



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: LAPTOP

Test Model: K160

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	Ant1	0.919	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.92	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.929	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.276	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.307	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.279	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.303	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.276	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.294	N/A	Pass





Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

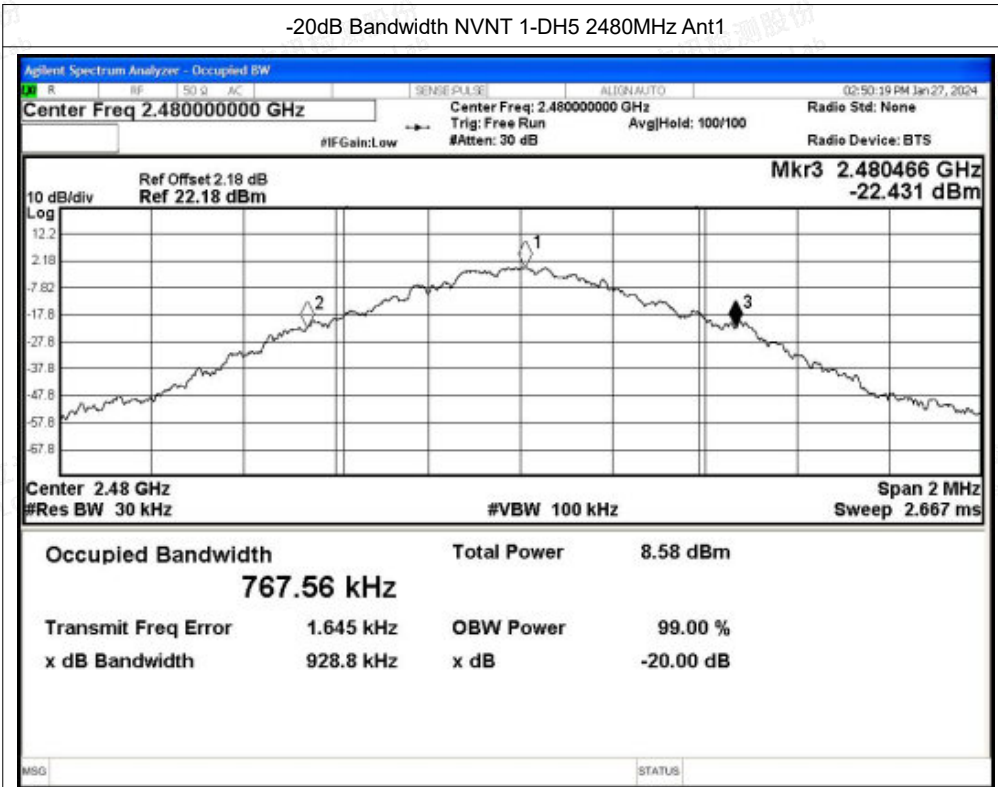


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

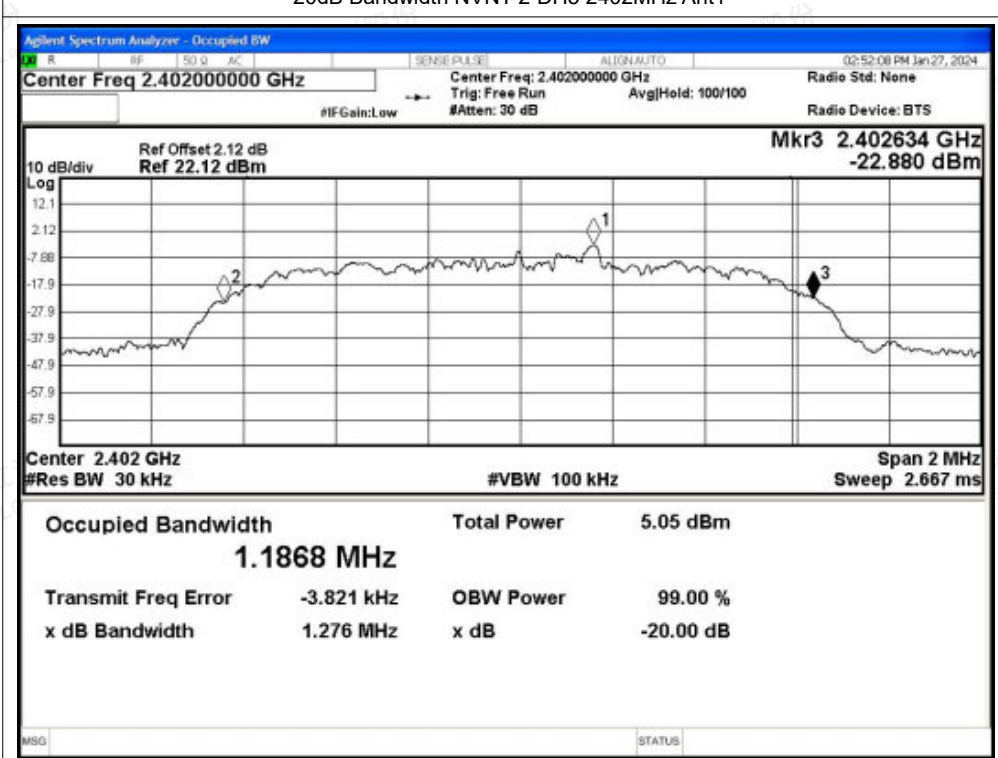




-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

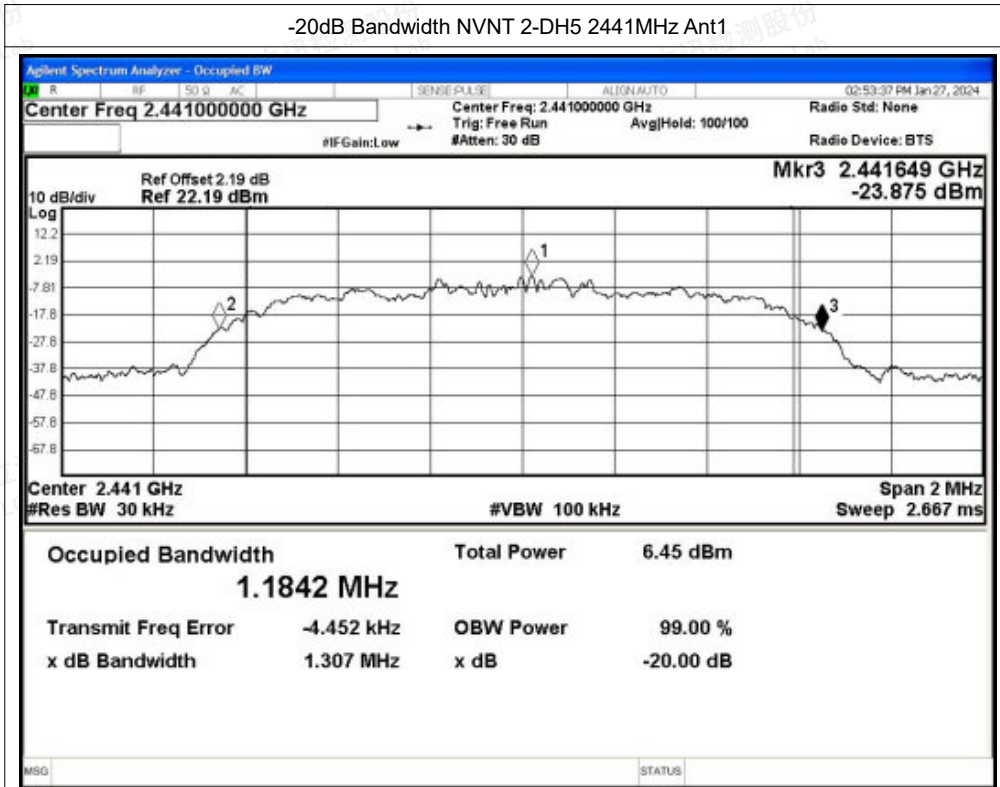


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1

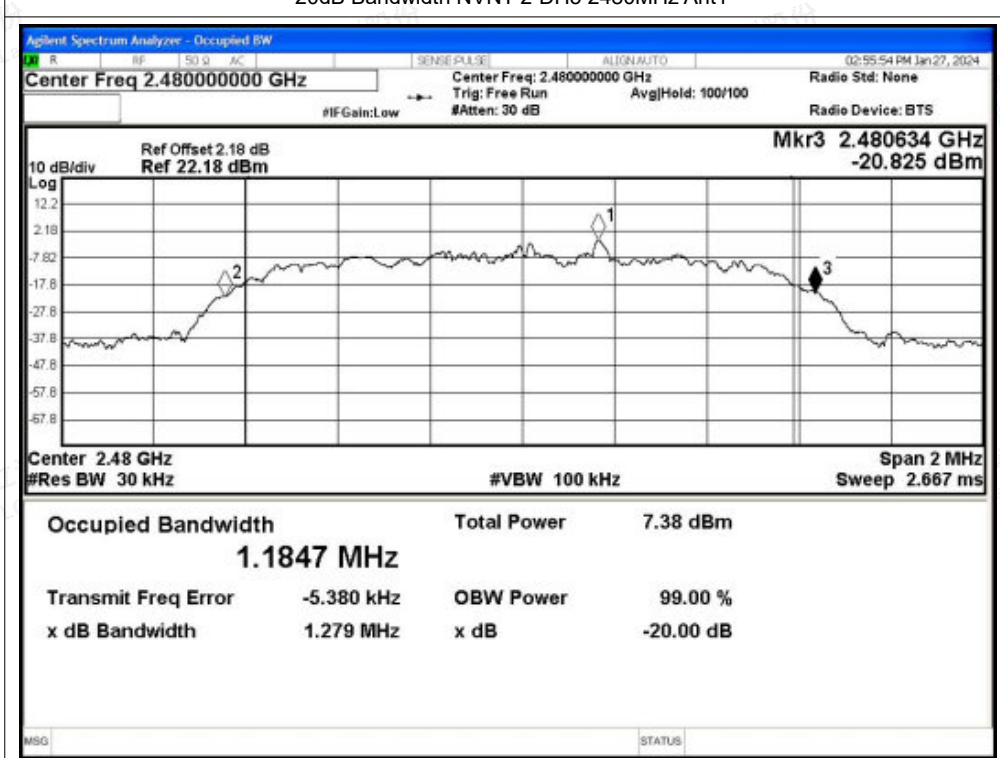




-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1

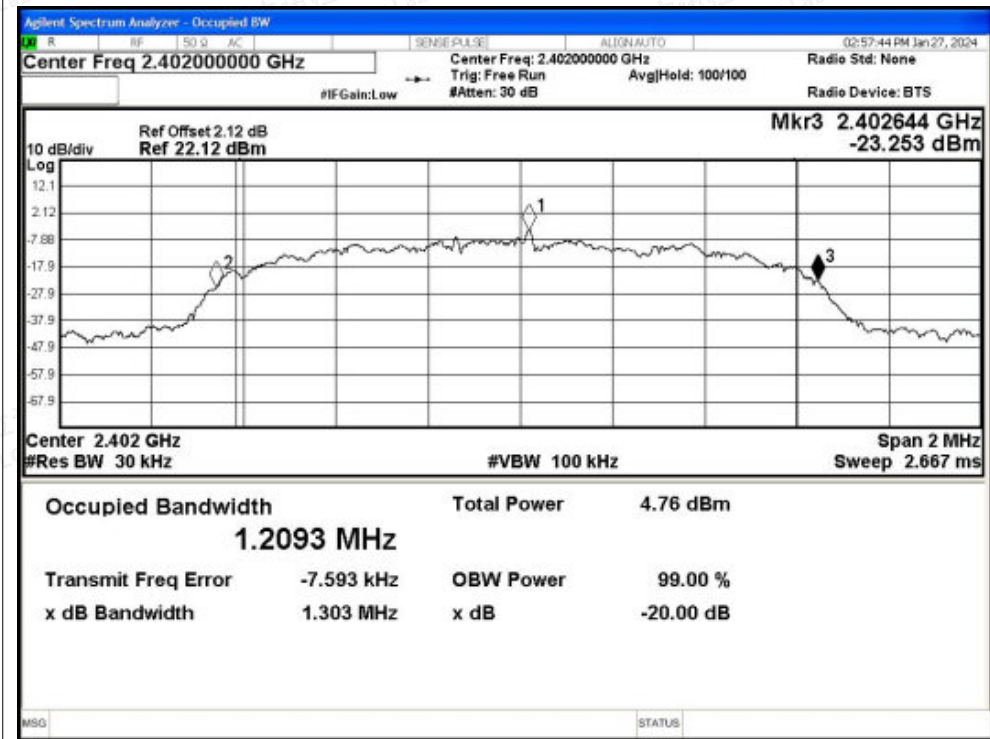


-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

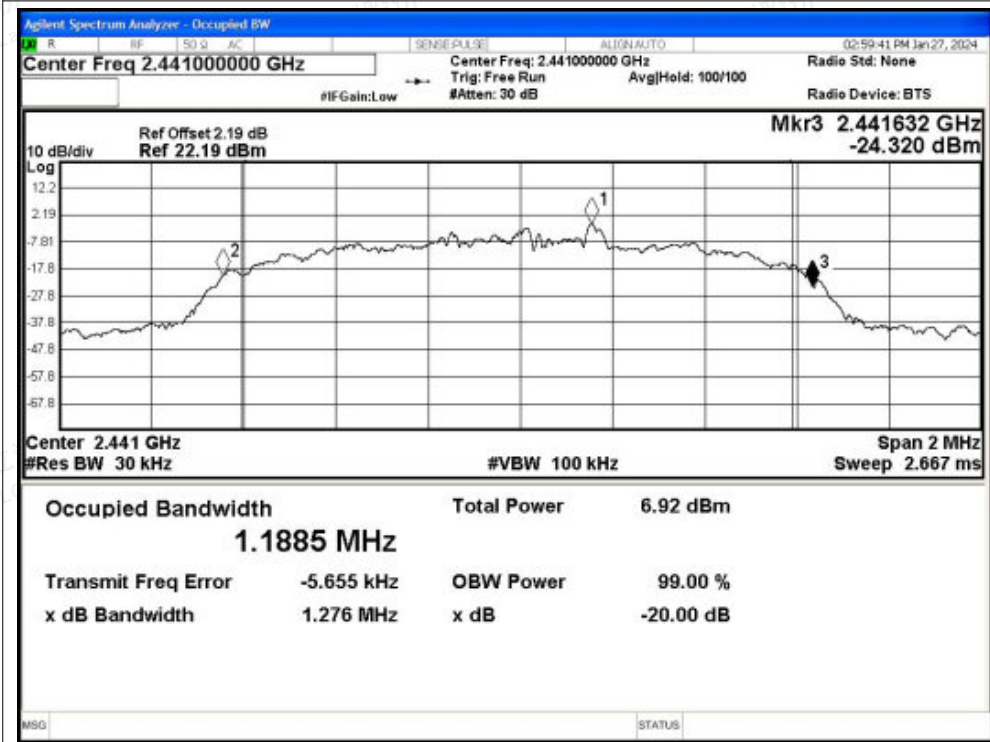




-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1

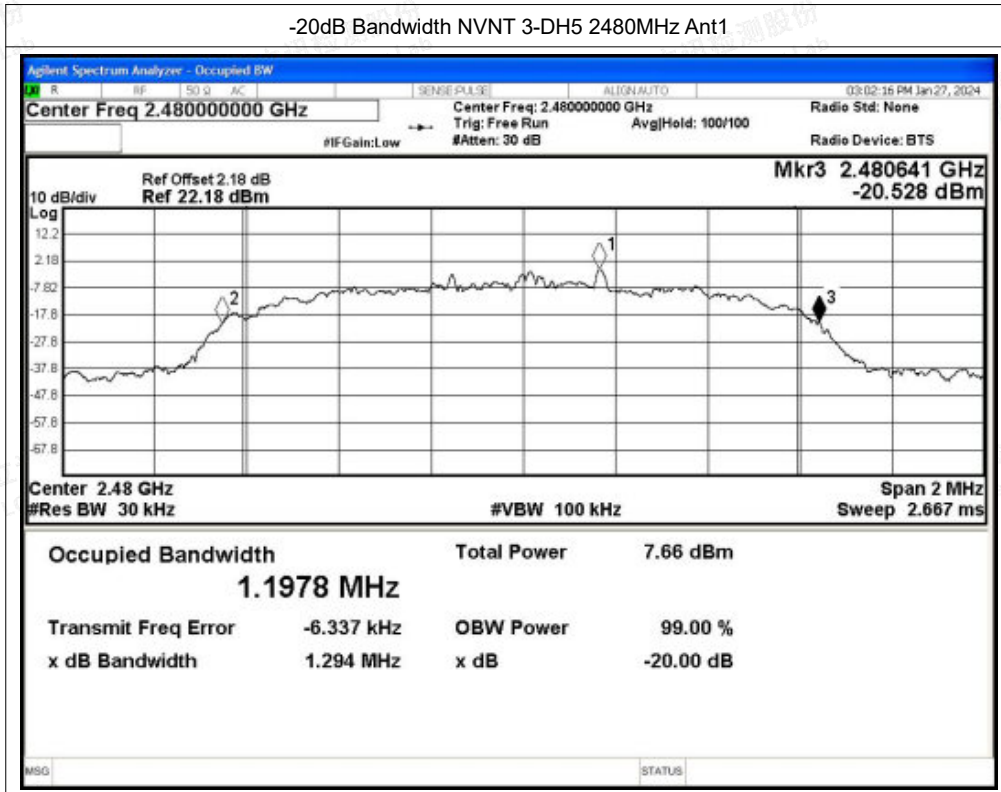


-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1





-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1





A.2 Maximum Conducted Output Power

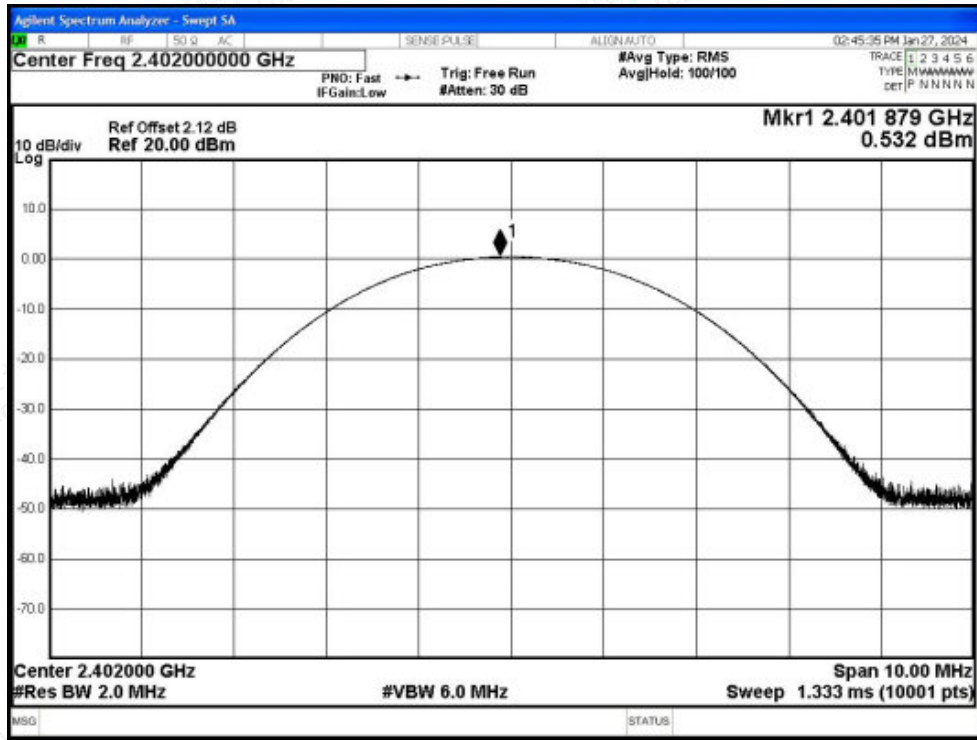
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.53	21	Pass
NVNT	1-DH5	2441	Ant1	1.74	21	Pass
NVNT	1-DH5	2480	Ant1	2.82	21	Pass
NVNT	2-DH5	2402	Ant1	0.55	21	Pass
NVNT	2-DH5	2441	Ant1	1.75	21	Pass
NVNT	2-DH5	2480	Ant1	2.85	21	Pass
NVNT	3-DH5	2402	Ant1	0.49	21	Pass
NVNT	3-DH5	2441	Ant1	1.82	21	Pass
NVNT	3-DH5	2480	Ant1	2.85	21	Pass



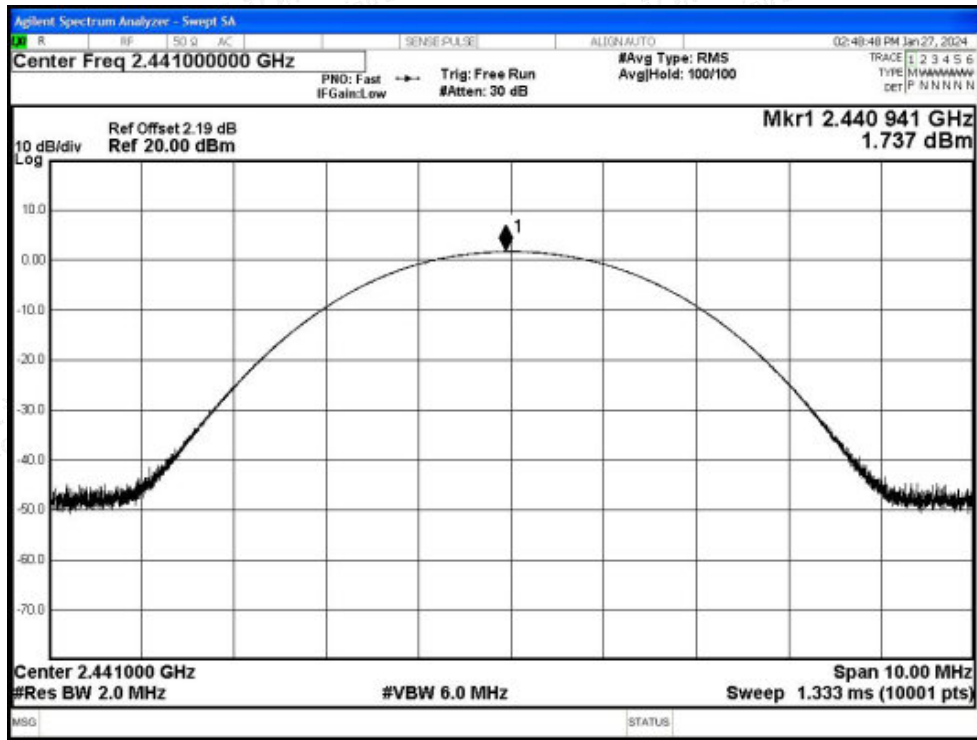


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

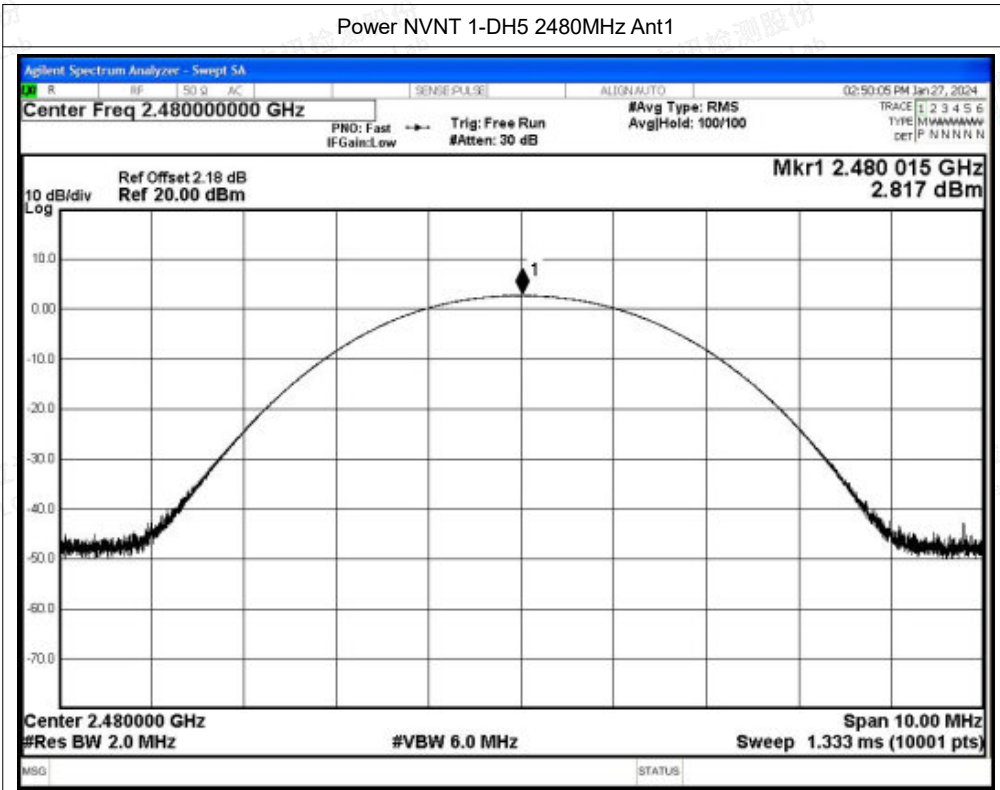


Power NVNT 1-DH5 2441MHz Ant1

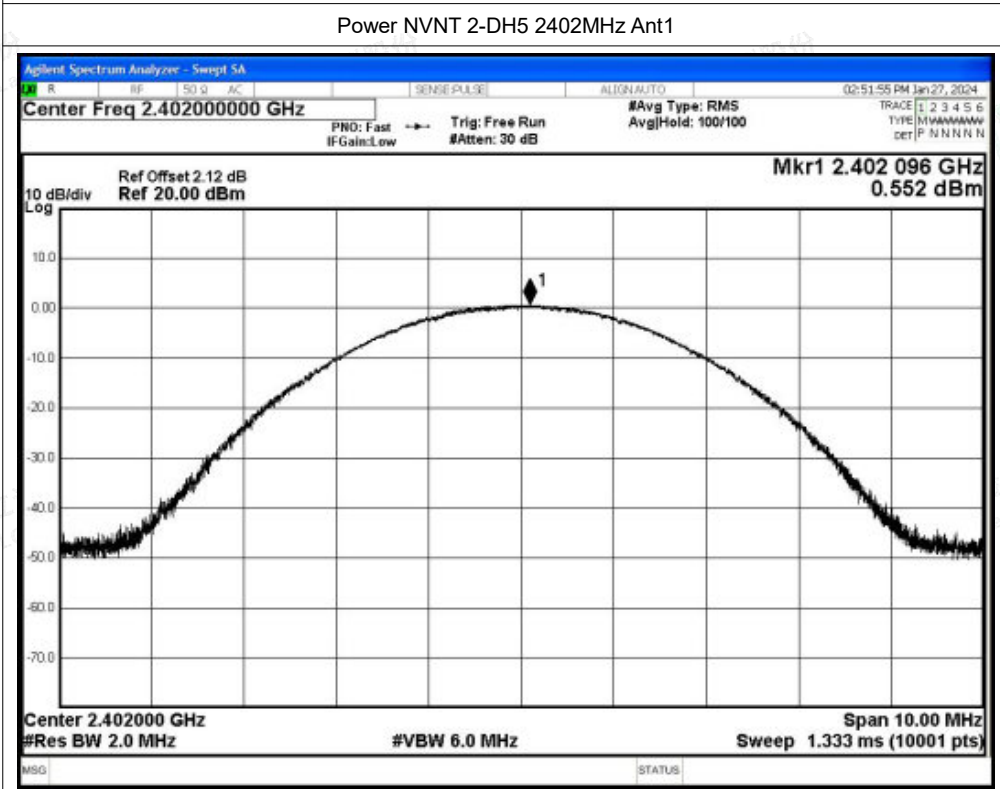




Power NVNT 1-DH5 2480MHz Ant1

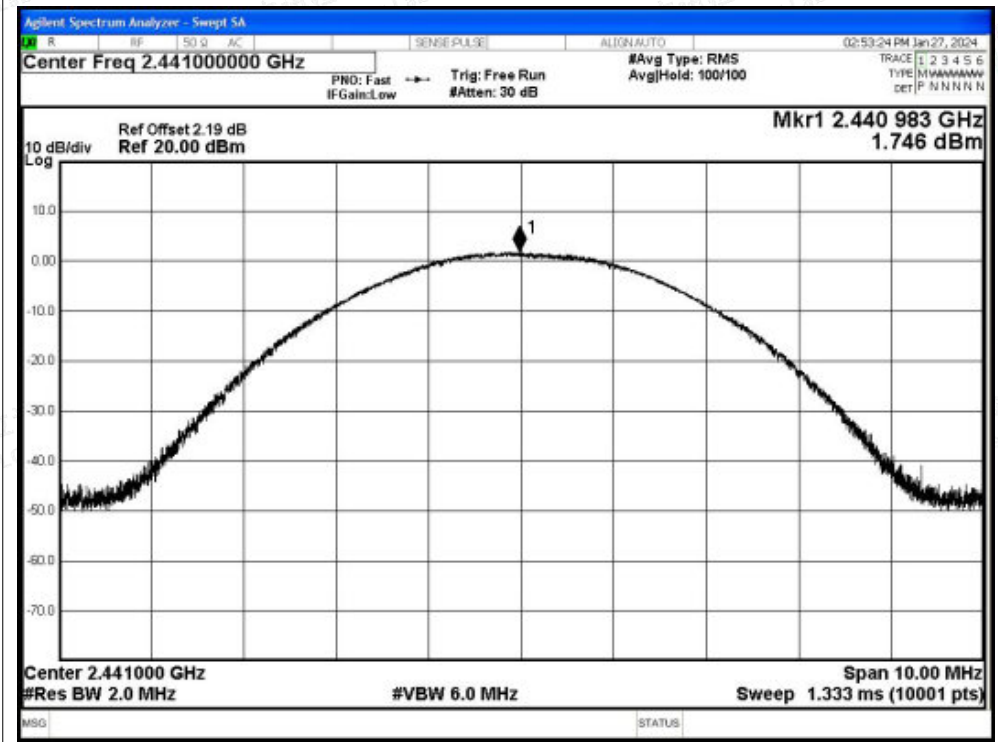


Power NVNT 2-DH5 2402MHz Ant1

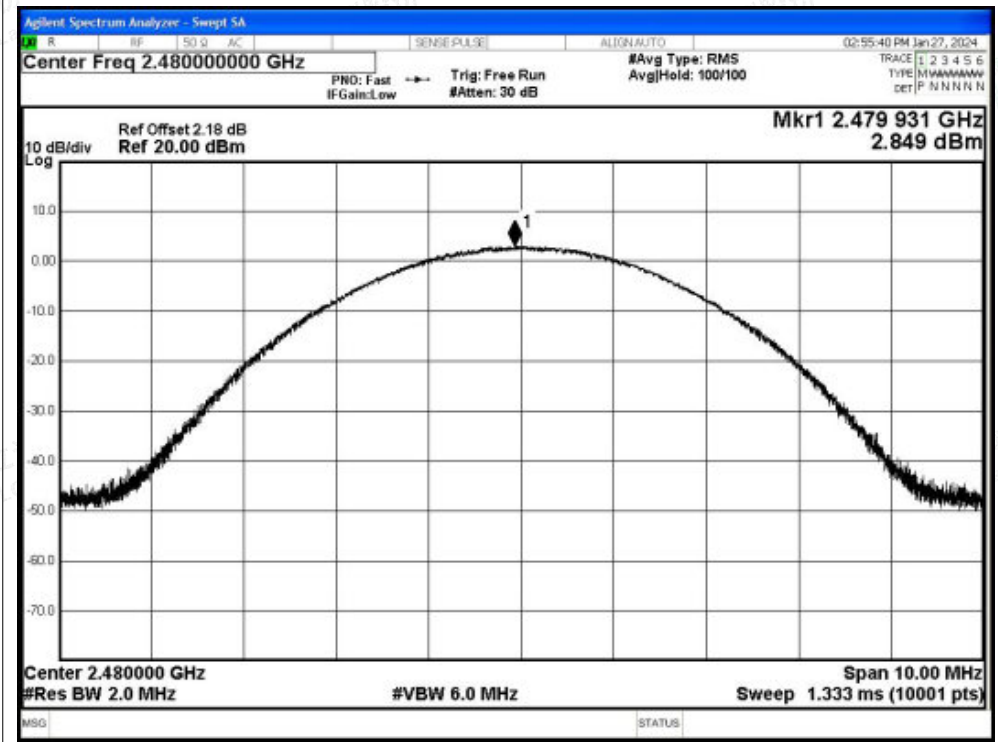




Power NVNT 2-DH5 2441MHz Ant1

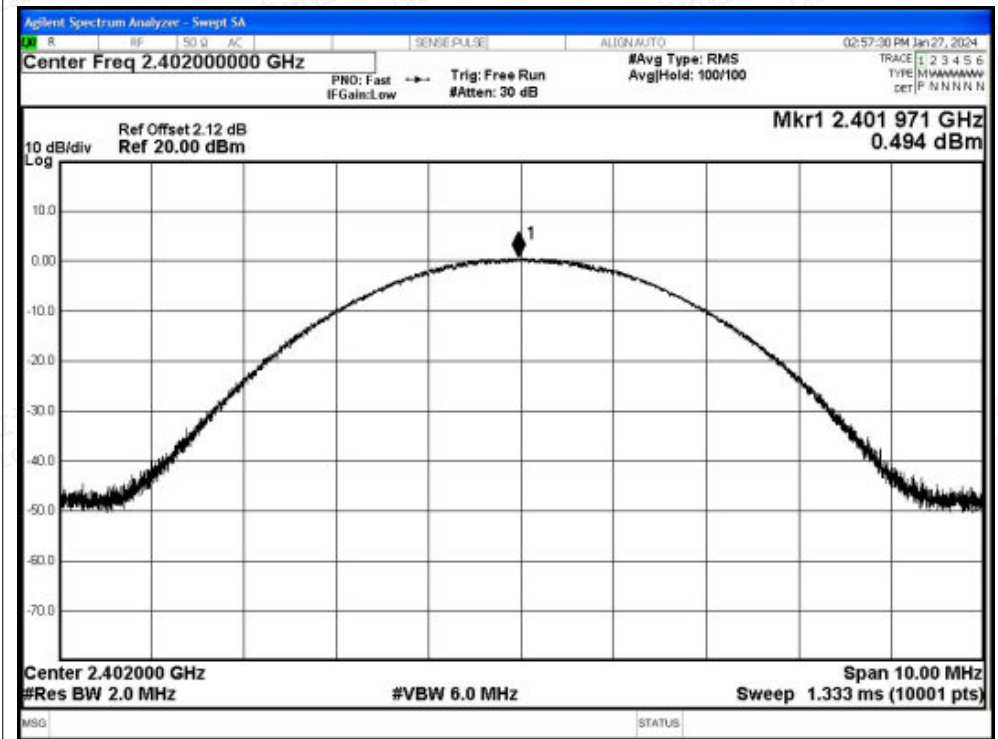


Power NVNT 2-DH5 2480MHz Ant1

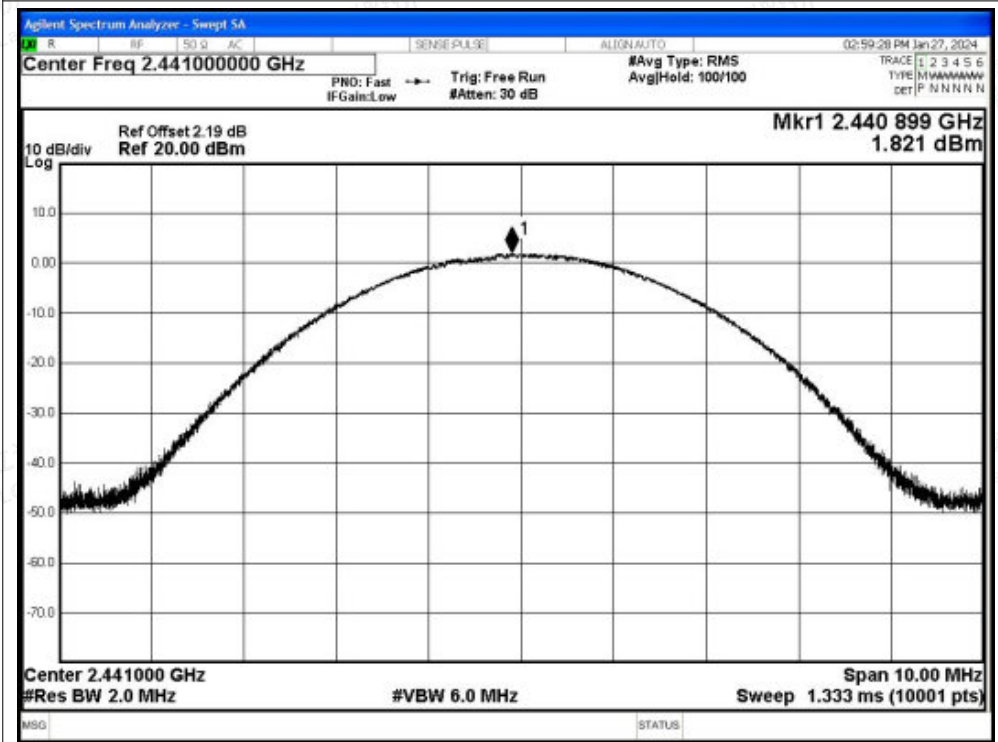


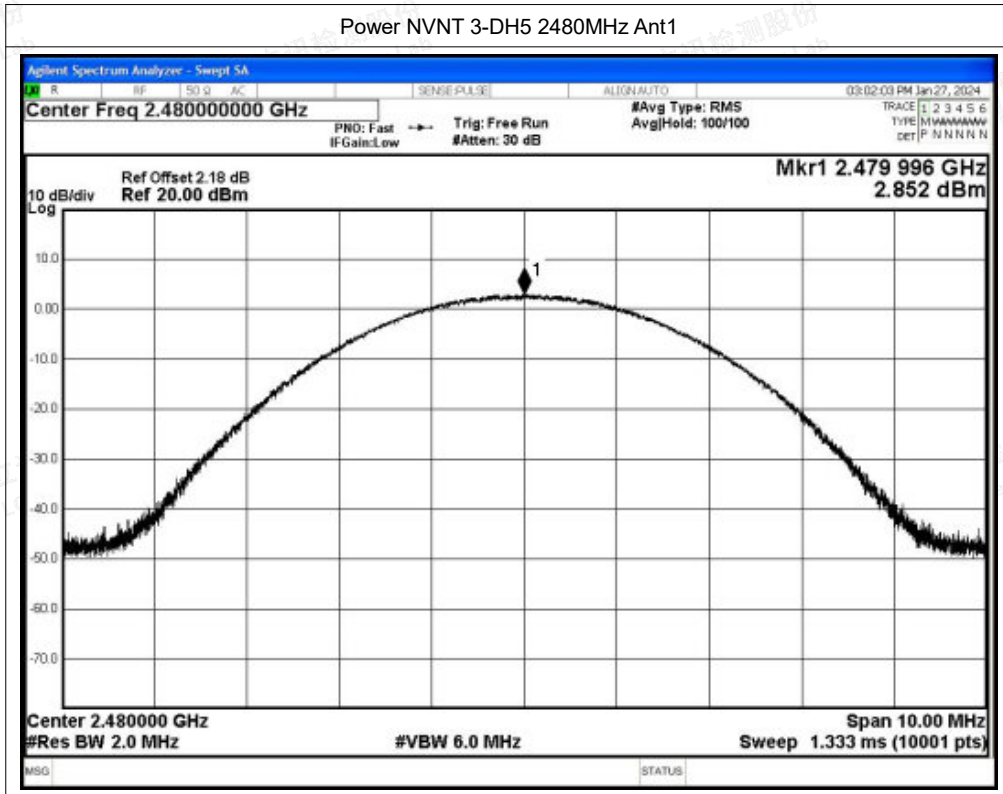


Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1







A.3 Carrier Frequencies Separation

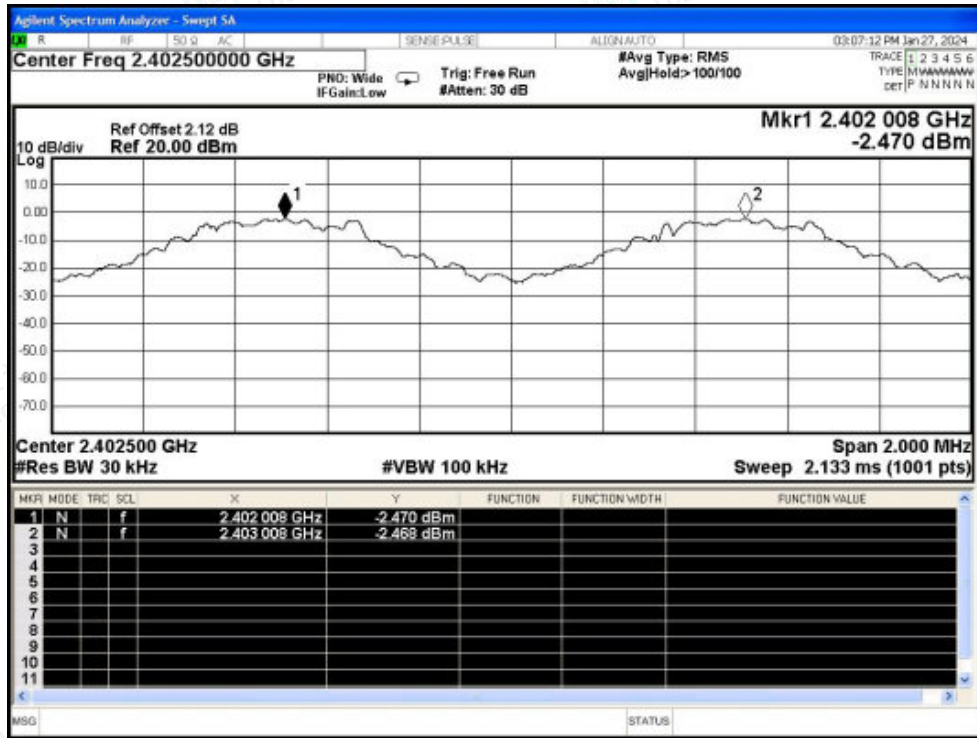
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.008	2403.008	1	0.619	Pass
NVNT	2-DH5	Ant1	2402.16	2403.158	0.998	0.871	Pass
NVNT	3-DH5	Ant1	2402.162	2403.152	0.99	0.869	Pass



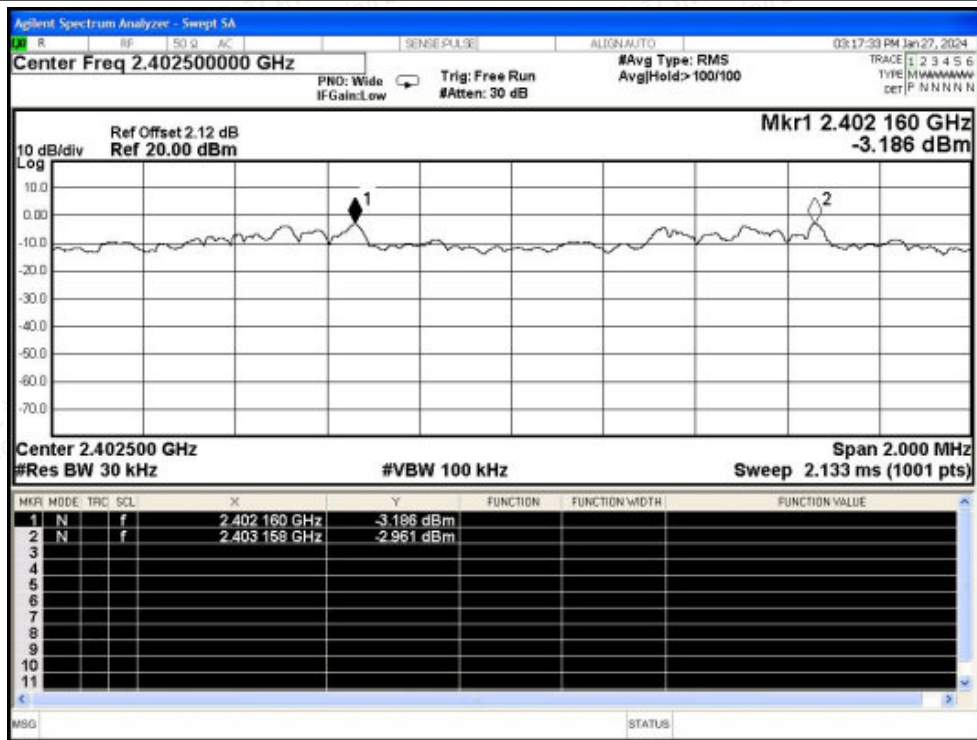


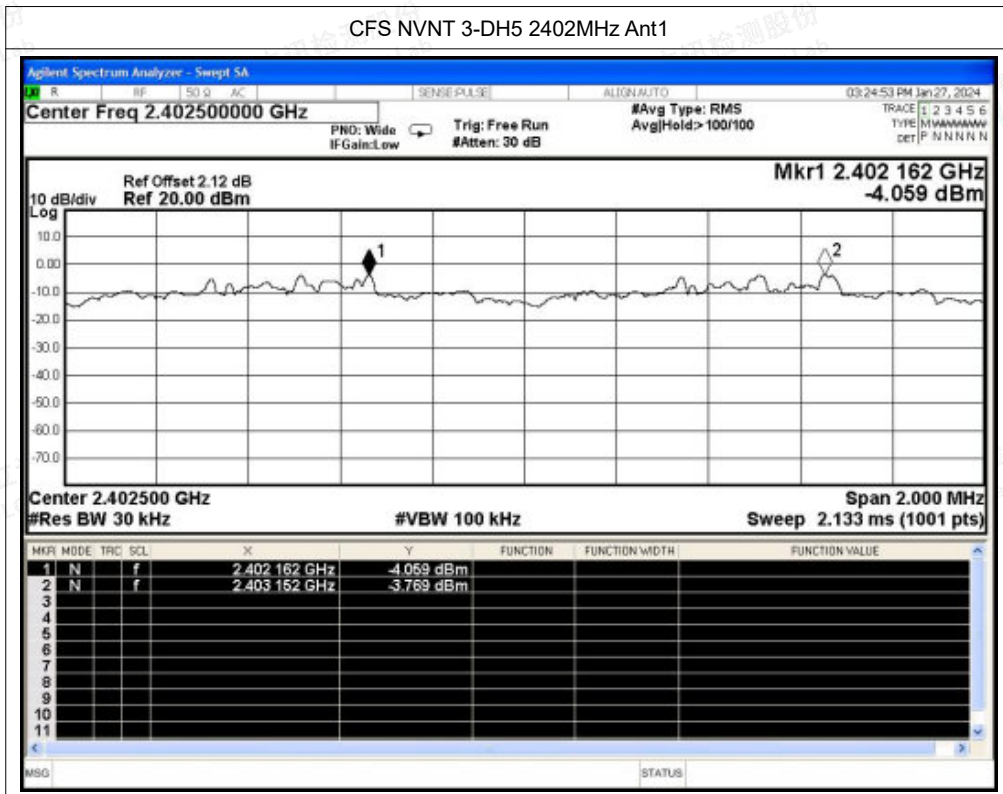
Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1







A.4 Dwell Time

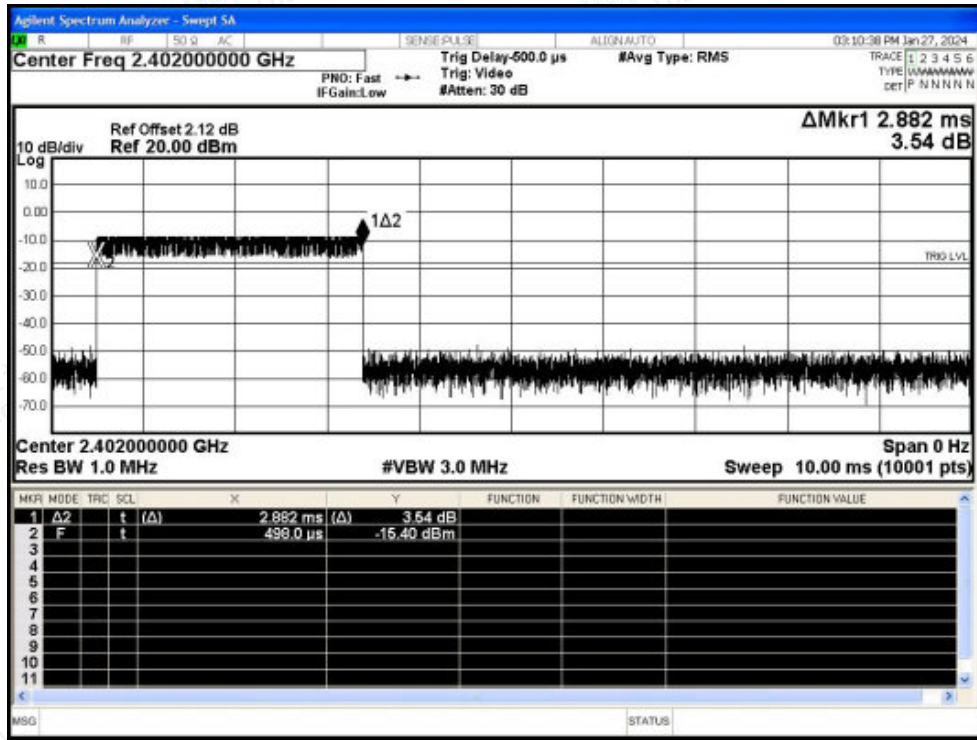
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.882	311.256	108	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.885	317.35	110	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.886	265.512	92	31600	400	Pass



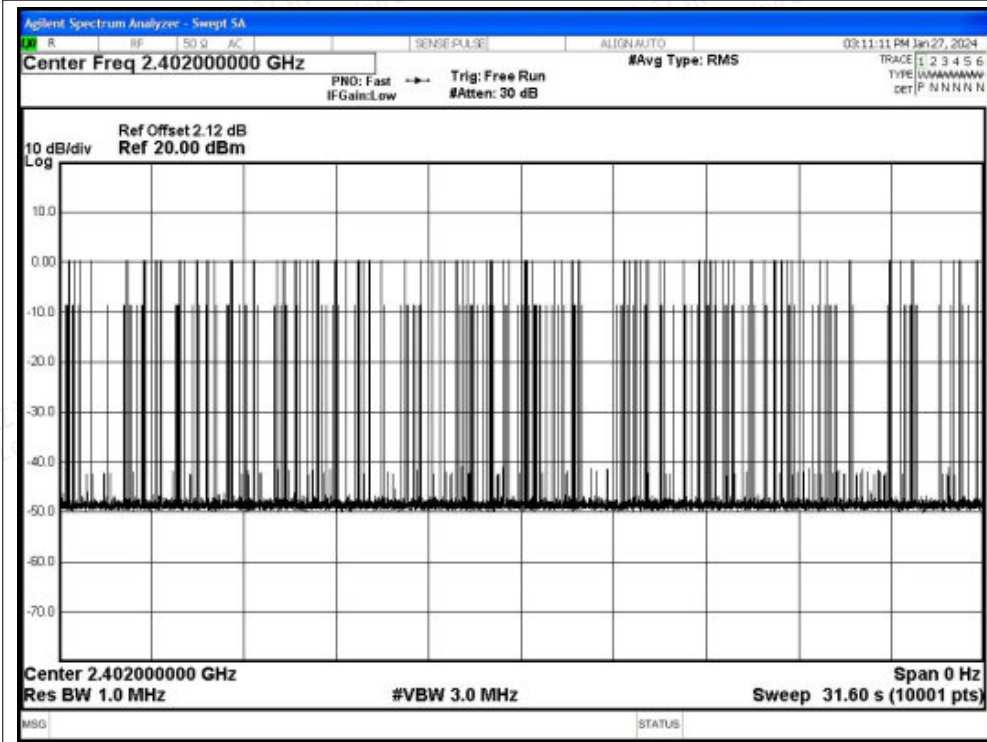


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

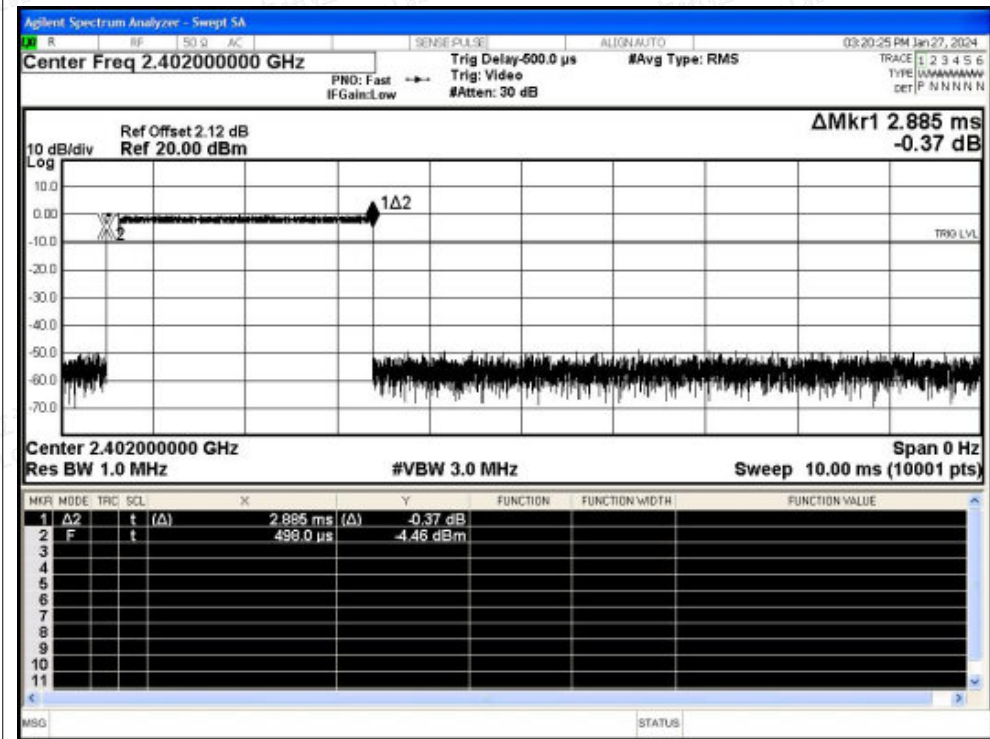


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

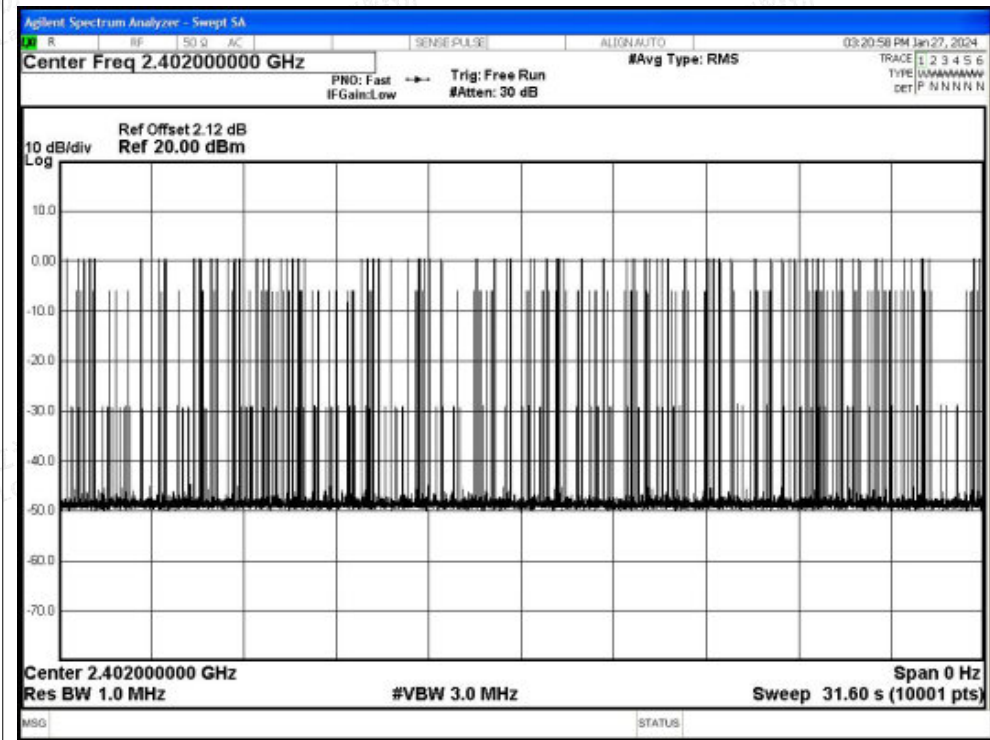




Dwell NVNT 2-DH5 2402MHz Ant1 One Burst

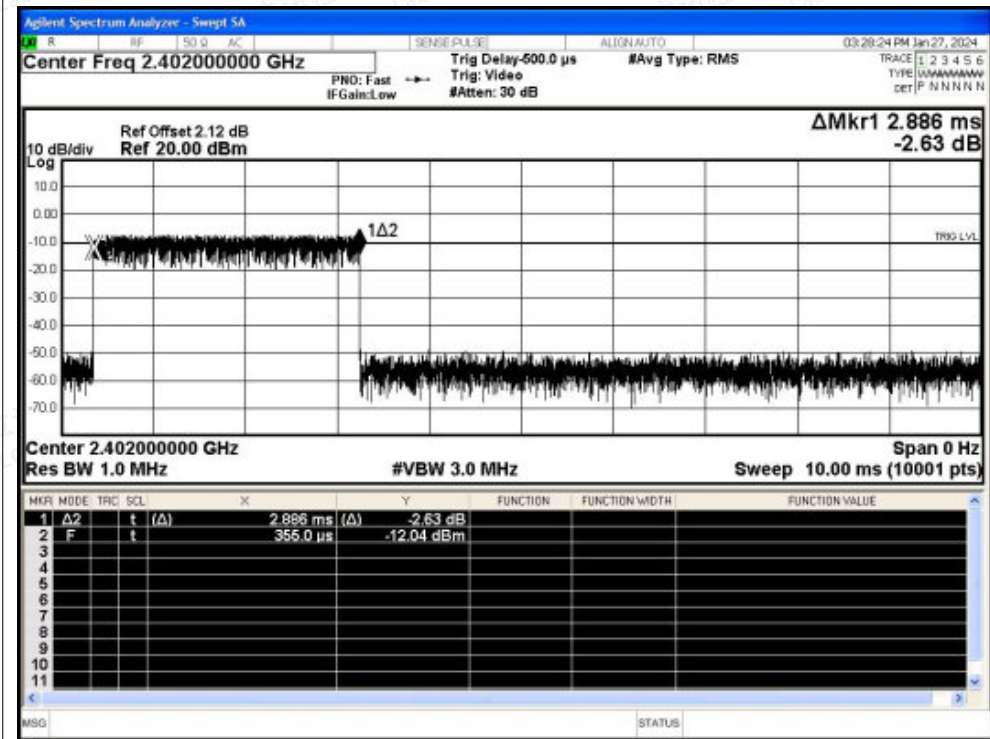


Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated

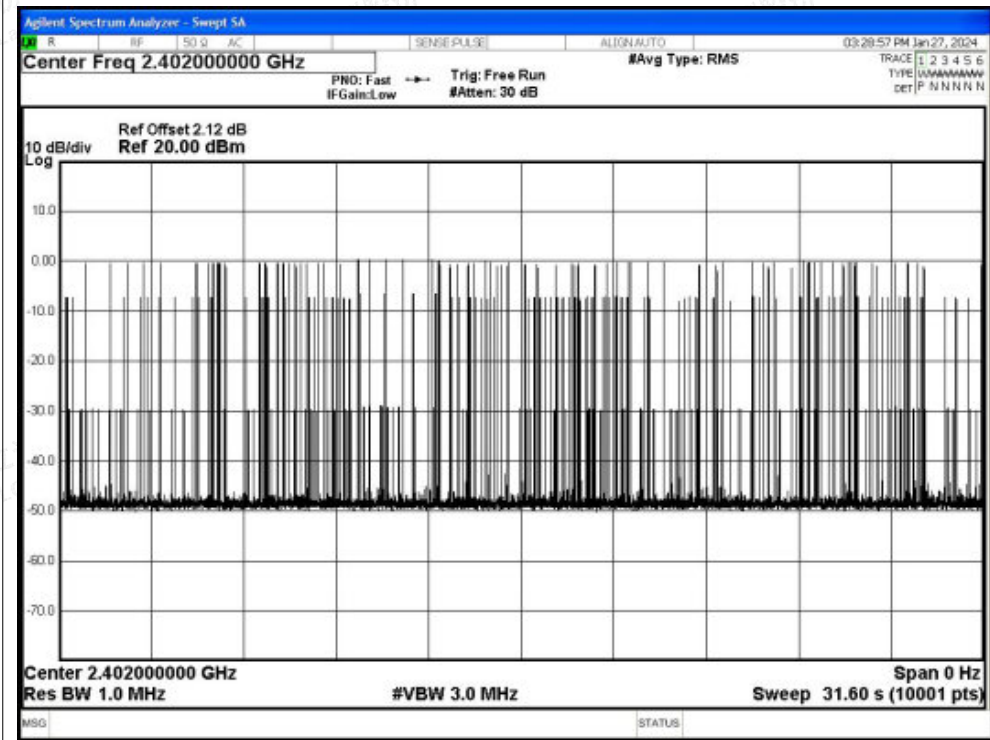




Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated





A.5 Number of Hopping Channel

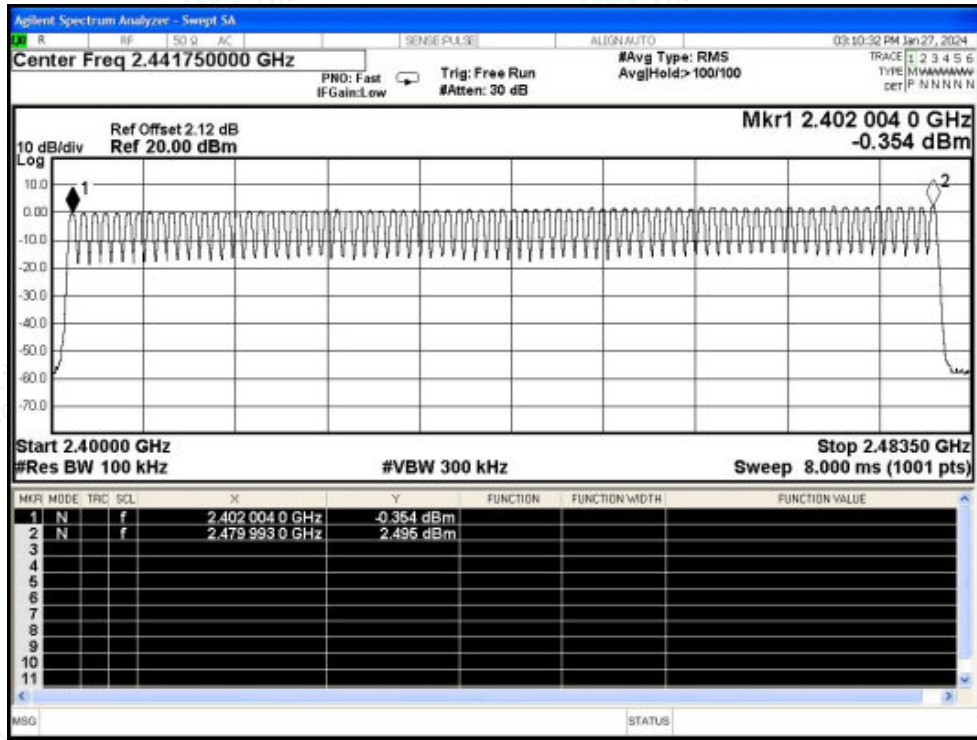
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass



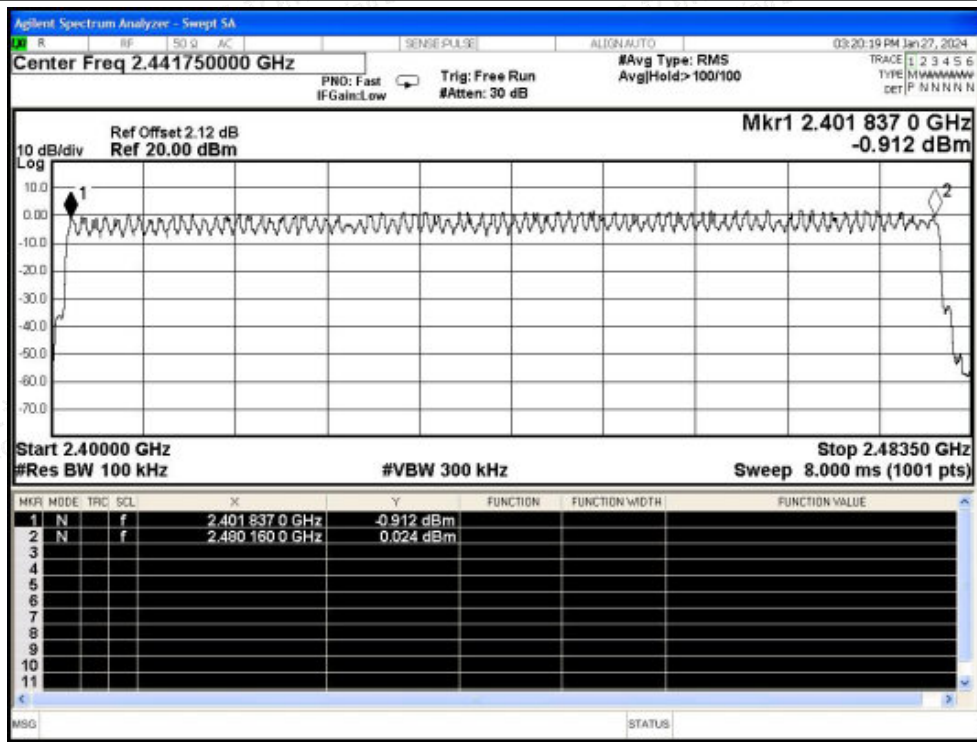


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1

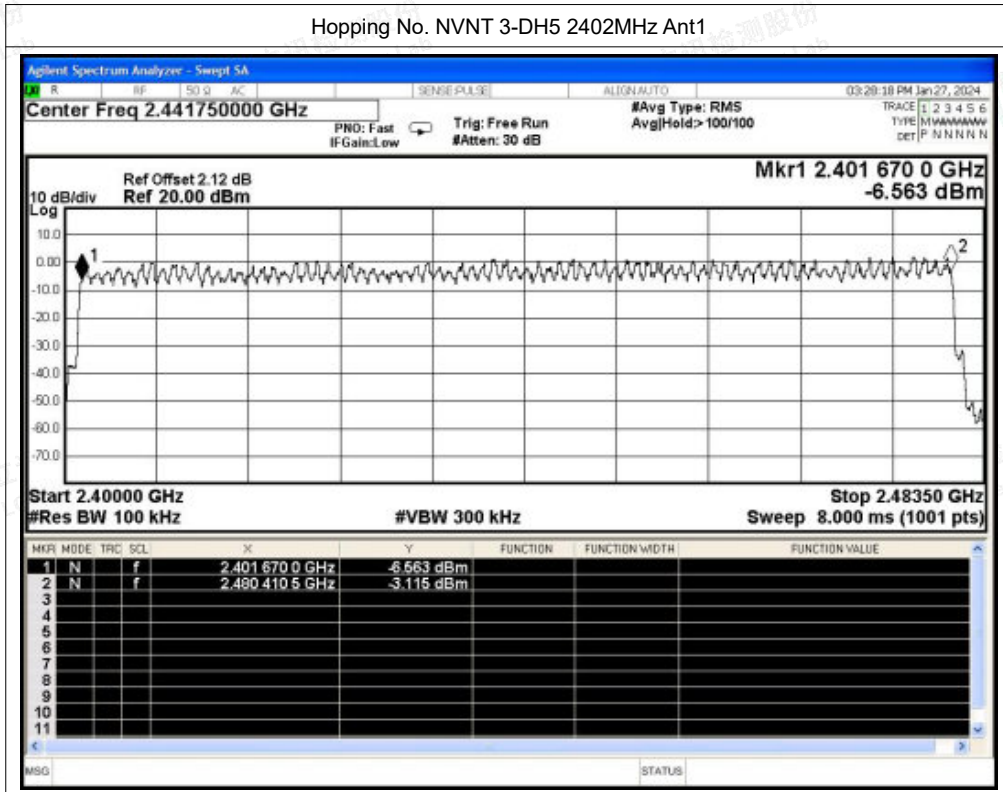


Hopping No. NVNT 2-DH5 2402MHz Ant1





Hopping No. NVNT 3-DH5 2402MHz Ant1





A.6 Band Edge

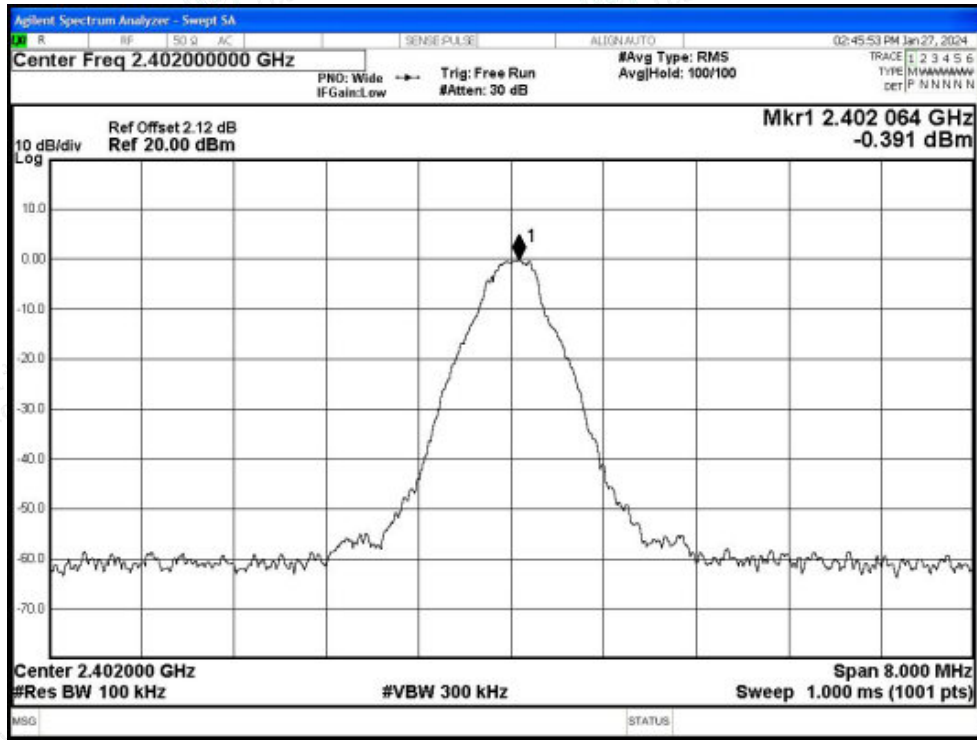
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-57.38	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-59.43	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-50.94	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-59.8	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-54.57	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-59.6	-20	Pass



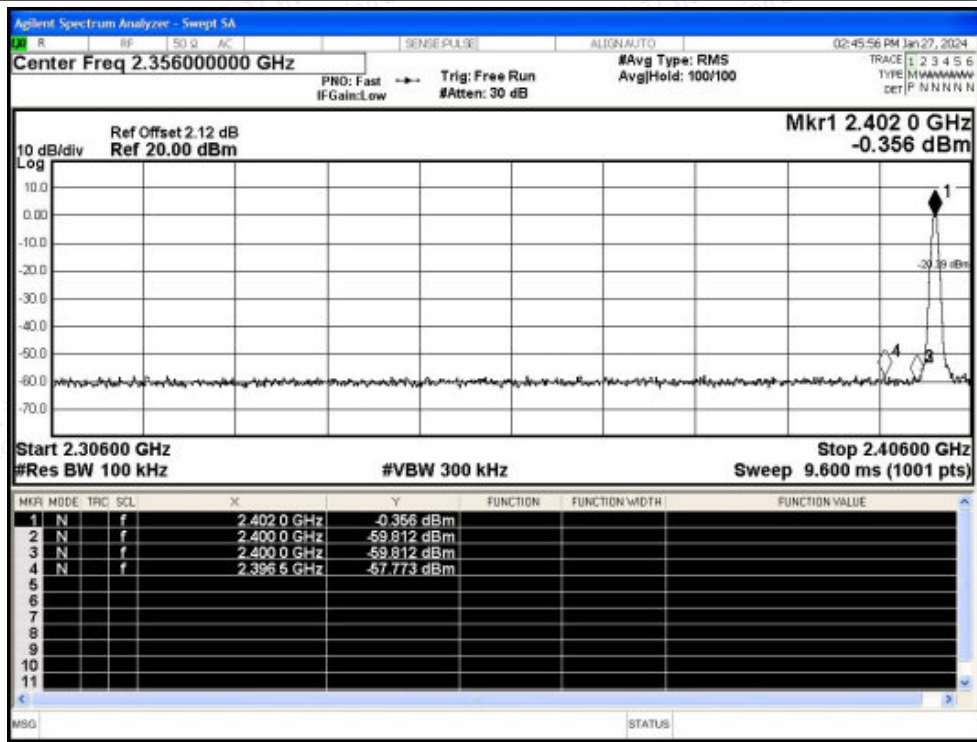


Test Graphs

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

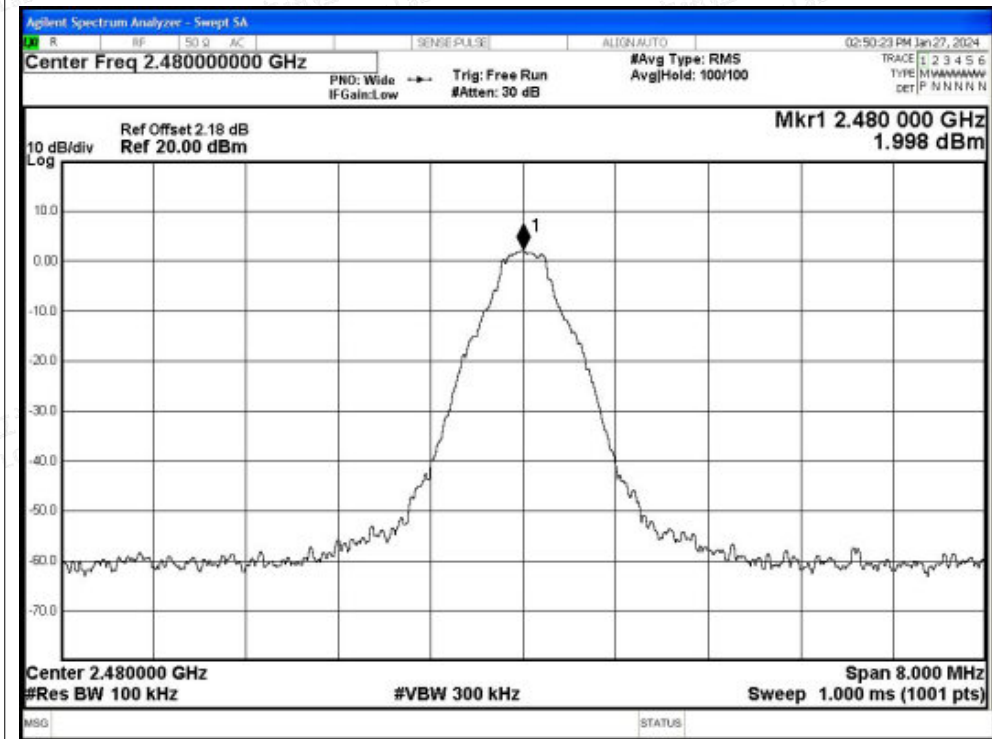


Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

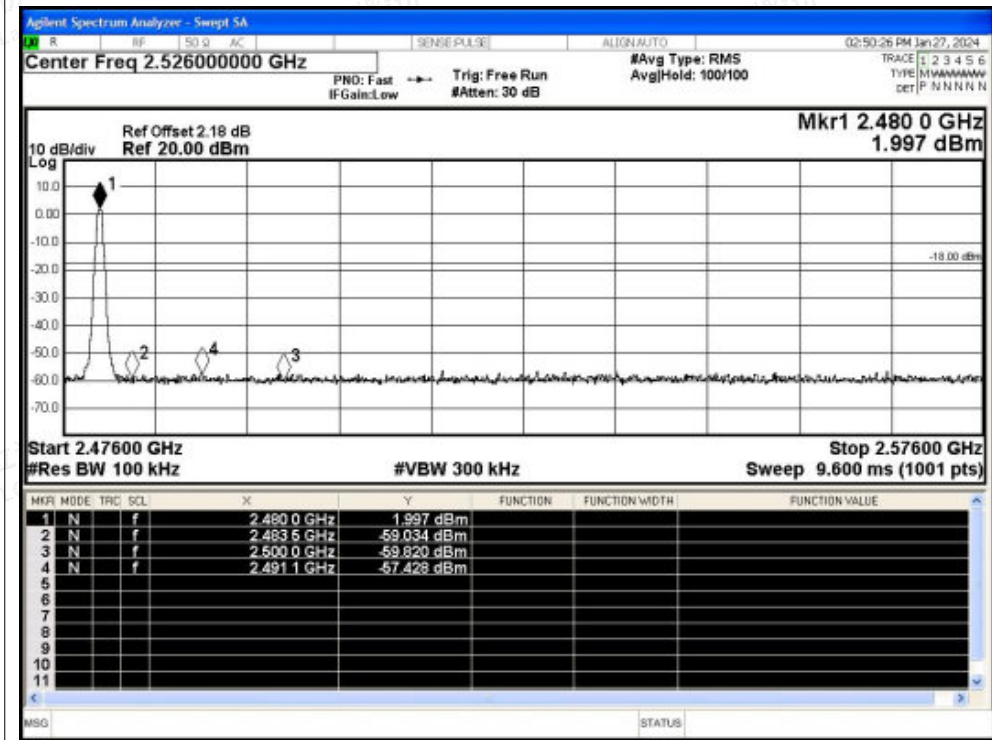




Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

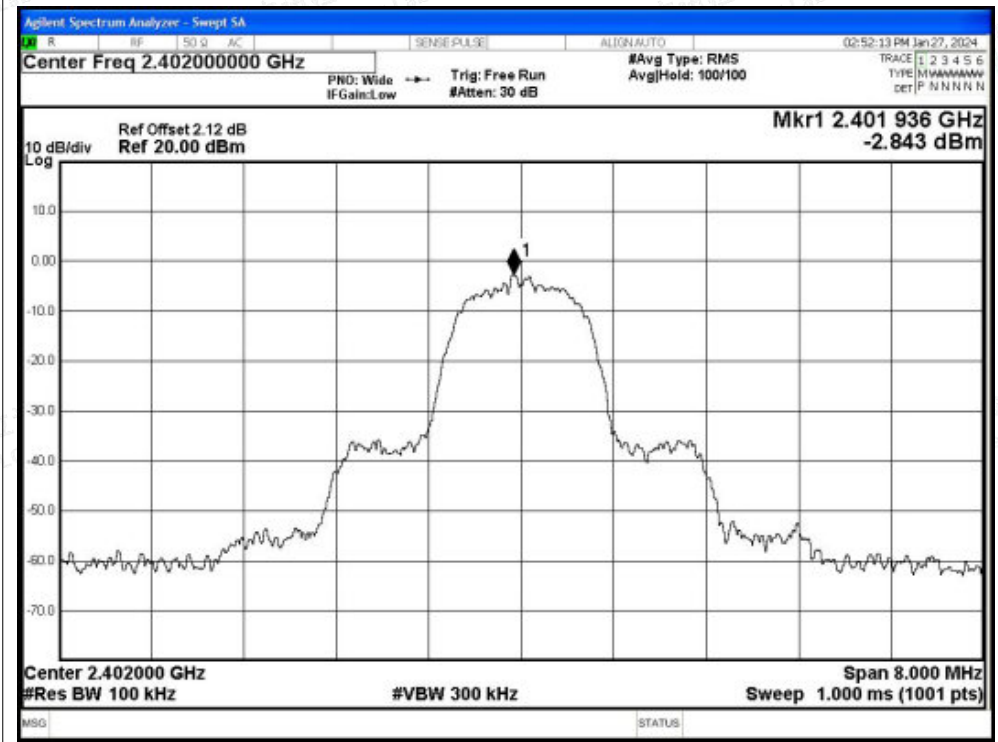


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

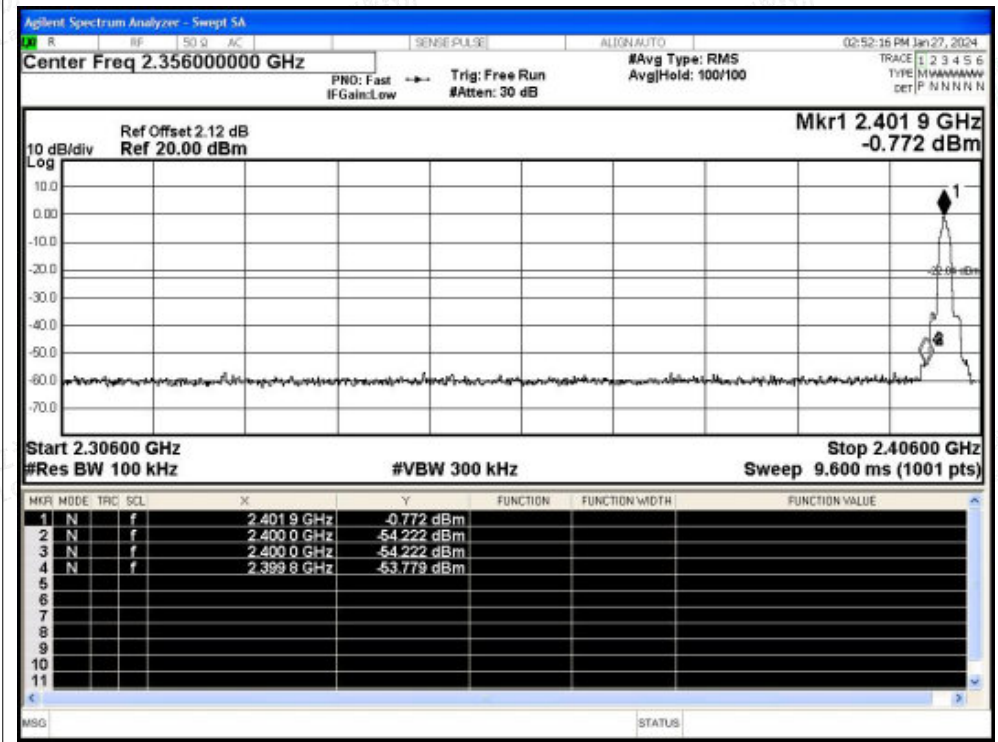




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref

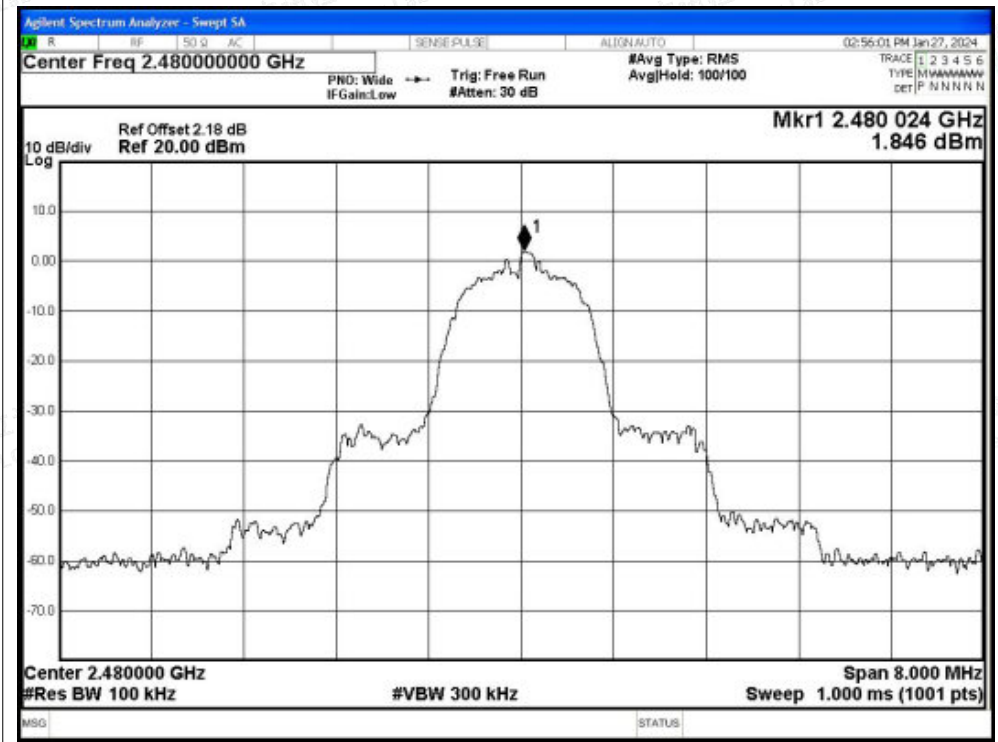


Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

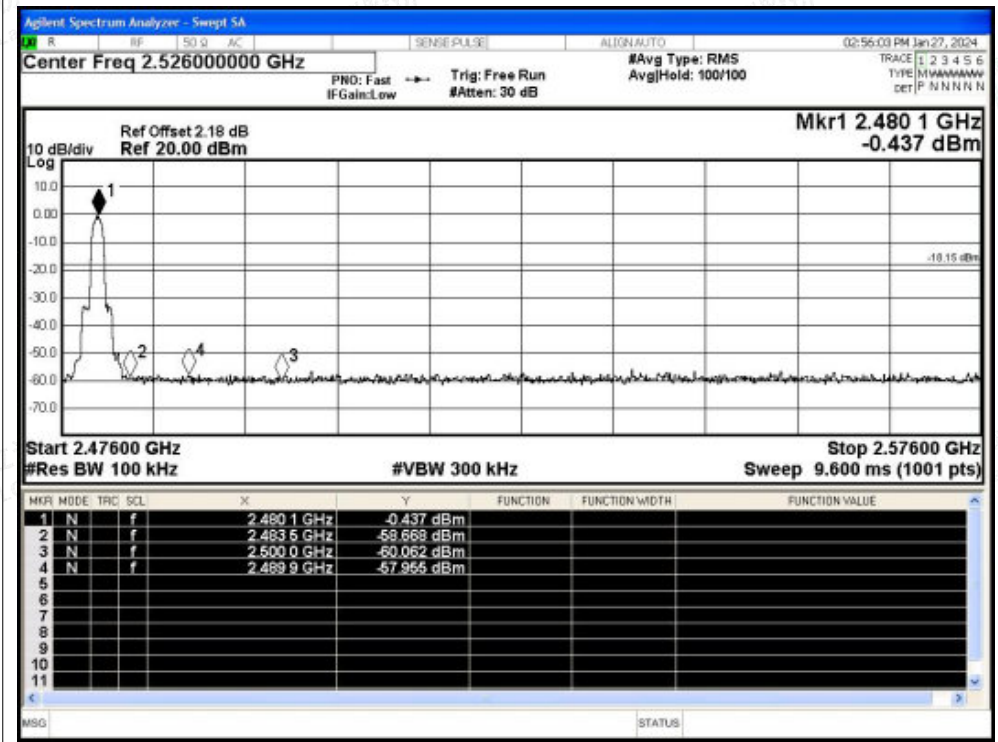




Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref

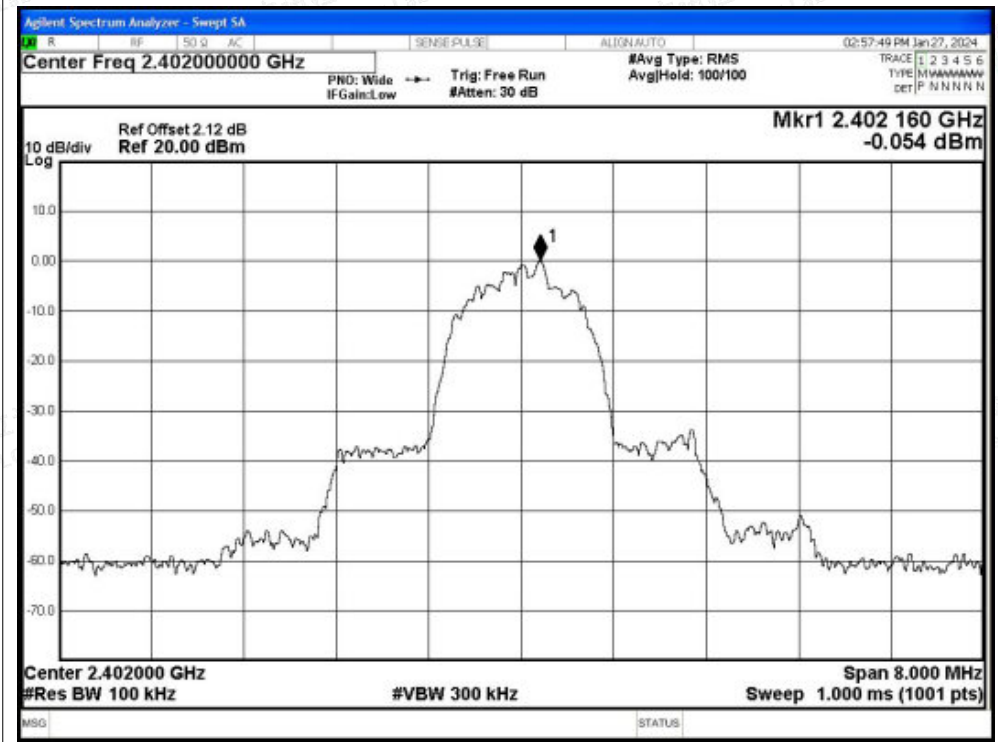


Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission

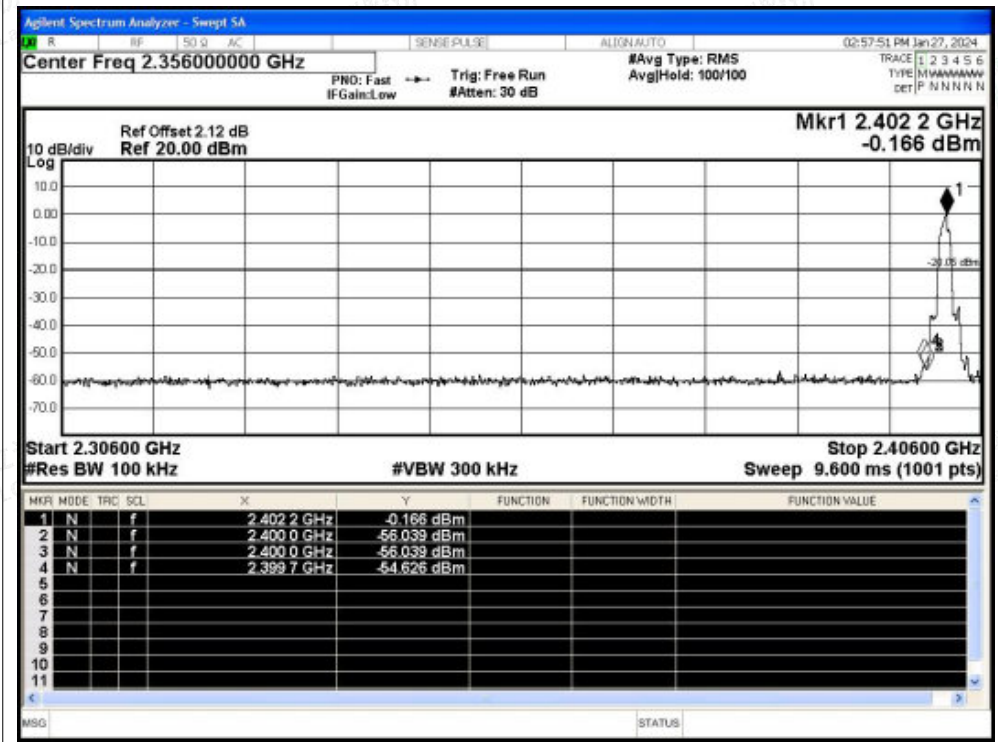




Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref

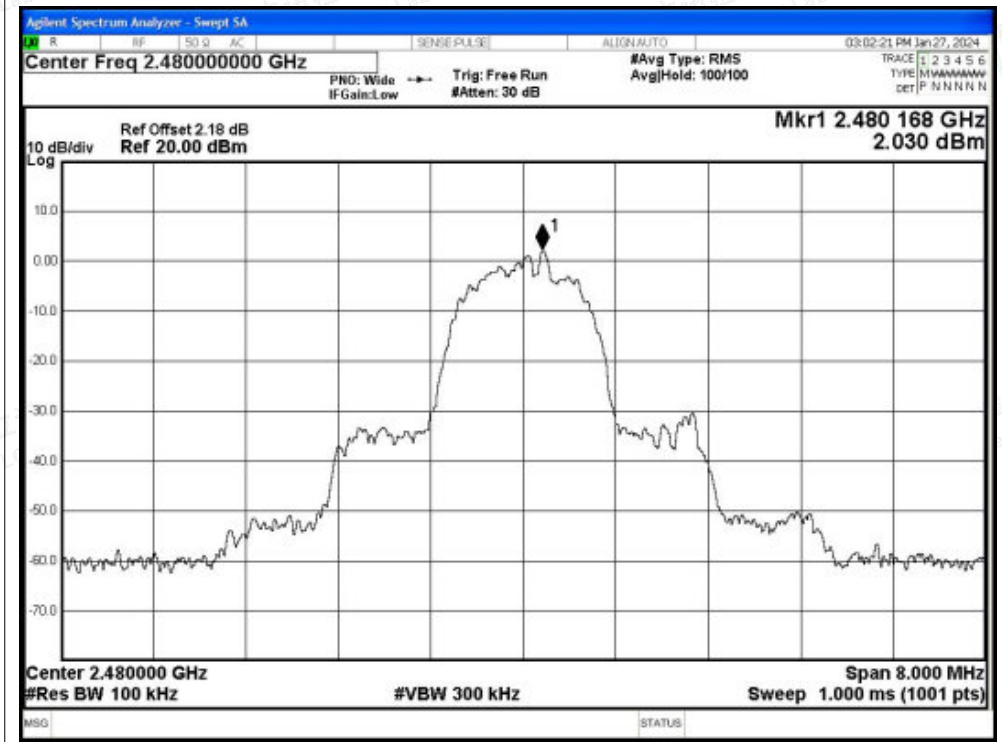


Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission

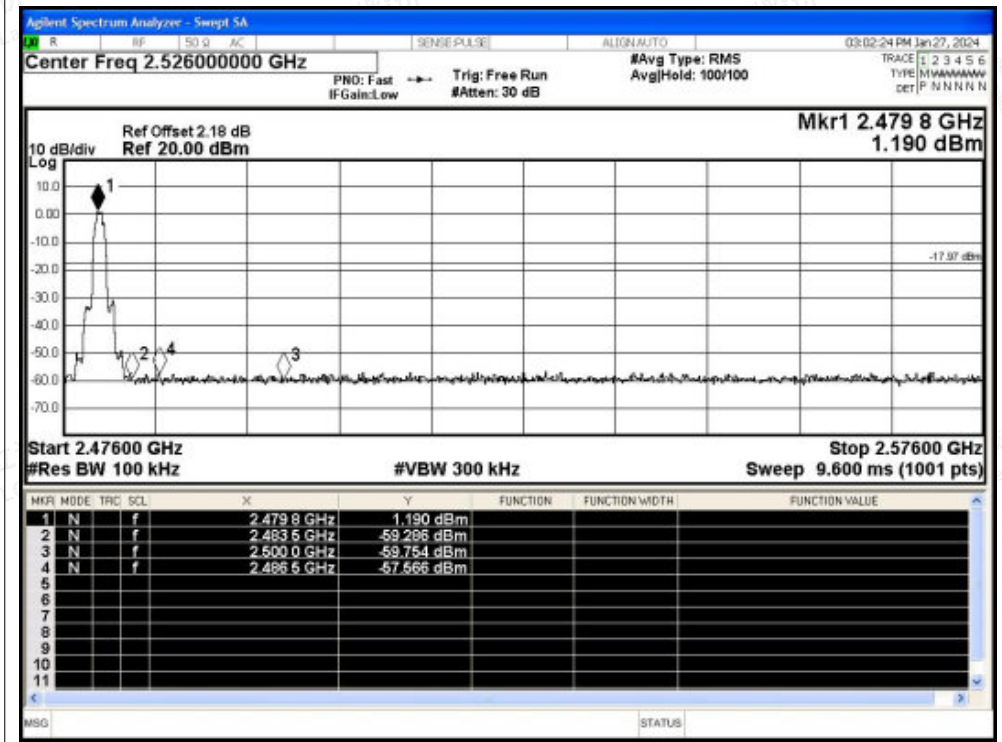




Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



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





(Hopping)

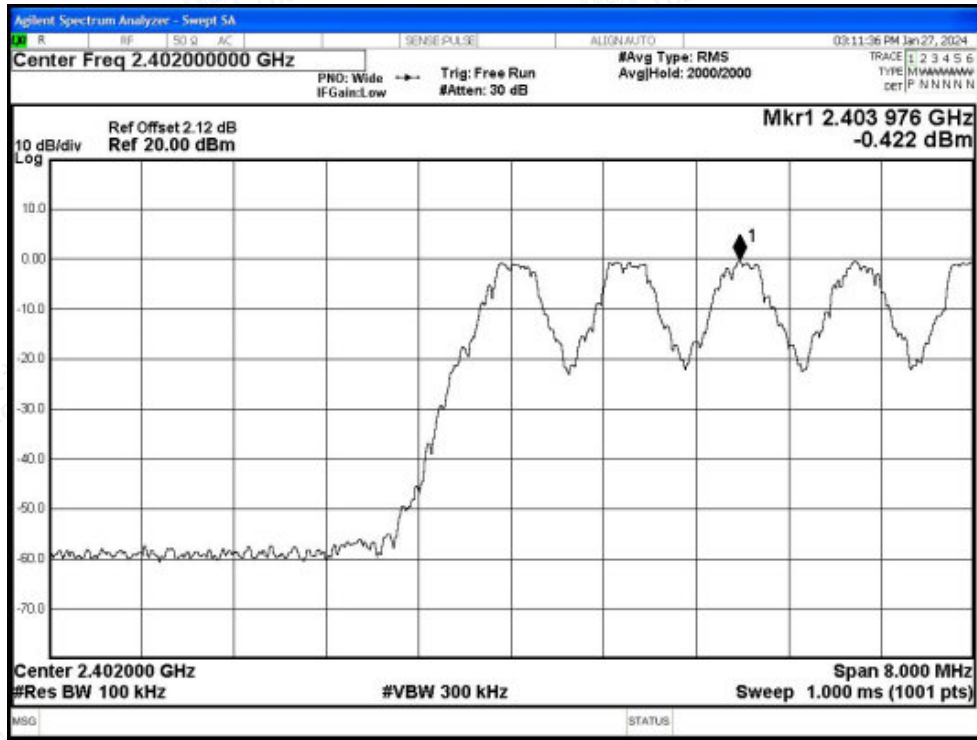
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-55.66	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-58.69	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-54.15	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-57.62	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-52.26	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-58.5	-20	Pass



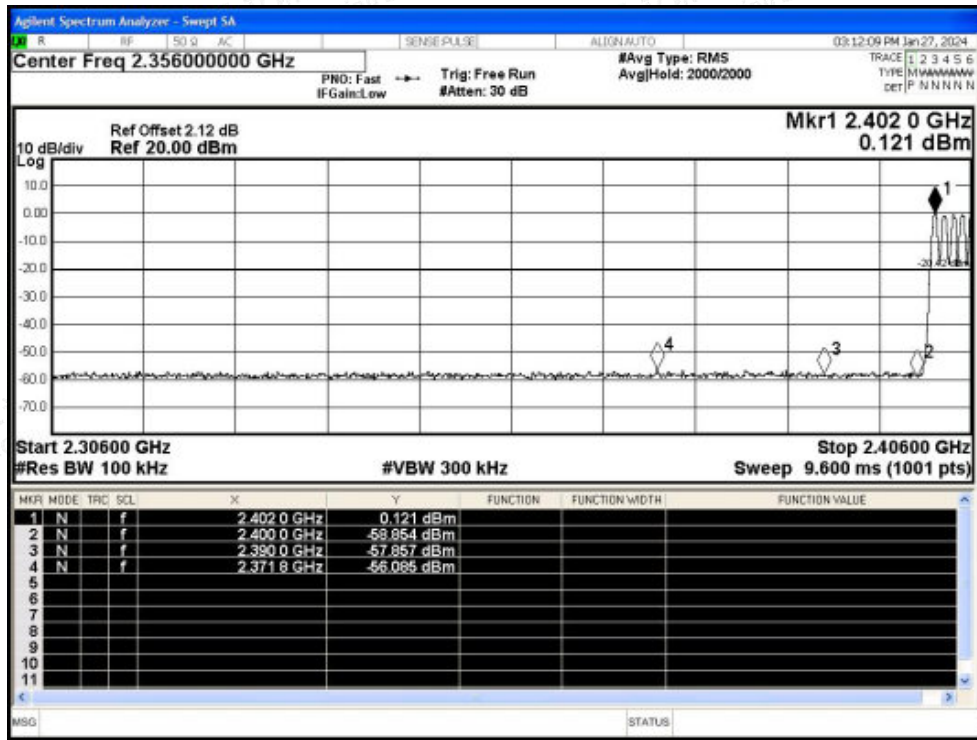


Test Graphs

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

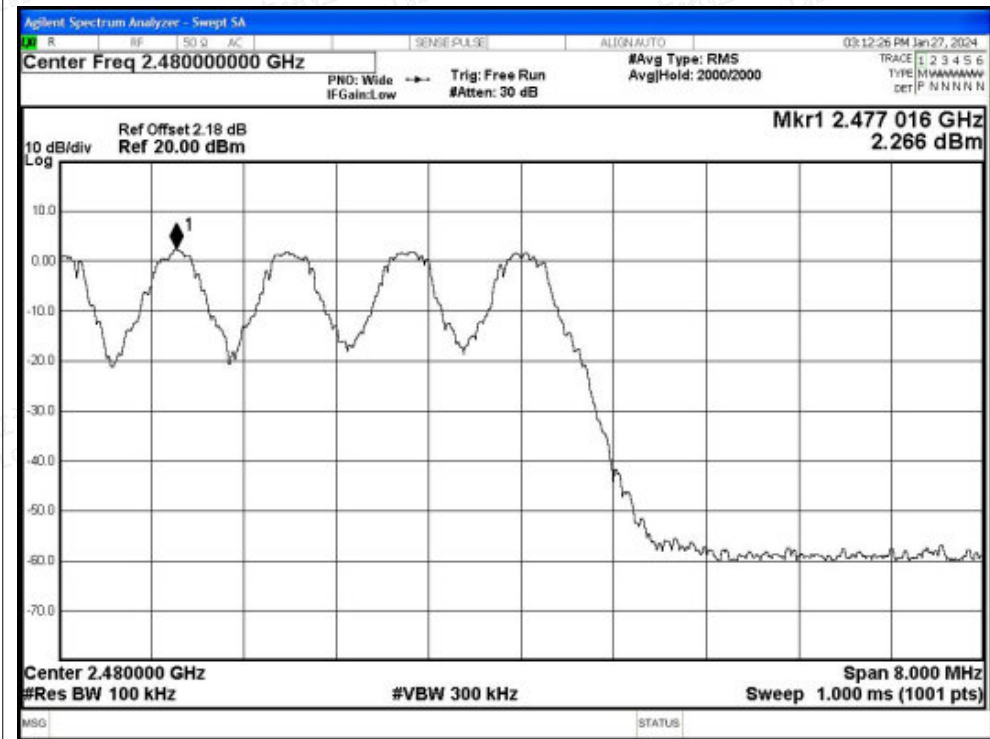


Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission

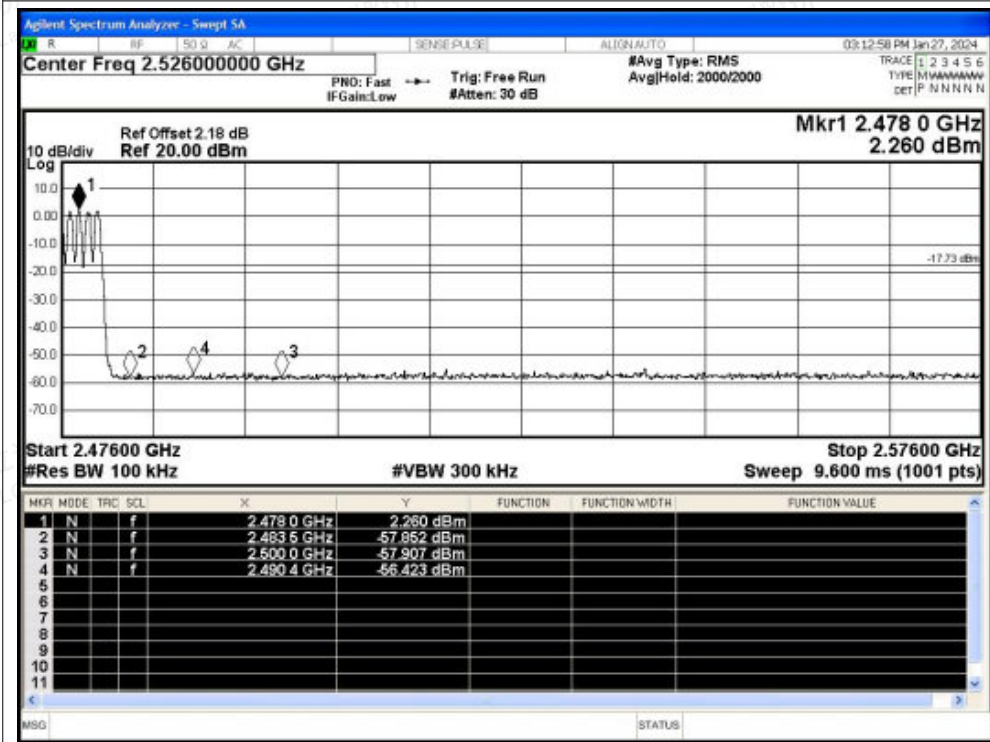




Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



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

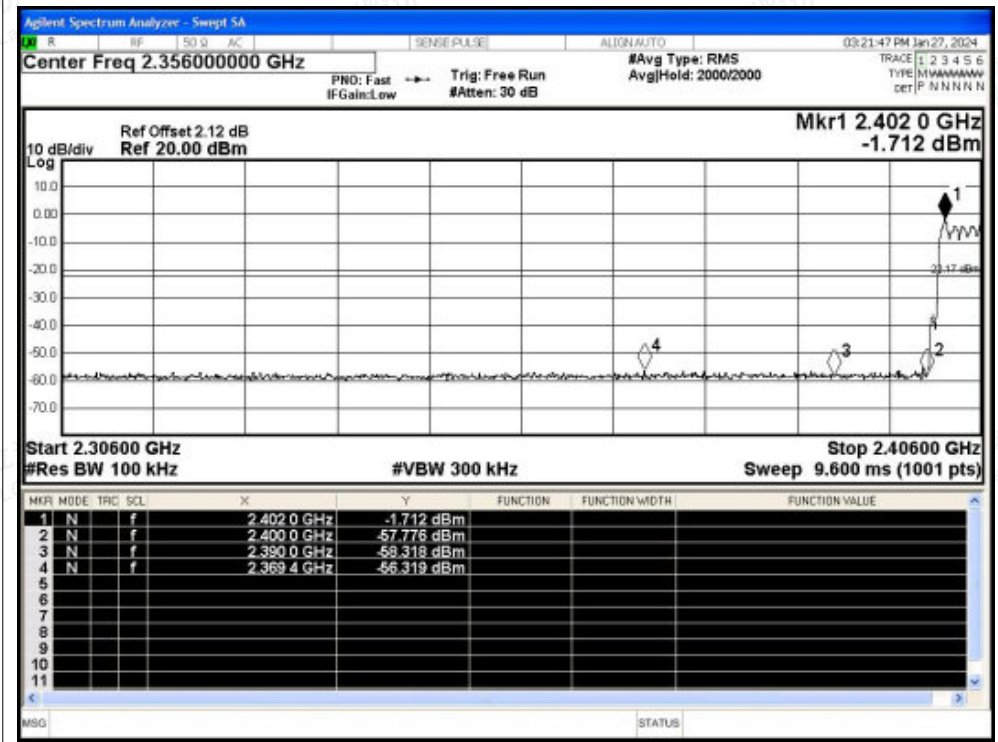




Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission

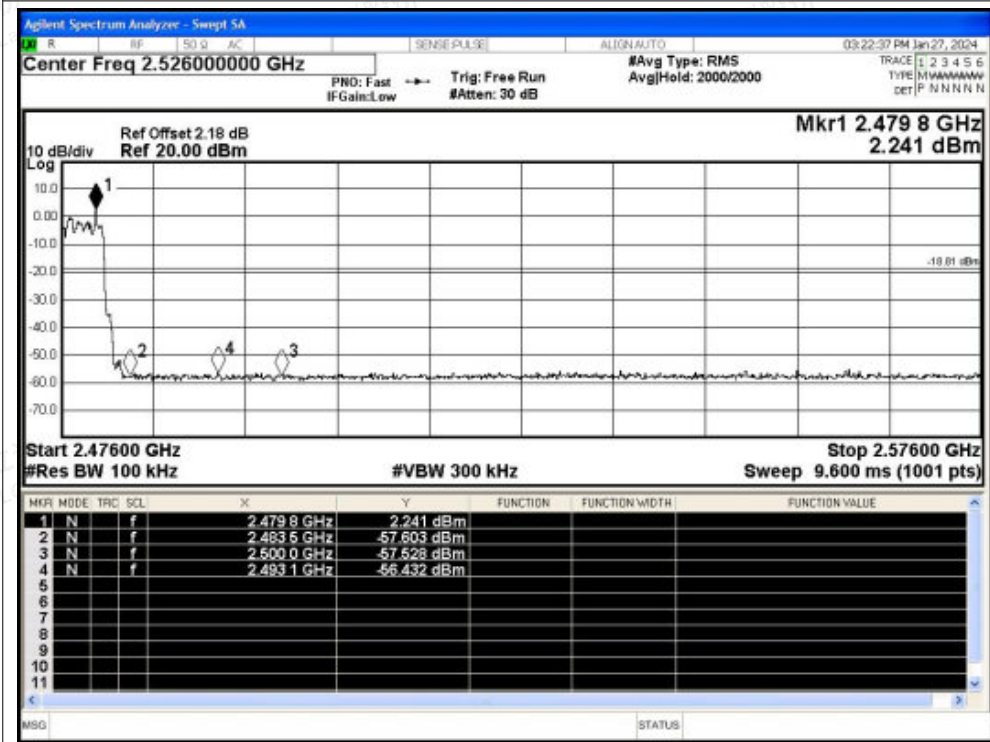




Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



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

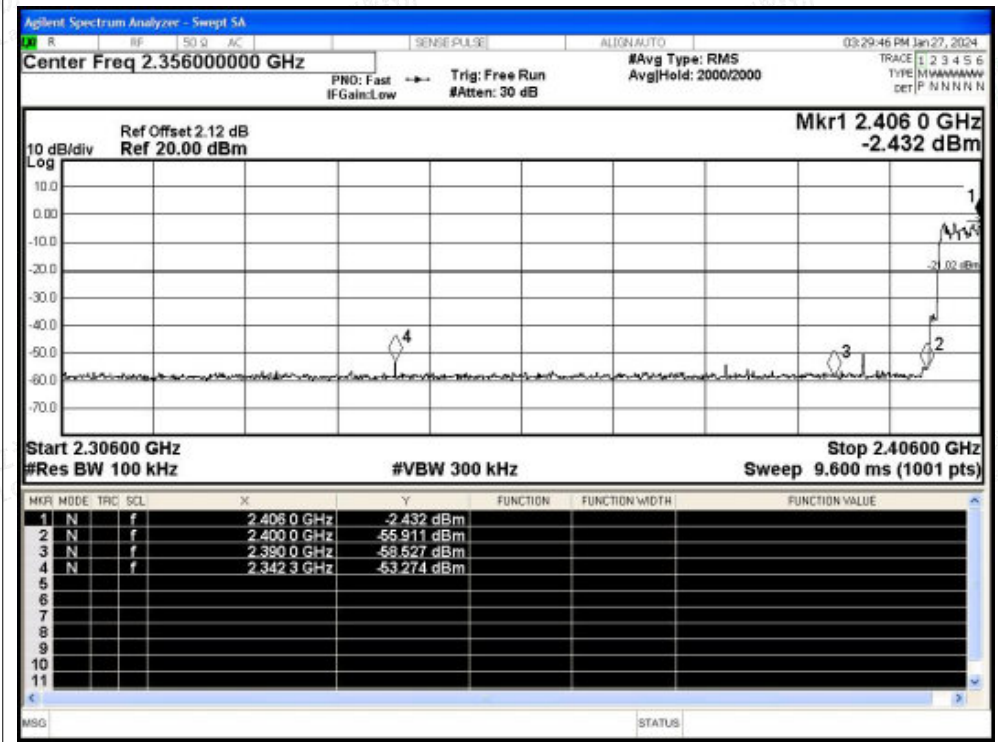




Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission

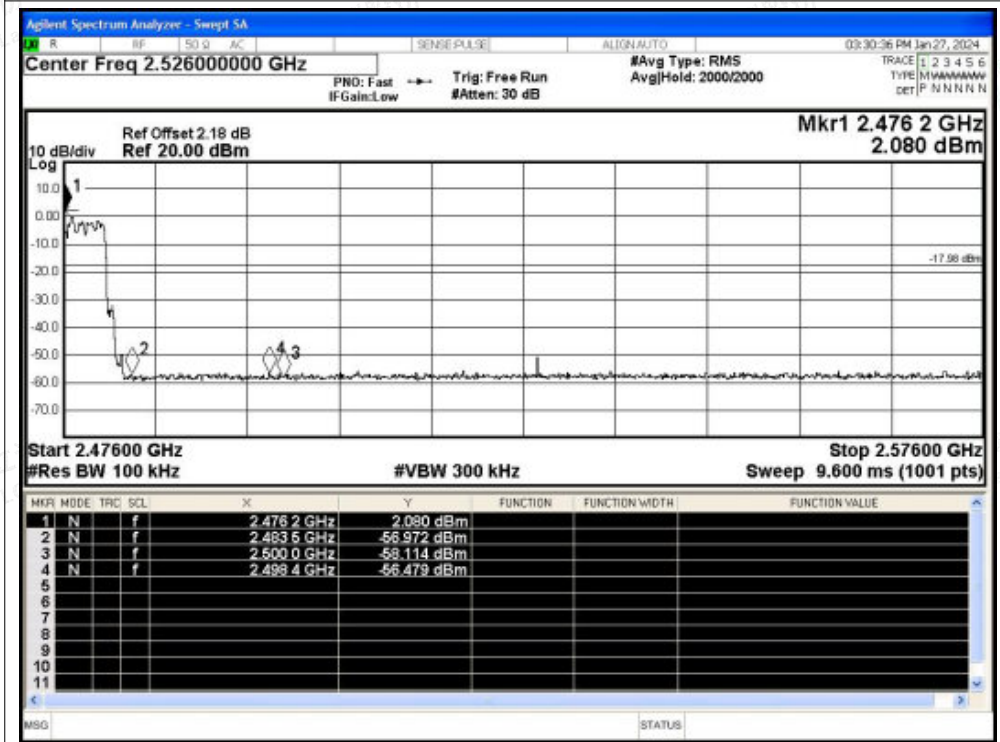




Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



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





A.7 Conducted RF Spurious Emission

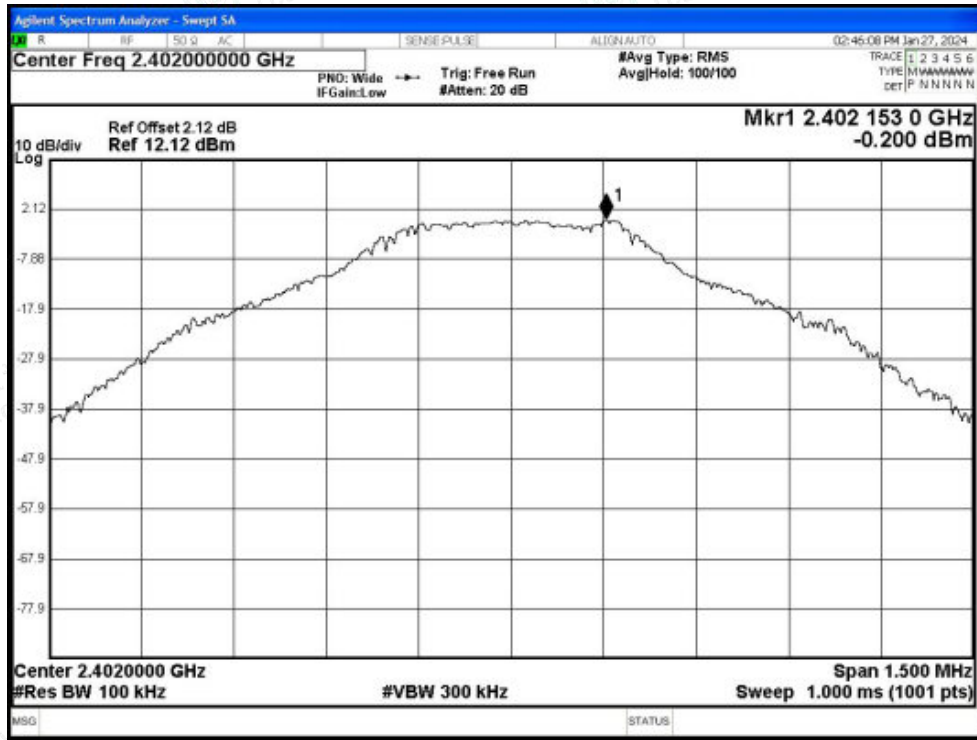
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-53.83	-20	Pass
NVNT	1-DH5	2441	Ant1	-54.13	-20	Pass
NVNT	1-DH5	2480	Ant1	-57.6	-20	Pass
NVNT	2-DH5	2402	Ant1	-54.61	-20	Pass
NVNT	2-DH5	2441	Ant1	-56.09	-20	Pass
NVNT	2-DH5	2480	Ant1	-57.6	-20	Pass
NVNT	3-DH5	2402	Ant1	-55.1	-20	Pass
NVNT	3-DH5	2441	Ant1	-54.12	-20	Pass
NVNT	3-DH5	2480	Ant1	-57.12	-20	Pass



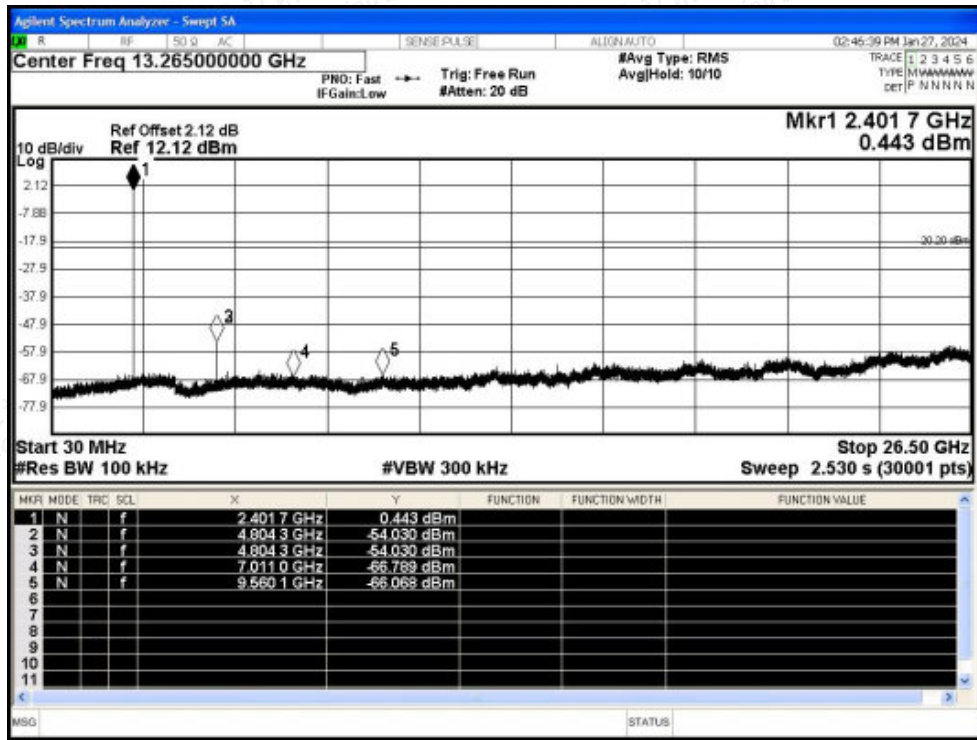


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

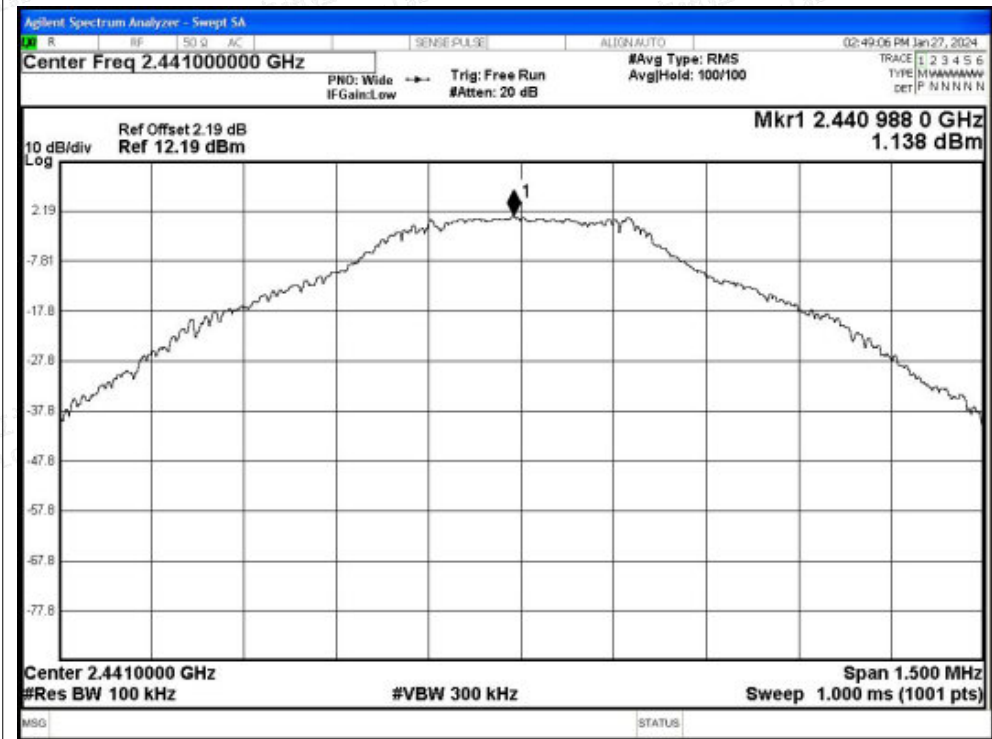


Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

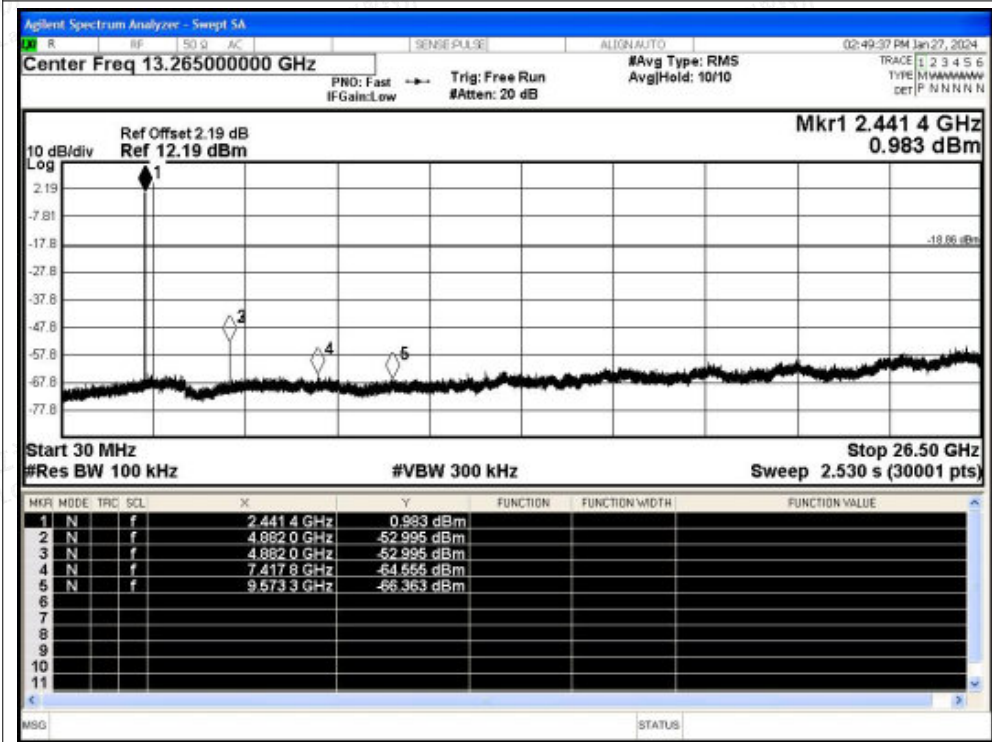




Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

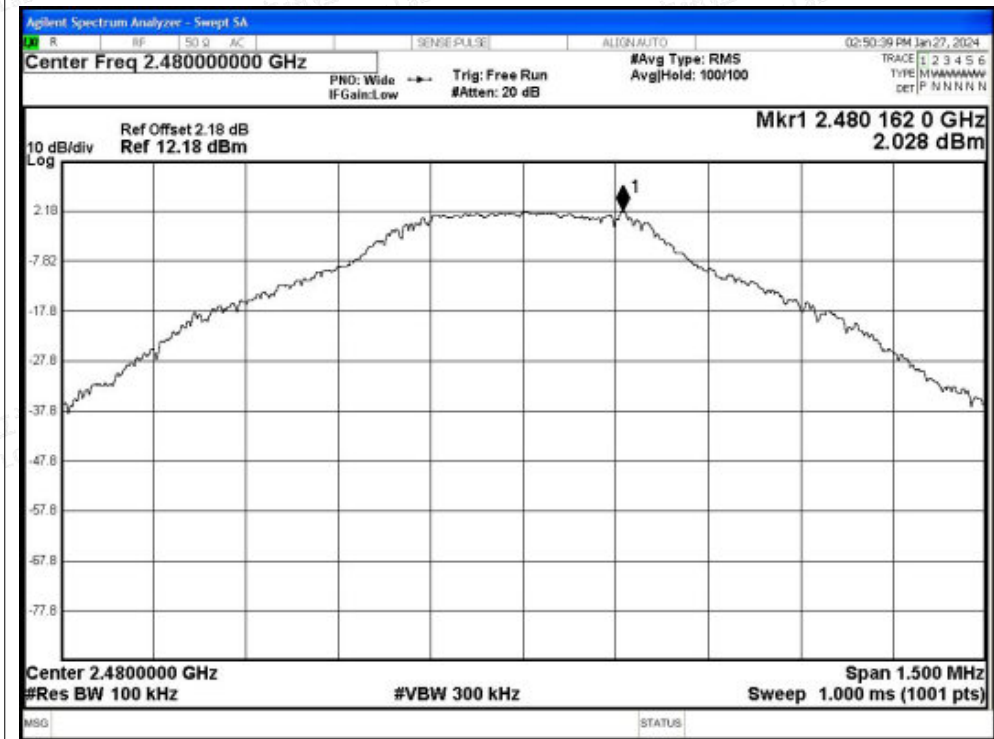


Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

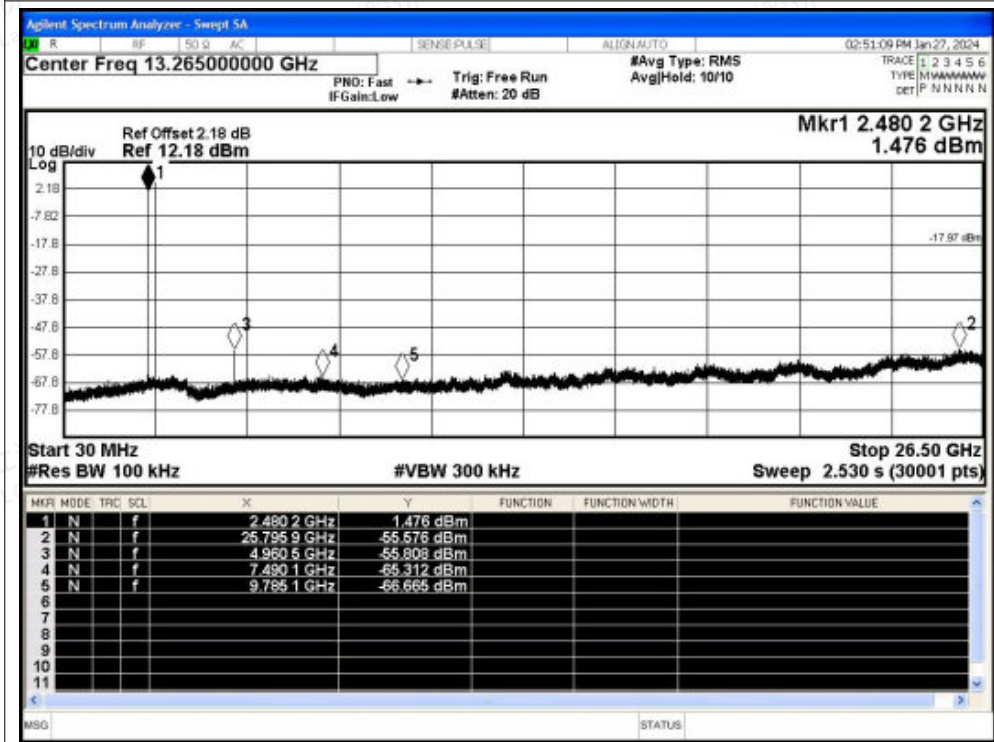




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

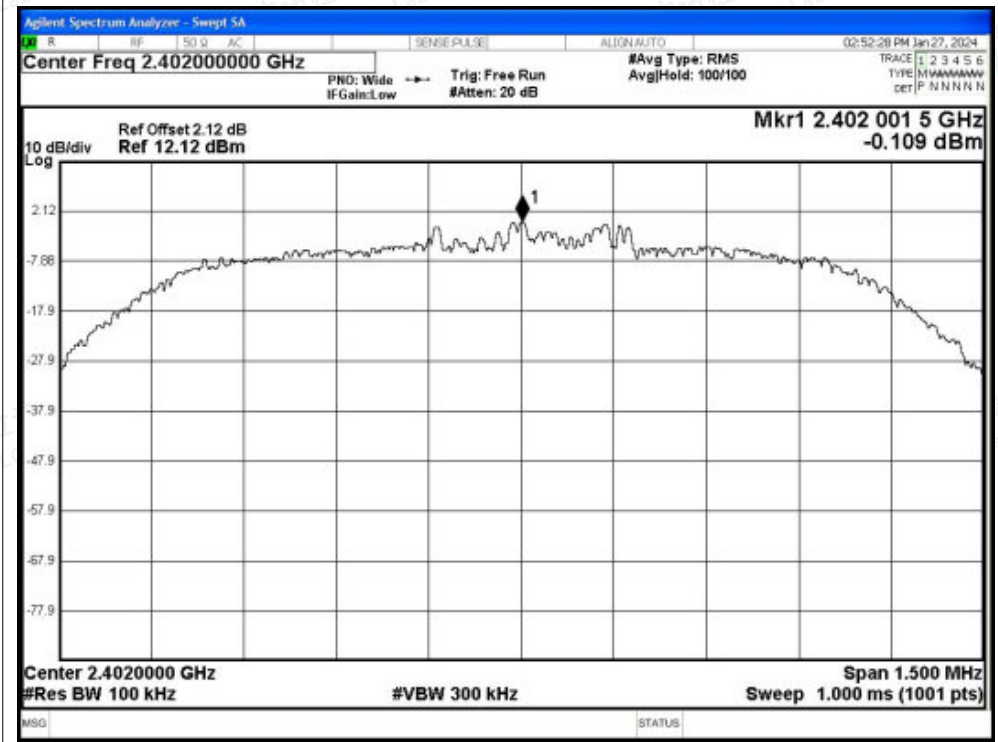


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

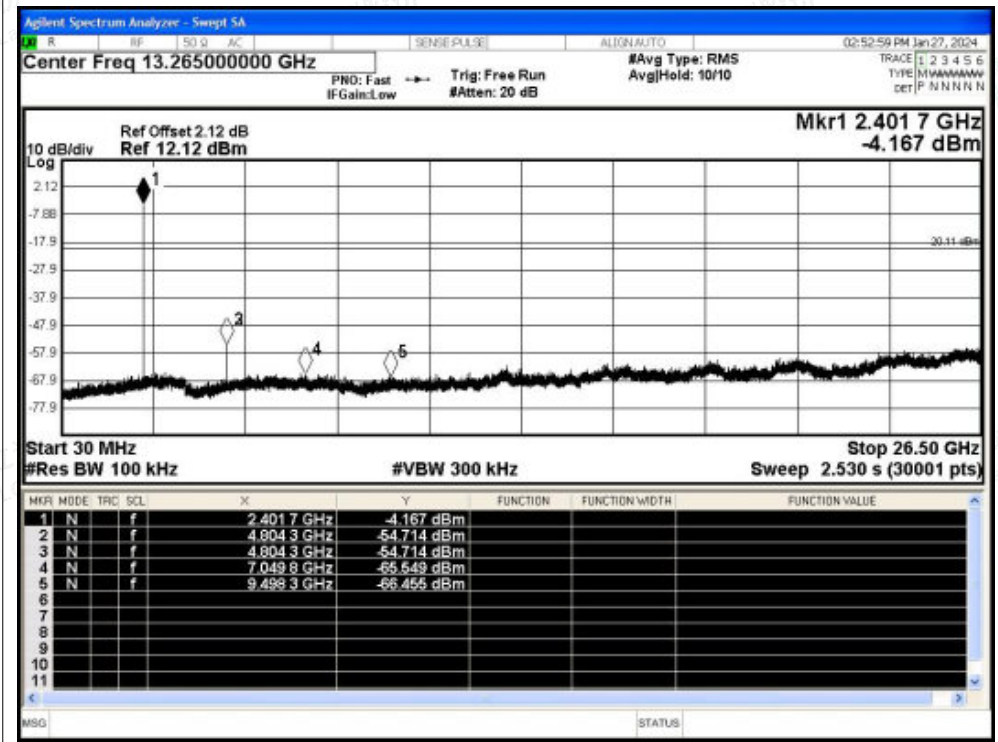




Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref

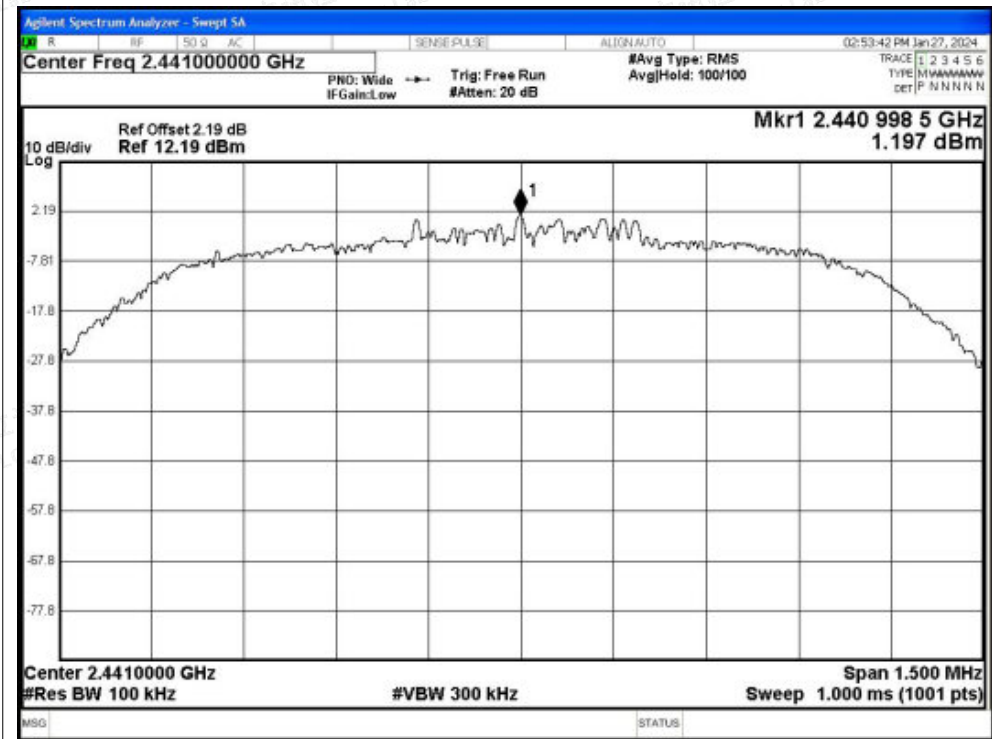


Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission

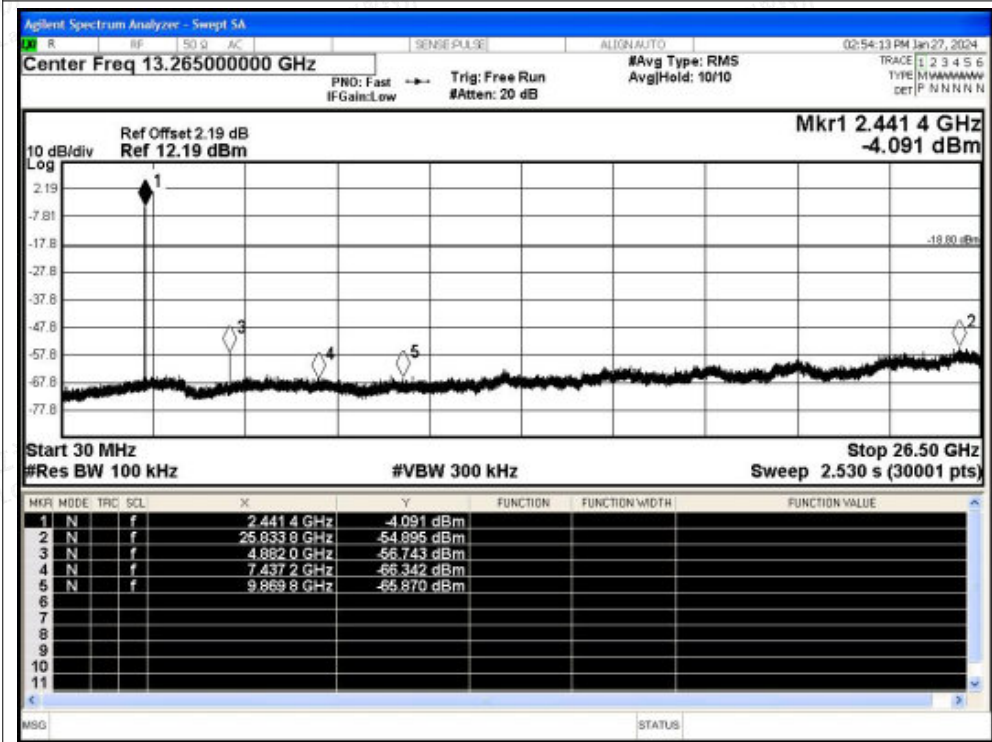




Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref

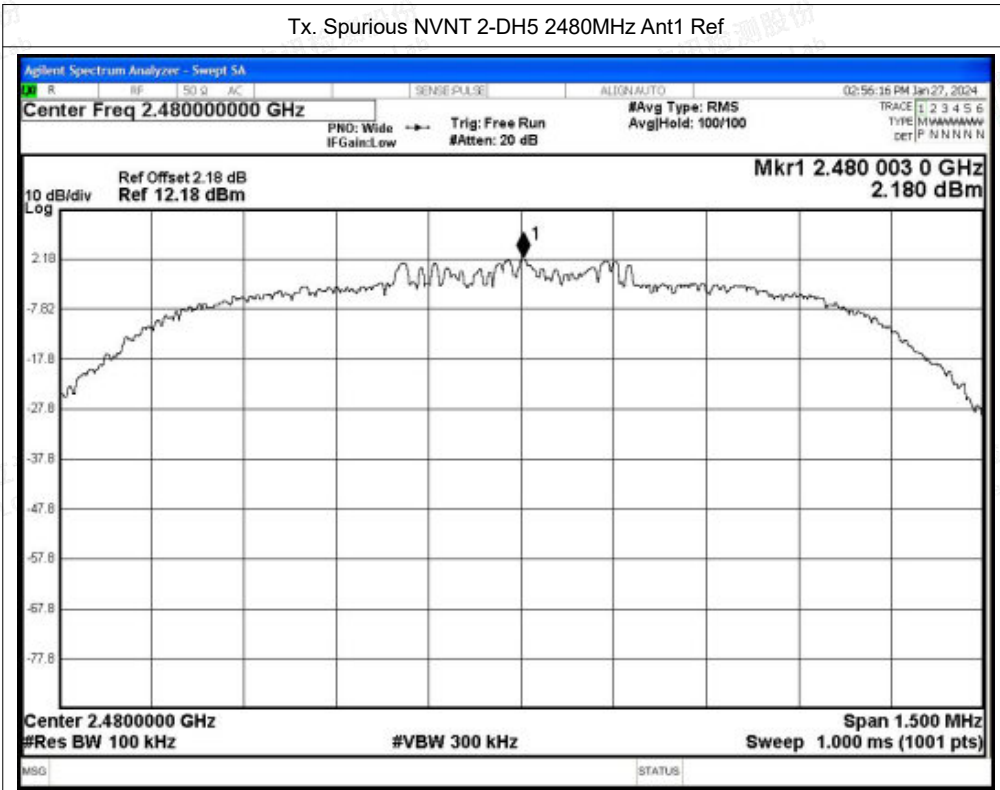


Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission

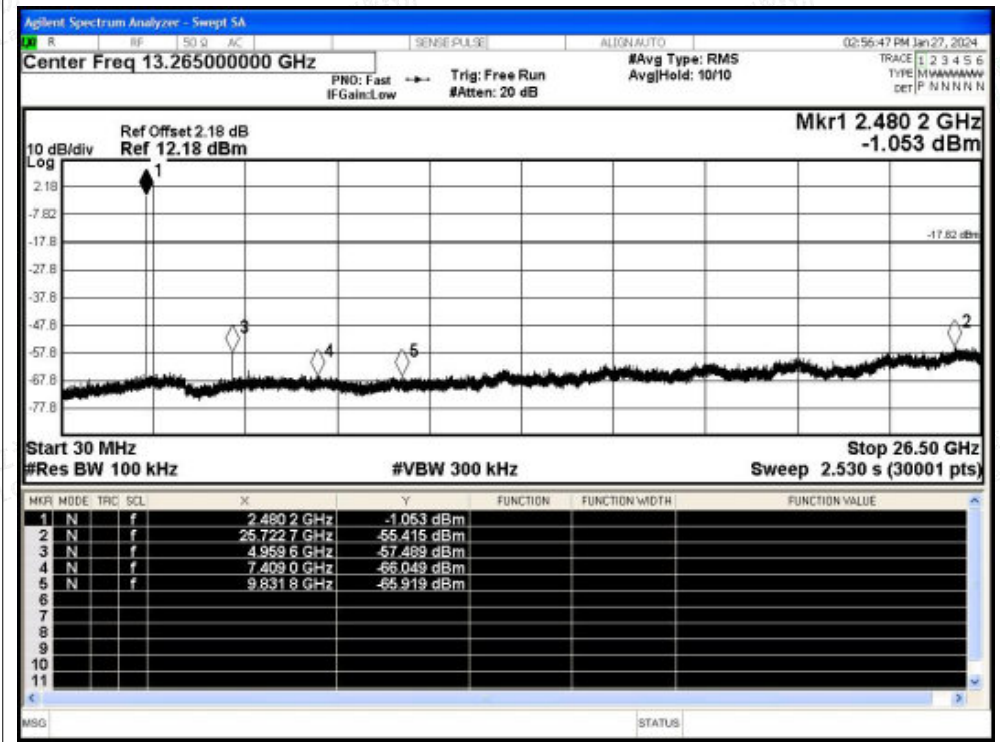




Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref

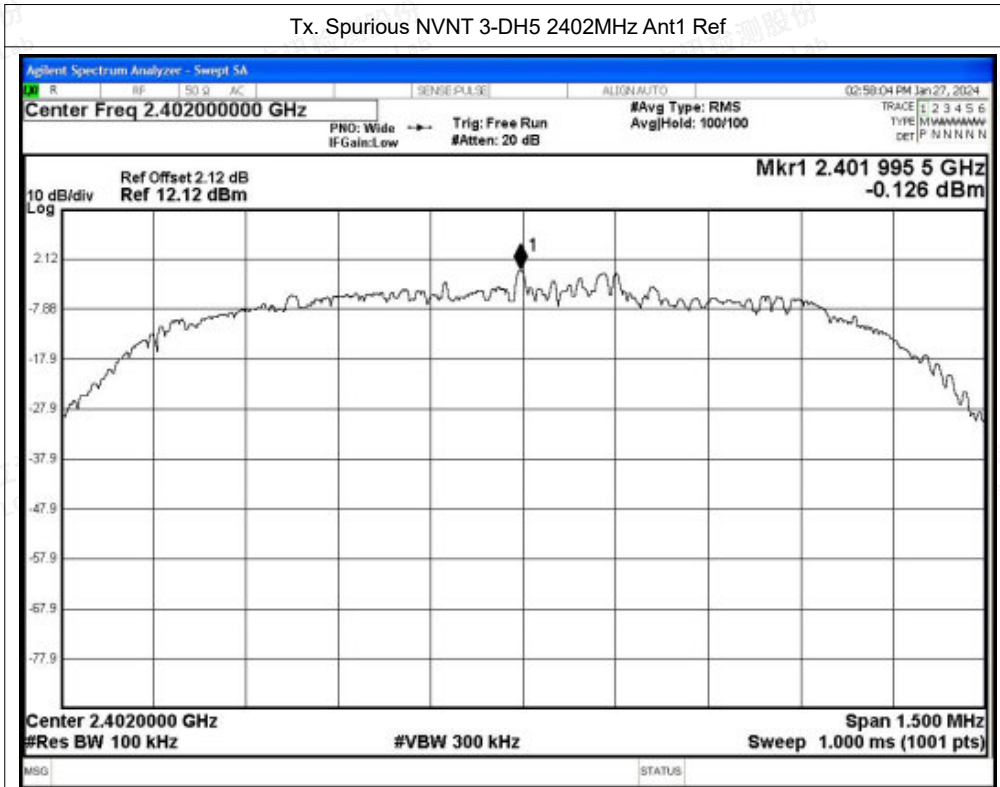


Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission

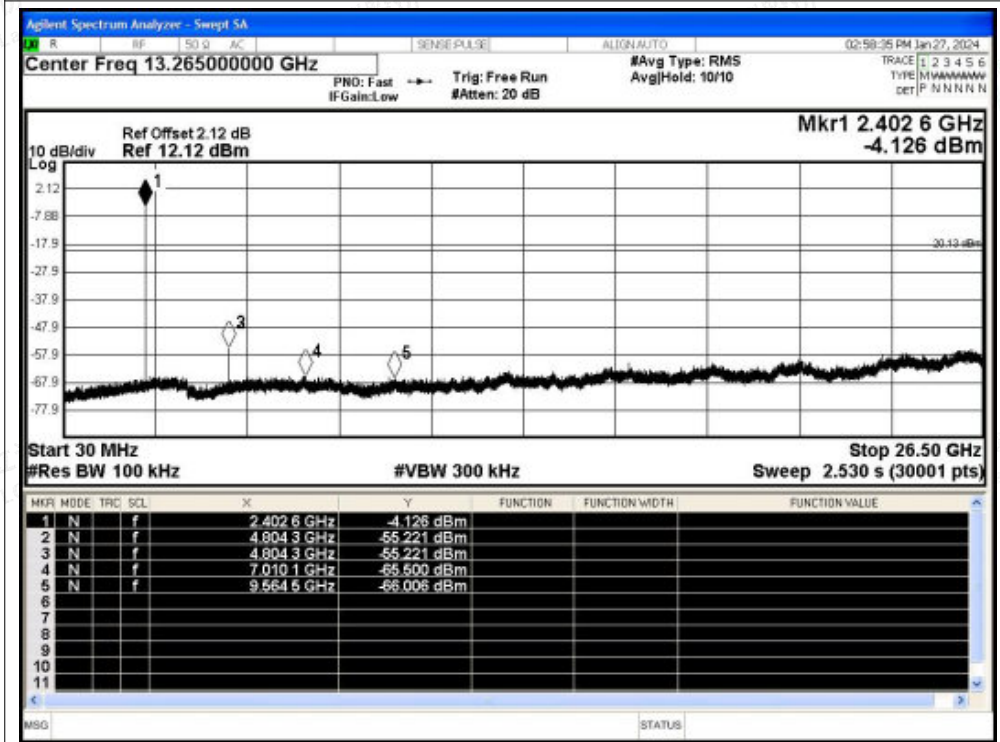




Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission

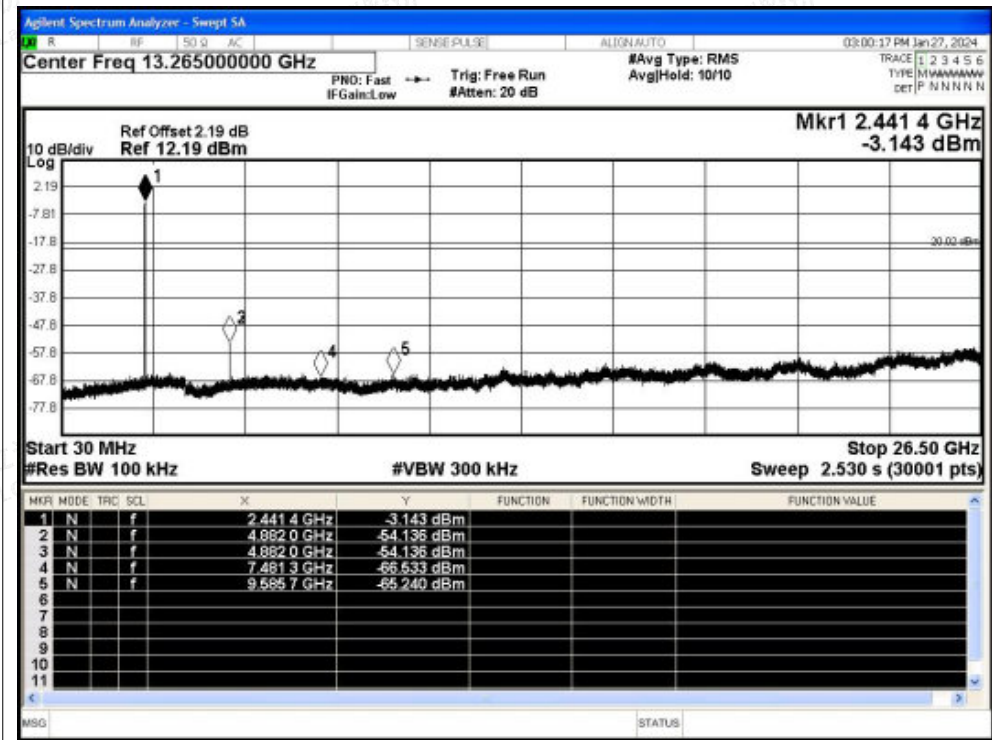




Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref

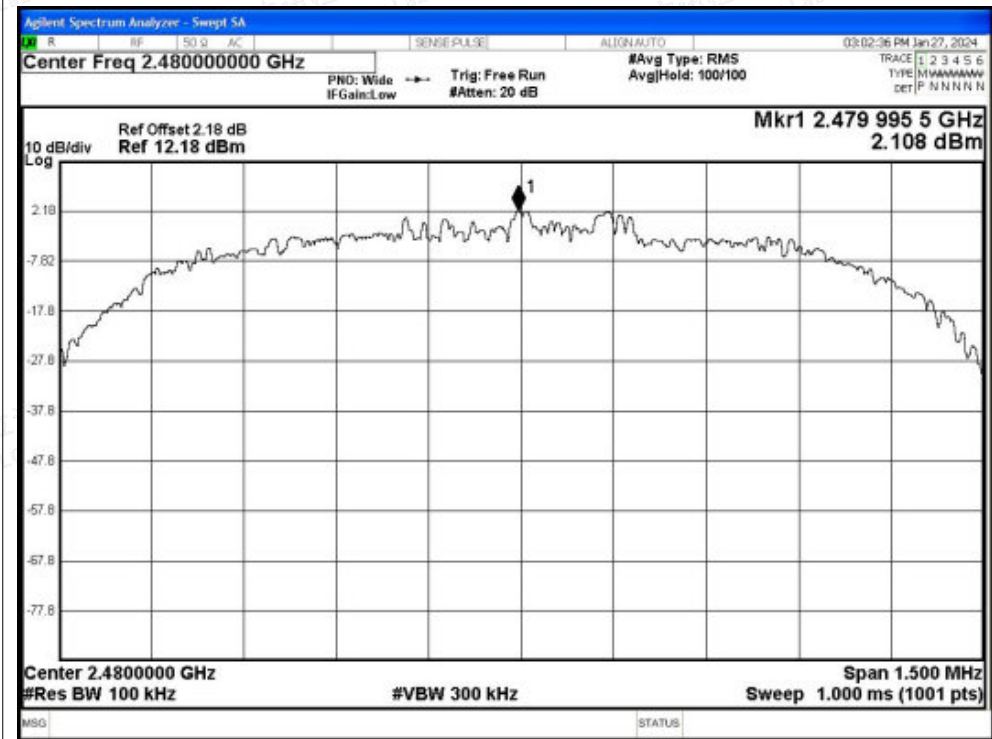


Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission

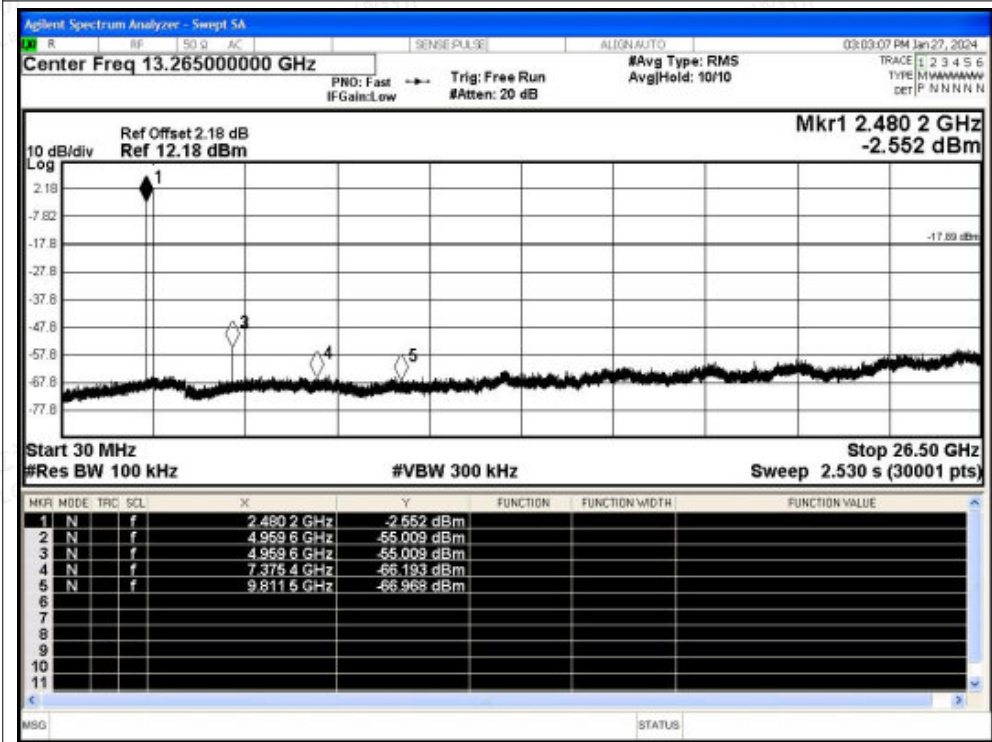




Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission





A.8 Duty Cycle

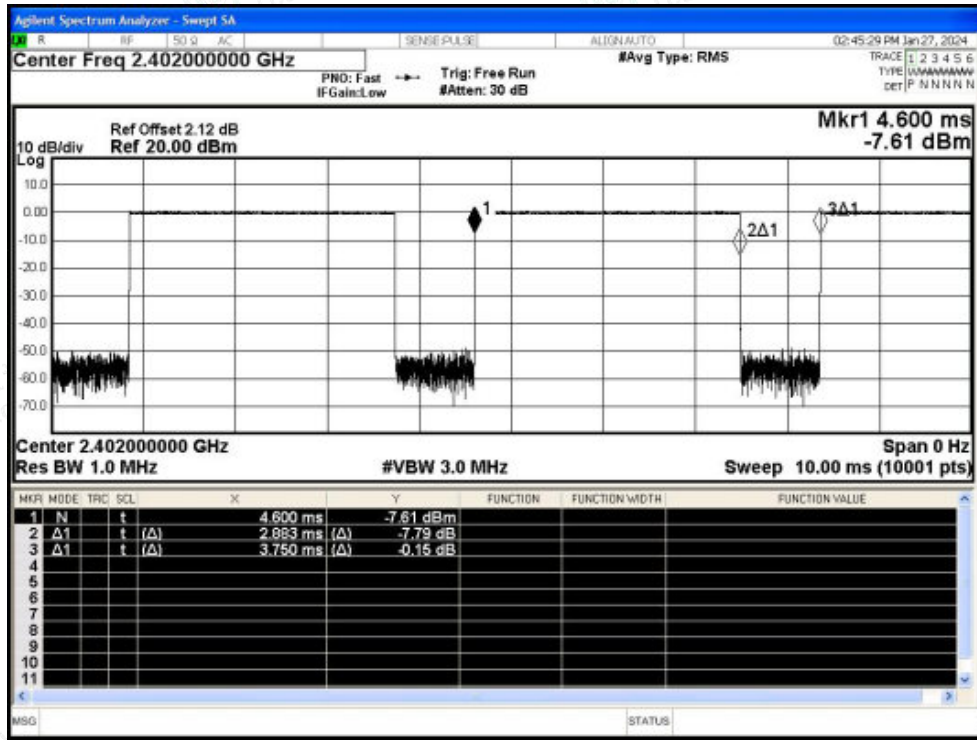
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	76.88	1.14	0.35
NVNT	1-DH5	2441	Ant1	76.88	1.14	0.35
NVNT	1-DH5	2480	Ant1	76.88	1.14	0.35
NVNT	2-DH5	2402	Ant1	76.99	1.14	0.35
NVNT	2-DH5	2441	Ant1	76.99	1.14	0.35
NVNT	2-DH5	2480	Ant1	76.96	1.14	0.35
NVNT	3-DH5	2402	Ant1	77.01	1.13	0.35
NVNT	3-DH5	2441	Ant1	77.04	1.13	0.35
NVNT	3-DH5	2480	Ant1	77.01	1.13	0.35



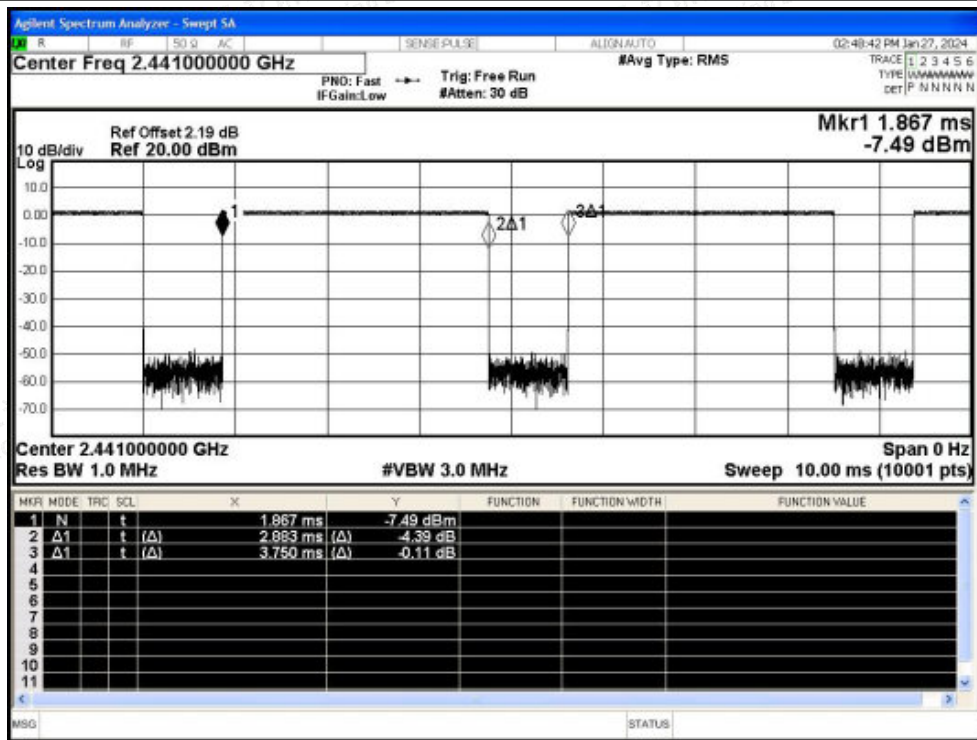


Test Graphs

Duty Cycle NVNT 1-DH5 2402MHz Ant1

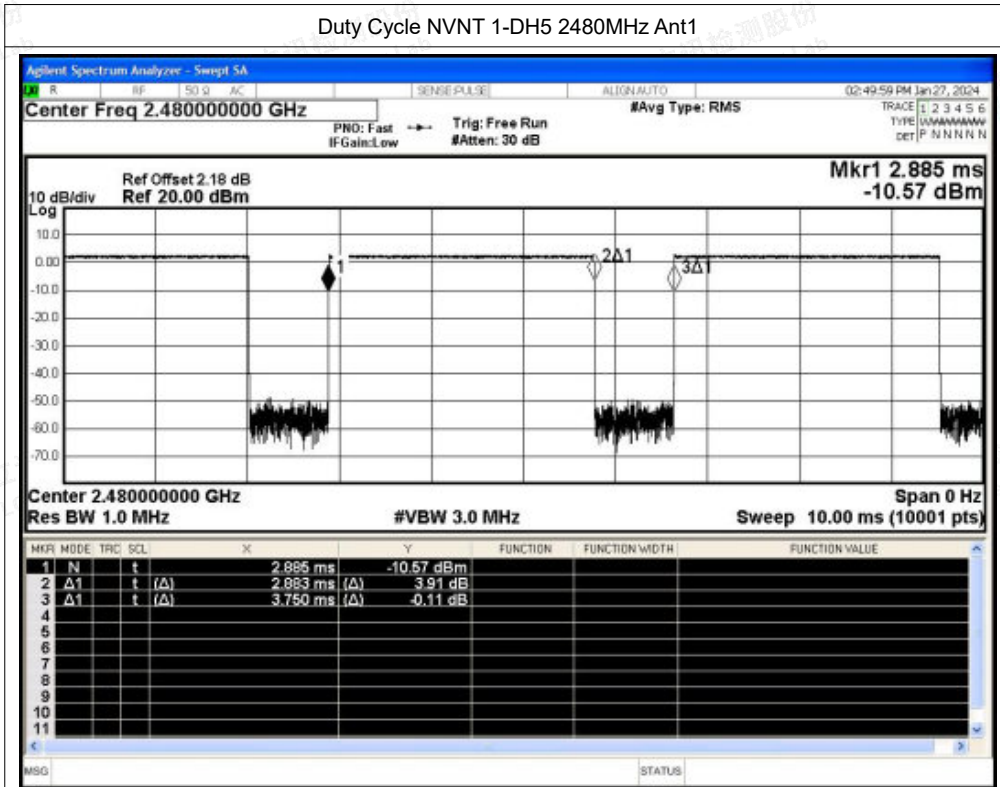


Duty Cycle NVNT 1-DH5 2441MHz Ant1

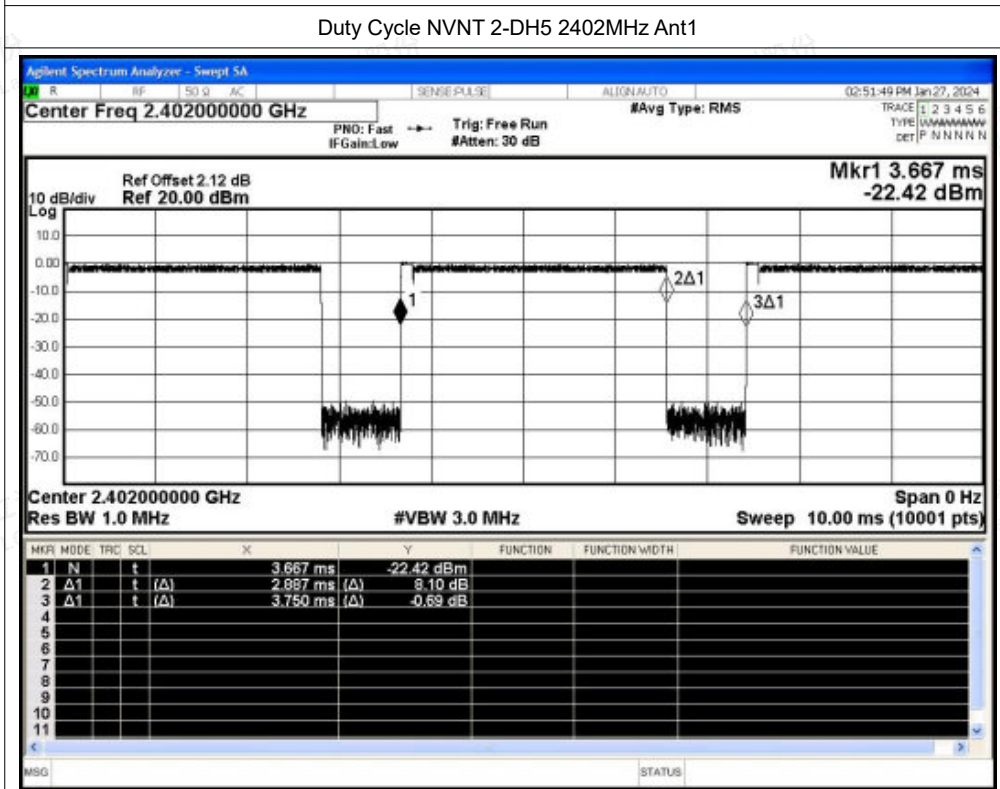




Duty Cycle NVNT 1-DH5 2480MHz Ant1

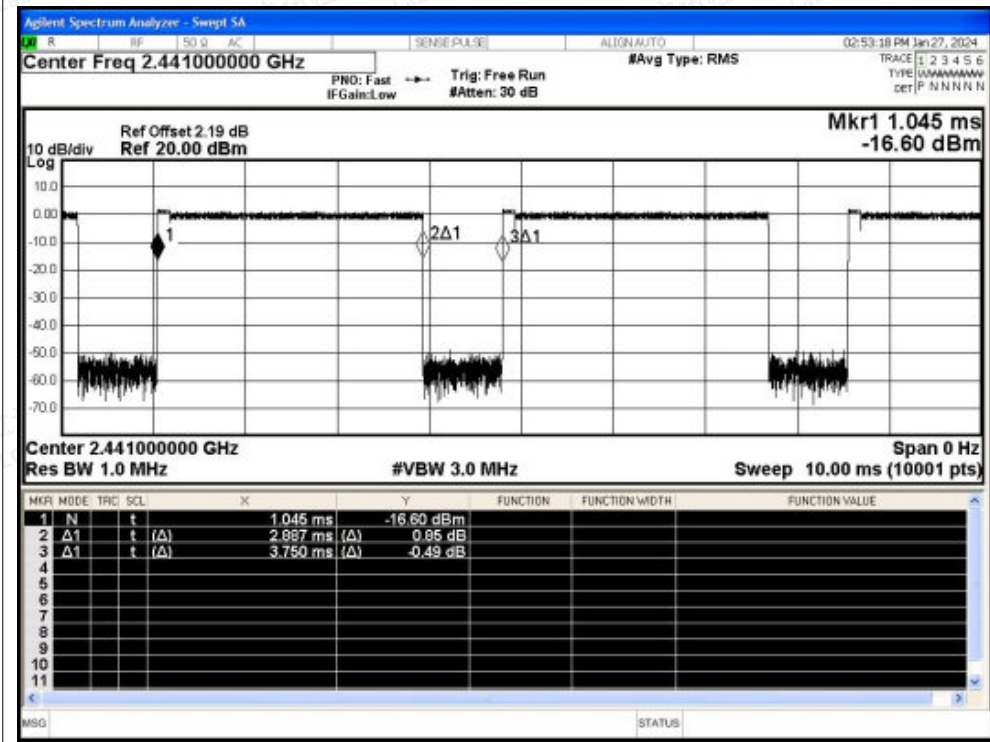


Duty Cycle NVNT 2-DH5 2402MHz Ant1

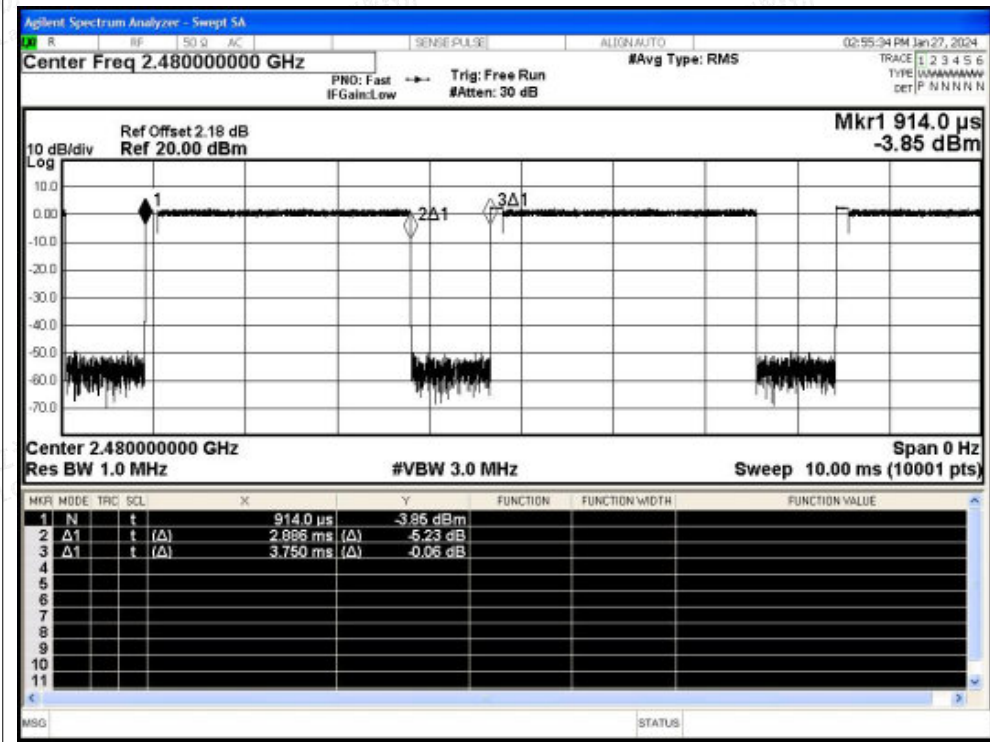




Duty Cycle NVNT 2-DH5 2441MHz Ant1

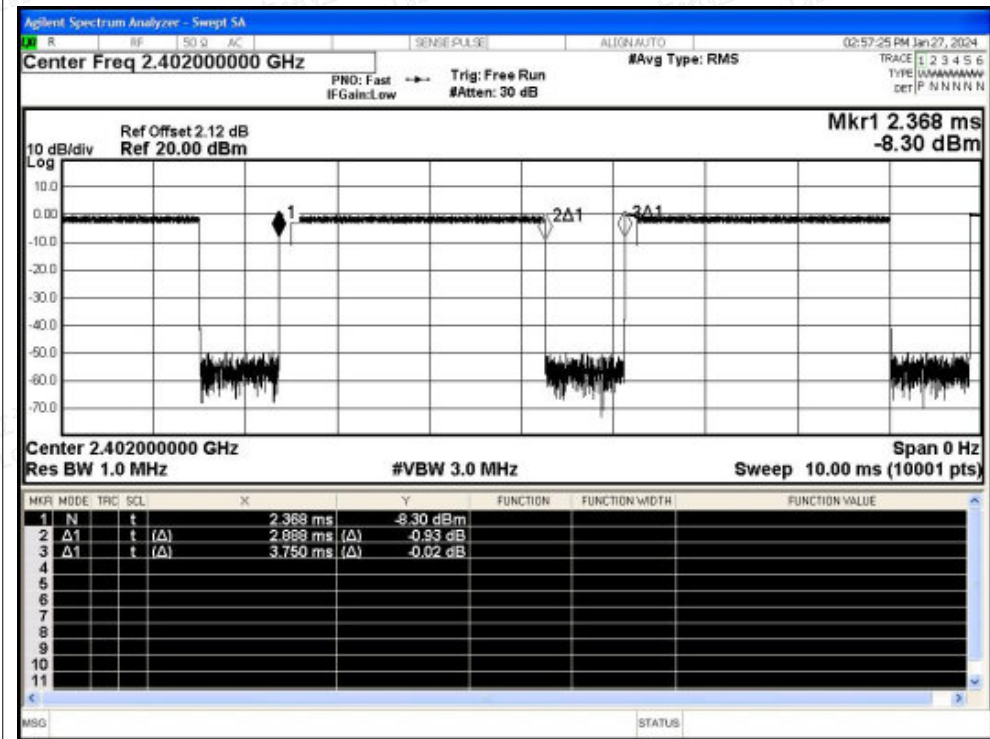


Duty Cycle NVNT 2-DH5 2480MHz Ant1

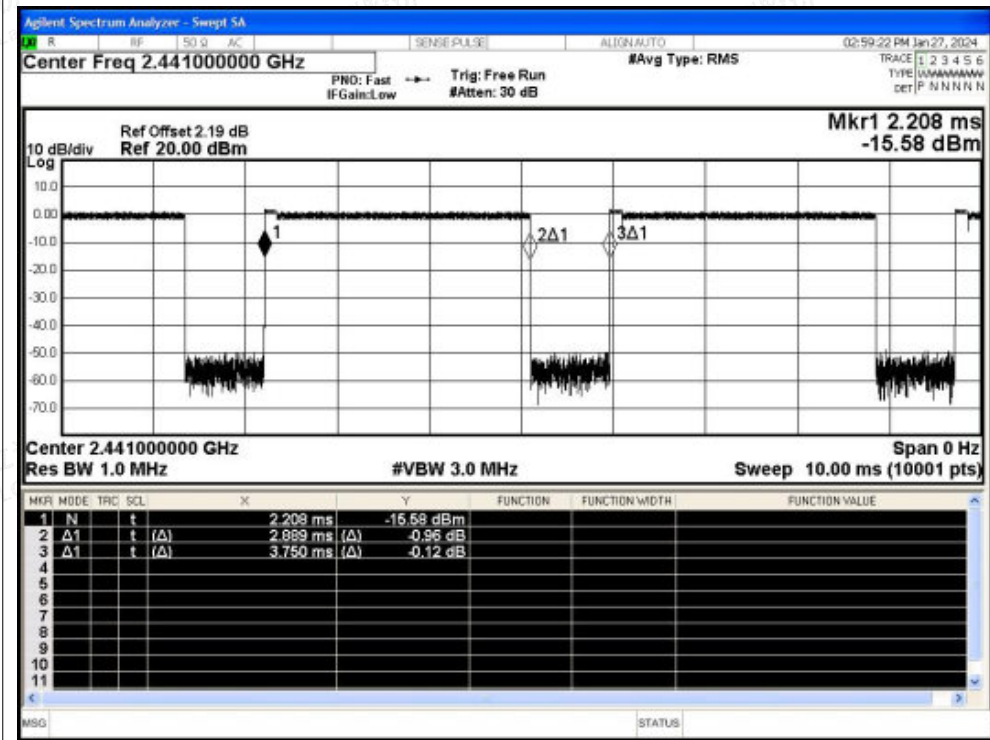




Duty Cycle NVNT 3-DH5 2402MHz Ant1

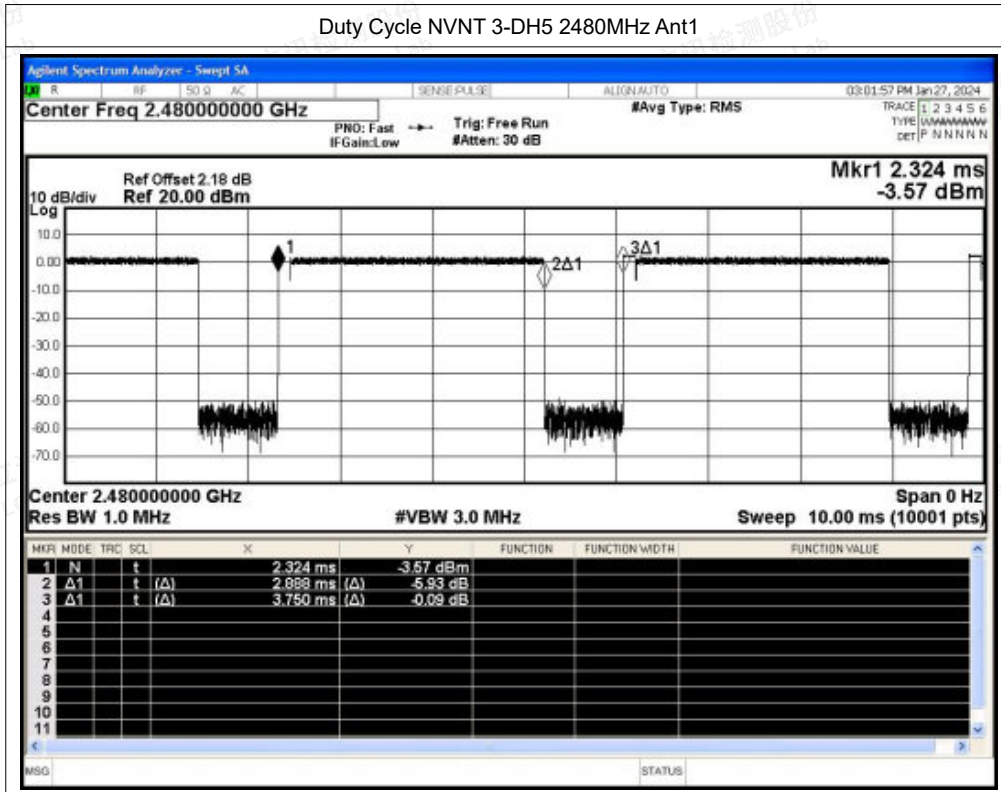


Duty Cycle NVNT 3-DH5 2441MHz Ant1





Duty Cycle NVNT 3-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	-50.05	2	-	47.21	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.63	2	1.14	39.77	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2363.568	-48.07	2	-	49.19	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2378.64	-57.47	2	1.14	40.93	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-51.34	2	-	45.92	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.84	2	1.14	39.56	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-49.16	2	-	48.1	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-57.84	2	1.14	40.56	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2499.496	-47.32	2	-	49.94	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2496.712	-57.36	2	1.14	41.04	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-49.99	2	-	47.27	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-57.49	2	1.14	40.91	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-50.33	2	-	46.93	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-59.13	2	1.14	39.27	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2385.264	-47.47	2	-	49.79	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2389.008	-57.82	2	1.14	40.58	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-51.23	2	-	46.03	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-58.64	2	1.14	39.76	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-49.56	2	-	47.7	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-57.43	2	1.14	40.97	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2493.616	-47	2	-	50.26	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.584	-57.12	2	1.14	41.28	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-50.74	2	-	46.52	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-58.1	2	1.14	40.3	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-49.87	2	-	47.39	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-58.85	2	1.13	39.54	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2388.624	-46.43	2	-	50.83	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2377.68	-57.73	2	1.13	40.66	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-50.82	2	-	46.44	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-58.75	2	1.13	39.64	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-48.18	2	-	49.08	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-57.3	2	1.13	41.09	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2487.304	-46.92	2	-	50.34	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.752	-57.08	2	1.13	41.31	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-49.65	2	-	47.61	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-58.39	2	1.13	40	Average	54	Pass



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

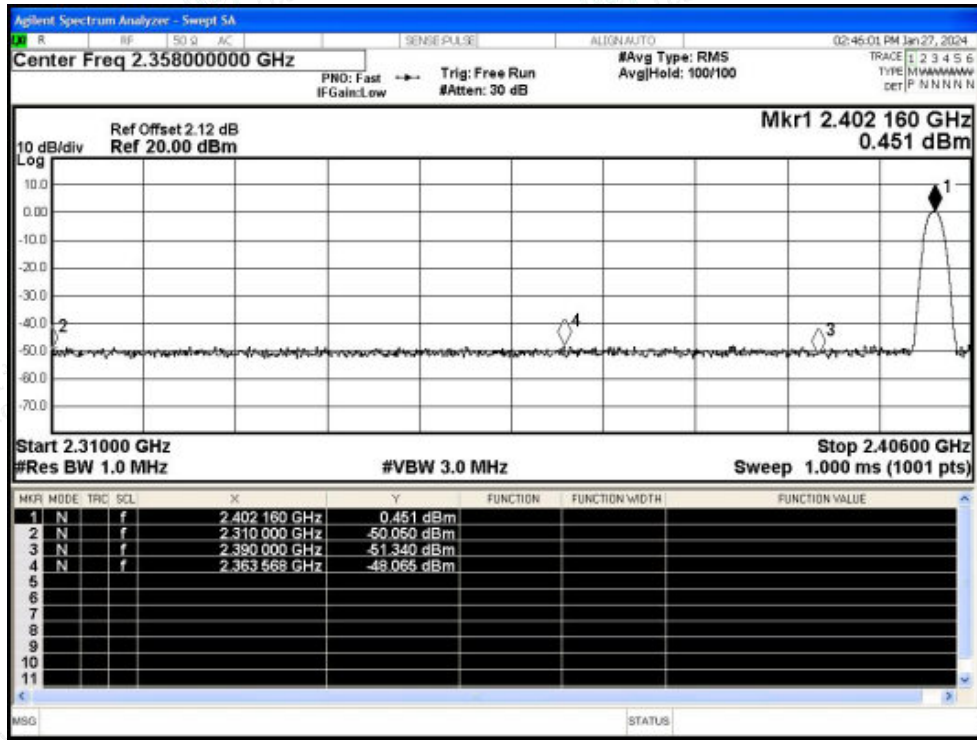
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

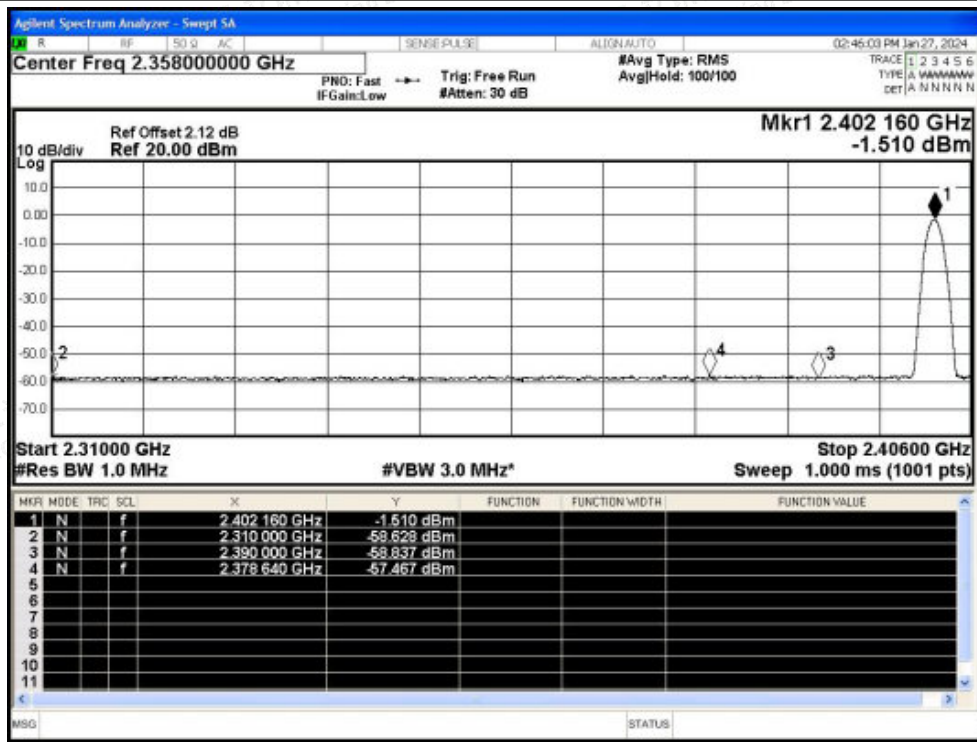


Test Graphs

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

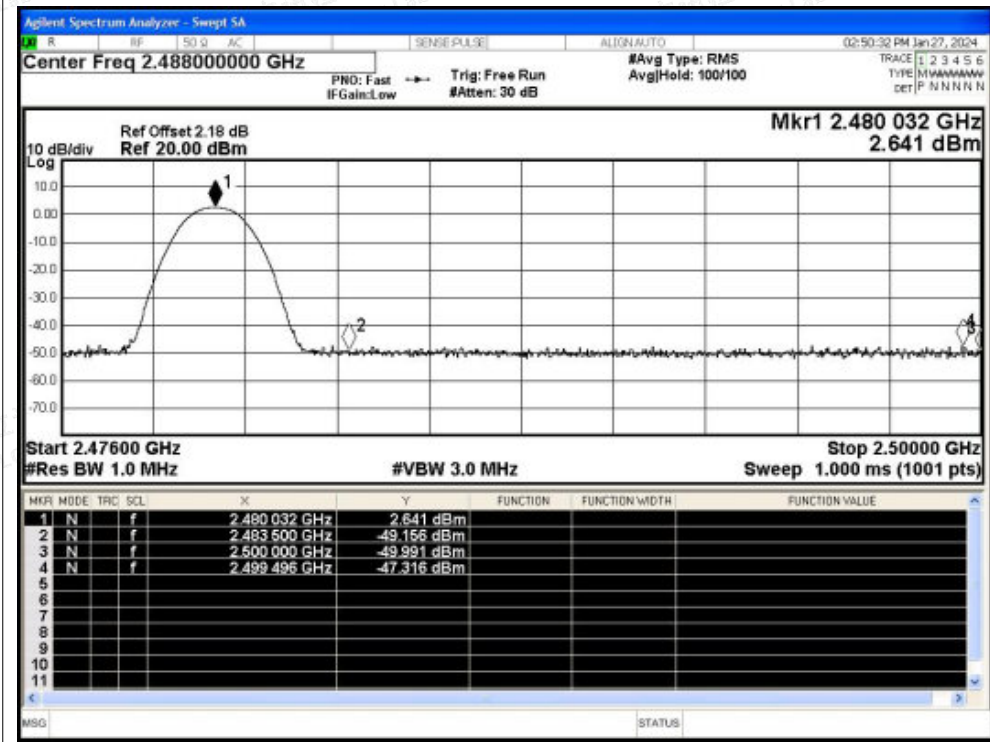


Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

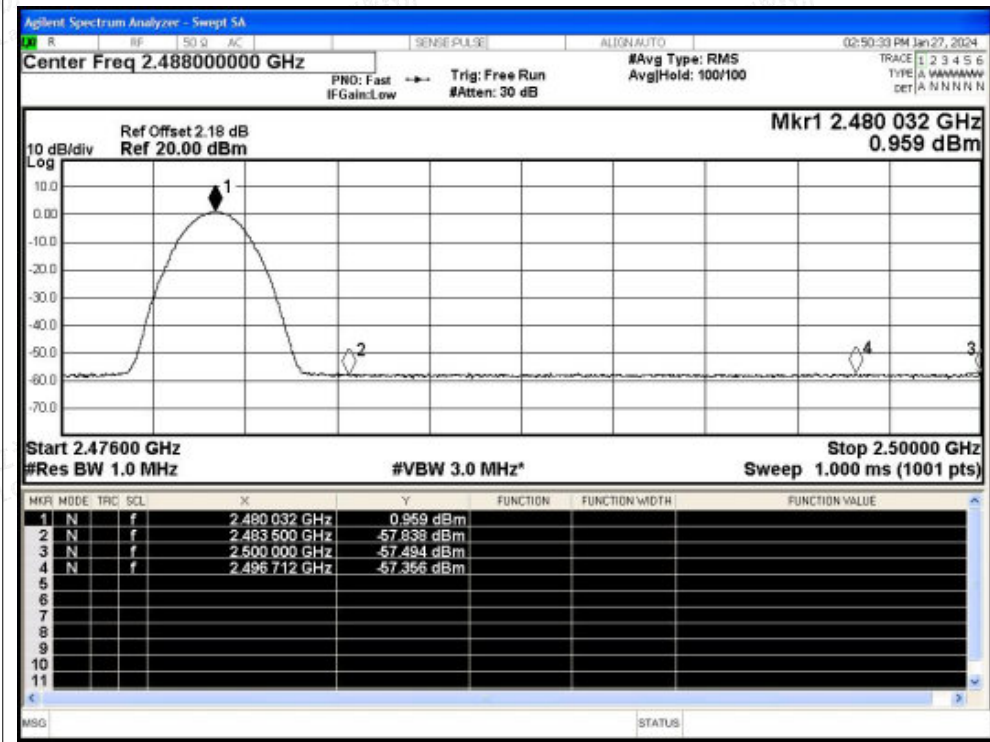




Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak

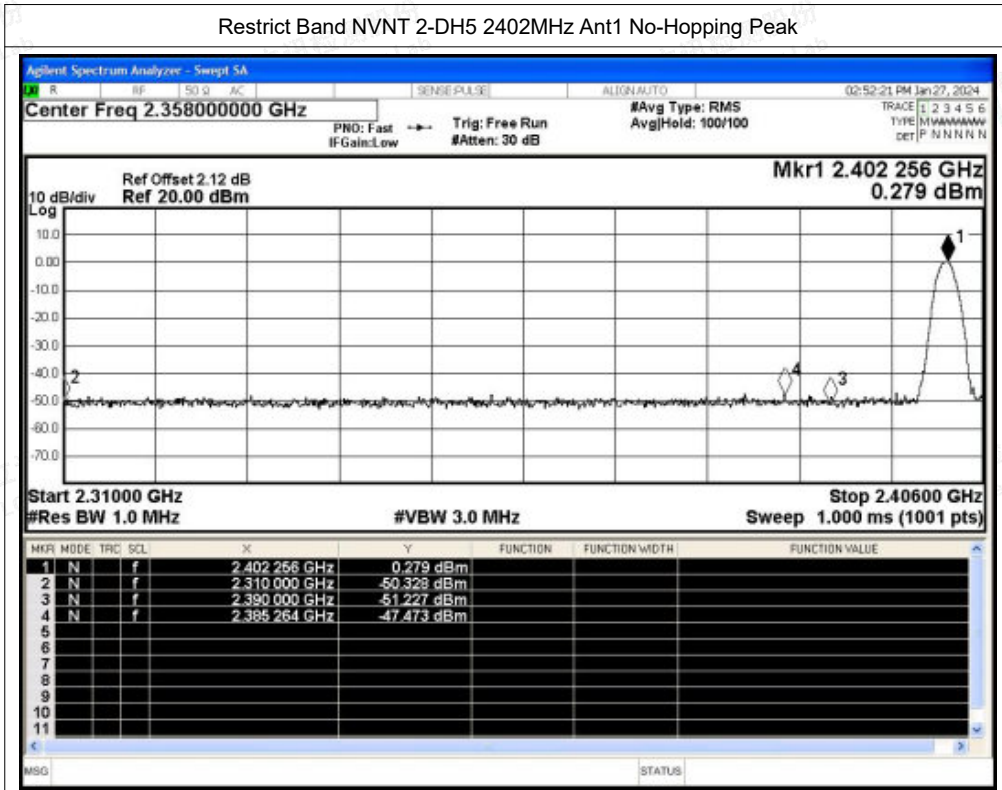


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

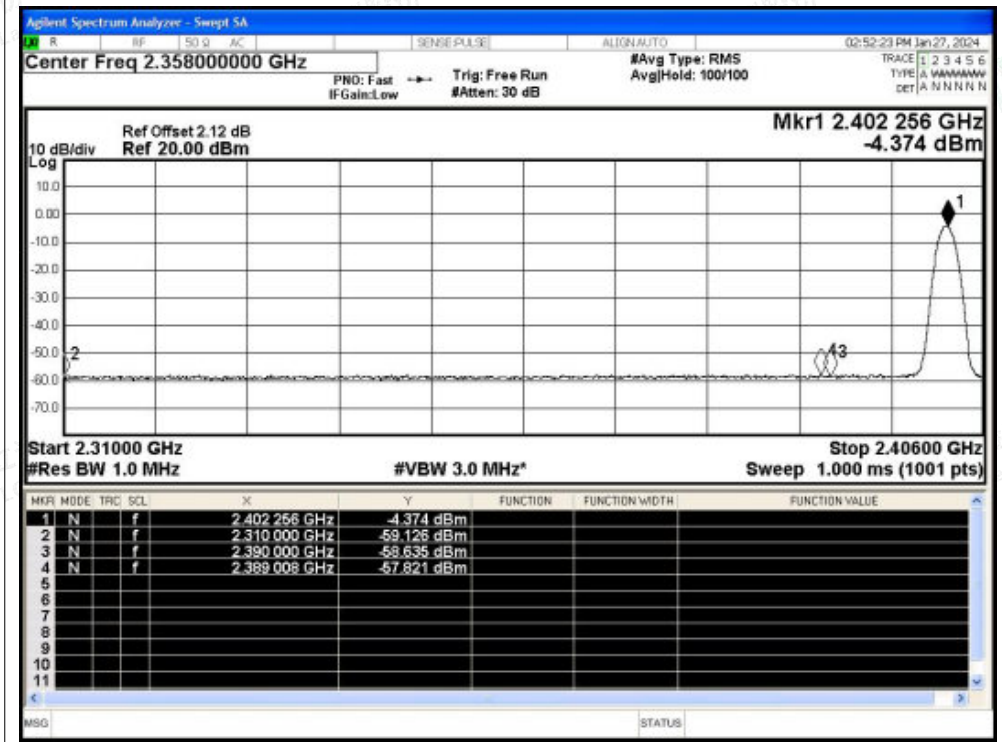




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak

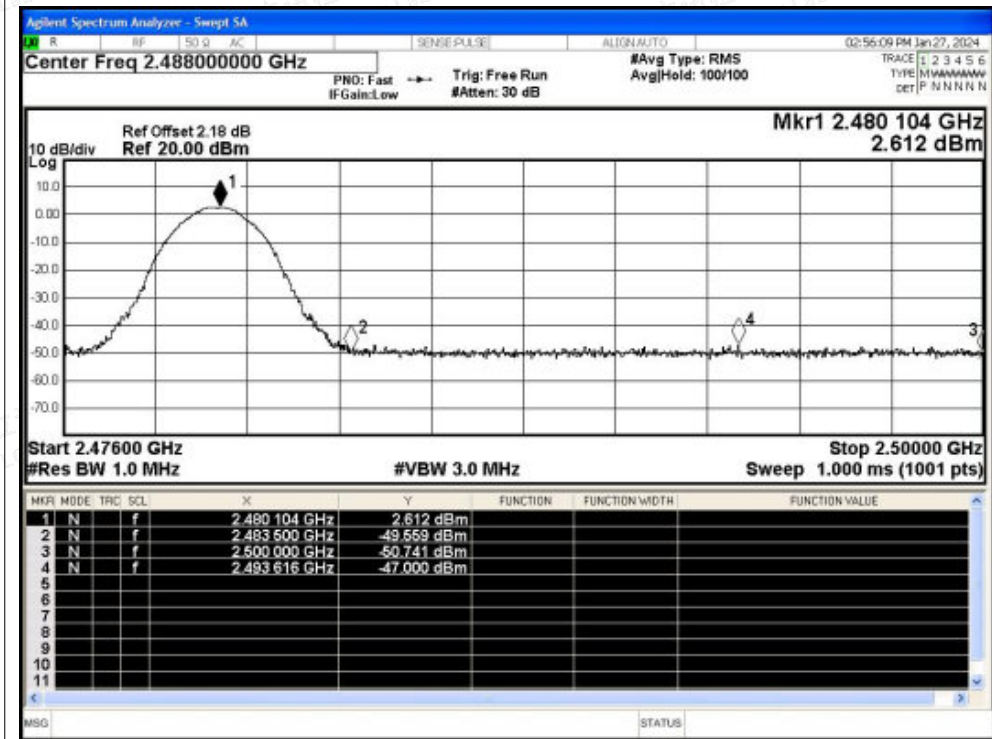


Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average

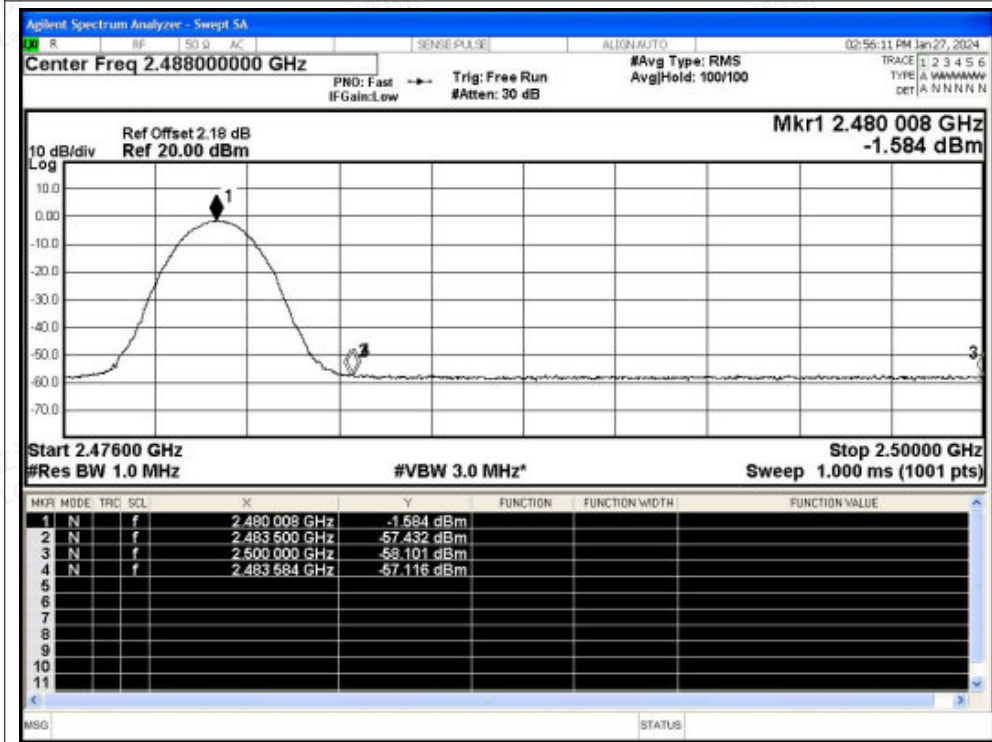




Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak

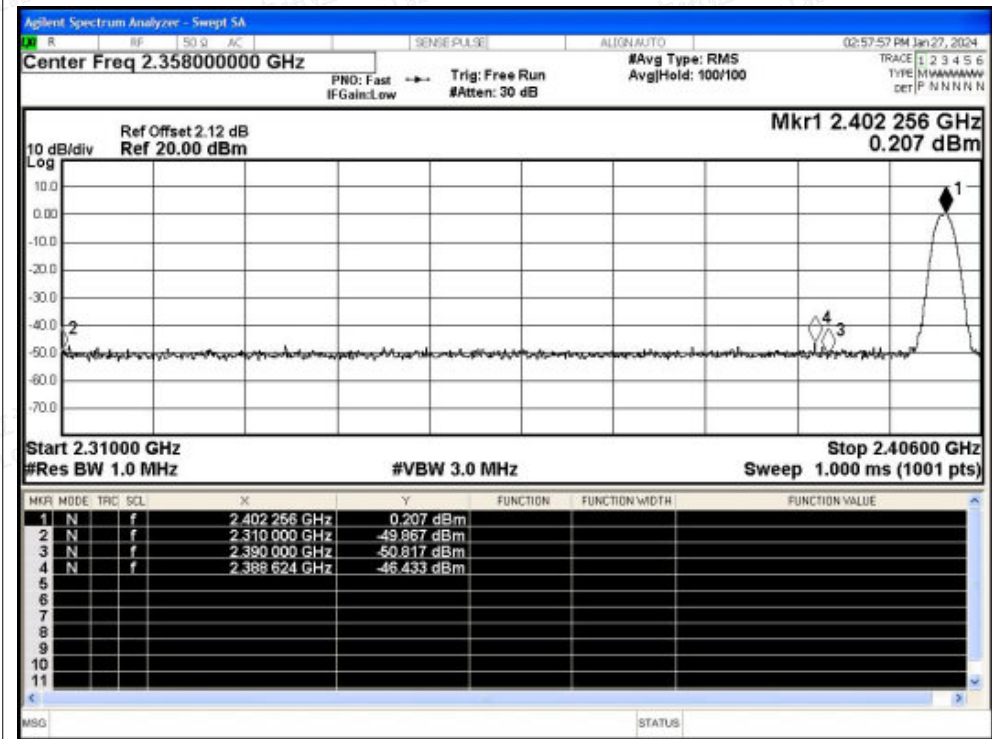


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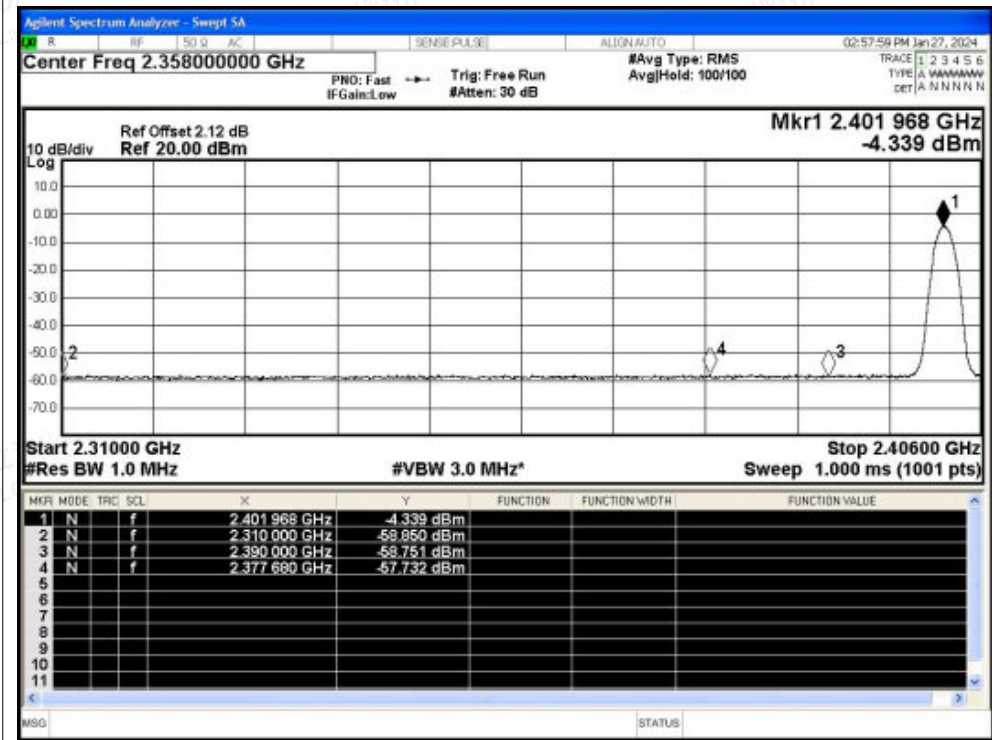




Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak

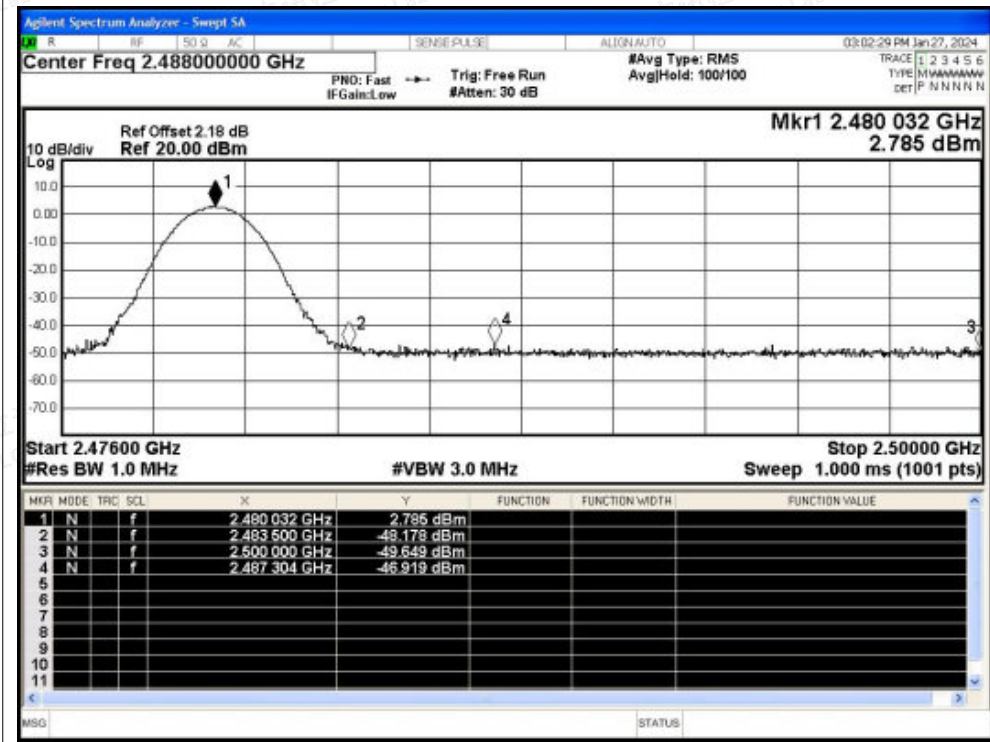


Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Average





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



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

