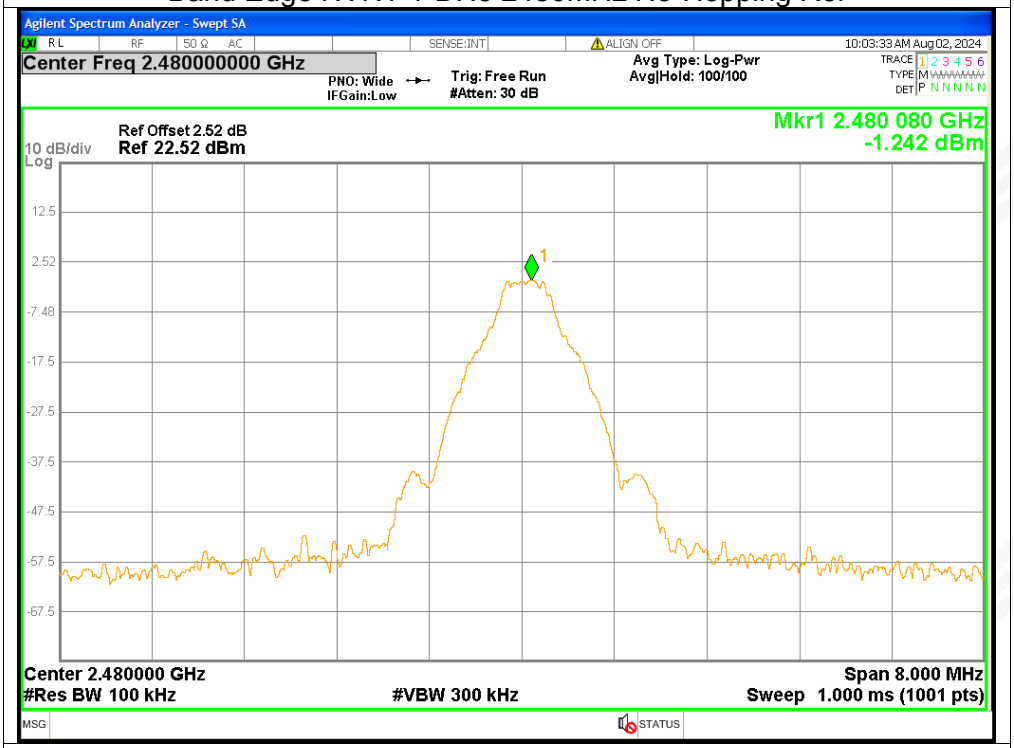
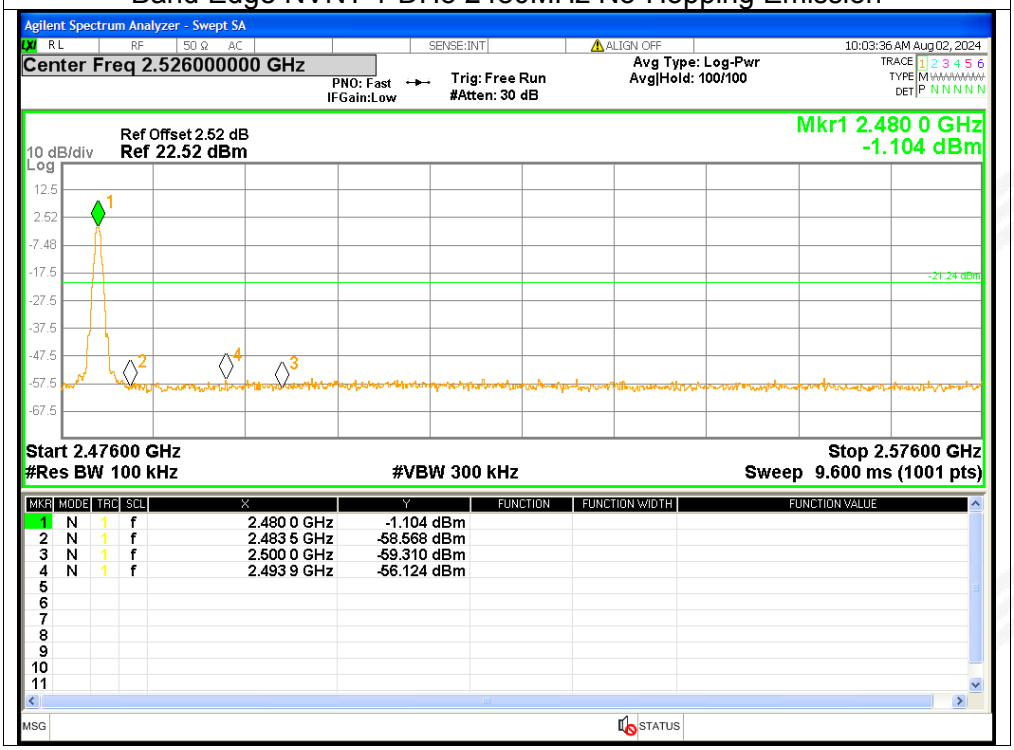
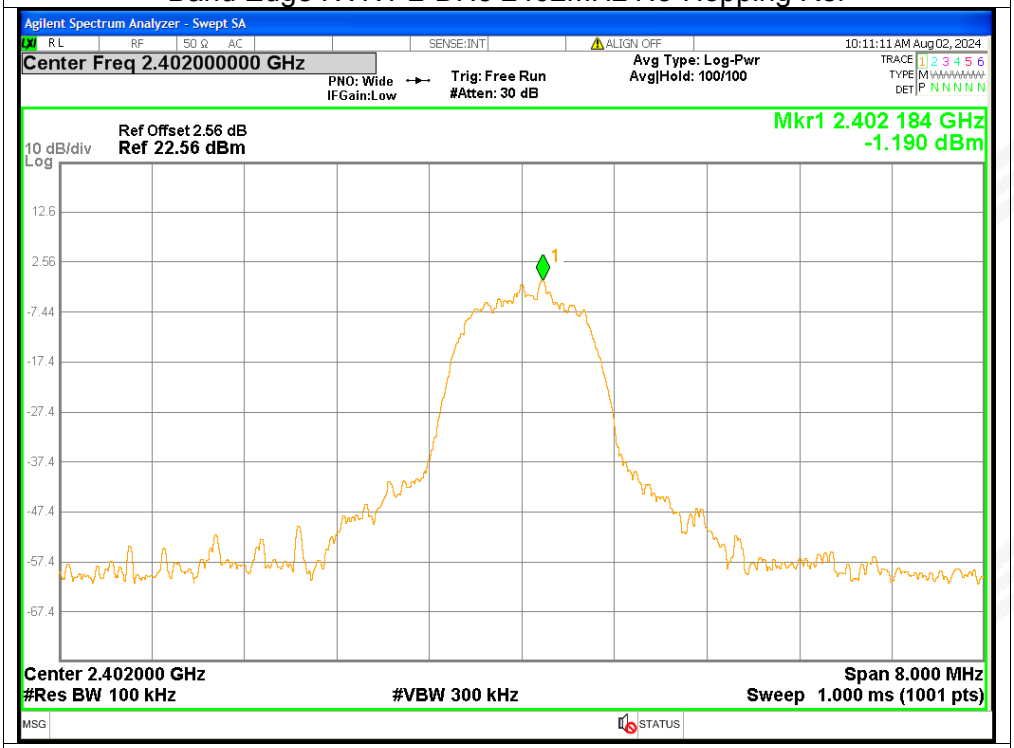
Band Edge NVNT 1-DH5 2480MHz No-Hopping Ref



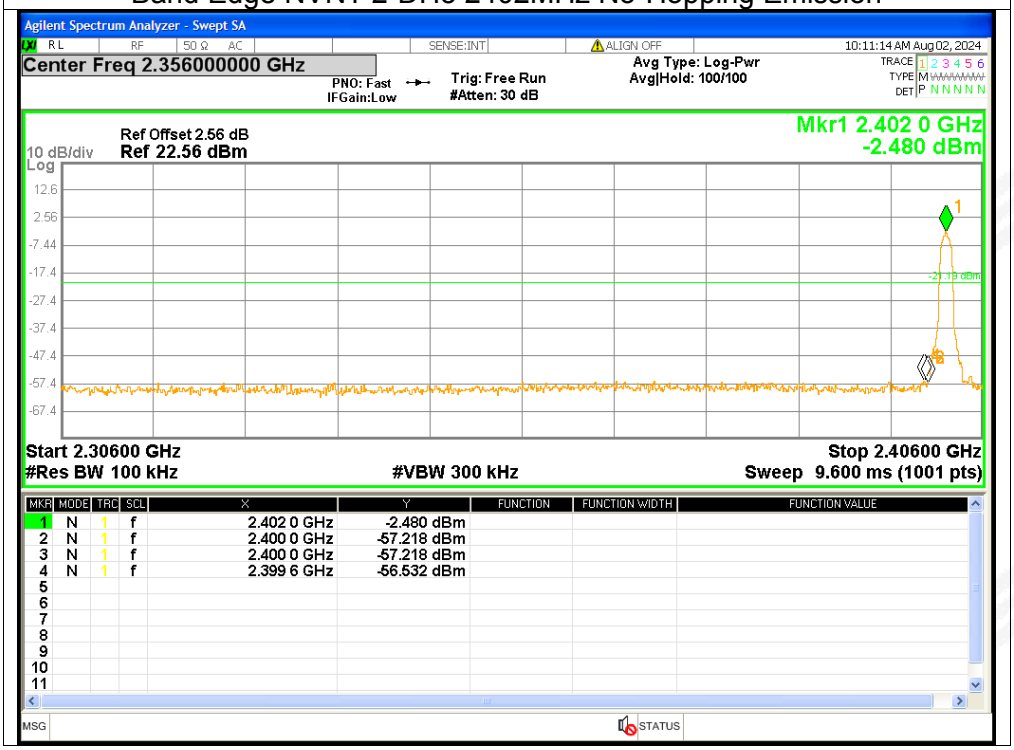
Band Edge NVNT 1-DH5 2480MHz No-Hopping Emission



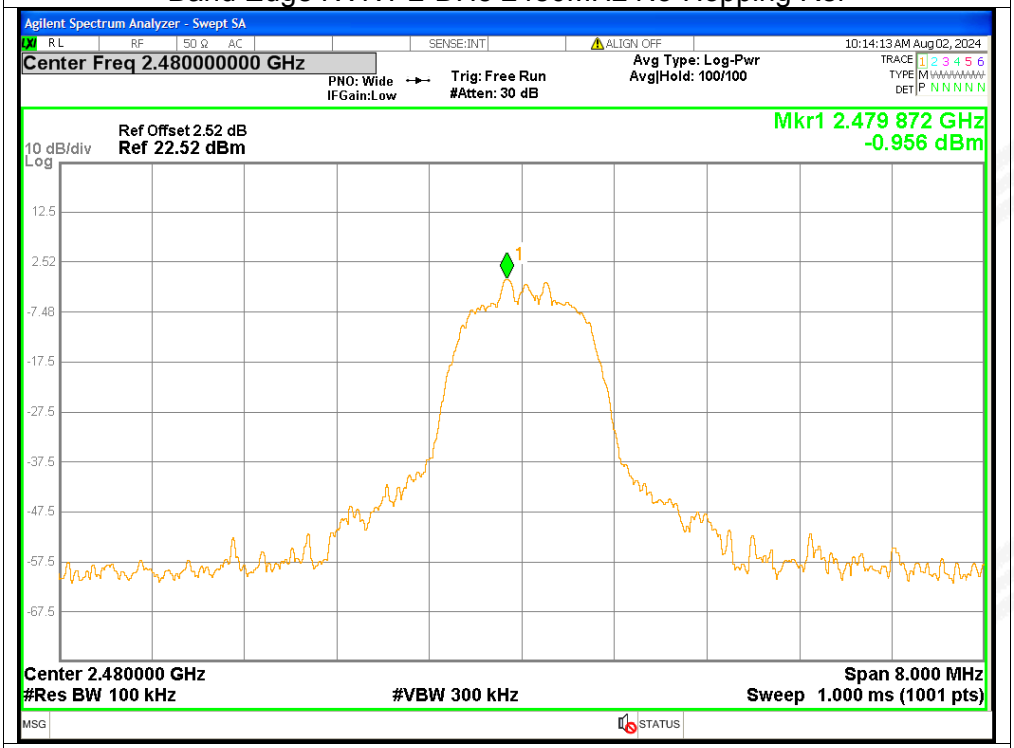
Band Edge NVNT 2-DH5 2402MHz No-Hopping Ref



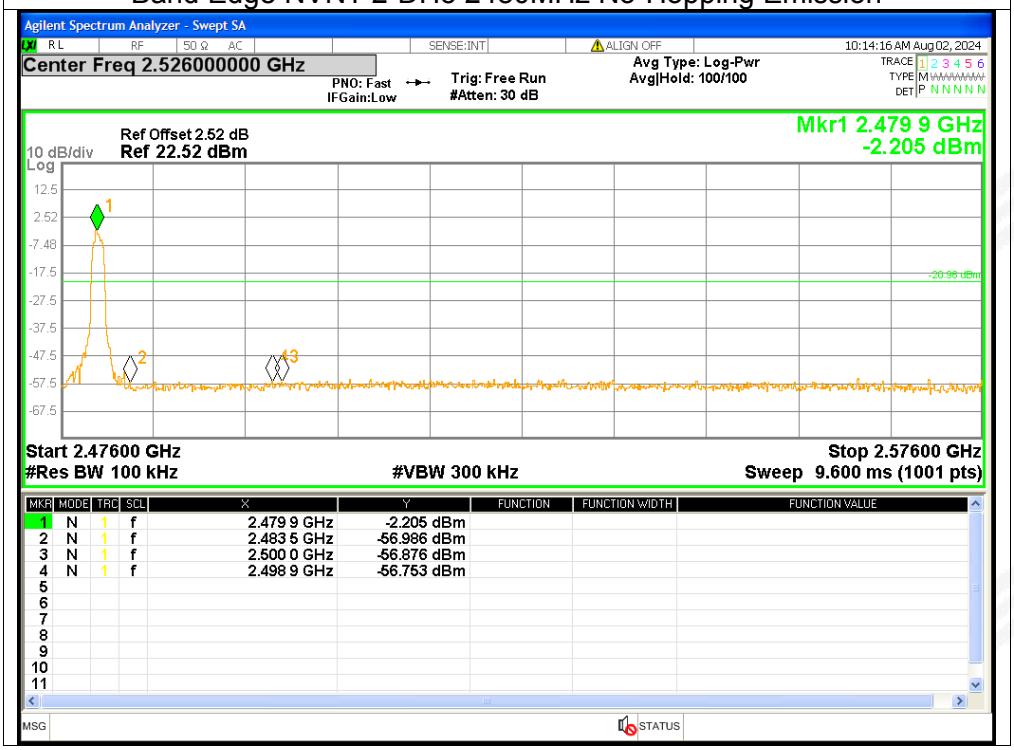
Band Edge NVNT 2-DH5 2402MHz No-Hopping Emission



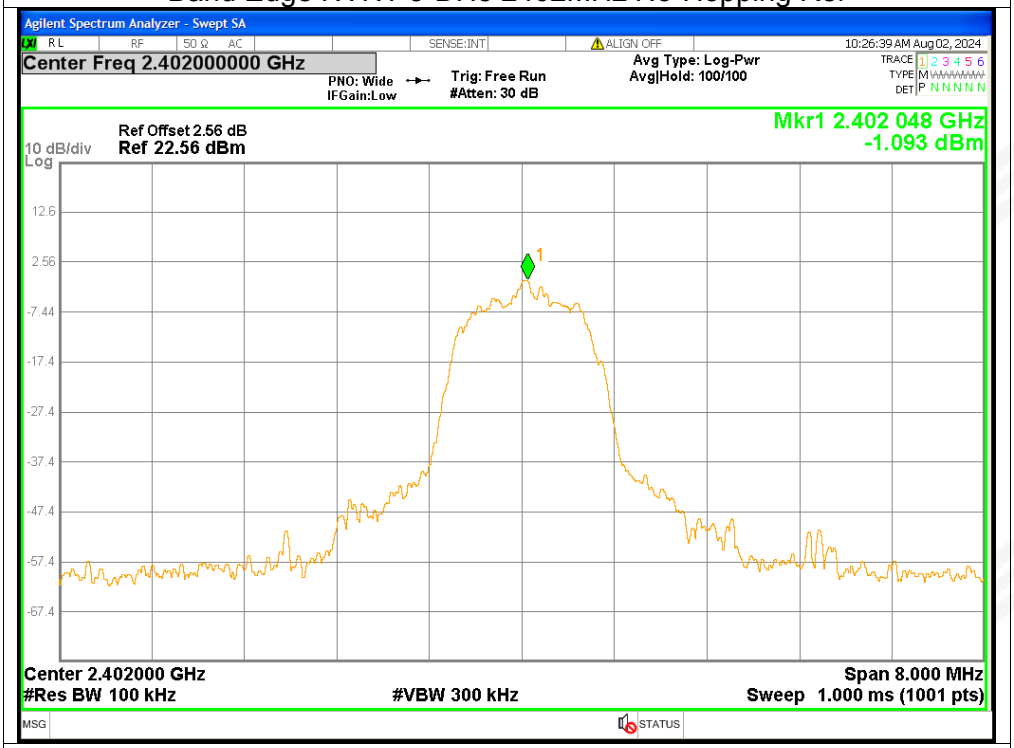
Band Edge NVNT 2-DH5 2480MHz No-Hopping Ref



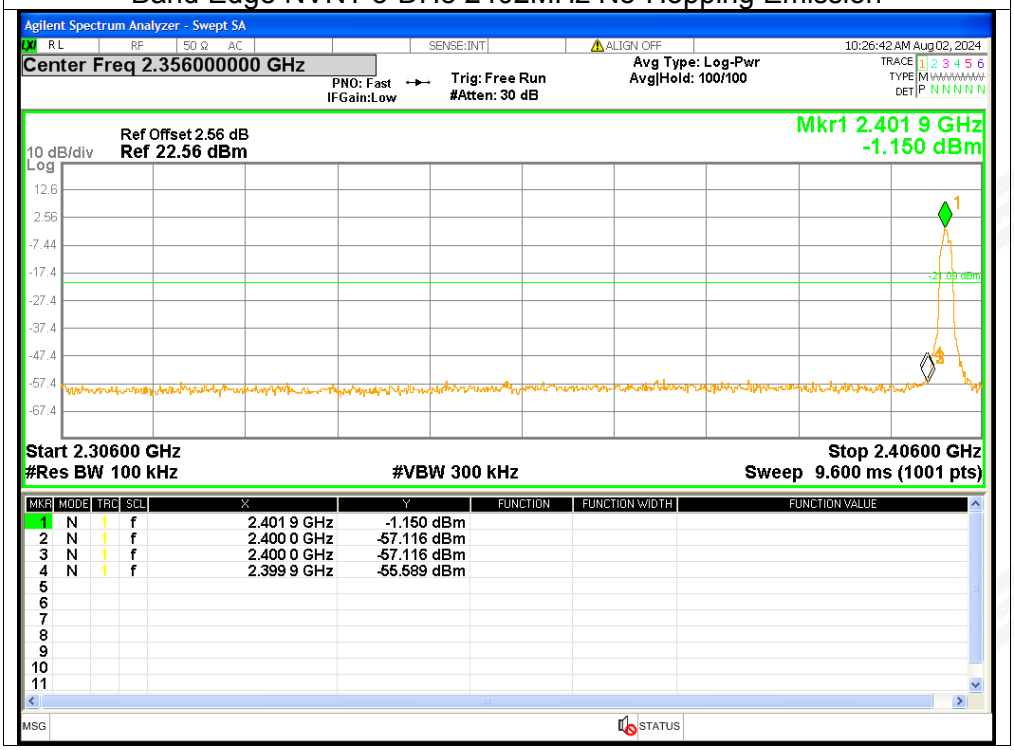
Band Edge NVNT 2-DH5 2480MHz No-Hopping Emission



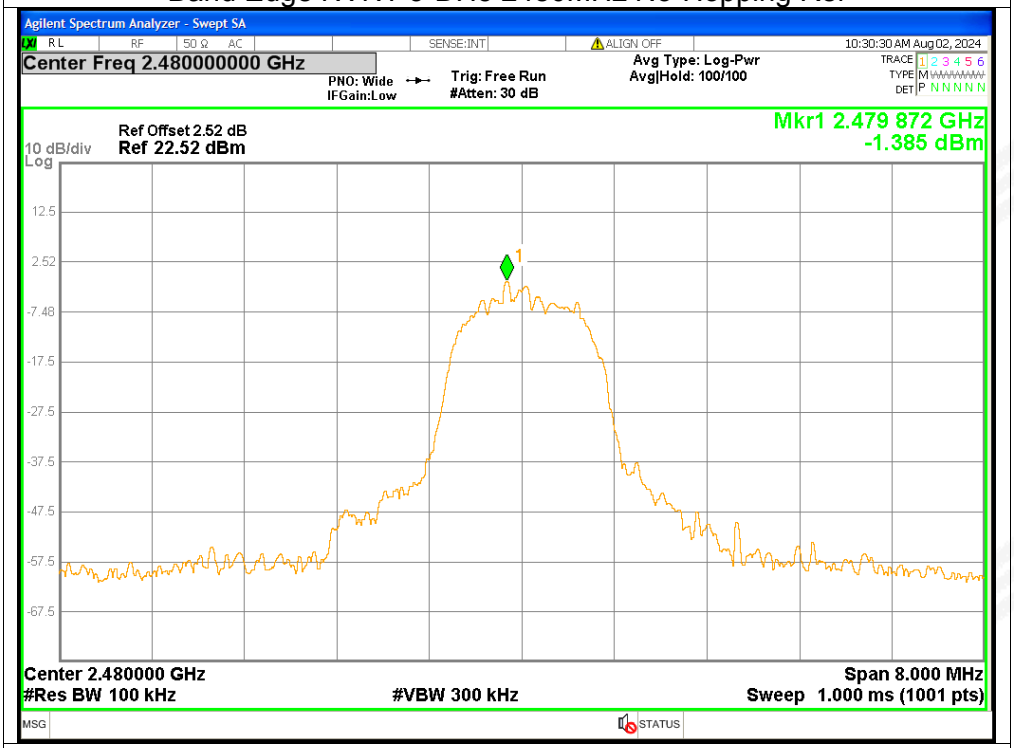
Band Edge NVNT 3-DH5 2402MHz No-Hopping Ref



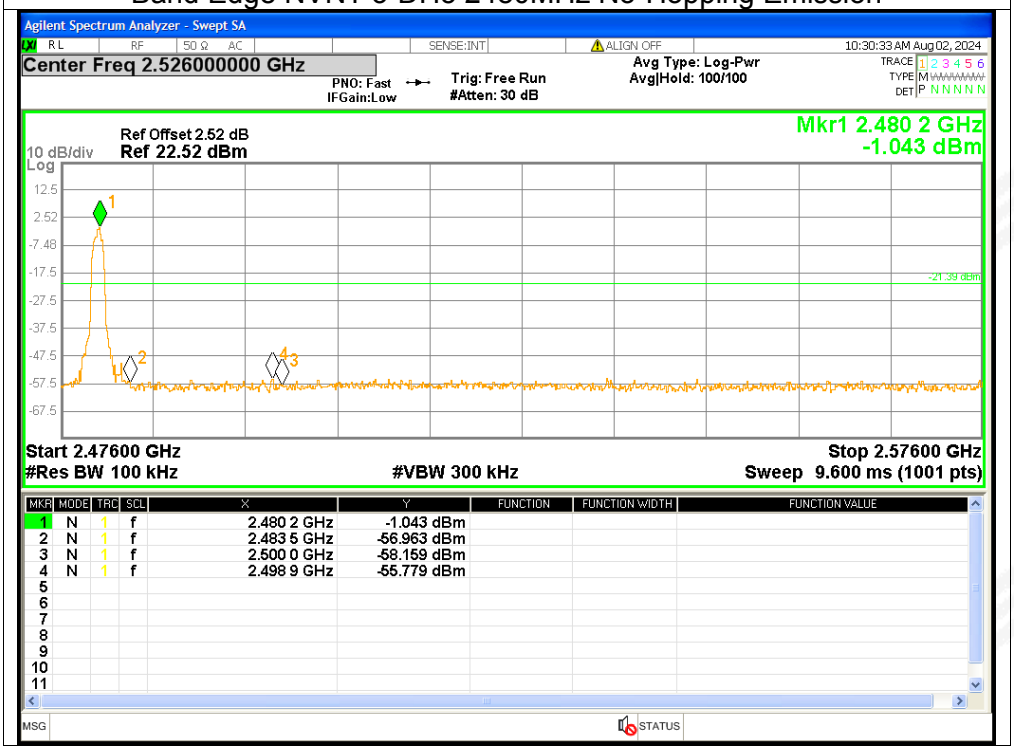
Band Edge NVNT 3-DH5 2402MHz No-Hopping Emission



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



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

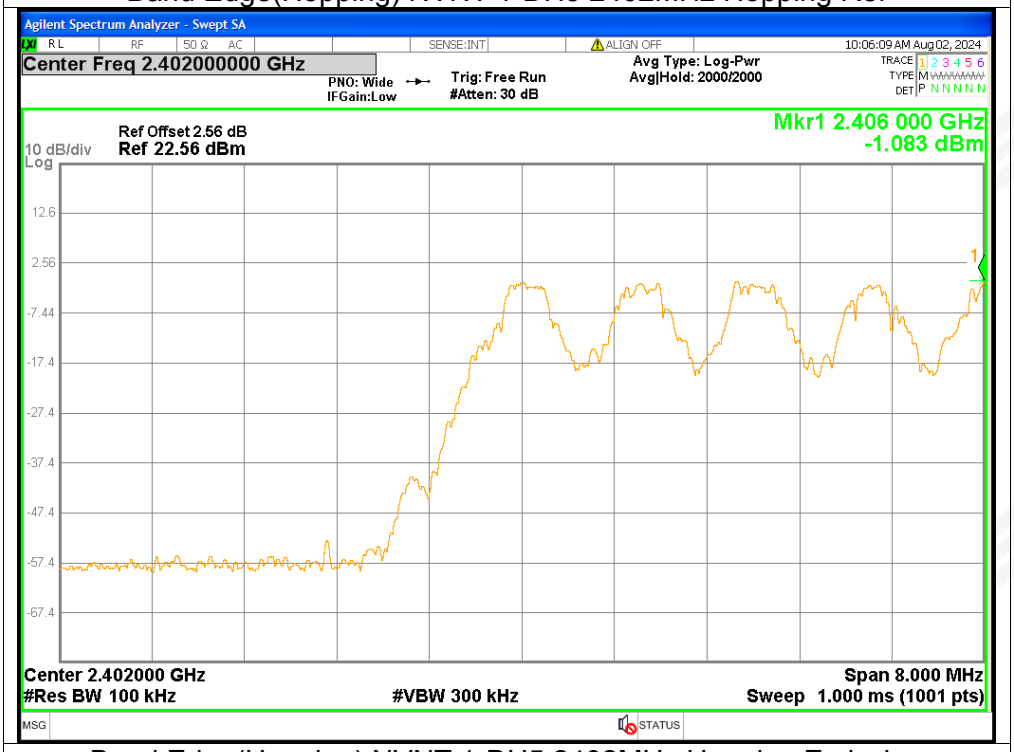


7. Band Edge(Hopping)

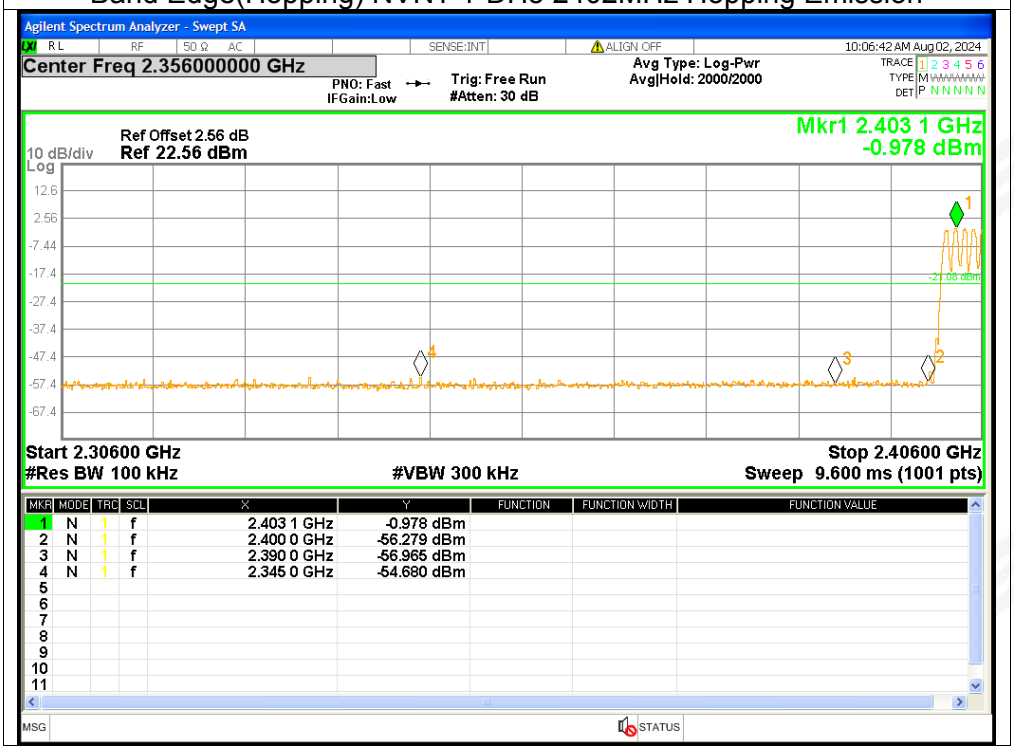
Condition	Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Hopping	-53.6	<=-20	Pass
NVNT	1-DH5	2480	Hopping	-53.22	<=-20	Pass
NVNT	2-DH5	2402	Hopping	-54.33	<=-20	Pass
NVNT	2-DH5	2480	Hopping	-53.8	<=-20	Pass
NVNT	3-DH5	2402	Hopping	-55.3	<=-20	Pass
NVNT	3-DH5	2480	Hopping	-54.83	<=-20	Pass

Test Graphs

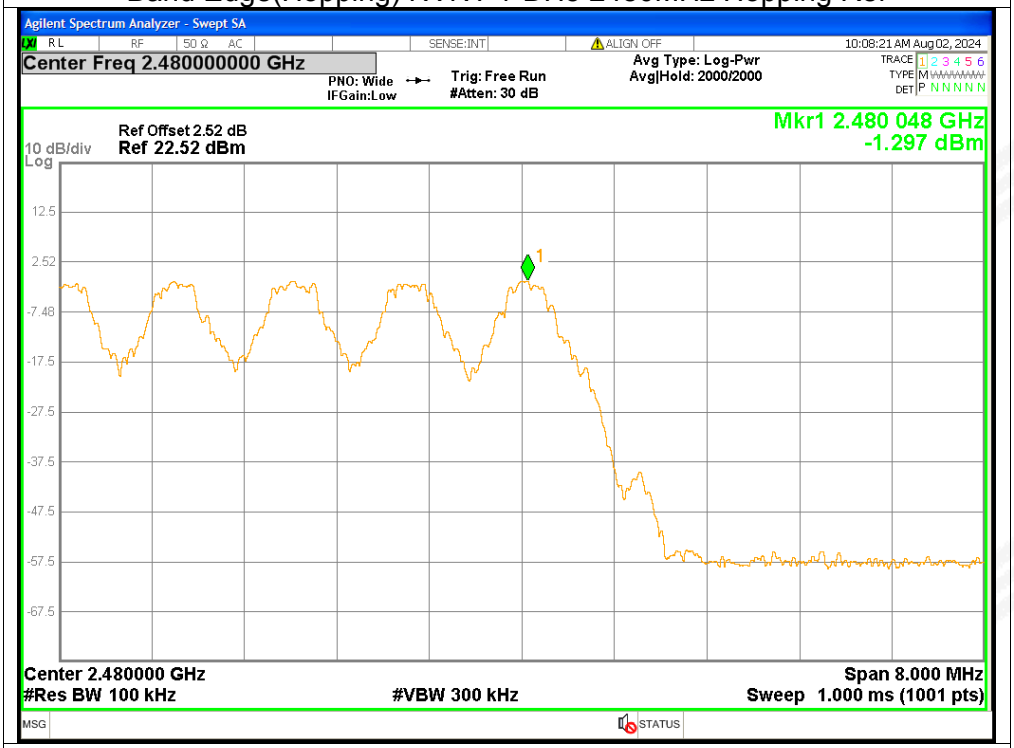
Band Edge(Hopping) NVNT 1-DH5 2402MHz Hopping Ref



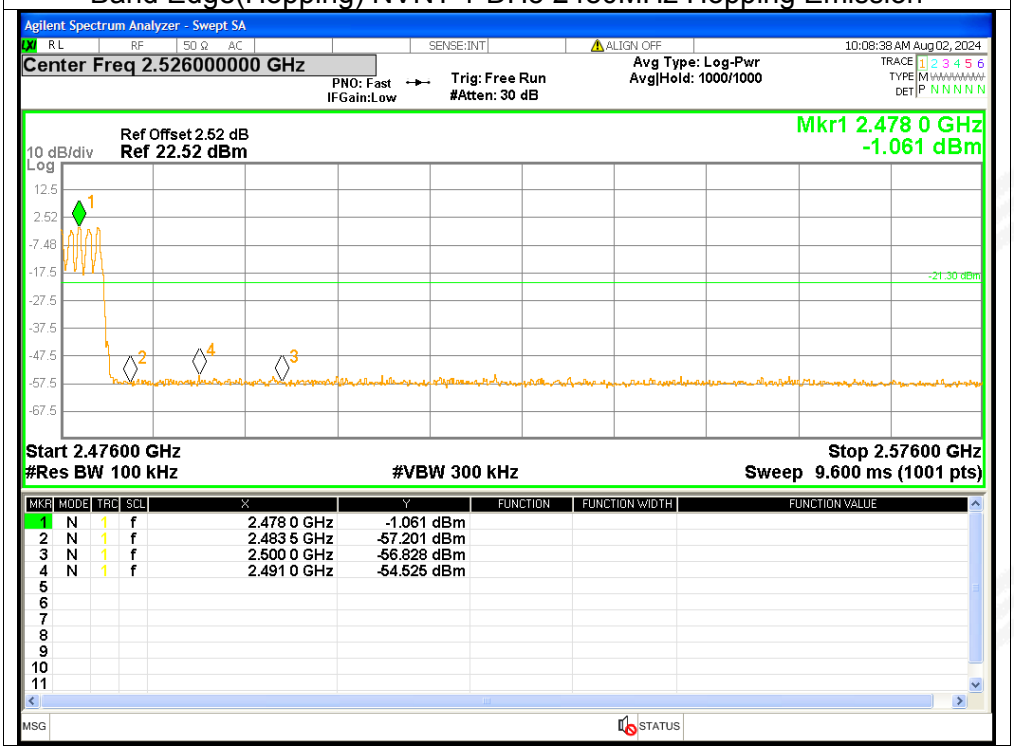
Band Edge(Hopping) NVNT 1-DH5 2402MHz Hopping Emission



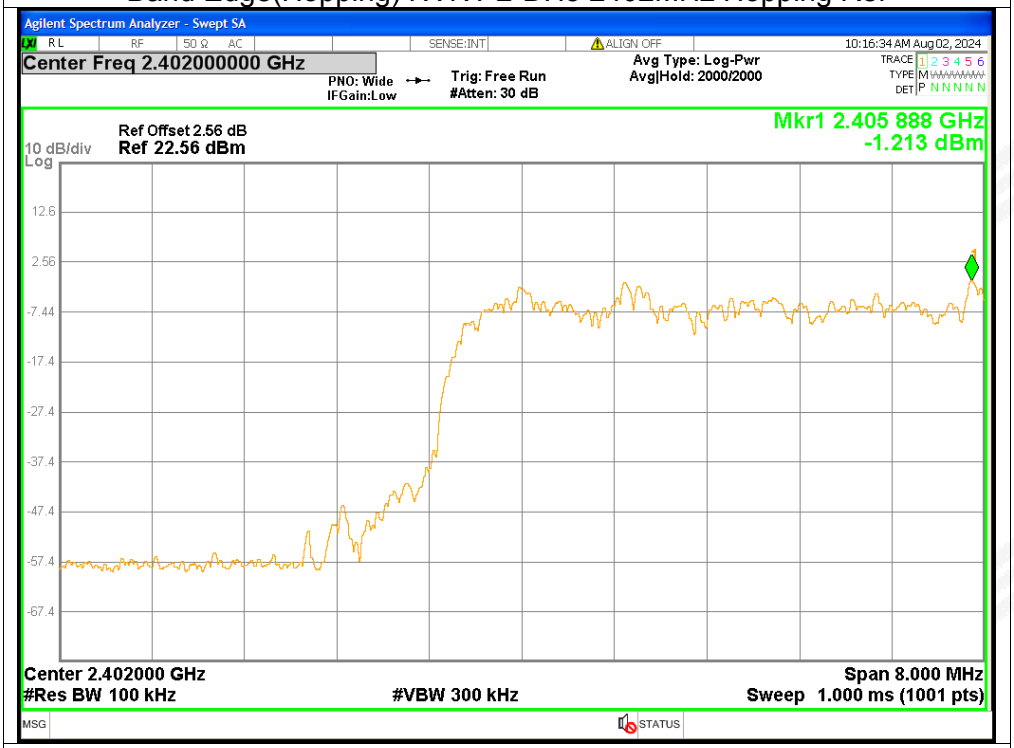
Band Edge(Hopping) NVNT 1-DH5 2480MHz Hopping Ref



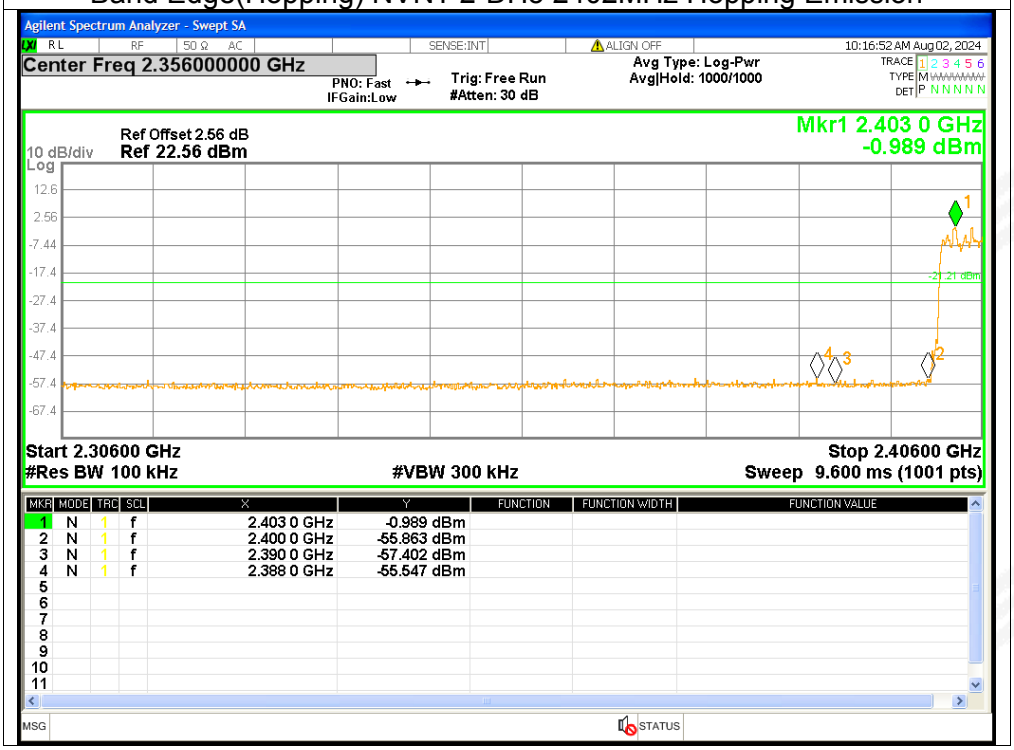
Band Edge(Hopping) NVNT 1-DH5 2480MHz Hopping Emission



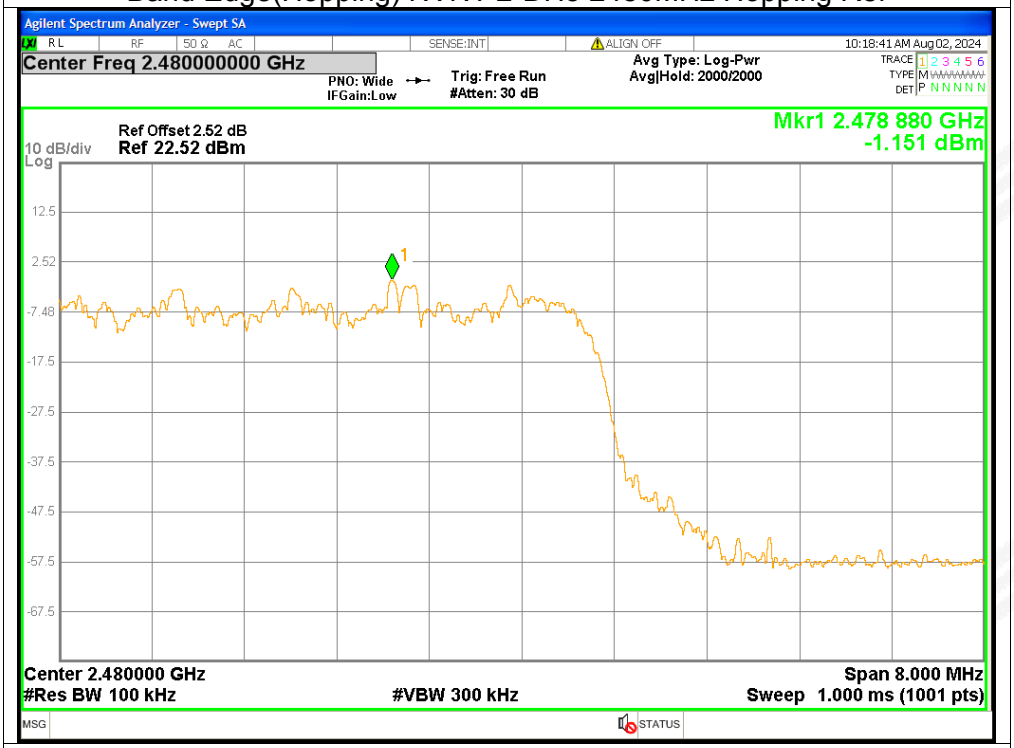
Band Edge(Hopping) NVNT 2-DH5 2402MHz Hopping Ref



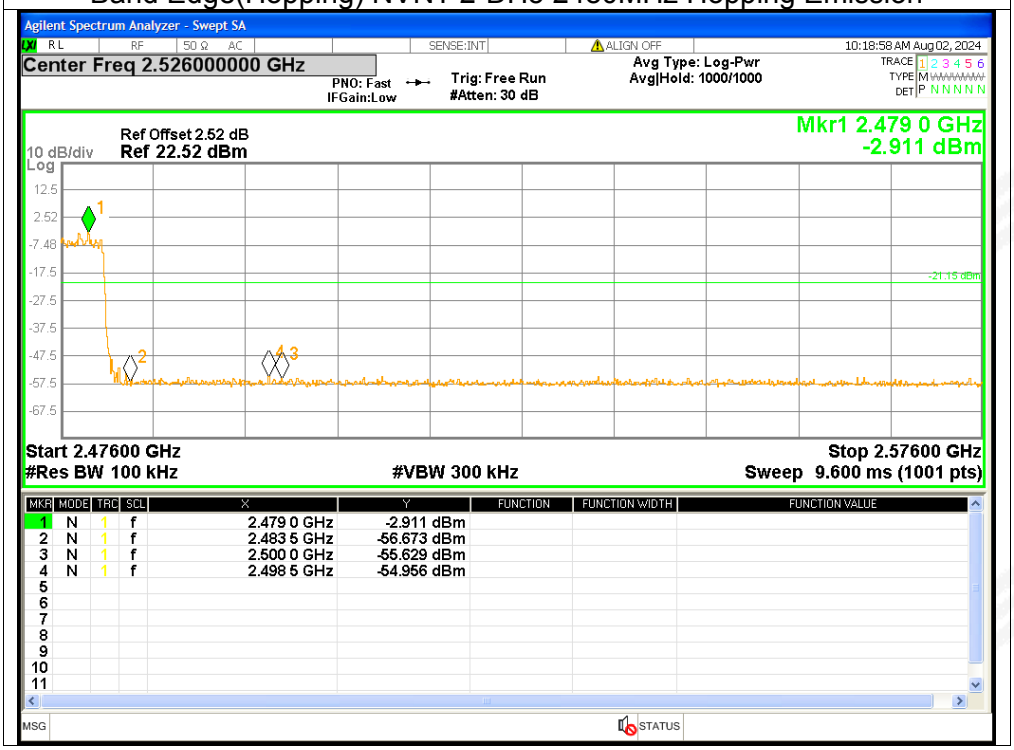
Band Edge(Hopping) NVNT 2-DH5 2402MHz Hopping Emission



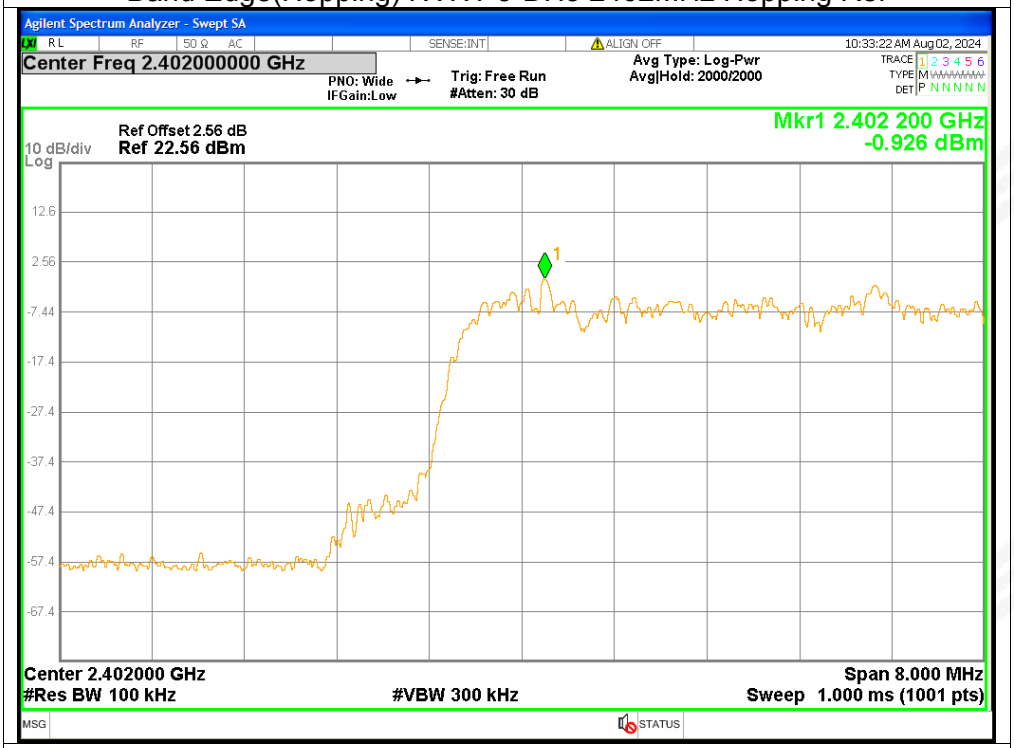
Band Edge(Hopping) NVNT 2-DH5 2480MHz Hopping Ref



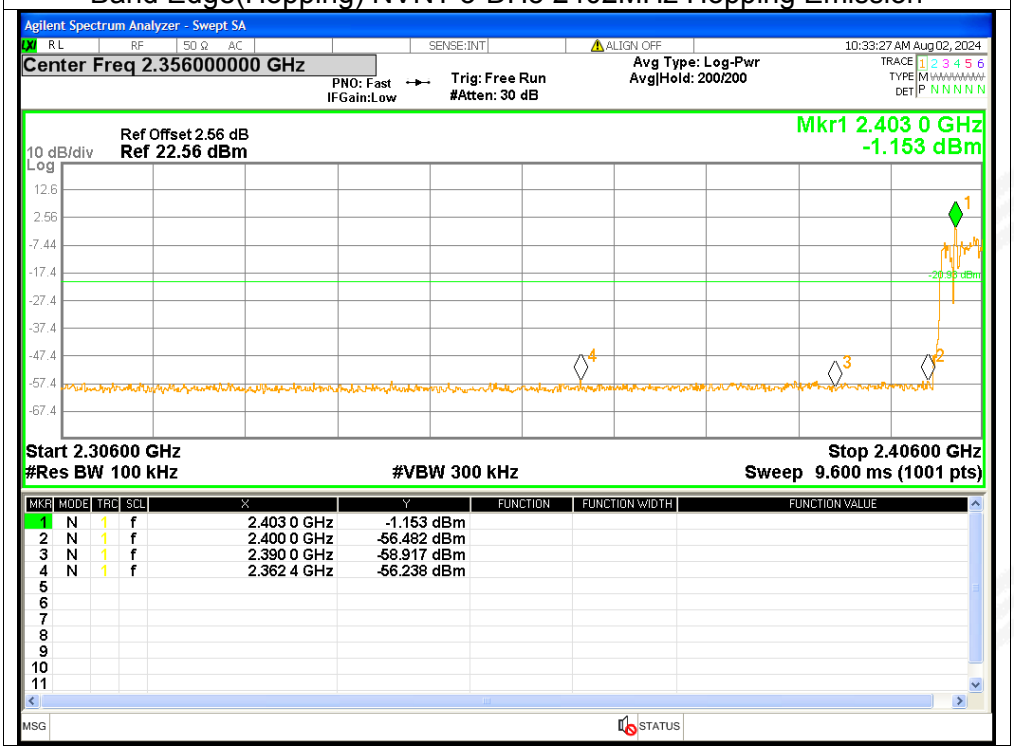
Band Edge(Hopping) NVNT 2-DH5 2480MHz Hopping Emission



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

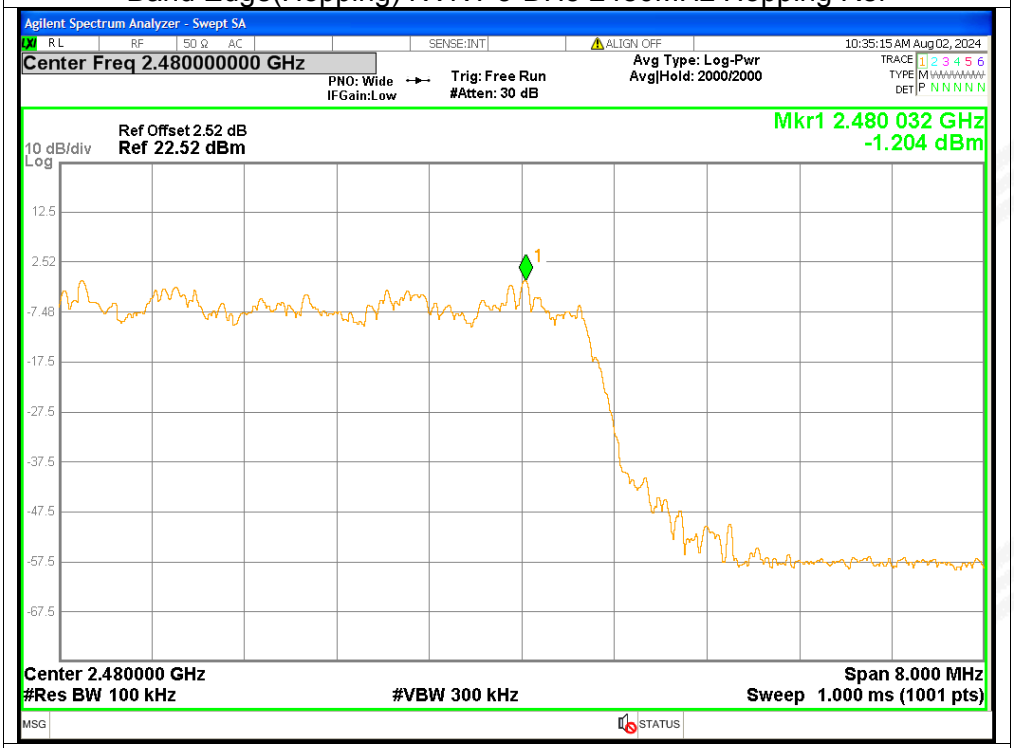


Band Edge(Hopping) NVNT 3-DH5 2402MHz Hopping Emission

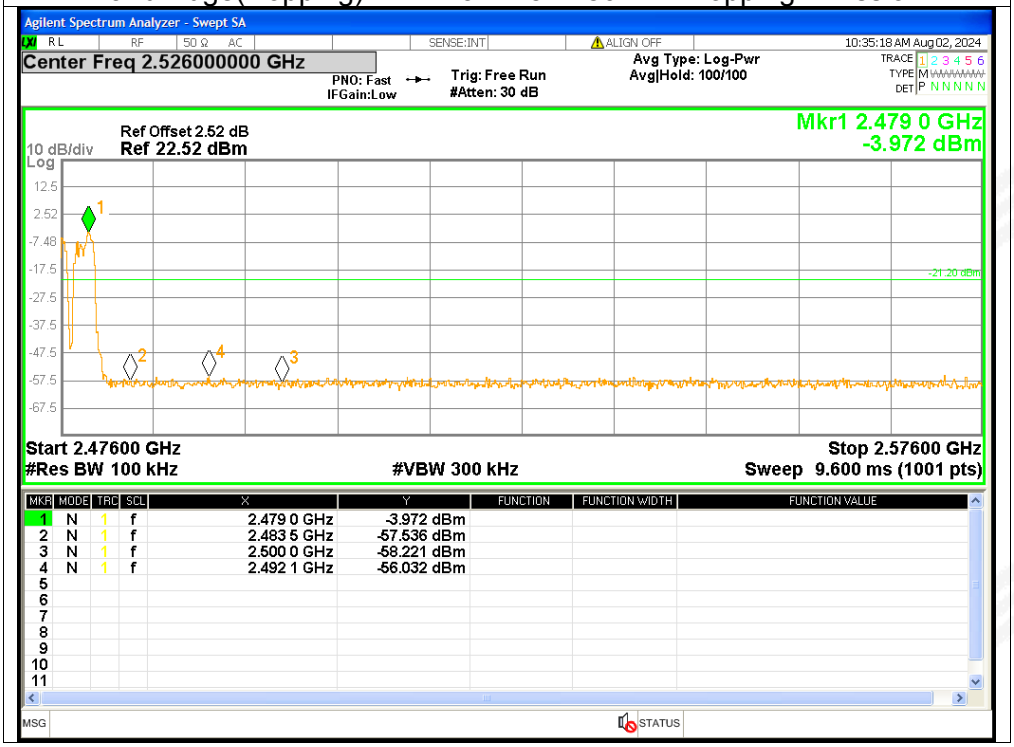


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.403 0 GHz	-1.153 dBm			
2	N	1	f	2.400 0 GHz	-56.482 dBm			
3	N	1	f	2.390 0 GHz	-58.917 dBm			
4	N	1	f	2.362 4 GHz	-56.238 dBm			
5								
6								
7								
8								
9								
10								
11								

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



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

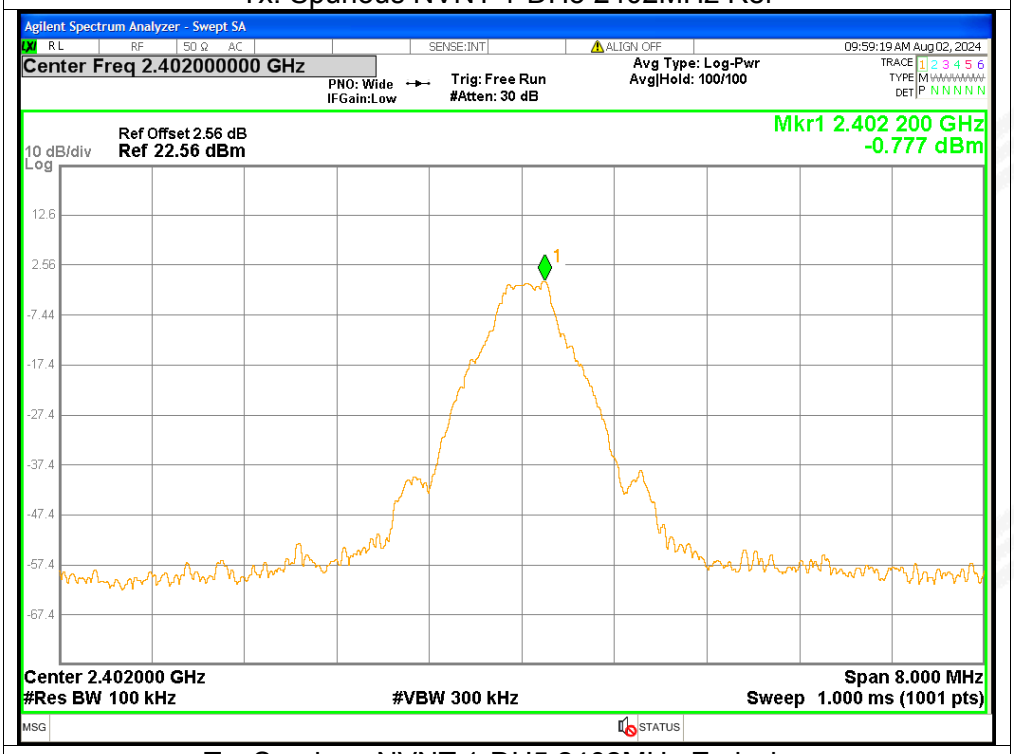


8. Conducted RF Spurious Emission

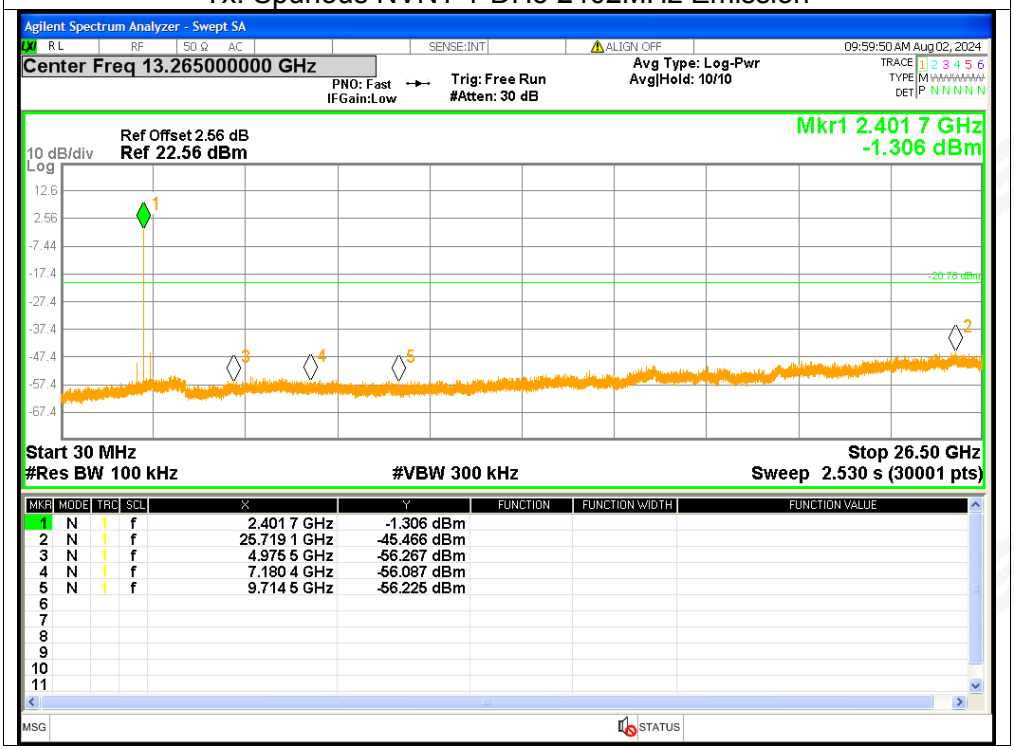
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	-44.68	<=-20	Pass
NVNT	1-DH5	2441	-44.25	<=-20	Pass
NVNT	1-DH5	2480	-44.92	<=-20	Pass
NVNT	2-DH5	2402	-44.78	<=-20	Pass
NVNT	2-DH5	2441	-44.83	<=-20	Pass
NVNT	2-DH5	2480	-43.97	<=-20	Pass
NVNT	3-DH5	2402	-42.46	<=-20	Pass
NVNT	3-DH5	2441	-44.54	<=-20	Pass
NVNT	3-DH5	2480	-44.07	<=-20	Pass

Test Graphs

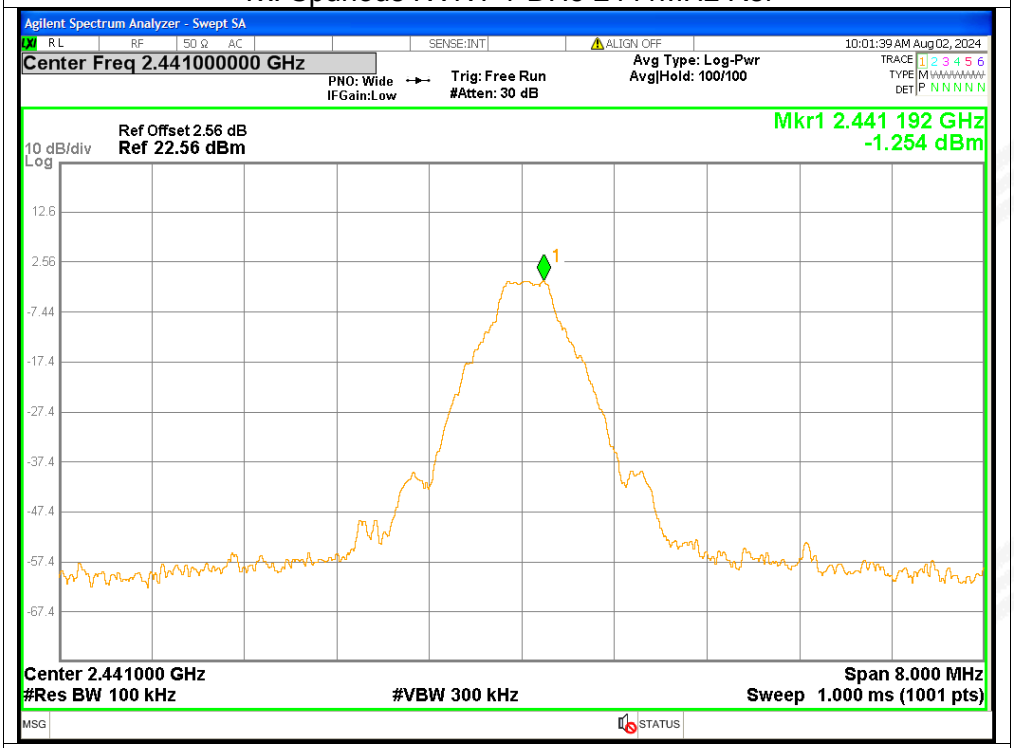
Tx. Spurious NVNT 1-DH5 2402MHz Ref



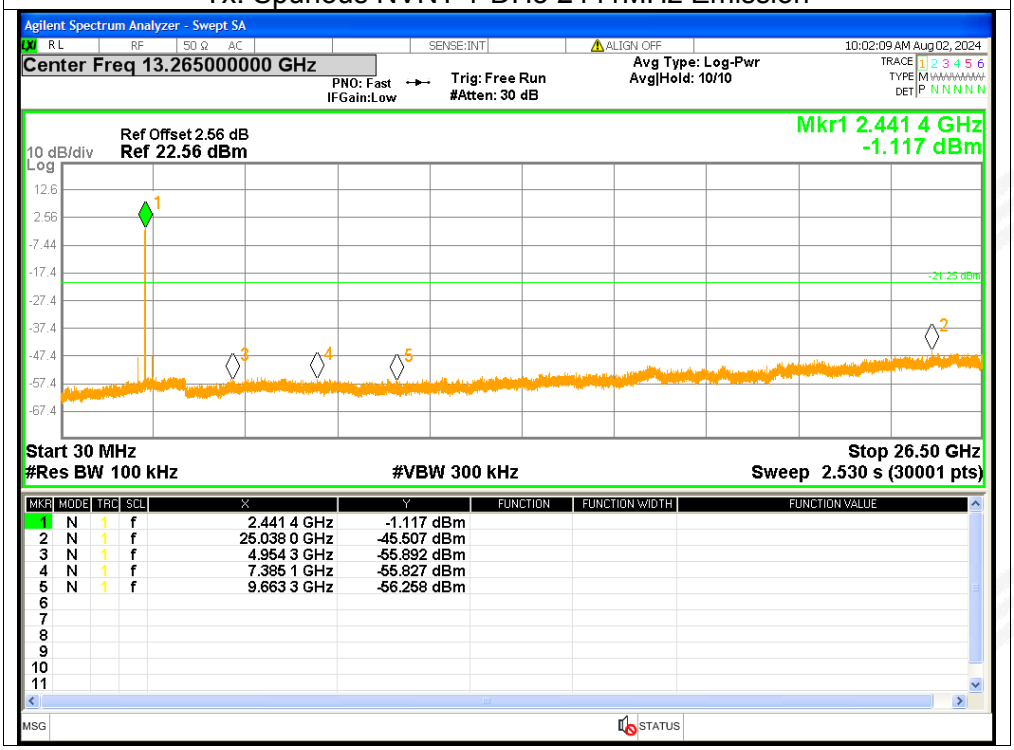
Tx. Spurious NVNT 1-DH5 2402MHz Emission



Tx. Spurious NVNT 1-DH5 2441MHz Ref

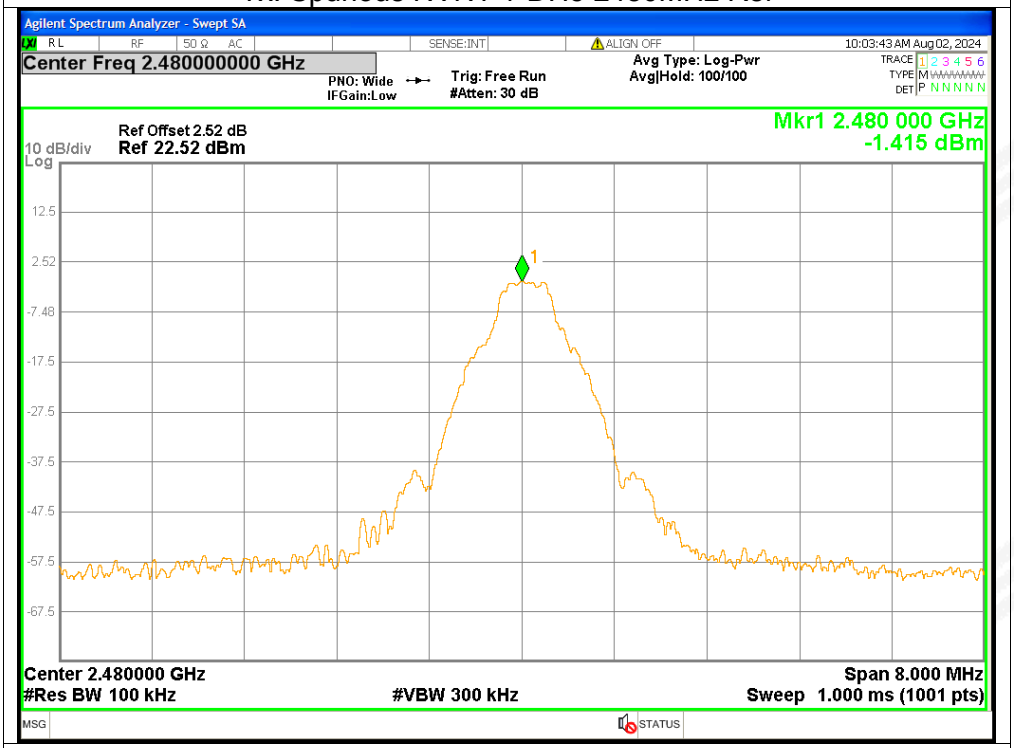


Tx. Spurious NVNT 1-DH5 2441MHz Emission

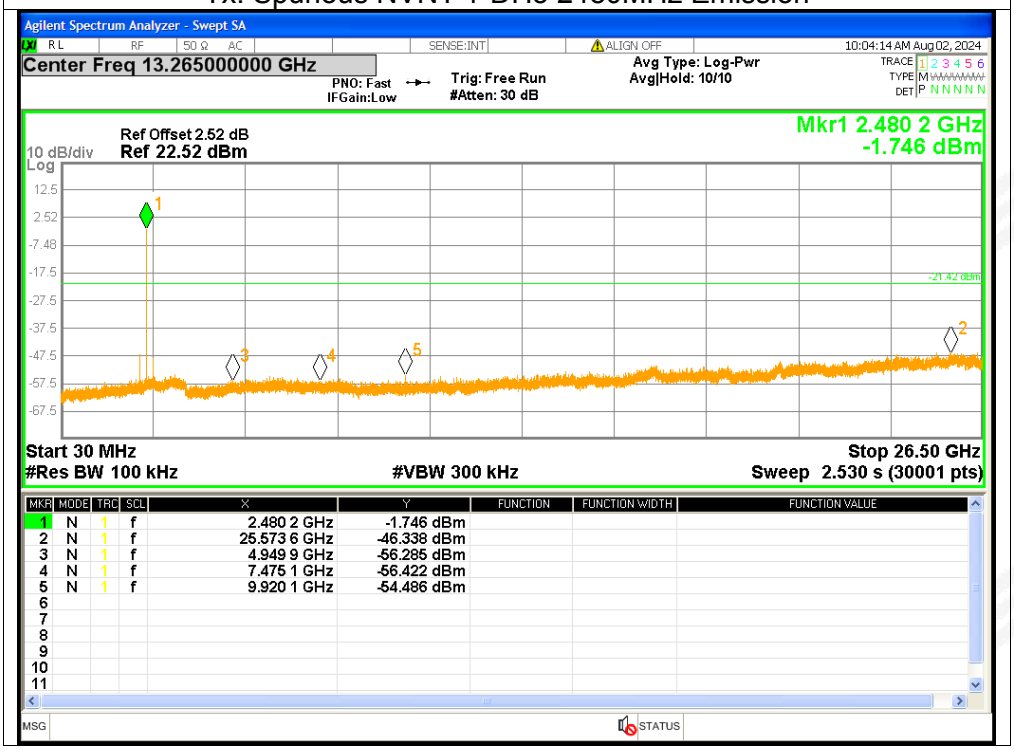


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.441 4 GHz	-1.117 dBm			
2	N	1	f	25.038 0 GHz	-45.507 dBm			
3	N	1	f	4.954 3 GHz	-55.892 dBm			
4	N	1	f	7.385 1 GHz	-55.827 dBm			
5	N	1	f	9.663 3 GHz	-56.258 dBm			
6								
7								
8								
9								
10								
11								

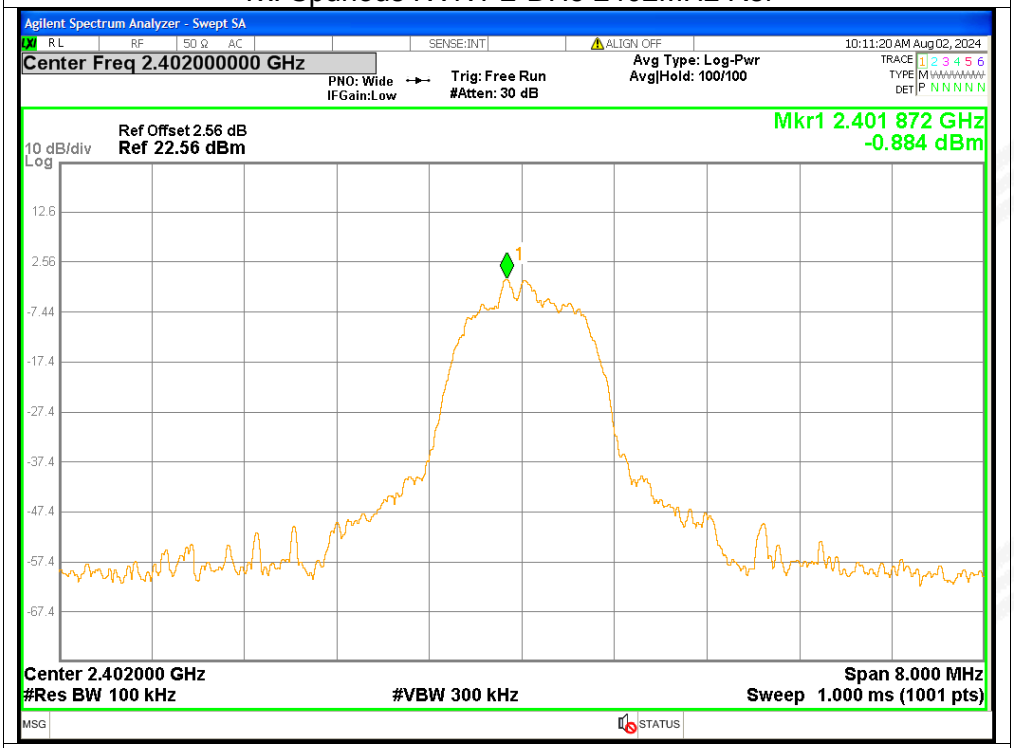
Tx. Spurious NVNT 1-DH5 2480MHz Ref



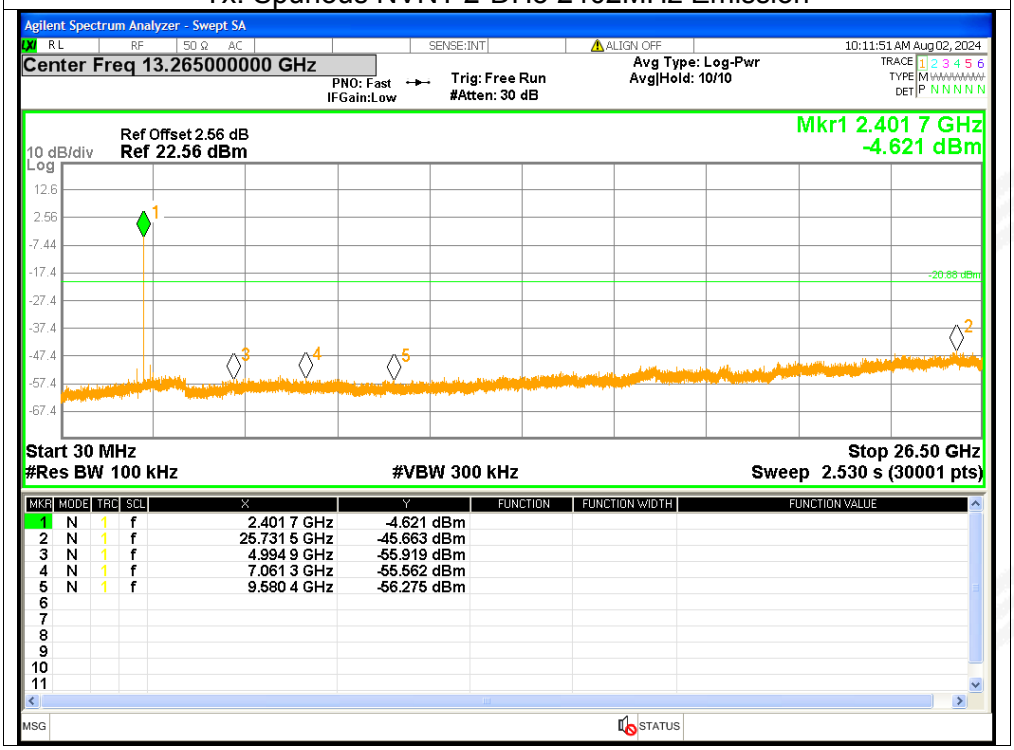
Tx. Spurious NVNT 1-DH5 2480MHz Emission



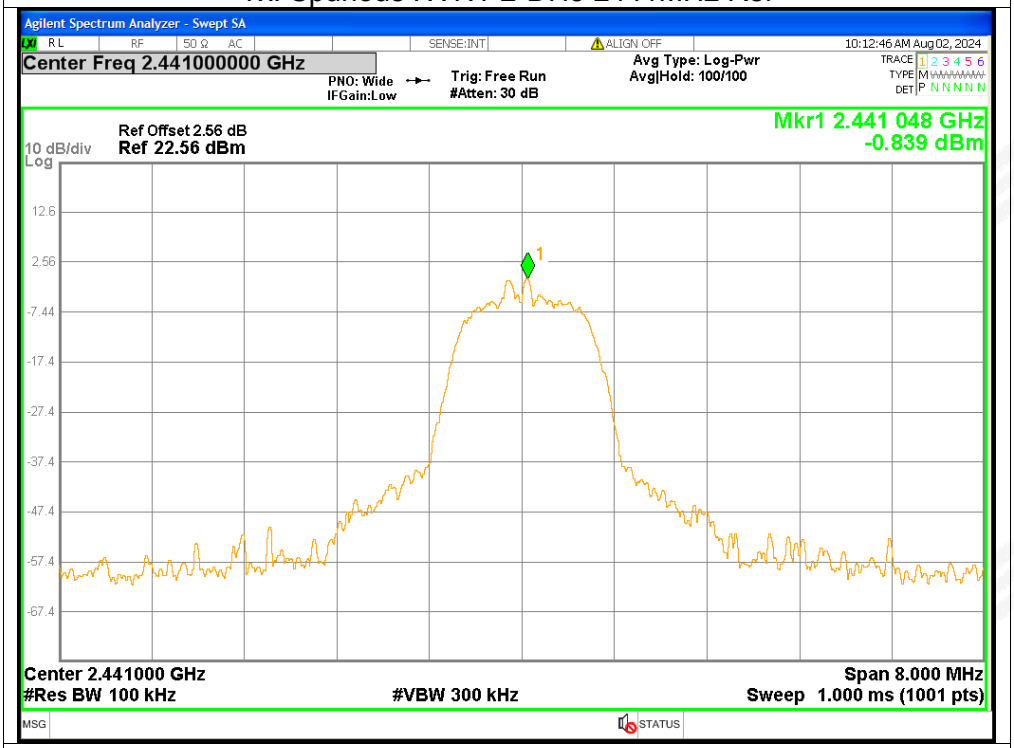
Tx. Spurious NVNT 2-DH5 2402MHz Ref



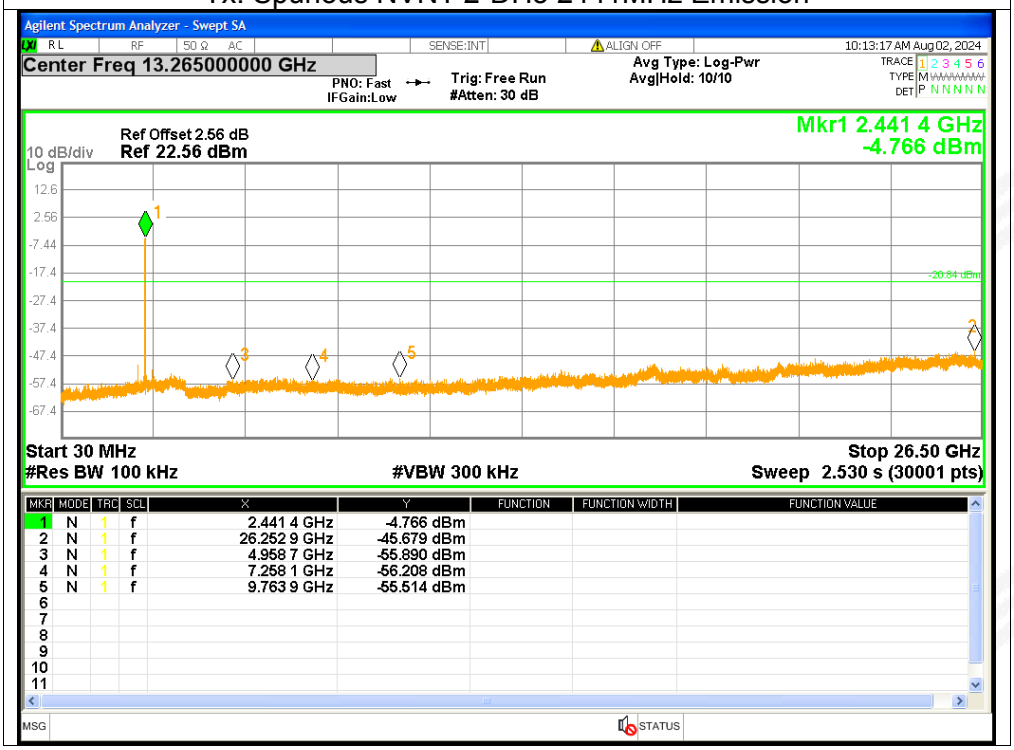
Tx. Spurious NVNT 2-DH5 2402MHz Emission



Tx. Spurious NVNT 2-DH5 2441MHz Ref

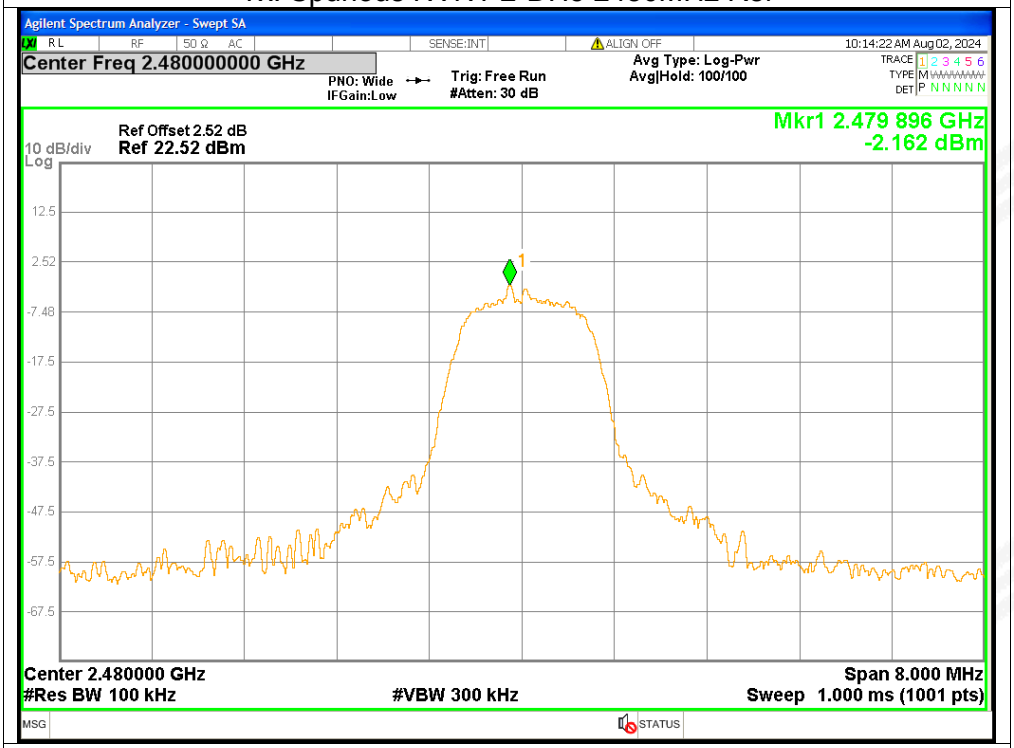


Tx. Spurious NVNT 2-DH5 2441MHz Emission

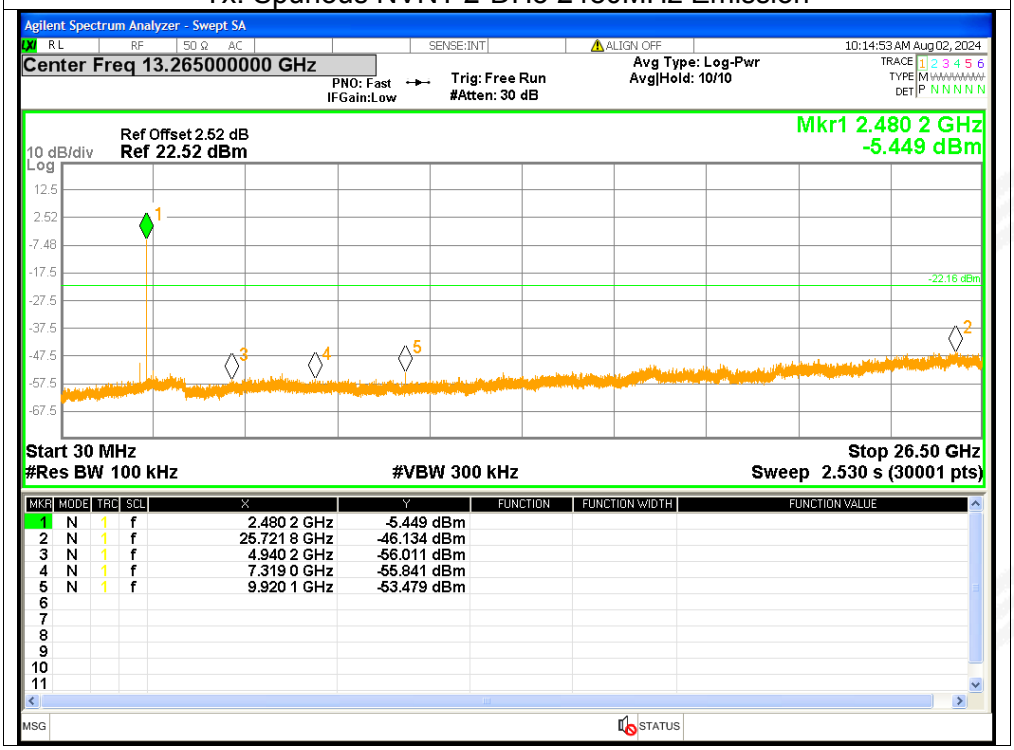


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.441 4 GHz	-4.766 dBm			
2	N	1	f	26.252 9 GHz	-45.679 dBm			
3	N	1	f	4.958 7 GHz	-55.890 dBm			
4	N	1	f	7.258 1 GHz	-56.208 dBm			
5	N	1	f	9.763 9 GHz	-55.514 dBm			
6								
7								
8								
9								
10								
11								

Tx. Spurious NVNT 2-DH5 2480MHz Ref

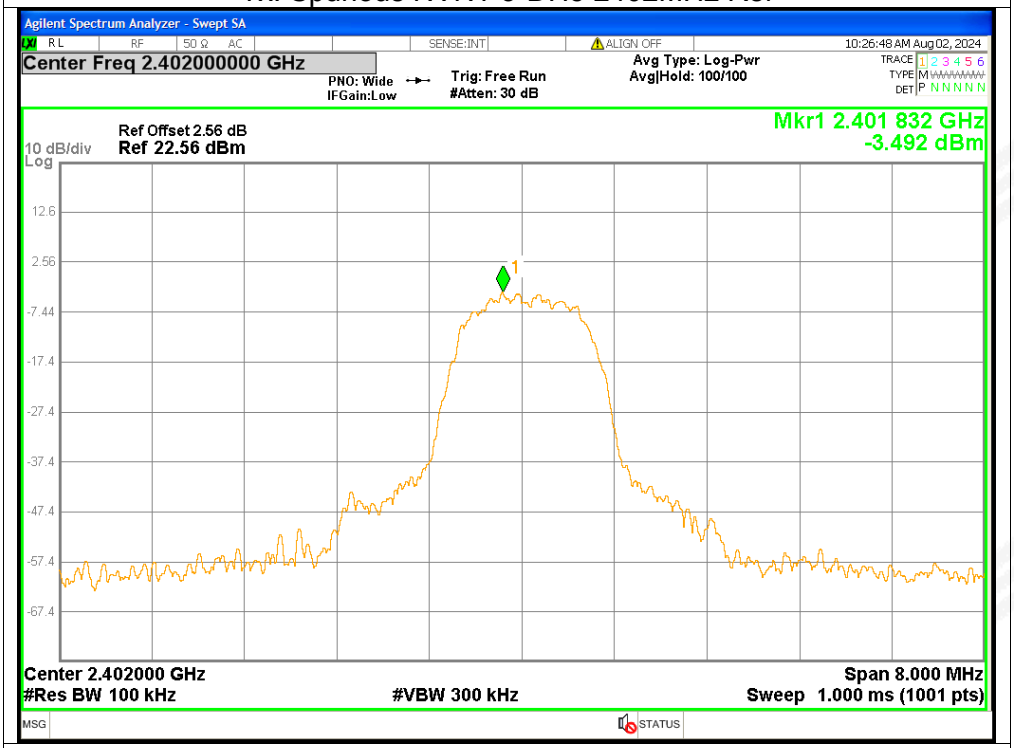


Tx. Spurious NVNT 2-DH5 2480MHz Emission

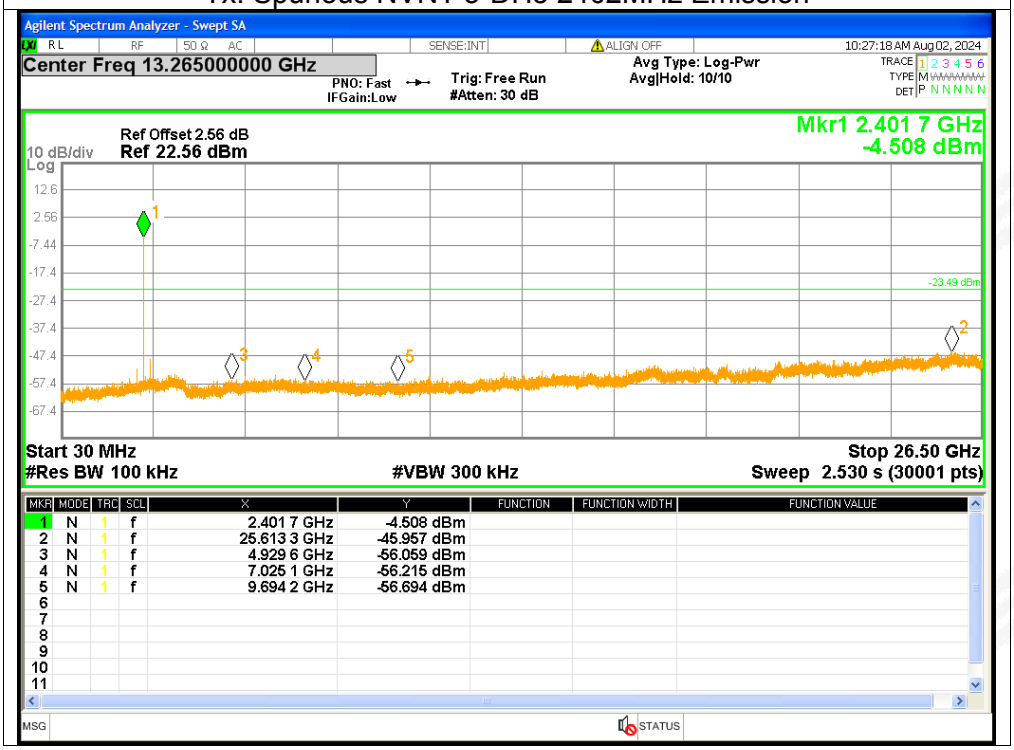


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.480 2 GHz	-5.449 dBm			
2	N	1	f	25.721 8 GHz	-46.134 dBm			
3	N	1	f	4.940 2 GHz	-56.011 dBm			
4	N	1	f	7.319 0 GHz	-55.841 dBm			
5	N	1	f	9.920 1 GHz	-53.479 dBm			
6								
7								
8								
9								
10								
11								

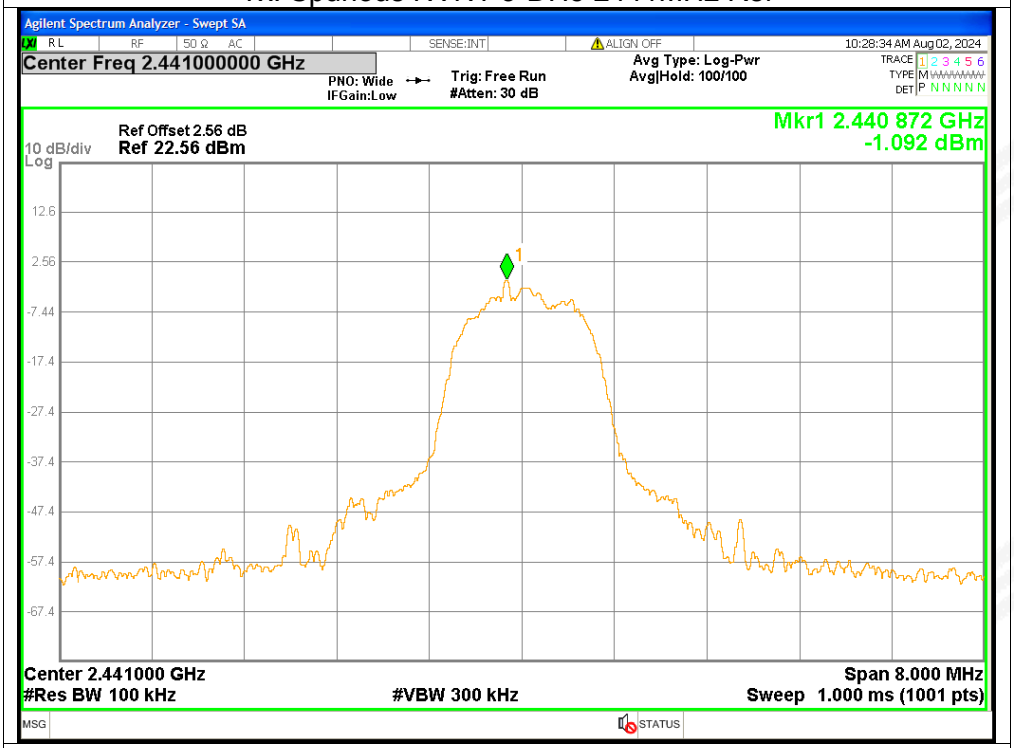
Tx. Spurious NVNT 3-DH5 2402MHz Ref



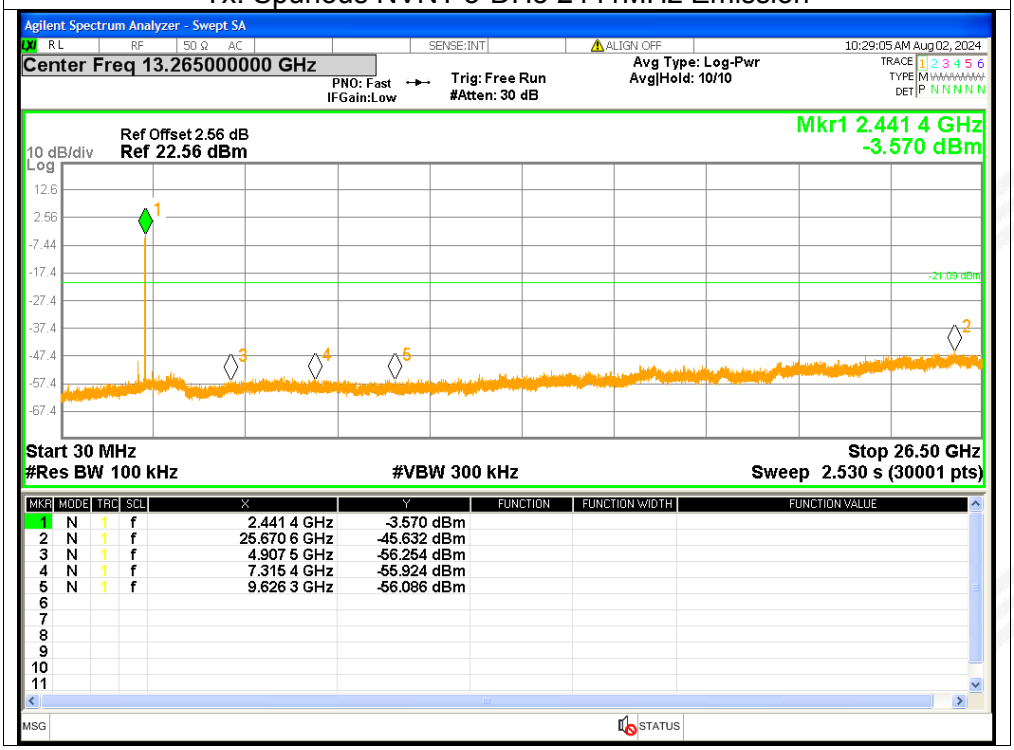
Tx. Spurious NVNT 3-DH5 2402MHz Emission



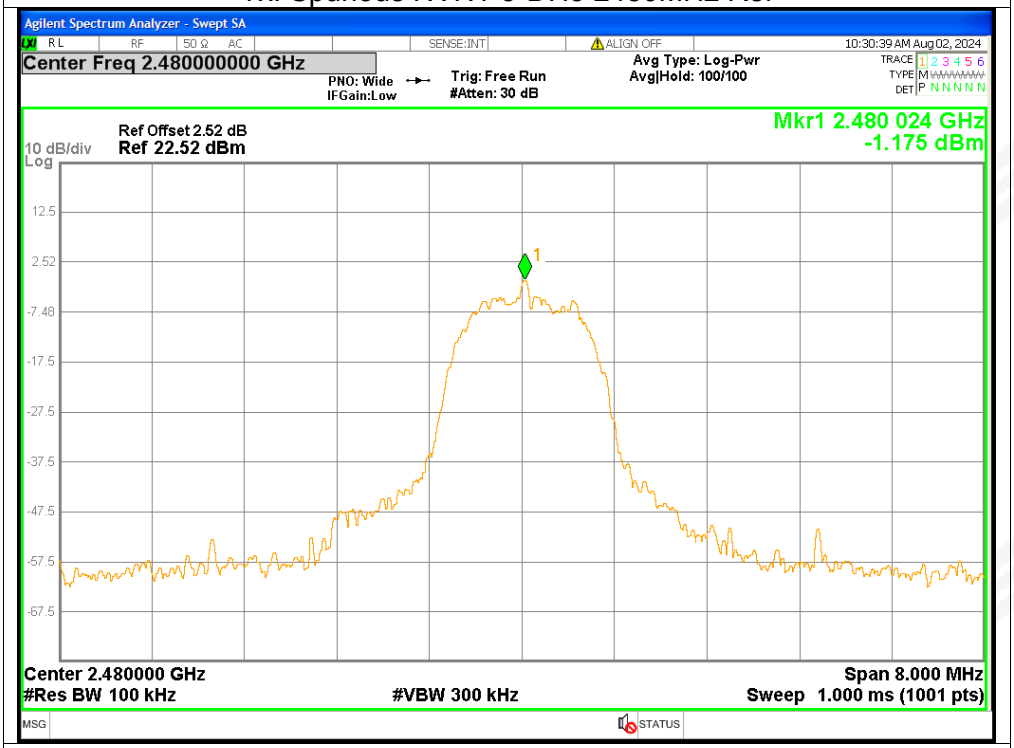
Tx. Spurious NVNT 3-DH5 2441MHz Ref



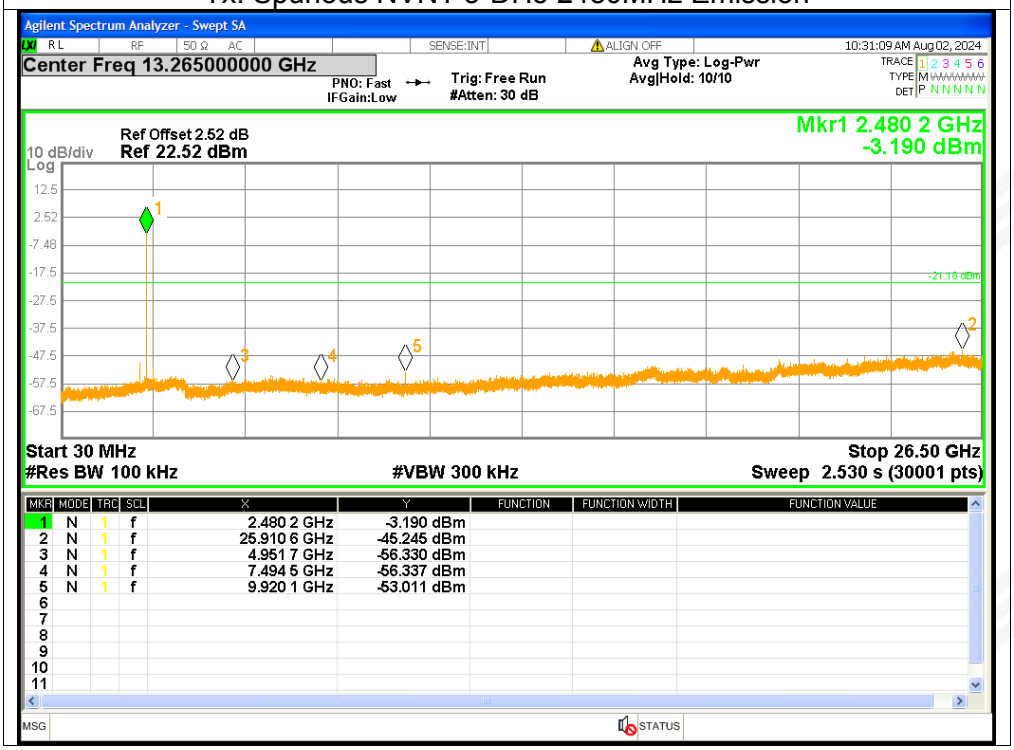
Tx. Spurious NVNT 3-DH5 2441MHz Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ref



Tx. Spurious NVNT 3-DH5 2480MHz Emission



MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.480 2 GHz	-3.190 dBm			
2	N	1	f	25.910 6 GHz	-45.245 dBm			
3	N	1	f	4.951 7 GHz	-56.330 dBm			
4	N	1	f	7.494 5 GHz	-56.337 dBm			
5	N	1	f	9.920 1 GHz	-53.011 dBm			
6								
7								
8								
9								
10								
11								

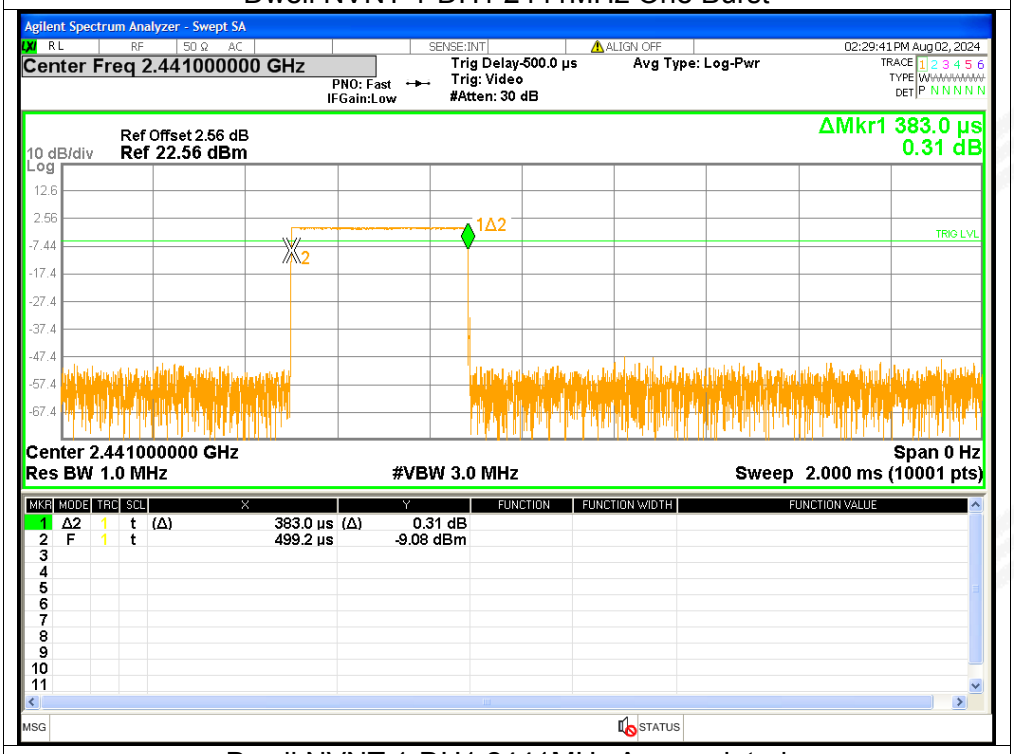
Right:

1. Dwell Time

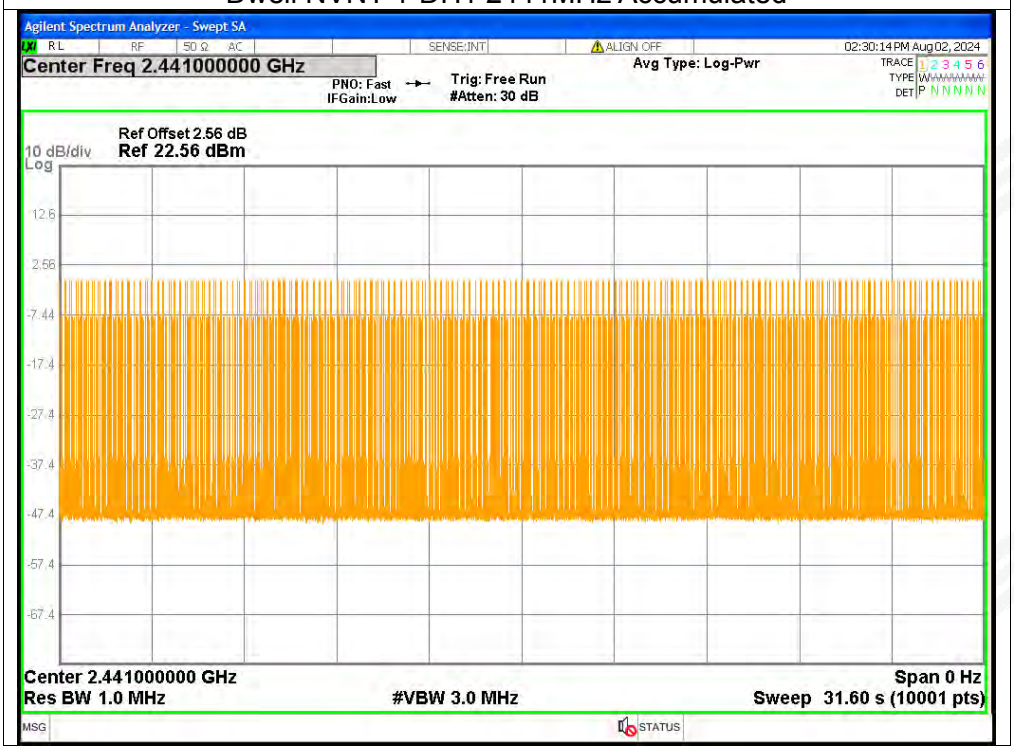
Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	0.383	122.177	319	31600	<=400	Pass
NVNT	1-DH3	2441	1.638	258.804	158	31600	<=400	Pass
NVNT	1-DH5	2441	2.887	340.666	118	31600	<=400	Pass
NVNT	2-DH1	2441	0.392	125.048	319	31600	<=400	Pass
NVNT	2-DH3	2441	1.644	271.26	165	31600	<=400	Pass
NVNT	2-DH5	2441	2.892	286.308	99	31600	<=400	Pass
NVNT	3-DH1	2441	0.392	123.48	315	31600	<=400	Pass
NVNT	3-DH3	2441	1.643	253.022	154	31600	<=400	Pass
NVNT	3-DH5	2441	2.894	318.34	110	31600	<=400	Pass

Test Graphs

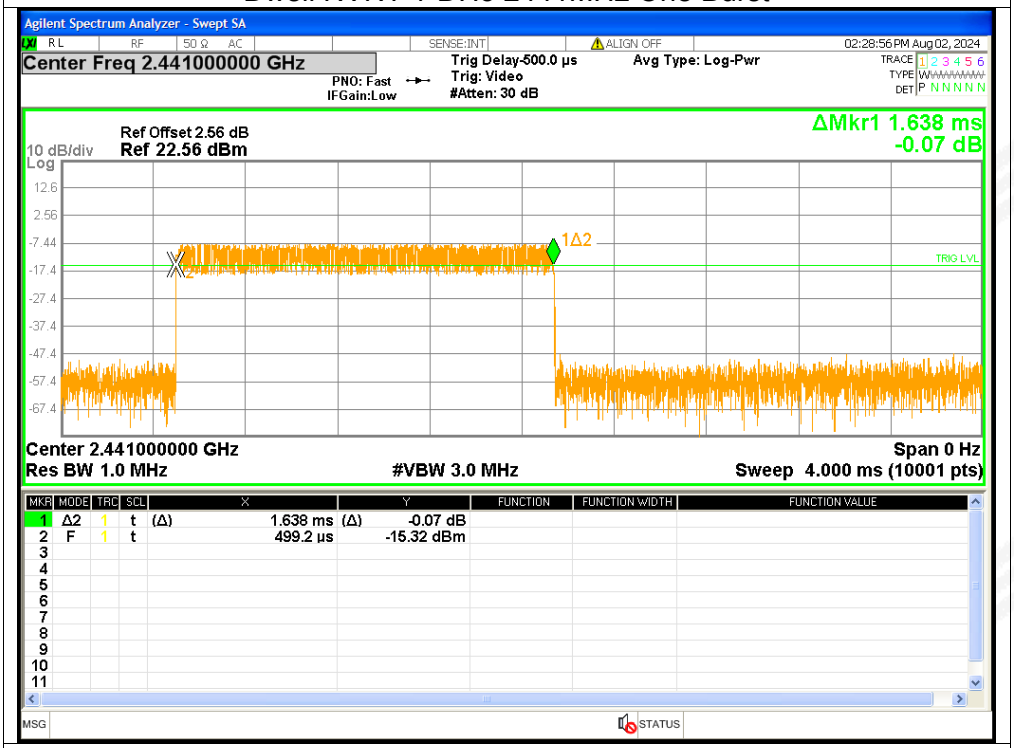
Dwell NVNT 1-DH1 2441MHz One Burst



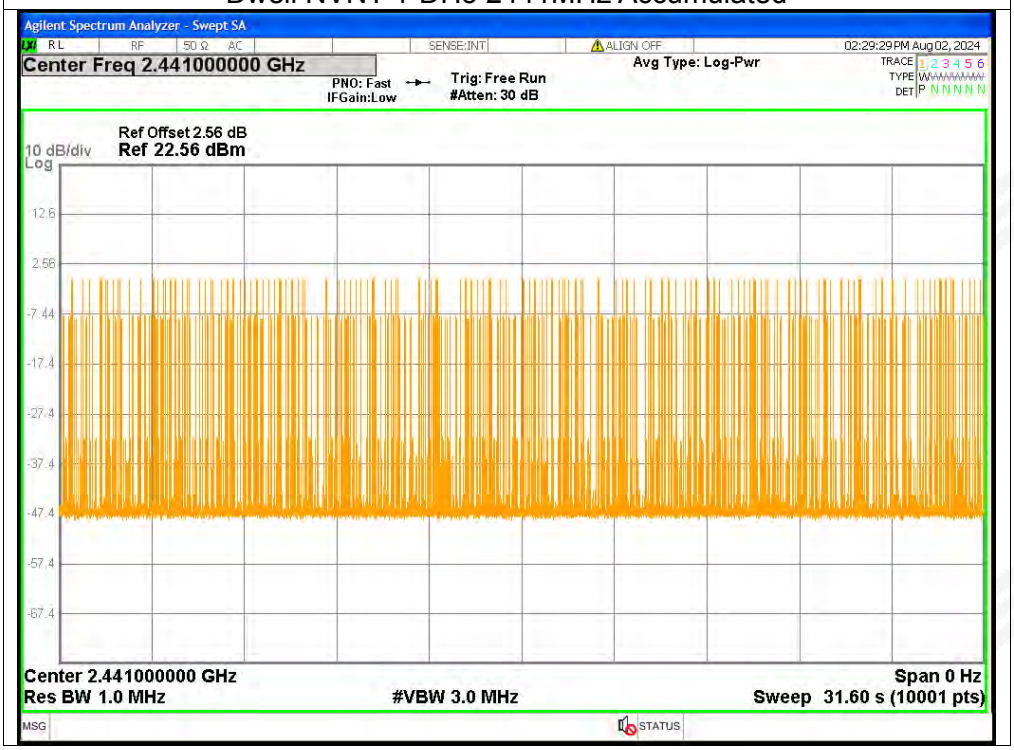
Dwell NVNT 1-DH1 2441MHz Accumulated



Dwell NVNT 1-DH3 2441MHz One Burst

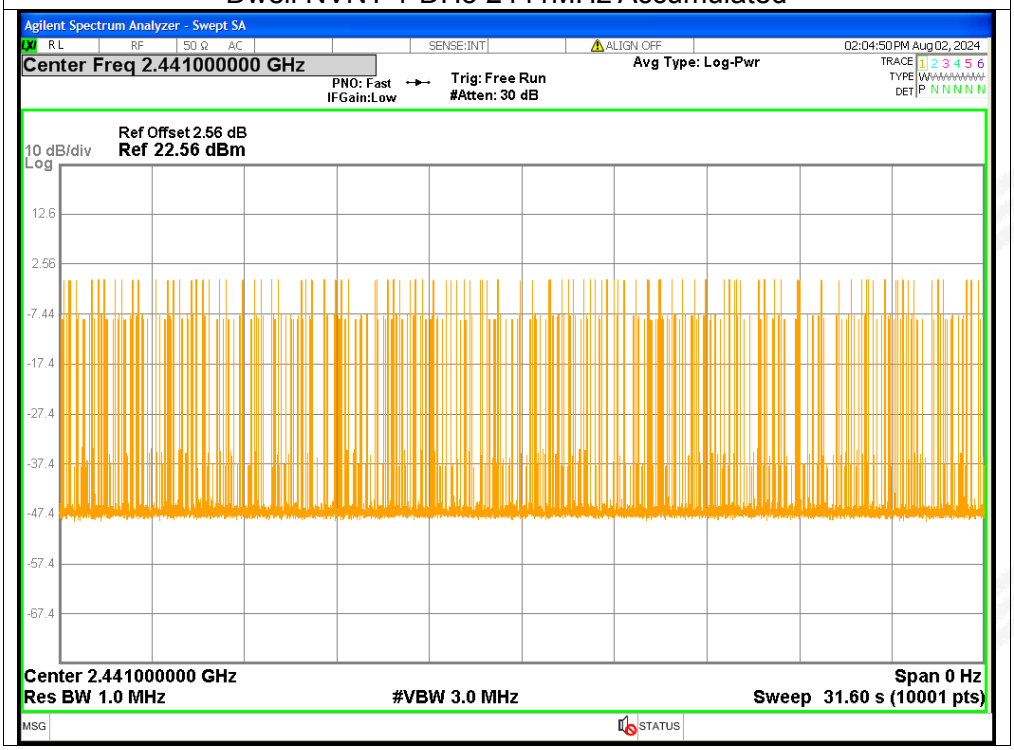


Dwell NVNT 1-DH3 2441MHz Accumulated



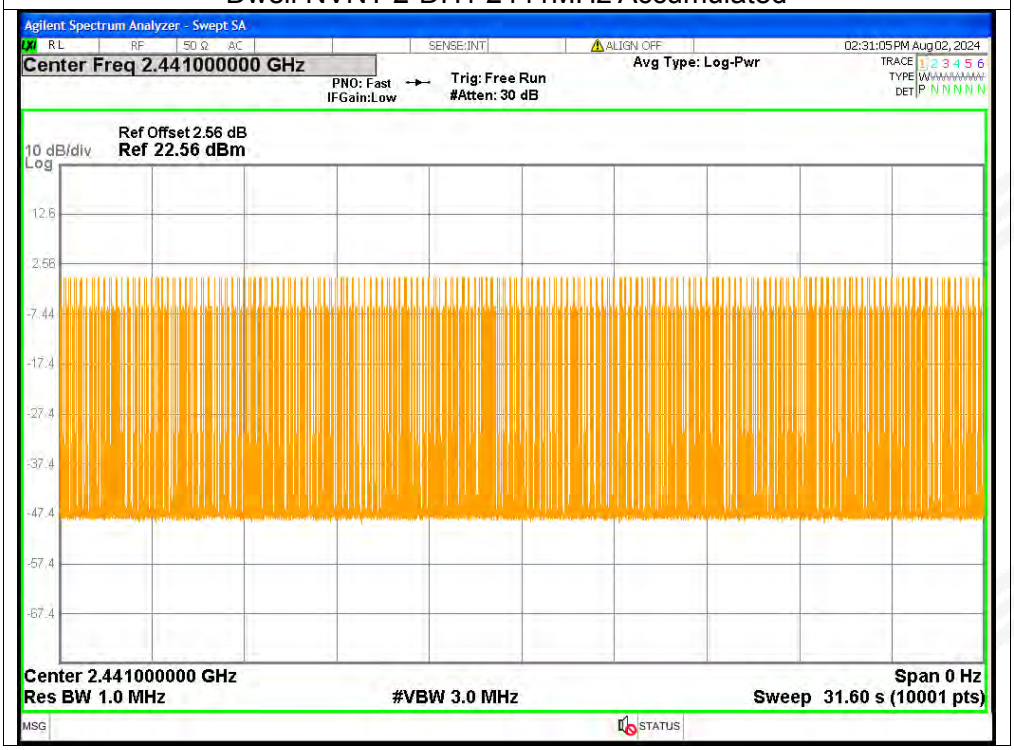
Dwell NVNT 1-DH5 2441MHz One Burst

Dwell NVNT 1-DH5 2441MHz Accumulated

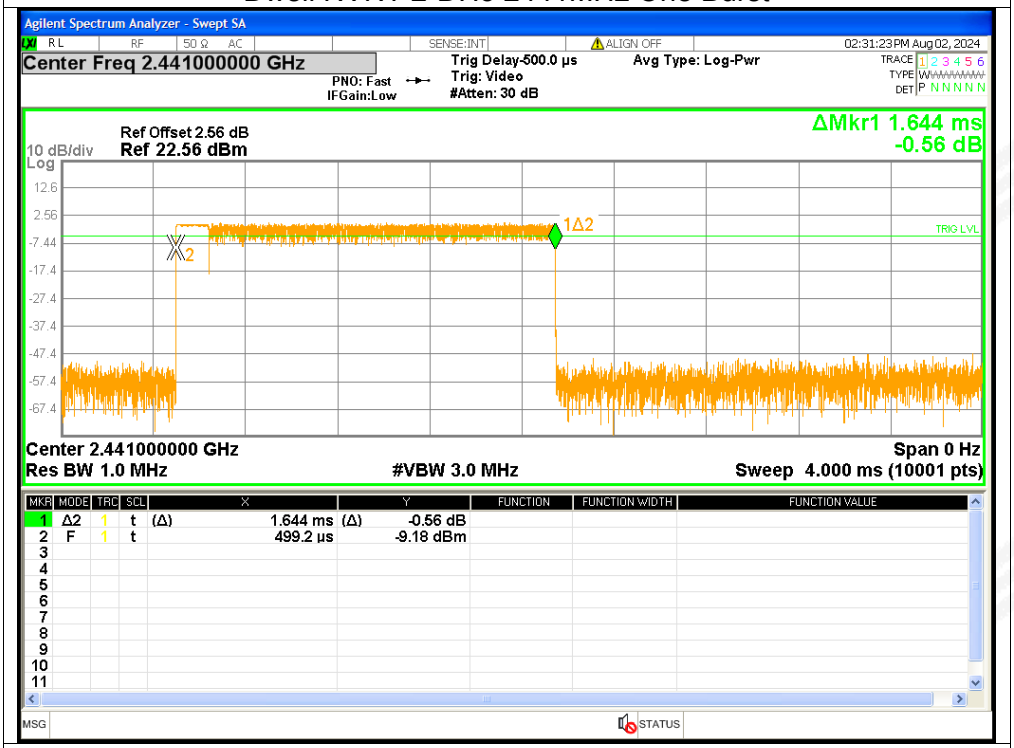


Dwell NVNT 2-DH1 2441MHz One Burst

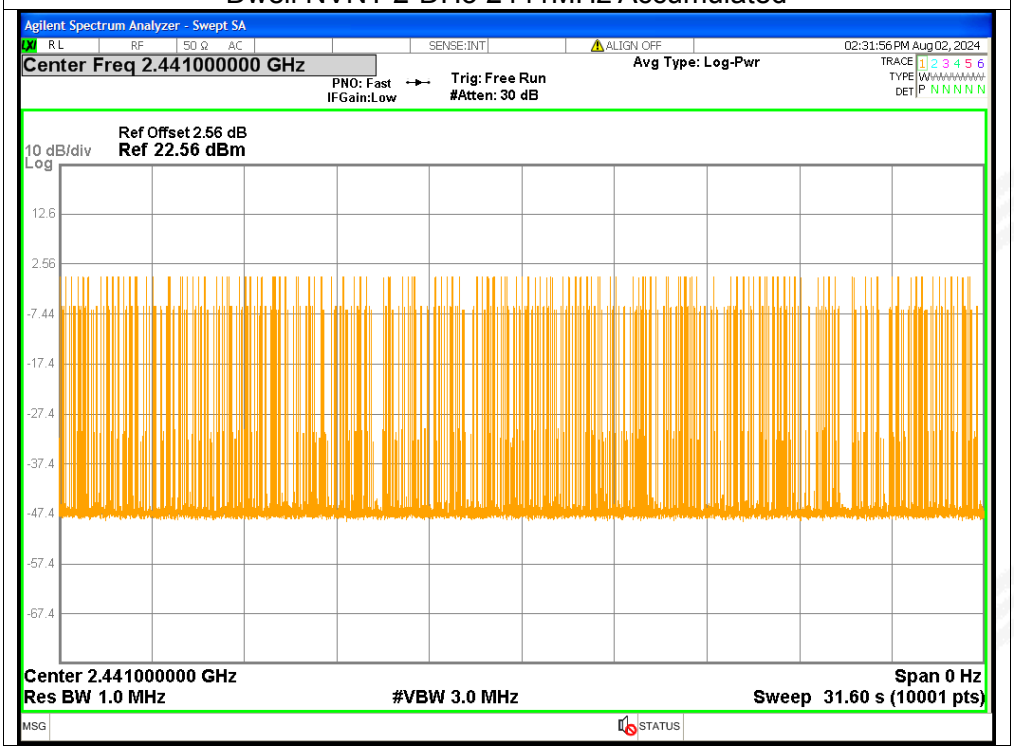
Dwell NVNT 2-DH1 2441MHz Accumulated



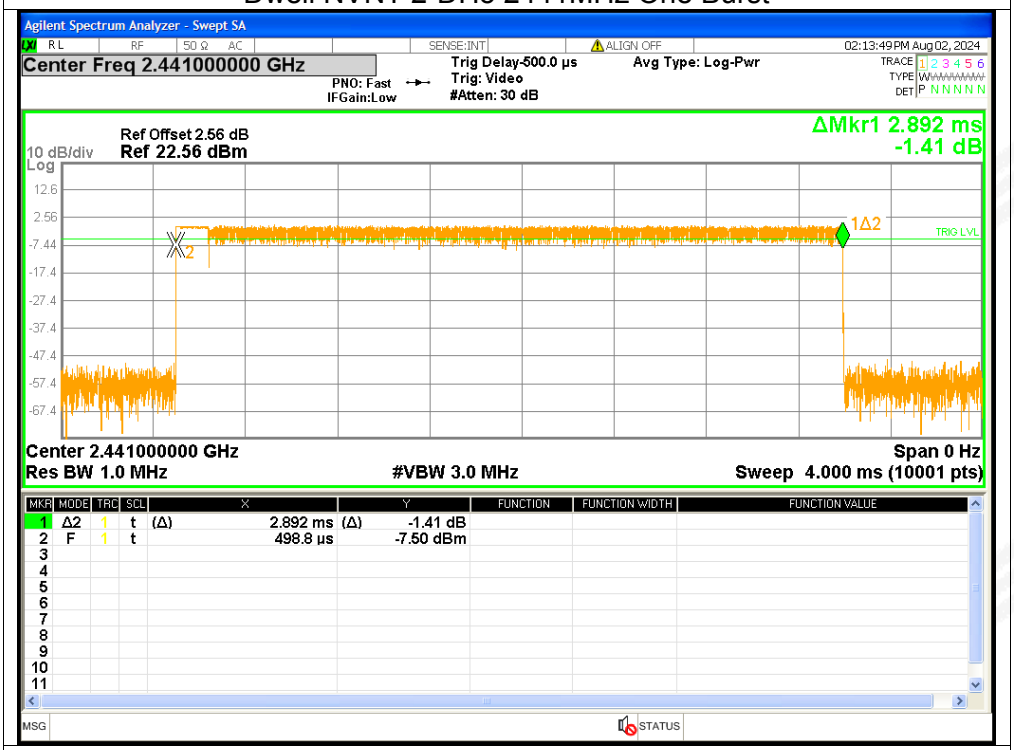
Dwell NVNT 2-DH3 2441MHz One Burst



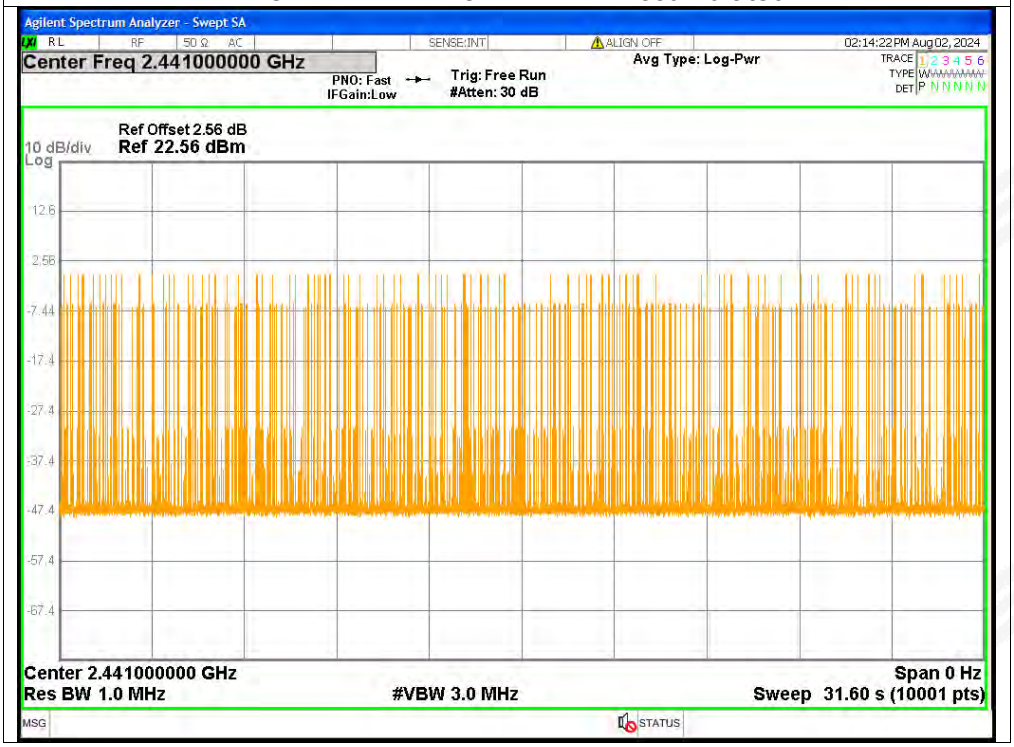
Dwell NVNT 2-DH3 2441MHz Accumulated



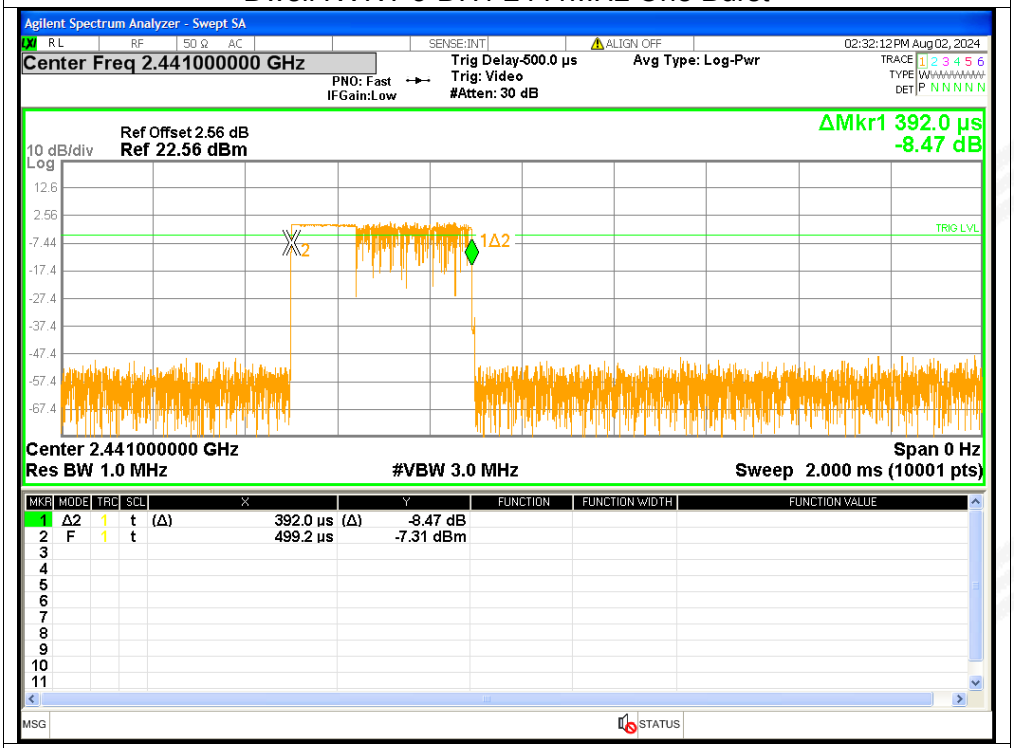
Dwell NVNT 2-DH5 2441MHz One Burst



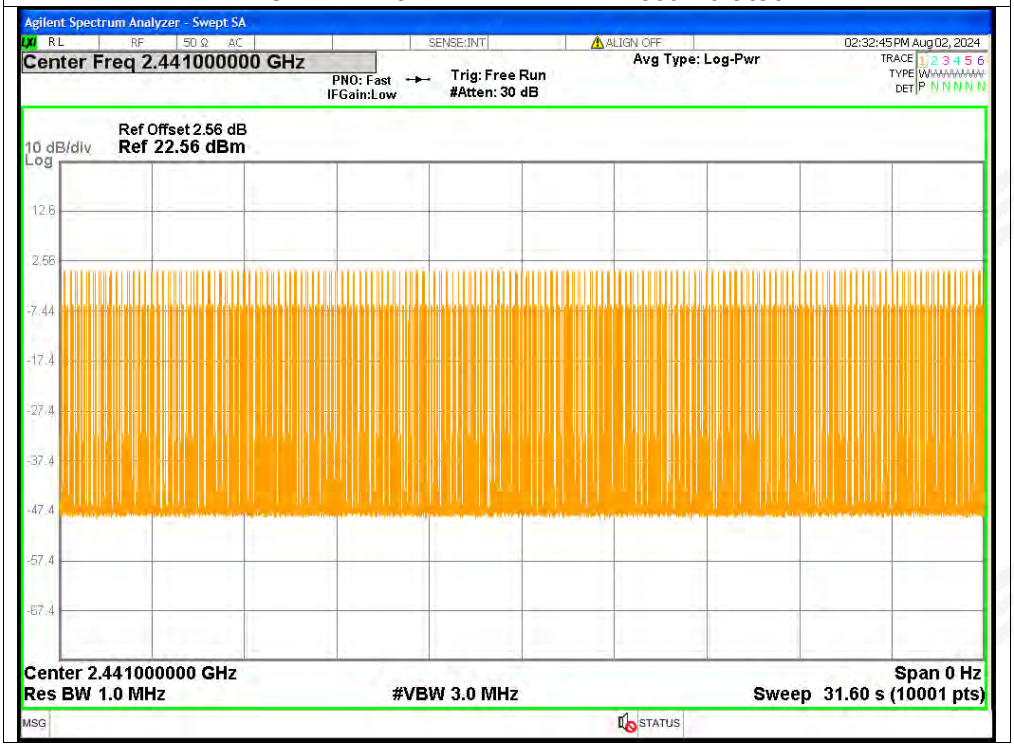
Dwell NVNT 2-DH5 2441MHz Accumulated



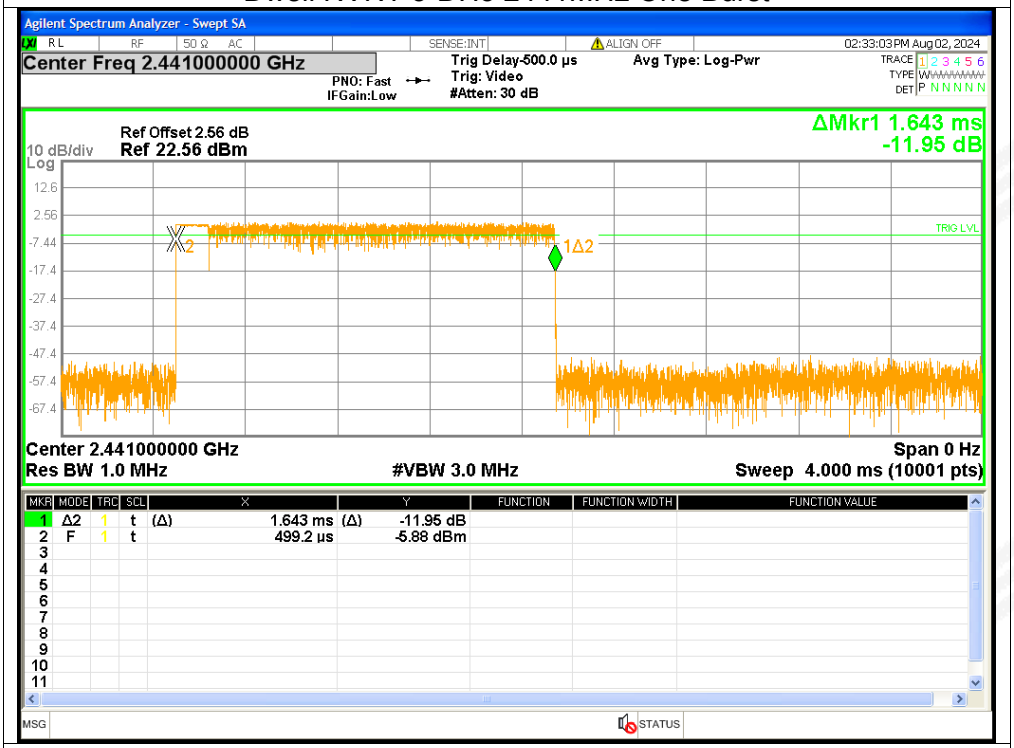
Dwell NVNT 3-DH1 2441MHz One Burst



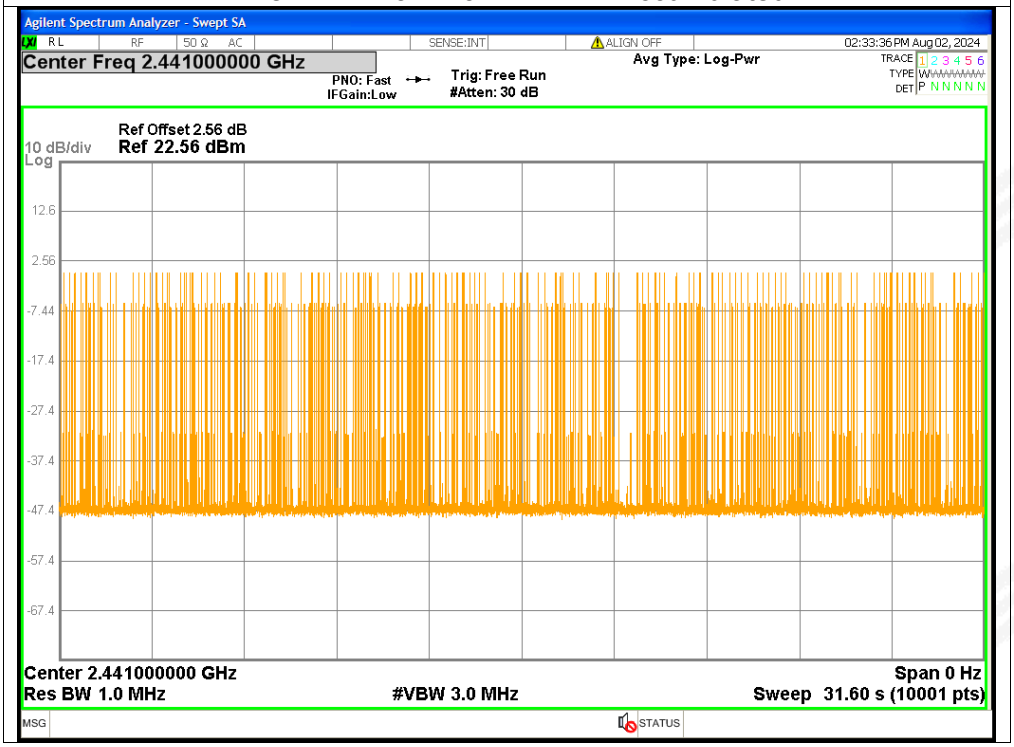
Dwell NVNT 3-DH1 2441MHz Accumulated



Dwell NVNT 3-DH3 2441MHz One Burst

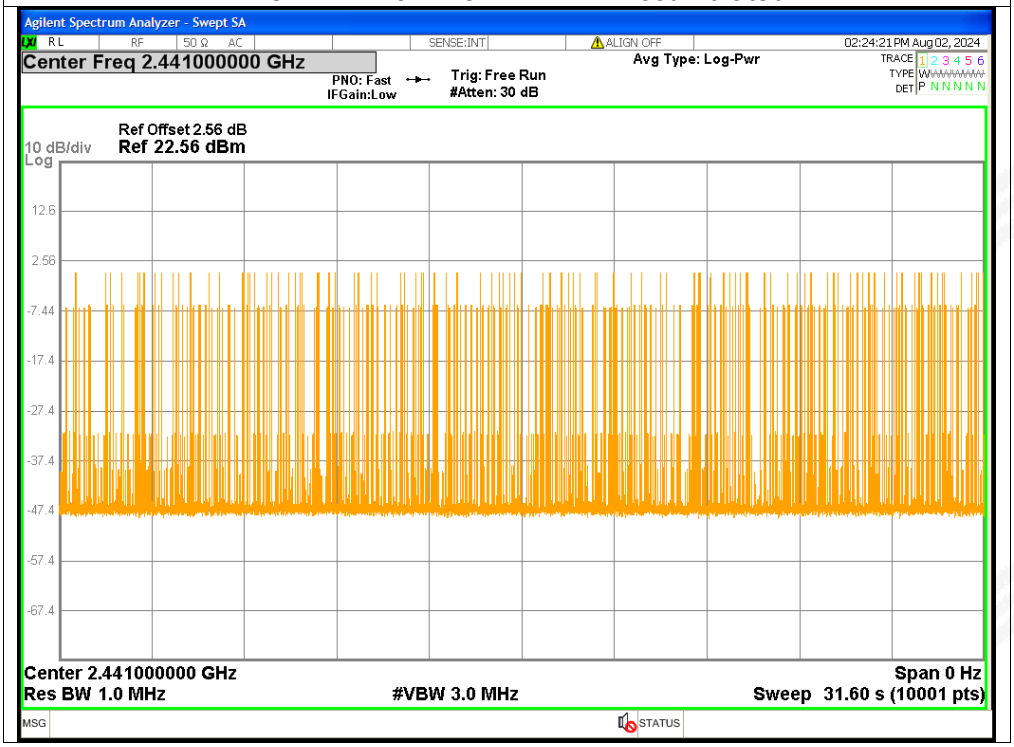


Dwell NVNT 3-DH3 2441MHz Accumulated



Dwell NVNT 3-DH5 2441MHz One Burst

Dwell NVNT 3-DH5 2441MHz Accumulated

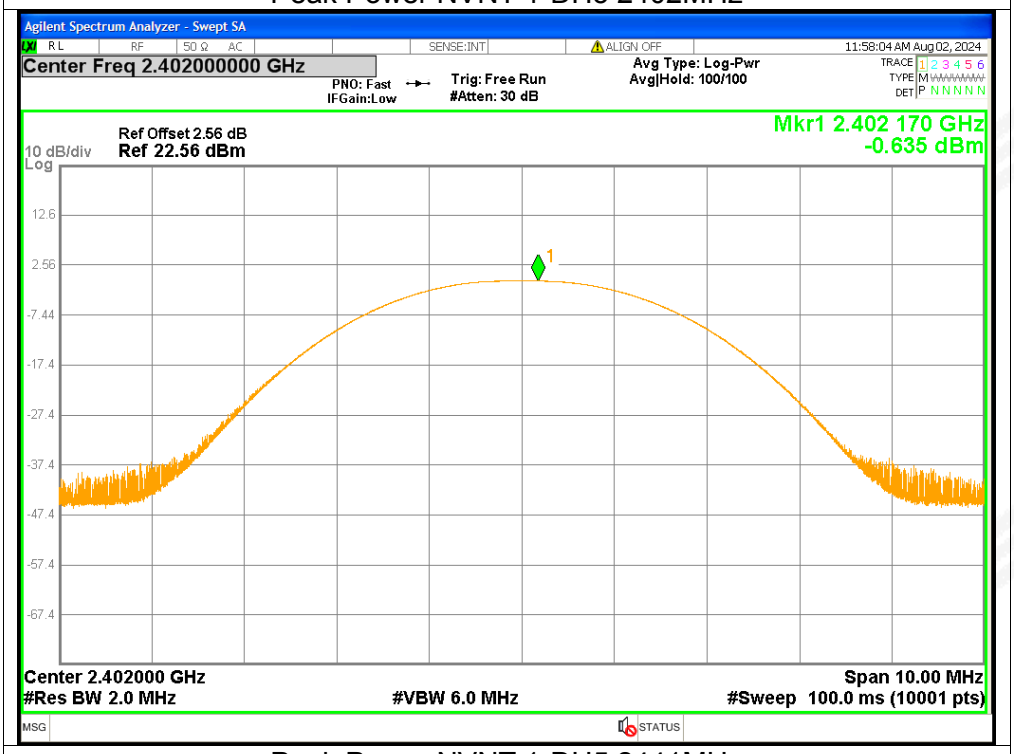


2. Maximum Peak Conducted Output Power

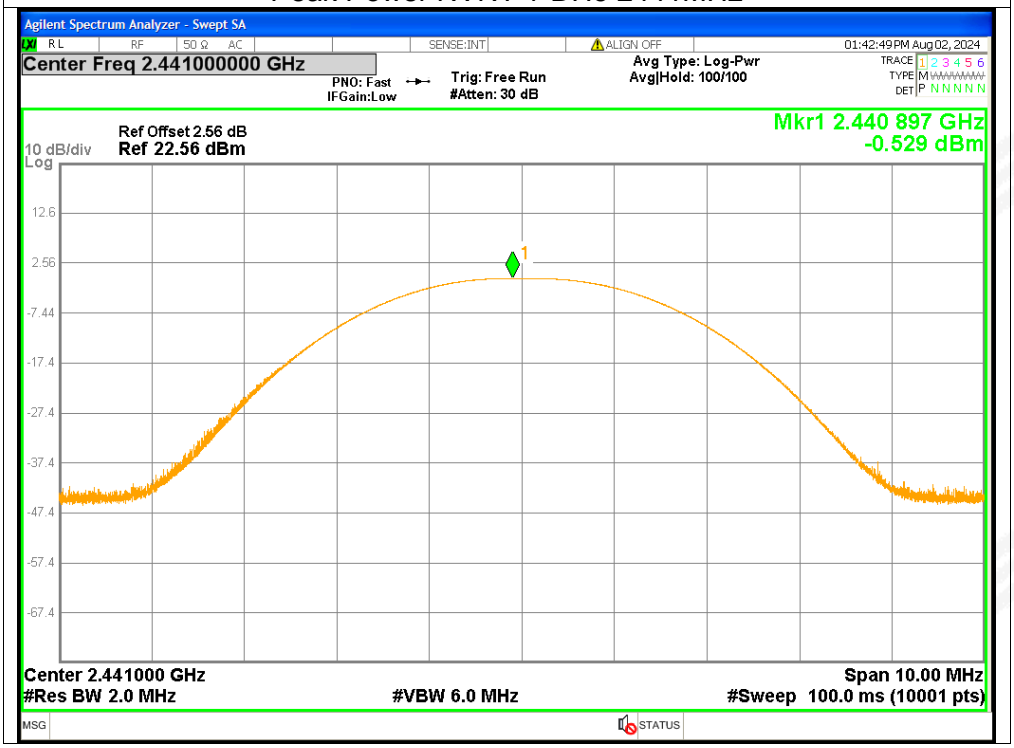
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	-0.64	<=21	Pass
NVNT	1-DH5	2441	-0.53	<=21	Pass
NVNT	1-DH5	2480	-0.79	<=21	Pass
NVNT	2-DH5	2402	0.27	<=21	Pass
NVNT	2-DH5	2441	0.19	<=21	Pass
NVNT	2-DH5	2480	-0.01	<=21	Pass
NVNT	3-DH5	2402	0.54	<=21	Pass
NVNT	3-DH5	2441	0.49	<=21	Pass
NVNT	3-DH5	2480	0.27	<=21	Pass

Test Graphs

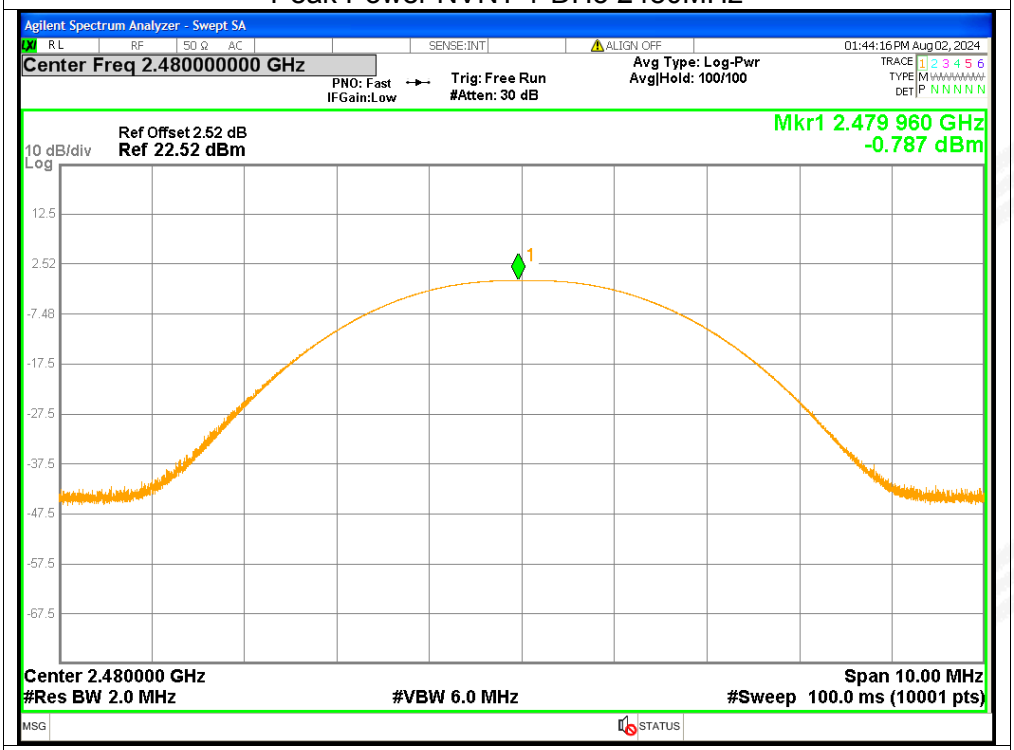
Peak Power NVNT 1-DH5 2402MHz



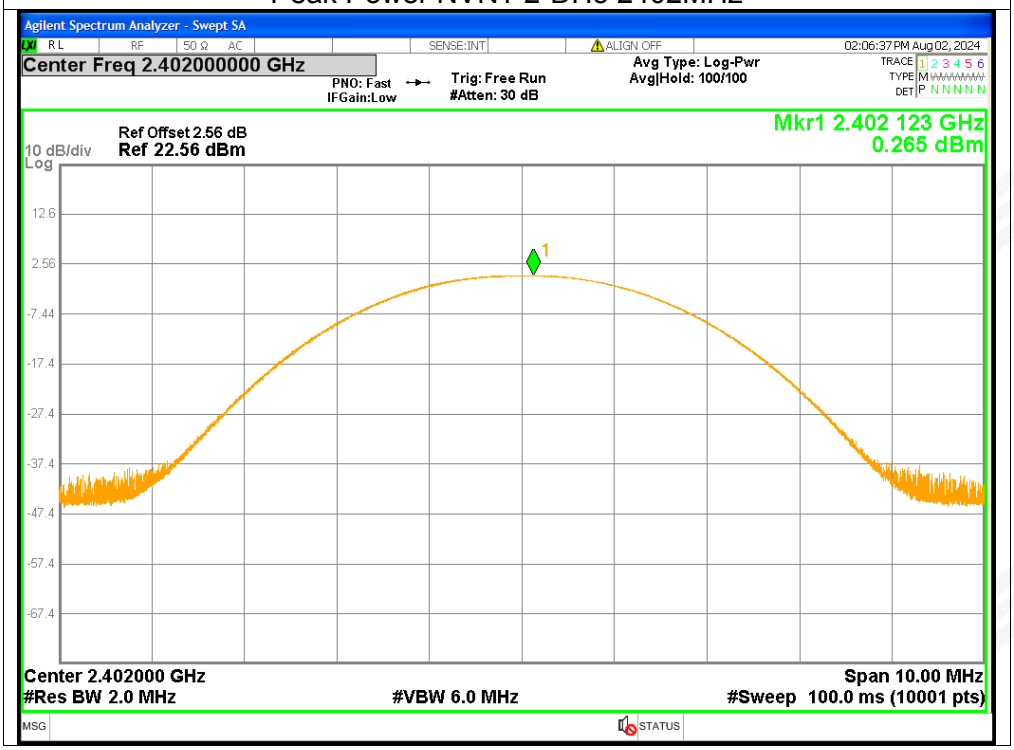
Peak Power NVNT 1-DH5 2441MHz



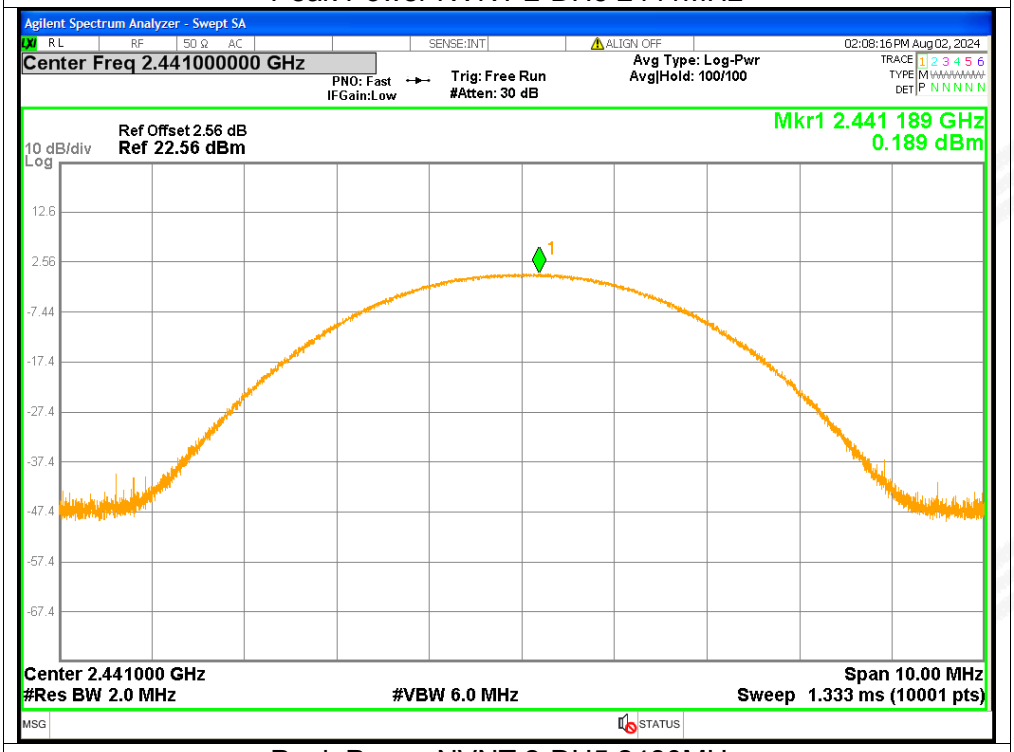
Peak Power NVNT 1-DH5 2480MHz



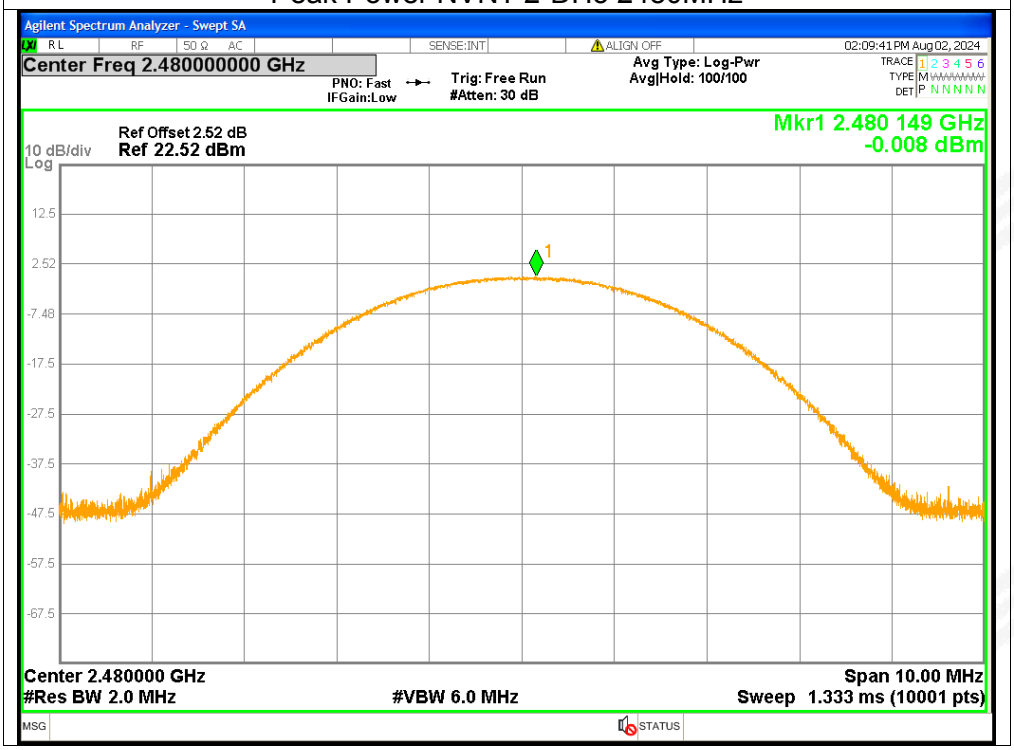
Peak Power NVNT 2-DH5 2402MHz



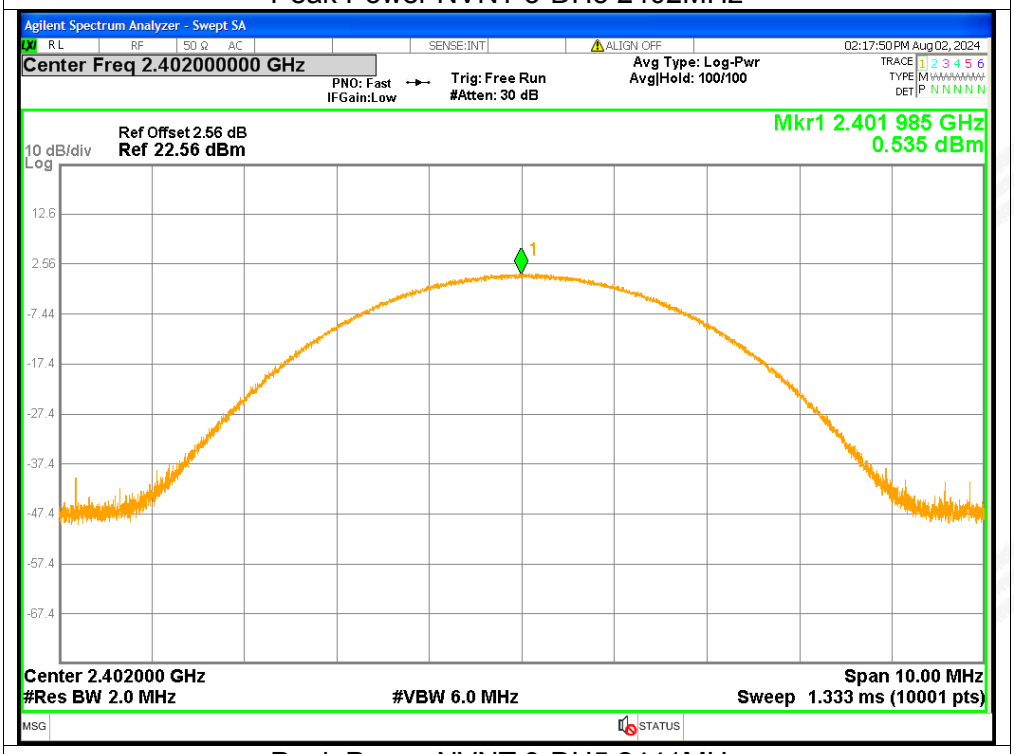
Peak Power NVNT 2-DH5 2441MHz



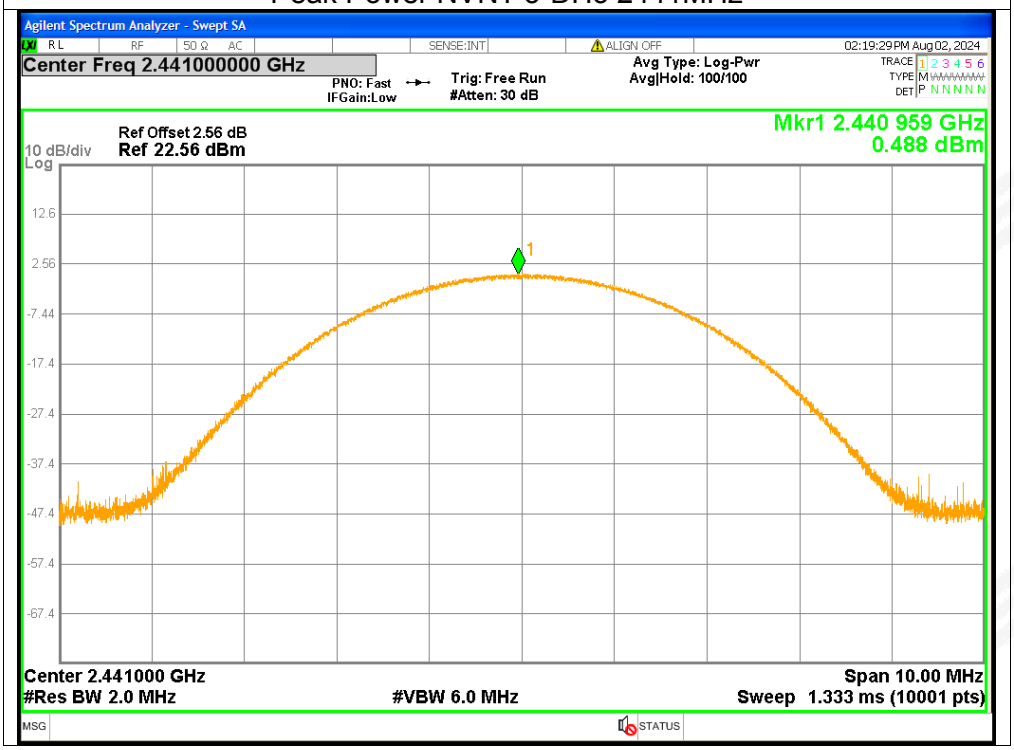
Peak Power NVNT 2-DH5 2480MHz



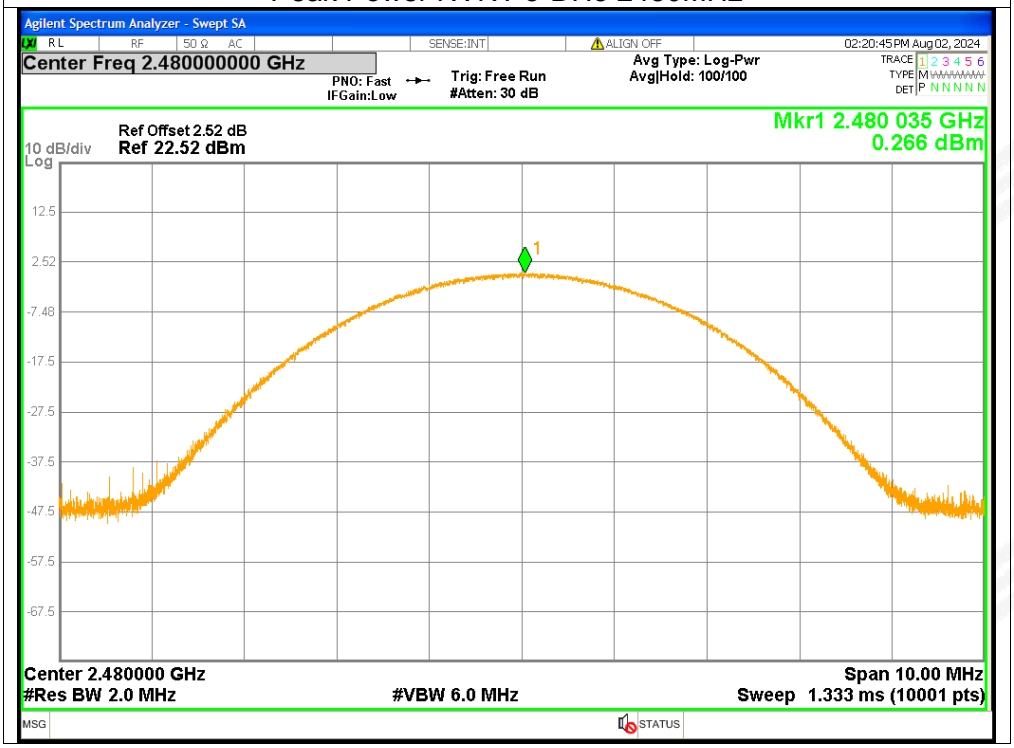
Peak Power NVNT 3-DH5 2402MHz



Peak Power NVNT 3-DH5 2441MHz



Peak Power NVNT 3-DH5 2480MHz

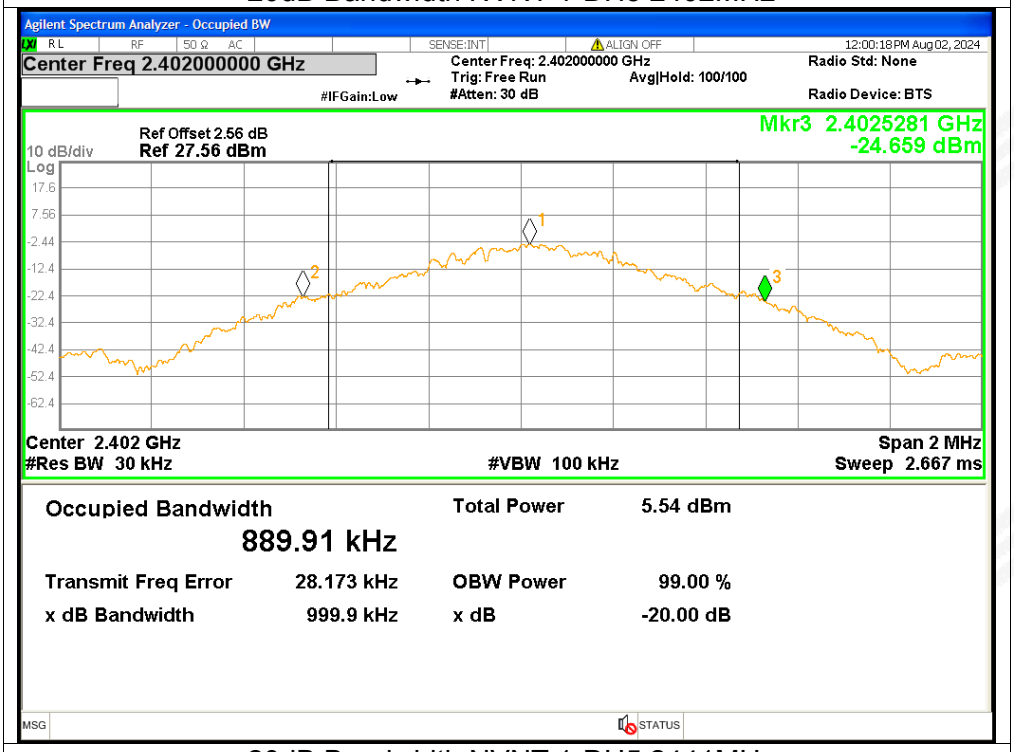


3. -20dB Bandwidth

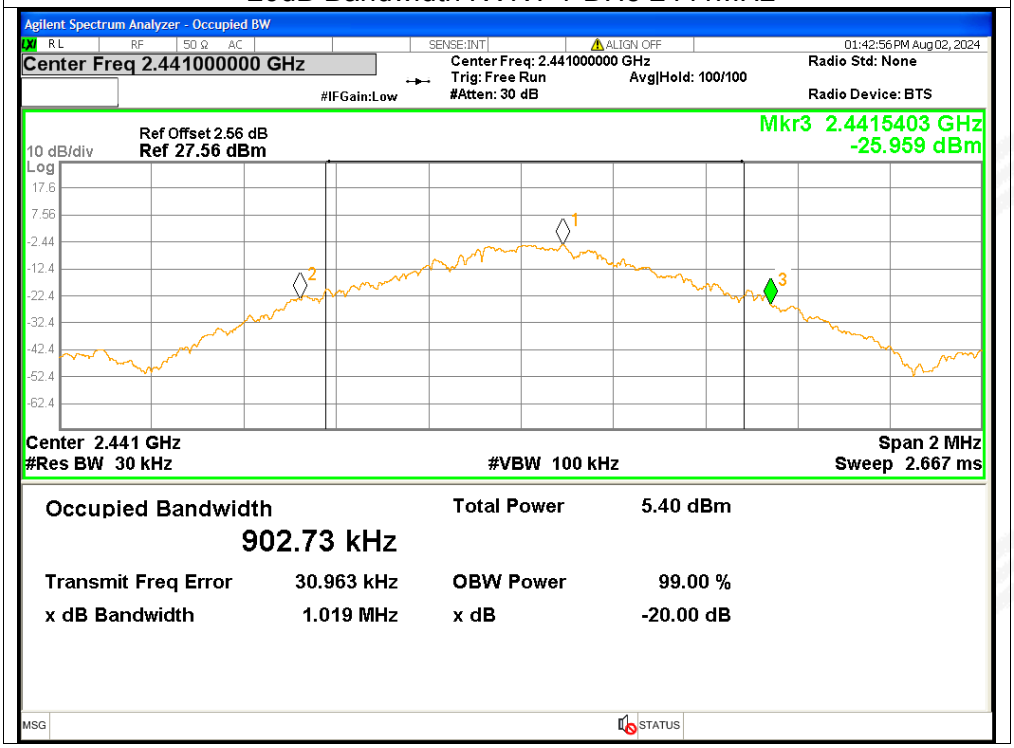
Condition	Mode	Frequency (MHz)	-20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	0.9999	Pass
NVNT	1-DH5	2441	1.0186	Pass
NVNT	1-DH5	2480	1.0065	Pass
NVNT	2-DH5	2402	1.2757	Pass
NVNT	2-DH5	2441	1.2832	Pass
NVNT	2-DH5	2480	1.2724	Pass
NVNT	3-DH5	2402	1.2904	Pass
NVNT	3-DH5	2441	1.3016	Pass
NVNT	3-DH5	2480	1.2961	Pass

Test Graphs

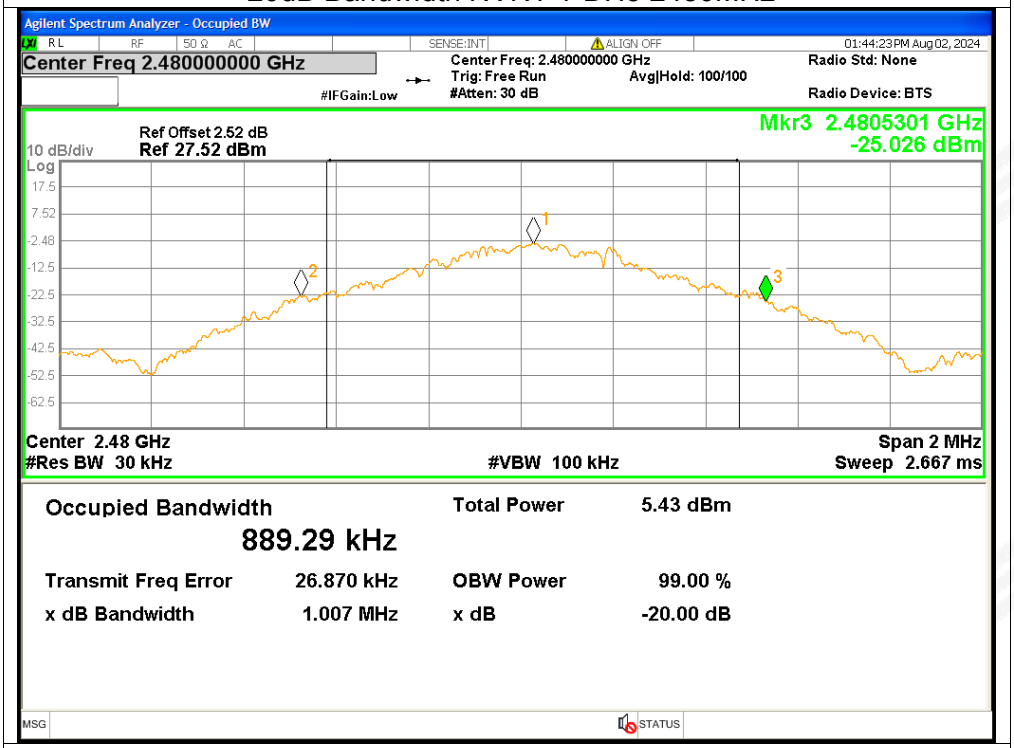
-20dB Bandwidth NVNT 1-DH5 2402MHz



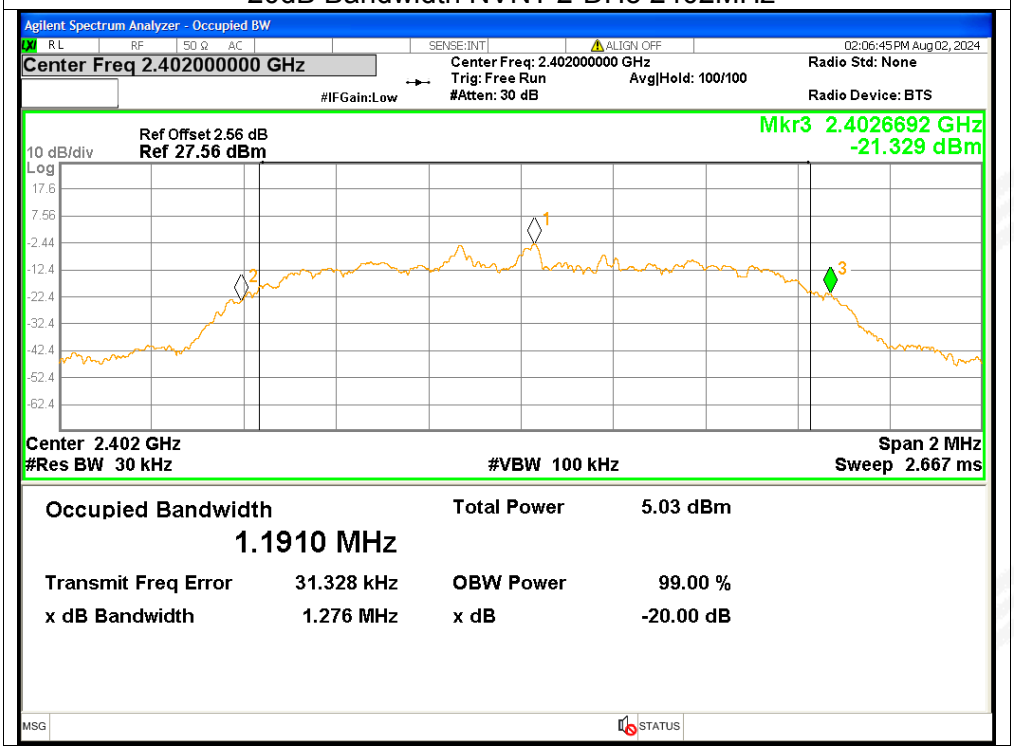
-20dB Bandwidth NVNT 1-DH5 2441MHz



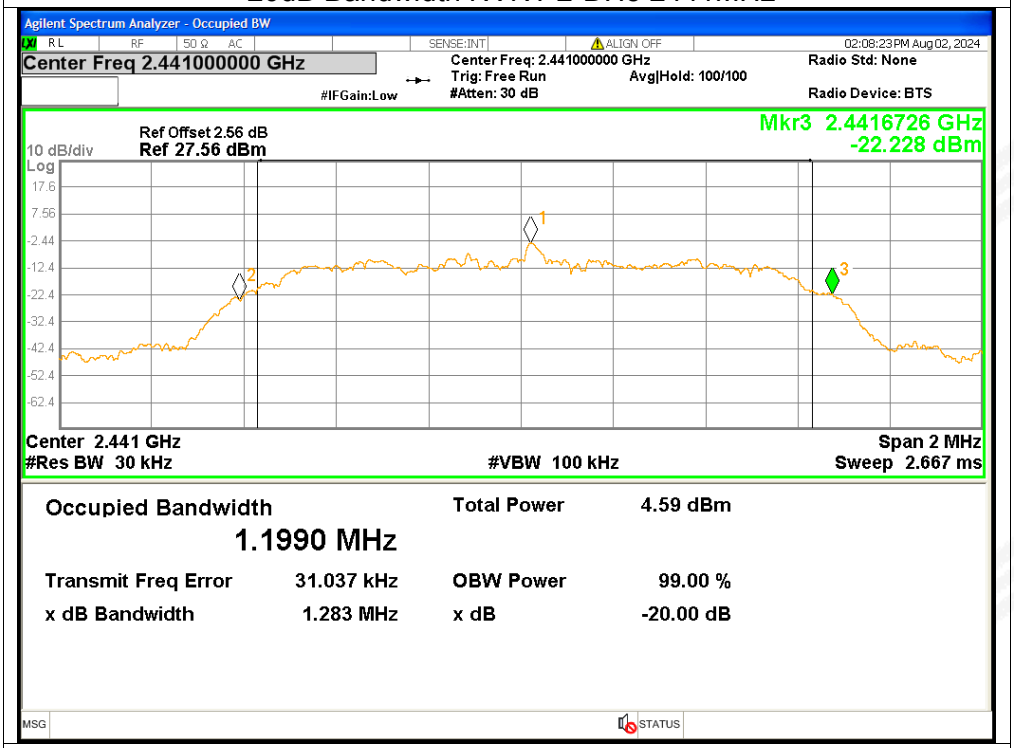
-20dB Bandwidth NVNT 1-DH5 2480MHz



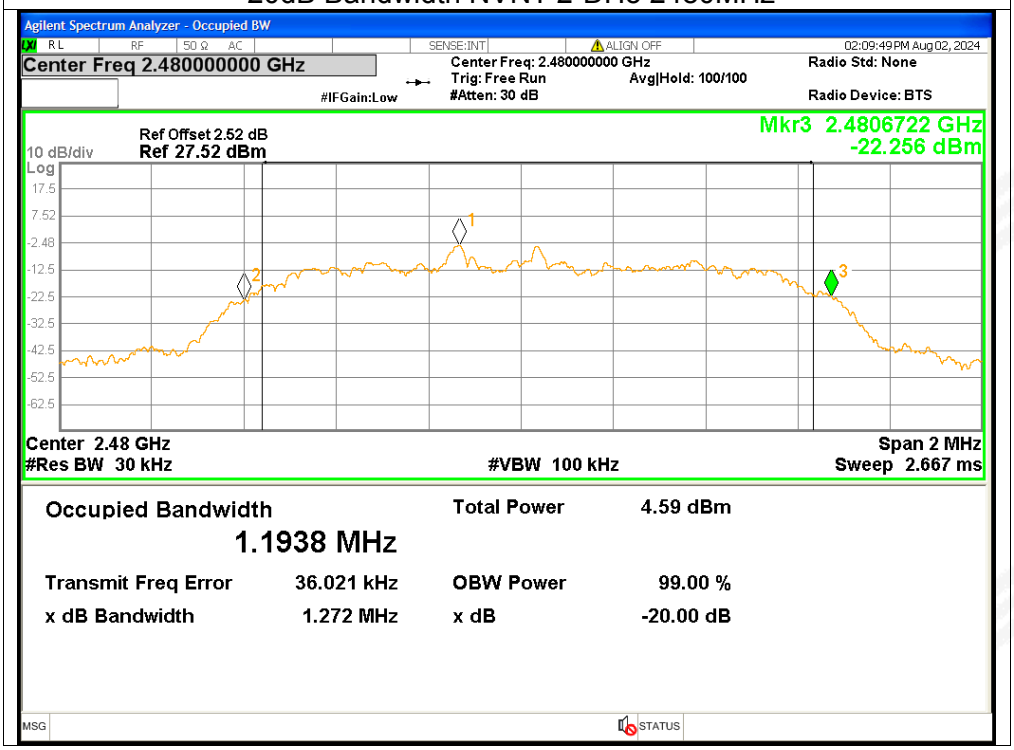
-20dB Bandwidth NVNT 2-DH5 2402MHz



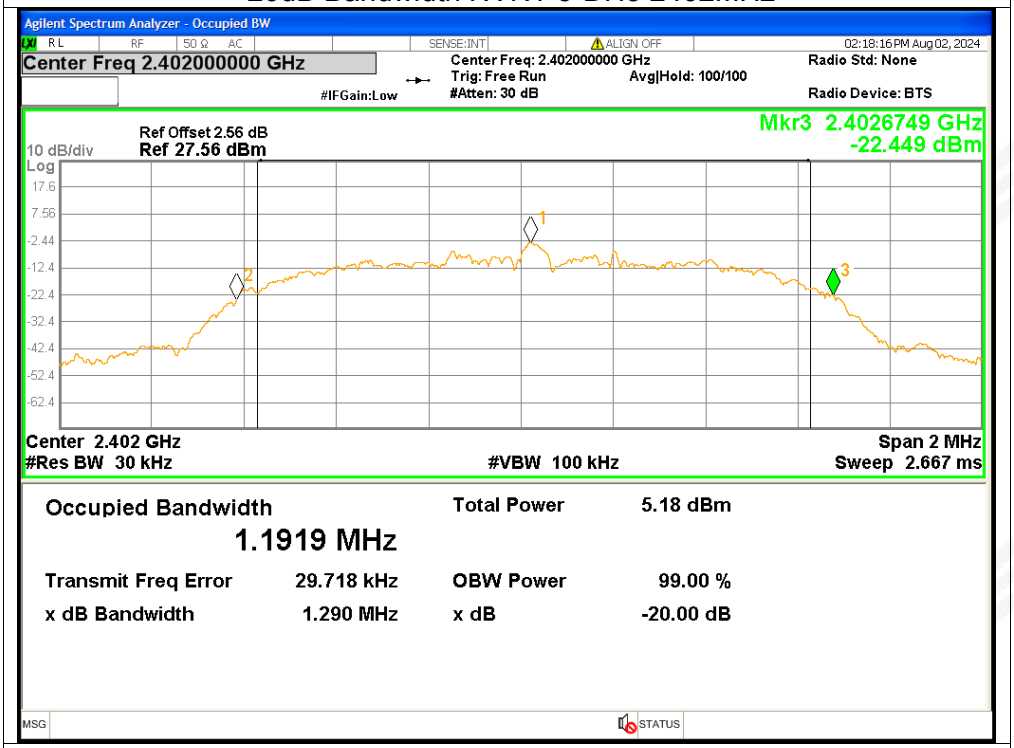
-20dB Bandwidth NVNT 2-DH5 2441MHz



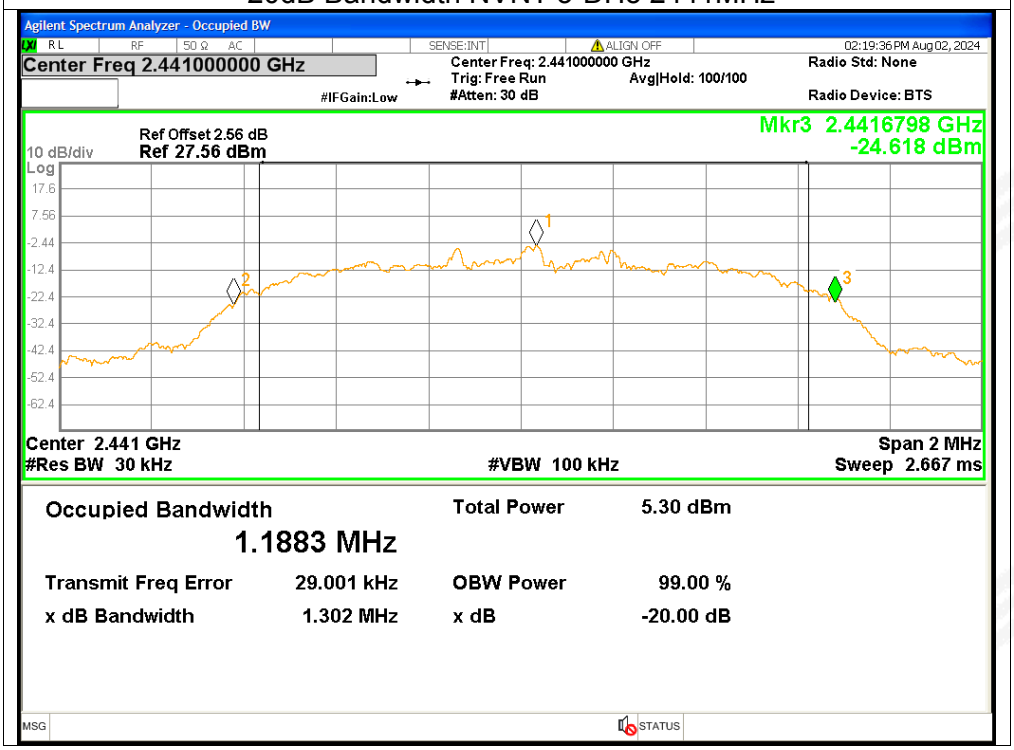
-20dB Bandwidth NVNT 2-DH5 2480MHz



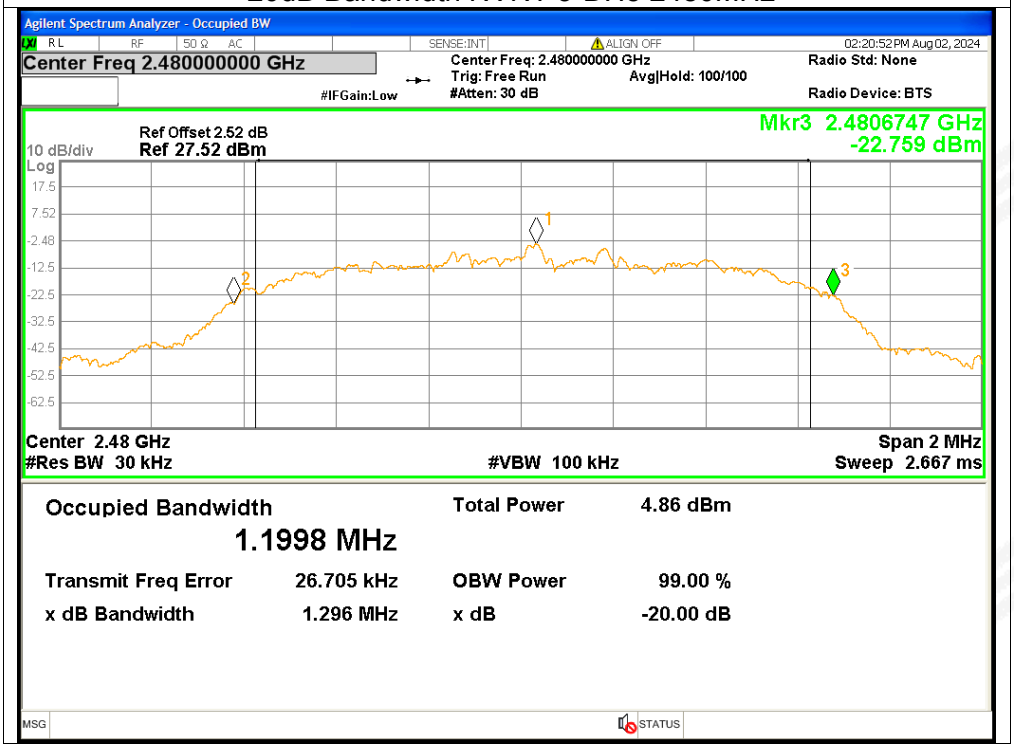
-20dB Bandwidth NVNT 3-DH5 2402MHz



-20dB Bandwidth NVNT 3-DH5 2441MHz



-20dB Bandwidth NVNT 3-DH5 2480MHz

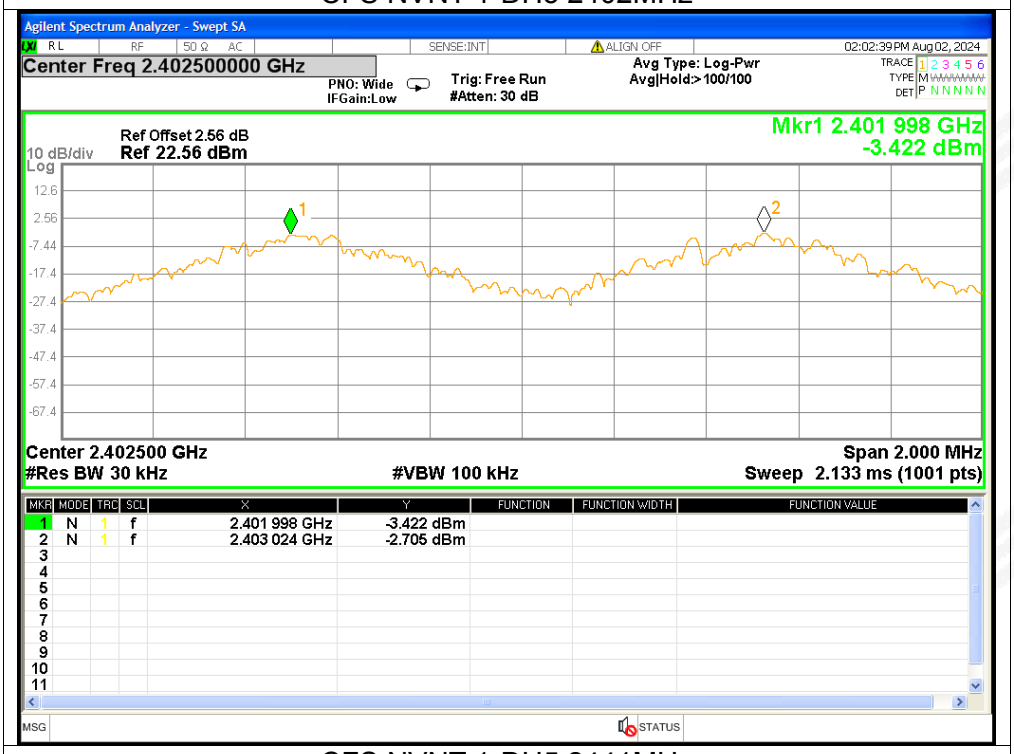


4. Carrier Frequencies Separation

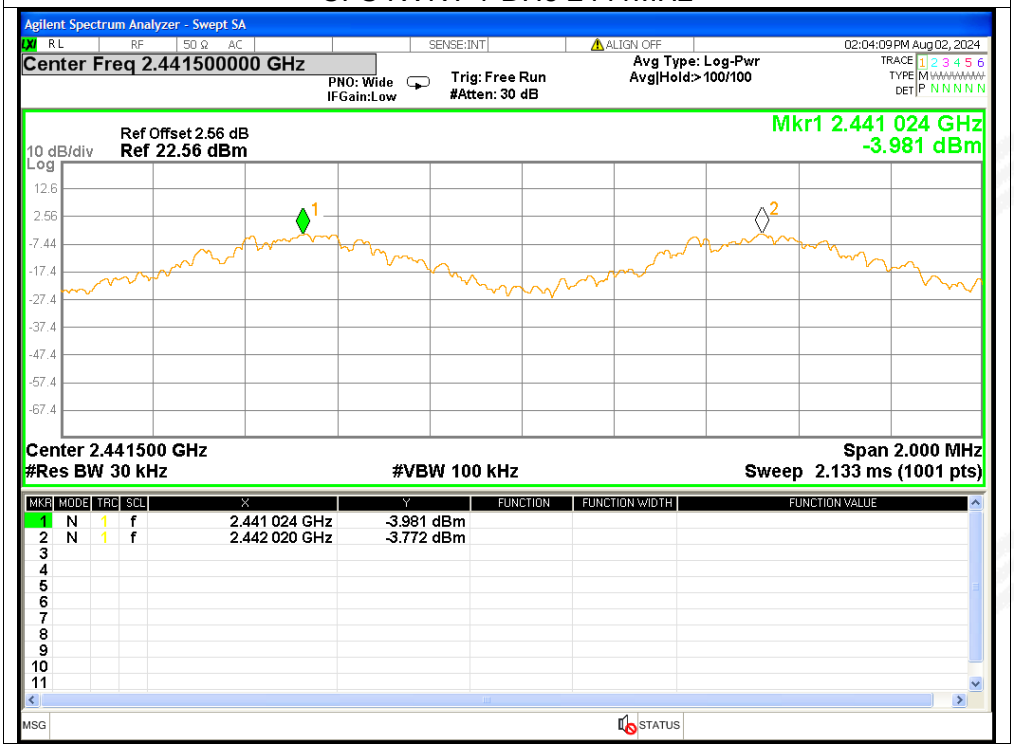
Condition	Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	2401.998	2403.024	1.026	>=0.667	Pass
NVNT	1-DH5	2441.024	2442.02	0.996	>=0.679	Pass
NVNT	1-DH5	2479.018	2480.022	1.004	>=0.671	Pass
NVNT	2-DH5	2401.864	2403.03	1.166	>=0.85	Pass
NVNT	2-DH5	2441.022	2442.366	1.344	>=0.855	Pass
NVNT	2-DH5	2479.022	2480.174	1.152	>=0.848	Pass
NVNT	3-DH5	2402.152	2403.2	1.048	>=0.86	Pass
NVNT	3-DH5	2441.022	2442.014	0.992	>=0.868	Pass
NVNT	3-DH5	2479.002	2480.204	1.202	>=0.864	Pass

Test Graphs

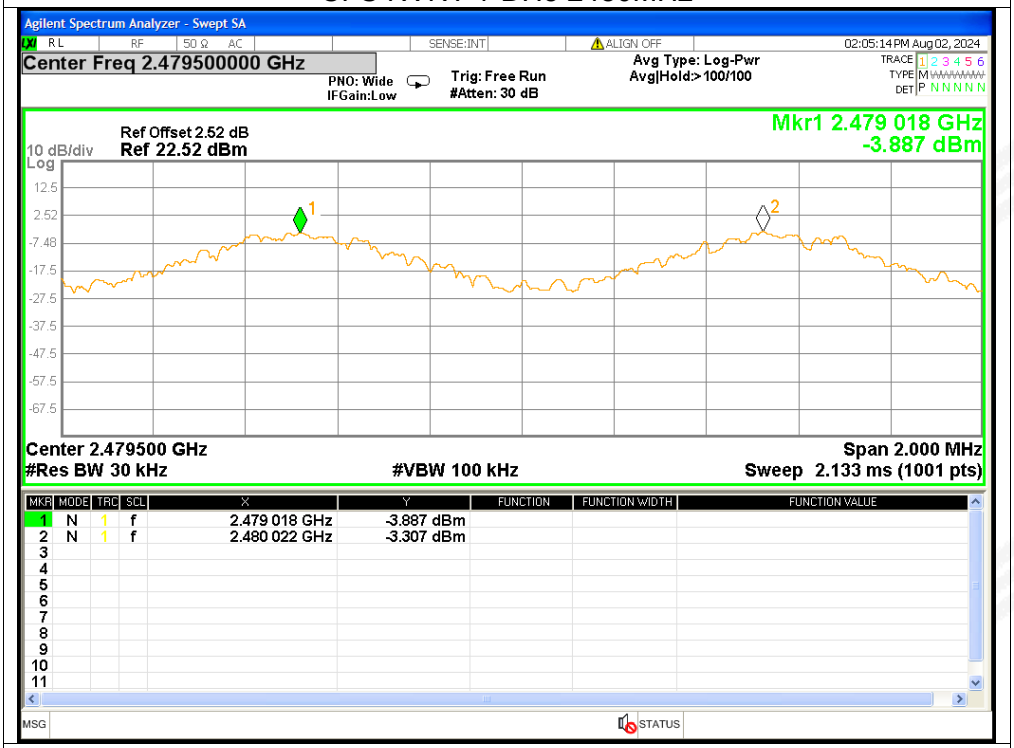
CFS NVNT 1-DH5 2402MHz



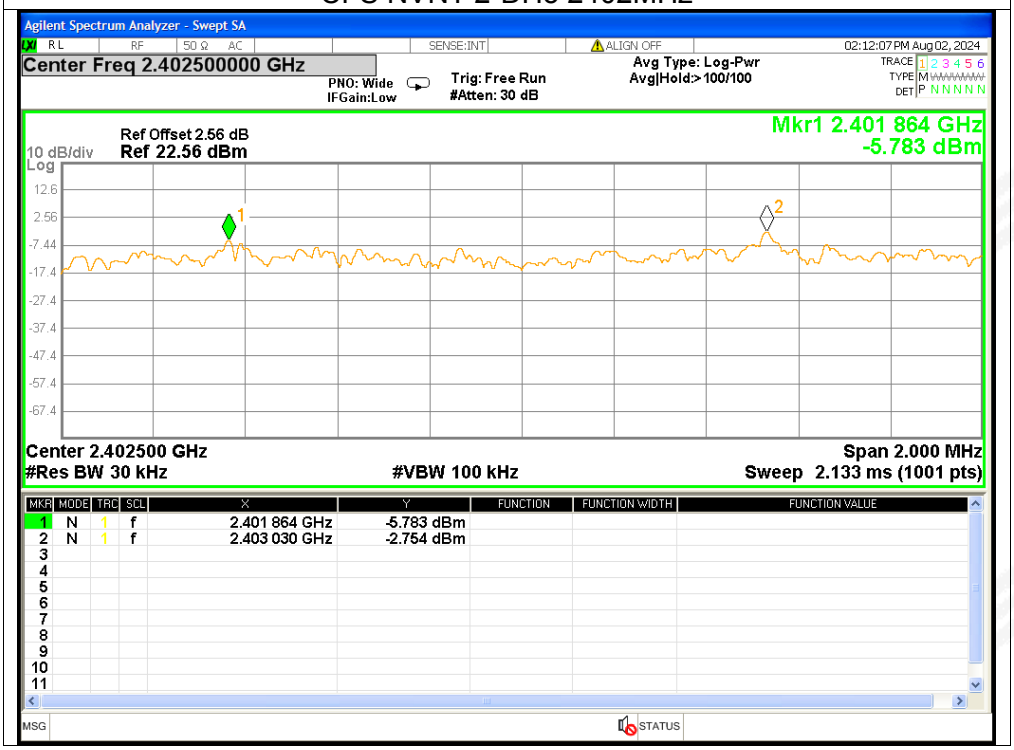
CFS NVNT 1-DH5 2441MHz



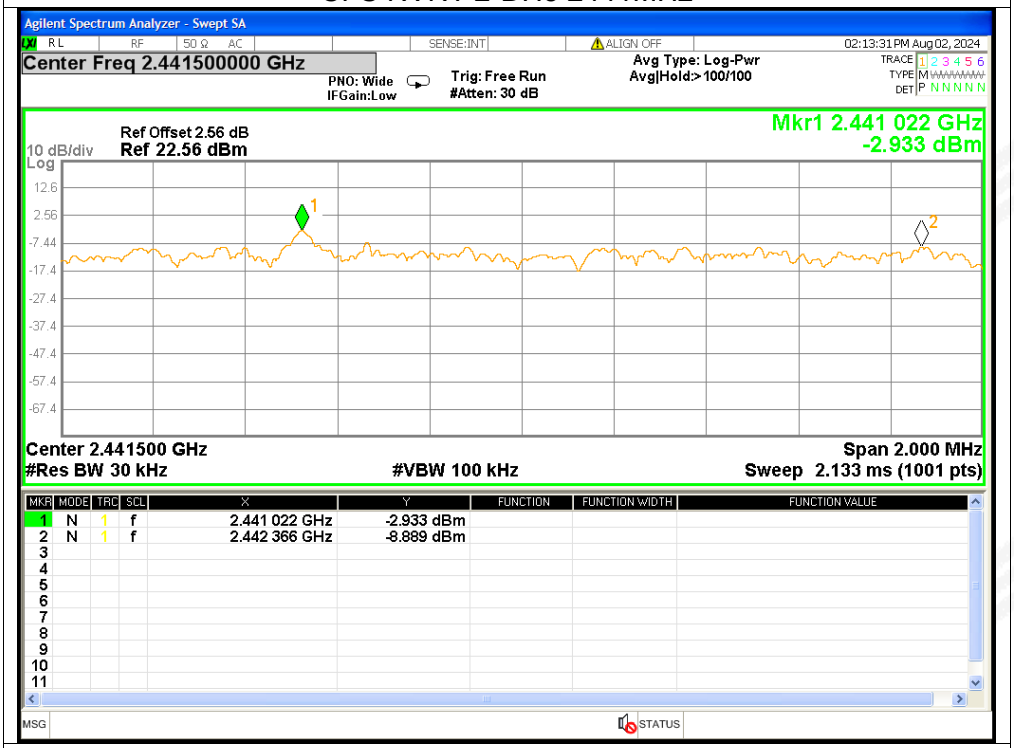
CFS NVNT 1-DH5 2480MHz



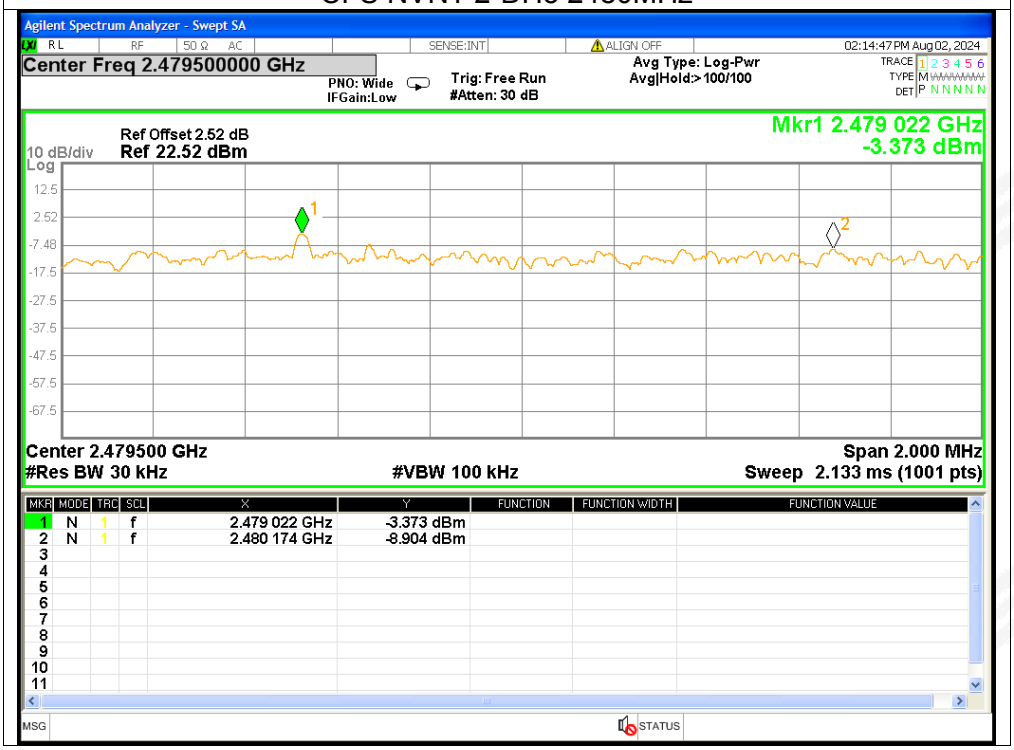
CFS NVNT 2-DH5 2402MHz



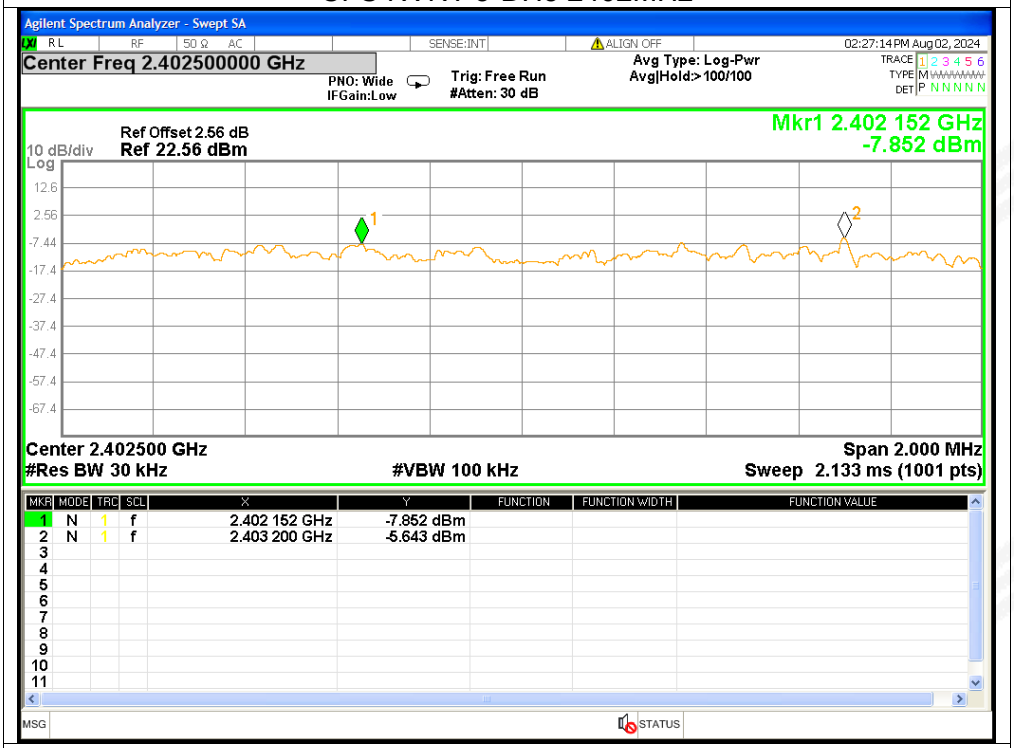
CFS NVNT 2-DH5 2441MHz



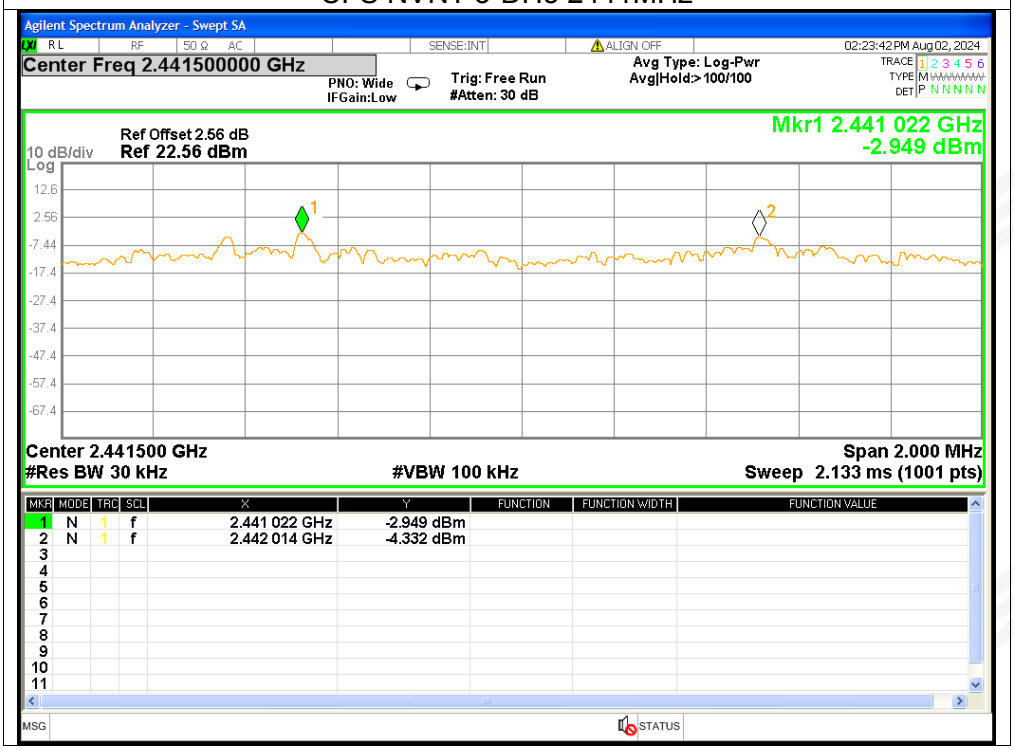
CFS NVNT 2-DH5 2480MHz



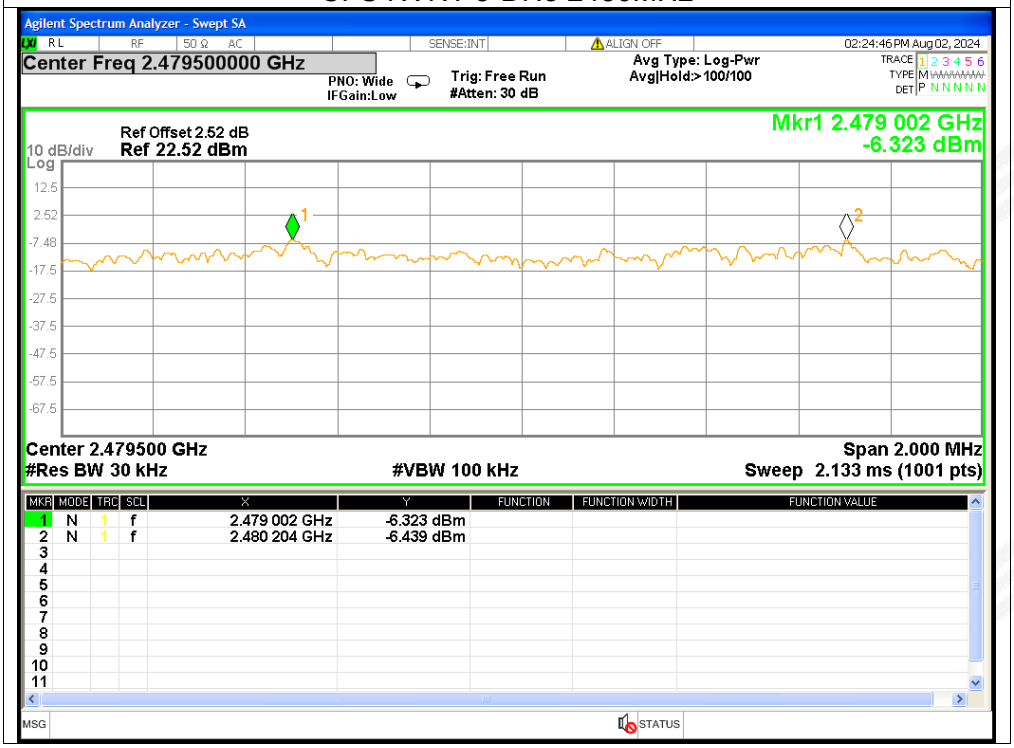
CFS NVNT 3-DH5 2402MHz



CFS NVNT 3-DH5 2441MHz



CFS NVNT 3-DH5 2480MHz

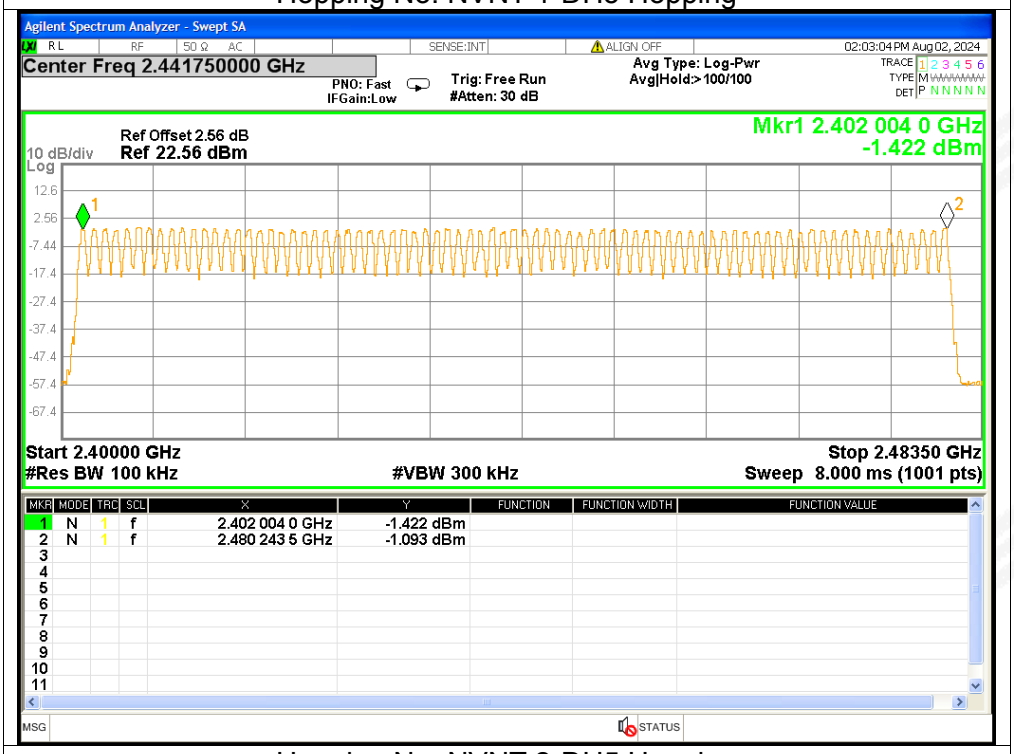


5. Number of Hopping Channel

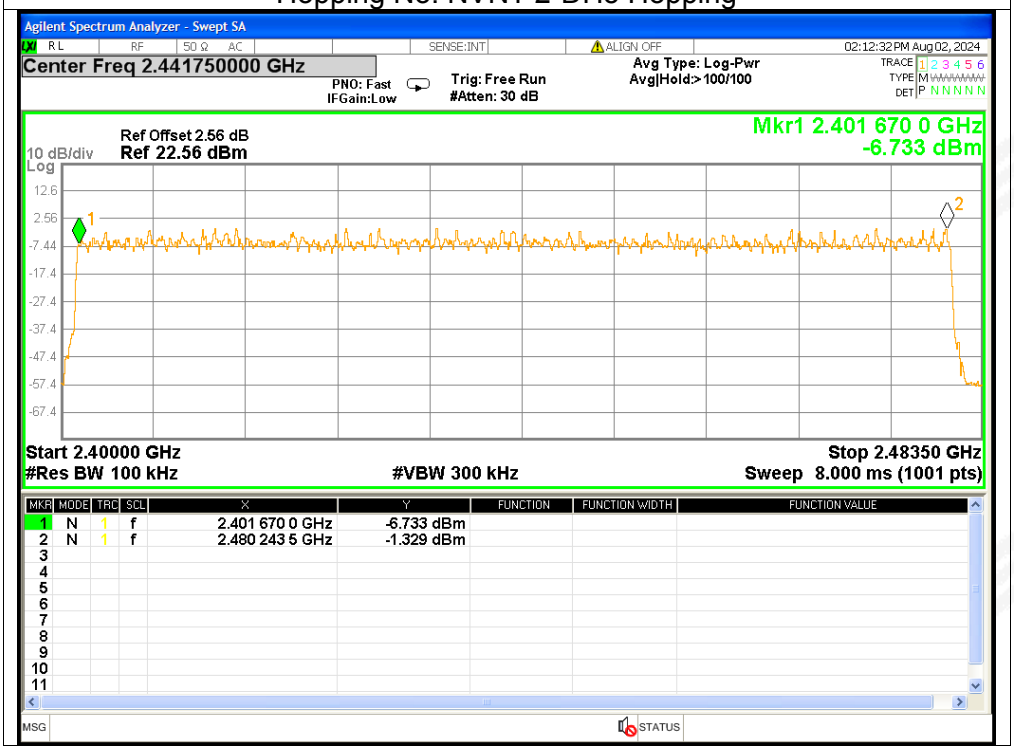
Condition	Mode	Hopping Number	Limit	Verdict
NVNT	1-DH5	79	>=15	Pass
NVNT	2-DH5	79	>=15	Pass
NVNT	3-DH5	79	>=15	Pass

Test Graphs

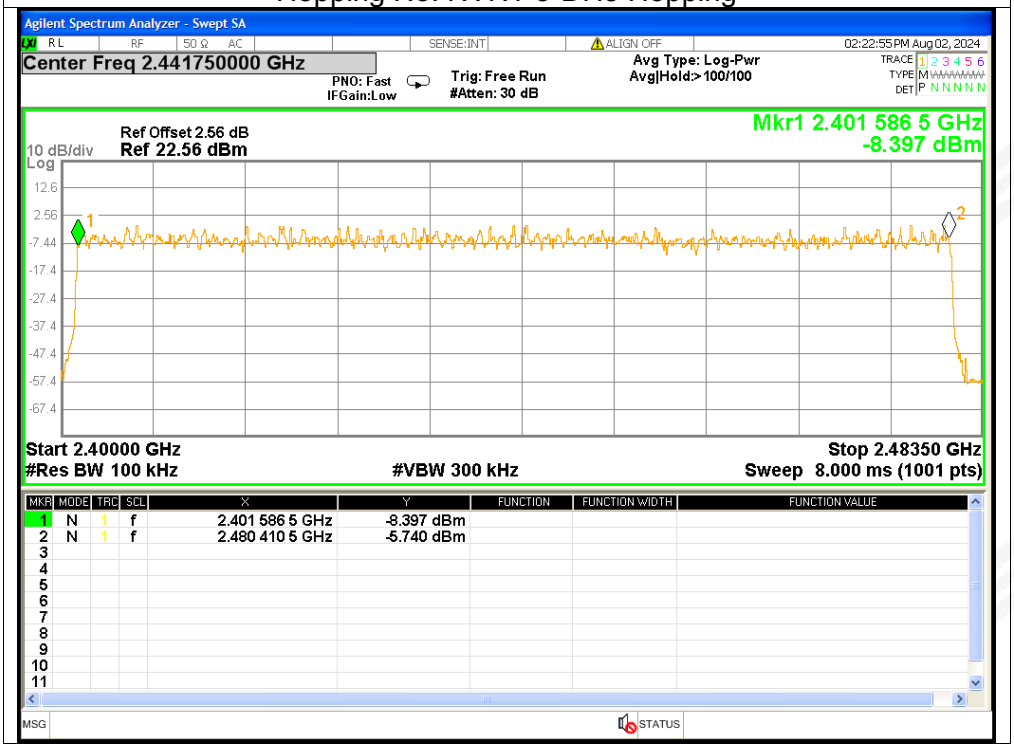
Hopping No. NVNT 1-DH5 Hopping



Hopping No. NVNT 2-DH5 Hopping



Hopping No. NVNT 3-DH5 Hopping

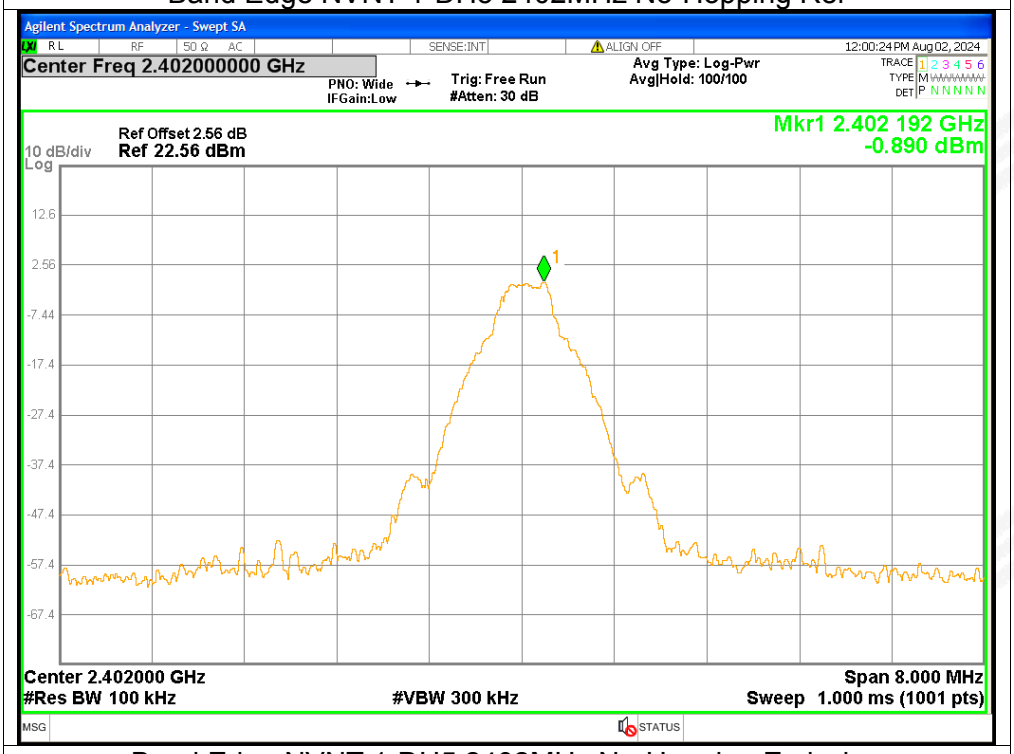


6. Band Edge

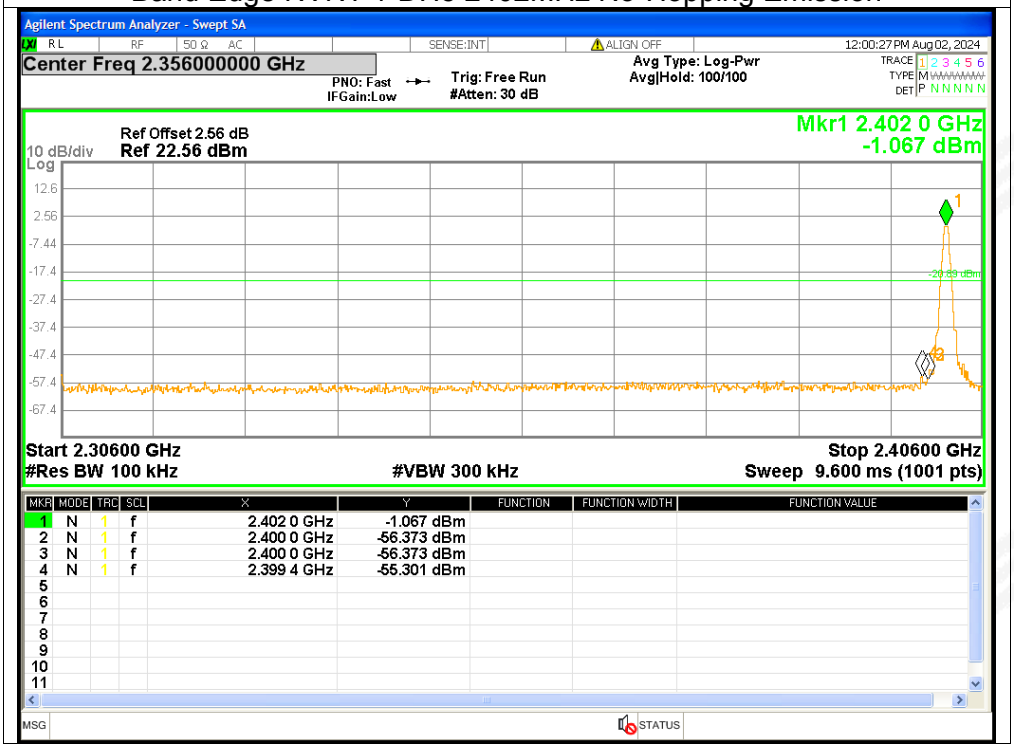
Condition	Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	No-Hopping	-54.41	<=-20	Pass
NVNT	1-DH5	2480	No-Hopping	-53.97	<=-20	Pass
NVNT	2-DH5	2402	No-Hopping	-52.33	<=-20	Pass
NVNT	2-DH5	2480	No-Hopping	-54.17	<=-20	Pass
NVNT	3-DH5	2402	No-Hopping	-51.19	<=-20	Pass
NVNT	3-DH5	2480	No-Hopping	-54.21	<=-20	Pass

Test Graphs

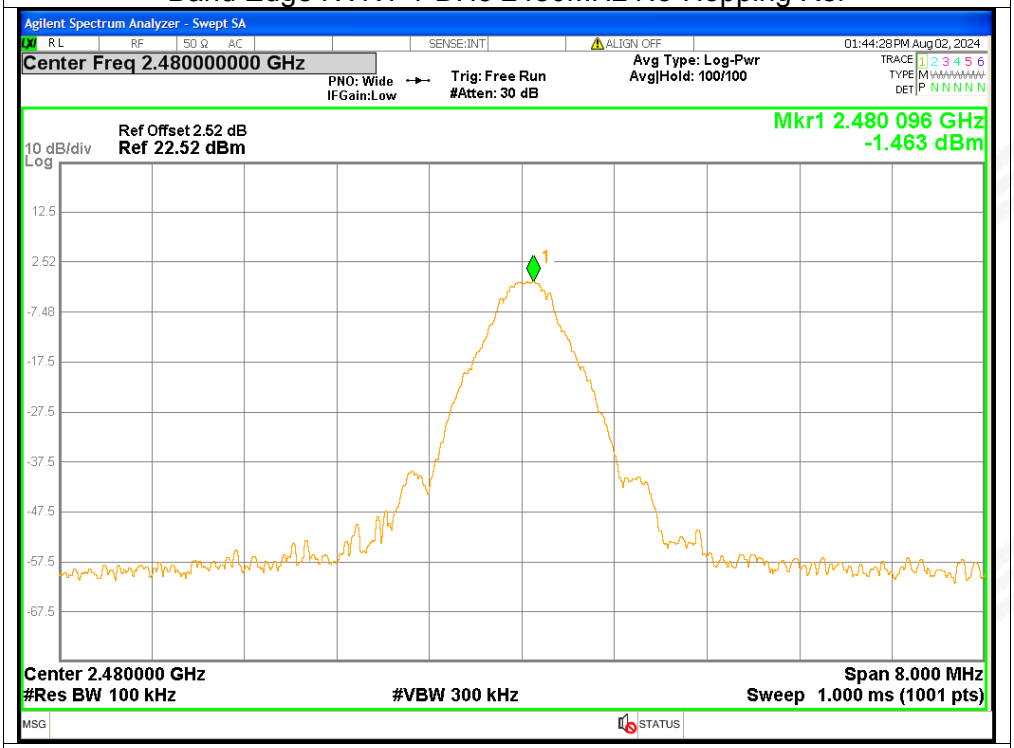
Band Edge NVNT 1-DH5 2402MHz No-Hopping Ref



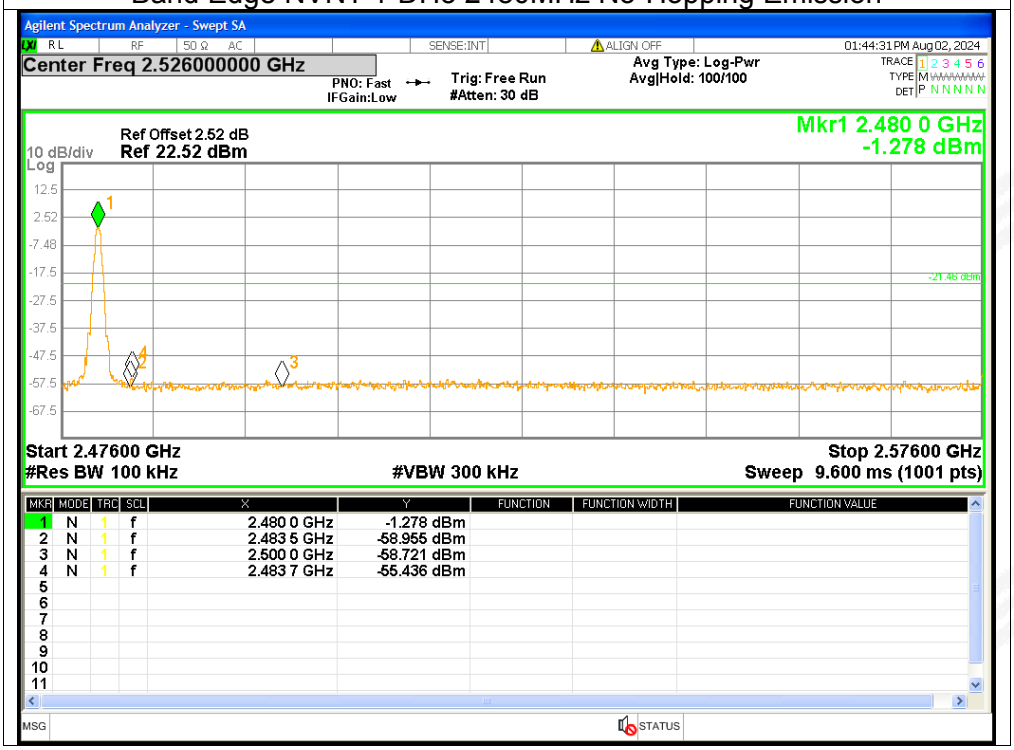
Band Edge NVNT 1-DH5 2402MHz No-Hopping Emission



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

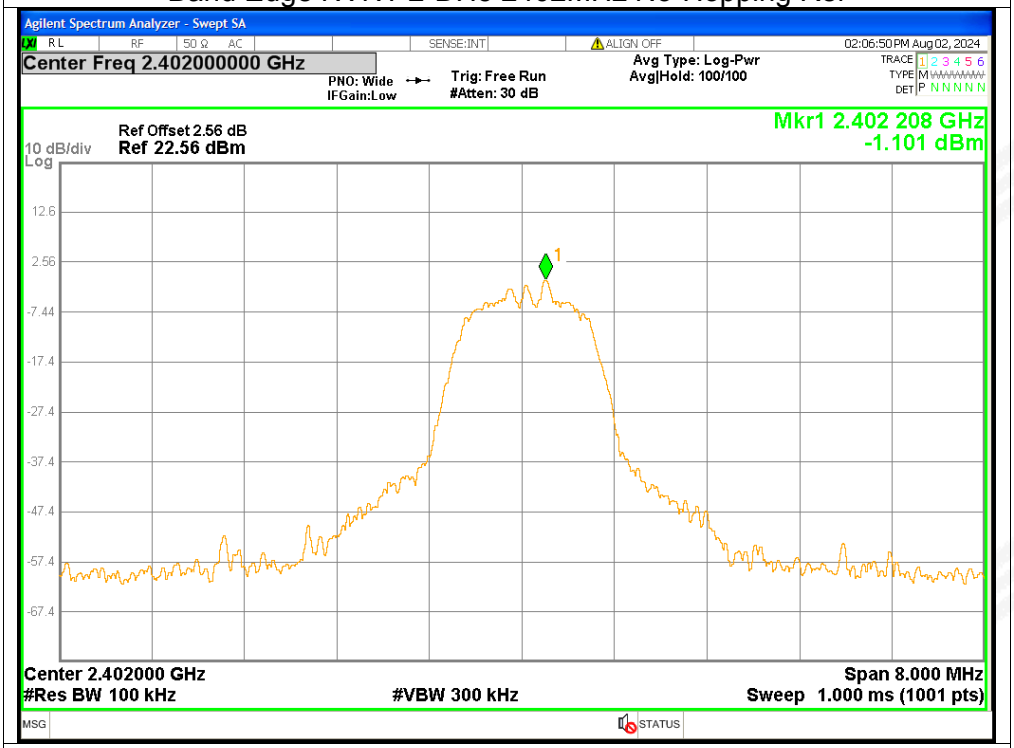


Band Edge NVNT 1-DH5 2480MHz No-Hopping Emission

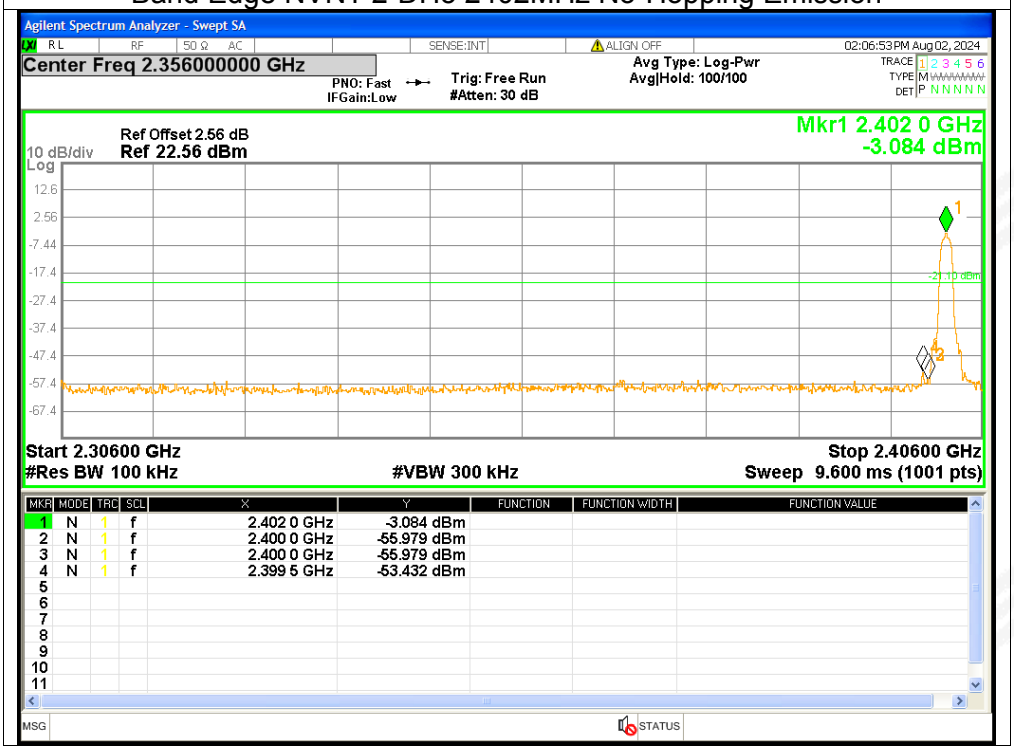


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.480 0 GHz	-1.278 dBm			
2	N	1	f	2.483 5 GHz	-58.955 dBm			
3	N	1	f	2.500 0 GHz	-58.721 dBm			
4	N	1	f	2.483 7 GHz	-55.436 dBm			
5								
6								
7								
8								
9								
10								
11								

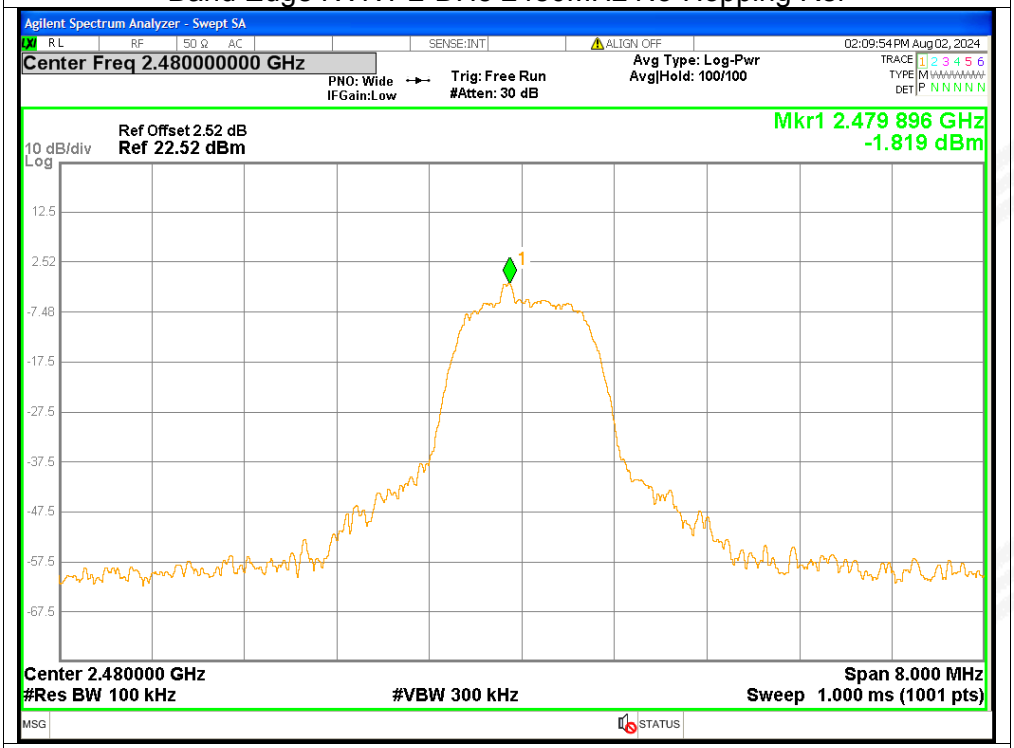
Band Edge NVNT 2-DH5 2402MHz No-Hopping Ref



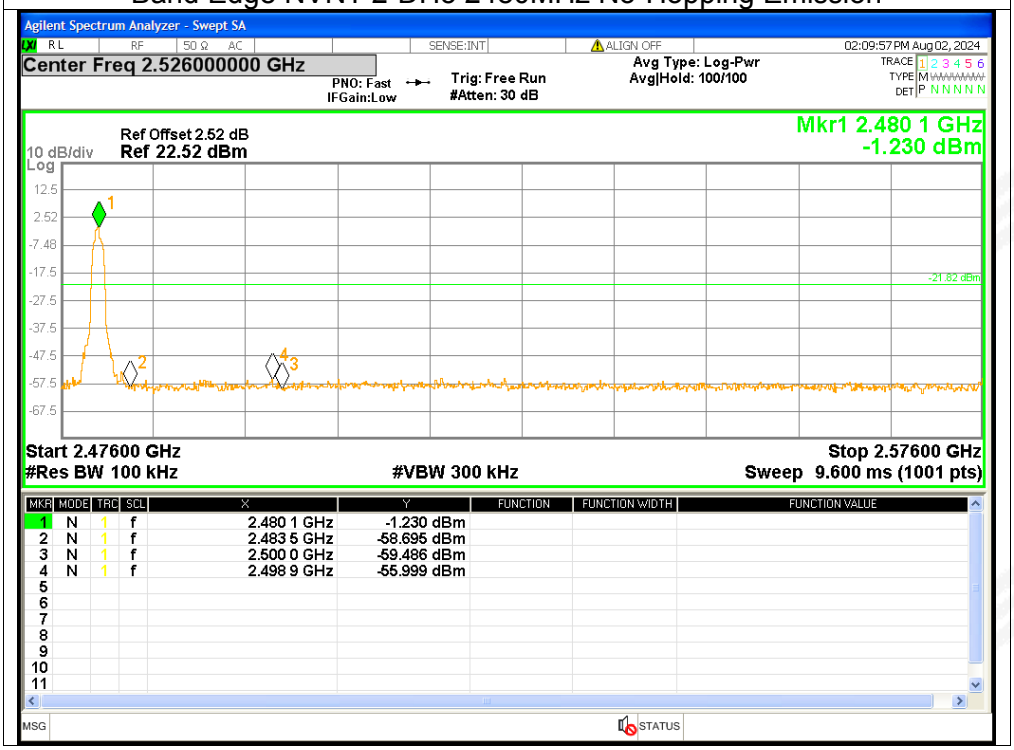
Band Edge NVNT 2-DH5 2402MHz No-Hopping Emission



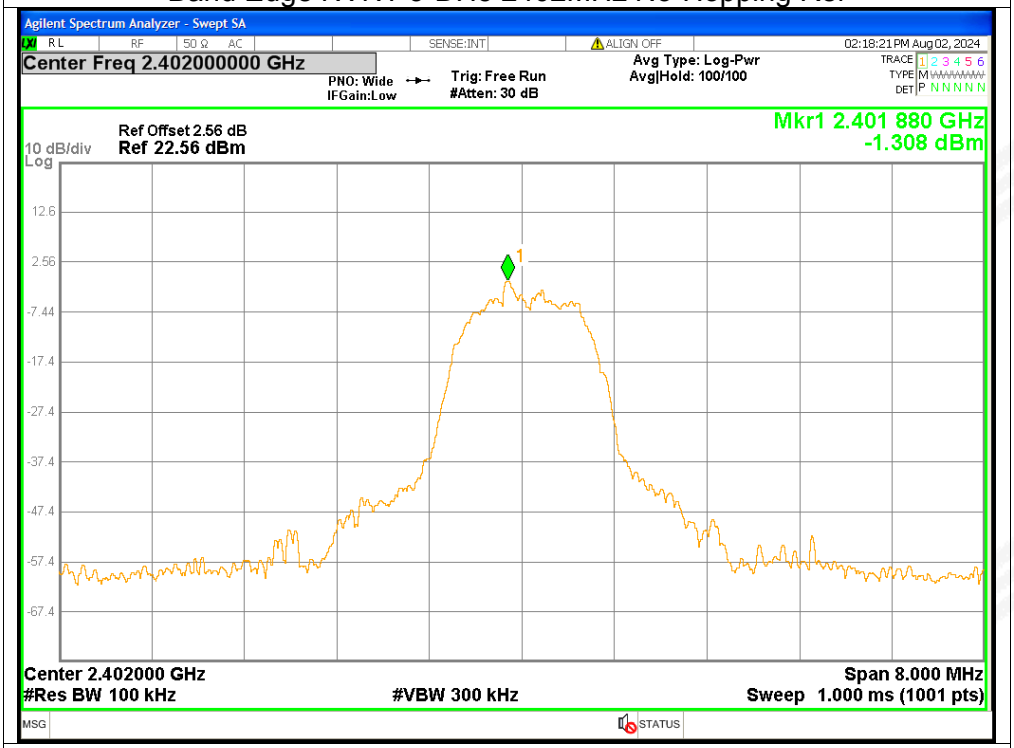
Band Edge NVNT 2-DH5 2480MHz No-Hopping Ref



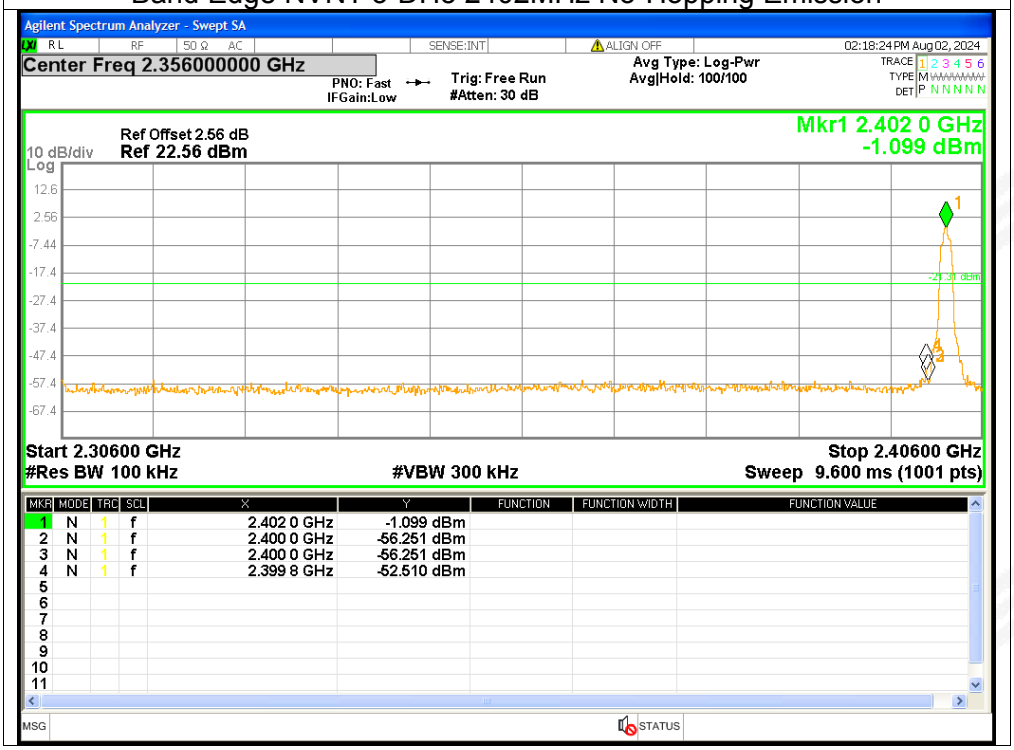
Band Edge NVNT 2-DH5 2480MHz No-Hopping Emission



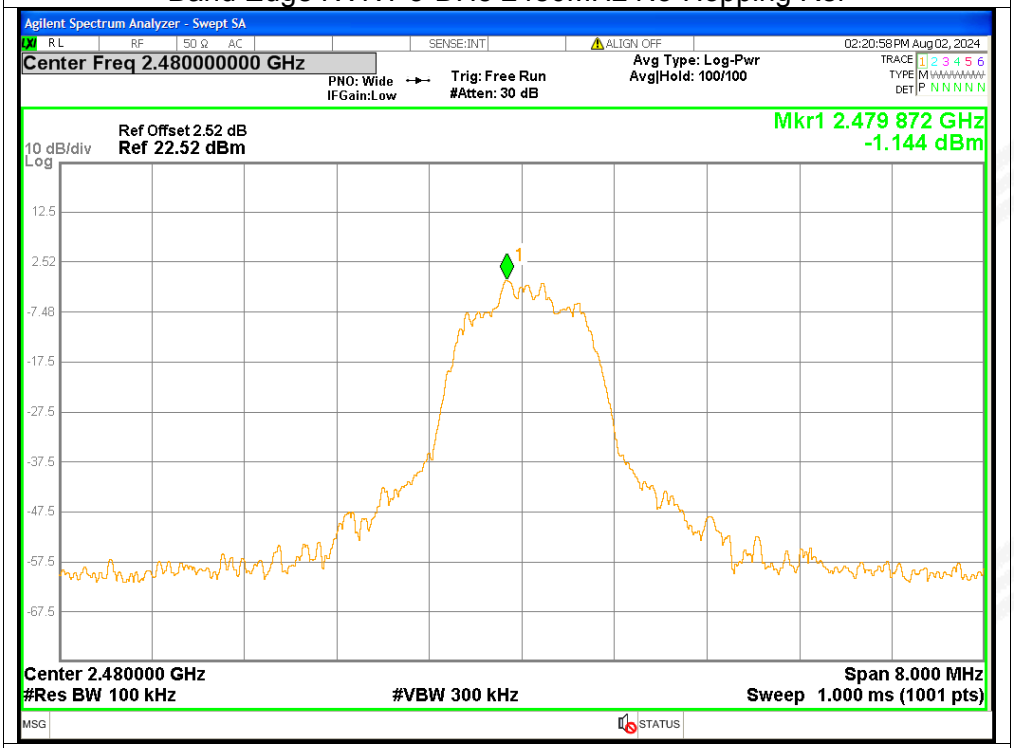
Band Edge NVNT 3-DH5 2402MHz No-Hopping Ref



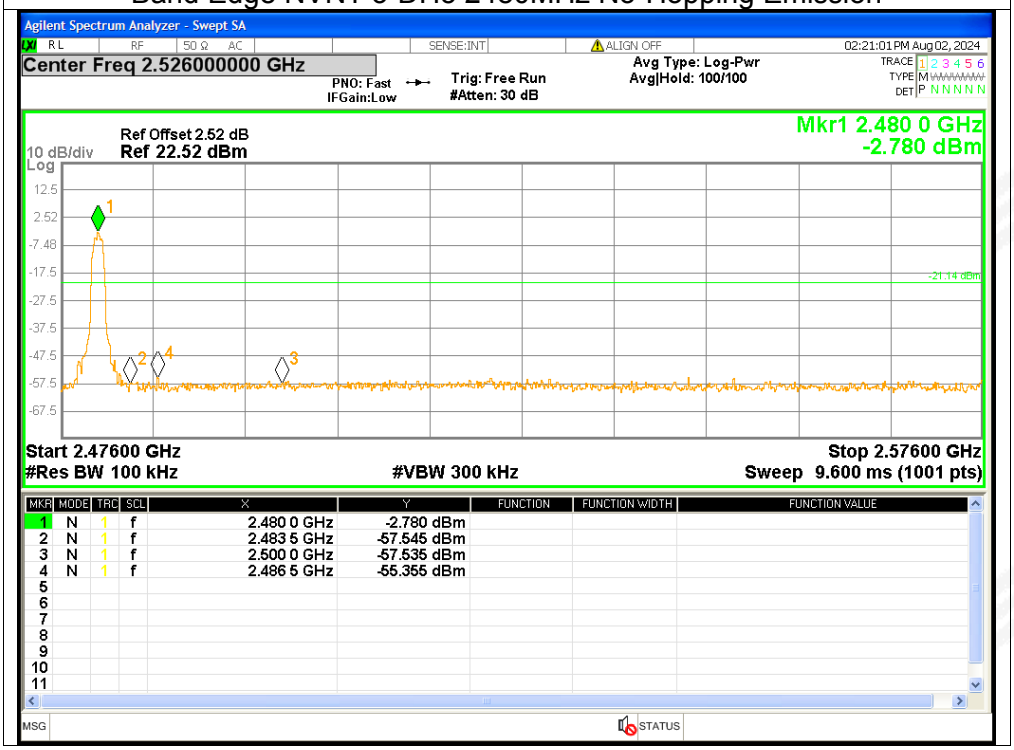
Band Edge NVNT 3-DH5 2402MHz No-Hopping Emission



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



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

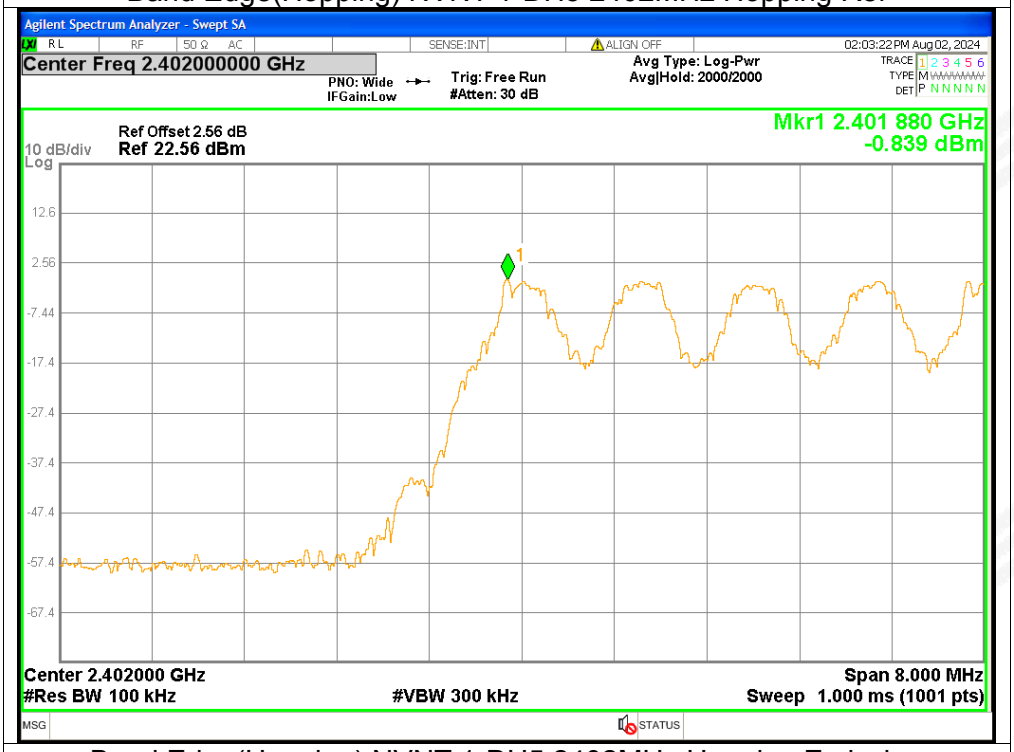


7. Band Edge(Hopping)

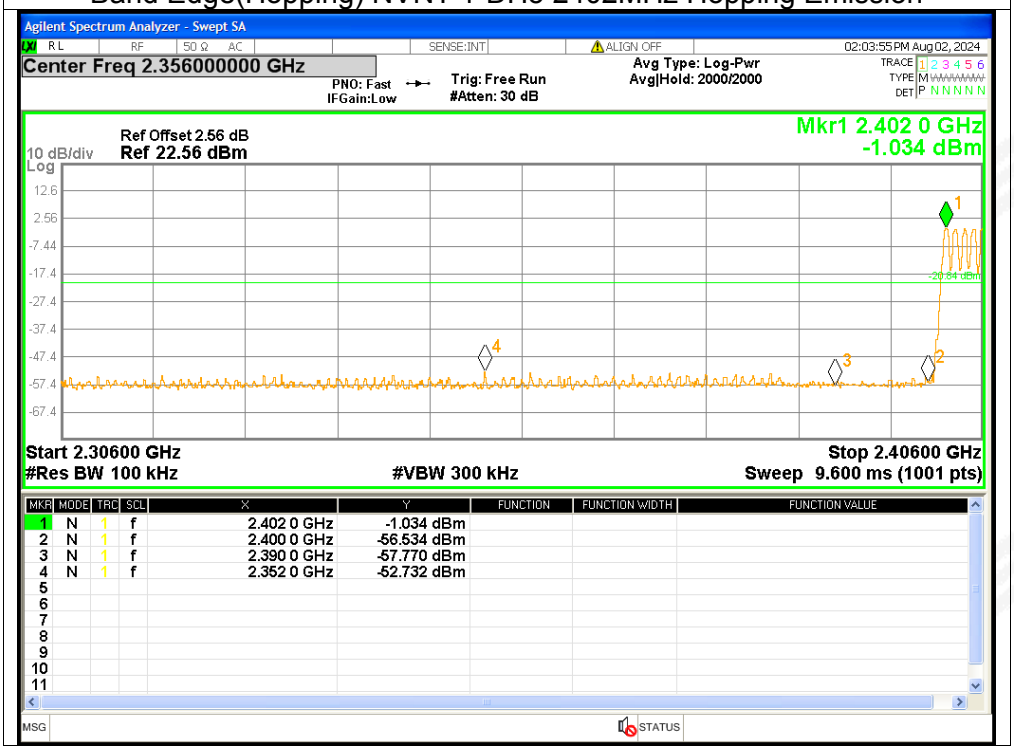
Condition	Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Hopping	-51.89	<=-20	Pass
NVNT	1-DH5	2480	Hopping	-53.14	<=-20	Pass
NVNT	2-DH5	2402	Hopping	-53.27	<=-20	Pass
NVNT	2-DH5	2480	Hopping	-53.99	<=-20	Pass
NVNT	3-DH5	2402	Hopping	-53.44	<=-20	Pass
NVNT	3-DH5	2480	Hopping	-53.73	<=-20	Pass

Test Graphs

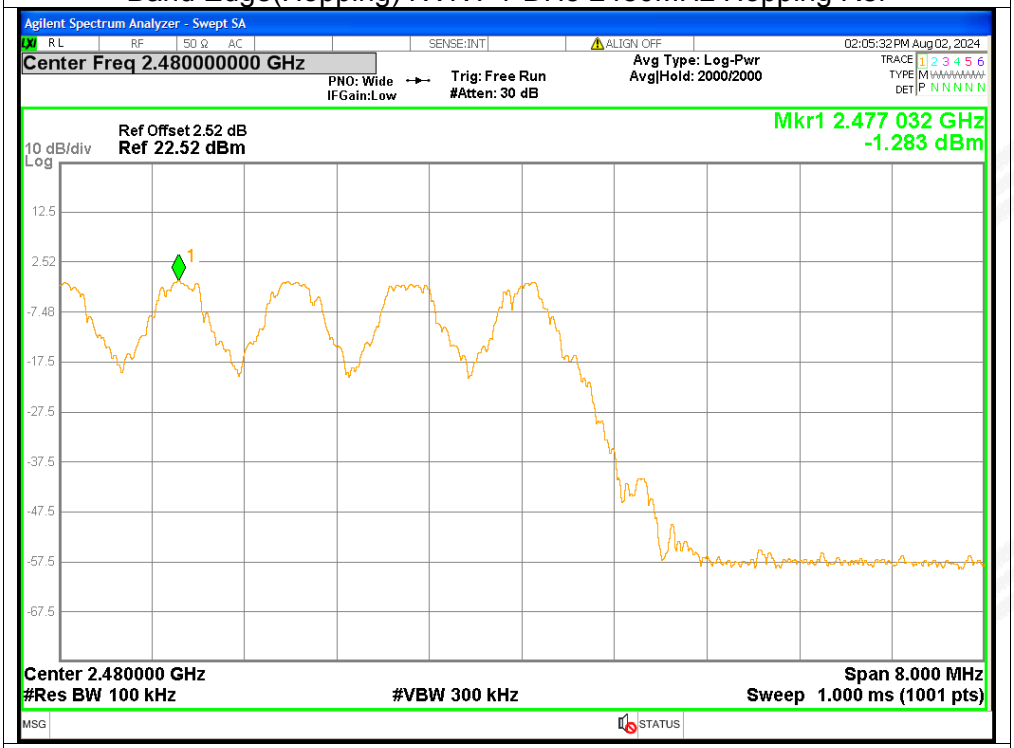
Band Edge(Hopping) NVNT 1-DH5 2402MHz Hopping Ref



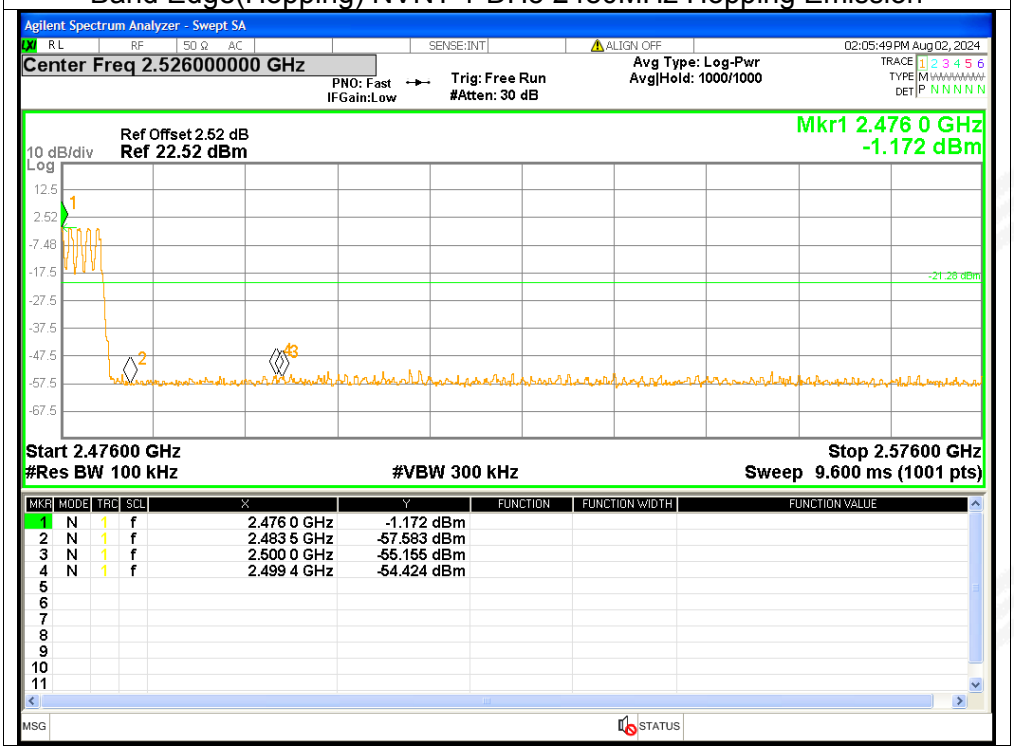
Band Edge(Hopping) NVNT 1-DH5 2402MHz Hopping Emission



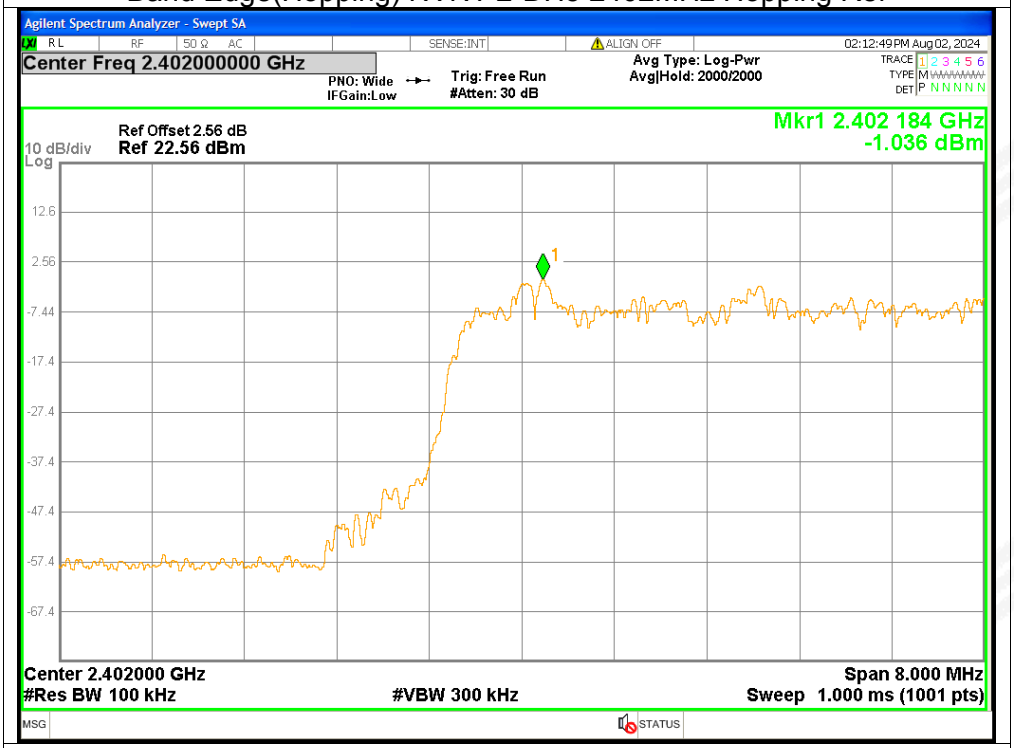
Band Edge(Hopping) NVNT 1-DH5 2480MHz Hopping Ref



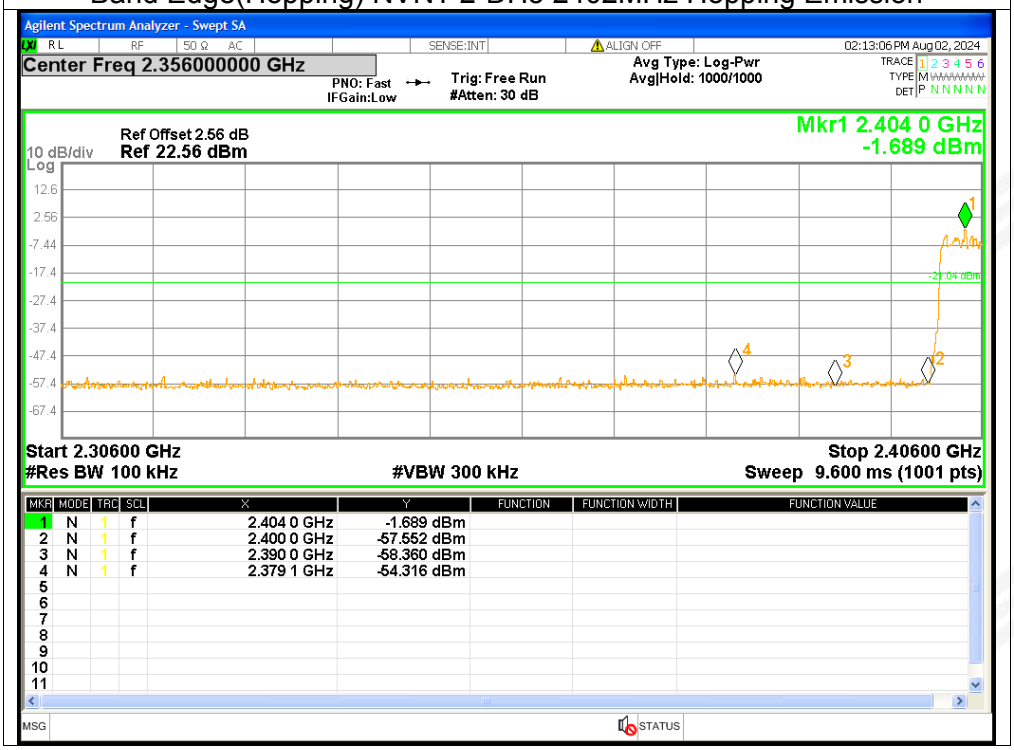
Band Edge(Hopping) NVNT 1-DH5 2480MHz Hopping Emission



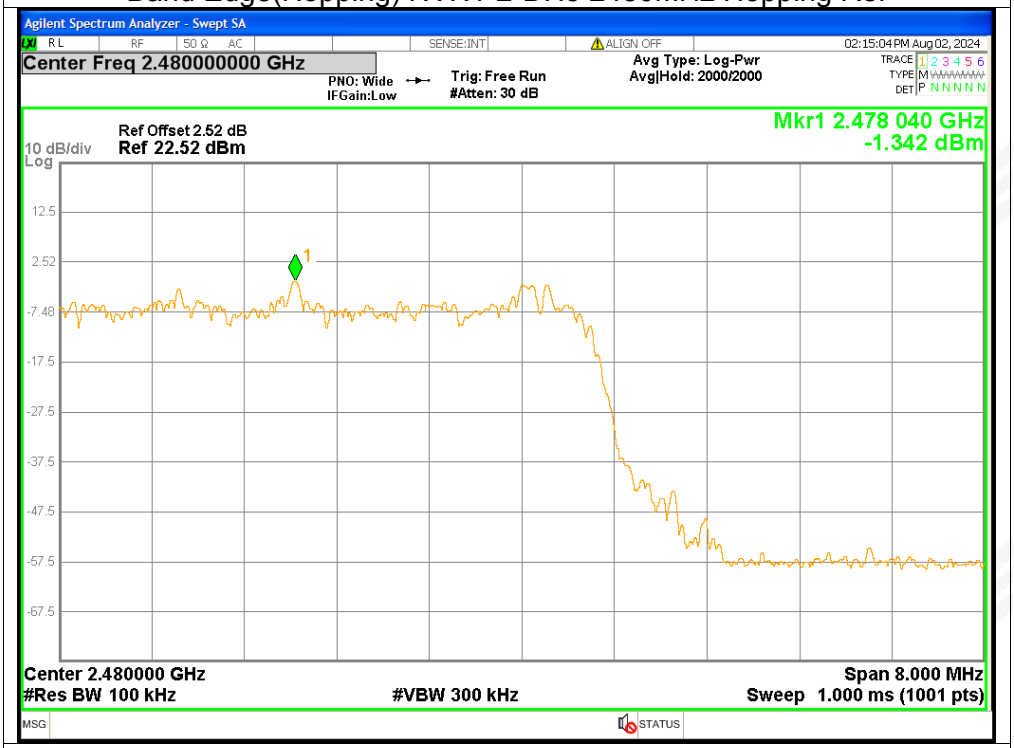
Band Edge(Hopping) NVNT 2-DH5 2402MHz Hopping Ref



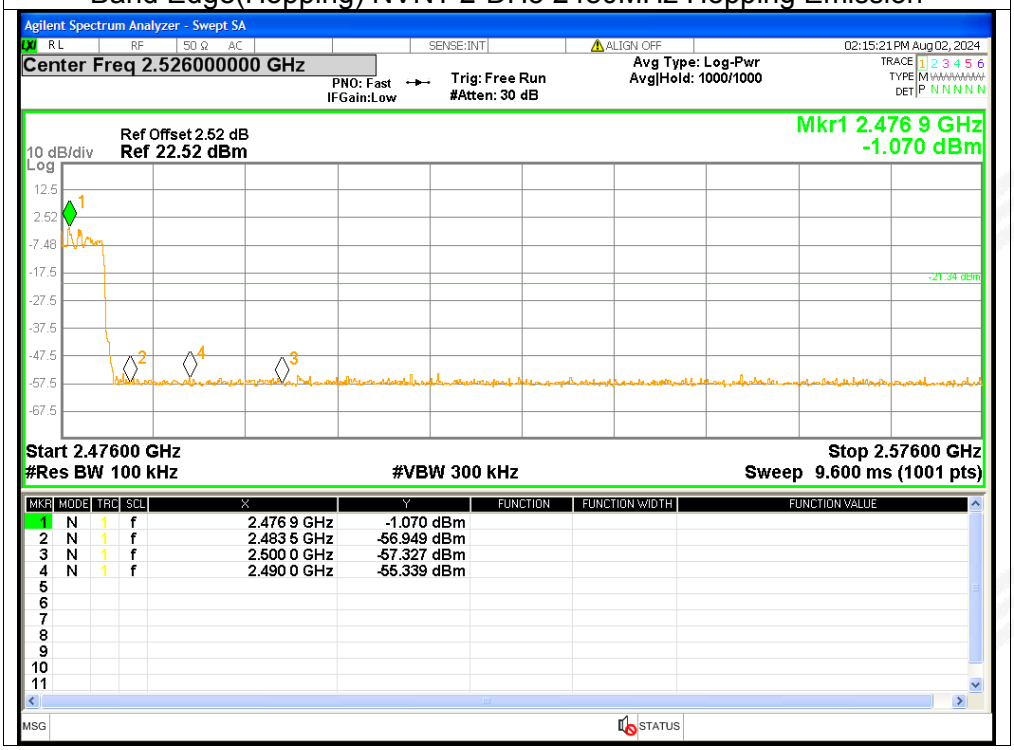
Band Edge(Hopping) NVNT 2-DH5 2402MHz Hopping Emission



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

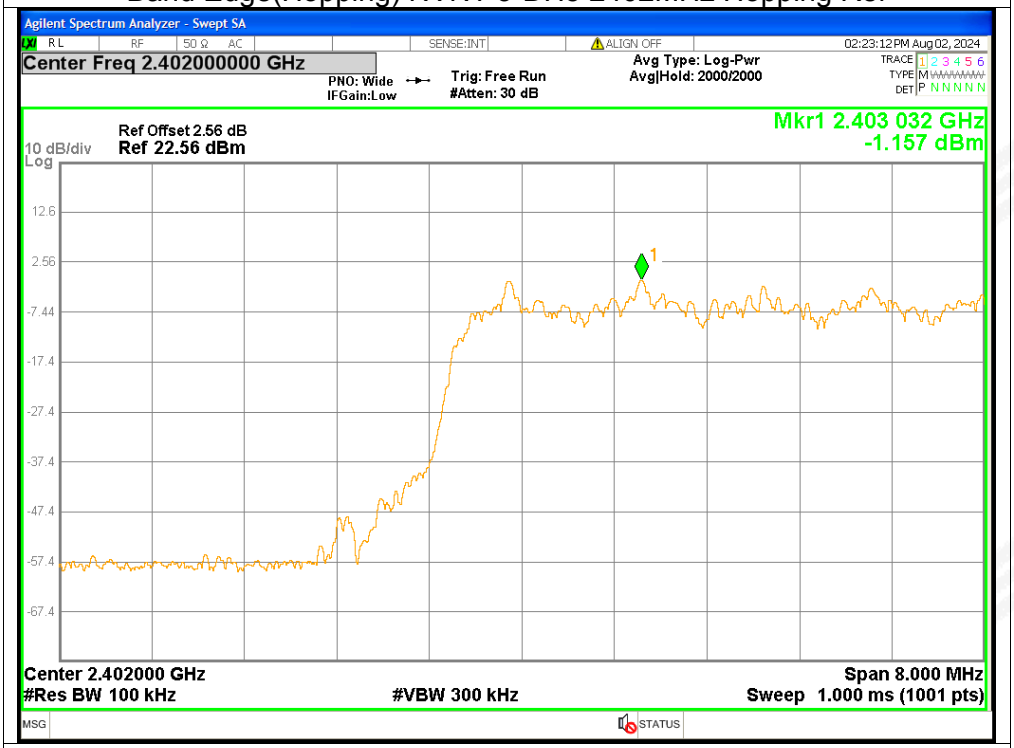


Band Edge(Hopping) NVNT 2-DH5 2480MHz Hopping Emission

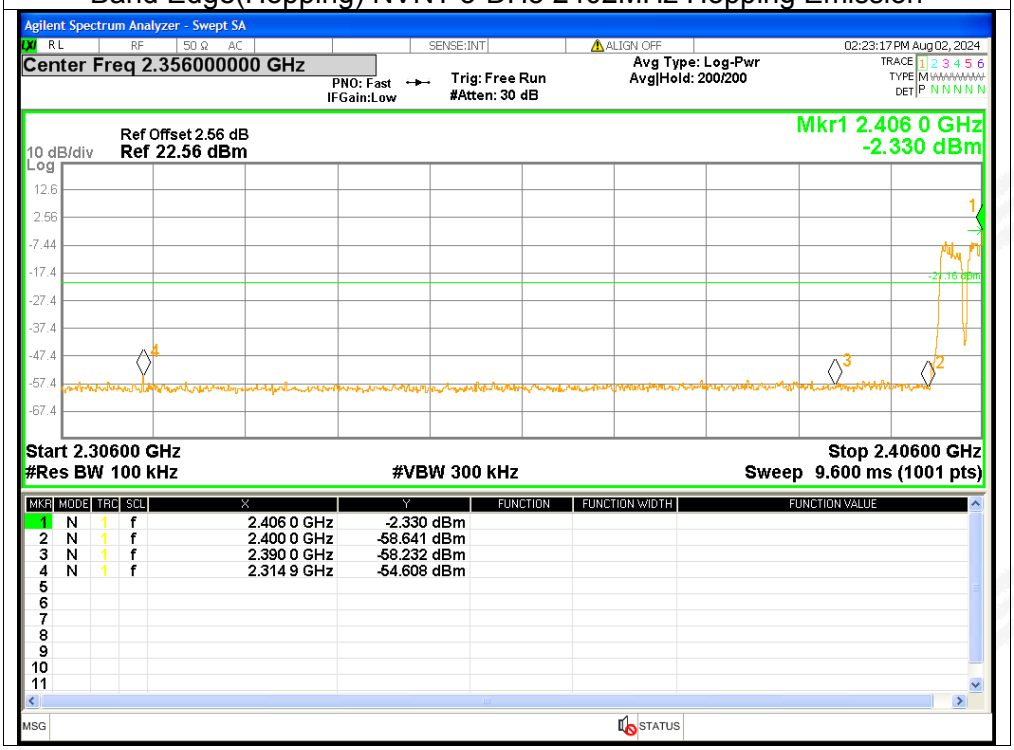


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.476 9 GHz	-1.070 dBm			
2	N	1	f	2.483 5 GHz	-56.949 dBm			
3	N	1	f	2.500 0 GHz	-57.327 dBm			
4	N	1	f	2.490 0 GHz	-55.339 dBm			
5								
6								
7								
8								
9								
10								
11								

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

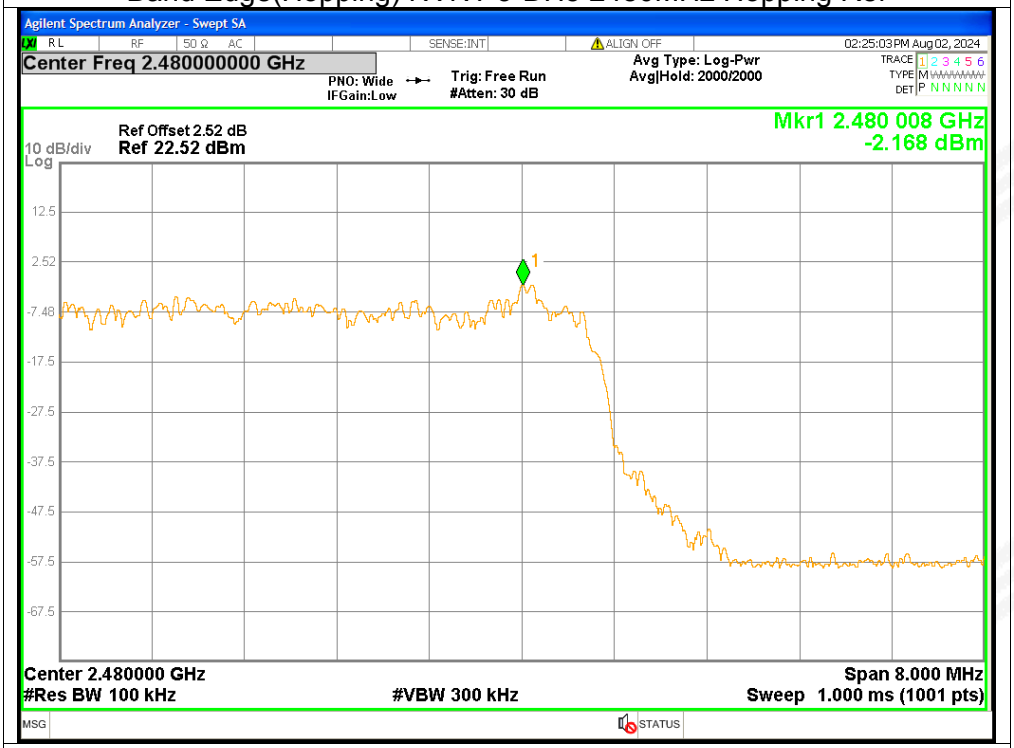


Band Edge(Hopping) NVNT 3-DH5 2402MHz Hopping Emission

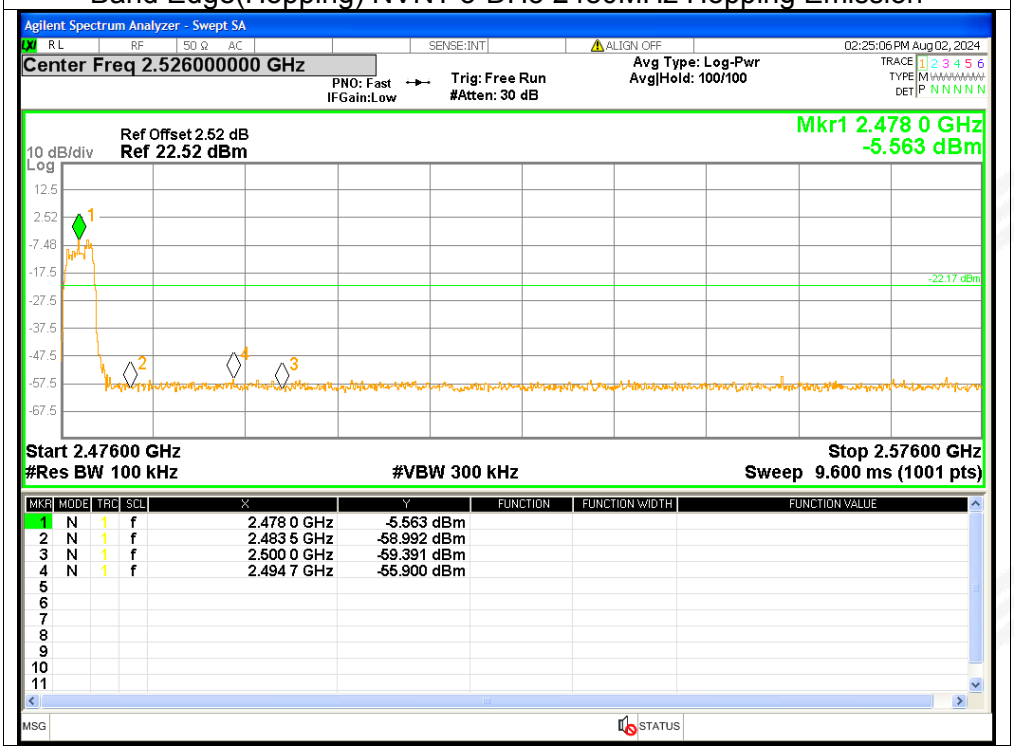


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.406 0 GHz	-2.330 dBm			
2	N	1	f	2.400 0 GHz	-58.641 dBm			
3	N	1	f	2.390 0 GHz	-58.232 dBm			
4	N	1	f	2.314 9 GHz	-54.608 dBm			
5								
6								
7								
8								
9								
10								
11								

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



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

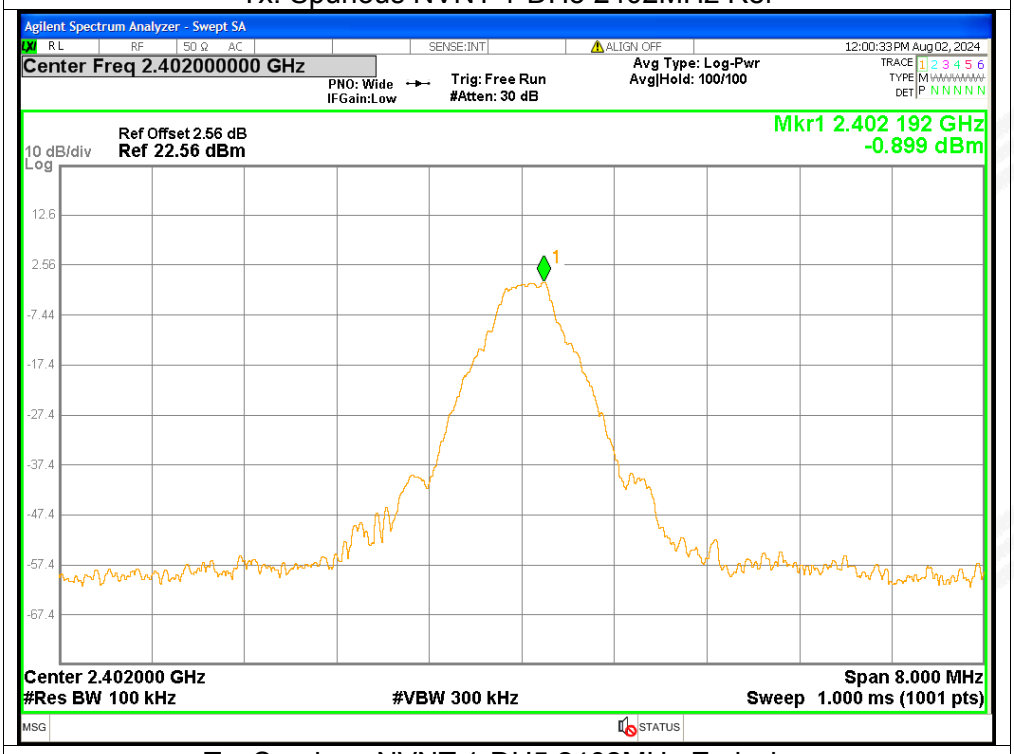


8. Conducted RF Spurious Emission

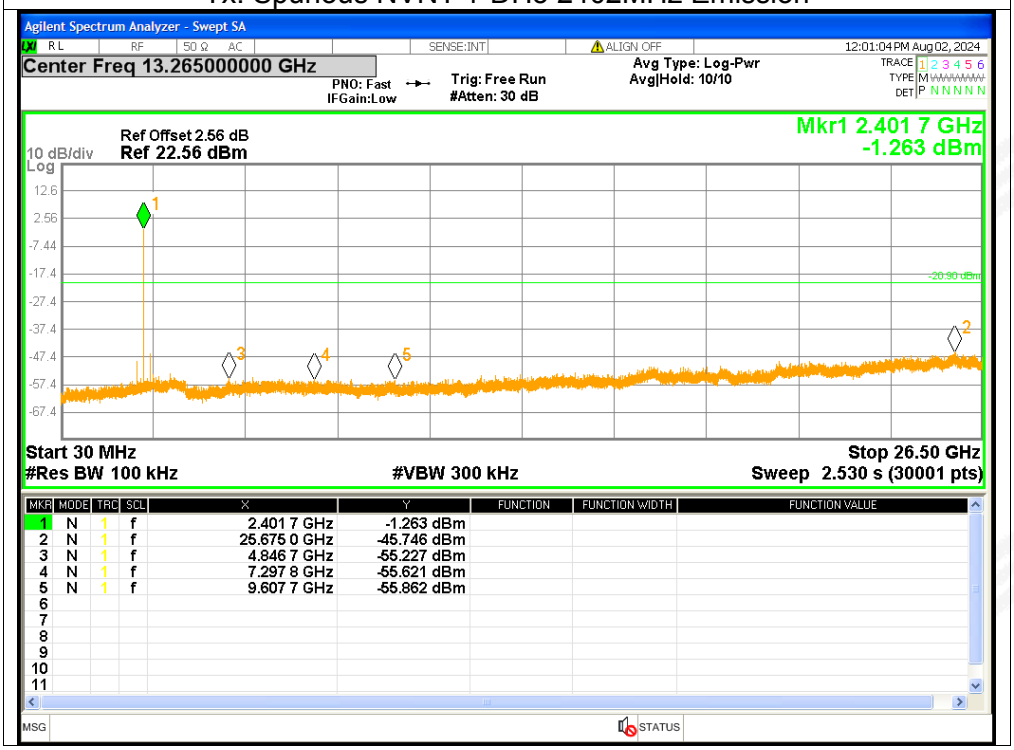
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	-44.84	<=-20	Pass
NVNT	1-DH5	2441	-43.63	<=-20	Pass
NVNT	1-DH5	2480	-45.41	<=-20	Pass
NVNT	2-DH5	2402	-44.74	<=-20	Pass
NVNT	2-DH5	2441	-41.68	<=-20	Pass
NVNT	2-DH5	2480	-41.21	<=-20	Pass
NVNT	3-DH5	2402	-44.78	<=-20	Pass
NVNT	3-DH5	2441	-44.28	<=-20	Pass
NVNT	3-DH5	2480	-42.05	<=-20	Pass

Test Graphs

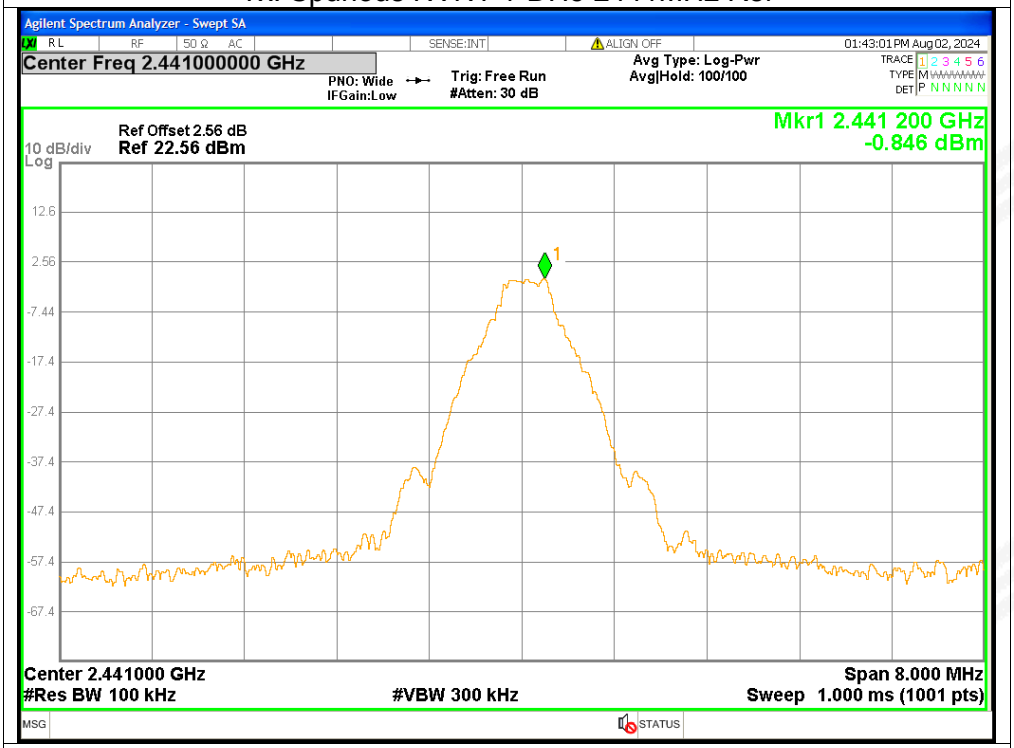
Tx. Spurious NVNT 1-DH5 2402MHz Ref



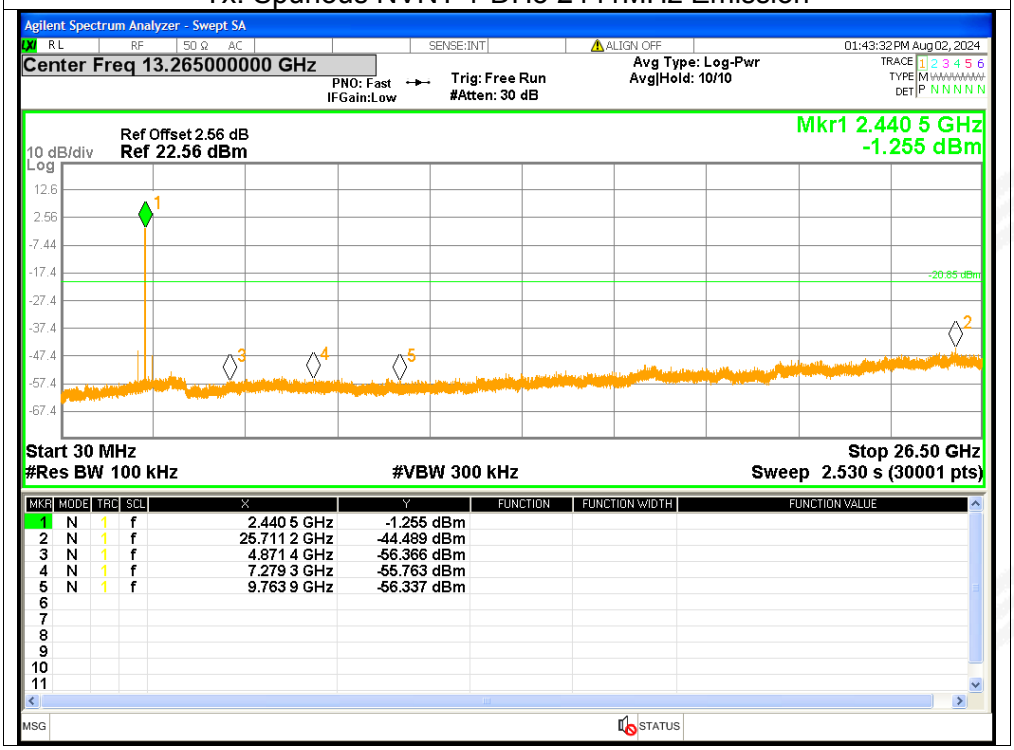
Tx. Spurious NVNT 1-DH5 2402MHz Emission



Tx. Spurious NVNT 1-DH5 2441MHz Ref

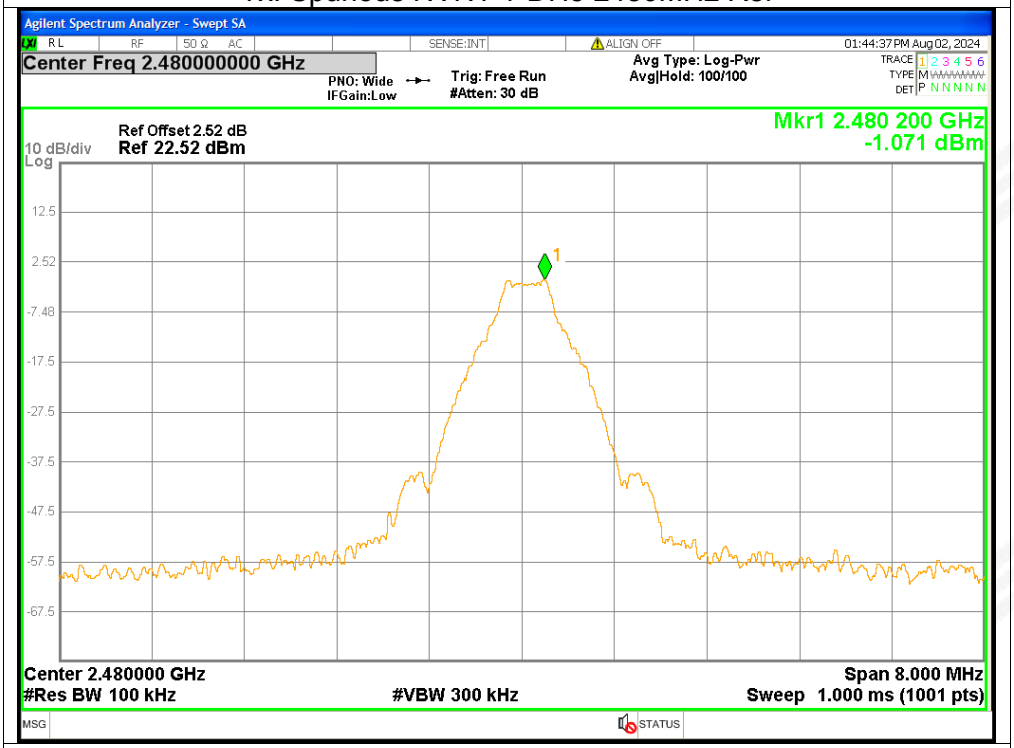


Tx. Spurious NVNT 1-DH5 2441MHz Emission

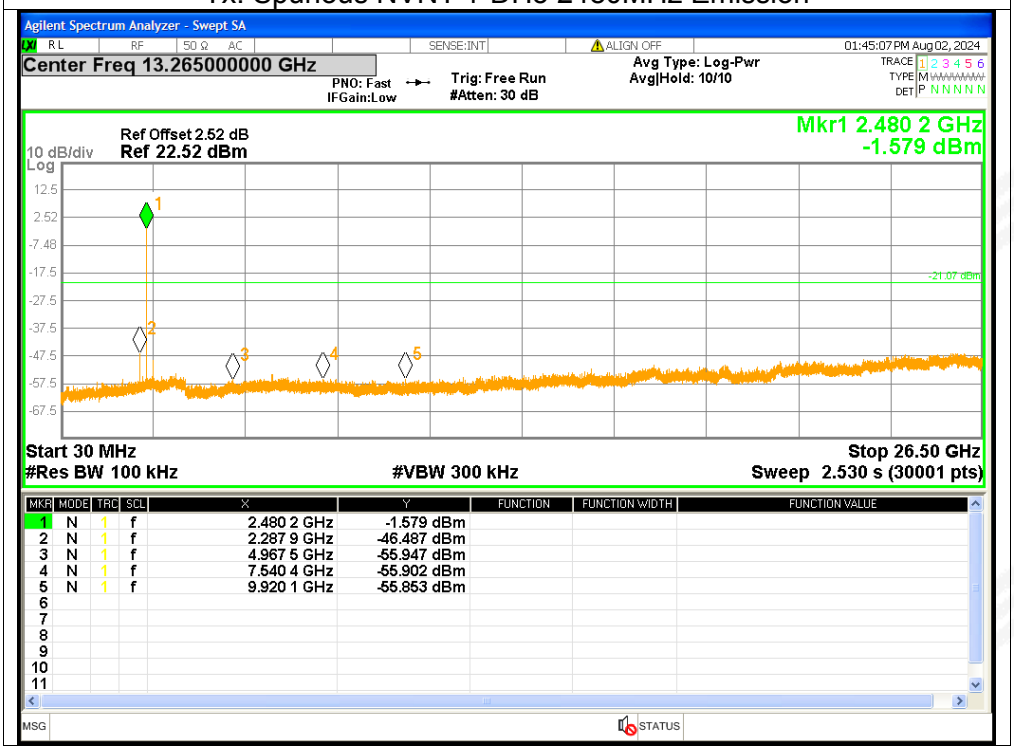


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.440 5 GHz	-1.255 dBm			
2	N	1	f	25.711 2 GHz	-44.489 dBm			
3	N	1	f	4.871 4 GHz	-56.366 dBm			
4	N	1	f	7.279 3 GHz	-55.763 dBm			
5	N	1	f	9.763 9 GHz	-56.337 dBm			
6								
7								
8								
9								
10								
11								

Tx. Spurious NVNT 1-DH5 2480MHz Ref

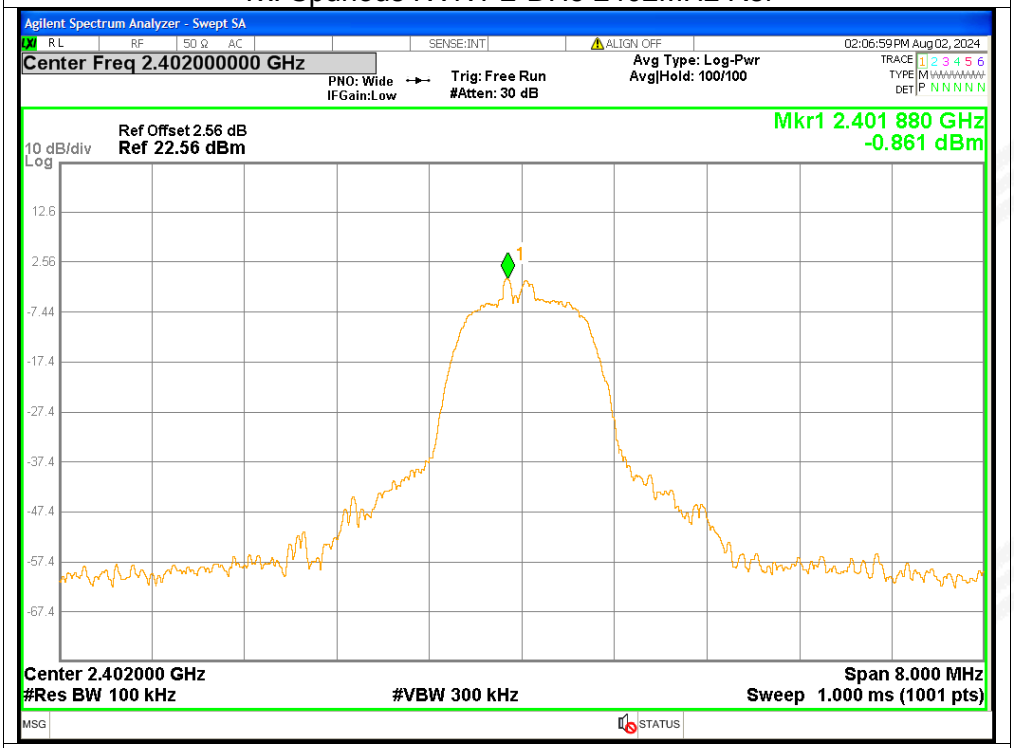


Tx. Spurious NVNT 1-DH5 2480MHz Emission

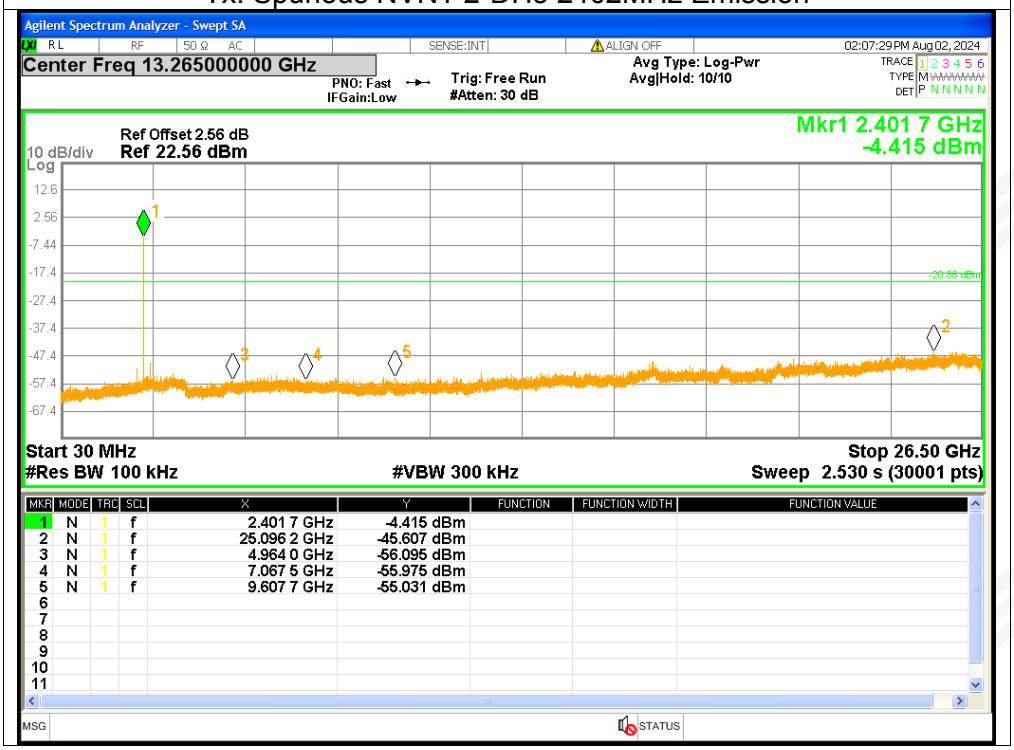


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.480 2 GHz	-1.579 dBm			
2	N	1	f	2.287 9 GHz	-46.487 dBm			
3	N	1	f	4.967 5 GHz	-55.947 dBm			
4	N	1	f	7.540 4 GHz	-55.902 dBm			
5	N	1	f	9.920 1 GHz	-55.853 dBm			
6								
7								
8								
9								
10								
11								

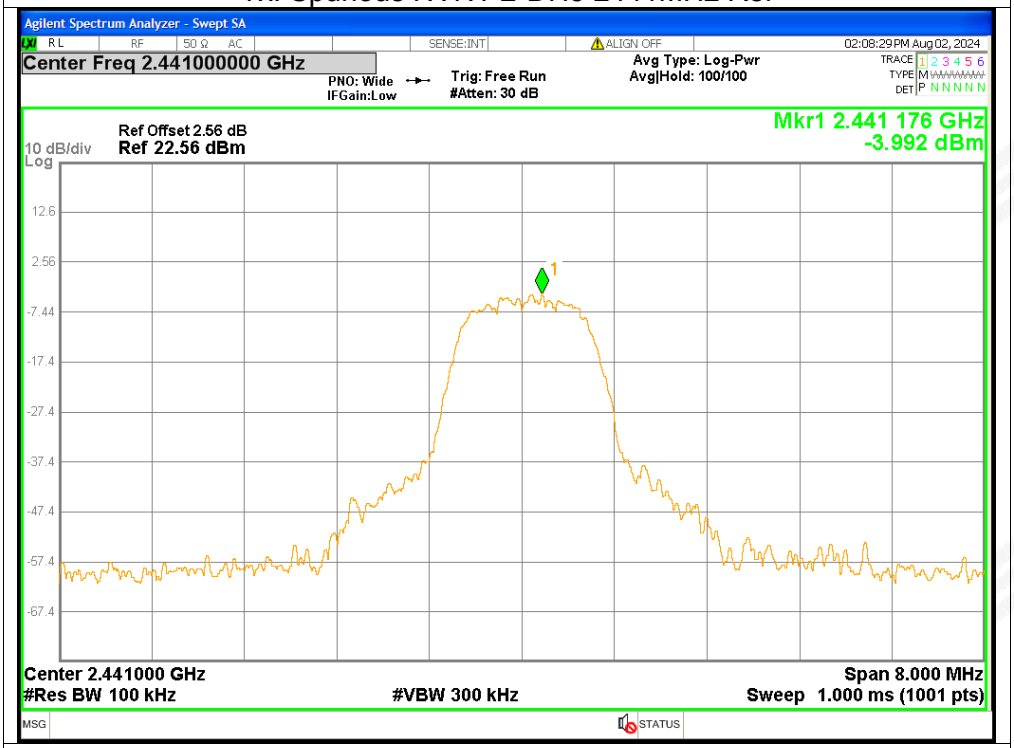
Tx. Spurious NVNT 2-DH5 2402MHz Ref



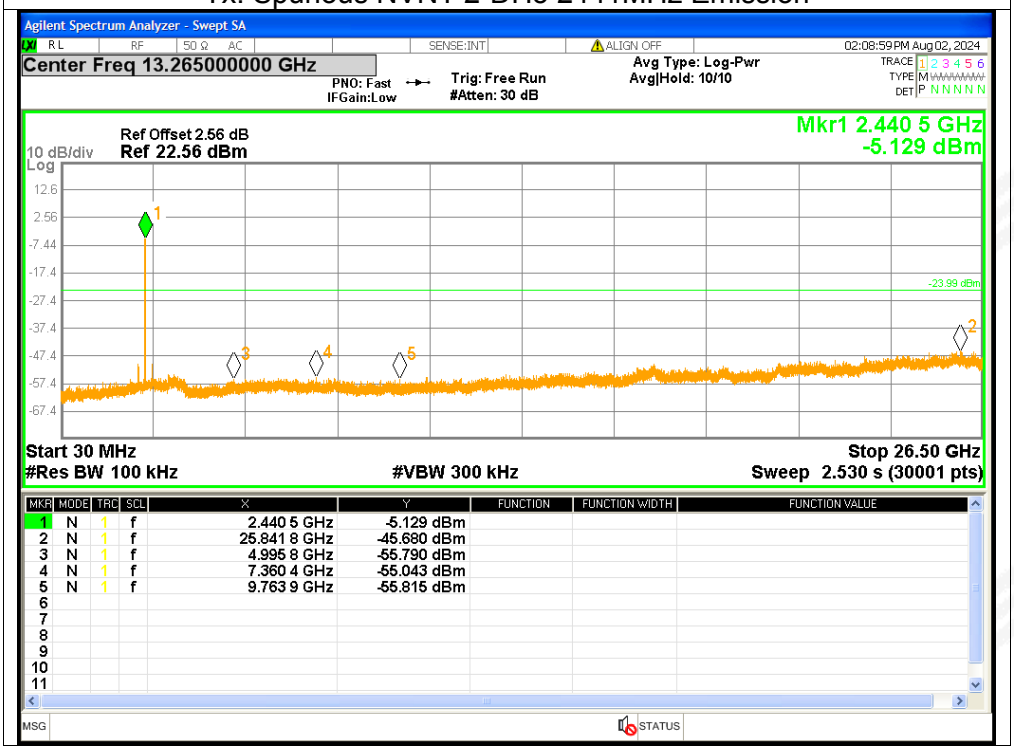
Tx. Spurious NVNT 2-DH5 2402MHz Emission



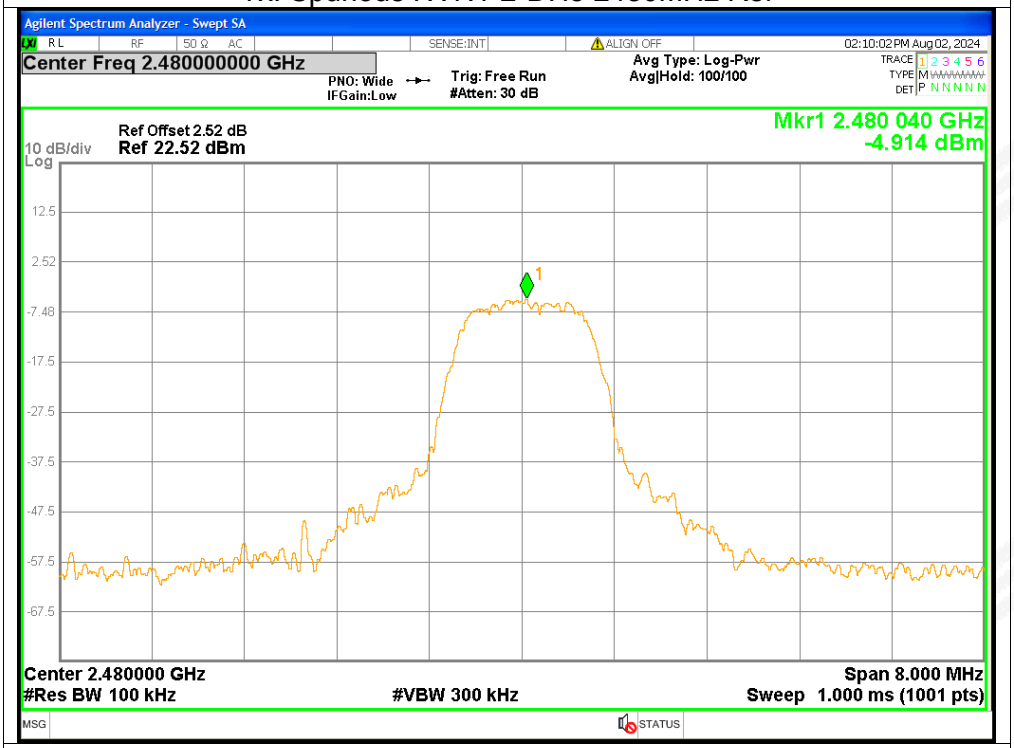
Tx. Spurious NVNT 2-DH5 2441MHz Ref



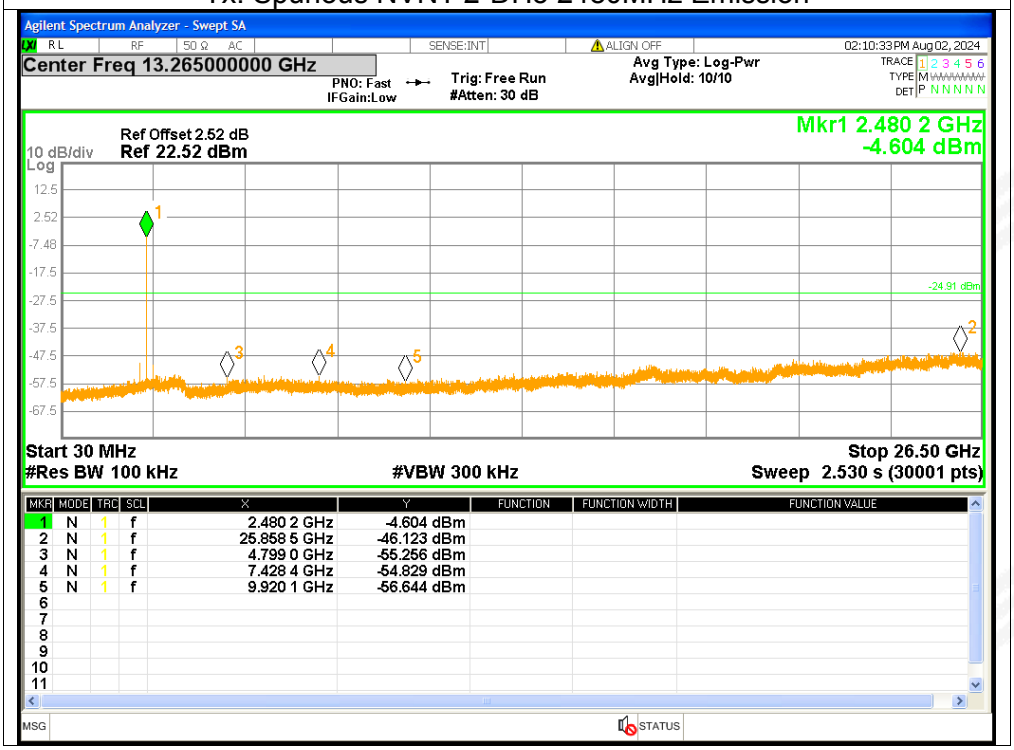
Tx. Spurious NVNT 2-DH5 2441MHz Emission



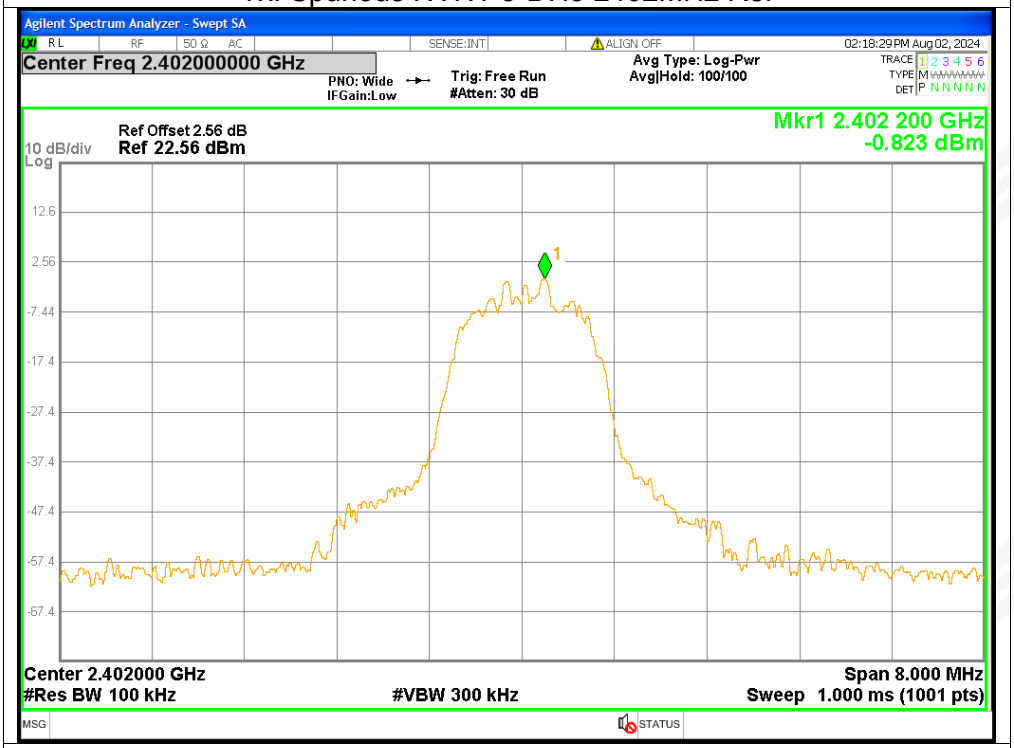
Tx. Spurious NVNT 2-DH5 2480MHz Ref



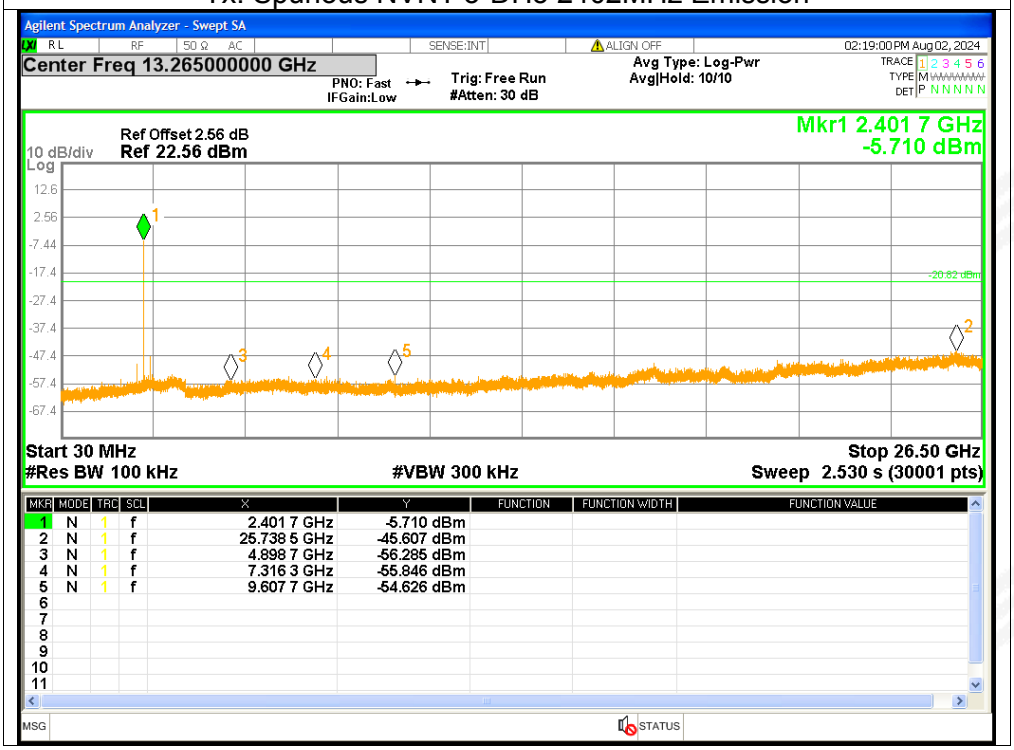
Tx. Spurious NVNT 2-DH5 2480MHz Emission



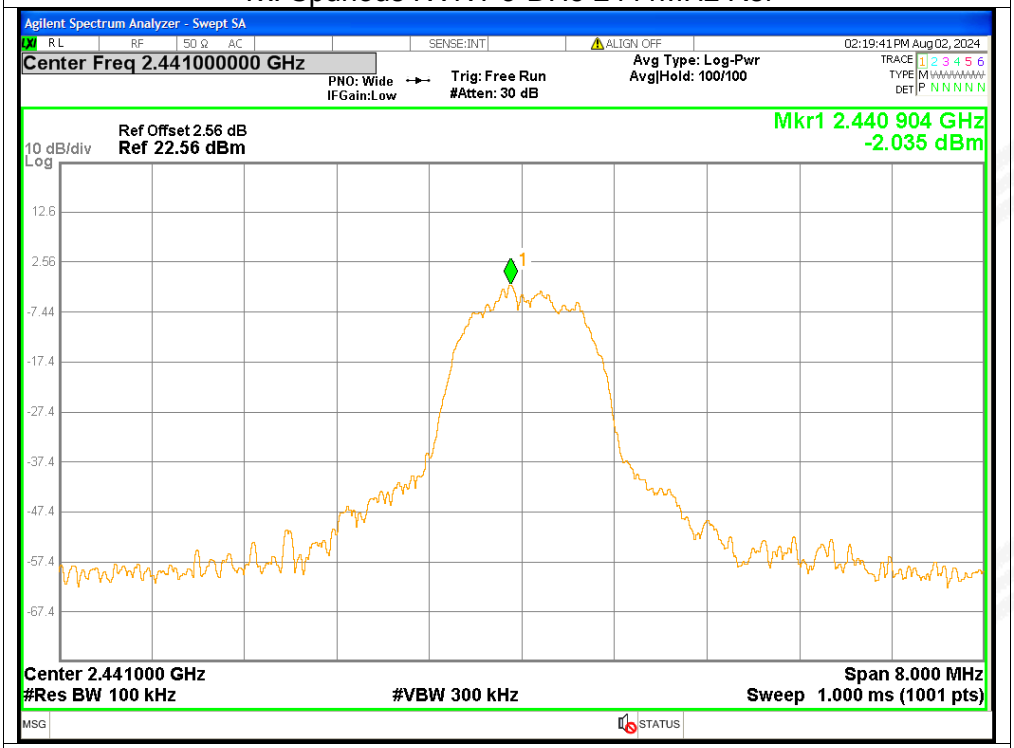
Tx. Spurious NVNT 3-DH5 2402MHz Ref



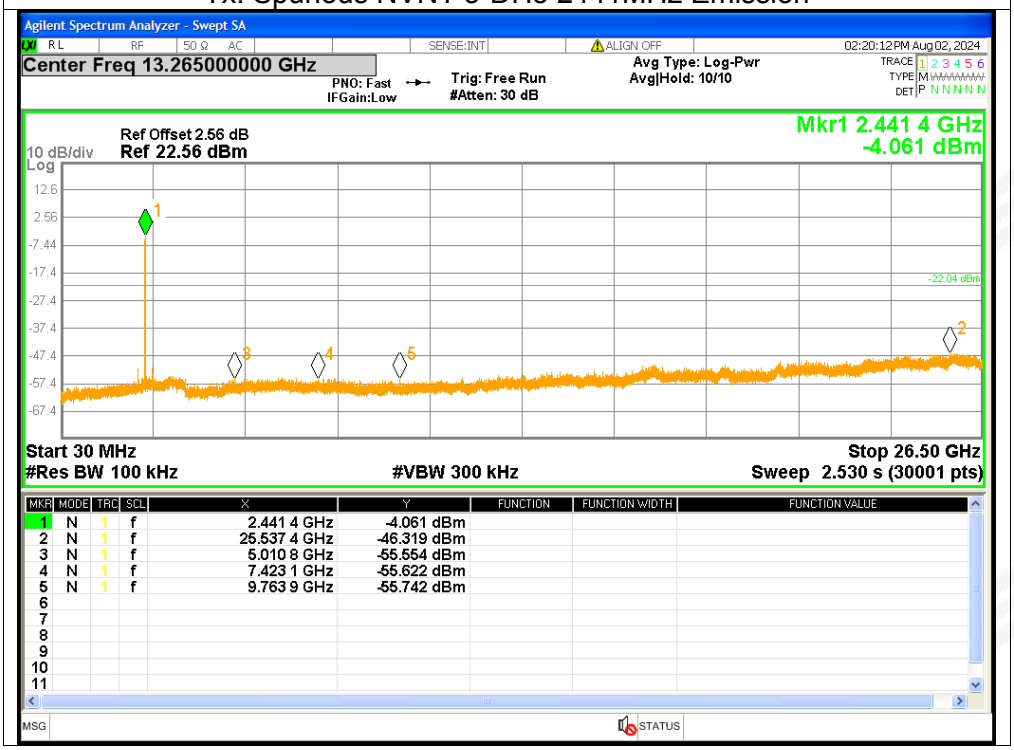
Tx. Spurious NVNT 3-DH5 2402MHz Emission



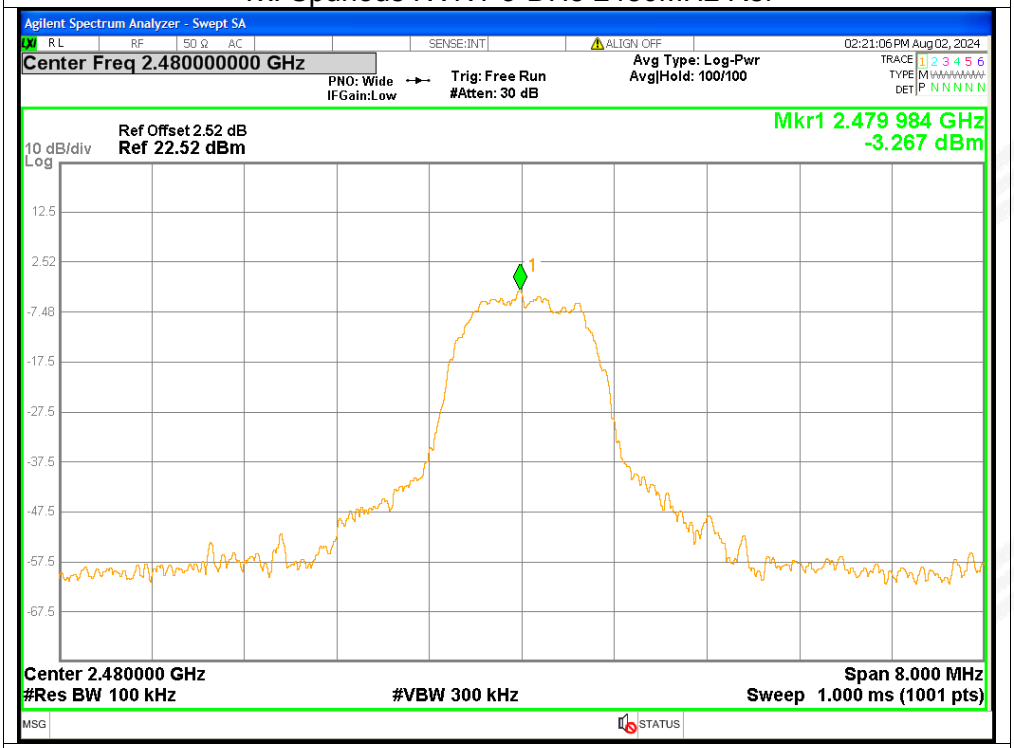
Tx. Spurious NVNT 3-DH5 2441MHz Ref



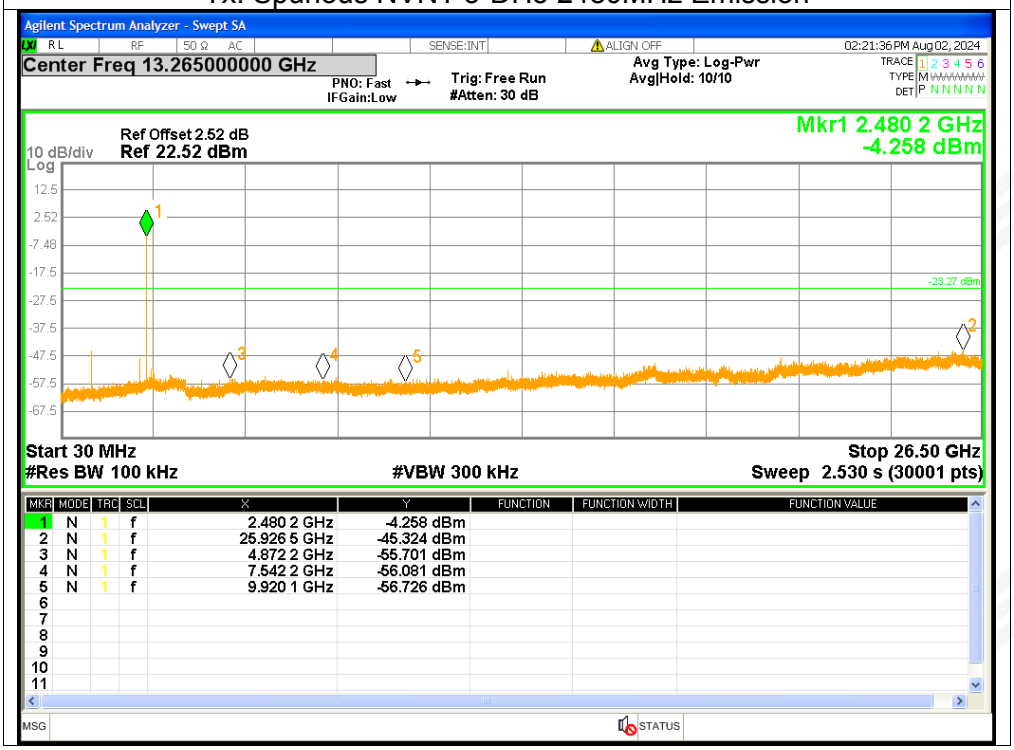
Tx. Spurious NVNT 3-DH5 2441MHz Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ref



Tx. Spurious NVNT 3-DH5 2480MHz Emission



APPENDIX 2-PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

※※※※※END OF THE REPORT※※※※※