



## Appendix A

### RF Test Data for BT (Conducted Measurement)

Product Name: Mini PC

Test Model: ArieBox10

#### Environmental Conditions

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





### A.1 -20dB Bandwidth

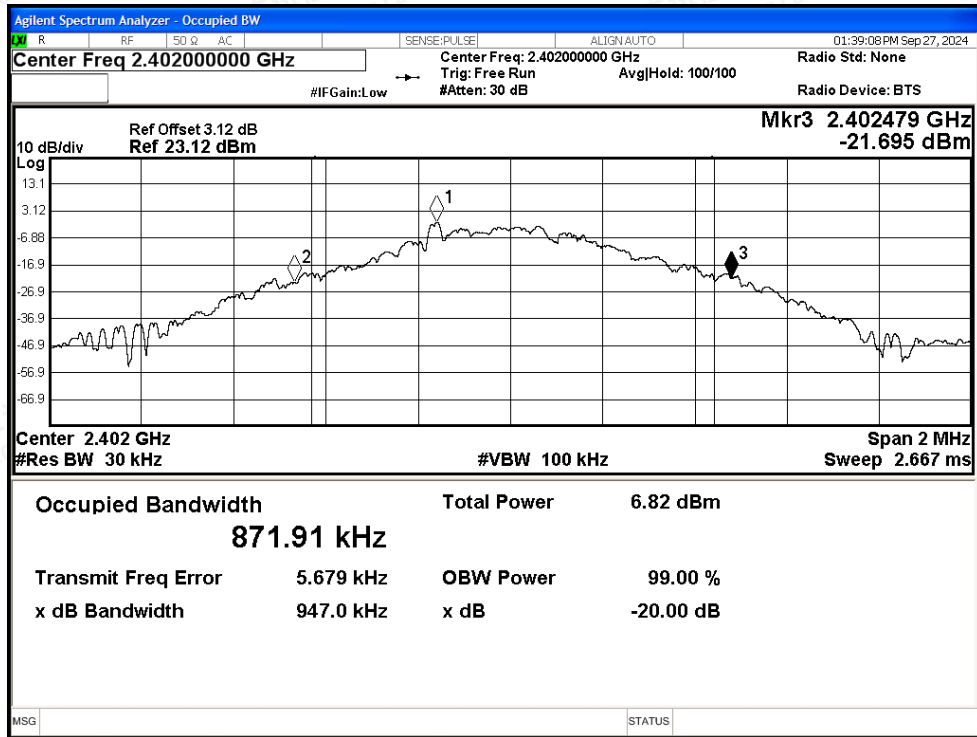
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant0	0.947	N/A	Pass
NVNT	1-DH5	2441	Ant0	0.956	N/A	Pass
NVNT	1-DH5	2480	Ant0	0.943	N/A	Pass
NVNT	2-DH5	2402	Ant0	1.314	N/A	Pass
NVNT	2-DH5	2441	Ant0	1.287	N/A	Pass
NVNT	2-DH5	2480	Ant0	1.285	N/A	Pass
NVNT	3-DH5	2402	Ant0	1.302	N/A	Pass
NVNT	3-DH5	2441	Ant0	1.299	N/A	Pass
NVNT	3-DH5	2480	Ant0	1.303	N/A	Pass





Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant0

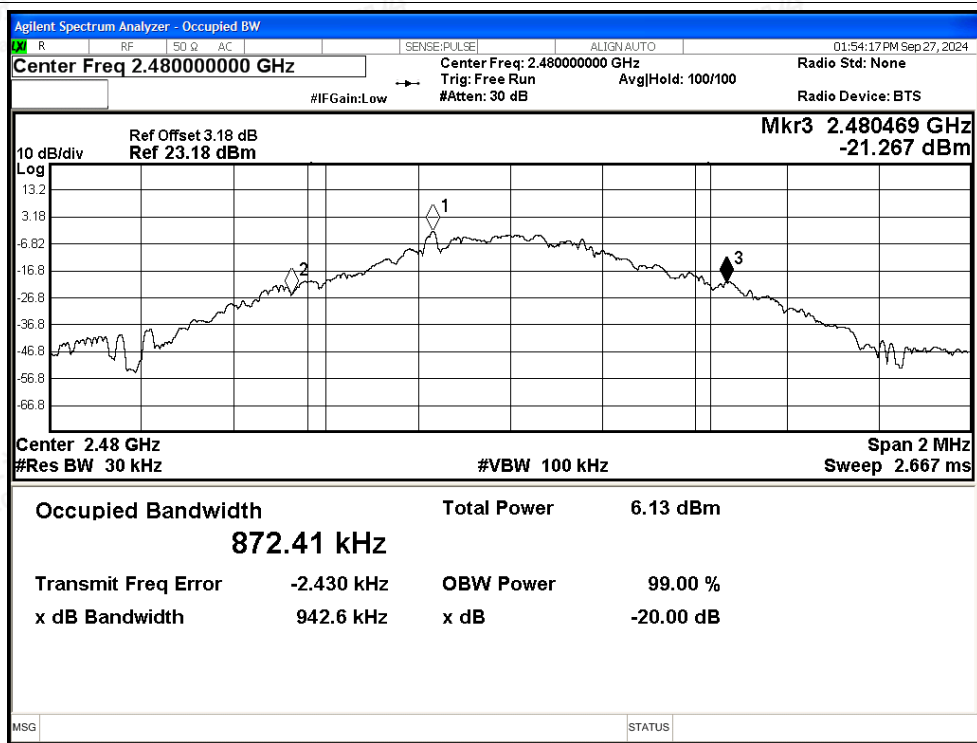


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant0

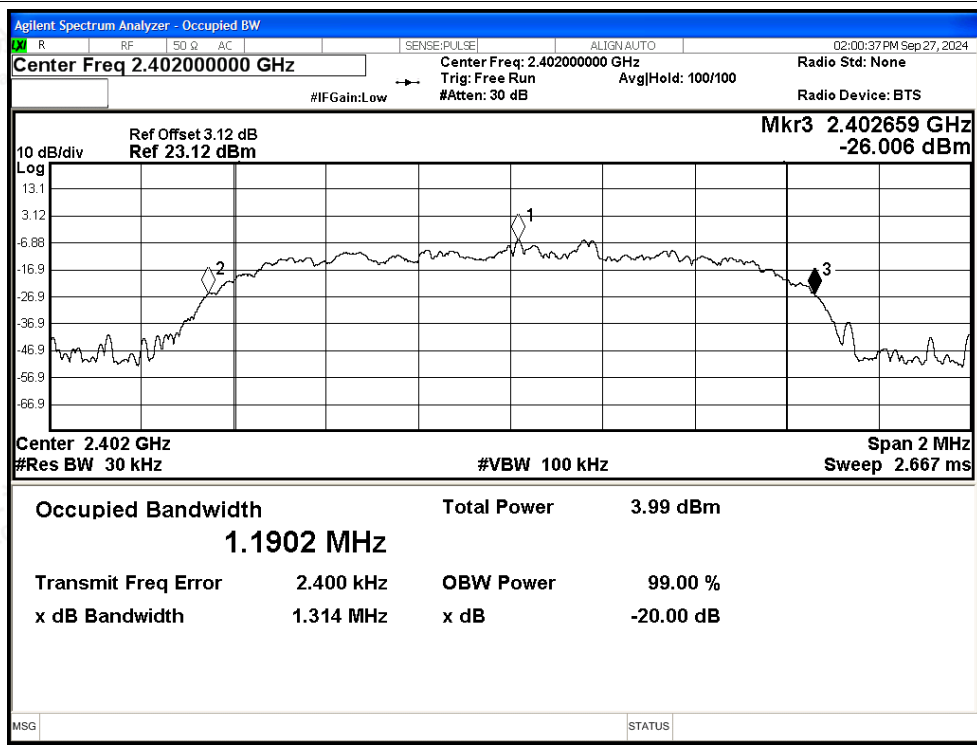




-20dB Bandwidth NVNT 1-DH5 2480MHz Ant0

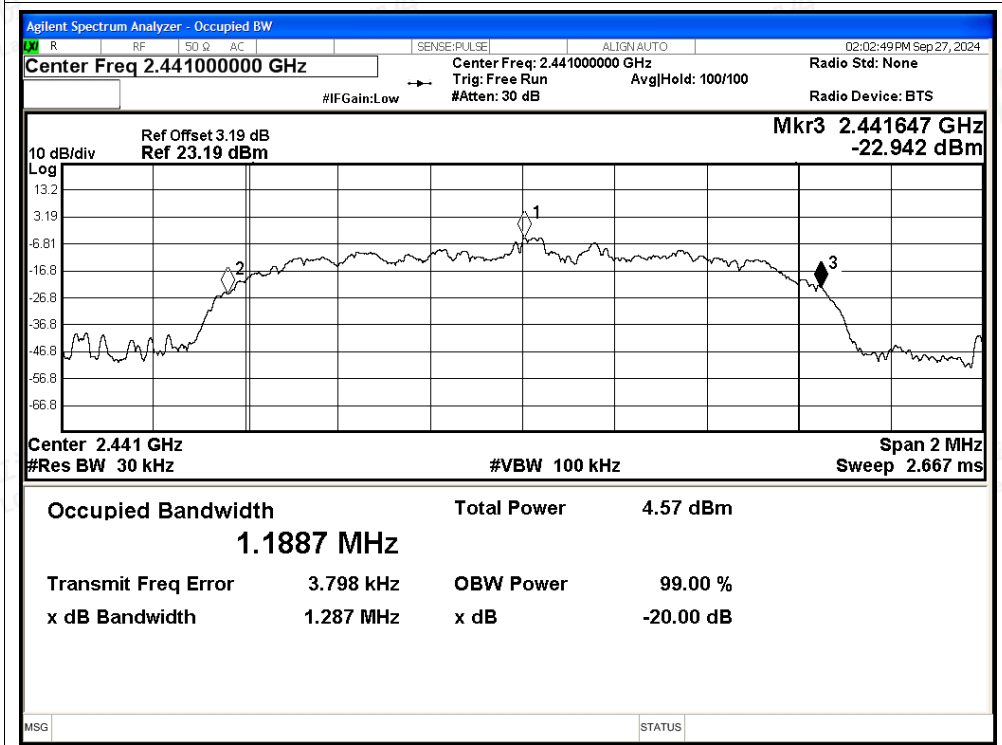


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant0





-20dB Bandwidth NVNT 2-DH5 2441MHz Ant0

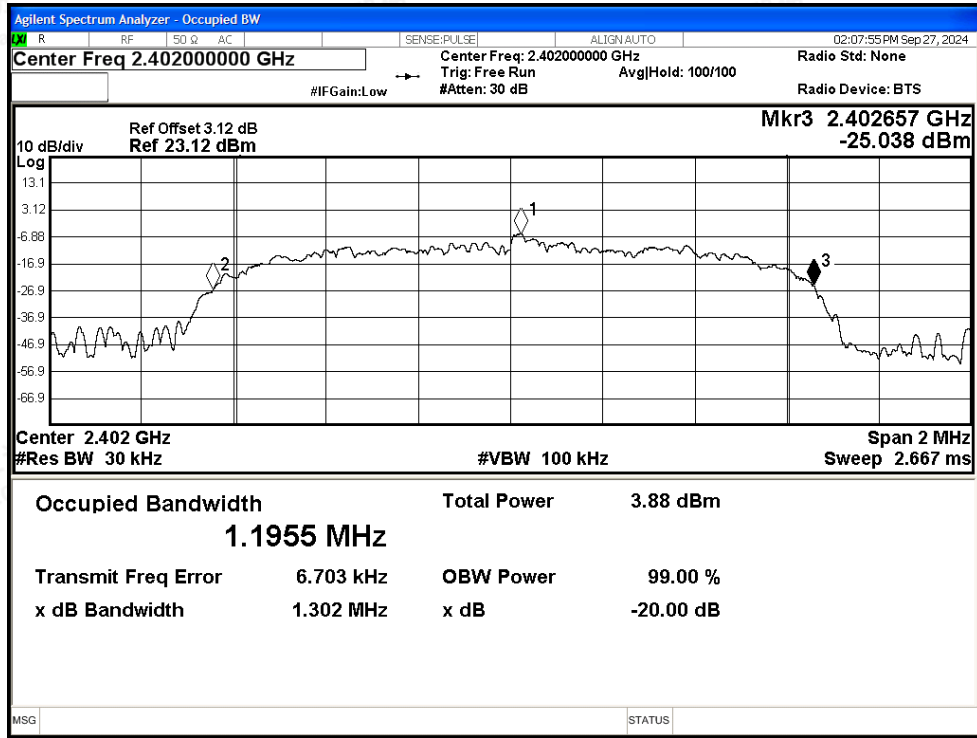


-20dB Bandwidth NVNT 2-DH5 2480MHz Ant0

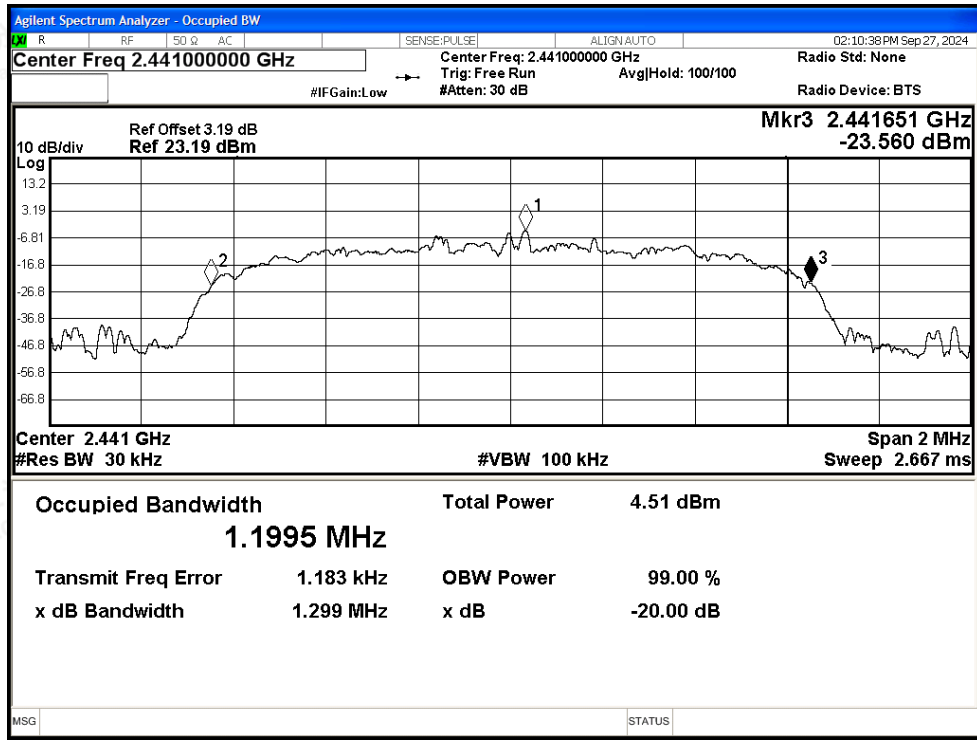


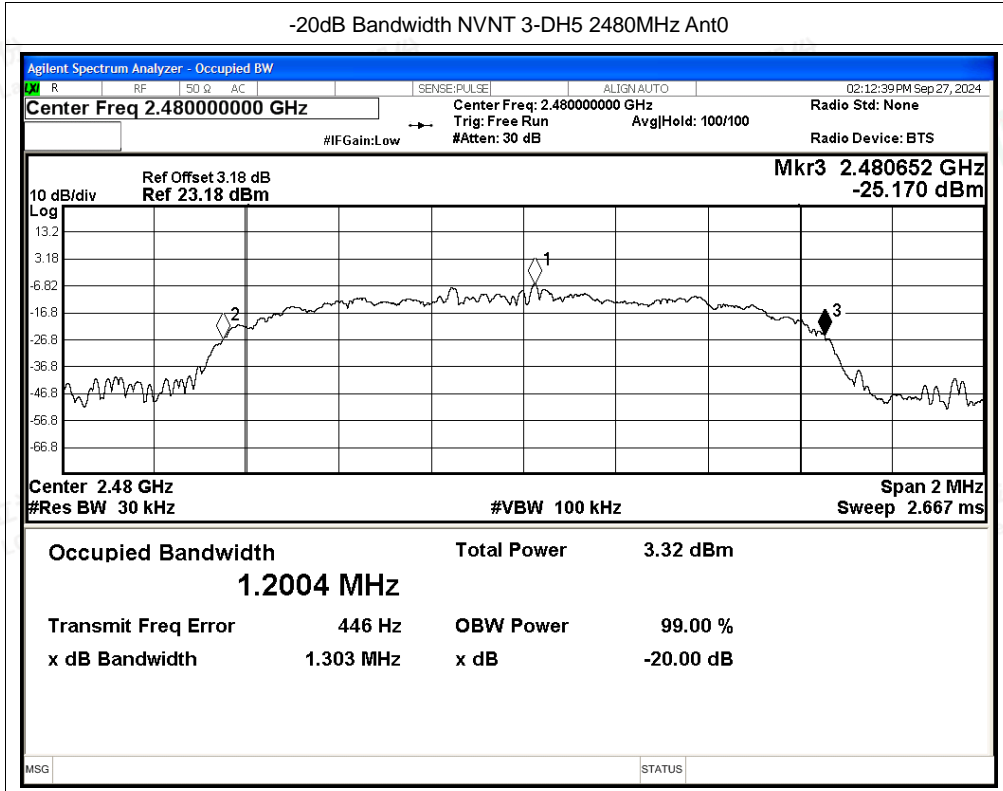


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant0



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant0







## A.2 Maximum peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant0	0.51	21	Pass
NVNT	1-DH5	2441	Ant0	0.87	21	Pass
NVNT	1-DH5	2480	Ant0	-0.22	21	Pass
NVNT	2-DH5	2402	Ant0	-0.28	21	Pass
NVNT	2-DH5	2441	Ant0	0.22	21	Pass
NVNT	2-DH5	2480	Ant0	-0.89	21	Pass
NVNT	3-DH5	2402	Ant0	0.14	21	Pass
NVNT	3-DH5	2441	Ant0	0.57	21	Pass
NVNT	3-DH5	2480	Ant0	-0.52	21	Pass

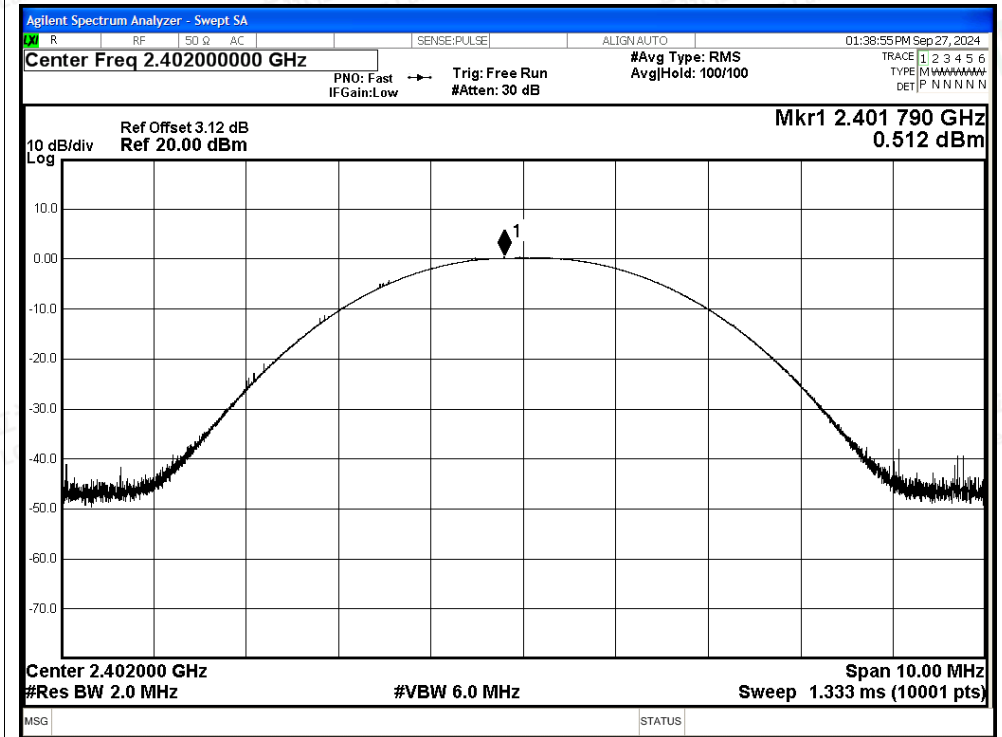




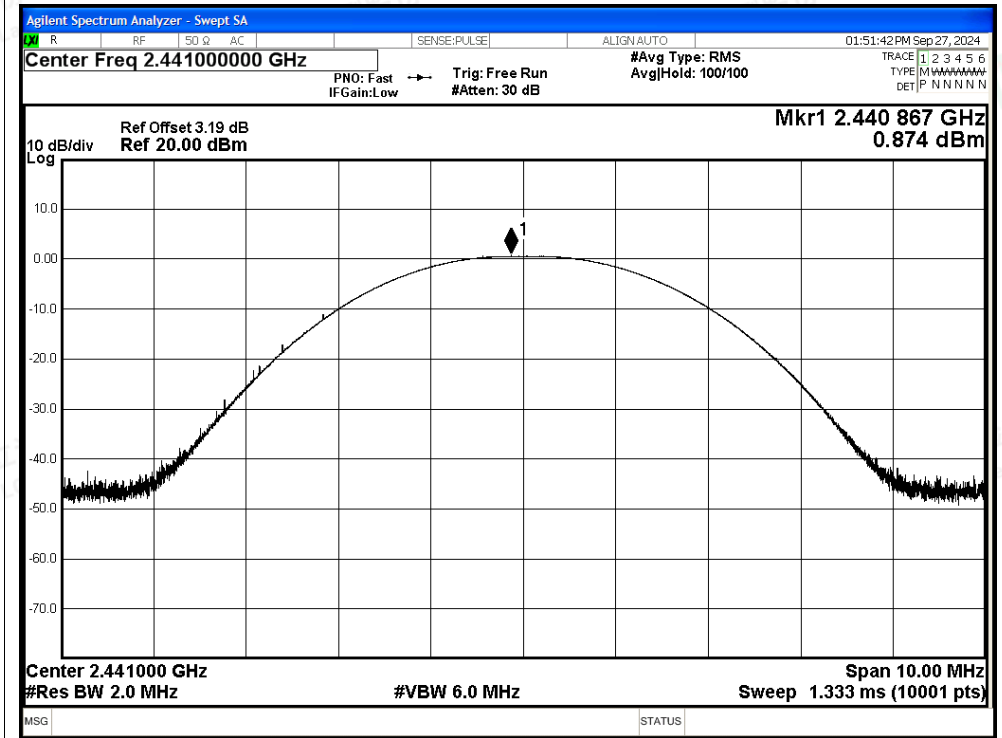


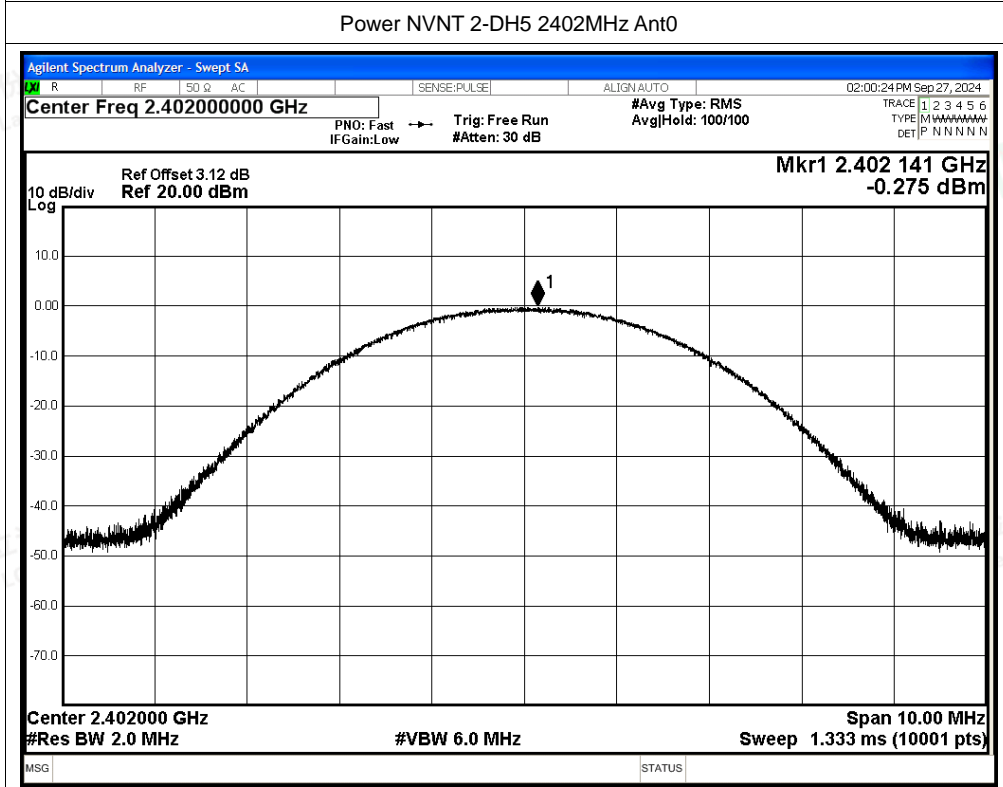
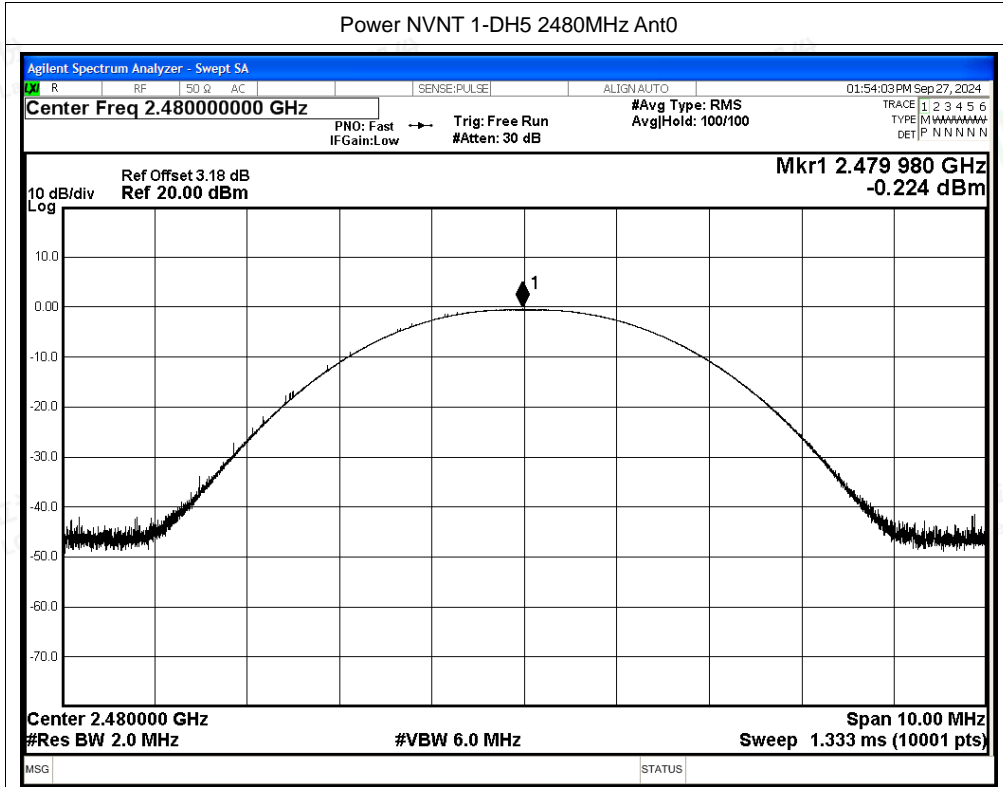
Test Graphs

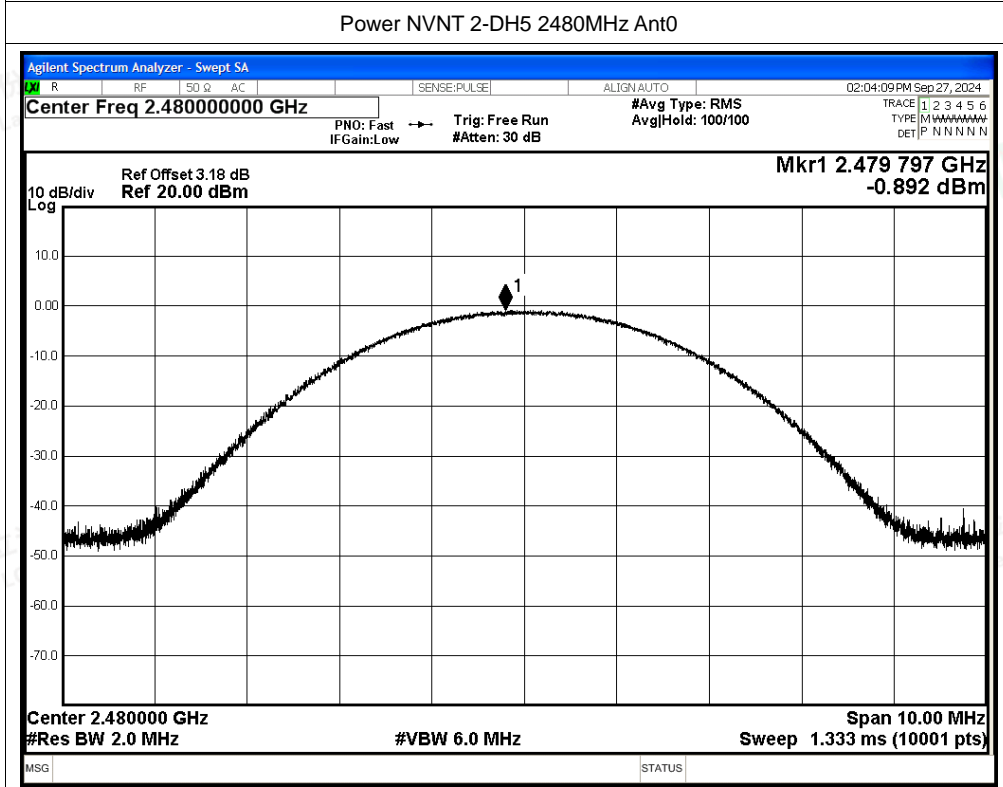
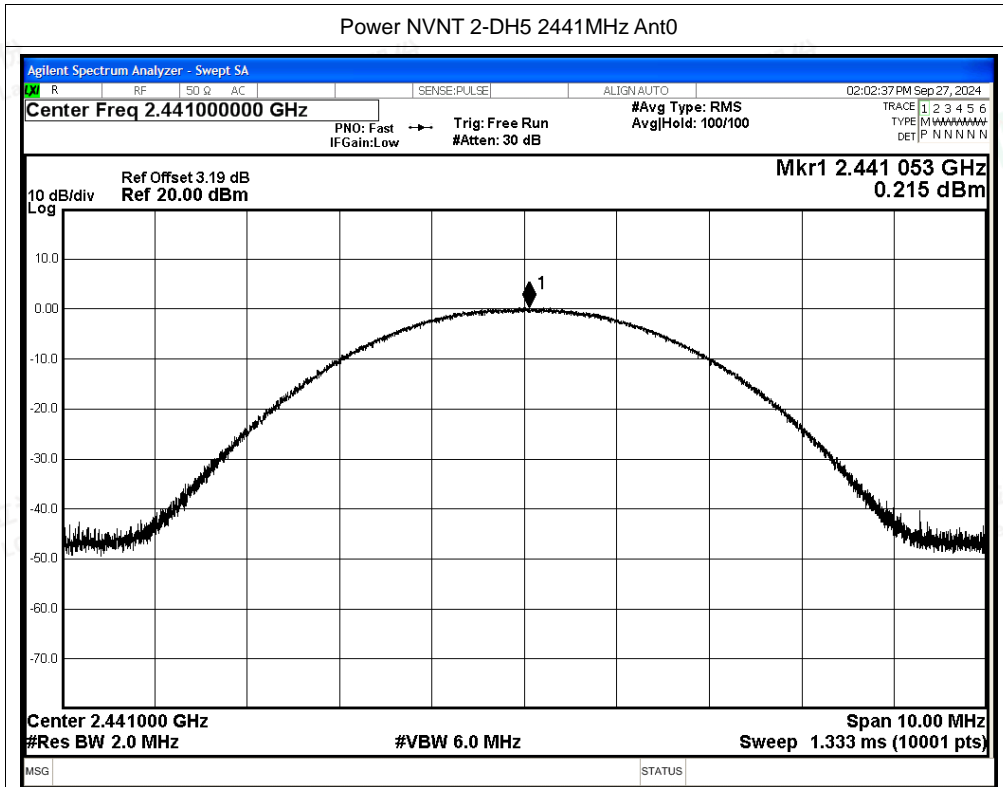
Power NVNT 1-DH5 2402MHz Ant0

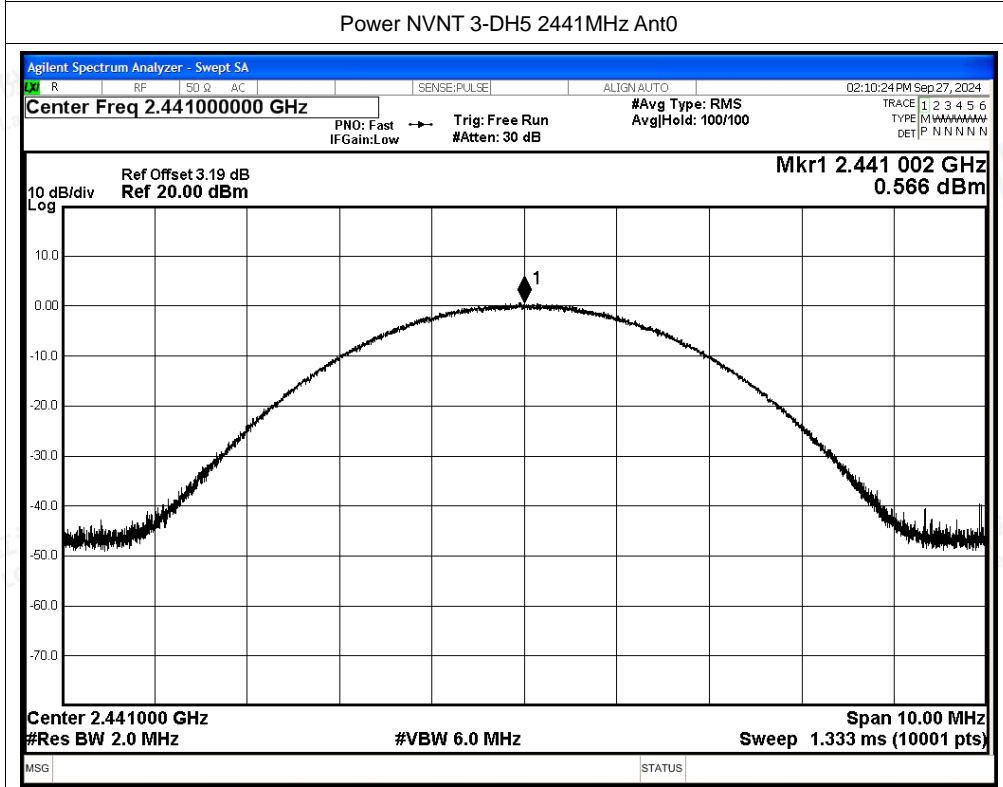
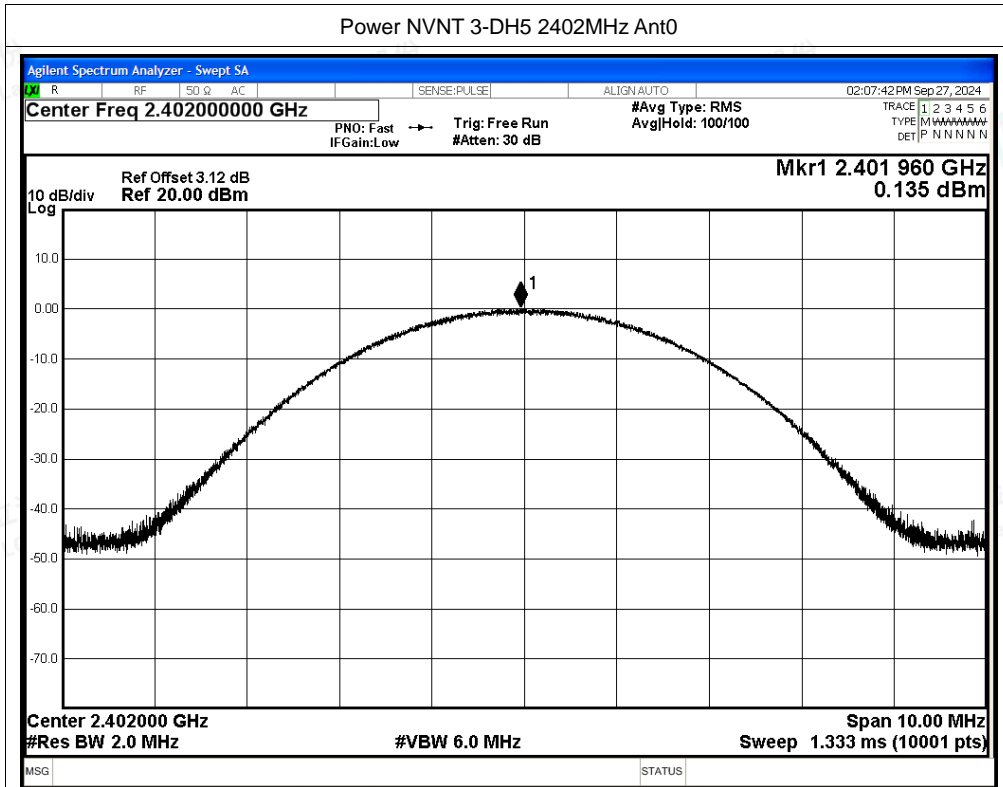


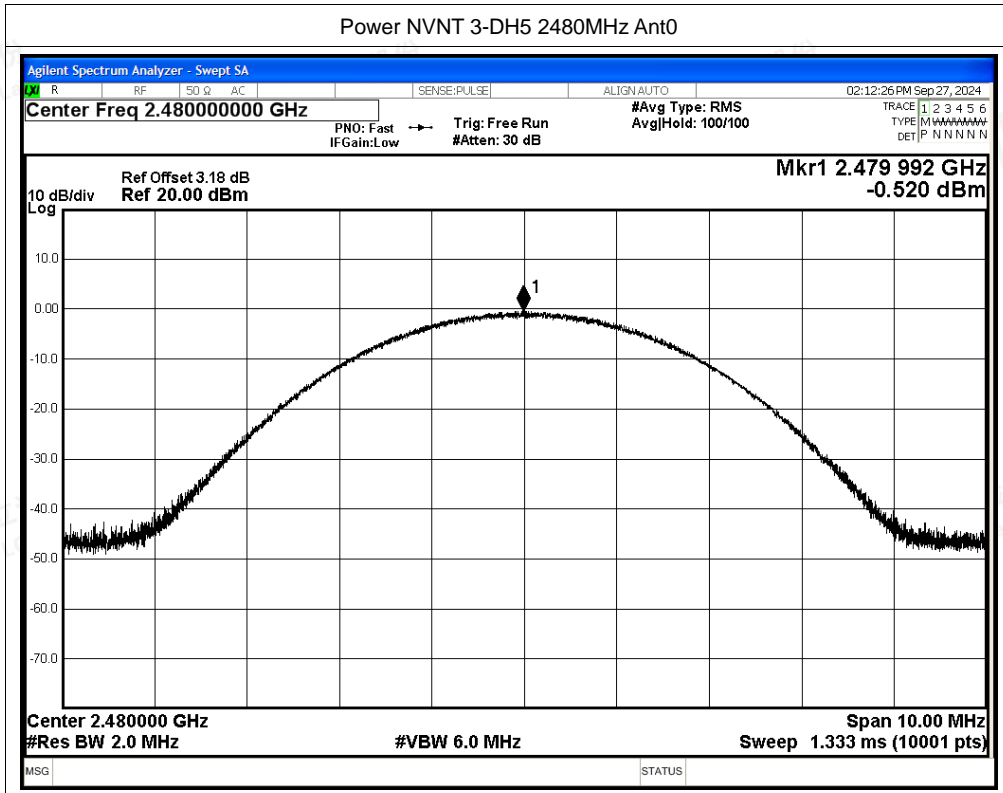
Power NVNT 1-DH5 2441MHz Ant0













### A.3 Carrier Frequencies Separation

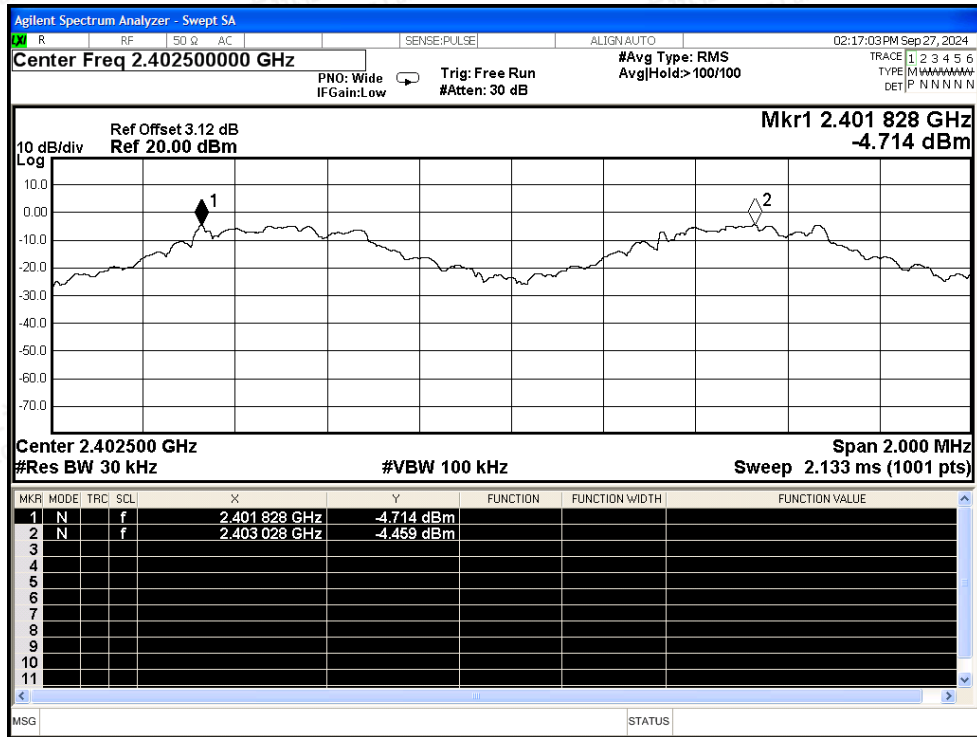
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant0	2401.828	2403.028	1.2	0.637	Pass
NVNT	2-DH5	Ant0	2402.016	2403.002	0.986	0.876	Pass
NVNT	3-DH5	Ant0	2402.032	2403.03	0.998	0.869	Pass



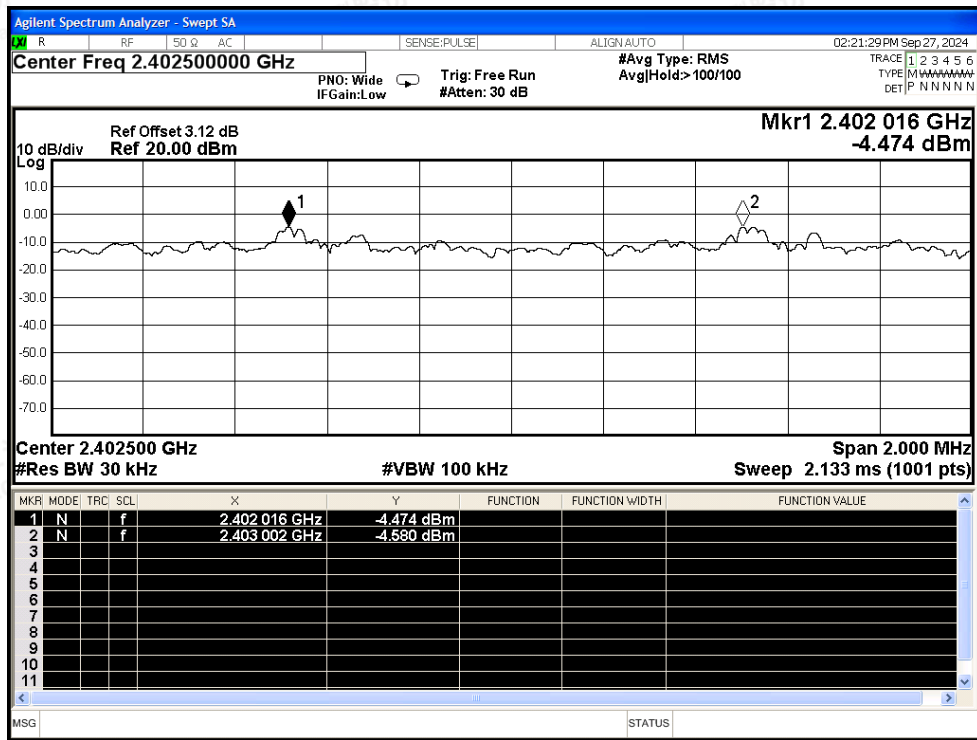


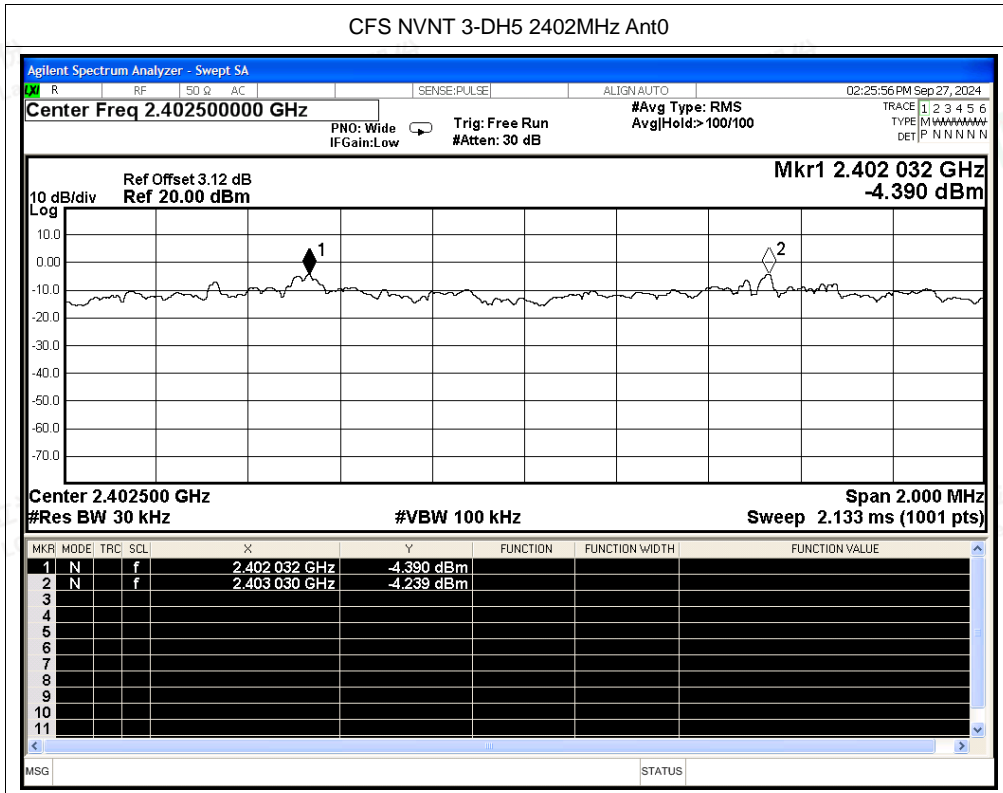
Test Graphs

CFS NVNT 1-DH5 2402MHz Ant0



CFS NVNT 2-DH5 2402MHz Ant0









### A.4 Dwell Time

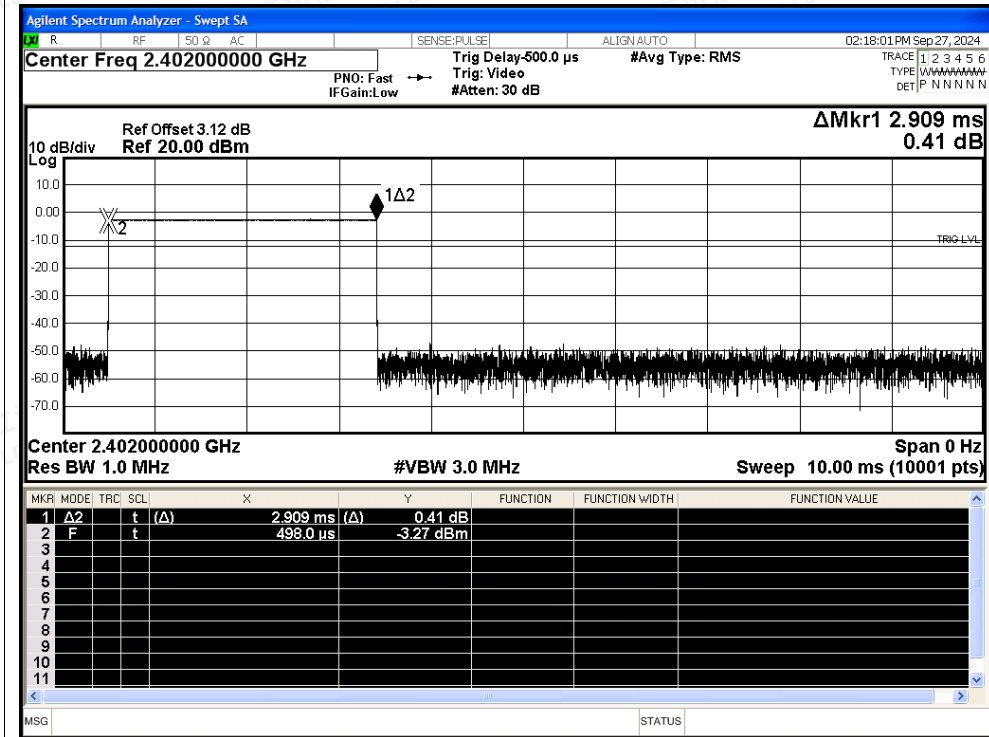
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant0	2.909	340.353	117	31600	400	Pass
NVNT	2-DH5	2402	Ant0	2.898	327.474	113	31600	400	Pass
NVNT	3-DH5	2402	Ant0	2.897	295.494	102	31600	400	Pass



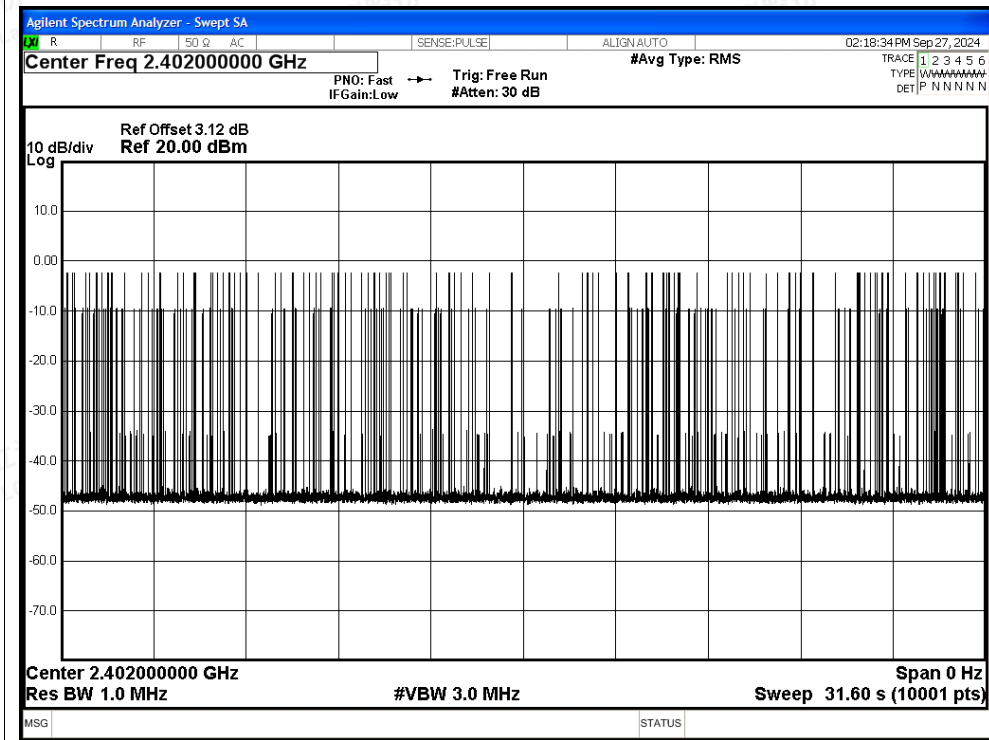


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant0 One Burst

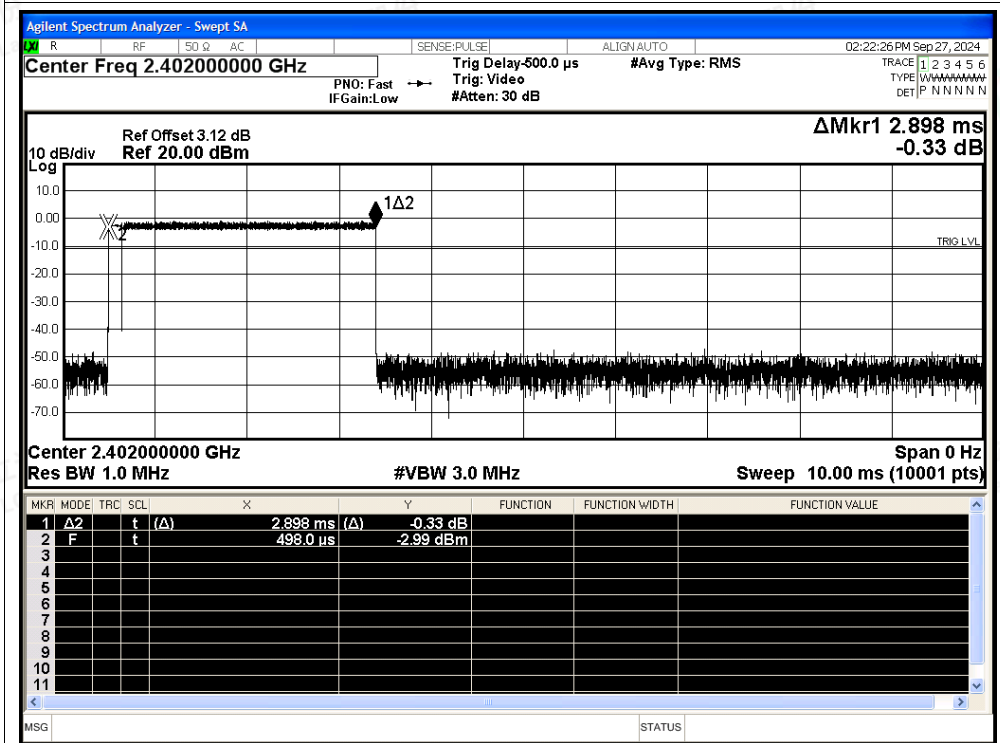


Dwell NVNT 1-DH5 2402MHz Ant0 Accumulated

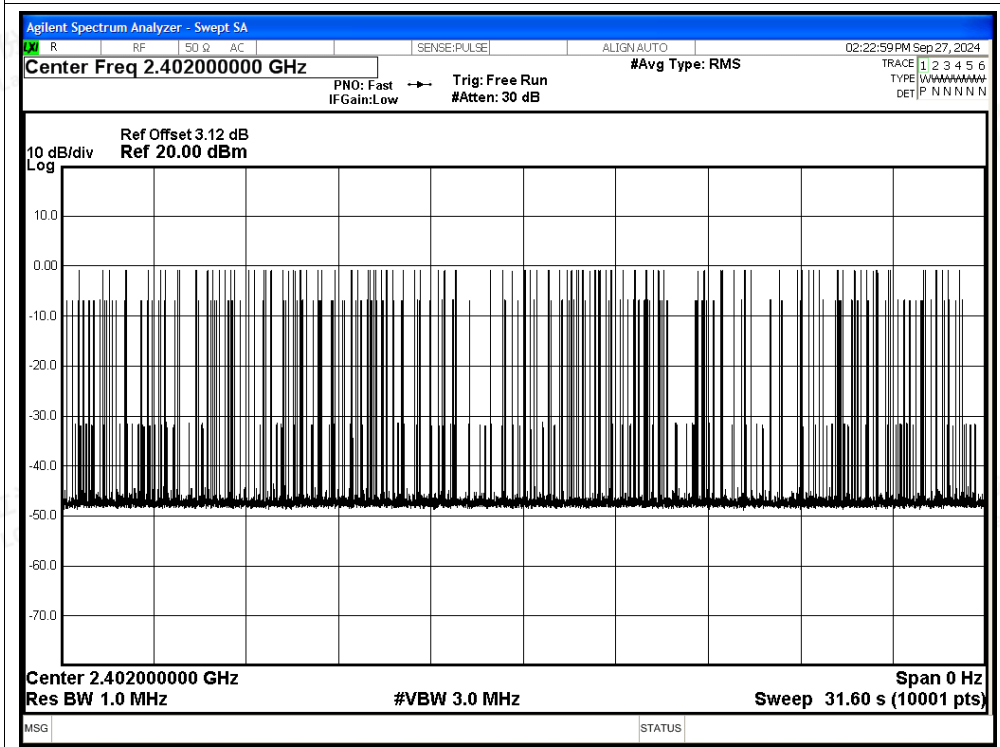




Dwell NVNT 2-DH5 2402MHz Ant0 One Burst

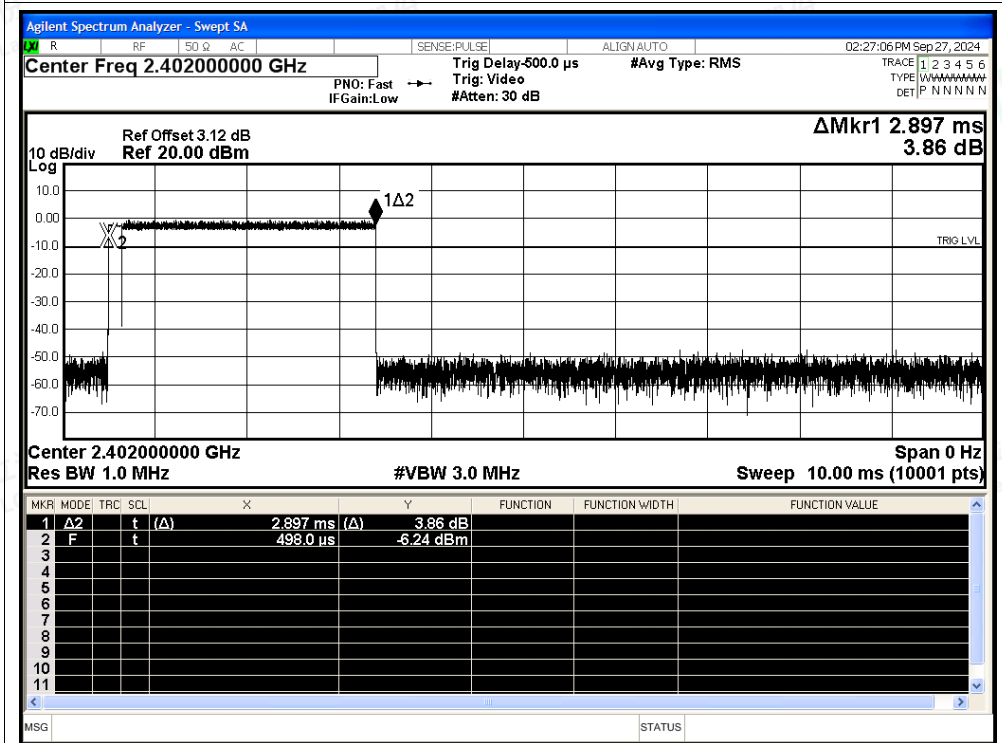


Dwell NVNT 2-DH5 2402MHz Ant0 Accumulated

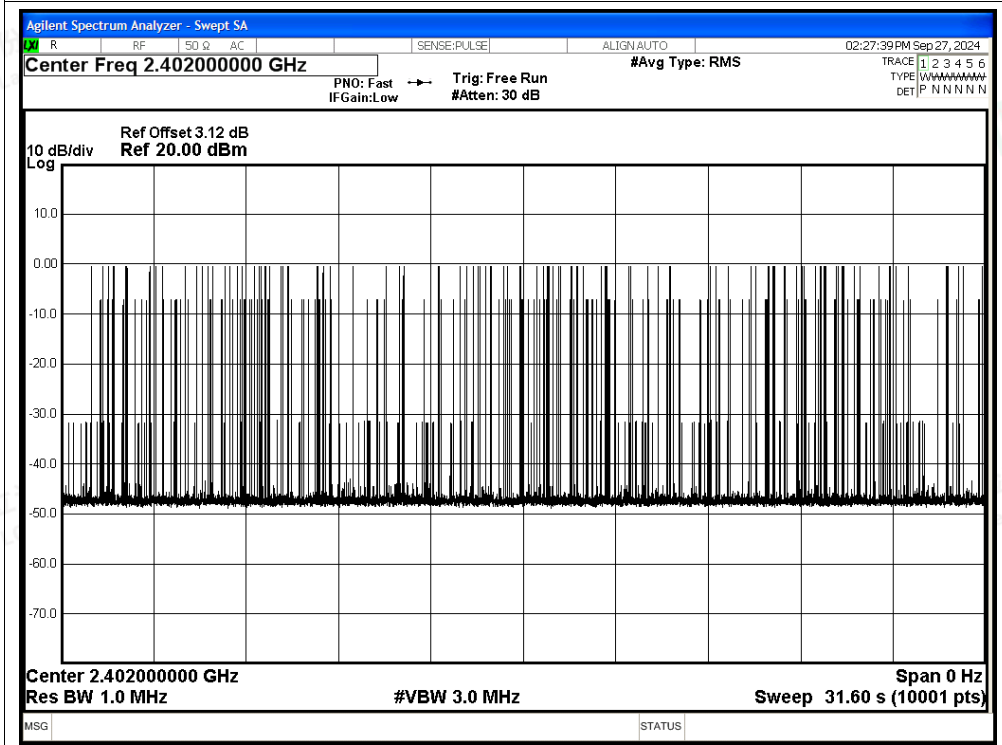




Dwell NVNT 3-DH5 2402MHz Ant0 One Burst



Dwell NVNT 3-DH5 2402MHz Ant0 Accumulated





### A.5 Number of Hopping Channel

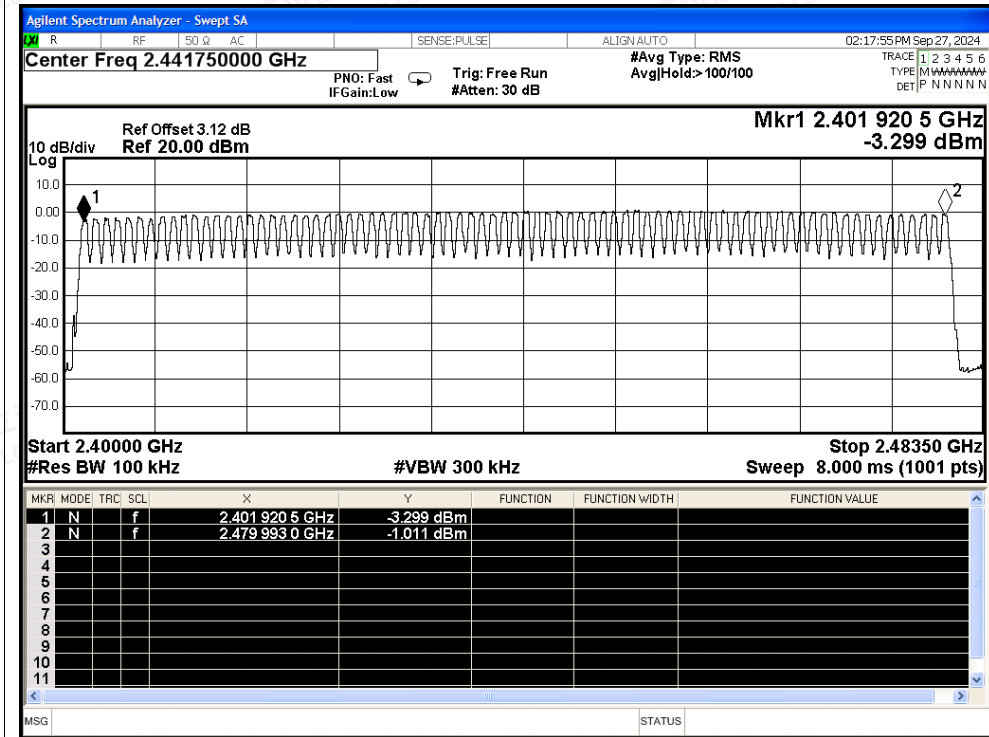
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant0	79	15	Pass
NVNT	2-DH5	Ant0	79	15	Pass
NVNT	3-DH5	Ant0	79	15	Pass



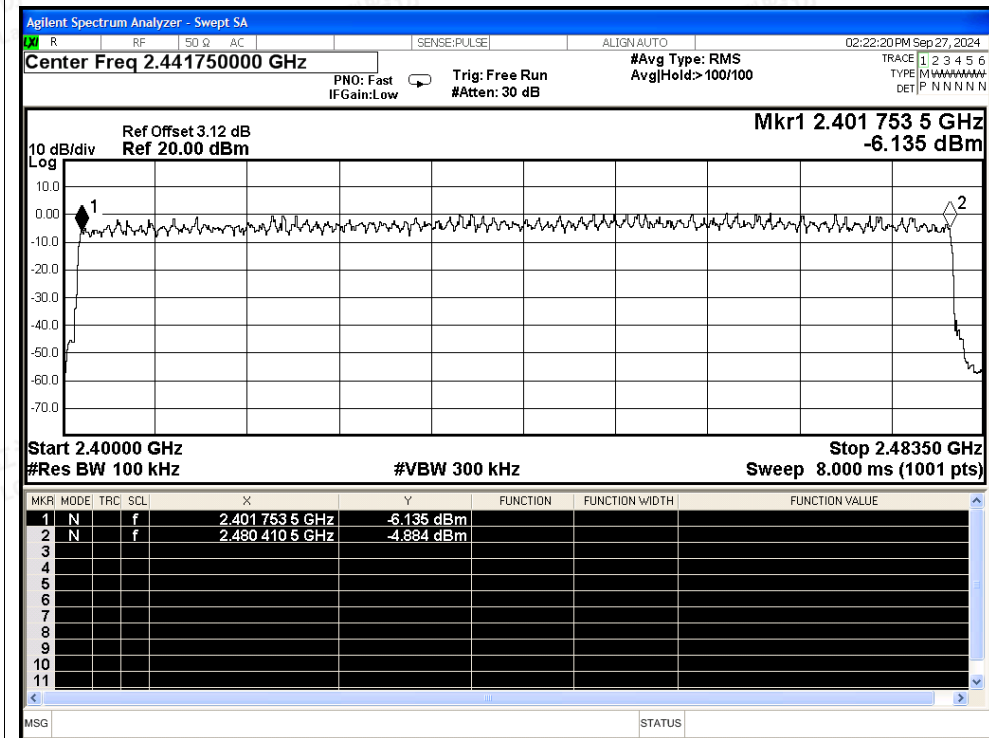


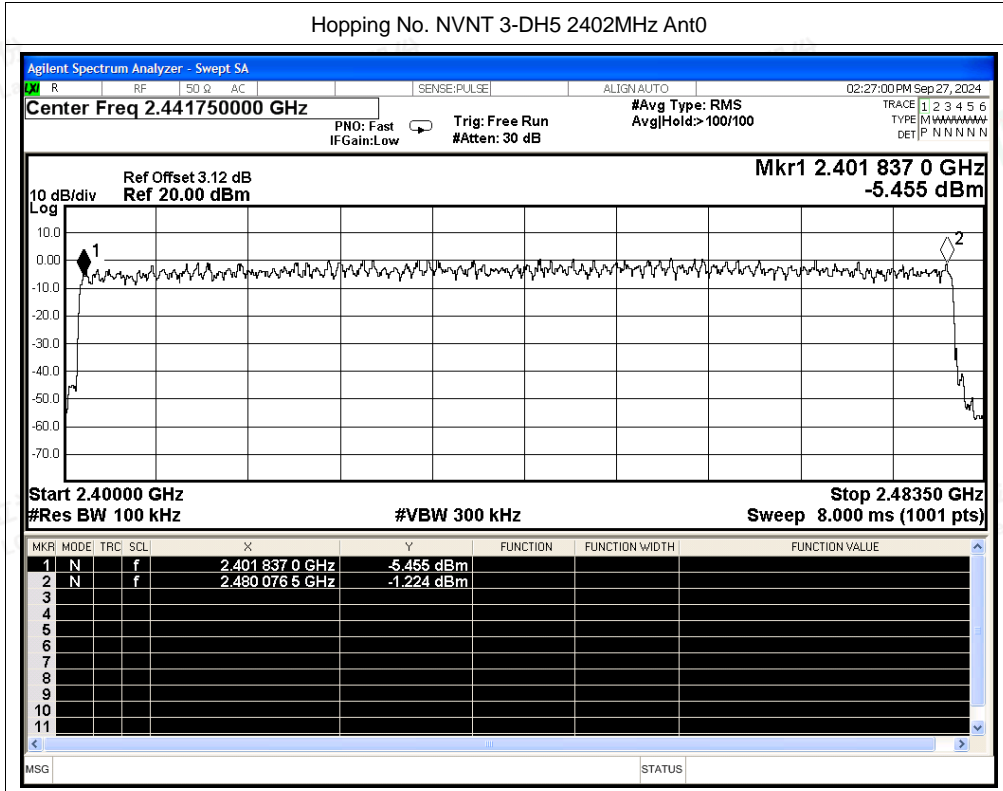
Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant0



Hopping No. NVNT 2-DH5 2402MHz Ant0







## A.6 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant0	No-Hopping	-55.57	-20	Pass
NVNT	1-DH5	2480	Ant0	No-Hopping	-55.06	-20	Pass
NVNT	2-DH5	2402	Ant0	No-Hopping	-51.7	-20	Pass
NVNT	2-DH5	2480	Ant0	No-Hopping	-52.17	-20	Pass
NVNT	3-DH5	2402	Ant0	No-Hopping	-50.48	-20	Pass
NVNT	3-DH5	2480	Ant0	No-Hopping	-52.84	-20	Pass

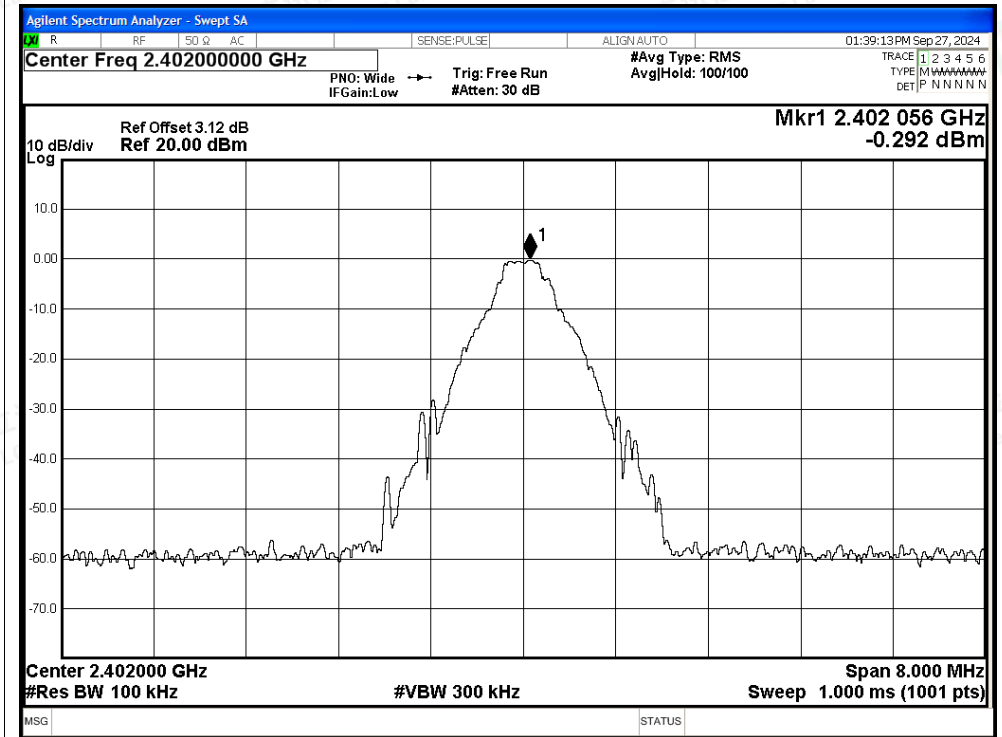




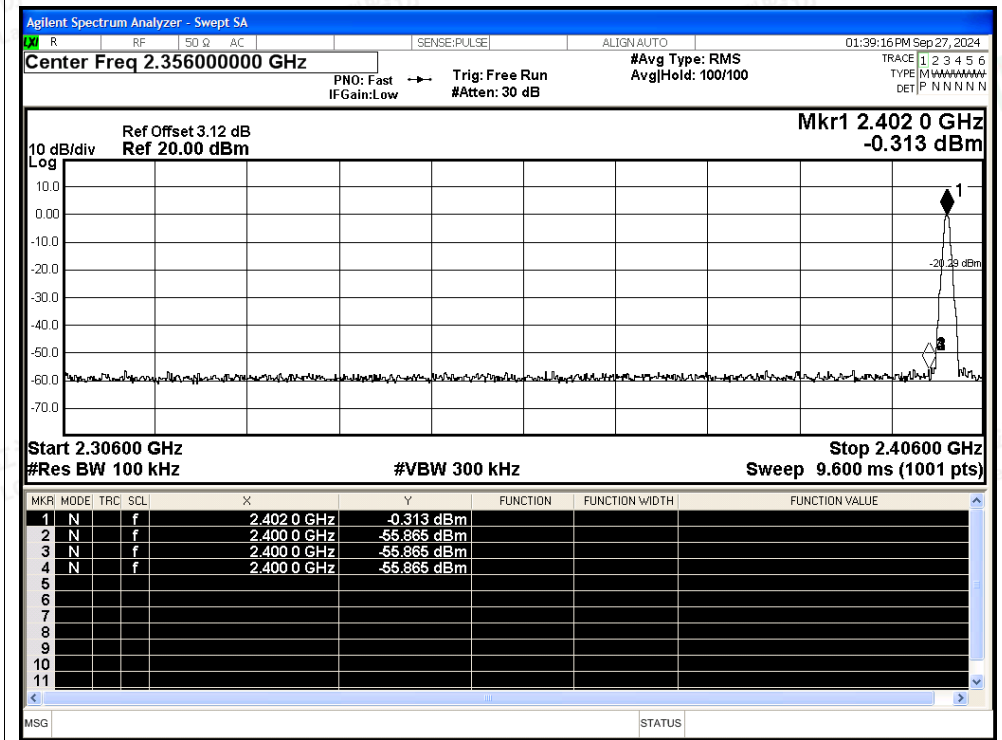


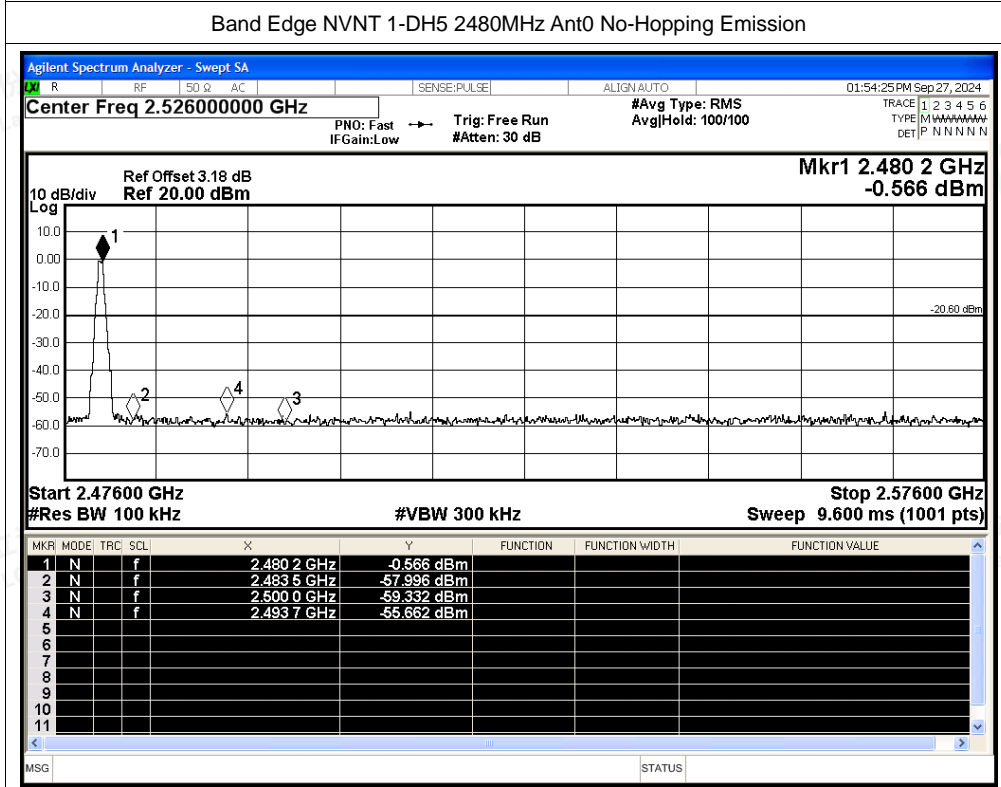
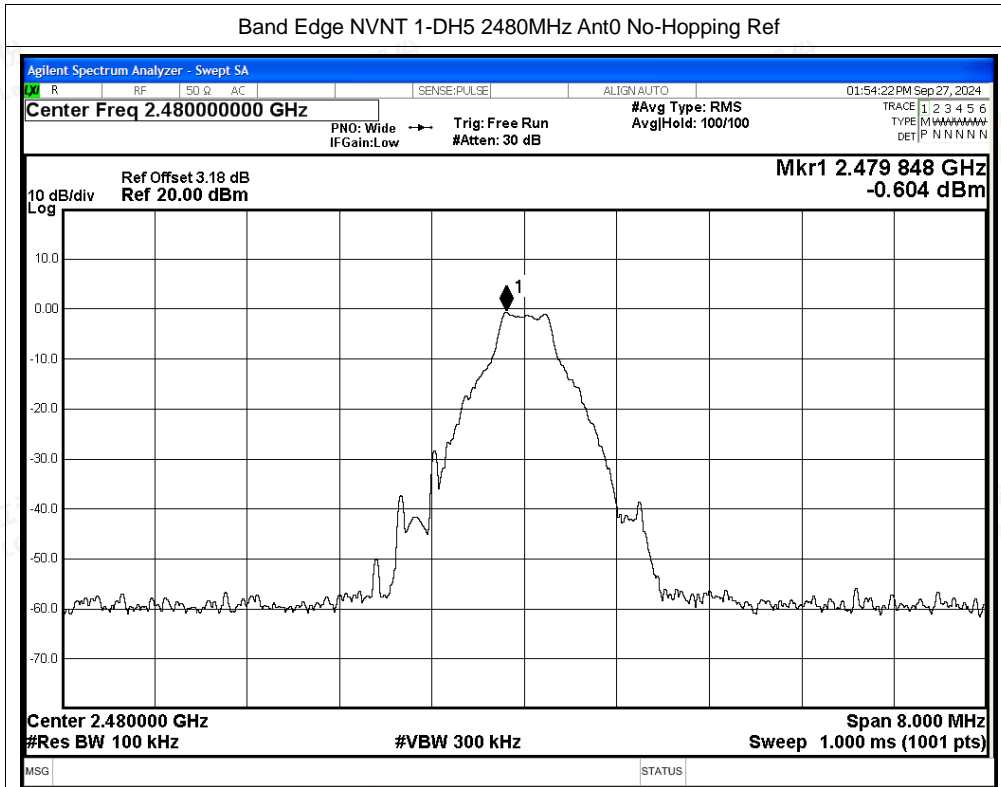
Test Graphs

Band Edge NVNT 1-DH5 2402MHz Ant0 No-Hopping Ref



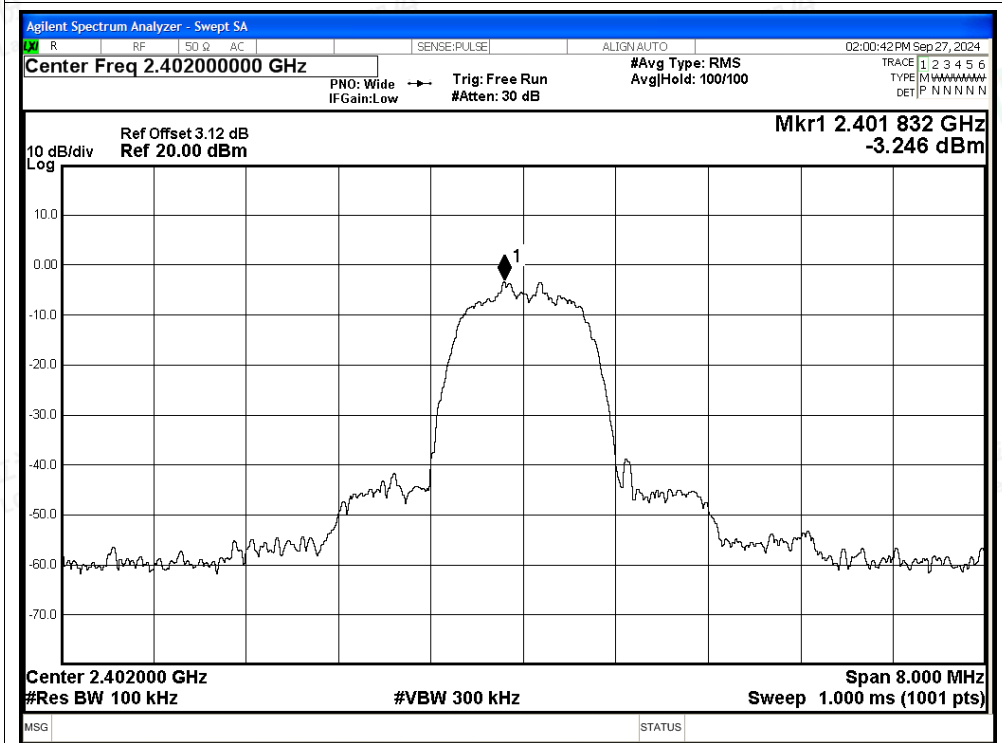
Band Edge NVNT 1-DH5 2402MHz Ant0 No-Hopping Emission



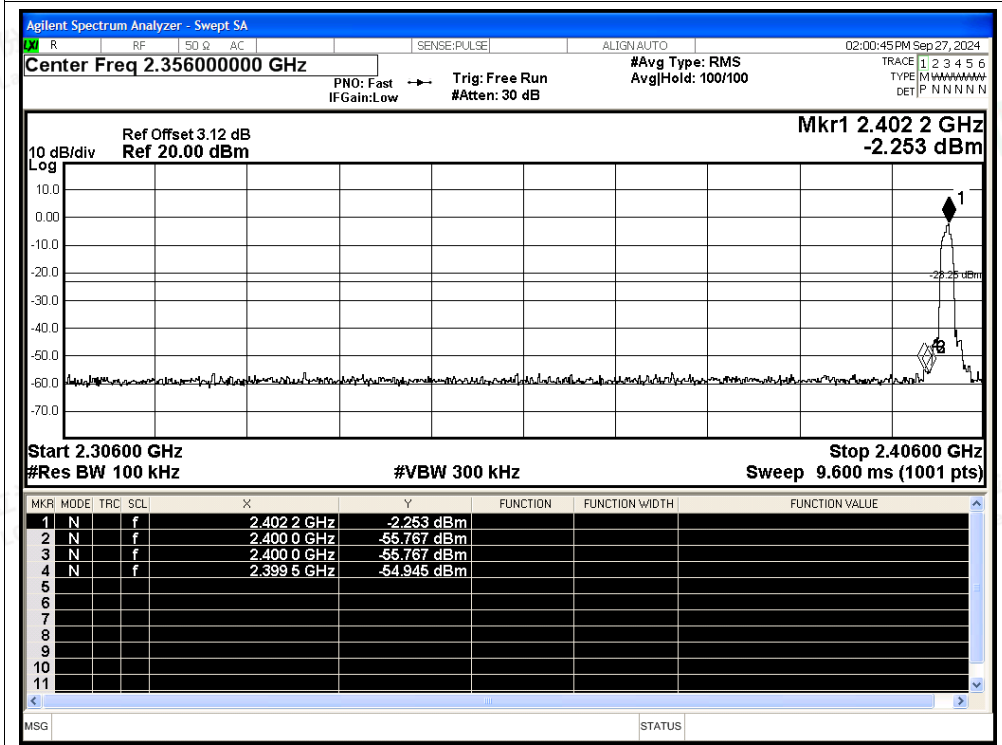


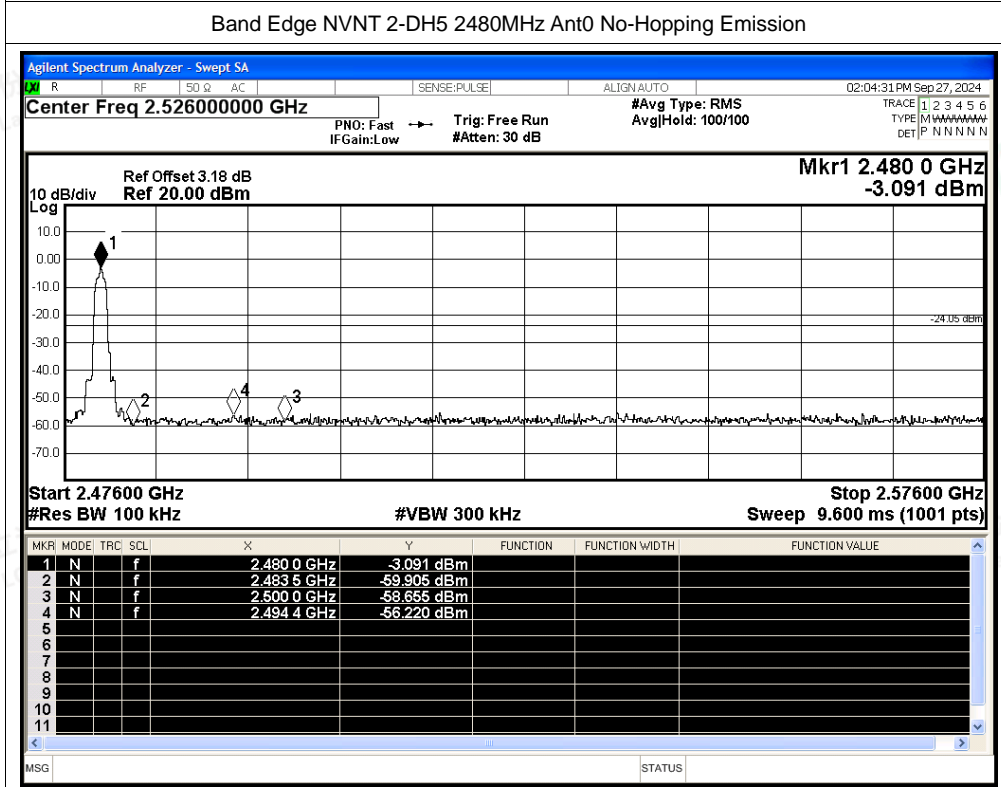
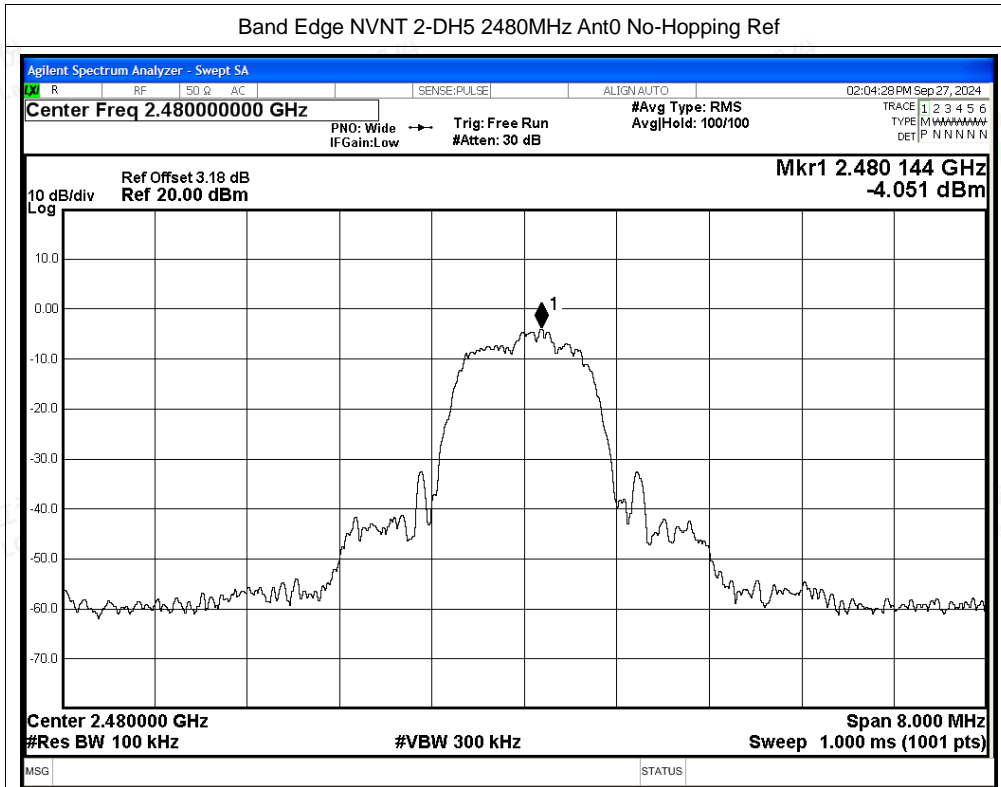


Band Edge NVNT 2-DH5 2402MHz Ant0 No-Hopping Ref



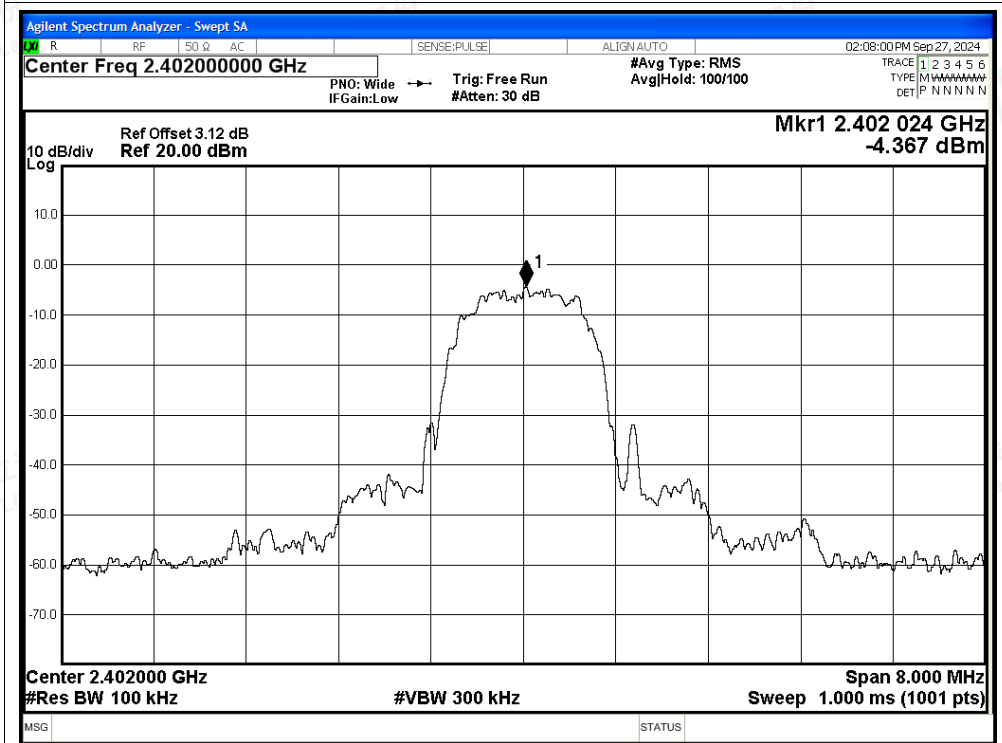
Band Edge NVNT 2-DH5 2402MHz Ant0 No-Hopping Emission



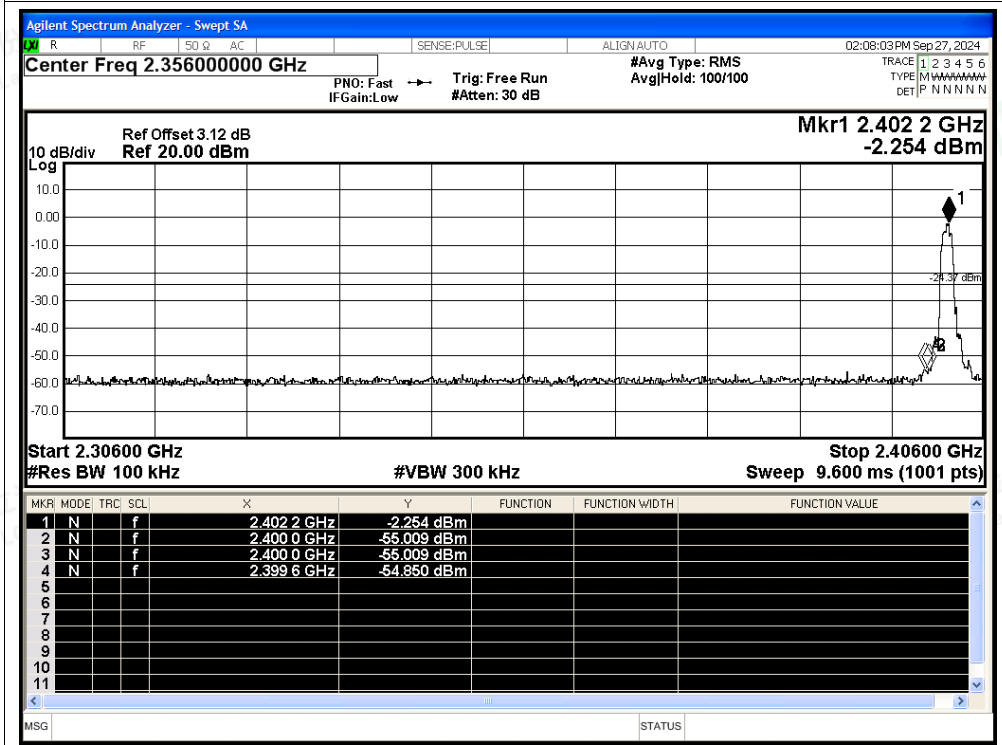




Band Edge NVNT 3-DH5 2402MHz Ant0 No-Hopping Ref

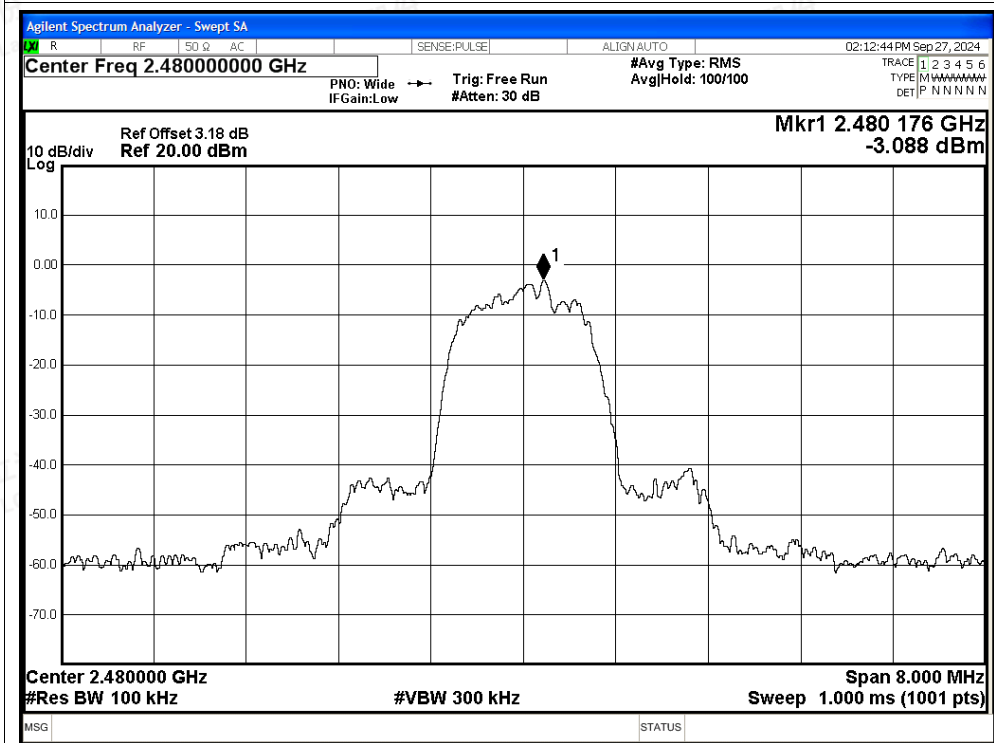


Band Edge NVNT 3-DH5 2402MHz Ant0 No-Hopping Emission

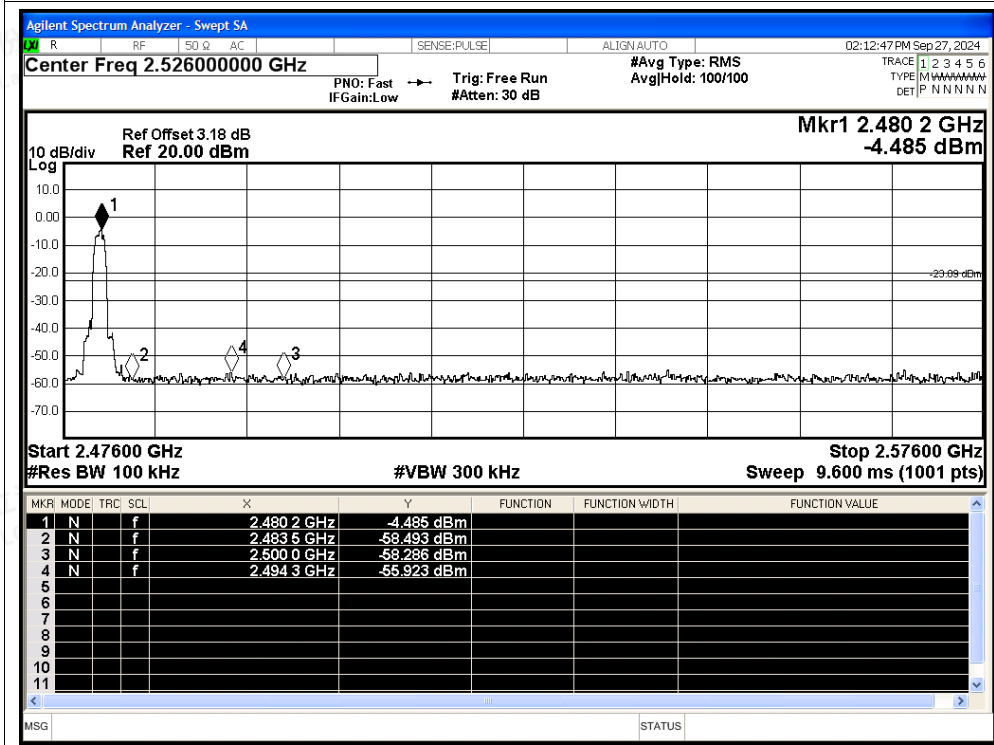




Band Edge NVNT 3-DH5 2480MHz Ant0 No-Hopping Ref



Band Edge NVNT 3-DH5 2480MHz Ant0 No-Hopping Emission





### (Hopping)

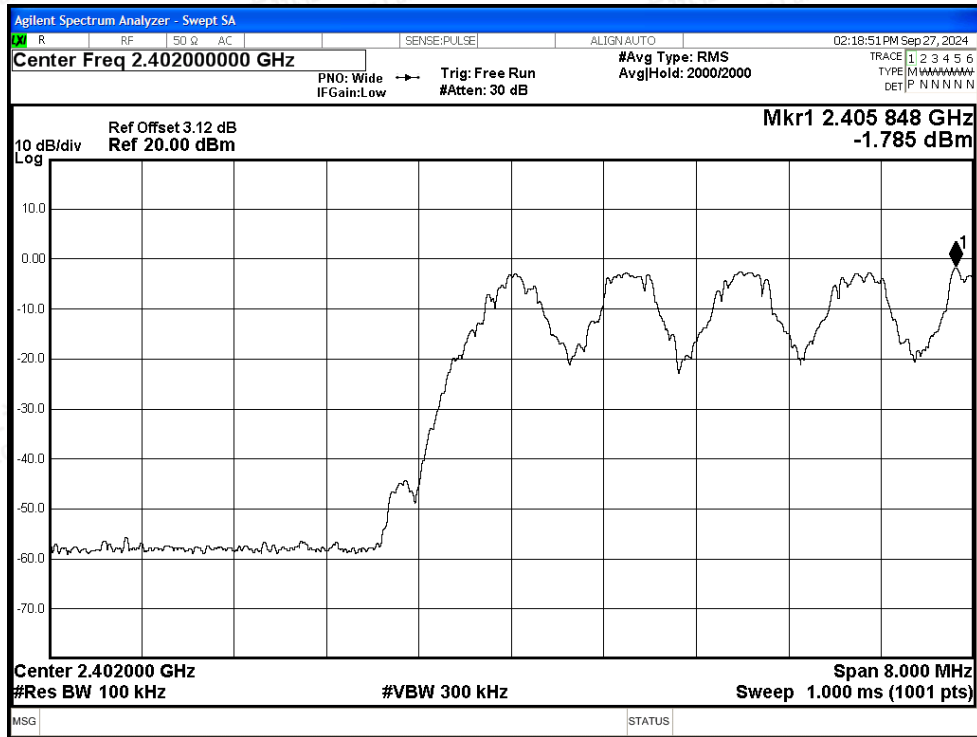
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant0	Hopping	-52.7	-20	Pass
NVNT	1-DH5	2480	Ant0	Hopping	-54.39	-20	Pass
NVNT	2-DH5	2402	Ant0	Hopping	-53.09	-20	Pass
NVNT	2-DH5	2480	Ant0	Hopping	-54.19	-20	Pass
NVNT	3-DH5	2402	Ant0	Hopping	-53.1	-20	Pass
NVNT	3-DH5	2480	Ant0	Hopping	-54.3	-20	Pass



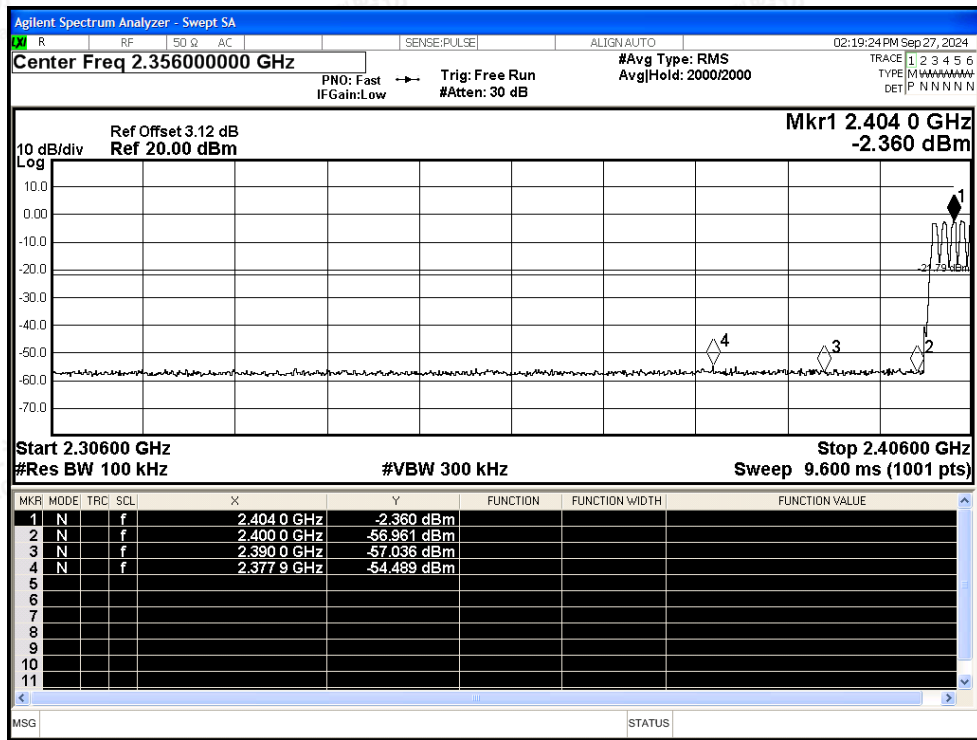


Test Graphs

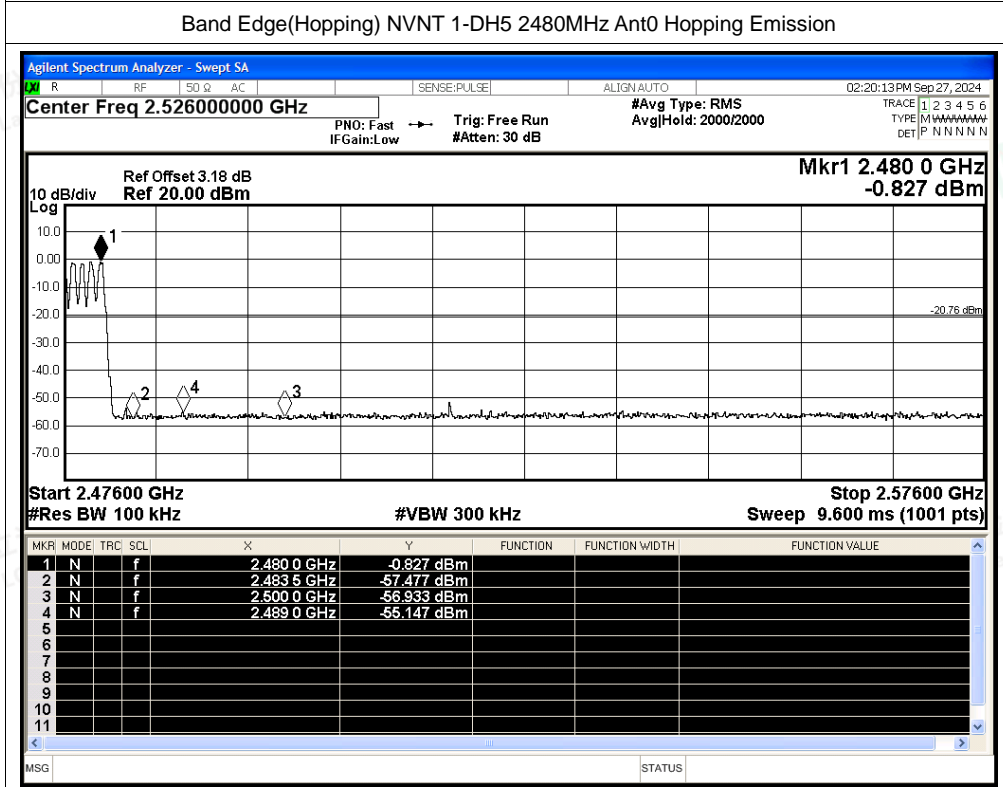
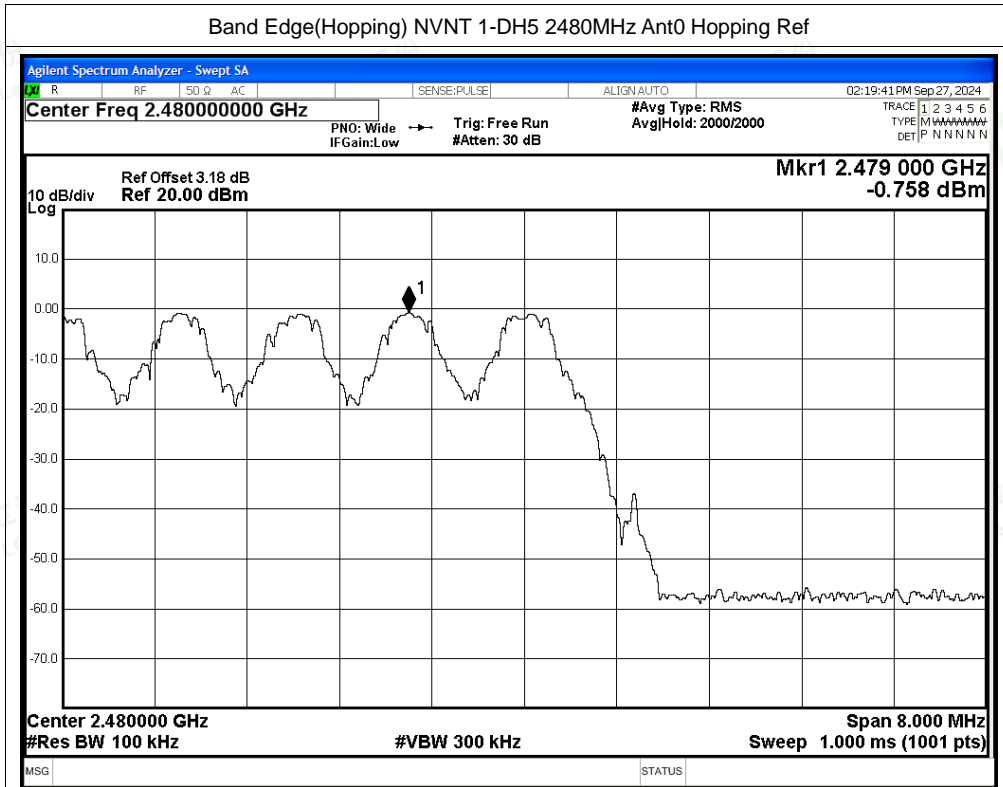
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant0 Hopping Ref

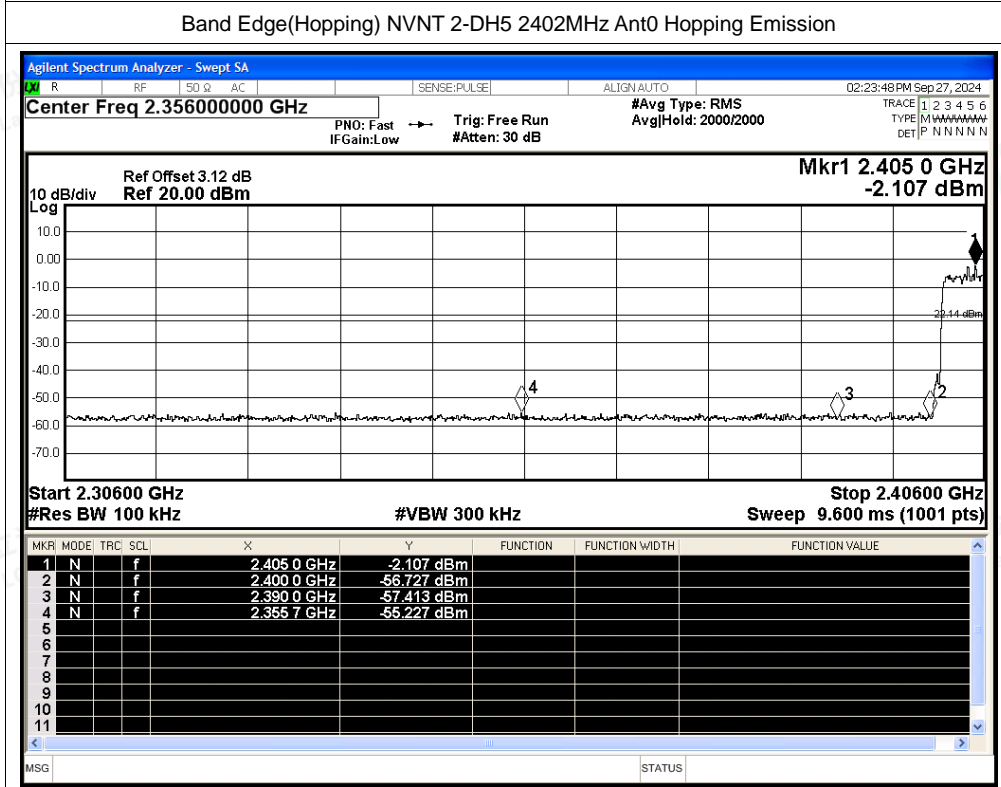
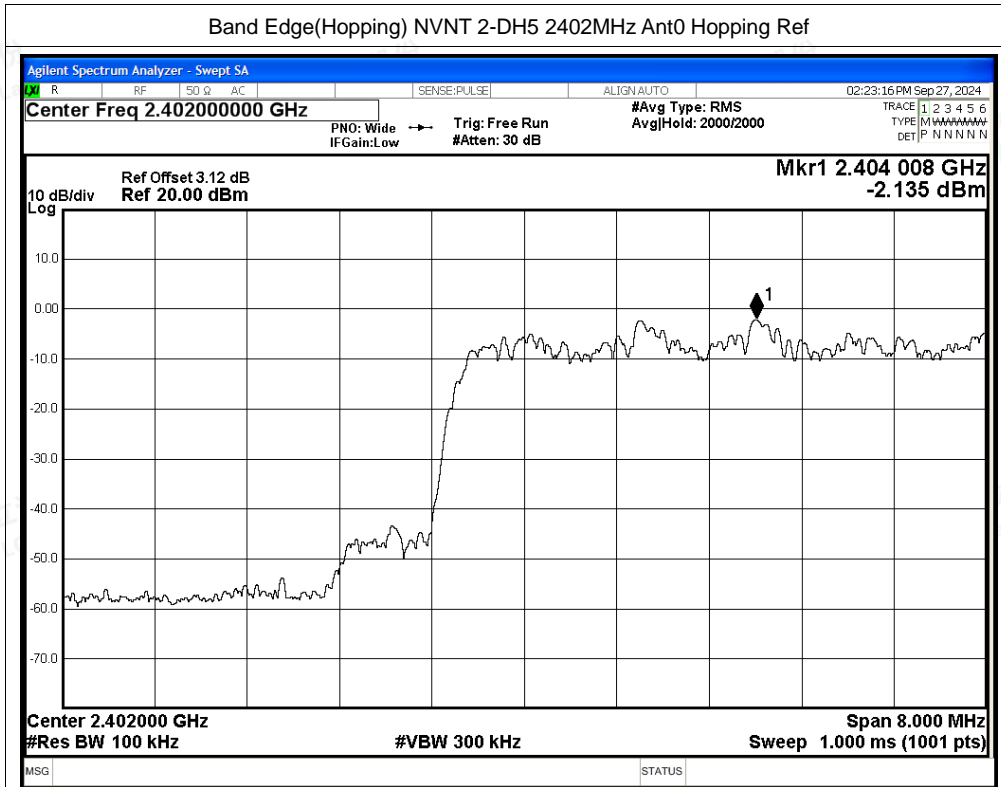


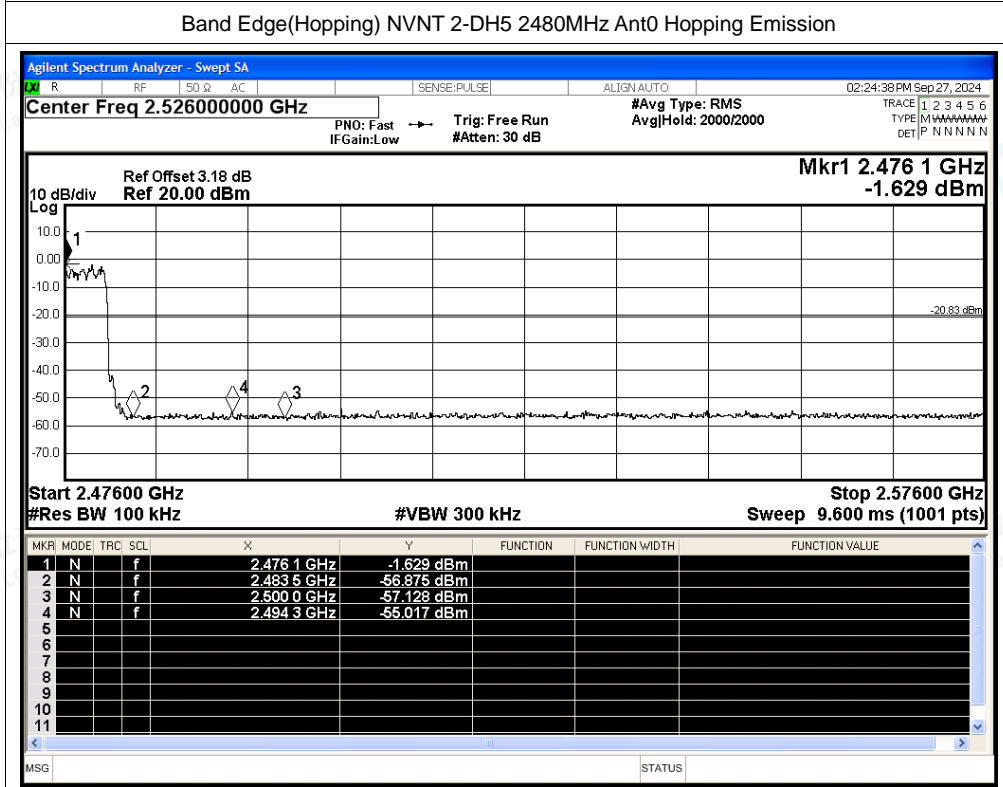
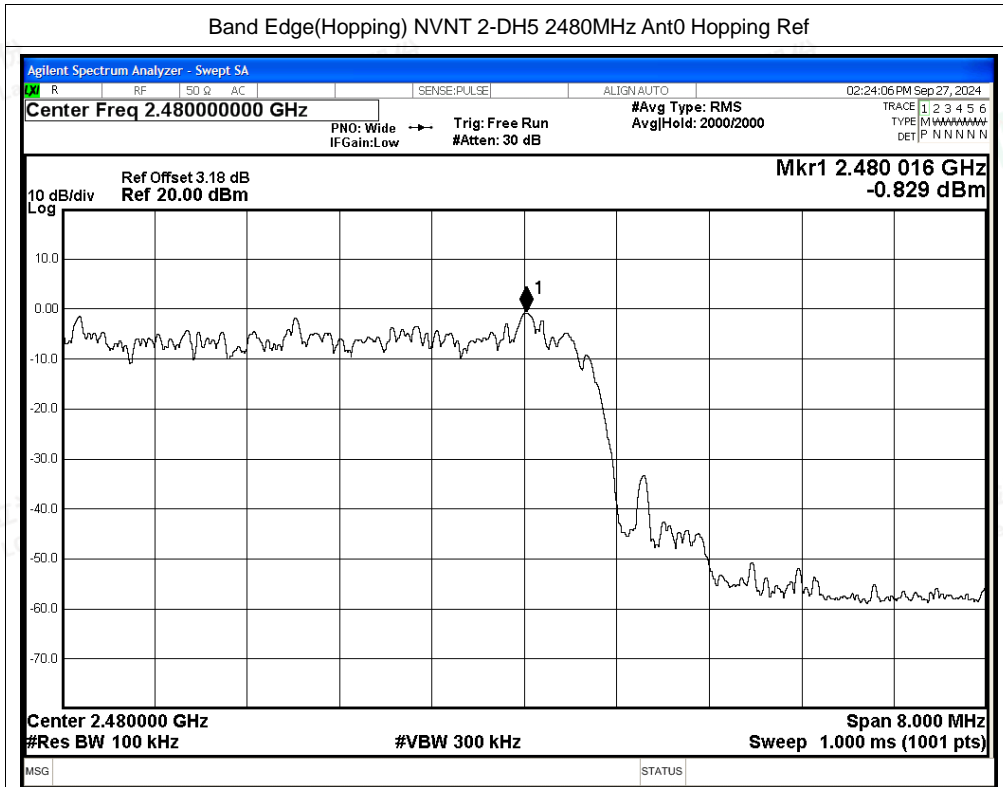
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant0 Hopping Emission

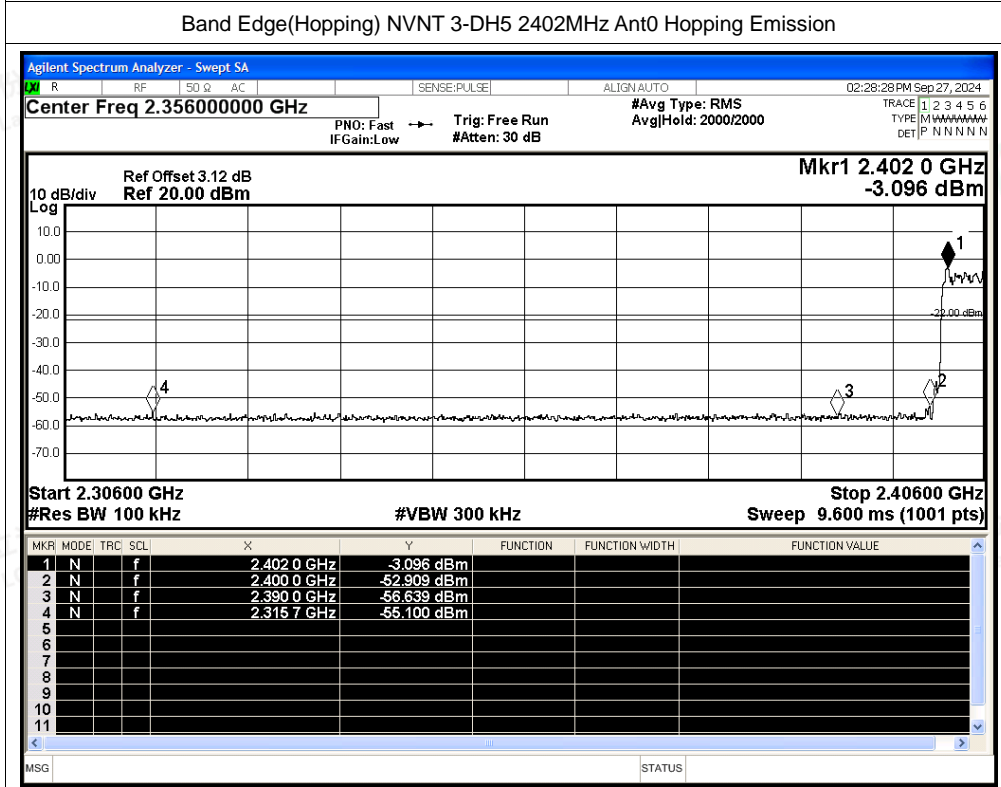
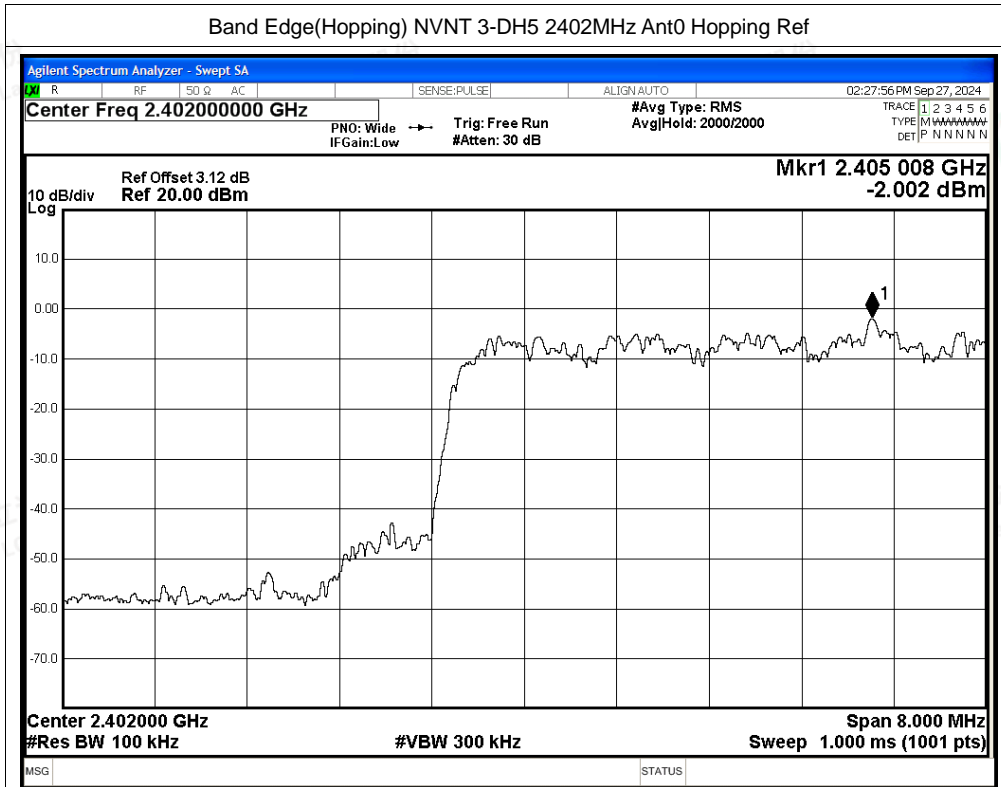


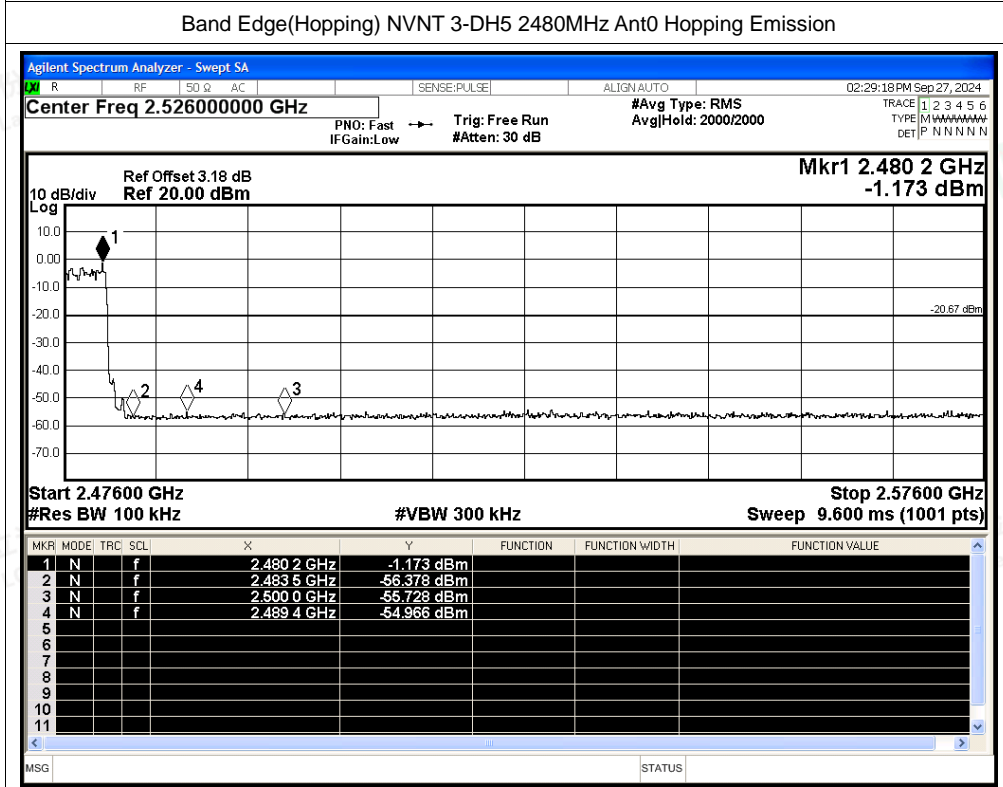
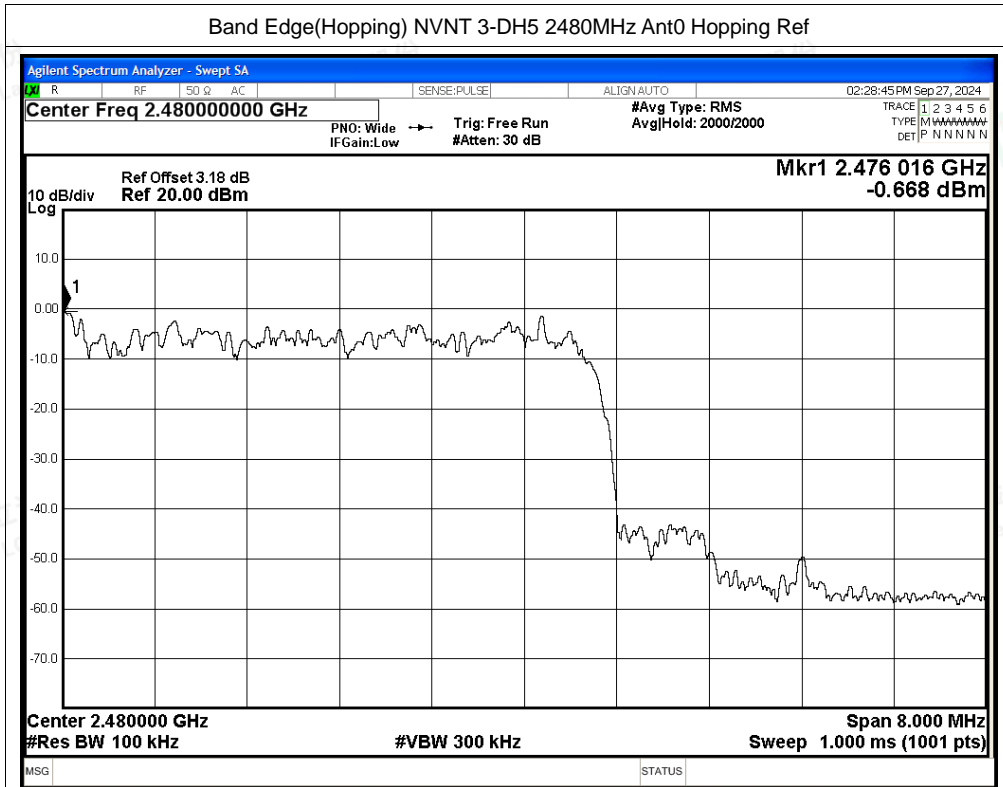














### A.7 Conducted RF Spurious Emission

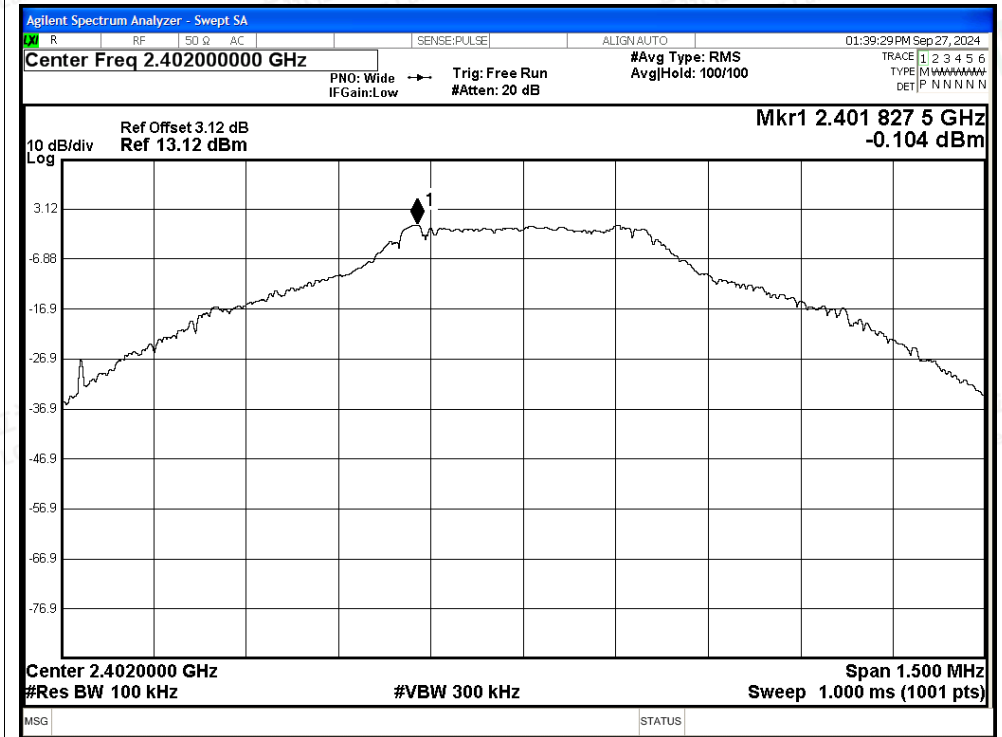
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant0	-54.39	-20	Pass
NVNT	1-DH5	2441	Ant0	-53.47	-20	Pass
NVNT	1-DH5	2480	Ant0	-53.63	-20	Pass
NVNT	2-DH5	2402	Ant0	-51.06	-20	Pass
NVNT	2-DH5	2441	Ant0	-51.37	-20	Pass
NVNT	2-DH5	2480	Ant0	-48.06	-20	Pass
NVNT	3-DH5	2402	Ant0	-51.35	-20	Pass
NVNT	3-DH5	2441	Ant0	-52.42	-20	Pass
NVNT	3-DH5	2480	Ant0	-50.59	-20	Pass



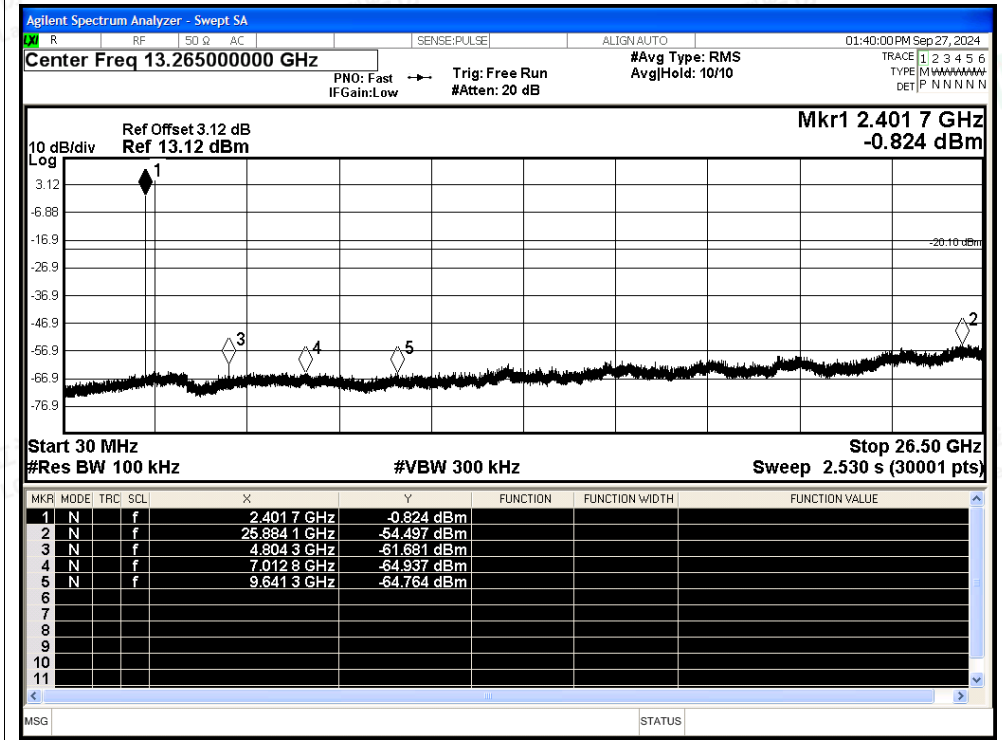


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant0 Ref



Tx. Spurious NVNT 1-DH5 2402MHz Ant0 Emission

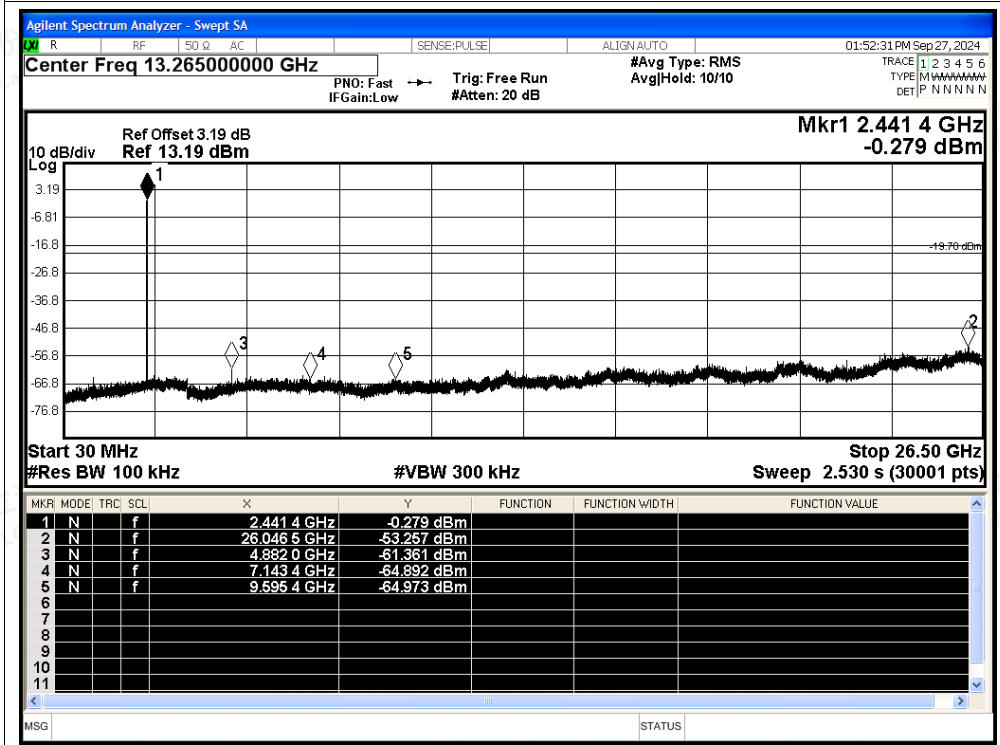




Tx. Spurious NVNT 1-DH5 2441MHz Ant0 Ref



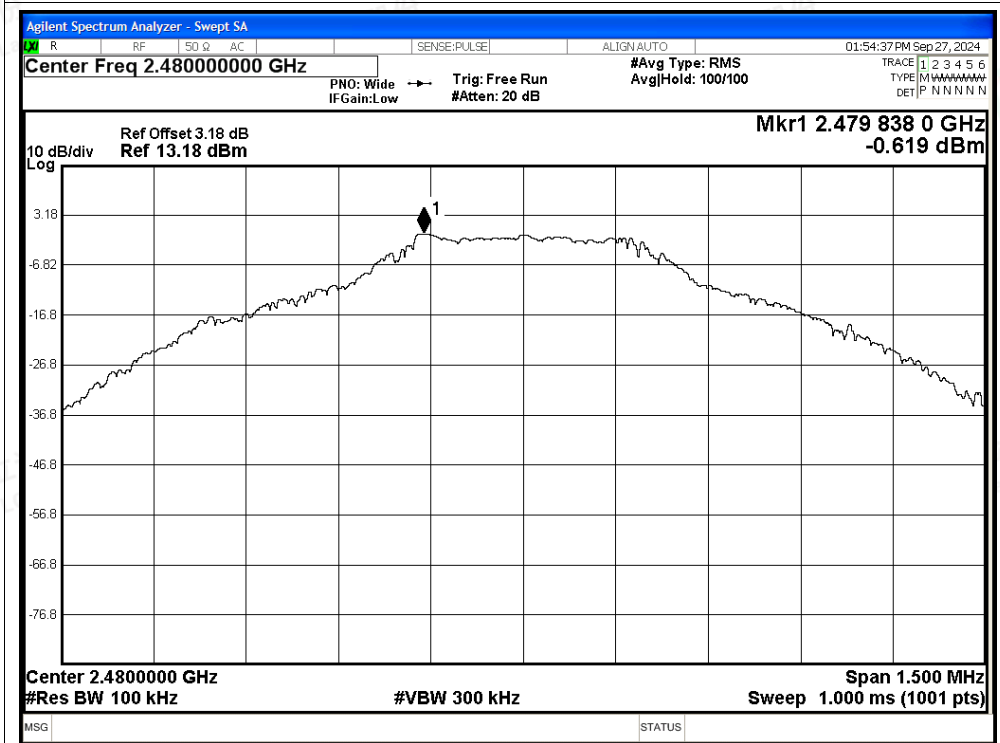
Tx. Spurious NVNT 1-DH5 2441MHz Ant0 Emission



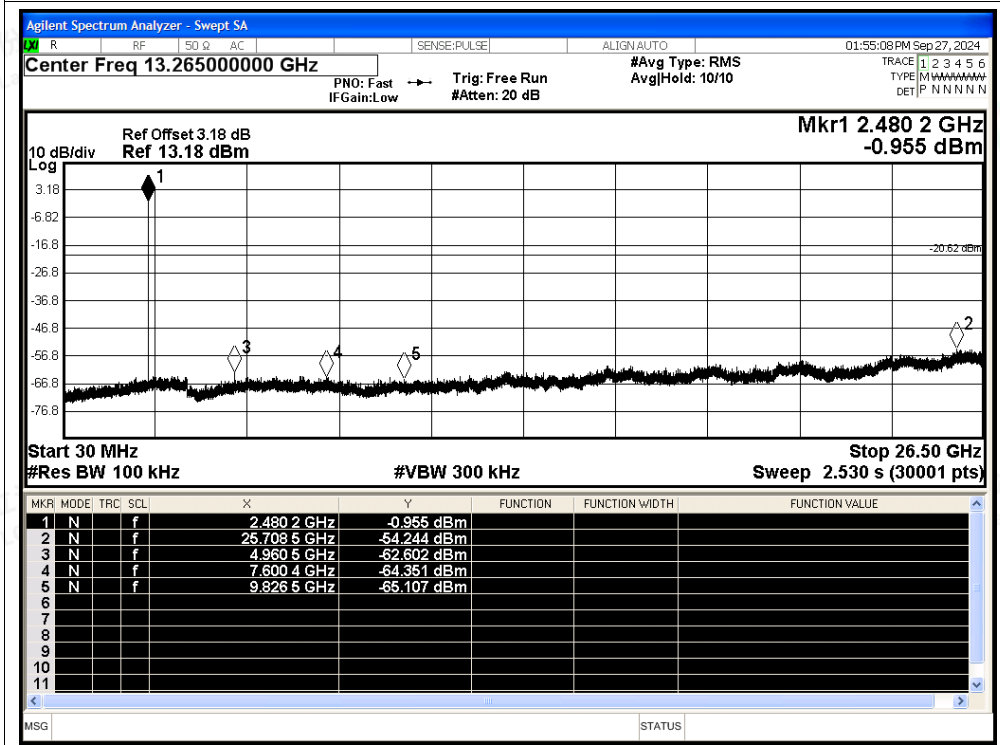




Tx. Spurious NVNT 1-DH5 2480MHz Ant0 Ref

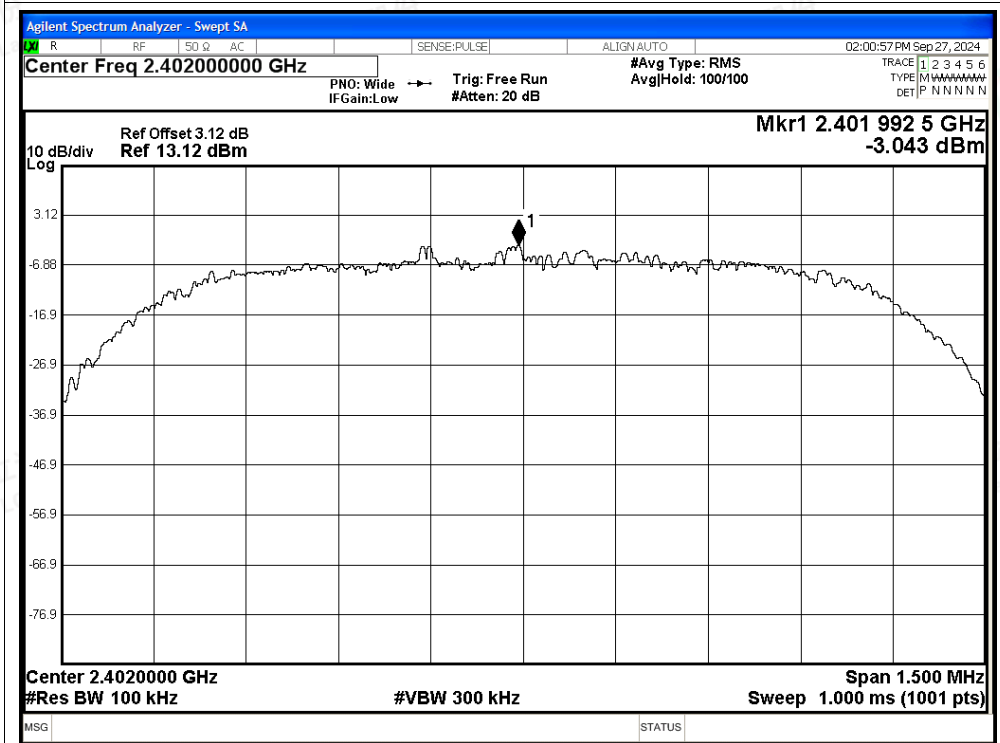


Tx. Spurious NVNT 1-DH5 2480MHz Ant0 Emission

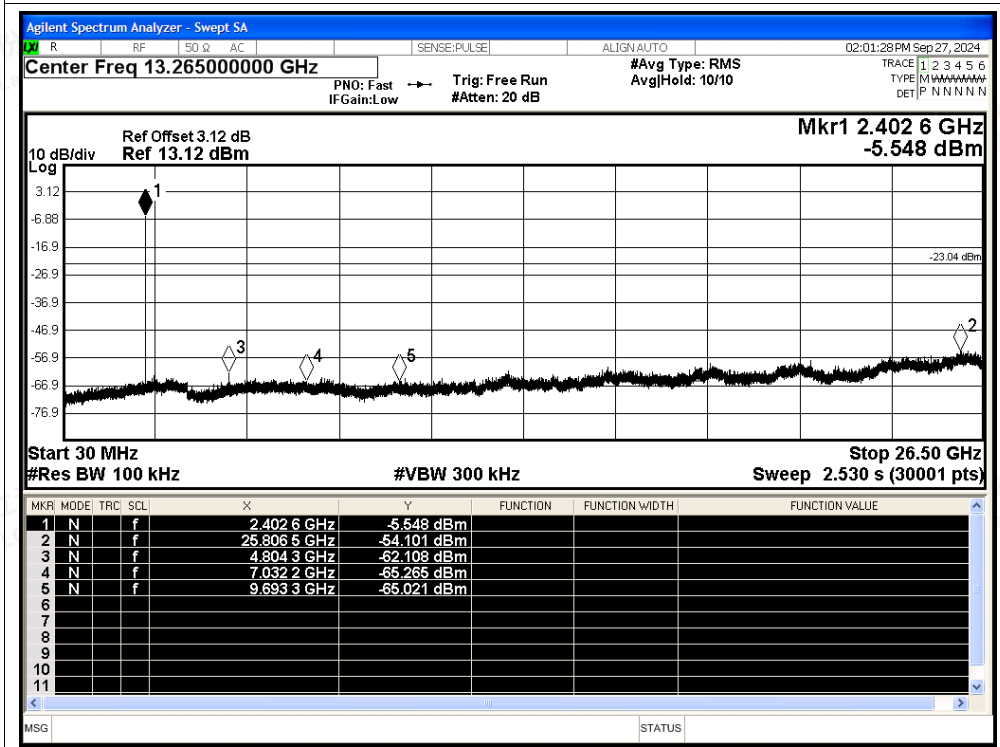




Tx. Spurious NVNT 2-DH5 2402MHz Ant0 Ref

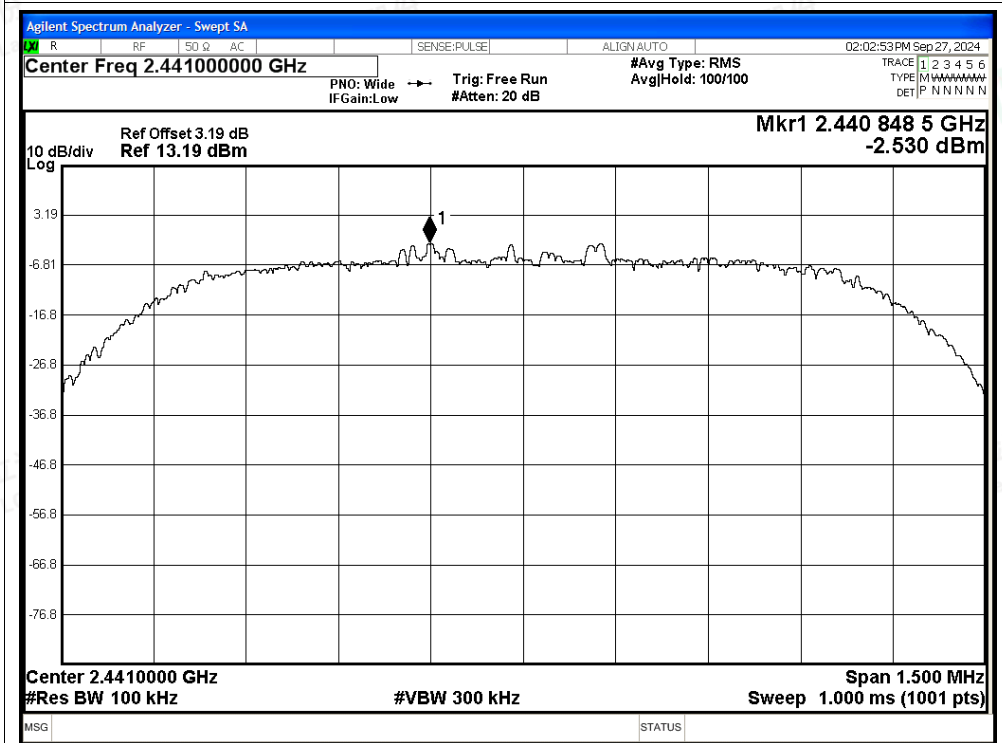


Tx. Spurious NVNT 2-DH5 2402MHz Ant0 Emission

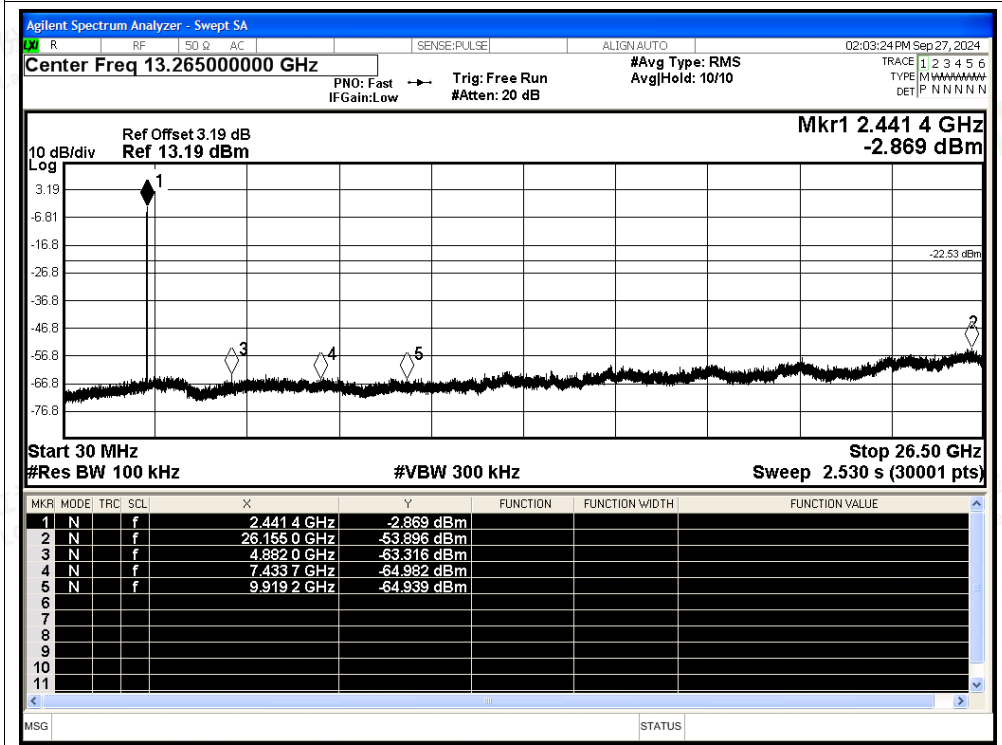




Tx. Spurious NVNT 2-DH5 2441MHz Ant0 Ref

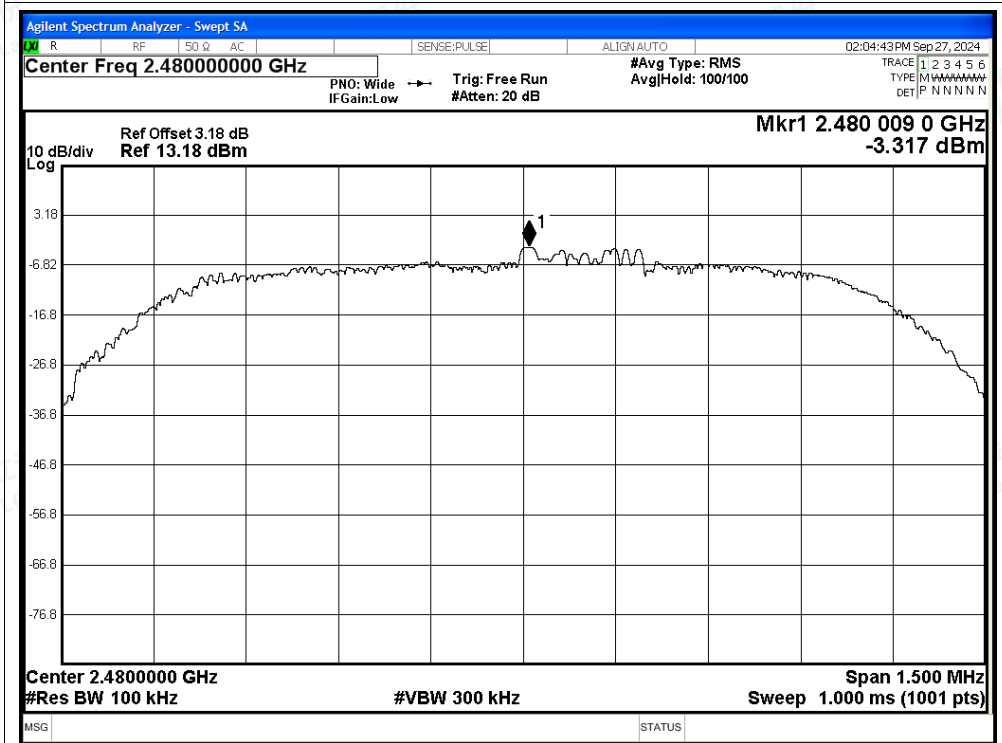


Tx. Spurious NVNT 2-DH5 2441MHz Ant0 Emission

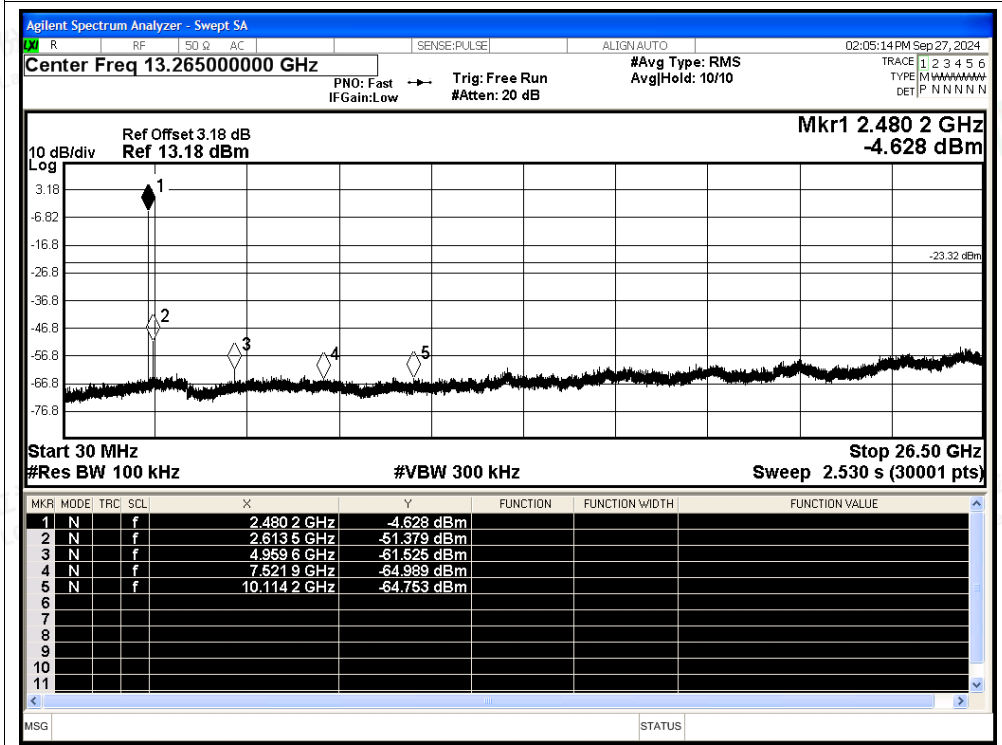




Tx. Spurious NVNT 2-DH5 2480MHz Ant0 Ref

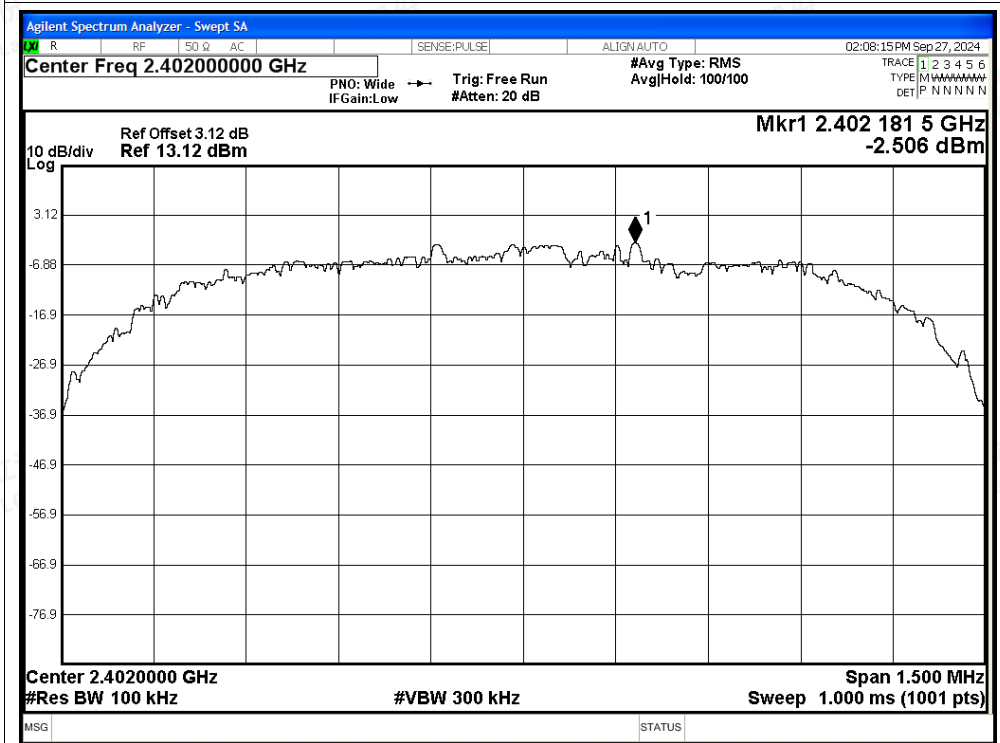


Tx. Spurious NVNT 2-DH5 2480MHz Ant0 Emission

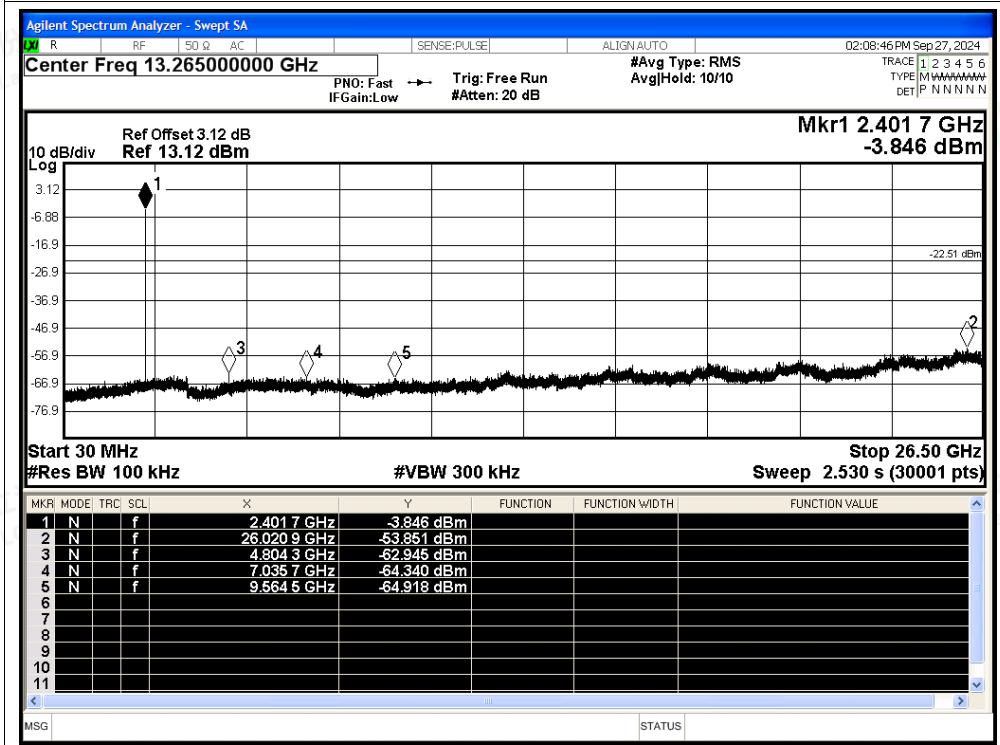




Tx. Spurious NVNT 3-DH5 2402MHz Ant0 Ref

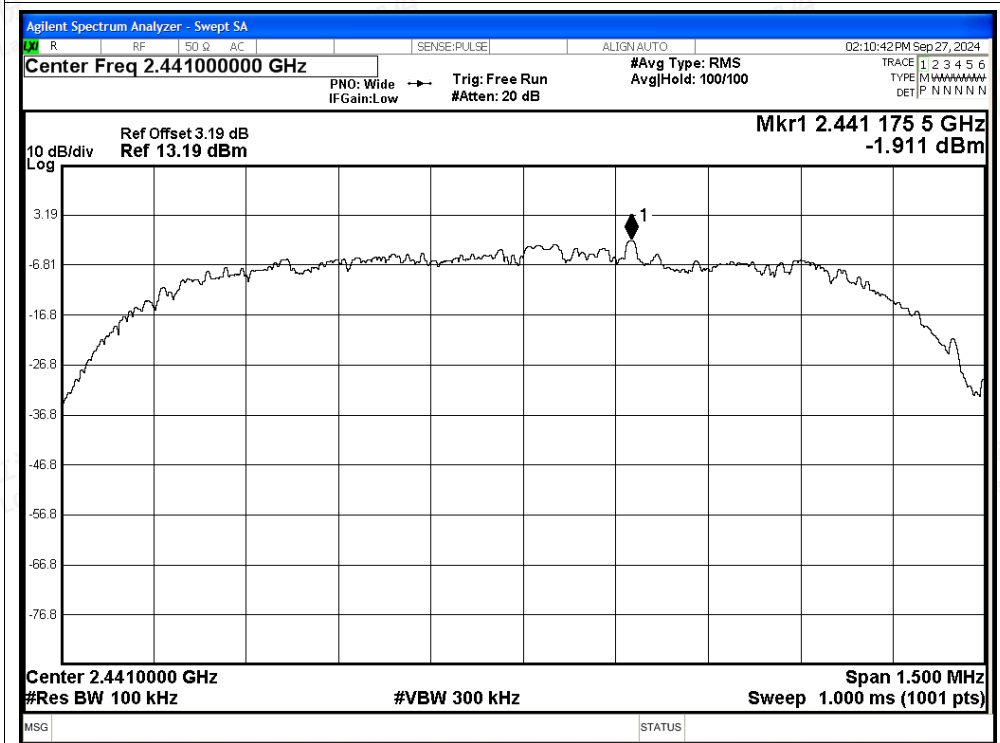


Tx. Spurious NVNT 3-DH5 2402MHz Ant0 Emission

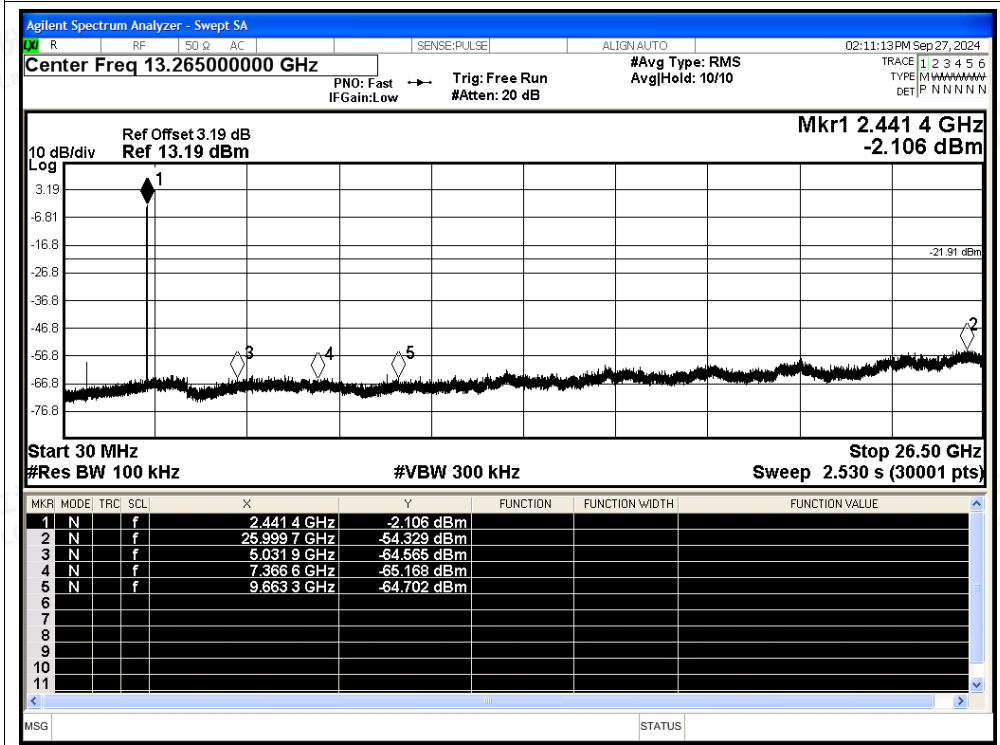




Tx. Spurious NVNT 3-DH5 2441MHz Ant0 Ref

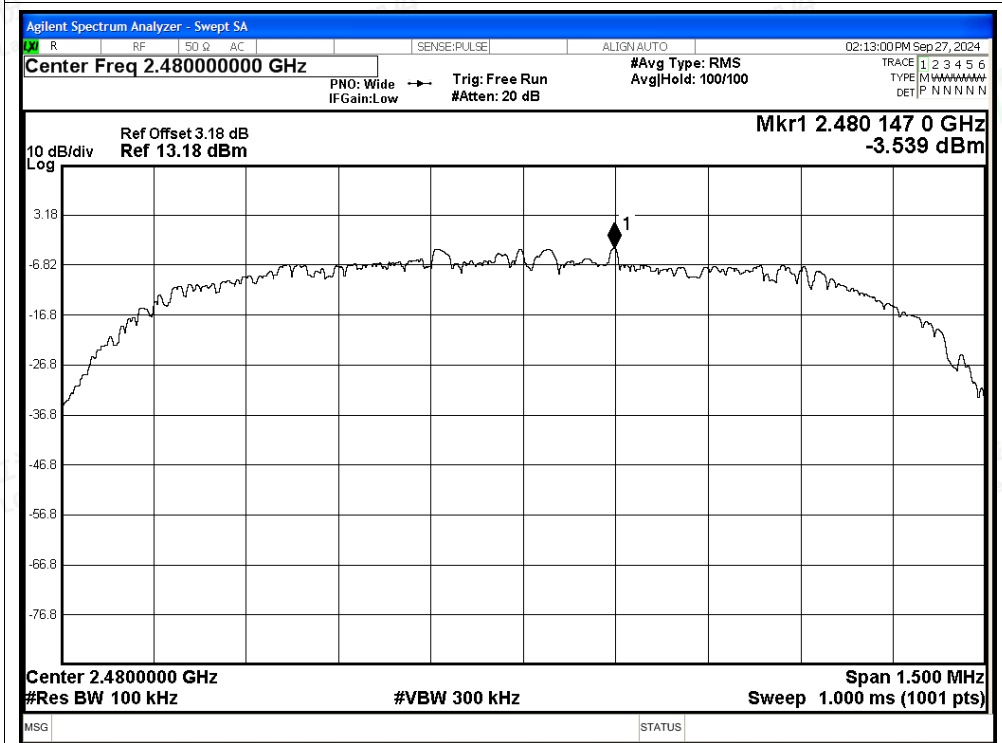


Tx. Spurious NVNT 3-DH5 2441MHz Ant0 Emission

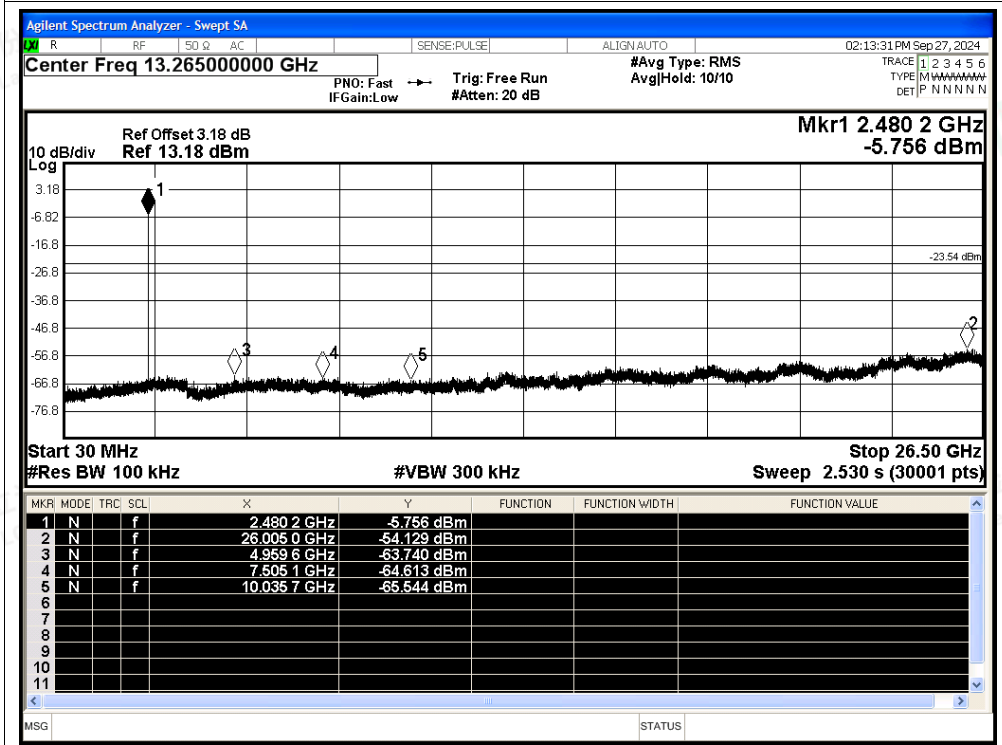




Tx. Spurious NVNT 3-DH5 2480MHz Ant0 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant0 Emission





## A.8 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant0	77.63	1.1	0.34
NVNT	1-DH5	2441	Ant0	77.63	1.1	0.34
NVNT	1-DH5	2480	Ant0	77.6	1.1	0.34
NVNT	2-DH5	2402	Ant0	77.33	1.12	0.34
NVNT	2-DH5	2441	Ant0	77.28	1.12	0.35
NVNT	2-DH5	2480	Ant0	77.28	1.12	0.35
NVNT	3-DH5	2402	Ant0	77.28	1.12	0.35
NVNT	3-DH5	2441	Ant0	77.28	1.12	0.35
NVNT	3-DH5	2480	Ant0	77.28	1.12	0.35

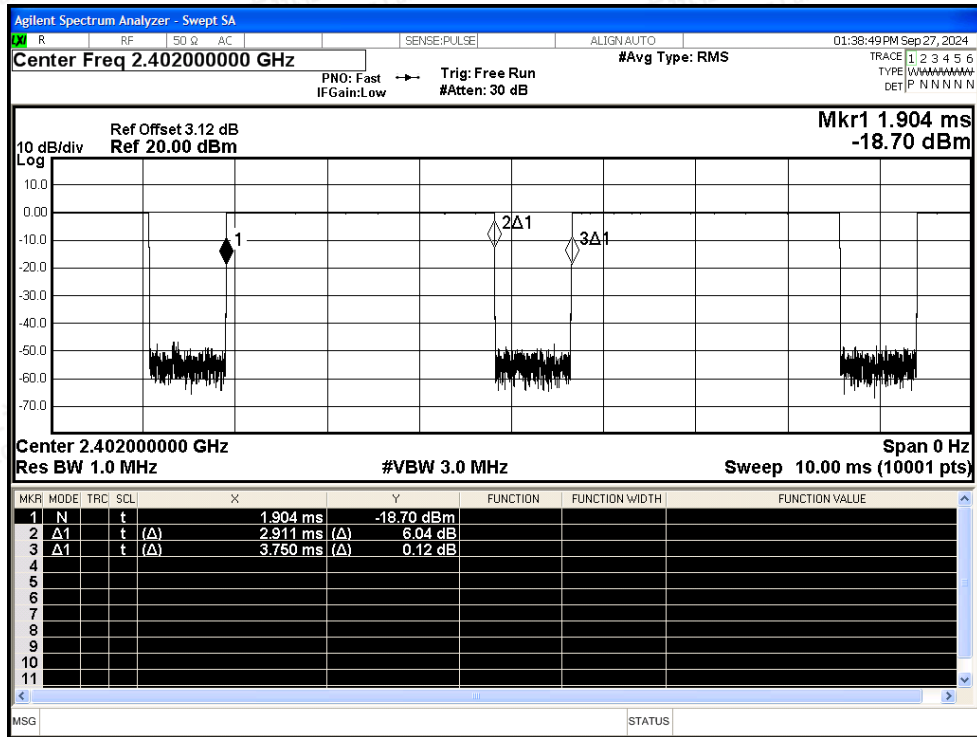




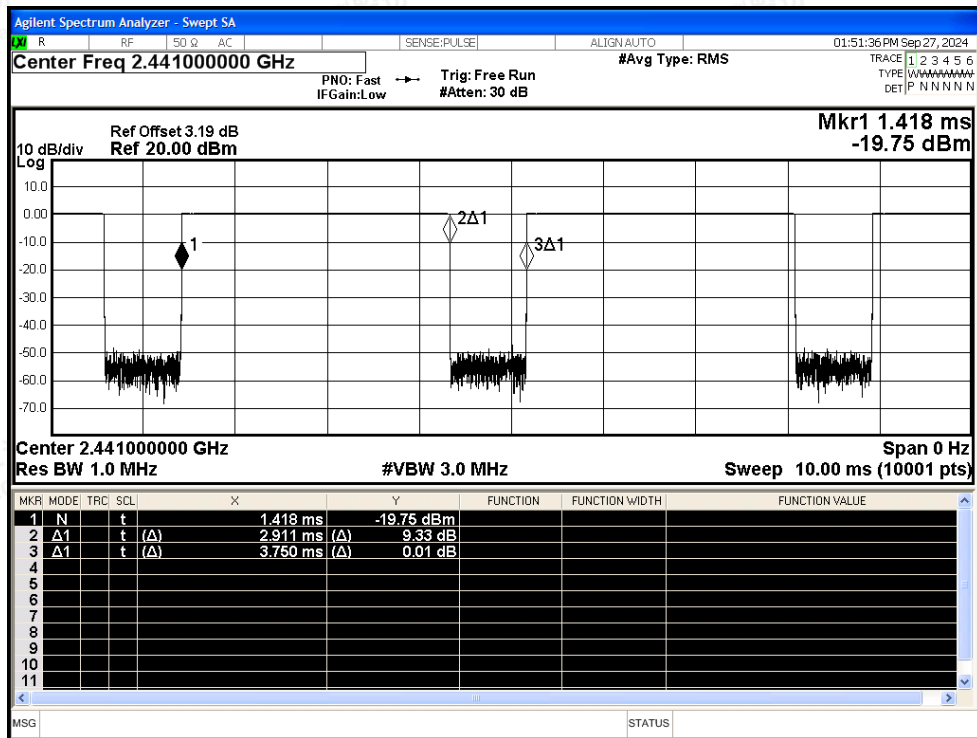


Test Graphs

Duty Cycle NVNT 1-DH5 2402MHz Ant0

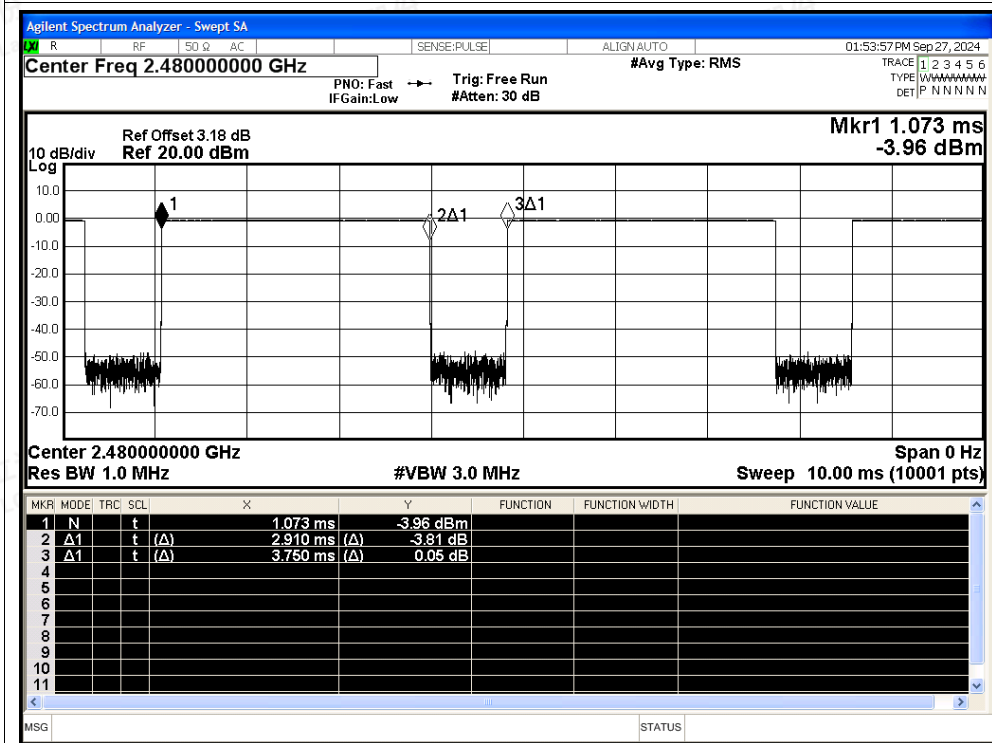


Duty Cycle NVNT 1-DH5 2441MHz Ant0

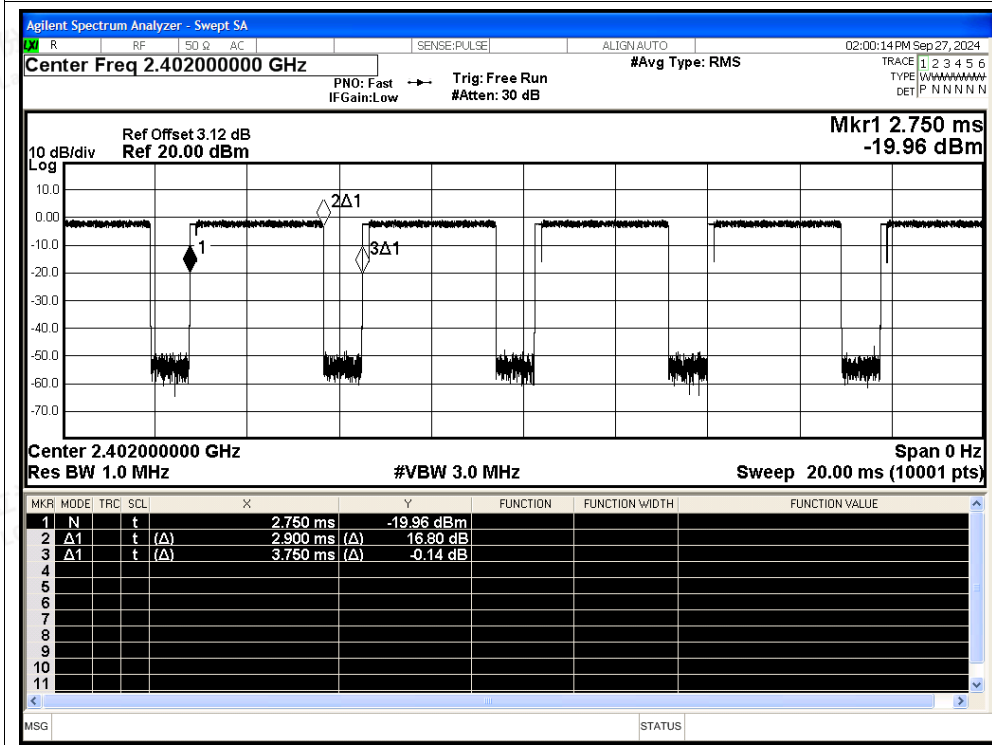




Duty Cycle NVNT 1-DH5 2480MHz Ant0

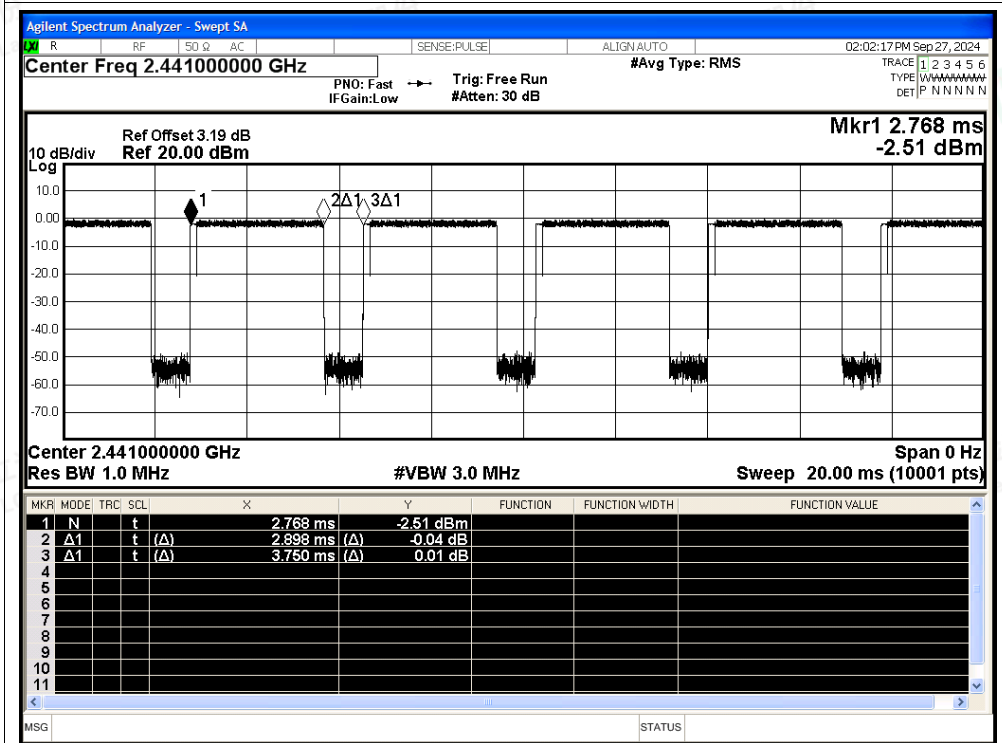


Duty Cycle NVNT 2-DH5 2402MHz Ant0

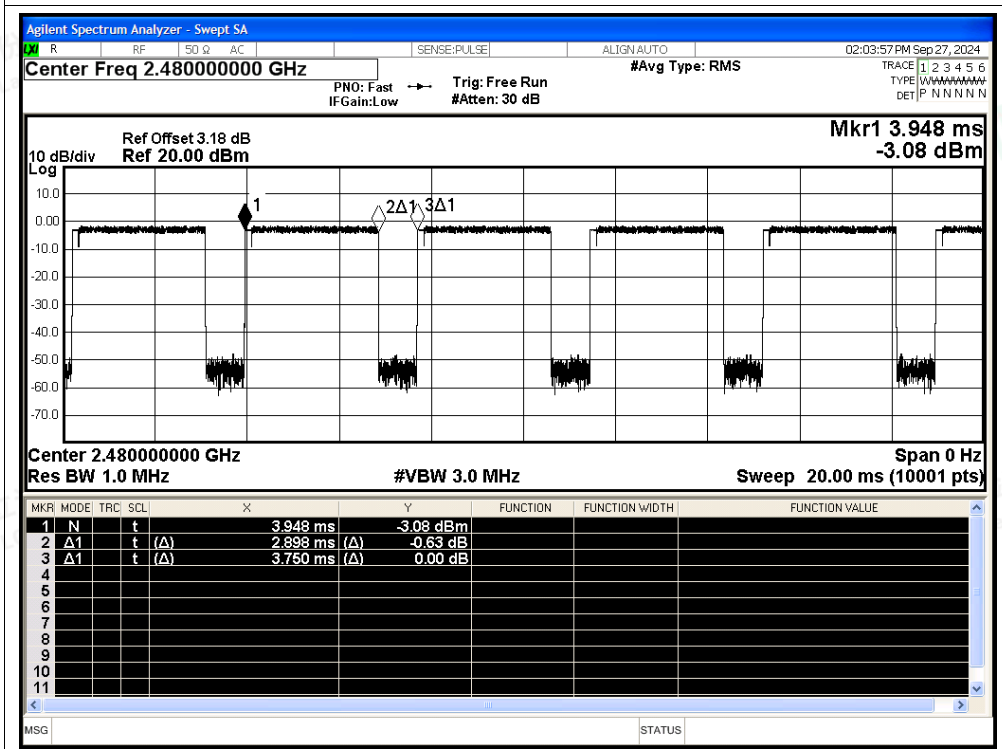




Duty Cycle NVNT 2-DH5 2441MHz Ant0

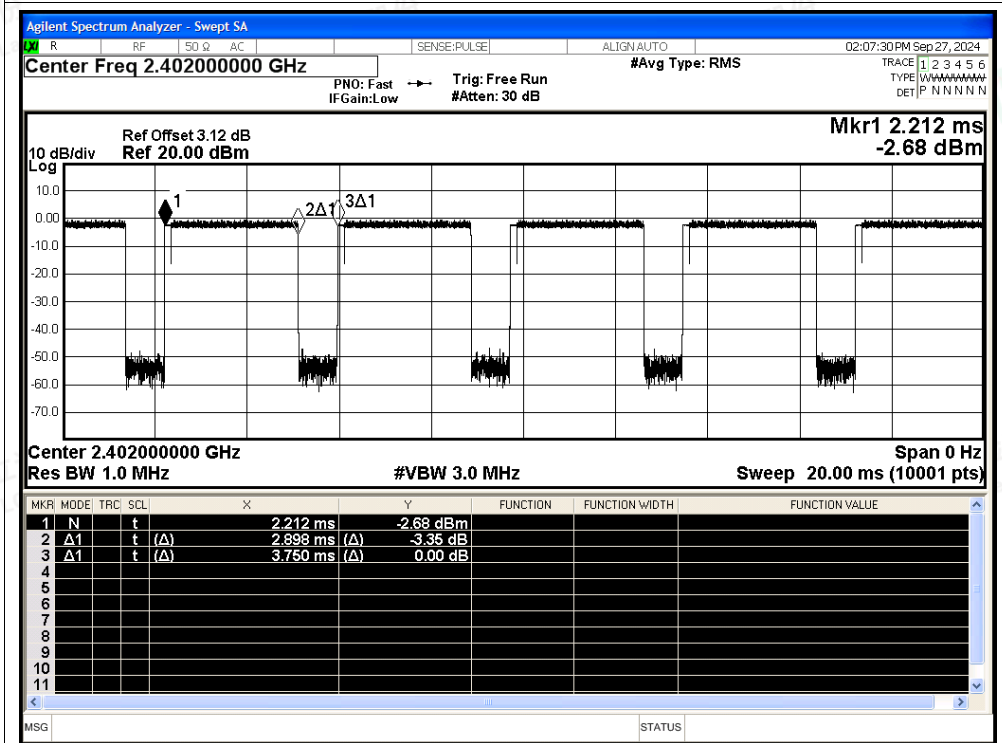


Duty Cycle NVNT 2-DH5 2480MHz Ant0

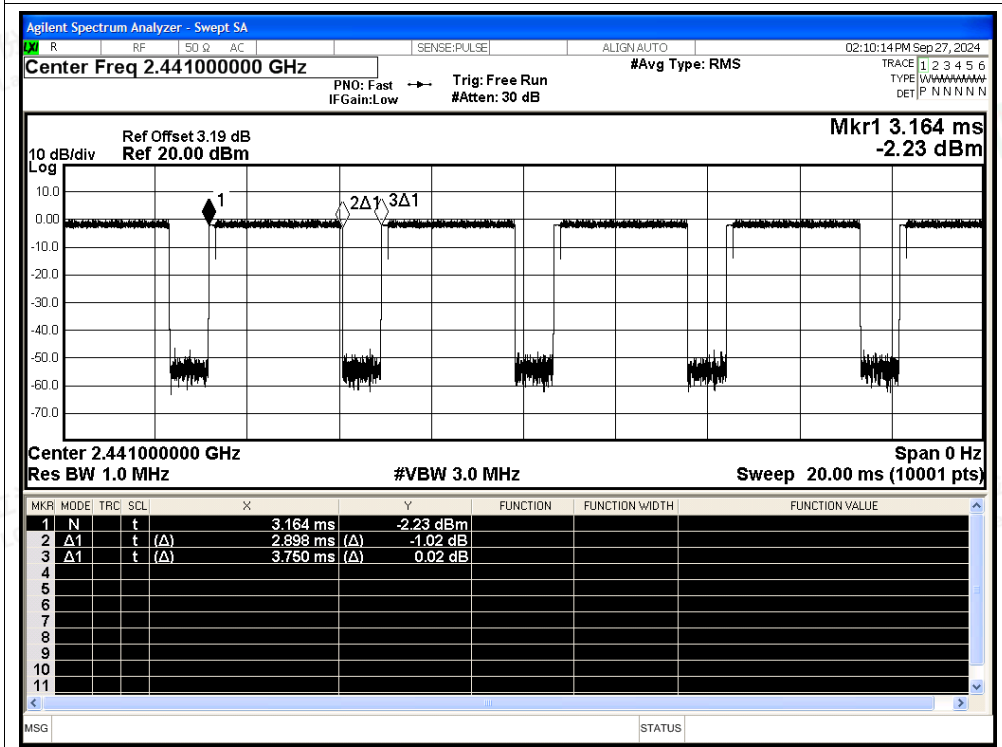


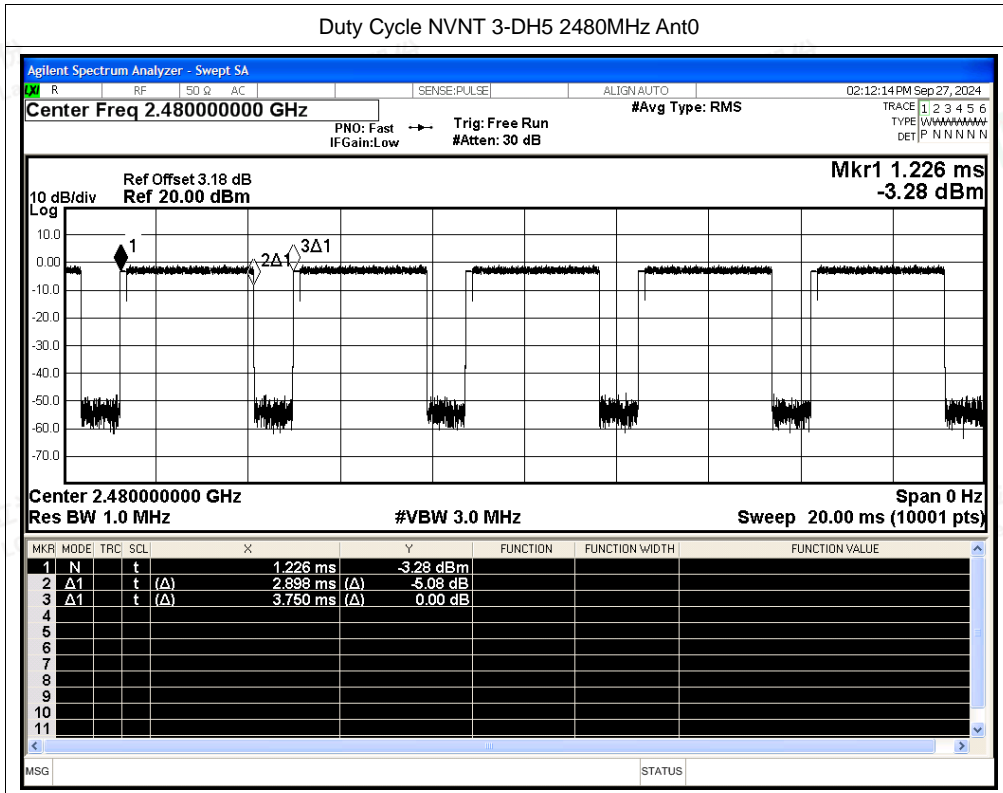


Duty Cycle NVNT 3-DH5 2402MHz Ant0



Duty Cycle NVNT 3-DH5 2441MHz Ant0







### A.9 Restrict Band

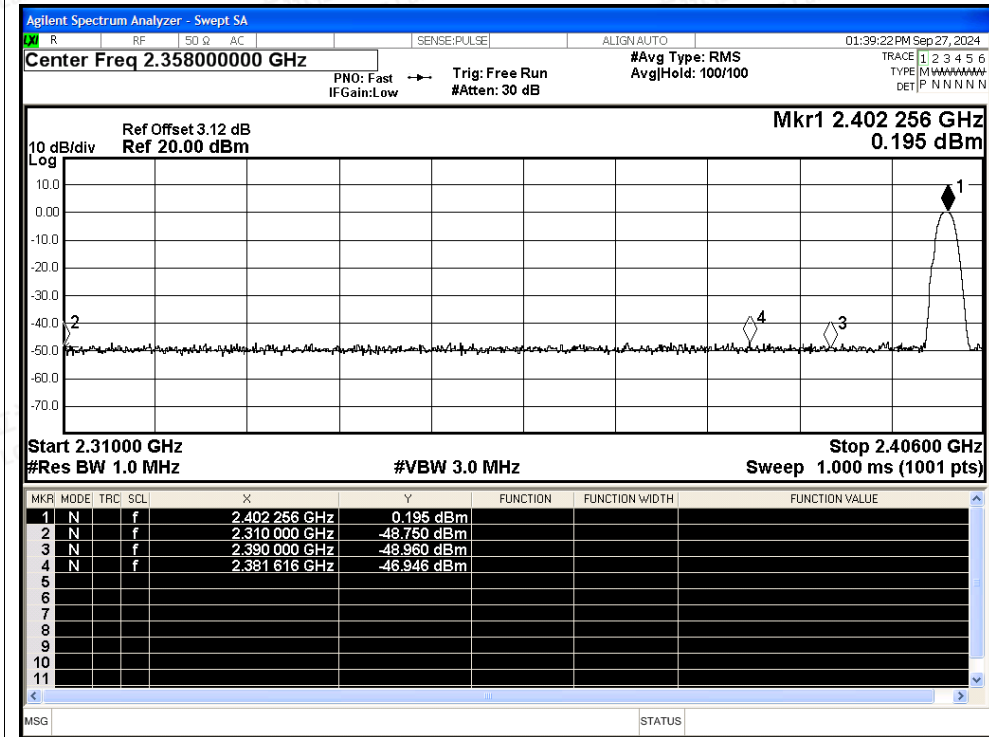
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant0	No-Hopping	2310	-48.75	2	-	48.51	Peak	74	Pass
NVNT	1-DH5	2402	Ant0	No-Hopping	2310	-57.43	2	1.1	40.93	Average	54	Pass
NVNT	1-DH5	2402	Ant0	No-Hopping	2381.616	-46.95	2	-	50.31	Peak	74	Pass
NVNT	1-DH5	2402	Ant0	No-Hopping	2373.552	-56.53	2	1.1	41.83	Average	54	Pass
NVNT	1-DH5	2402	Ant0	No-Hopping	2390	-48.96	2	-	48.3	Peak	74	Pass
NVNT	1-DH5	2402	Ant0	No-Hopping	2390	-57.32	2	1.1	41.04	Average	54	Pass
NVNT	1-DH5	2480	Ant0	No-Hopping	2483.5	-48.23	2	-	49.03	Peak	74	Pass
NVNT	1-DH5	2480	Ant0	No-Hopping	2483.5	-56.65	2	1.1	41.71	Average	54	Pass
NVNT	1-DH5	2480	Ant0	No-Hopping	2486.008	-44.92	2	-	52.34	Peak	74	Pass
NVNT	1-DH5	2480	Ant0	No-Hopping	2484.256	-55.91	2	1.1	42.45	Average	54	Pass
NVNT	1-DH5	2480	Ant0	No-Hopping	2500	-49.43	2	-	47.83	Peak	74	Pass
NVNT	1-DH5	2480	Ant0	No-Hopping	2500	-56.81	2	1.1	41.55	Average	54	Pass
NVNT	2-DH5	2402	Ant0	No-Hopping	2310	-50.33	2	-	46.93	Peak	74	Pass
NVNT	2-DH5	2402	Ant0	No-Hopping	2310	-57.87	2	1.12	40.51	Average	54	Pass
NVNT	2-DH5	2402	Ant0	No-Hopping	2319.12	-46.69	2	-	50.57	Peak	74	Pass
NVNT	2-DH5	2402	Ant0	No-Hopping	2362.224	-56.53	2	1.12	41.85	Average	54	Pass
NVNT	2-DH5	2402	Ant0	No-Hopping	2390	-49.31	2	-	47.95	Peak	74	Pass
NVNT	2-DH5	2402	Ant0	No-Hopping	2390	-56.77	2	1.12	41.61	Average	54	Pass
NVNT	2-DH5	2480	Ant0	No-Hopping	2483.5	-47.84	2	-	49.42	Peak	74	Pass
NVNT	2-DH5	2480	Ant0	No-Hopping	2483.5	-56.71	2	1.12	41.67	Average	54	Pass
NVNT	2-DH5	2480	Ant0	No-Hopping	2484.832	-45.52	2	-	51.74	Peak	74	Pass
NVNT	2-DH5	2480	Ant0	No-Hopping	2494.696	-56.24	2	1.12	42.14	Average	54	Pass
NVNT	2-DH5	2480	Ant0	No-Hopping	2500	-48.14	2	-	49.12	Peak	74	Pass
NVNT	2-DH5	2480	Ant0	No-Hopping	2500	-56.7	2	1.12	41.68	Average	54	Pass
NVNT	3-DH5	2402	Ant0	No-Hopping	2310	-48.71	2	-	48.55	Peak	74	Pass
NVNT	3-DH5	2402	Ant0	No-Hopping	2310	-57.75	2	1.12	40.63	Average	54	Pass
NVNT	3-DH5	2402	Ant0	No-Hopping	2382.384	-46.8	2	-	50.46	Peak	74	Pass
NVNT	3-DH5	2402	Ant0	No-Hopping	2385.648	-56.64	2	1.12	41.74	Average	54	Pass
NVNT	3-DH5	2402	Ant0	No-Hopping	2390	-48.87	2	-	48.39	Peak	74	Pass
NVNT	3-DH5	2402	Ant0	No-Hopping	2390	-56.96	2	1.12	41.42	Average	54	Pass
NVNT	3-DH5	2480	Ant0	No-Hopping	2483.5	-49.74	2	-	47.52	Peak	74	Pass
NVNT	3-DH5	2480	Ant0	No-Hopping	2483.5	-56.86	2	1.12	41.52	Average	54	Pass
NVNT	3-DH5	2480	Ant0	No-Hopping	2486.08	-46	2	-	51.26	Peak	74	Pass
NVNT	3-DH5	2480	Ant0	No-Hopping	2491.384	-56.26	2	1.12	42.12	Average	54	Pass
NVNT	3-DH5	2480	Ant0	No-Hopping	2500	-49.7	2	-	47.56	Peak	74	Pass
NVNT	3-DH5	2480	Ant0	No-Hopping	2500	-56.72	2	1.12	41.66	Average	54	Pass



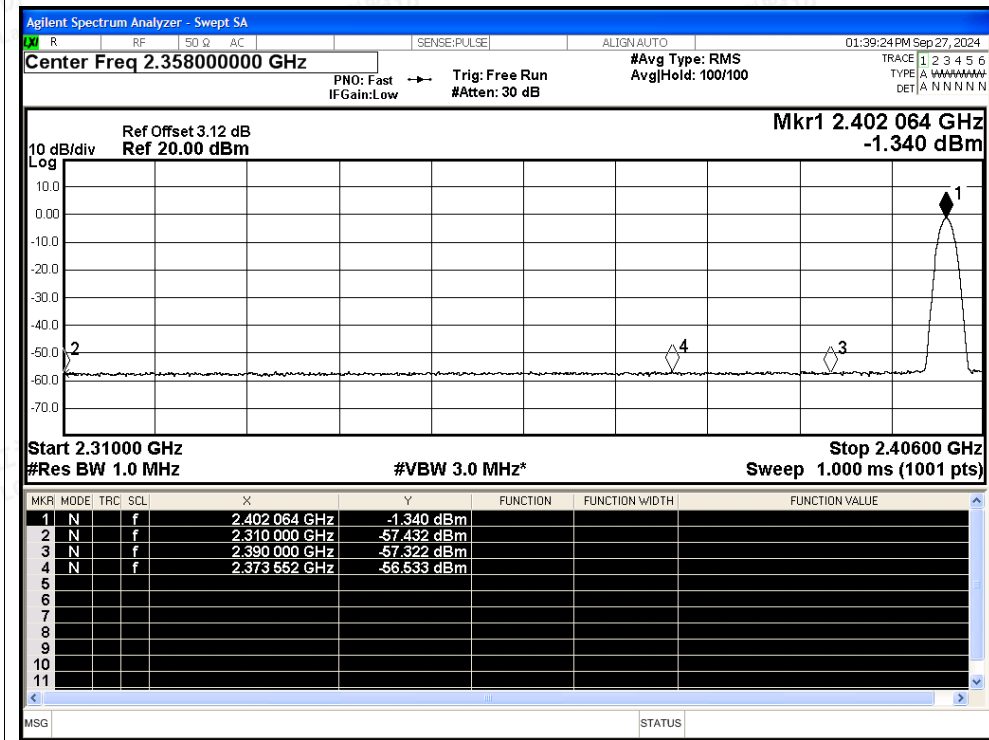


Test Graphs

Restrict Band NVNT 1-DH5 2402MHz Ant0 No-Hopping Peak

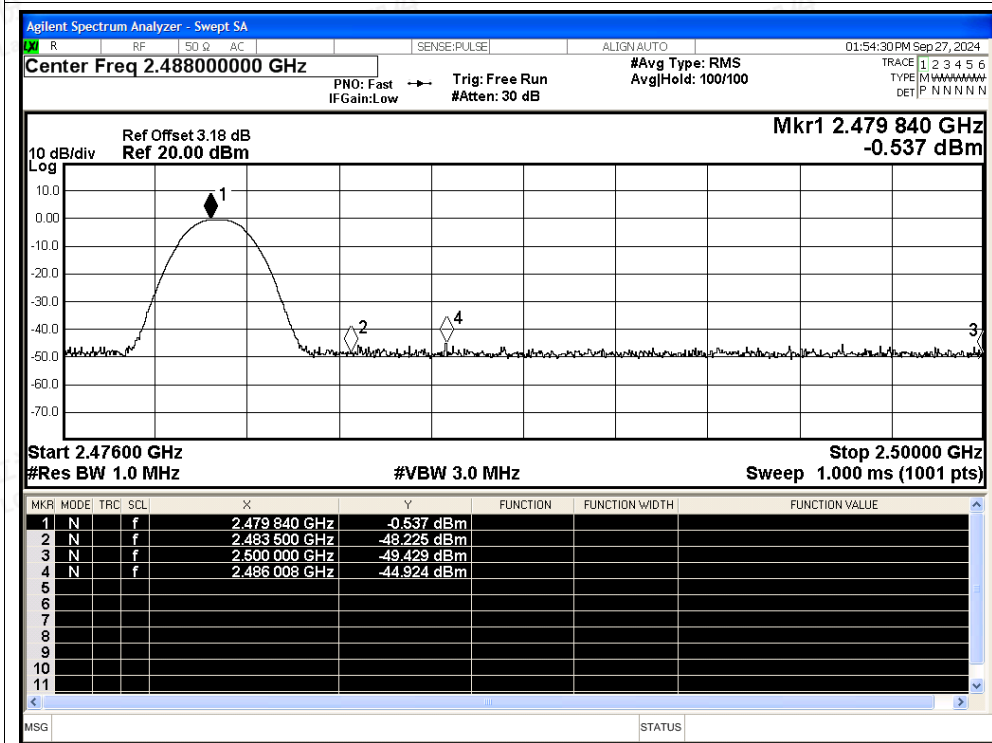


Restrict Band NVNT 1-DH5 2402MHz Ant0 No-Hopping Average

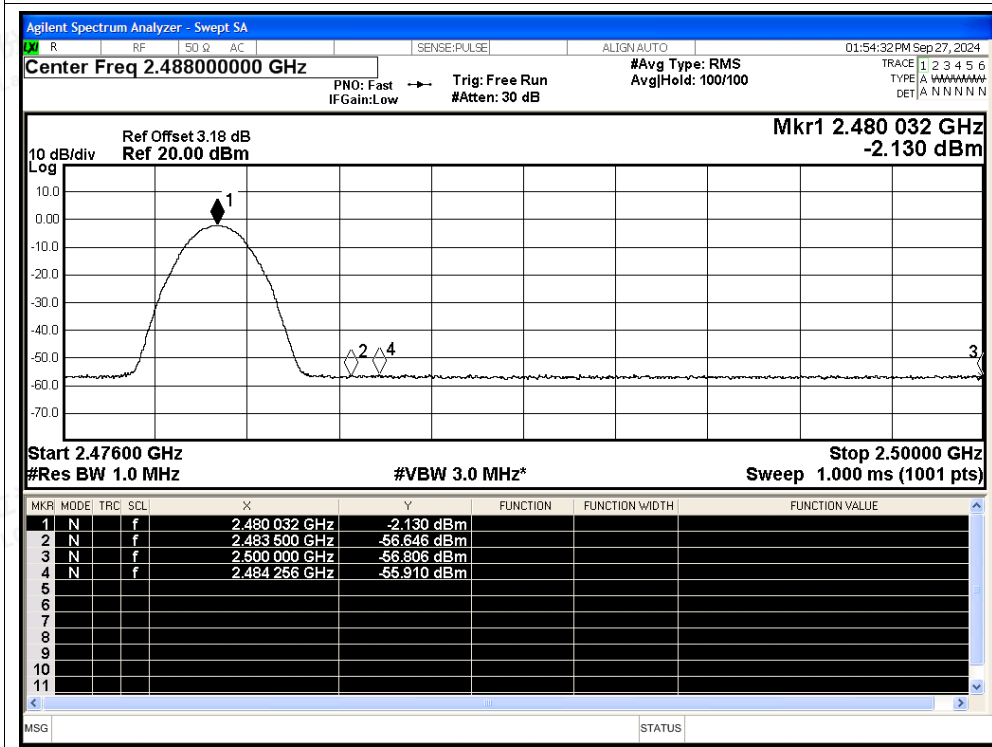




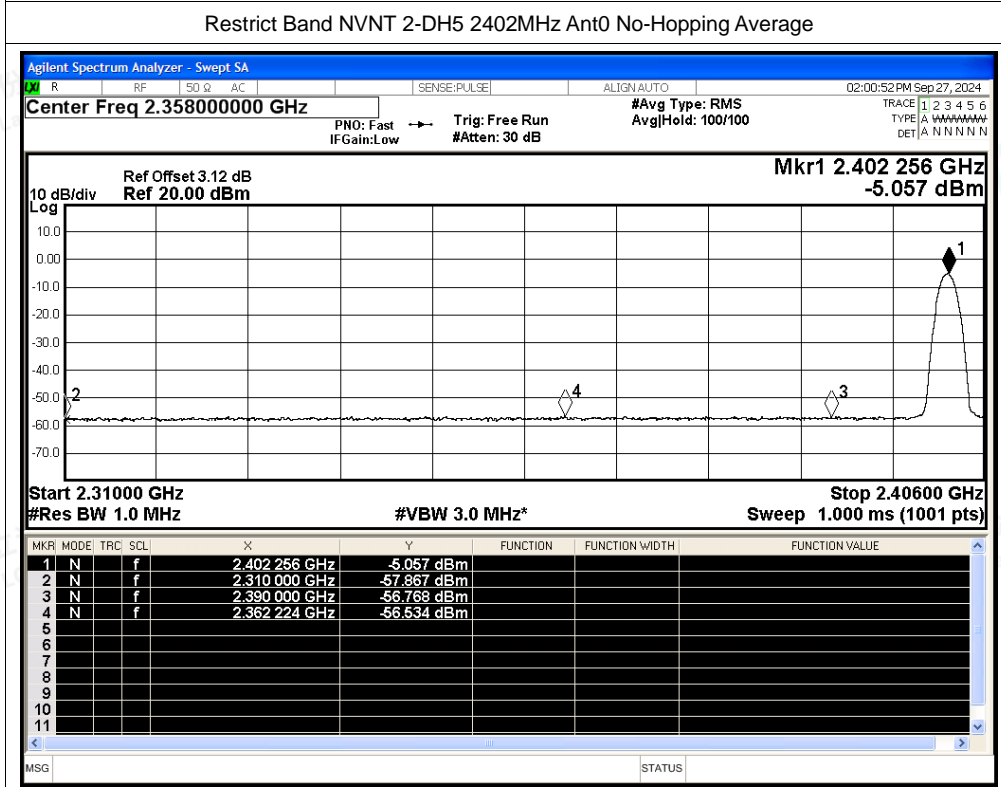
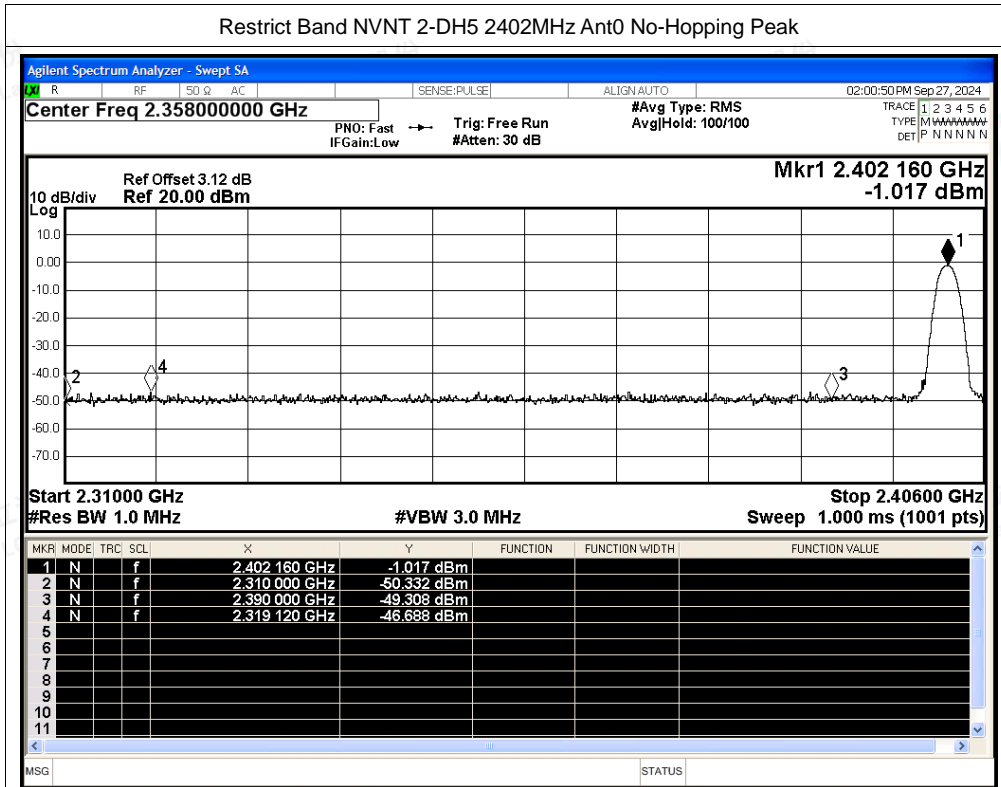
Restrict Band NVNT 1-DH5 2480MHz Ant0 No-Hopping Peak



Restrict Band NVNT 1-DH5 2480MHz Ant0 No-Hopping Average

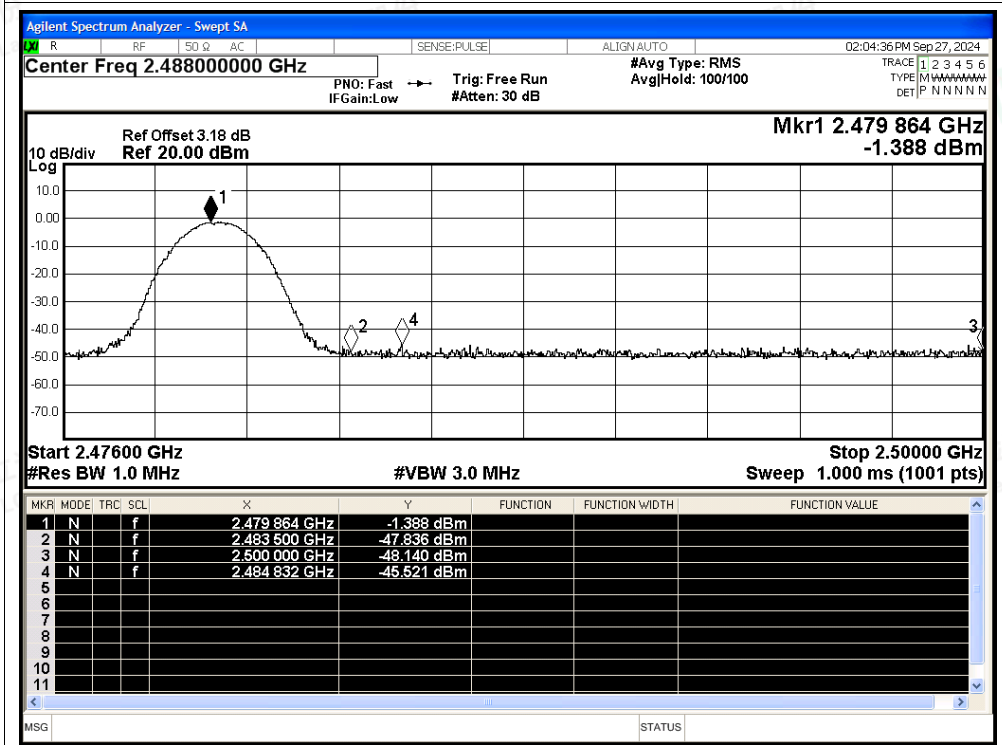




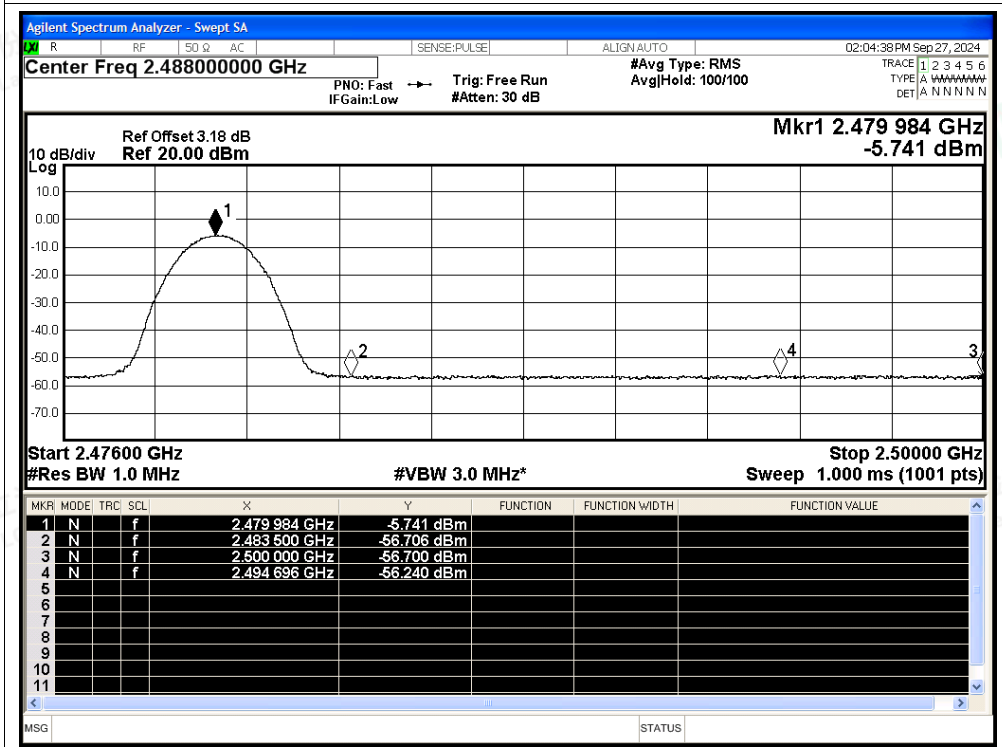




Restrict Band NVNT 2-DH5 2480MHz Ant0 No-Hopping Peak

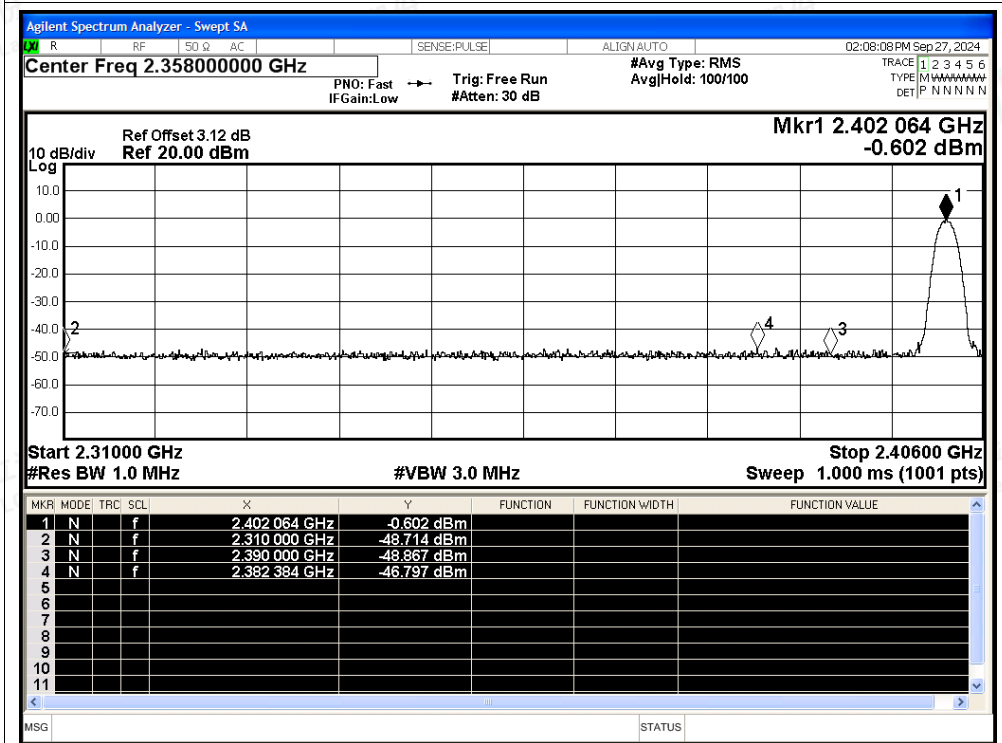


Restrict Band NVNT 2-DH5 2480MHz Ant0 No-Hopping Average

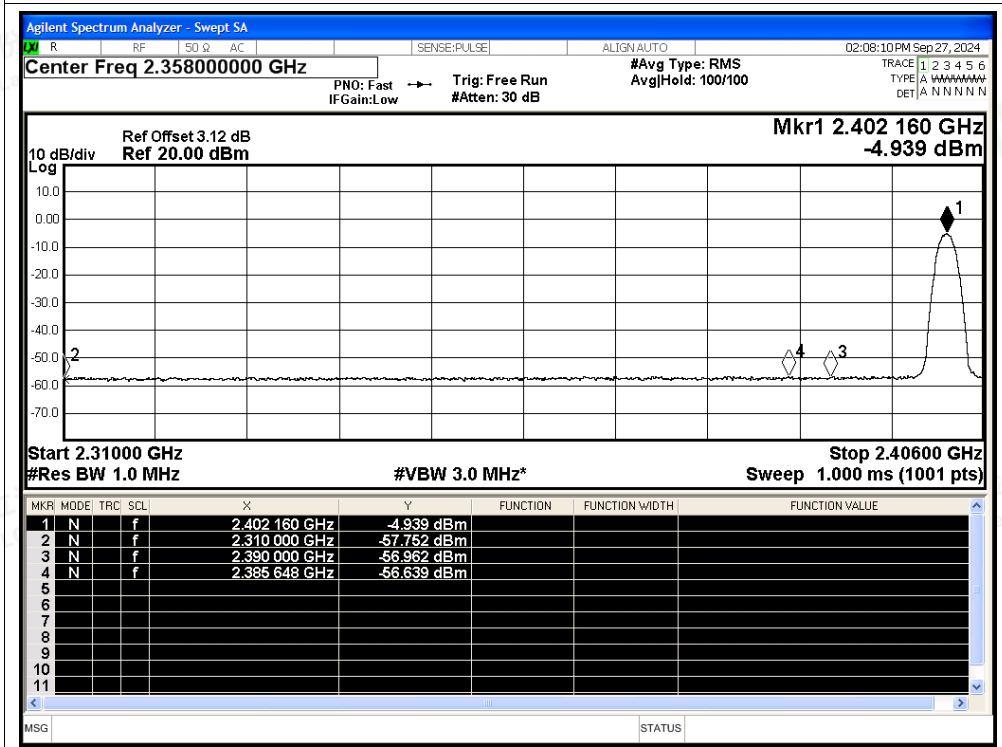




Restrict Band NVNT 3-DH5 2402MHz Ant0 No-Hopping Peak

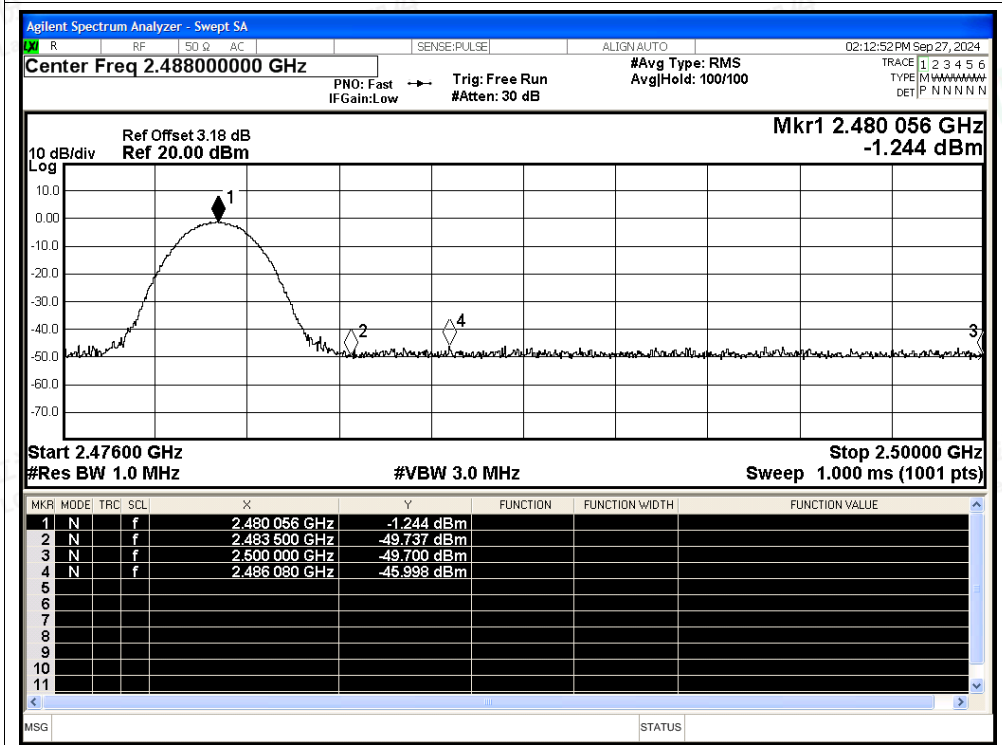


Restrict Band NVNT 3-DH5 2402MHz Ant0 No-Hopping Average





Restrict Band NVNT 3-DH5 2480MHz Ant0 No-Hopping Peak



Restrict Band NVNT 3-DH5 2480MHz Ant0 No-Hopping Average

