



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: BLUETOOTH CD/RADIO BOOMBOX

Test Model: IBC233B

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Joker Hu
Supervised by:	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	0.861	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.913	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.847	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.284	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.272	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.28	N/A	Pass

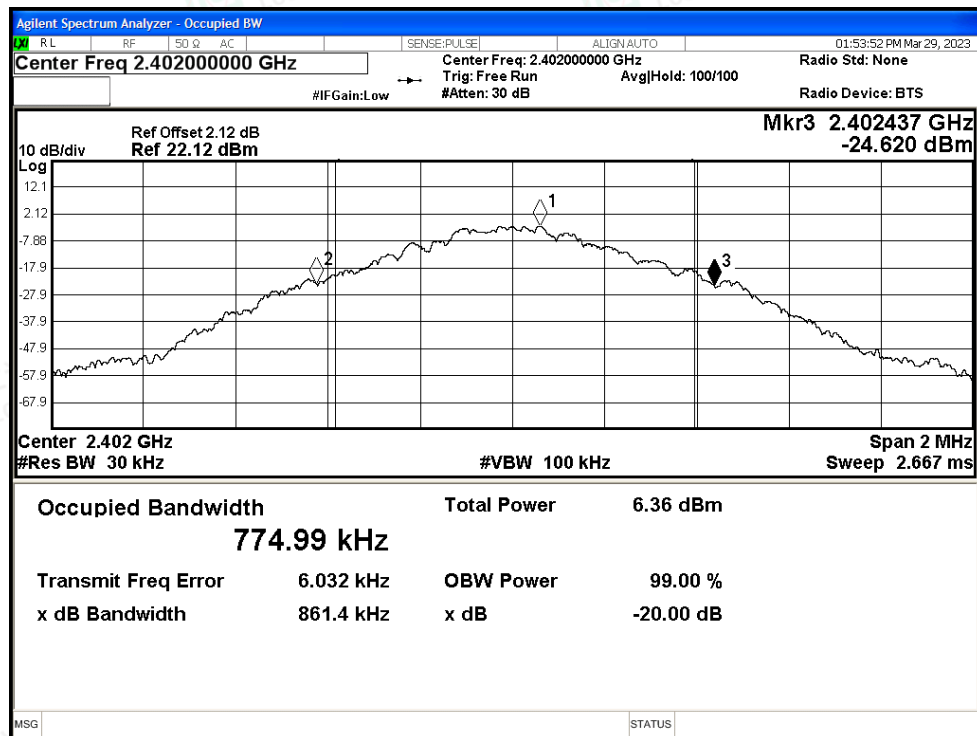


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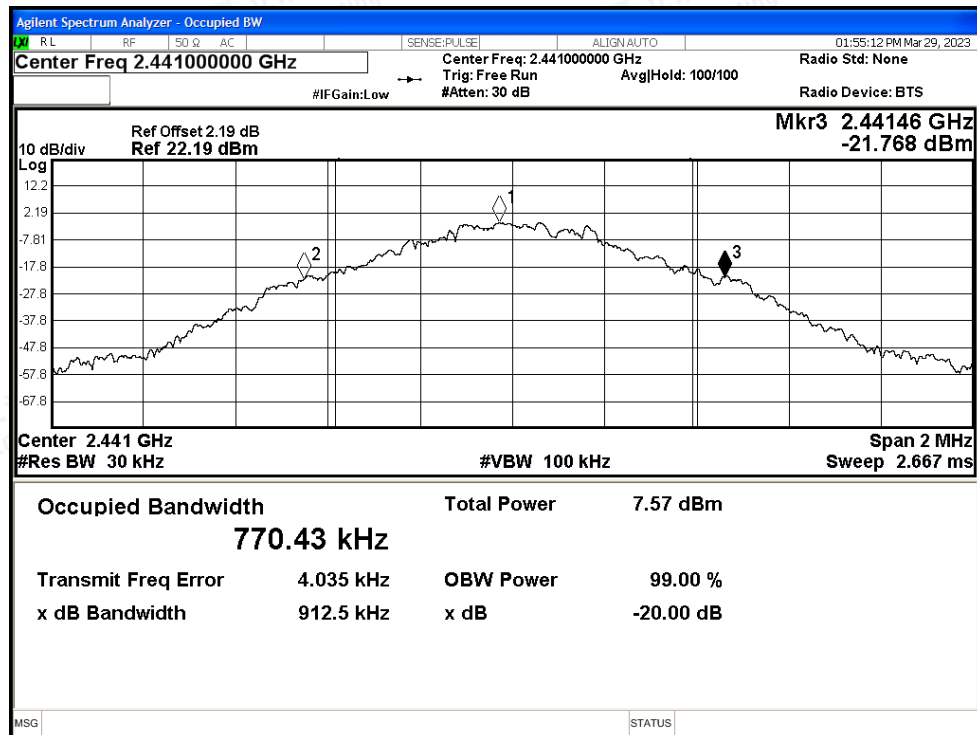


Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



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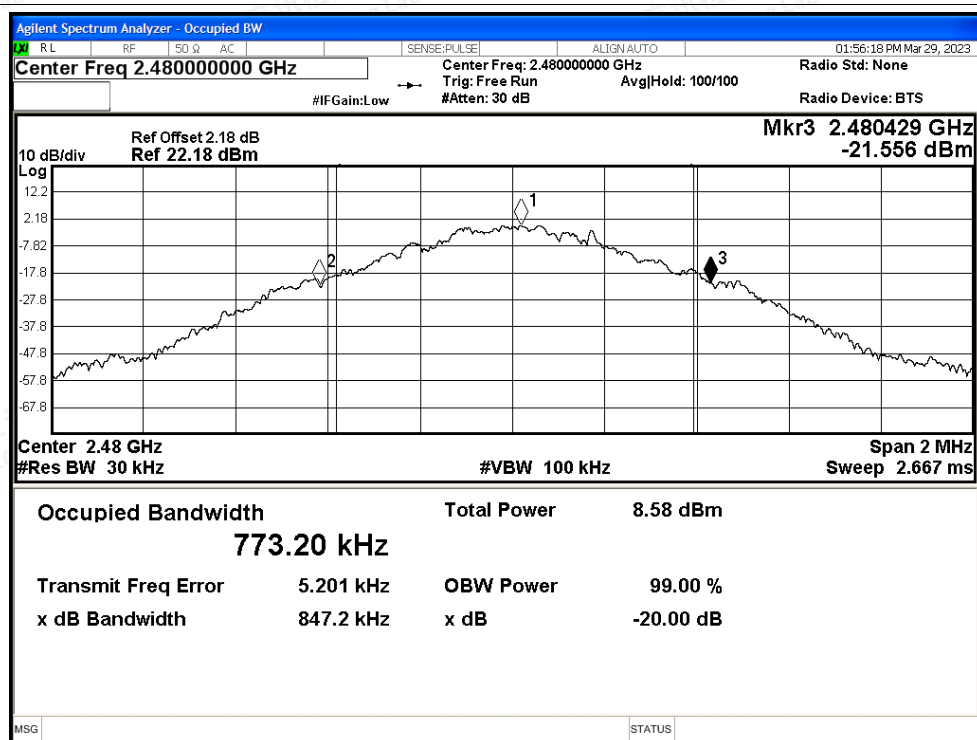
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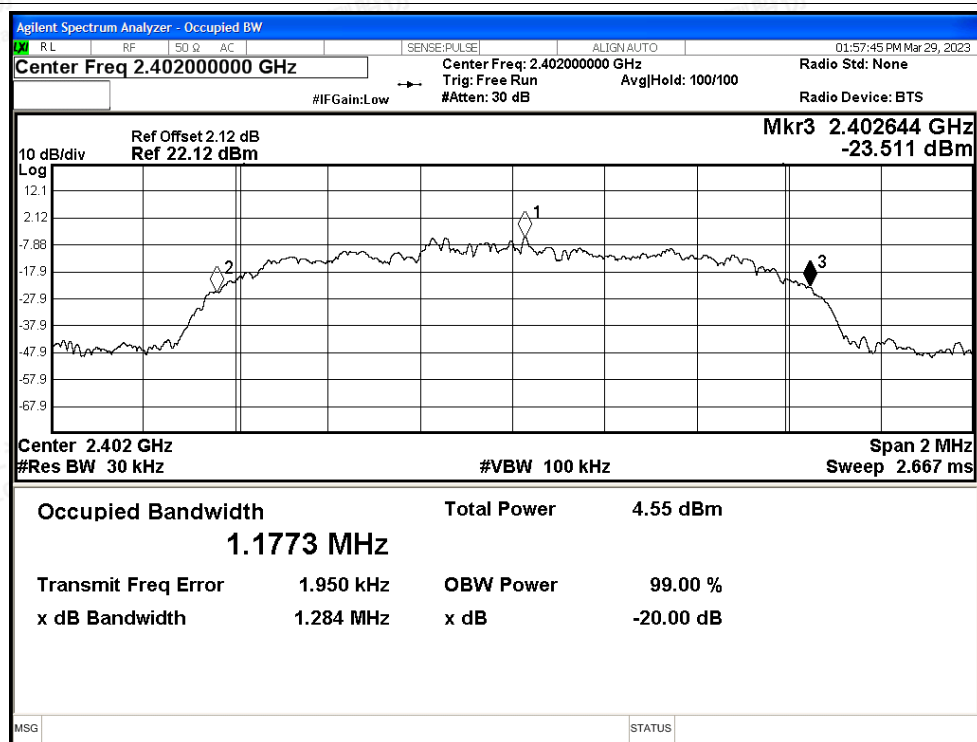
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-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



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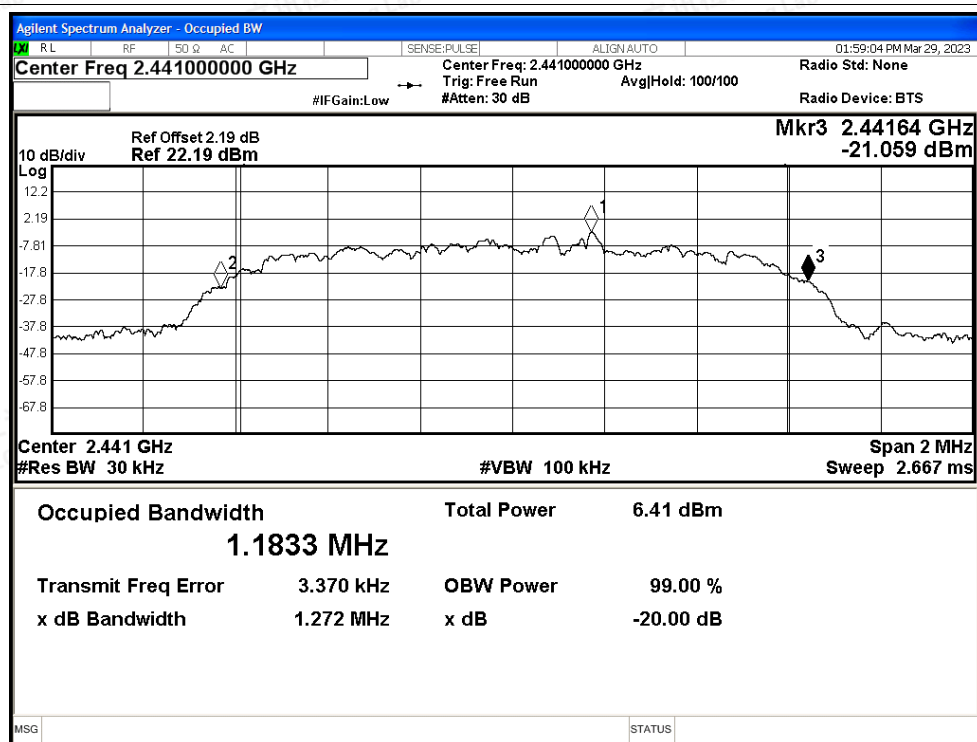
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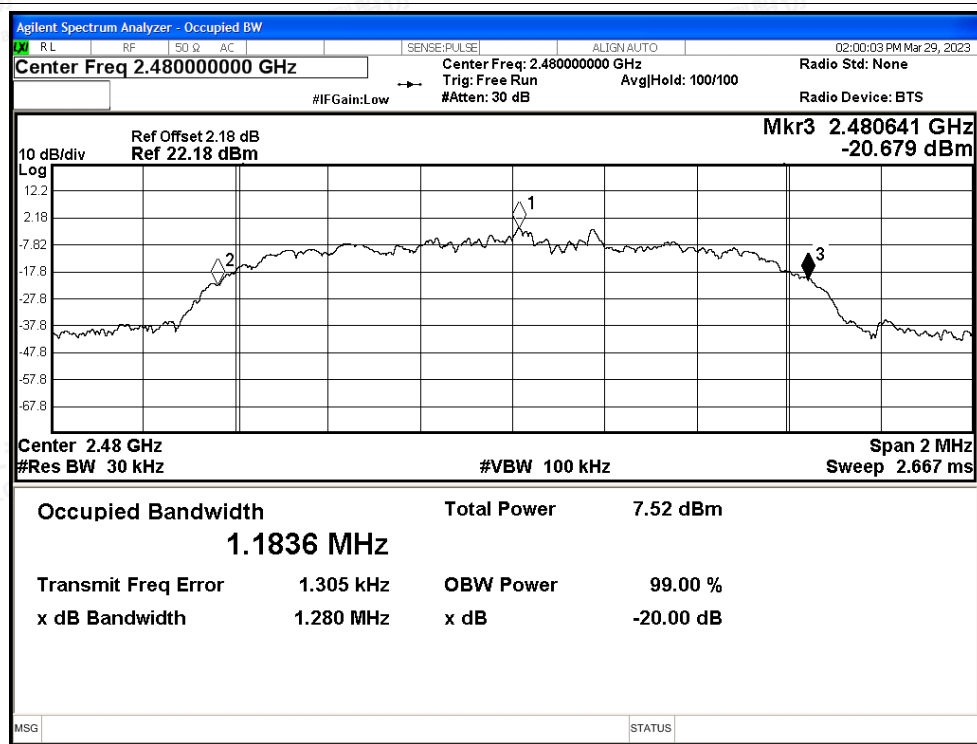
Scan code to check authenticity



-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



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A.2 Maximum Conducted Output Power

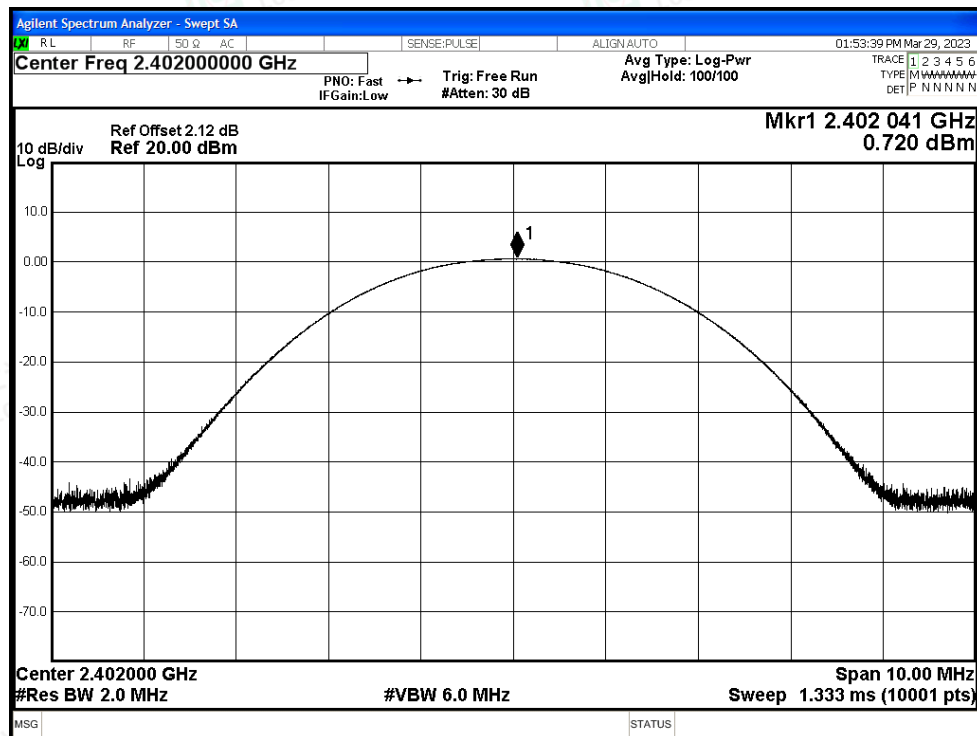
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.72	21	Pass
NVNT	1-DH5	2441	Ant1	1.74	21	Pass
NVNT	1-DH5	2480	Ant1	2.75	21	Pass
NVNT	2-DH5	2402	Ant1	0.05	21	Pass
NVNT	2-DH5	2441	Ant1	1.81	21	Pass
NVNT	2-DH5	2480	Ant1	2.84	21	Pass



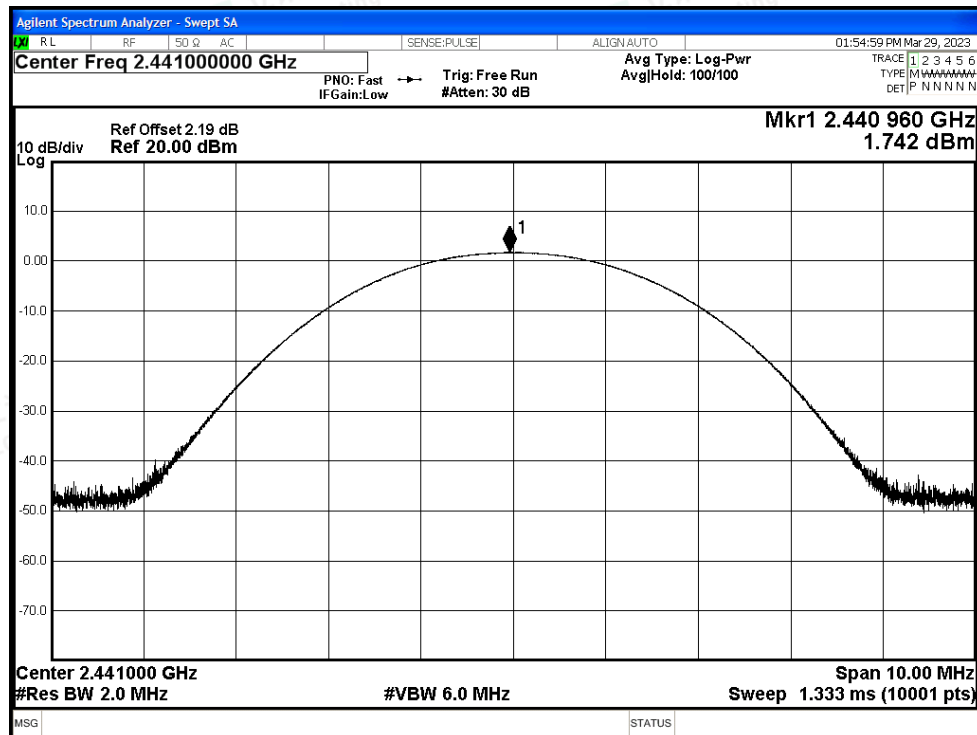


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

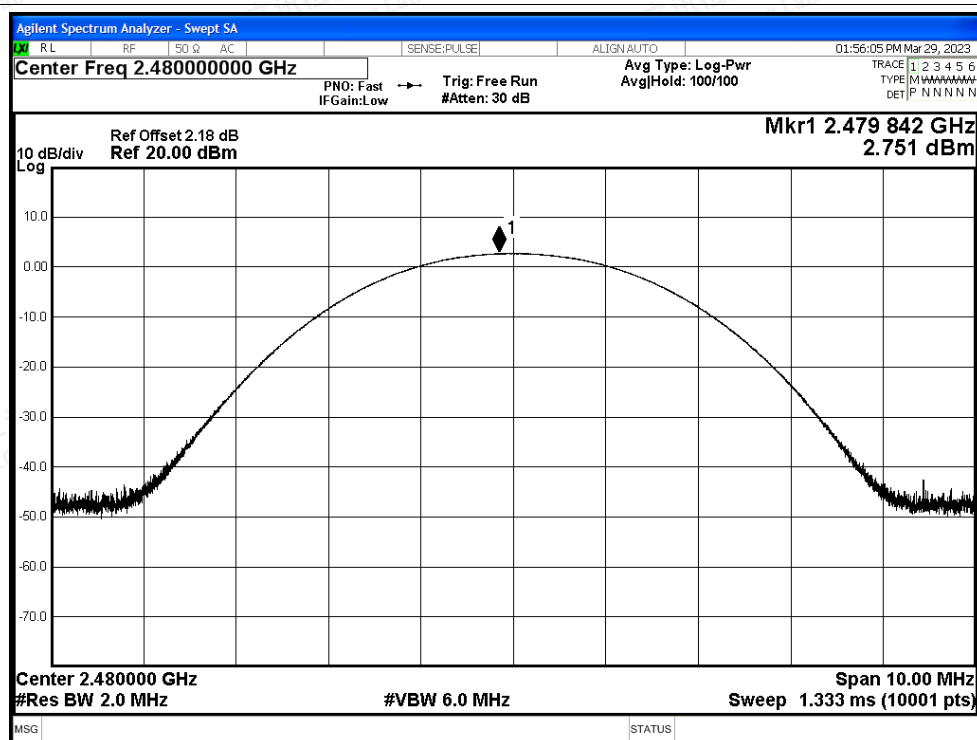


Power NVNT 1-DH5 2441MHz Ant1

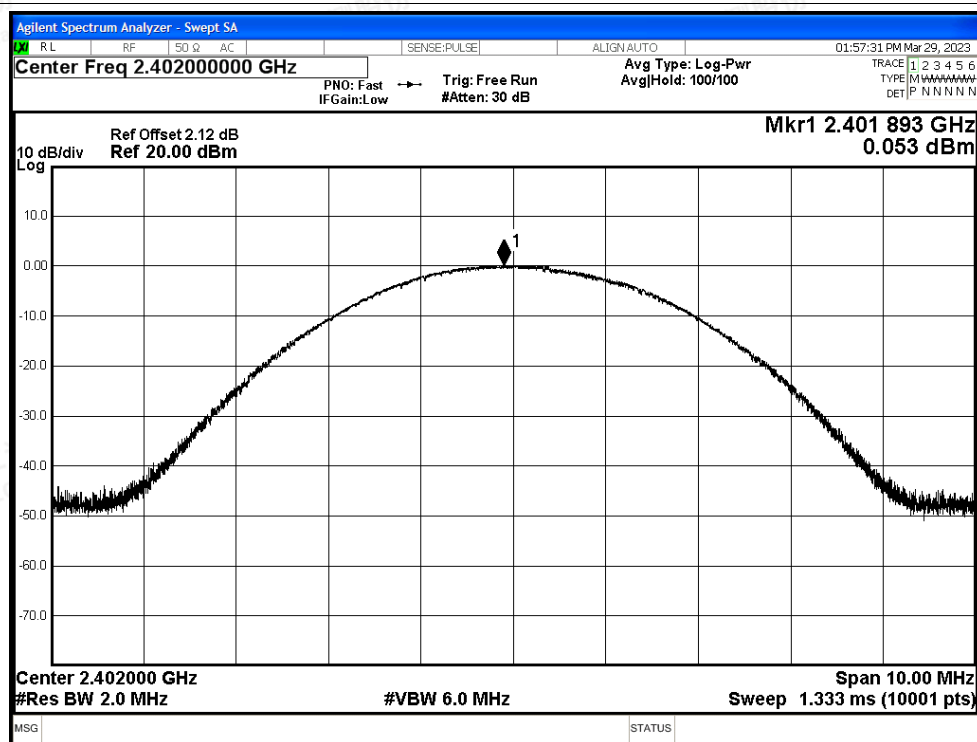




Power NVNT 1-DH5 2480MHz Ant1

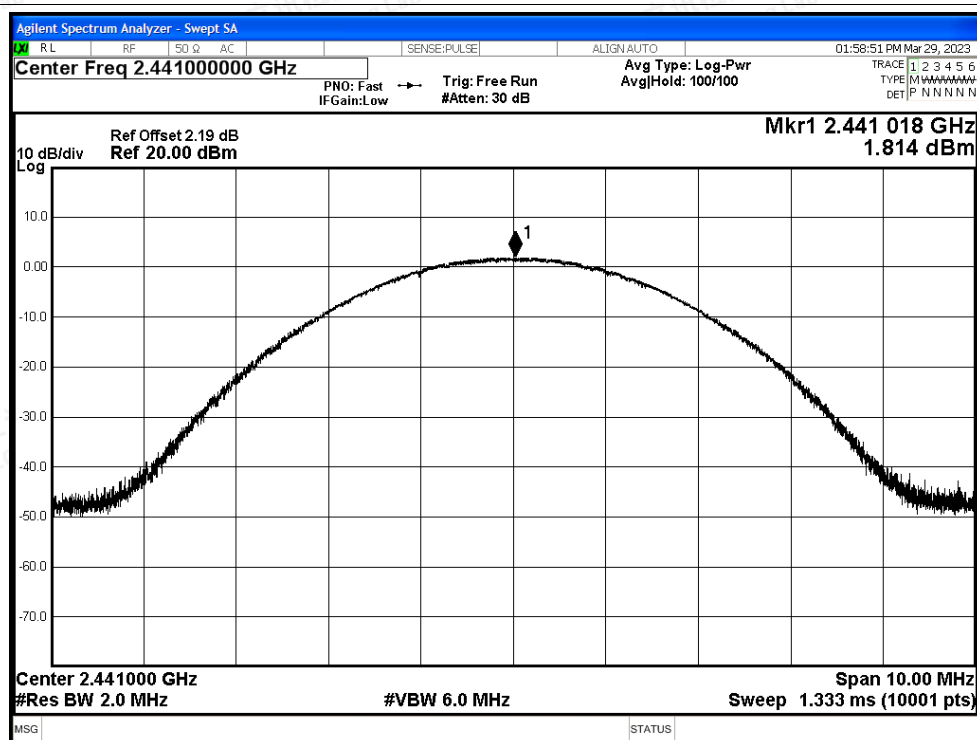


Power NVNT 2-DH5 2402MHz Ant1

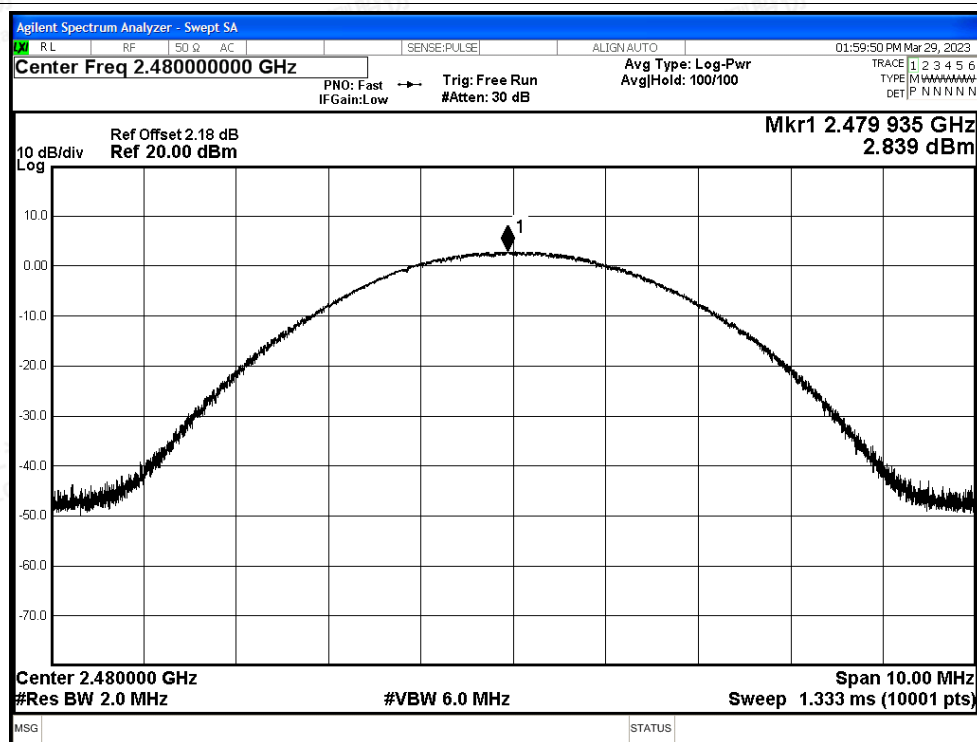




Power NVNT 2-DH5 2441MHz Ant1



Power NVNT 2-DH5 2480MHz Ant1





A.3 Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.974	2402.976	1.002	0.609	Pass
NVNT	2-DH5	Ant1	2402.004	2403.018	1.014	0.856	Pass

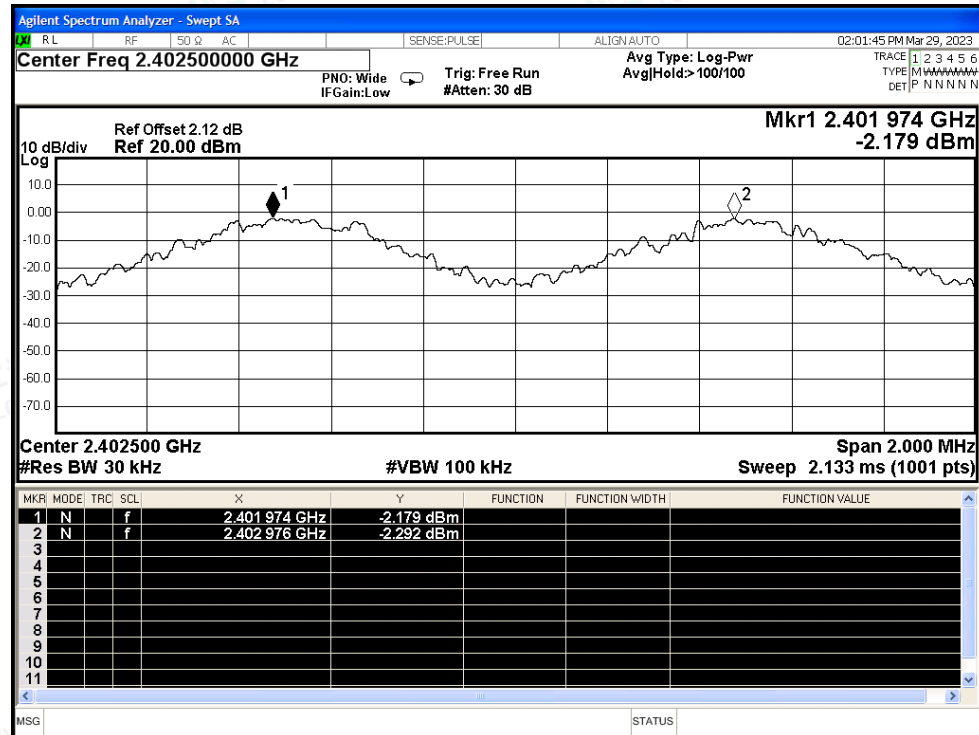


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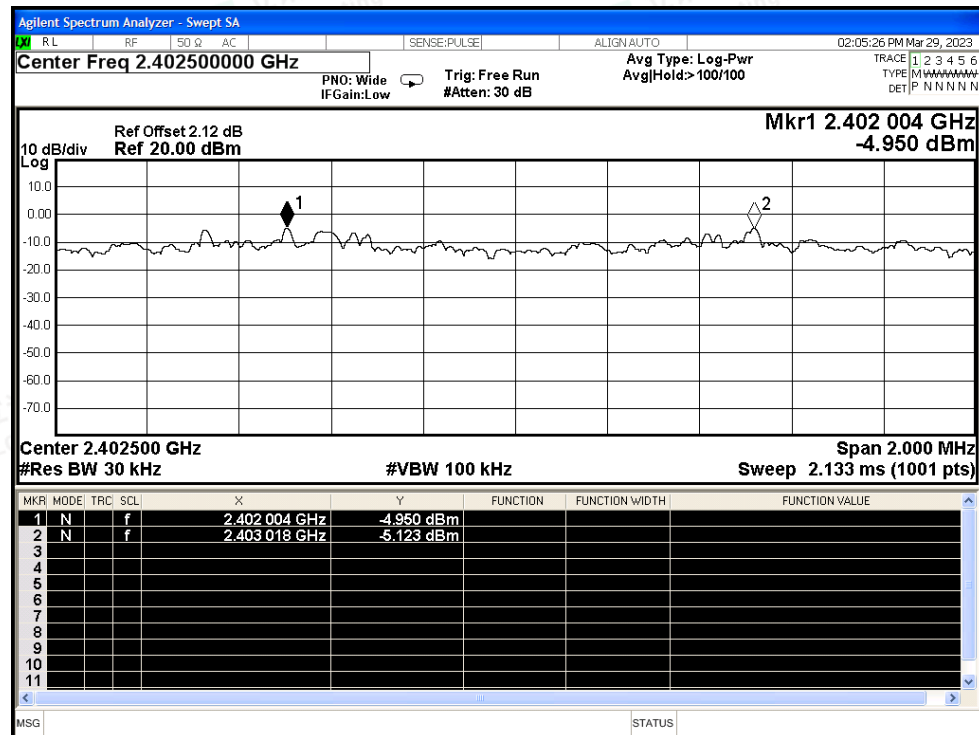


Test Graphs

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	2.882	299.728	104	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.885	268.305	93	31600	400	Pass

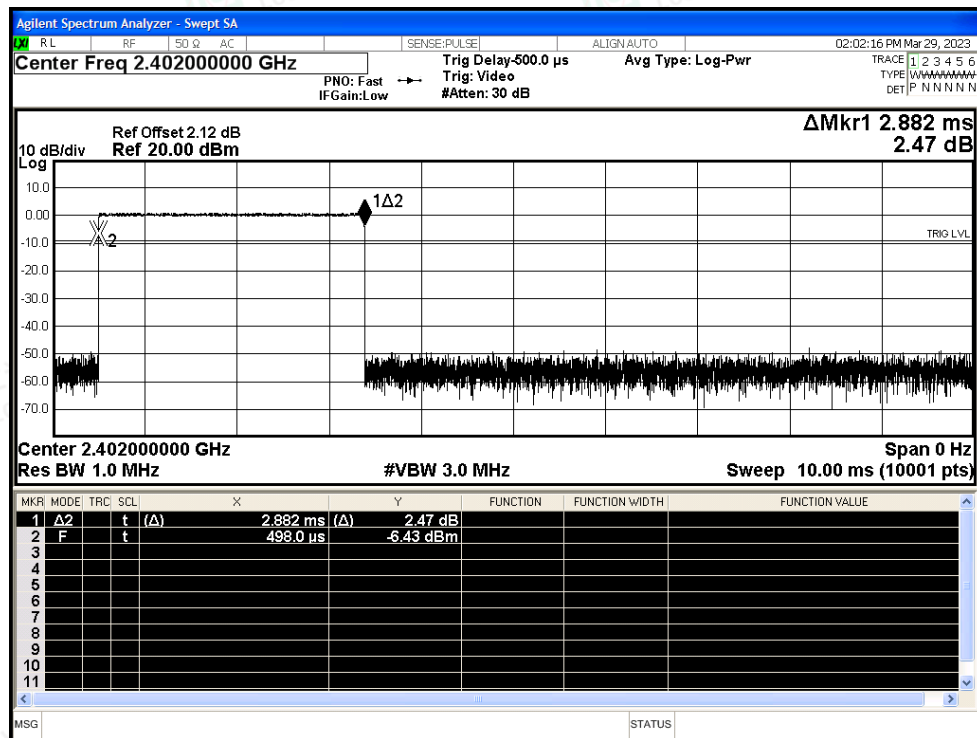


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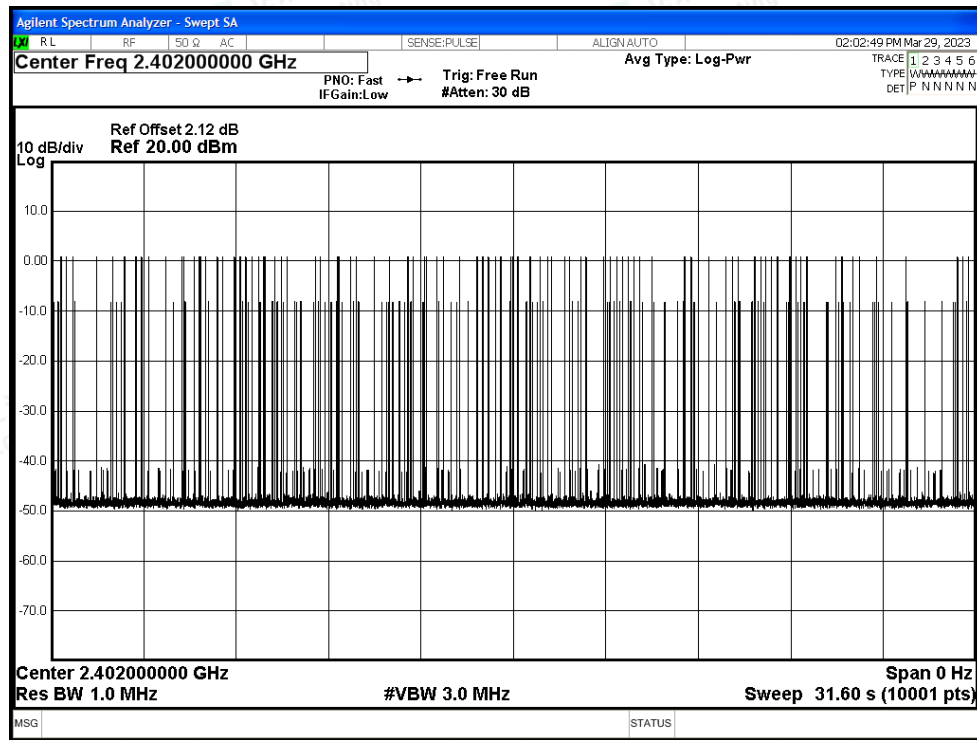


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

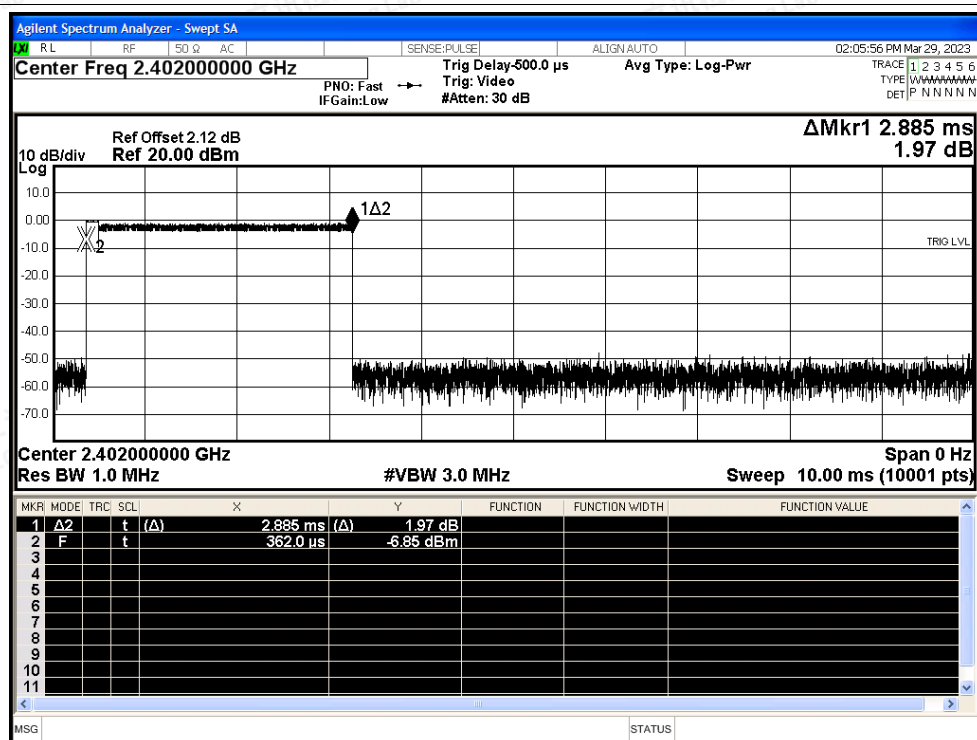


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

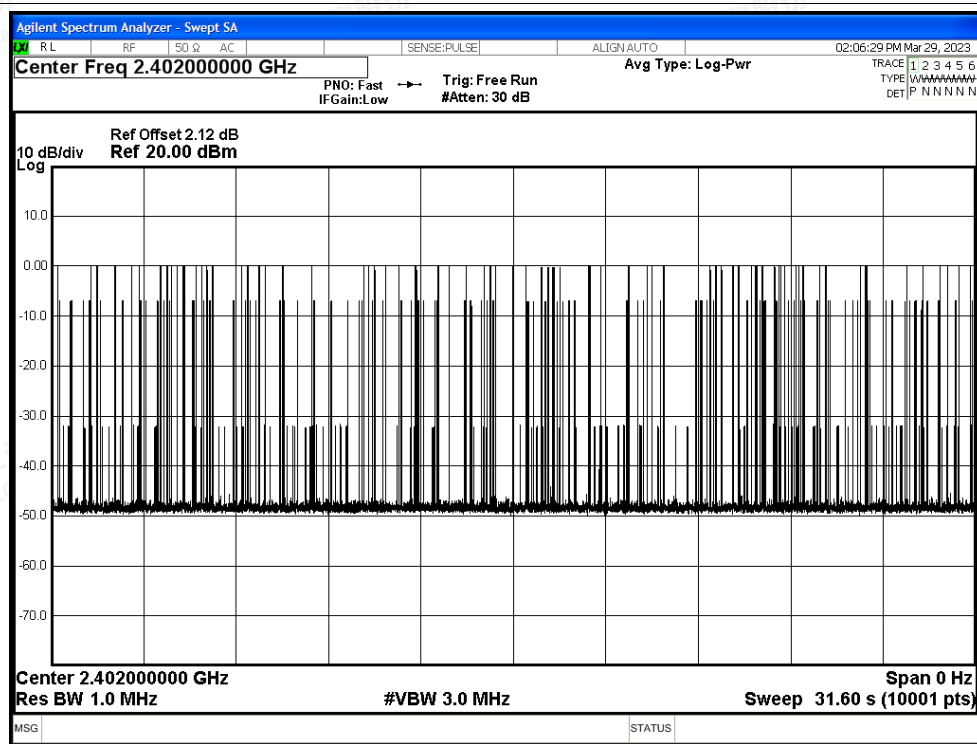




Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



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A.5 Number of Hopping Channel

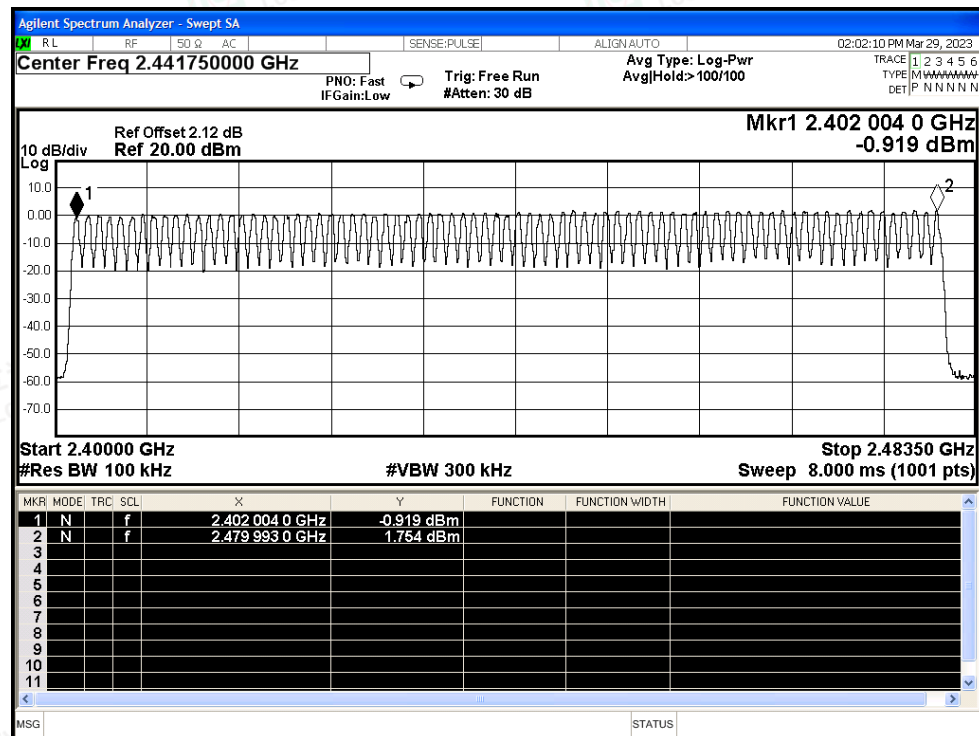
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass



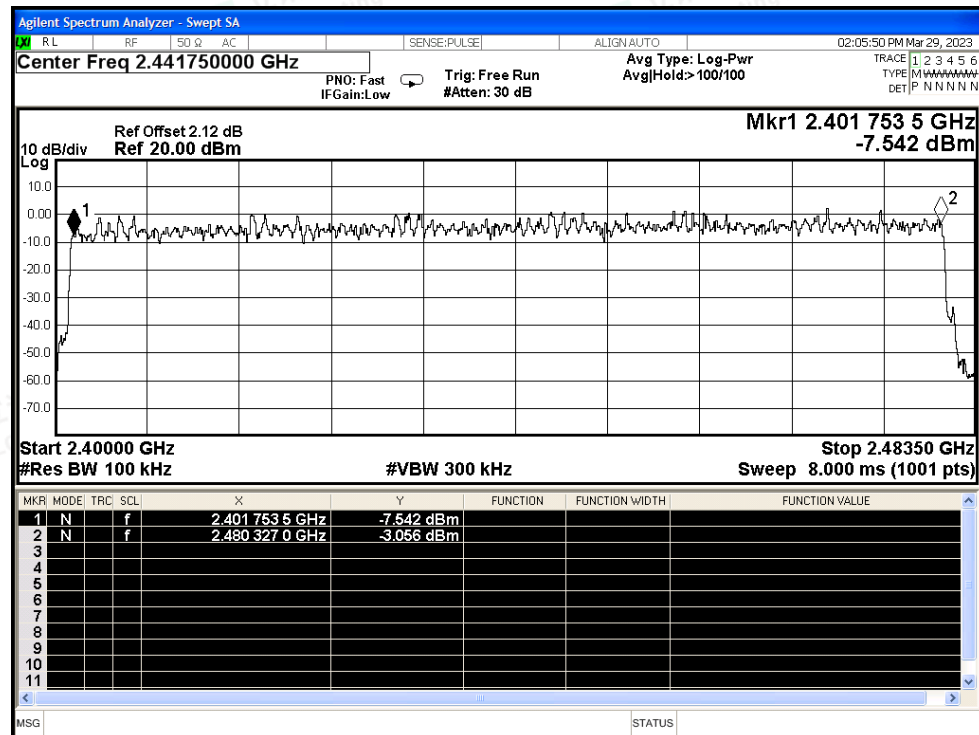


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



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A.6 Band Edge

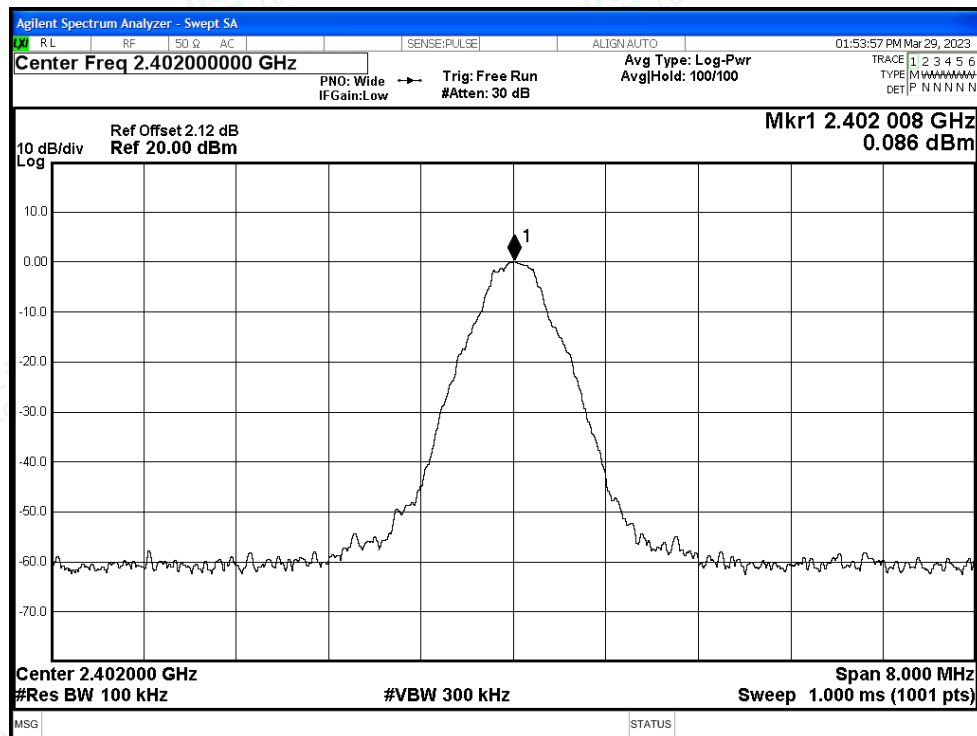
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-56.2	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-58.08	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-54.2	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-57.4	-20	Pass



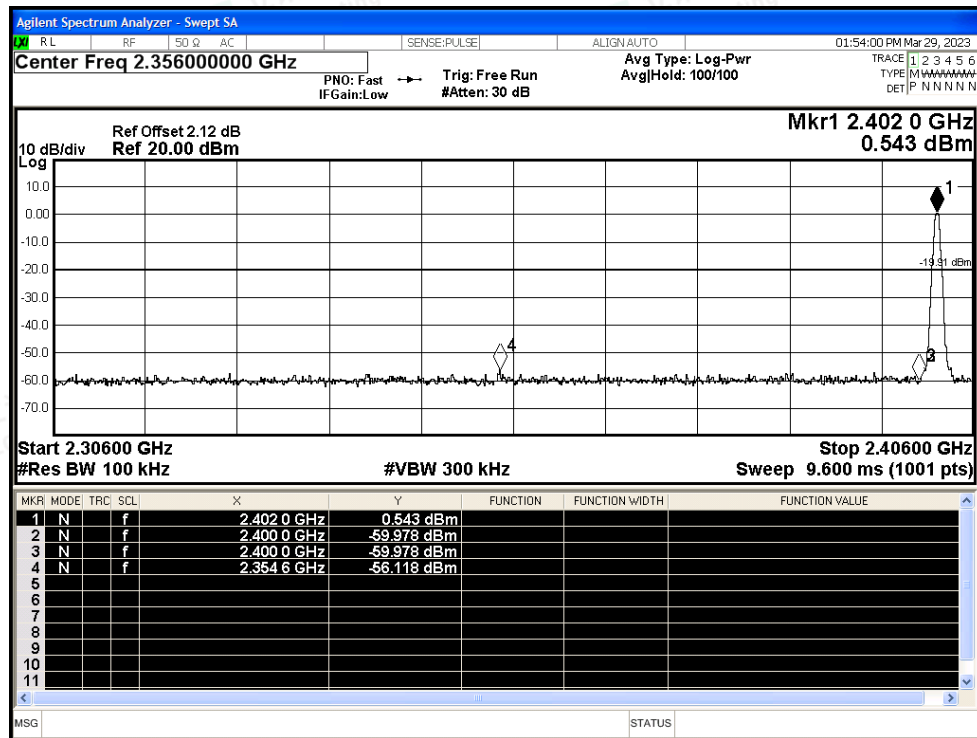


Test Graphs

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



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



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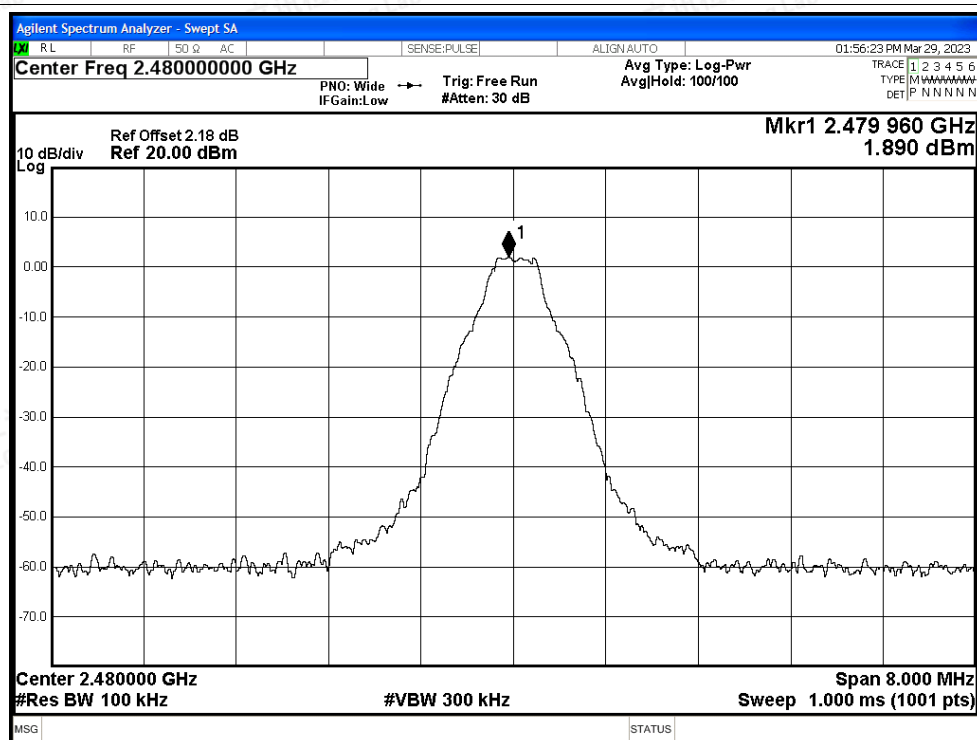
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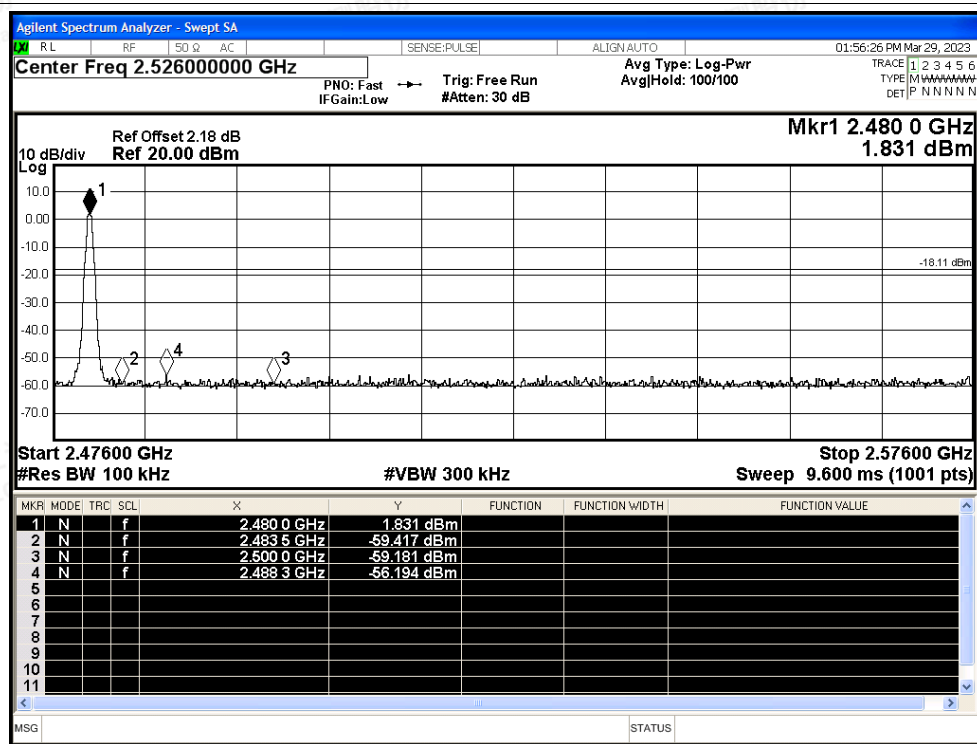
Scan code to check authenticity



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

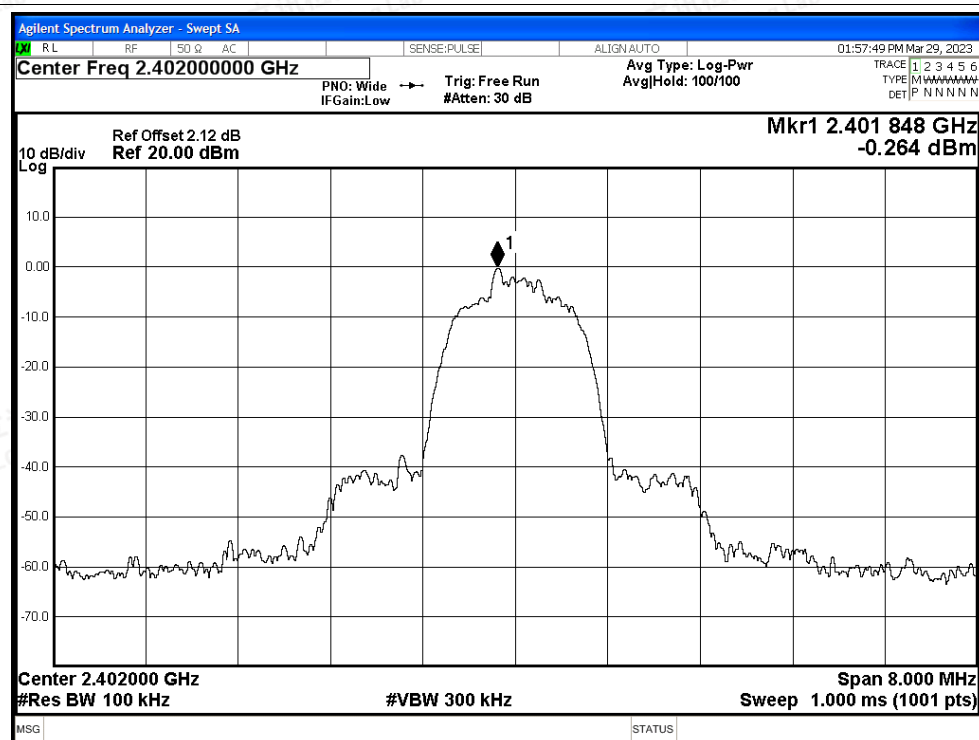


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

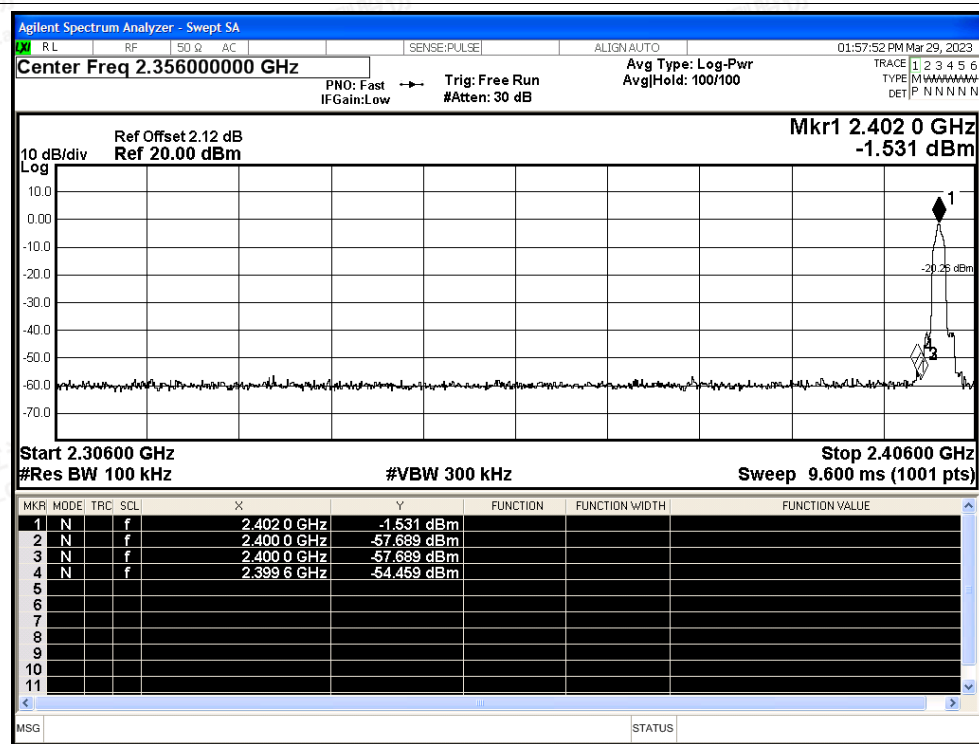




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



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



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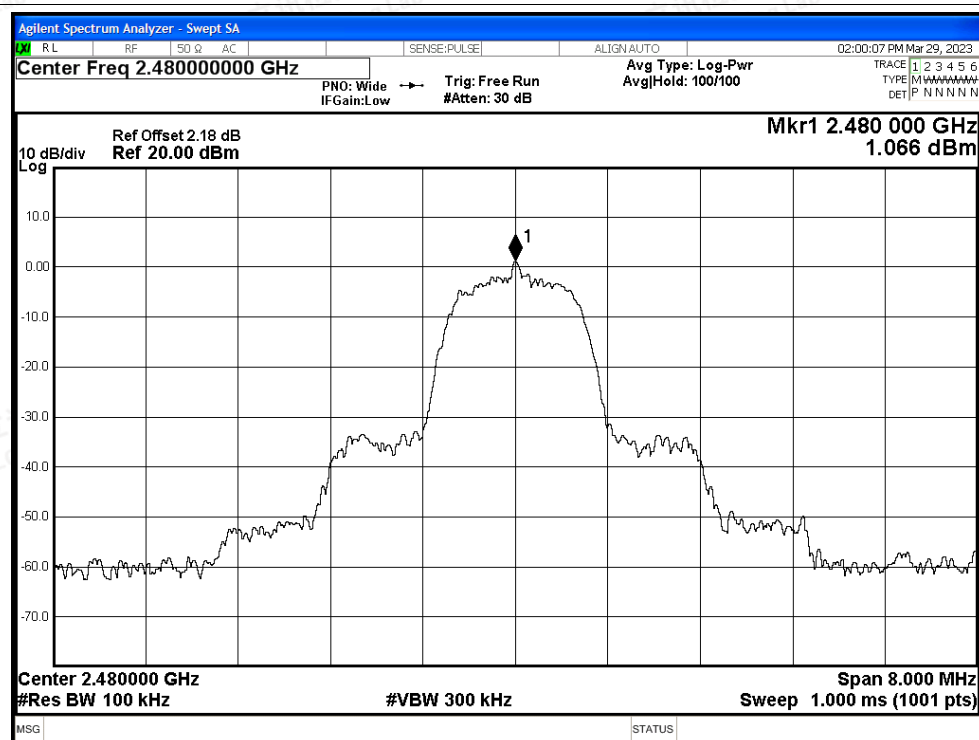
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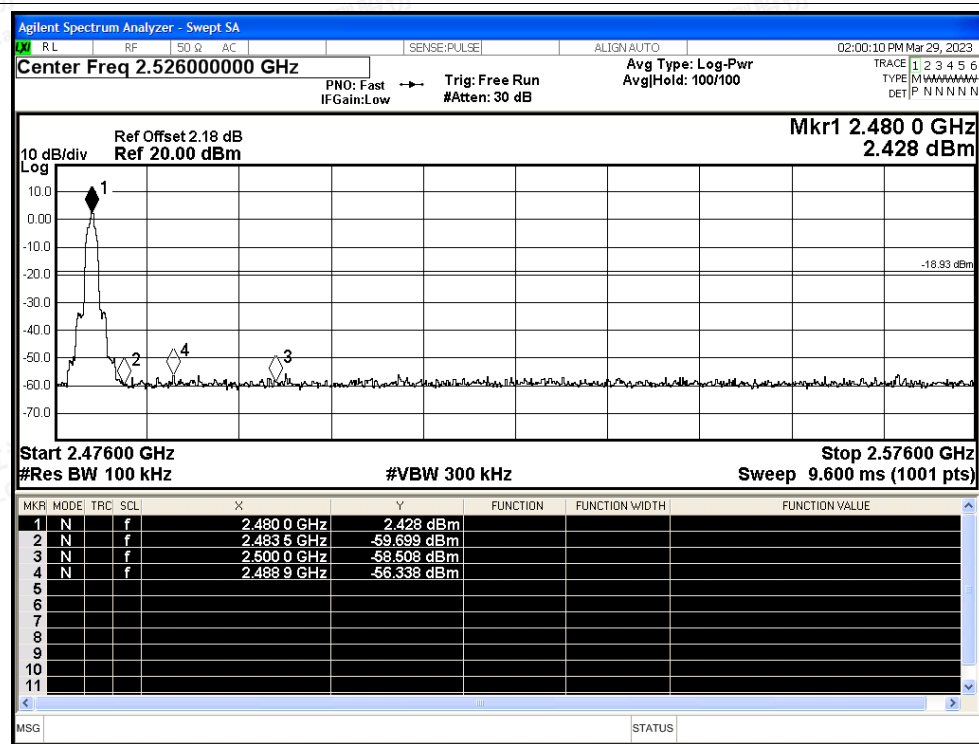
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Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



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



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**(Hopping)**

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-56.27	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-57.66	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-54.29	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-56.19	-20	Pass

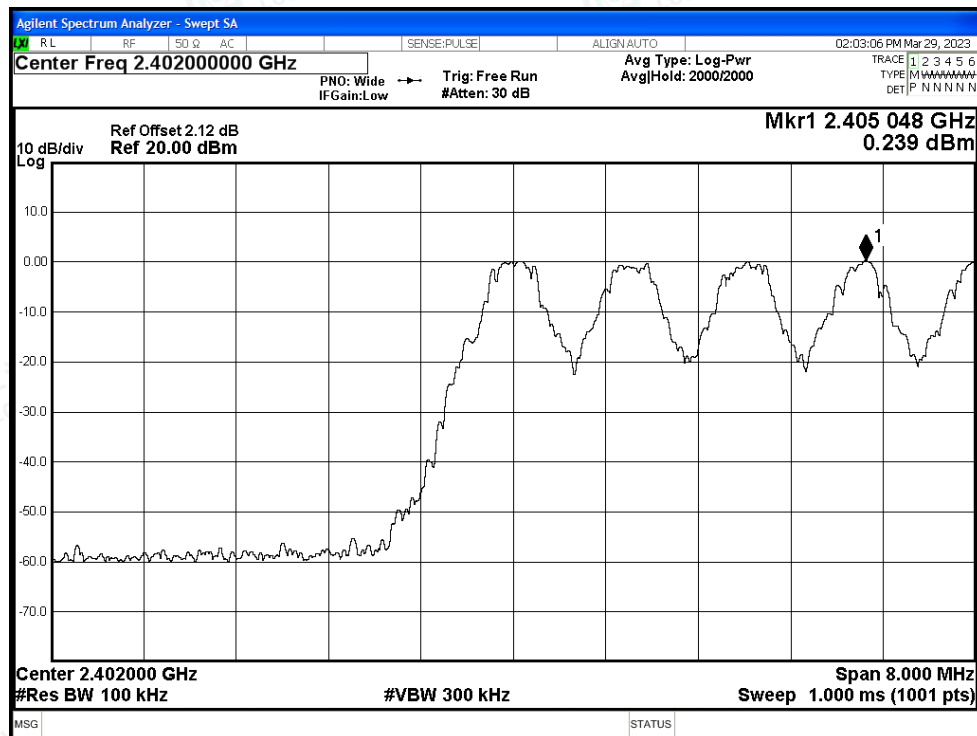


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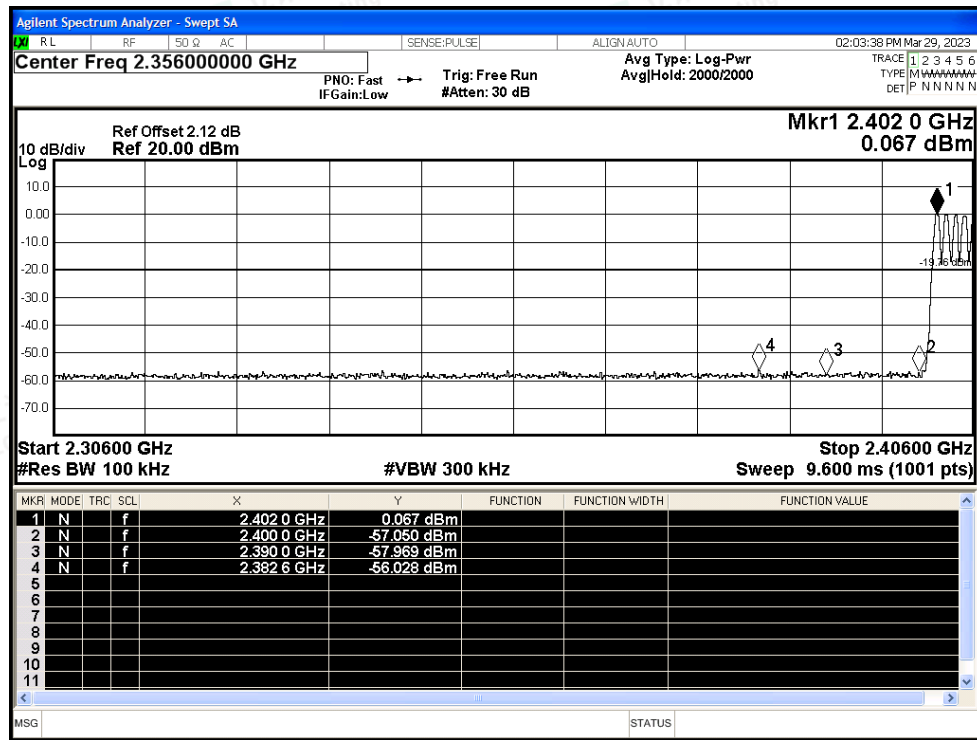


Test Graphs

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



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



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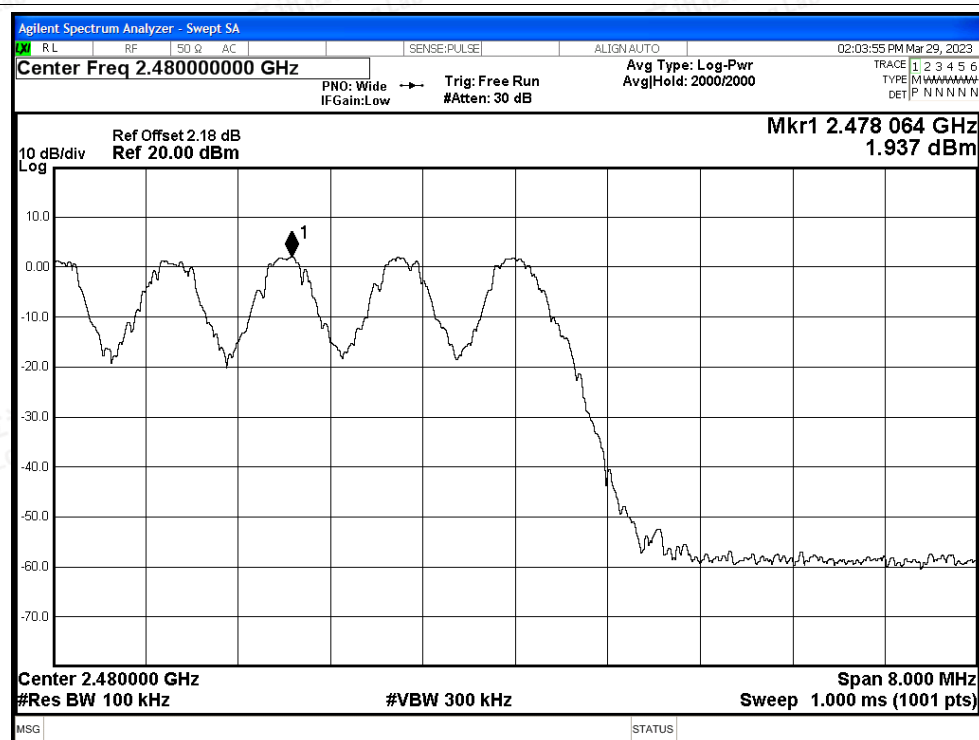
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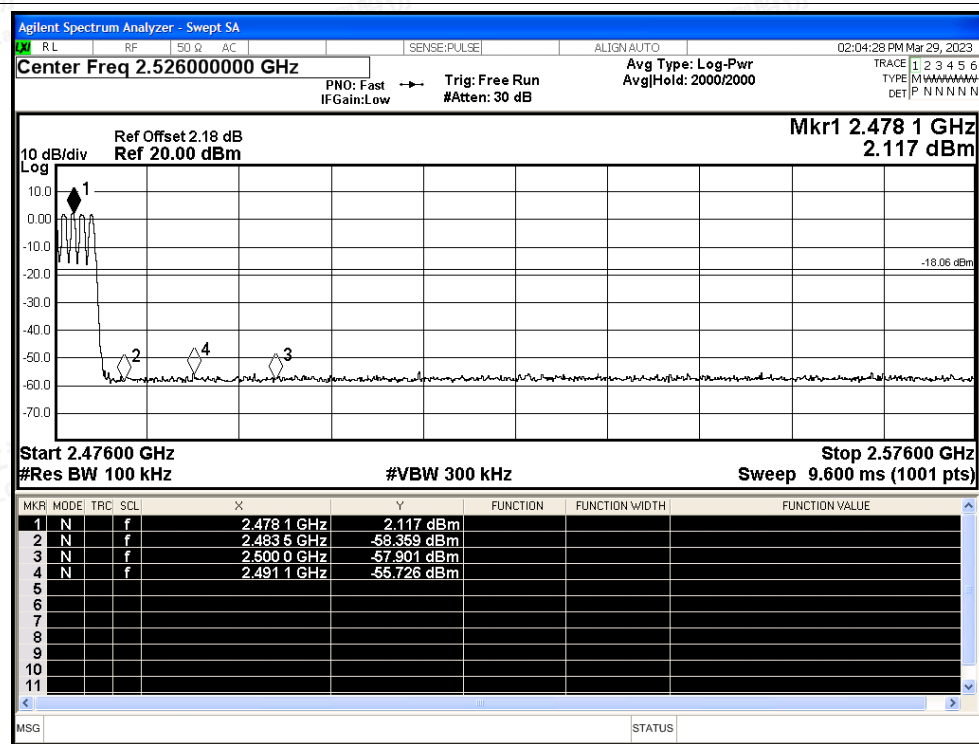
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Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref

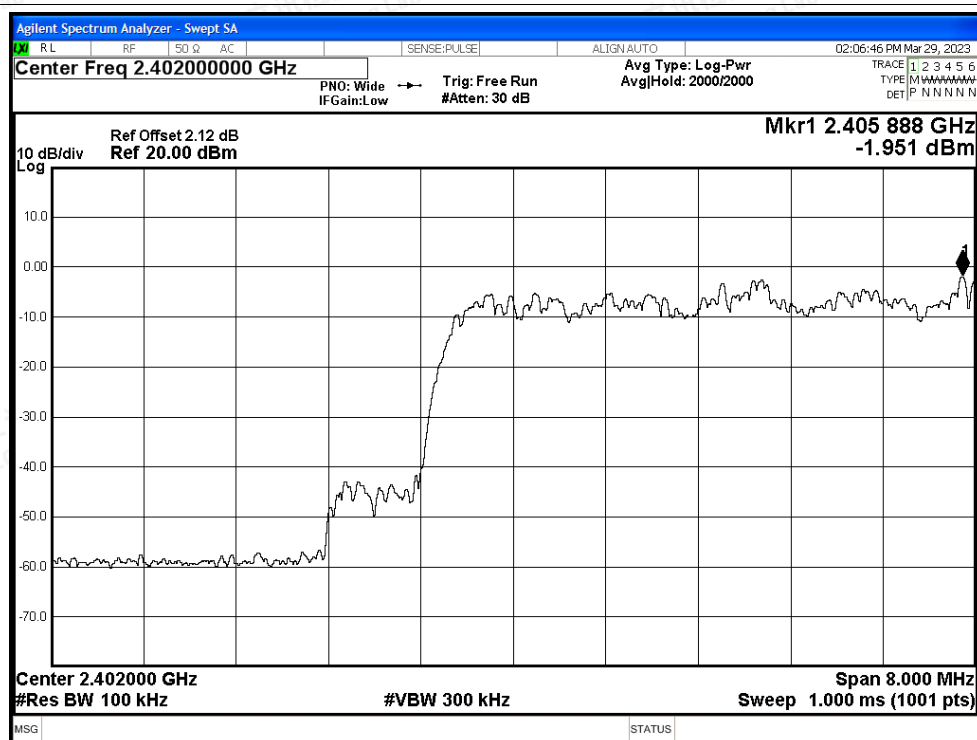


Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission

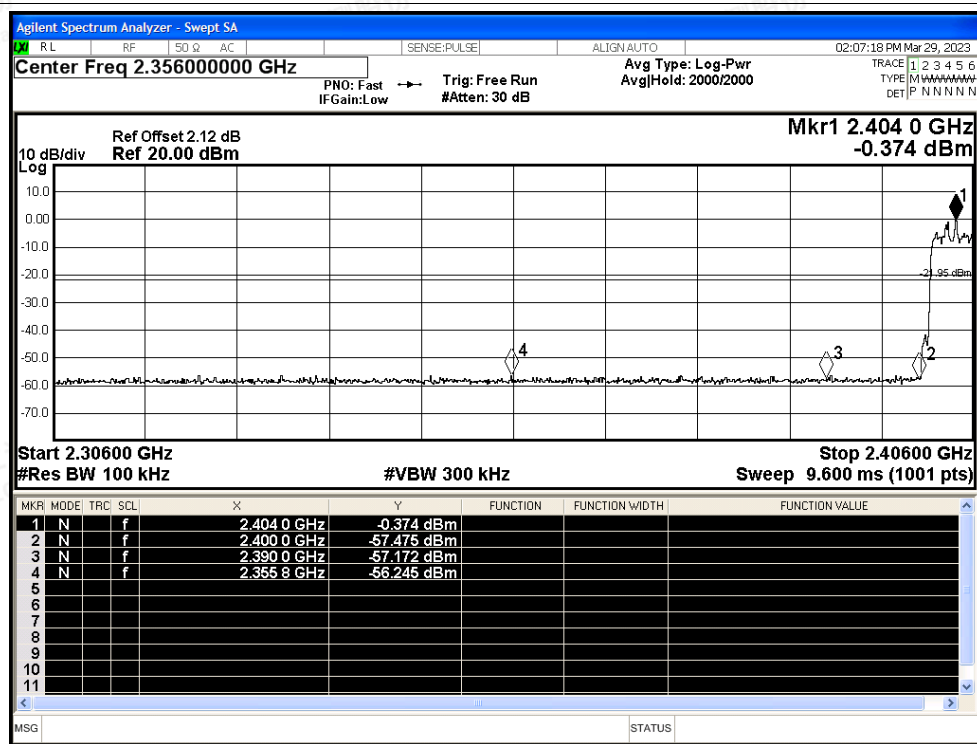




Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



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



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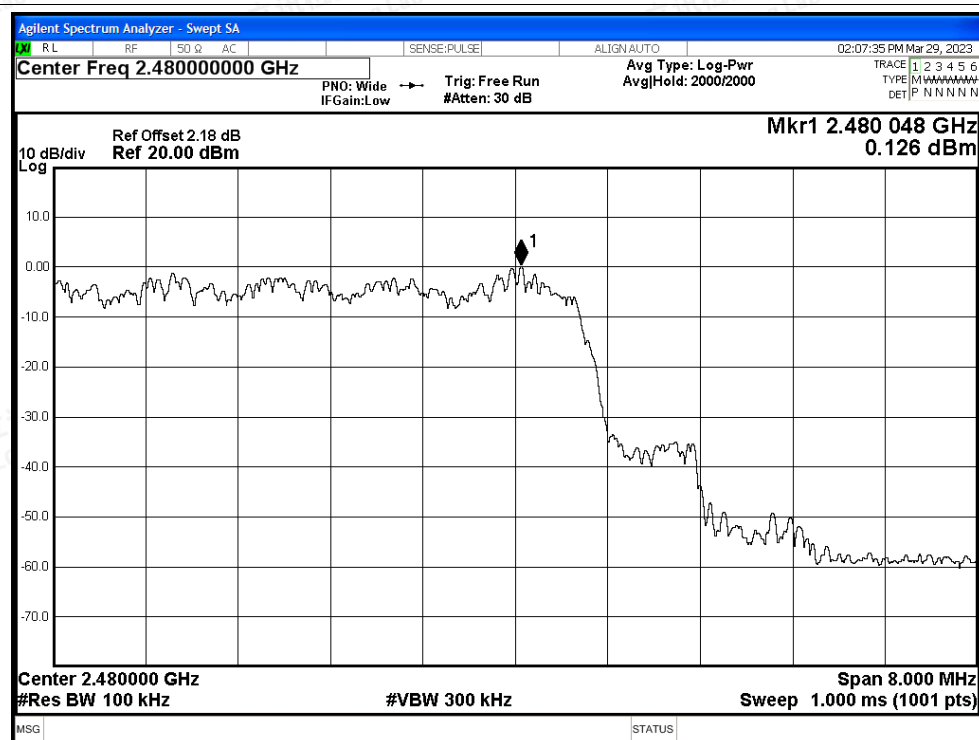
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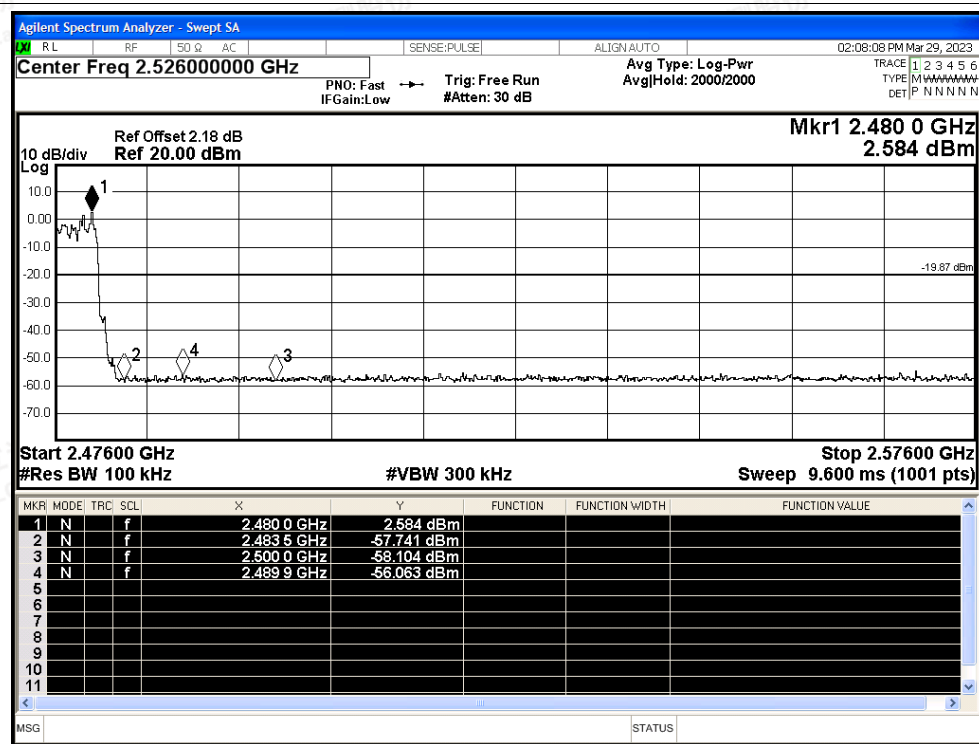
Scan code to check authenticity



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

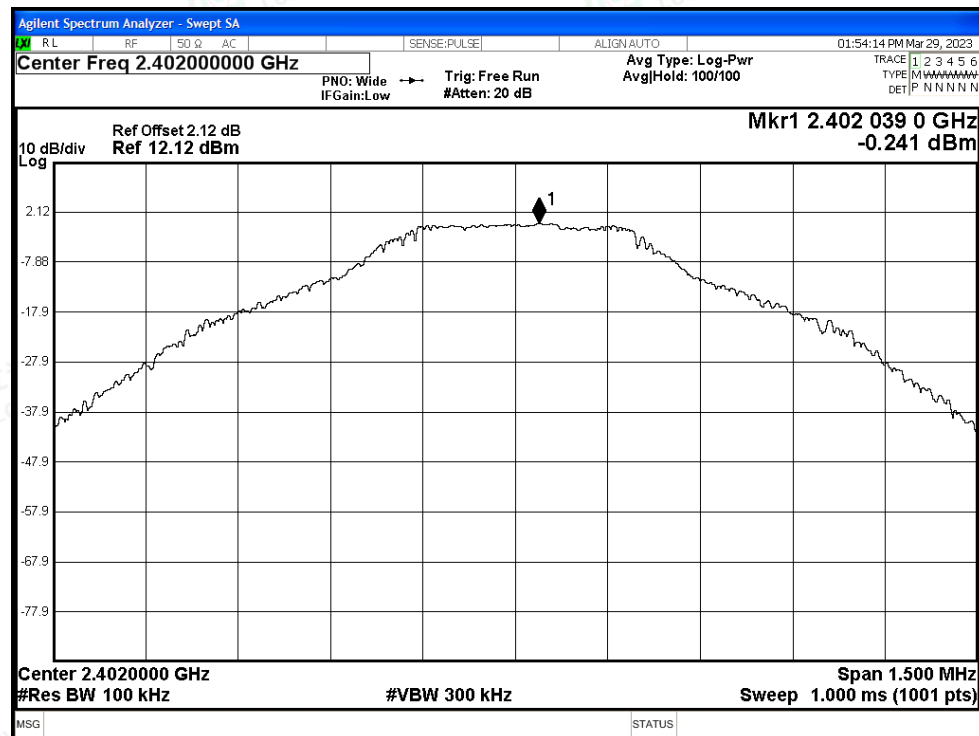
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-55.5	-20	Pass
NVNT	1-DH5	2441	Ant1	-56.02	-20	Pass
NVNT	1-DH5	2480	Ant1	-57.46	-20	Pass
NVNT	2-DH5	2402	Ant1	-55.2	-20	Pass
NVNT	2-DH5	2441	Ant1	-55.16	-20	Pass
NVNT	2-DH5	2480	Ant1	-56.81	-20	Pass



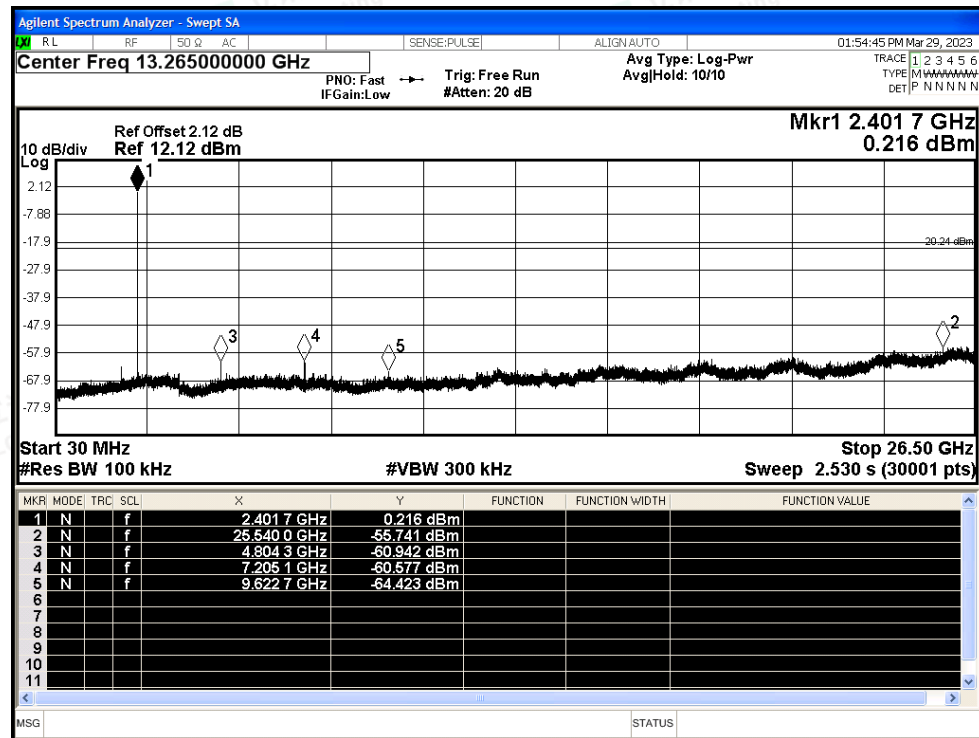


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

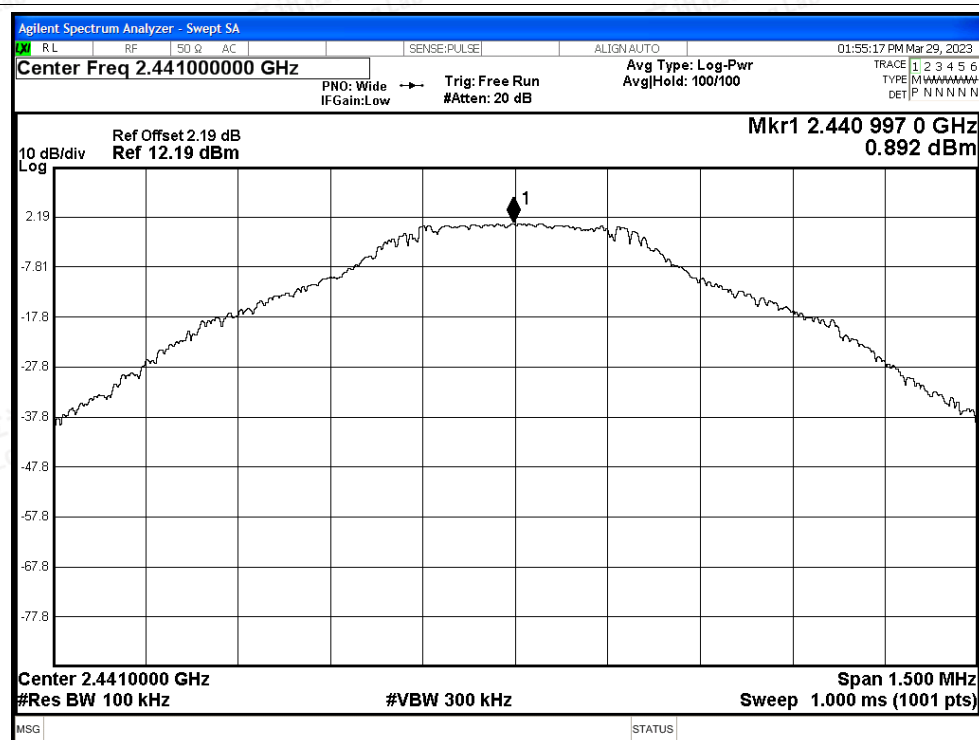


Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

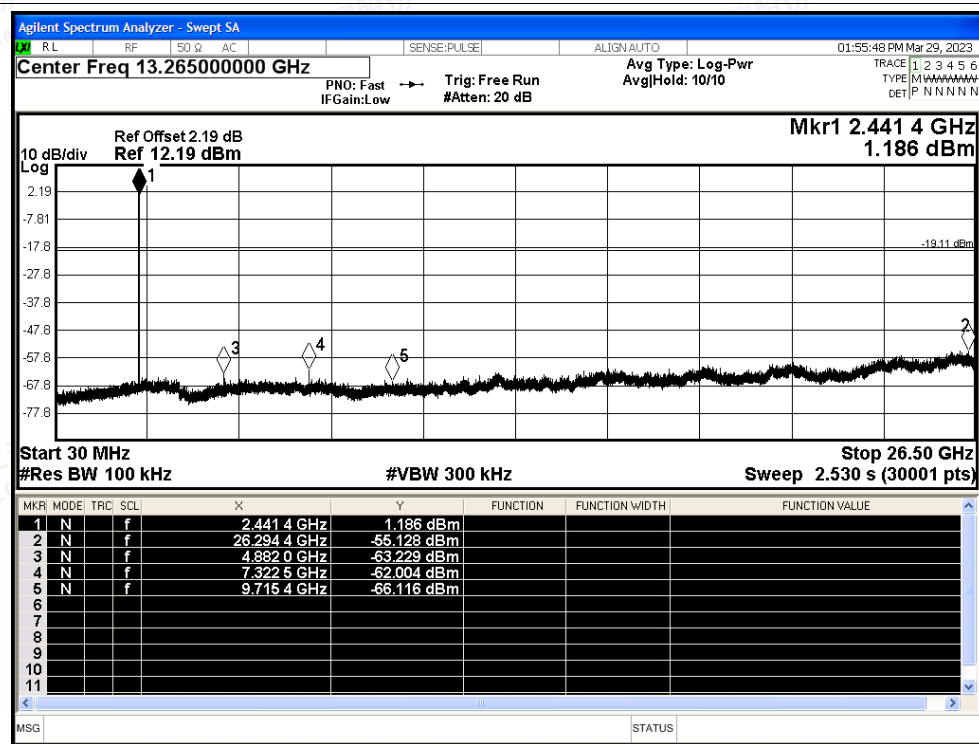




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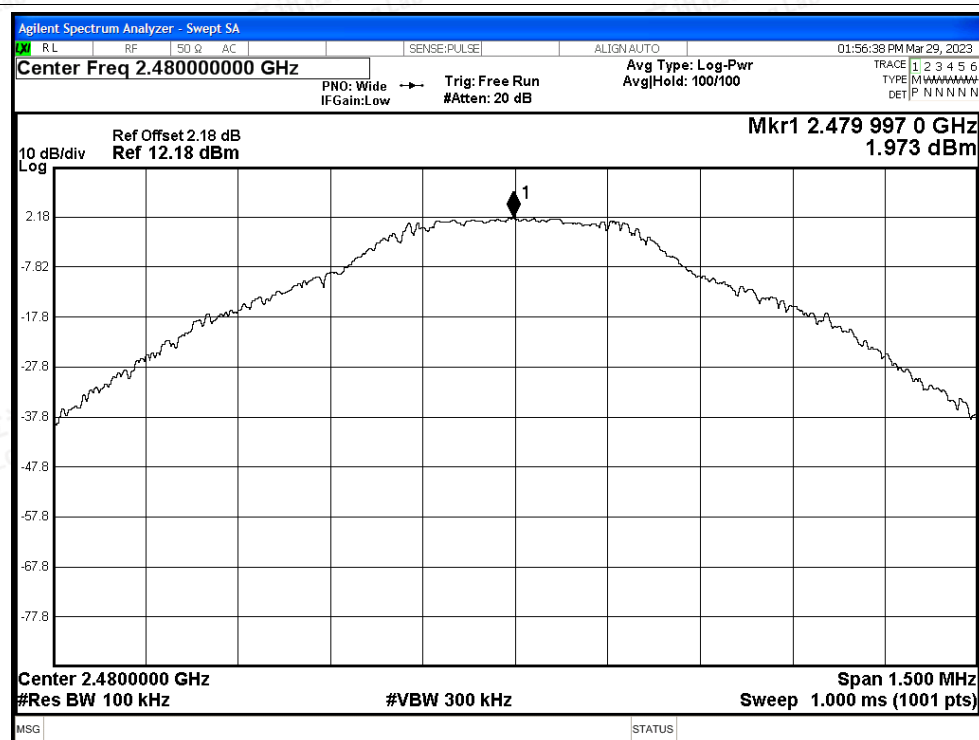


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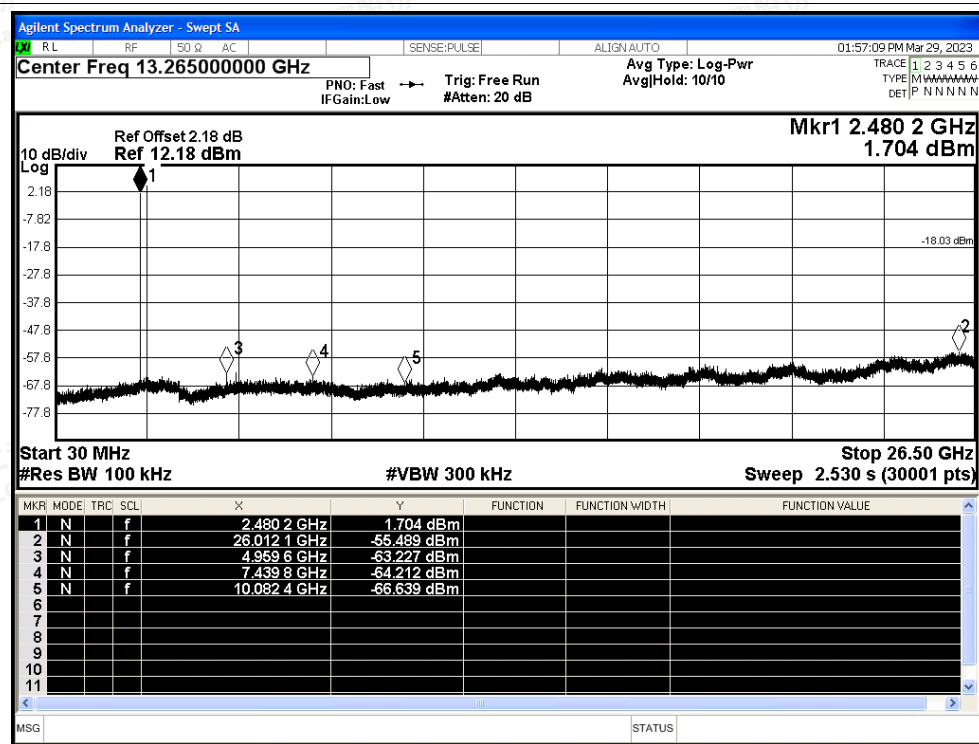




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

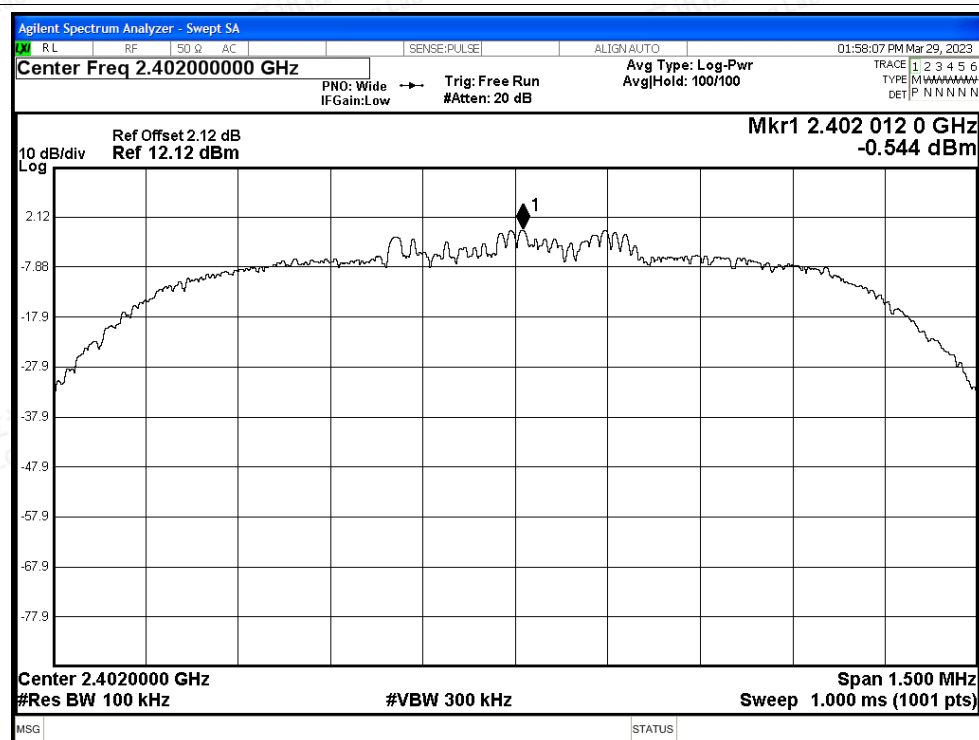


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

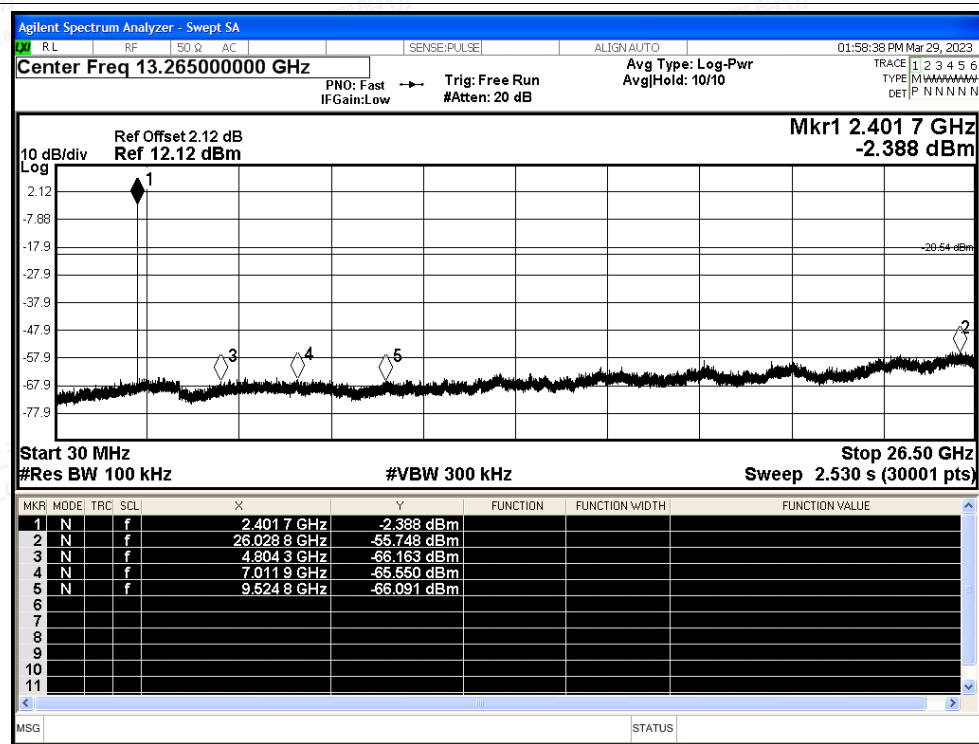




Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref

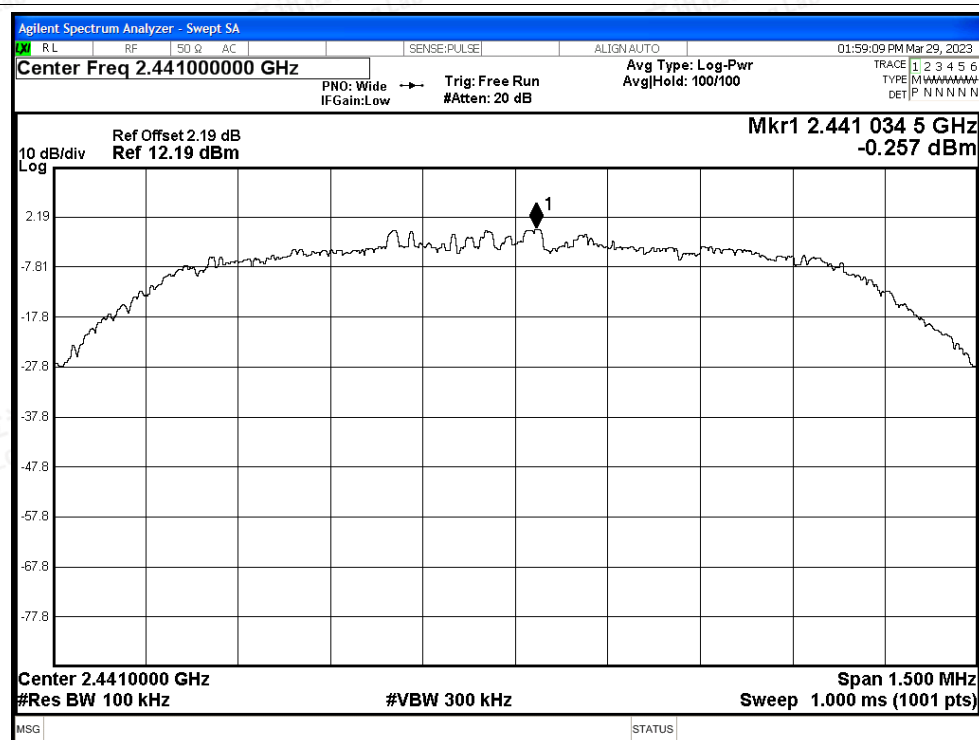


Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission

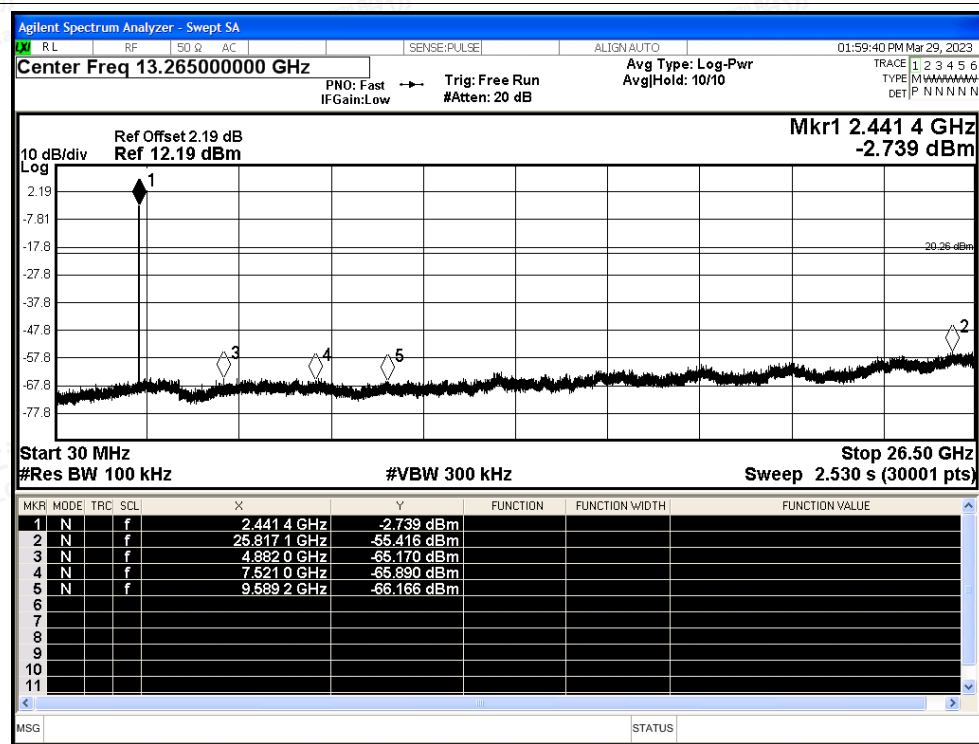




Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



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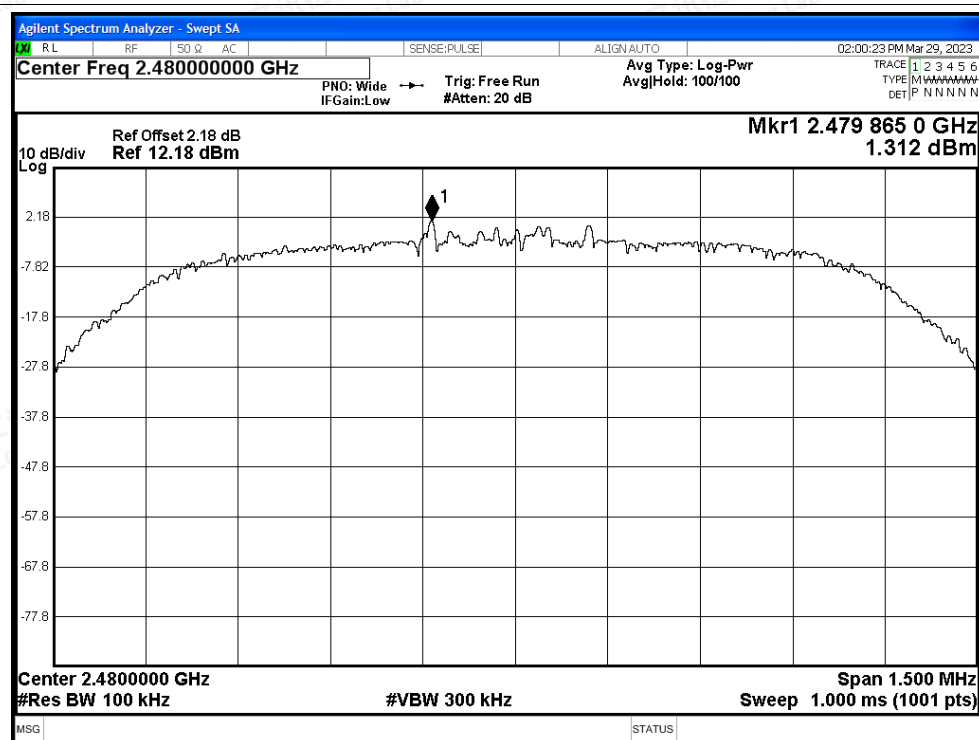
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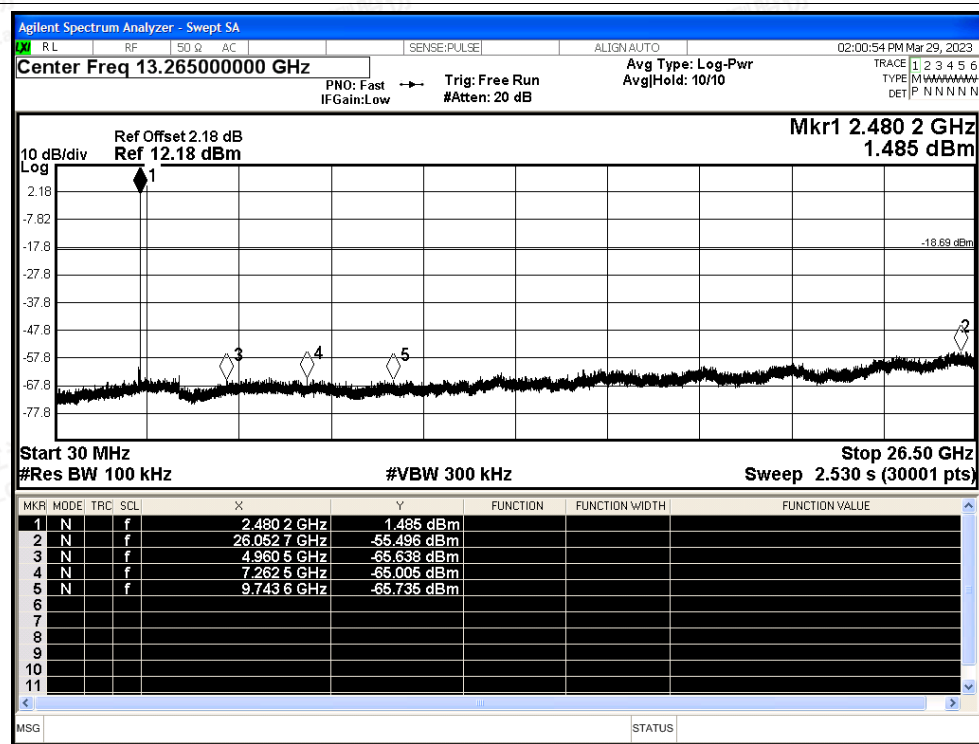
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Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



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A.8 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-50.38	2	46.88	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-60.21	2	37.05	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2368.176	-47.08	2	50.18	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2389.008	-59.89	2	37.37	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-51.36	2	45.9	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-60.09	2	37.17	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-49.05	2	48.21	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-59.38	2	37.88	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2488.84	-47.09	2	50.17	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.608	-59.35	2	37.91	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-50.23	2	47.03	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-59.75	2	37.51	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-49.48	2	47.78	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-60.36	2	36.9	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2343.888	-46.53	2	50.73	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2388.72	-59.93	2	37.33	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-50.09	2	47.17	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-59.94	2	37.32	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-49.41	2	47.85	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-58.93	2	38.33	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2487.4	-46.7	2	50.56	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.512	-58.93	2	38.33	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-50.24	2	47.02	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-59.56	2	37.7	Average	54	Pass

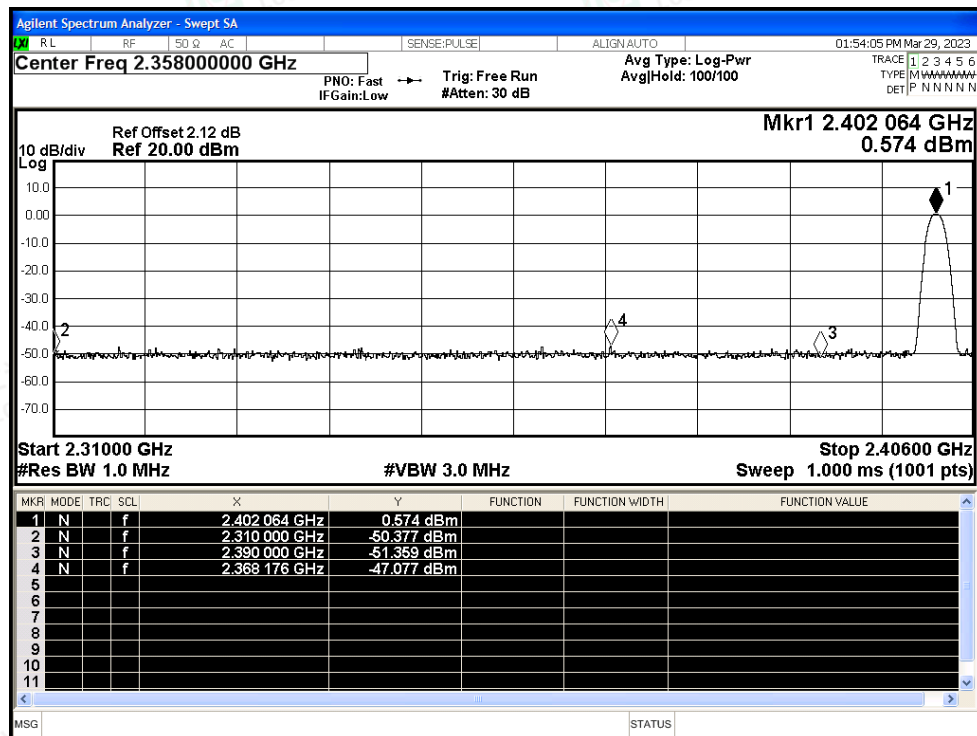


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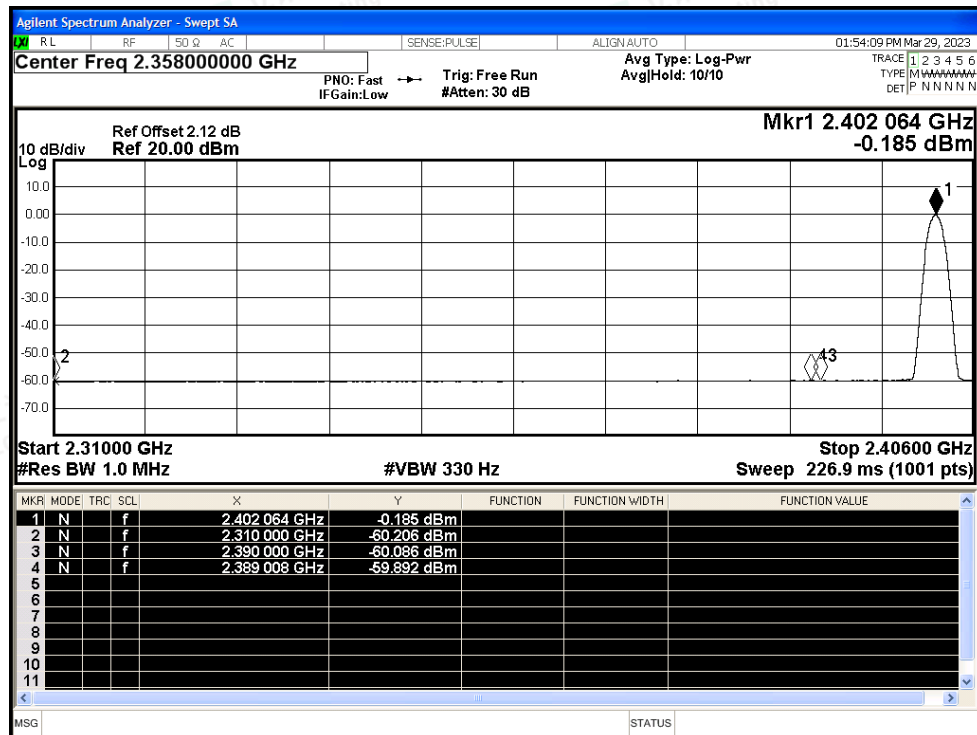


Test Graphs

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



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



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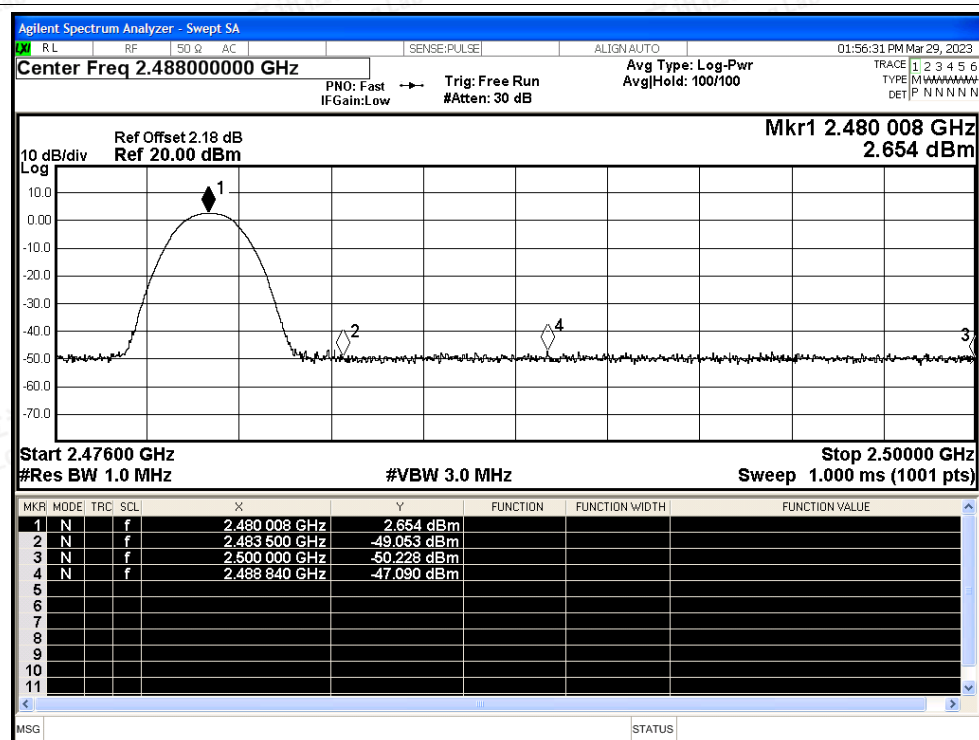
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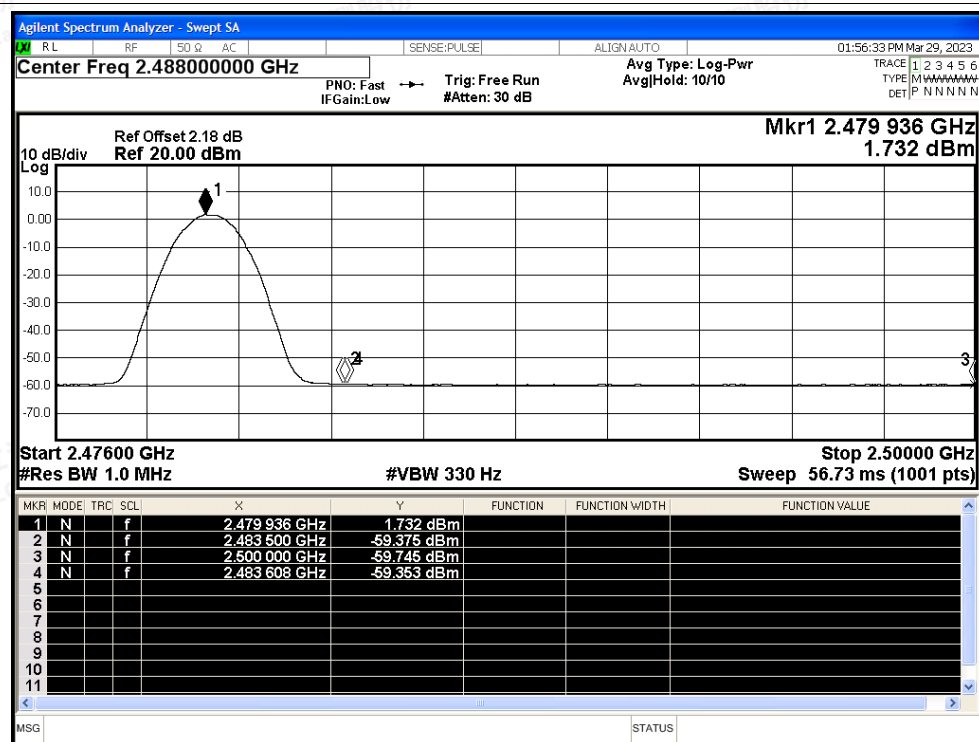
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Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



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



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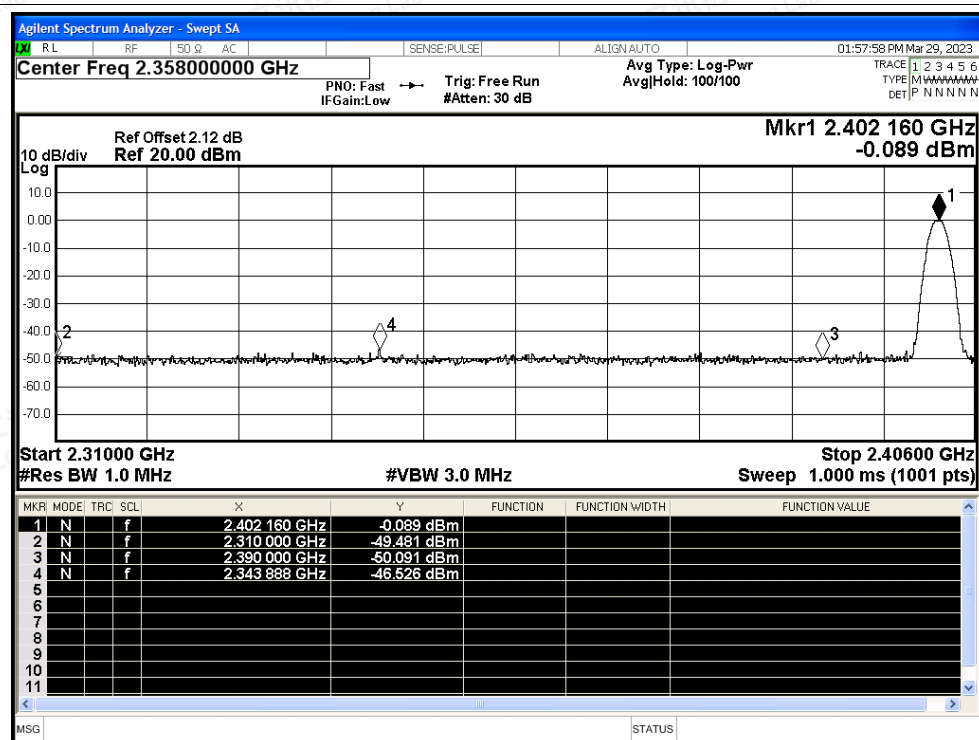
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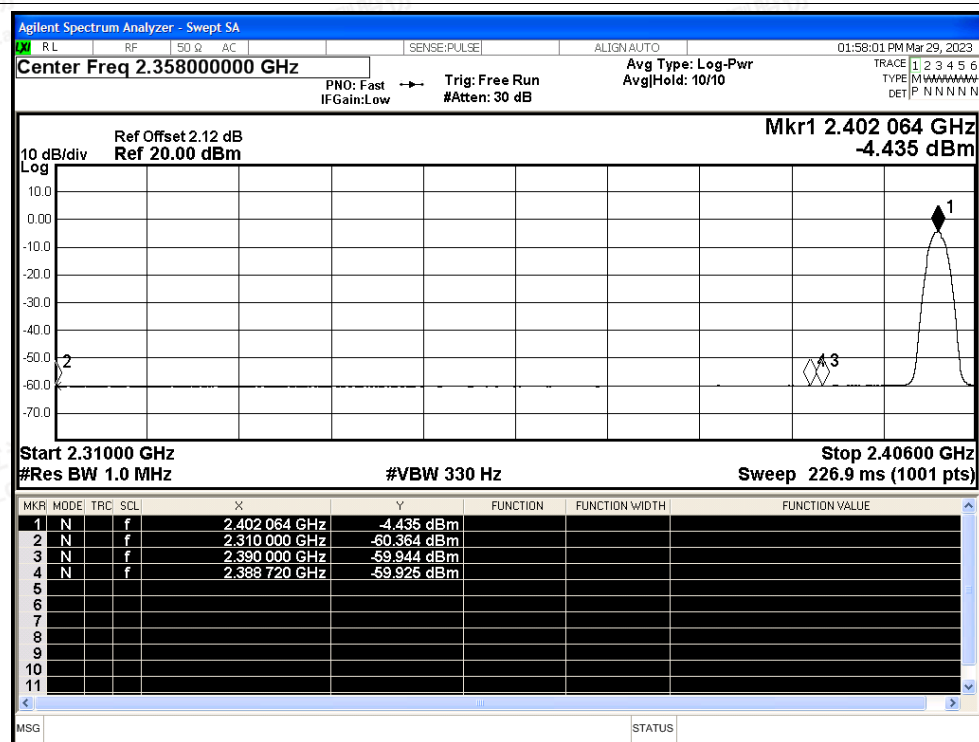
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Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



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



Shenzhen LCS Compliance Testing Laboratory Ltd.

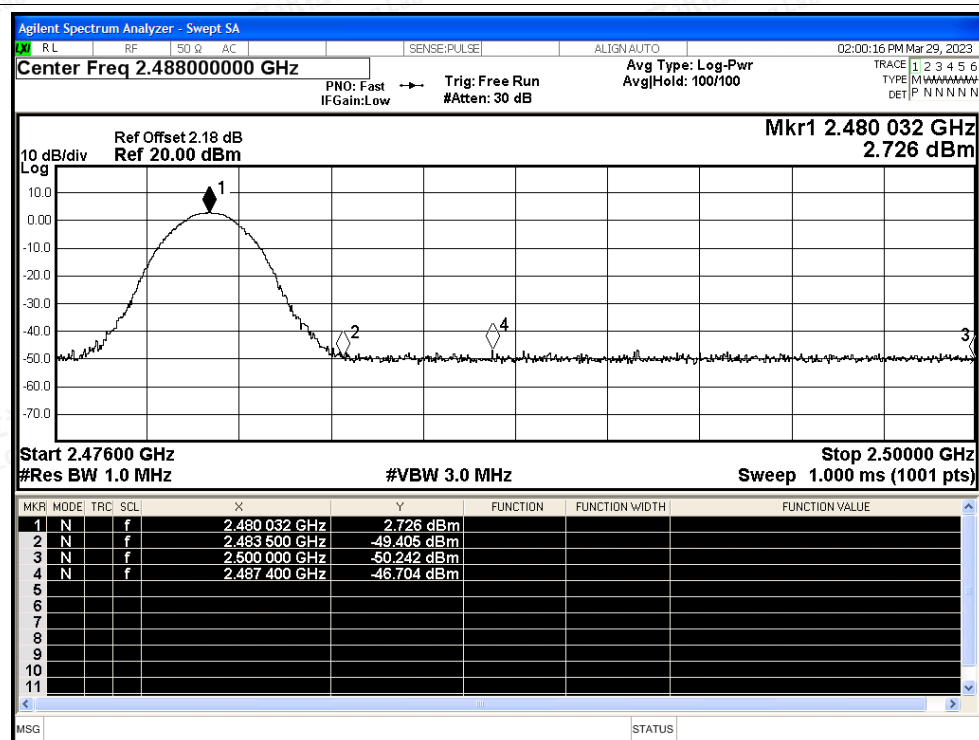
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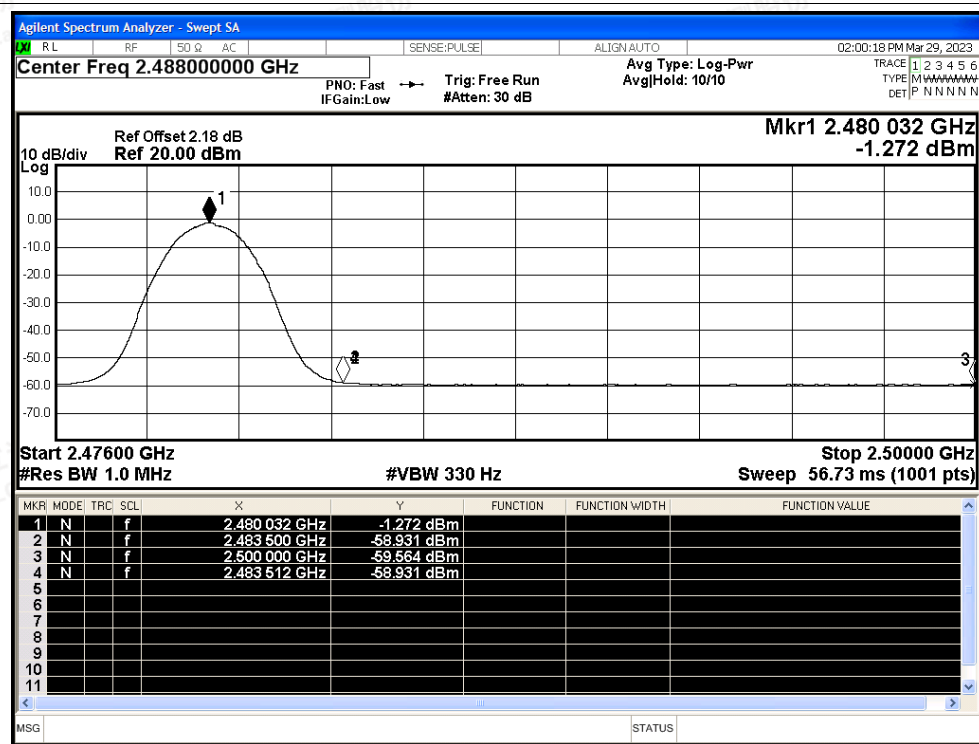
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Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



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



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