



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: smart watch

Test Model: TB67

Environmental Conditions

Temperature:	24.6°C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Can Kun
Supervised by:	Nick Peng





A.1 -20dB Bandwidth

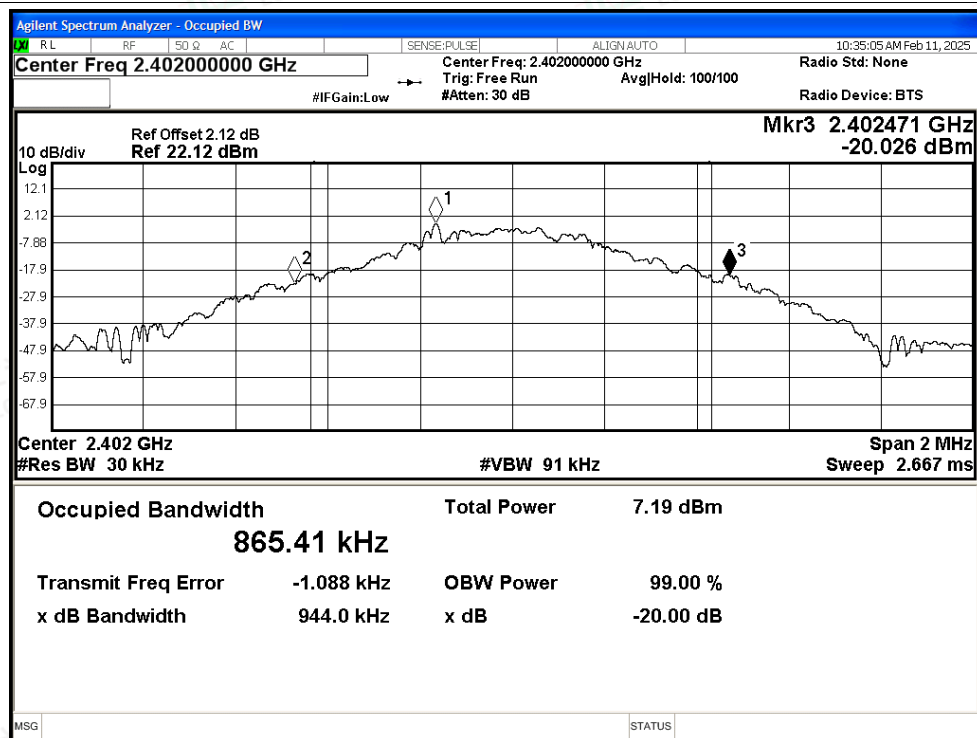
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.944	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.947	N/A	Pass
NVNT	1-DH5	2480	Ant1	1.008	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.26	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.286	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.285	N/A	Pass





Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



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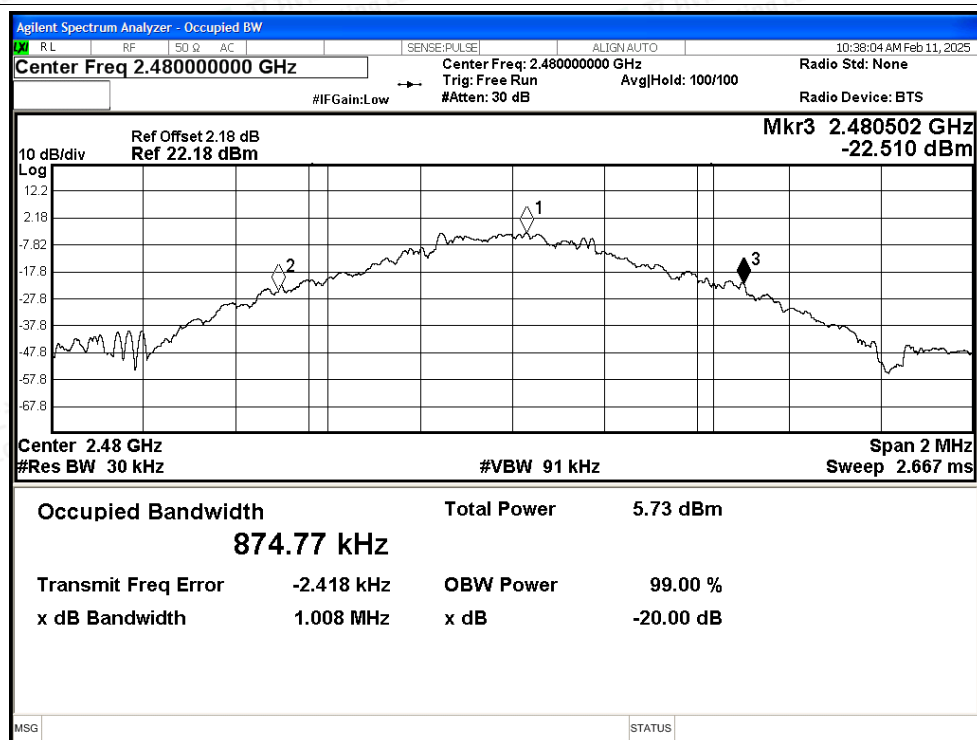
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

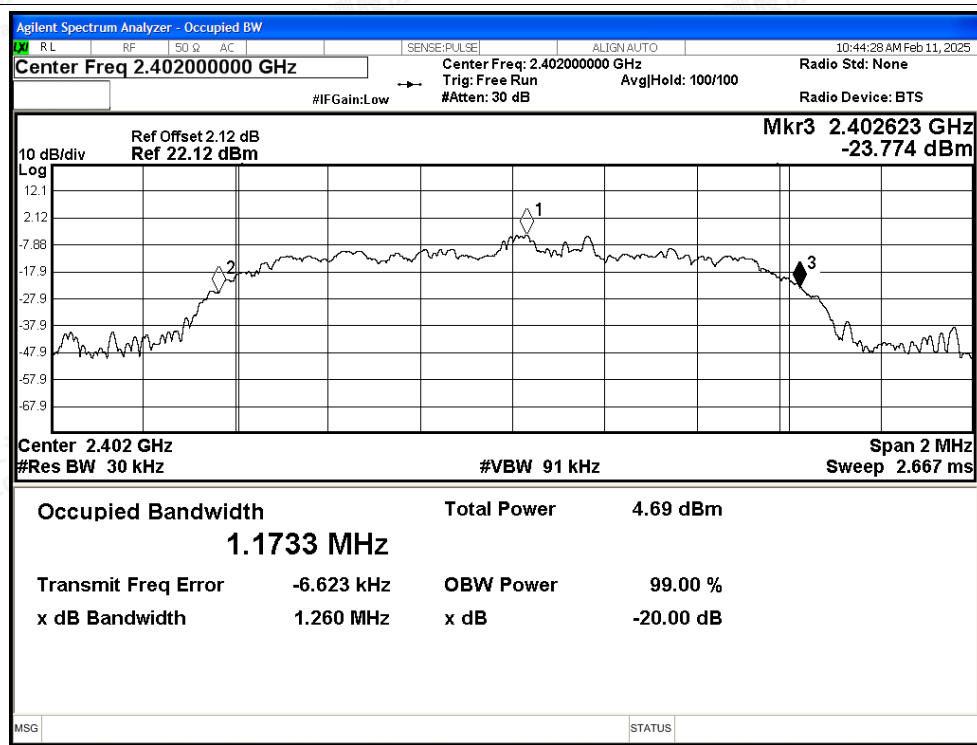
Scan code to check authenticity



-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



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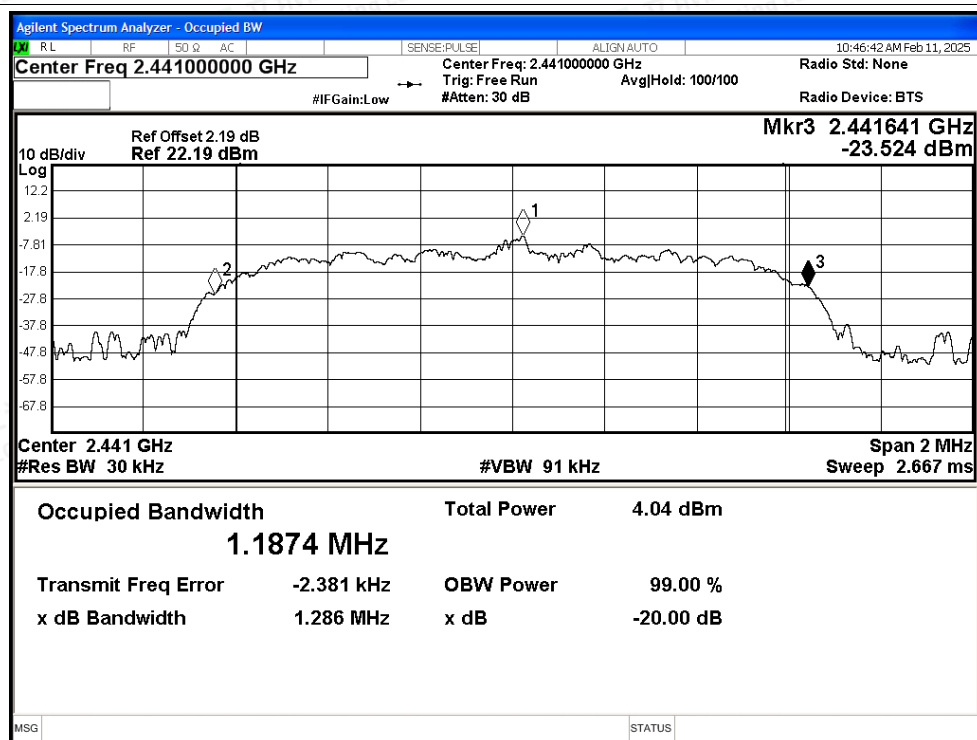
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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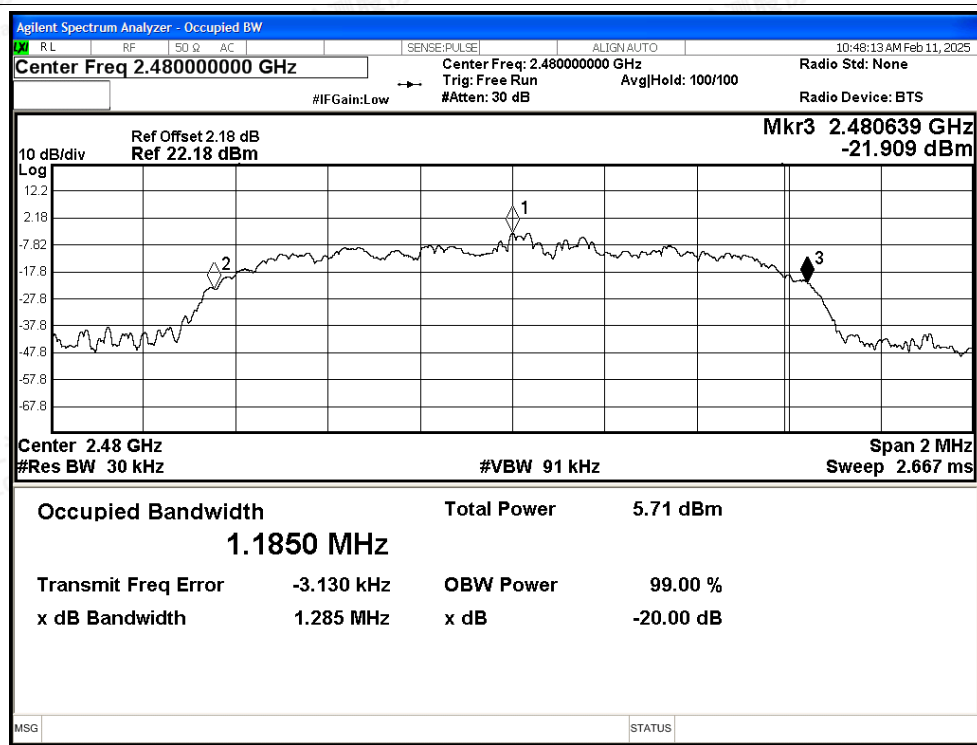
Scan code to check authenticity



-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



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A.2 Maximum Peak Conducted Output Power

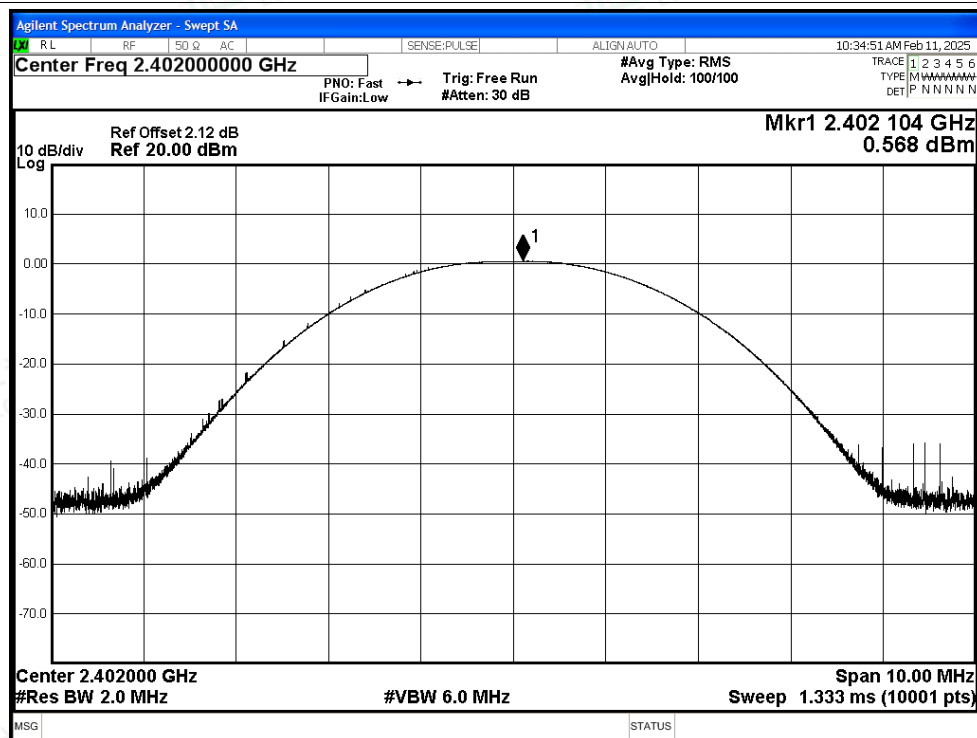
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.57	21	Pass
NVNT	1-DH5	2441	Ant1	0.74	21	Pass
NVNT	1-DH5	2480	Ant1	-0.56	21	Pass
NVNT	2-DH5	2402	Ant1	0.23	21	Pass
NVNT	2-DH5	2441	Ant1	-0.31	21	Pass
NVNT	2-DH5	2480	Ant1	1.36	21	Pass



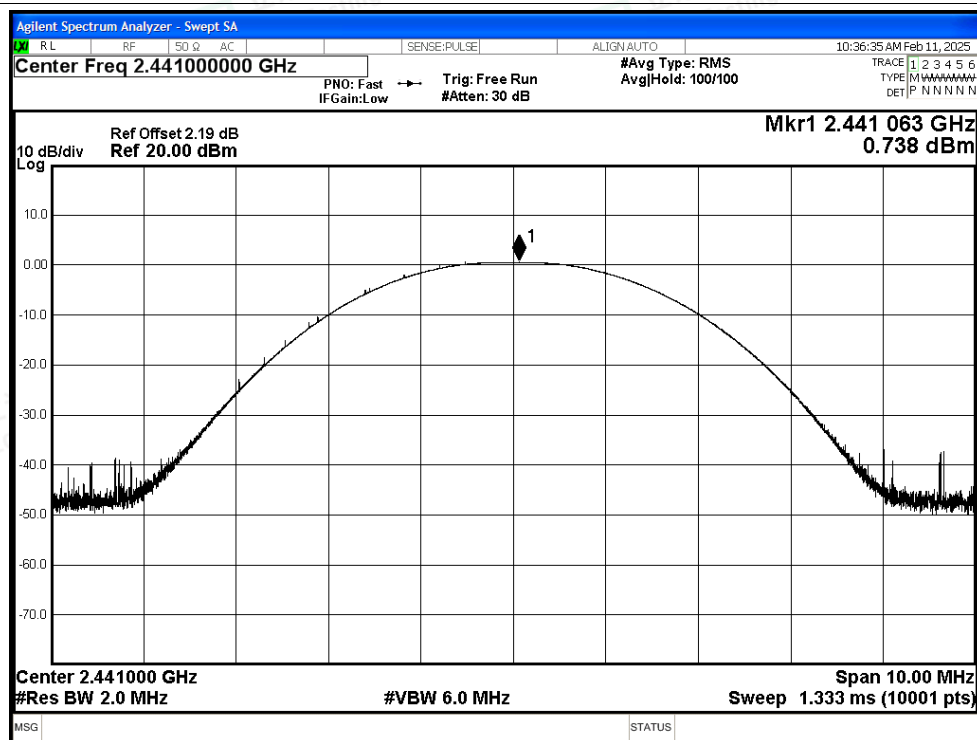


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1



Power NVNT 1-DH5 2441MHz Ant1



Shenzhen LCS Compliance Testing Laboratory Ltd.

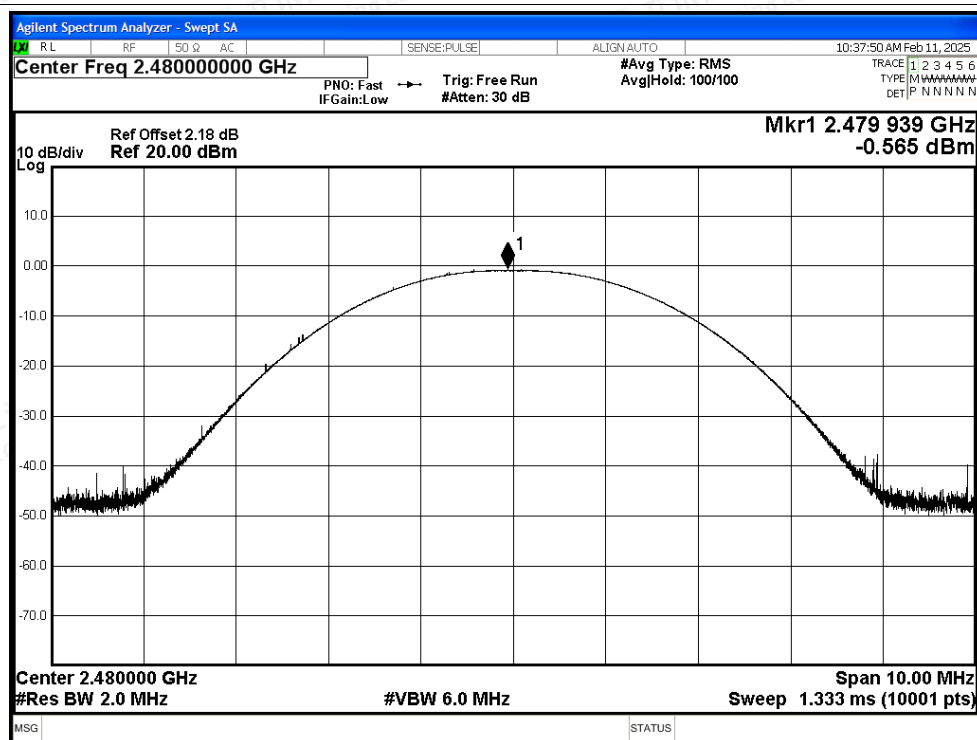
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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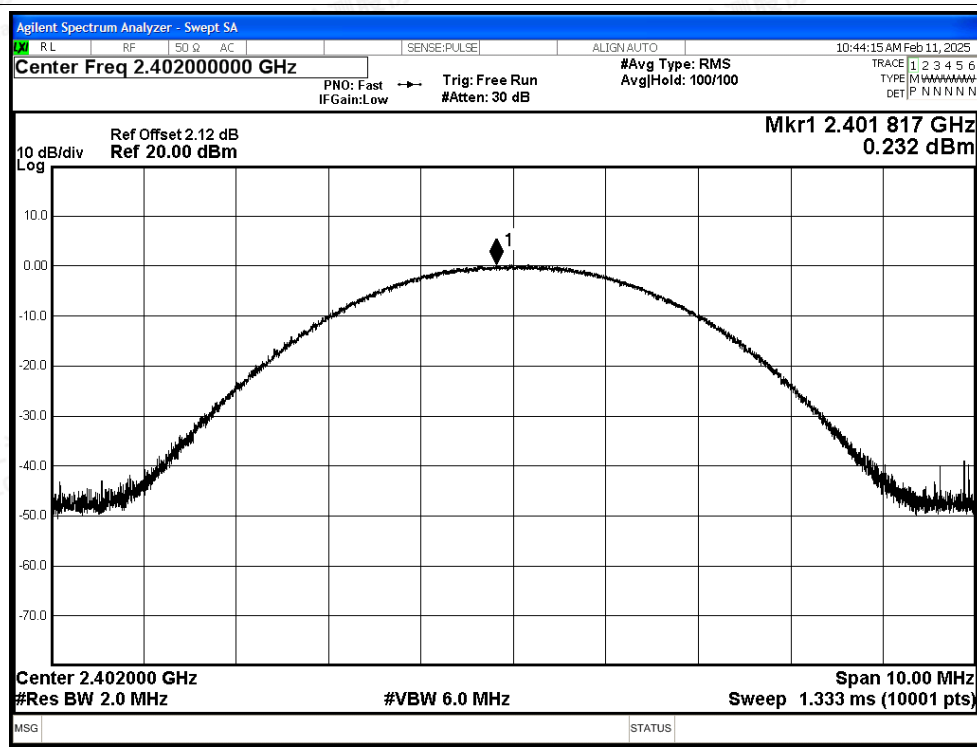
Scan code to check authenticity



Power NVNT 1-DH5 2480MHz Ant1



Power NVNT 2-DH5 2402MHz Ant1



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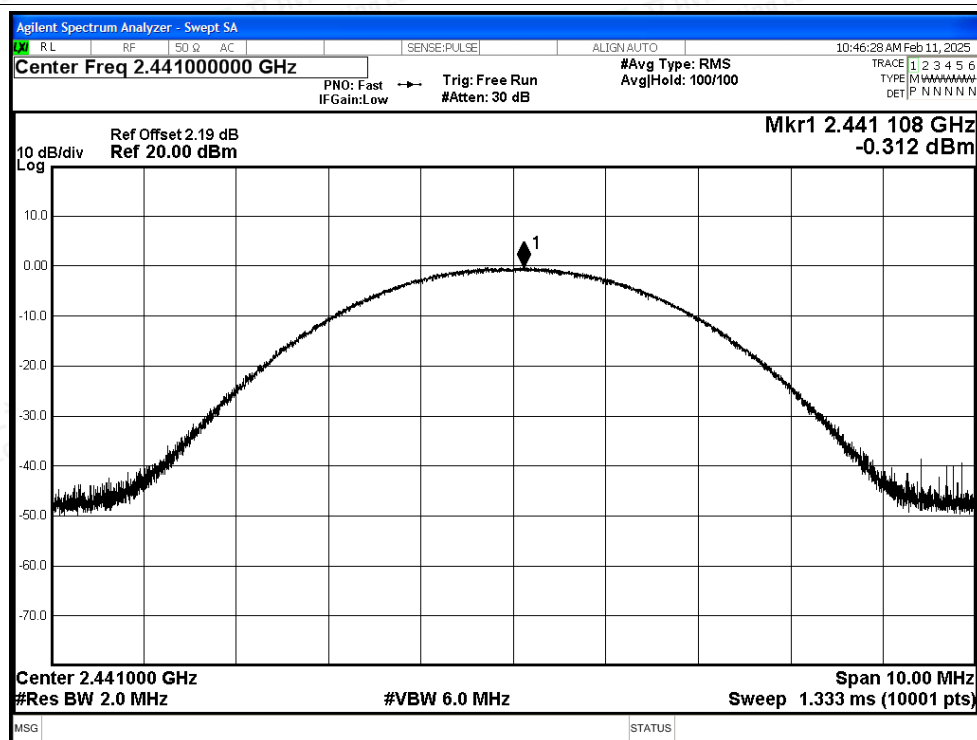
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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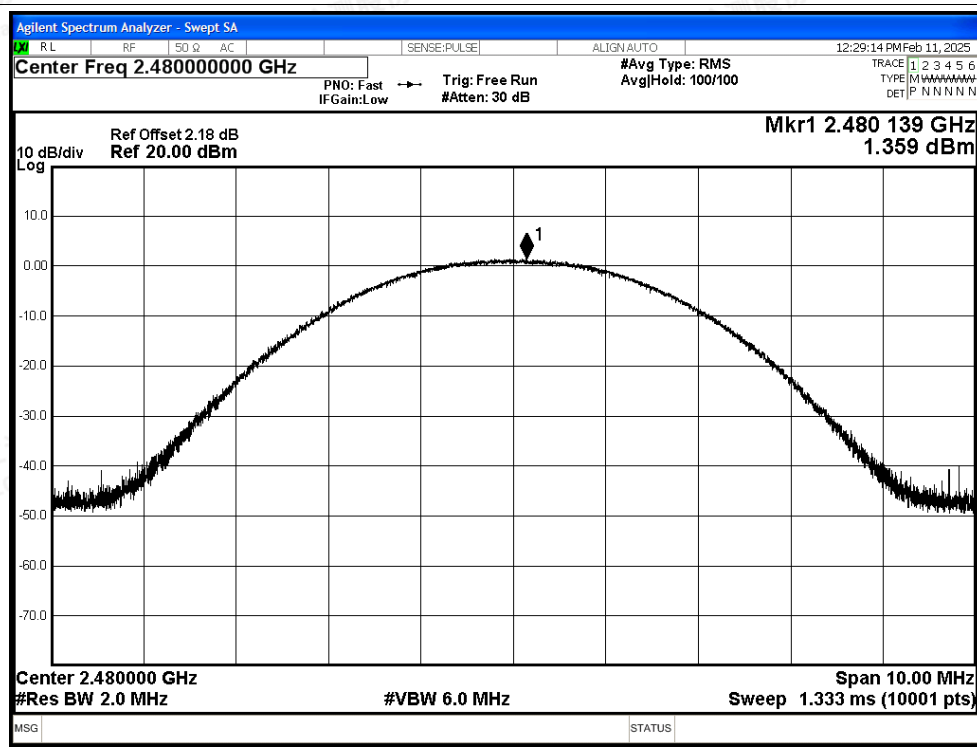
Scan code to check authenticity



Power NVNT 2-DH5 2441MHz Ant1



Power NVNT 2-DH5 2480MHz Ant1



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A.3 Carrier Frequencies Separation

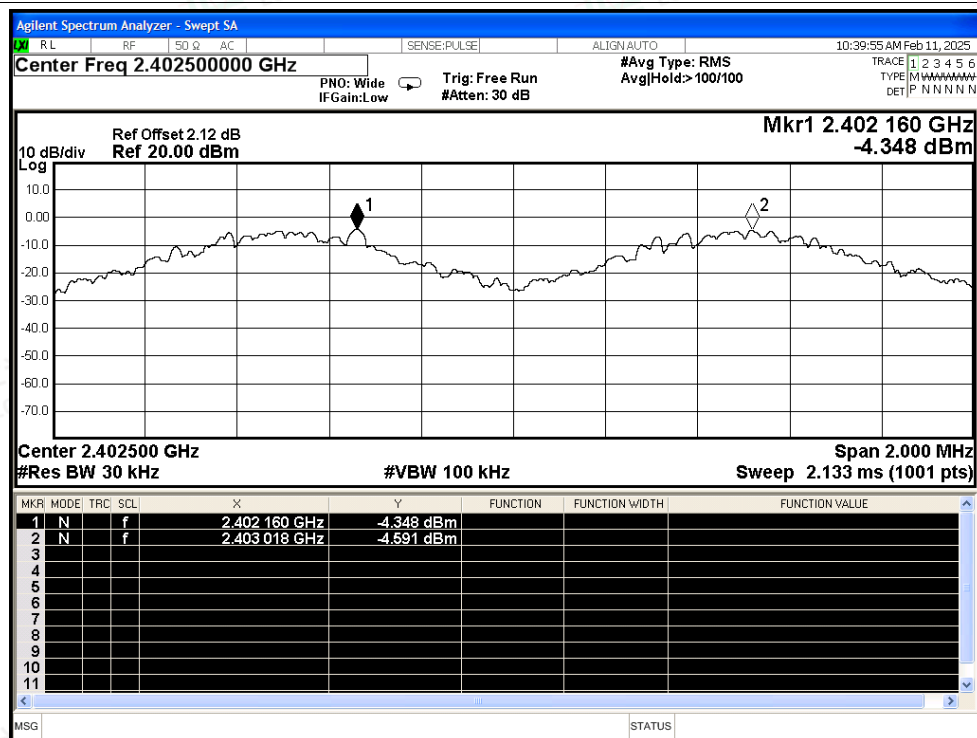
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.16	2403.018	0.858	0.672	Pass
NVNT	2-DH5	Ant1	2402.02	2403.006	0.986	0.857	Pass



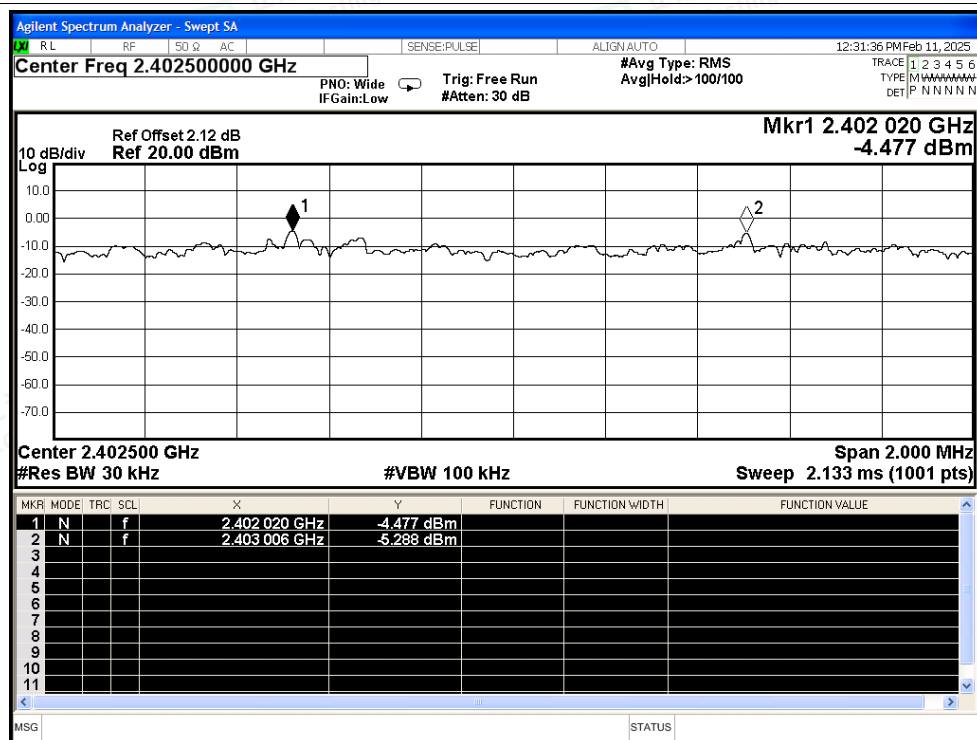


Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



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A.4 Dwell Time

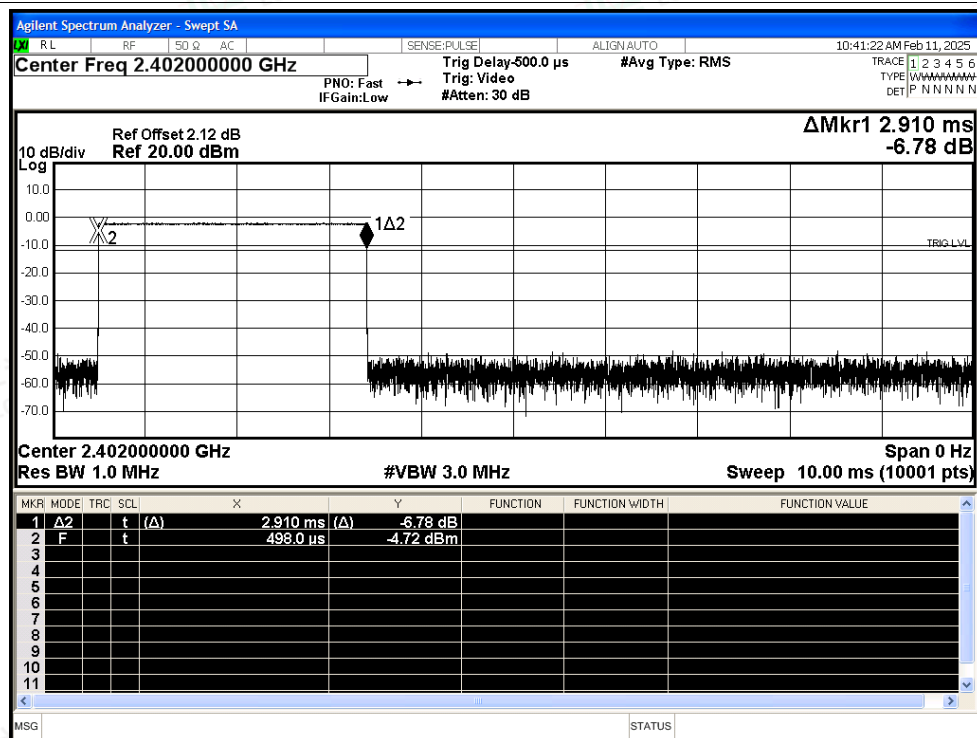
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.91	293.91	101	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.898	318.78	110	31600	400	Pass



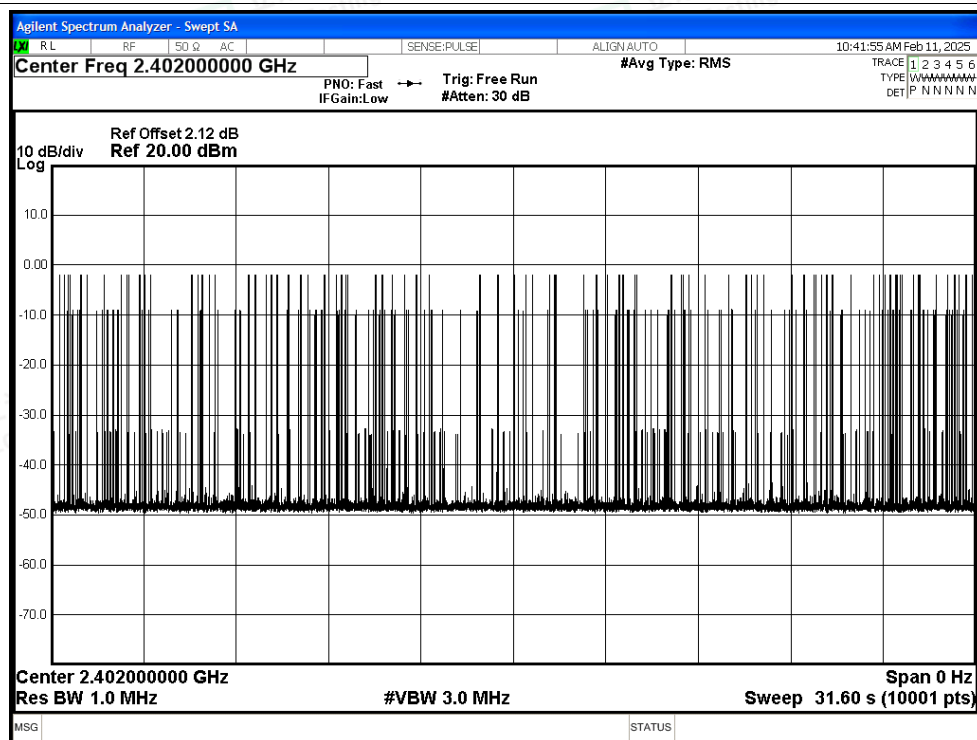


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

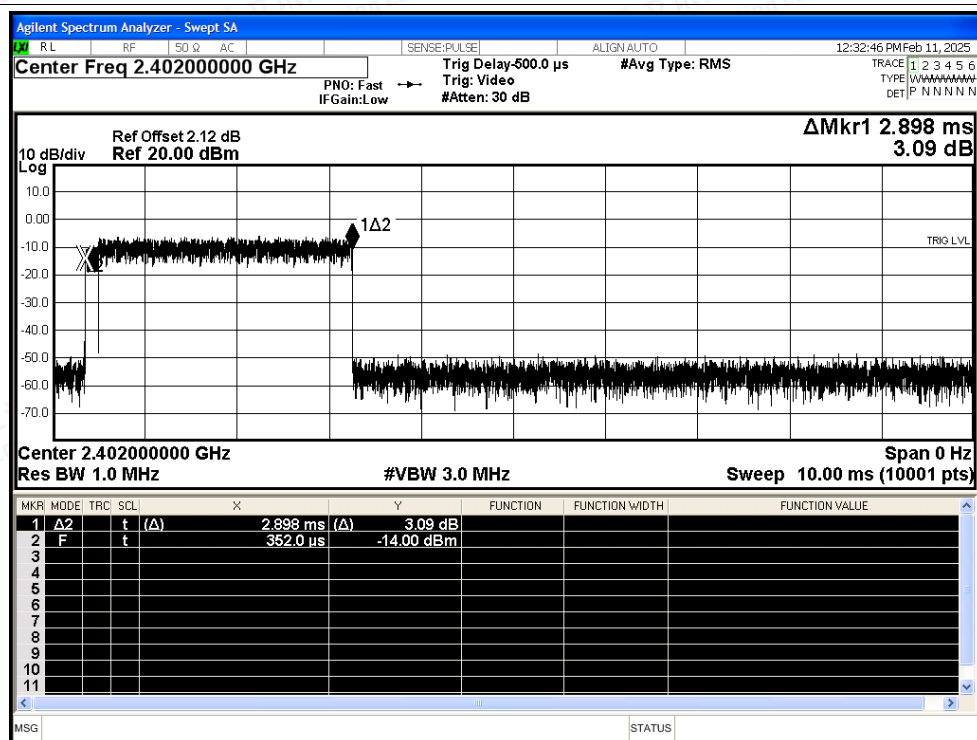


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

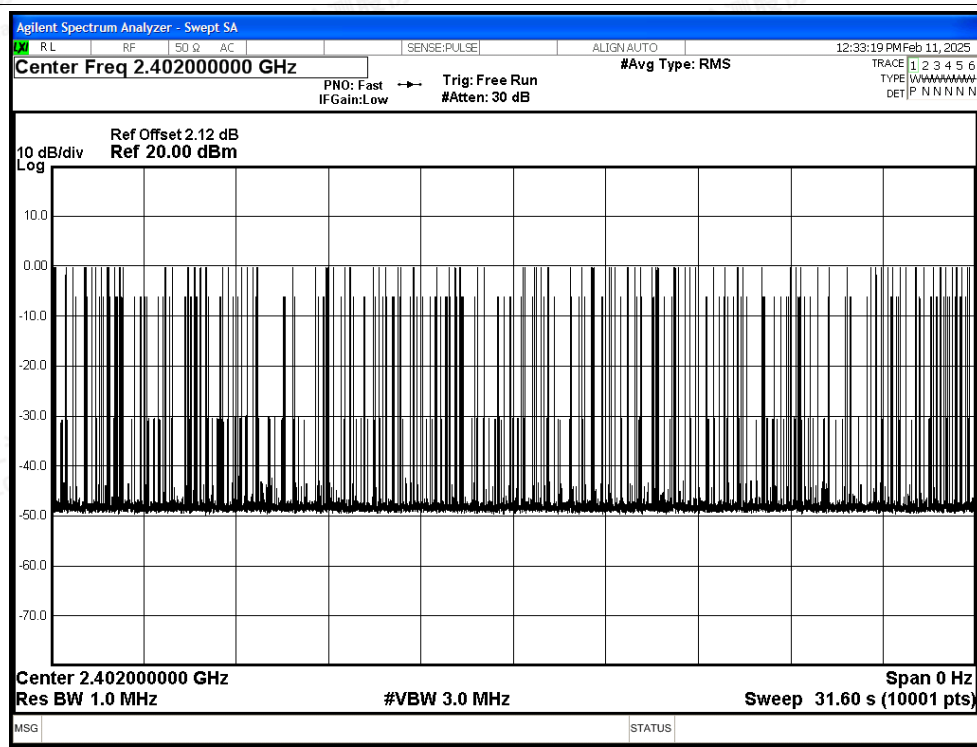




Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated





A.5 Number of Hopping Channel

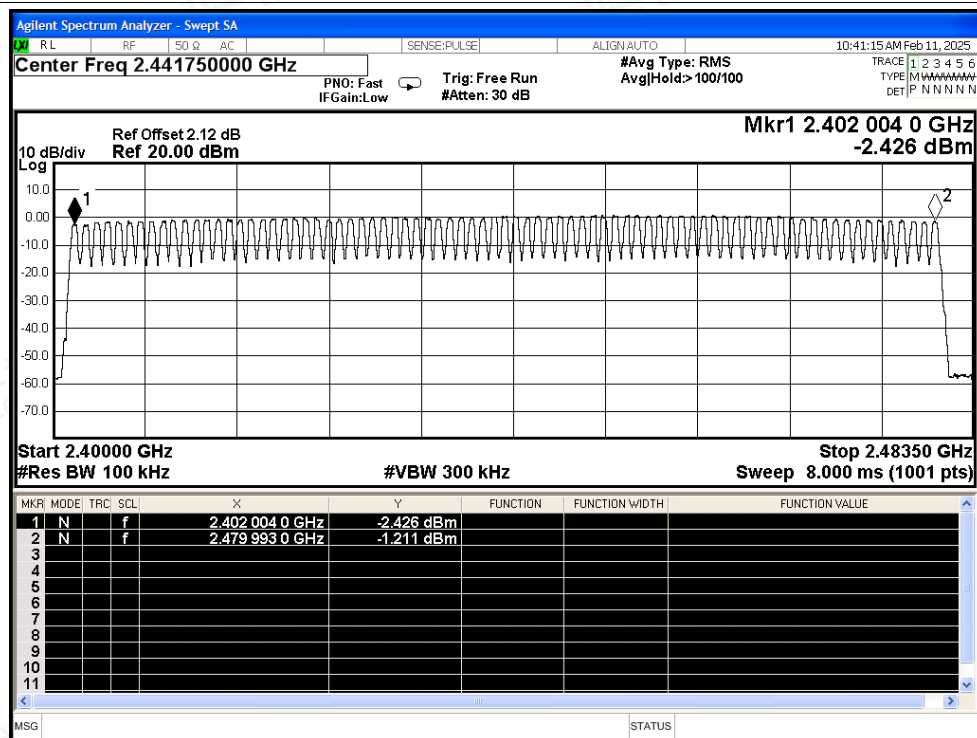
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass



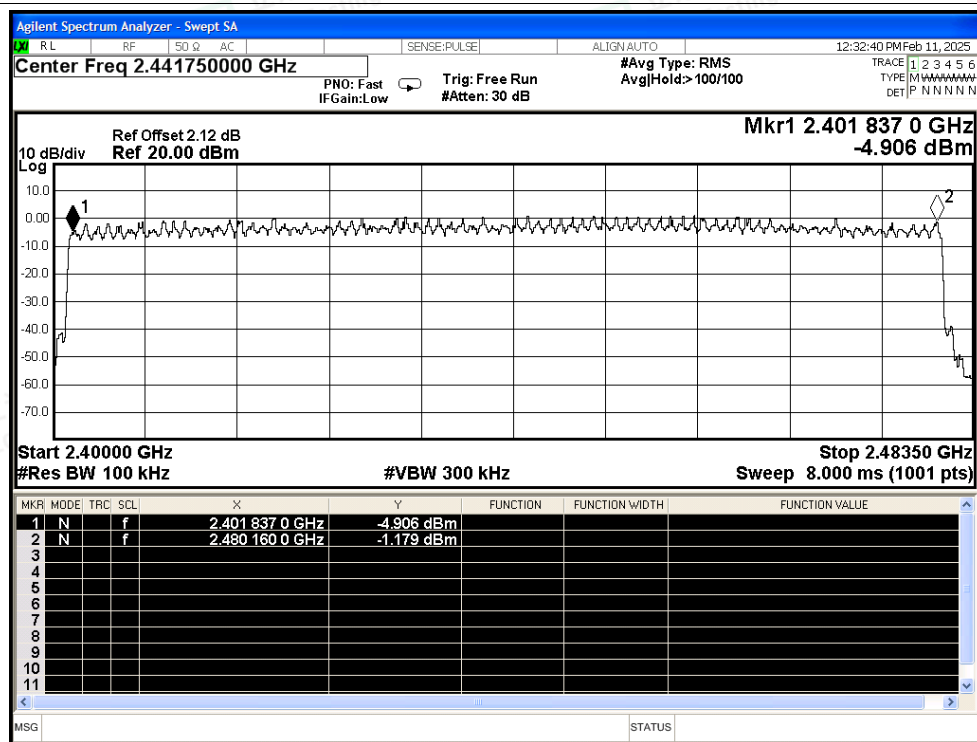


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



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A.6 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-56.53	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-55.97	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-48.48	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-56.08	-20	Pass

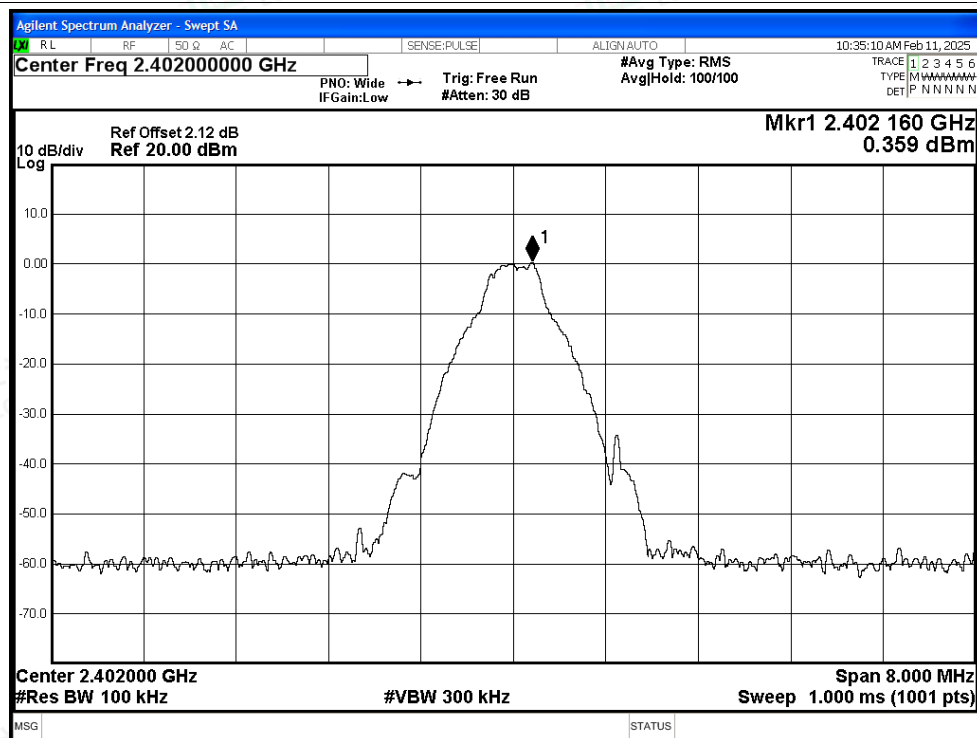


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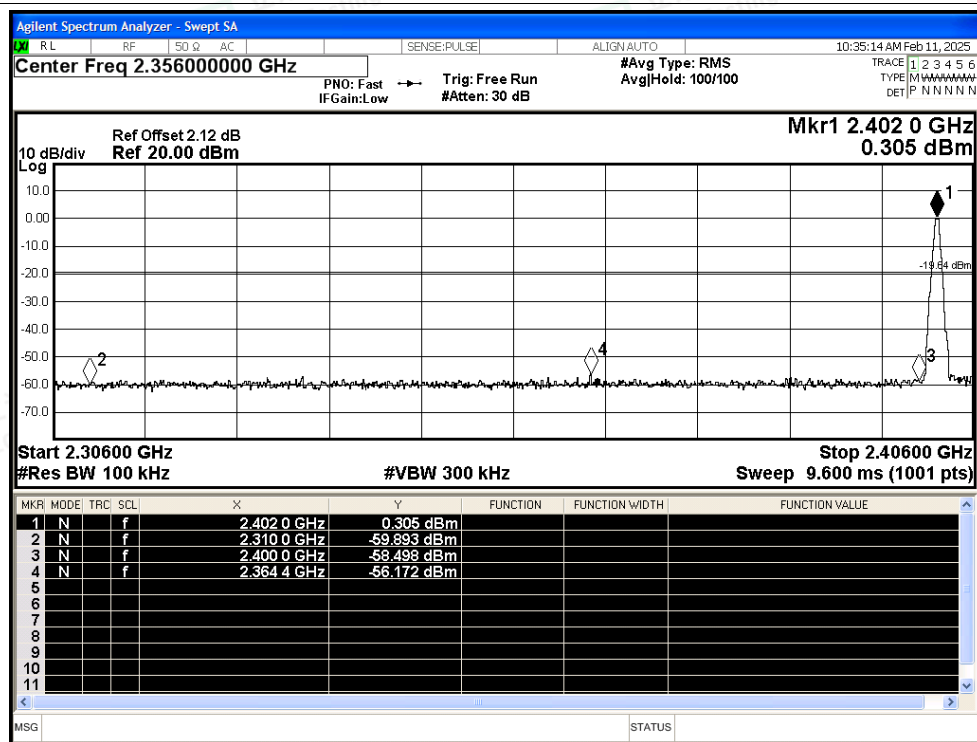


Test Graphs

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



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



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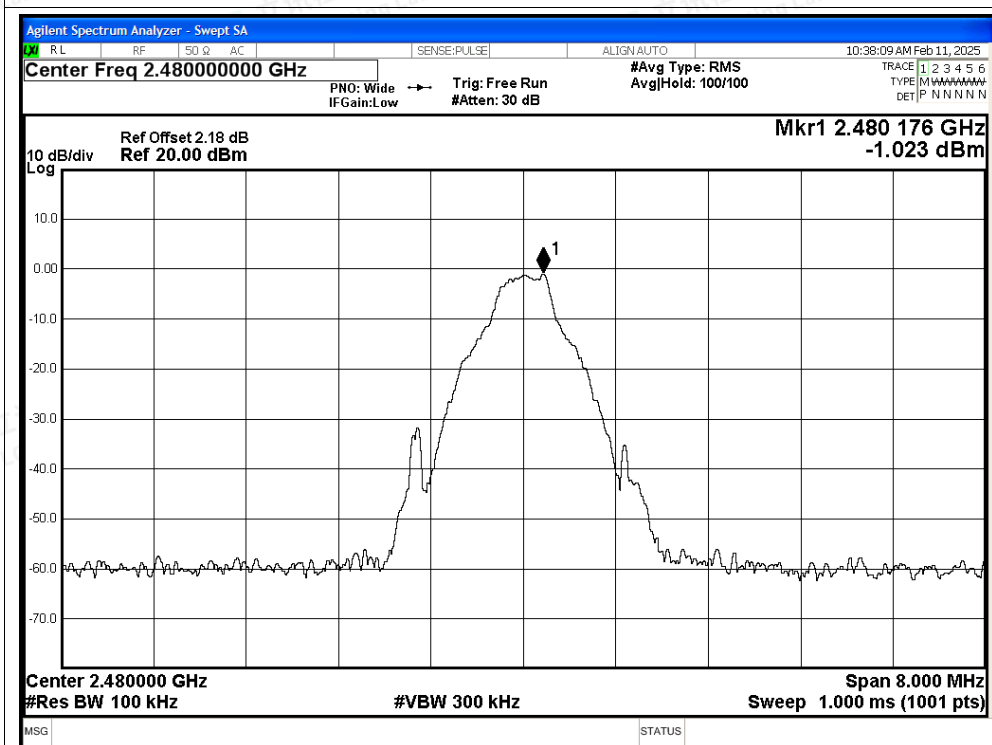
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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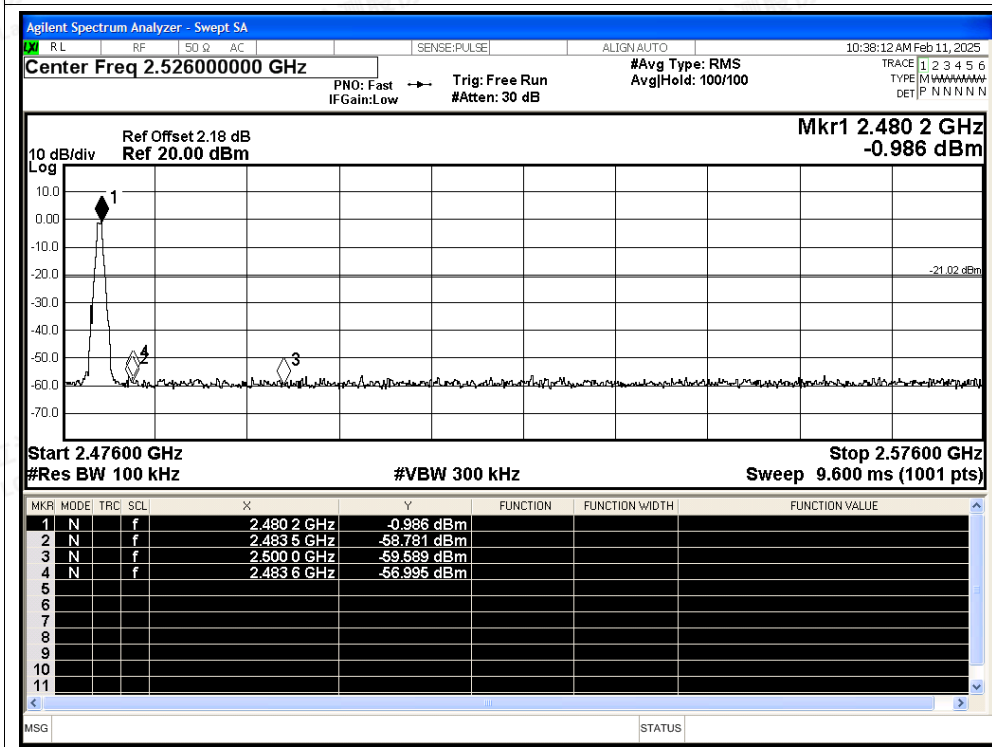
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Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



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



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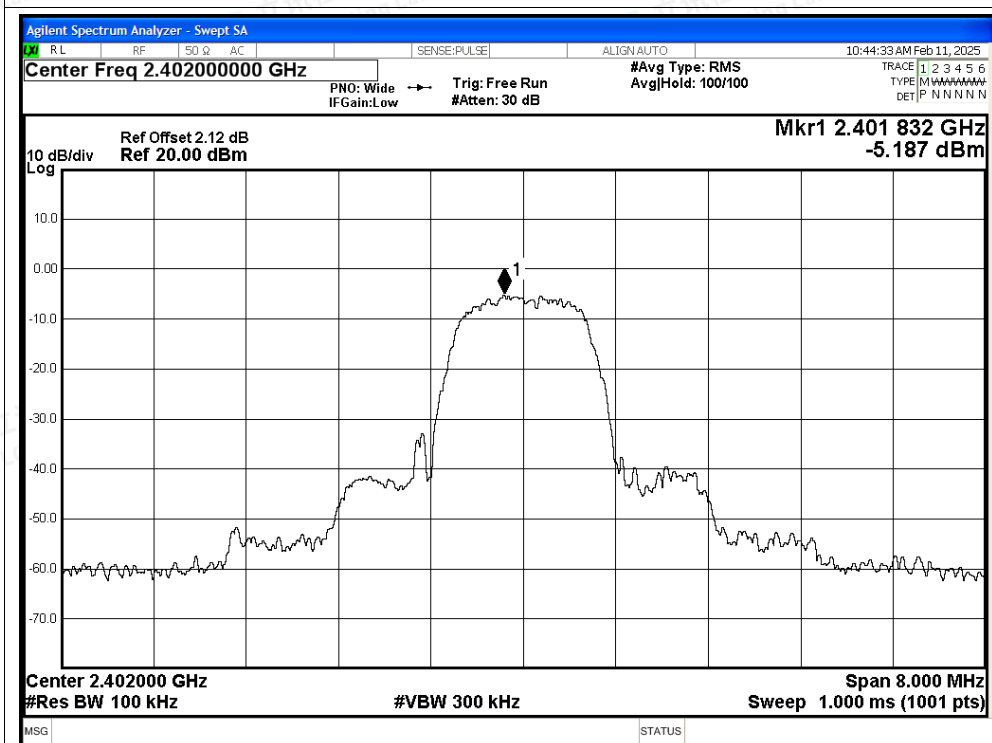
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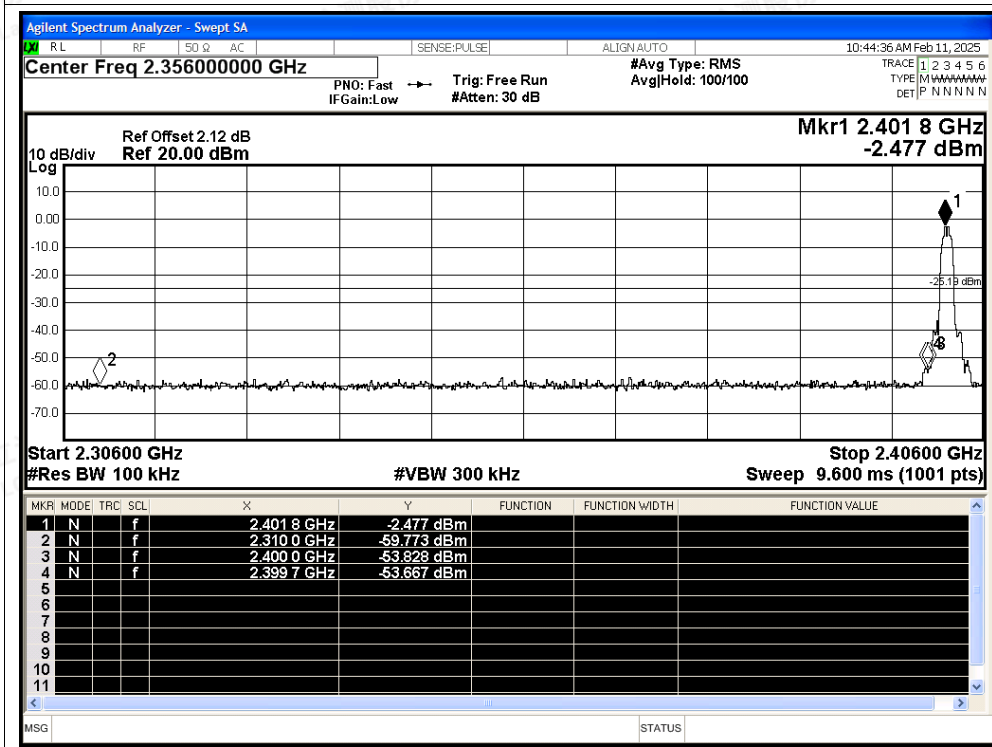
Scan code to check authenticity



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



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



Shenzhen LCS Compliance Testing Laboratory Ltd.

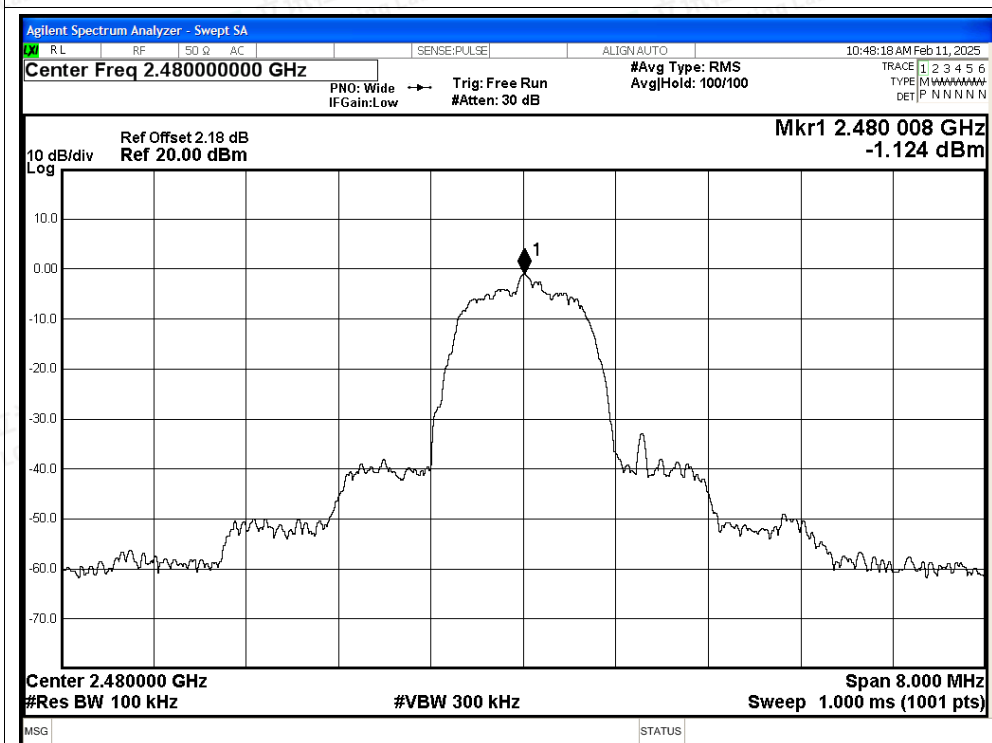
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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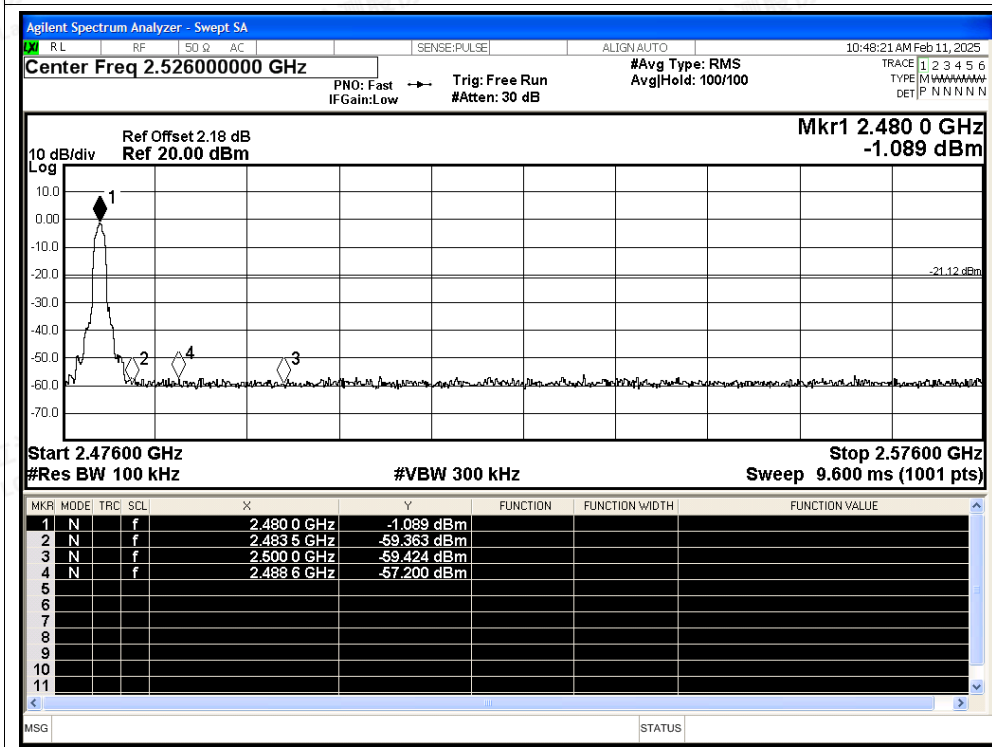
Scan code to check authenticity



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



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



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(Hopping)

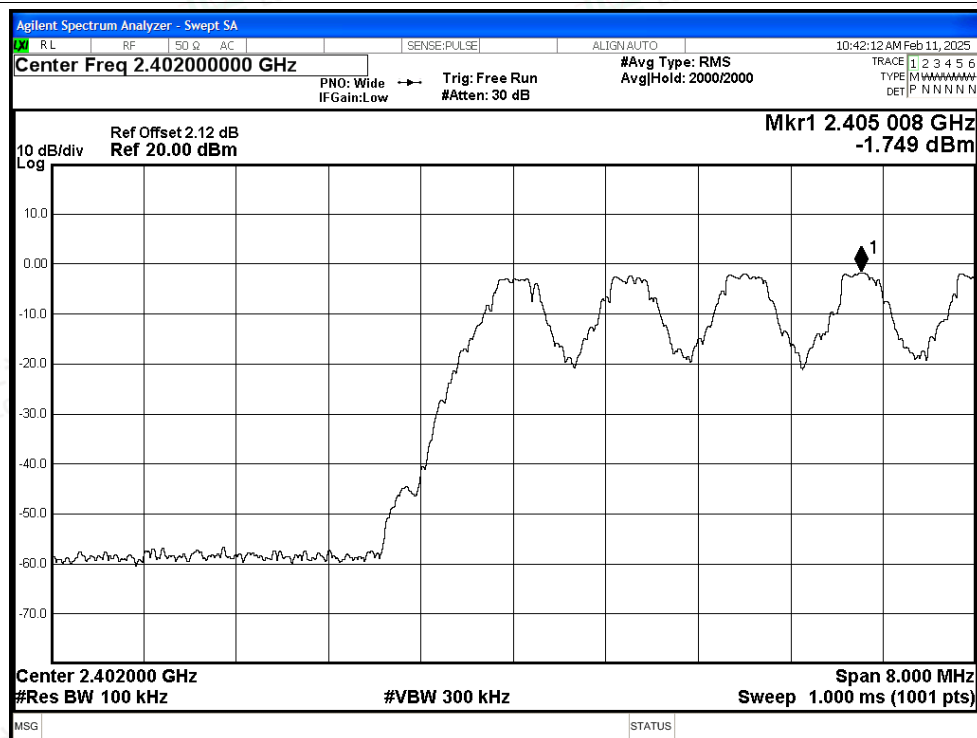
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-54.54	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-54.66	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-54.13	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-55	-20	Pass



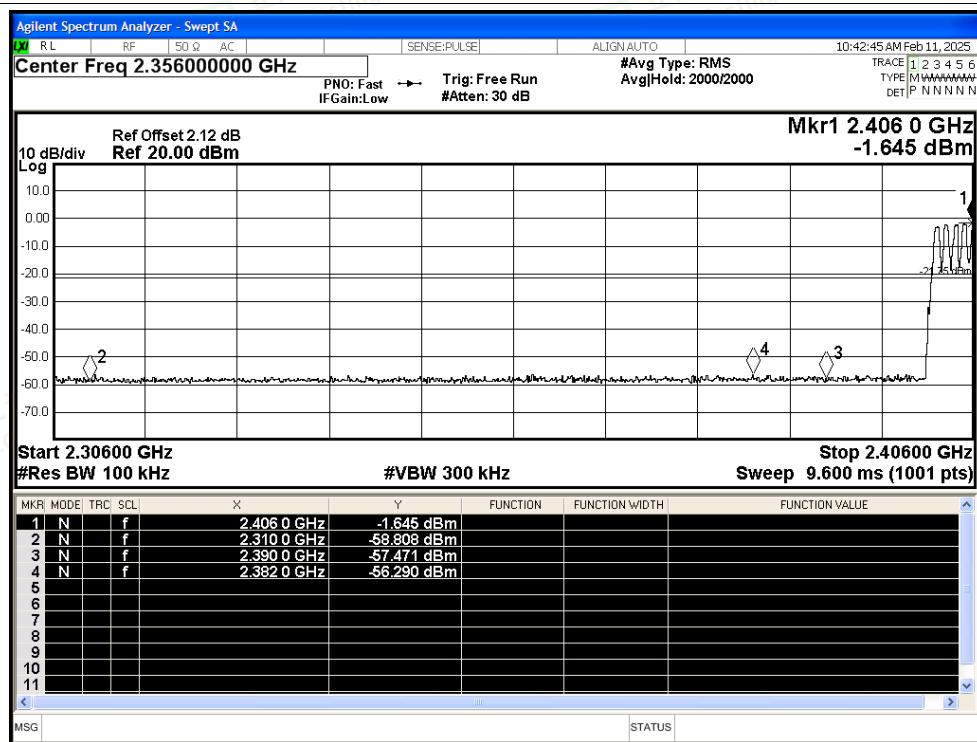


Test Graphs

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



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

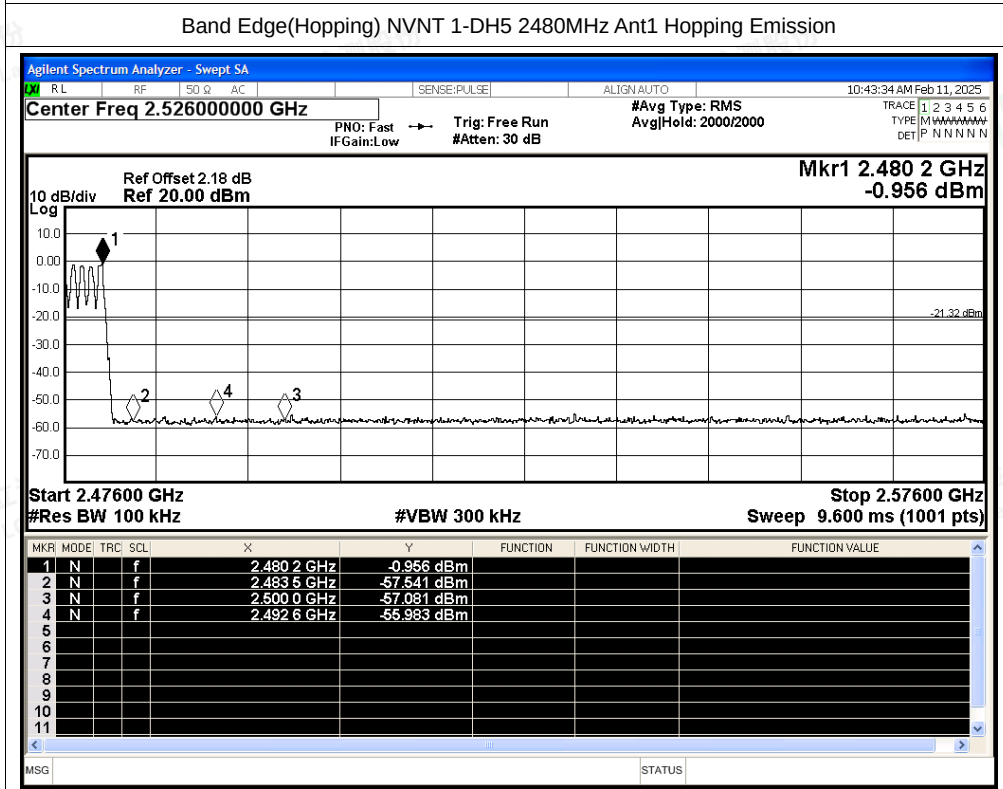
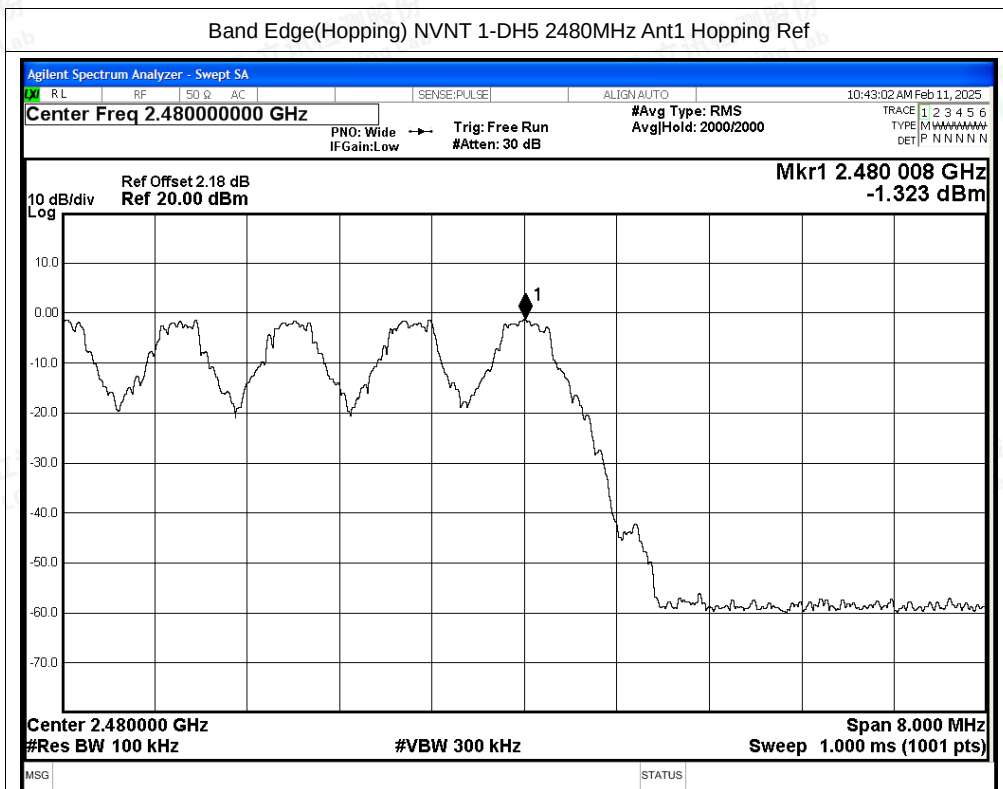


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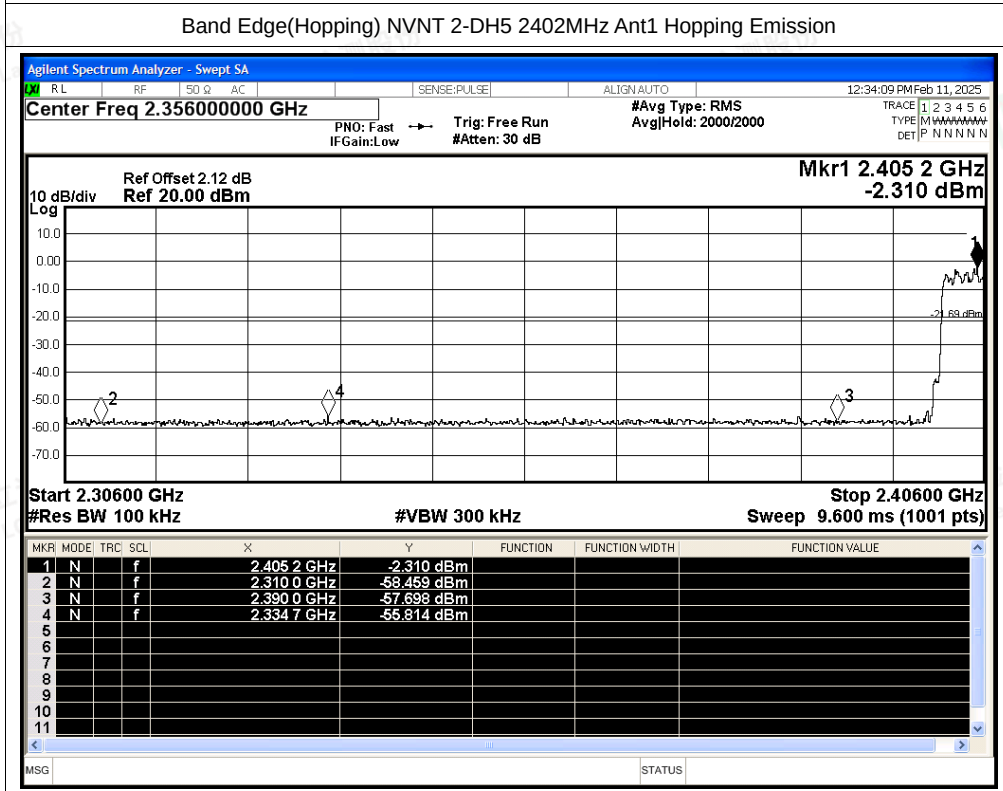
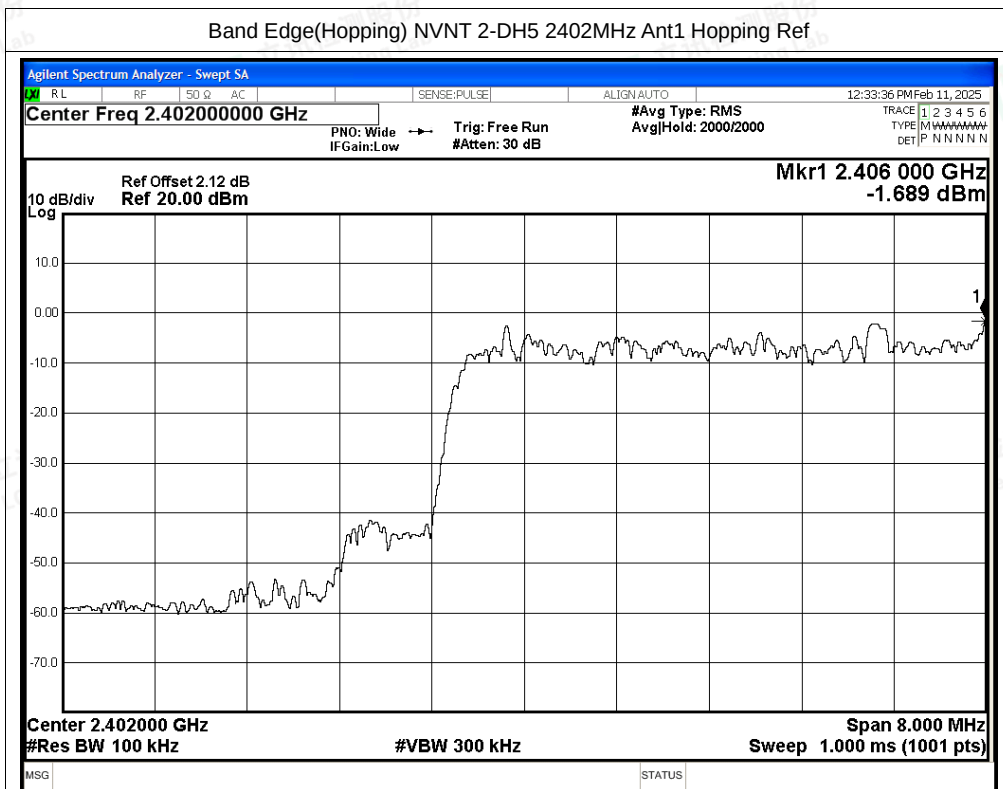


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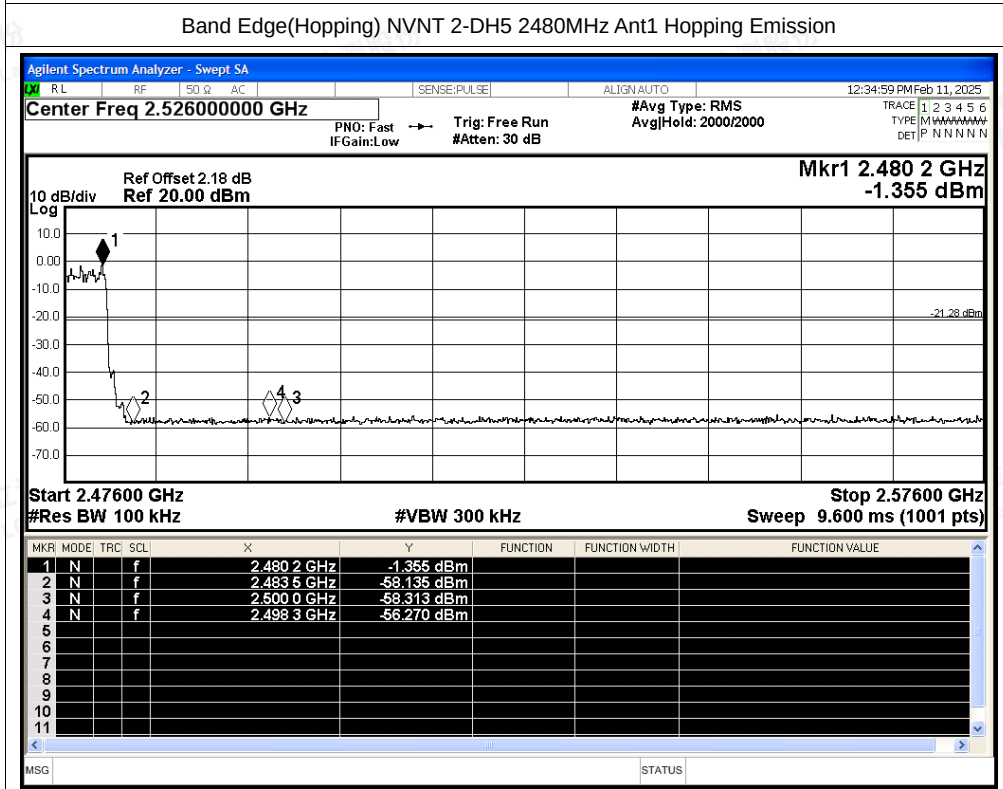
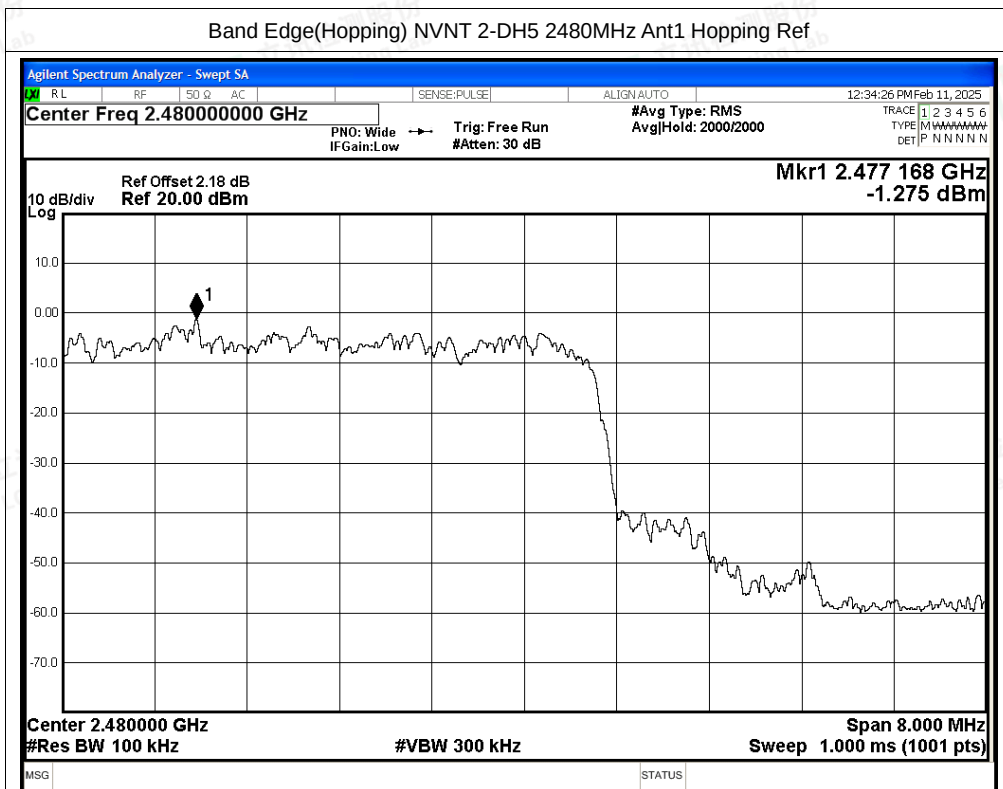


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A.7 Conducted RF Spurious Emission

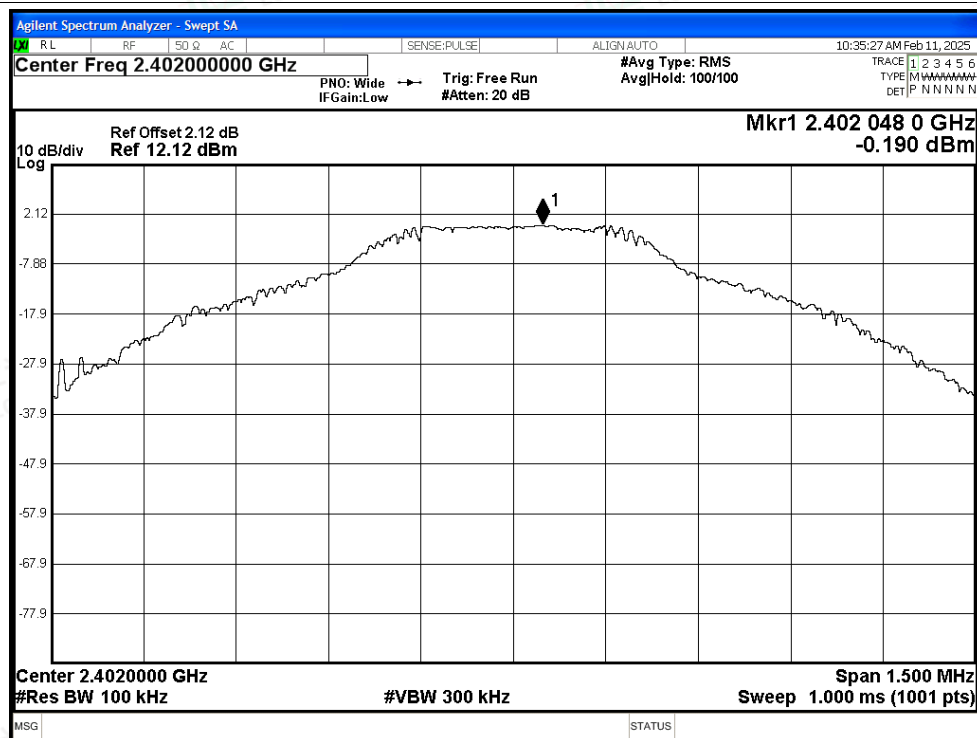
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-55.39	-20	Pass
NVNT	1-DH5	2441	Ant1	-55.52	-20	Pass
NVNT	1-DH5	2480	Ant1	-54.46	-20	Pass
NVNT	2-DH5	2402	Ant1	-52.53	-20	Pass
NVNT	2-DH5	2441	Ant1	-52.78	-20	Pass
NVNT	2-DH5	2480	Ant1	-53.46	-20	Pass



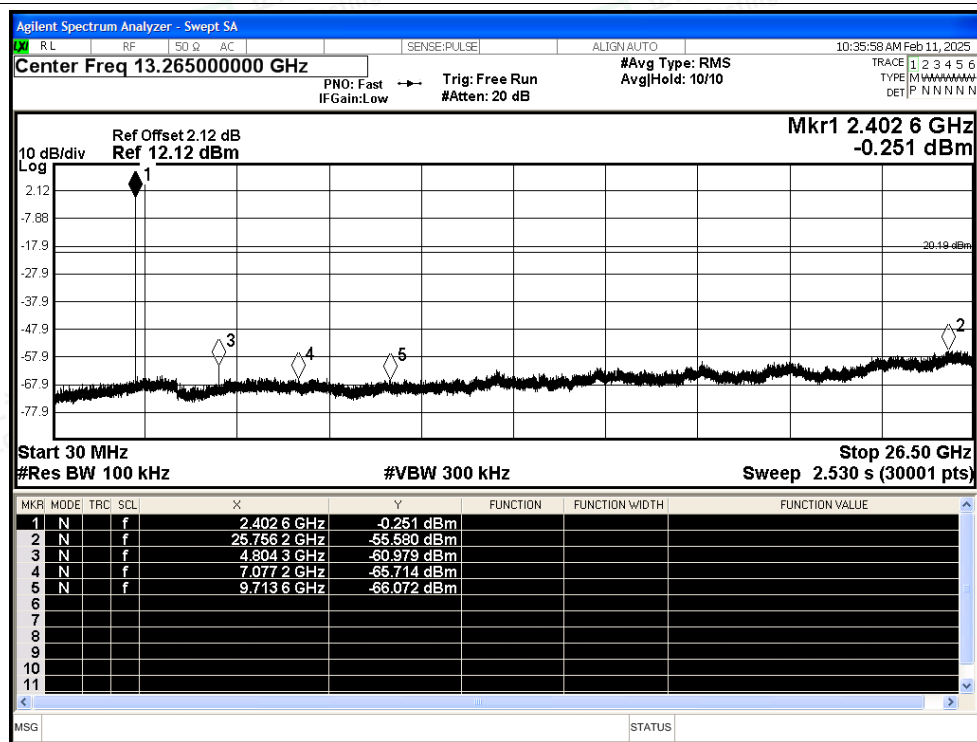


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

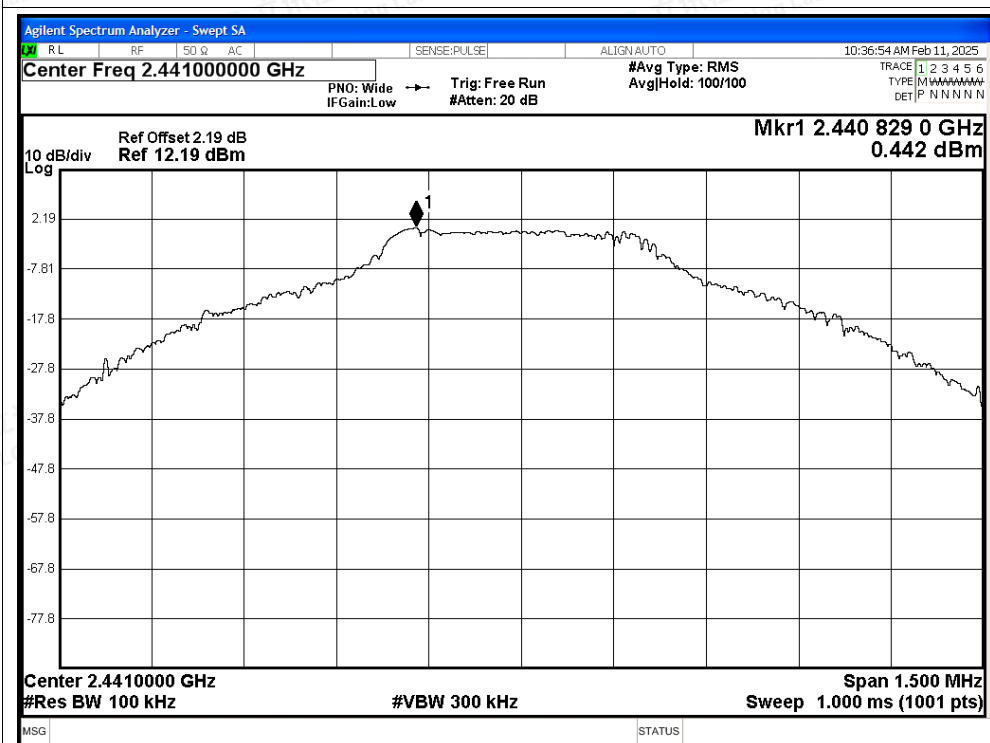
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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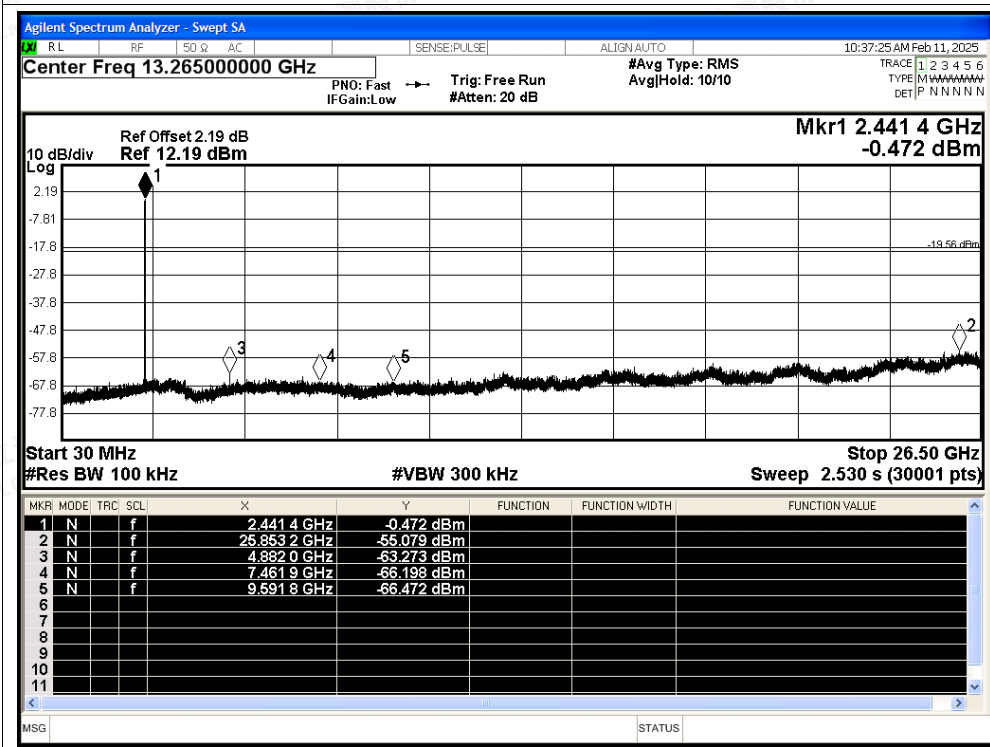
Scan code to check authenticity



Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



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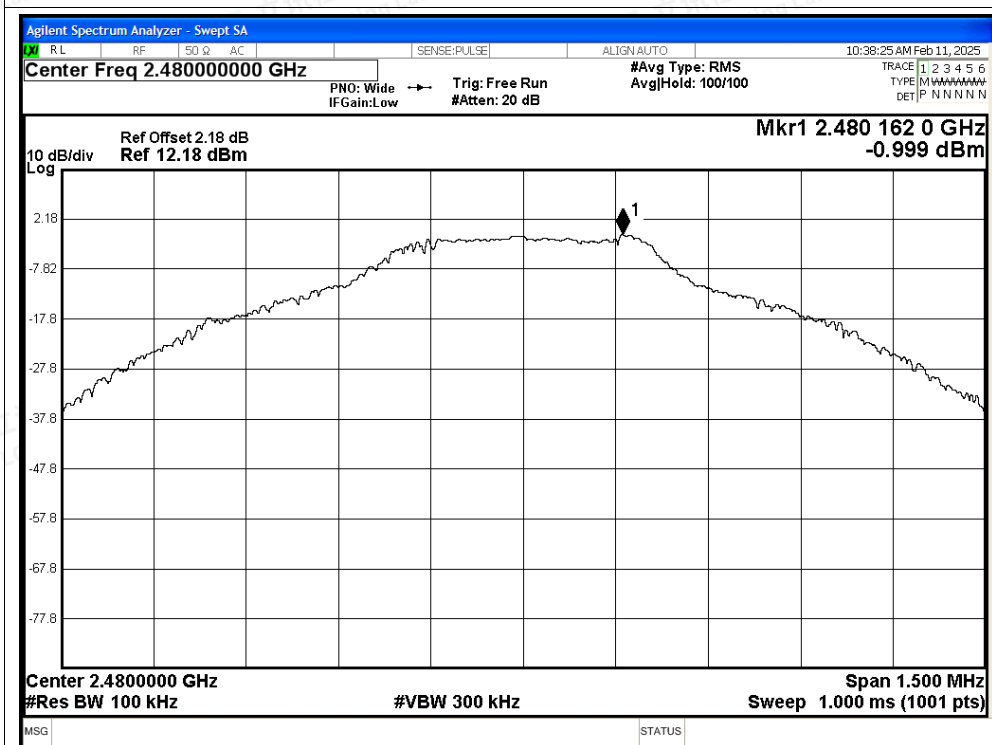
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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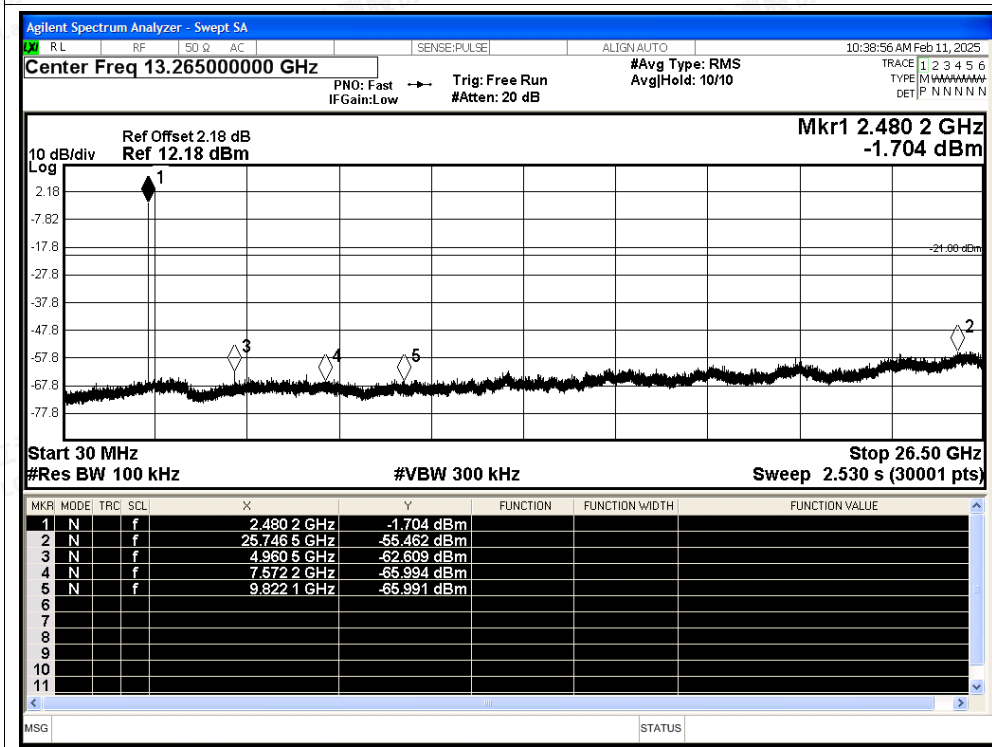
Scan code to check authenticity



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



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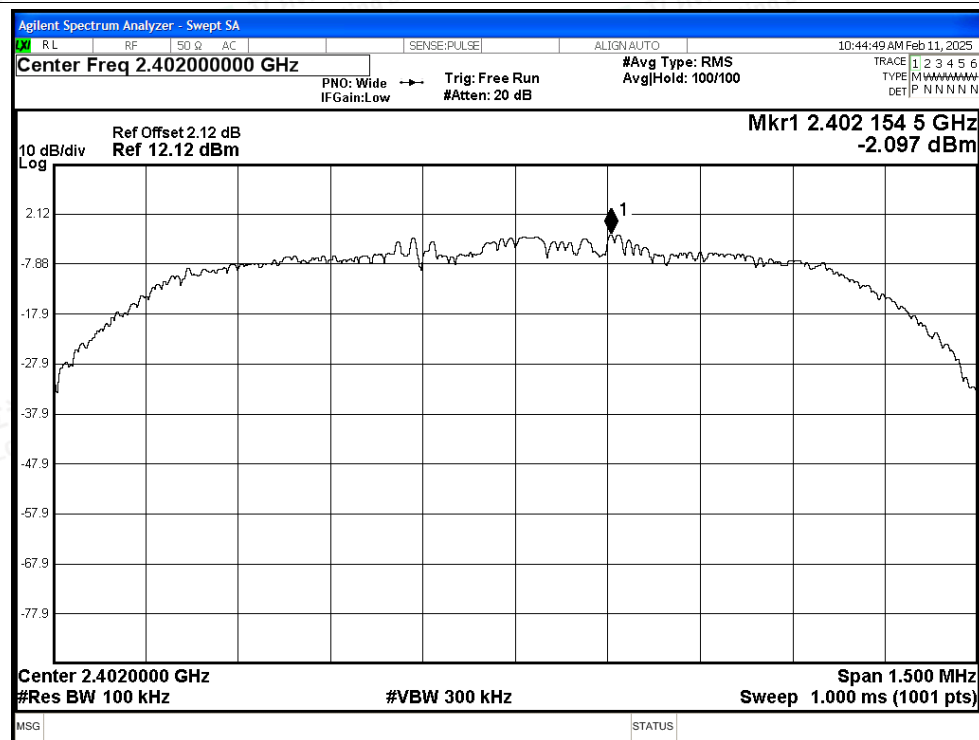
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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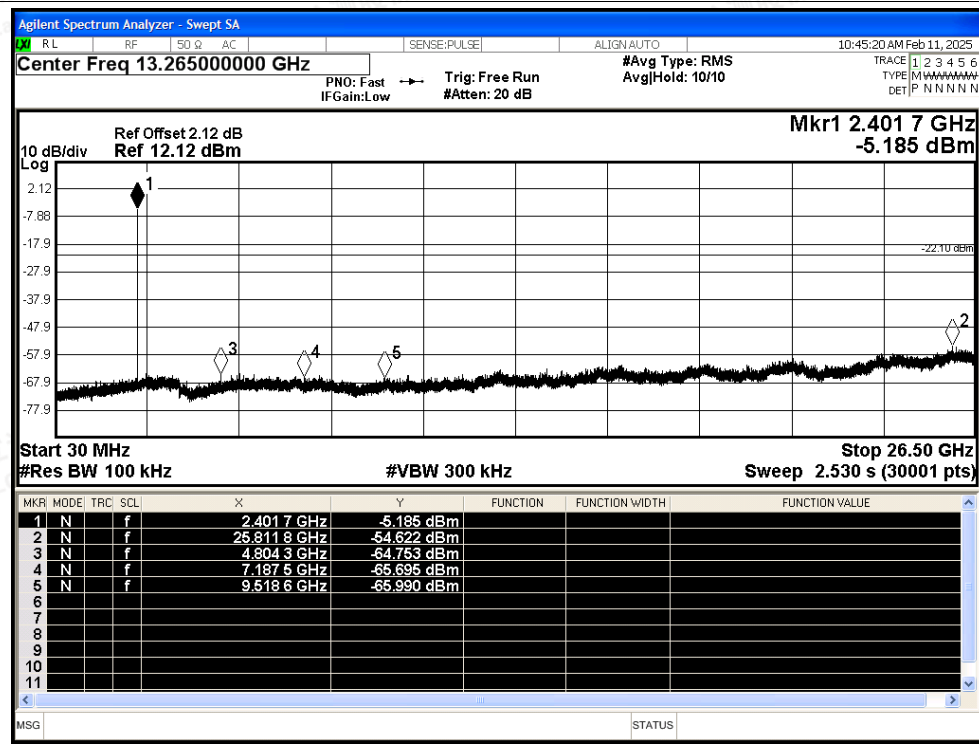
Scan code to check authenticity



Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref

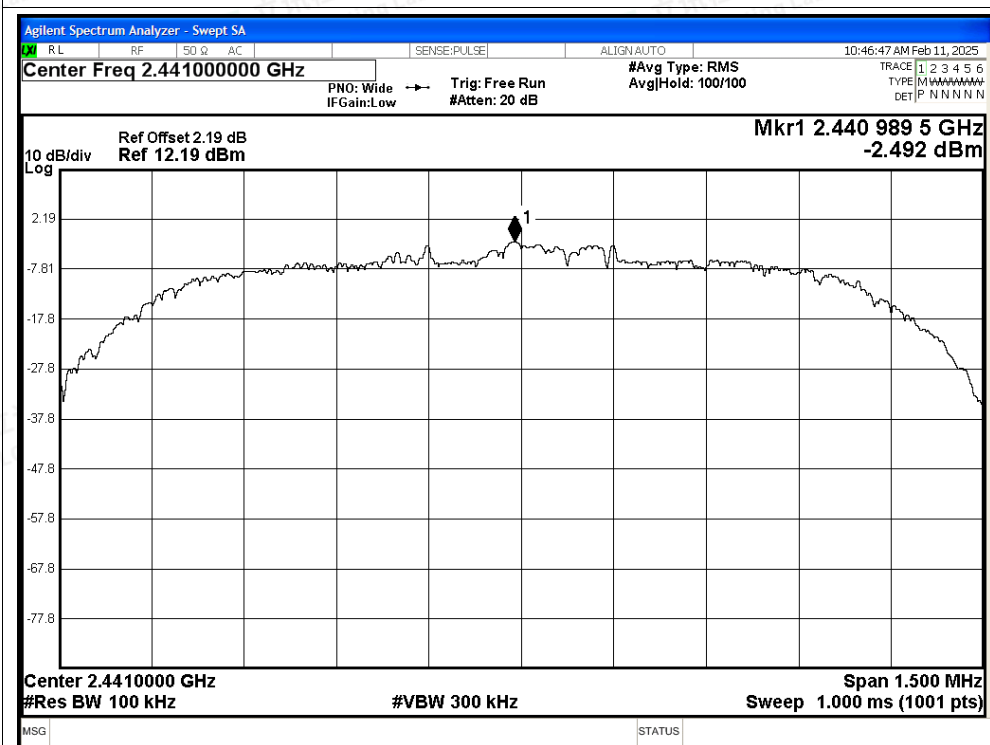


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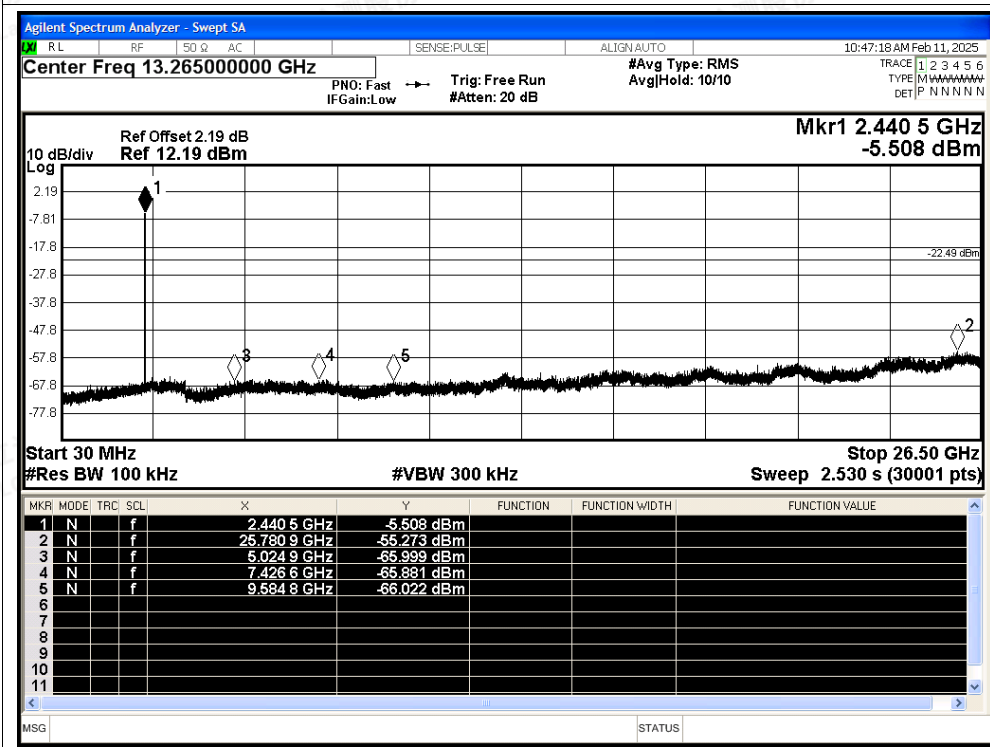




Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref

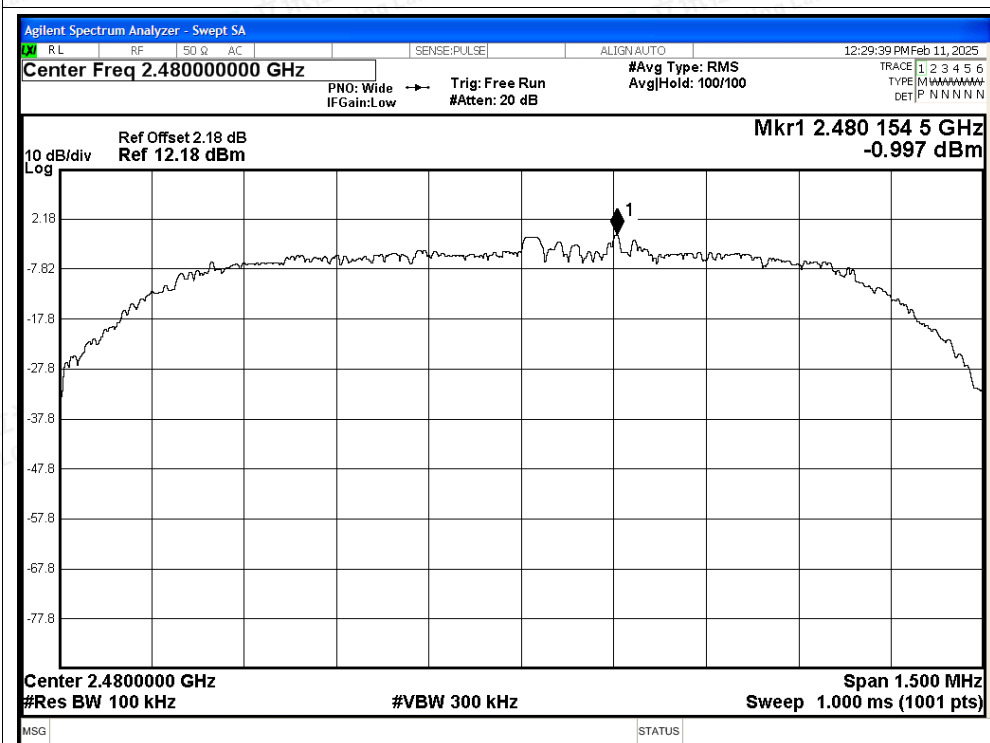


Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission

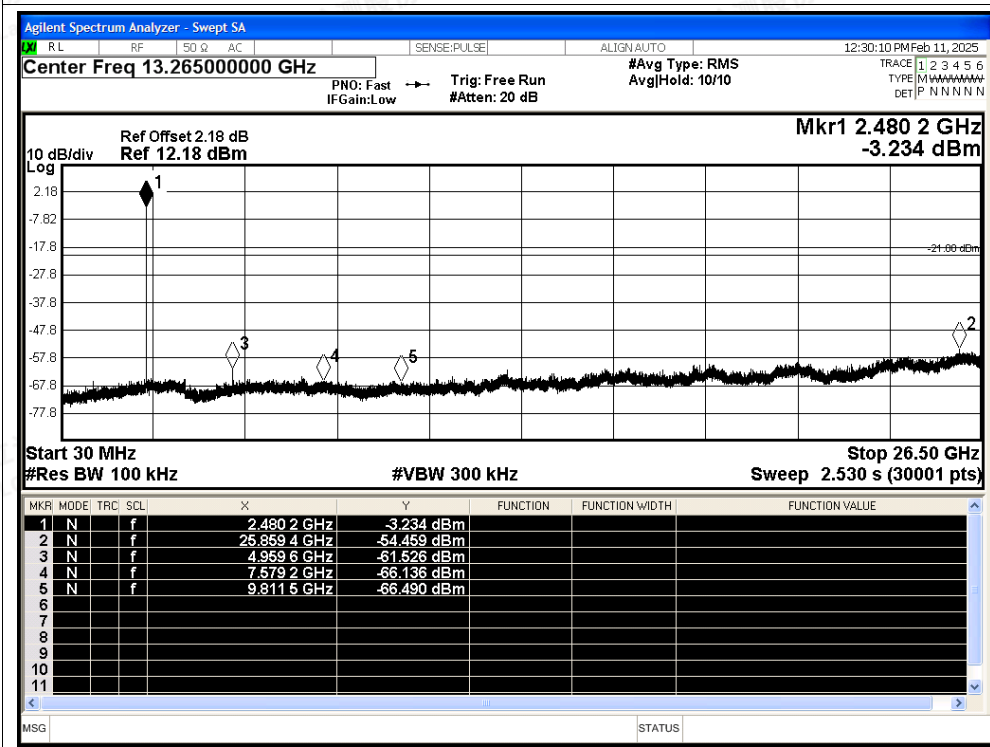




Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



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A.8 Duty Cycle

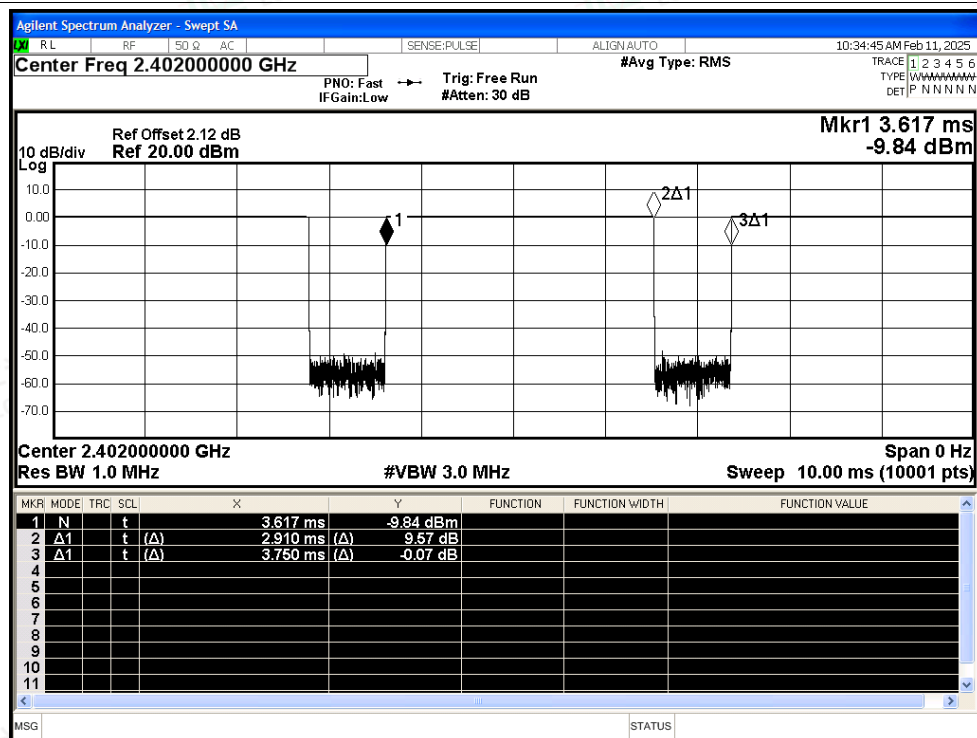
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	77.6	1.1	0.34
NVNT	1-DH5	2441	Ant1	77.6	1.1	0.34
NVNT	1-DH5	2480	Ant1	77.63	1.1	0.34
NVNT	2-DH5	2402	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2441	Ant1	77.28	1.12	0.35
NVNT	2-DH5	2480	Ant1	77.28	1.12	0.35



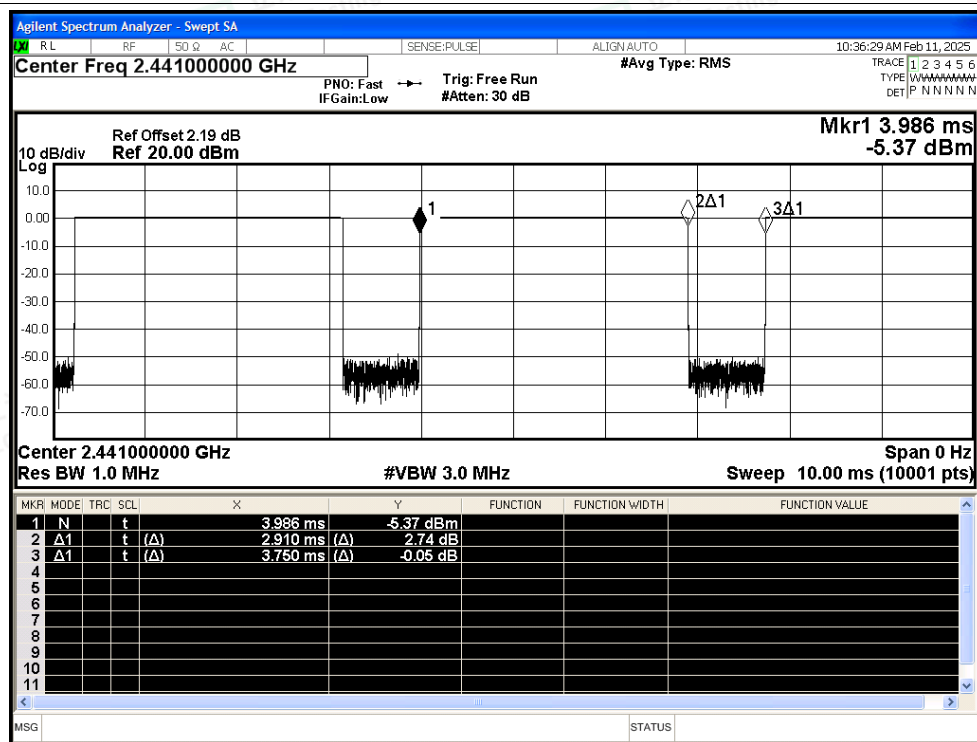


Test Graphs

Duty Cycle NVNT 1-DH5 2402MHz Ant1



Duty Cycle NVNT 1-DH5 2441MHz Ant1



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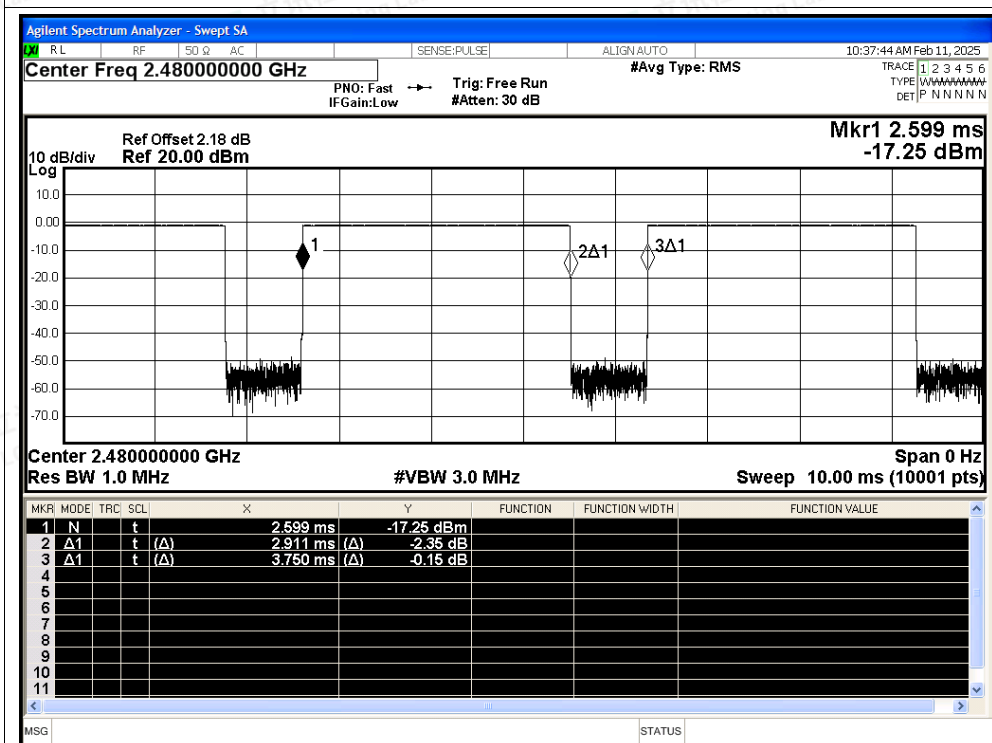
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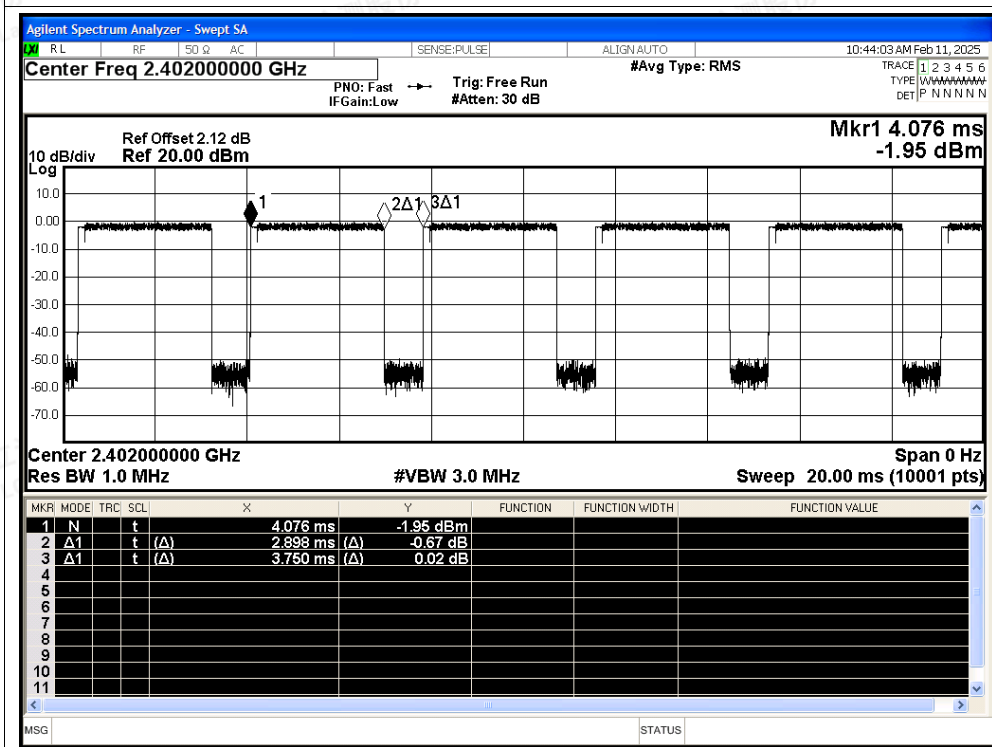
Scan code to check authenticity



Duty Cycle NVNT 1-DH5 2480MHz Ant1

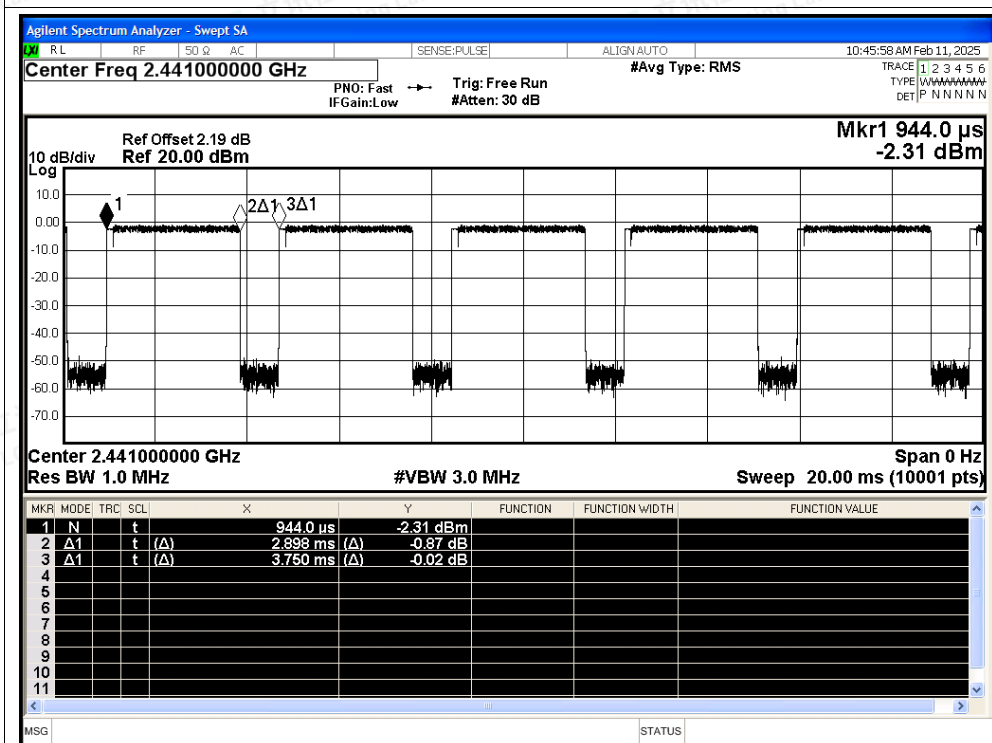


Duty Cycle NVNT 2-DH5 2402MHz Ant1

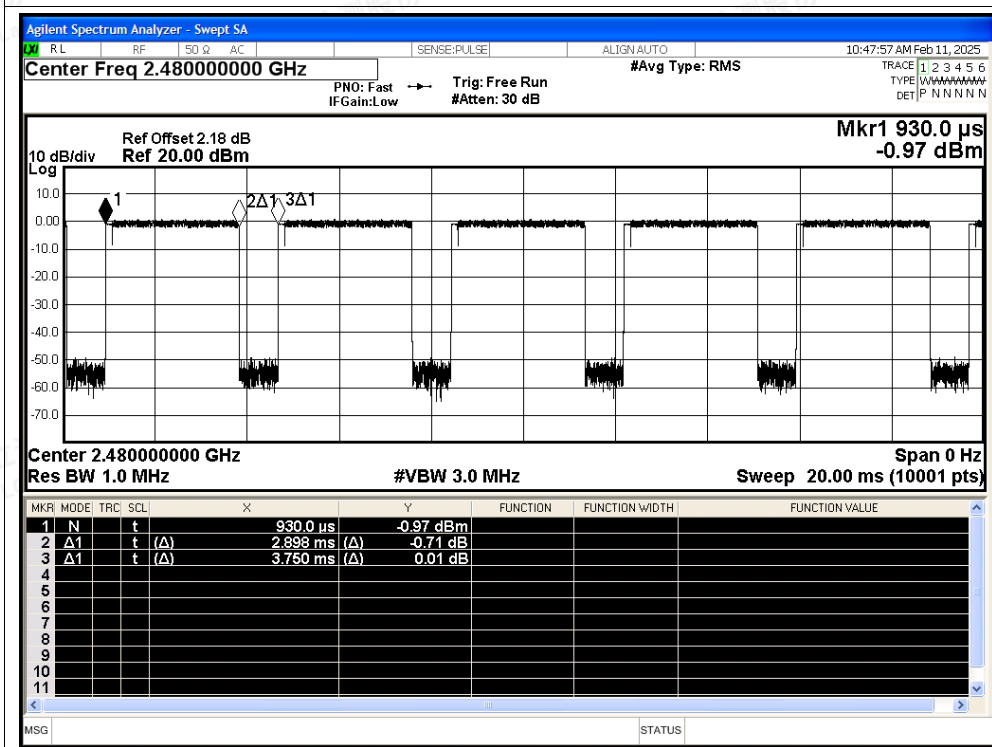




Duty Cycle NVNT 2-DH5 2441MHz Ant1



Duty Cycle NVNT 2-DH5 2480MHz Ant1





A.9 Restrict Band

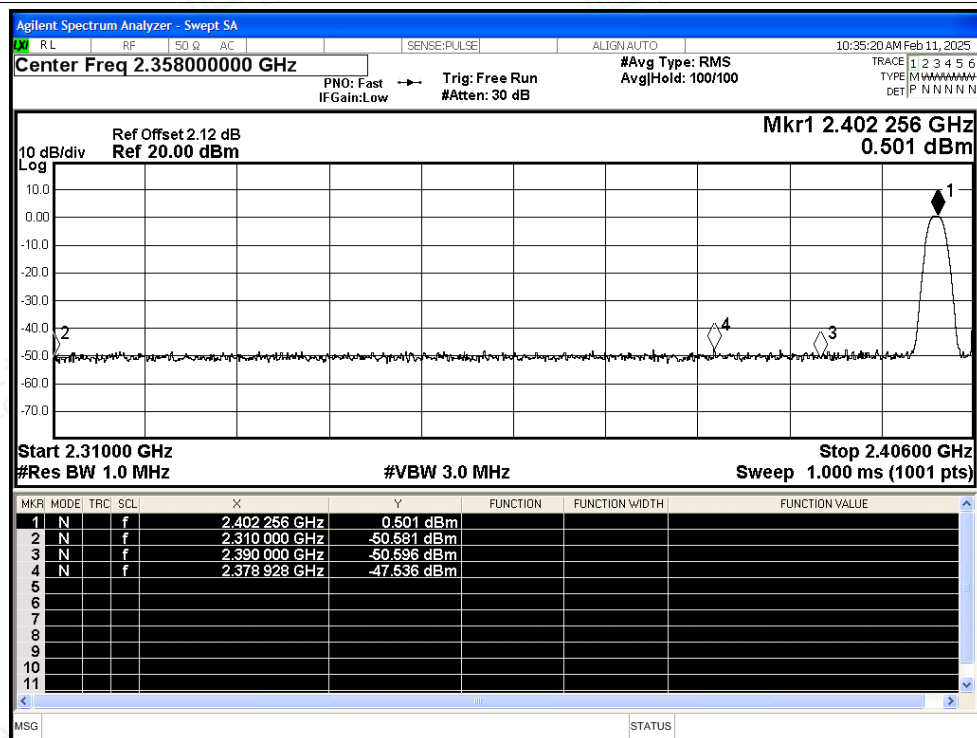
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-50.58	2.09	-	46.77	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-58.49	2.09	1.1	39.96	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2378.928	-47.54	2.09	-	49.81	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2357.04	-57.53	2.09	1.1	40.92	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-50.6	2.09	-	46.75	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.06	2.09	1.1	40.39	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.87	2.09	-	46.48	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-57.6	2.09	1.1	40.85	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2486.056	-46.47	2.09	-	50.88	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2499.4	-57	2.09	1.1	41.45	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-50.69	2.09	-	46.66	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-57.47	2.09	1.1	40.98	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-50.12	2.09	-	47.23	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-58.77	2.09	1.12	39.7	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2387.28	-47.5	2.09	-	49.85	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2384.592	-57.59	2.09	1.12	40.88	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-51.49	2.09	-	45.86	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-58.34	2.09	1.12	40.13	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-45.07	2.09	-	52.28	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-56.81	2.09	1.12	41.66	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.776	-44.03	2.09	-	53.32	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.536	-56.47	2.09	1.12	42	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-48.6	2.09	-	48.75	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-58.23	2.09	1.12	40.24	Average	54	Pass



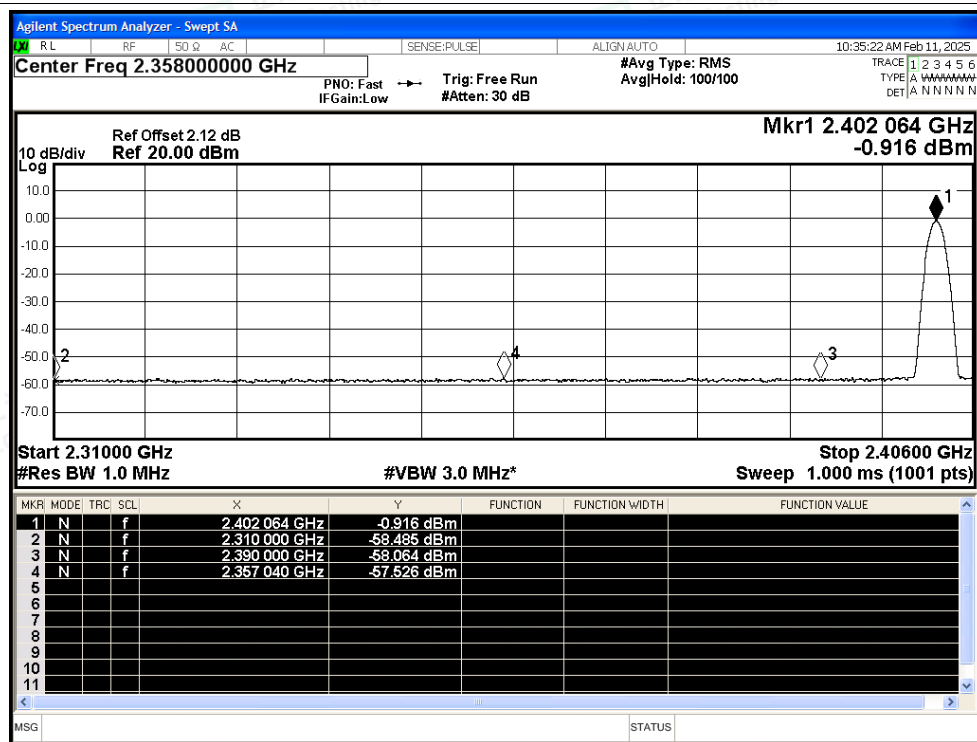


Test Graphs

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.

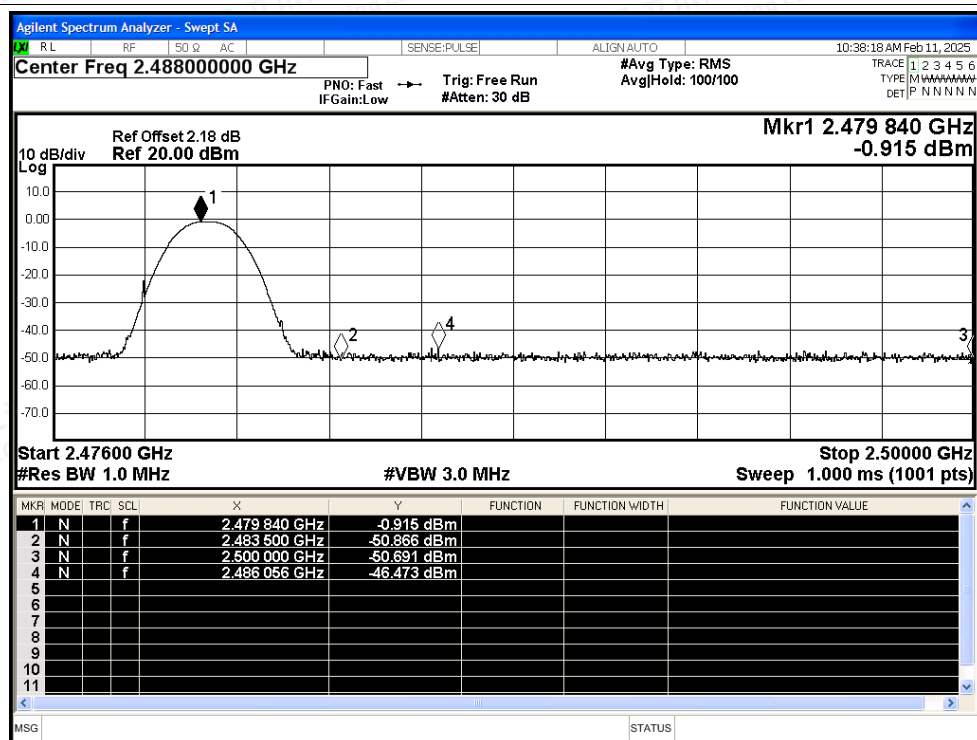
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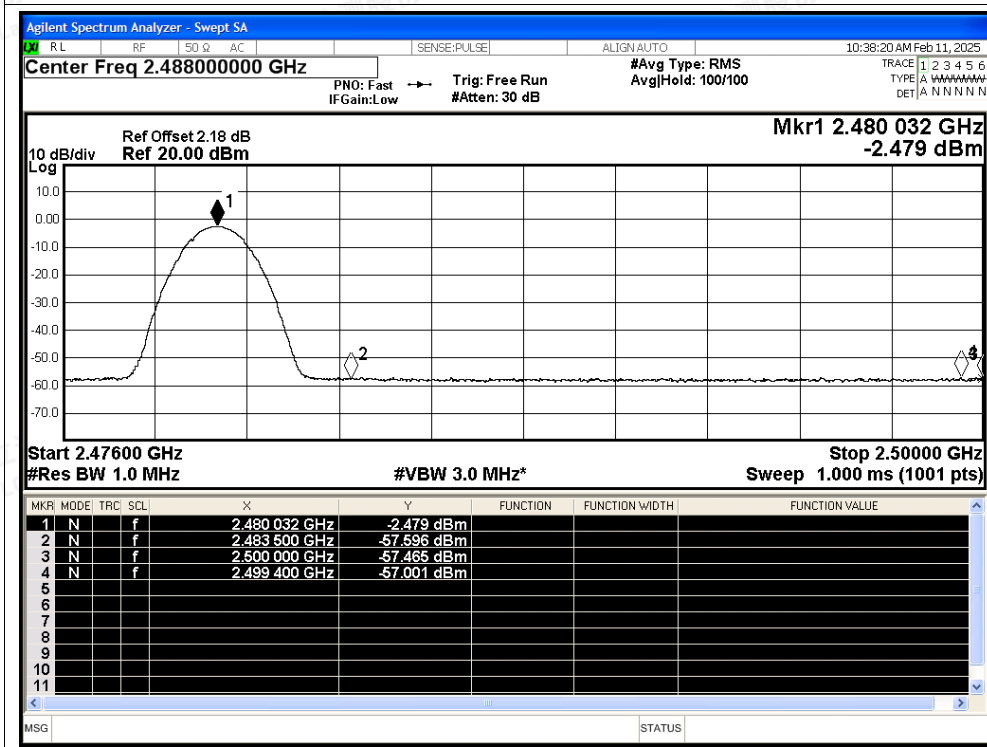
Scan code to check authenticity



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

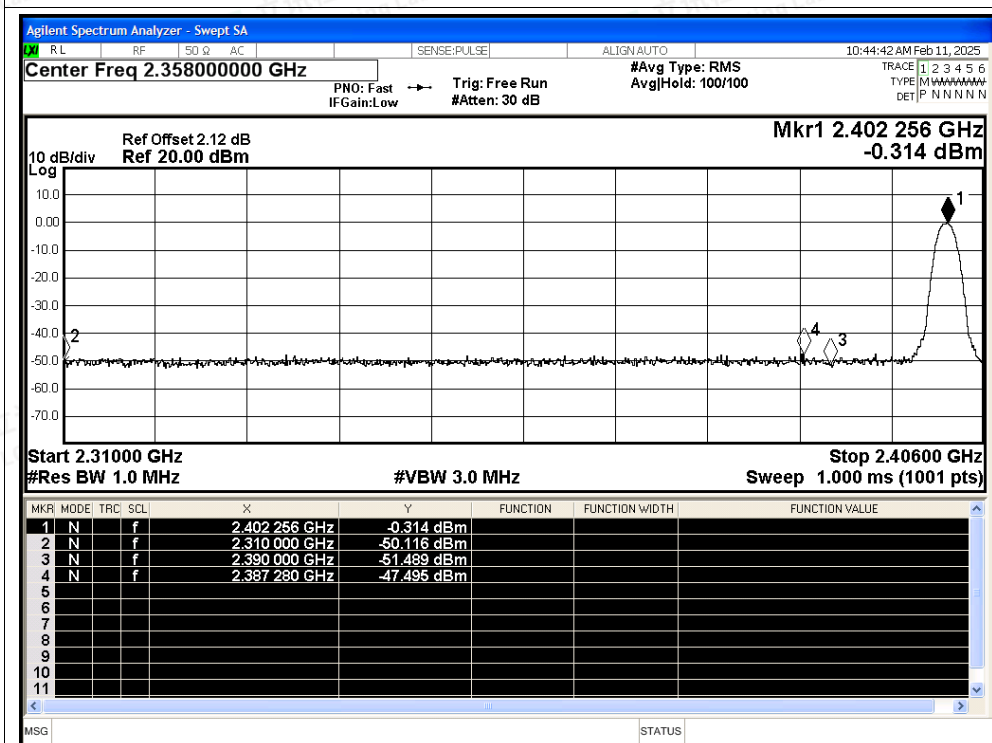


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

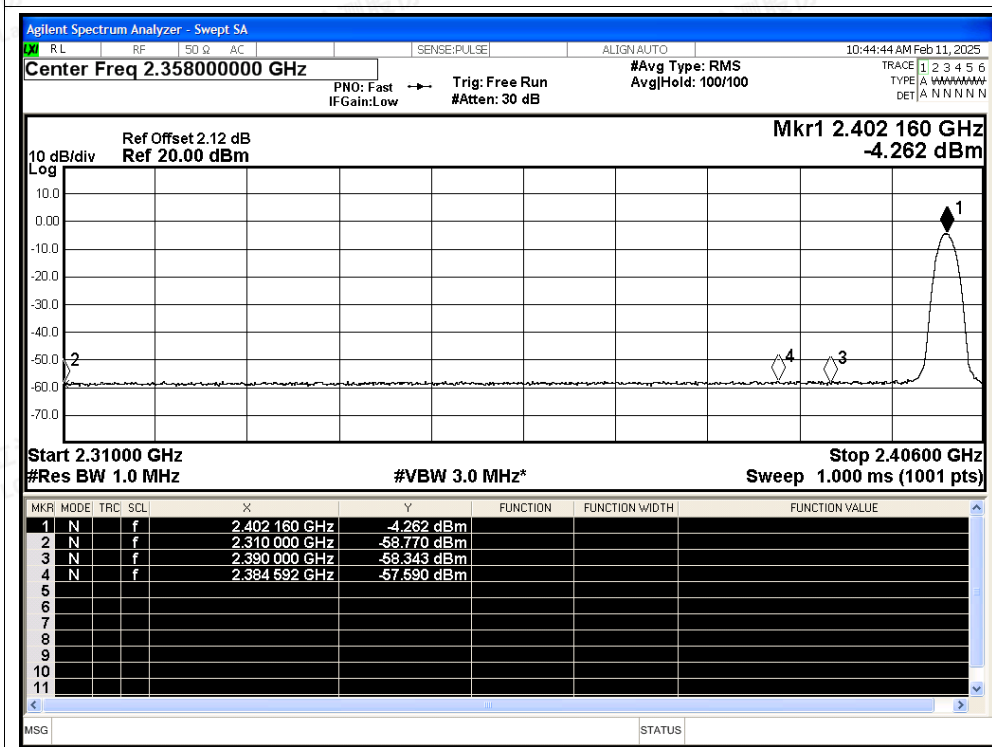




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak

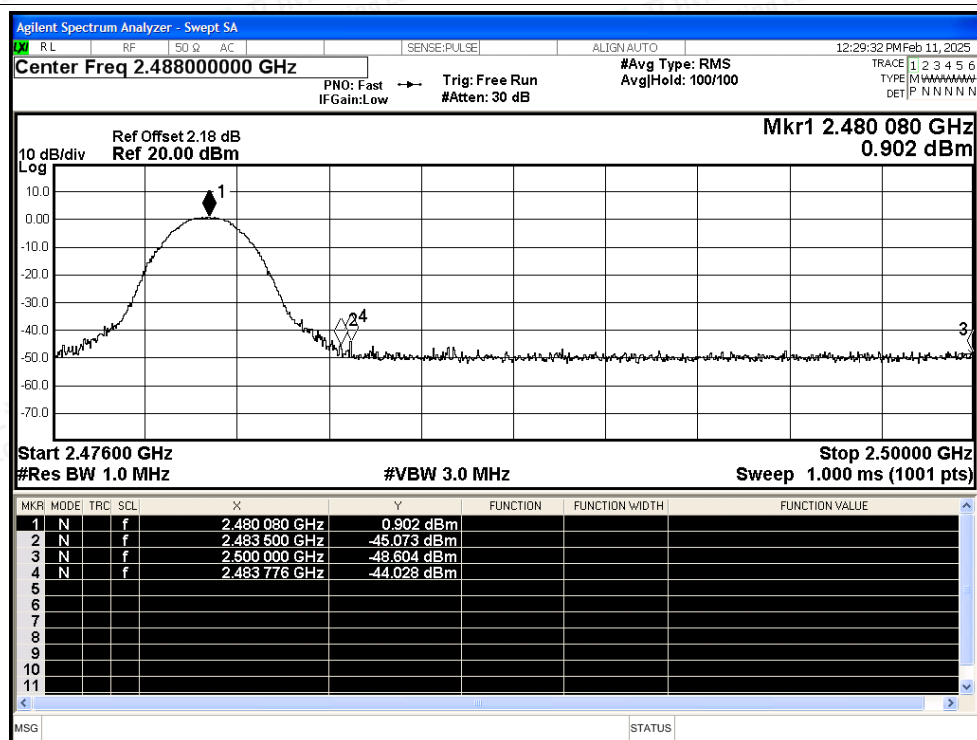


Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average





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



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

