



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: smart watch

Test Model: TB40D

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jerry Chu
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	Ant1	0.941	N/A	Pass
NVNT	1-DH5	2441	Ant1	1.017	N/A	Pass
NVNT	1-DH5	2480	Ant1	1.01	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.287	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.327	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.324	N/A	Pass



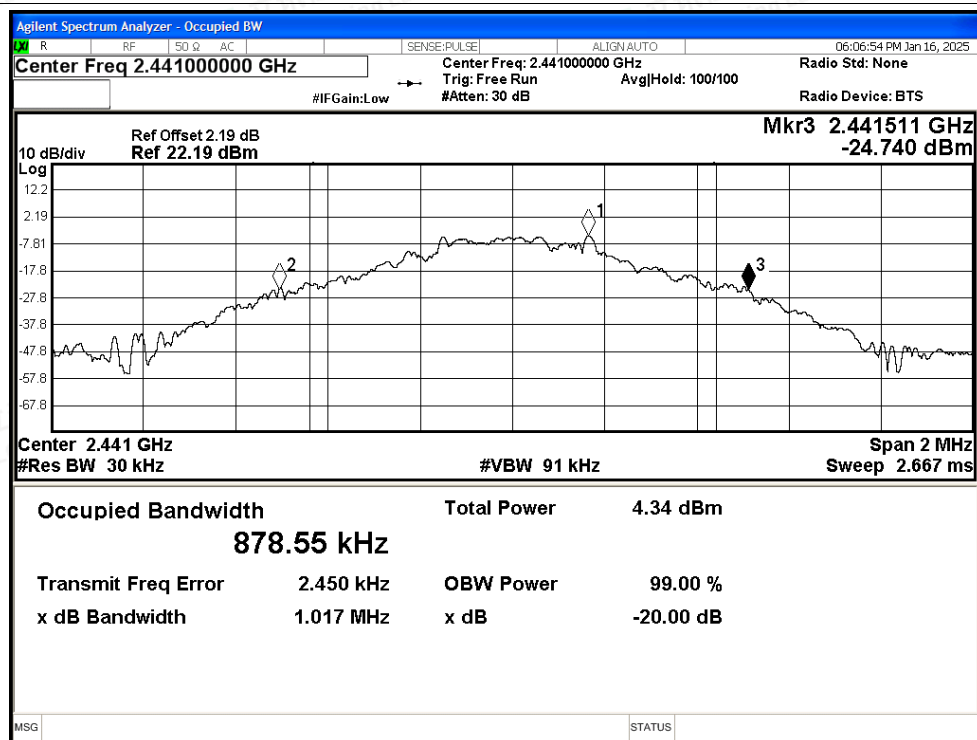


Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



Shenzhen LCS Compliance Testing Laboratory Ltd.

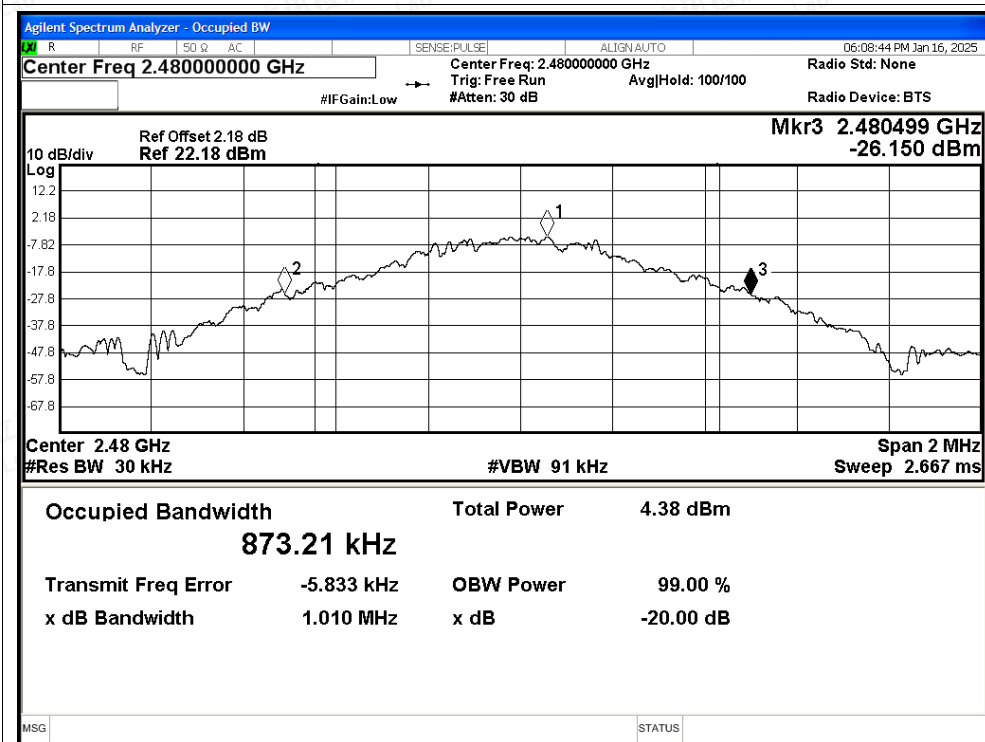
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street,
Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

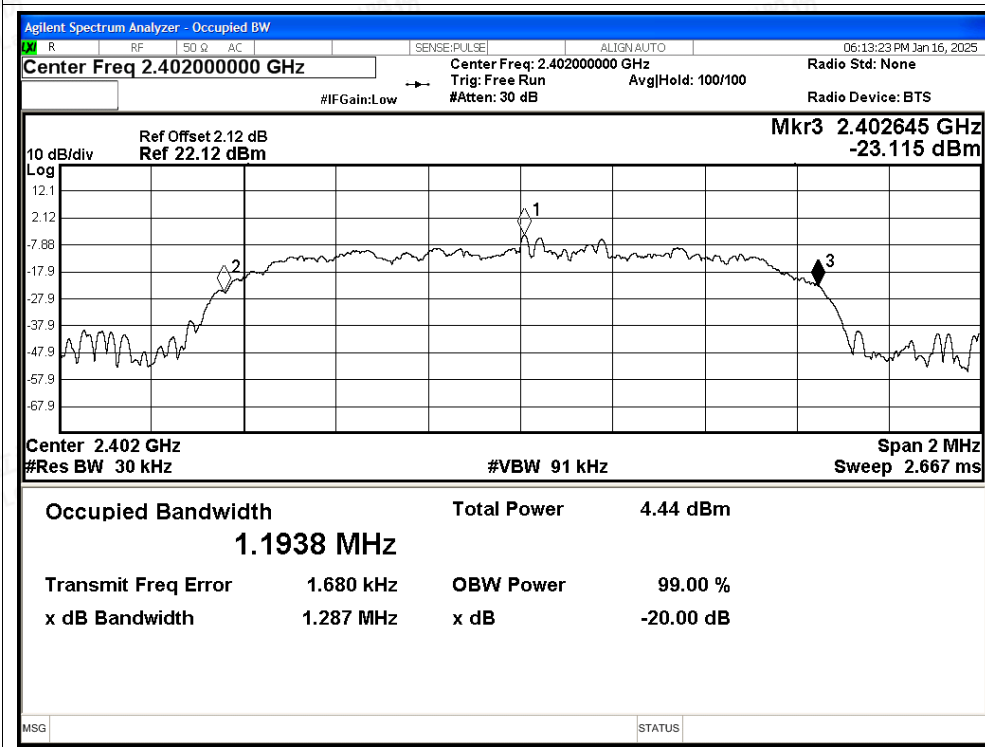
Scan code to check authenticity



-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

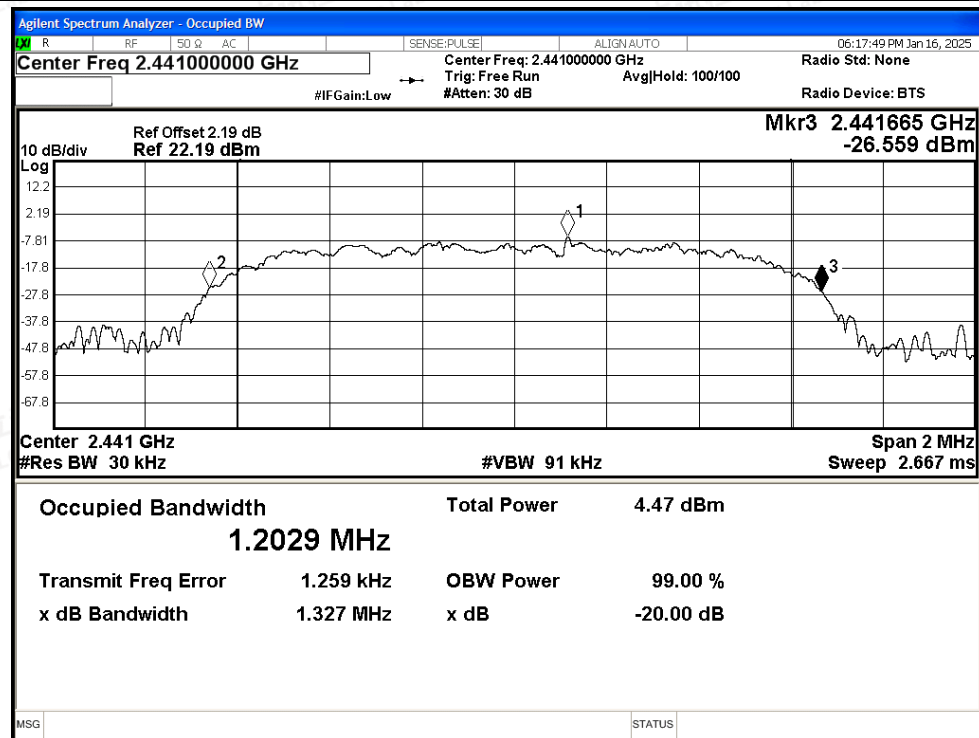


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1

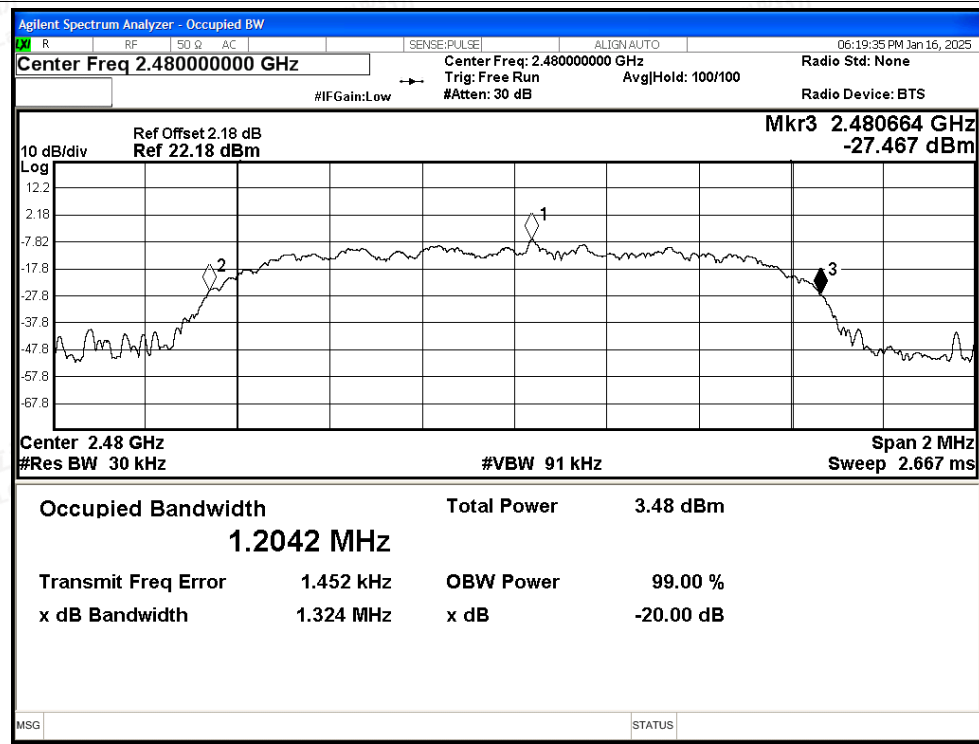




-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1





A.2 Maximum Peak Conducted Output Power

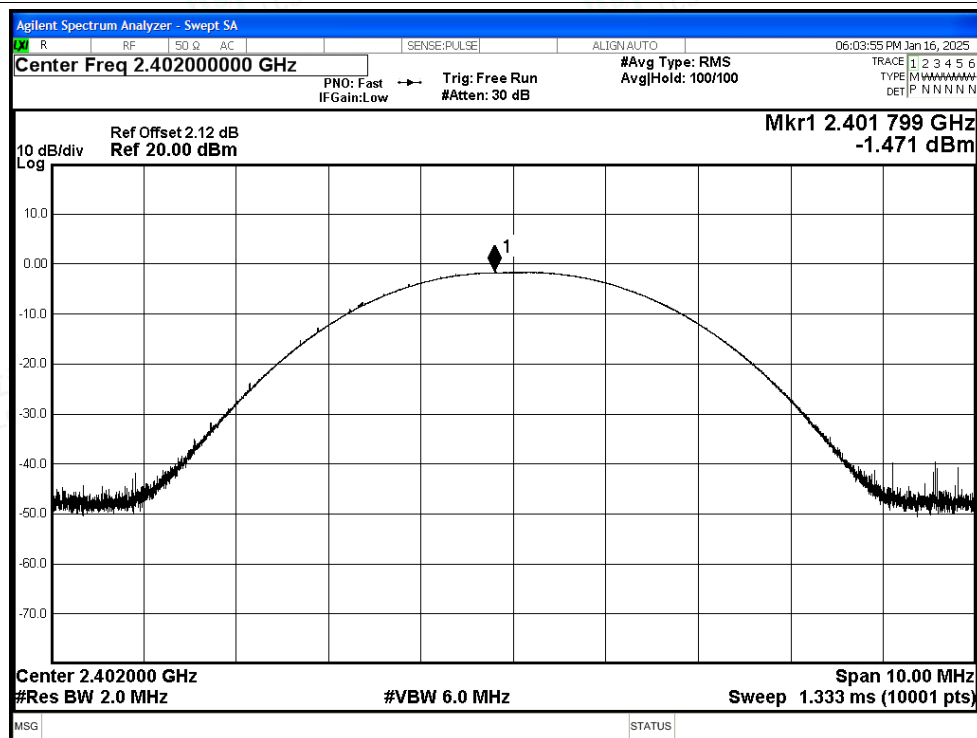
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-1.47	21	Pass
NVNT	1-DH5	2441	Ant1	-1.18	21	Pass
NVNT	1-DH5	2480	Ant1	-1.59	21	Pass
NVNT	2-DH5	2402	Ant1	0.31	21	Pass
NVNT	2-DH5	2441	Ant1	0.8	21	Pass
NVNT	2-DH5	2480	Ant1	-0.23	21	Pass



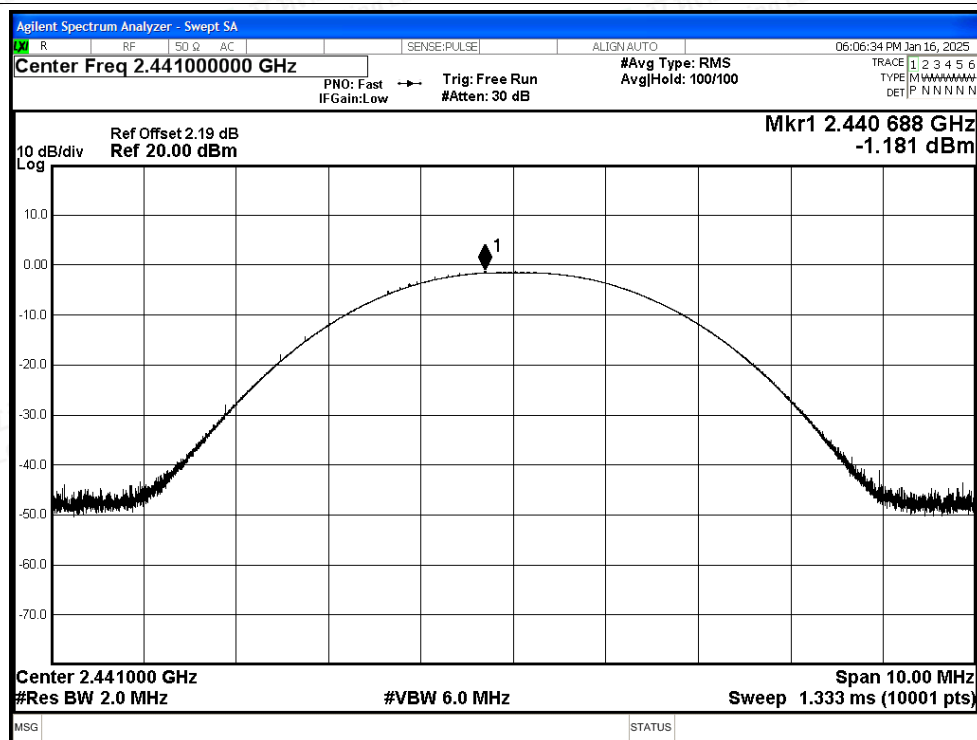


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

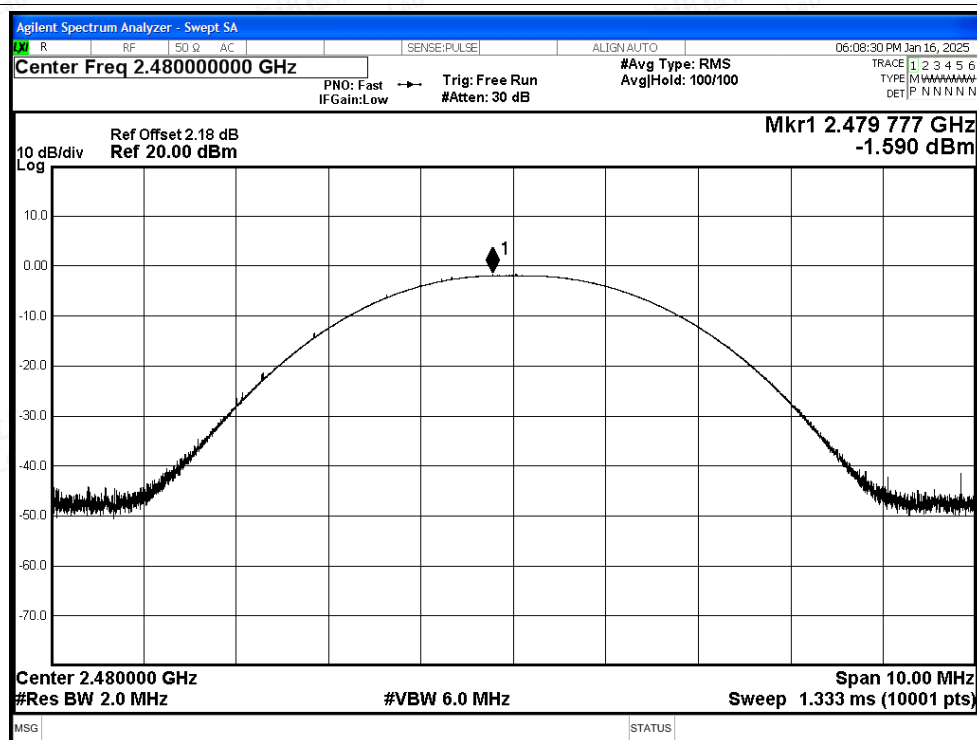


Power NVNT 1-DH5 2441MHz Ant1

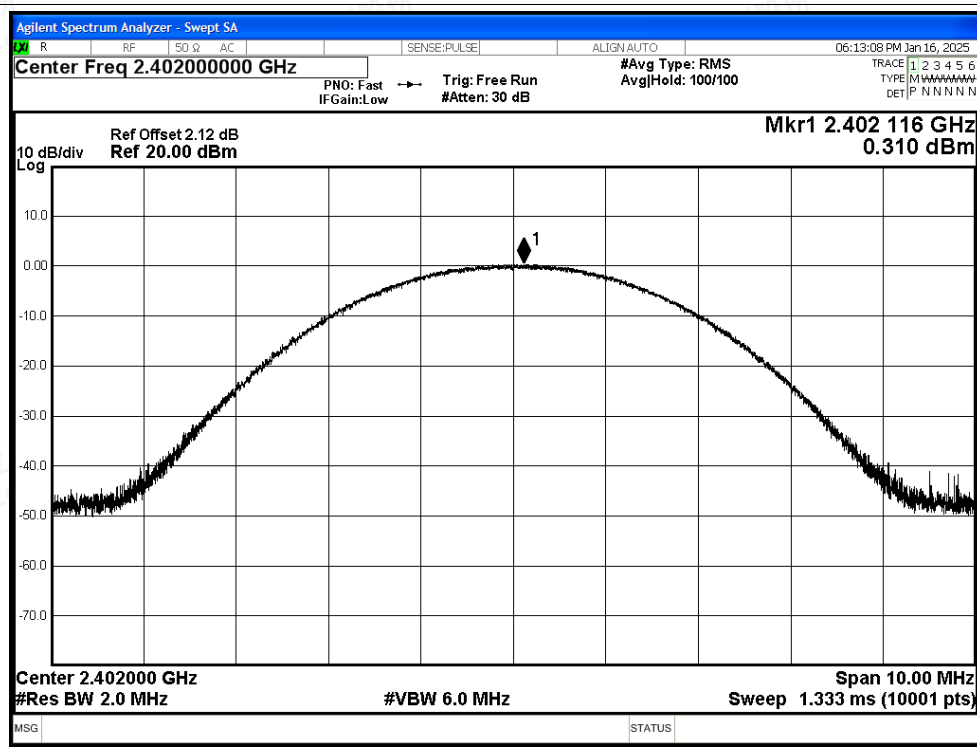


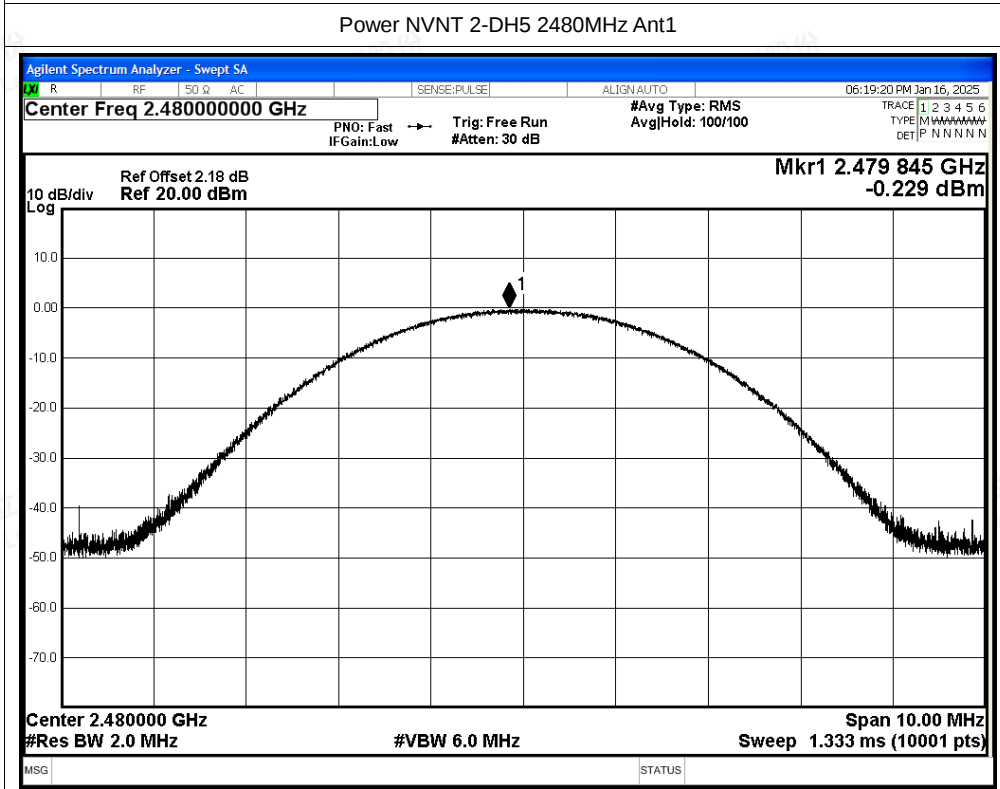
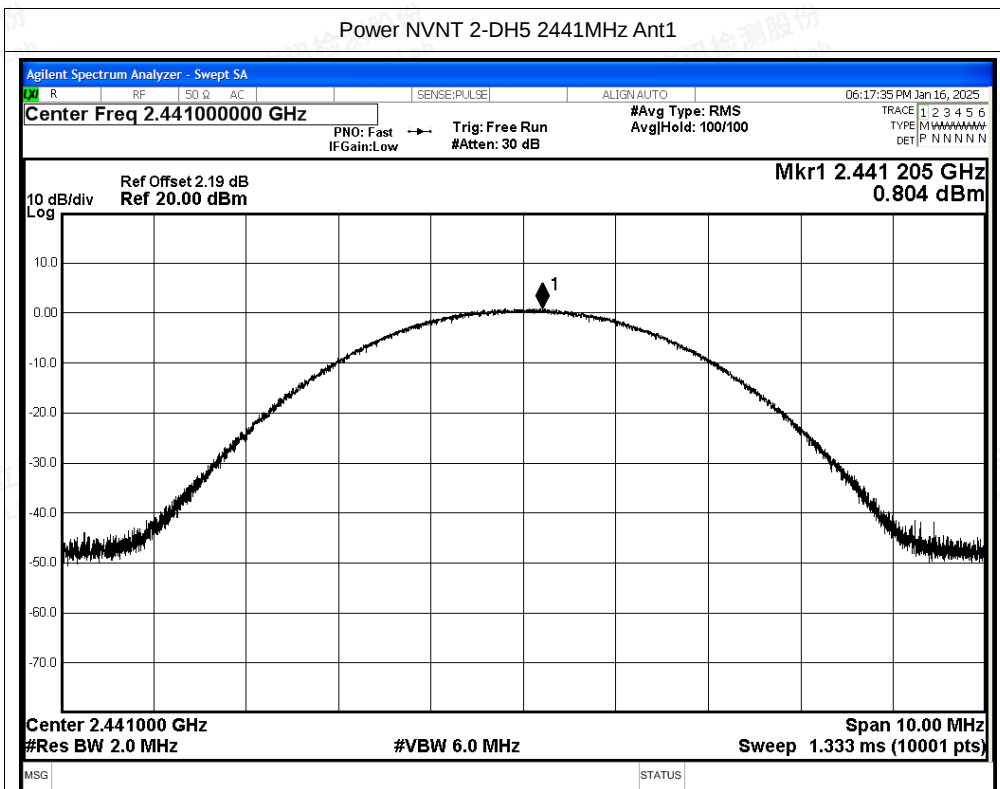


Power NVNT 1-DH5 2480MHz Ant1



Power NVNT 2-DH5 2402MHz Ant1







A.3 Carrier Frequencies Separation

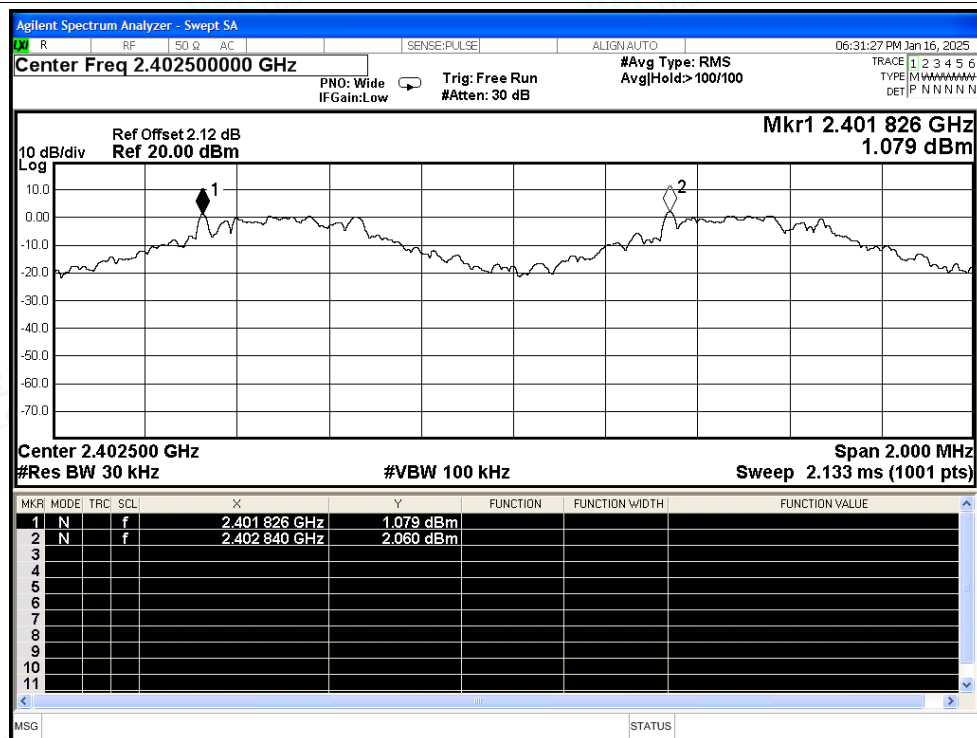
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.826	2402.84	1.014	0.678	Pass
NVNT	2-DH5	Ant1	2402.006	2403.016	1.01	0.885	Pass



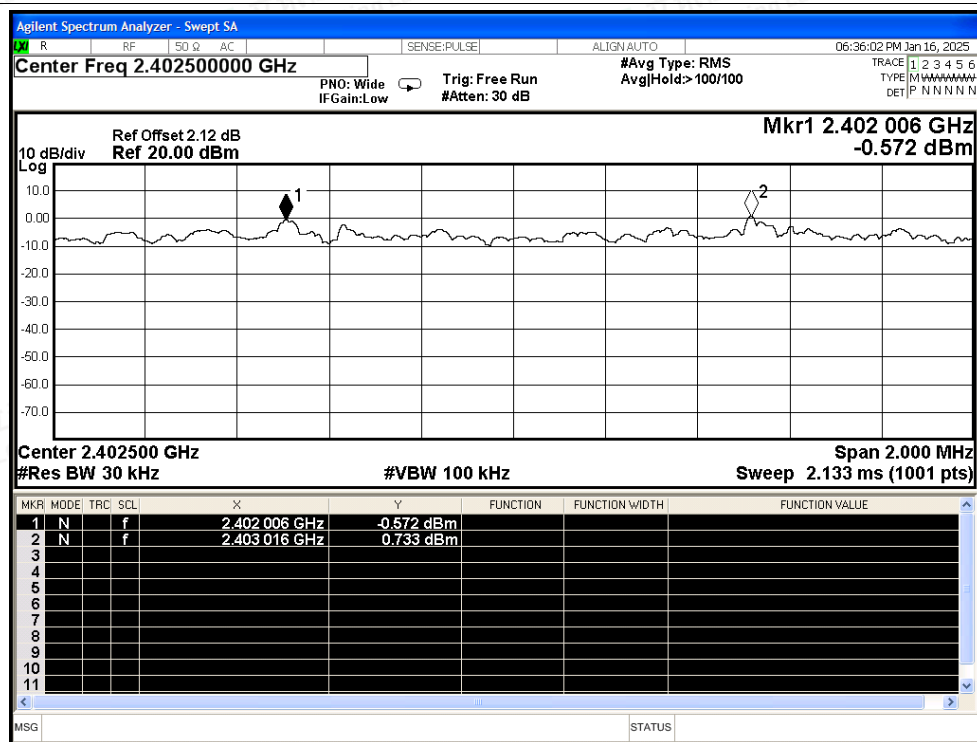


Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1





A.4 Dwell Time

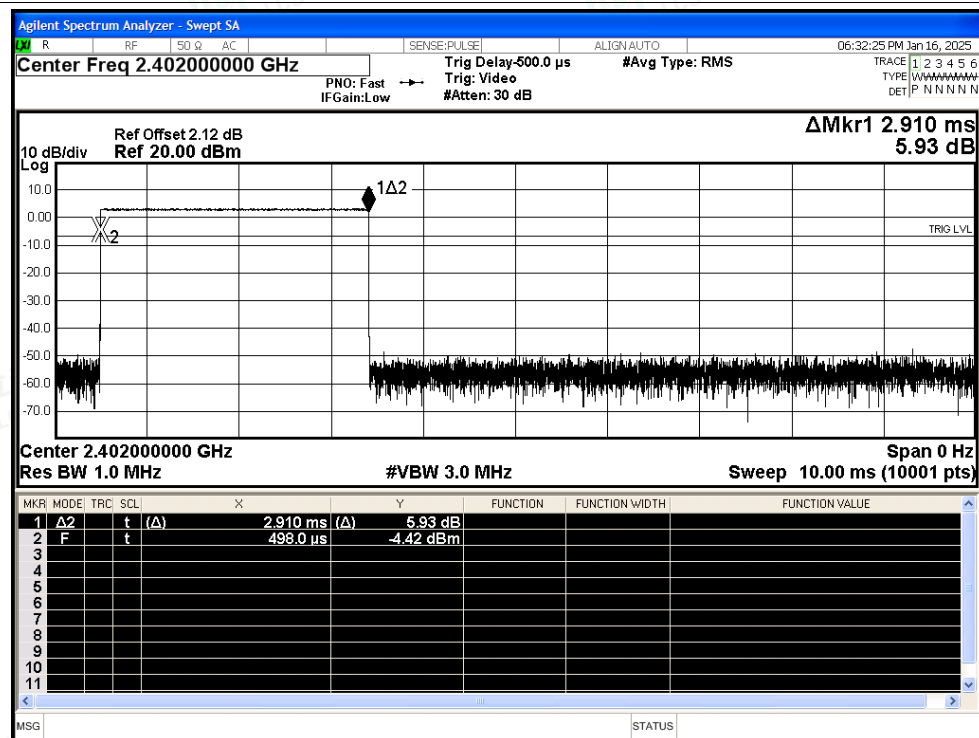
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.91	305.55	105	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.898	292.698	101	31600	400	Pass



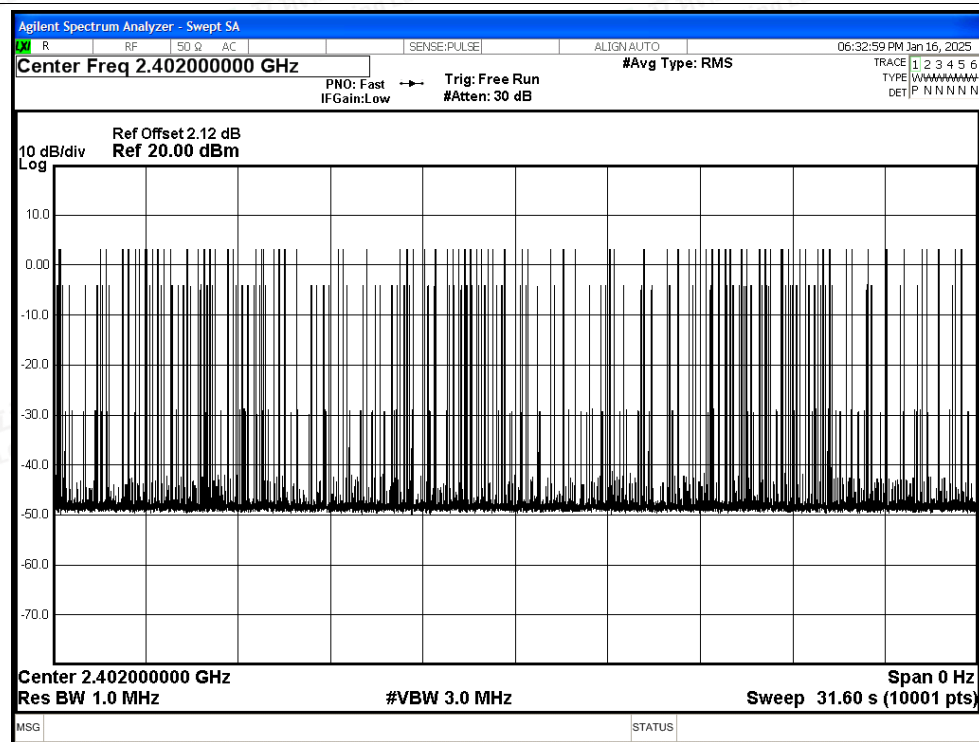


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

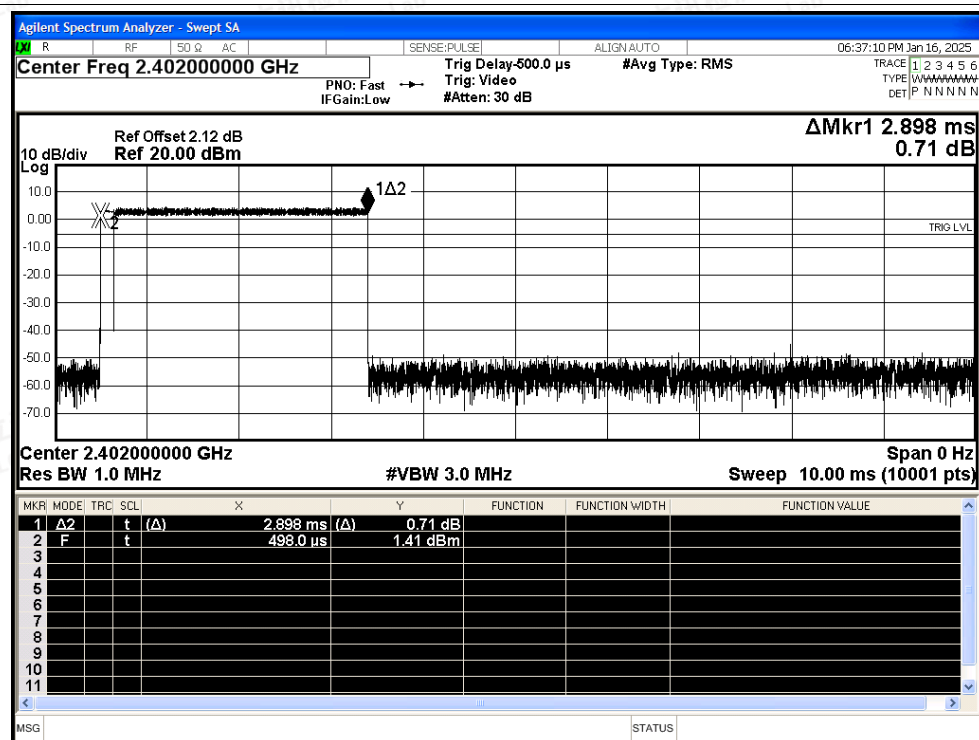


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

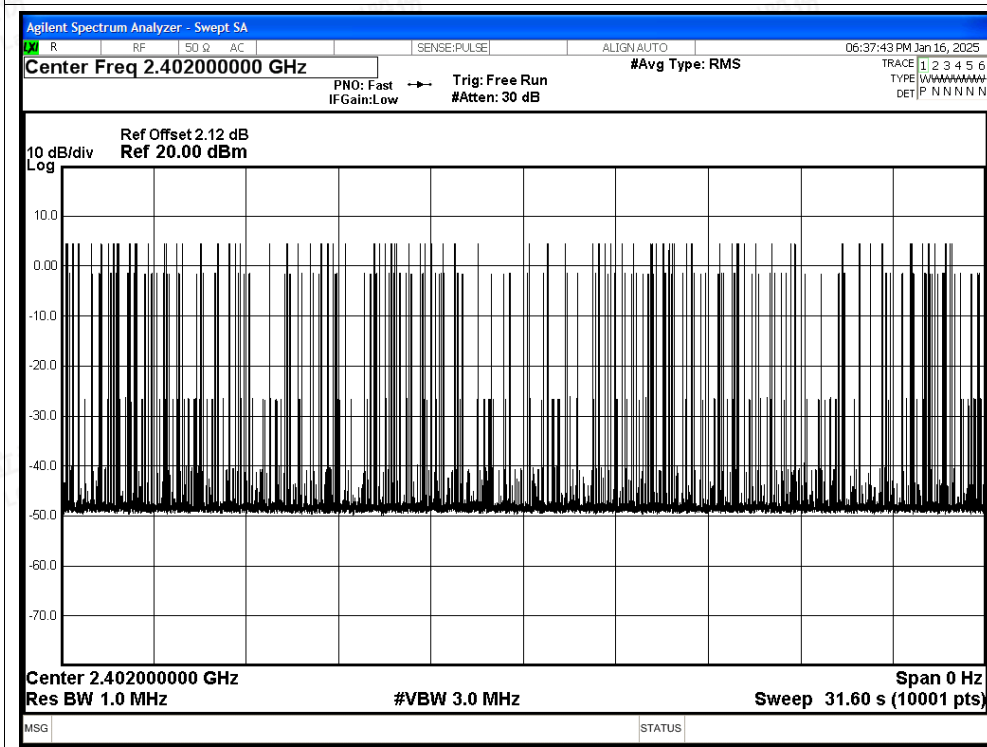




Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated





A.5 Number of Hopping Channel

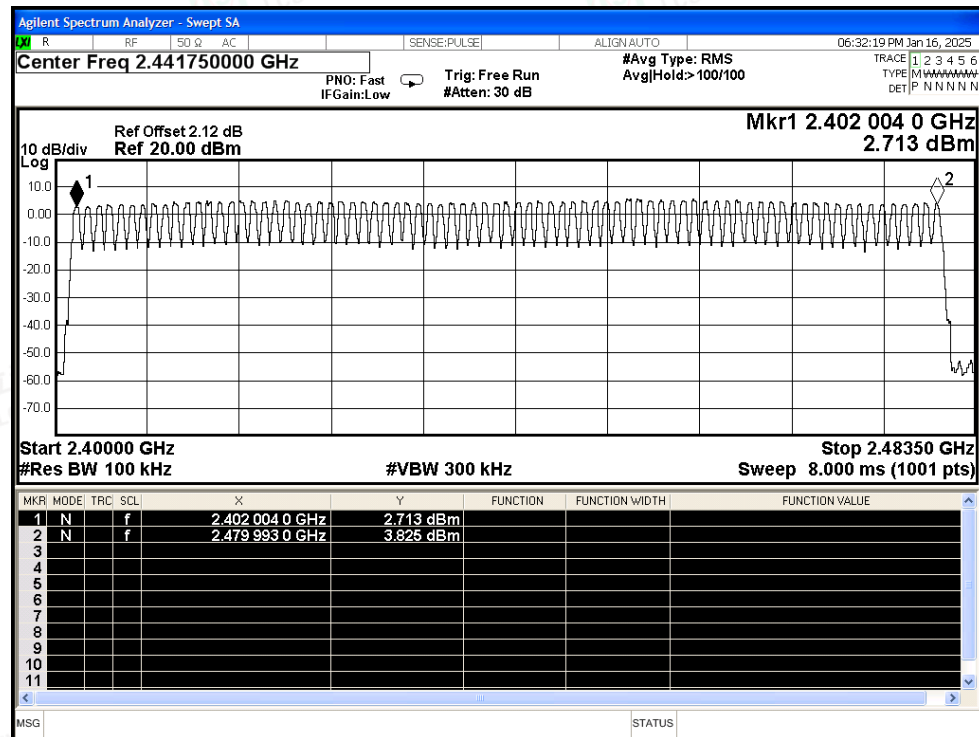
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass



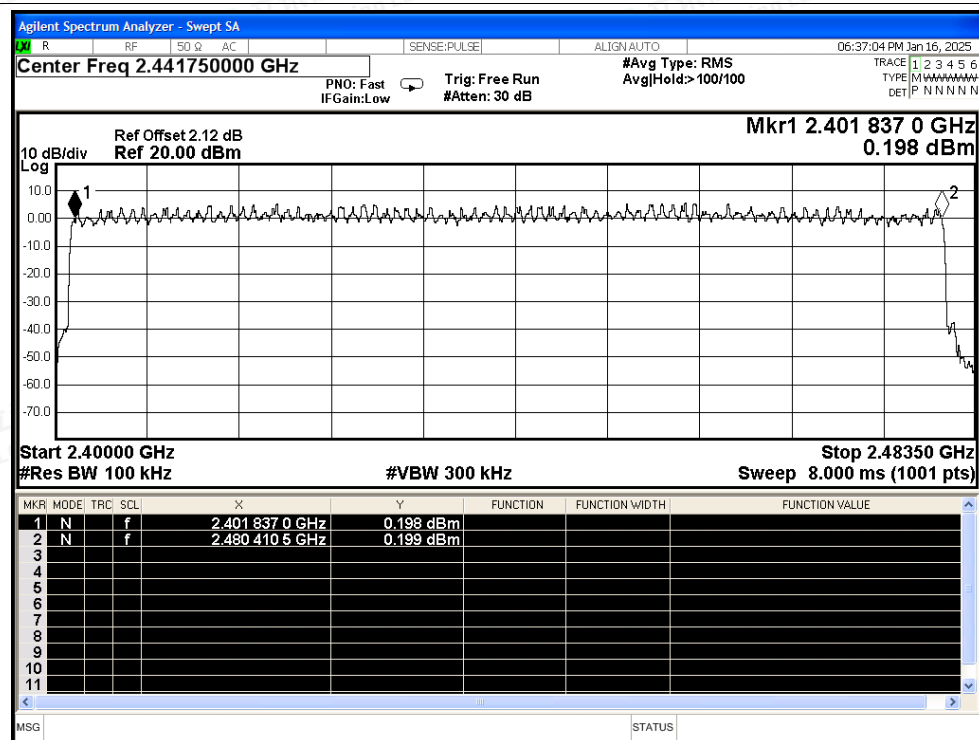


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1





A.6 Band Edge

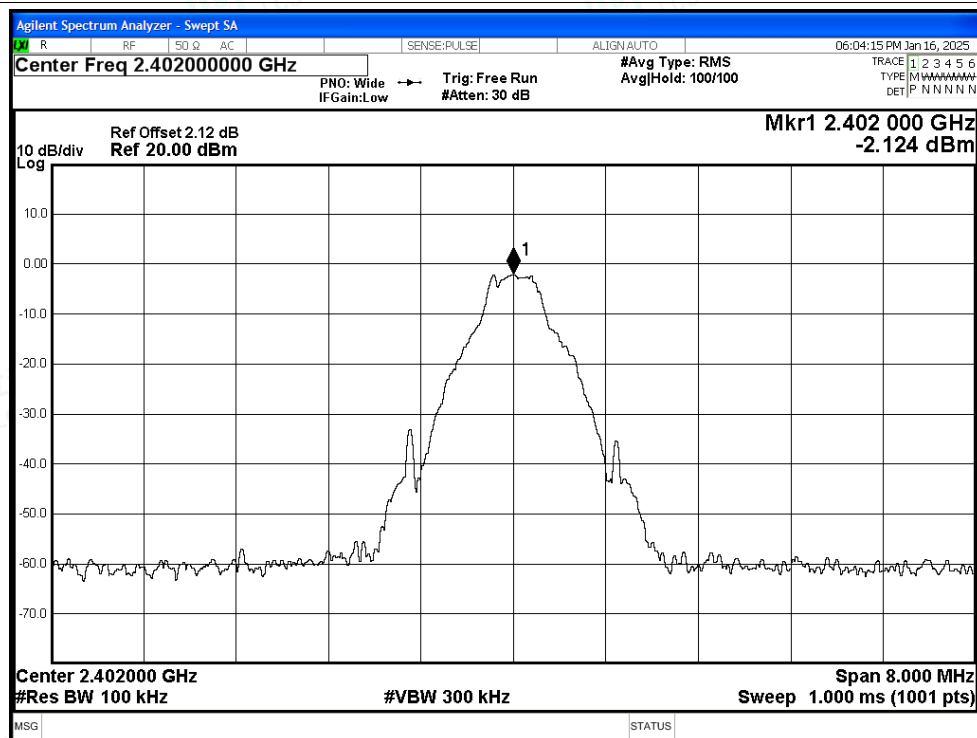
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-54.77	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-54.9	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-52.2	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-53.86	-20	Pass



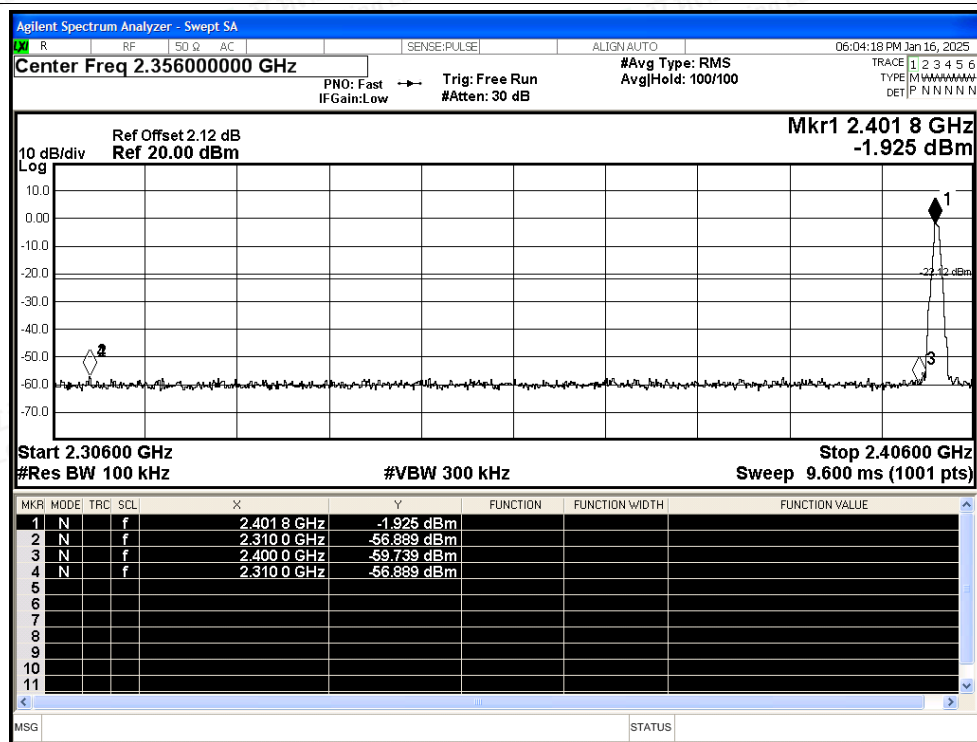


Test Graphs

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

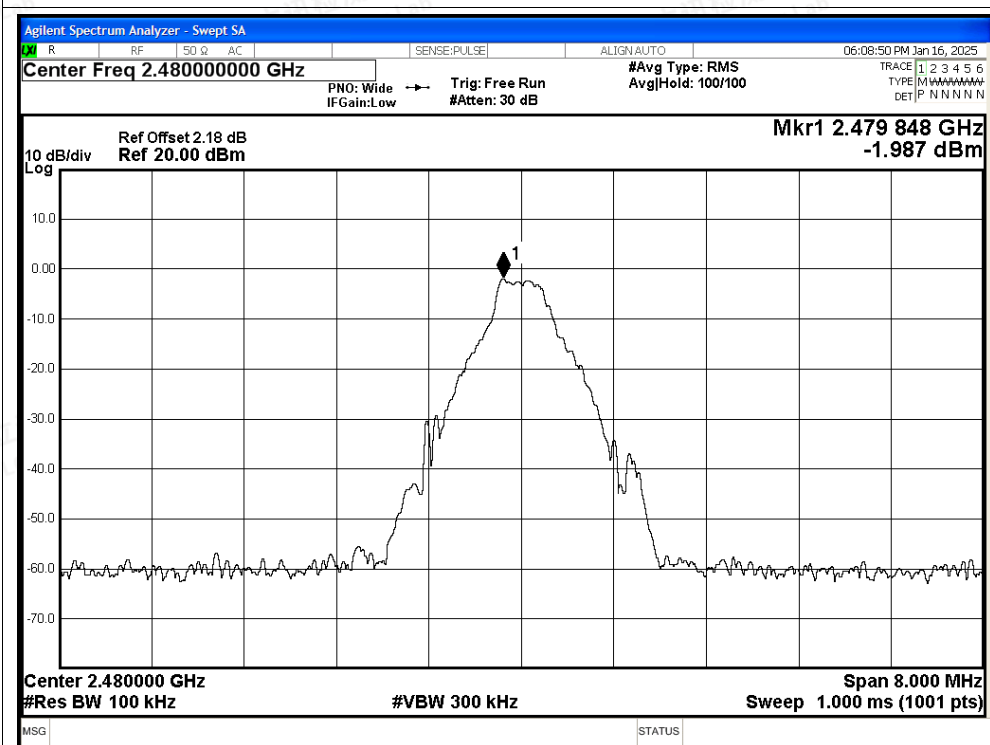


Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

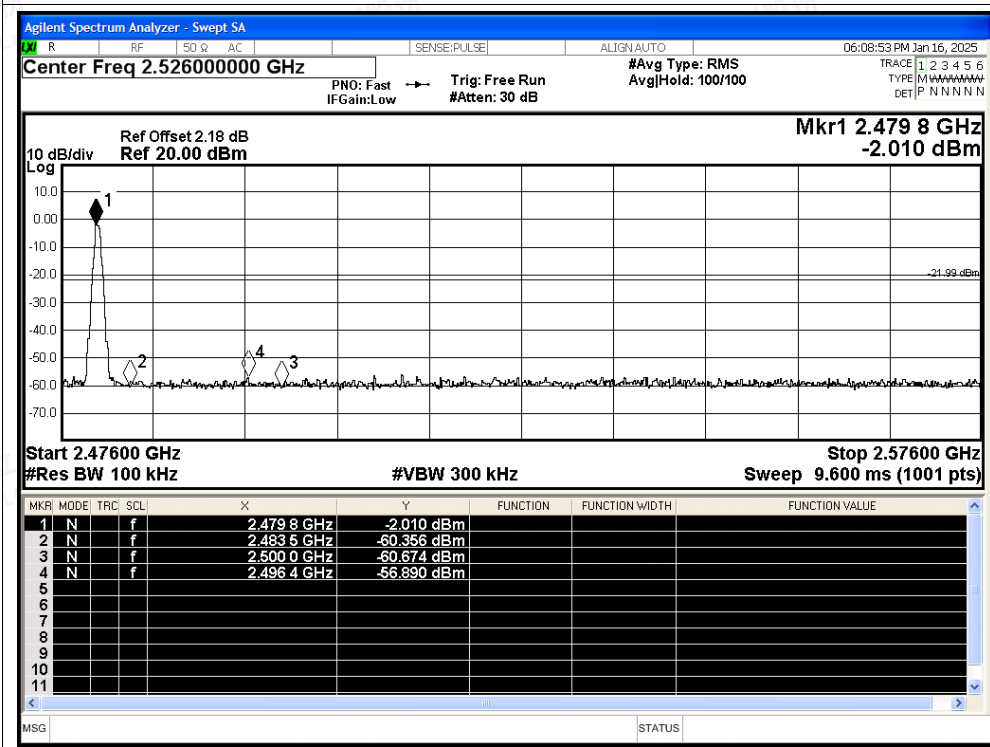




Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

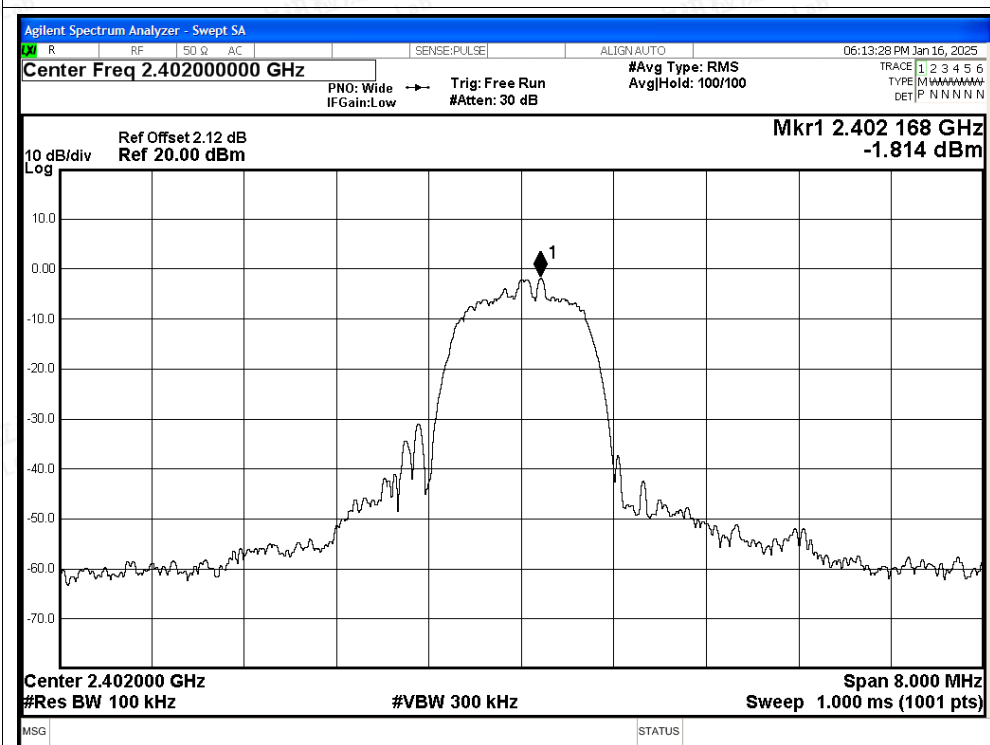


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

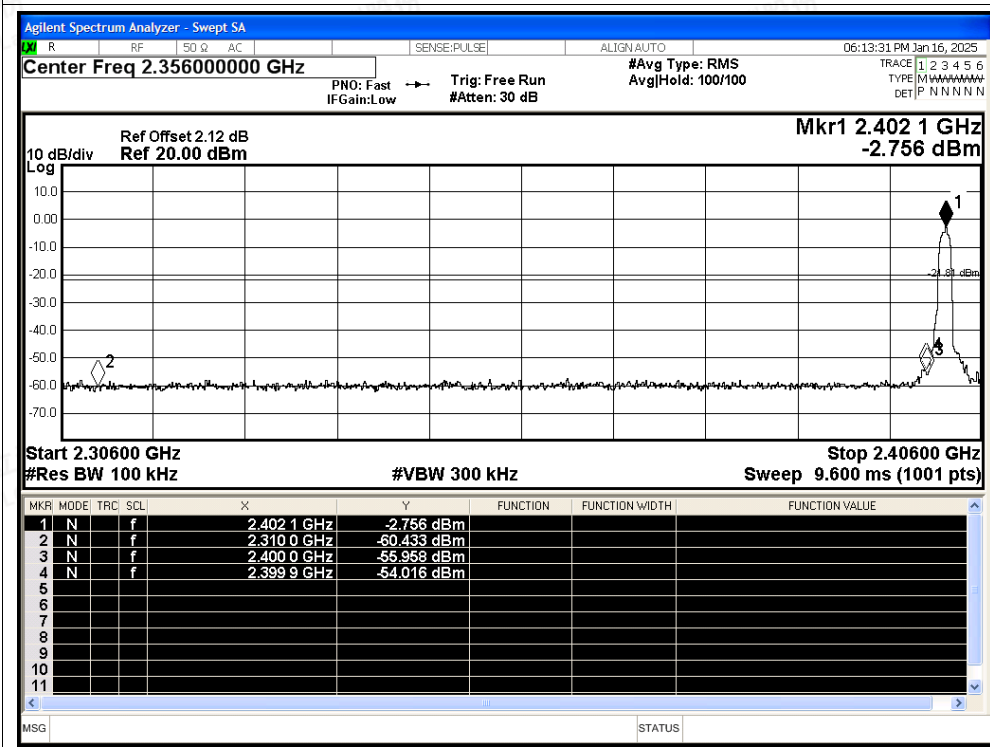




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref

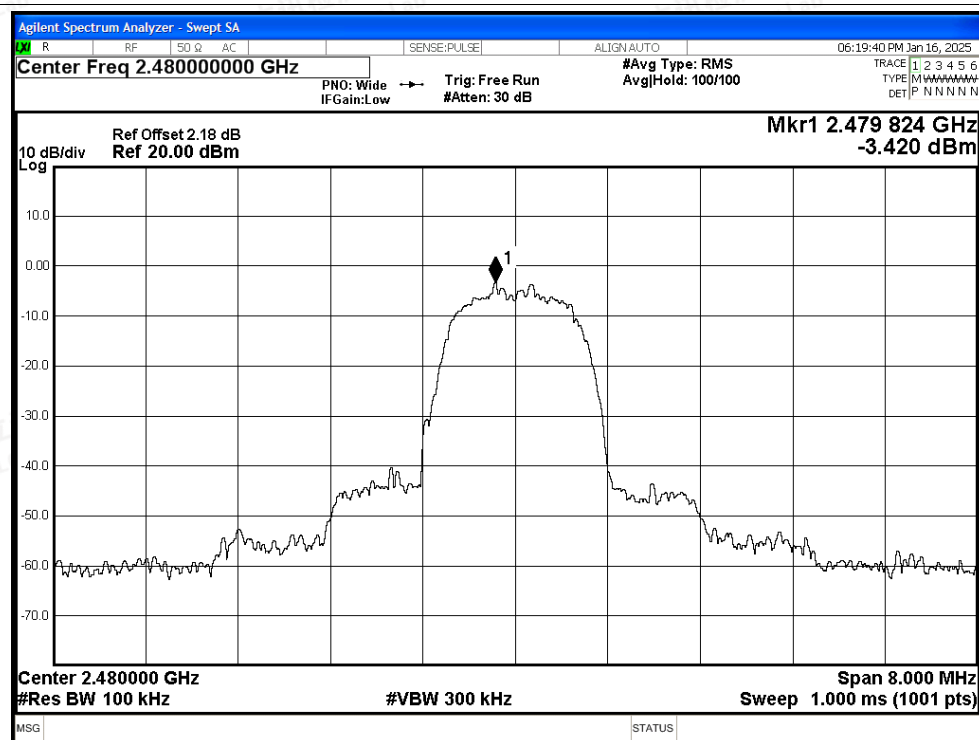


Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

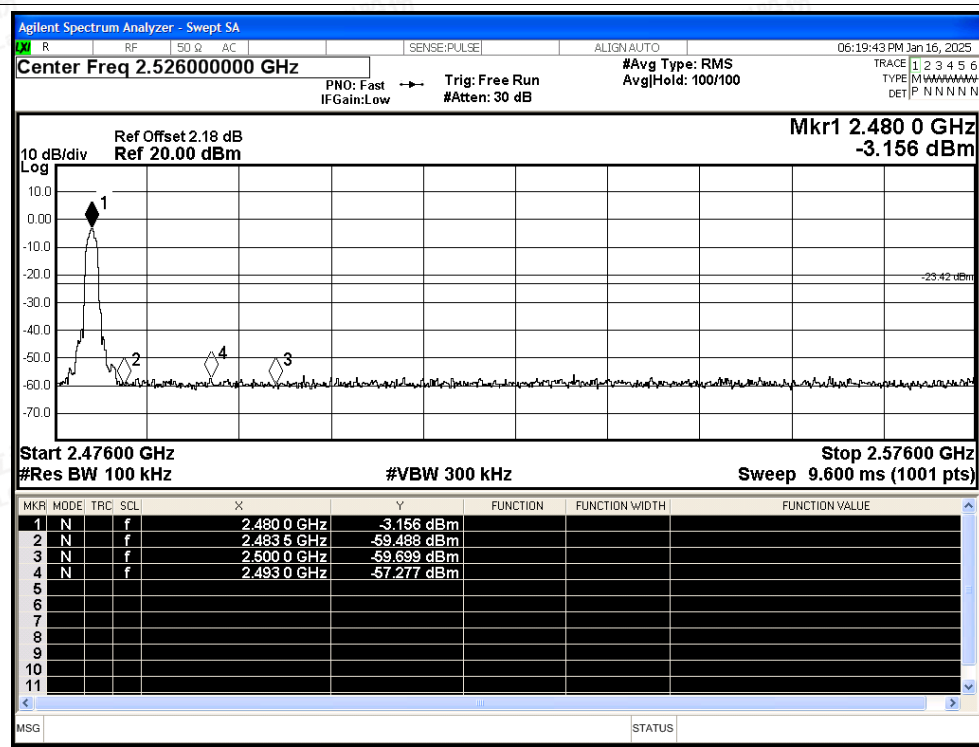




Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



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





(Hopping)

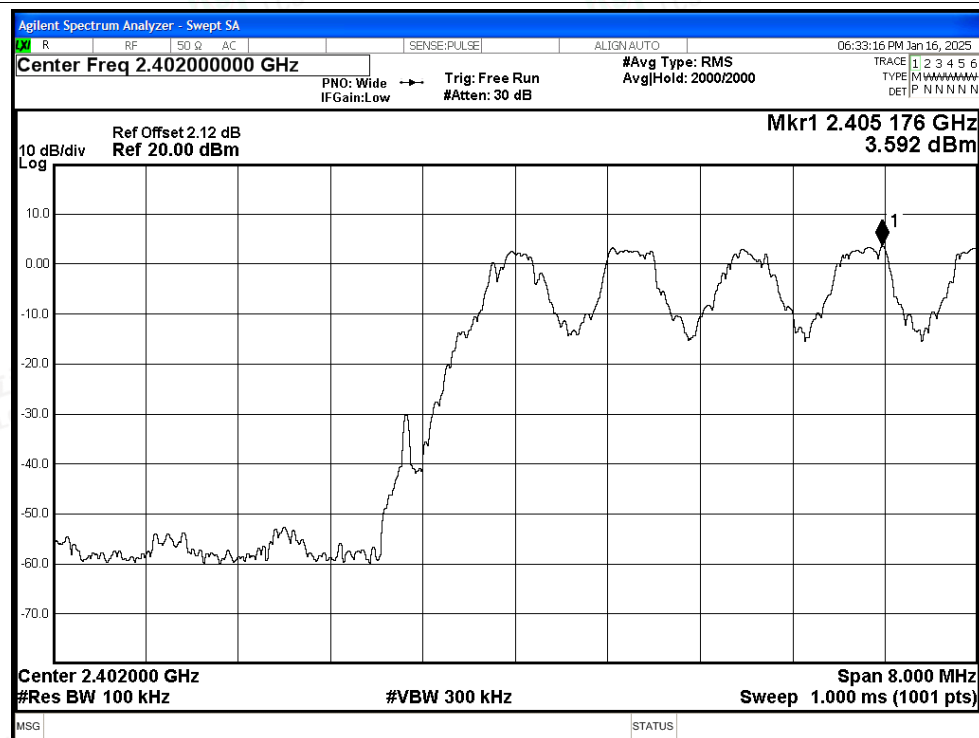
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-60.09	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.19	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-59.75	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-54.78	-20	Pass



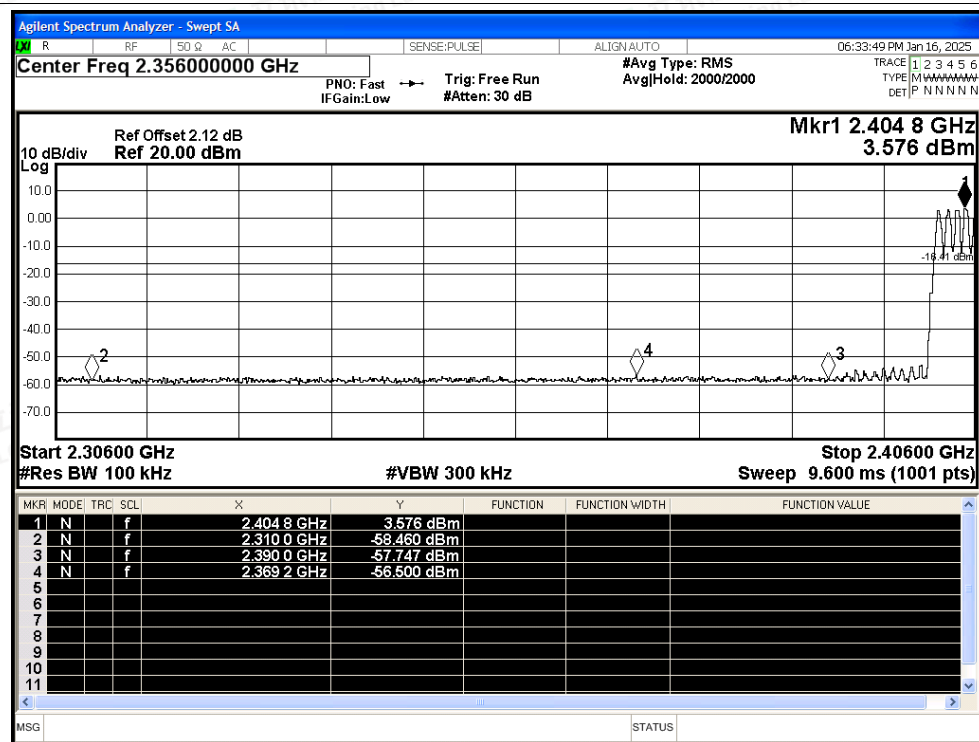


Test Graphs

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

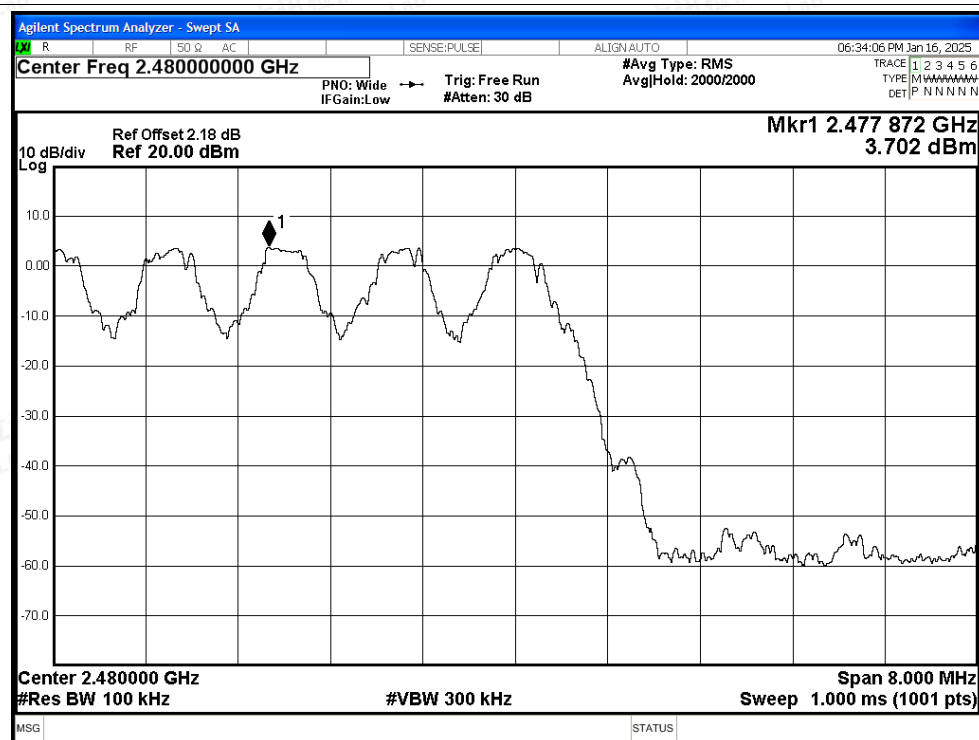


Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission

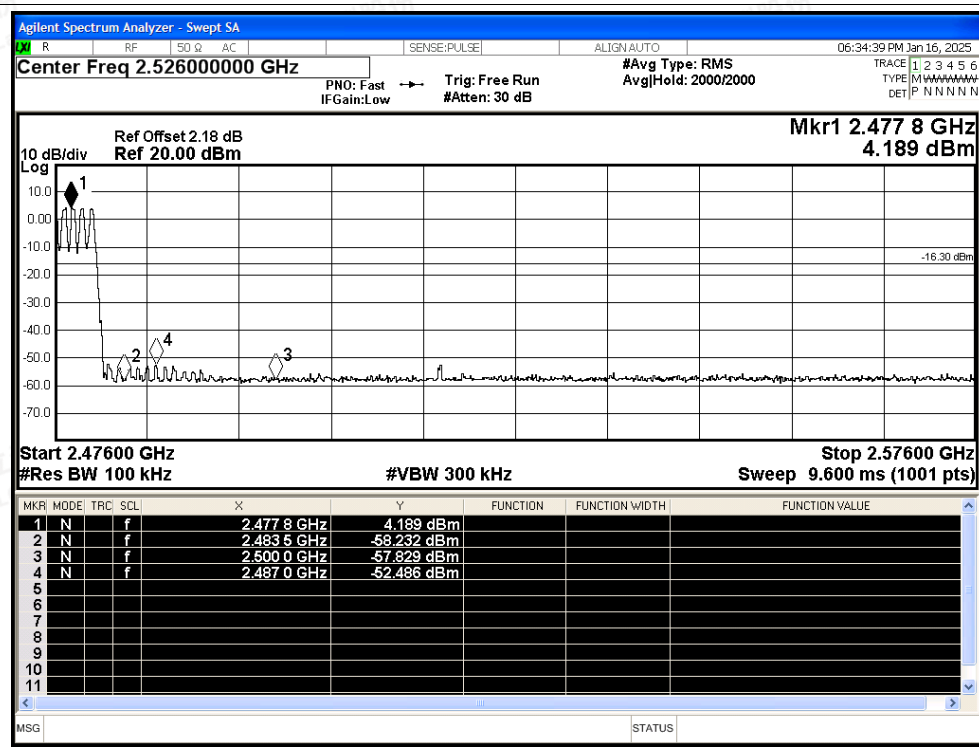


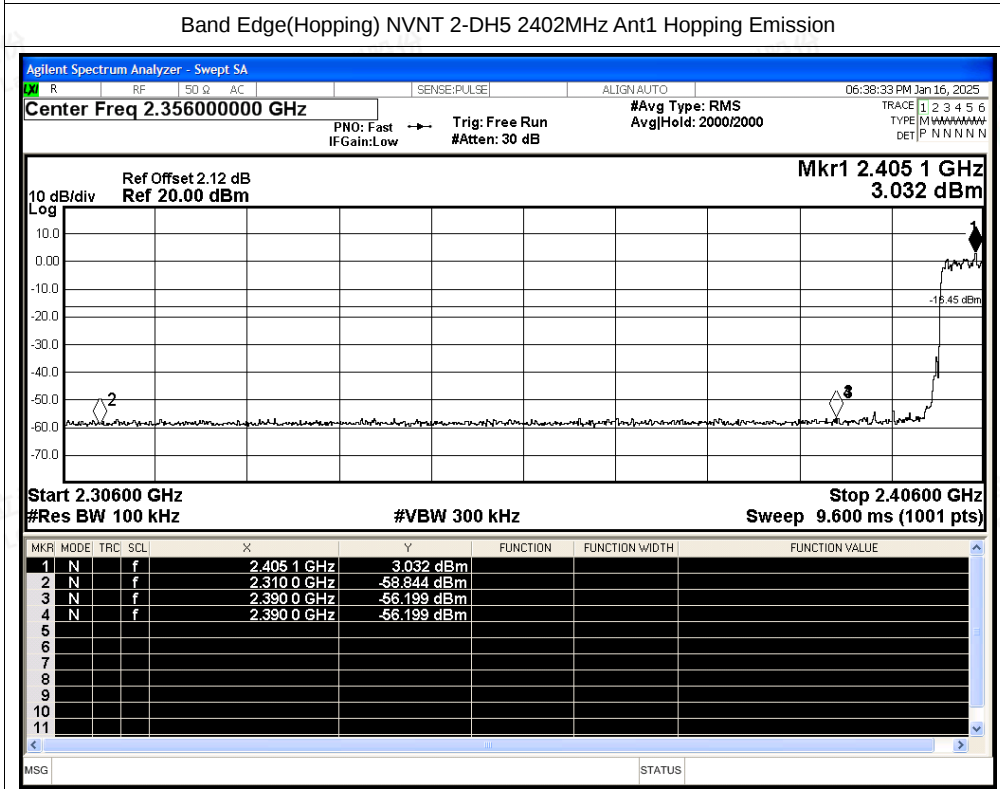
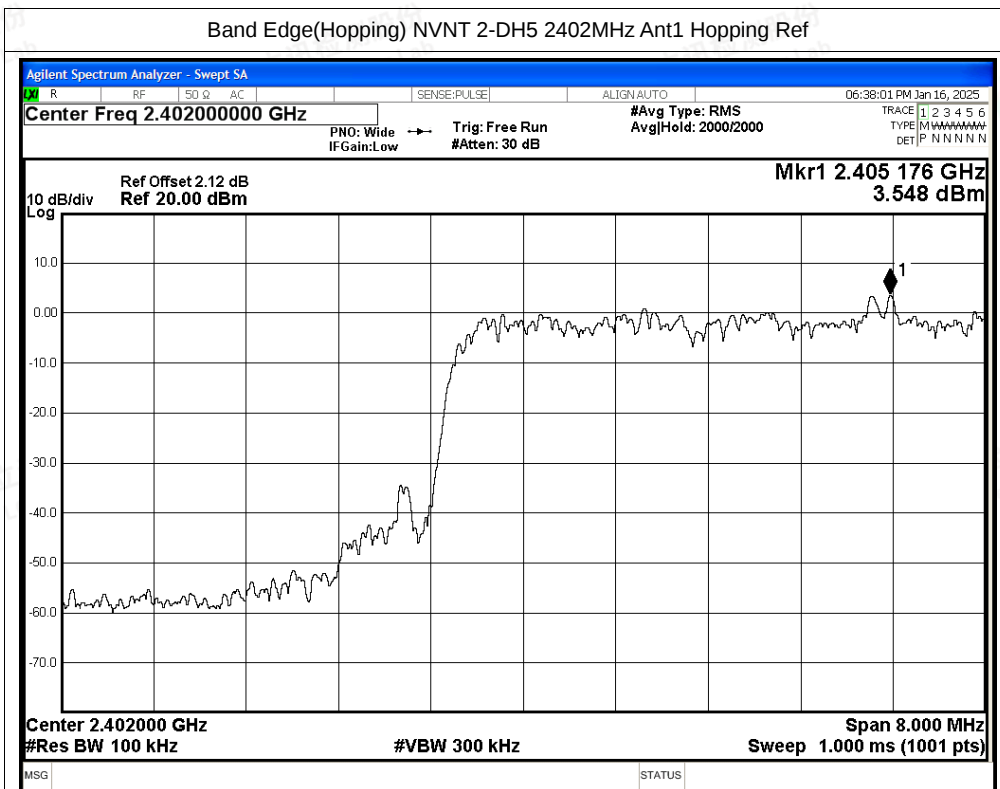


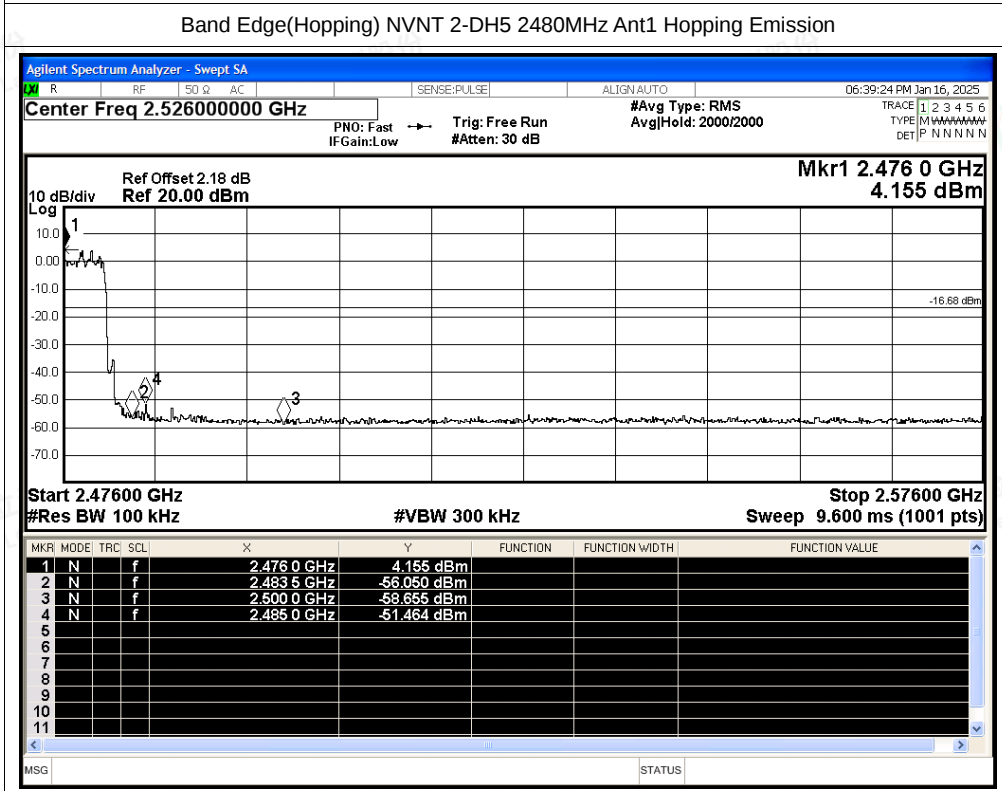
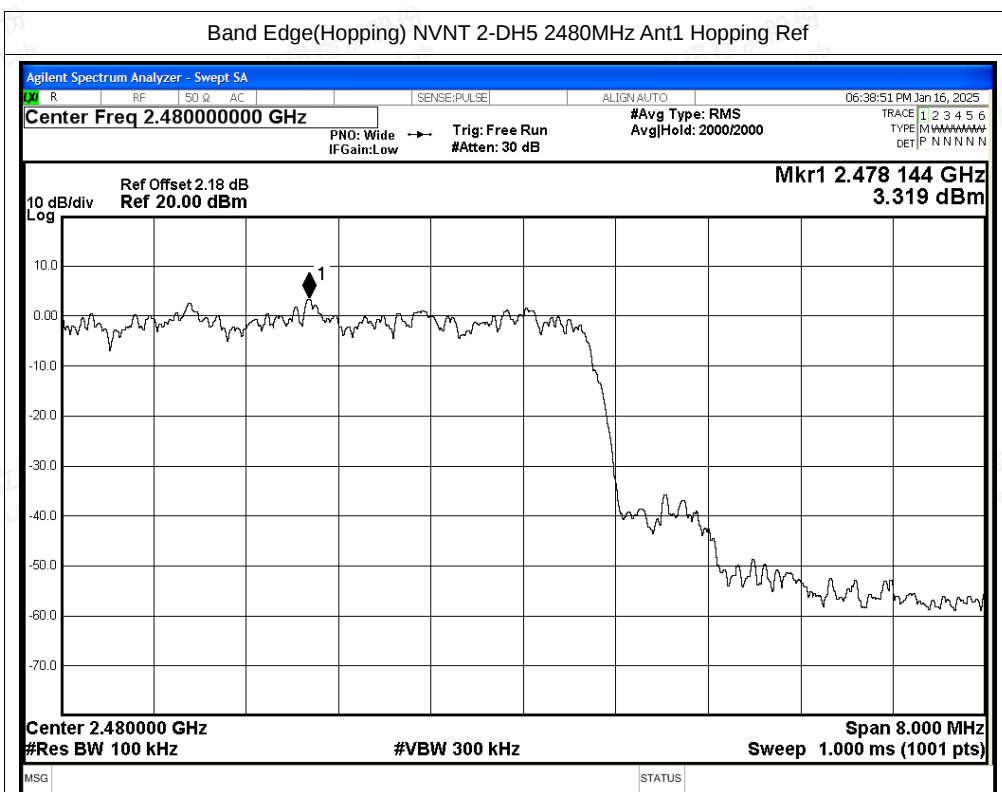
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



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









A.7 Conducted RF Spurious Emission

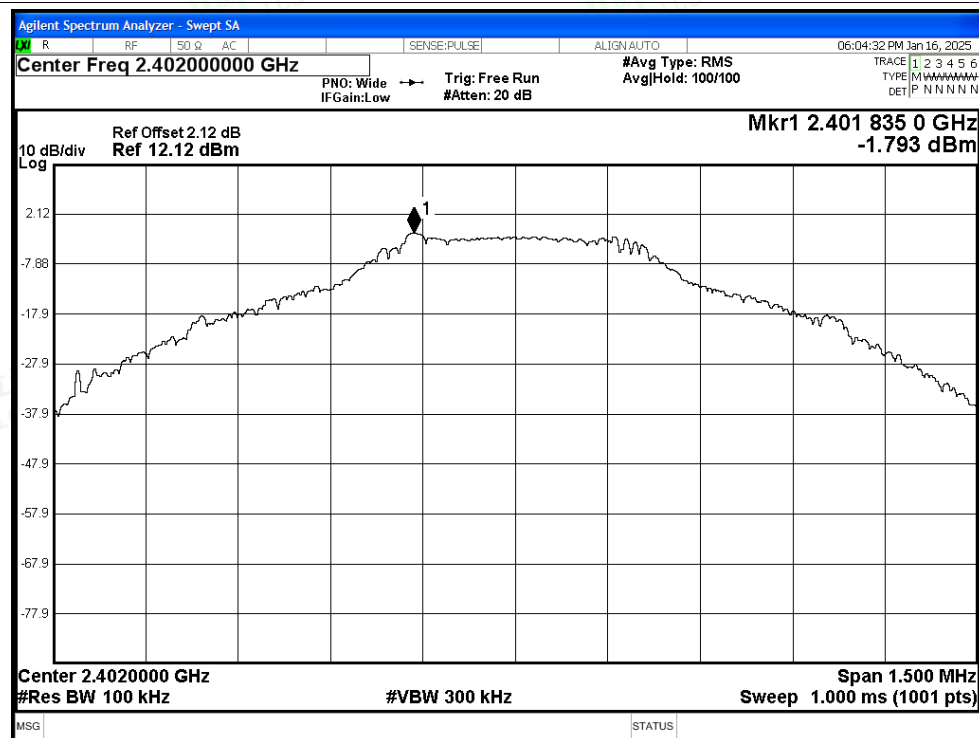
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-53.7	-20	Pass
NVNT	1-DH5	2441	Ant1	-53.14	-20	Pass
NVNT	1-DH5	2480	Ant1	-53.15	-20	Pass
NVNT	2-DH5	2402	Ant1	-53.77	-20	Pass
NVNT	2-DH5	2441	Ant1	-53.91	-20	Pass
NVNT	2-DH5	2480	Ant1	-52.93	-20	Pass



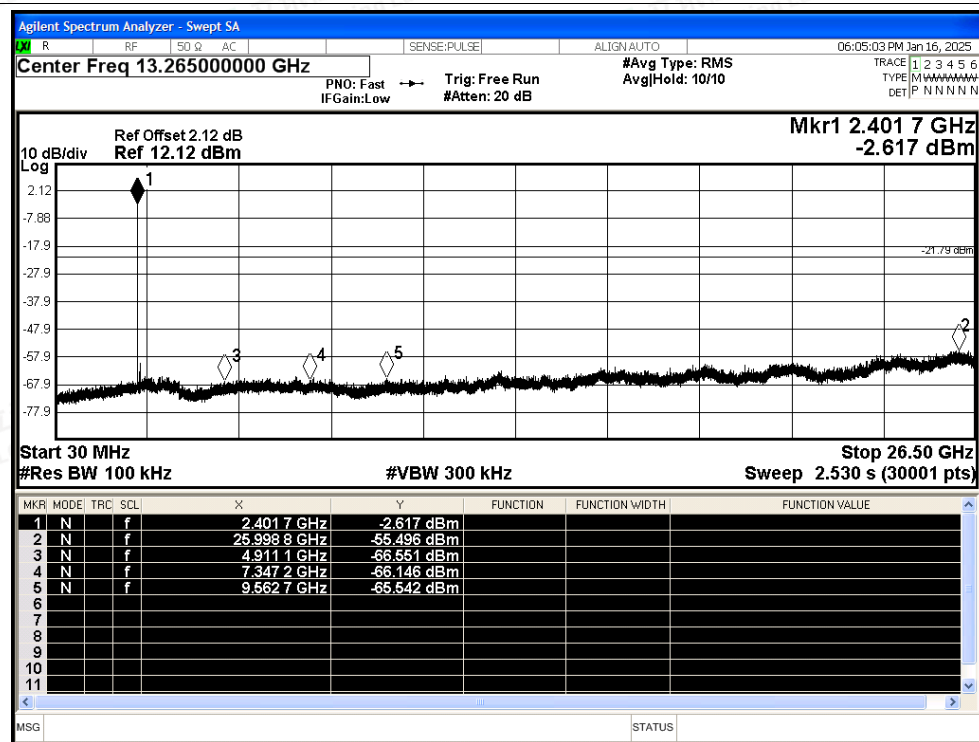


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

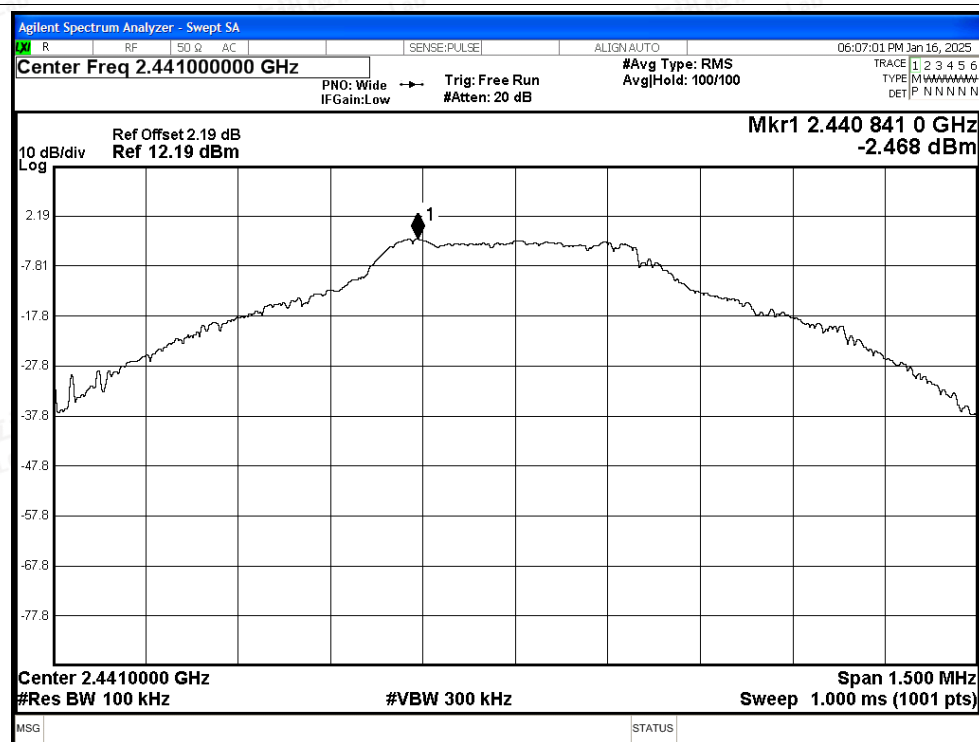


Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

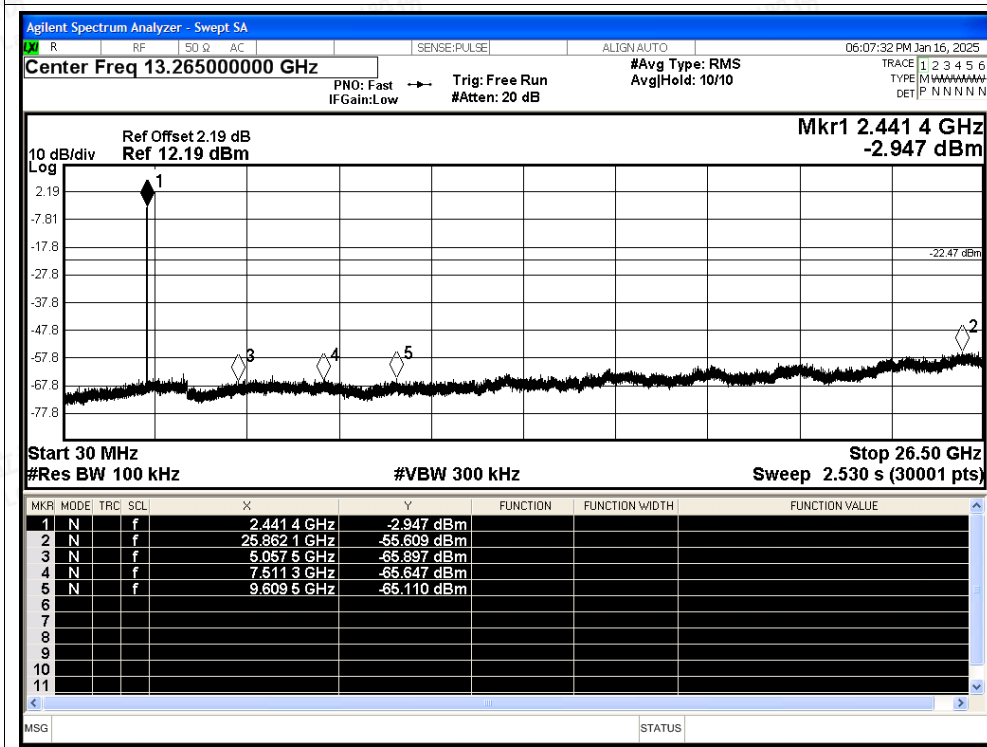




Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

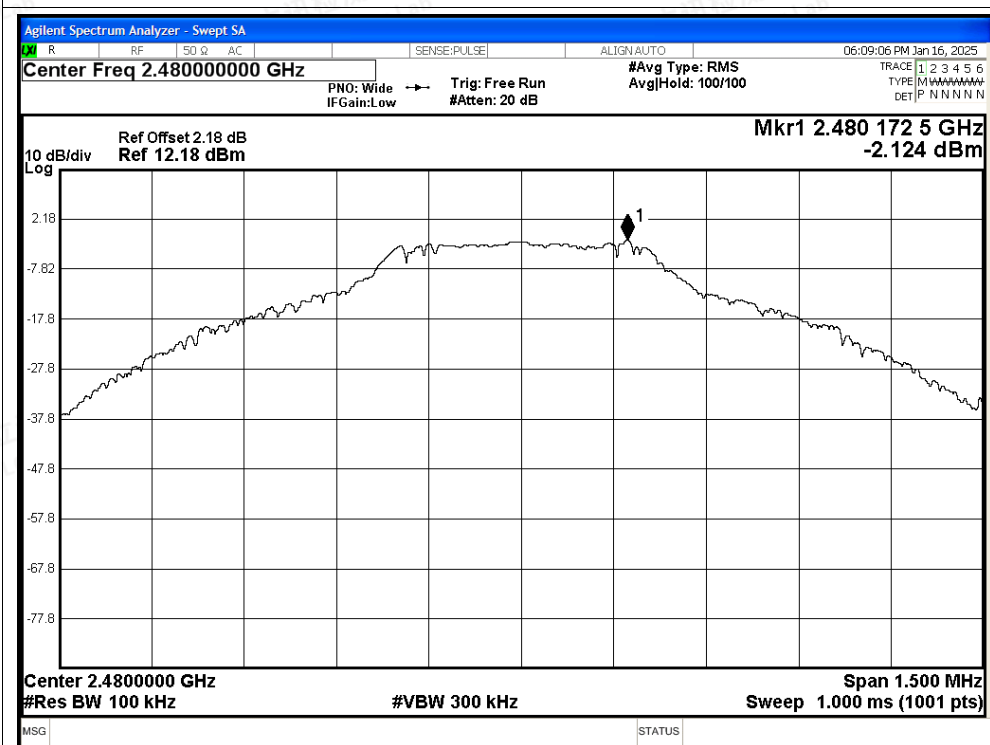


Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

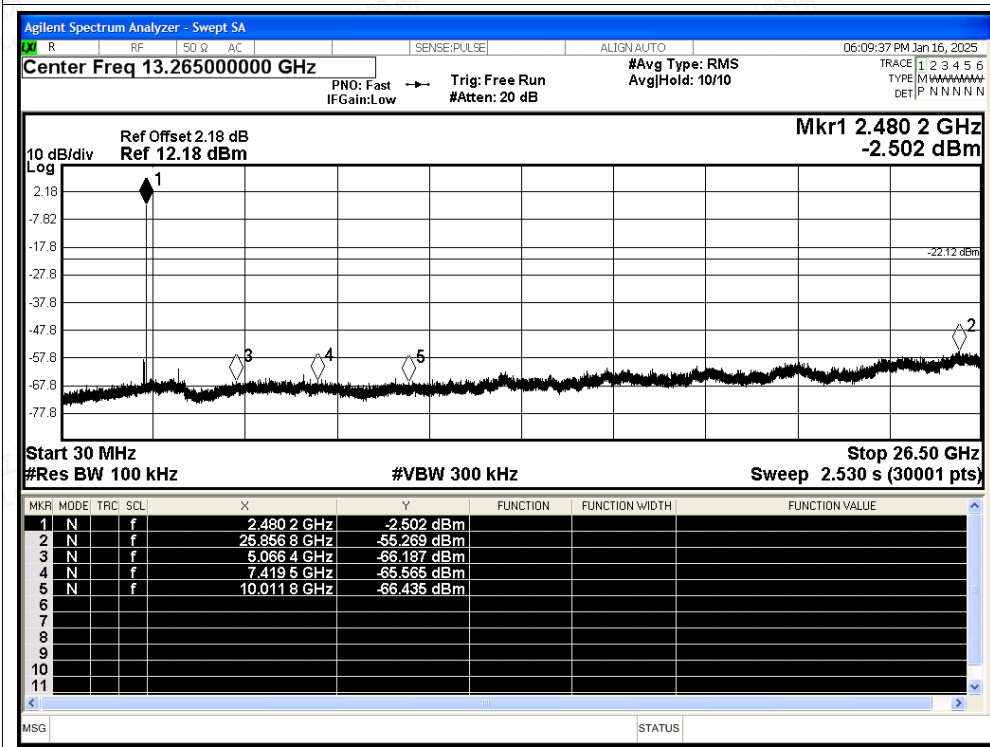




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

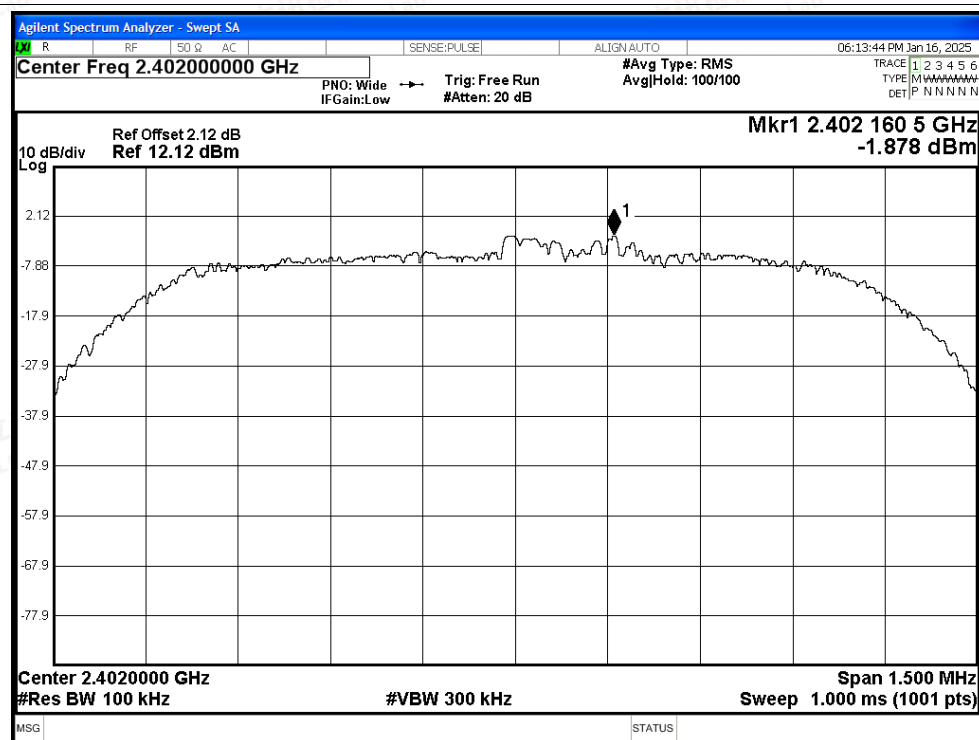


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

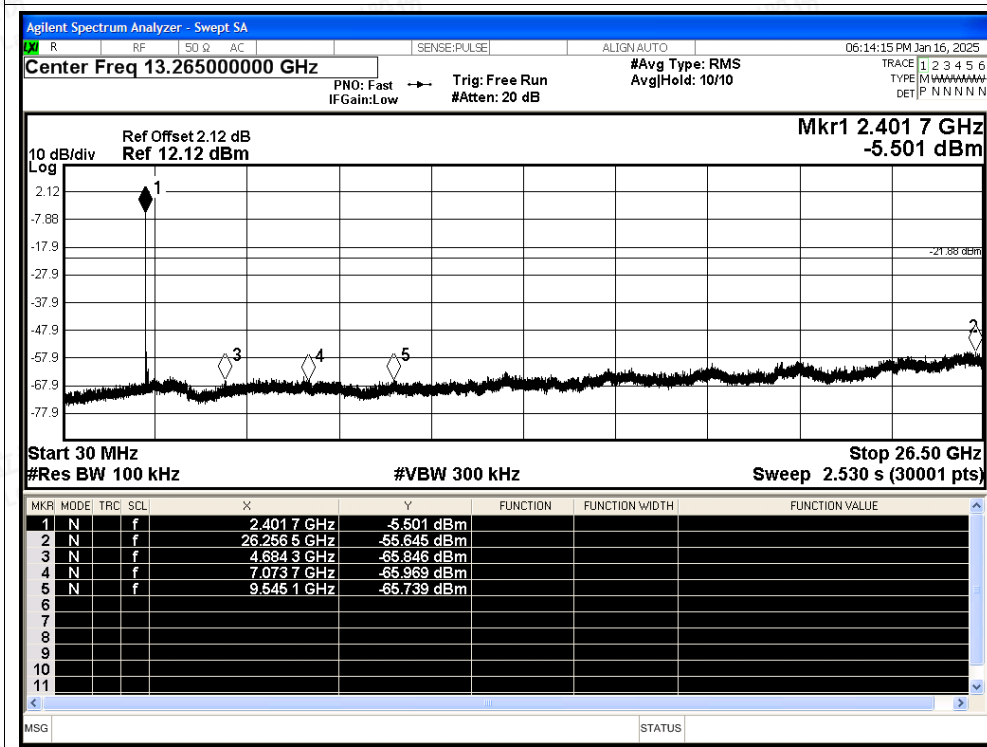




Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref

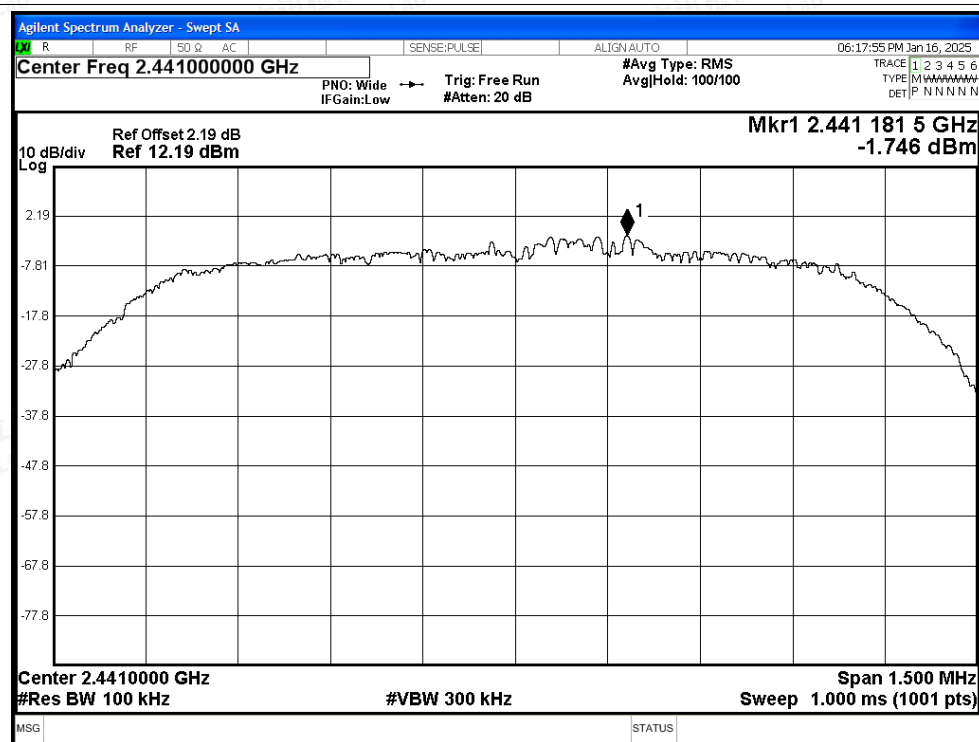


Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission

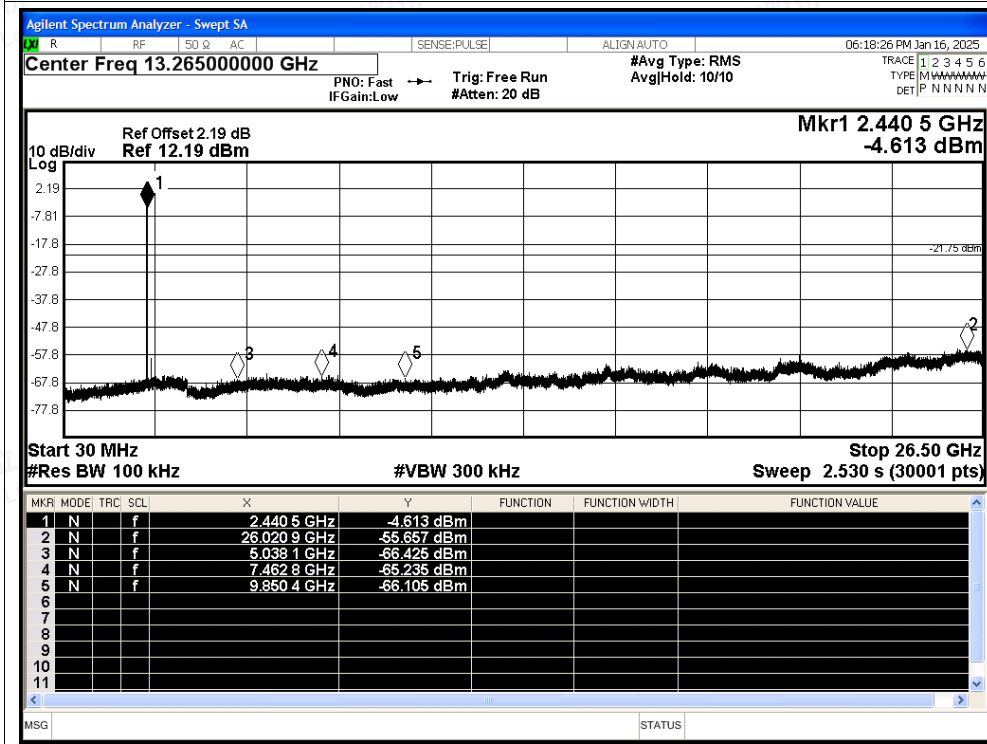




Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref

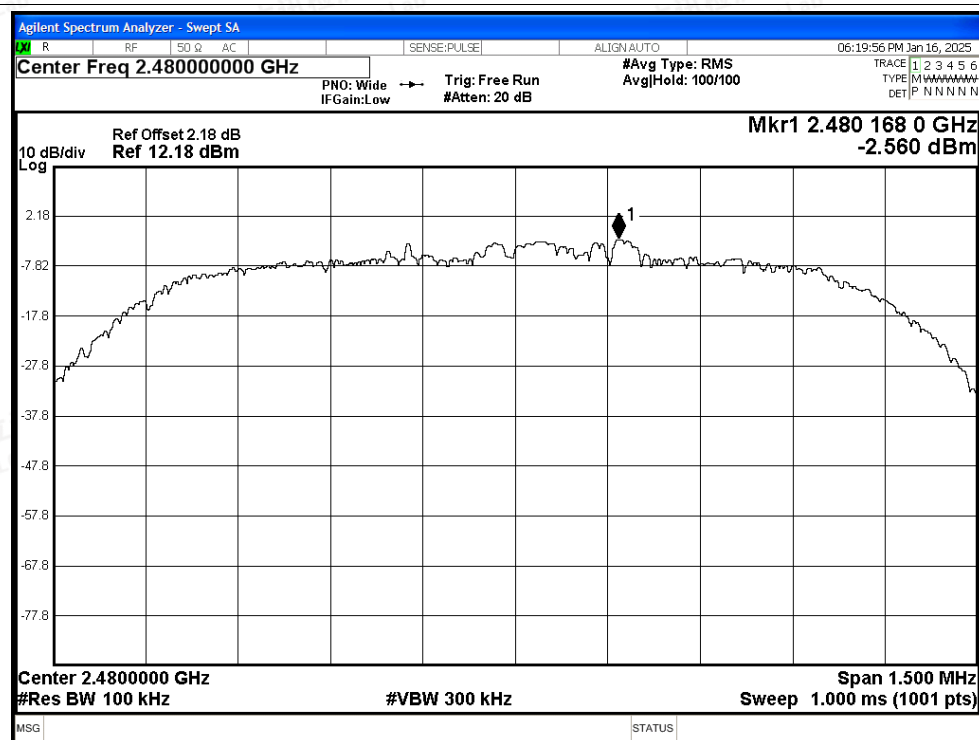


Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission

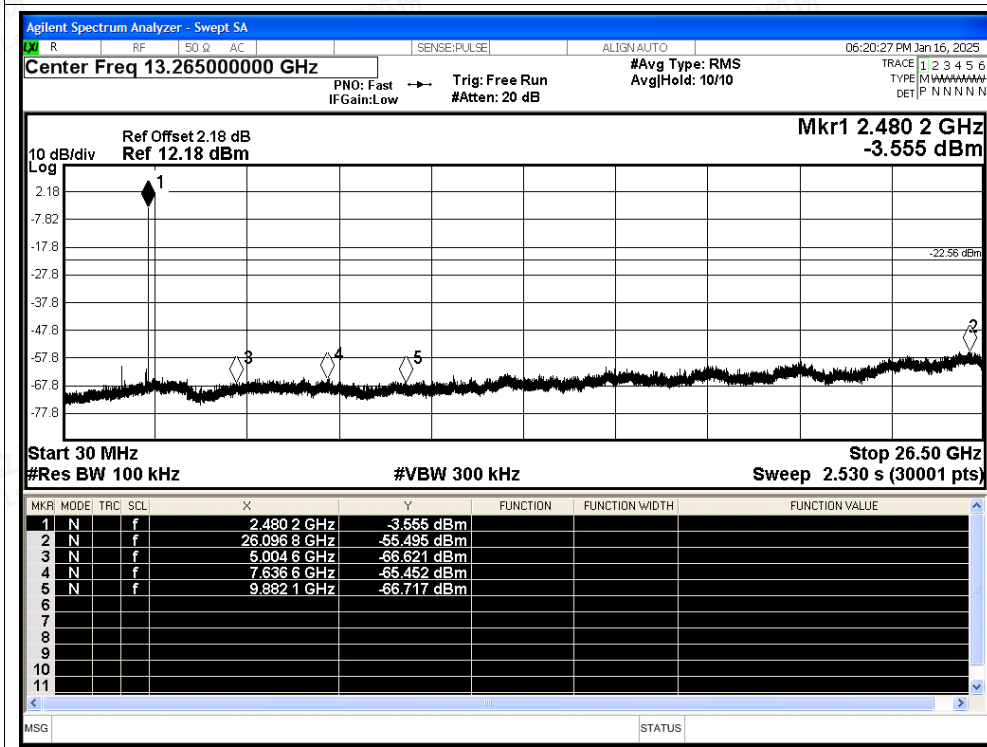




Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission





A.8 Duty Cycle

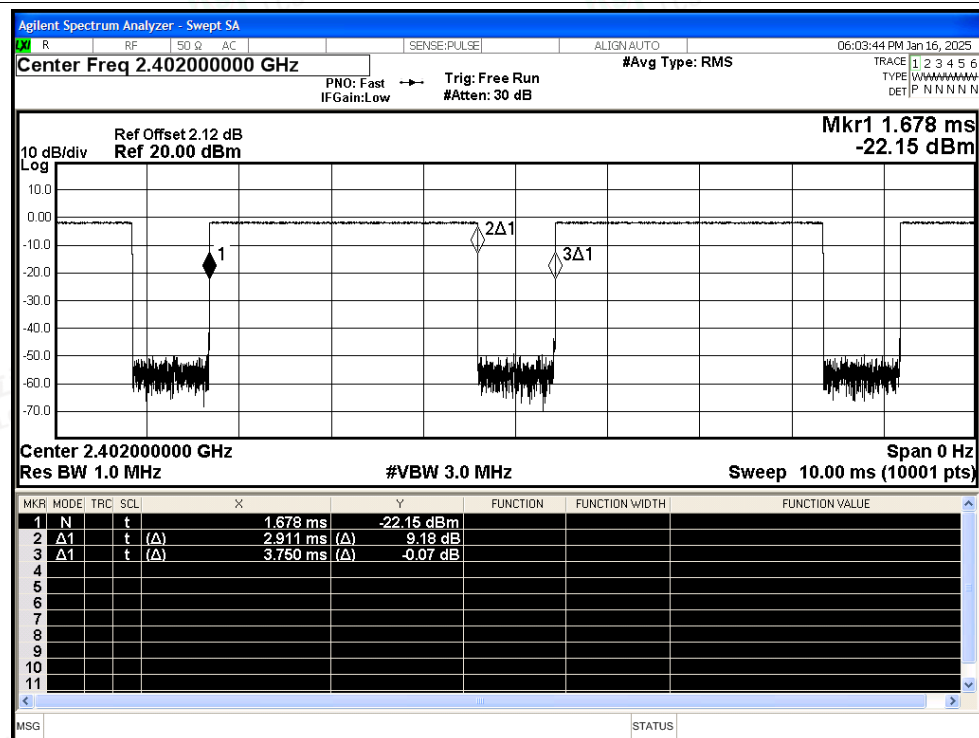
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	77.63	1.1	0.34
NVNT	1-DH5	2441	Ant1	77.63	1.1	0.34
NVNT	1-DH5	2480	Ant1	77.6	1.1	0.34
NVNT	2-DH5	2402	Ant1	77.33	1.12	0.34
NVNT	2-DH5	2441	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2480	Ant1	77.33	1.12	0.34



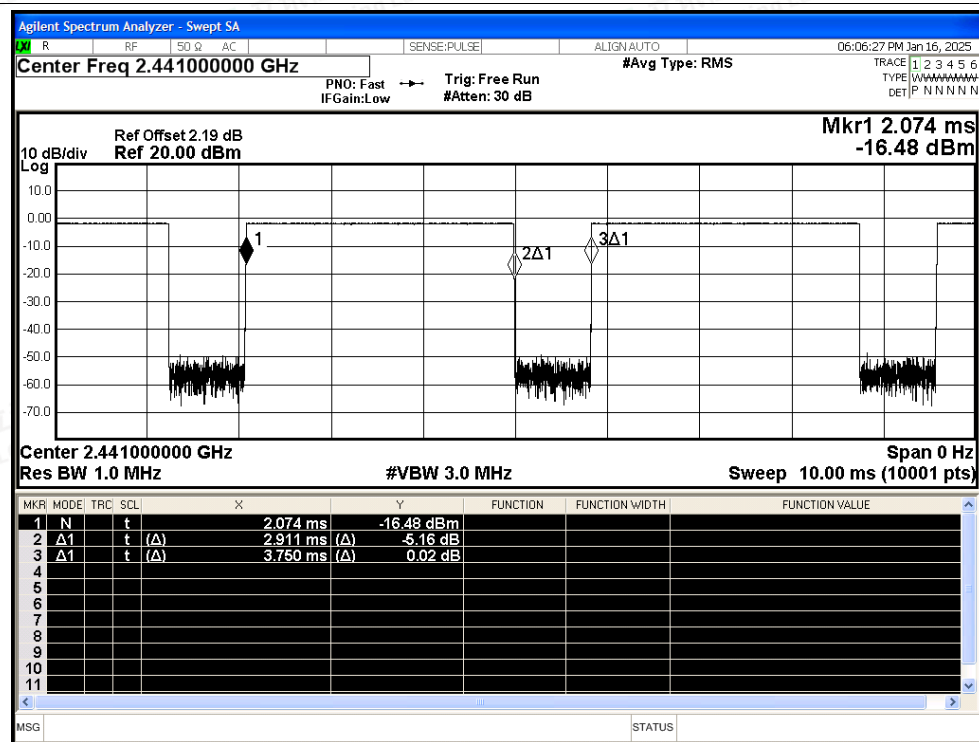


Test Graphs

Duty Cycle NVNT 1-DH5 2402MHz Ant1

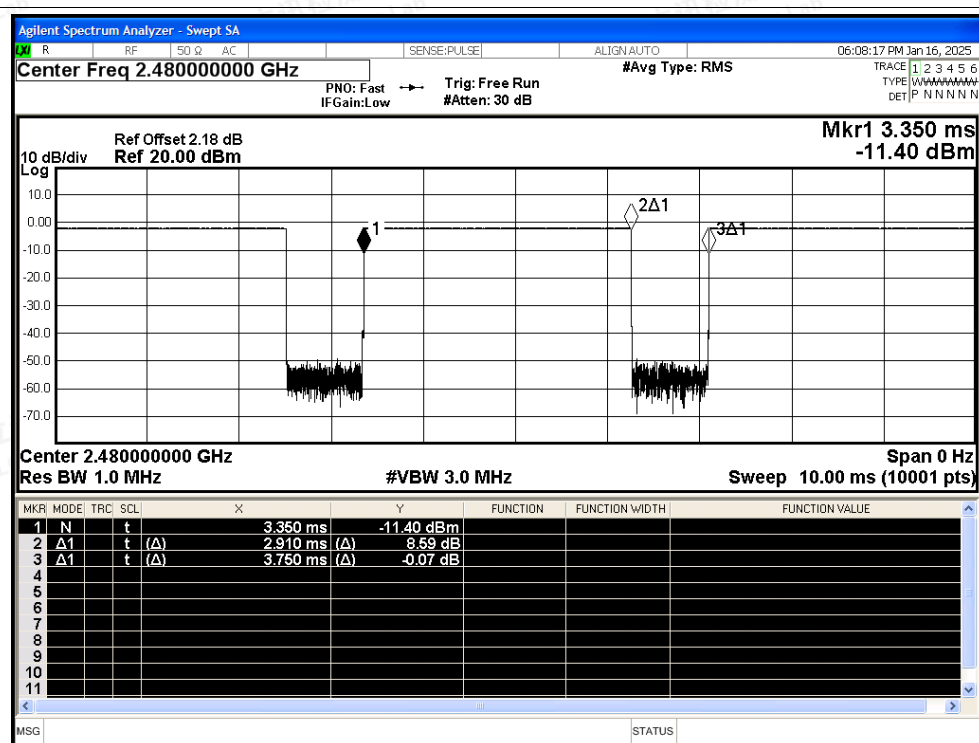


Duty Cycle NVNT 1-DH5 2441MHz Ant1

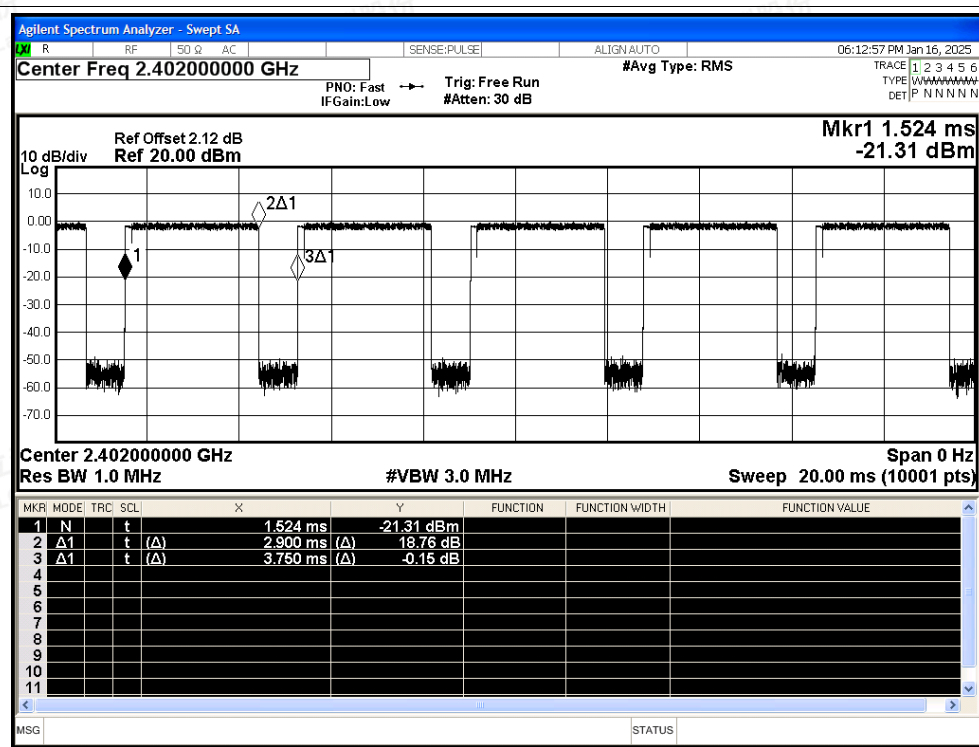




Duty Cycle NVNT 1-DH5 2480MHz Ant1

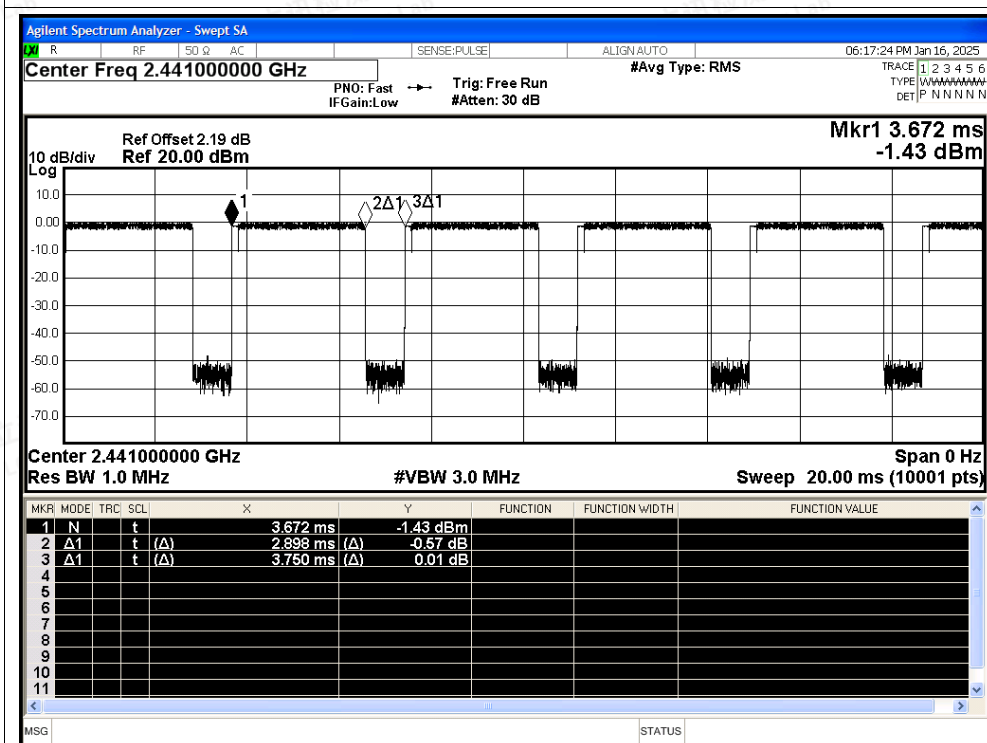


Duty Cycle NVNT 2-DH5 2402MHz Ant1

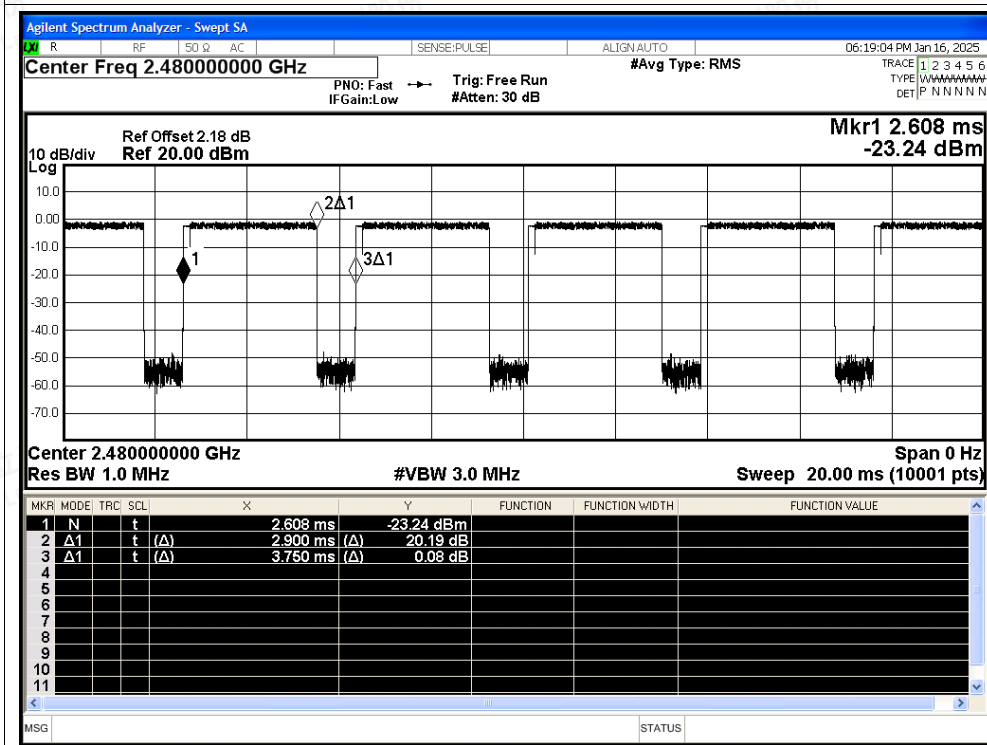




Duty Cycle NVNT 2-DH5 2441MHz Ant1



Duty Cycle NVNT 2-DH5 2480MHz Ant1





A.9 Restrict Band

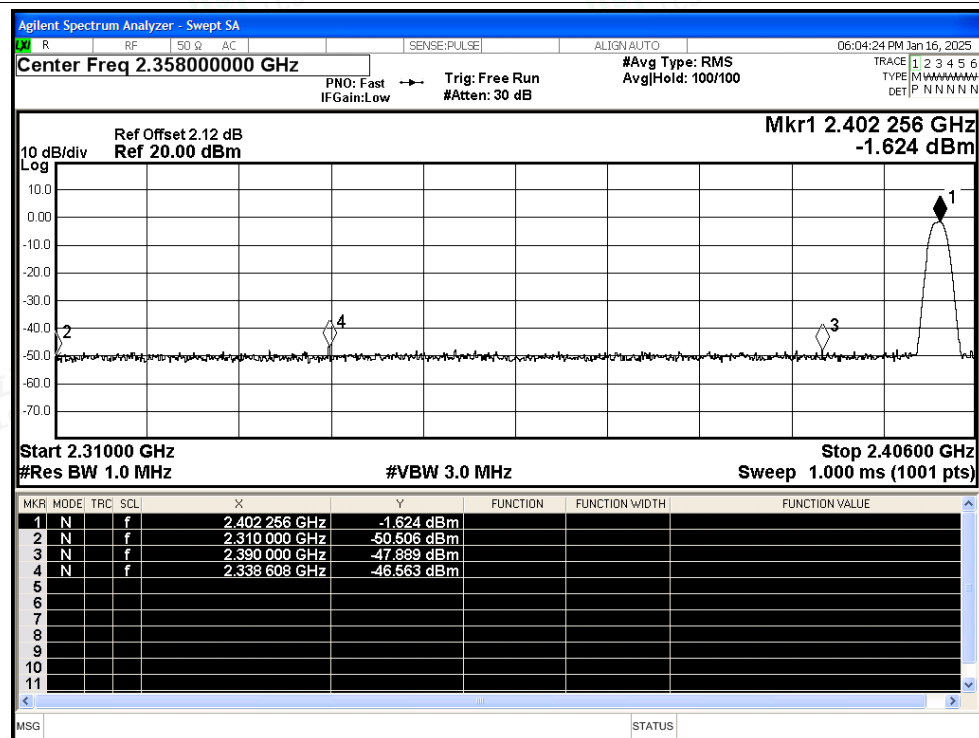
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-50.51	2.09	-	46.84	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.99	2.09	1.1	39.46	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2338.608	-46.56	2.09	-	50.79	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2387.28	-57.82	2.09	1.1	40.63	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-47.89	2.09	-	49.46	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.54	2.09	1.1	39.91	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.76	2.09	-	46.59	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-57.41	2.09	1.1	41.04	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2487.688	-47.2	2.09	-	50.15	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2499.832	-57.31	2.09	1.1	41.14	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-51.18	2.09	-	46.17	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-58.08	2.09	1.1	40.37	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-51.44	2.09	-	45.91	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-58.77	2.09	1.12	39.70	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2375.28	-46.49	2.09	-	50.86	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2376.816	-57.55	2.09	1.12	40.92	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-51.02	2.09	-	46.33	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-58.53	2.09	1.12	39.94	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-48.7	2.09	-	48.65	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-57.46	2.09	1.12	41.01	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2484.04	-47.13	2.09	-	50.22	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2488.168	-57.18	2.09	1.12	41.29	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-49.86	2.09	-	47.49	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-58.01	2.09	1.12	40.46	Average	54	Pass



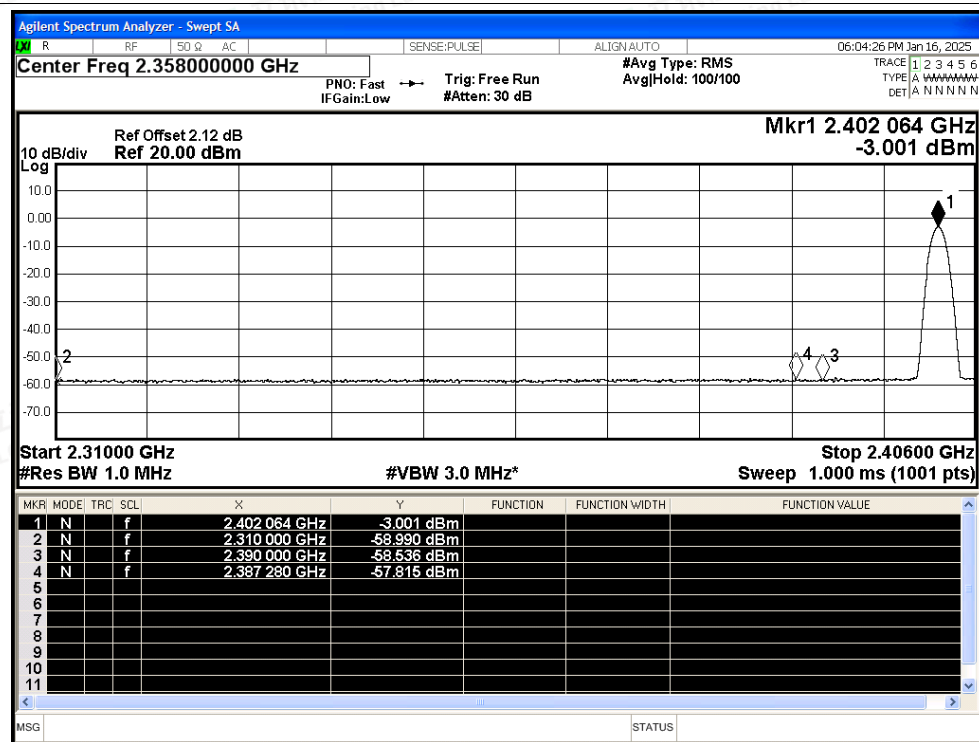


Test Graphs

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

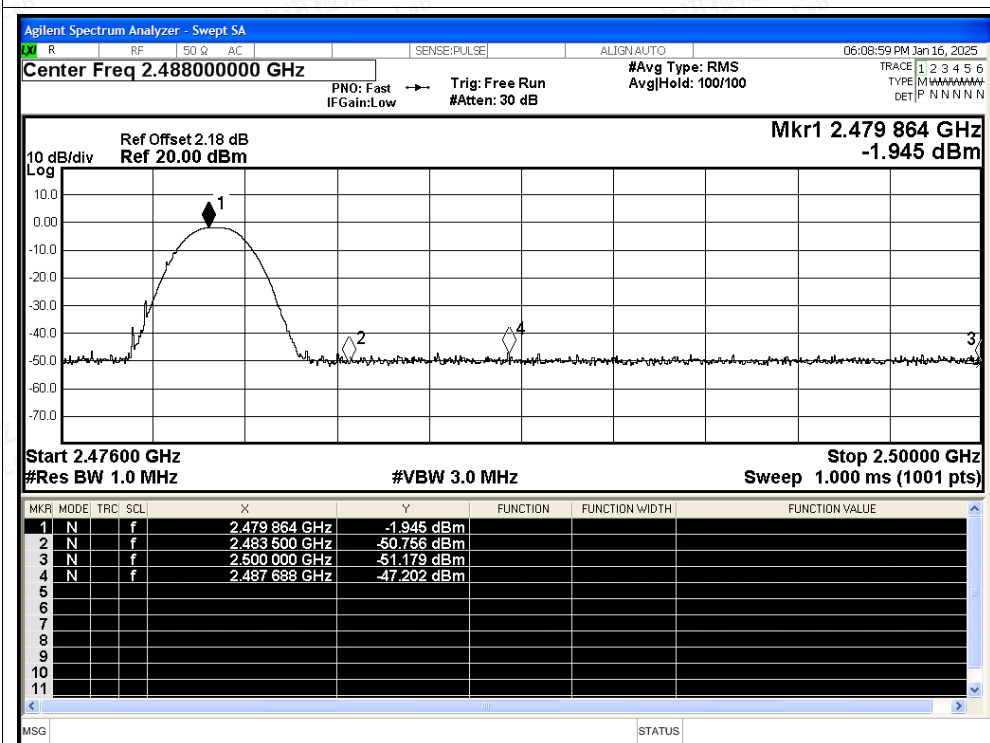


Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

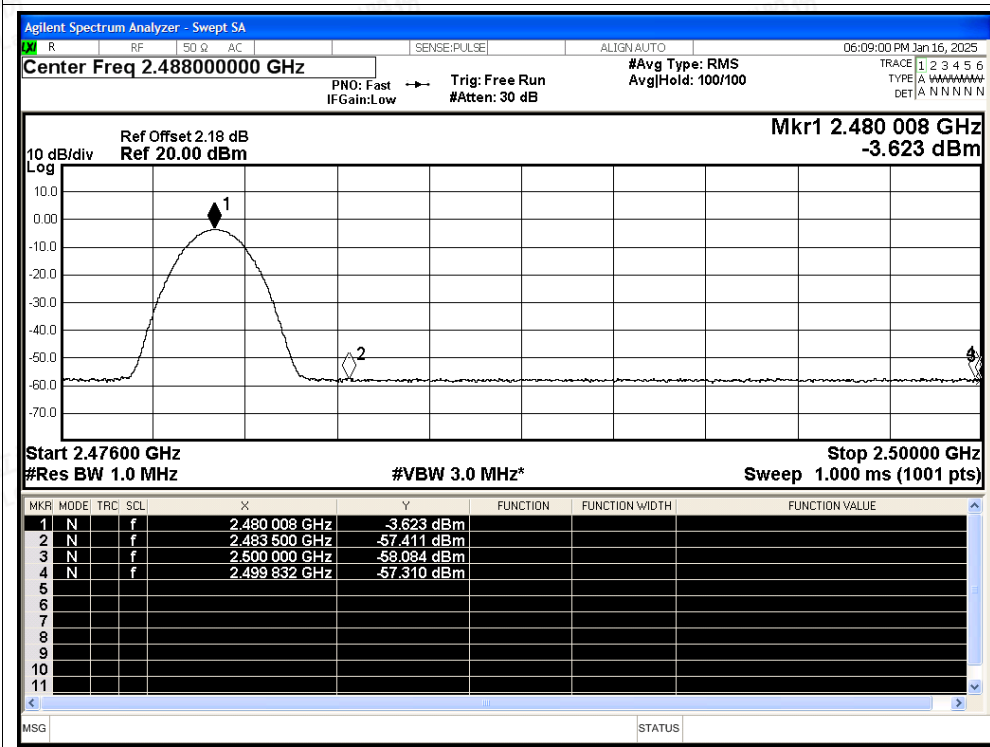




Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak

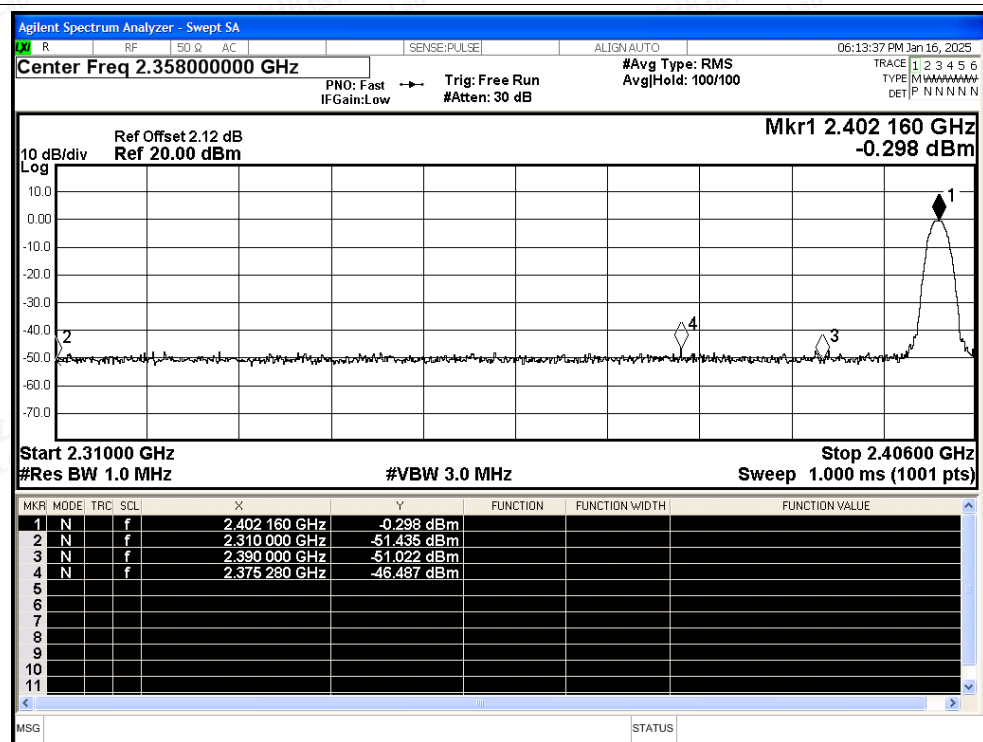


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

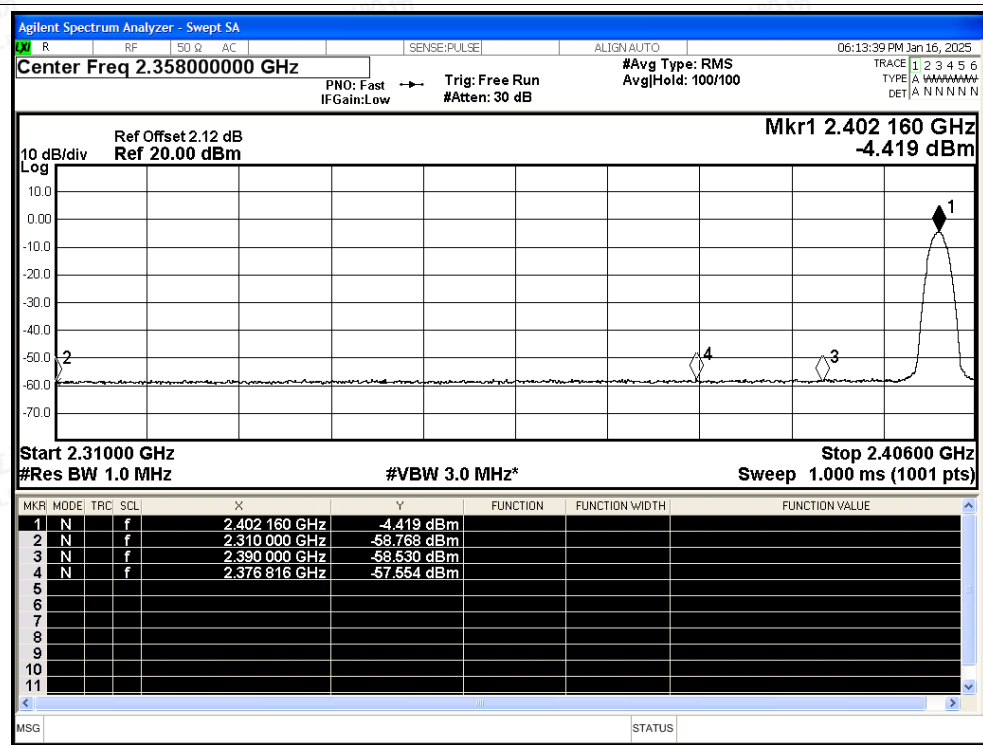




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak

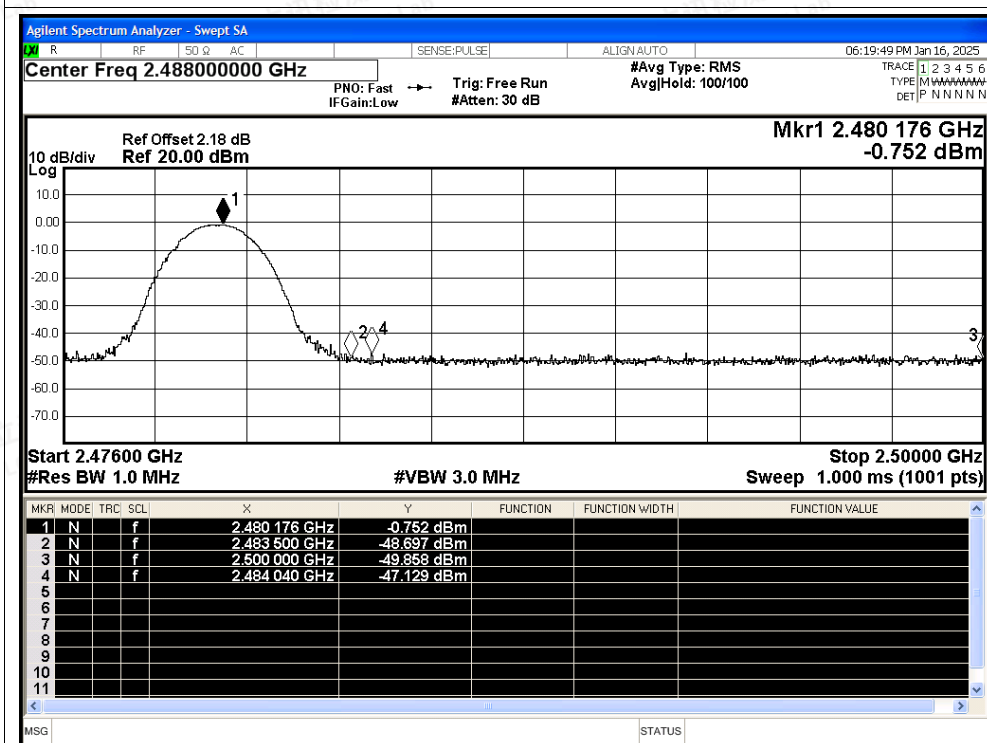


Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average





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



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

