Appendix A

RF Test Data for BT(Conducted Measurement)

Product Name: Digital Projector

Test Model: NeoPix 550 Smart

Environmental Conditions

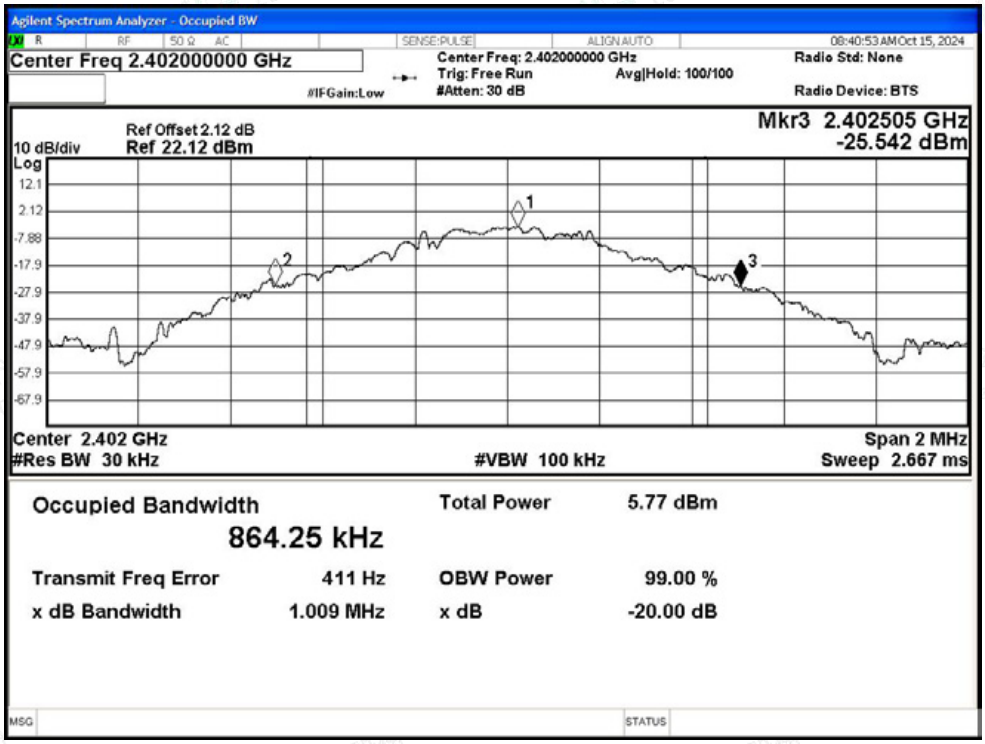
Temperature:	26.3° C
Relative Humidity:	52.9%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Luo
Supervised by:	Nick Peng

A.1 -20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant0	1.009	N/A	Pass
NVNT	1-DH5	2441	Ant0	0.956	N/A	Pass
NVNT	1-DH5	2480	Ant0	0.959	N/A	Pass
NVNT	2-DH5	2402	Ant0	1.288	N/A	Pass
NVNT	2-DH5	2441	Ant0	1.275	N/A	Pass
NVNT	2-DH5	2480	Ant0	1.281	N/A	Pass
NVNT	3-DH5	2402	Ant0	1.318	N/A	Pass
NVNT	3-DH5	2441	Ant0	1.321	N/A	Pass
NVNT	3-DH5	2480	Ant0	1.289	N/A	Pass

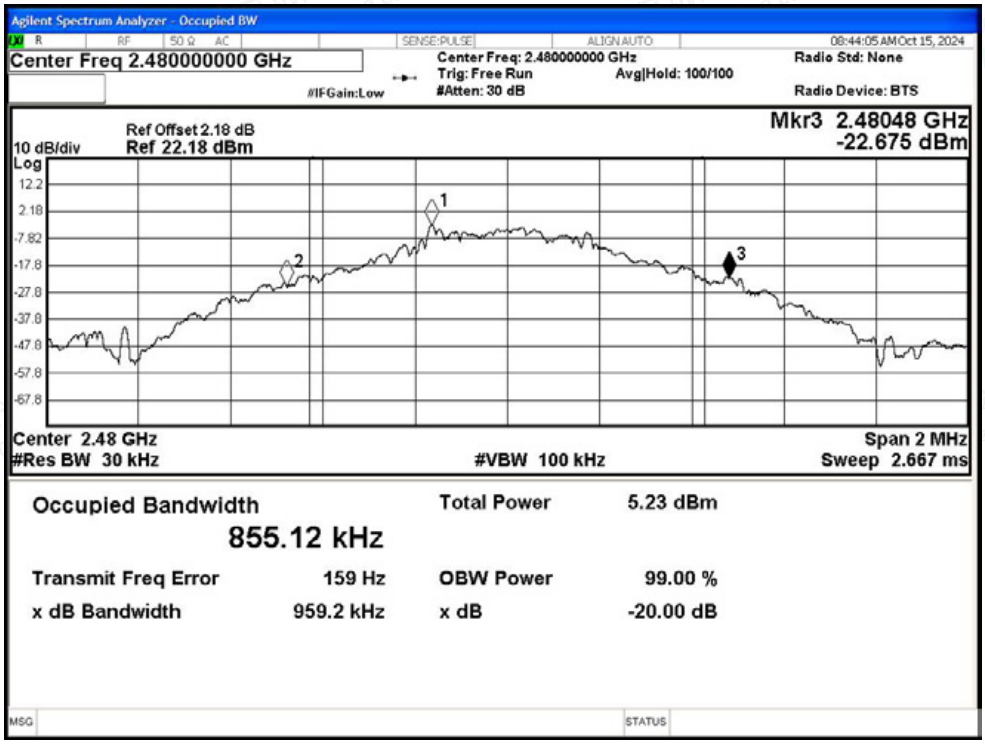
Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant0

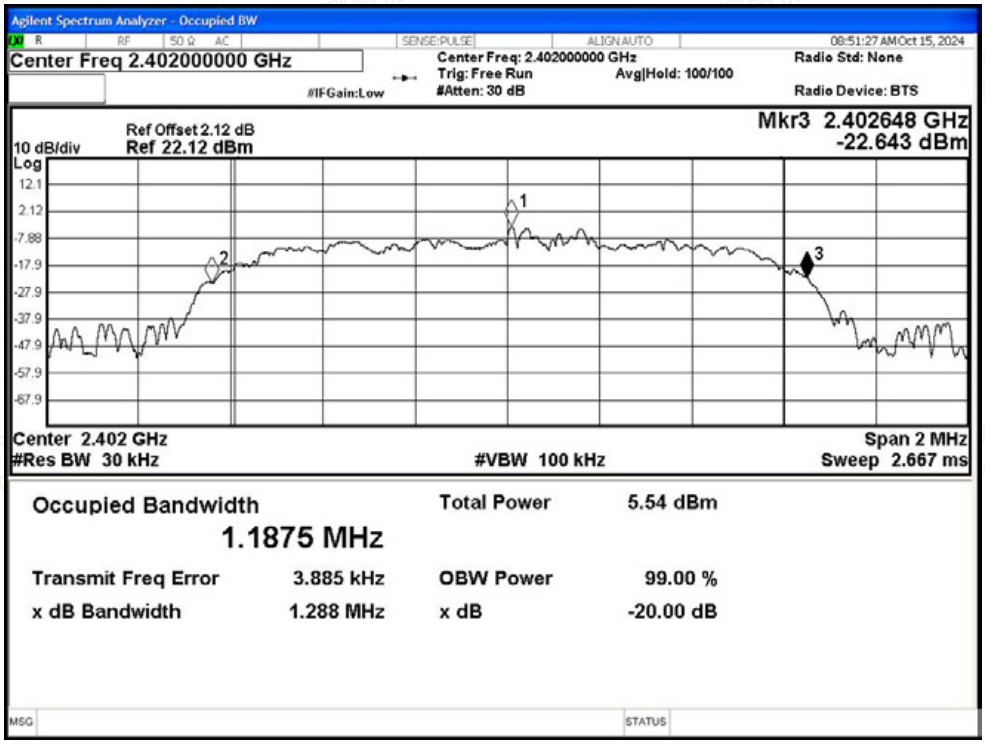


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant0

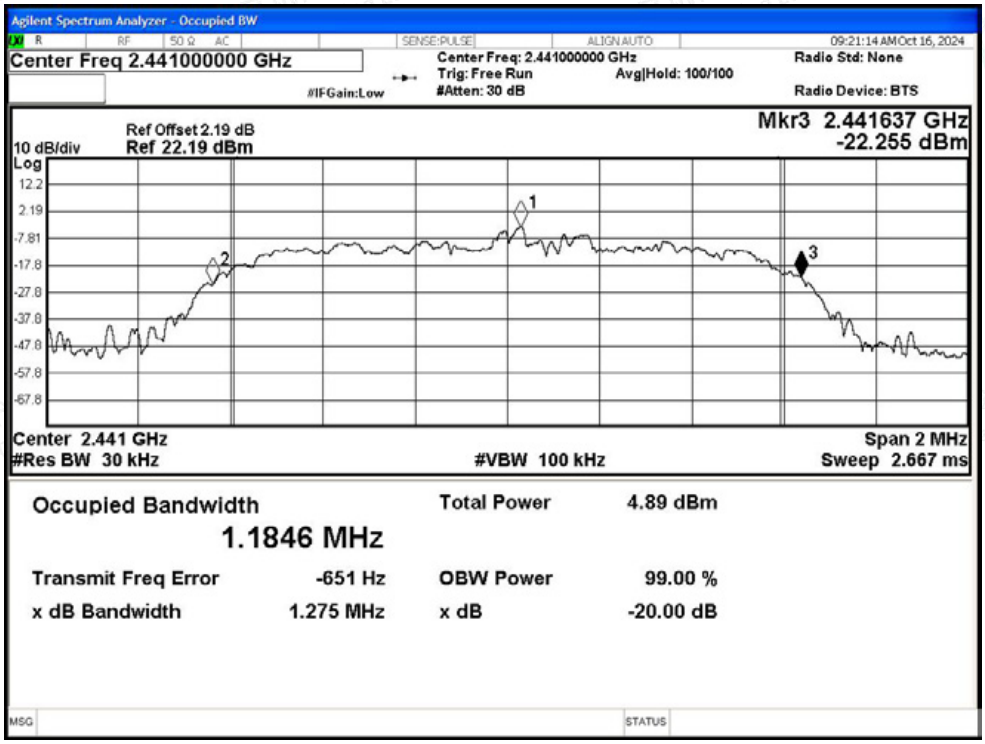
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant0



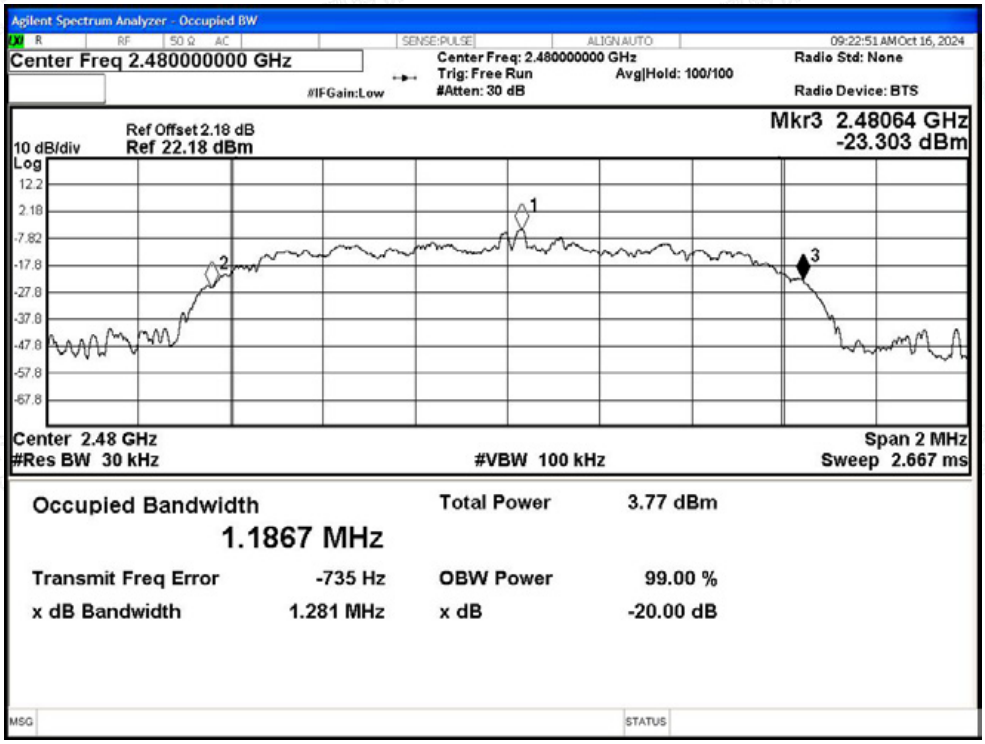
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant0



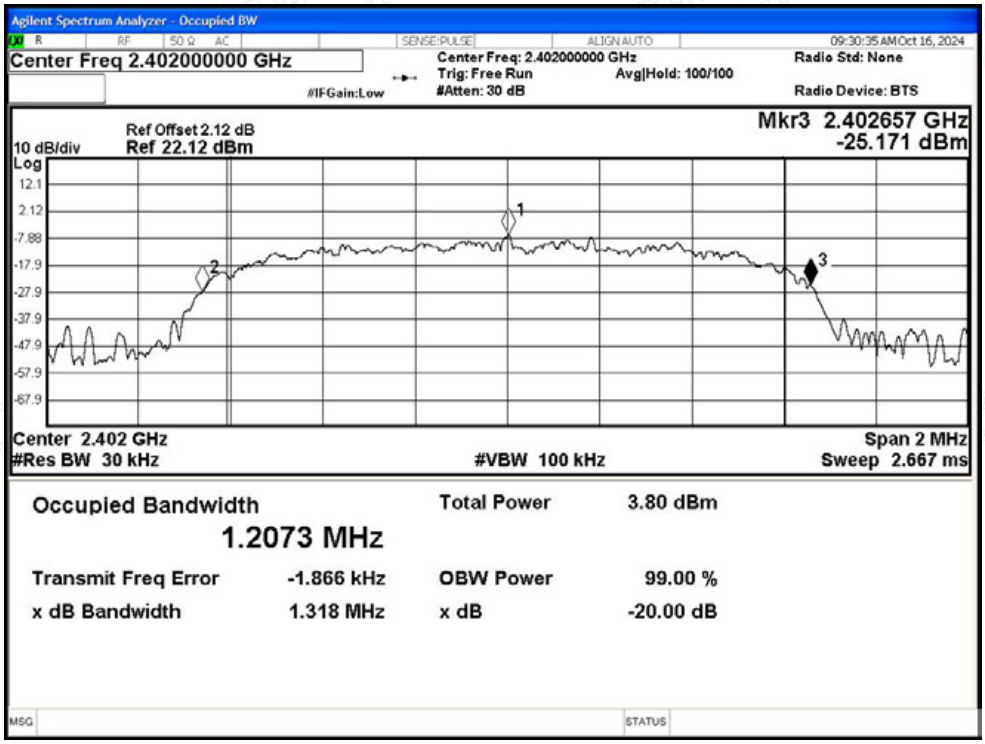
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant0



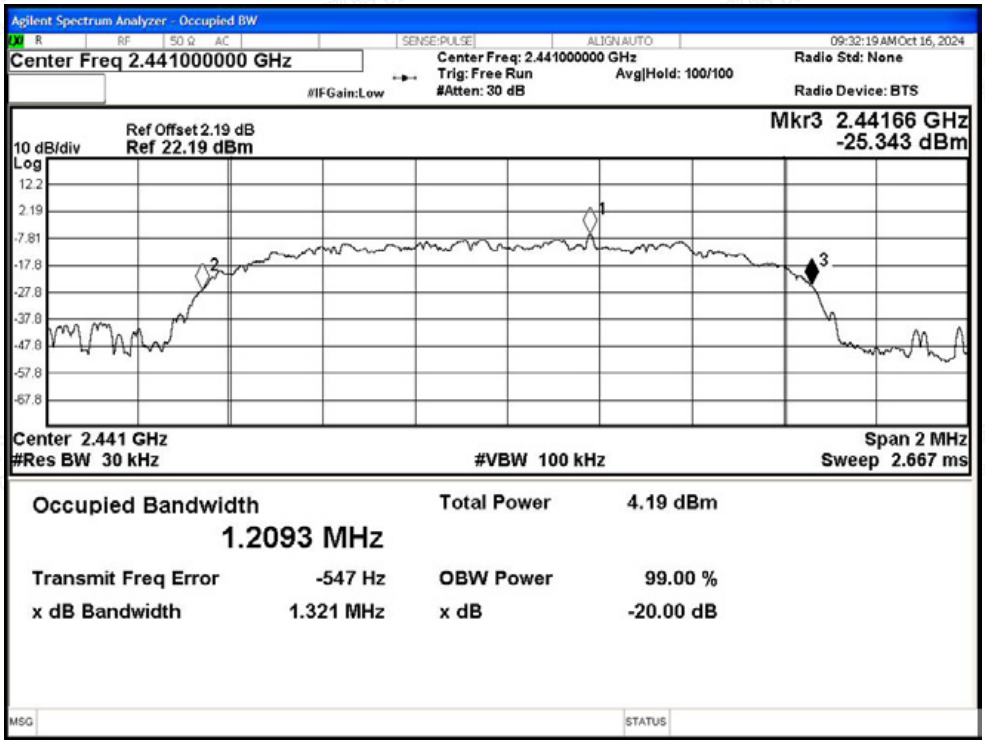
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant0



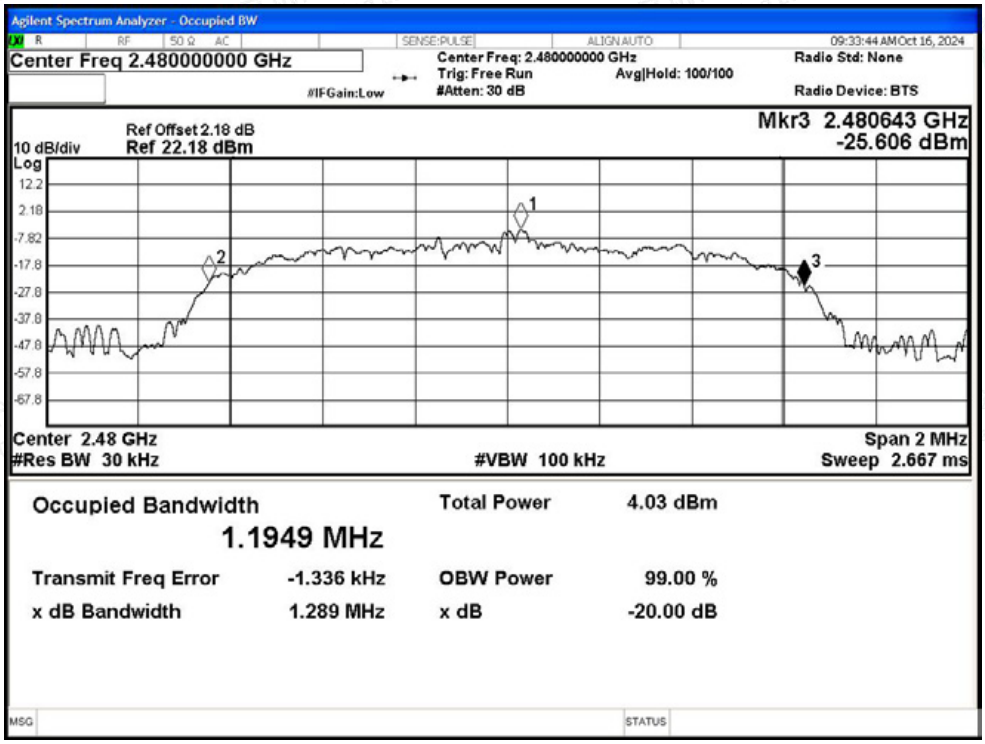
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant0



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant0



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant0

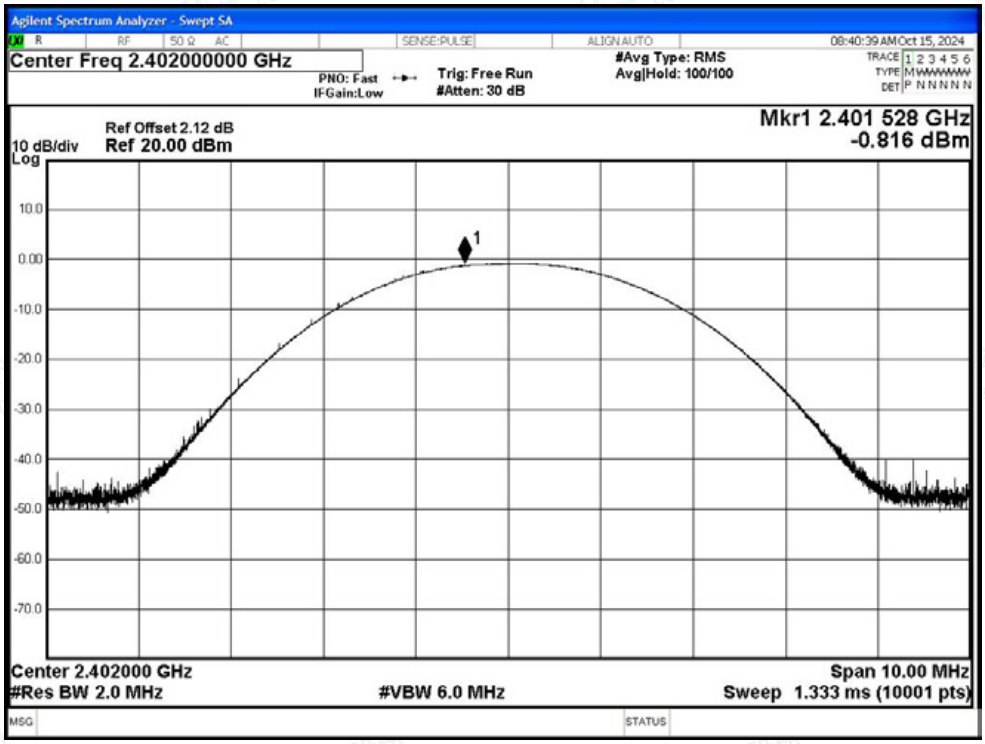


A.2 Maximum Peak Conducted Output Power

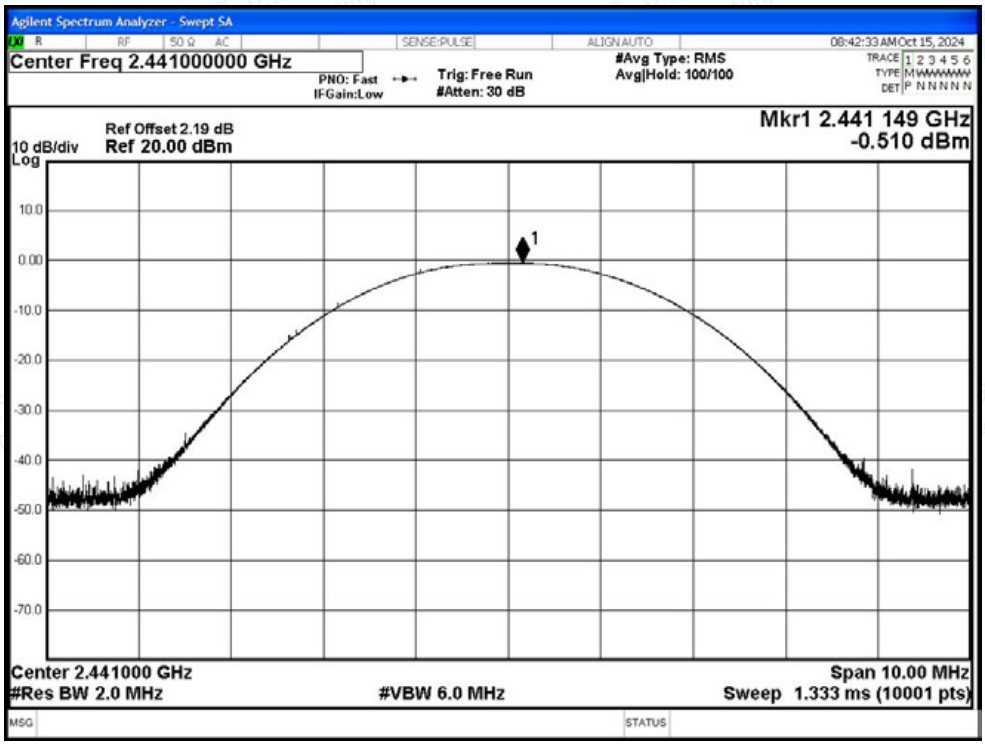
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant0	-0.82	21	Pass
NVNT	1-DH5	2441	Ant0	-0.51	21	Pass
NVNT	1-DH5	2480	Ant0	0.9	21	Pass
NVNT	2-DH5	2402	Ant0	1.16	21	Pass
NVNT	2-DH5	2441	Ant0	0.41	21	Pass
NVNT	2-DH5	2480	Ant0	-0.48	21	Pass
NVNT	3-DH5	2402	Ant0	0.39	21	Pass
NVNT	3-DH5	2441	Ant0	0.8	21	Pass
NVNT	3-DH5	2480	Ant0	-0.15	21	Pass

Test Graphs

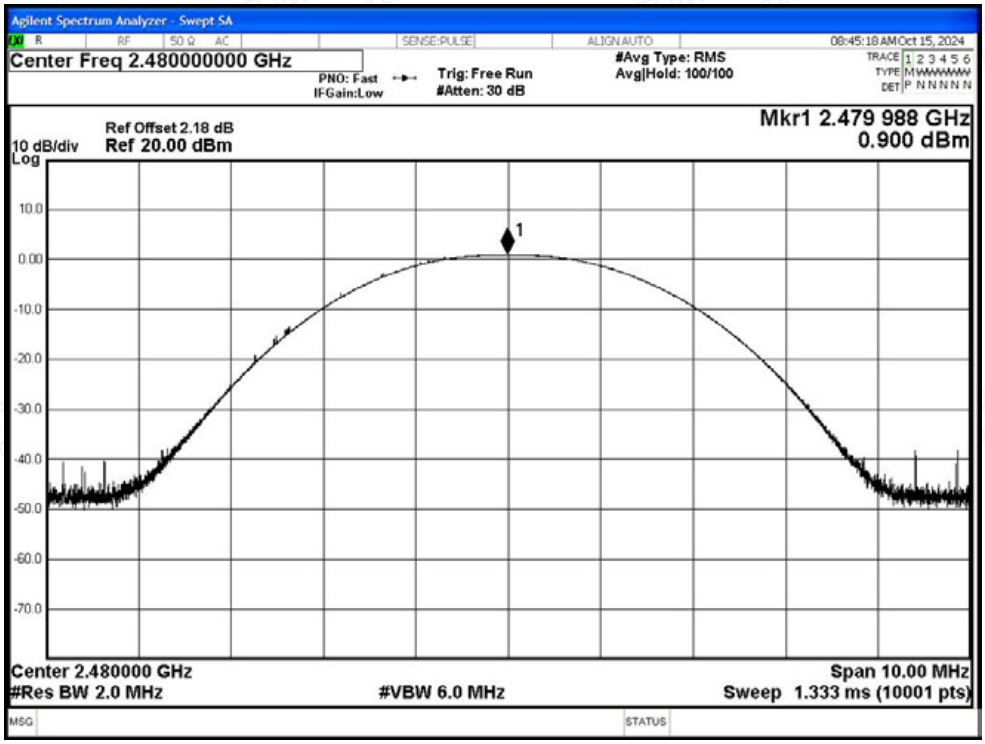
Power NVNT 1-DH5 2402MHz Ant0



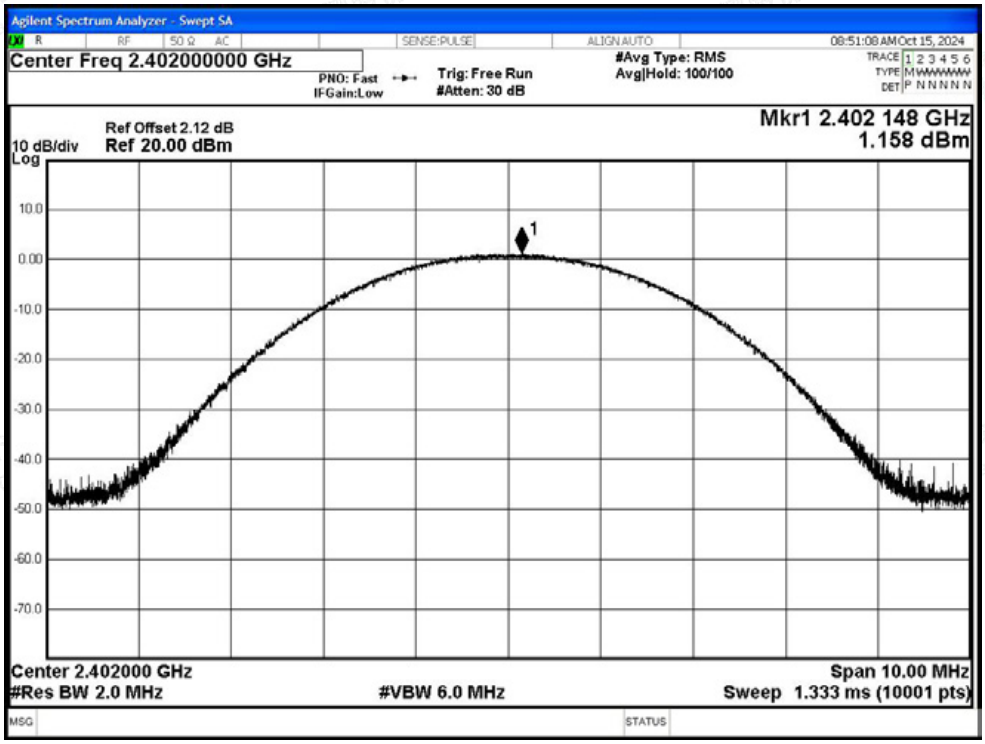
Power NVNT 1-DH5 2441MHz Ant0



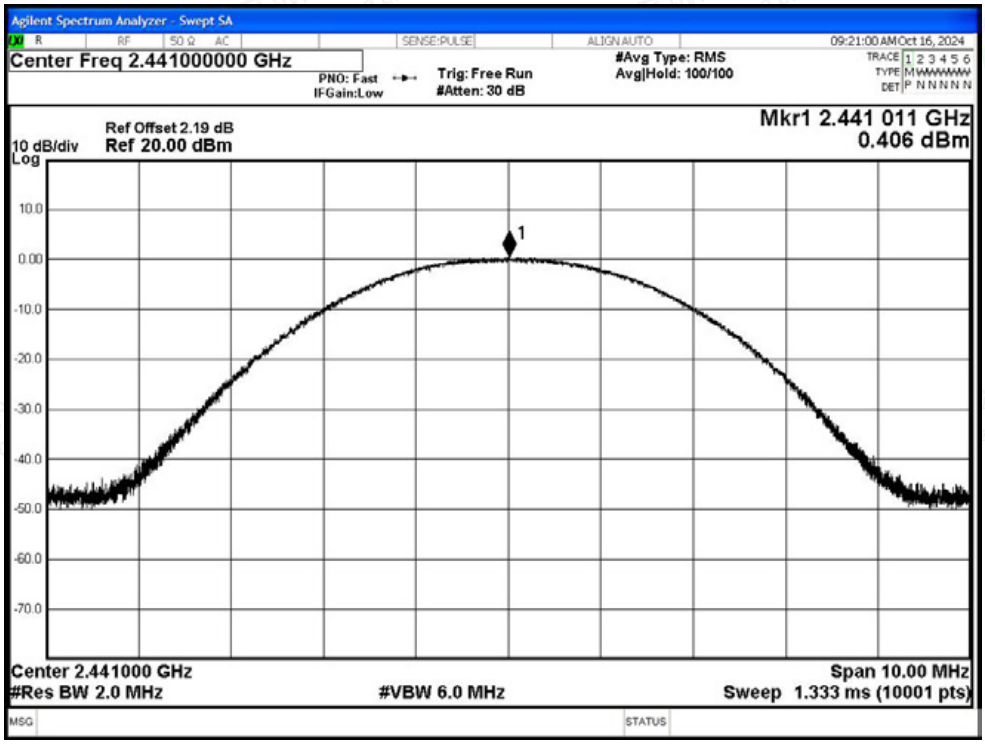
Power NVNT 1-DH5 2480MHz Ant0



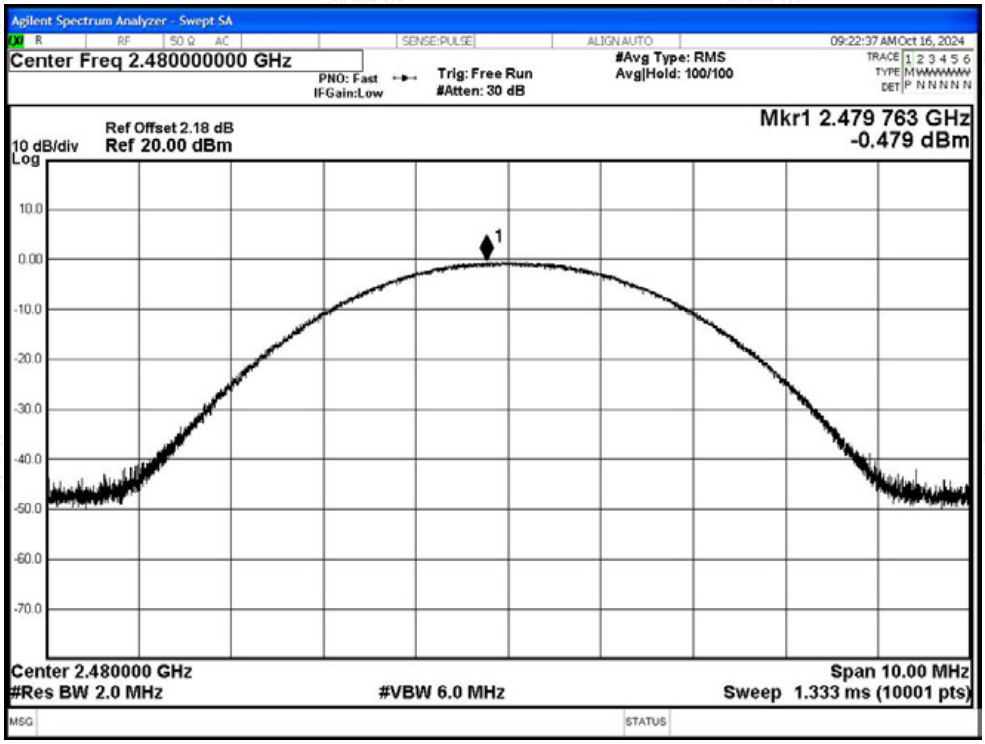
Power NVNT 2-DH5 2402MHz Ant0



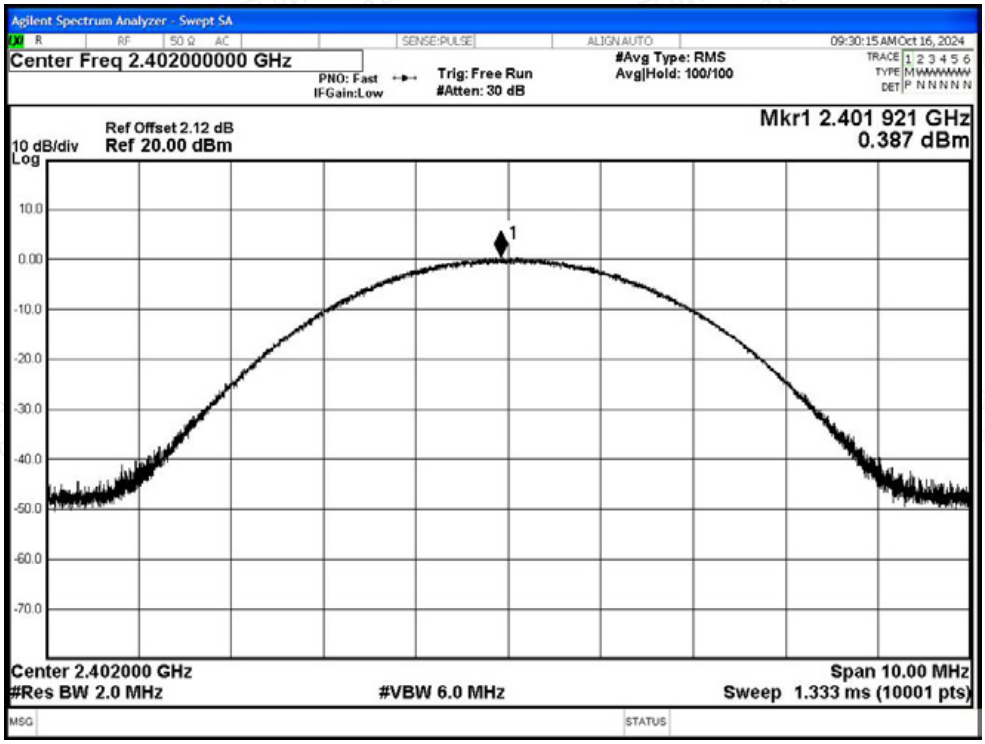
Power NVNT 2-DH5 2441MHz Ant0



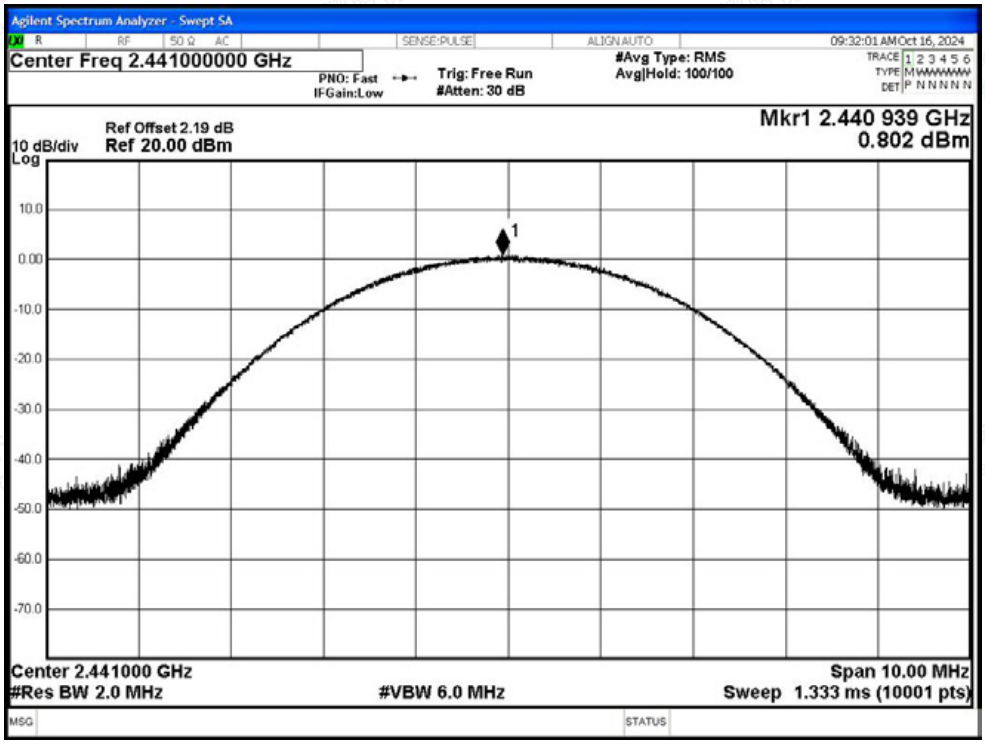
Power NVNT 2-DH5 2480MHz Ant0



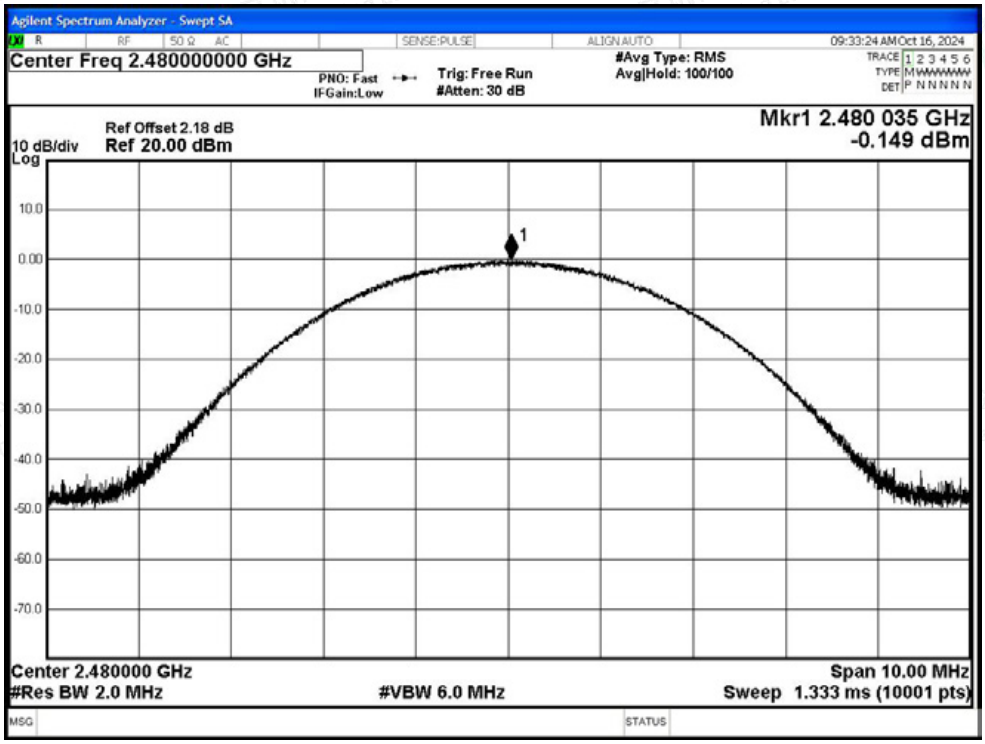
Power NVNT 3-DH5 2402MHz Ant0



Power NVNT 3-DH5 2441MHz Ant0



Power NVNT 3-DH5 2480MHz Ant0

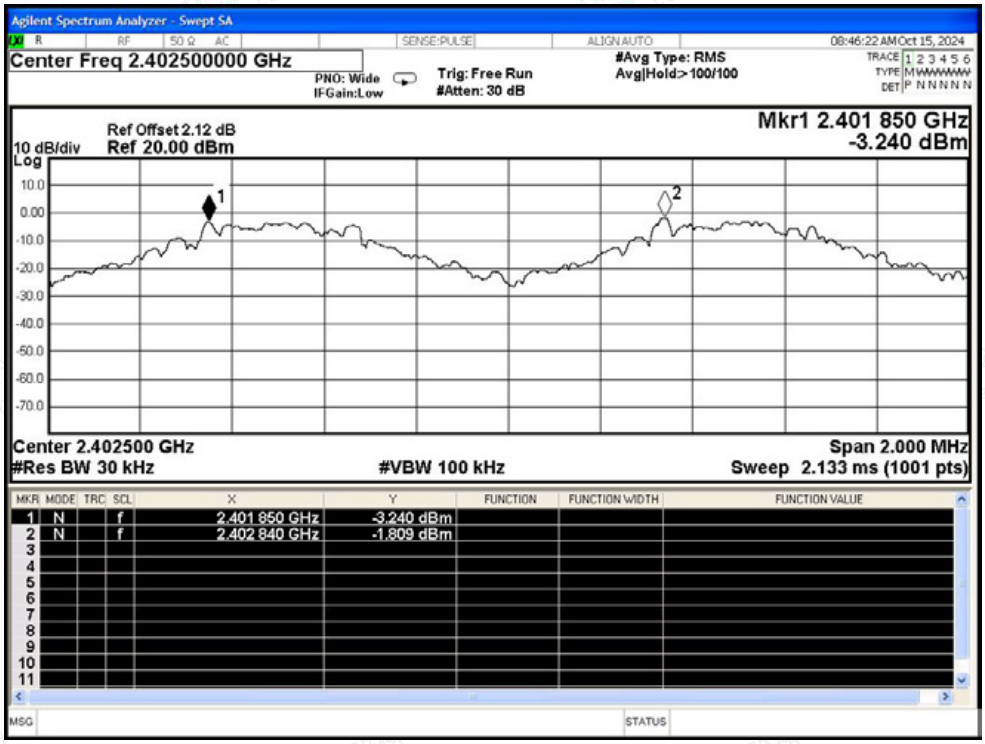


A.3 Carrier Frequencies Separation

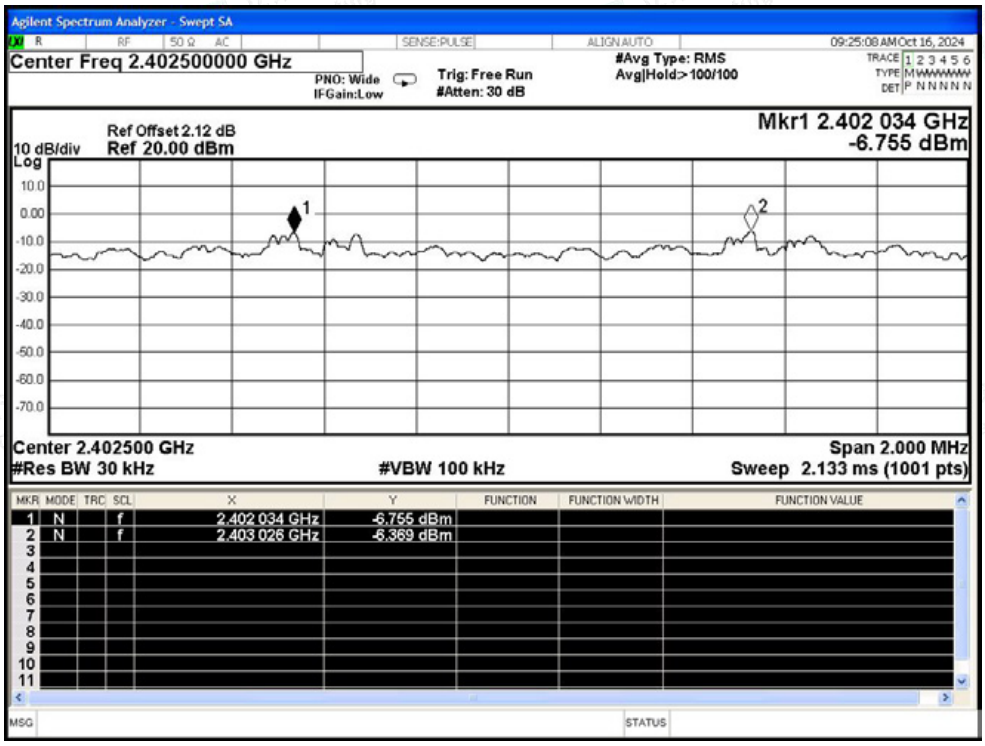
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant0	2401.85	2402.84	0.99	0.673	Pass
NVNT	2-DH5	Ant0	2402.034	2403.026	0.992	0.859	Pass
NVNT	3-DH5	Ant0	2402.004	2403.006	1.002	0.881	Pass

Test Graphs

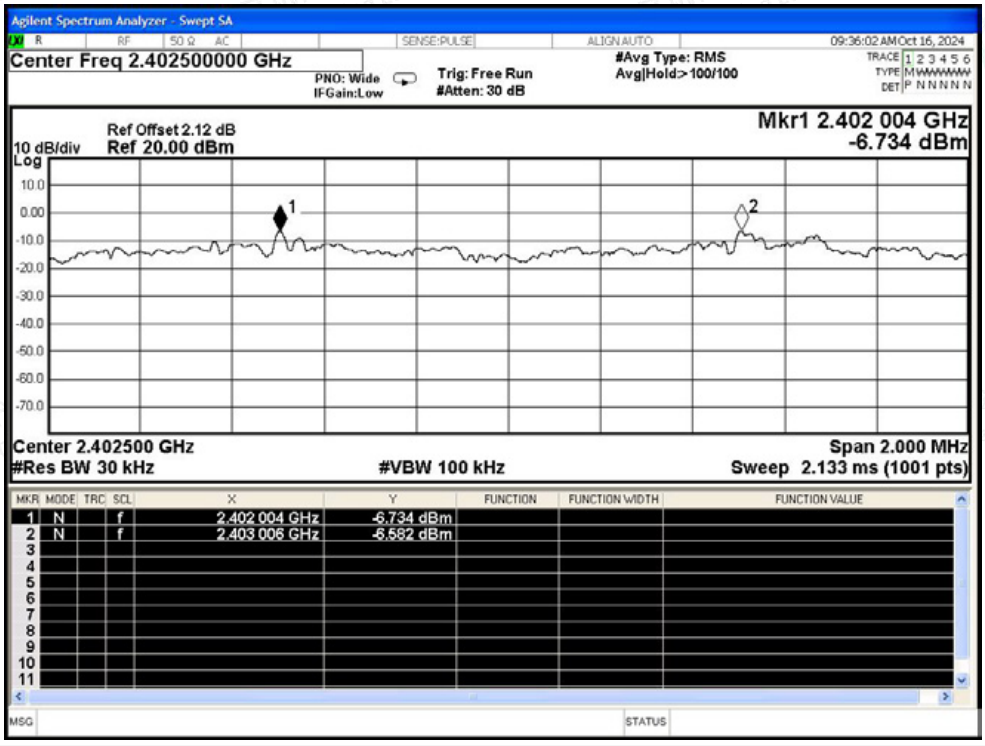
CFS NVNT 1-DH5 2402MHz Ant0



CFS NVNT 2-DH5 2402MHz Ant0



CFS NVNT 3-DH5 2402MHz Ant0

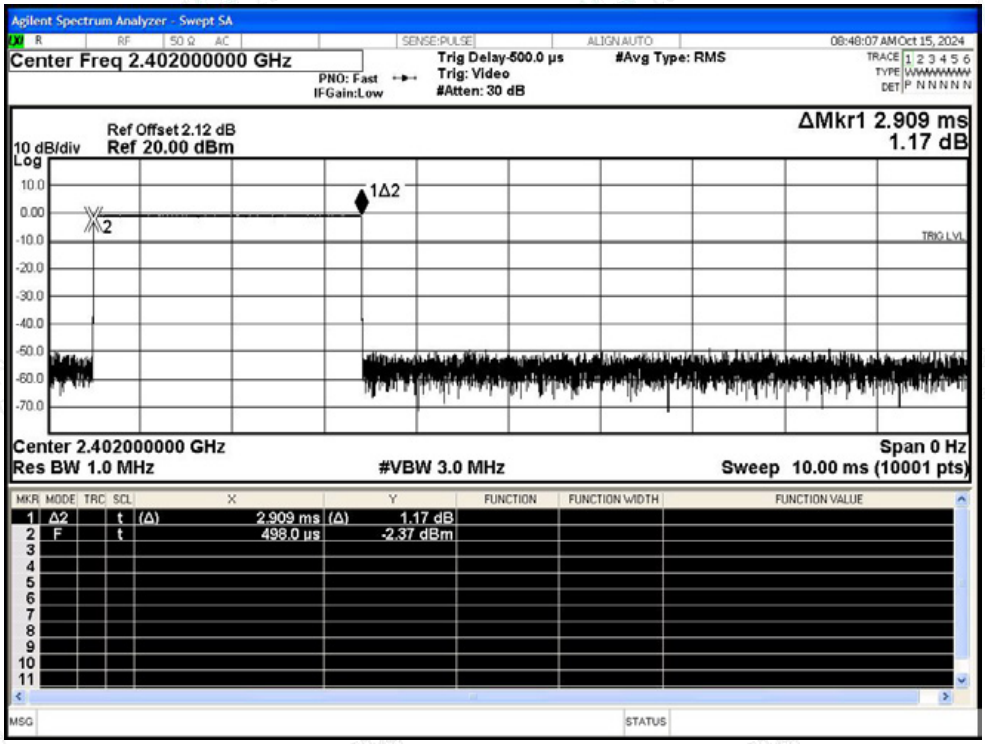


A.4 Dwell Time

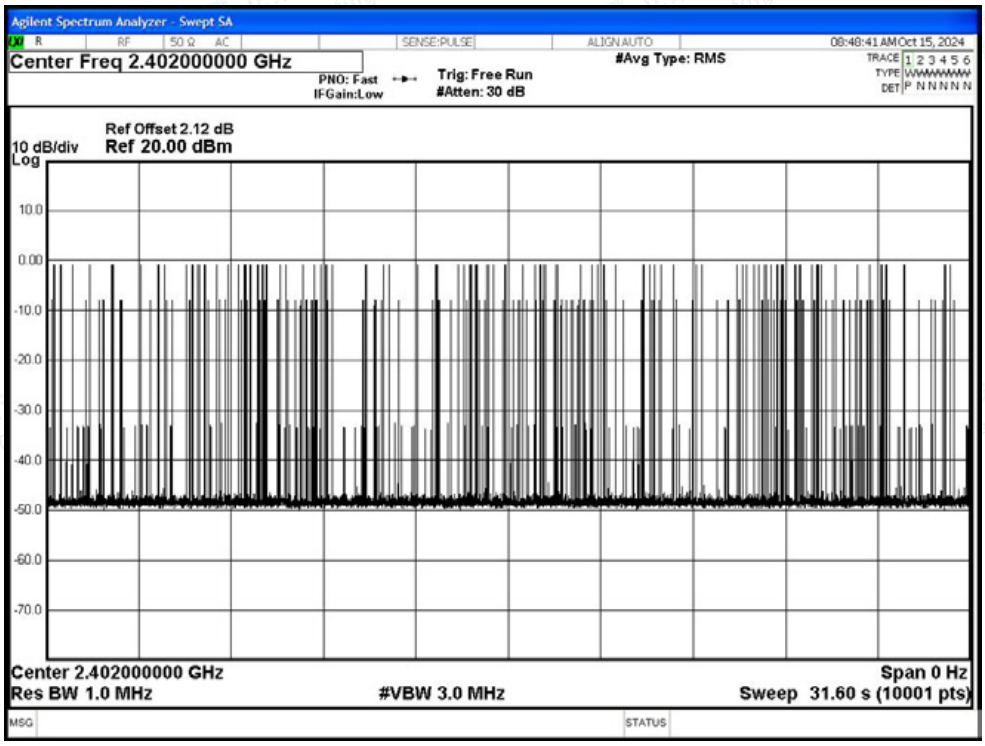
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant0	2.909	290.9	100	31600	400	Pass
NVNT	2-DH5	2402	Ant0	2.898	336.168	116	31600	400	Pass
NVNT	3-DH5	2402	Ant0	2.897	309.979	107	31600	400	Pass

Test Graphs

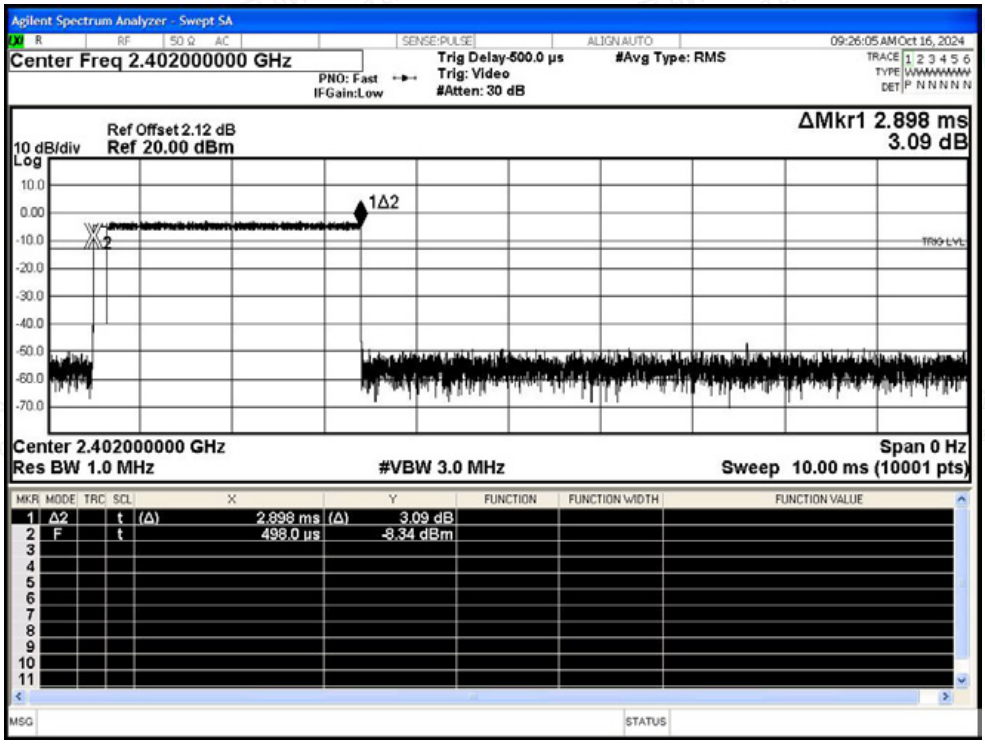
Dwell NVNT 1-DH5 2402MHz Ant0 One Burst



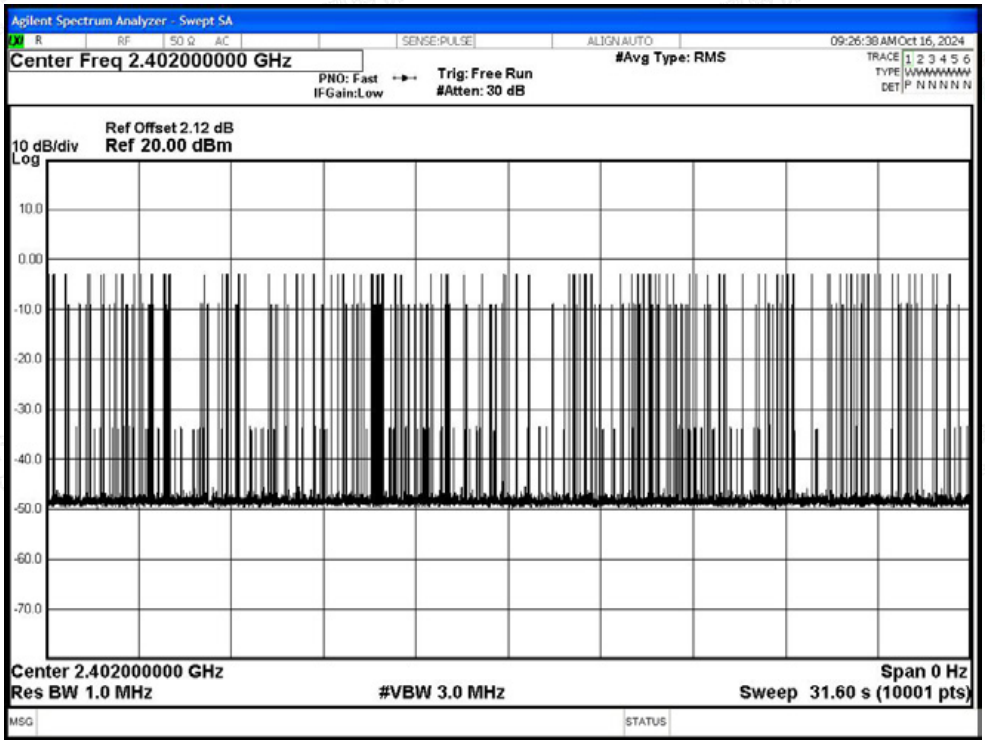
Dwell NVNT 1-DH5 2402MHz Ant0 Accumulated



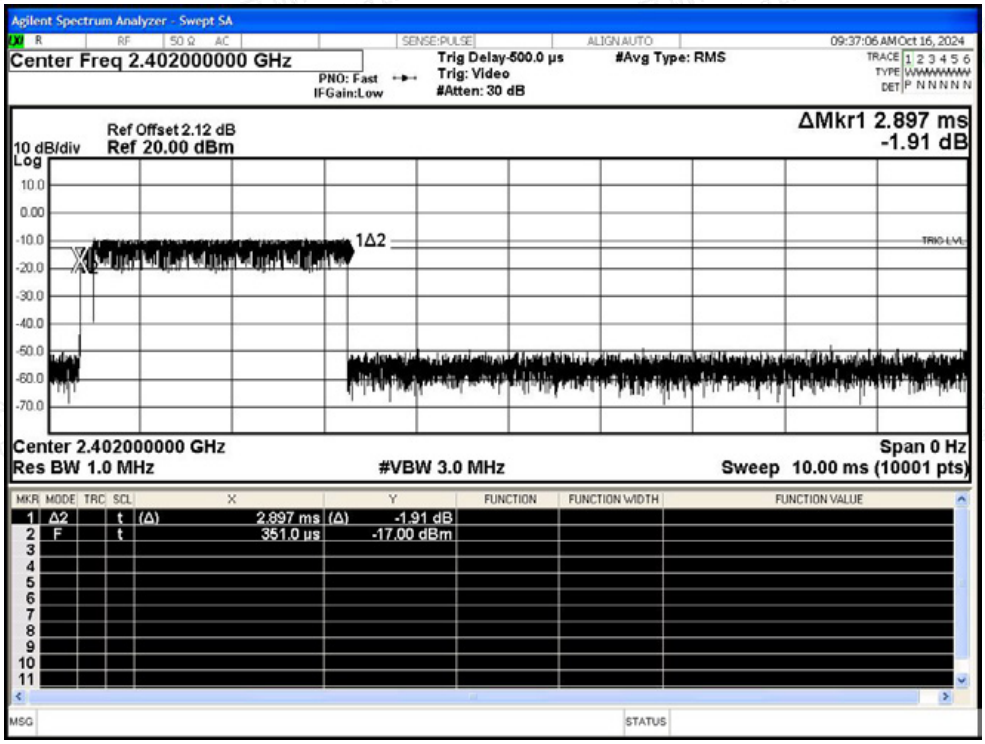
Dwell NVNT 2-DH5 2402MHz Ant0 One Burst



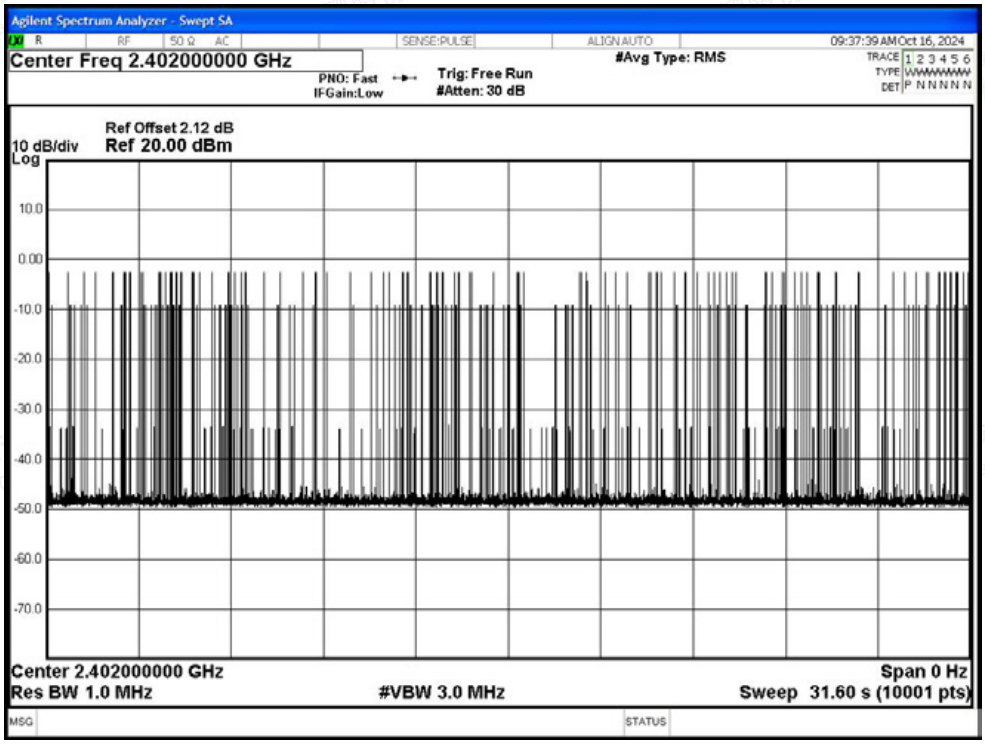
Dwell NVNT 2-DH5 2402MHz Ant0 Accumulated



Dwell NVNT 3-DH5 2402MHz Ant0 One Burst



Dwell NVNT 3-DH5 2402MHz Ant0 Accumulated

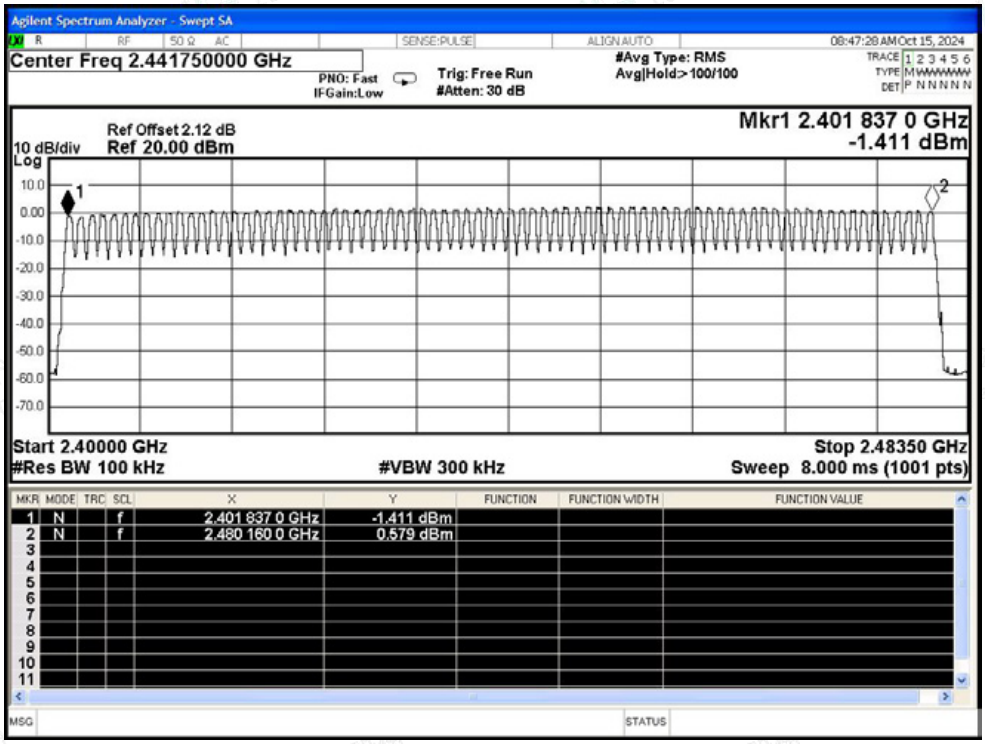


A.5 Number of Hopping Channel

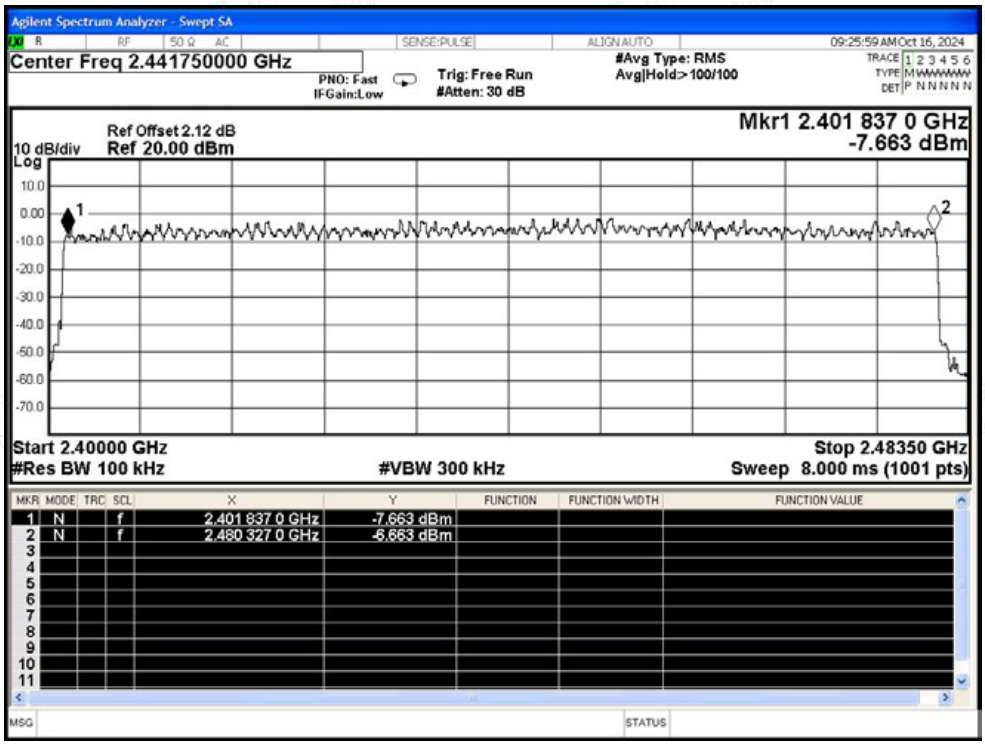
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant0	79	15	Pass
NVNT	2-DH5	Ant0	79	15	Pass
NVNT	3-DH5	Ant0	79	15	Pass

Test Graphs

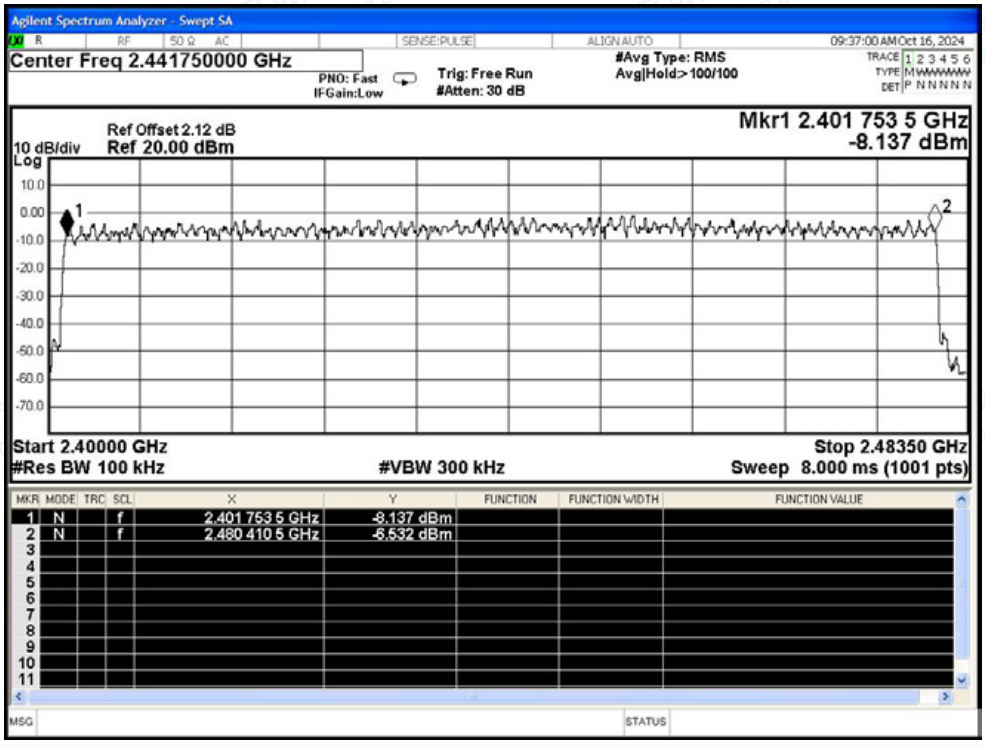
Hopping No. NVNT 1-DH5 2402MHz Ant0



Hopping No. NVNT 2-DH5 2402MHz Ant0



Hopping No. NVNT 3-DH5 2402MHz Ant0

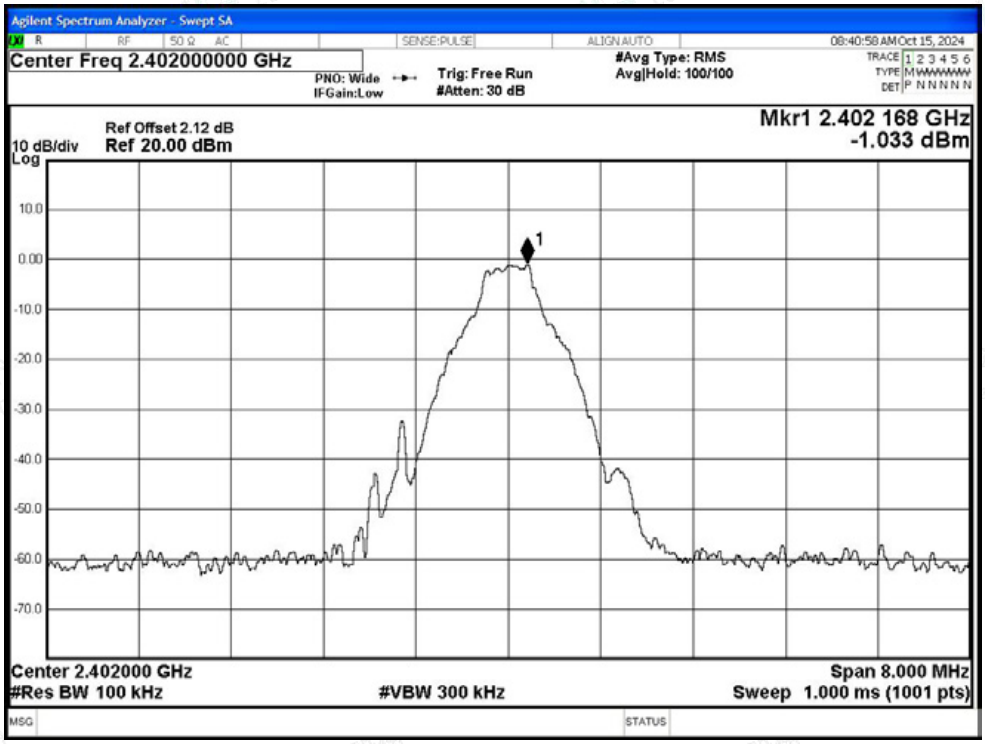


A.6 Band Edge

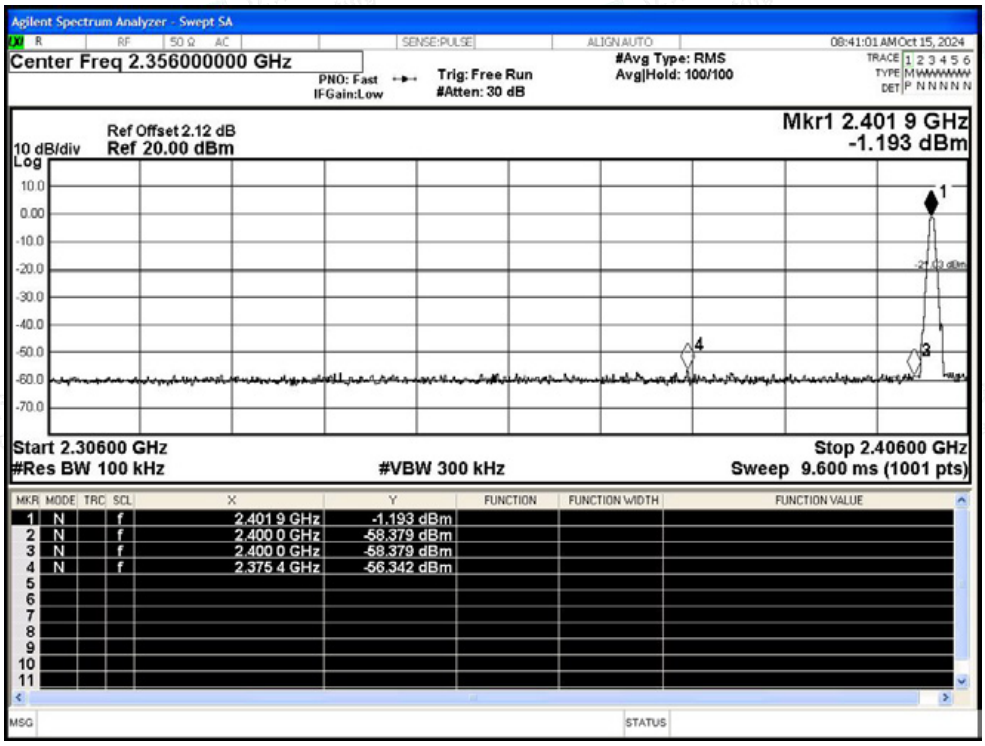
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant0	No-Hopping	-55.31	-20	Pass
NVNT	1-DH5	2480	Ant0	No-Hopping	-55.1	-20	Pass
NVNT	2-DH5	2402	Ant0	No-Hopping	-52.33	-20	Pass
NVNT	2-DH5	2480	Ant0	No-Hopping	-53.69	-20	Pass
NVNT	3-DH5	2402	Ant0	No-Hopping	-51.54	-20	Pass
NVNT	3-DH5	2480	Ant0	No-Hopping	-52.02	-20	Pass

Test Graphs

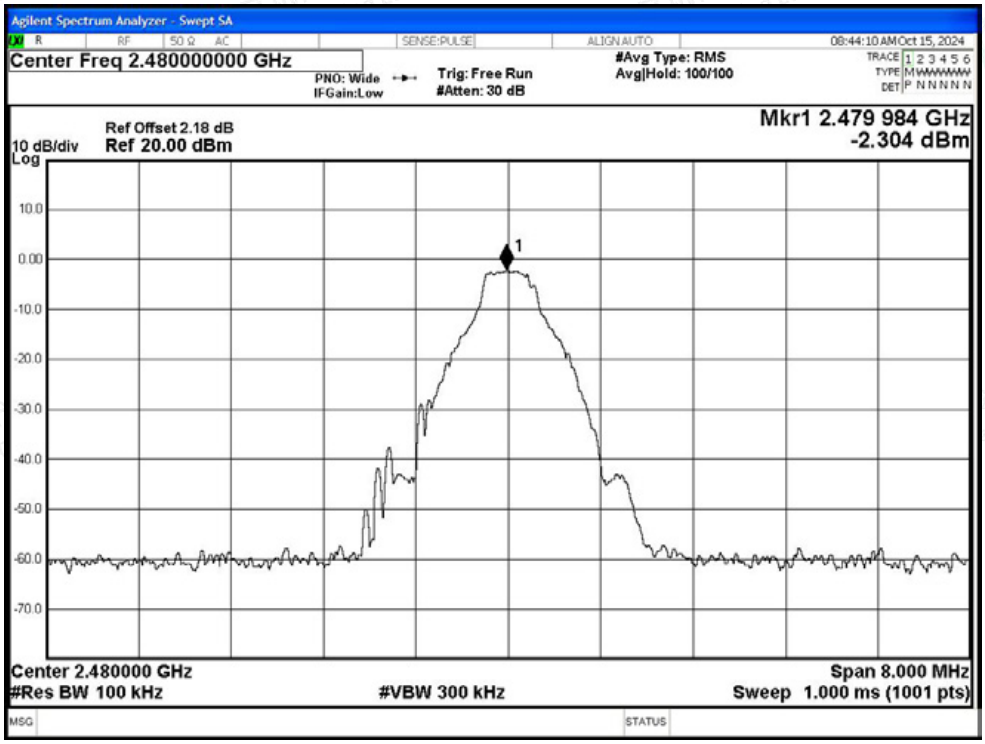
Band Edge NVNT 1-DH5 2402MHz Ant0 No-Hopping Ref



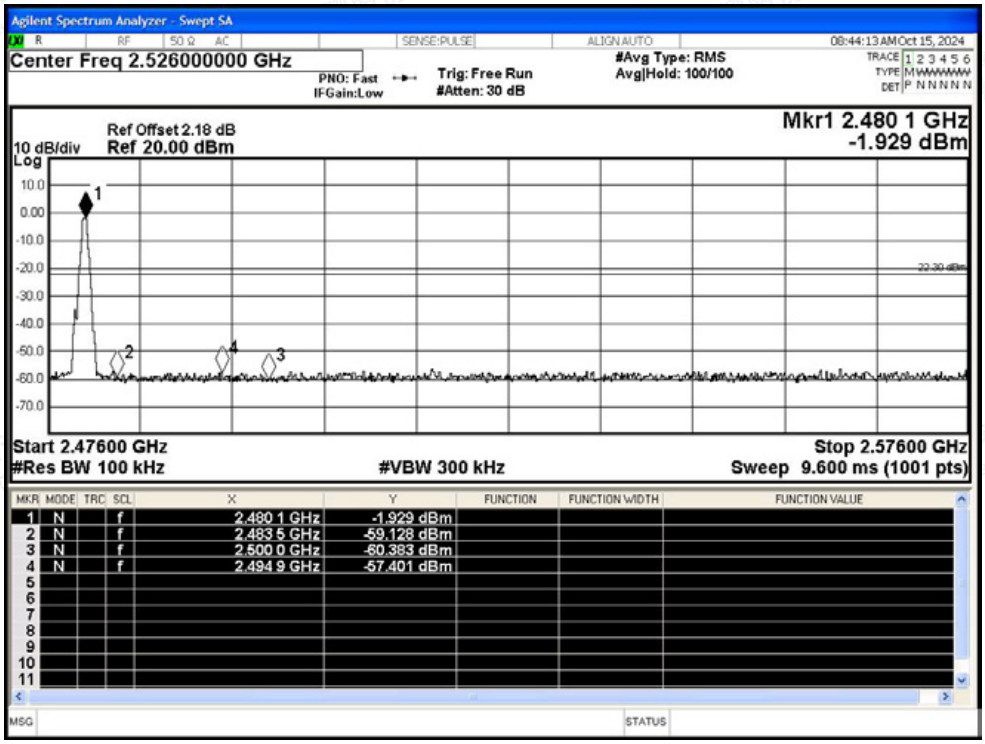
Band Edge NVNT 1-DH5 2402MHz Ant0 No-Hopping Emission



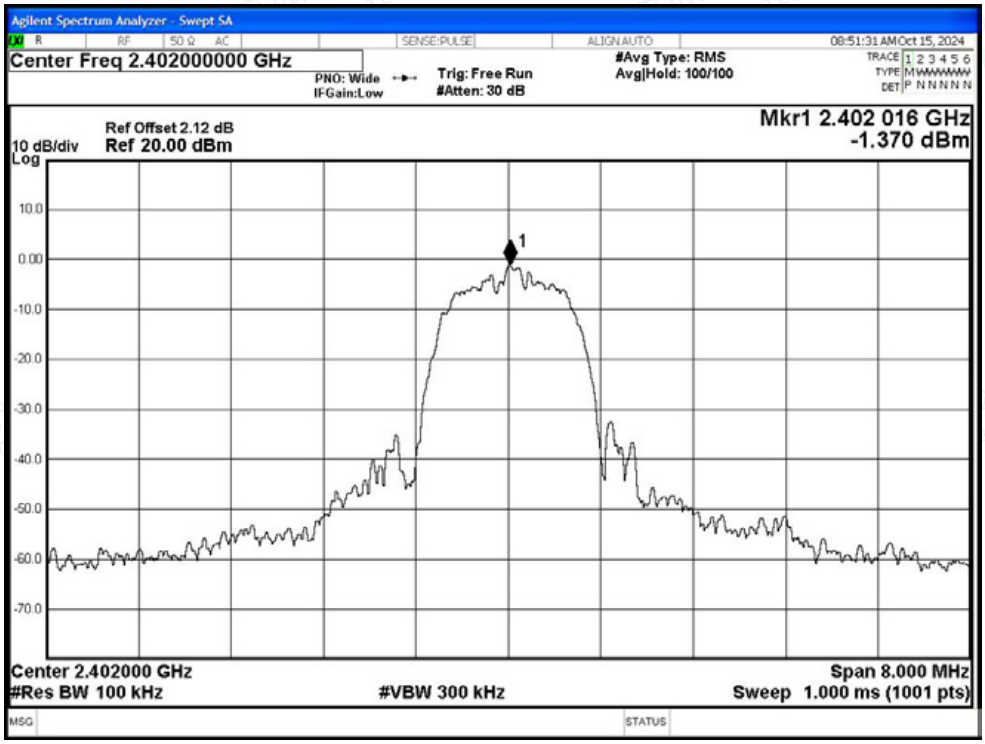
Band Edge NVNT 1-DH5 2480MHz Ant0 No-Hopping Ref



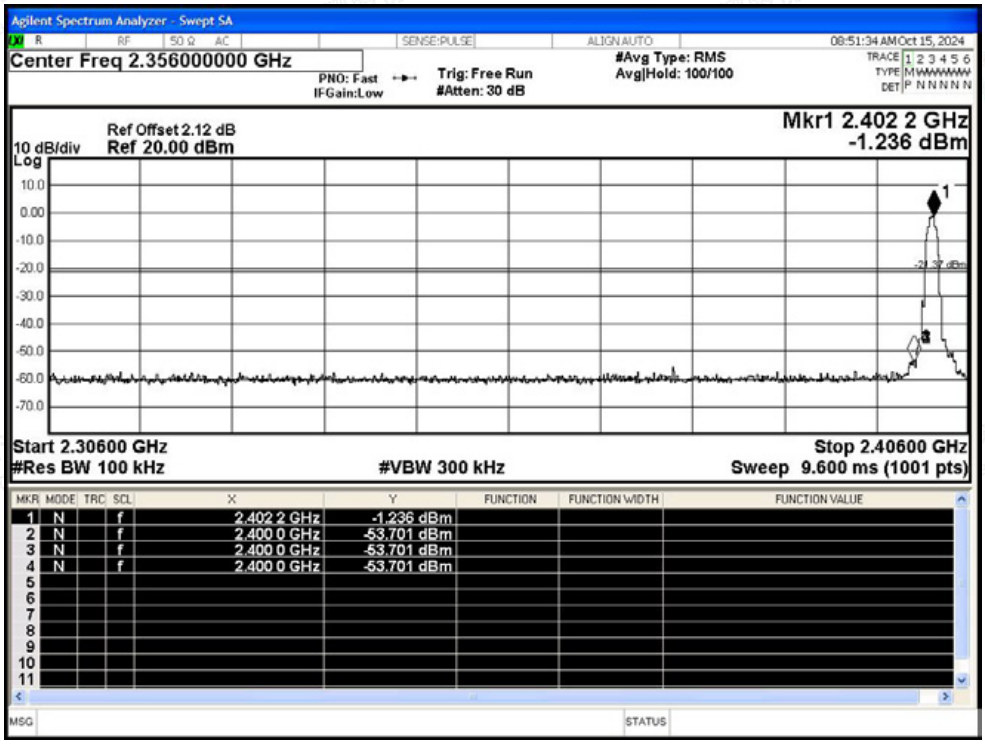
Band Edge NVNT 1-DH5 2480MHz Ant0 No-Hopping Emission



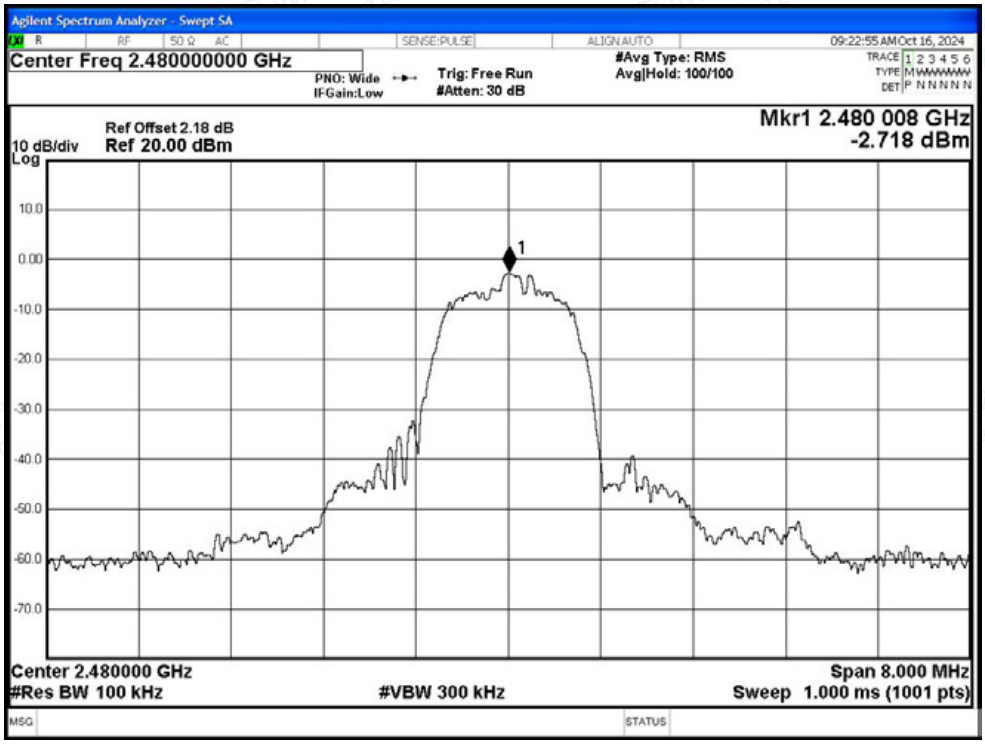
Band Edge NVNT 2-DH5 2402MHz Ant0 No-Hopping Ref



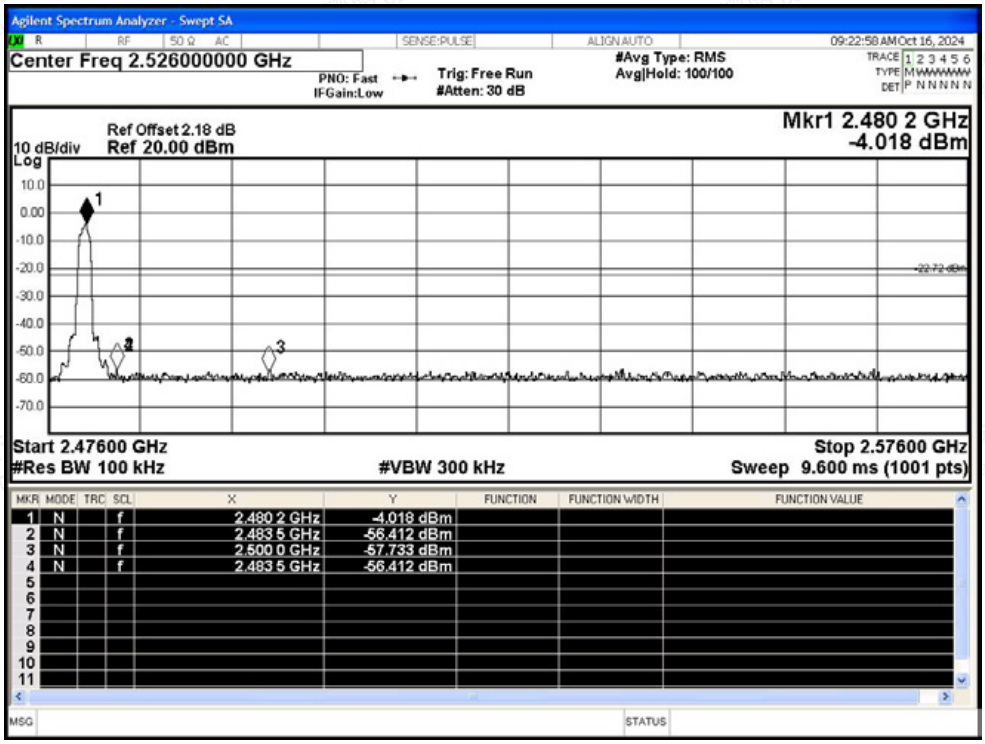
Band Edge NVNT 2-DH5 2402MHz Ant0 No-Hopping Emission



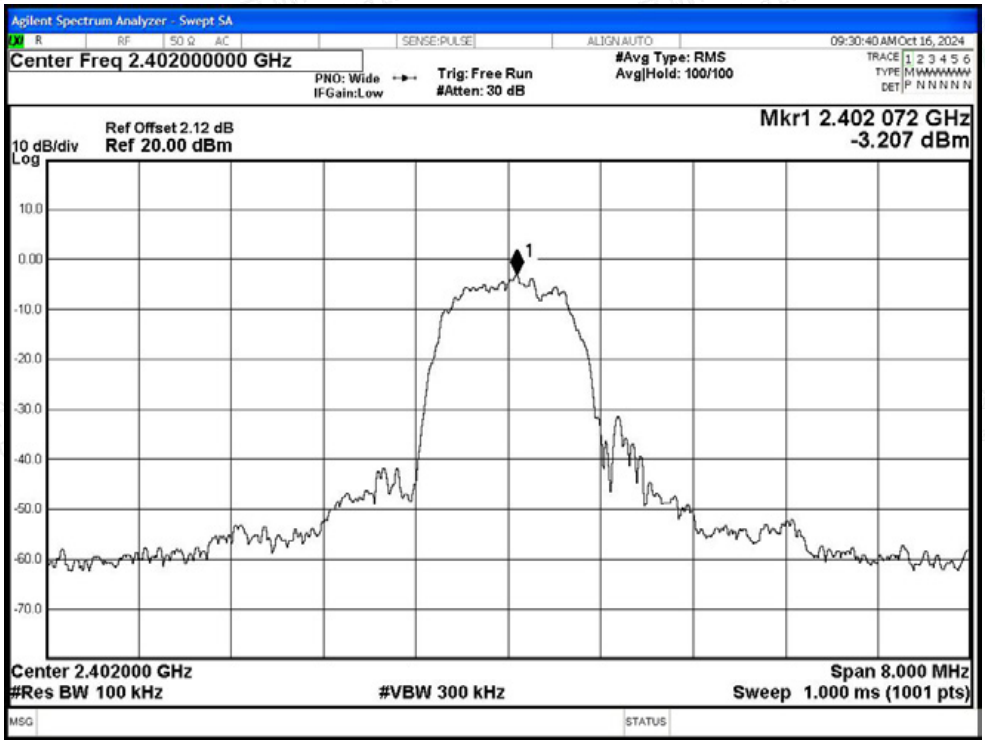
Band Edge NVNT 2-DH5 2480MHz Ant0 No-Hopping Ref



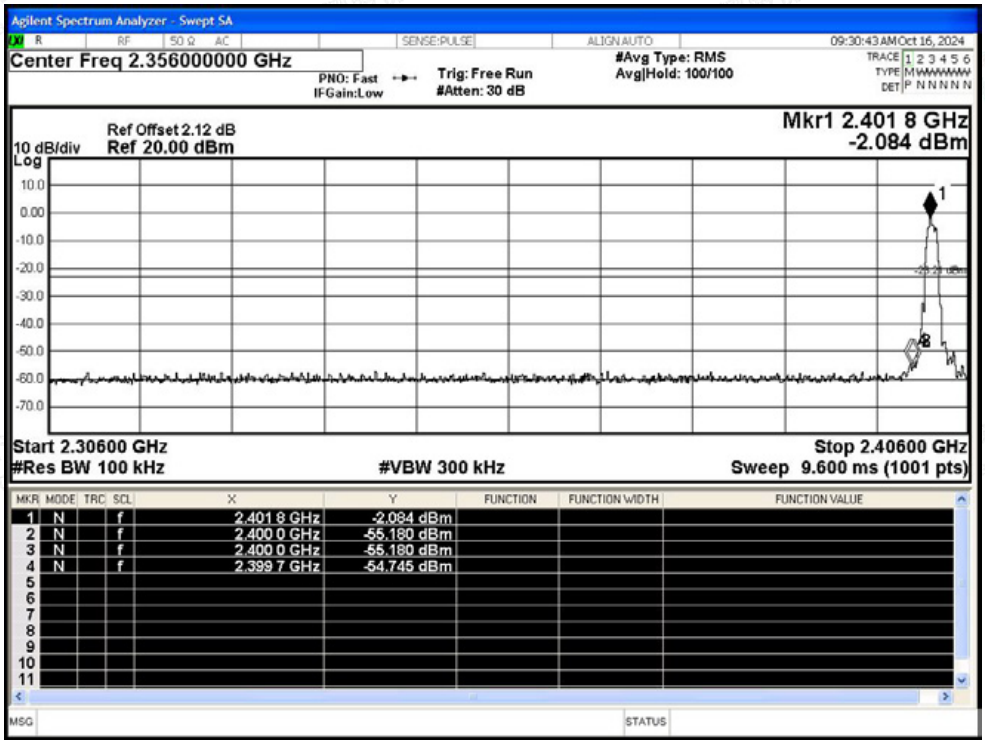
Band Edge NVNT 2-DH5 2480MHz Ant0 No-Hopping Emission



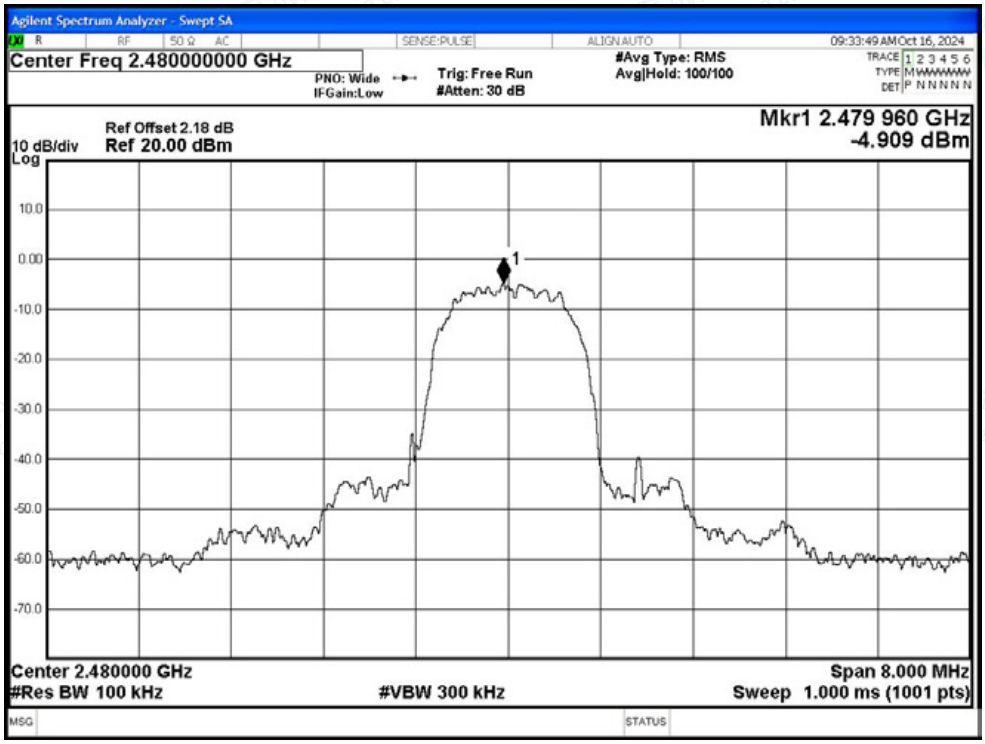
Band Edge NVNT 3-DH5 2402MHz Ant0 No-Hopping Ref



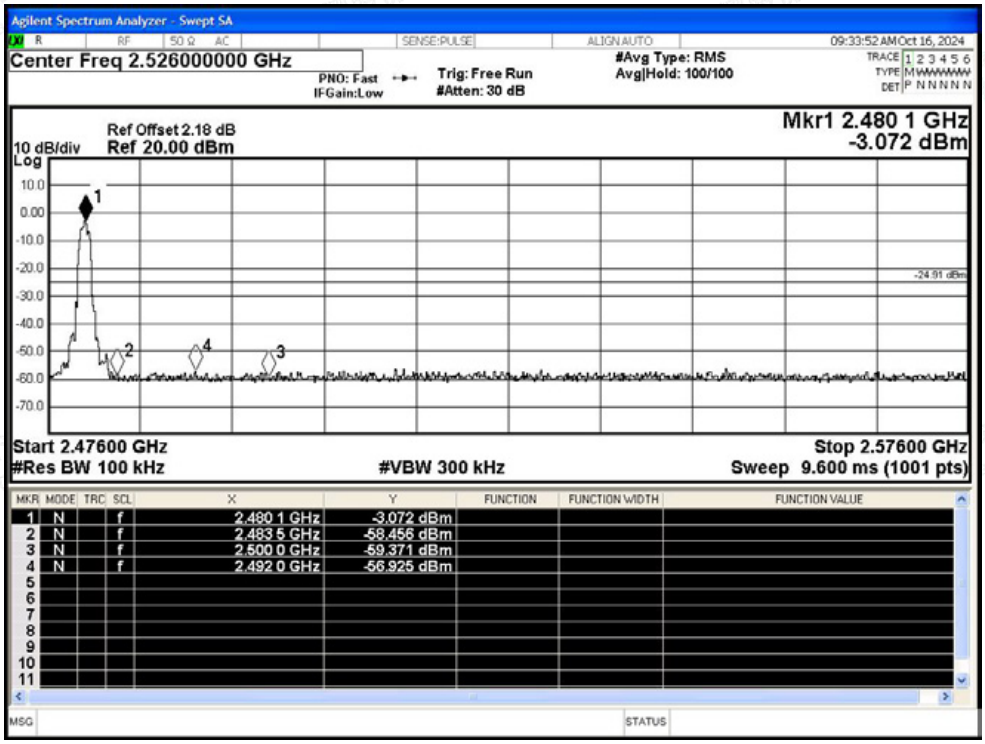
Band Edge NVNT 3-DH5 2402MHz Ant0 No-Hopping Emission



Band Edge NVNT 3-DH5 2480MHz Ant0 No-Hopping Ref



Band Edge NVNT 3-DH5 2480MHz Ant0 No-Hopping Emission

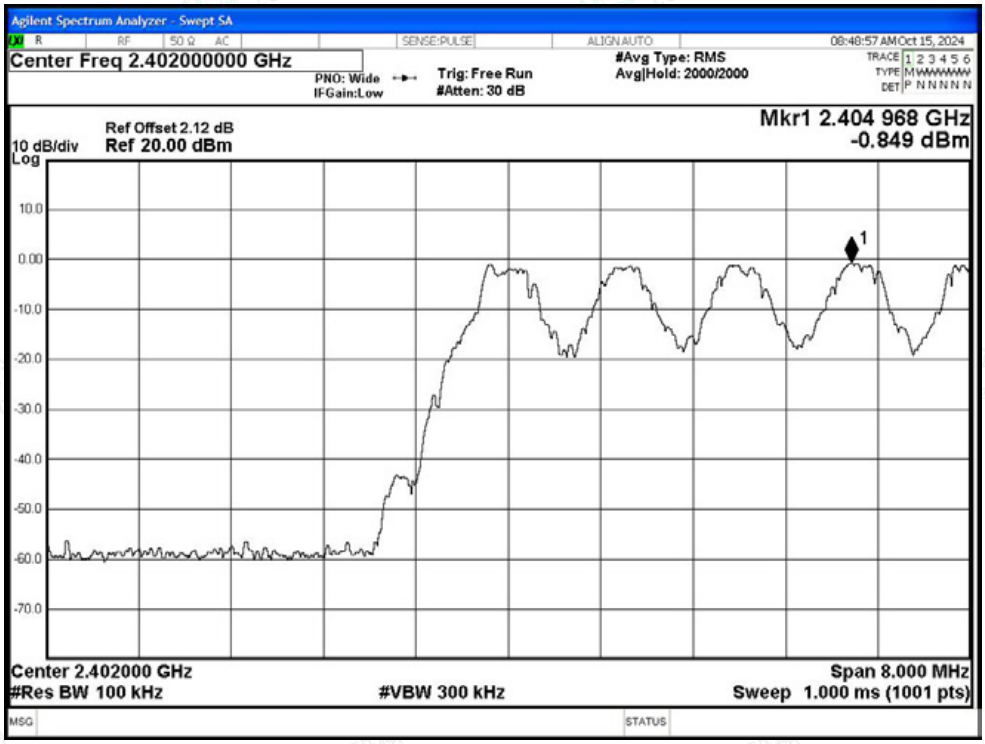


(Hopping)

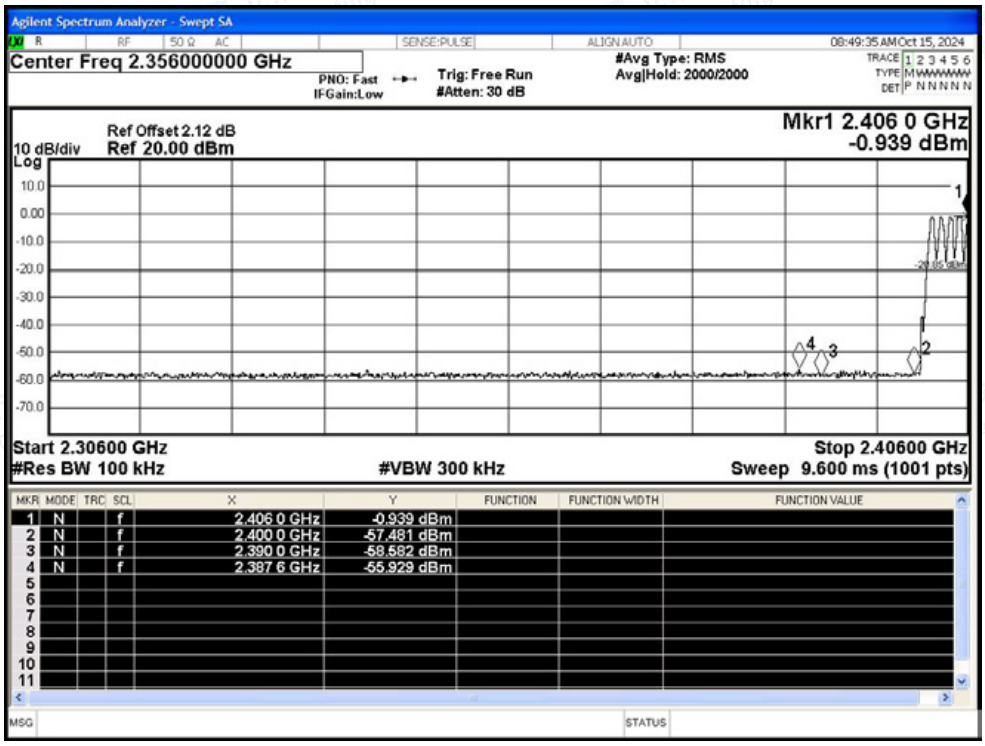
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant0	Hopping	-55.08	-20	Pass
NVNT	1-DH5	2480	Ant0	Hopping	-56.52	-20	Pass
NVNT	2-DH5	2402	Ant0	Hopping	-50.88	-20	Pass
NVNT	2-DH5	2480	Ant0	Hopping	-51.89	-20	Pass
NVNT	3-DH5	2402	Ant0	Hopping	-51.5	-20	Pass
NVNT	3-DH5	2480	Ant0	Hopping	-52.42	-20	Pass

Test Graphs

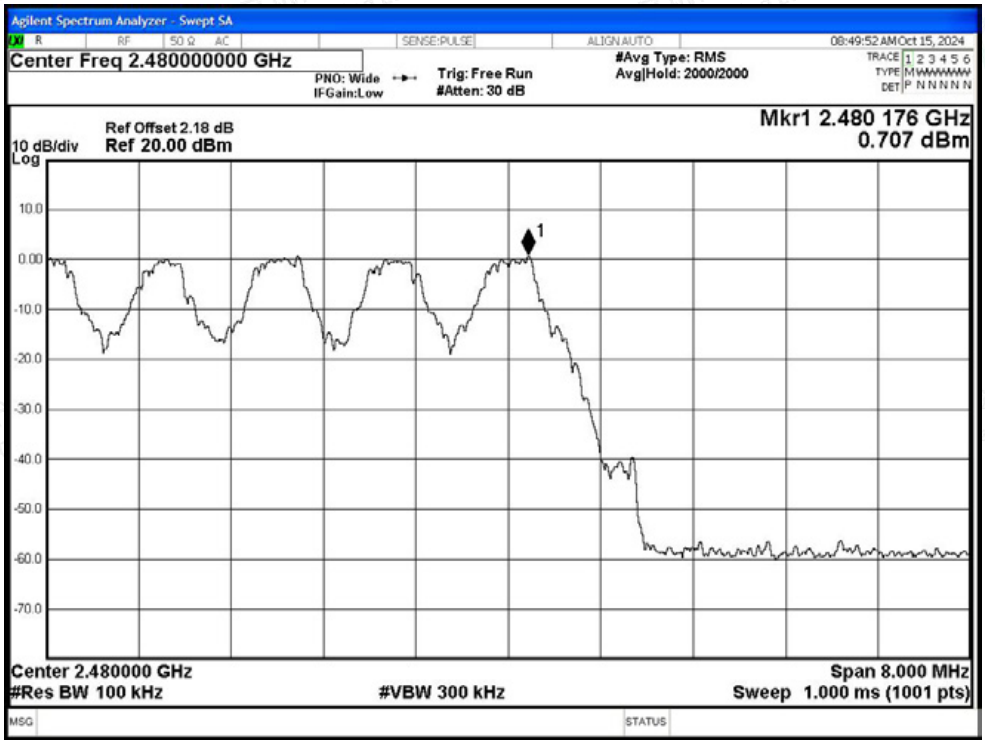
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant0 Hopping Ref



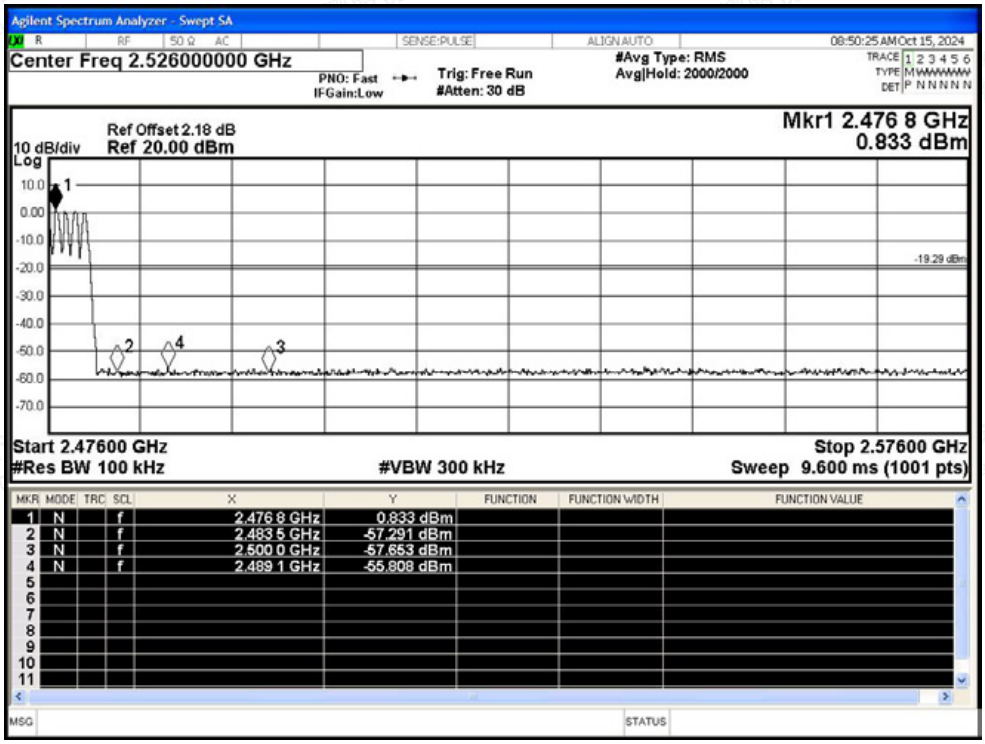
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant0 Hopping Emission



Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant0 Hopping Ref



Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant0 Hopping Emission



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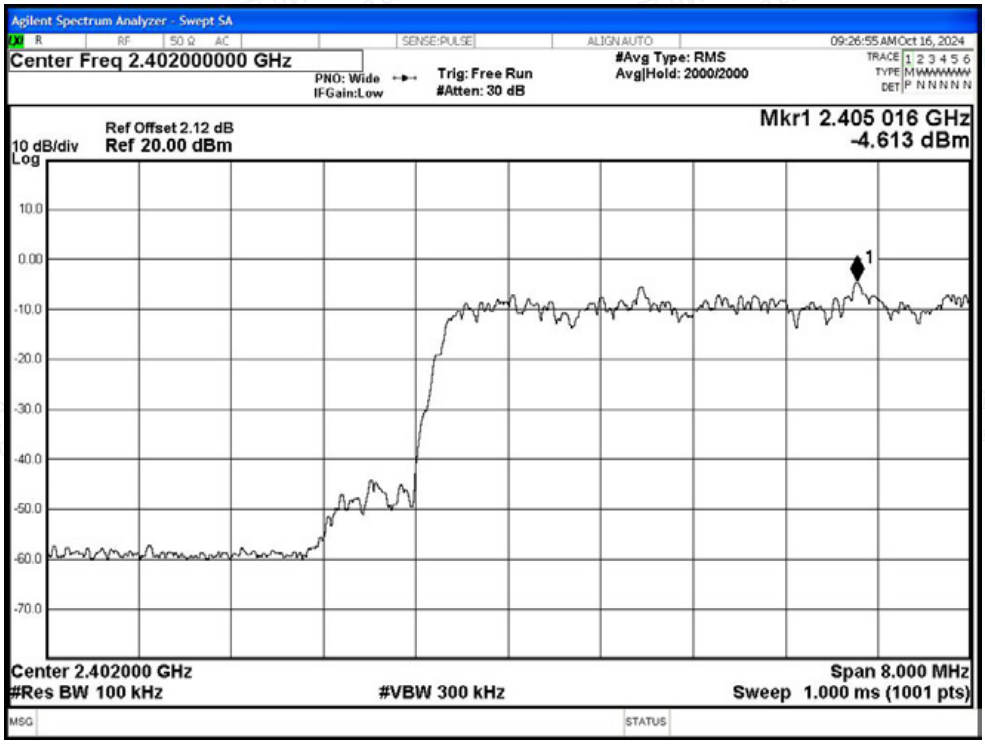
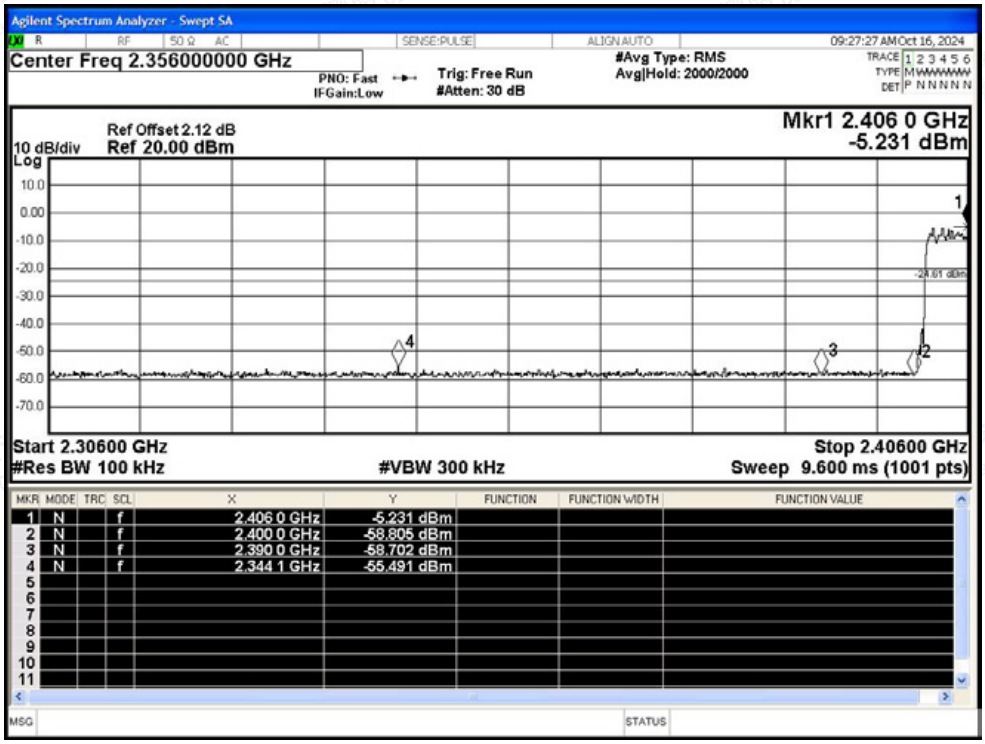
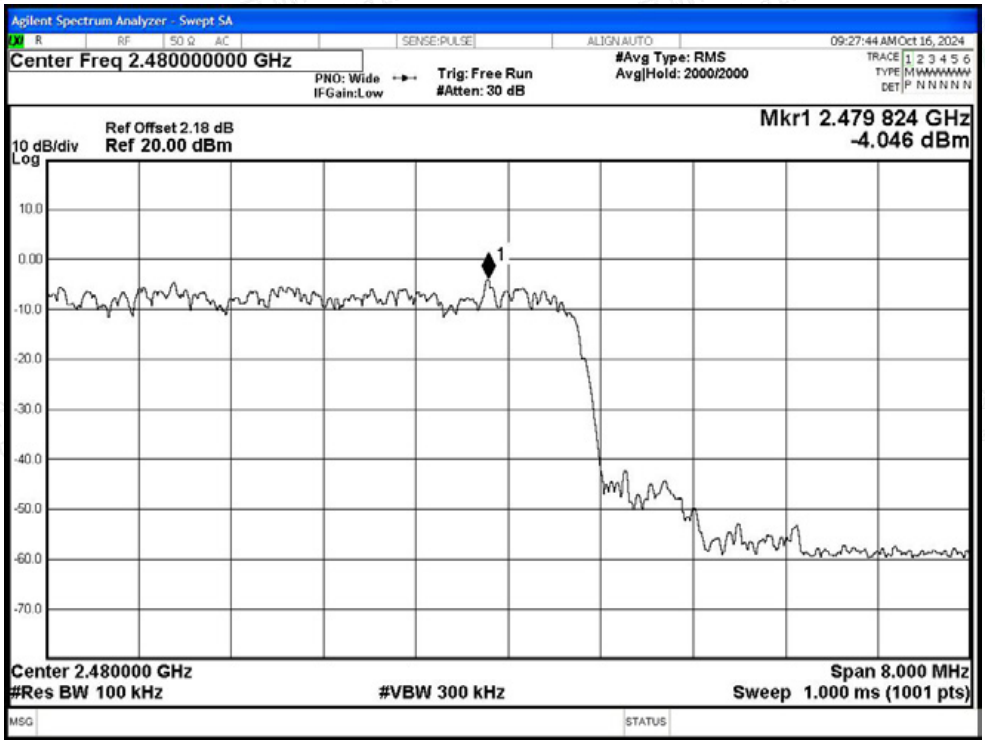


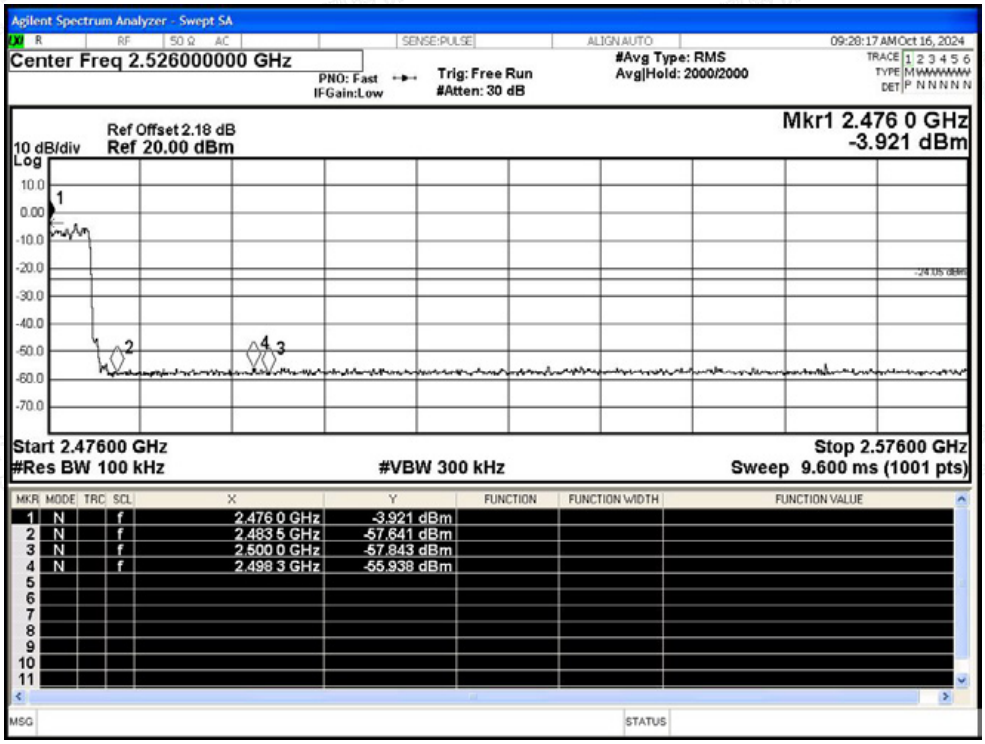
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant0 Hopping Emission



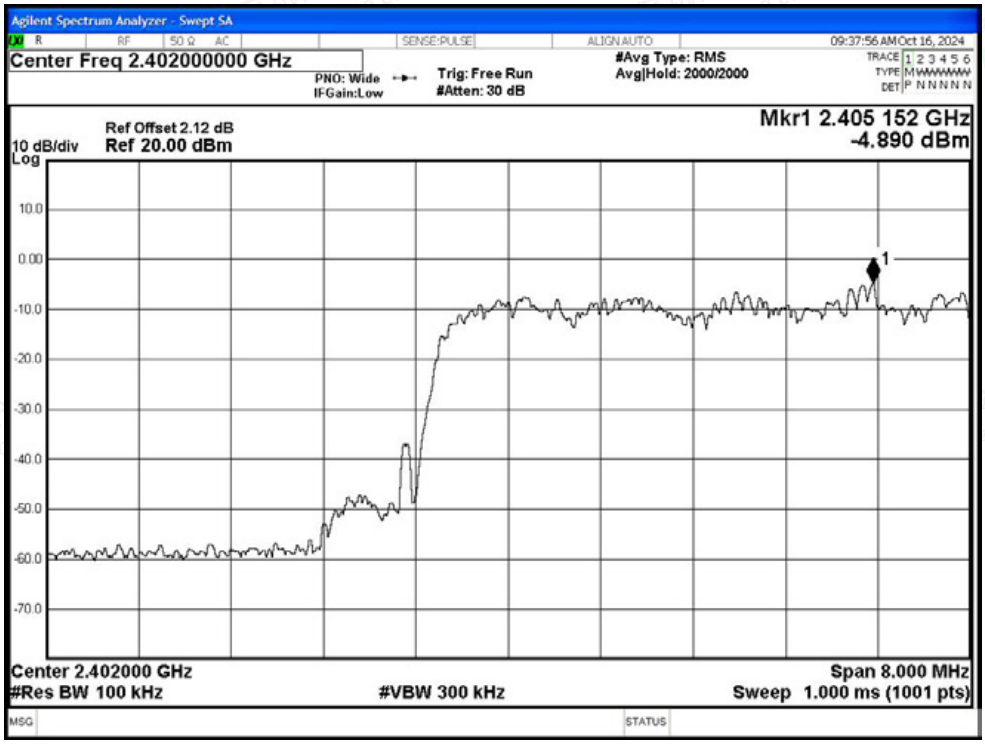
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant0 Hopping Ref



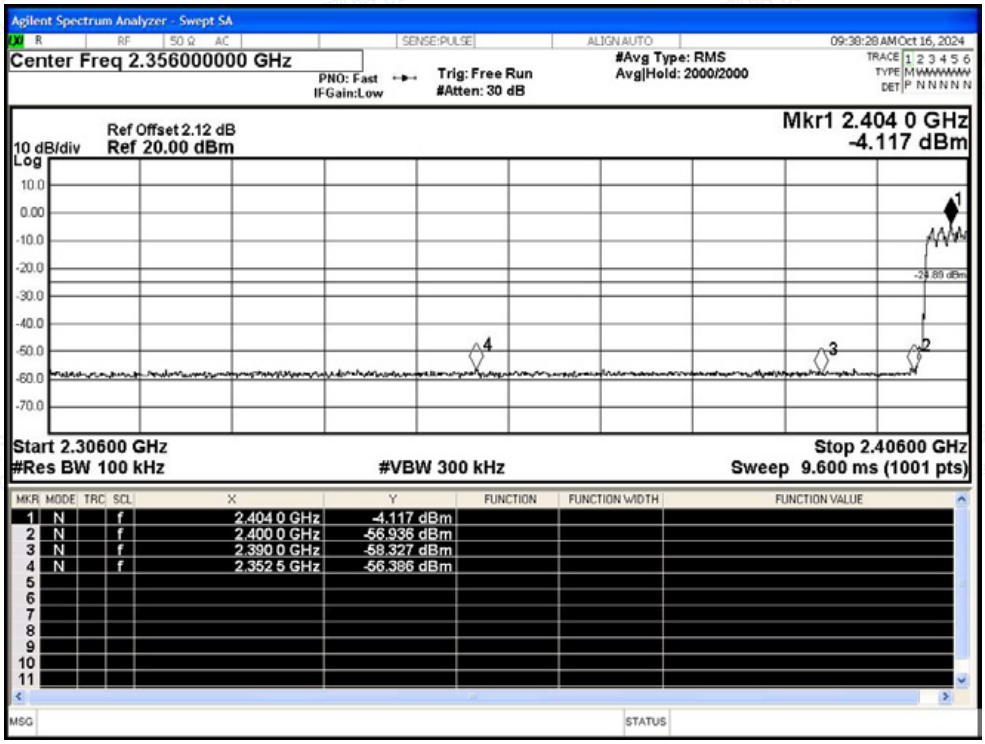
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant0 Hopping Emission



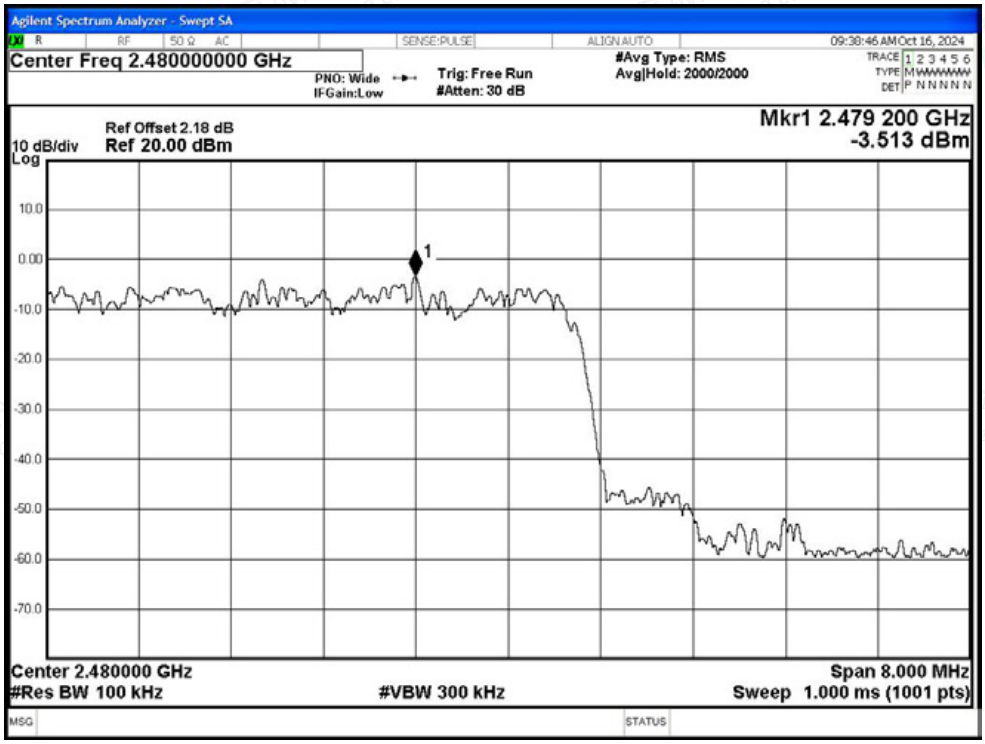
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant0 Hopping Ref



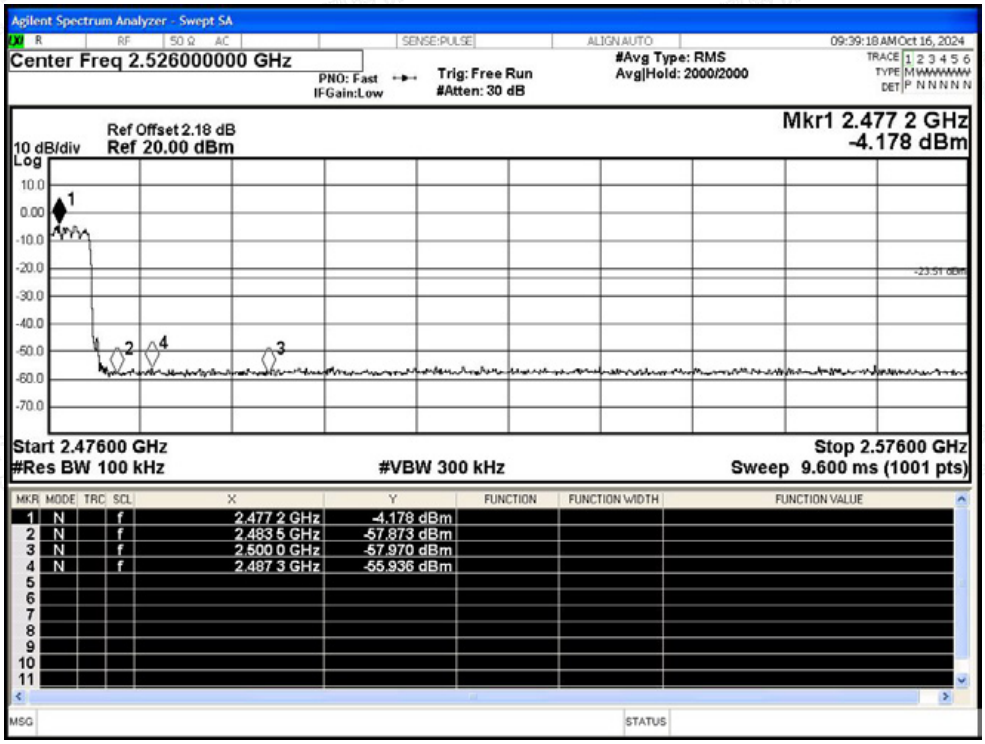
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant0 Hopping Emission



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant0 Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant0 Hopping Emission



A.7 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant0	-53.59	-20	Pass
NVNT	1-DH5	2441	Ant0	-54.48	-20	Pass
NVNT	1-DH5	2480	Ant0	-53.28	-20	Pass
NVNT	2-DH5	2402	Ant0	-50.9	-20	Pass
NVNT	2-DH5	2441	Ant0	-53.92	-20	Pass
NVNT	2-DH5	2480	Ant0	-52.66	-20	Pass
NVNT	3-DH5	2402	Ant0	-52.99	-20	Pass
NVNT	3-DH5	2441	Ant0	-53.1	-20	Pass
NVNT	3-DH5	2480	Ant0	-52.42	-20	Pass