

FCC Appendix RF Test Data for BT

FCC ID : **WWE-2IHSK1031**

Company : **LIFEWORCS TECHNOLOGY GROUP LLC.**

EUT : **ECLIPSE SPEAKER WITH LED LIGHT**

Model Number : **2IHSK1013**

Report No. : **CTA26062201602**

Reviewed By : **Eric Wang**

Dwell Time

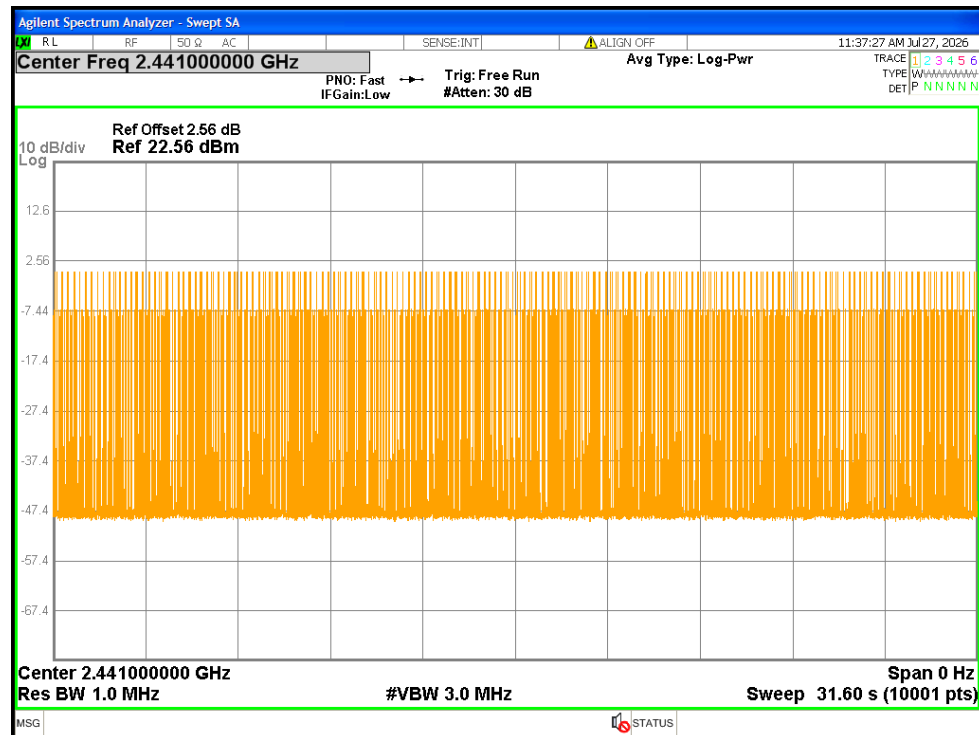
Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
1-DH1	2441	0.402	127.434	317	31600	<=400	Pass
1-DH3	2441	1.658	273.57	165	31600	<=400	Pass
1-DH5	2441	2.906	316.754	109	31600	<=400	Pass
2-DH1	2441	0.412	130.604	317	31600	<=400	Pass
2-DH3	2441	1.664	257.92	155	31600	<=400	Pass
2-DH5	2441	2.912	297.024	102	31600	<=400	Pass
3-DH1	2441	0.414	131.238	317	31600	<=400	Pass
3-DH3	2441	1.664	252.928	152	31600	<=400	Pass
3-DH5	2441	2.914	317.626	109	31600	<=400	Pass

Test Graphs

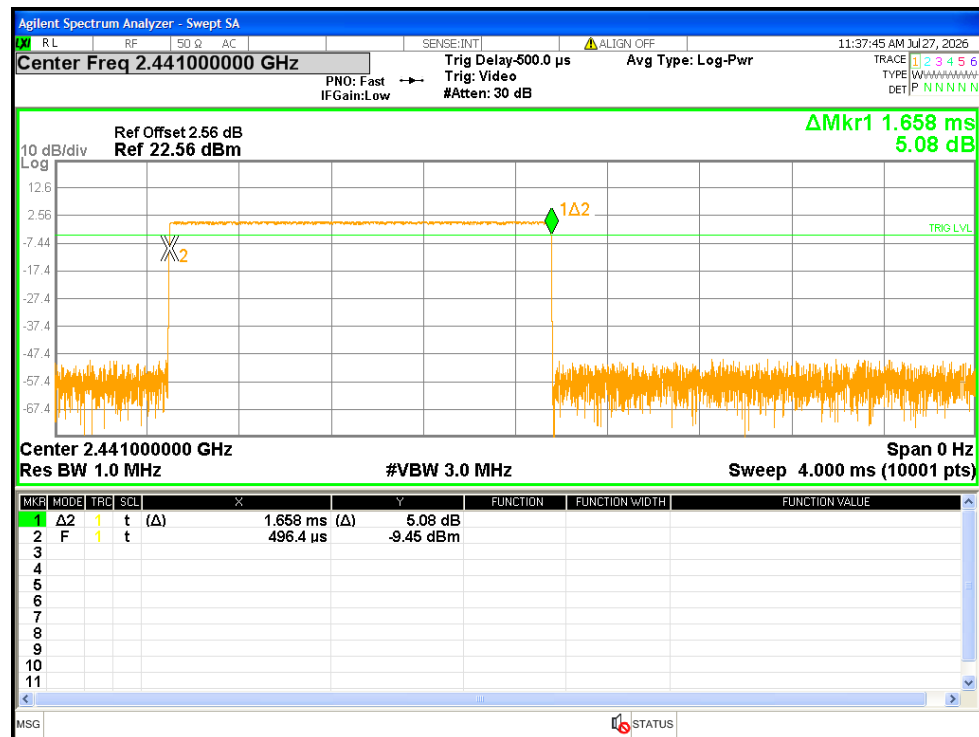
Dwell NVNT 1-DH1 2441MHz One Burst



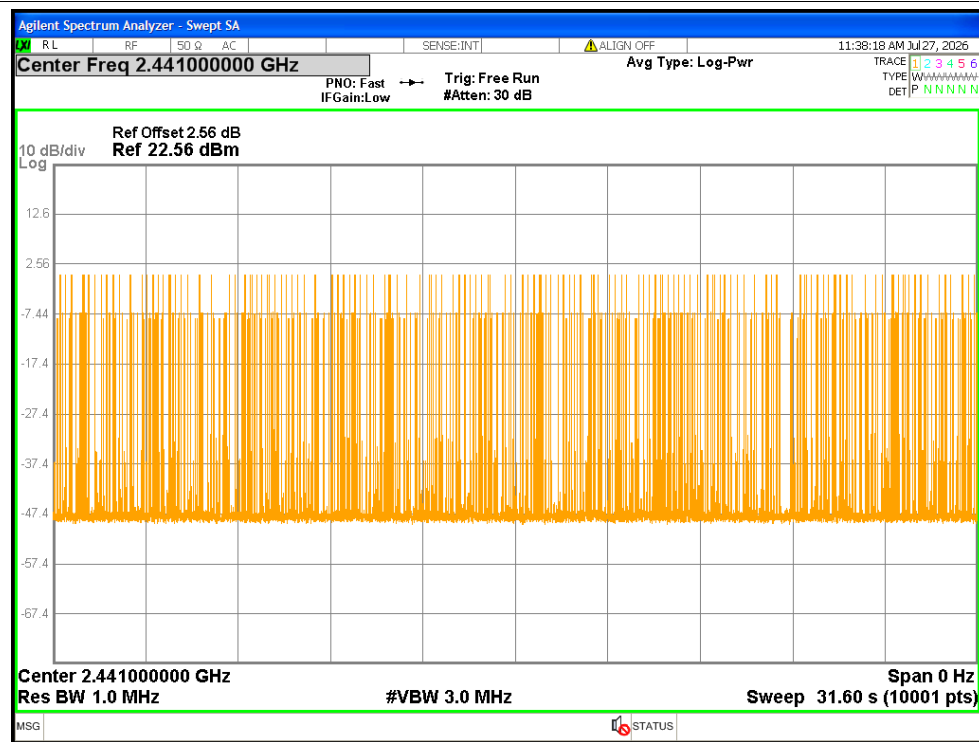
Dwell NVNT 1-DH1 2441MHz Accumulated



Dwell NVNT 1-DH3 2441MHz One Burst



Dwell NVNT 1-DH3 2441MHz Accumulated



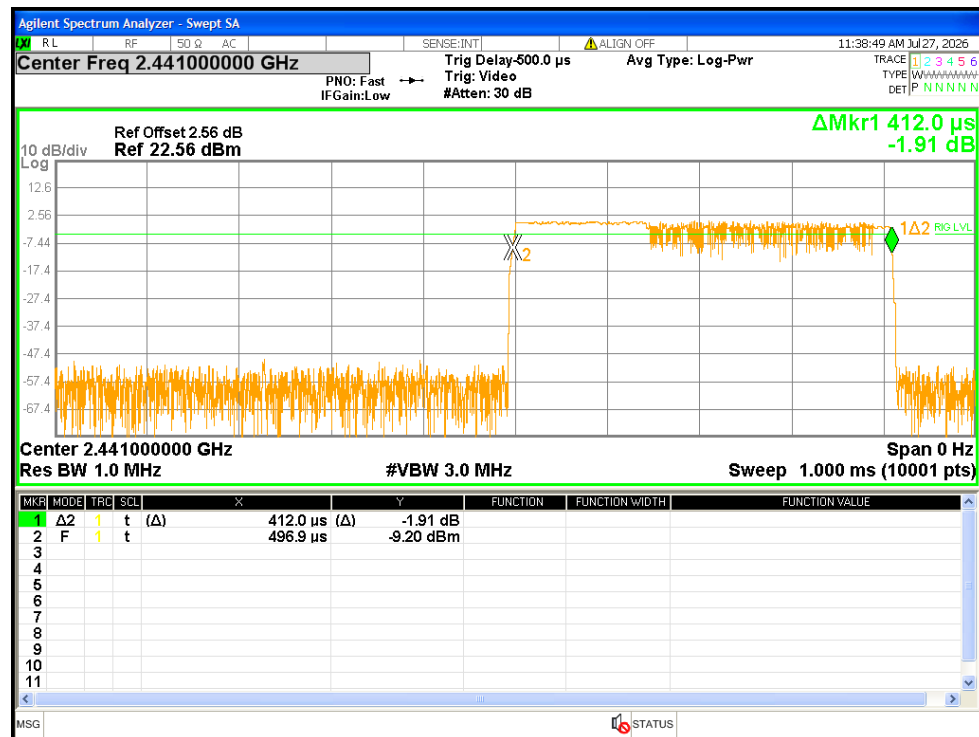
Dwell NVNT 1-DH5 2441MHz One Burst



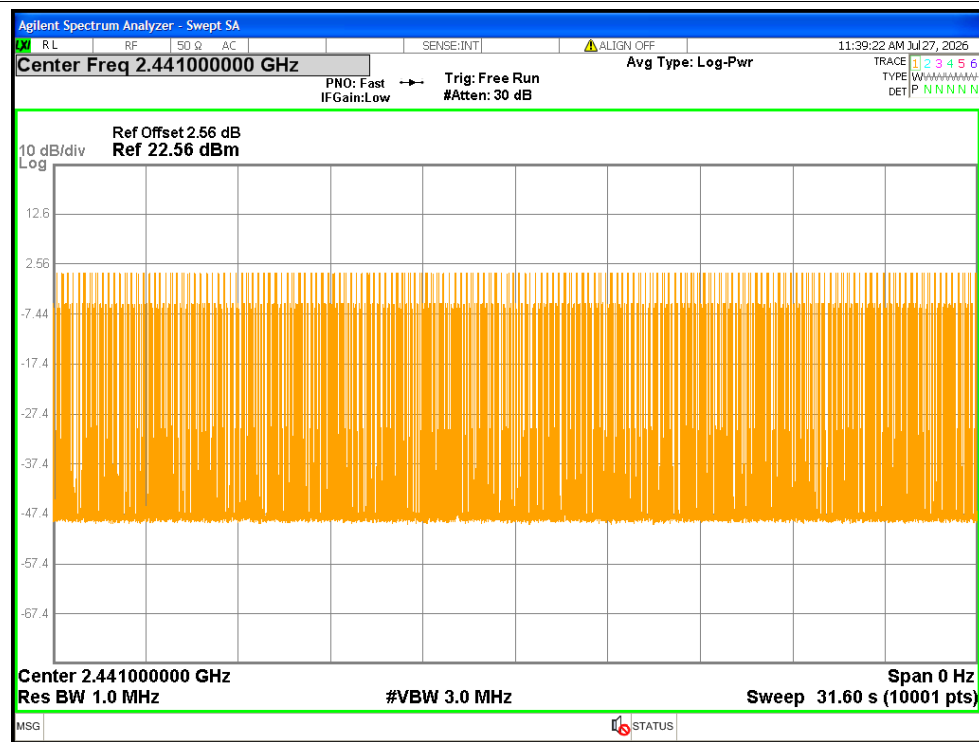
Dwell NVNT 1-DH5 2441MHz Accumulated



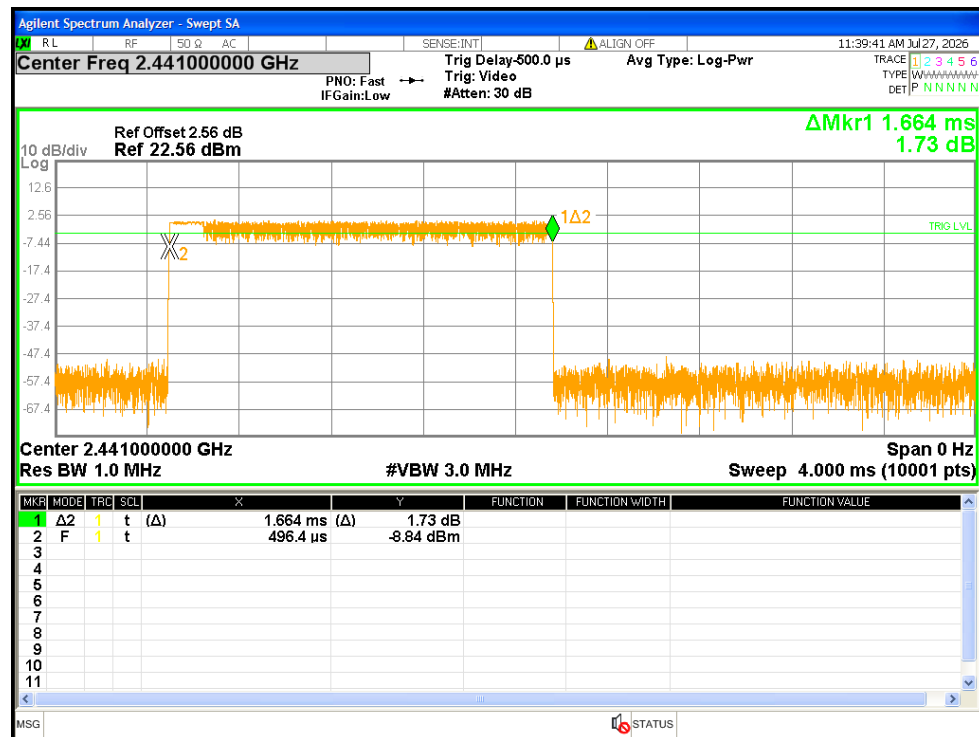
Dwell NVNT 2-DH1 2441MHz One Burst



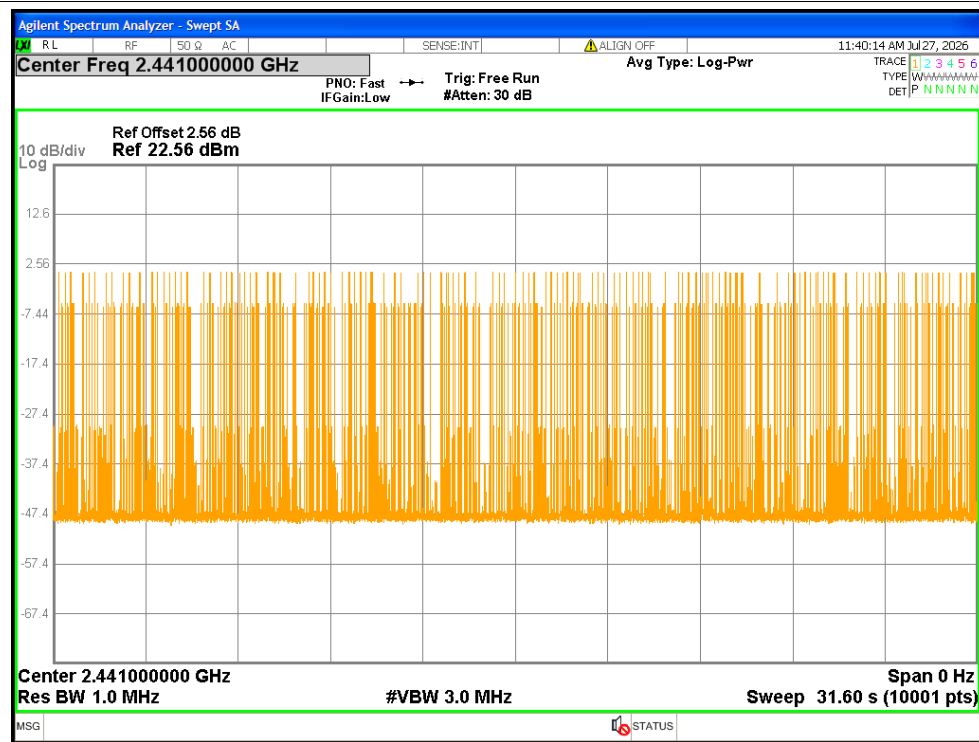
Dwell NVNT 2-DH1 2441MHz Accumulated



Dwell NVNT 2-DH3 2441MHz One Burst



Dwell NVNT 2-DH3 2441MHz Accumulated



[illegible]

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Q AC SENSE:INT ALIGN OFF 11:28:06 AM Jul 27, 2026

Center Freq 2.441000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr

TRACE 1 2 3 4 5 6
TYPE W W W W W W
DET P N N N N N

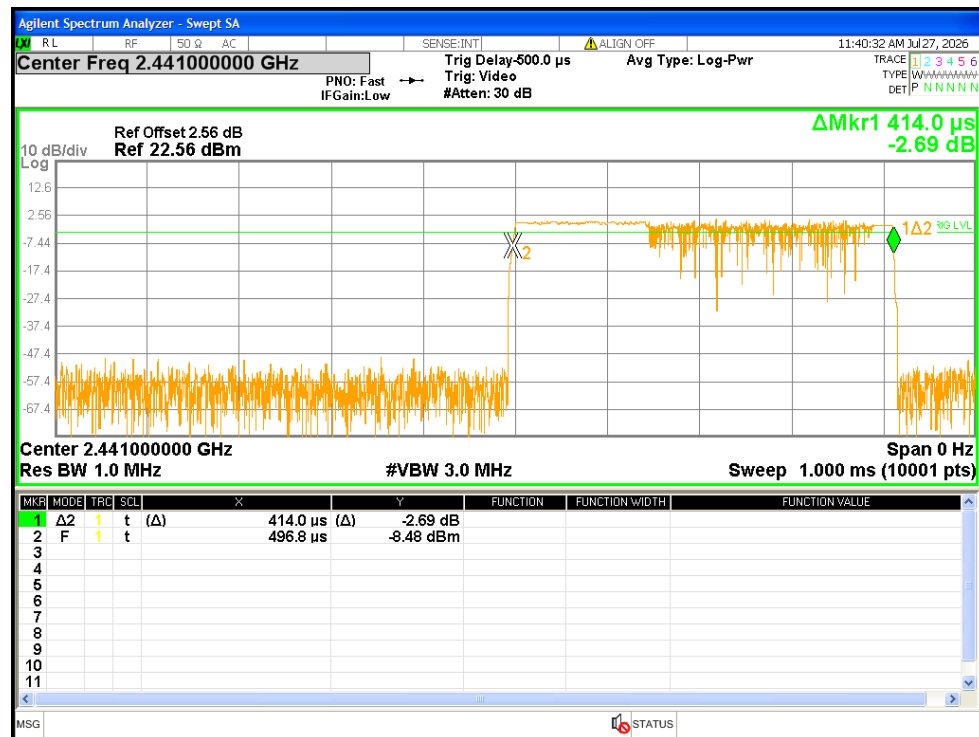
Ref Offset 2.56 dB
Ref 20.00 dBm

10 dB/div
Log

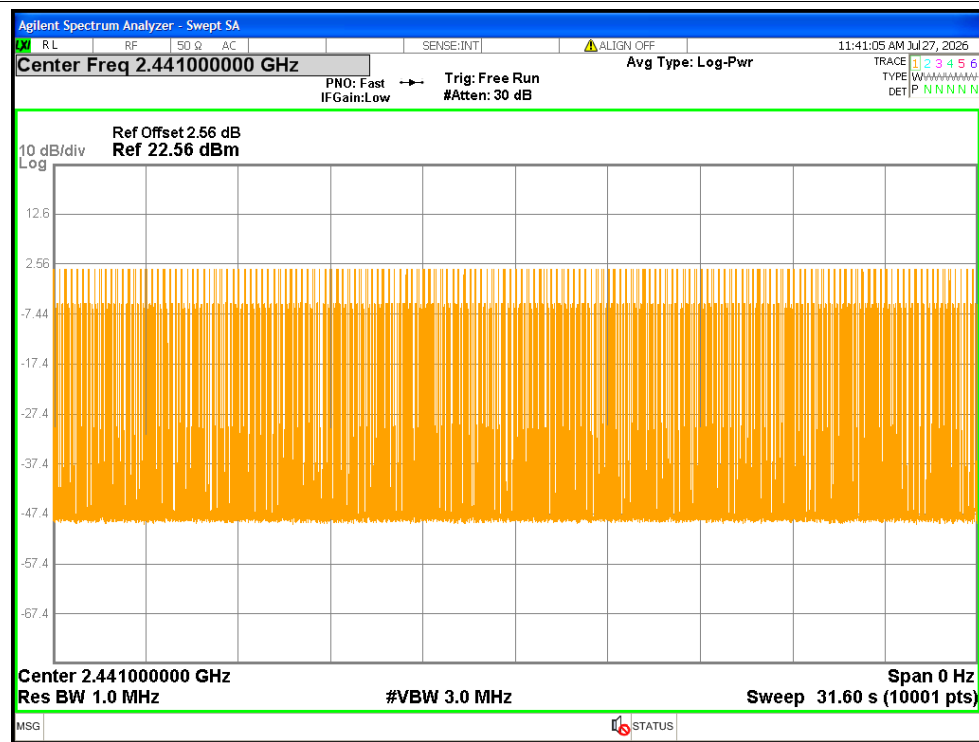
Center 2.441000000 GHz Span 0 Hz
Res BW 1.0 MHz #VBW 3.0 MHz Sweep 31.60 s (10001 pts)

MSG STATUS

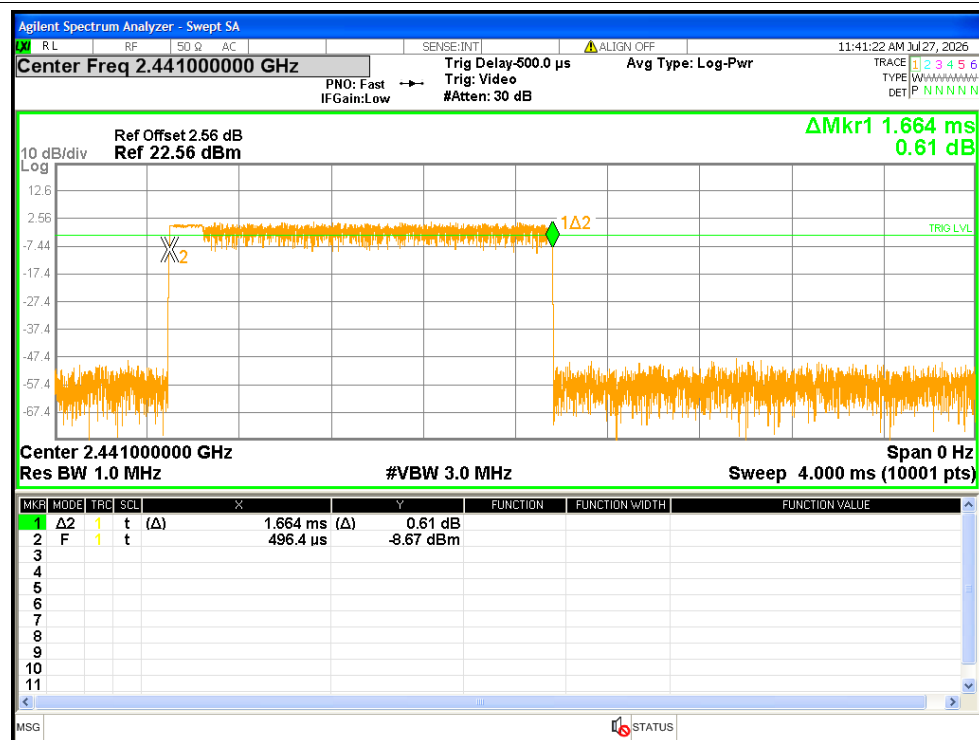
Dwell NVNT 3-DH1 2441MHz One Burst



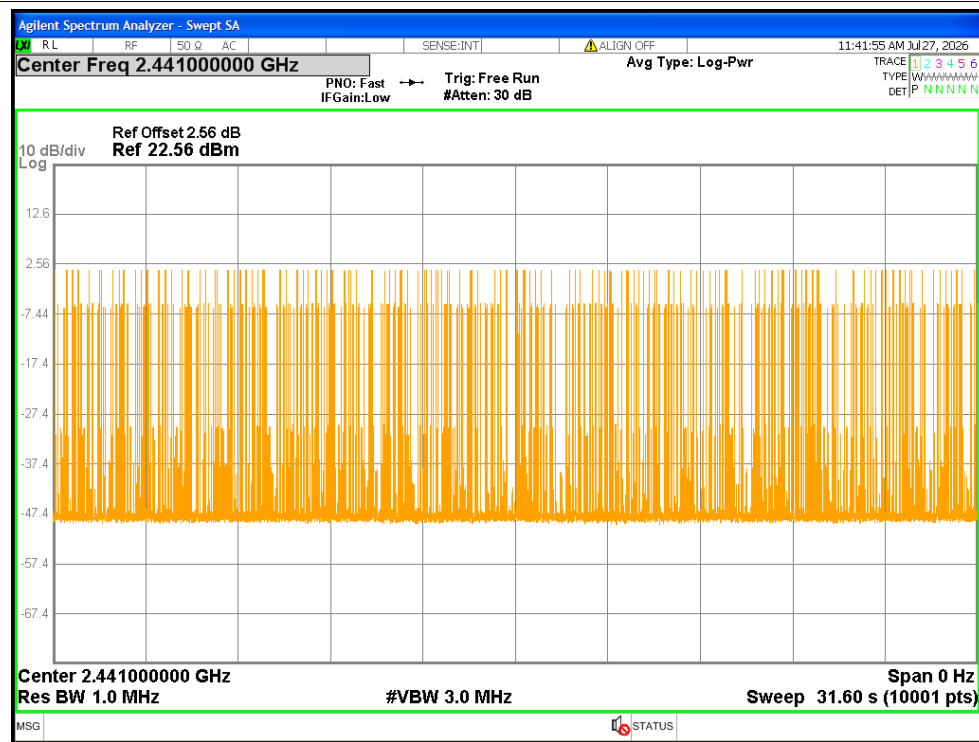
Dwell NVNT 3-DH1 2441MHz Accumulated



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

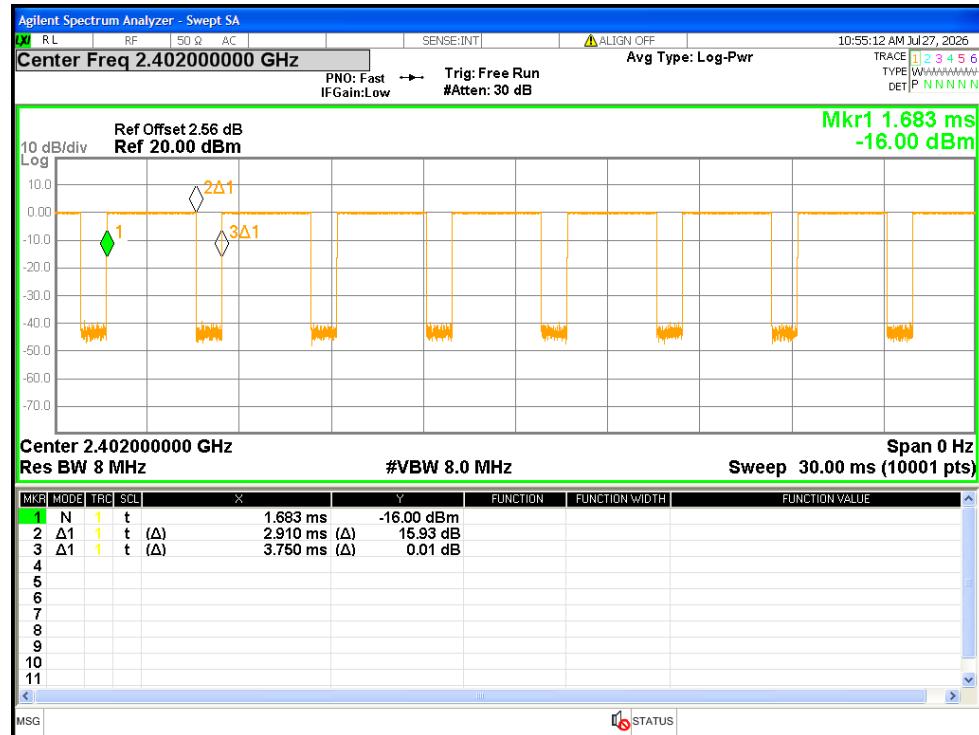


Duty Cycle

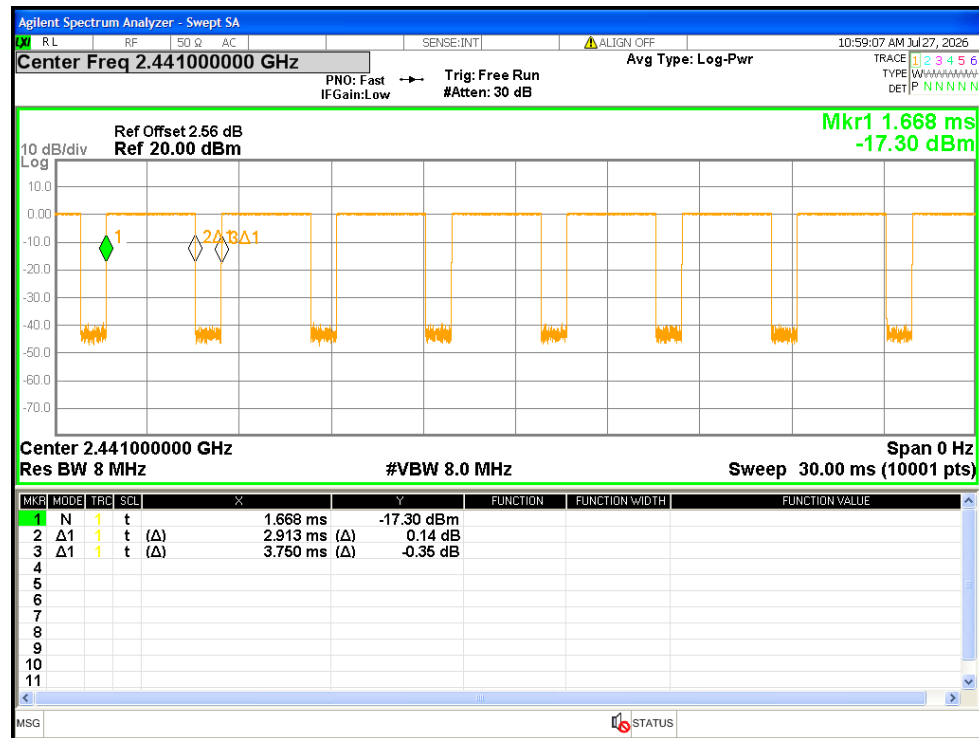
Mode	Frequency (MHz)	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
1-DH5	2402	2.91	3.75	77.6	1.1	0.34
1-DH5	2441	2.913	3.75	77.68	1.1	0.34
1-DH5	2480	2.91	3.75	77.6	1.1	0.34
2-DH5	2402	2.916	3.75	77.76	1.09	0.34
2-DH5	2441	2.916	3.75	77.76	1.09	0.34
2-DH5	2480	2.919	3.75	77.84	1.09	0.34
3-DH5	2402	2.919	3.75	77.84	1.09	0.34
3-DH5	2441	2.919	3.75	77.84	1.09	0.34
3-DH5	2480	2.922	3.75	77.92	1.08	0.34

Test Graphs

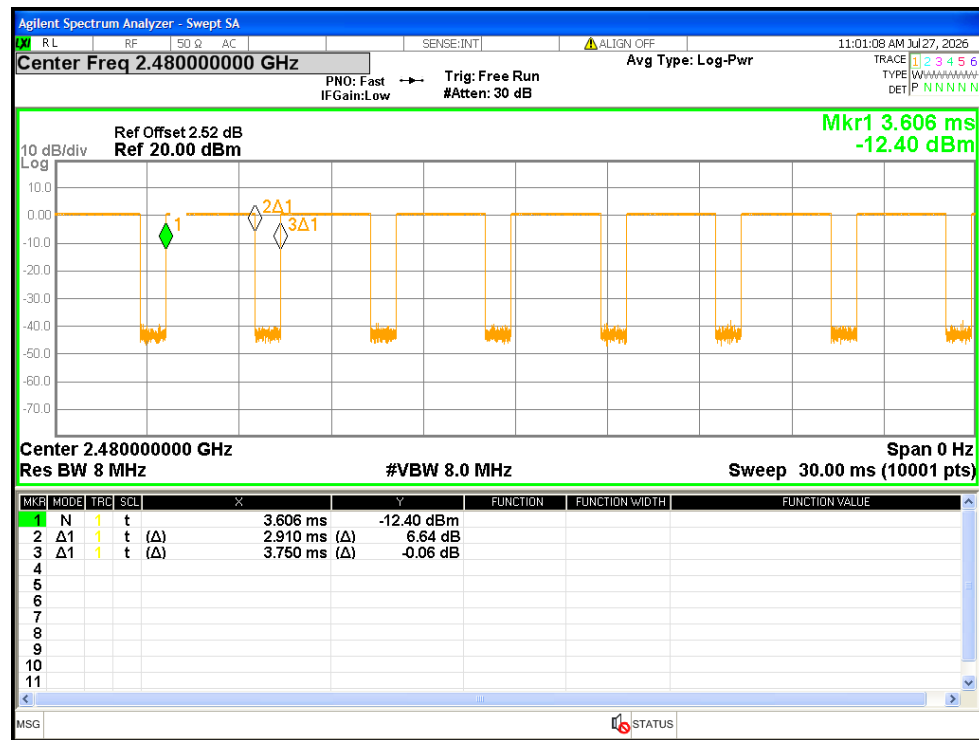
Duty Cycle NVNT 1-DH5 2402MHz



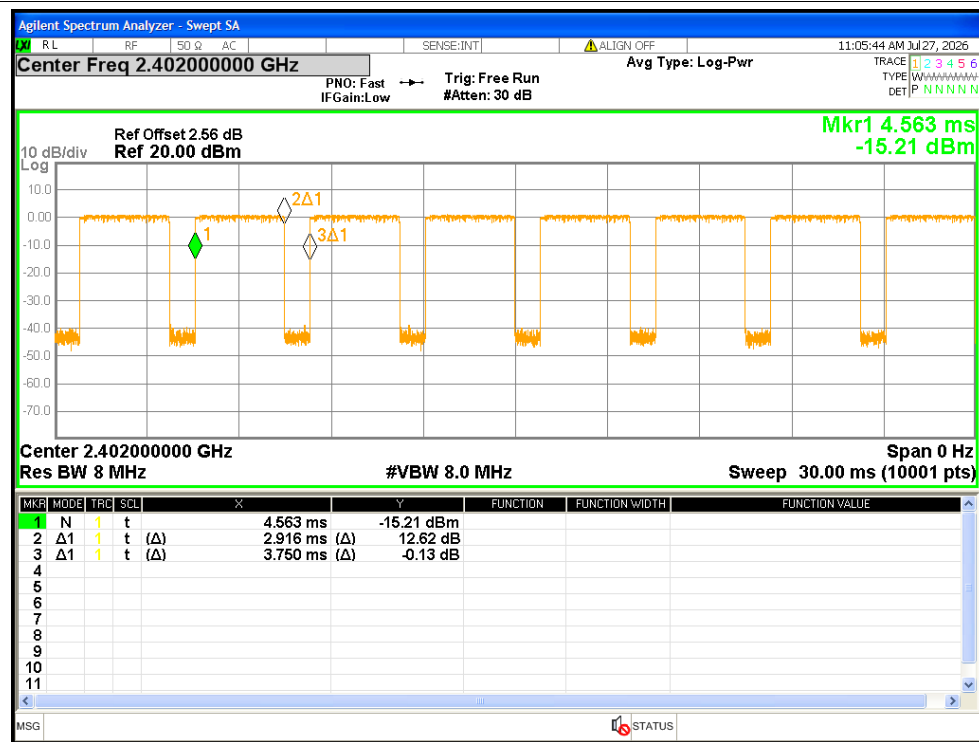
Duty Cycle NVNT 1-DH5 2441MHz



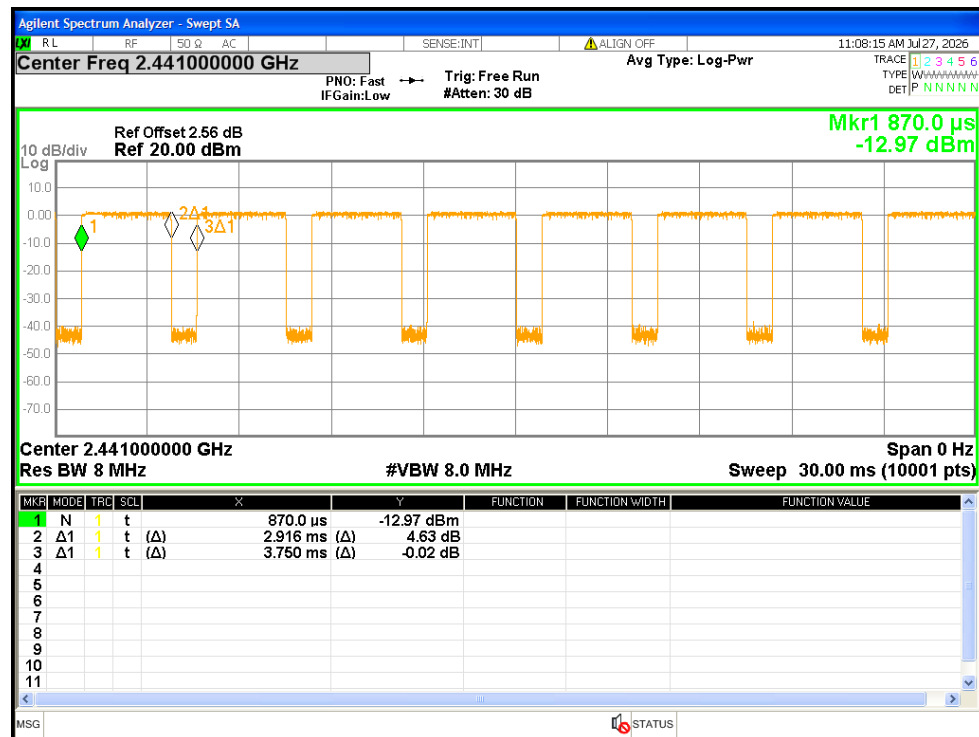
Duty Cycle NVNT 1-DH5 2480MHz



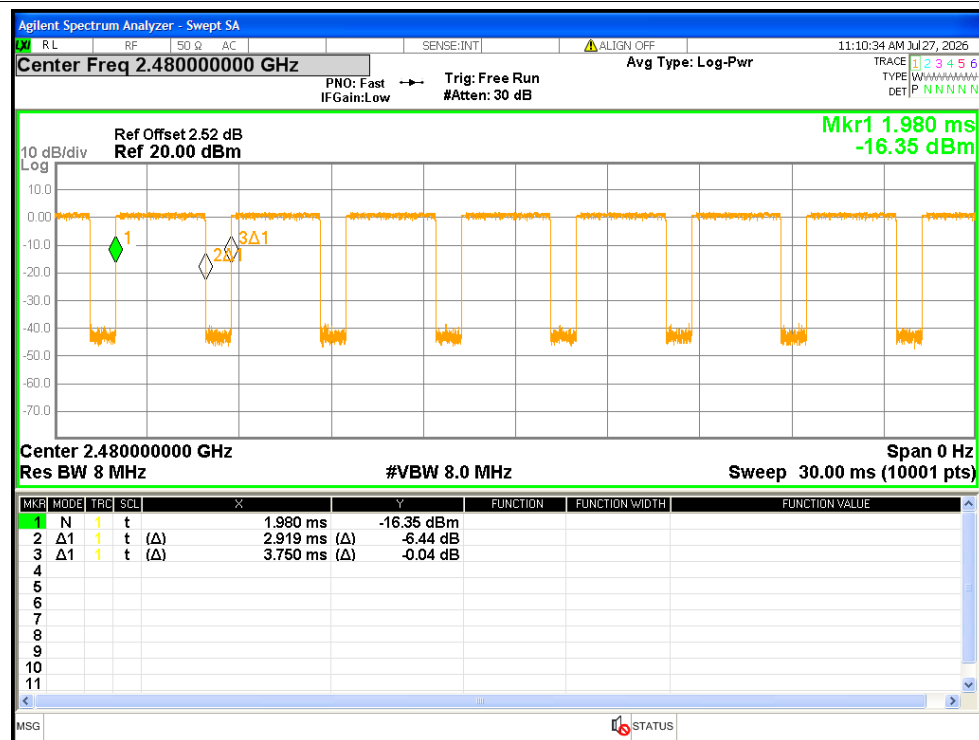
Duty Cycle NVNT 2-DH5 2402MHz



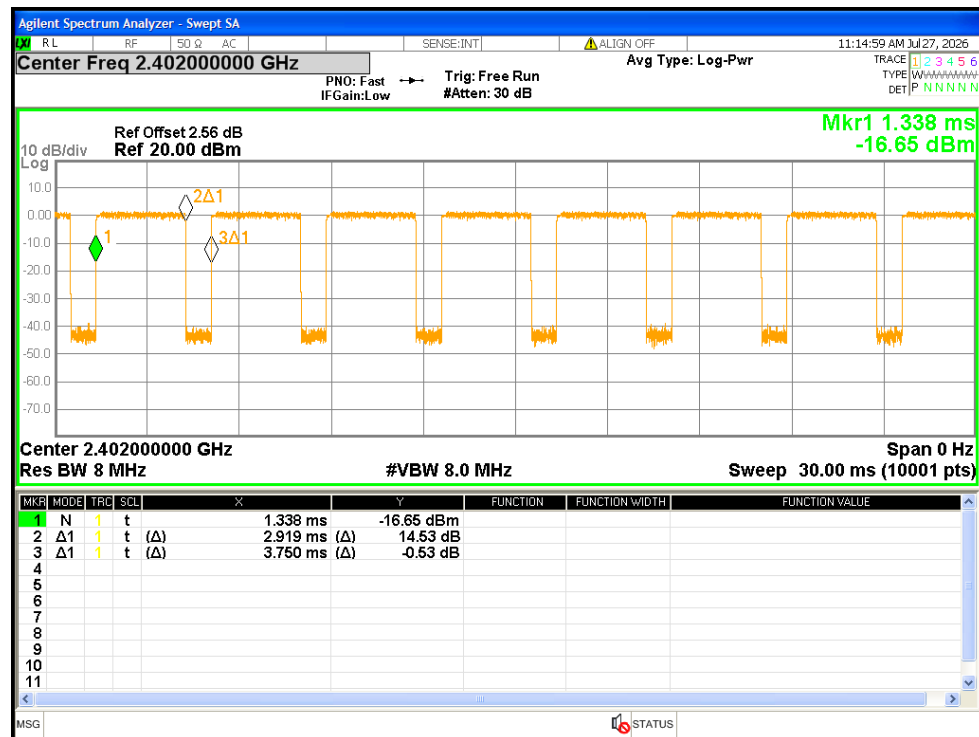
Duty Cycle NVNT 2-DH5 2441MHz



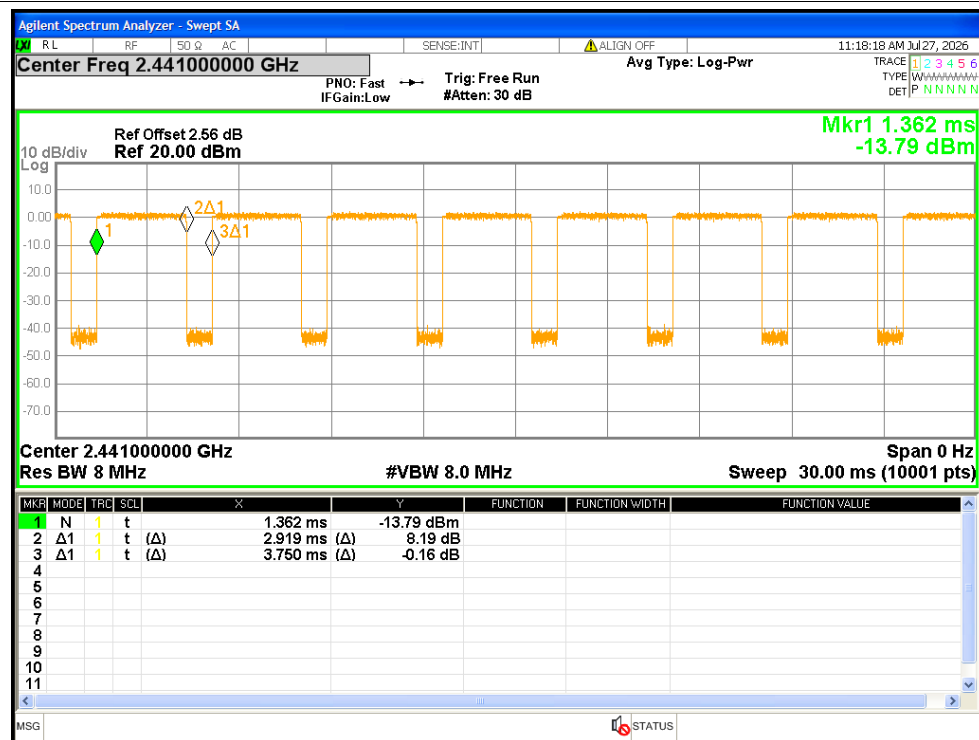
Duty Cycle NVNT 2-DH5 2480MHz



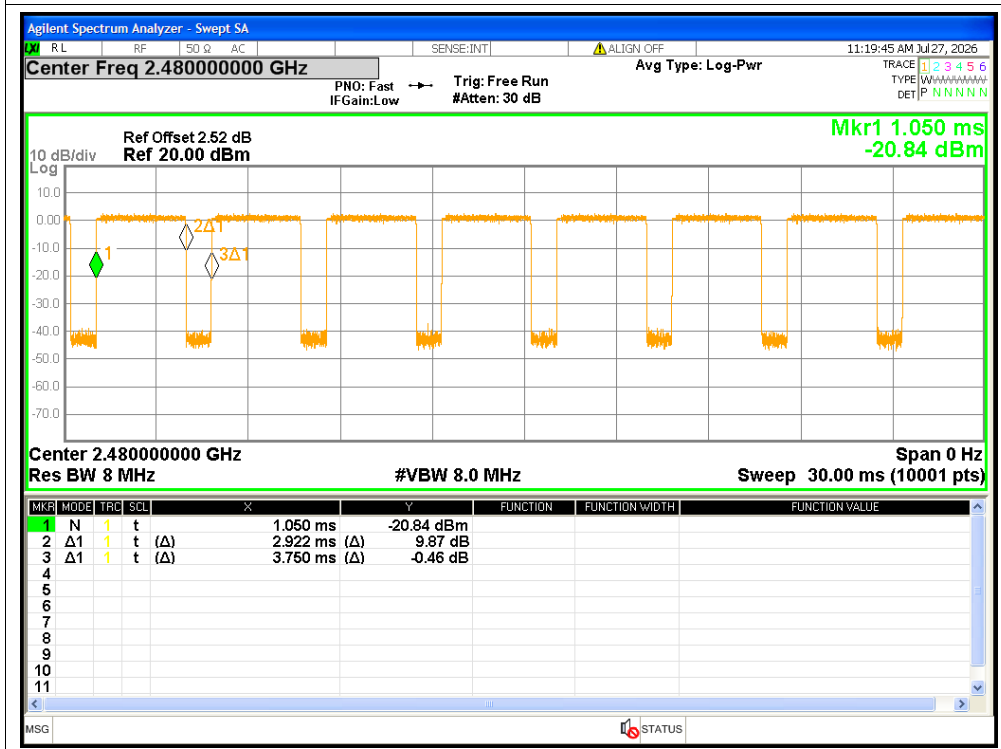
Duty Cycle NVNT 3-DH5 2402MHz



Duty Cycle NVNT 3-DH5 2441MHz



Duty Cycle NVNT 3-DH5 2480MHz



Maximum Peak Conducted Output Power

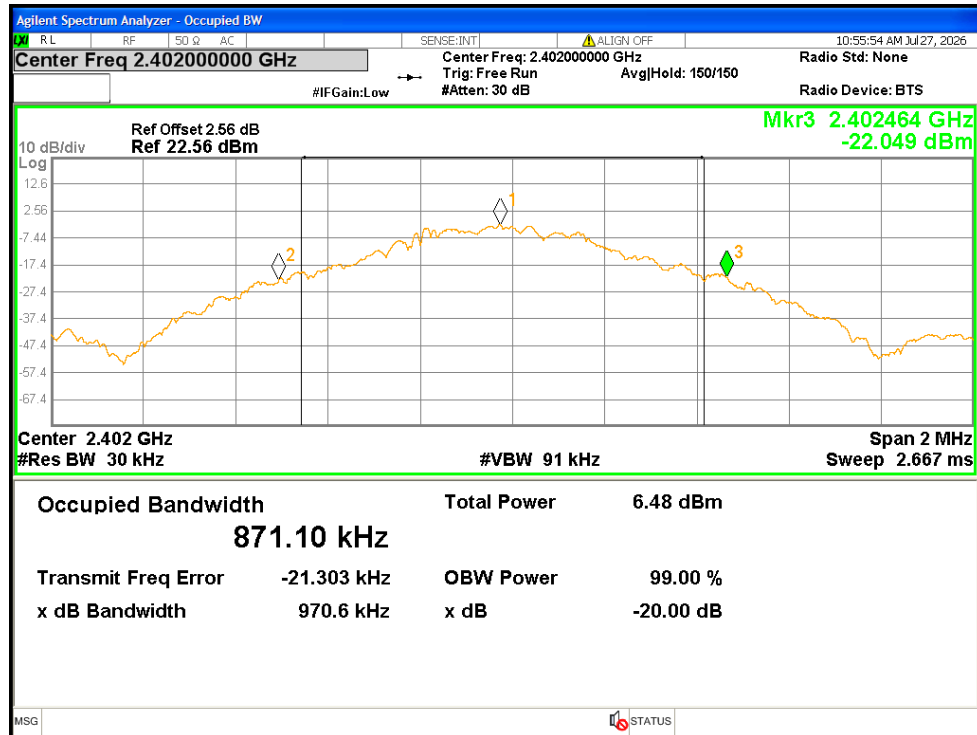
Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
1-DH5	2402	0.05	<=30	Pass
1-DH5	2441	0.43	<=30	Pass
1-DH5	2480	0.78	<=30	Pass
2-DH5	2402	0.91	<=21	Pass
2-DH5	2441	1.27	<=21	Pass
2-DH5	2480	1.6	<=21	Pass
3-DH5	2402	1.49	<=21	Pass
3-DH5	2441	1.89	<=21	Pass
3-DH5	2480	2.26	<=21	Pass

-20dB Bandwidth

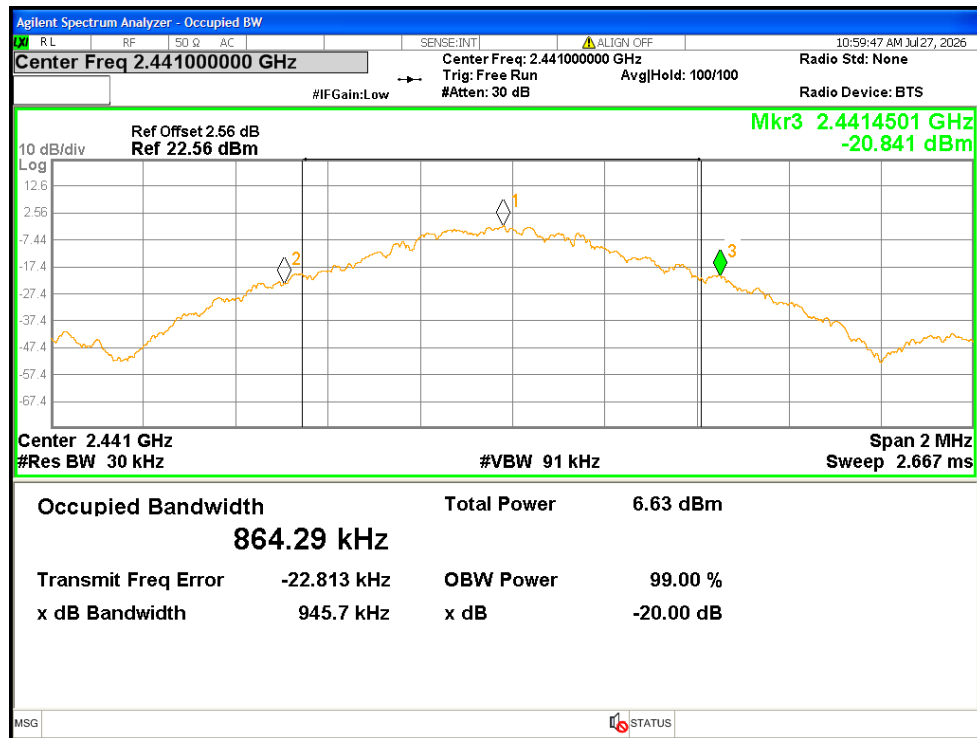
Mode	Frequency (MHz)	-20 dB Bandwidth (MHz)	Verdict
1-DH5	2402	0.9706	Pass
1-DH5	2441	0.9457	Pass
1-DH5	2480	0.9734	Pass
2-DH5	2402	1.271	Pass
2-DH5	2441	1.303	Pass
2-DH5	2480	1.304	Pass
3-DH5	2402	1.285	Pass
3-DH5	2441	1.286	Pass
3-DH5	2480	1.284	Pass

Test Graphs

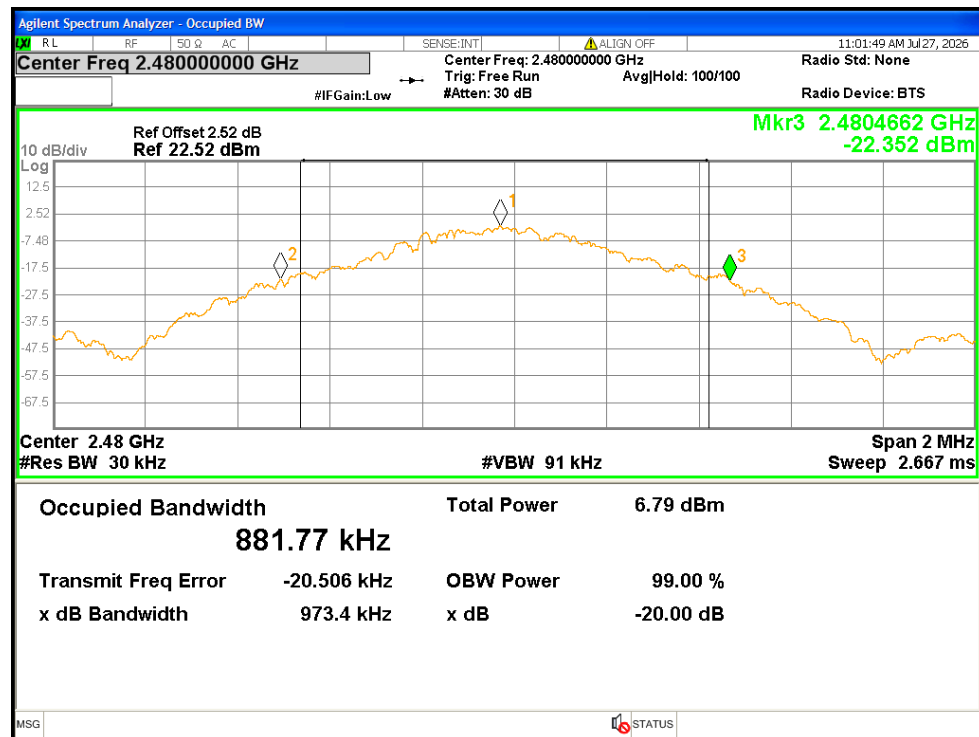
-20dB Bandwidth NVNT 1-DH5 2402MHz



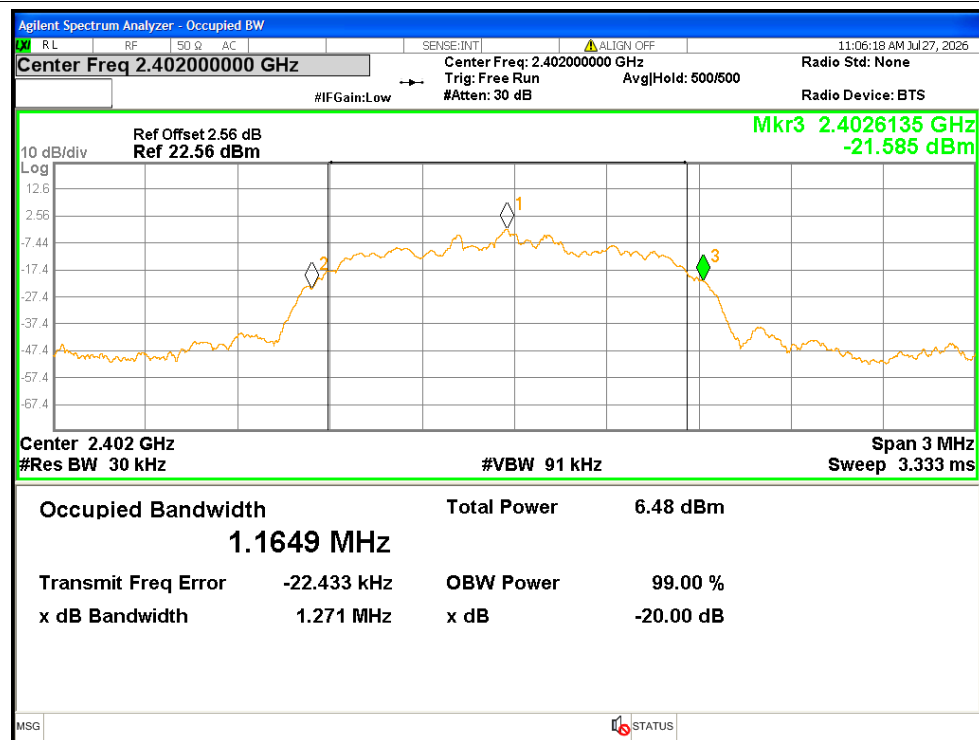
-20dB Bandwidth NVNT 1-DH5 2441MHz



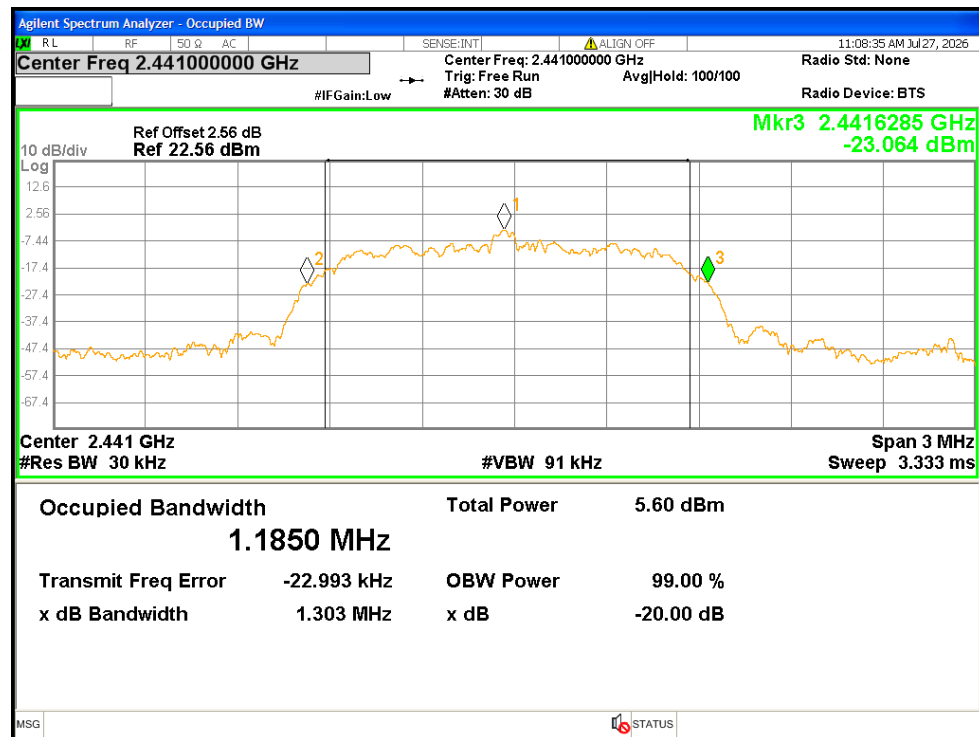
-20dB Bandwidth NVNT 1-DH5 2480MHz



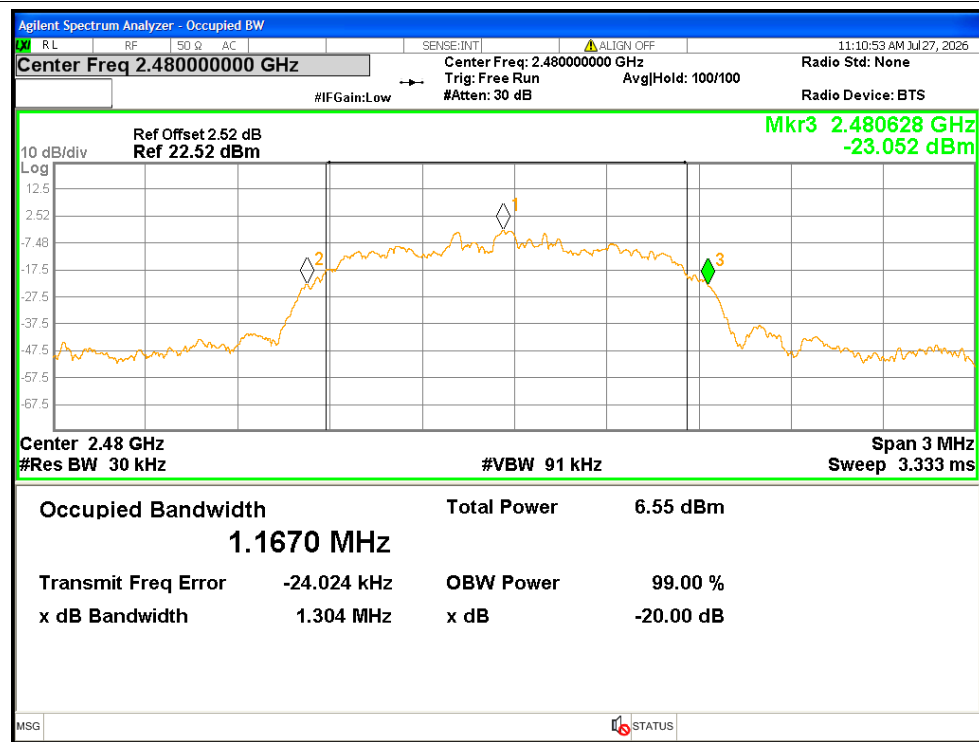
-20dB Bandwidth NVNT 2-DH5 2402MHz



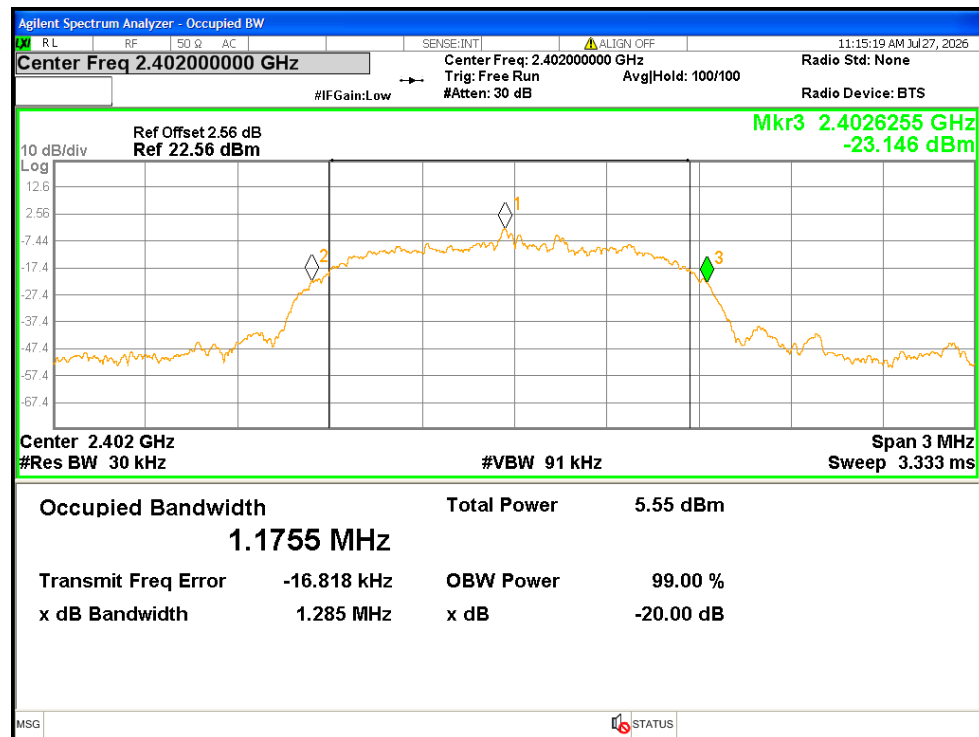
-20dB Bandwidth NVNT 2-DH5 2441MHz



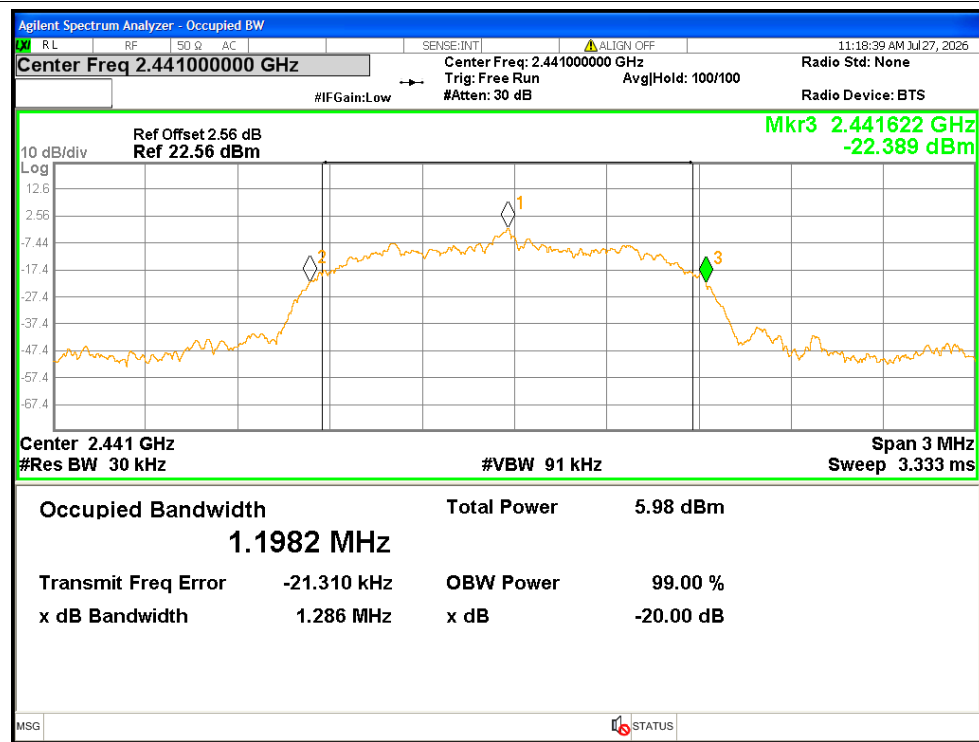
-20dB Bandwidth NVNT 2-DH5 2480MHz



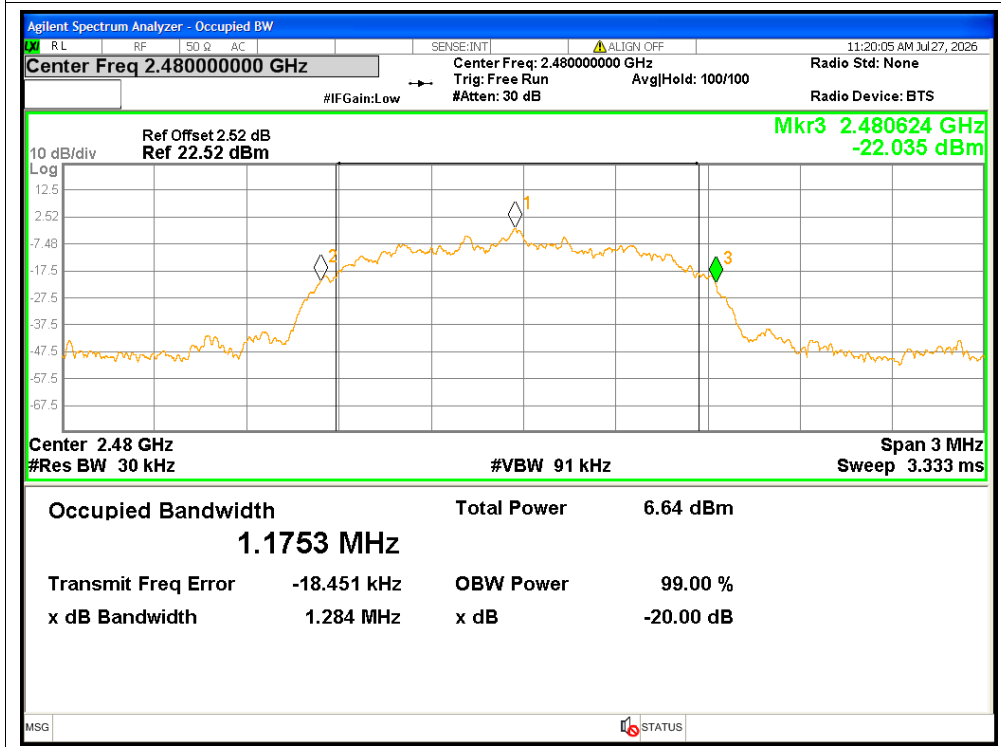
-20dB Bandwidth NVNT 3-DH5 2402MHz



-20dB Bandwidth NVNT 3-DH5 2441MHz



-20dB Bandwidth NVNT 3-DH5 2480MHz

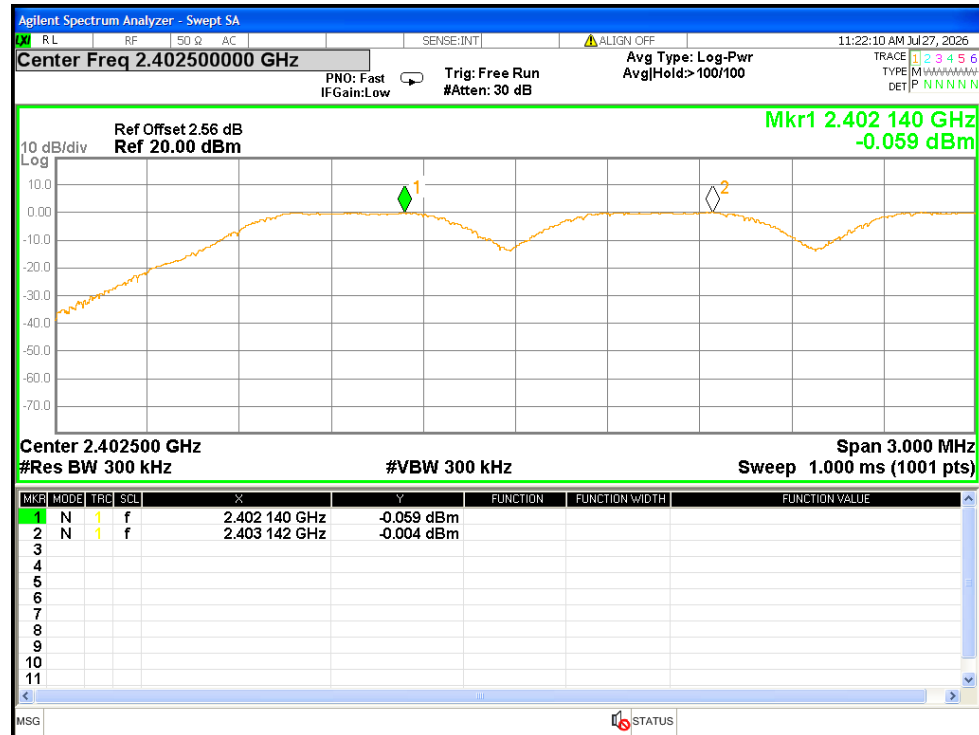


Carrier Frequencies Separation

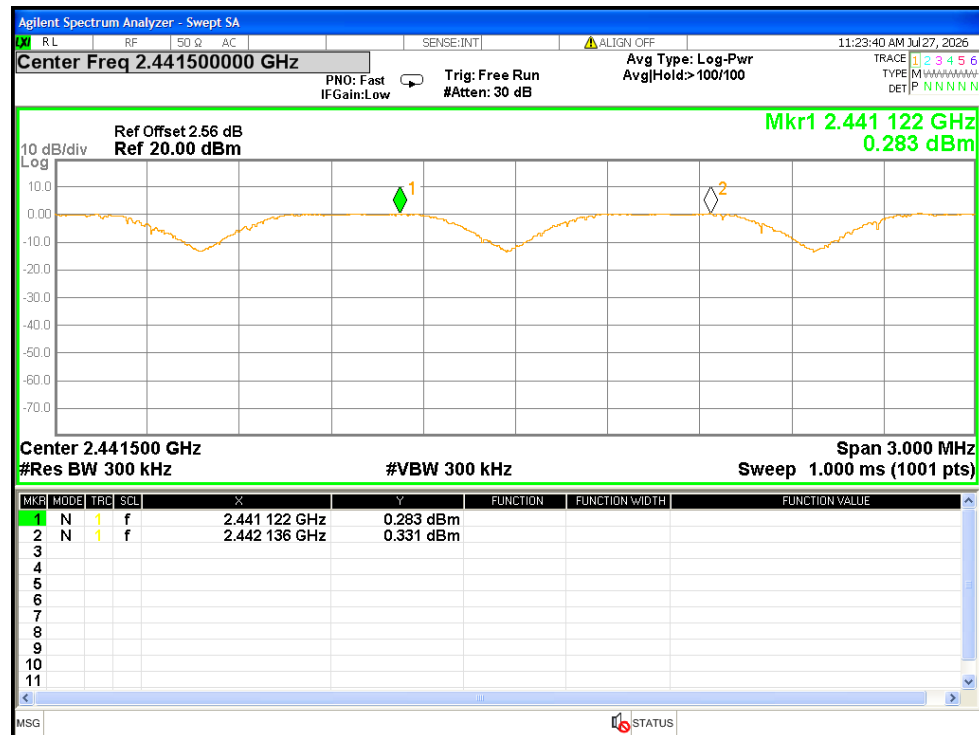
Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
1-DH5	2402.14	2403.142	1.002	≥ 0.971	Pass
1-DH5	2441.122	2442.136	1.014	≥ 0.946	Pass
1-DH5	2479.122	2480.133	1.011	≥ 0.973	Pass
2-DH5	2401.879	2402.863	0.984	≥ 0.847	Pass
2-DH5	2440.777	2442.148	1.371	≥ 0.869	Pass
2-DH5	2479.155	2480.136	0.981	≥ 0.869	Pass
3-DH5	2401.789	2402.758	0.969	≥ 0.857	Pass
3-DH5	2440.993	2442.115	1.122	≥ 0.857	Pass
3-DH5	2478.747	2479.857	1.11	≥ 0.856	Pass

Test Graphs

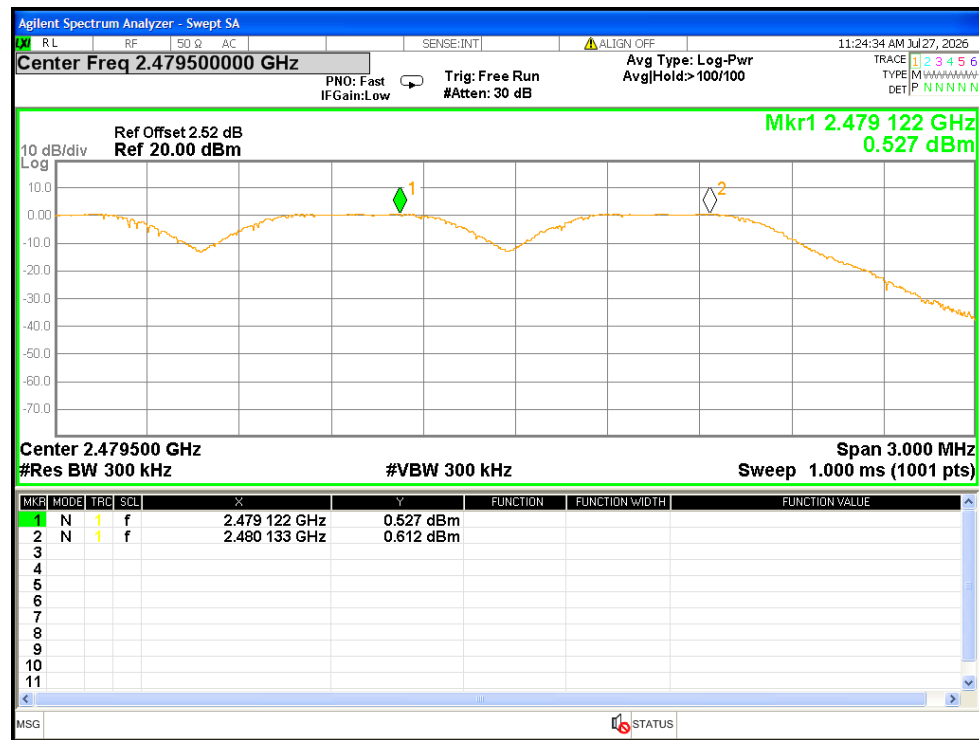
CFS NVNT 1-DH5 2402MHz



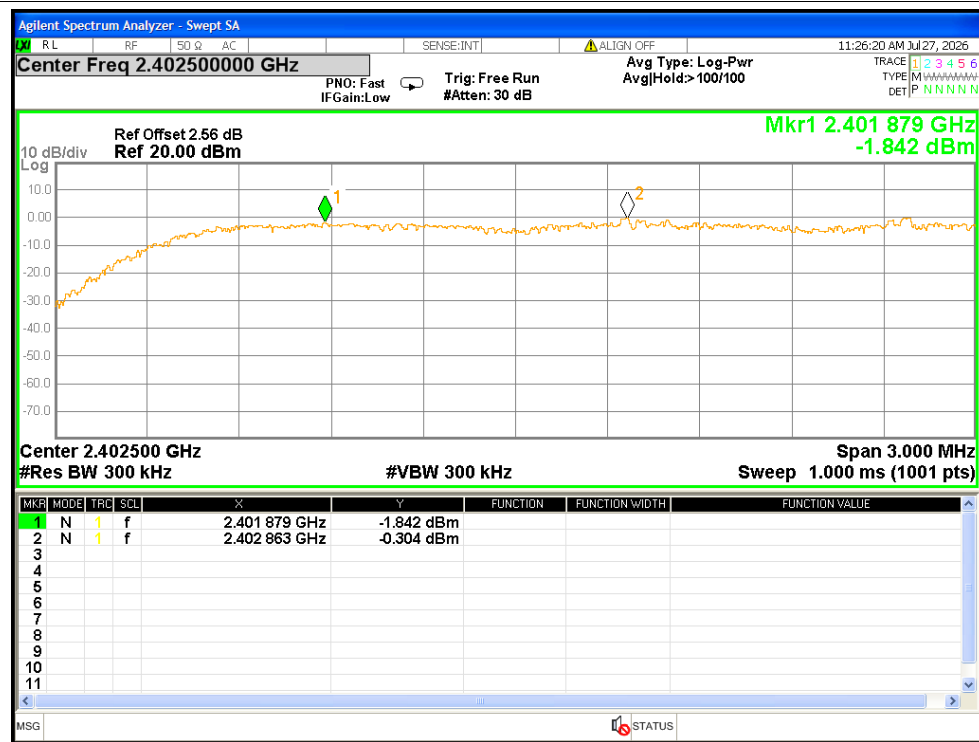
CFS NVNT 1-DH5 2441MHz



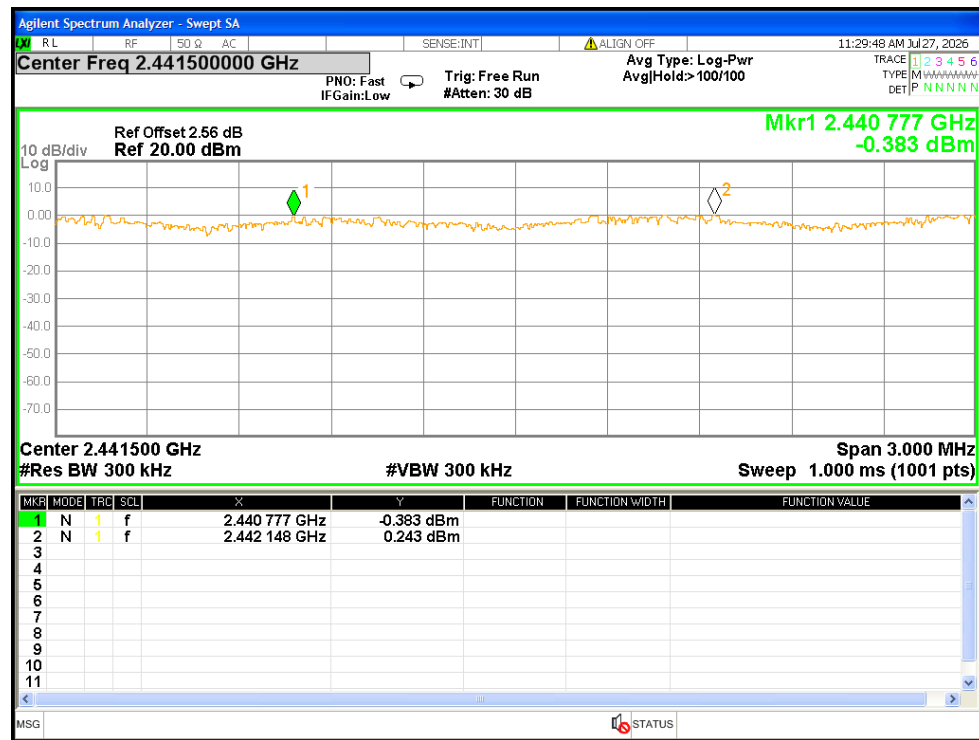
CFS NVNT 1-DH5 2480MHz



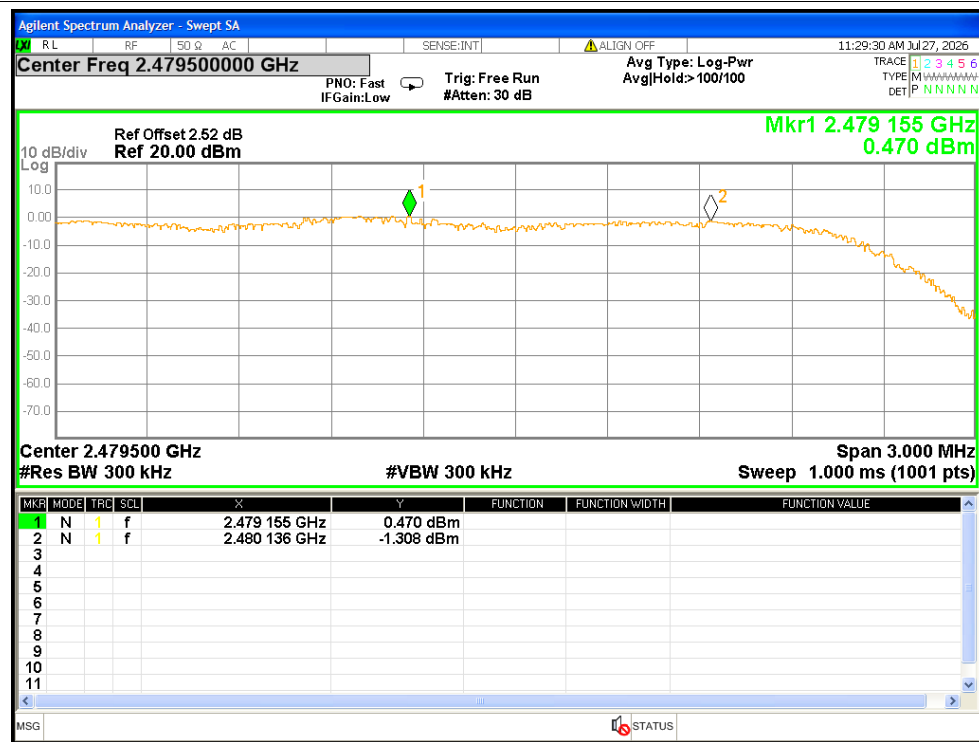
CFS NVNT 2-DH5 2402MHz



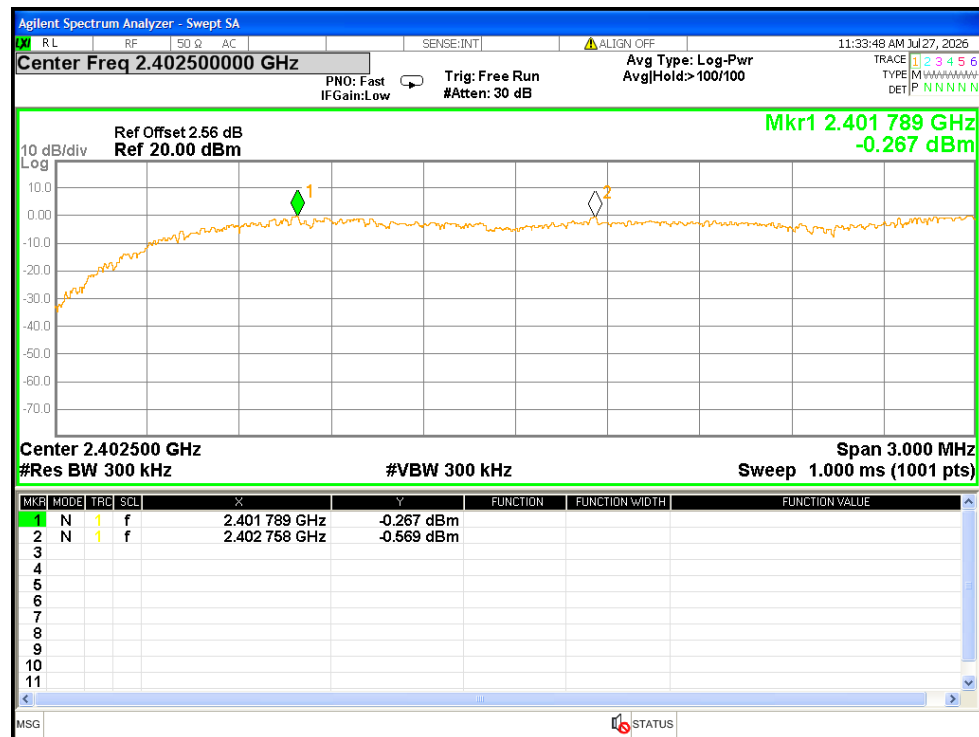
CFS NVNT 2-DH5 2441MHz



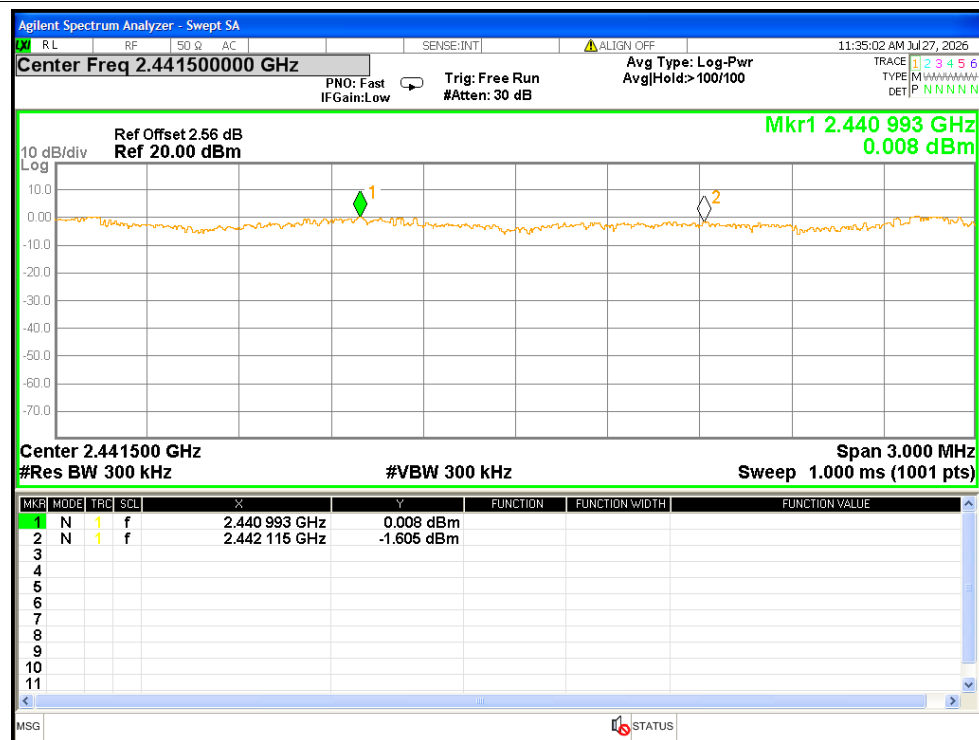
CFS NVNT 2-DH5 2480MHz



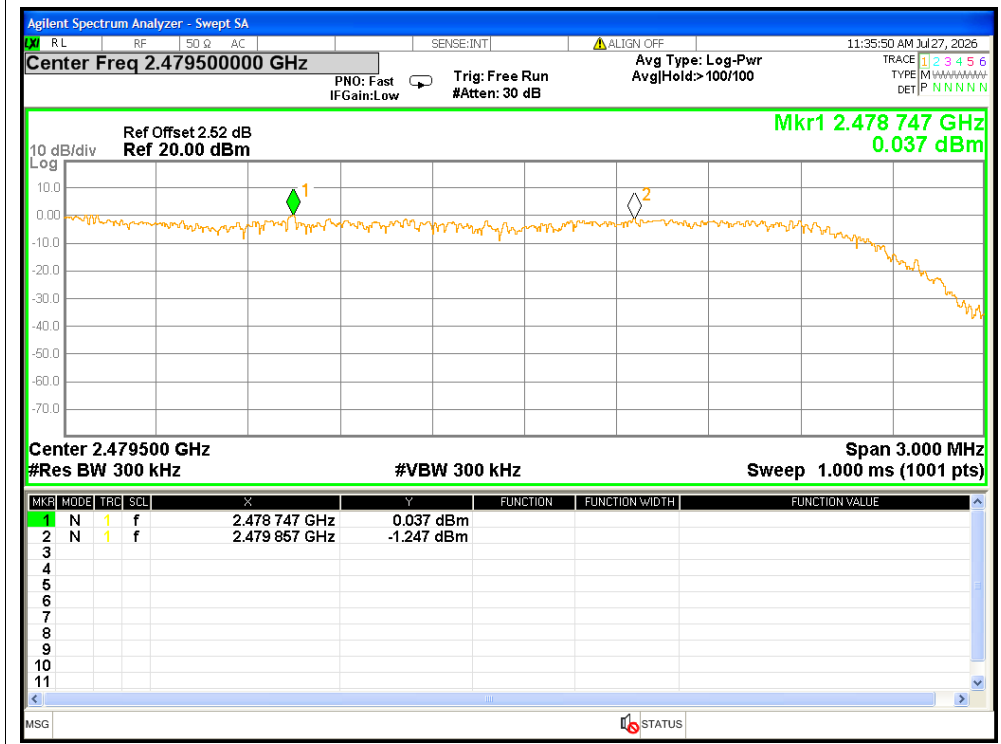
CFS NVNT 3-DH5 2402MHz



CFS NVNT 3-DH5 2441MHz



CFS NVNT 3-DH5 2480MHz

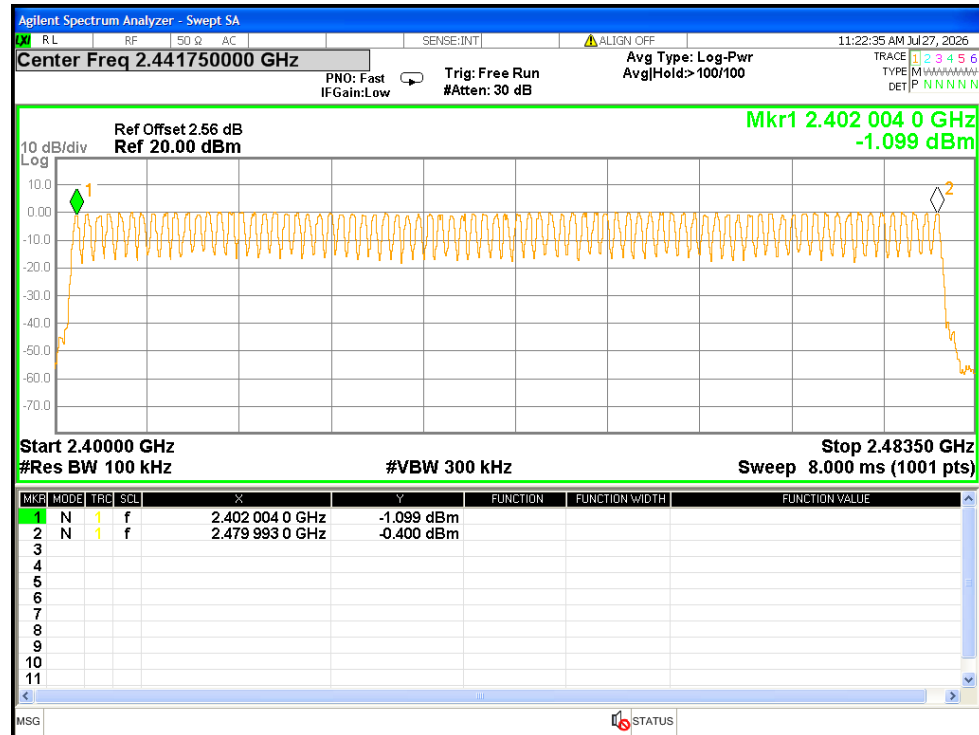


Number of Hopping Channel

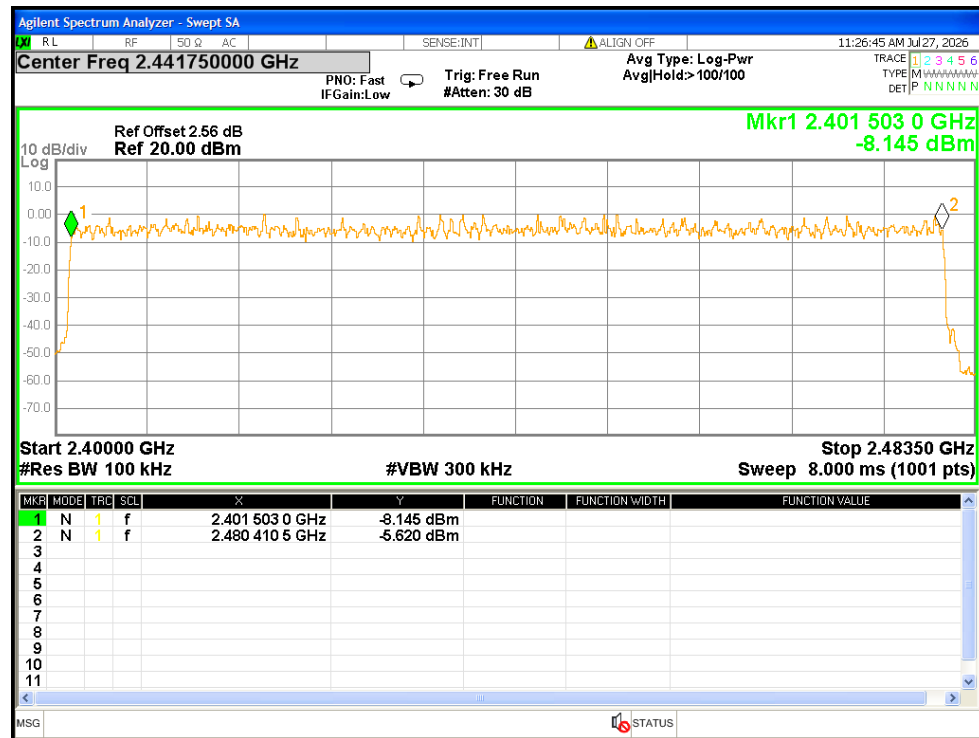
Mode	Hopping Number	Limit	Verdict
1-DH5	79	≥ 15	Pass
2-DH5	79	≥ 15	Pass
3-DH5	79	≥ 15	Pass

Test Graphs

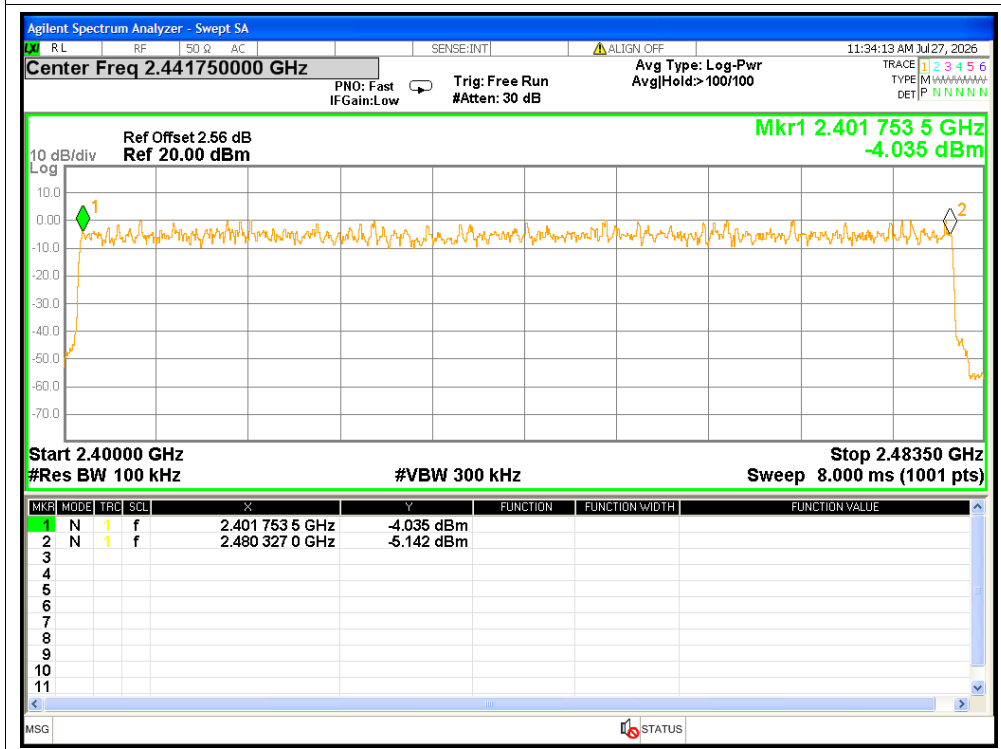
Hopping No. NVNT 1-DH5 Hopping



Hopping No. NVNT 2-DH5 Hopping



Hopping No. NVNT 3-DH5 Hopping

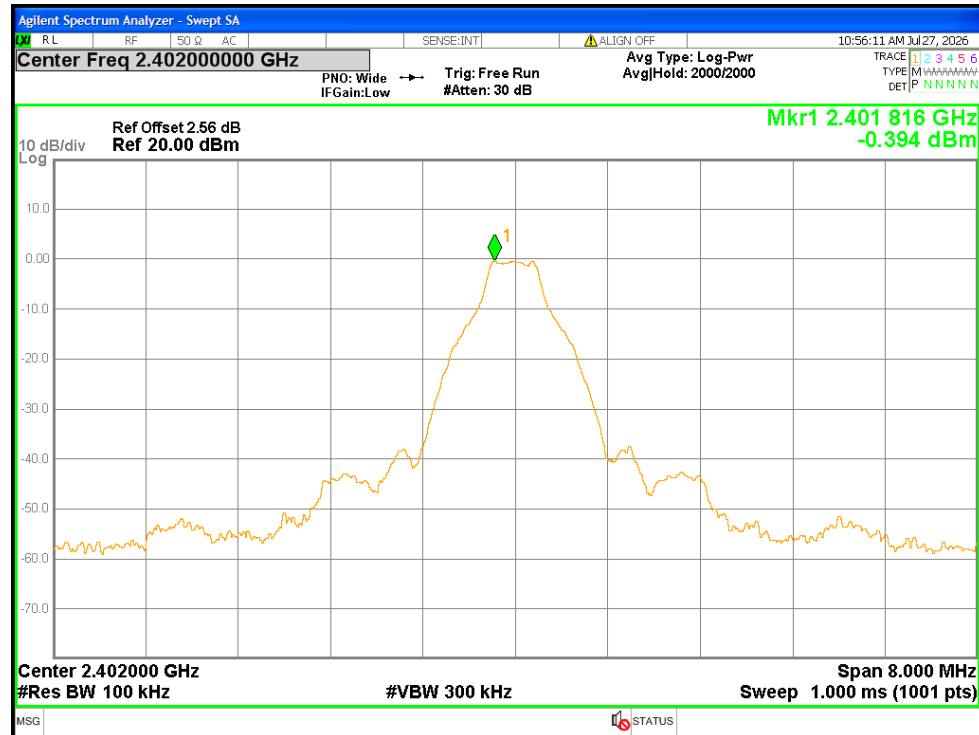


Band Edge

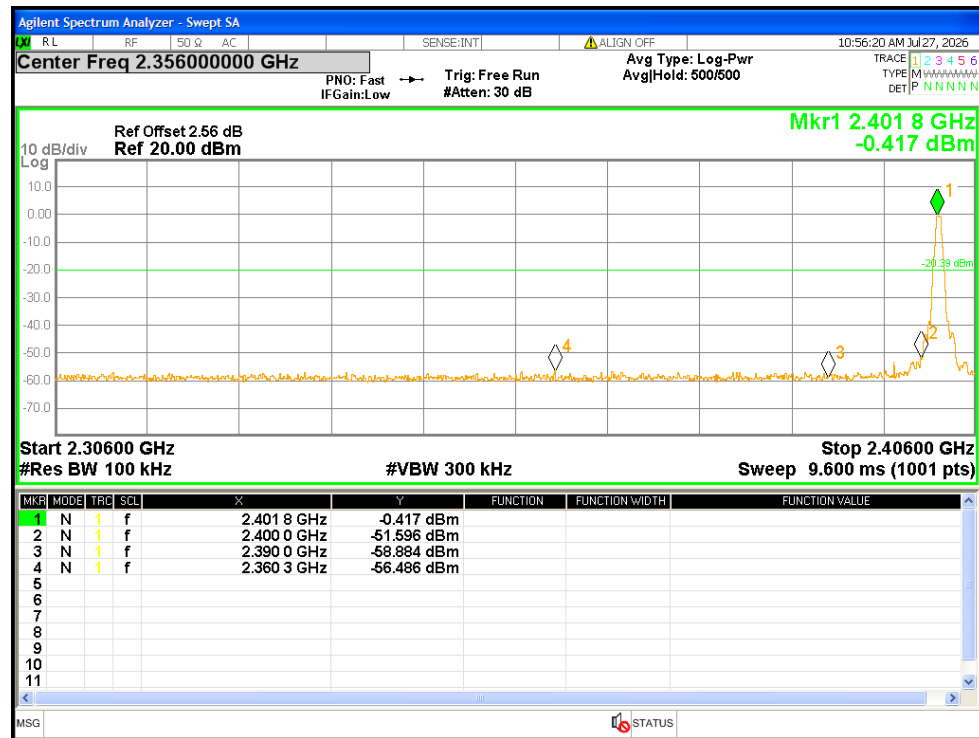
Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
1-DH5	2402	No-Hopping	-56.09	<=-20	Pass
1-DH5	2480	No-Hopping	-54.55	<=-20	Pass
2-DH5	2402	No-Hopping	-56.47	<=-20	Pass
2-DH5	2480	No-Hopping	-55.91	<=-20	Pass
3-DH5	2402	No-Hopping	-56.59	<=-20	Pass
3-DH5	2480	No-Hopping	-55.63	<=-20	Pass

Test Graphs

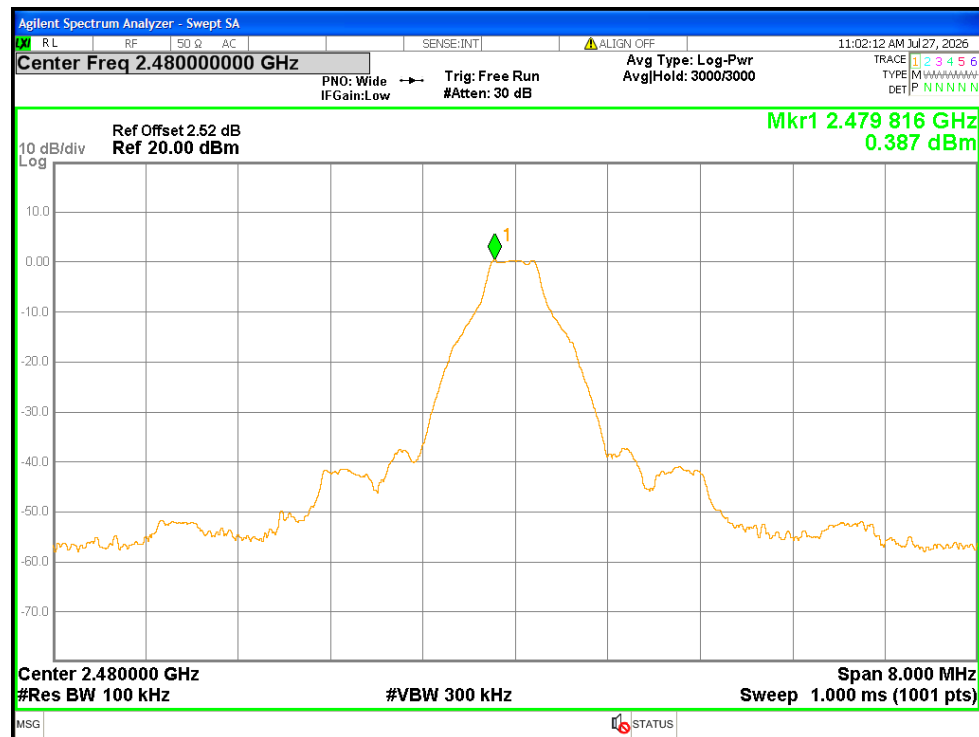
Band Edge NVNT 1-DH5 2402MHz No-Hopping Ref



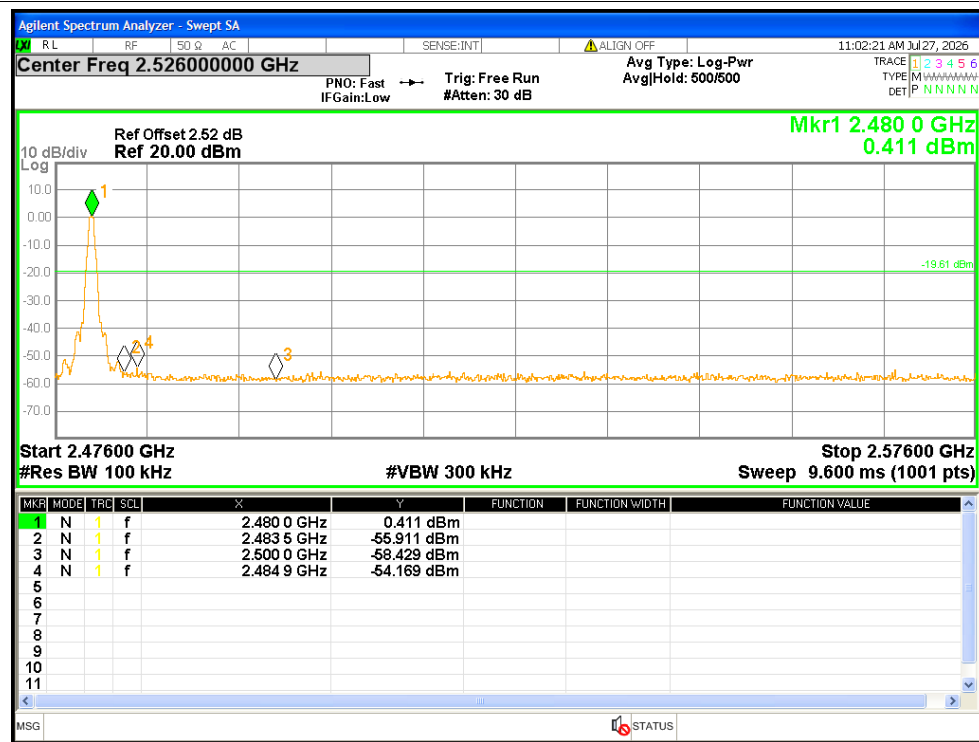
Band Edge NVNT 1-DH5 2402MHz No-Hopping Emission



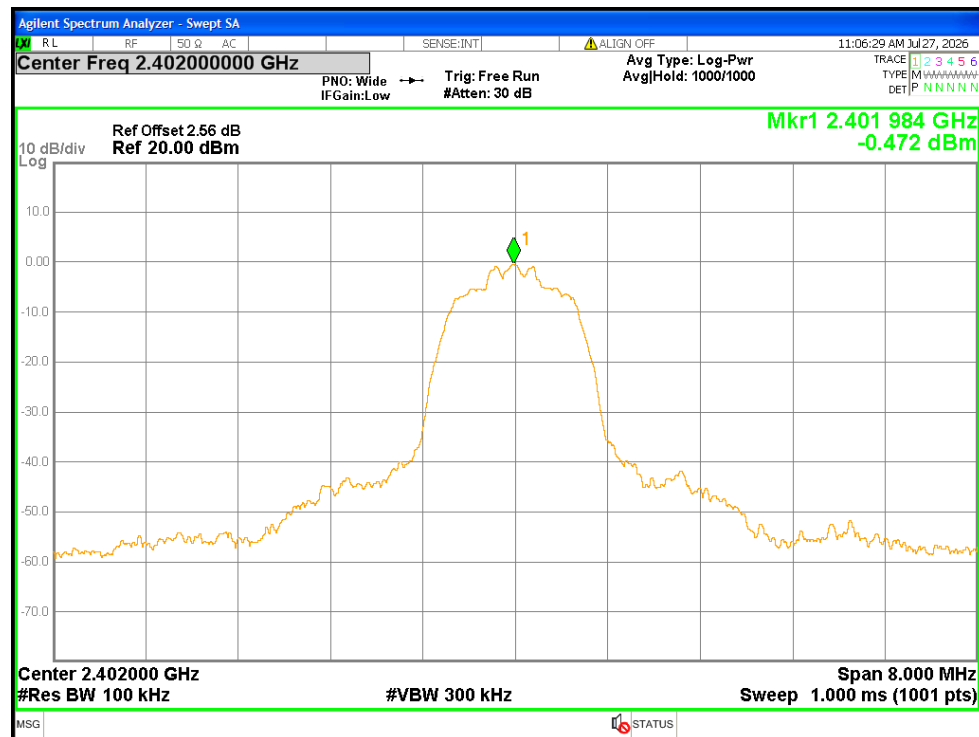
Band Edge NVNT 1-DH5 2480MHz No-Hopping Ref



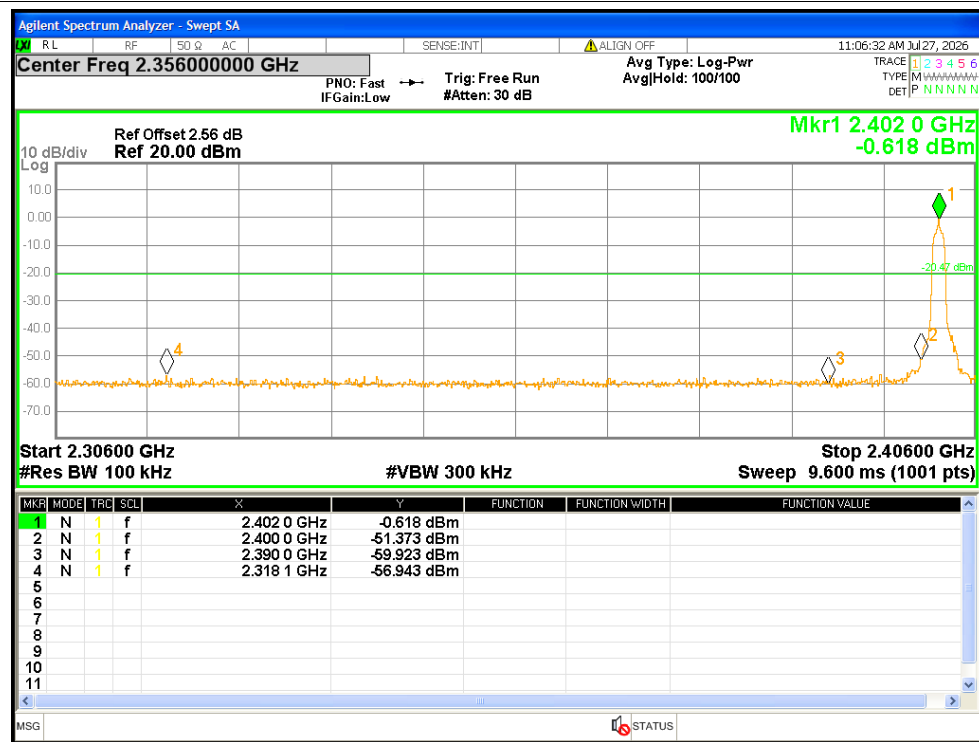
Band Edge NVNT 1-DH5 2480MHz No-Hopping Emission



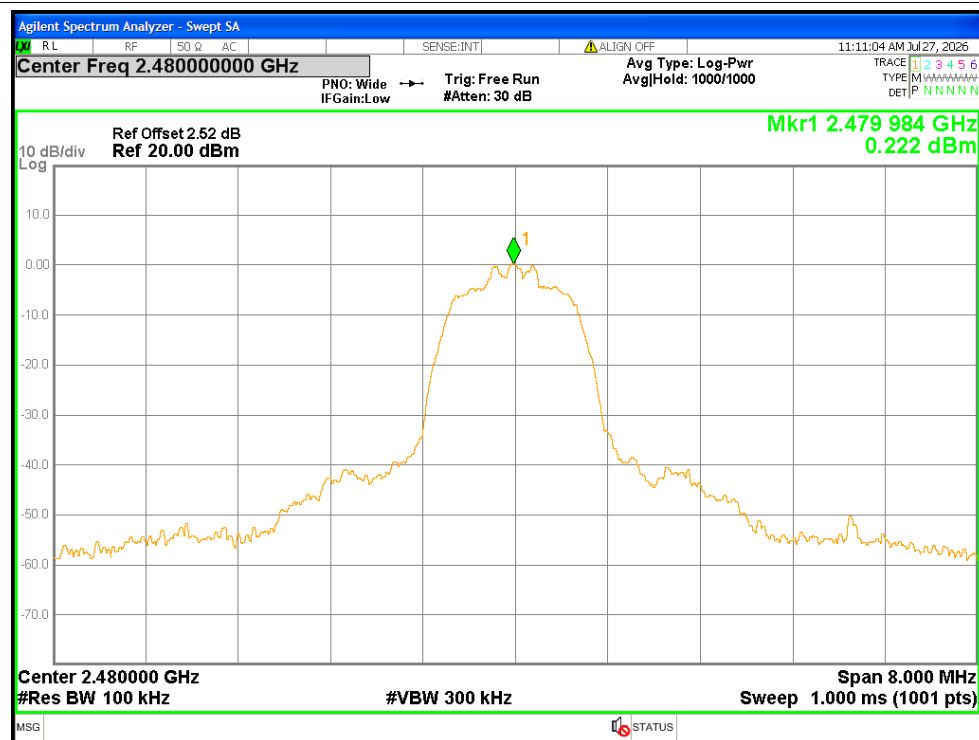
Band Edge NVNT 2-DH5 2402MHz No-Hopping Ref



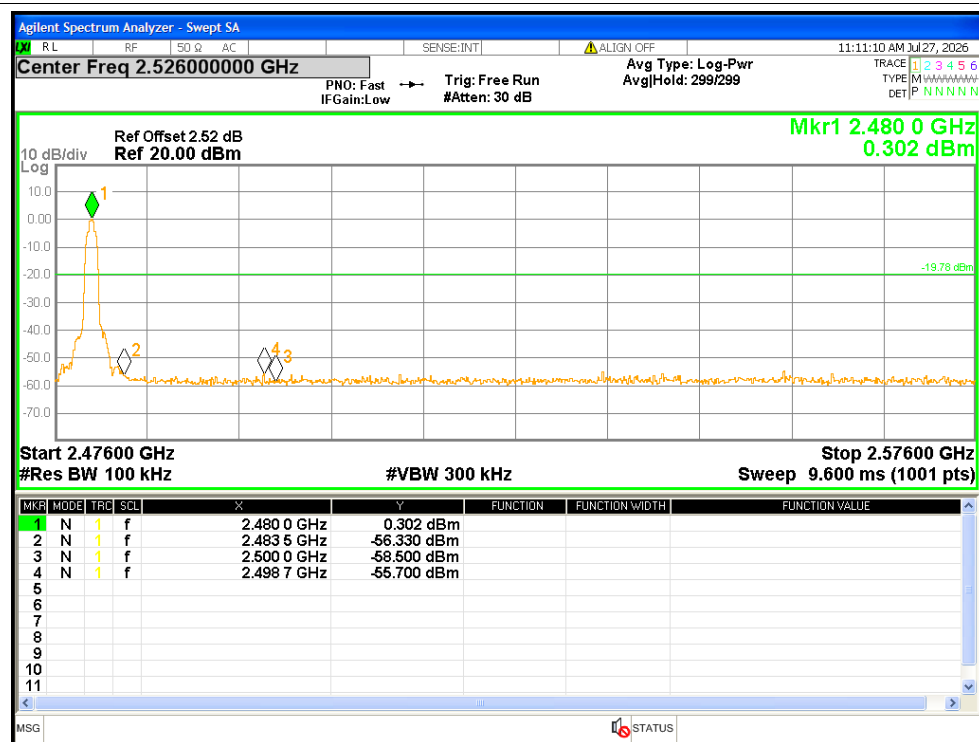
Band Edge NVNT 2-DH5 2402MHz No-Hopping Emission



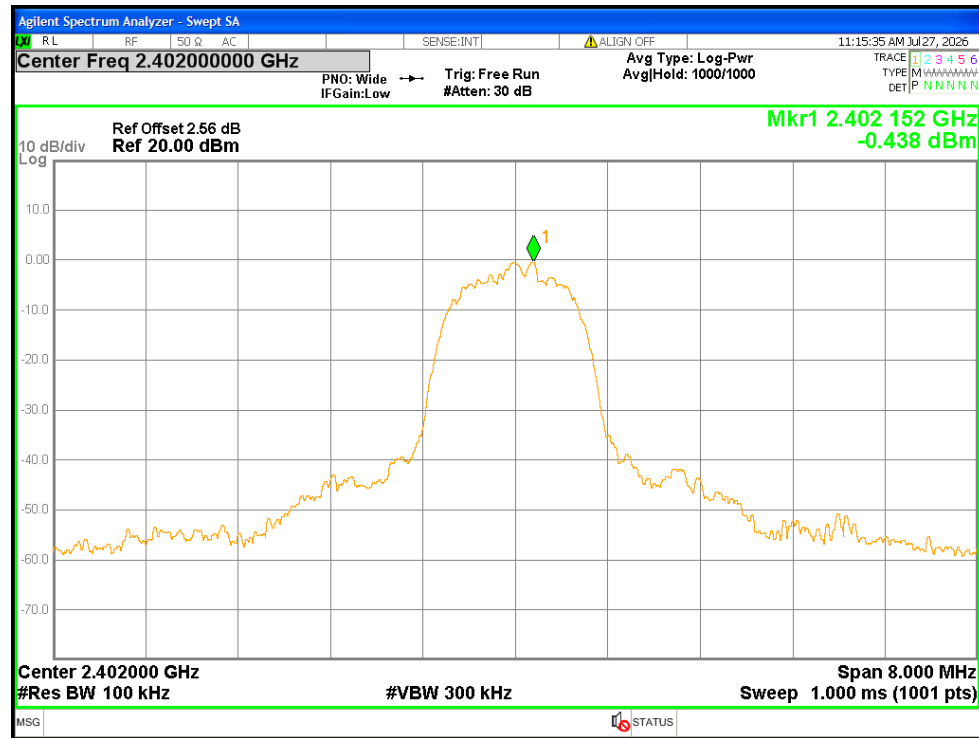
Band Edge NVNT 2-DH5 2480MHz No-Hopping Ref



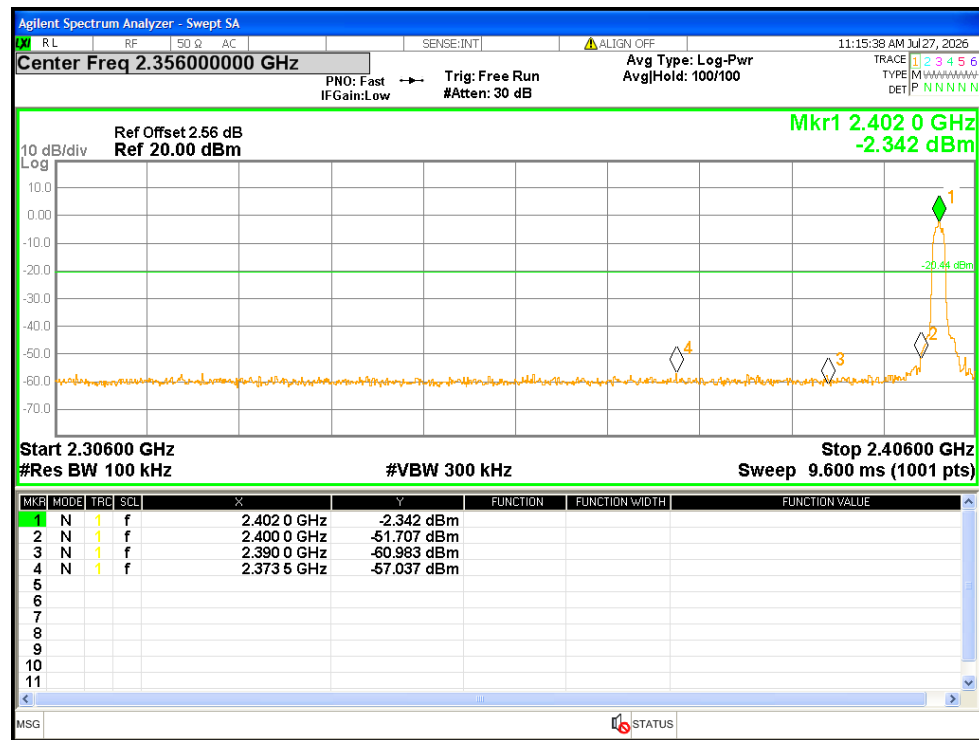
Band Edge NVNT 2-DH5 2480MHz No-Hopping Emission



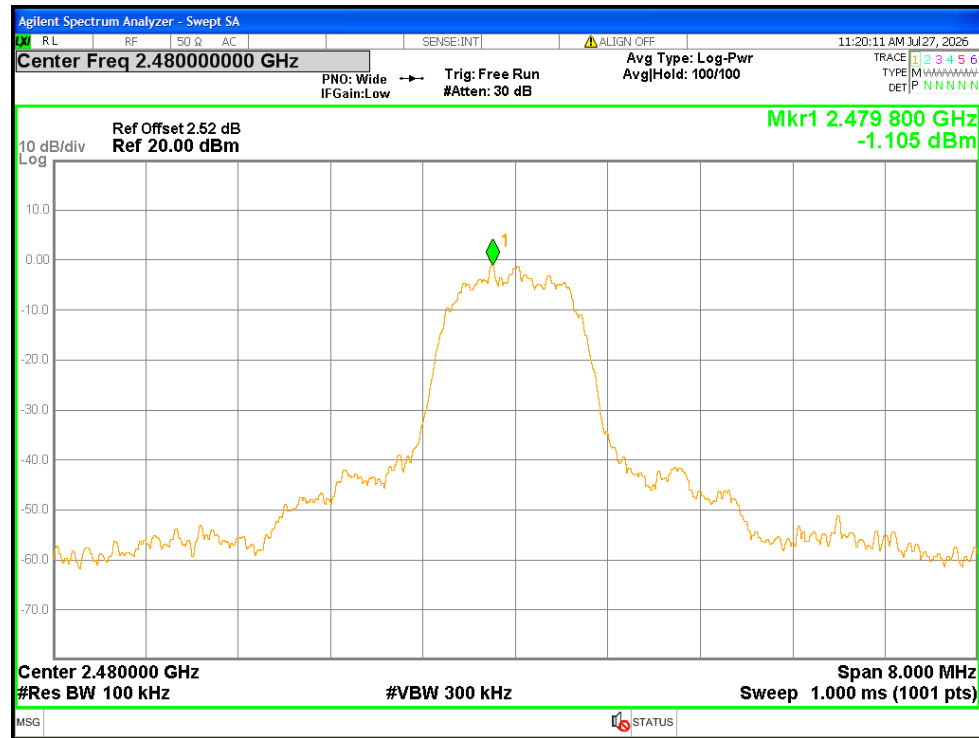
Band Edge NVNT 3-DH5 2402MHz No-Hopping Ref



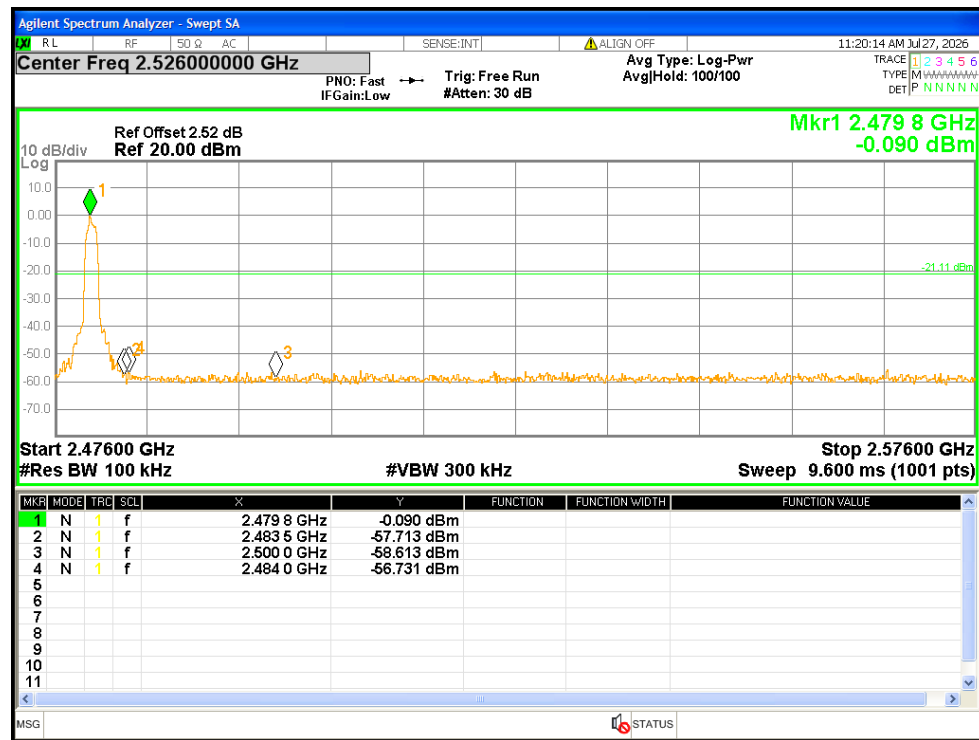
Band Edge NVNT 3-DH5 2402MHz No-Hopping Emission



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



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



Band Edge(Hopping)

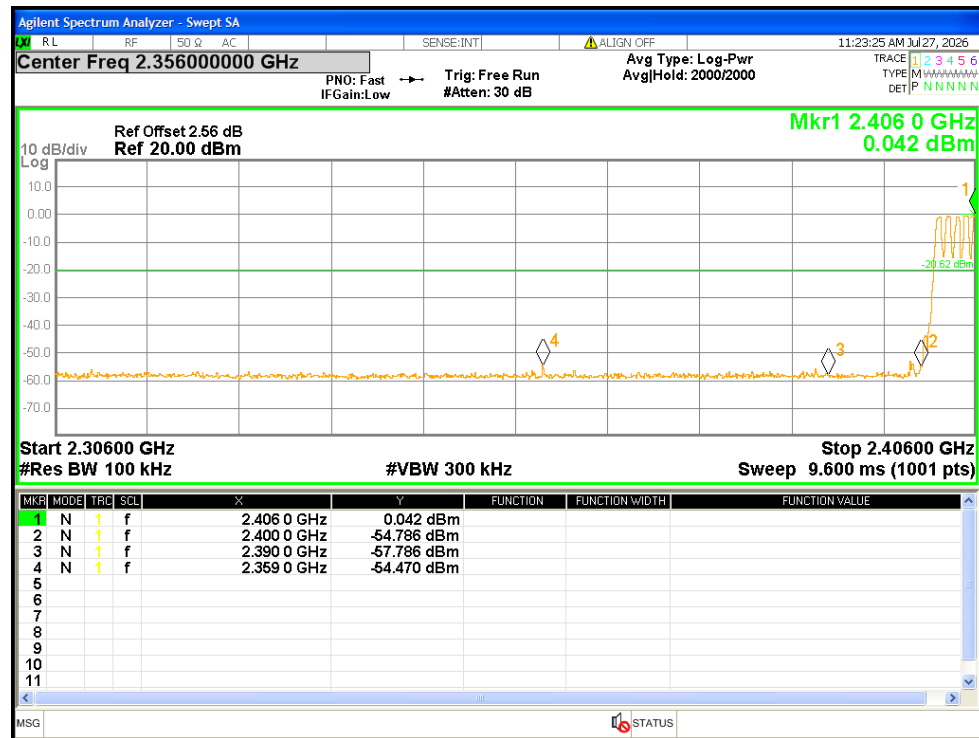
Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
1-DH5	2402	Hopping	-53.84	<=-20	Pass
1-DH5	2480	Hopping	-56.35	<=-20	Pass
2-DH5	2402	Hopping	-54.08	<=-20	Pass
2-DH5	2480	Hopping	-54.11	<=-20	Pass
3-DH5	2402	Hopping	-54.85	<=-20	Pass
3-DH5	2480	Hopping	-56.25	<=-20	Pass

Test Graphs

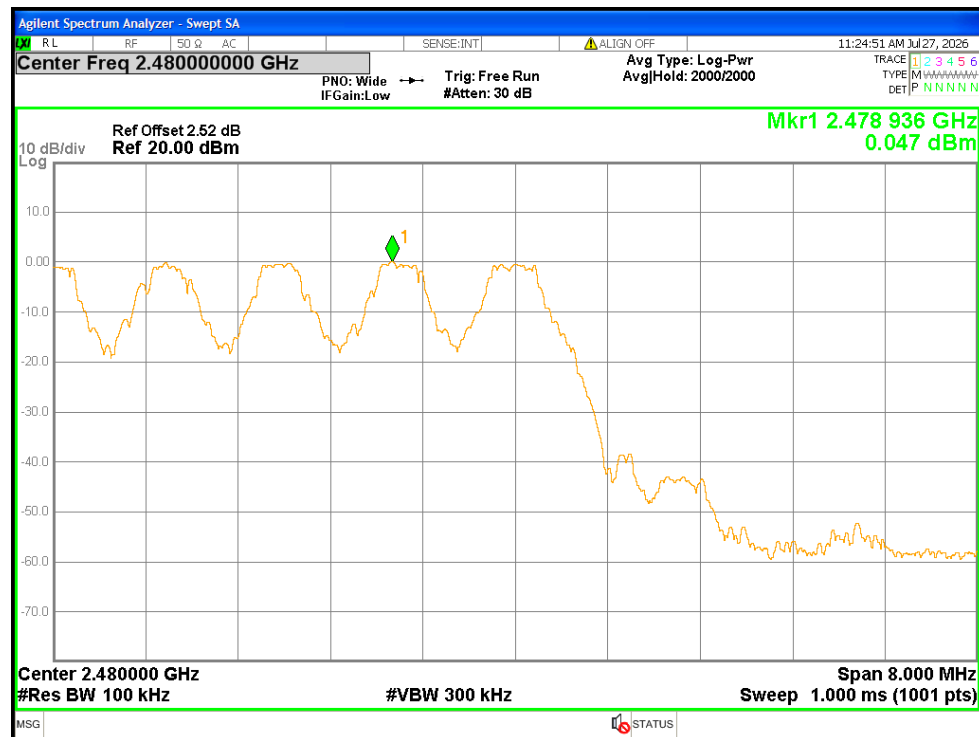
Band Edge(Hopping) NVNT 1-DH5 2402MHz Hopping Ref



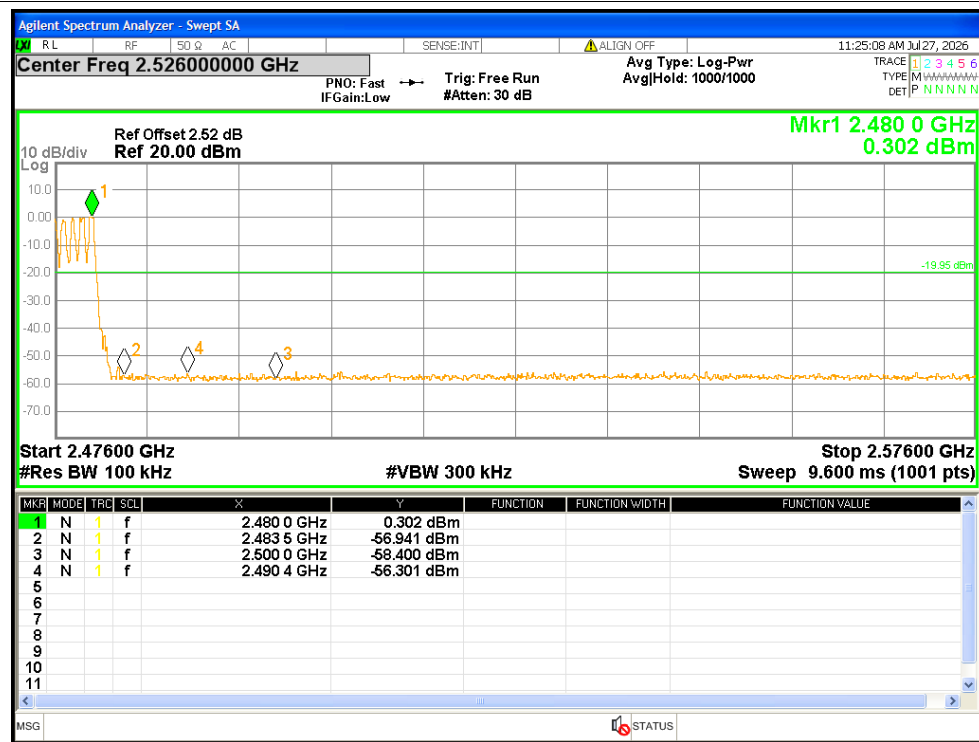
Band Edge(Hopping) NVNT 1-DH5 2402MHz Hopping Emission



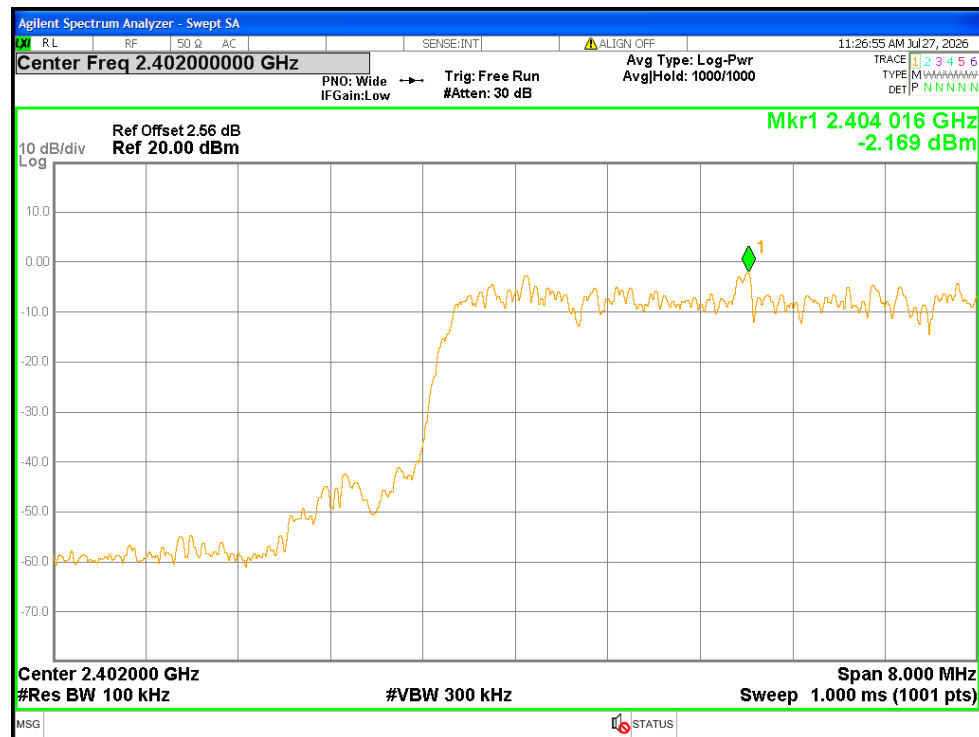
Band Edge(Hopping) NVNT 1-DH5 2480MHz Hopping Ref



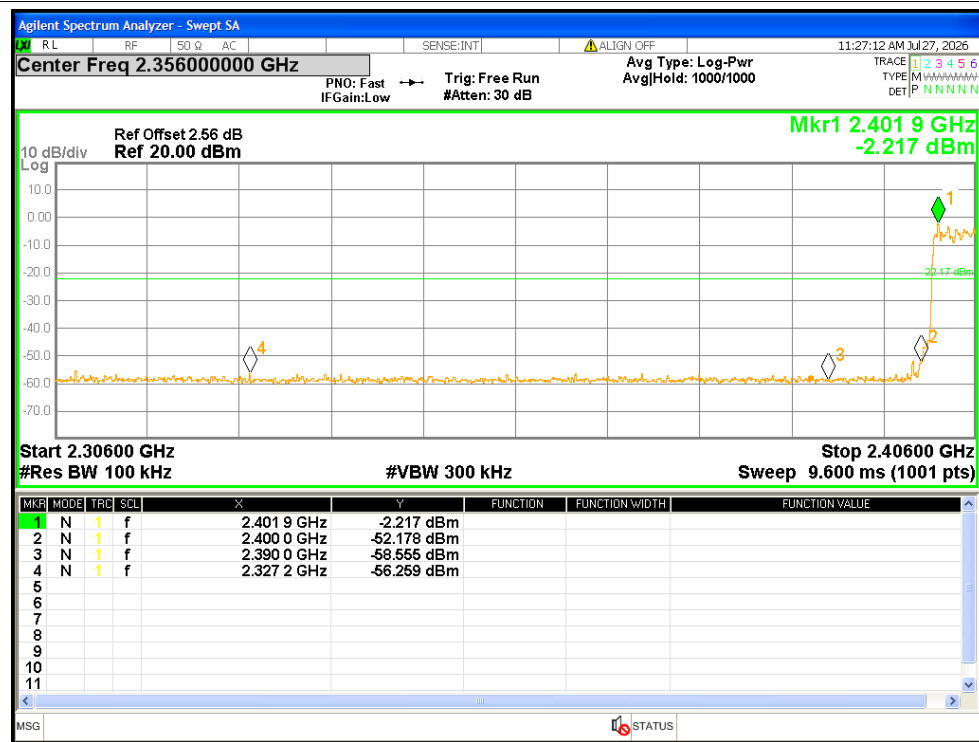
Band Edge(Hopping) NVNT 1-DH5 2480MHz Hopping Emission



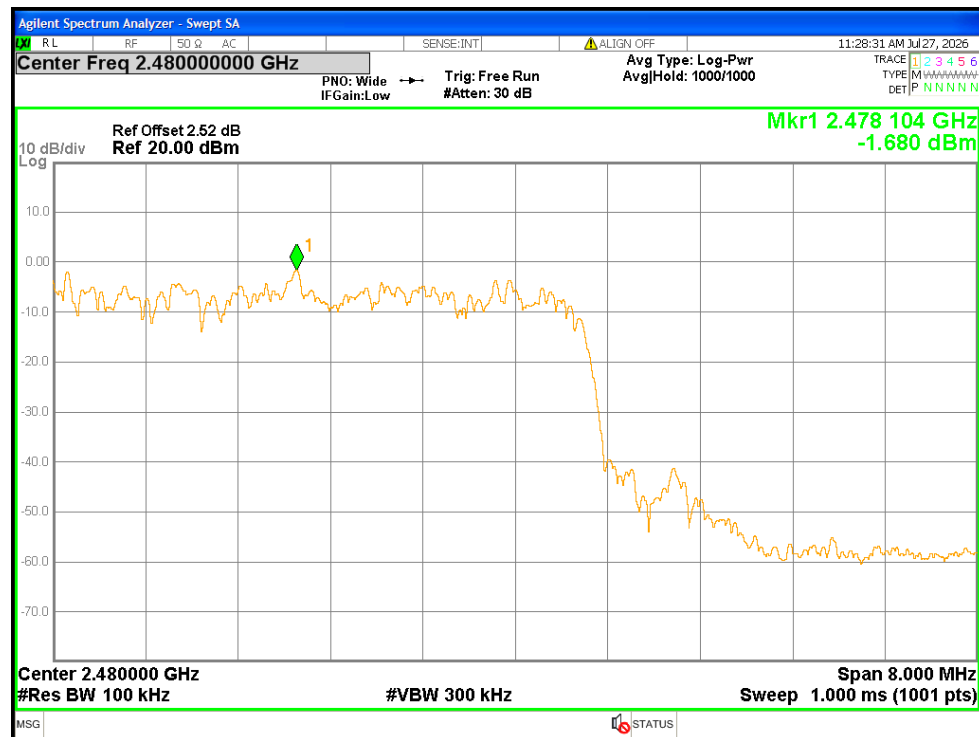
Band Edge(Hopping) NVNT 2-DH5 2402MHz Hopping Ref



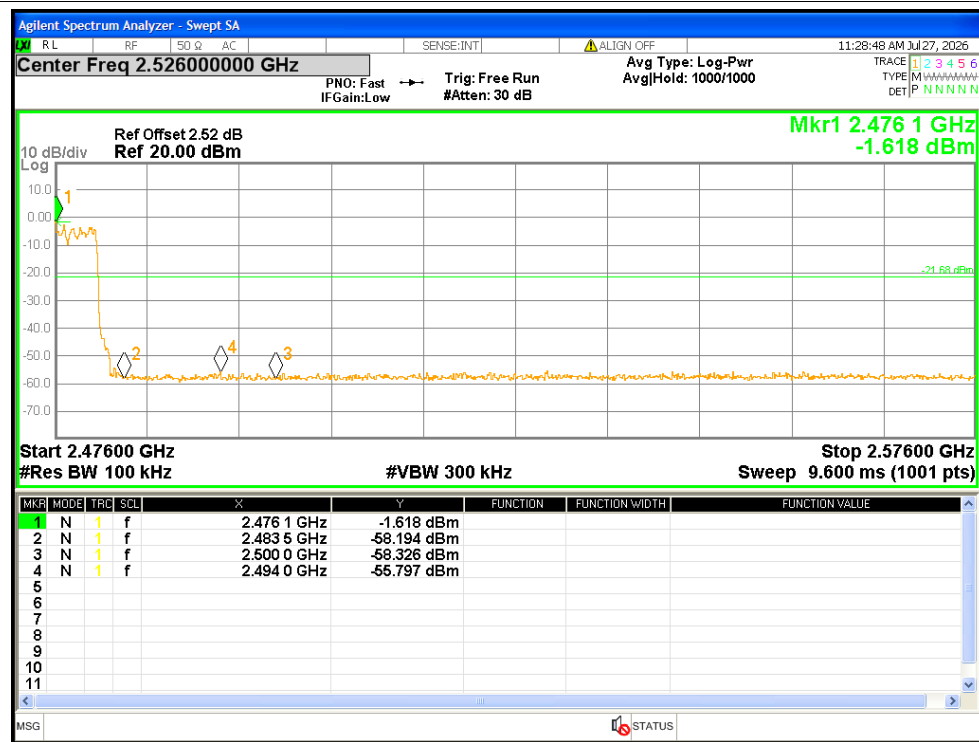
Band Edge(Hopping) NVNT 2-DH5 2402MHz Hopping Emission



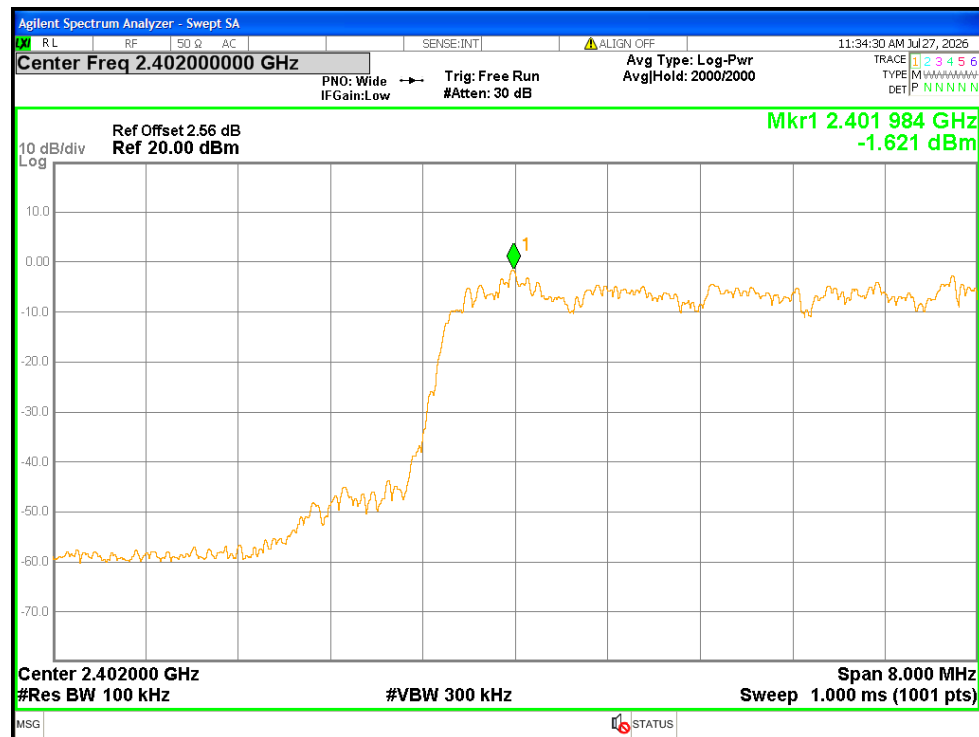
Band Edge(Hopping) NVNT 2-DH5 2480MHz Hopping Ref



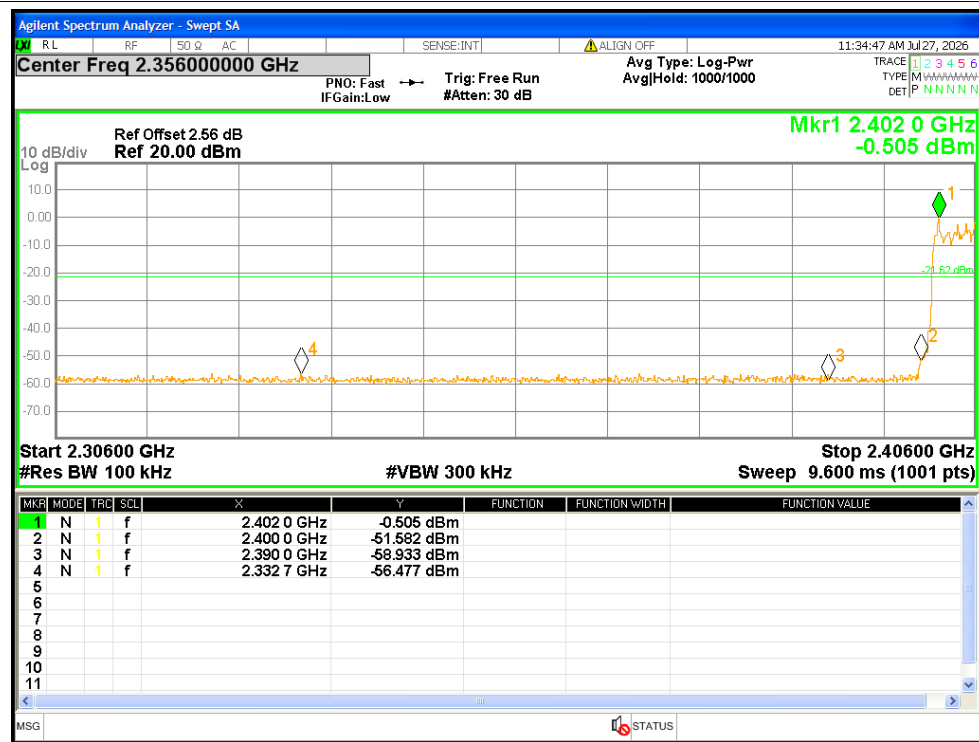
Band Edge(Hopping) NVNT 2-DH5 2480MHz Hopping Emission



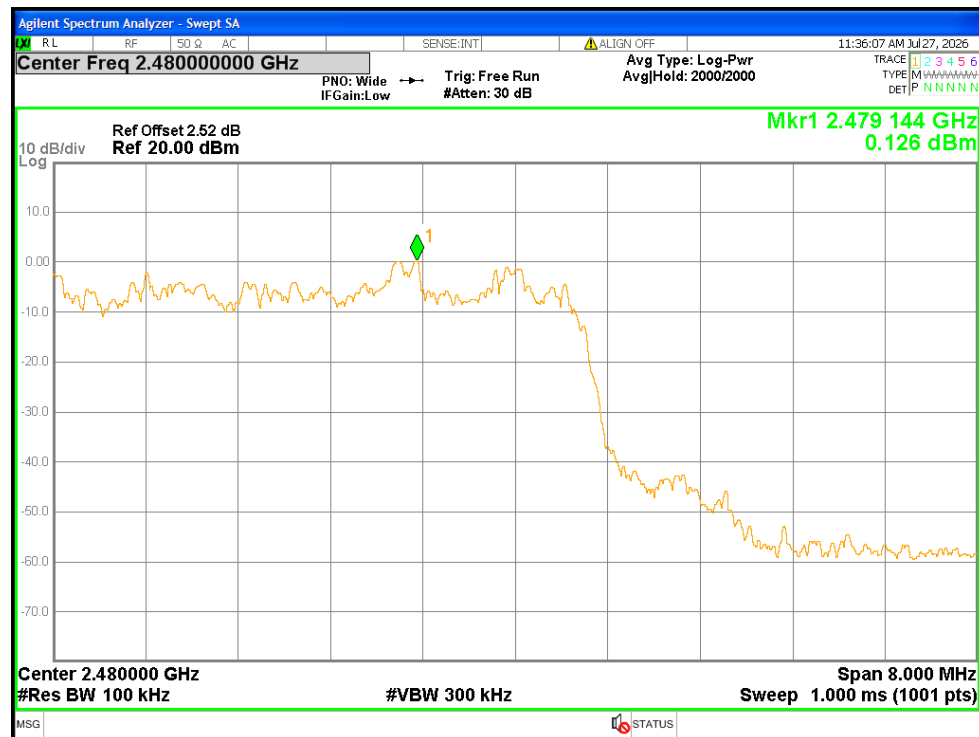
Band Edge(Hopping) NVNT 3-DH5 2402MHz Hopping Ref



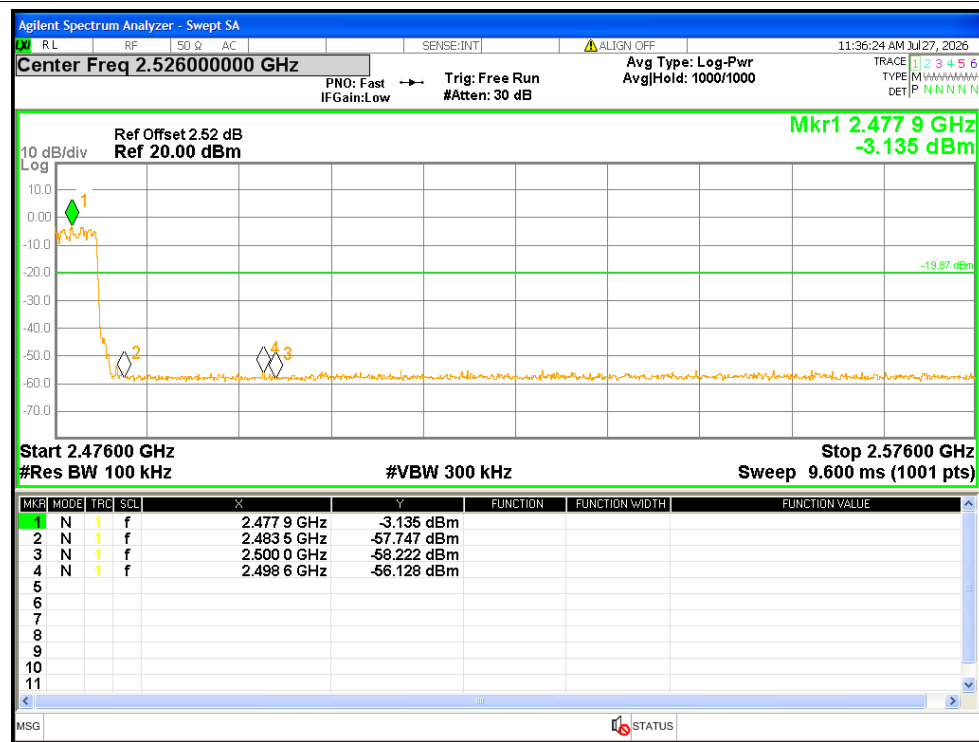
Band Edge(Hopping) NVNT 3-DH5 2402MHz Hopping Emission



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



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



Conducted RF Spurious Emission

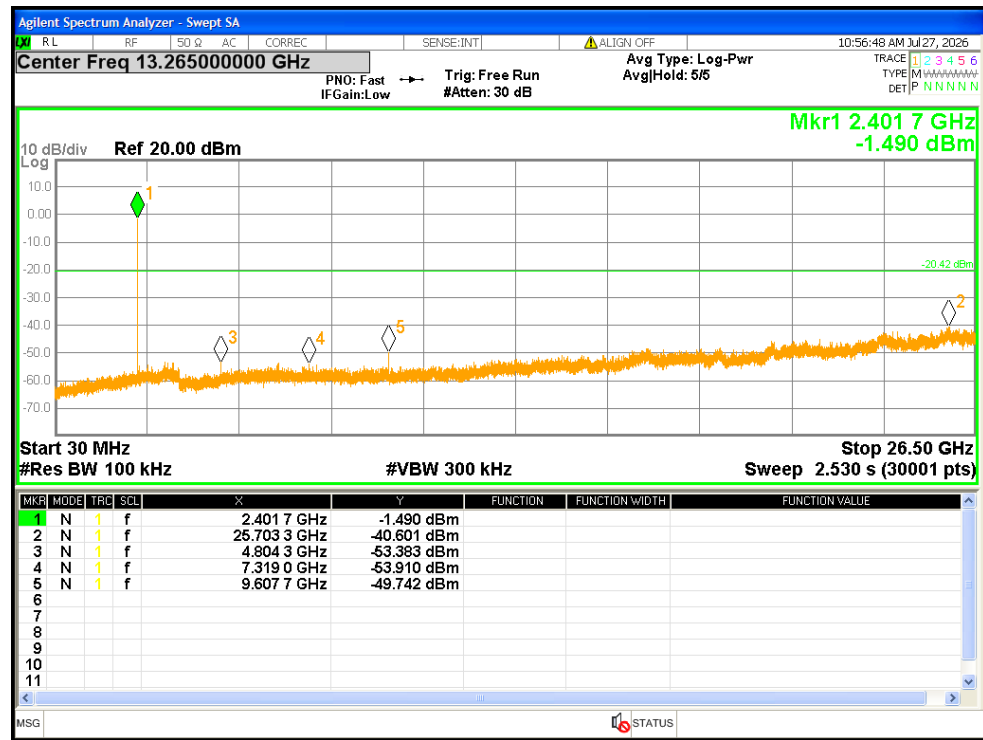
Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
1-DH5	2402	-40.18	<=-20	Pass
1-DH5	2441	-40.48	<=-20	Pass
1-DH5	2480	-40.27	<=-20	Pass
2-DH5	2402	-40.07	<=-20	Pass
2-DH5	2441	-40.06	<=-20	Pass
2-DH5	2480	-40.47	<=-20	Pass
3-DH5	2402	-39.76	<=-20	Pass
3-DH5	2441	-40.05	<=-20	Pass
3-DH5	2480	-38.67	<=-20	Pass

Test Graphs

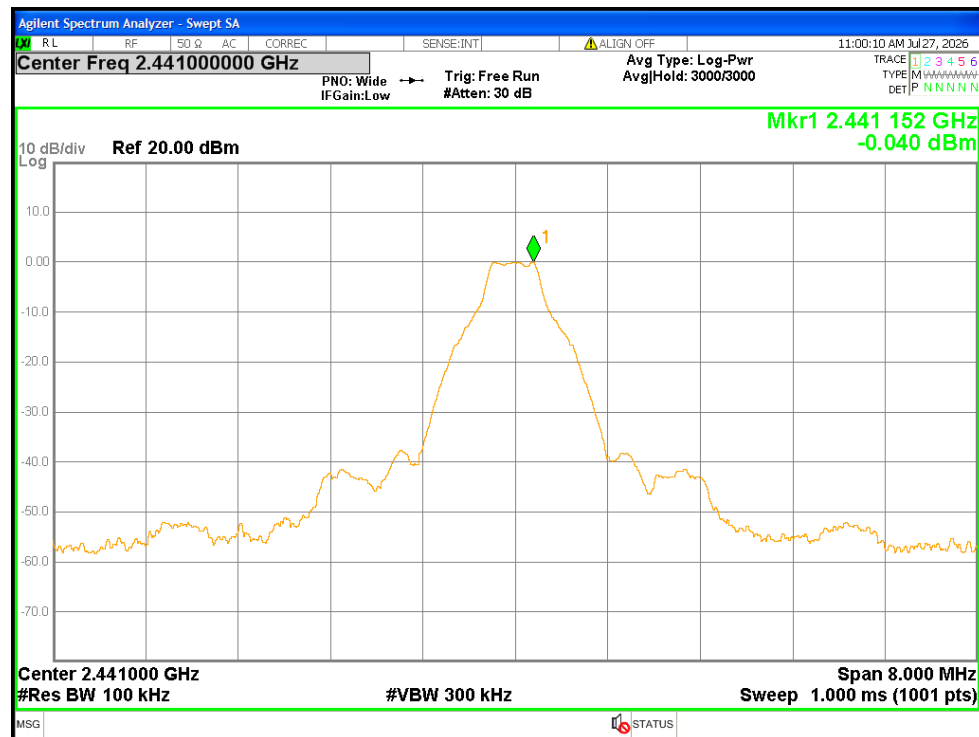
Tx. Spurious NVNT 1-DH5 2402MHz Ref



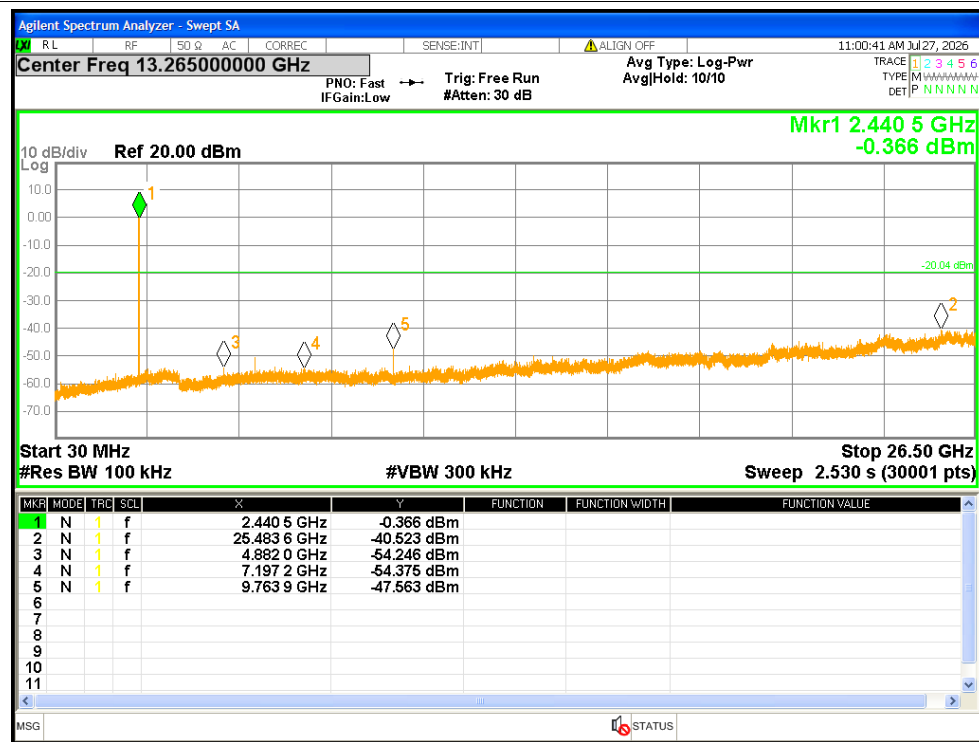
Tx. Spurious NVNT 1-DH5 2402MHz Emission



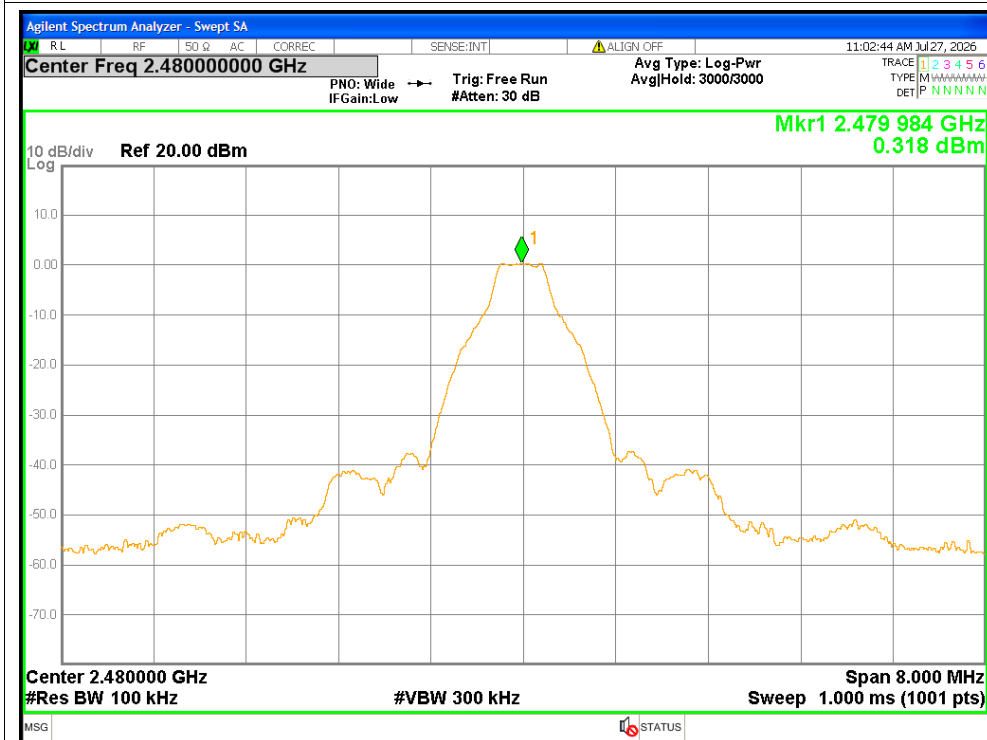
Tx. Spurious NVNT 1-DH5 2441MHz Ref



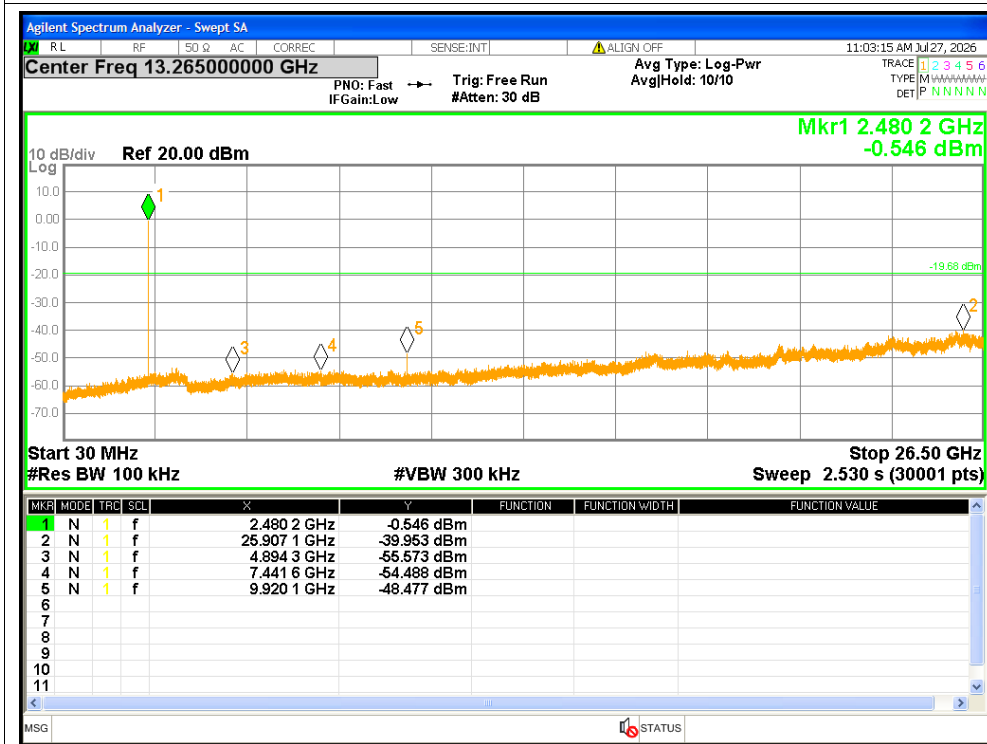
Tx. Spurious NVNT 1-DH5 2441MHz Emission



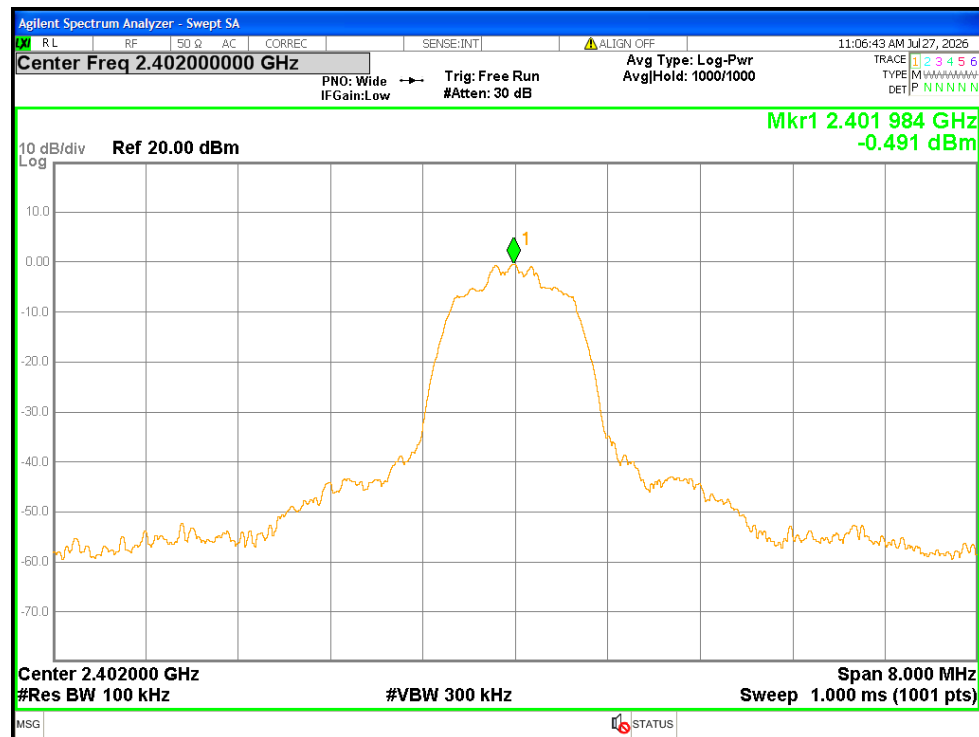
Tx. Spurious NVNT 1-DH5 2480MHz Ref



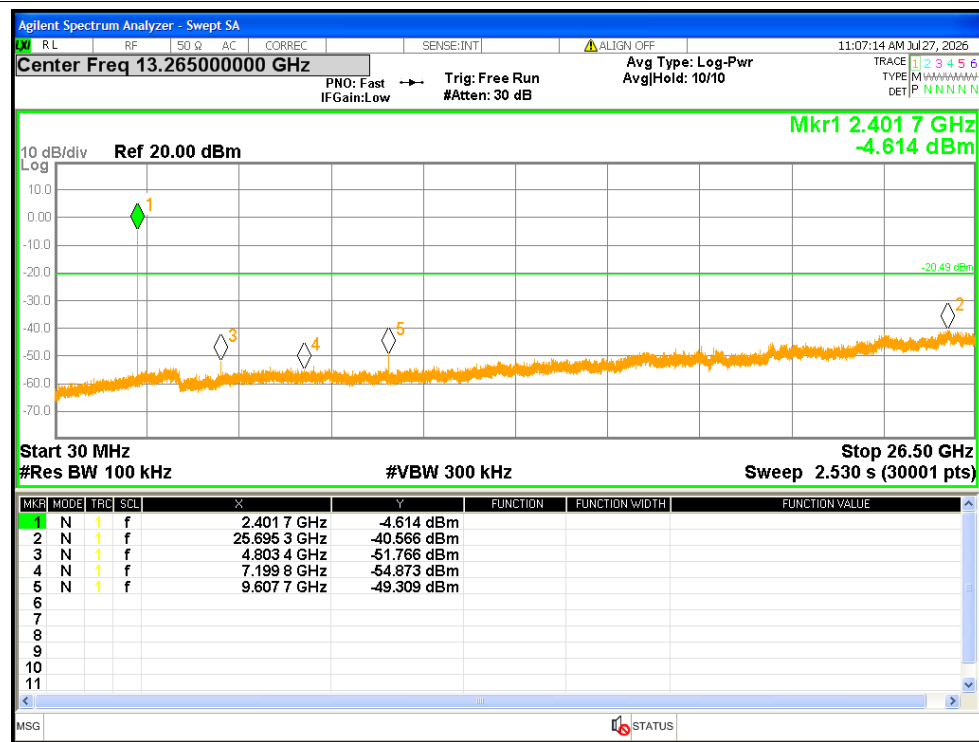
Tx. Spurious NVNT 1-DH5 2480MHz Emission



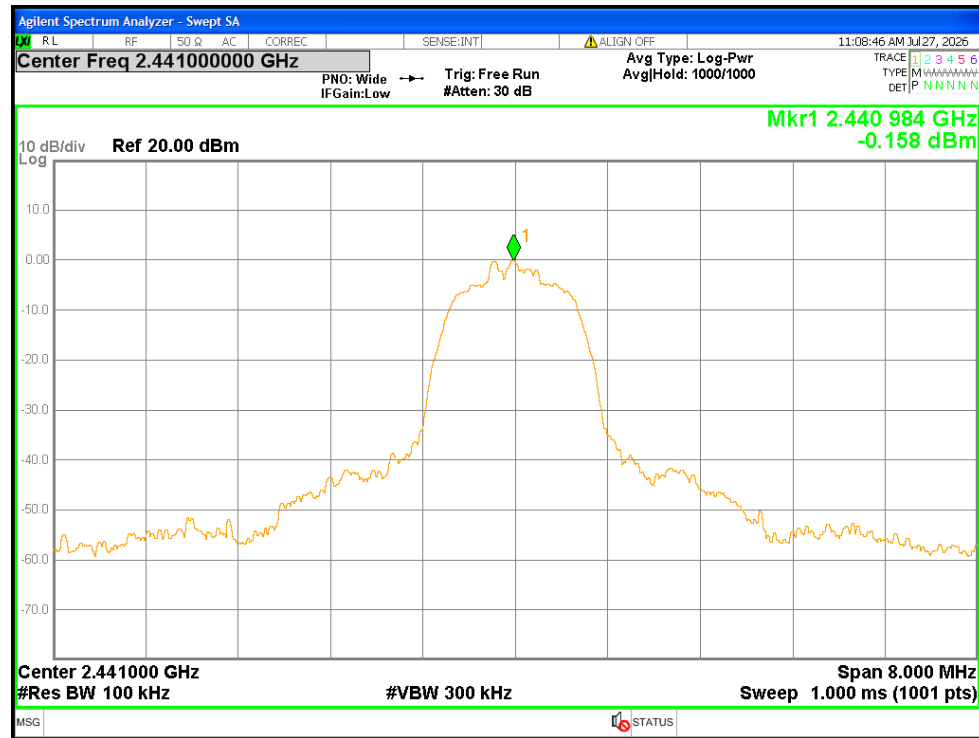
Tx. Spurious NVNT 2-DH5 2402MHz Ref



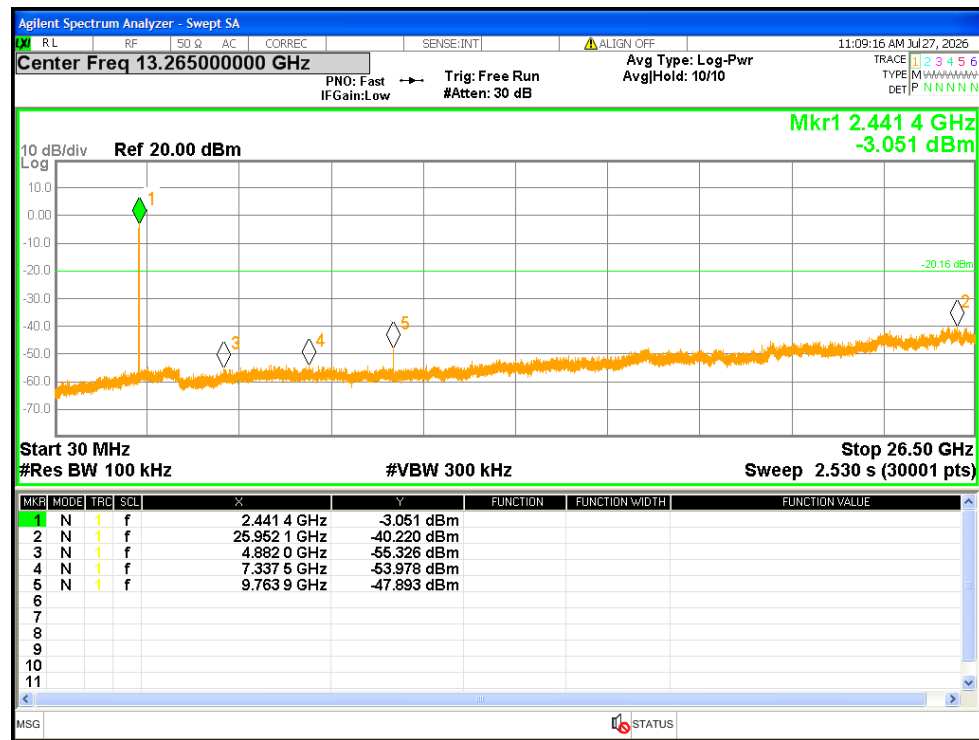
Tx. Spurious NVNT 2-DH5 2402MHz Emission



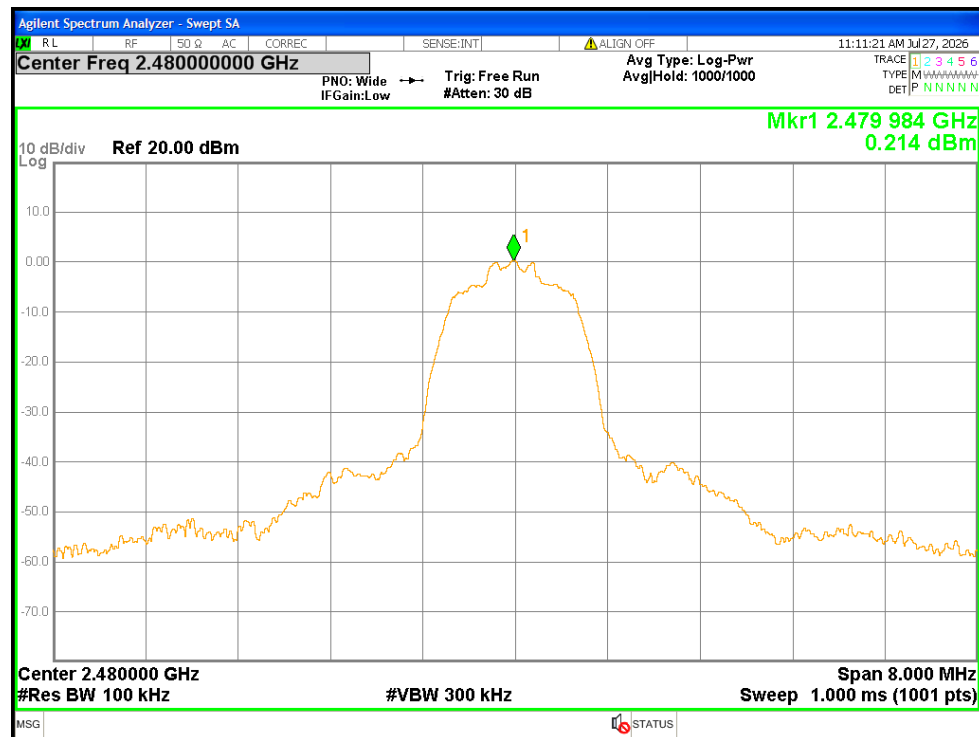
Tx. Spurious NVNT 2-DH5 2441MHz Ref



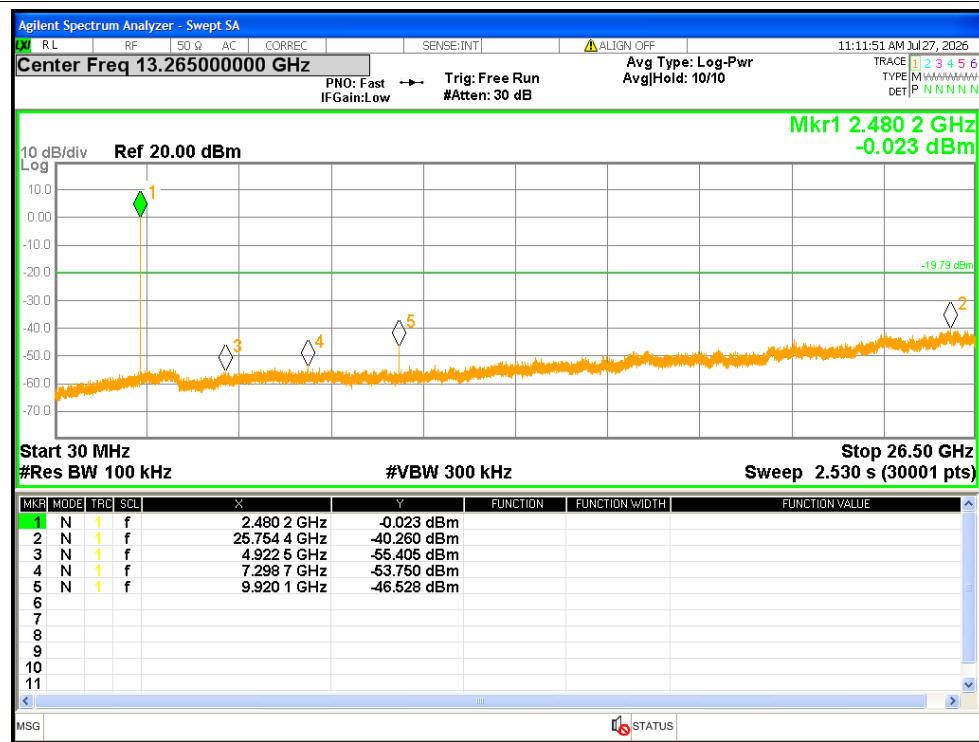
Tx. Spurious NVNT 2-DH5 2441MHz Emission



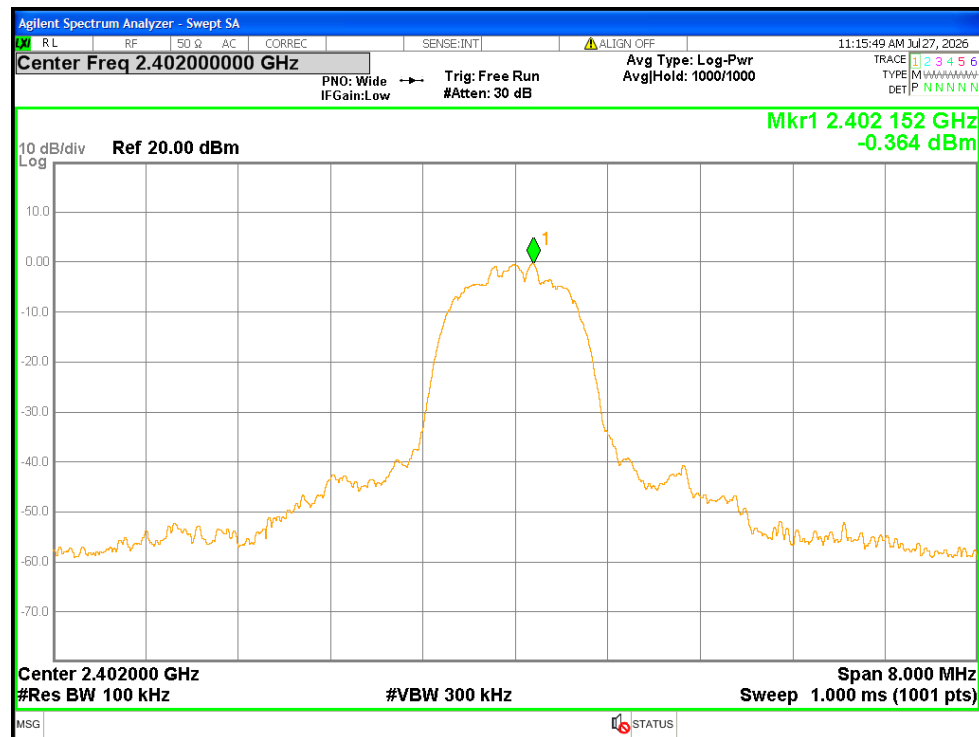
Tx. Spurious NVNT 2-DH5 2480MHz Ref



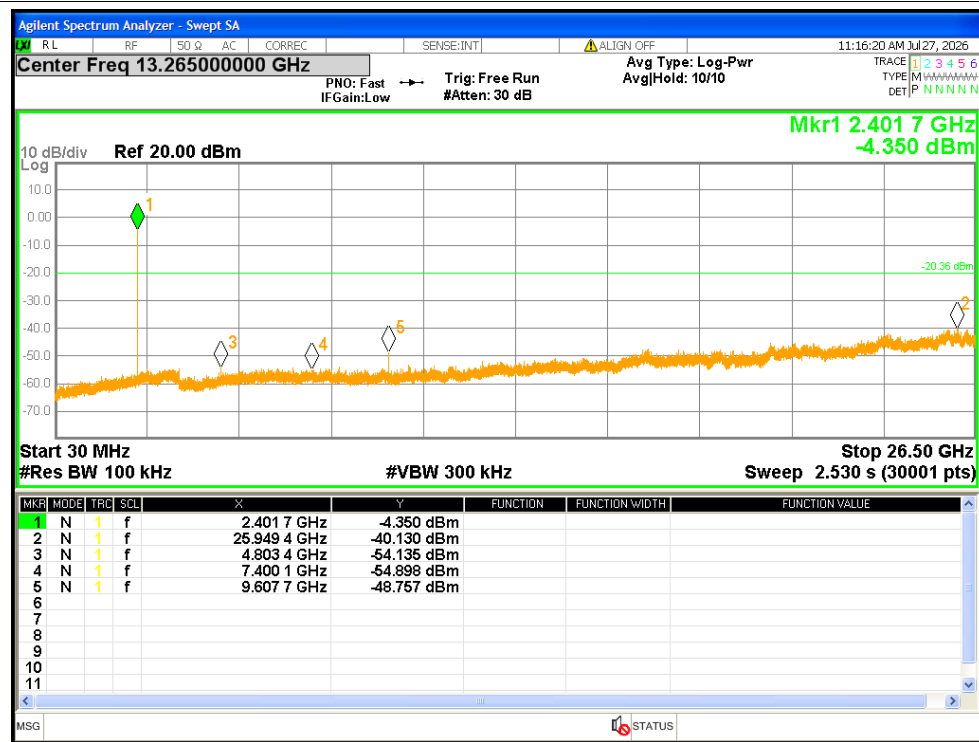
Tx. Spurious NVNT 2-DH5 2480MHz Emission



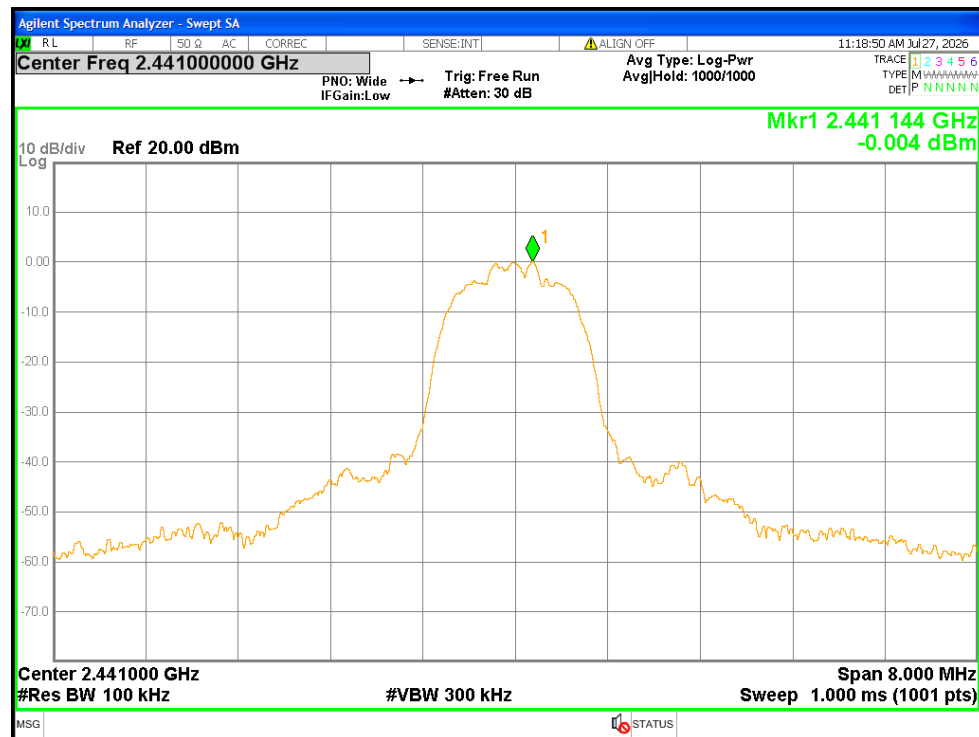
Tx. Spurious NVNT 3-DH5 2402MHz Ref



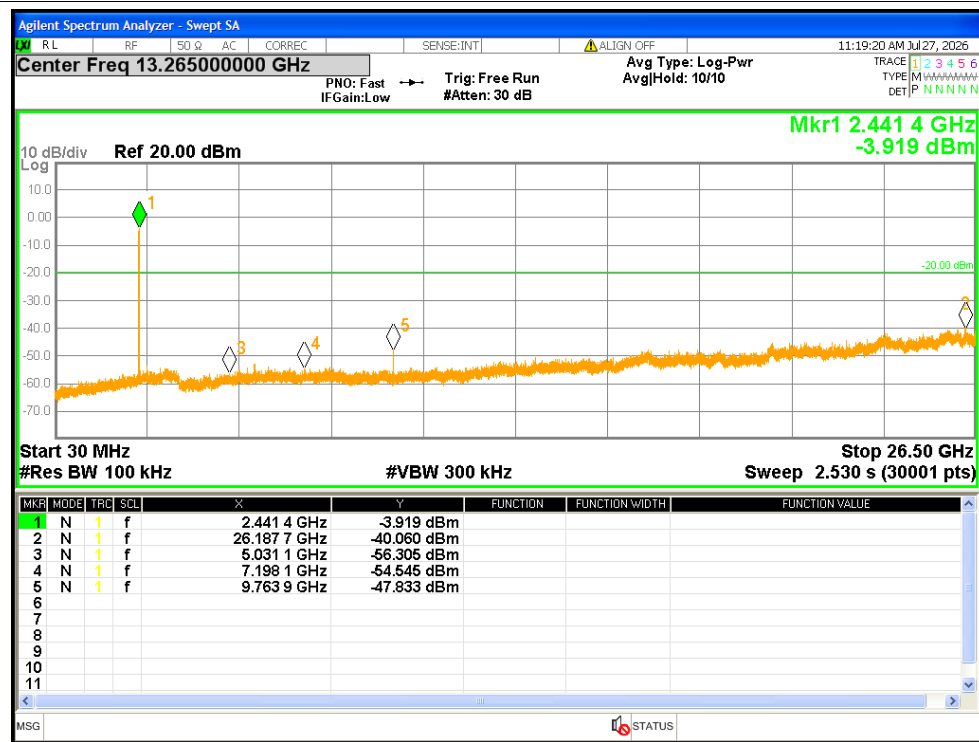
Tx. Spurious NVNT 3-DH5 2402MHz Emission



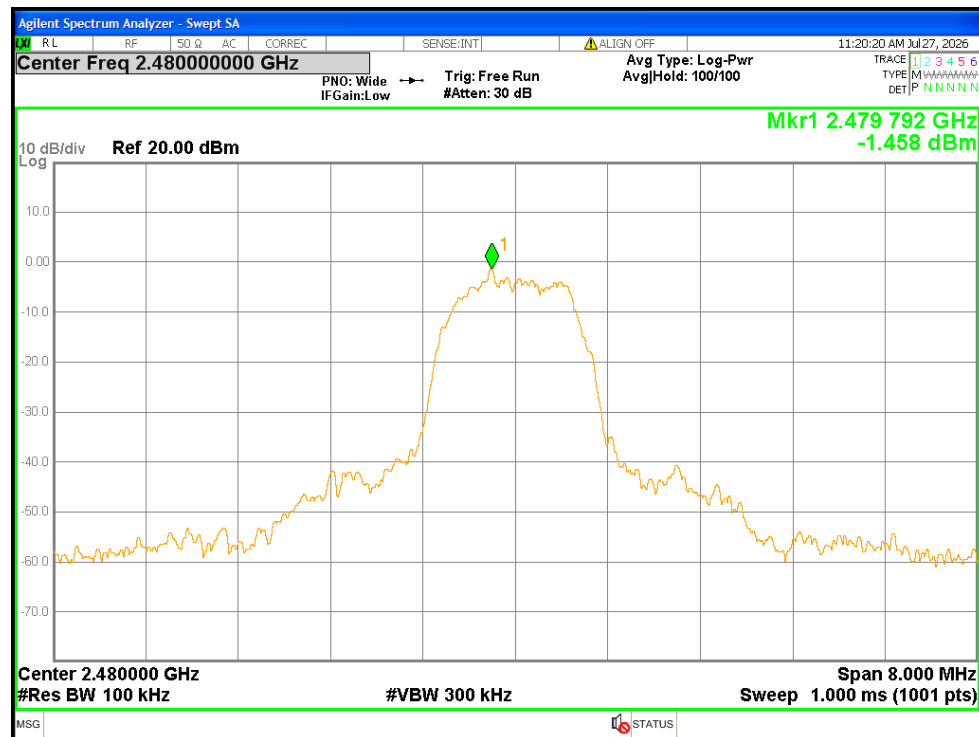
Tx. Spurious NVNT 3-DH5 2441MHz Ref



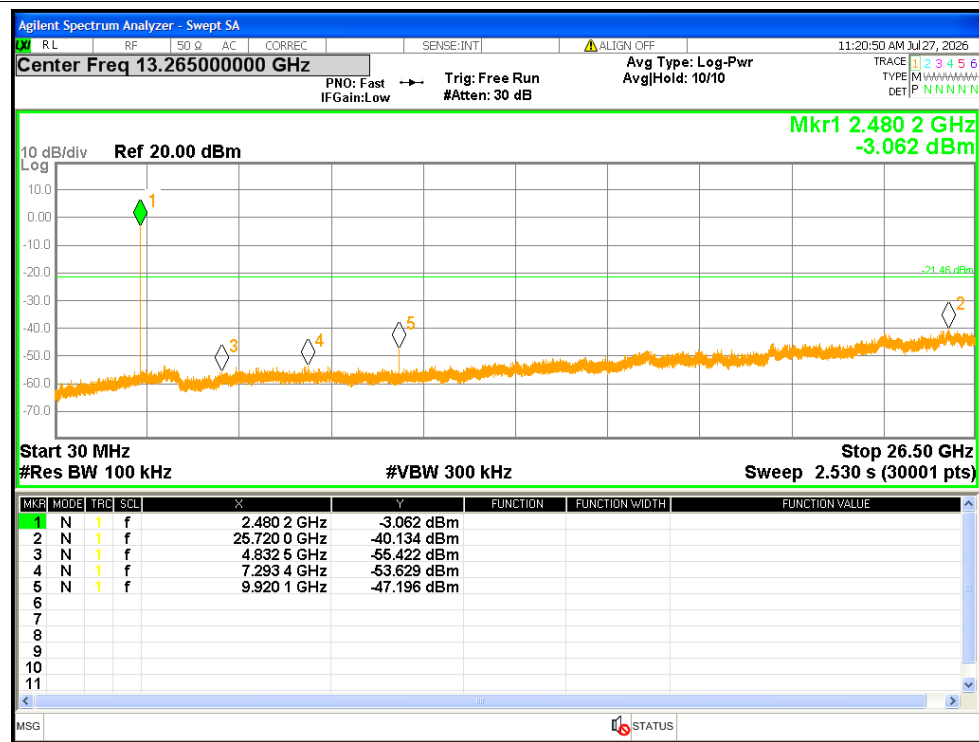
Tx. Spurious NVNT 3-DH5 2441MHz Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ref



Tx. Spurious NVNT 3-DH5 2480MHz Emission



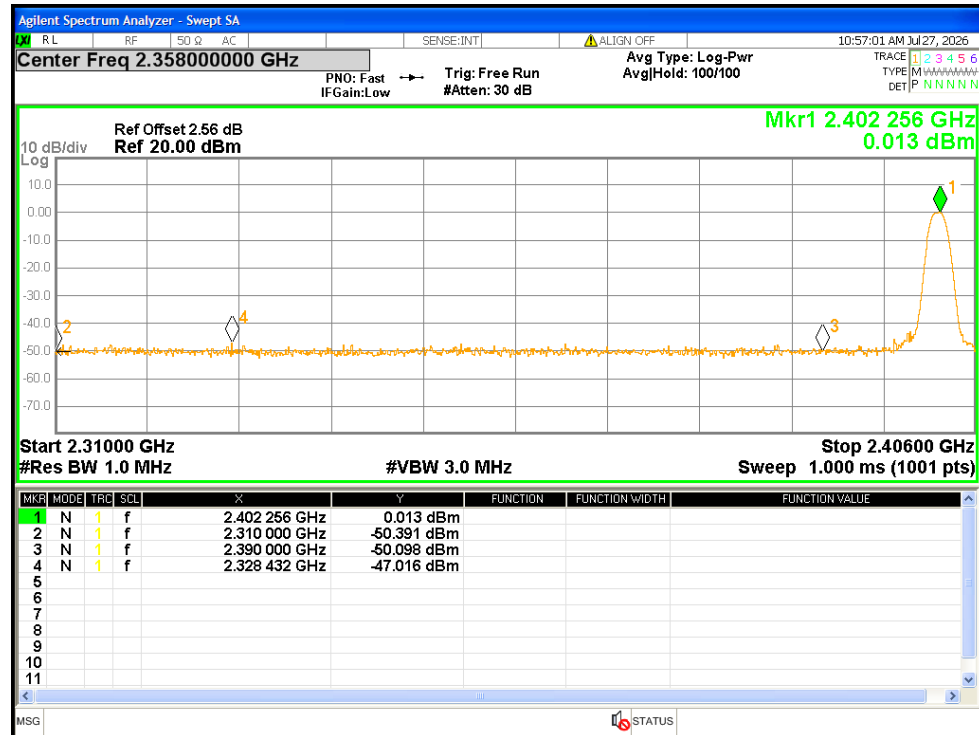
Restrict Band

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	-50.39	2	0	46.87	Peak	<=74	Pass
1-DH5	2402	No-Hopping	2310	-58.35	2	1.1	40.01	Average	<=54	Pass
1-DH5	2402	No-Hopping	2328.432	-47.01	2	0	50.25	Peak	<=74	Pass
1-DH5	2402	No-Hopping	2321.04	-57.58	2	1.1	40.78	Average	<=54	Pass
1-DH5	2402	No-Hopping	2390	-49.62	2	0	47.64	Peak	<=74	Pass
1-DH5	2402	No-Hopping	2390	-58.51	2	1.1	39.85	Average	<=54	Pass
1-DH5	2480	No-Hopping	2483.5	-46.7	2	0	50.56	Peak	<=74	Pass
1-DH5	2480	No-Hopping	2483.5	-55.37	2	1.1	42.99	Average	<=54	Pass
1-DH5	2480	No-Hopping	2484.448	-44.62	2	0	52.64	Peak	<=74	Pass
1-DH5	2480	No-Hopping	2483.584	-55.3	2	1.1	43.06	Average	<=54	Pass
1-DH5	2480	No-Hopping	2500	-49.78	2	0	47.48	Peak	<=74	Pass
1-DH5	2480	No-Hopping	2500	-57.33	2	1.1	41.03	Average	<=54	Pass
2-DH5	2402	No-Hopping	2310	-50.31	2	0	46.95	Peak	<=74	Pass
2-DH5	2402	No-Hopping	2310	-58.6	2	1.09	39.75	Average	<=54	Pass
2-DH5	2402	No-Hopping	2379.312	-46.99	2	0	50.27	Peak	<=74	Pass
2-DH5	2402	No-Hopping	2369.52	-57.47	2	1.09	40.88	Average	<=54	Pass
2-DH5	2402	No-Hopping	2390	-49	2	0	48.26	Peak	<=74	Pass
2-DH5	2402	No-Hopping	2390	-58.66	2	1.09	39.69	Average	<=54	Pass
2-DH5	2480	No-Hopping	2483.5	-47.94	2	0	49.32	Peak	<=74	Pass
2-DH5	2480	No-Hopping	2483.5	-	2	1.09	42.4	Average	<=54	Pass

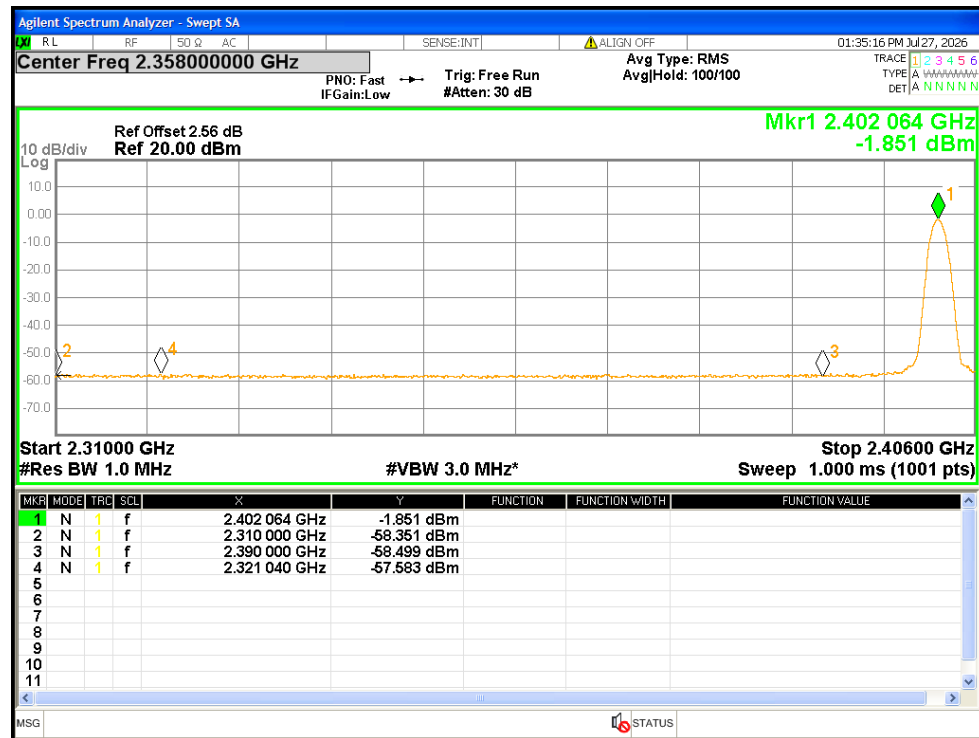
DH5		Hopping		55.95						
2-DH5	2480	No-Hopping	2483.752	- 42.27	2	0	54.99	Peak	<=74	Pass
2-DH5	2480	No-Hopping	2483.656	- 55.77	2	1.09	42.58	Average	<=54	Pass
2-DH5	2480	No-Hopping	2500	- 49.09	2	0	48.17	Peak	<=74	Pass
2-DH5	2480	No-Hopping	2500	- 57.87	2	1.09	40.48	Average	<=54	Pass
3-DH5	2402	No-Hopping	2310	- 51.05	2	0	46.21	Peak	<=74	Pass
3-DH5	2402	No-Hopping	2310	- 58.48	2	1.09	39.87	Average	<=54	Pass
3-DH5	2402	No-Hopping	2336.496	- 47.39	2	0	49.87	Peak	<=74	Pass
3-DH5	2402	No-Hopping	2375.952	- 57.48	2	1.09	40.87	Average	<=54	Pass
3-DH5	2402	No-Hopping	2390	- 50.84	2	0	46.42	Peak	<=74	Pass
3-DH5	2402	No-Hopping	2390	- 58.86	2	1.09	39.49	Average	<=54	Pass
3-DH5	2480	No-Hopping	2483.5	- 48.42	2	0	48.84	Peak	<=74	Pass
3-DH5	2480	No-Hopping	2483.5	- 56.29	2	1.08	42.05	Average	<=54	Pass
3-DH5	2480	No-Hopping	2485.624	- 45.45	2	0	51.81	Peak	<=74	Pass
3-DH5	2480	No-Hopping	2483.584	- 55.44	2	1.08	42.9	Average	<=54	Pass
3-DH5	2480	No-Hopping	2500	- 49.04	2	0	48.22	Peak	<=74	Pass
3-DH5	2480	No-Hopping	2500	- 57.61	2	1.08	40.73	Average	<=54	Pass

Test Graphs

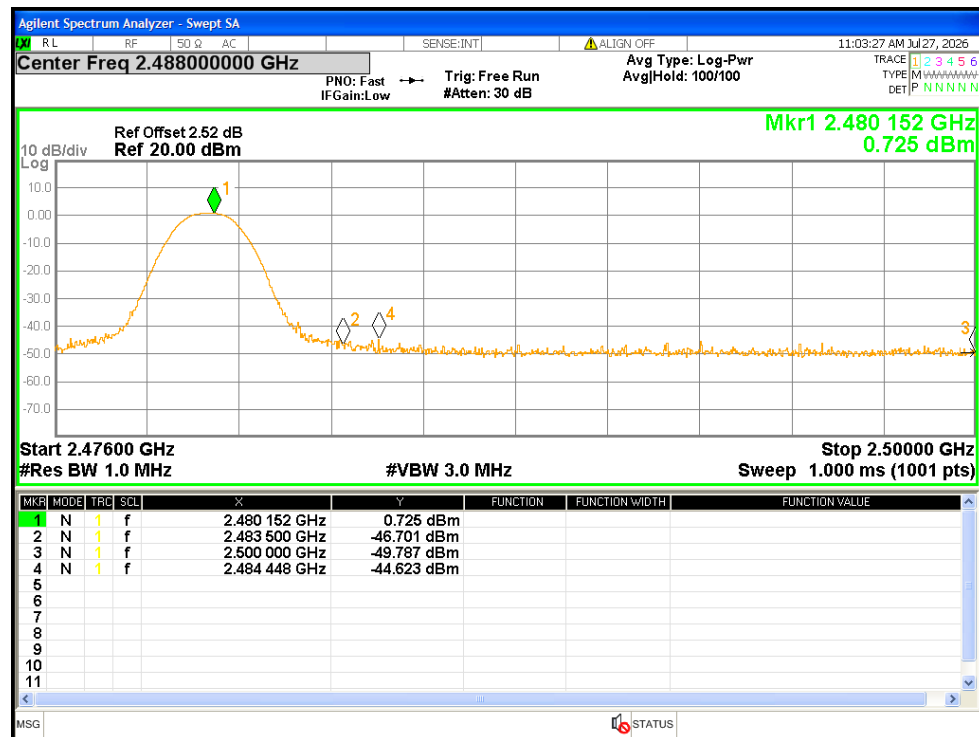
Restrict Band NVNT 1-DH5 2402MHz No-Hopping Peak



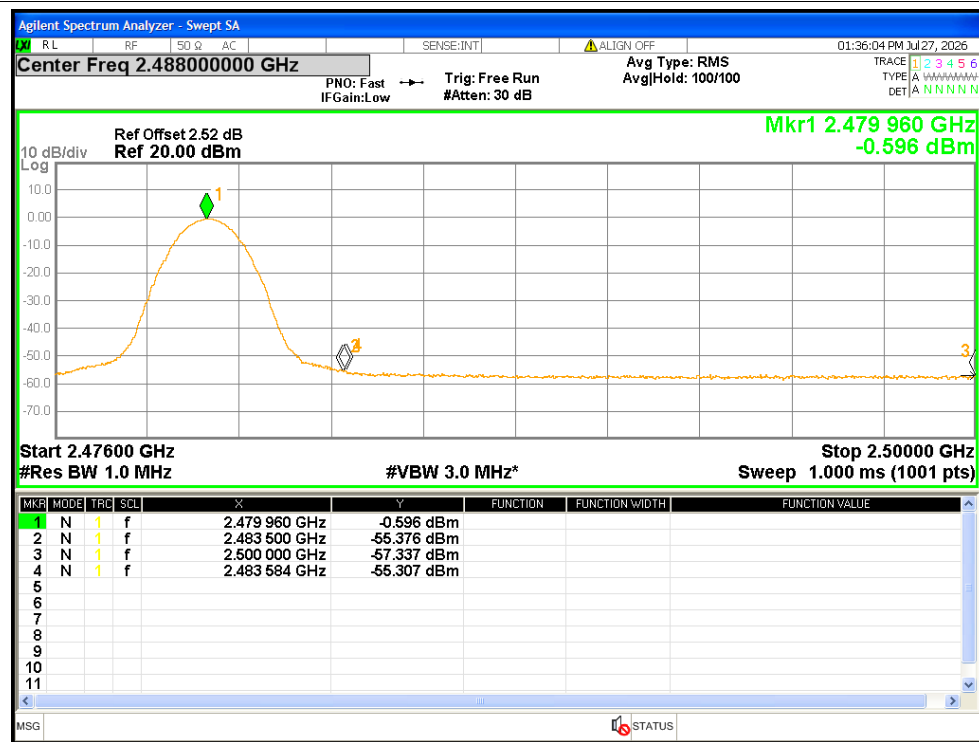
Restrict Band NVNT 1-DH5 2402MHz No-Hopping Average



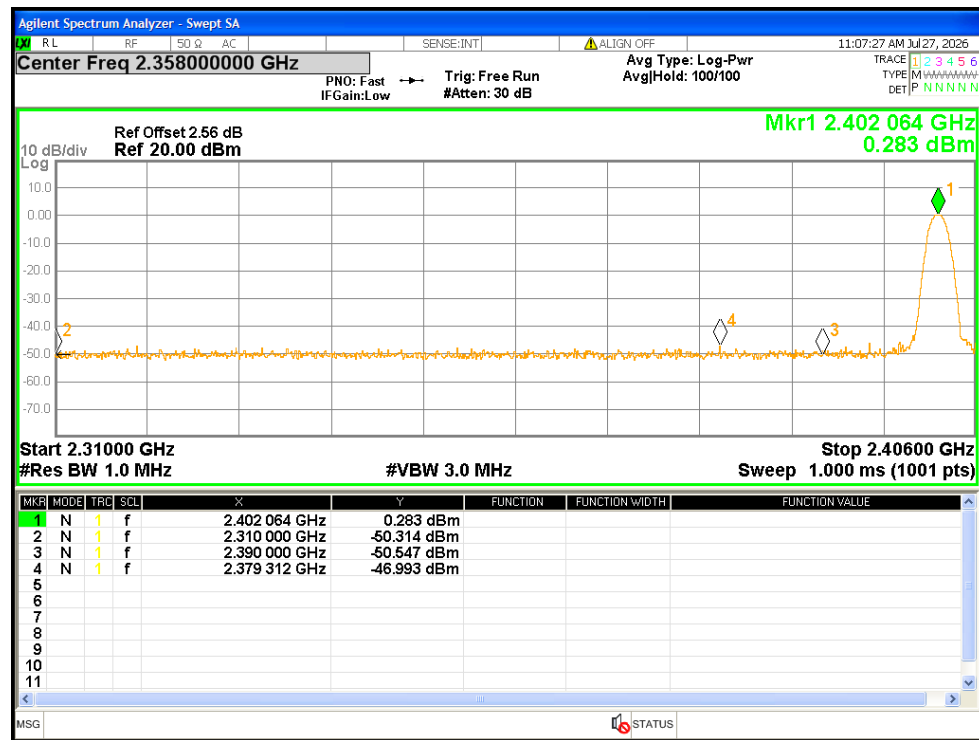
Restrict Band NVNT 1-DH5 2480MHz No-Hopping Peak



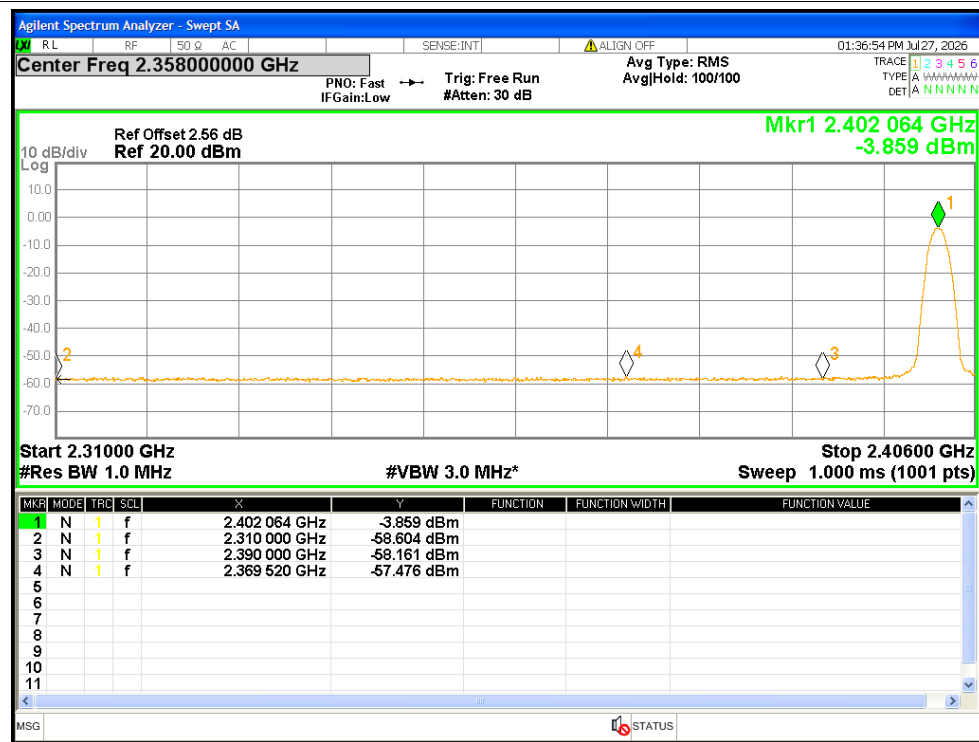
Restrict Band NVNT 1-DH5 2480MHz No-Hopping Average



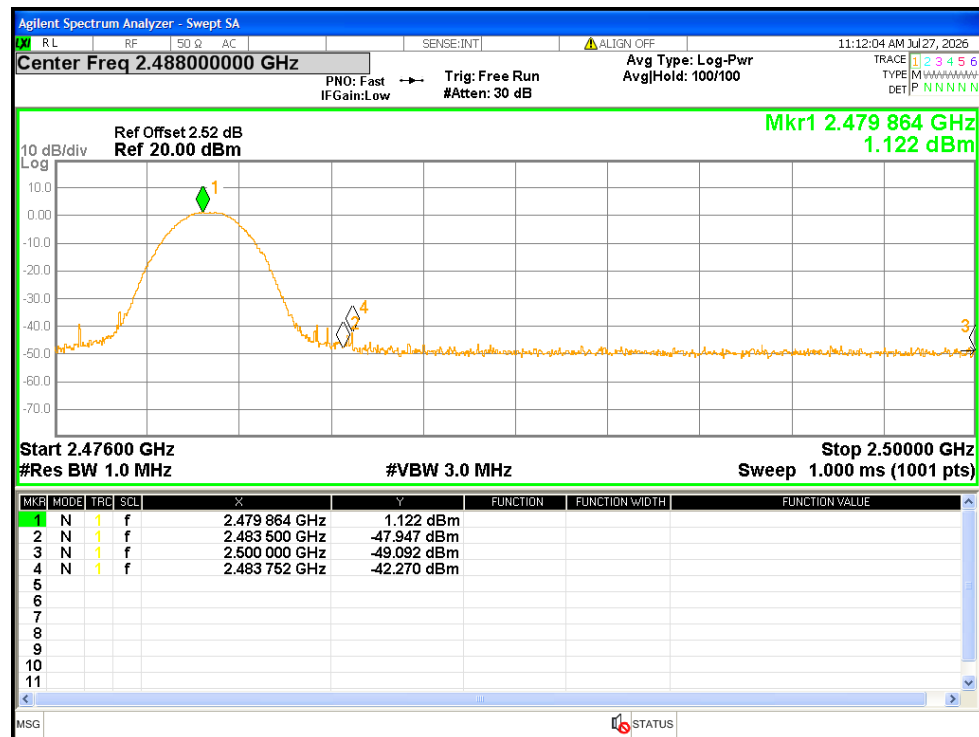
Restrict Band NVNT 2-DH5 2402MHz No-Hopping Peak



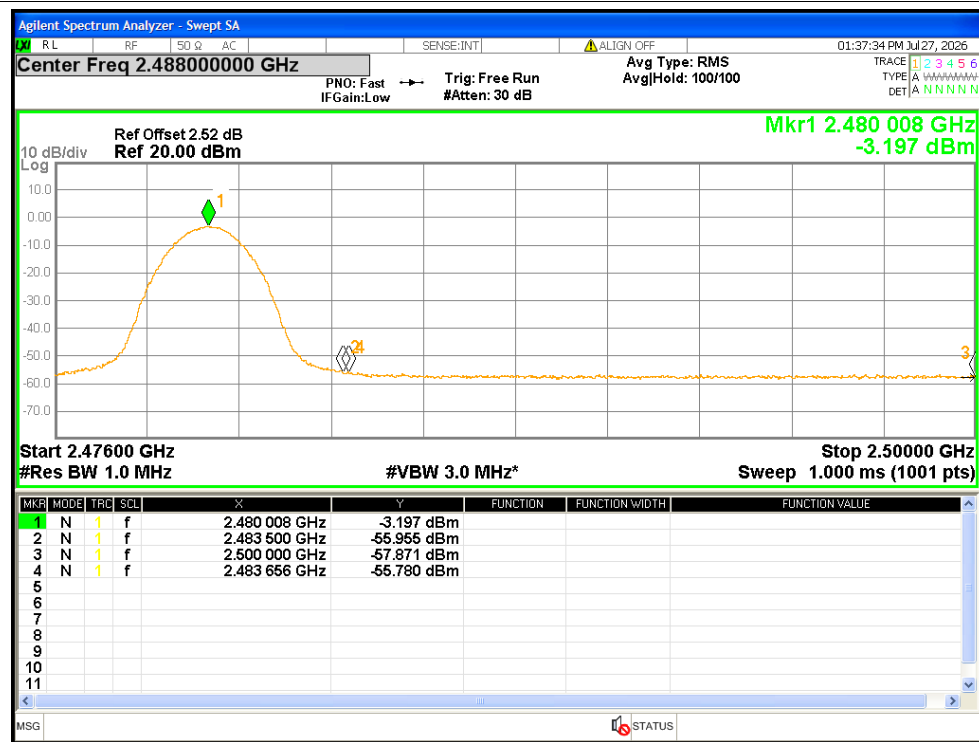
Restrict Band NVNT 2-DH5 2402MHz No-Hopping Average



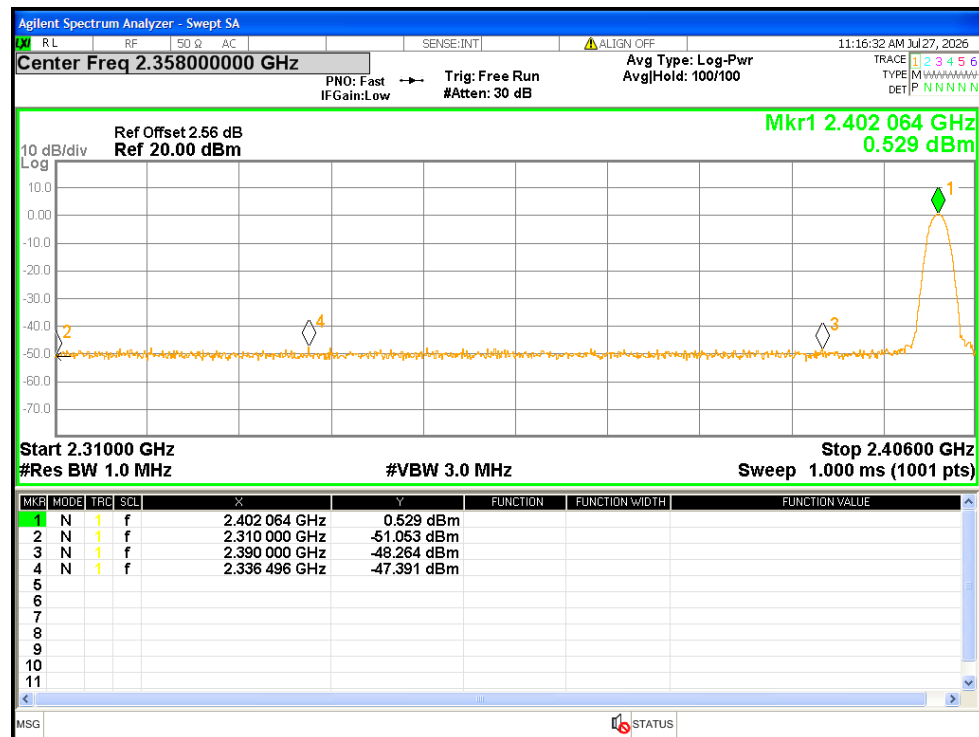
Restrict Band NVNT 2-DH5 2480MHz No-Hopping Peak



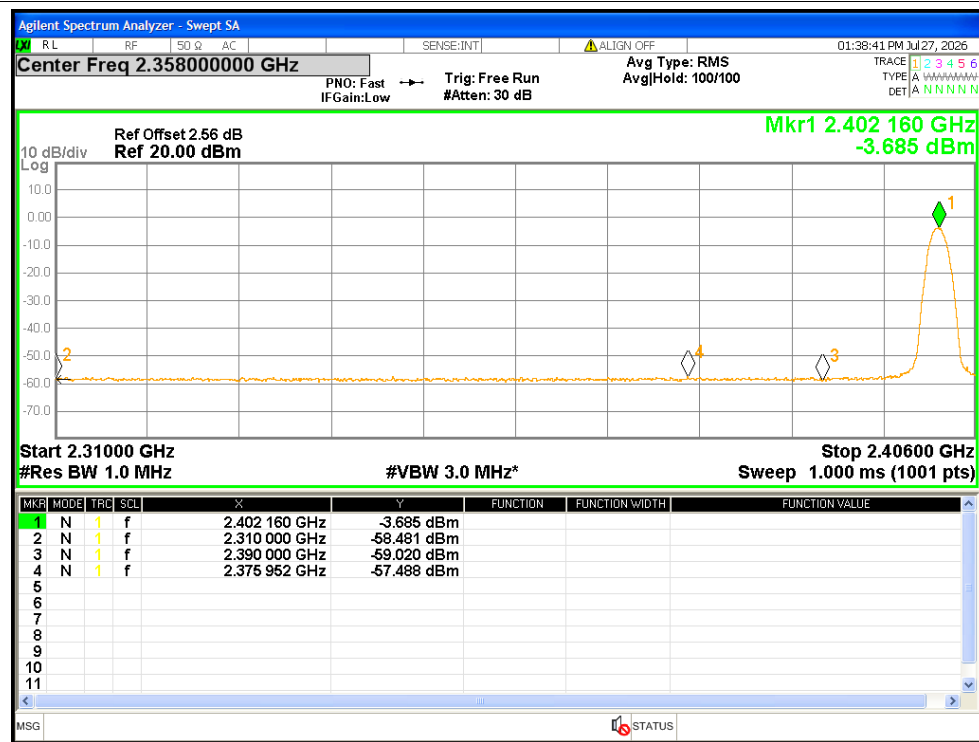
Restrict Band NVNT 2-DH5 2480MHz No-Hopping Average



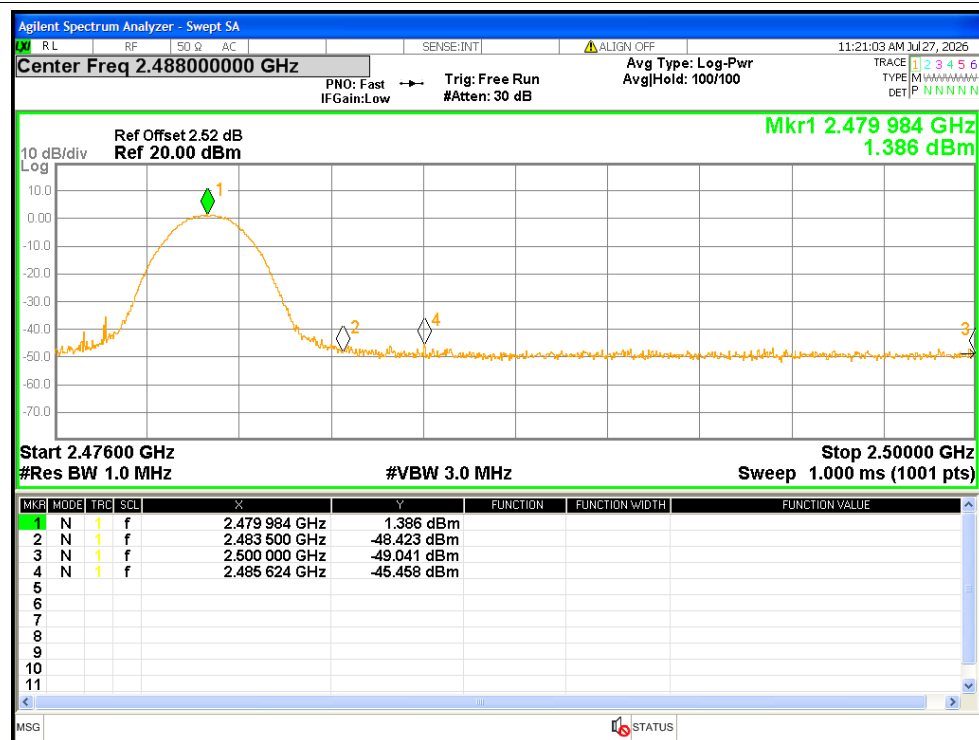
Restrict Band NVNT 3-DH5 2402MHz No-Hopping Peak



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

