

FCC Appendix RF Test Data for BT

Company: : Shenzhen Tianxing Hongye Electronic Technology Co., Ltd.

EUT : mobile phone

Model Number : 16 Pro Max

FCC ID : 2BU24-17PROMAX

Report No. : CTA25082902303

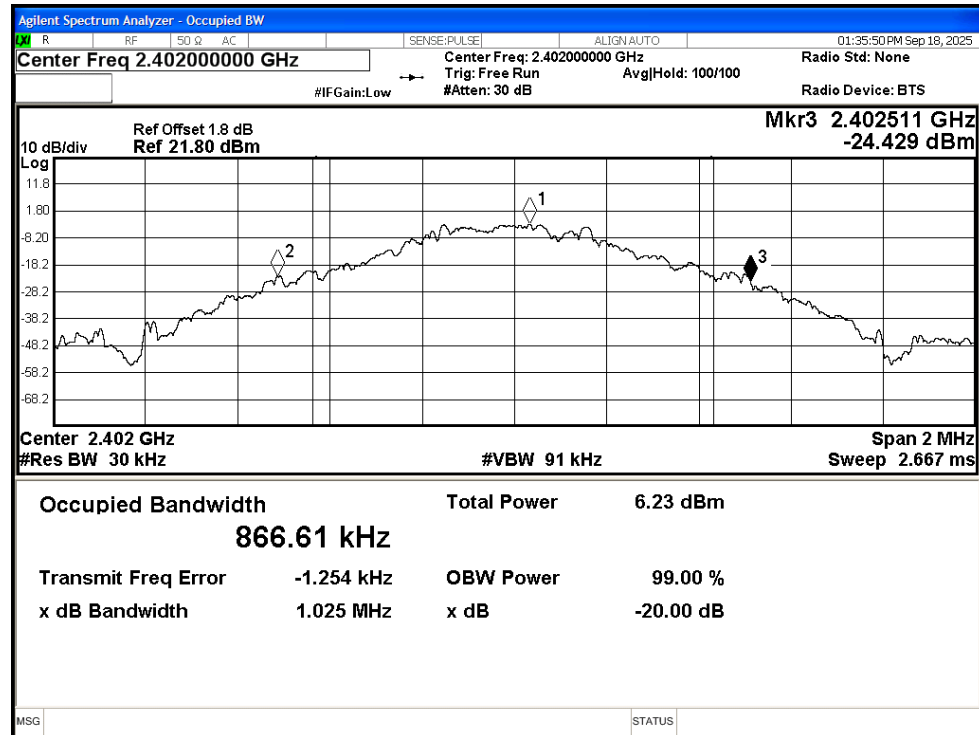
Reviewed By : Eric Wang

1 -20dB Bandwidth

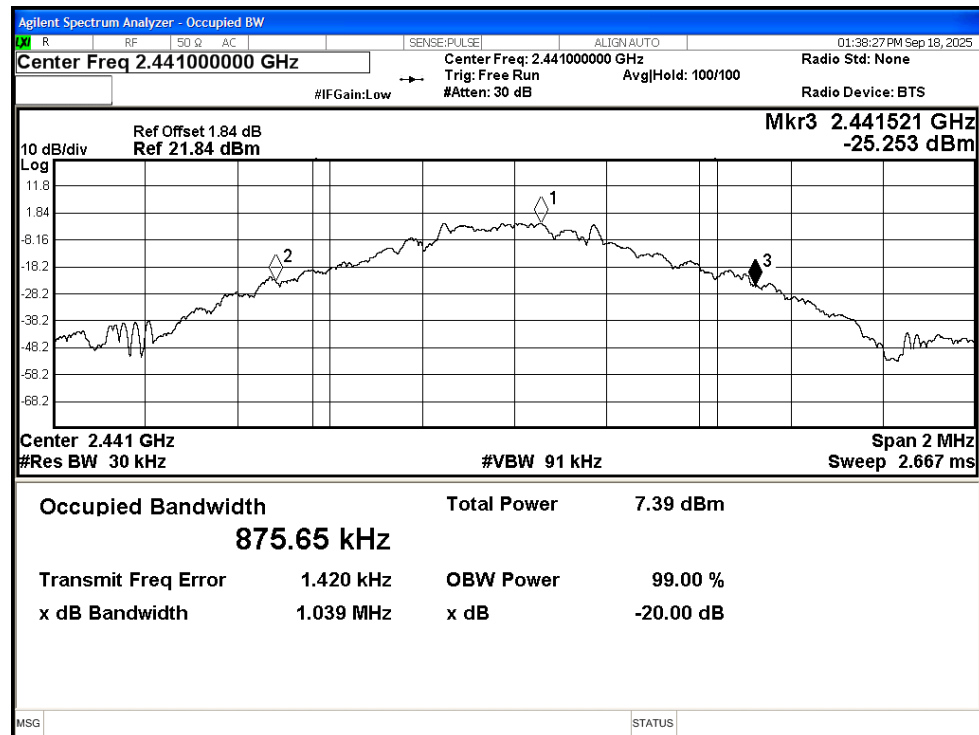
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	1.025	N/A	Pass
NVNT	1-DH5	2441	Ant1	1.039	N/A	Pass
NVNT	1-DH5	2480	Ant1	1.014	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.284	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.279	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.289	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.284	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.289	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.289	N/A	Pass

Test Graphs

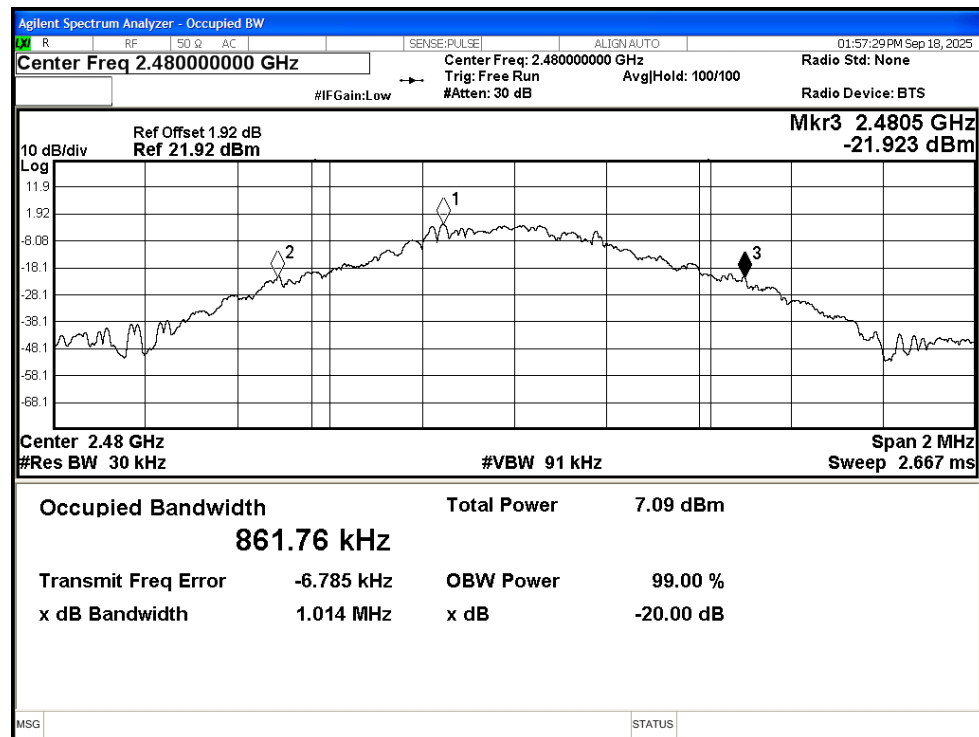
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



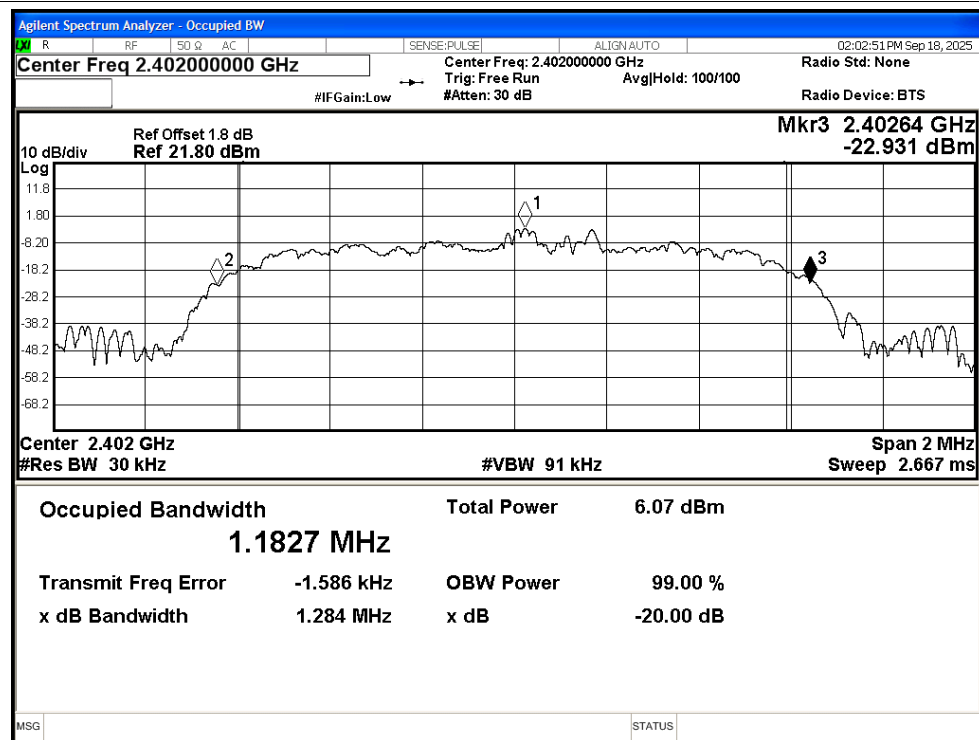
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



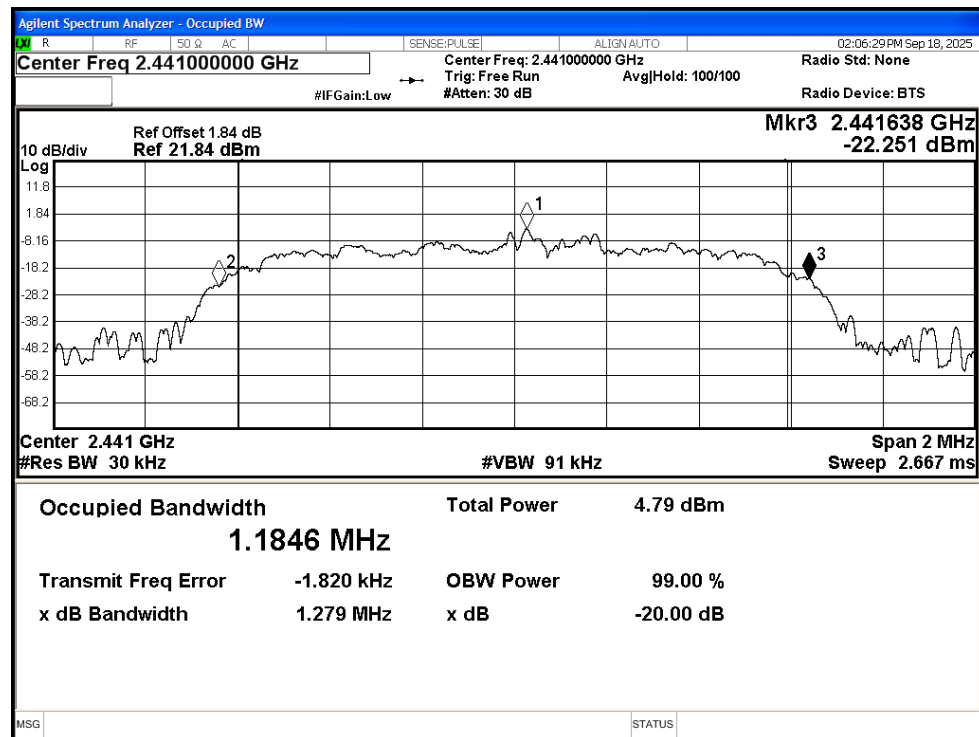
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



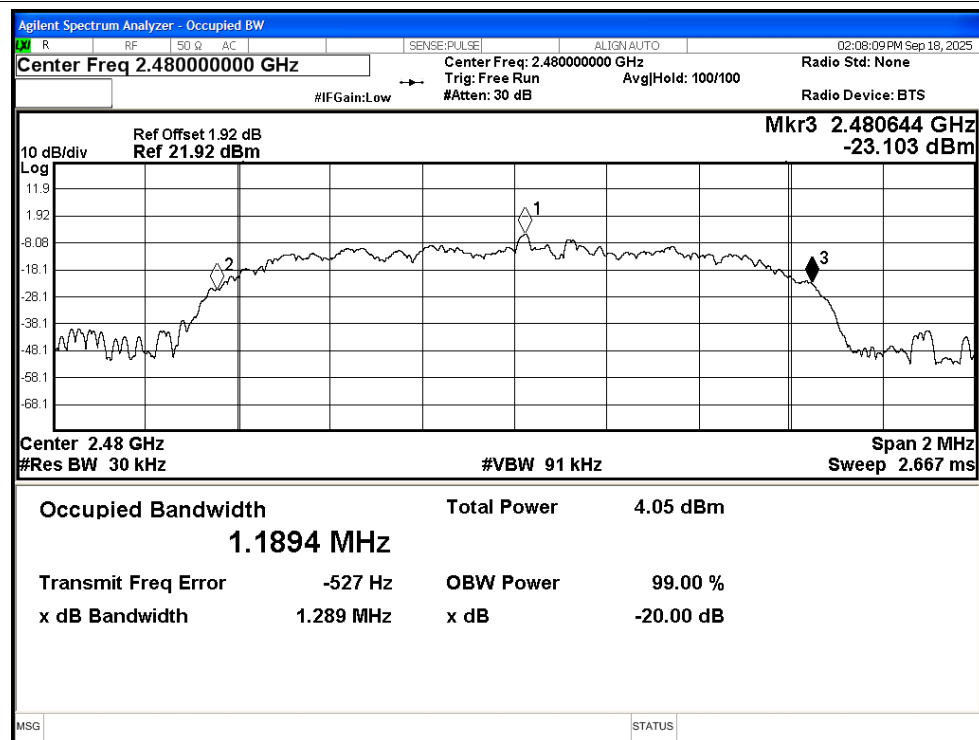
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



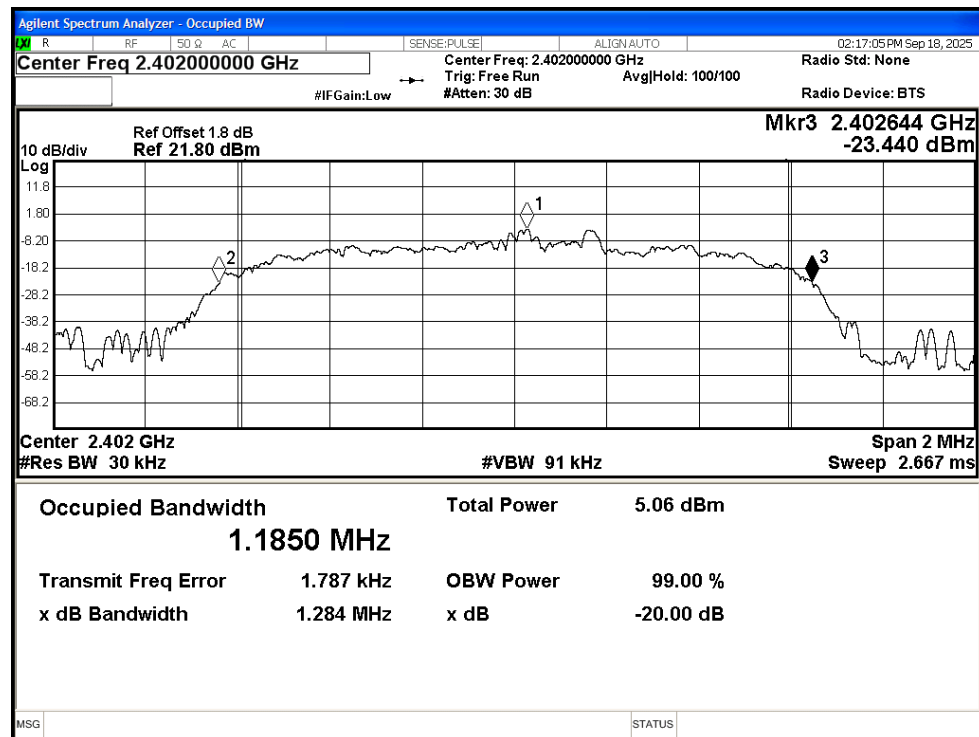
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



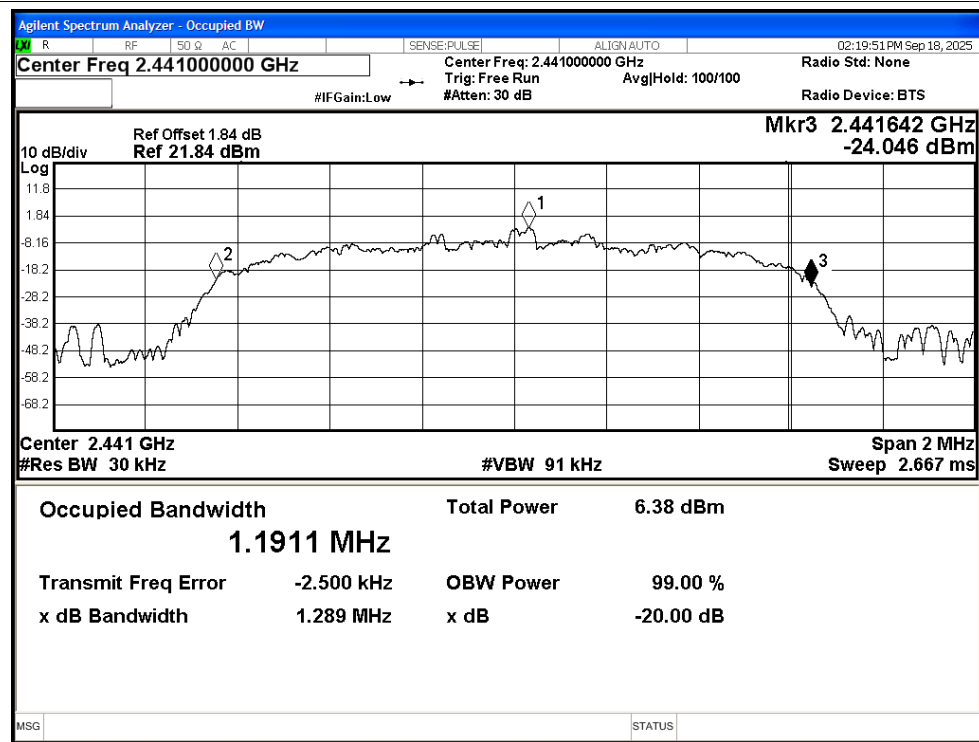
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



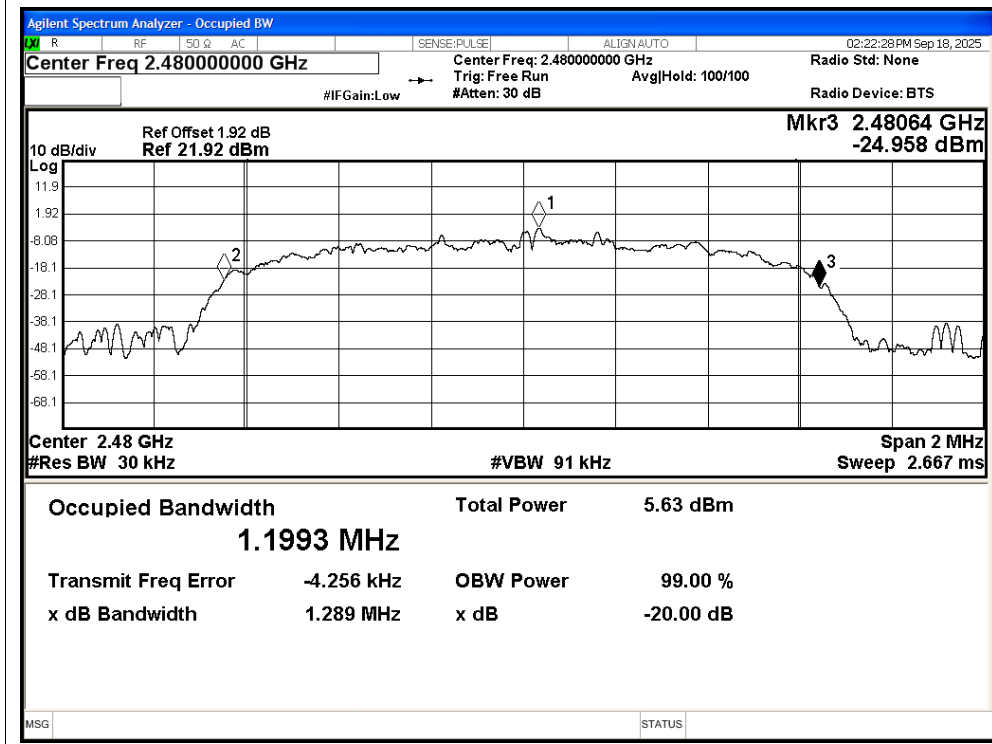
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1



2 Maximum Peak Conducted Output Power

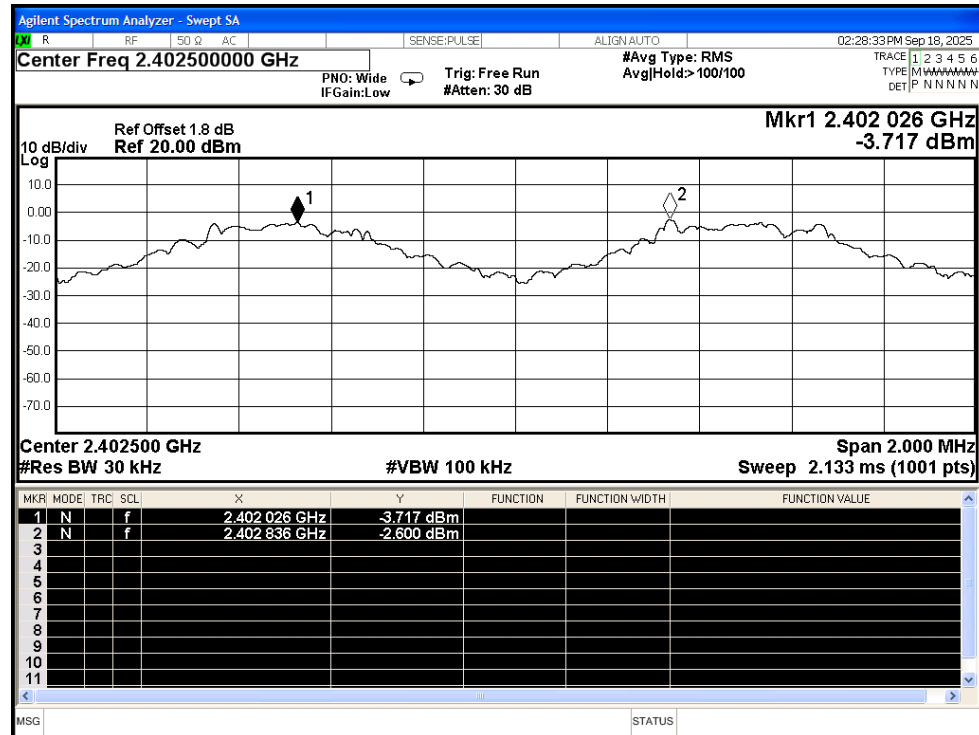
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-0.33	21	Pass
NVNT	1-DH5	2441	Ant1	1.1	21	Pass
NVNT	1-DH5	2480	Ant1	0.58	21	Pass
NVNT	2-DH5	2402	Ant1	1.32	21	Pass
NVNT	2-DH5	2441	Ant1	0.17	21	Pass
NVNT	2-DH5	2480	Ant1	-0.37	21	Pass
NVNT	3-DH5	2402	Ant1	0.4	21	Pass
NVNT	3-DH5	2441	Ant1	1.78	21	Pass
NVNT	3-DH5	2480	Ant1	0.89	21	Pass

3 Carrier Frequencies Separation

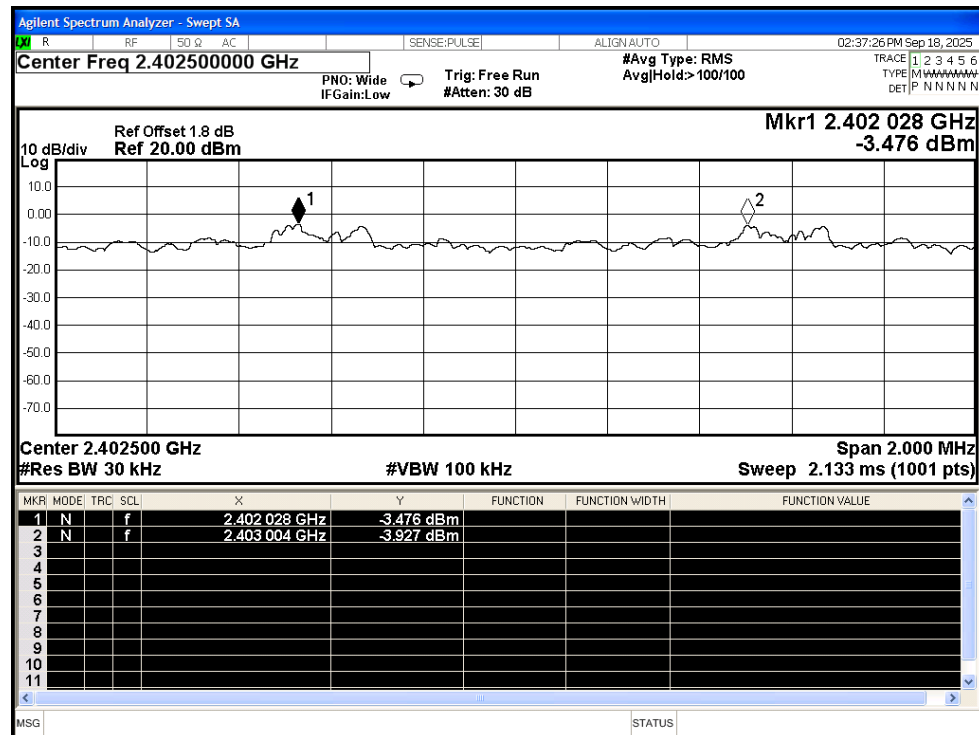
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.026	2402.836	0.81	0.693	Pass
NVNT	2-DH5	Ant1	2402.028	2403.004	0.976	0.859	Pass
NVNT	3-DH5	Ant1	2402.162	2403.032	0.87	0.859	Pass

Test Graphs

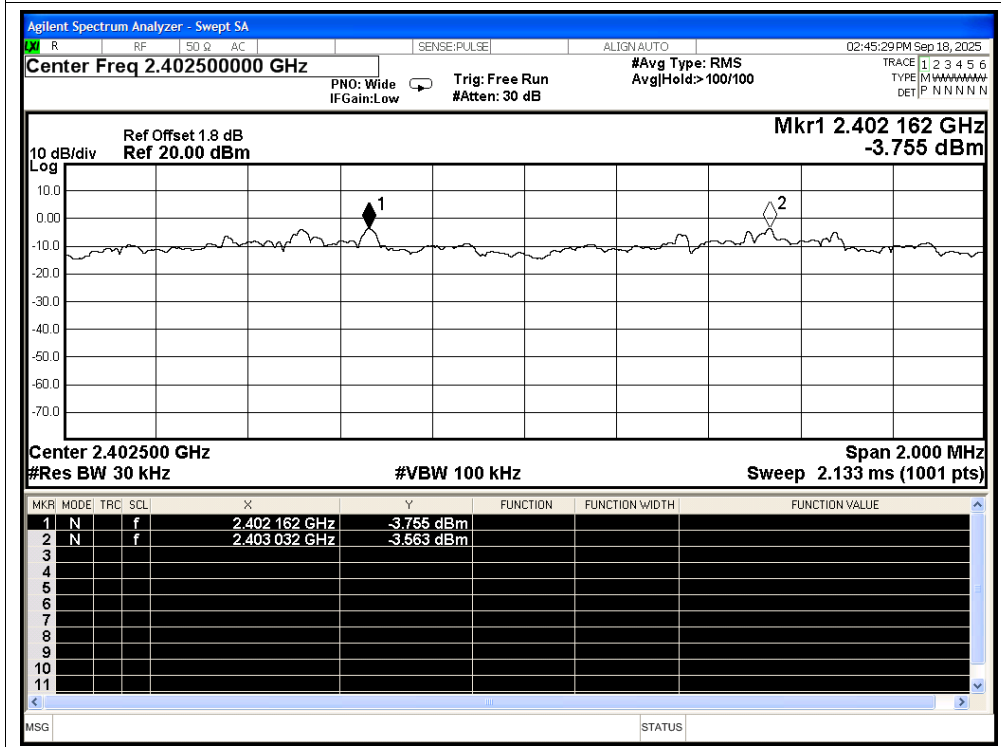
CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2402MHz Ant1

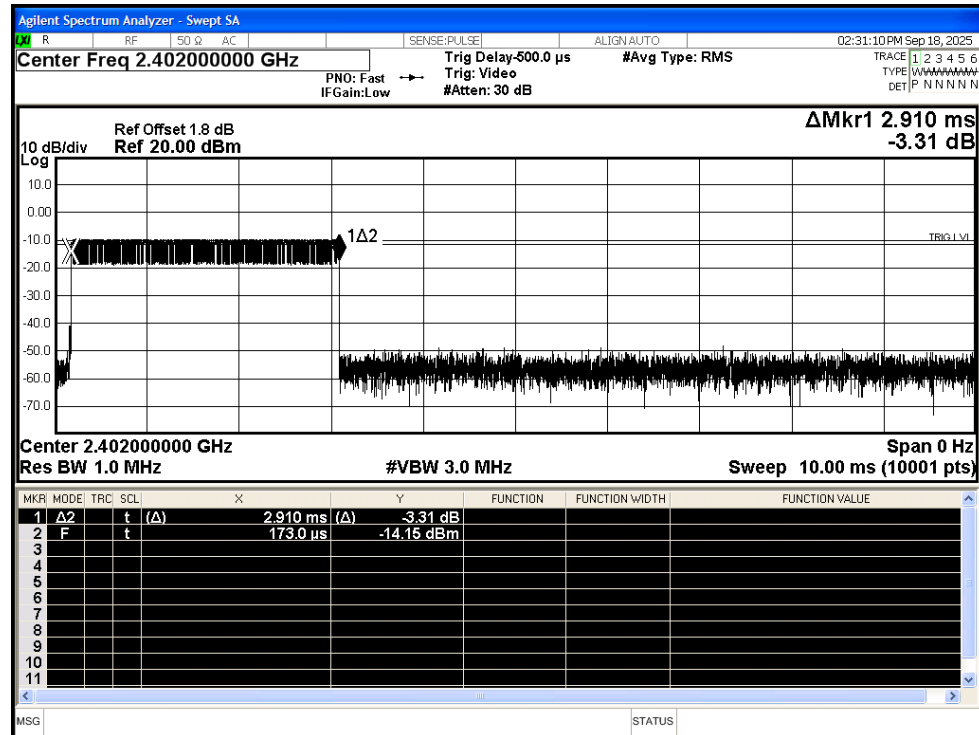


4 Dwell Time

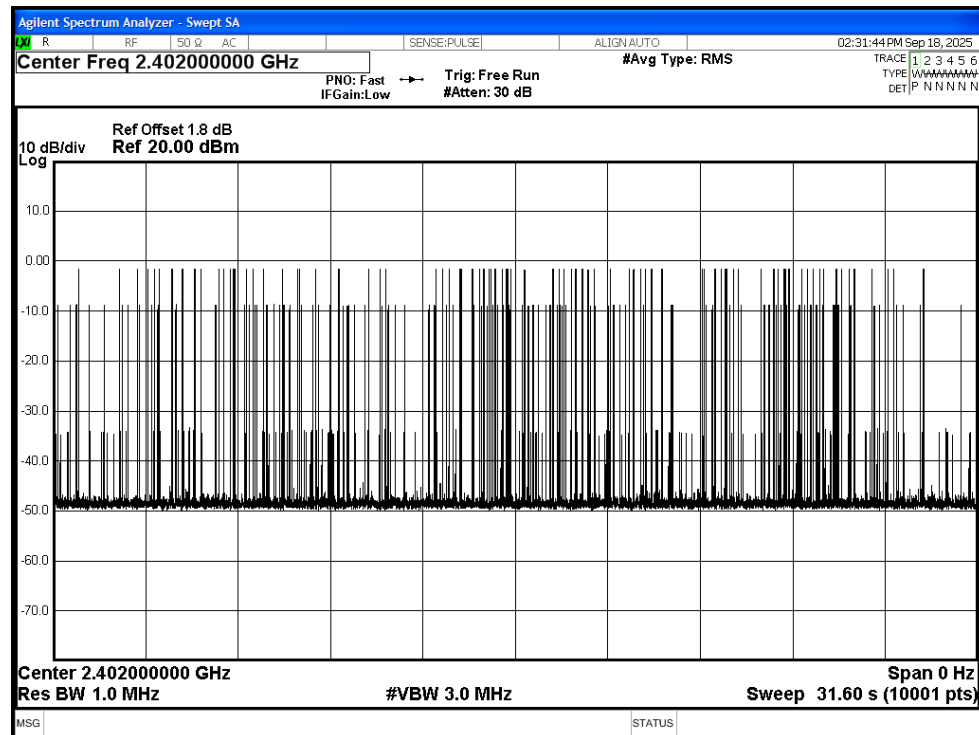
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.91	270.63	93	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.899	321.789	111	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.897	289.7	100	31600	400	Pass

Test Graphs

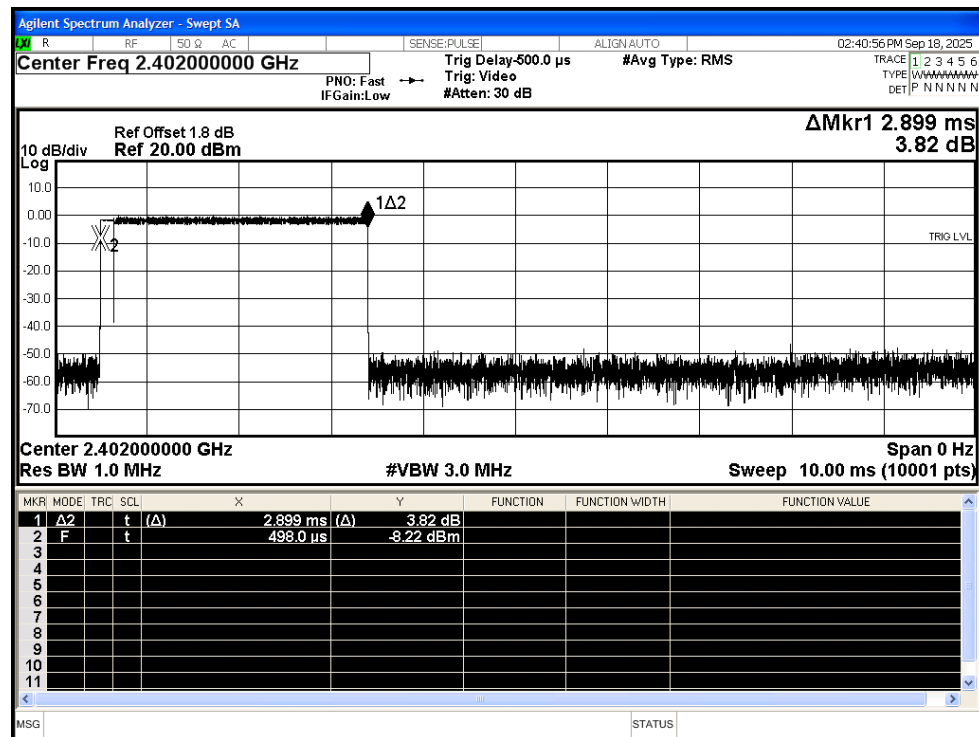
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



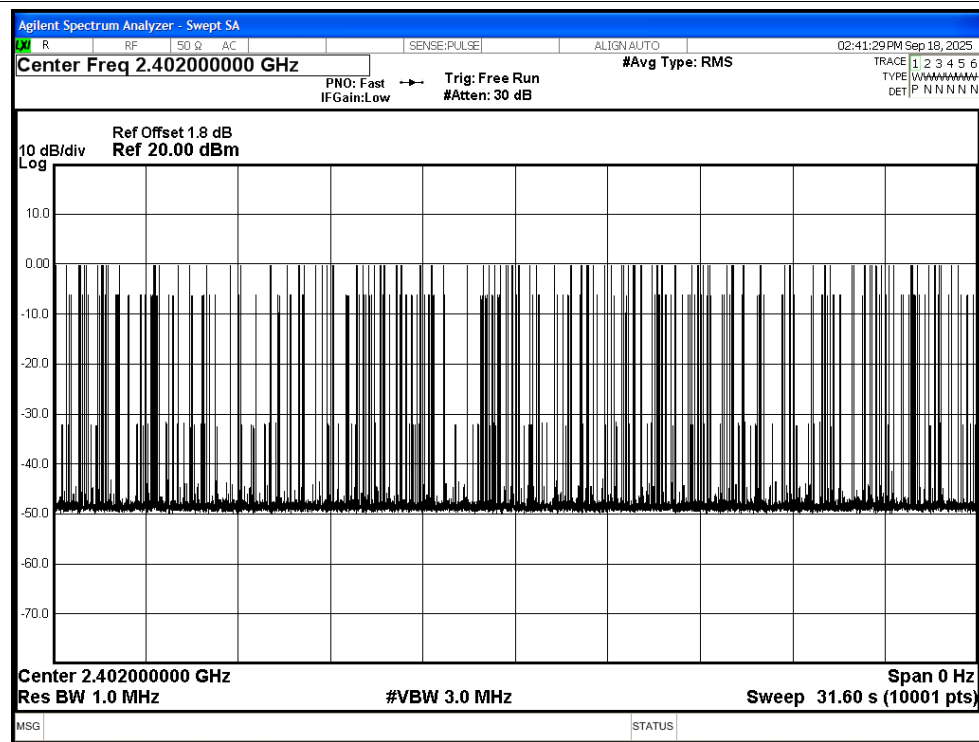
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



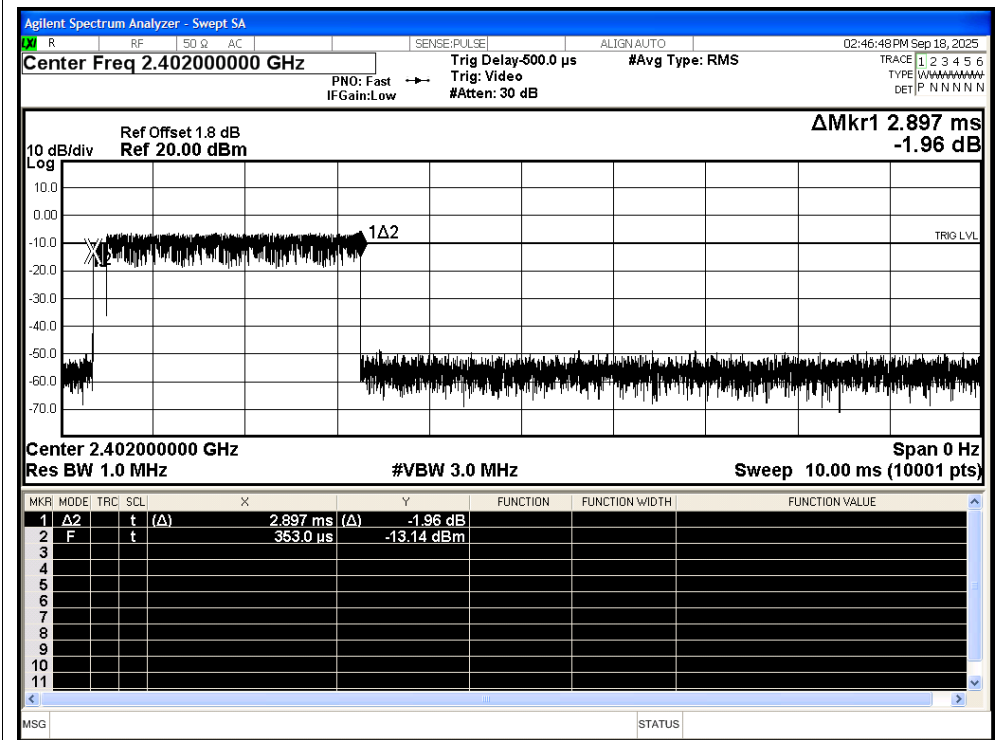
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



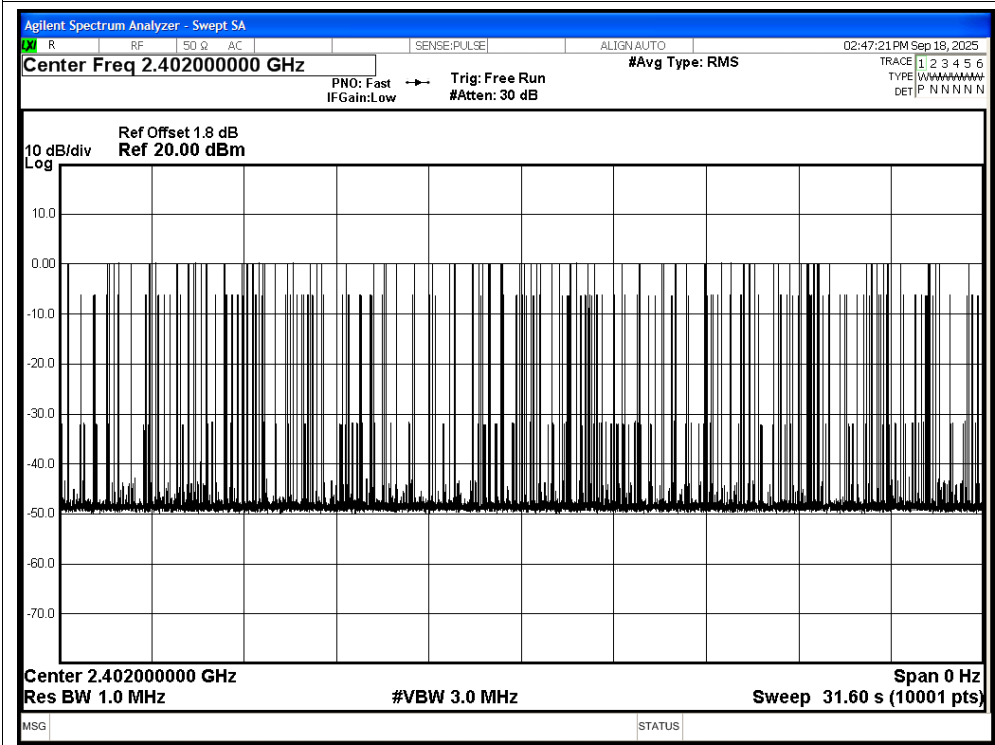
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated

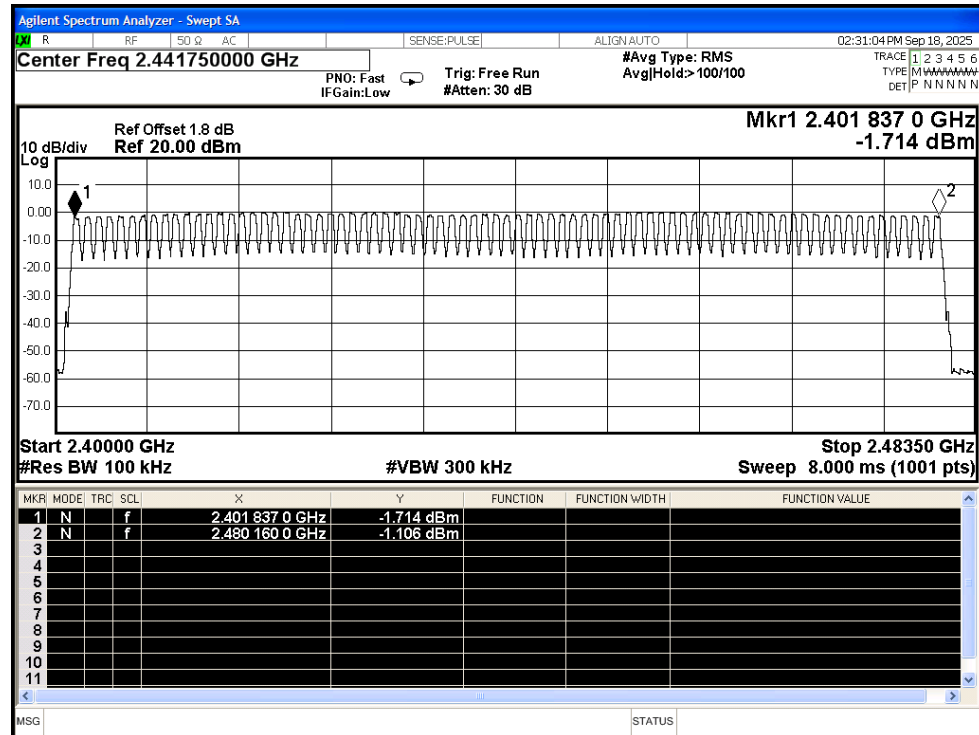


5 Number of Hopping Channel

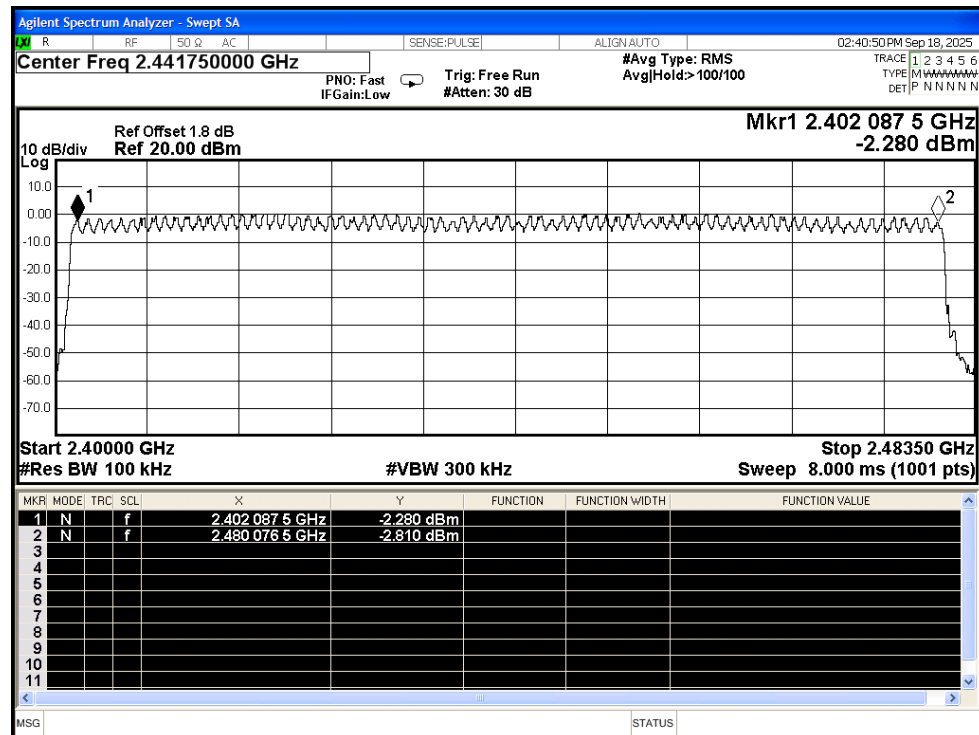
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

Test Graphs

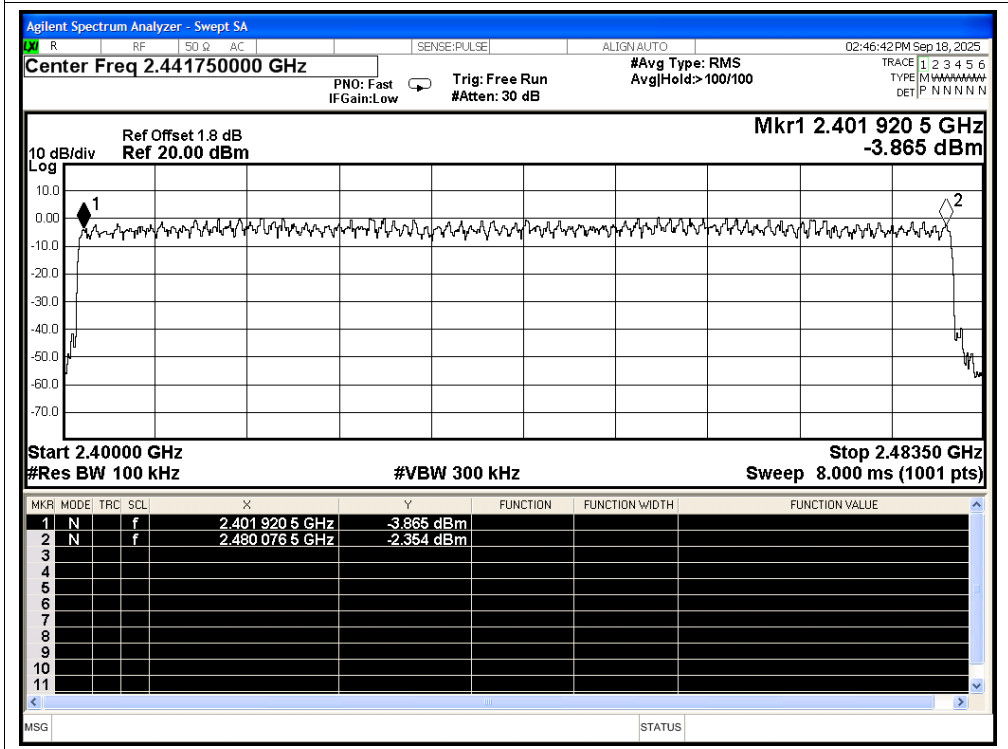
Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



Hopping No. NVNT 3-DH5 2402MHz Ant1

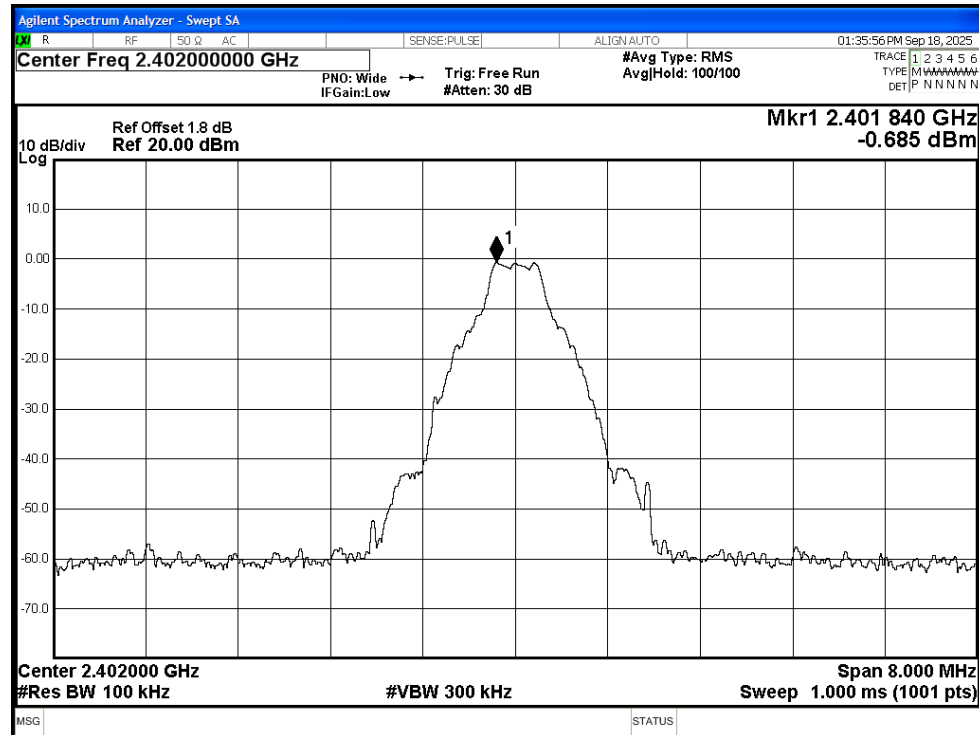


6 Band Edge

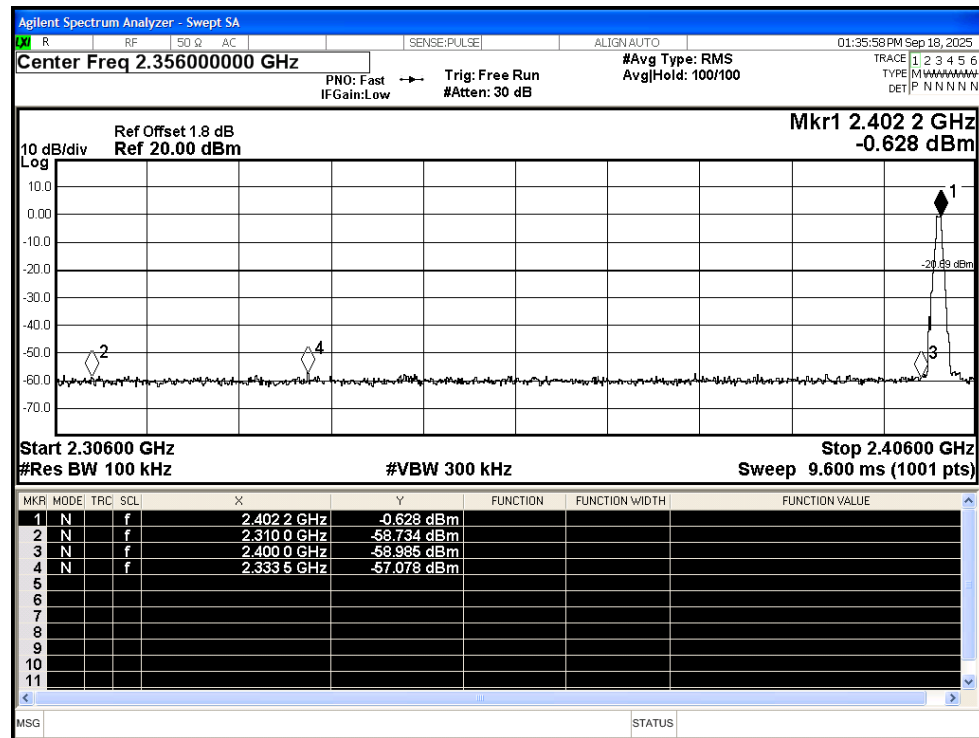
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-56.39	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-57.79	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-54.86	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-51.38	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-50.93	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-53.75	-20	Pass

Test Graphs

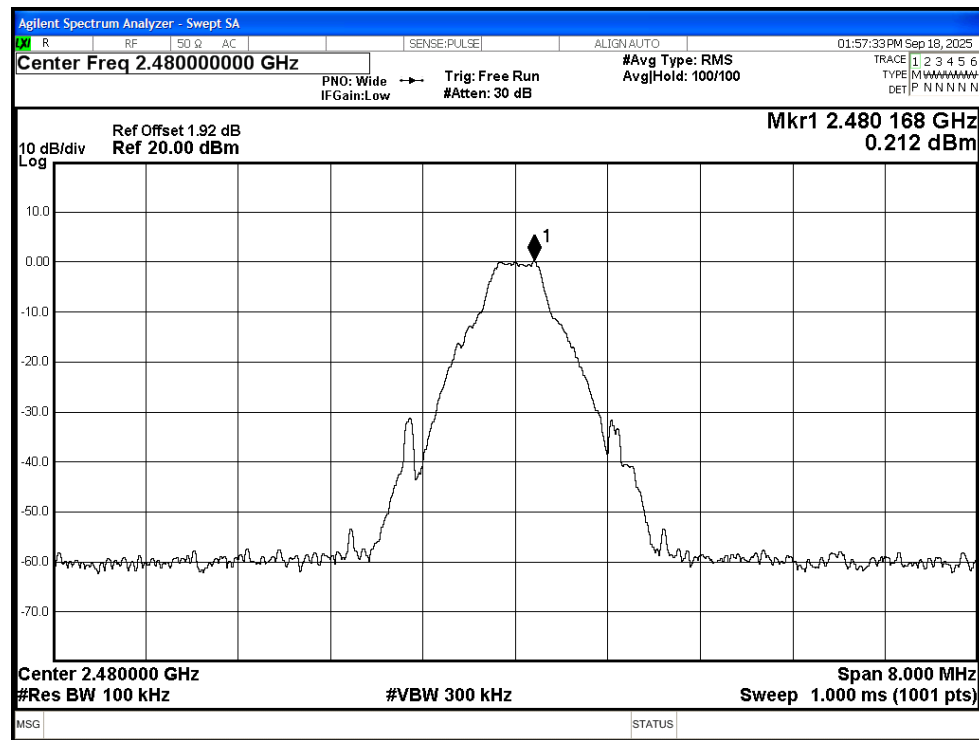
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



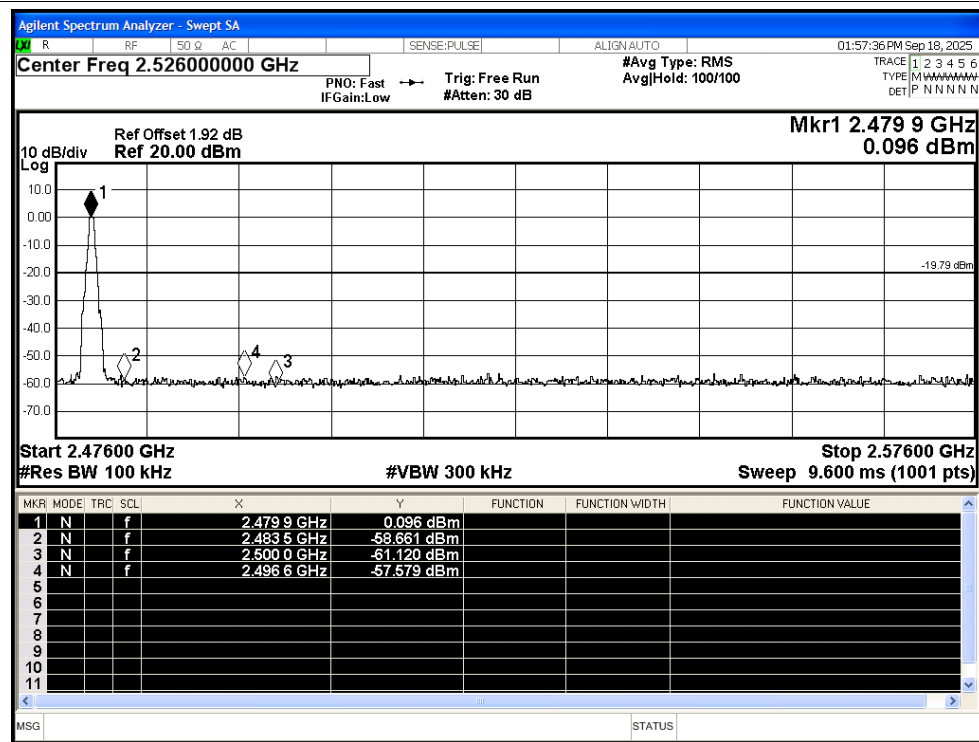
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



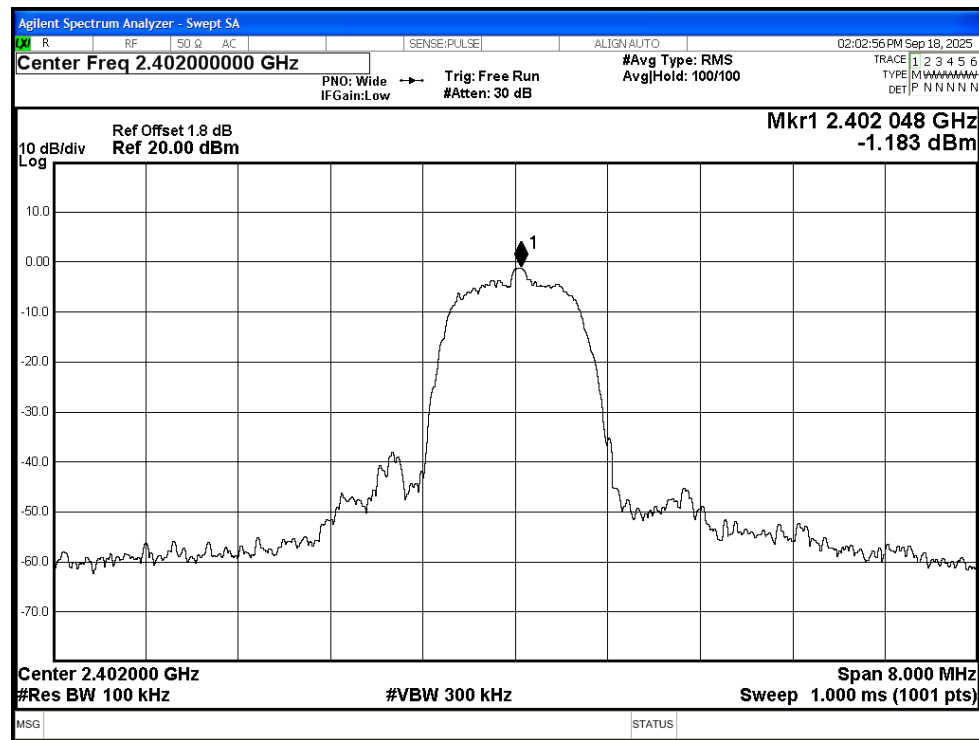
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



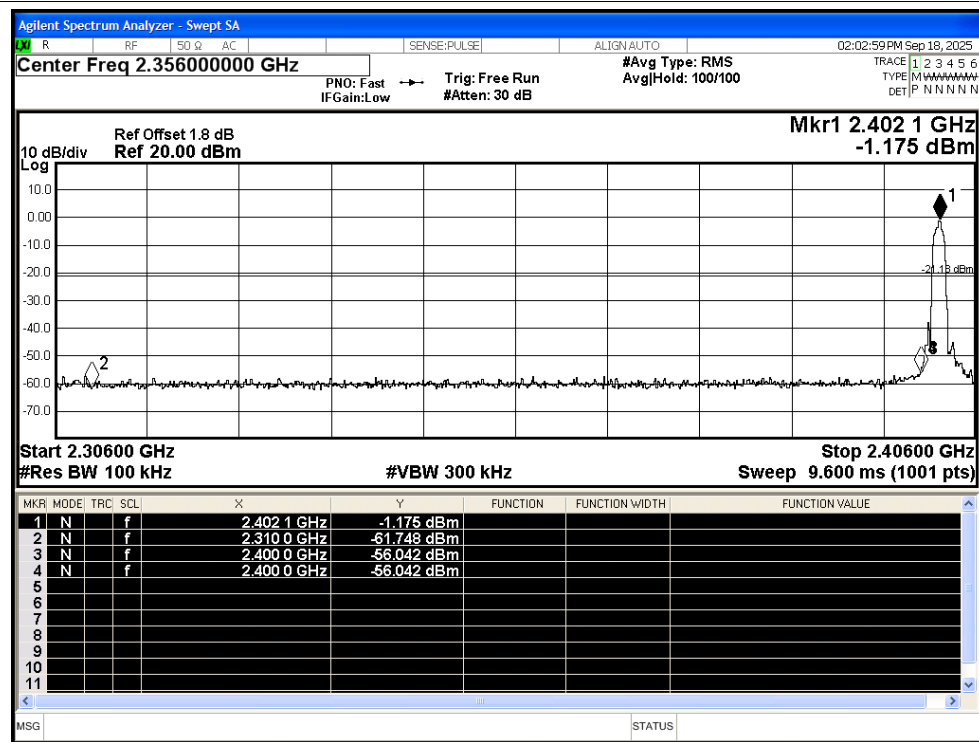
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



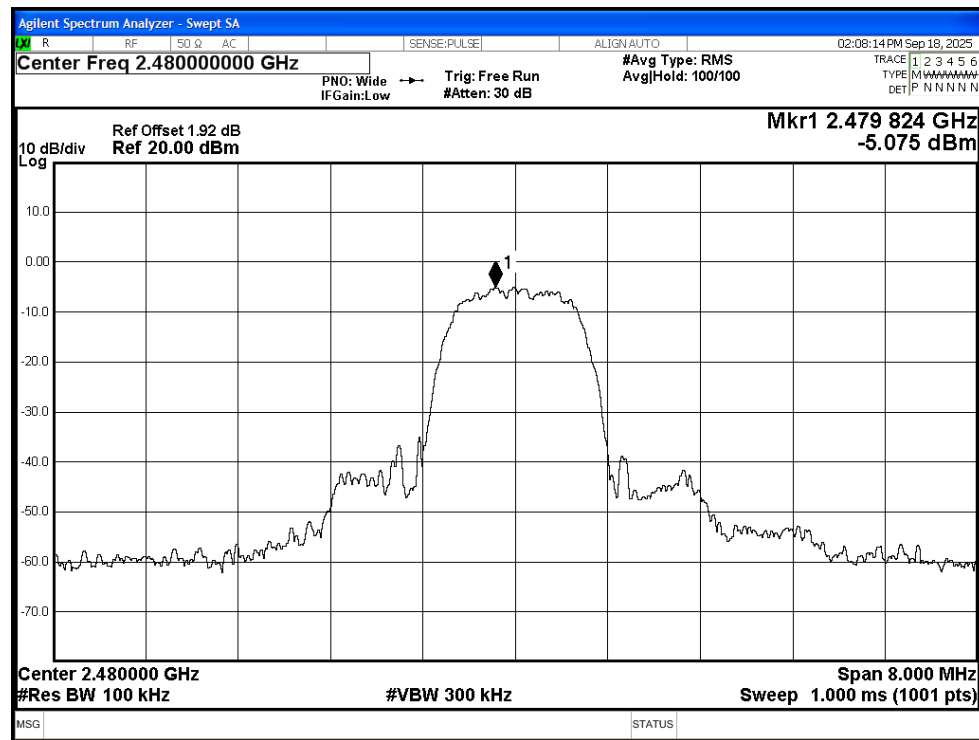
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



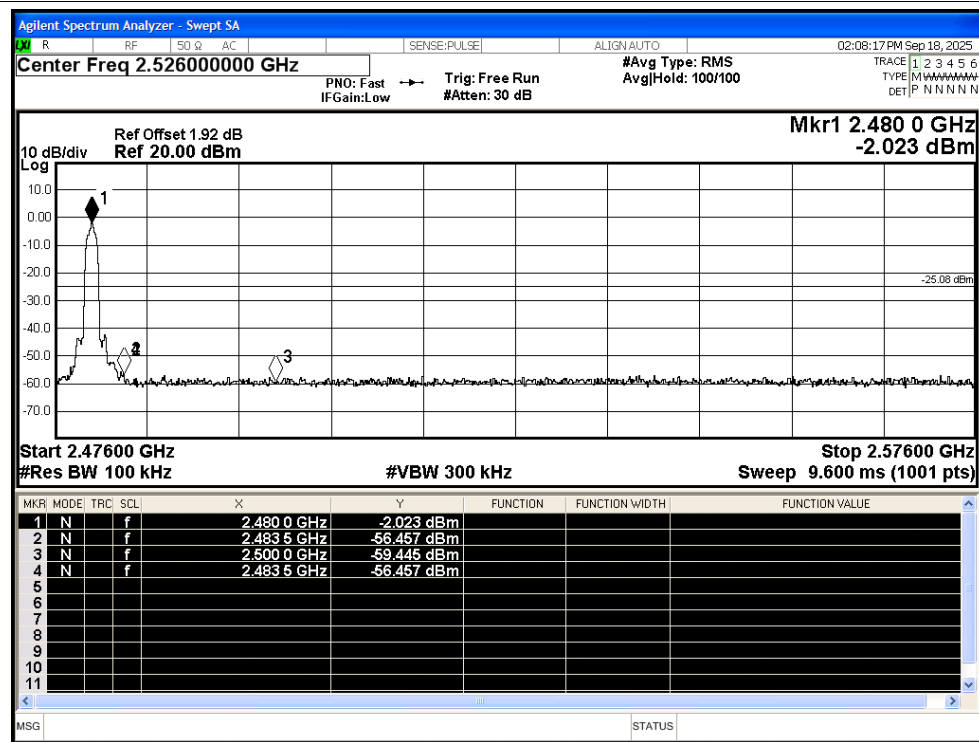
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



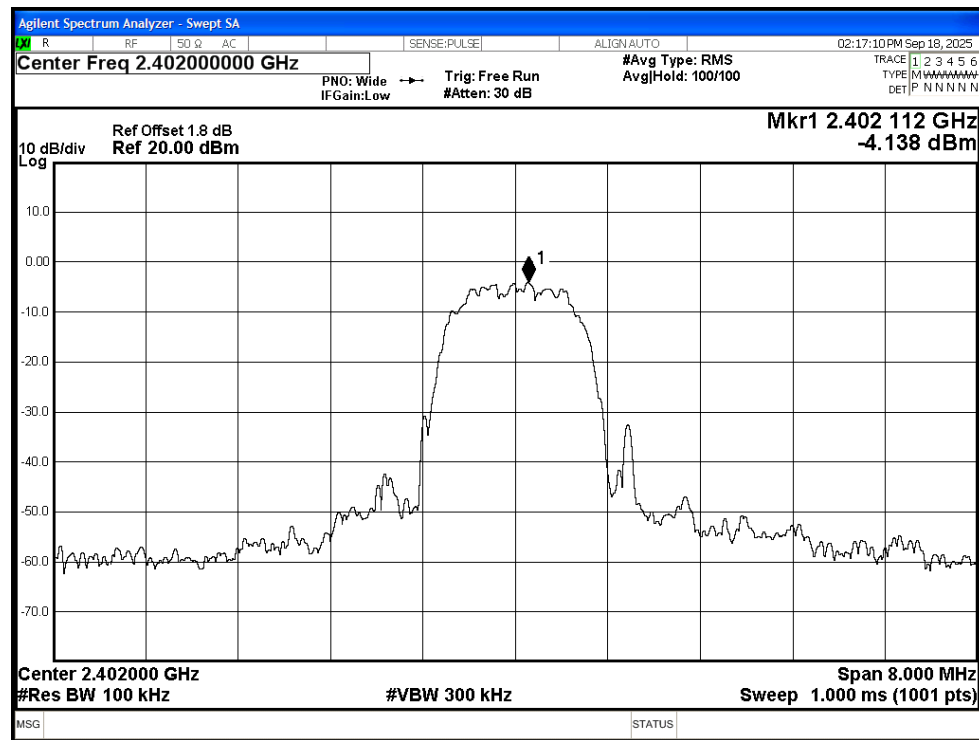
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



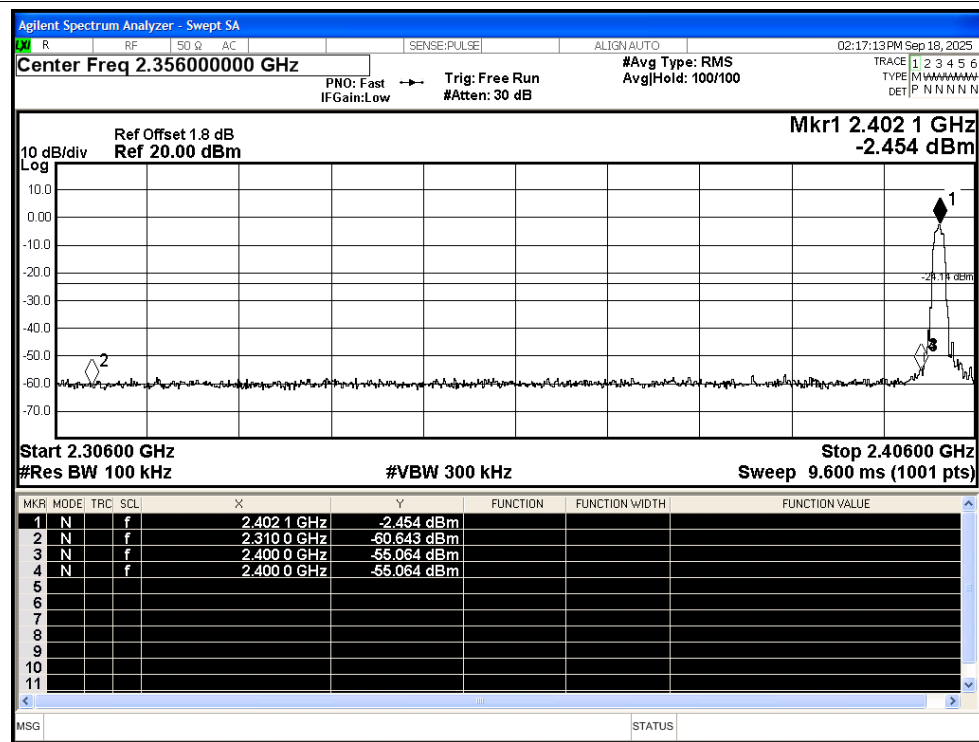
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



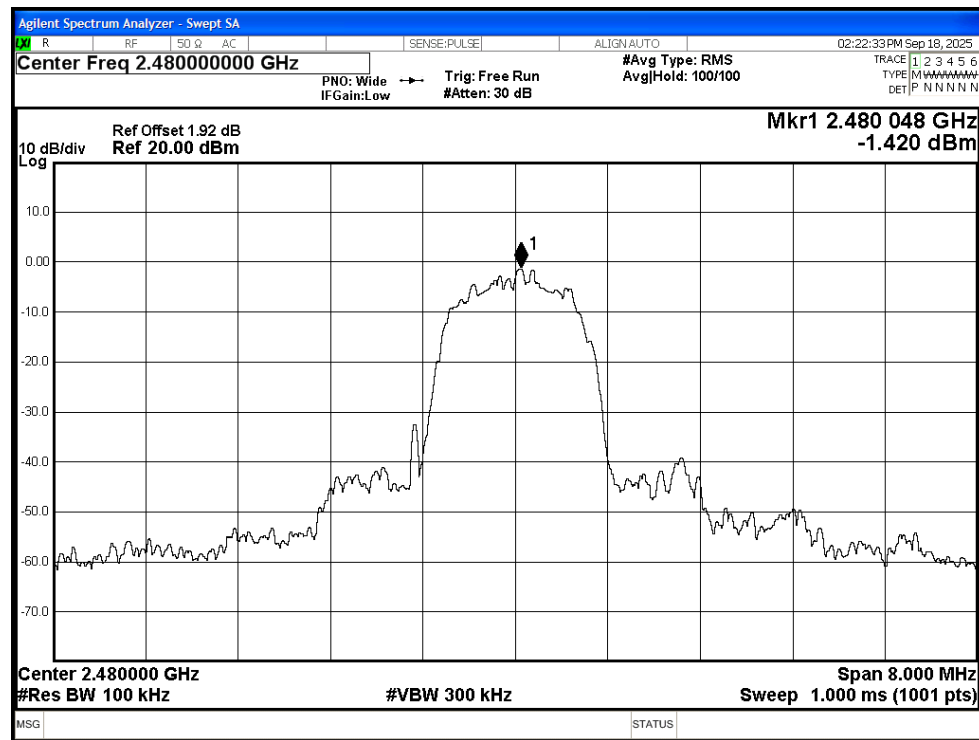
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



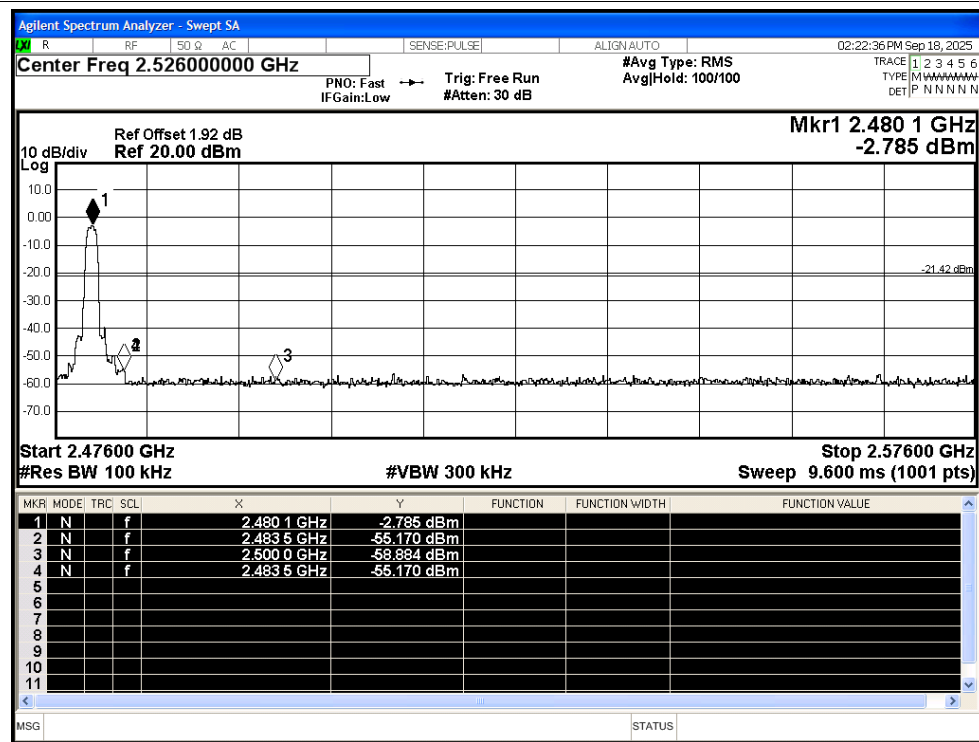
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Emission

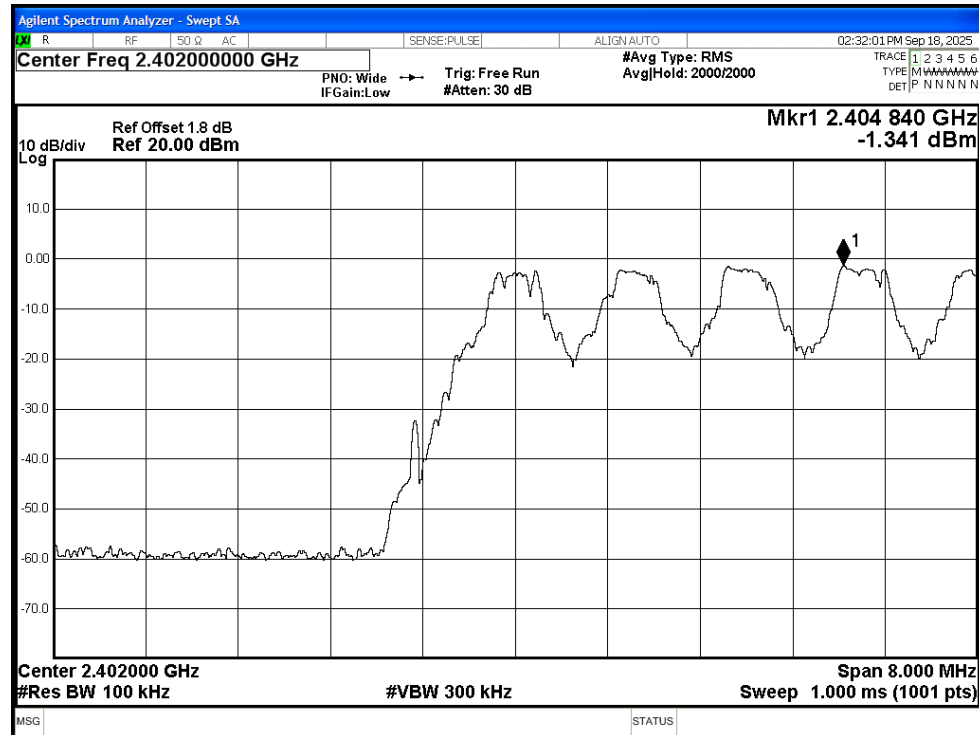


(Hopping)

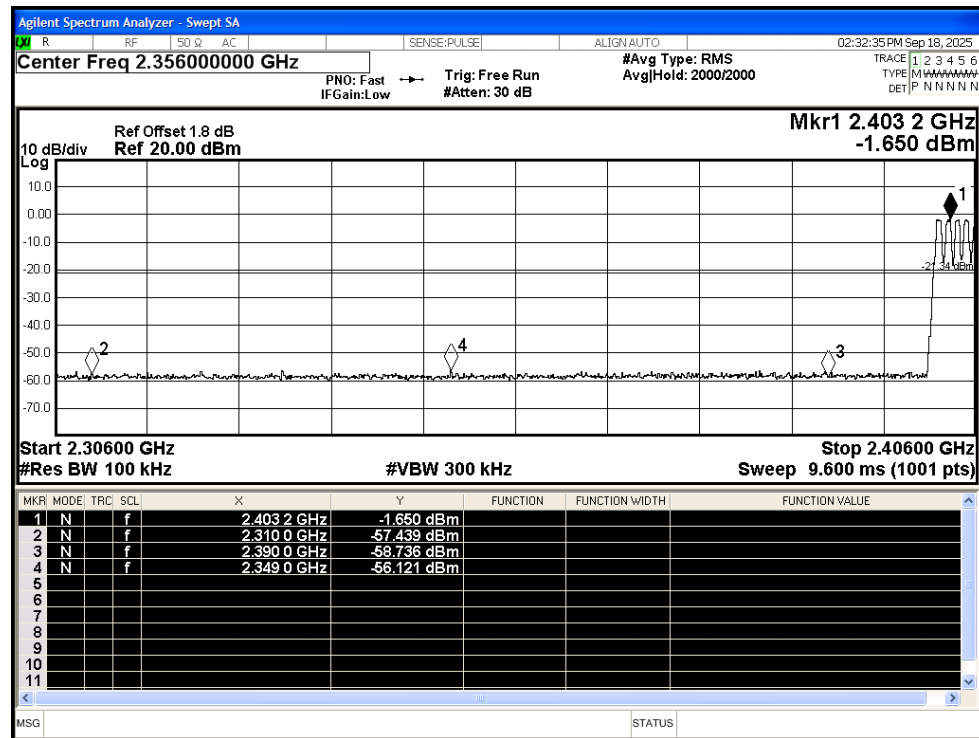
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-54.78	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-55.26	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-54.75	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-53.92	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-55.37	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-52.17	-20	Pass

Test Graphs

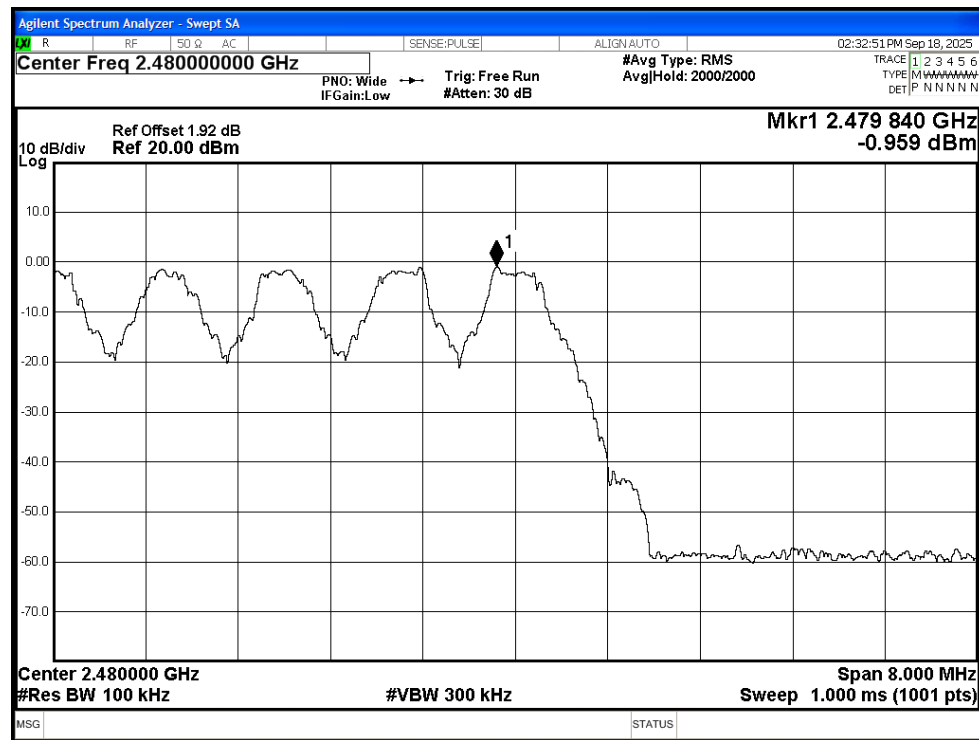
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



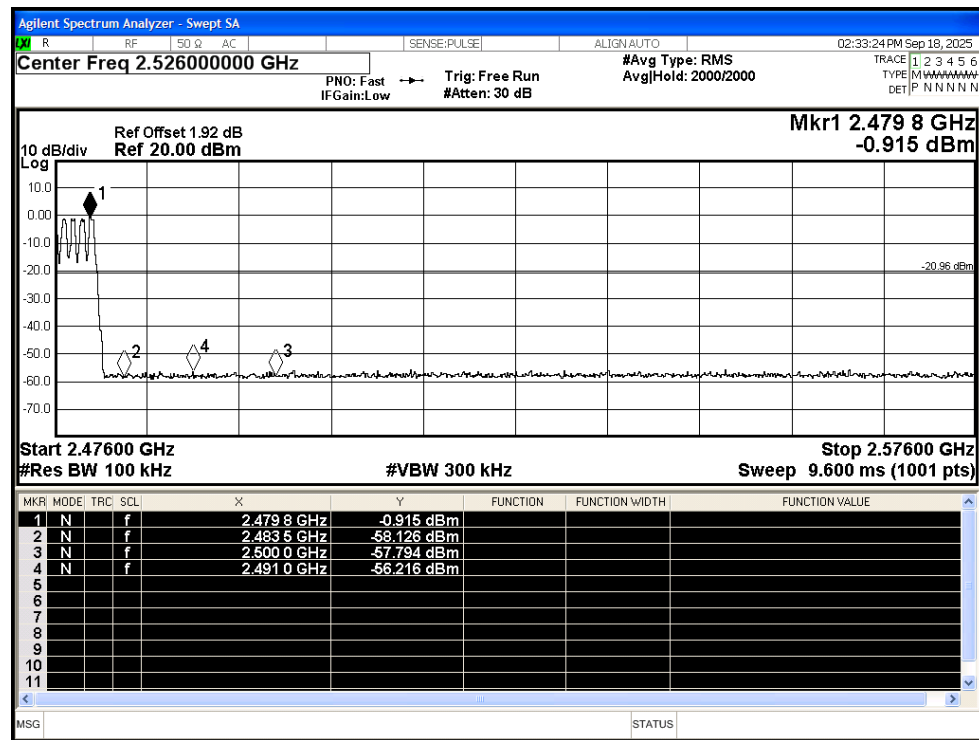
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



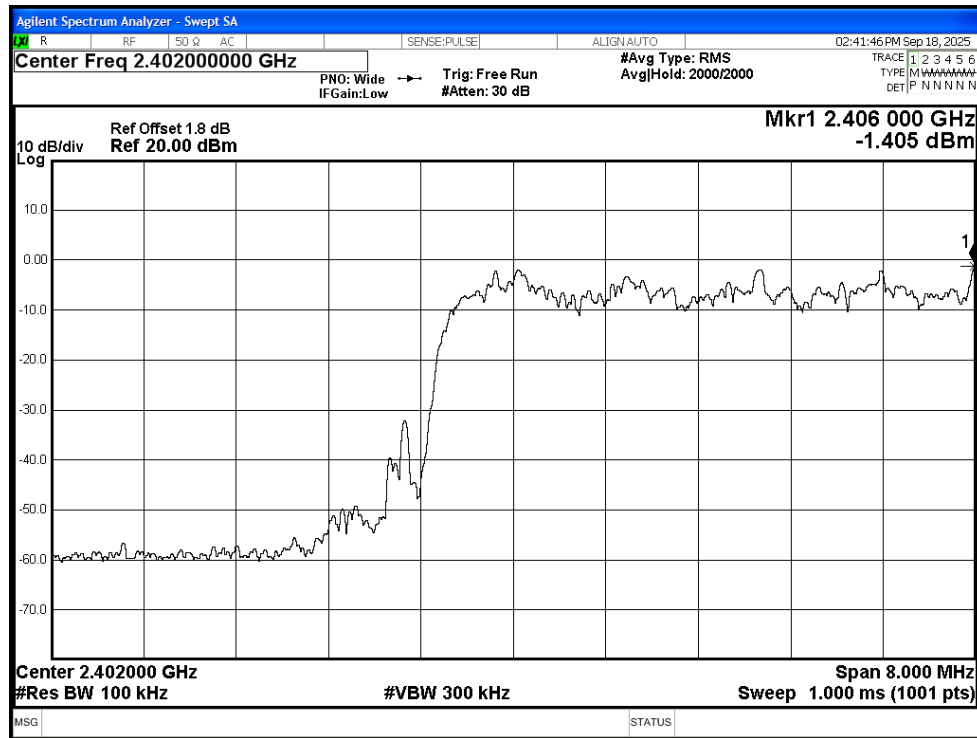
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



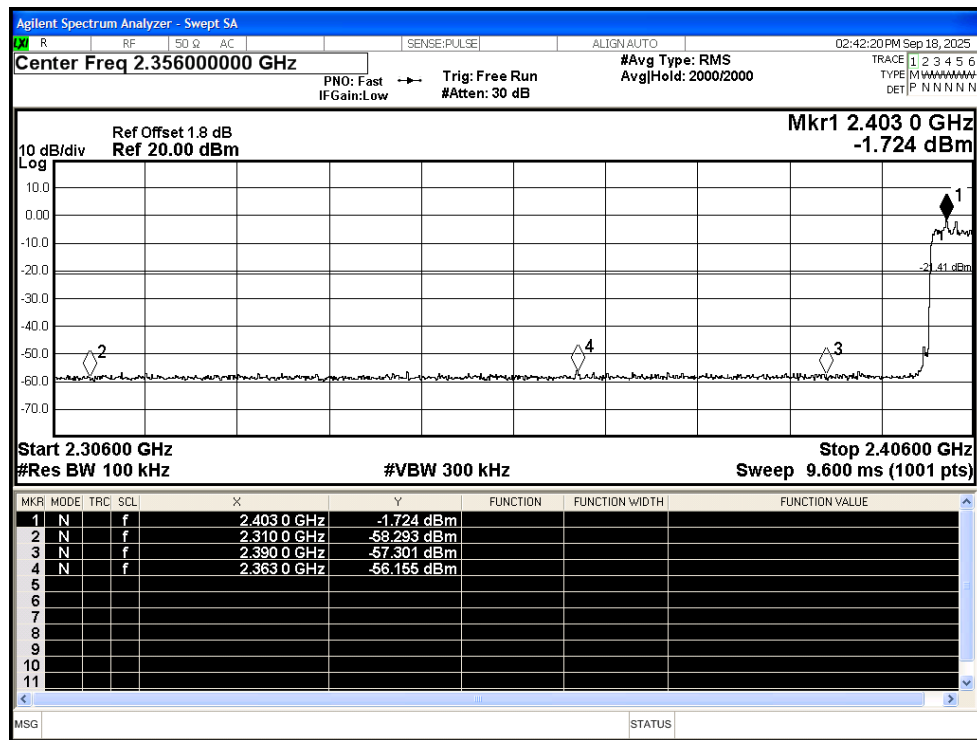
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



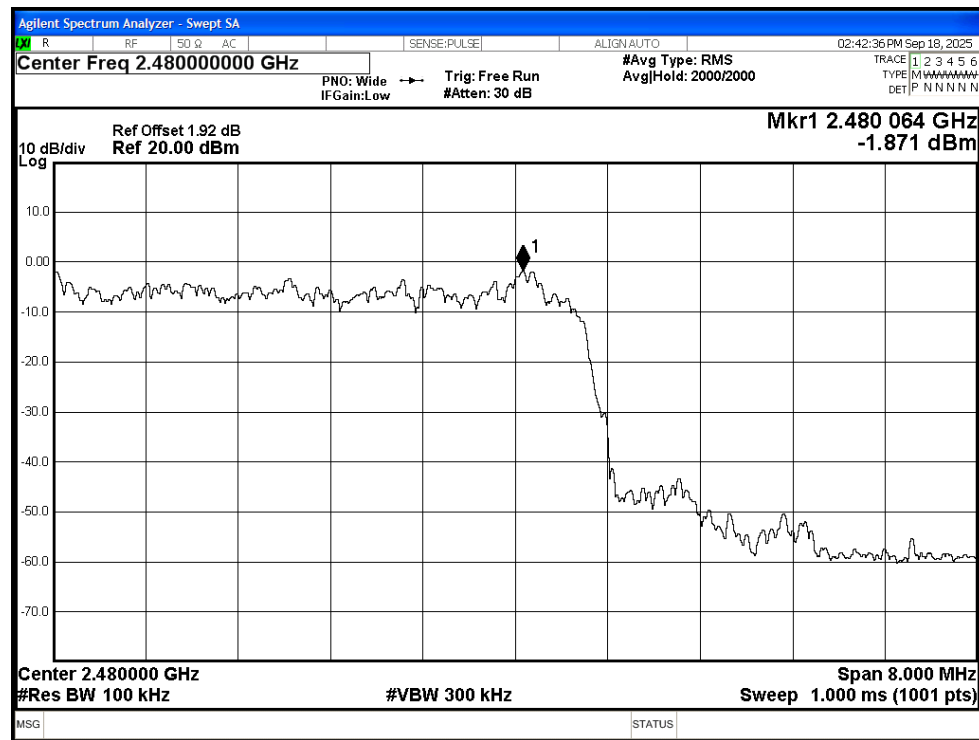
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



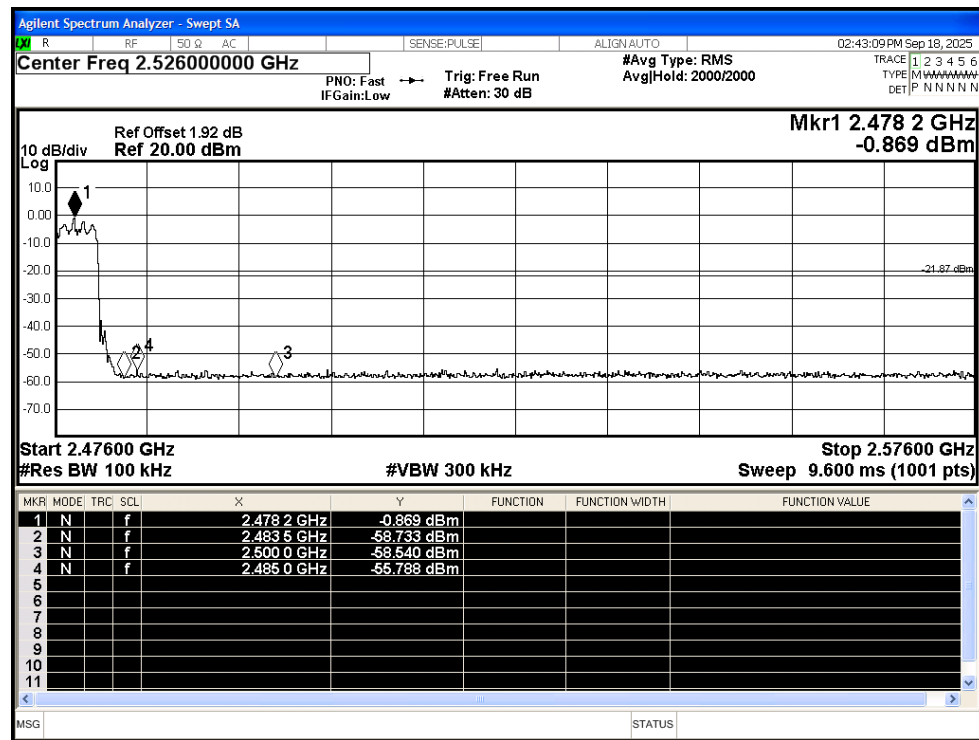
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



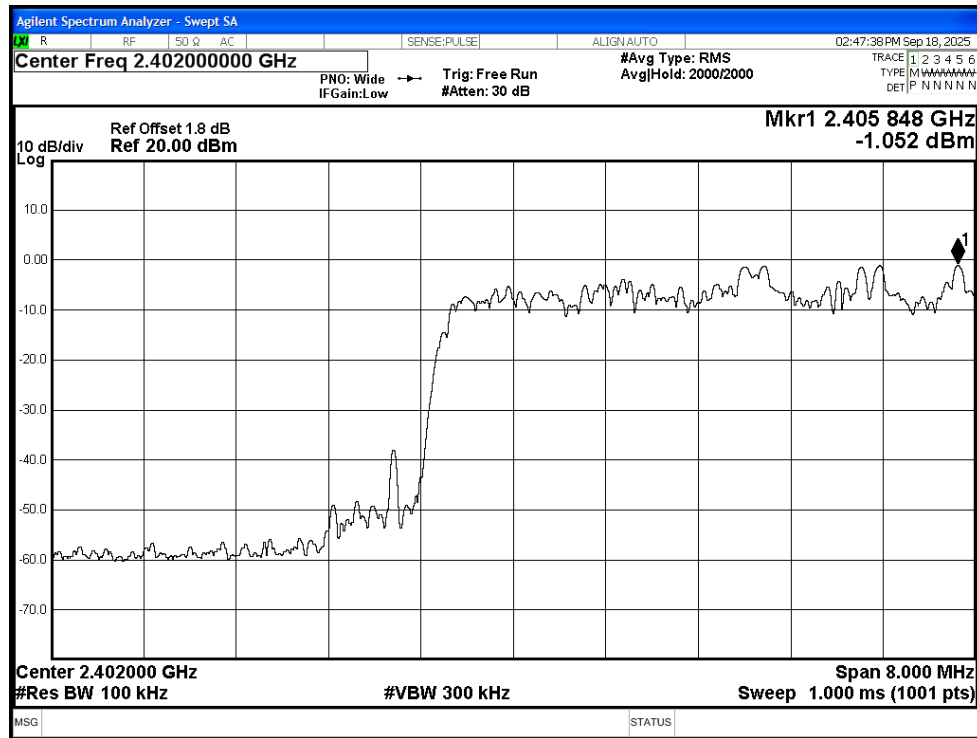
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



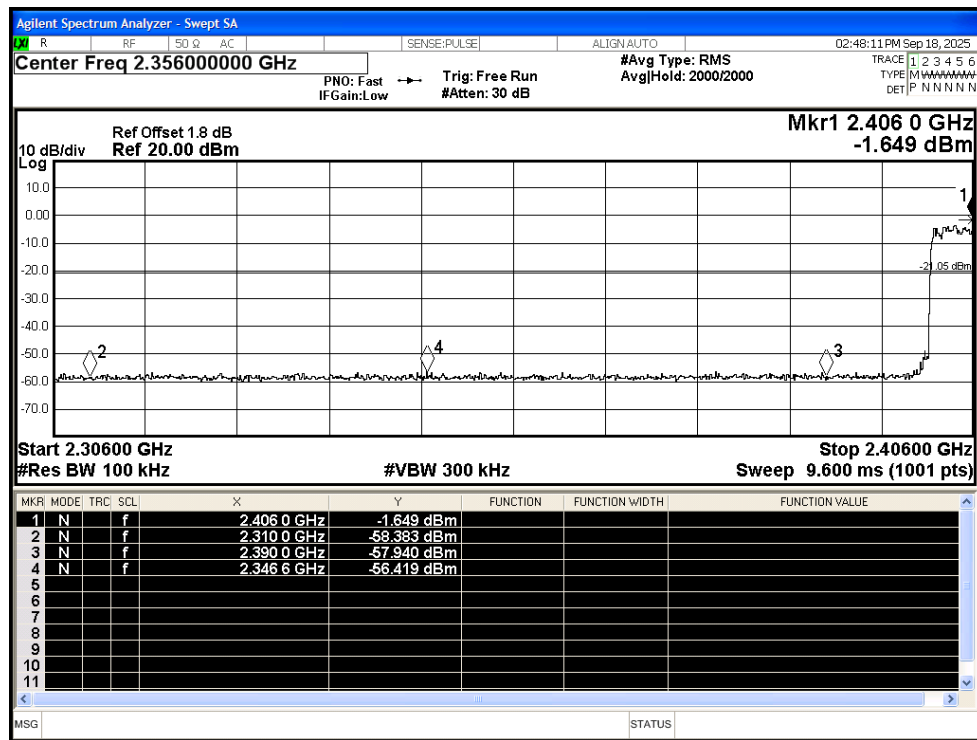
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



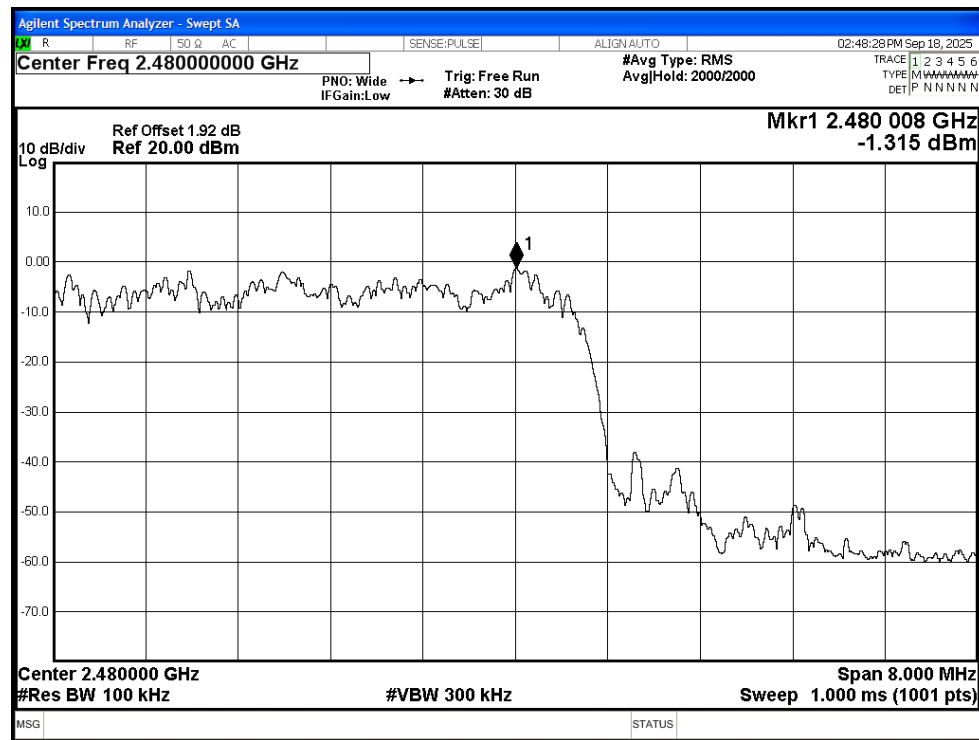
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



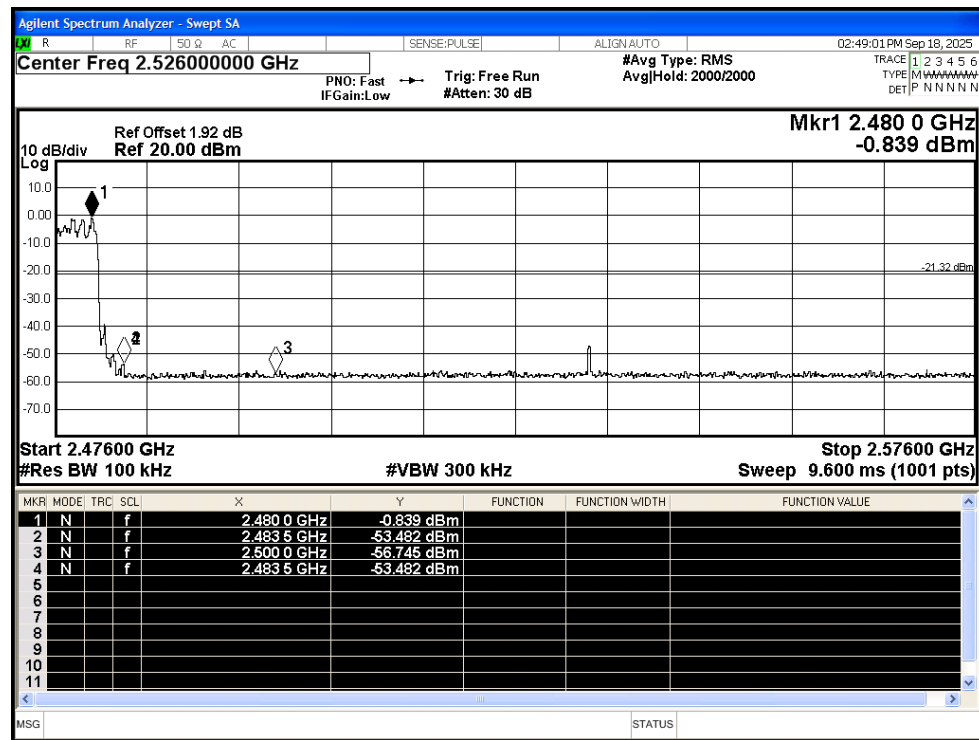
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Emission

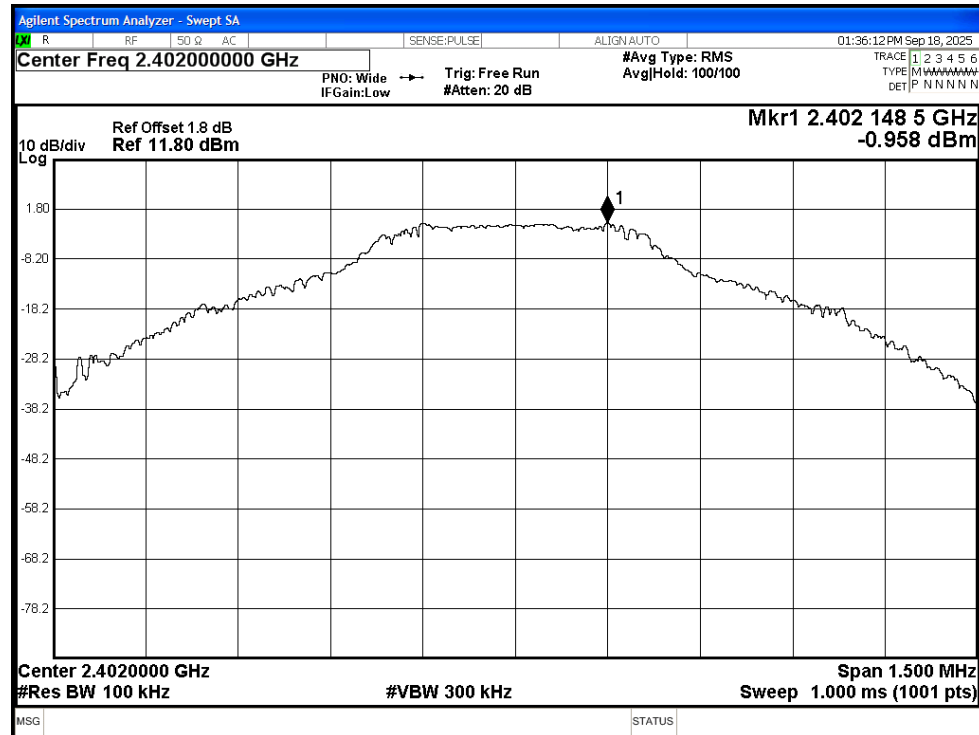


7 Conducted RF Spurious Emission

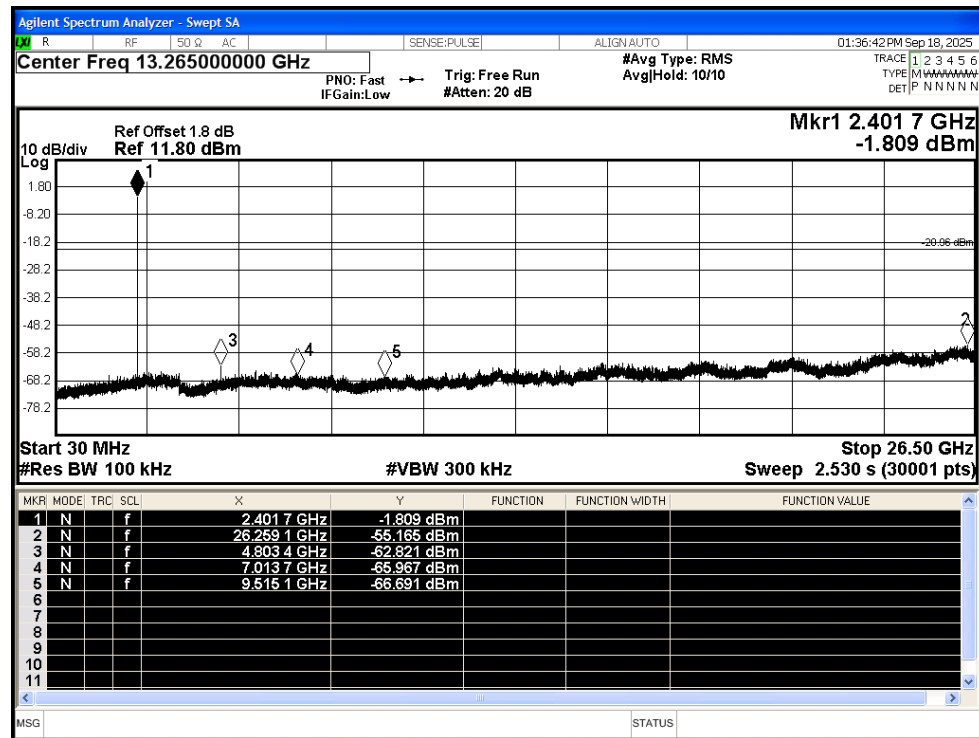
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-54.21	-20	Pass
NVNT	1-DH5	2441	Ant1	-55.19	-20	Pass
NVNT	1-DH5	2480	Ant1	-55.94	-20	Pass
NVNT	2-DH5	2402	Ant1	-54.77	-20	Pass
NVNT	2-DH5	2441	Ant1	-53.04	-20	Pass
NVNT	2-DH5	2480	Ant1	-52.75	-20	Pass
NVNT	3-DH5	2402	Ant1	-53.29	-20	Pass
NVNT	3-DH5	2441	Ant1	-54.51	-20	Pass
NVNT	3-DH5	2480	Ant1	-54.35	-20	Pass

Test Graphs

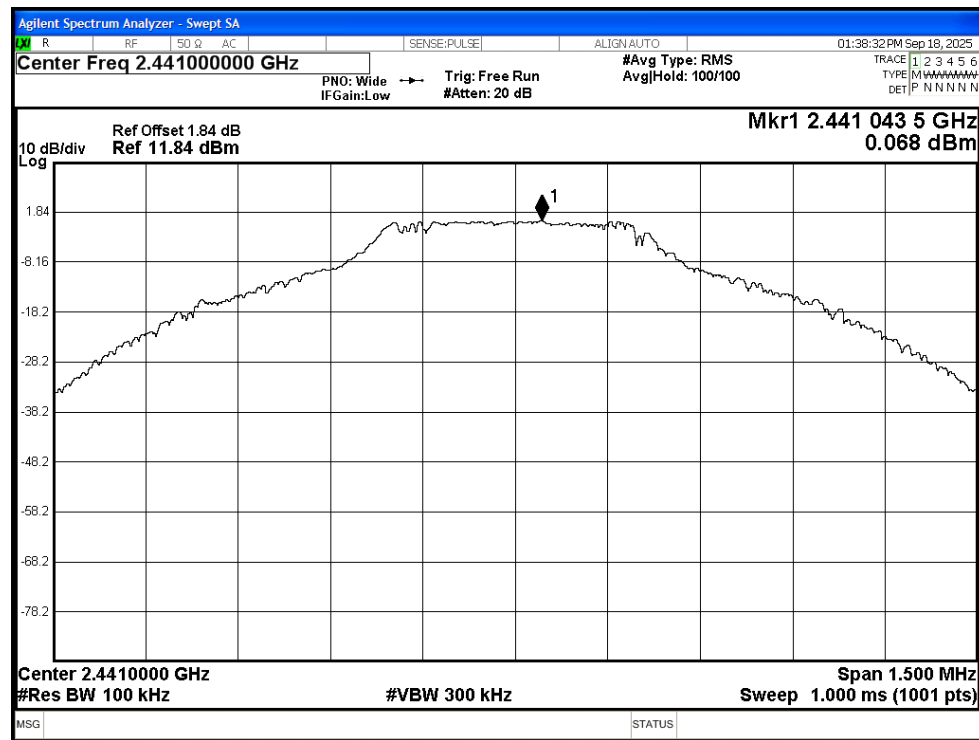
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



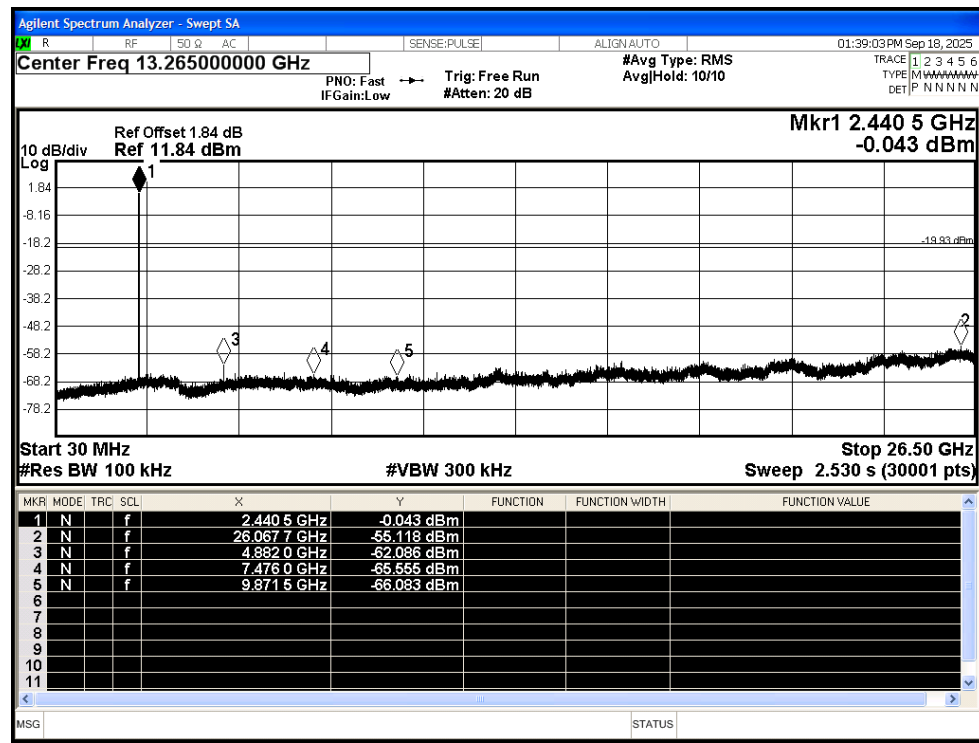
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



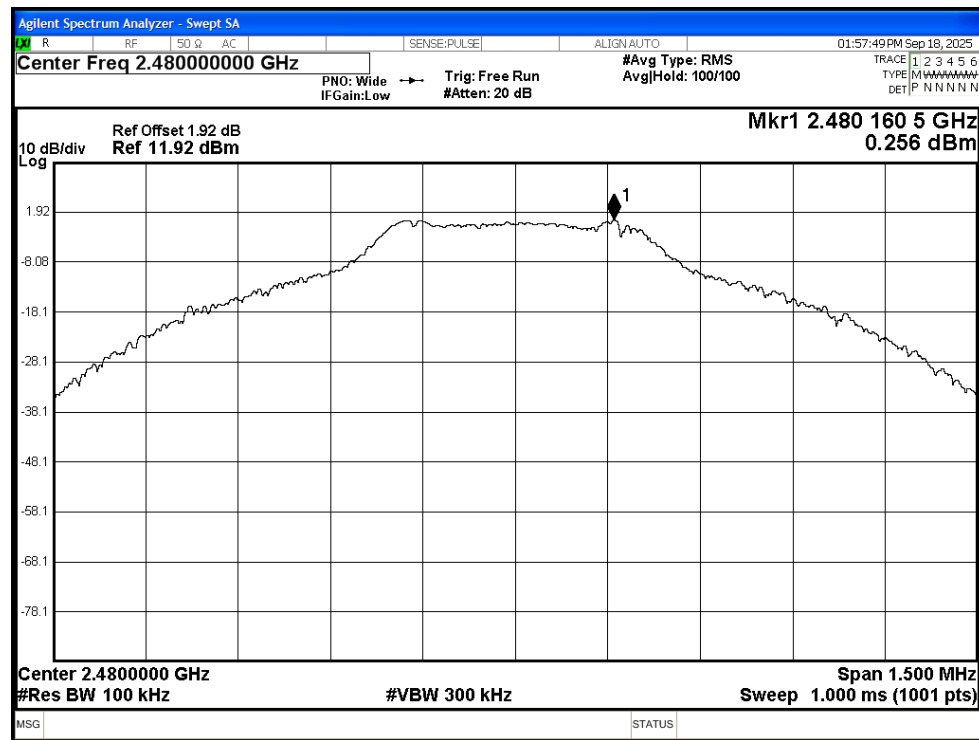
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



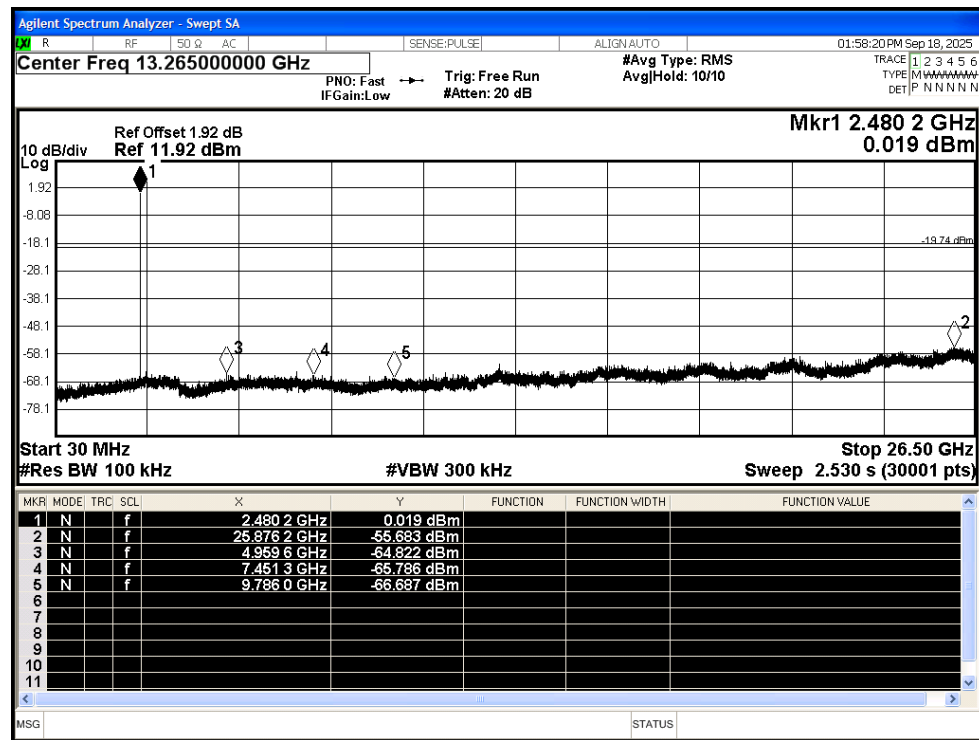
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



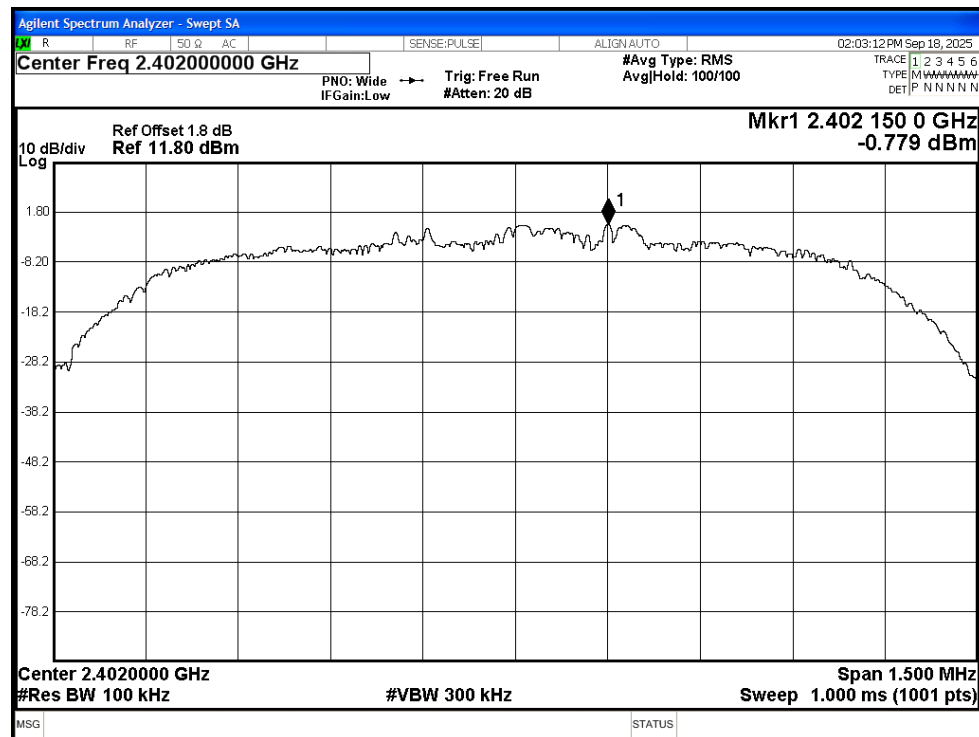
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



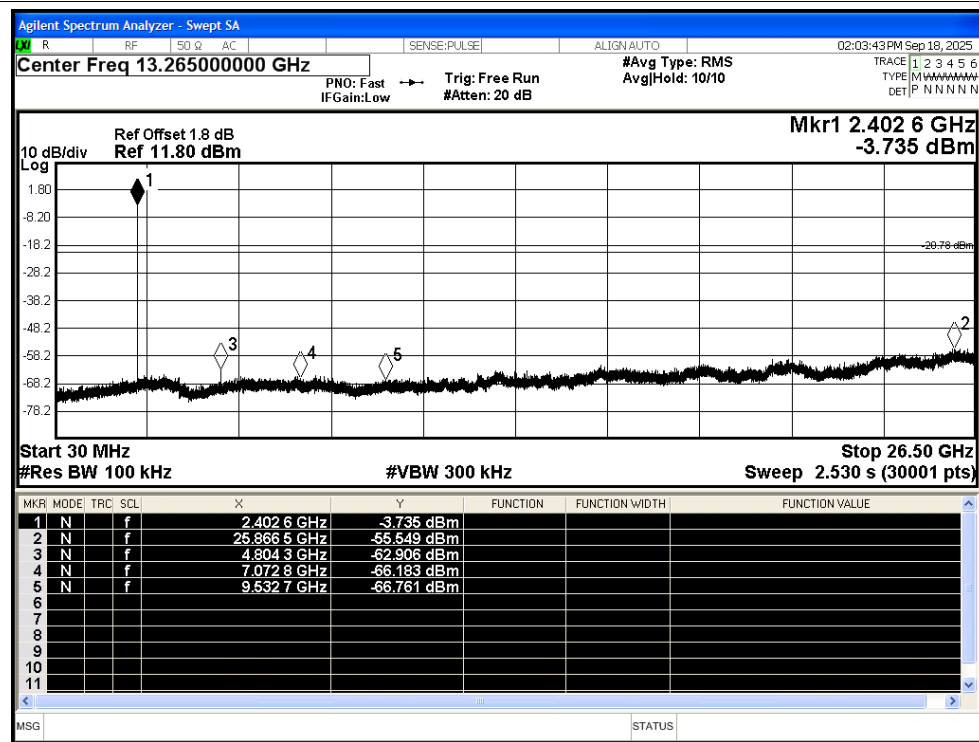
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



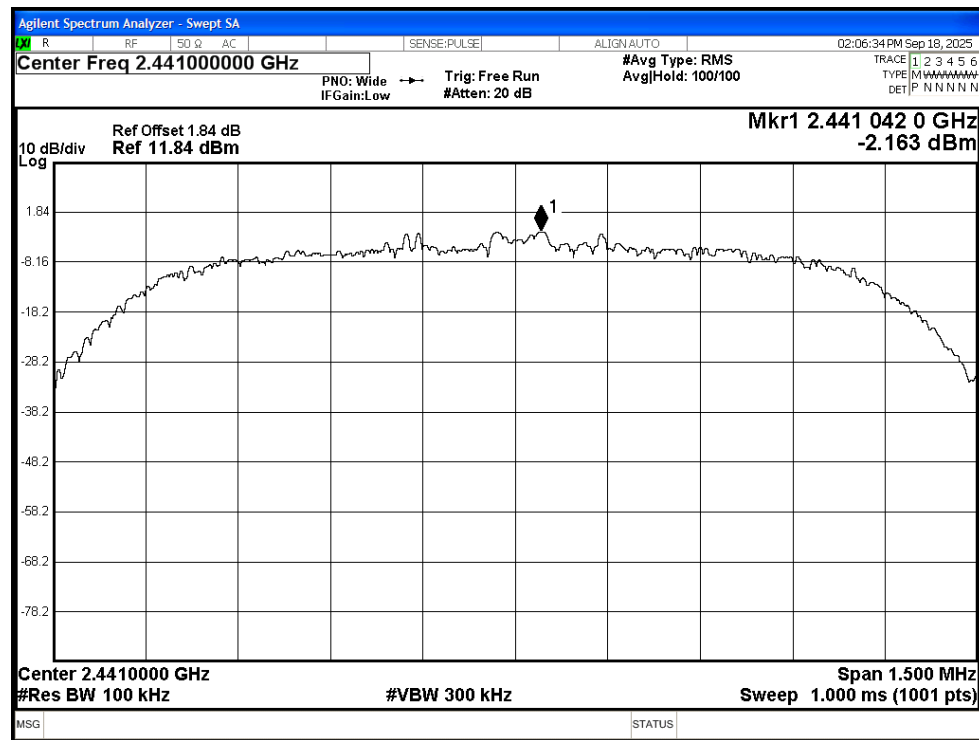
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



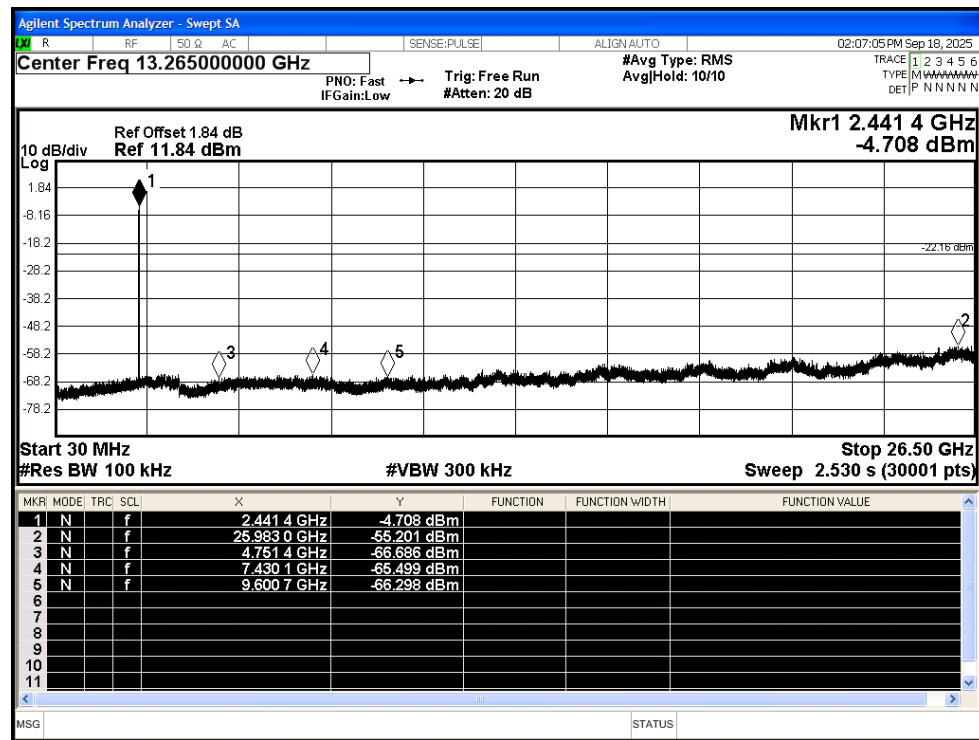
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



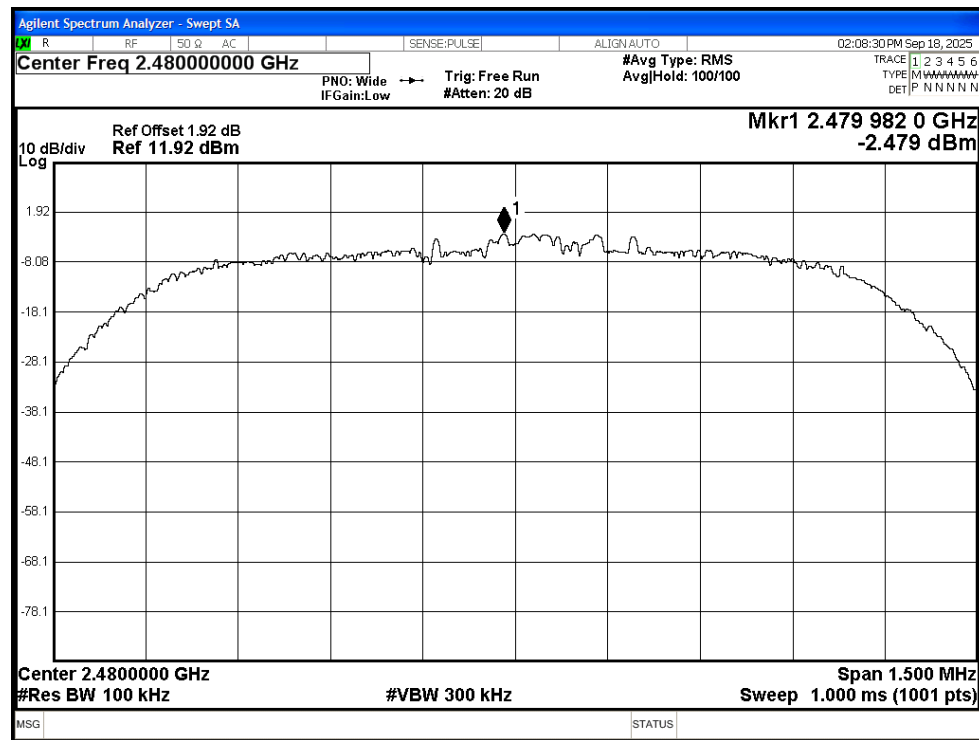
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



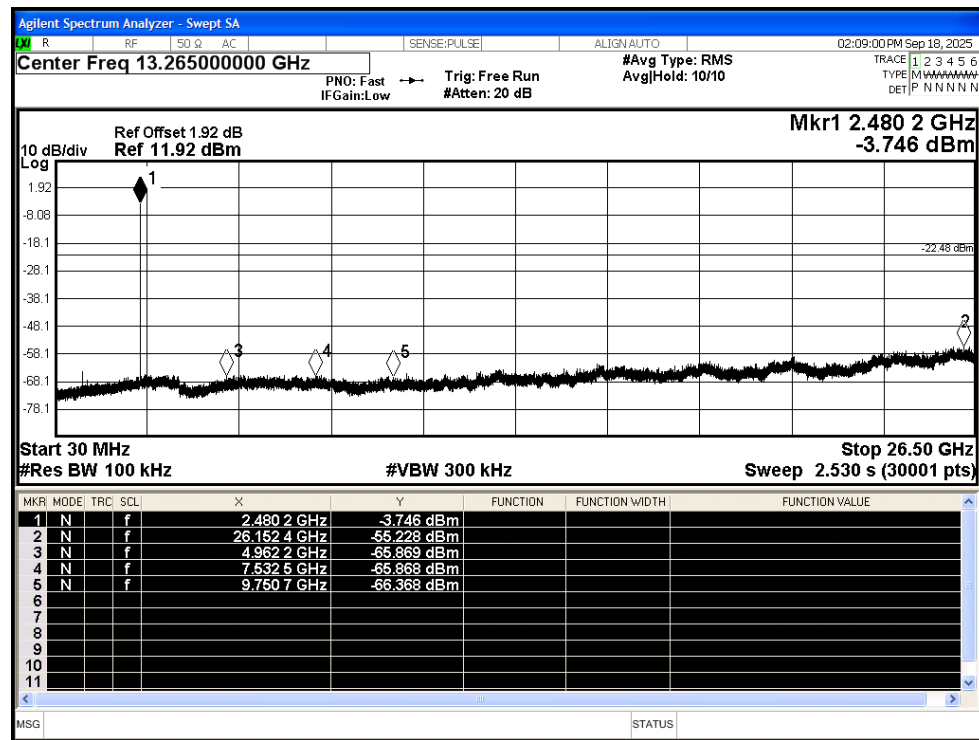
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



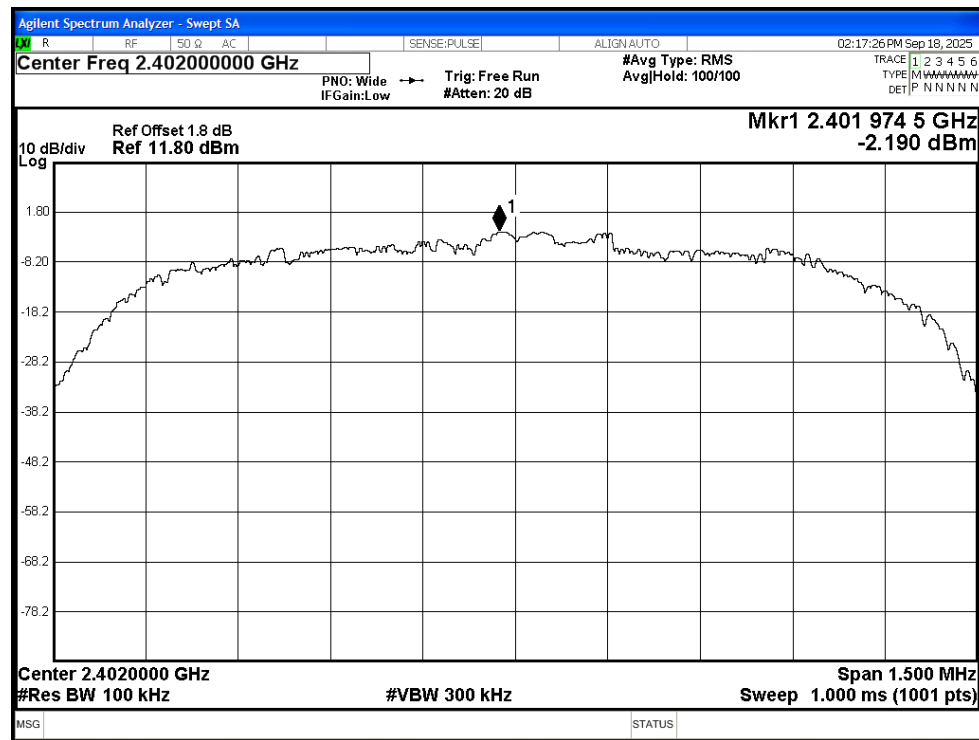
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



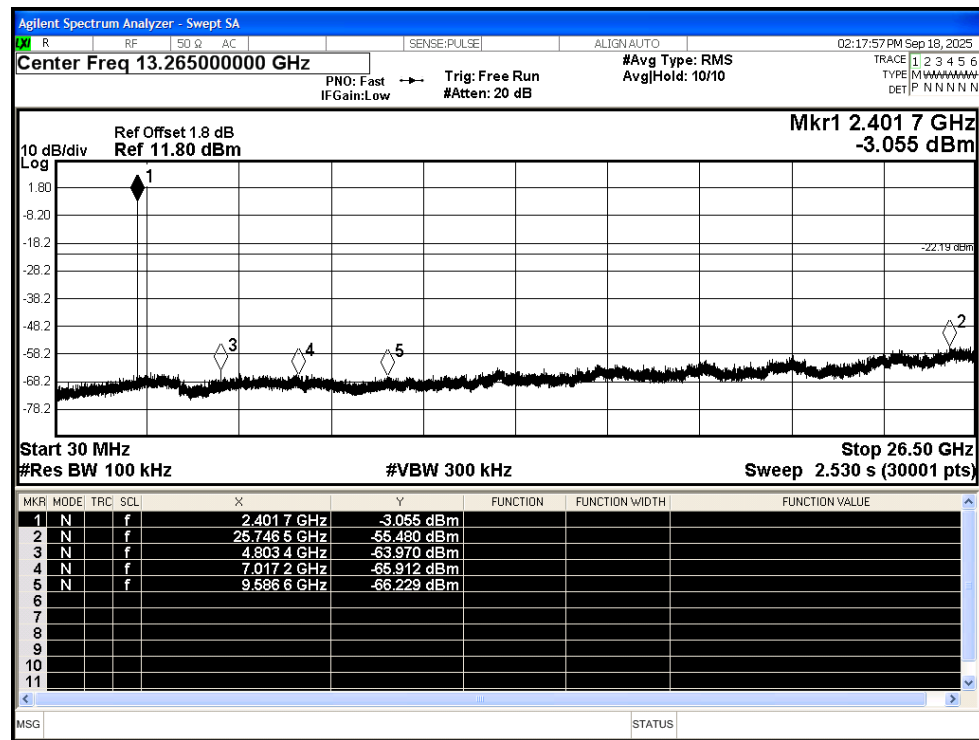
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



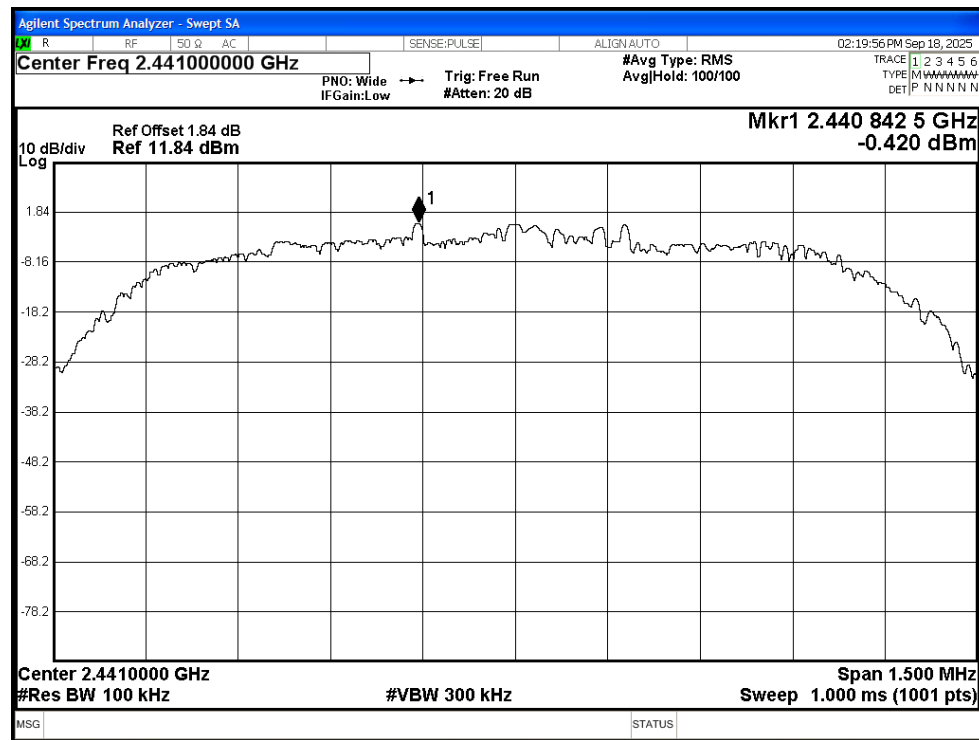
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



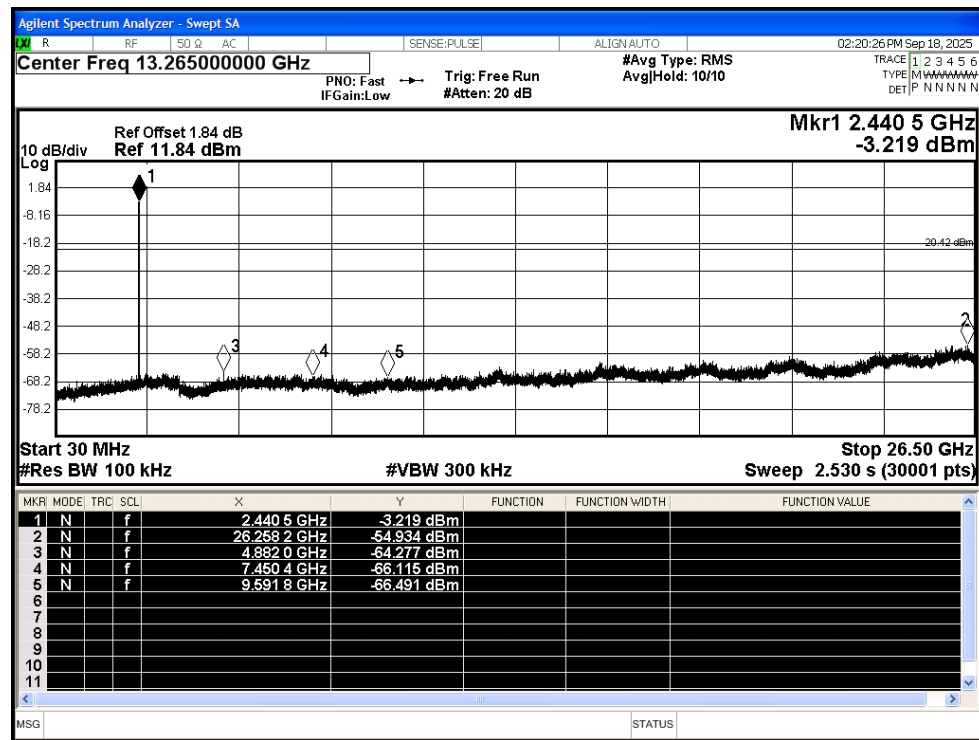
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.48000000 GHz

Ref Offset 1.92 dB
Ref 11.92 dBm

Mkr1 2.480 163 5 GHz
-0.857 dBm

10 dB/div
Log

Center 2.480000 GHz
#Res BW 100 kHz

#VBW 300 kHz

Span 1.500 MHz
Sweep 1.000 ms (1001 pts)

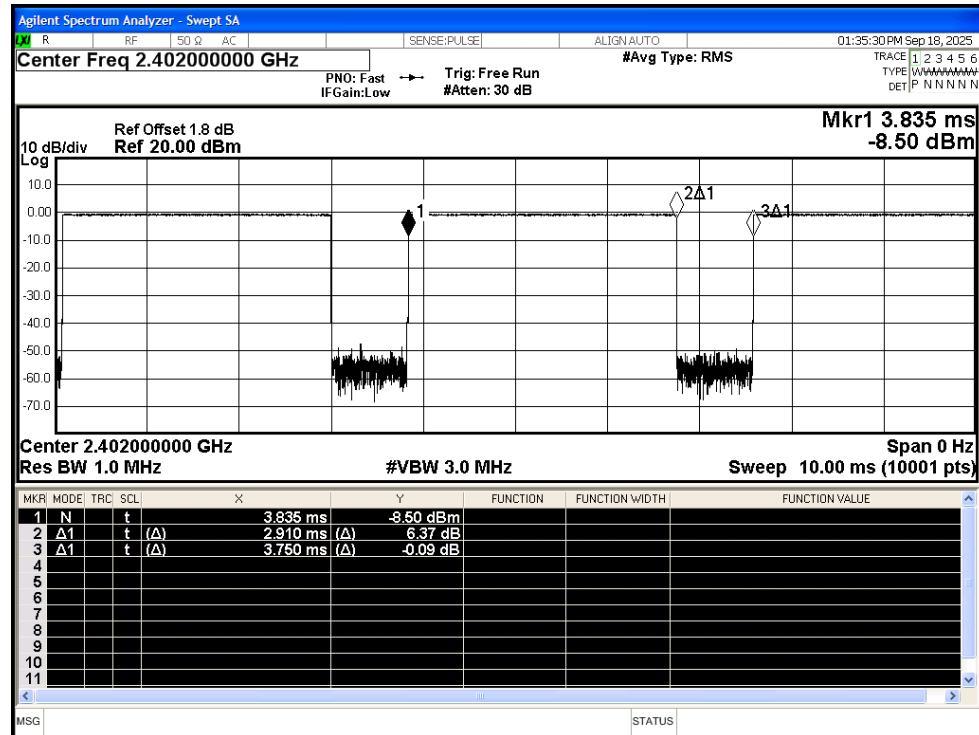
[illegible]

8 Duty Cycle

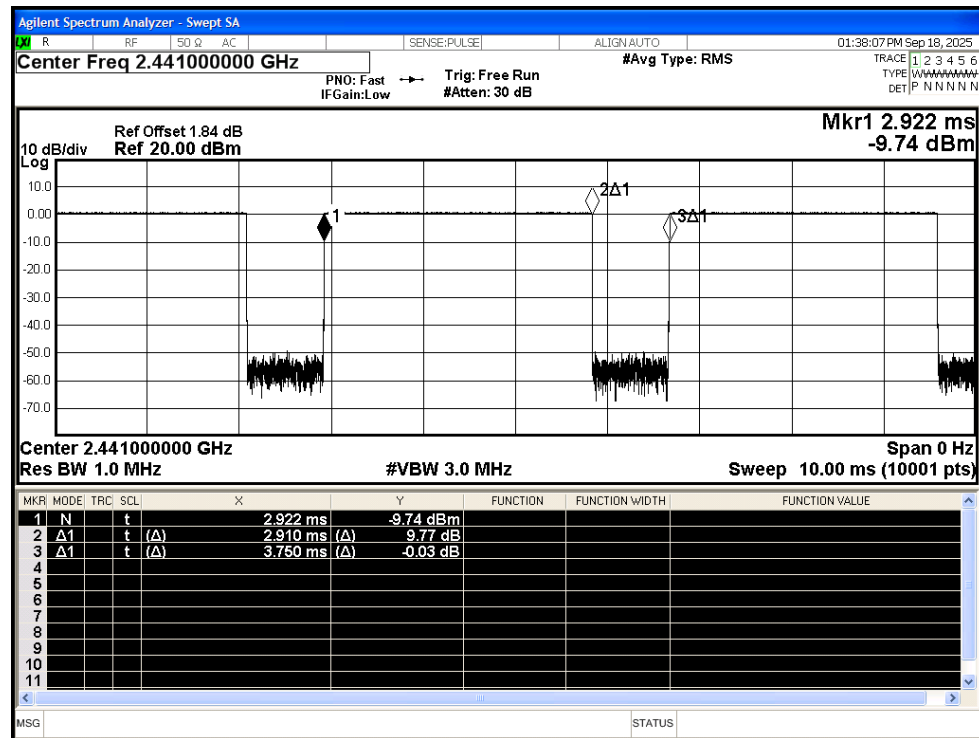
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	77.6	1.1	0.34
NVNT	1-DH5	2441	Ant1	77.6	1.1	0.34
NVNT	1-DH5	2480	Ant1	77.6	1.1	0.34
NVNT	2-DH5	2402	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2441	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2480	Ant1	77.28	1.12	0.35
NVNT	3-DH5	2402	Ant1	77.28	1.12	0.35
NVNT	3-DH5	2441	Ant1	77.28	1.12	0.35
NVNT	3-DH5	2480	Ant1	77.28	1.12	0.35

Test Graphs

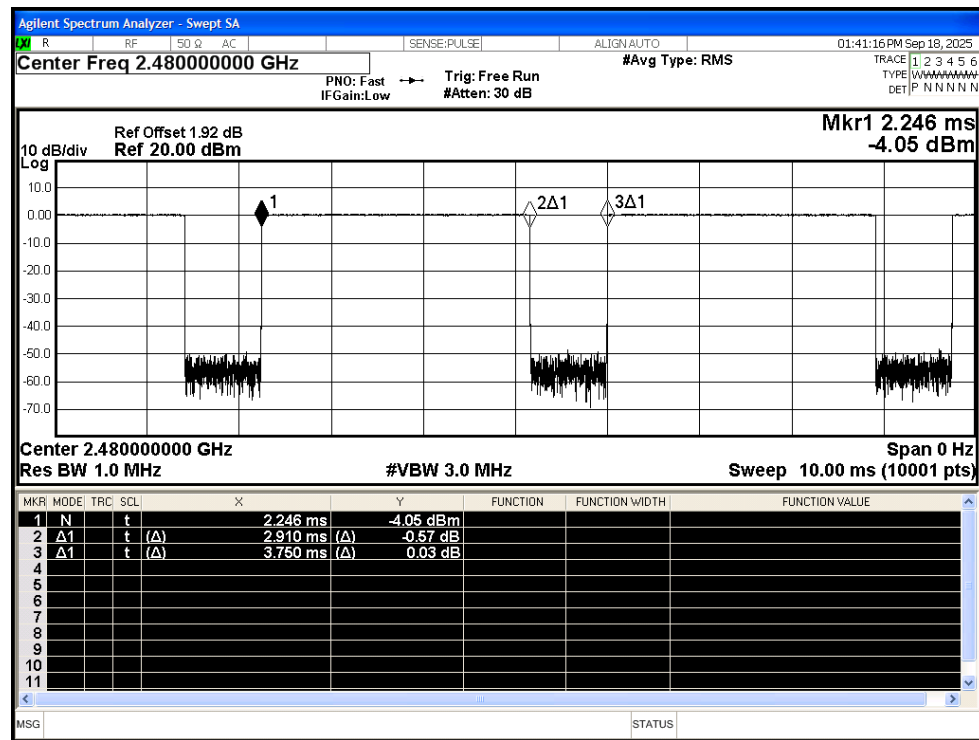
Duty Cycle NVNT 1-DH5 2402MHz Ant1



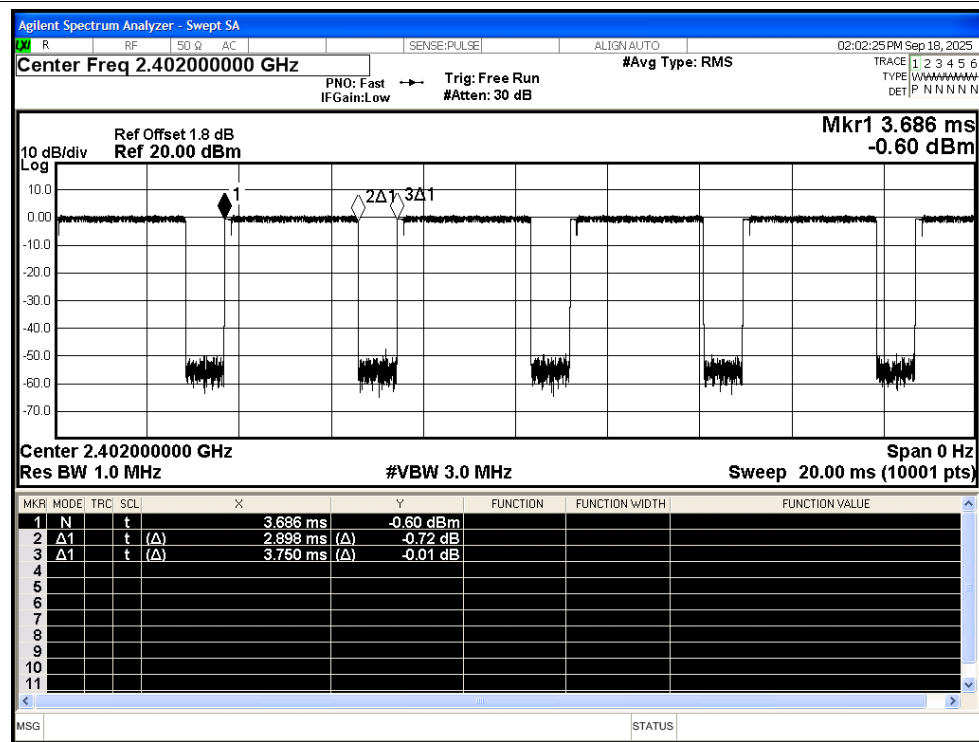
Duty Cycle NVNT 1-DH5 2441MHz Ant1



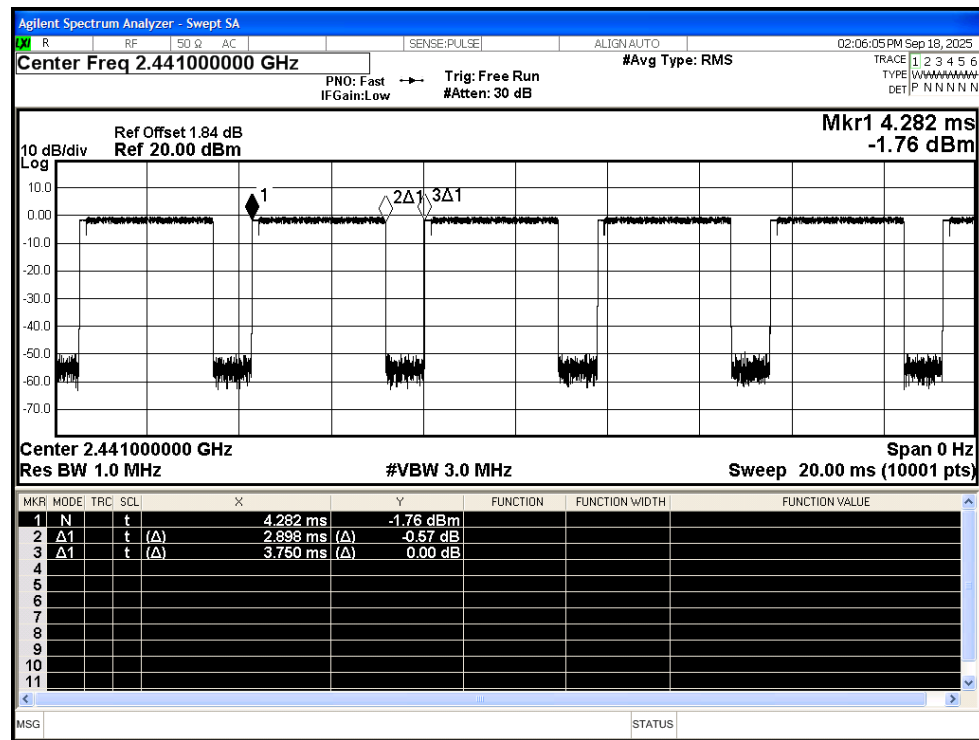
Duty Cycle NVNT 1-DH5 2480MHz Ant1



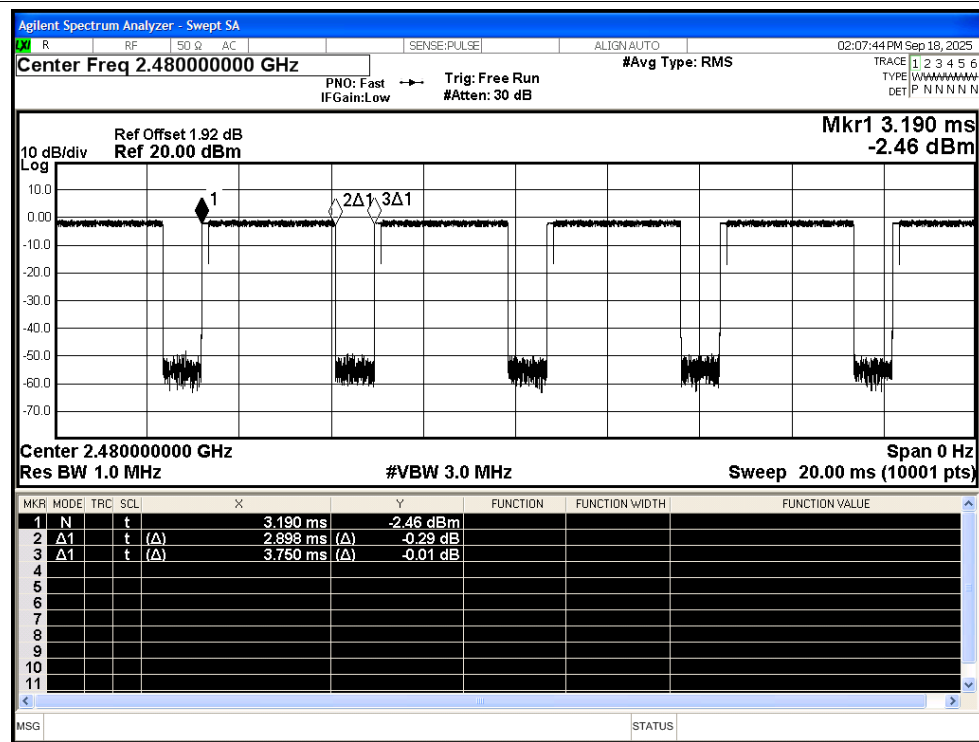
Duty Cycle NVNT 2-DH5 2402MHz Ant1



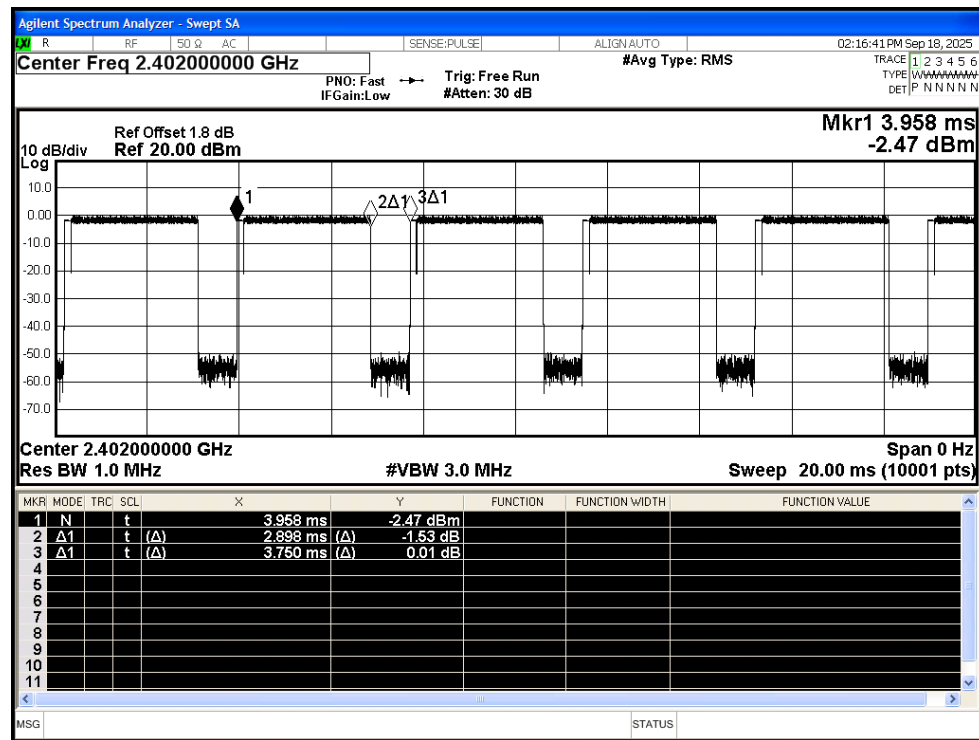
Duty Cycle NVNT 2-DH5 2441MHz Ant1



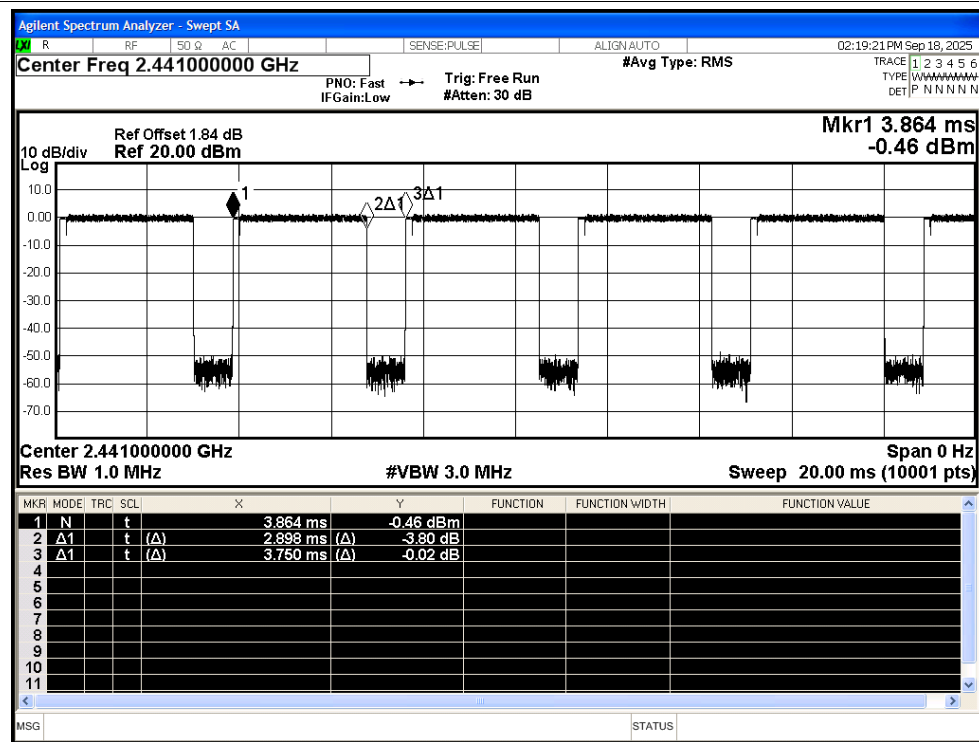
Duty Cycle NVNT 2-DH5 2480MHz Ant1



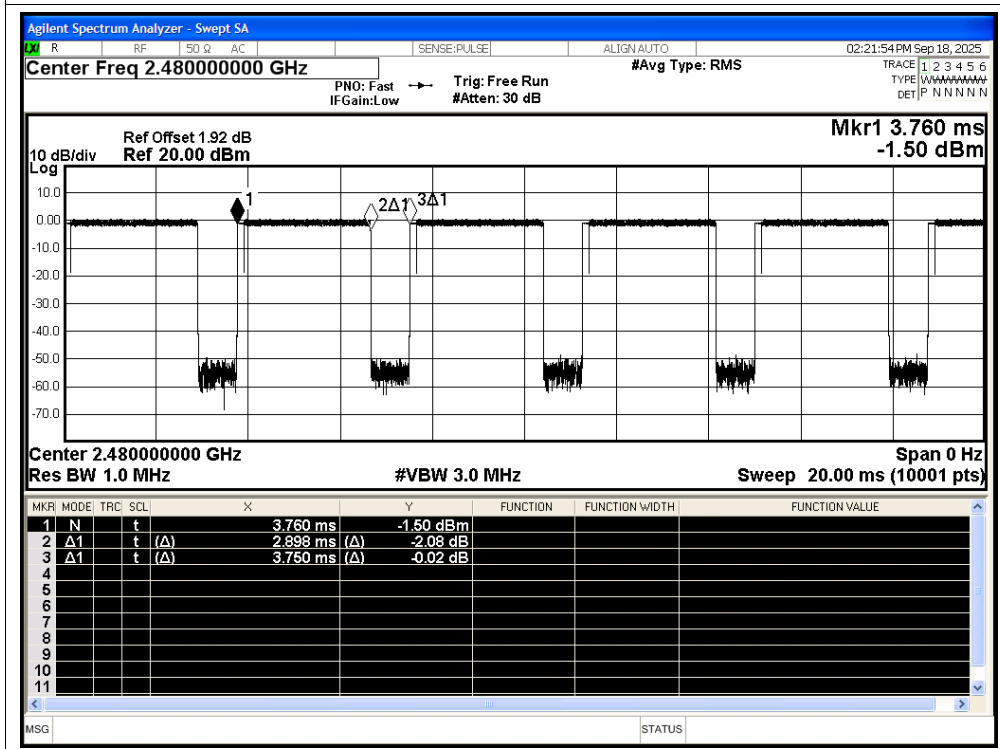
Duty Cycle NVNT 3-DH5 2402MHz Ant1



Duty Cycle NVNT 3-DH5 2441MHz Ant1



Duty Cycle NVNT 3-DH5 2480MHz Ant1

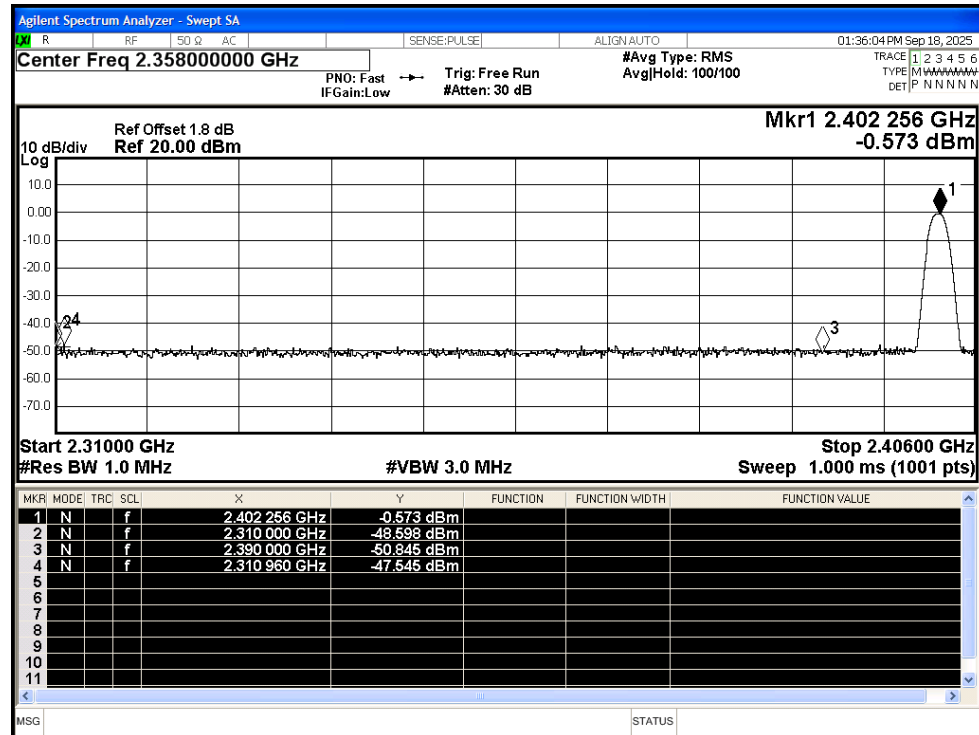


9 Restrict Band

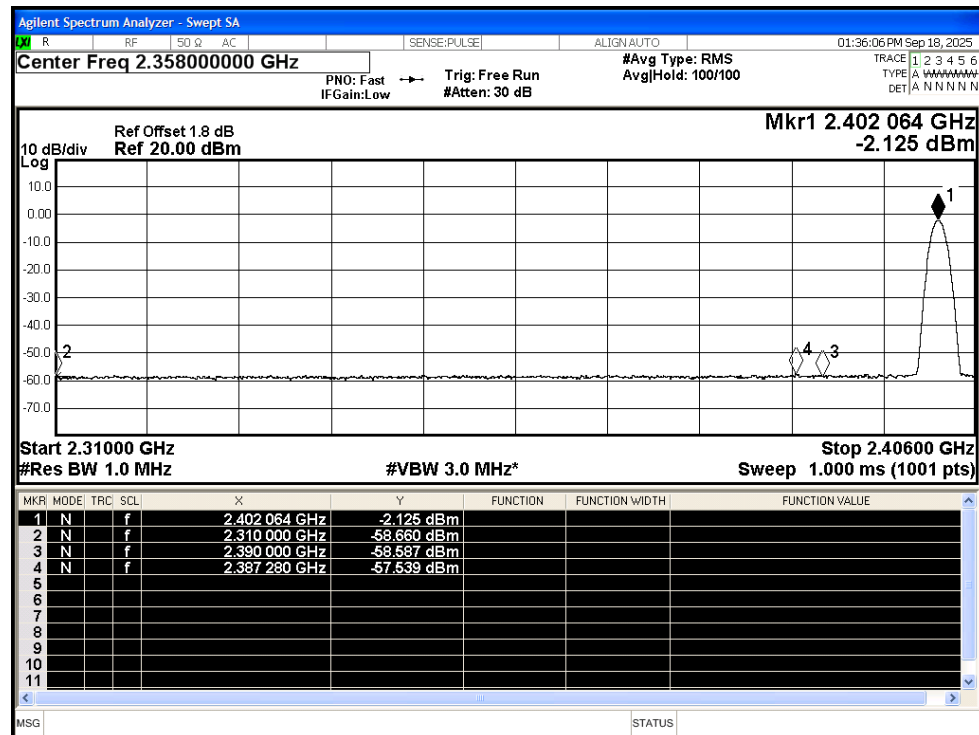
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-48.6	2	-	48.66	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.66	2	1.1	39.7	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310.96	-47.55	2	-	49.71	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2387.28	-57.54	2	1.1	40.82	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-50.85	2	-	46.41	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.59	2	1.1	39.77	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.8	2	-	46.46	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-57.82	2	1.1	40.54	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2485.984	-43.6	2	-	53.66	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2498.896	-57.18	2	1.1	41.18	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-50.16	2	-	47.1	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-58.61	2	1.1	39.75	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-51.63	2	-	45.63	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-58.79	2	1.12	39.59	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2329.872	-47.79	2	-	49.47	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2366.448	-57.85	2	1.12	40.53	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-50.79	2	-	46.47	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-58.57	2	1.12	39.81	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-49.34	2	-	47.92	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-56.55	2	1.12	41.83	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.584	-45.62	2	-	51.64	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.512	-56.55	2	1.12	41.83	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-52.01	2	-	45.25	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-58.17	2	1.12	40.21	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-50.58	2	-	46.68	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-58.62	2	1.12	39.76	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2370.96	-47.92	2	-	49.34	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2347.248	-57.93	2	1.12	40.45	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-50.27	2	-	46.99	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-58.97	2	1.12	39.41	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-43.33	2	-	53.93	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-55.53	2	1.12	42.85	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.536	-43.04	2	-	54.22	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.512	-55.53	2	1.12	42.85	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-49.88	2	-	47.38	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-58.6	2	1.12	39.78	Average	54	Pass

Test Graphs

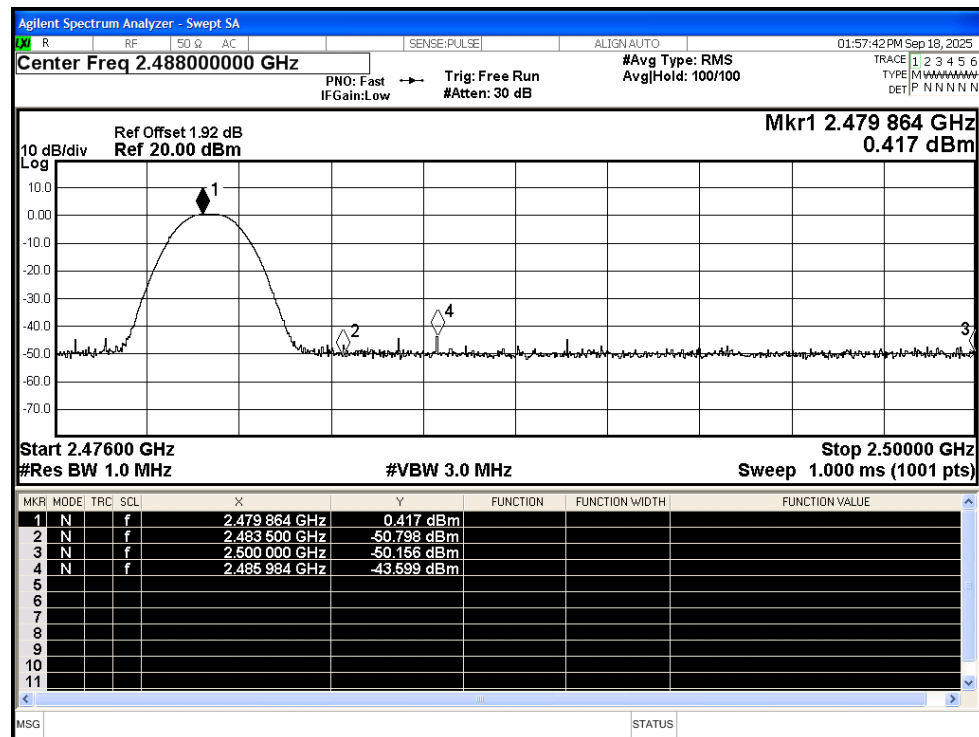
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



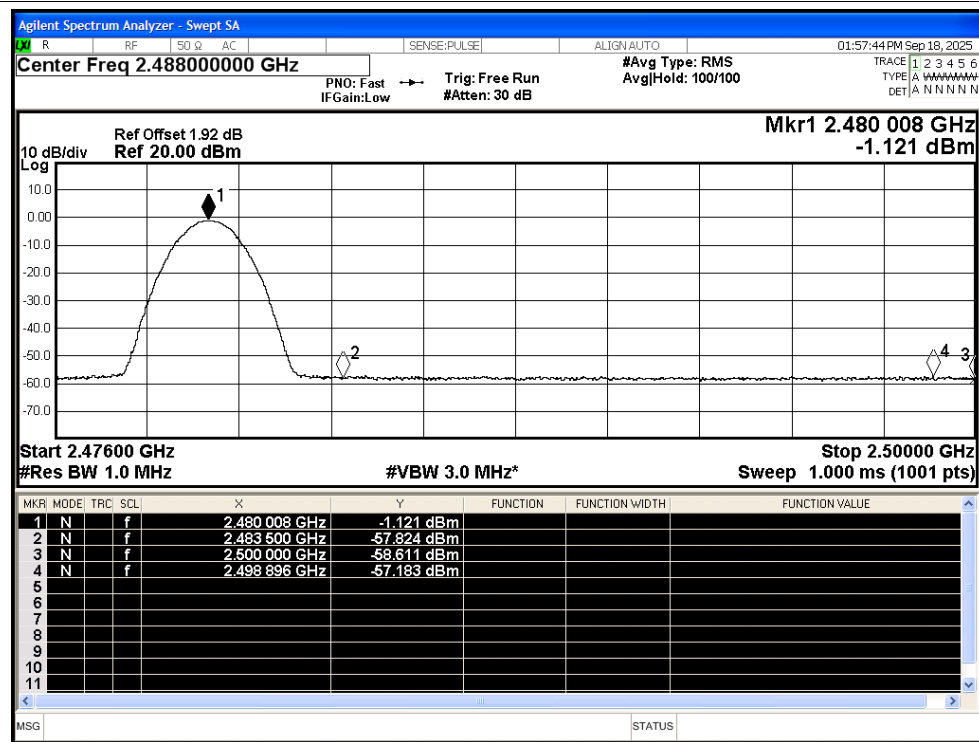
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



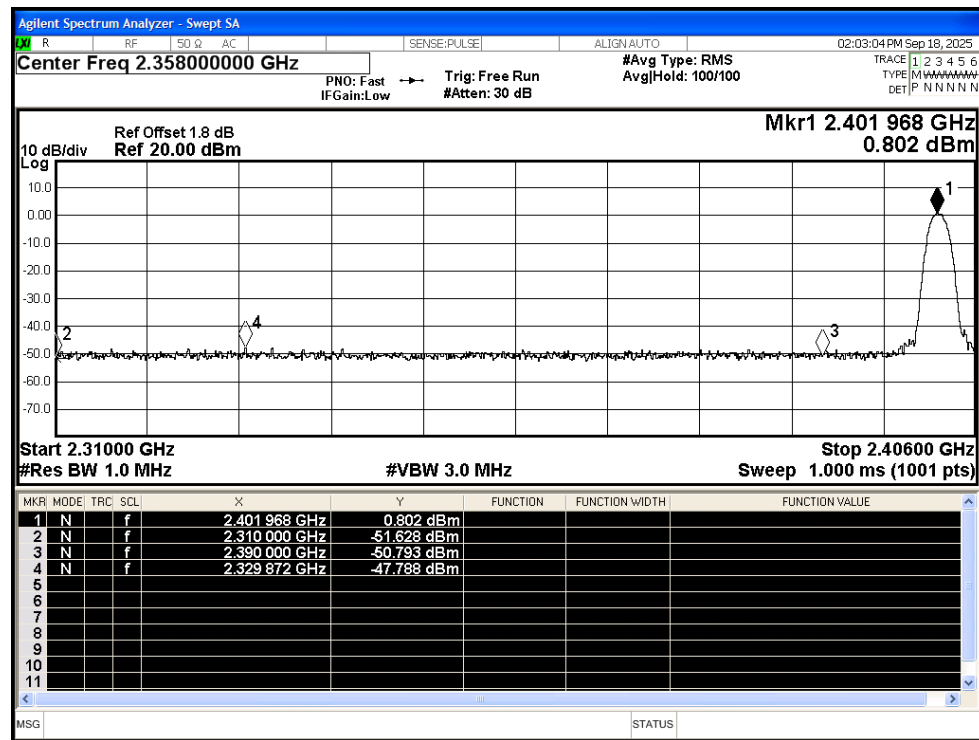
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



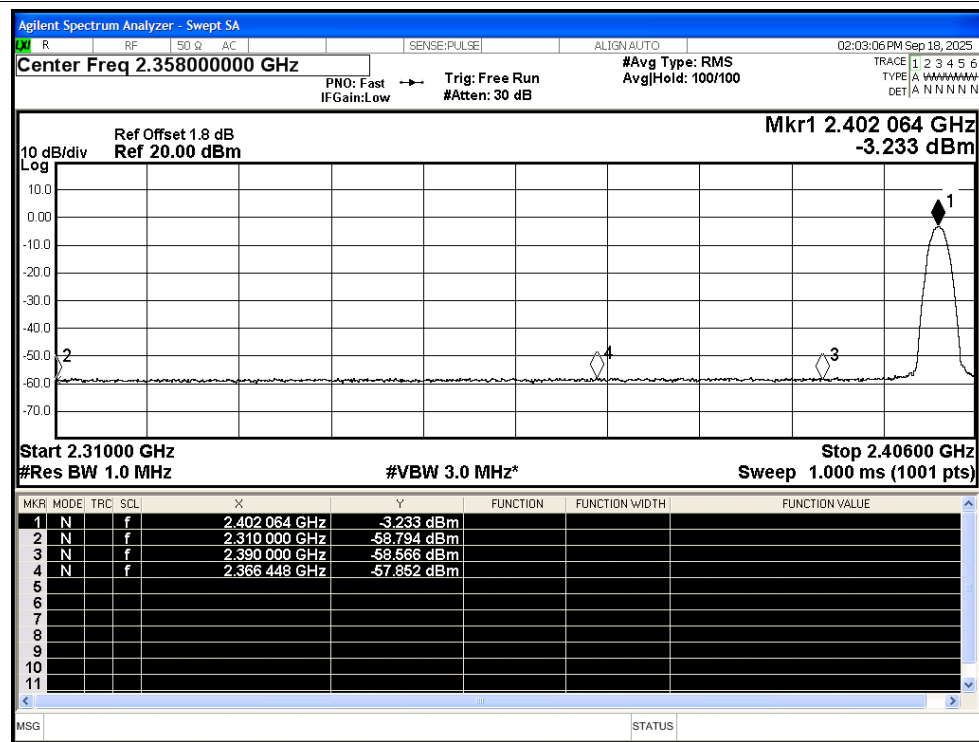
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



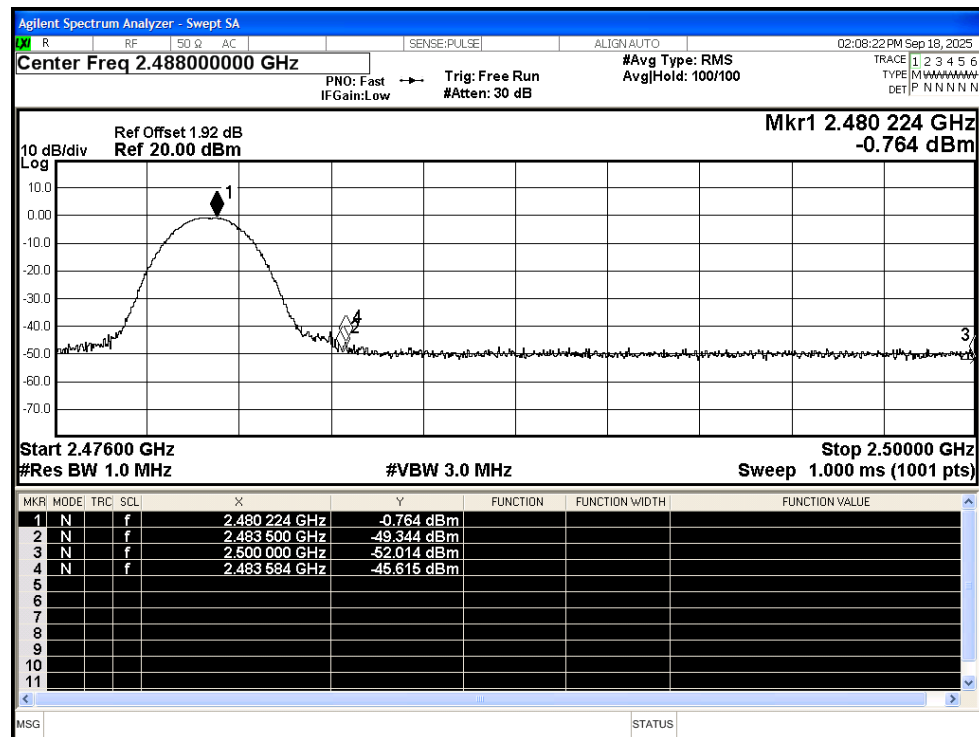
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



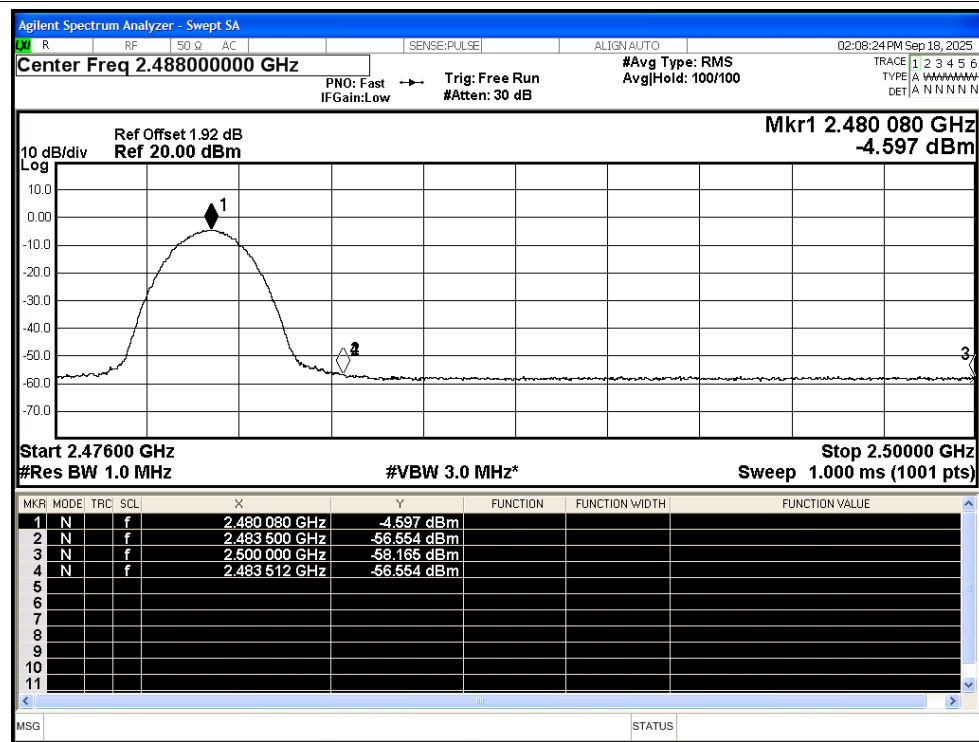
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average



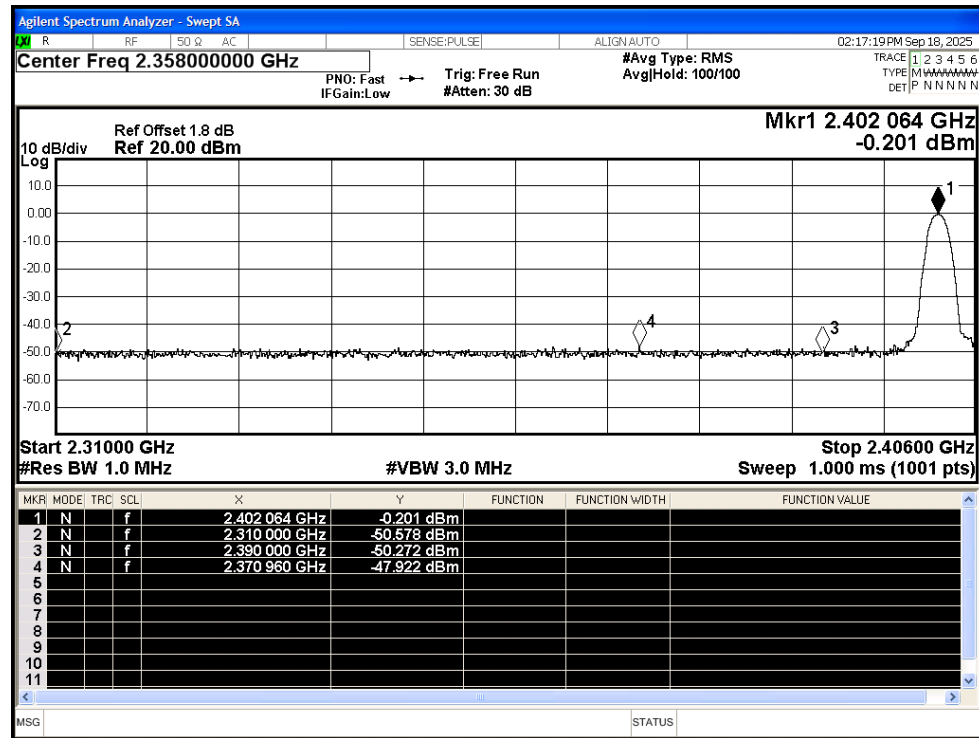
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



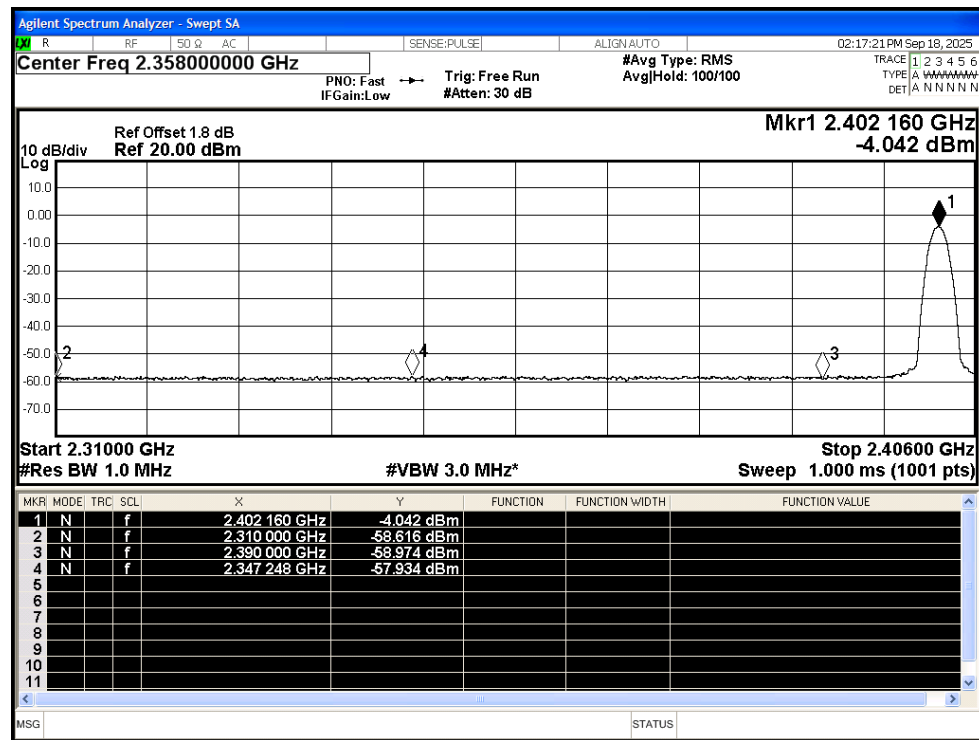
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average



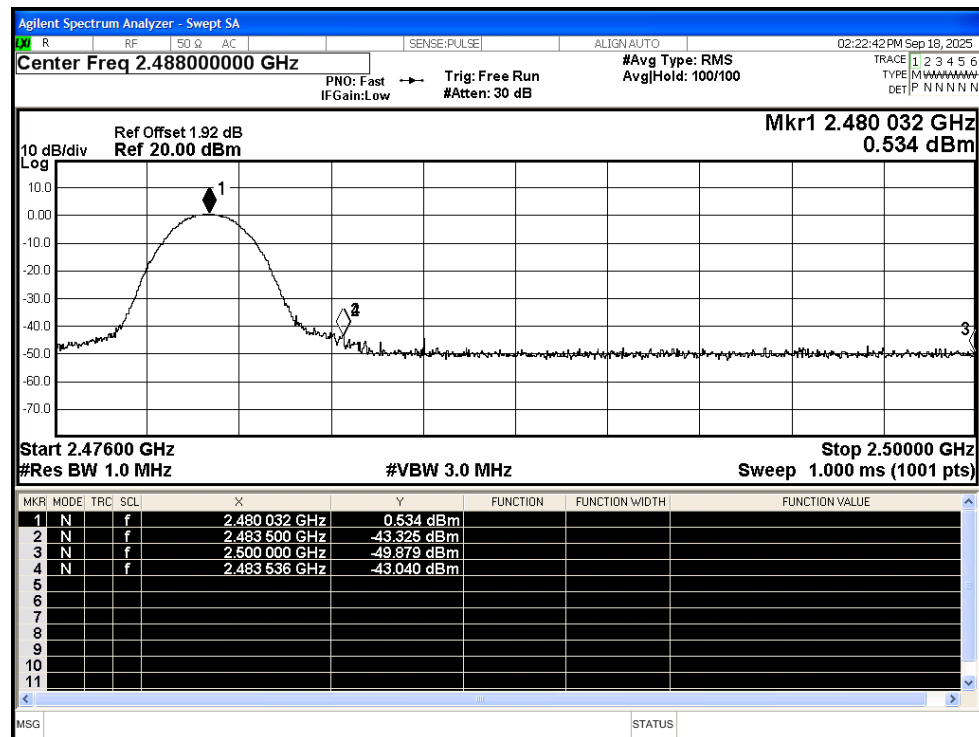
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak



Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Average



Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Average

