

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Prechat agent

Test Model: V3

Environmental Conditions

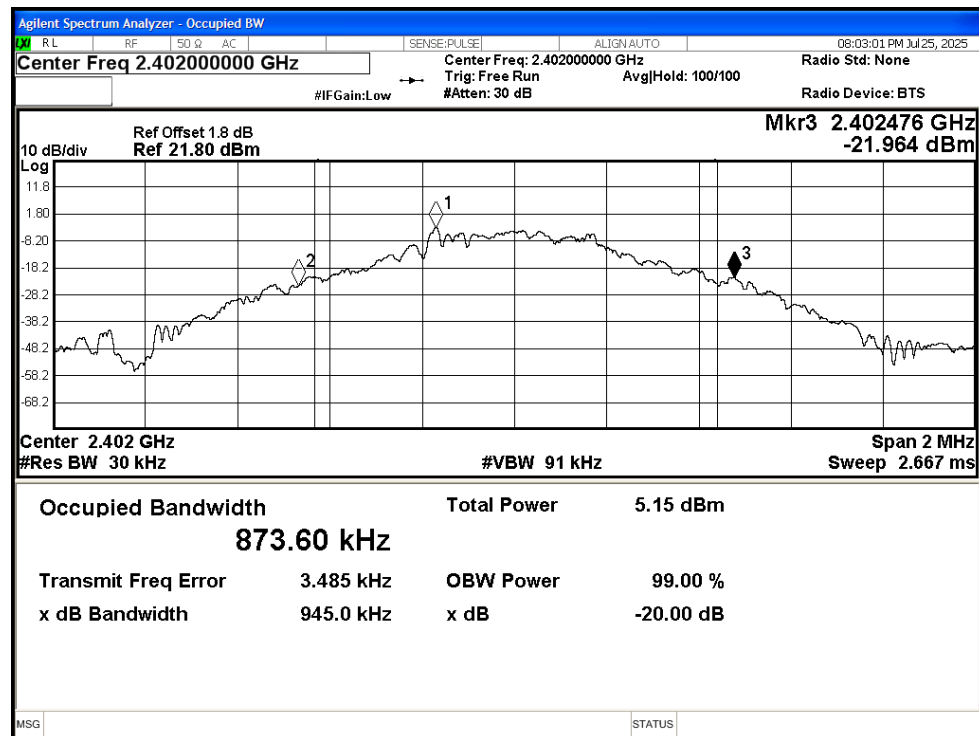
Temperature:	23.8°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Yan Chen
Supervised by:	Fengliu Tang

A.1 -20dB Bandwidth

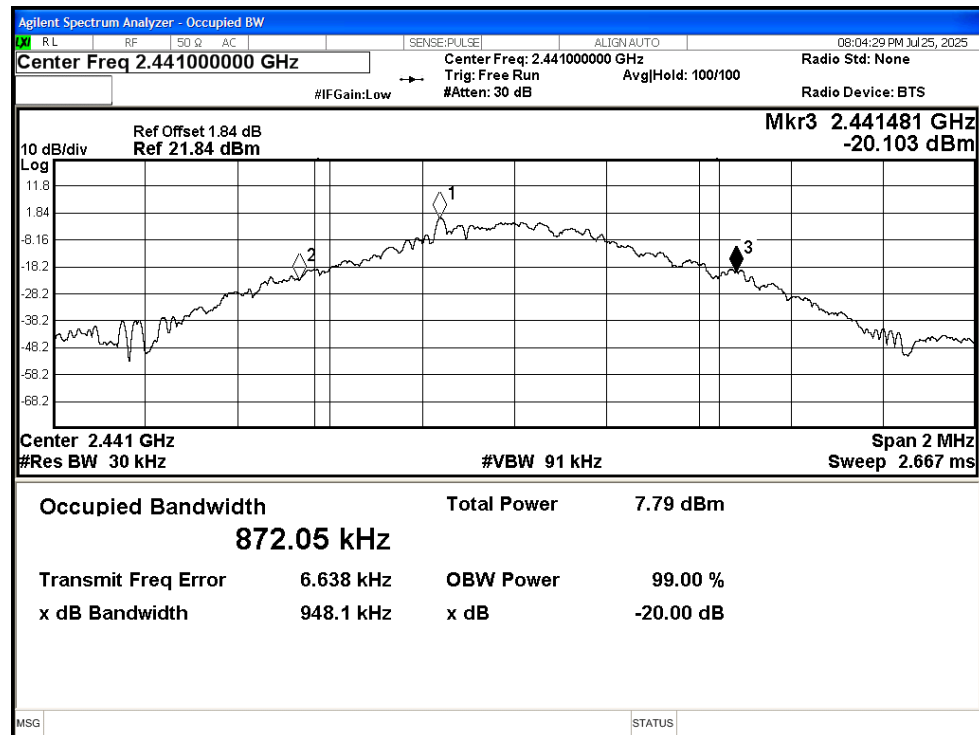
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.945	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.948	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.945	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.266	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.288	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.315	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.296	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.295	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.304	N/A	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



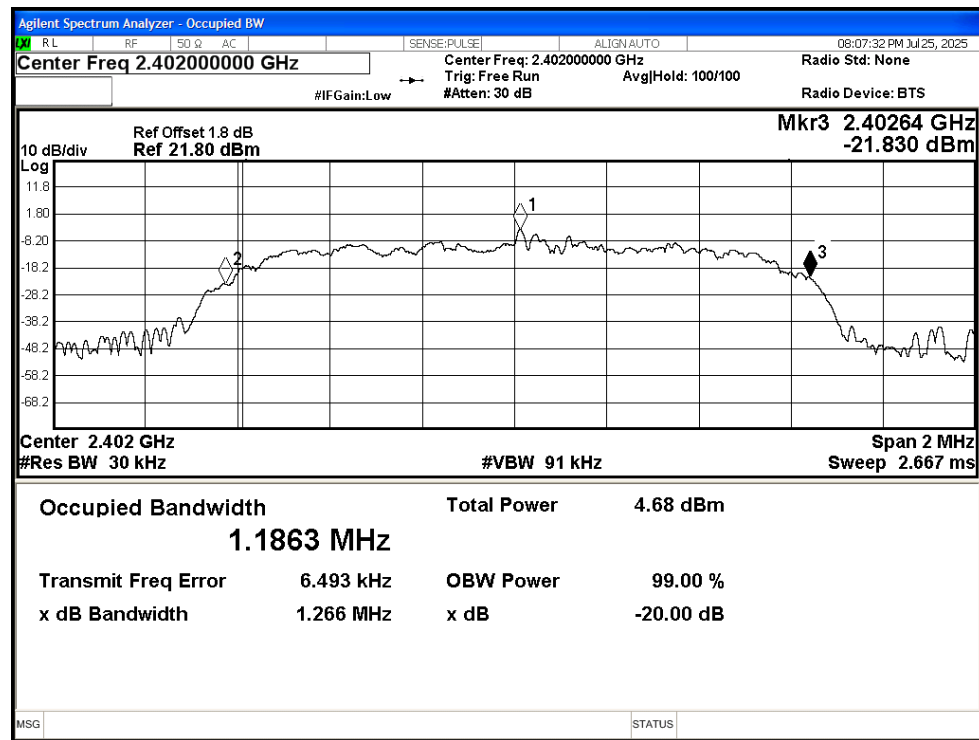
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



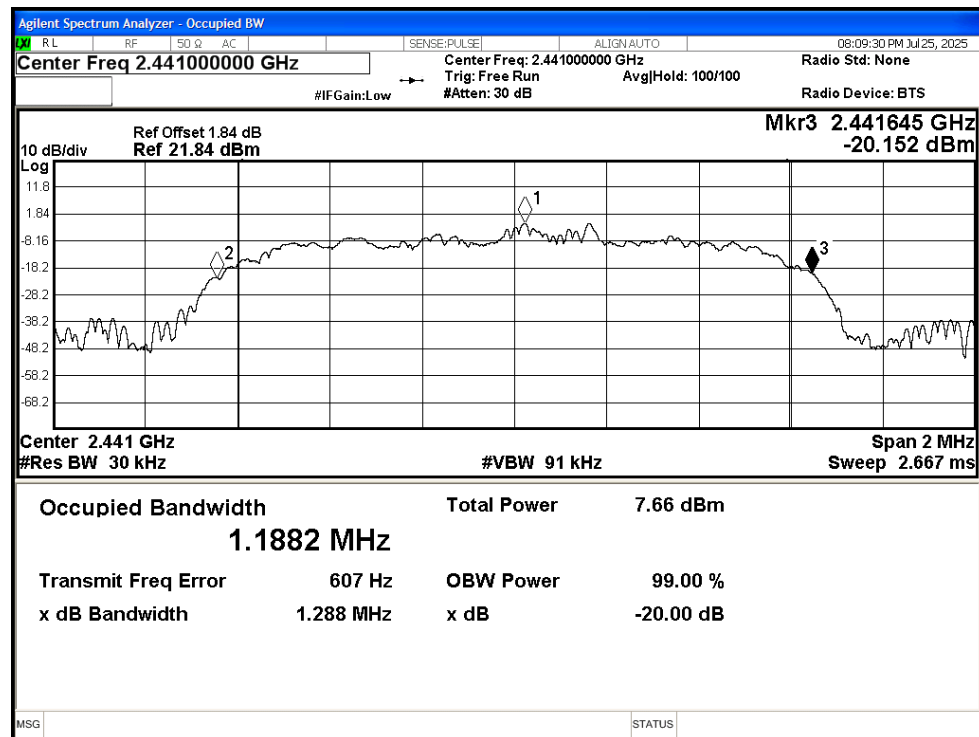
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



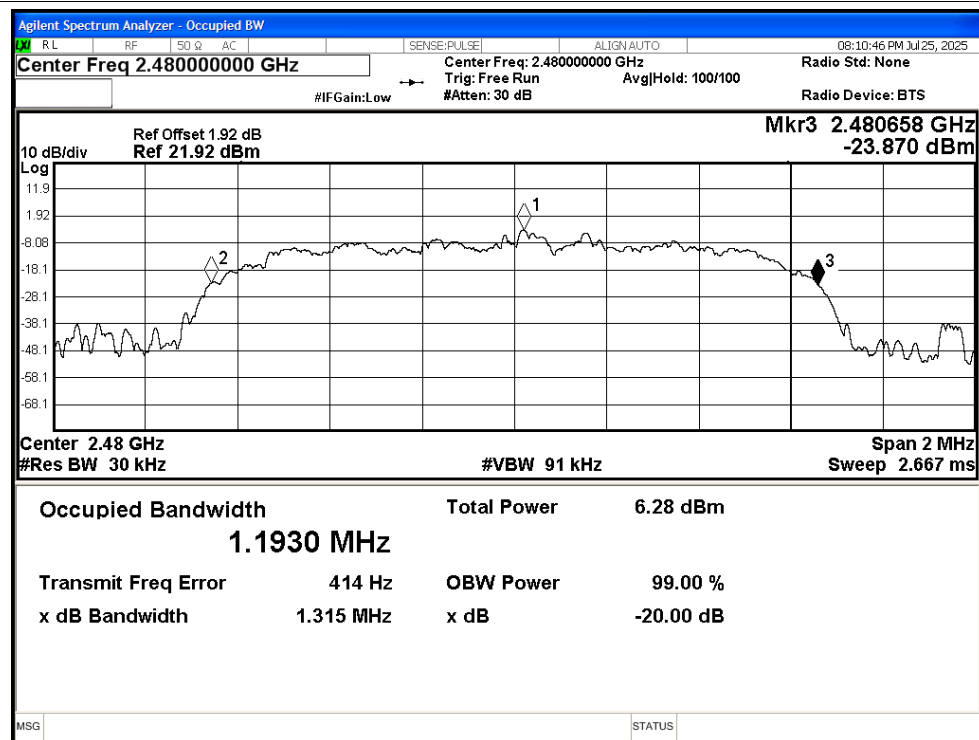
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



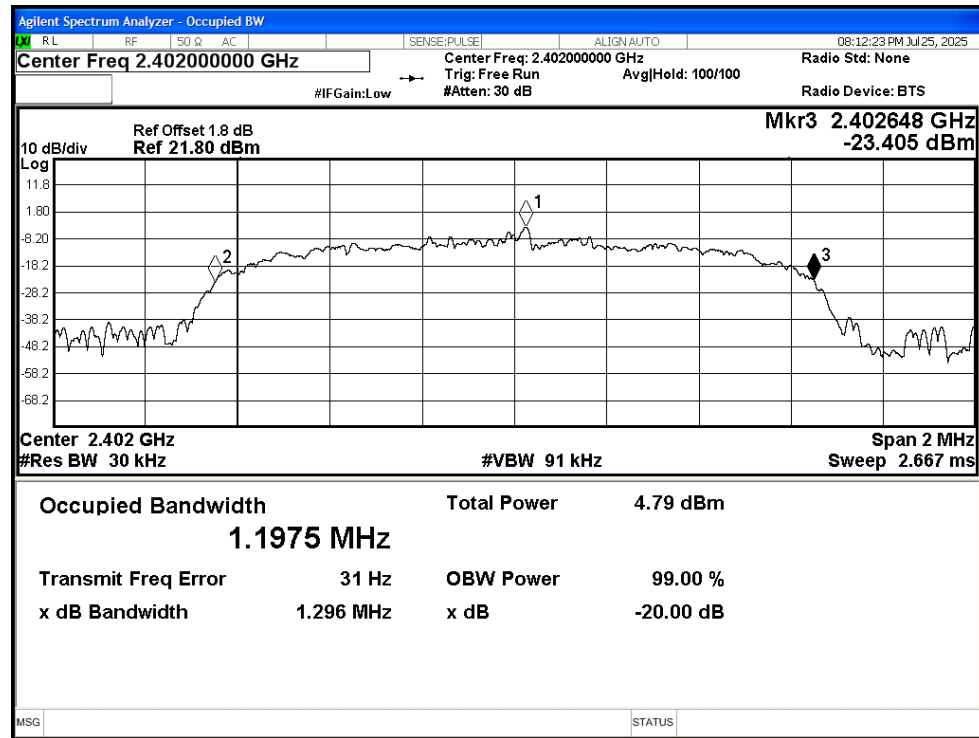
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



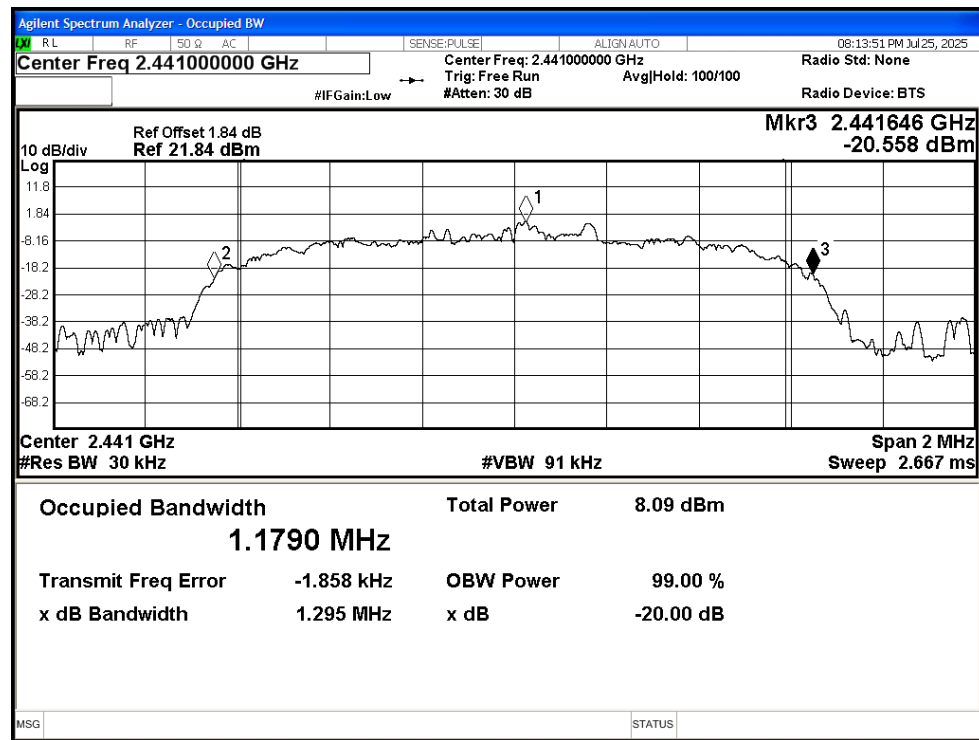
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

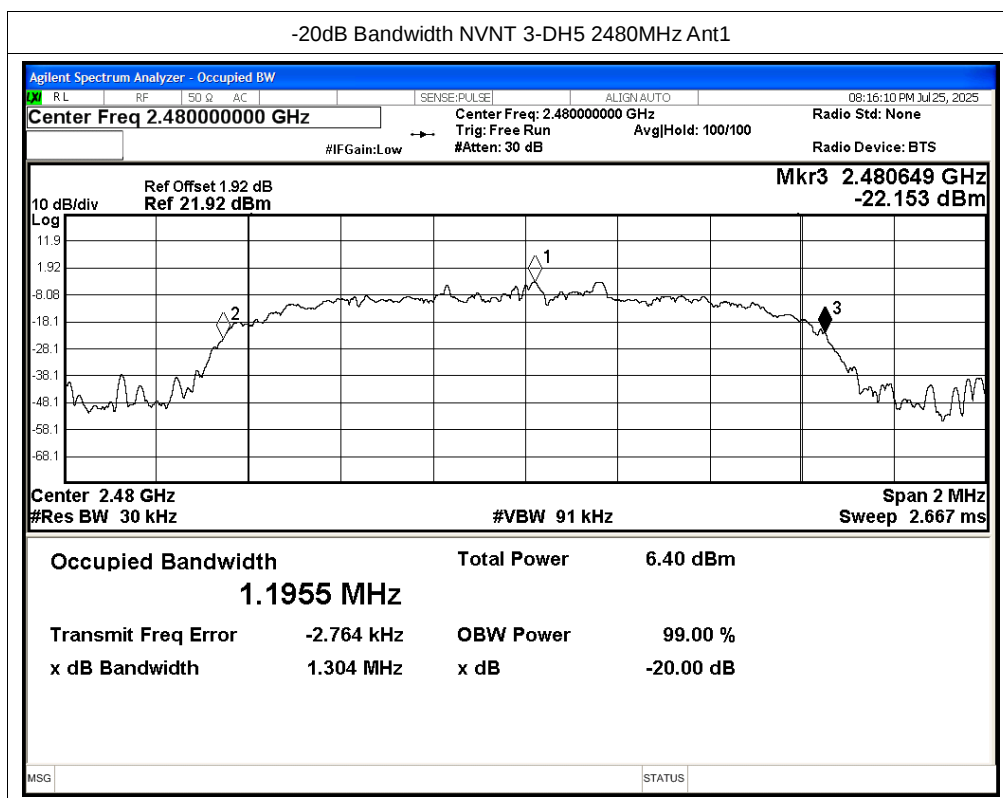


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



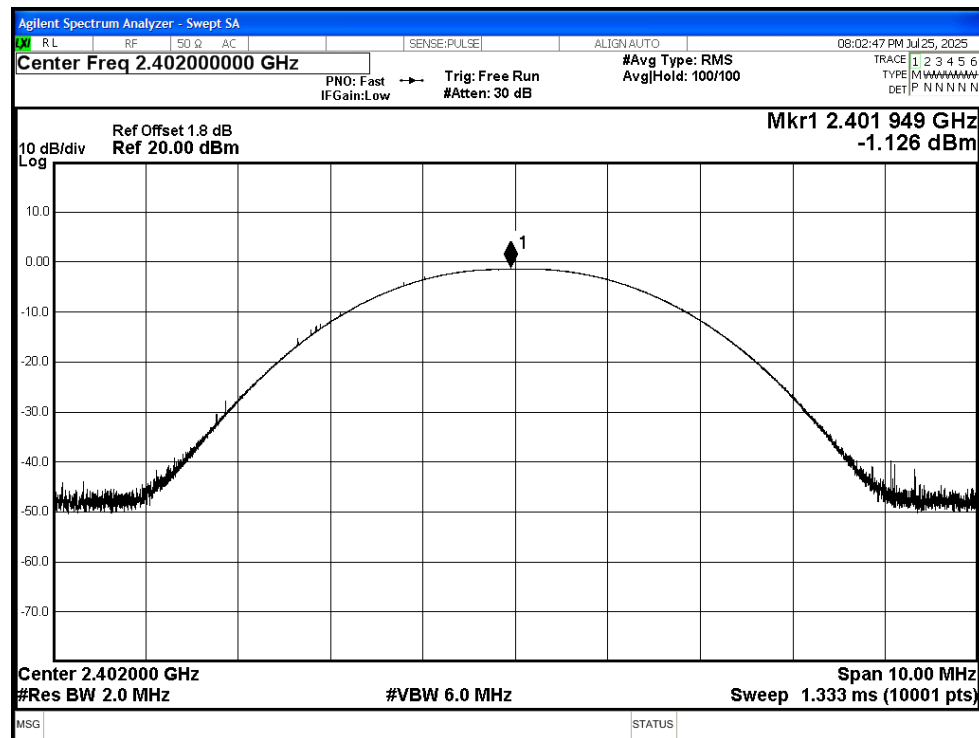


A.2 Maximum Peak Conducted Output Power

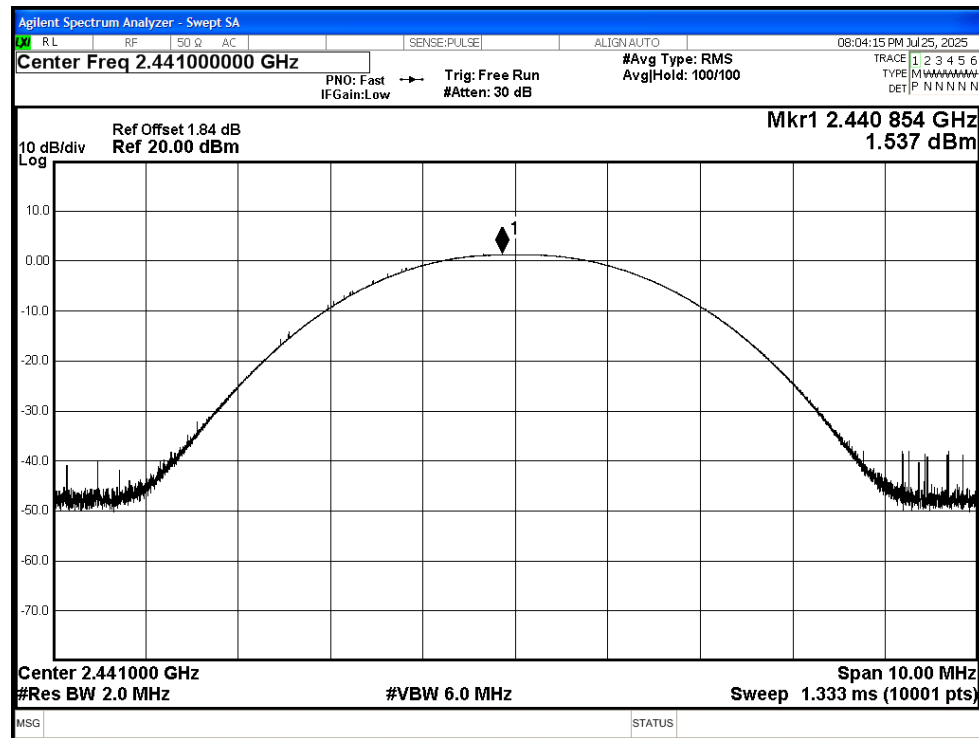
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-1.13	30	Pass
NVNT	1-DH5	2441	Ant1	1.54	30	Pass
NVNT	1-DH5	2480	Ant1	0.41	30	Pass
NVNT	2-DH5	2402	Ant1	0.60	30	Pass
NVNT	2-DH5	2441	Ant1	3.15	30	Pass
NVNT	2-DH5	2480	Ant1	2.01	30	Pass
NVNT	3-DH5	2402	Ant1	1.01	30	Pass
NVNT	3-DH5	2441	Ant1	3.57	30	Pass
NVNT	3-DH5	2480	Ant1	2.24	30	Pass

Test Graphs

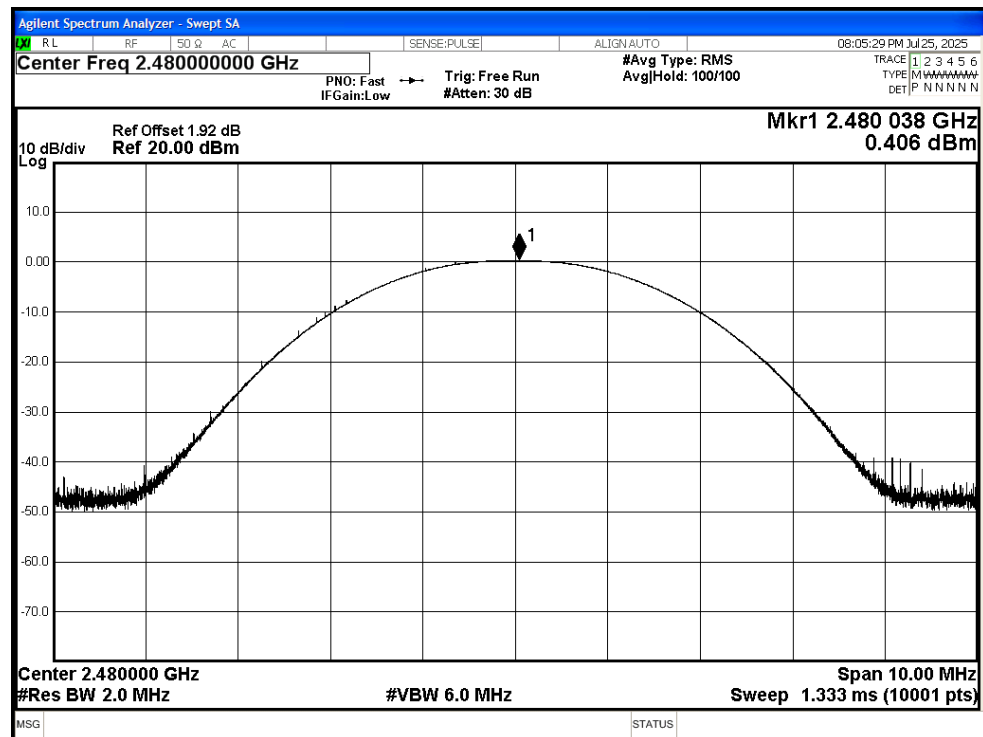
Power NVNT 1-DH5 2402MHz Ant1



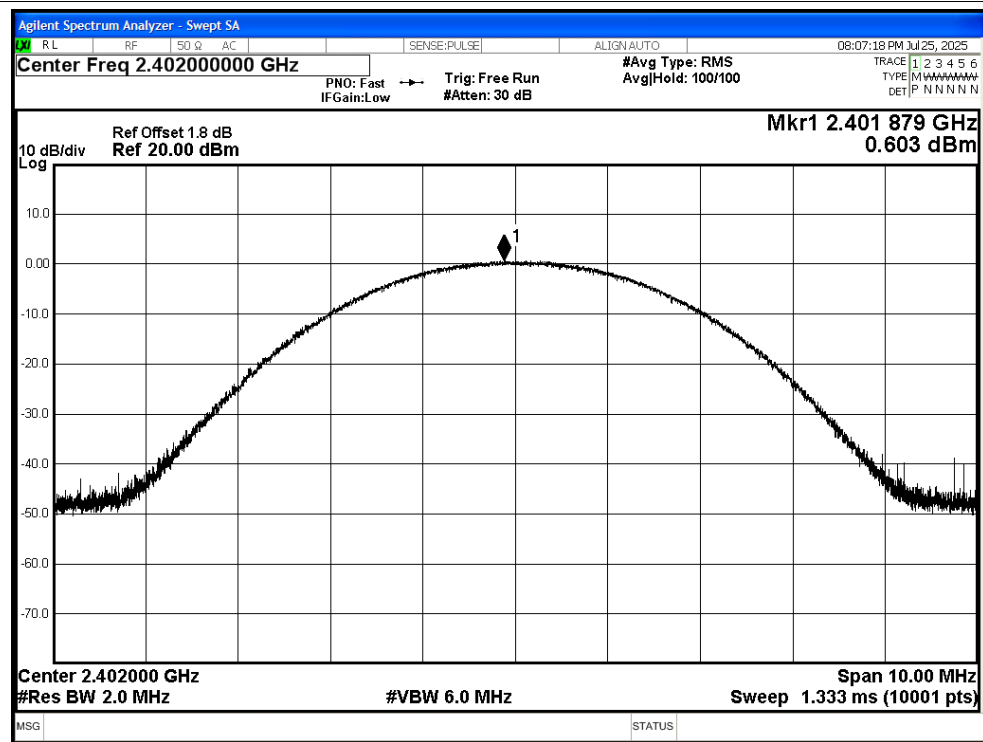
Power NVNT 1-DH5 2441MHz Ant1



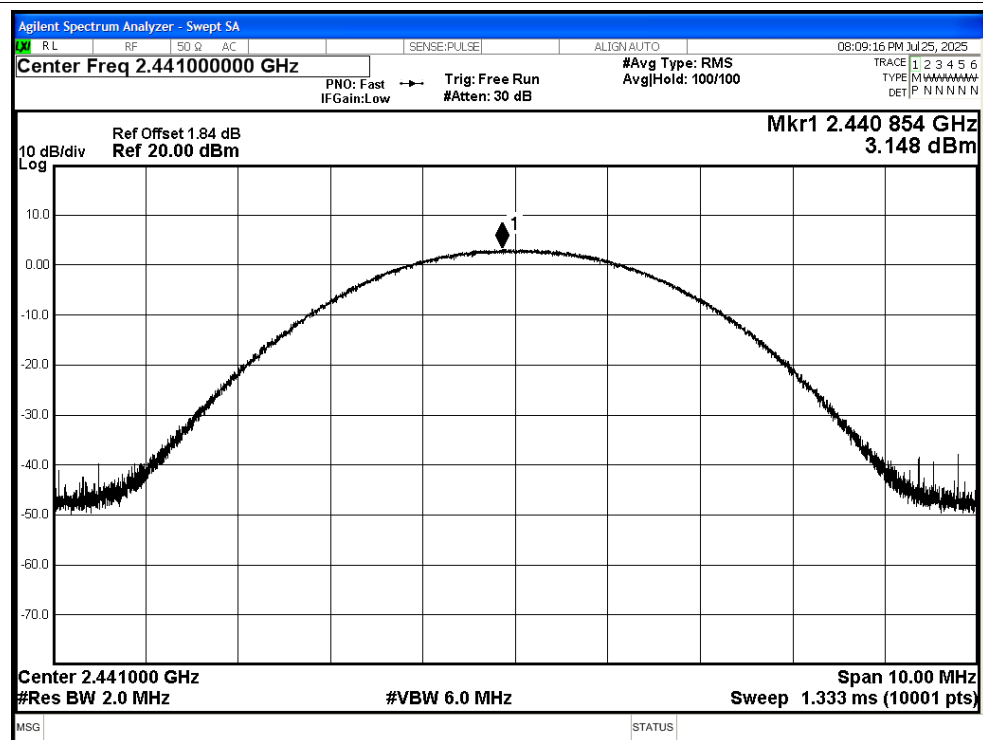
Power NVNT 1-DH5 2480MHz Ant1



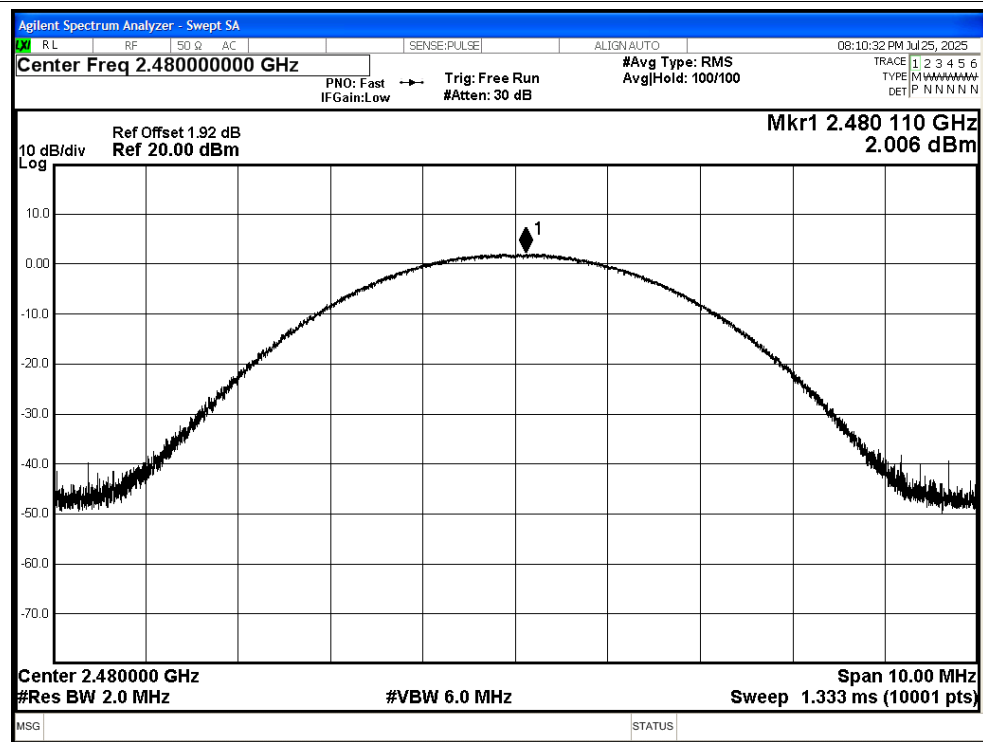
Power NVNT 2-DH5 2402MHz Ant1



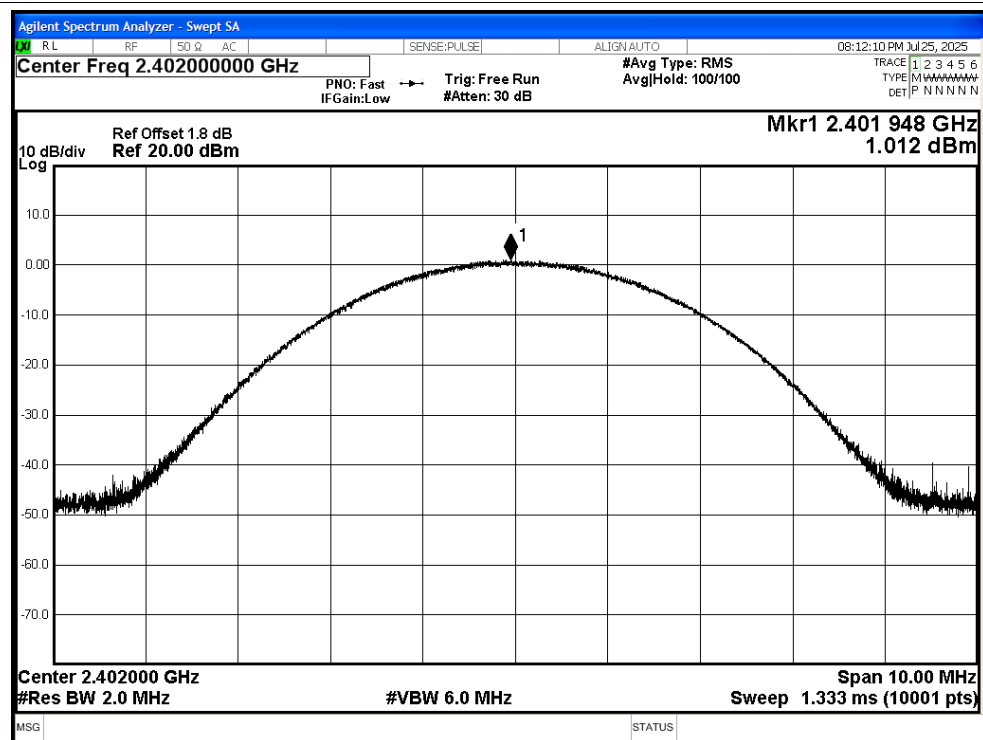
Power NVNT 2-DH5 2441MHz Ant1



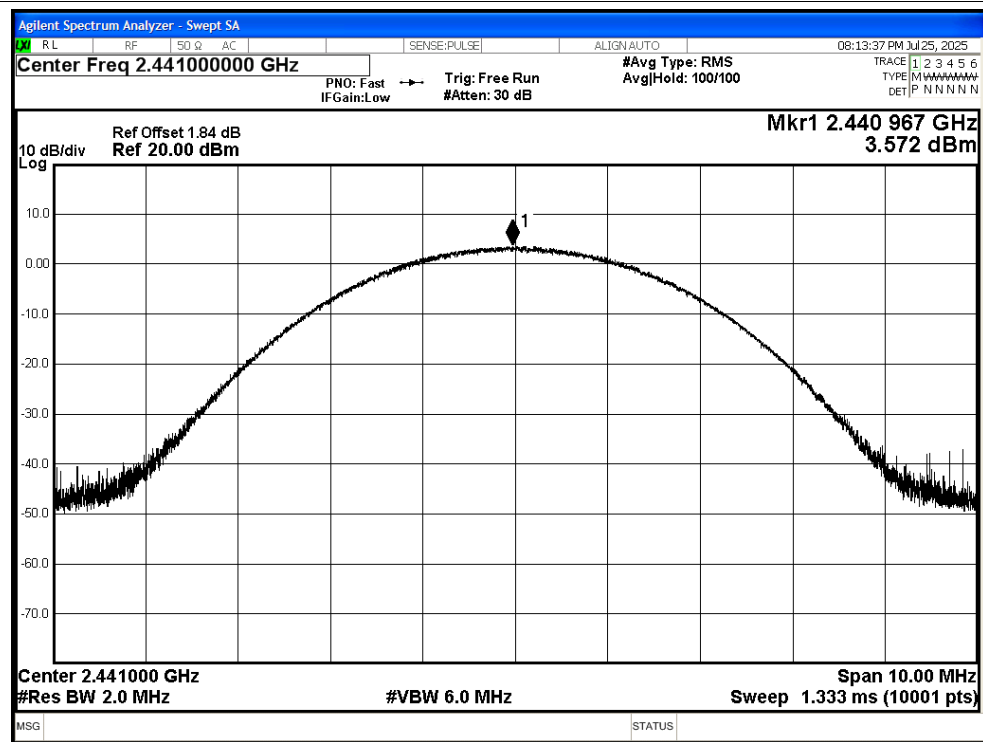
Power NVNT 2-DH5 2480MHz Ant1

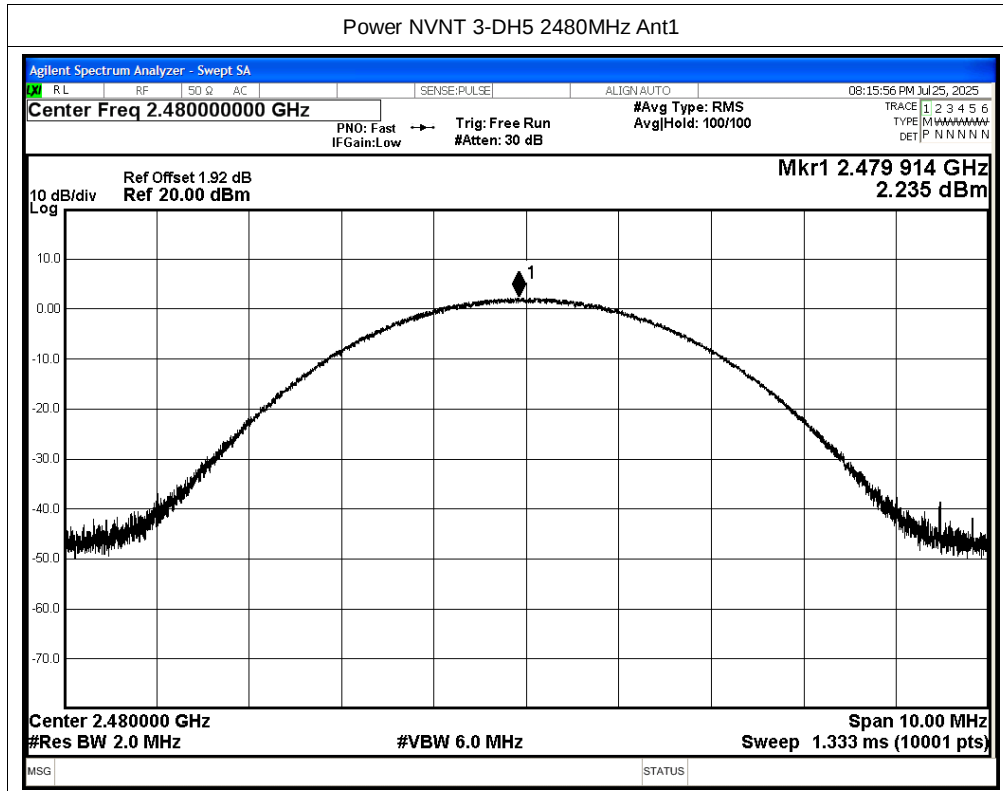


Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



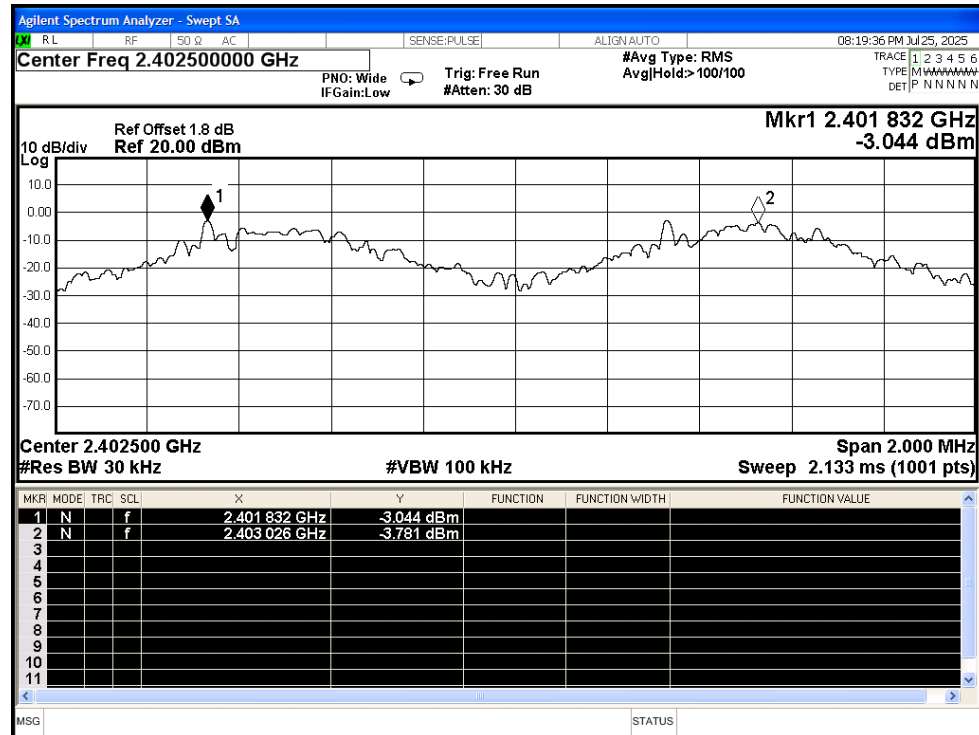


A.3 Carrier Frequencies Separation

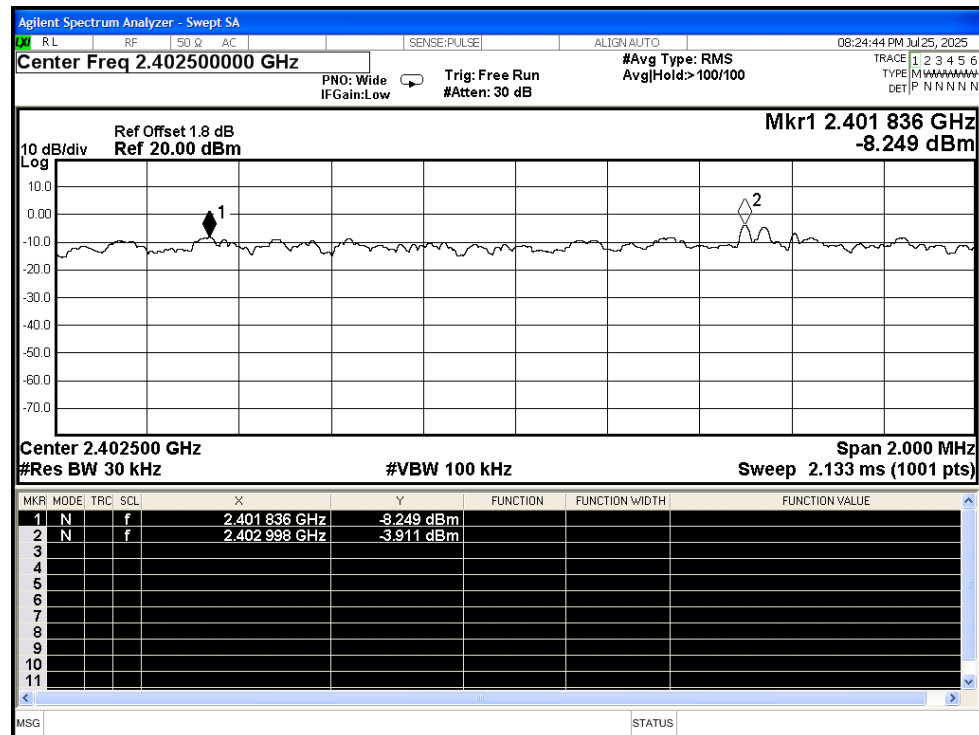
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.832	2403.026	1.194	0.632	Pass
NVNT	2-DH5	Ant1	2401.836	2402.998	1.162	0.877	Pass
NVNT	3-DH5	Ant1	2401.908	2403.108	1.2	0.869	Pass

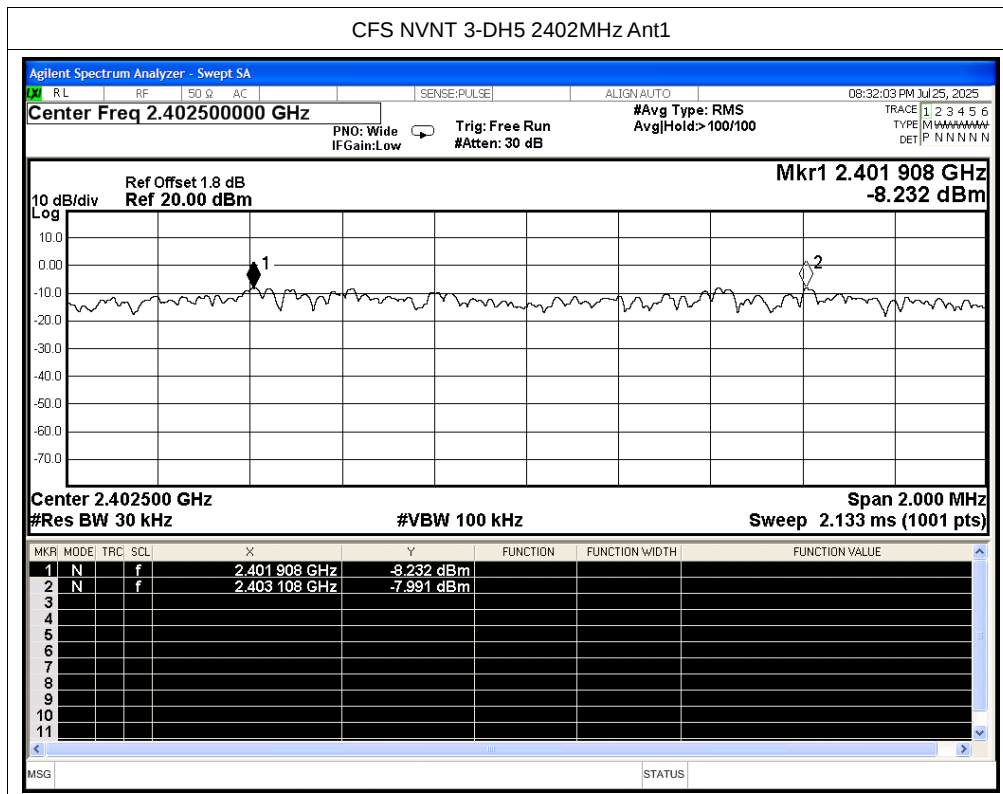
Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



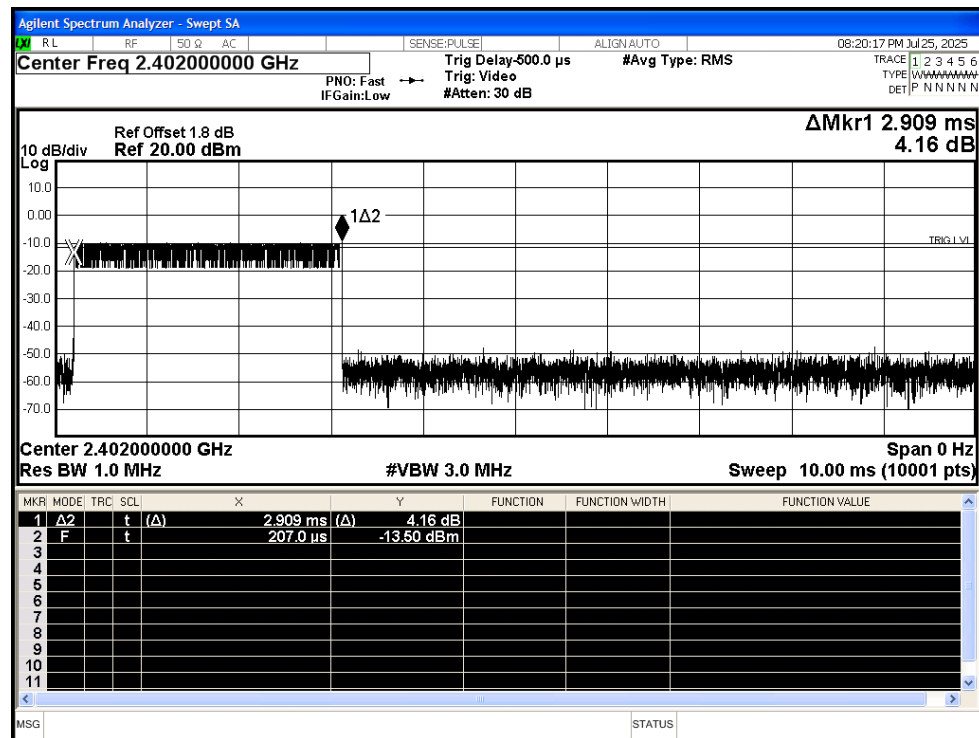


A.4 Dwell Time

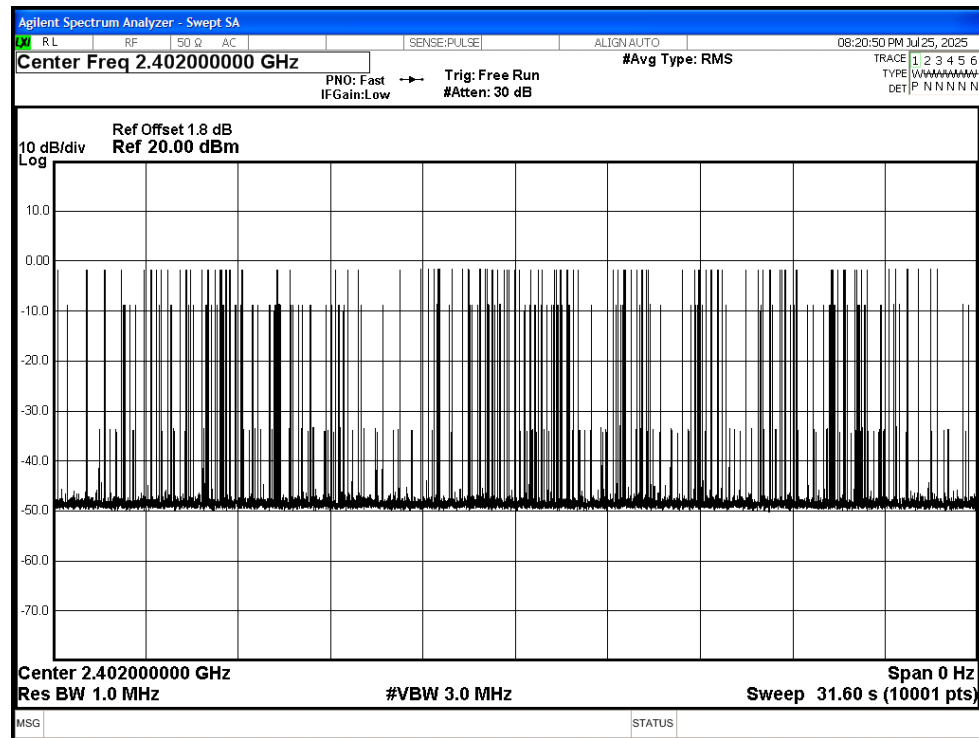
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.909	299.627	103	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.898	312.984	108	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.897	278.112	96	31600	400	Pass

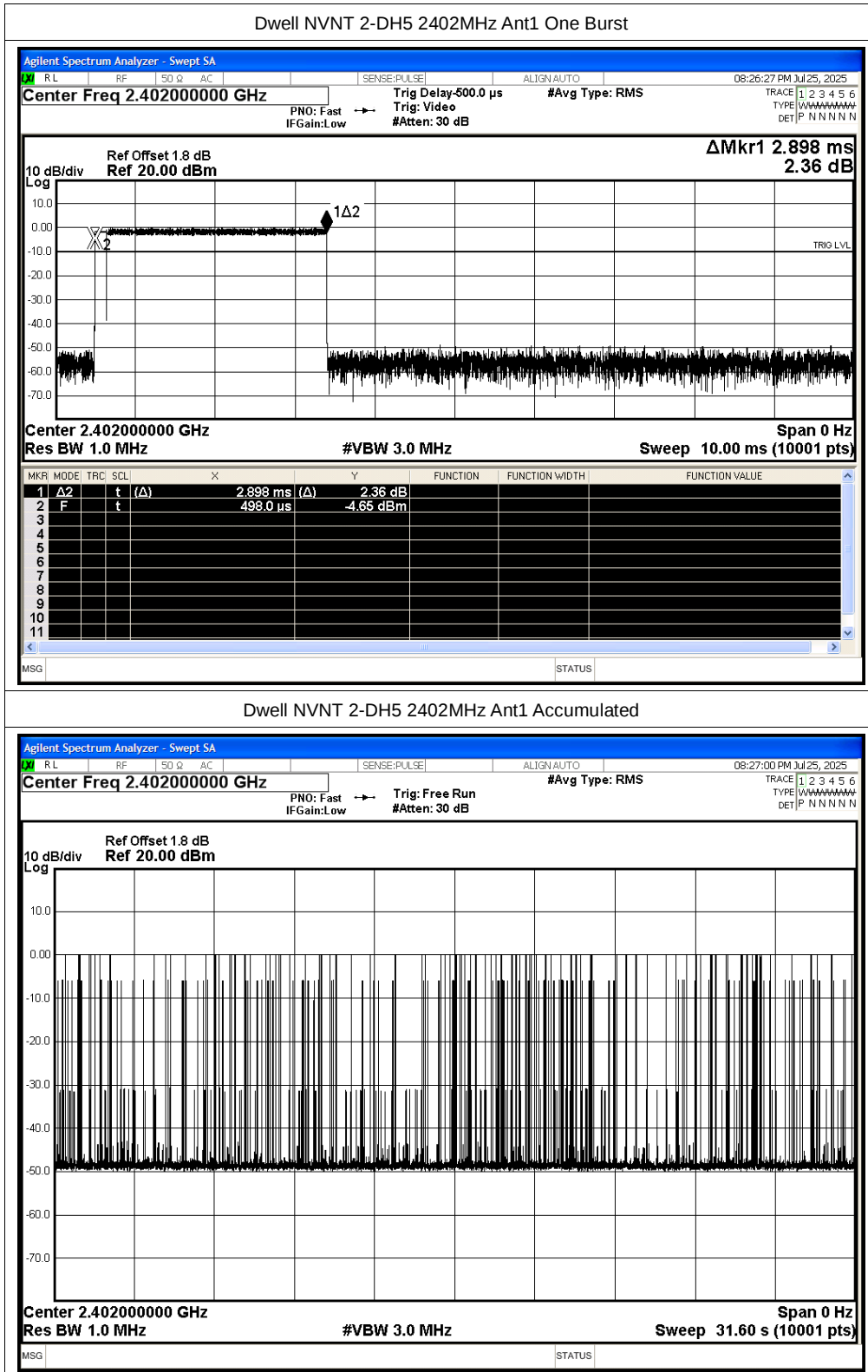
Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

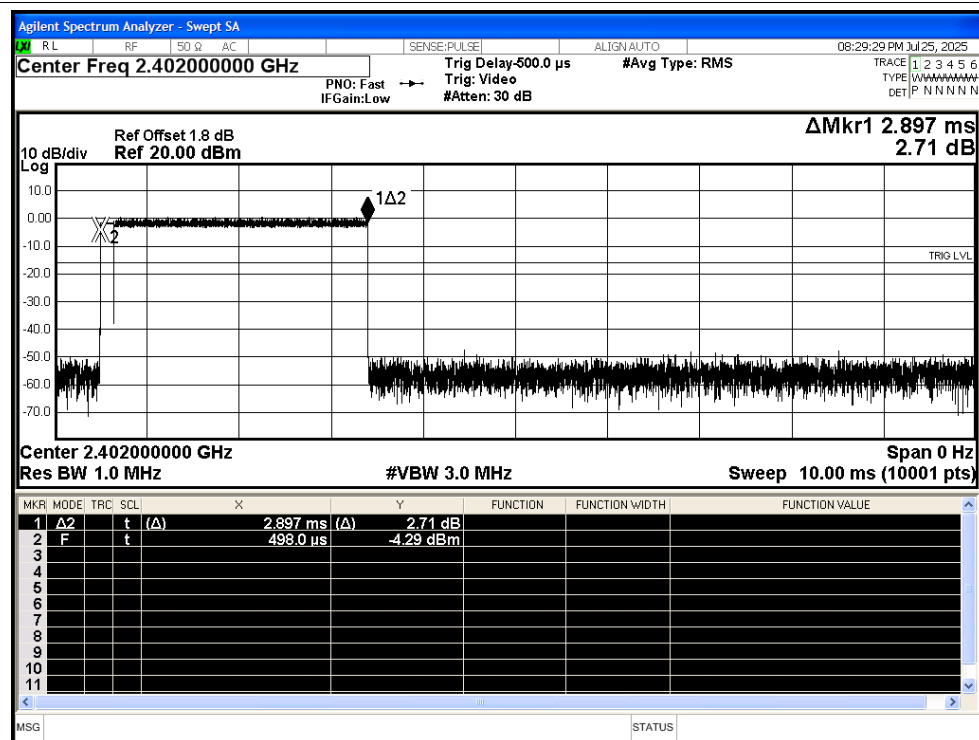


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

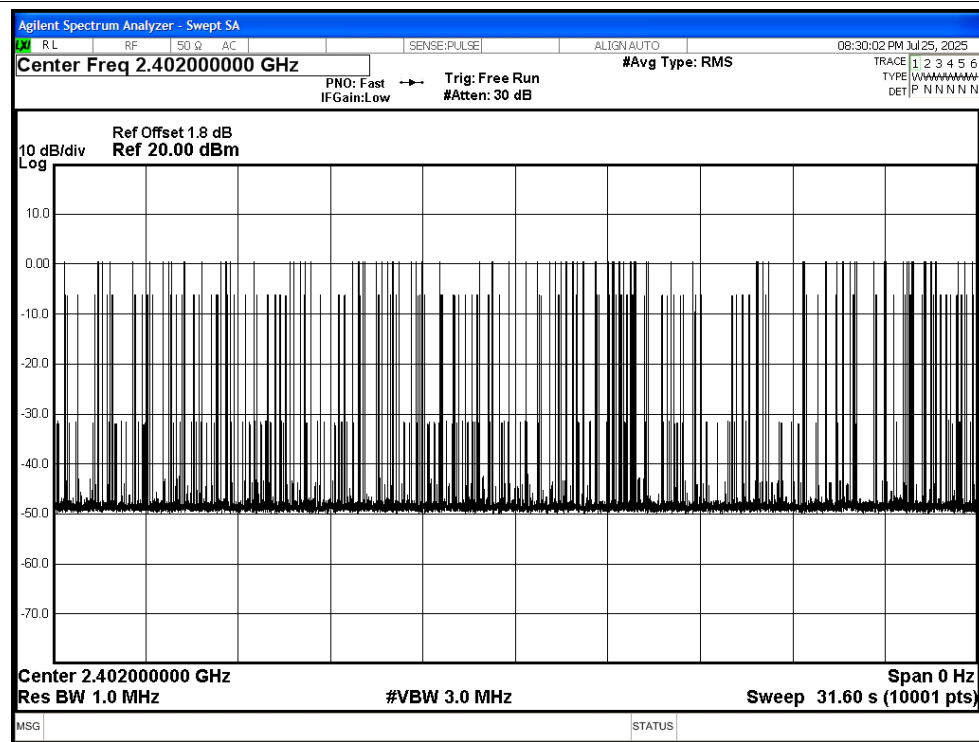




Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated

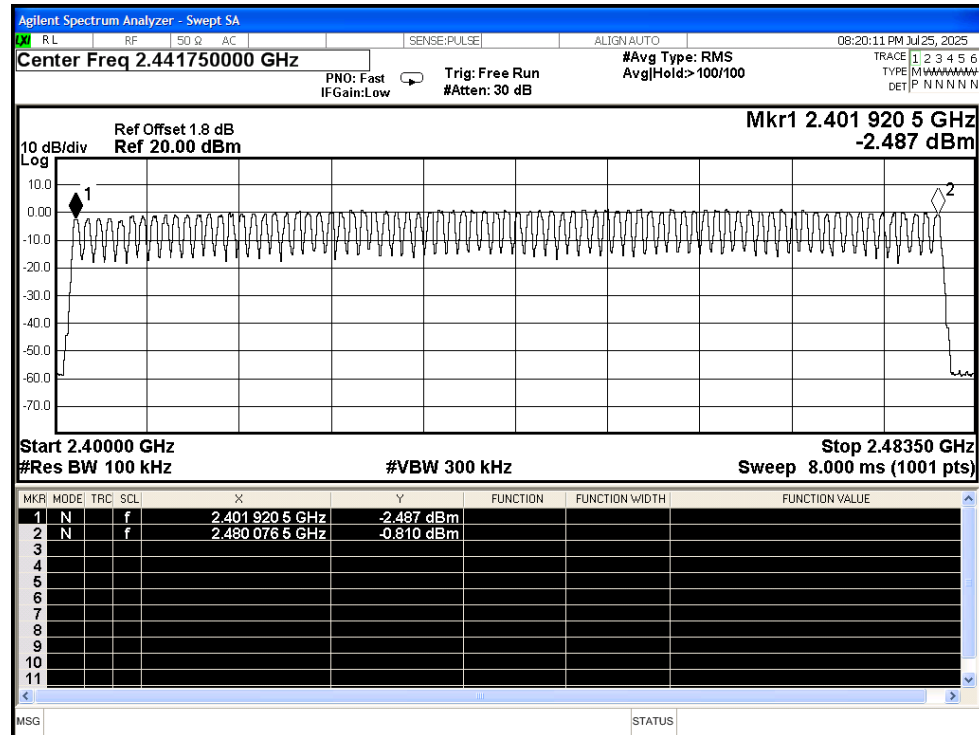


A.5 Number of Hopping Channel

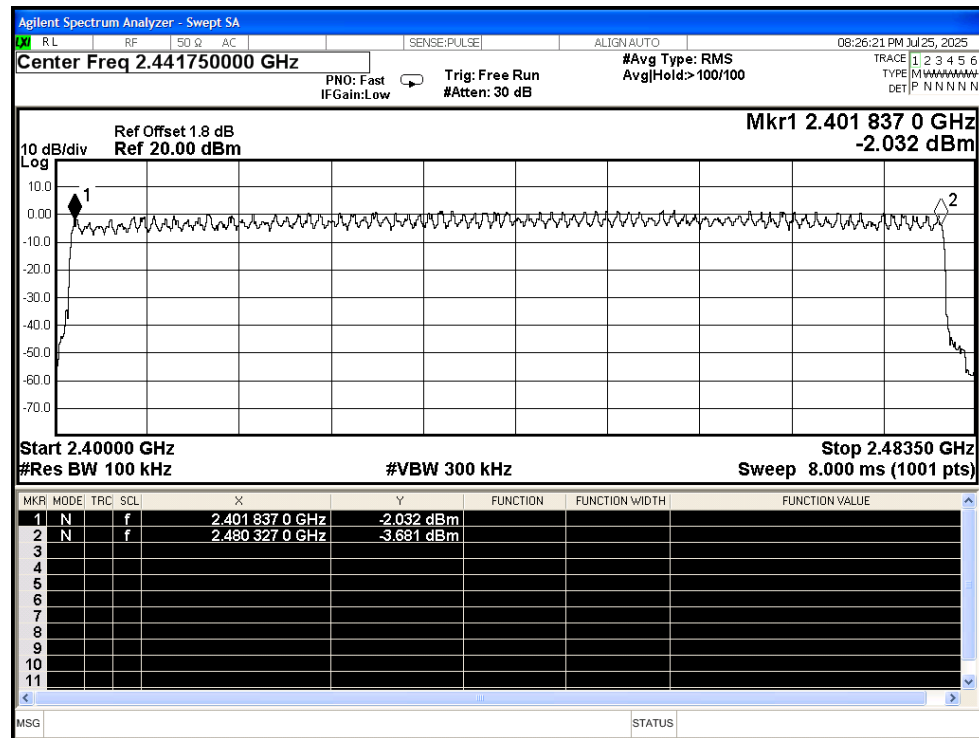
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

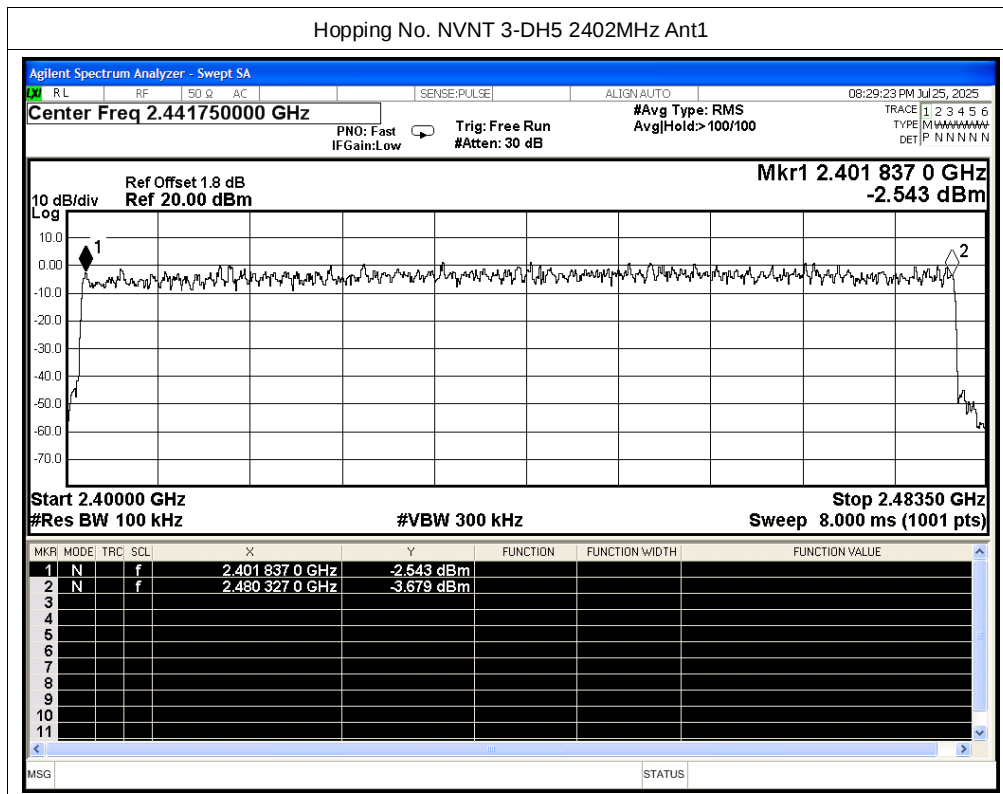
Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



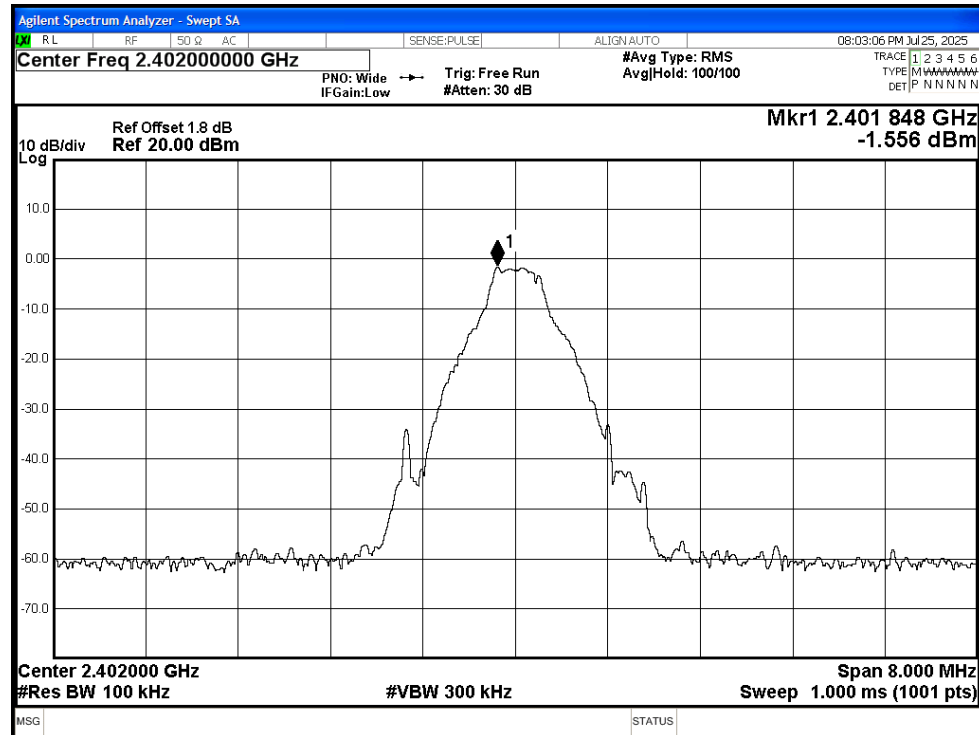


A.6 Band Edge

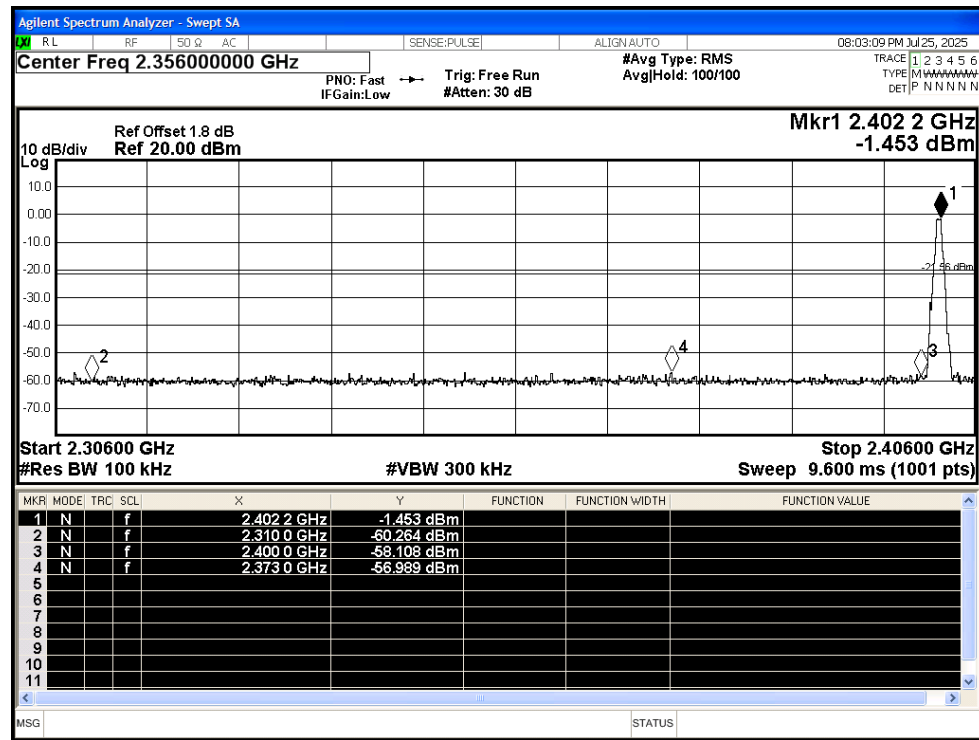
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-55.43	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-57.3	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-51.6	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-56.4	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-49.39	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-54.67	-20	Pass

Test Graphs

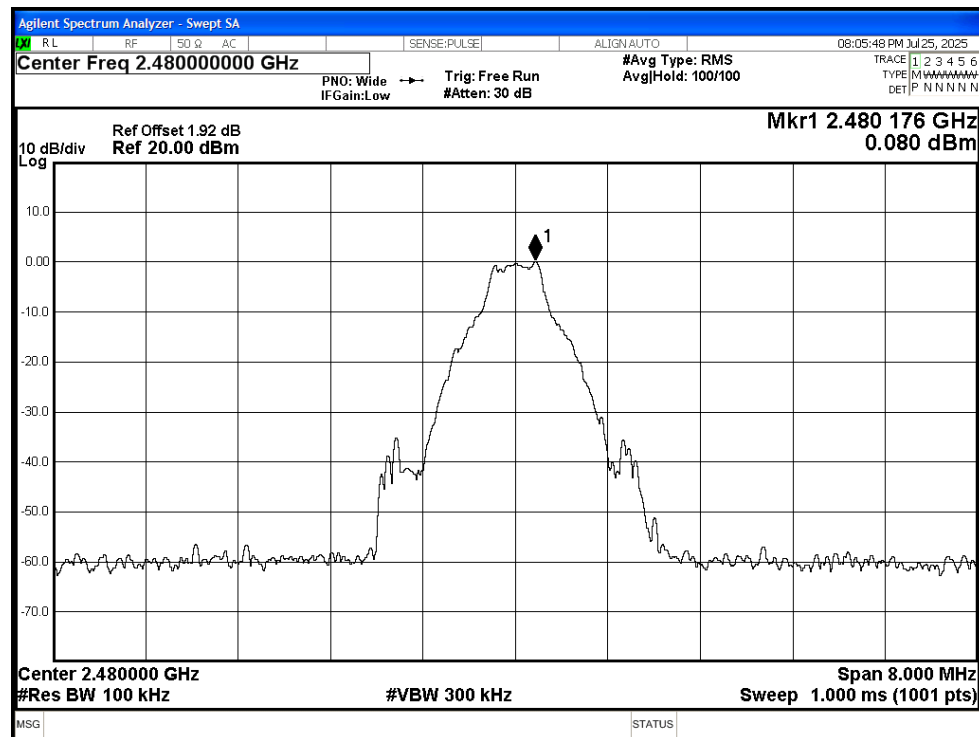
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



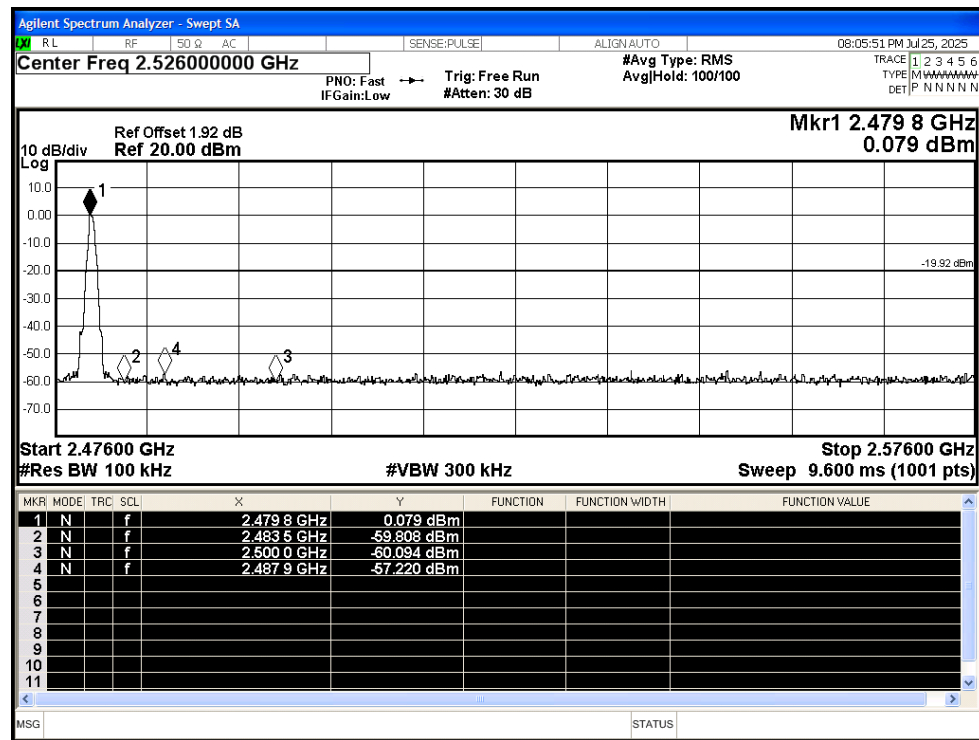
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



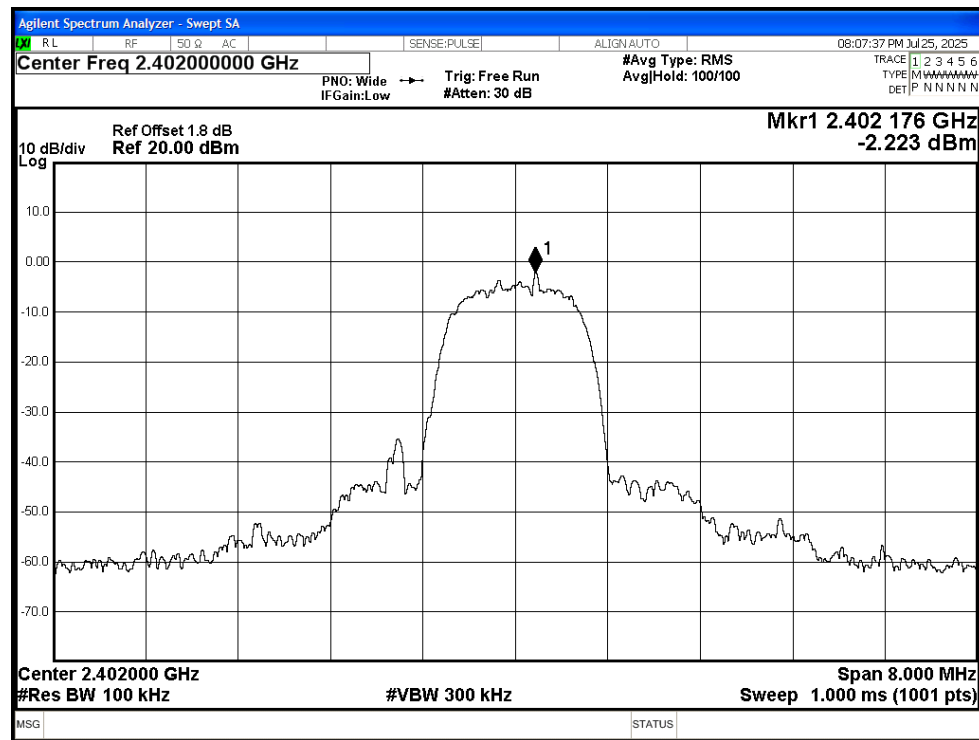
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



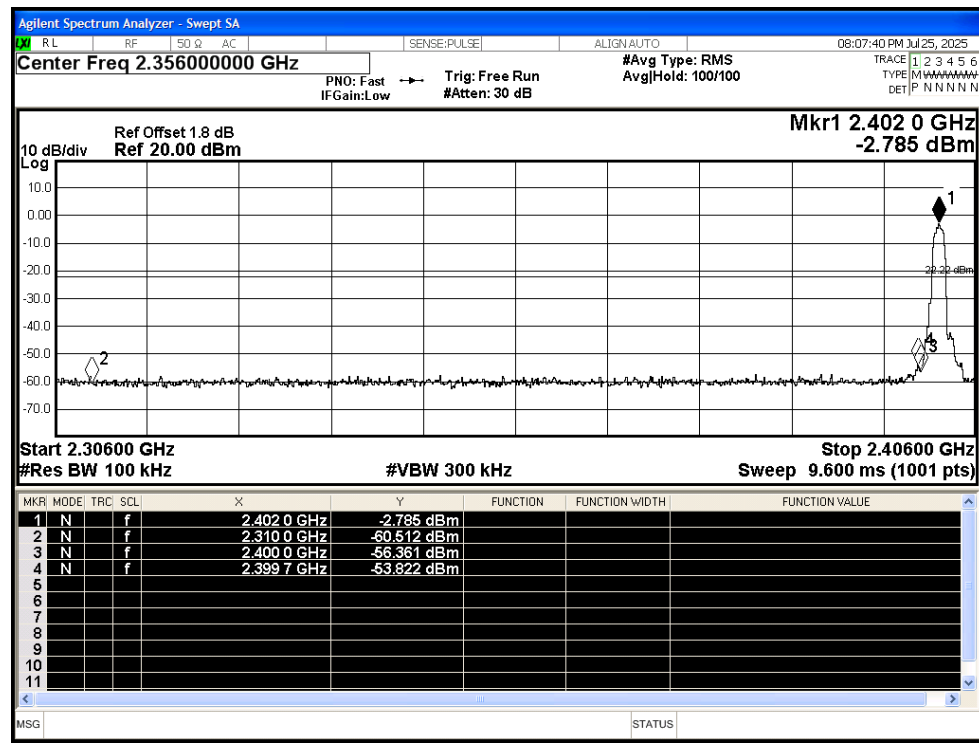
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



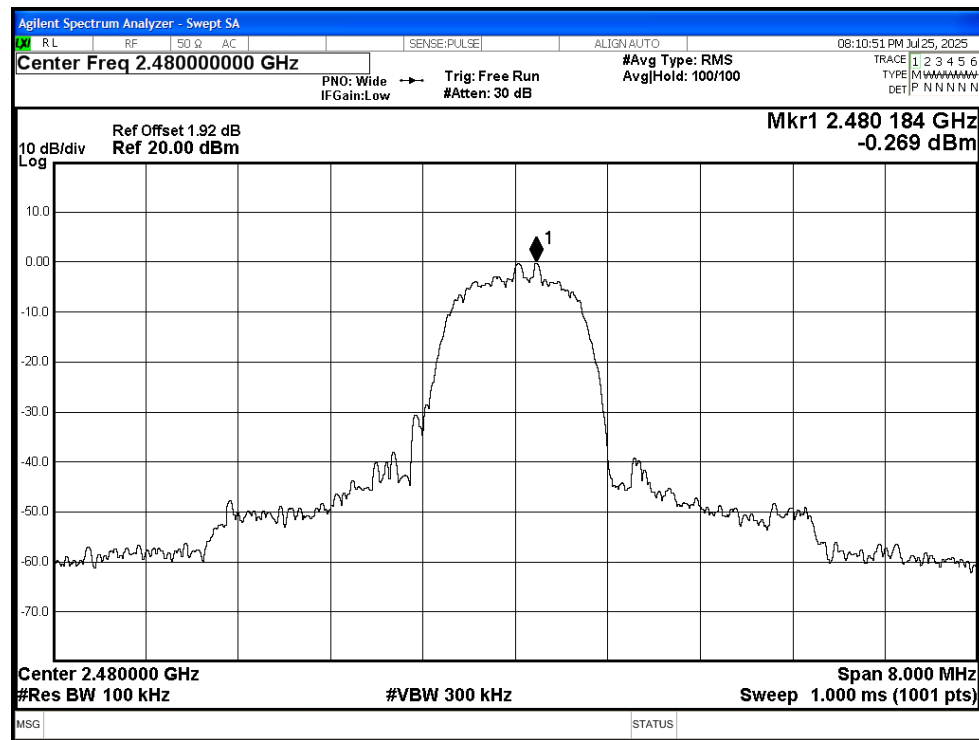
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



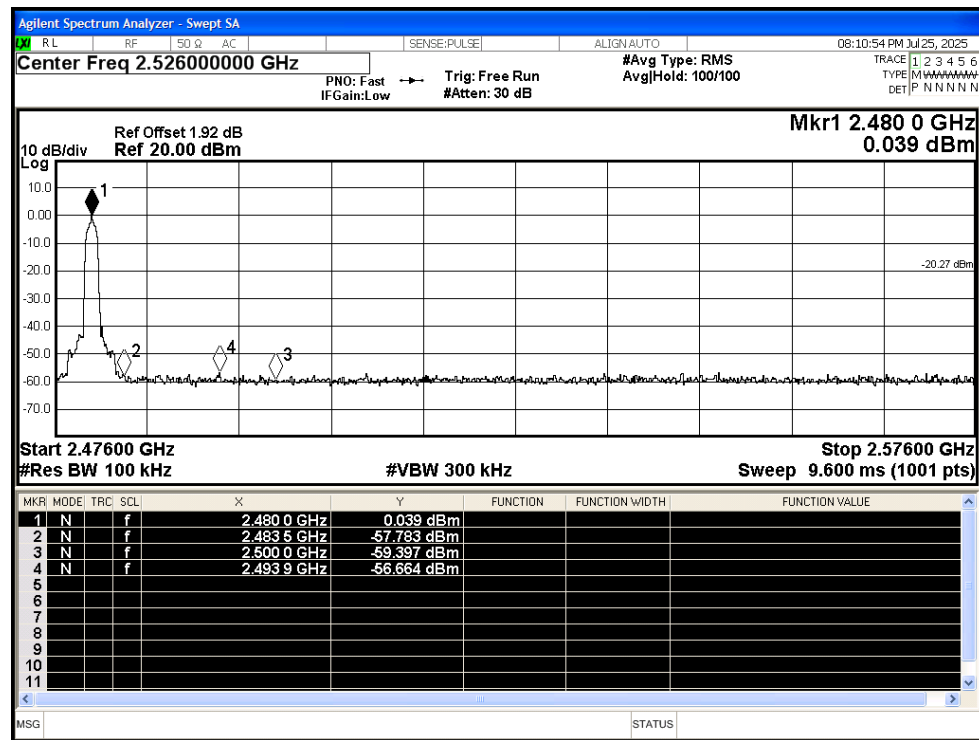
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



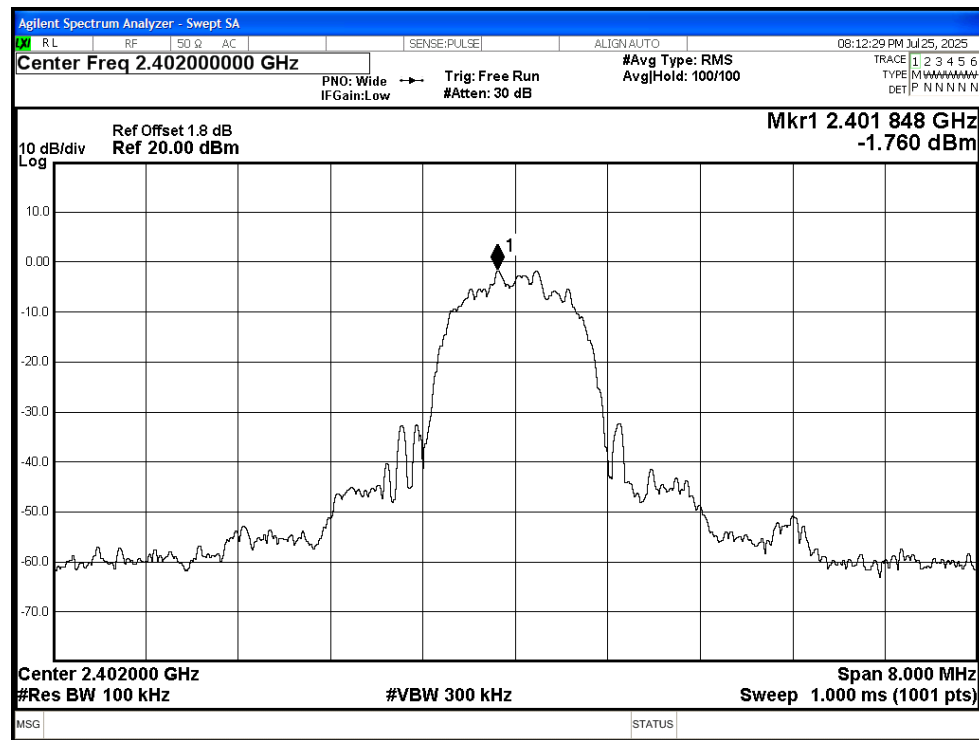
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



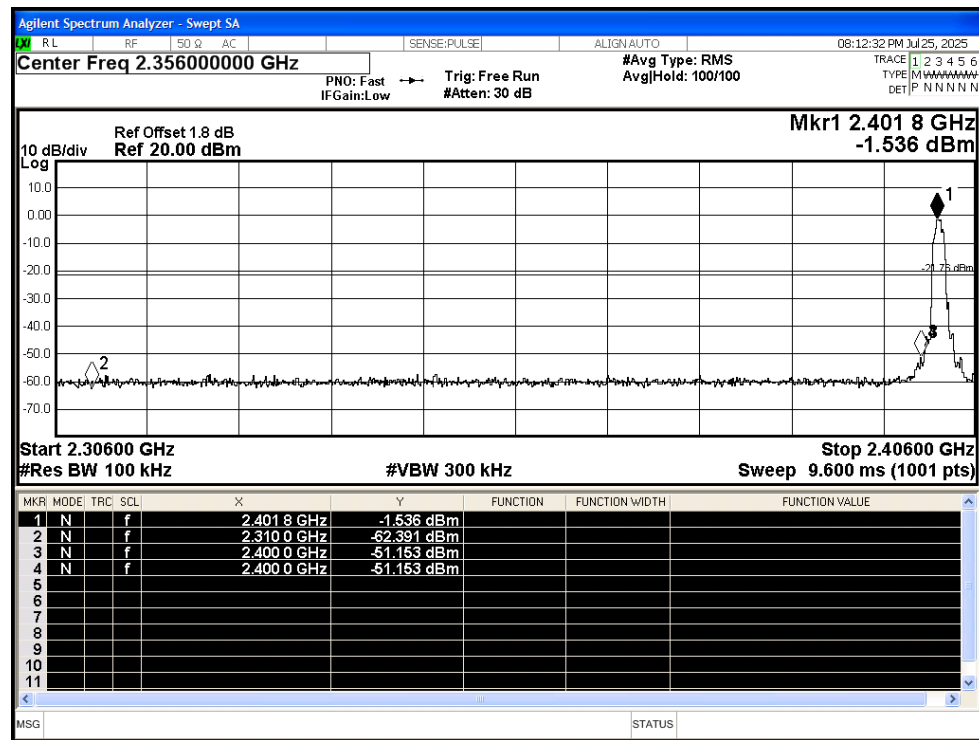
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



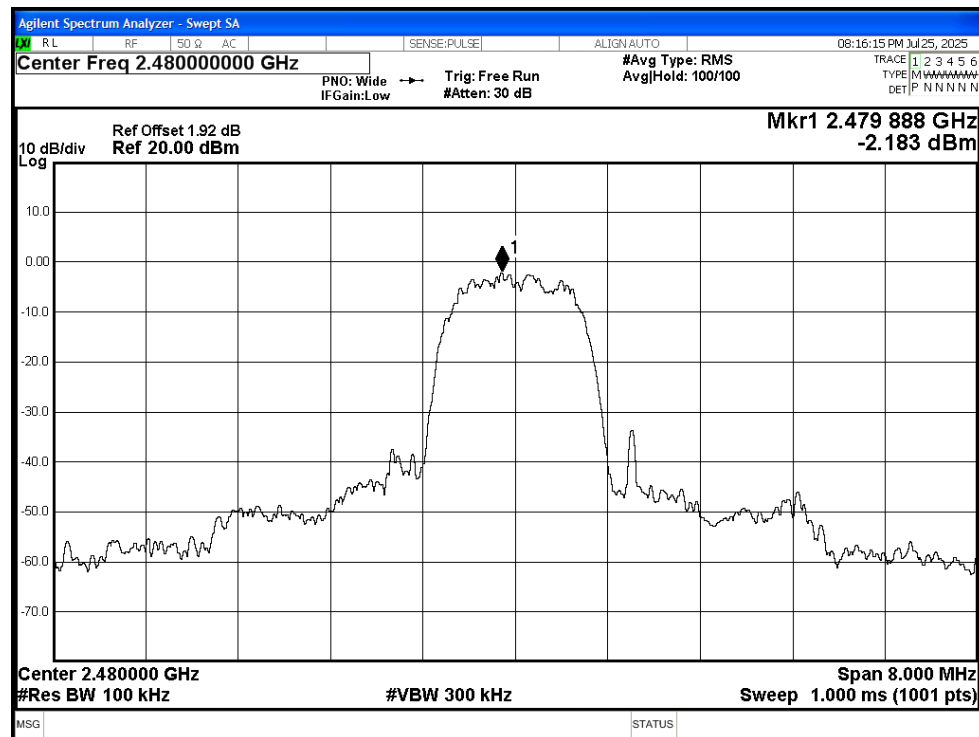
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



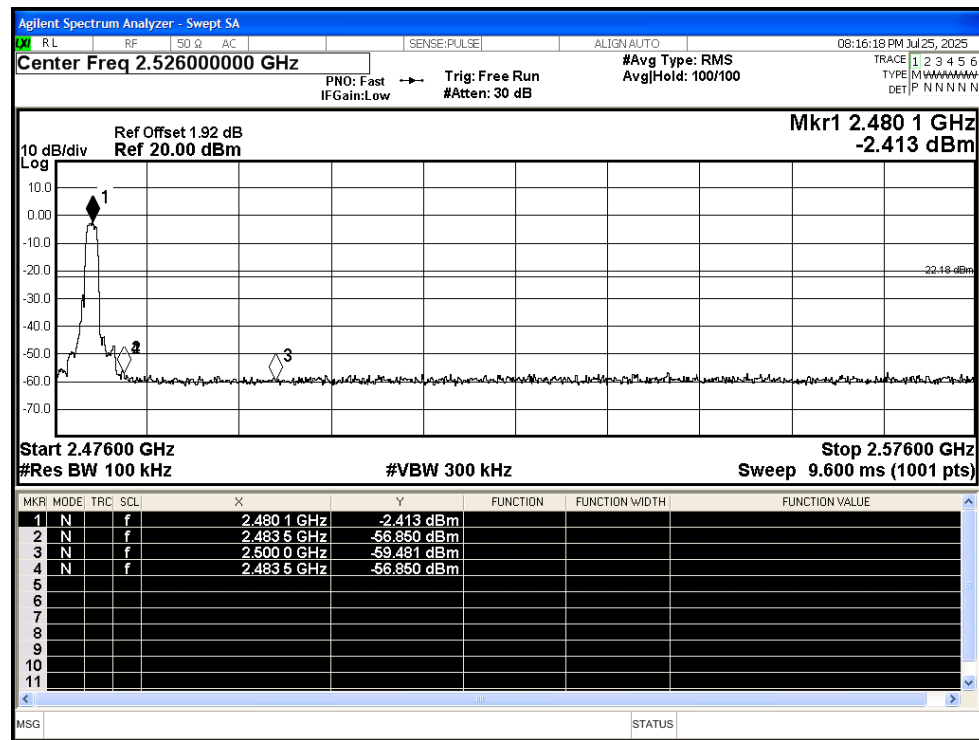
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



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



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

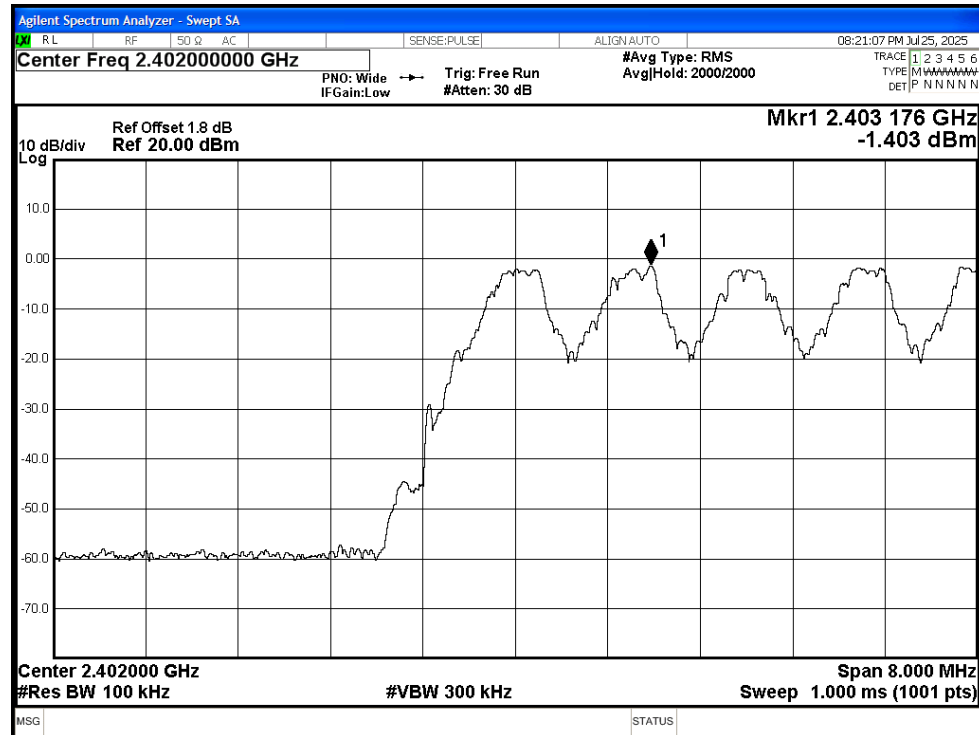


(Hopping)

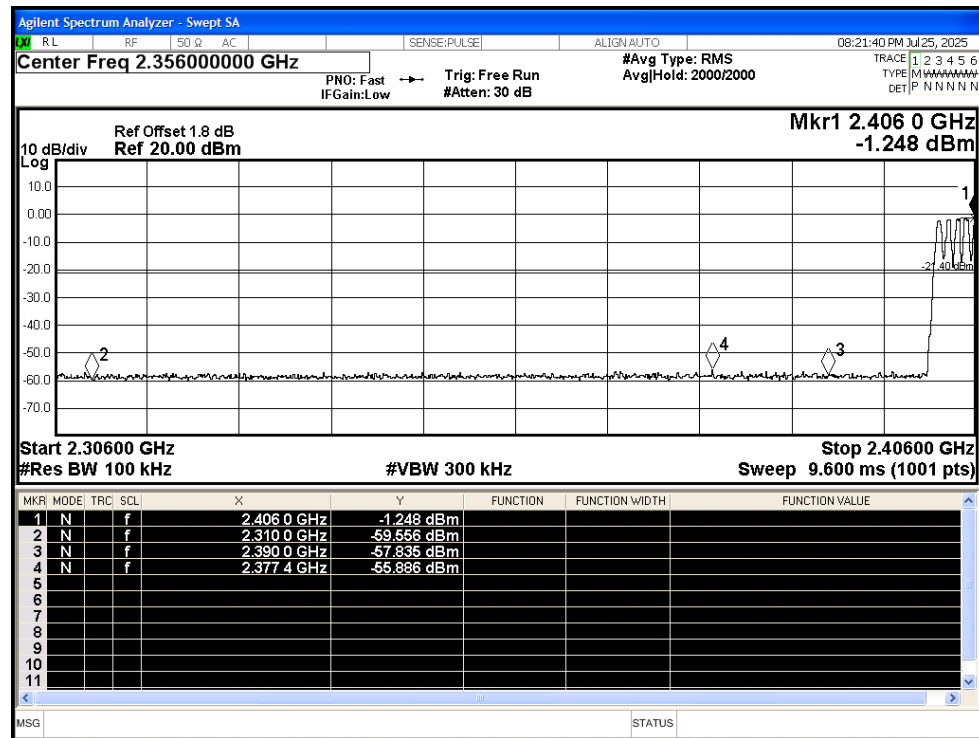
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-54.48	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.28	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-54.52	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-56.15	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-54.63	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-55.93	-20	Pass

Test Graphs

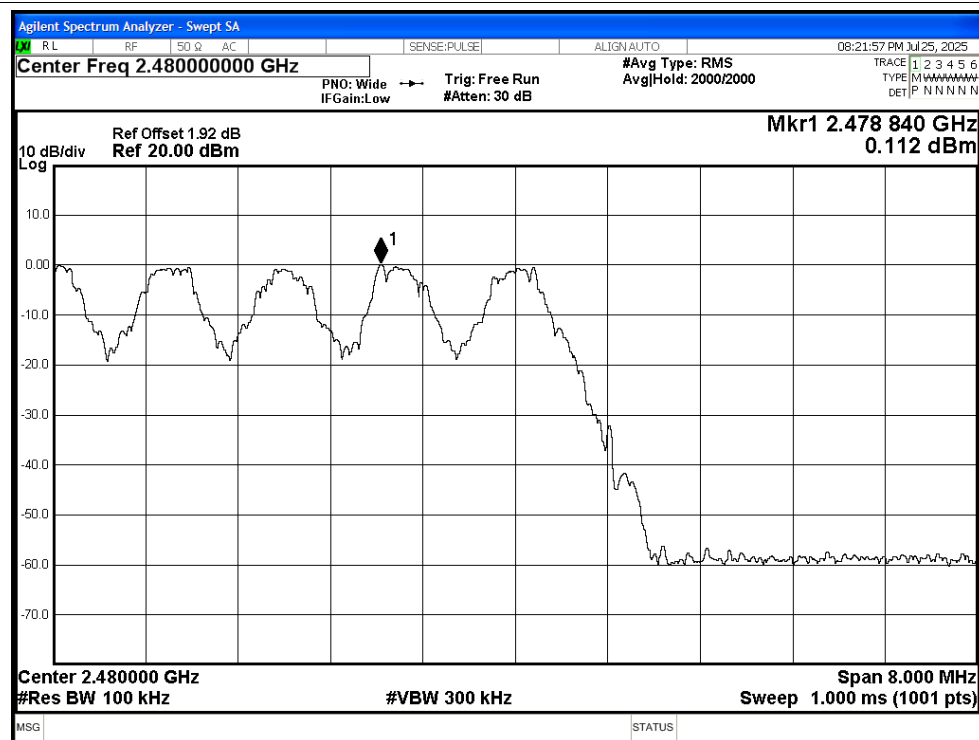
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



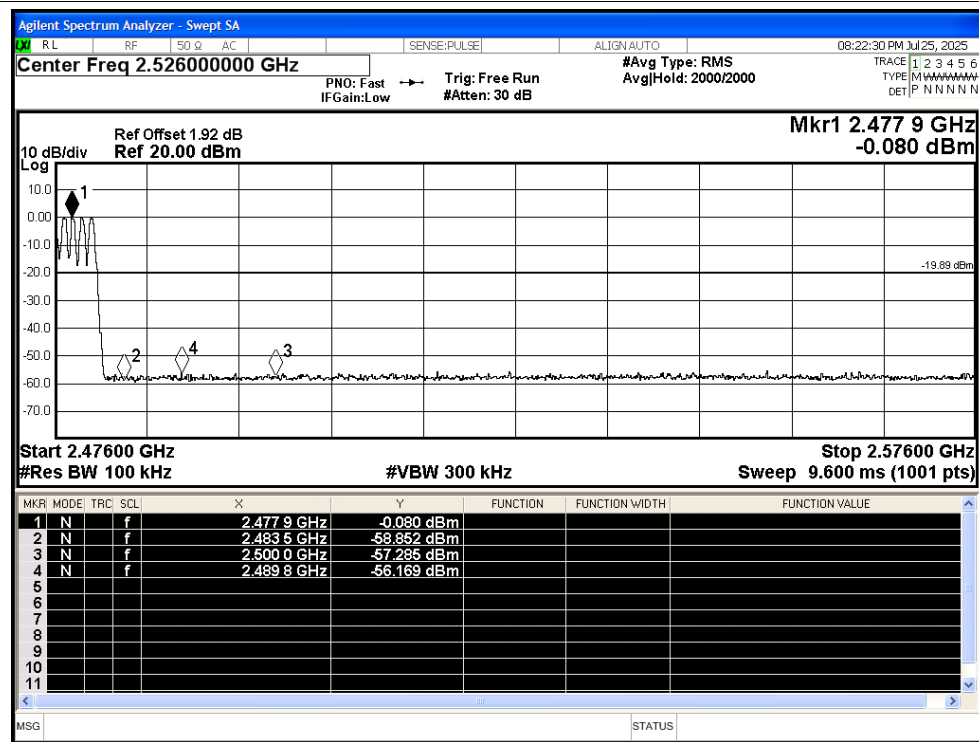
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission

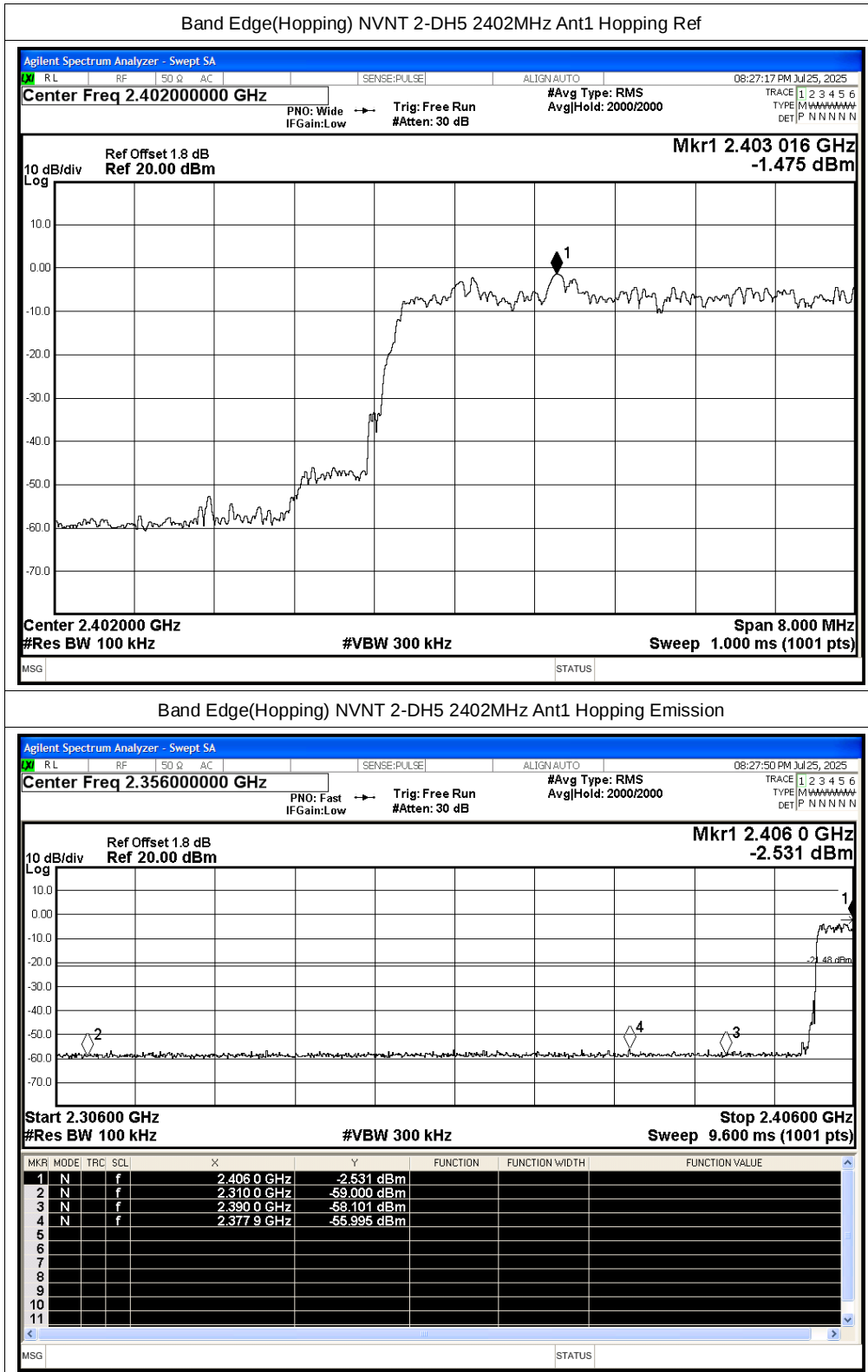


Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



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

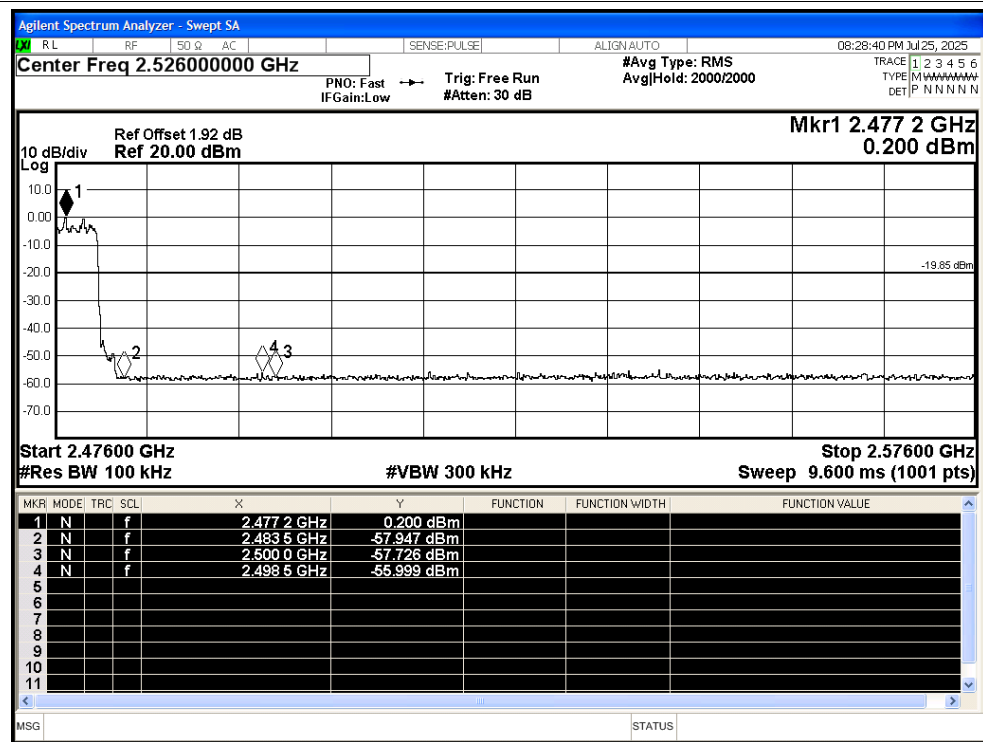


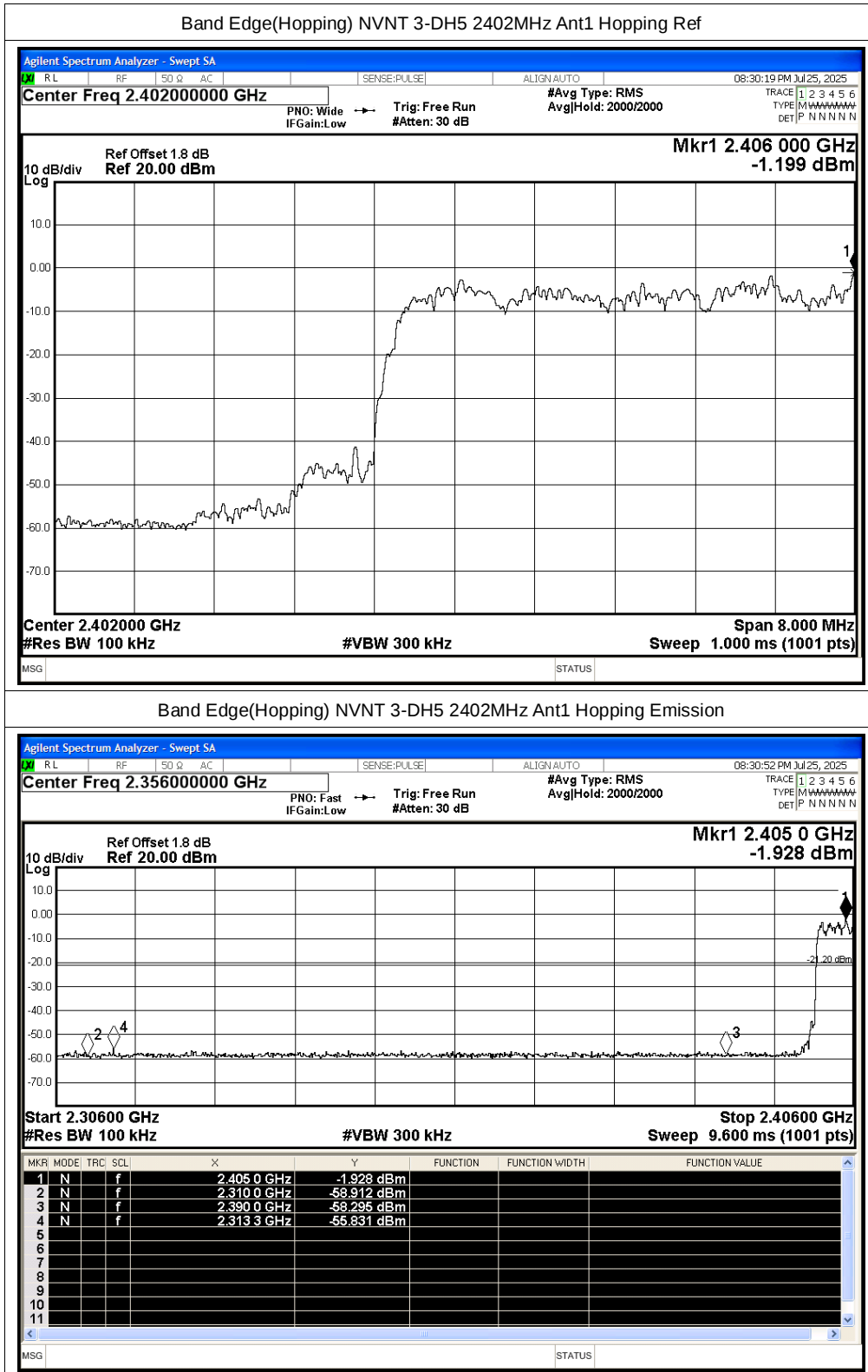


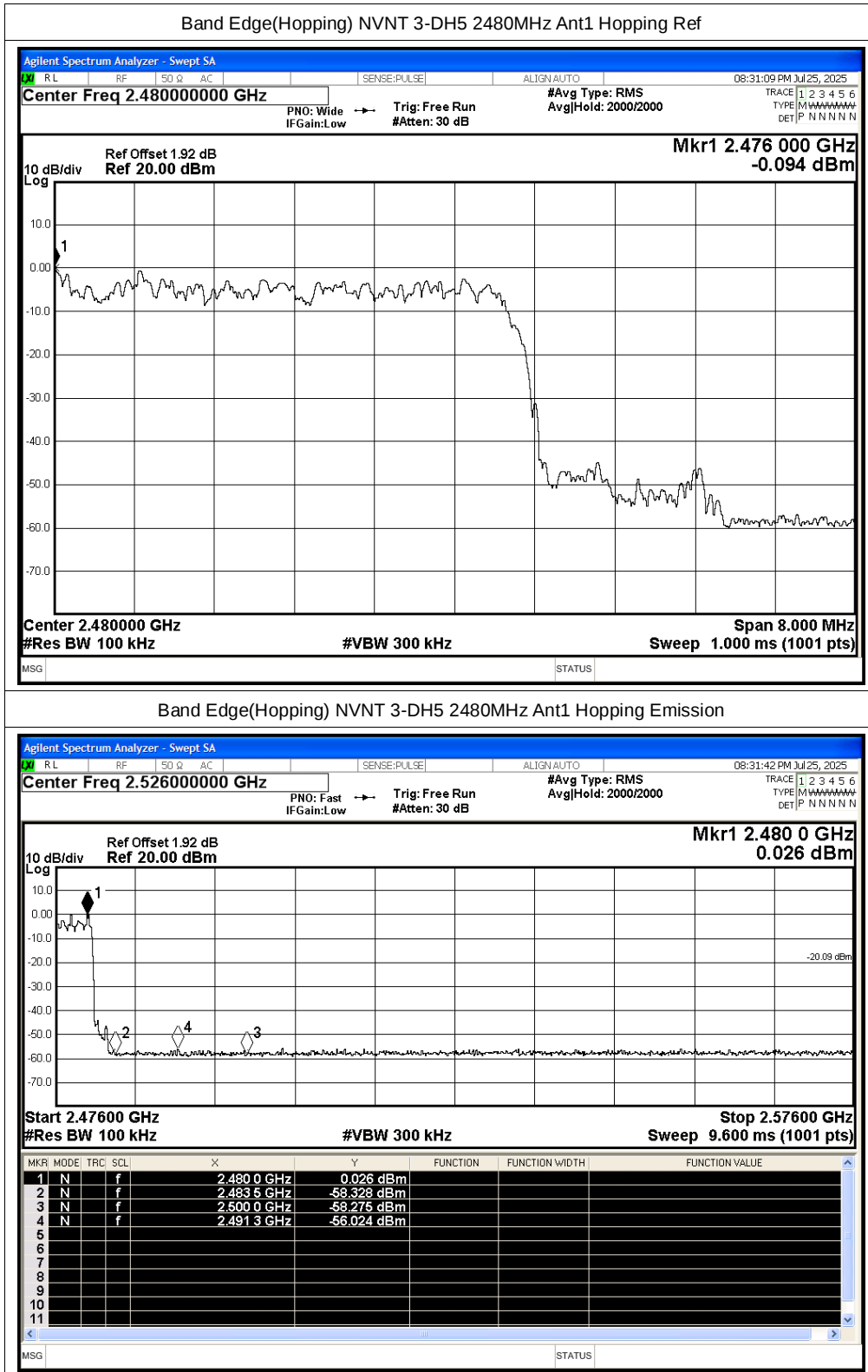
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



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





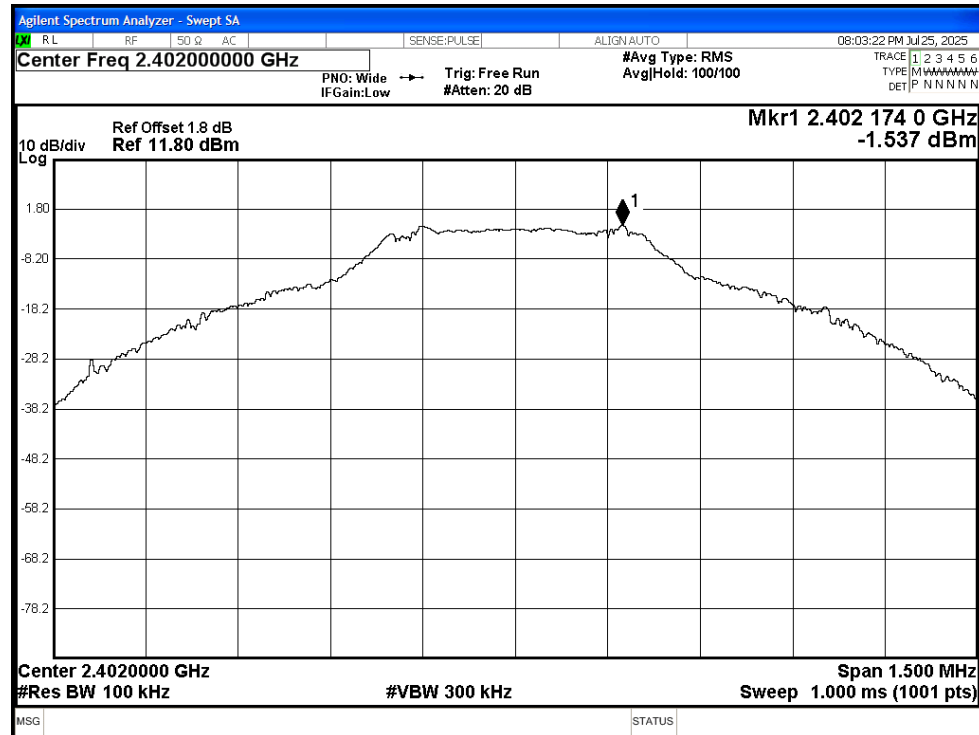


A.7 Conducted RF Spurious Emission

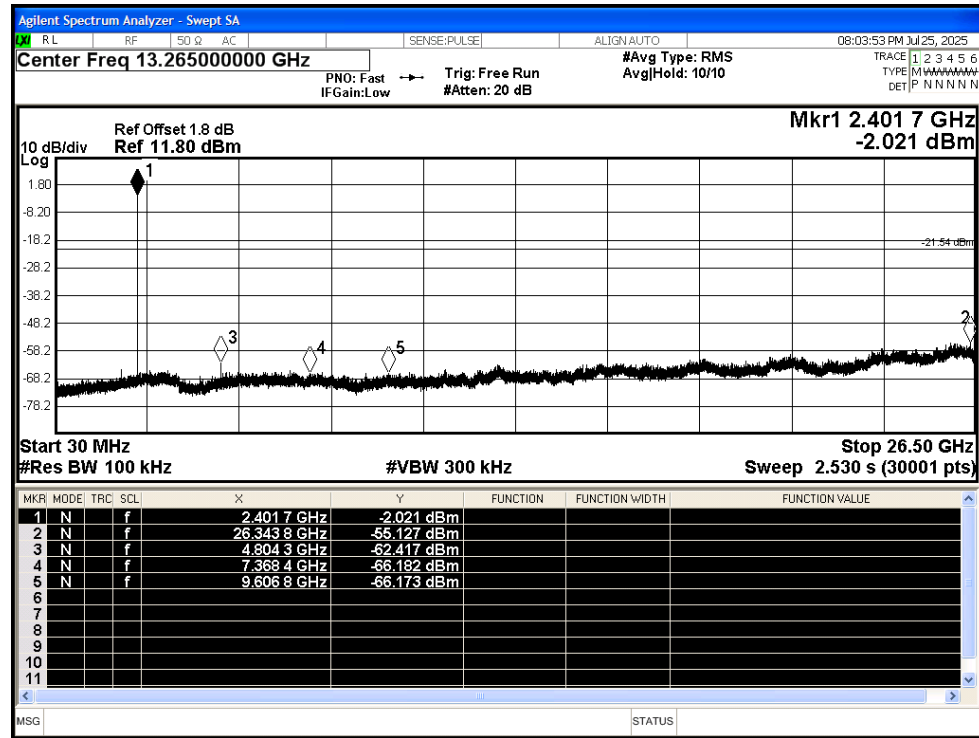
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-53.59	-20	Pass
NVNT	1-DH5	2441	Ant1	-56.94	-20	Pass
NVNT	1-DH5	2480	Ant1	-54.97	-20	Pass
NVNT	2-DH5	2402	Ant1	-47.58	-20	Pass
NVNT	2-DH5	2441	Ant1	-54.66	-20	Pass
NVNT	2-DH5	2480	Ant1	-55.52	-20	Pass
NVNT	3-DH5	2402	Ant1	-51.38	-20	Pass
NVNT	3-DH5	2441	Ant1	-56.49	-20	Pass
NVNT	3-DH5	2480	Ant1	-55.51	-20	Pass

Test Graphs

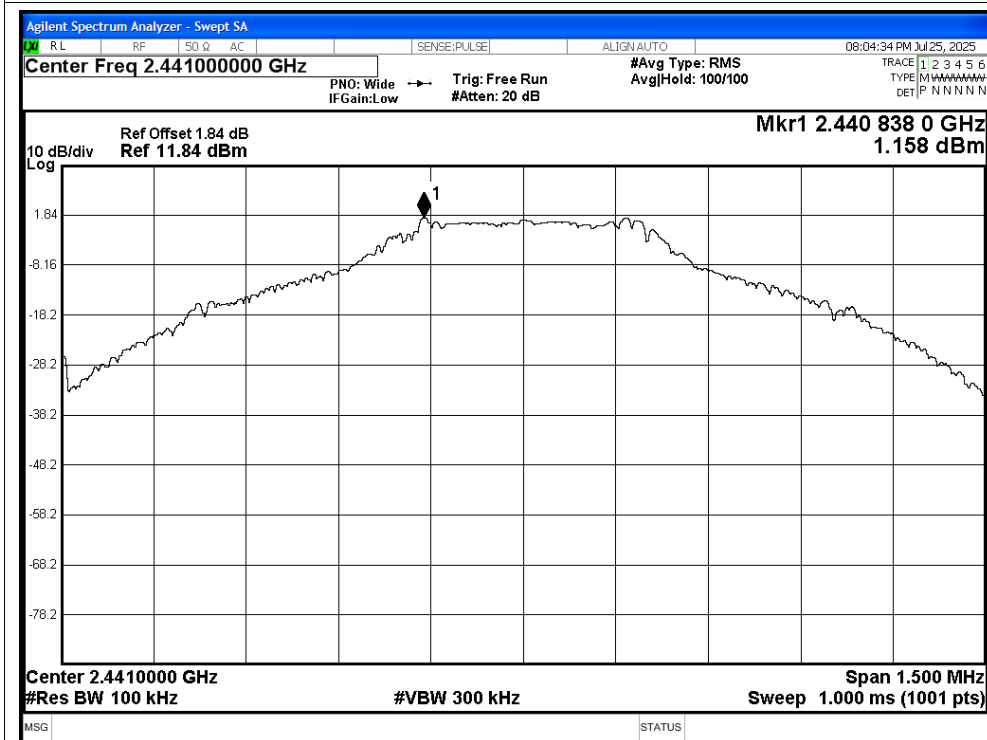
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



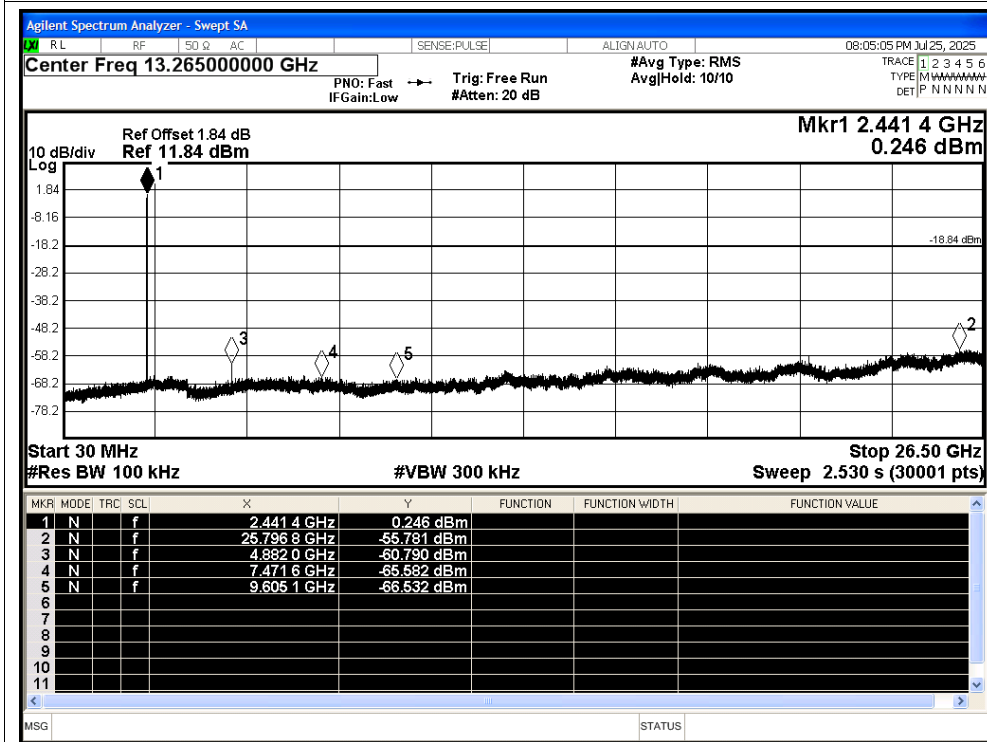
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



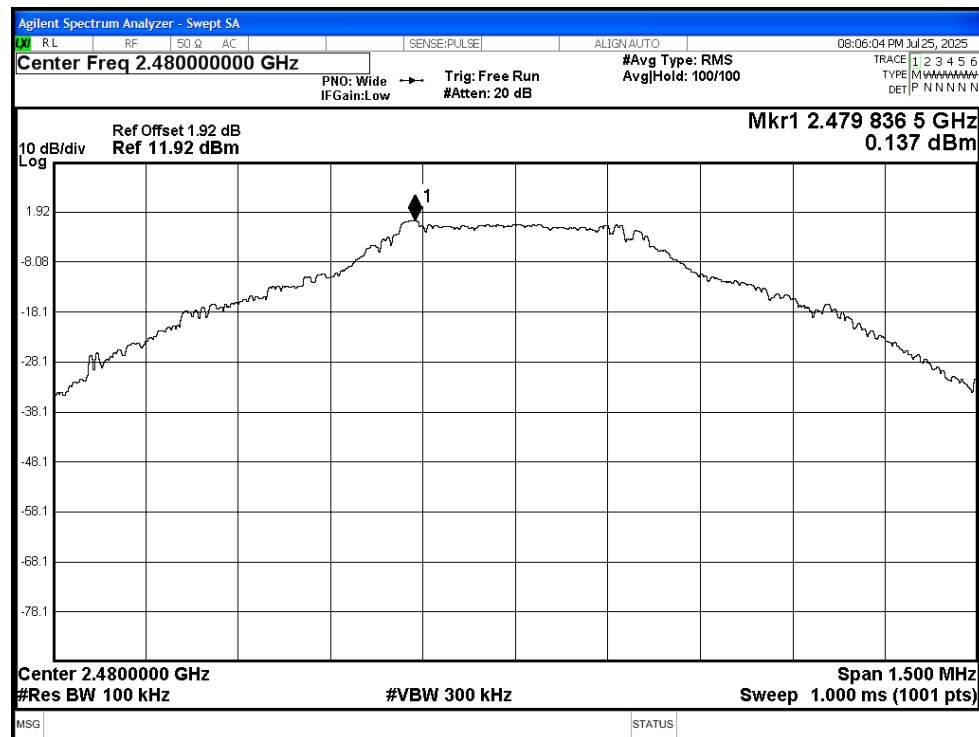
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



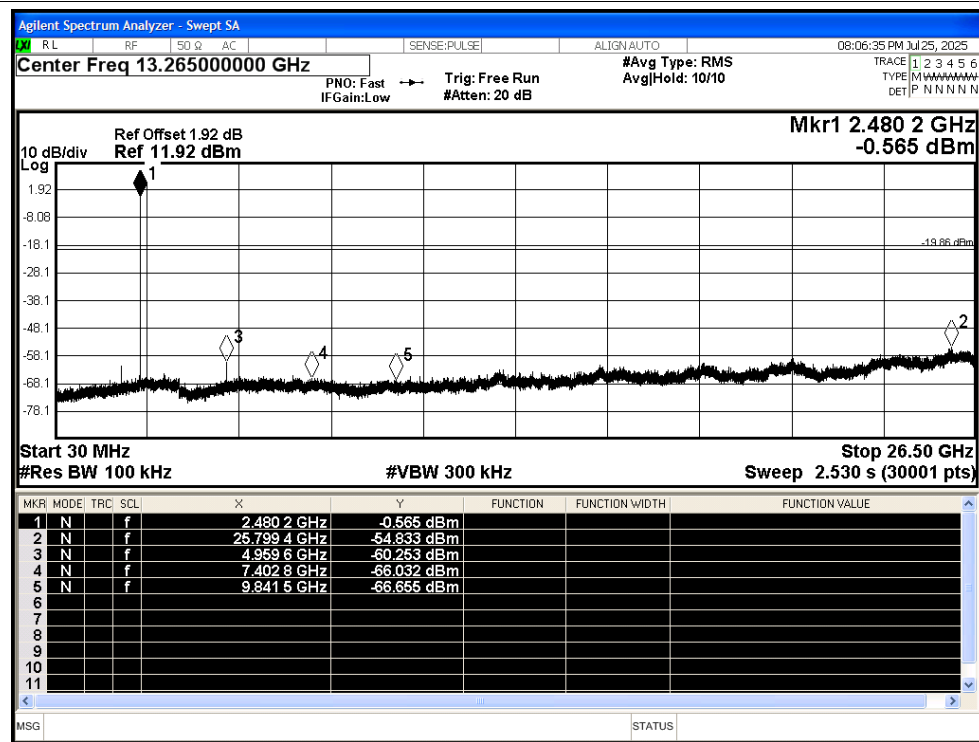
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



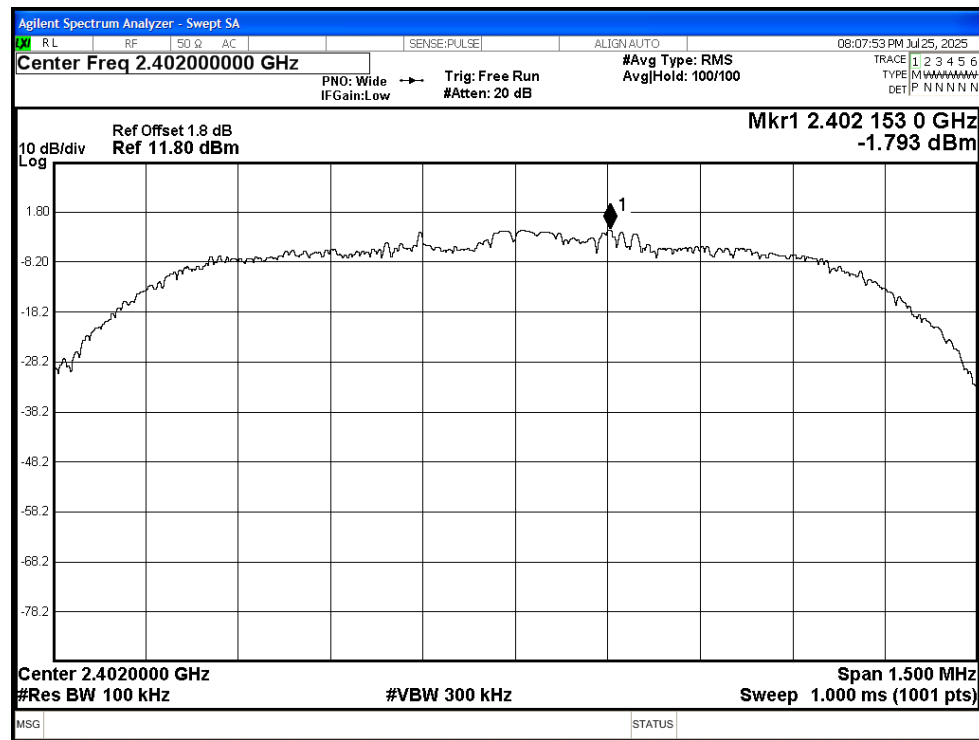
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



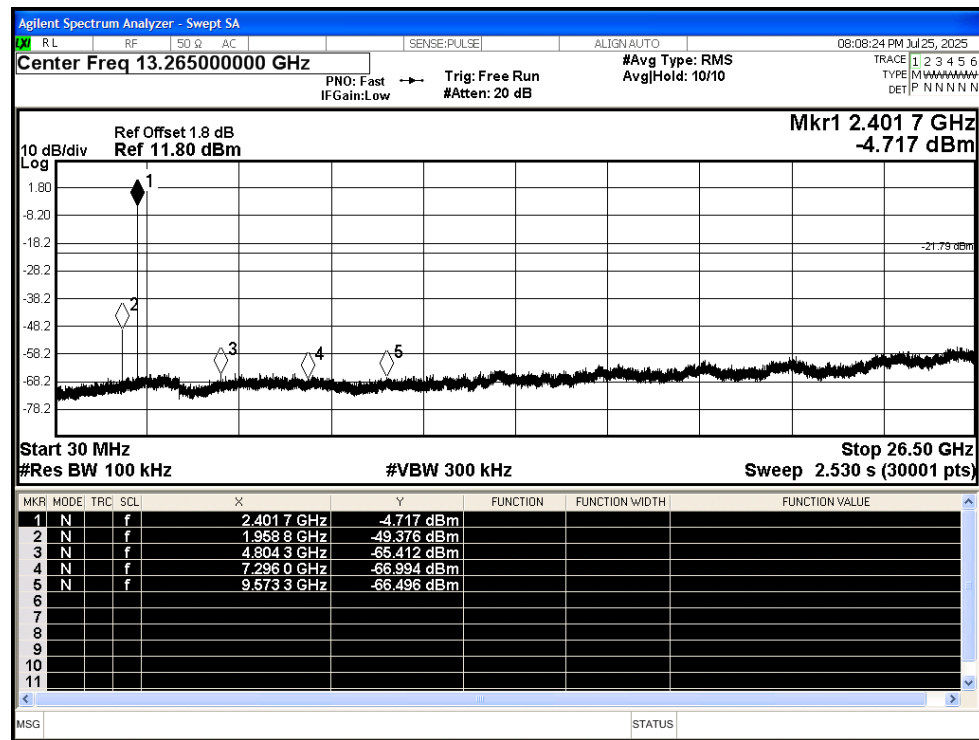
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



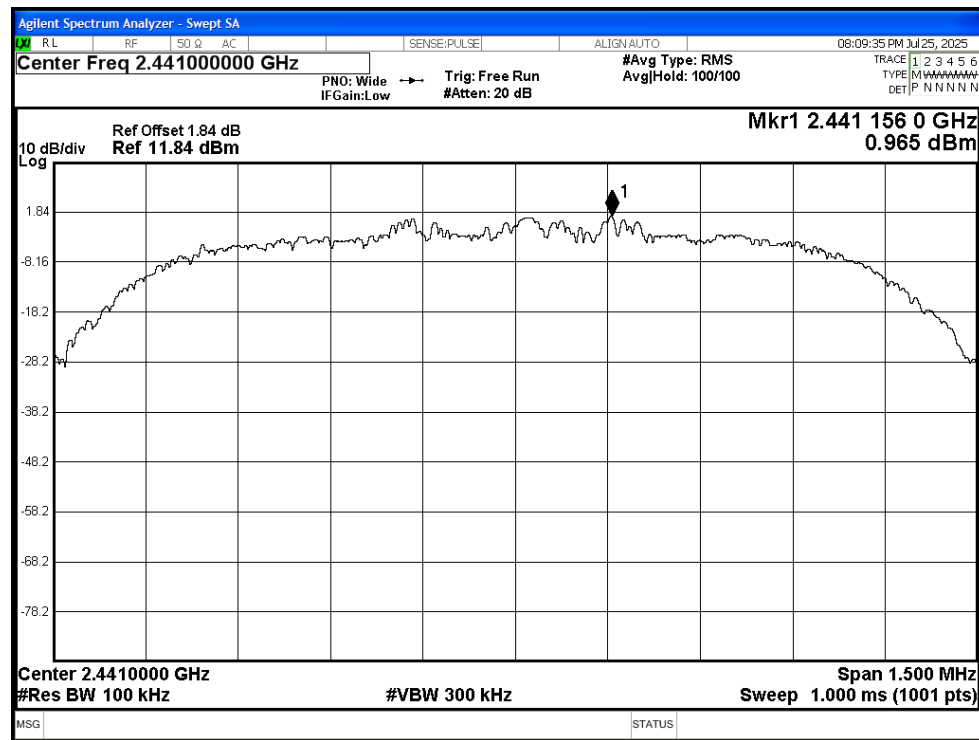
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



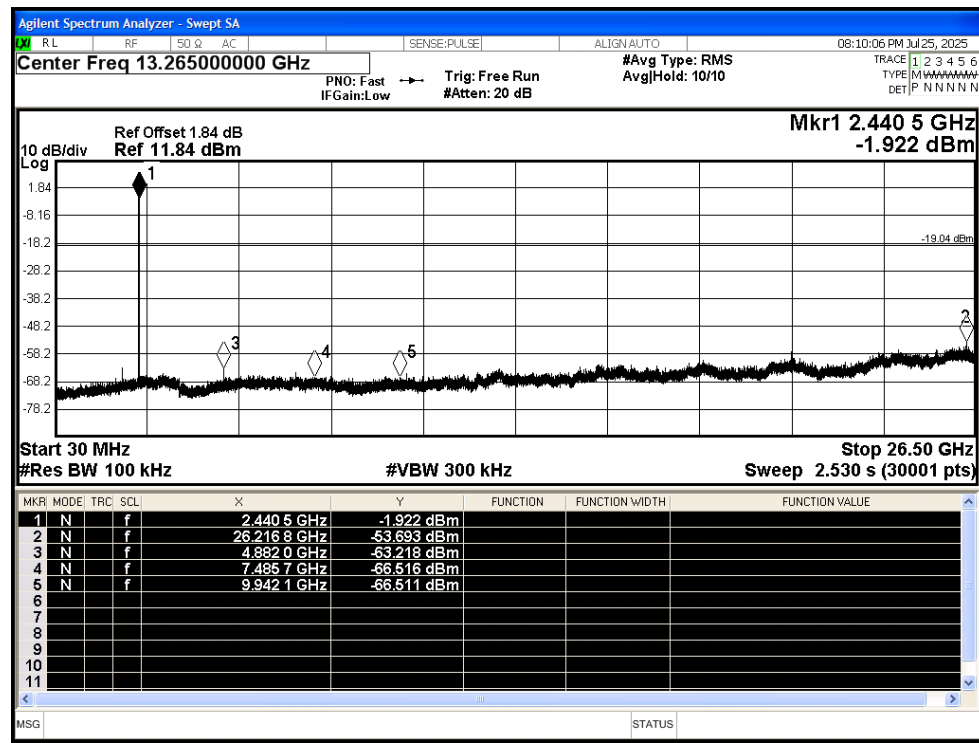
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



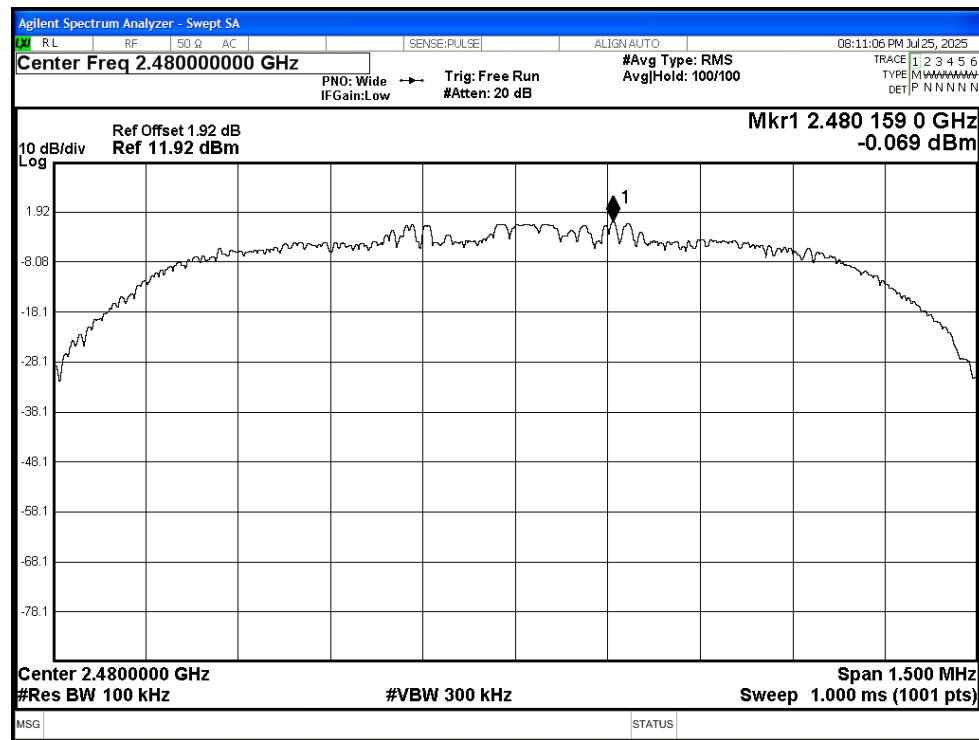
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



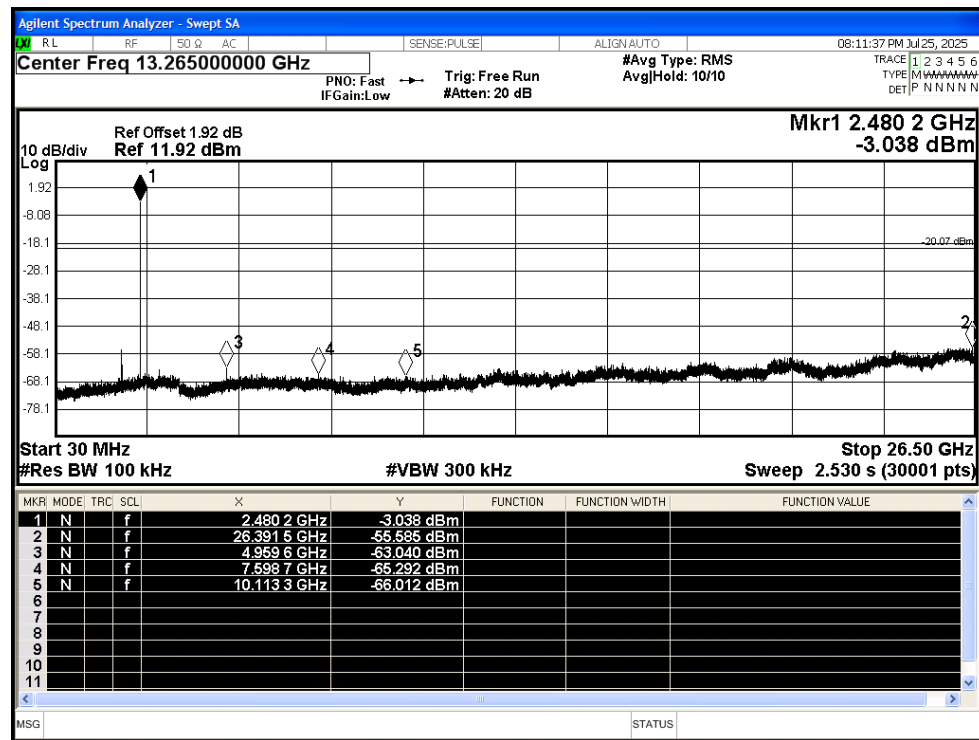
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



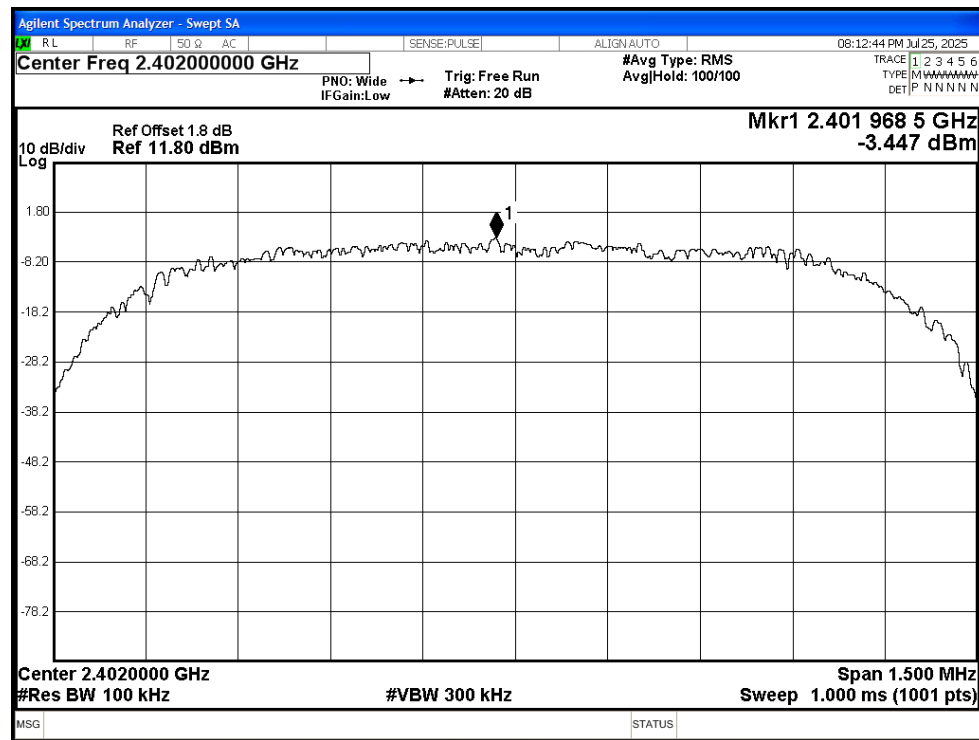
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



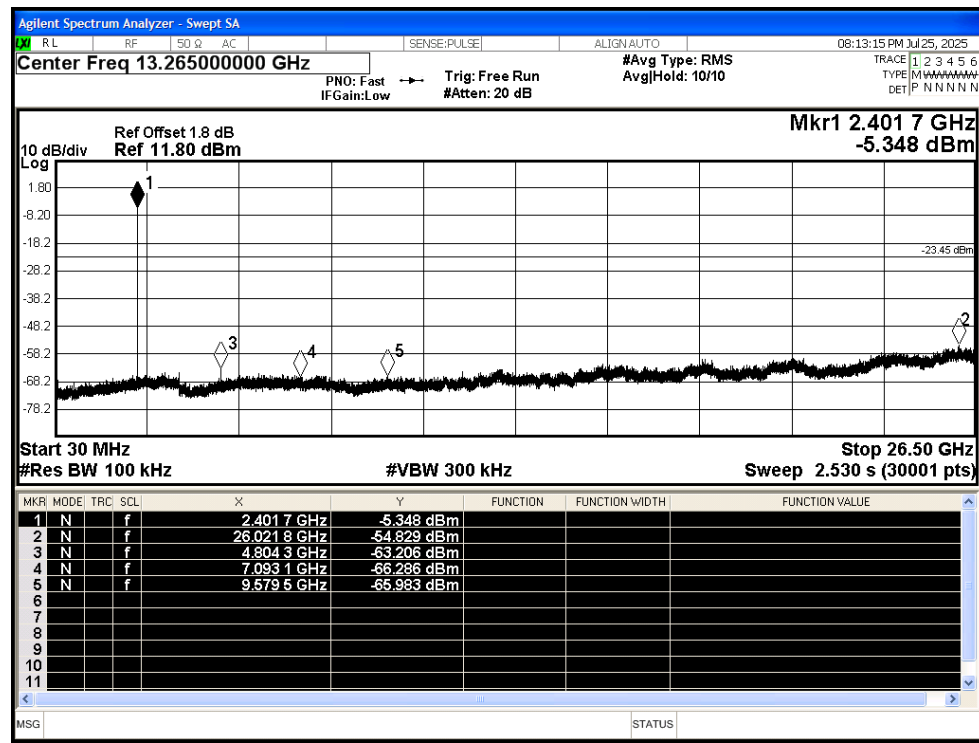
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



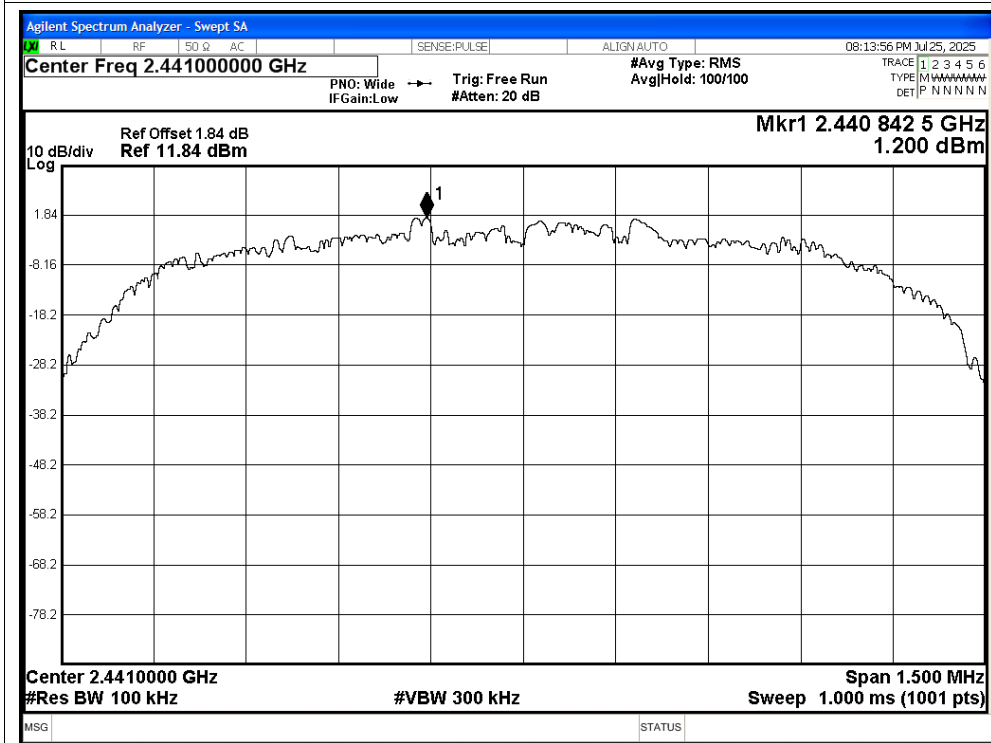
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



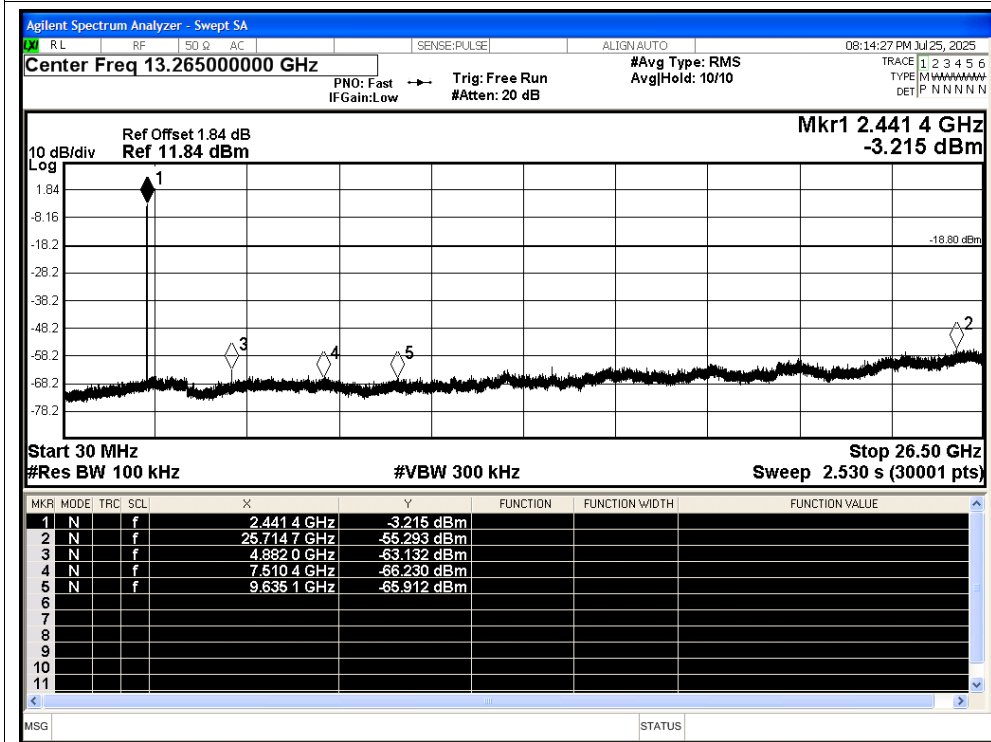
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



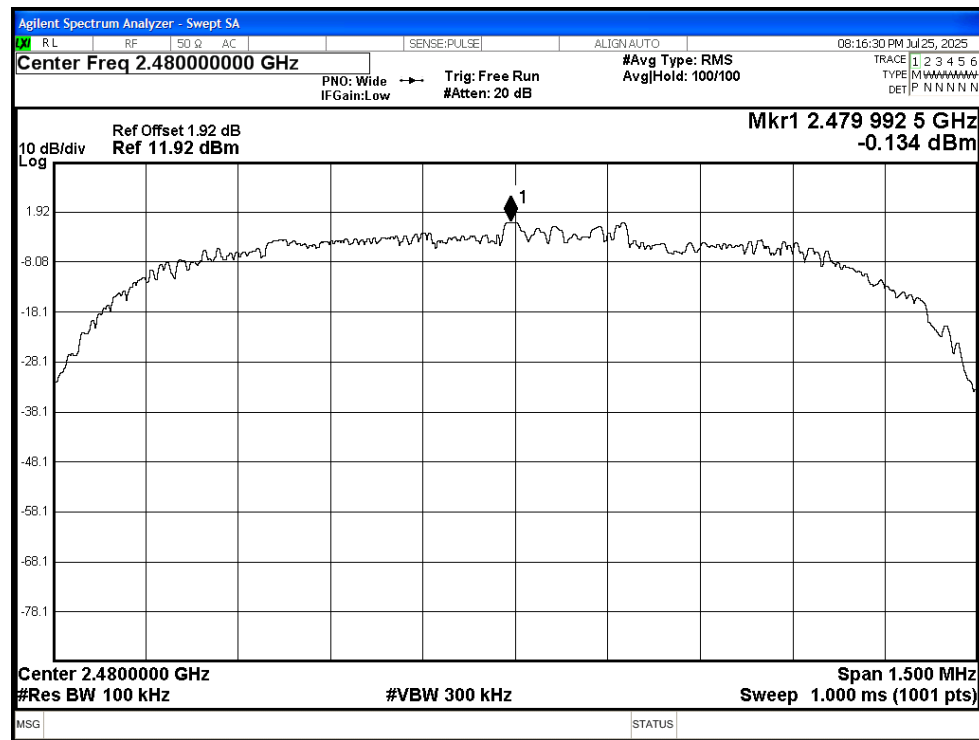
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



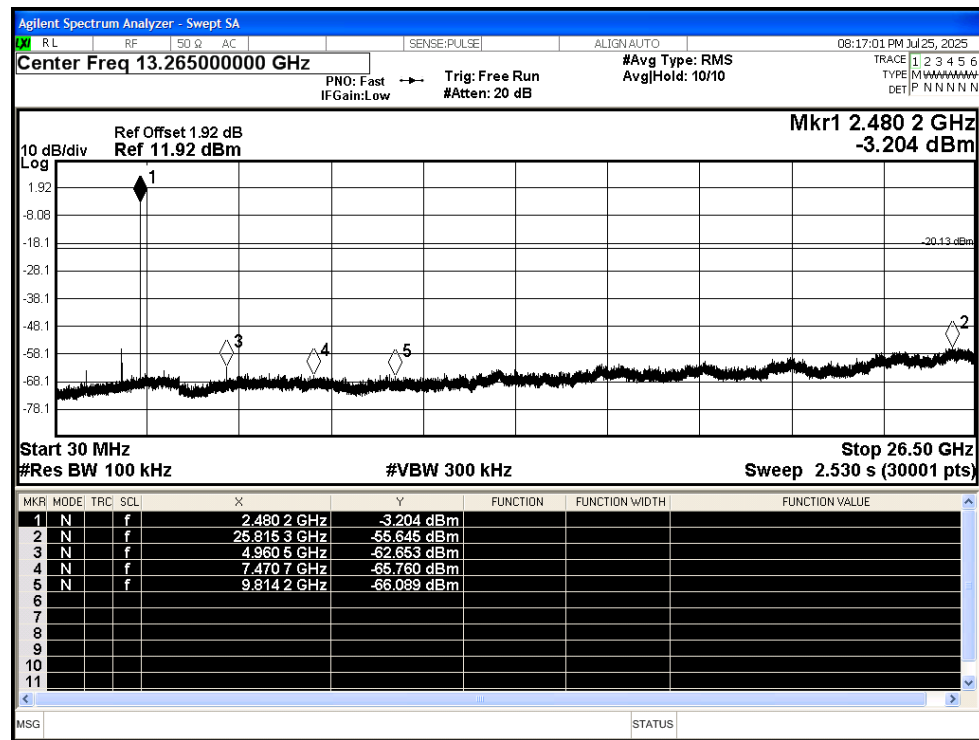
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

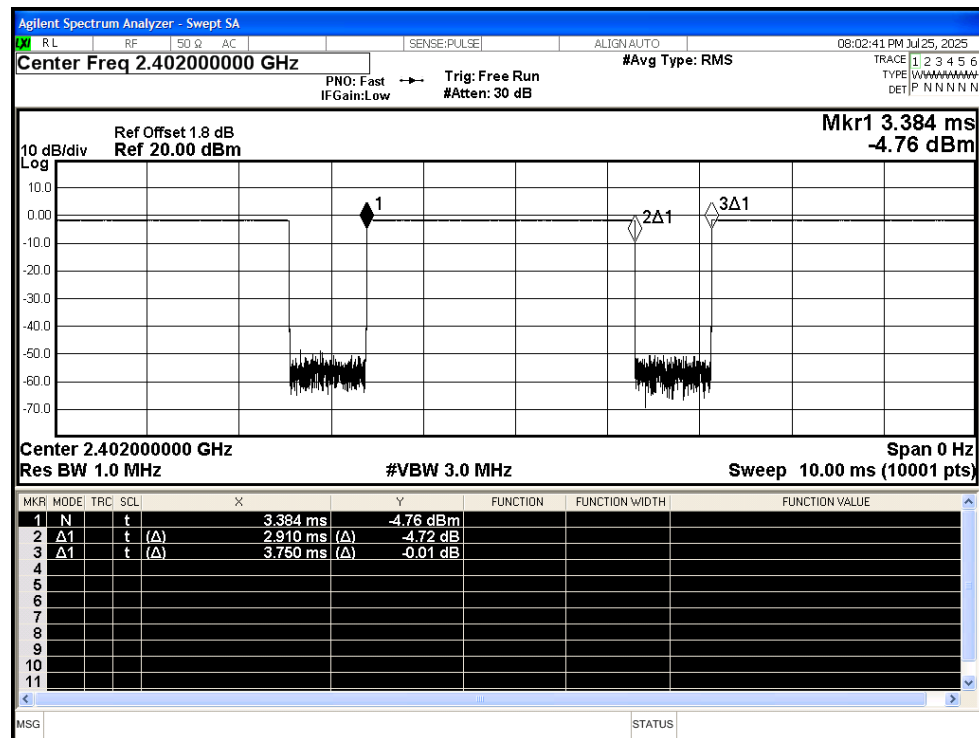


A.8 Duty Cycle

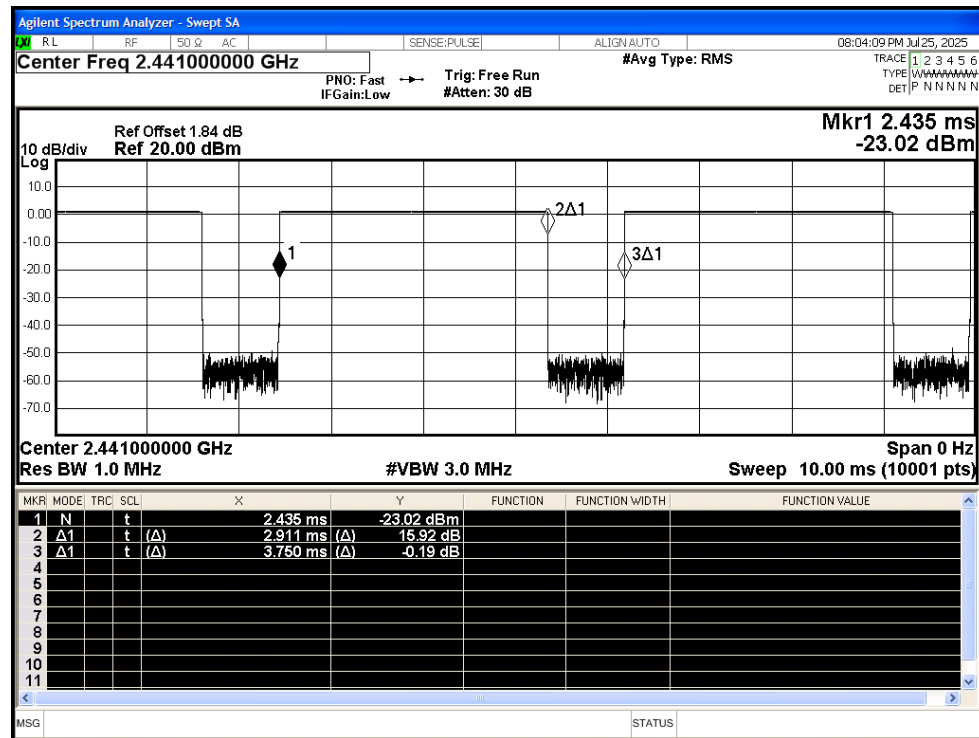
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	77.6	1.1	0.34
NVNT	1-DH5	2441	Ant1	77.63	1.1	0.34
NVNT	1-DH5	2480	Ant1	77.6	1.1	0.34
NVNT	2-DH5	2402	Ant1	41.87	3.78	0.66
NVNT	2-DH5	2441	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2480	Ant1	77.28	1.12	0.35
NVNT	3-DH5	2402	Ant1	67.79	1.69	0.39
NVNT	3-DH5	2441	Ant1	77.28	1.12	0.35
NVNT	3-DH5	2480	Ant1	67.84	1.69	0.39

Test Graphs

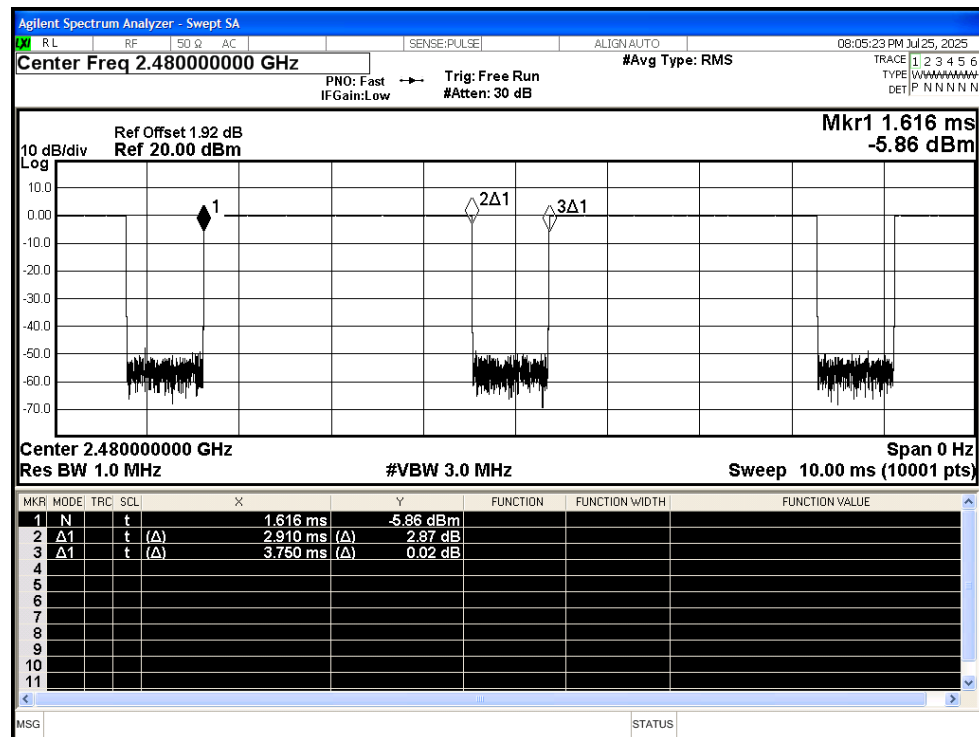
Duty Cycle NVNT 1-DH5 2402MHz Ant1



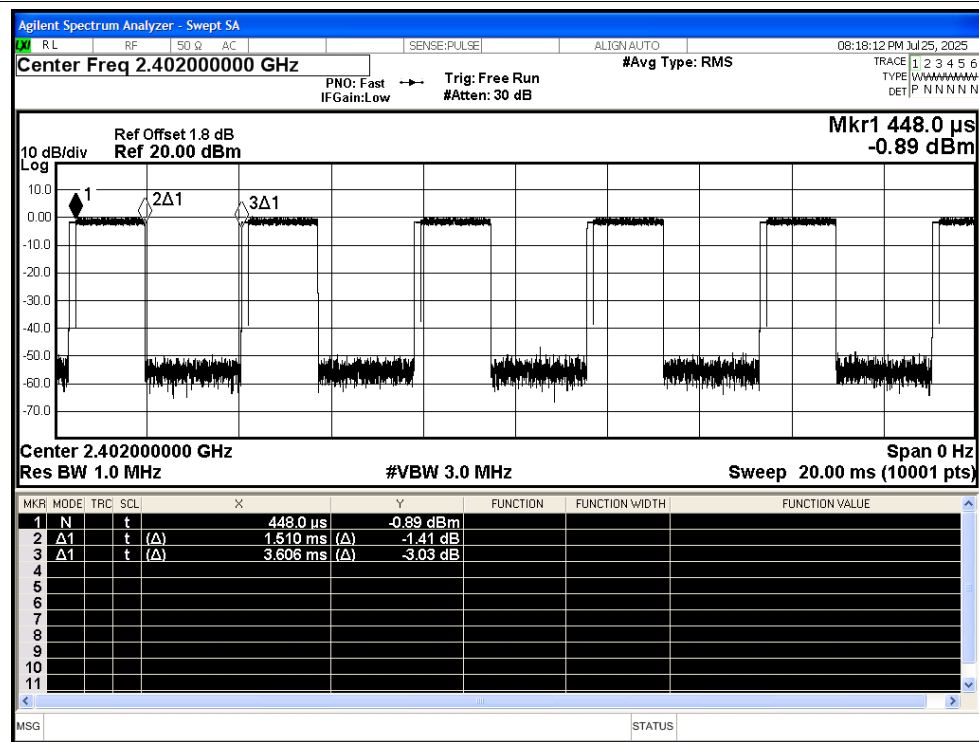
Duty Cycle NVNT 1-DH5 2441MHz Ant1



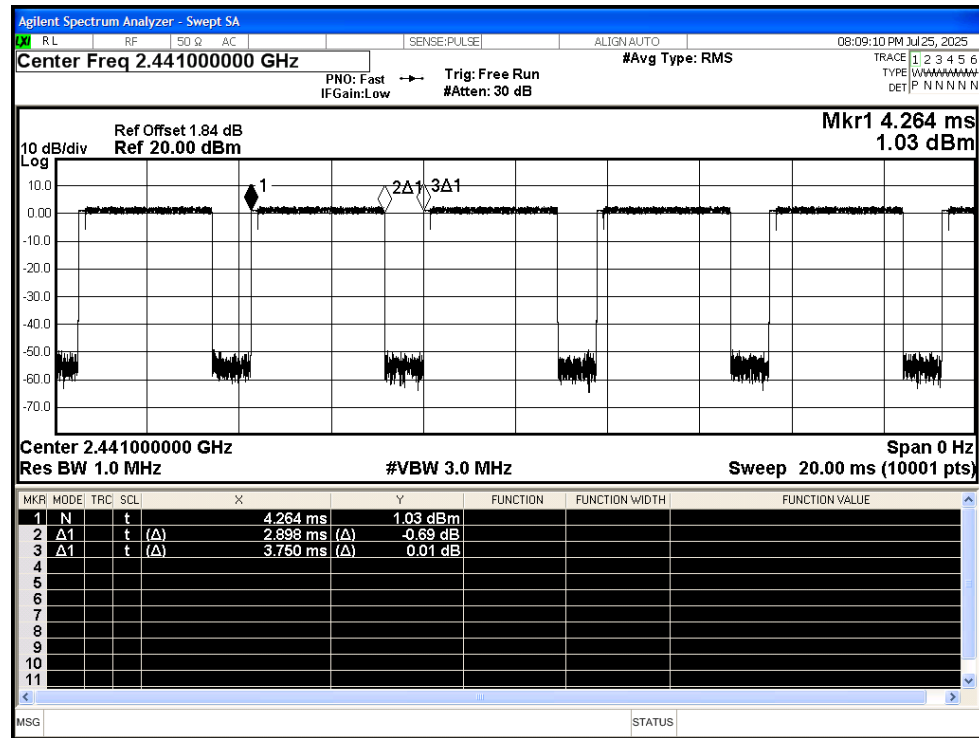
Duty Cycle NVNT 1-DH5 2480MHz Ant1



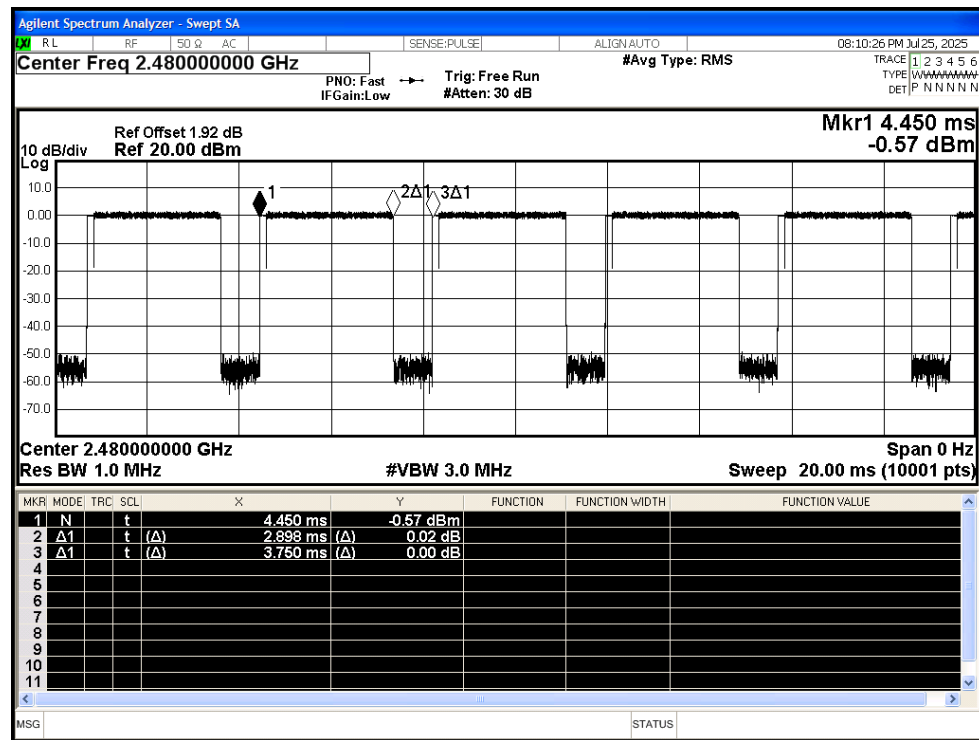
Duty Cycle NVNT 2-DH5 2402MHz Ant1



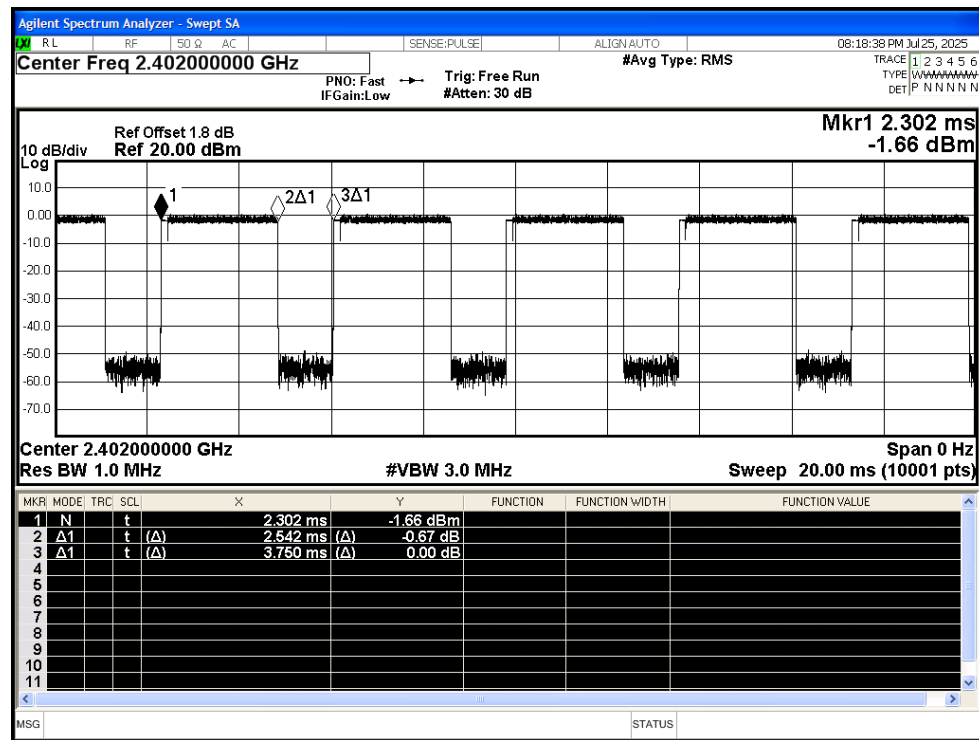
Duty Cycle NVNT 2-DH5 2441MHz Ant1



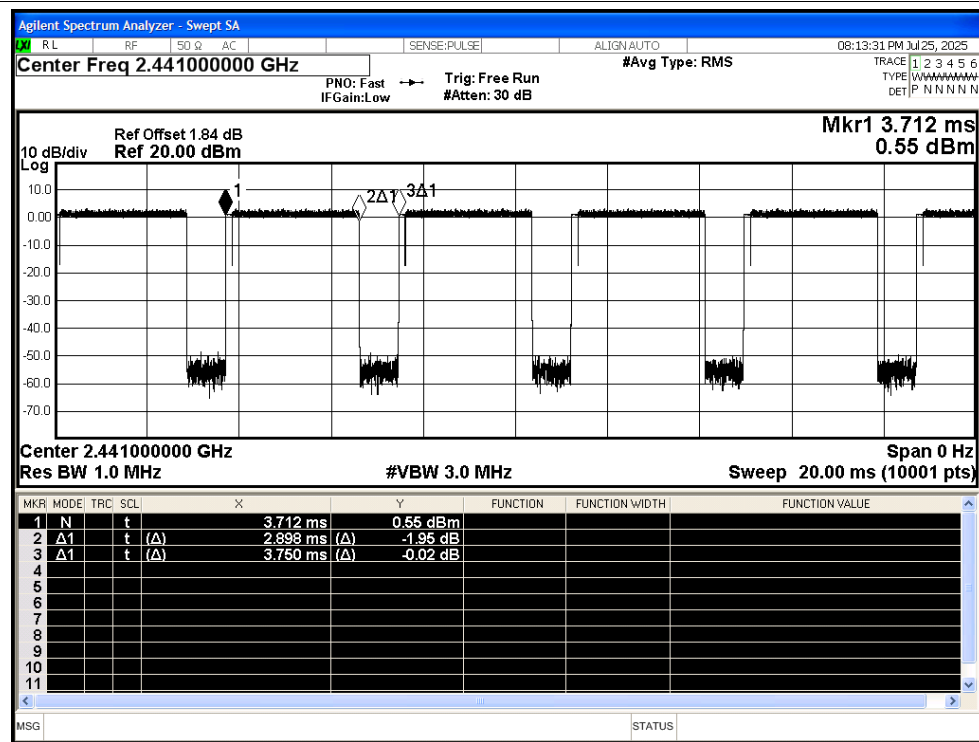
Duty Cycle NVNT 2-DH5 2480MHz Ant1

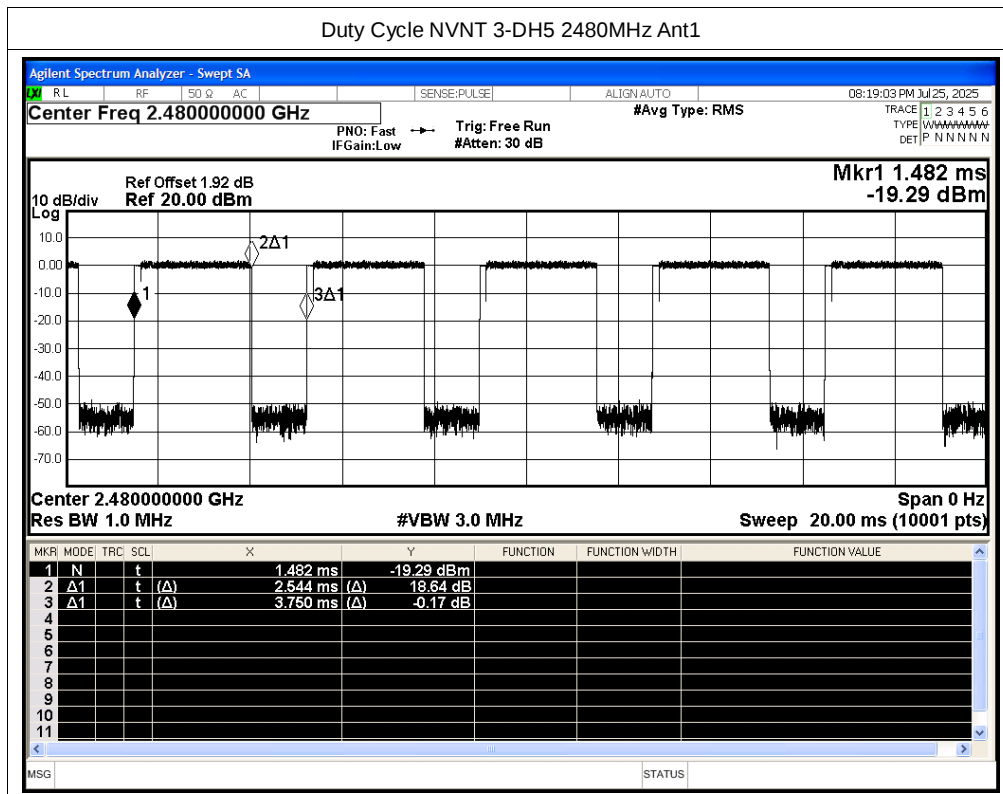


Duty Cycle NVNT 3-DH5 2402MHz Ant1



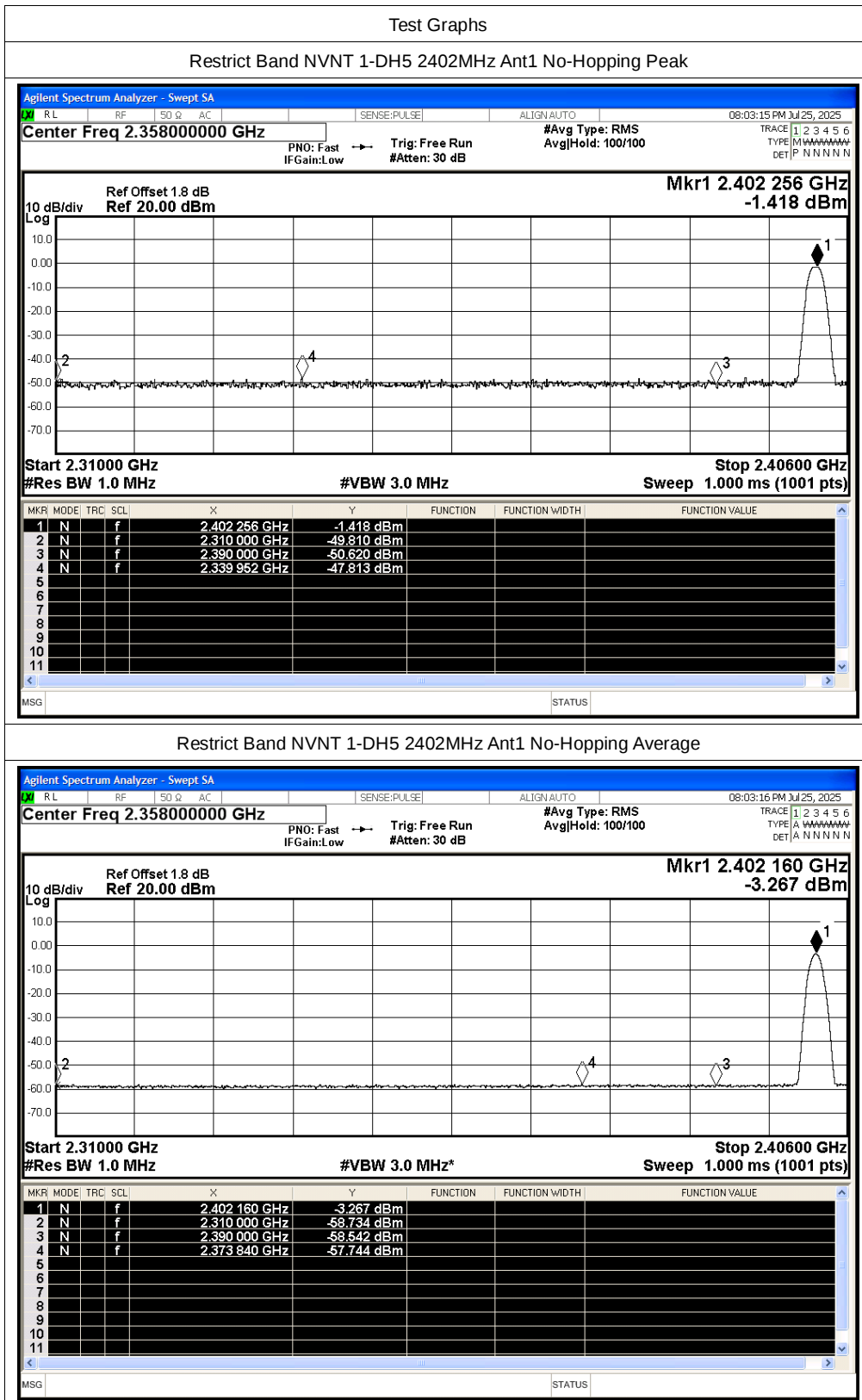
Duty Cycle NVNT 3-DH5 2441MHz Ant1



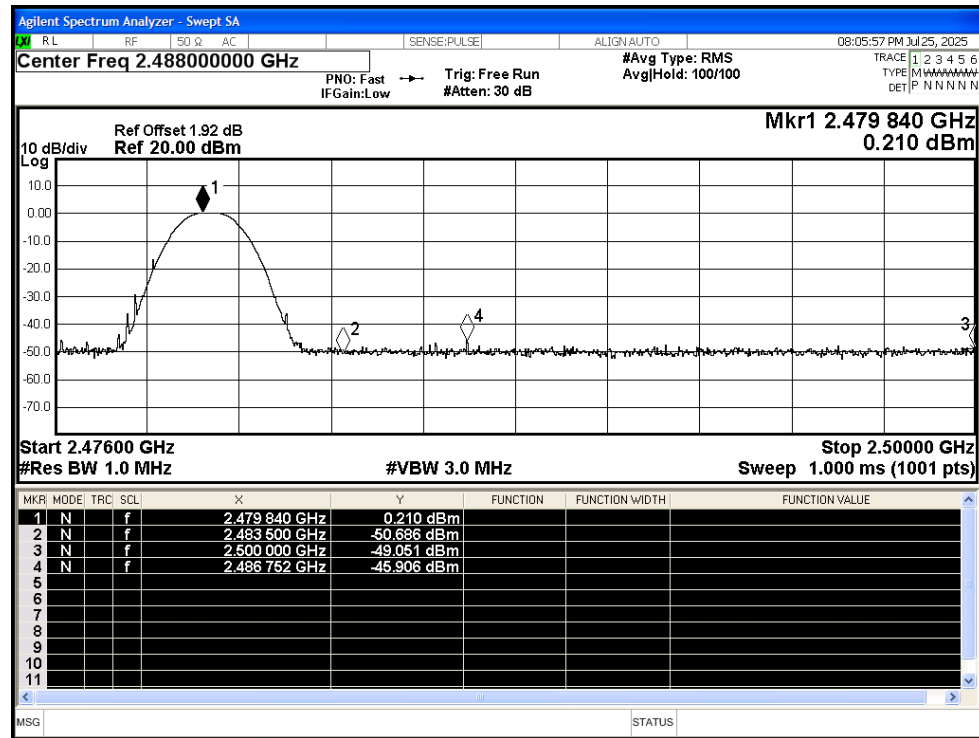


A.9 Restrict Band

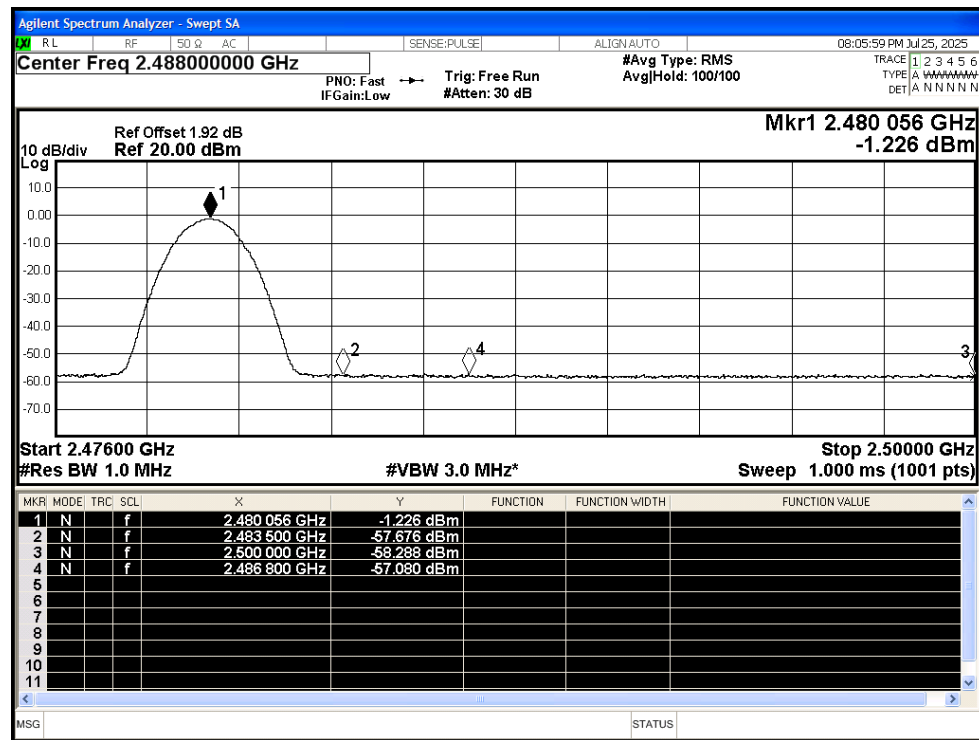
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-49.81	2	-	47.45	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.73	2	1.1	39.63	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2339.952	-47.81	2	-	49.45	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2373.84	-57.74	2	1.1	40.62	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-50.62	2	-	46.64	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.54	2	1.1	39.82	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.69	2	-	46.57	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-57.68	2	1.1	40.68	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2486.752	-45.91	2	-	51.35	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2486.8	-57.08	2	1.1	41.28	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-49.05	2	-	48.21	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-58.29	2	1.1	40.07	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-49.99	2	-	47.27	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-58.79	2	0.12	38.59	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2354.256	-46.58	2	-	50.68	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2371.536	-57.79	2	0.12	39.59	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-50.69	2	-	46.57	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-58.99	2	0.12	38.39	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-45.13	2	-	52.13	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-56.74	2	1.12	41.64	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.728	-44.23	2	-	53.03	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.536	-56.41	2	1.12	41.97	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-50.7	2	-	46.56	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-58.16	2	1.12	40.22	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-51.43	2	-	45.83	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-58.91	2	0.12	38.47	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2368.848	-48.27	2	-	48.99	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2343.504	-57.98	2	0.12	39.4	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-51.51	2	-	45.75	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-58.97	2	0.12	38.41	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-46.84	2	-	50.42	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-56.4	2	0.12	40.98	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.896	-44.47	2	-	52.79	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.512	-56.4	2	0.12	40.98	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-49.73	2	-	47.53	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-58.27	2	0.12	39.11	Average	54	Pass



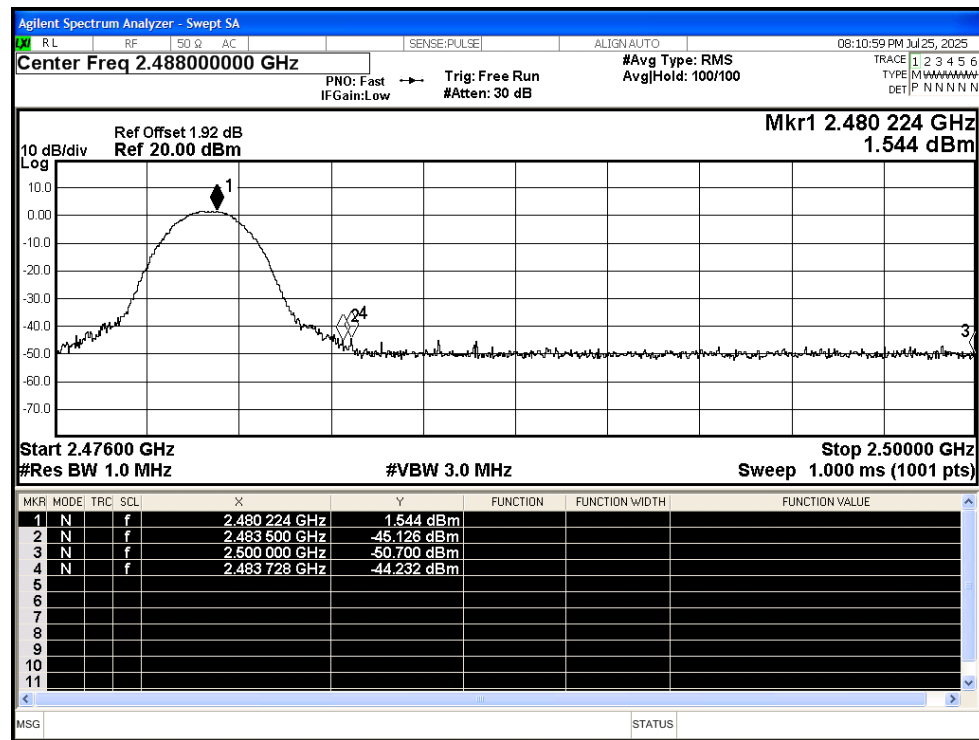
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



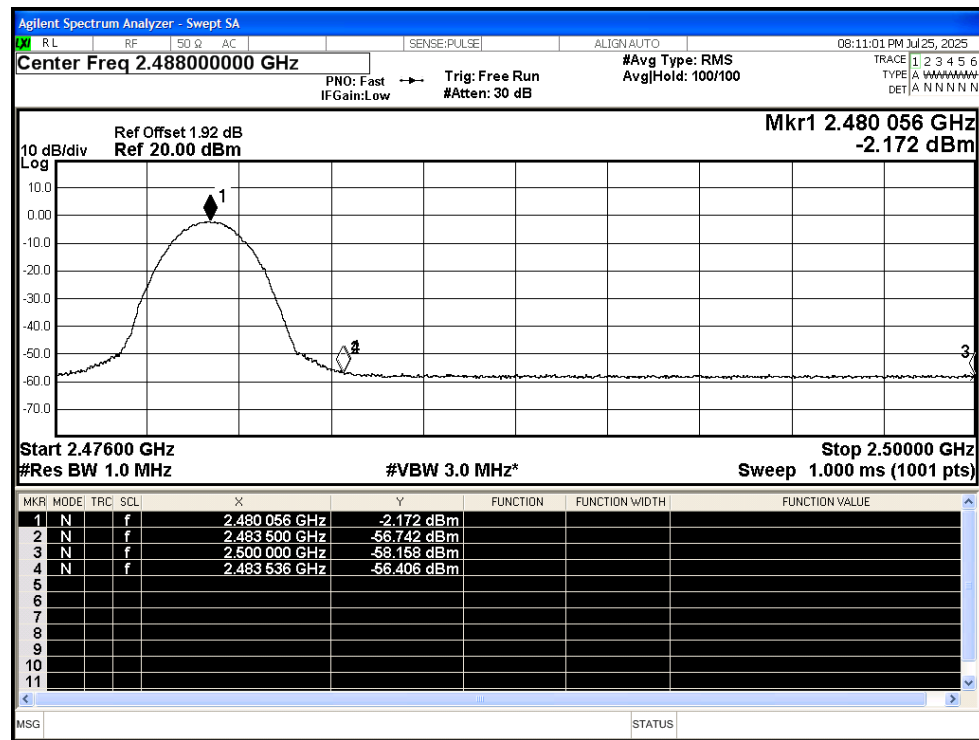
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



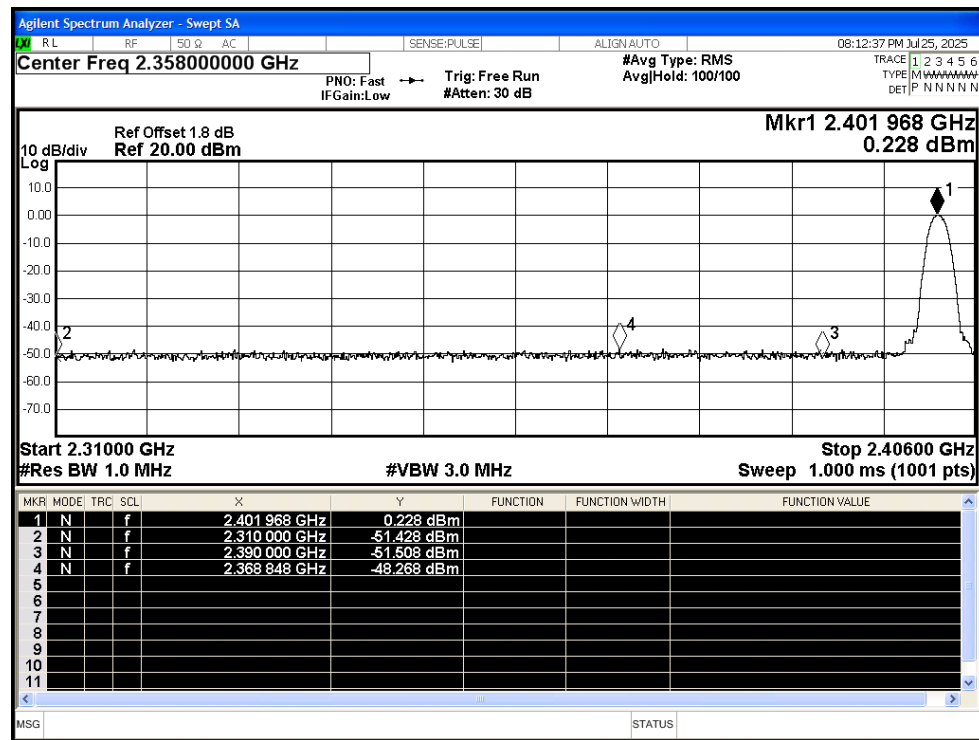
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



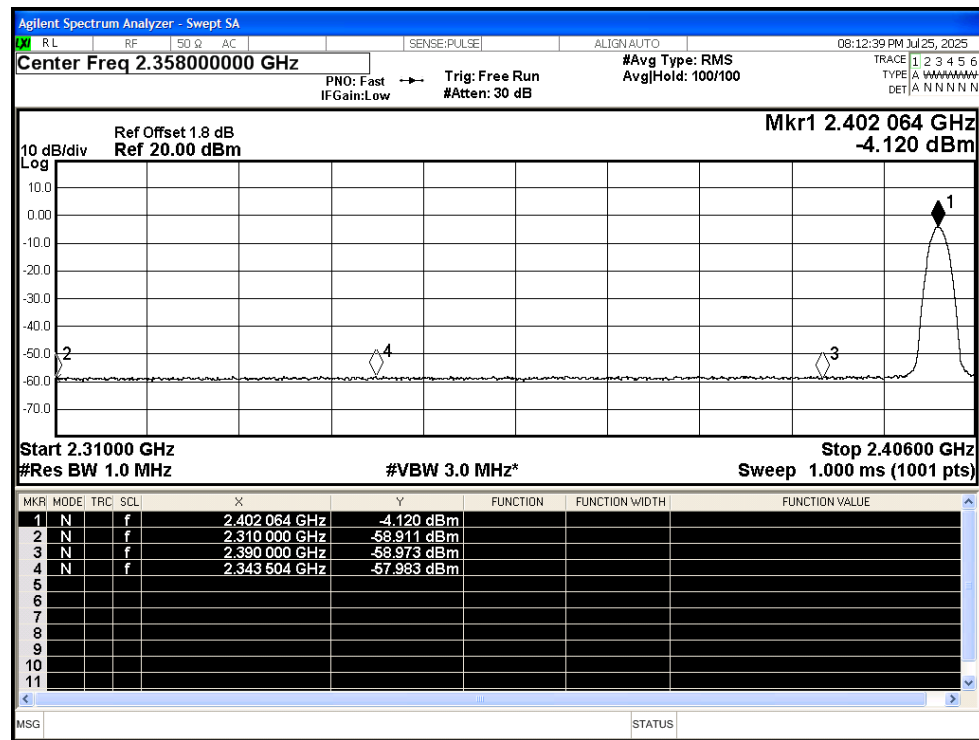
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average



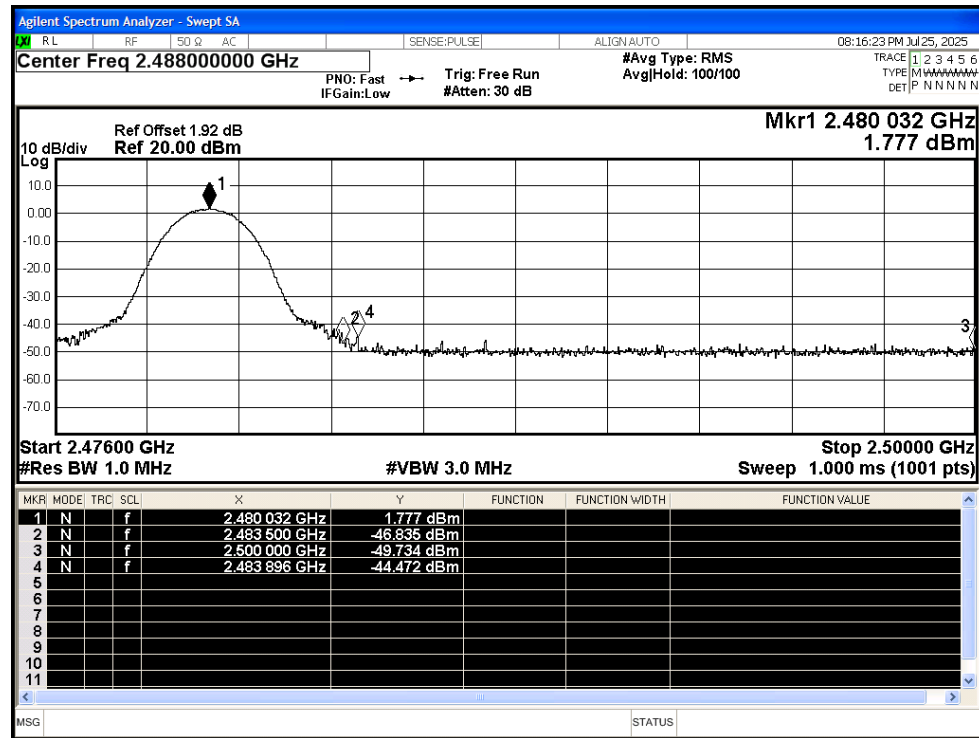
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak



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

