Duty Cycle NVNT 1-DH5 2441MHz



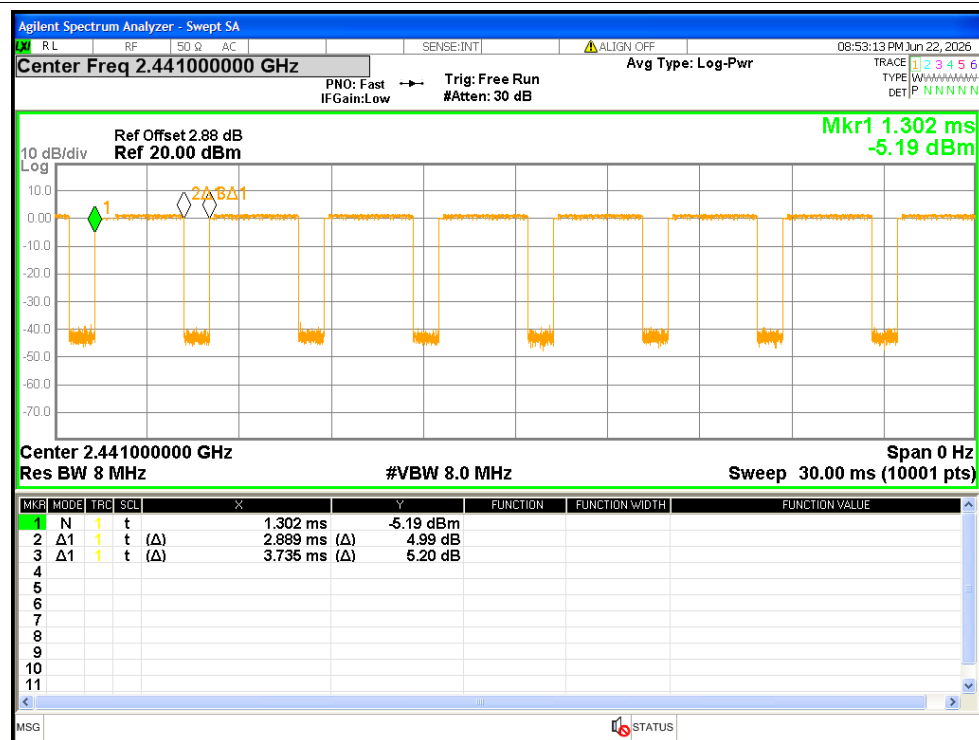
Duty Cycle NVNT 1-DH5 2480MHz



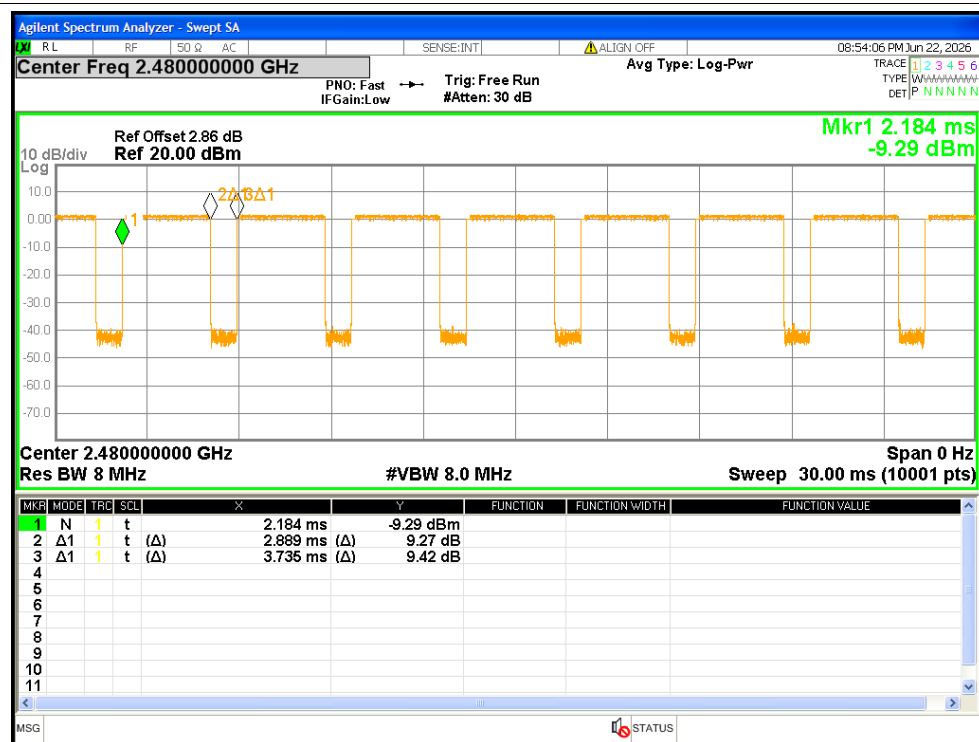
Duty Cycle NVNT 2-DH5 2402MHz



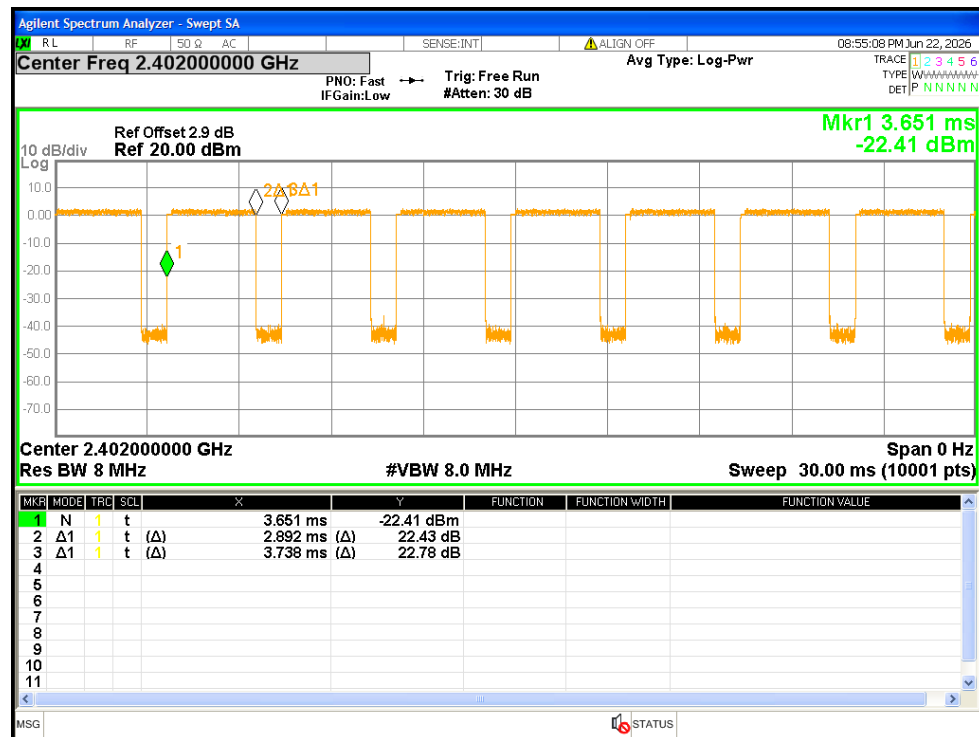
Duty Cycle NVNT 2-DH5 2441MHz



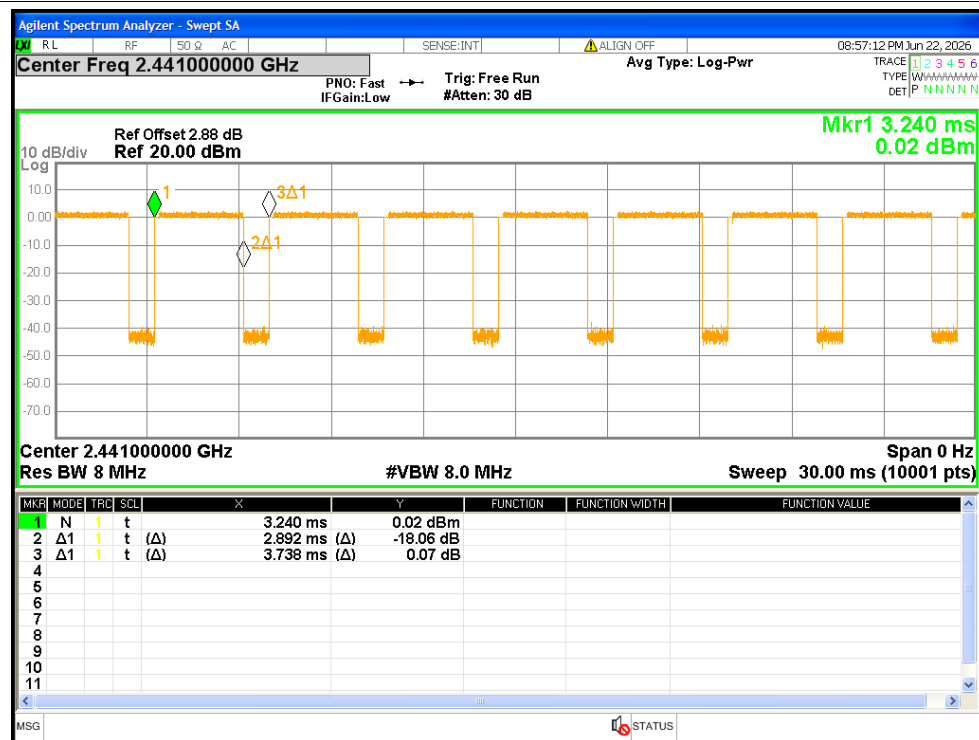
Duty Cycle NVNT 2-DH5 2480MHz



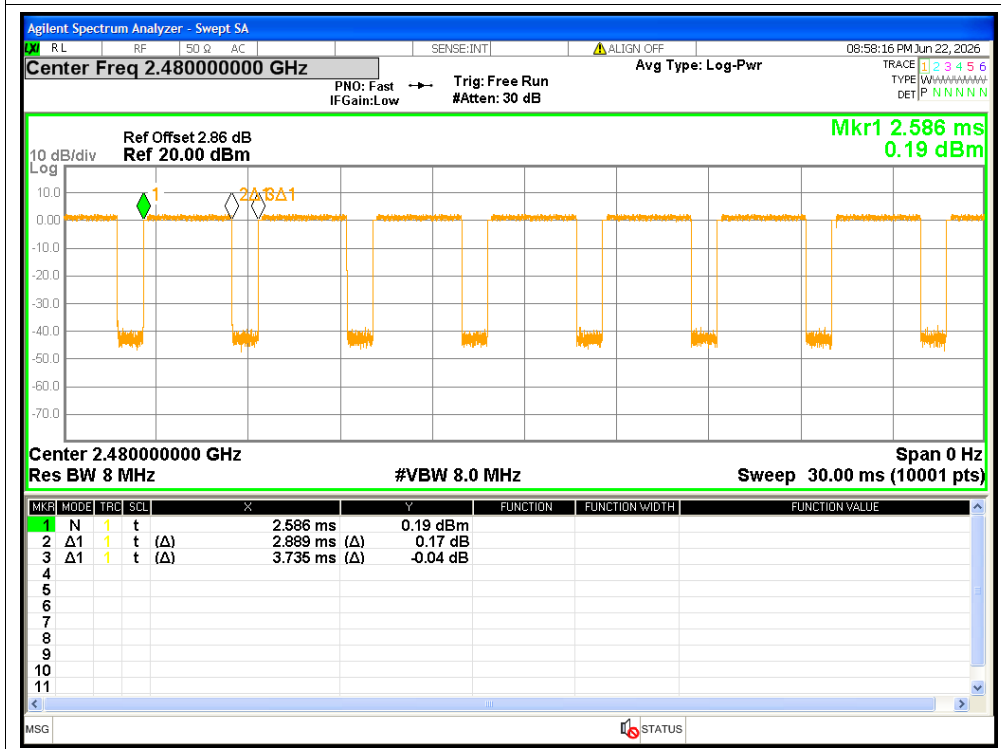
Duty Cycle NVNT 3-DH5 2402MHz



Duty Cycle NVNT 3-DH5 2441MHz



Duty Cycle NVNT 3-DH5 2480MHz

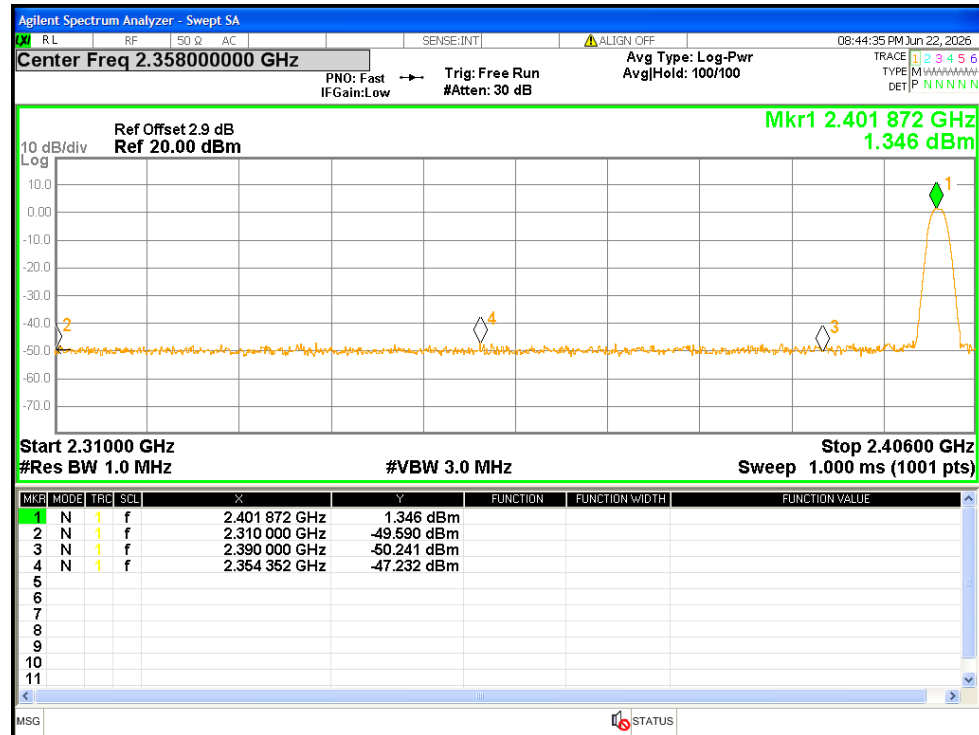


Restrict Band

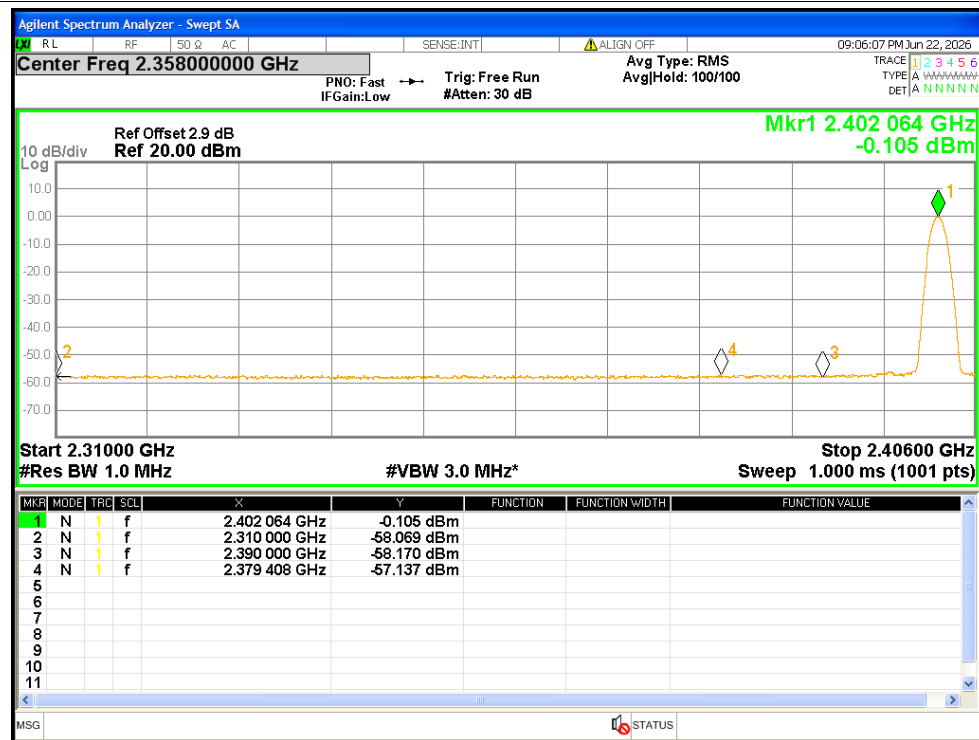
Mode	Frequency (MHz)	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
1-DH5	2402	No-Hopping	2310	-49.59	2	0	47.67	Peak	<=74	Pass
1-DH5	2402	No-Hopping	2310	-58.06	2	1.11	40.31	Average	<=54	Pass
1-DH5	2402	No-Hopping	2354.352	-47.23	2	0	50.03	Peak	<=74	Pass
1-DH5	2402	No-Hopping	2379.408	-57.13	2	1.11	41.24	Average	<=54	Pass
1-DH5	2402	No-Hopping	2390	-50.16	2	0	47.1	Peak	<=74	Pass
1-DH5	2402	No-Hopping	2390	-57.93	2	1.11	40.44	Average	<=54	Pass
1-DH5	2480	No-Hopping	2483.5	-49.27	2	0	47.99	Peak	<=74	Pass
1-DH5	2480	No-Hopping	2483.5	-56.43	2	1.12	41.95	Average	<=54	Pass
1-DH5	2480	No-Hopping	2491.384	-46.3	2	0	50.96	Peak	<=74	Pass
1-DH5	2480	No-Hopping	2483.56	-55.82	2	1.12	42.56	Average	<=54	Pass
1-DH5	2480	No-Hopping	2500	-48.5	2	0	48.76	Peak	<=74	Pass
1-DH5	2480	No-Hopping	2500	-57.05	2	1.12	41.33	Average	<=54	Pass
2-DH5	2402	No-Hopping	2310	-48.97	2	0	48.29	Peak	<=74	Pass
2-DH5	2402	No-Hopping	2310	-57.56	2	1.12	40.82	Average	<=54	Pass
2-DH5	2402	No-Hopping	2382.096	-46.65	2	0	50.61	Peak	<=74	Pass
2-DH5	2402	No-Hopping	2314.992	-57.15	2	1.12	41.23	Average	<=54	Pass
2-DH5	2402	No-Hopping	2390	-49.42	2	0	47.84	Peak	<=74	Pass
2-DH5	2402	No-Hopping	2390	-57.79	2	1.12	40.59	Average	<=54	Pass
2-DH5	2480	No-Hopping	2483.5	-49.01	2	0	48.25	Peak	<=74	Pass
2-DH5	2480	No-Hopping	2483.5	-56.55	2	1.12	41.83	Average	<=54	Pass
2-DH5	2480	No-Hopping	2491.528	-45.16	2	0	52.1	Peak	<=74	Pass
2-DH5	2480	No-Hopping	2486.32	-56.32	2	1.12	42.06	Average	<=54	Pass
2-DH5	2480	No-Hopping	2500	-48.61	2	0	48.65	Peak	<=74	Pass
2-DH5	2480	No-Hopping	2500	-56.95	2	1.12	41.43	Average	<=54	Pass
3-DH5	2402	No-Hopping	2310	-49.38	2	0	47.88	Peak	<=74	Pass
3-DH5	2402	No-Hopping	2310	-58.17	2	1.11	40.2	Average	<=54	Pass
3-DH5	2402	No-Hopping	2385.648	-46.42	2	0	50.84	Peak	<=74	Pass
3-DH5	2402	No-Hopping	2389.776	-56.9	2	1.11	41.47	Average	<=54	Pass
3-DH5	2402	No-Hopping	2390	-50.39	2	0	46.87	Peak	<=74	Pass
3-DH5	2402	No-Hopping	2390	-57.75	2	1.11	40.62	Average	<=54	Pass
3-DH5	2480	No-Hopping	2483.5	-45.9	2	0	51.36	Peak	<=74	Pass
3-DH5	2480	No-Hopping	2483.5	-56.53	2	1.12	41.85	Average	<=54	Pass
3-DH5	2480	No-Hopping	2483.512	-45.9	2	0	51.36	Peak	<=74	Pass
3-DH5	2480	No-Hopping	2499.928	-56.26	2	1.12	42.12	Average	<=54	Pass
3-DH5	2480	No-Hopping	2500	-50.25	2	0	47.01	Peak	<=74	Pass
3-DH5	2480	No-Hopping	2500	-57.35	2	1.12	41.03	Average	<=54	Pass

Test Graphs

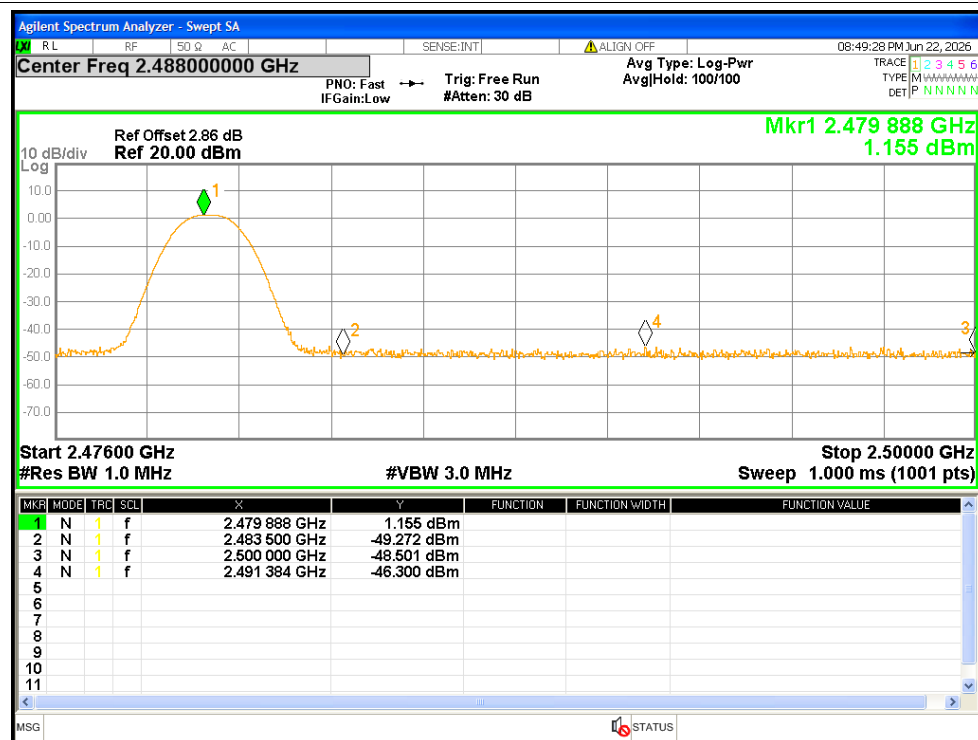
Restrict Band NVNT 1-DH5 2402MHz No-Hopping Peak



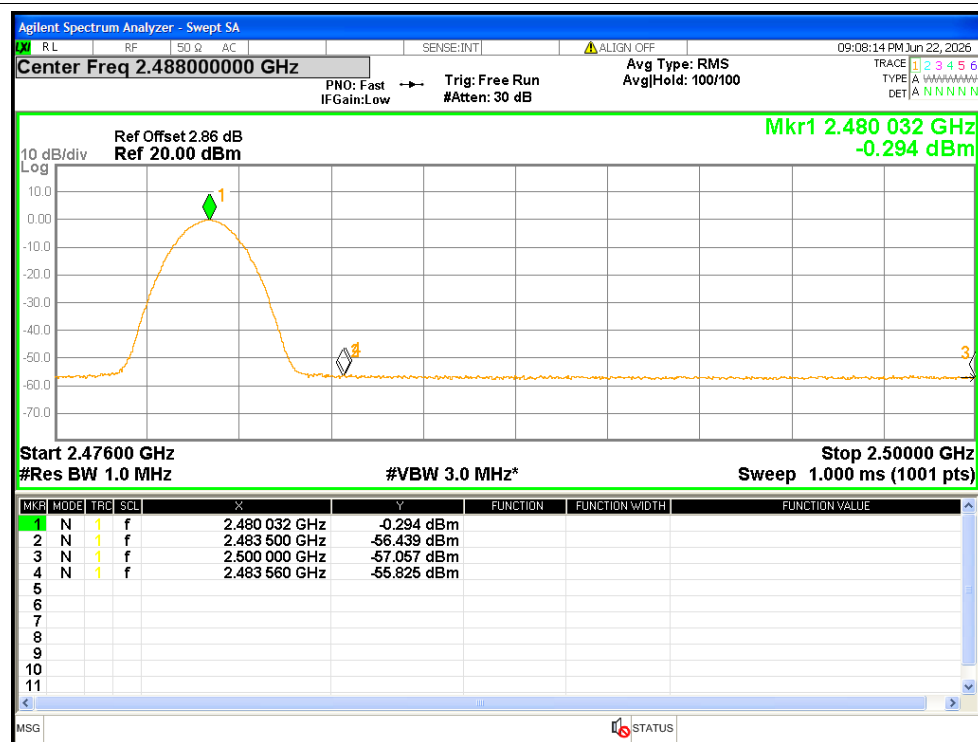
Restrict Band NVNT 1-DH5 2402MHz No-Hopping Average



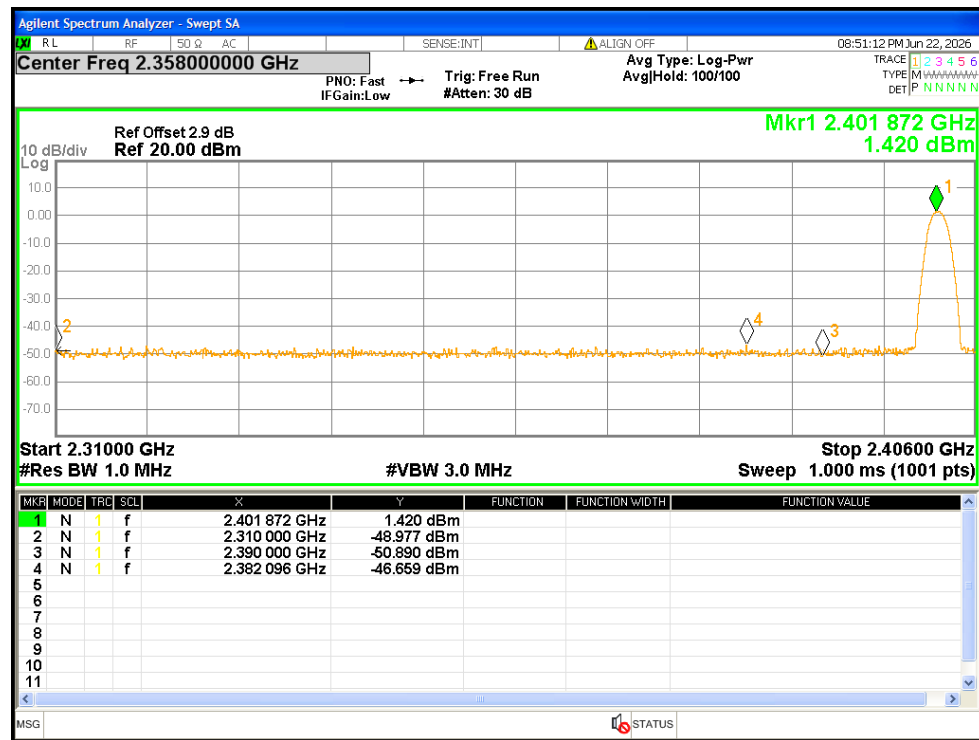
Restrict Band NVNT 1-DH5 2480MHz No-Hopping Peak



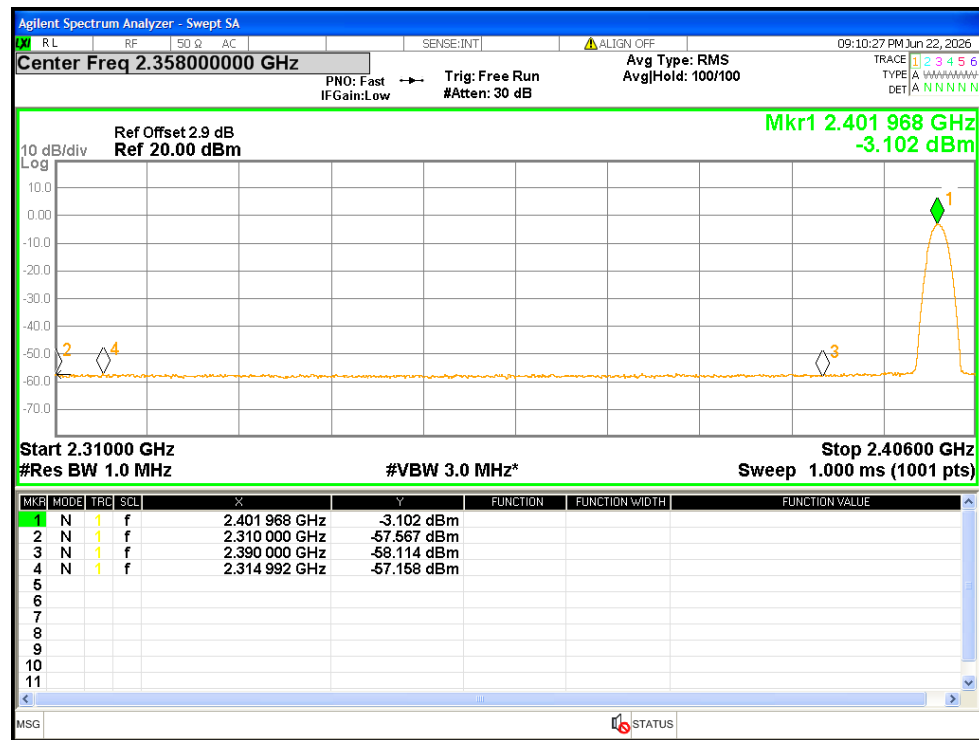
Restrict Band NVNT 1-DH5 2480MHz No-Hopping Average



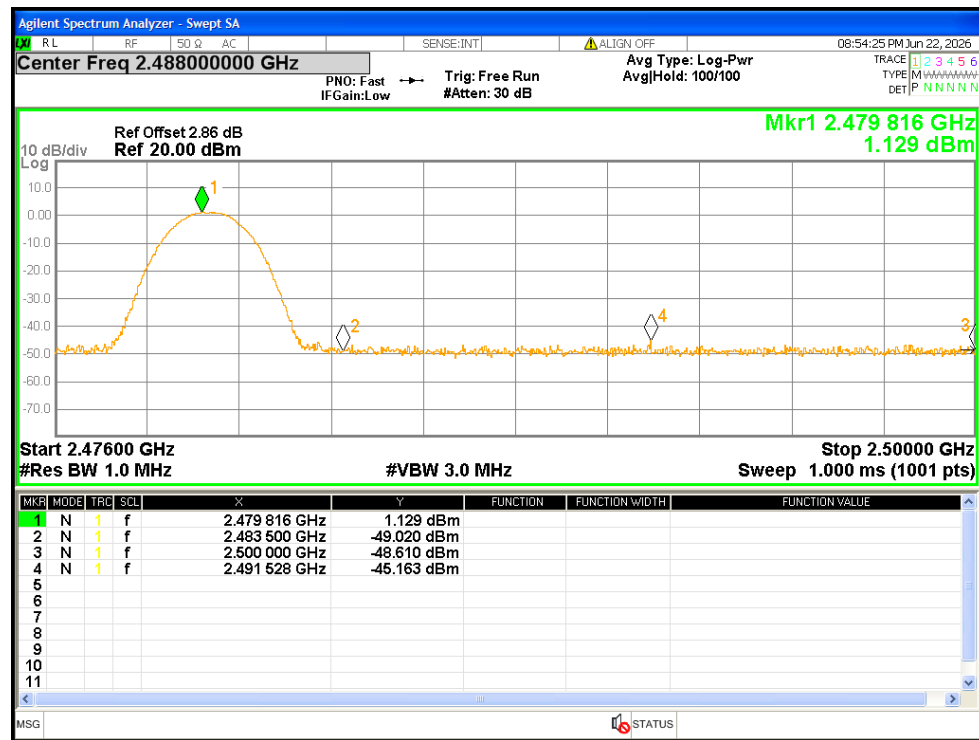
Restrict Band NVNT 2-DH5 2402MHz No-Hopping Peak



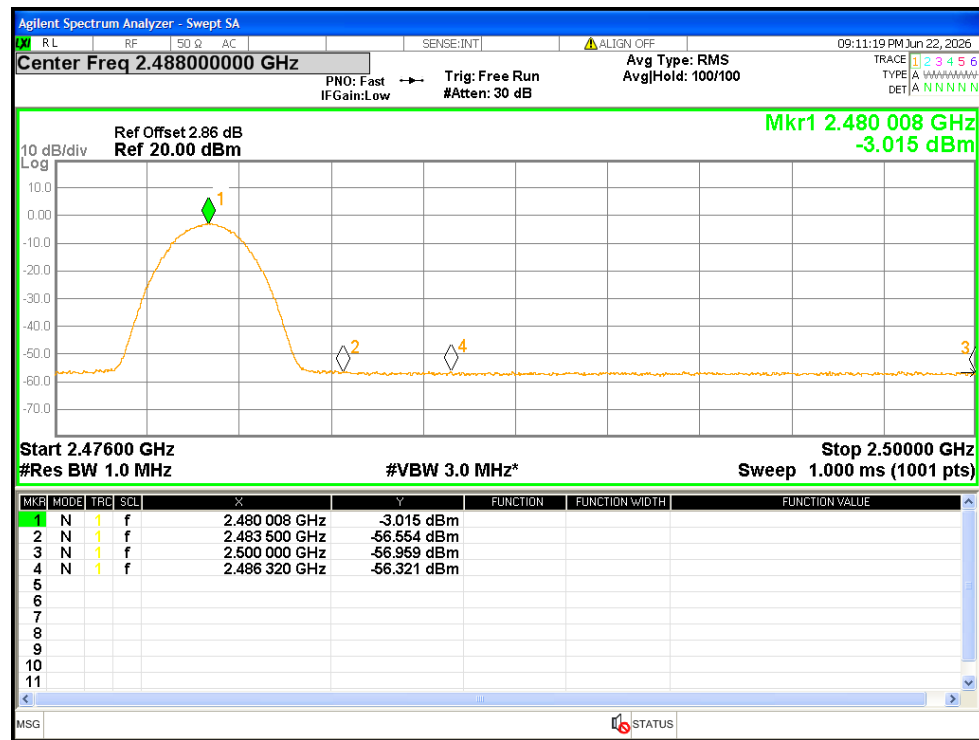
Restrict Band NVNT 2-DH5 2402MHz No-Hopping Average



Restrict Band NVNT 2-DH5 2480MHz No-Hopping Peak

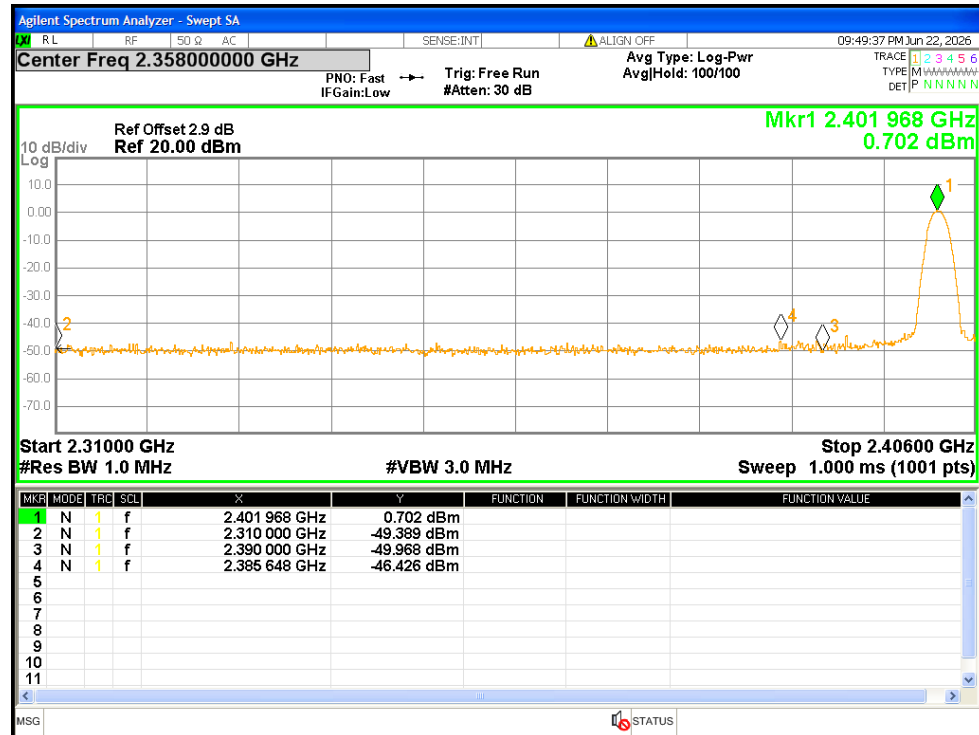


Restrict Band NVNT 2-DH5 2480MHz No-Hopping Average

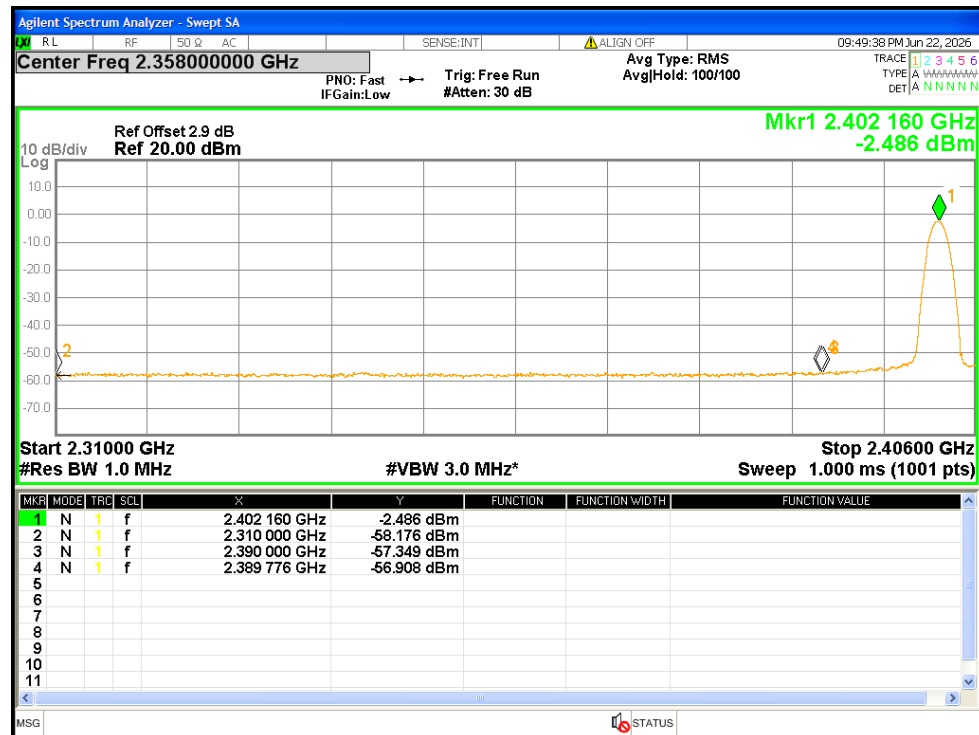


Test Graphs

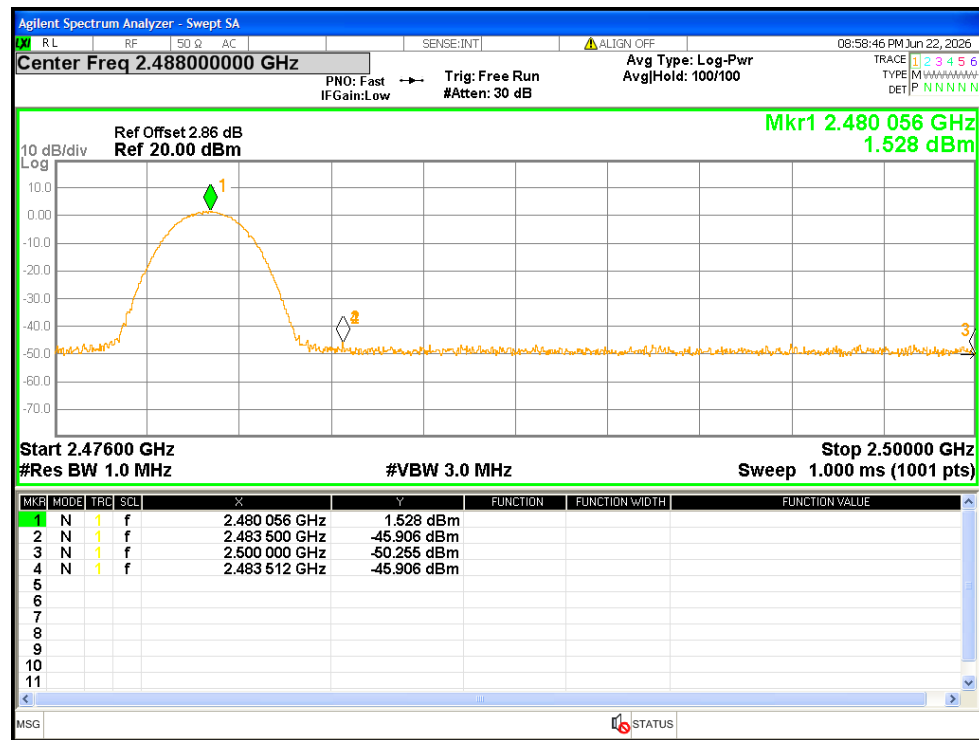
Restrict Band NVNT 3-DH5 2402MHz No-Hopping Peak



Restrict Band NVNT 3-DH5 2402MHz No-Hopping Average



Restrict Band NVNT 3-DH5 2480MHz No-Hopping Peak



Restrict Band NVNT 3-DH5 2480MHz No-Hopping Average

