

Appendix A

RF Test Data for BT(Conducted Measurement)

Product Name: Translator

Test Model: G6

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	0.95	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.946	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.992	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.288	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.285	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.283	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.312	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.291	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.303	N/A	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



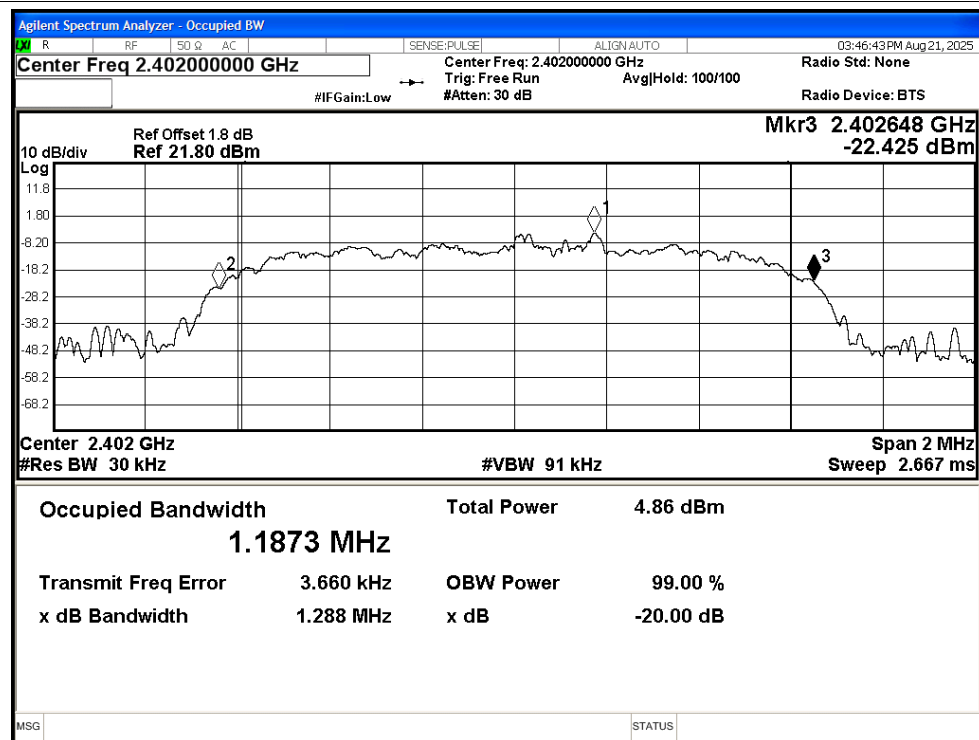
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



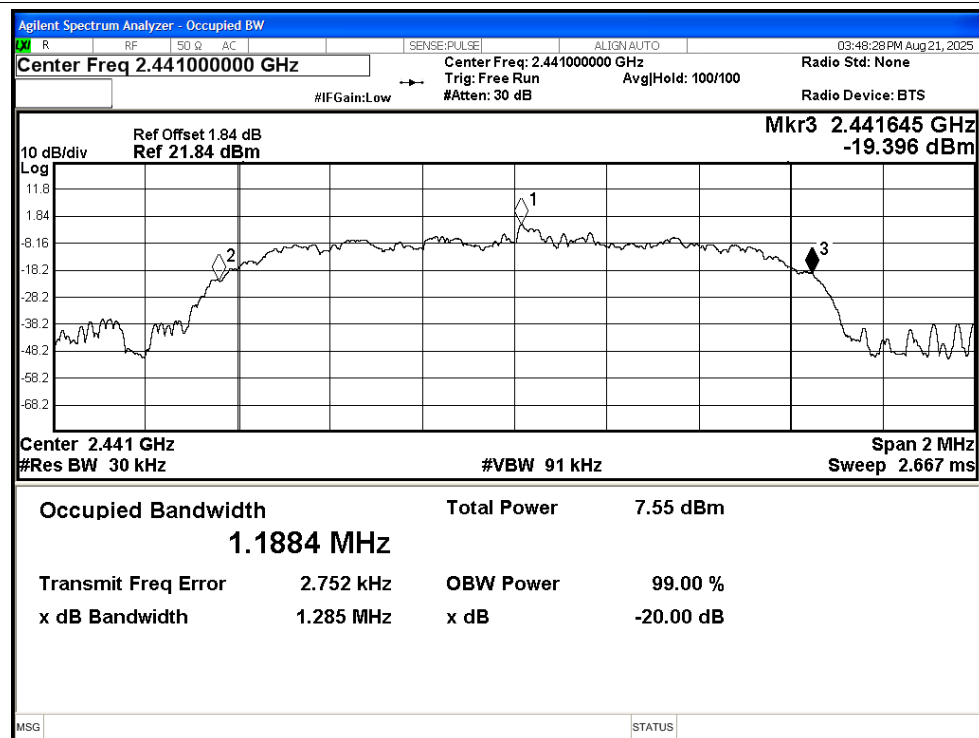
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



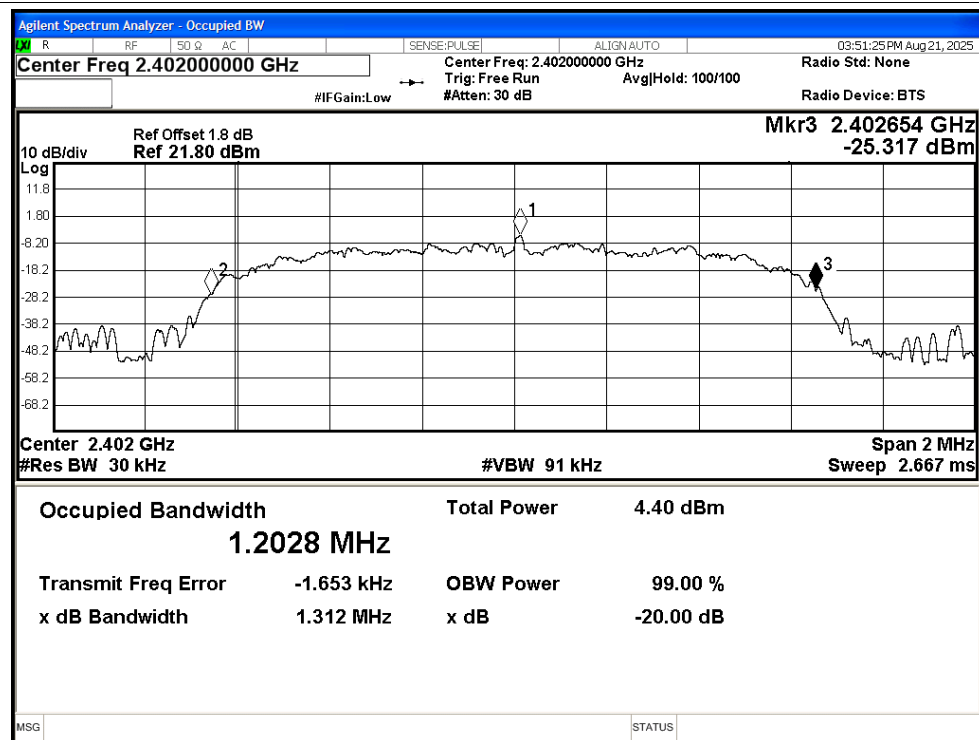
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



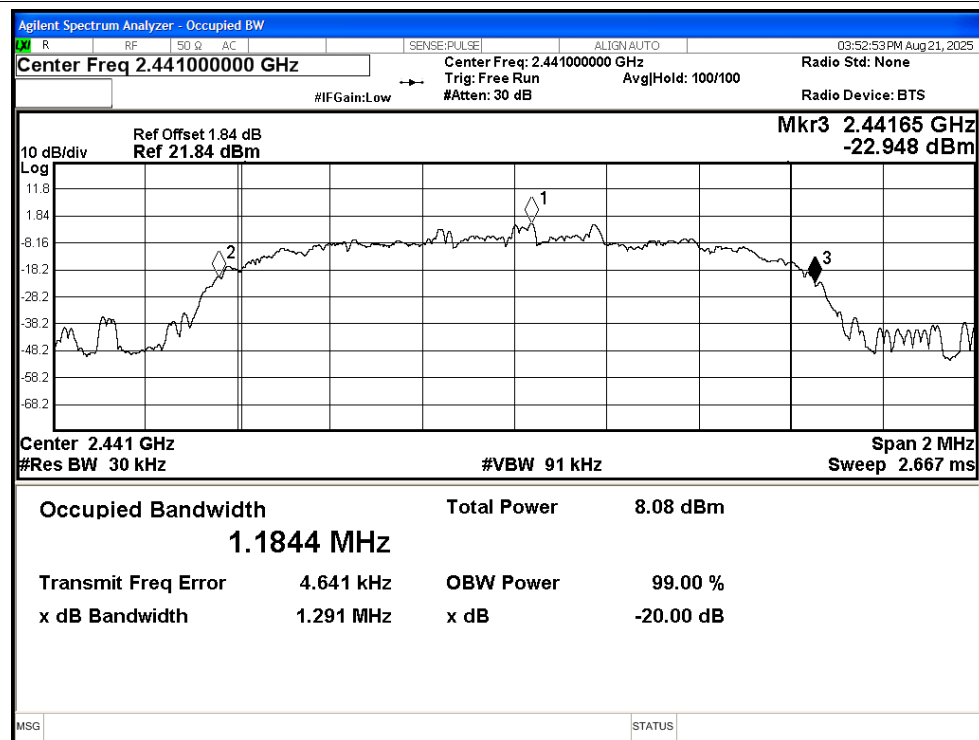
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

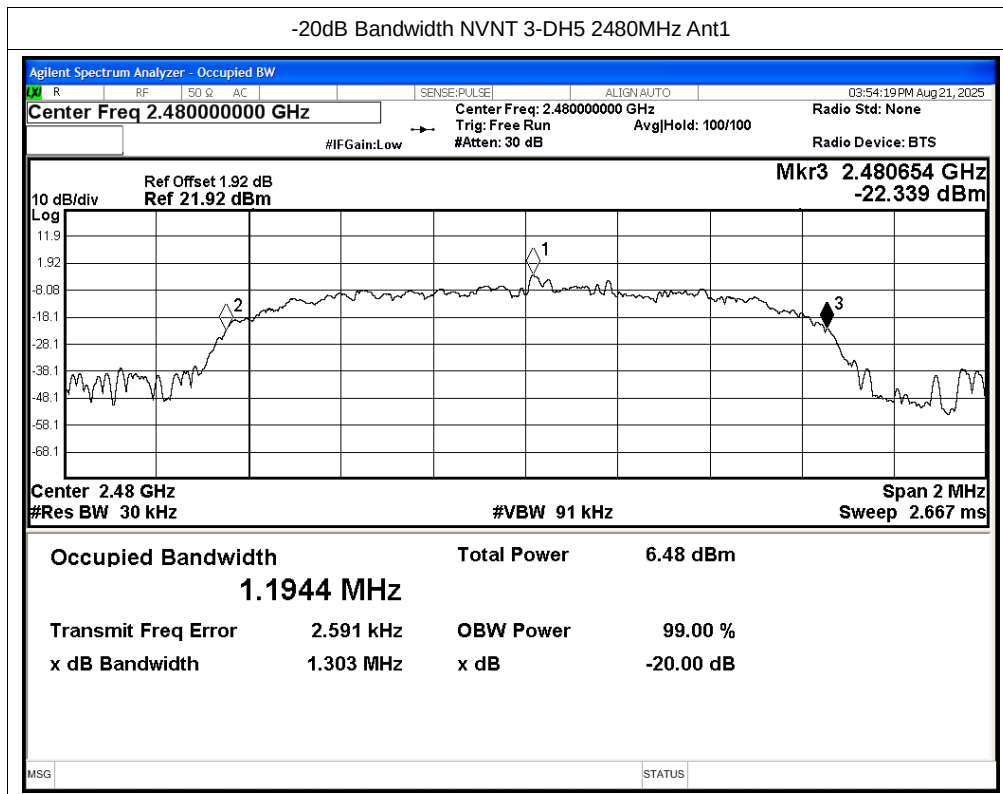


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



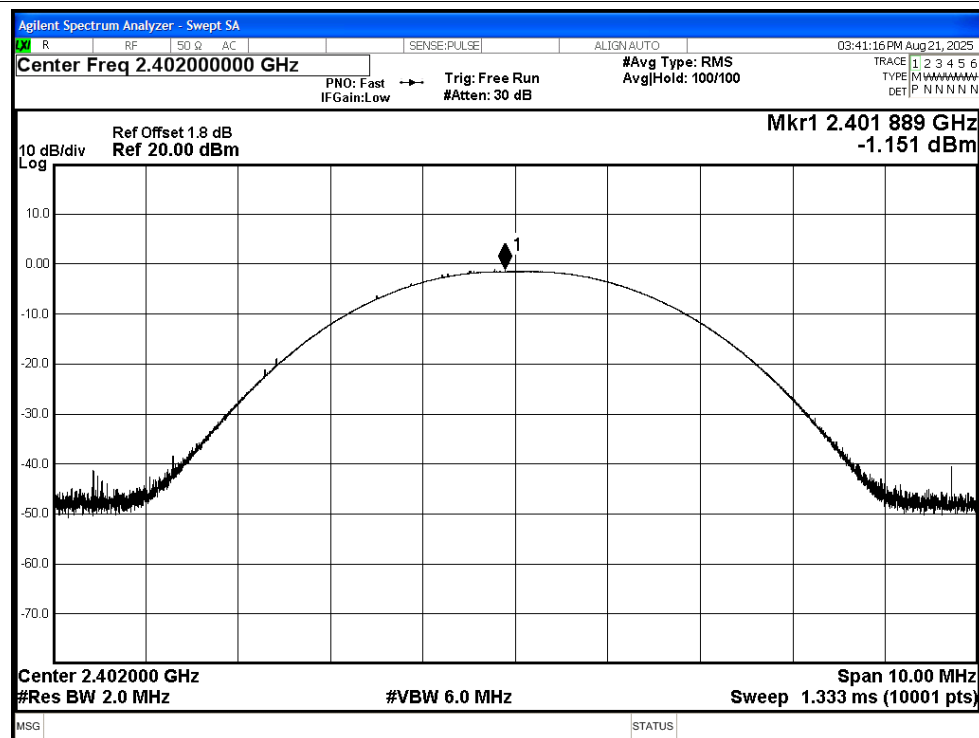


A.2 Maximum Peak Conducted Output Power

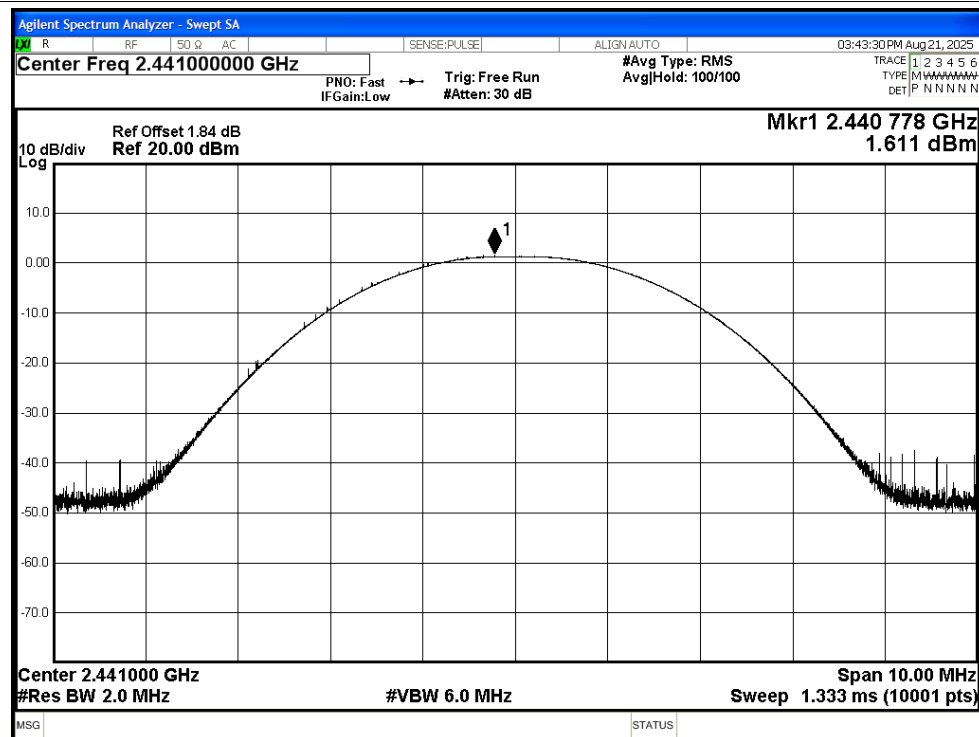
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-1.15	21	Pass
NVNT	1-DH5	2441	Ant1	1.61	21	Pass
NVNT	1-DH5	2480	Ant1	0.35	21	Pass
NVNT	2-DH5	2402	Ant1	0.64	21	Pass
NVNT	2-DH5	2441	Ant1	3.29	21	Pass
NVNT	2-DH5	2480	Ant1	2.12	21	Pass
NVNT	3-DH5	2402	Ant1	1.01	21	Pass
NVNT	3-DH5	2441	Ant1	3.63	21	Pass
NVNT	3-DH5	2480	Ant1	2.42	21	Pass

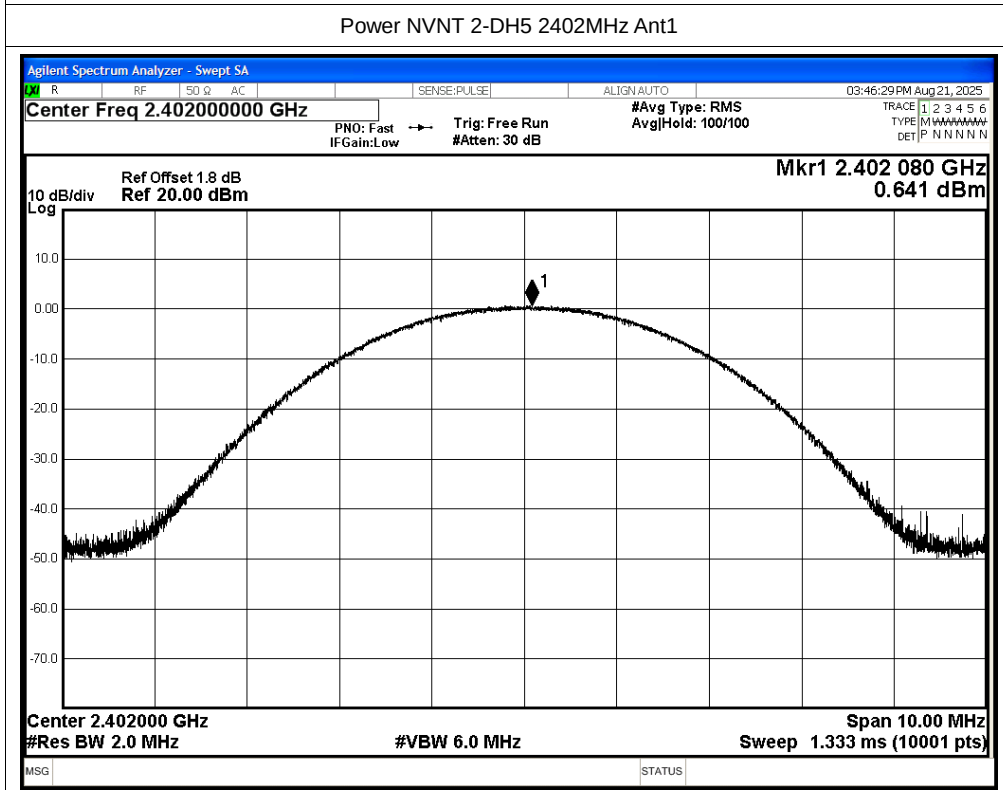
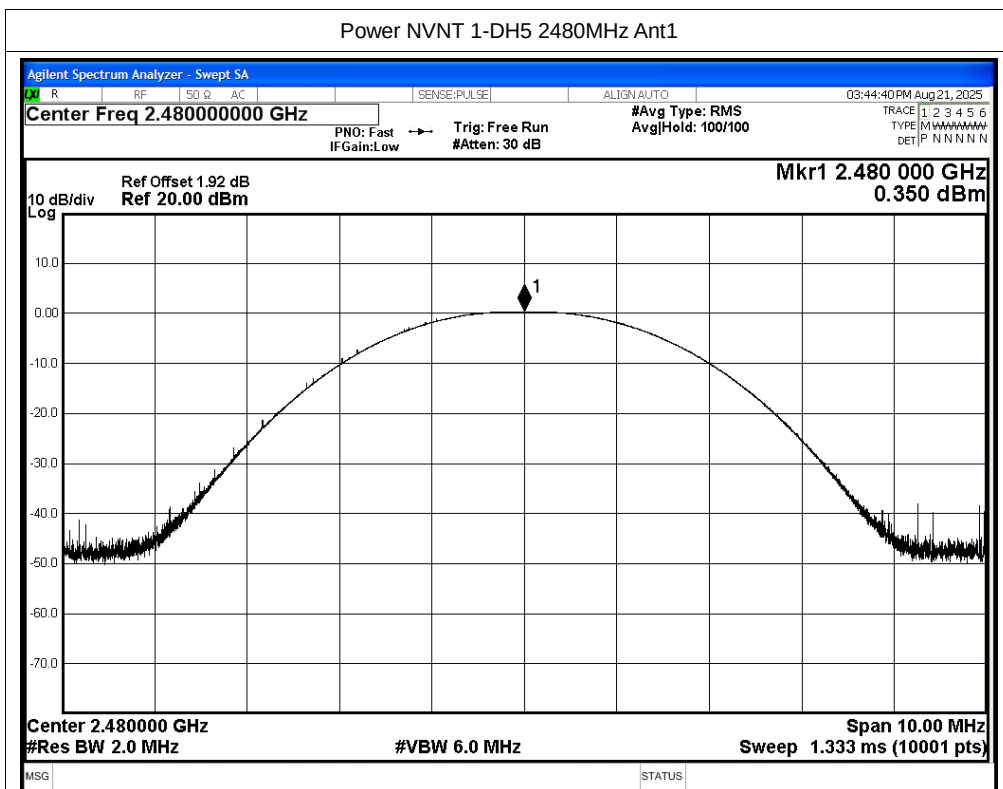
Test Graphs

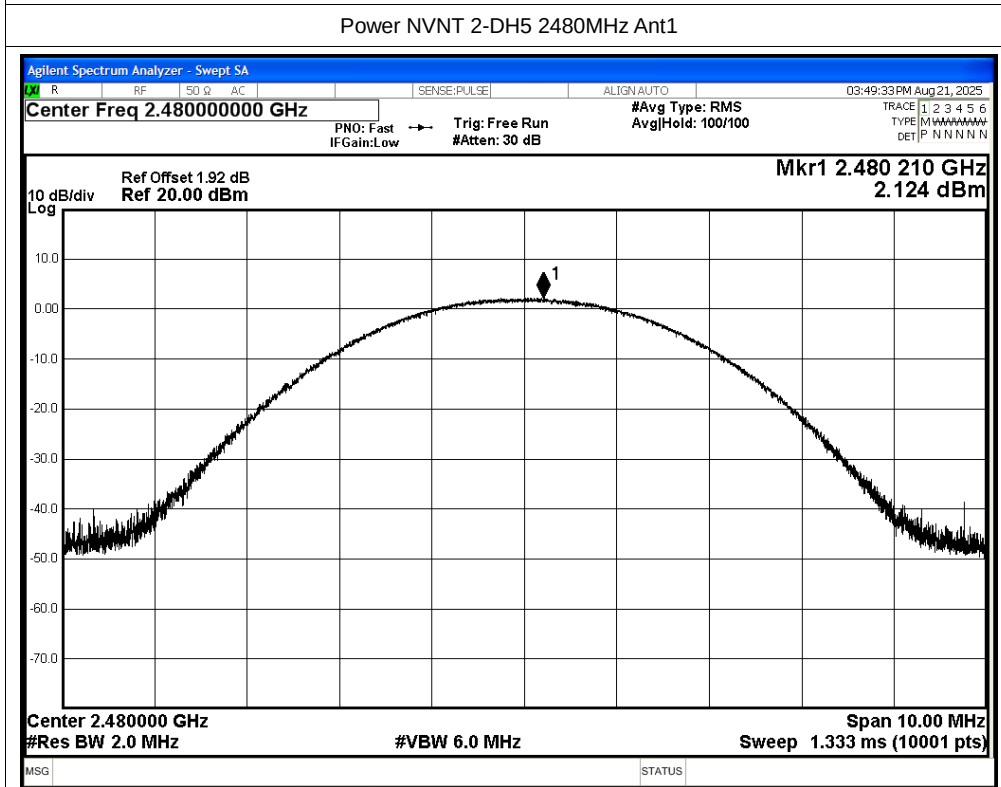
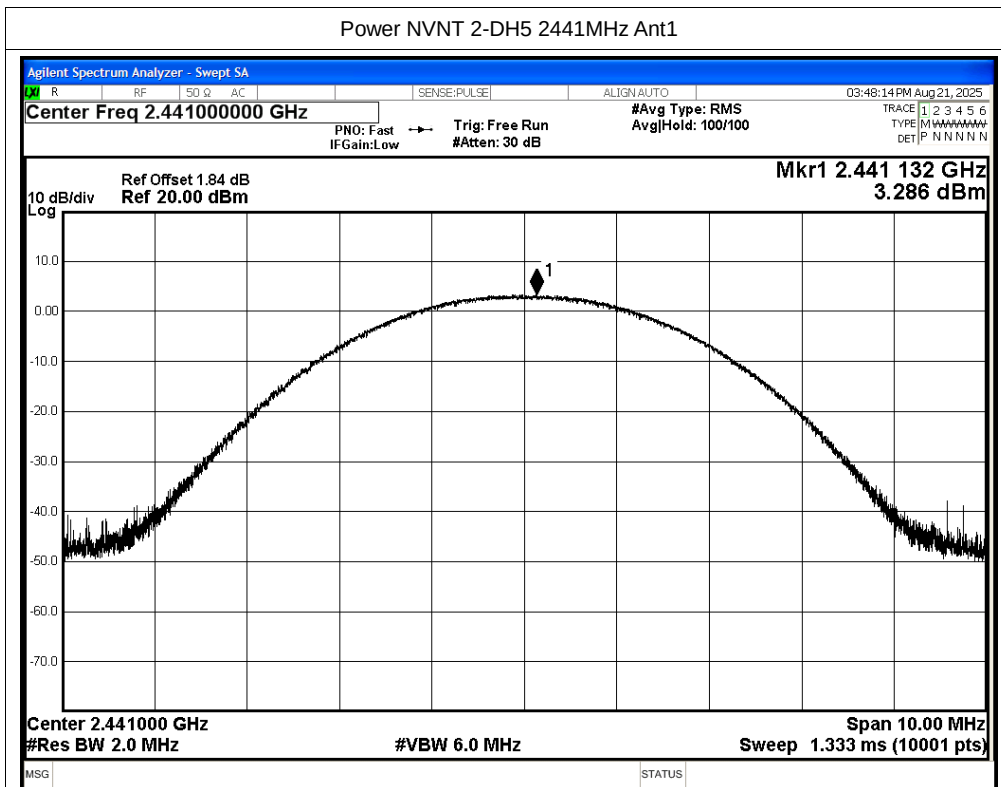
Power NVNT 1-DH5 2402MHz Ant1

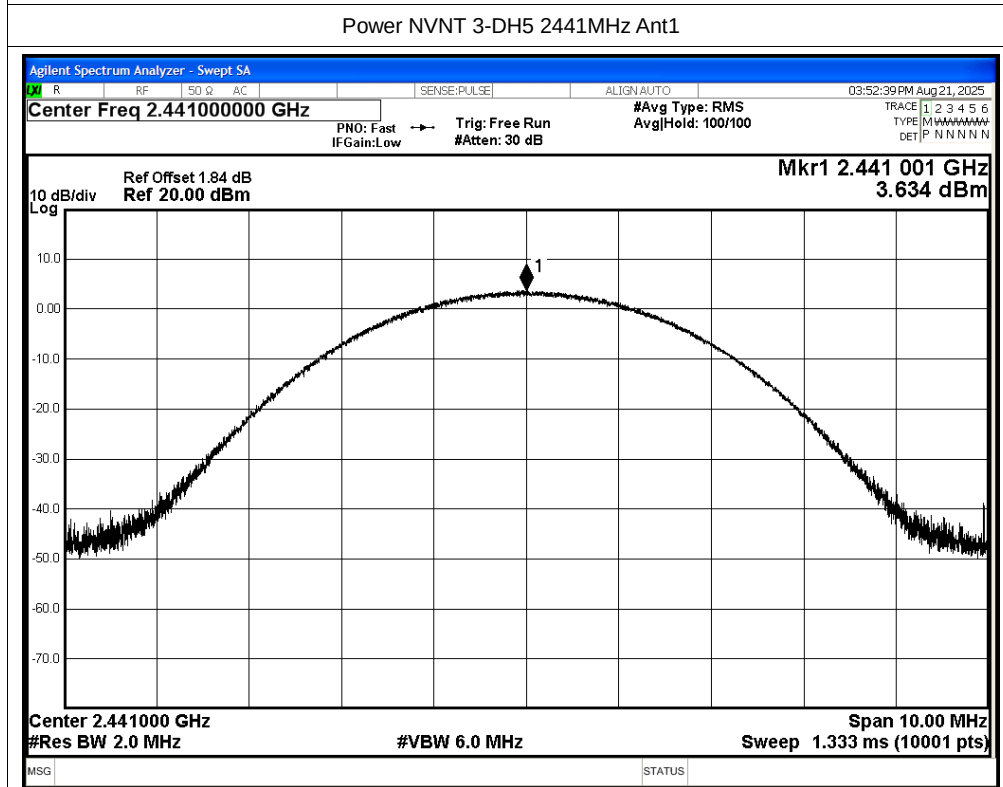
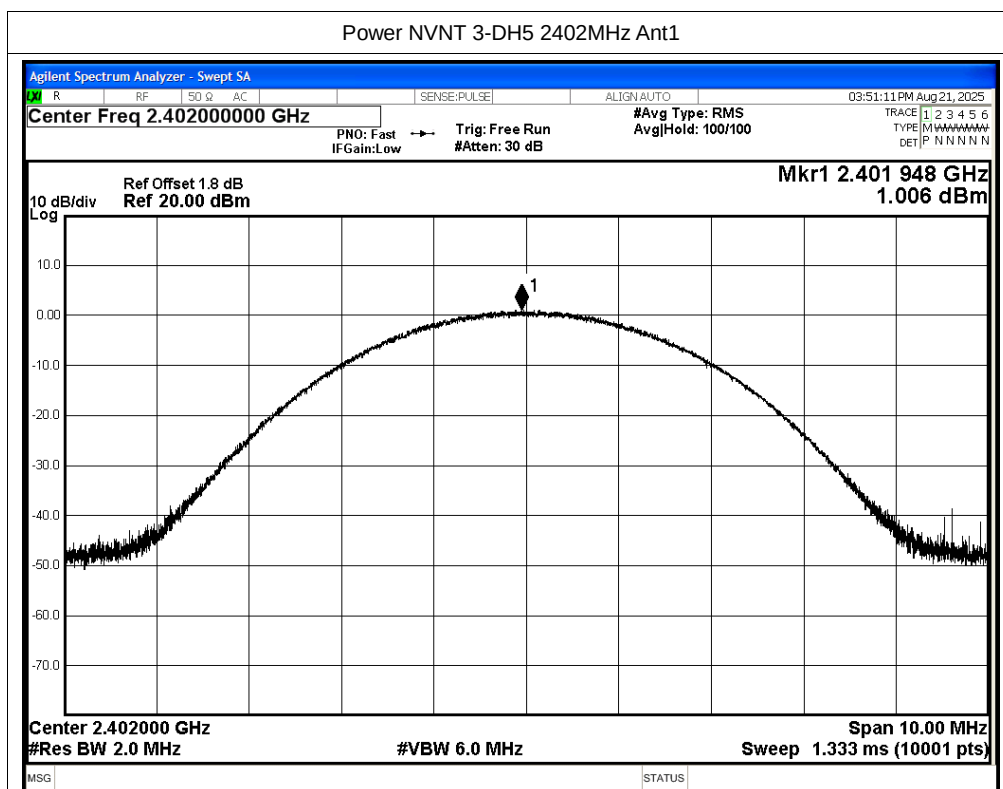


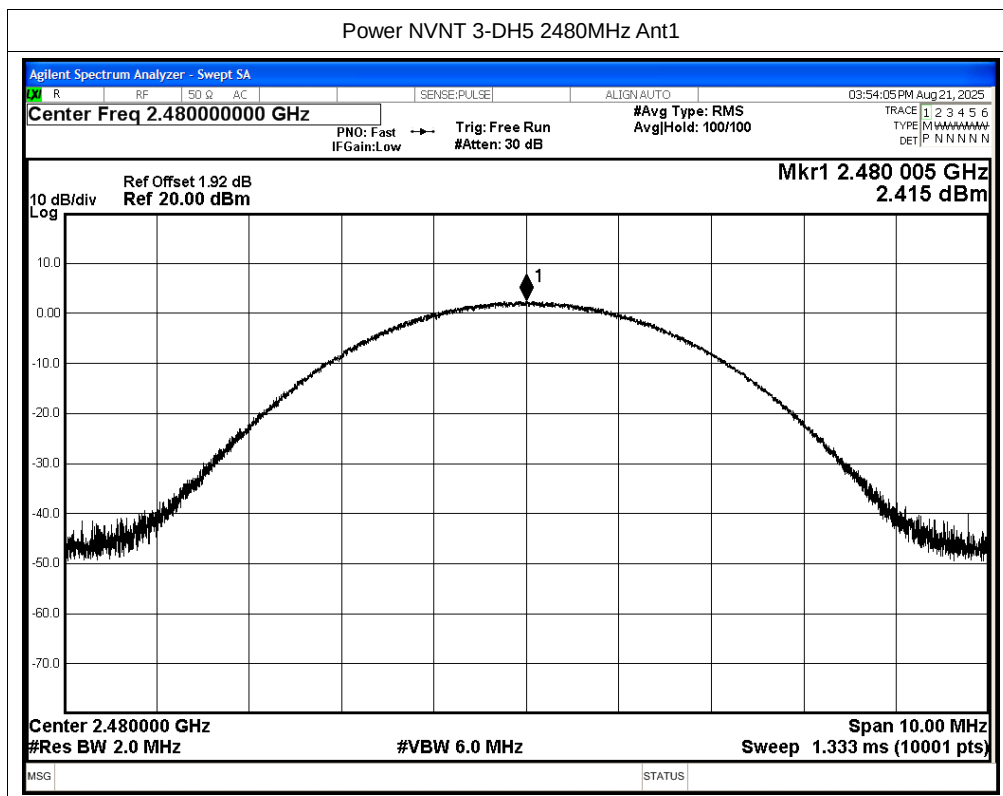
Power NVNT 1-DH5 2441MHz Ant1









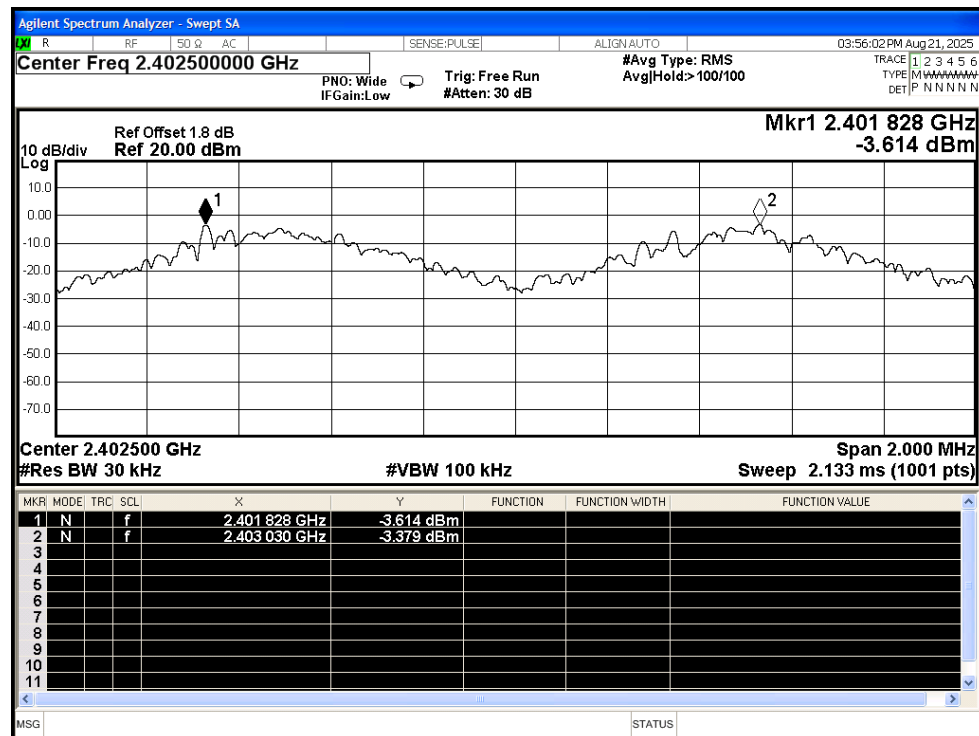


A. 3 Carrier Frequencies Separation

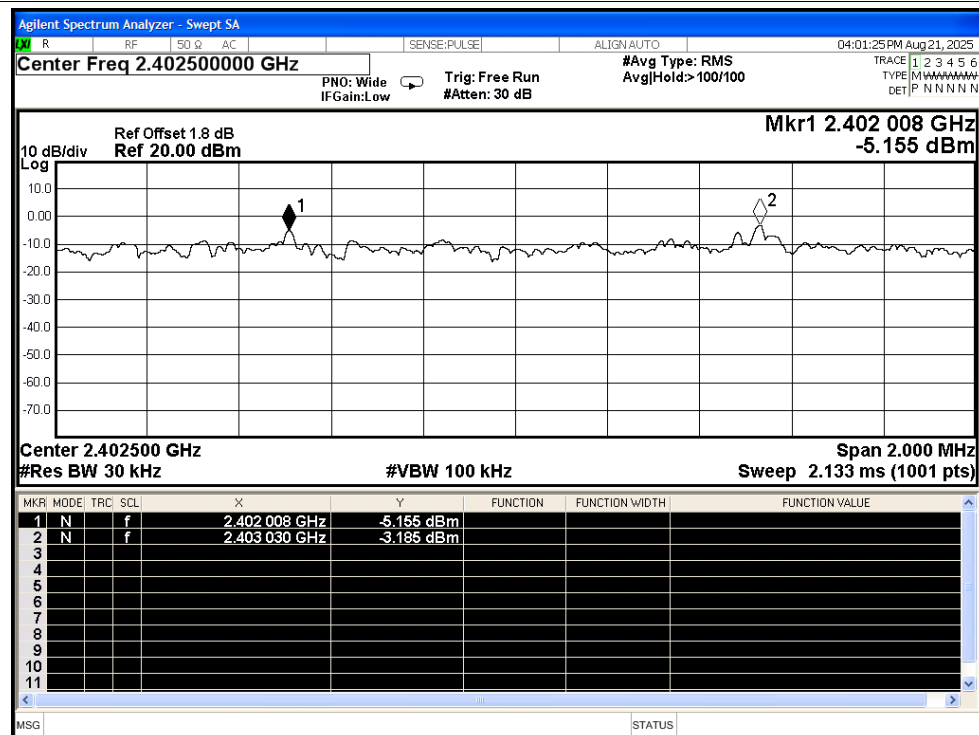
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.828	2403.03	1.202	0.661	Pass
NVNT	2-DH5	Ant1	2402.008	2403.03	1.022	0.859	Pass
NVNT	3-DH5	Ant1	2402.014	2403.022	1.008	0.875	Pass

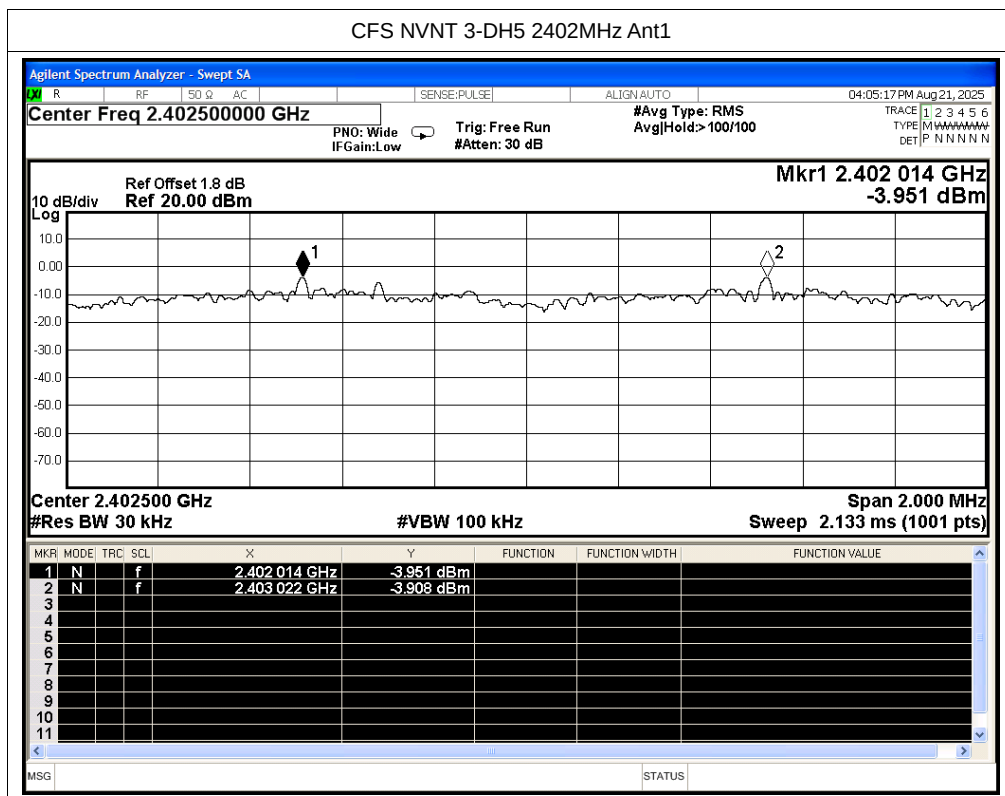
Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



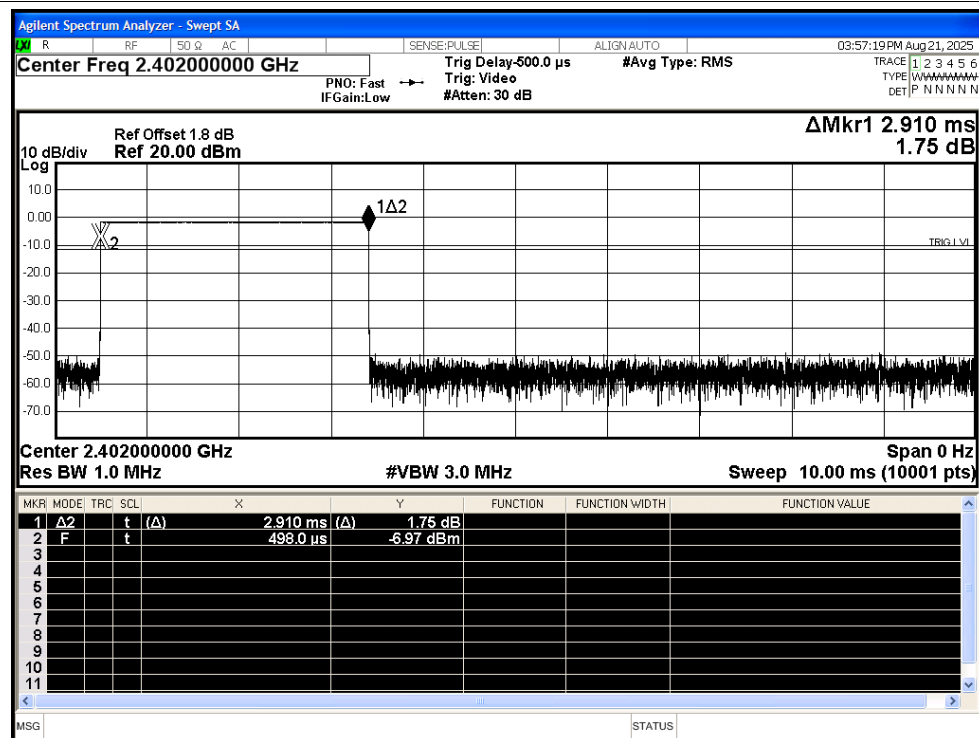


A.4 Dwell Time

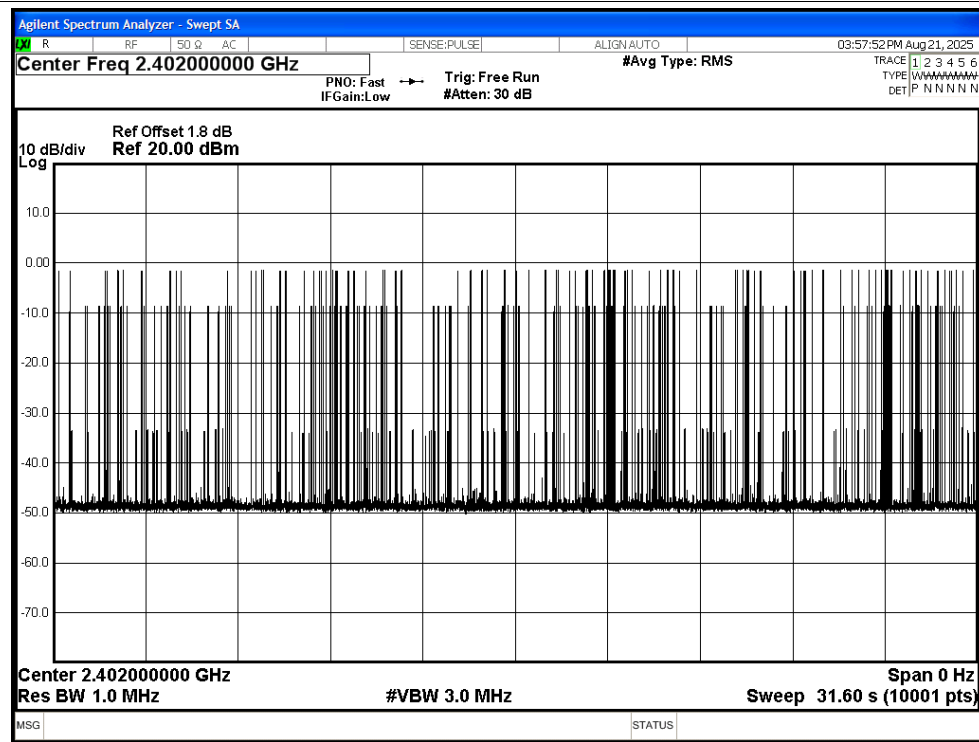
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.91	323.01	111	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.898	289.8	100	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.897	309.979	107	31600	400	Pass

Test Graphs

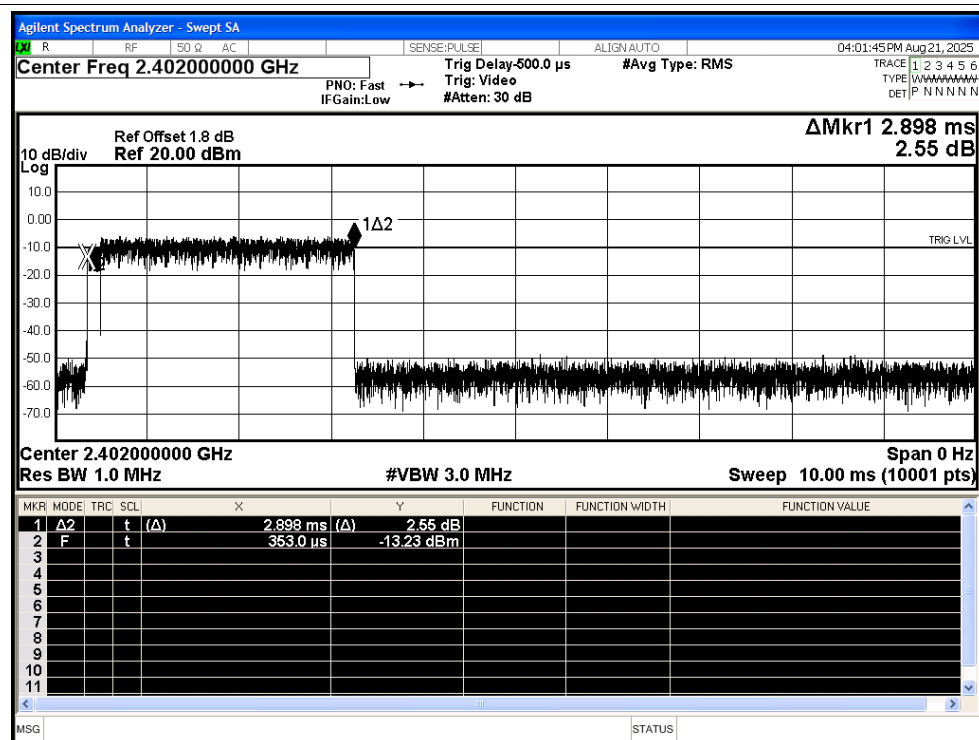
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



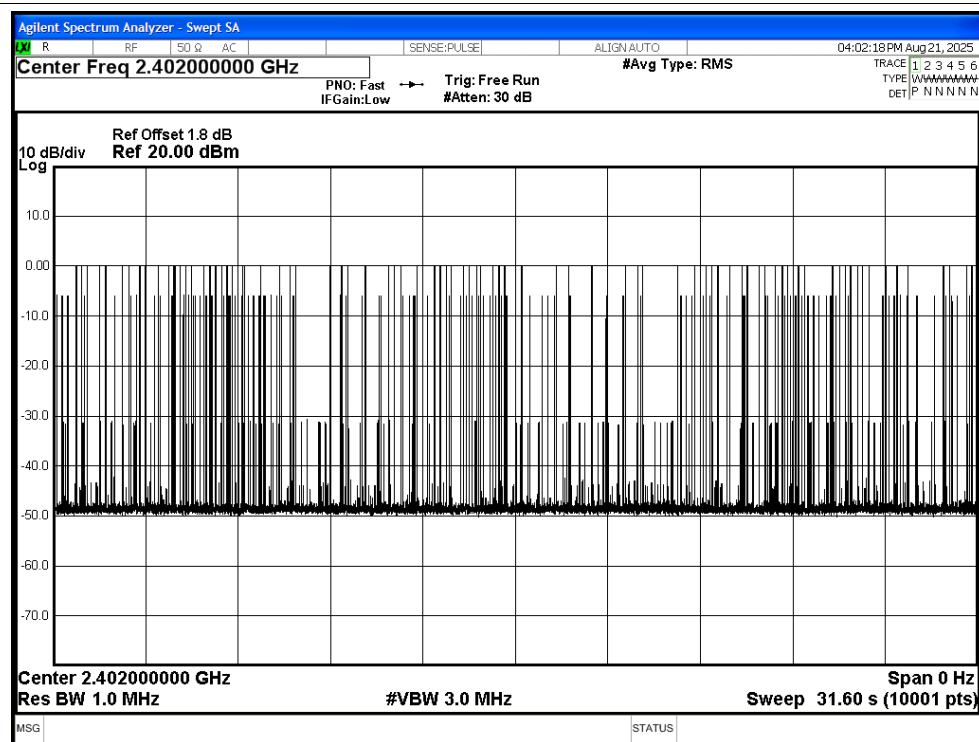
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



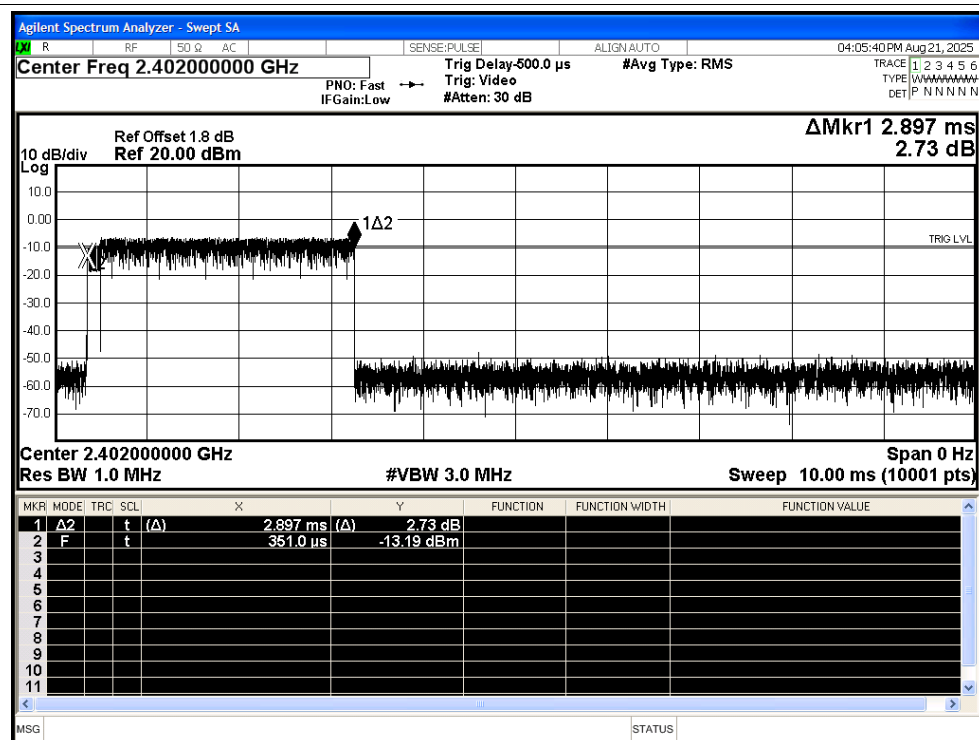
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



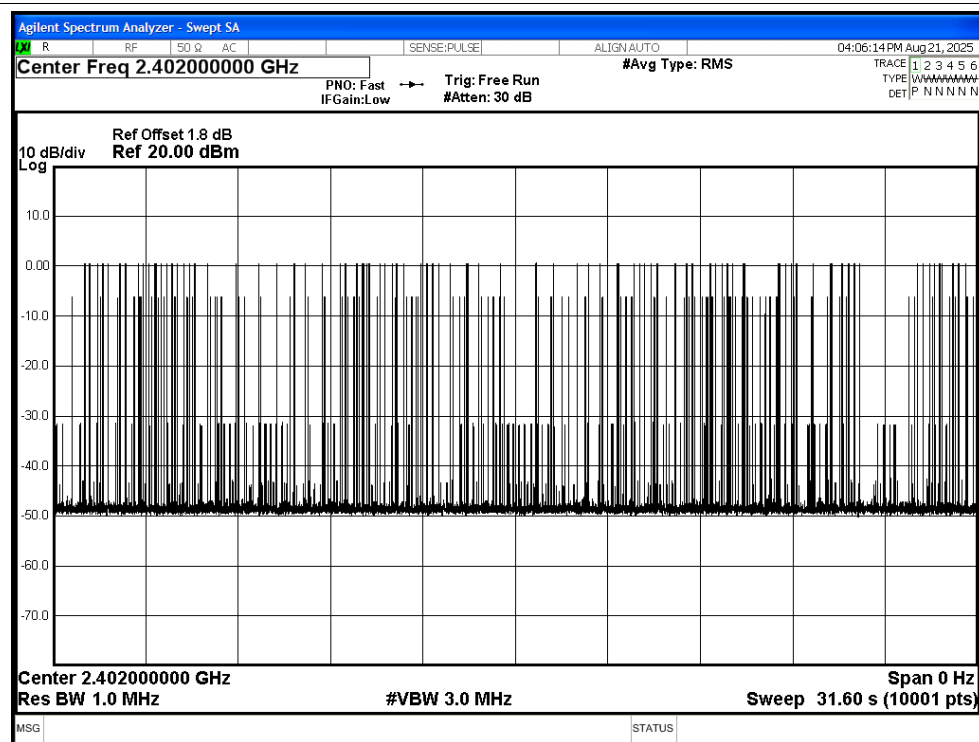
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated

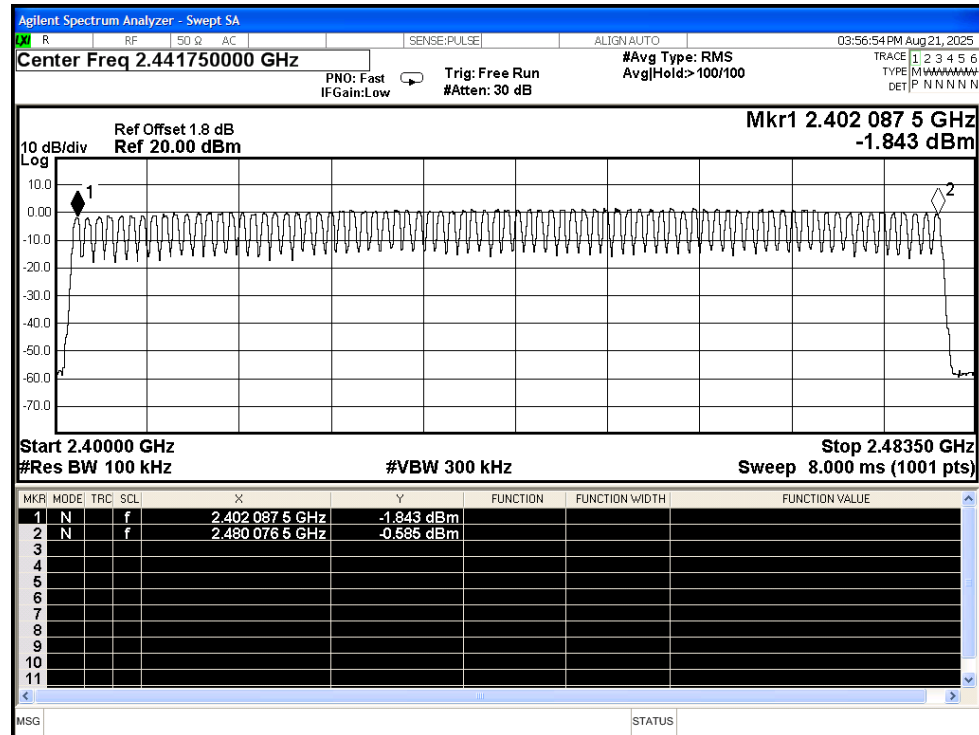


A.5 Number of Hopping Channel

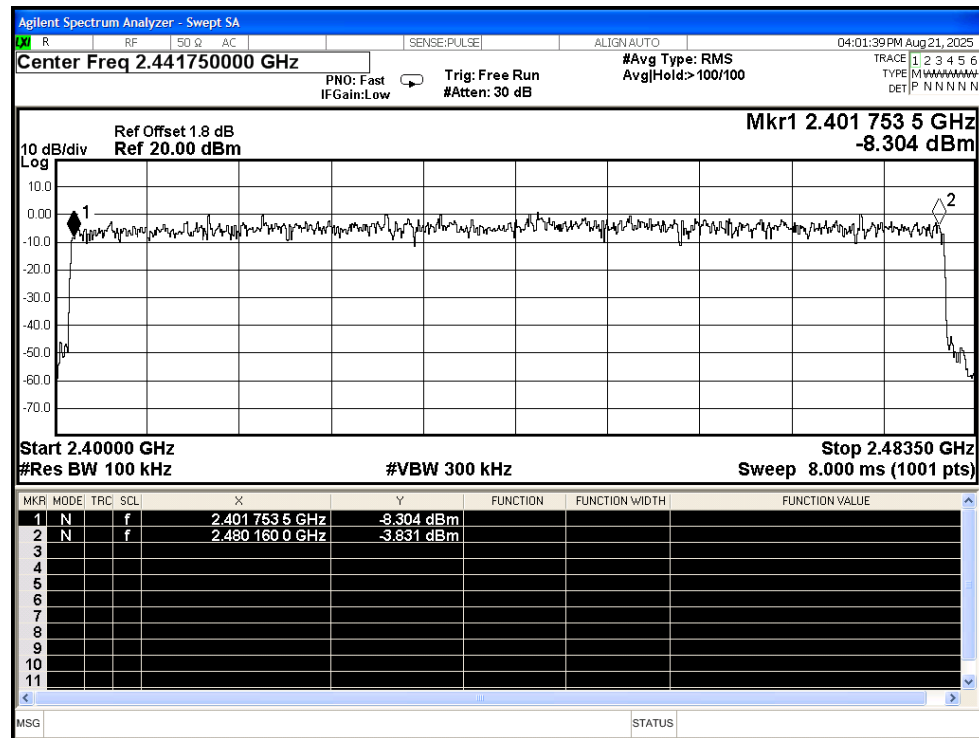
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

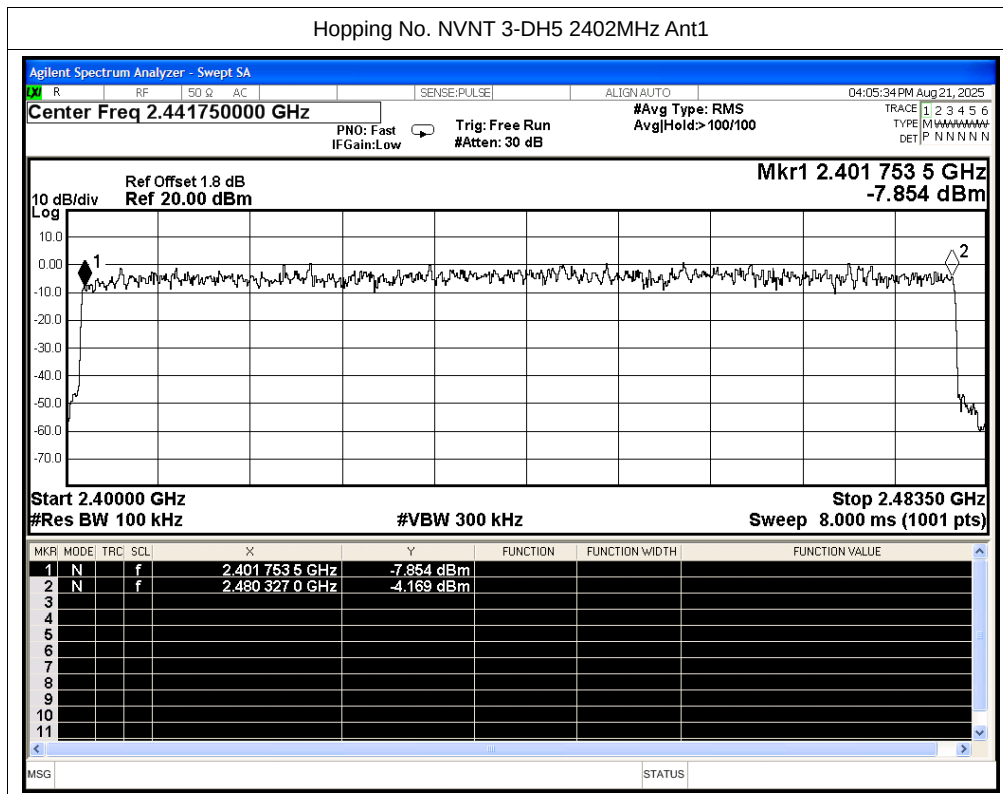
Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



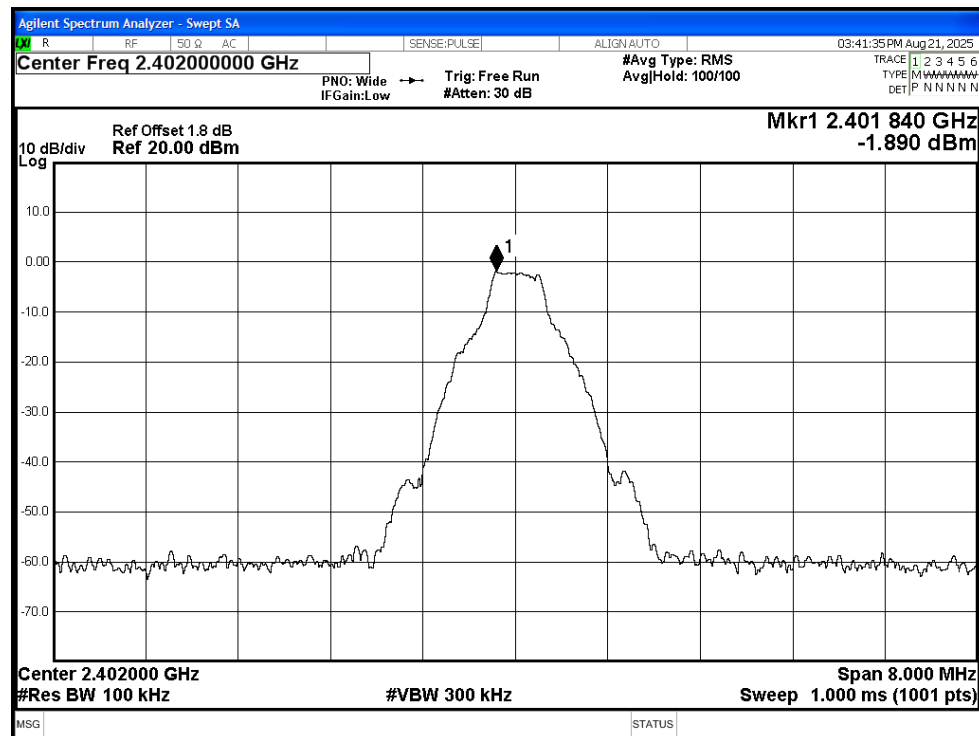


A.6 Band Edge

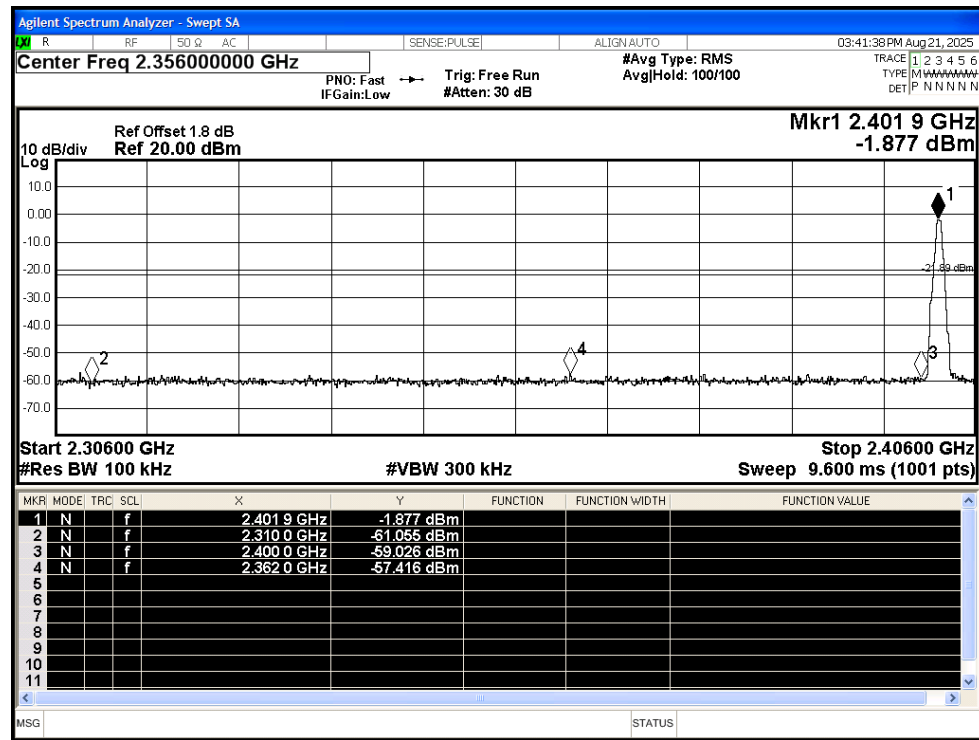
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-55.53	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-56.61	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-49.04	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-56.48	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-48.67	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-53.32	-20	Pass

Test Graphs

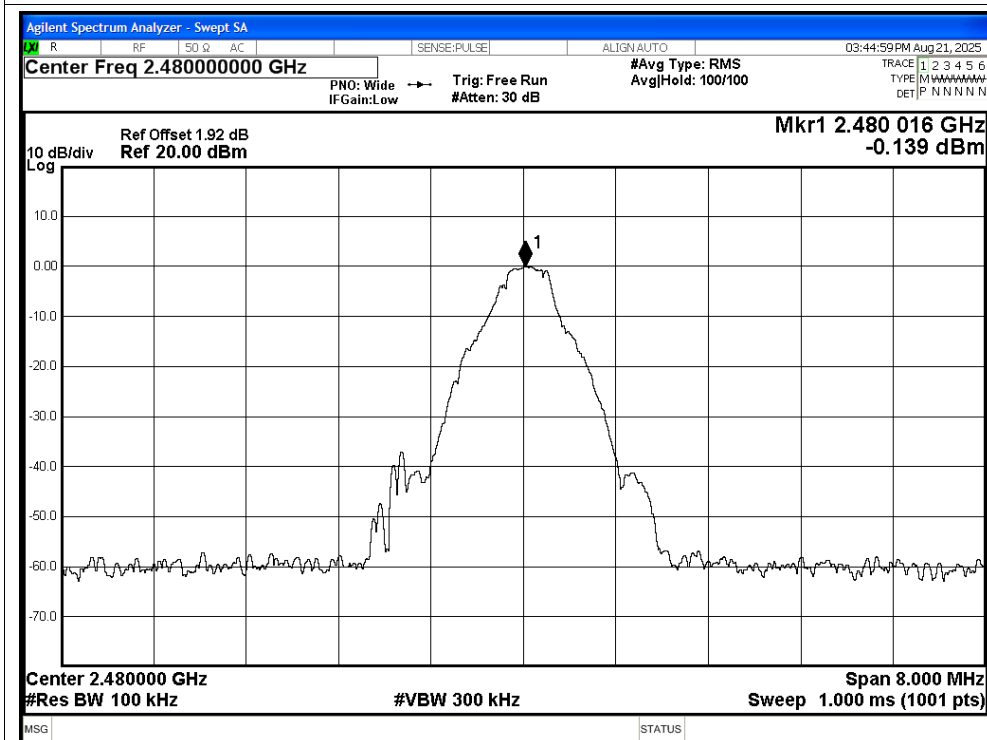
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



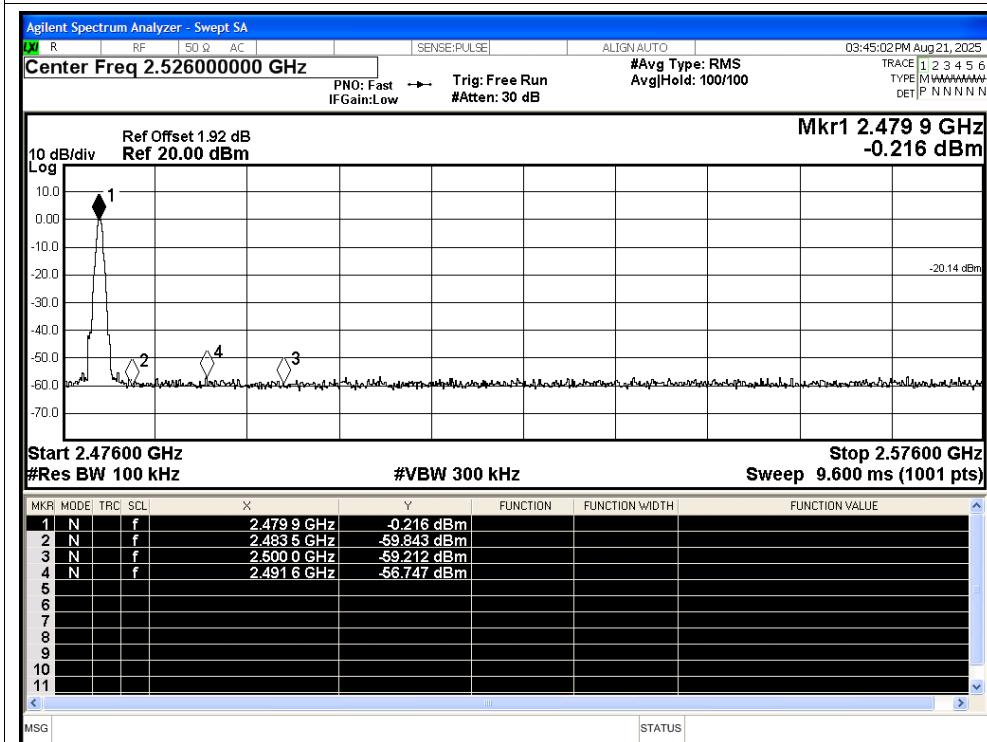
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



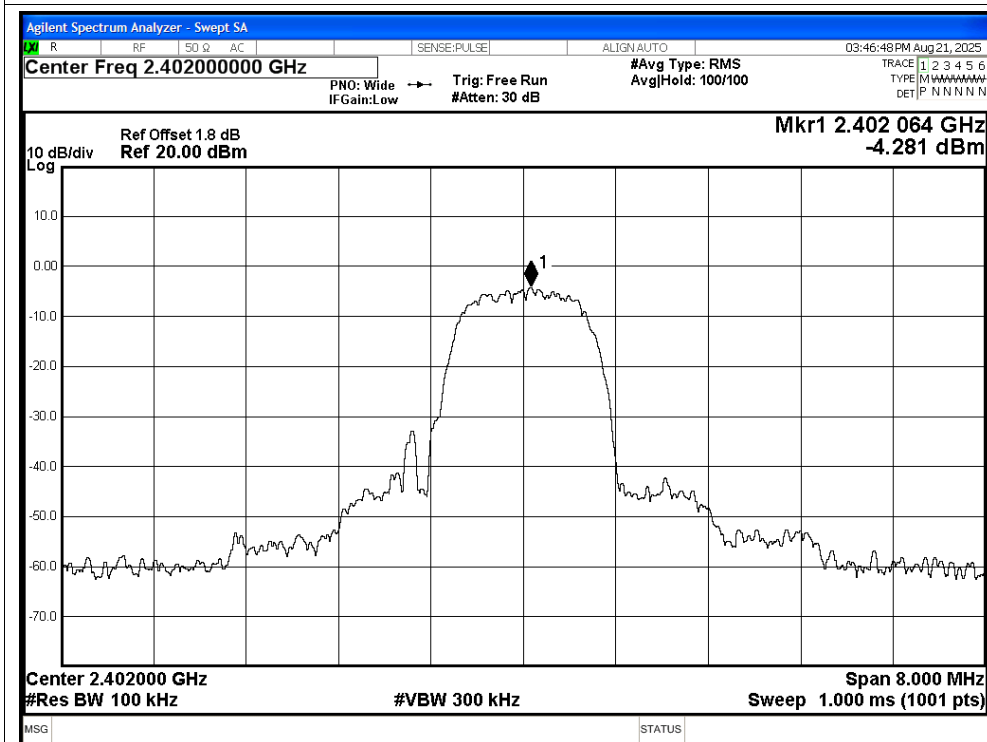
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



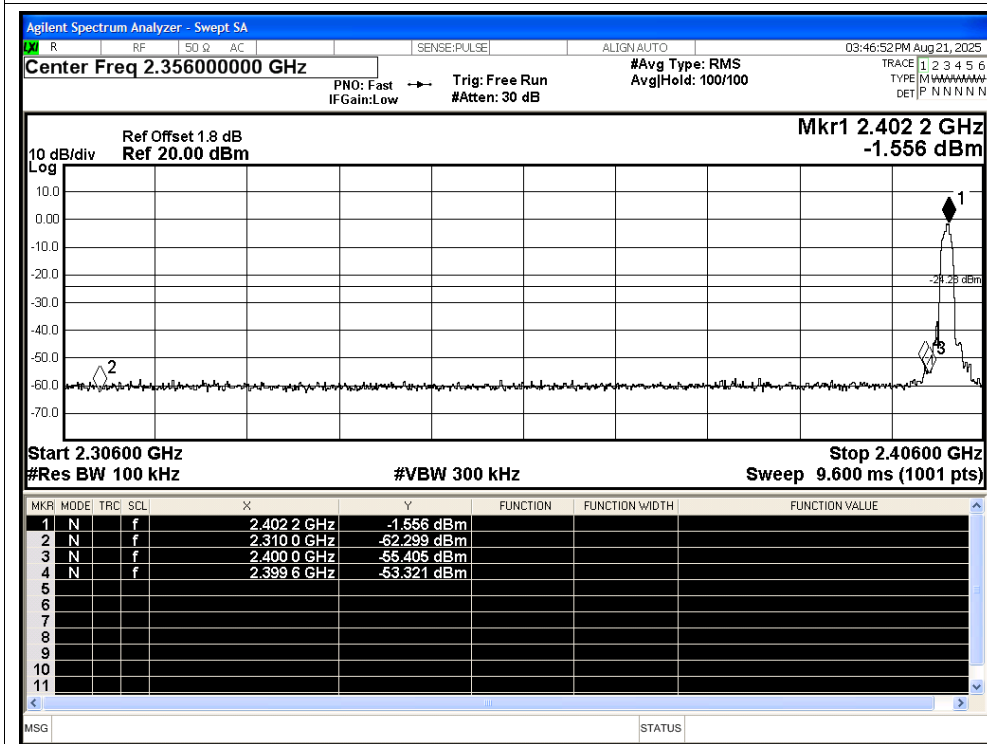
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



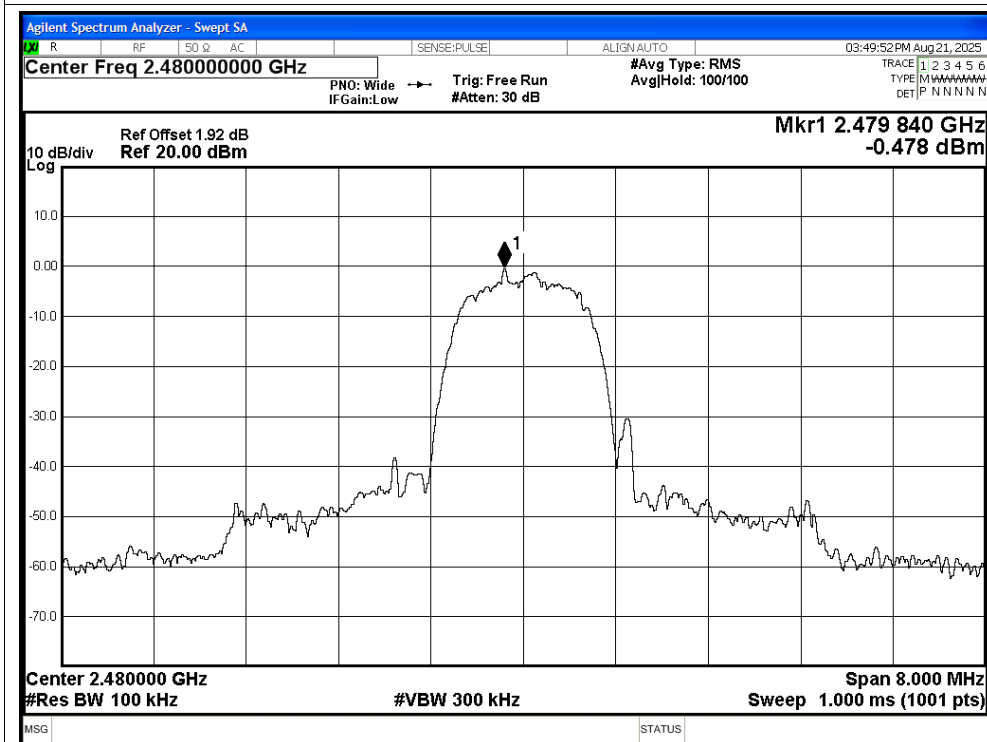
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



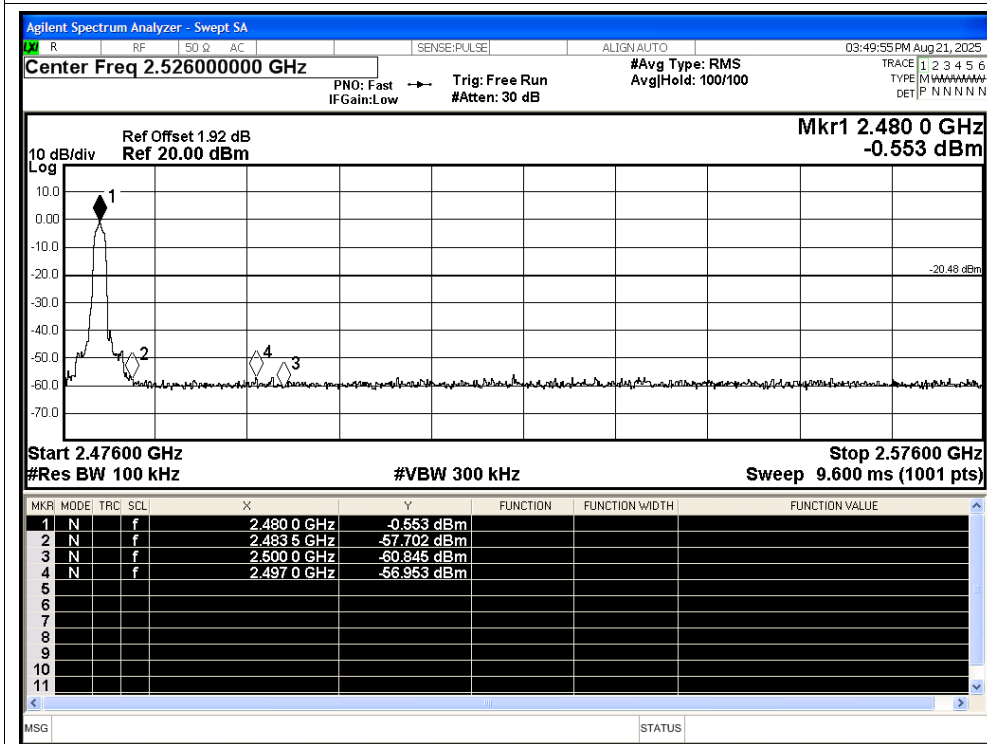
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



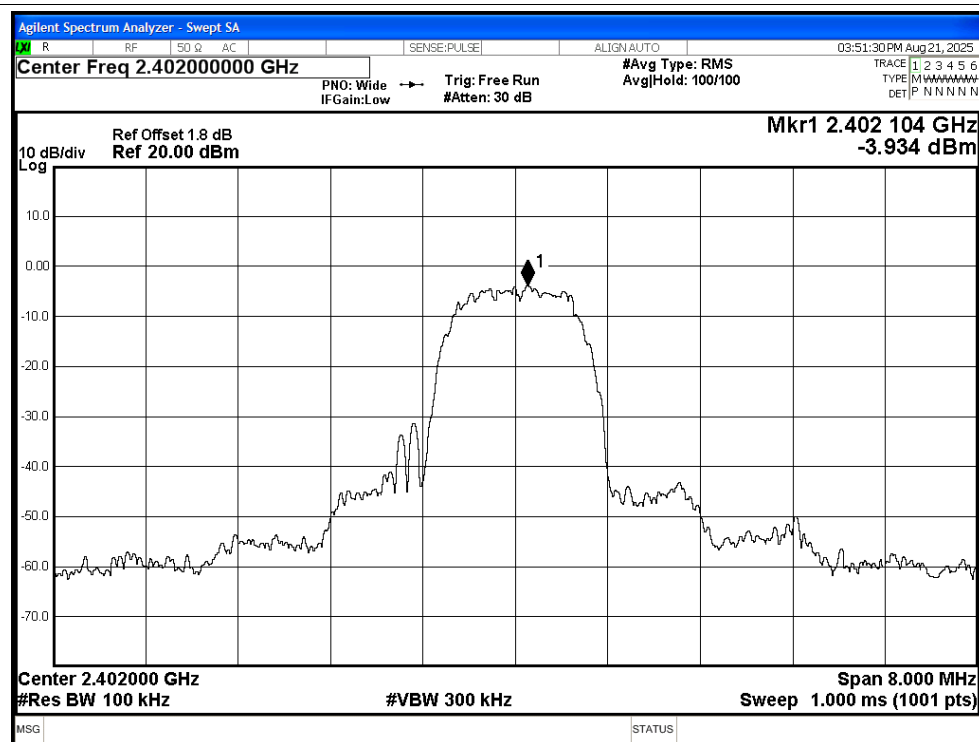
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



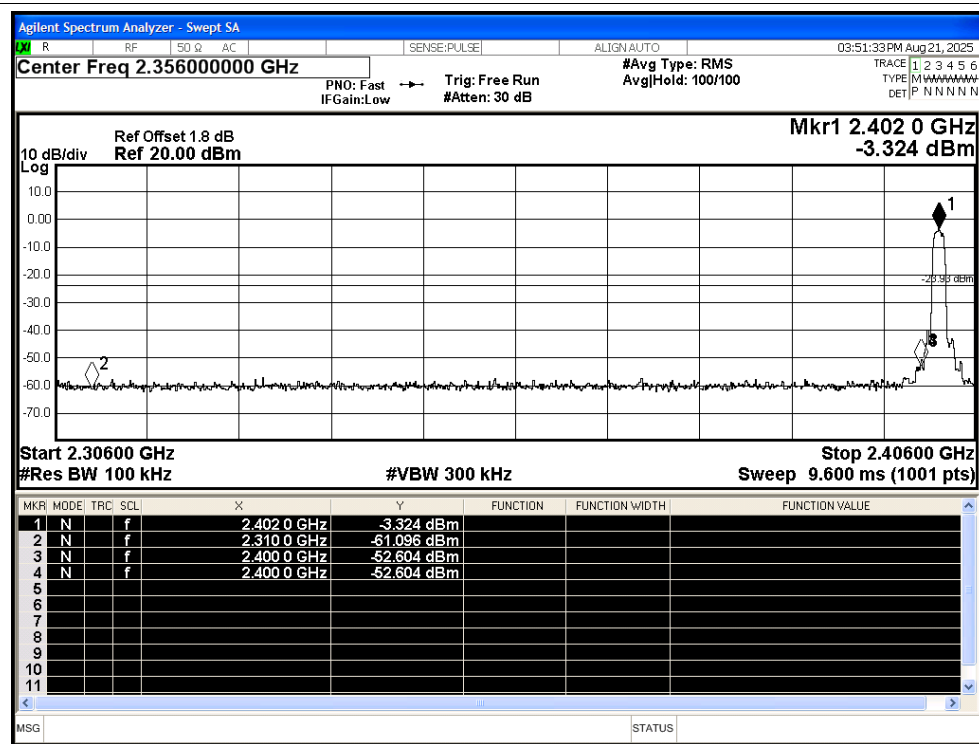
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission

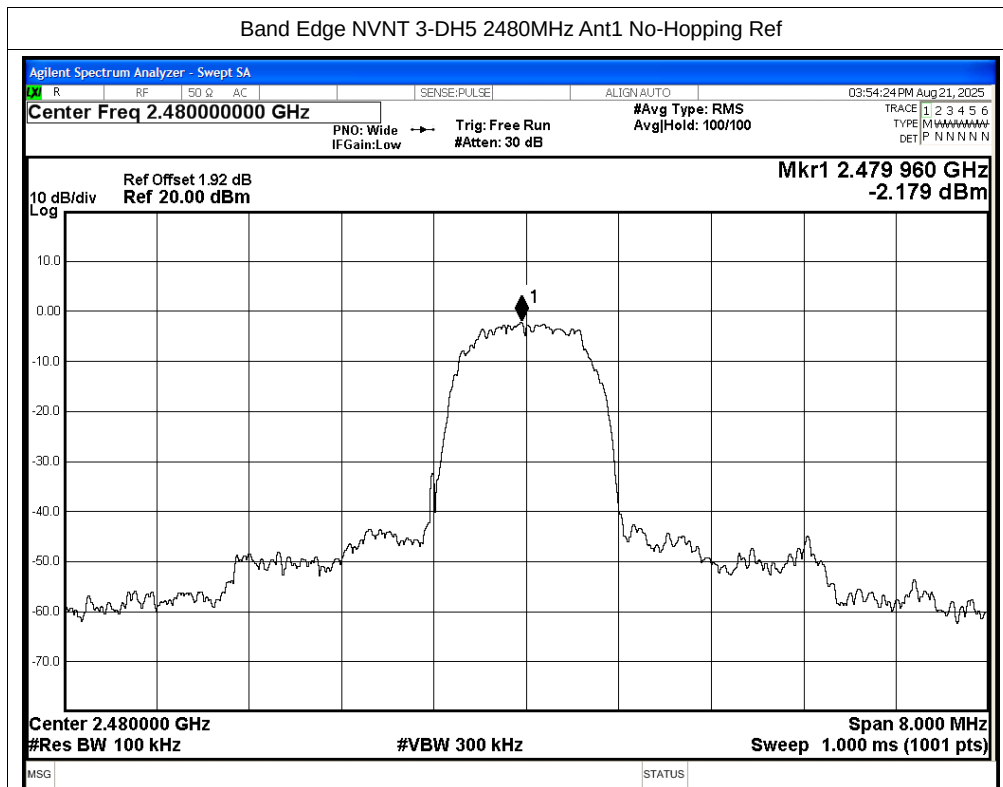


Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref

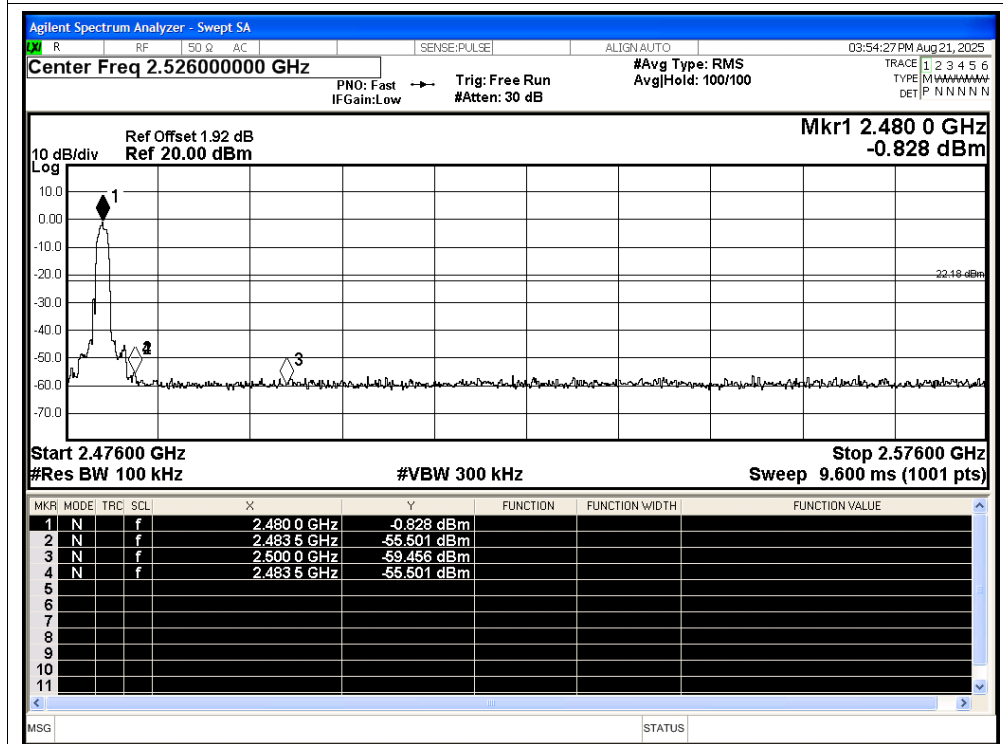


Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission





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

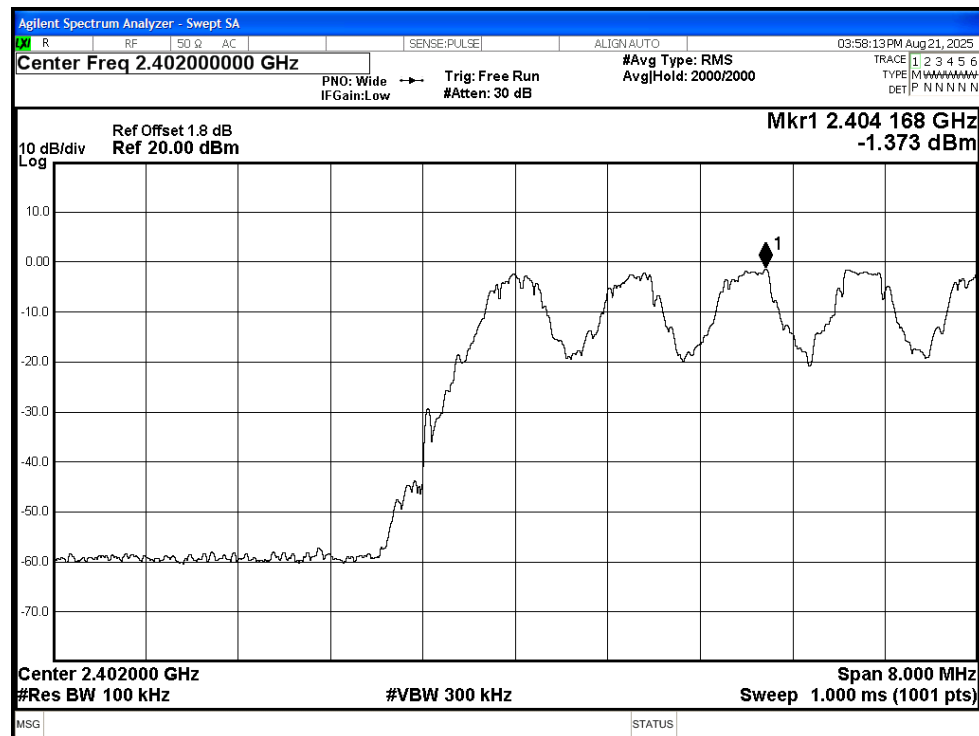


(Hopping)

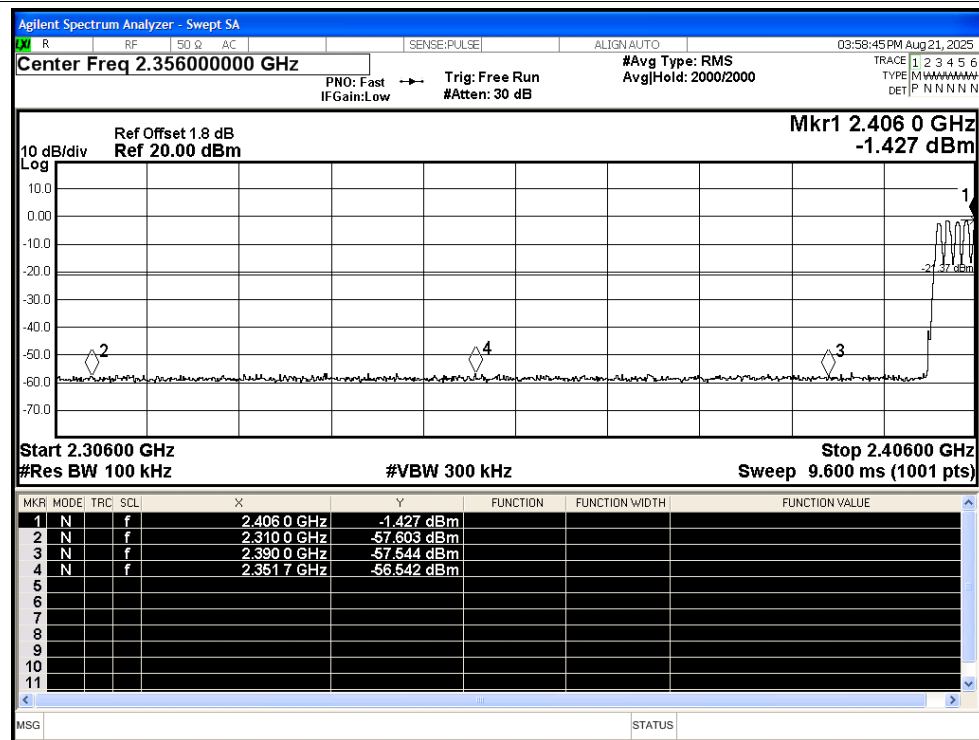
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-55.17	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.08	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-55.32	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-56.78	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-54.04	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-51.45	-20	Pass

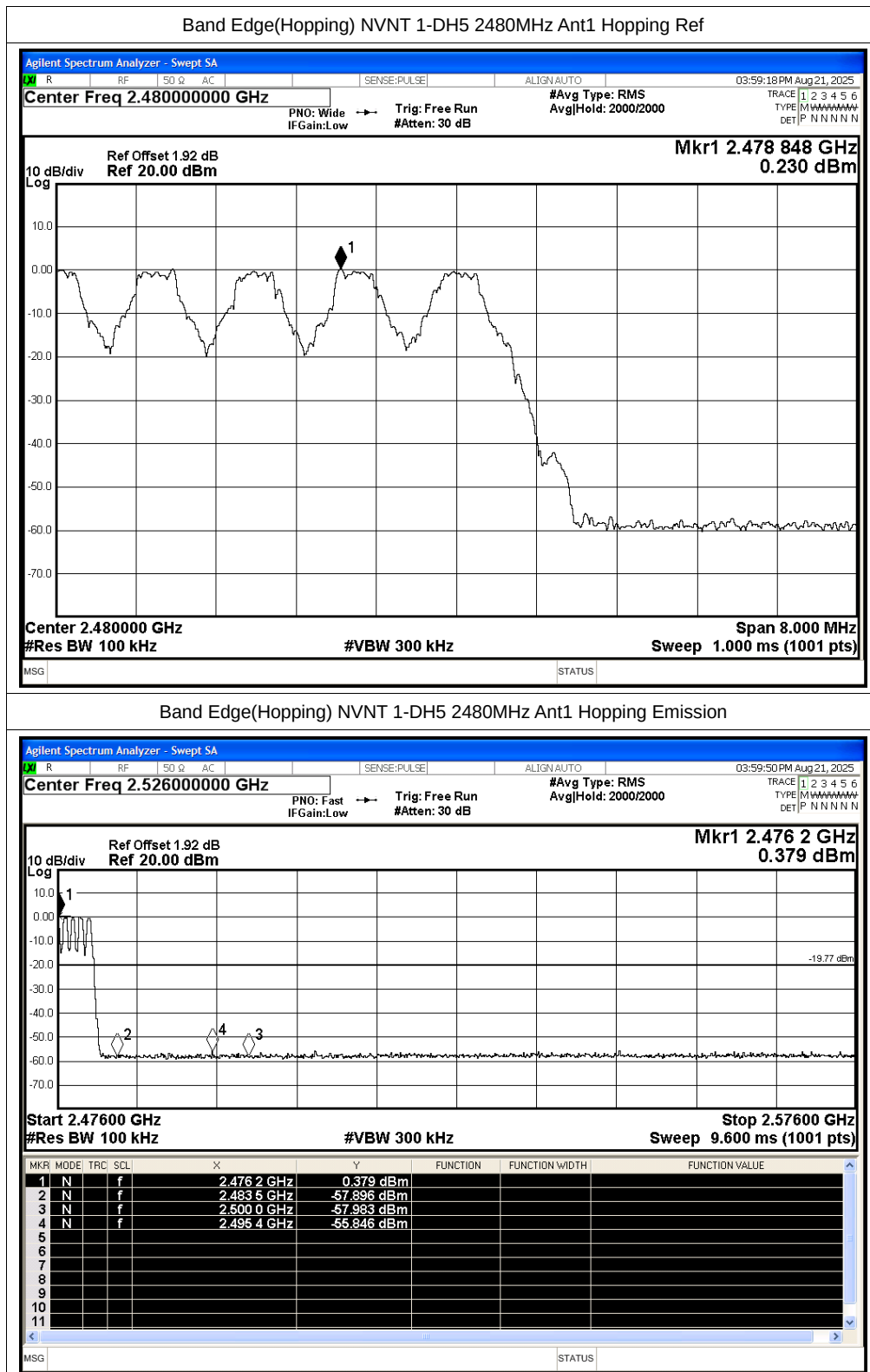
Test Graphs

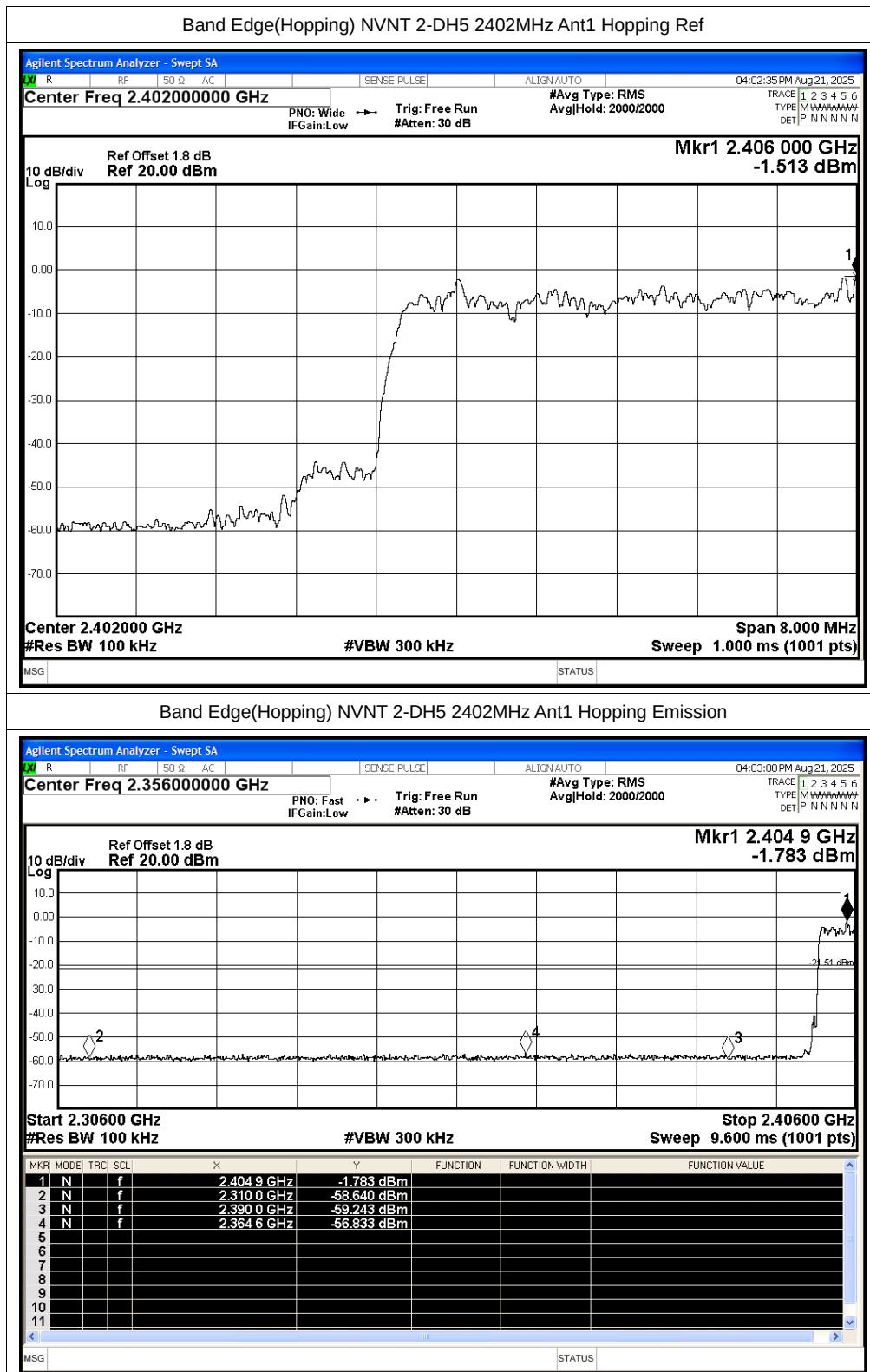
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



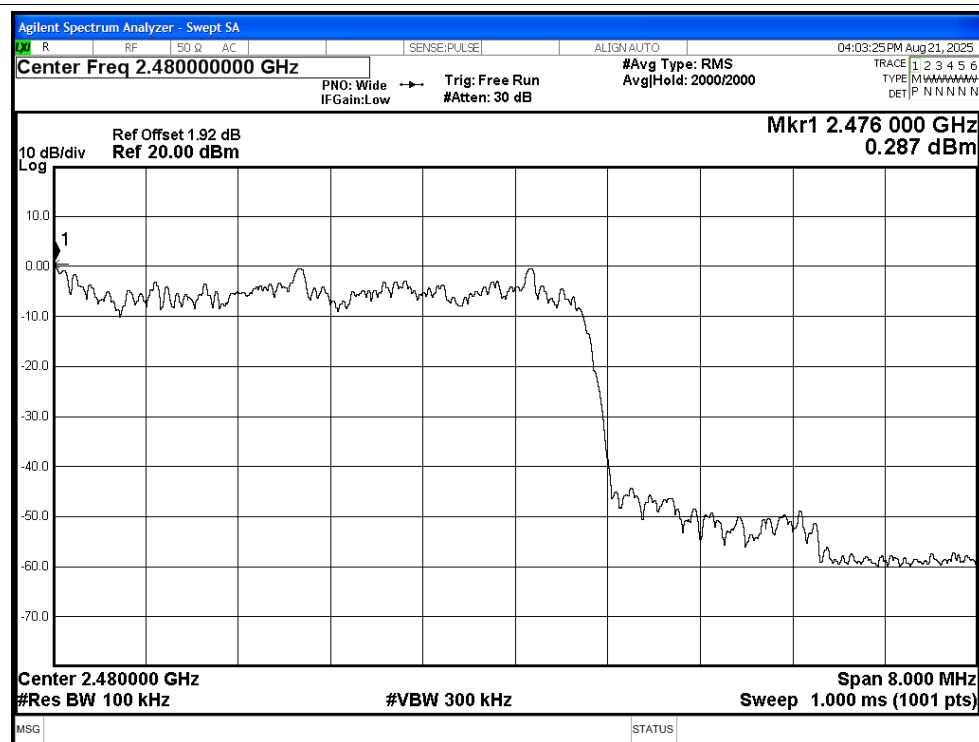
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



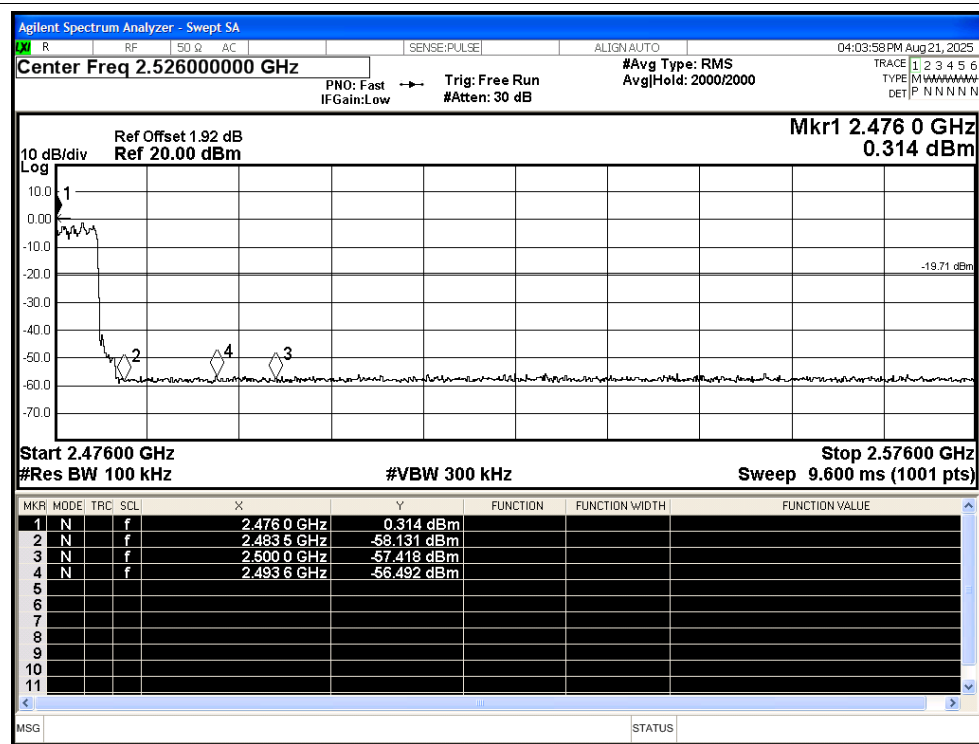


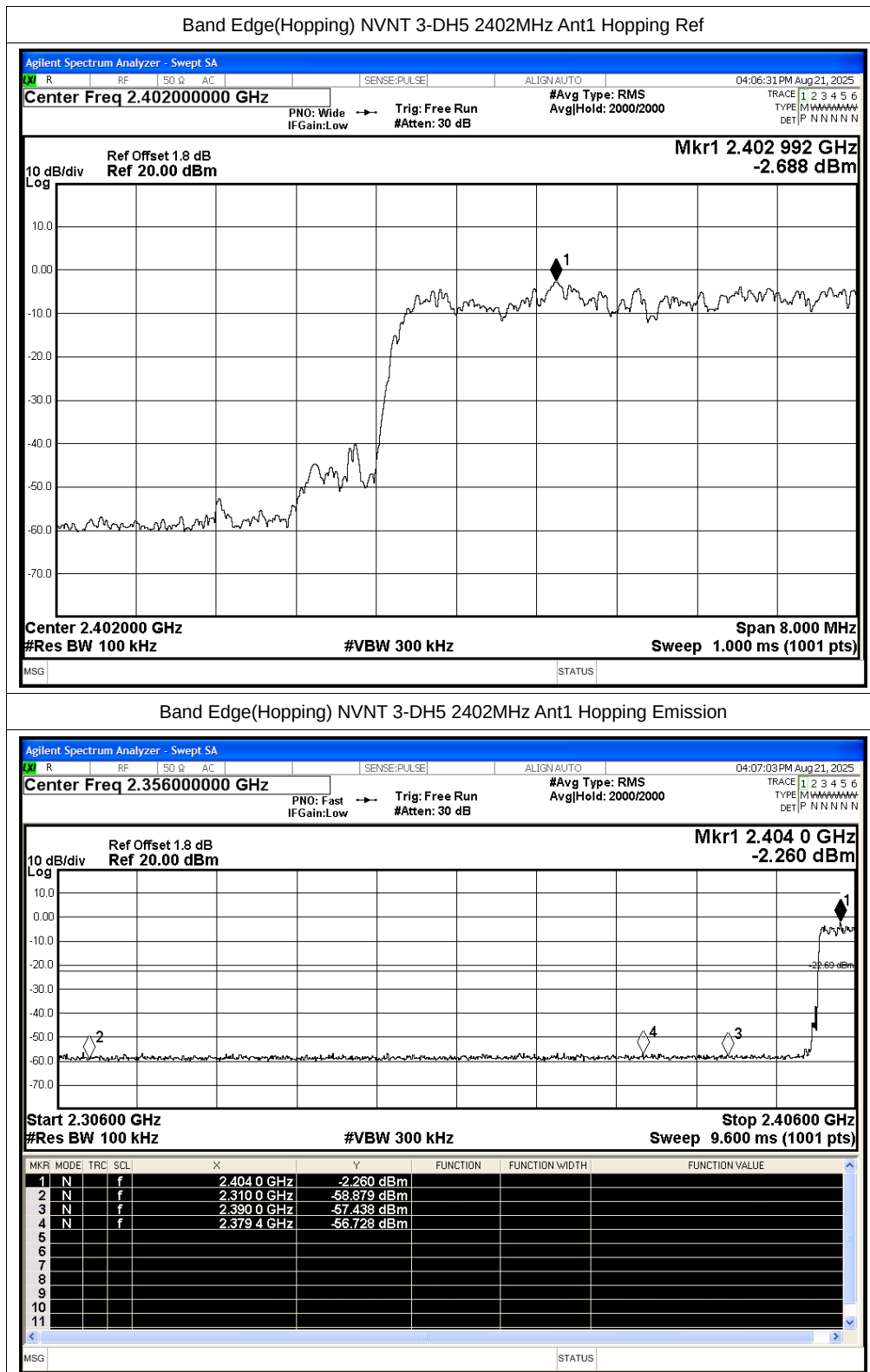


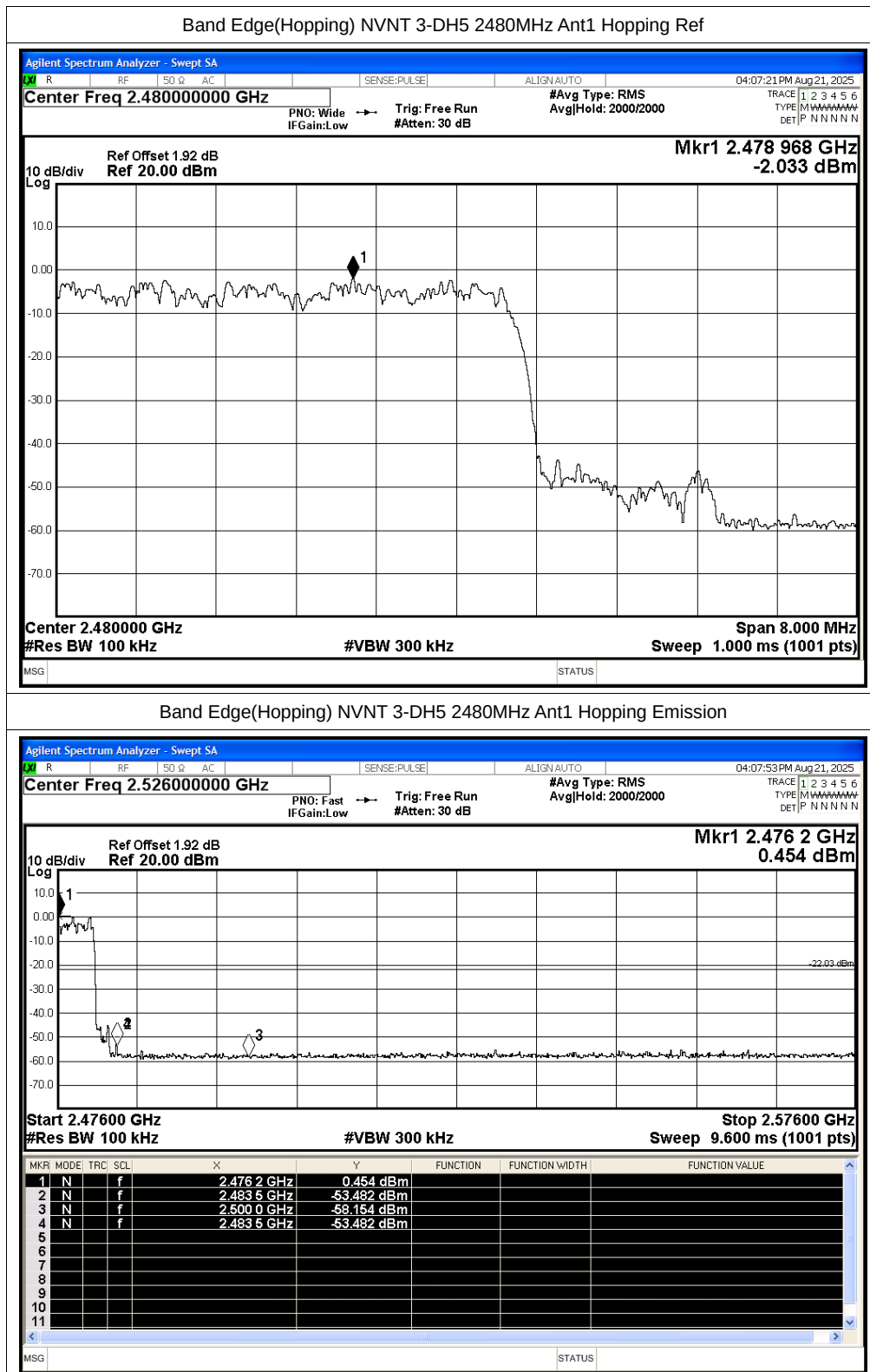
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



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





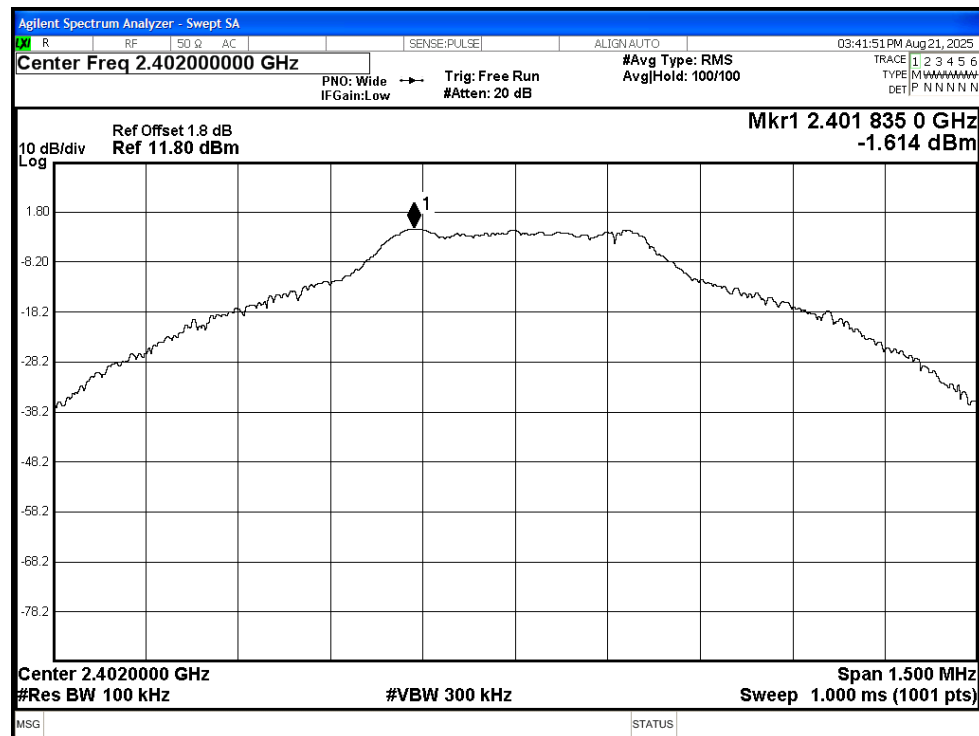


A.7 Conducted RF Spurious Emission

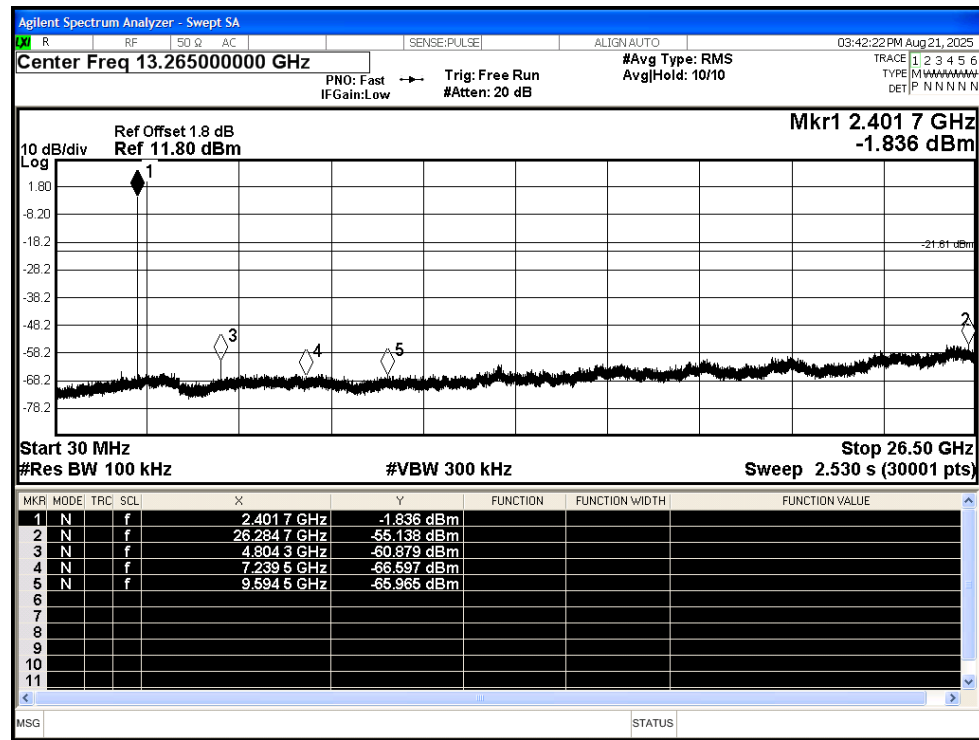
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-53.52	-20	Pass
NVNT	1-DH5	2441	Ant1	-56.96	-20	Pass
NVNT	1-DH5	2480	Ant1	-55.14	-20	Pass
NVNT	2-DH5	2402	Ant1	-53.95	-20	Pass
NVNT	2-DH5	2441	Ant1	-56.97	-20	Pass
NVNT	2-DH5	2480	Ant1	-55.03	-20	Pass
NVNT	3-DH5	2402	Ant1	-52.54	-20	Pass
NVNT	3-DH5	2441	Ant1	-56.6	-20	Pass
NVNT	3-DH5	2480	Ant1	-55	-20	Pass

Test Graphs

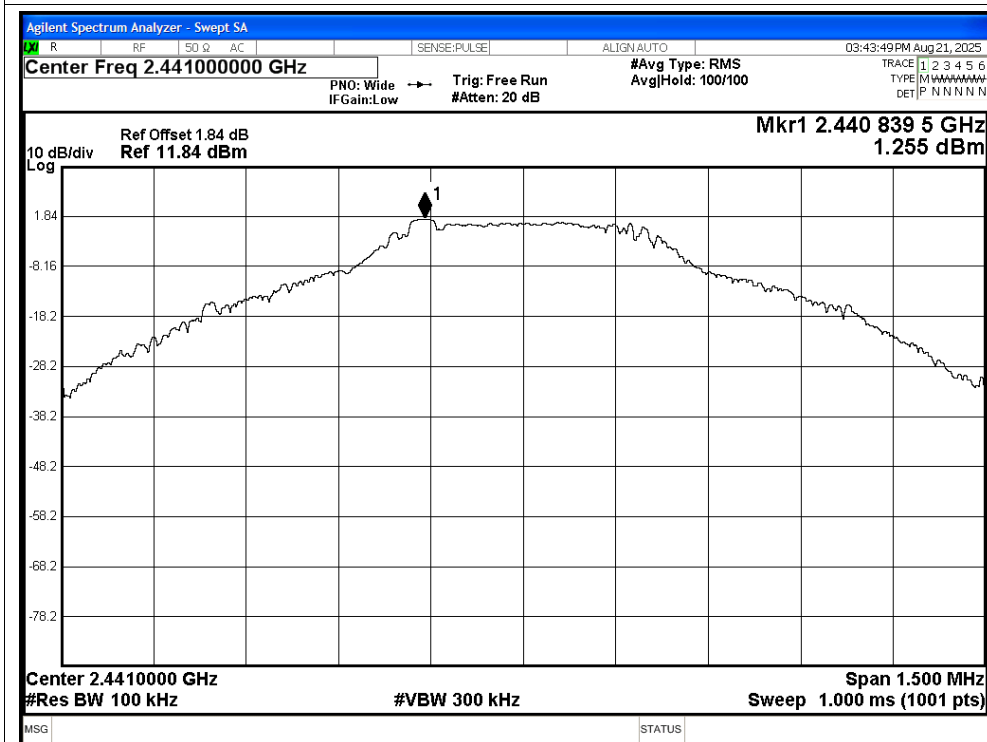
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



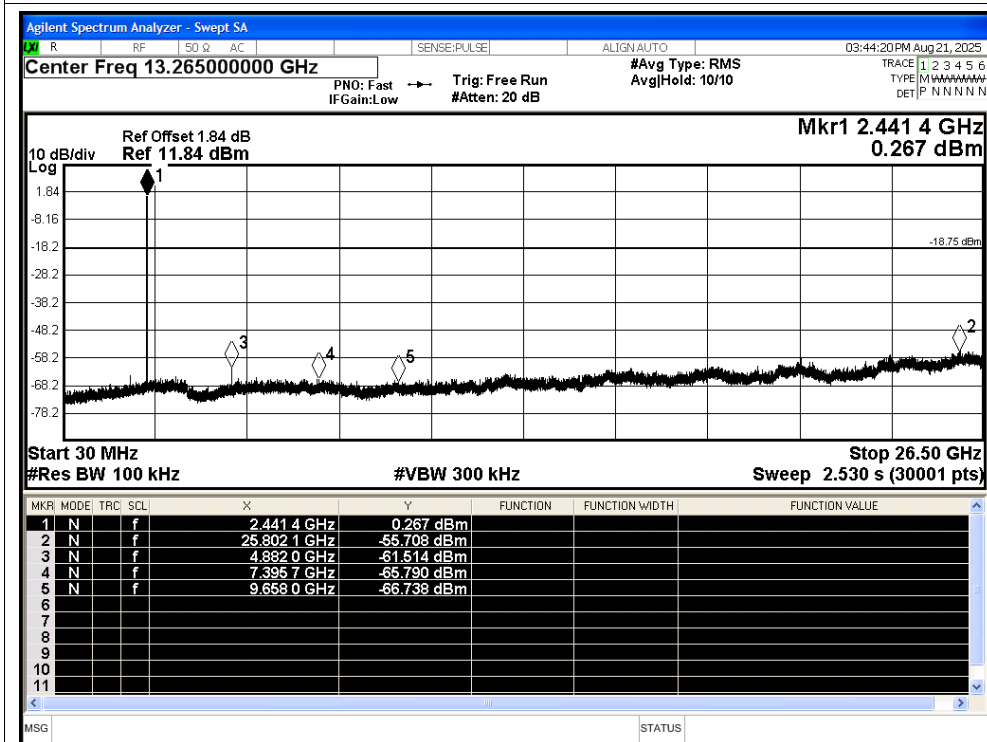
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



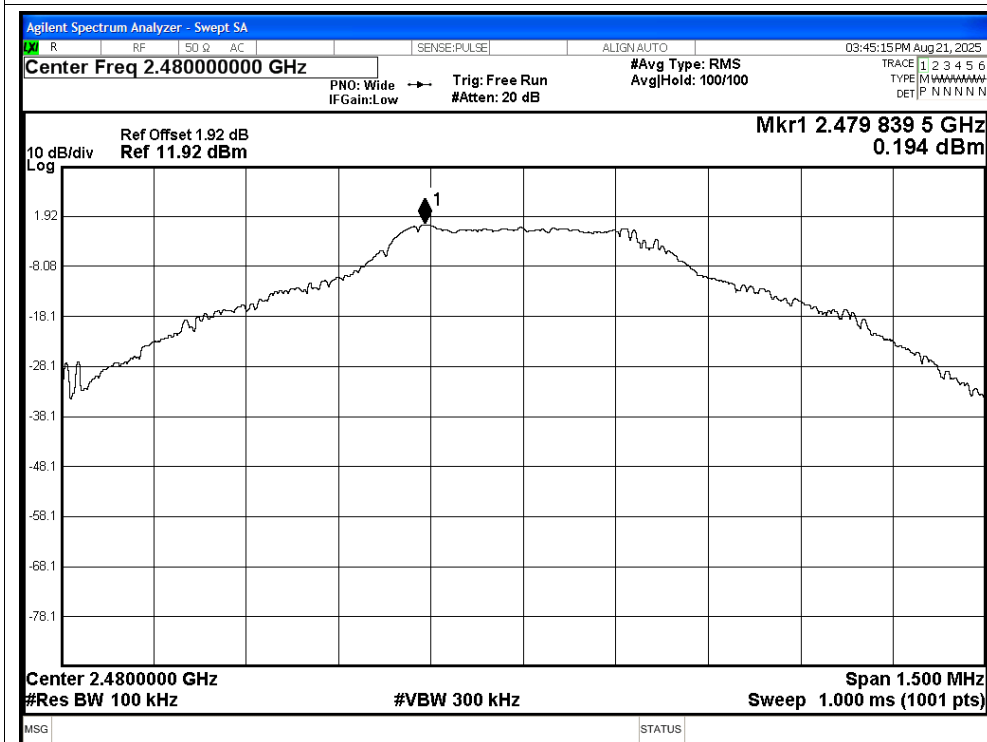
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



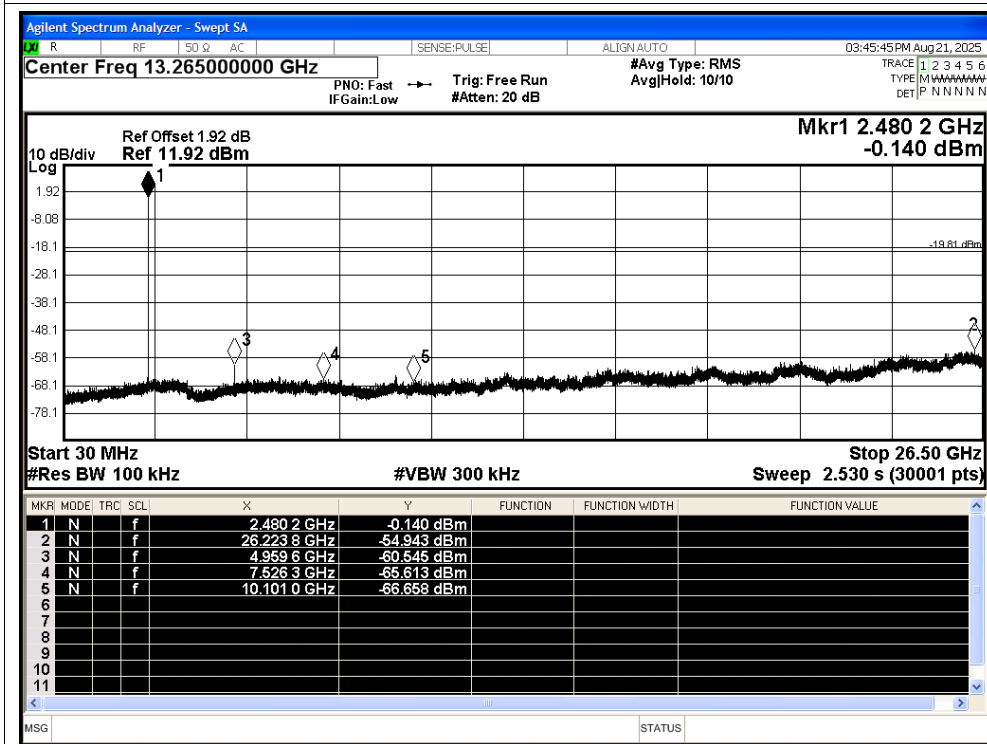
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



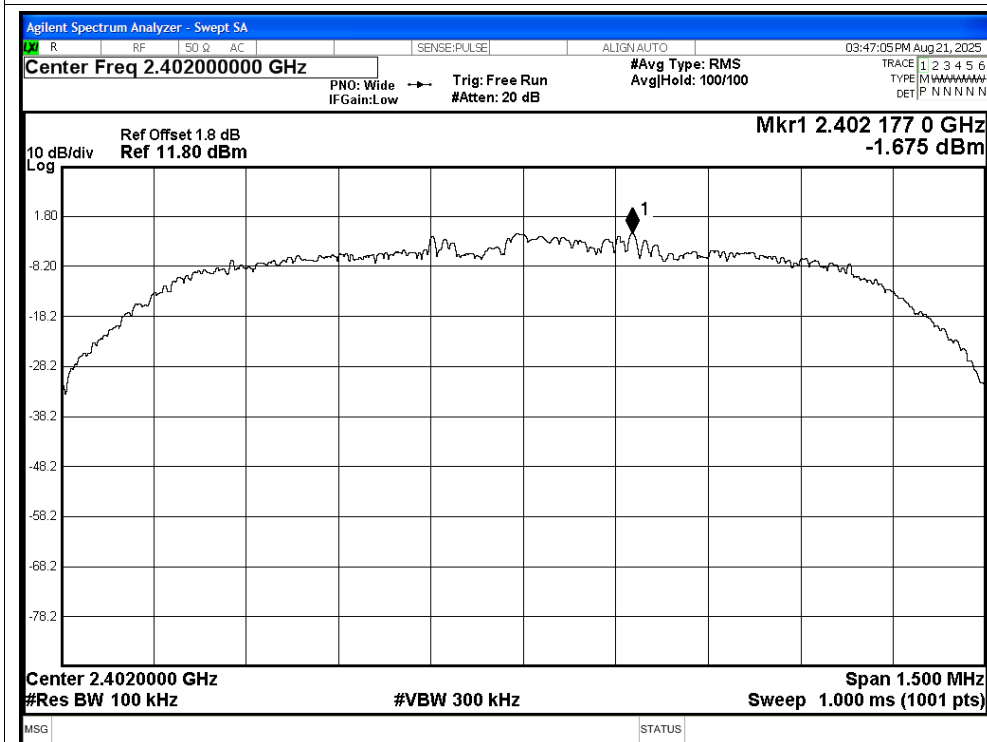
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



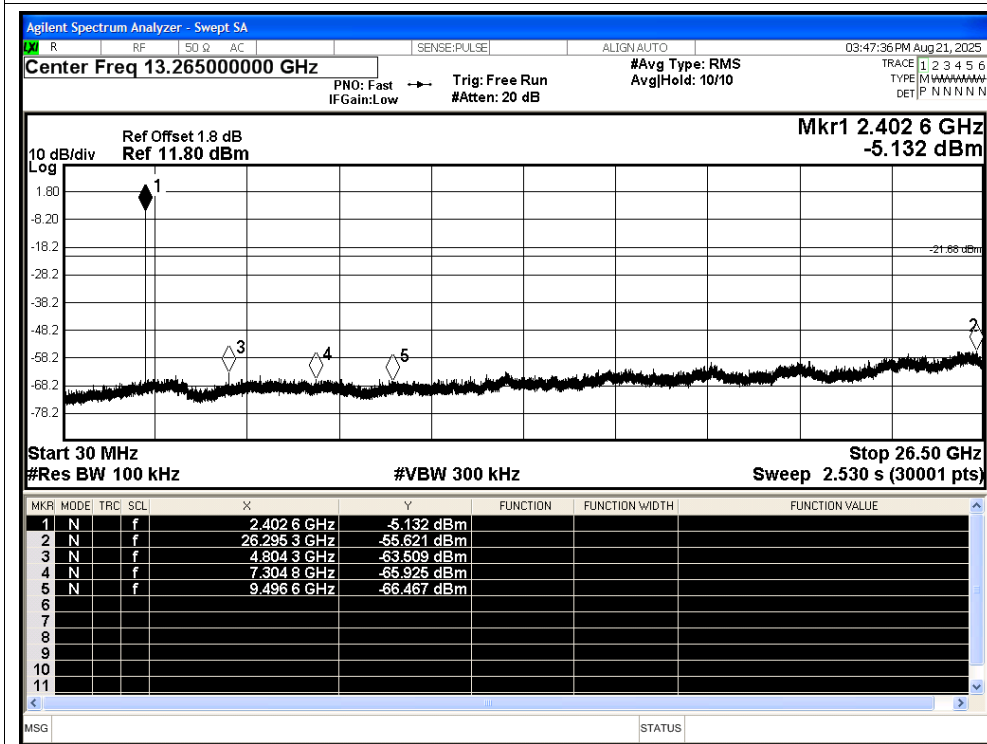
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



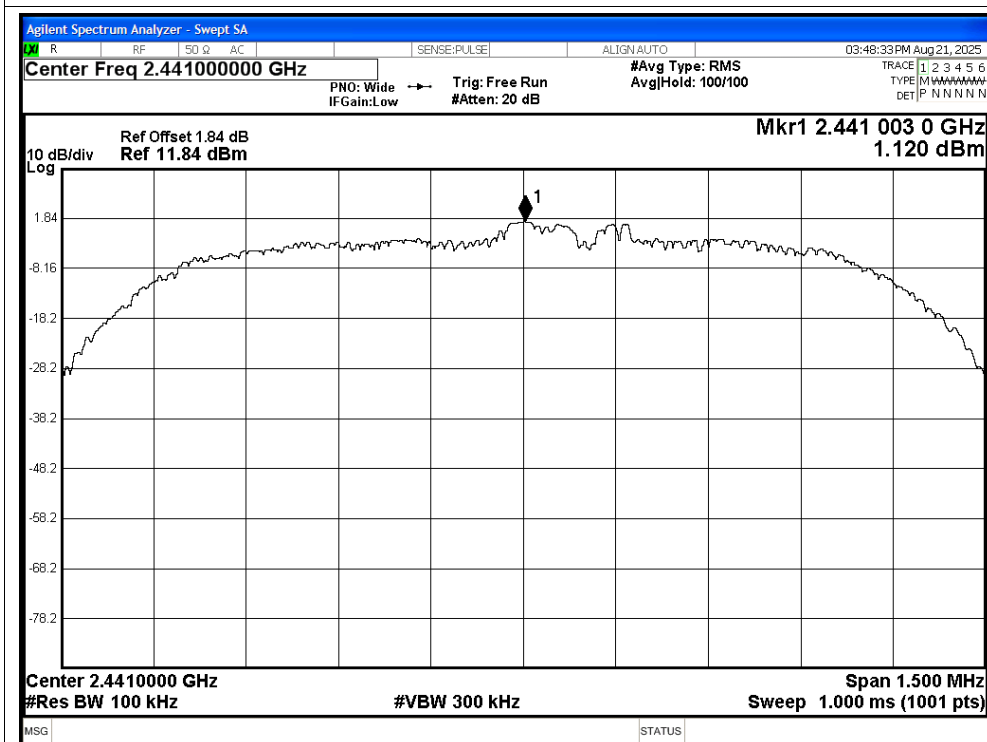
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



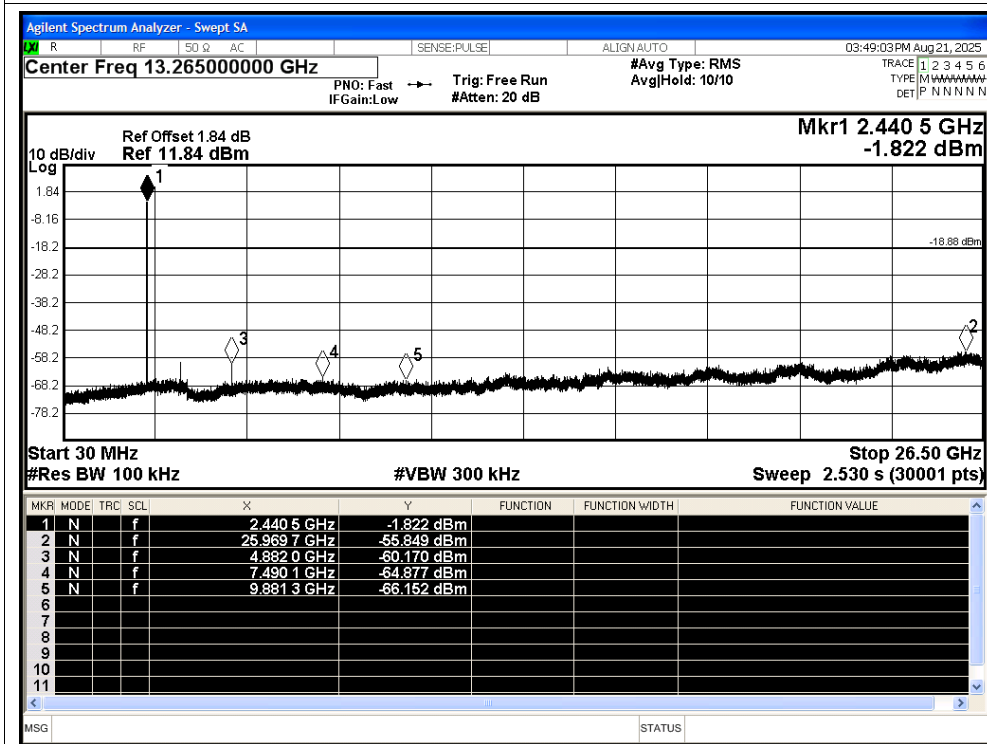
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



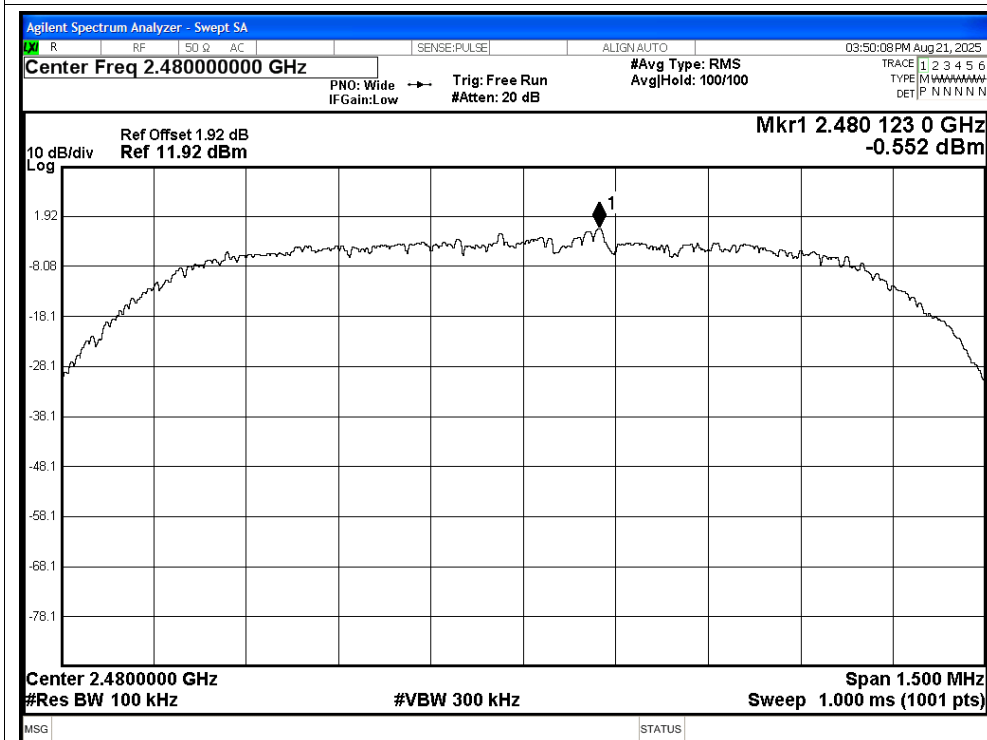
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



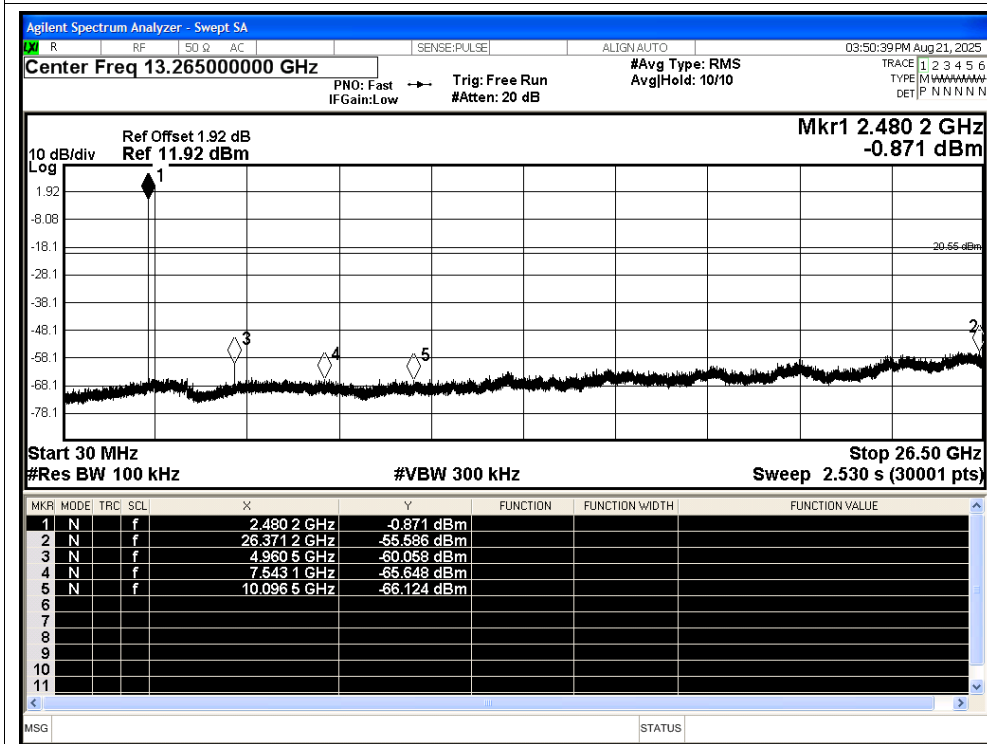
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



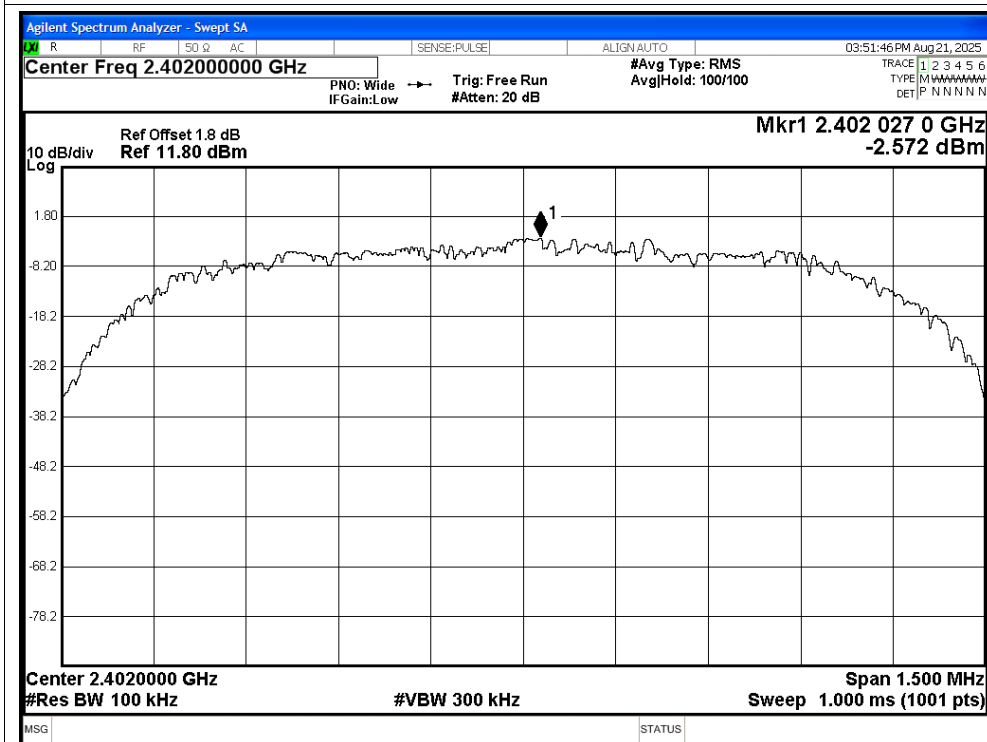
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



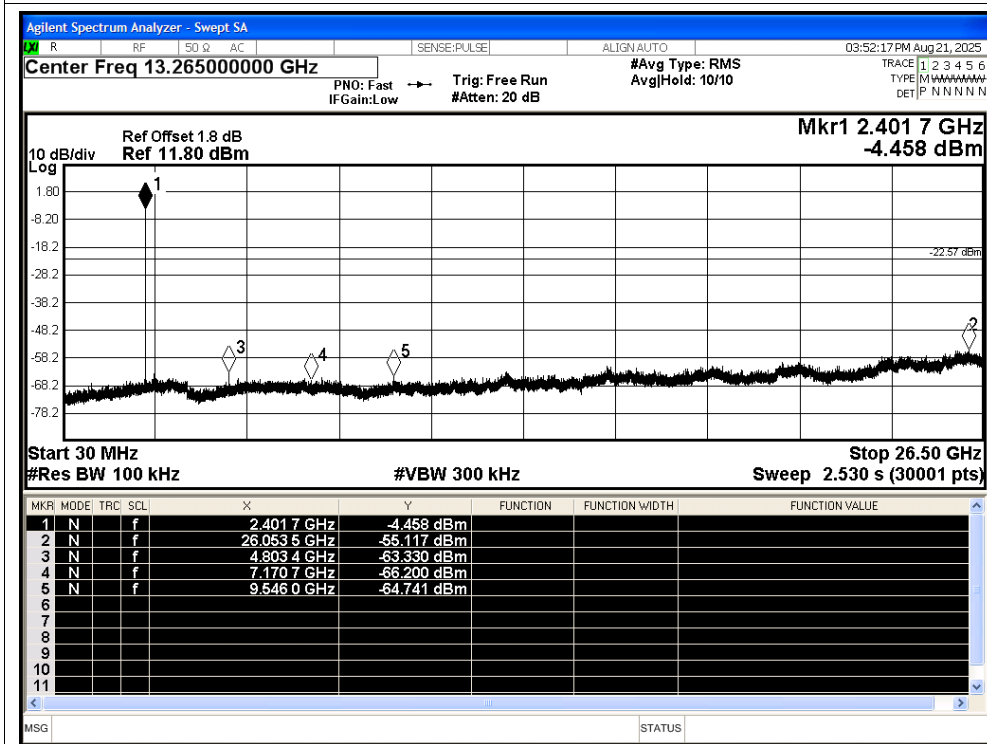
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



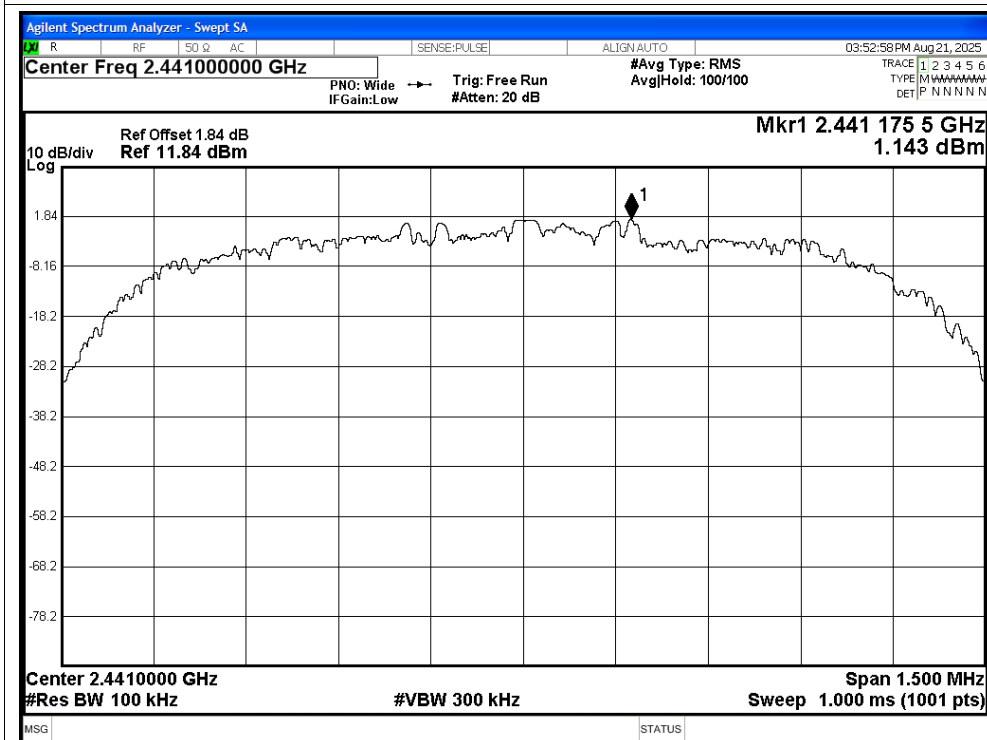
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



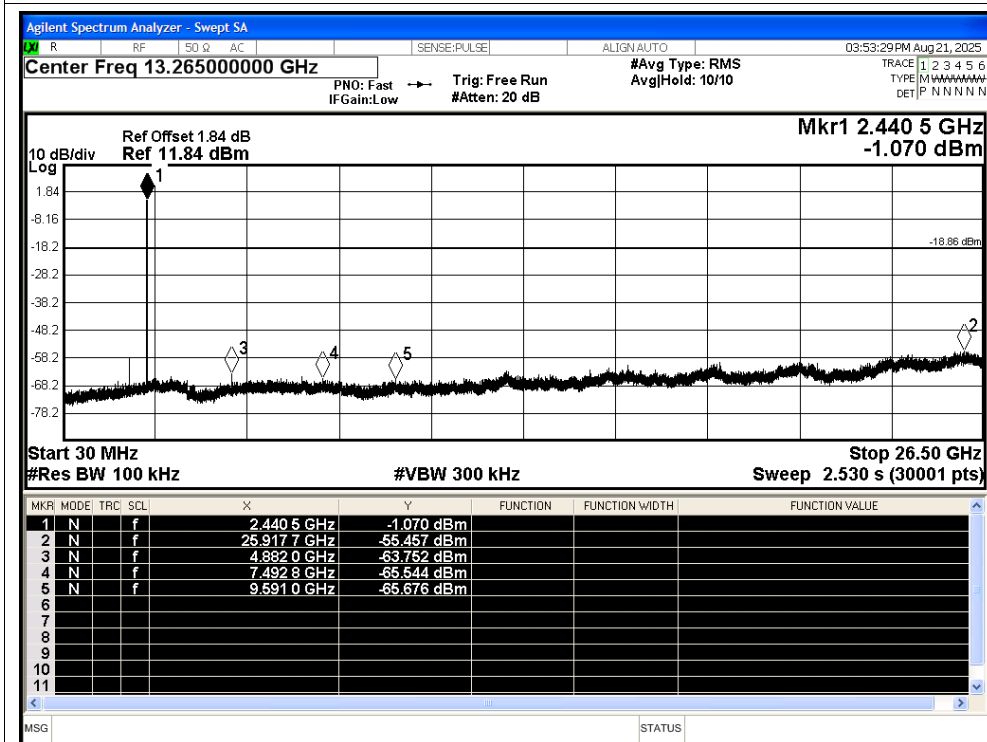
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



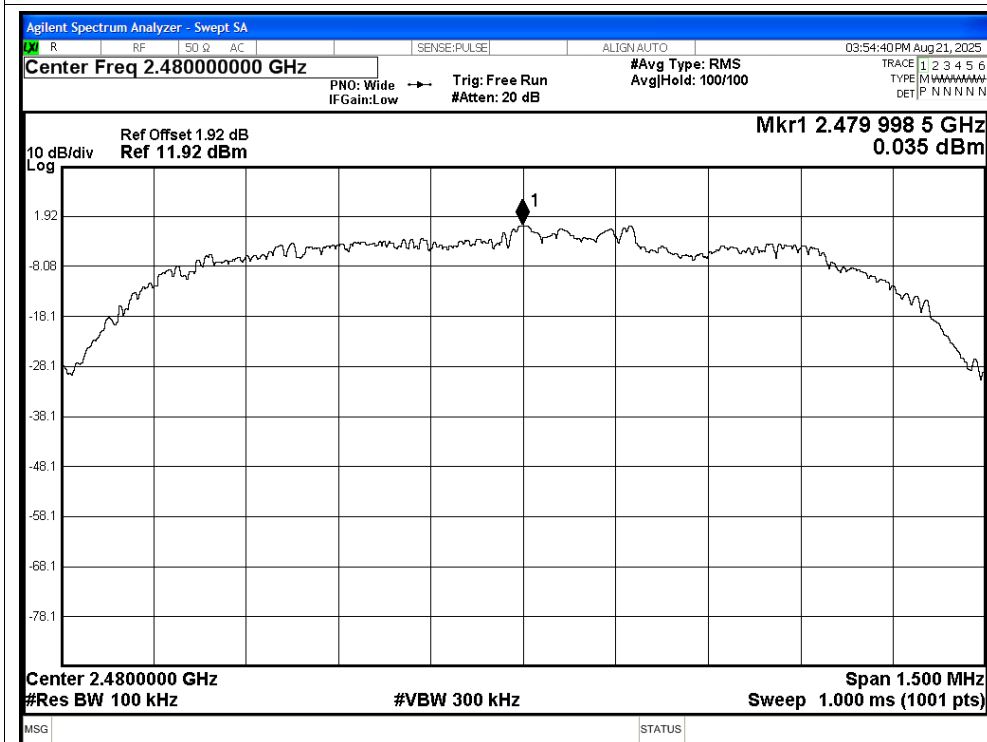
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



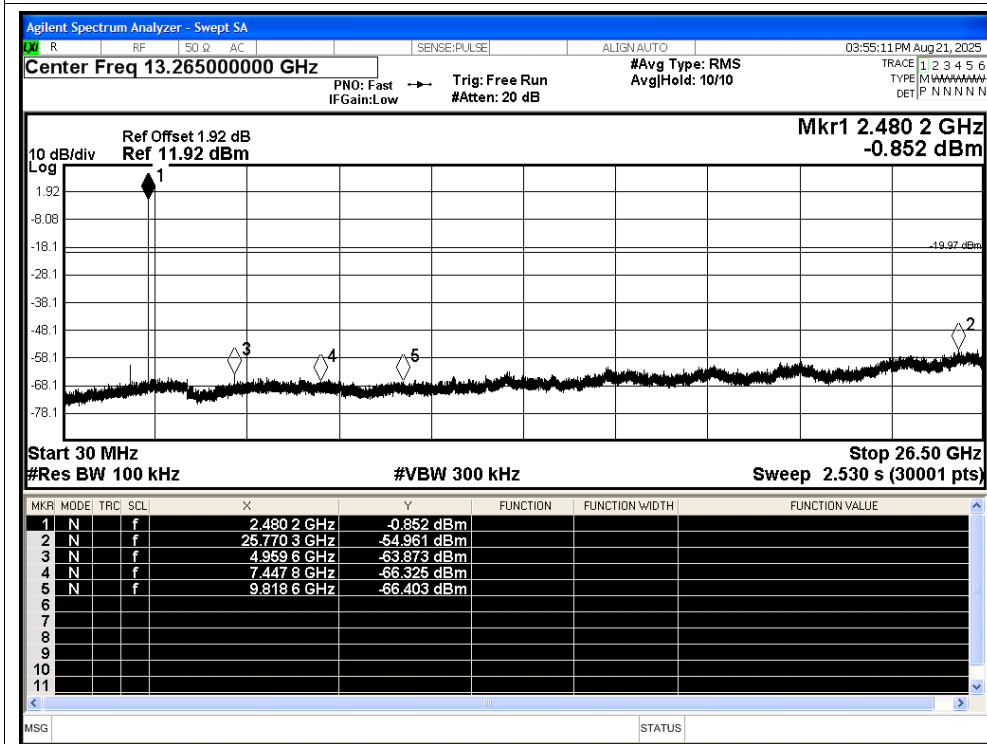
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

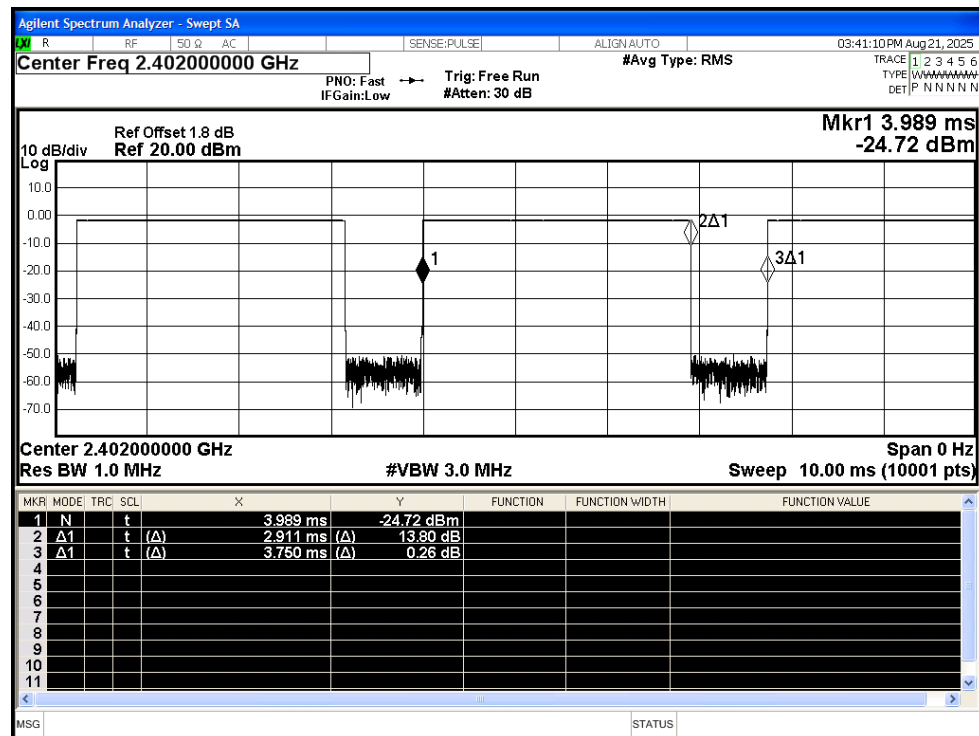


A.8 Duty Cycle

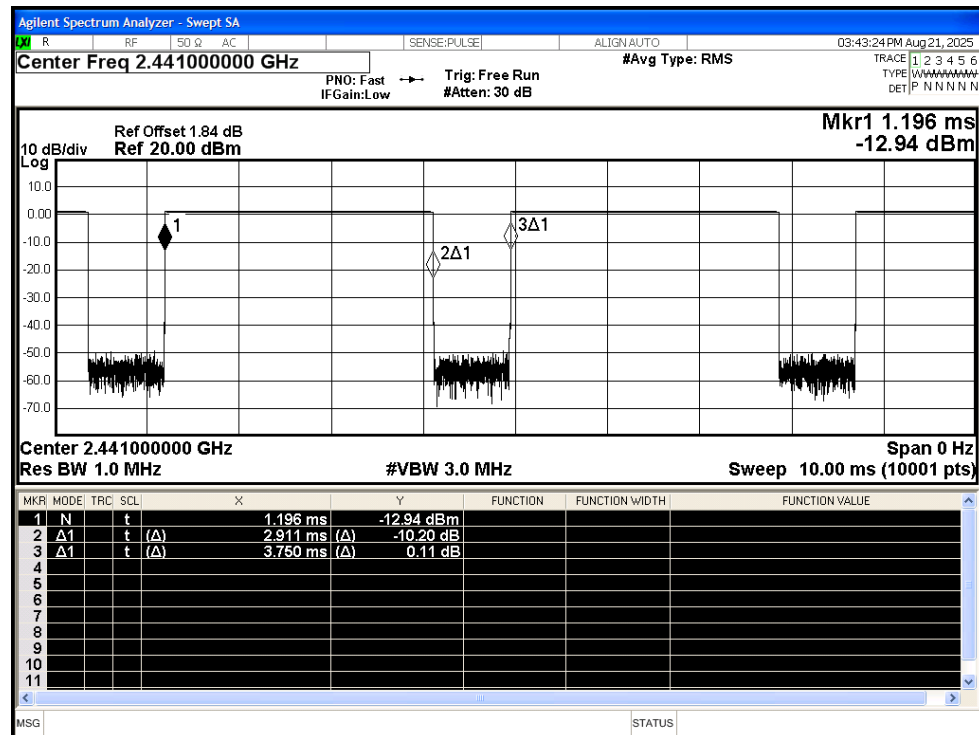
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	77.63	1.1	0.34
NVNT	1-DH5	2441	Ant1	77.63	1.1	0.34
NVNT	1-DH5	2480	Ant1	77.63	1.1	0.34
NVNT	2-DH5	2402	Ant1	76.37	1.17	0.36
NVNT	2-DH5	2441	Ant1	76.39	1.17	0.36
NVNT	2-DH5	2480	Ant1	77.28	1.12	0.35
NVNT	3-DH5	2402	Ant1	76.33	1.17	0.36
NVNT	3-DH5	2441	Ant1	76.37	1.17	0.36
NVNT	3-DH5	2480	Ant1	76.37	1.17	0.36

Test Graphs

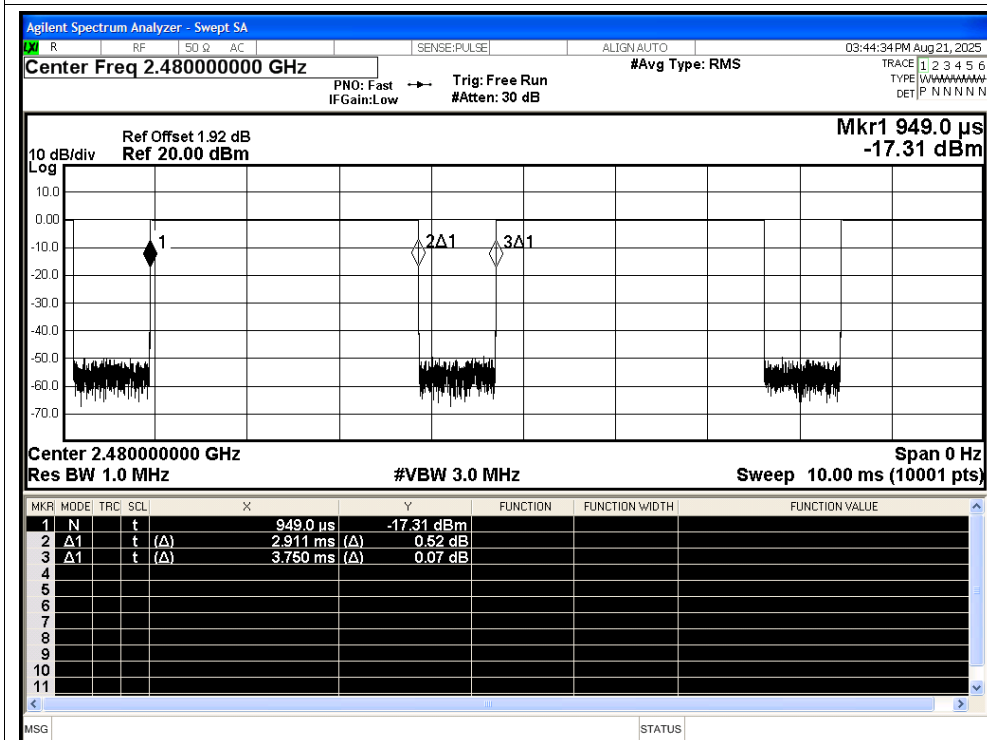
Duty Cycle NVNT 1-DH5 2402MHz Ant1



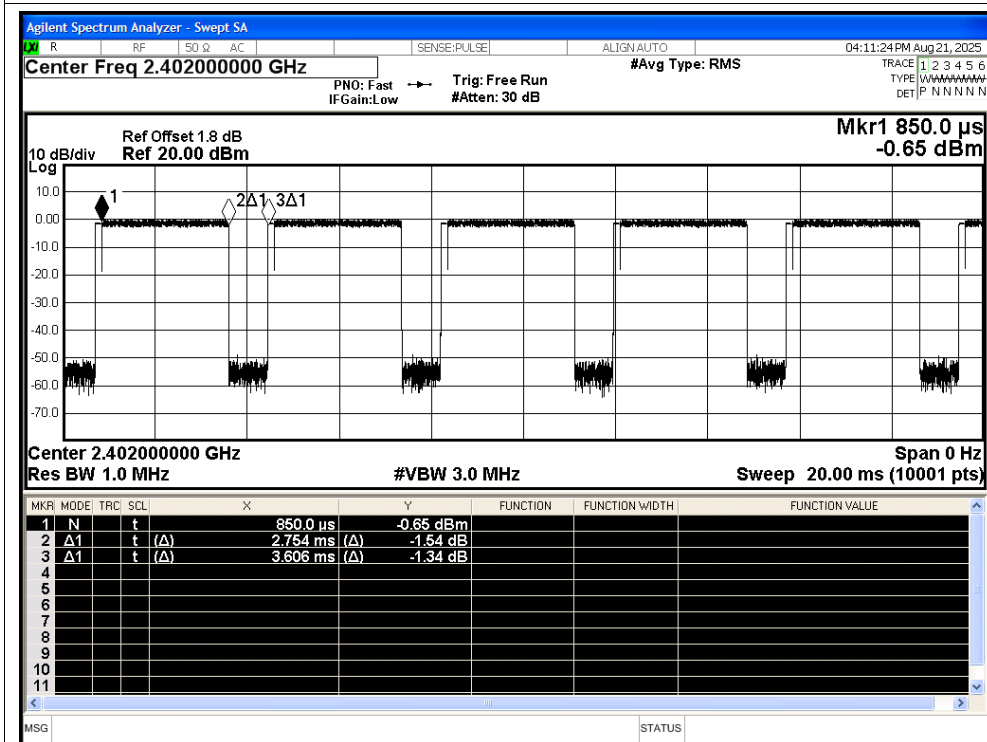
Duty Cycle NVNT 1-DH5 2441MHz Ant1



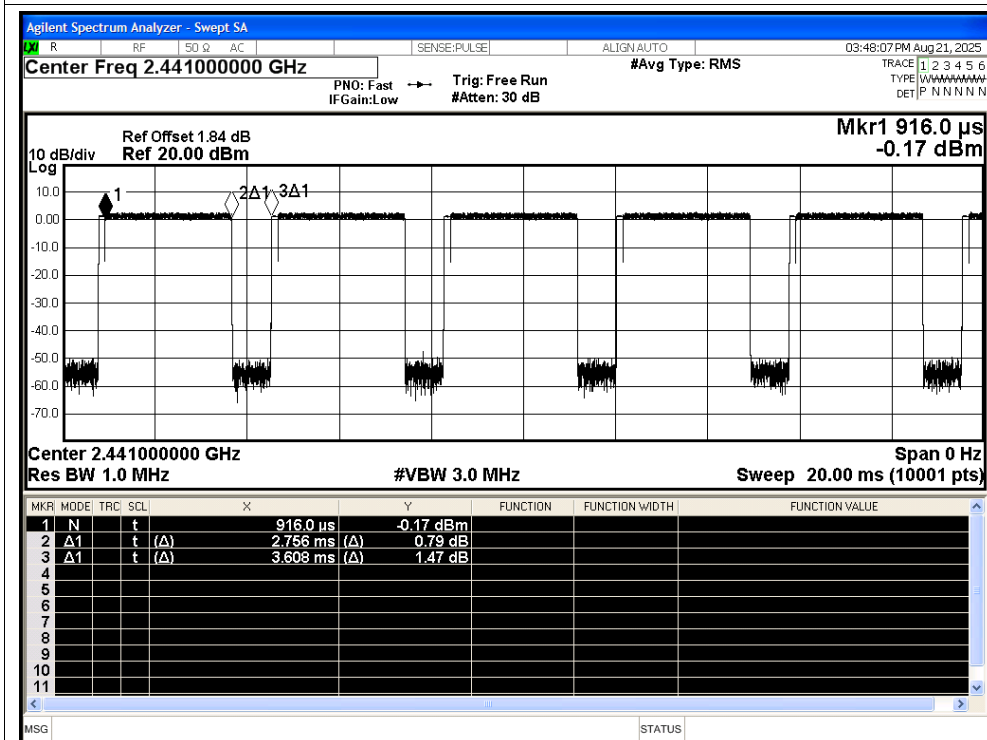
Duty Cycle NVNT 1-DH5 2480MHz Ant1



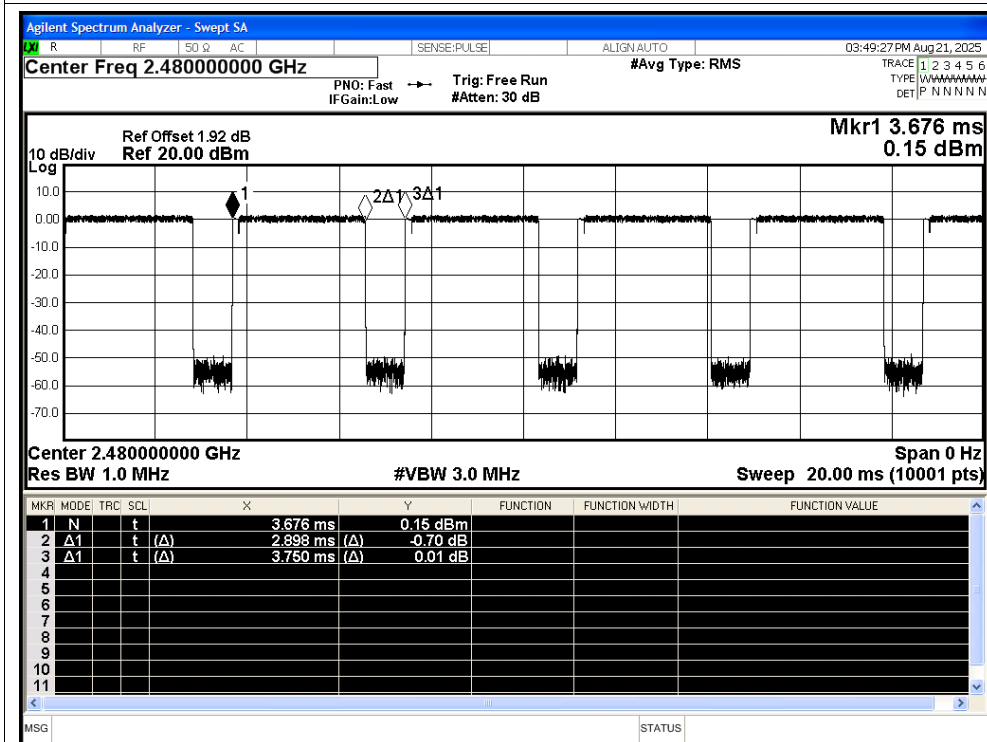
Duty Cycle NVNT 2-DH5 2402MHz Ant1



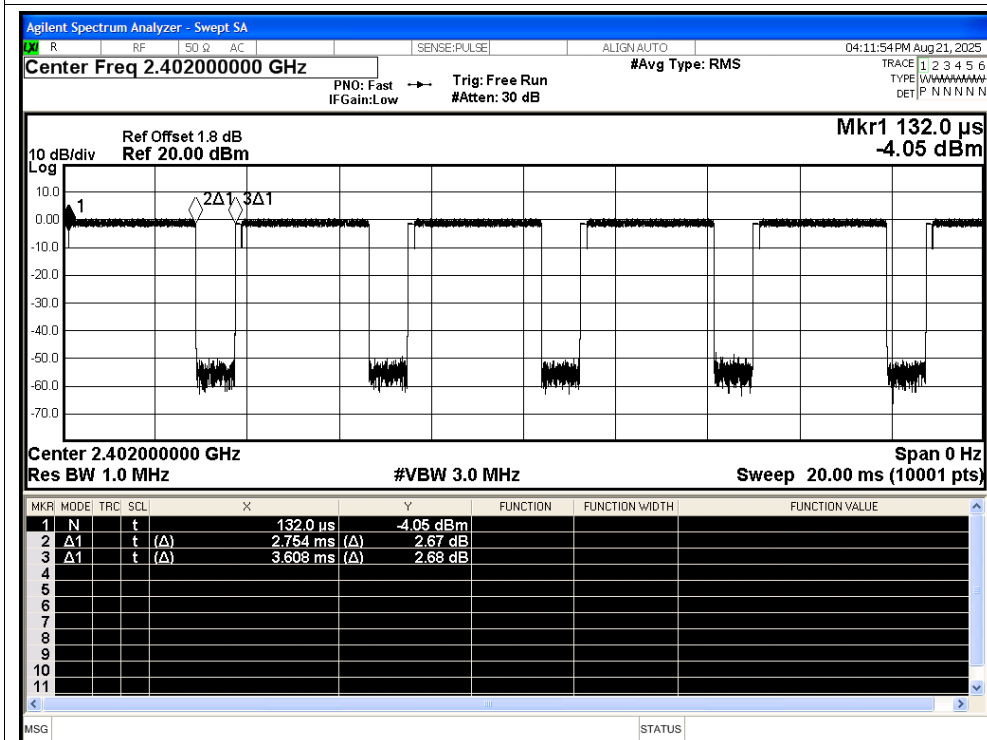
Duty Cycle NVNT 2-DH5 2441MHz Ant1



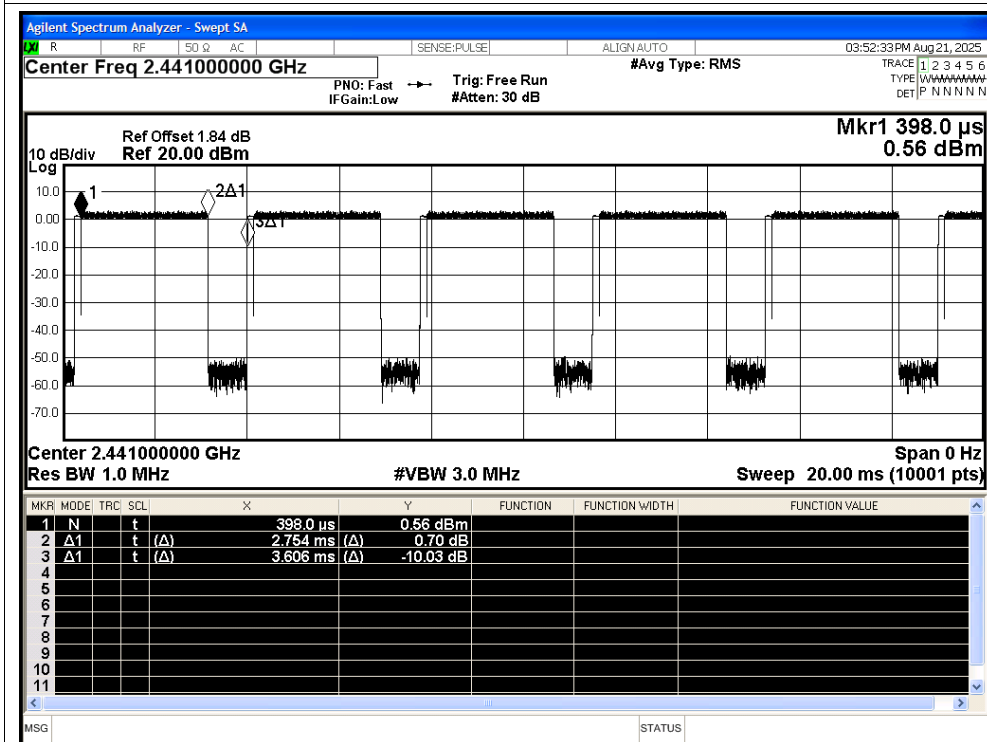
Duty Cycle NVNT 2-DH5 2480MHz Ant1

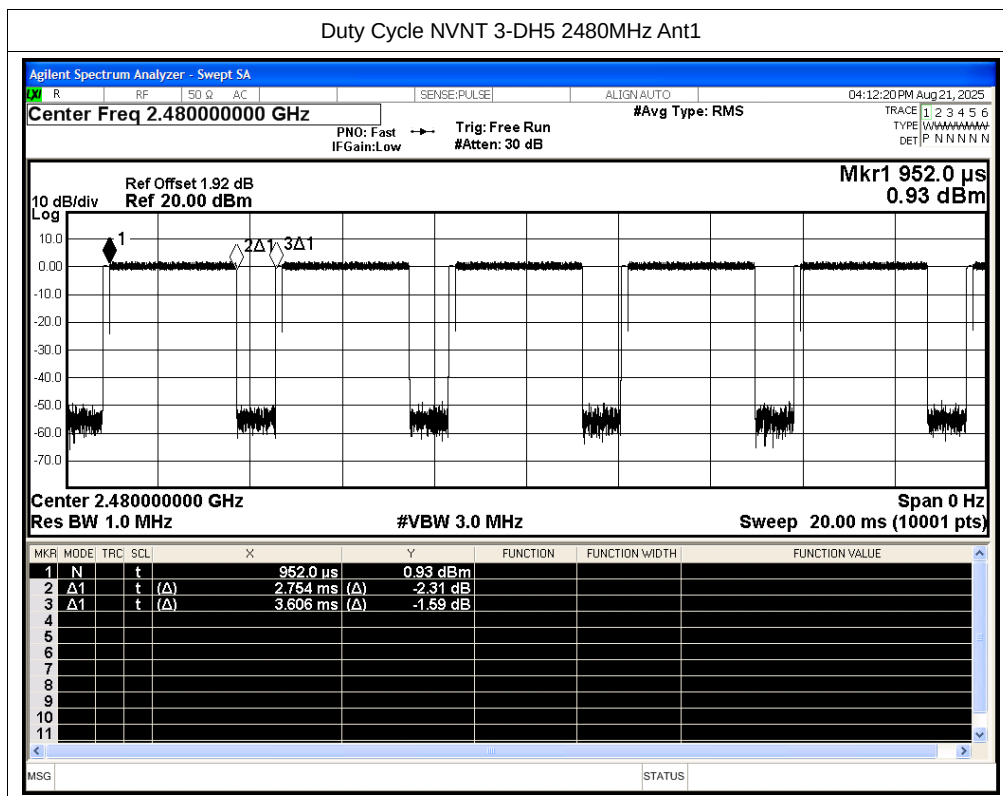


Duty Cycle NVNT 3-DH5 2402MHz Ant1



Duty Cycle NVNT 3-DH5 2441MHz Ant1



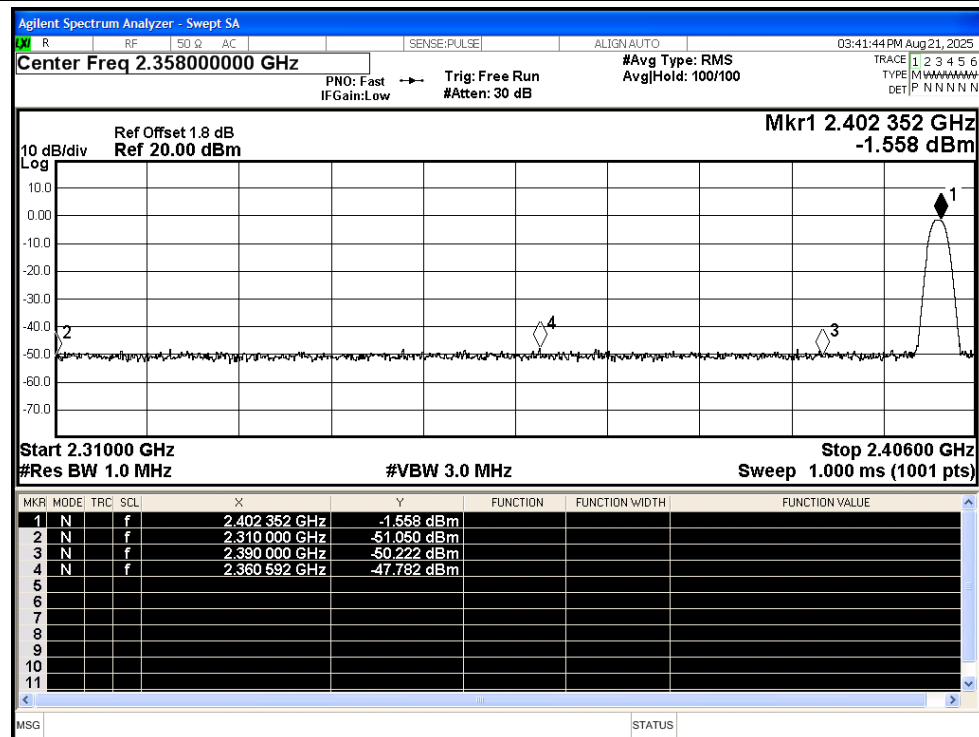


A.9 Restrict Band

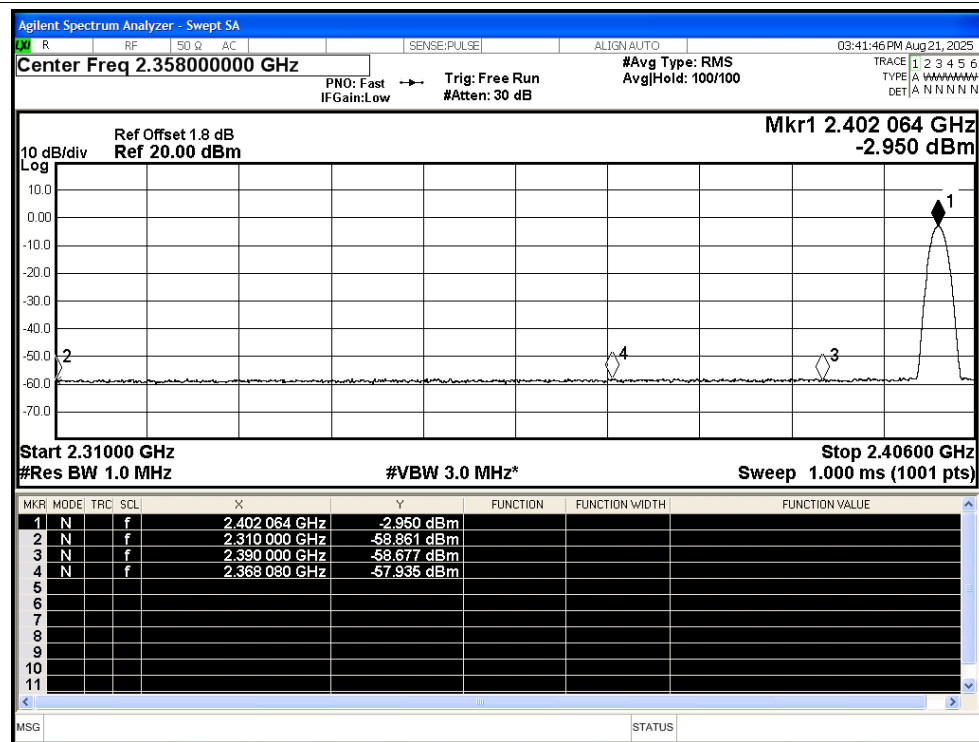
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-51.05	2	-	46.21	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.86	2	1.1	39.5	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2360.592	-47.78	2	-	49.48	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2368.08	-57.94	2	1.1	40.42	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-50.22	2	-	47.04	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.68	2	1.1	39.68	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-49.03	2	-	48.23	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-58.03	2	1.1	40.33	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.608	-44.28	2	-	52.98	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2495.56	-57.12	2	1.1	41.24	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-49.92	2	-	47.34	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-58.73	2	1.1	39.63	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-51.34	2	-	45.92	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-58.88	2	0.12	38.5	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2353.2	-48.19	2	-	49.07	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2319.6	-57.83	2	0.12	39.55	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-51.9	2	-	45.36	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-58.17	2	0.12	39.21	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-47.55	2	-	49.71	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-56.81	2	1.12	41.57	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2485.456	-43.76	2	-	53.5	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.608	-56.54	2	1.12	41.84	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-49.96	2	-	47.3	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-58.11	2	1.12	40.27	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-50.78	2	-	46.48	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-59.09	2	0.12	38.29	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2342.832	-47.85	2	-	49.41	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2379.984	-57.87	2	0.12	39.51	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-51.1	2	-	46.16	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-58.06	2	0.12	39.32	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-45.09	2	-	52.17	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-56.49	2	0.12	40.89	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.584	-43.86	2	-	53.4	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.536	-56.18	2	0.12	41.2	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-50.78	2	-	46.48	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-58.16	2	0.12	39.22	Average	54	Pass

Test Graphs

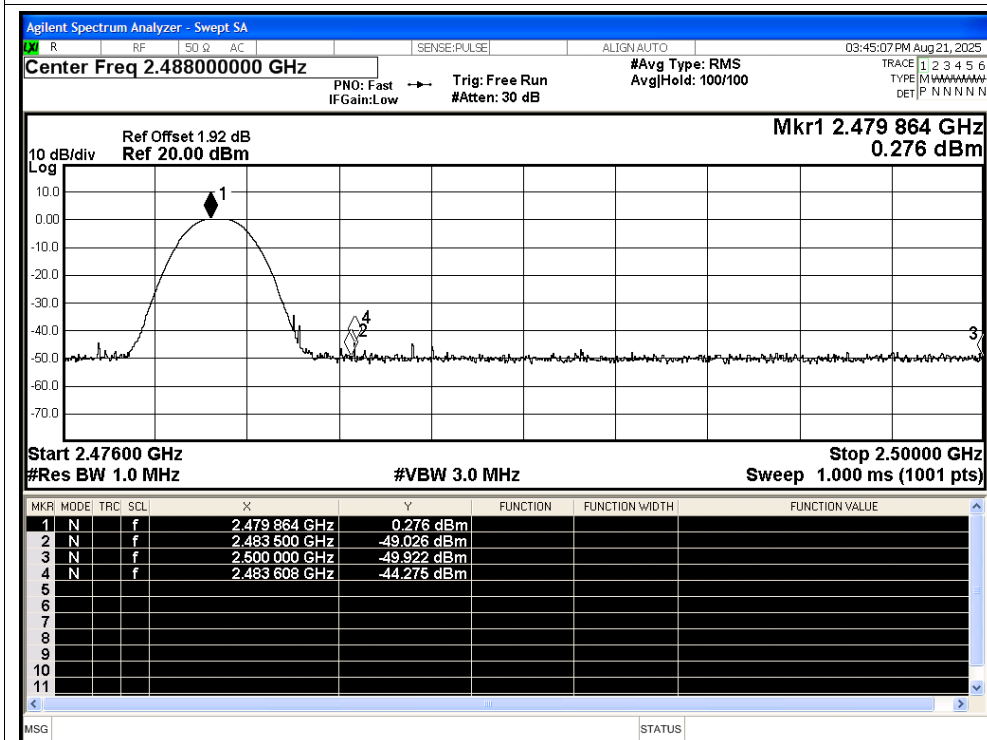
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



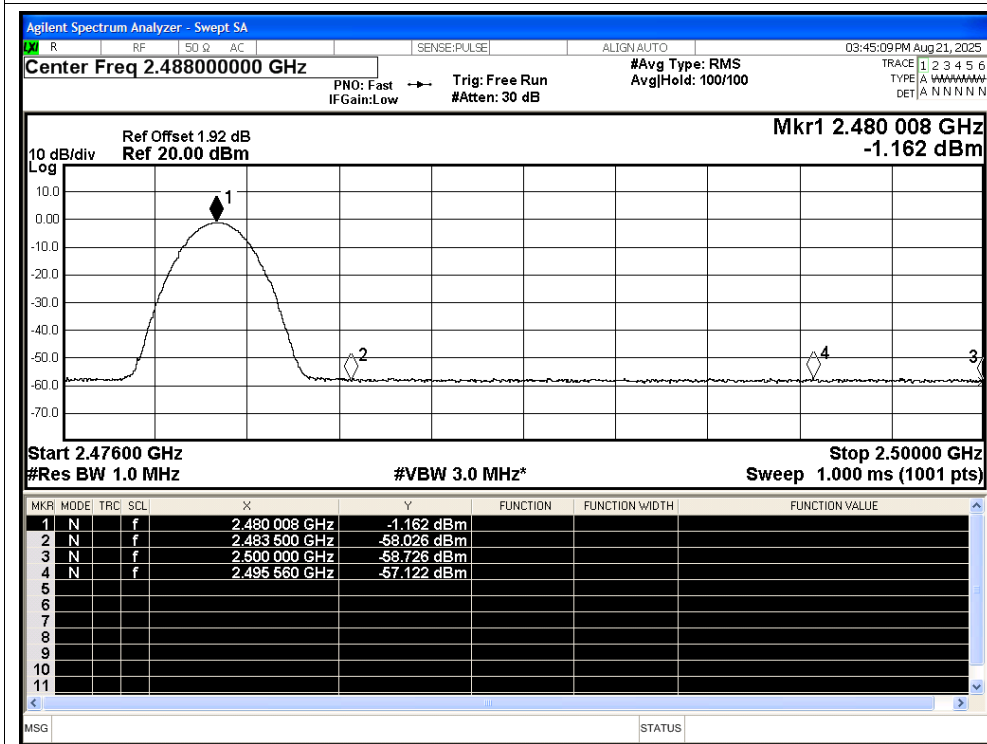
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

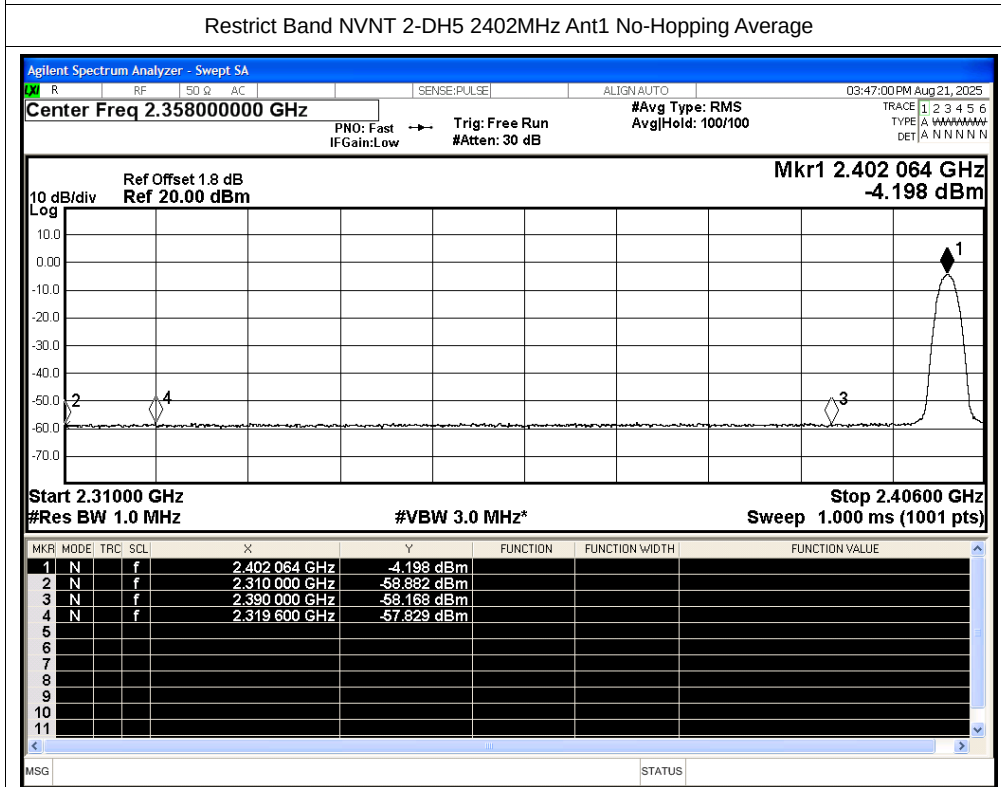
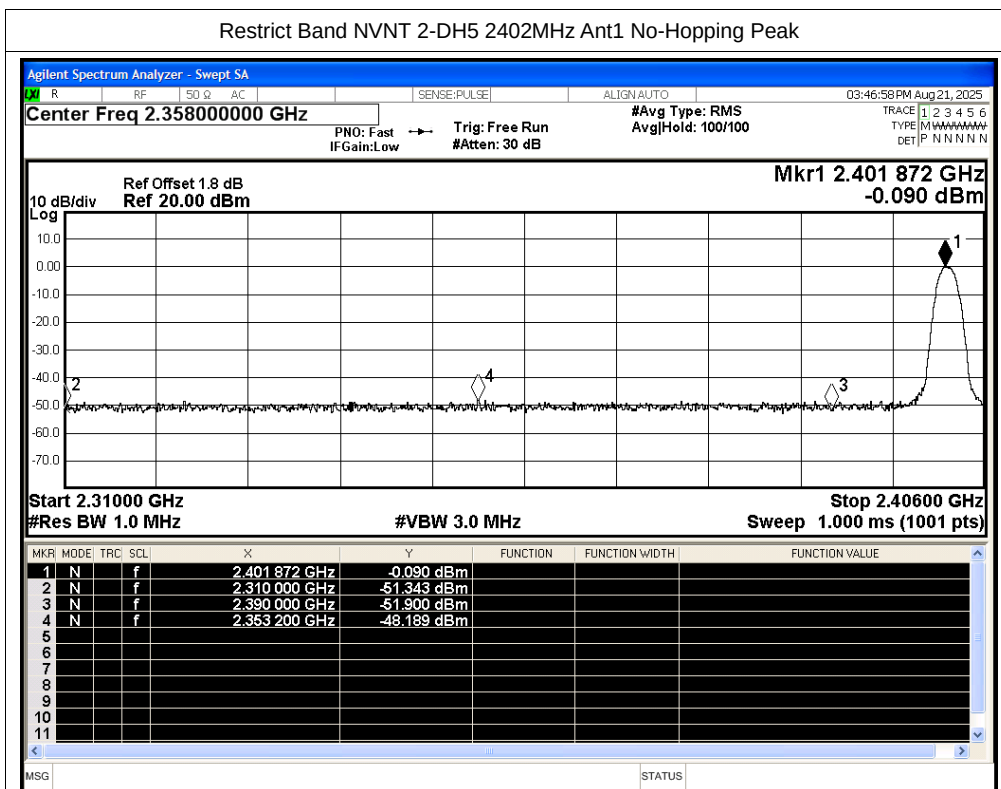


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak

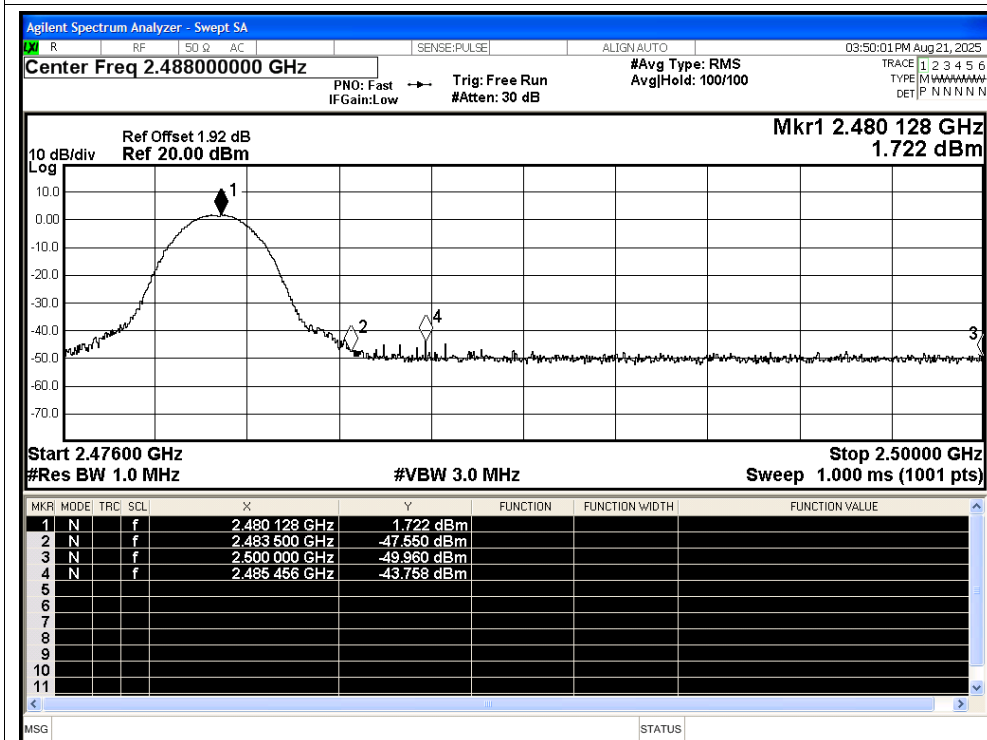


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

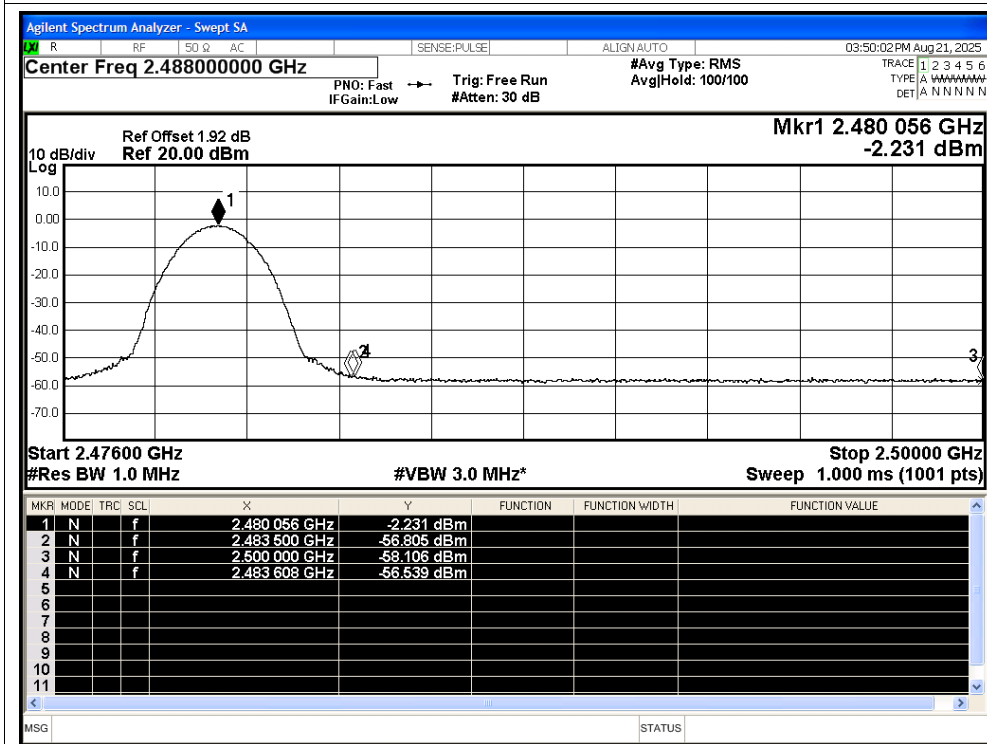




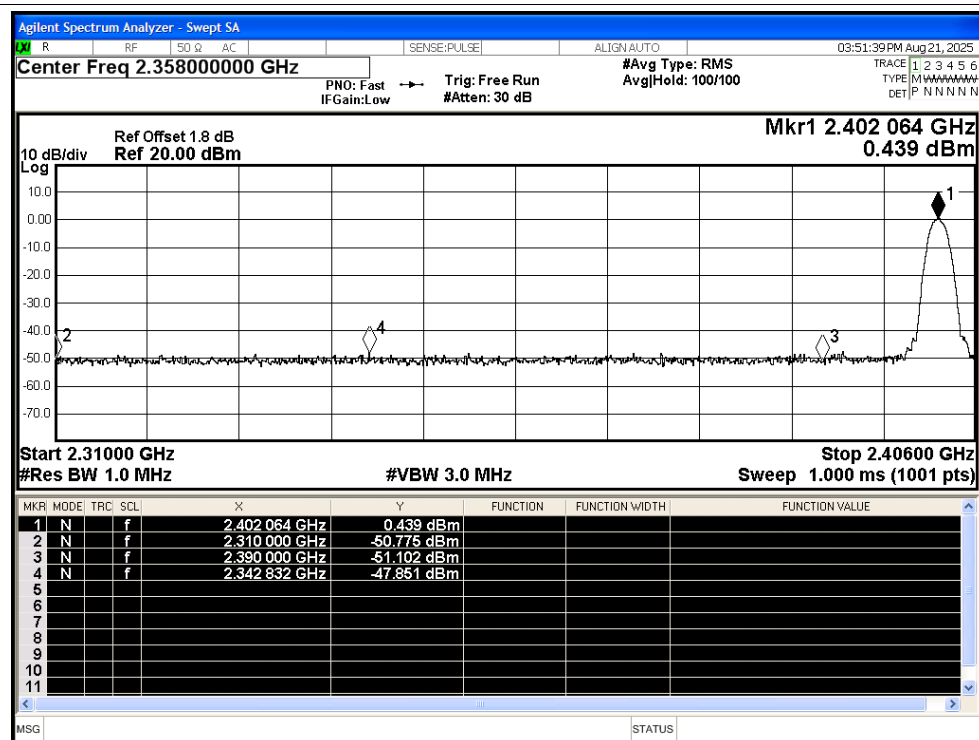
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



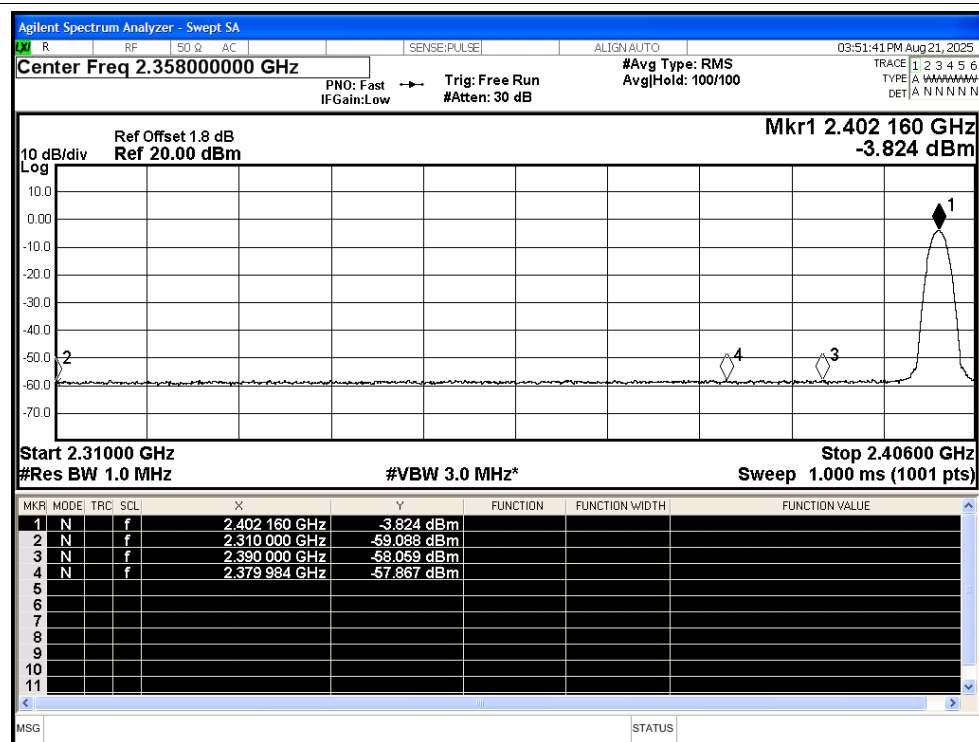
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average



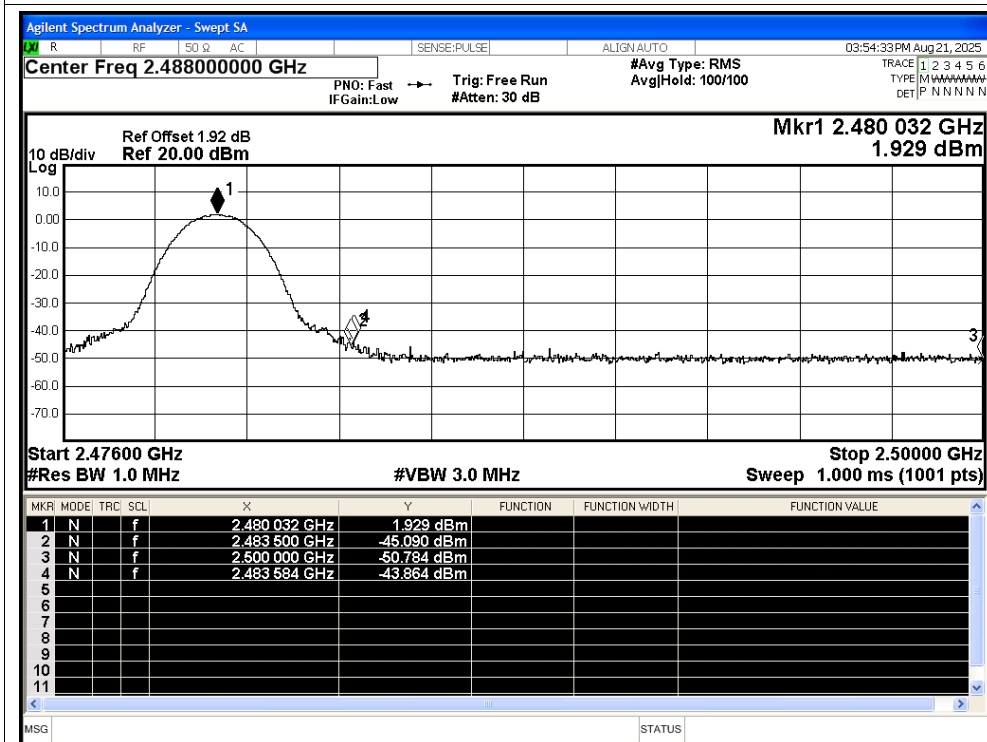
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak



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

