



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: BLUETOOTH TV SOUNDBAR SPEAKER

Test Model: PSB3205

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

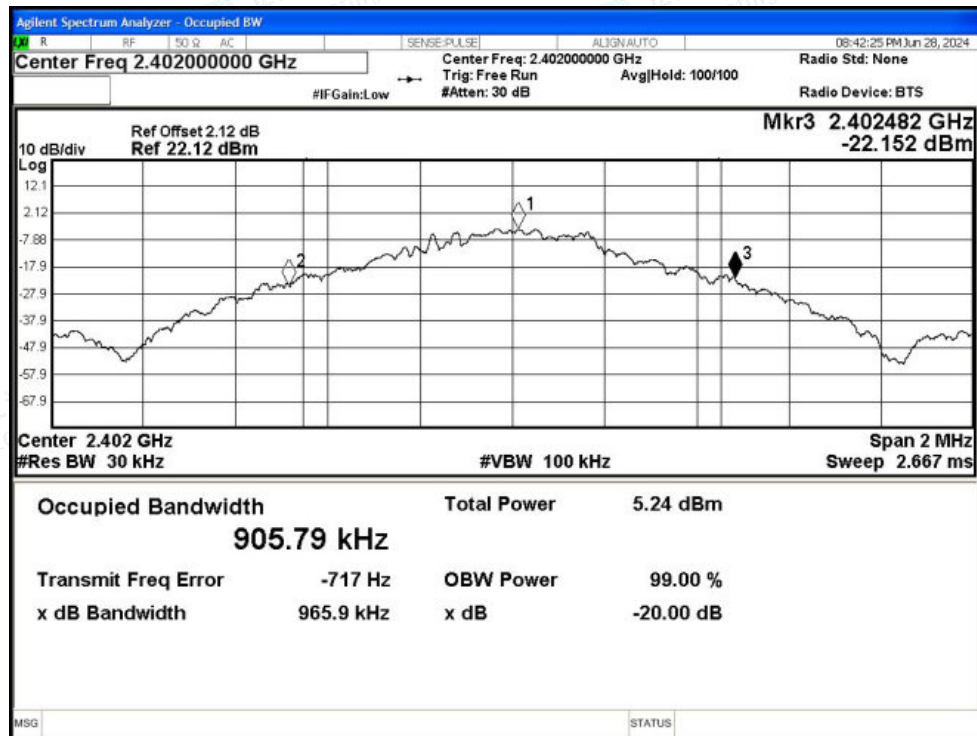
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.966	N/A	Pass
NVNT	1-DH5	2441	Ant1	1.024	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.958	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.308	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.305	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.286	N/A	Pass





Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



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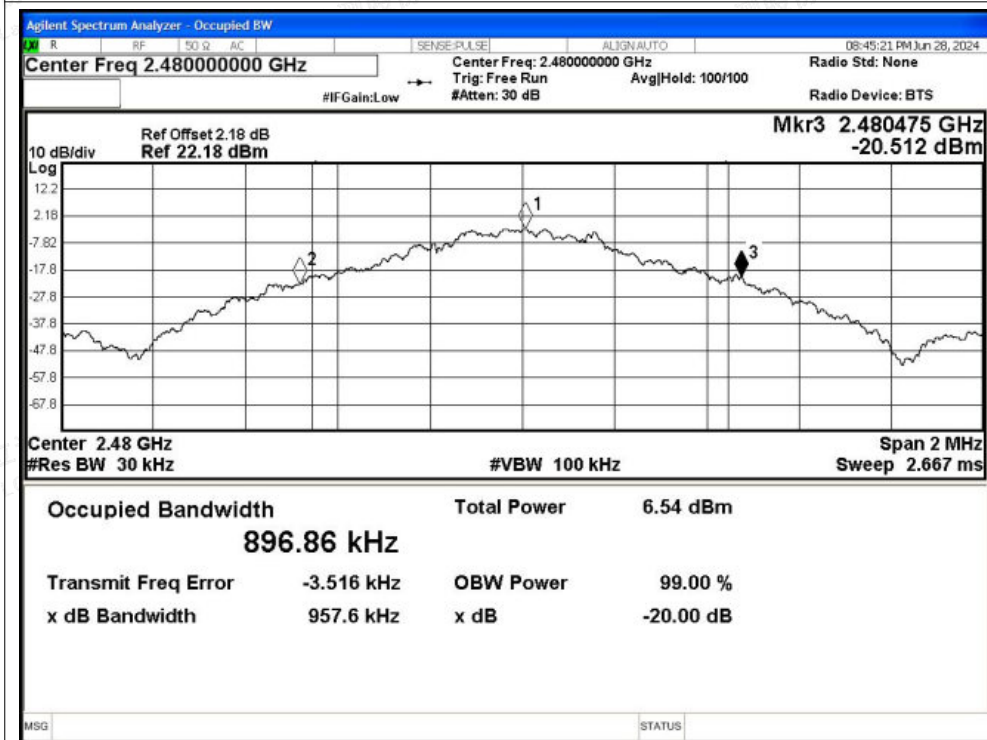
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

Scan code to check authenticity



-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



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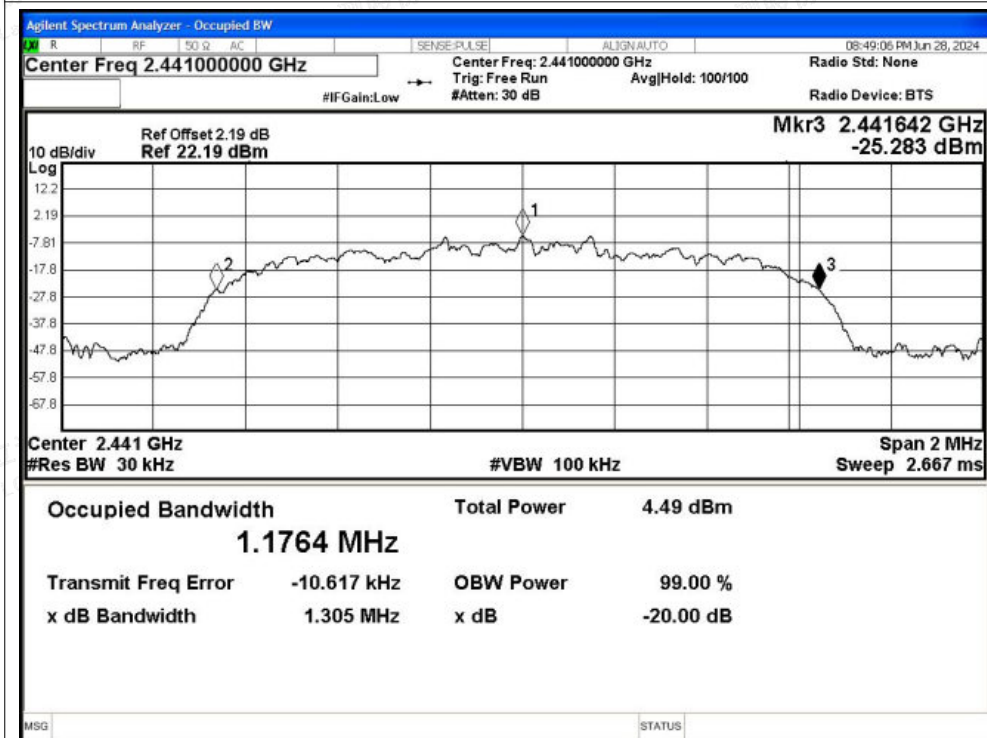
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

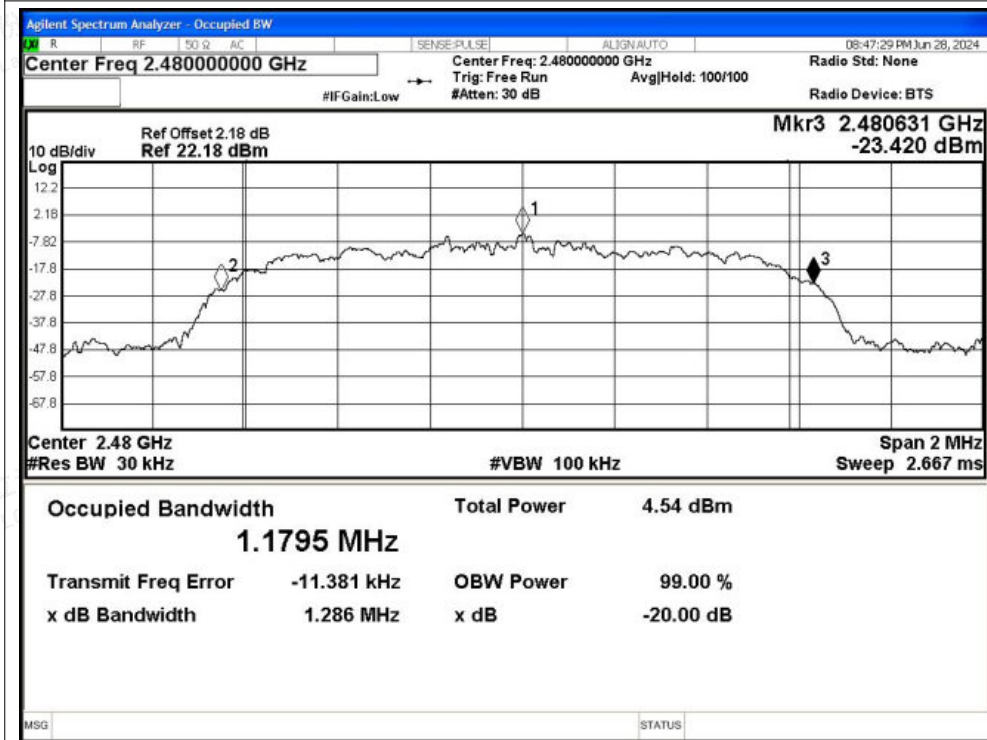
Scan code to check authenticity



-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



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A.2 Maximum Conducted Output Power

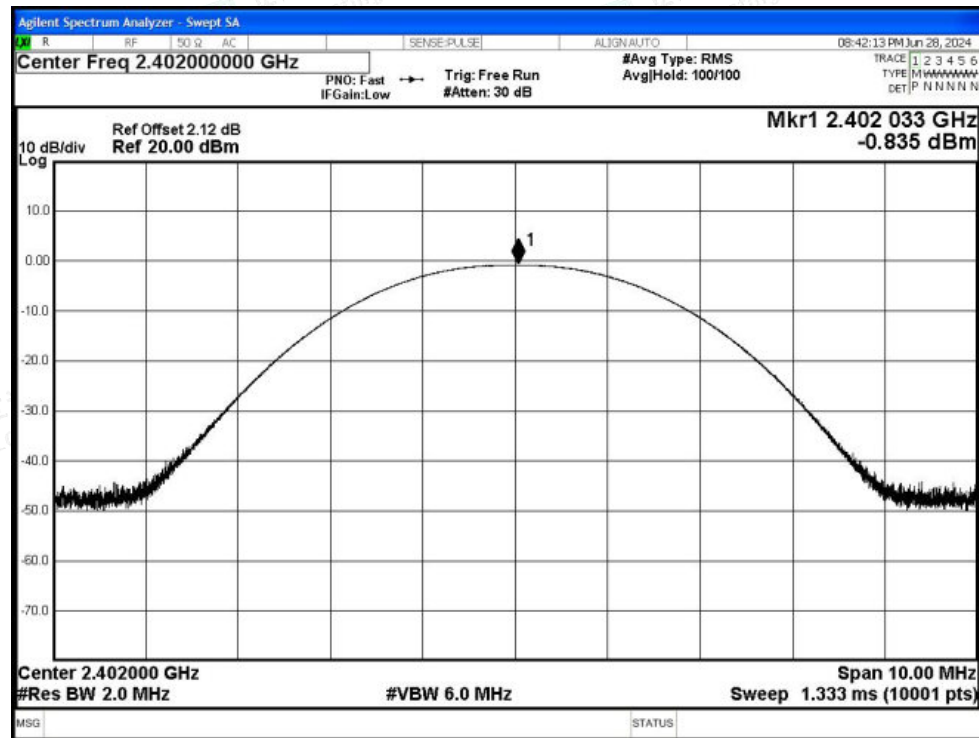
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-0.84	21	Pass
NVNT	1-DH5	2441	Ant1	-0.02	21	Pass
NVNT	1-DH5	2480	Ant1	0.2	21	Pass
NVNT	2-DH5	2402	Ant1	-0.85	21	Pass
NVNT	2-DH5	2441	Ant1	-0.38	21	Pass
NVNT	2-DH5	2480	Ant1	-0.1	21	Pass



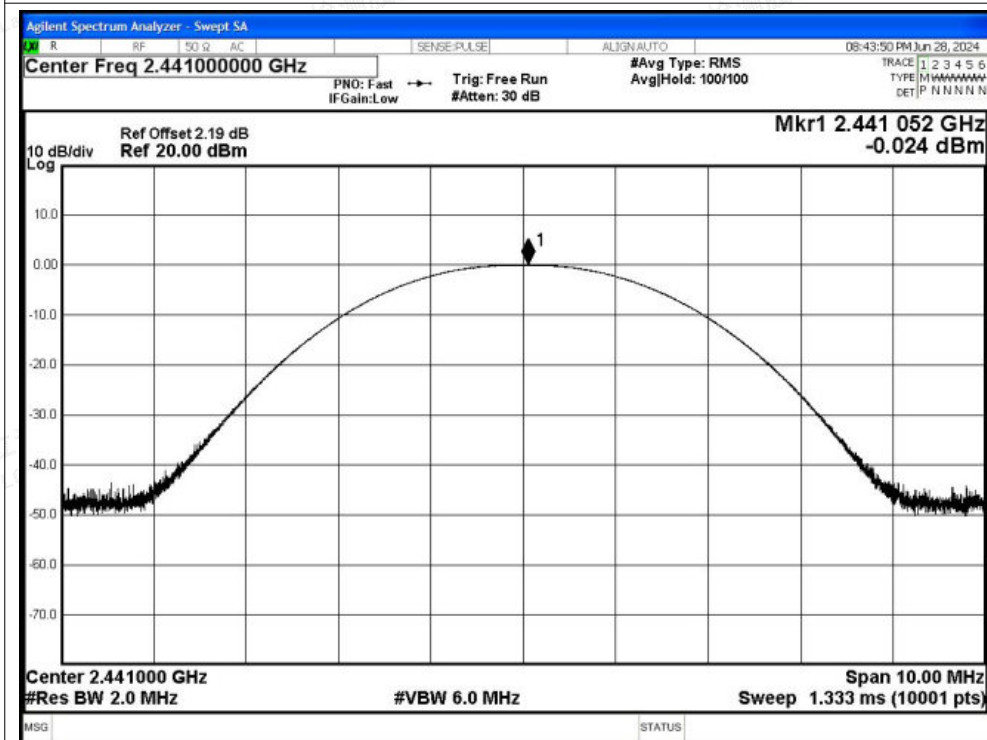


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1



Power NVNT 1-DH5 2441MHz Ant1



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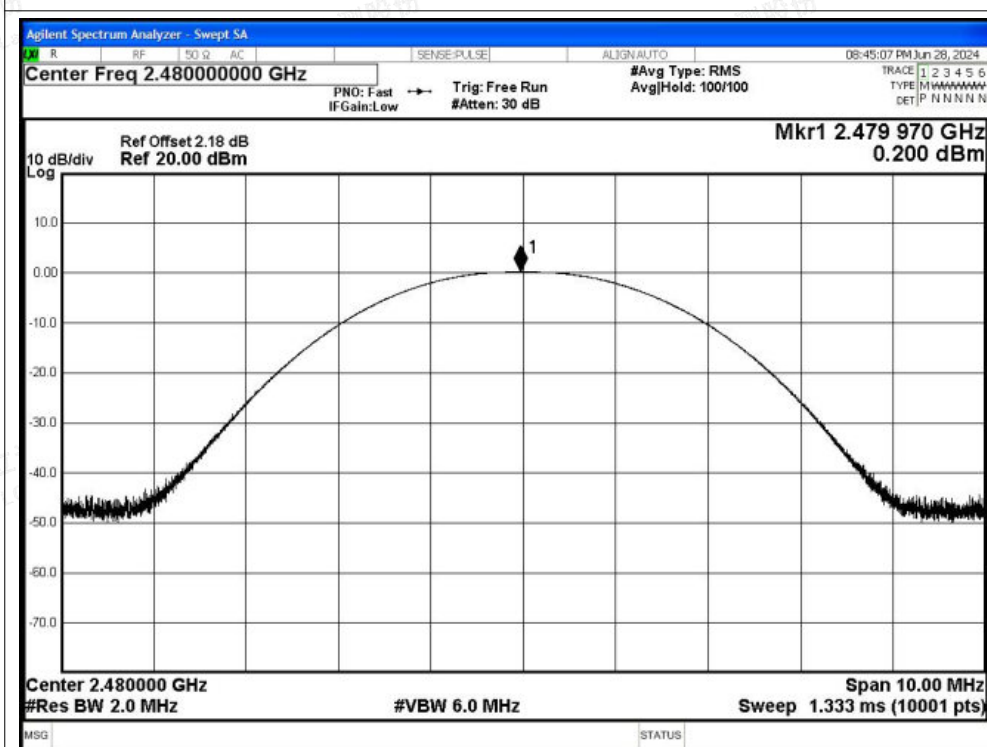
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

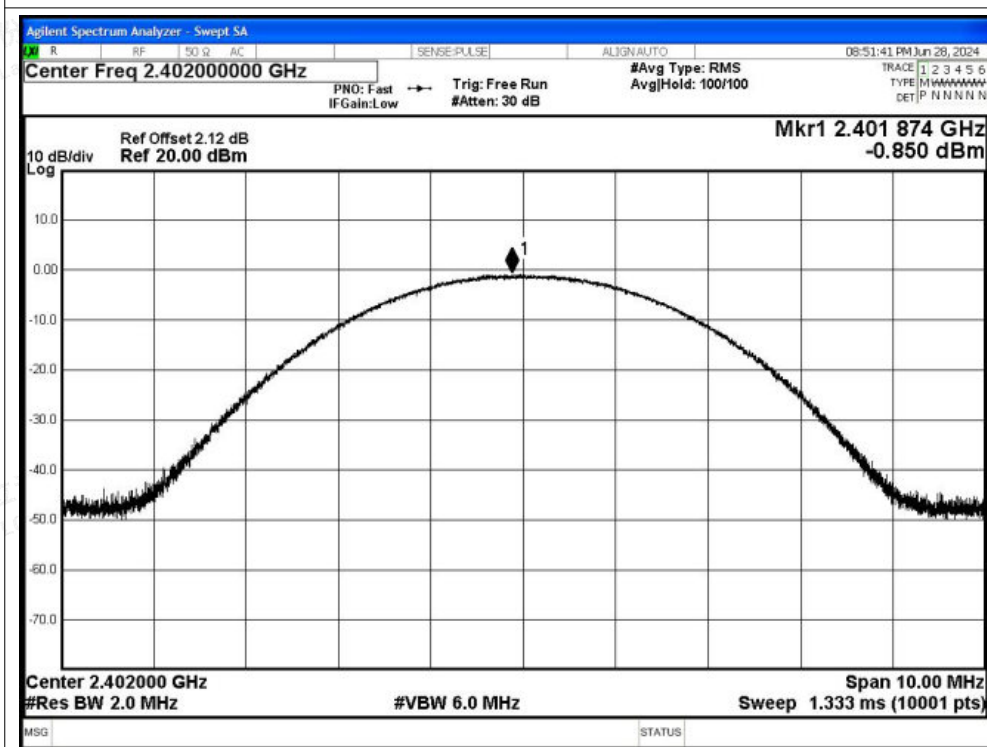
Scan code to check authenticity



Power NVNT 1-DH5 2480MHz Ant1

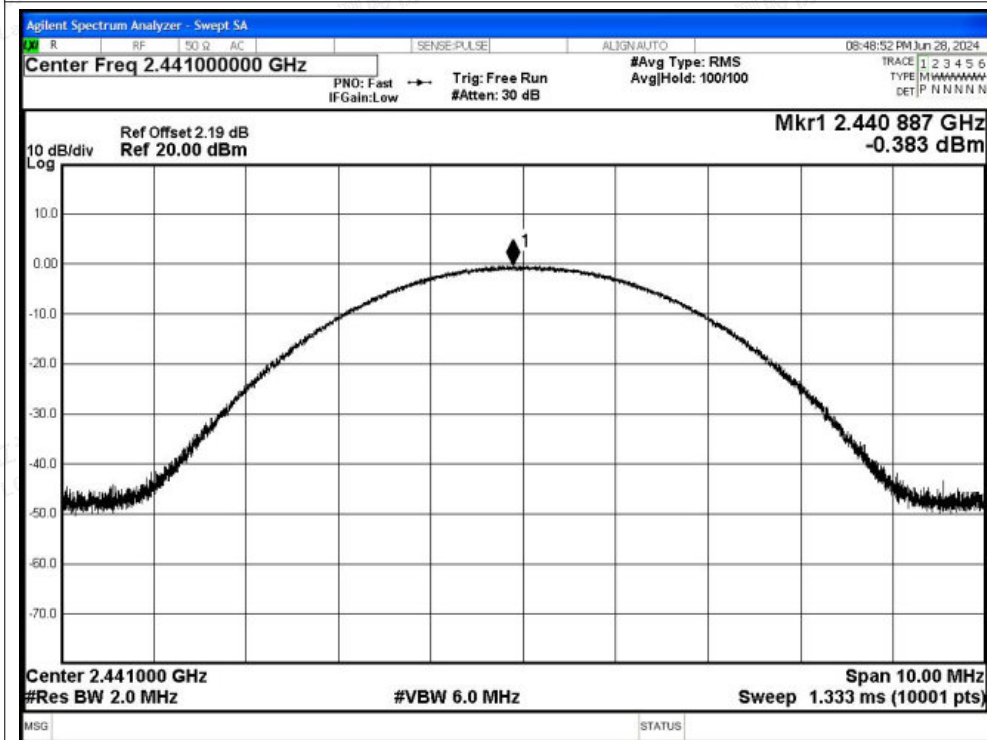


Power NVNT 2-DH5 2402MHz Ant1

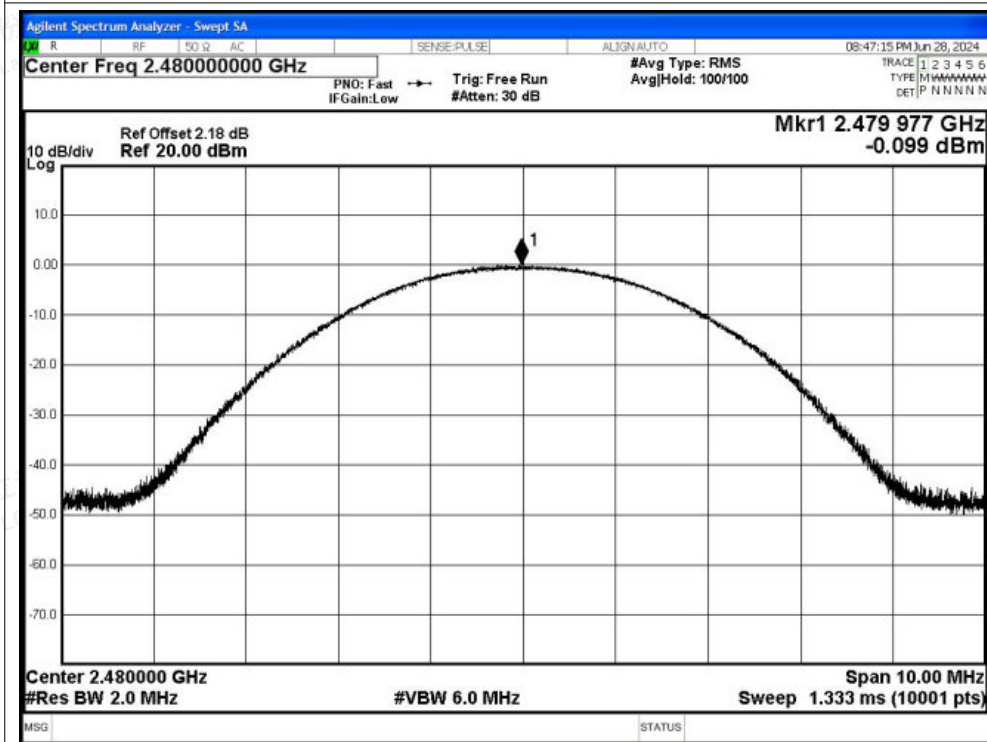




Power NVNT 2-DH5 2441MHz Ant1



Power NVNT 2-DH5 2480MHz Ant1



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A.3 Carrier Frequencies Separation

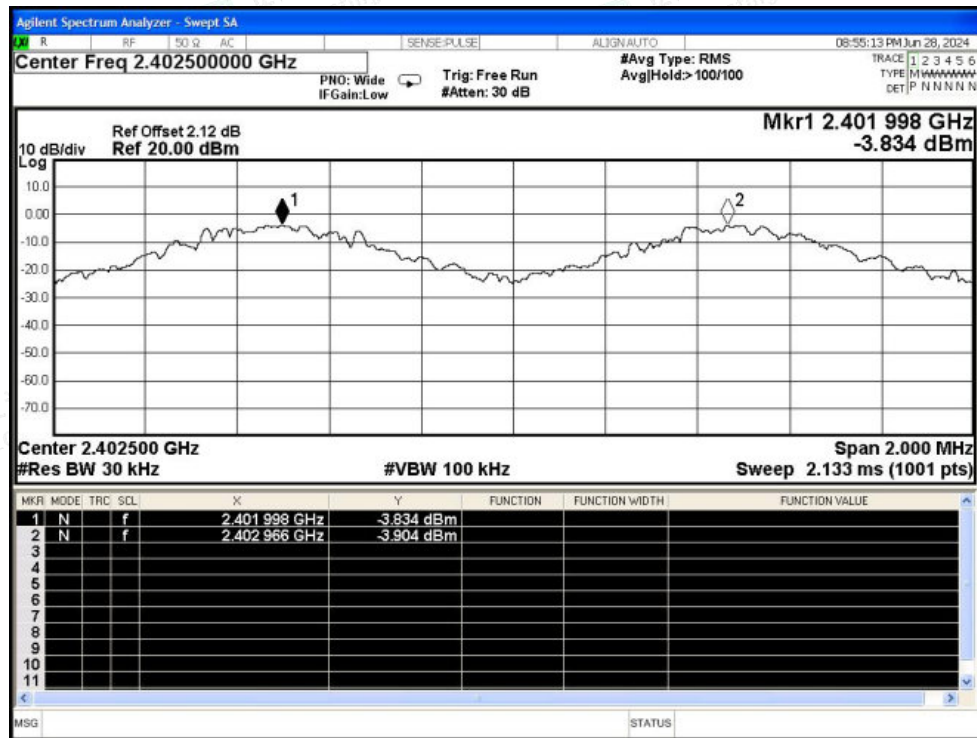
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.998	2402.966	0.968	0.683	Pass
NVNT	2-DH5	Ant1	2401.998	2403.152	1.154	0.872	Pass



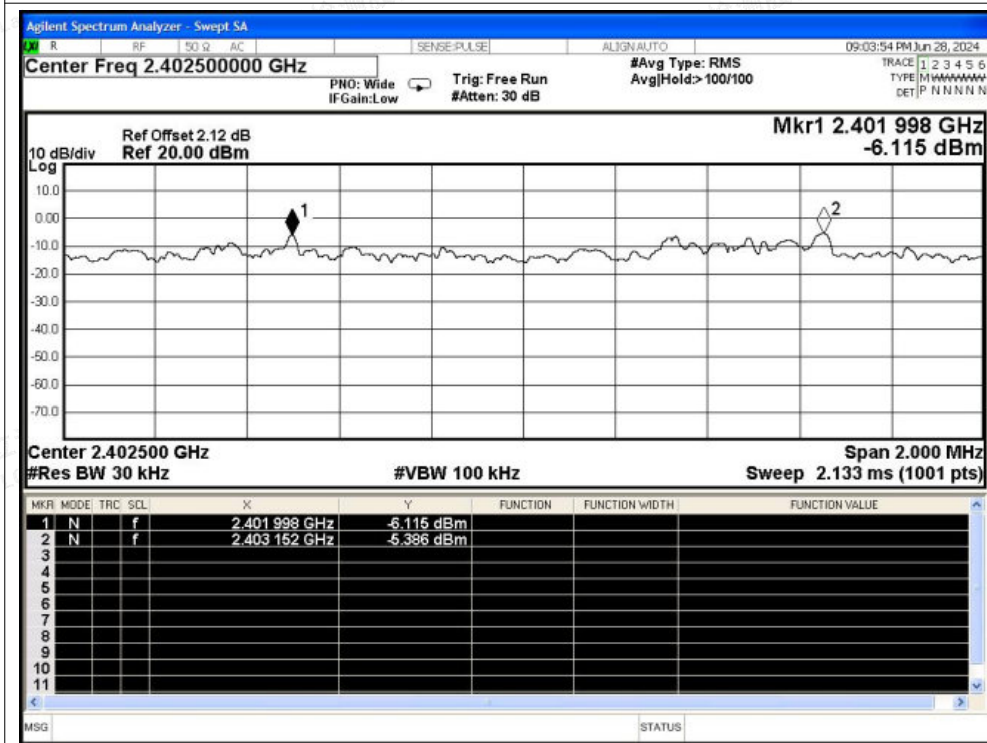


Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1





A.4 Dwell Time

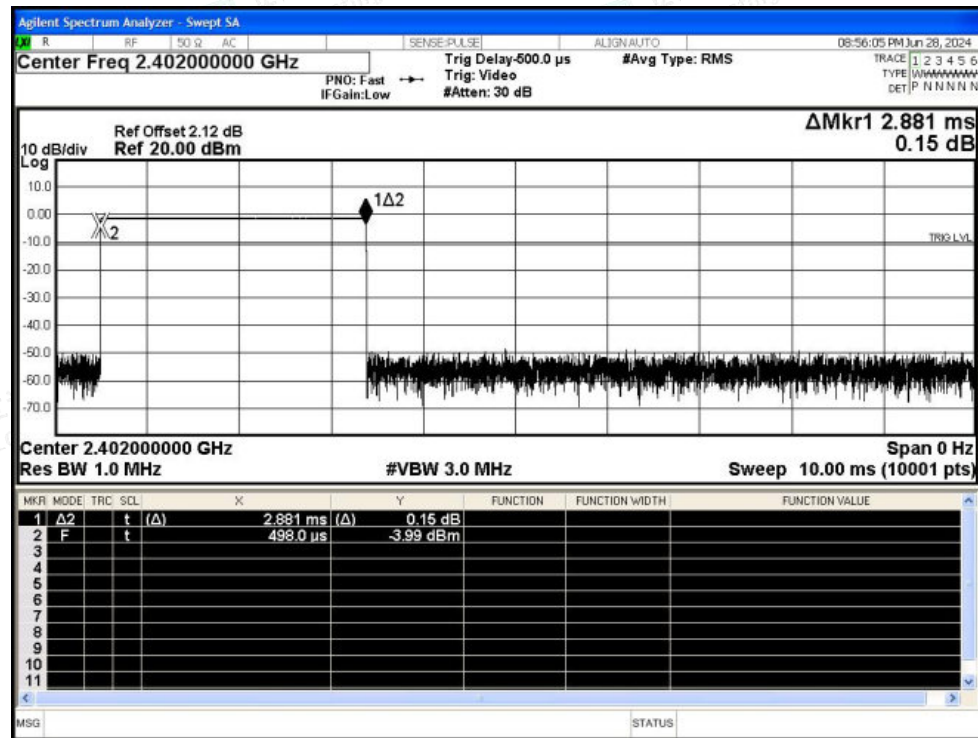
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.881	314.029	109	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.88	293.76	102	31600	400	Pass



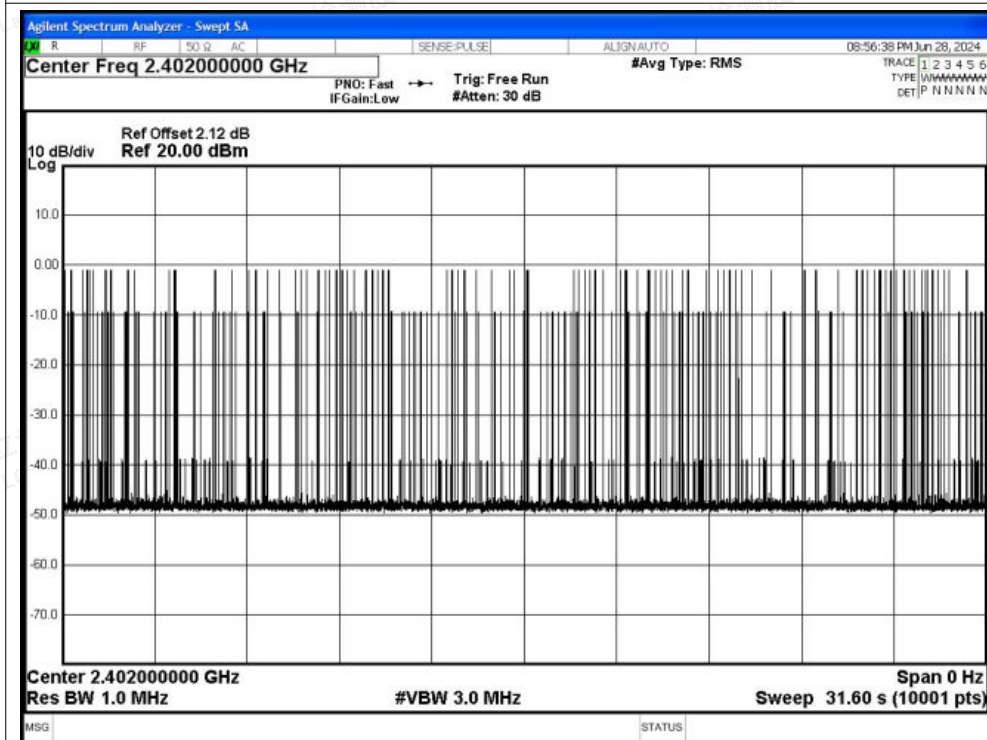


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



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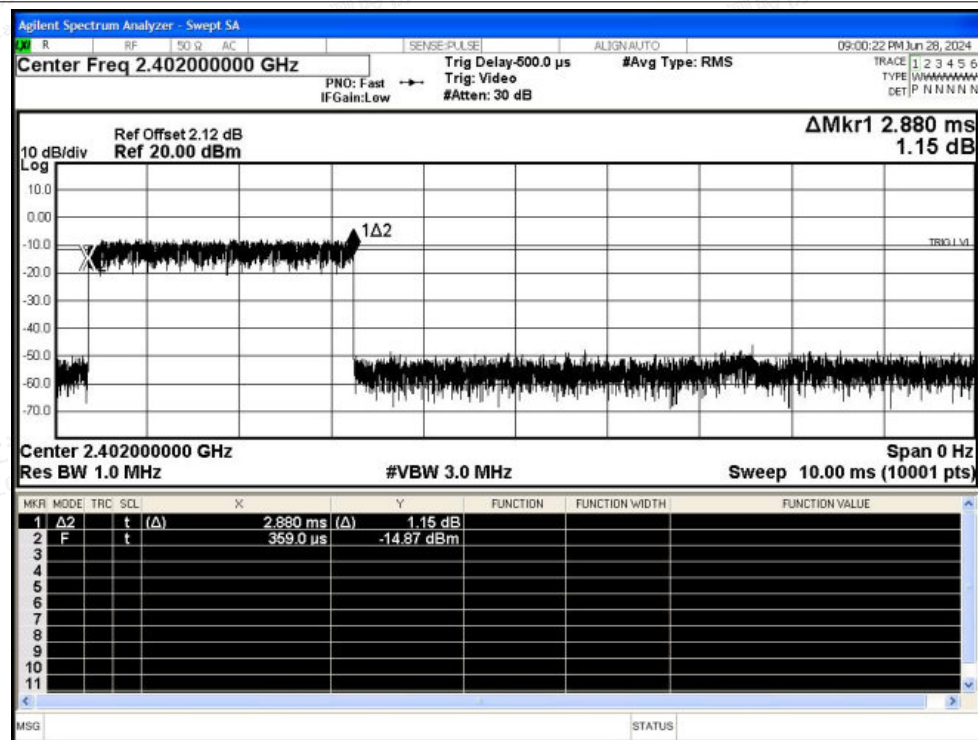
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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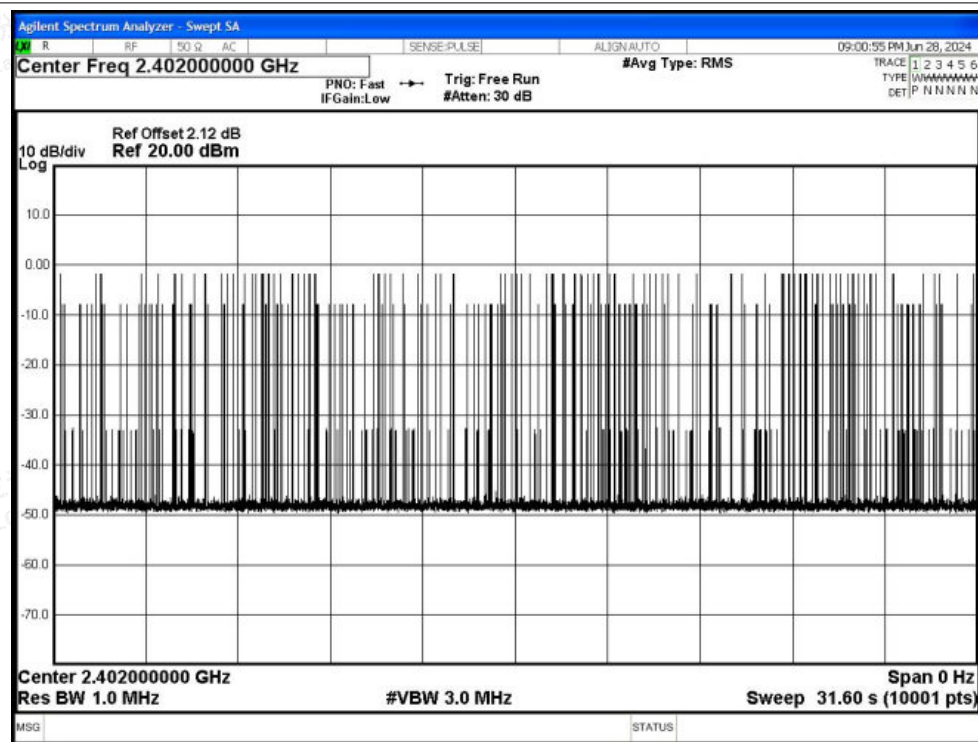
Scan code to check authenticity



Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



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A.5 Number of Hopping Channel

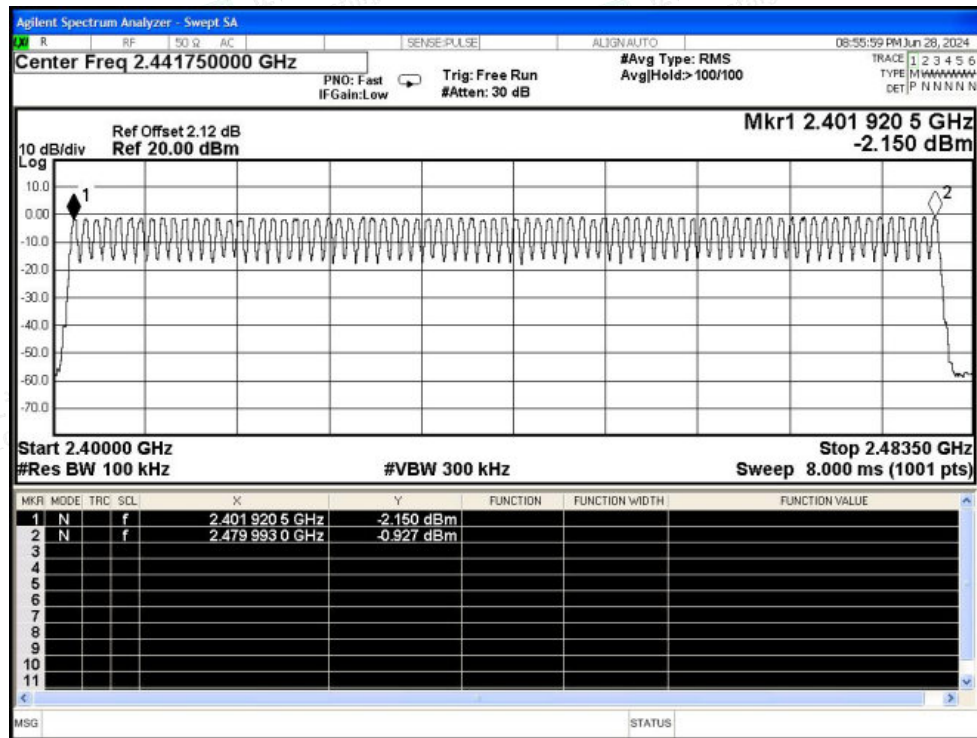
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass



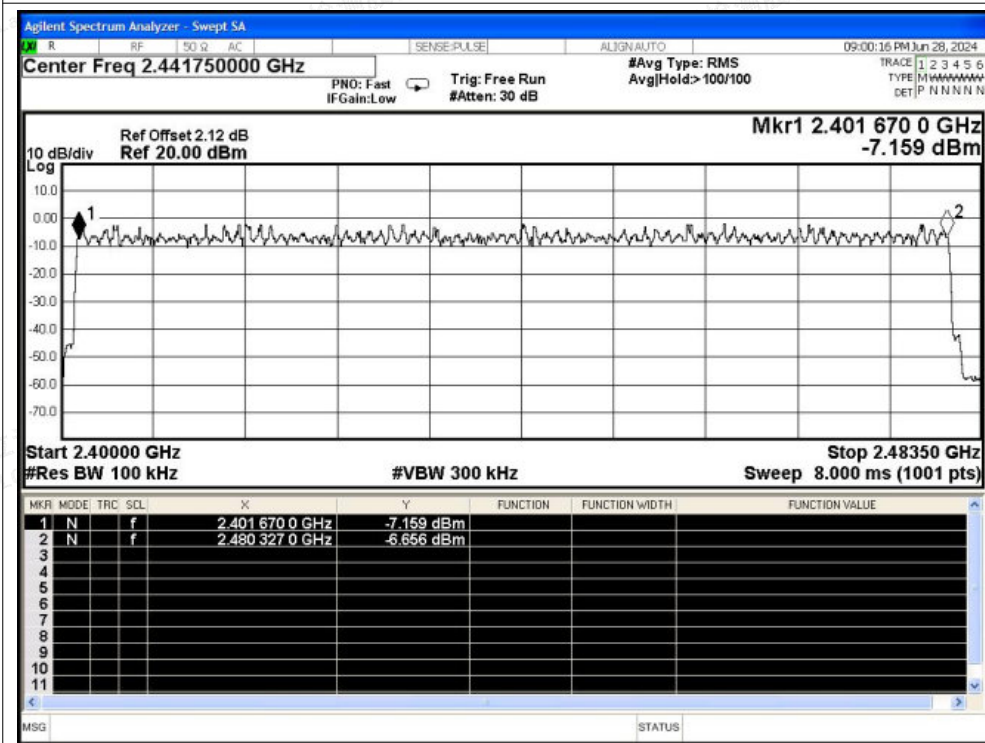


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1





A.6 Band Edge

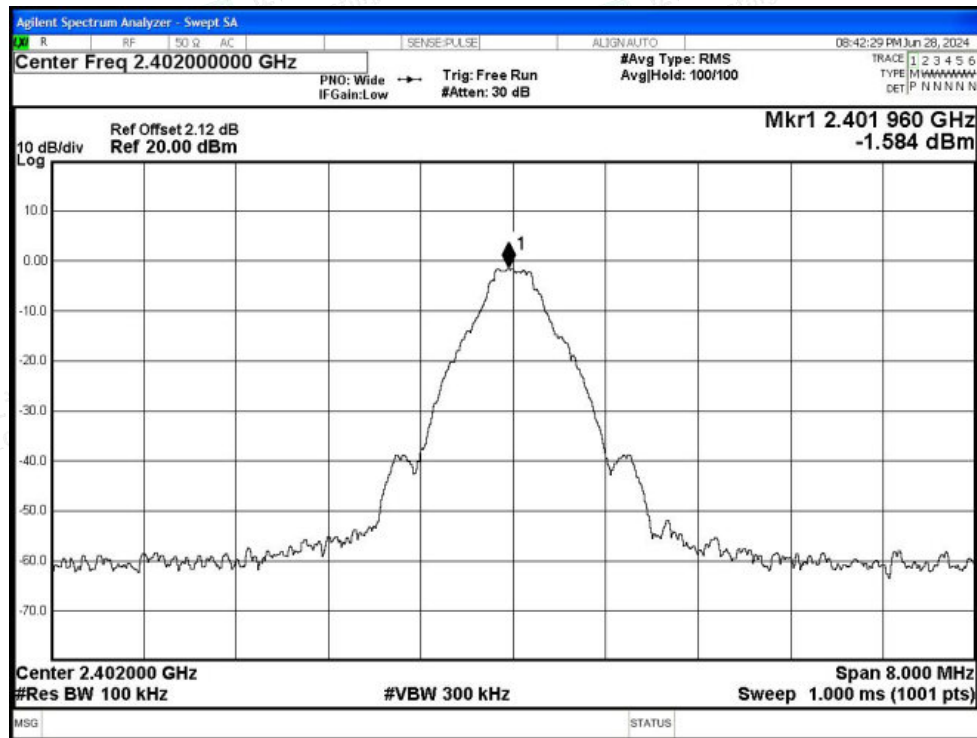
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-55.53	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-56.39	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-54.27	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-55.82	-20	Pass



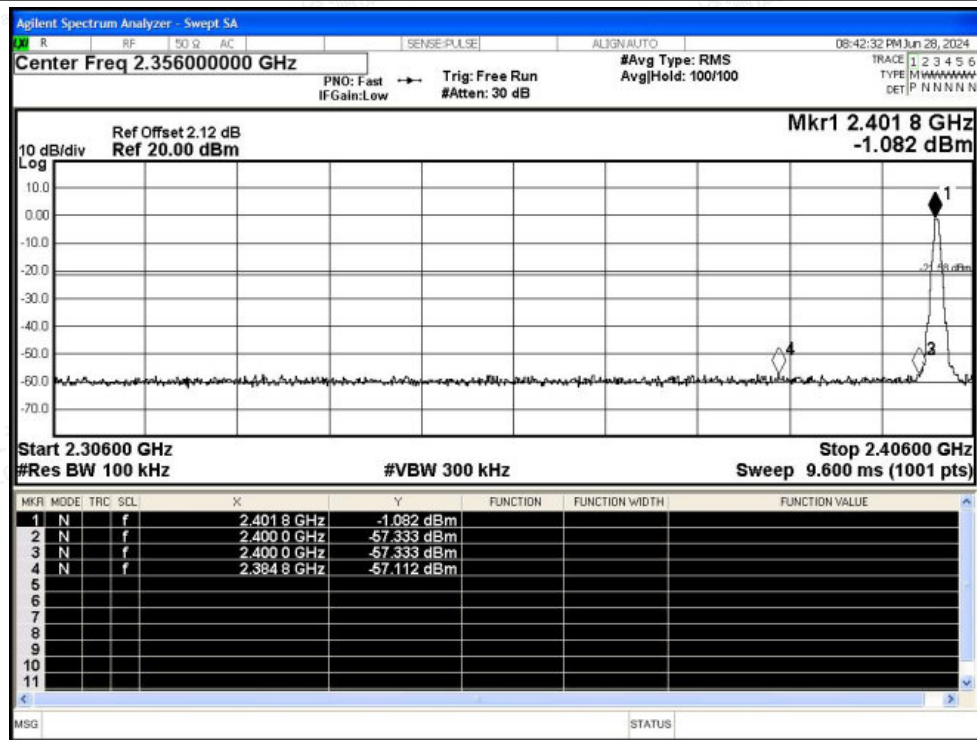


Test Graphs

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

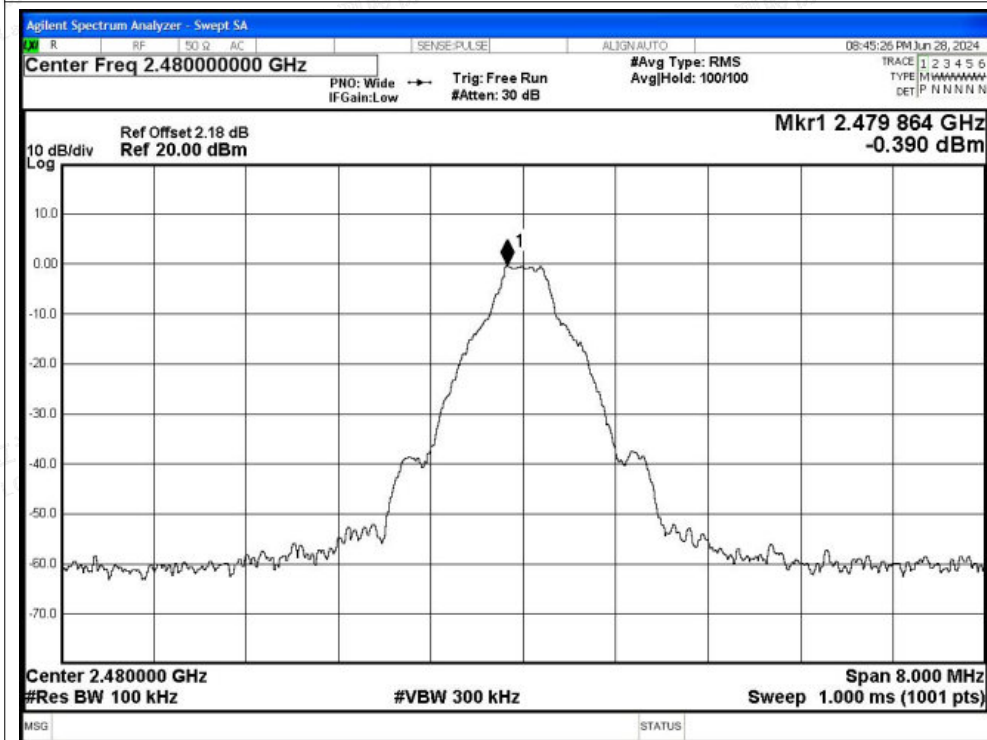


Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

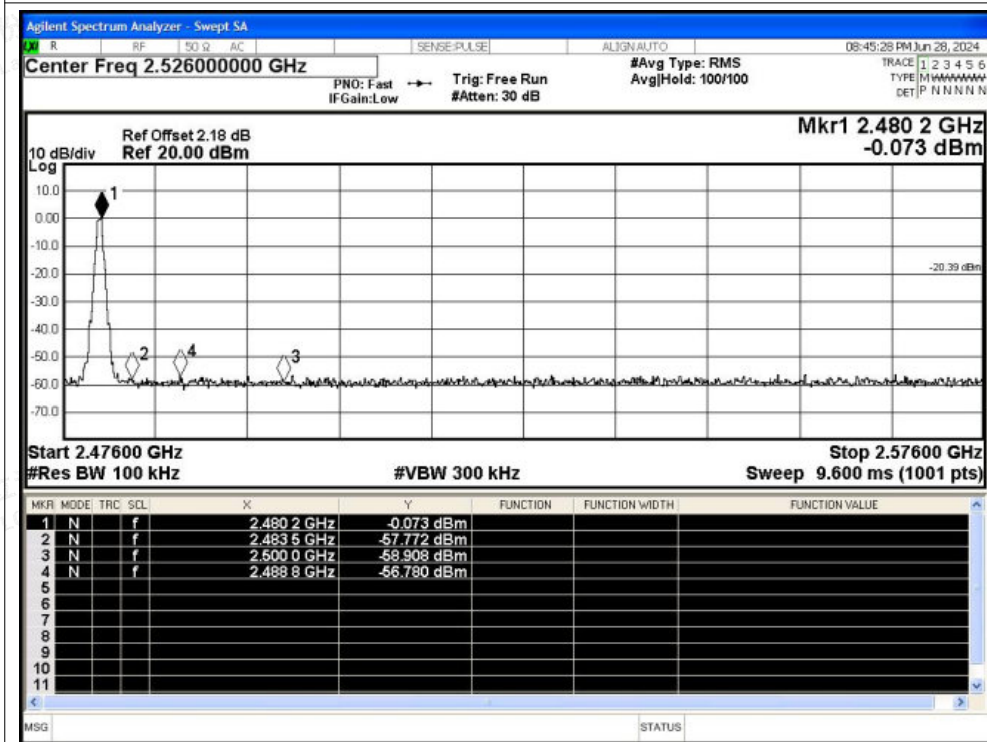




Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



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



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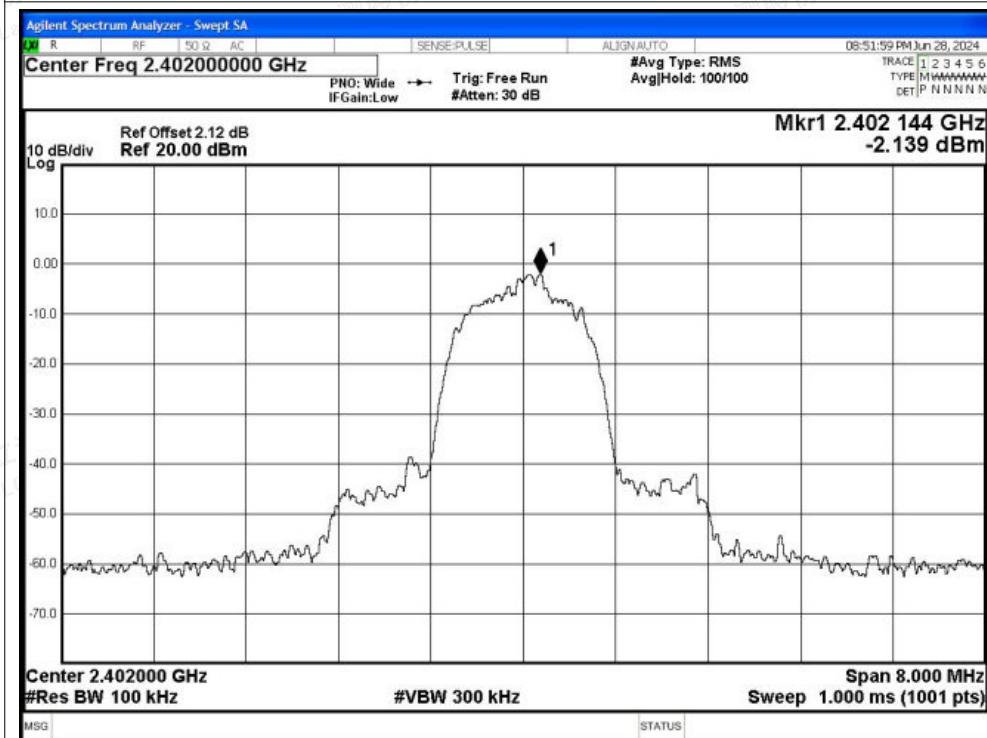
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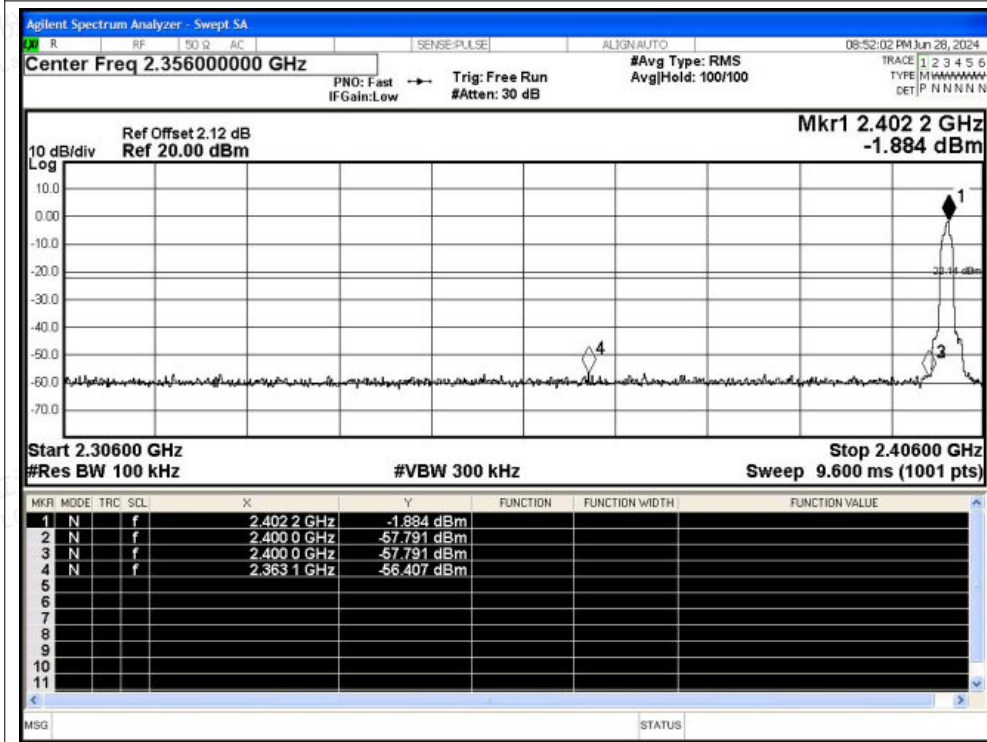
Scan code to check authenticity



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

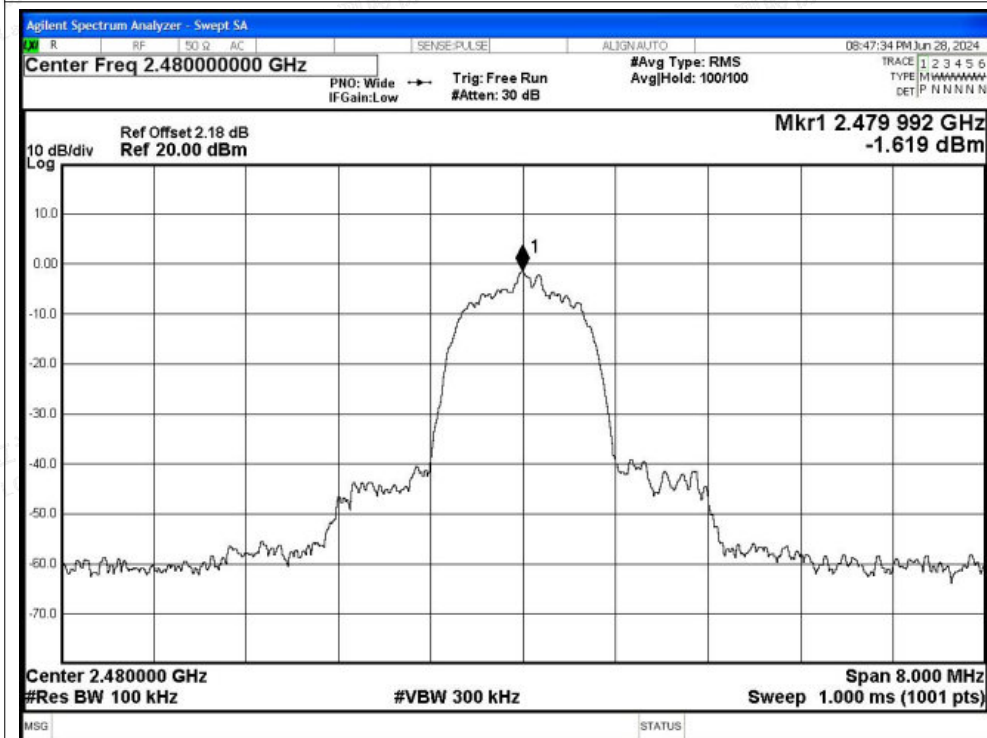


Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

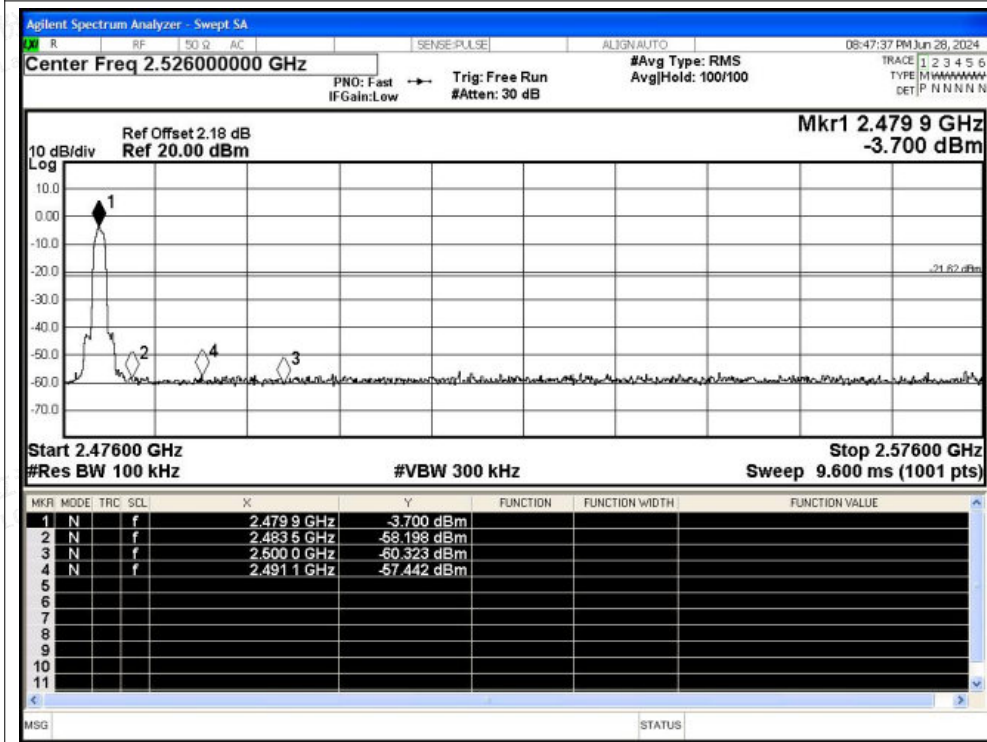




Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



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





(Hopping)

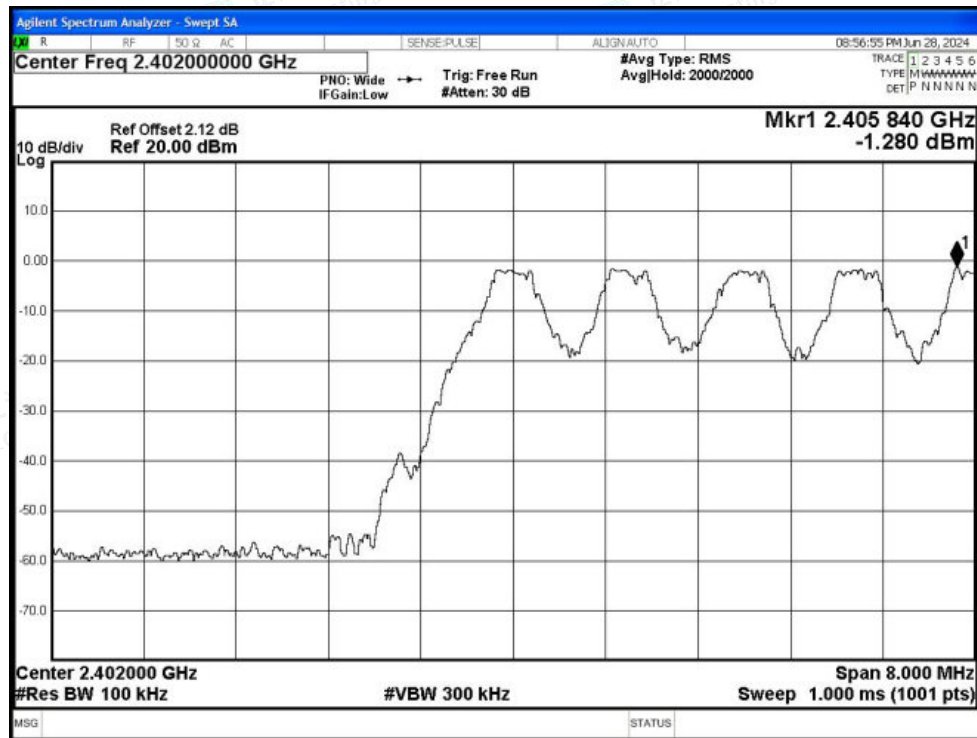
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-54.74	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-54.23	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-50.77	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-54.08	-20	Pass



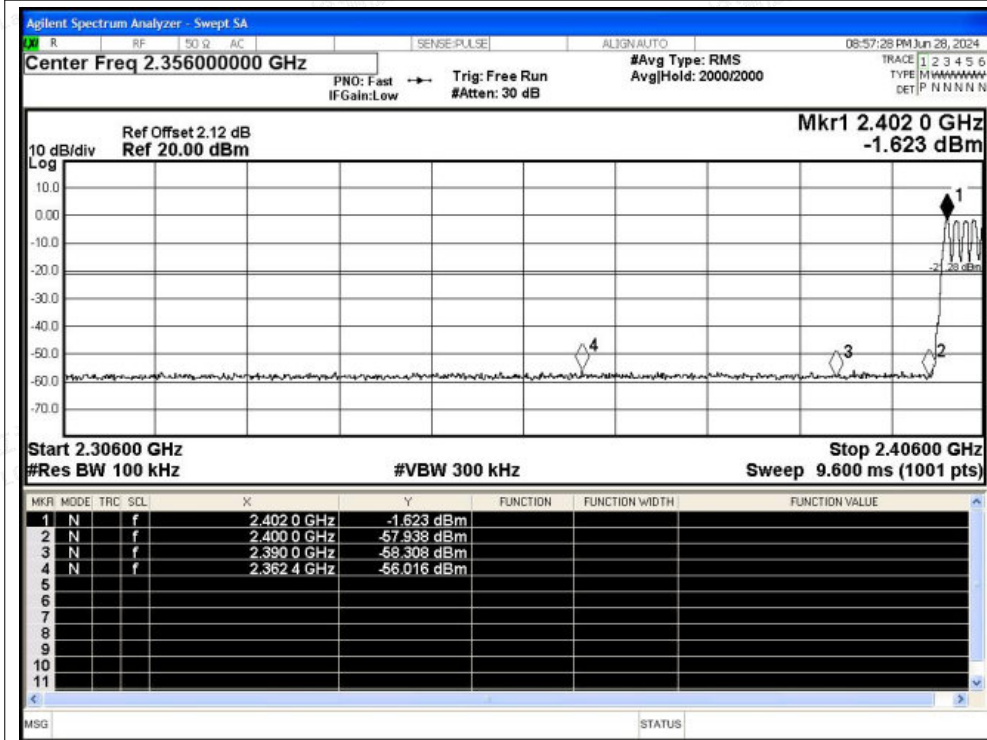


Test Graphs

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

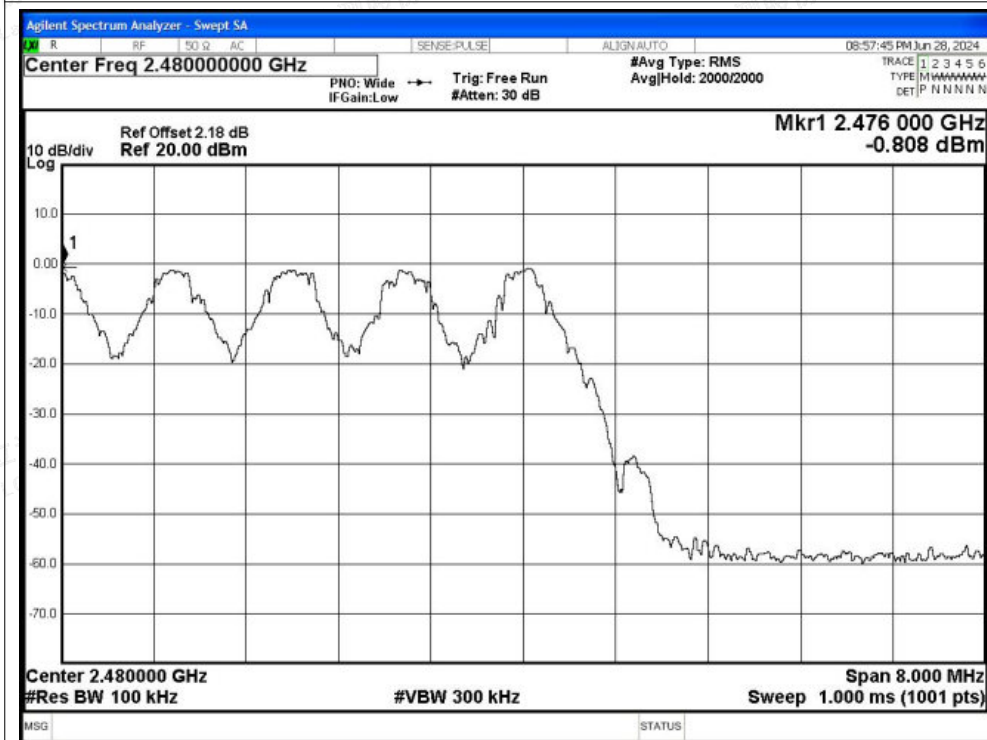


Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission

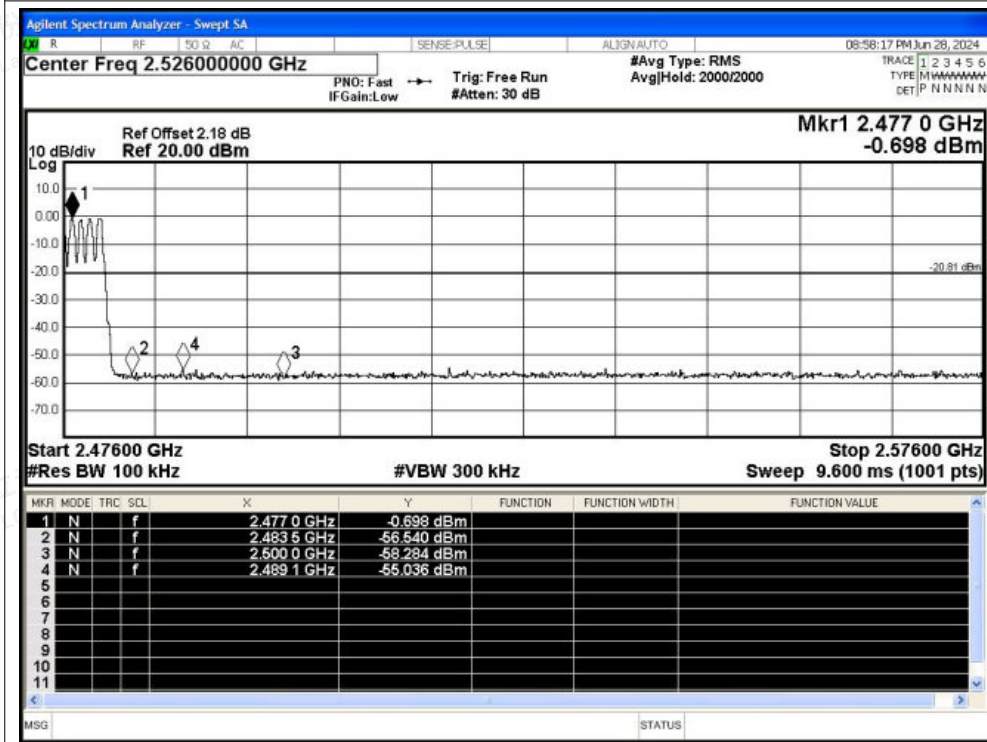




Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



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



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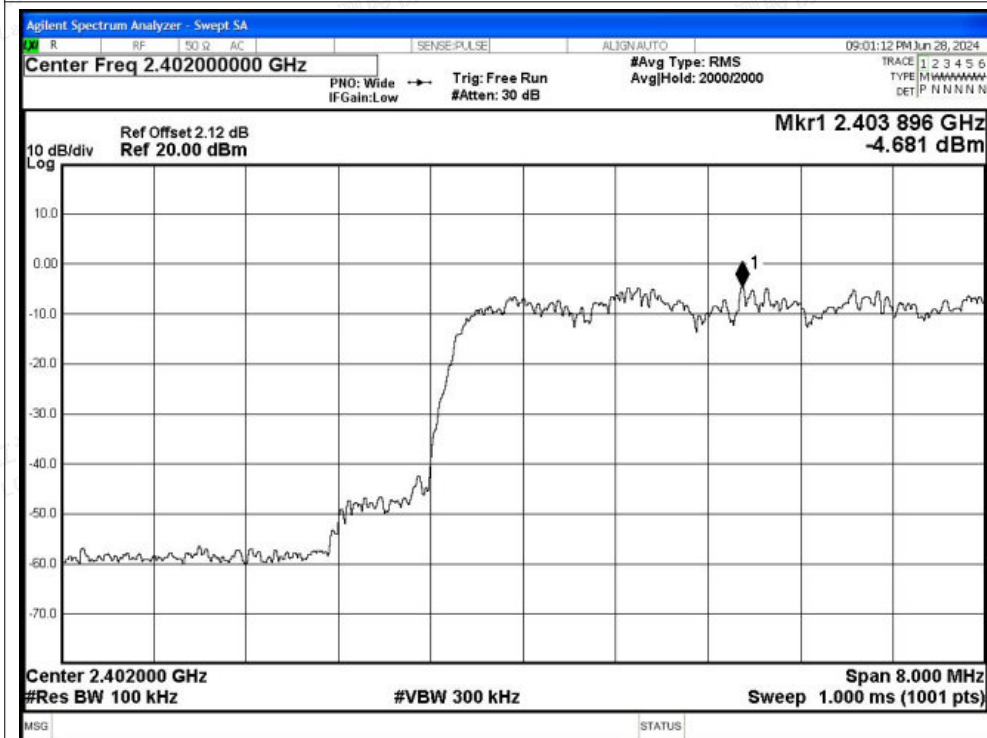
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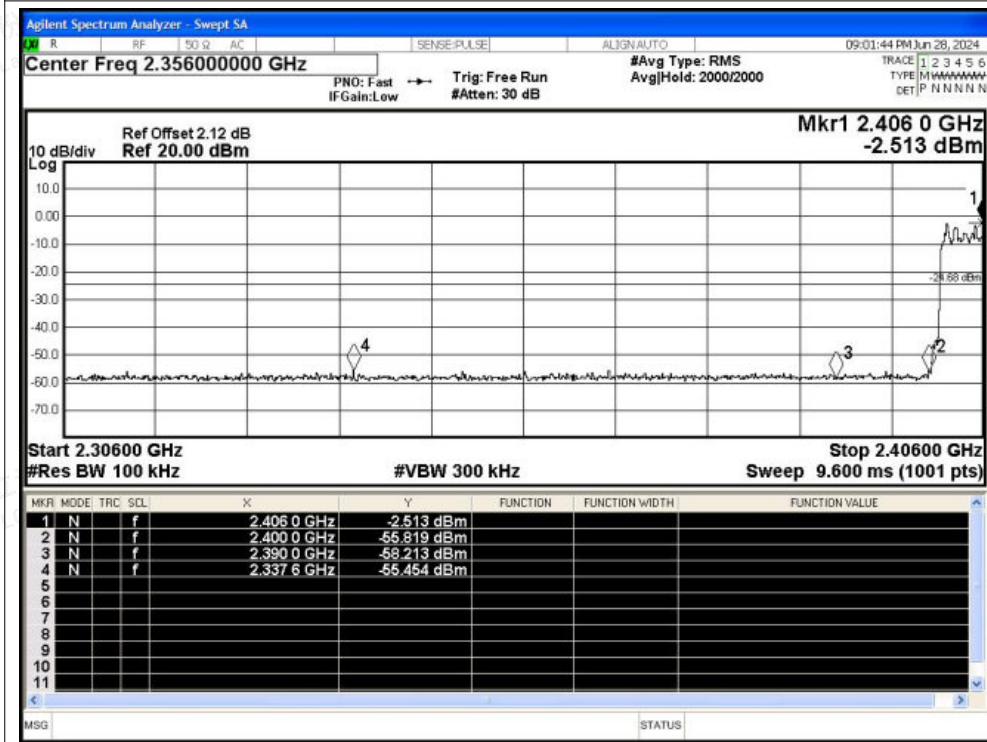
Scan code to check authenticity



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

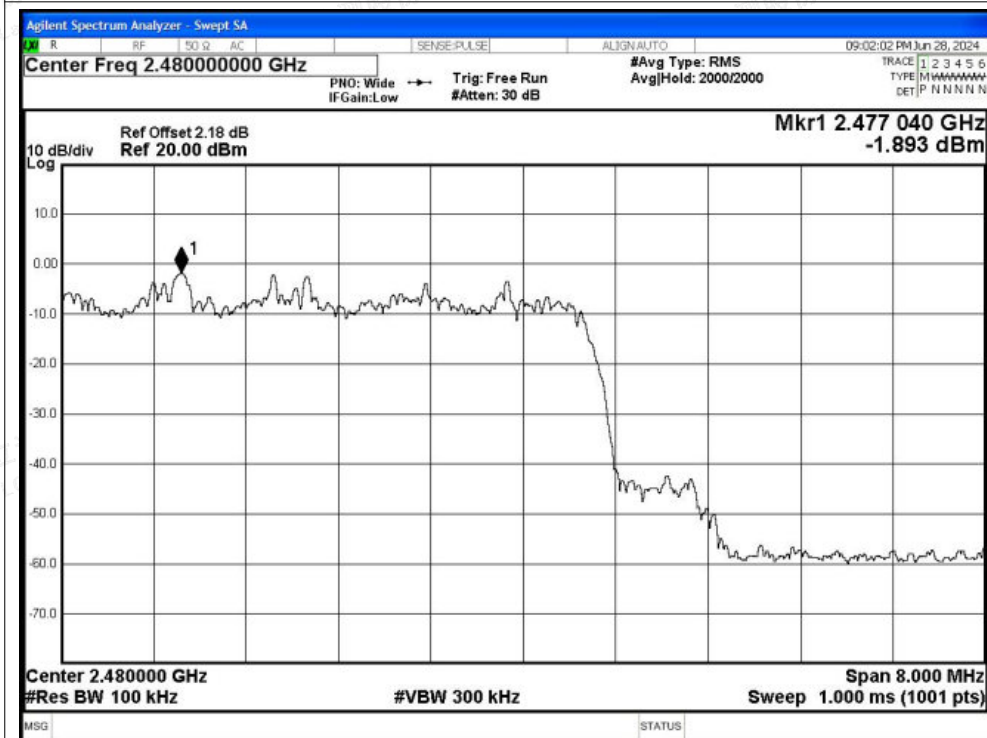


Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission

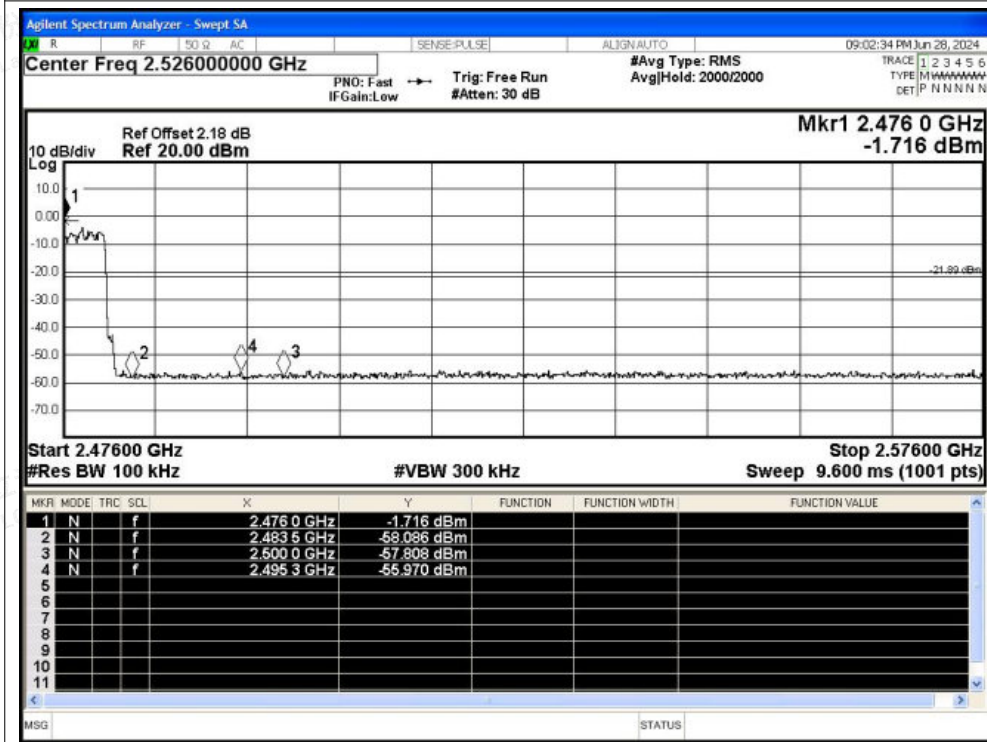




Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



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



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A.7 Conducted RF Spurious Emission

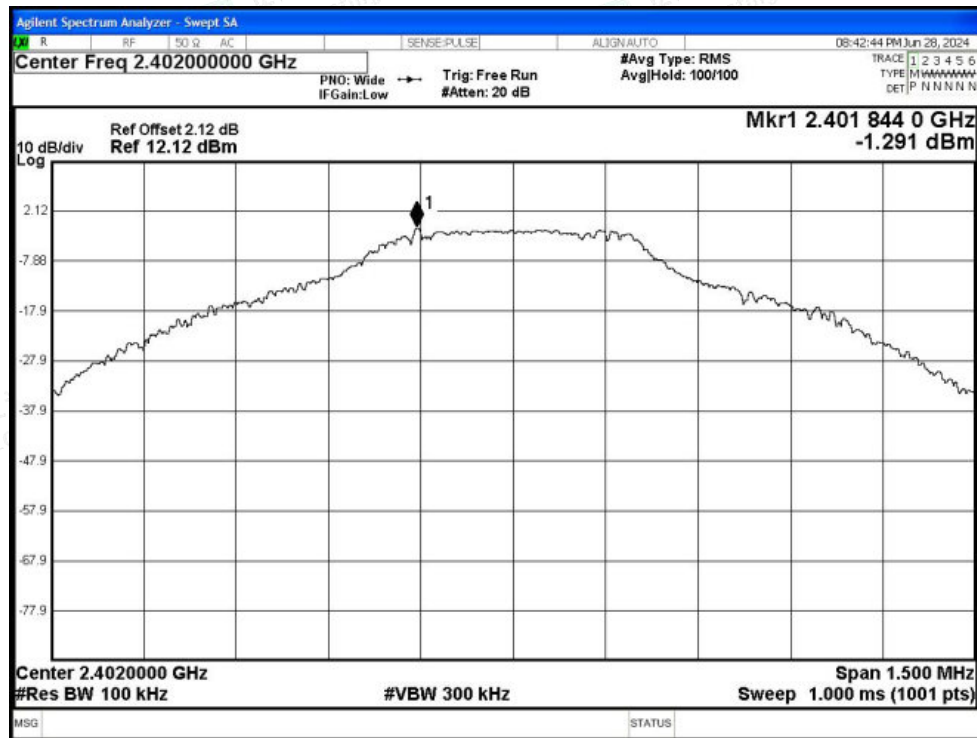
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-54.64	-20	Pass
NVNT	1-DH5	2441	Ant1	-53.76	-20	Pass
NVNT	1-DH5	2480	Ant1	-54.73	-20	Pass
NVNT	2-DH5	2402	Ant1	-53.01	-20	Pass
NVNT	2-DH5	2441	Ant1	-53.6	-20	Pass
NVNT	2-DH5	2480	Ant1	-54.03	-20	Pass



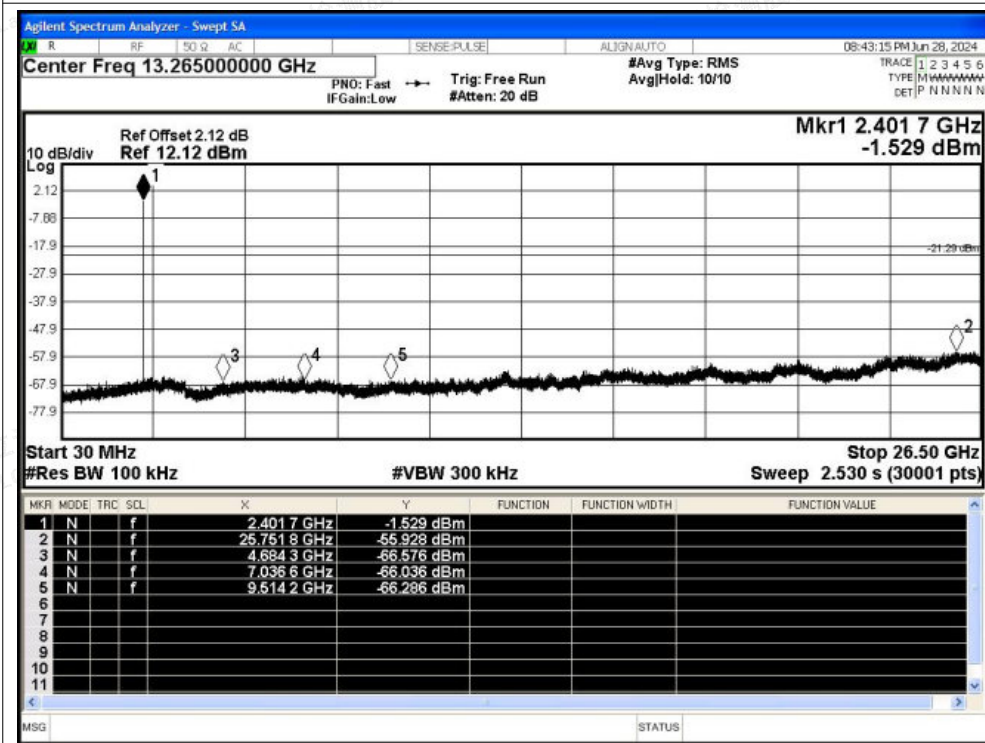


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



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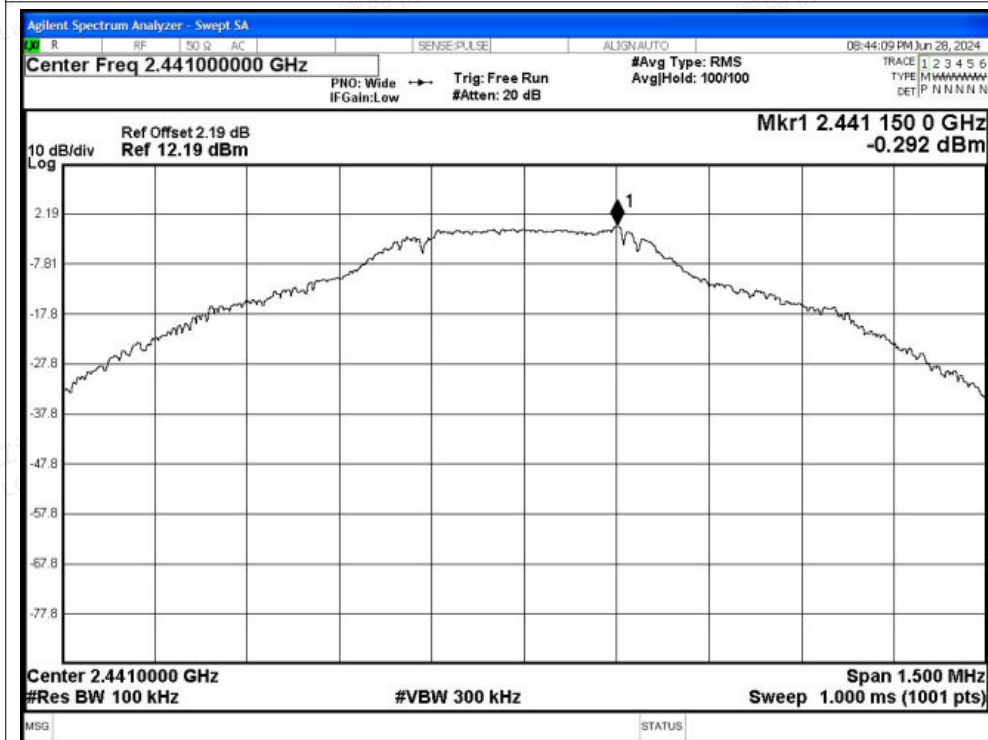
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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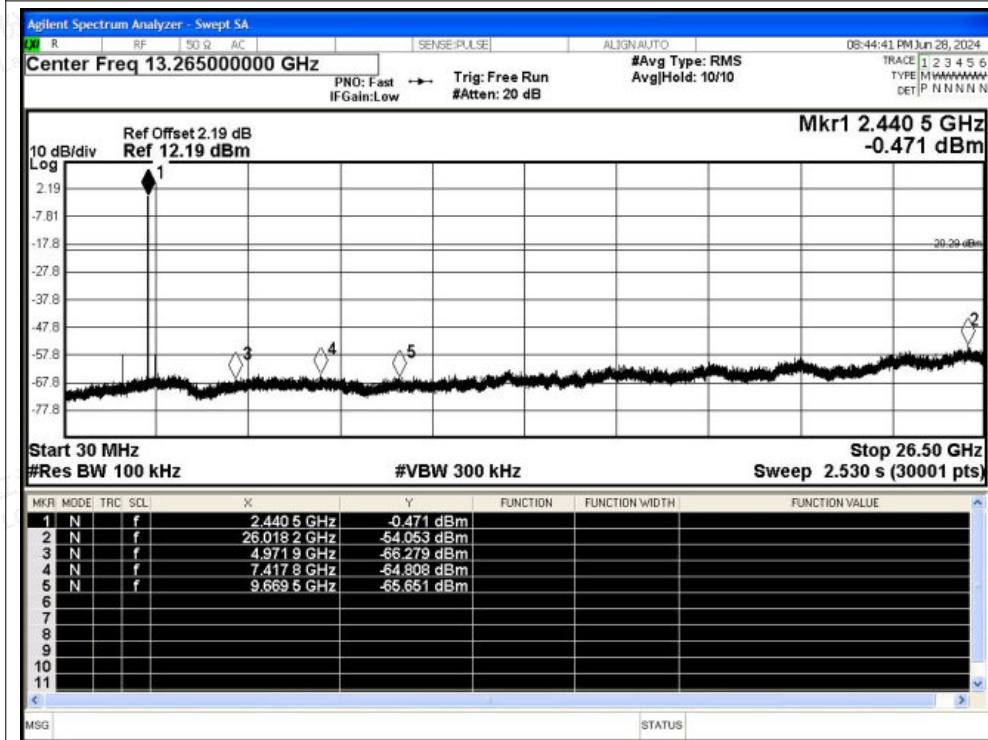
Scan code to check authenticity



Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



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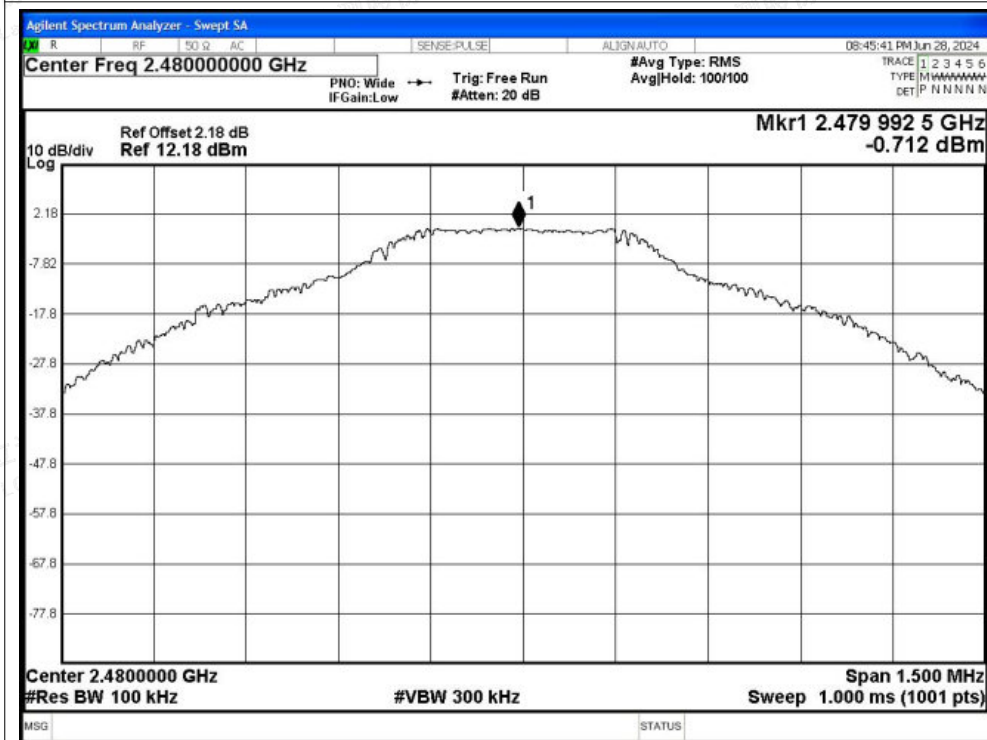
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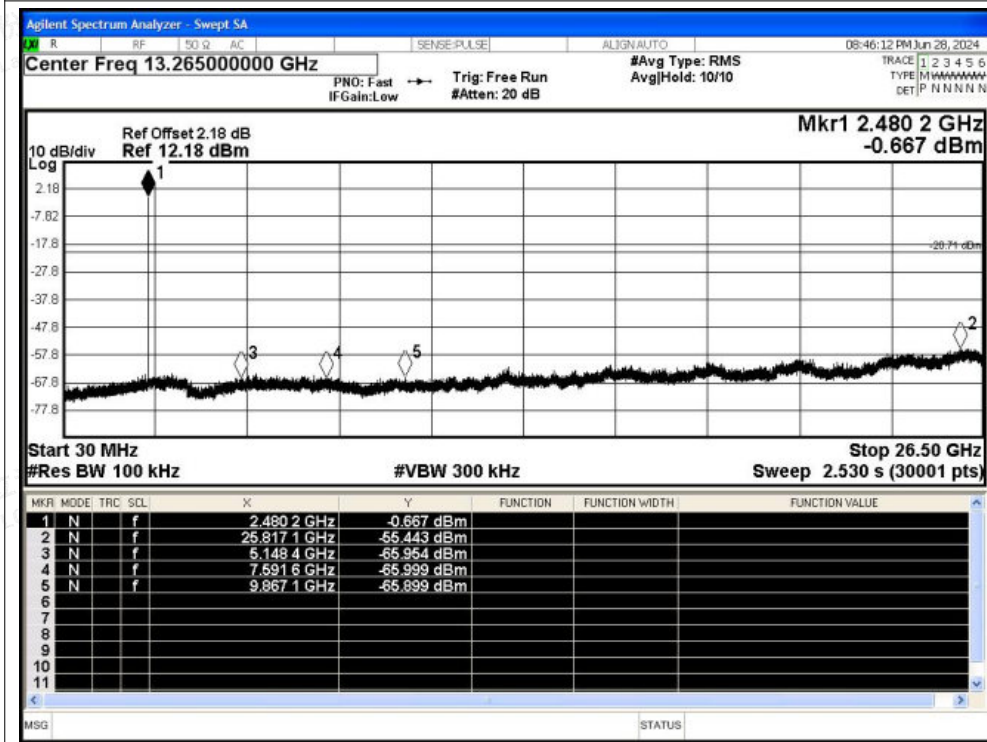
Scan code to check authenticity



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



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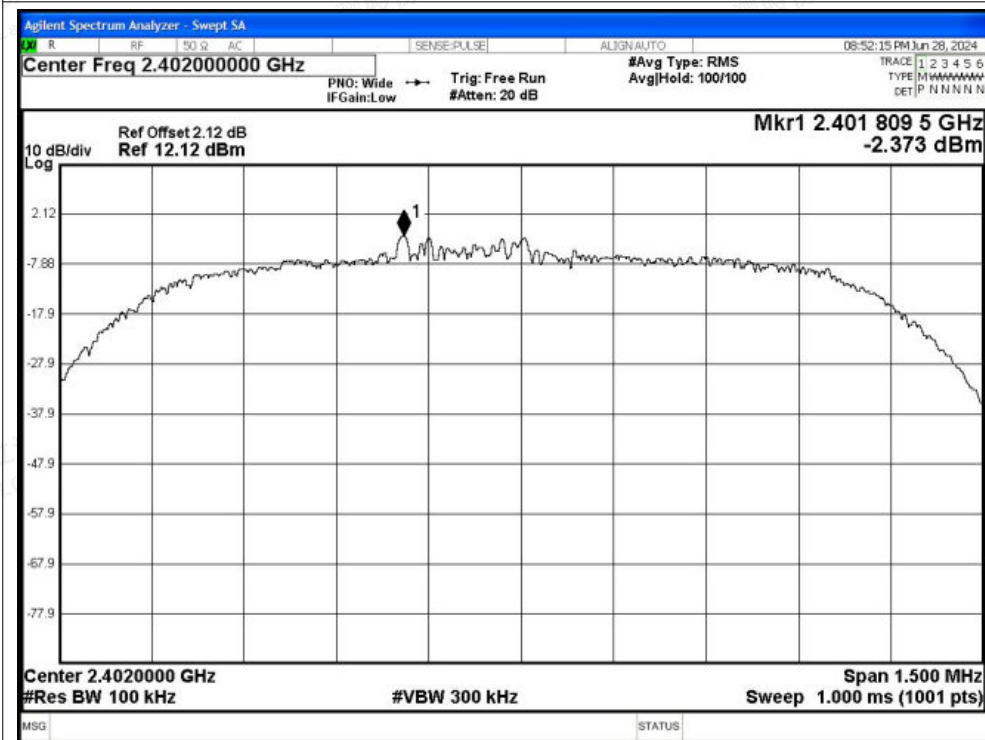
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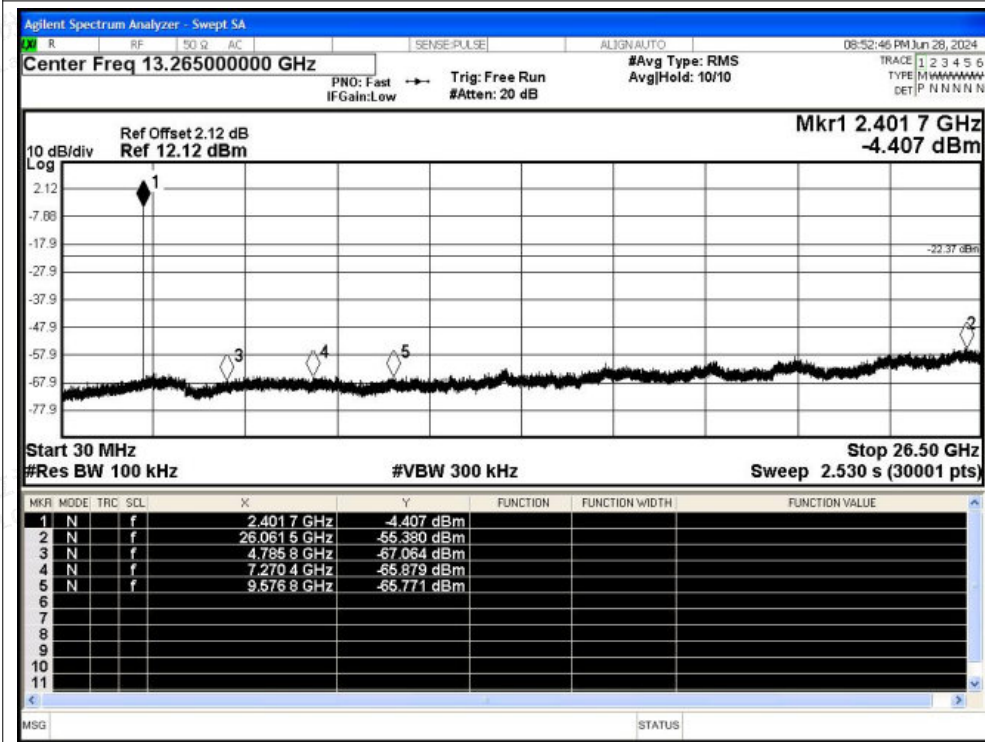
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Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



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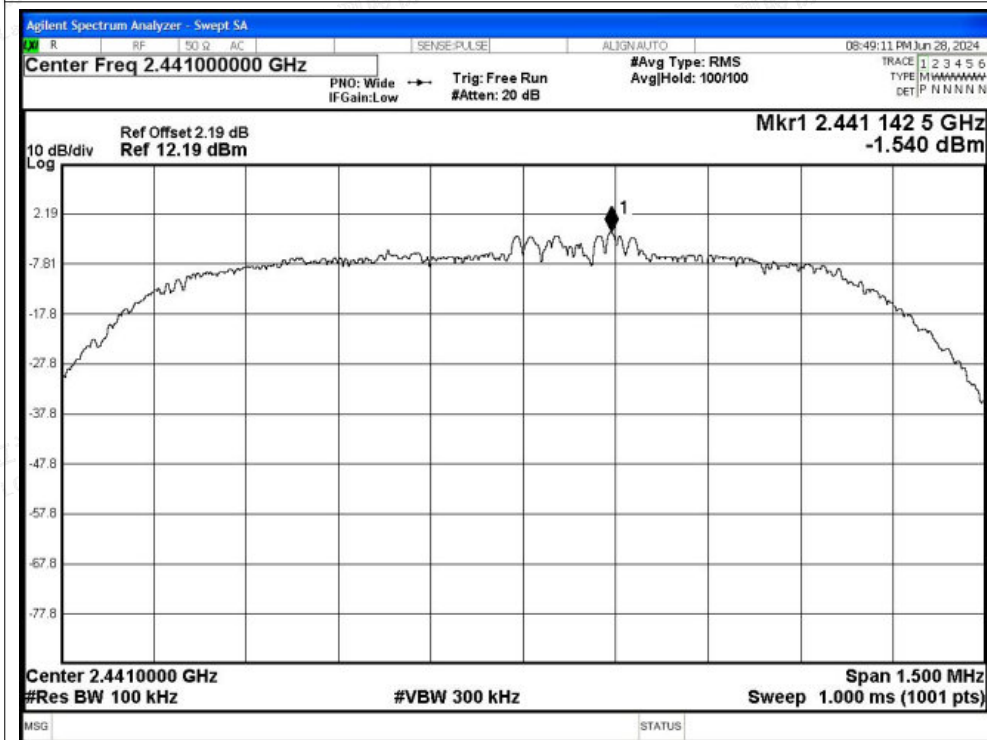
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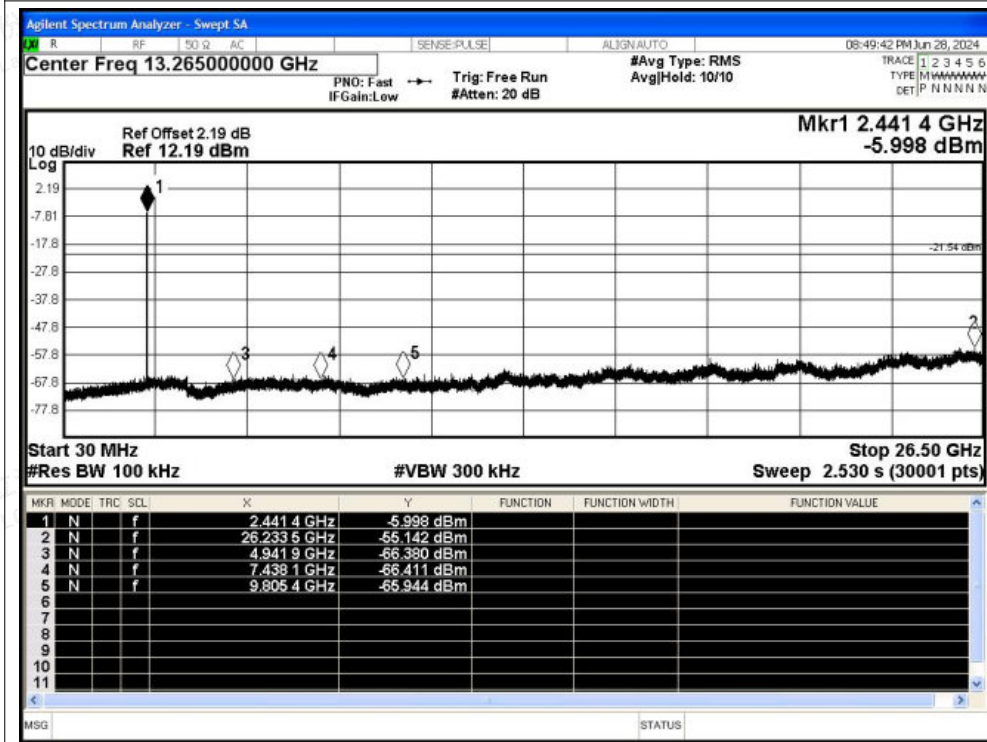
Scan code to check authenticity



Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

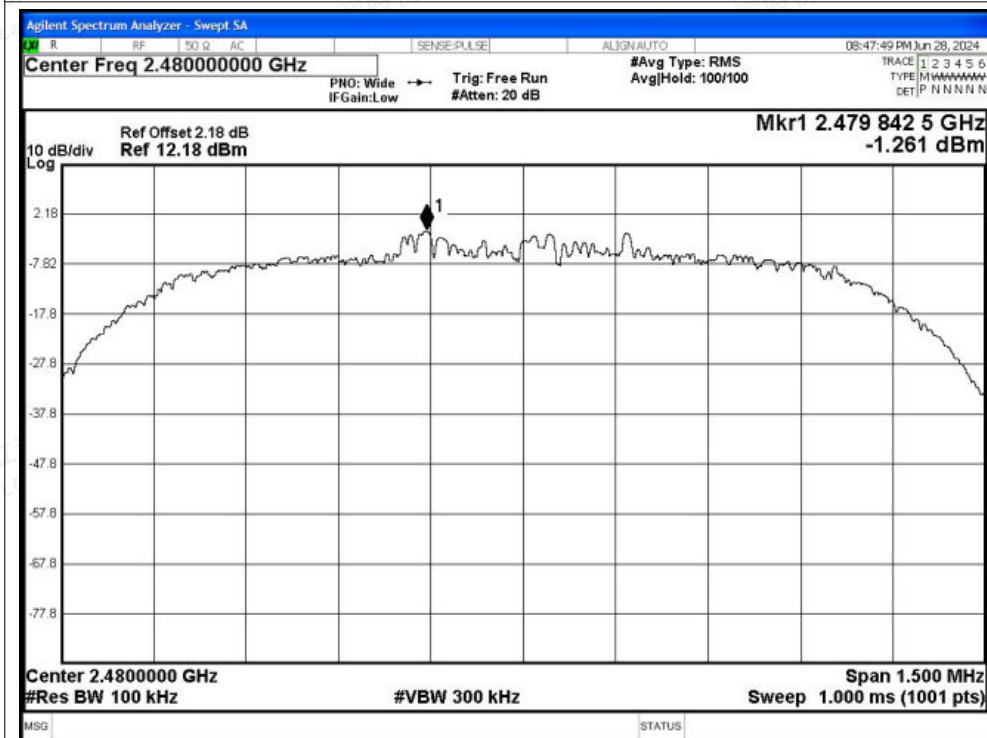
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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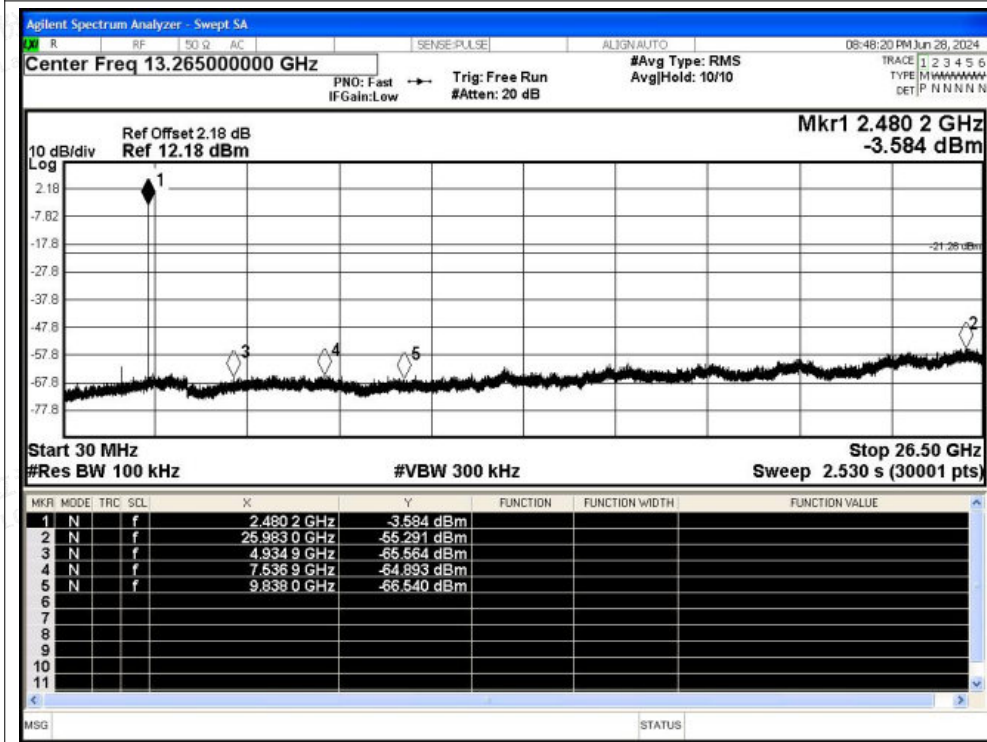
Scan code to check authenticity



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



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A.8 Duty Cycle

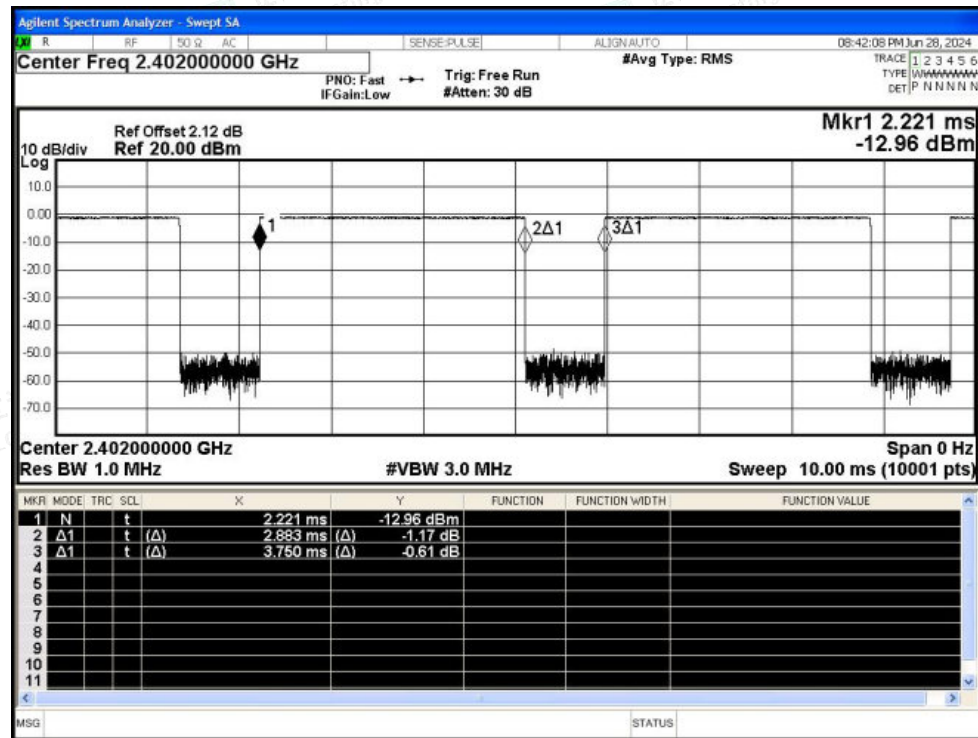
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	76.88	1.14	0.35
NVNT	1-DH5	2441	Ant1	76.88	1.14	0.35
NVNT	1-DH5	2480	Ant1	76.88	1.14	0.35
NVNT	2-DH5	2402	Ant1	76.96	1.14	0.35
NVNT	2-DH5	2441	Ant1	76.96	1.14	0.35
NVNT	2-DH5	2480	Ant1	76.96	1.14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



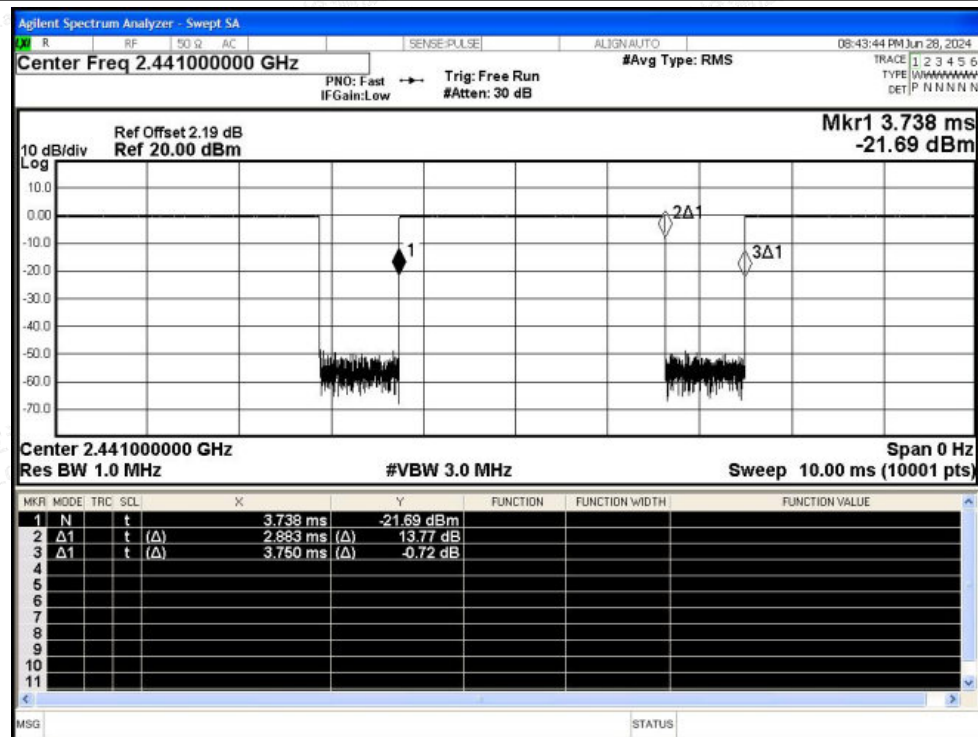


Test Graphs

Duty Cycle NVNT 1-DH5 2402MHz Ant1



Duty Cycle NVNT 1-DH5 2441MHz Ant1



Shenzhen LCS Compliance Testing Laboratory Ltd.

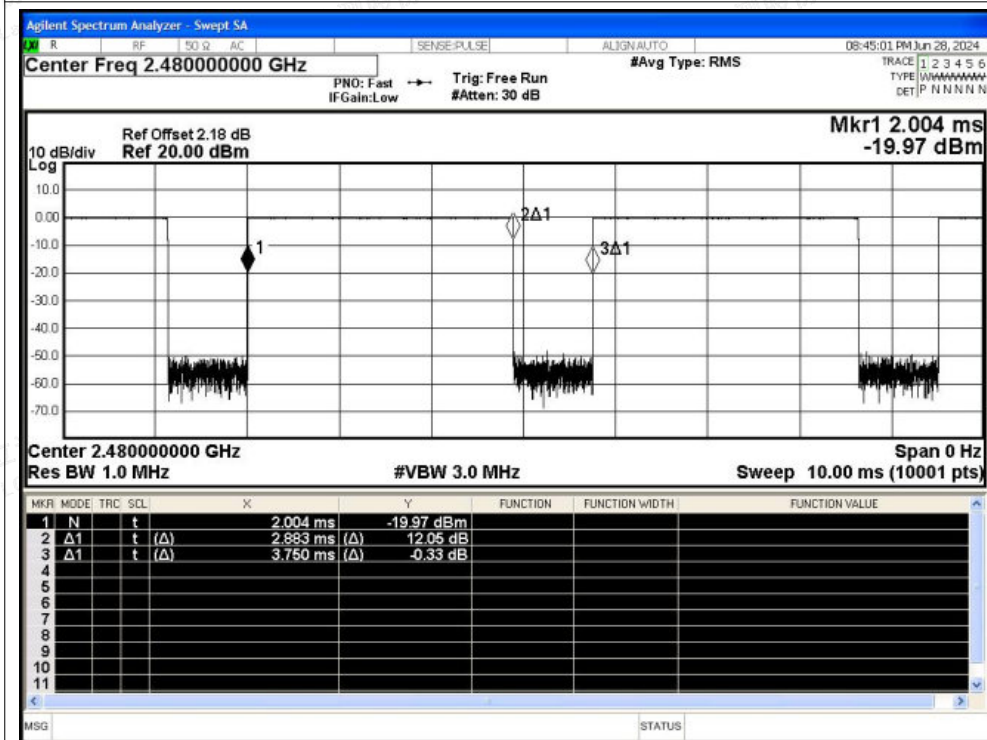
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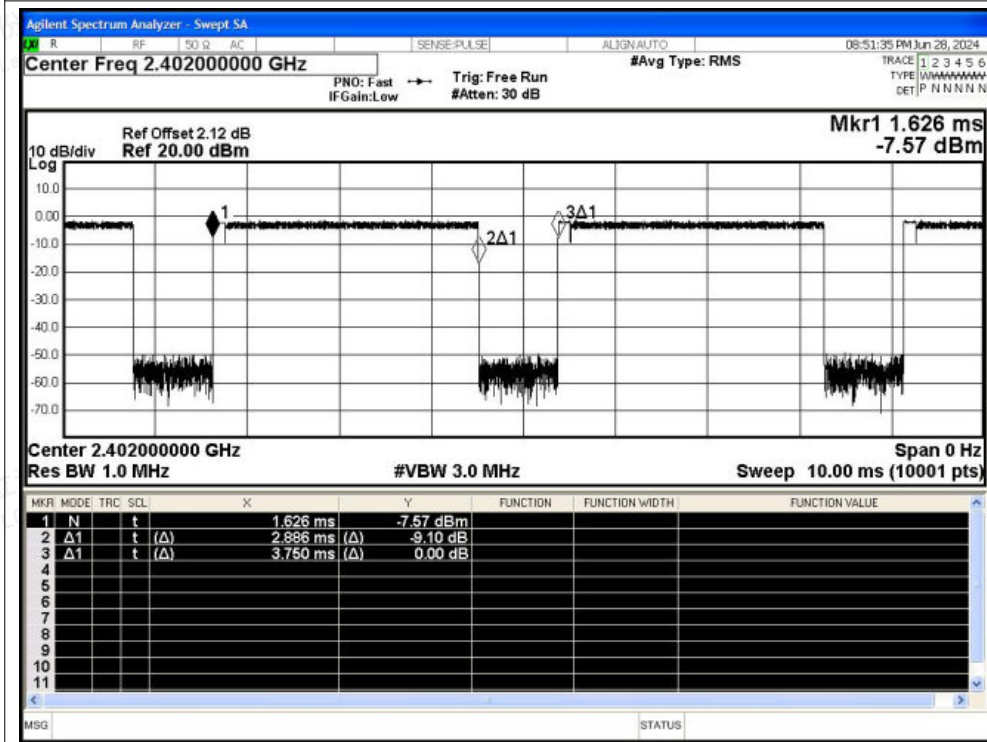
Scan code to check authenticity



Duty Cycle NVNT 1-DH5 2480MHz Ant1



Duty Cycle NVNT 2-DH5 2402MHz Ant1



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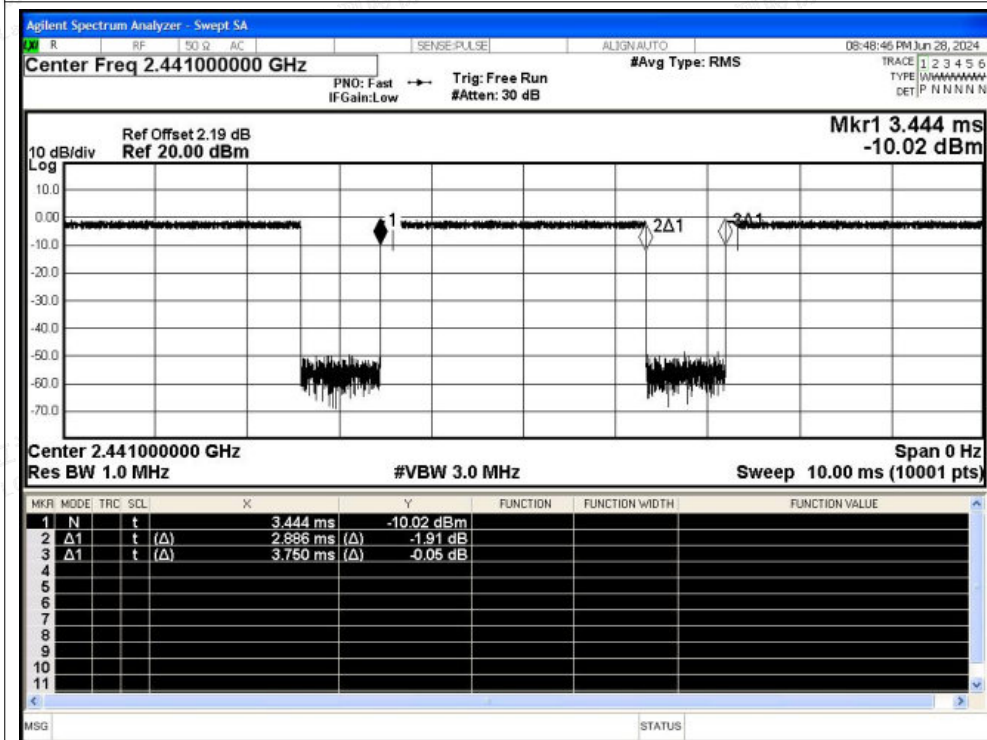
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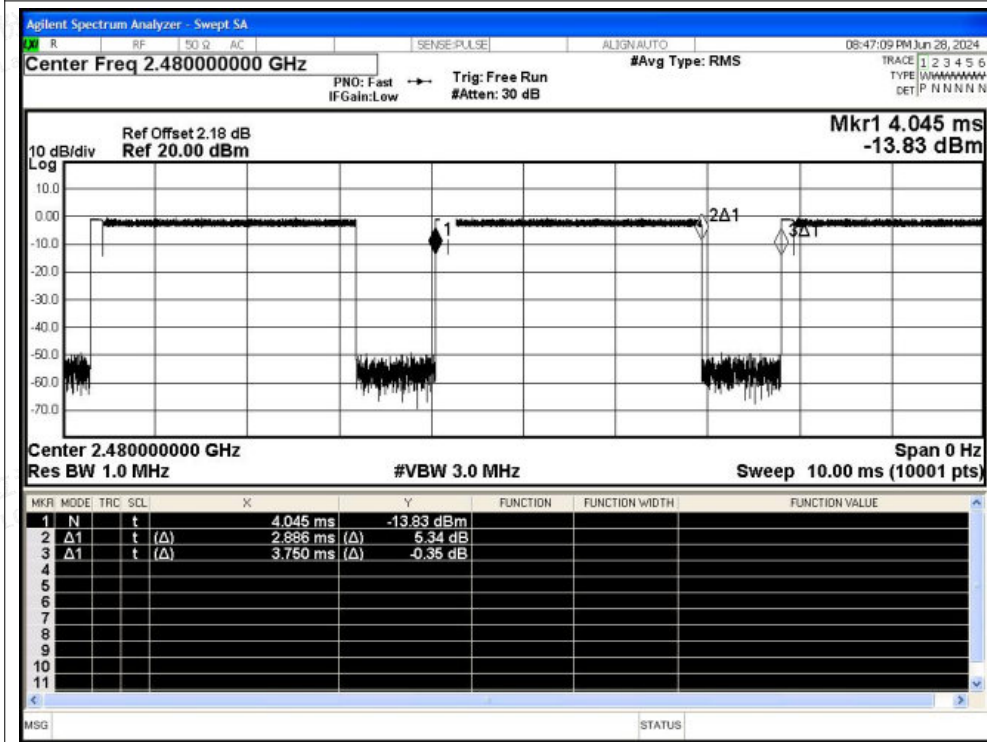
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Duty Cycle NVNT 2-DH5 2441MHz Ant1



Duty Cycle NVNT 2-DH5 2480MHz Ant1



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A.9 Restrict Band

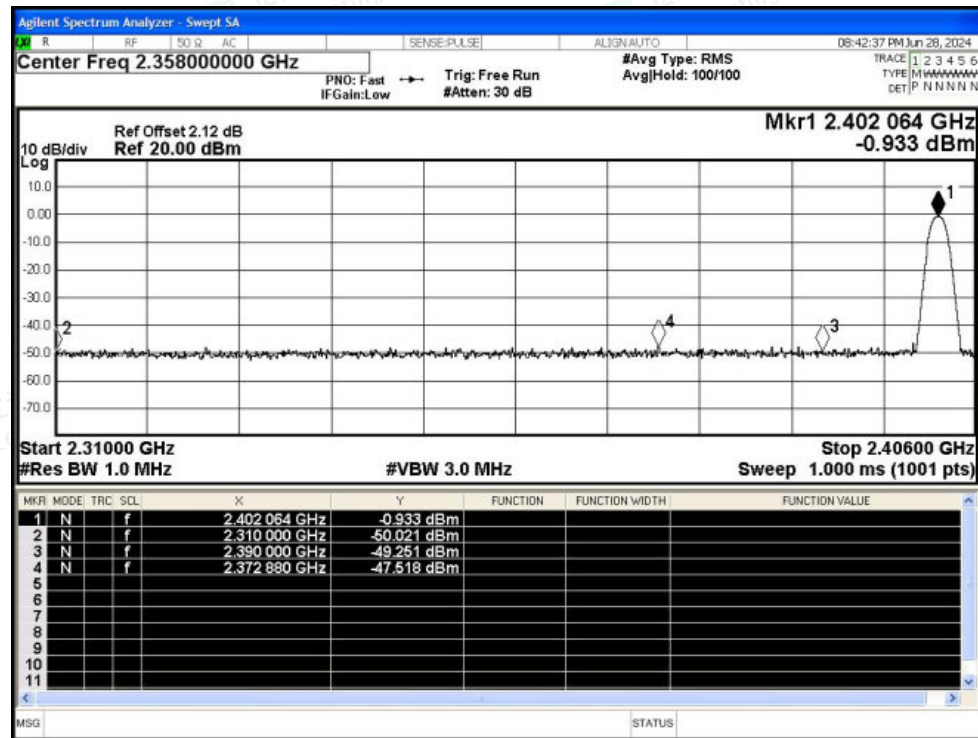
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-50.02	2	-	47.24	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.59	2	1.14	39.81	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2372.88	-47.52	2	-	49.74	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2388.912	-57.54	2	1.14	40.86	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.25	2	-	48.01	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.12	2	1.14	40.28	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-49.97	2	-	47.29	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-57.65	2	1.14	40.75	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2497.984	-46.54	2	-	50.72	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2495.584	-57.04	2	1.14	41.36	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-49.38	2	-	47.88	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-58.32	2	1.14	40.08	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-50.44	2	-	46.82	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-58.96	2	1.14	39.44	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2352.048	-47.05	2	-	50.21	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2375.376	-57.58	2	1.14	40.82	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-50.74	2	-	46.52	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-57.79	2	1.14	40.61	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-51.06	2	-	46.20	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-58.06	2	1.14	40.34	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2492.656	-47.2	2	-	50.06	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2485.888	-56.99	2	1.14	41.41	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-51.44	2	-	45.82	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-57.47	2	1.14	40.93	Average	54	Pass



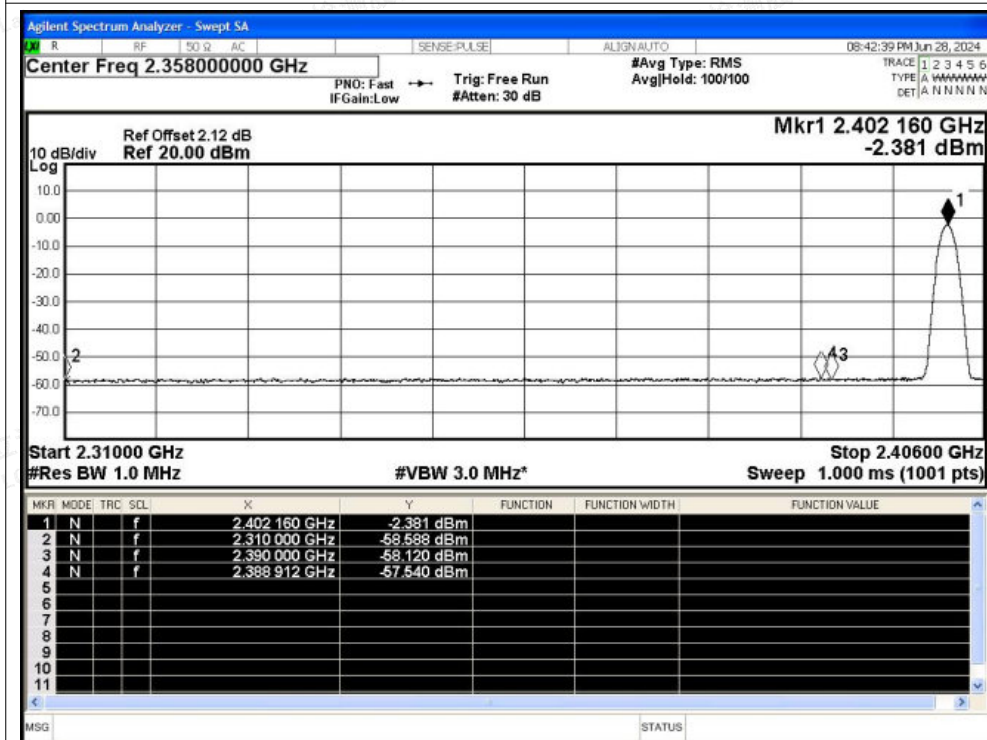


Test Graphs

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



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



Shenzhen LCS Compliance Testing Laboratory Ltd.

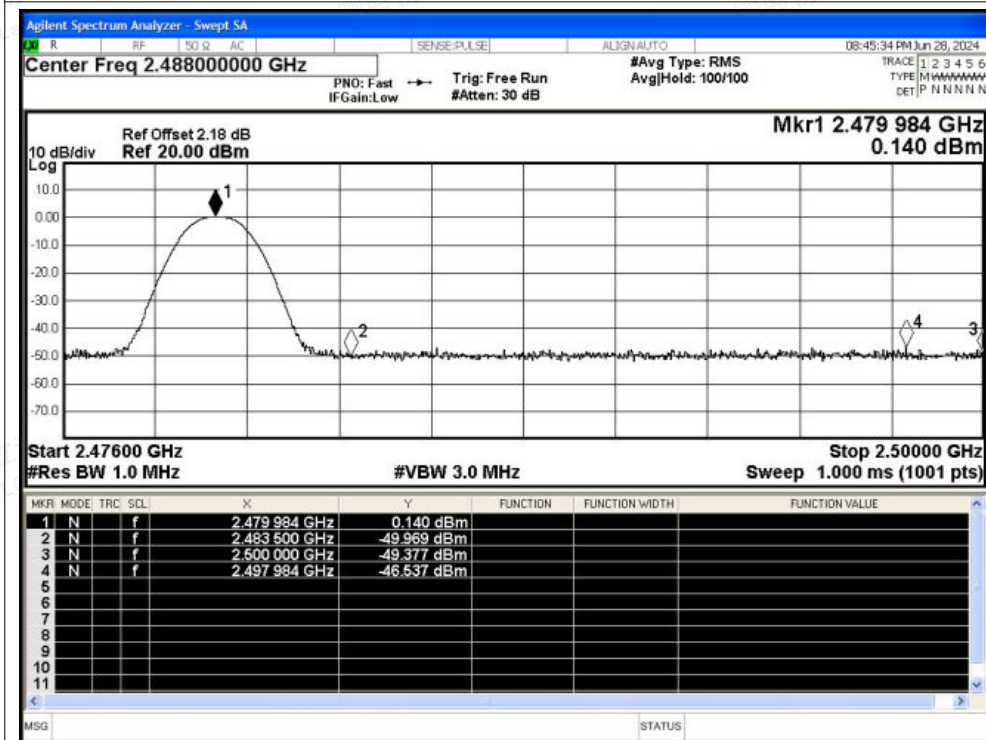
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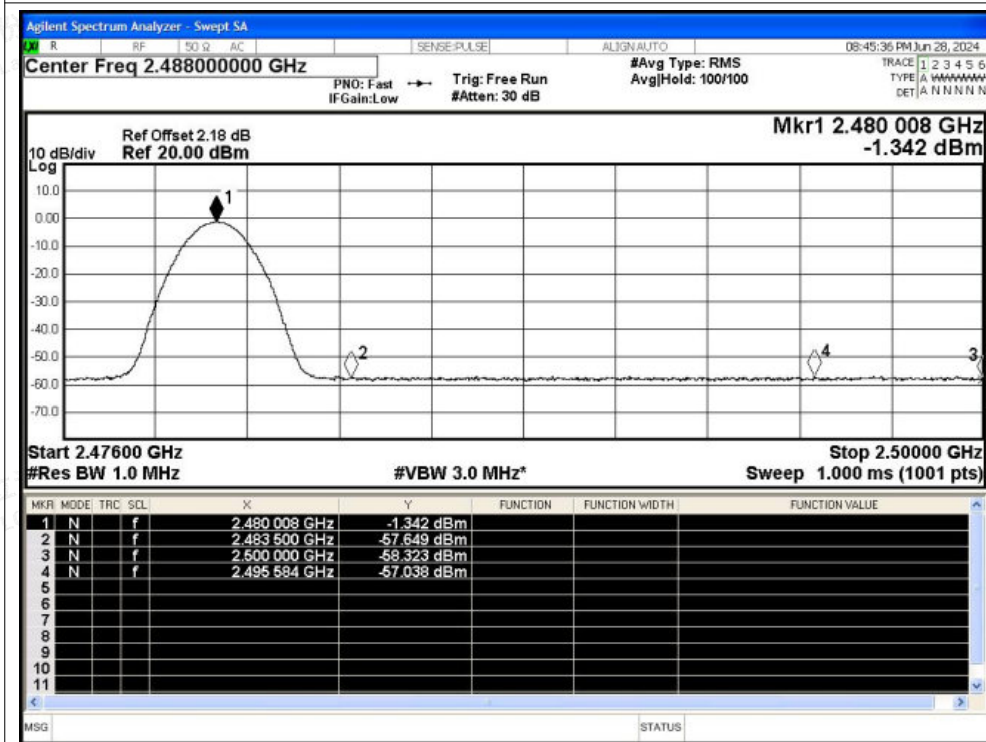
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Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



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



Shenzhen LCS Compliance Testing Laboratory Ltd.

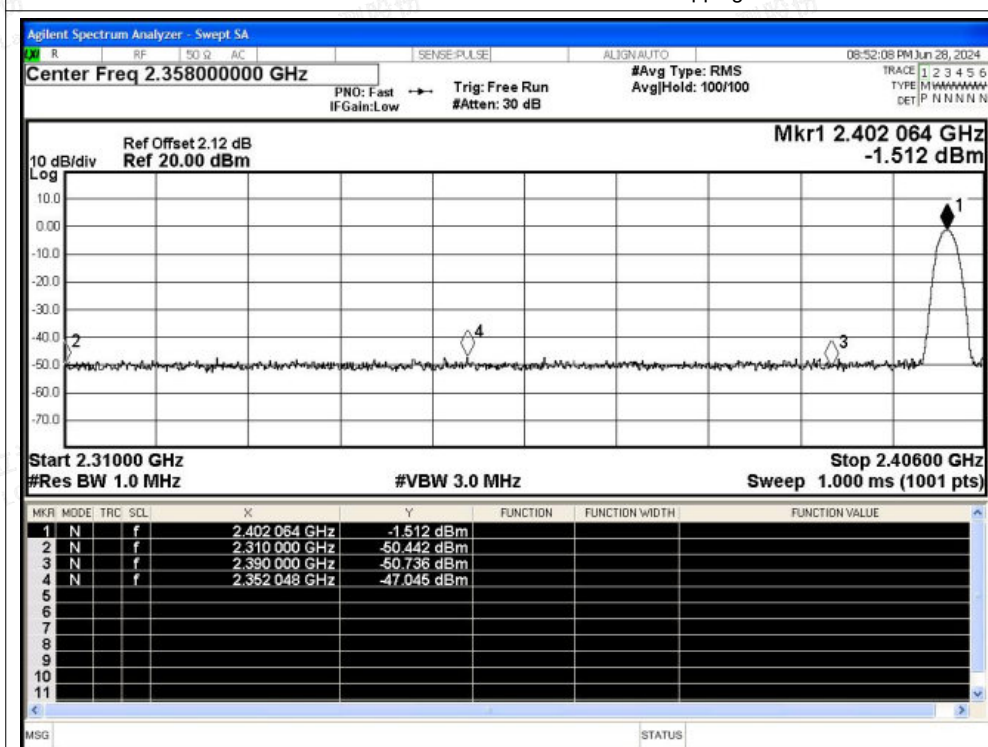
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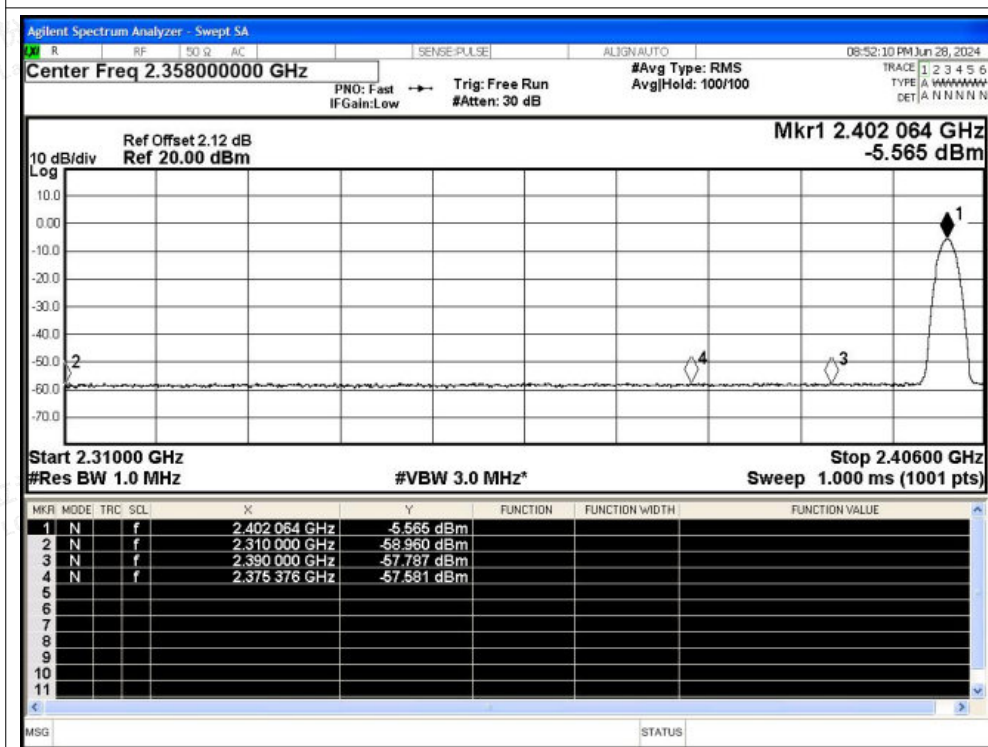
Scan code to check authenticity



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



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



Shenzhen LCS Compliance Testing Laboratory Ltd.

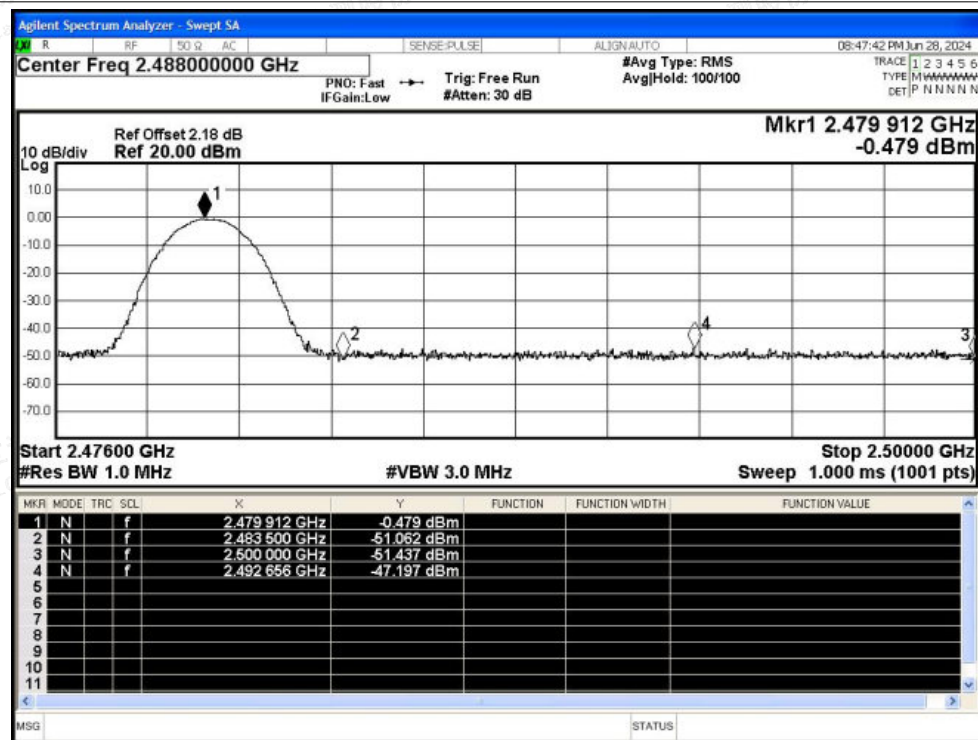
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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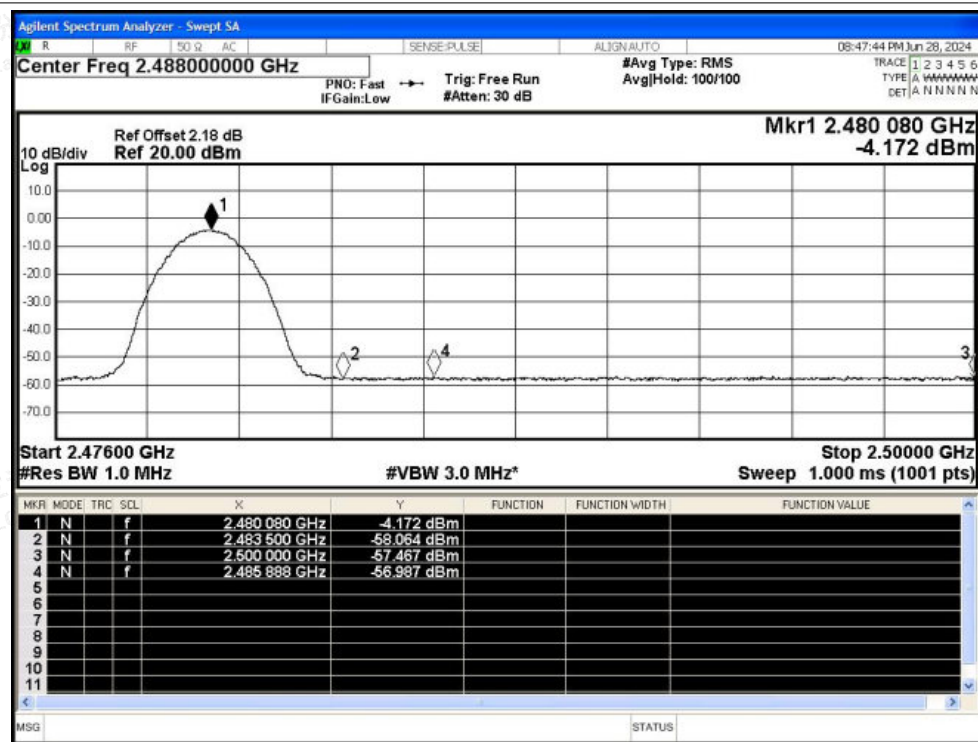
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Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



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



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