



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: 3D Printer

Test Model: Anycubic Kobra S1

Environmental Conditions

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



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



A.1 -20dB Bandwidth

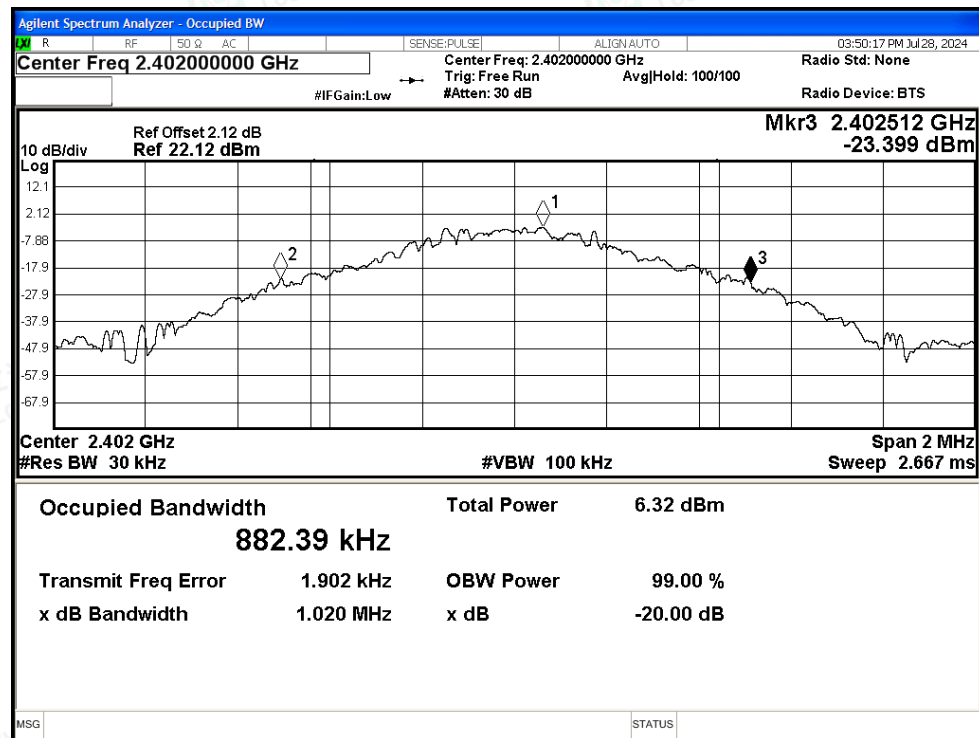
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	1.02	N/A	Pass
NVNT	1-DH5	2441	Ant1	1.008	N/A	Pass
NVNT	1-DH5	2480	Ant1	1.022	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.281	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.284	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.284	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.31	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.301	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.298	N/A	Pass



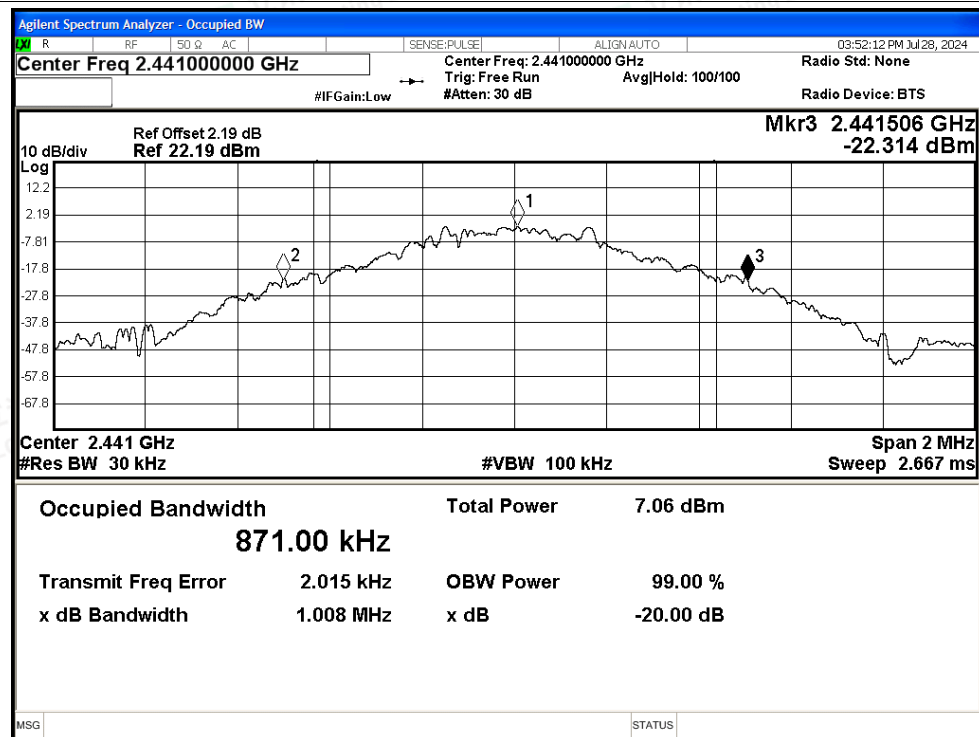


Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

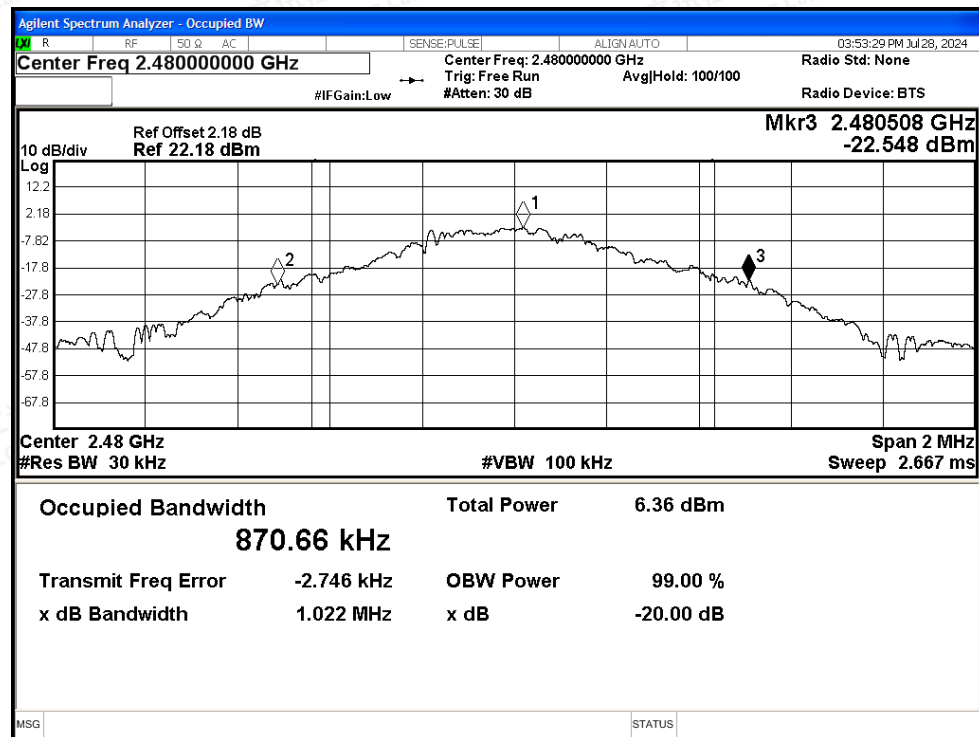


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

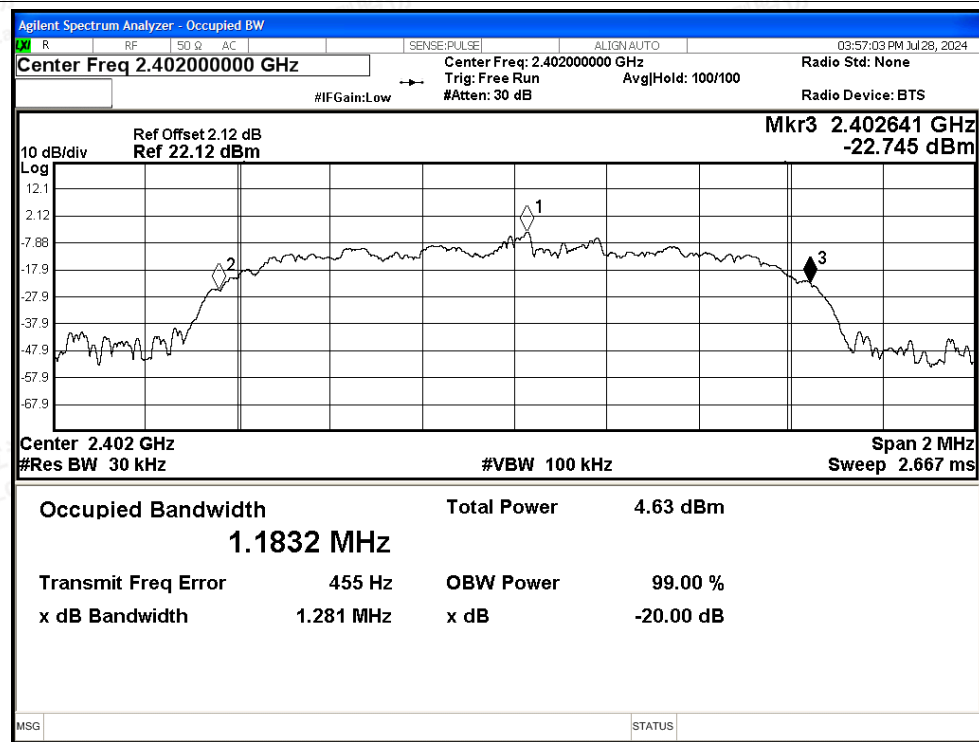




-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



Shenzhen LCS Compliance Testing Laboratory Ltd.

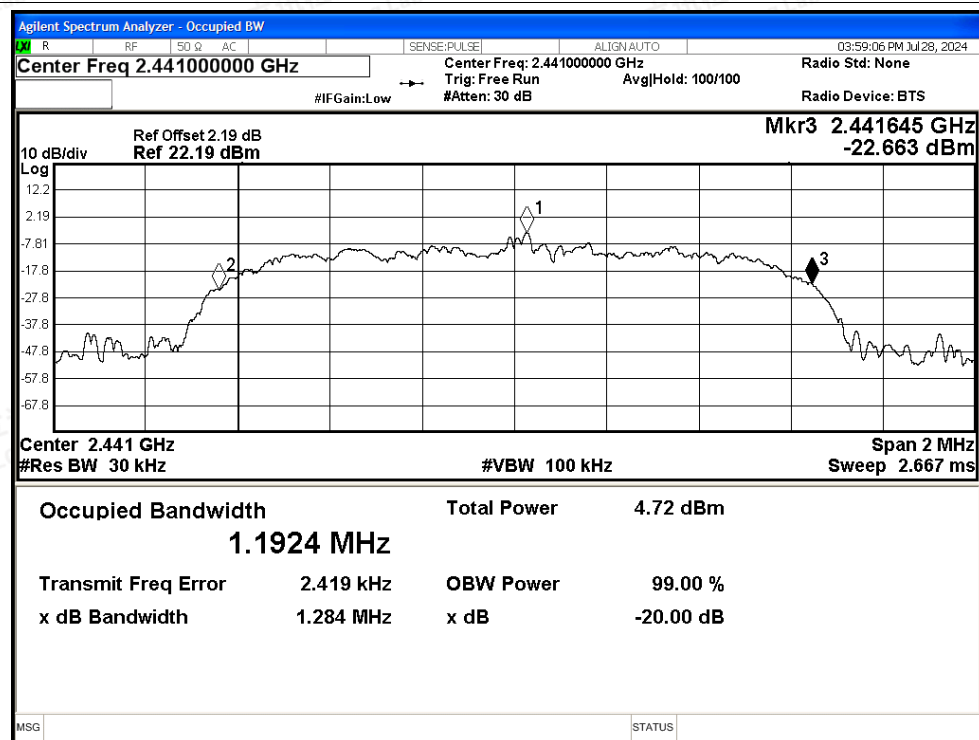
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

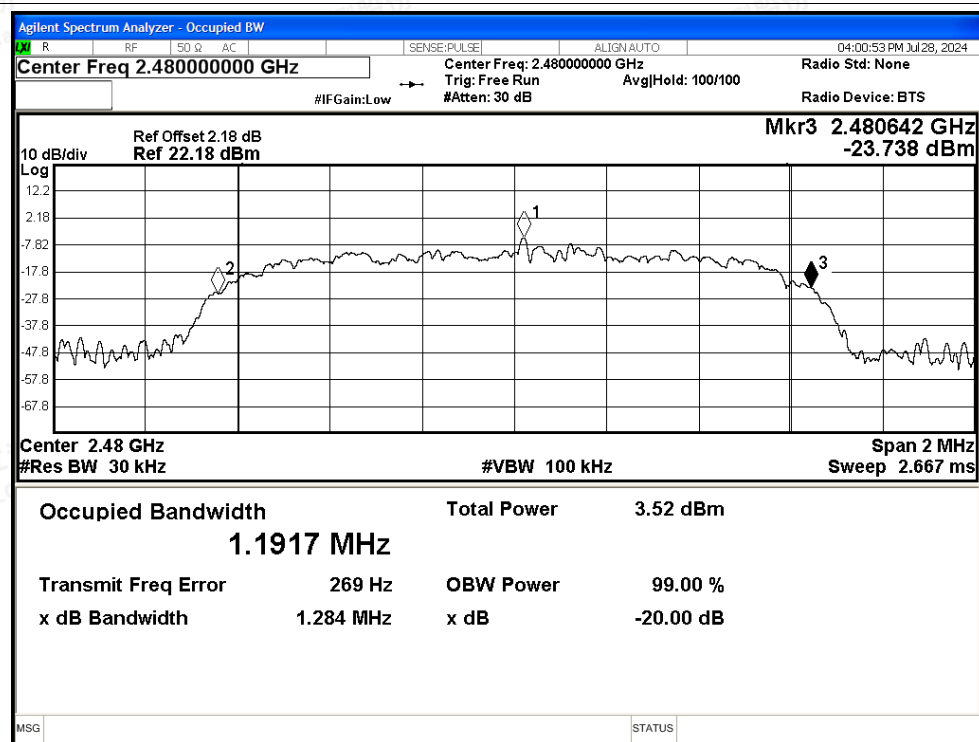
Scan code to check authenticity



-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1

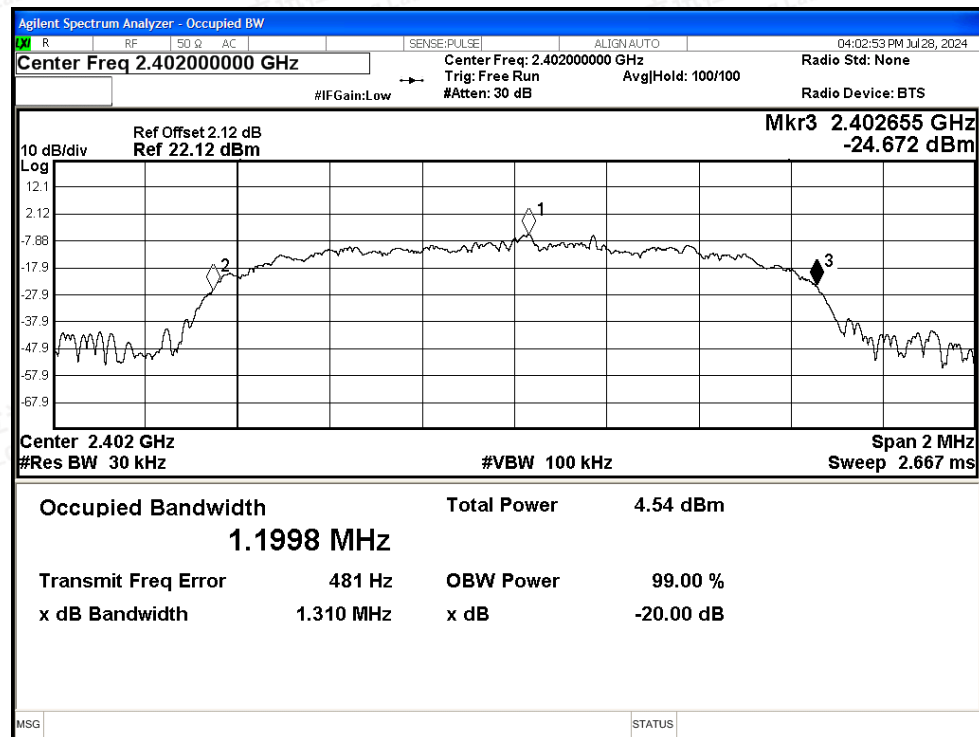


-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

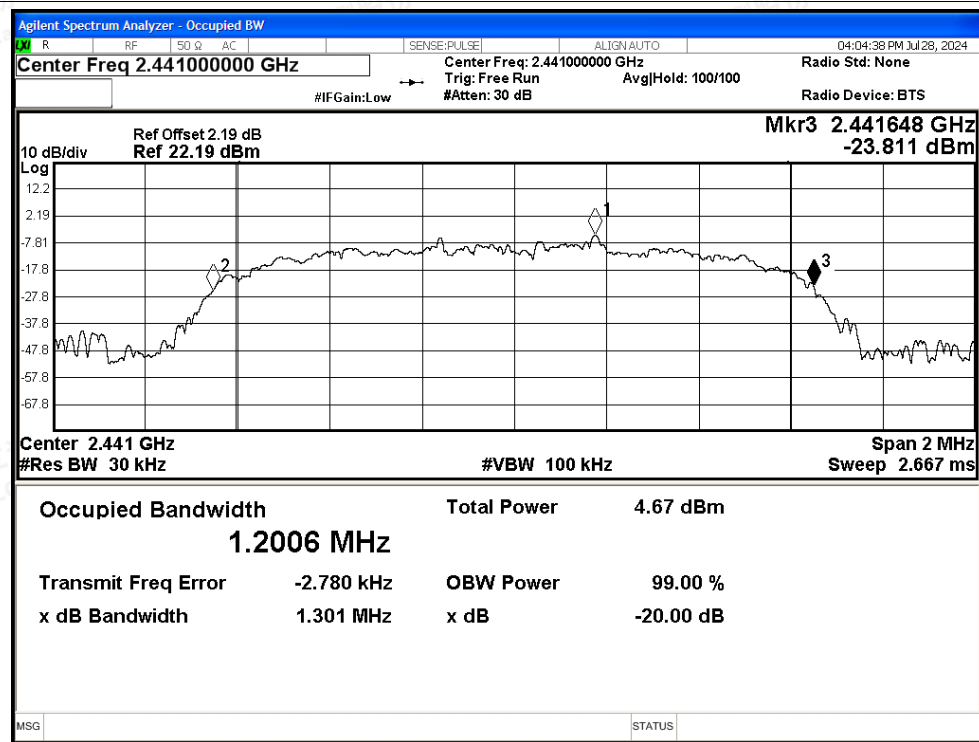


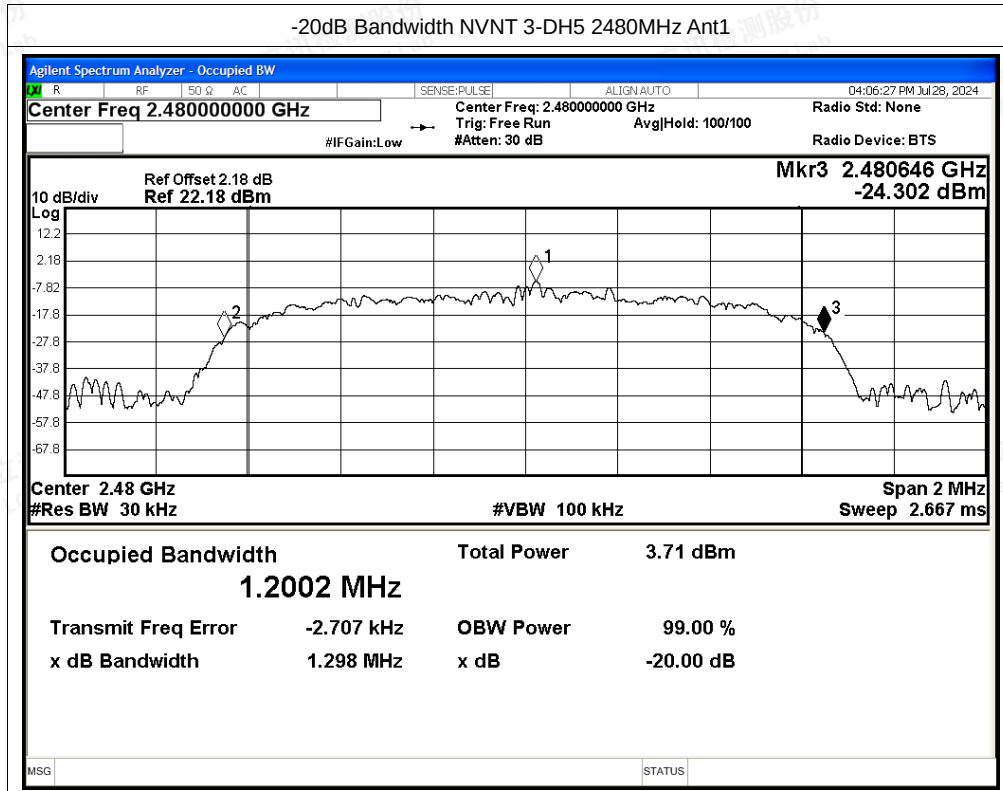


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1







A.2 Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.26	21	Pass
NVNT	1-DH5	2441	Ant1	0.7	21	Pass
NVNT	1-DH5	2480	Ant1	0.1	21	Pass
NVNT	2-DH5	2402	Ant1	0.21	21	Pass
NVNT	2-DH5	2441	Ant1	0.52	21	Pass
NVNT	2-DH5	2480	Ant1	-0.48	21	Pass
NVNT	3-DH5	2402	Ant1	0.39	21	Pass
NVNT	3-DH5	2441	Ant1	0.74	21	Pass
NVNT	3-DH5	2480	Ant1	-0.32	21	Pass

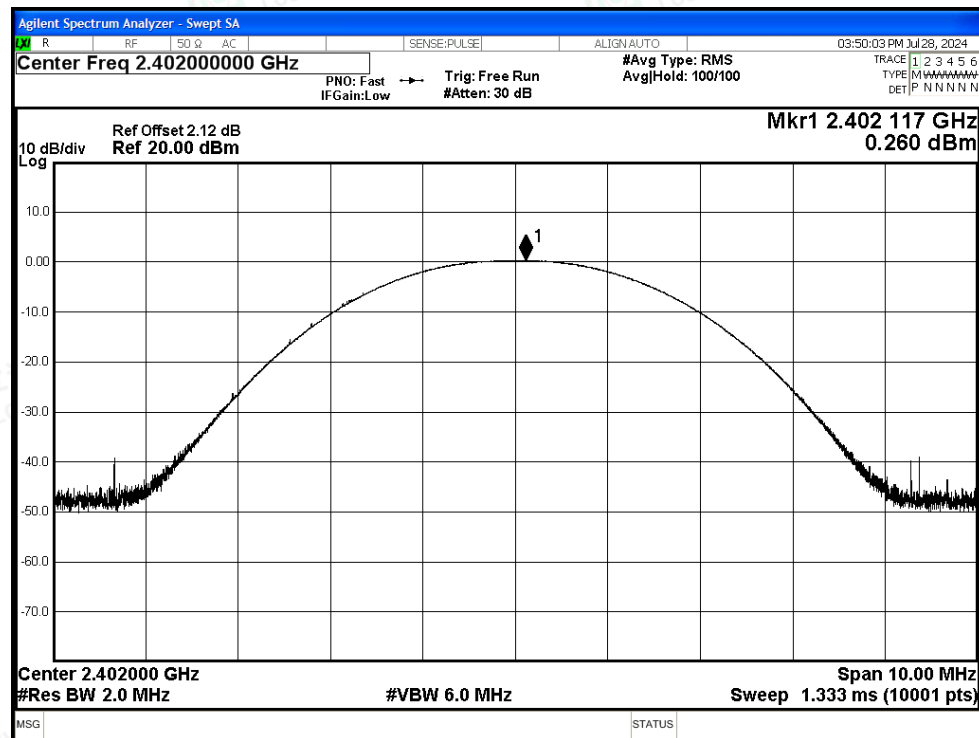


Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

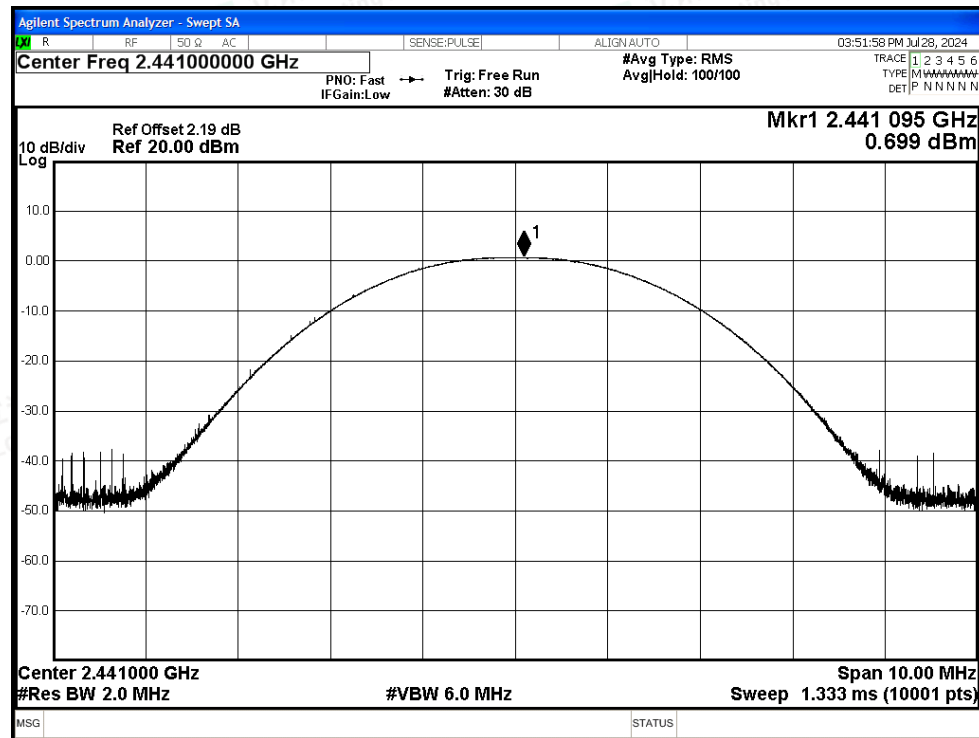


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

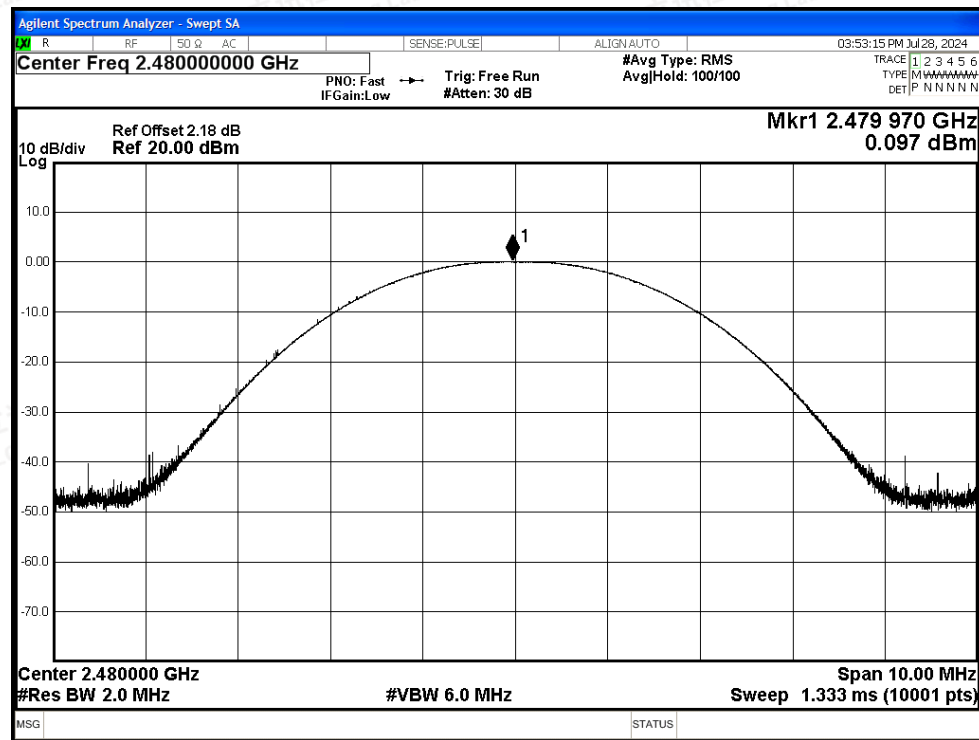


Power NVNT 1-DH5 2441MHz Ant1

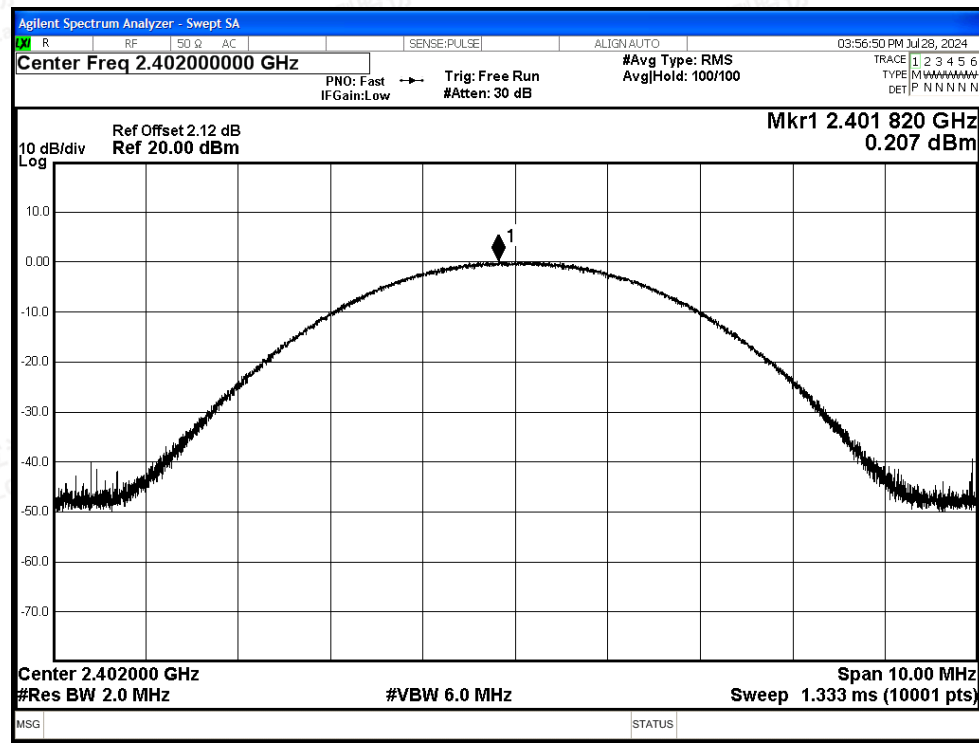




Power NVNT 1-DH5 2480MHz Ant1

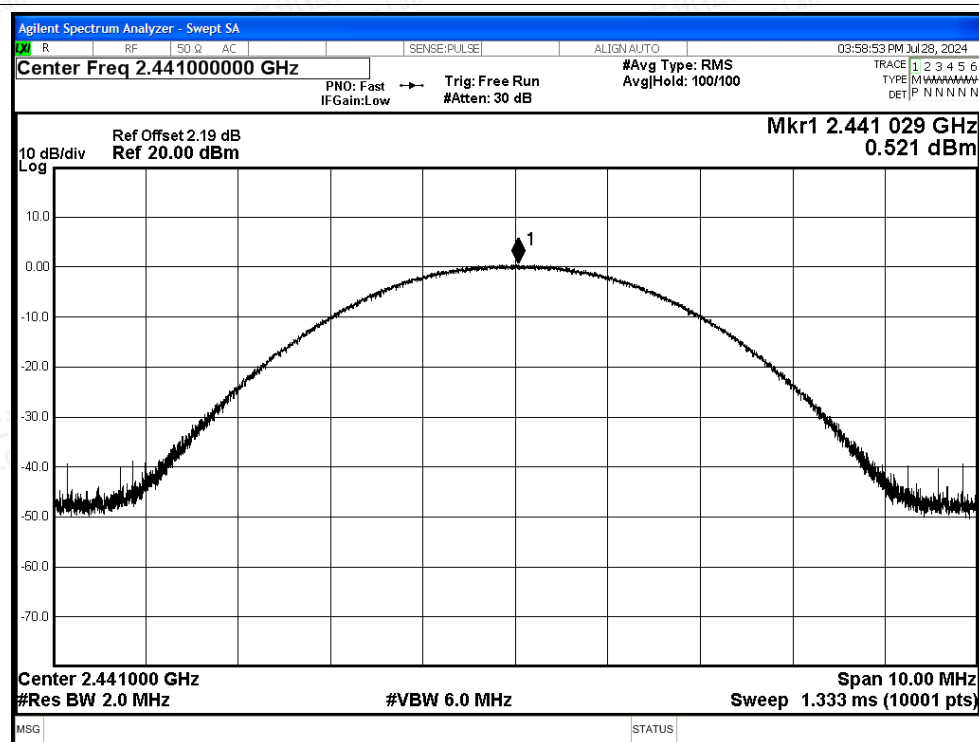


Power NVNT 2-DH5 2402MHz Ant1

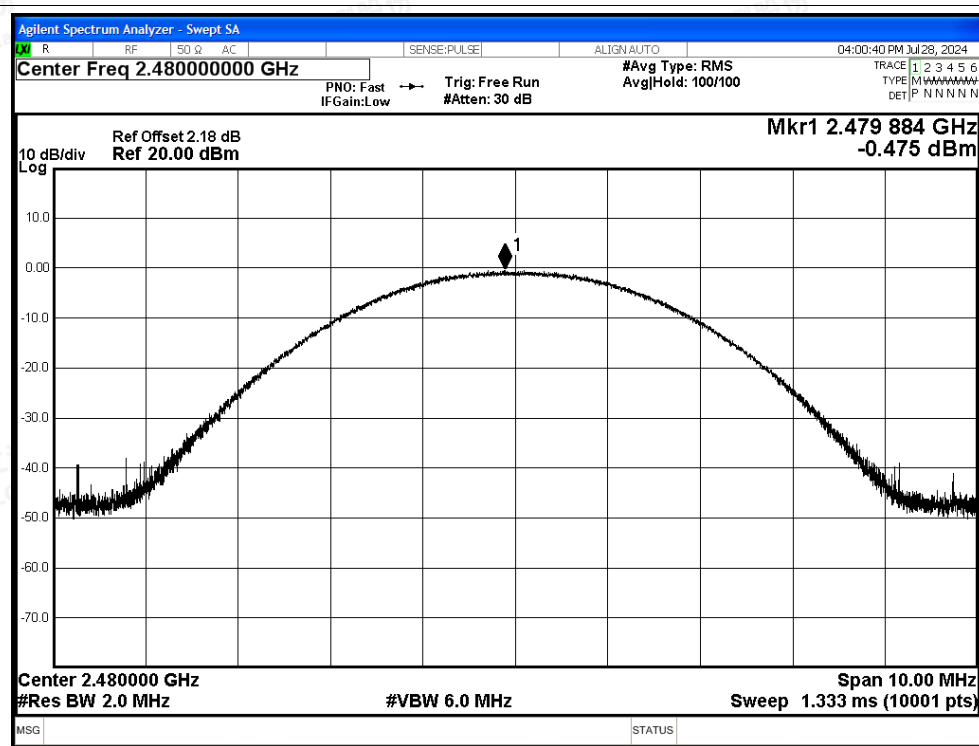




Power NVNT 2-DH5 2441MHz Ant1

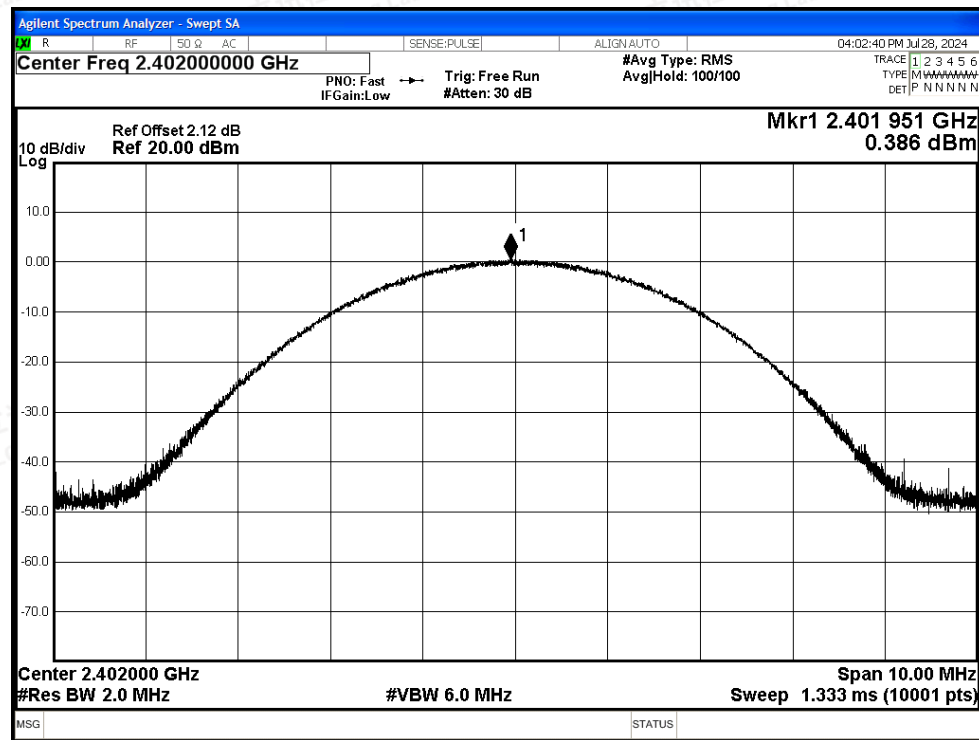


Power NVNT 2-DH5 2480MHz Ant1

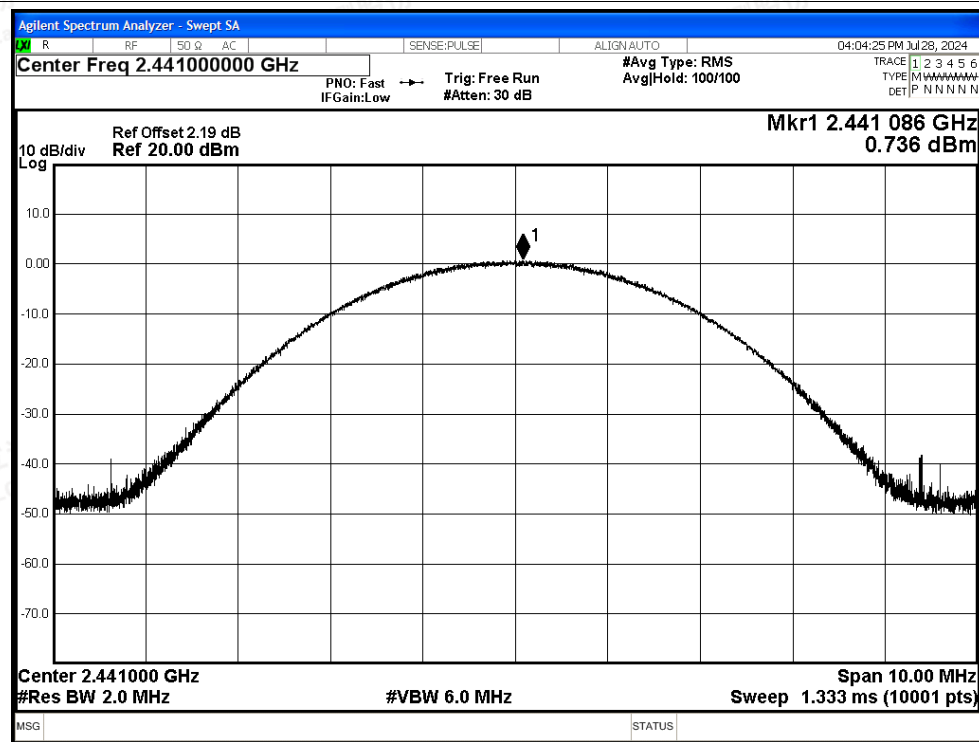


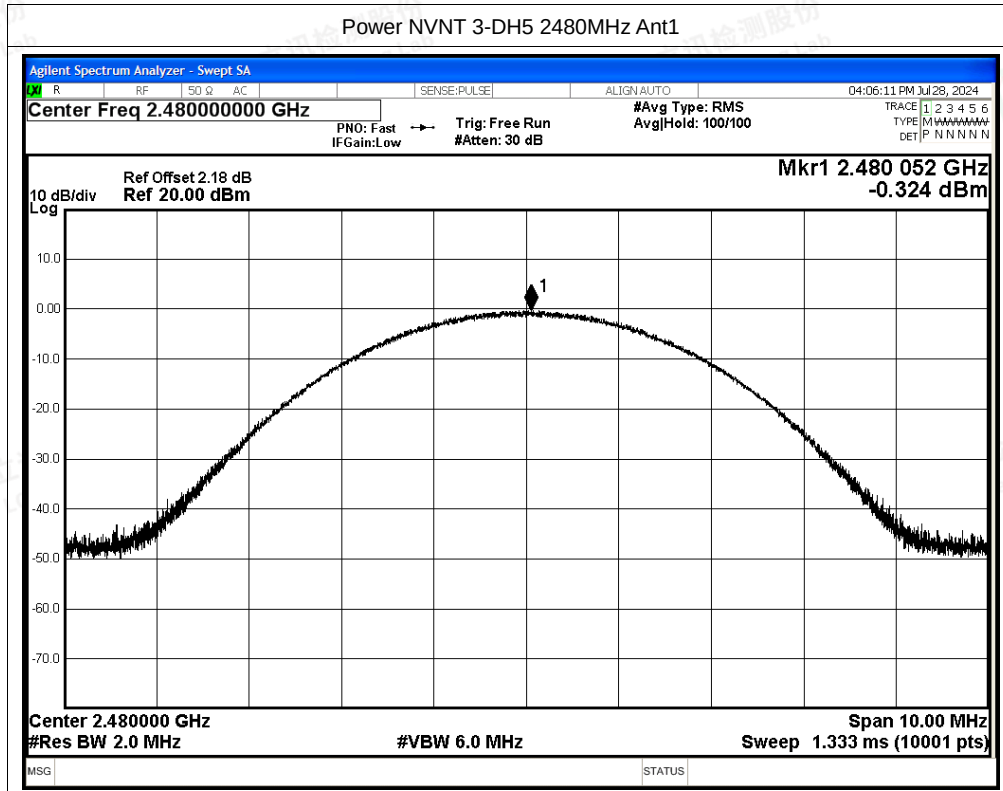


Power NVNT 3-DH5 2402MHz Ant1



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	2401.976	2403.164	1.188	0.681	Pass
NVNT	2-DH5	Ant1	2402.014	2403.02	1.006	0.856	Pass
NVNT	3-DH5	Ant1	2402.032	2403.166	1.134	0.873	Pass

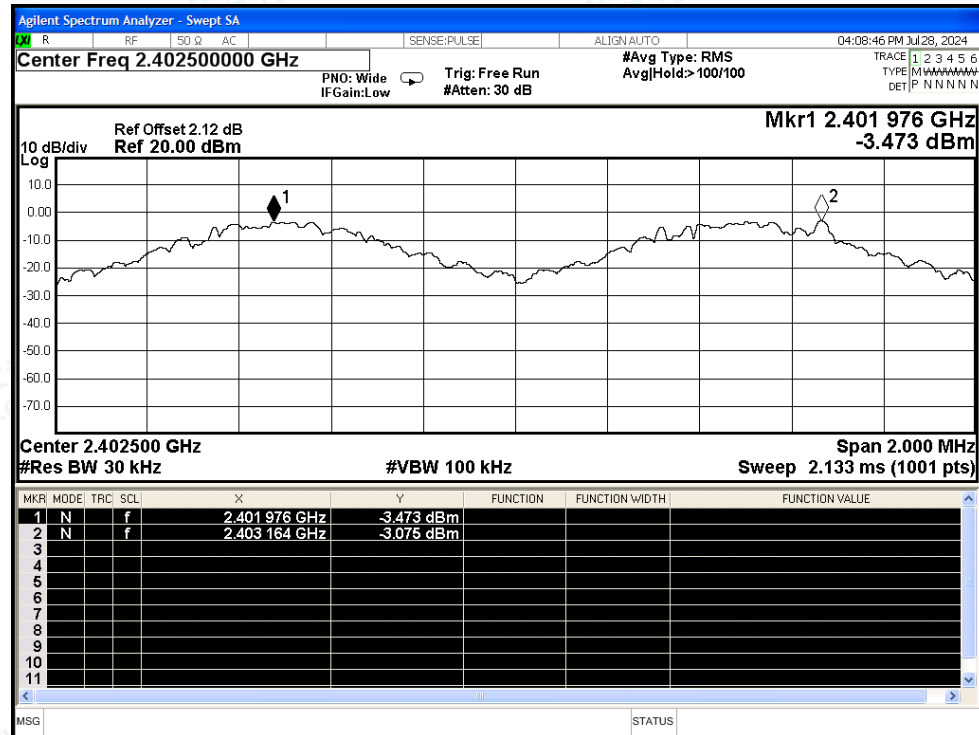


Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

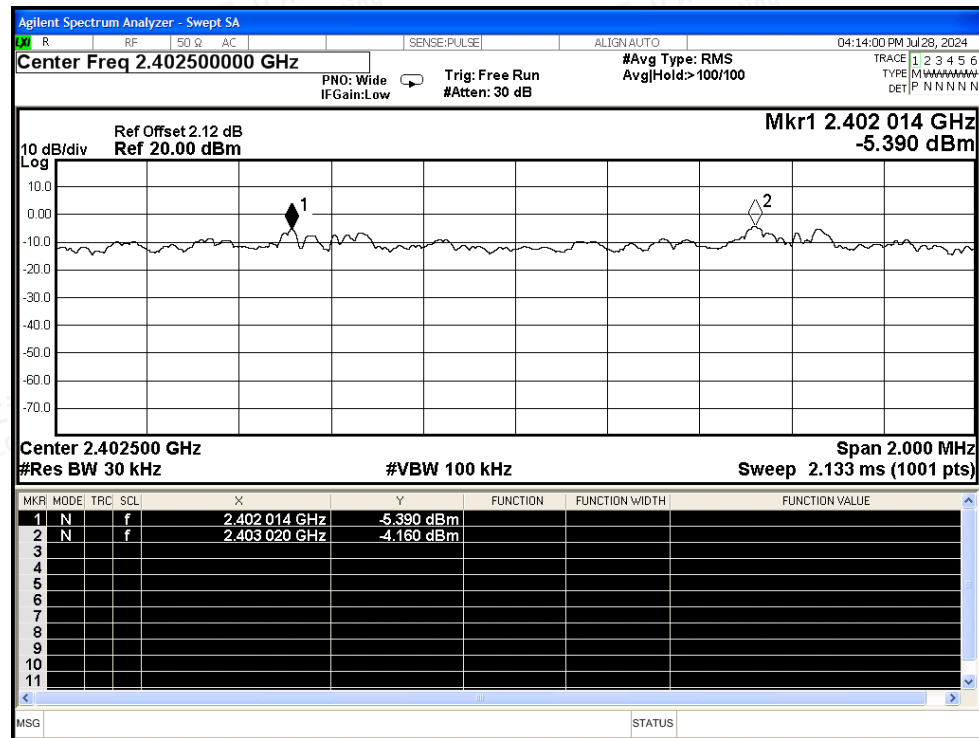


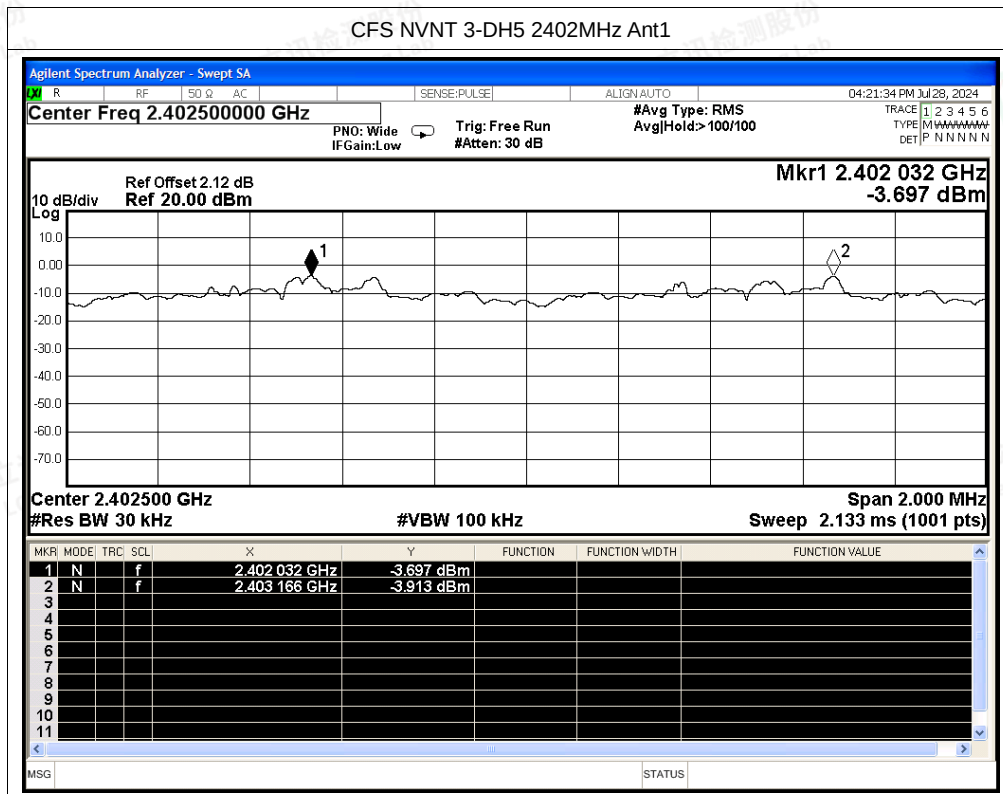
Test Graphs

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	317.19	109	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.898	310.086	107	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.898	359.352	124	31600	400	Pass

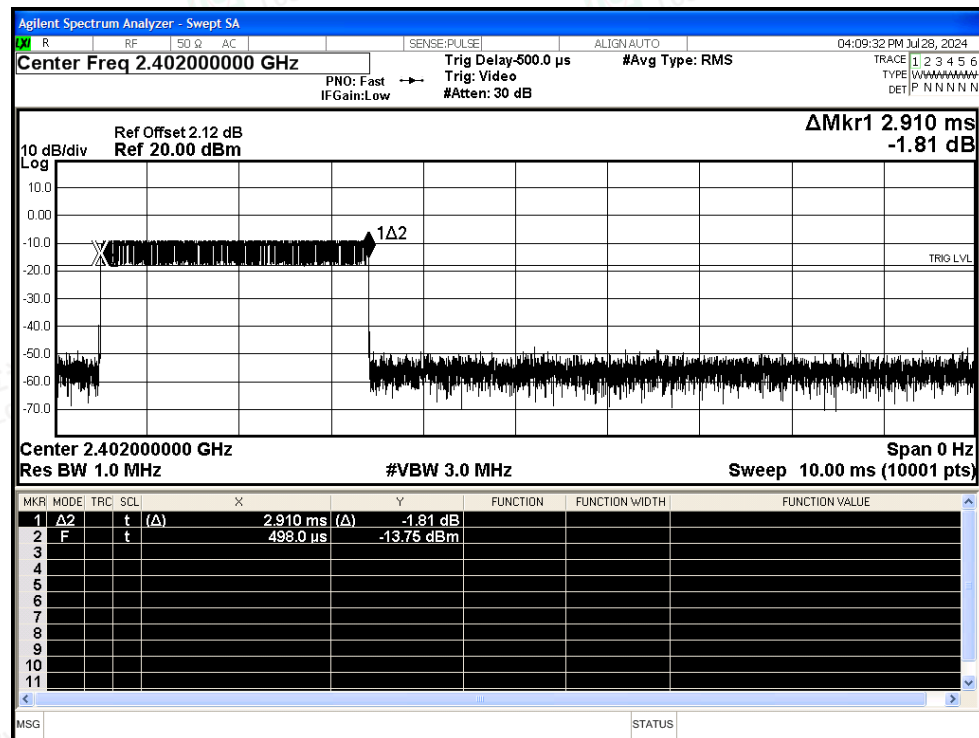


Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

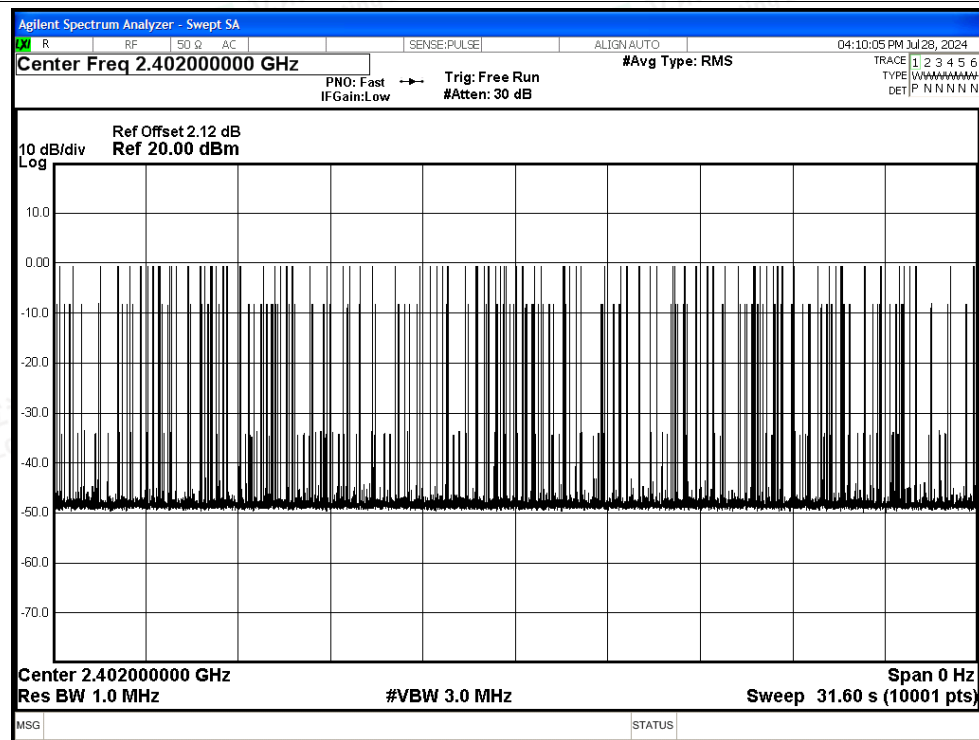


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

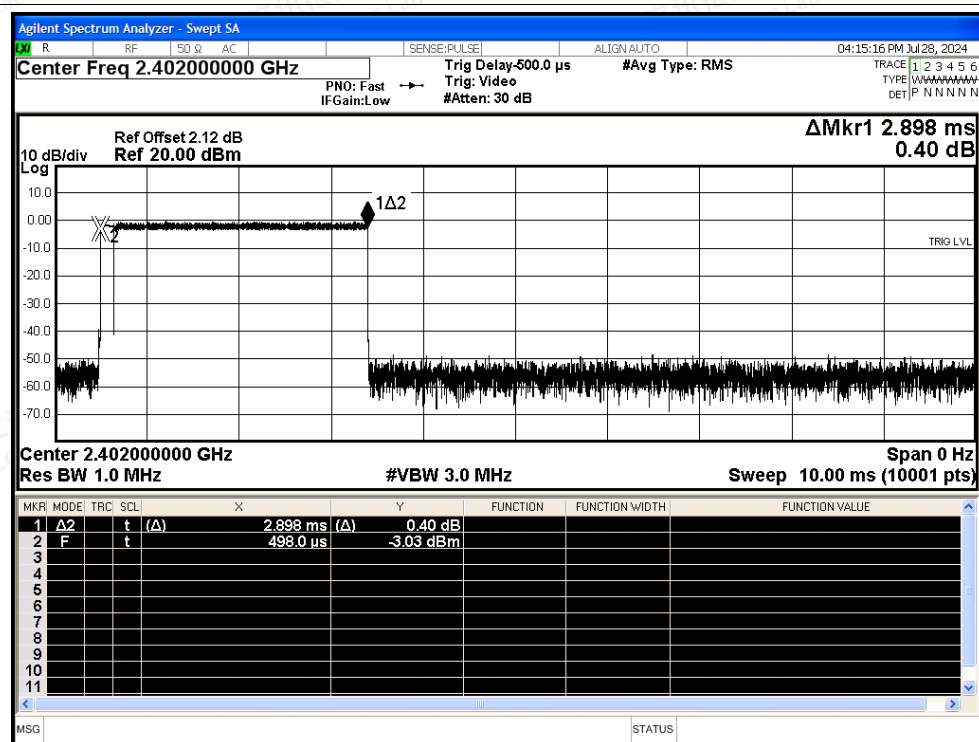


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

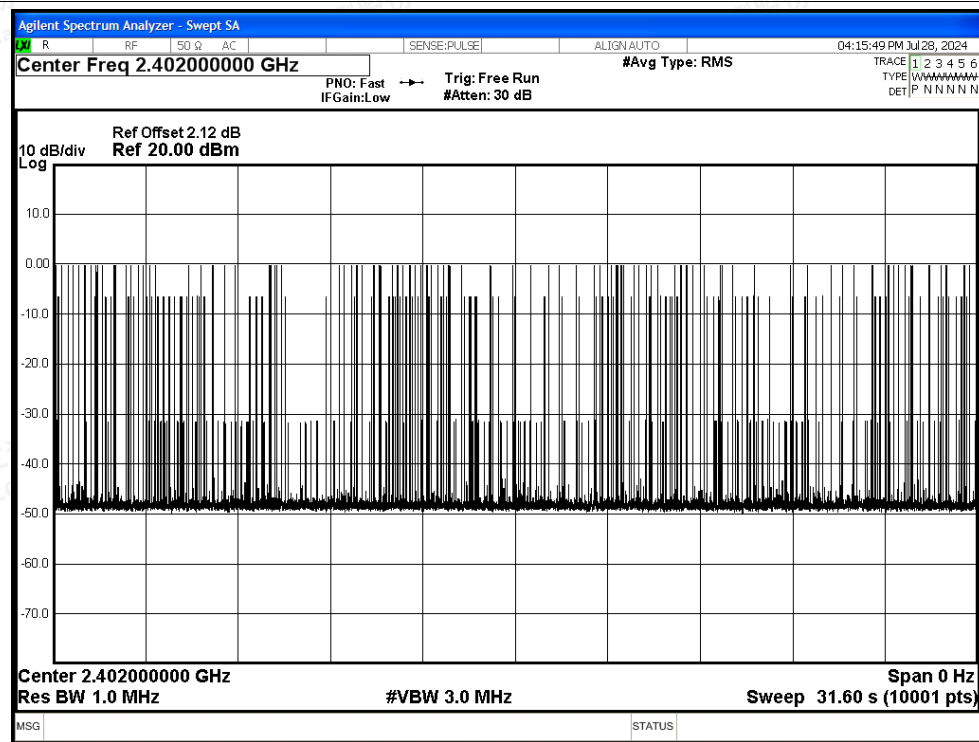




Dwell NVNT 2-DH5 2402MHz Ant1 One Burst

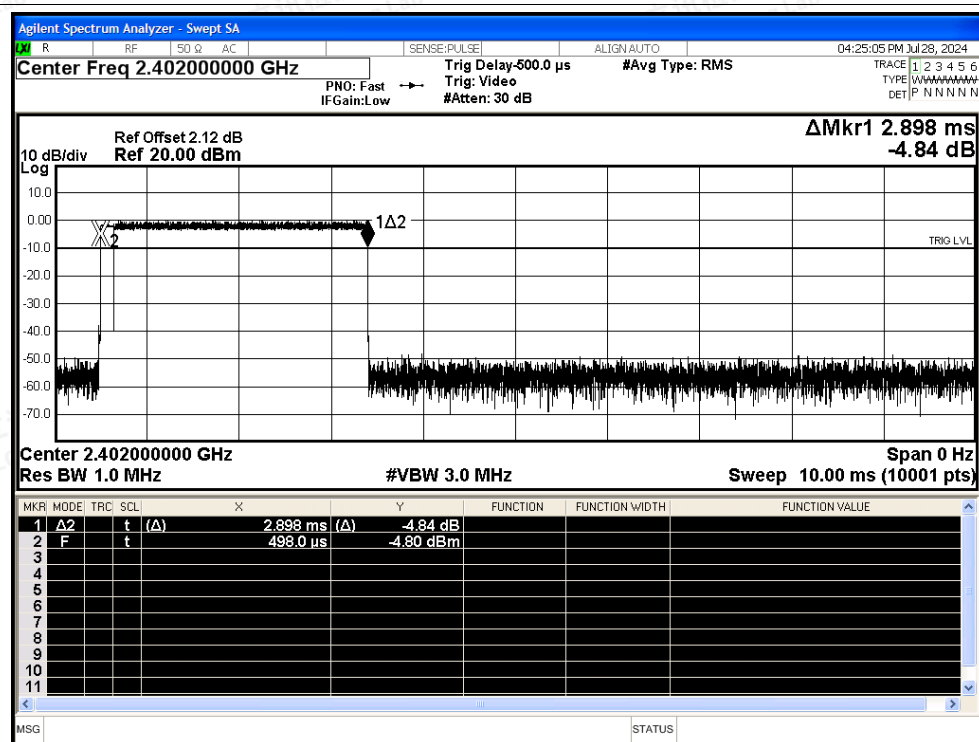


Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated

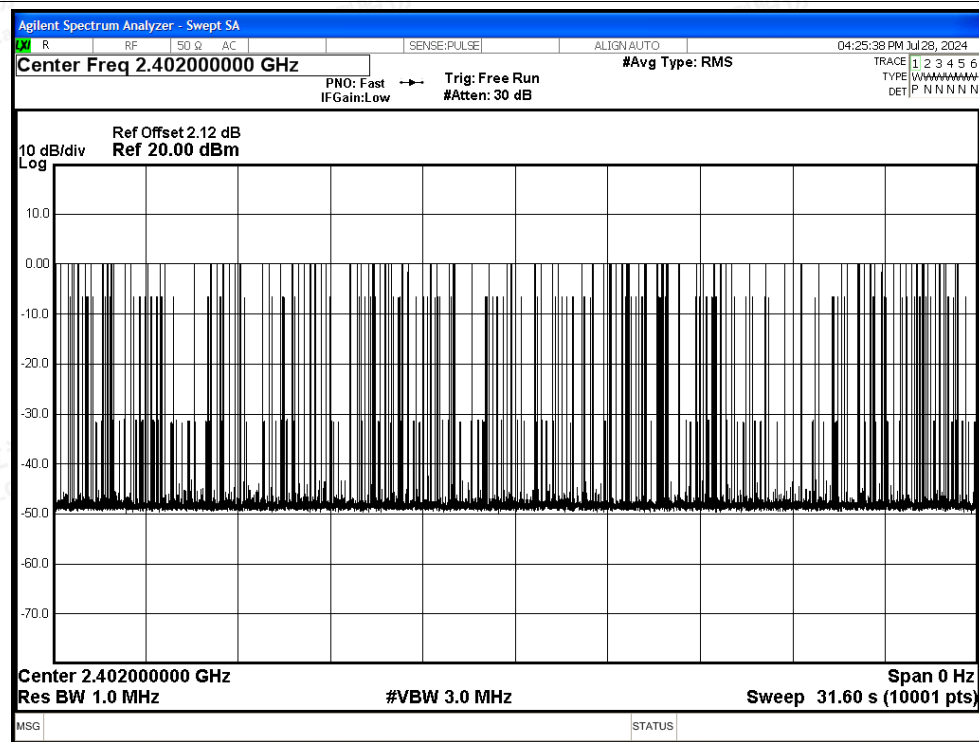




Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated





A.5 Number of Hopping Channel

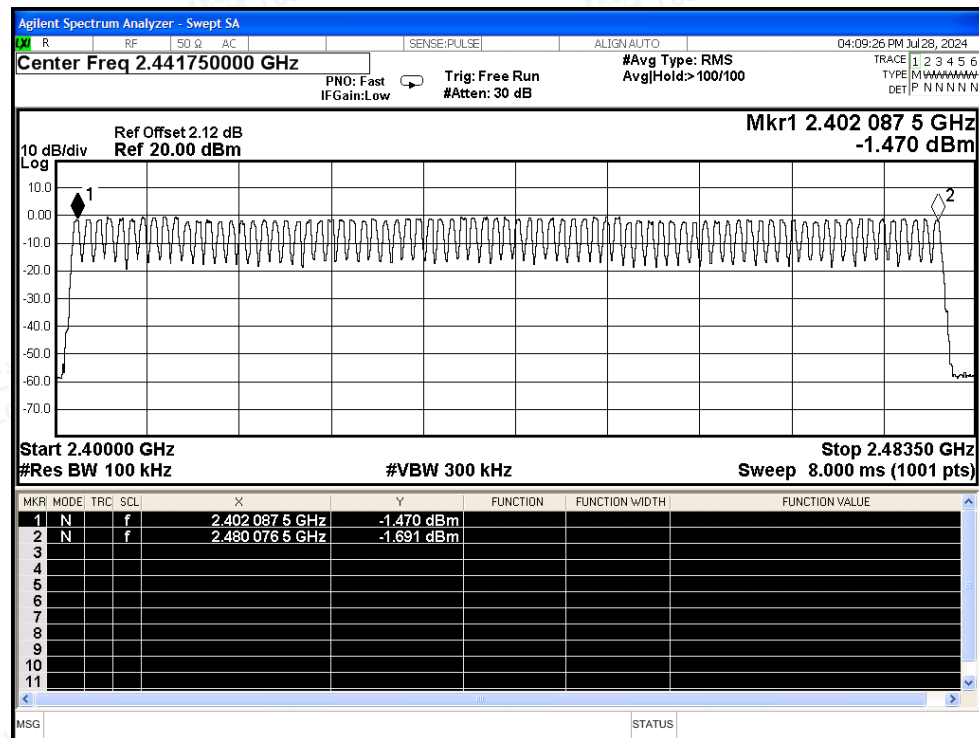
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass



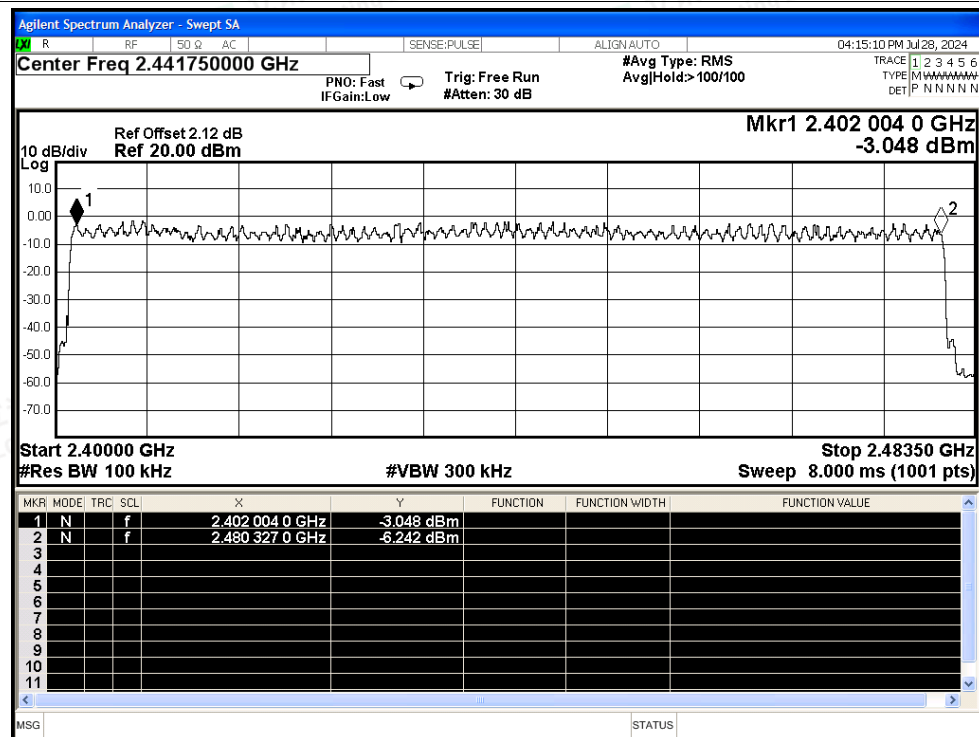


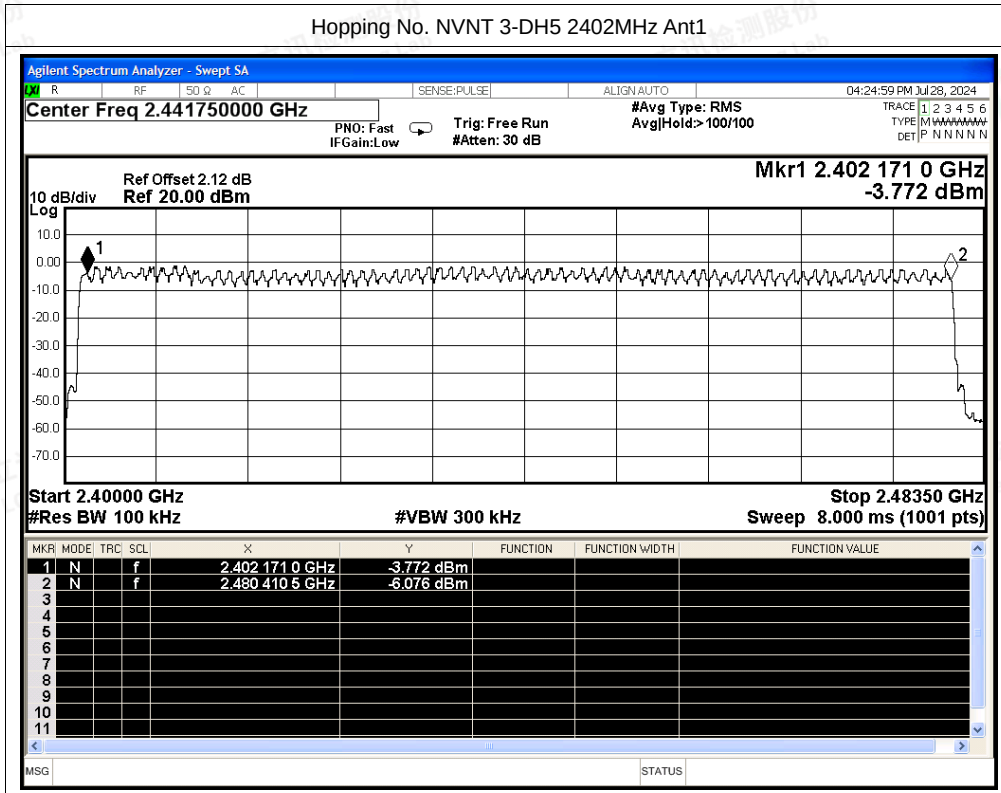
Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1







A.6 Band Edge

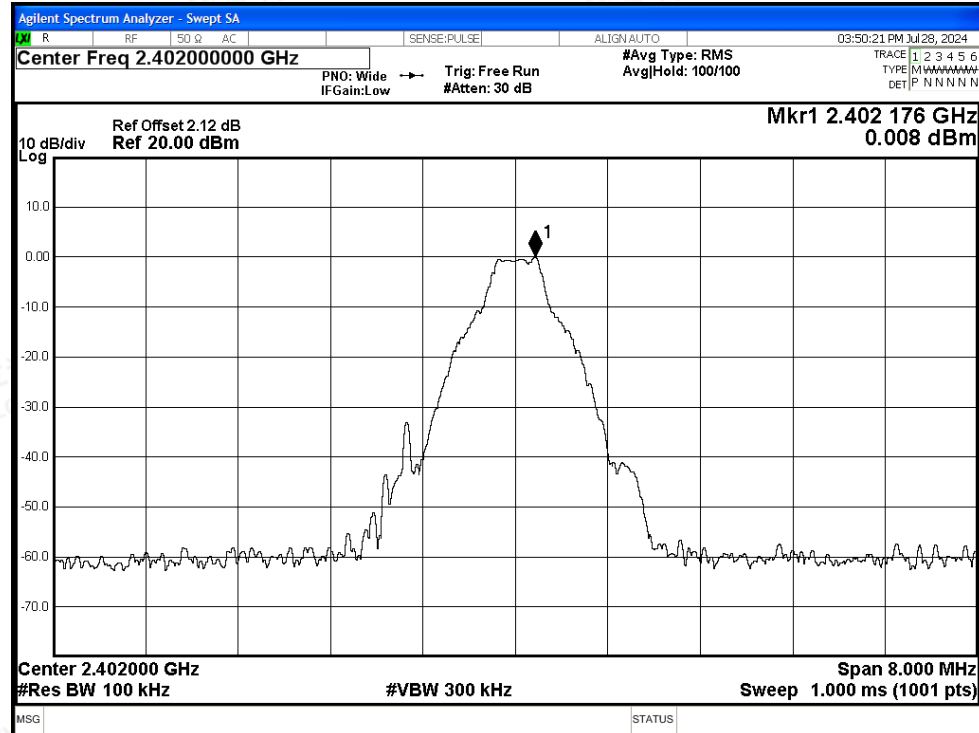
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-56.54	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-56.21	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-52.76	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-54.08	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-50.88	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-53.26	-20	Pass



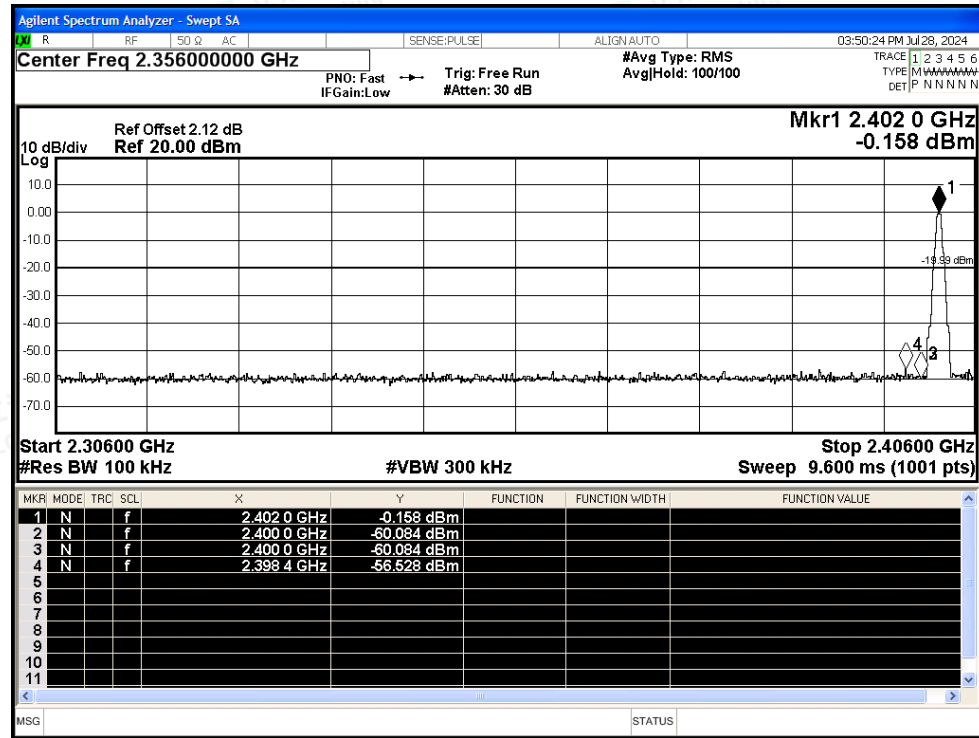


Test Graphs

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

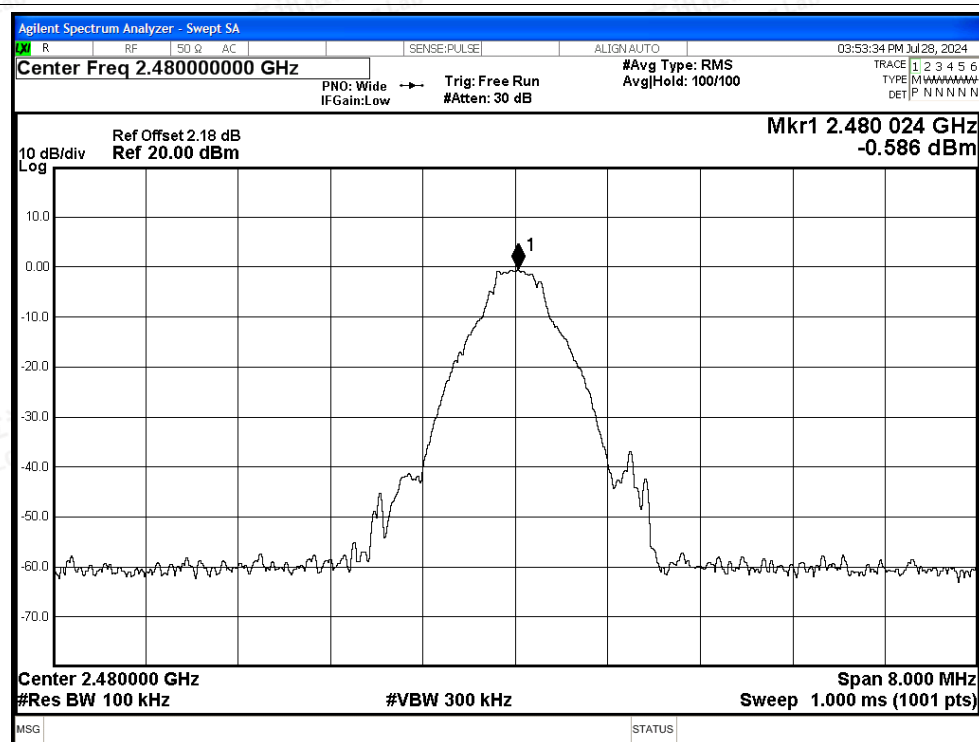


Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

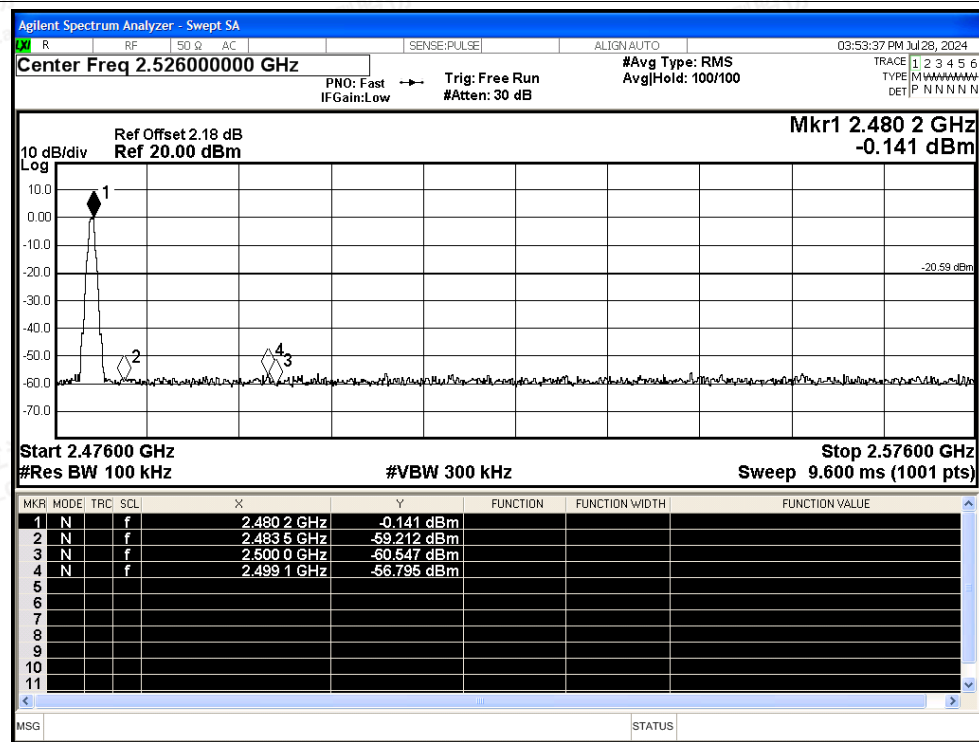




Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

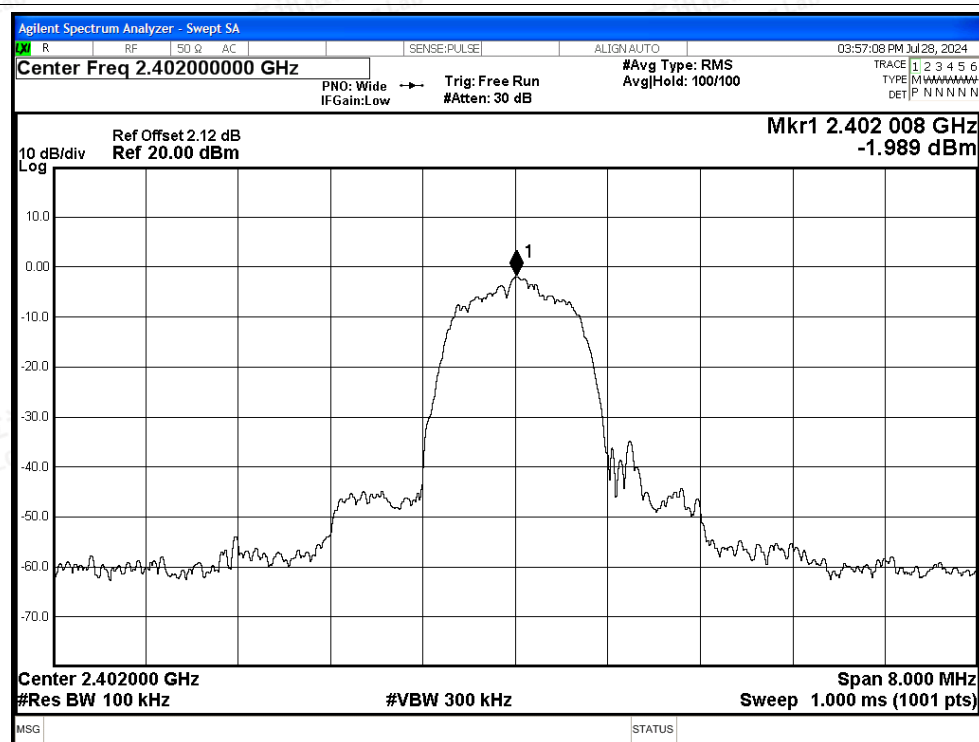


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

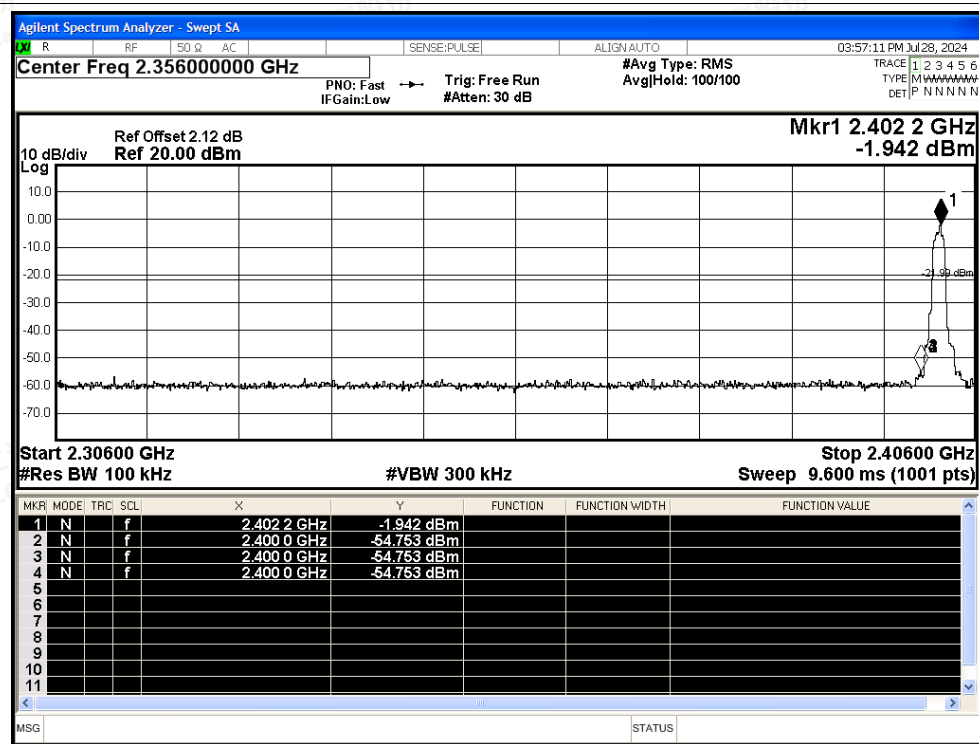




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



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



Shenzhen LCS Compliance Testing Laboratory Ltd.

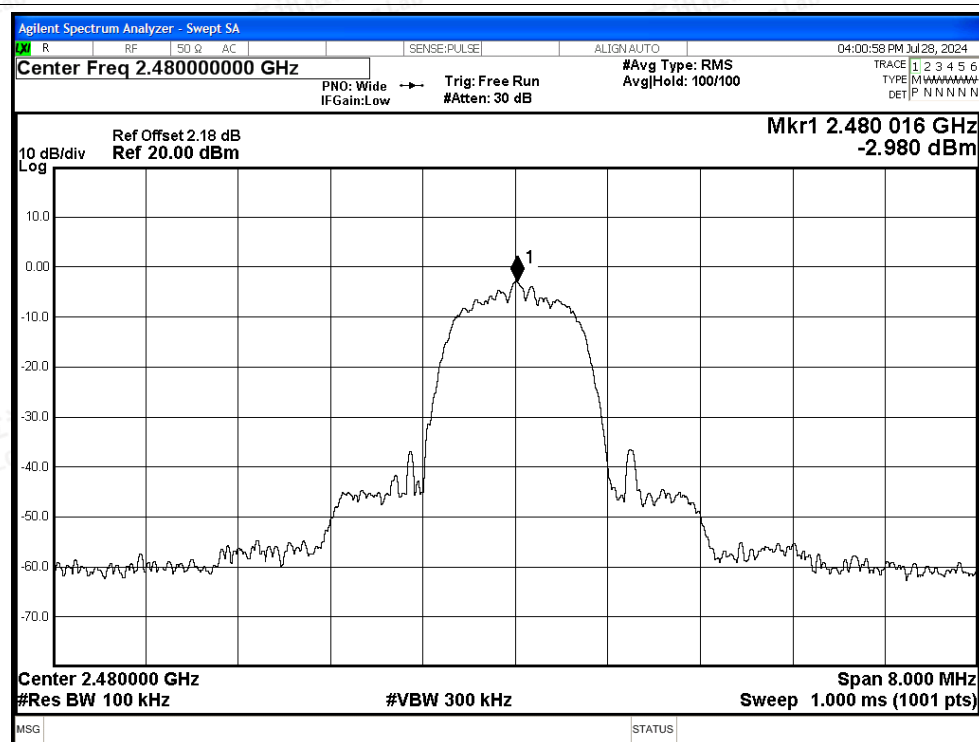
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

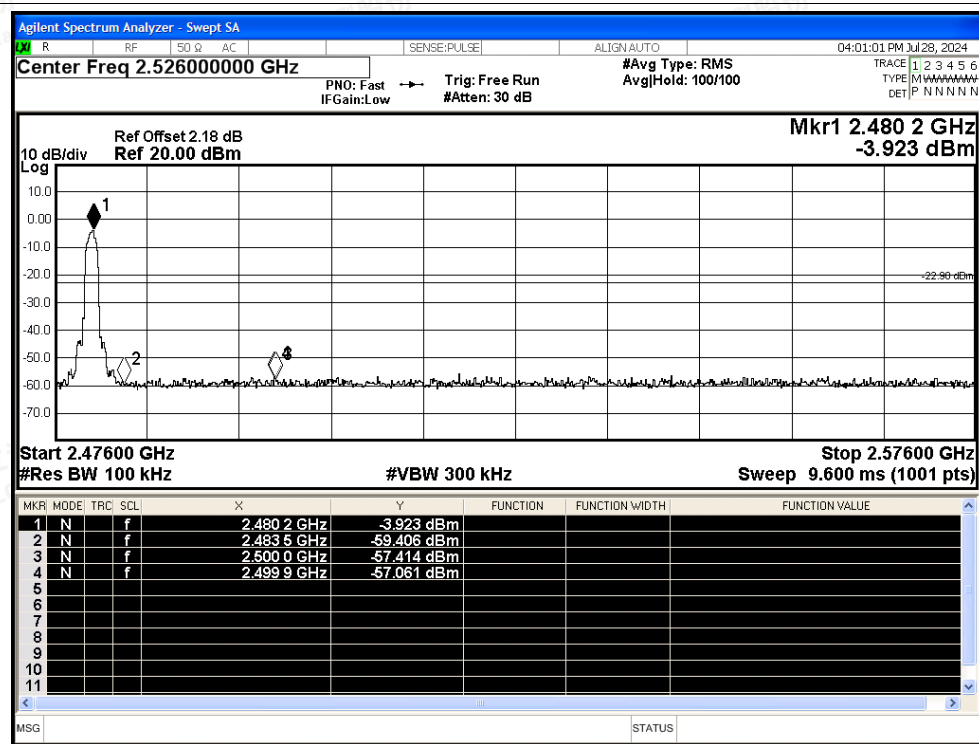
Scan code to check authenticity



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



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



Shenzhen LCS Compliance Testing Laboratory Ltd.

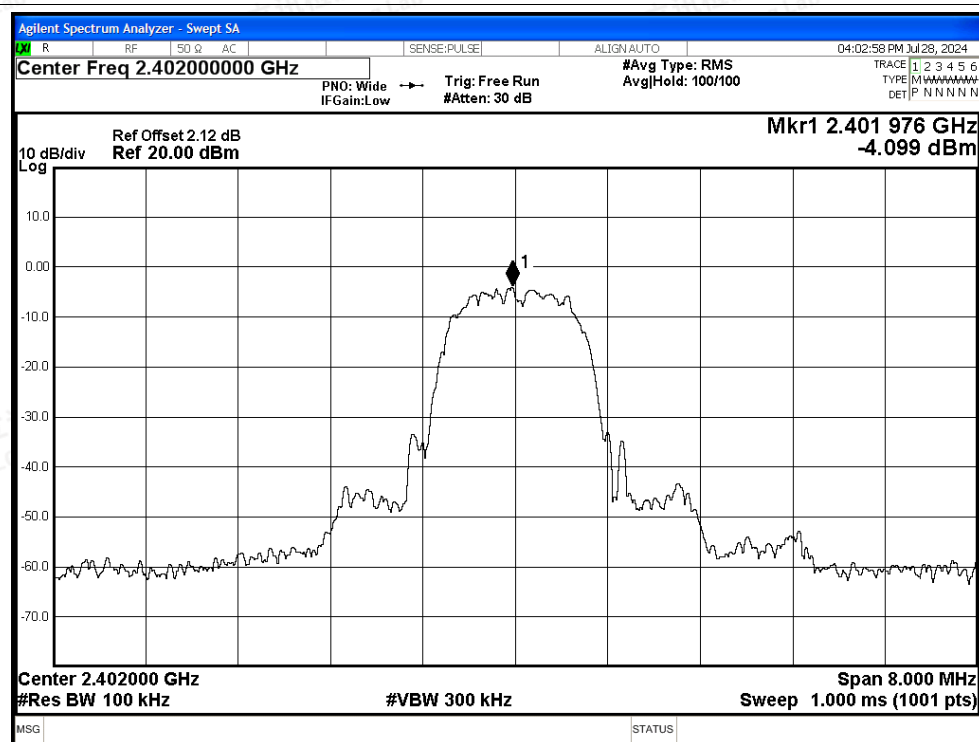
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

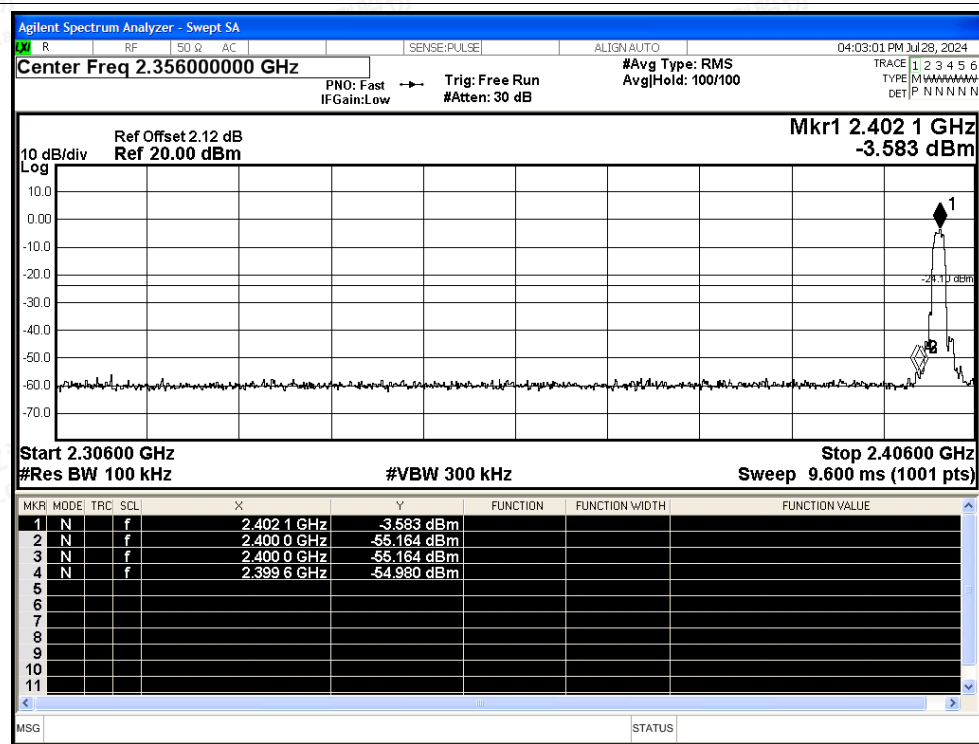
Scan code to check authenticity



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

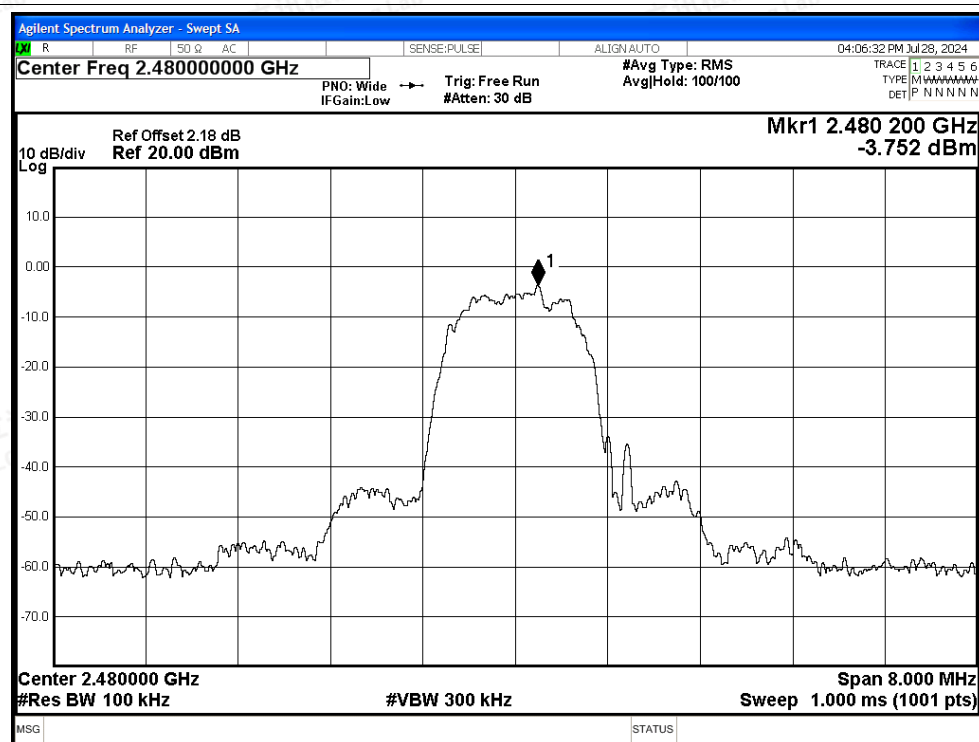


Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission

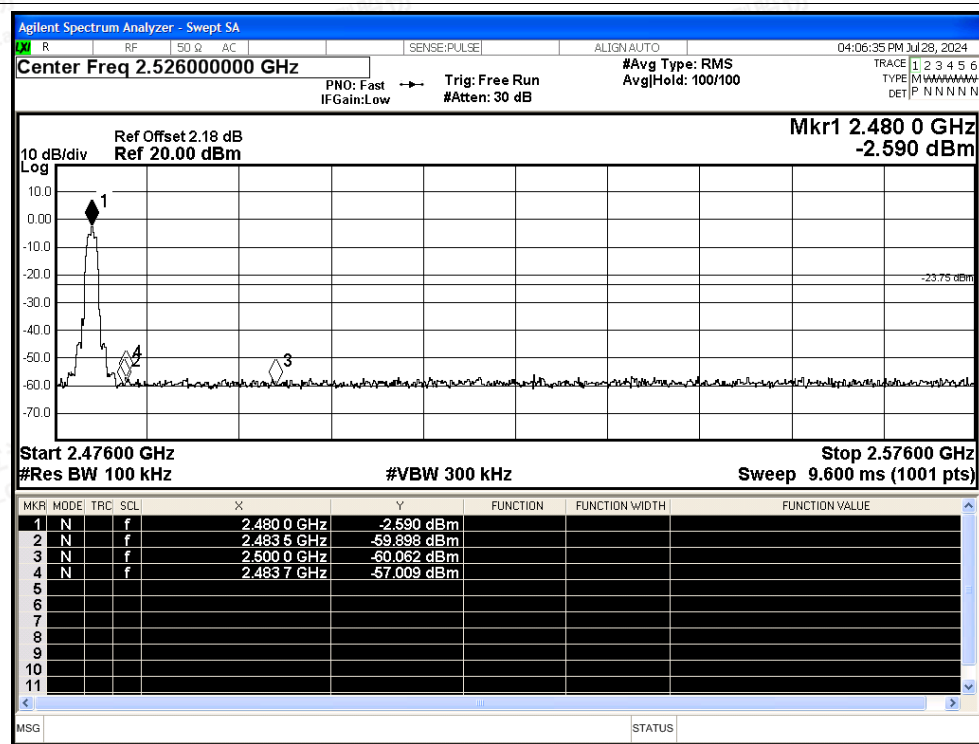




Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



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



**(Hopping)**

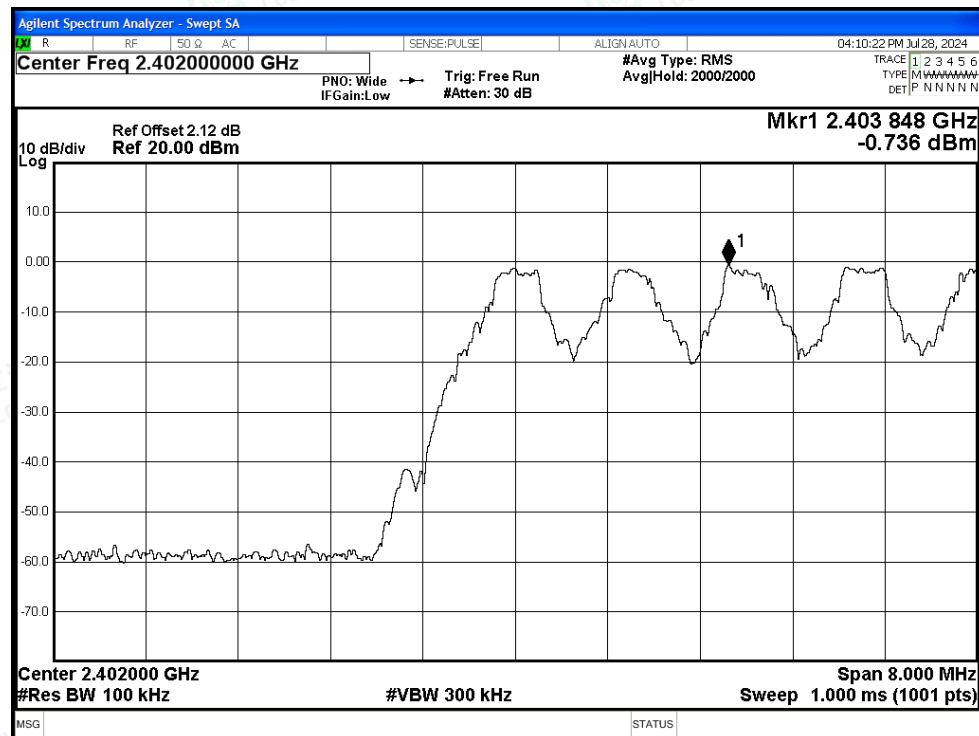
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-54.64	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-54.98	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-52.76	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-53.04	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-54.58	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-53.58	-20	Pass



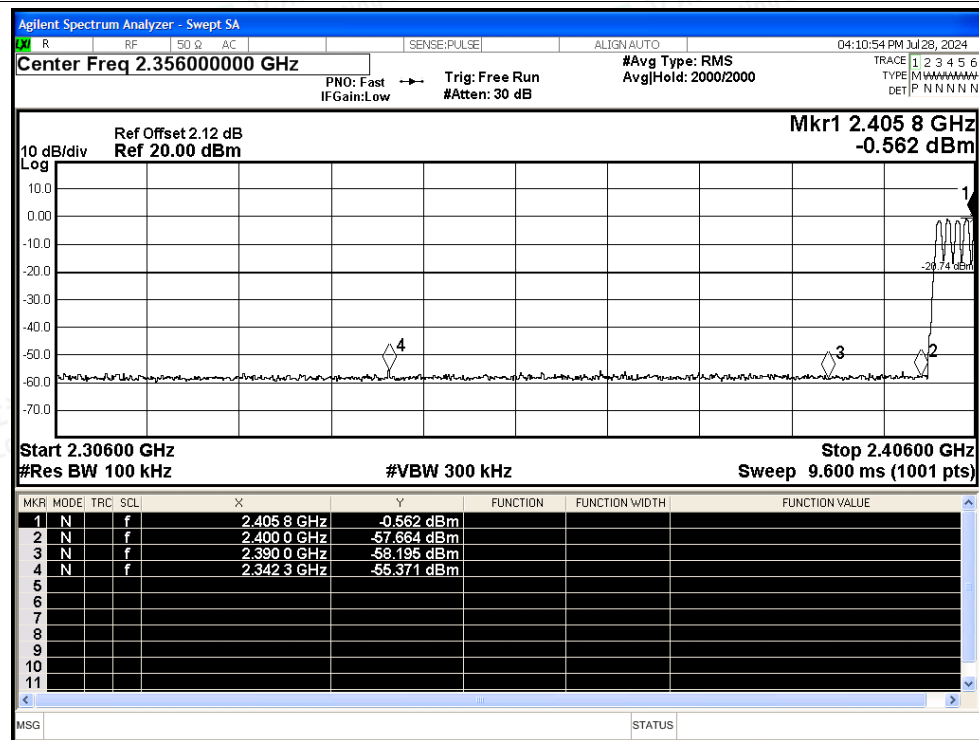


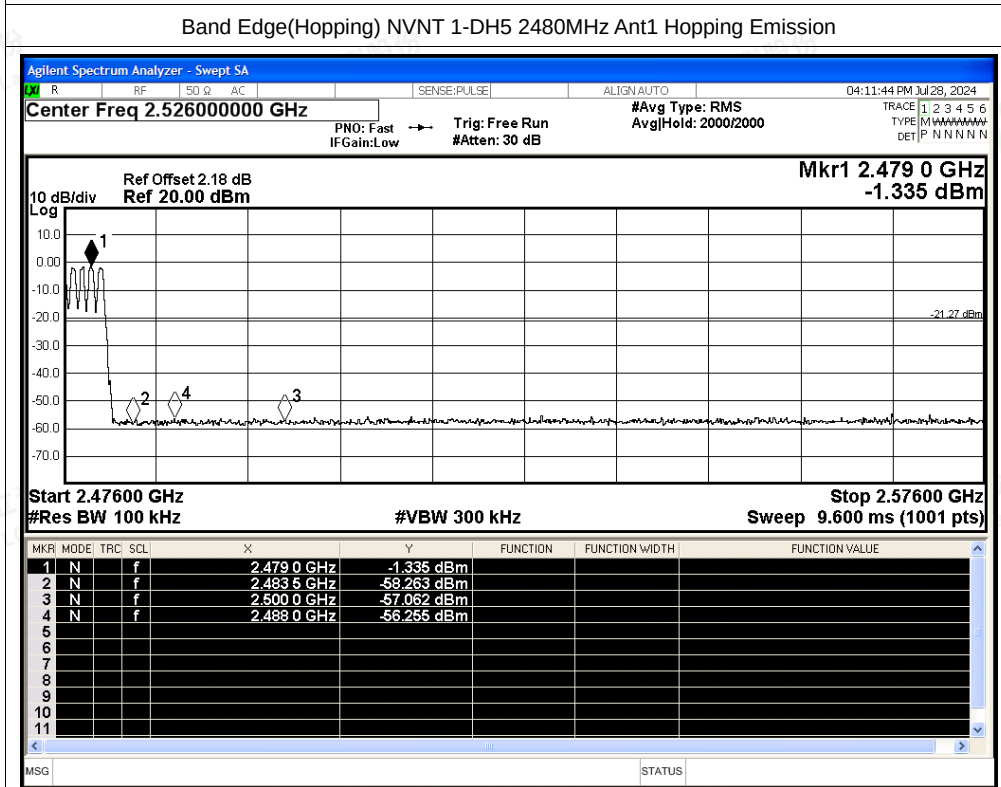
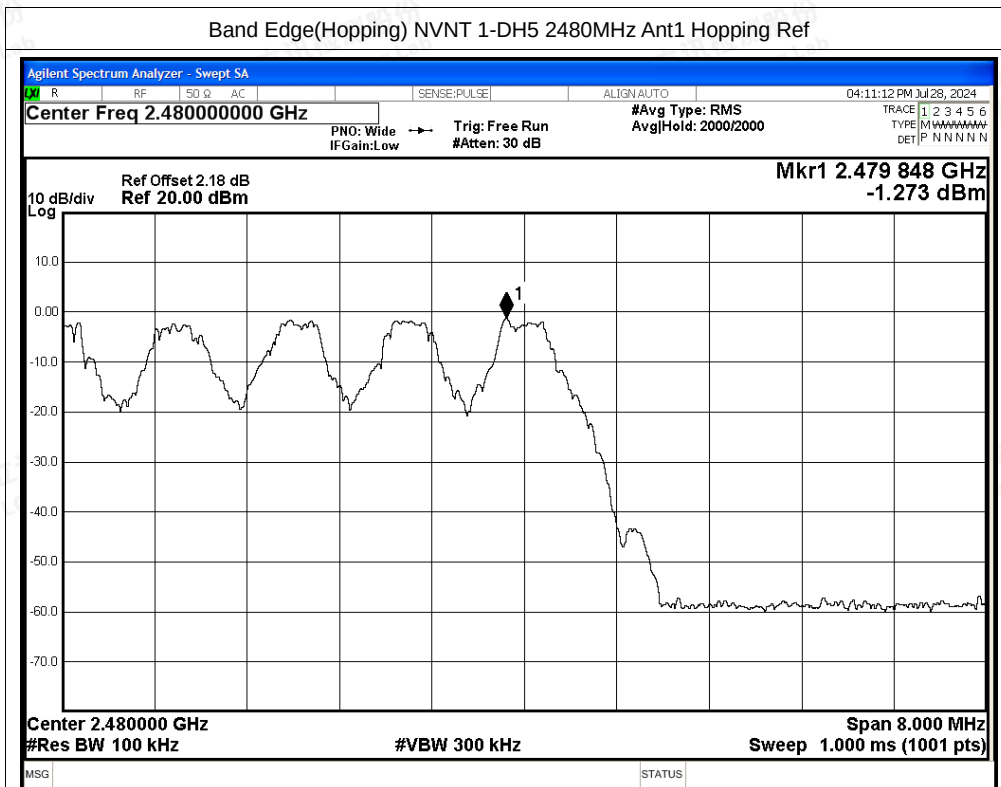
Test Graphs

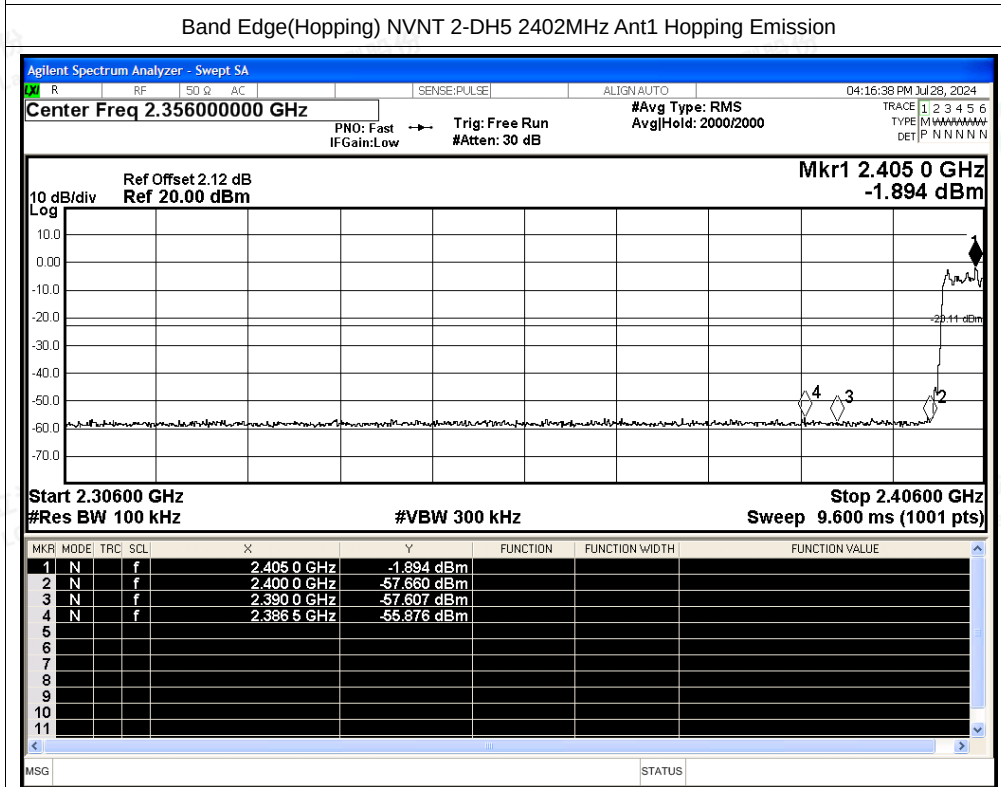
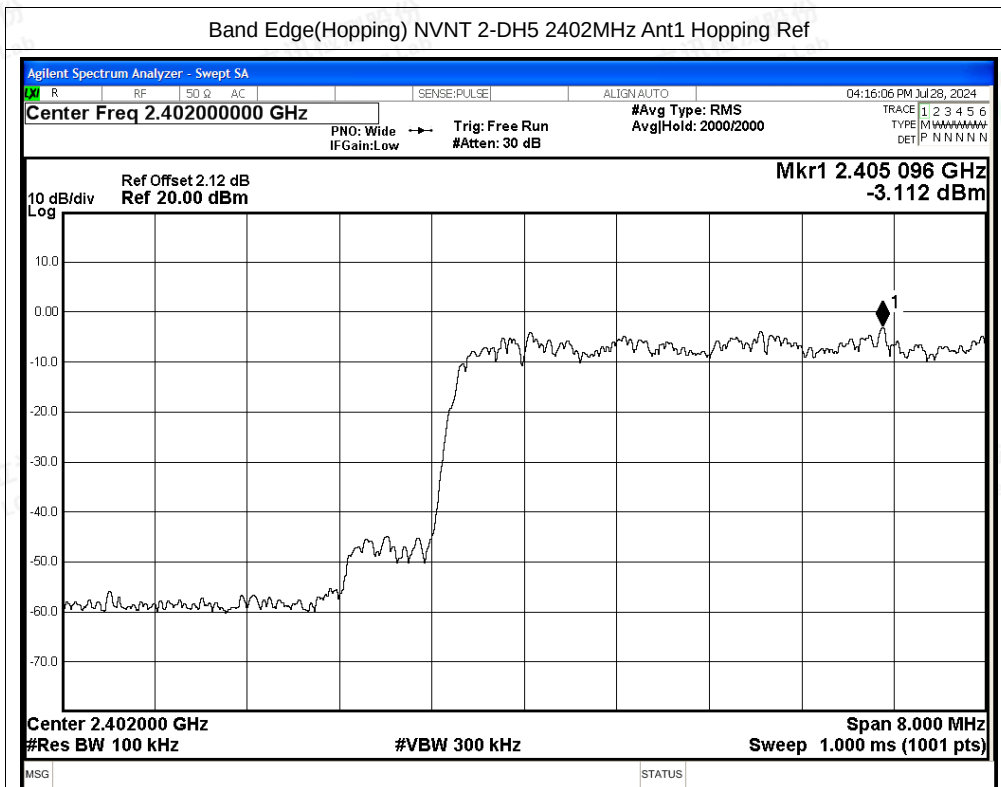
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref

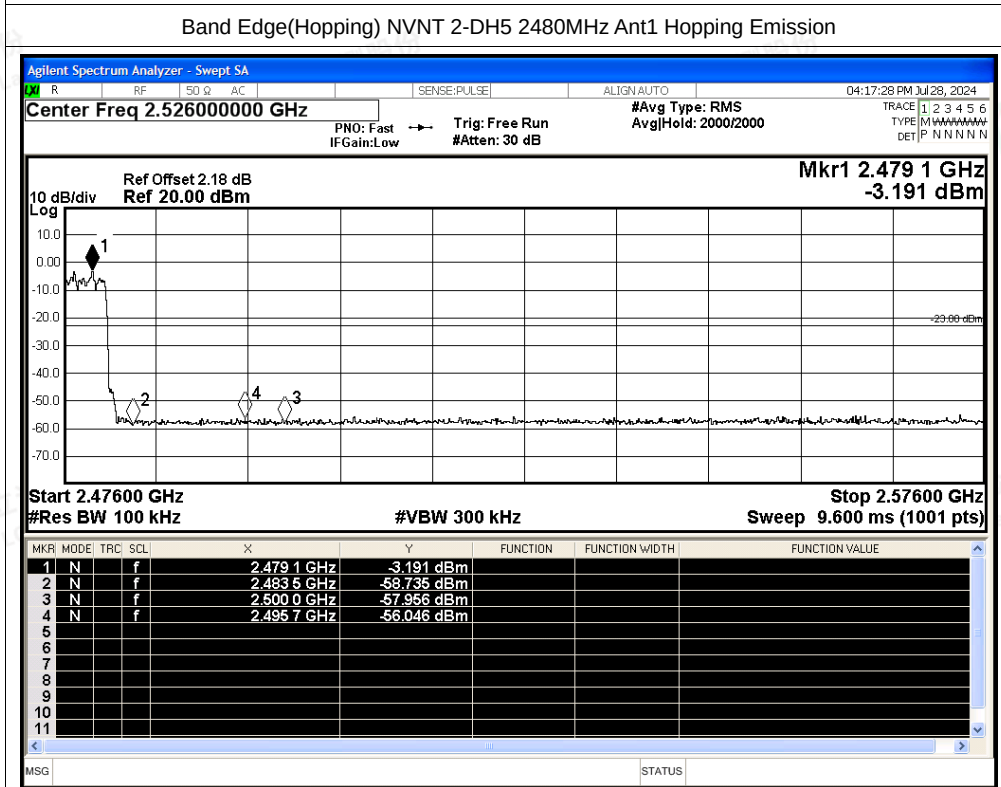
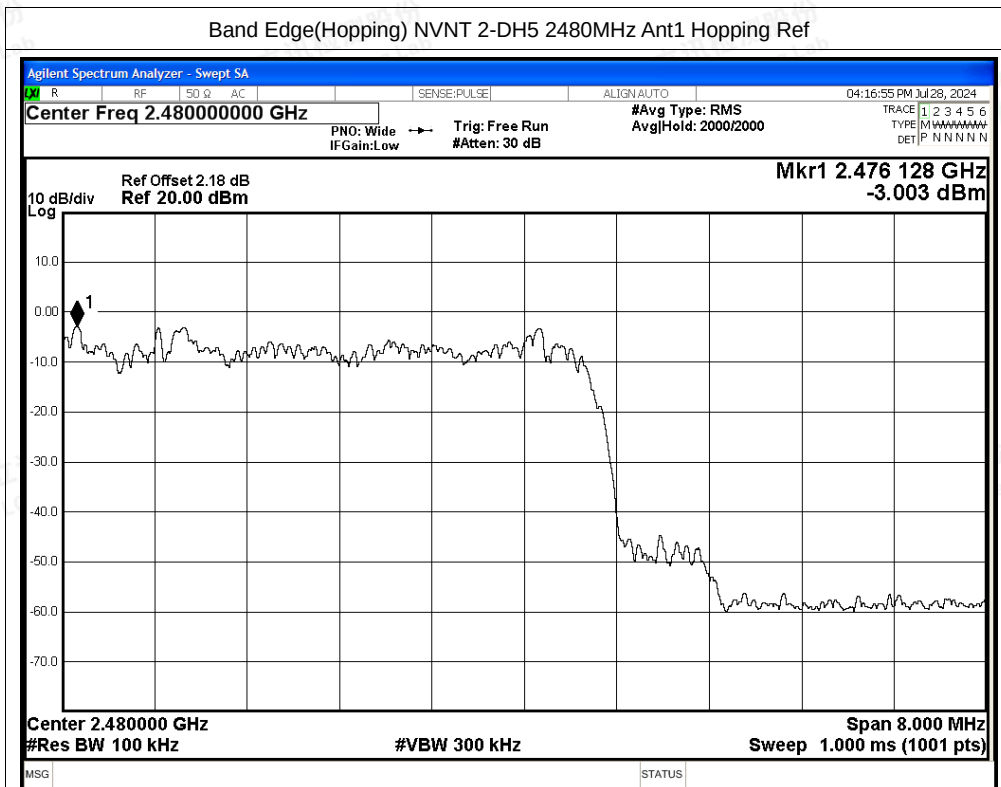


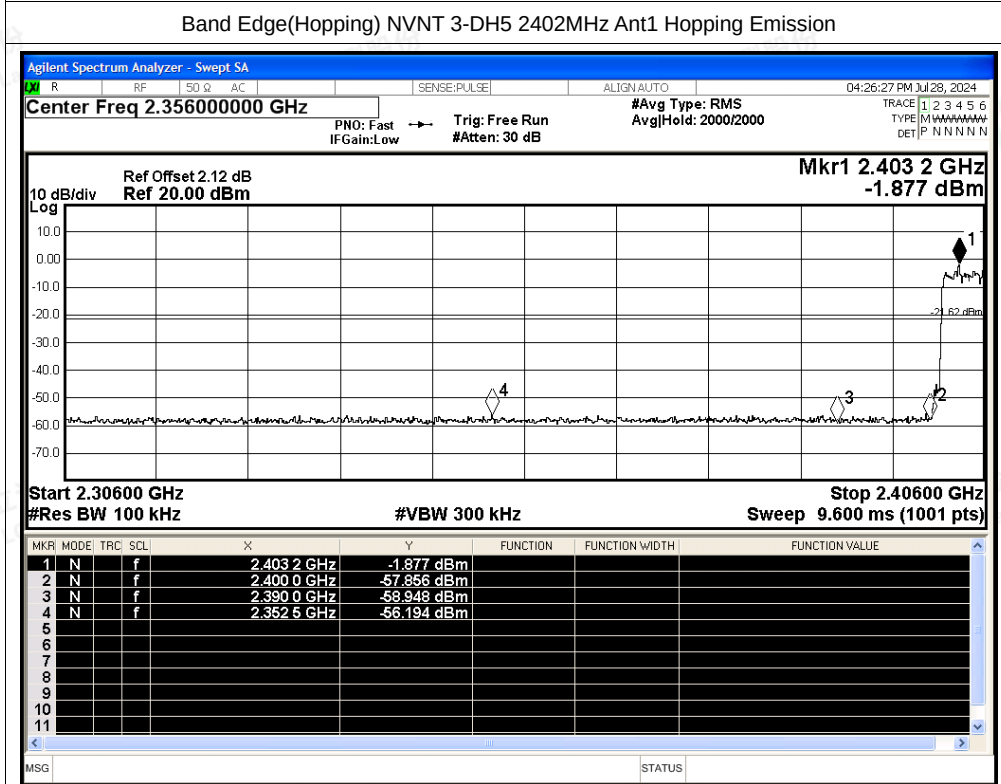
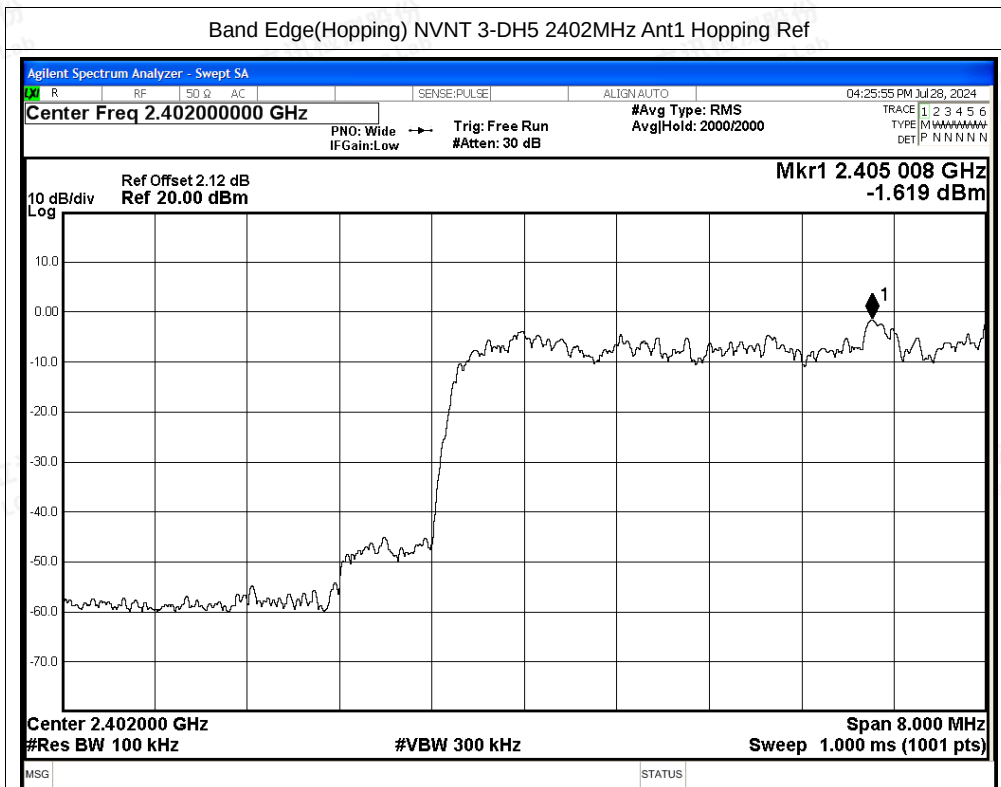
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission





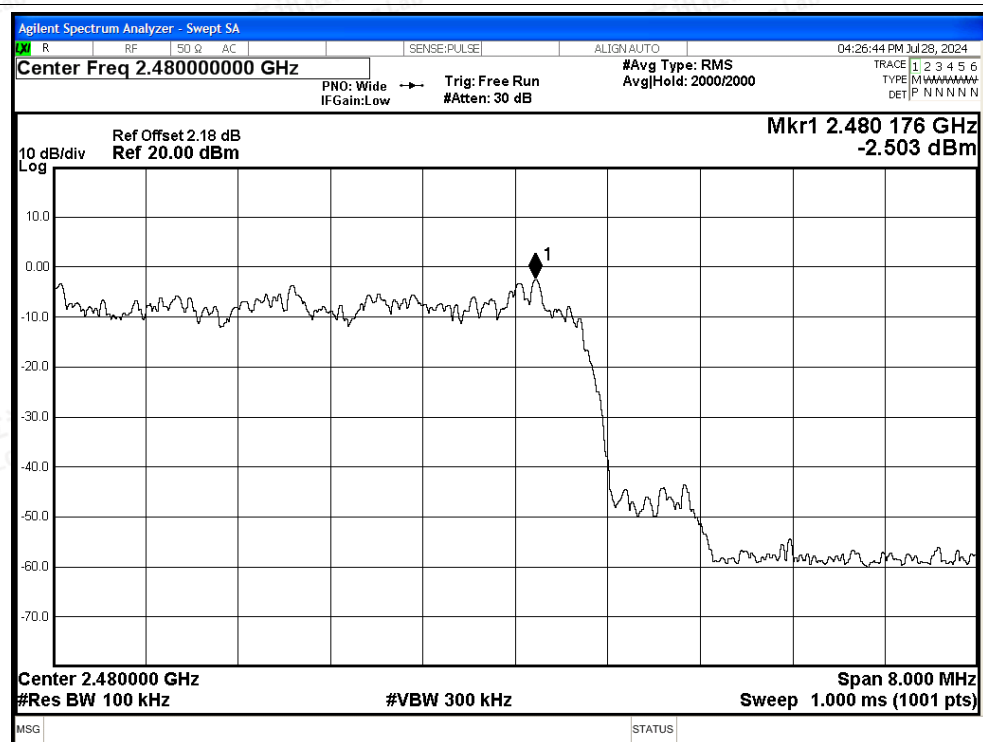




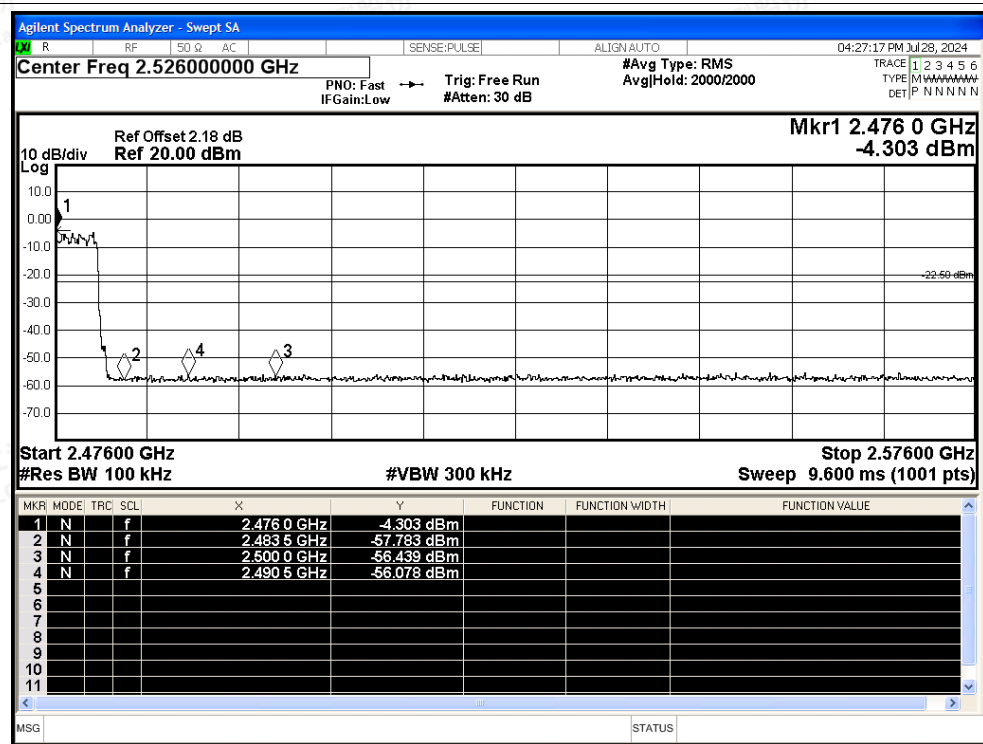




Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



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	-55.48	-20	Pass
NVNT	1-DH5	2441	Ant1	-55.9	-20	Pass
NVNT	1-DH5	2480	Ant1	-55.06	-20	Pass
NVNT	2-DH5	2402	Ant1	-52.92	-20	Pass
NVNT	2-DH5	2441	Ant1	-53.8	-20	Pass
NVNT	2-DH5	2480	Ant1	-52.13	-20	Pass
NVNT	3-DH5	2402	Ant1	-52.47	-20	Pass
NVNT	3-DH5	2441	Ant1	-52.97	-20	Pass
NVNT	3-DH5	2480	Ant1	-50.89	-20	Pass

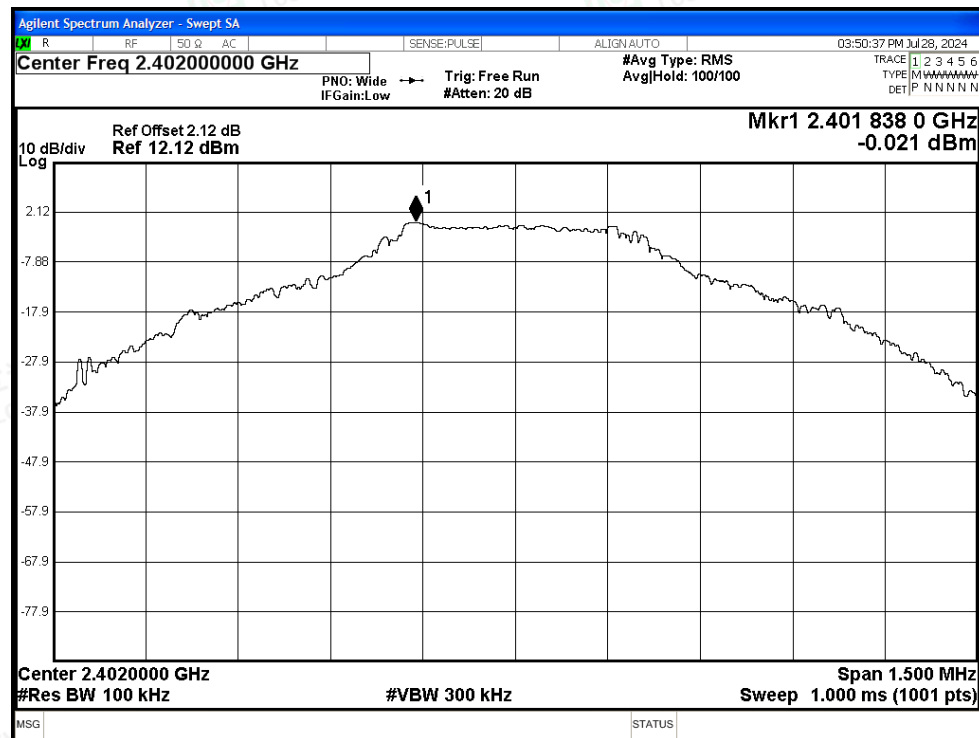


Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

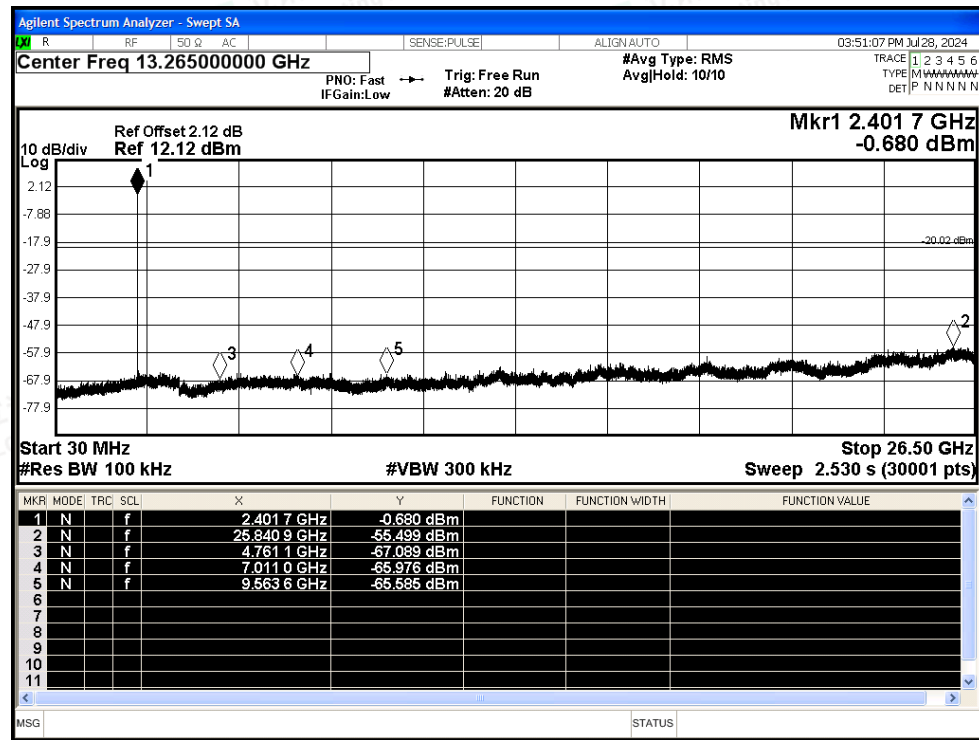


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

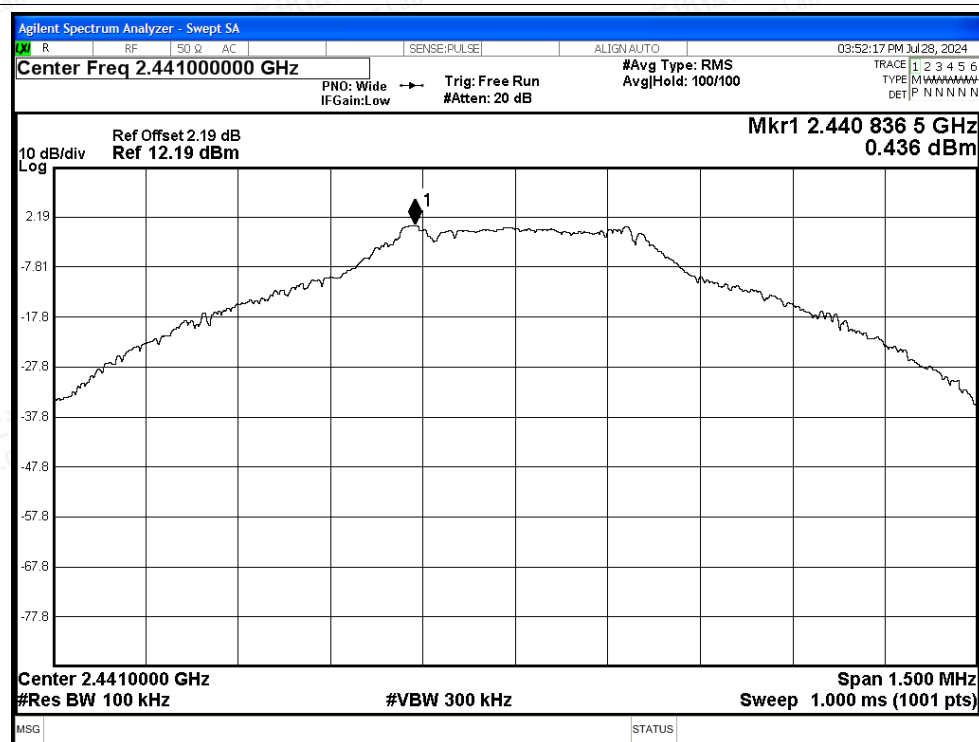


Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

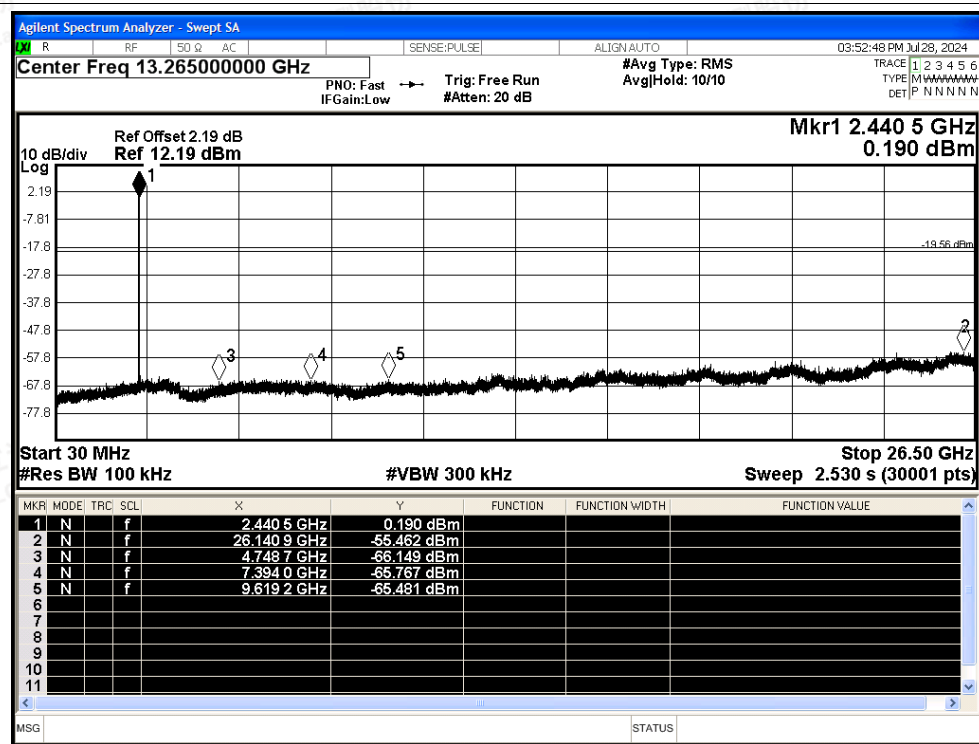




Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

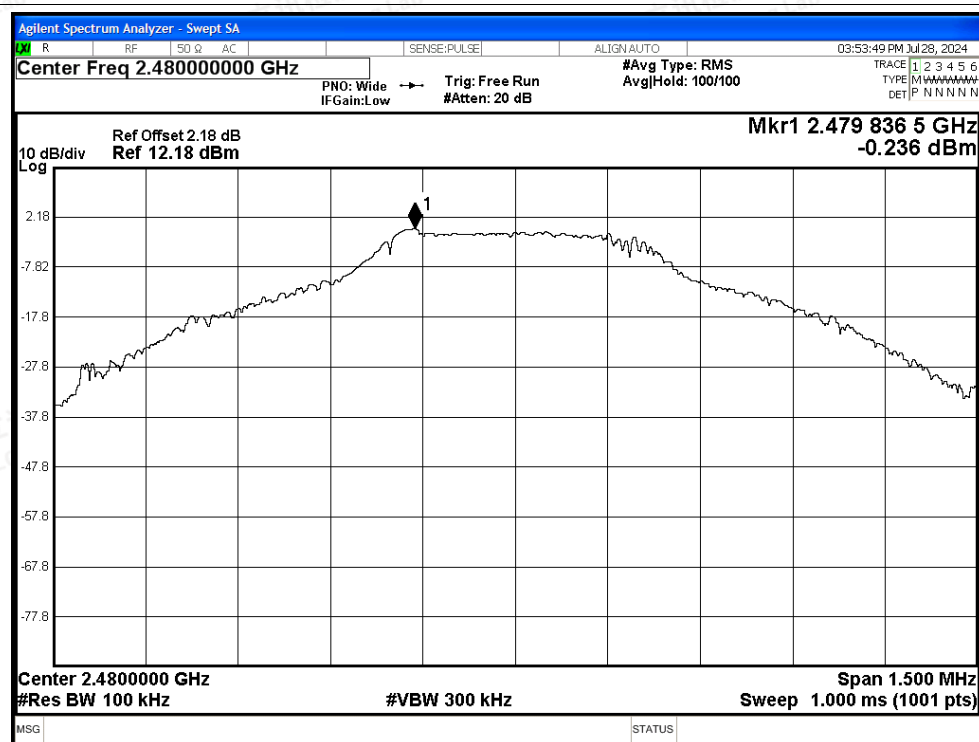


Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

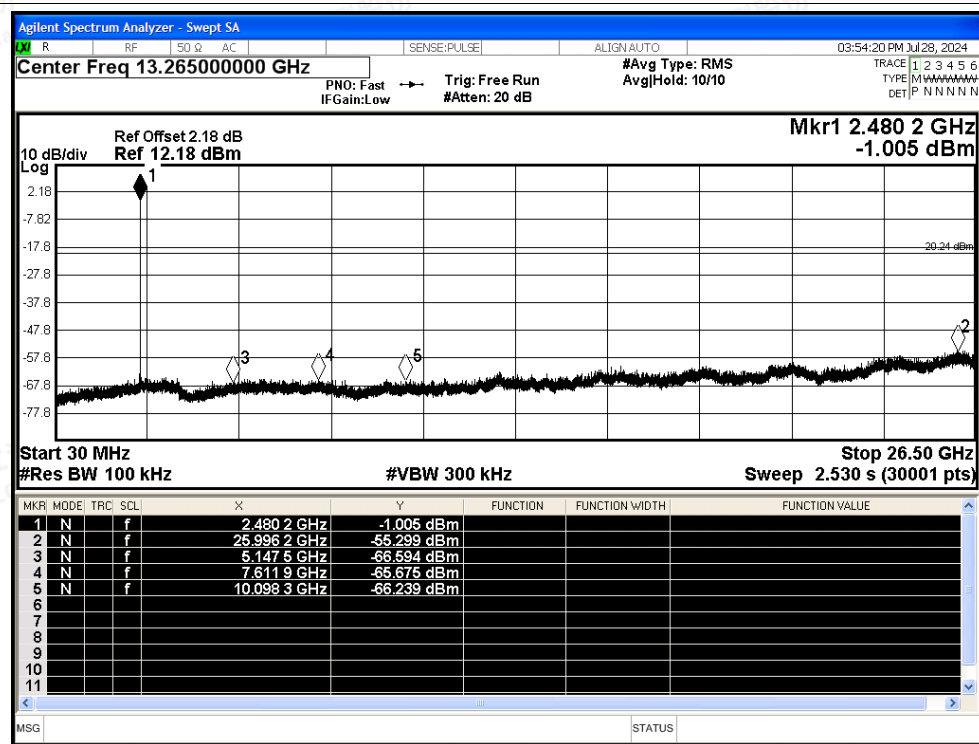




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

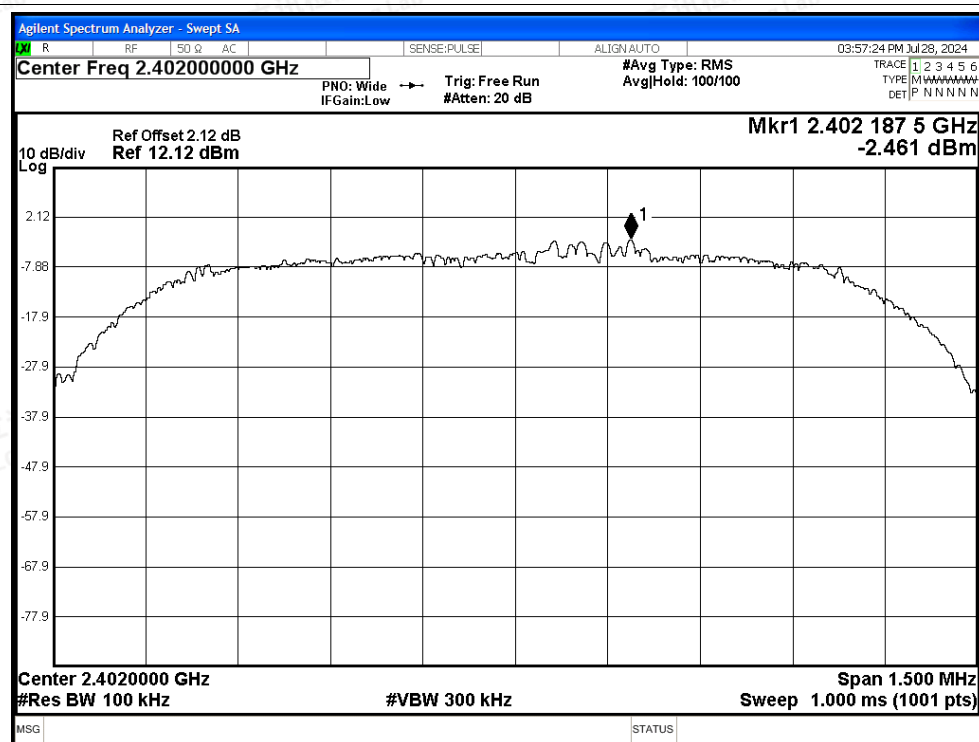


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

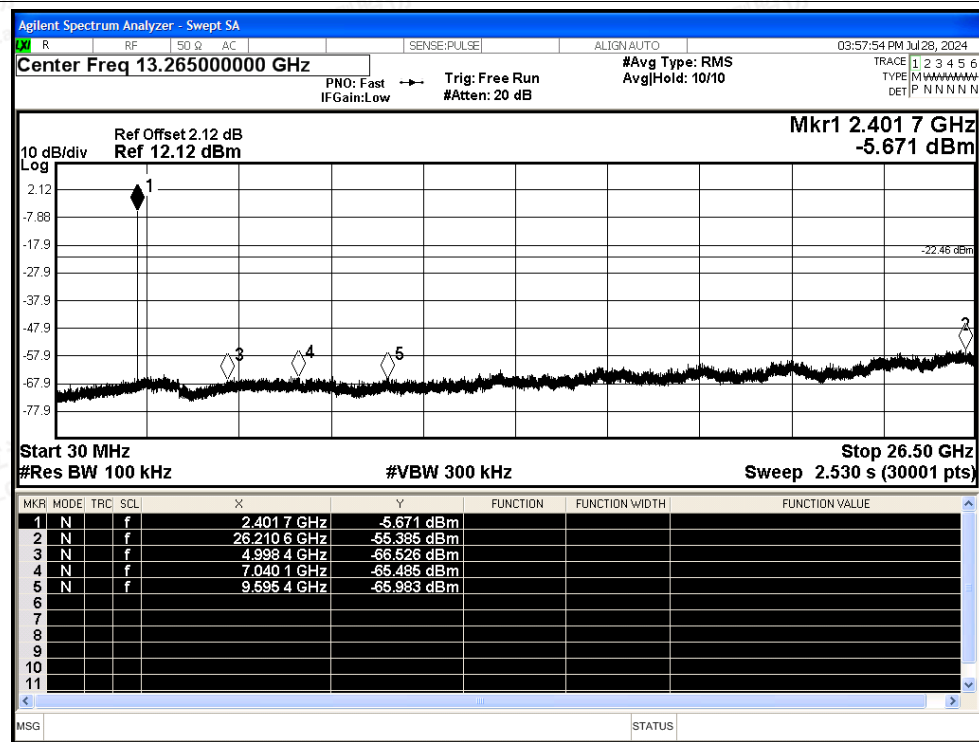




Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref

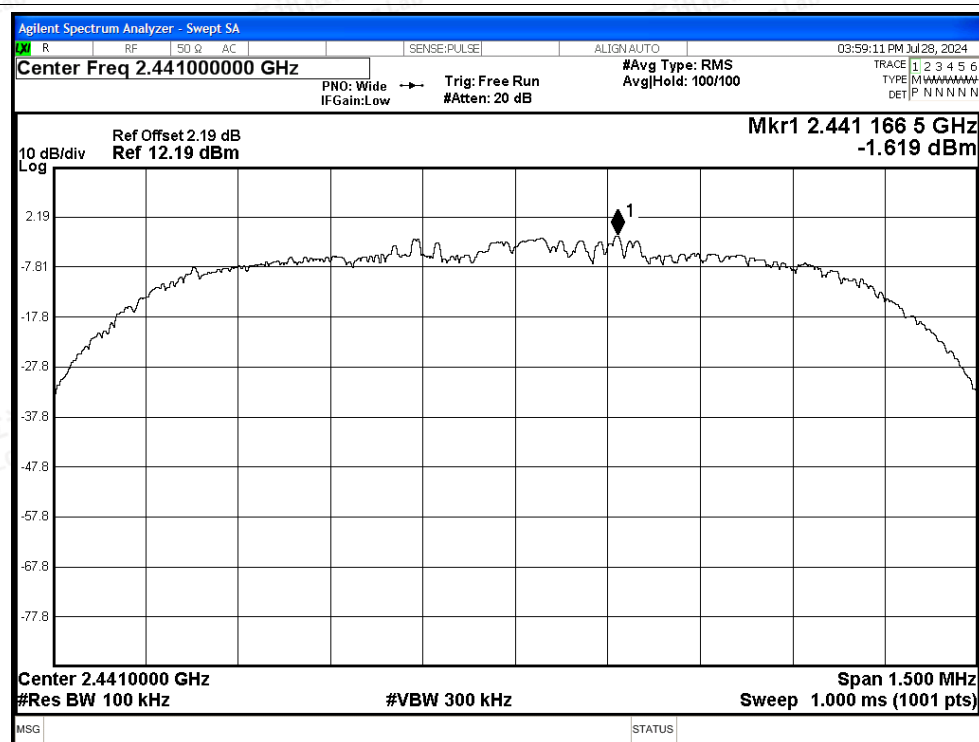


Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission

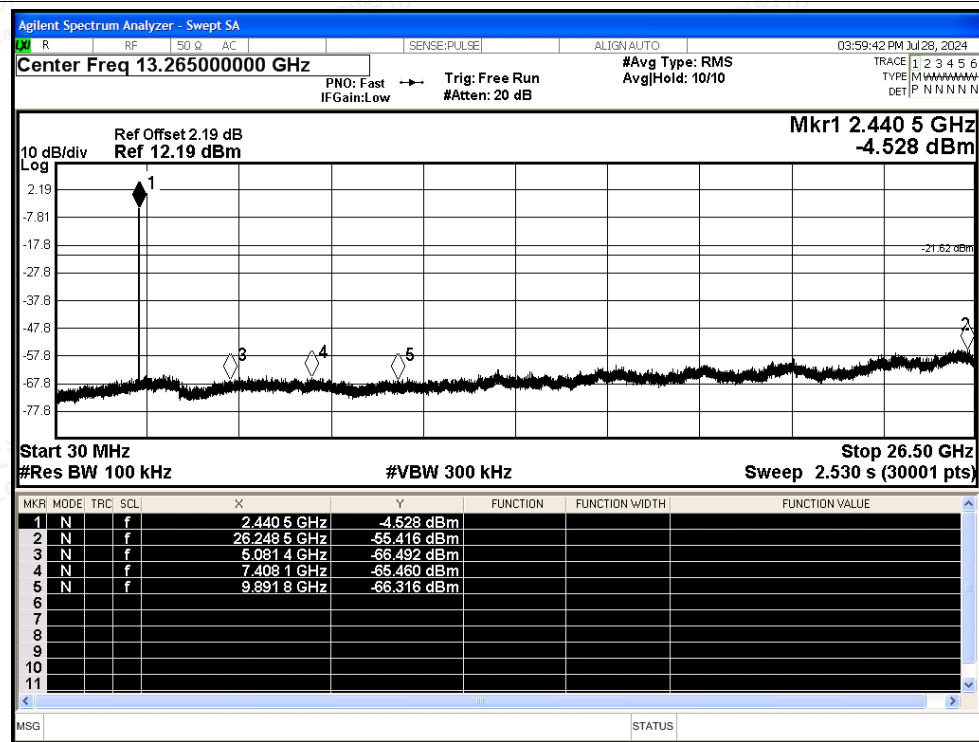




Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref

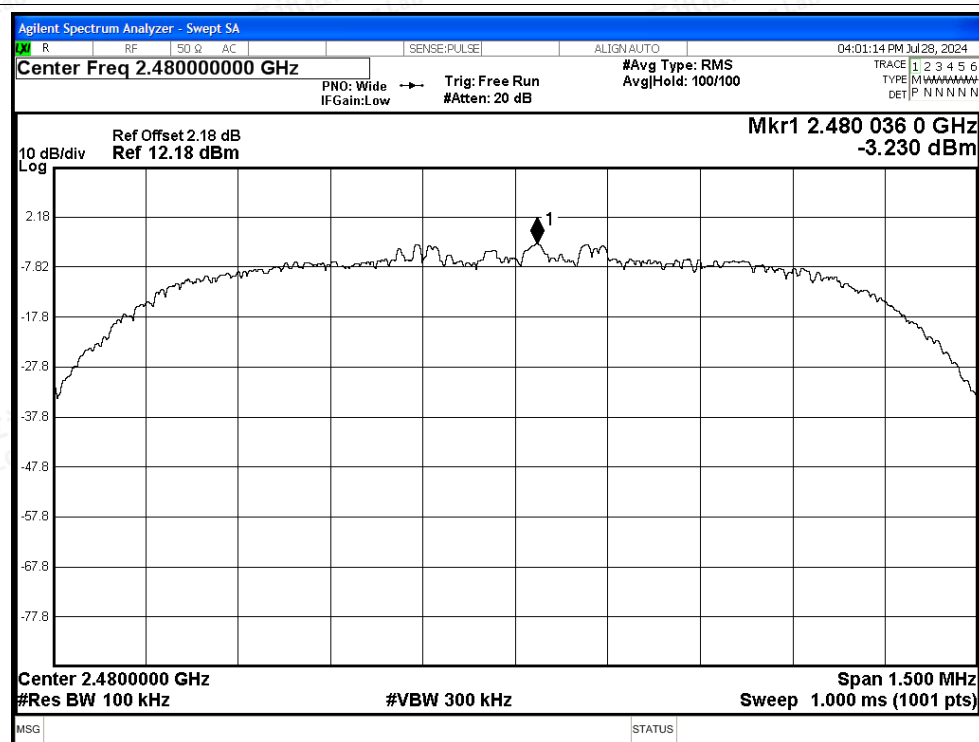


Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission

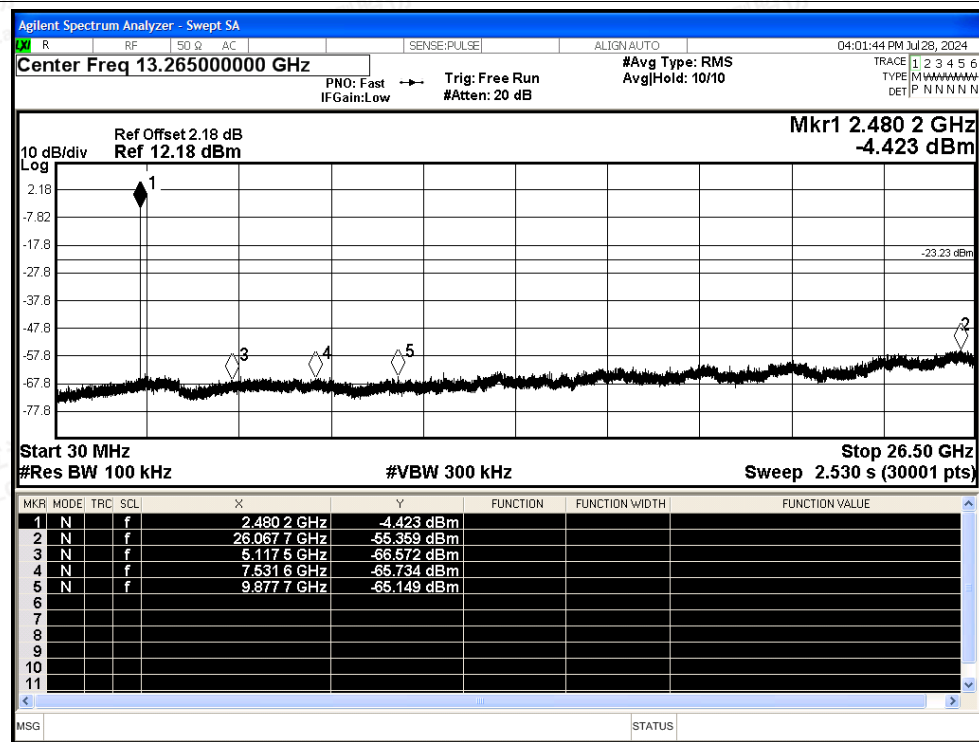




Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref

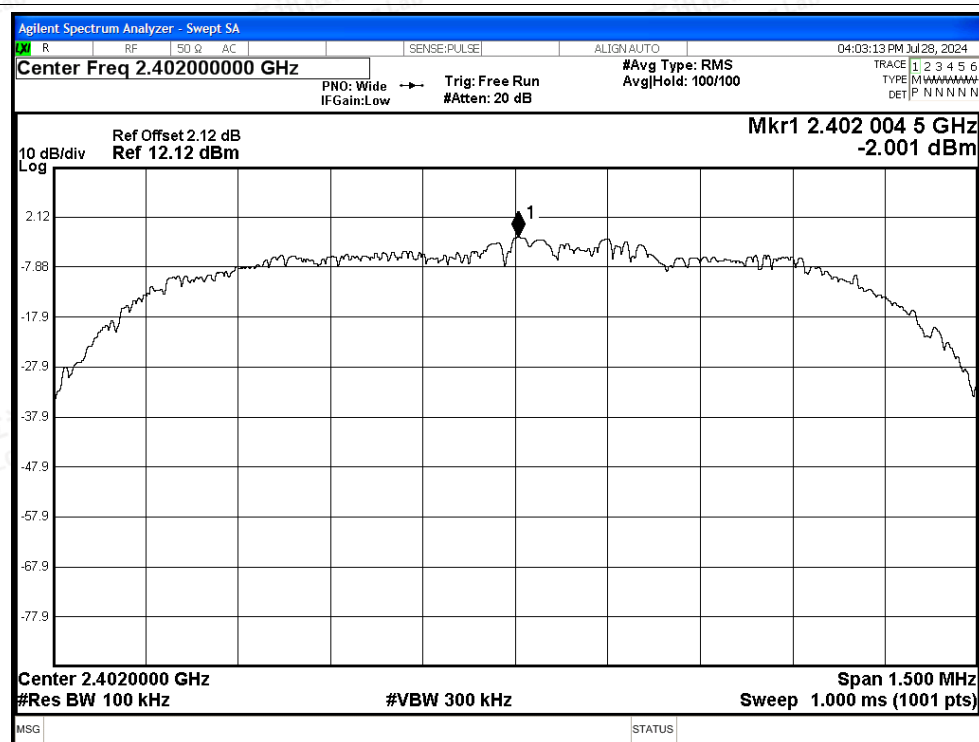


Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission

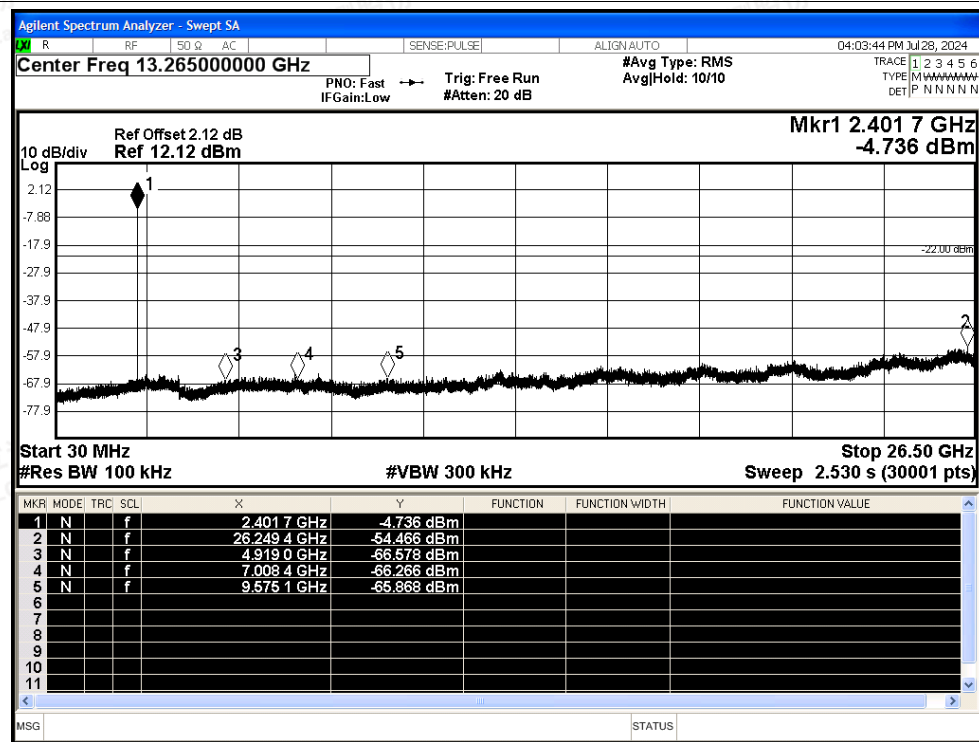




Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref

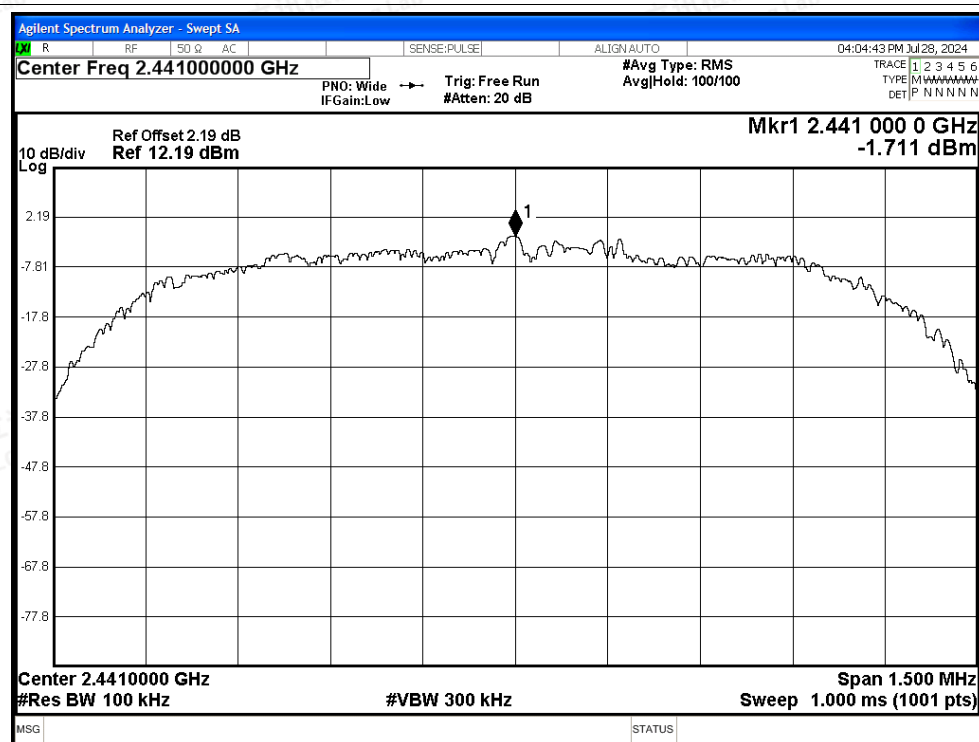


Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission

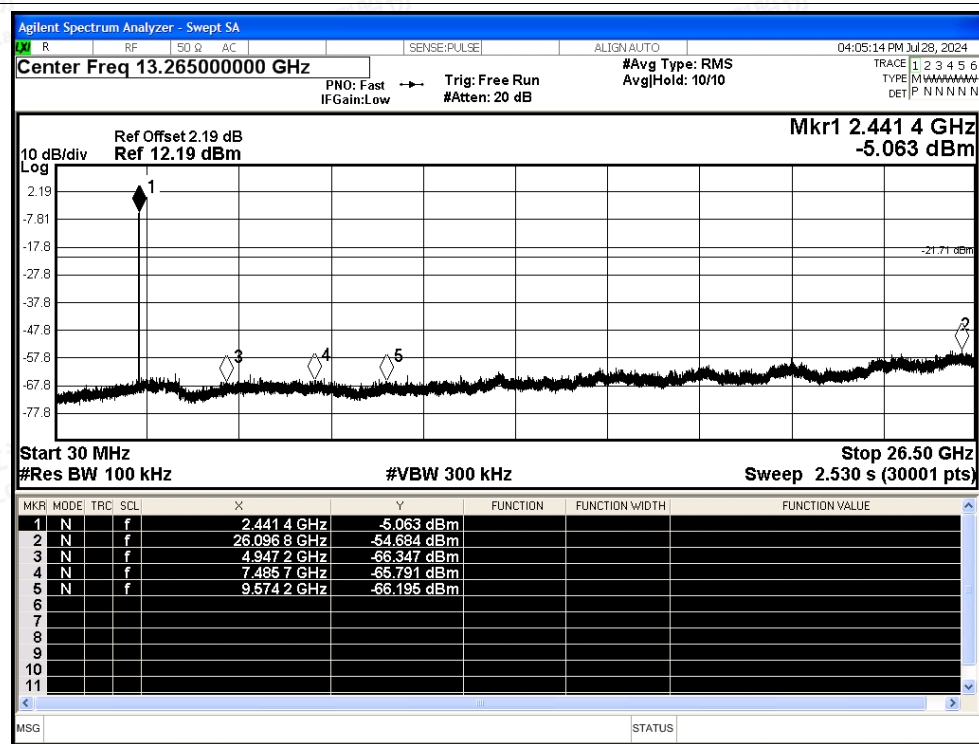




Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref

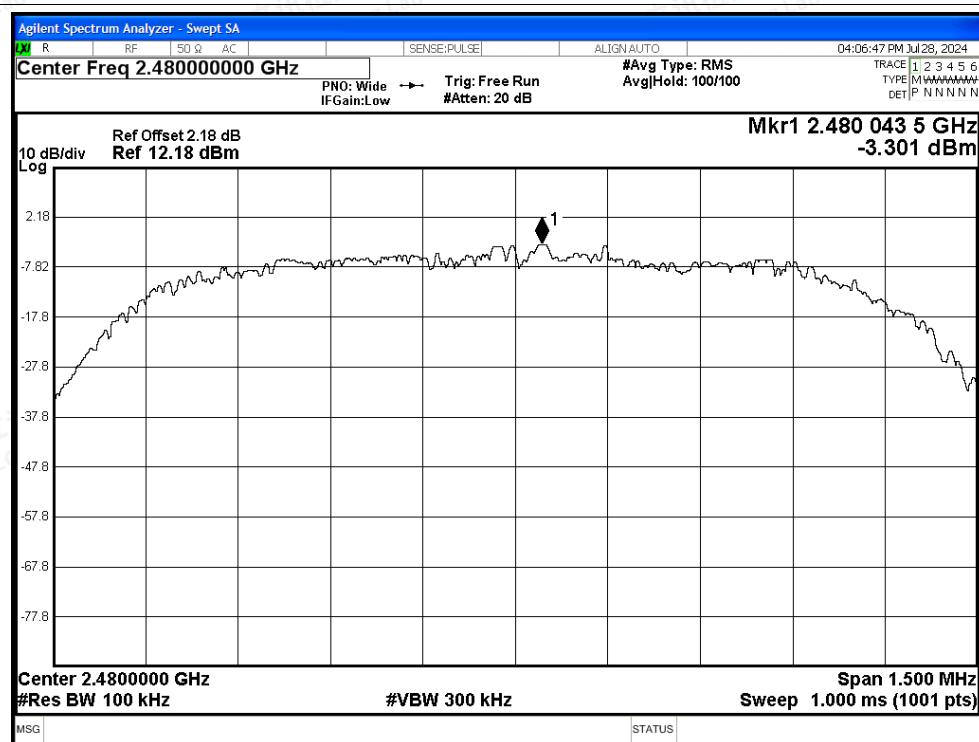


Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission

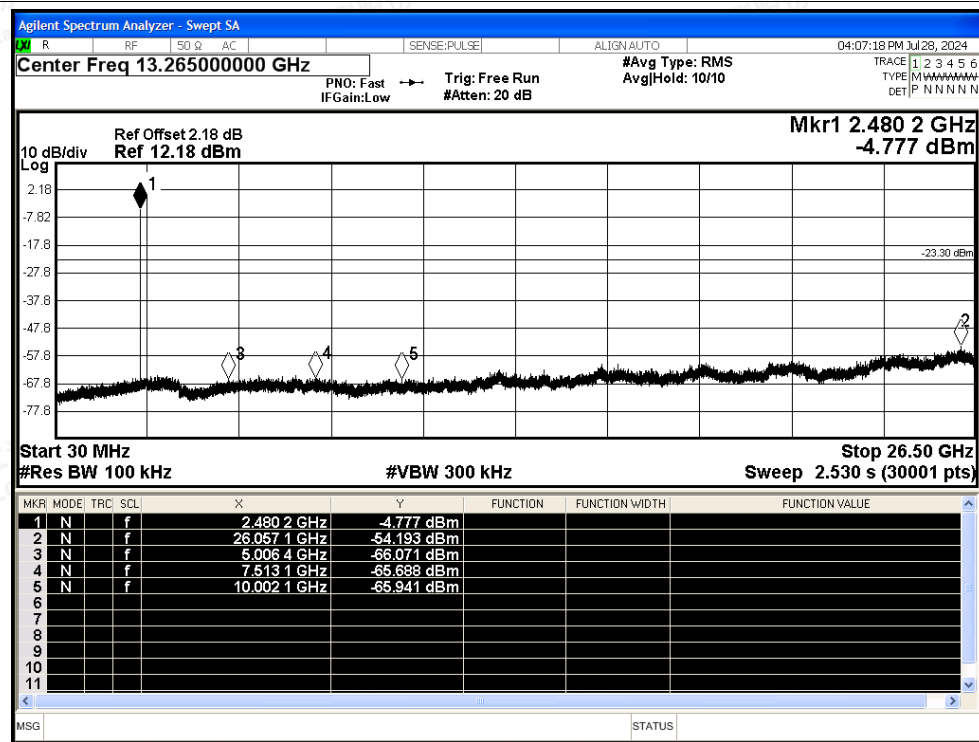




Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission





A.8 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	77.6	1.1	0.34
NVNT	1-DH5	2441	Ant1	77.6	1.1	0.34
NVNT	1-DH5	2480	Ant1	77.6	1.1	0.34
NVNT	2-DH5	2402	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2441	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2480	Ant1	77.28	1.12	0.35
NVNT	3-DH5	2402	Ant1	77.33	1.12	0.34
NVNT	3-DH5	2441	Ant1	76.37	1.17	0.36
NVNT	3-DH5	2480	Ant1	77.28	1.12	0.35

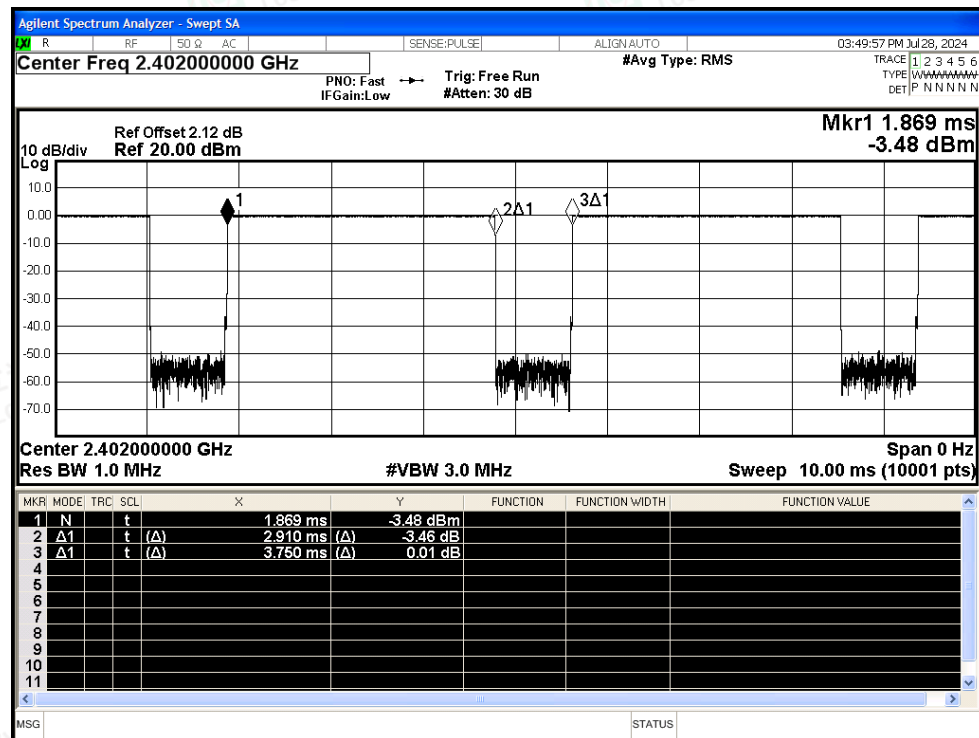


Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

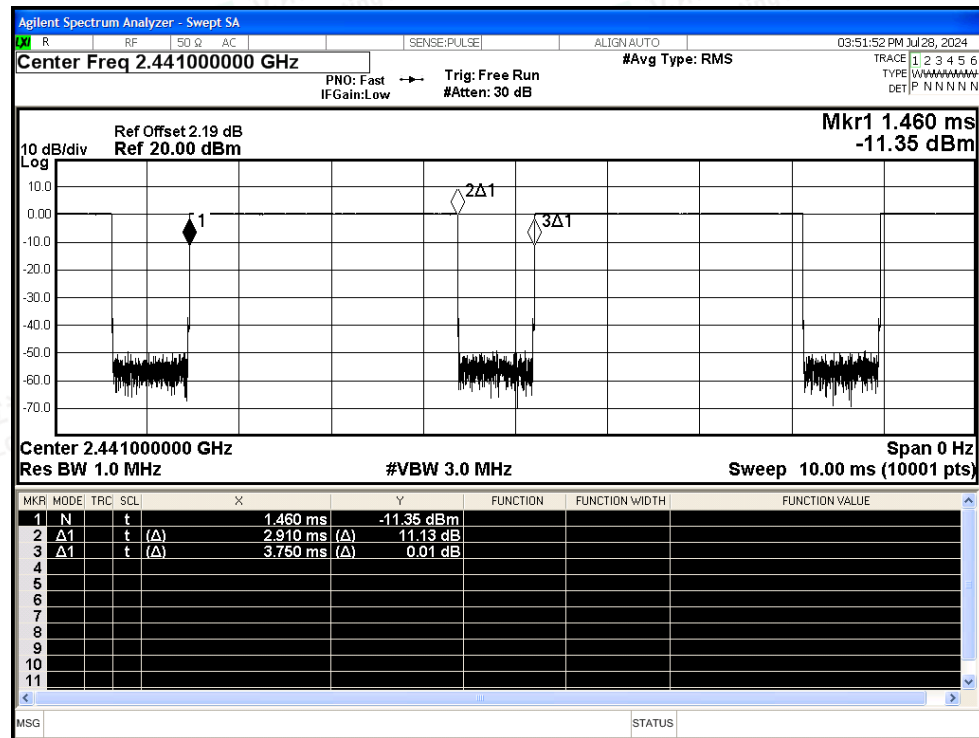


Test Graphs

Duty Cycle NVNT 1-DH5 2402MHz Ant1

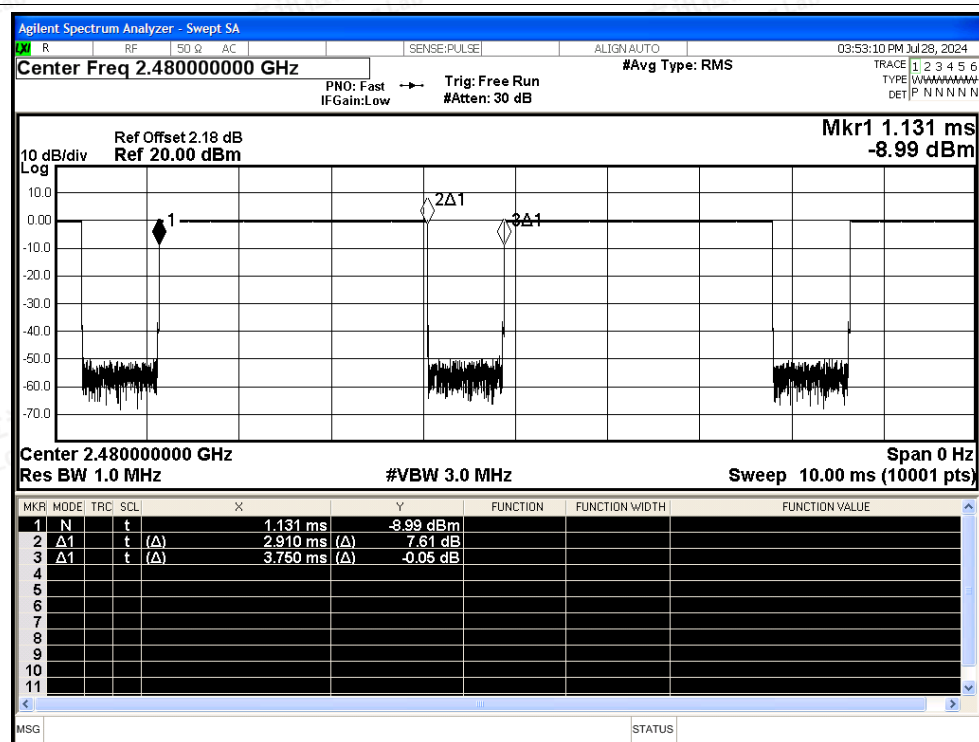


Duty Cycle NVNT 1-DH5 2441MHz Ant1

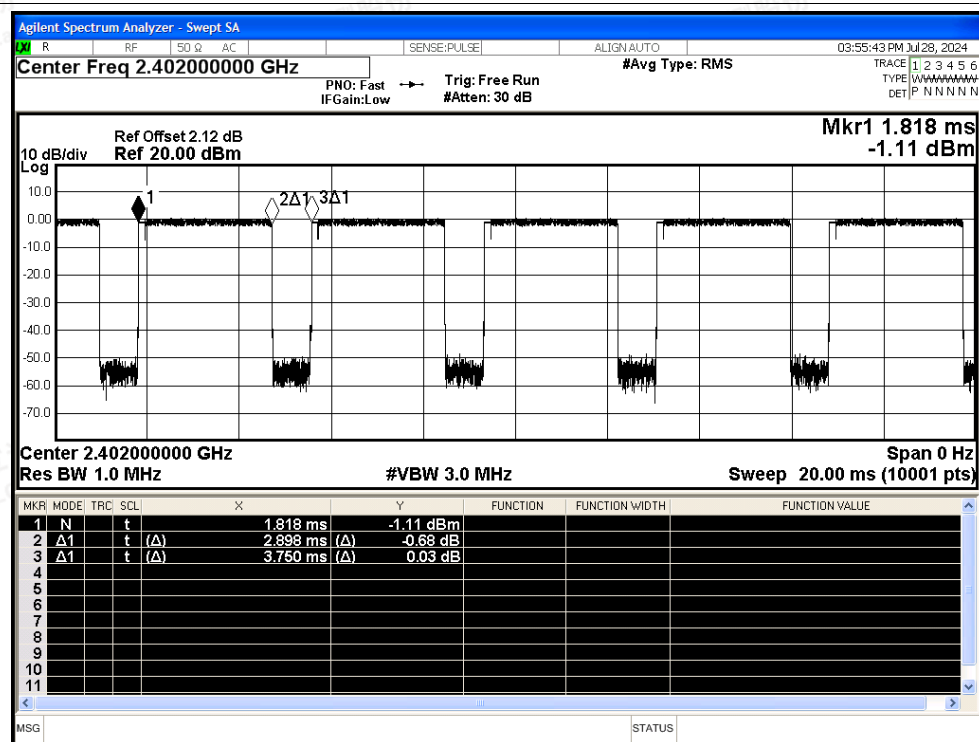




Duty Cycle NVNT 1-DH5 2480MHz Ant1

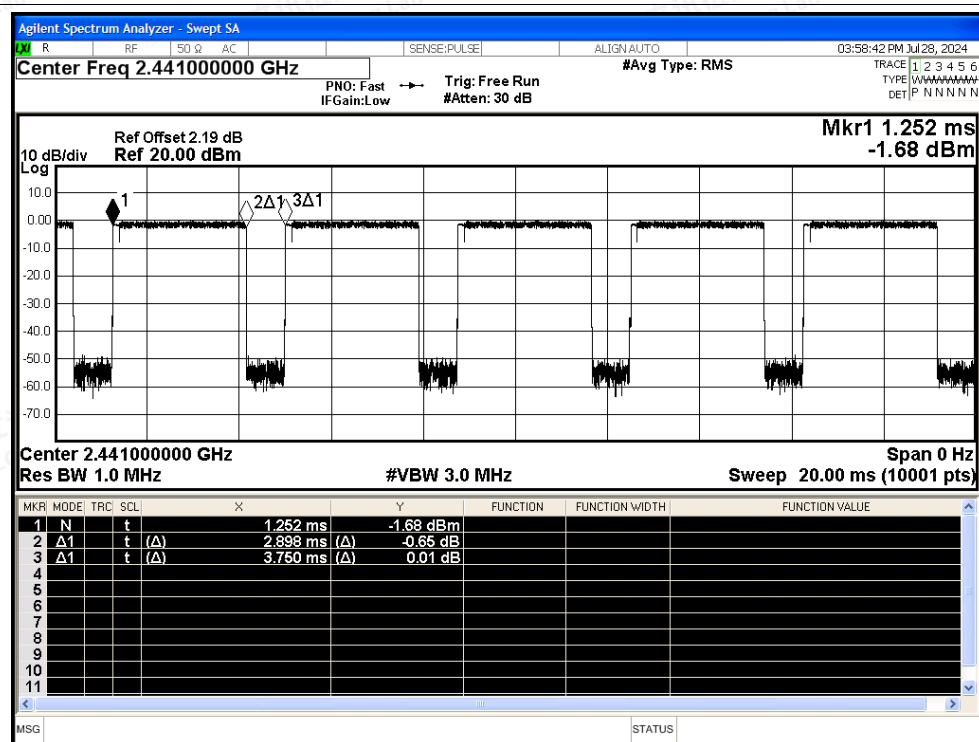


Duty Cycle NVNT 2-DH5 2402MHz Ant1

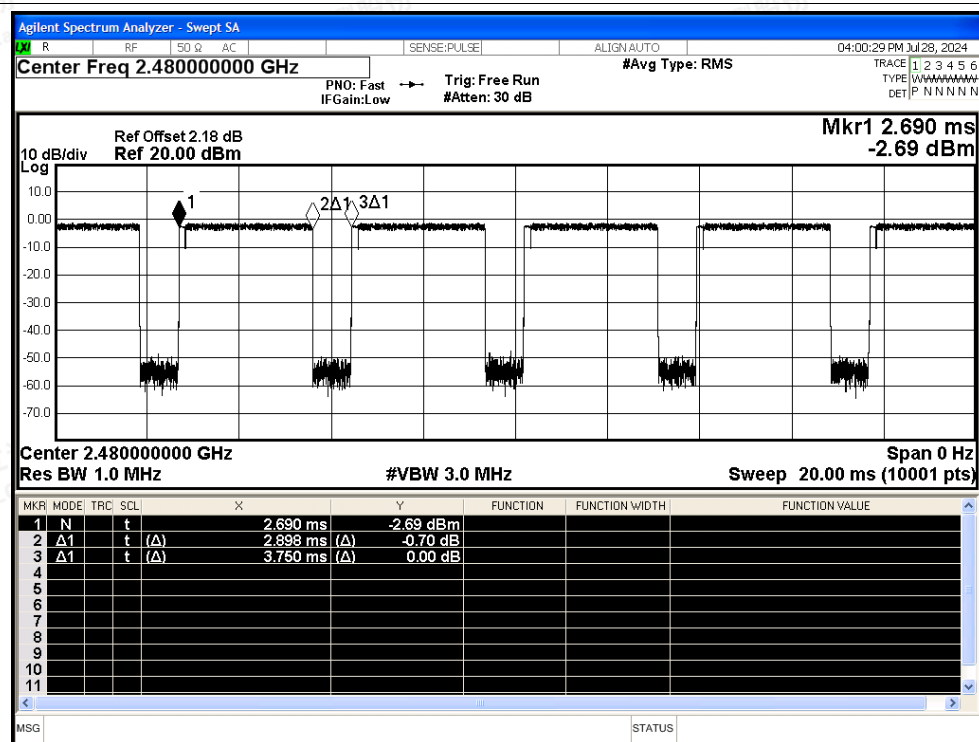




Duty Cycle NVNT 2-DH5 2441MHz Ant1

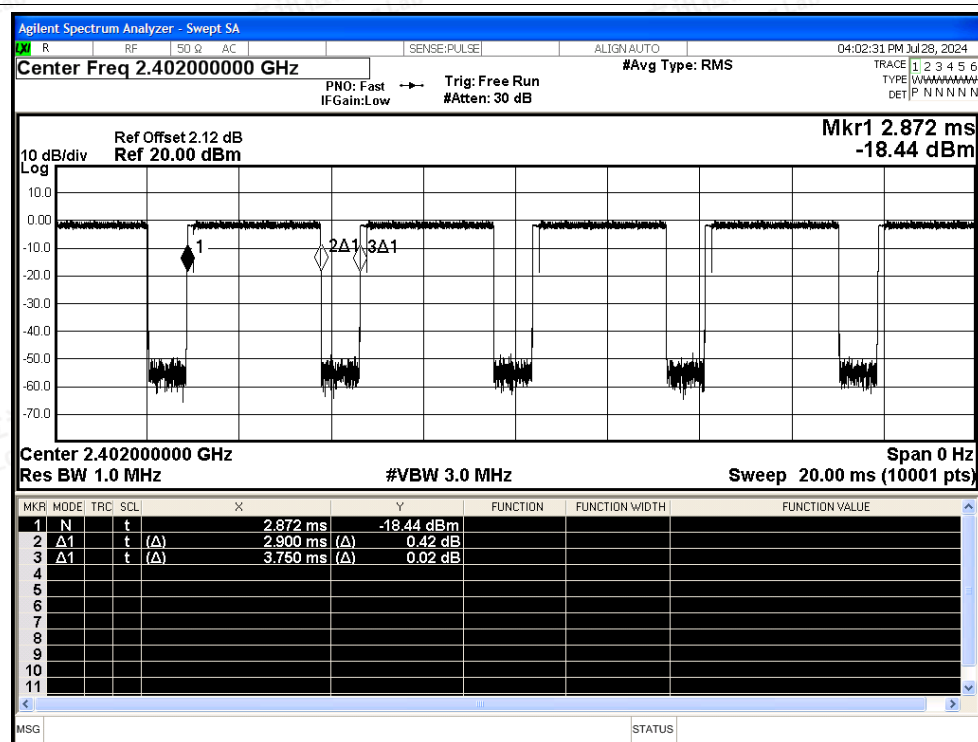


Duty Cycle NVNT 2-DH5 2480MHz Ant1

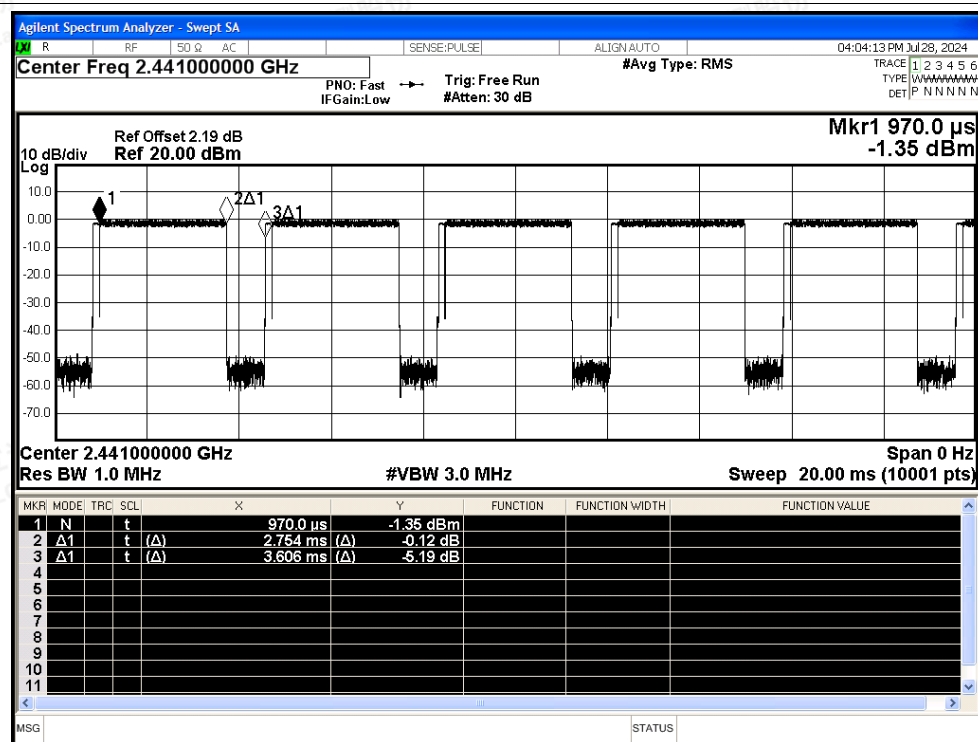


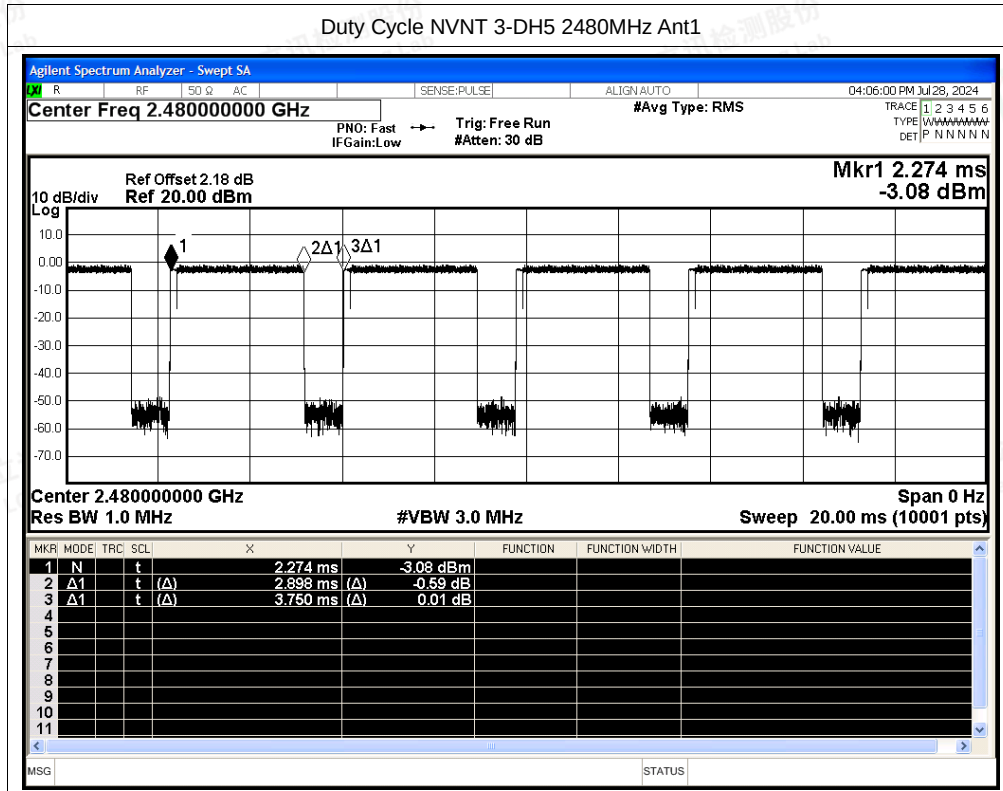


Duty Cycle NVNT 3-DH5 2402MHz Ant1



Duty Cycle NVNT 3-DH5 2441MHz Ant1







A.9 Restrict Band

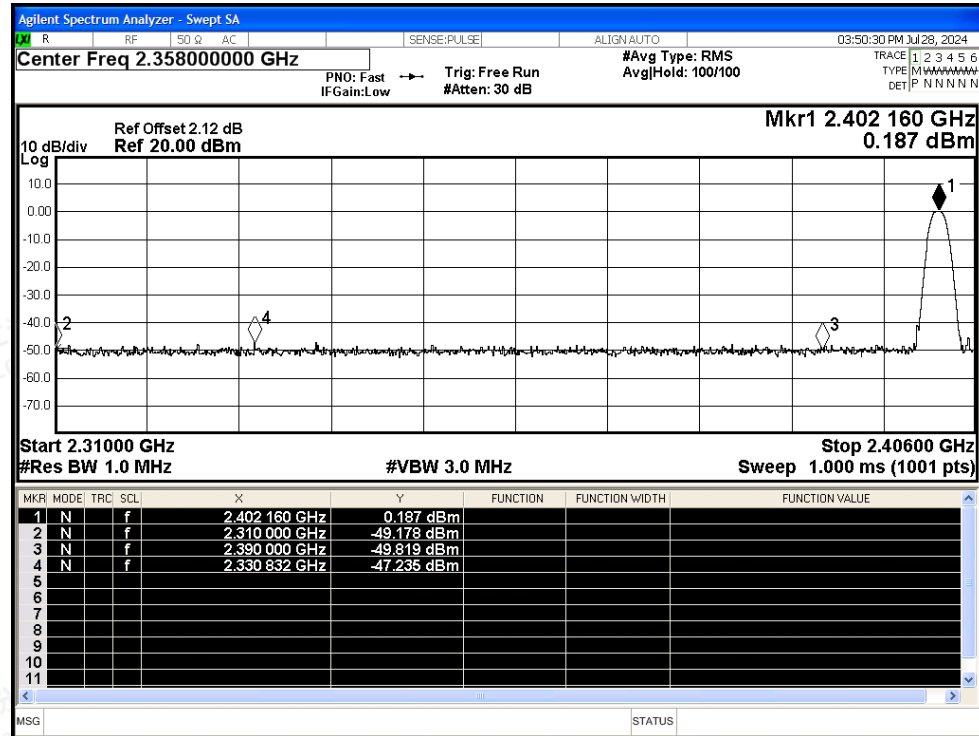
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-49.18	2	-	48.08	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.52	2	1.1	39.84	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2330.832	-47.24	2	-	50.02	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2381.52	-57.53	2	1.1	40.83	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.82	2	-	47.44	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.38	2	1.1	39.98	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-49.81	2	-	47.45	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-57.67	2	1.1	40.69	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2486.968	-46.22	2	-	51.04	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2488.432	-56.92	2	1.1	41.44	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-48.03	2	-	49.23	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-57.59	2	1.1	40.77	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-51.03	2	-	46.23	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-58.64	2	1.12	39.74	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2380.848	-46.21	2	-	51.05	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2362.224	-57.5	2	1.12	40.88	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-48.01	2	-	49.25	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-58.25	2	1.12	40.13	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-50.24	2	-	47.02	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-58.03	2	1.12	40.35	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2484.88	-44.2	2	-	53.06	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2492.56	-56.86	2	1.12	41.52	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-50.41	2	-	46.85	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-57.94	2	1.12	40.44	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-51.87	2	-	45.39	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-58.88	2	1.12	39.5	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2356.848	-47.37	2	-	49.89	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2388.624	-57.53	2	1.12	40.85	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-50.9	2	-	46.36	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-57.88	2	1.12	40.5	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-50.33	2	-	46.93	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-58	2	1.12	40.38	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2498.368	-46.14	2	-	51.12	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2485.288	-57.01	2	1.12	41.37	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-48.34	2	-	48.92	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-57.92	2	1.12	40.46	Average	54	Pass



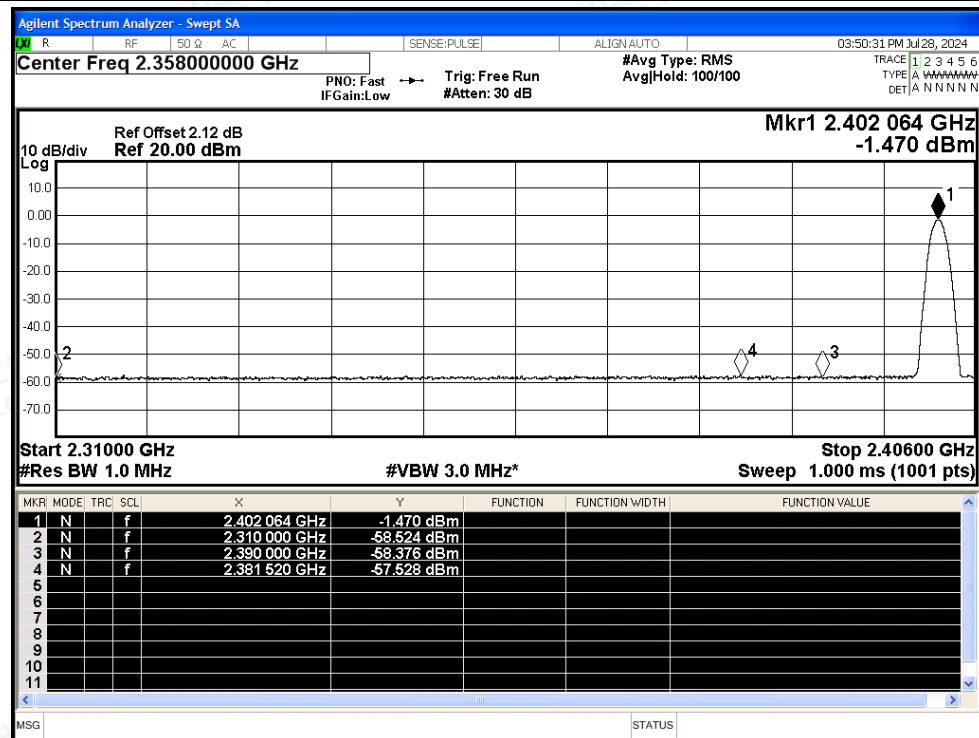


Test Graphs

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

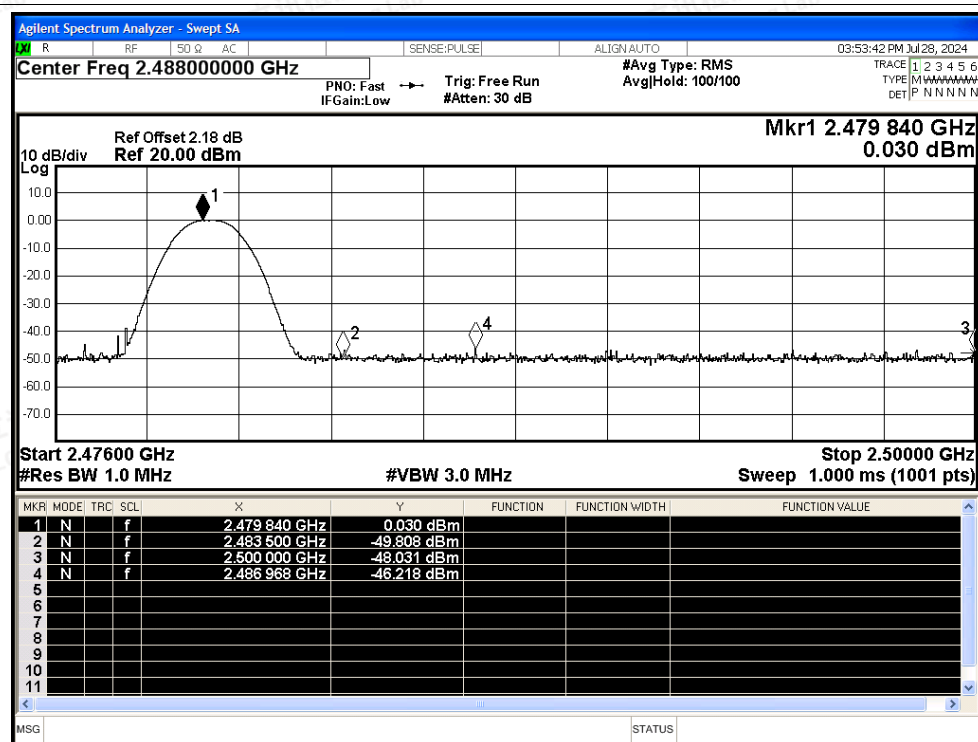


Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

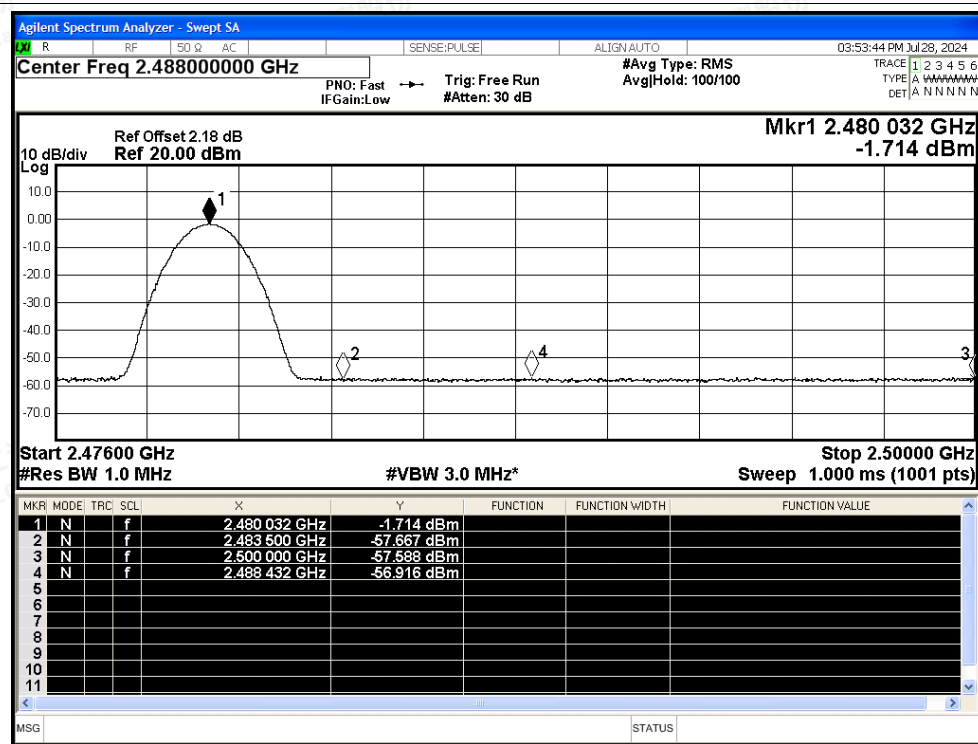




Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



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



Shenzhen LCS Compliance Testing Laboratory Ltd.

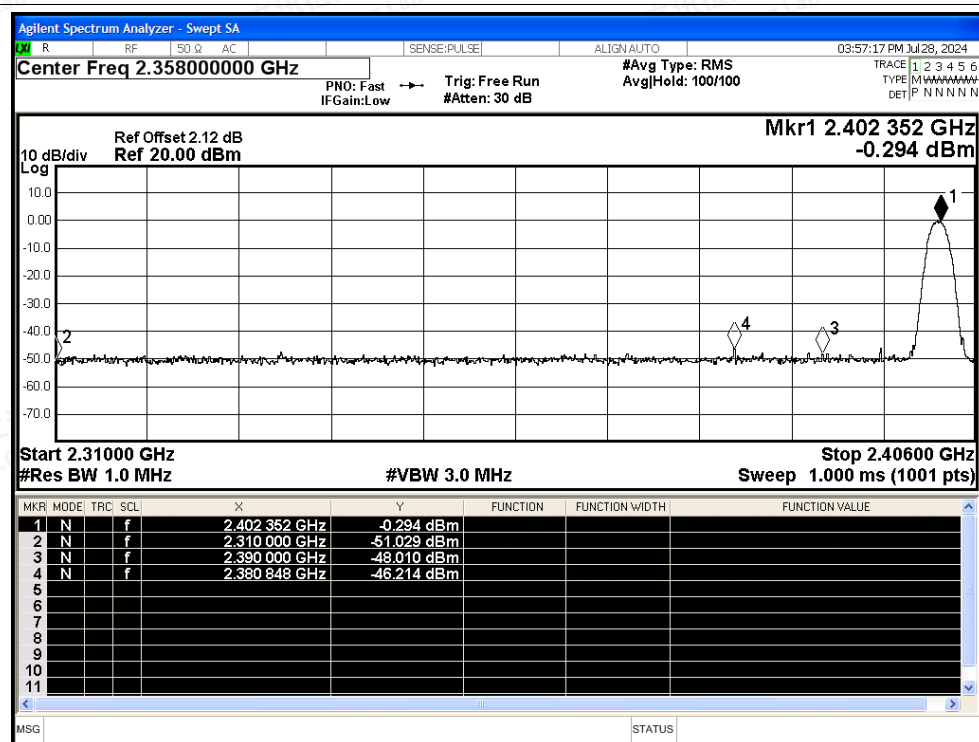
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

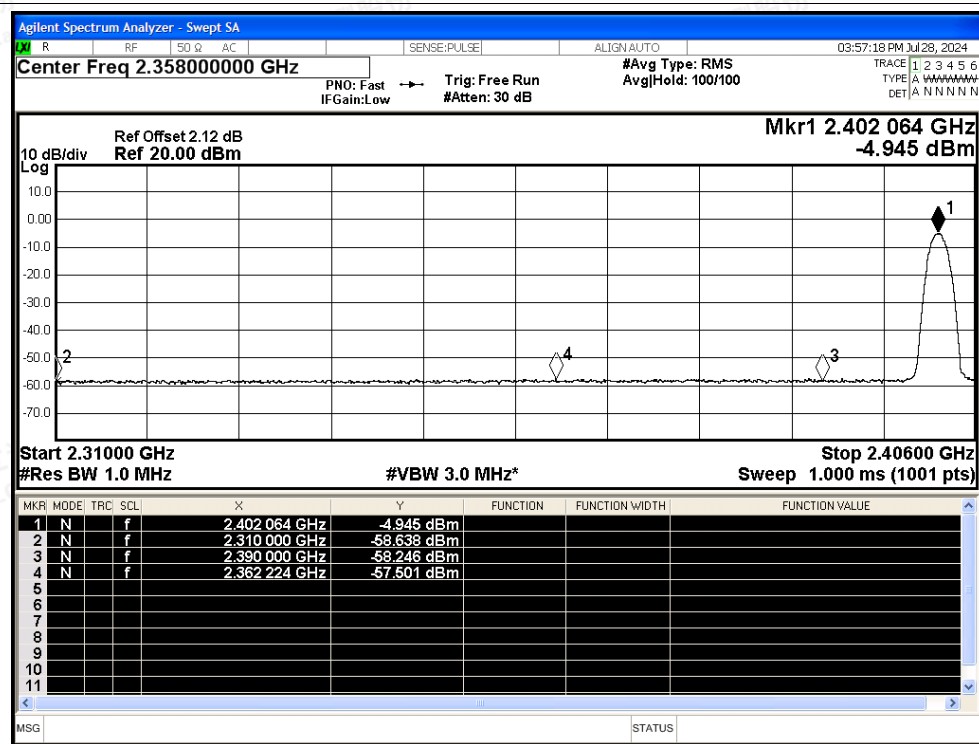
Scan code to check authenticity



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

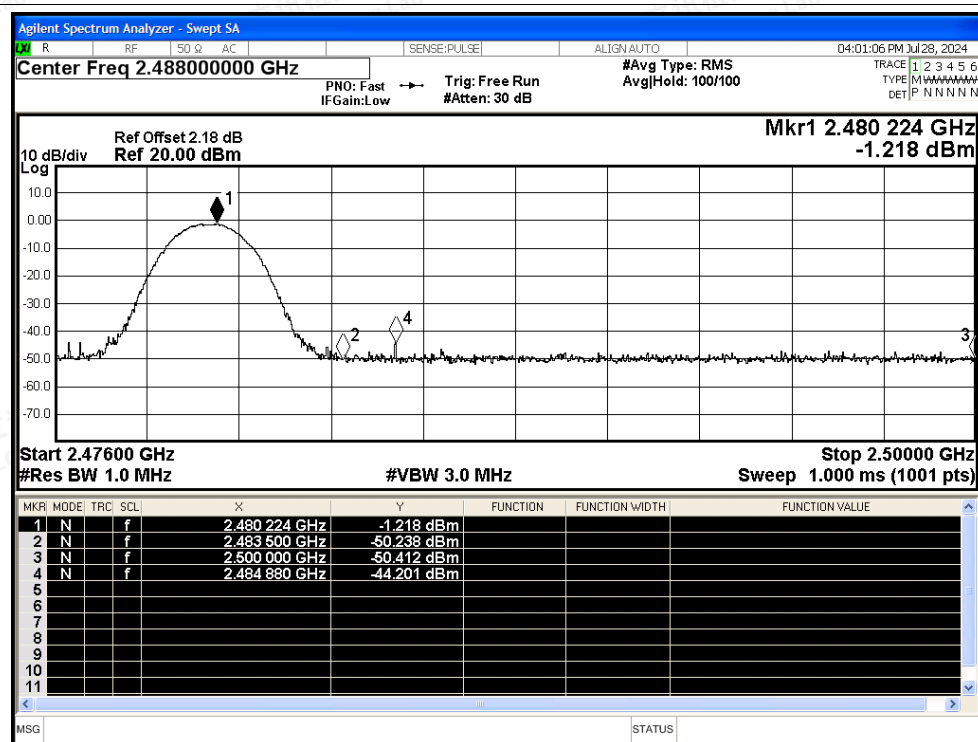


Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average

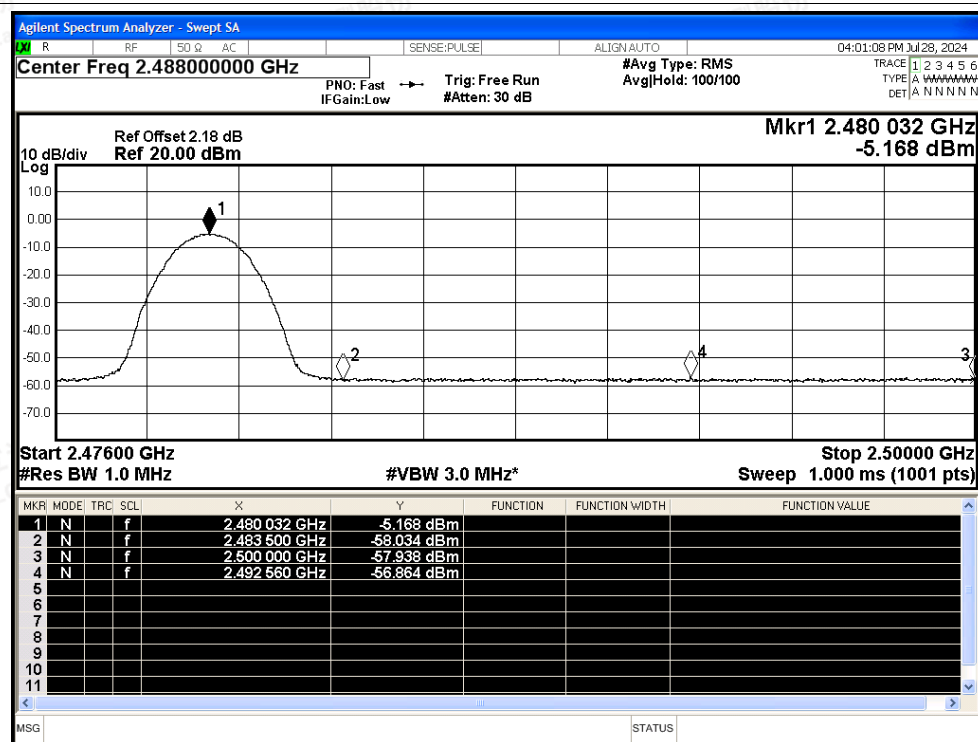




Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak

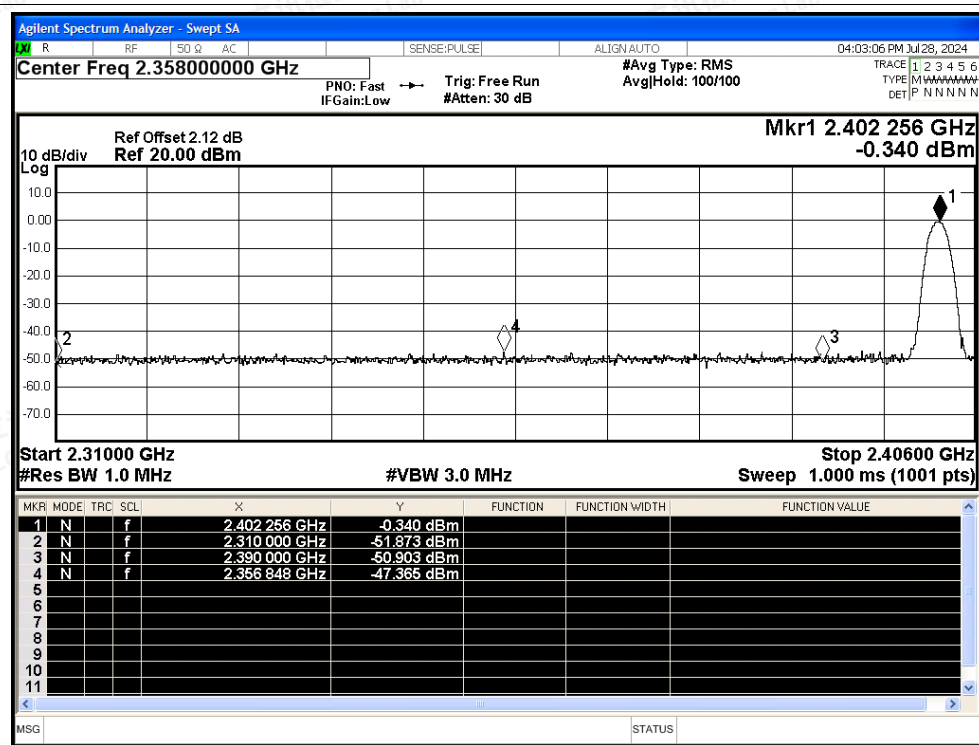


Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average

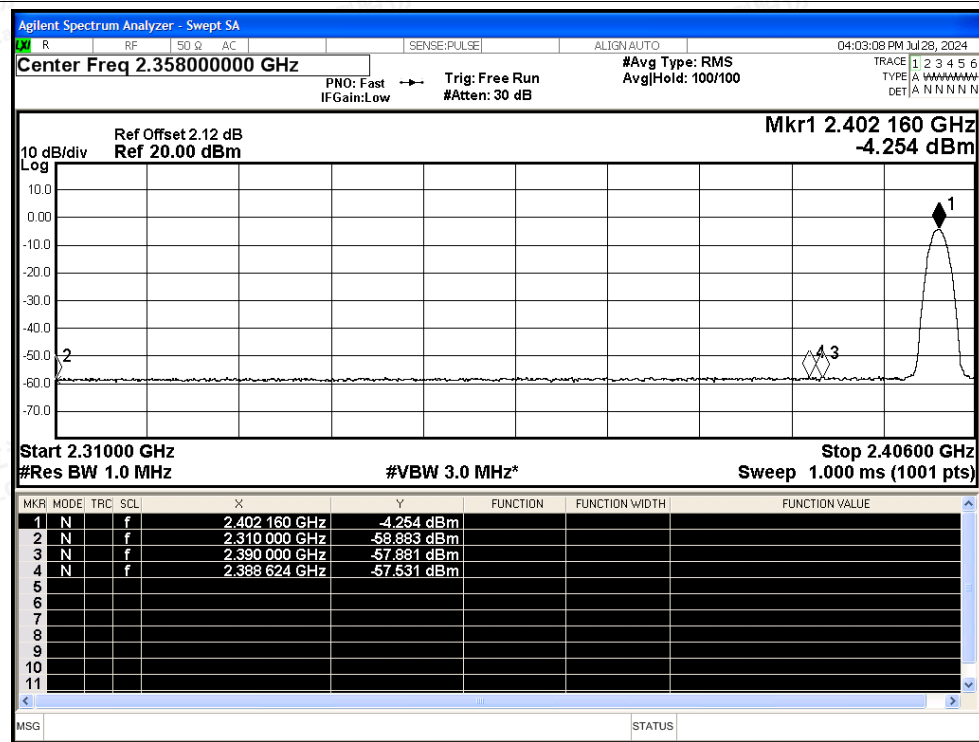




Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak

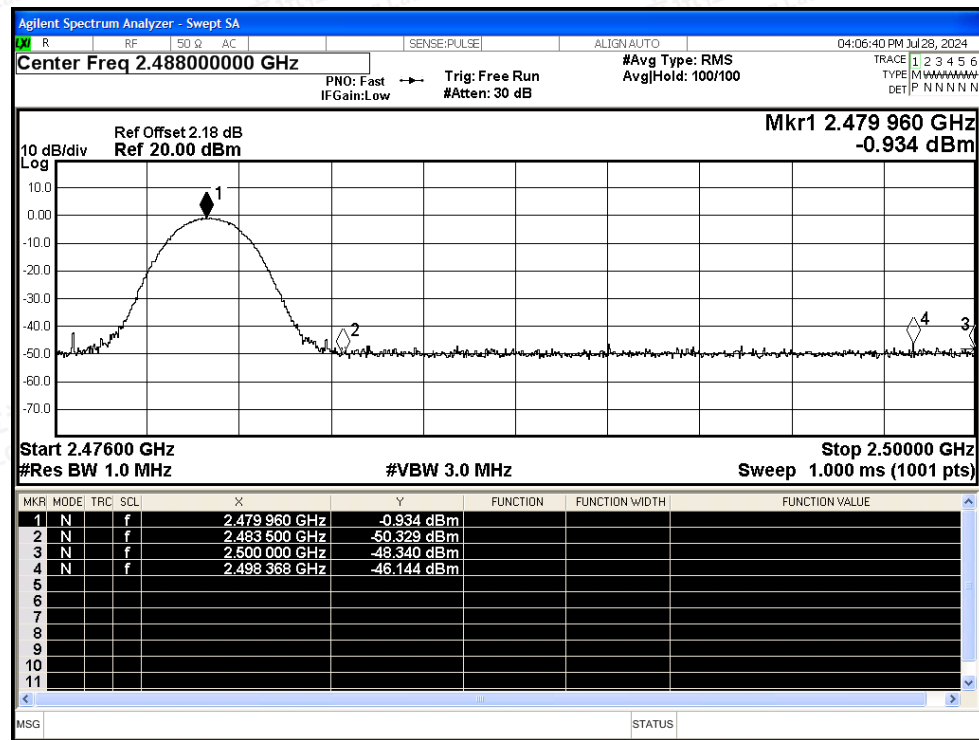


Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Average





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



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

