Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Life is for fun

Test Model: F66

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.1%
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	Ant1	0.963	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.942	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.94	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.286	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.284	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.302	N/A	Pass

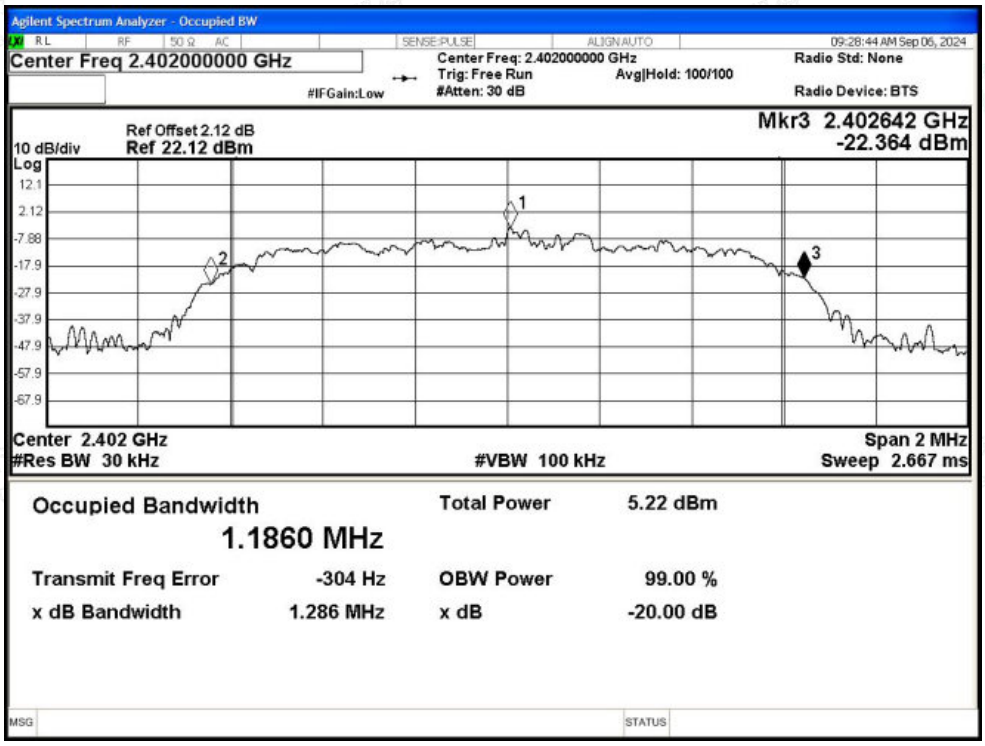
Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

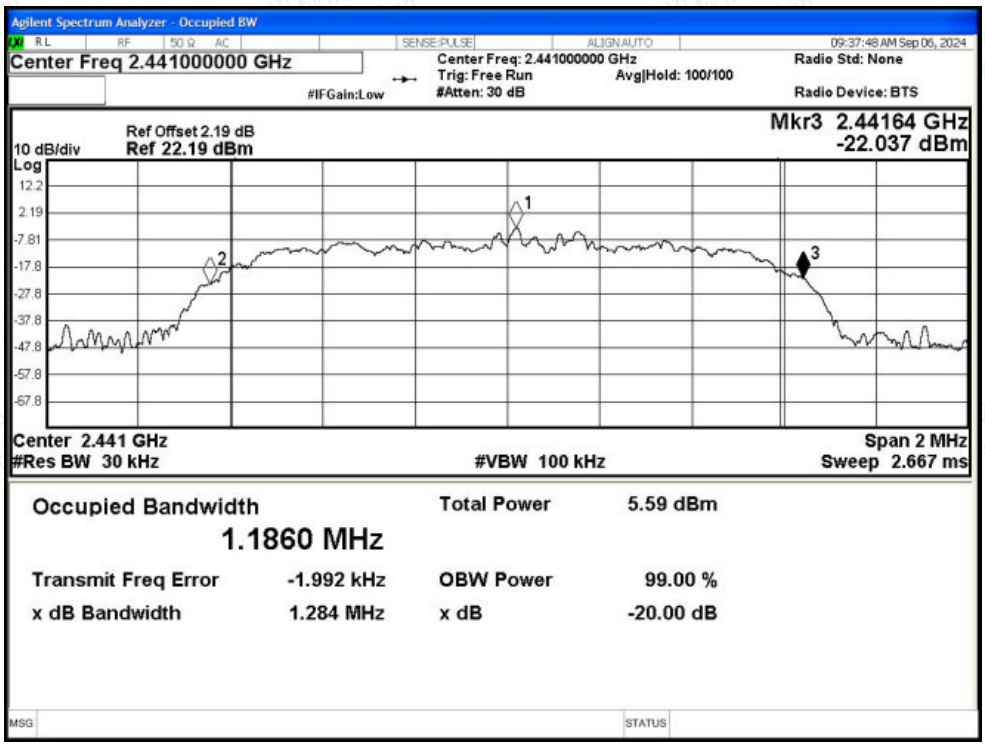
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

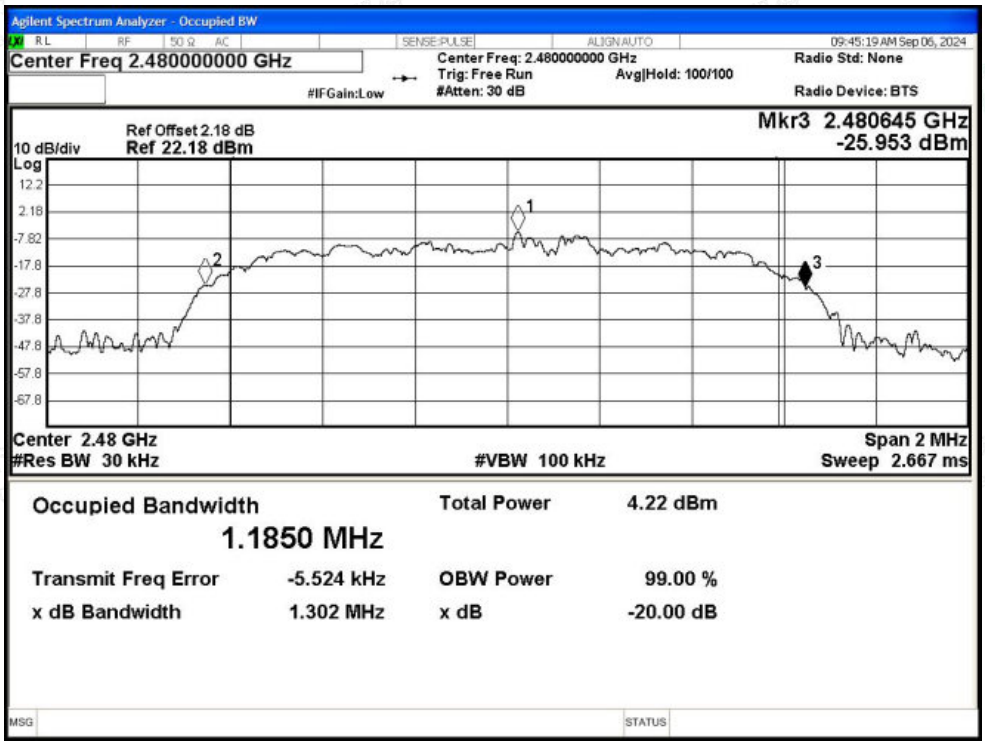
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

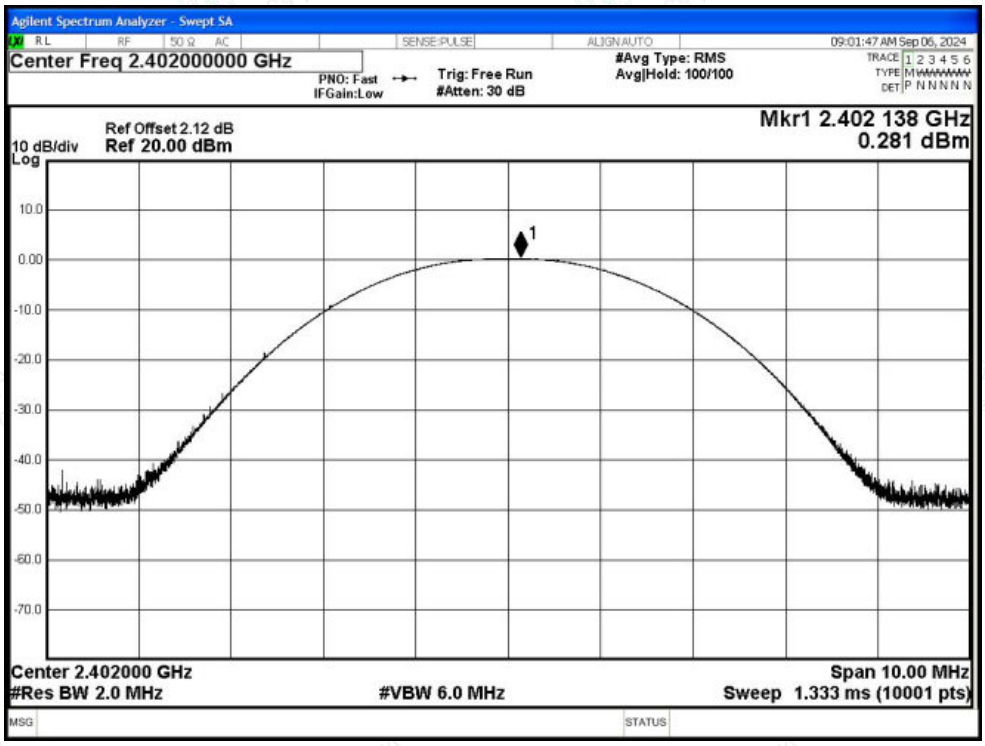


A.2 Maximum Peak Conducted Output Power

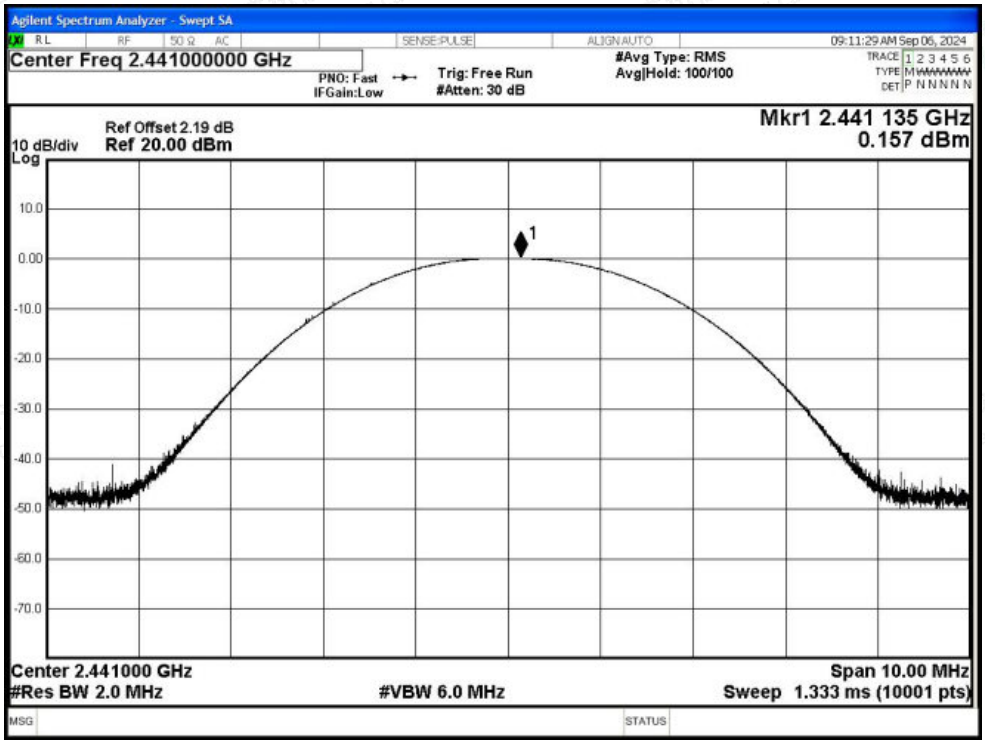
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.28	21	Pass
NVNT	1-DH5	2441	Ant1	0.16	21	Pass
NVNT	1-DH5	2480	Ant1	-0.66	21	Pass
NVNT	2-DH5	2402	Ant1	0.7	21	Pass
NVNT	2-DH5	2441	Ant1	**1.08**	21	Pass
NVNT	2-DH5	2480	Ant1	-0.08	21	Pass

Test Graphs

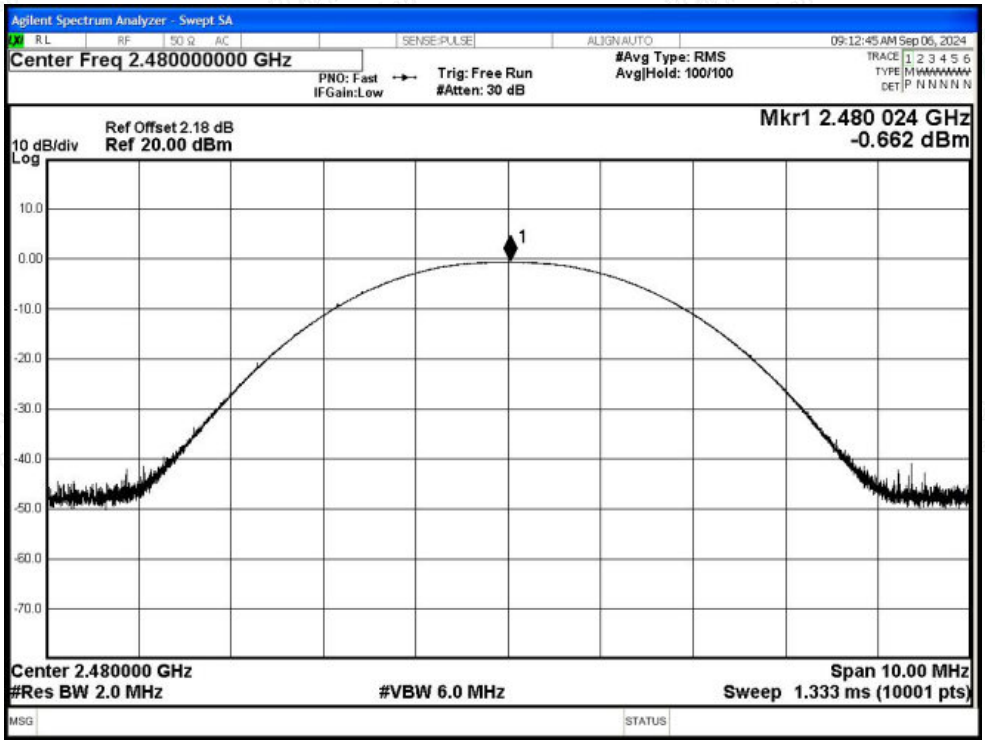
Power NVNT 1-DH5 2402MHz Ant1



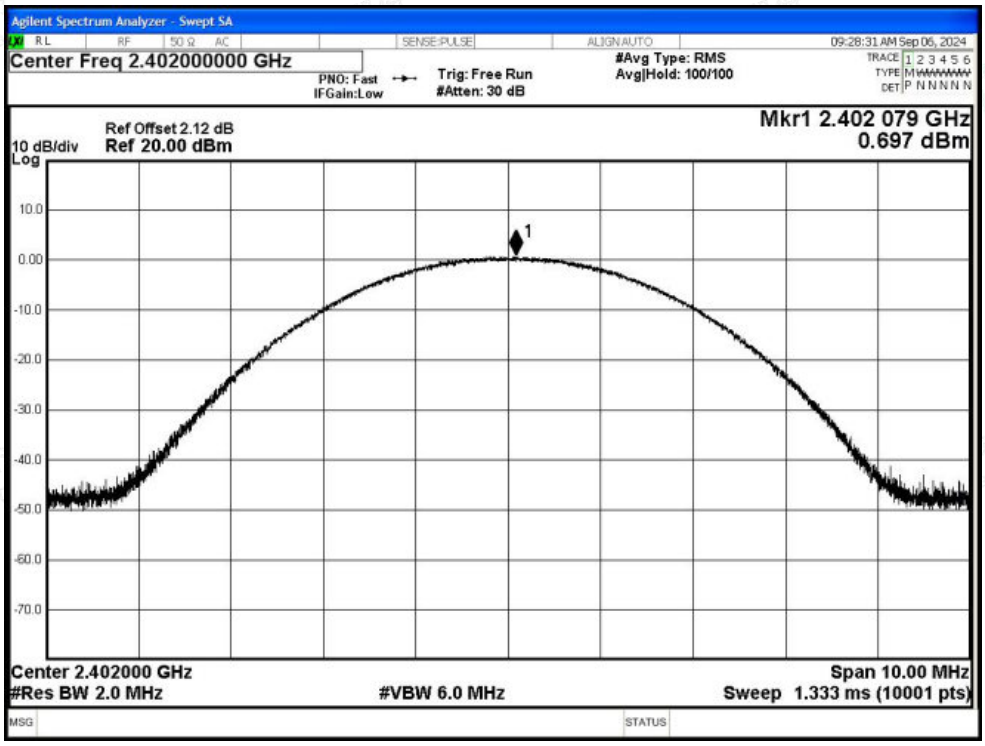
Power NVNT 1-DH5 2441MHz Ant1



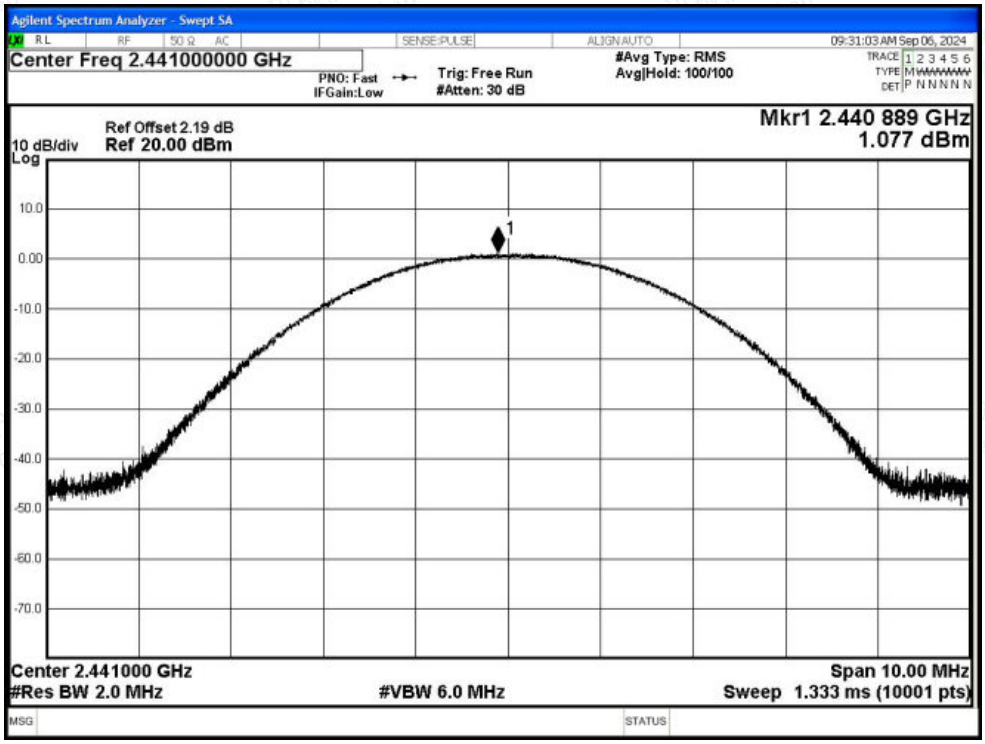
Power NVNT 1-DH5 2480MHz Ant1



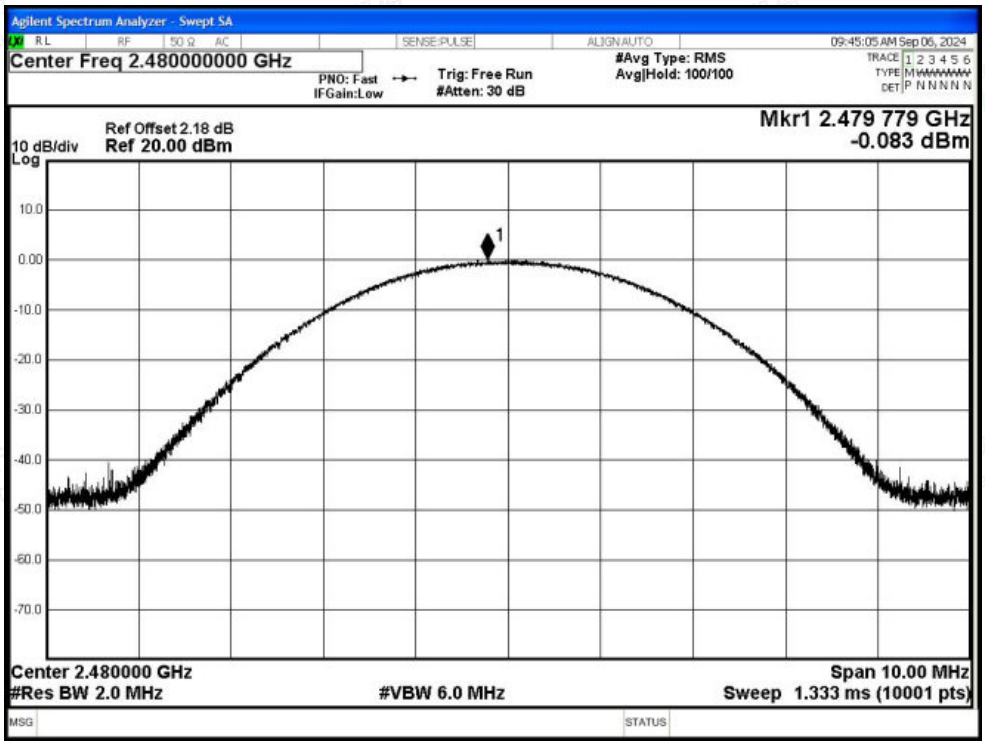
Power NVNT 2-DH5 2402MHz Ant1



Power NVNT 2-DH5 2441MHz Ant1



Power NVNT 2-DH5 2480MHz Ant1

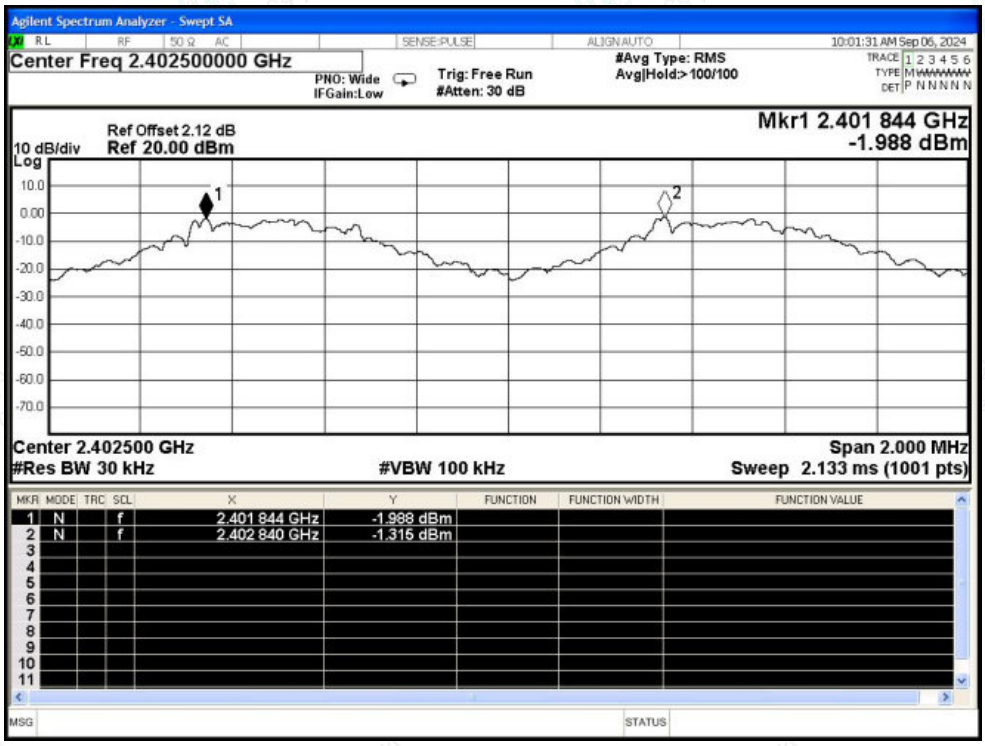


A.3 Carrier Frequencies Separation

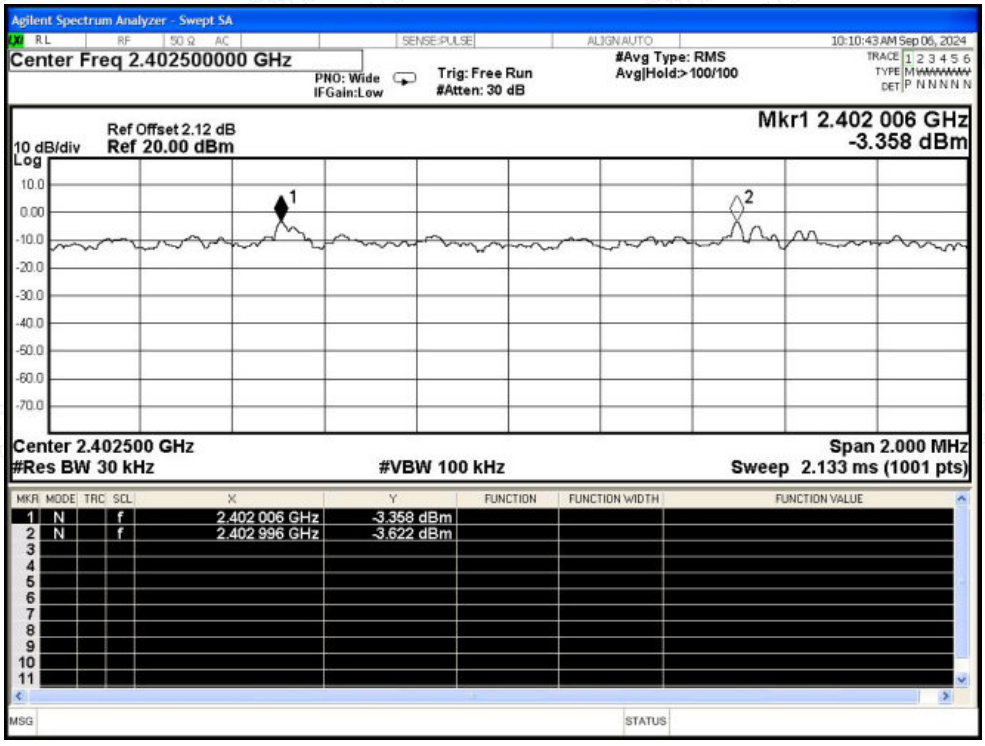
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.844	2402.84	0.996	0.642	Pass
NVNT	2-DH5	Ant1	2402.006	2402.996	0.99	0.868	Pass

Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1

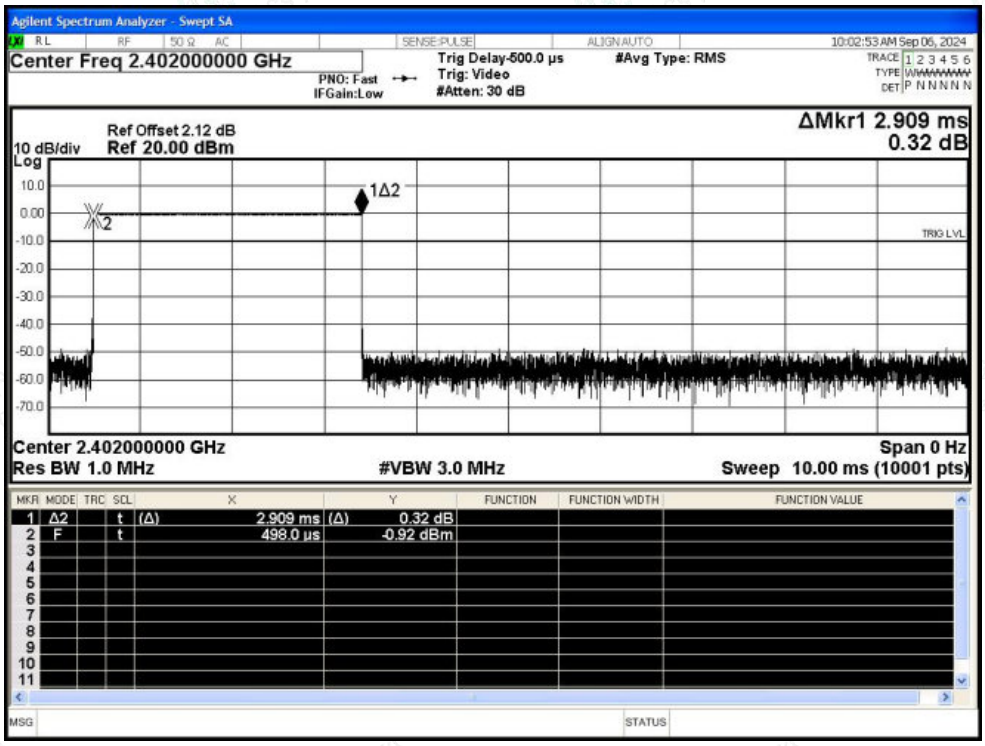


A.4 Dwell Time

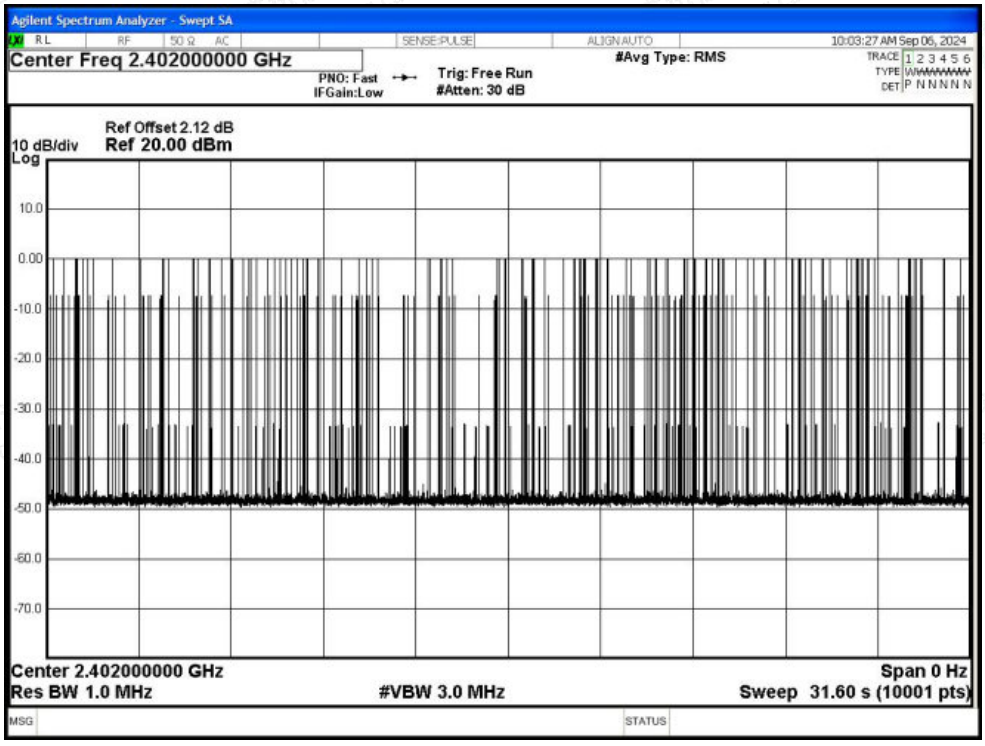
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.909	311.263	107	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.898	321.678	111	31600	400	Pass

Test Graphs

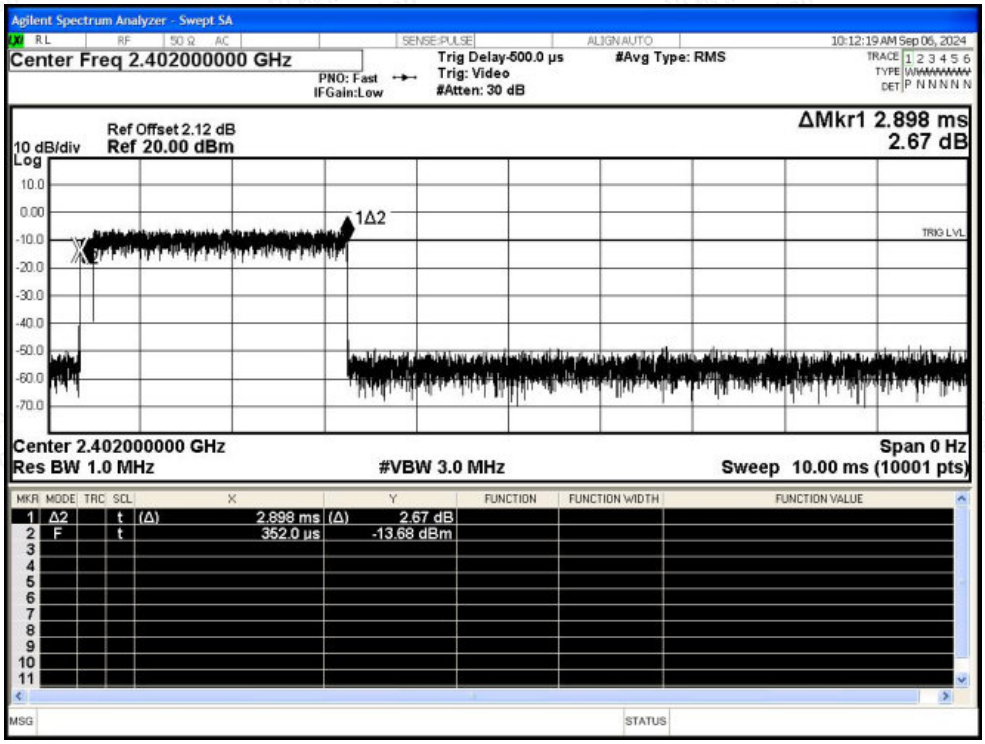
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



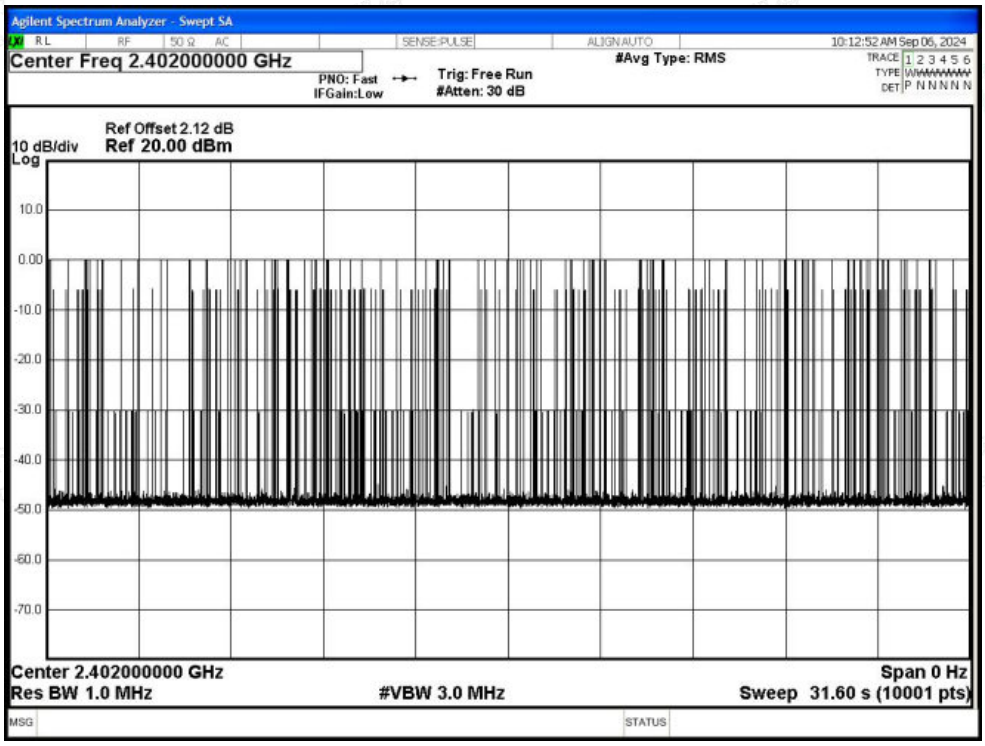
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated

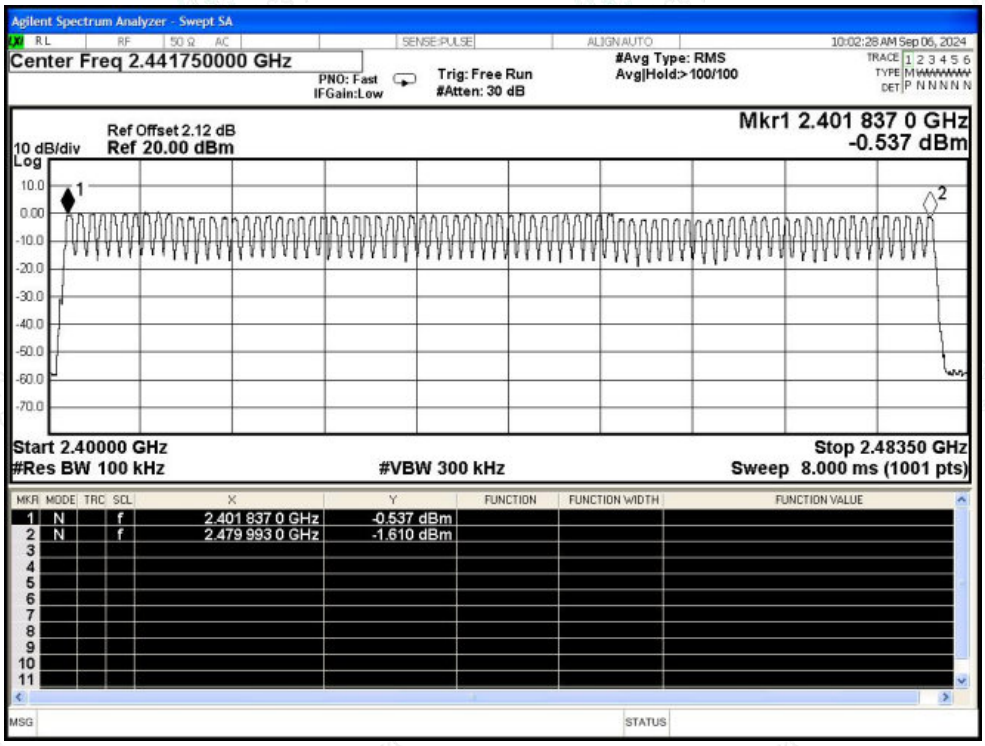


A.5 Number of Hopping Channel

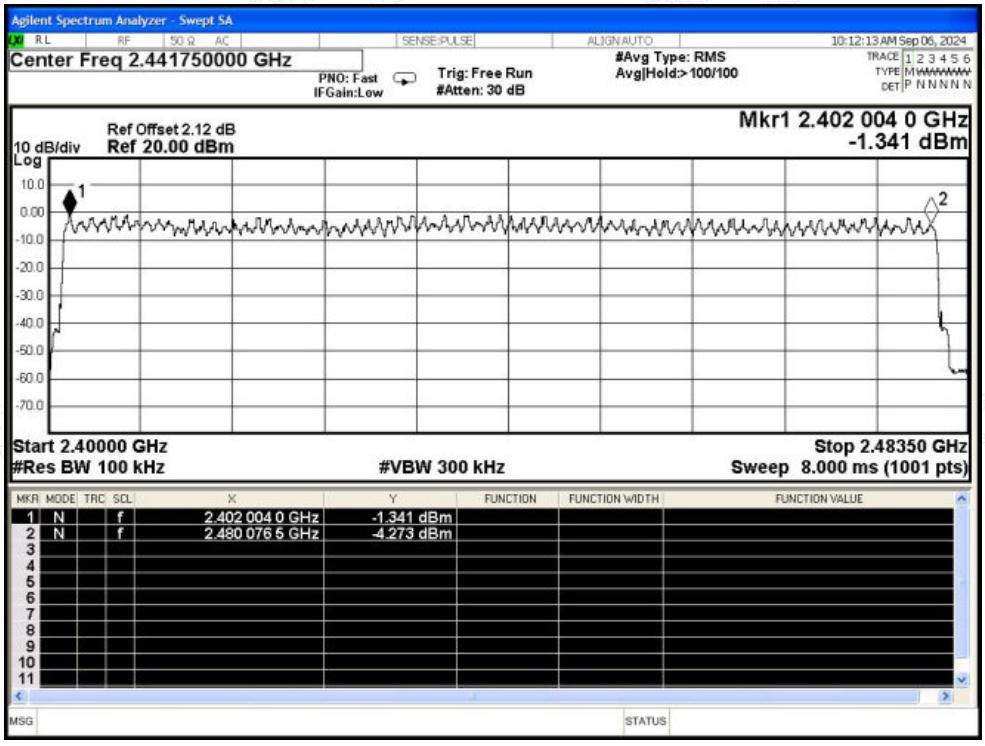
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass

Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1

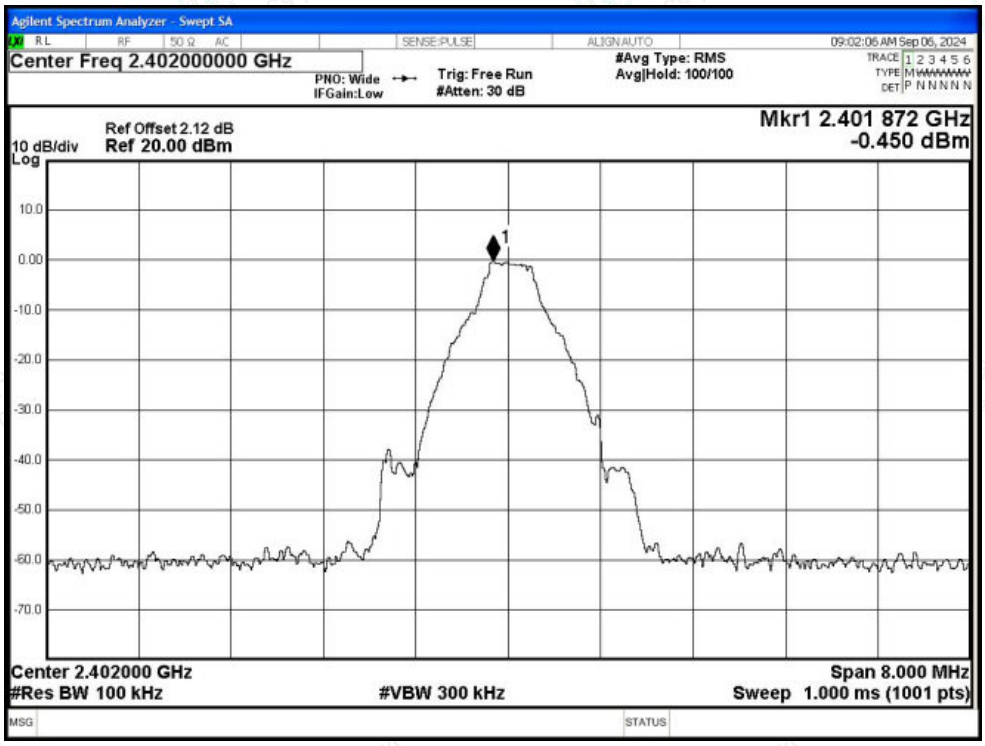


A.6 Band Edge

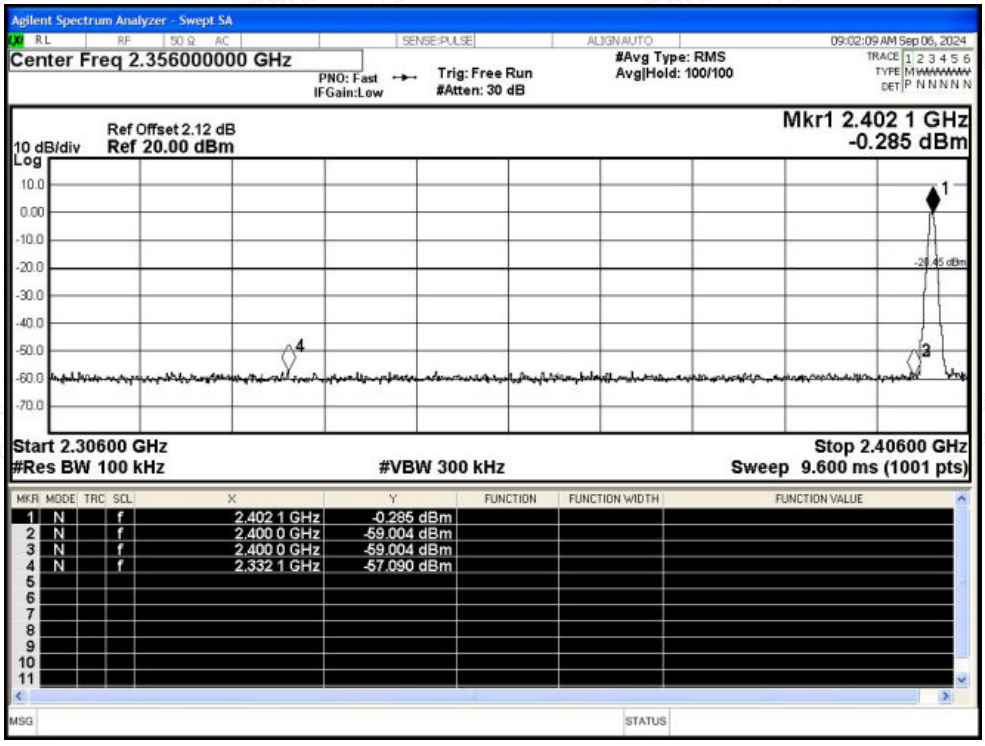
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-56.64	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-56.39	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-54.61	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-54.24	-20	Pass

Test Graphs

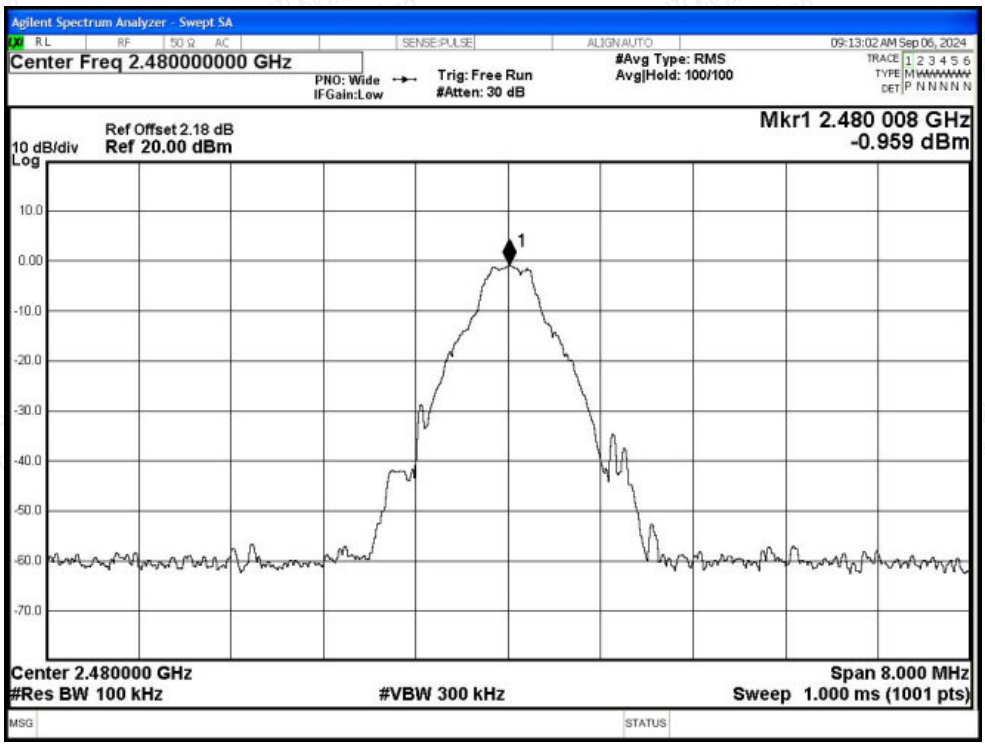
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



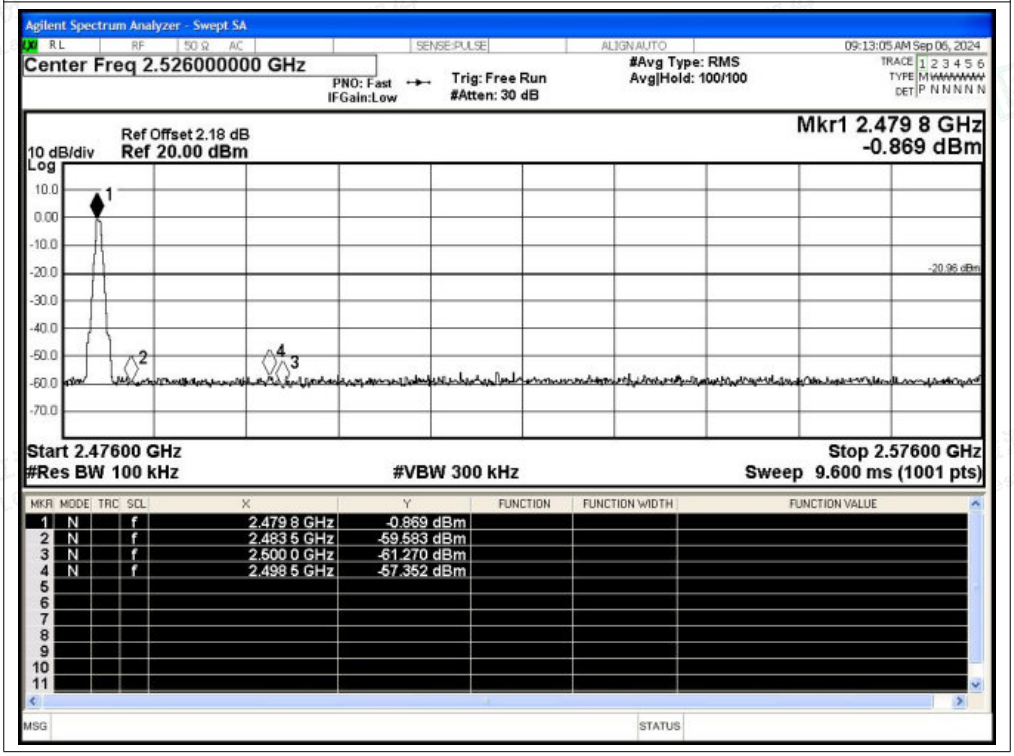
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



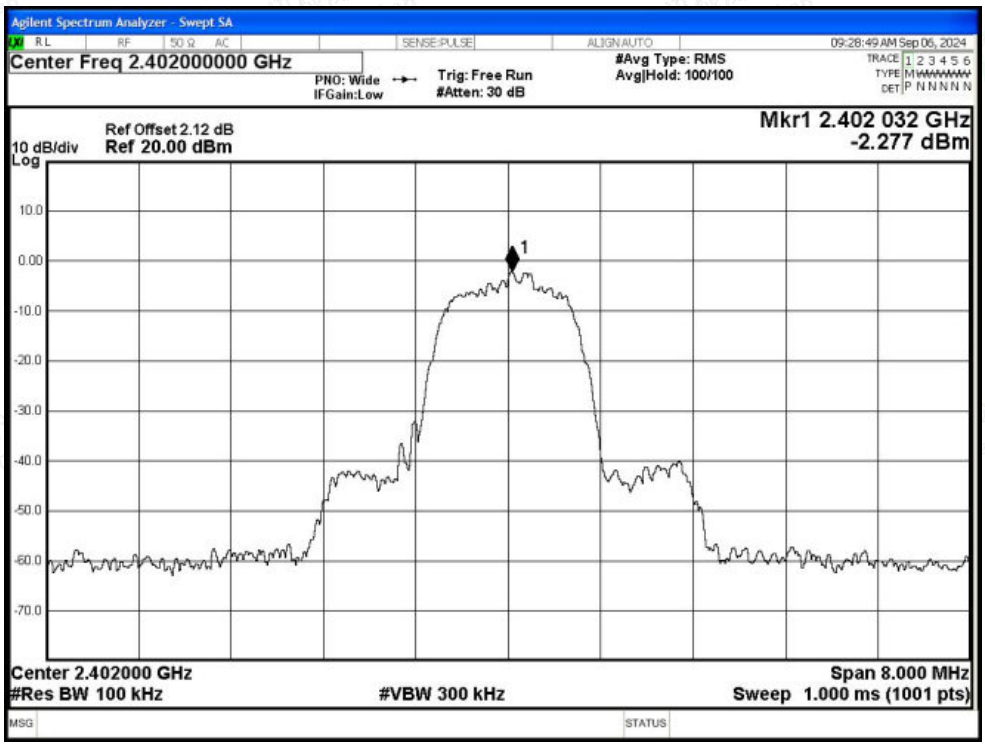
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



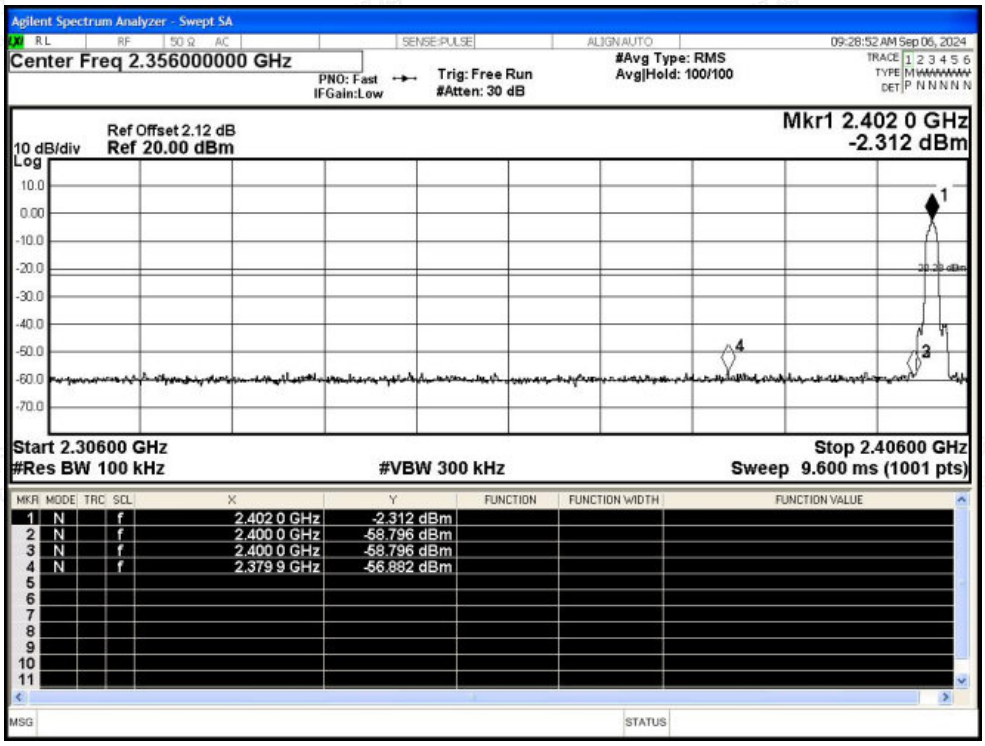
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



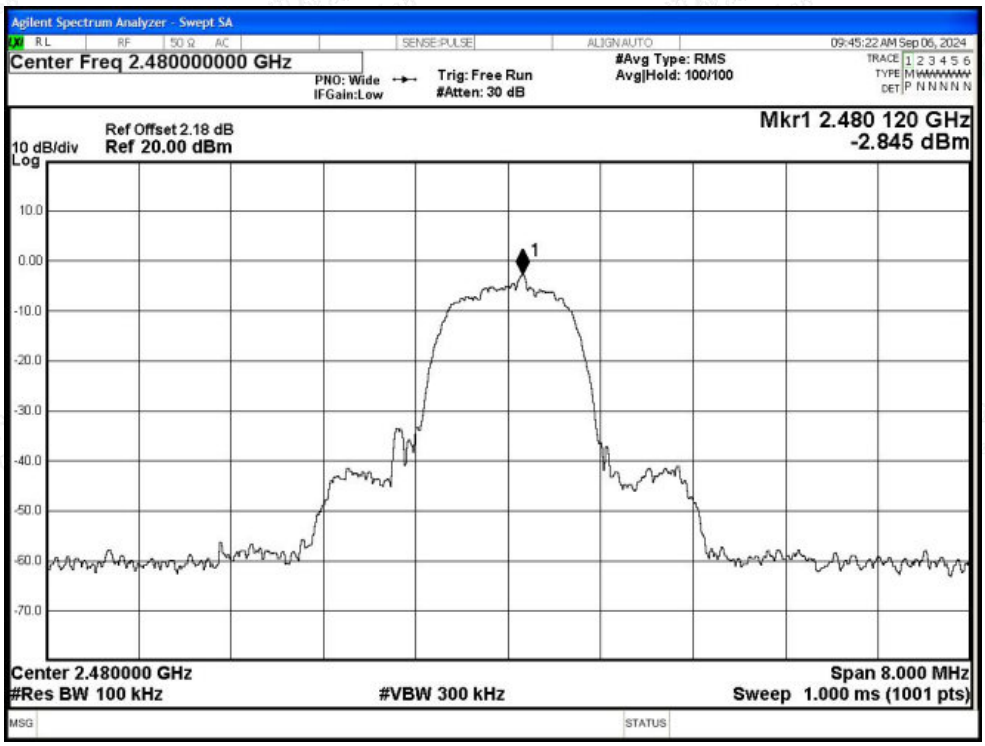
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



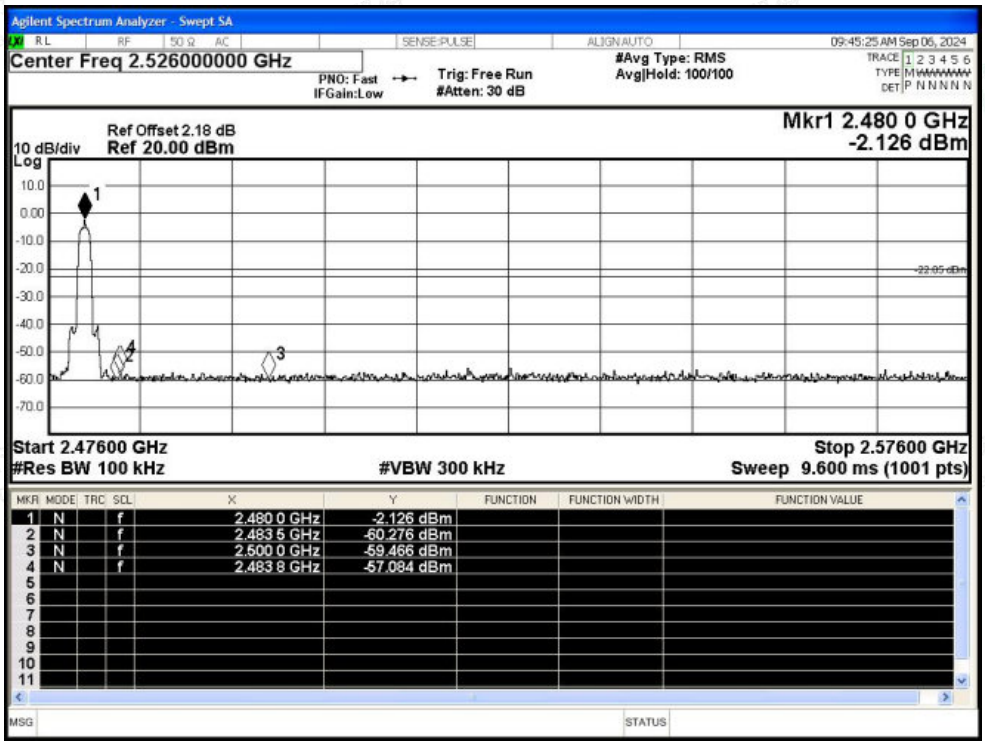
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



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



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

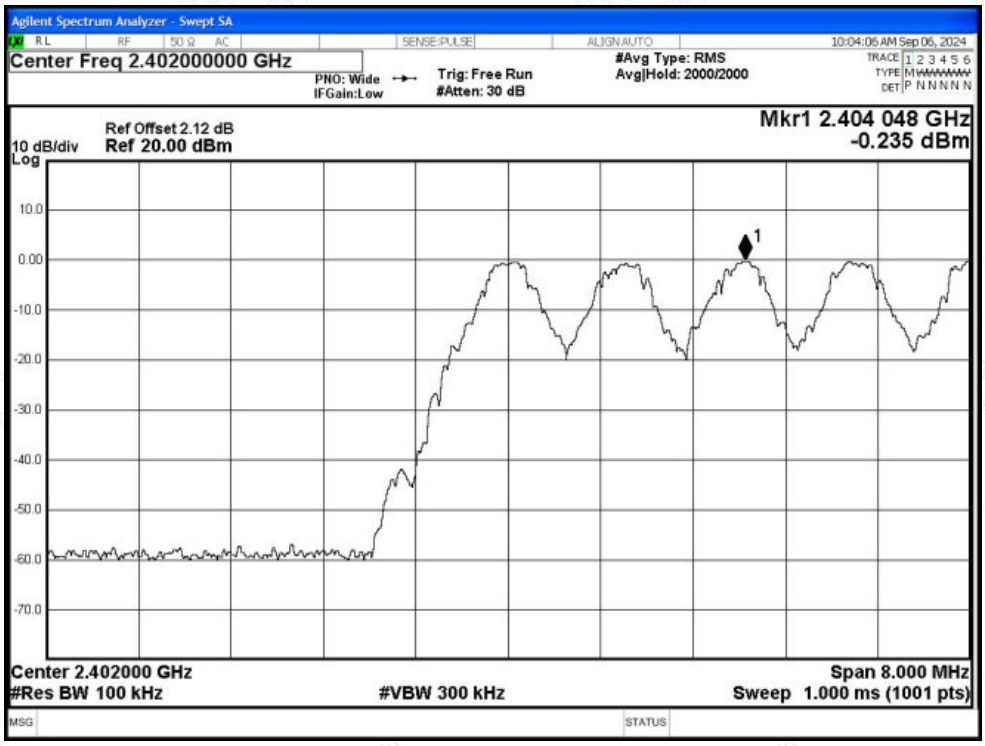


(Hopping)

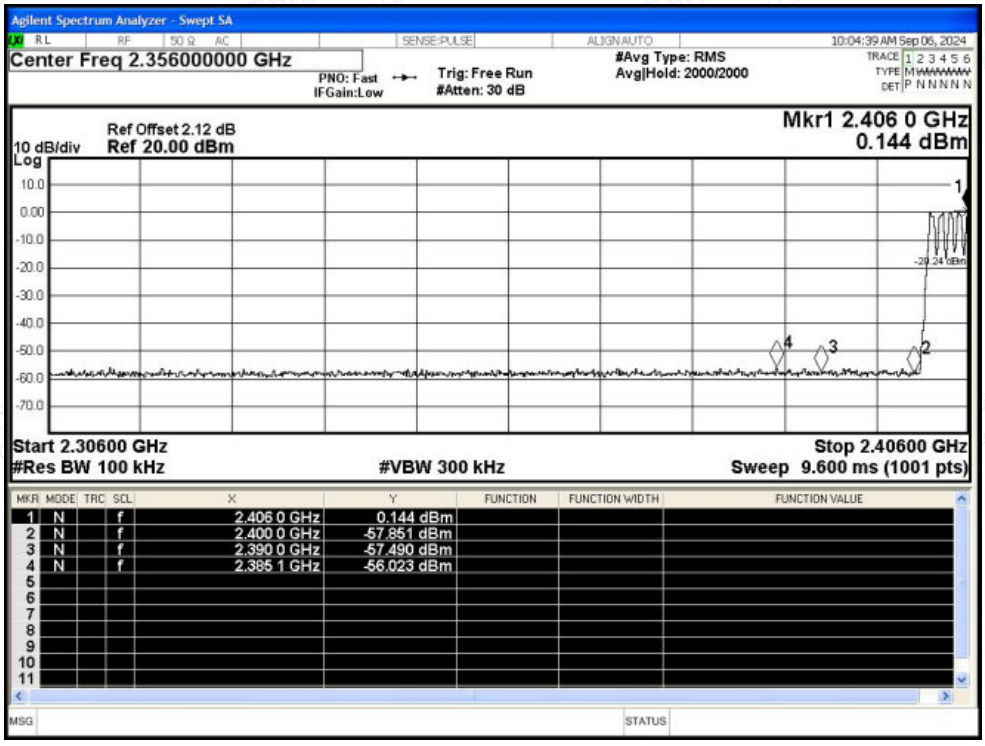
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-55.79	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-54.71	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-54.43	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-53.86	-20	Pass

Test Graphs

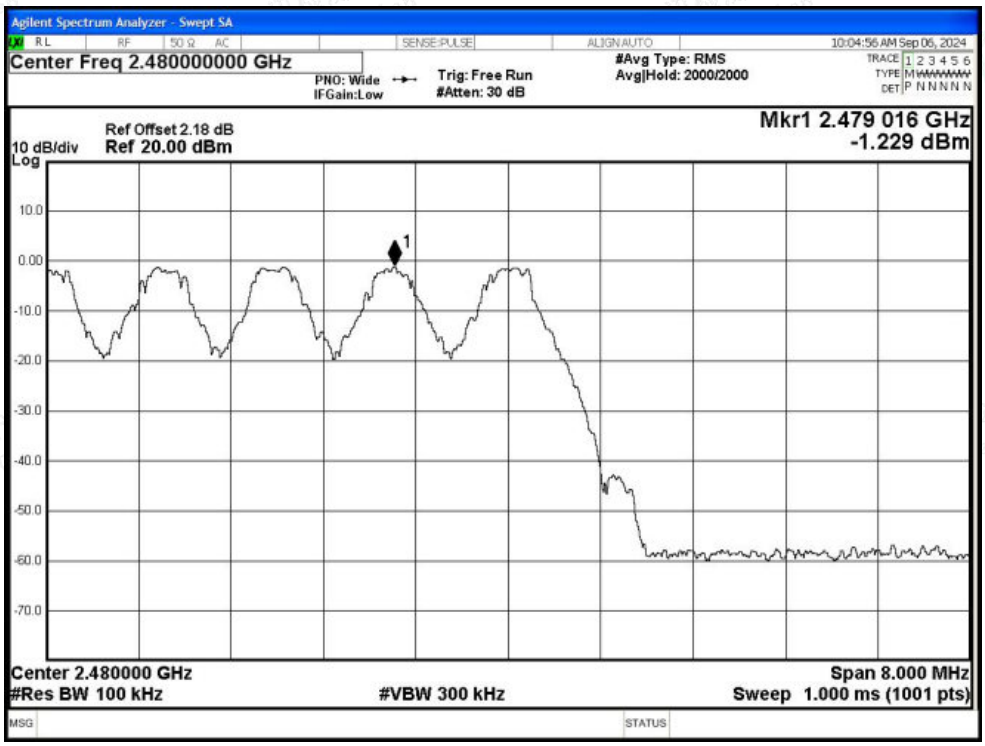
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



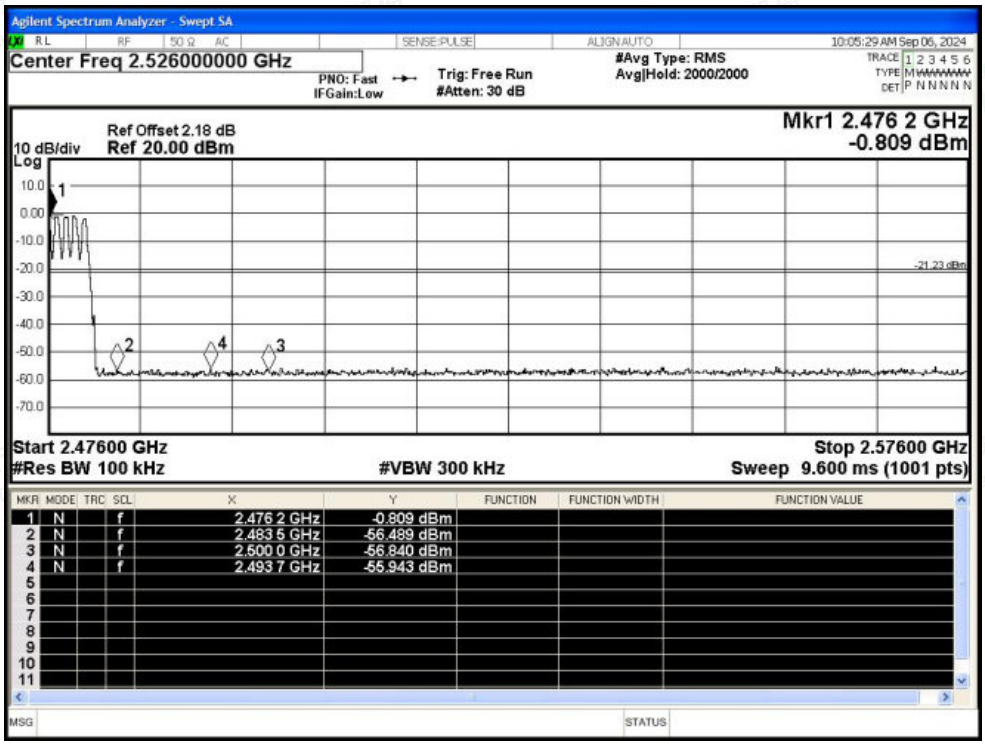
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



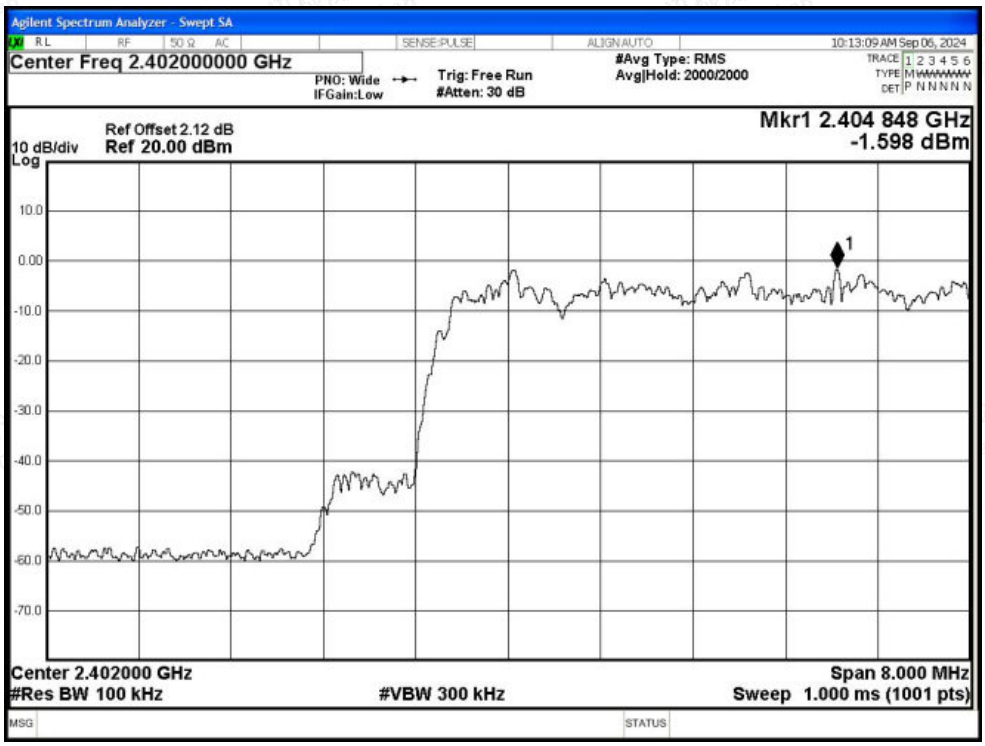
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



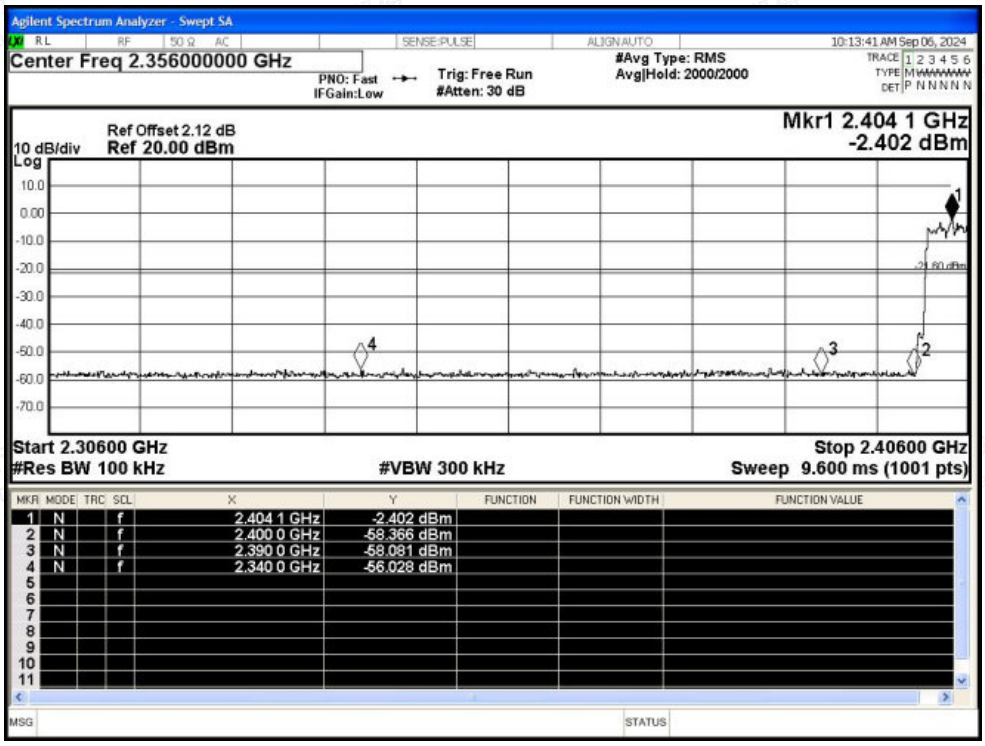
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



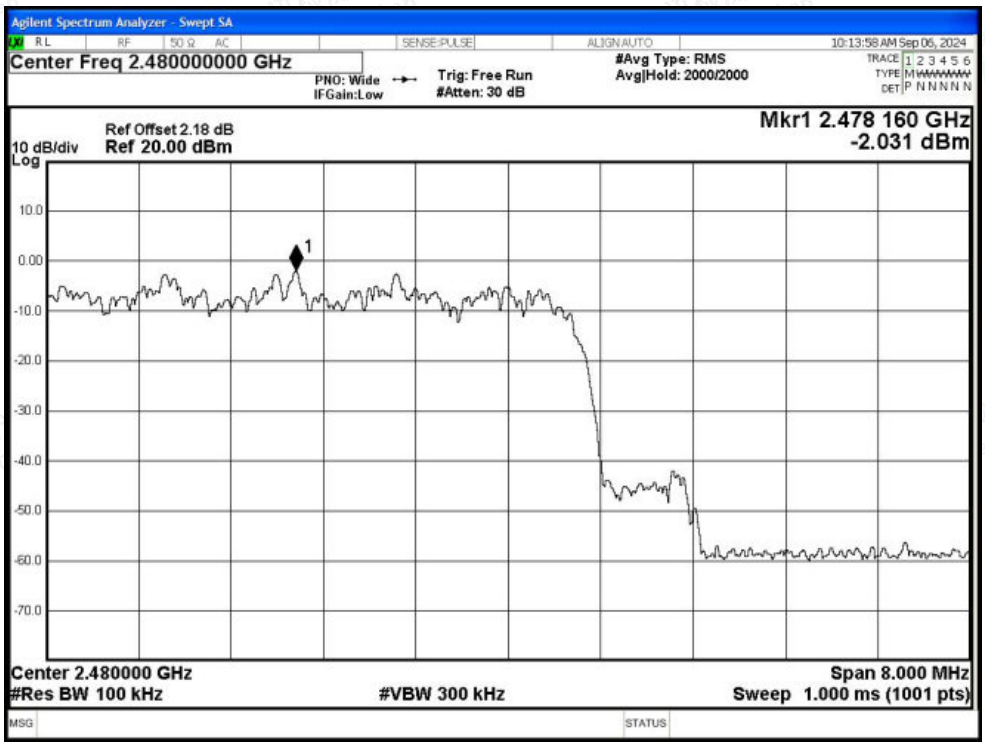
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



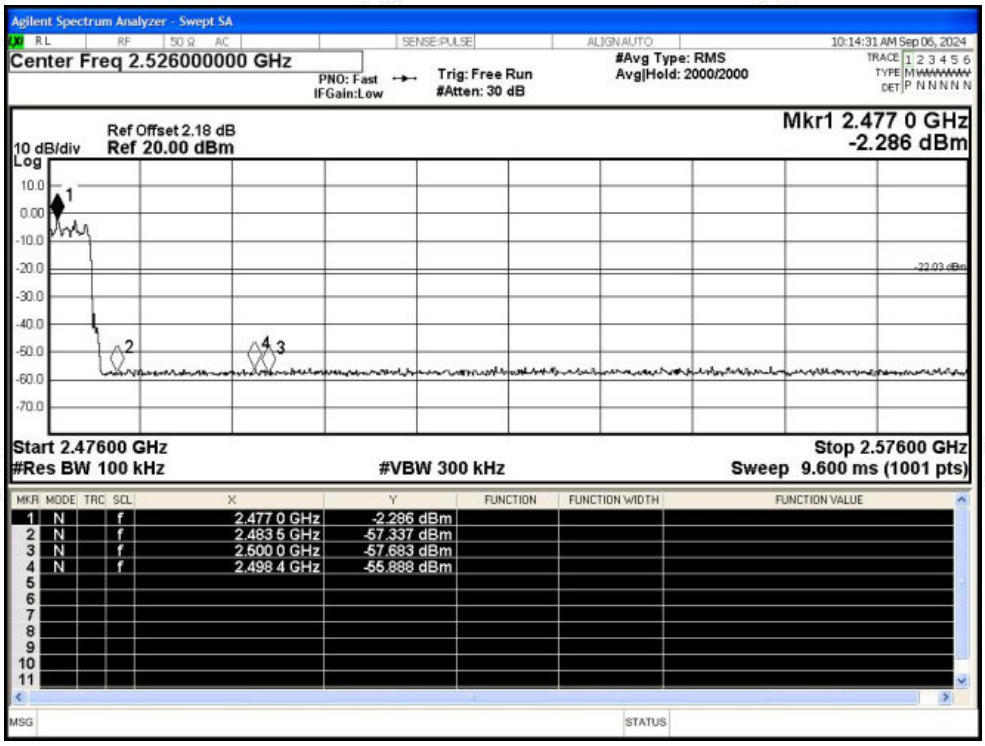
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



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



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

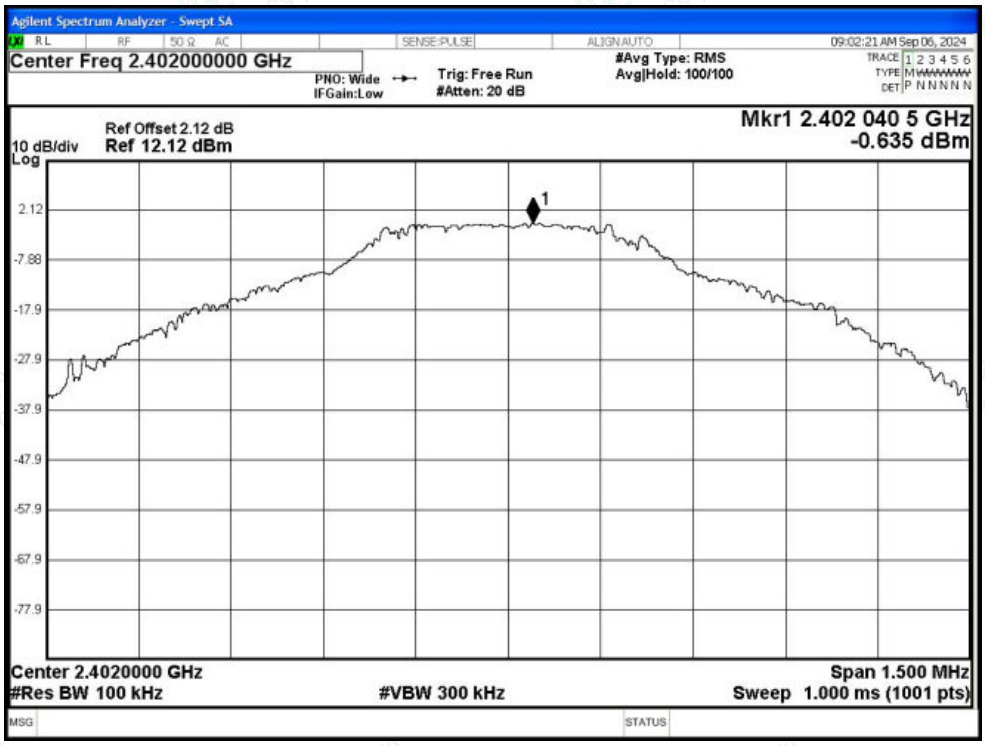


A.7 Conducted RF Spurious Emission

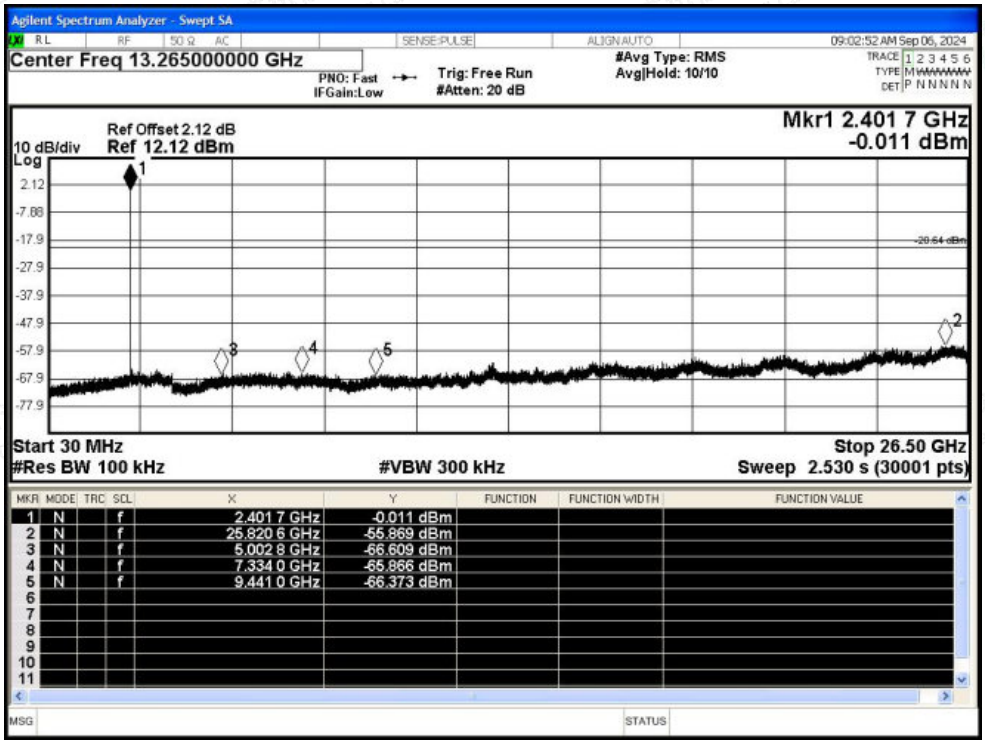
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-55.23	-20	Pass
NVNT	1-DH5	2441	Ant1	-55.53	-20	Pass
NVNT	1-DH5	2480	Ant1	-54.65	-20	Pass
NVNT	2-DH5	2402	Ant1	-52.85	-20	Pass
NVNT	2-DH5	2441	Ant1	-54.3	-20	Pass
NVNT	2-DH5	2480	Ant1	-52.78	-20	Pass

Test Graphs

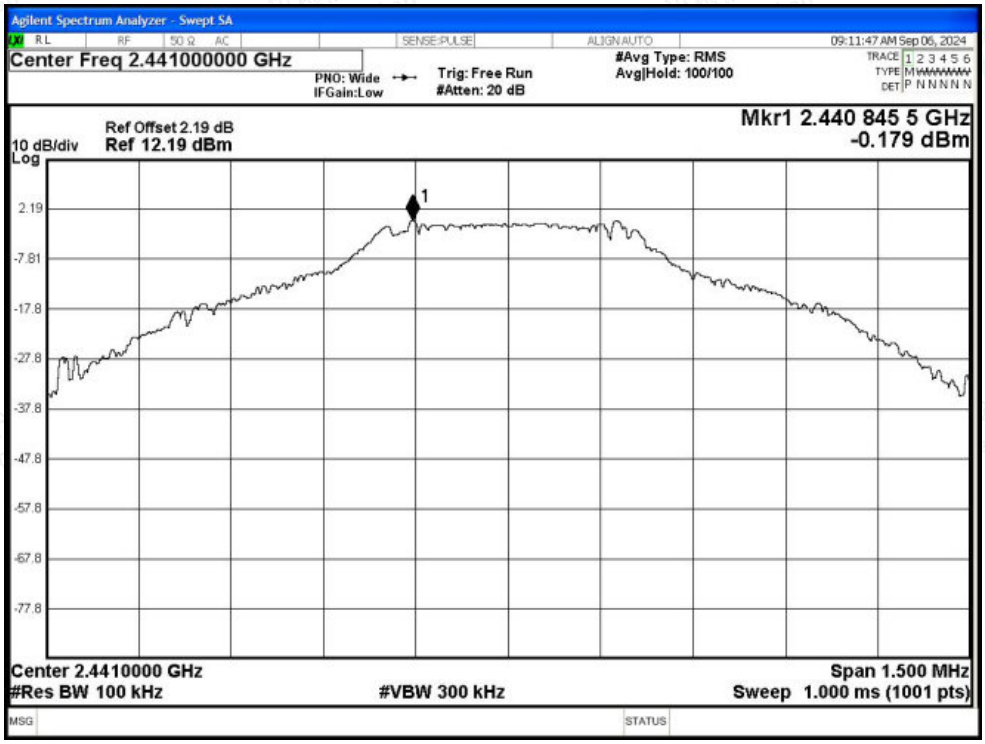
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



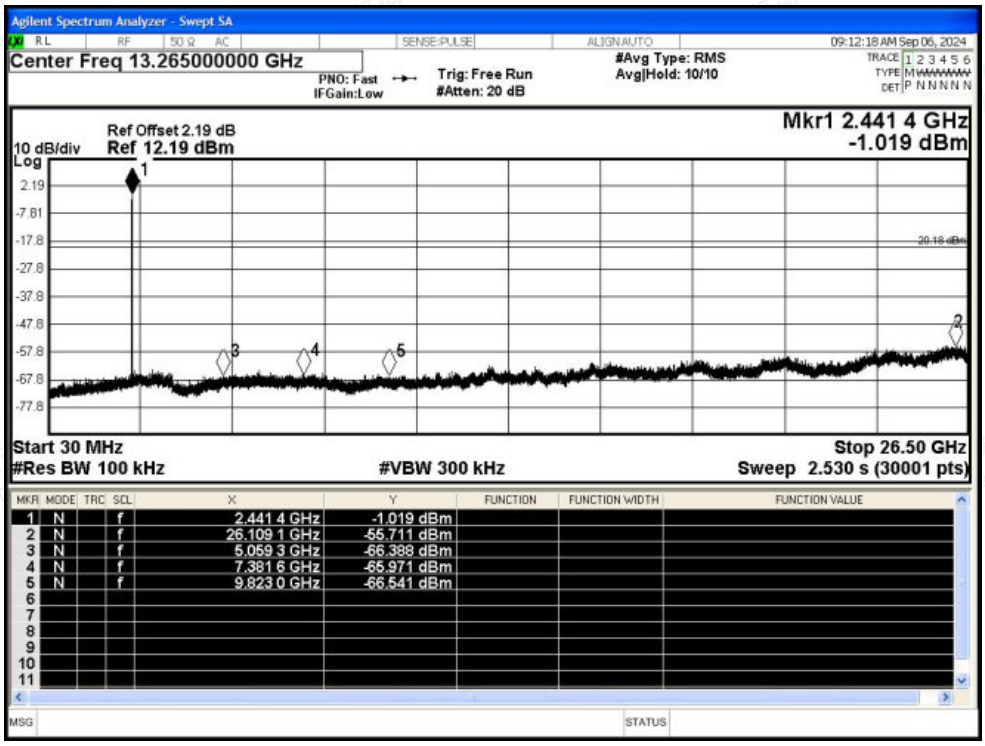
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



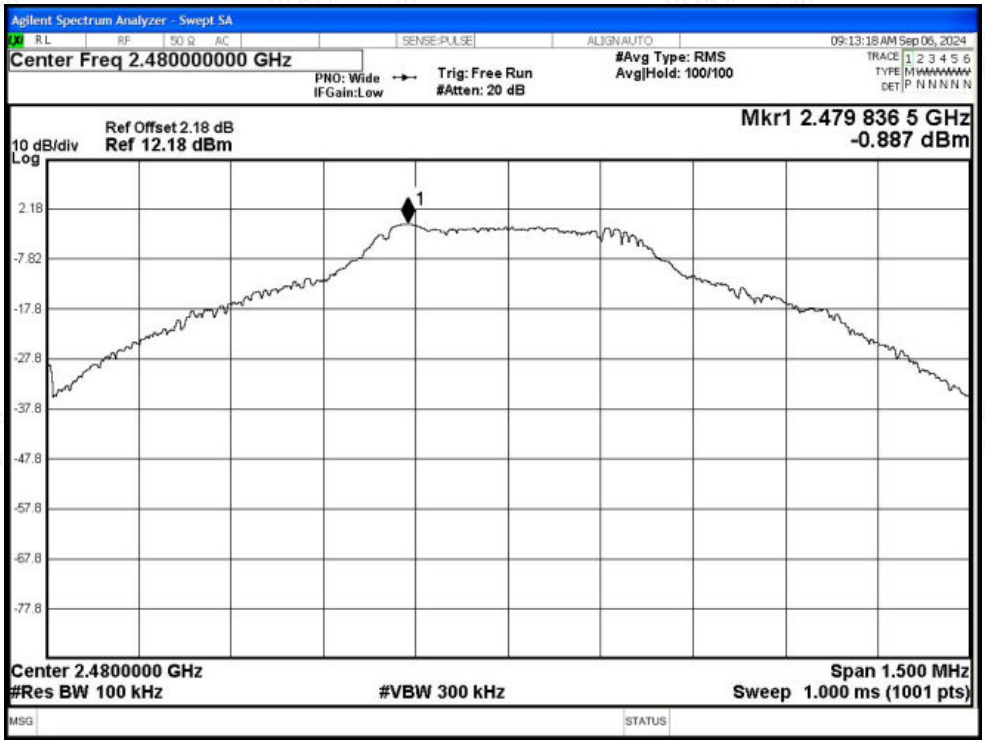
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



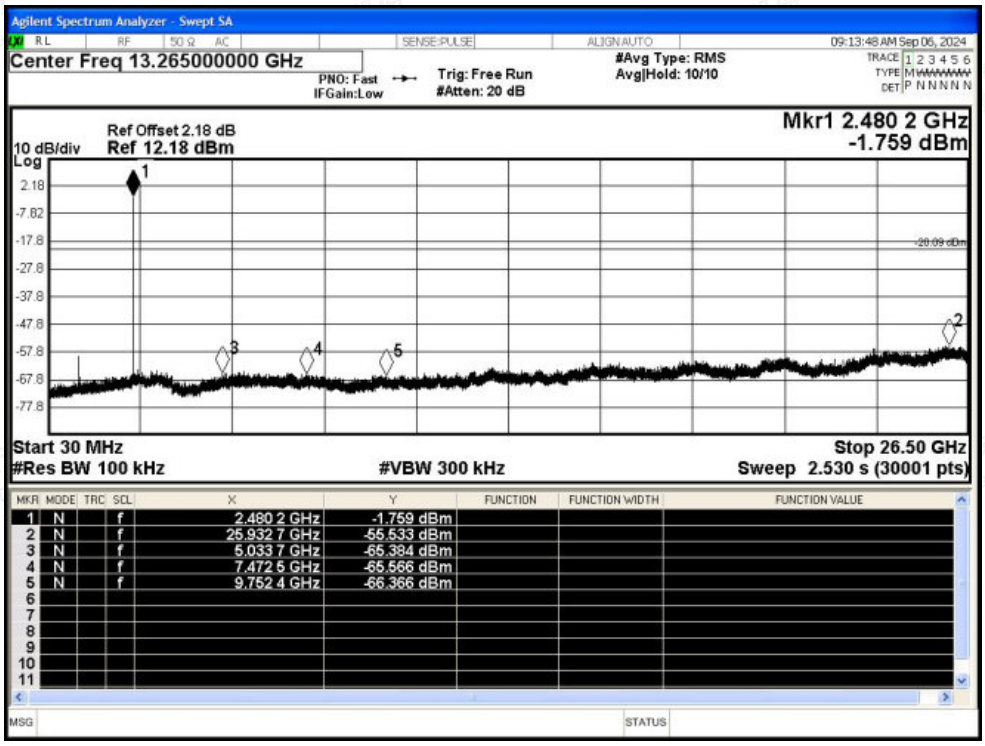
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



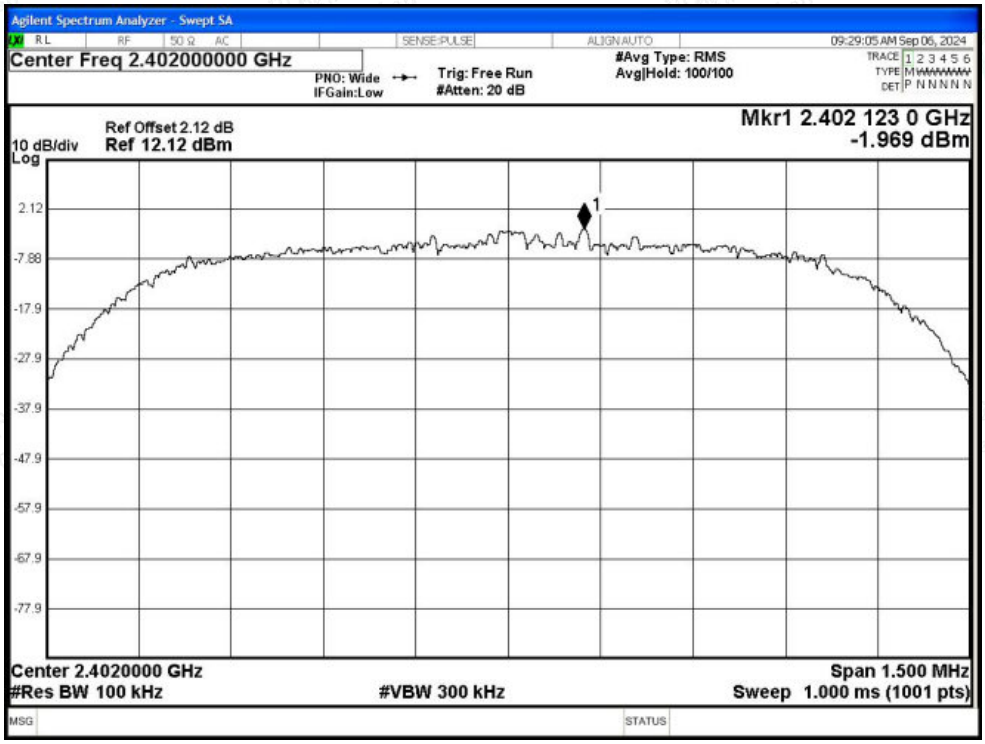
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



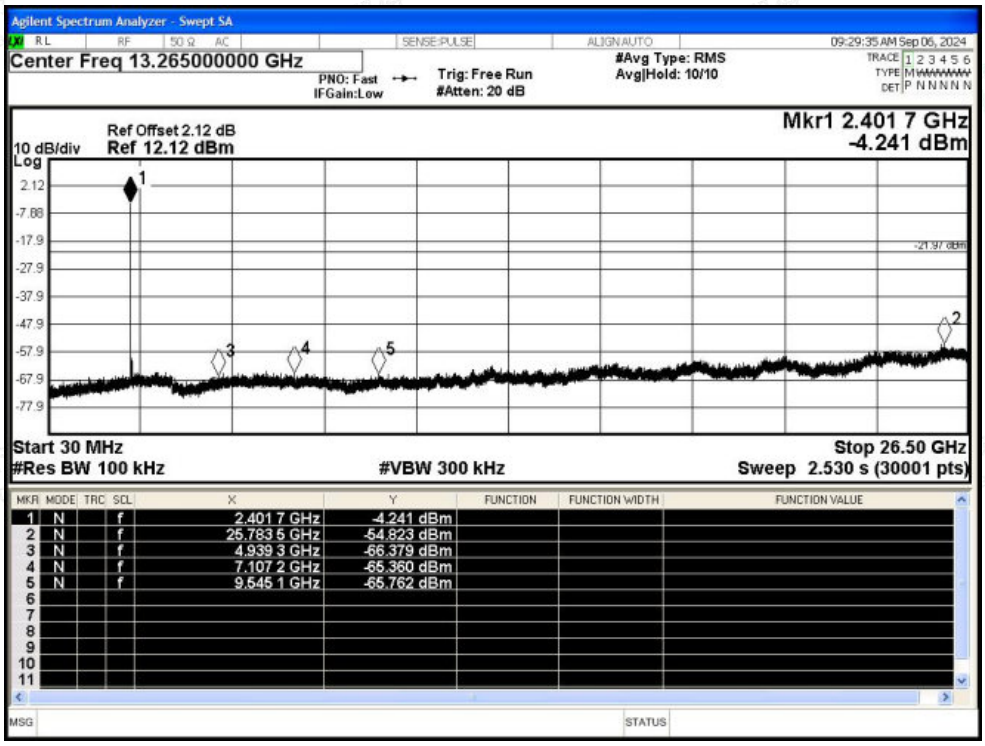
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



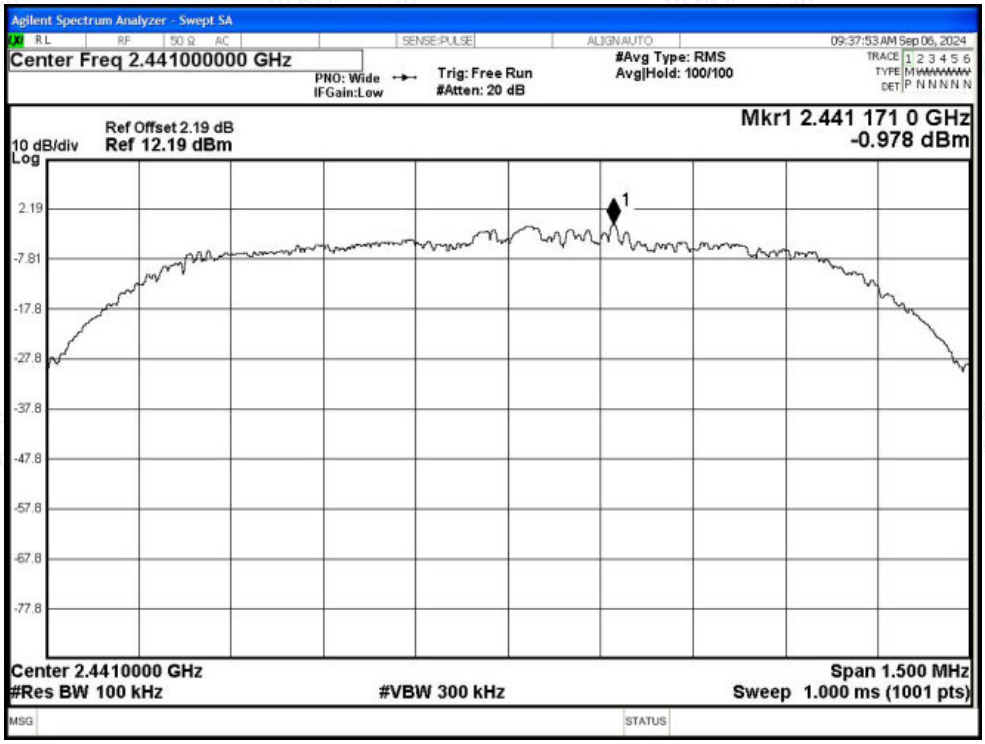
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



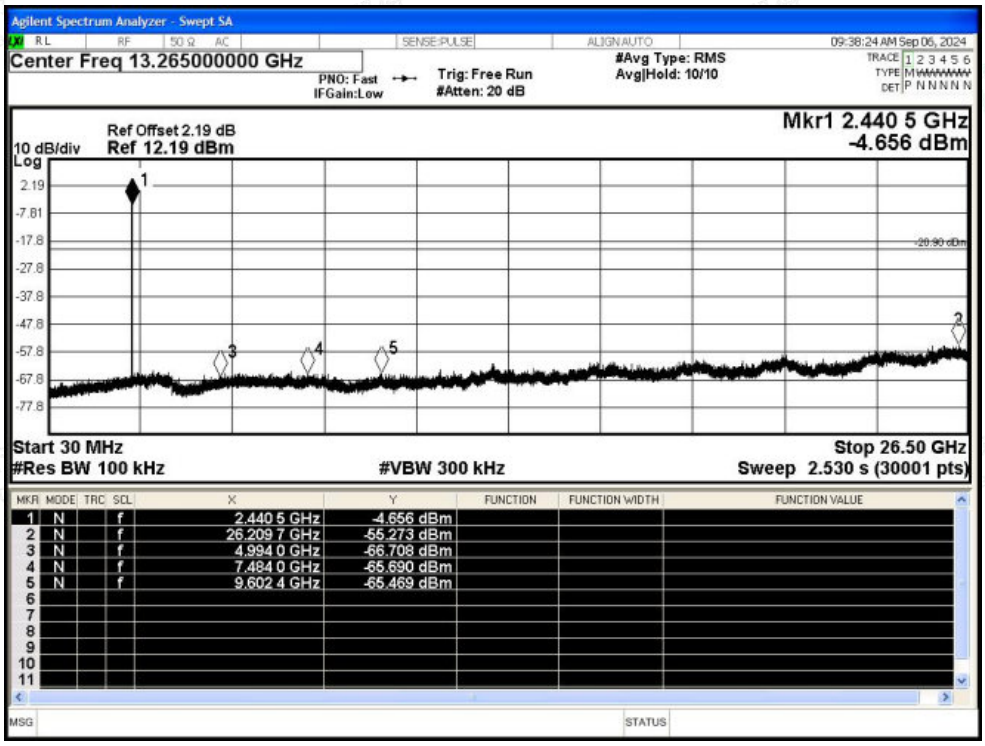
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



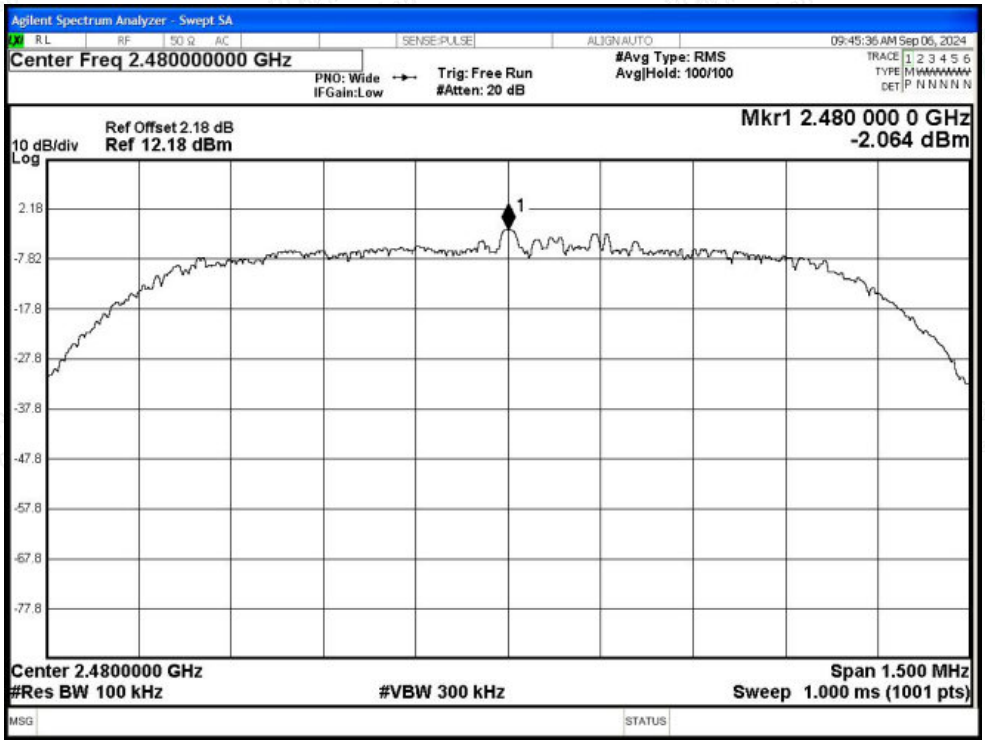
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



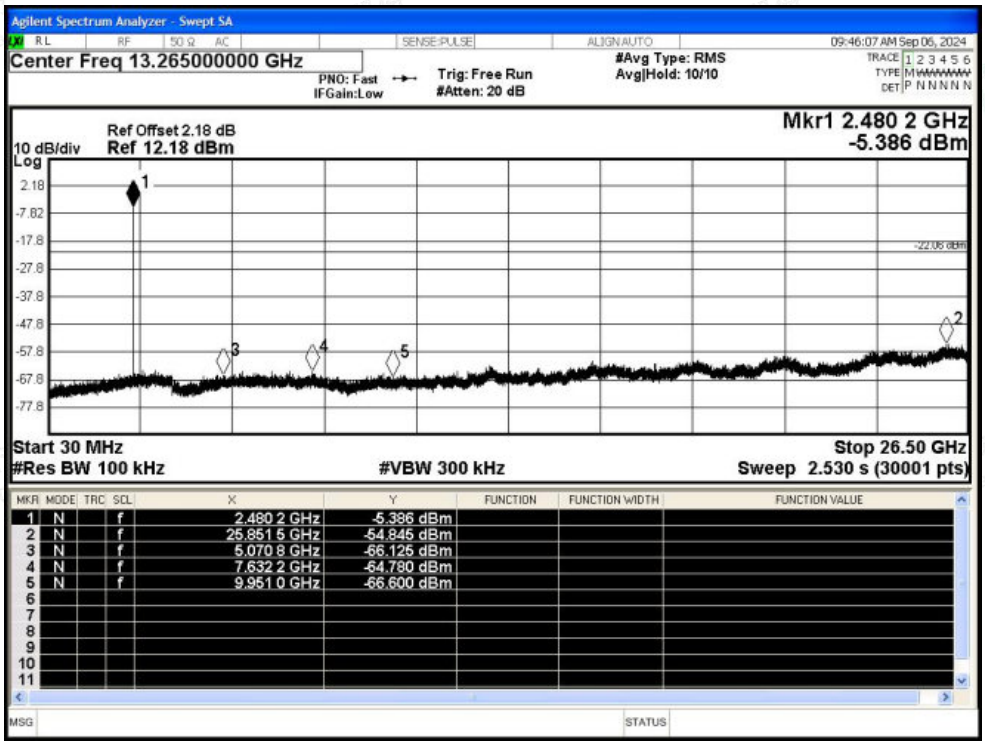
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission

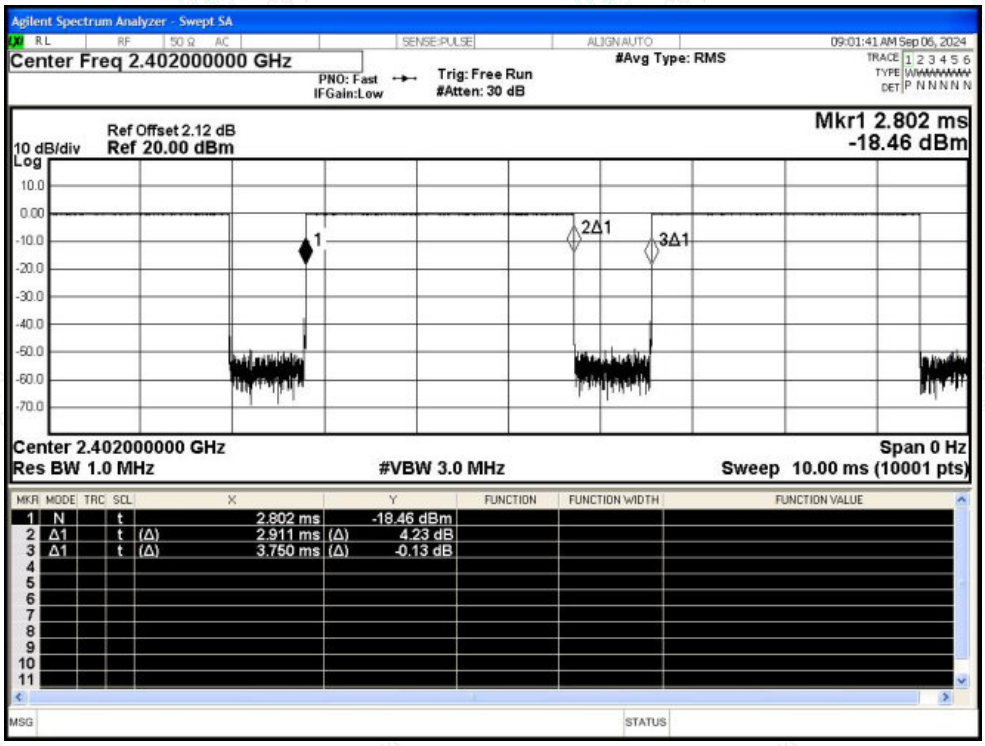


A.8 Duty Cycle

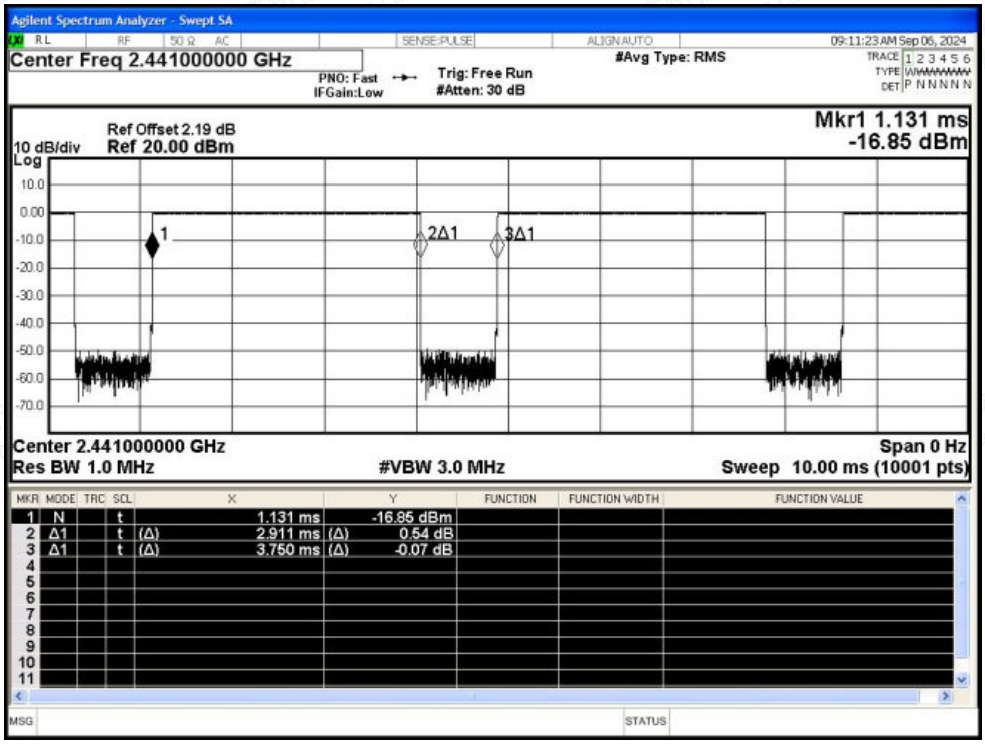
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	77.63	1.1	0.34
NVNT	1-DH5	2441	Ant1	77.63	1.1	0.34
NVNT	1-DH5	2480	Ant1	77.6	1.1	0.34
NVNT	2-DH5	2402	Ant1	77.33	1.12	0.34
NVNT	2-DH5	2441	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2480	Ant1	77.28	1.12	0.35

Test Graphs

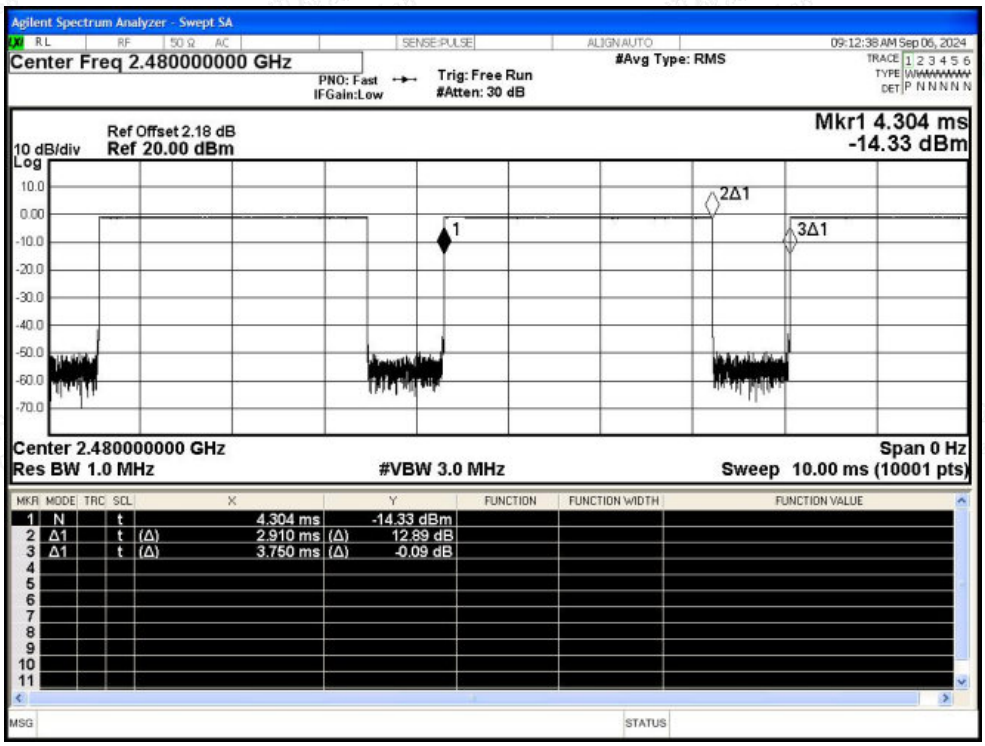
Duty Cycle NVNT 1-DH5 2402MHz Ant1



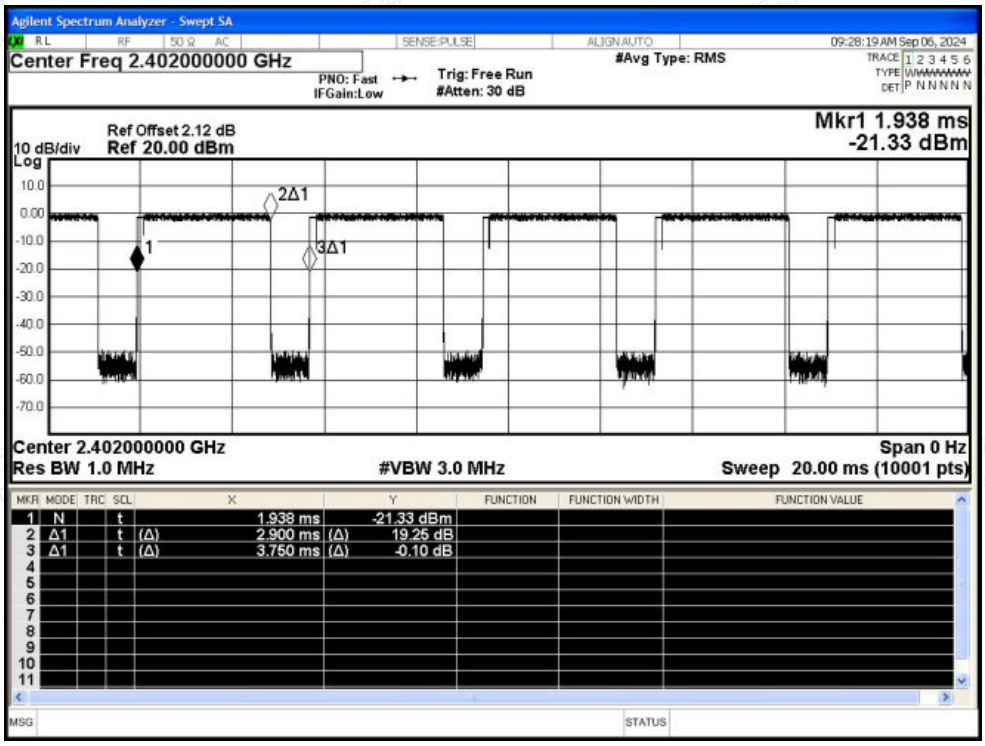
Duty Cycle NVNT 1-DH5 2441MHz Ant1



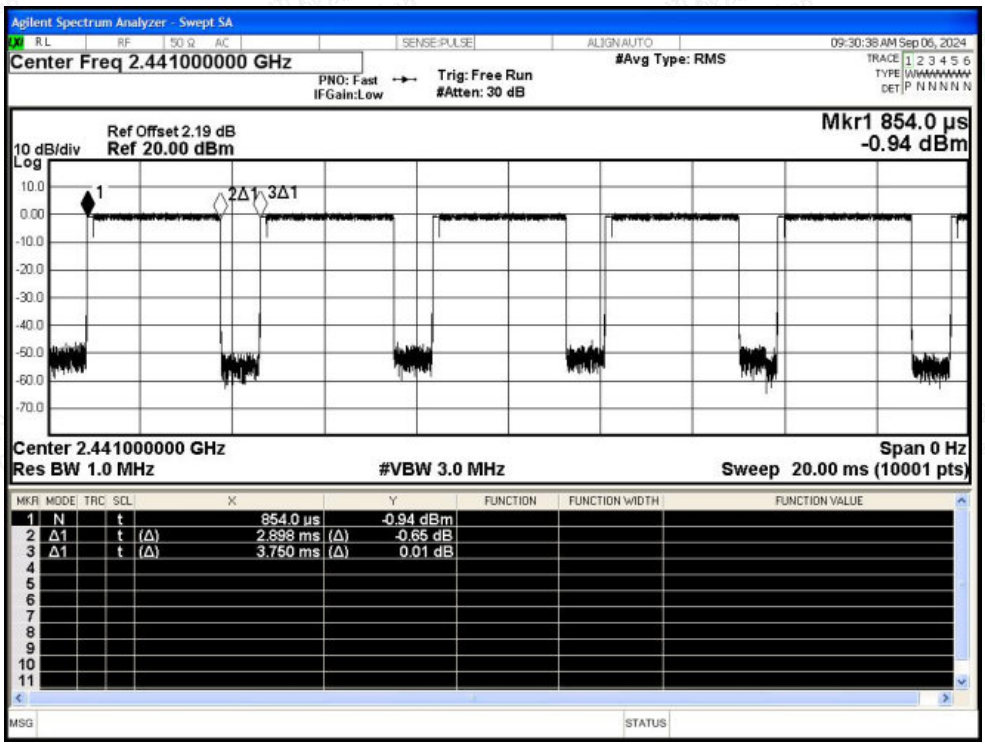
Duty Cycle NVNT 1-DH5 2480MHz Ant1



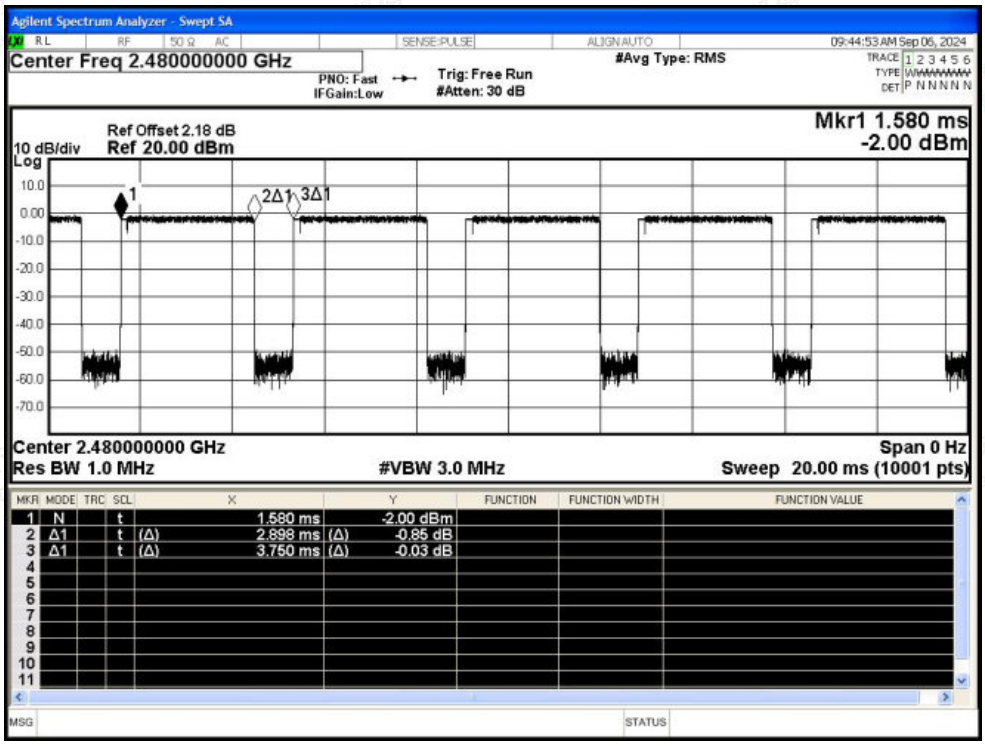
Duty Cycle NVNT 2-DH5 2402MHz Ant1



Duty Cycle NVNT 2-DH5 2441MHz Ant1



Duty Cycle NVNT 2-DH5 2480MHz Ant1

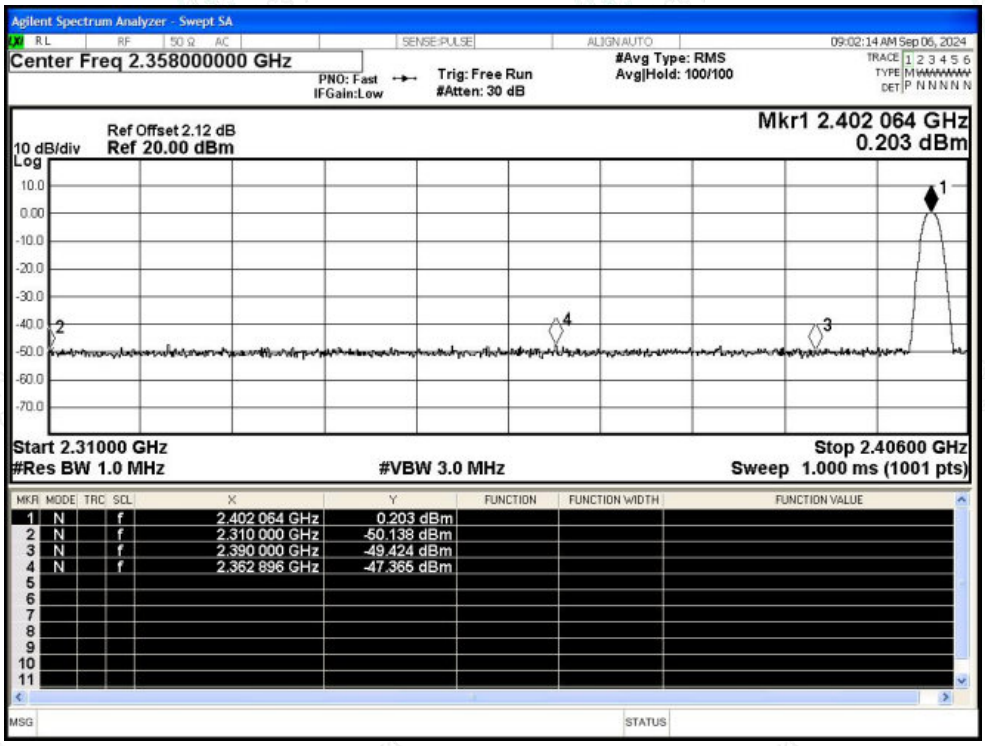


A.9 Restrict Band

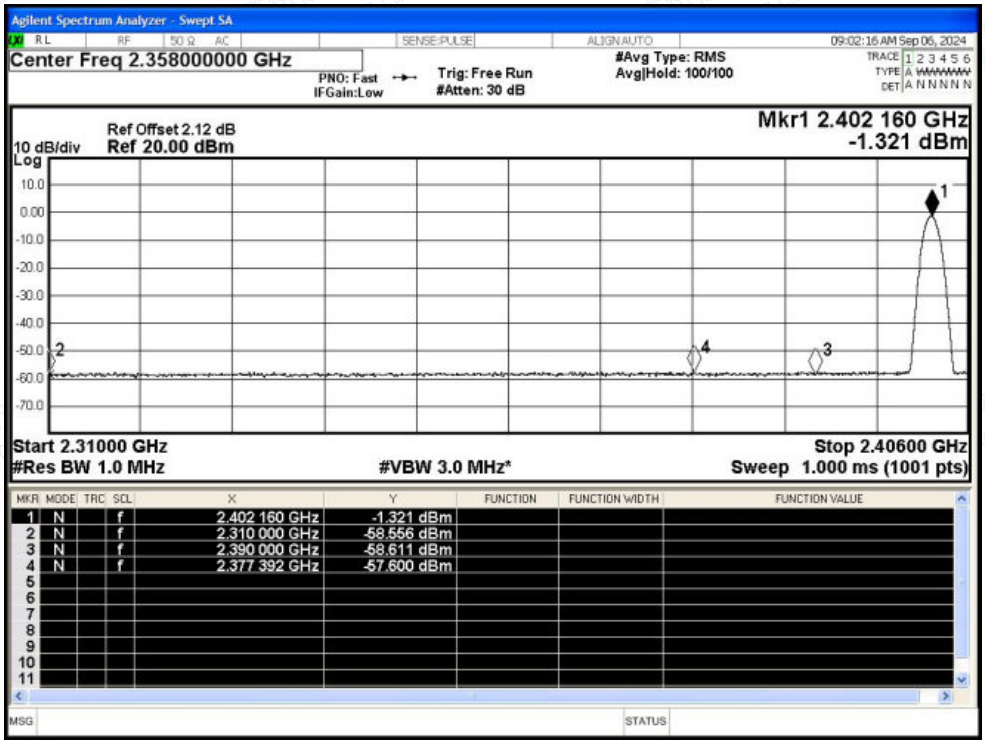
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-50.14	2.50	-	47.62	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.56	2.50	1.1	40.30	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2362.896	-47.37	2.50	-	50.39	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2377.392	-57.6	2.50	1.1	41.26	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.42	2.50	-	48.34	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.61	2.50	1.1	40.25	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.18	2.50	-	47.58	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-57.87	2.50	1.1	40.99	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2488.072	-46.46	2.50	-	51.30	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2485.744	-57.23	2.50	1.1	41.63	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-49.49	2.50	-	48.27	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-58.14	2.50	1.1	40.72	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-50.96	2.50	-	46.80	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-58.61	2.50	1.12	40.27	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2353.968	-47.8	2.50	-	49.96	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2373.36	-57.4	2.50	1.12	41.48	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-48.79	2.50	-	48.97	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-58.71	2.50	1.12	40.17	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-50.73	2.50	-	47.03	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-57.35	2.50	1.12	41.53	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.872	-46.06	2.50	-	51.70	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2489.368	-57.04	2.50	1.12	41.84	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-49.82	2.50	-	47.94	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-57.54	2.50	1.12	41.34	Average	54	Pass

Test Graphs

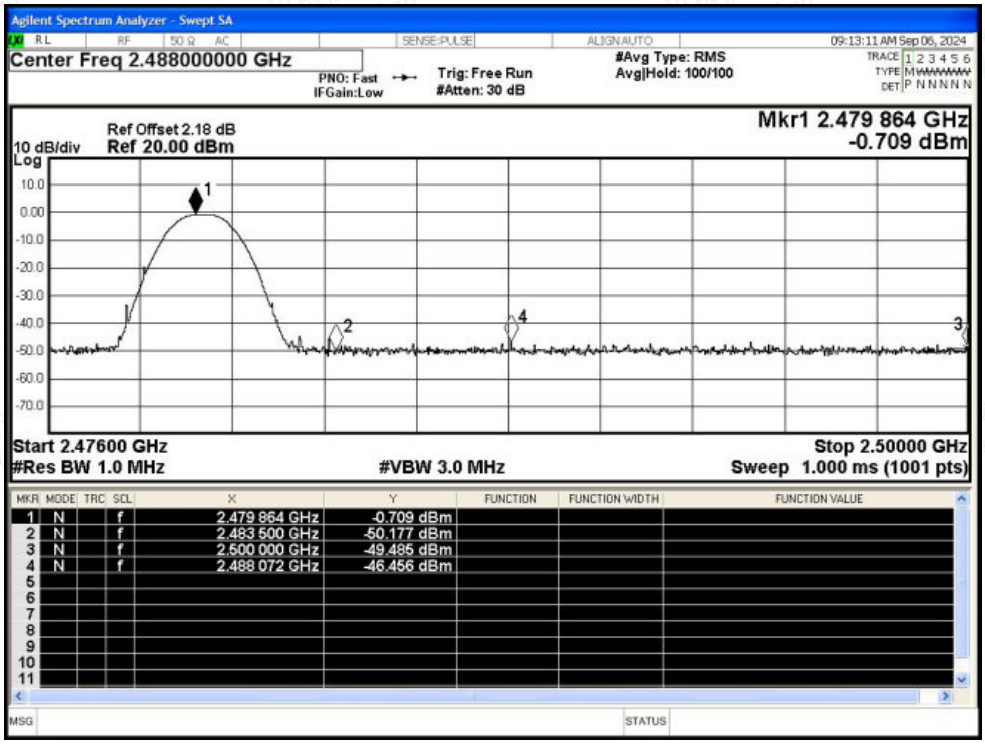
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



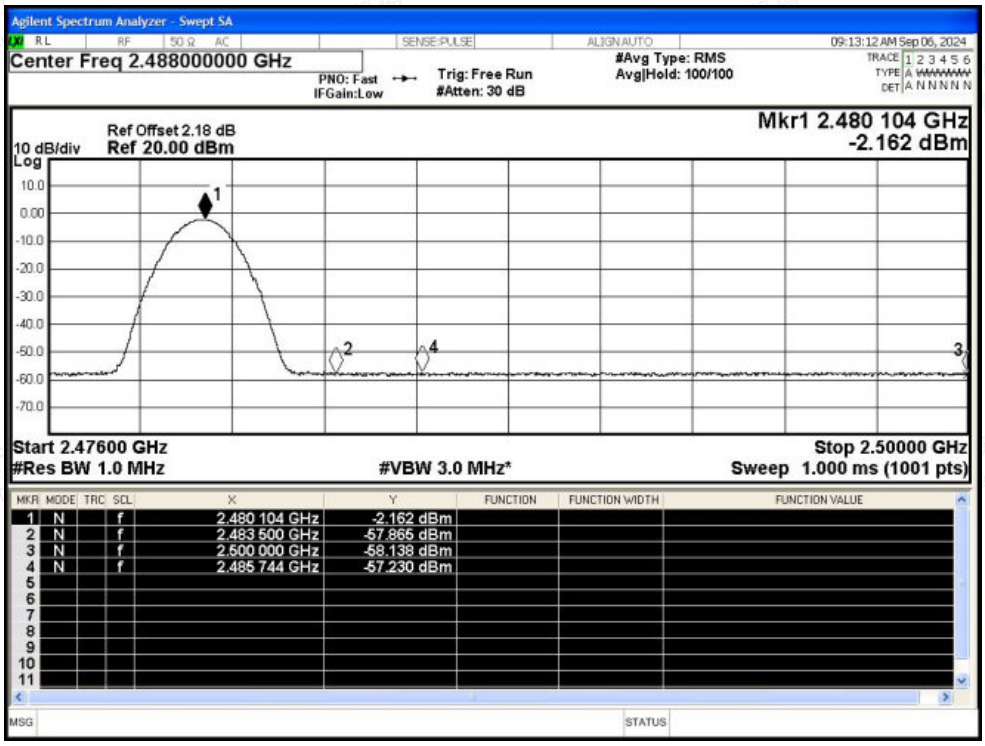
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



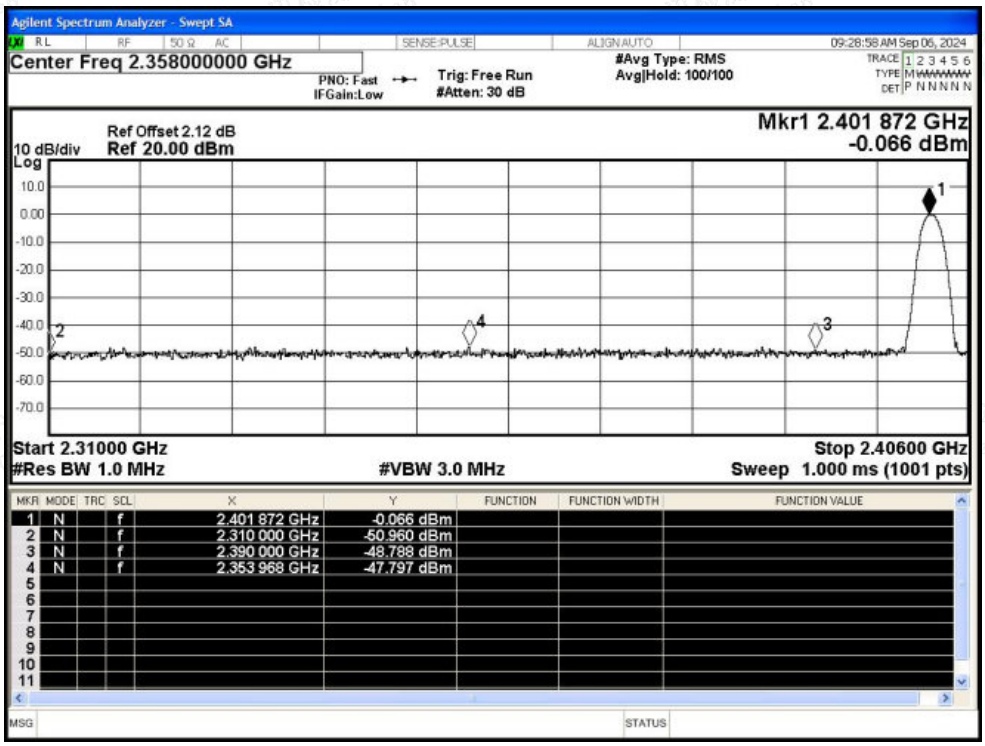
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



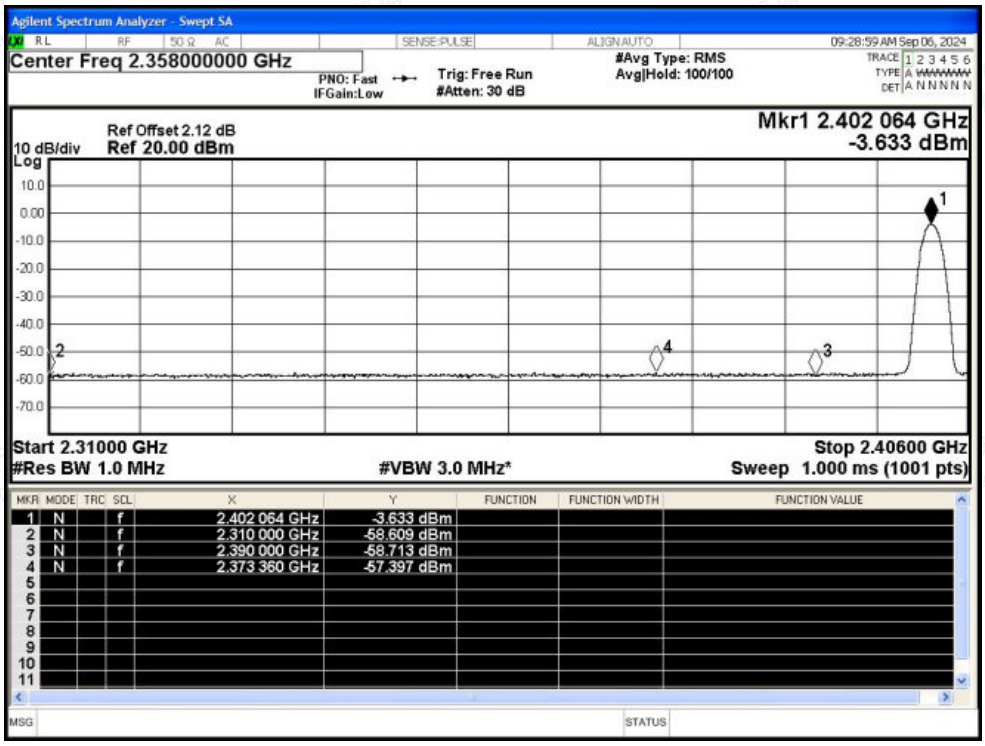
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



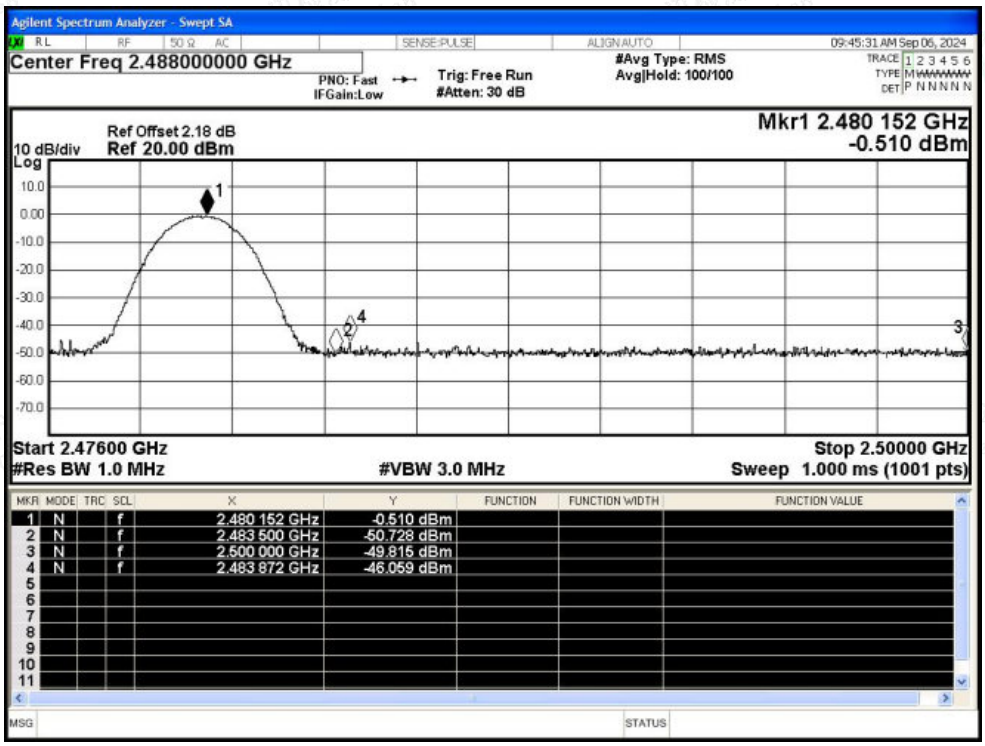
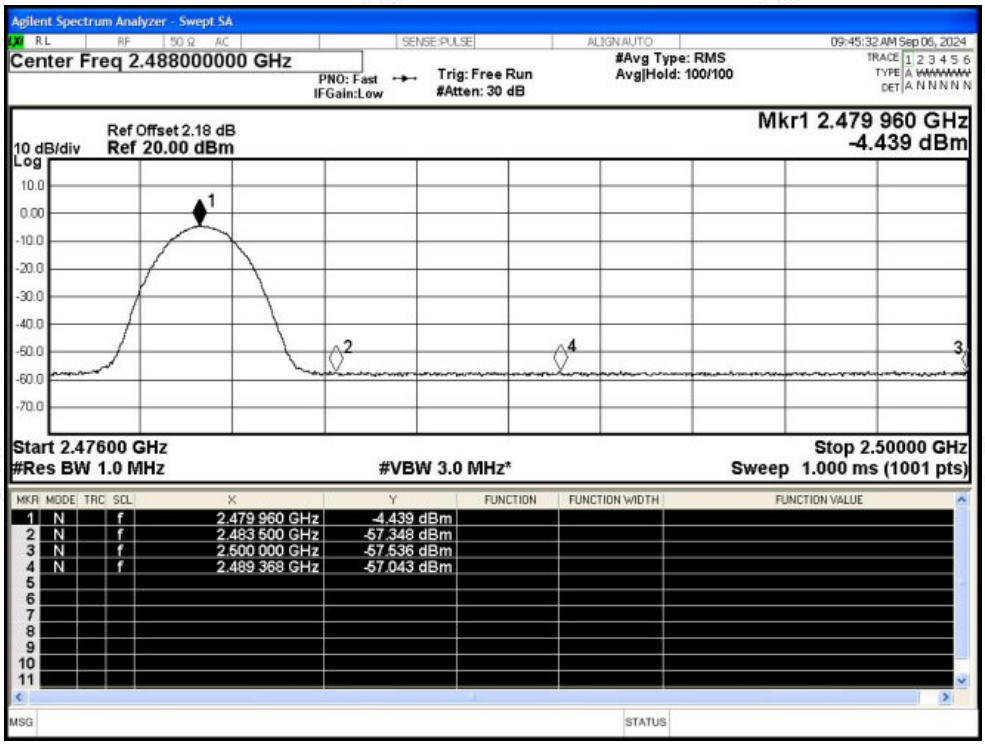
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



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