

Appendix A

RF Test Data for BT(Conducted Measurement)

Product Name: Translator

Test Model: T16

Environmental Conditions

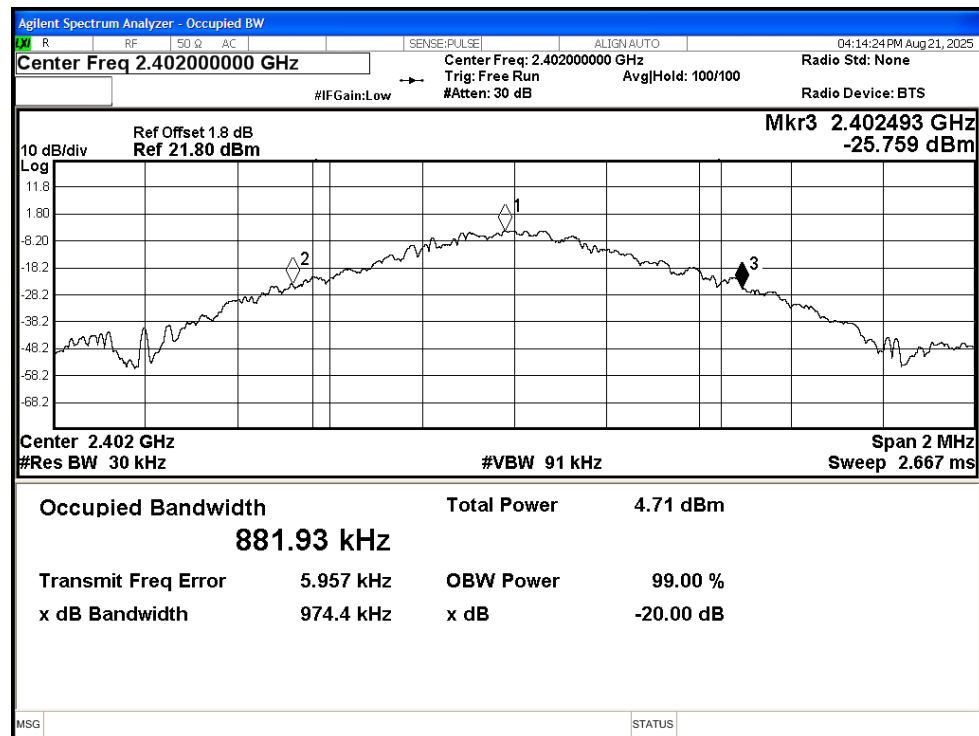
Temperature:	23.8°C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Jone.Lee
Supervised by:	Yan Chen

A.1 -20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.974	N/A	Pass
NVNT	1-DH5	2441	Ant1	1.024	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.961	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.316	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.284	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.318	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.299	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.297	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.295	N/A	Pass

Test Graphs

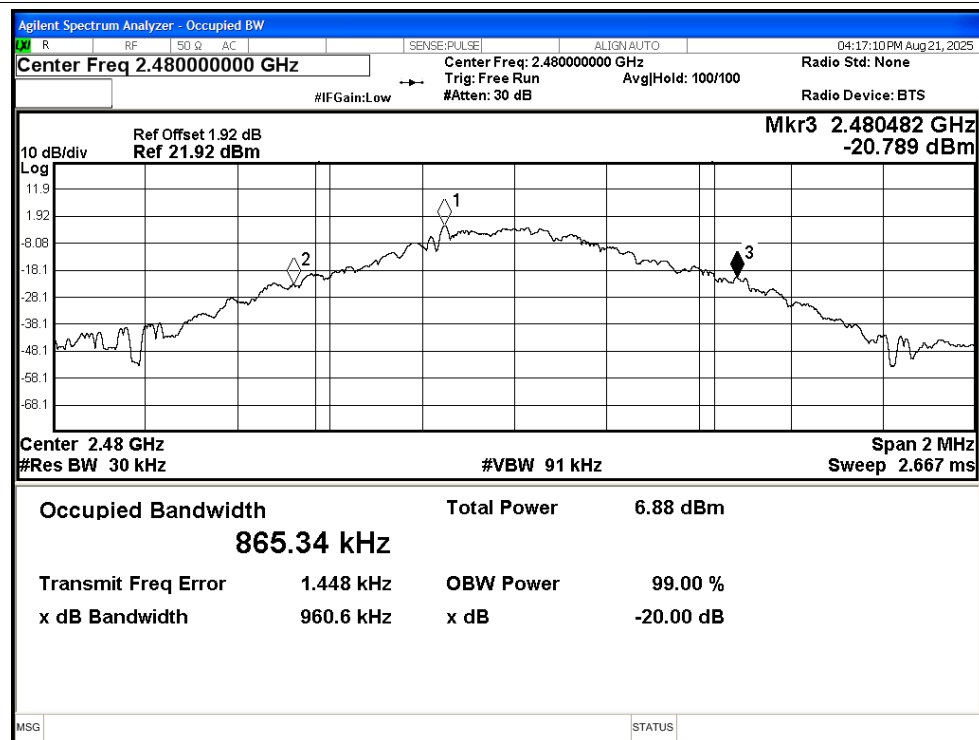
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



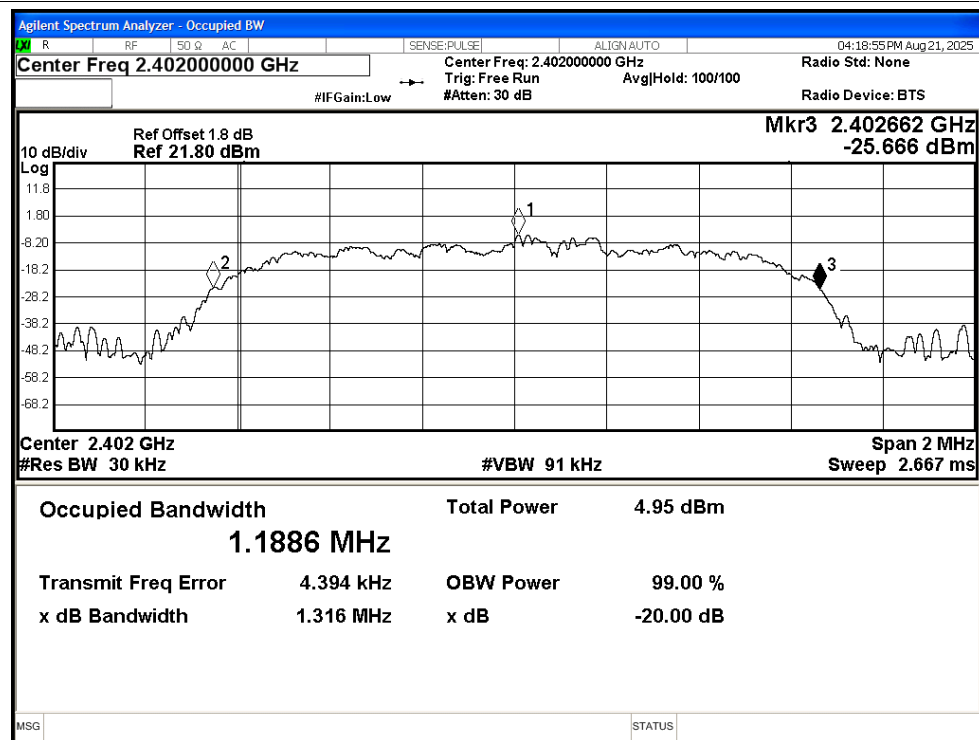
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



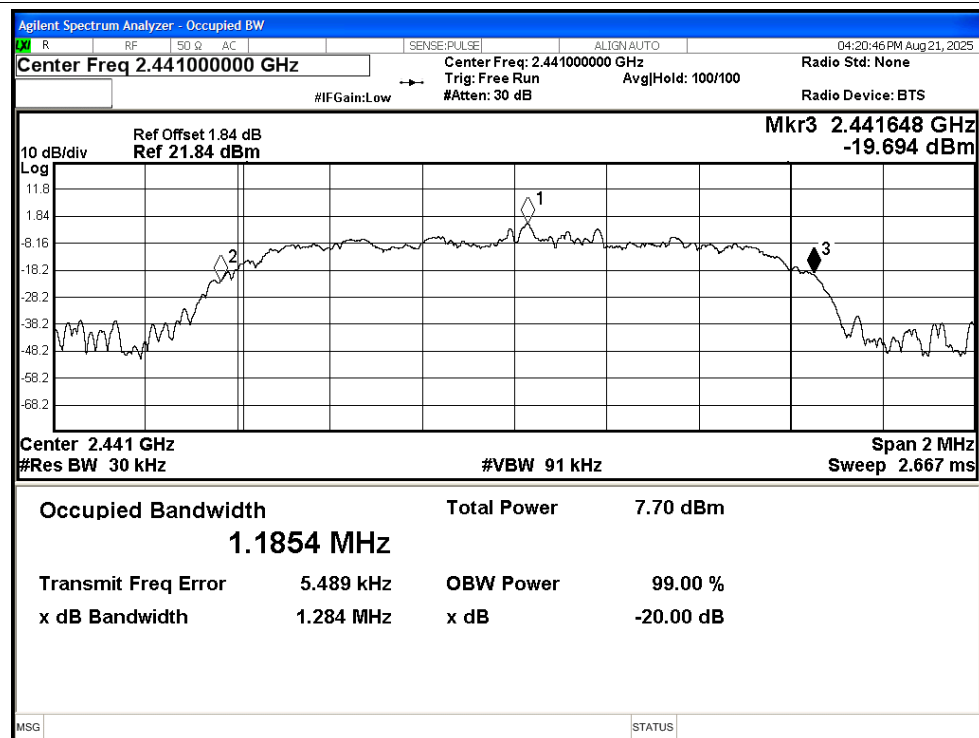
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



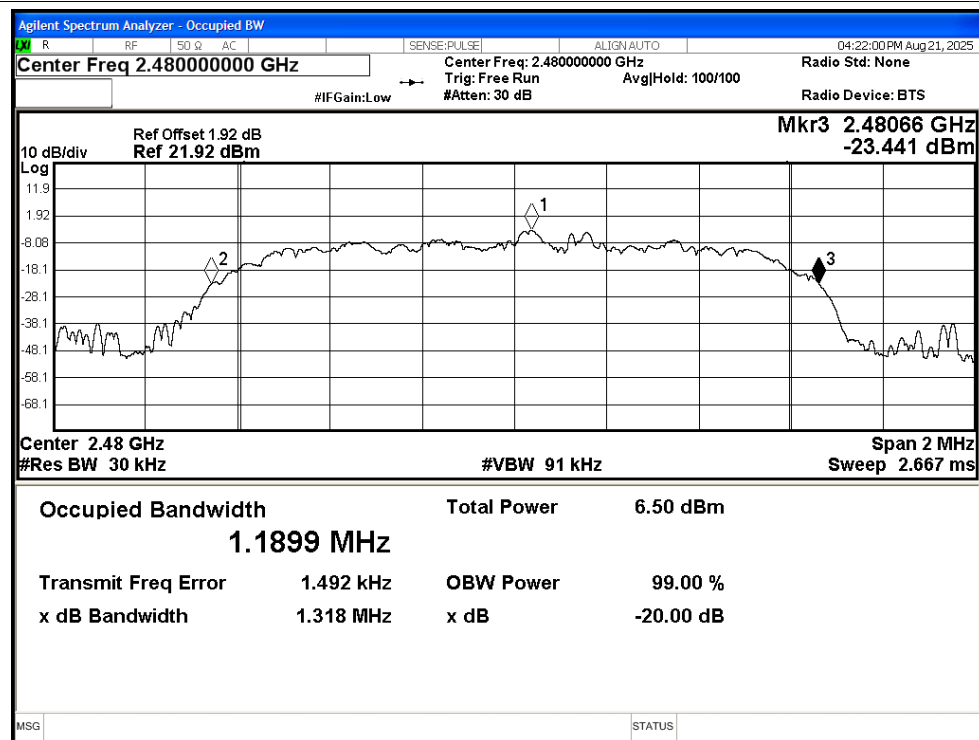
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



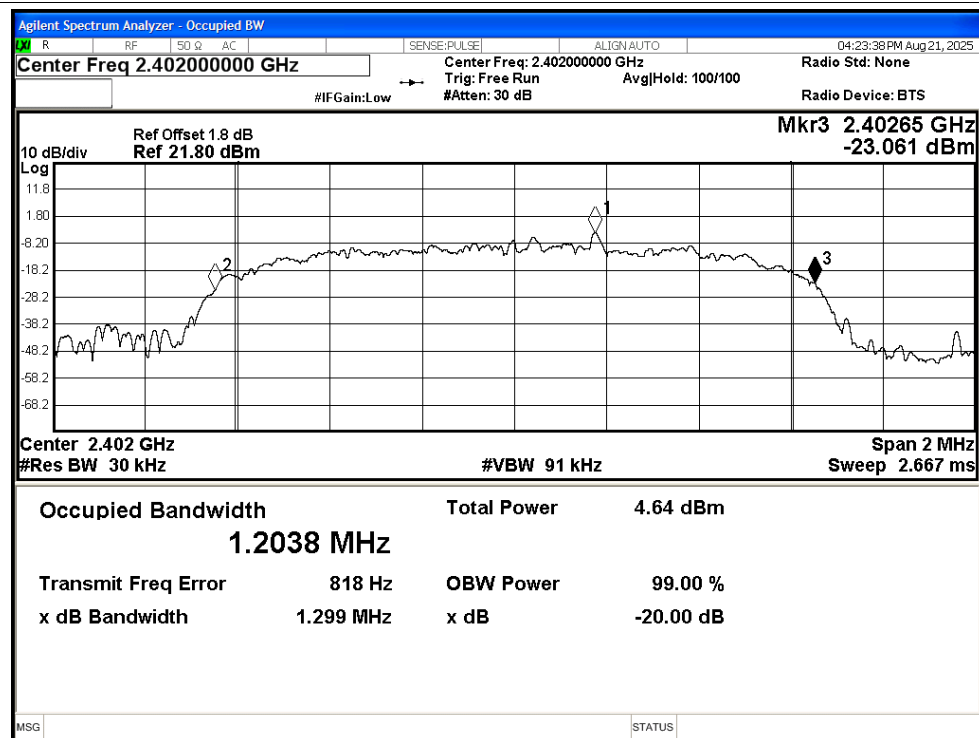
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



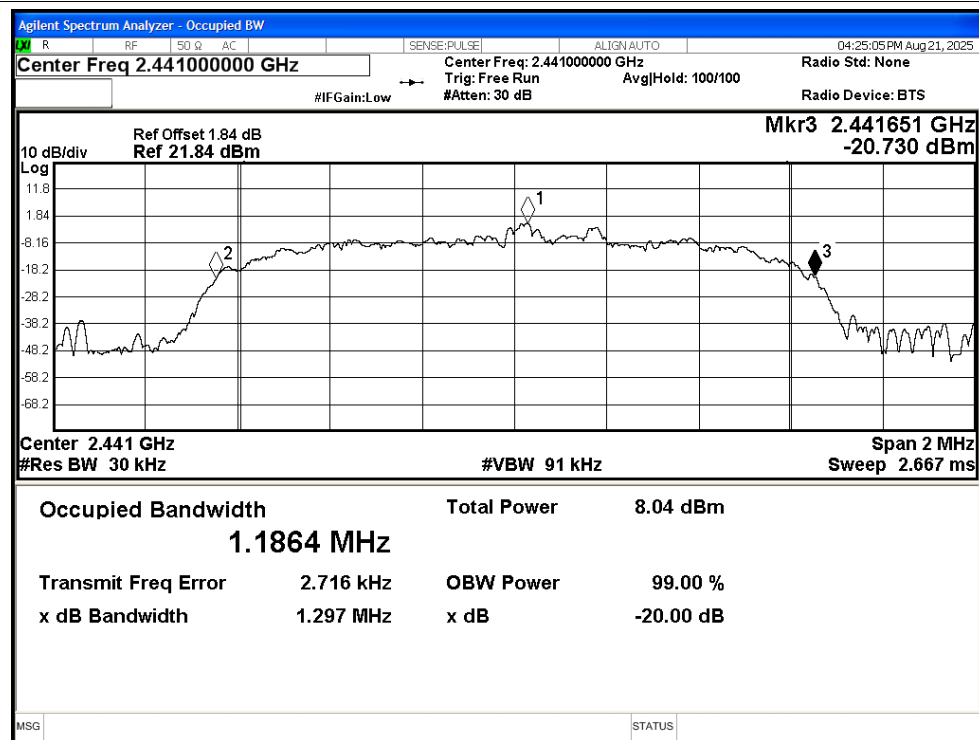
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

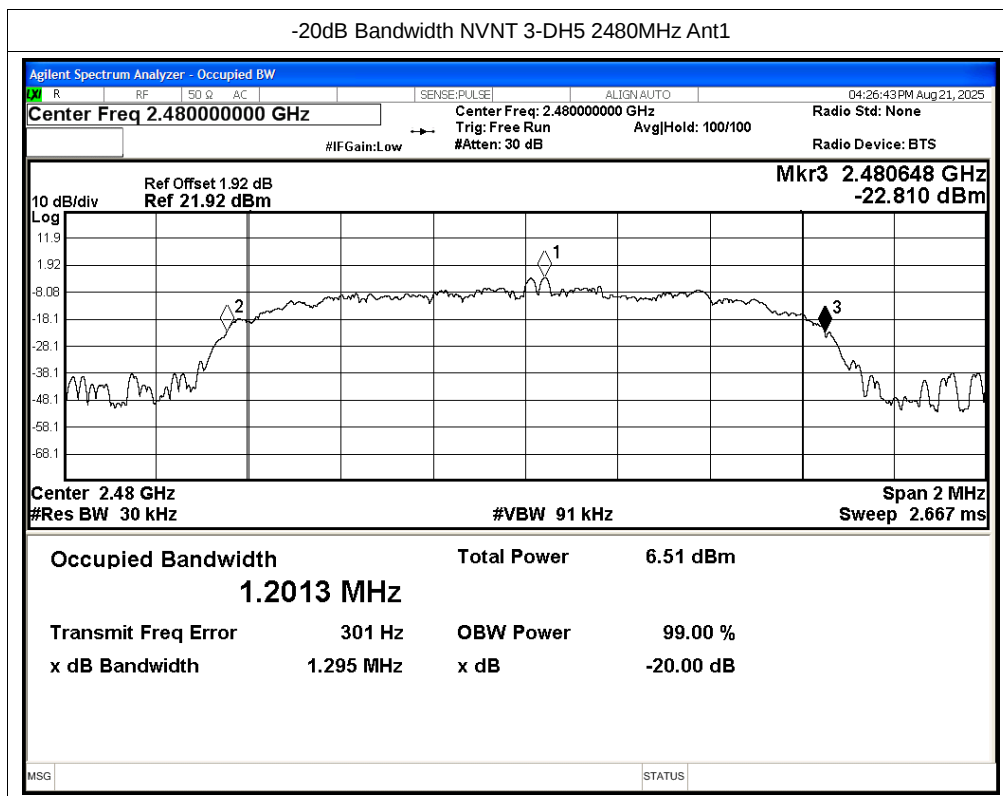


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



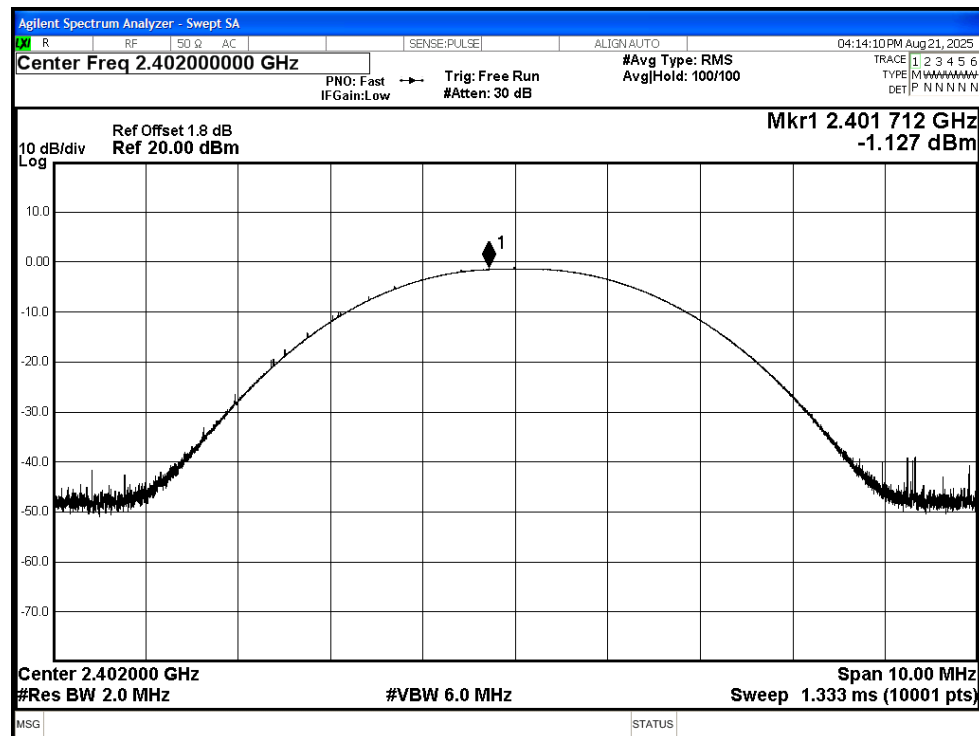


A.2 Maximum Peak Conducted Output Power

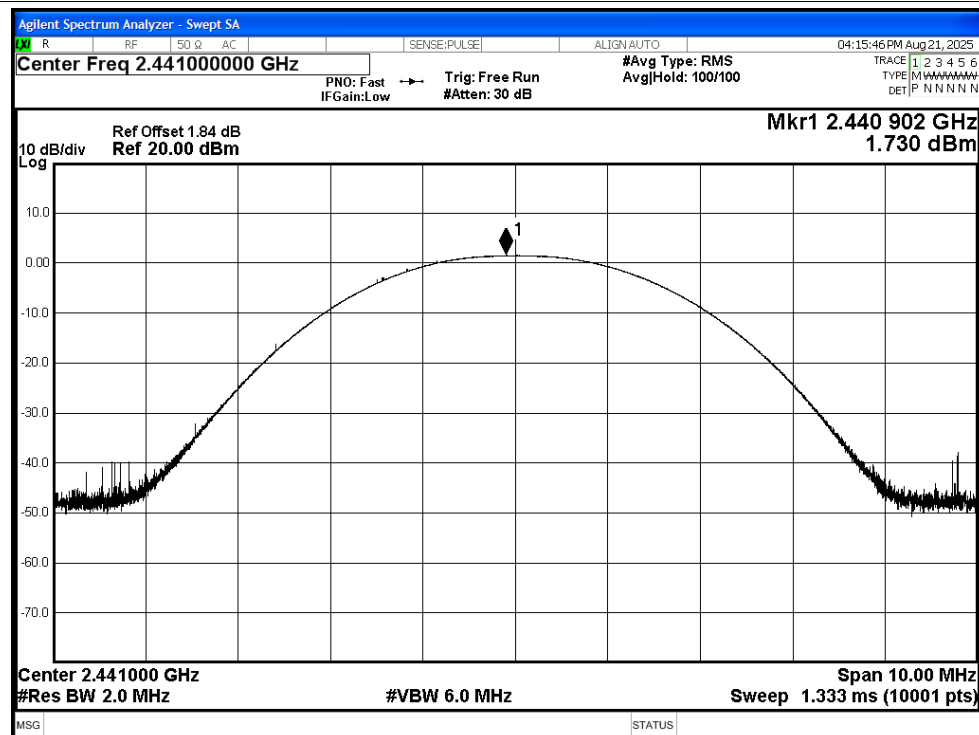
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-1.13	21	Pass
NVNT	1-DH5	2441	Ant1	1.73	21	Pass
NVNT	1-DH5	2480	Ant1	0.55	21	Pass
NVNT	2-DH5	2402	Ant1	0.7	21	Pass
NVNT	2-DH5	2441	Ant1	3.33	21	Pass
NVNT	2-DH5	2480	Ant1	2.19	21	Pass
NVNT	3-DH5	2402	Ant1	1.1	21	Pass
NVNT	3-DH5	2441	Ant1	3.66	21	Pass
NVNT	3-DH5	2480	Ant1	2.46	21	Pass

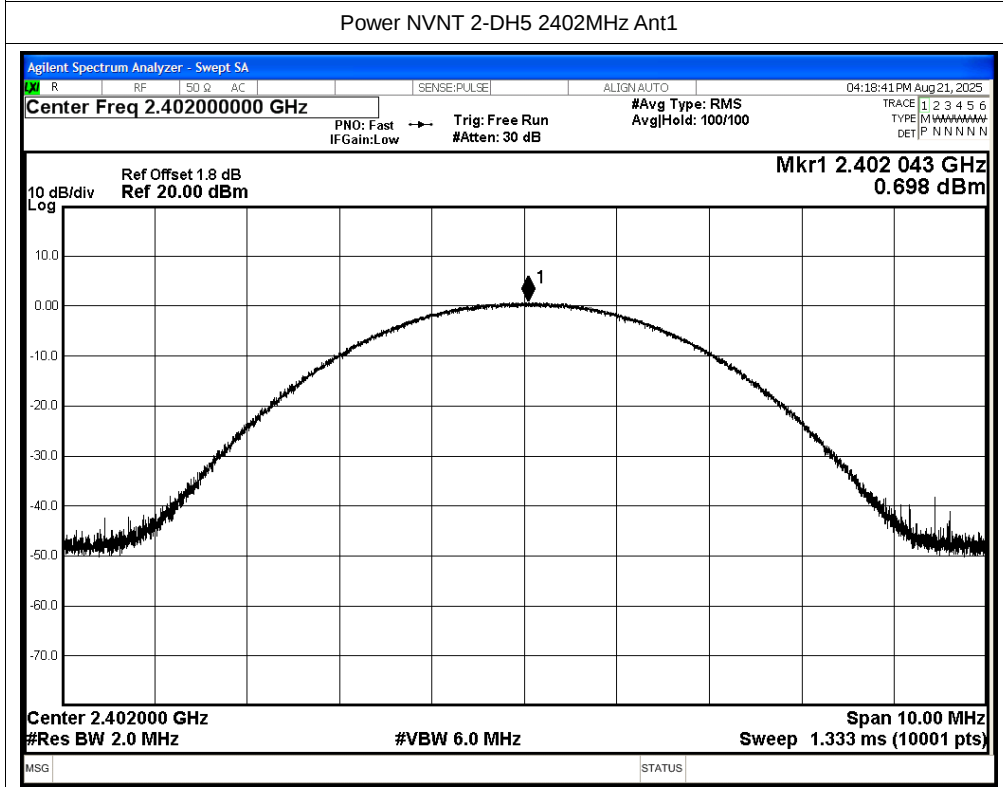
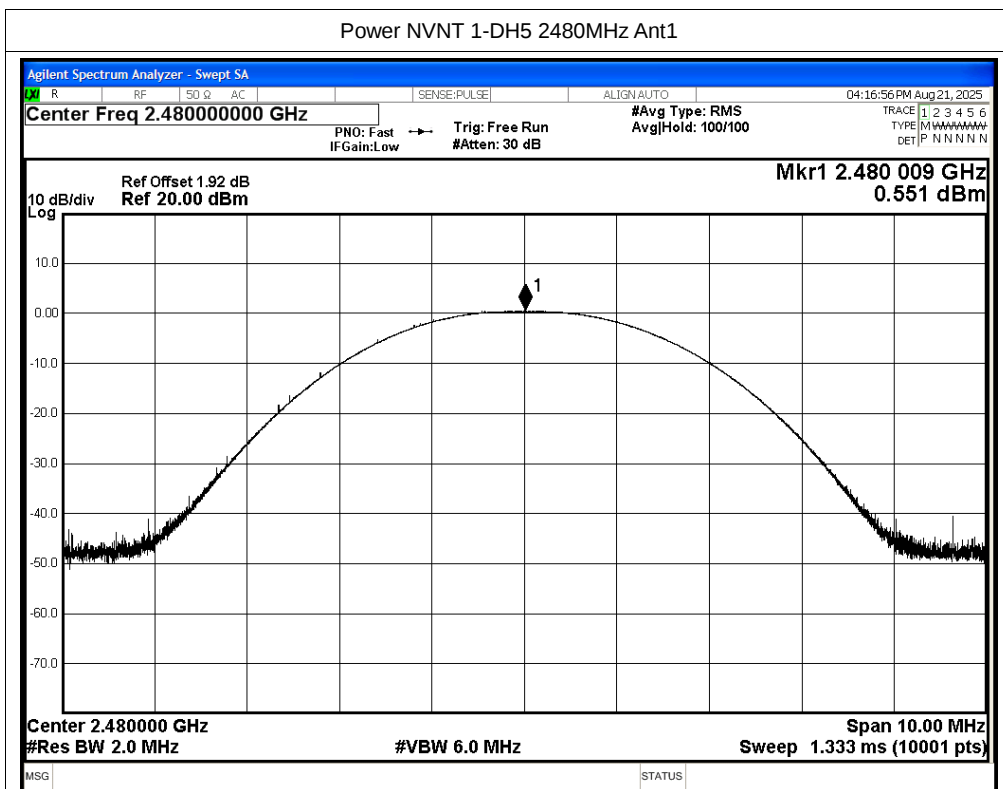
Test Graphs

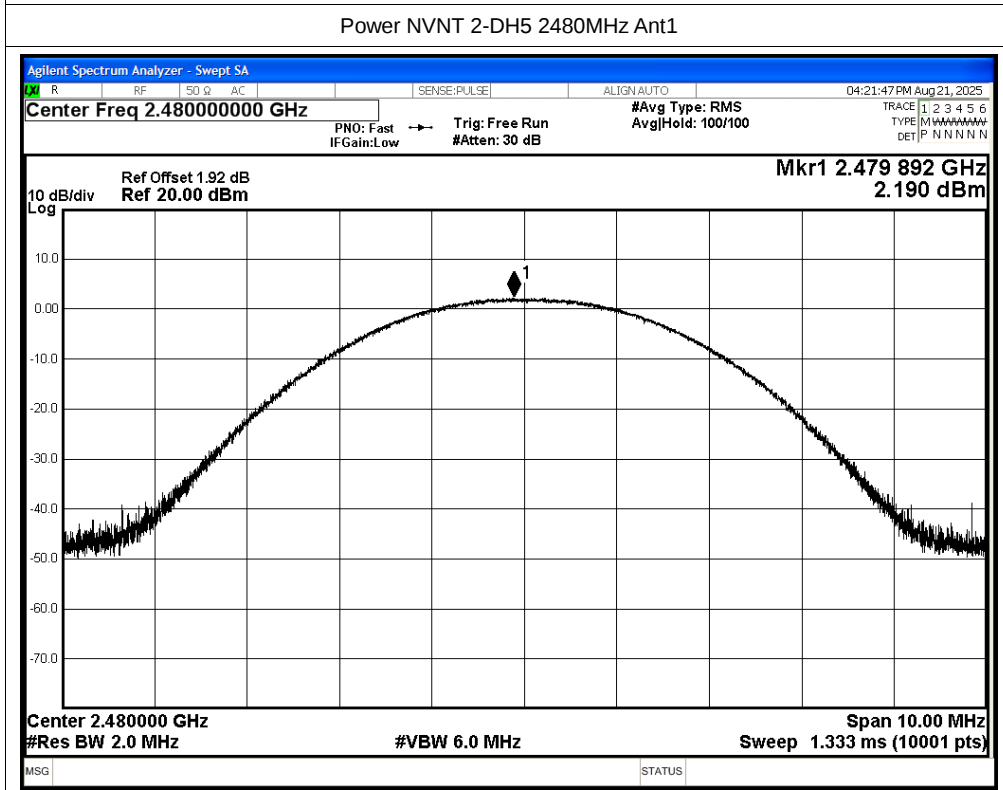
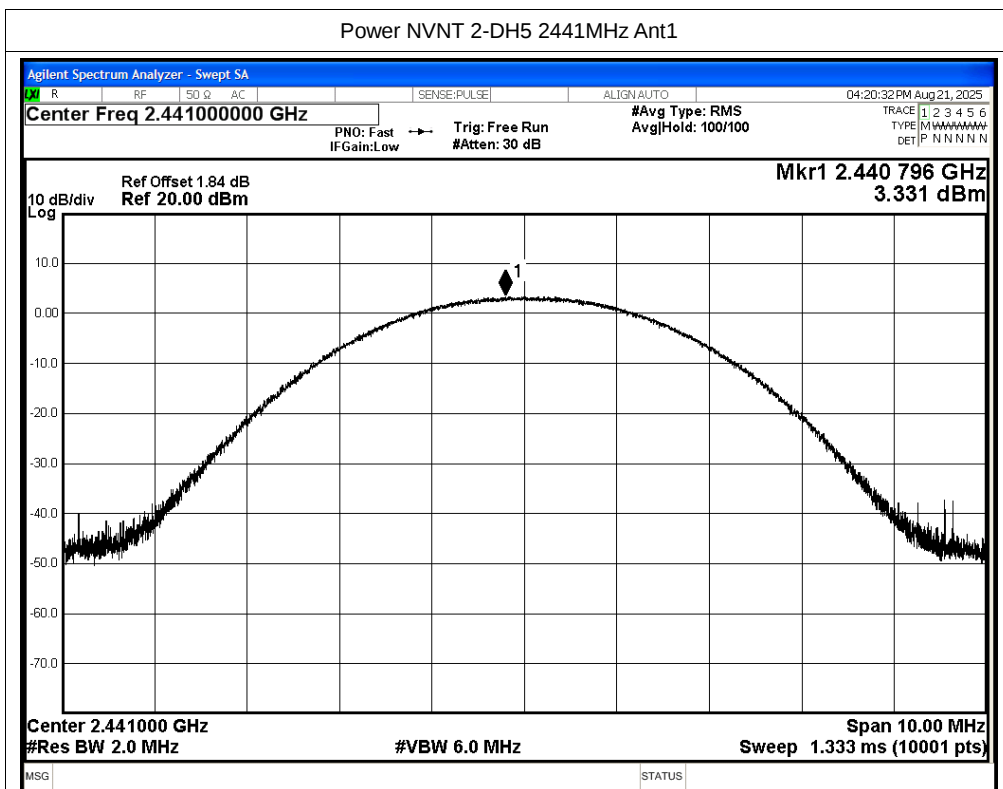
Power NVNT 1-DH5 2402MHz Ant1

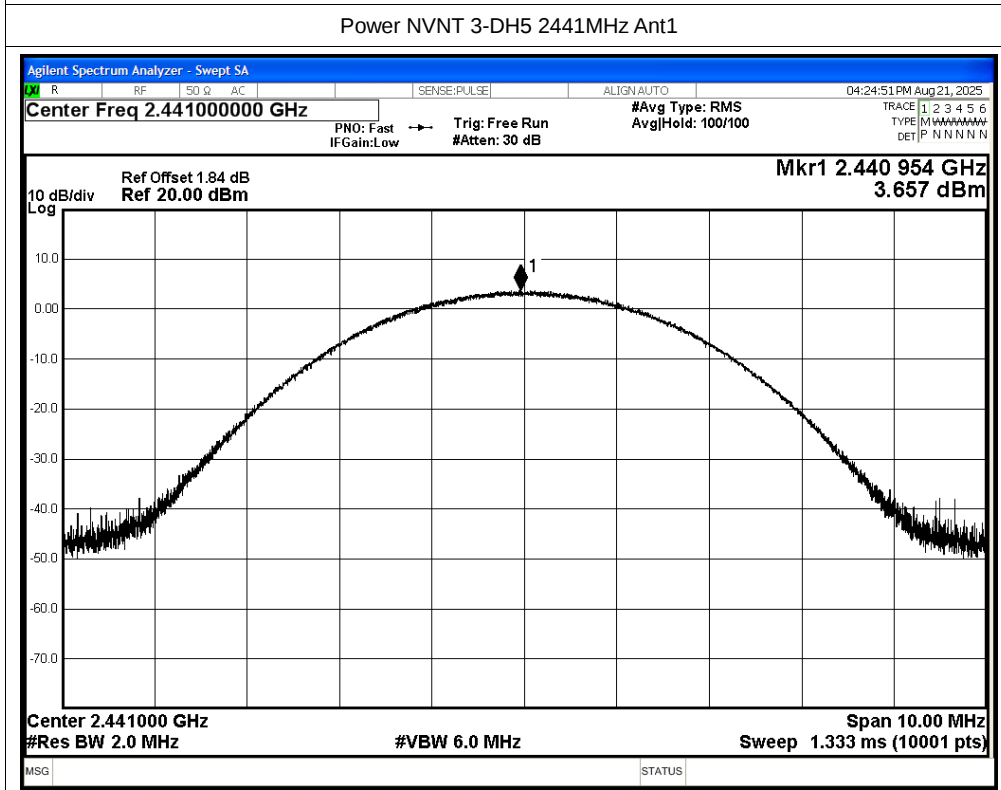
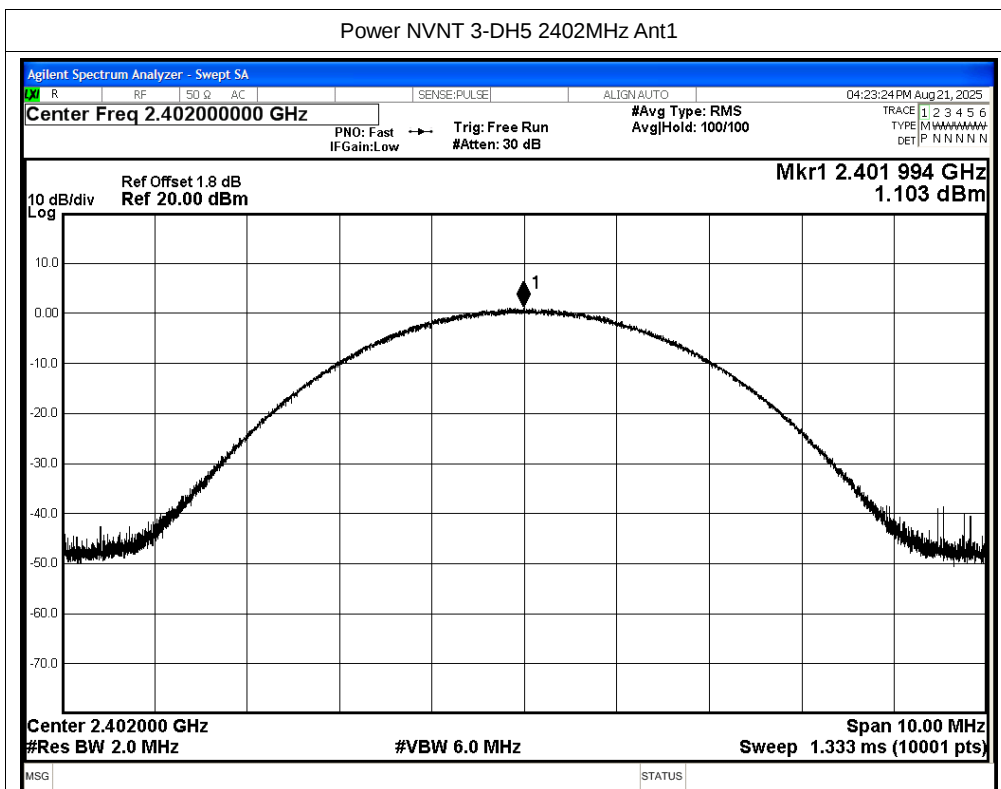


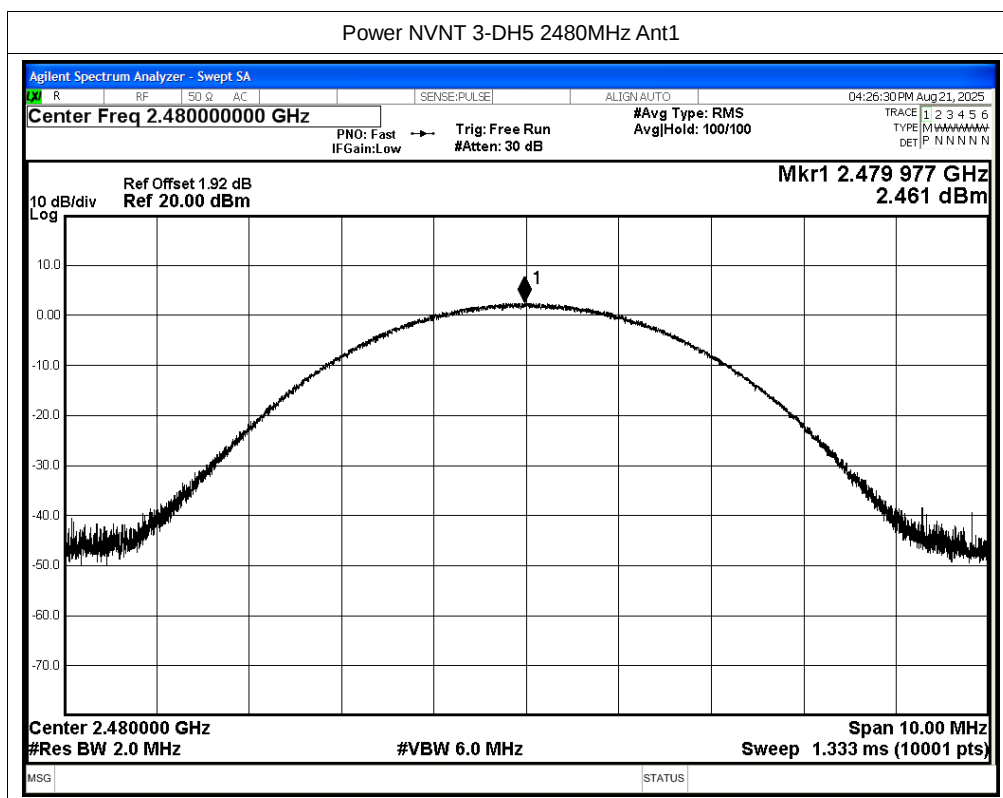
Power NVNT 1-DH5 2441MHz Ant1









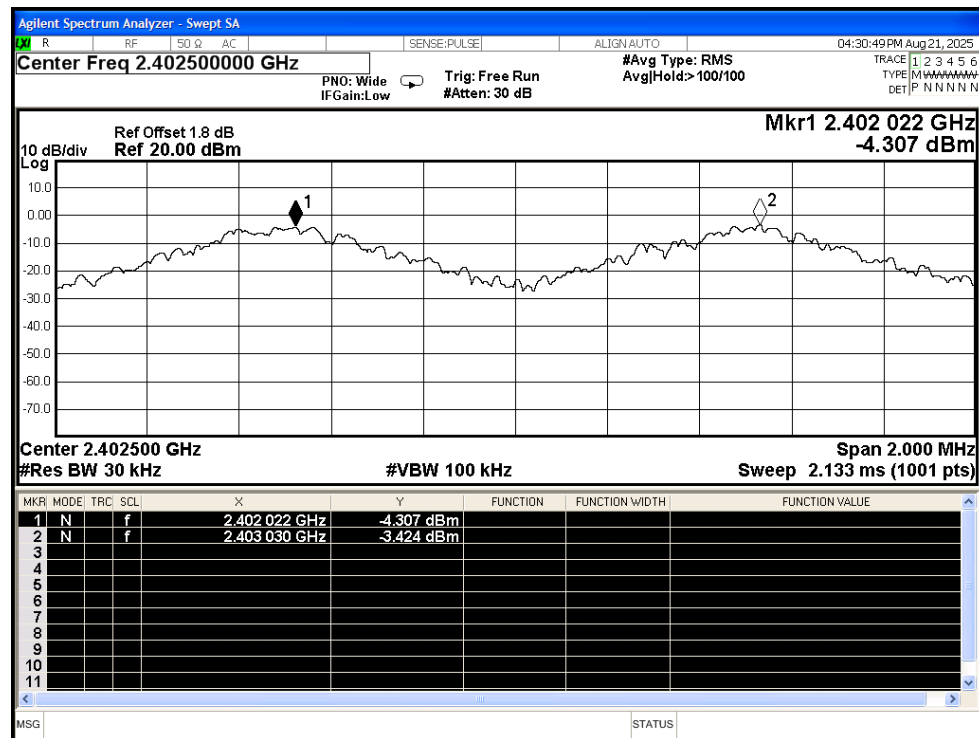


A.3 Carrier Frequencies Separation

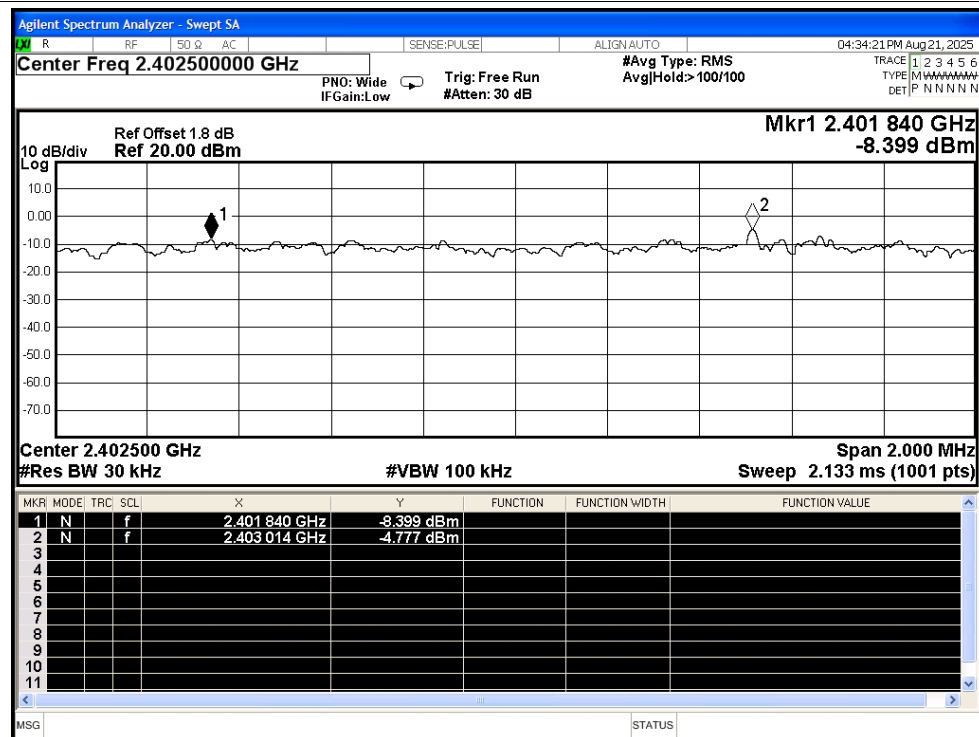
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.022	2403.03	1.008	0.683	Pass
NVNT	2-DH5	Ant1	2401.84	2403.014	1.174	0.879	Pass
NVNT	3-DH5	Ant1	2402.178	2403.098	0.92	0.866	Pass

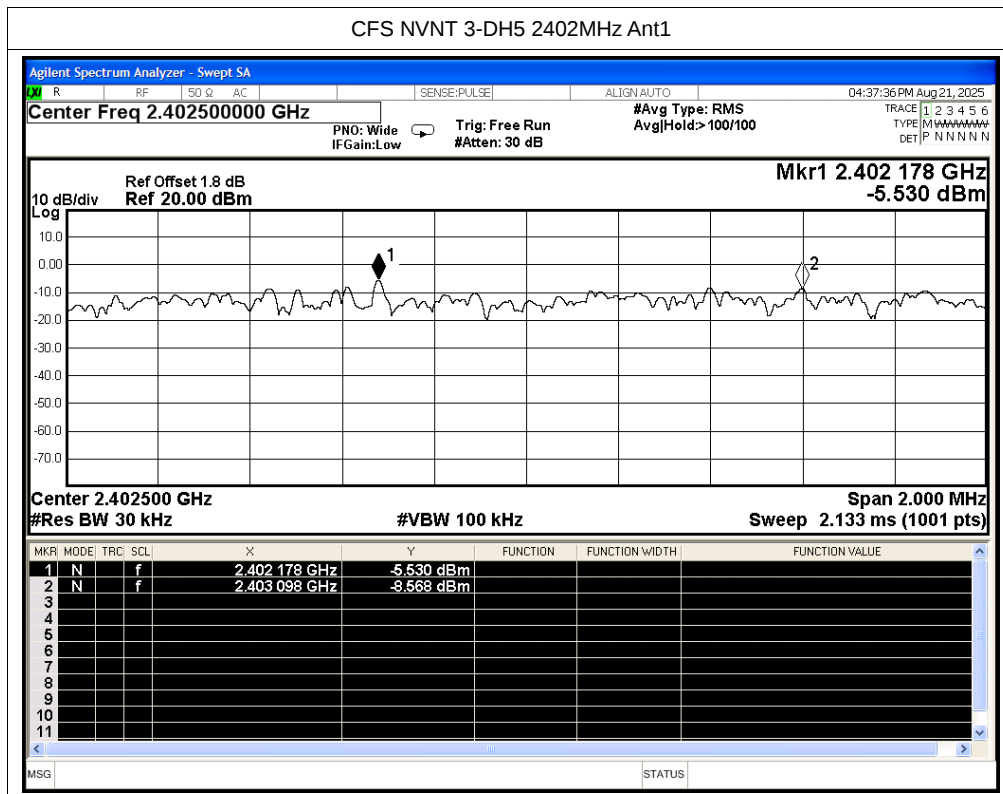
Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



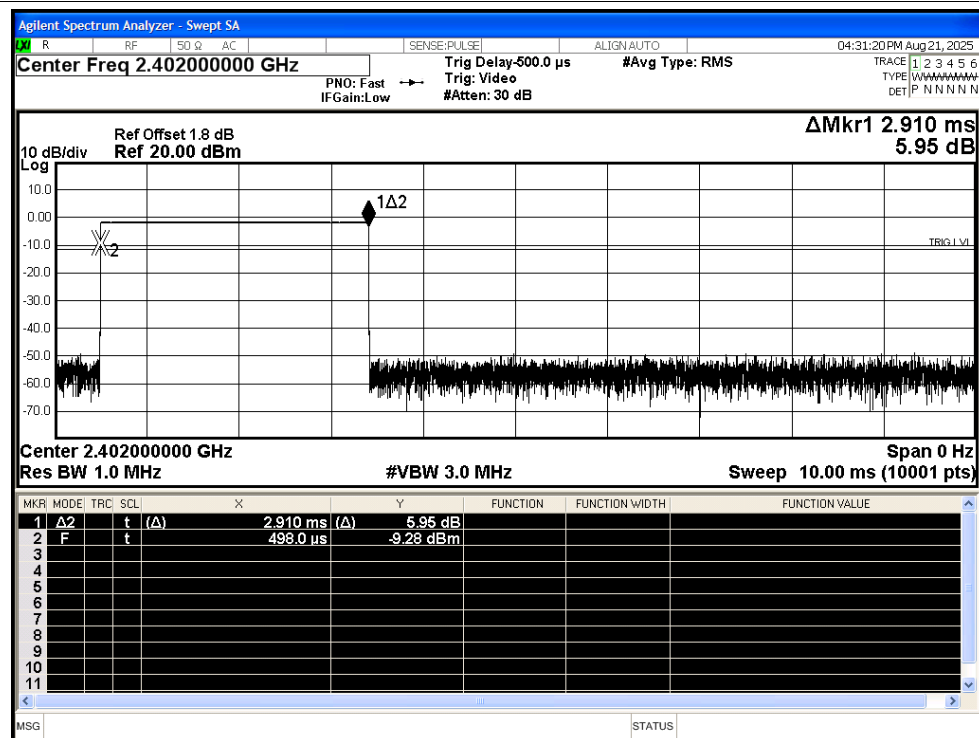


A.4 Dwell Time

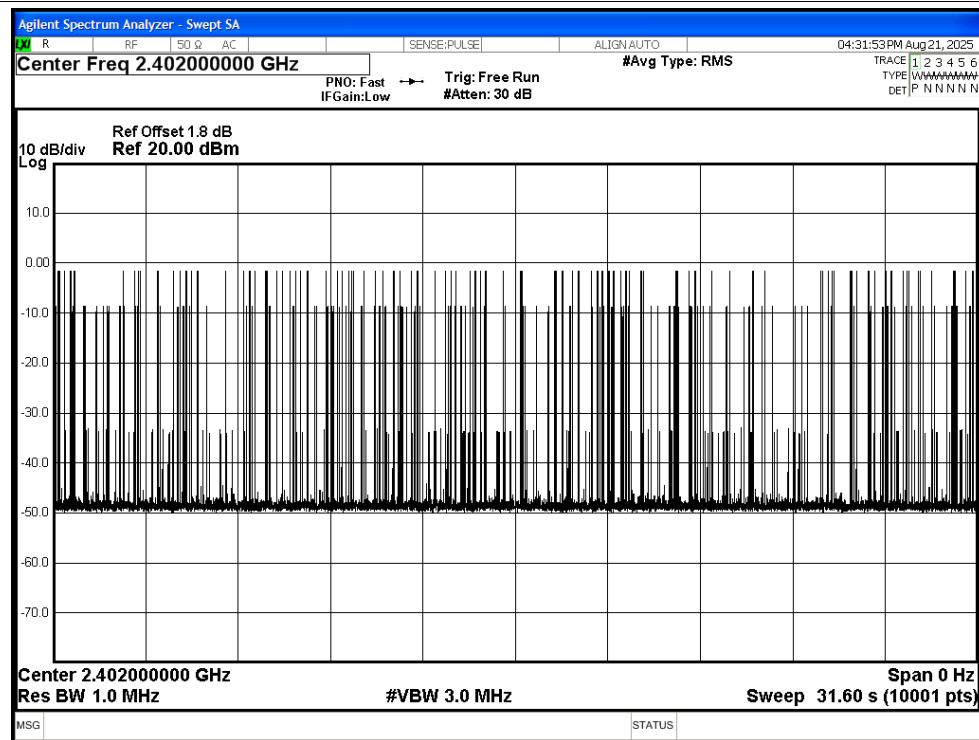
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.91	317.19	109	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.897	321.567	111	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.897	286.803	99	31600	400	Pass

Test Graphs

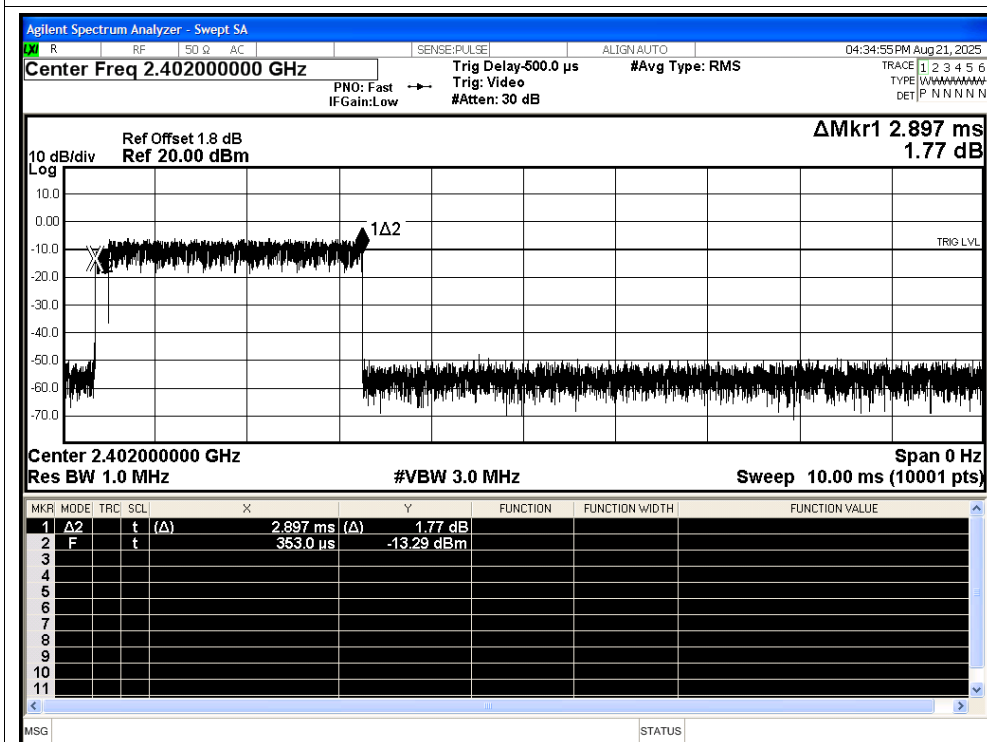
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



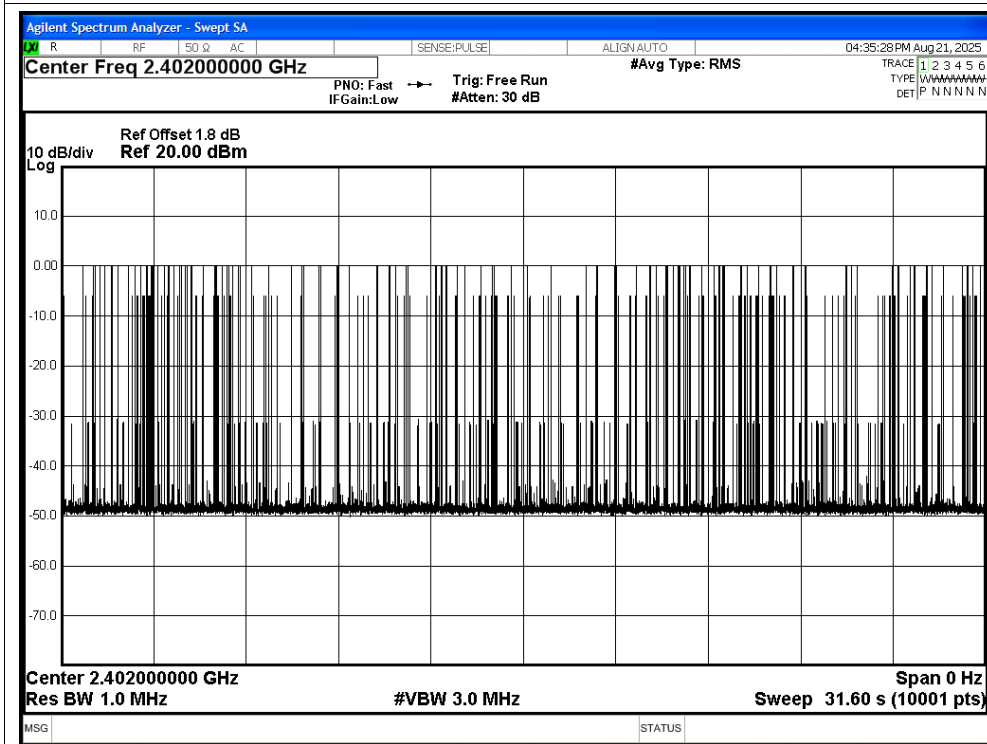
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



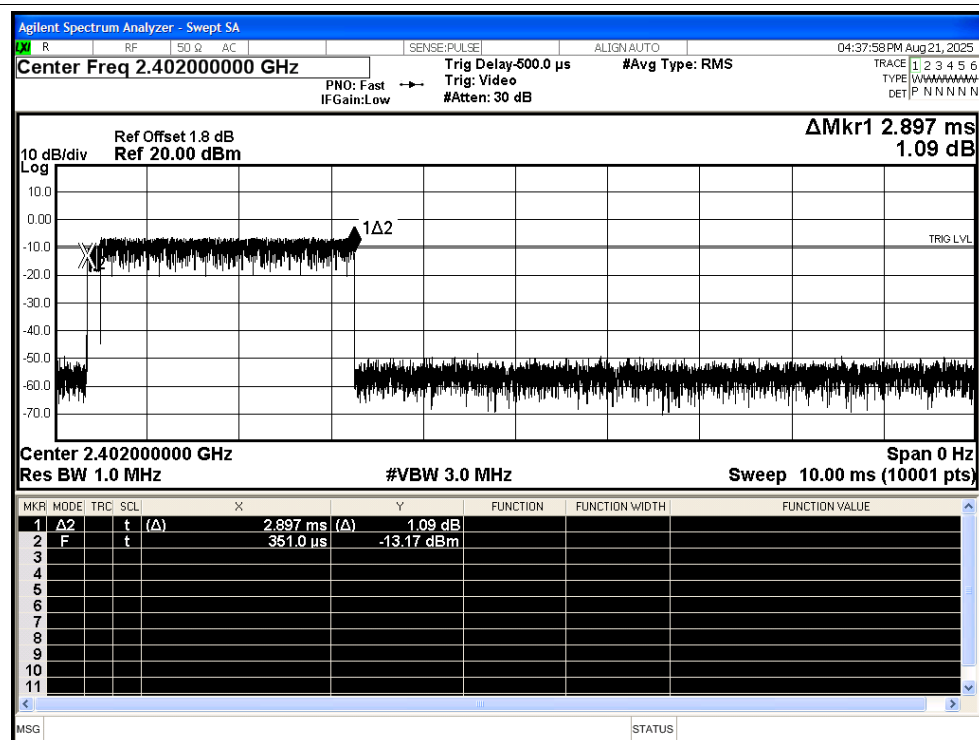
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



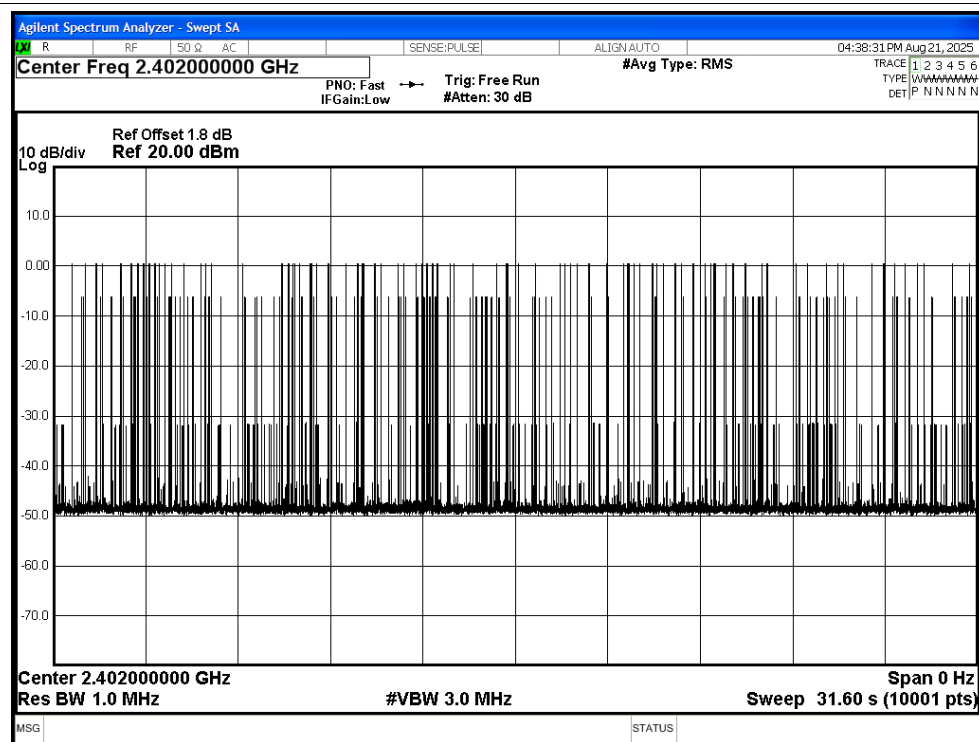
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated

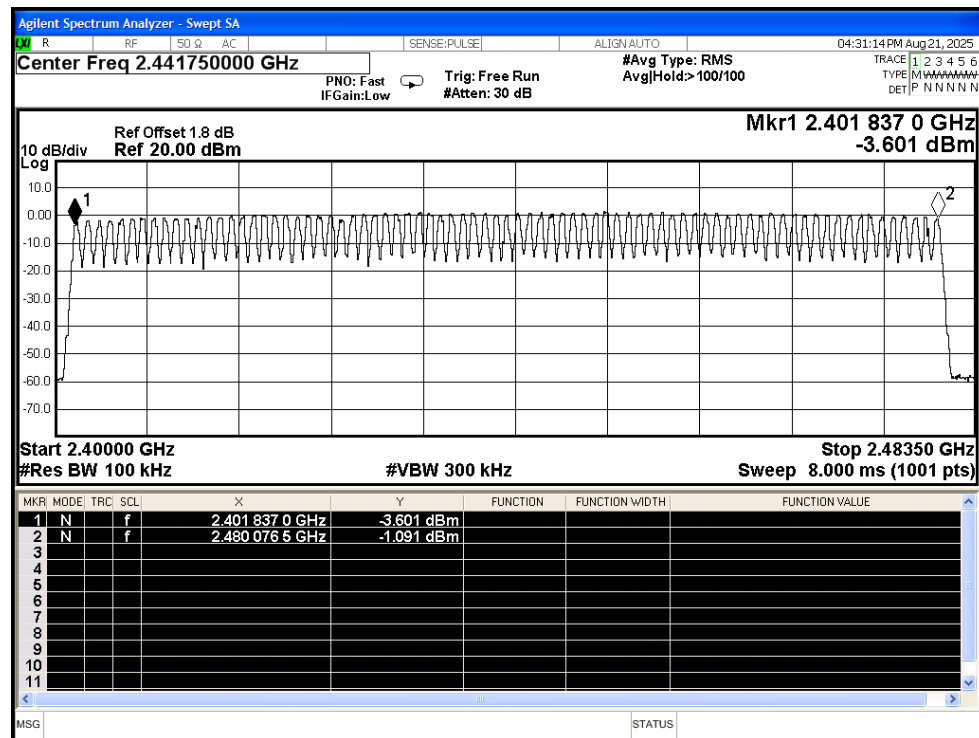


A.5 Number of Hopping Channel

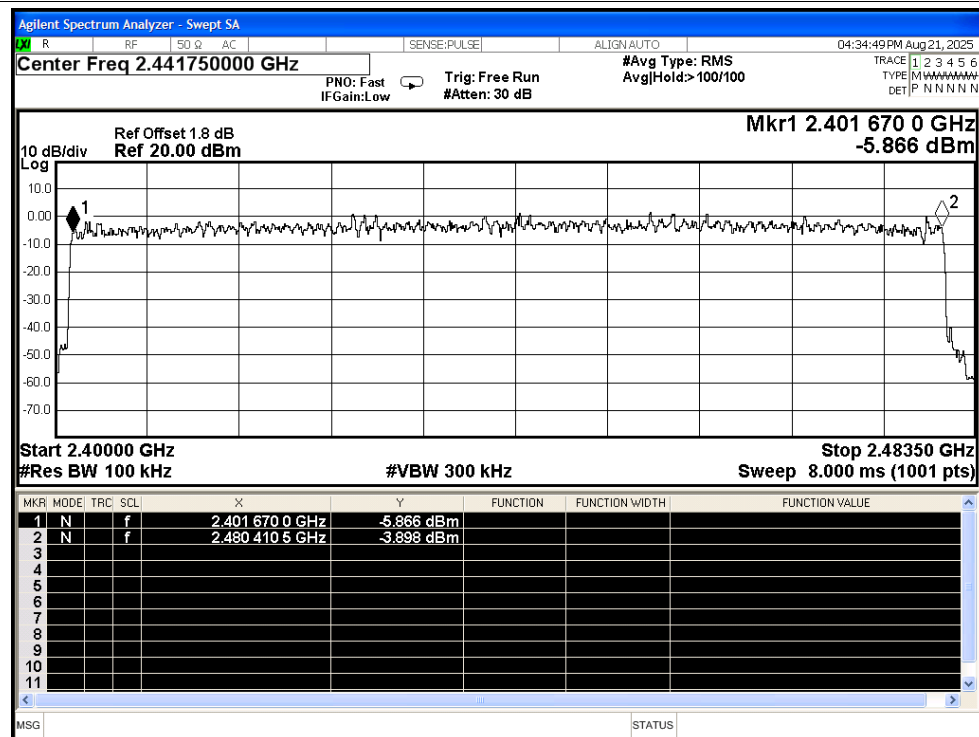
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

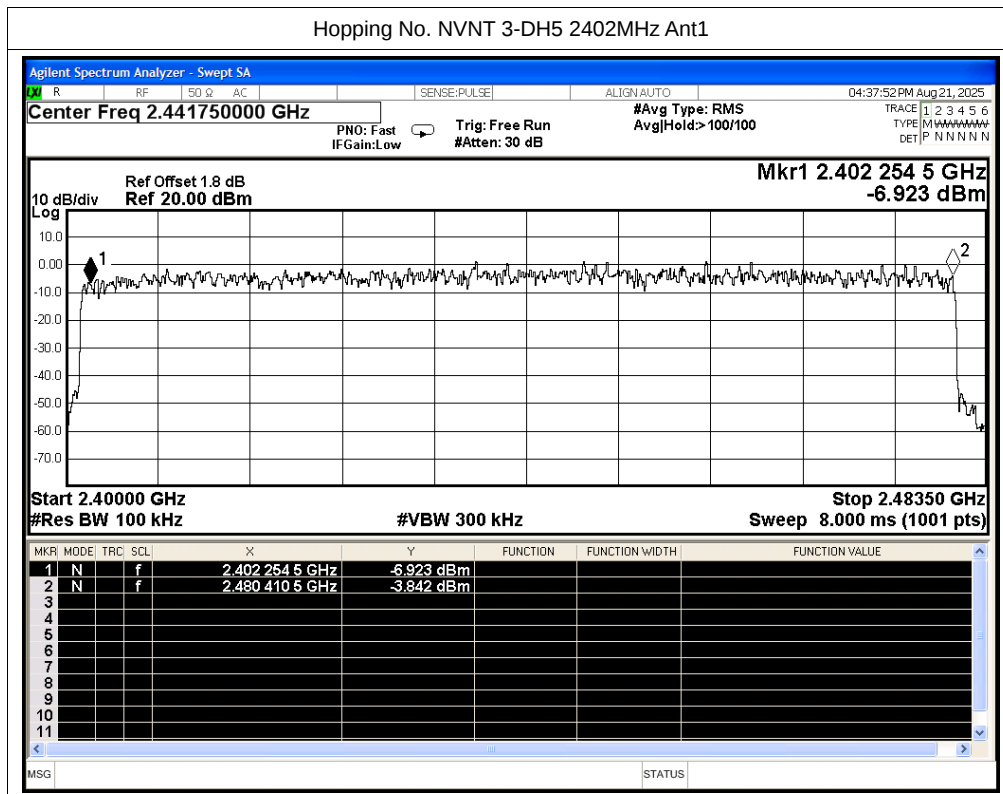
Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



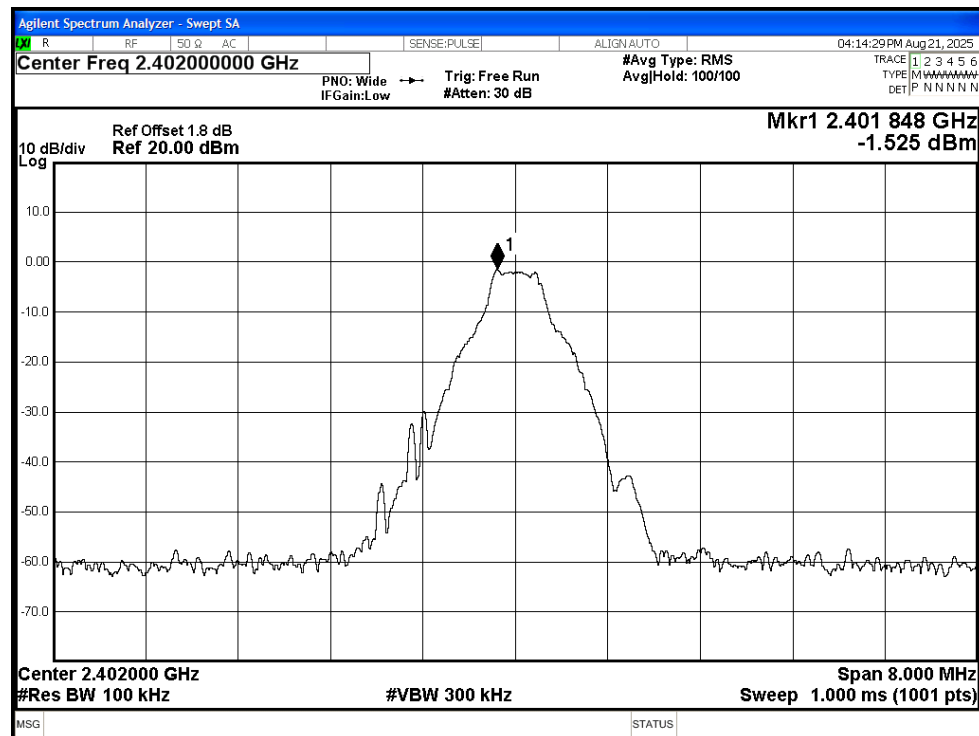


A.6 Band Edge

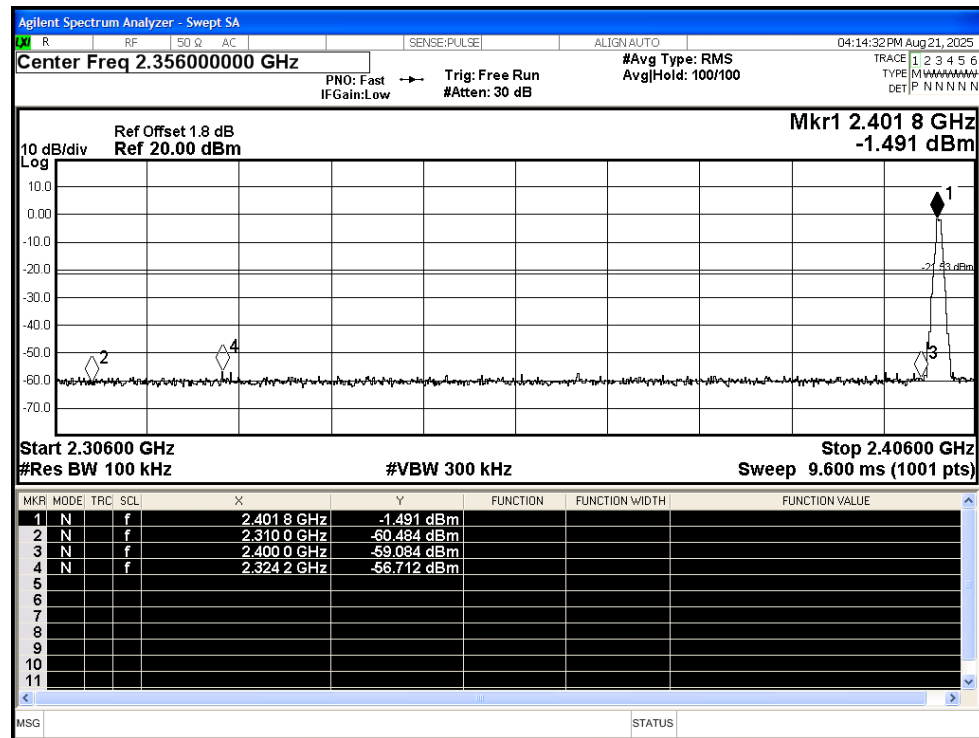
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-55.19	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-57.23	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-52.96	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-54.61	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-51.1	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-56.03	-20	Pass

Test Graphs

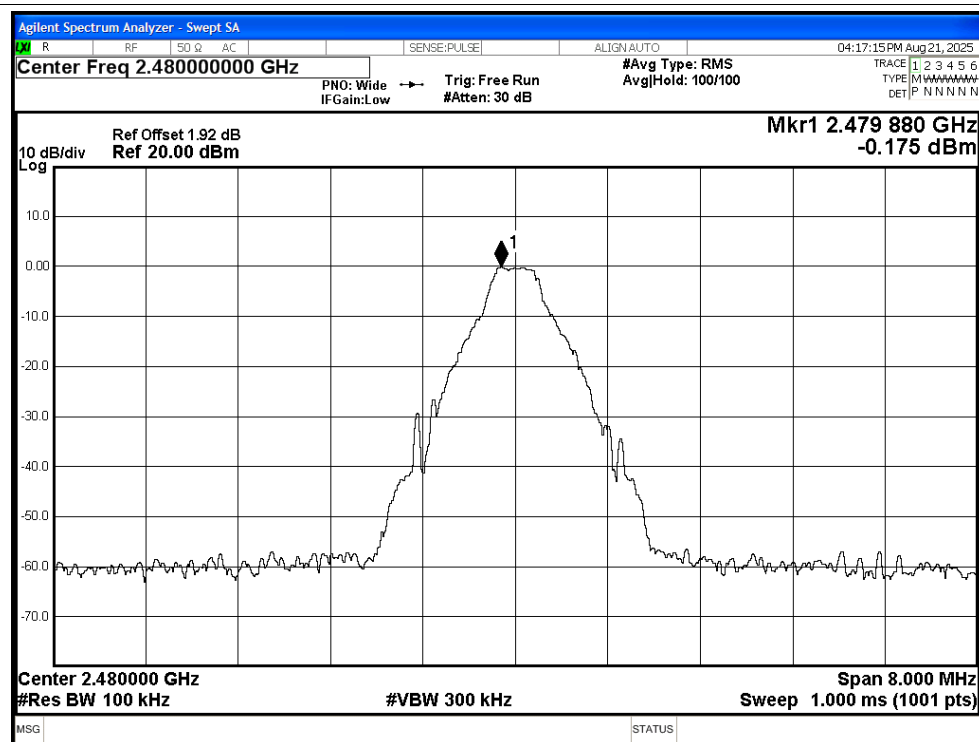
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



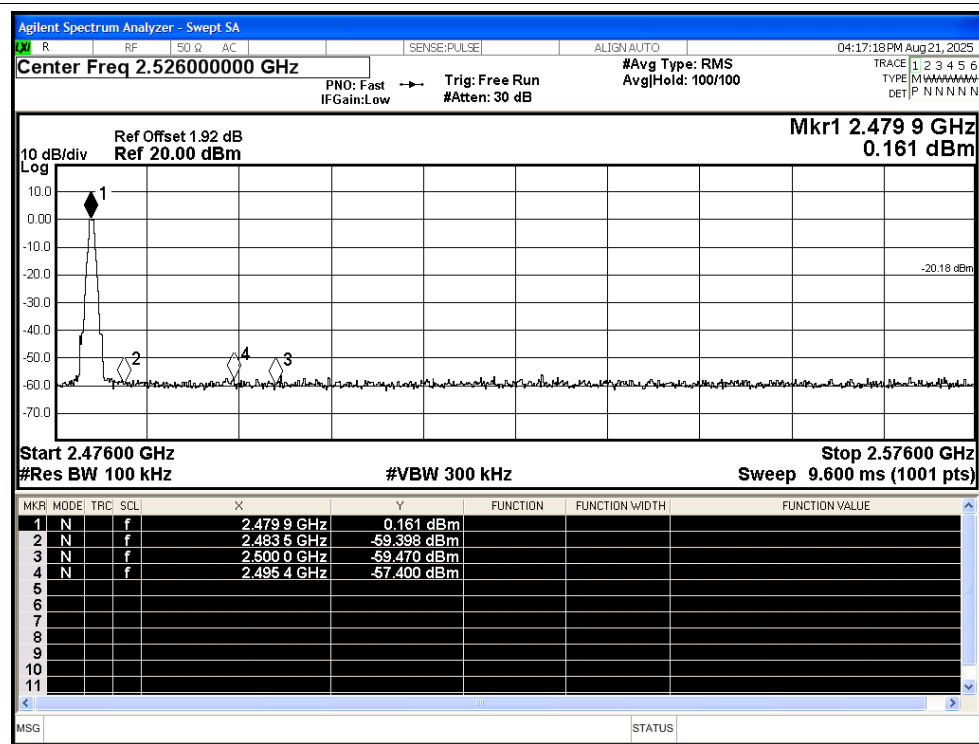
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



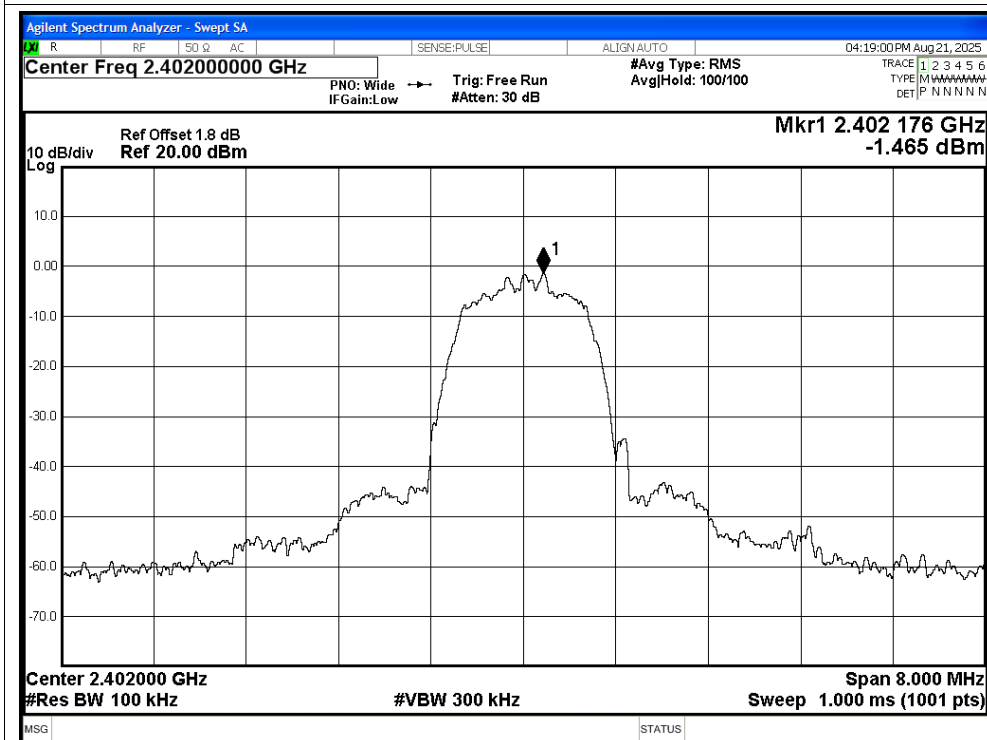
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



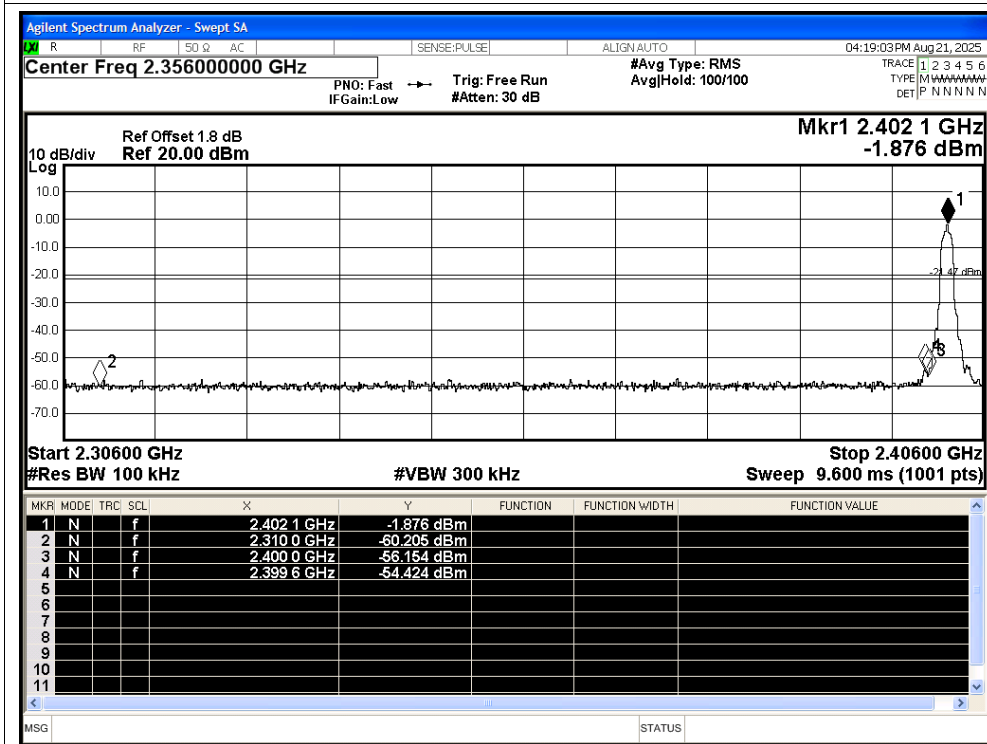
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



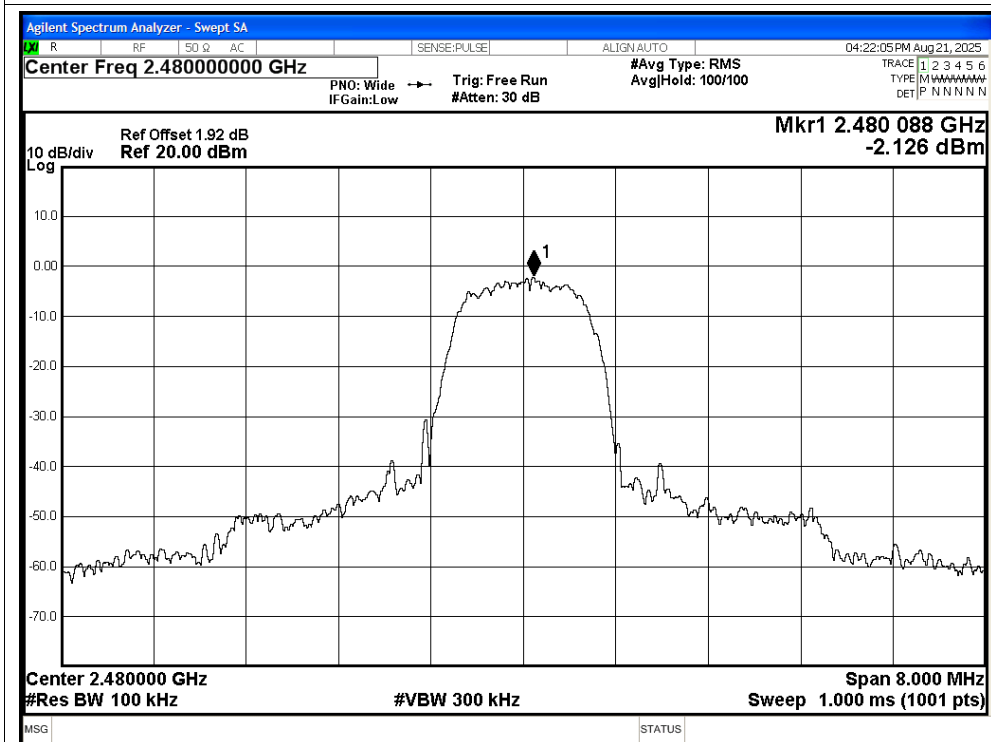
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



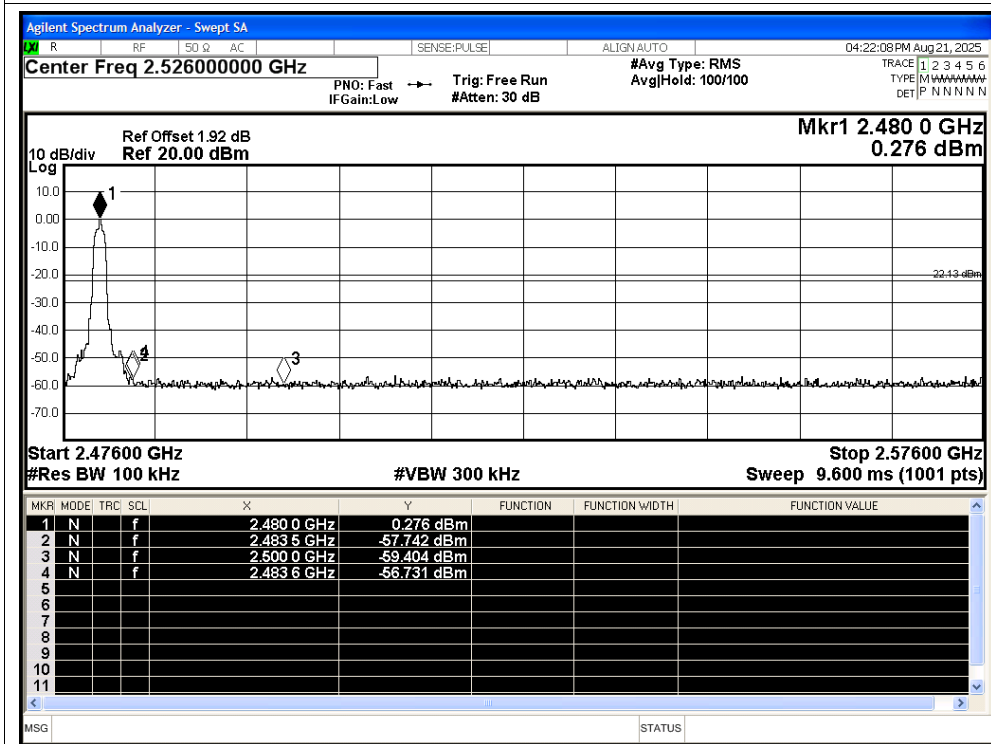
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

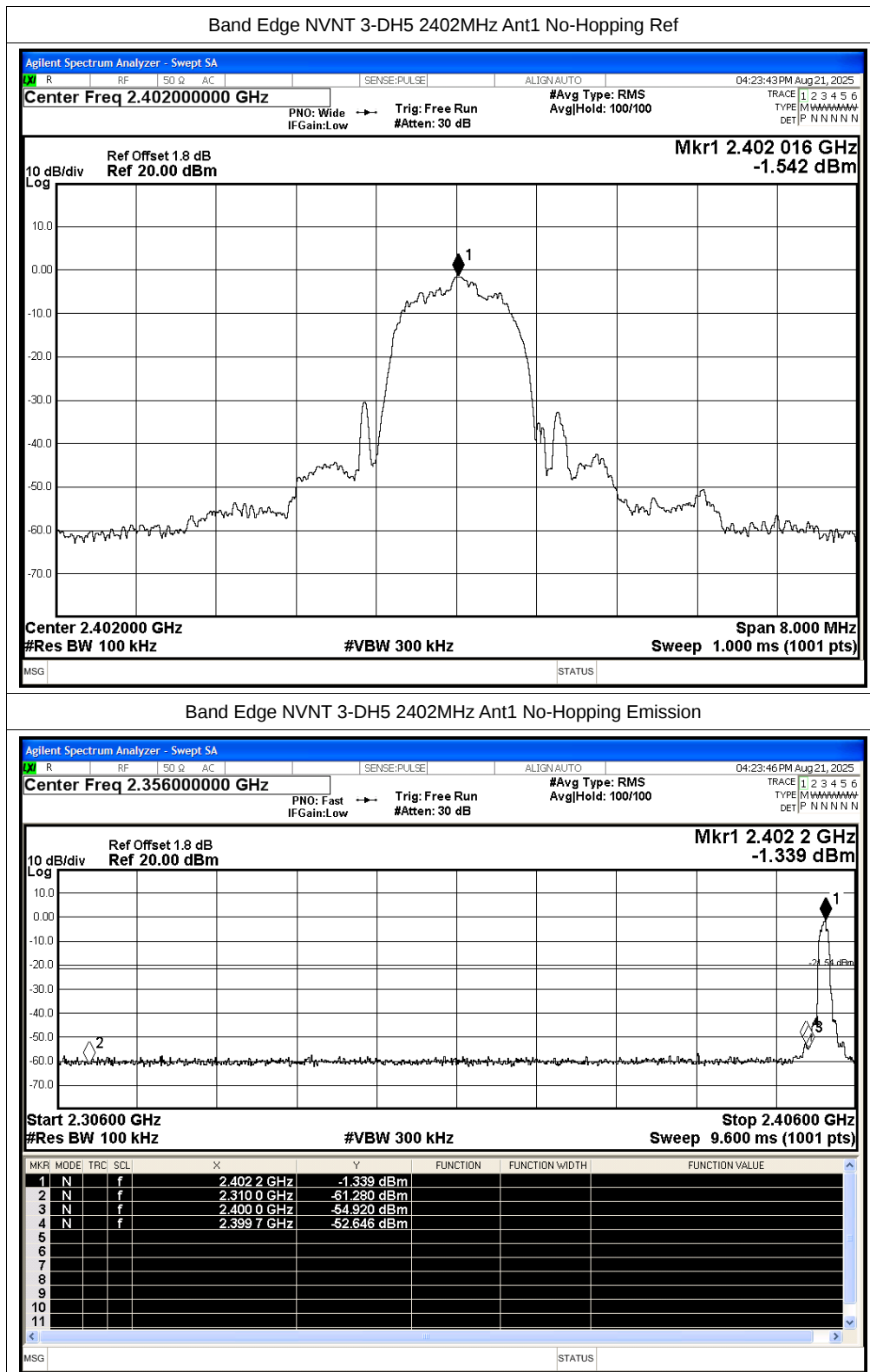


Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref

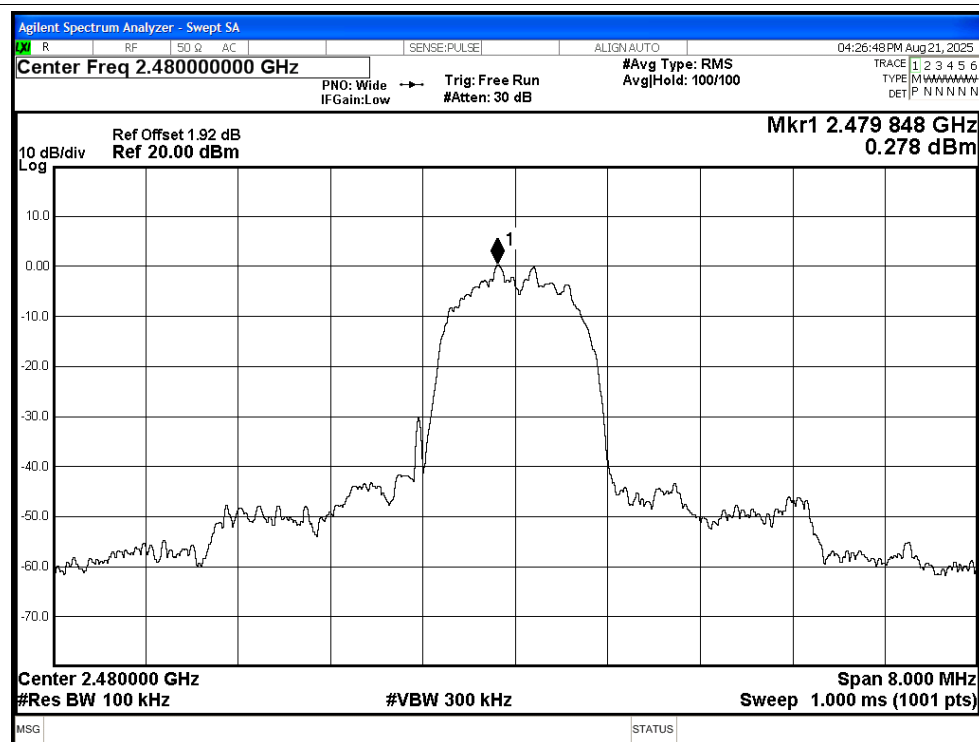


Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission

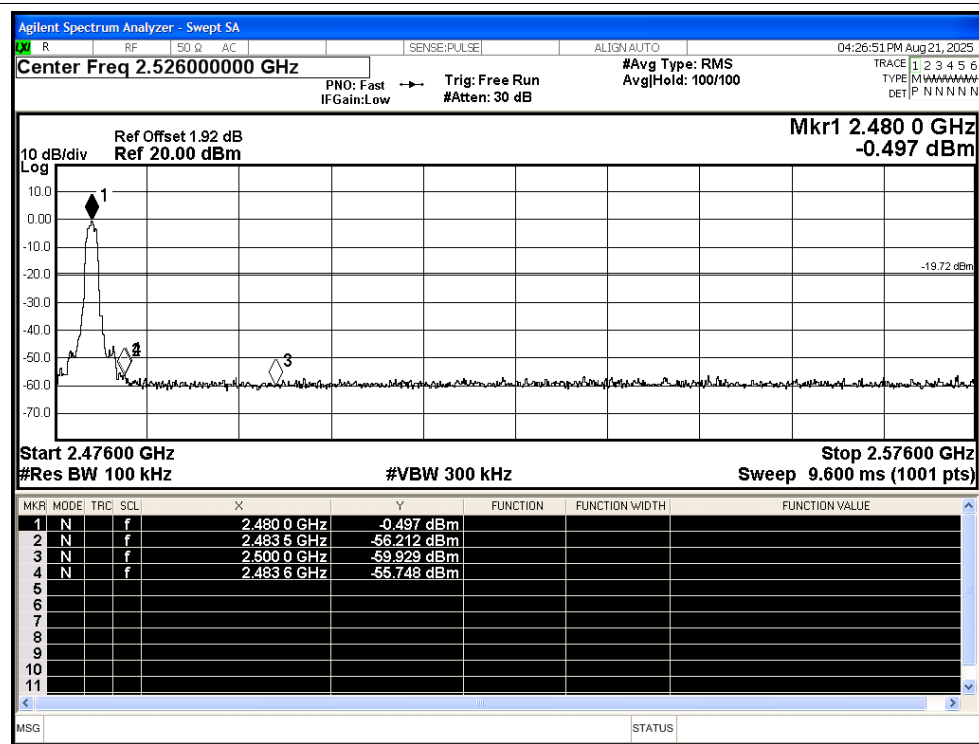




Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



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

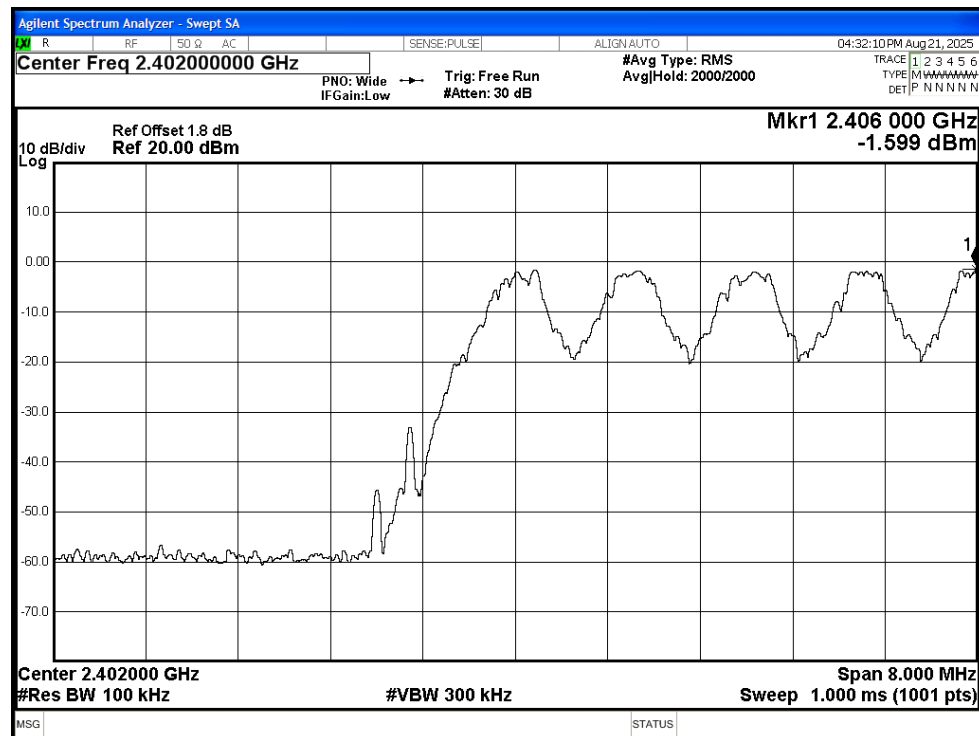


(Hopping)

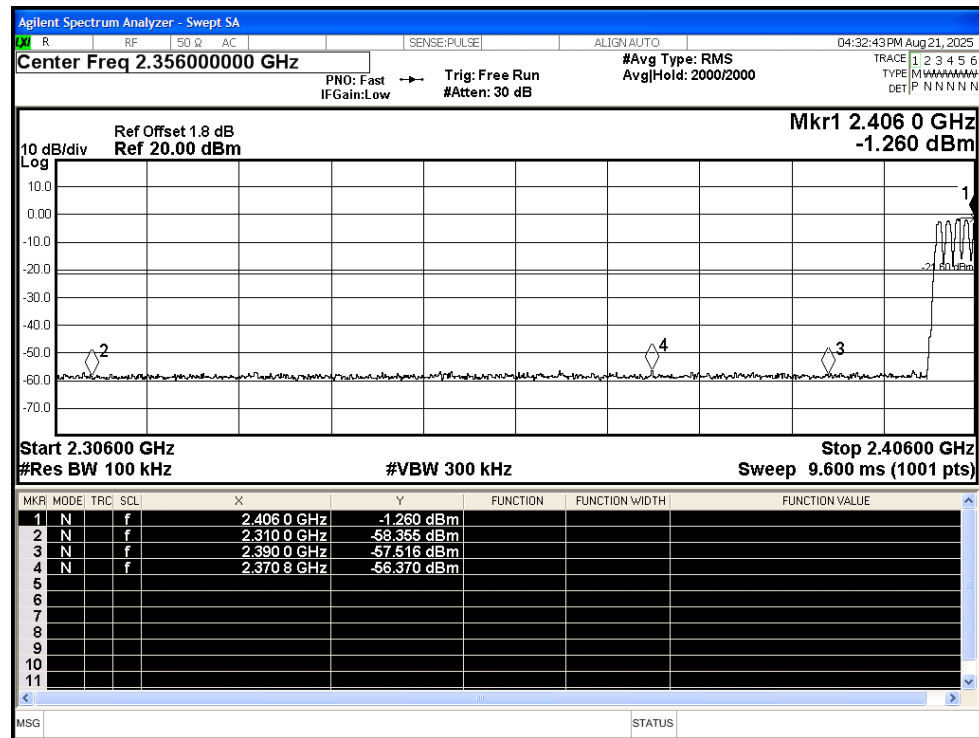
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-54.77	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.47	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-55.05	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-56.16	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-54.23	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-56.43	-20	Pass

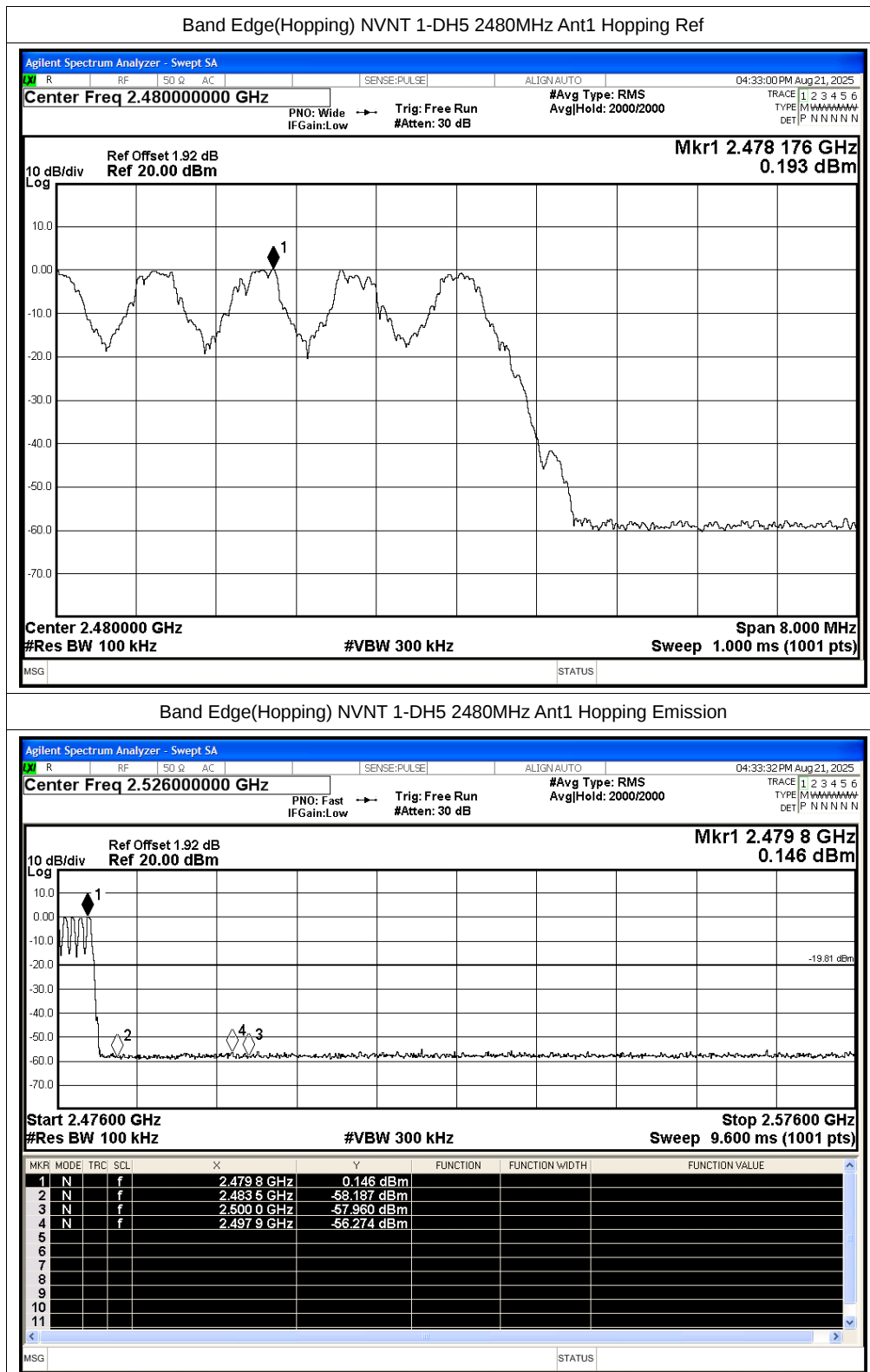
Test Graphs

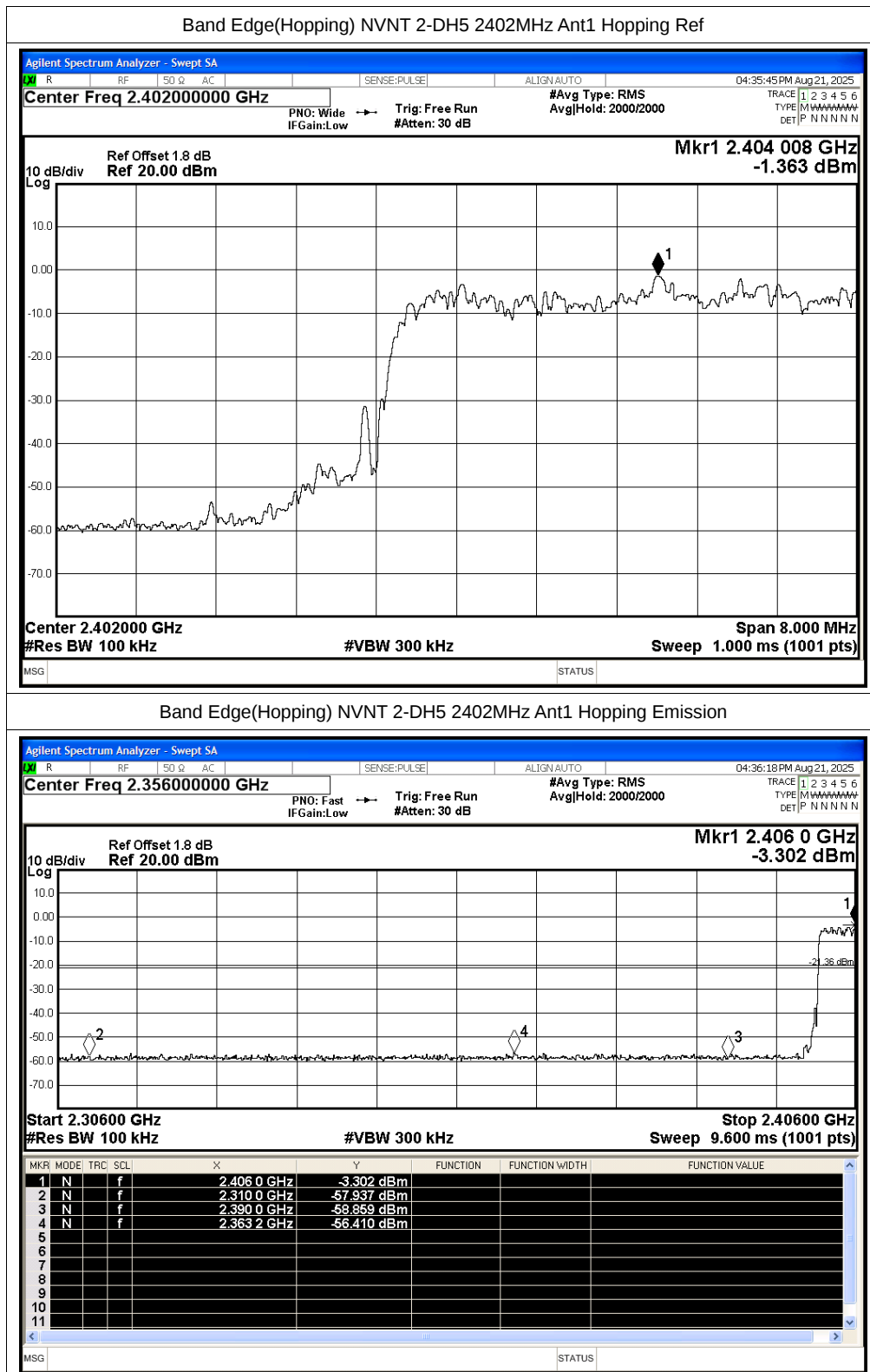
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref

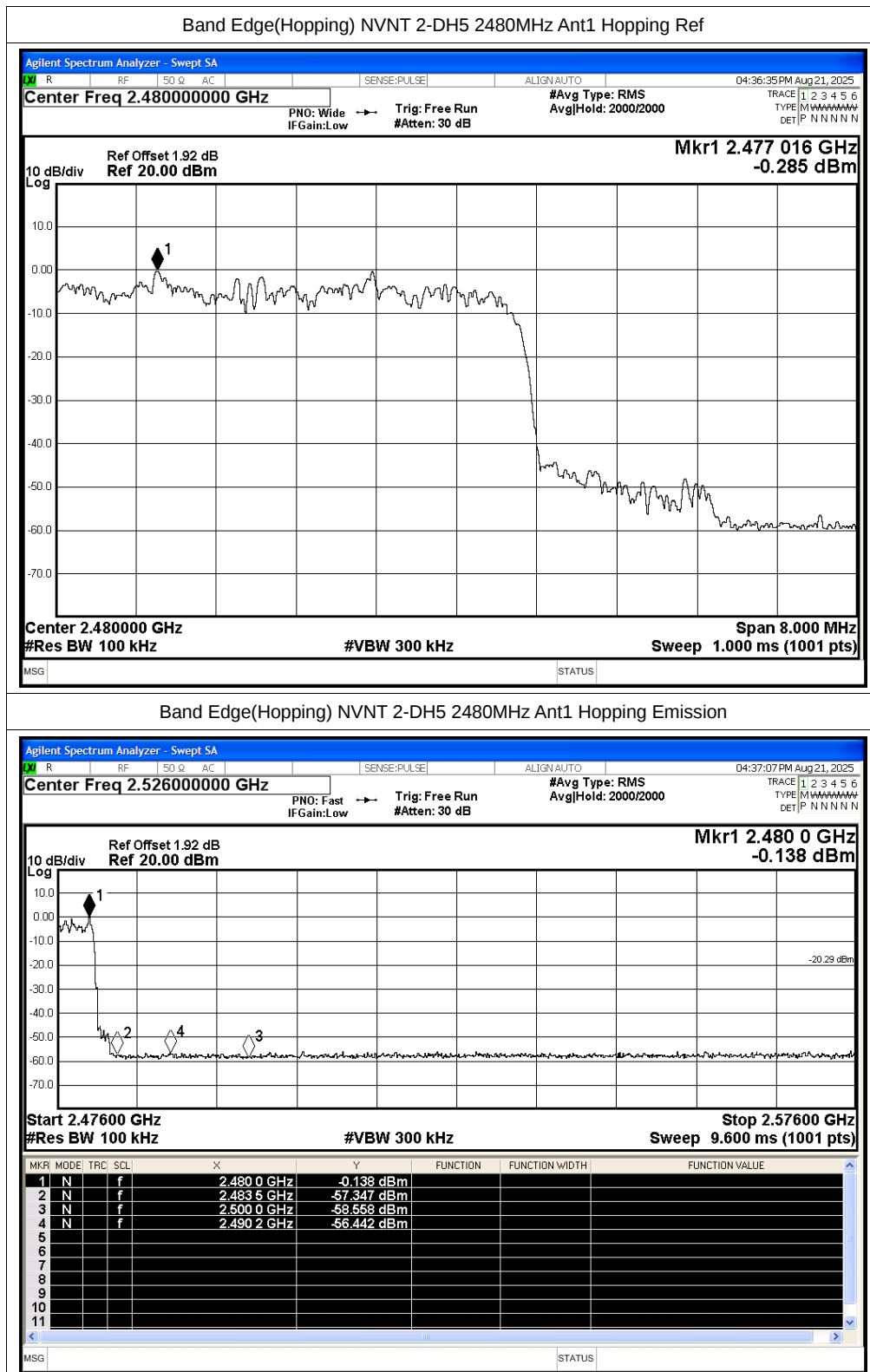


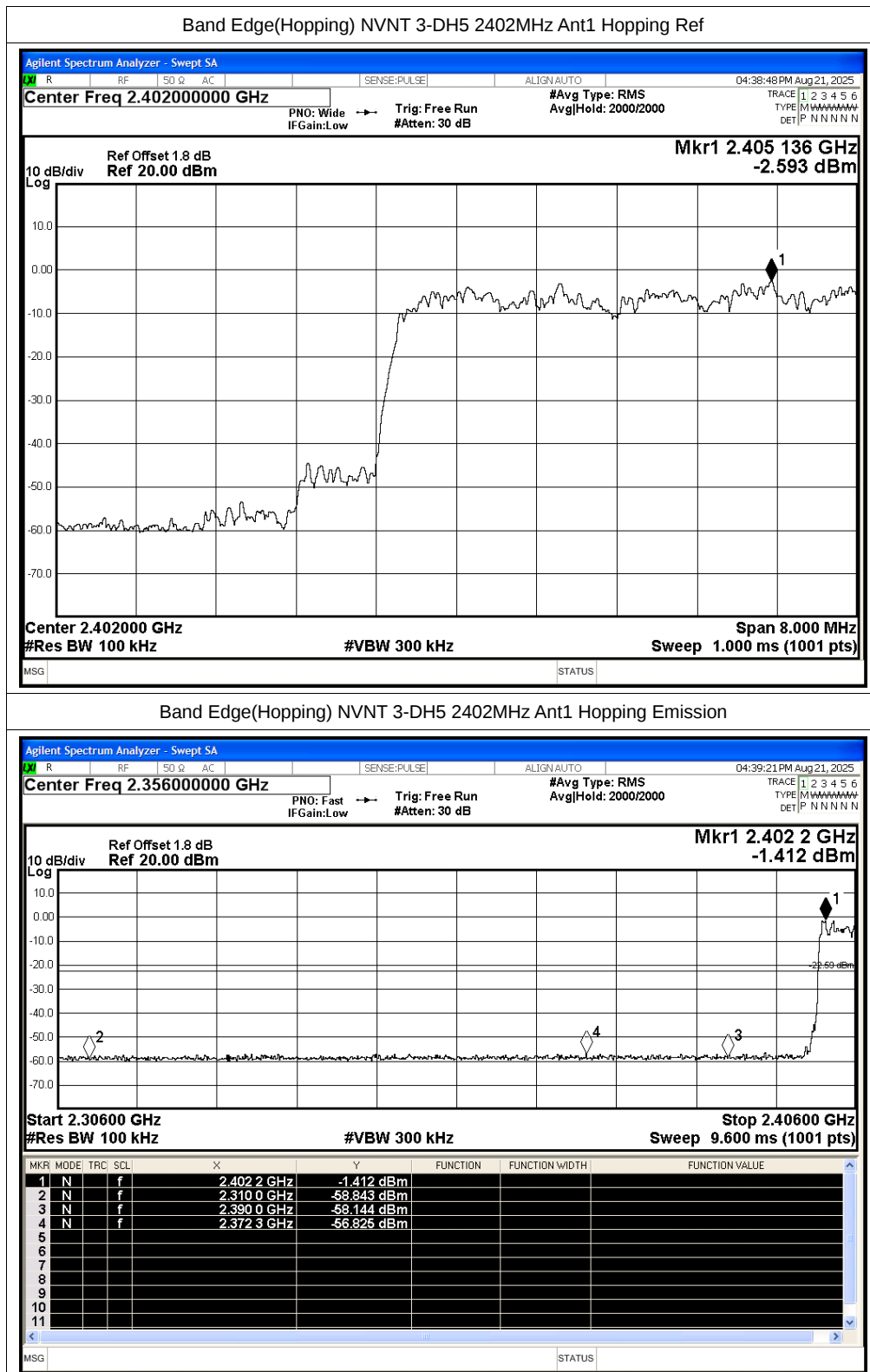
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



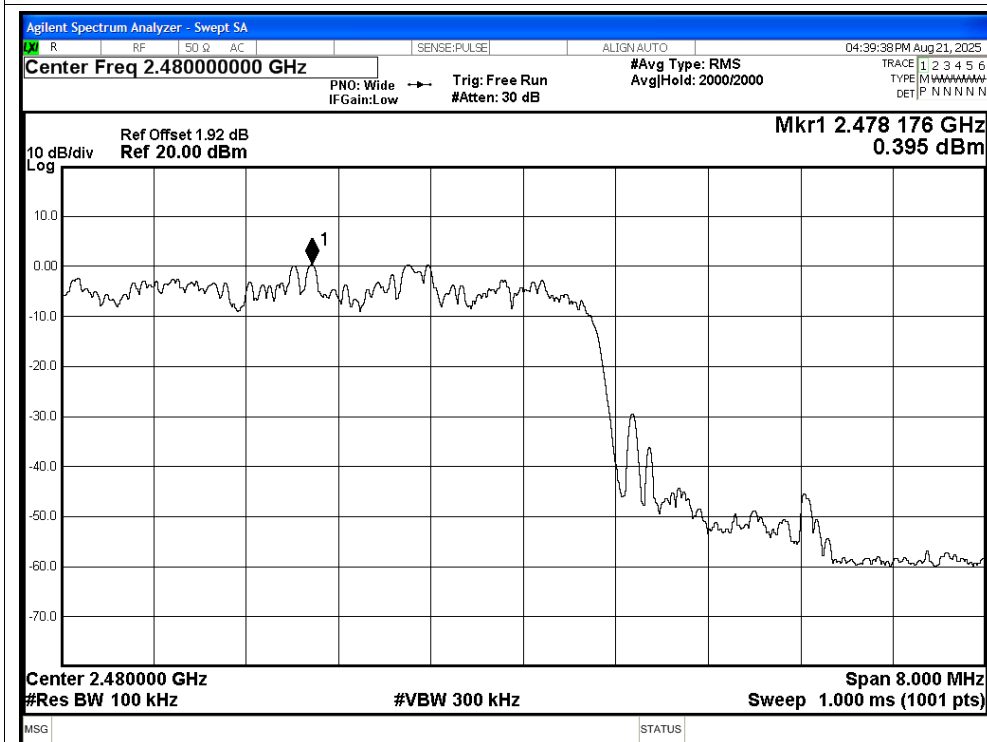




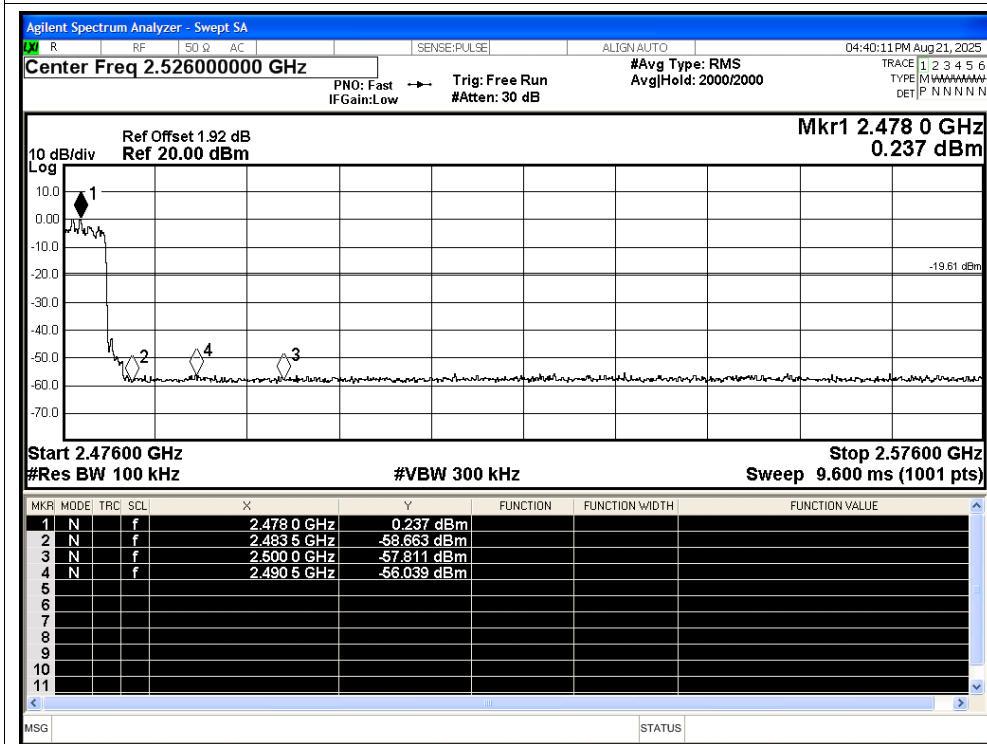




Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



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

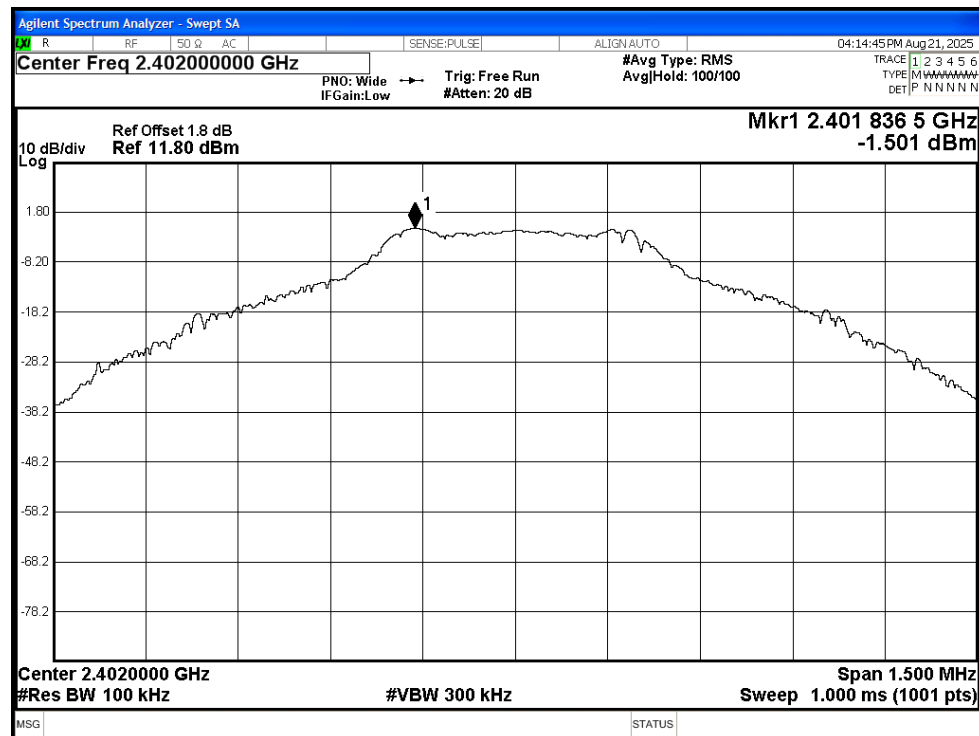


A.7 Conducted RF Spurious Emission

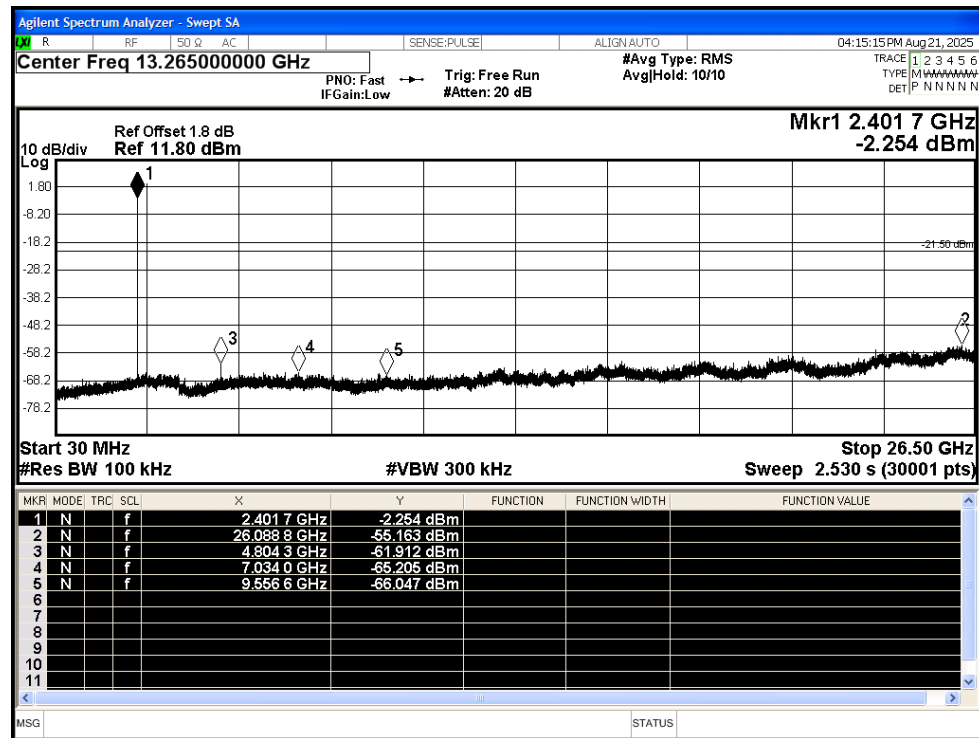
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-53.66	-20	Pass
NVNT	1-DH5	2441	Ant1	-56.24	-20	Pass
NVNT	1-DH5	2480	Ant1	-54.59	-20	Pass
NVNT	2-DH5	2402	Ant1	-53.86	-20	Pass
NVNT	2-DH5	2441	Ant1	-56.04	-20	Pass
NVNT	2-DH5	2480	Ant1	-54.97	-20	Pass
NVNT	3-DH5	2402	Ant1	-52.78	-20	Pass
NVNT	3-DH5	2441	Ant1	-56.32	-20	Pass
NVNT	3-DH5	2480	Ant1	-55.29	-20	Pass

Test Graphs

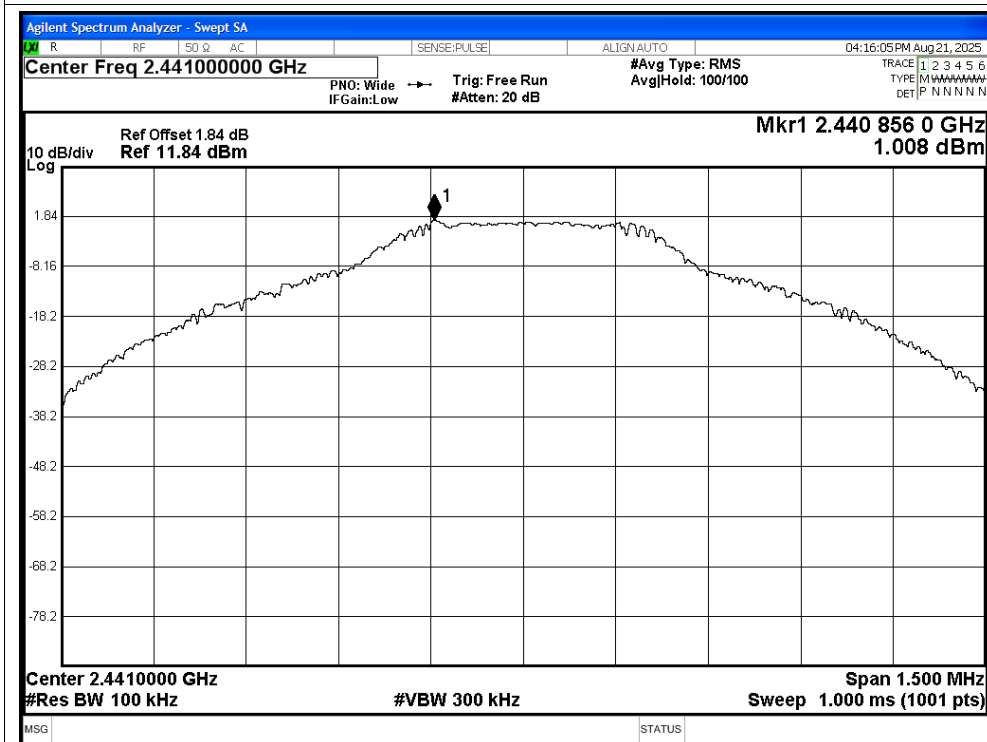
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



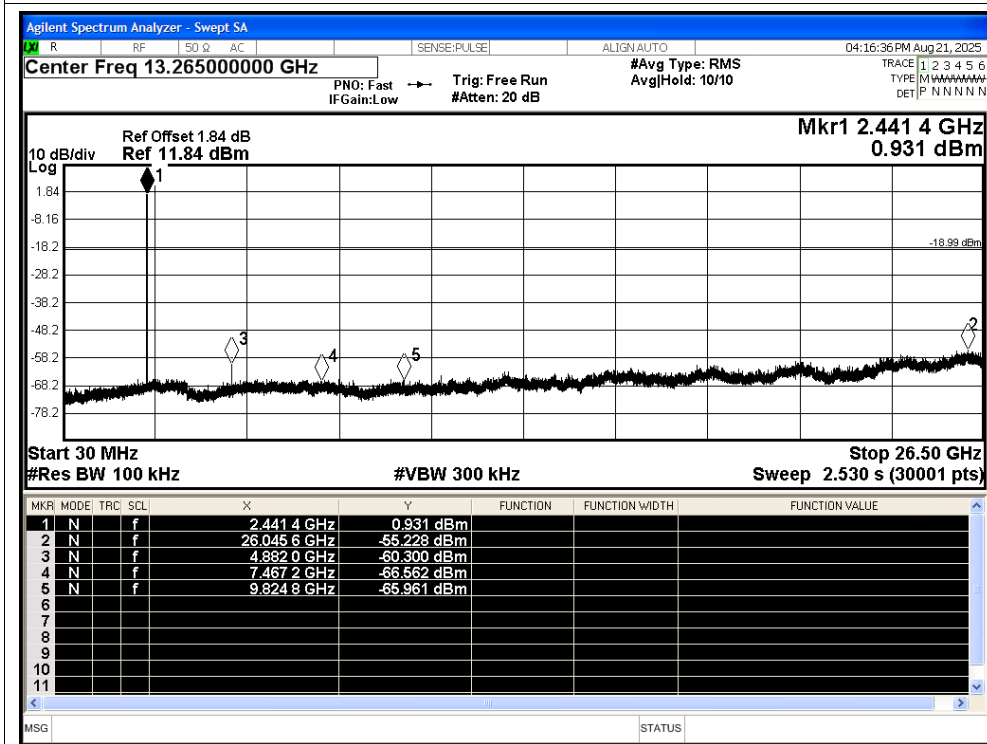
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



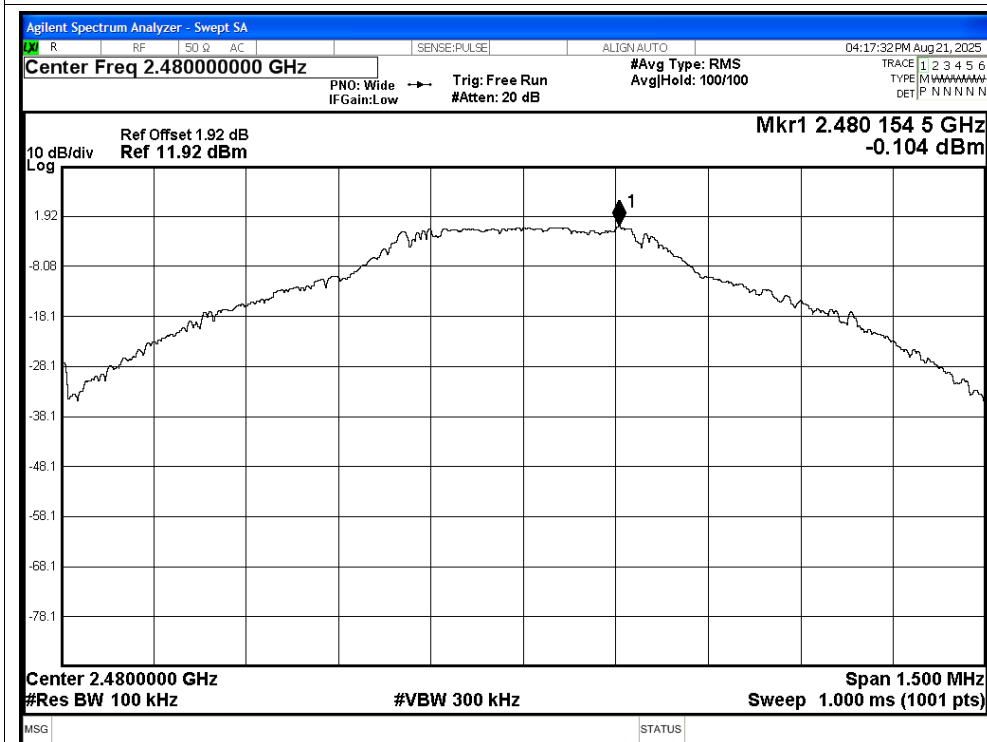
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



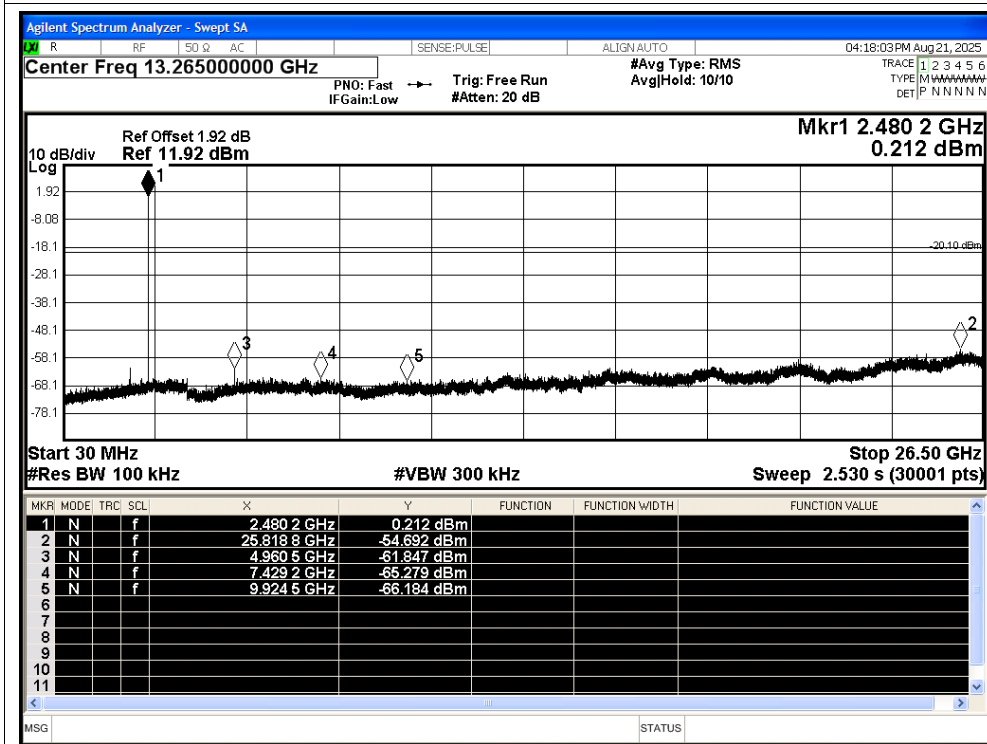
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



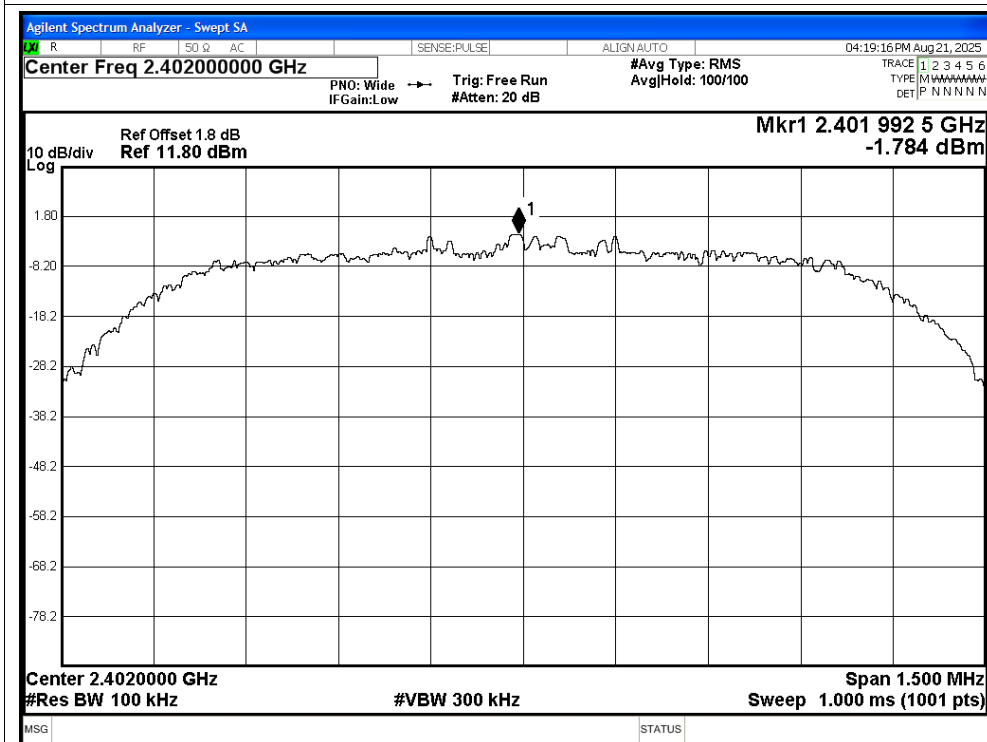
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



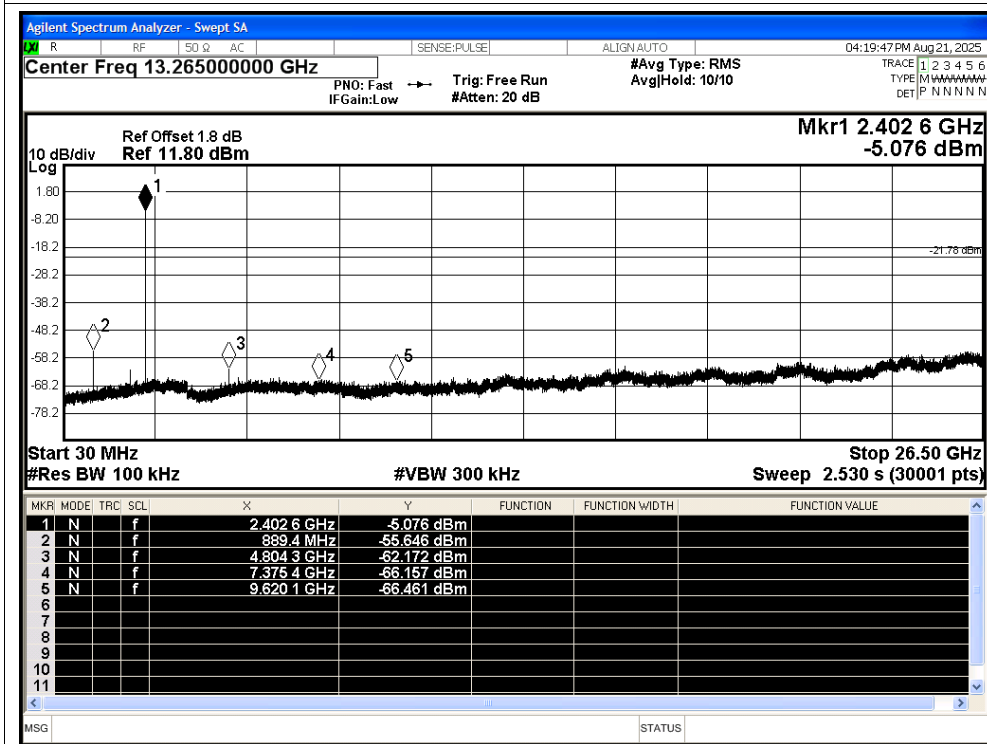
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



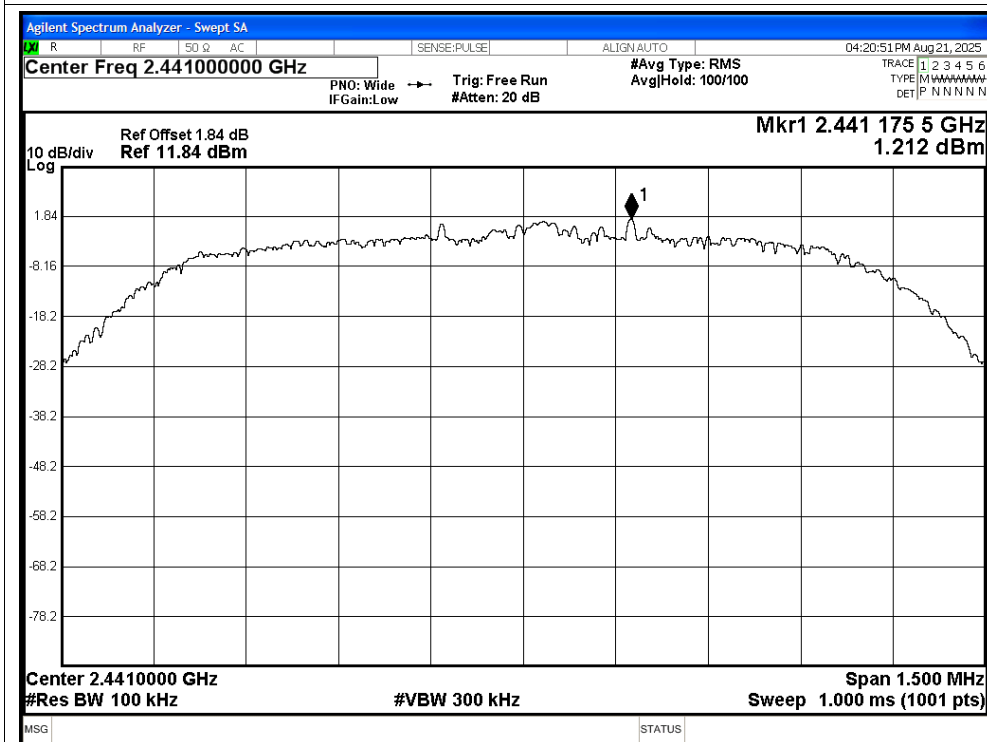
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



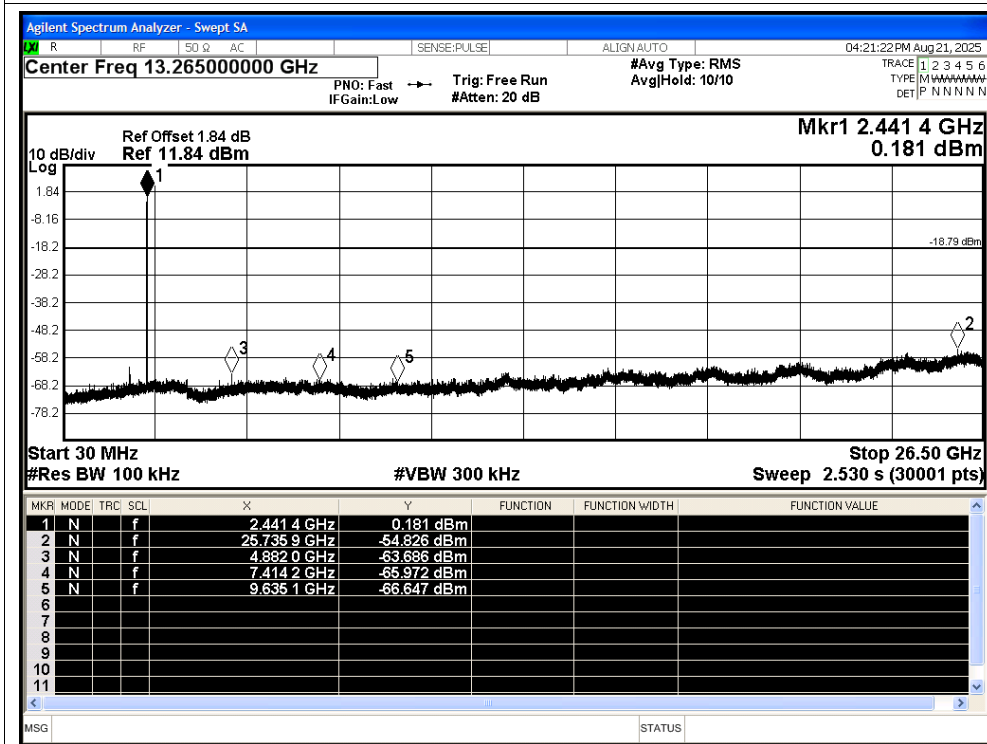
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



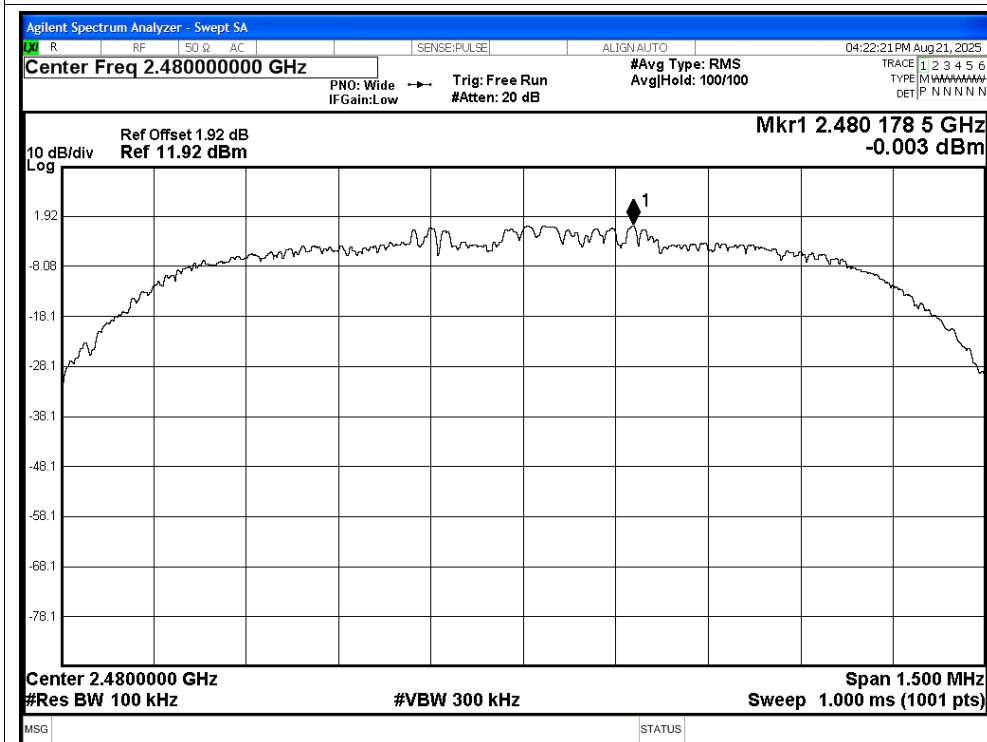
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



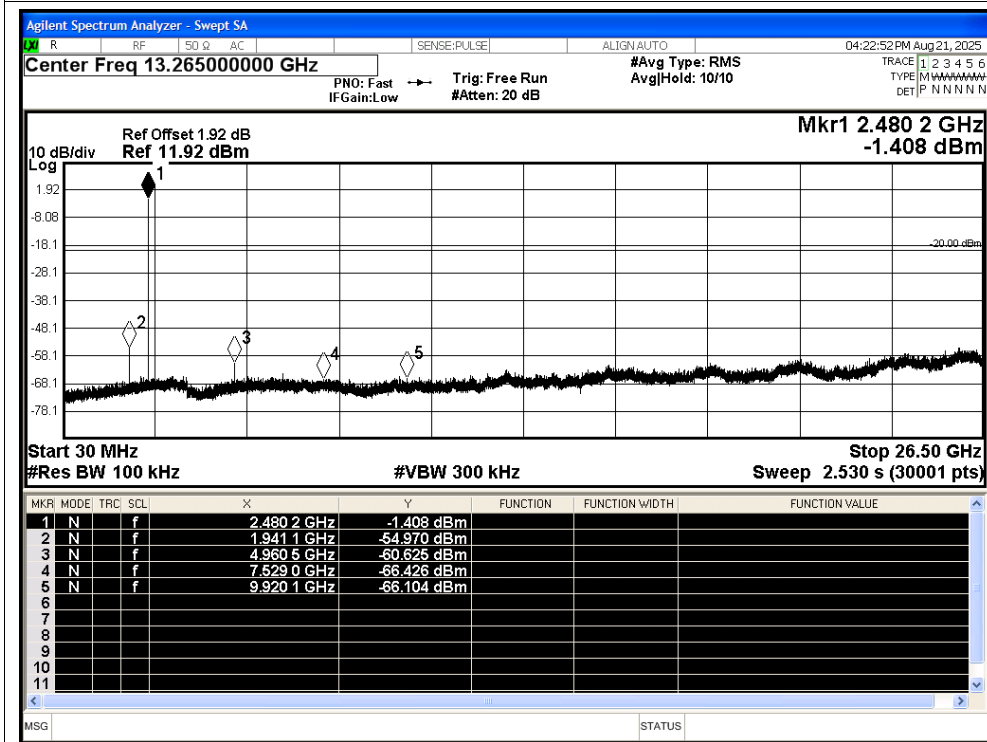
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



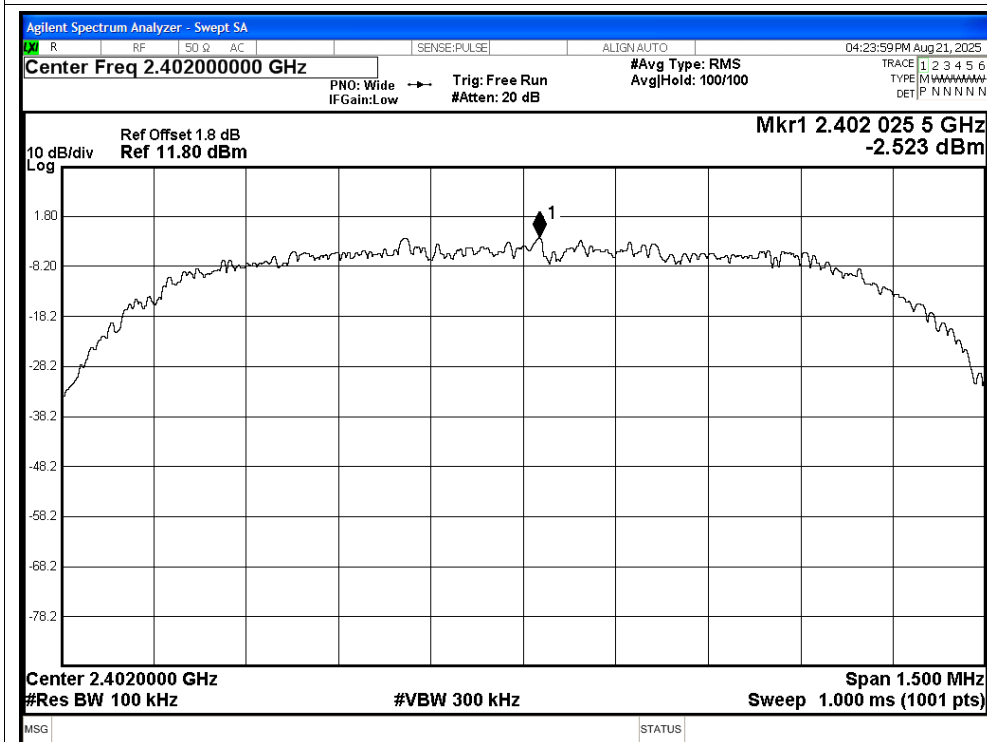
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



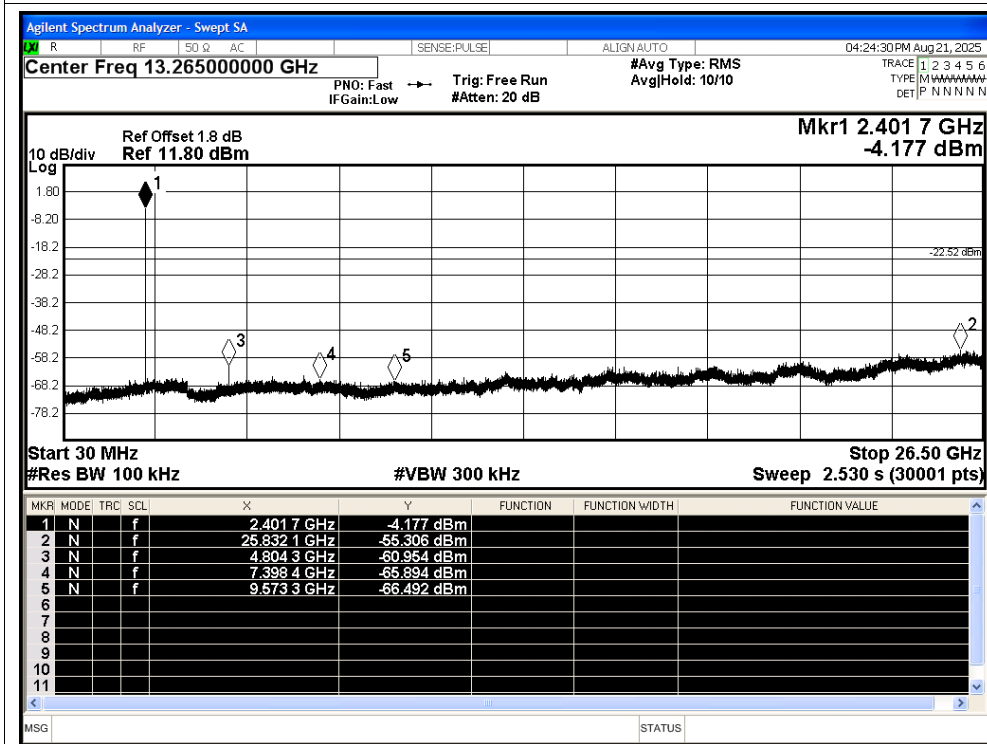
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



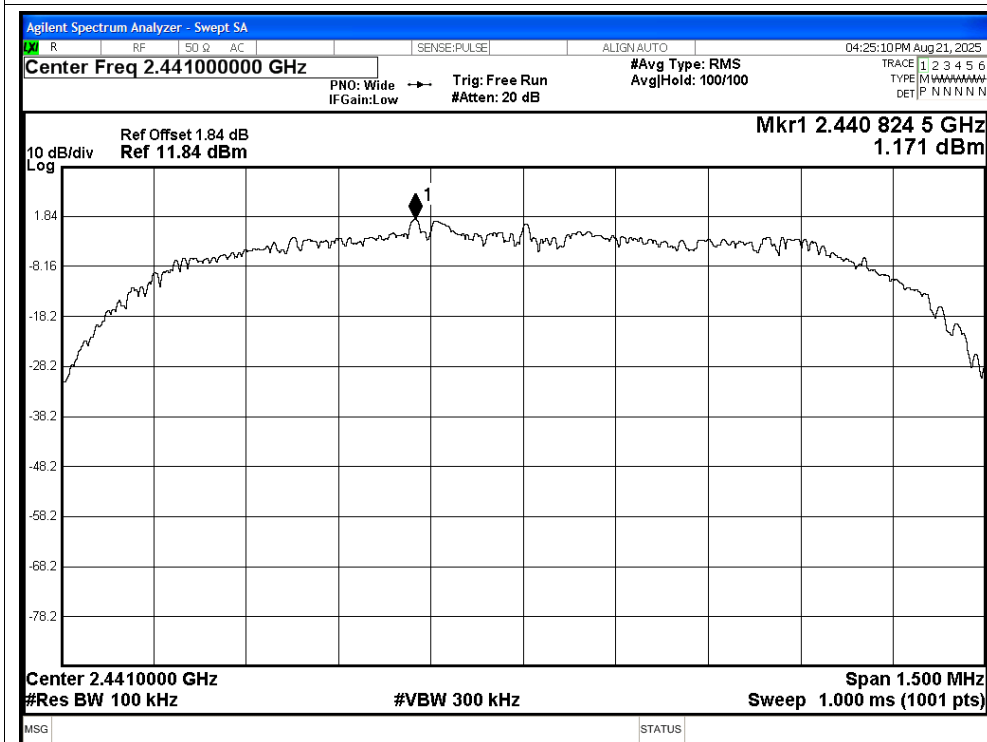
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



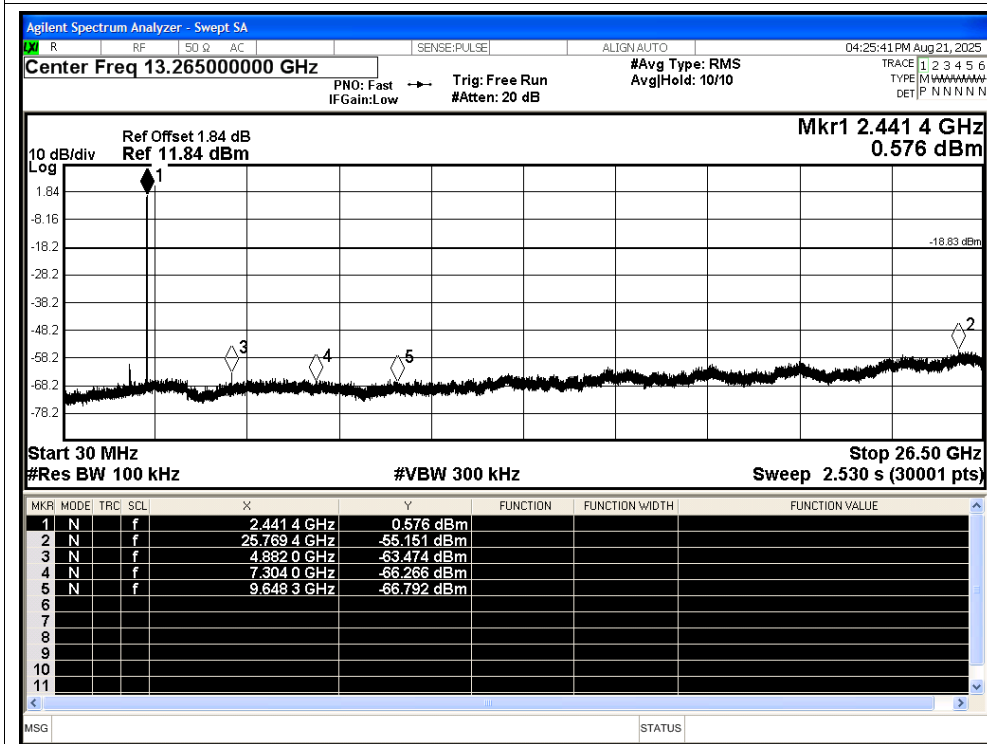
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



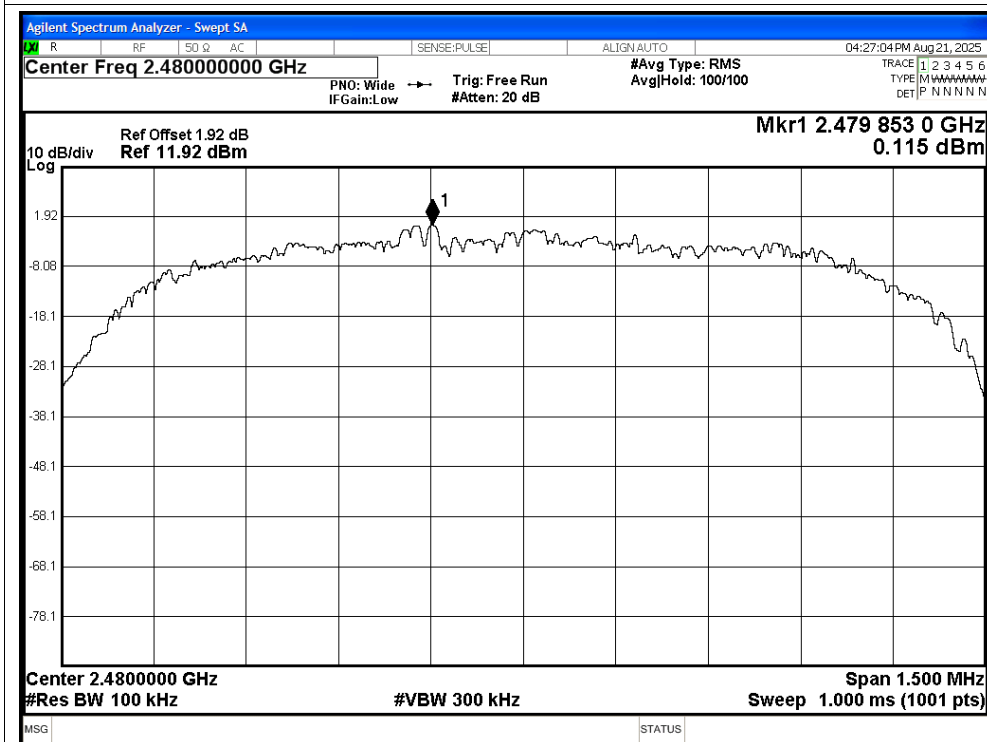
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



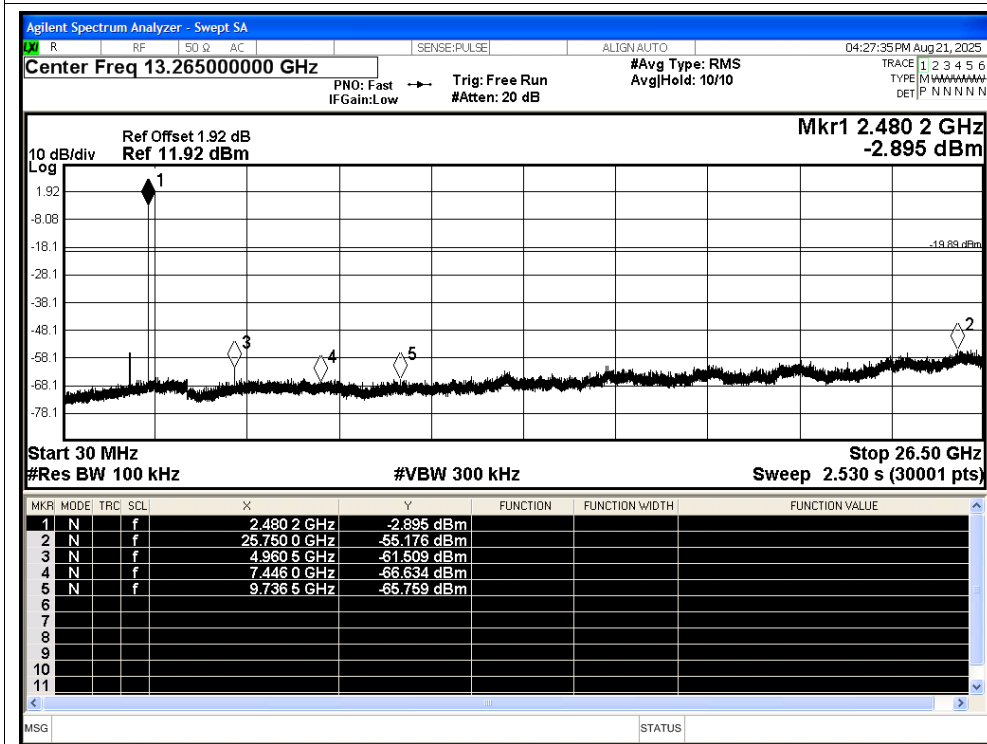
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

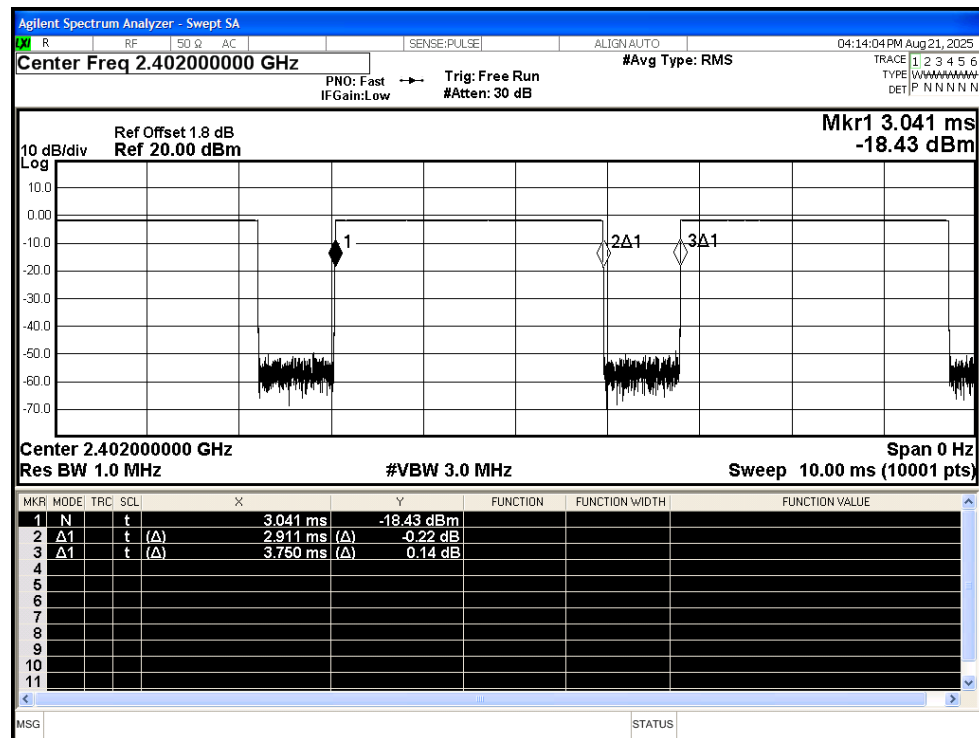


A.8 Duty Cycle

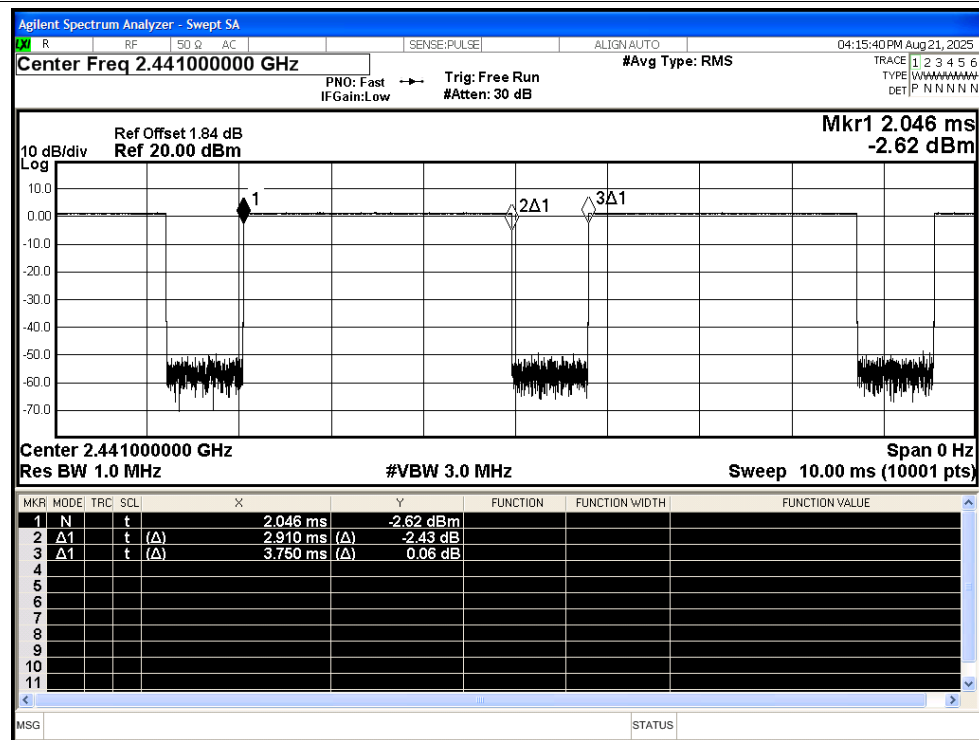
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	77.63	1.1	0.34
NVNT	1-DH5	2441	Ant1	77.6	1.1	0.34
NVNT	1-DH5	2480	Ant1	77.63	1.1	0.34
NVNT	2-DH5	2402	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2441	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2480	Ant1	77.28	1.12	0.35
NVNT	3-DH5	2402	Ant1	77.28	1.12	0.35
NVNT	3-DH5	2441	Ant1	77.28	1.12	0.35
NVNT	3-DH5	2480	Ant1	76.37	1.17	0.36

Test Graphs

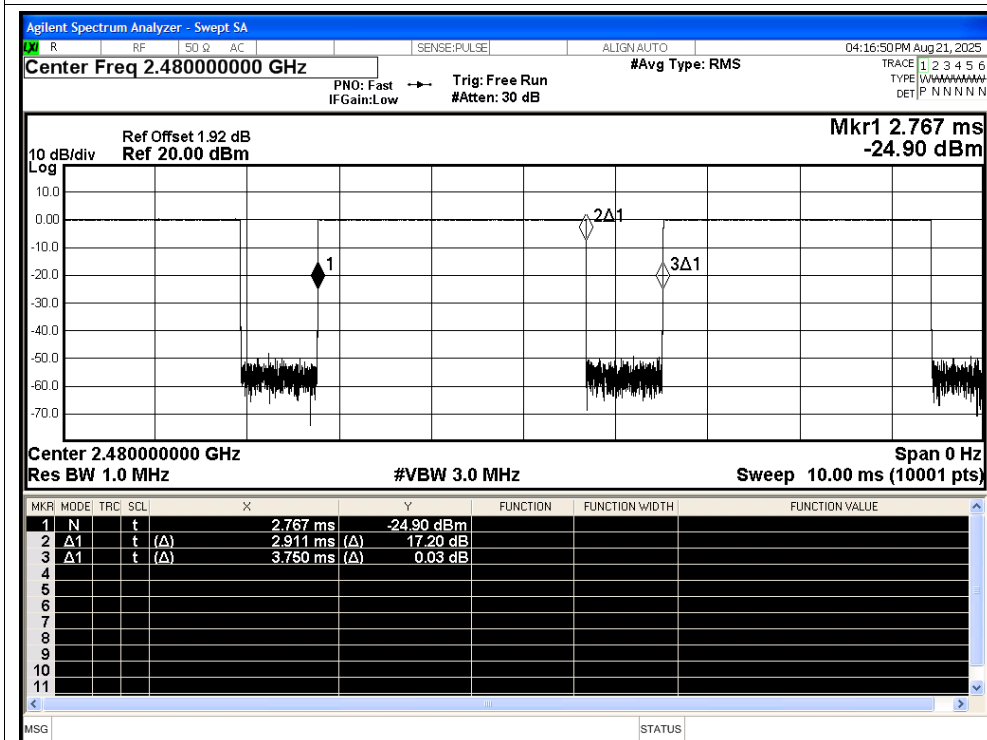
Duty Cycle NVNT 1-DH5 2402MHz Ant1



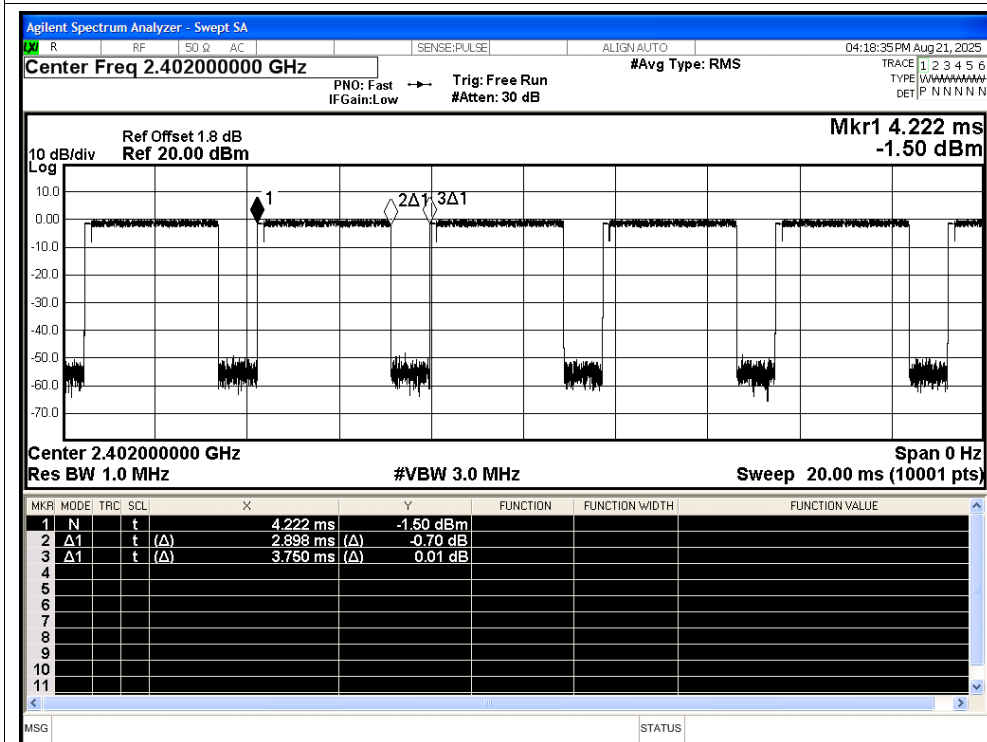
Duty Cycle NVNT 1-DH5 2441MHz Ant1



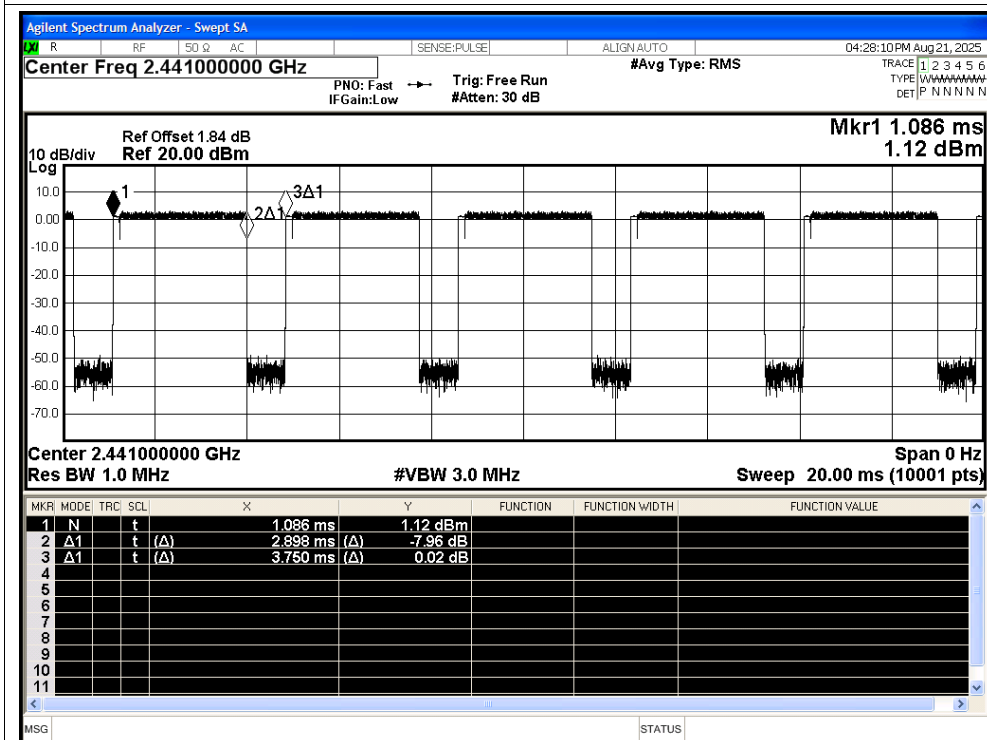
Duty Cycle NVNT 1-DH5 2480MHz Ant1



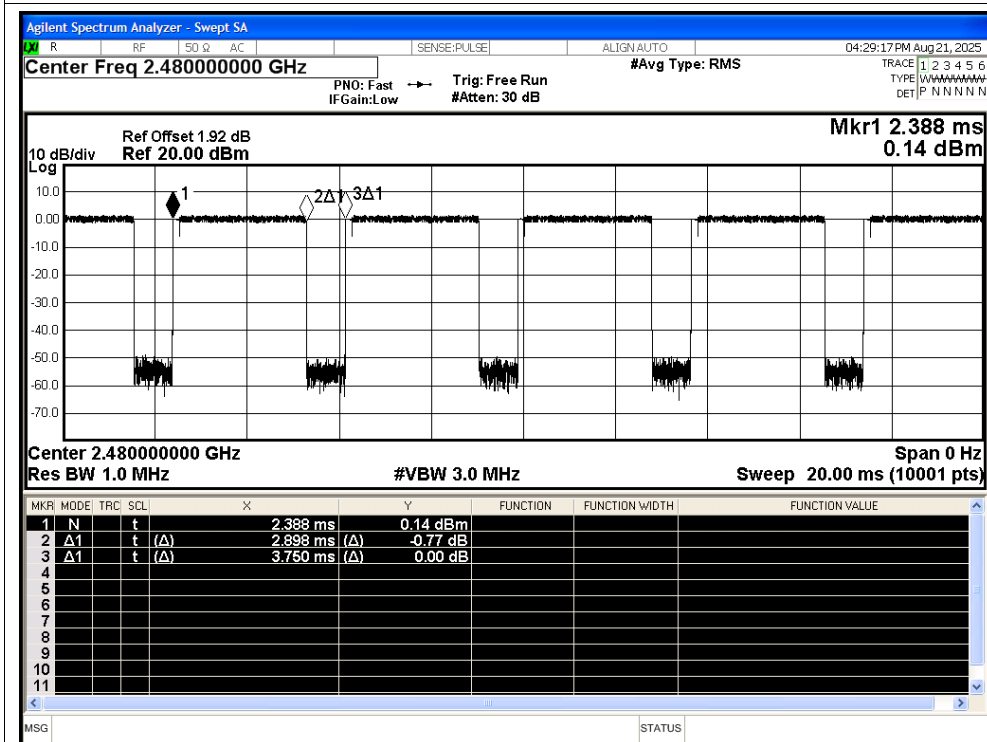
Duty Cycle NVNT 2-DH5 2402MHz Ant1



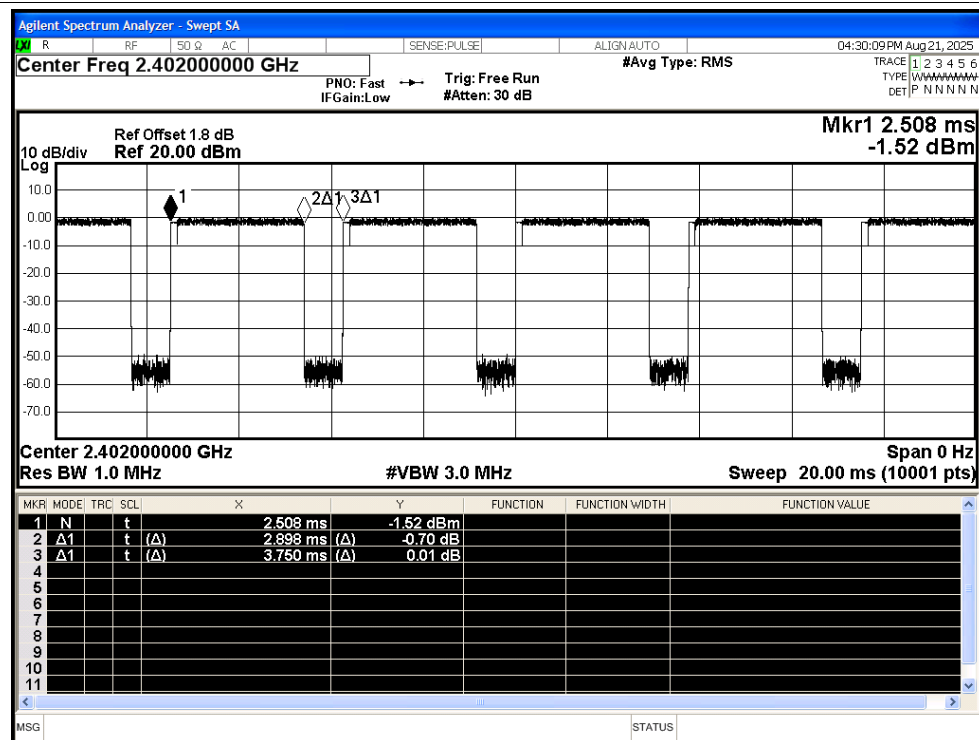
Duty Cycle NVNT 2-DH5 2441MHz Ant1



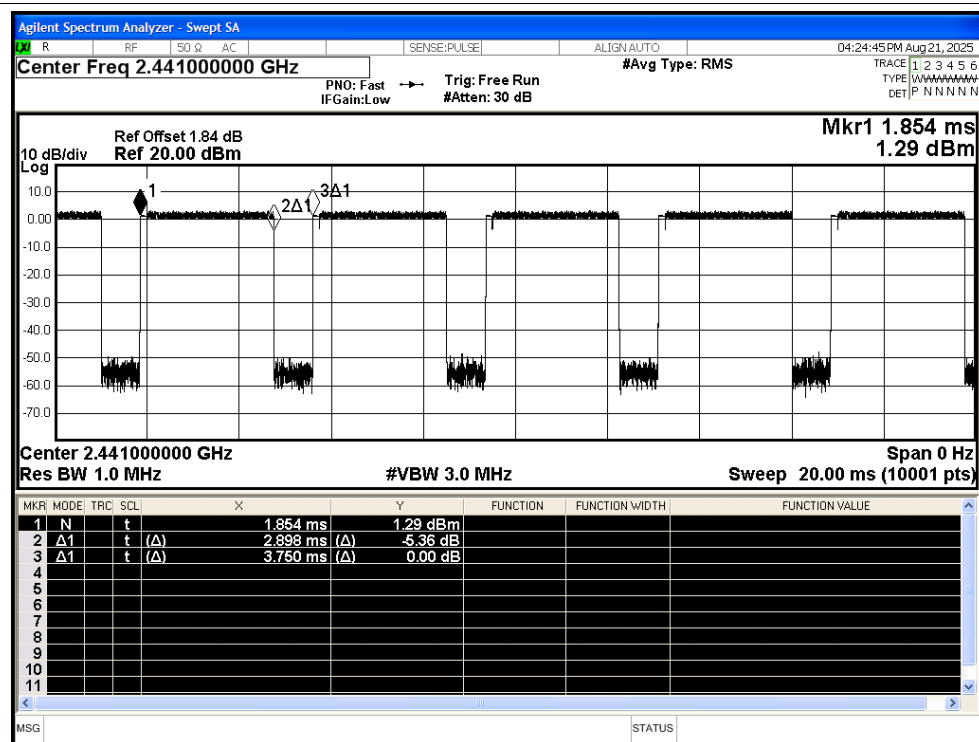
Duty Cycle NVNT 2-DH5 2480MHz Ant1

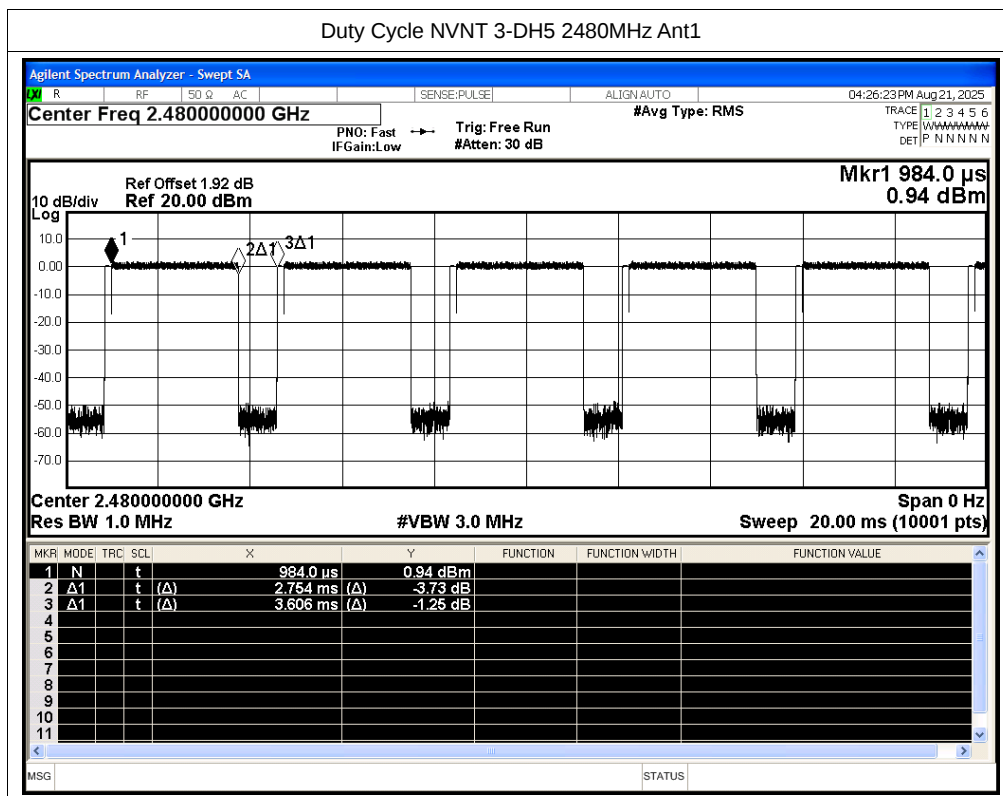


Duty Cycle NVNT 3-DH5 2402MHz Ant1



Duty Cycle NVNT 3-DH5 2441MHz Ant1



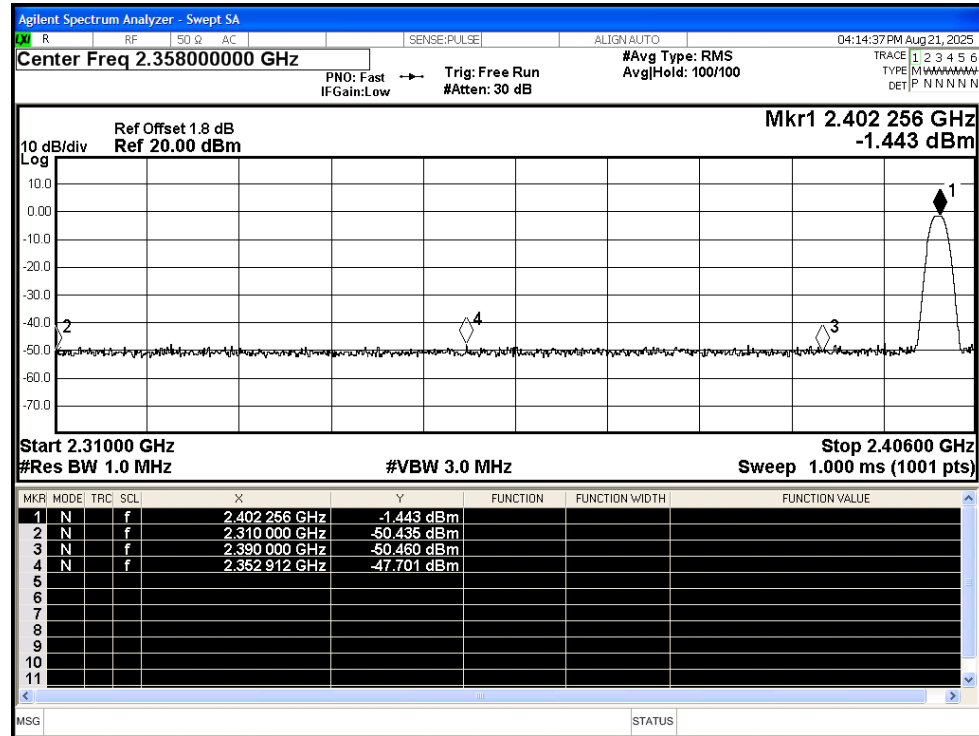


A.9 Restrict Band

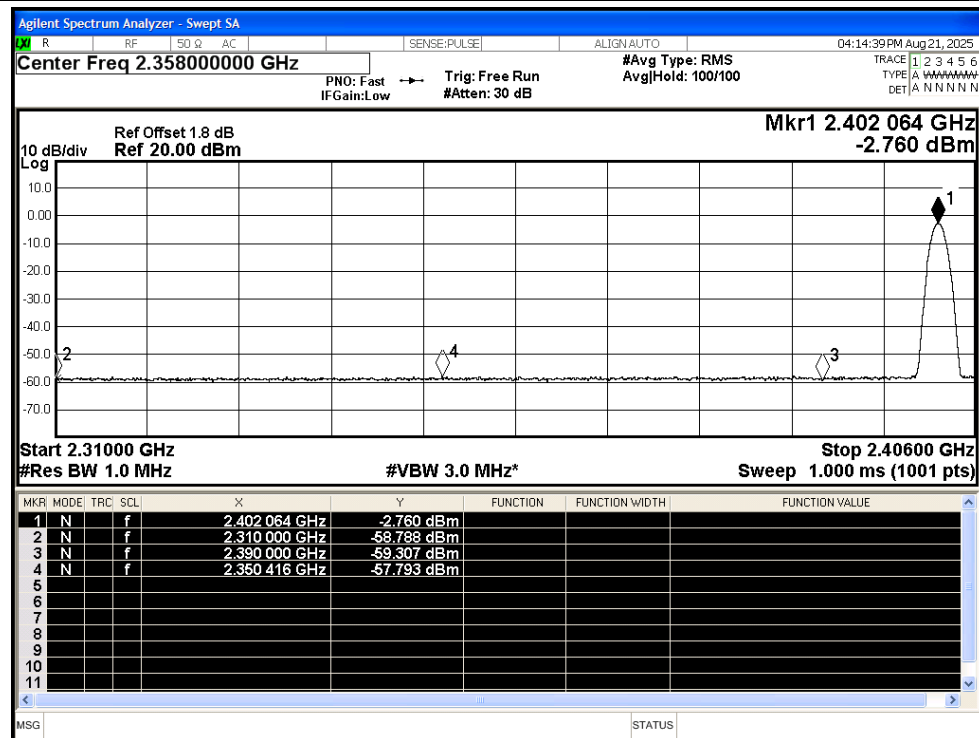
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBUV/m)	Detector	Limit (dBUV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-50.44	2	-	46.82	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.79	2	1.1	39.57	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2352.912	-47.7	2	-	49.56	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2350.416	-57.79	2	1.1	40.57	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-50.46	2	-	46.8	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-59.31	2	1.1	39.05	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.85	2	-	46.41	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-57.85	2	1.1	40.51	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2494.6	-47.09	2	-	50.17	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2491.36	-57.12	2	1.1	41.24	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-49.65	2	-	47.61	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-58.79	2	1.1	39.57	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-51.78	2	-	45.48	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-59.25	2	1.12	39.13	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2360.88	-46.68	2	-	50.58	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2382.192	-58.03	2	1.12	40.35	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-51.38	2	-	45.88	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-59.02	2	1.12	39.36	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-46.17	2	-	51.09	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-56.94	2	0.12	40.44	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2486.488	-45.1	2	-	52.16	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.704	-56.66	2	0.12	40.72	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-51.63	2	-	45.63	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-57.81	2	0.12	39.57	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-51.99	2	-	45.27	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-59.01	2	0.12	38.37	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2371.632	-47.91	2	-	49.35	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2360.112	-57.87	2	0.12	39.51	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-50.4	2	-	46.86	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-58.83	2	0.12	38.55	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-44.44	2	-	52.82	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-56.29	2	1.17	42.14	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.512	-44.44	2	-	52.82	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.512	-56.29	2	1.17	42.14	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-50.27	2	-	46.99	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-57.45	2	1.17	40.98	Average	54	Pass

Test Graphs

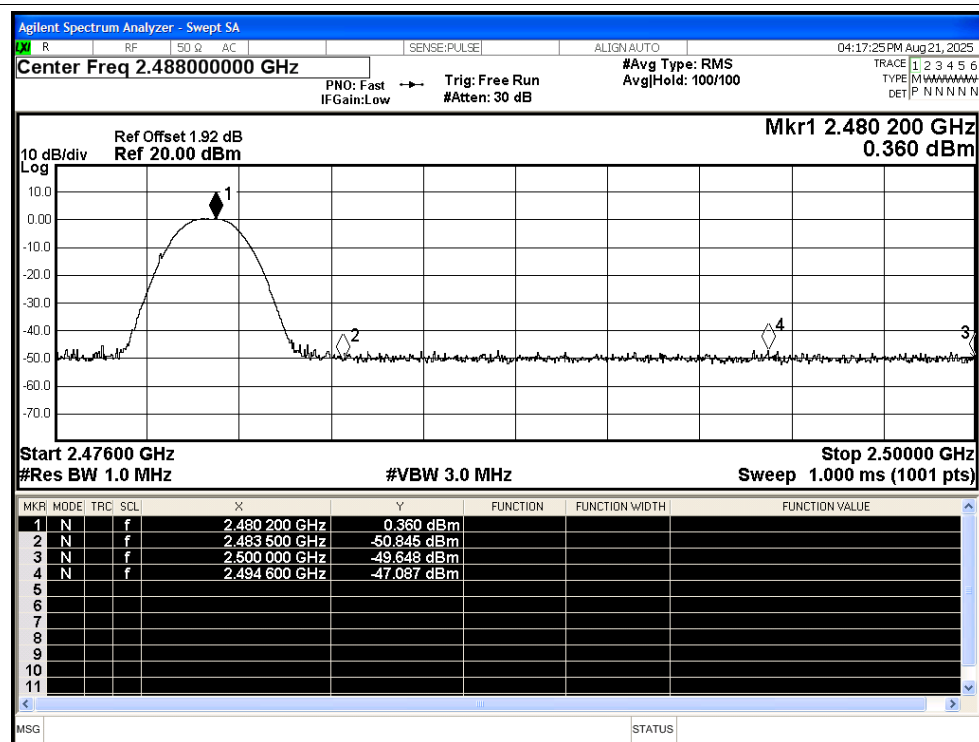
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



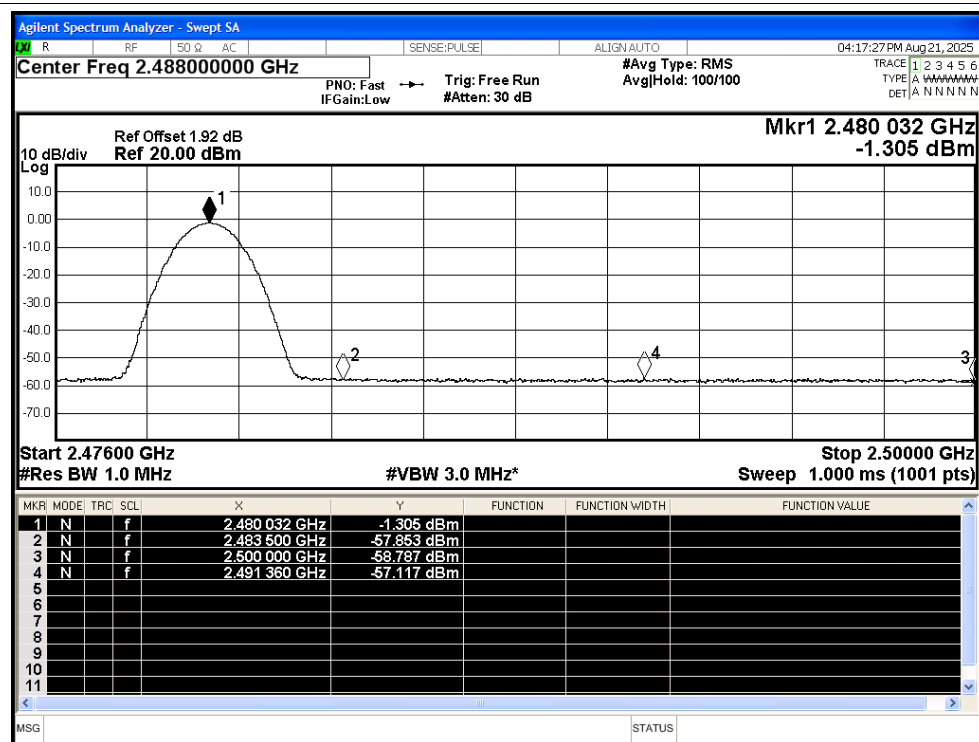
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



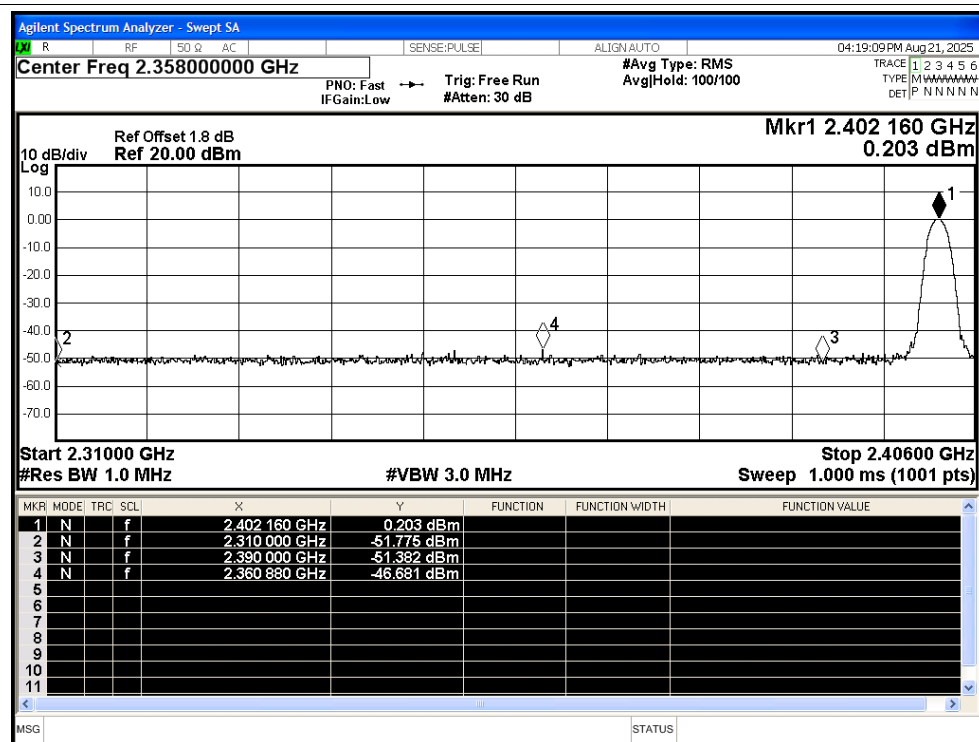
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



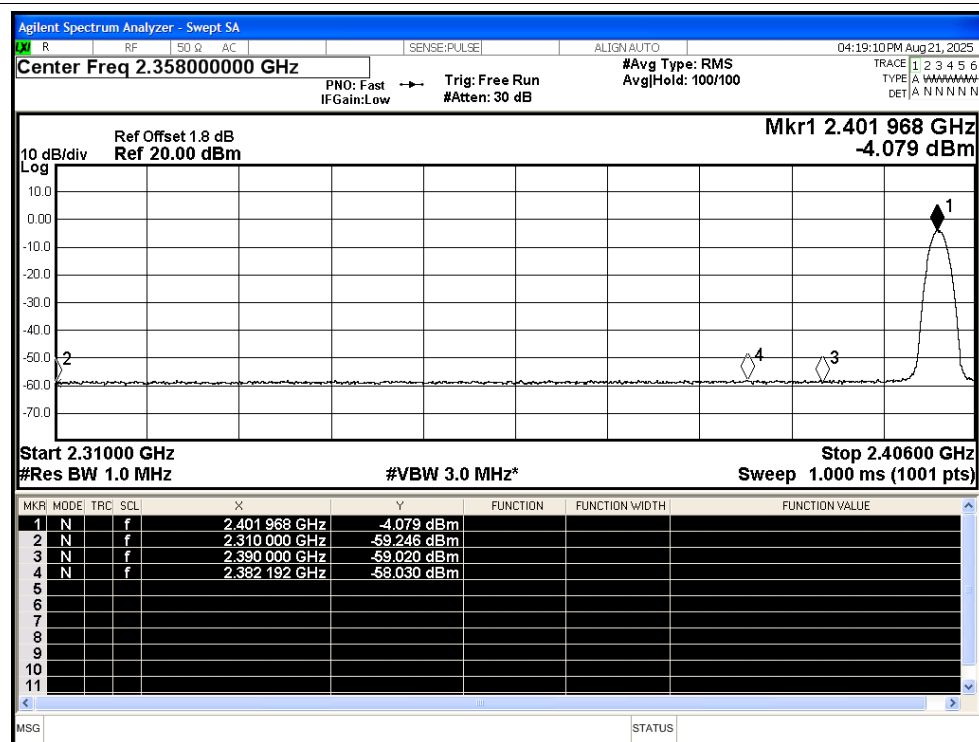
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



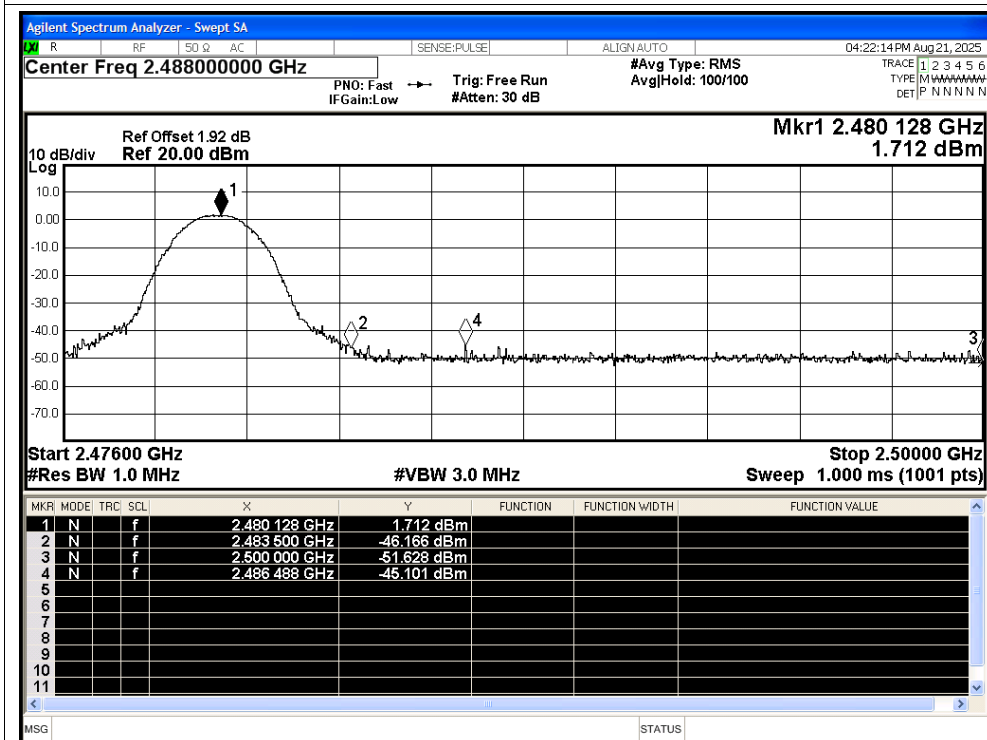
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



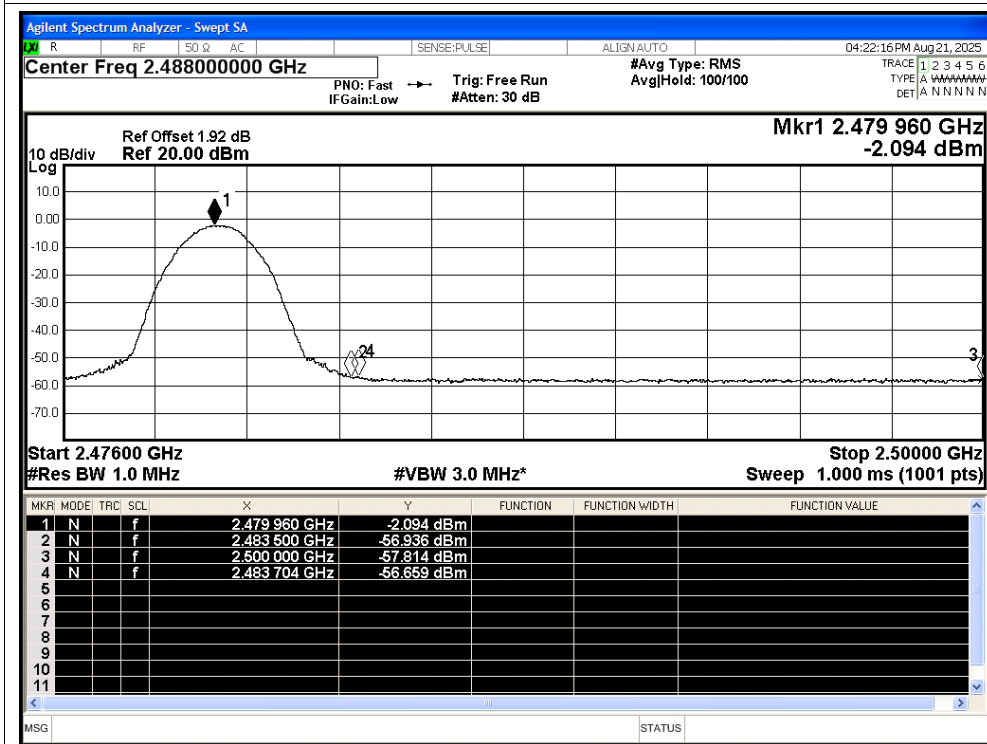
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average

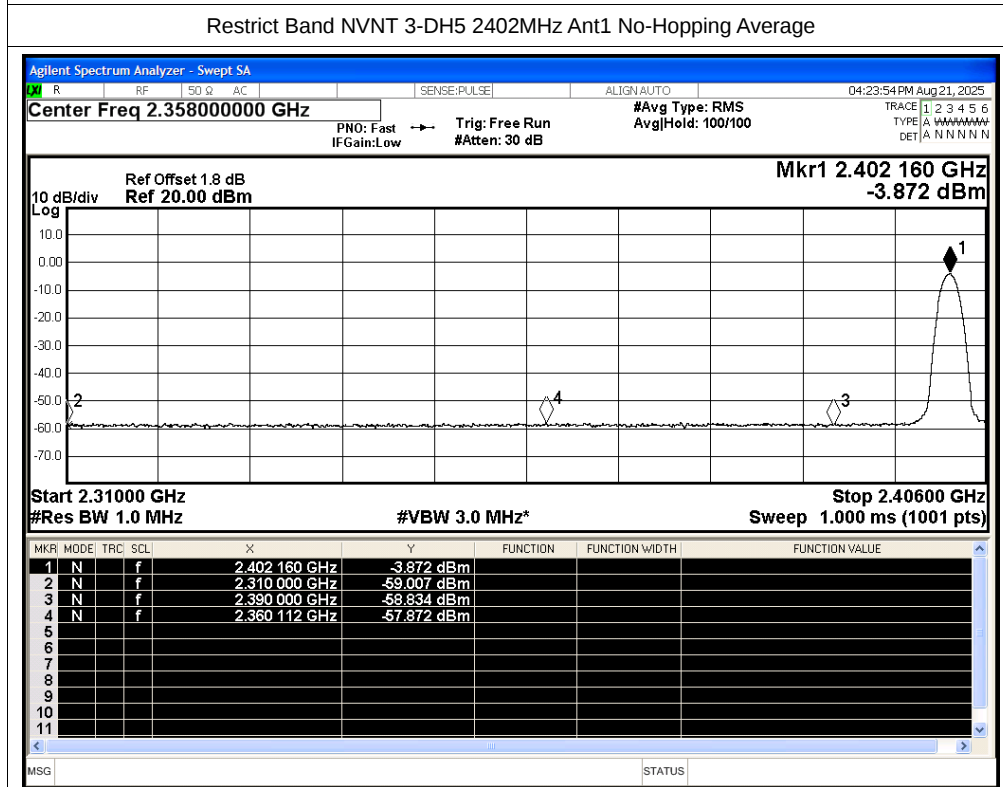
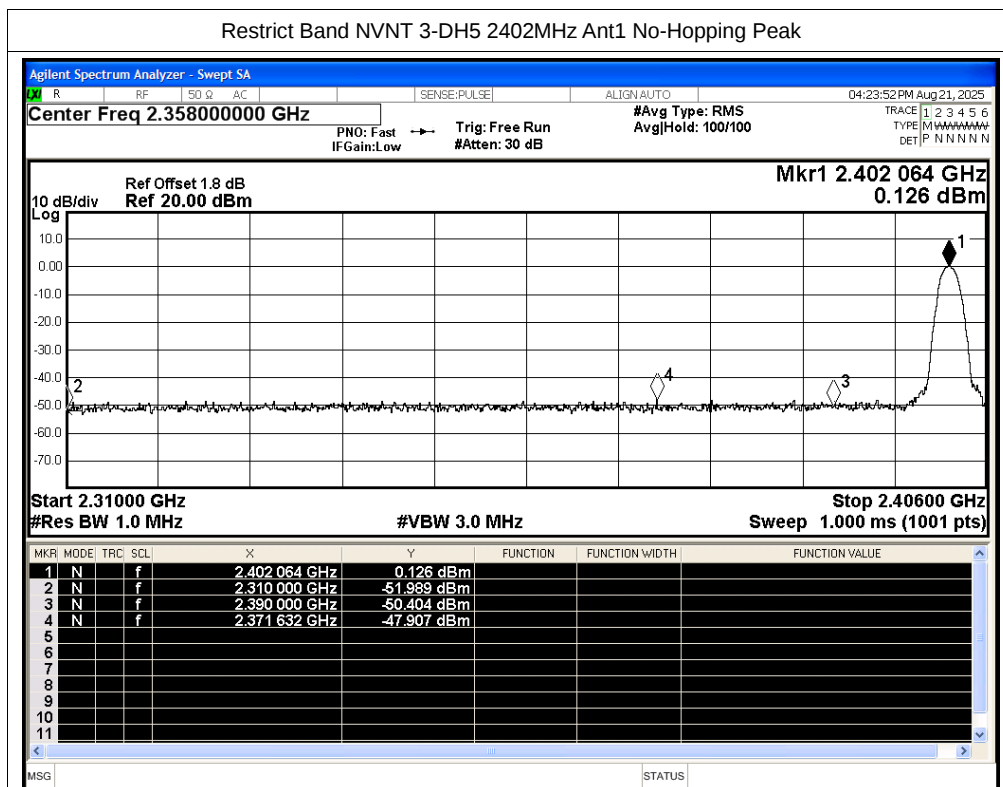


Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak

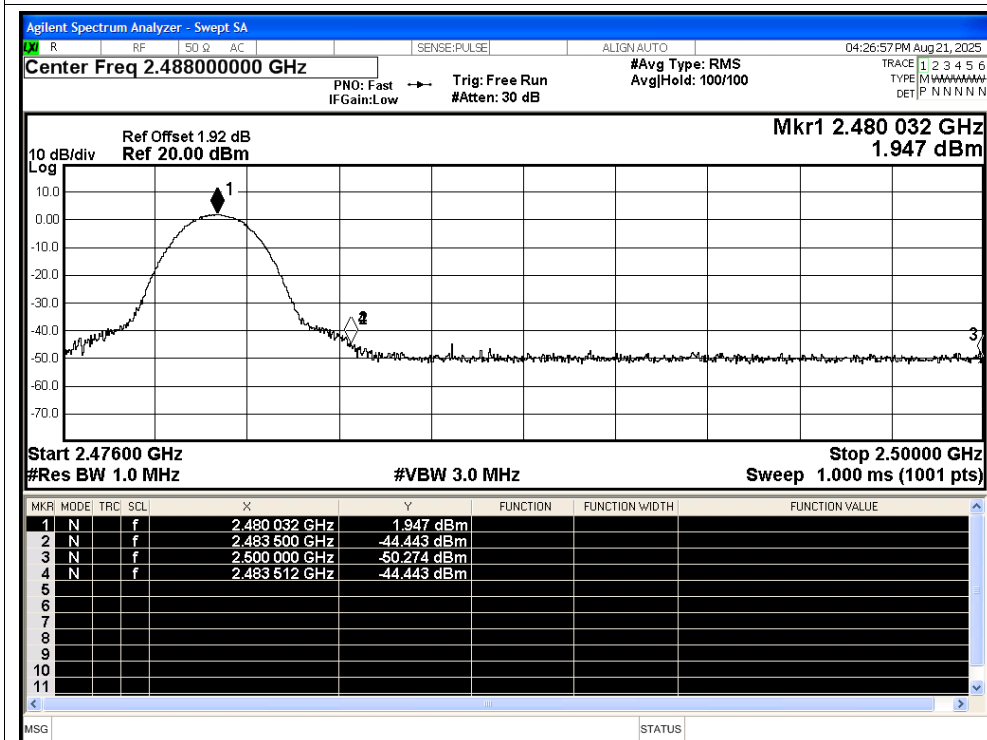


Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average





Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Average

