



## Appendix A

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

Product Name: Bone Conduction Bluetooth Headset

Test Model: Sam&Johnny YS01

#### Environmental Conditions

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





### A.1 -20dB Bandwidth

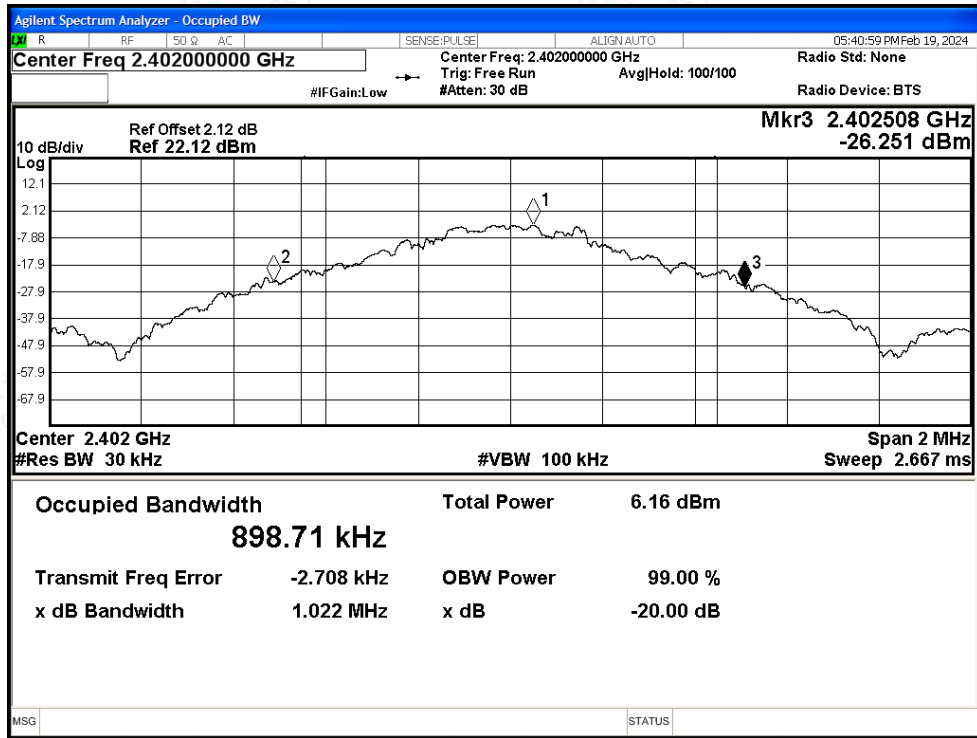
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant	1.022	N/A	Pass
NVNT	1-DH5	2441	Ant	1.018	N/A	Pass
NVNT	1-DH5	2480	Ant	0.948	N/A	Pass
NVNT	2-DH5	2402	Ant	1.329	N/A	Pass
NVNT	2-DH5	2441	Ant	1.322	N/A	Pass
NVNT	2-DH5	2480	Ant	1.283	N/A	Pass
NVNT	3-DH5	2402	Ant	1.299	N/A	Pass
NVNT	3-DH5	2441	Ant	1.297	N/A	Pass
NVNT	3-DH5	2480	Ant	1.295	N/A	Pass





Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant



-20dB Bandwidth NVNT 1-DH5 2441MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

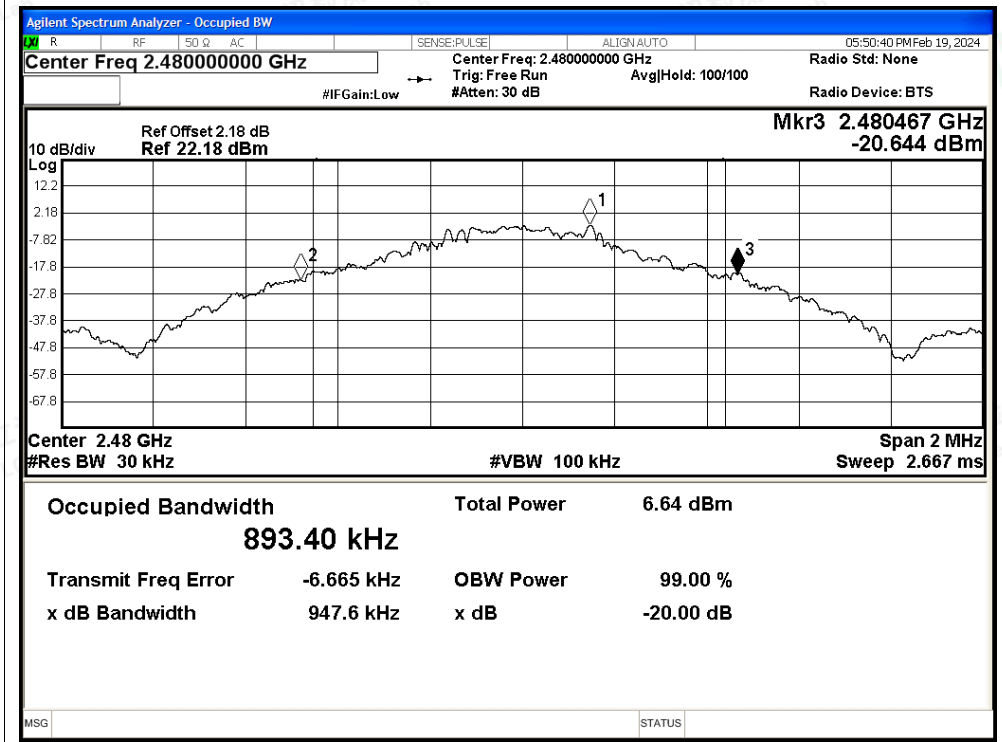
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

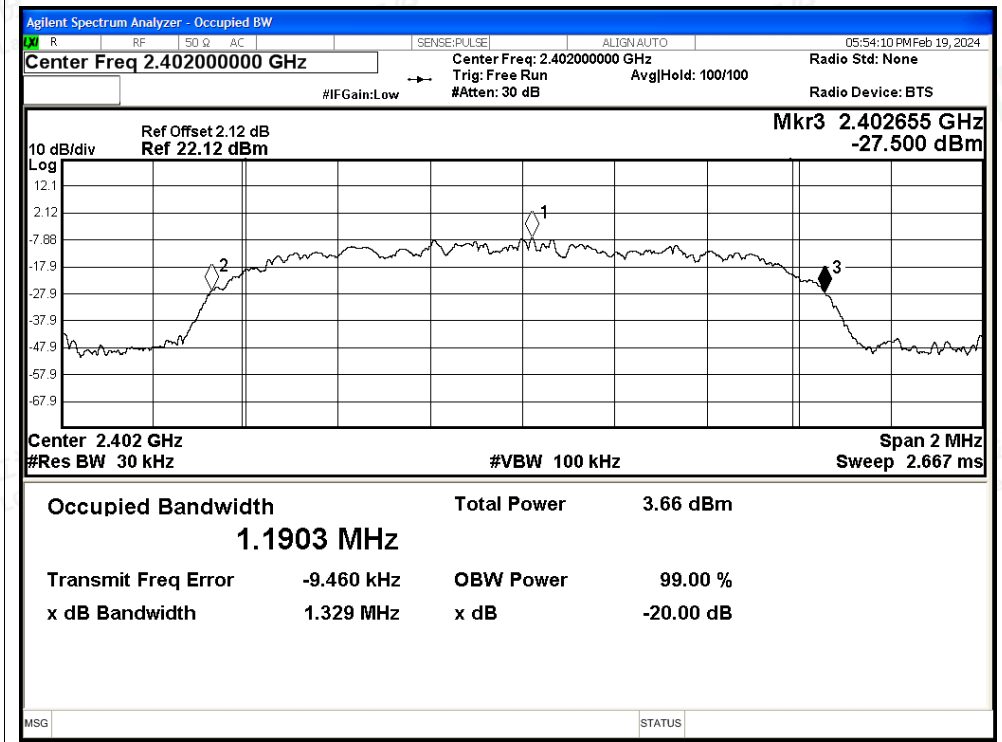
Scan code to check authenticity



-20dB Bandwidth NVNT 1-DH5 2480MHz Ant

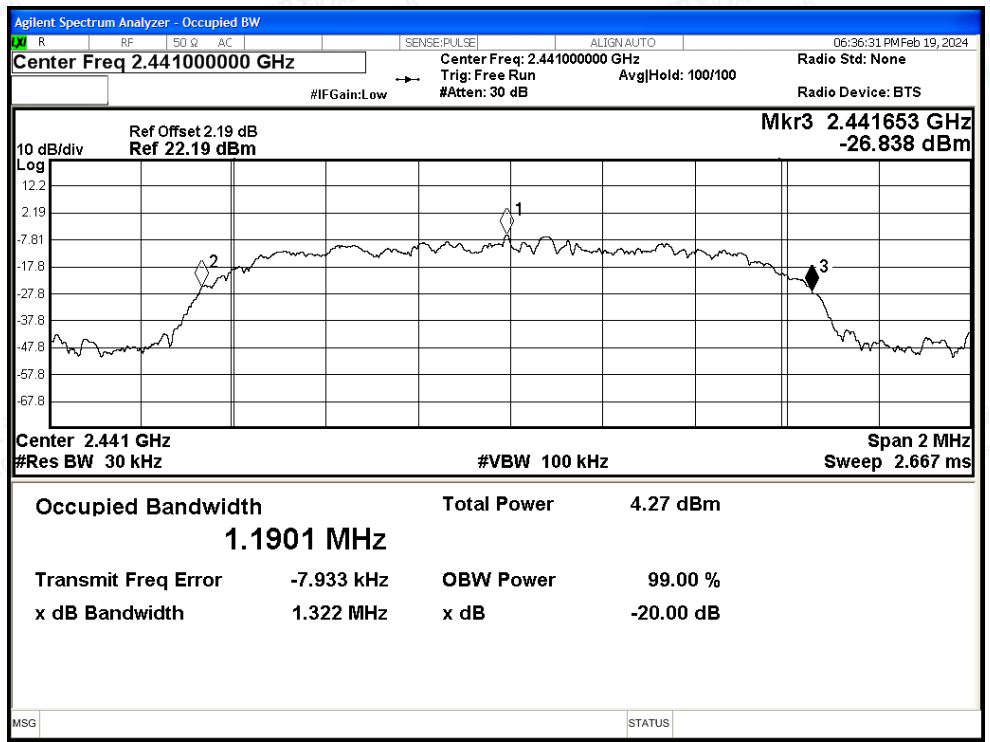


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant

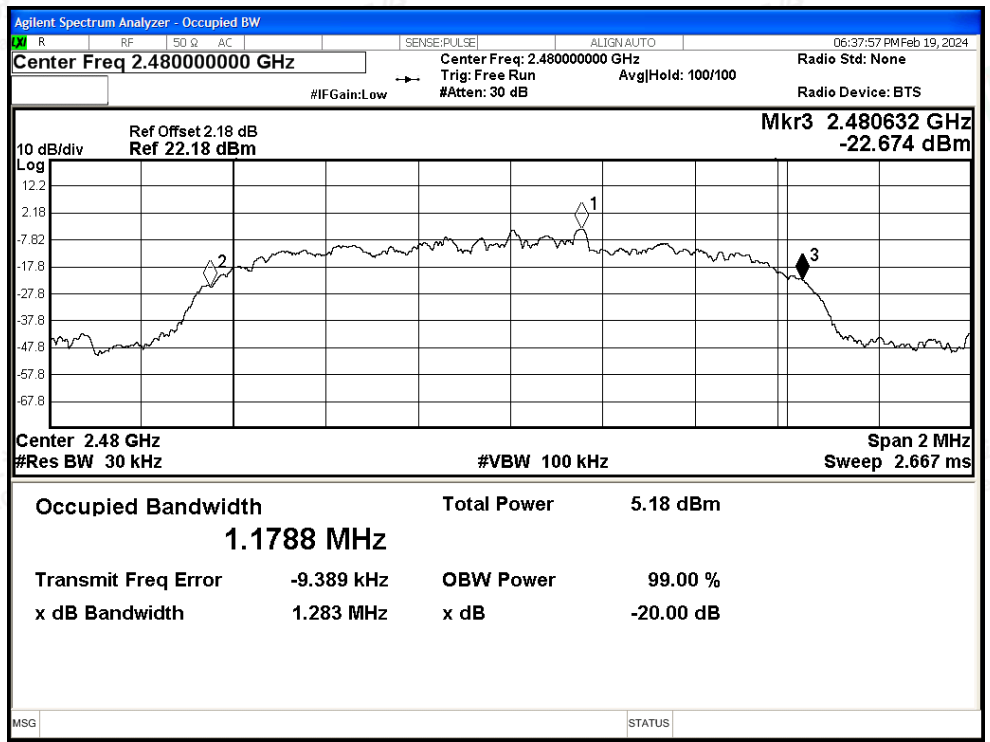




-20dB Bandwidth NVNT 2-DH5 2441MHz Ant

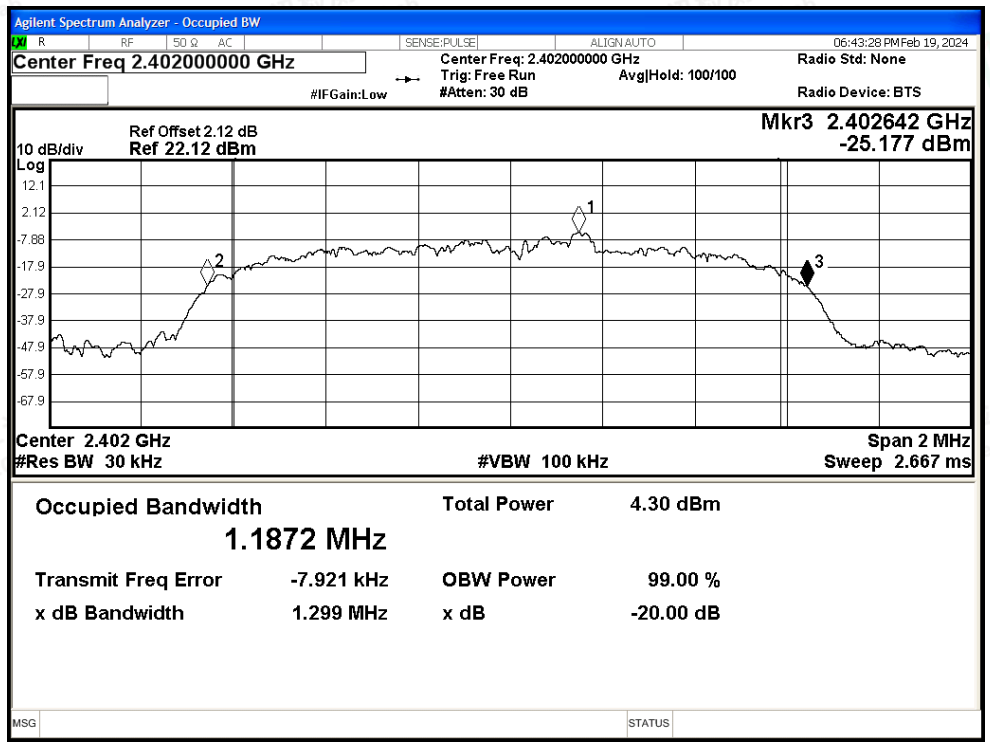


-20dB Bandwidth NVNT 2-DH5 2480MHz Ant

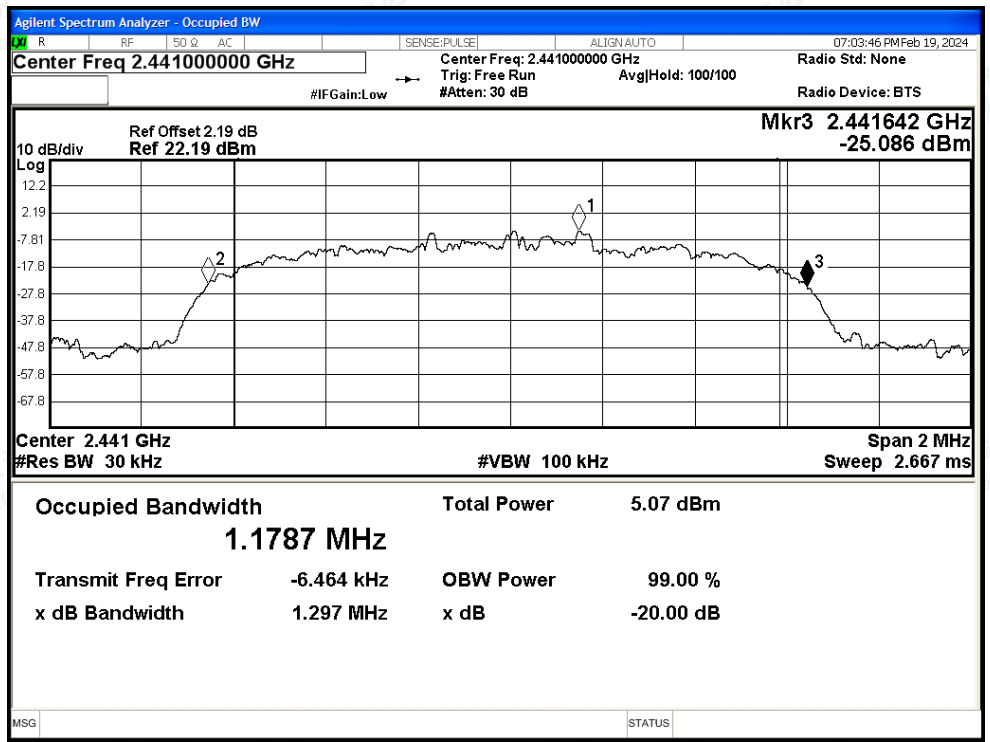


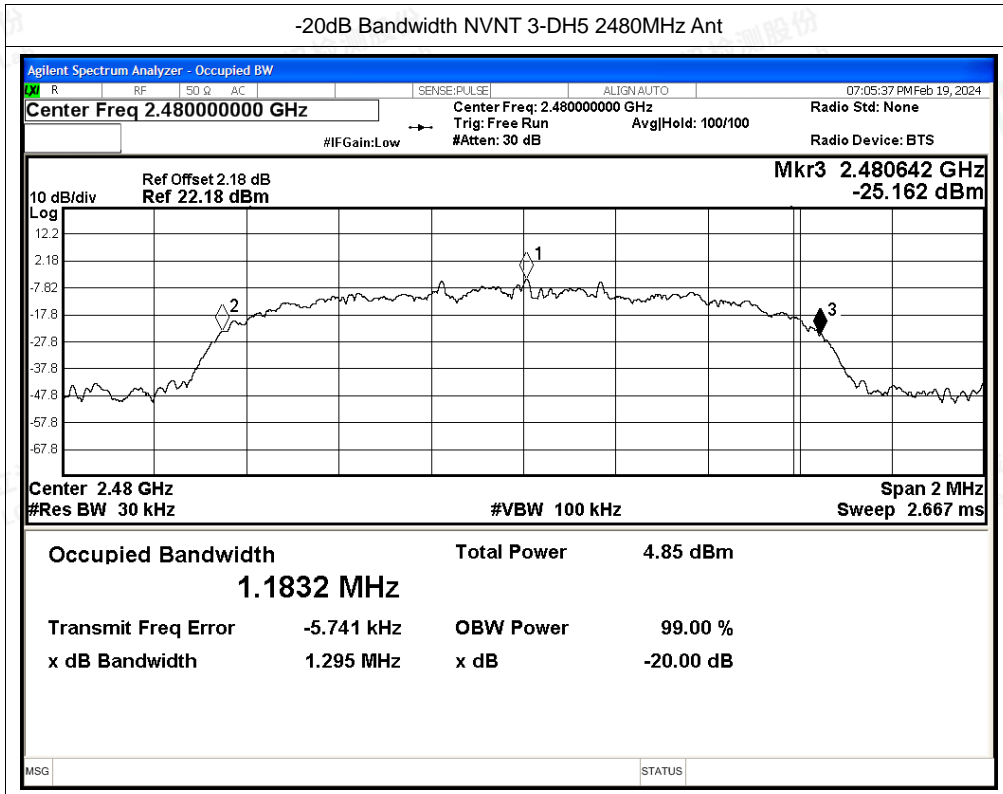


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant







## A.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant	-0.21	21	Pass
NVNT	1-DH5	2441	Ant	0.31	21	Pass
NVNT	1-DH5	2480	Ant	0.34	21	Pass
NVNT	2-DH5	2402	Ant	-0.41	21	Pass
NVNT	2-DH5	2441	Ant	0.15	21	Pass
NVNT	2-DH5	2480	Ant	0.3	21	Pass
NVNT	3-DH5	2402	Ant	-0.13	21	Pass
NVNT	3-DH5	2441	Ant	0.43	21	Pass
NVNT	3-DH5	2480	Ant	0.46	21	Pass

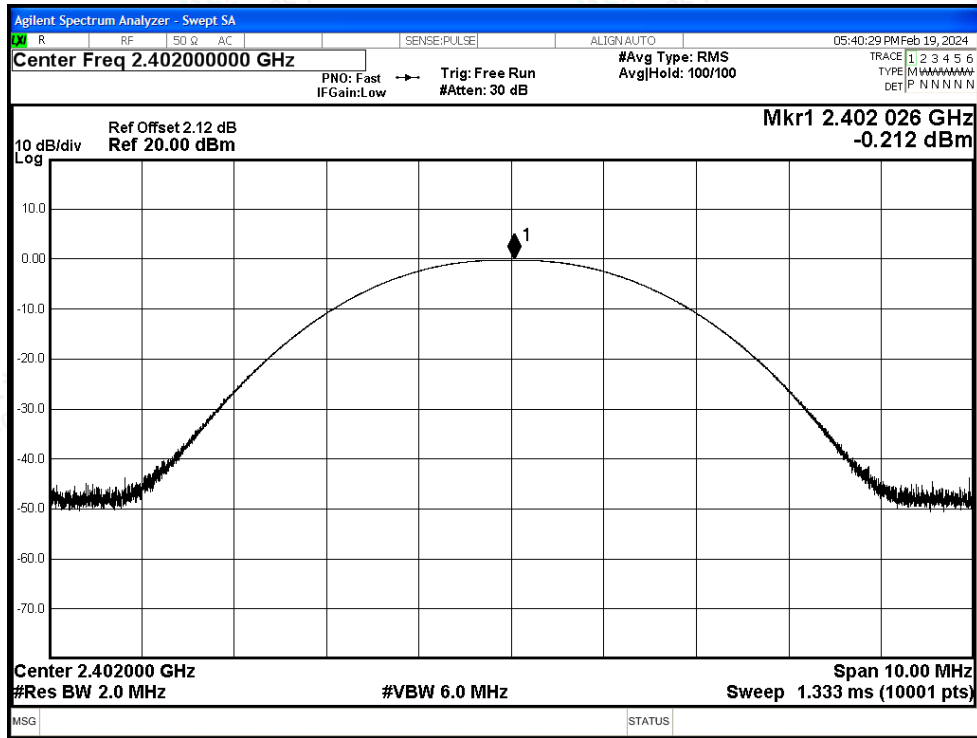




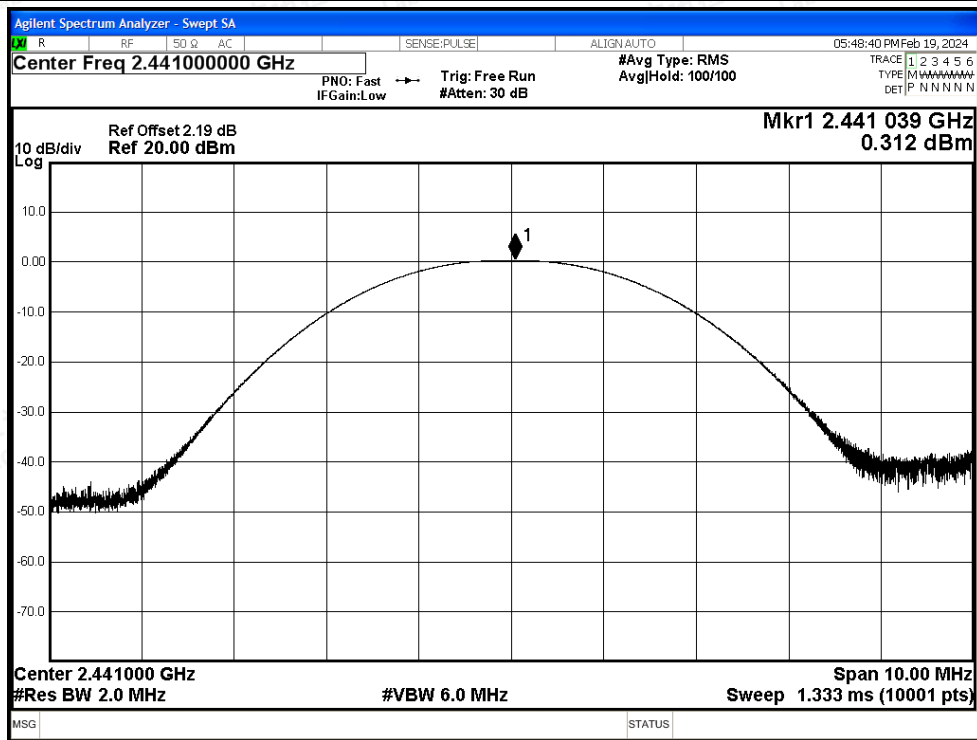


Test Graphs

Power NVNT 1-DH5 2402MHz Ant

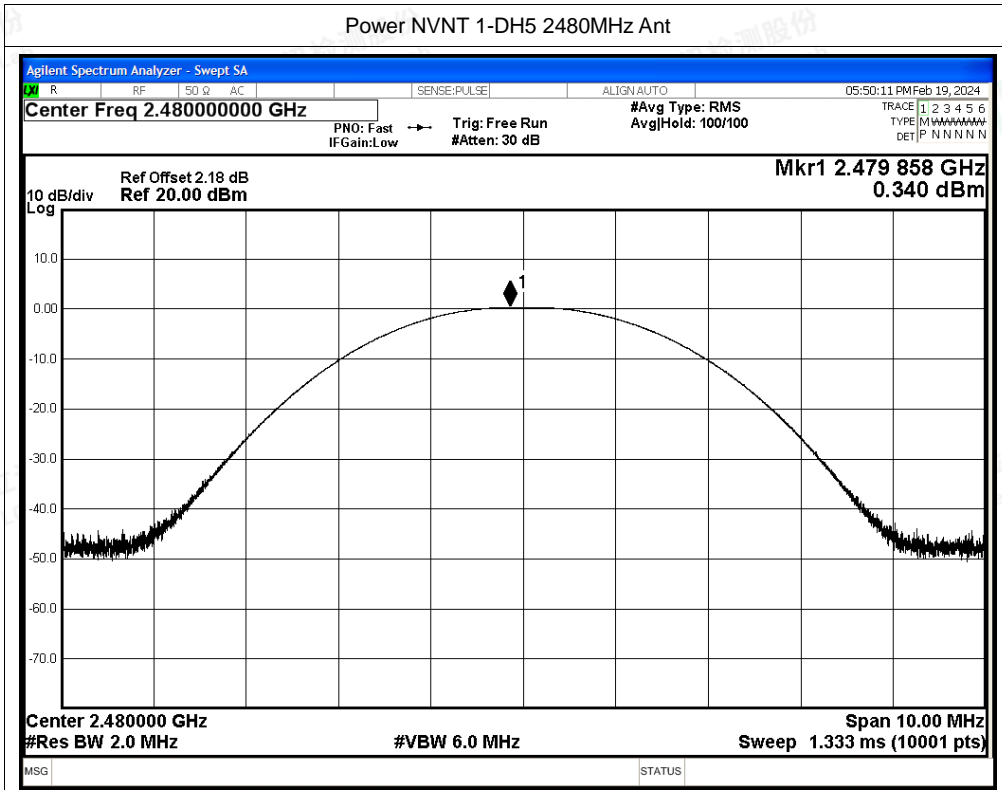


Power NVNT 1-DH5 2441MHz Ant

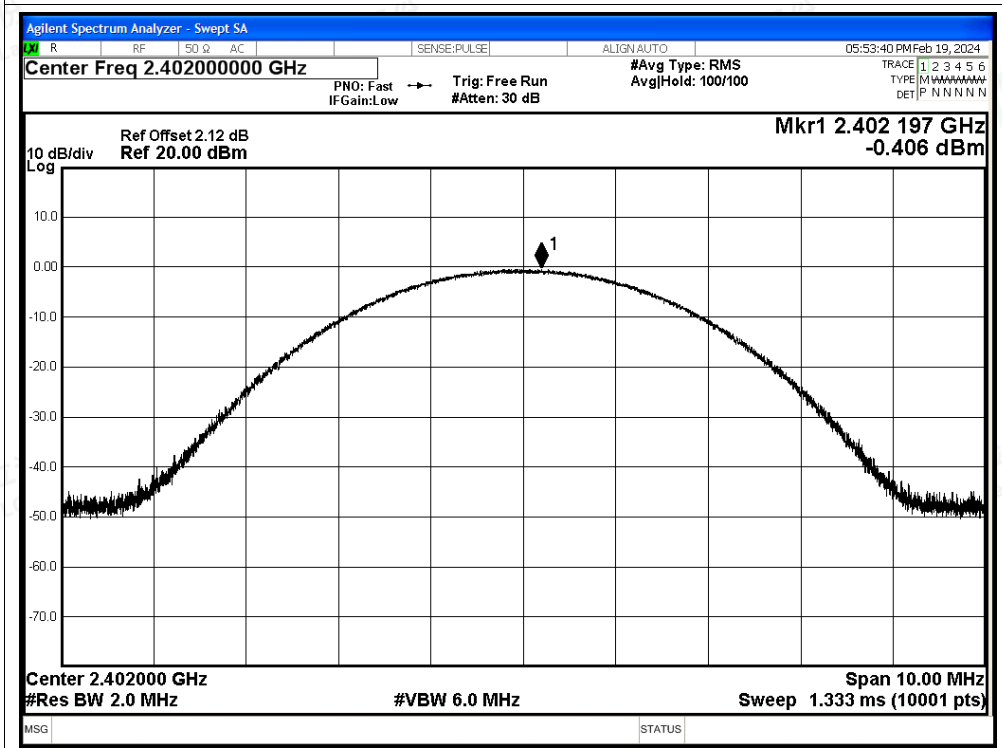


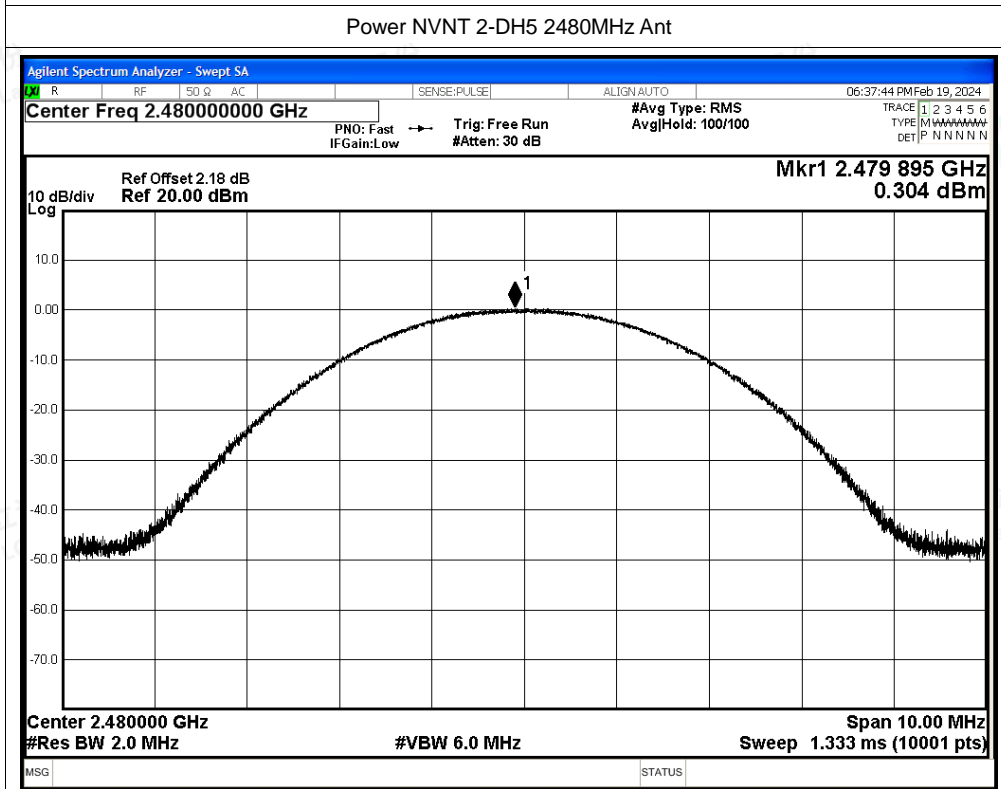
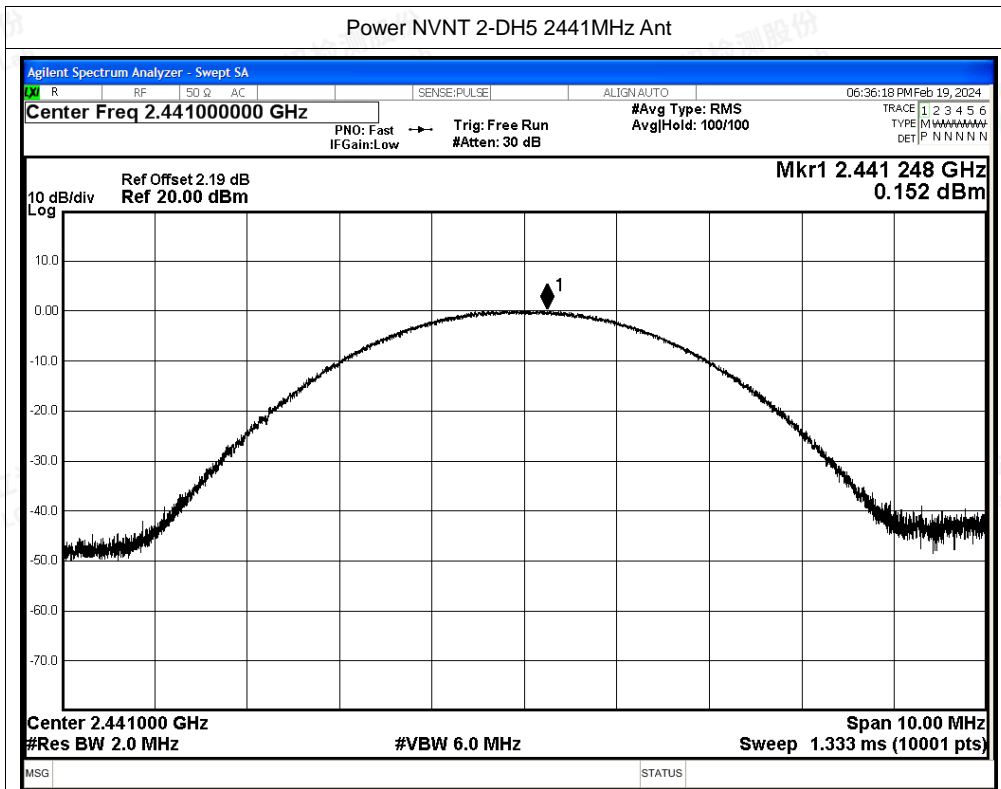


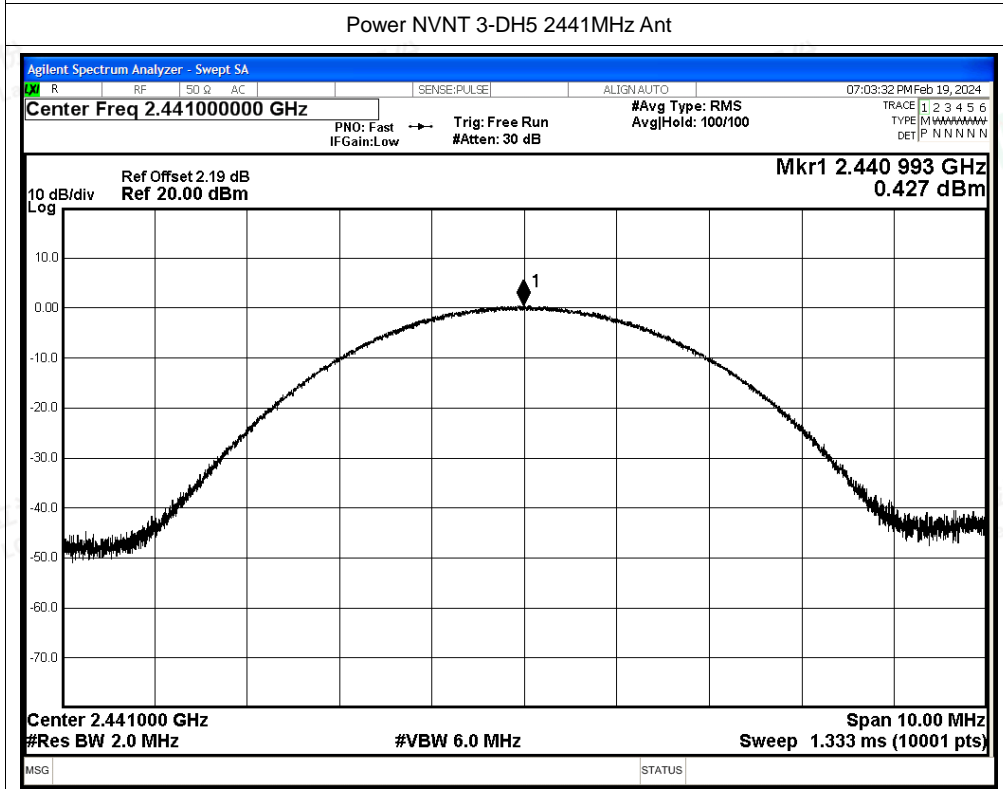
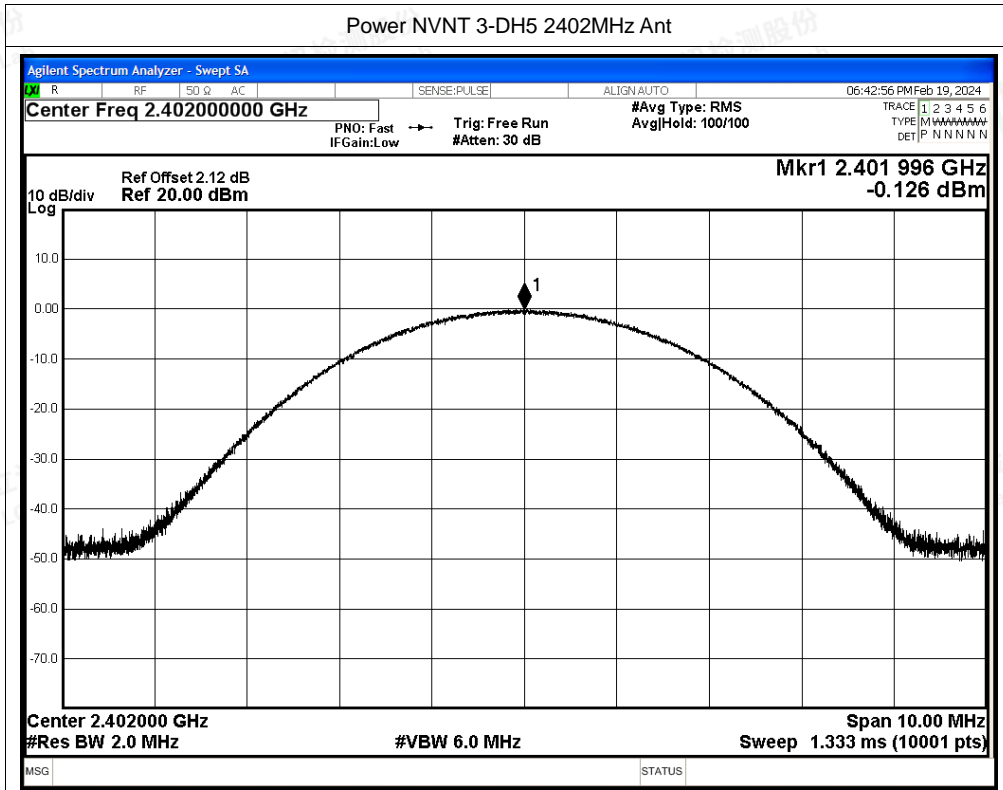
Power NVNT 1-DH5 2480MHz Ant

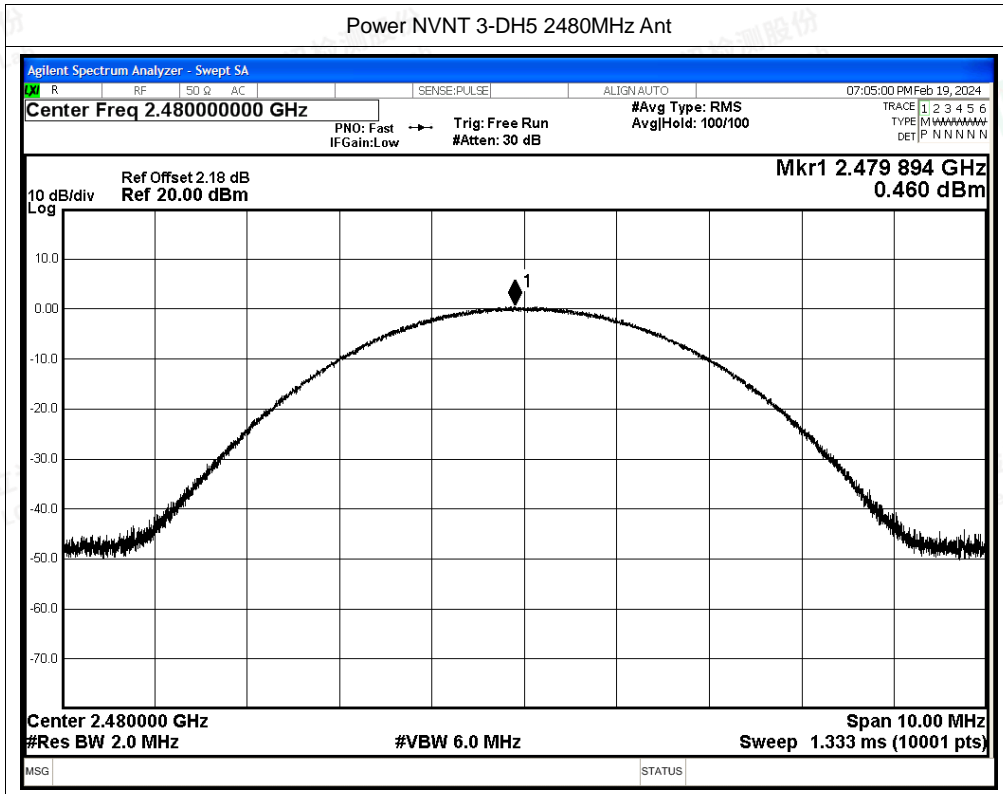


Power NVNT 2-DH5 2402MHz Ant











### A.3 Carrier Frequencies Separation

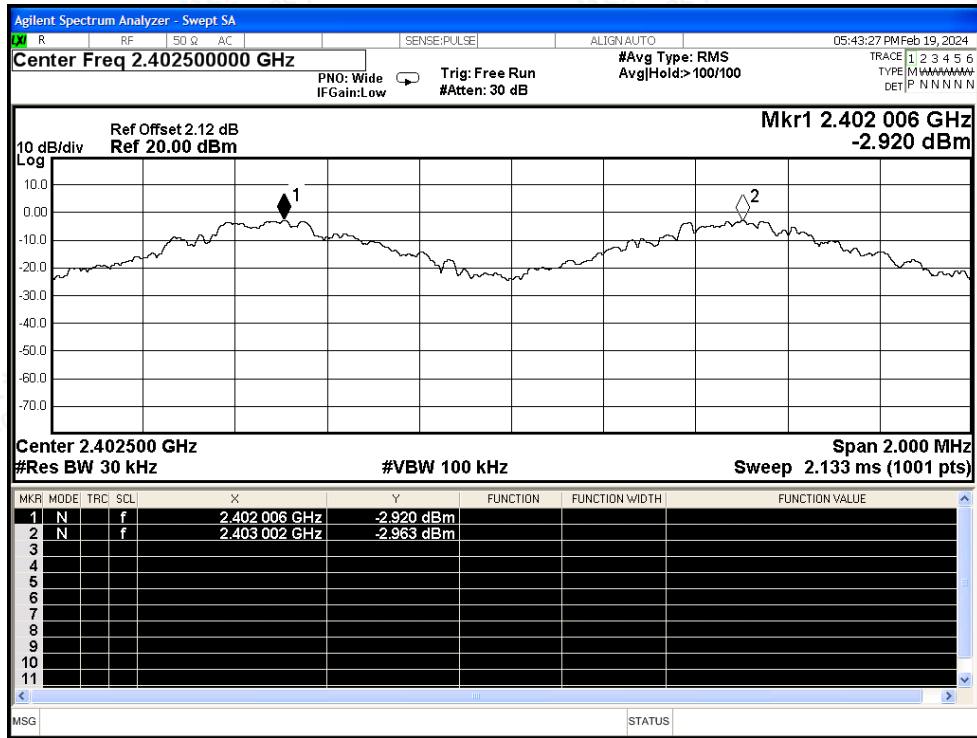
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant	2402.006	2403.002	0.996	0.681	Pass
NVNT	2-DH5	Ant	2402.012	2403.152	1.14	0.886	Pass
NVNT	3-DH5	Ant	2402.158	2403.154	0.996	0.866	Pass



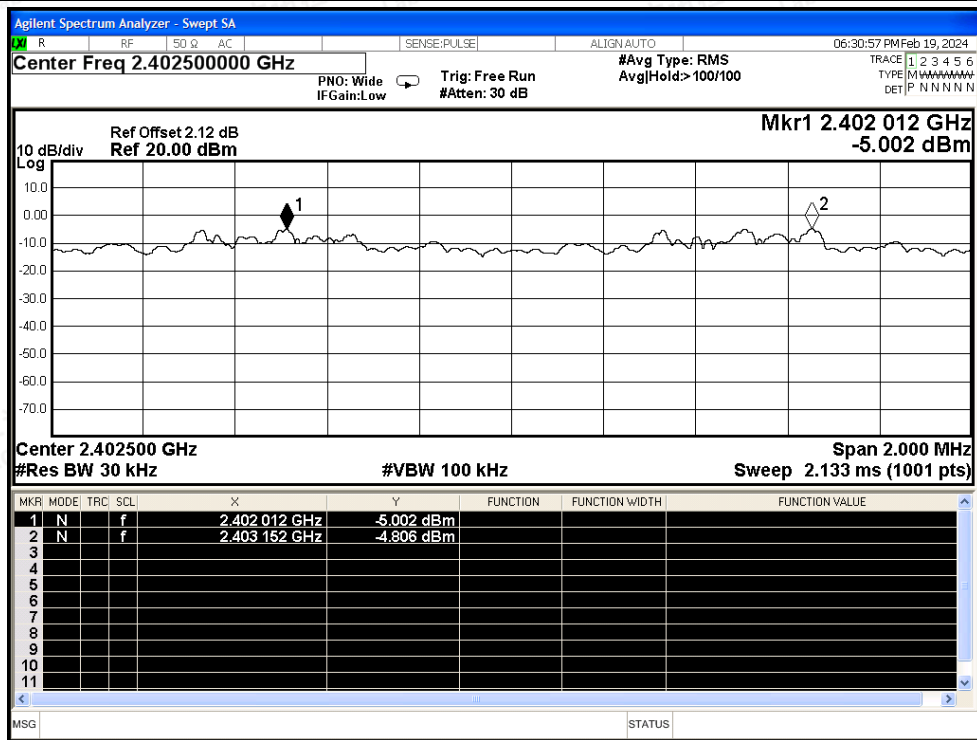


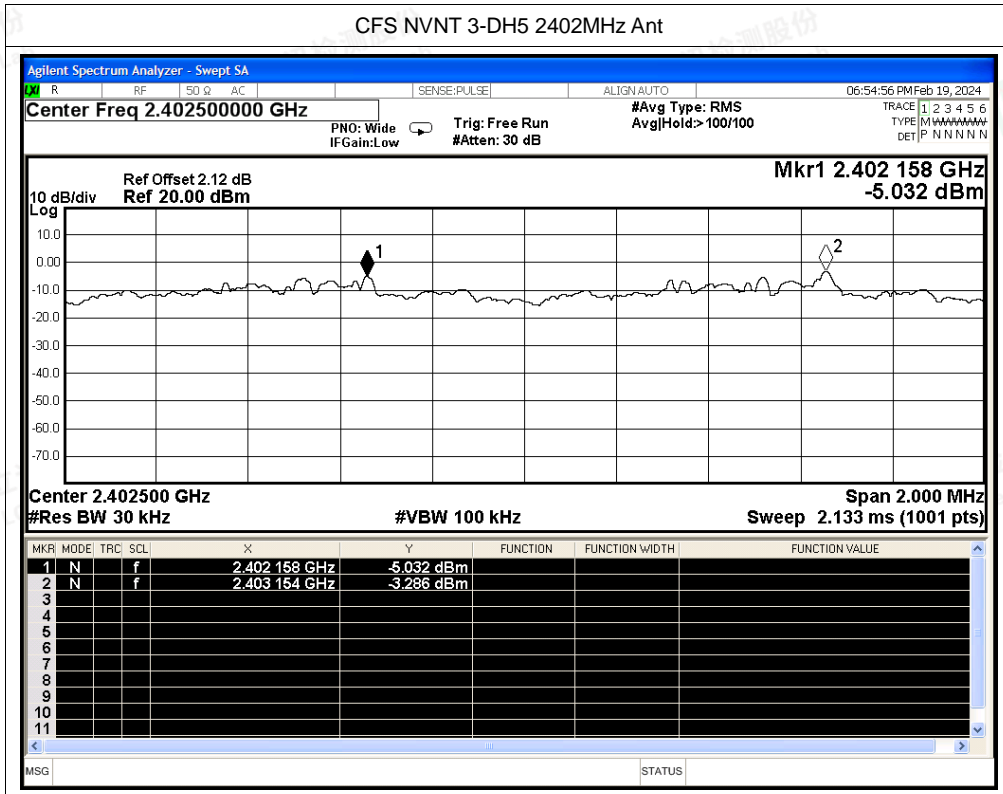
Test Graphs

CFS NVNT 1-DH5 2402MHz Ant



CFS NVNT 2-DH5 2402MHz Ant









## A.4 Dwell Time

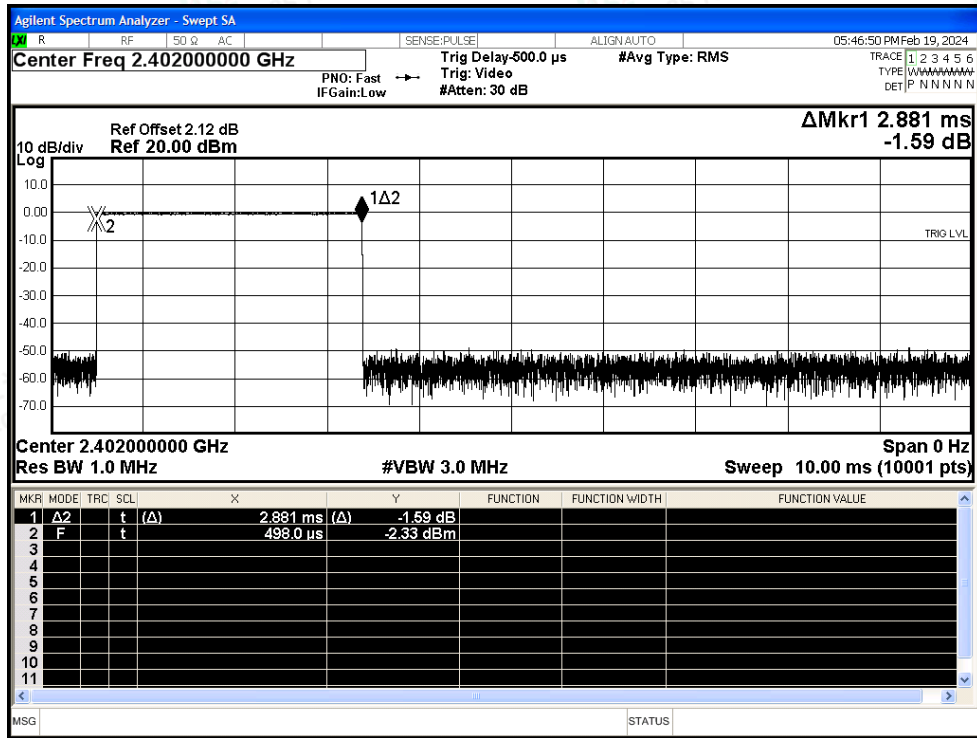
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant	2.881	299.624	104	31600	400	Pass
NVNT	2-DH5	2402	Ant	2.88	308.16	107	31600	400	Pass
NVNT	3-DH5	2402	Ant	2.887	288.7	100	31600	400	Pass



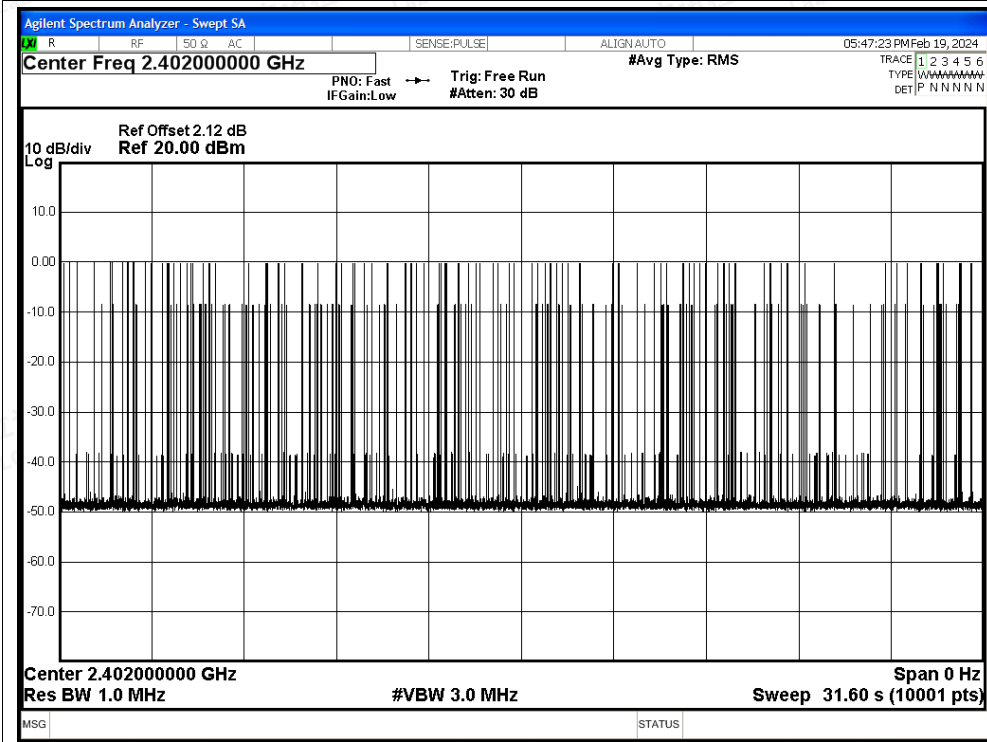


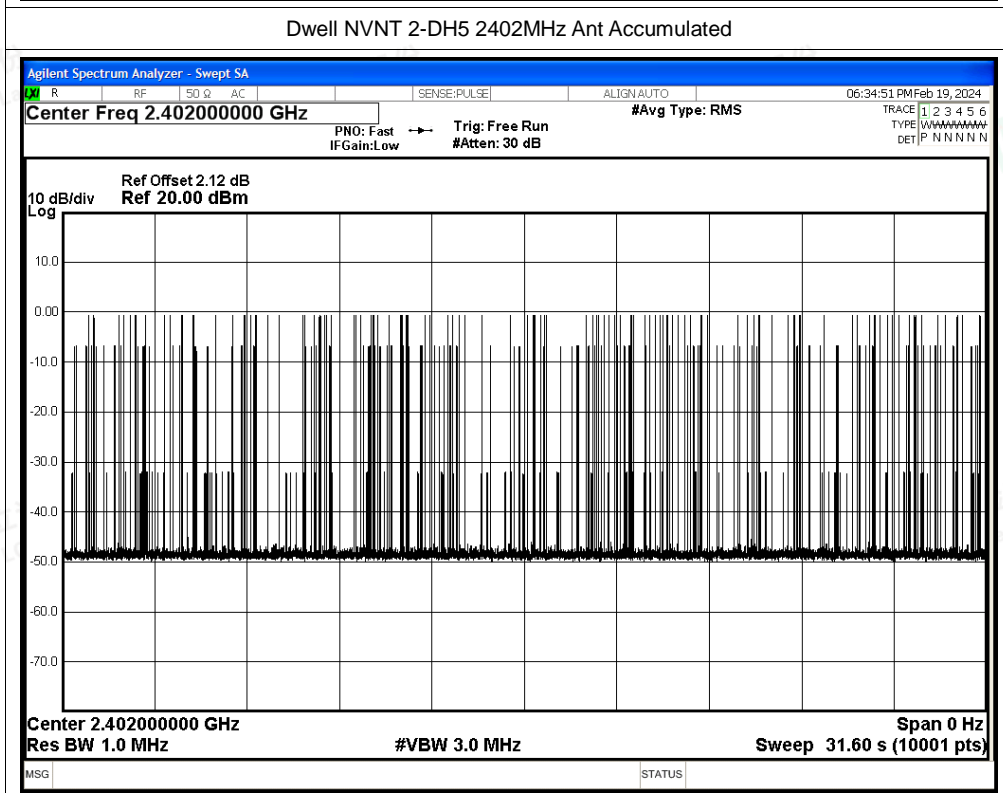
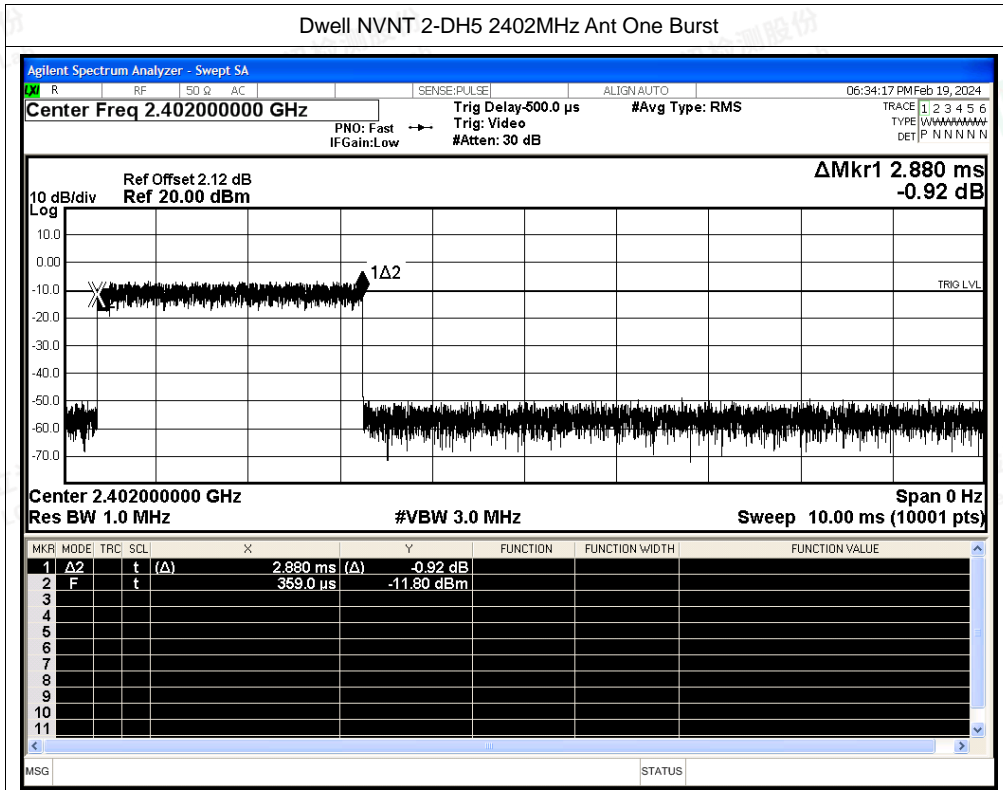
Test Graphs

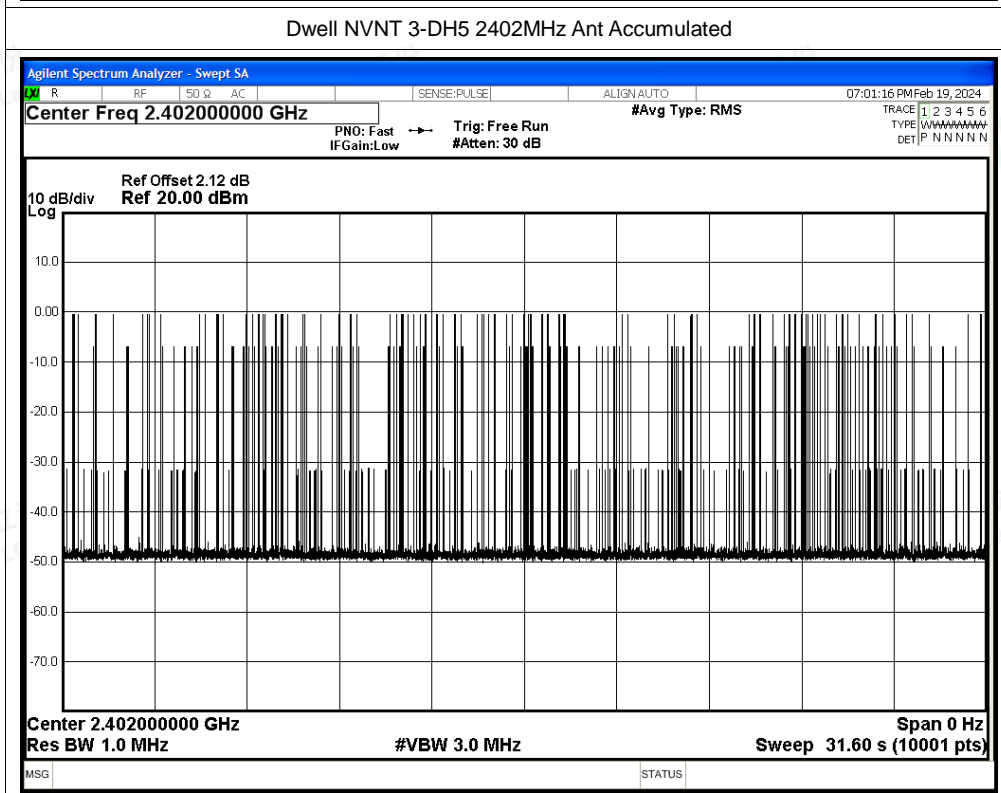
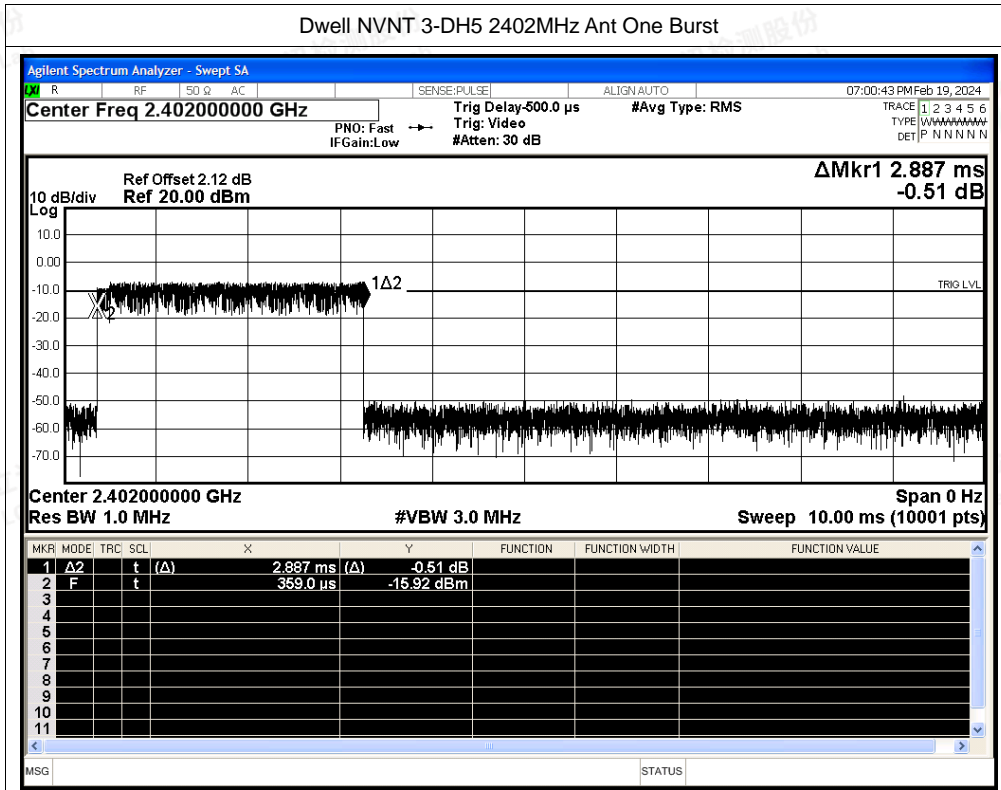
Dwell NVNT 1-DH5 2402MHz Ant One Burst



Dwell NVNT 1-DH5 2402MHz Ant Accumulated









## A.5 Number of Hopping Channel

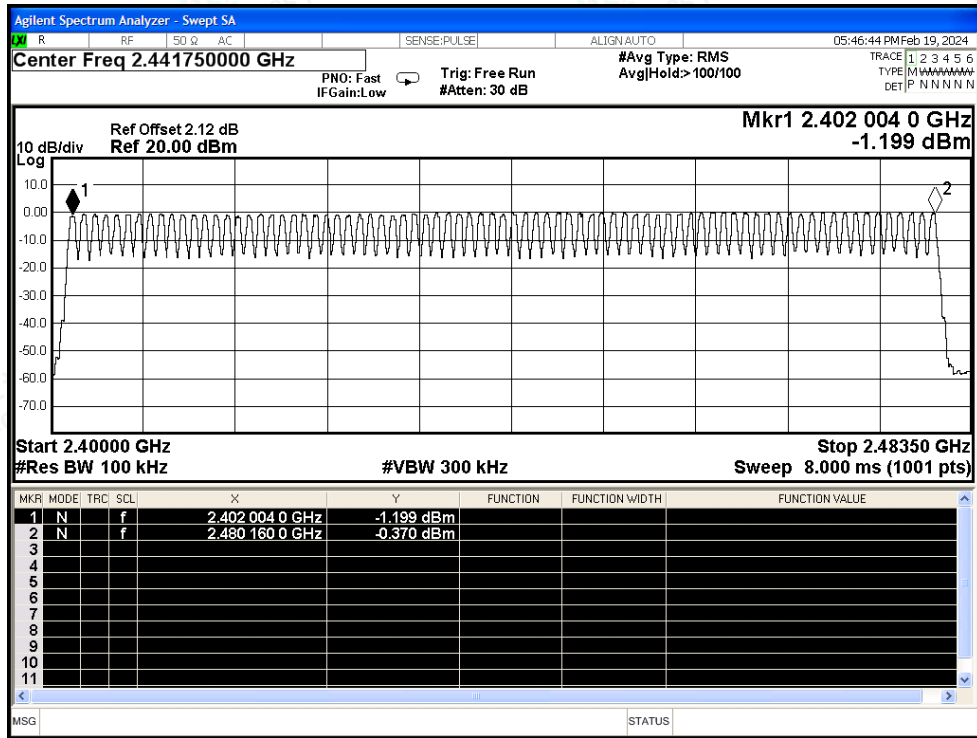
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant	79	15	Pass
NVNT	2-DH5	Ant	79	15	Pass
NVNT	3-DH5	Ant	79	15	Pass



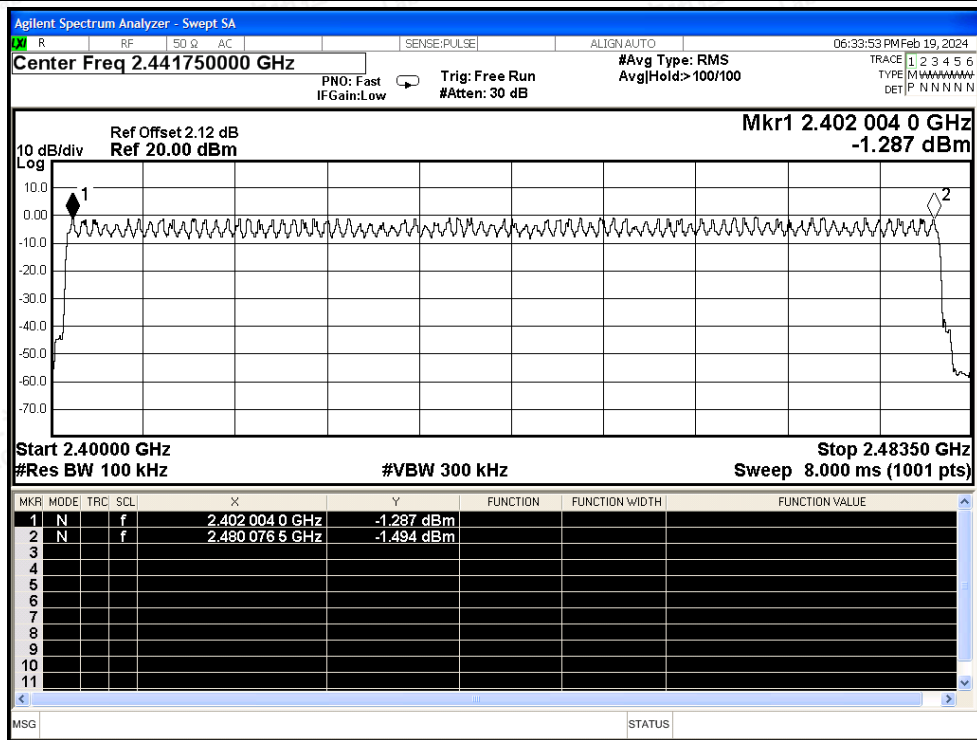


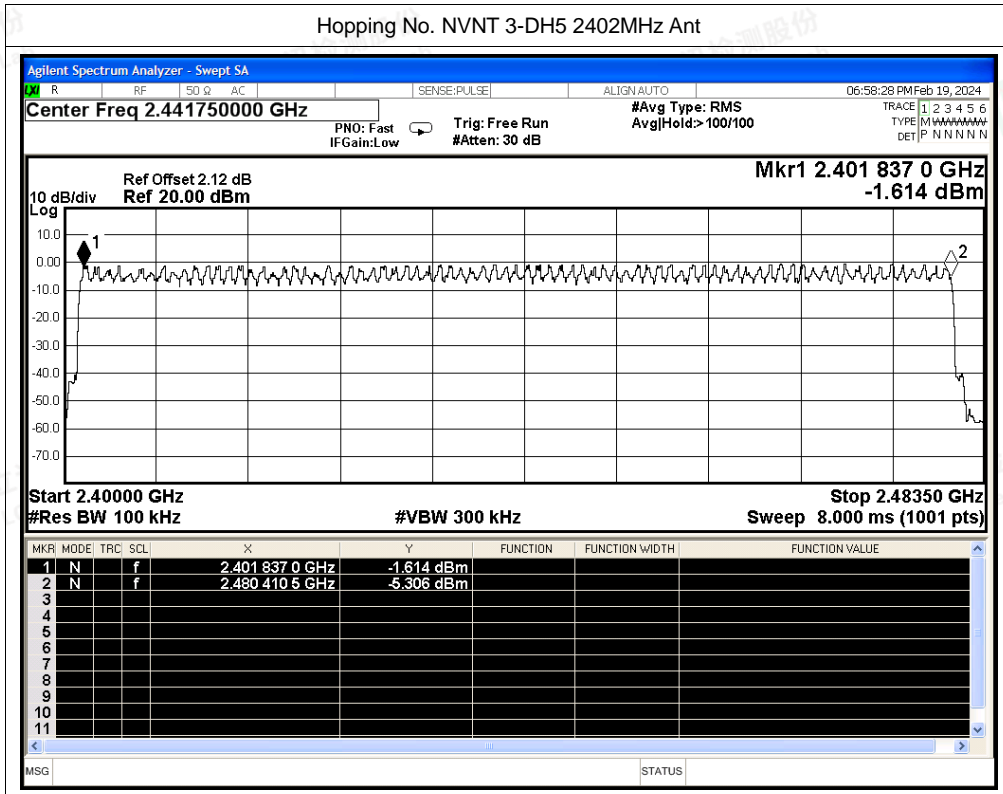
Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant



Hopping No. NVNT 2-DH5 2402MHz Ant







## A.6 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant	No-Hopping	-55.53	-20	Pass
NVNT	1-DH5	2480	Ant	No-Hopping	-56.16	-20	Pass
NVNT	2-DH5	2402	Ant	No-Hopping	-53.5	-20	Pass
NVNT	2-DH5	2480	Ant	No-Hopping	-54.96	-20	Pass
NVNT	3-DH5	2402	Ant	No-Hopping	-54.22	-20	Pass
NVNT	3-DH5	2480	Ant	No-Hopping	-54.59	-20	Pass

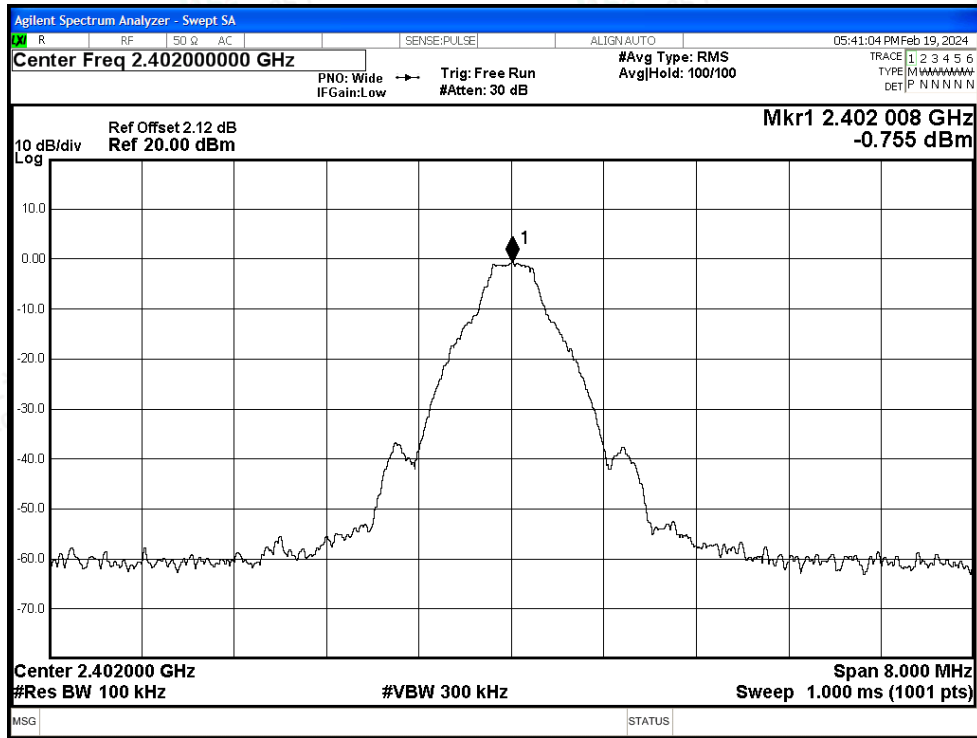




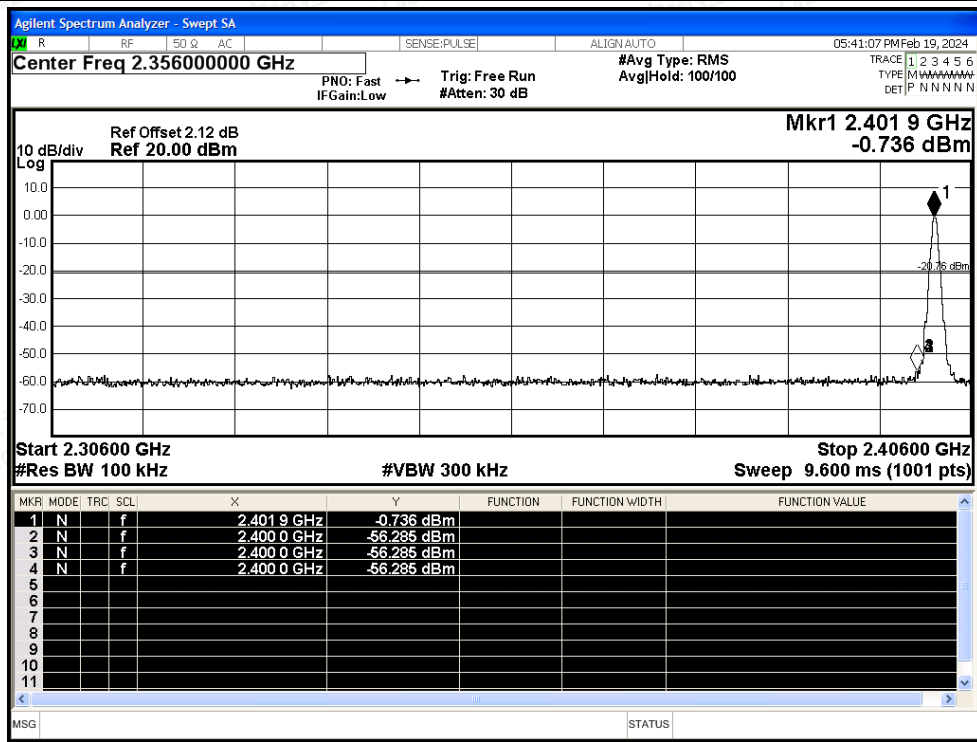


Test Graphs

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

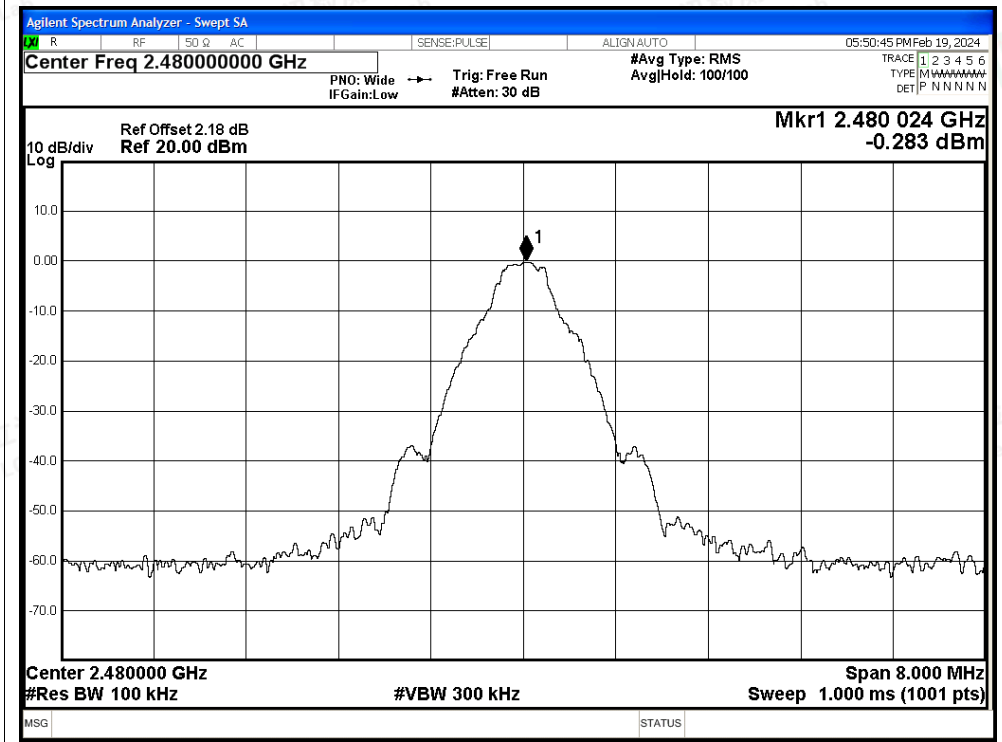


Band Edge NVNT 1-DH5 2402MHz Ant No-Hopping Emission

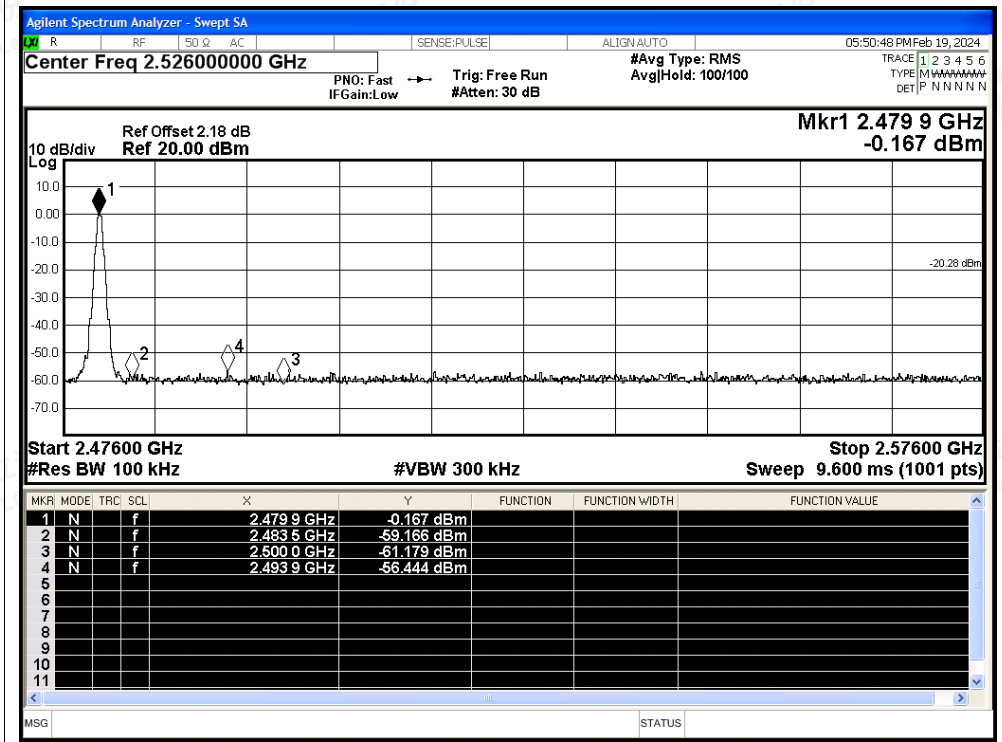




Band Edge NVNT 1-DH5 2480MHz Ant No-Hopping Ref

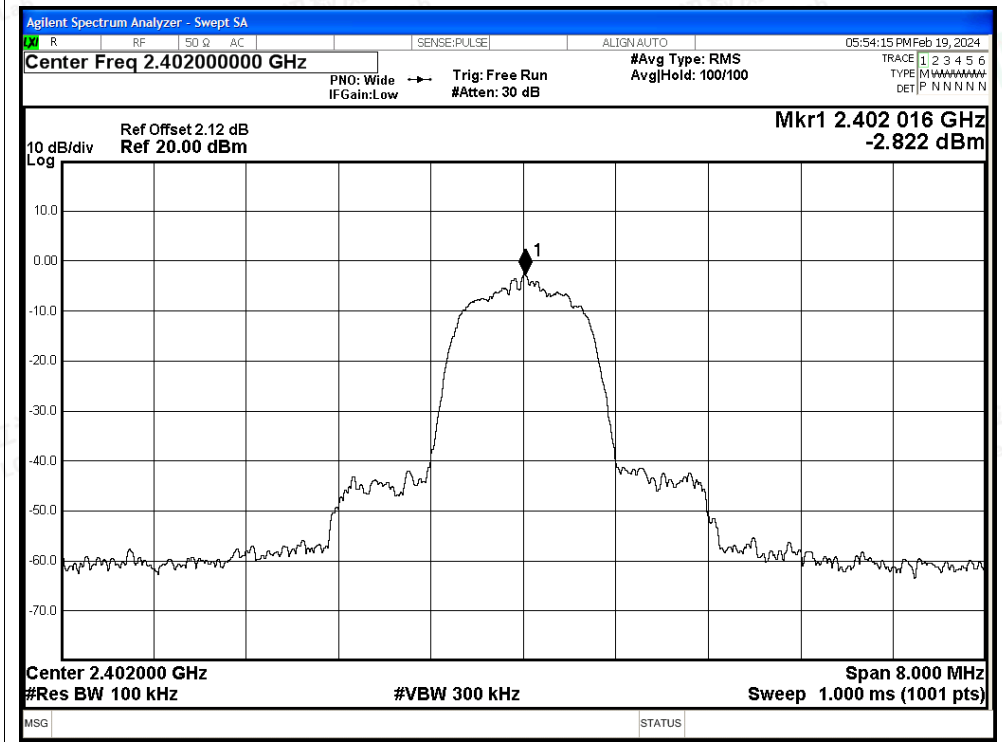


Band Edge NVNT 1-DH5 2480MHz Ant No-Hopping Emission

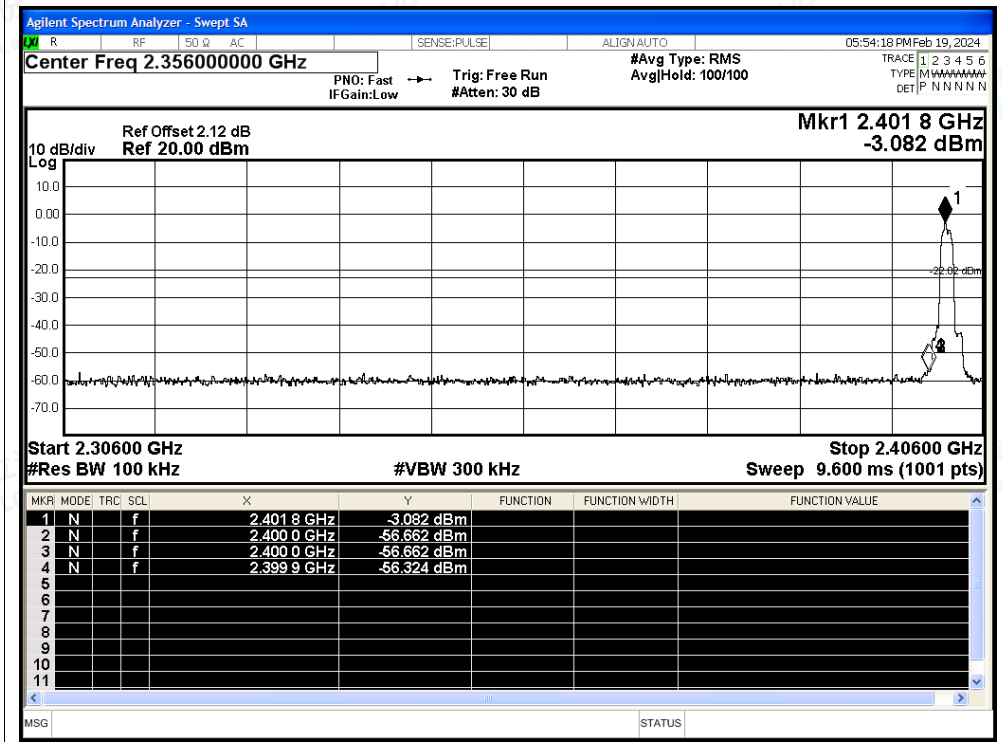




Band Edge NVNT 2-DH5 2402MHz Ant No-Hopping Ref

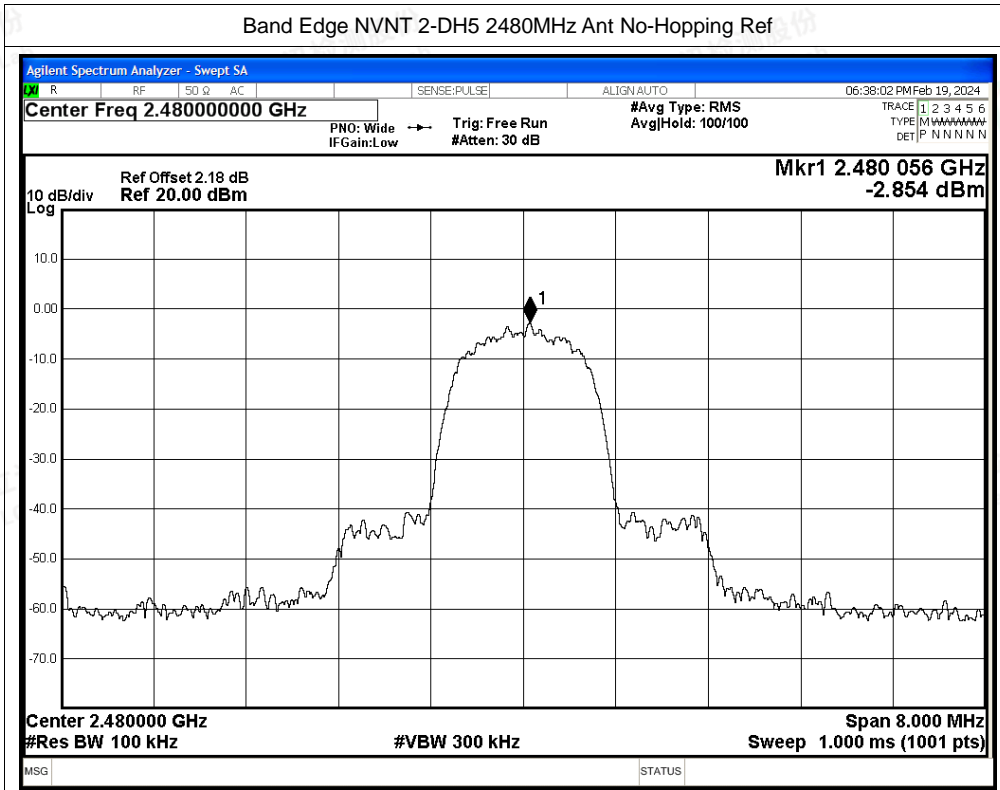


Band Edge NVNT 2-DH5 2402MHz Ant No-Hopping Emission

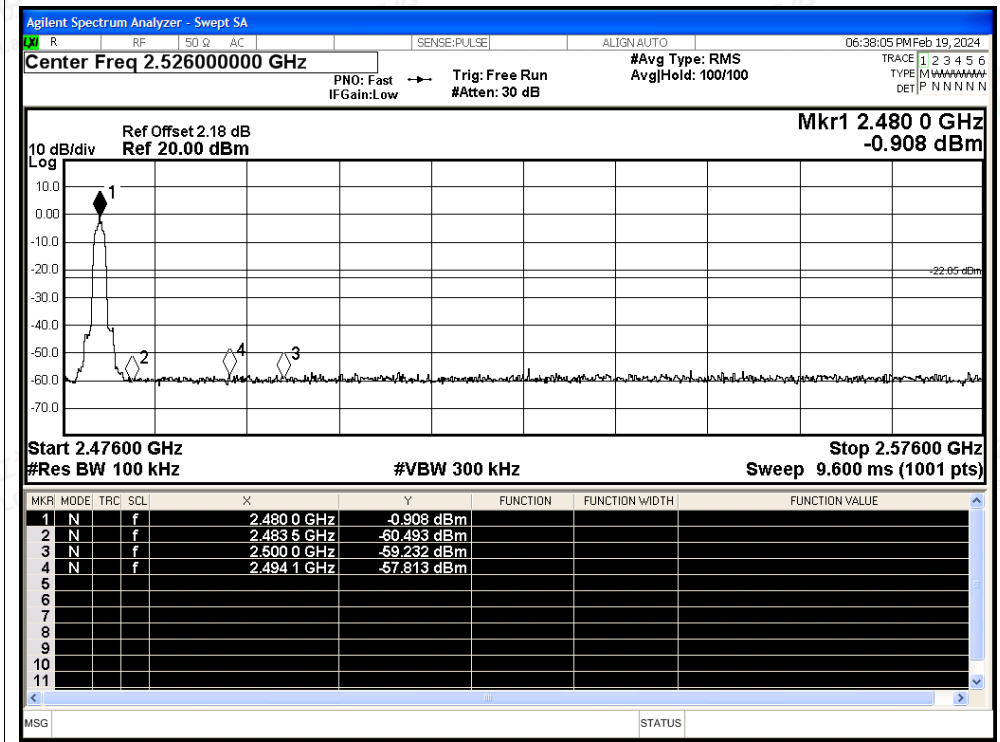




Band Edge NVNT 2-DH5 2480MHz Ant No-Hopping Ref

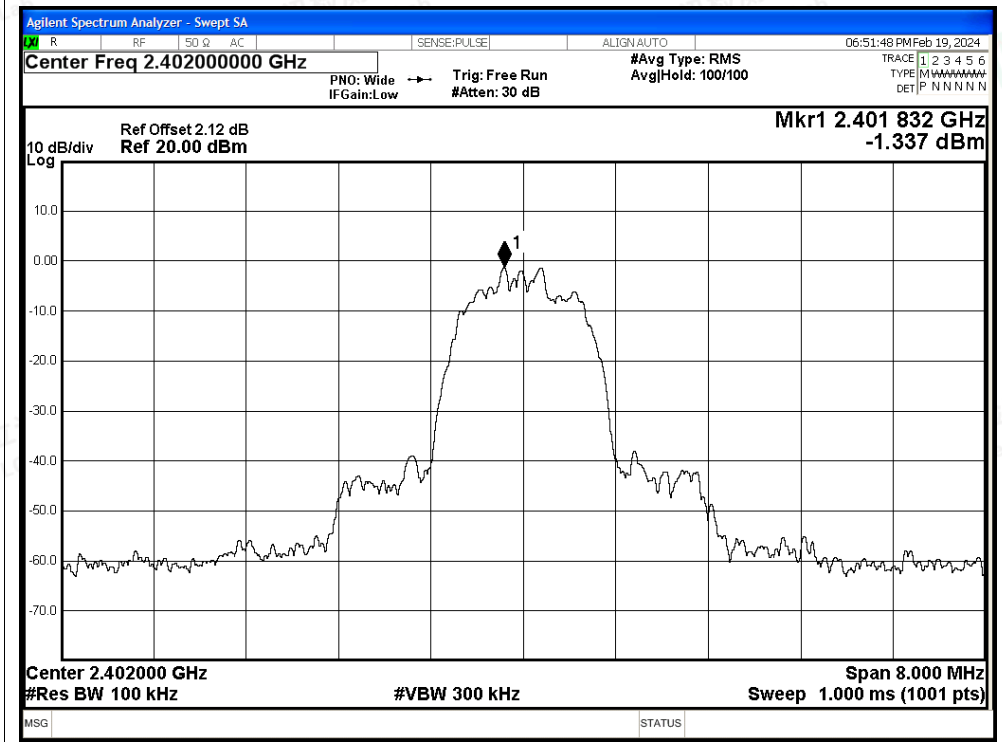


Band Edge NVNT 2-DH5 2480MHz Ant No-Hopping Emission

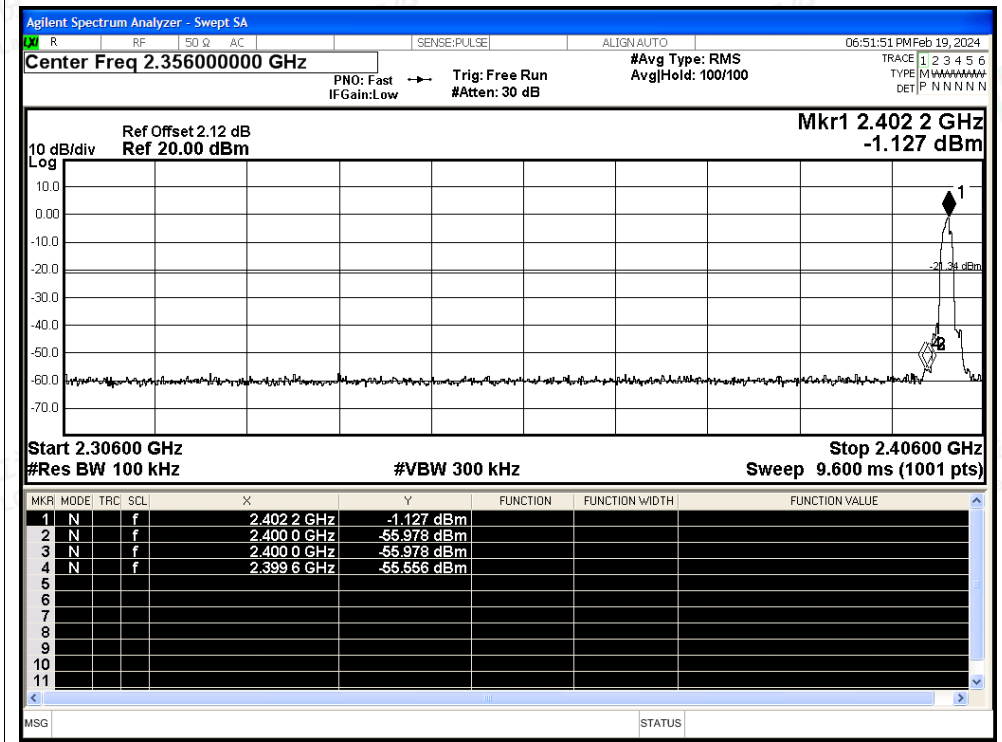




Band Edge NVNT 3-DH5 2402MHz Ant No-Hopping Ref

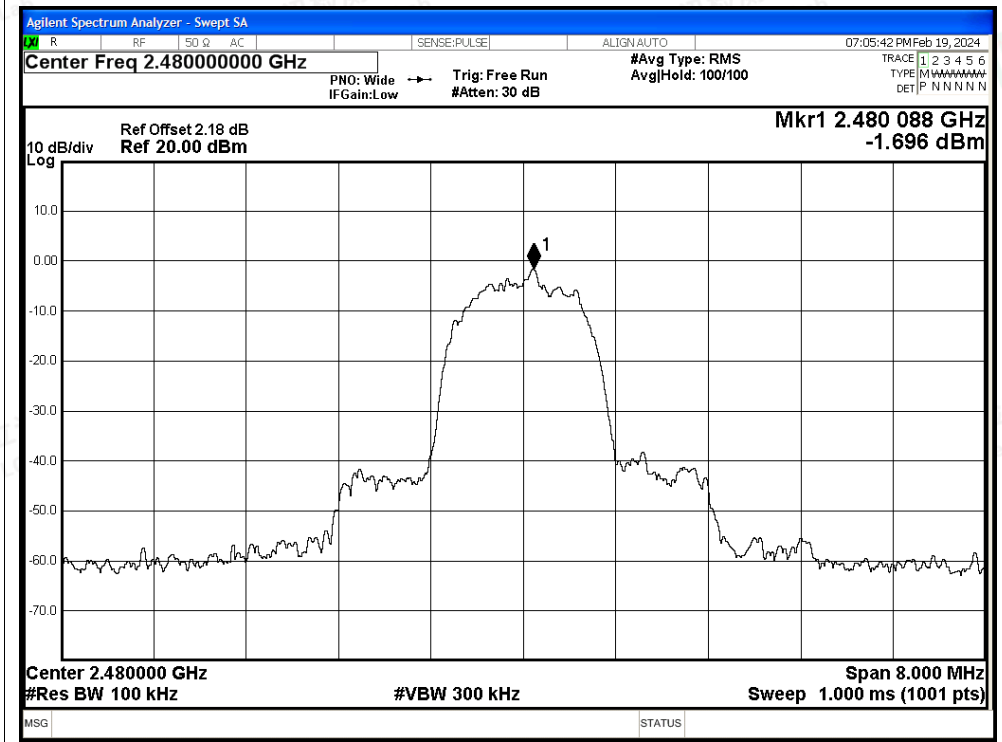


Band Edge NVNT 3-DH5 2402MHz Ant No-Hopping Emission

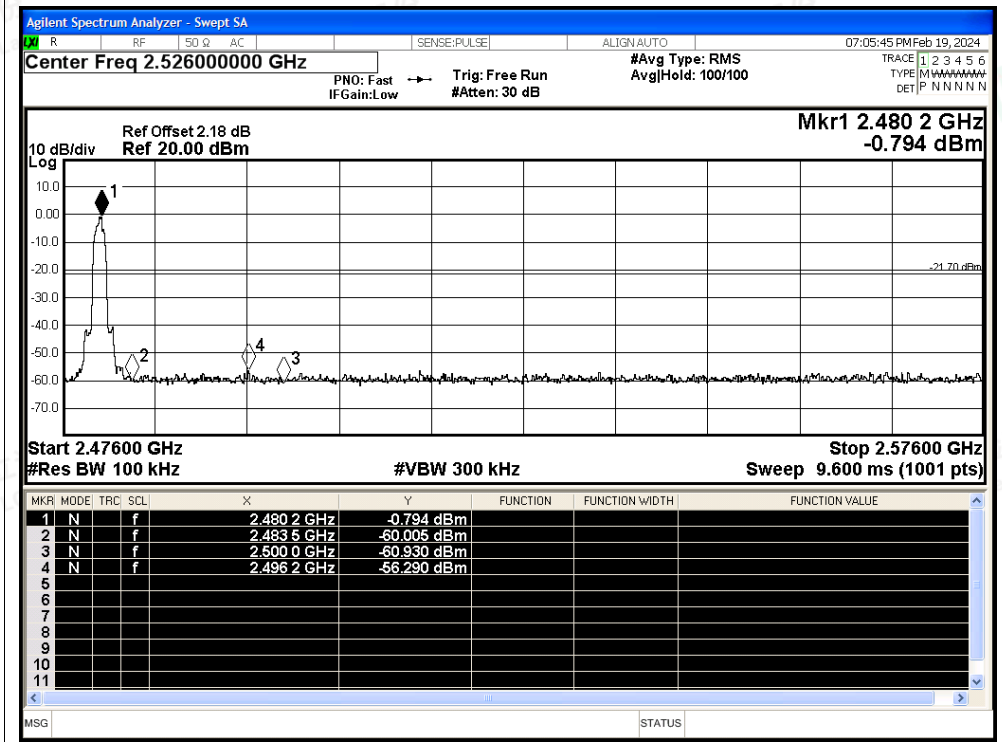




Band Edge NVNT 3-DH5 2480MHz Ant No-Hopping Ref



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





### (Hopping)

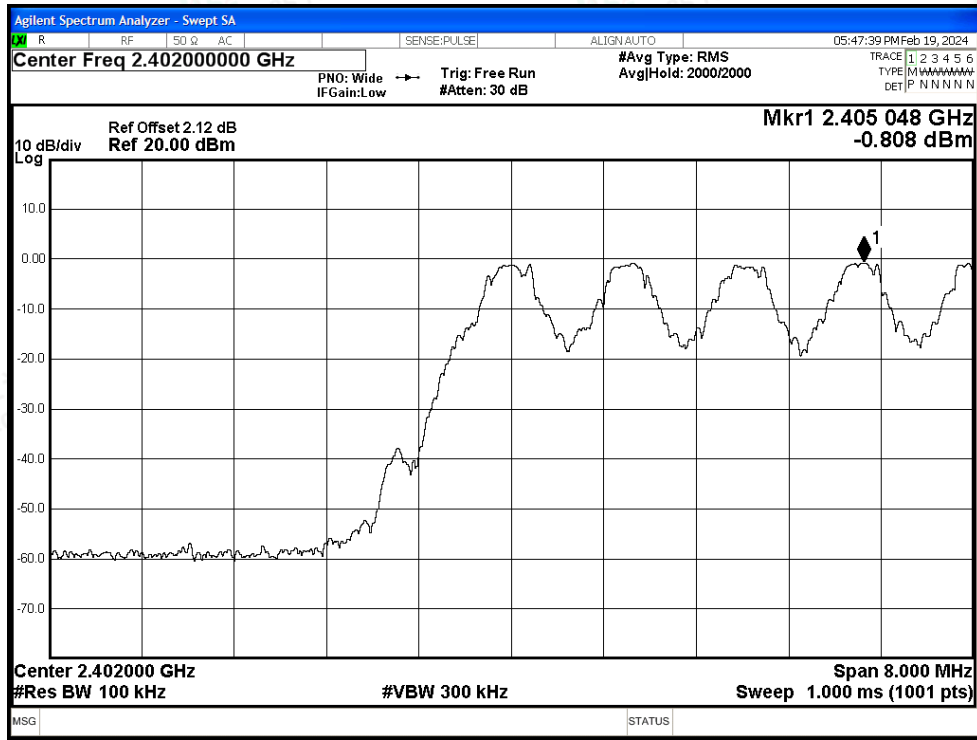
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant	Hopping	-55.66	-20	Pass
NVNT	1-DH5	2480	Ant	Hopping	-55.49	-20	Pass
NVNT	2-DH5	2402	Ant	Hopping	-53.43	-20	Pass
NVNT	2-DH5	2480	Ant	Hopping	-54.95	-20	Pass
NVNT	3-DH5	2402	Ant	Hopping	-54.83	-20	Pass
NVNT	3-DH5	2480	Ant	Hopping	-55.85	-20	Pass



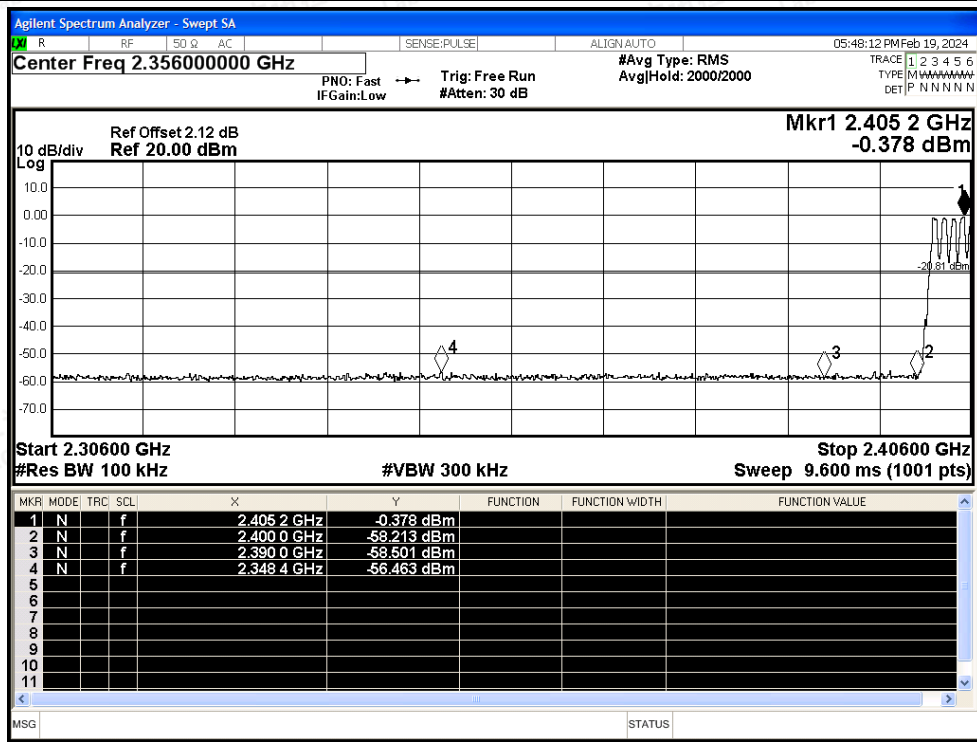


Test Graphs

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



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



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

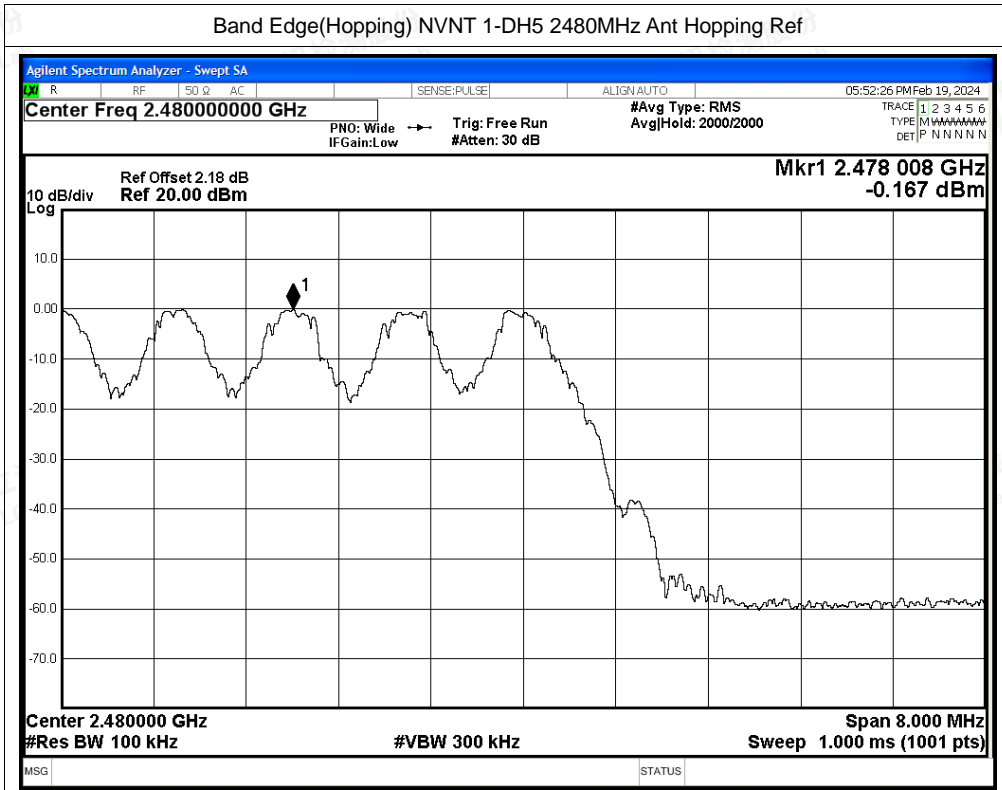
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

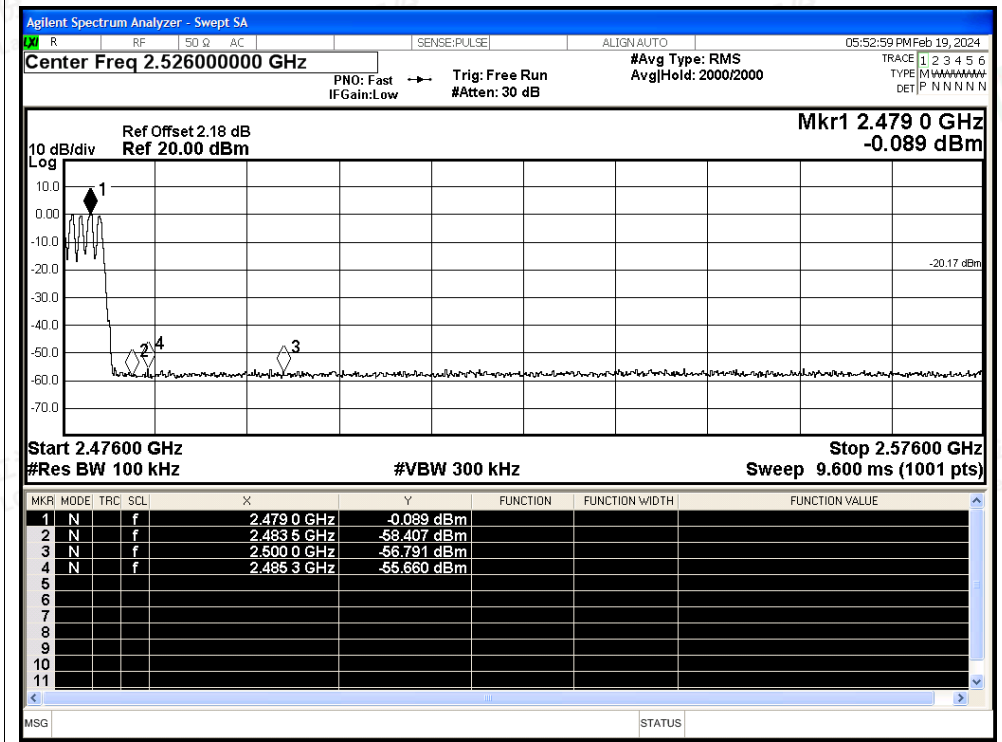




Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant Hopping Ref

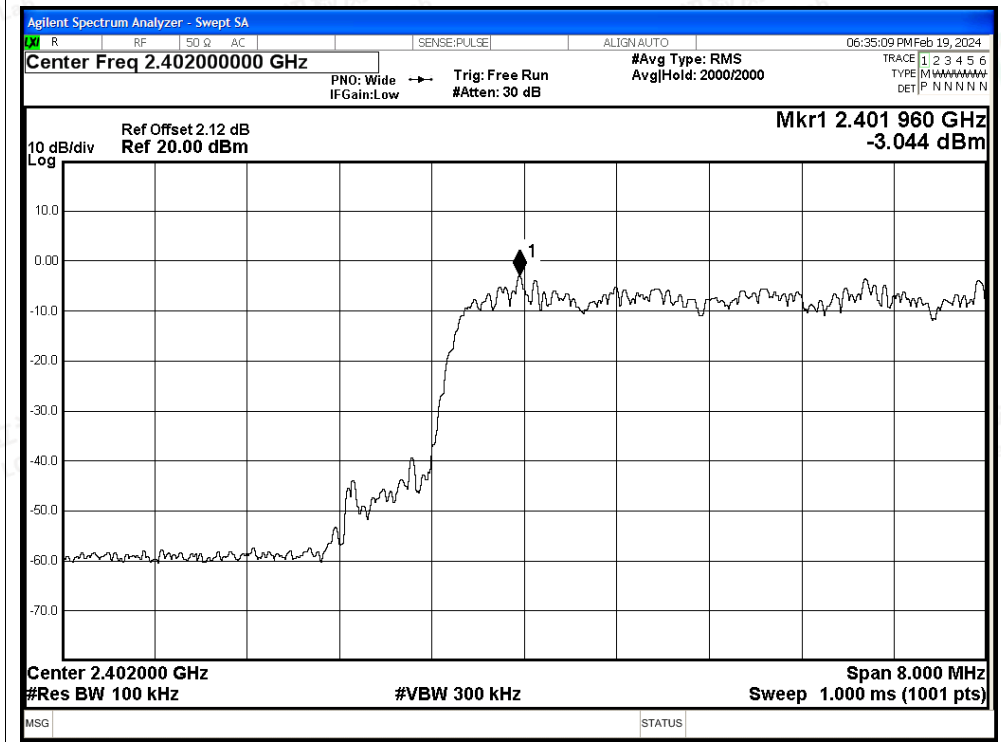


Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant Hopping Emission

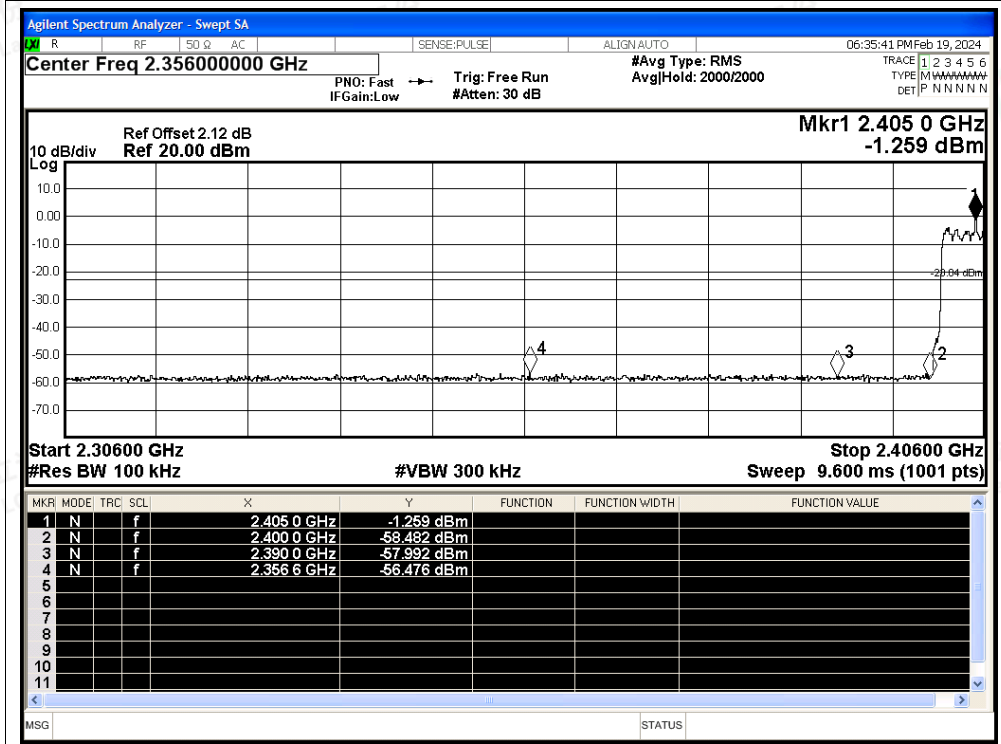




Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant Hopping Ref

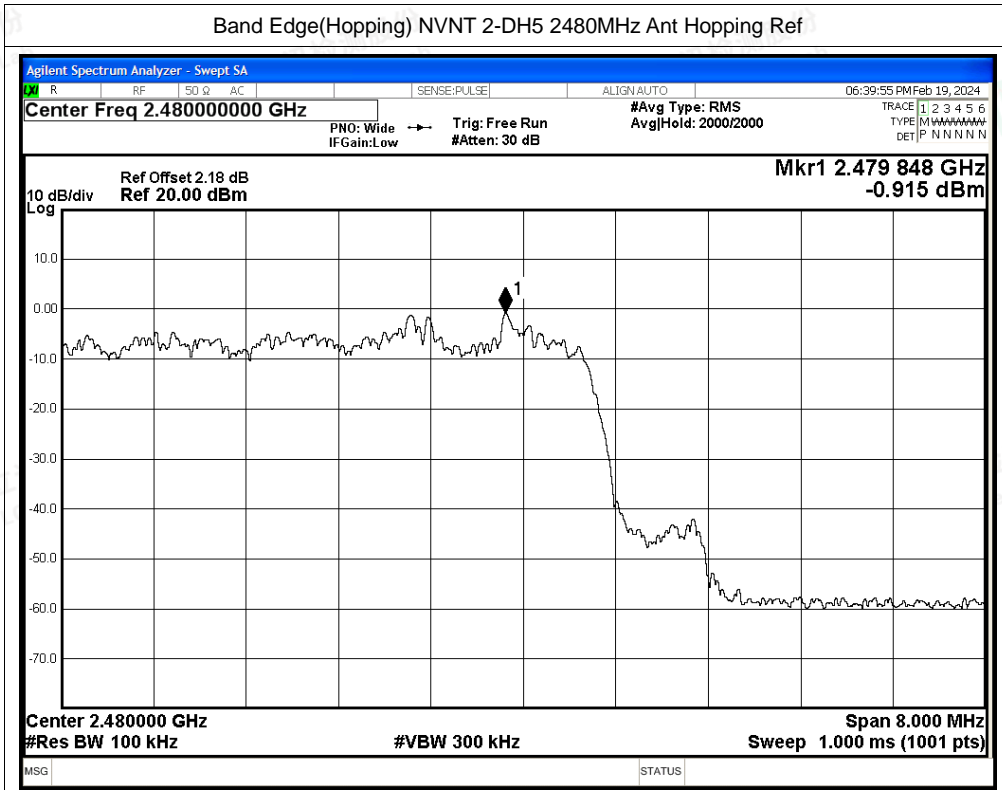


Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant Hopping Emission

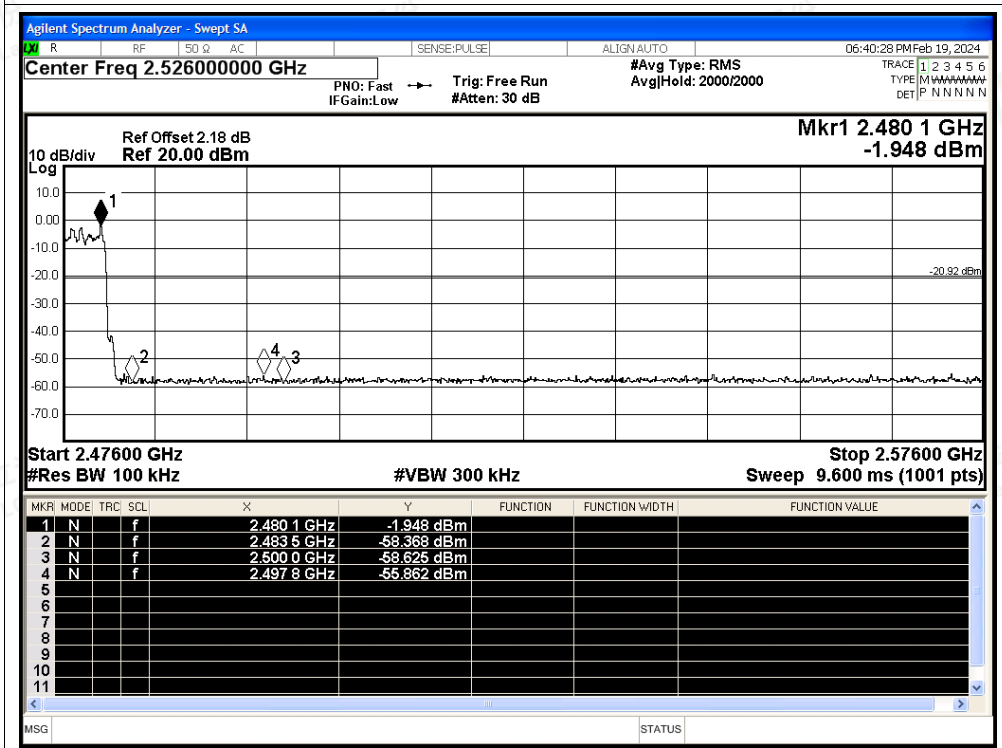




Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant Hopping Ref

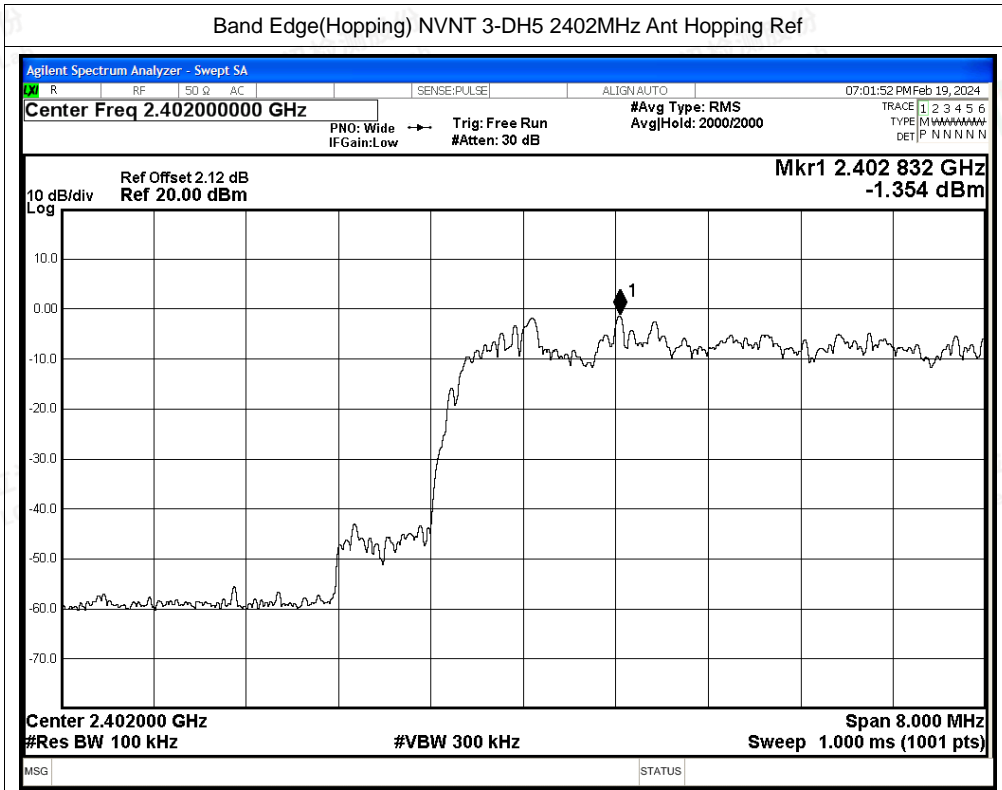


Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant Hopping Emission

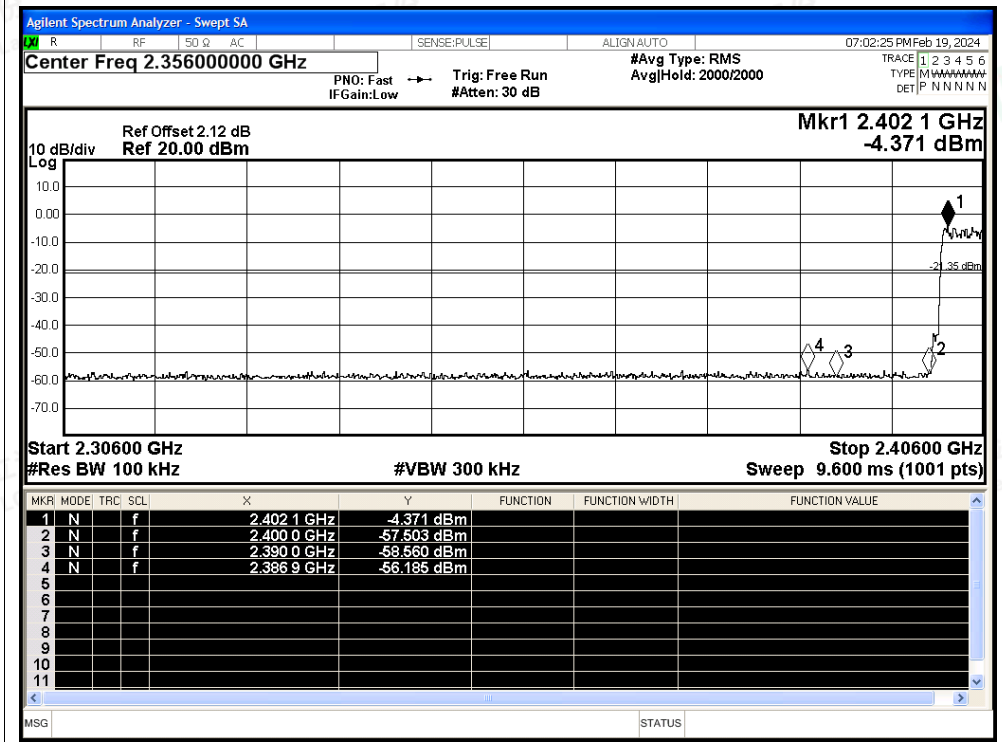




Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant Hopping Ref

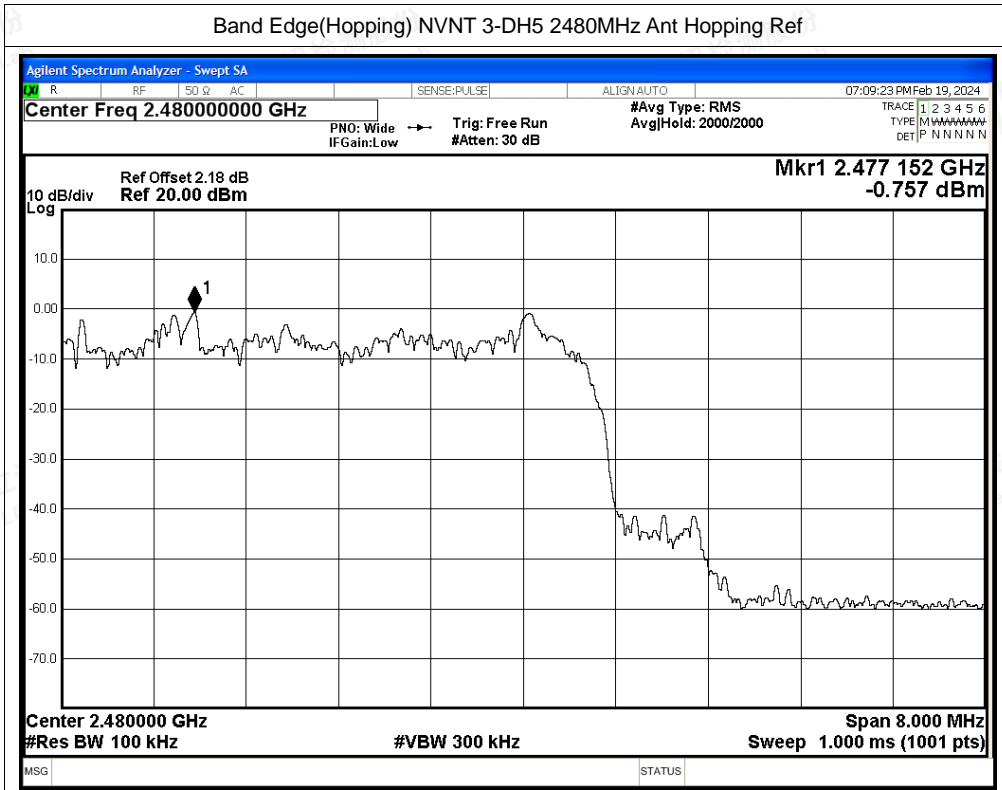


Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant Hopping Emission

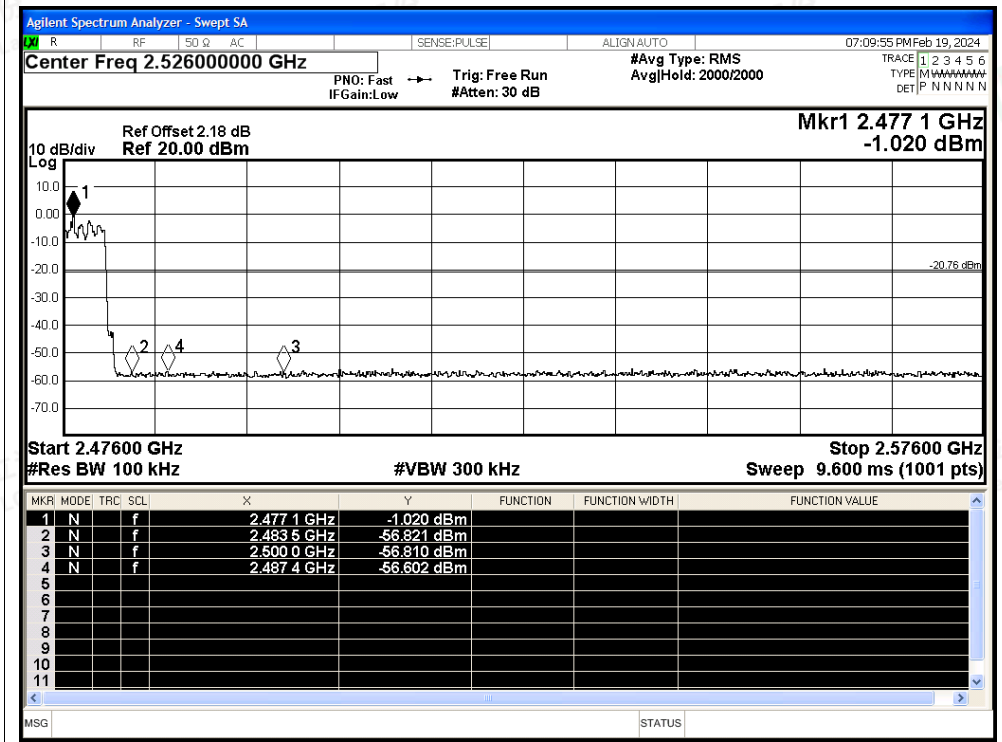




Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant Hopping Ref



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





## A.7 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant	-55.08	-20	Pass
NVNT	1-DH5	2441	Ant	-55.28	-20	Pass
NVNT	1-DH5	2480	Ant	-54.01	-20	Pass
NVNT	2-DH5	2402	Ant	-46.33	-20	Pass
NVNT	2-DH5	2441	Ant	-54.46	-20	Pass
NVNT	2-DH5	2480	Ant	-54.7	-20	Pass
NVNT	3-DH5	2402	Ant	-53.58	-20	Pass
NVNT	3-DH5	2441	Ant	-55.34	-20	Pass
NVNT	3-DH5	2480	Ant	-54.29	-20	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

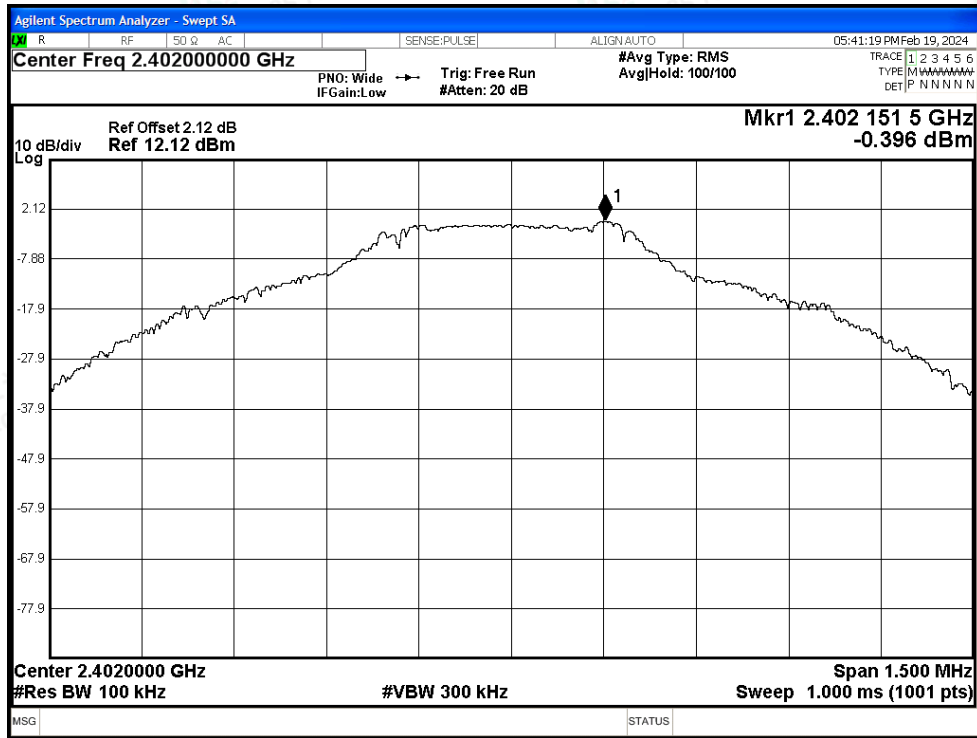
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

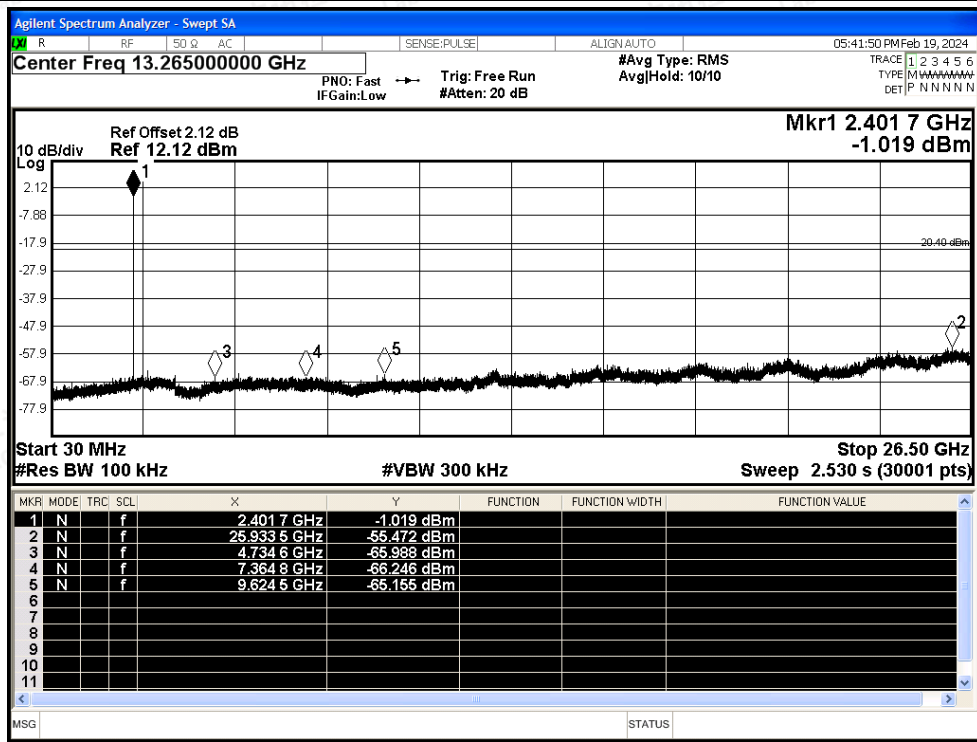


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant Ref



Tx. Spurious NVNT 1-DH5 2402MHz Ant Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

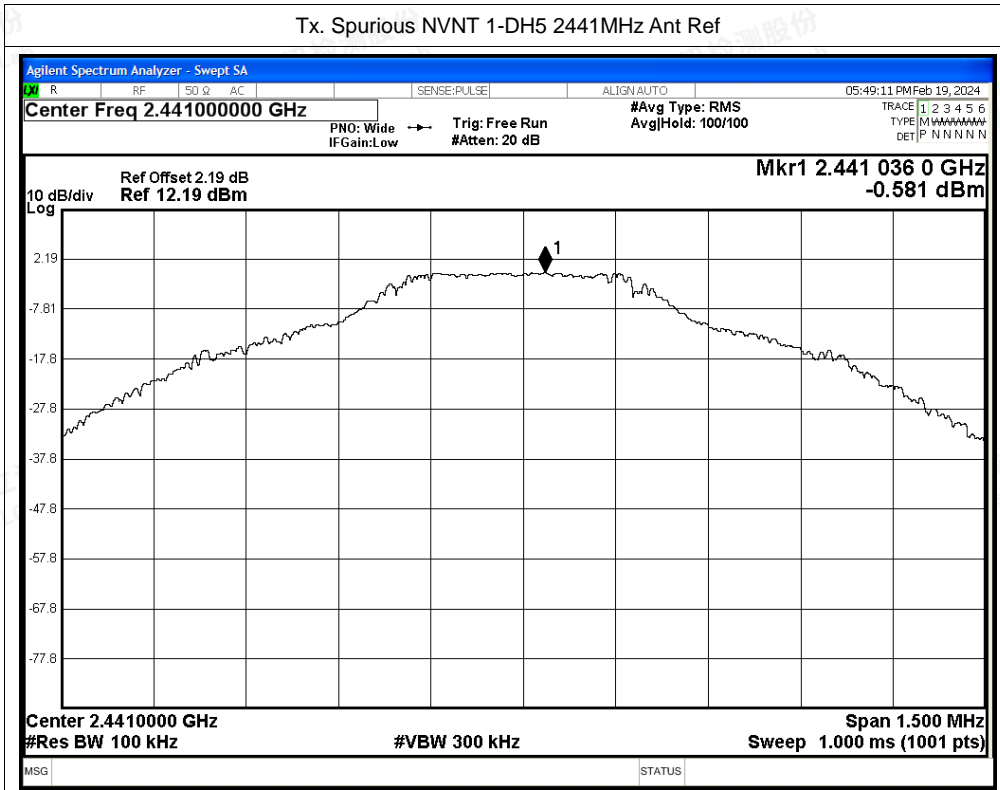
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

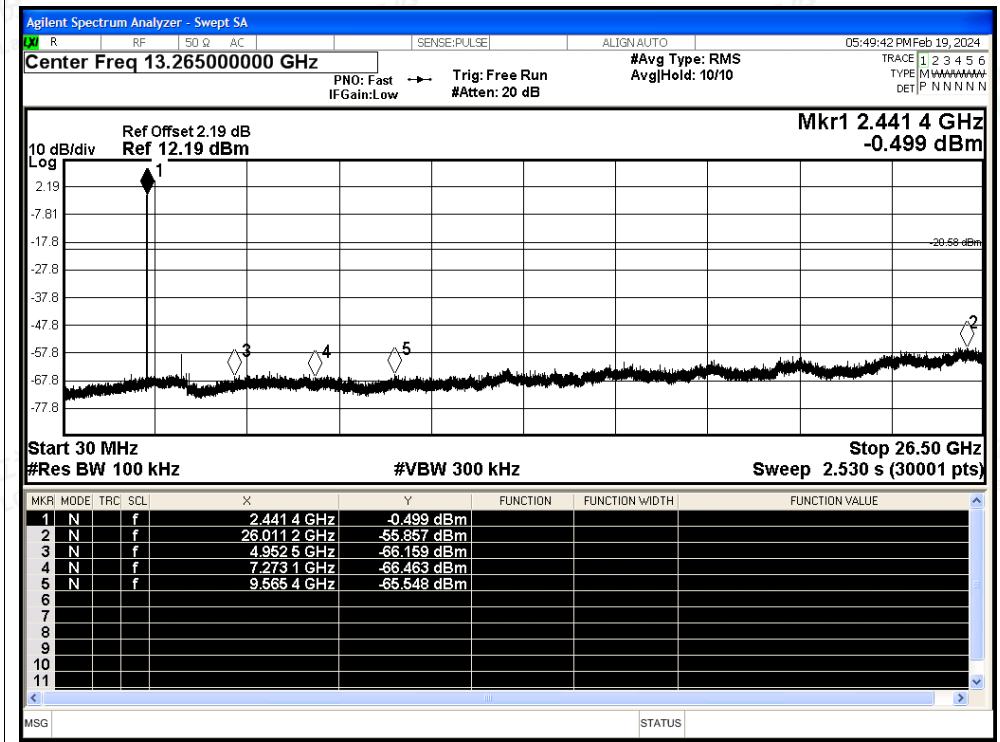
Scan code to check authenticity



Tx. Spurious NVNT 1-DH5 2441MHz Ant Ref



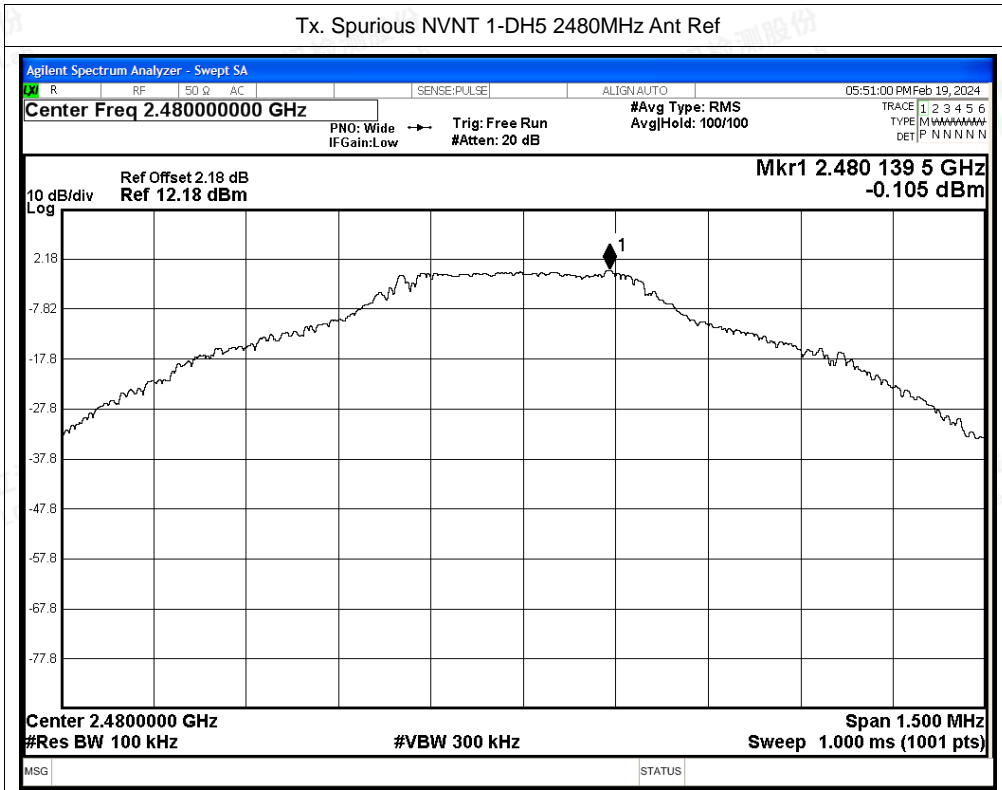
Tx. Spurious NVNT 1-DH5 2441MHz Ant Emission



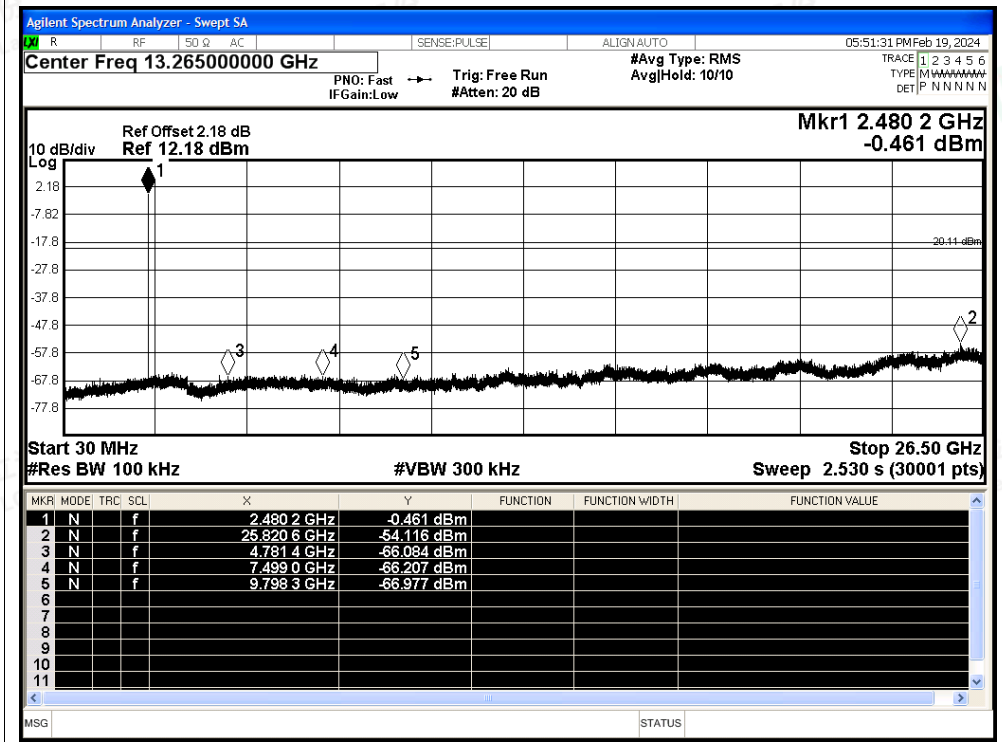




Tx. Spurious NVNT 1-DH5 2480MHz Ant Ref

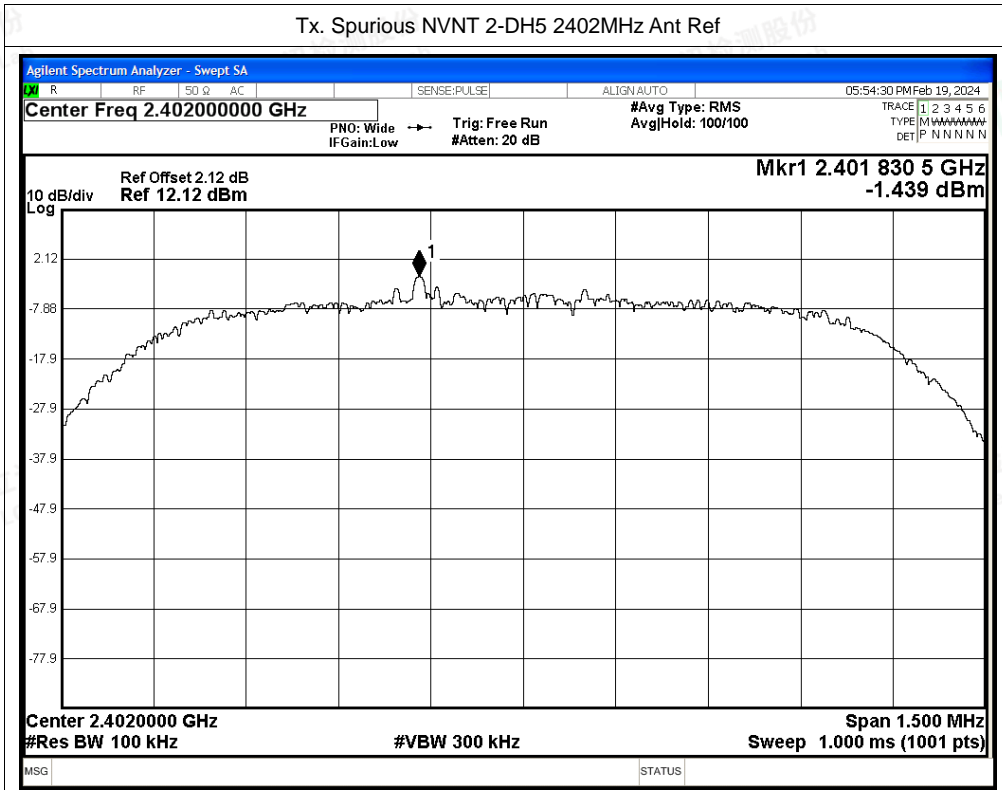


Tx. Spurious NVNT 1-DH5 2480MHz Ant Emission

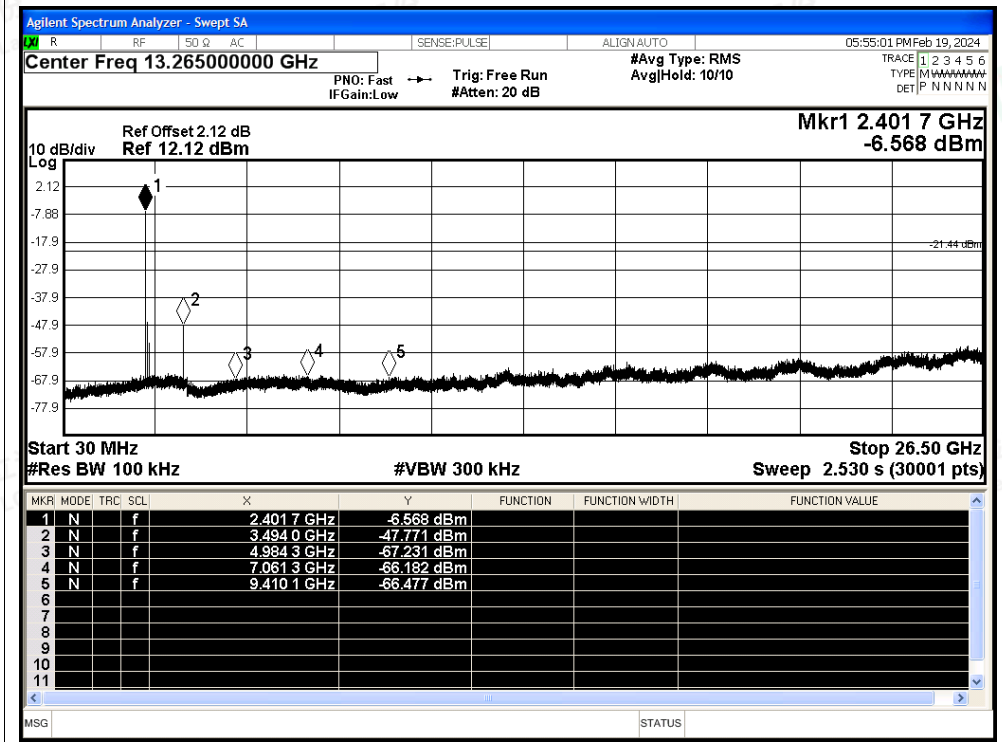




Tx. Spurious NVNT 2-DH5 2402MHz Ant Ref

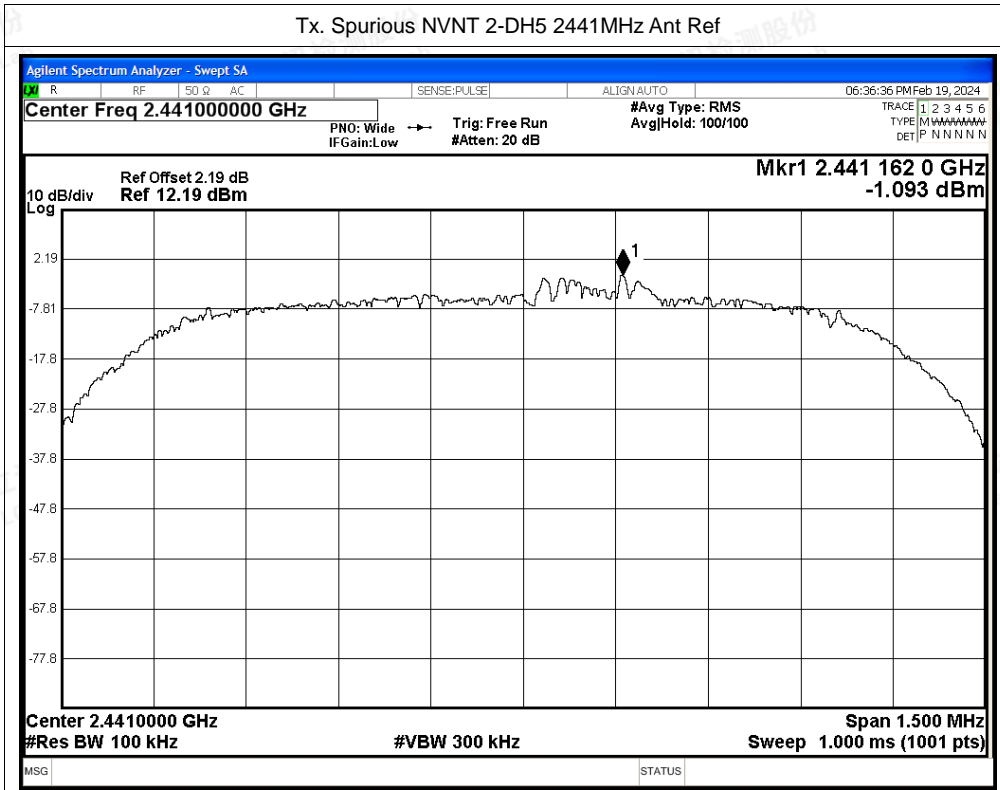


Tx. Spurious NVNT 2-DH5 2402MHz Ant Emission

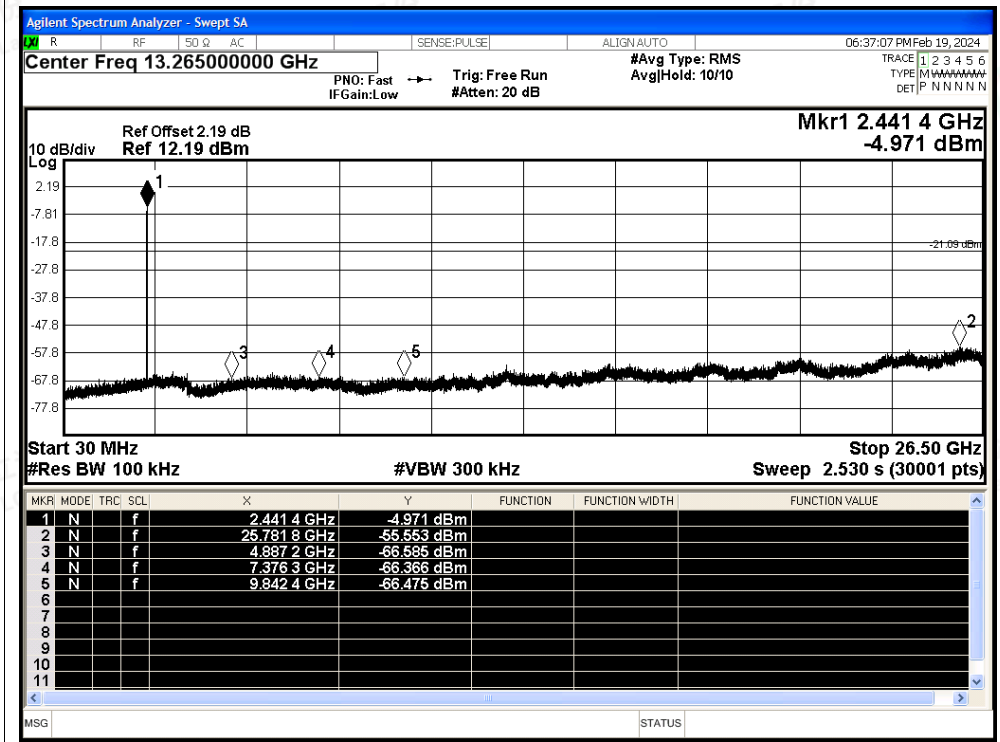




Tx. Spurious NVNT 2-DH5 2441MHz Ant Ref

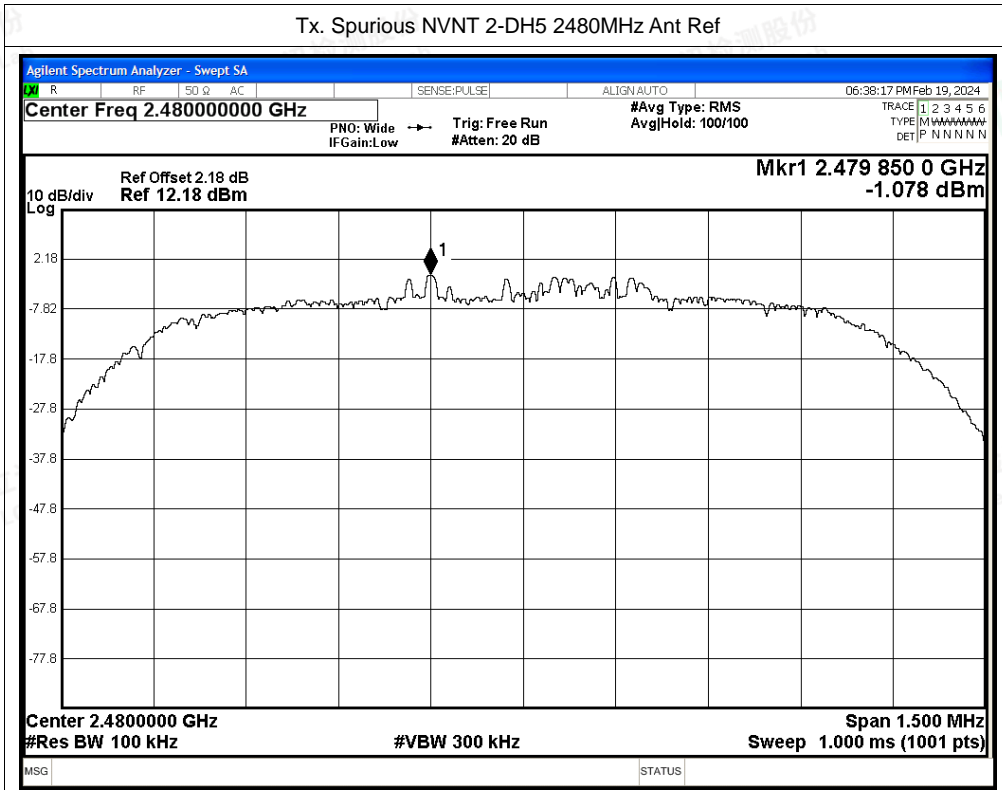


Tx. Spurious NVNT 2-DH5 2441MHz Ant Emission

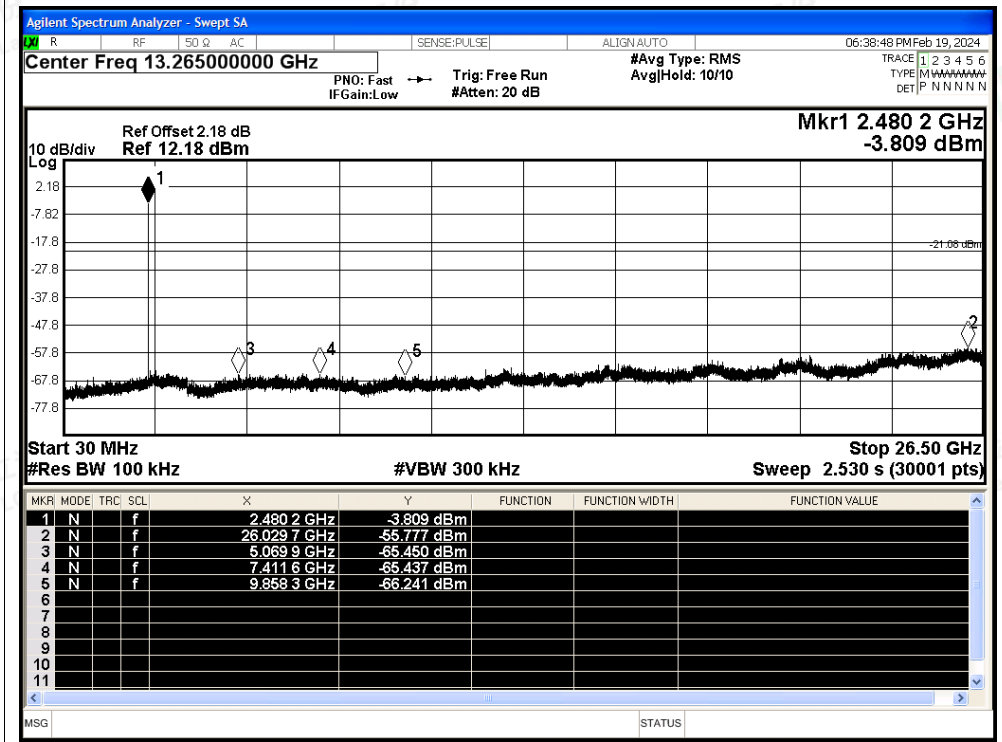




Tx. Spurious NVNT 2-DH5 2480MHz Ant Ref

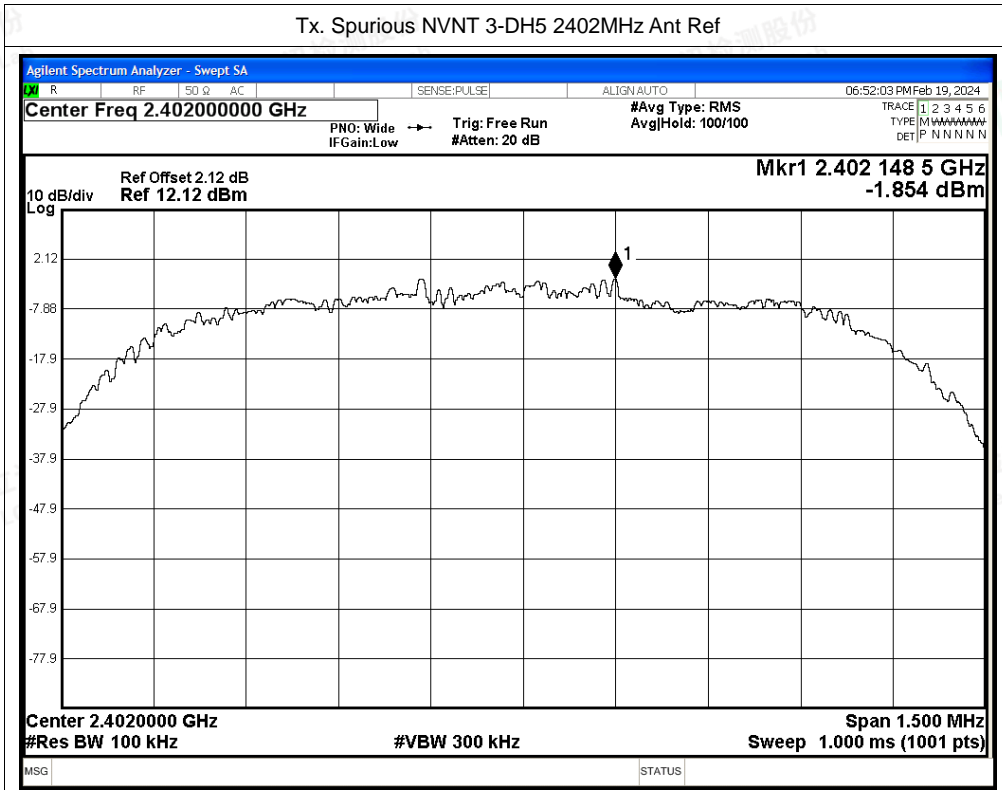


Tx. Spurious NVNT 2-DH5 2480MHz Ant Emission

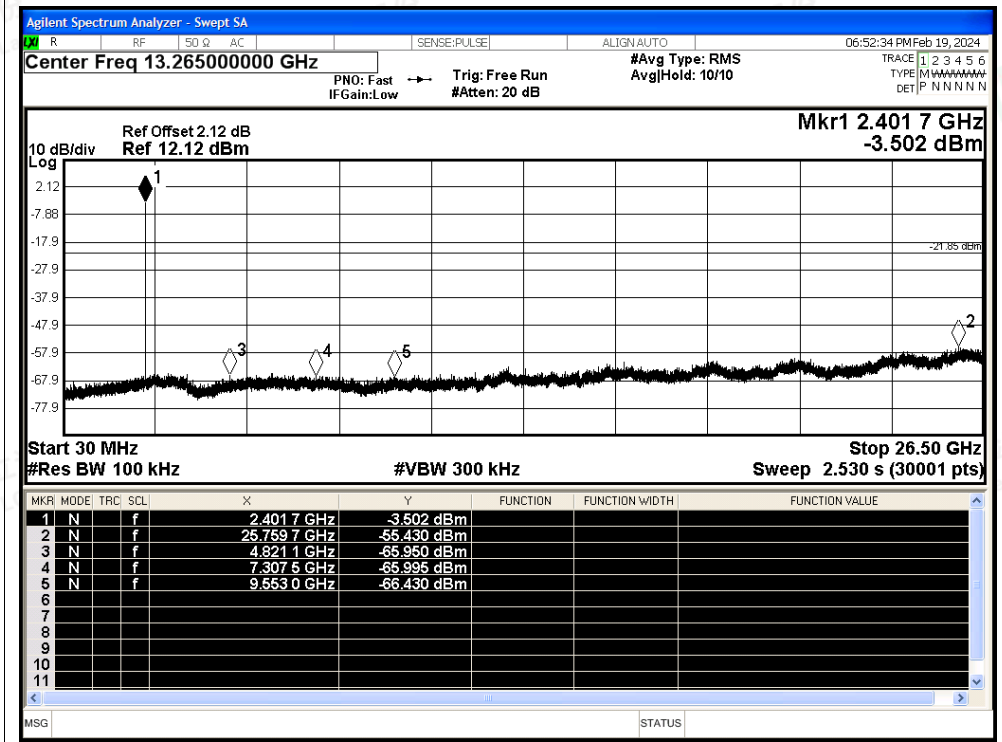




Tx. Spurious NVNT 3-DH5 2402MHz Ant Ref

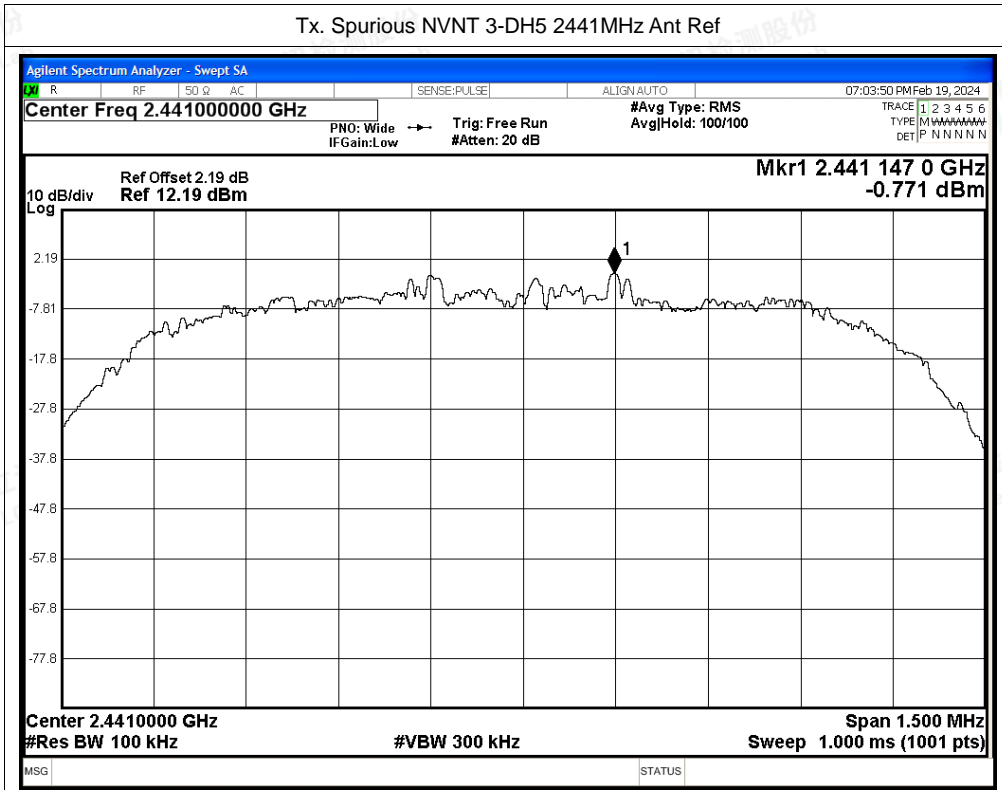


Tx. Spurious NVNT 3-DH5 2402MHz Ant Emission

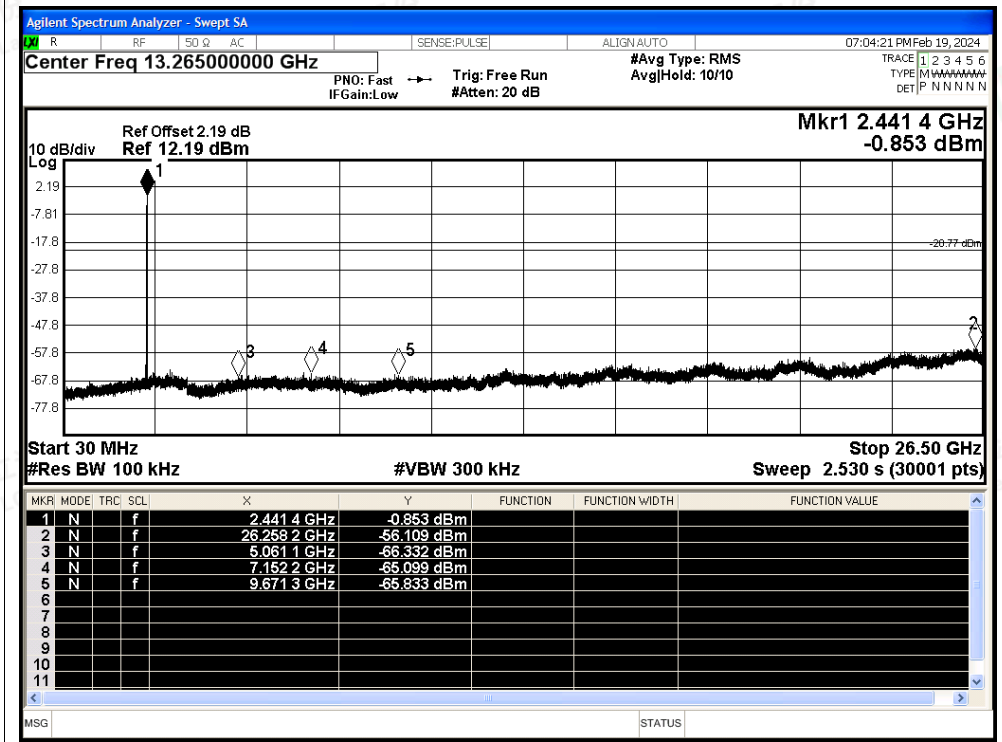




Tx. Spurious NVNT 3-DH5 2441MHz Ant Ref

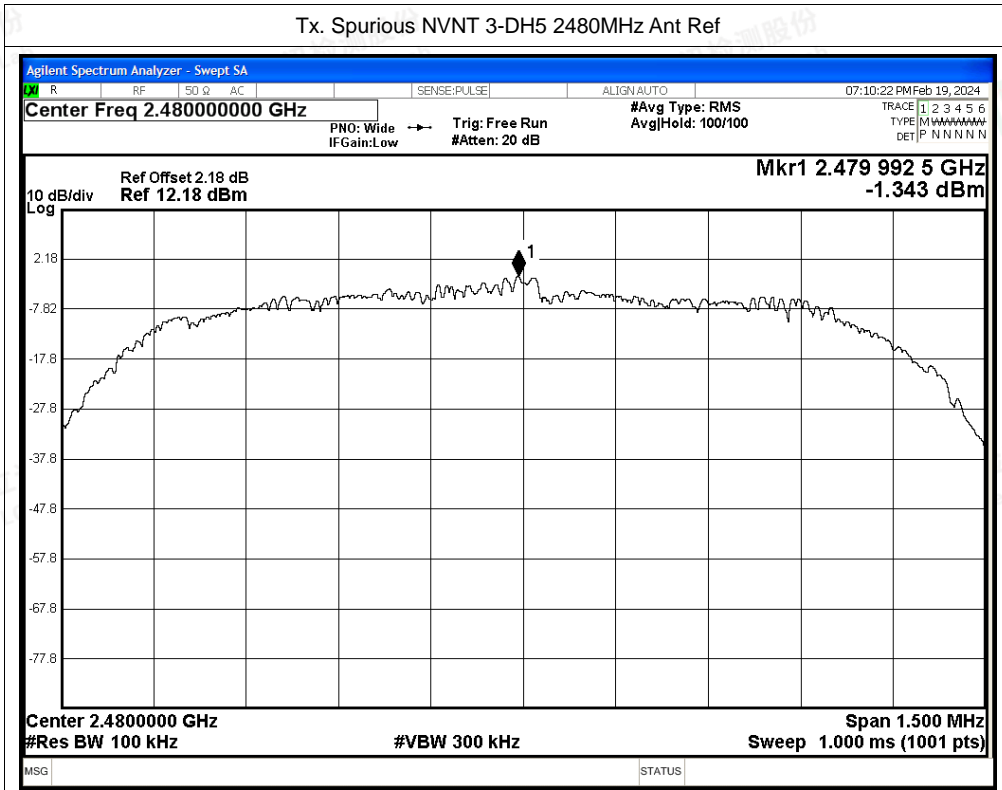


Tx. Spurious NVNT 3-DH5 2441MHz Ant Emission

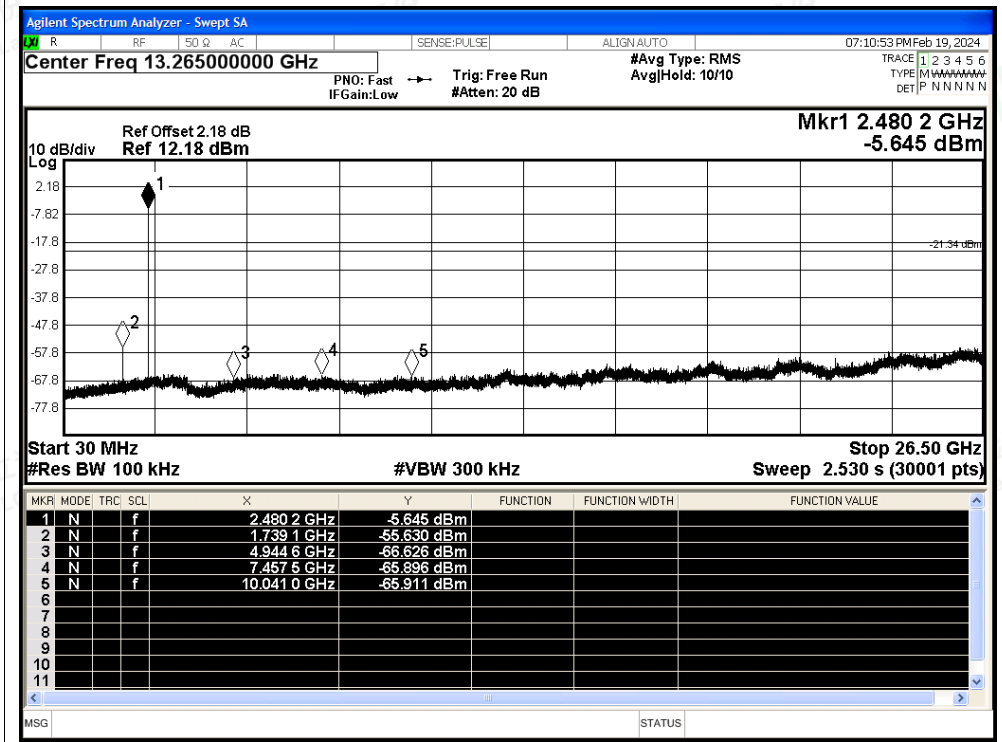




Tx. Spurious NVNT 3-DH5 2480MHz Ant Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant Emission





## A.8 Duty Cycle

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

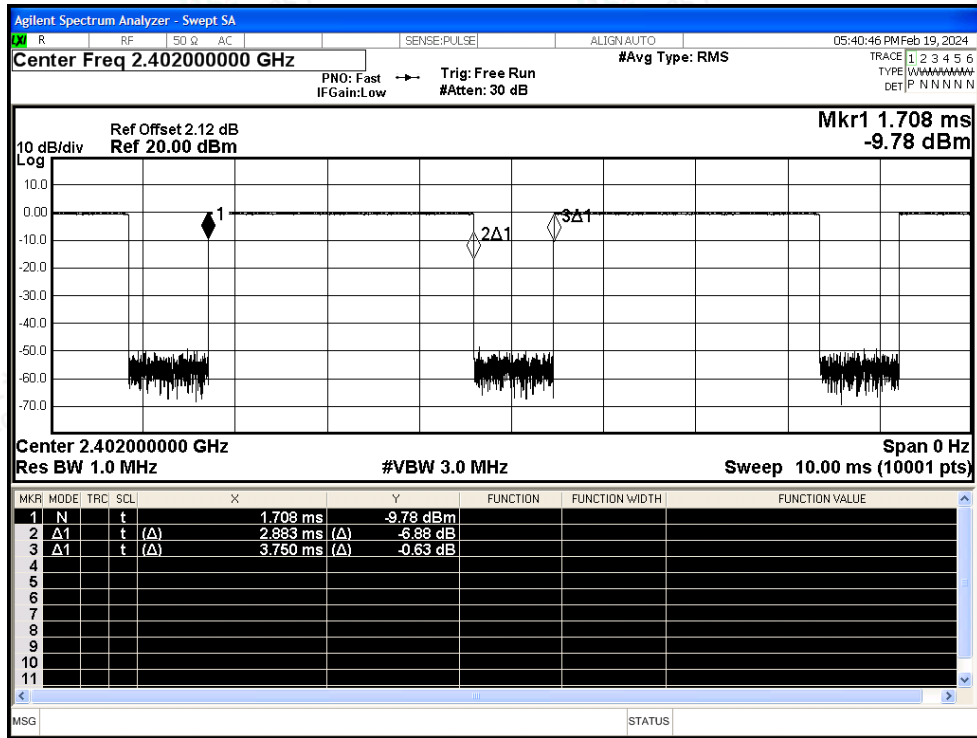




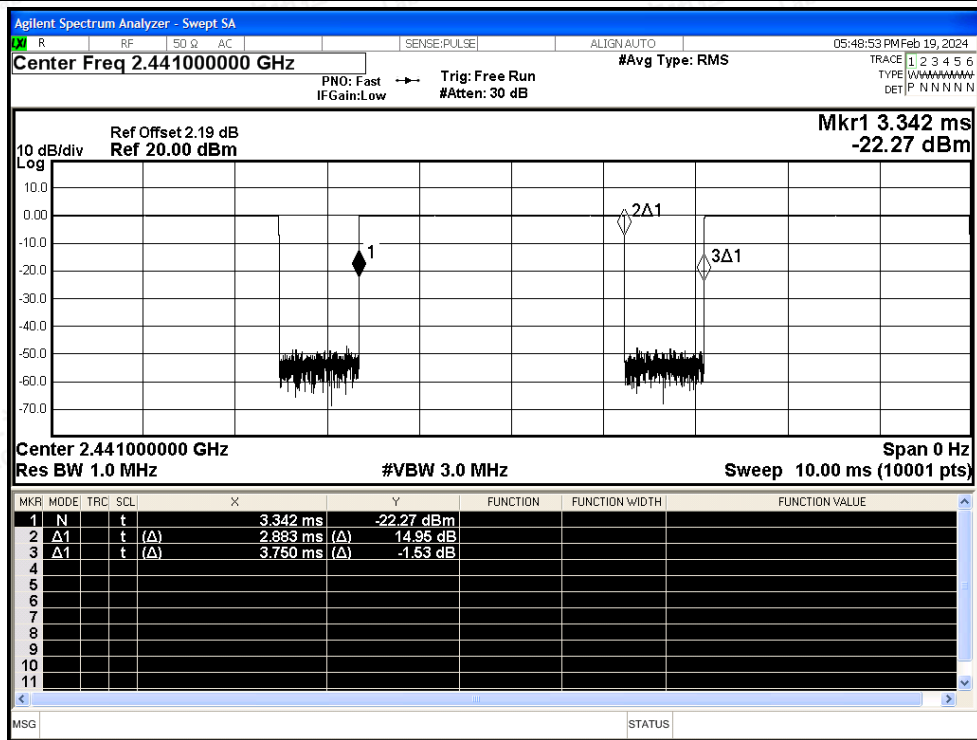


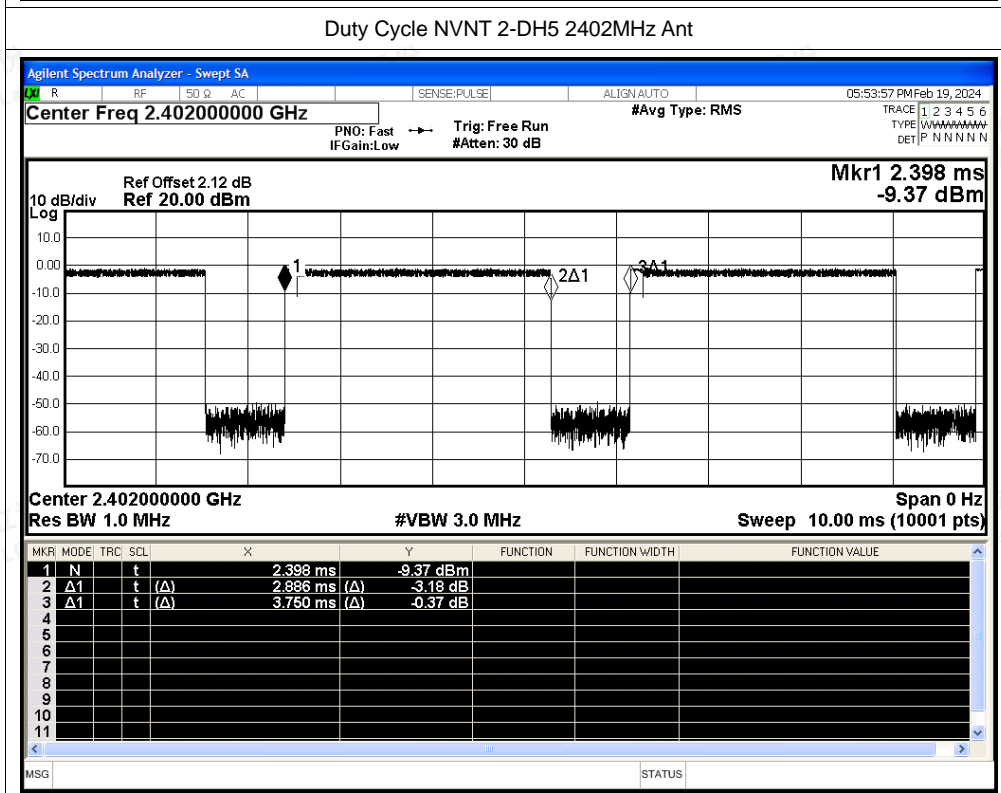
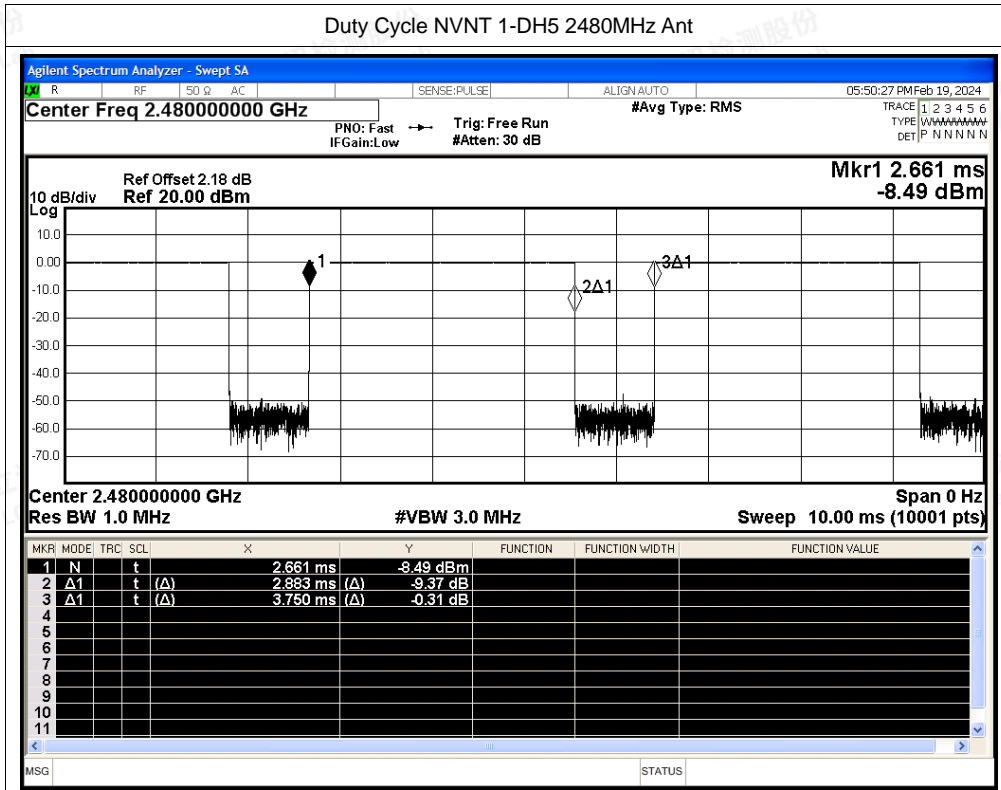
Test Graphs

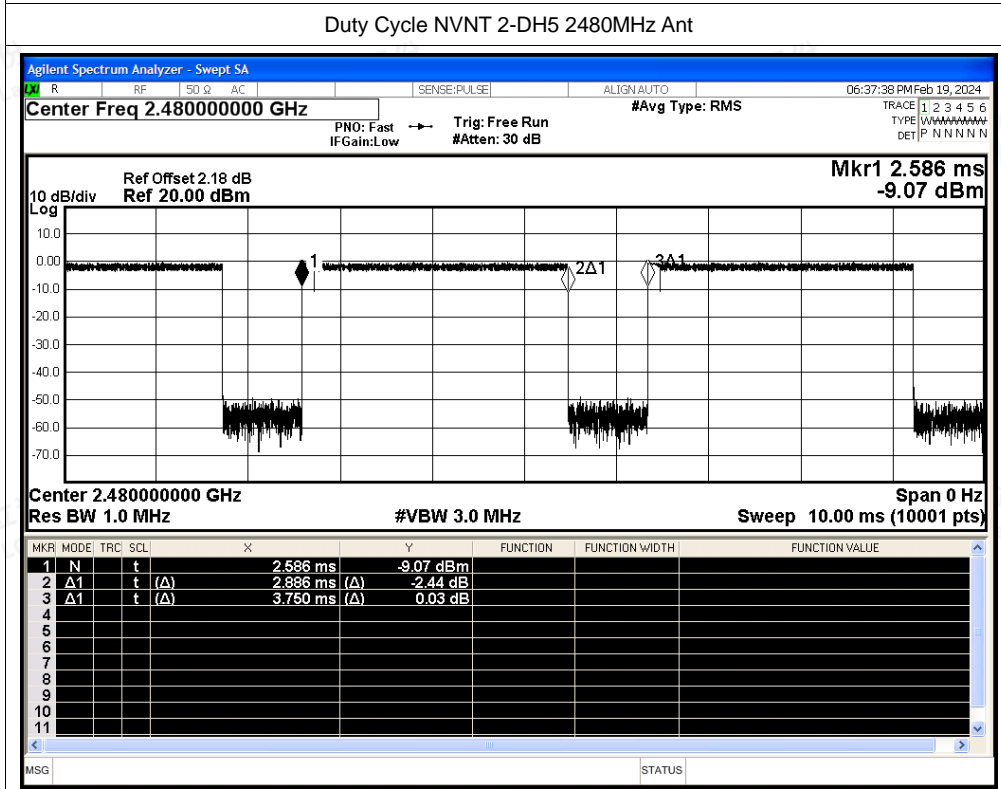
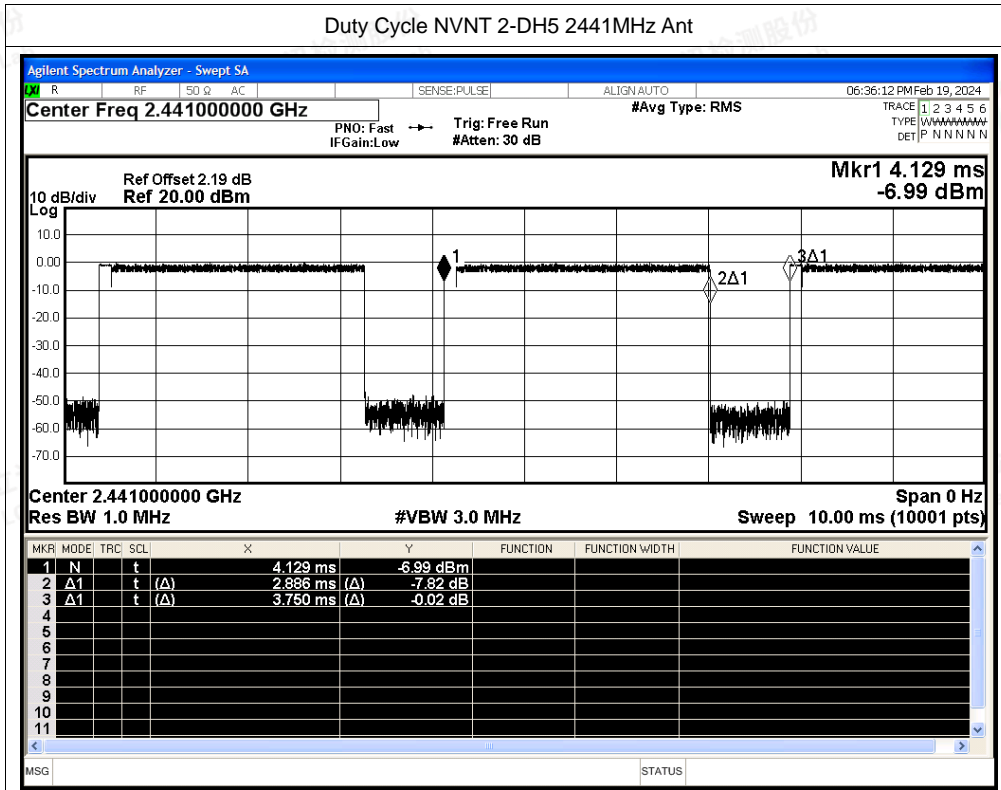
Duty Cycle NVNT 1-DH5 2402MHz Ant



Duty Cycle NVNT 1-DH5 2441MHz Ant

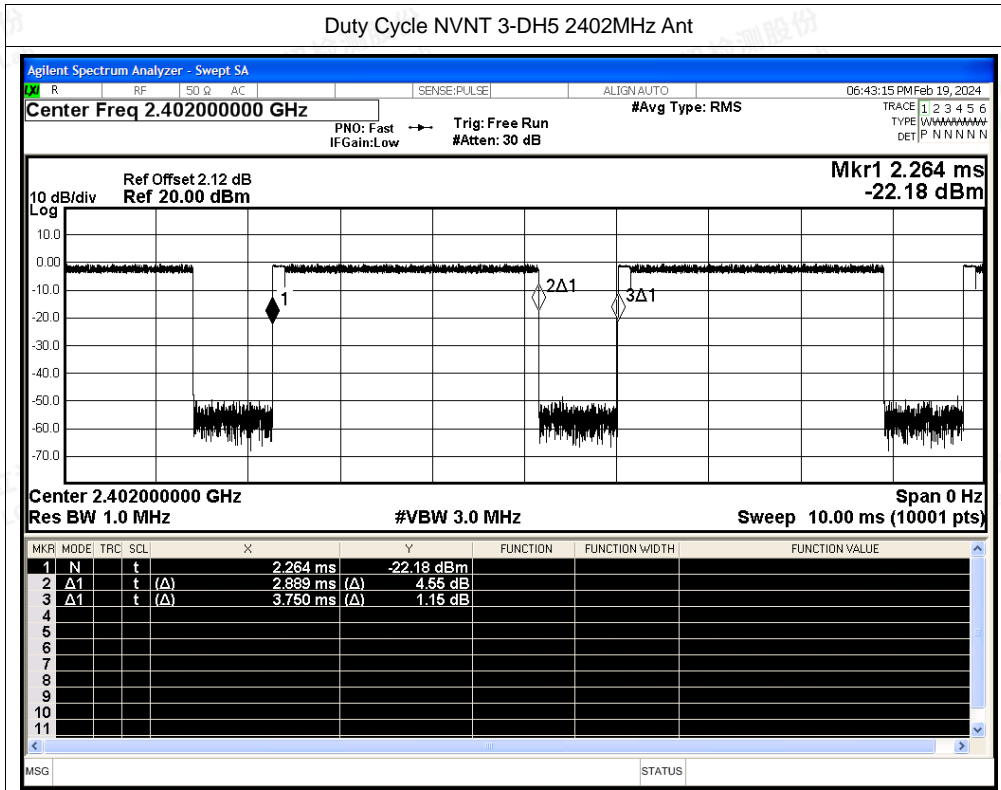




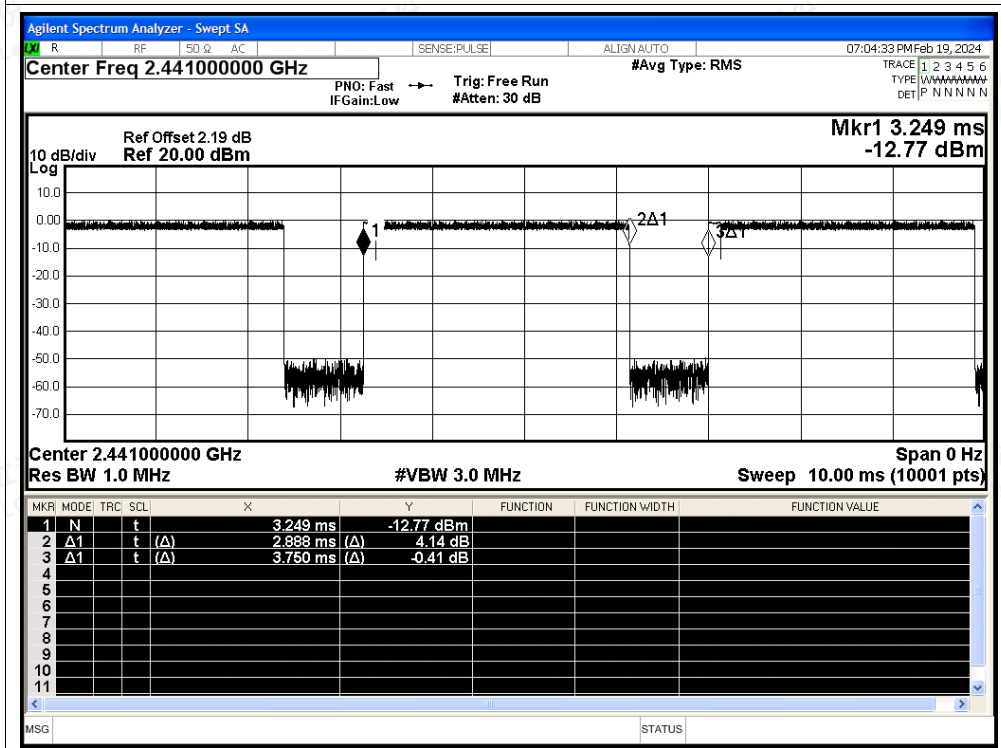


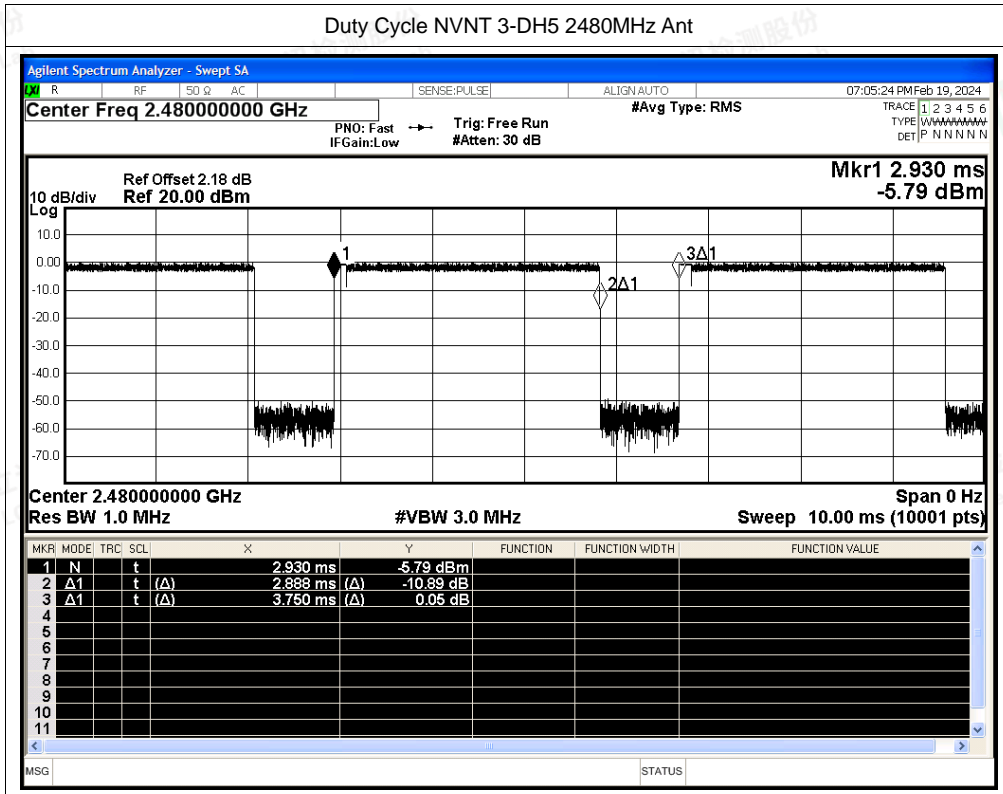


Duty Cycle NVNT 3-DH5 2402MHz Ant



Duty Cycle NVNT 3-DH5 2441MHz Ant







## 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	Ant	No-Hopping	2310	-51.65	2.67	-	46.28	Peak	74	Pass
NVNT	1-DH5	2402	Ant	No-Hopping	2310	-58.61	2.67	1.14	40.46	Average	54	Pass
NVNT	1-DH5	2402	Ant	No-Hopping	2339.088	-47.5	2.67	-	50.43	Peak	74	Pass
NVNT	1-DH5	2402	Ant	No-Hopping	2389.488	-57.86	2.67	1.14	41.21	Average	54	Pass
NVNT	1-DH5	2402	Ant	No-Hopping	2390	-50.97	2.67	-	46.96	Peak	74	Pass
NVNT	1-DH5	2402	Ant	No-Hopping	2390	-58.43	2.67	1.14	40.64	Average	54	Pass
NVNT	1-DH5	2480	Ant	No-Hopping	2483.5	-50.69	2.67	-	47.24	Peak	74	Pass
NVNT	1-DH5	2480	Ant	No-Hopping	2483.5	-58.03	2.67	1.14	41.04	Average	54	Pass
NVNT	1-DH5	2480	Ant	No-Hopping	2484.184	-47.36	2.67	-	50.57	Peak	74	Pass
NVNT	1-DH5	2480	Ant	No-Hopping	2498.896	-57.41	2.67	1.14	41.66	Average	54	Pass
NVNT	1-DH5	2480	Ant	No-Hopping	2500	-50.22	2.67	-	47.71	Peak	74	Pass
NVNT	1-DH5	2480	Ant	No-Hopping	2500	-58.13	2.67	1.14	40.94	Average	54	Pass
NVNT	2-DH5	2402	Ant	No-Hopping	2310	-50.94	2.67	-	46.99	Peak	74	Pass
NVNT	2-DH5	2402	Ant	No-Hopping	2310	-59.4	2.67	1.14	39.67	Average	54	Pass
NVNT	2-DH5	2402	Ant	No-Hopping	2382.384	-47.11	2.67	-	50.82	Peak	74	Pass
NVNT	2-DH5	2402	Ant	No-Hopping	2388.048	-57.76	2.67	1.14	41.31	Average	54	Pass
NVNT	2-DH5	2402	Ant	No-Hopping	2390	-50.83	2.67	-	47.10	Peak	74	Pass
NVNT	2-DH5	2402	Ant	No-Hopping	2390	-58.68	2.67	1.14	40.39	Average	54	Pass
NVNT	2-DH5	2480	Ant	No-Hopping	2483.5	-49.01	2.67	-	48.92	Peak	74	Pass
NVNT	2-DH5	2480	Ant	No-Hopping	2483.5	-58.32	2.67	1.14	40.75	Average	54	Pass
NVNT	2-DH5	2480	Ant	No-Hopping	2485.912	-47.02	2.67	-	50.91	Peak	74	Pass
NVNT	2-DH5	2480	Ant	No-Hopping	2494.6	-57.37	2.67	1.14	41.70	Average	54	Pass
NVNT	2-DH5	2480	Ant	No-Hopping	2500	-49.4	2.67	-	48.53	Peak	74	Pass
NVNT	2-DH5	2480	Ant	No-Hopping	2500	-57.89	2.67	1.14	41.18	Average	54	Pass
NVNT	3-DH5	2402	Ant	No-Hopping	2310	-50.85	2.67	-	47.08	Peak	74	Pass
NVNT	3-DH5	2402	Ant	No-Hopping	2310	-58.53	2.67	1.13	40.53	Average	54	Pass
NVNT	3-DH5	2402	Ant	No-Hopping	2373.84	-47.2	2.67	-	50.73	Peak	74	Pass
NVNT	3-DH5	2402	Ant	No-Hopping	2389.104	-57.61	2.67	1.13	41.45	Average	54	Pass
NVNT	3-DH5	2402	Ant	No-Hopping	2390	-50.34	2.67	-	47.59	Peak	74	Pass
NVNT	3-DH5	2402	Ant	No-Hopping	2390	-58.76	2.67	1.13	40.30	Average	54	Pass
NVNT	3-DH5	2480	Ant	No-Hopping	2483.5	-50.68	2.67	-	47.25	Peak	74	Pass
NVNT	3-DH5	2480	Ant	No-Hopping	2483.5	-57.61	2.67	1.13	41.45	Average	54	Pass
NVNT	3-DH5	2480	Ant	No-Hopping	2493.424	-47.31	2.67	-	50.62	Peak	74	Pass
NVNT	3-DH5	2480	Ant	No-Hopping	2485.672	-57.33	2.67	1.13	41.73	Average	54	Pass
NVNT	3-DH5	2480	Ant	No-Hopping	2500	-49.89	2.67	-	48.04	Peak	74	Pass
NVNT	3-DH5	2480	Ant	No-Hopping	2500	-58.53	2.67	1.13	40.53	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

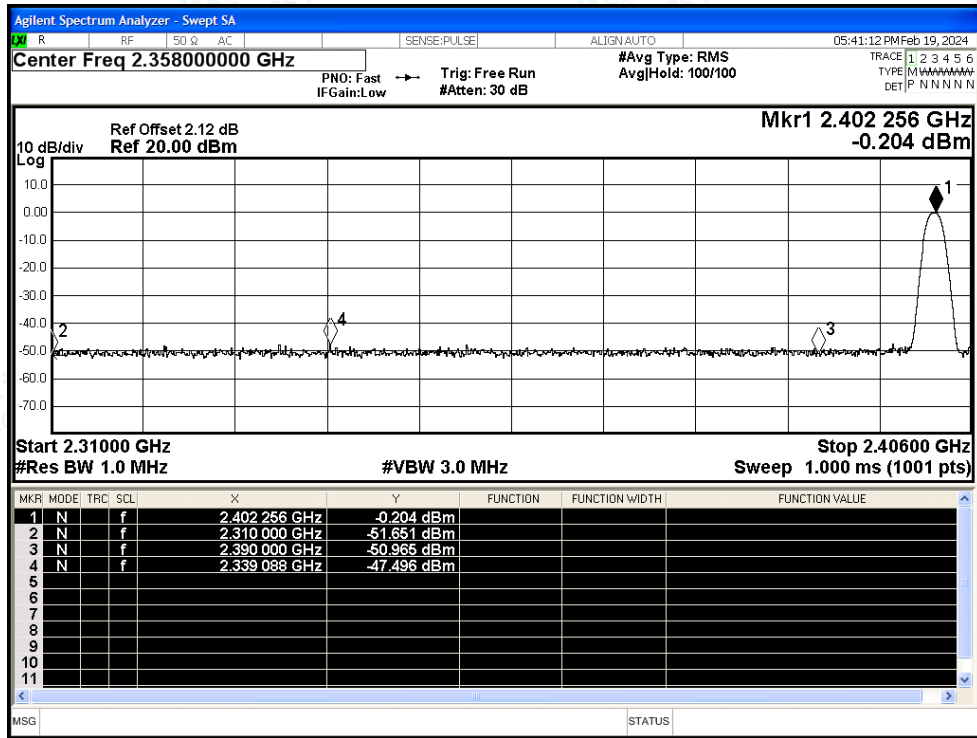
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

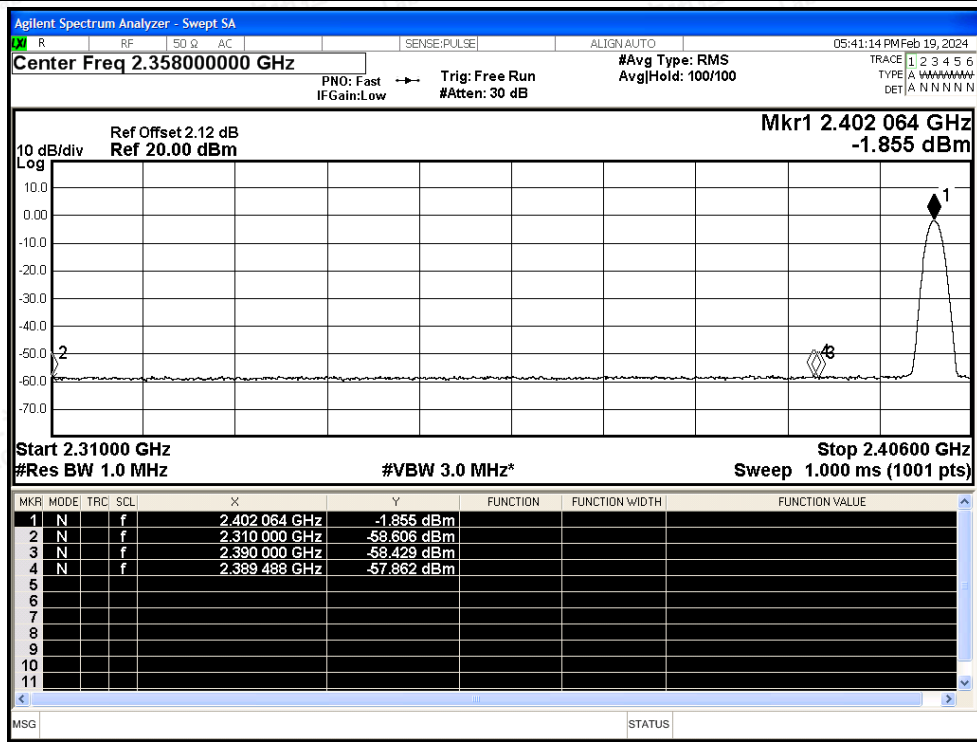


Test Graphs

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



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



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

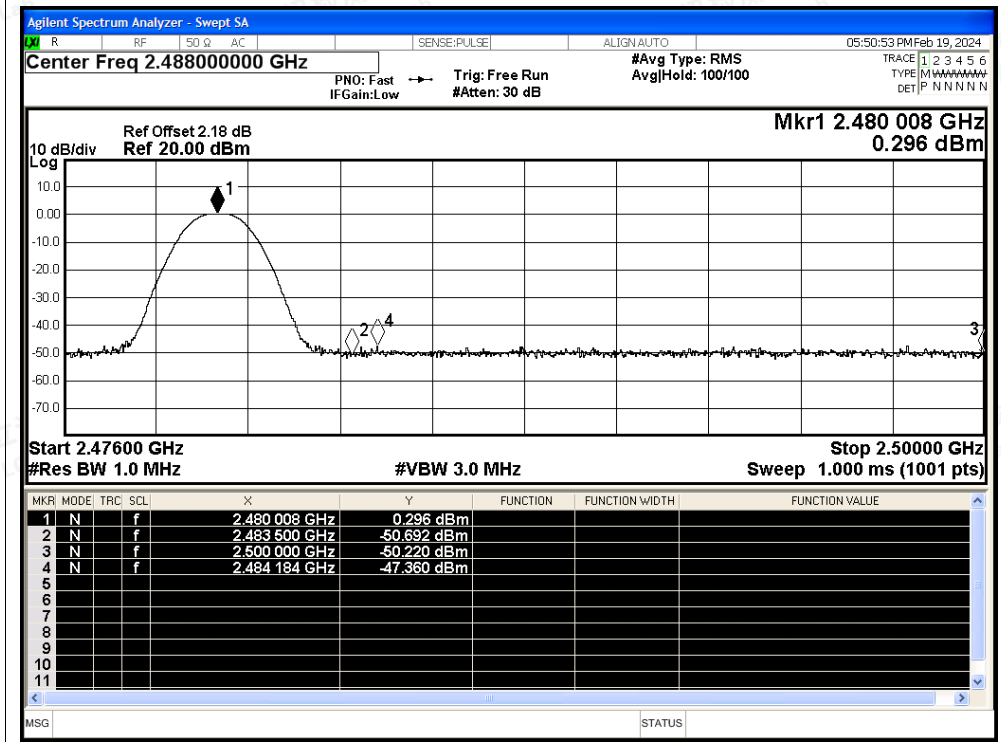
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

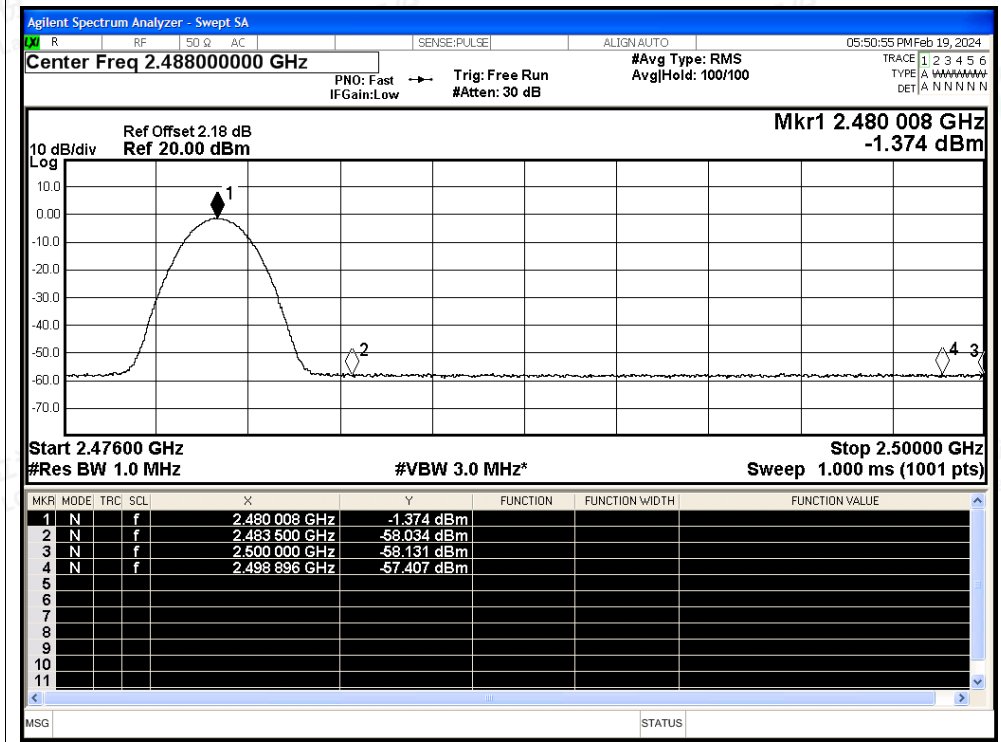




Restrict Band NVNT 1-DH5 2480MHz Ant No-Hopping Peak



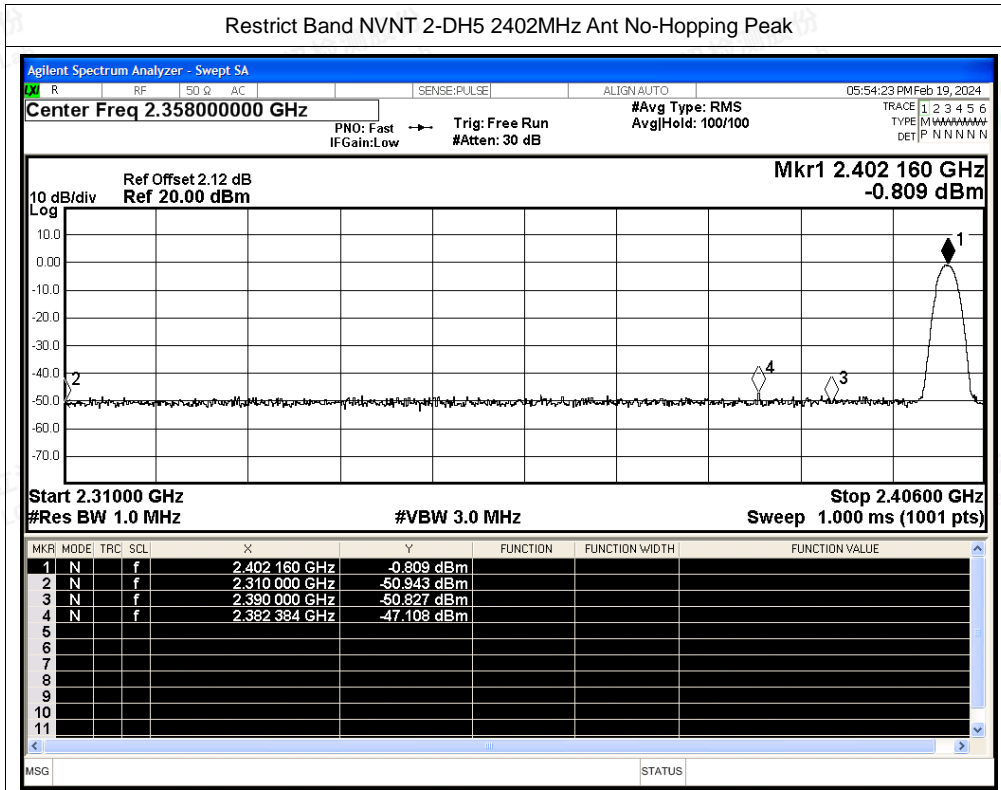
Restrict Band NVNT 1-DH5 2480MHz Ant No-Hopping Average



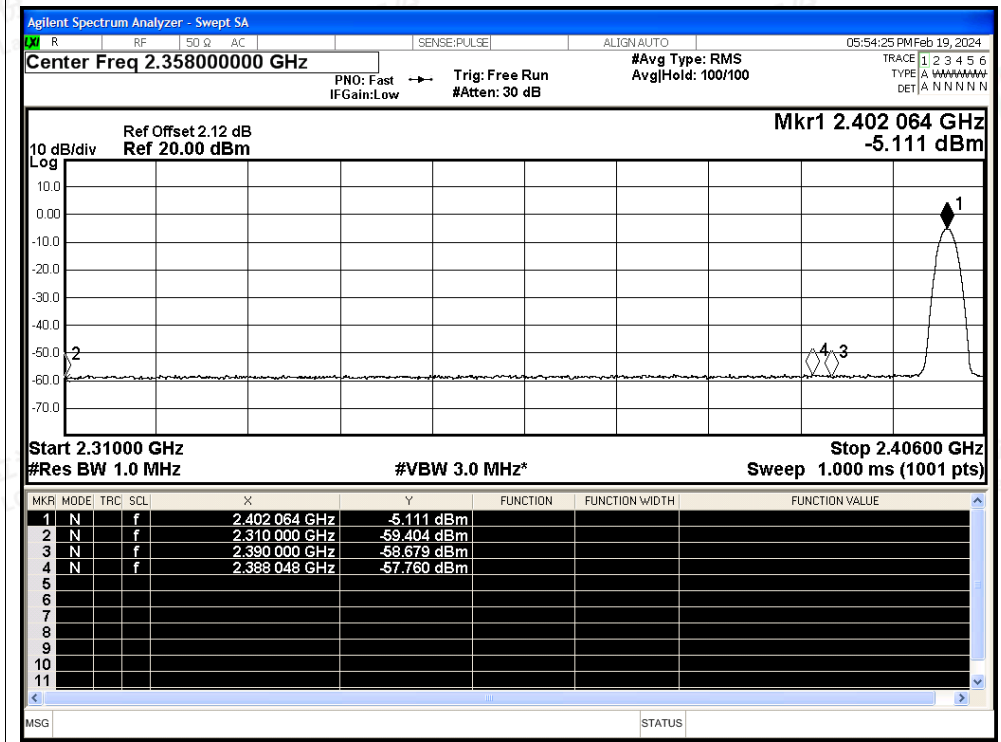




Restrict Band NVNT 2-DH5 2402MHz Ant No-Hopping Peak

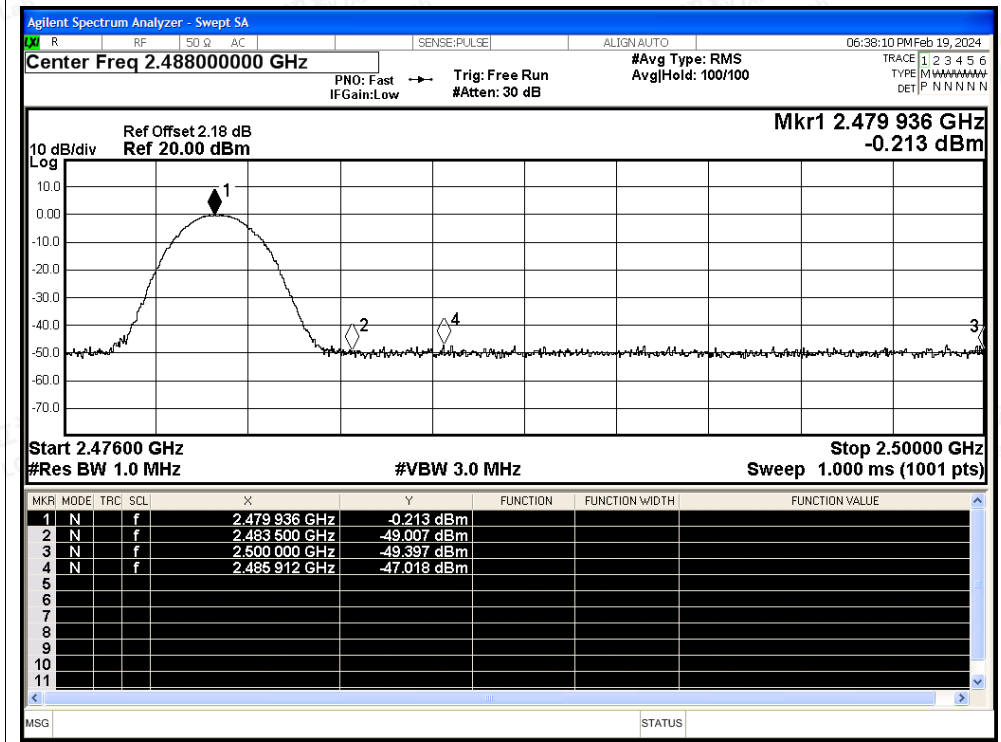


Restrict Band NVNT 2-DH5 2402MHz Ant No-Hopping Average

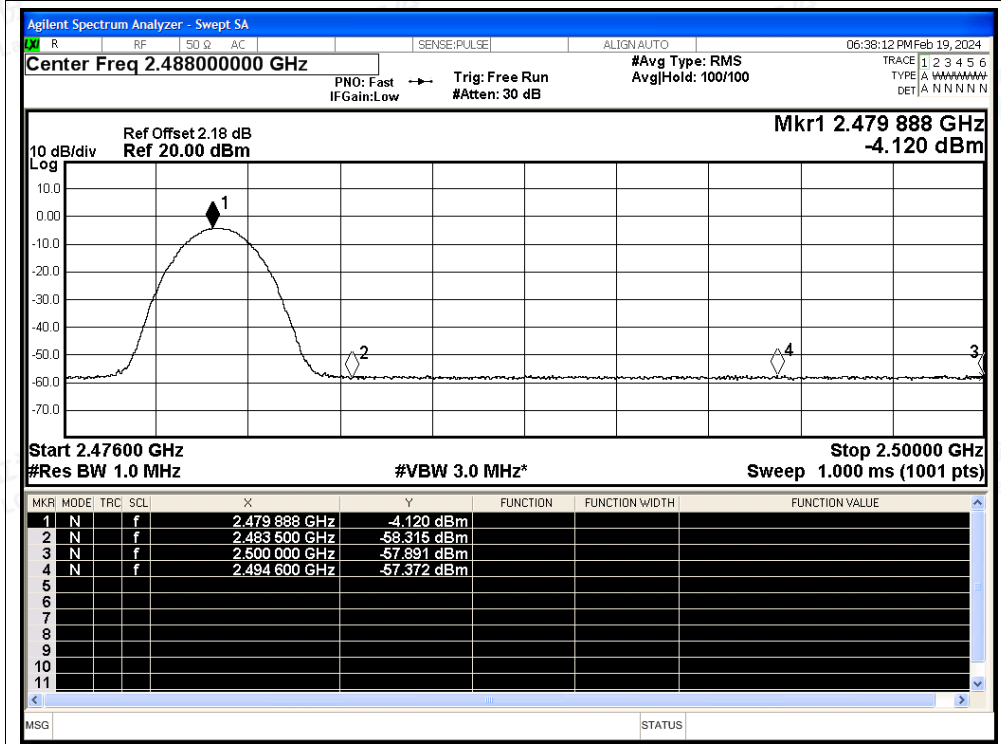




Restrict Band NVNT 2-DH5 2480MHz Ant No-Hopping Peak

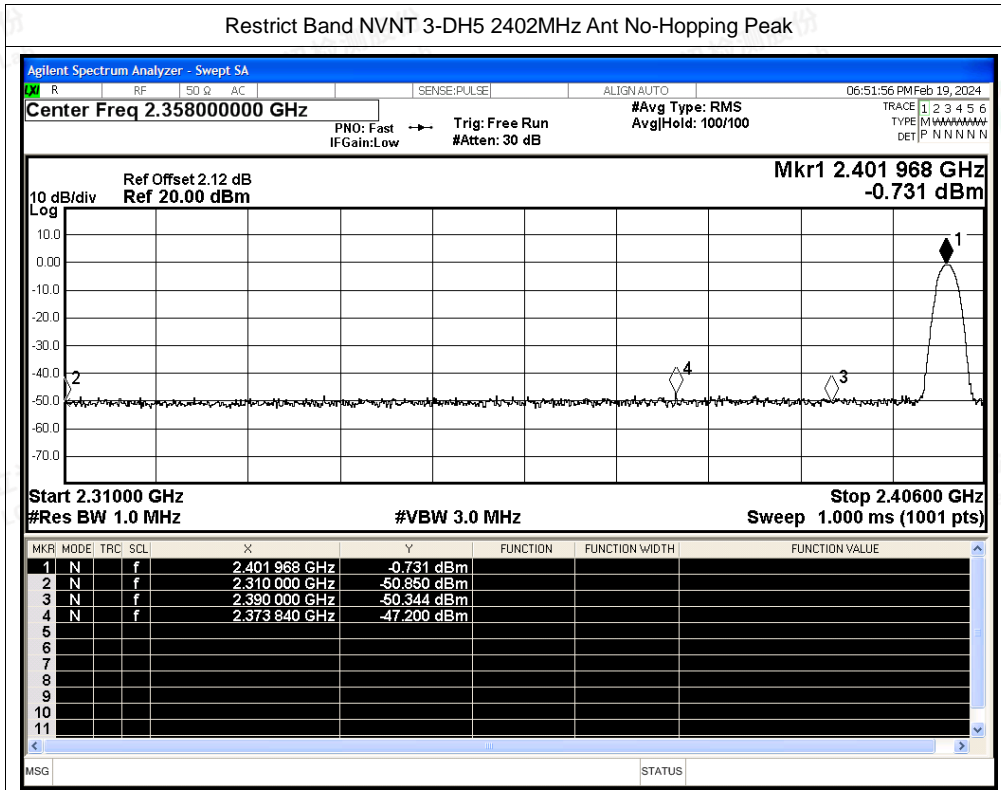


Restrict Band NVNT 2-DH5 2480MHz Ant No-Hopping Average

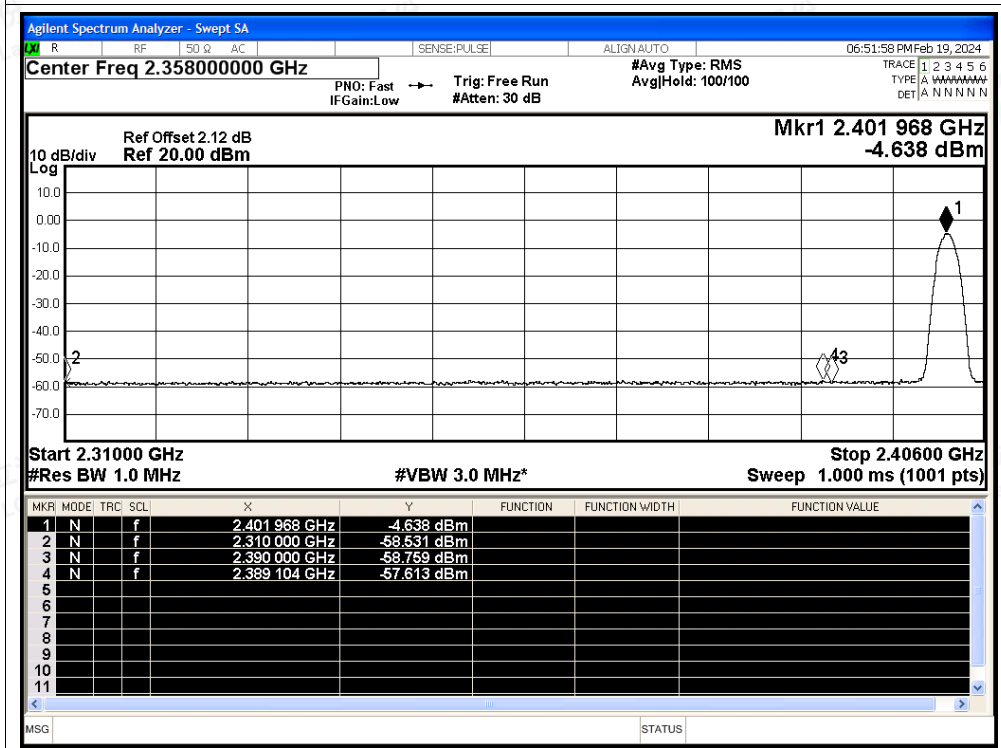




Restrict Band NVNT 3-DH5 2402MHz Ant No-Hopping Peak

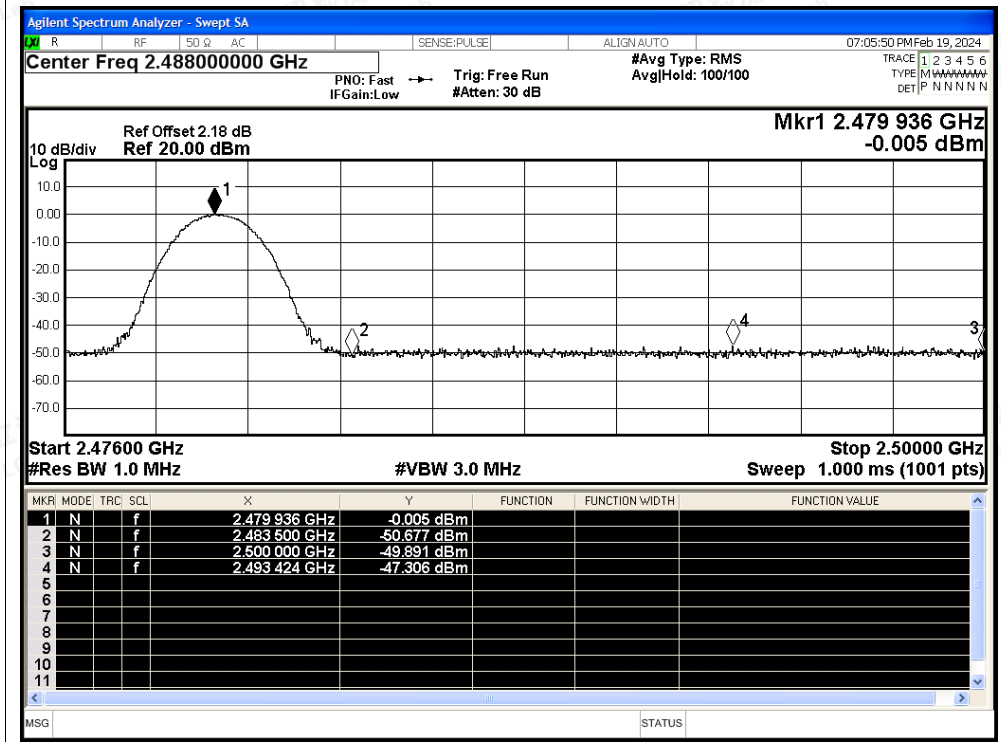


Restrict Band NVNT 3-DH5 2402MHz Ant No-Hopping Average





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



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

