Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Smart Watch

Test Model: V3Ultra Max

Environmental Conditions

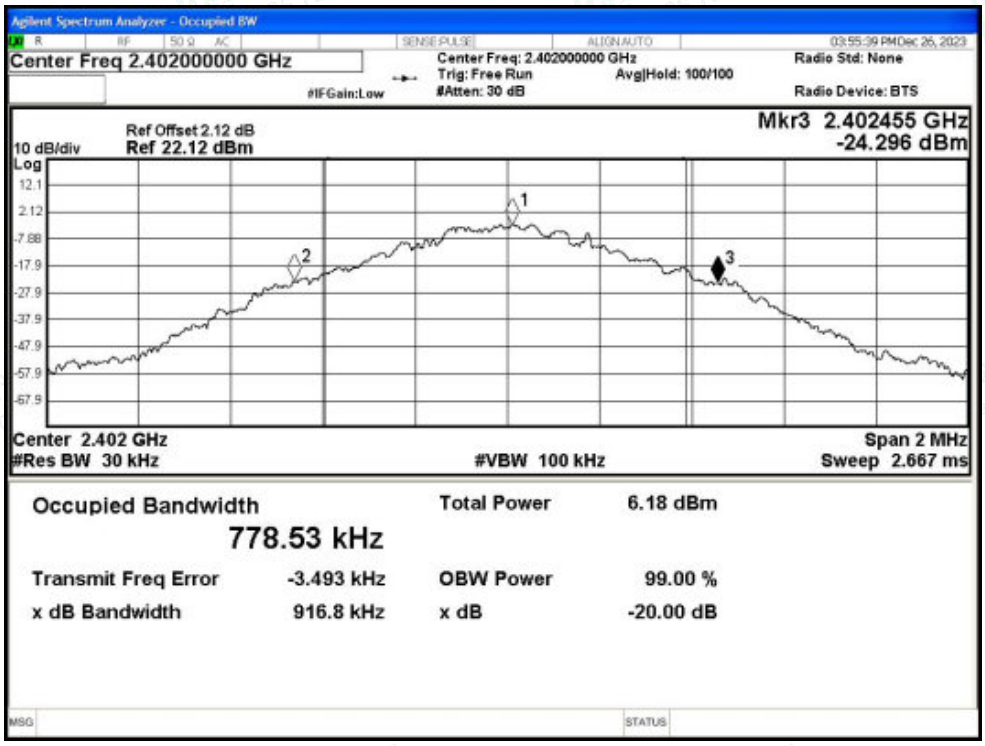
Temperature:	23.8 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng
Supervised by:	Joker Hu

A.1 -20dB Bandwidth

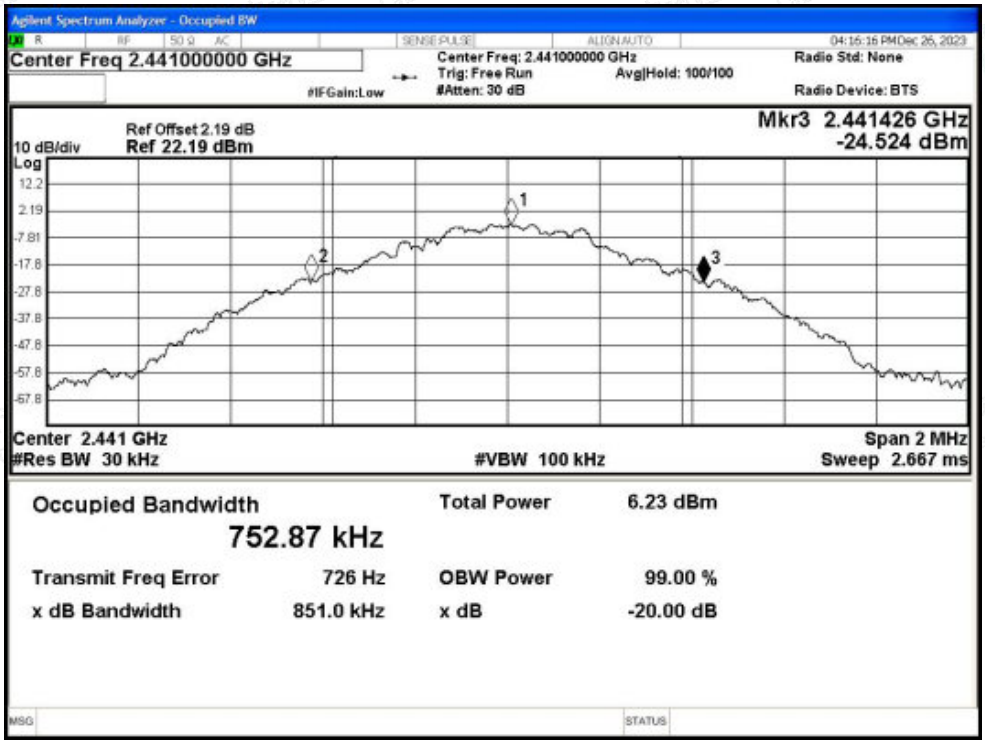
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.917	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.851	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.837	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.28	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.273	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.265	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.297	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.284	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.29	N/A	Pass

Test Graphs

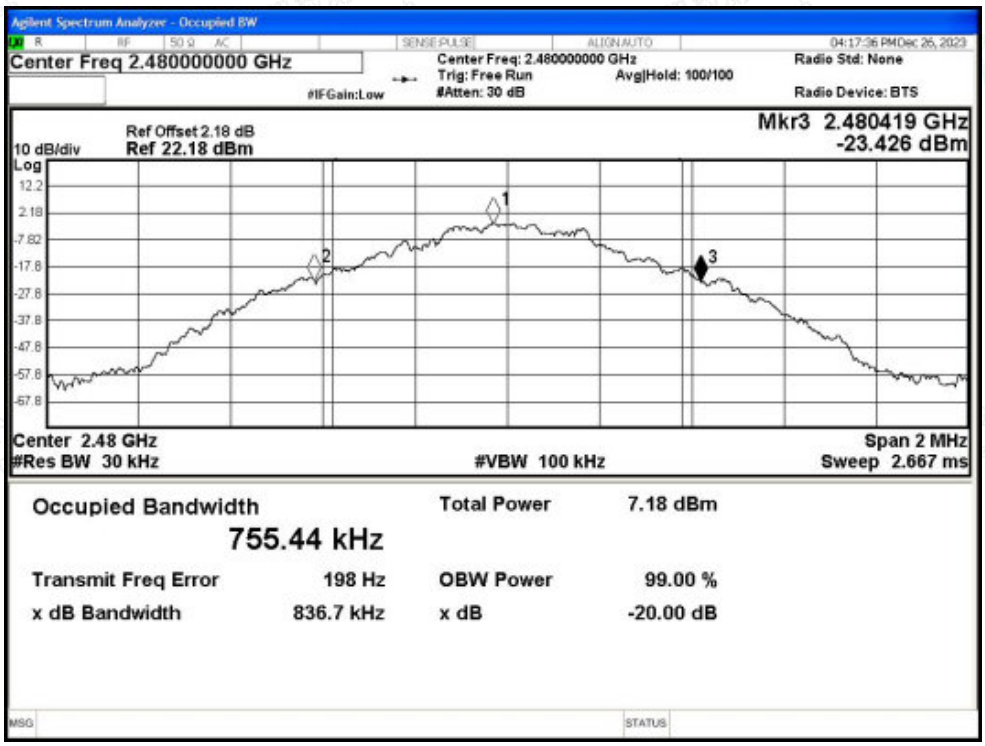
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



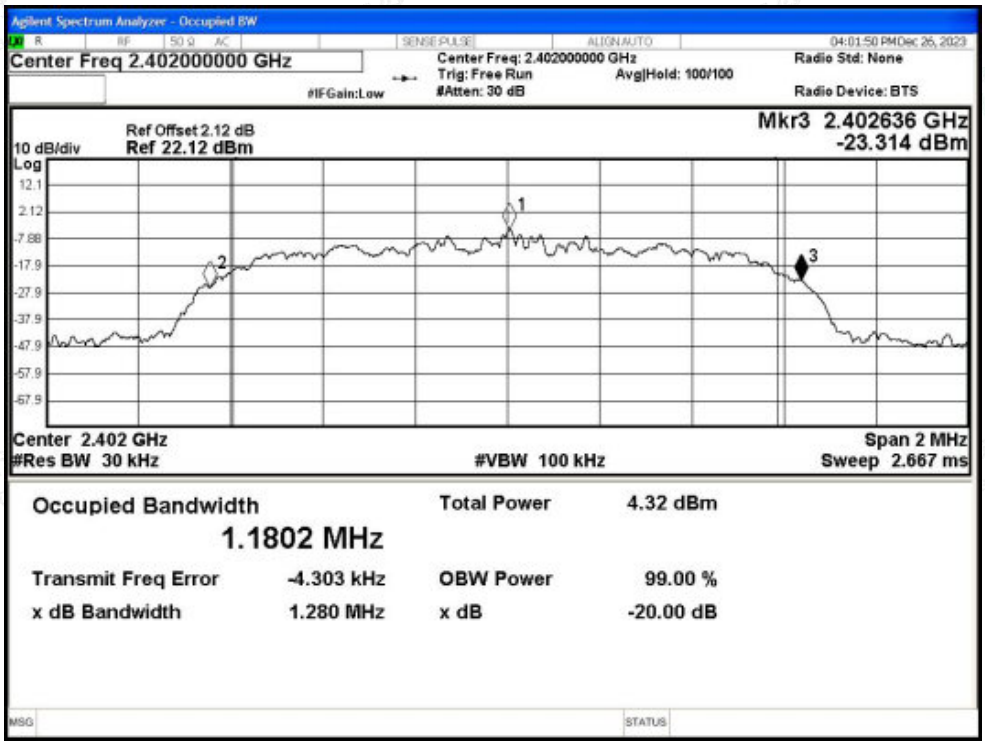
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



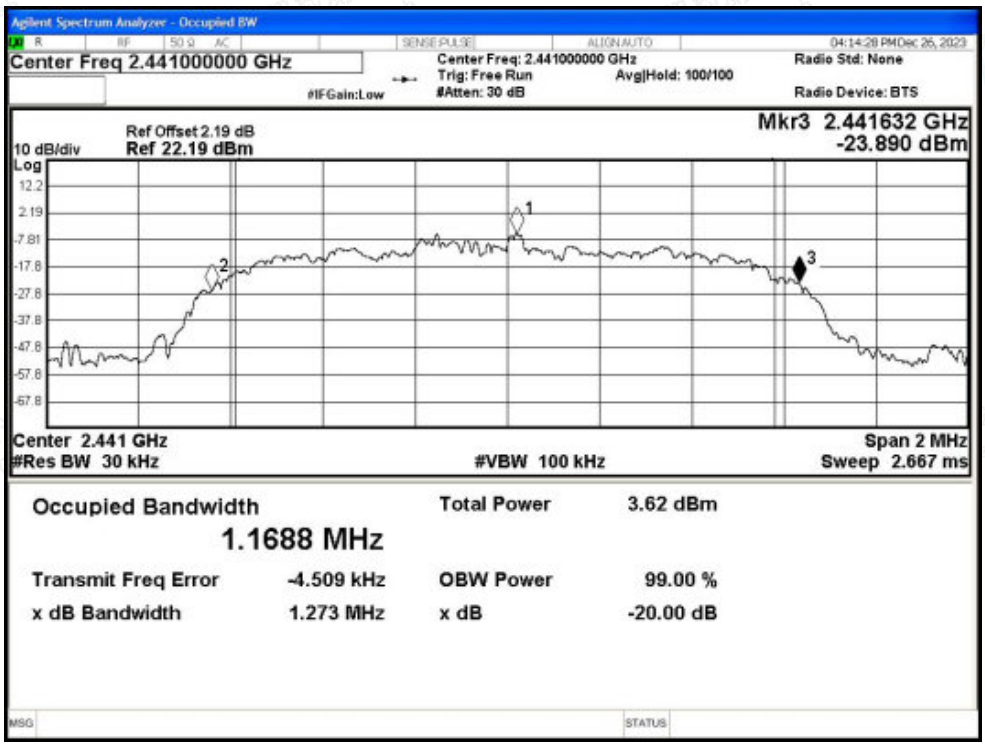
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



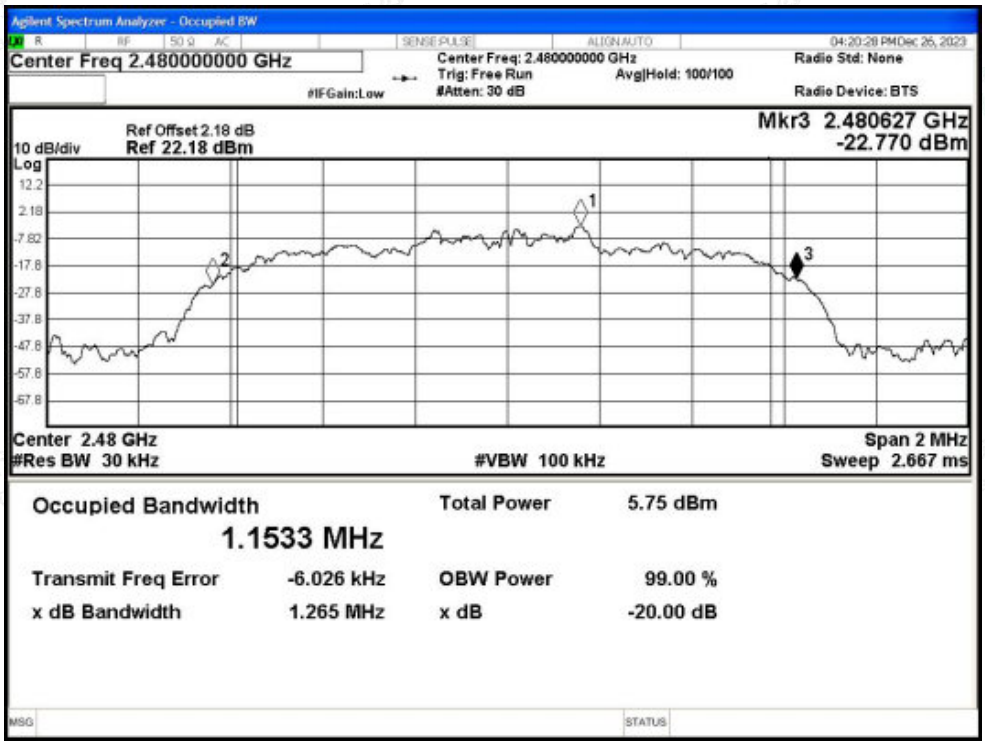
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



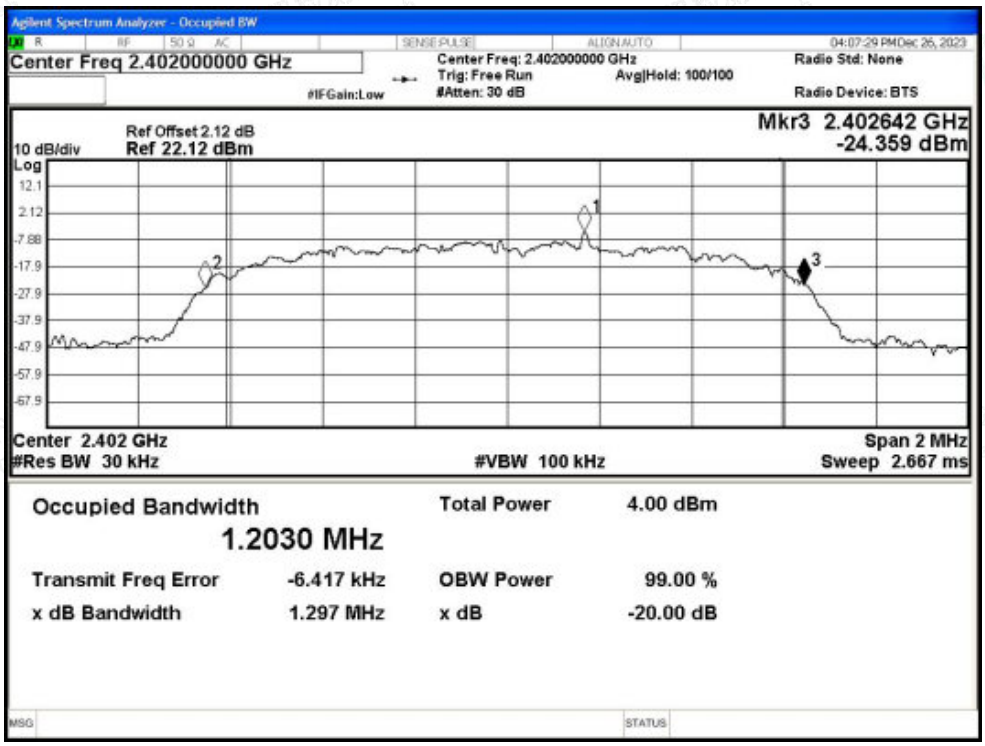
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



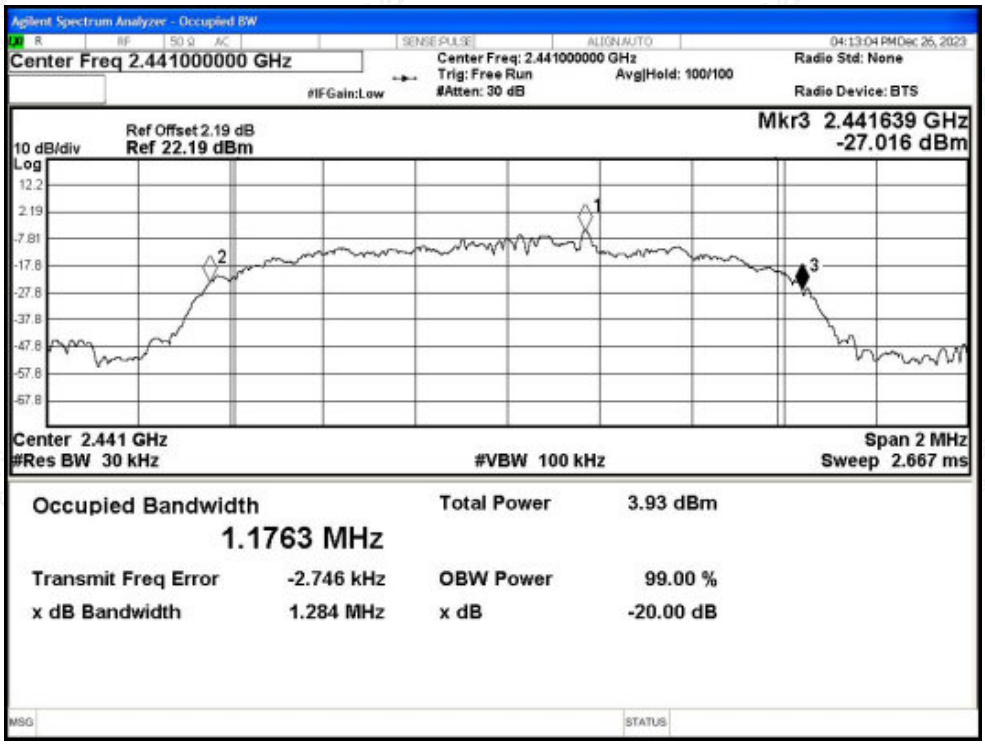
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



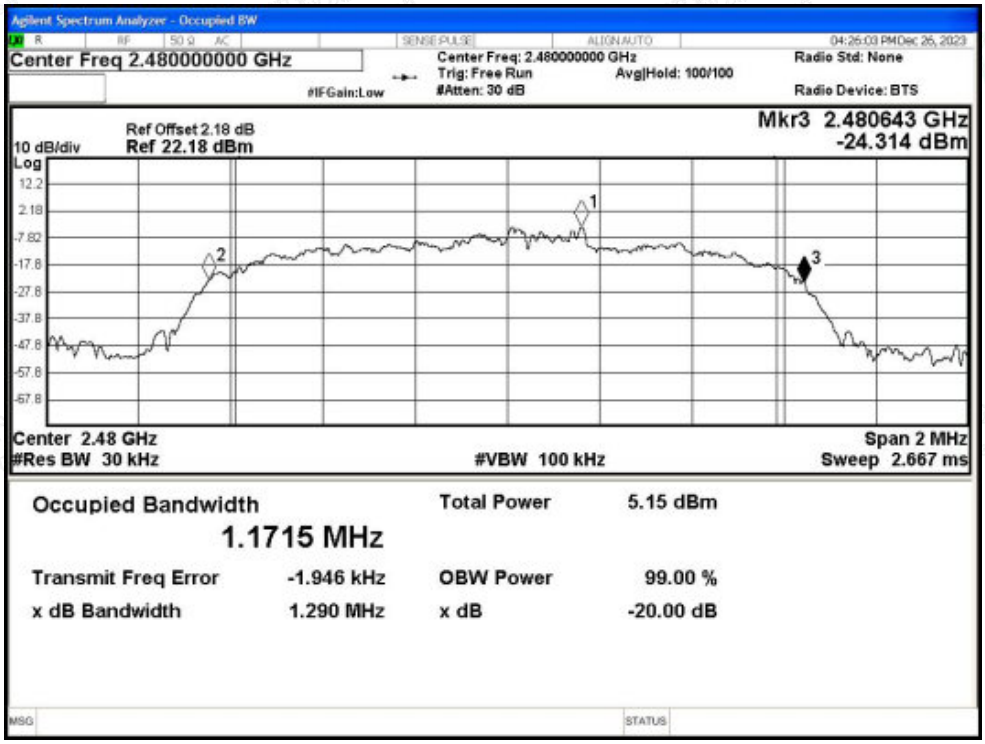
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1

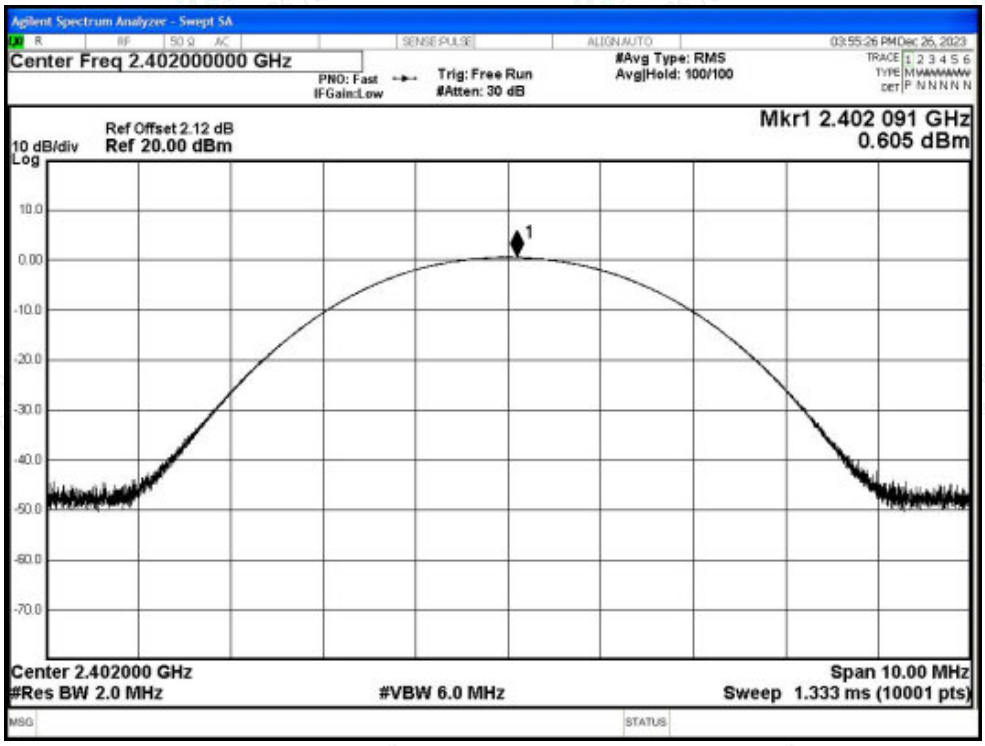


A.2 Maximum Conducted Output Power

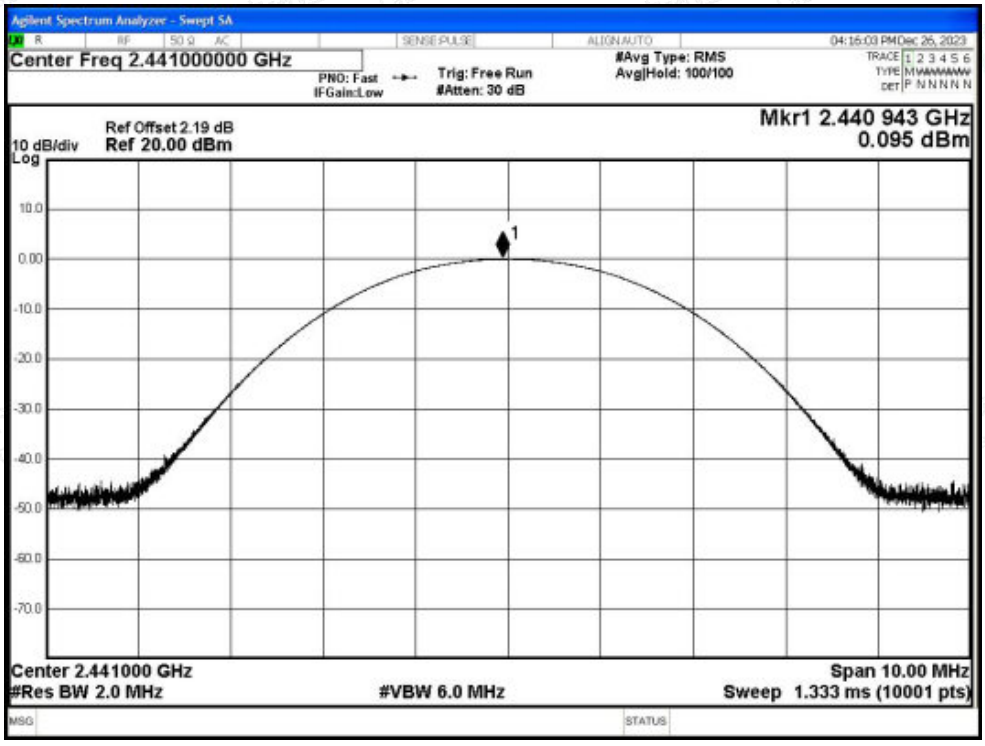
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.61	21	Pass
NVNT	1-DH5	2441	Ant1	0.1	21	Pass
NVNT	1-DH5	2480	Ant1	1	21	Pass
NVNT	2-DH5	2402	Ant1	0.05	21	Pass
NVNT	2-DH5	2441	Ant1	-0.67	21	Pass
NVNT	2-DH5	2480	Ant1	0.36	21	Pass
NVNT	3-DH5	2402	Ant1	0.07	21	Pass
NVNT	3-DH5	2441	Ant1	-0.7	21	Pass
NVNT	3-DH5	2480	Ant1	0.38	21	Pass

Test Graphs

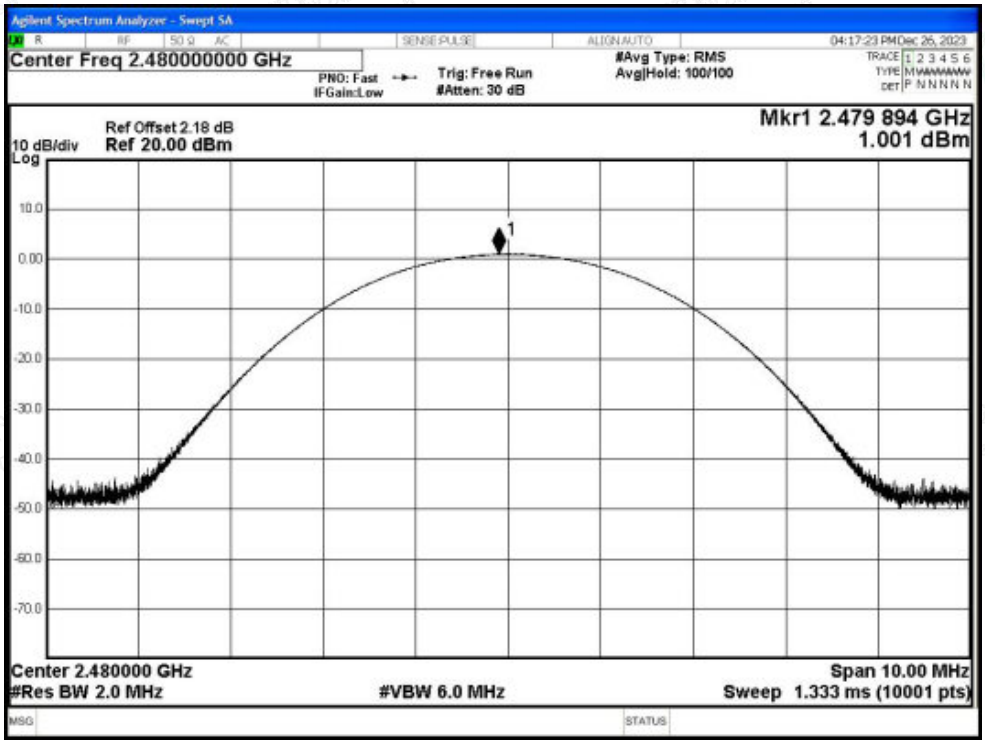
Power NVNT 1-DH5 2402MHz Ant1



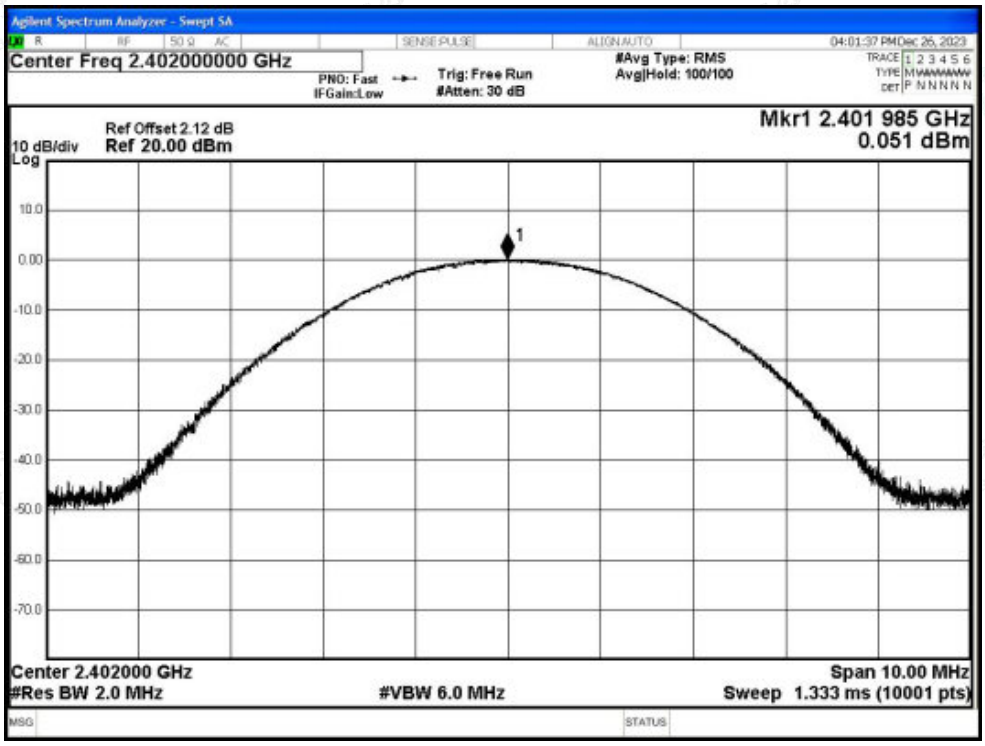
Power NVNT 1-DH5 2441MHz Ant1



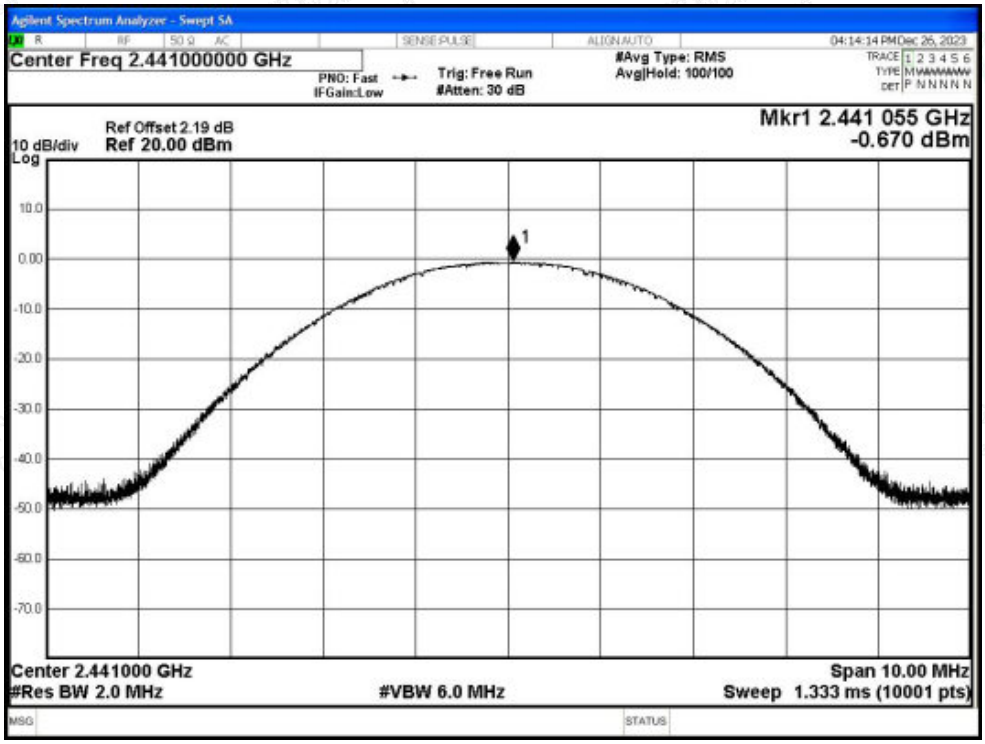
Power NVNT 1-DH5 2480MHz Ant1



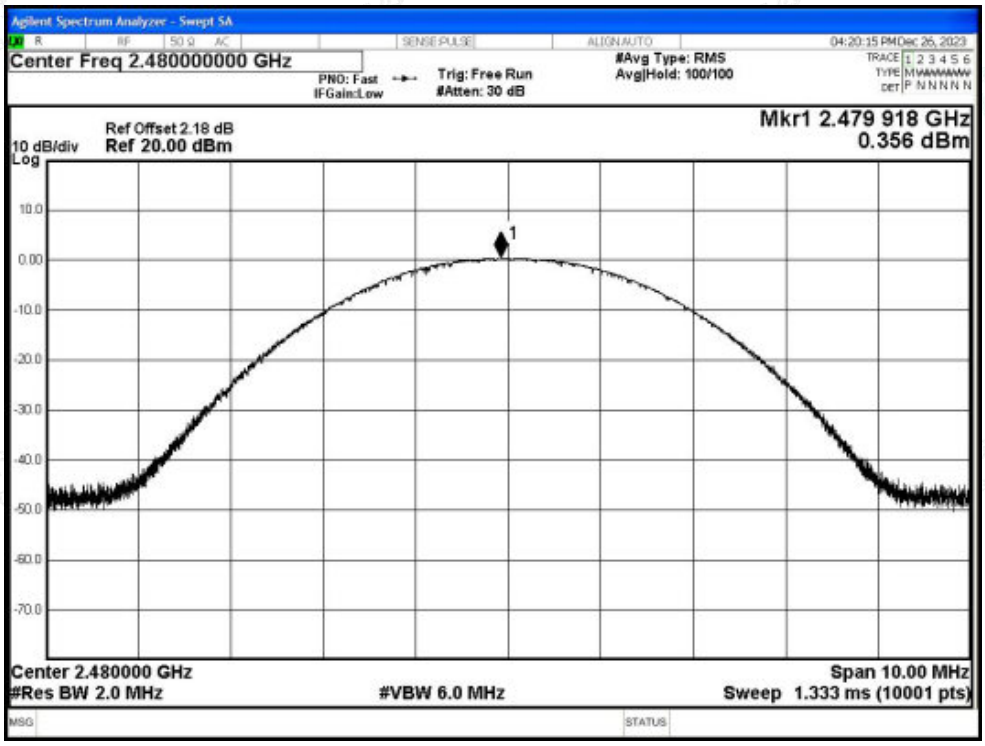
Power NVNT 2-DH5 2402MHz Ant1



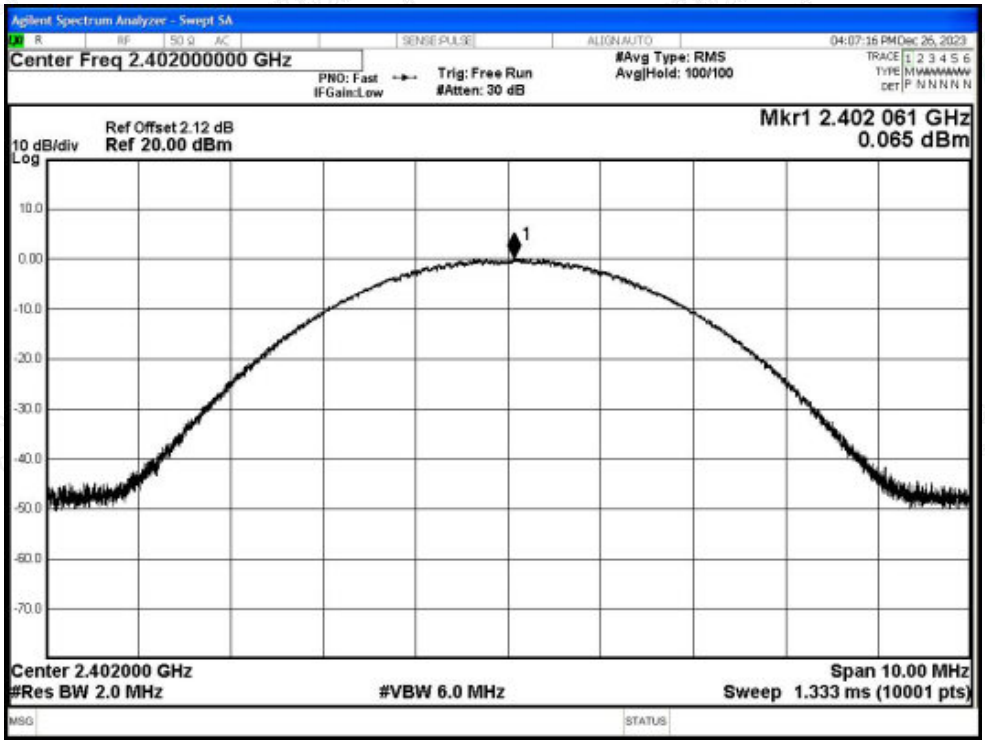
Power NVNT 2-DH5 2441MHz Ant1



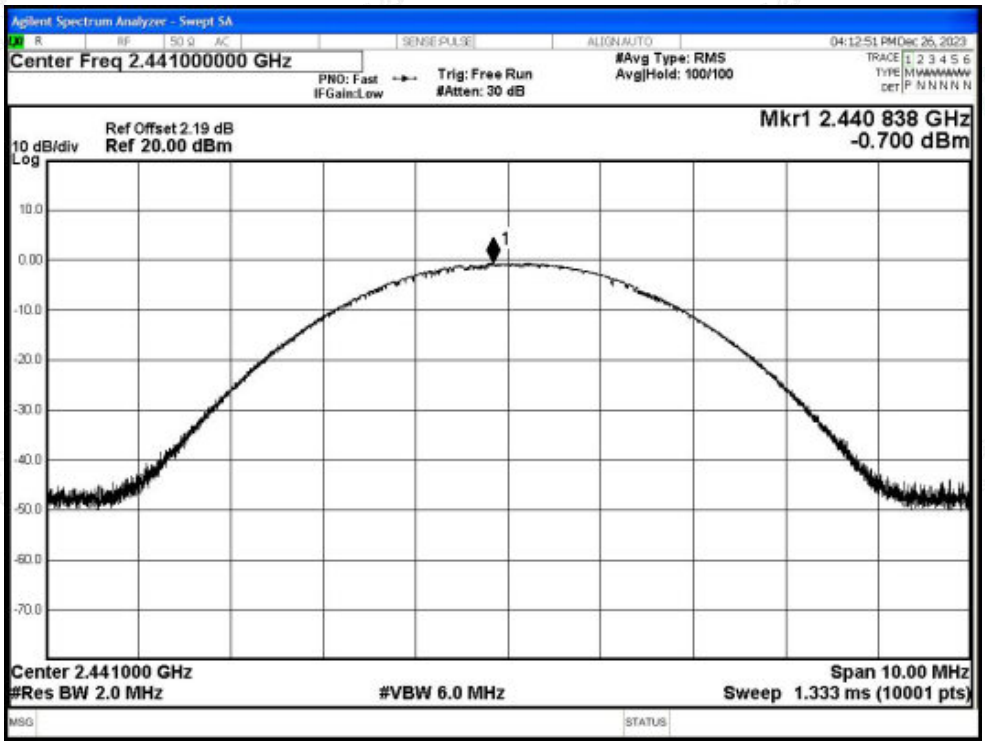
Power NVNT 2-DH5 2480MHz Ant1



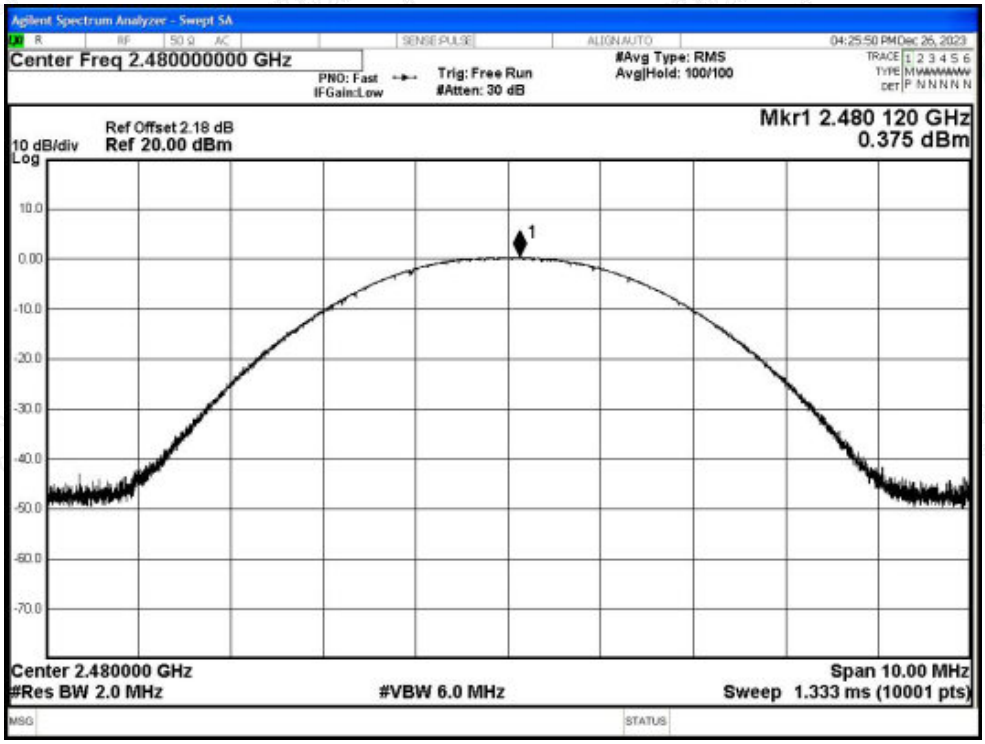
Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



Power NVNT 3-DH5 2480MHz Ant1

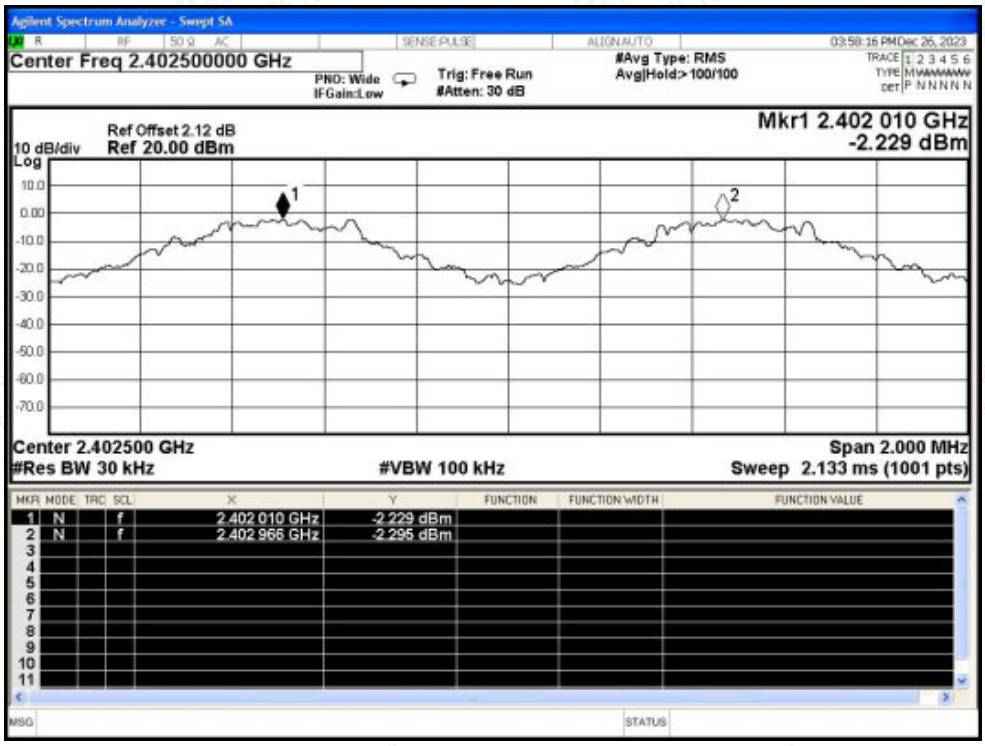


A.3 Carrier Frequencies Separation

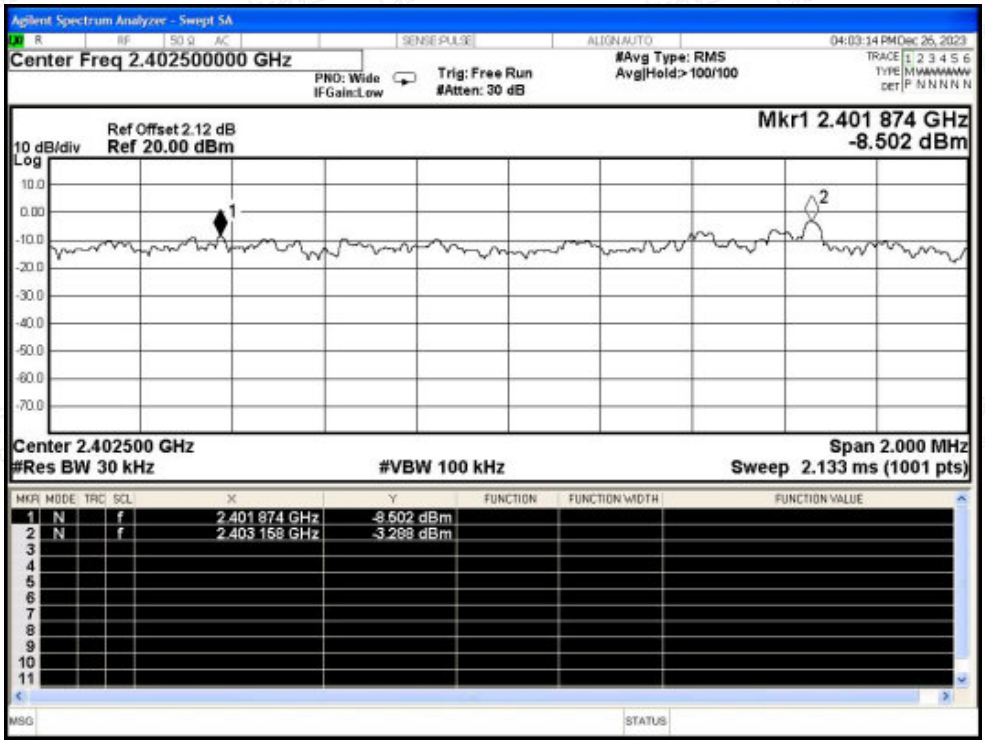
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.01	2402.966	0.956	0.611	Pass
NVNT	2-DH5	Ant1	2401.874	2403.158	1.284	0.853	Pass
NVNT	3-DH5	Ant1	2402.022	2403.172	1.15	0.865	Pass

Test Graphs

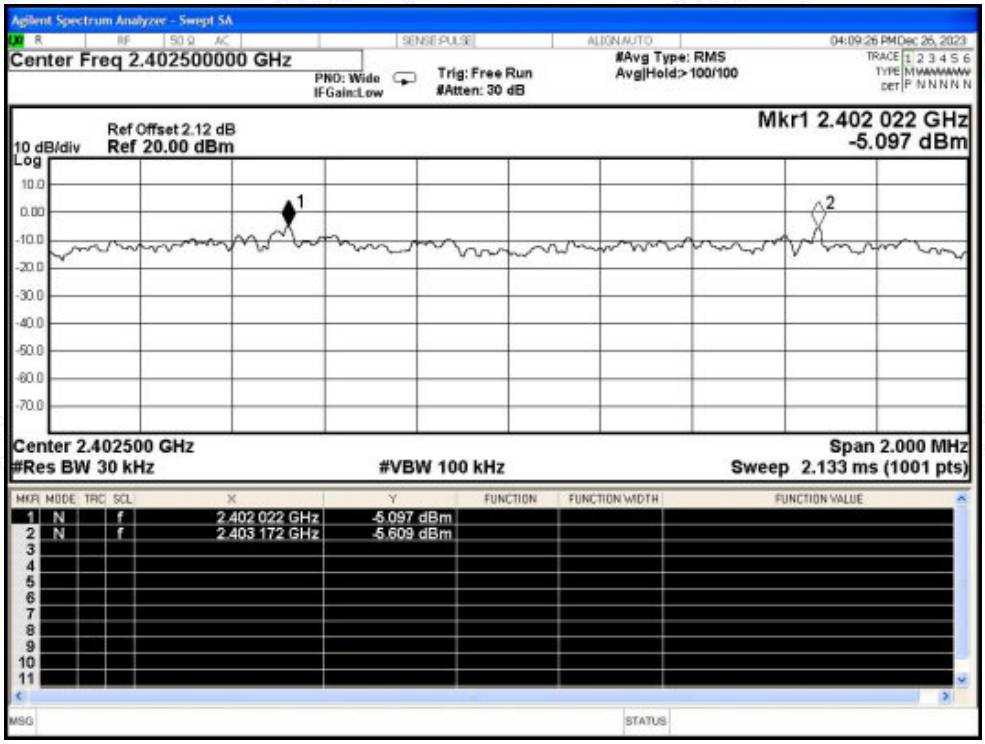
CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2402MHz Ant1

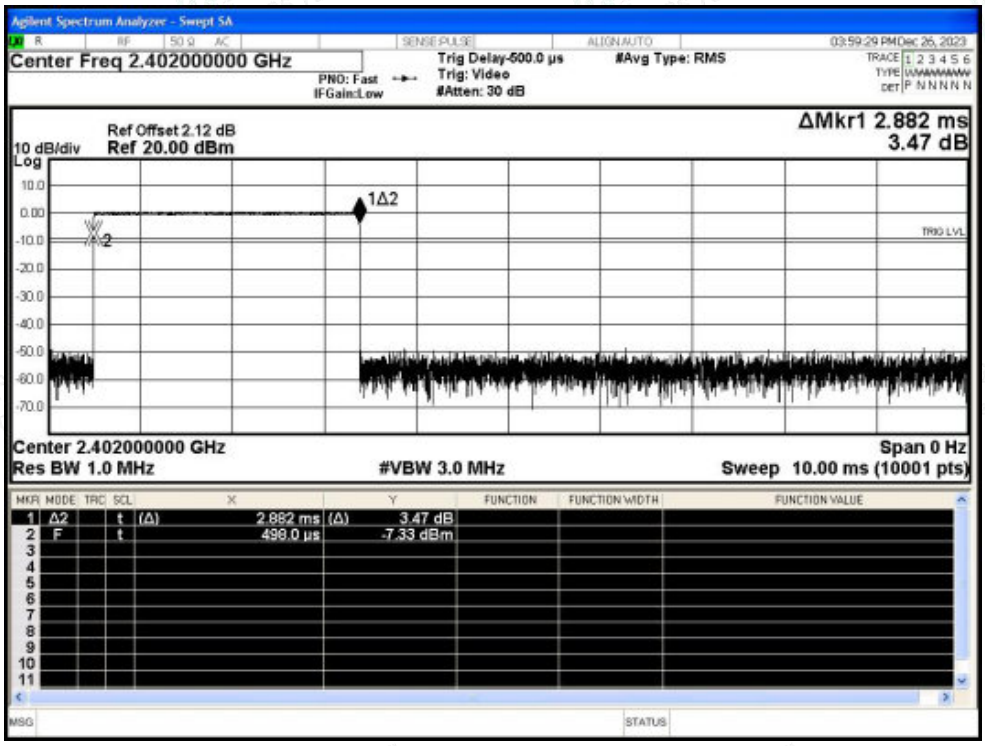


A.4 Dwell Time

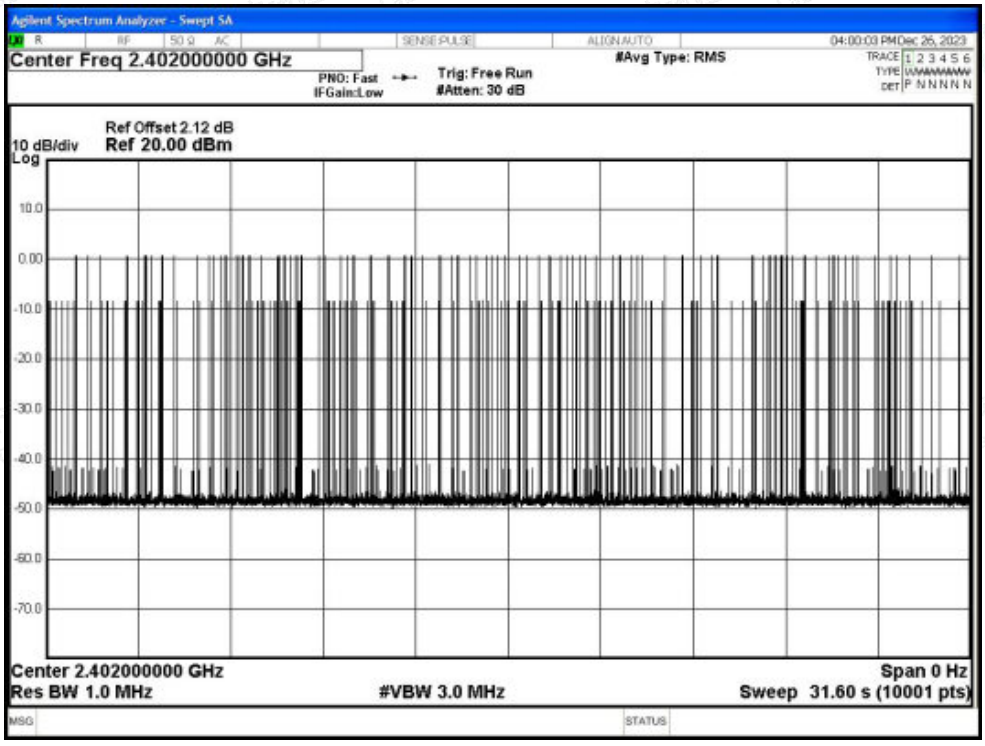
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.882	296.846	103	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.885	311.58	108	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.887	294.474	102	31600	400	Pass

Test Graphs

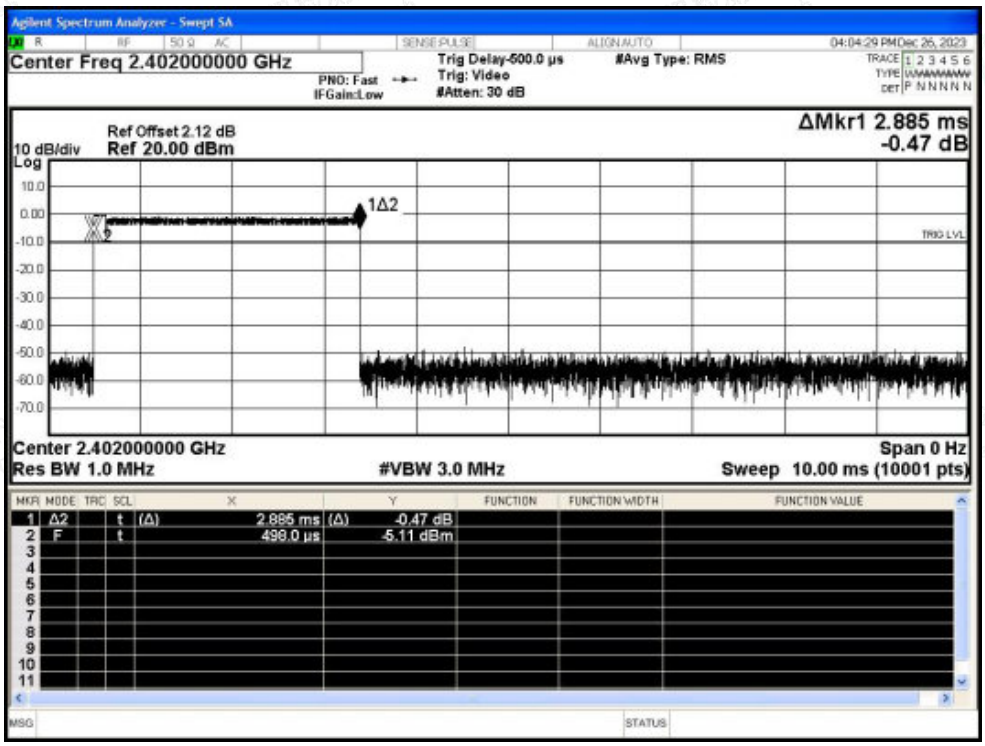
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



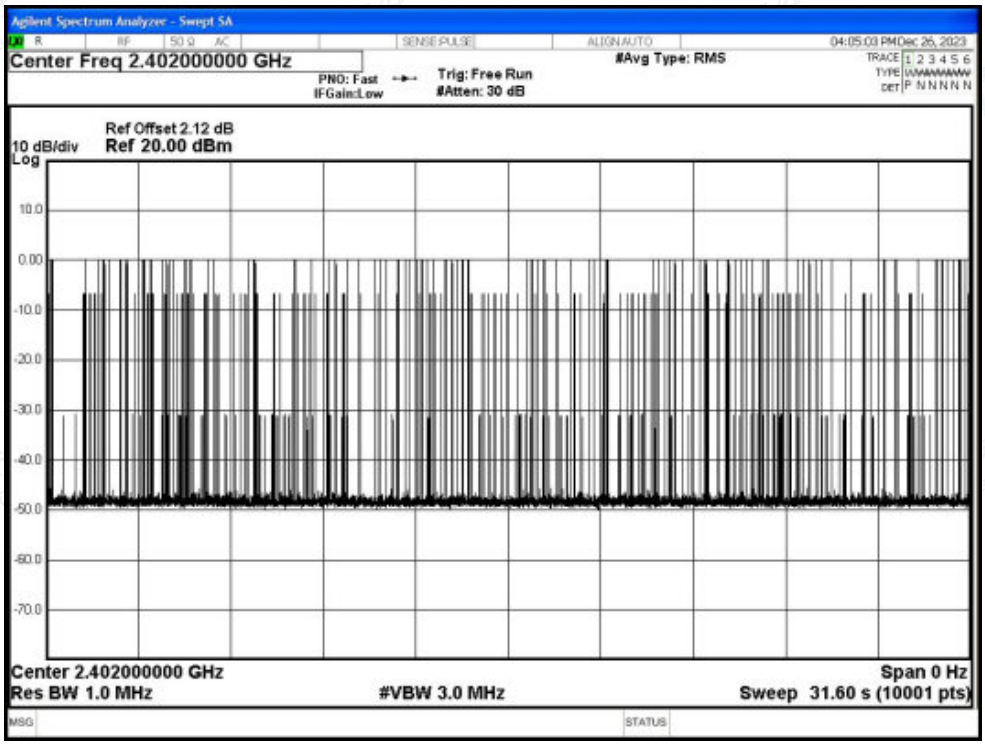
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



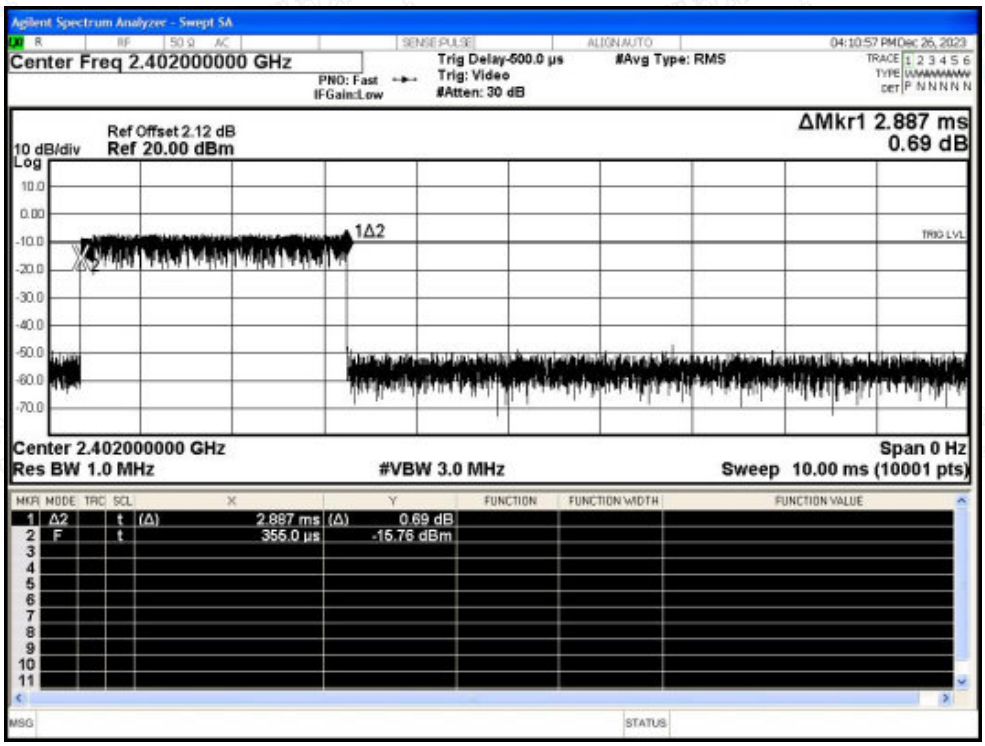
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



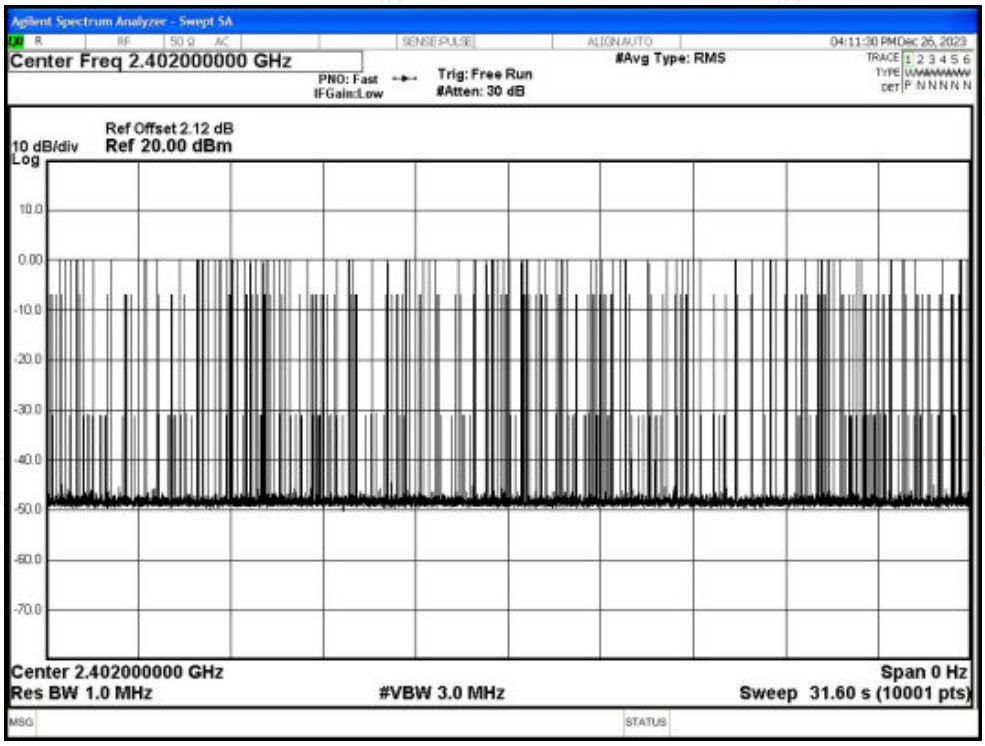
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated

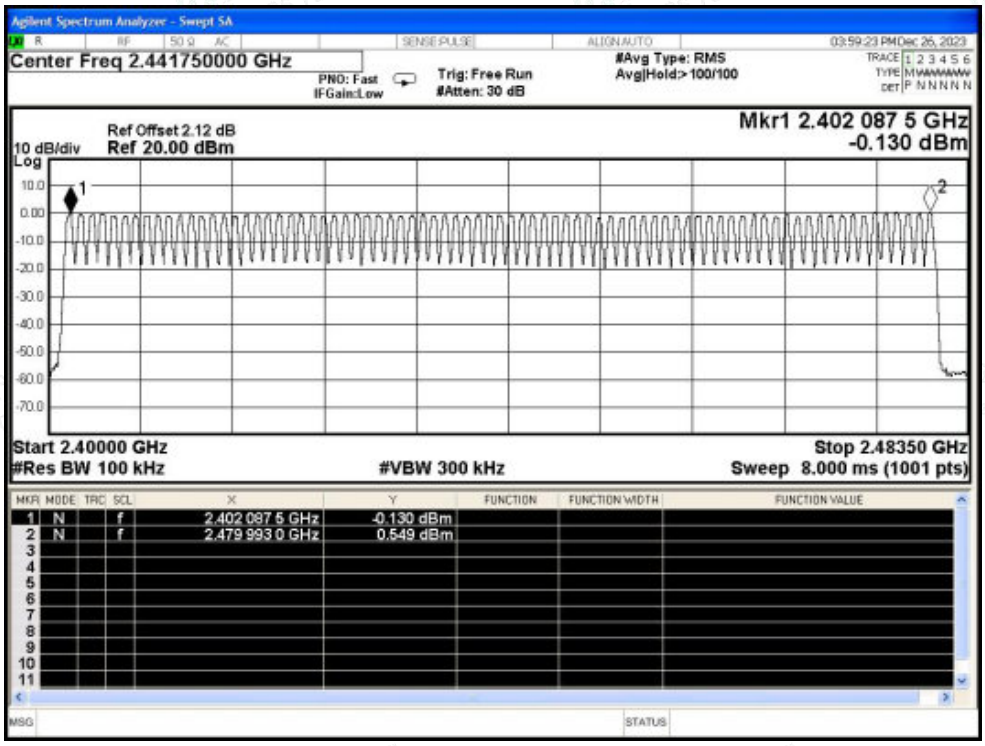


A.5 Number of Hopping Channel

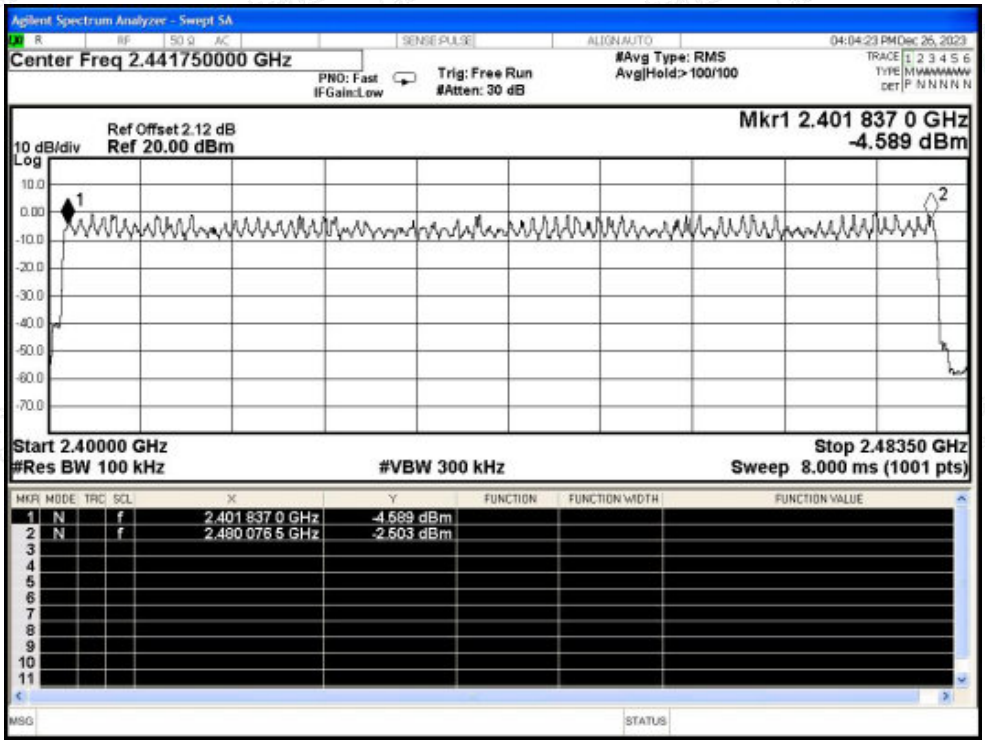
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

Test Graphs

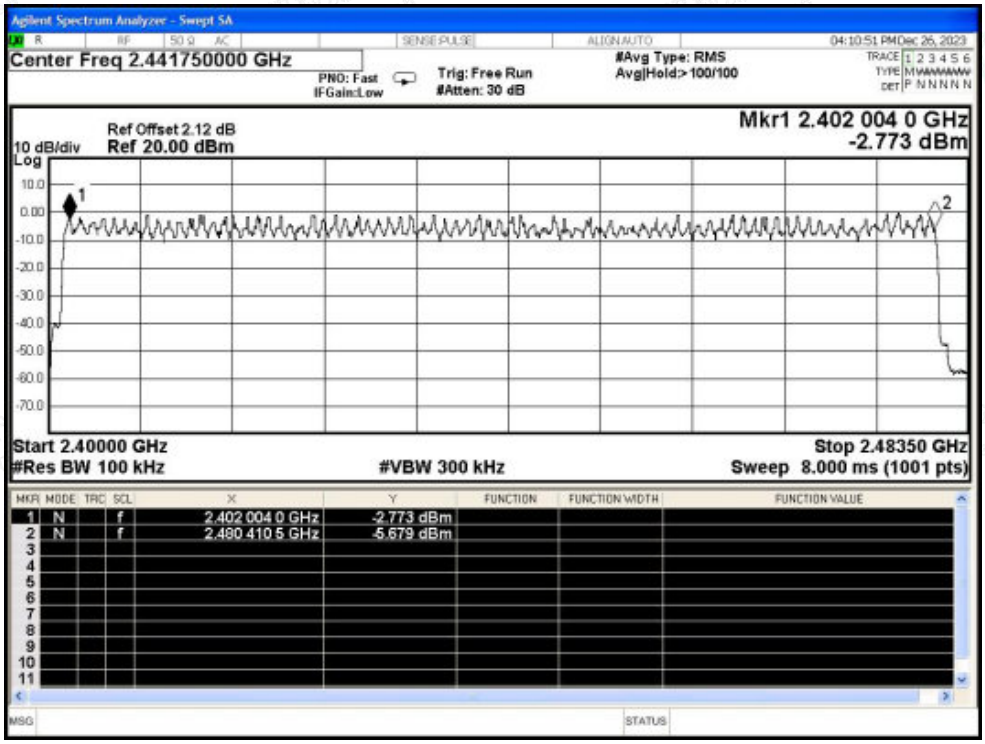
Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



Hopping No. NVNT 3-DH5 2402MHz Ant1

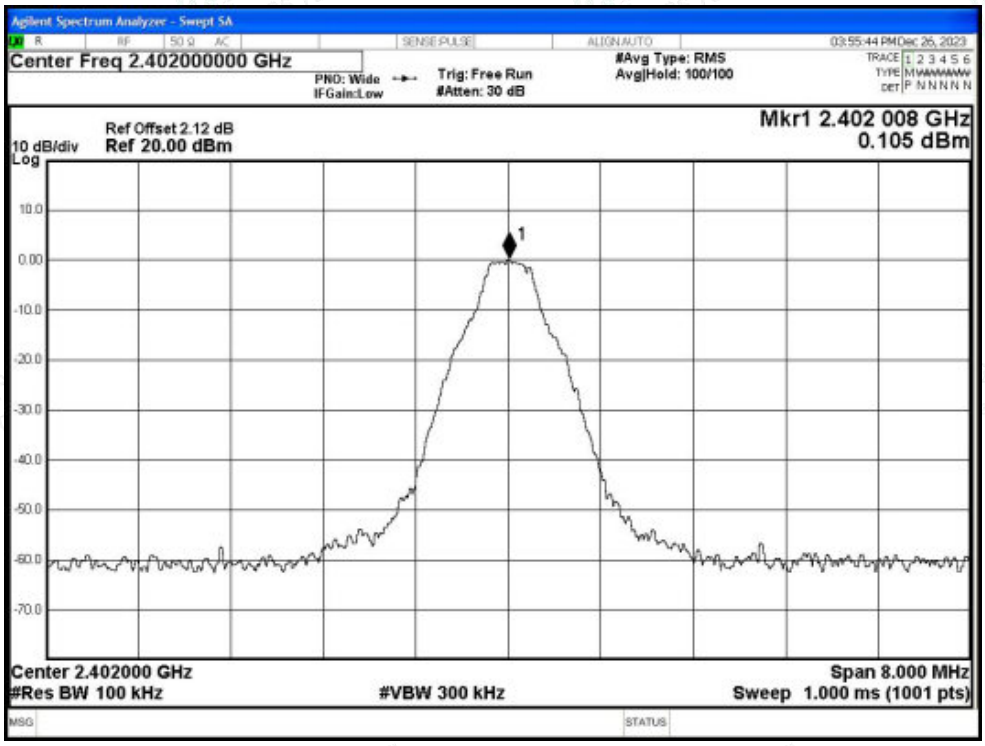


A.6 Band Edge

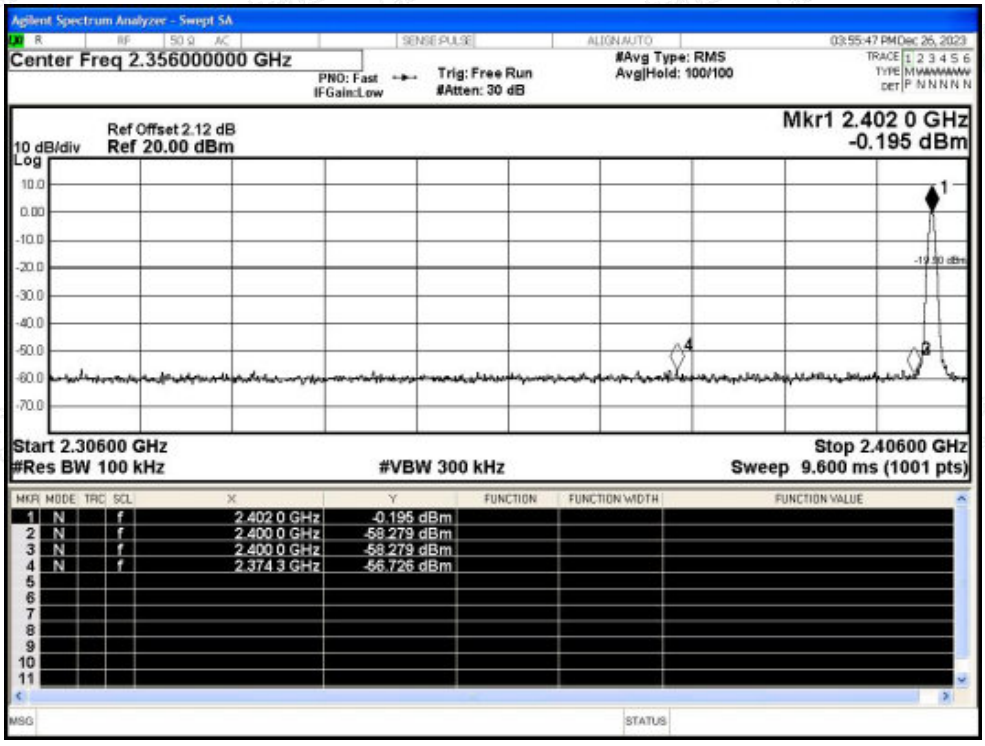
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-56.83	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-57.1	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-54.02	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-54.41	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-51.31	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-57.08	-20	Pass

Test Graphs

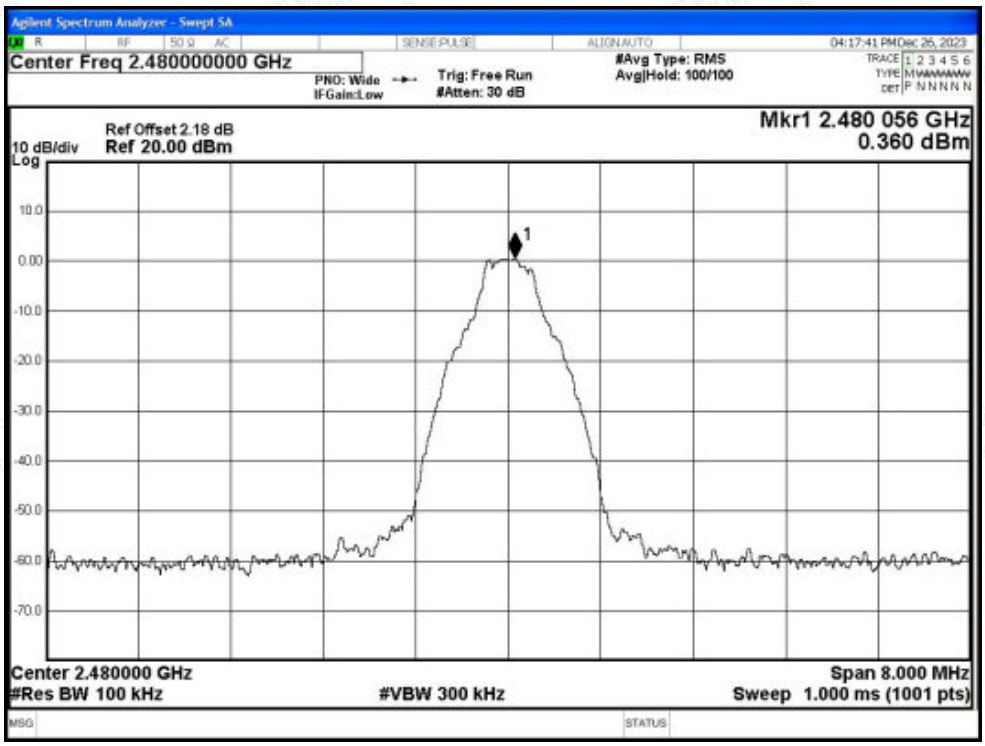
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



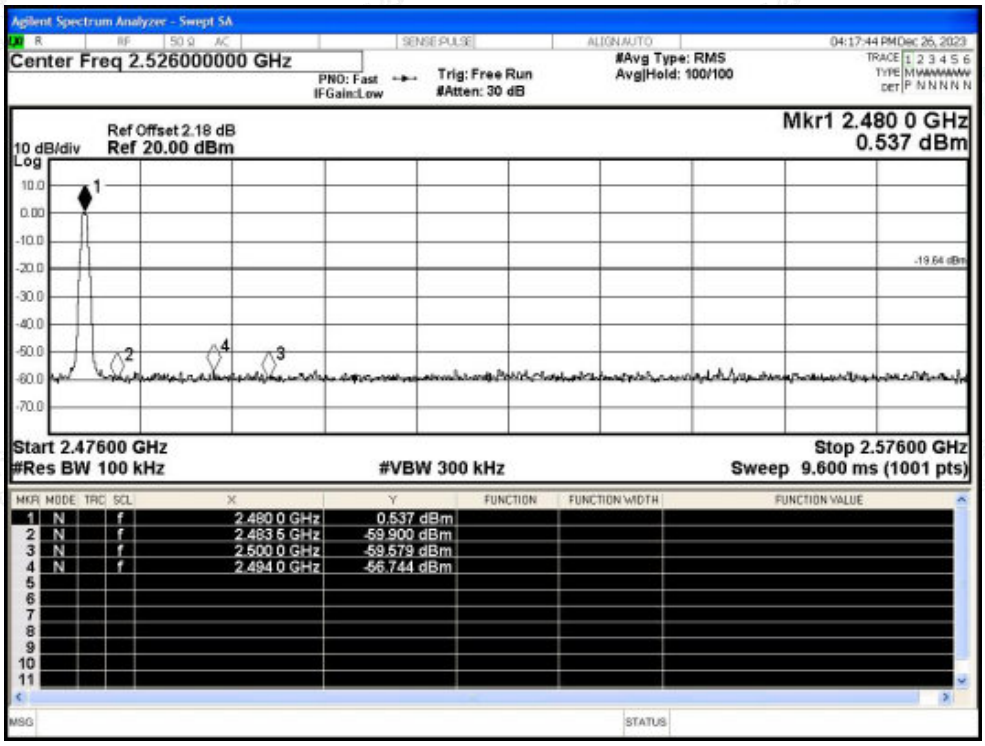
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



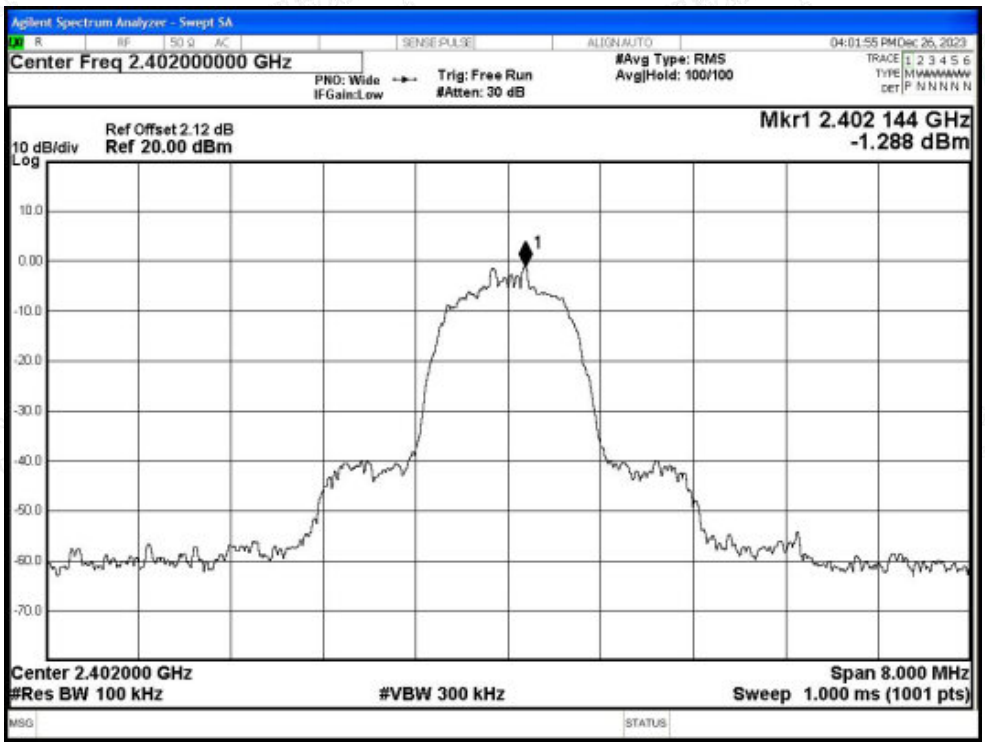
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



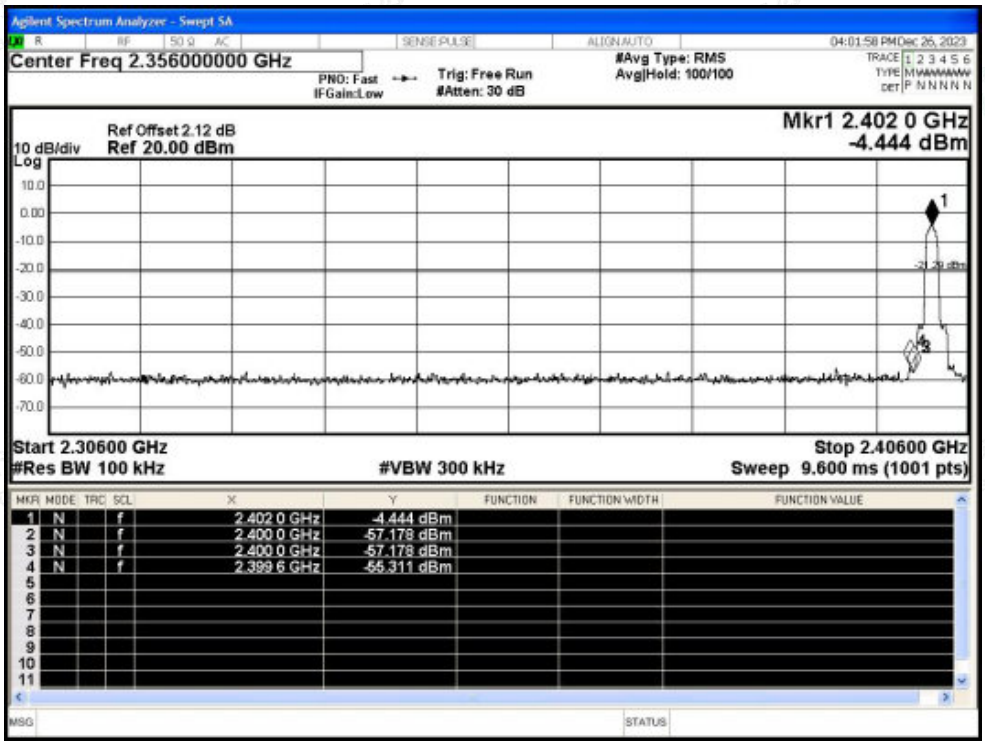
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



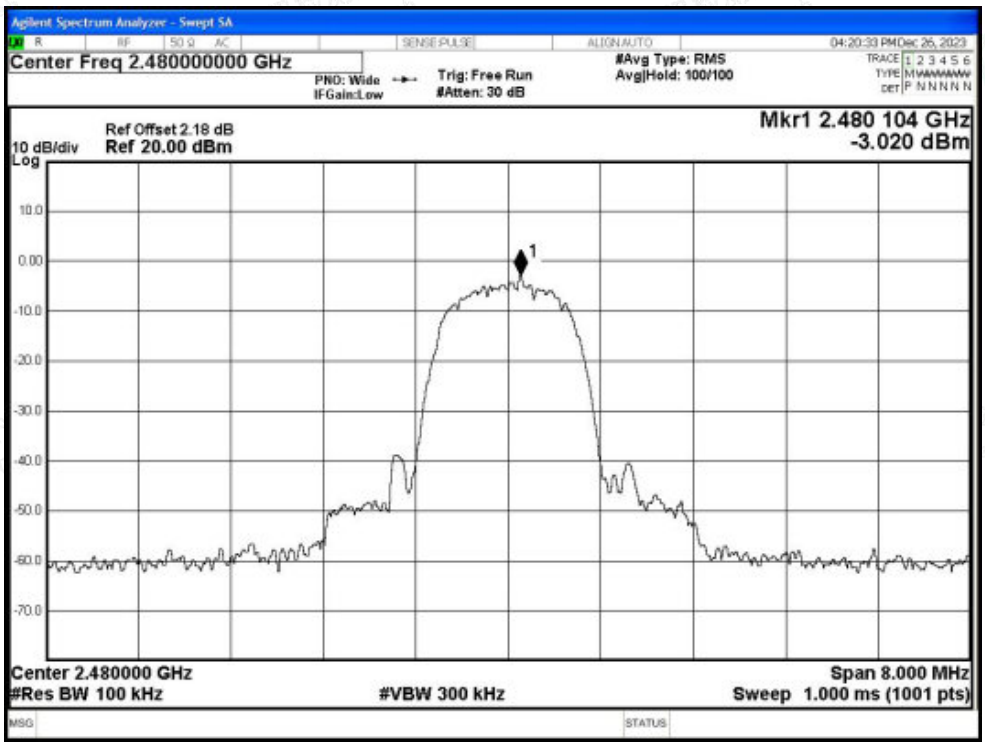
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



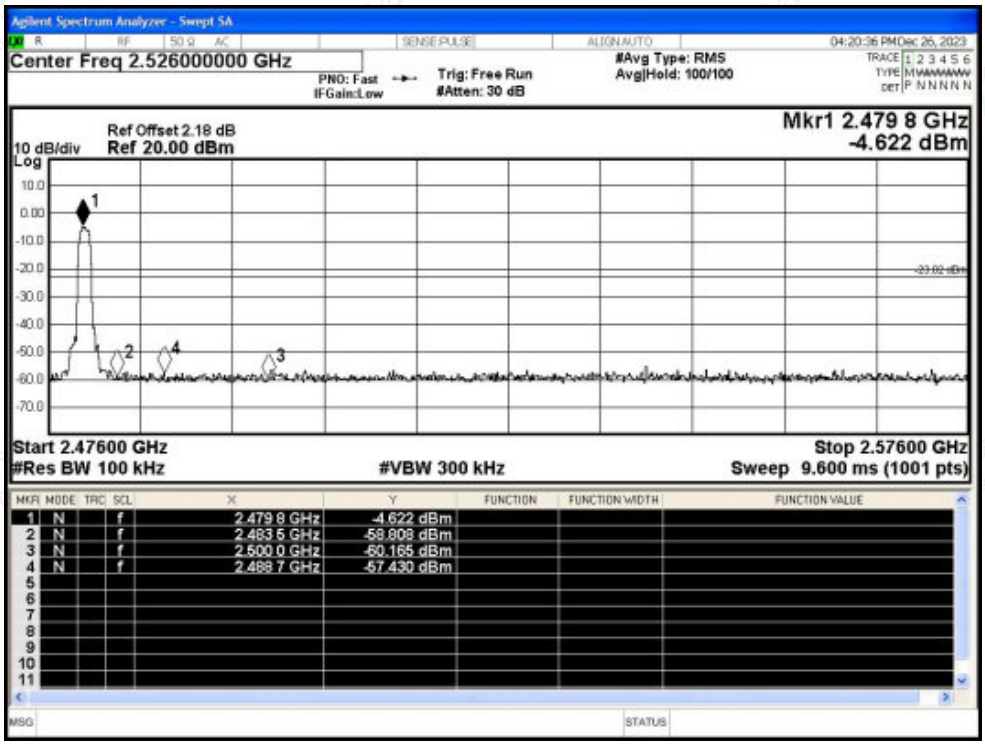
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



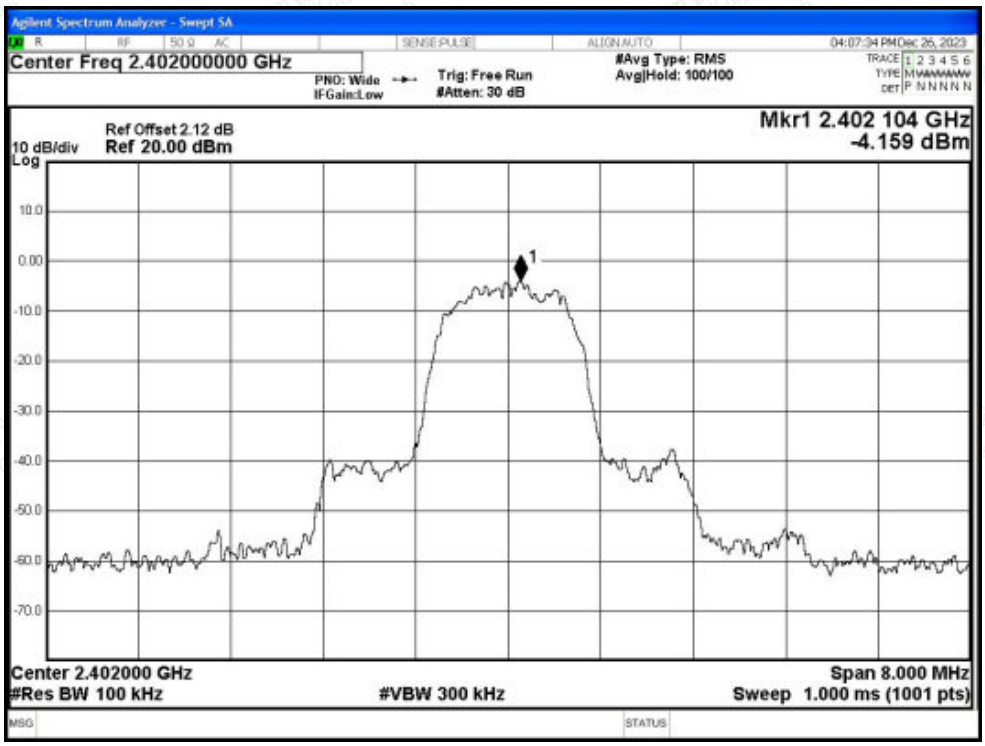
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



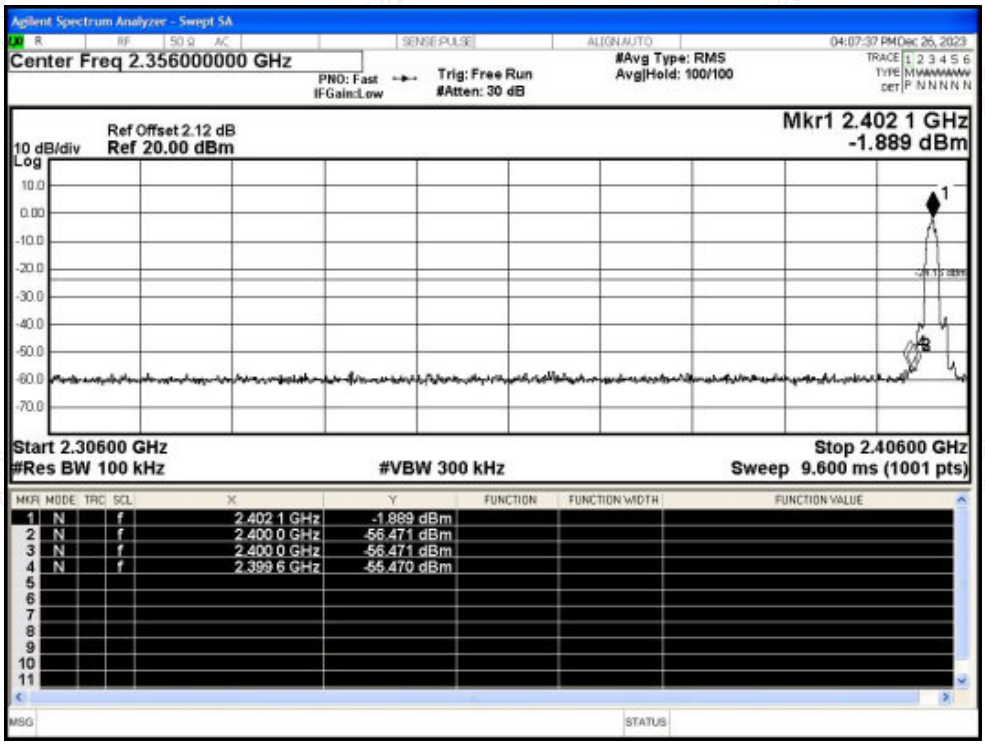
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



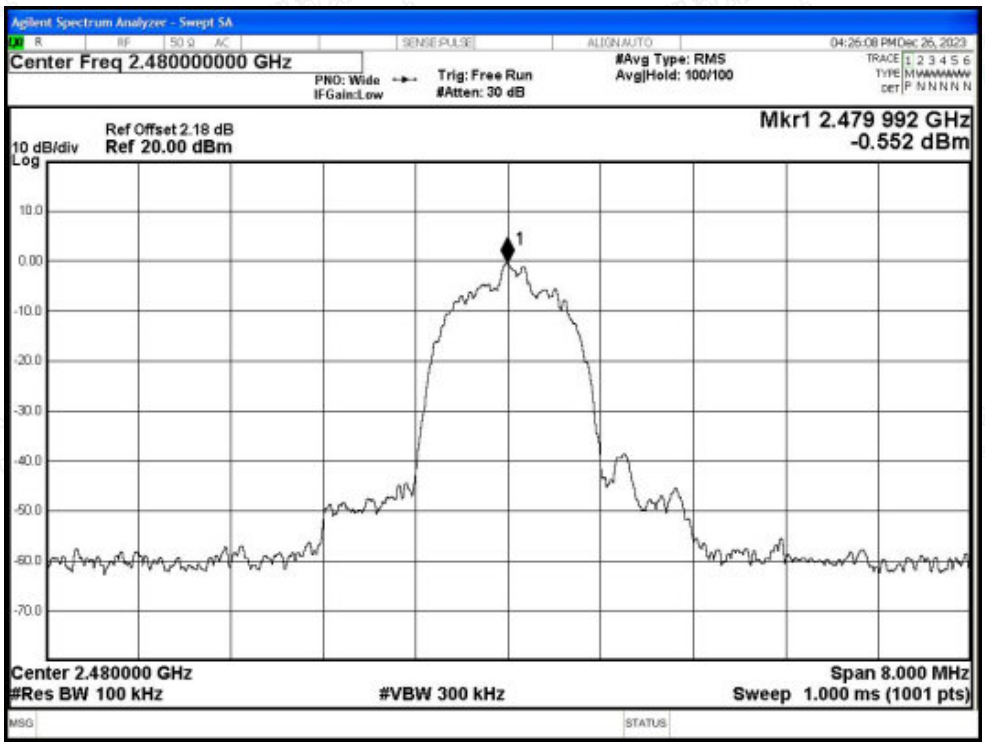
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



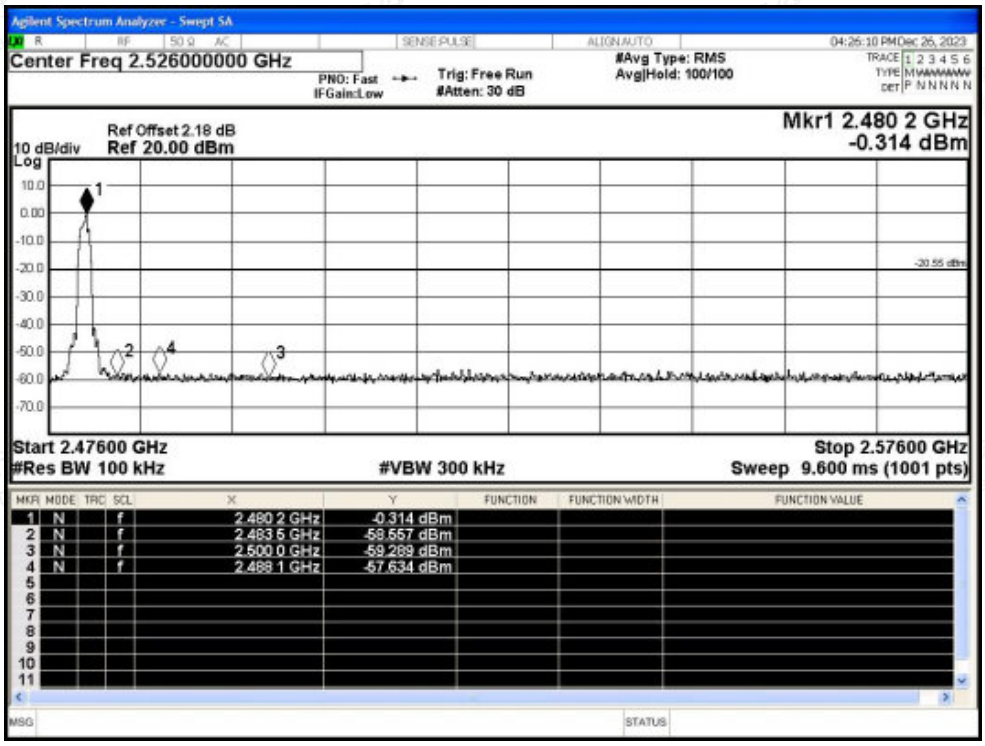
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



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



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

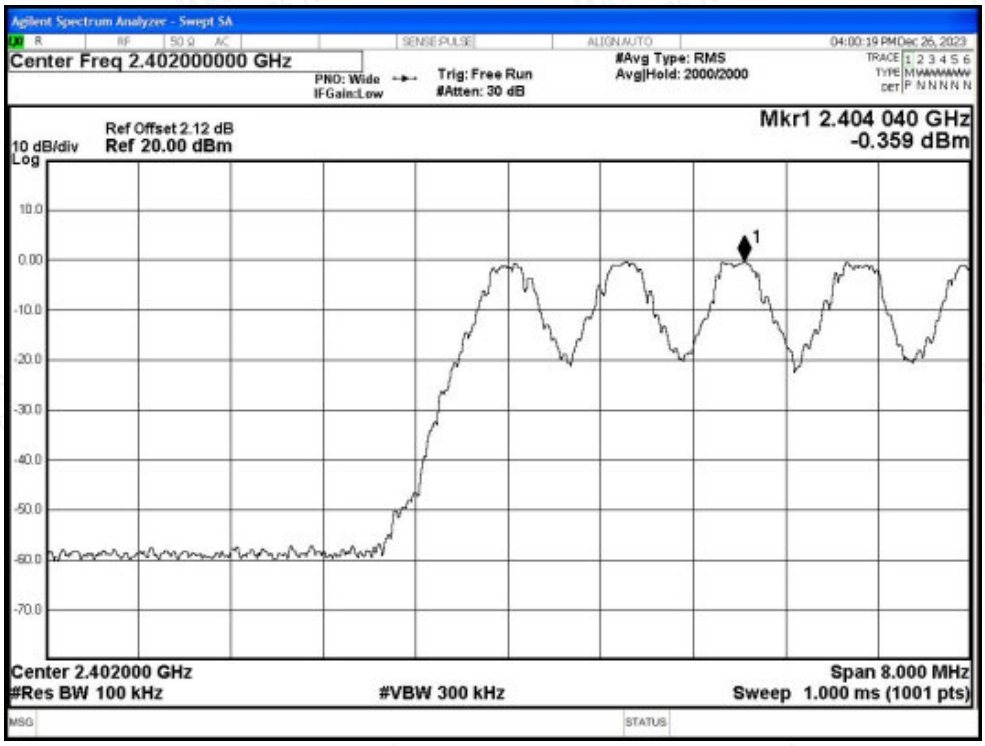


(Hopping)

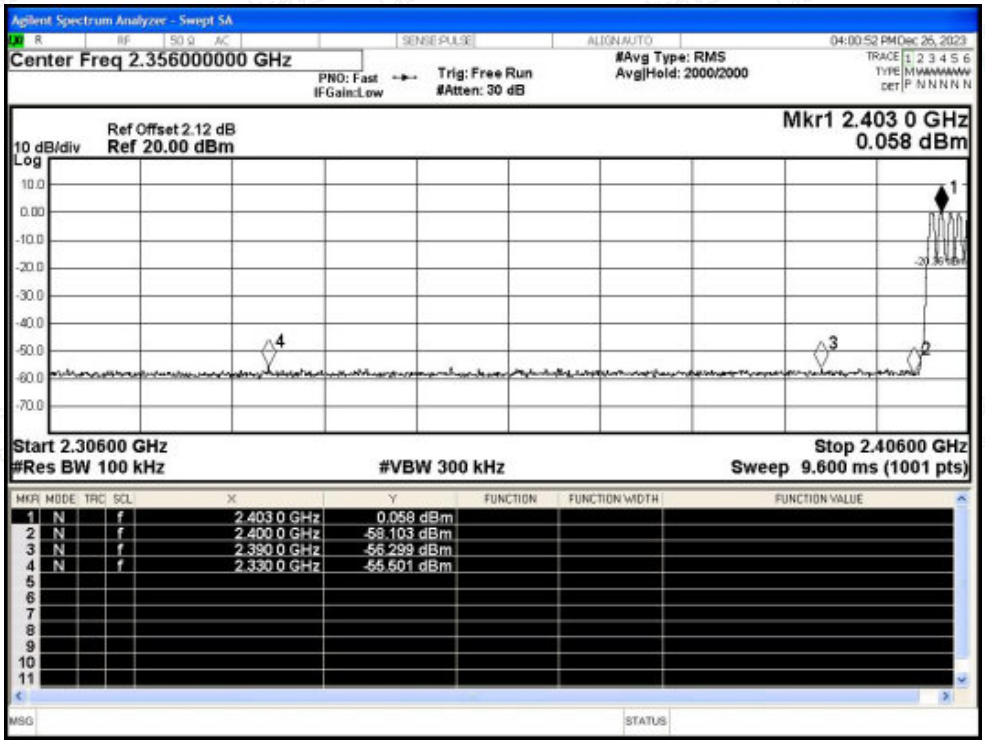
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-55.14	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.74	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-54.35	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-53.59	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-51.72	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-56.22	-20	Pass

Test Graphs

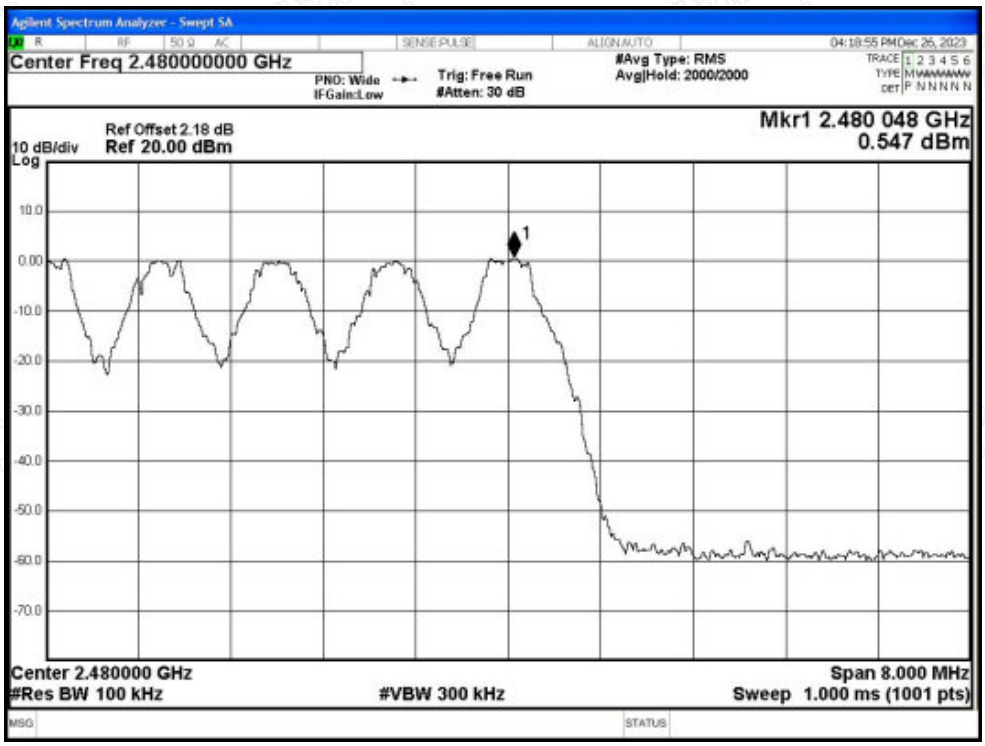
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



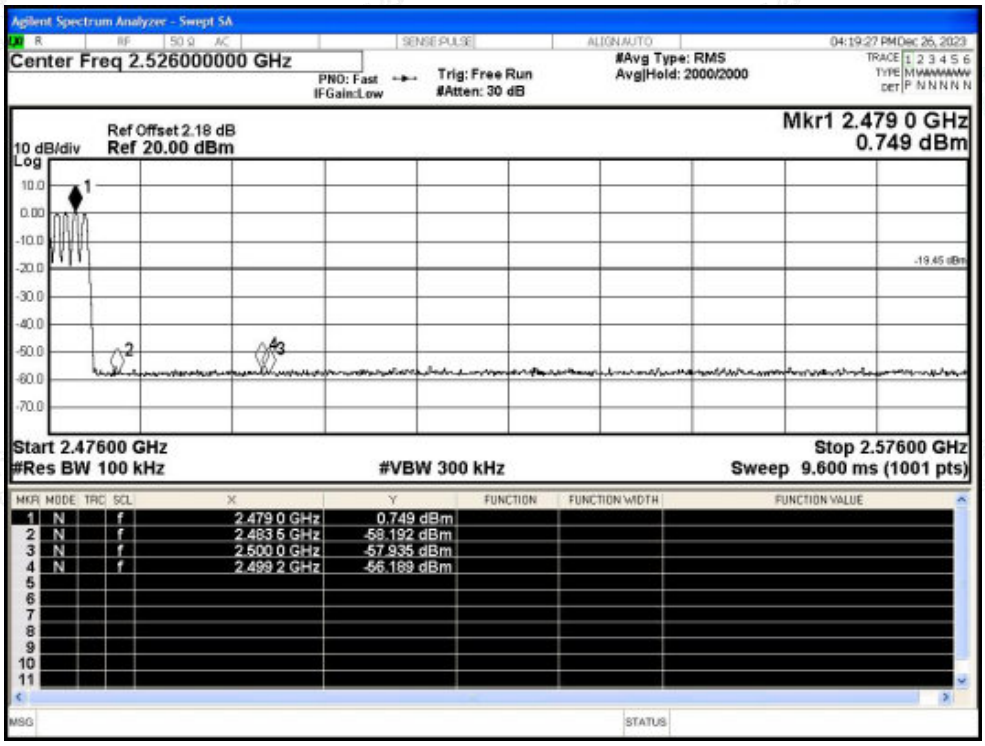
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



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

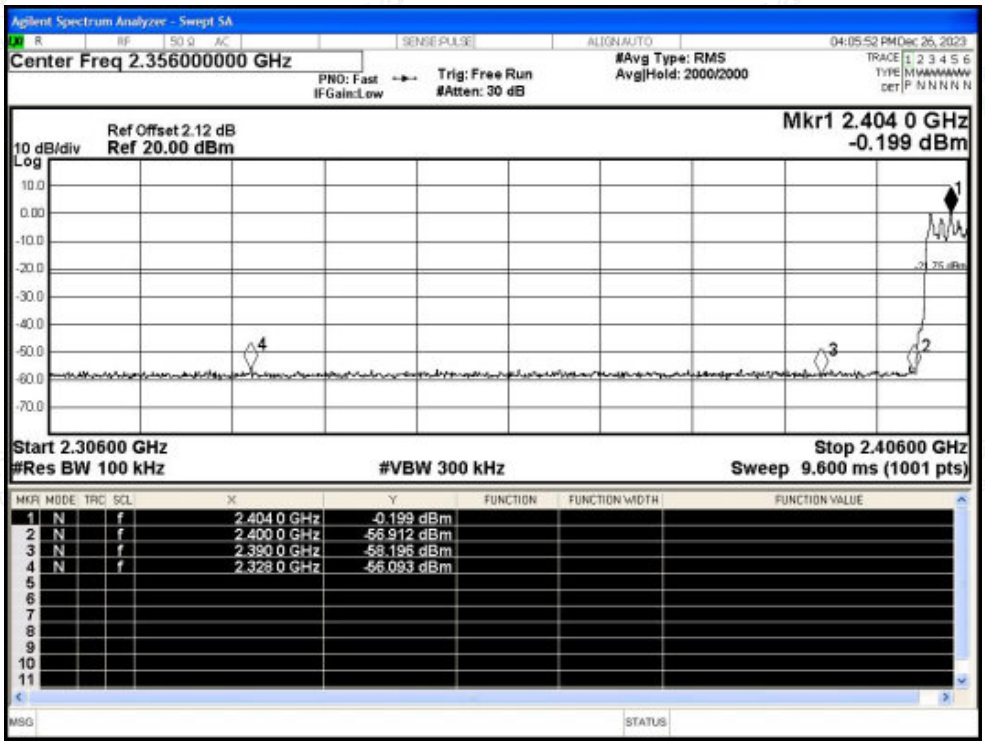


Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission

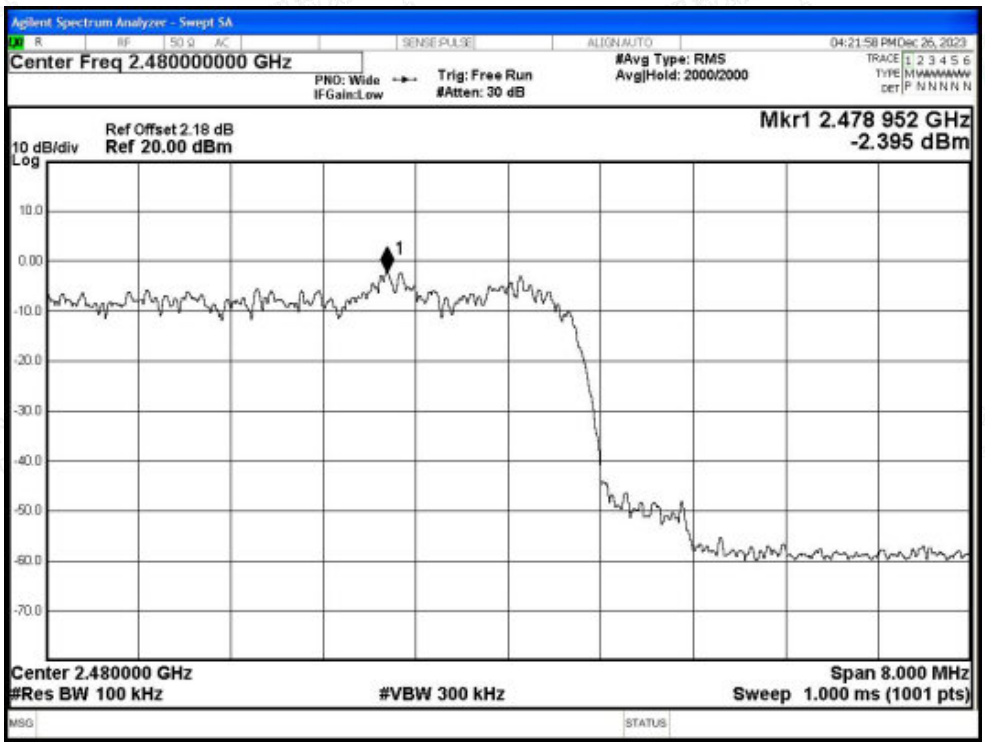


Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref

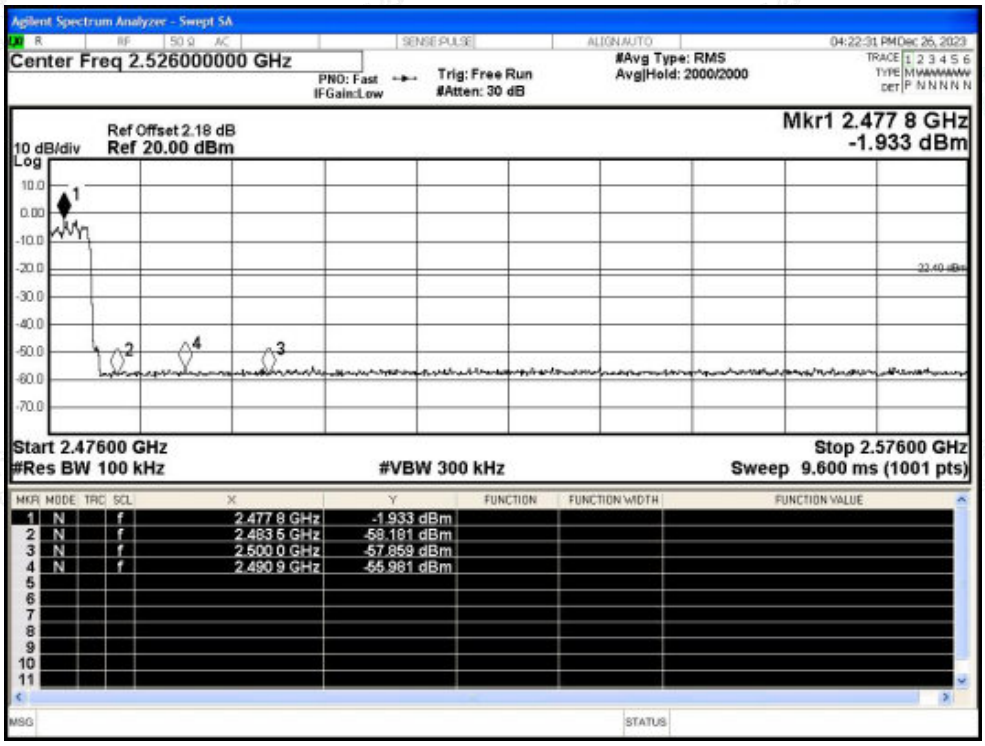
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



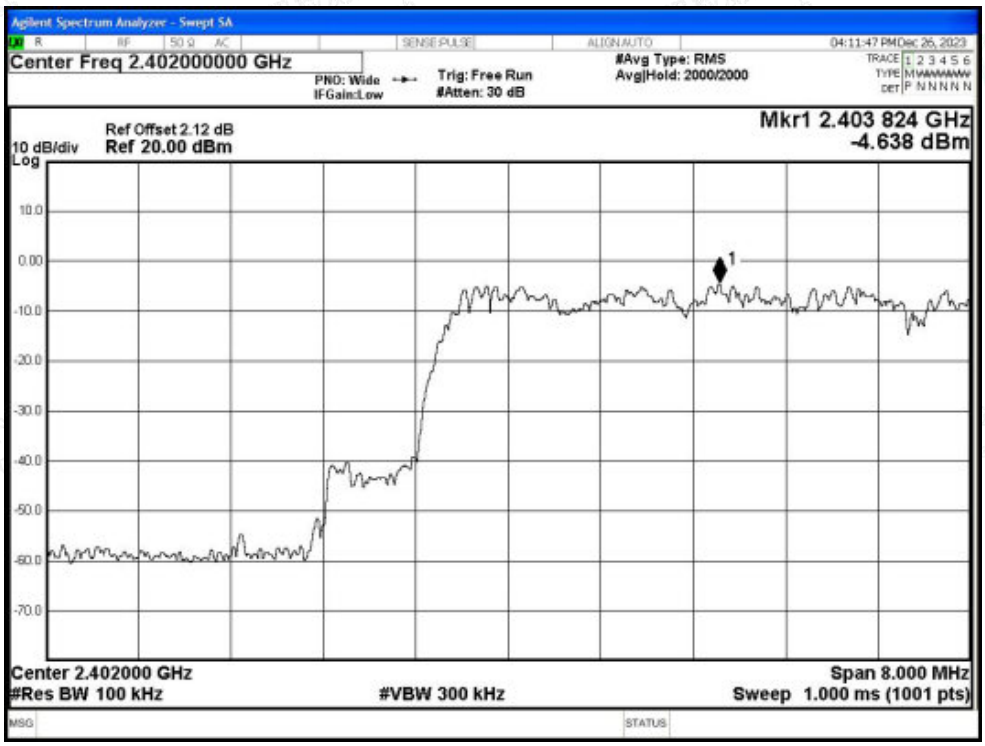
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



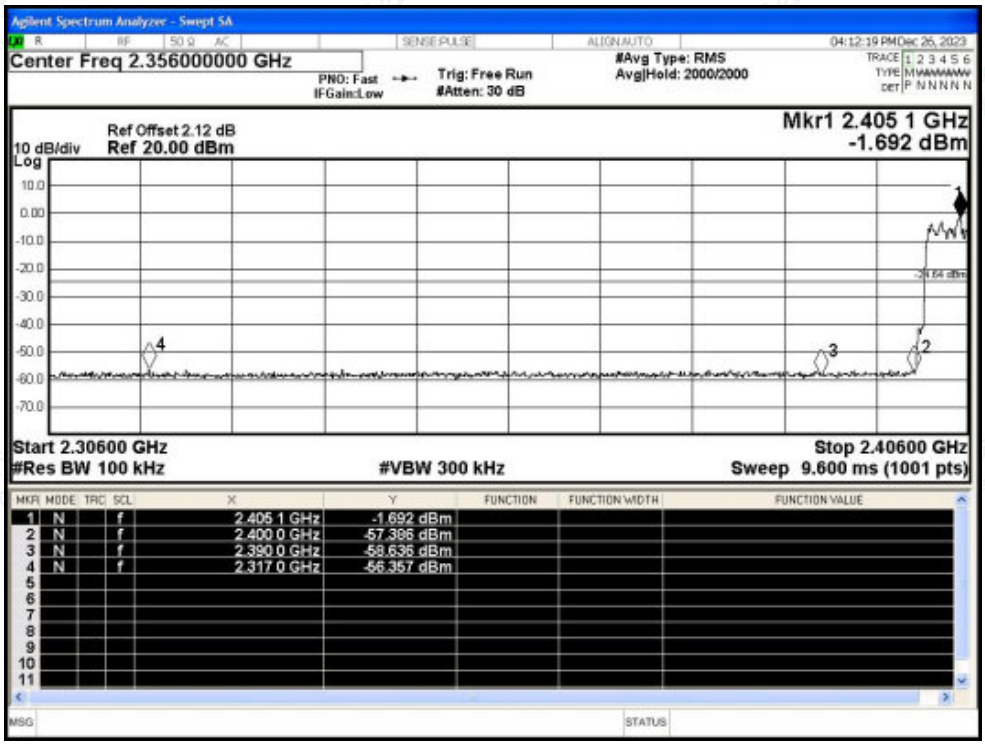
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



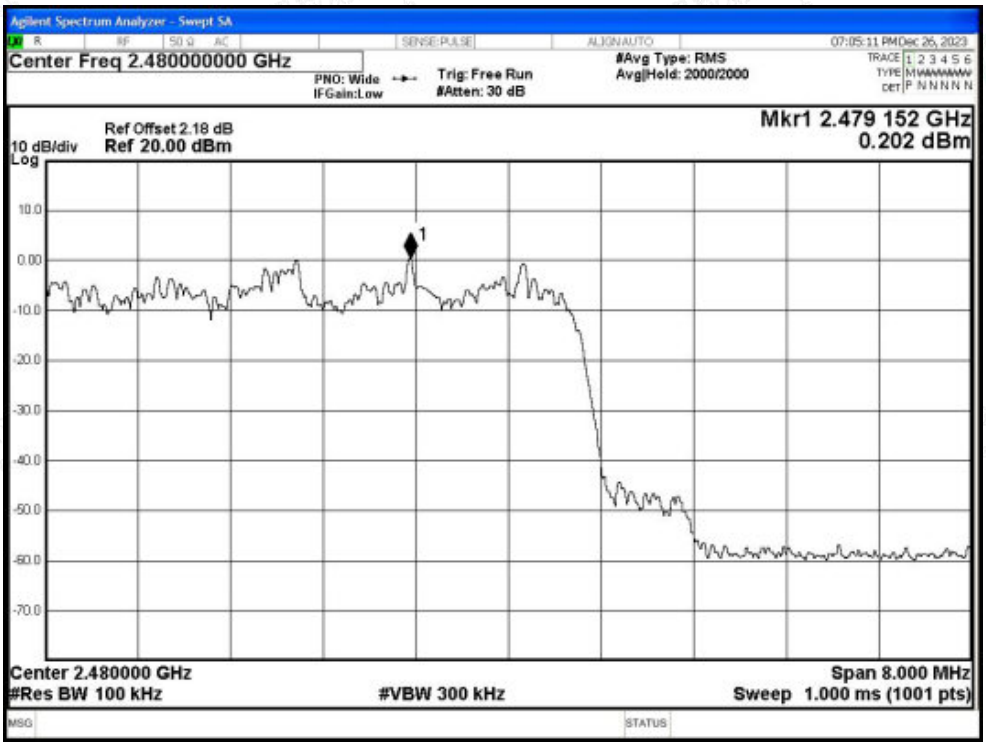
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



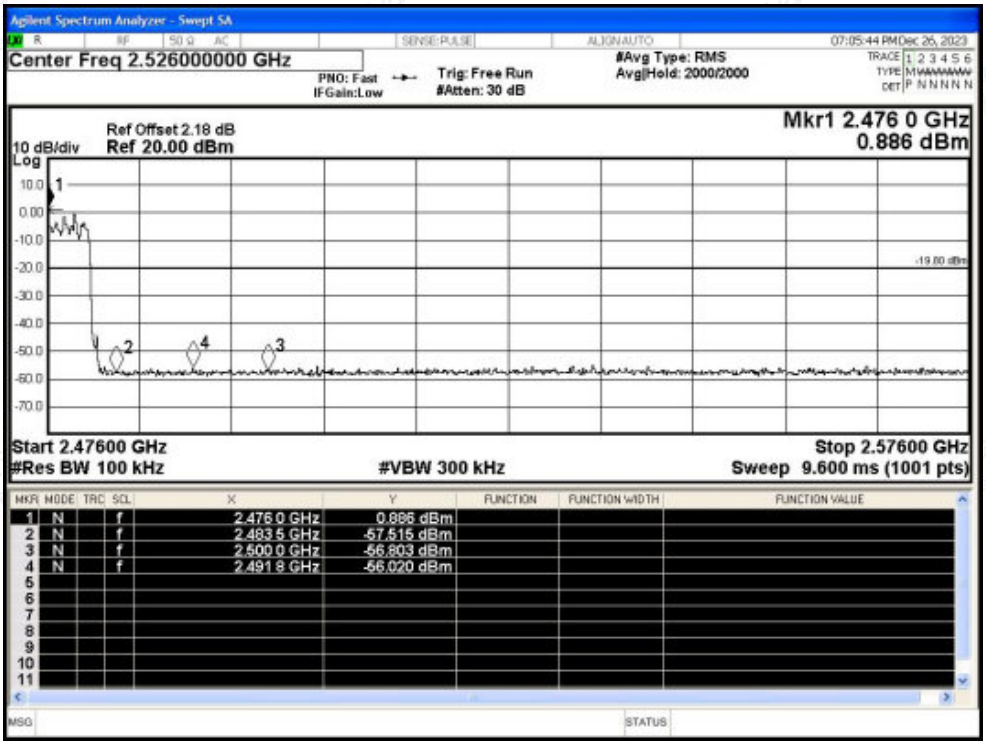
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission



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



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

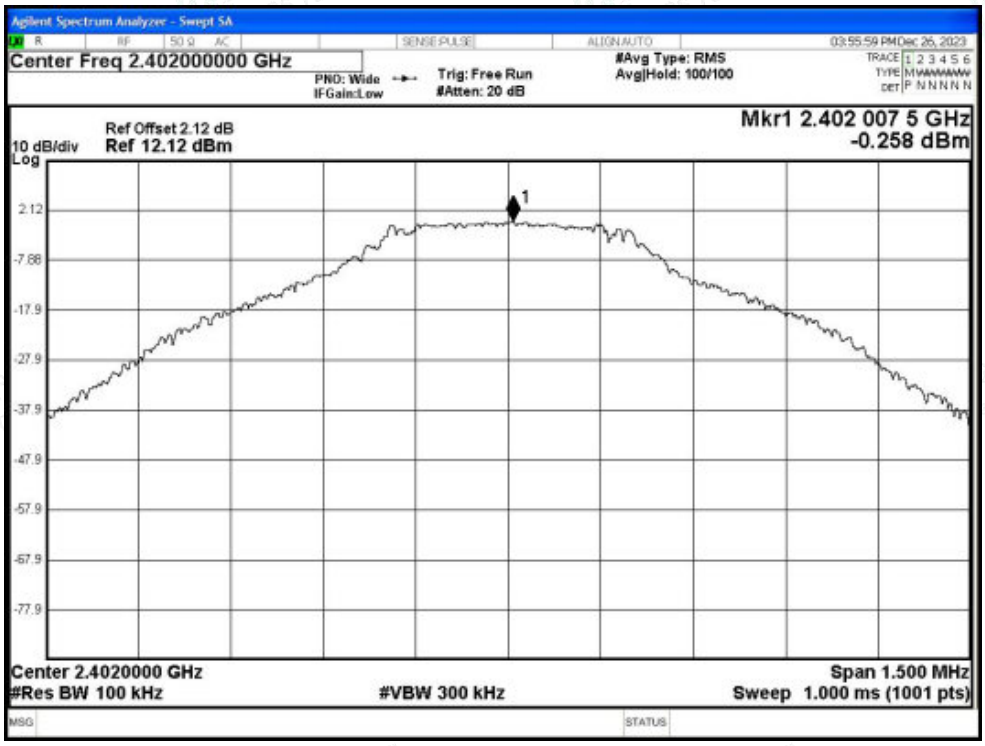


A.7 Conducted RF Spurious Emission

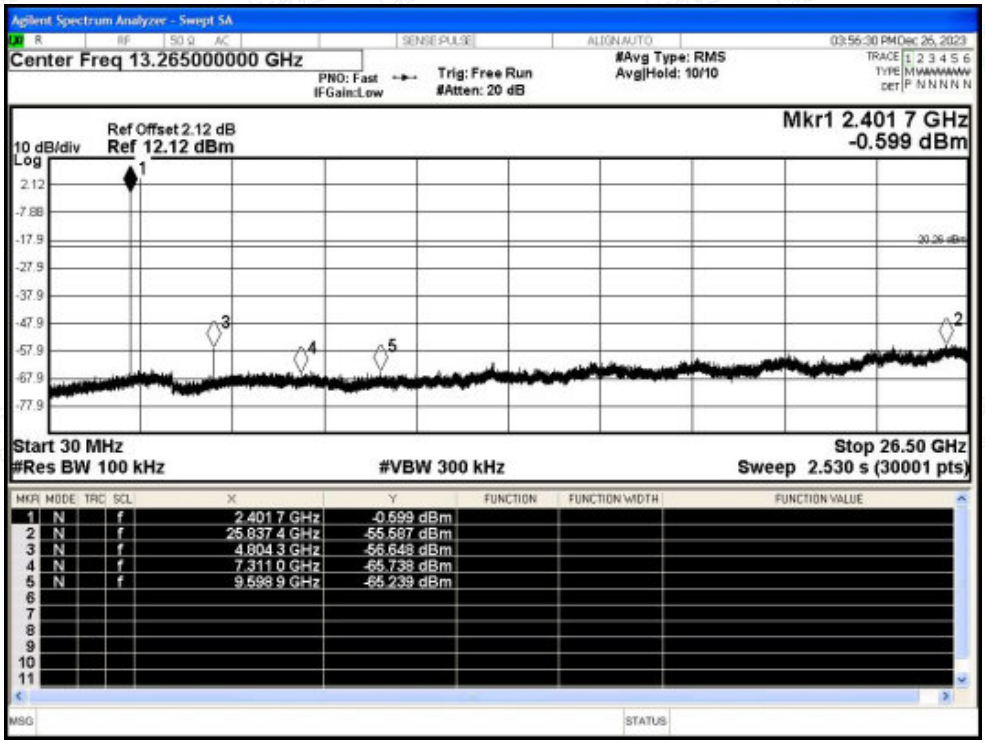
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-55.33	-20	Pass
NVNT	1-DH5	2441	Ant1	-54.95	-20	Pass
NVNT	1-DH5	2480	Ant1	-55.79	-20	Pass
NVNT	2-DH5	2402	Ant1	-54.33	-20	Pass
NVNT	2-DH5	2441	Ant1	-53.72	-20	Pass
NVNT	2-DH5	2480	Ant1	-54.35	-20	Pass
NVNT	3-DH5	2402	Ant1	-54.78	-20	Pass
NVNT	3-DH5	2441	Ant1	-53.82	-20	Pass
NVNT	3-DH5	2480	Ant1	-55.22	-20	Pass

Test Graphs

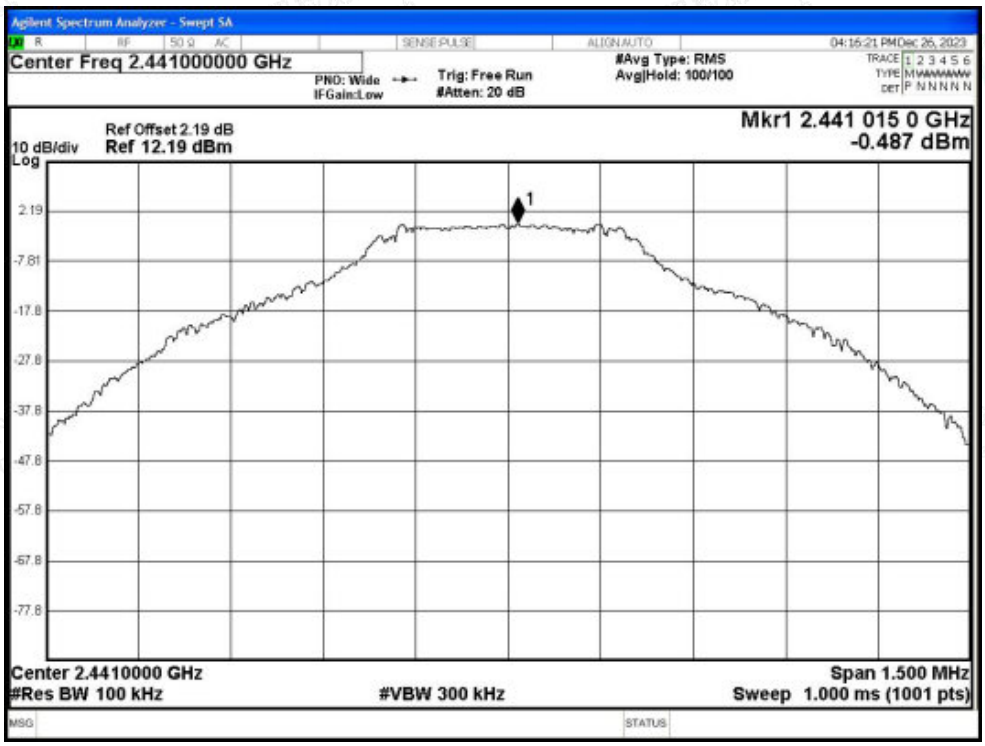
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



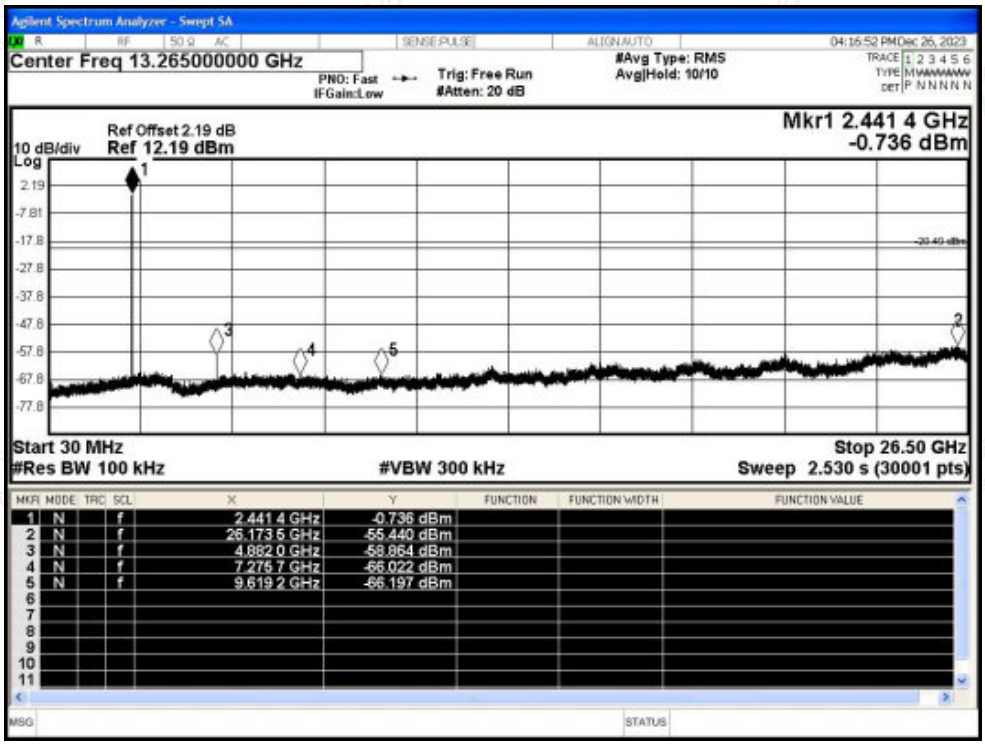
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



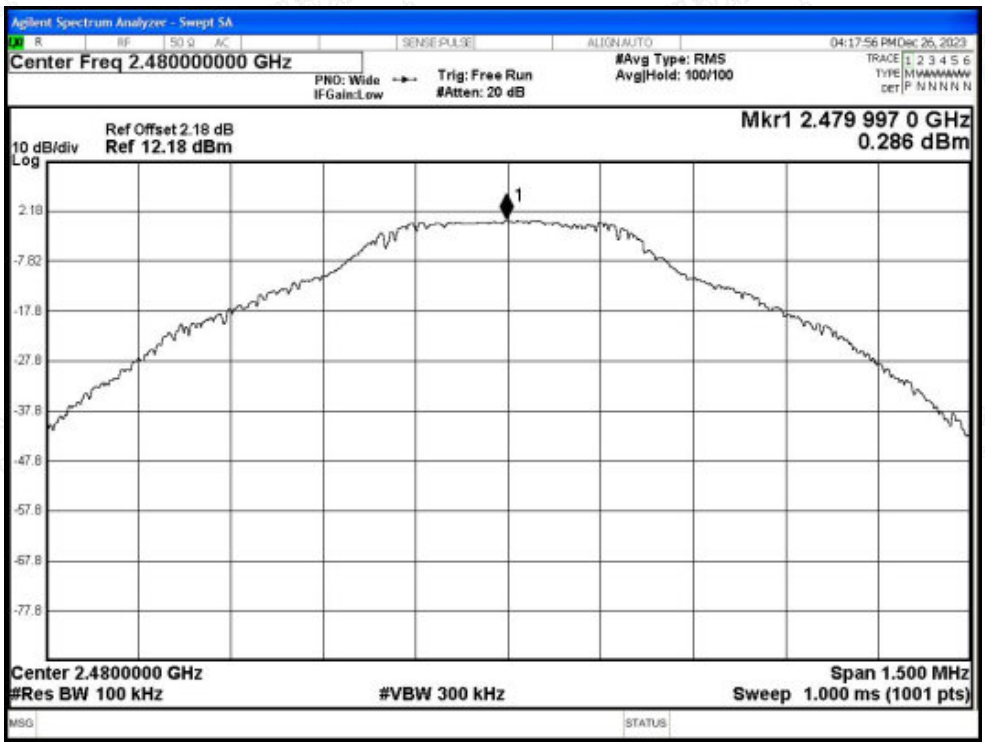
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



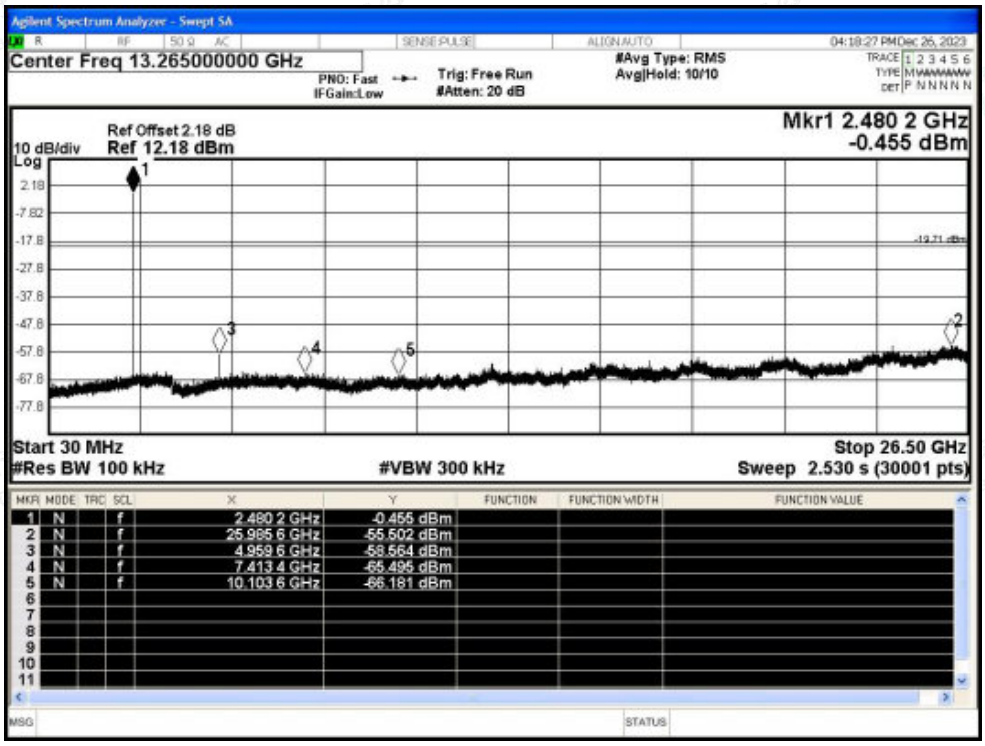
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



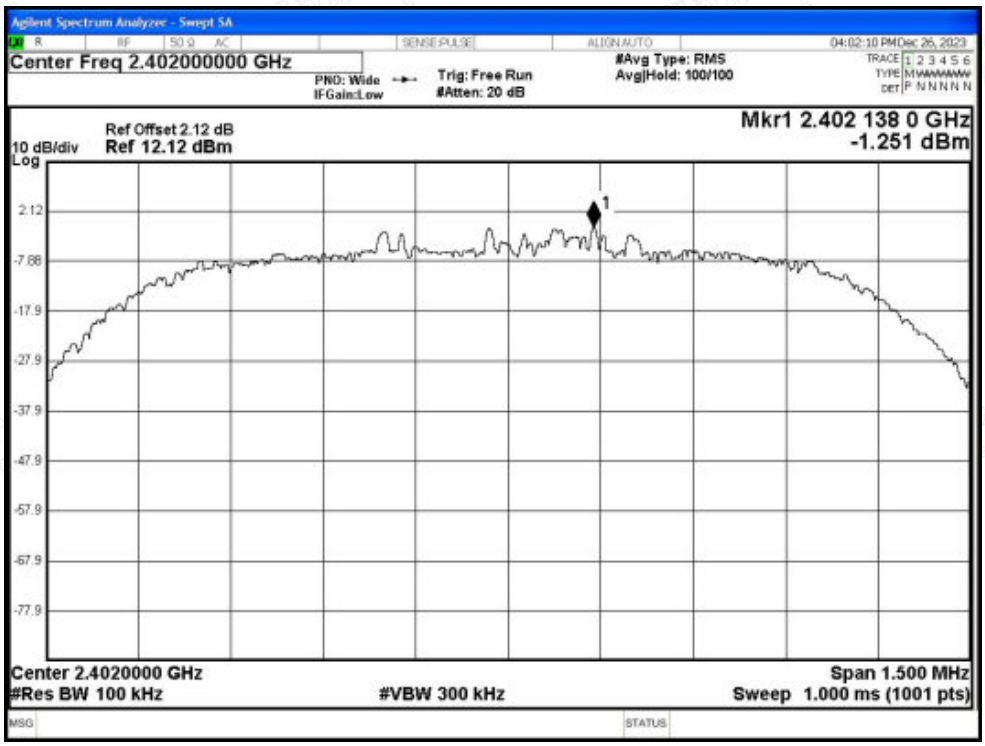
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



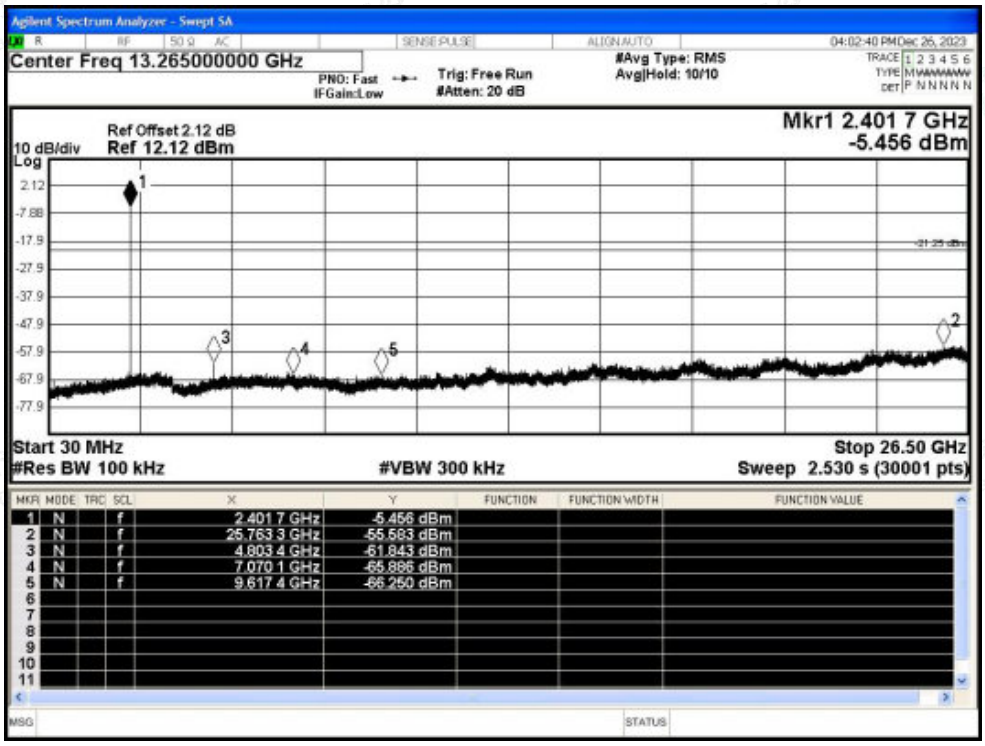
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



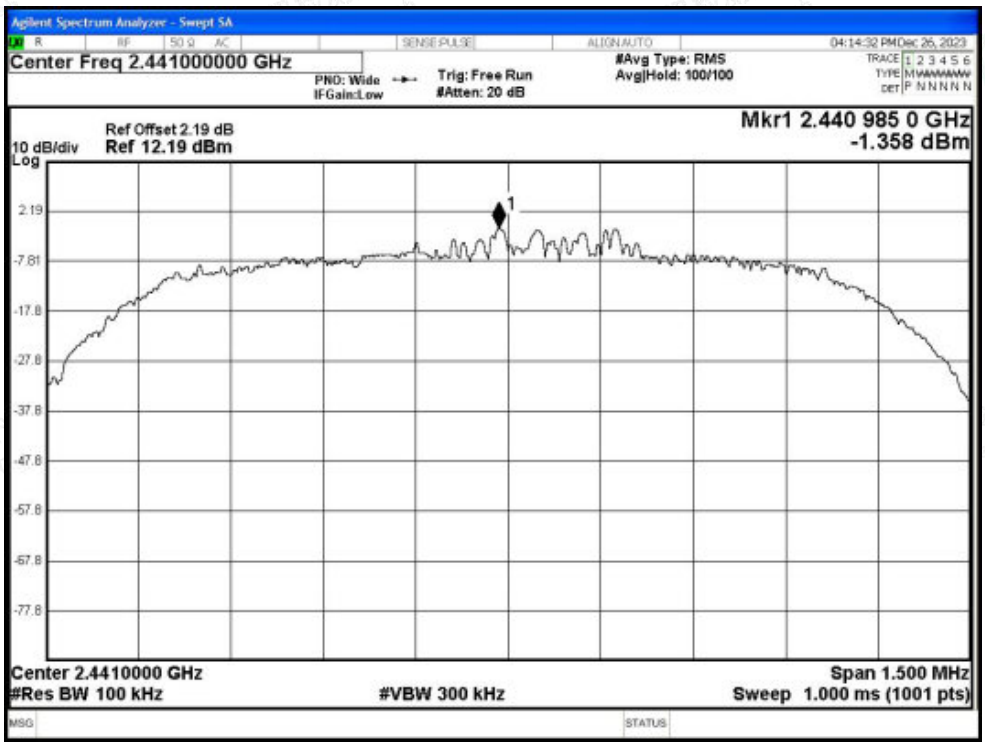
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



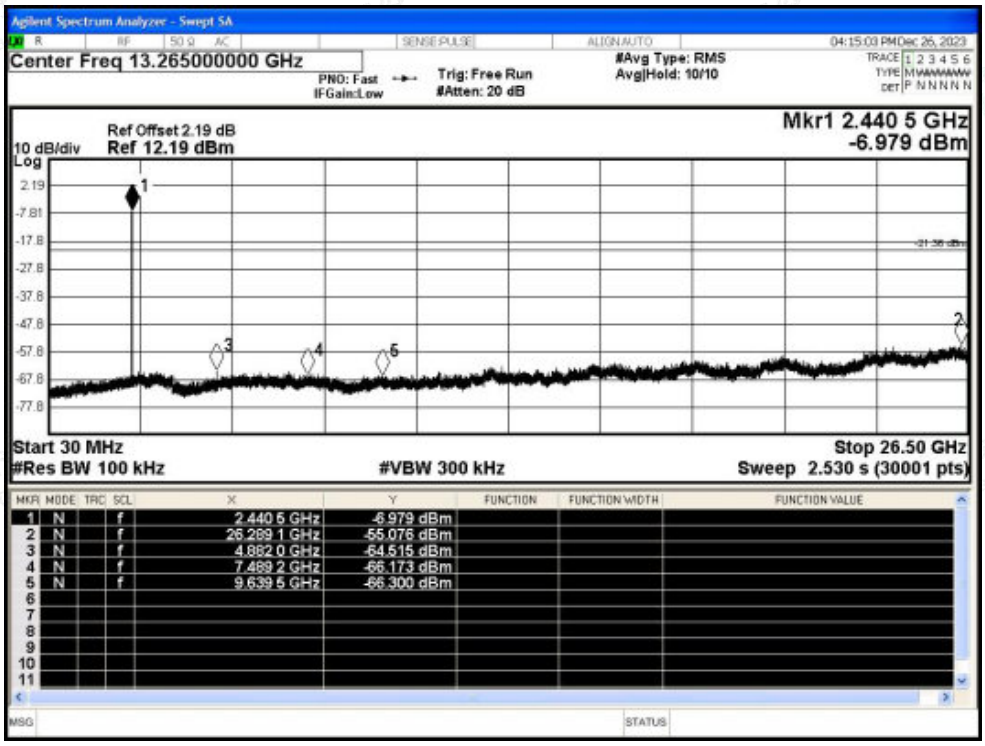
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



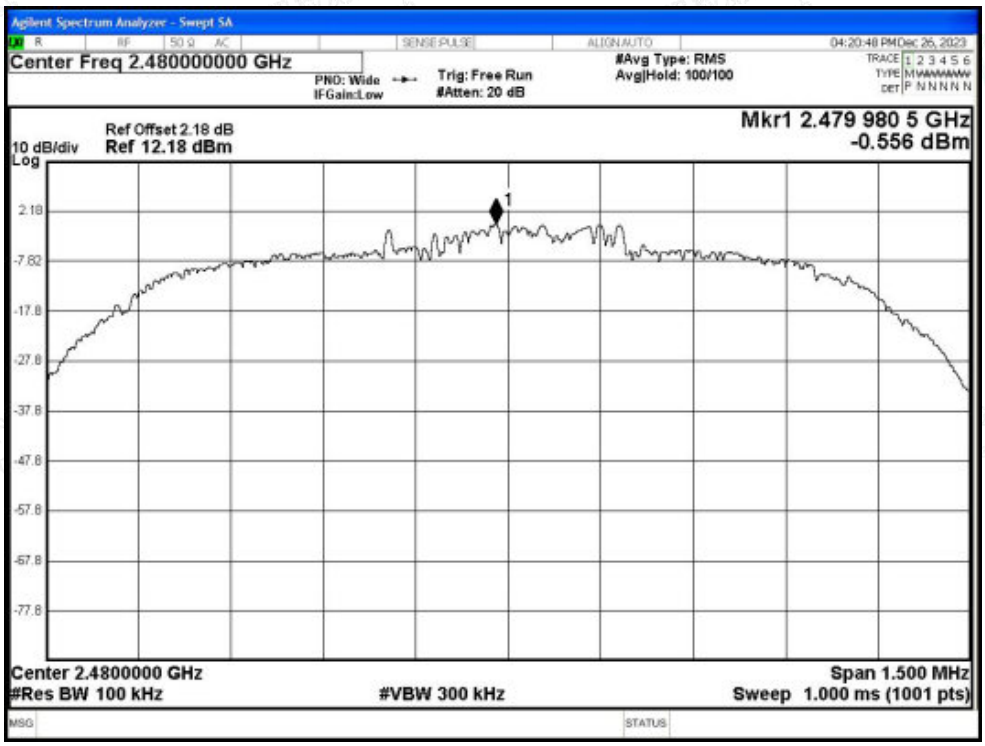
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



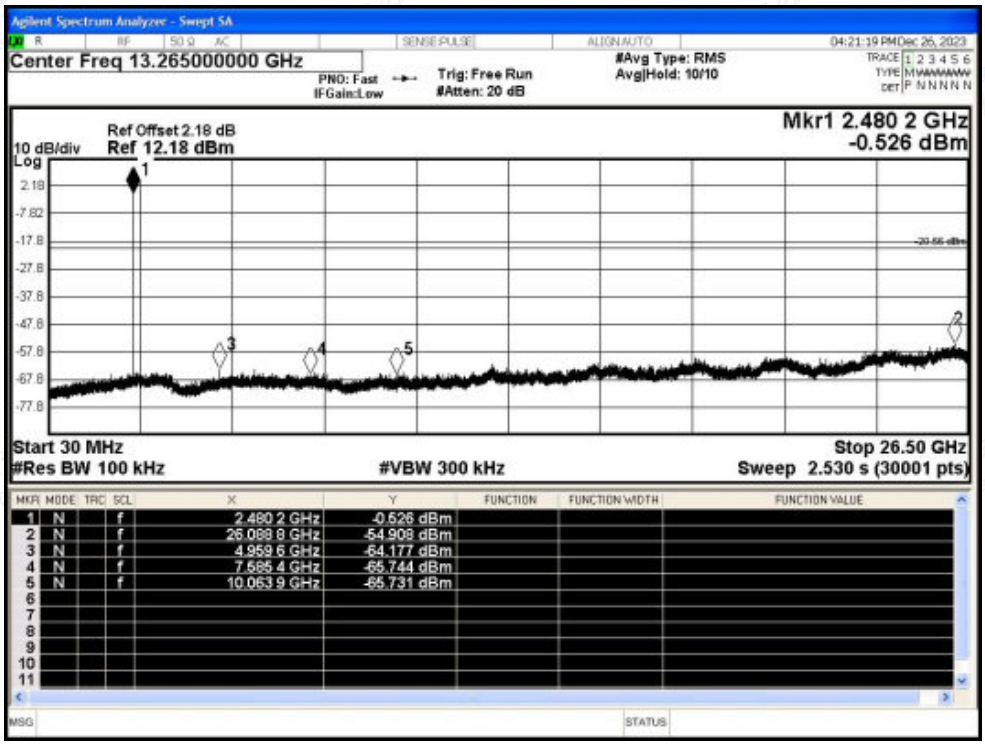
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



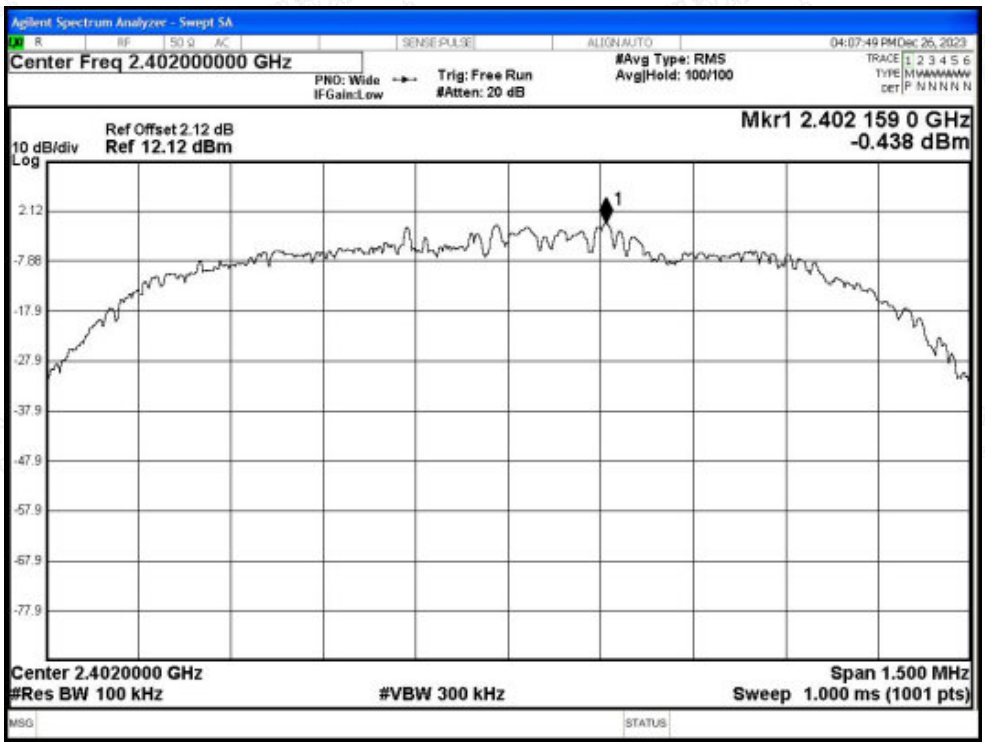
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



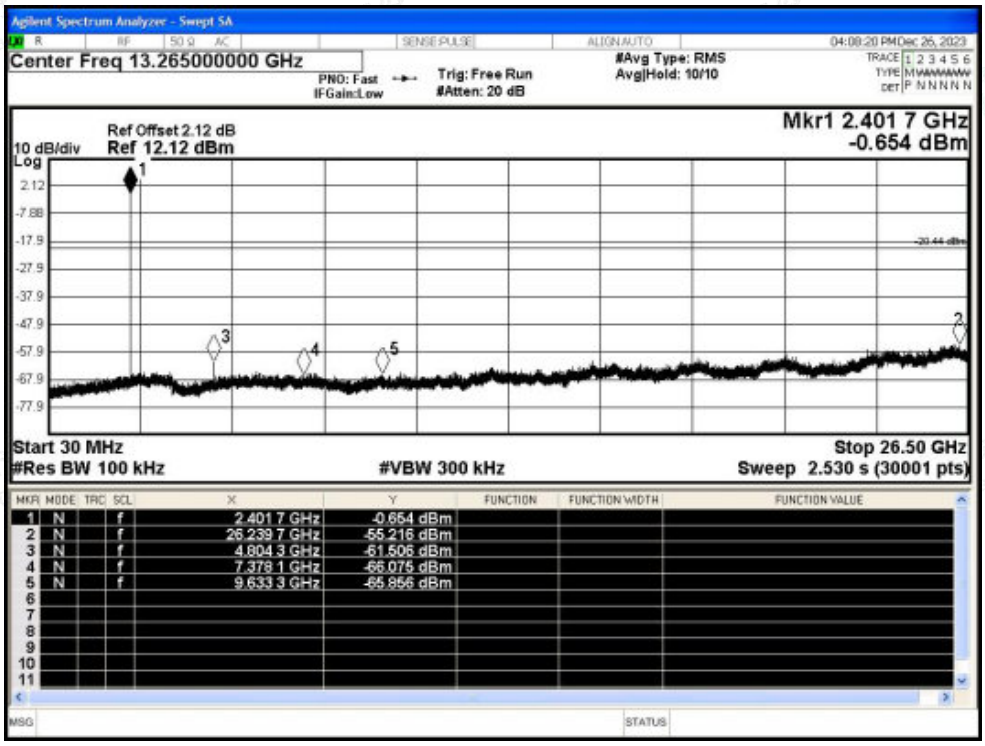
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



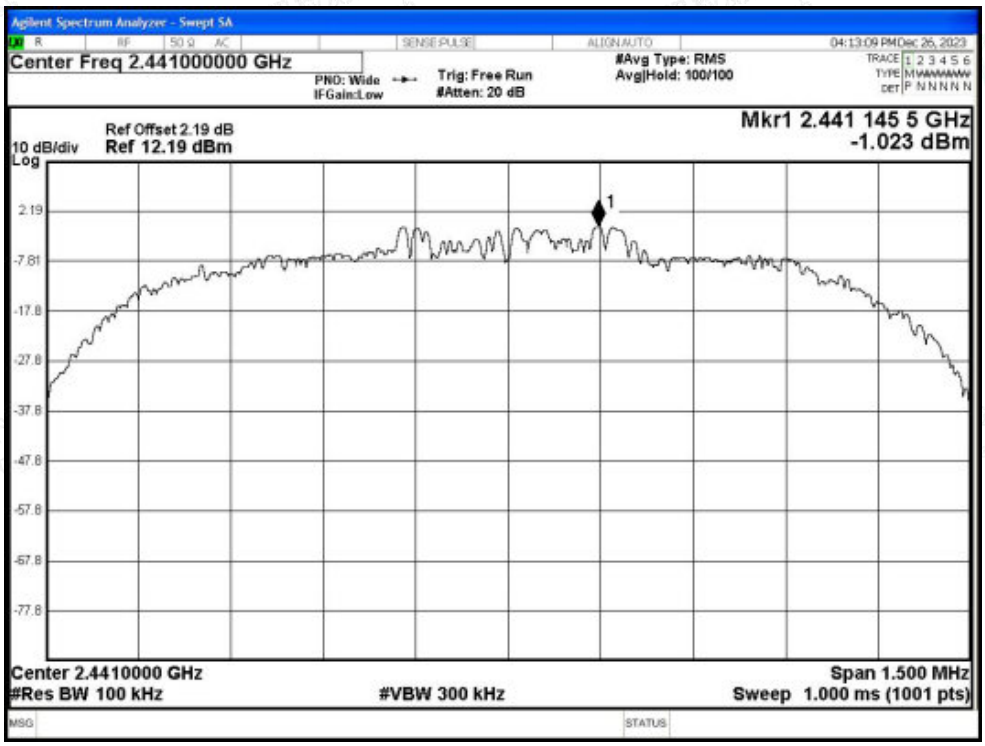
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



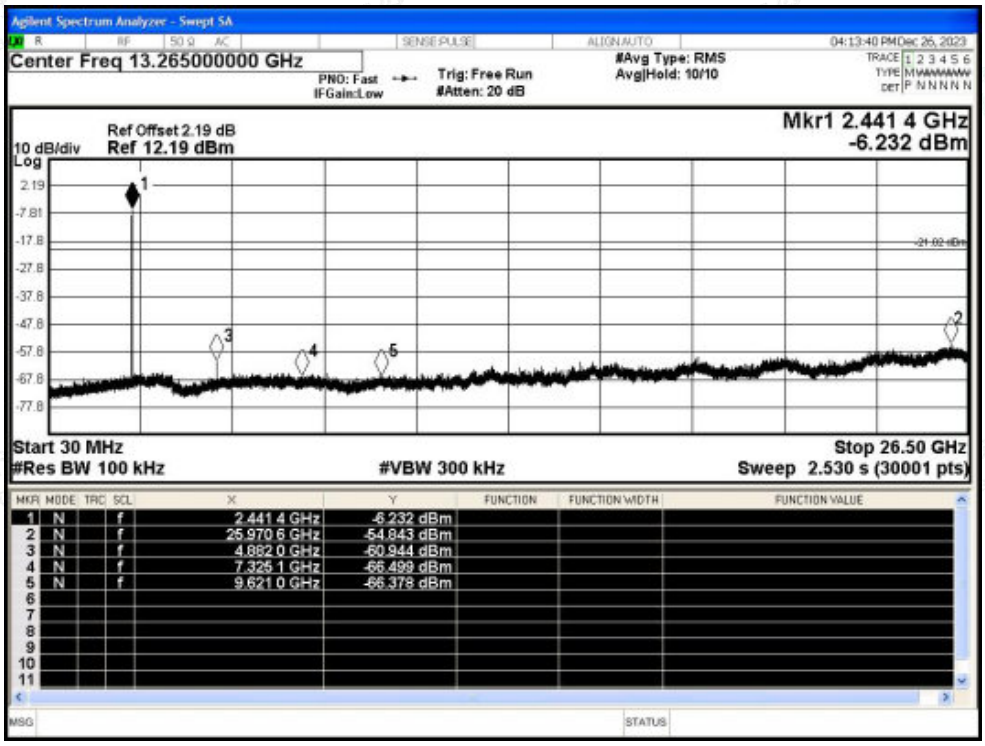
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



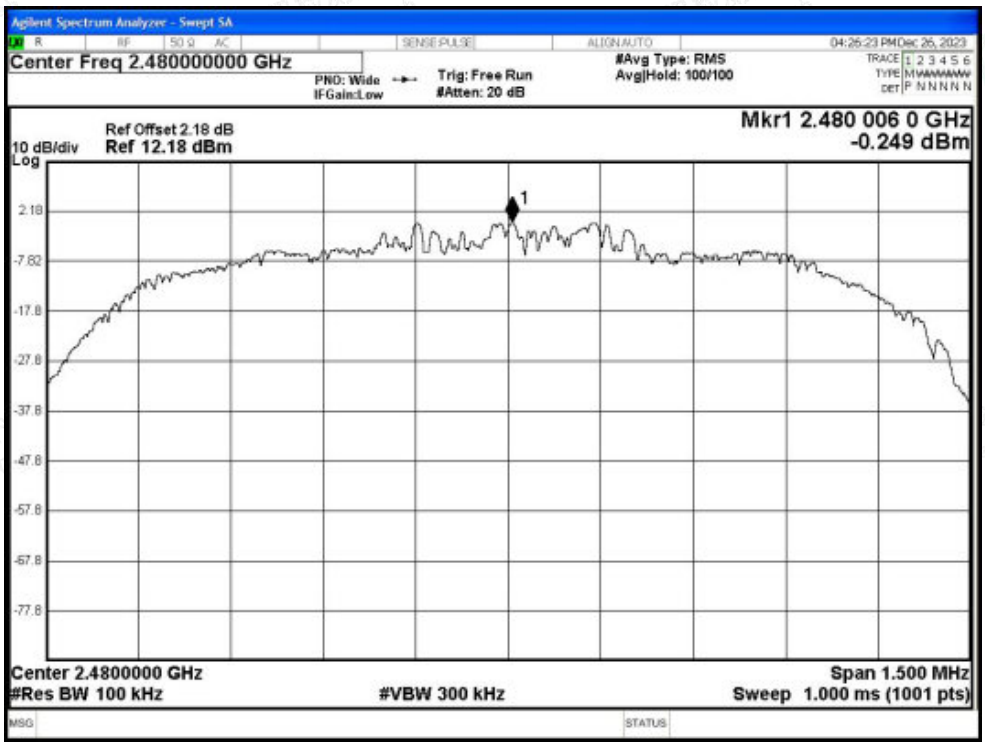
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



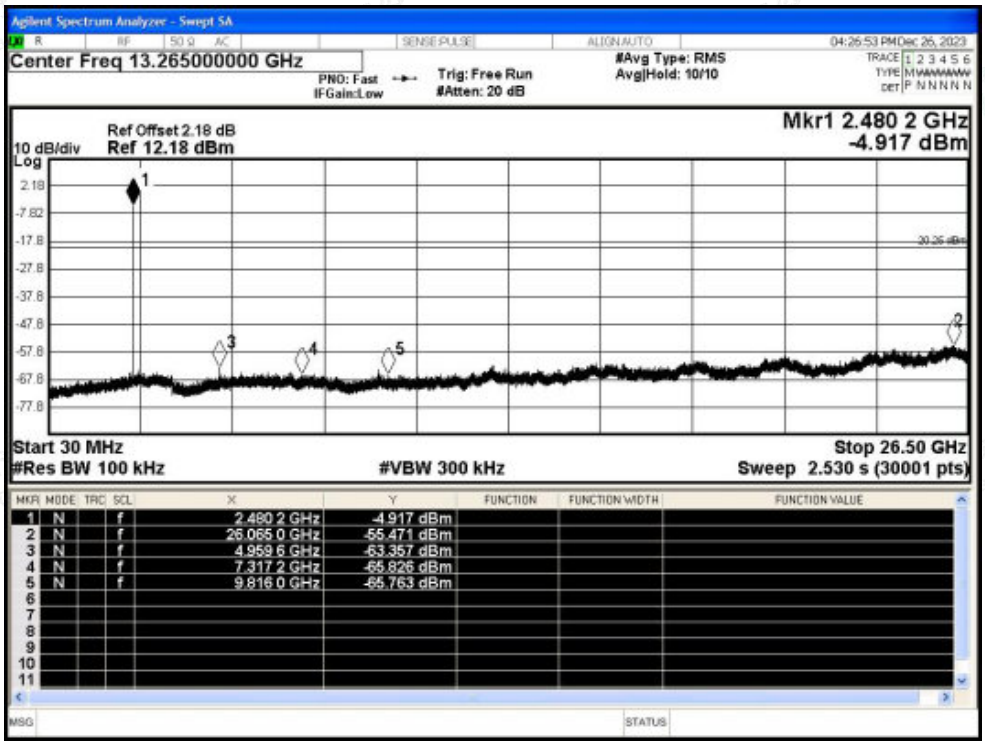
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

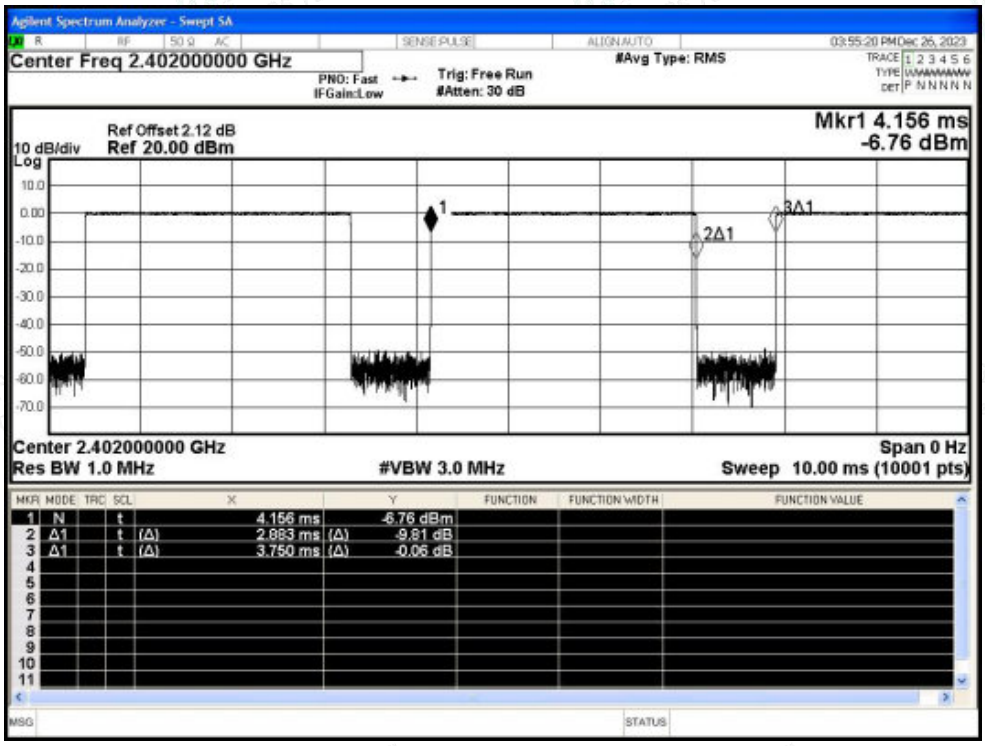


A.8 Duty Cycle

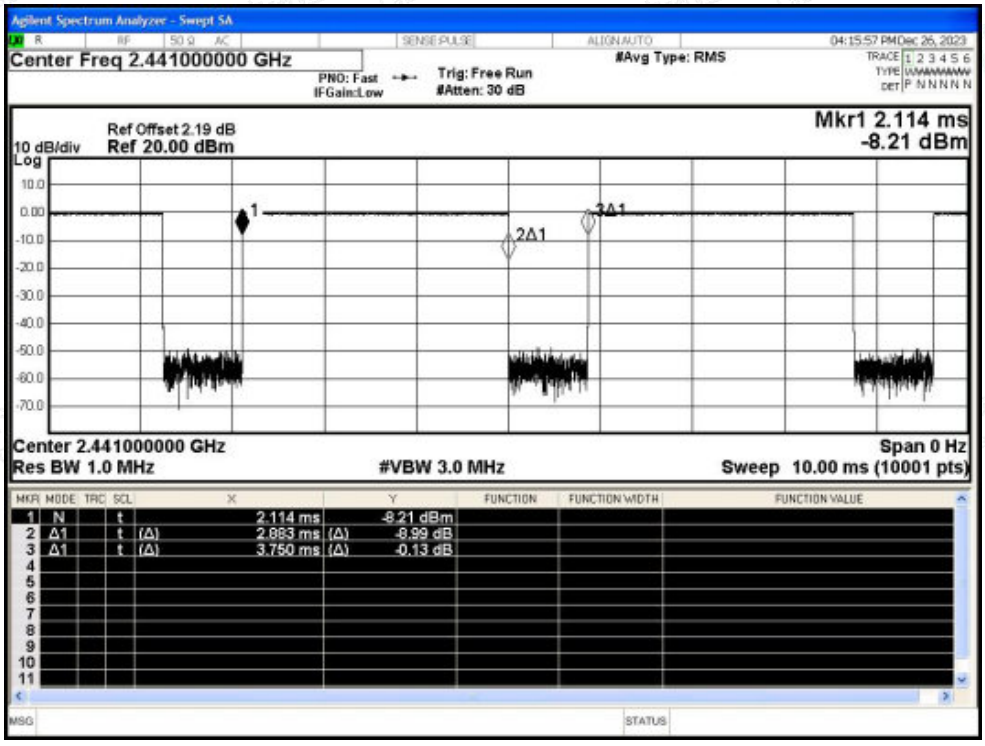
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	76.88	1.14	0.35
NVNT	1-DH5	2441	Ant1	76.88	1.14	0.35
NVNT	1-DH5	2480	Ant1	76.89	1.14	0.35
NVNT	2-DH5	2402	Ant1	76.99	1.14	0.35
NVNT	2-DH5	2441	Ant1	76.99	1.14	0.35
NVNT	2-DH5	2480	Ant1	76.96	1.14	0.35
NVNT	3-DH5	2402	Ant1	77.04	1.13	0.35
NVNT	3-DH5	2441	Ant1	77.01	1.13	0.35
NVNT	3-DH5	2480	Ant1	77.01	1.13	0.35

Test Graphs

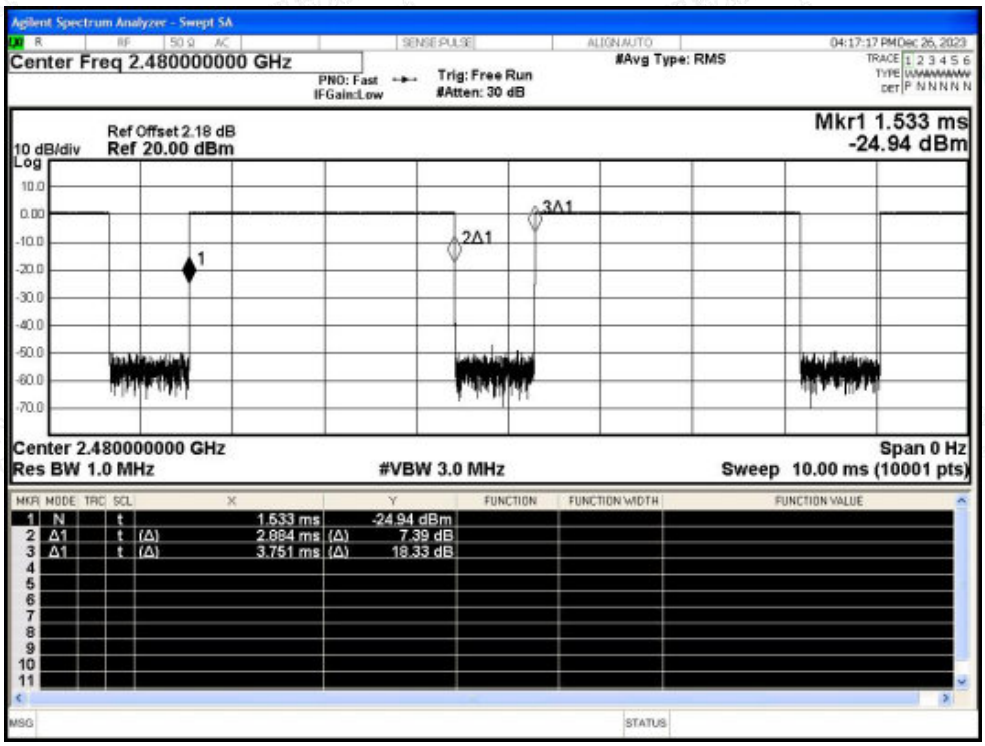
Duty Cycle NVNT 1-DH5 2402MHz Ant1



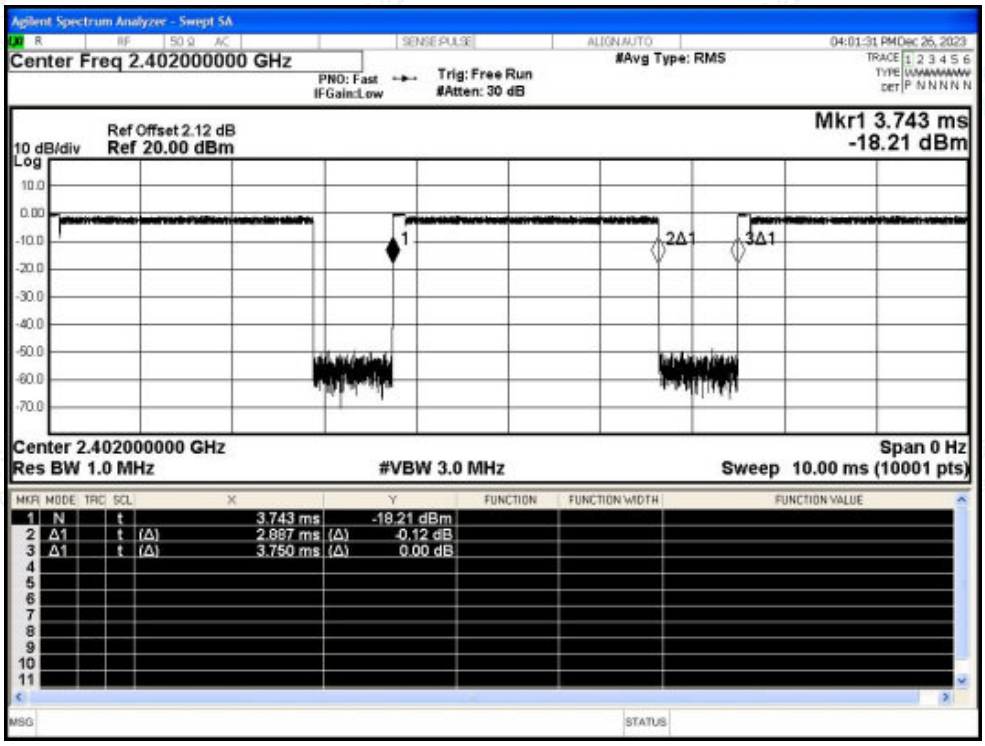
Duty Cycle NVNT 1-DH5 2441MHz Ant1



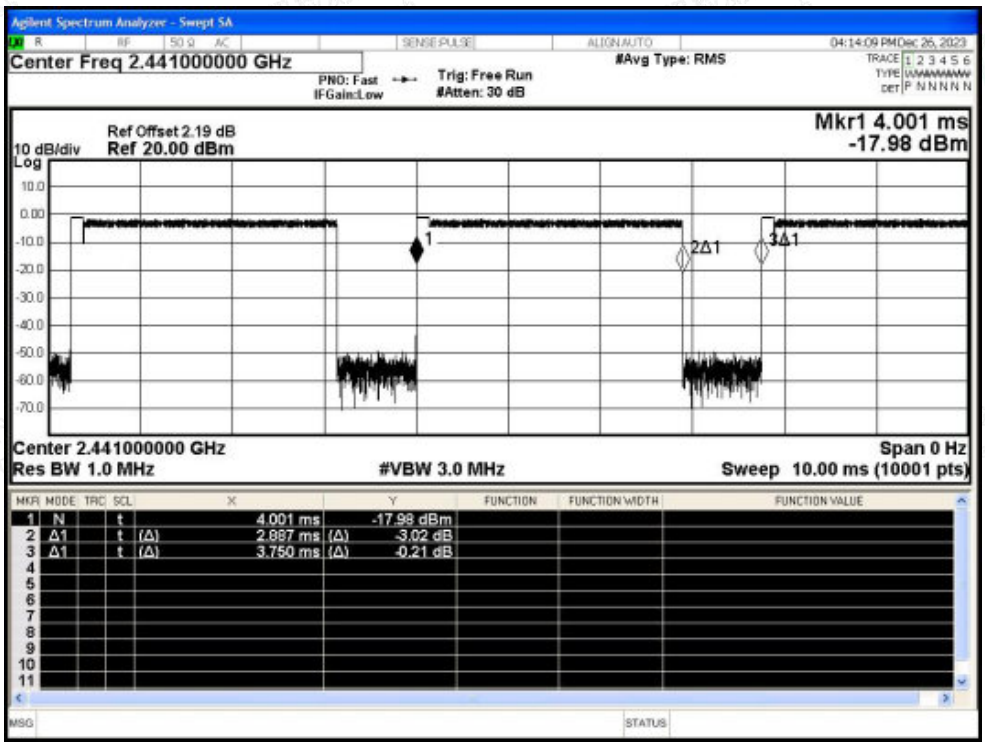
Duty Cycle NVNT 1-DH5 2480MHz Ant1



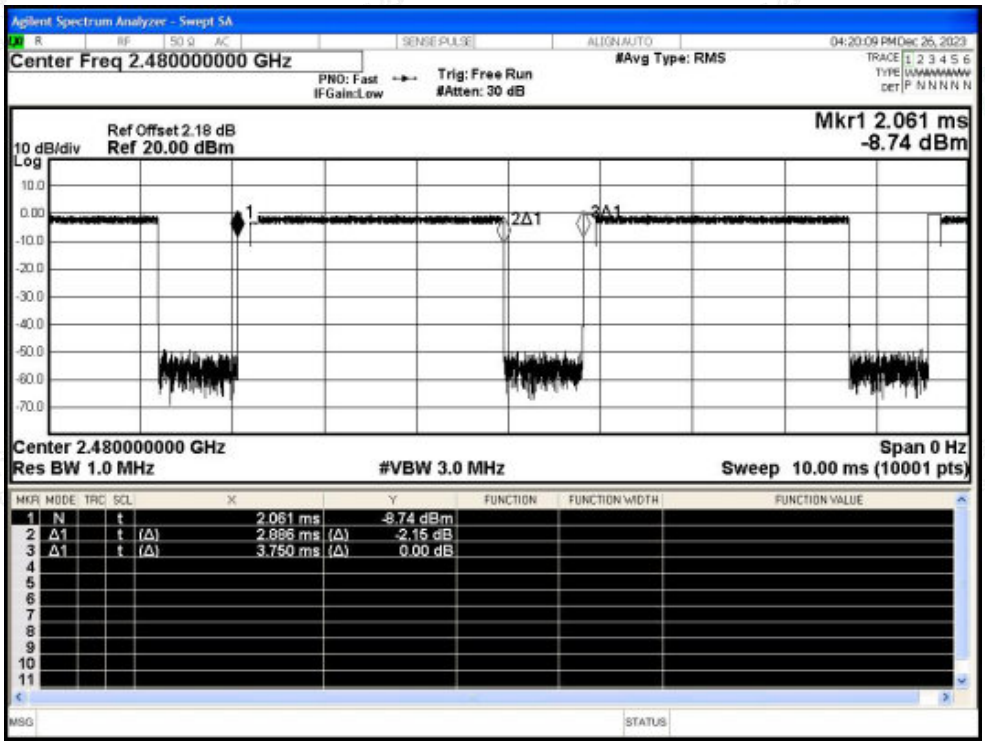
Duty Cycle NVNT 2-DH5 2402MHz Ant1



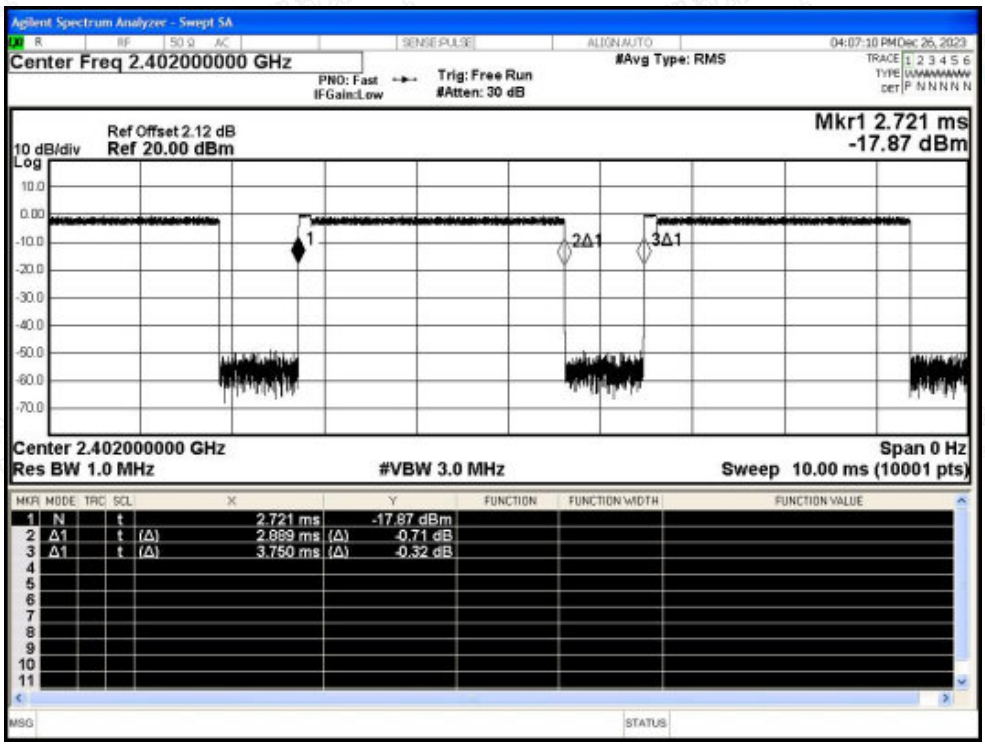
Duty Cycle NVNT 2-DH5 2441MHz Ant1



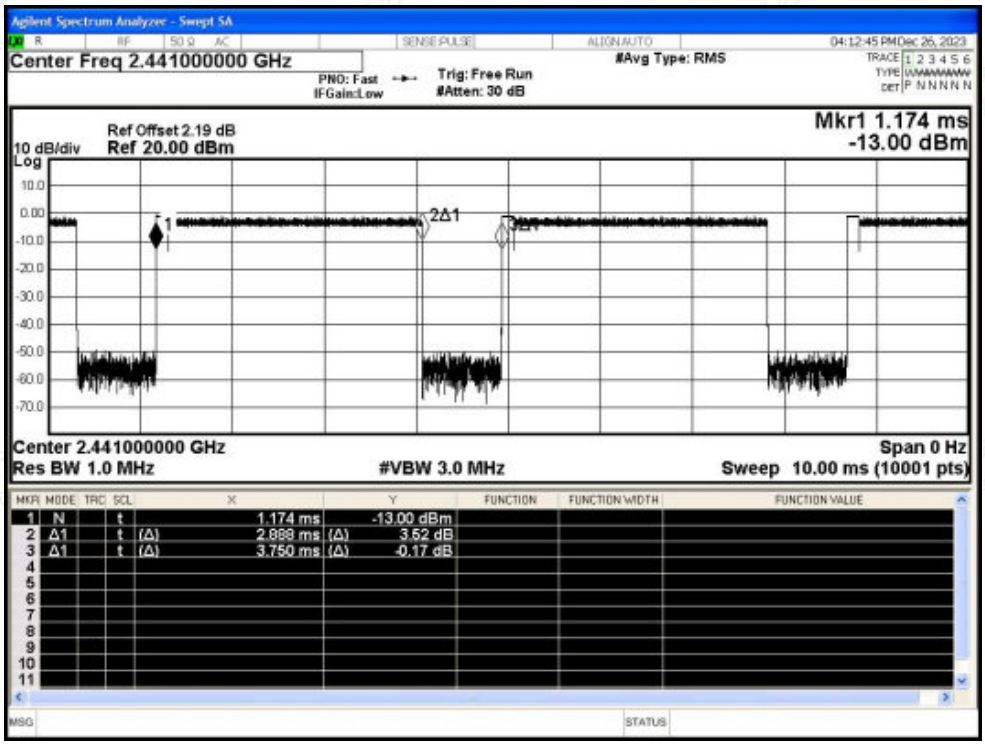
Duty Cycle NVNT 2-DH5 2480MHz Ant1



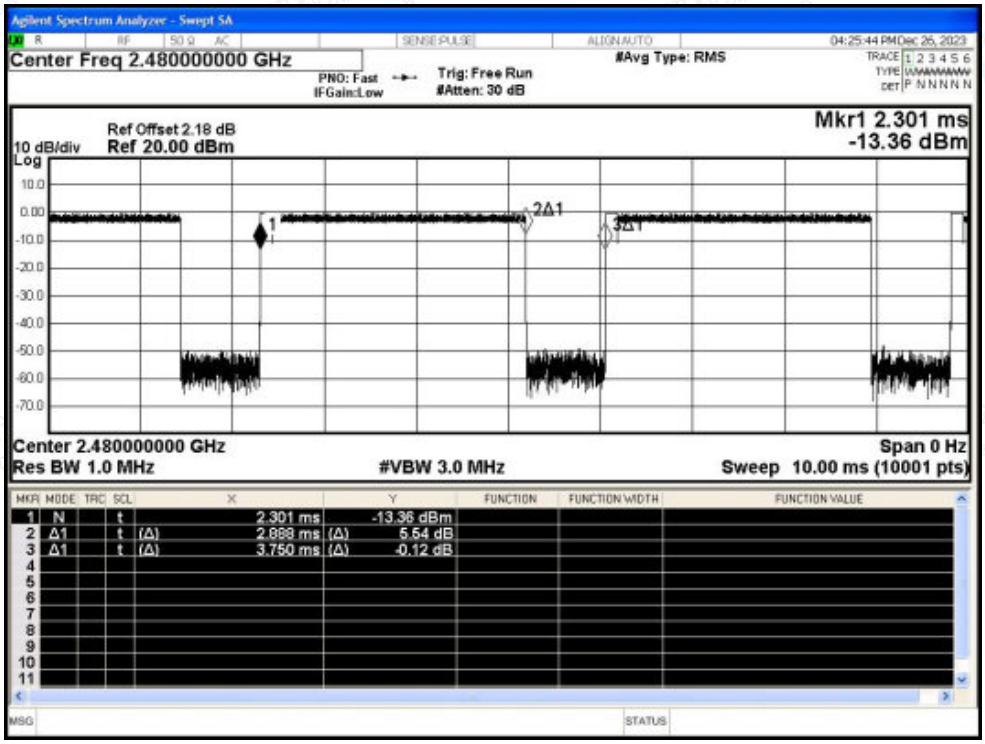
Duty Cycle NVNT 3-DH5 2402MHz Ant1



Duty Cycle NVNT 3-DH5 2441MHz Ant1



Duty Cycle NVNT 3-DH5 2480MHz Ant1

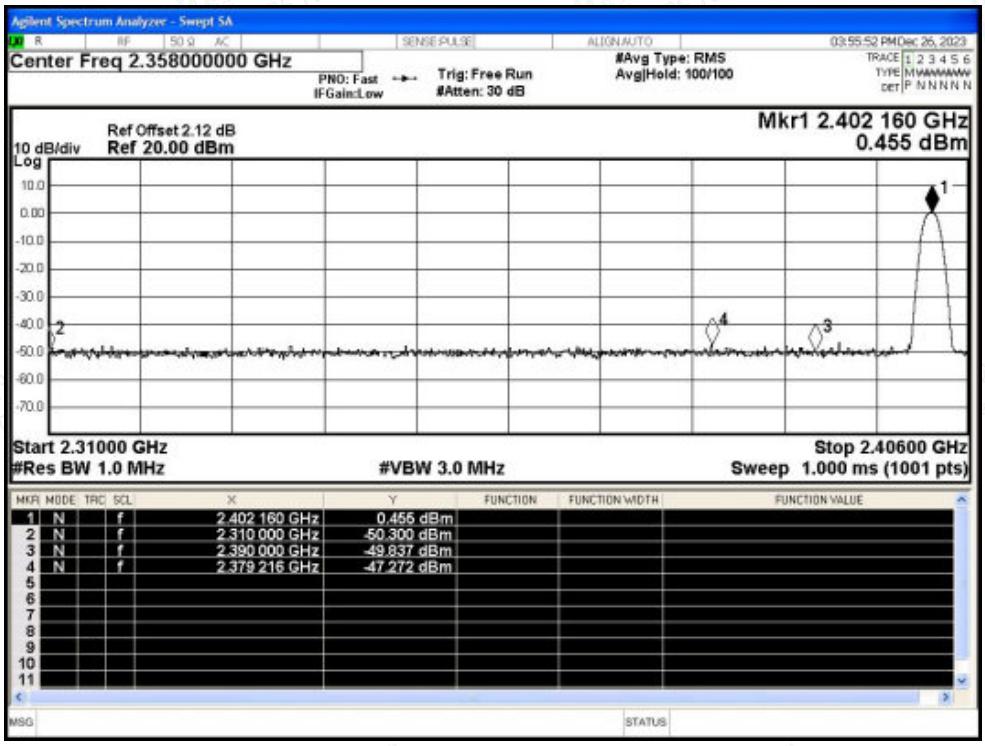


A.9 Restrict Band

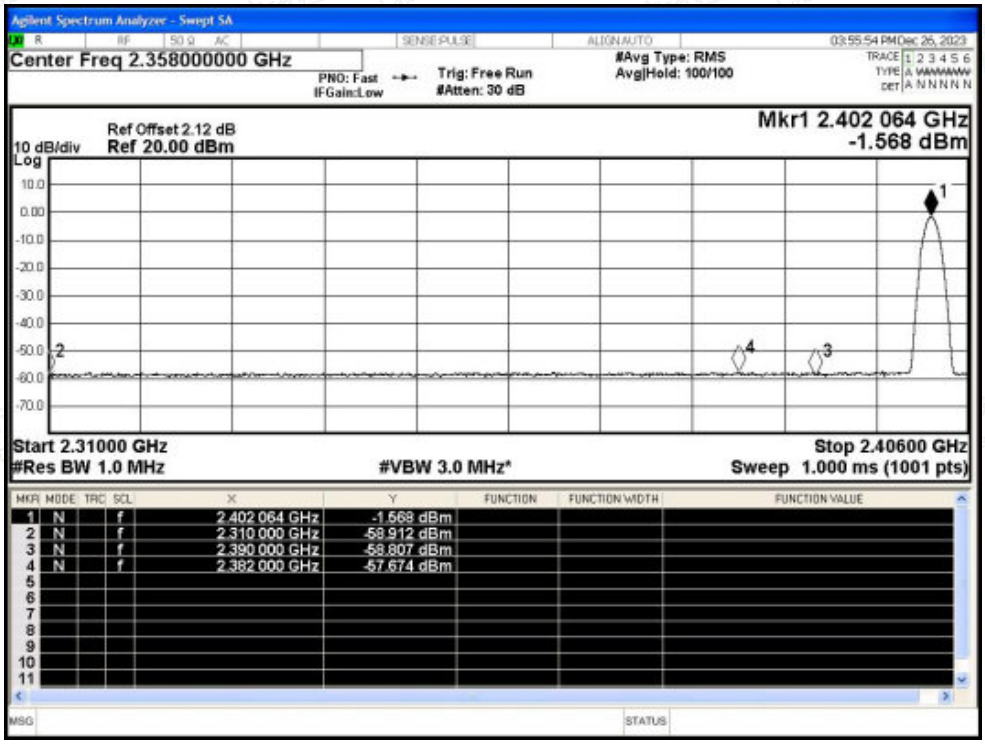
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-50.3	2	-	46.96	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.91	2	1.14	39.49	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2379.216	-47.27	2	-	49.99	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2382	-57.67	2	1.14	40.73	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.84	2	-	47.42	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.81	2	1.14	39.59	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-49.94	2	-	47.32	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-57.64	2	1.14	40.76	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2486.08	-47.72	2	-	49.54	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2486.344	-56.97	2	1.14	41.43	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-50.24	2	-	47.02	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-58.4	2	1.14	40	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-50.26	2	-	47	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-58.63	2	1.14	39.77	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2346.672	-47.25	2	-	50.01	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2364.24	-57.58	2	1.14	40.82	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-49.52	2	-	47.74	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-58.27	2	1.14	40.13	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-48.85	2	-	48.41	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-57.41	2	1.14	40.99	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2486.896	-46.2	2	-	51.06	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2497.888	-57.07	2	1.14	41.33	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-50.88	2	-	46.38	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-57.51	2	1.14	40.89	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-50.81	2	-	46.45	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-58.74	2	1.13	39.65	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2338.608	-47.59	2	-	49.67	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2375.856	-57.59	2	1.13	40.8	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-51.3	2	-	45.96	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-58.34	2	1.13	40.05	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-49.84	2	-	47.42	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-57.44	2	1.13	40.95	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2494.024	-46.93	2	-	50.33	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2485.696	-57.06	2	1.13	41.33	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-50.19	2	-	47.07	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-58.24	2	1.13	40.15	Average	54	Pass

Test Graphs

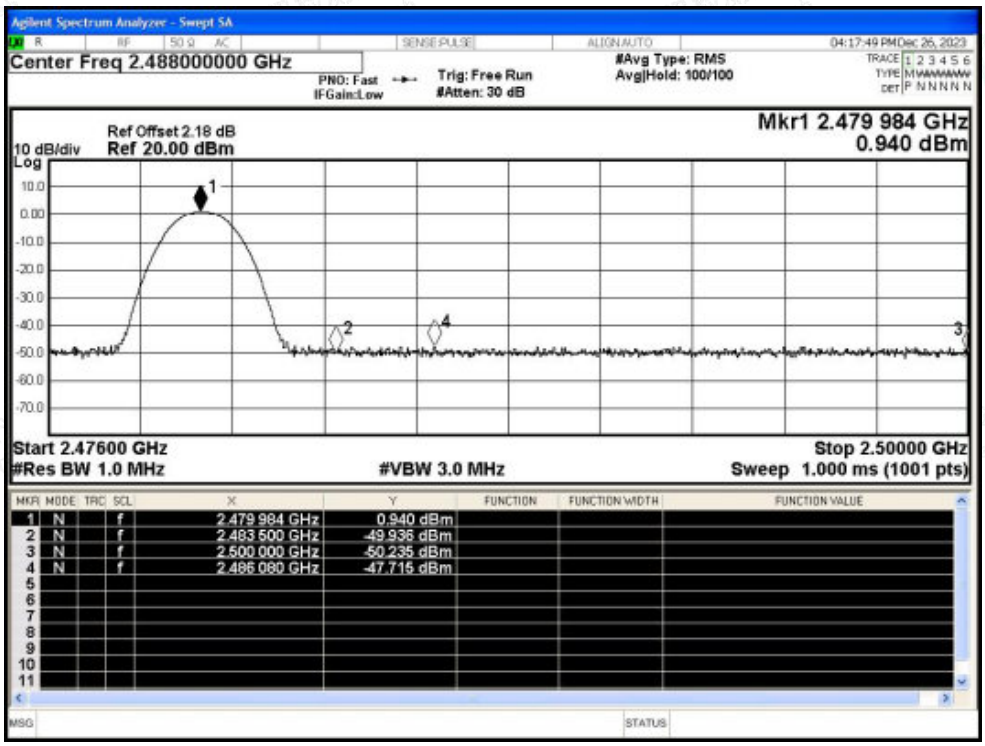
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



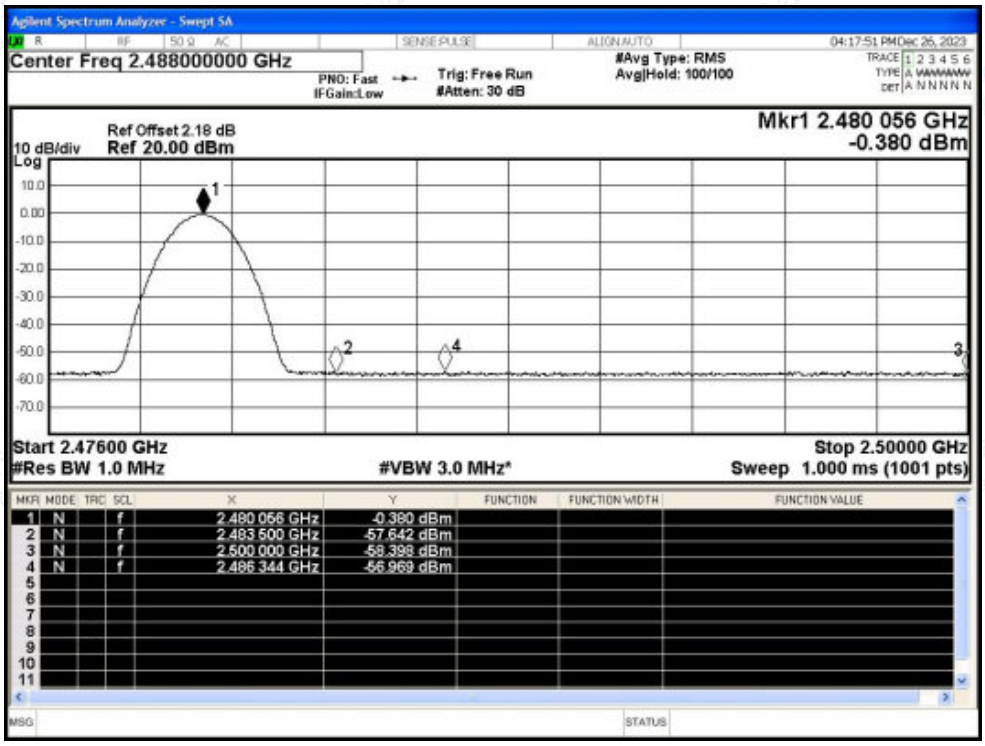
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



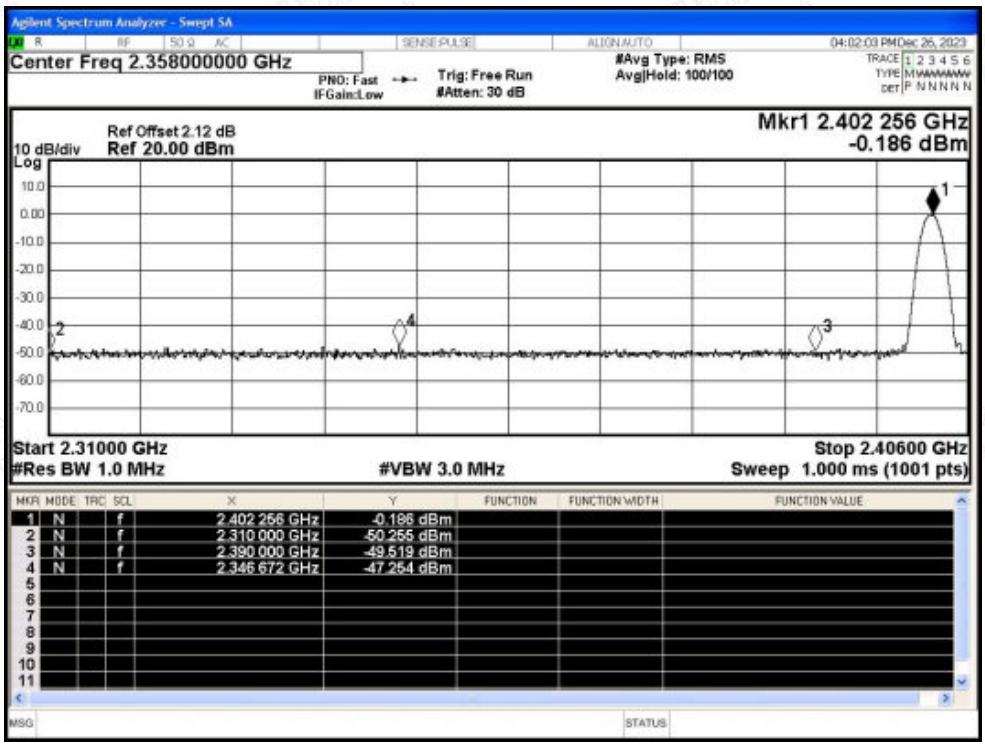
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



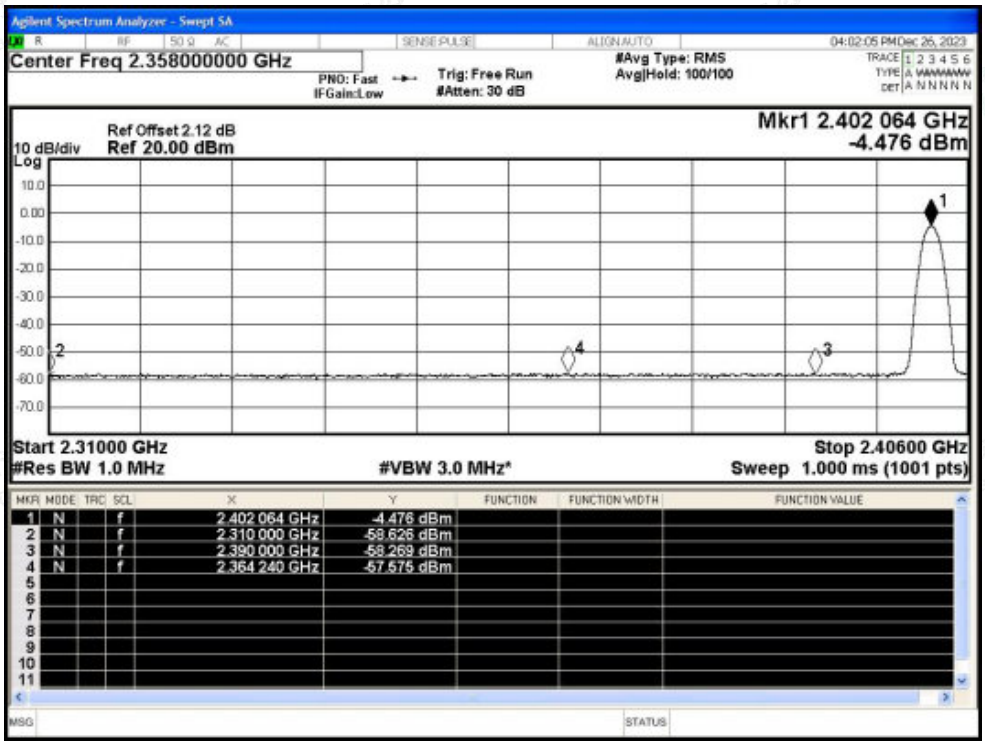
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



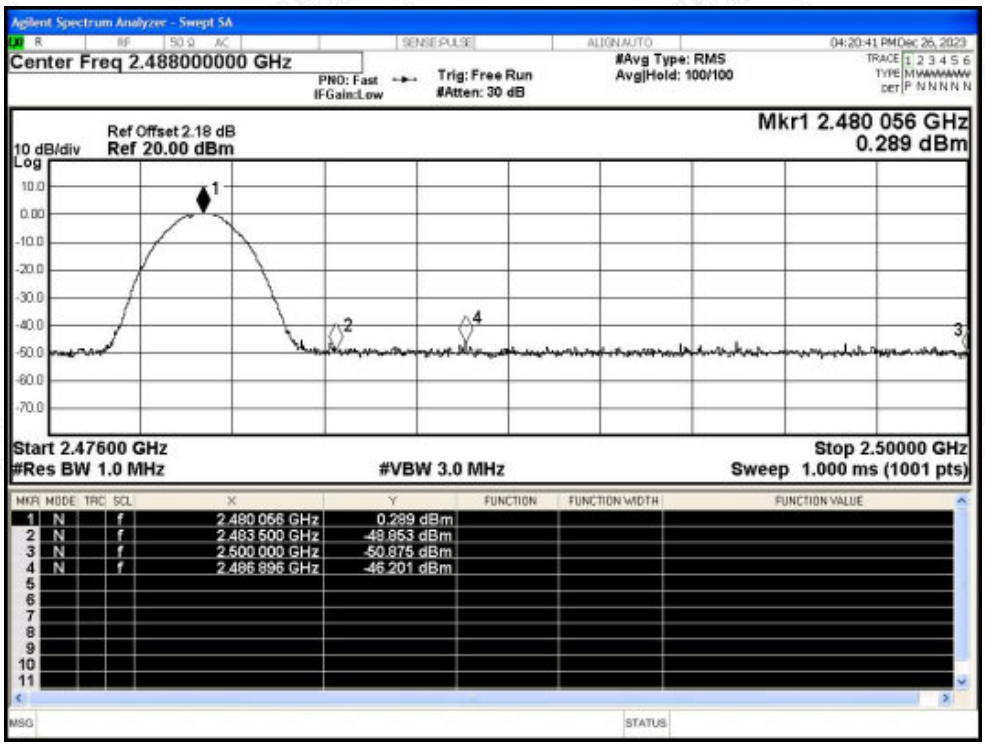
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



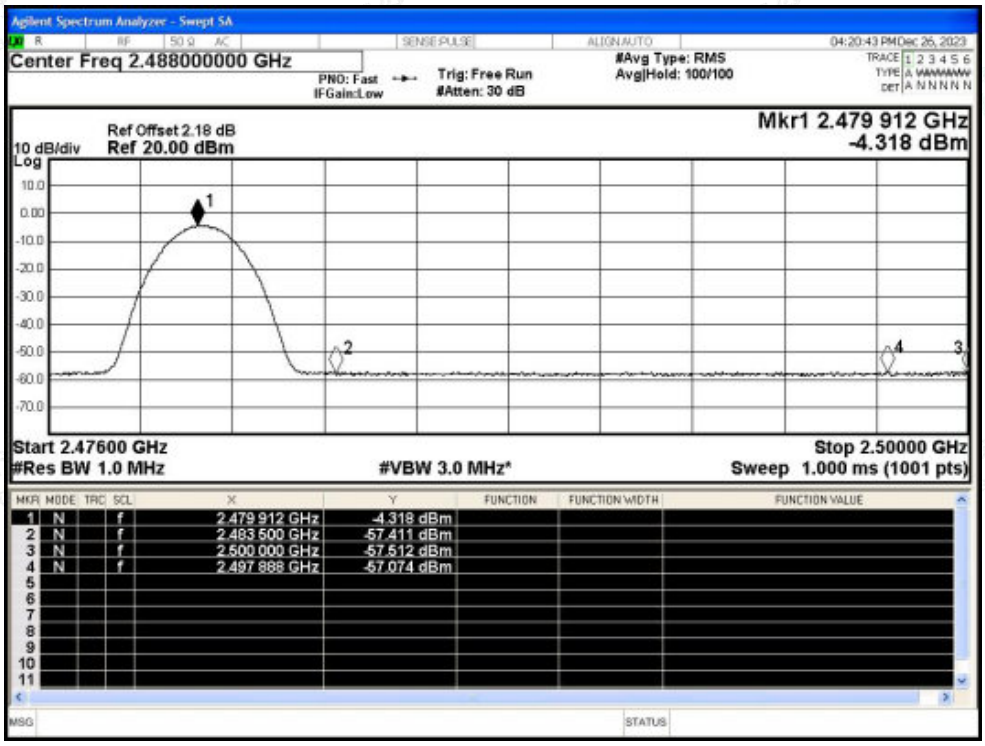
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average



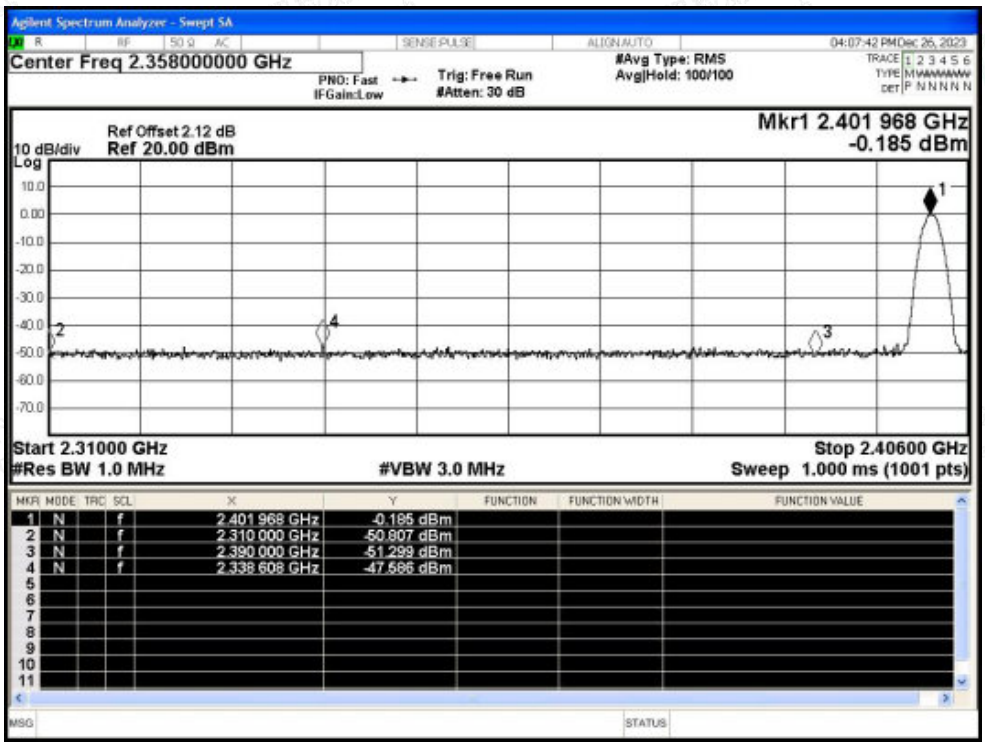
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



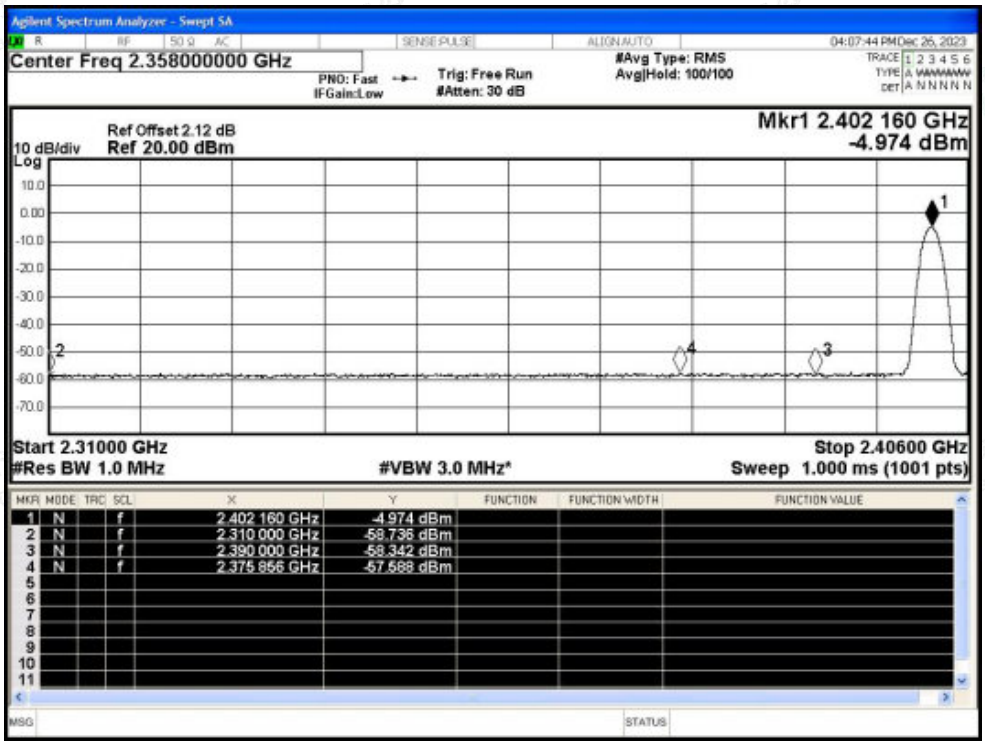
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average



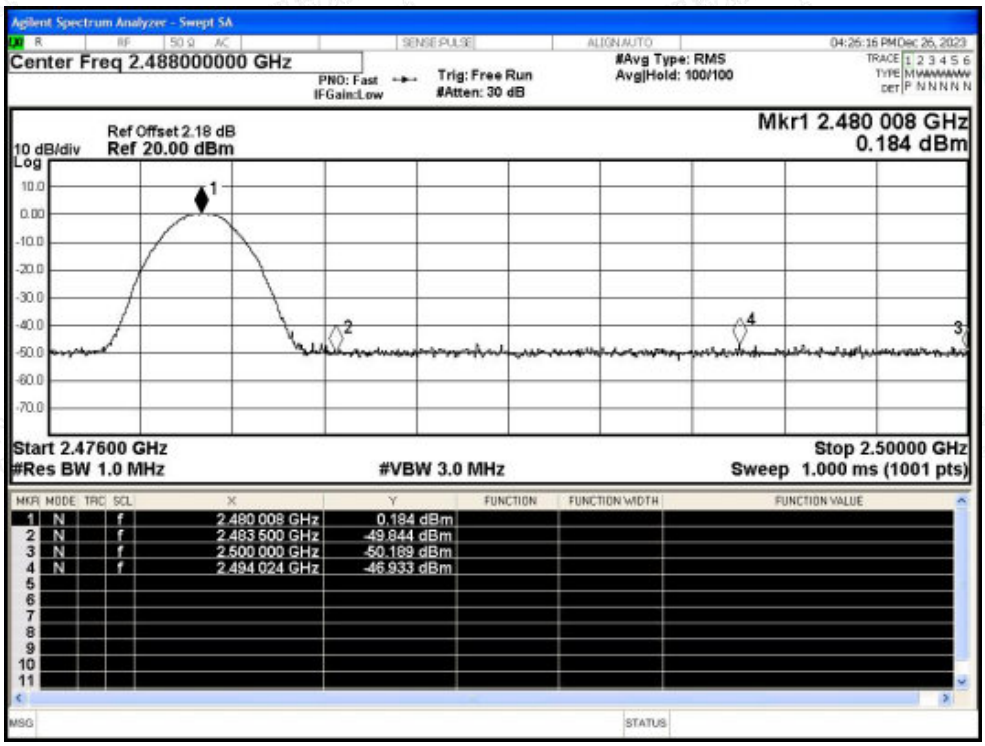
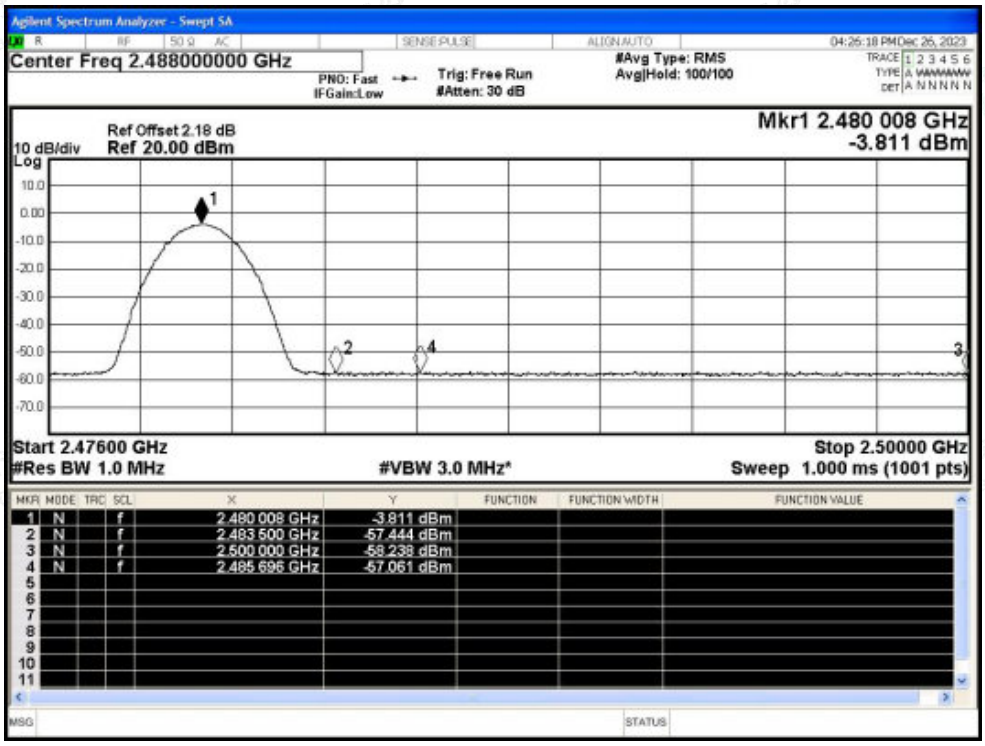
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak



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