

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Wireless voice amplifier

Test Model: YS-121S

Environmental Conditions

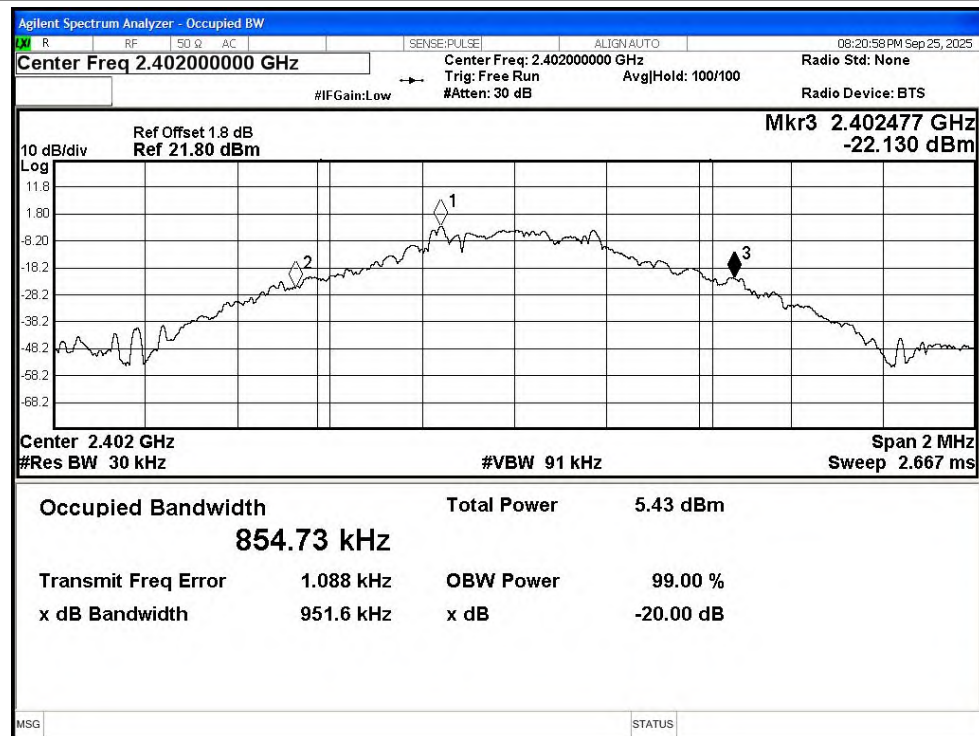
Temperature:	24.3°C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Jone Lee
Supervised by:	Yan Chen

A.1 -20dB Bandwidth

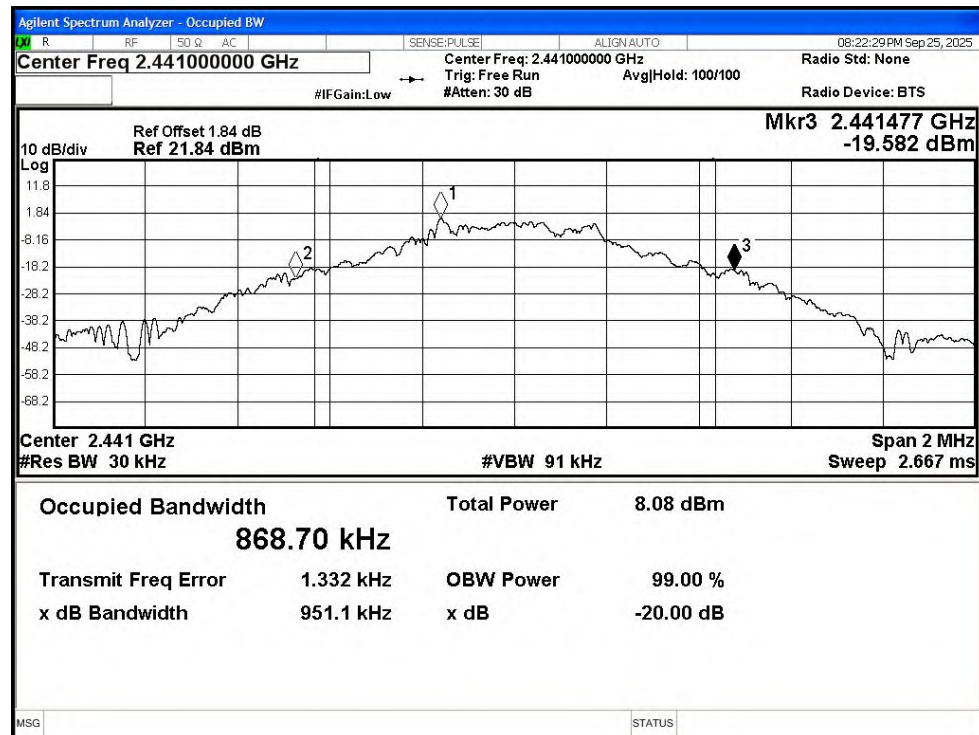
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.952	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.951	N/A	Pass
NVNT	1-DH5	2480	Ant1	1.012	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.278	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.286	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.282	N/A	Pass

Test Graphs

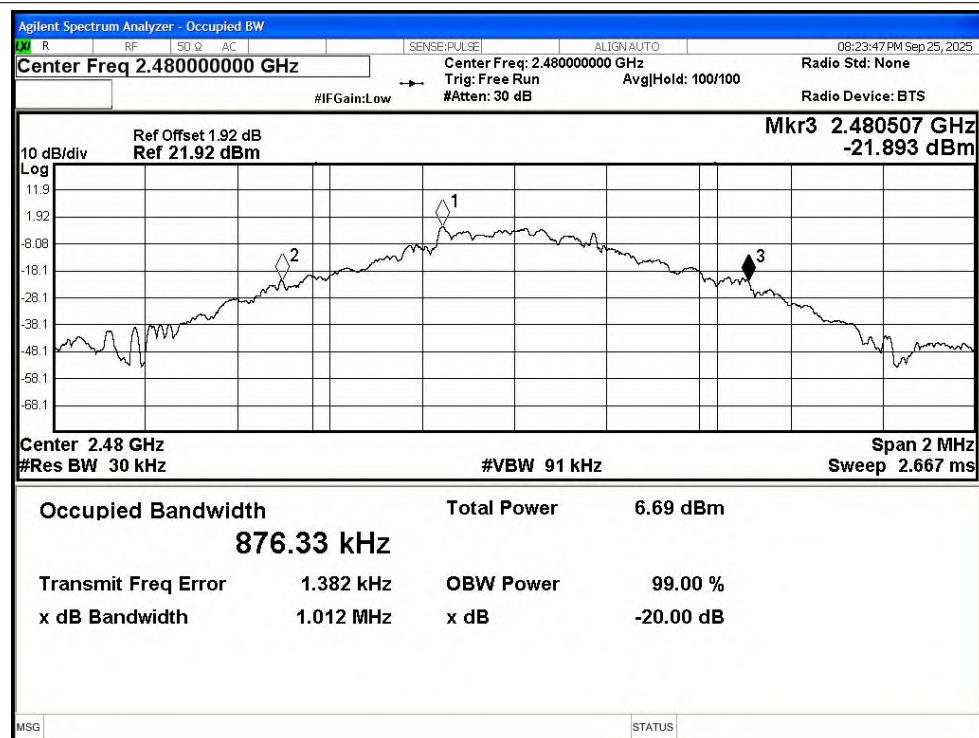
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



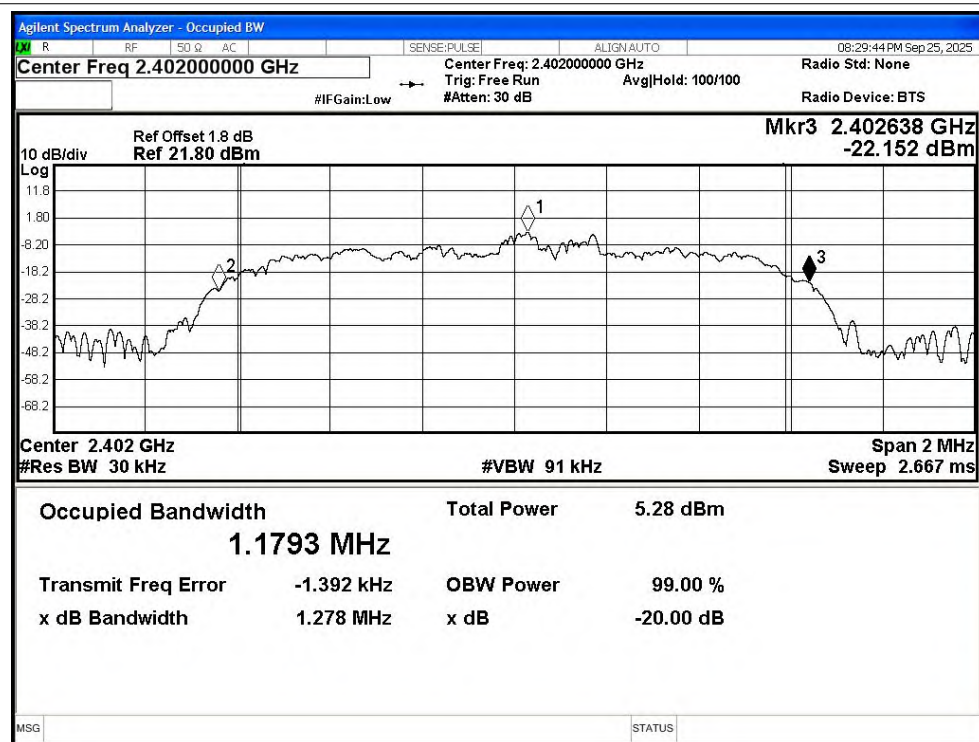
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



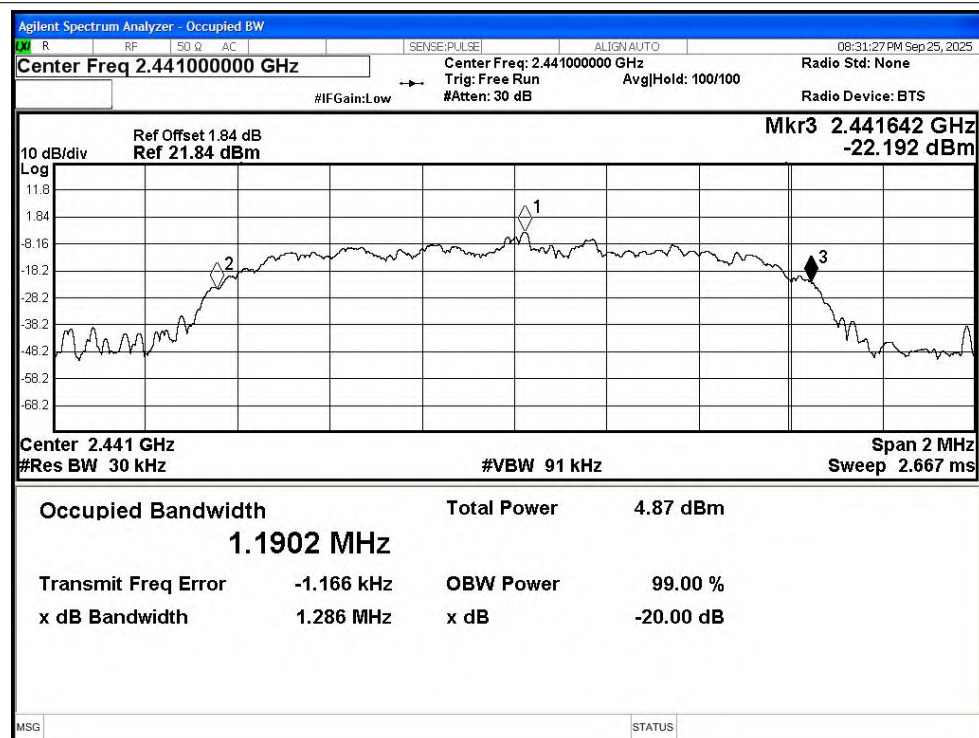
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



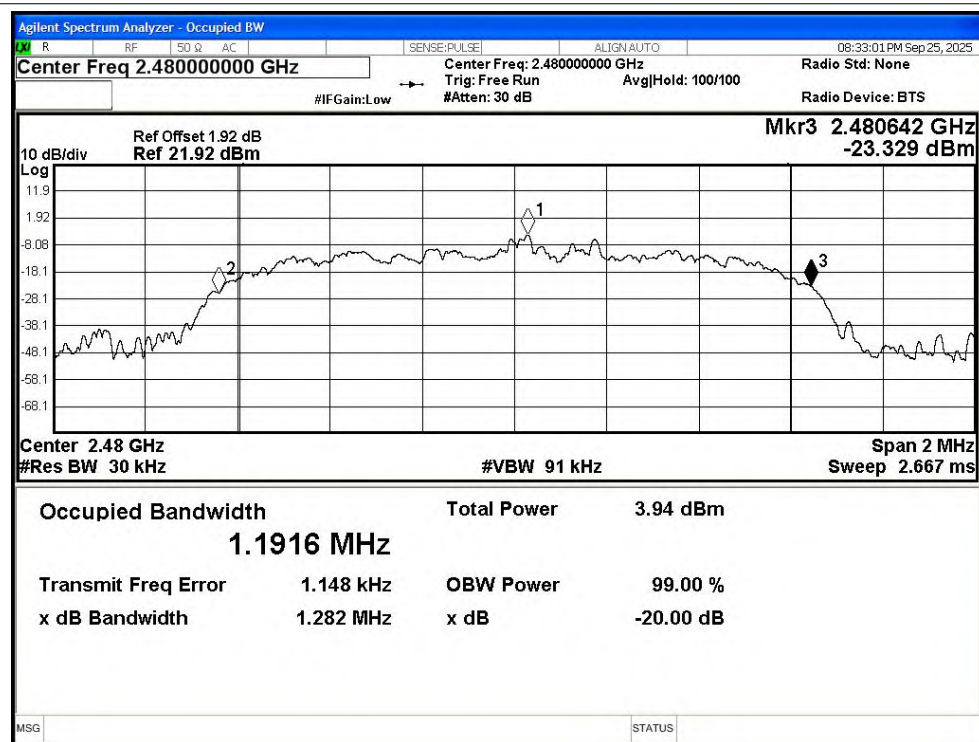
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

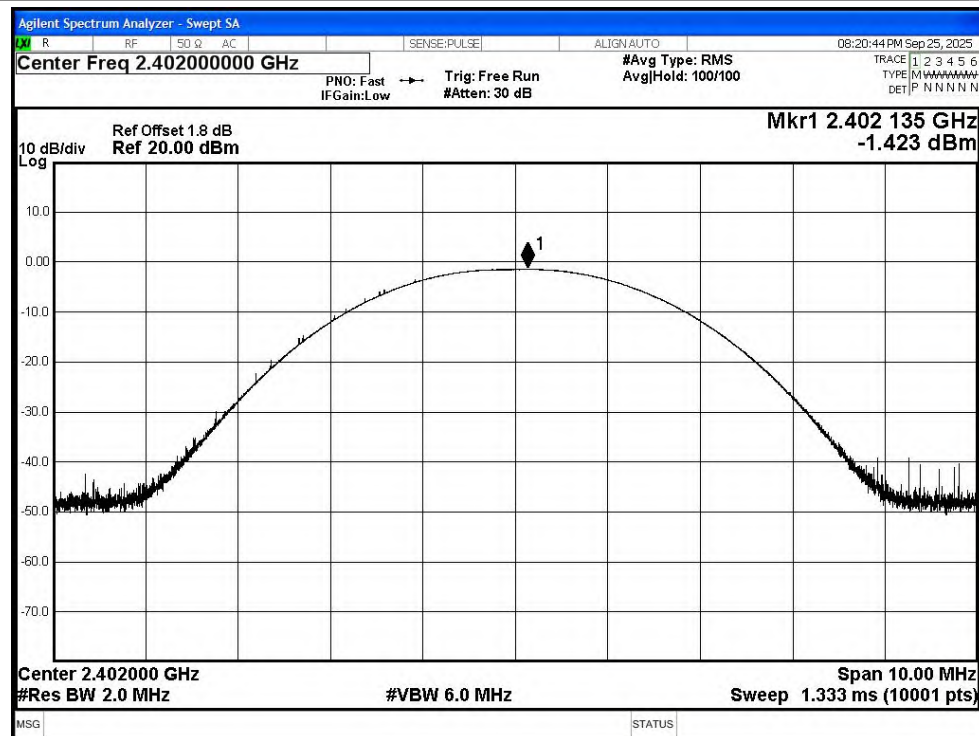


A.2 Maximum Peak Conducted Output Power

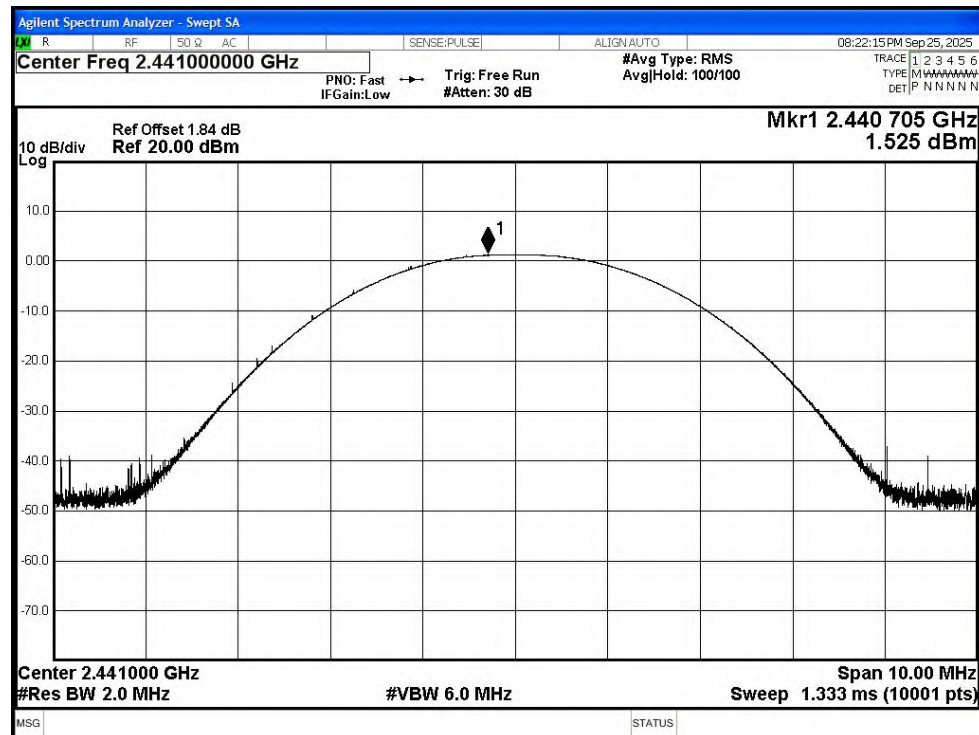
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-1.42	21	Pass
NVNT	1-DH5	2441	Ant1	1.53	21	Pass
NVNT	1-DH5	2480	Ant1	0.40	21	Pass
NVNT	2-DH5	2402	Ant1	0.64	21	Pass
NVNT	2-DH5	2441	Ant1	0.80	21	Pass
NVNT	2-DH5	2480	Ant1	-0.31	21	Pass

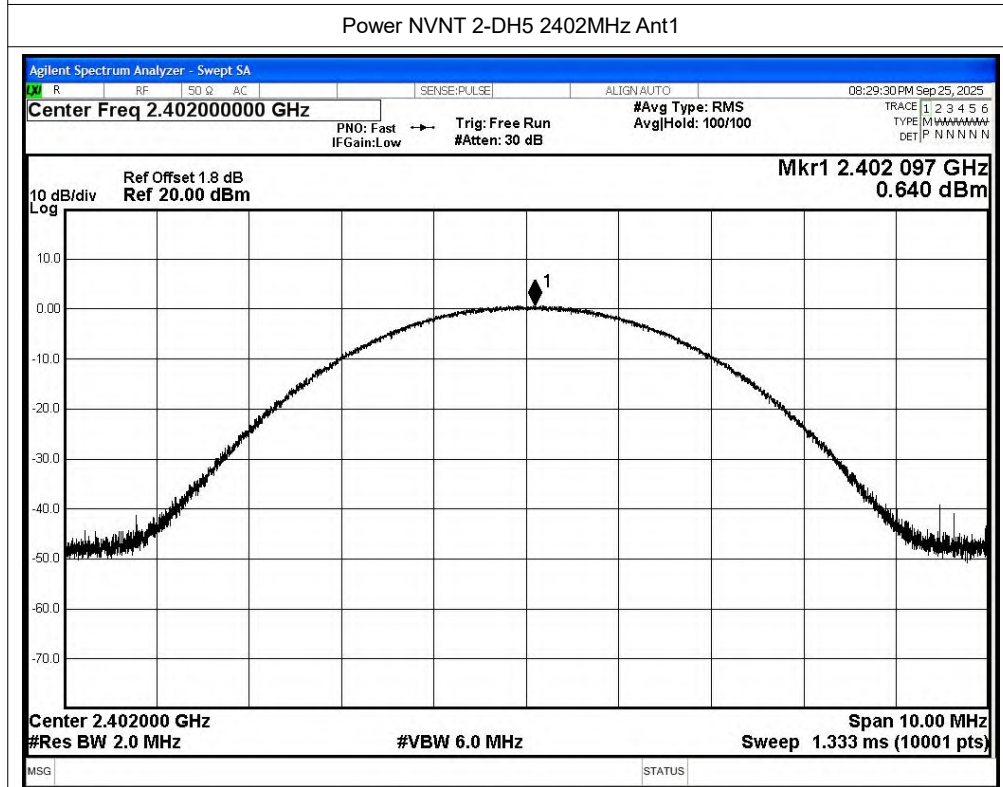
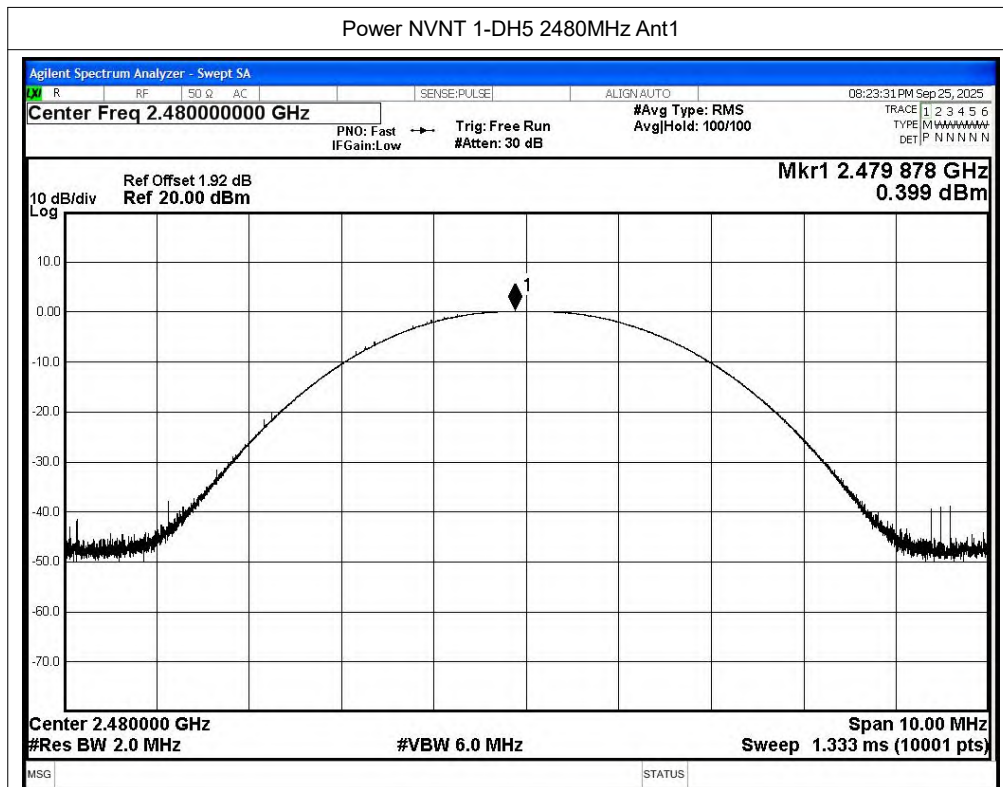
Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

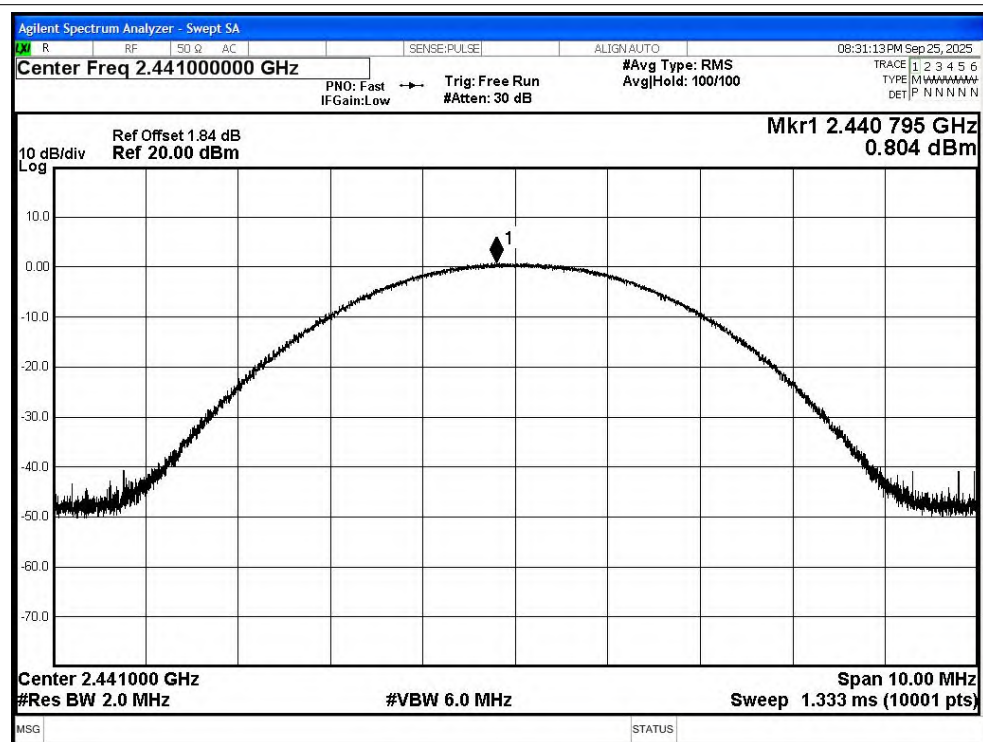


Power NVNT 1-DH5 2441MHz Ant1

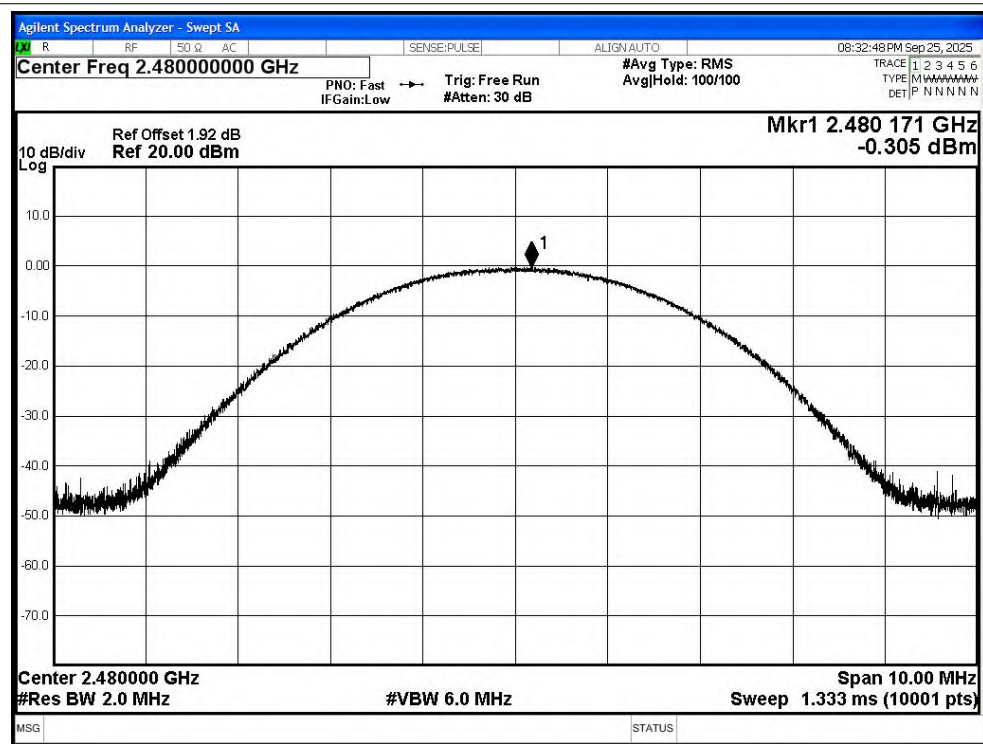




Power NVNT 2-DH5 2441MHz Ant1



Power NVNT 2-DH5 2480MHz Ant1

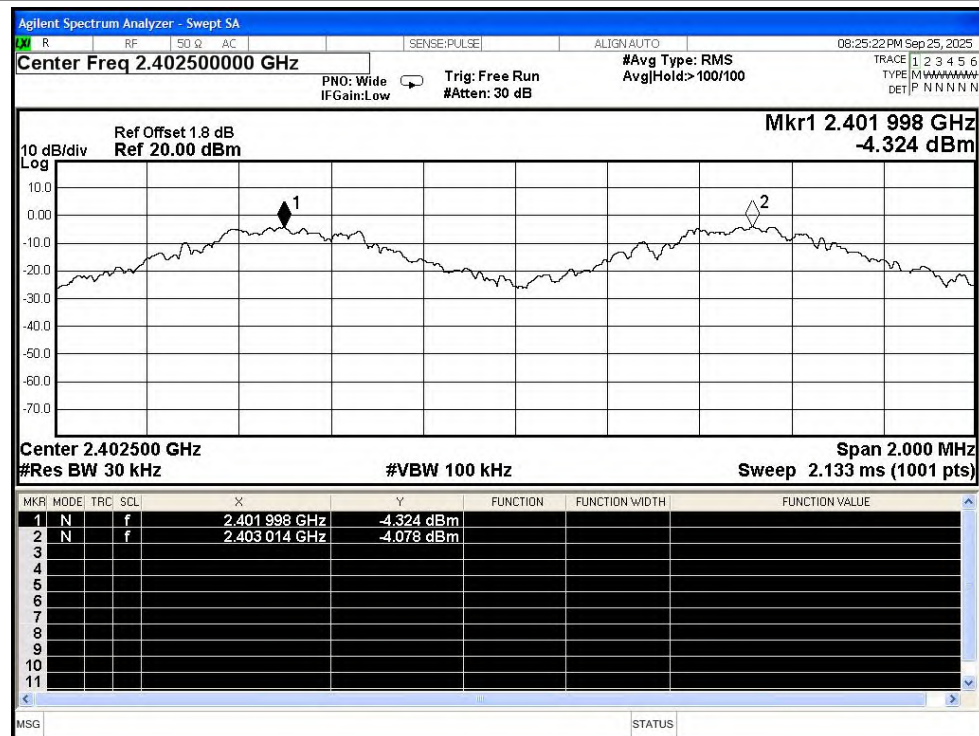


A.3 Carrier Frequencies Separation

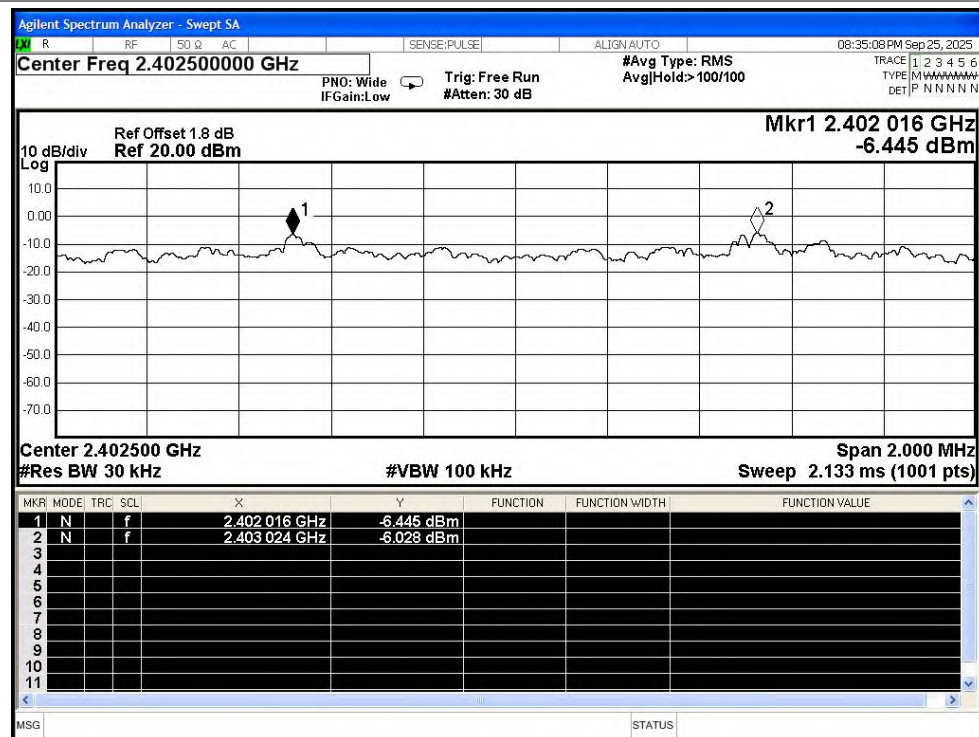
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.998	2403.014	1.016	0.675	Pass
NVNT	2-DH5	Ant1	2402.016	2403.024	1.008	0.857	Pass

Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1

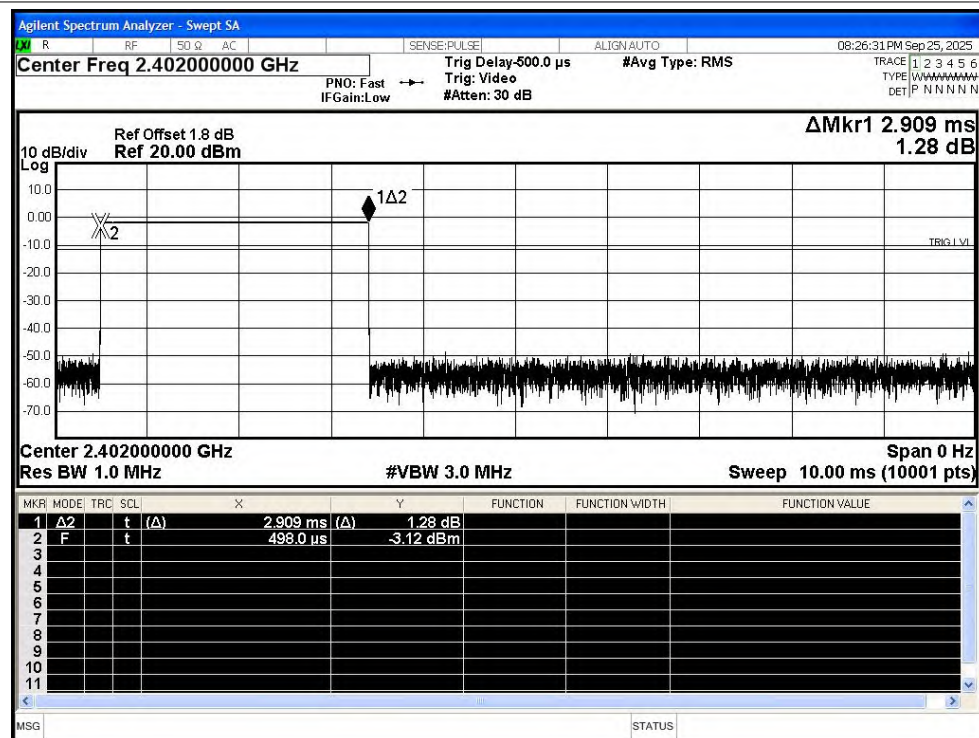


A.4 Dwell Time

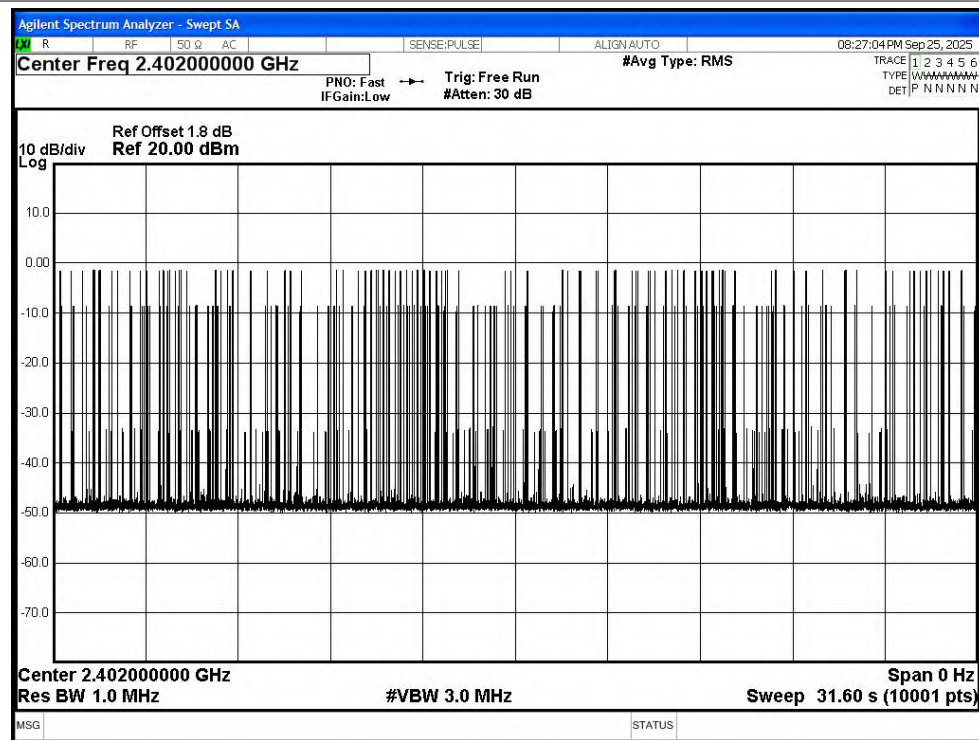
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.909	346.171	119	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.898	286.902	99	31600	400	Pass

Test Graphs

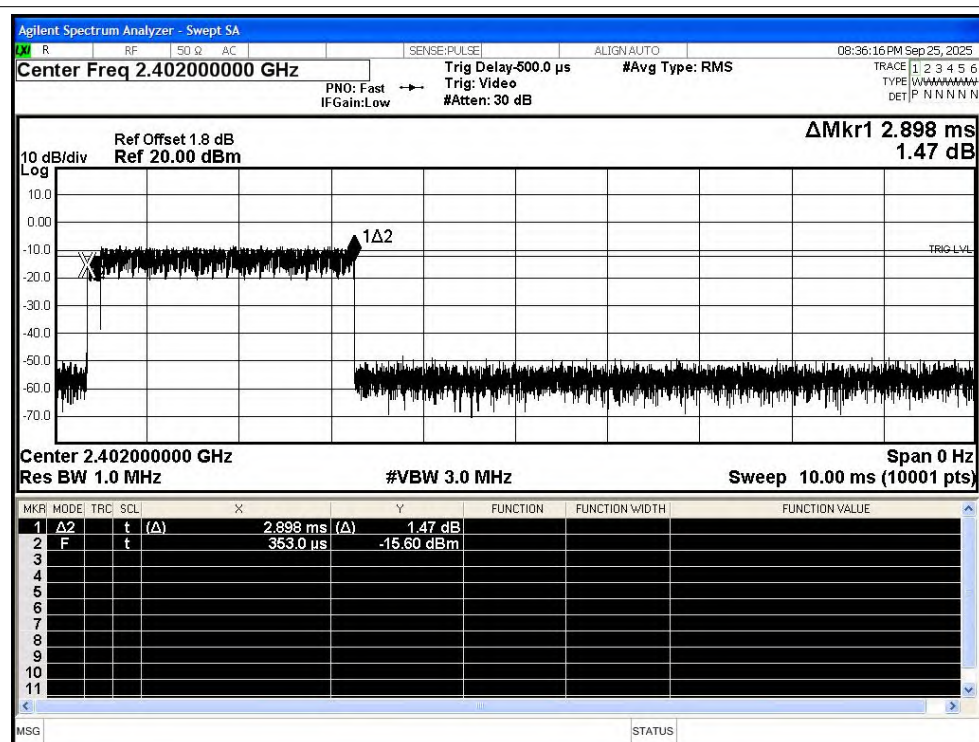
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



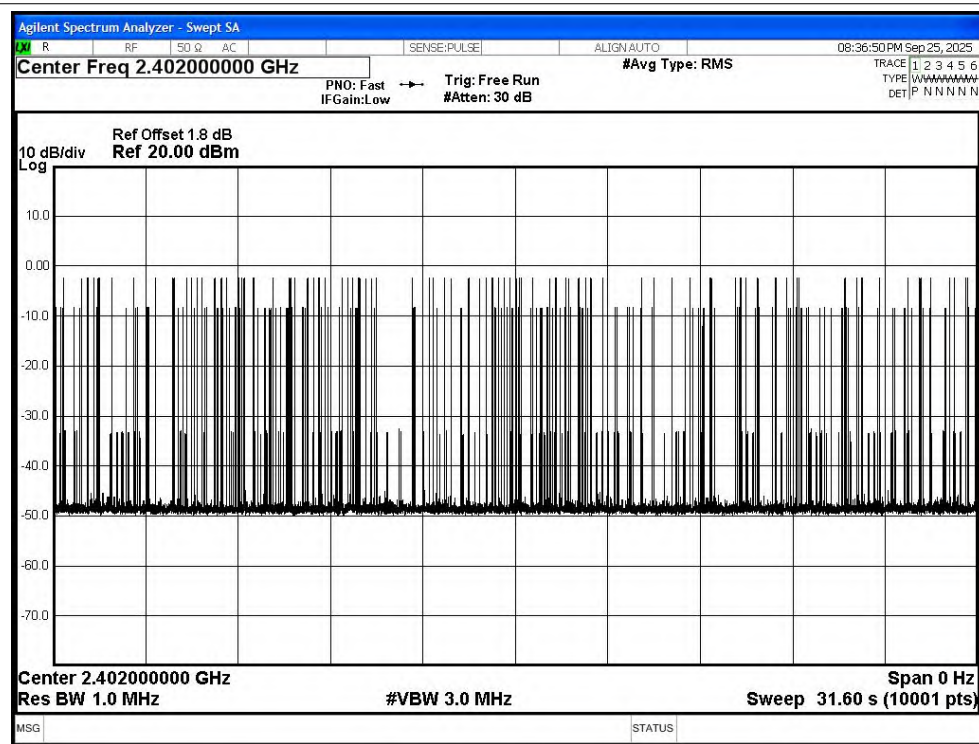
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated

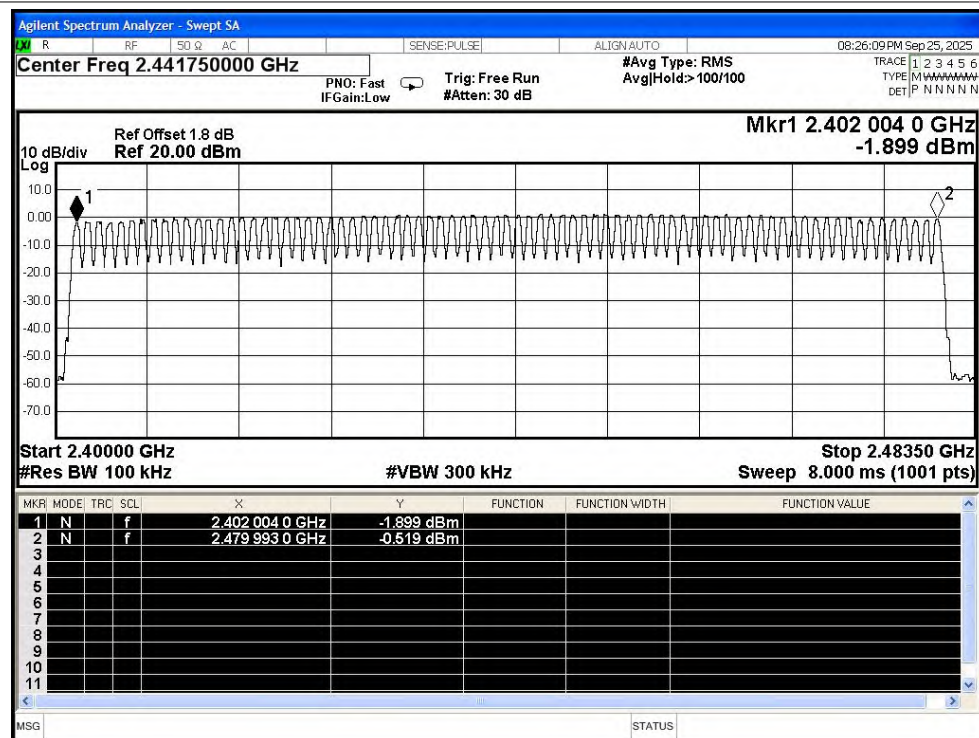


A.5 Number of Hopping Channel

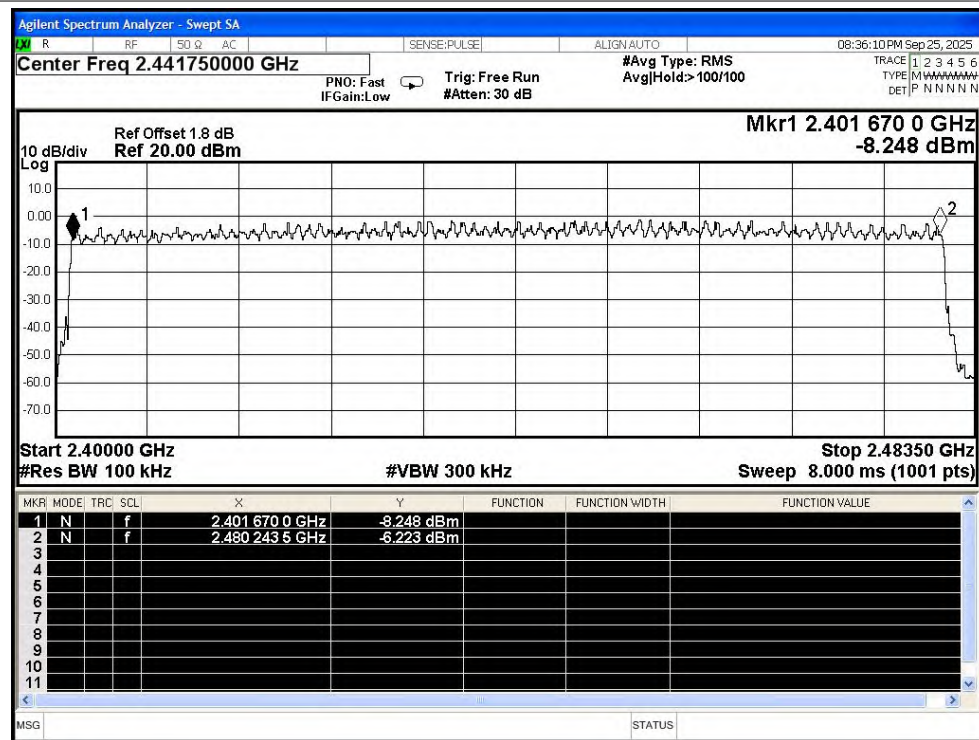
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass

Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1

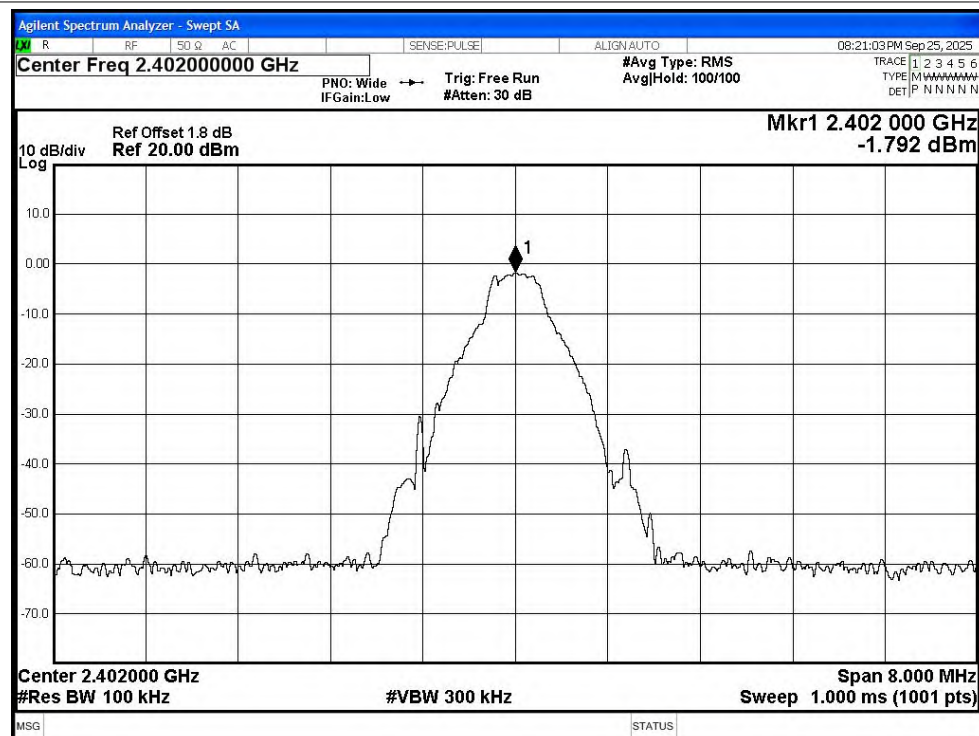


A.6 Band Edge

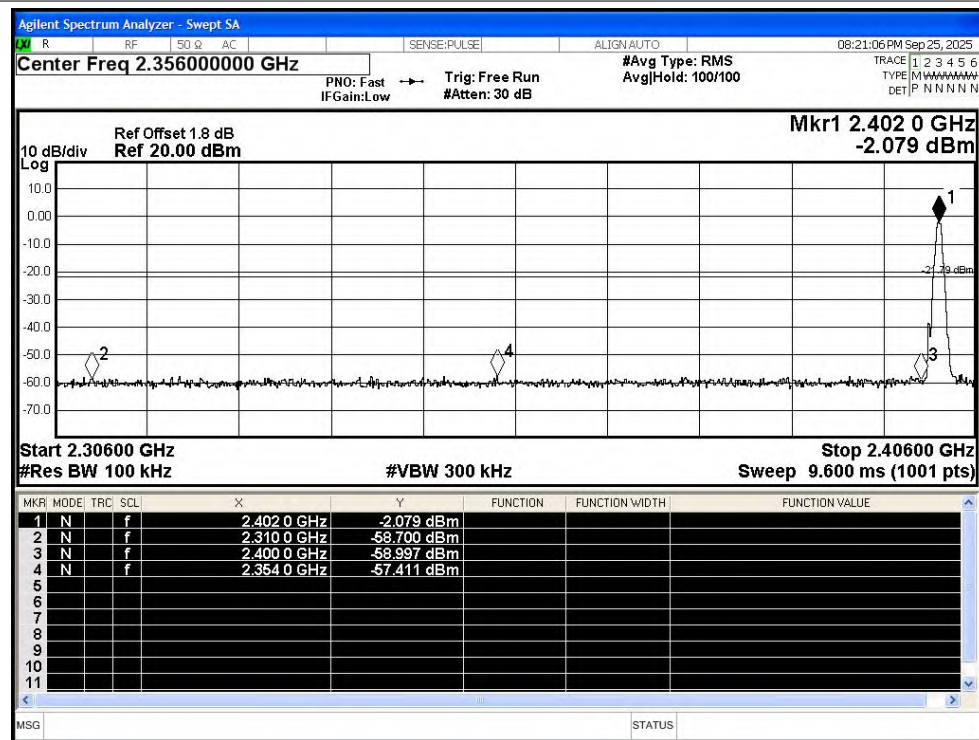
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-55.62	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-57.05	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-52.4	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-52.31	-20	Pass

Test Graphs

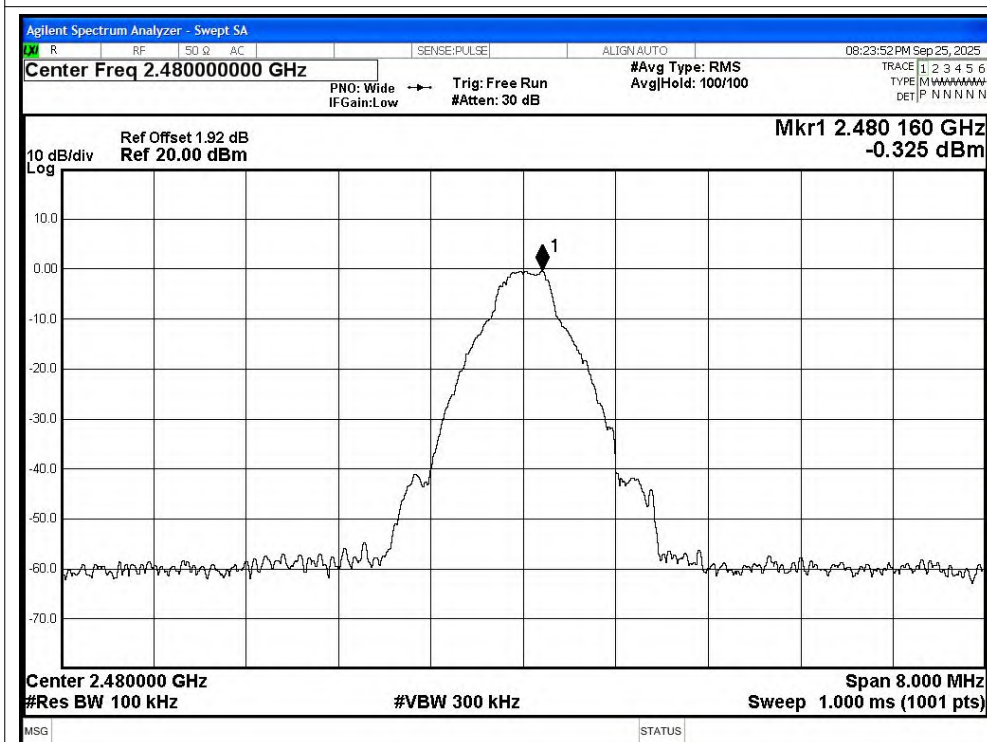
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



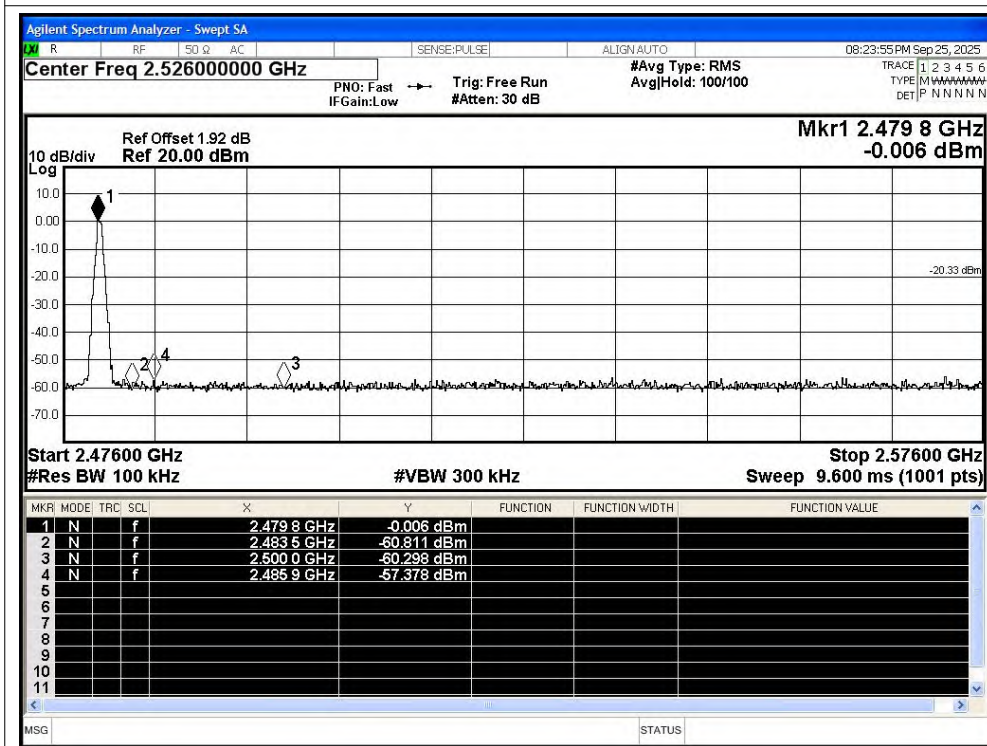
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



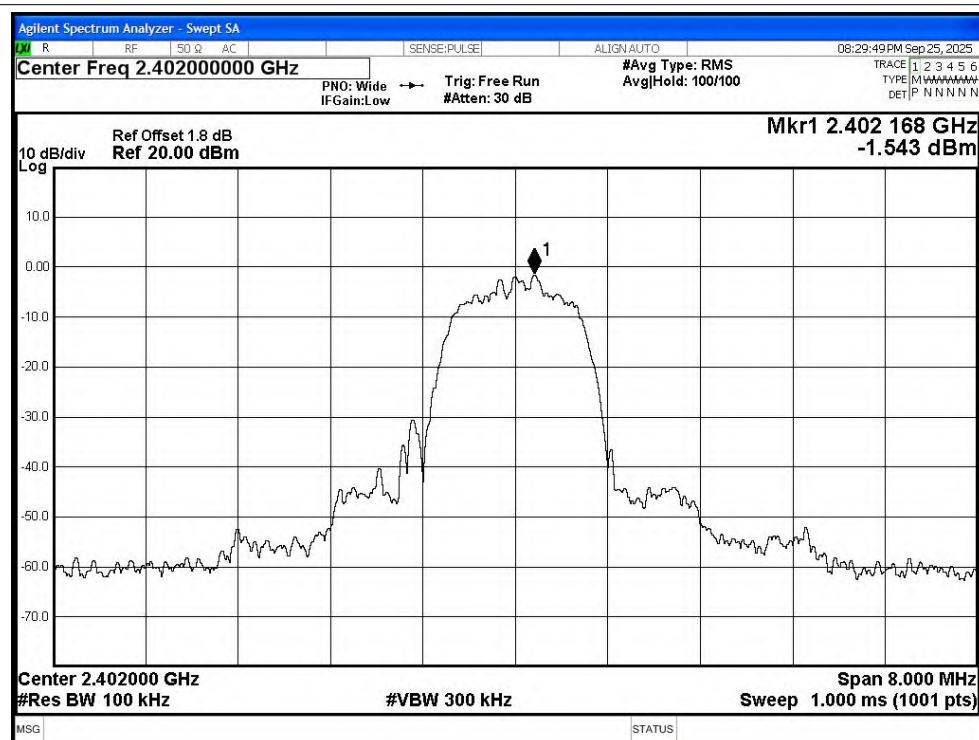
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



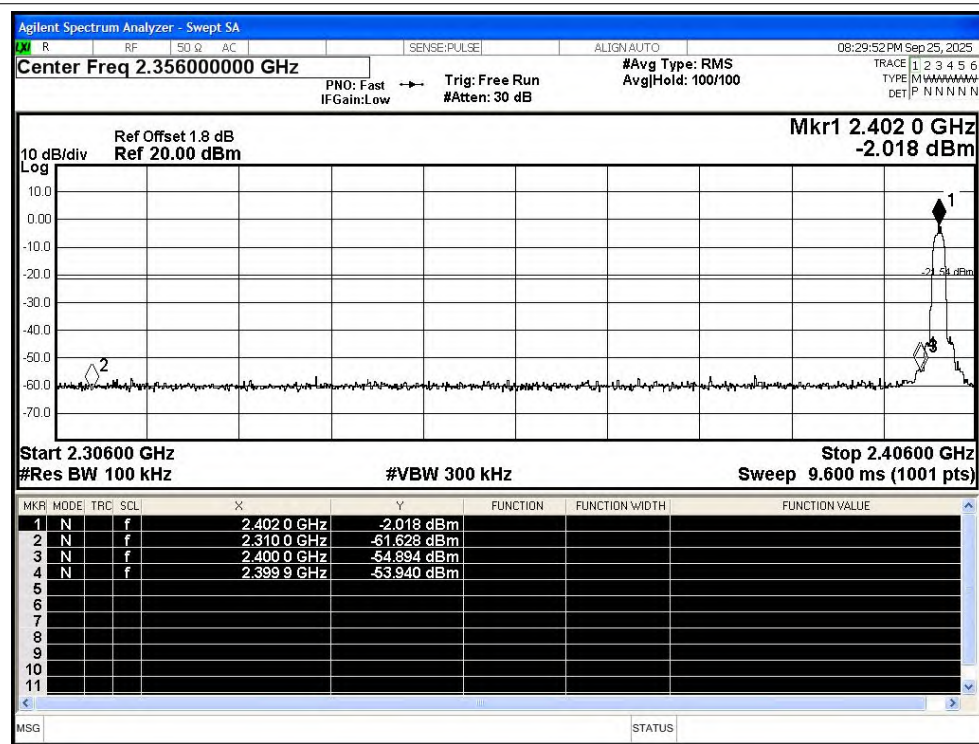
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

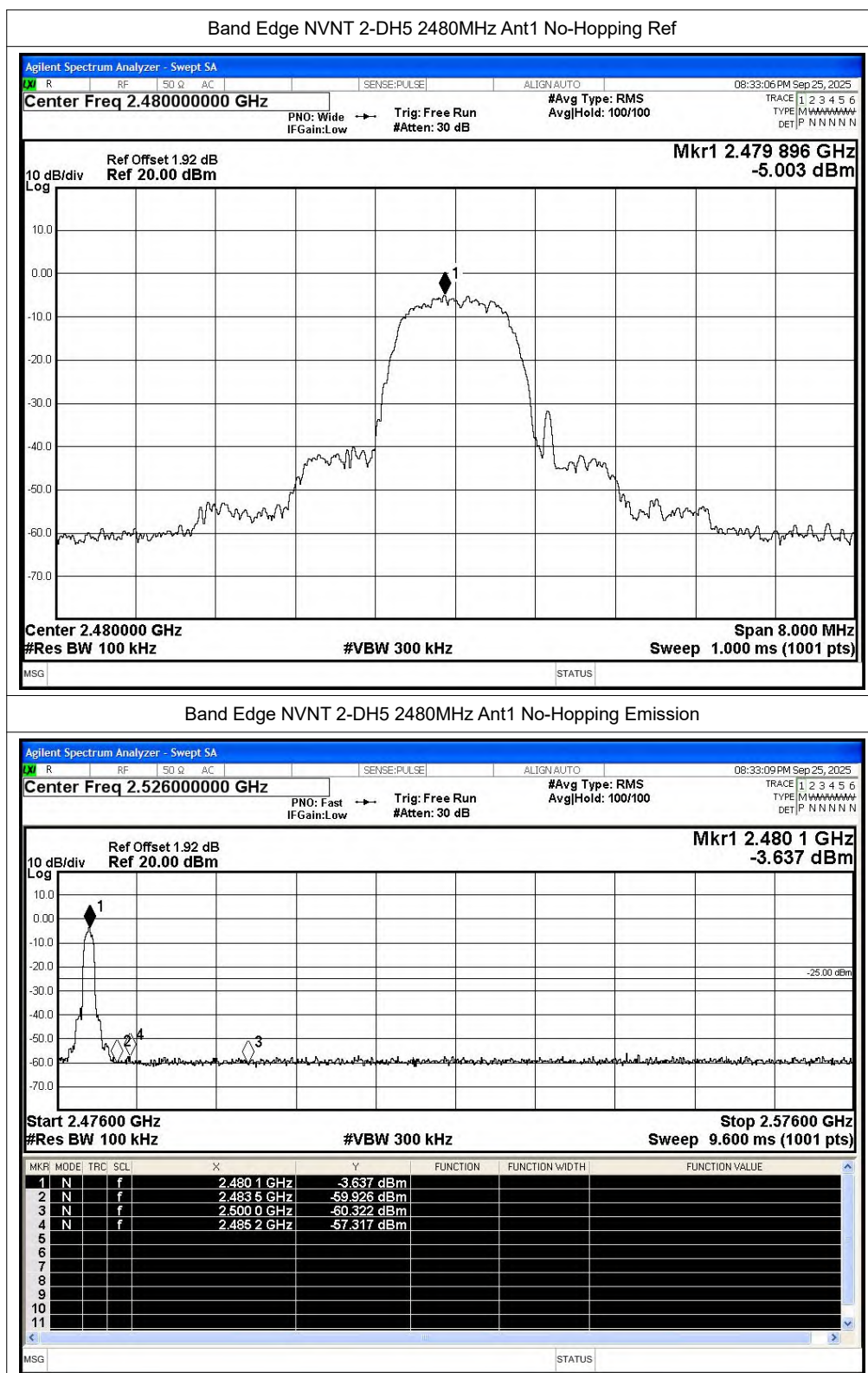


Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



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



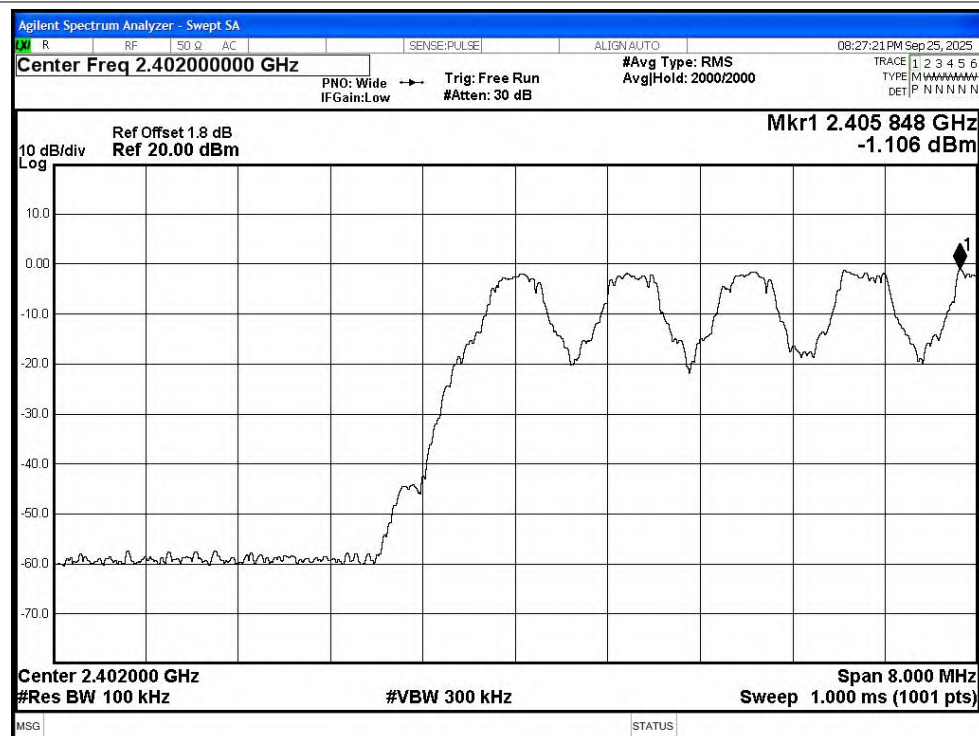


(Hopping)

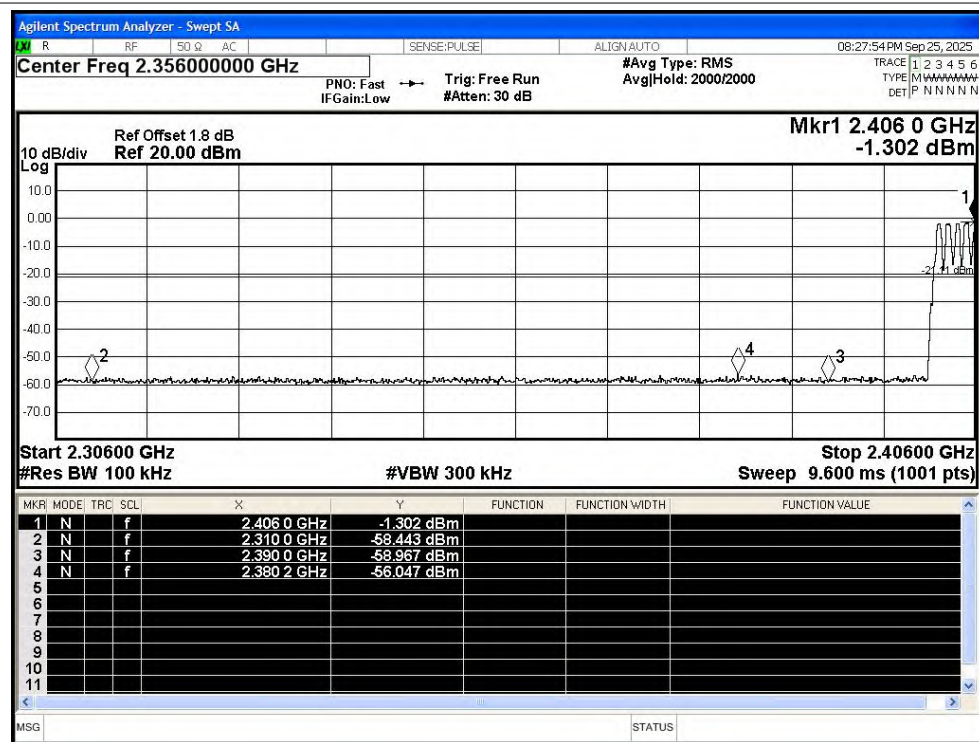
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-54.94	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.66	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-51.63	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-53.63	-20	Pass

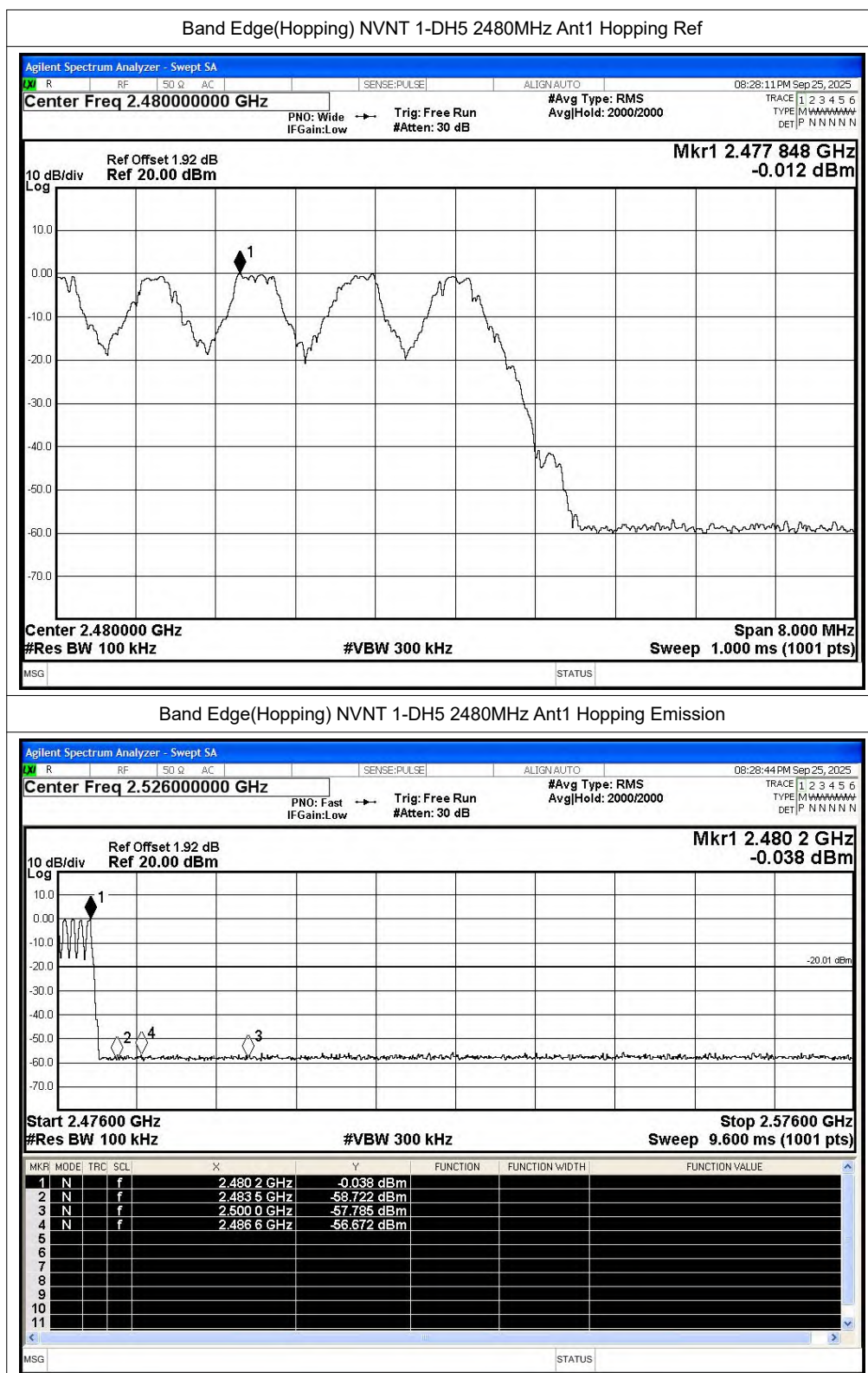
Test Graphs

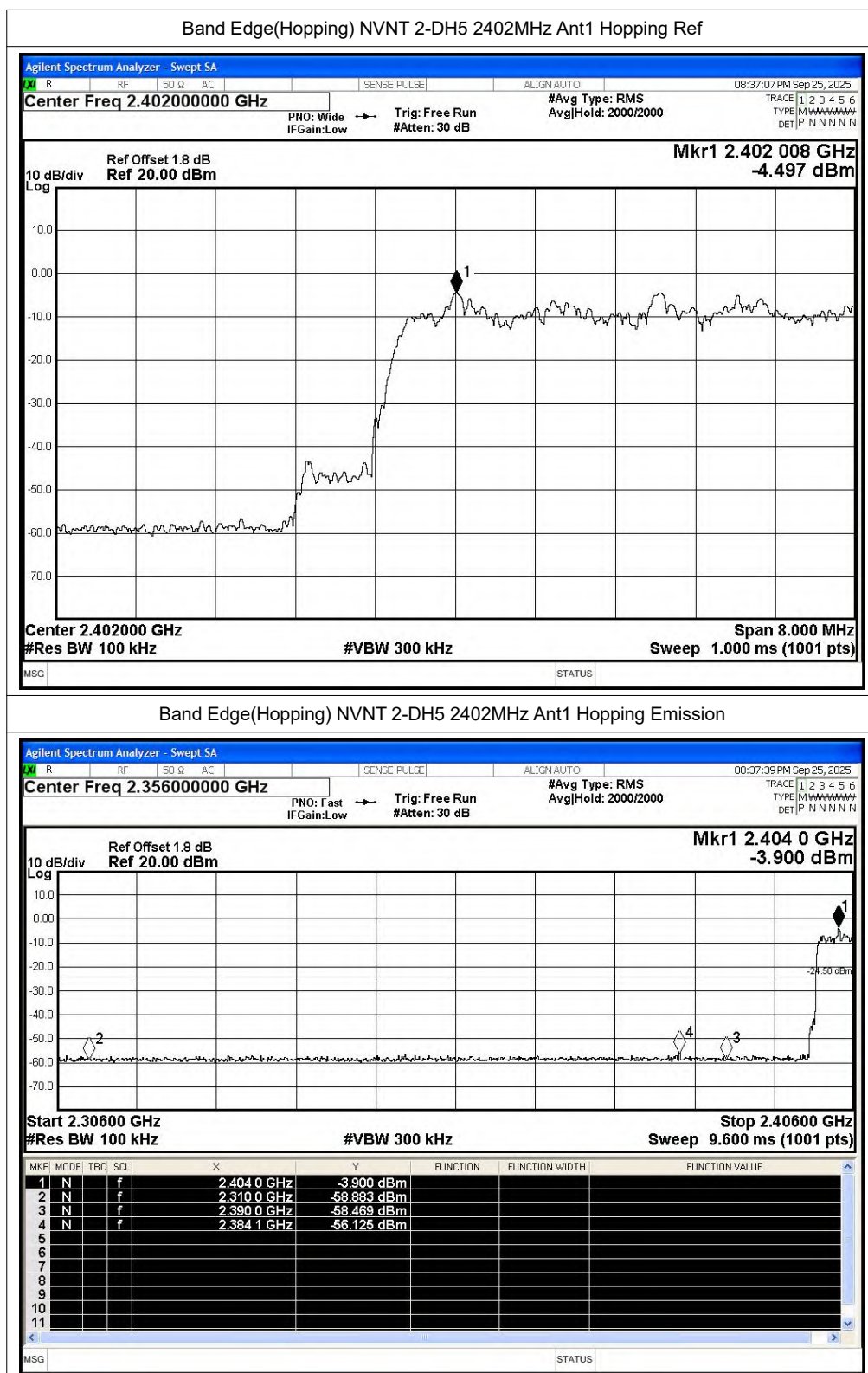
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref

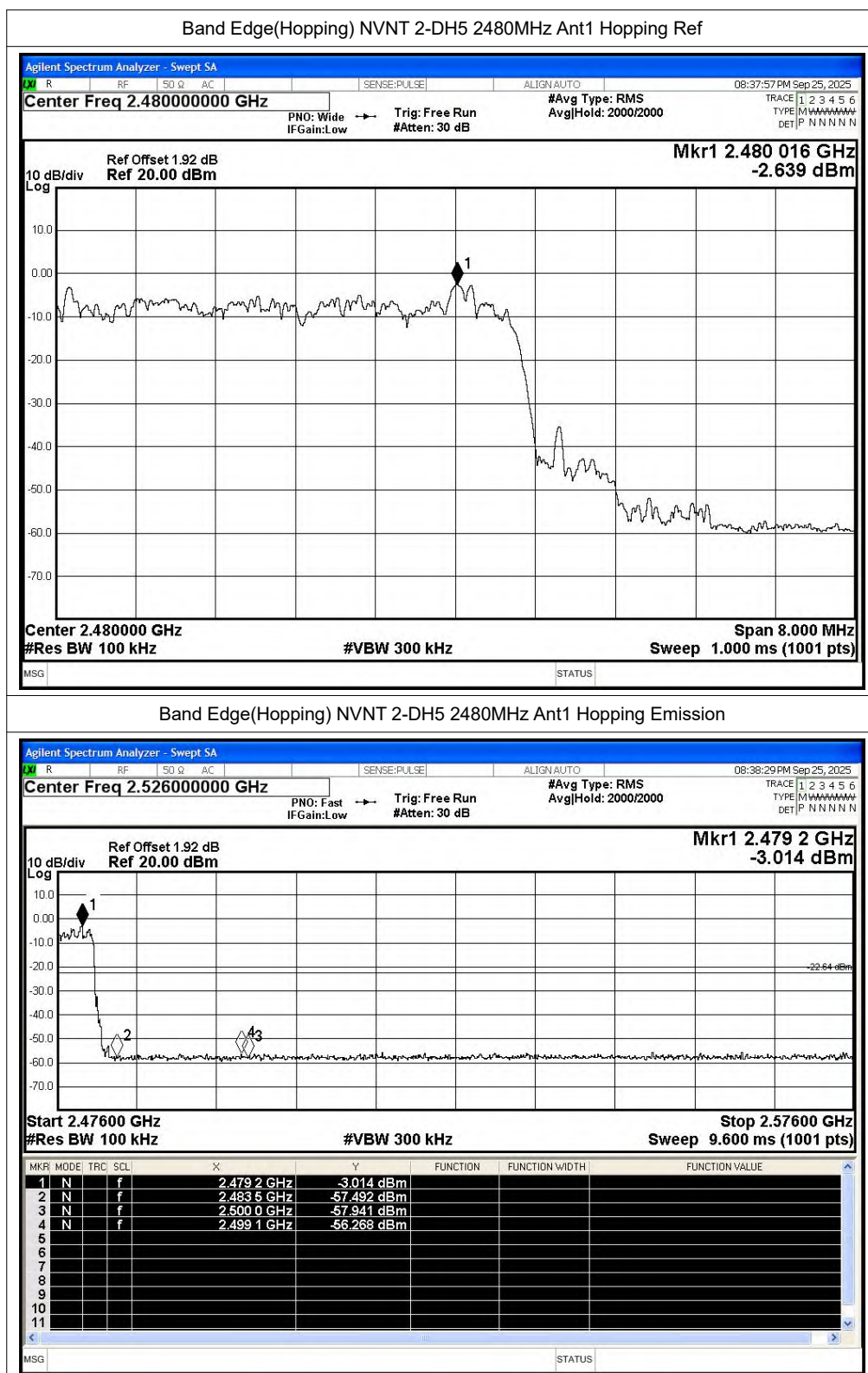


Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission







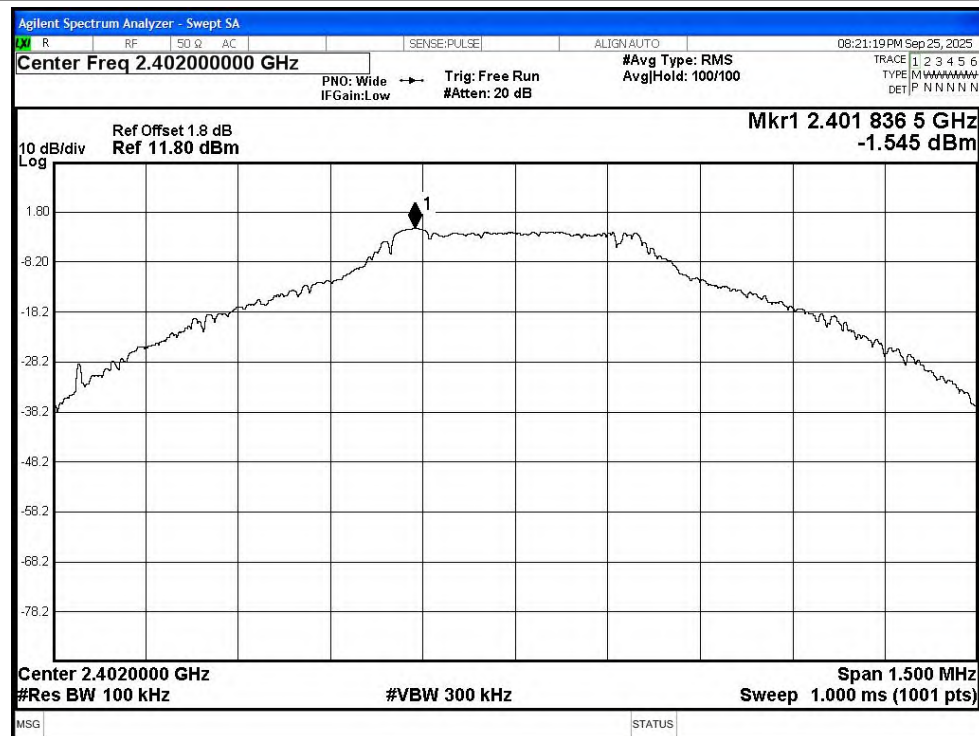


A.7 Conducted RF Spurious Emission

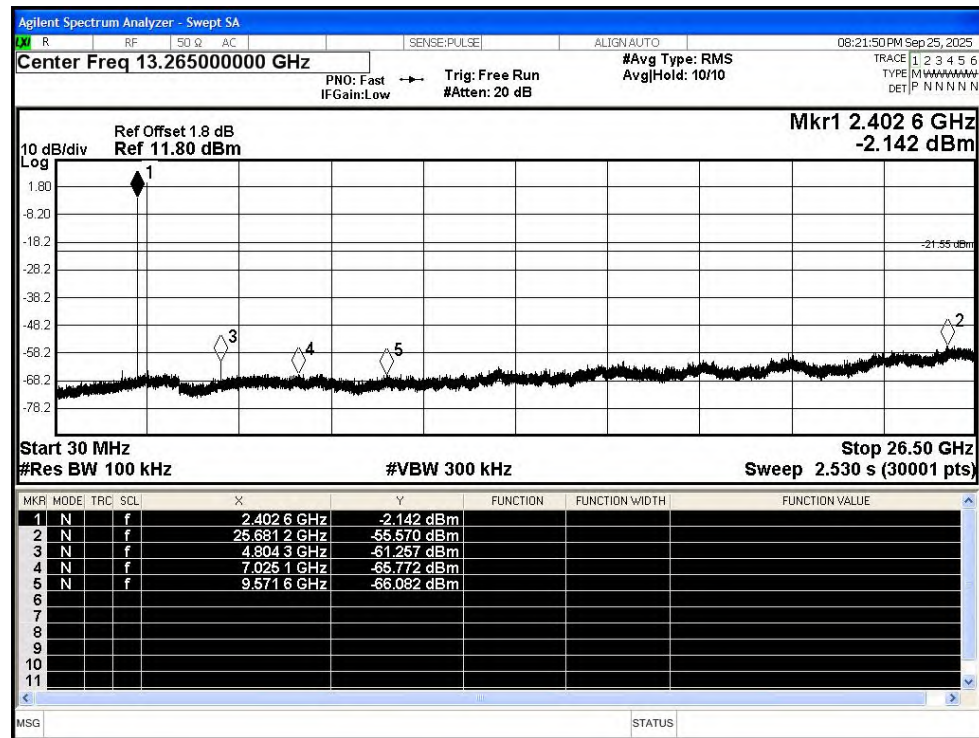
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-54.03	-20	Pass
NVNT	1-DH5	2441	Ant1	-55.95	-20	Pass
NVNT	1-DH5	2480	Ant1	-55.3	-20	Pass
NVNT	2-DH5	2402	Ant1	-53.85	-20	Pass
NVNT	2-DH5	2441	Ant1	-52.8	-20	Pass
NVNT	2-DH5	2480	Ant1	-51.95	-20	Pass

Test Graphs

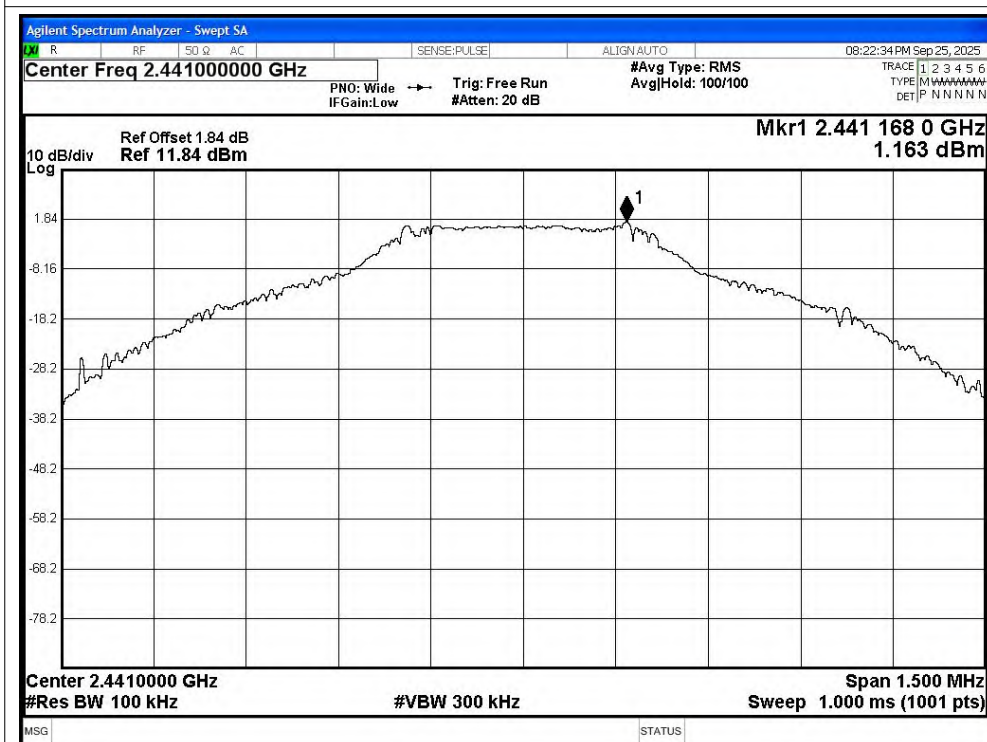
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



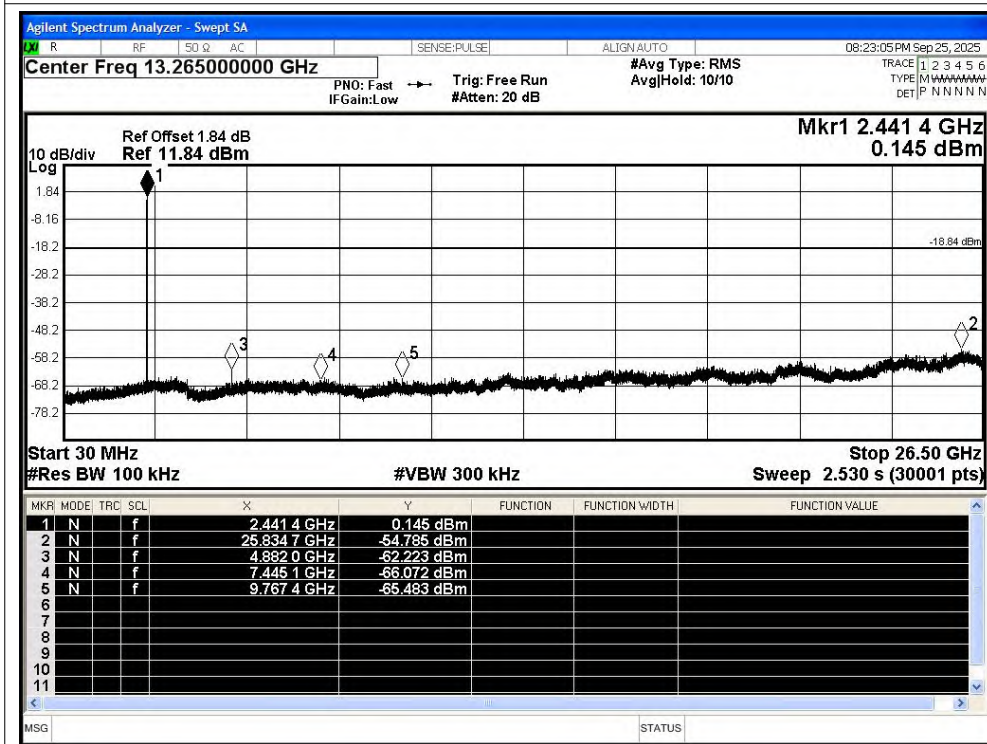
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



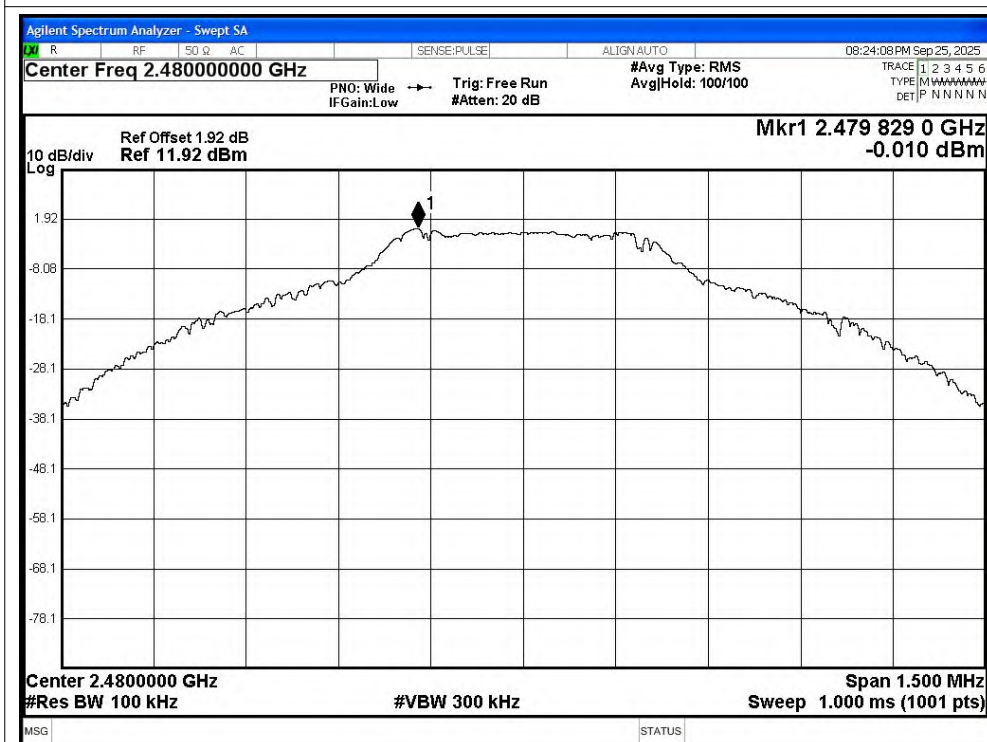
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



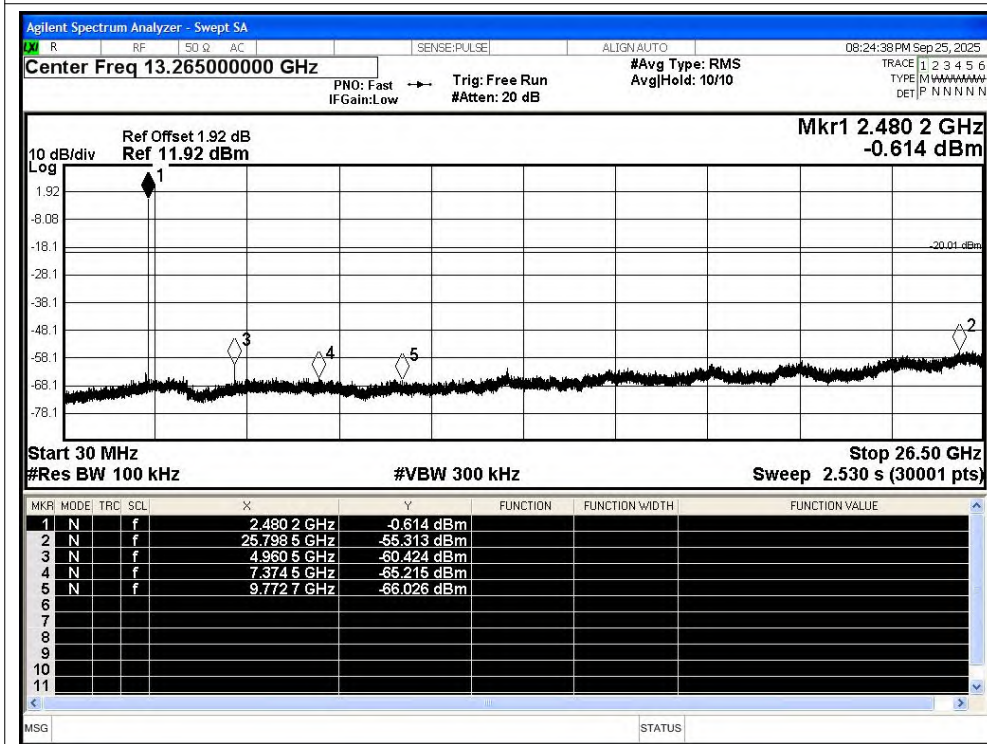
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



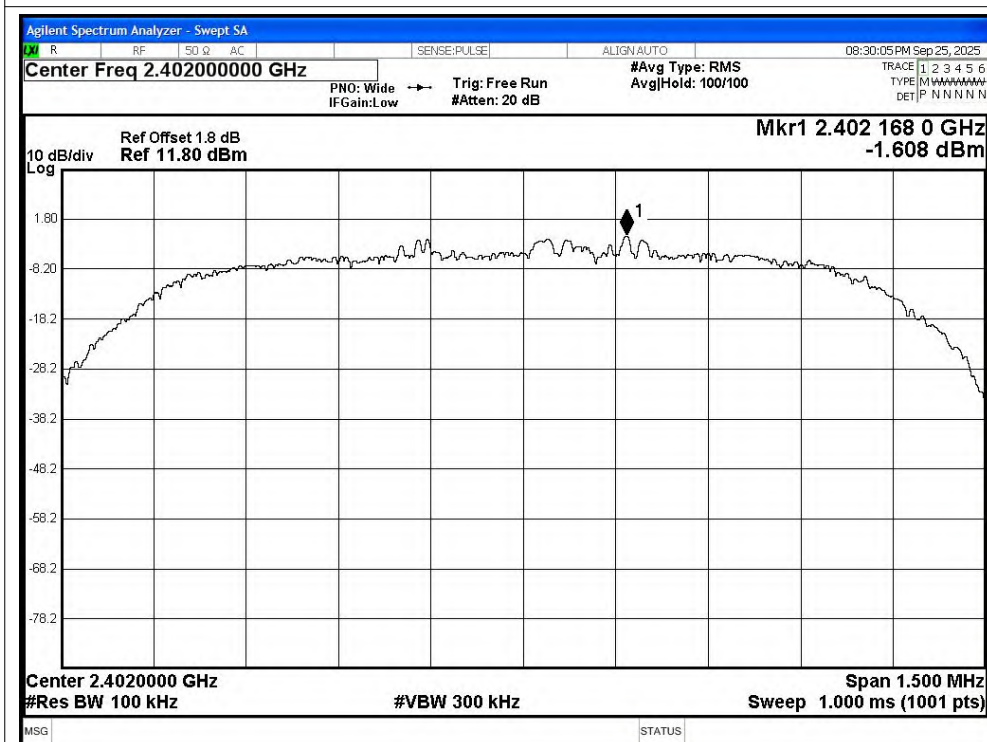
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



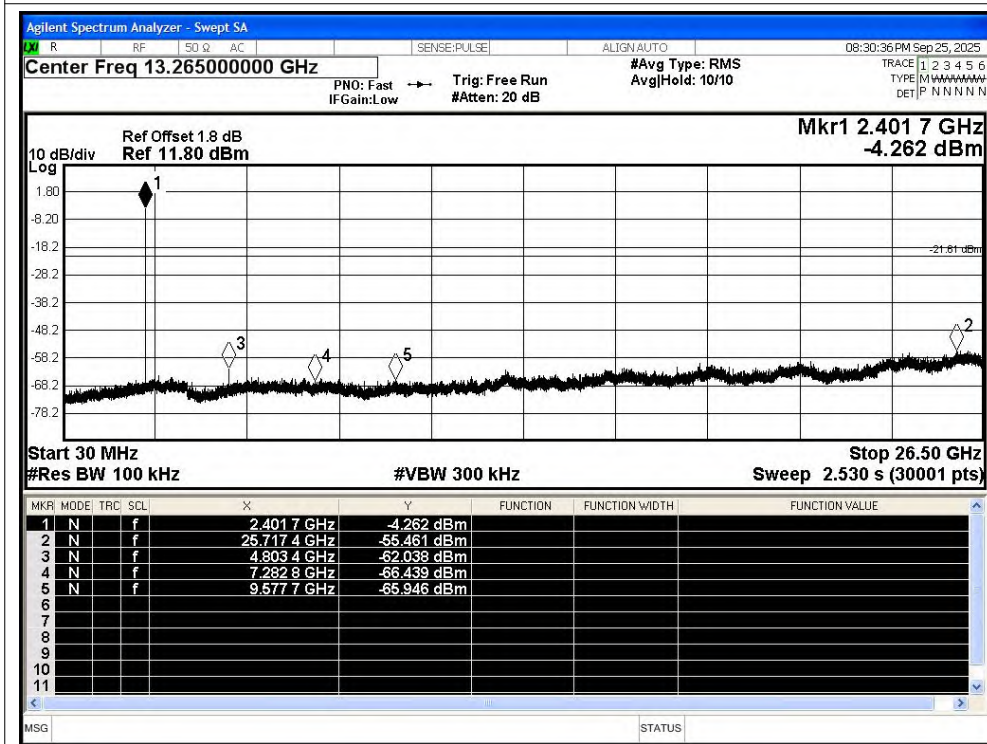
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



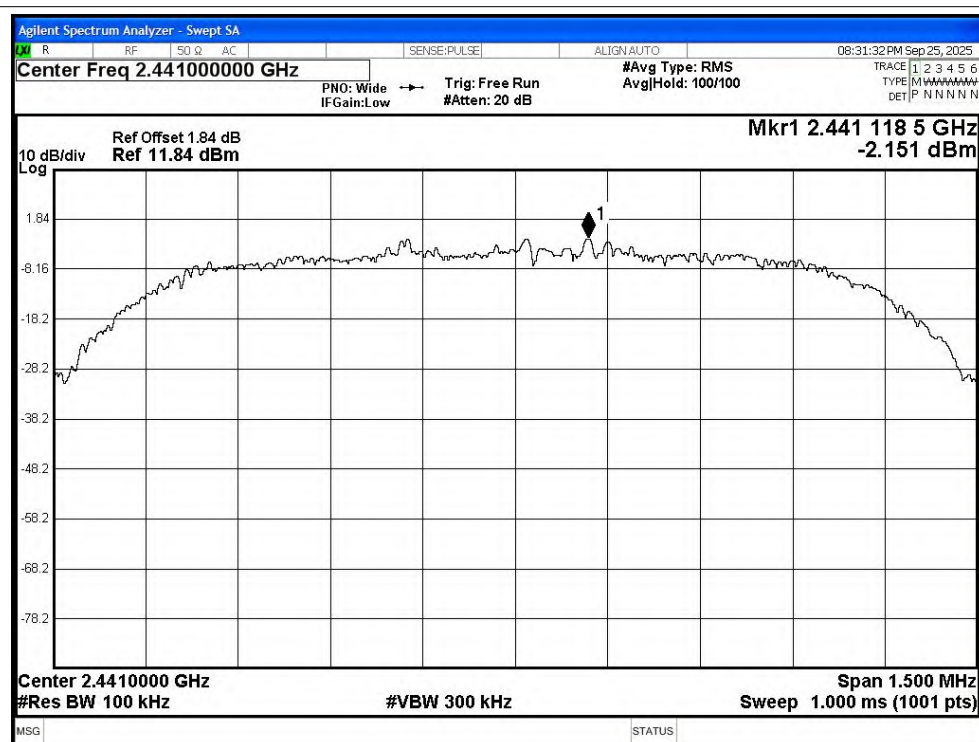
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



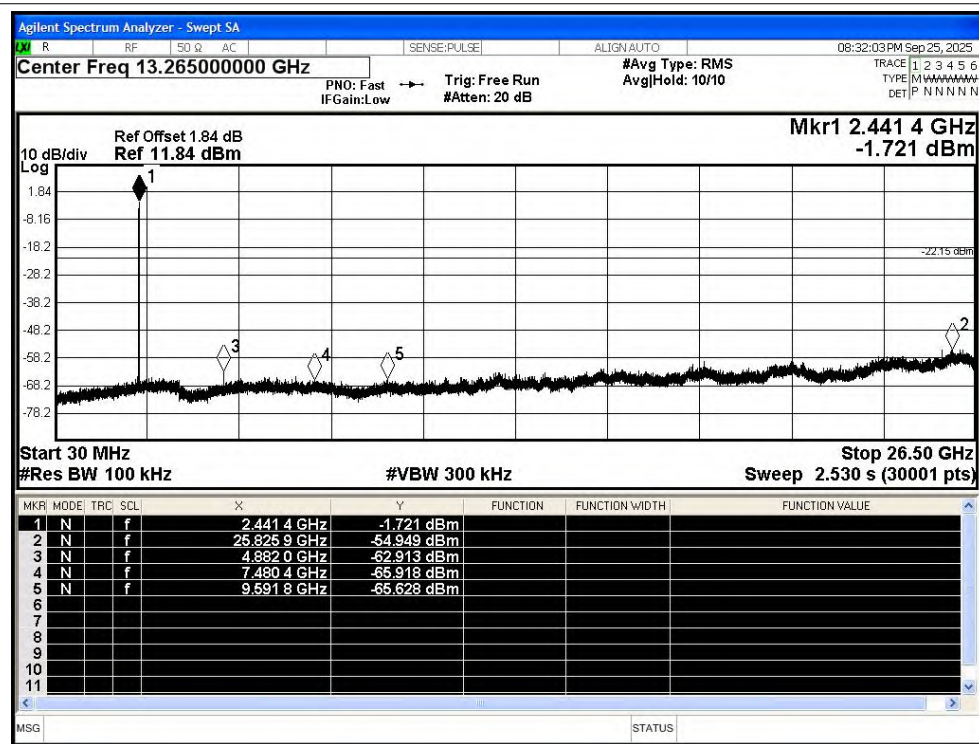
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



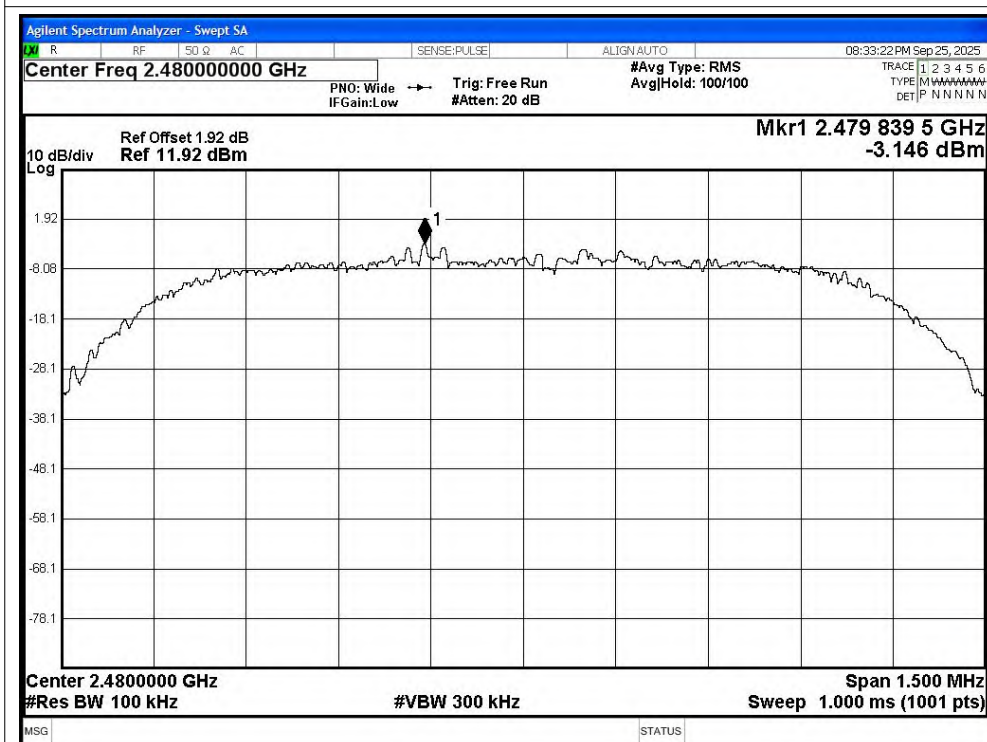
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



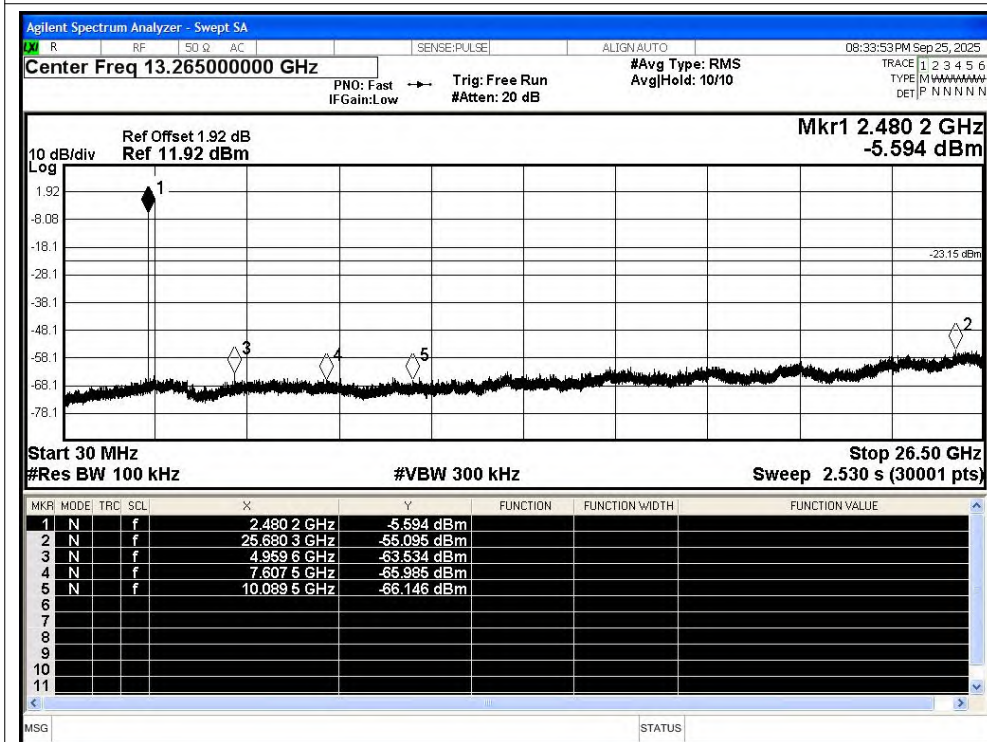
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission

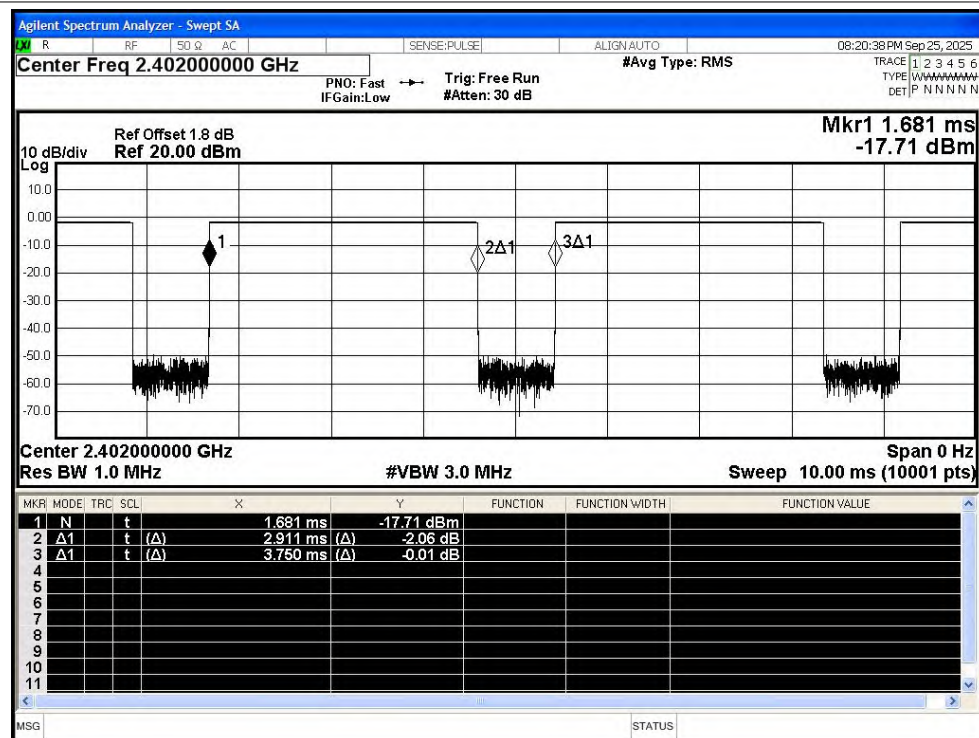


A.8 Duty Cycle

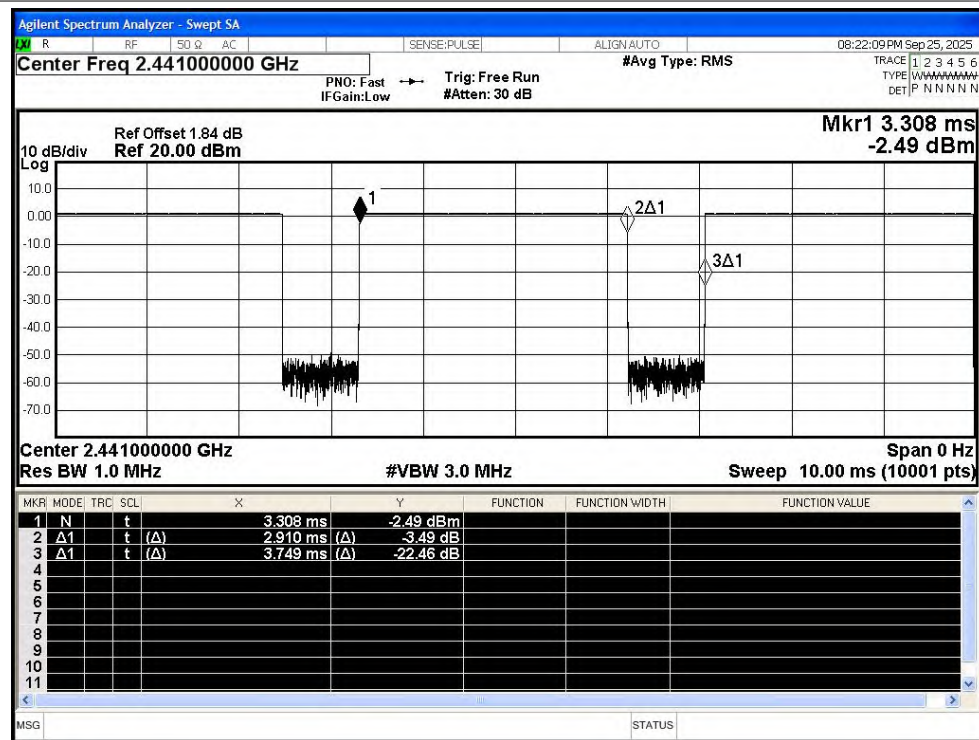
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	77.63	1.1	0.34
NVNT	1-DH5	2441	Ant1	77.62	1.1	0.34
NVNT	1-DH5	2480	Ant1	77.63	1.1	0.34
NVNT	2-DH5	2402	Ant1	77.33	1.12	0.34
NVNT	2-DH5	2441	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2480	Ant1	77.28	1.12	0.35

Test Graphs

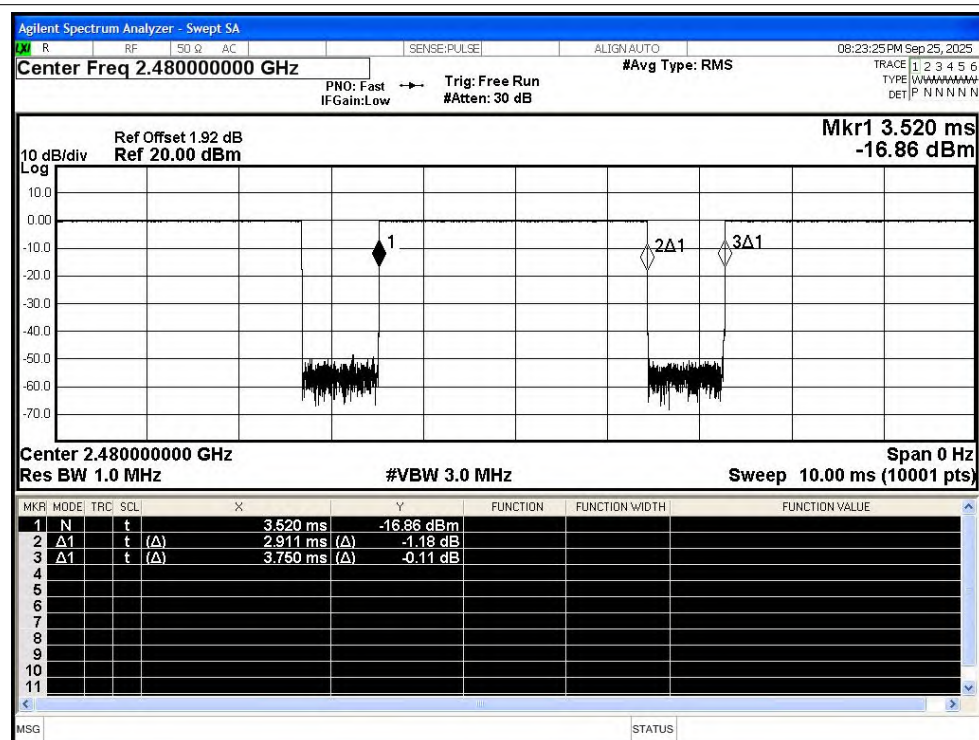
Duty Cycle NVNT 1-DH5 2402MHz Ant1



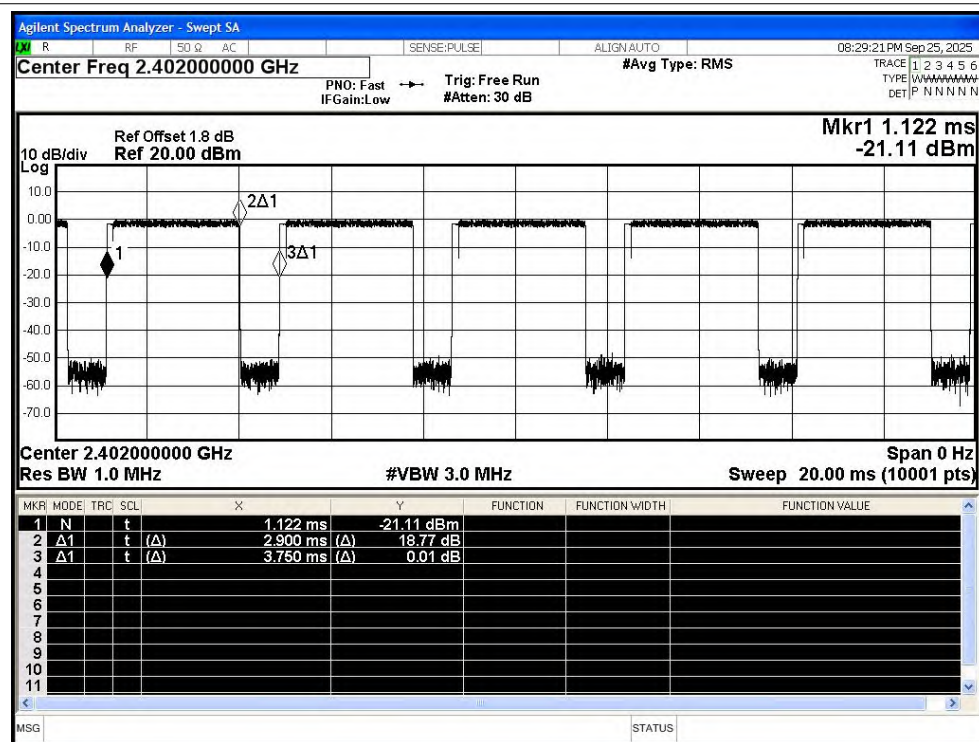
Duty Cycle NVNT 1-DH5 2441MHz Ant1



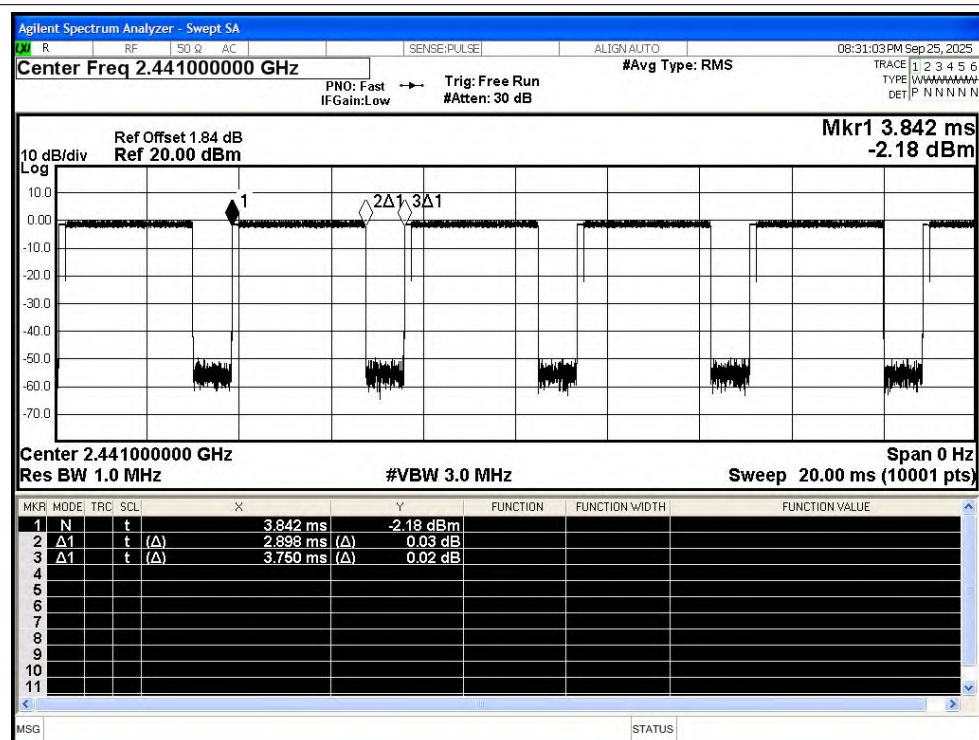
Duty Cycle NVNT 1-DH5 2480MHz Ant1



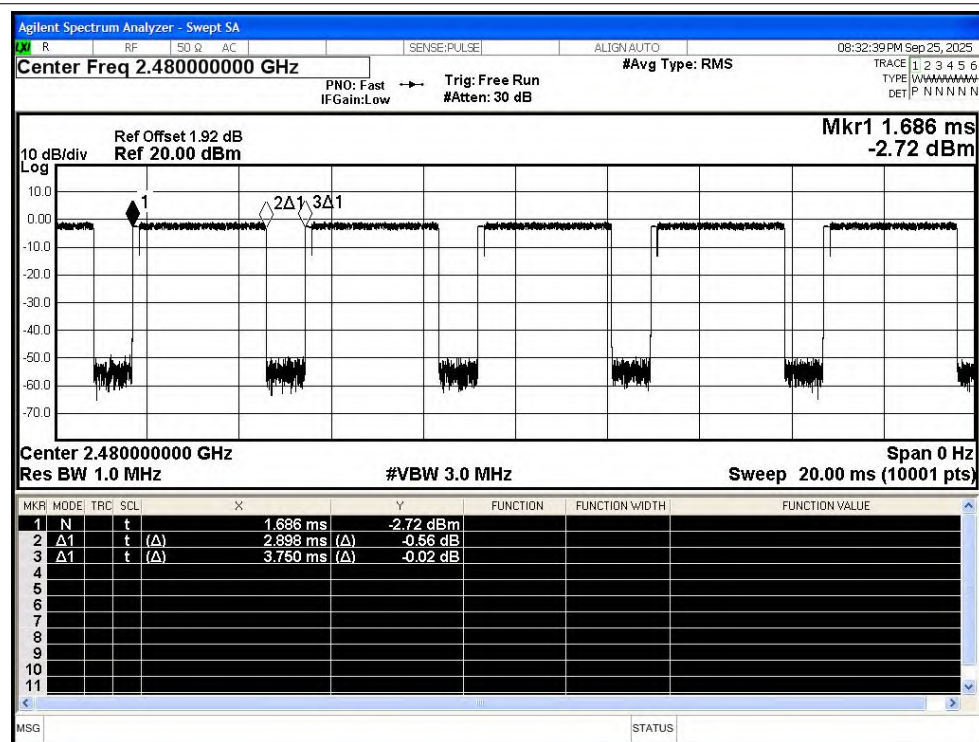
Duty Cycle NVNT 2-DH5 2402MHz Ant1



Duty Cycle NVNT 2-DH5 2441MHz Ant1



Duty Cycle NVNT 2-DH5 2480MHz Ant1

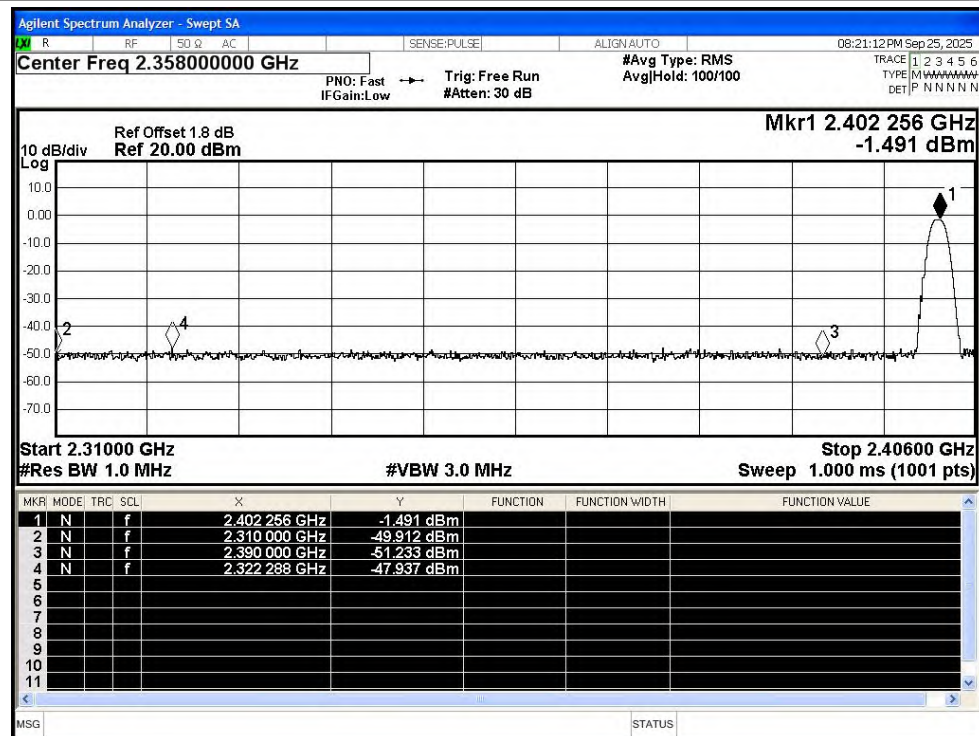


A.9 Restrict Band

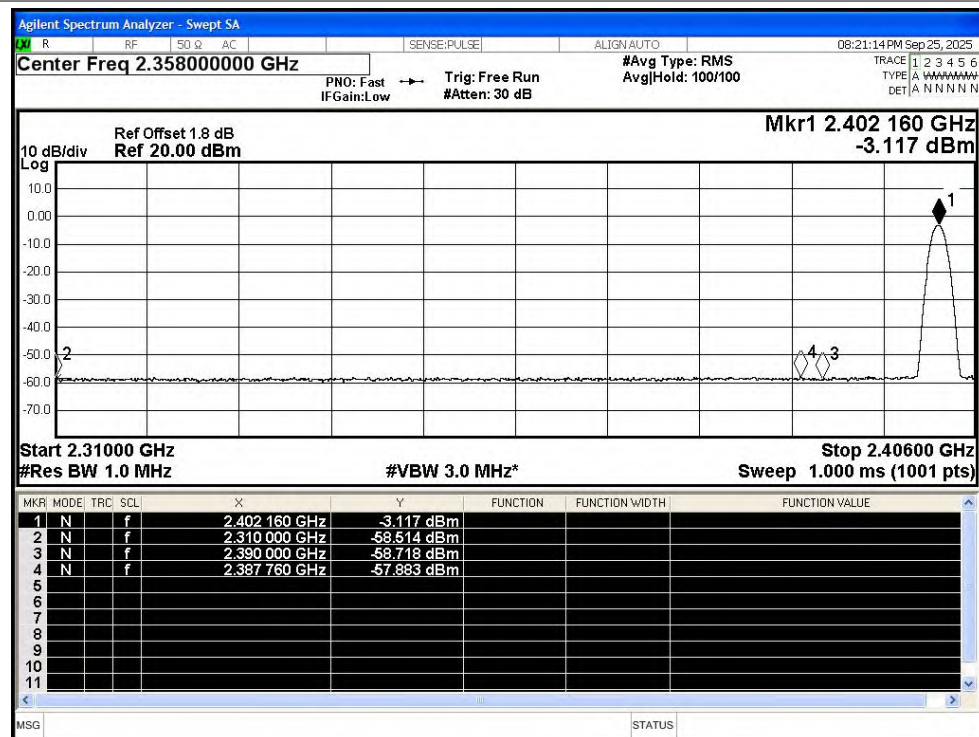
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-49.91	2	-	47.35	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.51	2	1.1	39.85	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2322.288	-47.94	2	-	49.32	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2387.76	-57.88	2	1.1	40.48	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-51.23	2	-	46.03	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.72	2	1.1	39.64	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.84	2	-	46.42	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-57.42	2	1.1	40.94	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2485.288	-45.41	2	-	51.85	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.632	-57.25	2	1.1	41.11	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-51.4	2	-	45.86	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-57.71	2	1.1	40.65	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-49.53	2	-	47.73	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-59.26	2	1.12	39.12	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2383.824	-47.81	2	-	49.45	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2328.816	-57.85	2	1.12	40.53	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-51.21	2	-	46.05	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-58.67	2	1.12	39.71	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-50.31	2	-	46.95	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-58.01	2	1.12	40.37	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2484.952	-46.37	2	-	50.89	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2494.12	-57.16	2	1.12	41.22	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-49.79	2	-	47.47	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-57.8	2	1.12	40.58	Average	54	Pass

Test Graphs

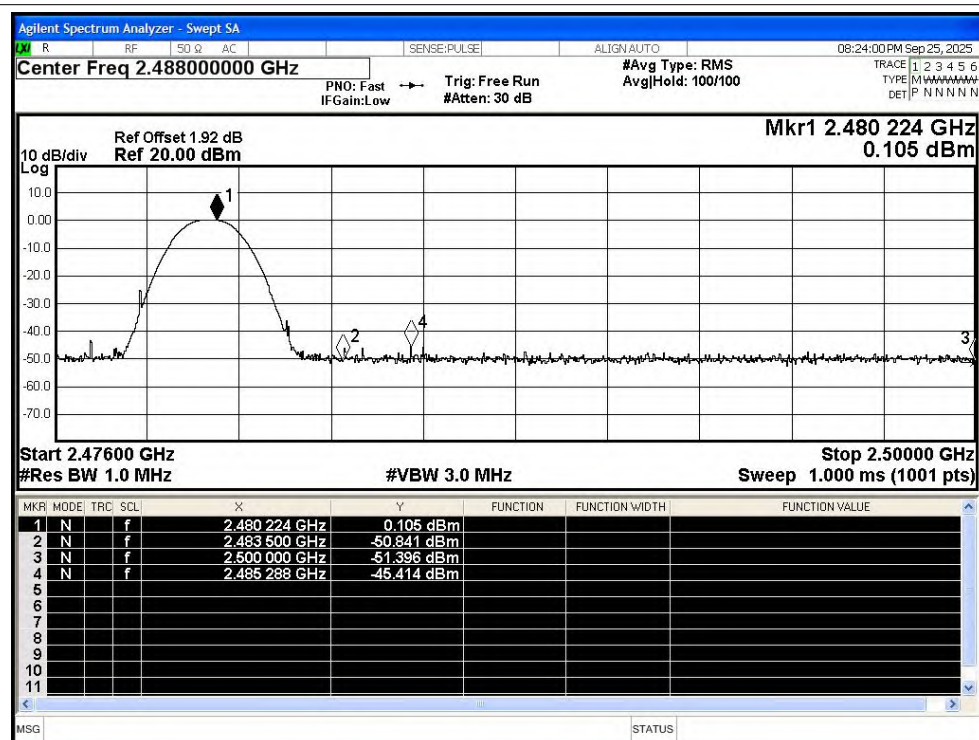
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



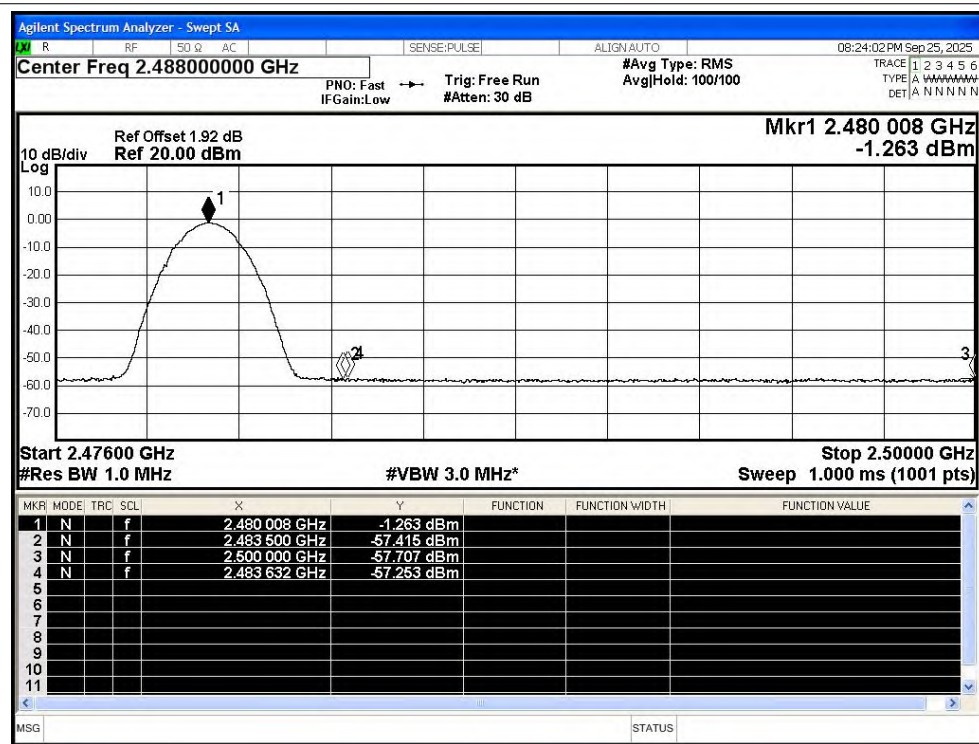
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



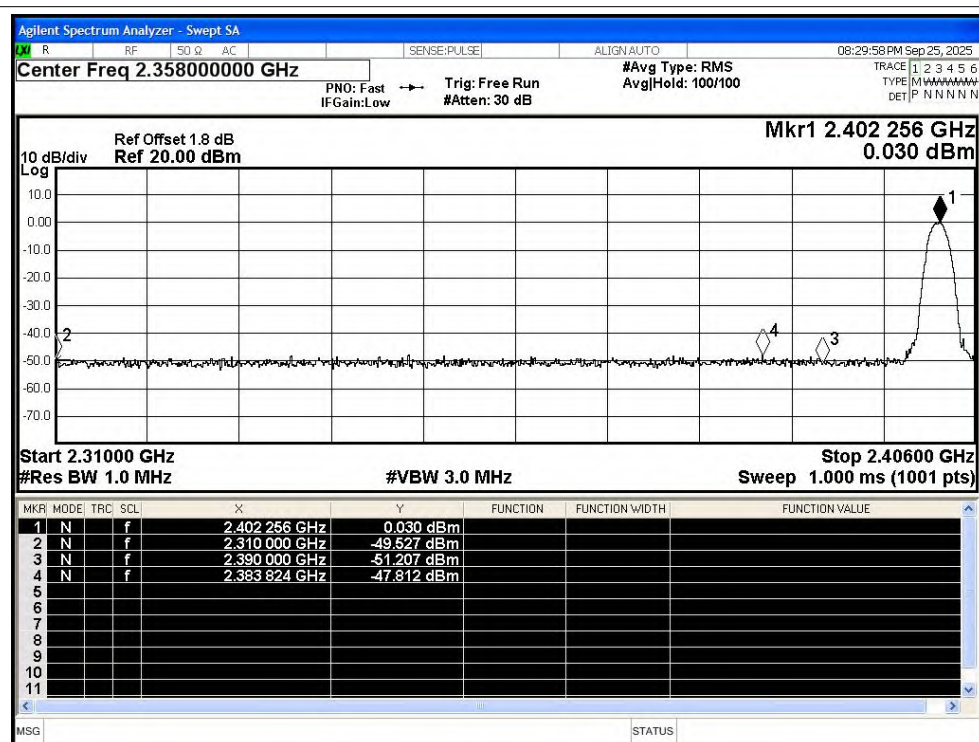
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



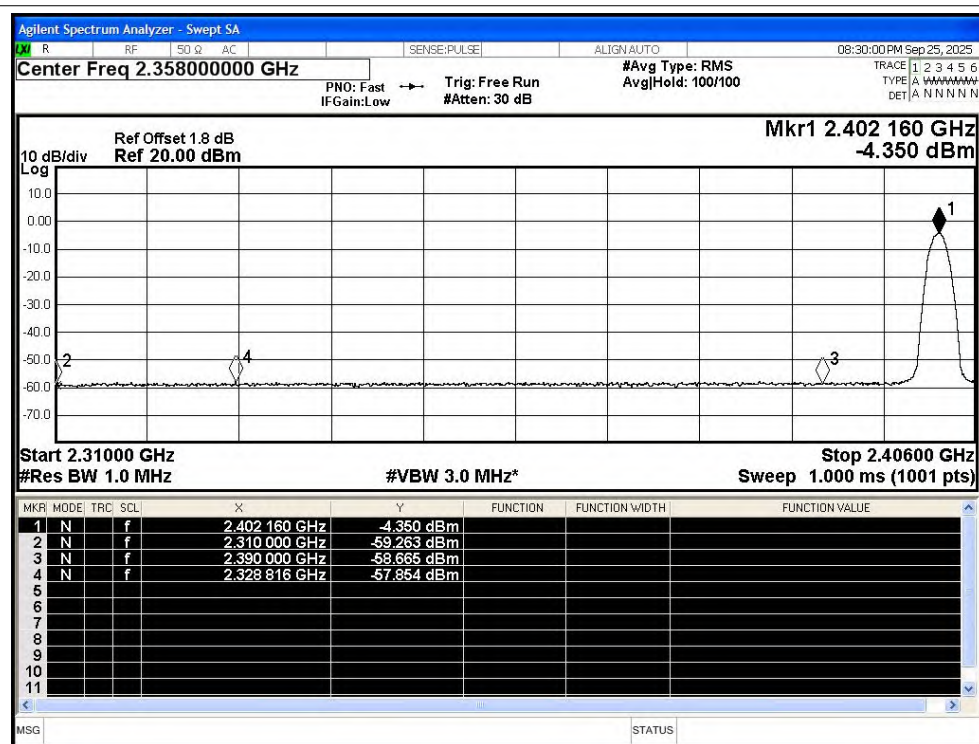
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



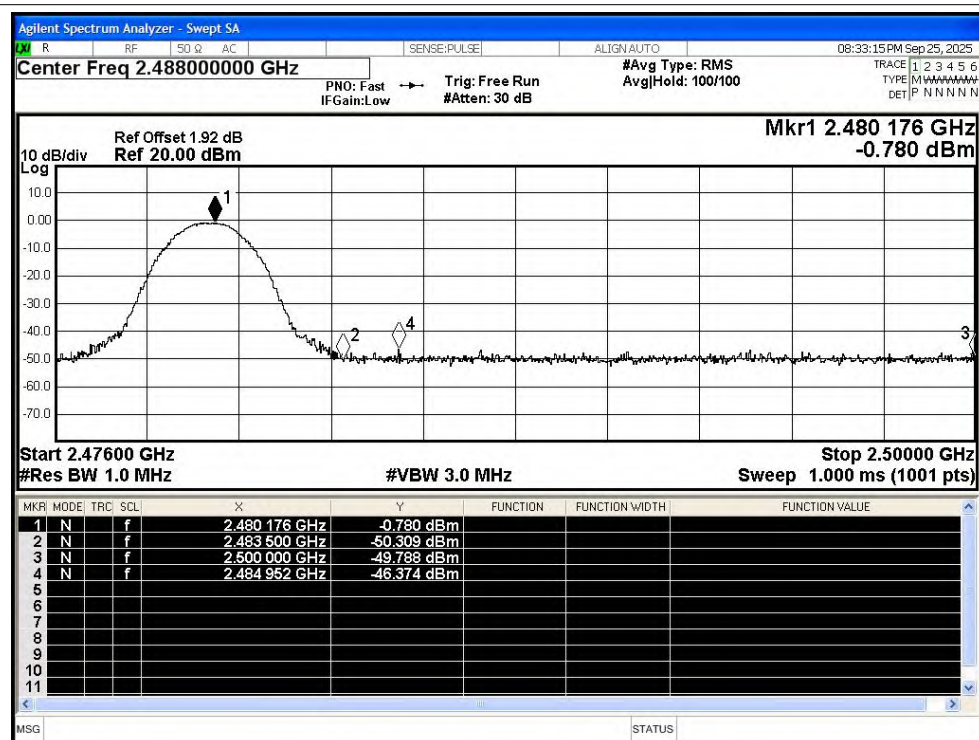
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



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

