



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: SAUER-Speaker XIV-BT19

Test Model: GS104768

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	<i>Nick Peng</i> Nick Peng
Supervised by:	<i>Ling Zhu</i> Ling Zhu



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A.1 -20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	1.009	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.945	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.948	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.283	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.276	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.287	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.298	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.299	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.306	N/A	Pass



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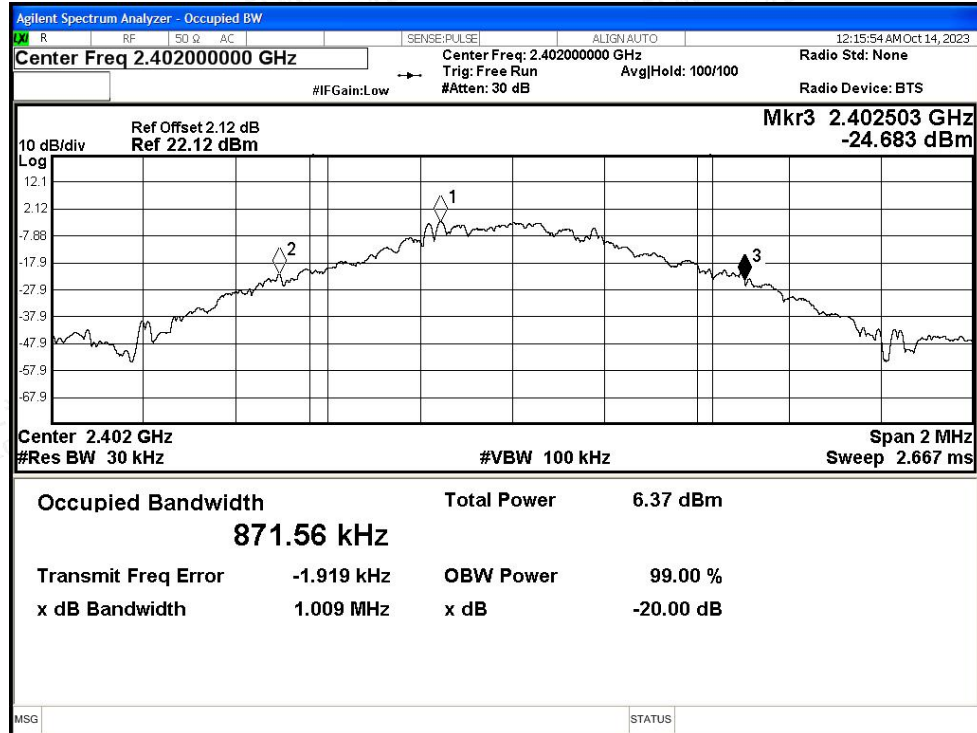
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Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



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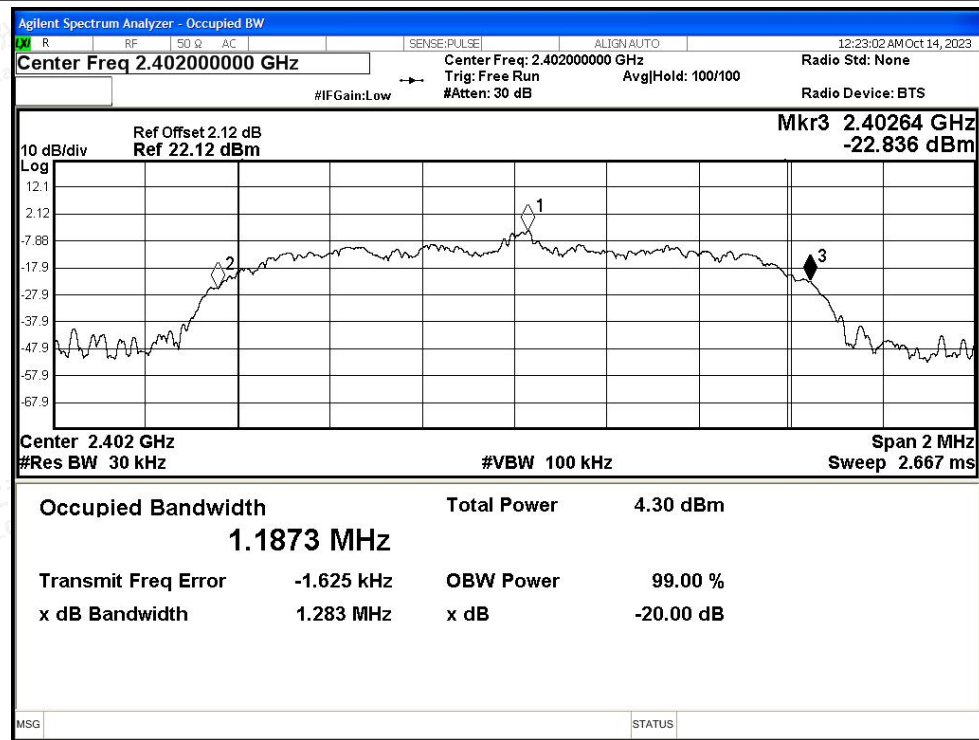
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-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



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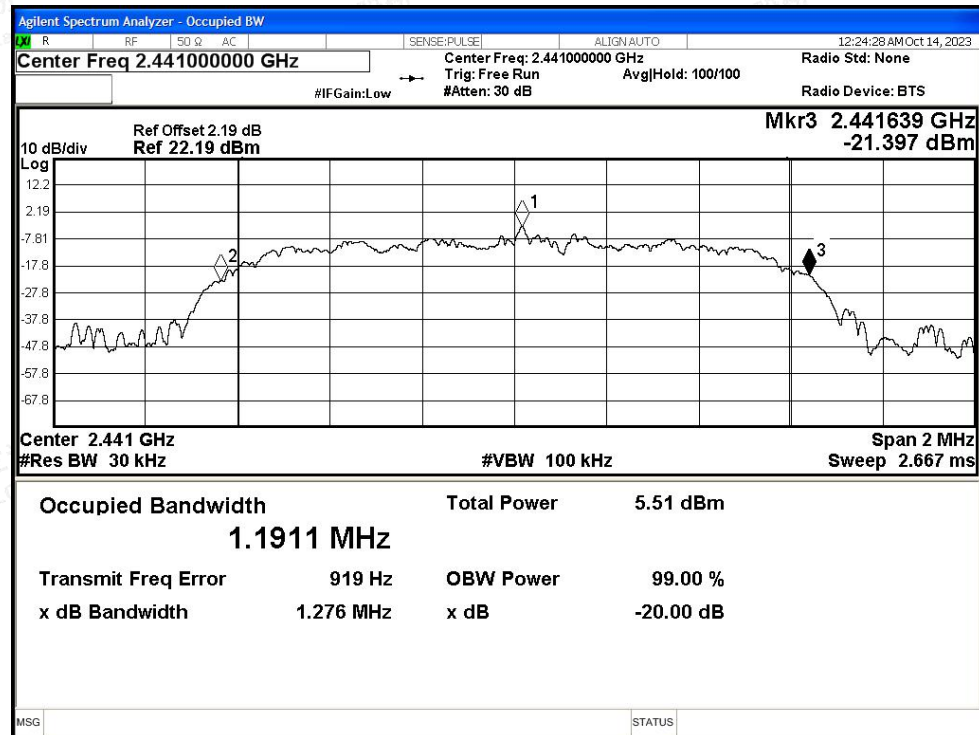
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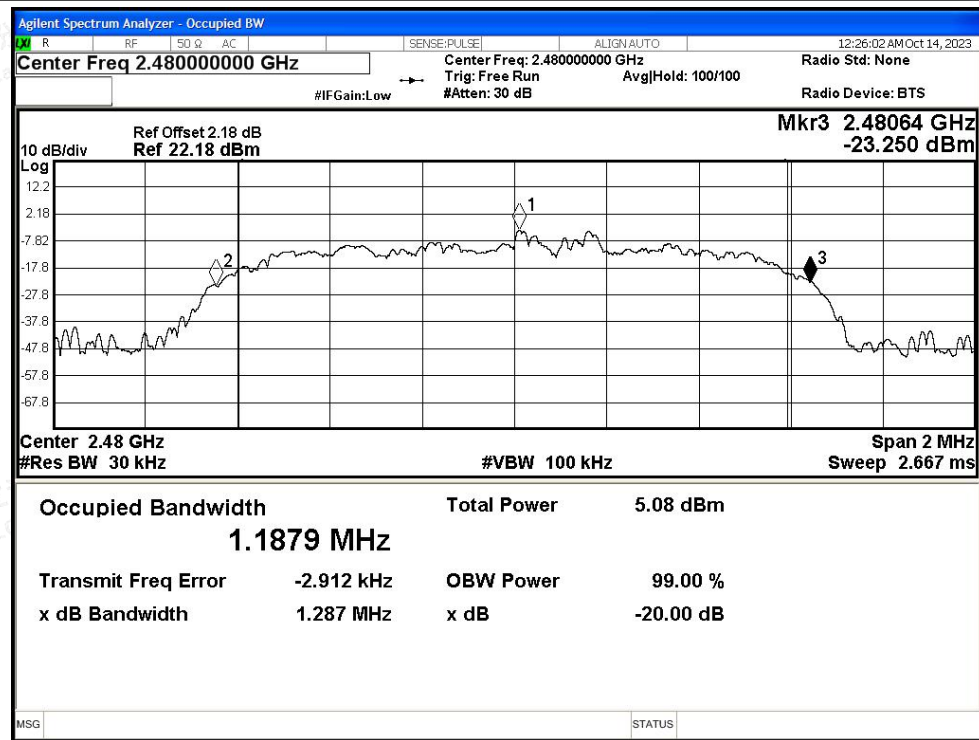
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-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



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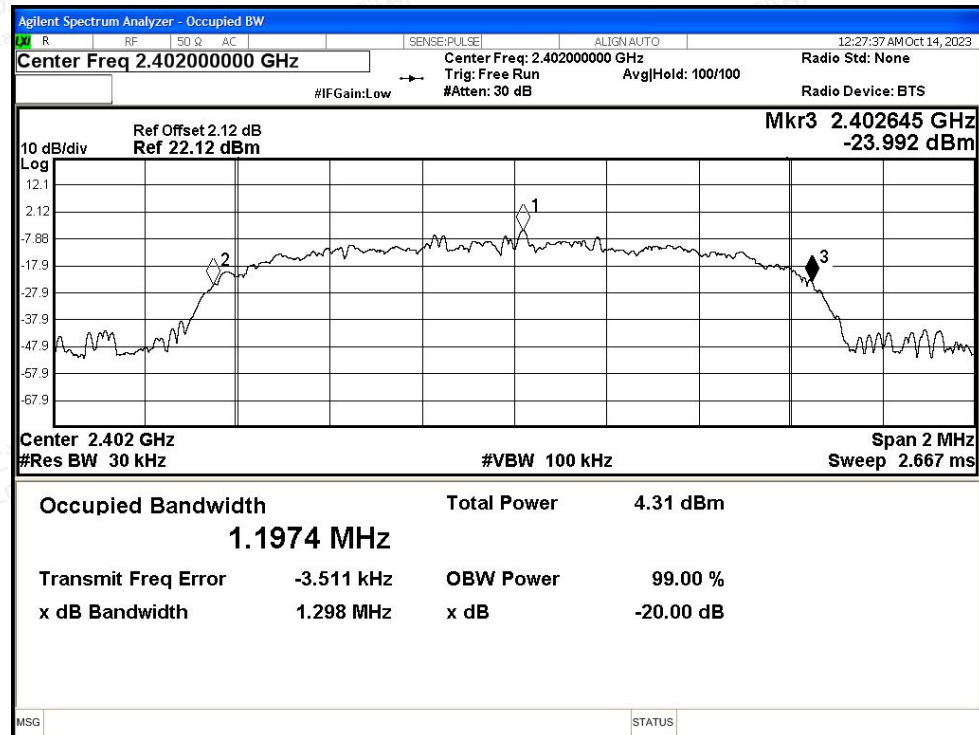
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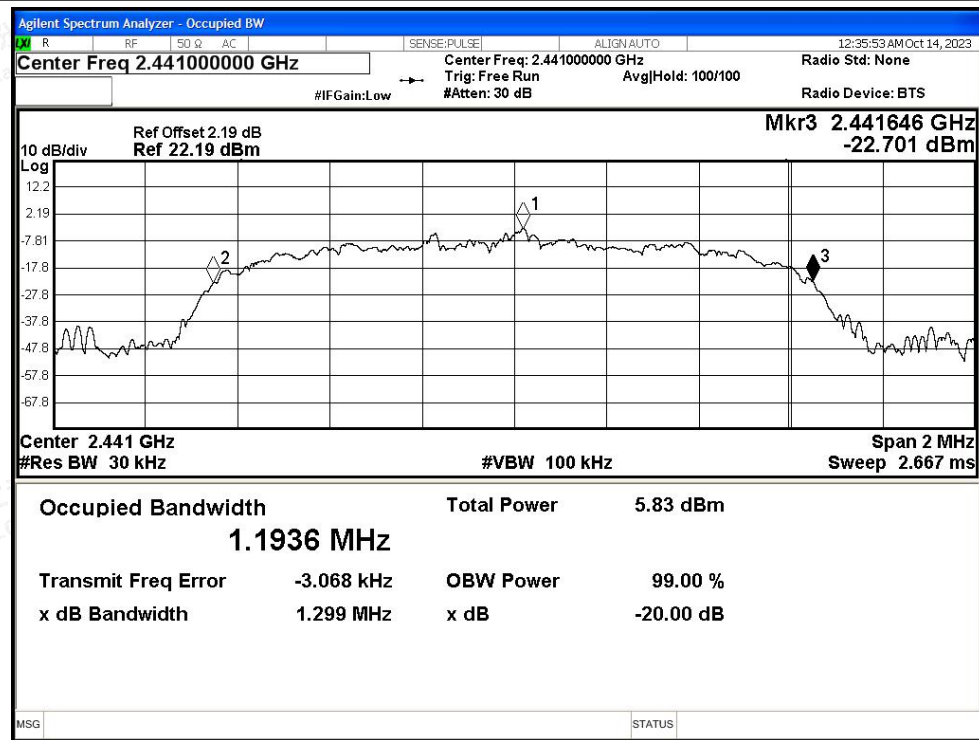
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-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1

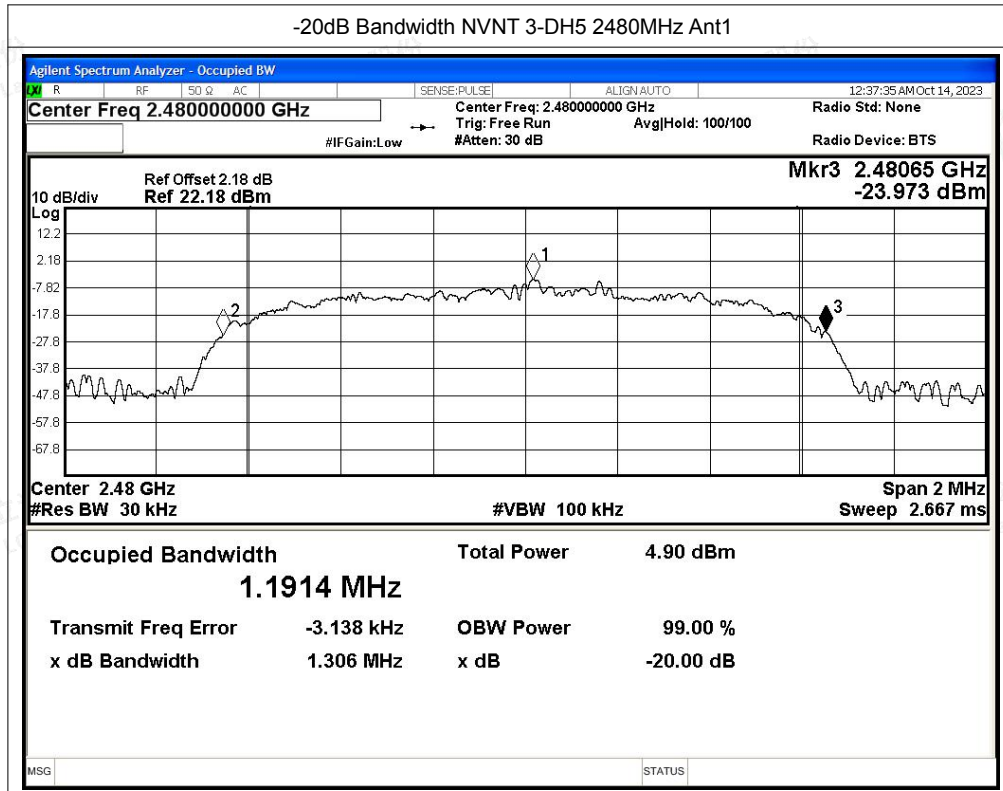


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A.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-0.02	21	Pass
NVNT	1-DH5	2441	Ant1	1.36	21	Pass
NVNT	1-DH5	2480	Ant1	0.01	21	Pass
NVNT	2-DH5	2402	Ant1	0.01	21	Pass
NVNT	2-DH5	2441	Ant1	1.47	21	Pass
NVNT	2-DH5	2480	Ant1	0.51	21	Pass
NVNT	3-DH5	2402	Ant1	0.2	21	Pass
NVNT	3-DH5	2441	Ant1	1.59	21	Pass
NVNT	3-DH5	2480	Ant1	0.71	21	Pass



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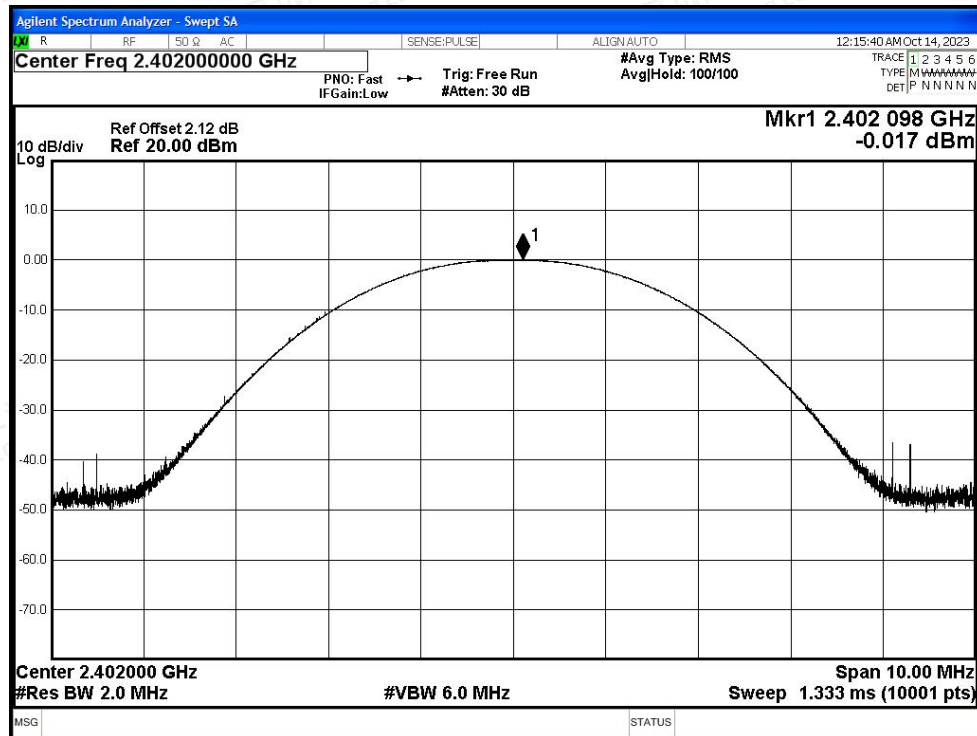
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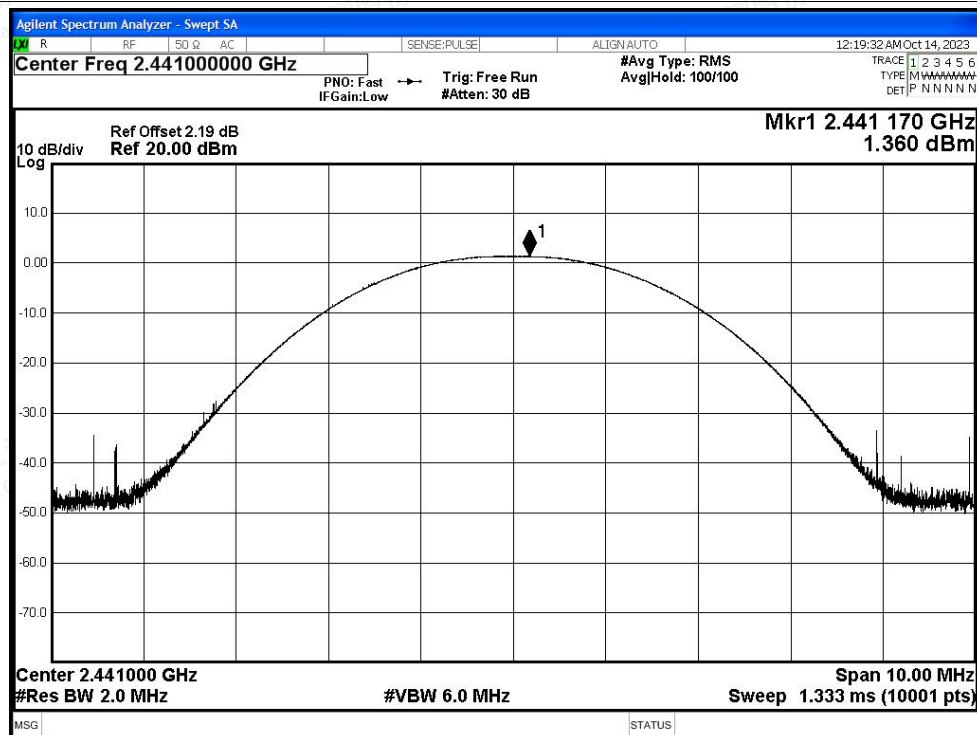


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1



Power NVNT 1-DH5 2441MHz Ant1



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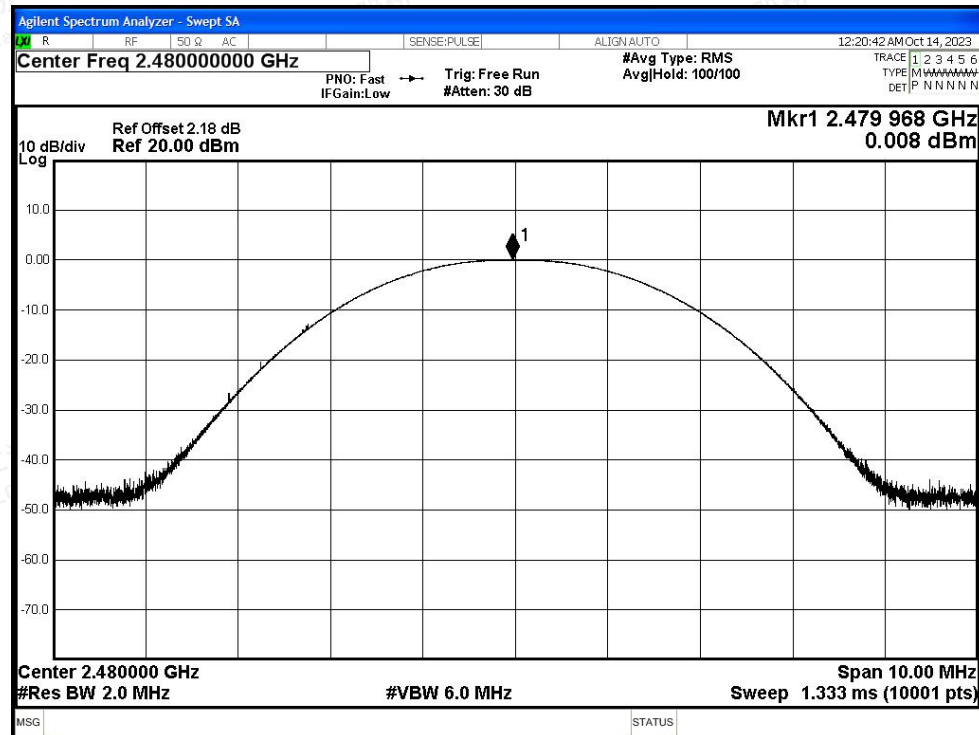
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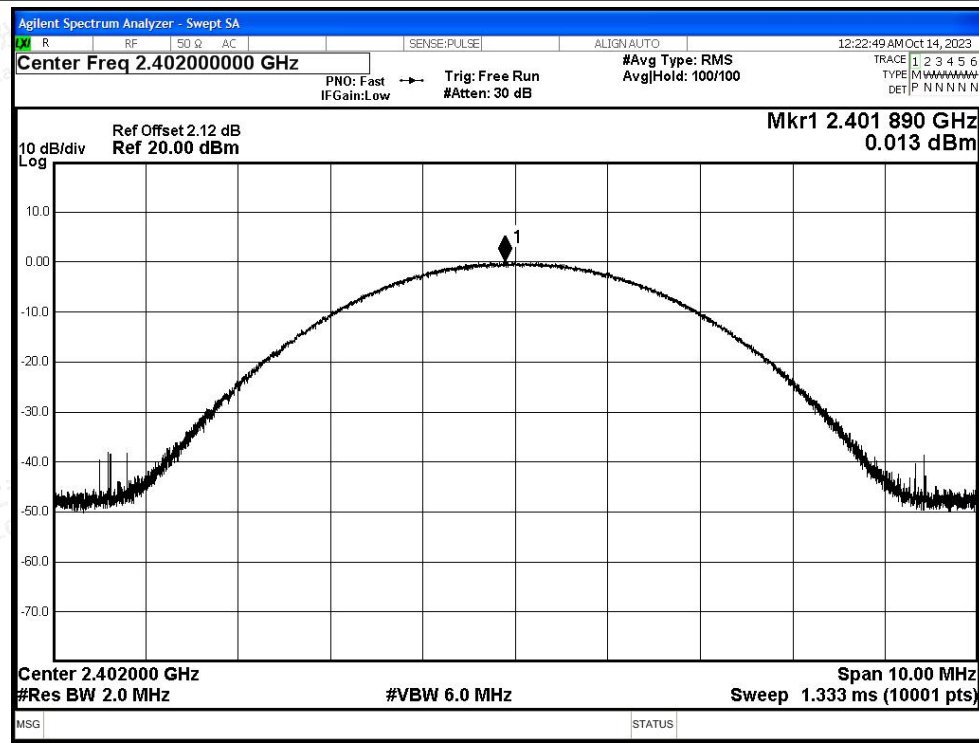
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Power NVNT 1-DH5 2480MHz Ant1



Power NVNT 2-DH5 2402MHz Ant1



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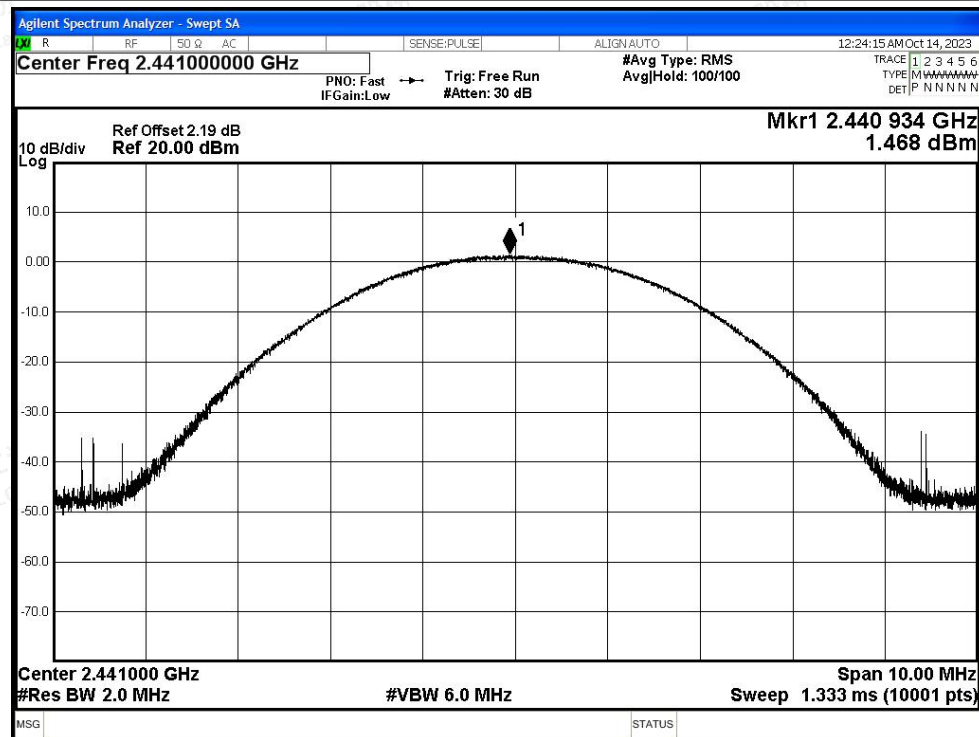
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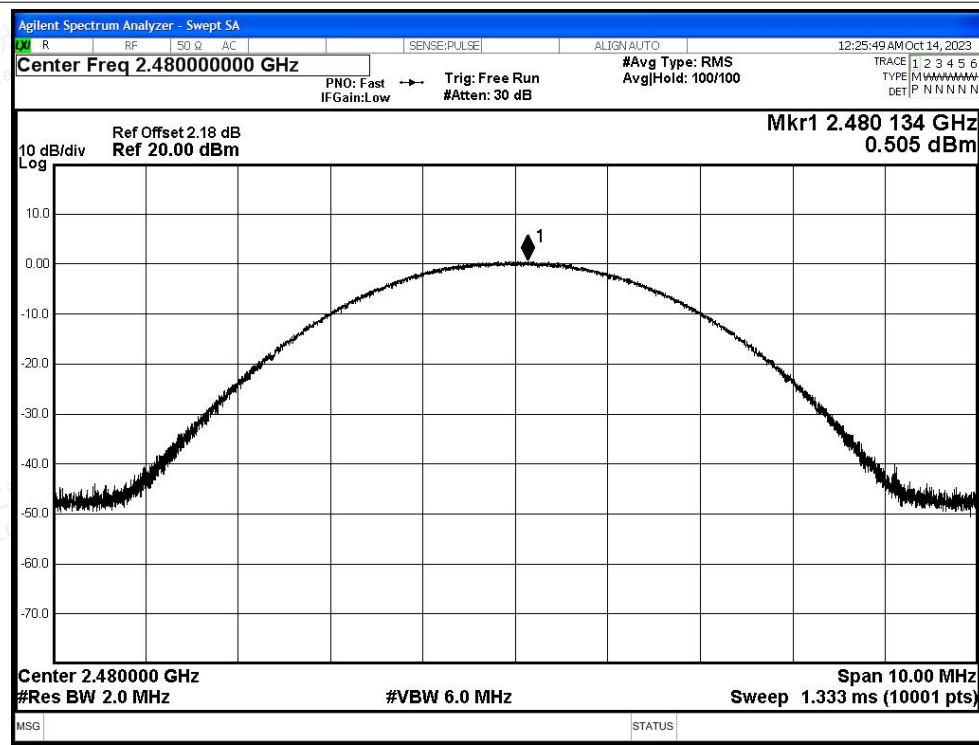
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Power NVNT 2-DH5 2441MHz Ant1



Power NVNT 2-DH5 2480MHz Ant1



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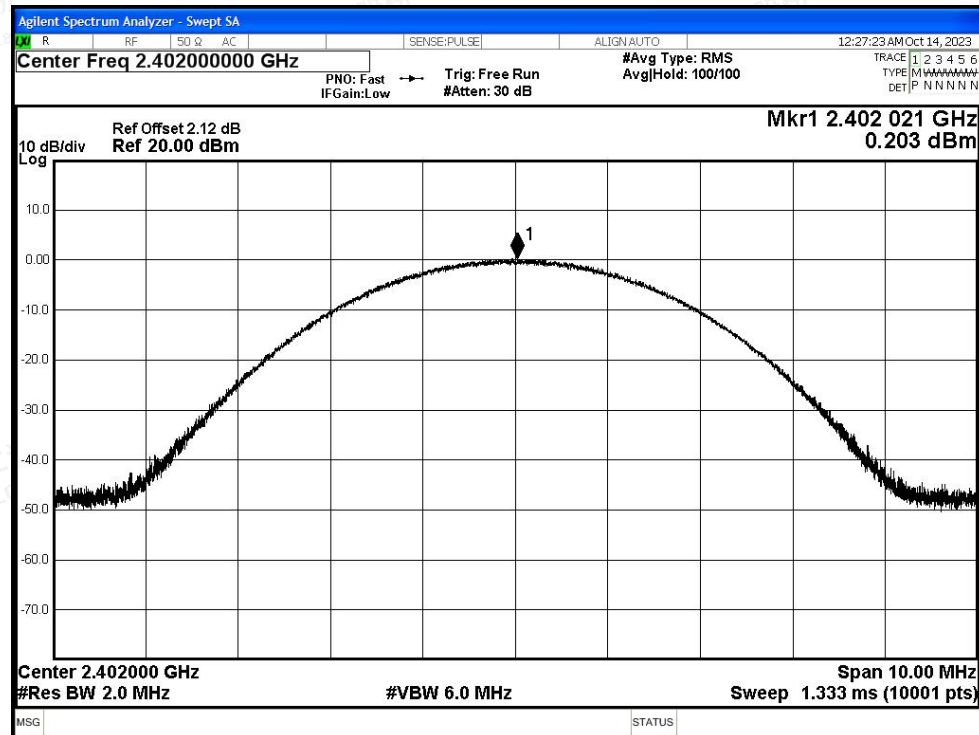
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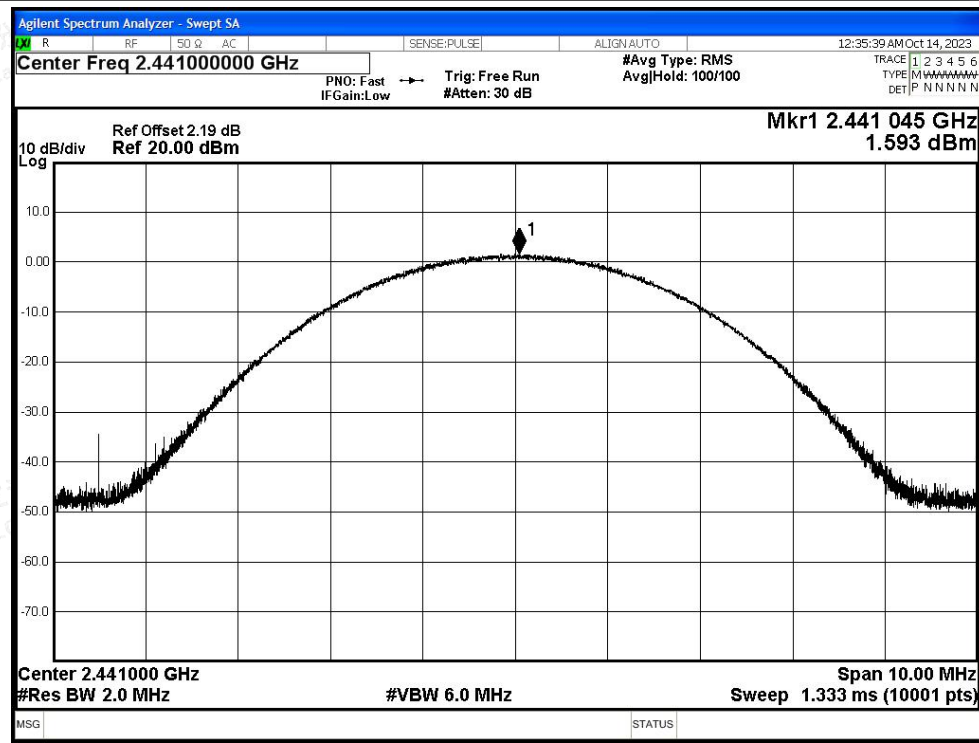
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Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1

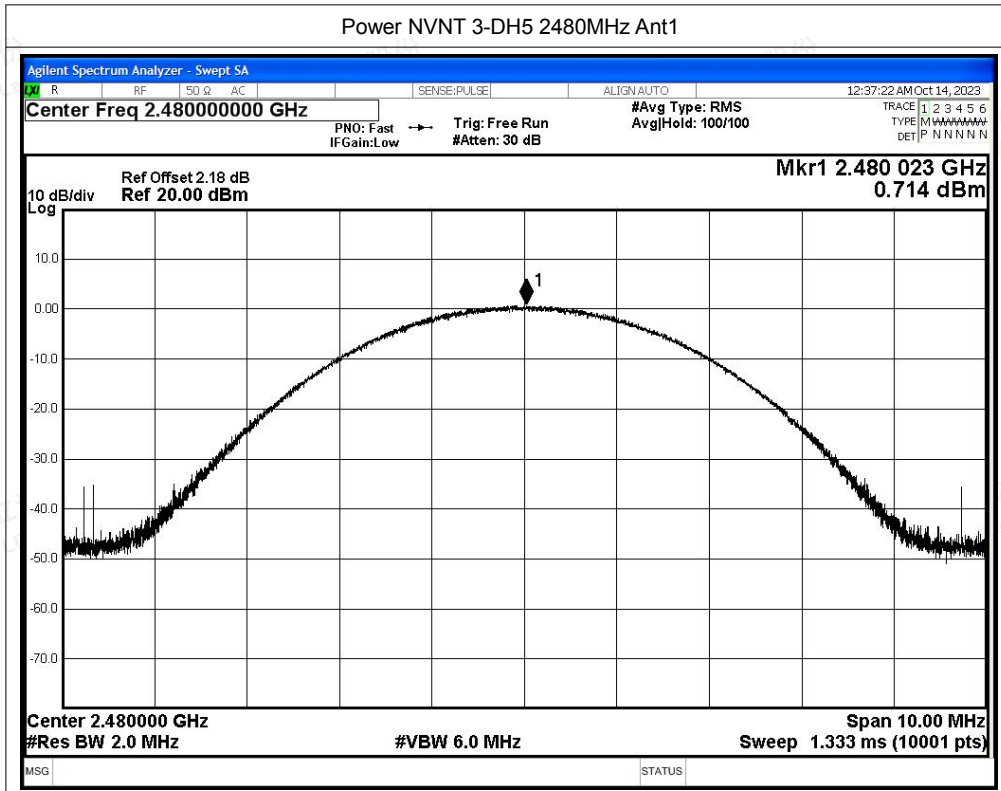


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A.3 Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.834	2402.842	1.008	0.673	Pass
NVNT	2-DH5	Ant1	2402.026	2403	0.974	0.858	Pass
NVNT	3-DH5	Ant1	2401.918	2403.11	1.192	0.871	Pass



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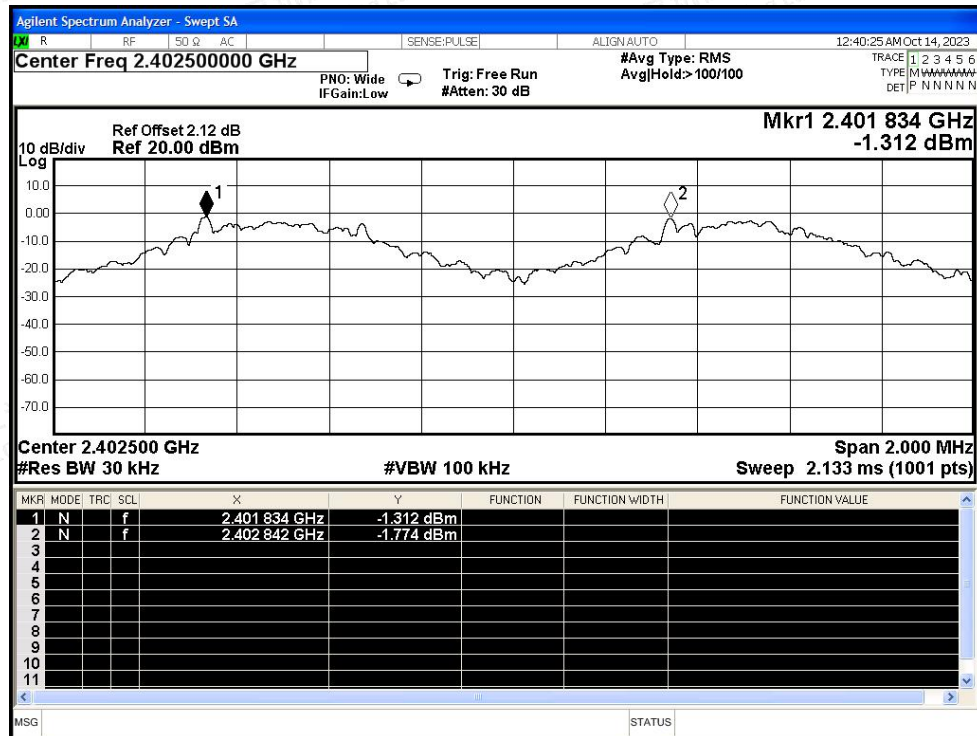
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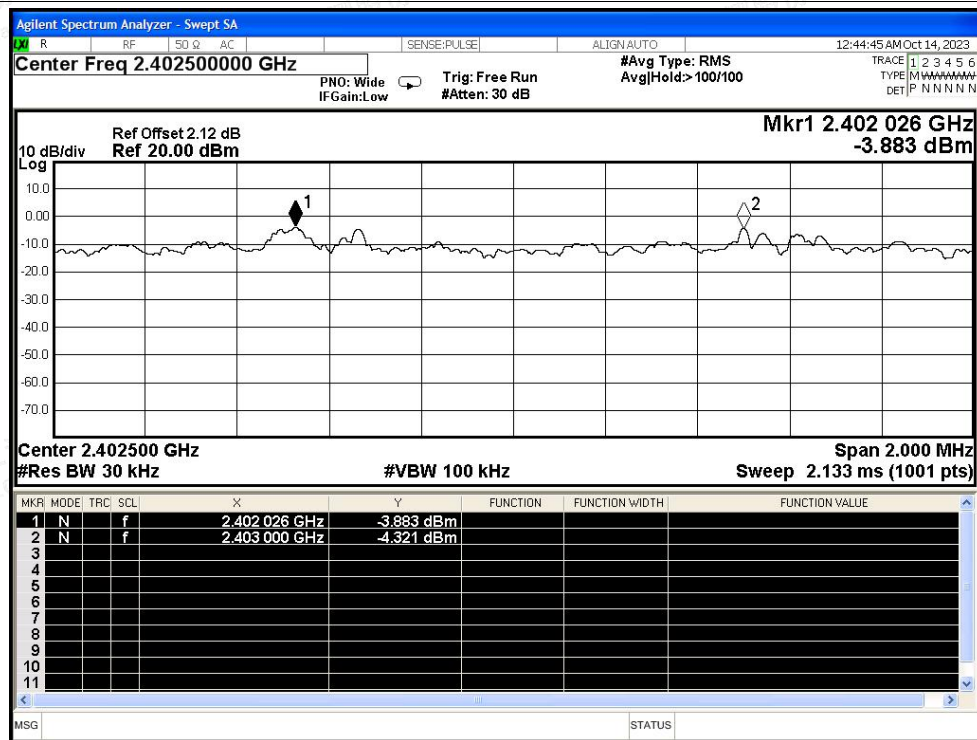


Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1

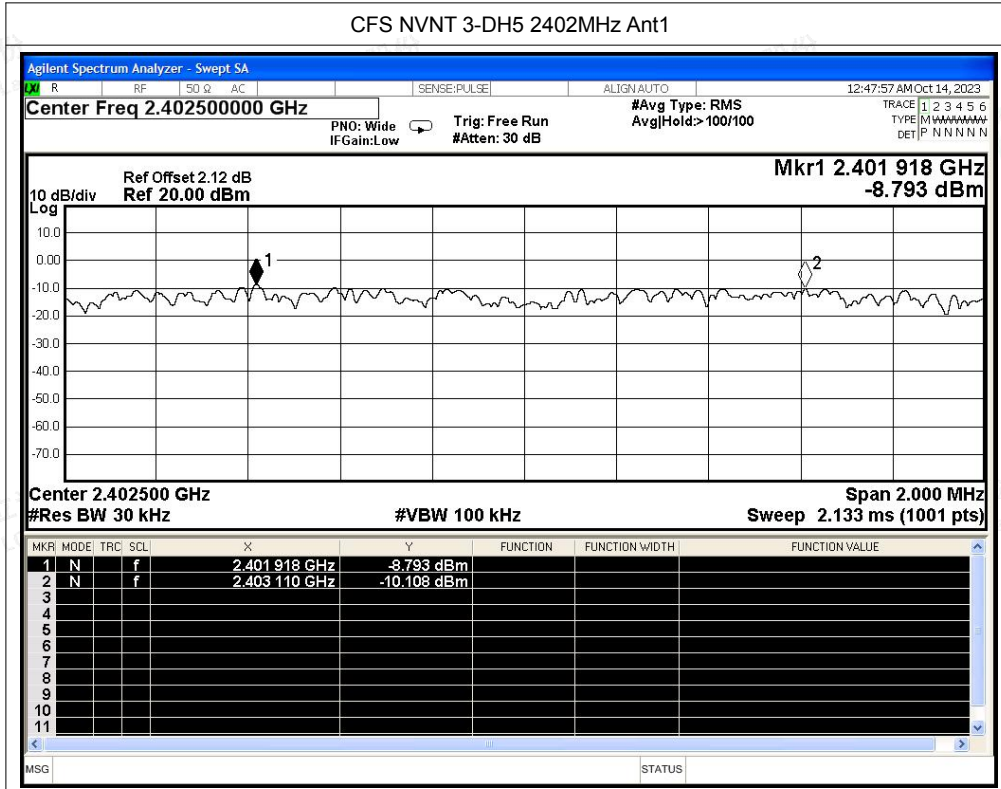


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A.4 Dwell Time

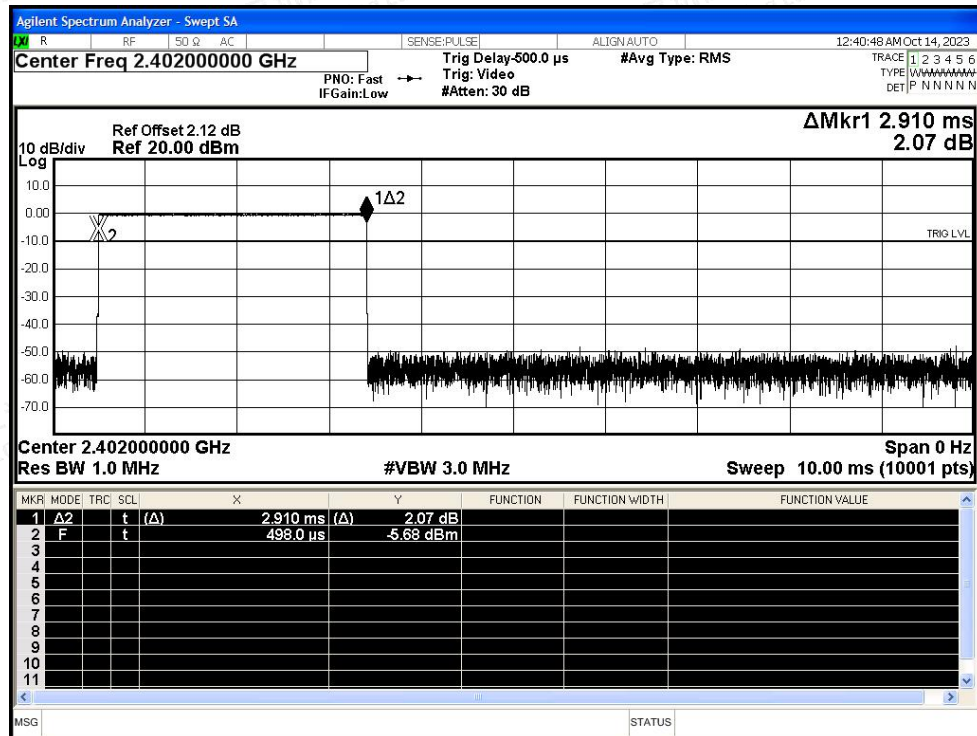
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.91	296.82	102	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.898	321.678	111	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.897	286.803	99	31600	400	Pass



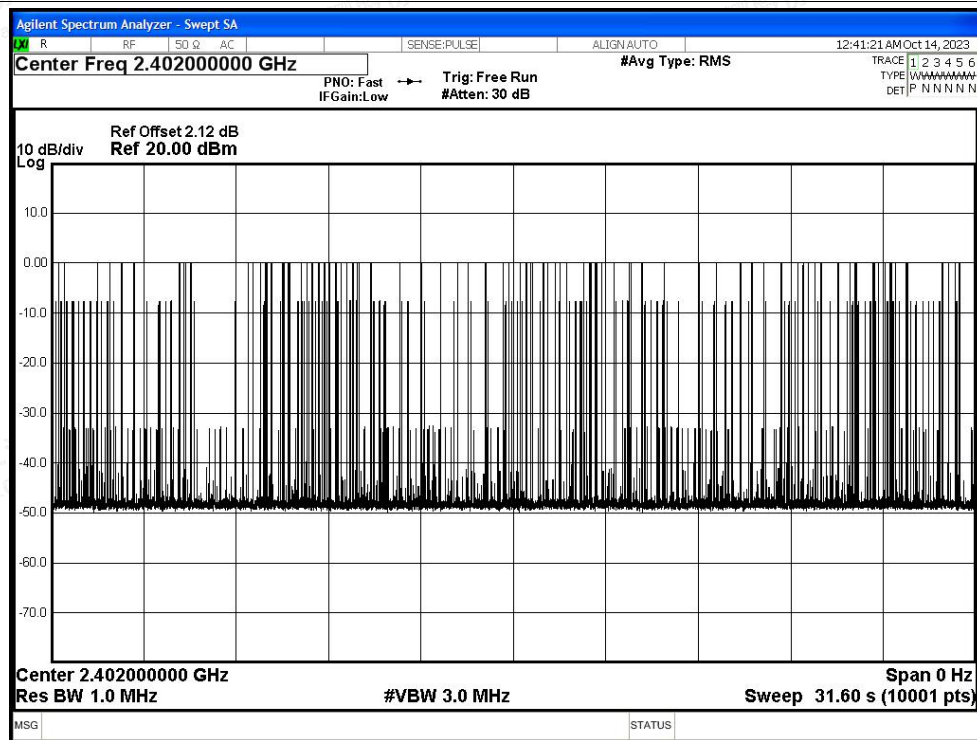


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



Shenzhen LCS Compliance Testing Laboratory Ltd.

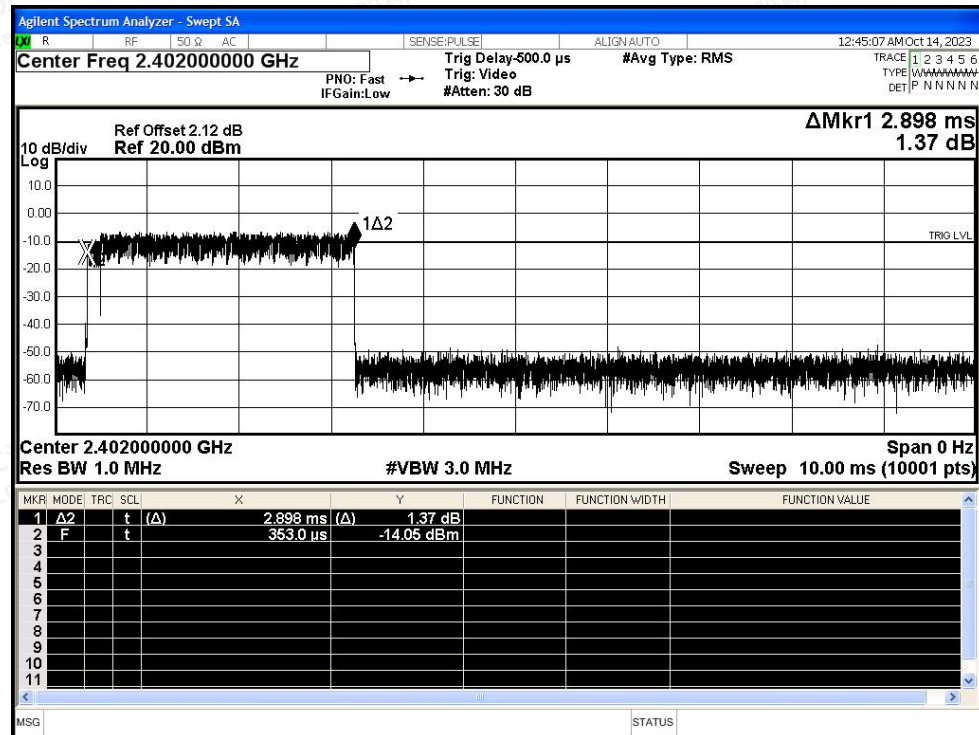
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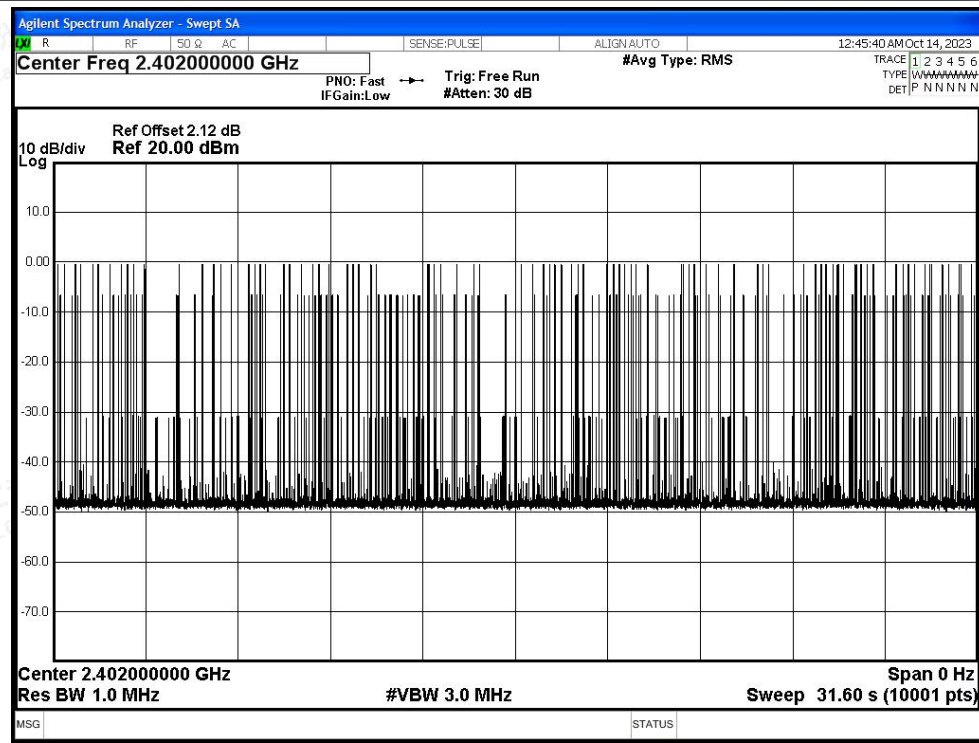
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Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



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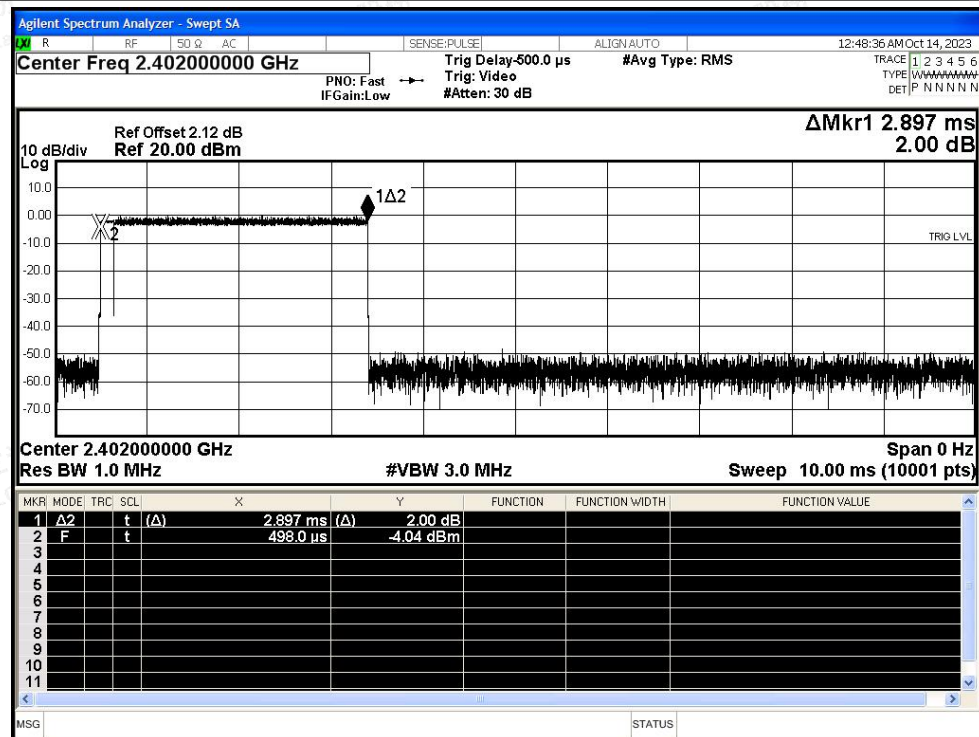
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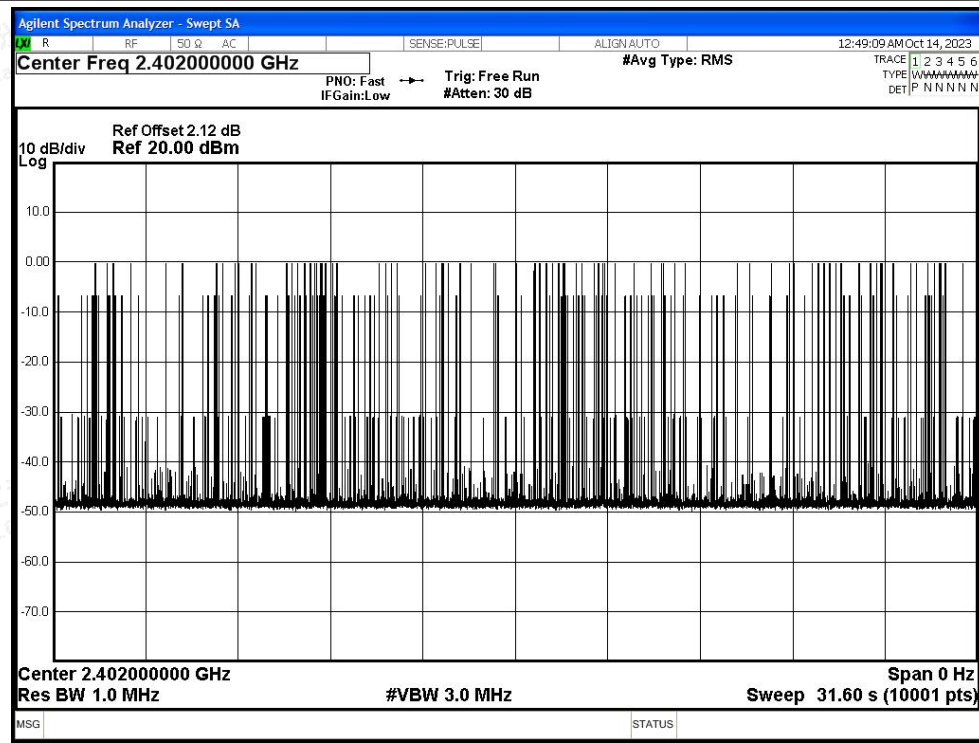
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Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated



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A.5 Number of Hopping Channel

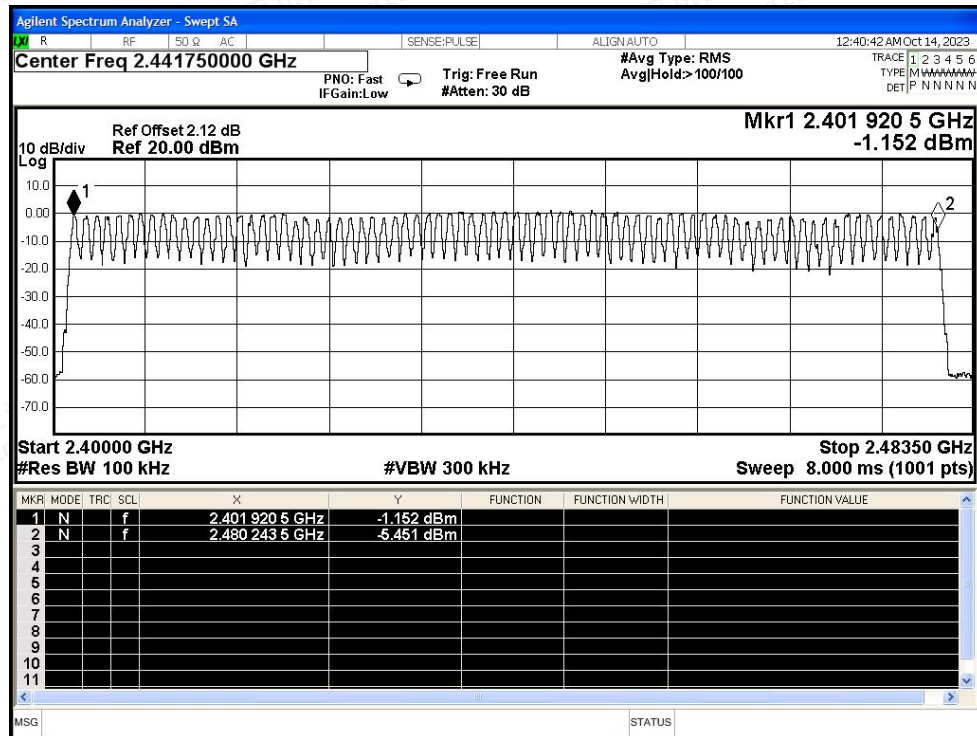
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass



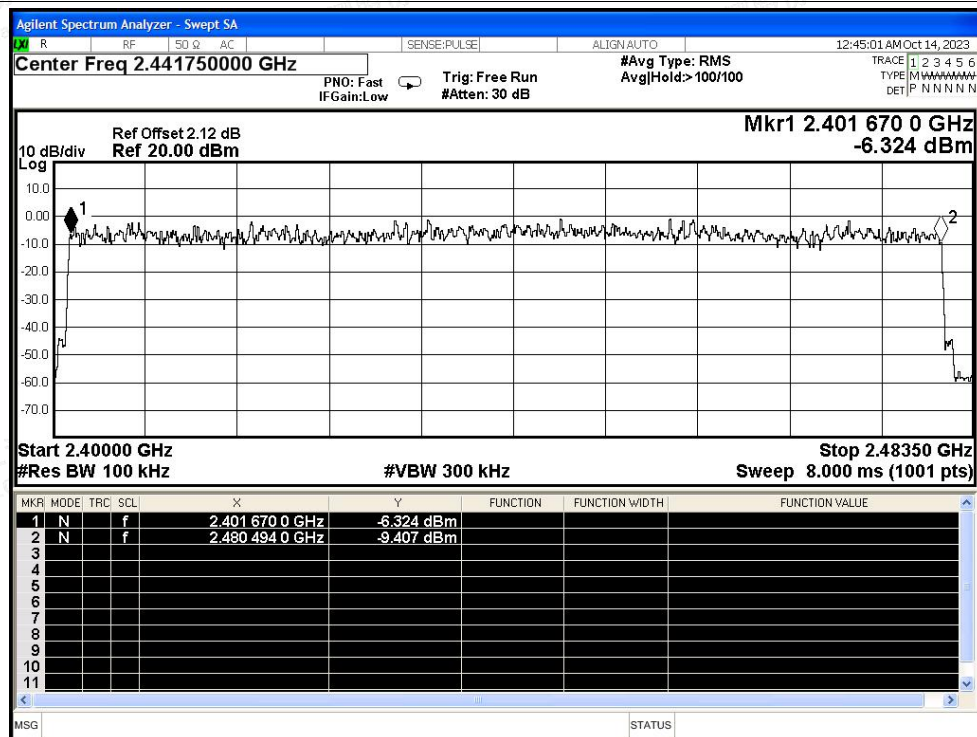


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1

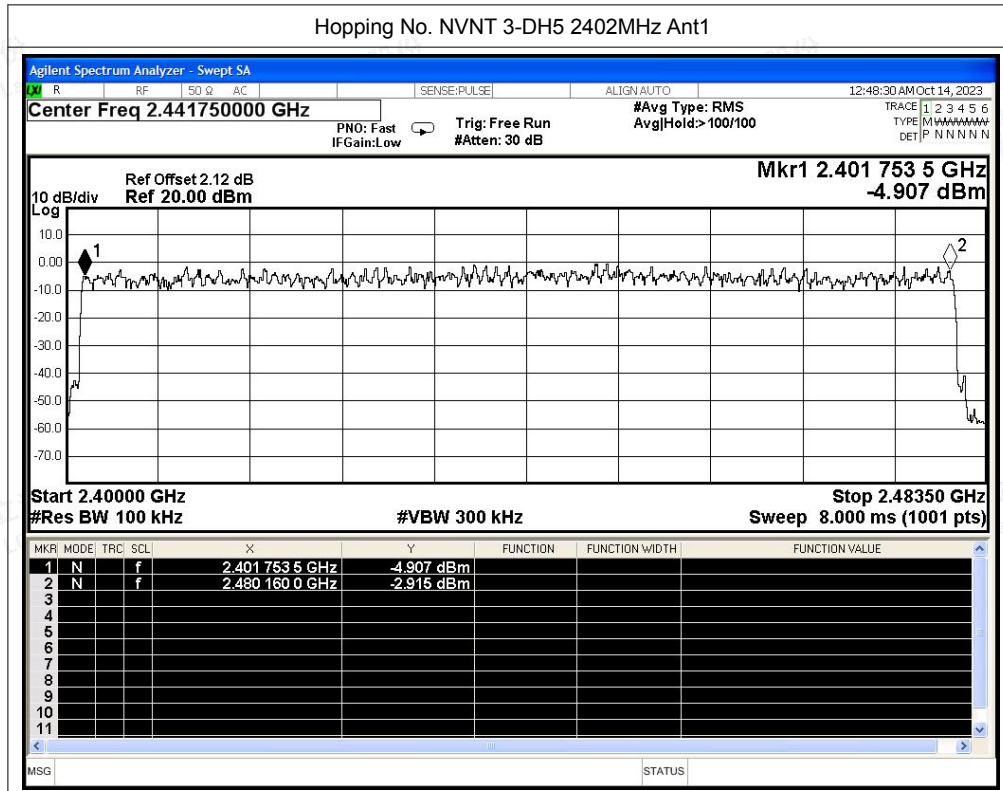


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A.6 Band Edge

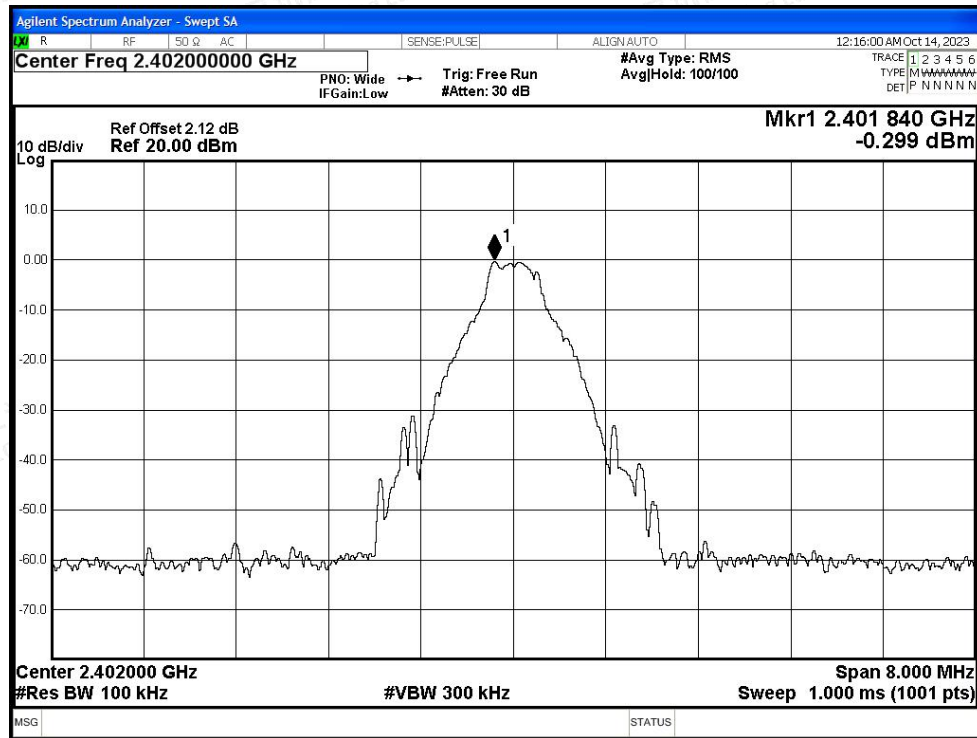
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-55.99	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-55.5	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-54.09	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-53.25	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-54.91	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-55.65	-20	Pass



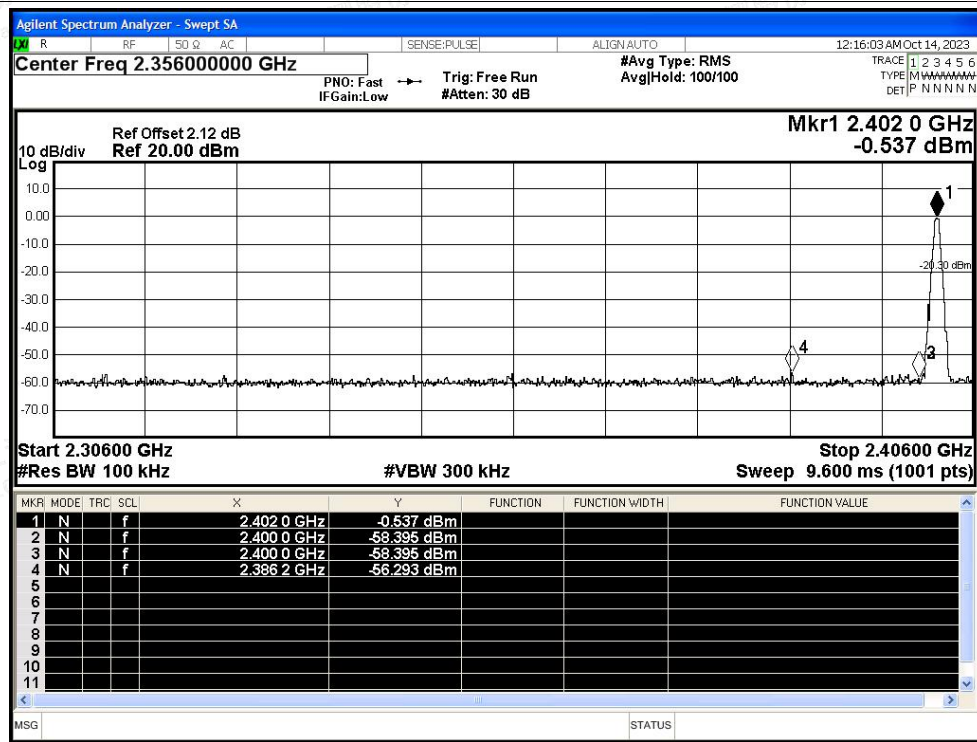


Test Graphs

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



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



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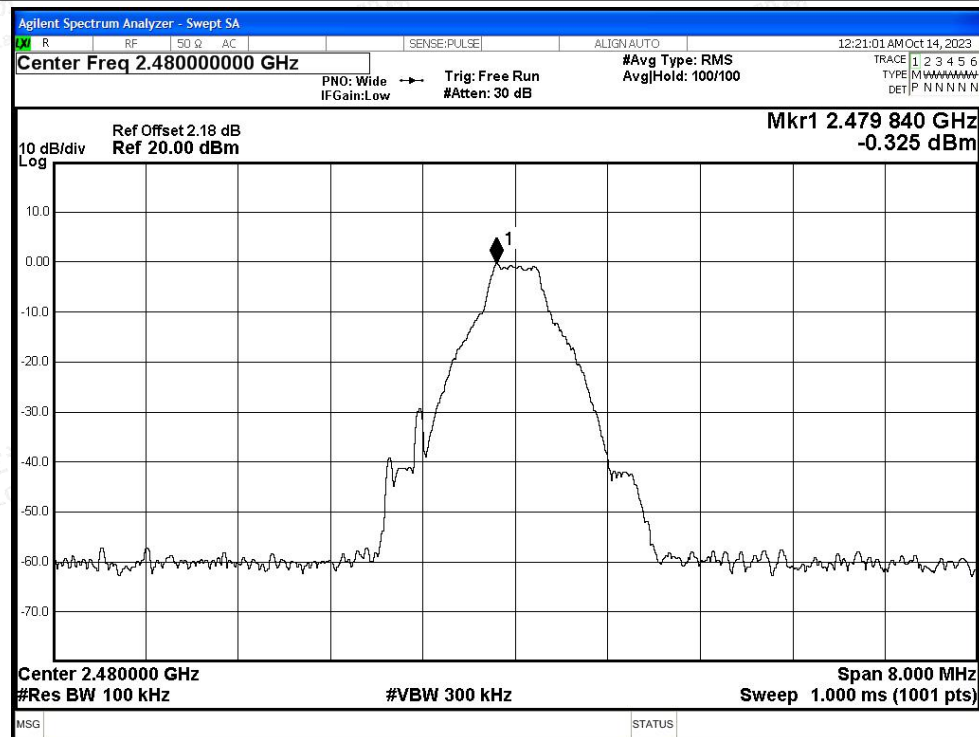
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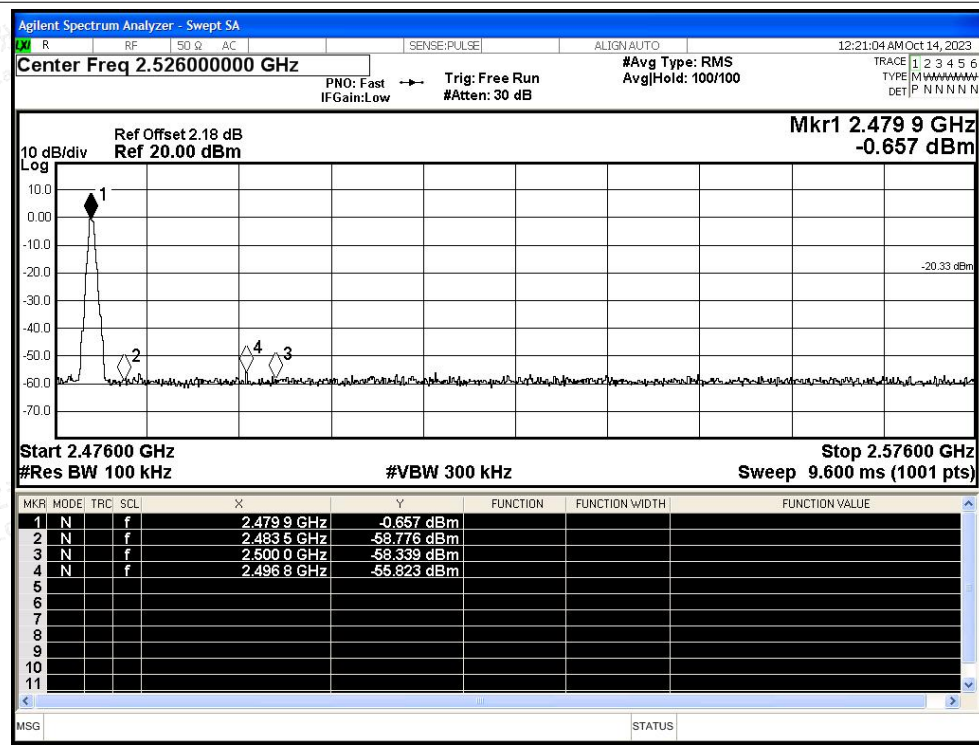
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Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



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



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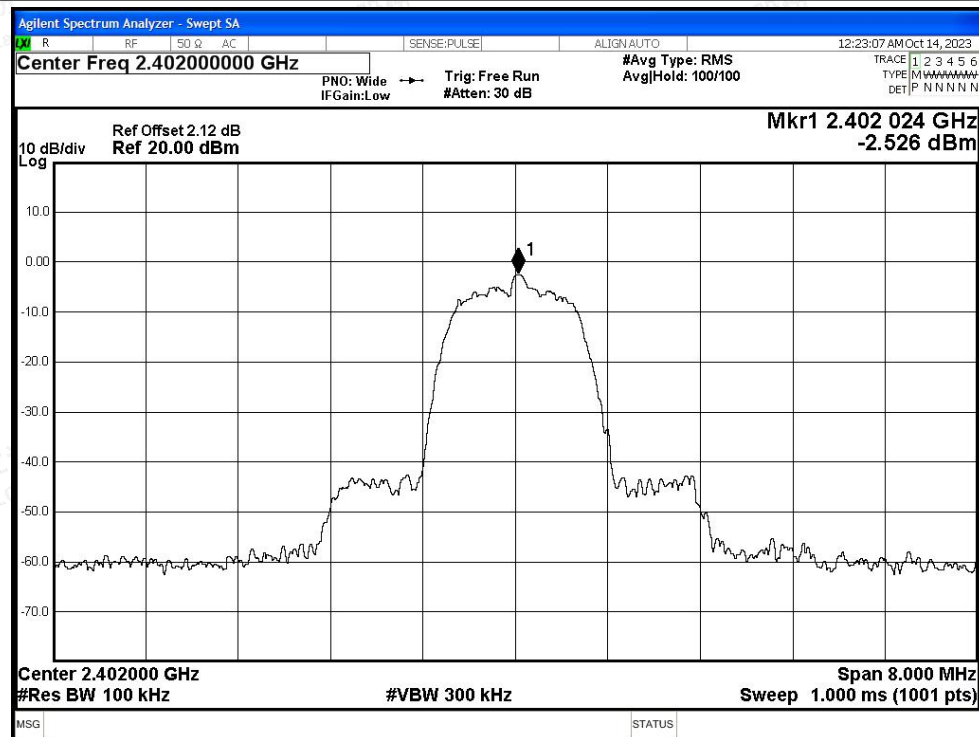
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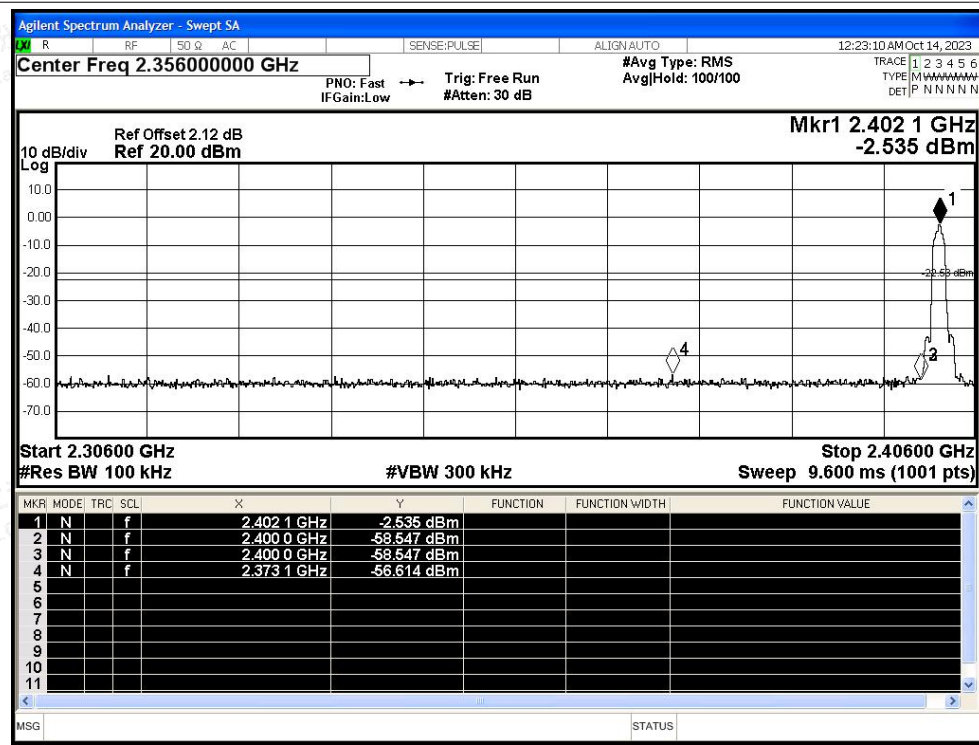
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Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



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



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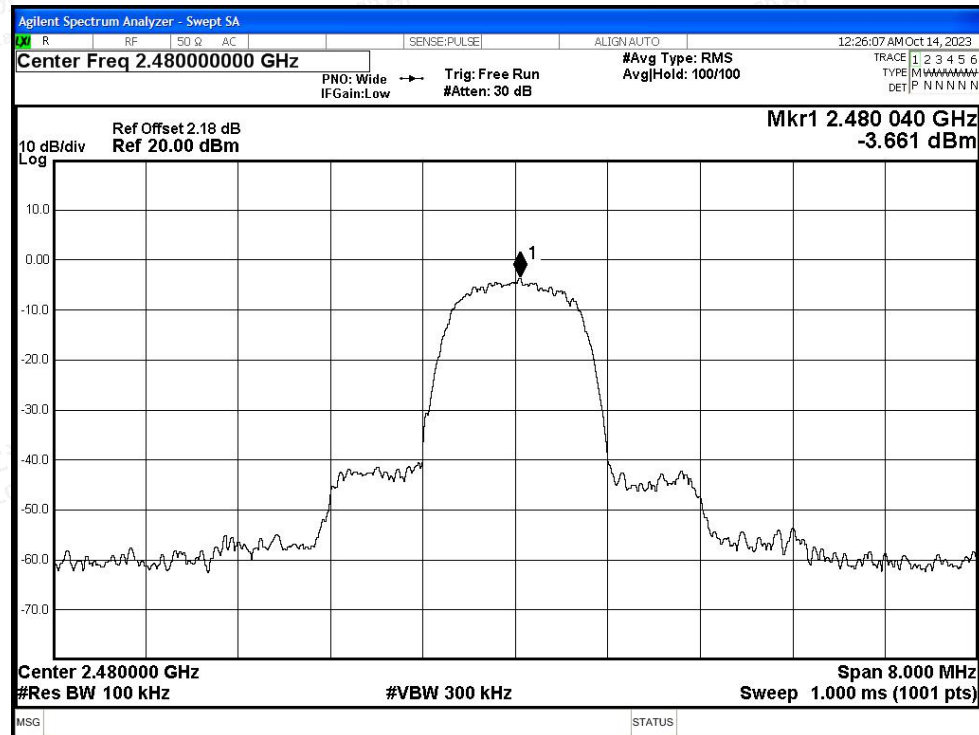
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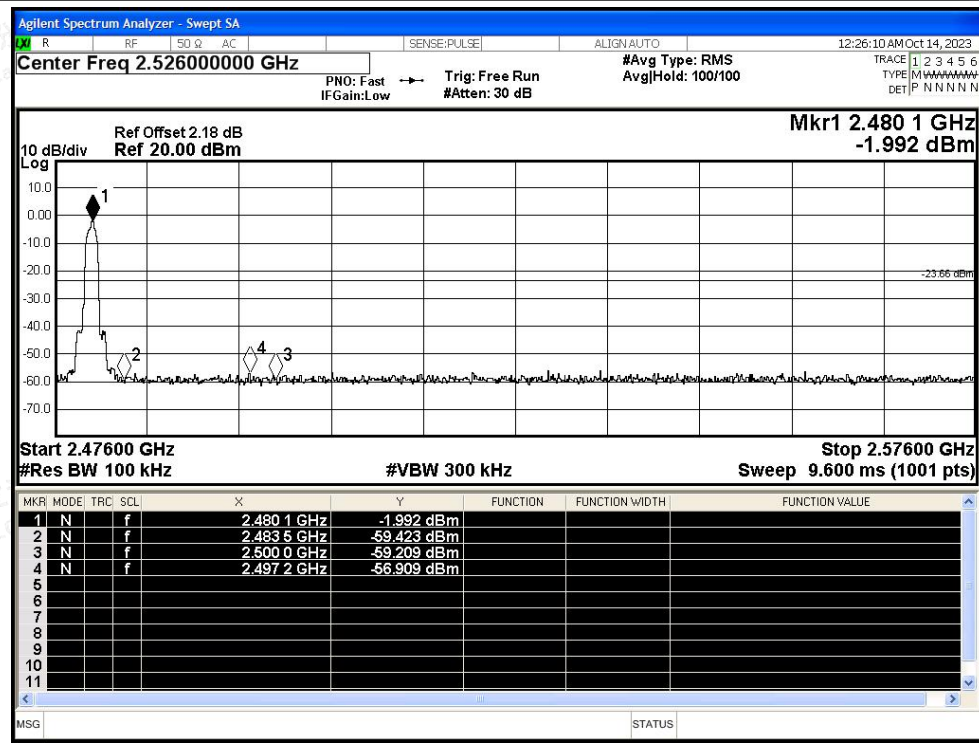
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Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



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



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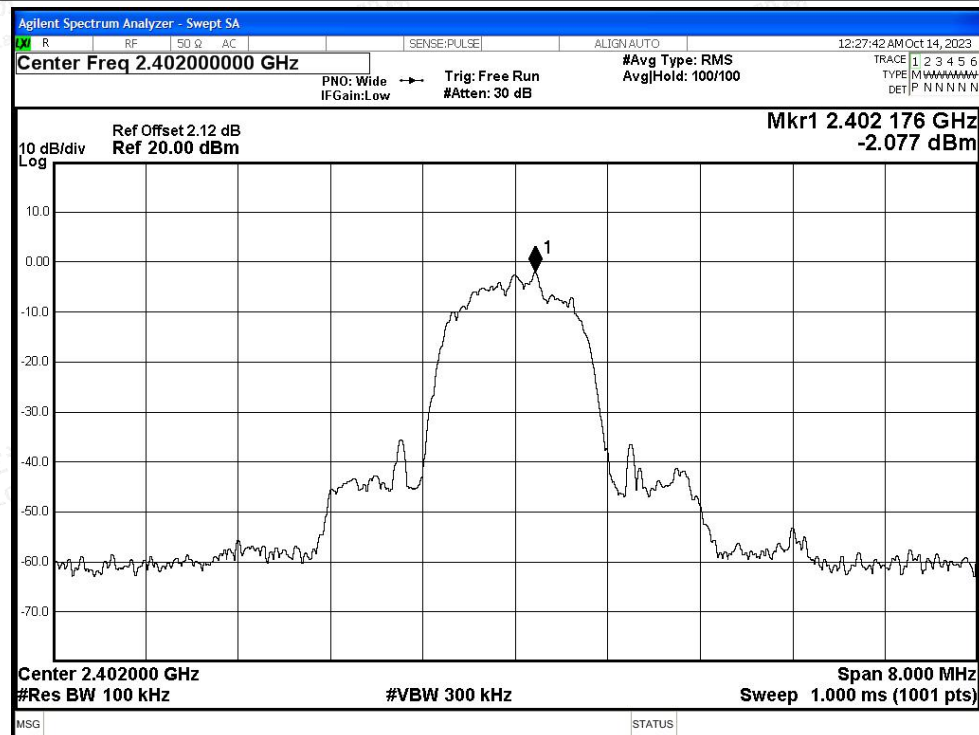
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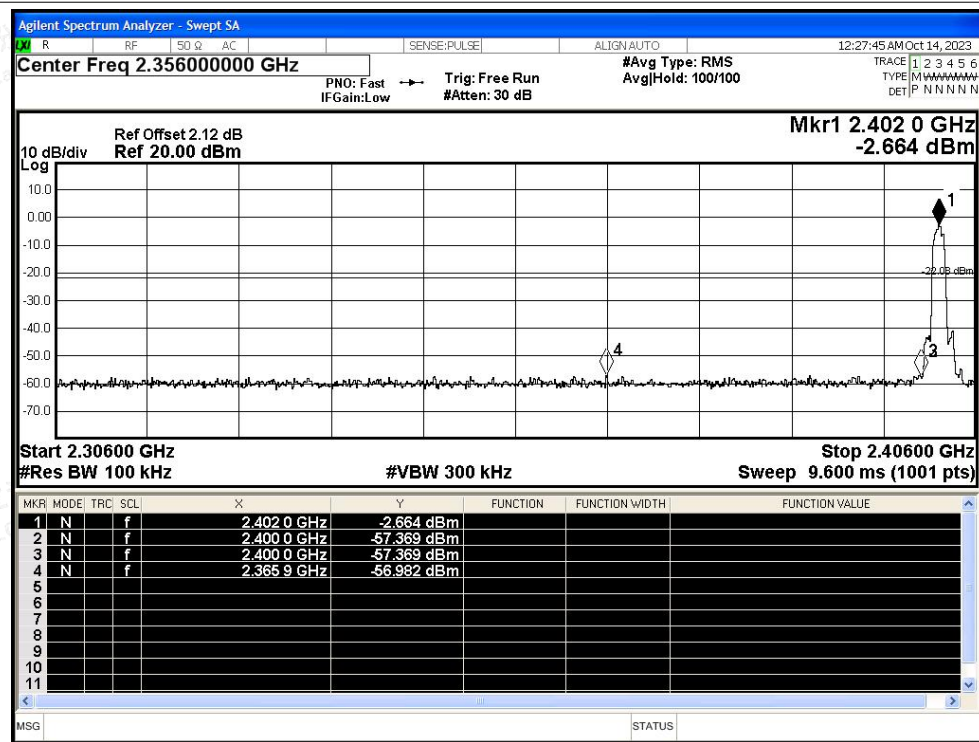
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Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



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



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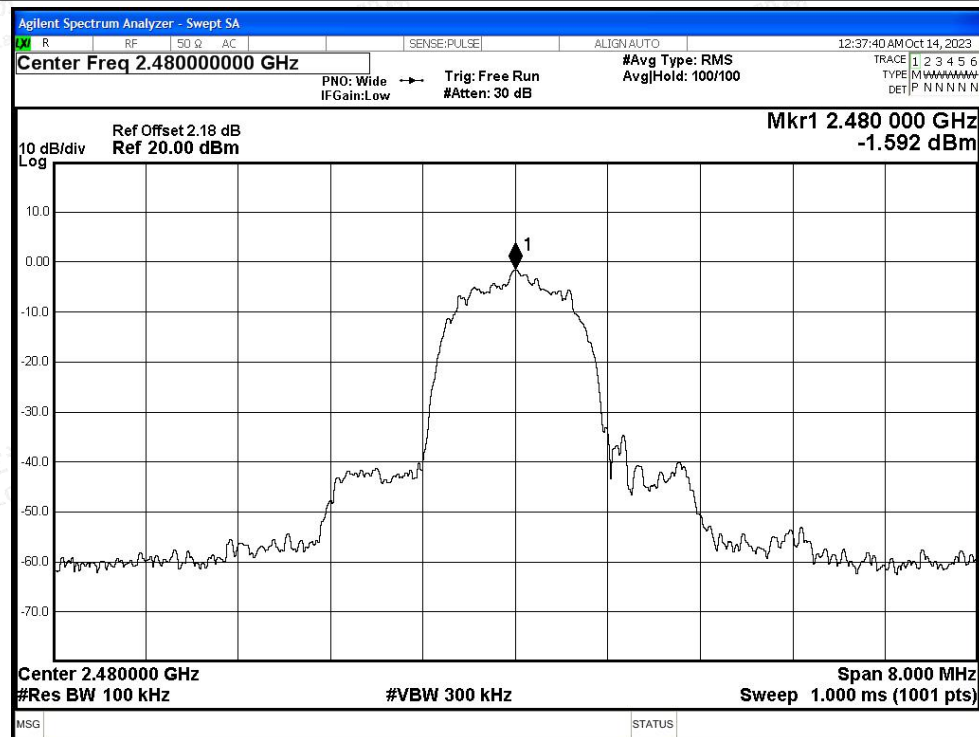
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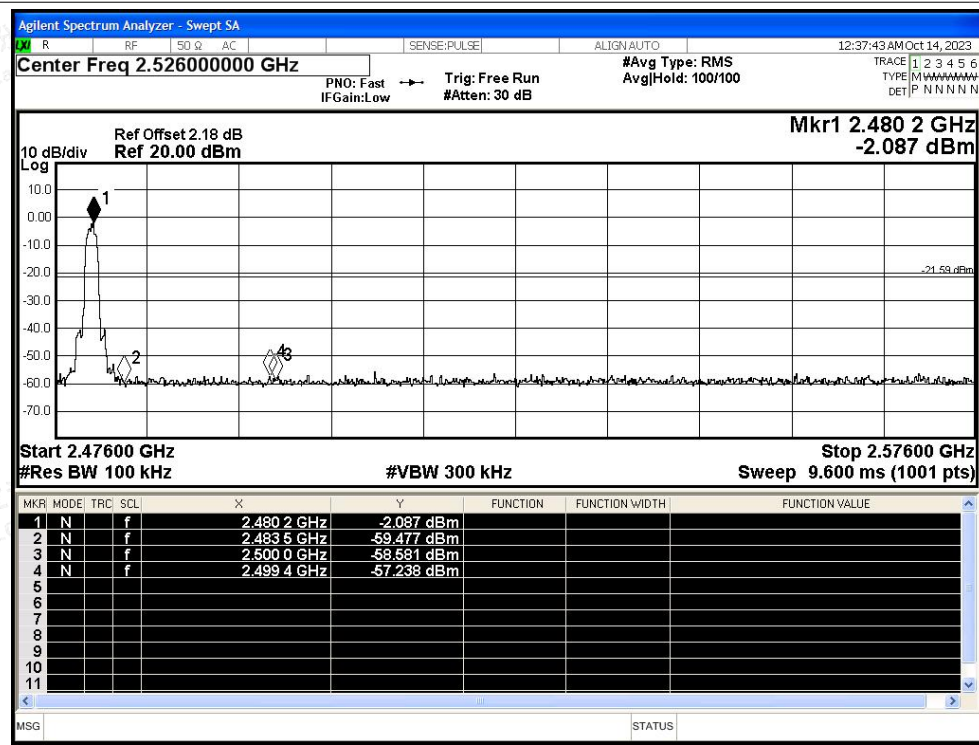
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Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



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



Shenzhen LCS Compliance Testing Laboratory Ltd.

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Scan code to check authenticity



(Hopping)

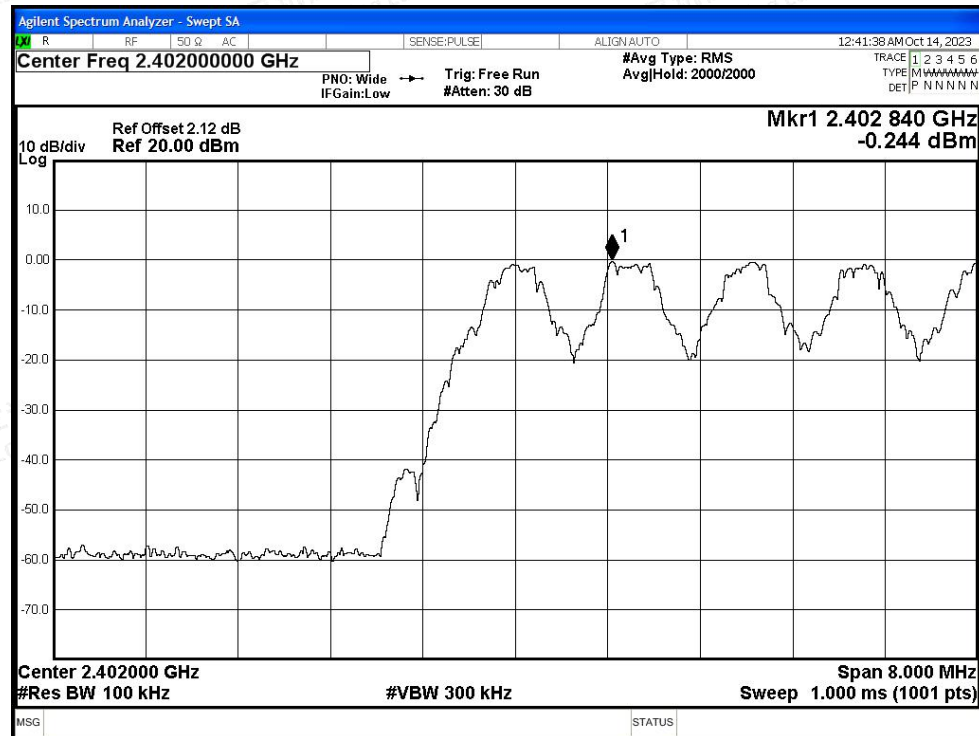
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-56.02	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-55.93	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-54.24	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-53.89	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-53	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-54.47	-20	Pass



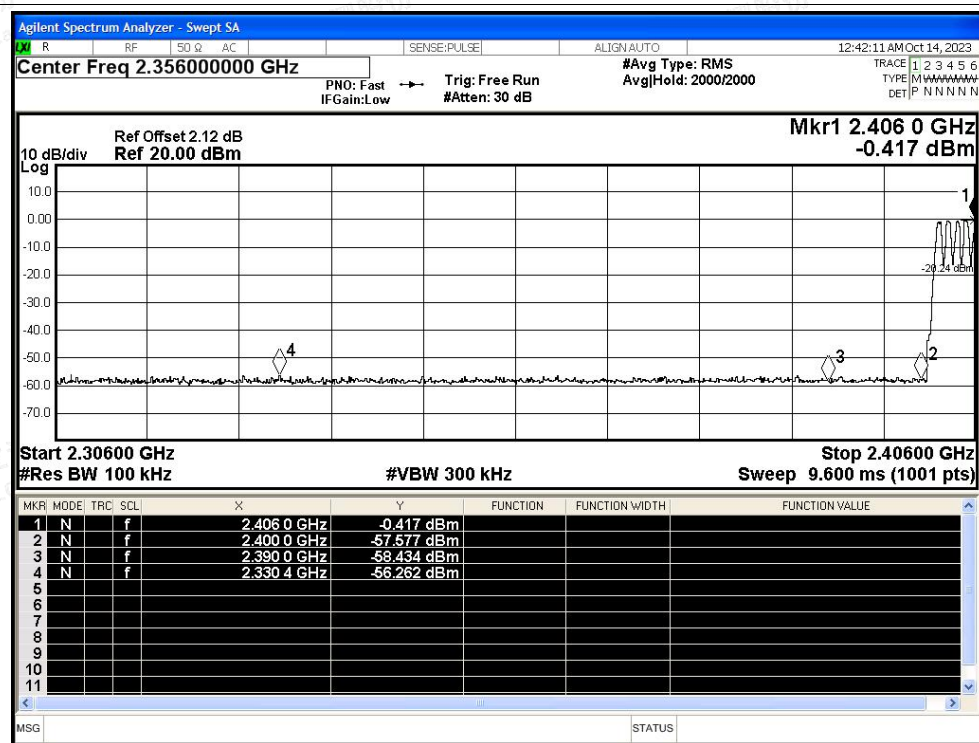


Test Graphs

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



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



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