



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Smartphone

Test Model: NET ALPHA

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Taylor Hu
Supervised by:	Ling Zhu



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A.1 -20dB Bandwidth

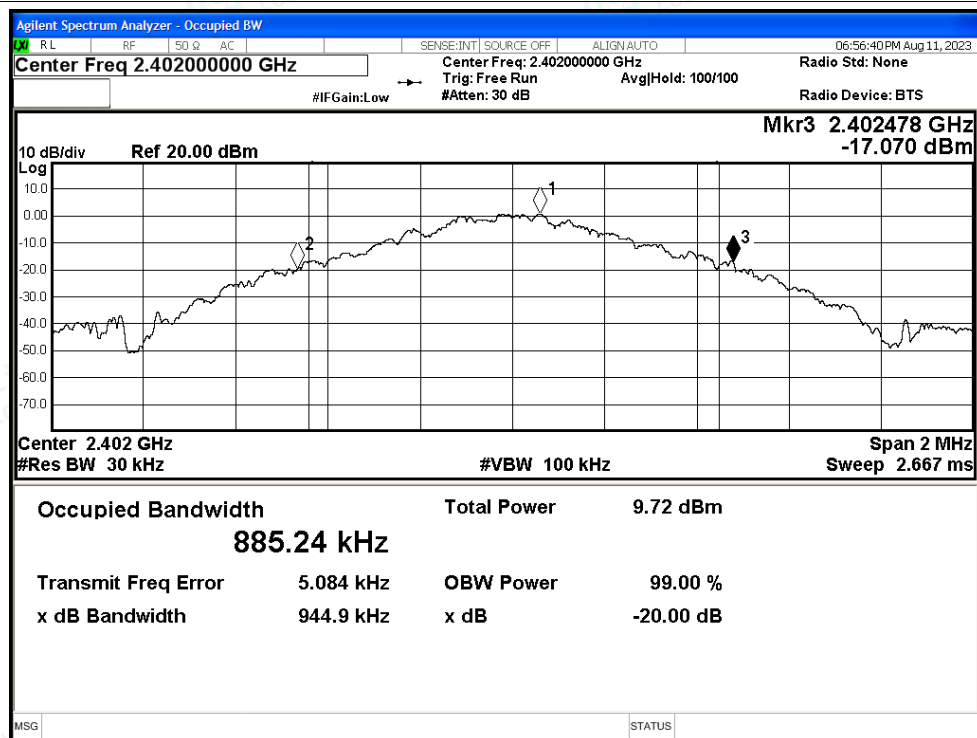
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.945	0	Pass
NVNT	1-DH5	2441	Ant1	0.952	0	Pass
NVNT	1-DH5	2480	Ant1	0.953	0	Pass
NVNT	2-DH5	2402	Ant1	1.278	0	Pass
NVNT	2-DH5	2441	Ant1	1.284	0	Pass
NVNT	2-DH5	2480	Ant1	1.322	0	Pass



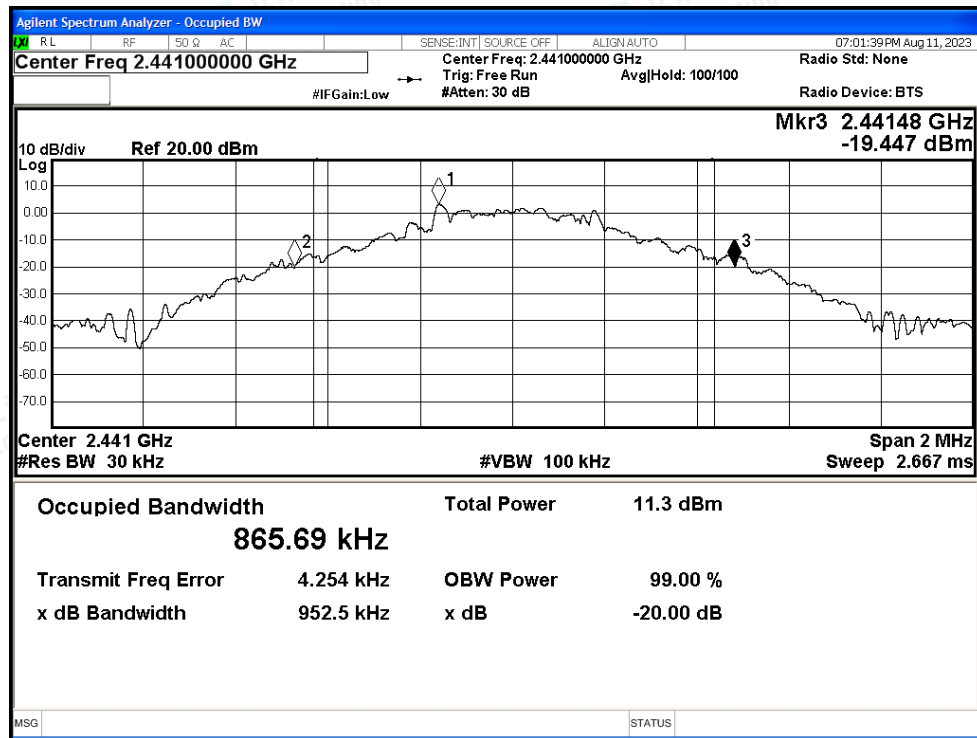


Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



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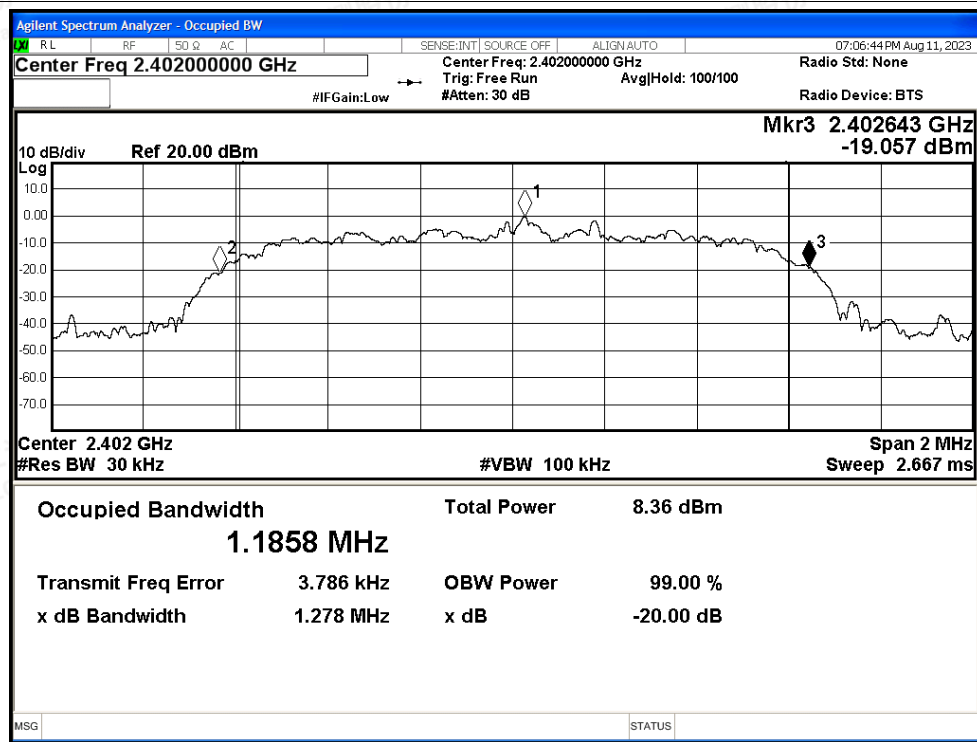
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-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

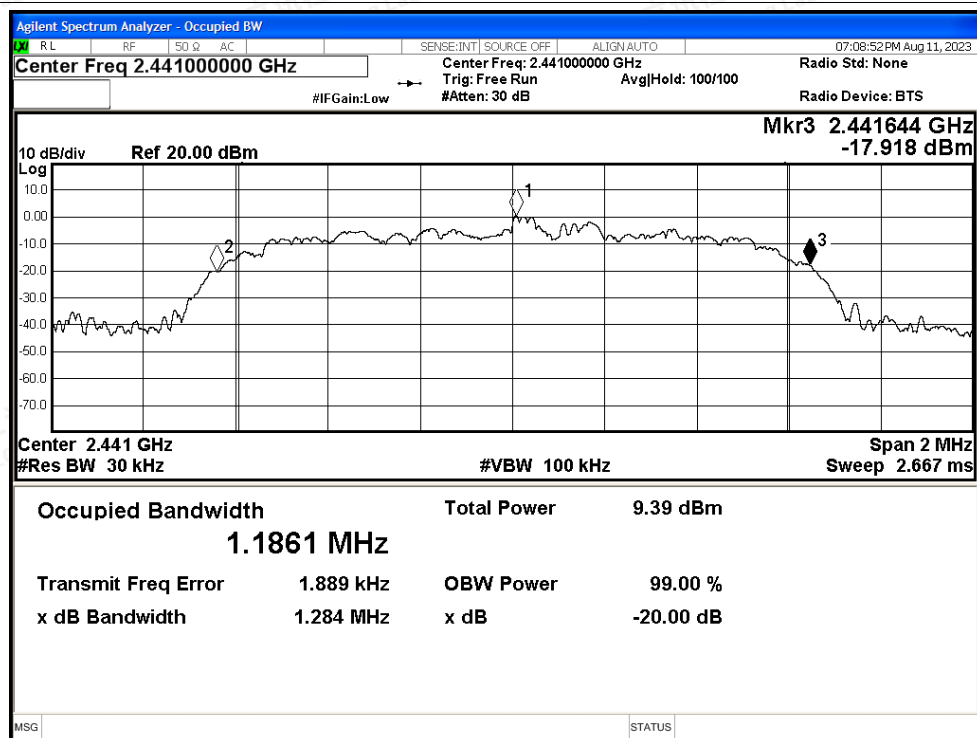


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1

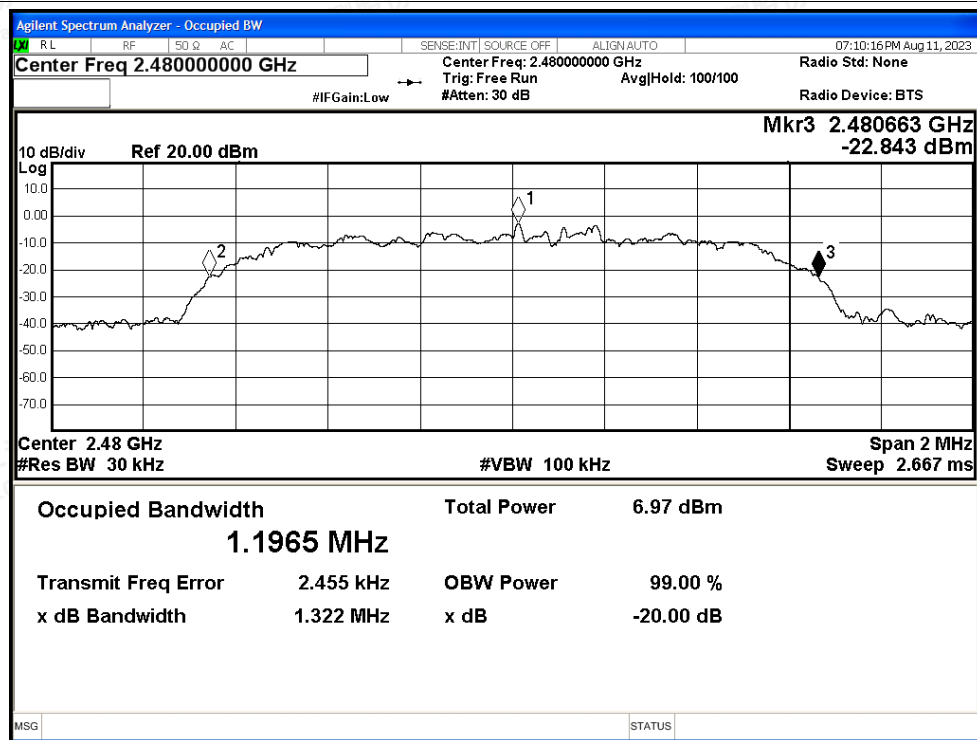




-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-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	3.74	21	Pass
NVNT	1-DH5	2441	Ant1	4.65	21	Pass
NVNT	1-DH5	2480	Ant1	2.00	21	Pass
NVNT	2-DH5	2402	Ant1	3.96	21	Pass
NVNT	2-DH5	2441	Ant1	4.78	21	Pass
NVNT	2-DH5	2480	Ant1	2.41	21	Pass

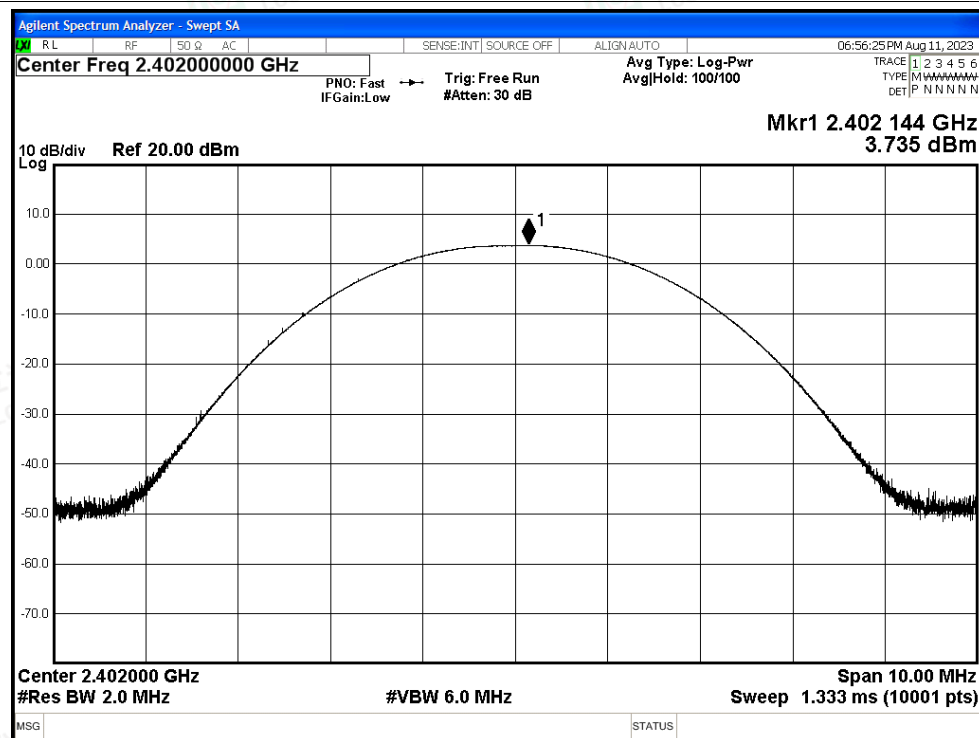


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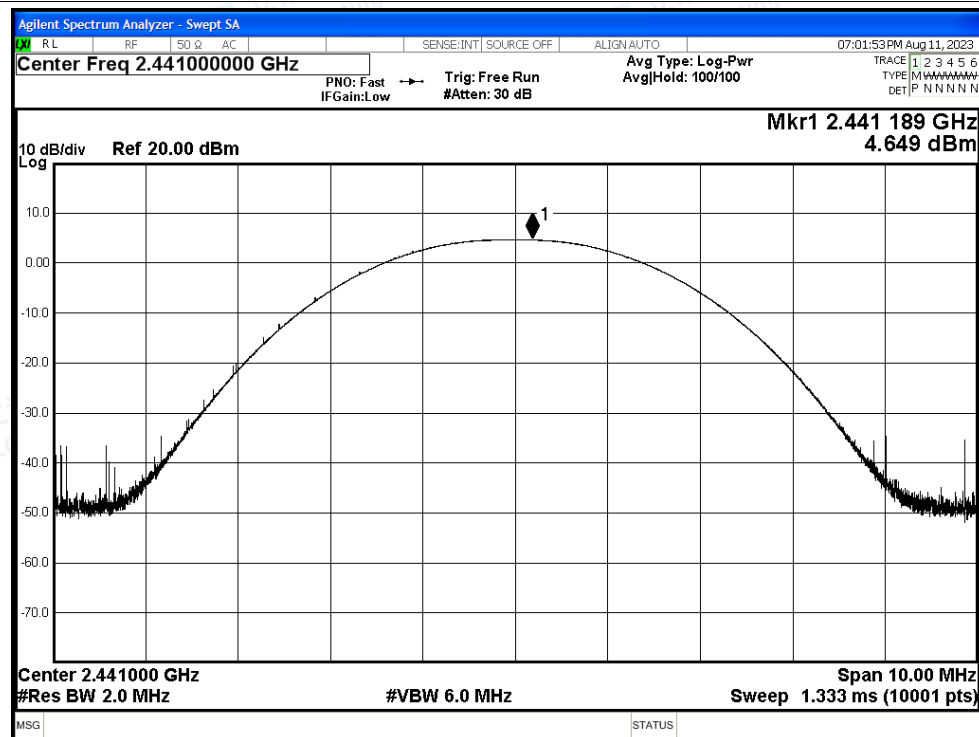


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1



Power NVNT 1-DH5 2441MHz Ant1



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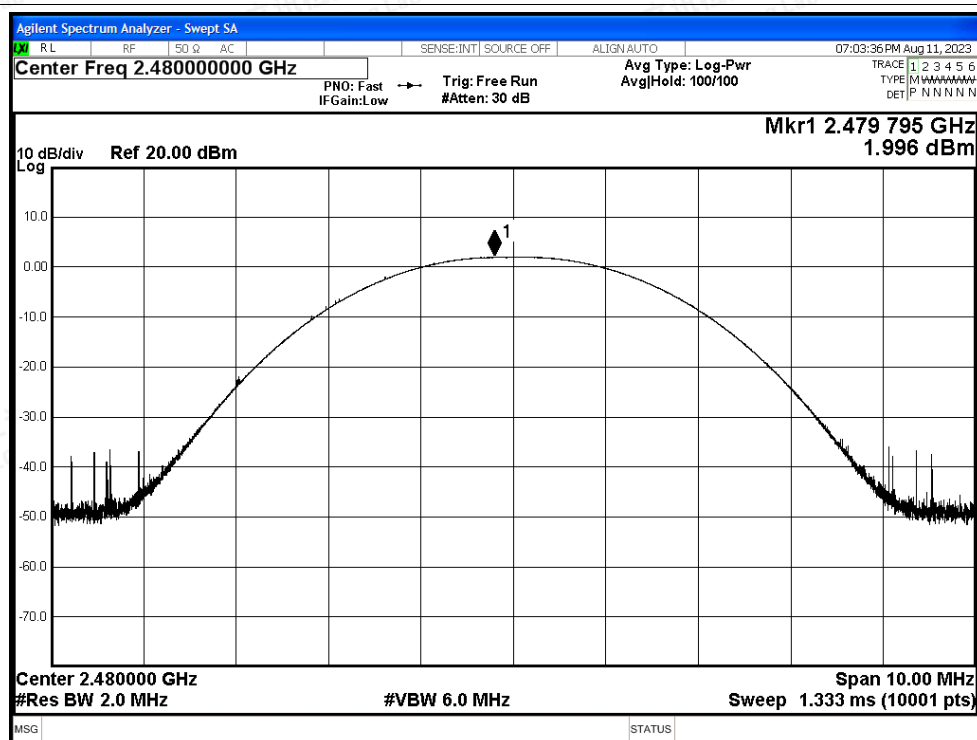
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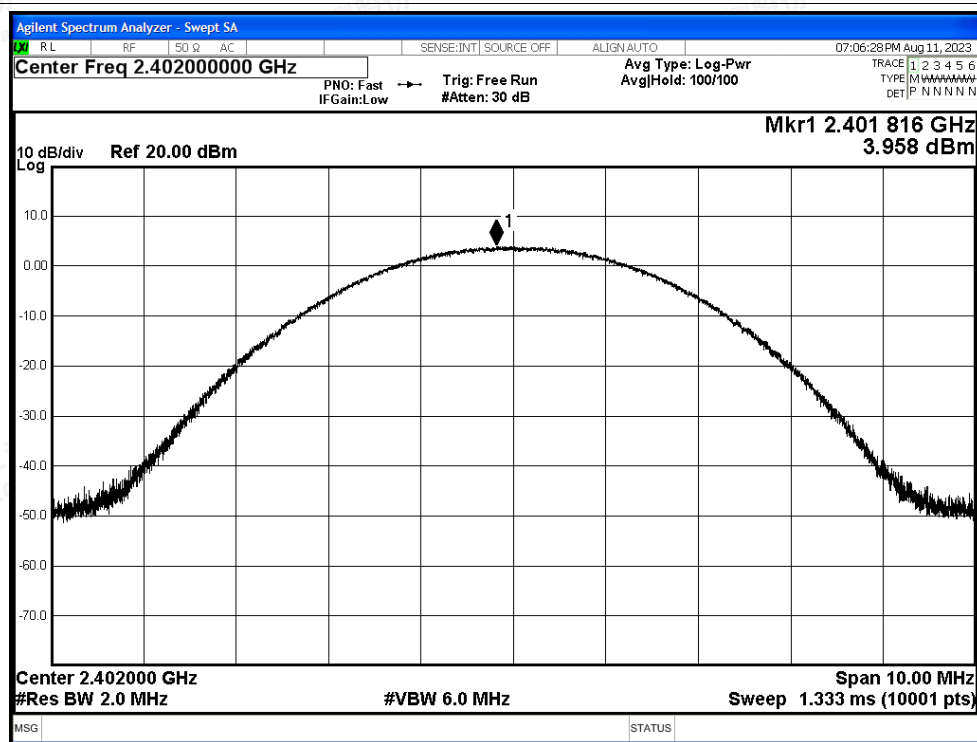
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Power NVNT 1-DH5 2480MHz Ant1

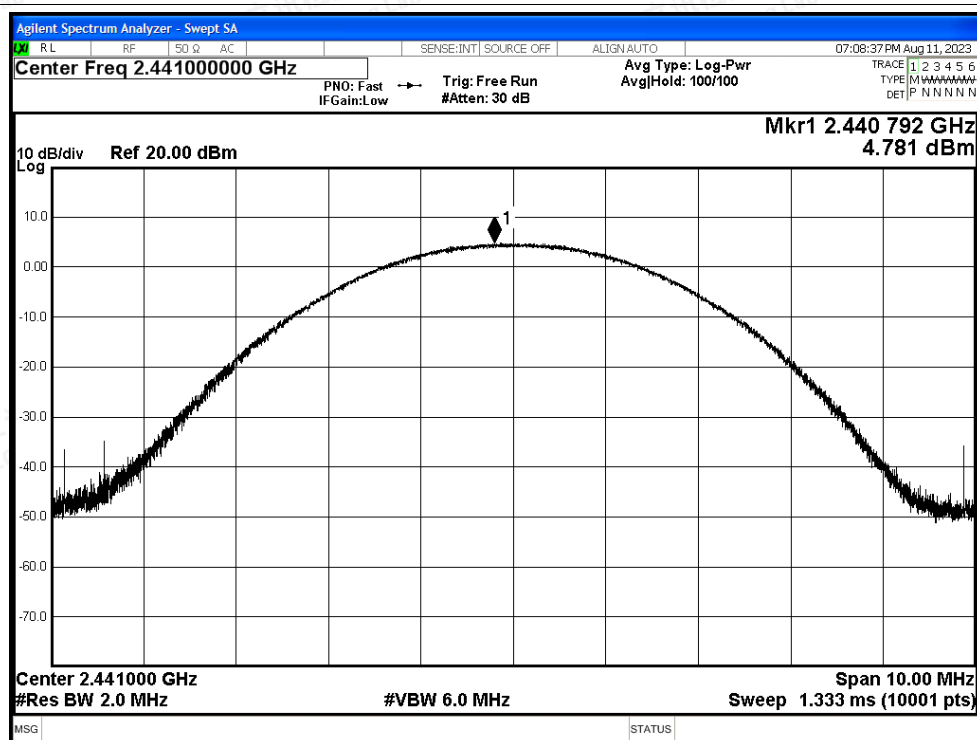


Power NVNT 2-DH5 2402MHz Ant1

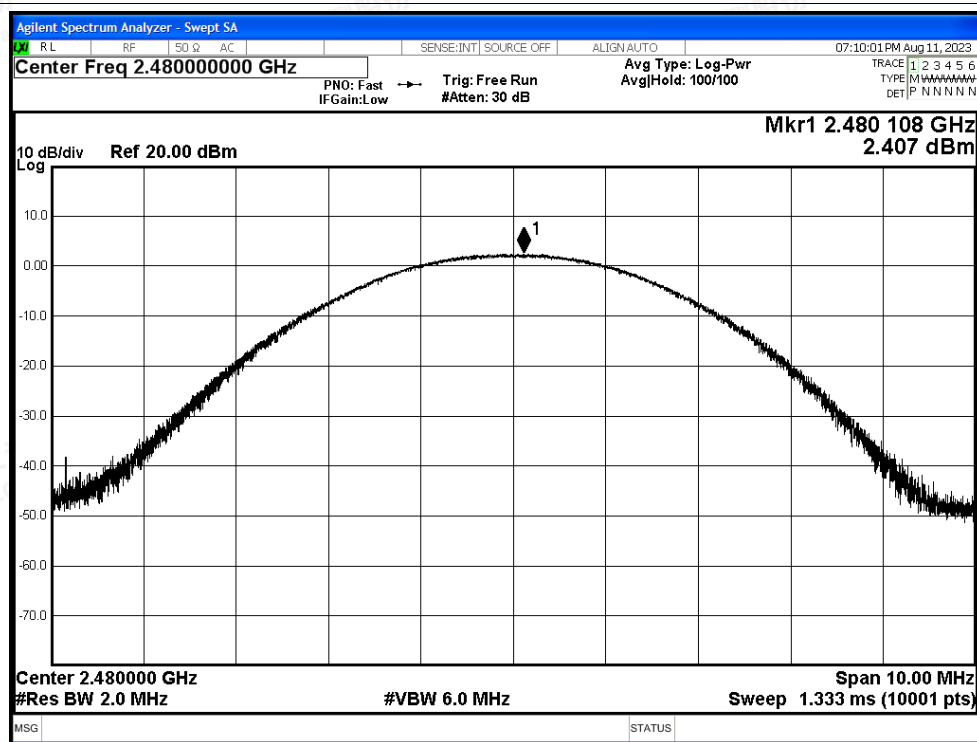




Power NVNT 2-DH5 2441MHz Ant1



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	2402.996	1.022	0.635	Pass
NVNT	2-DH5	Ant1	2402.122	2402.986	0.864	0.881	Pass

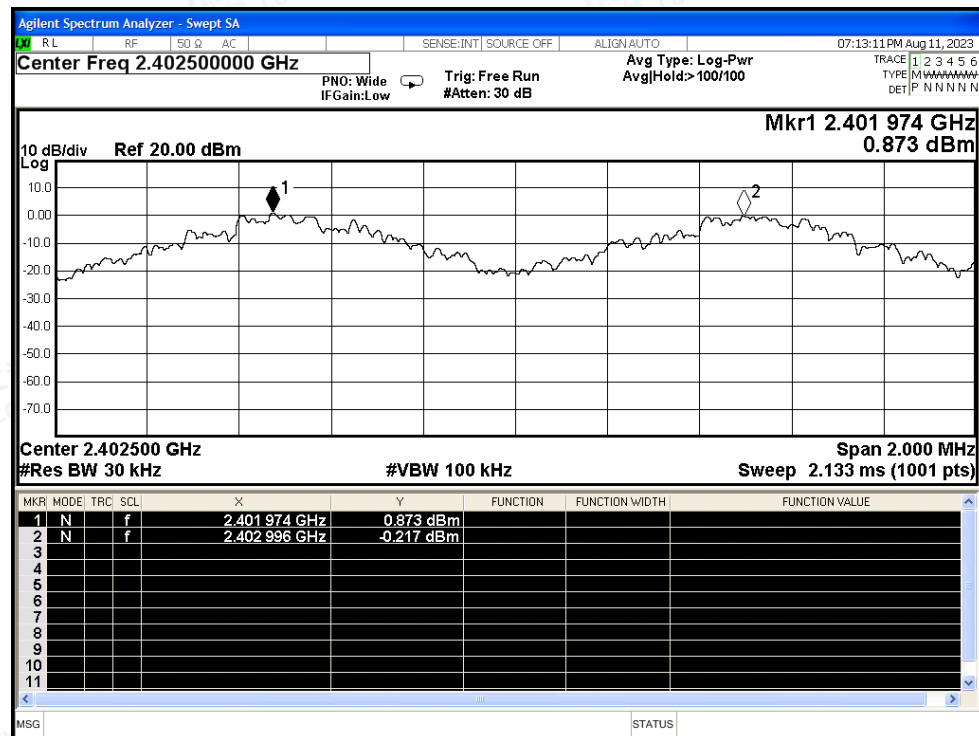


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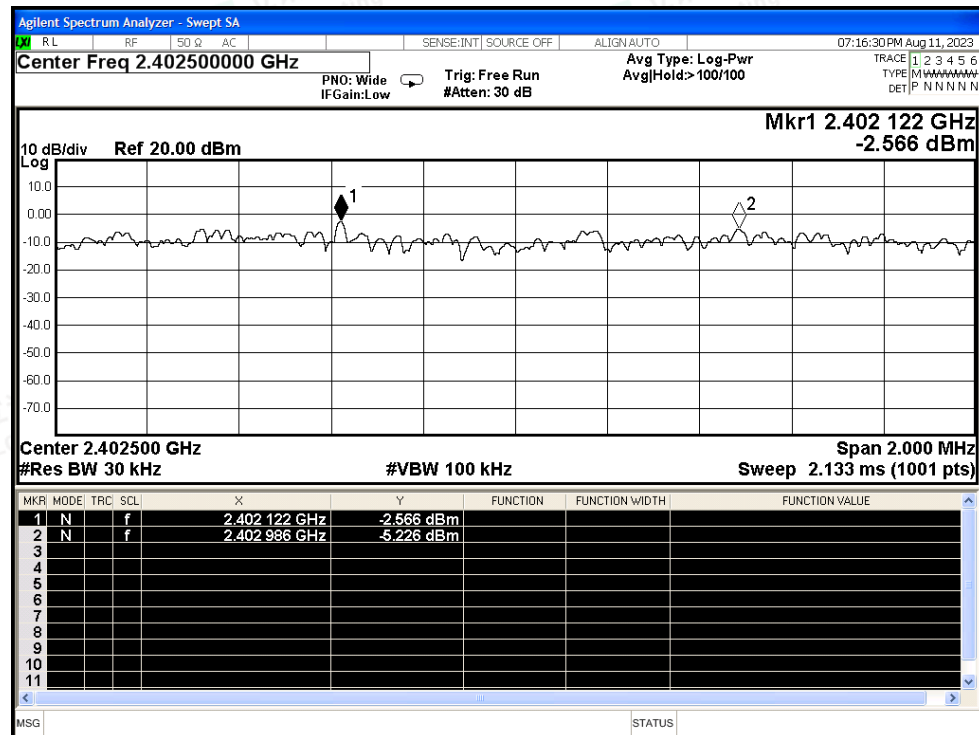


Test Graphs

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	2.91	328.83	113	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.899	304.395	105	31600	400	Pass

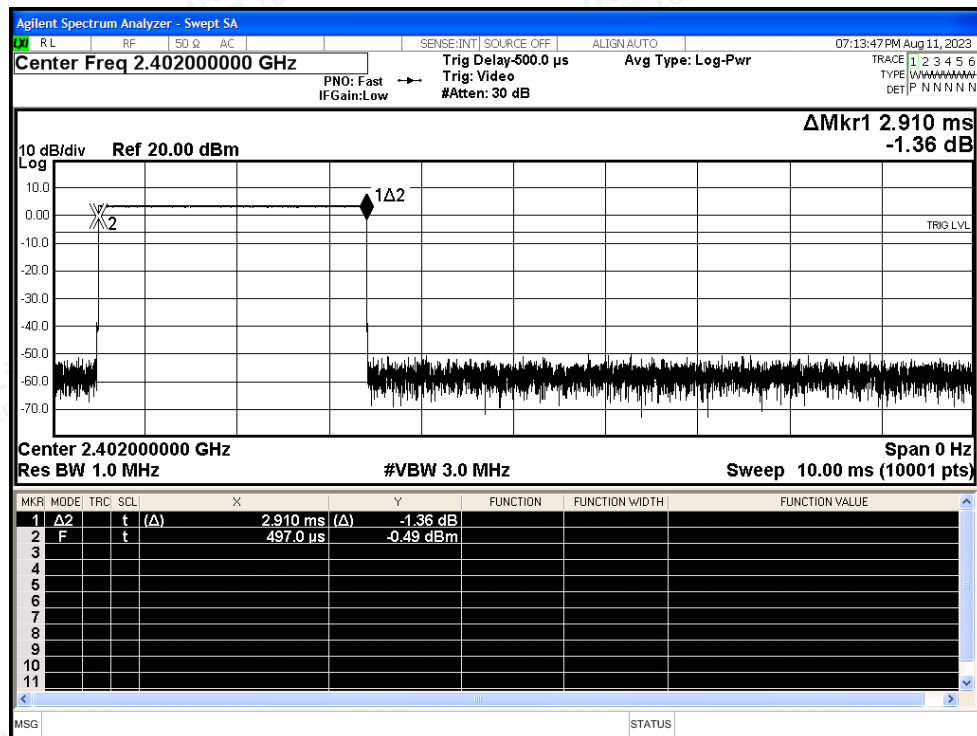


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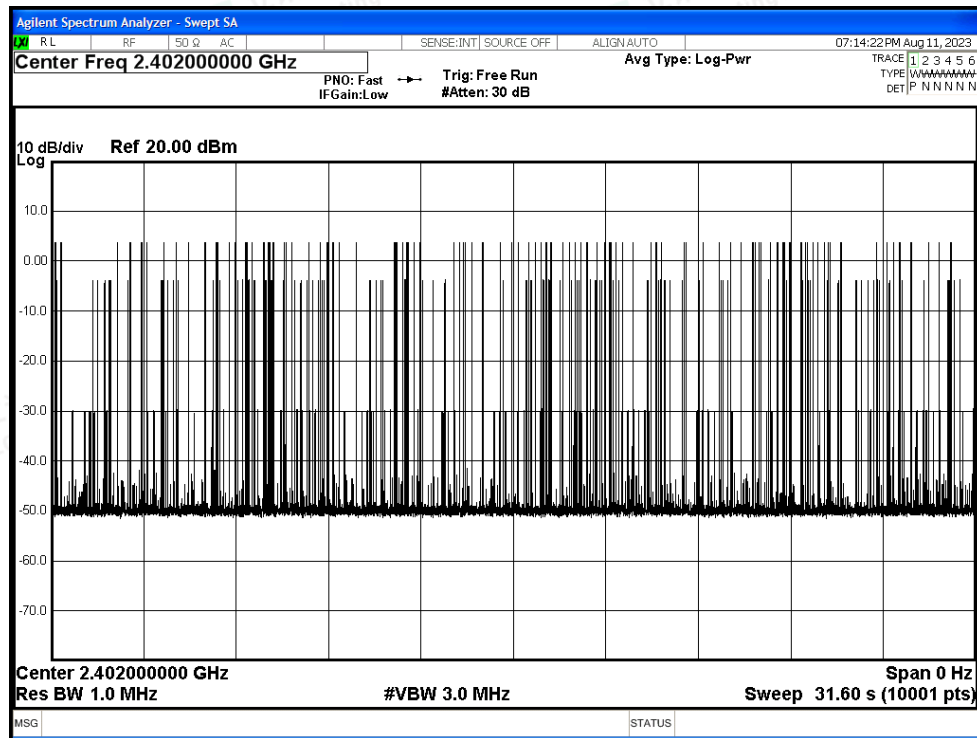


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



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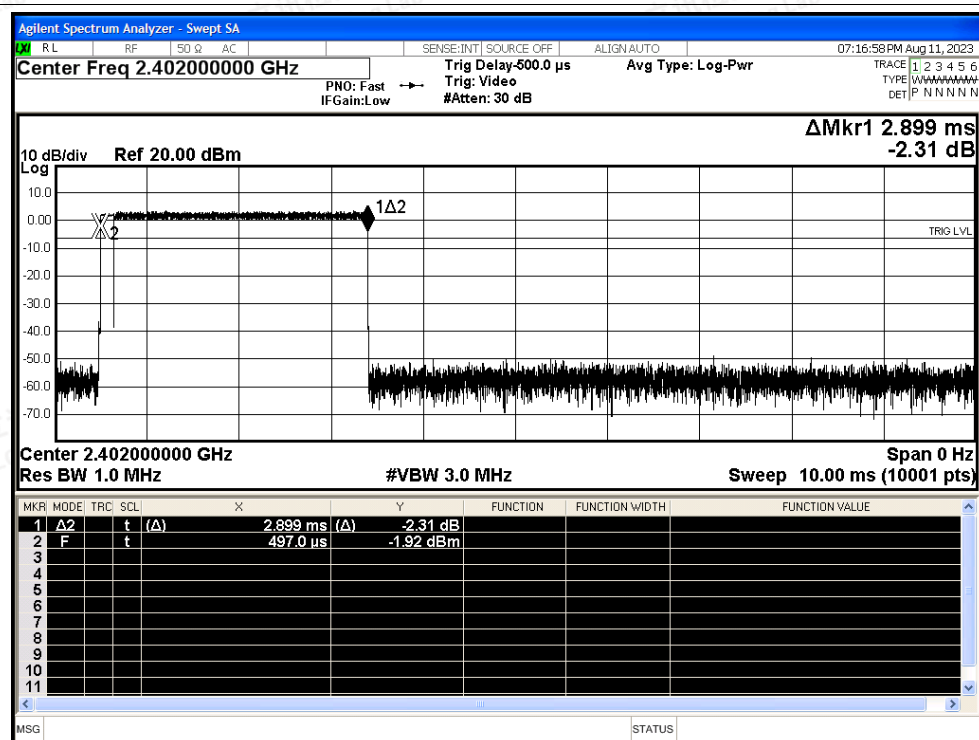
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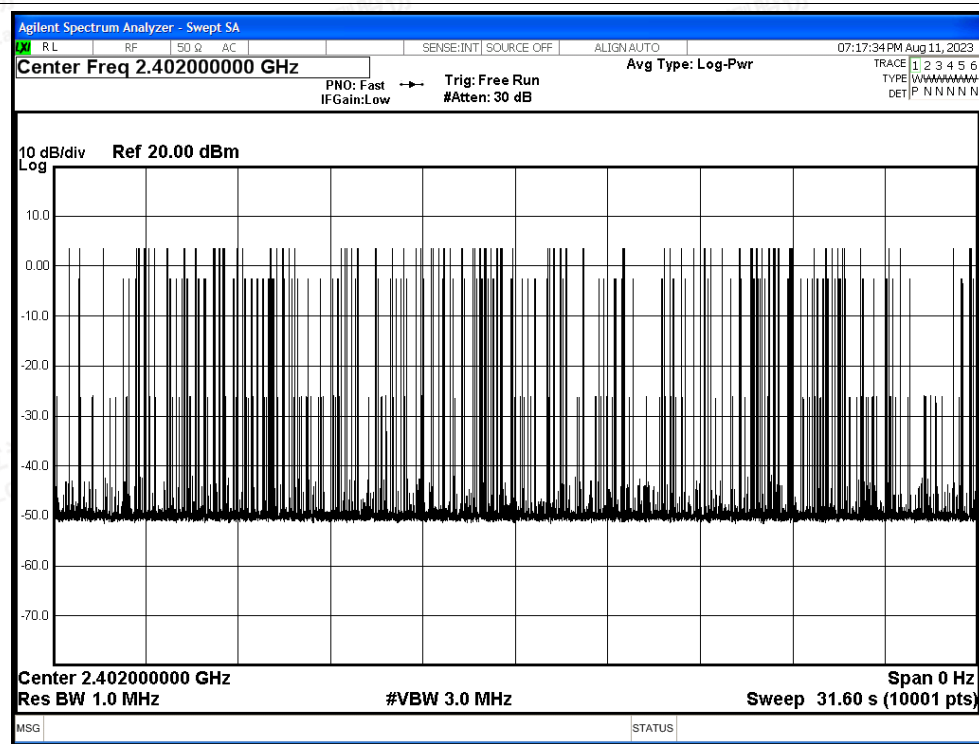
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Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



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A.5 Number of Hopping Channel

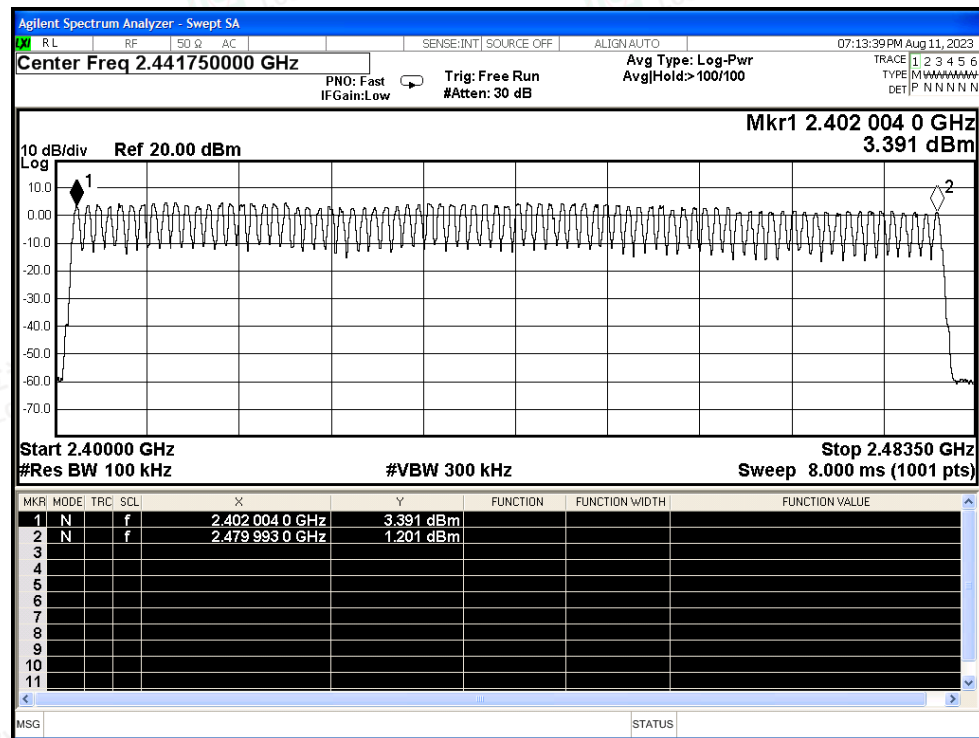
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass



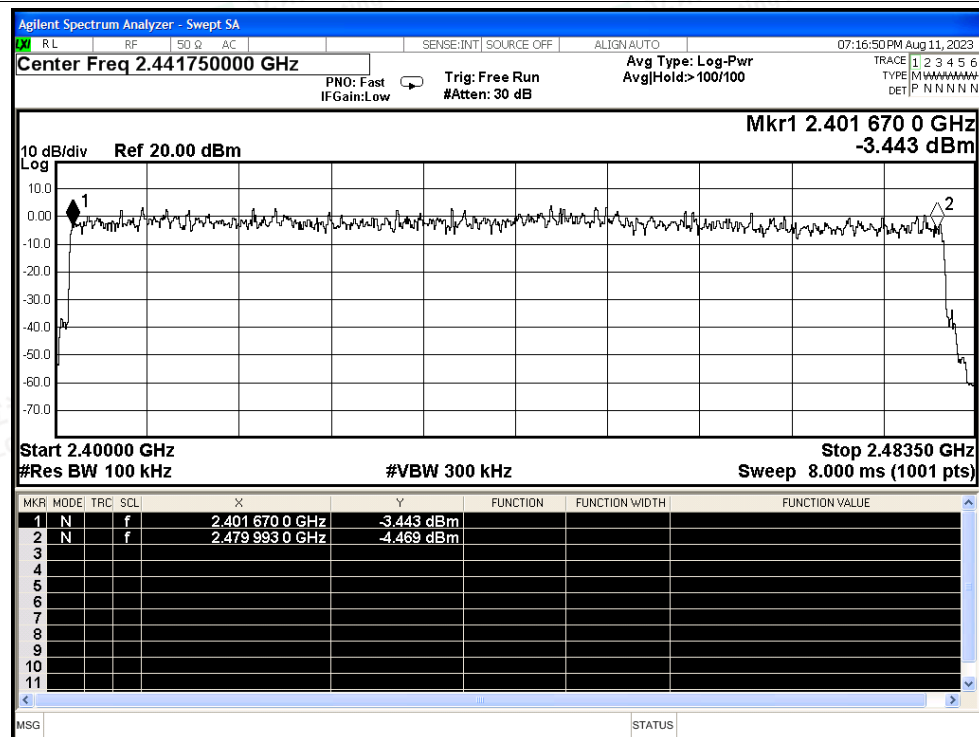


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1





A.6 Band Edge

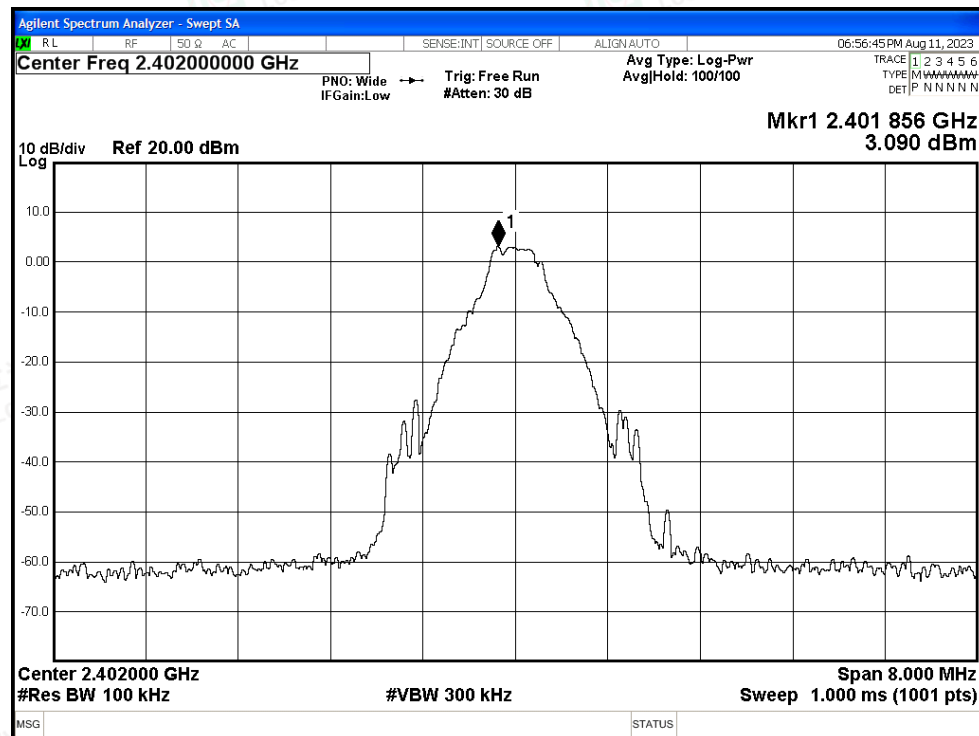
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-60.89	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-59.79	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-54.28	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-58.47	-20	Pass



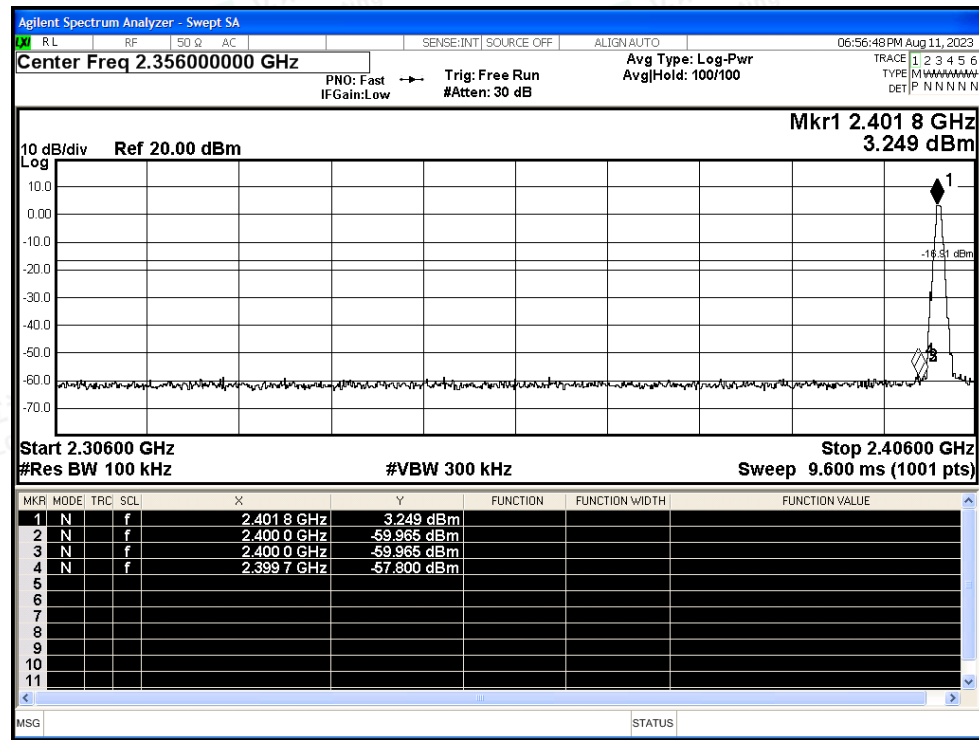


Test Graphs

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



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



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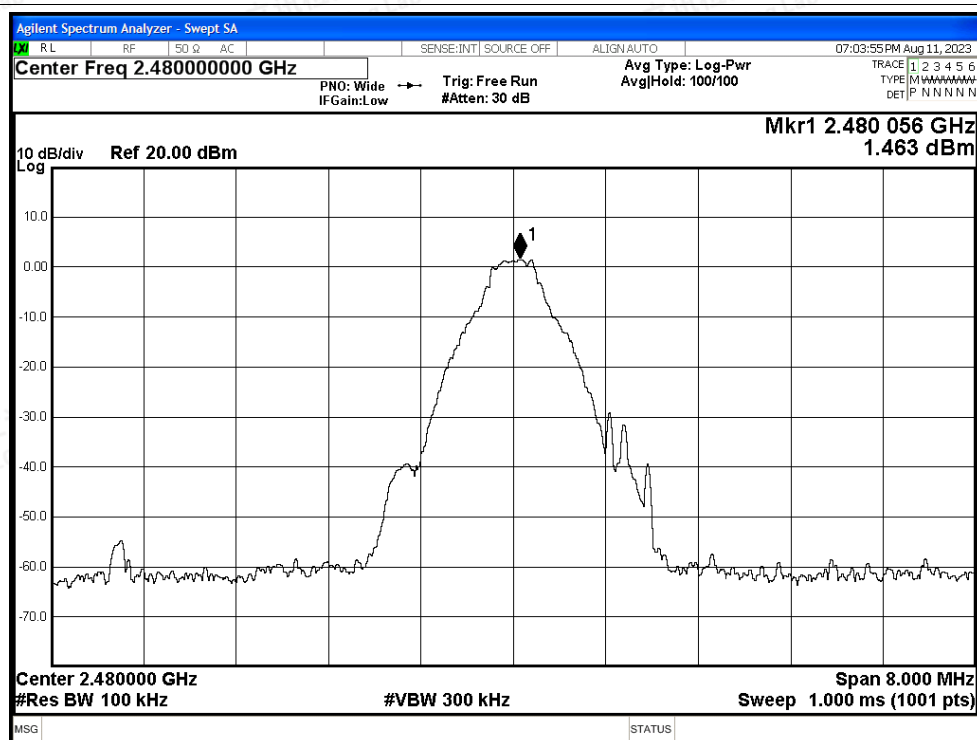
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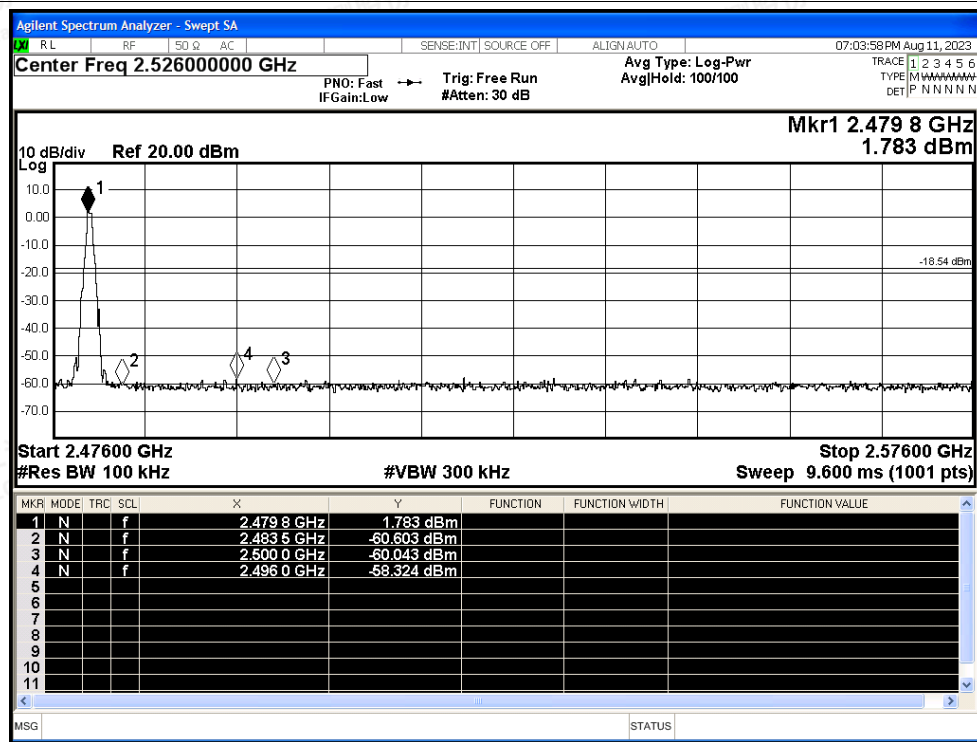
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Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



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



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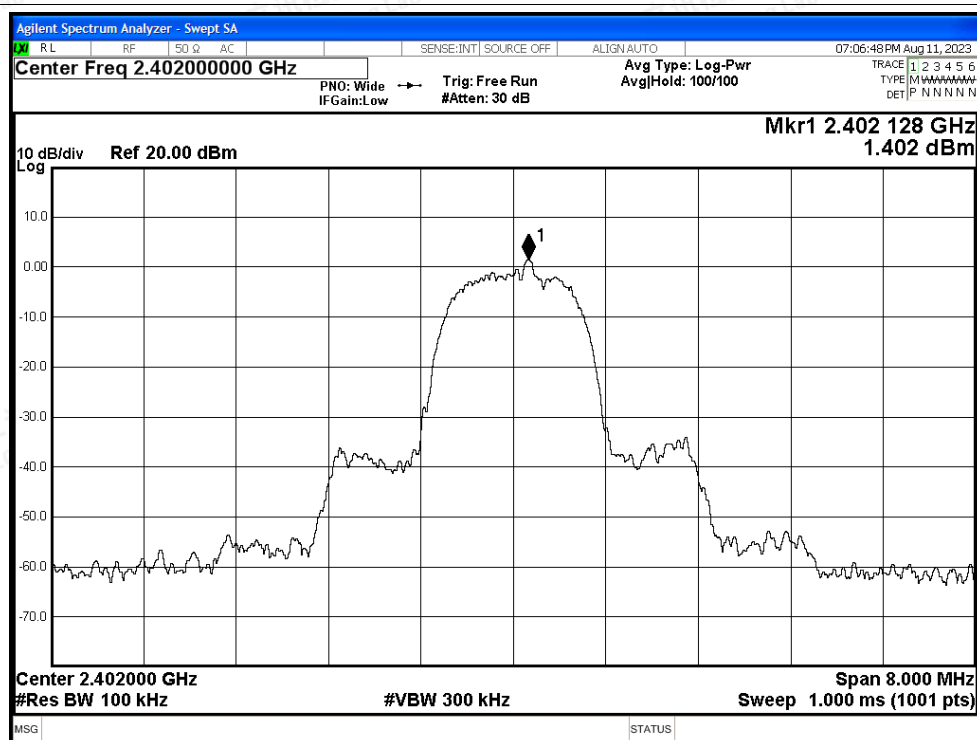
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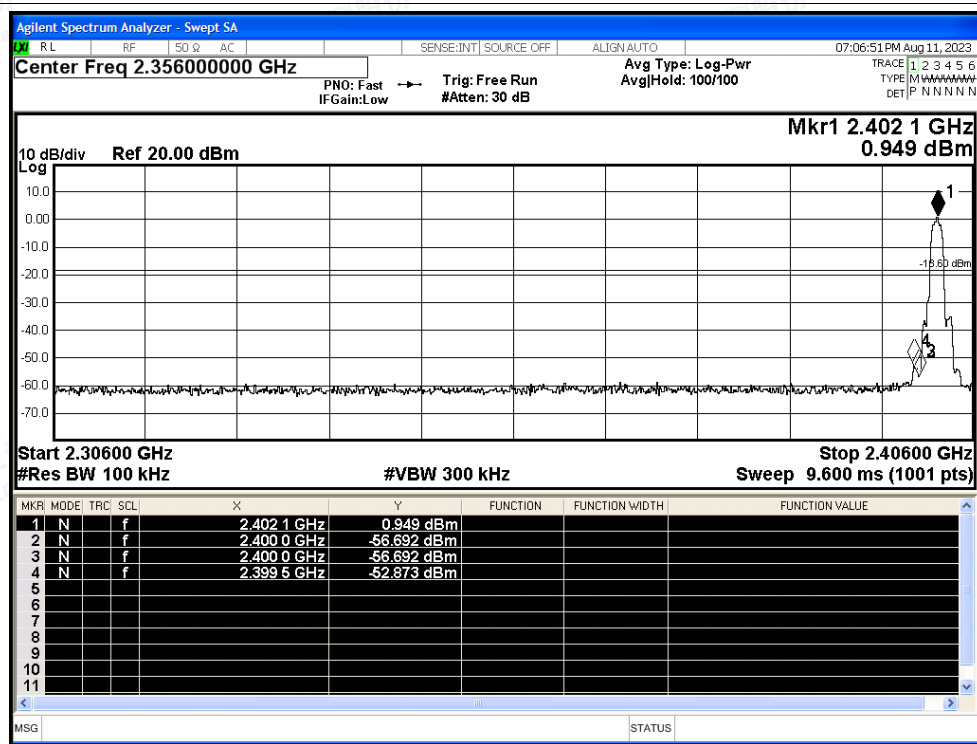
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Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



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



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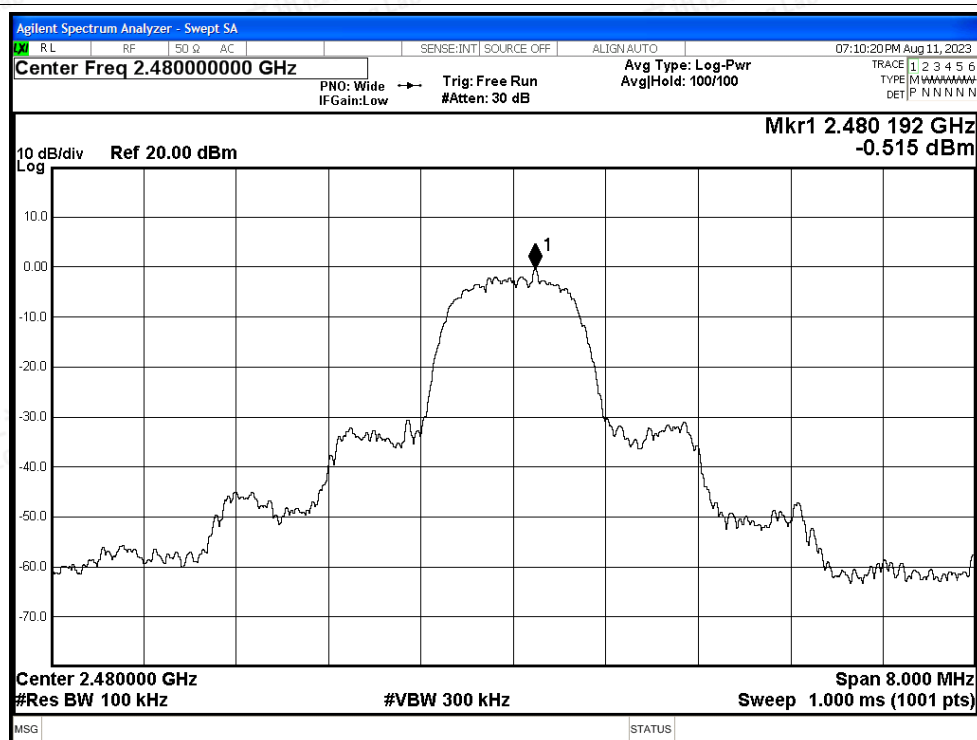
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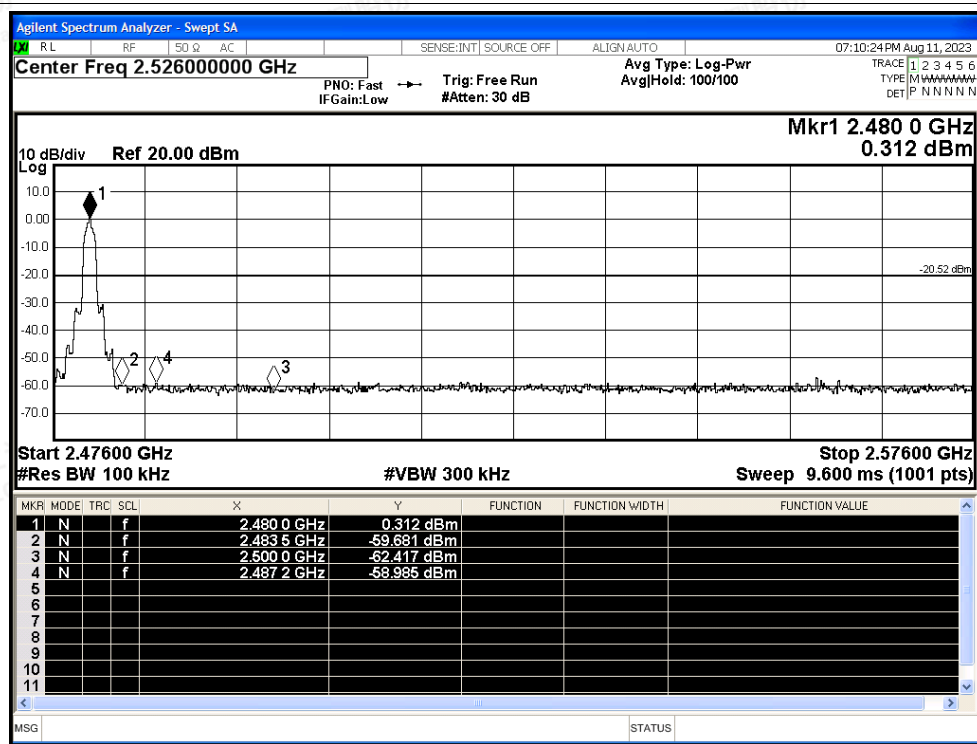
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Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



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



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**(Hopping)**

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-61.84	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-58.61	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-59.21	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-57.9	-20	Pass

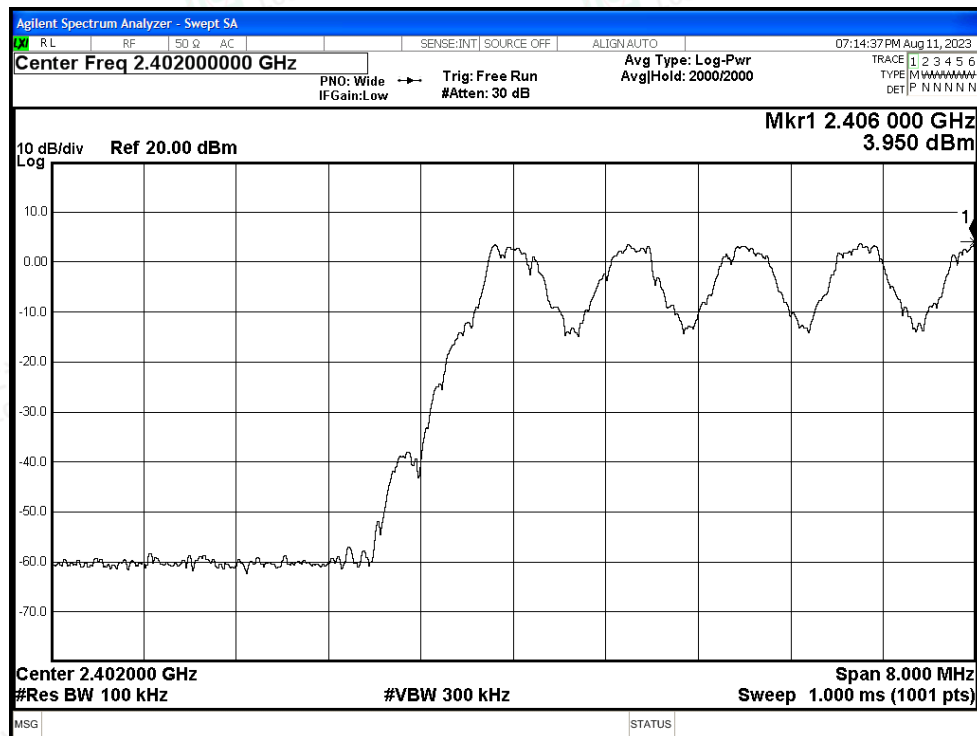


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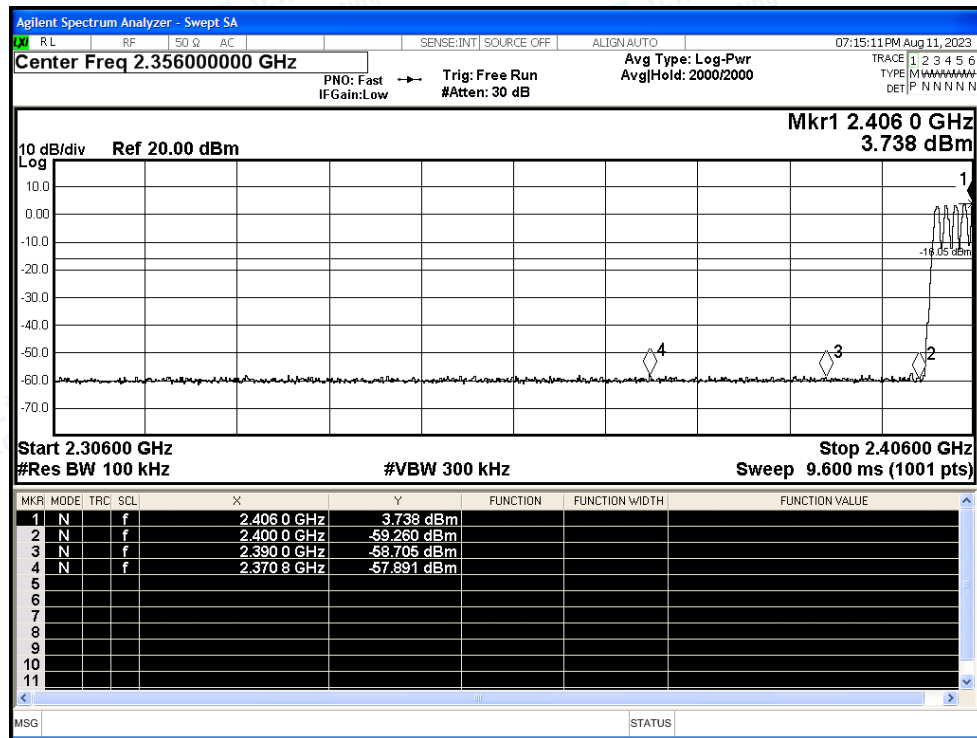


Test Graphs

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



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



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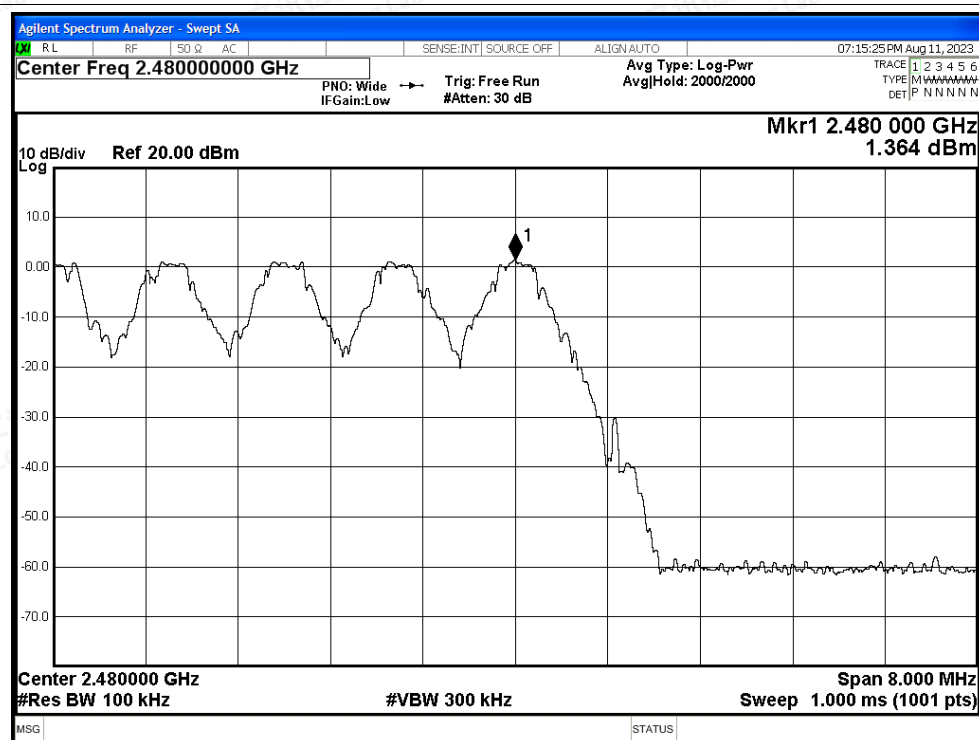
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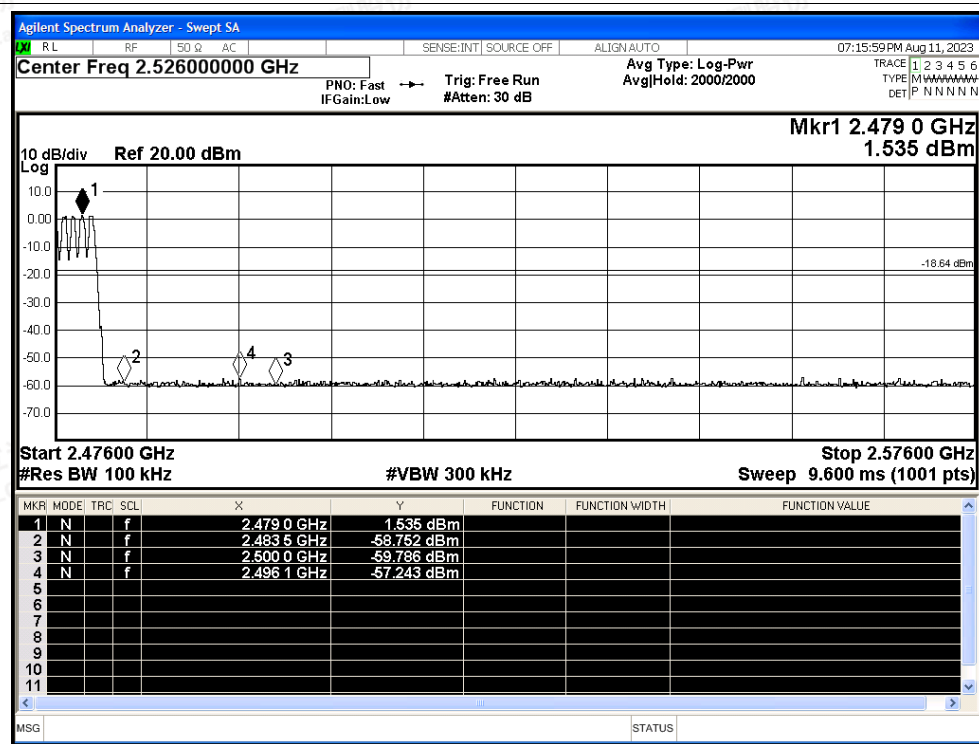
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Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref

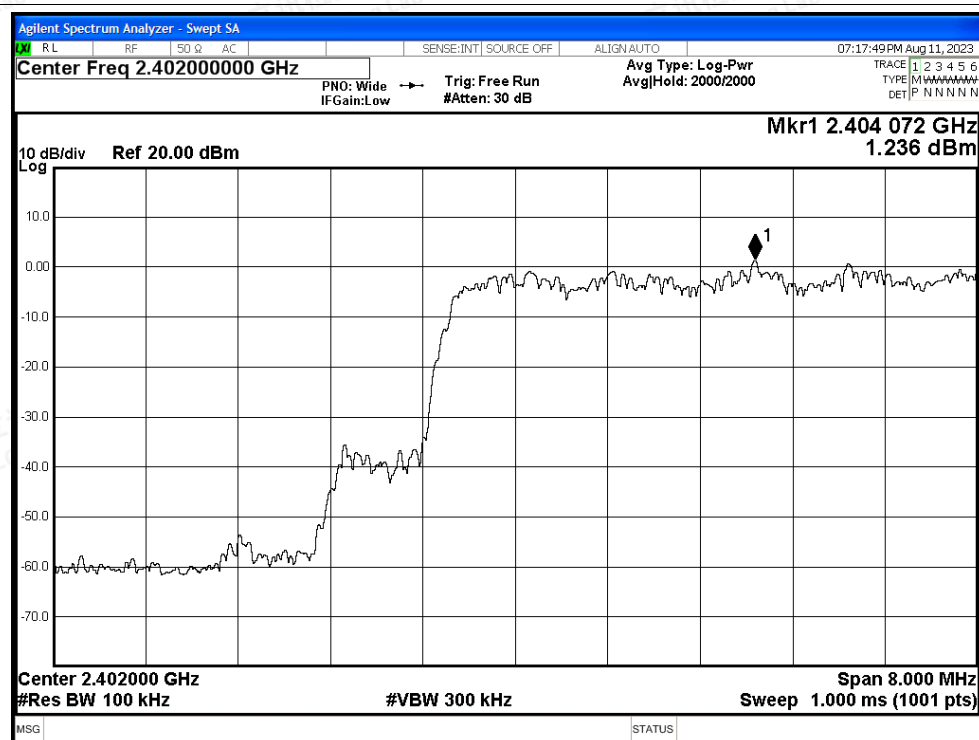


Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission

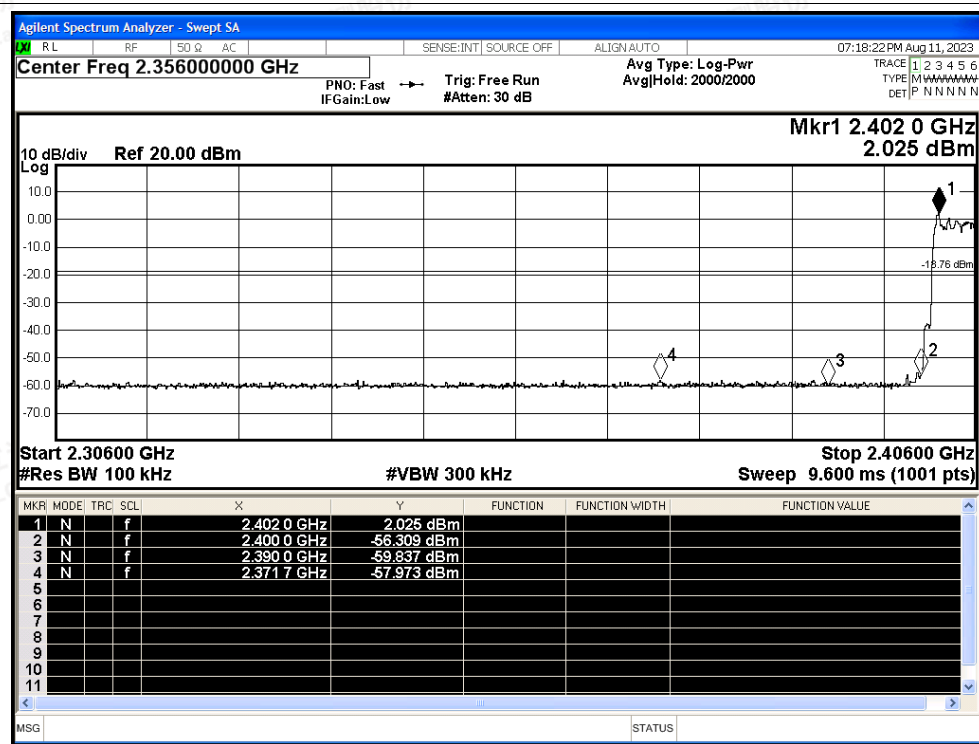




Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



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



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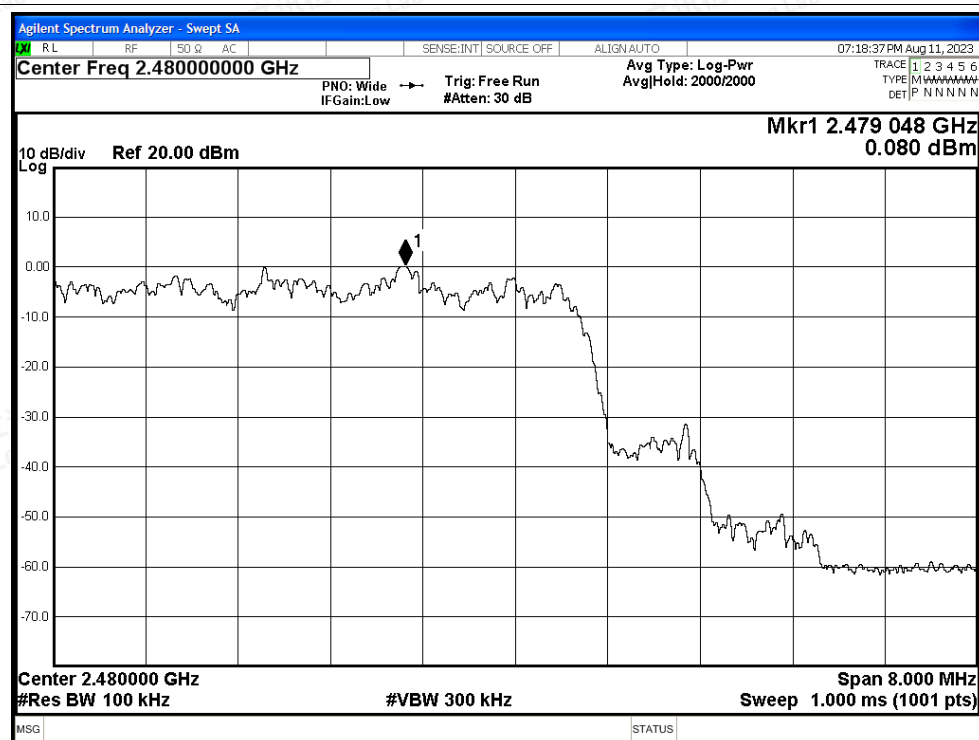
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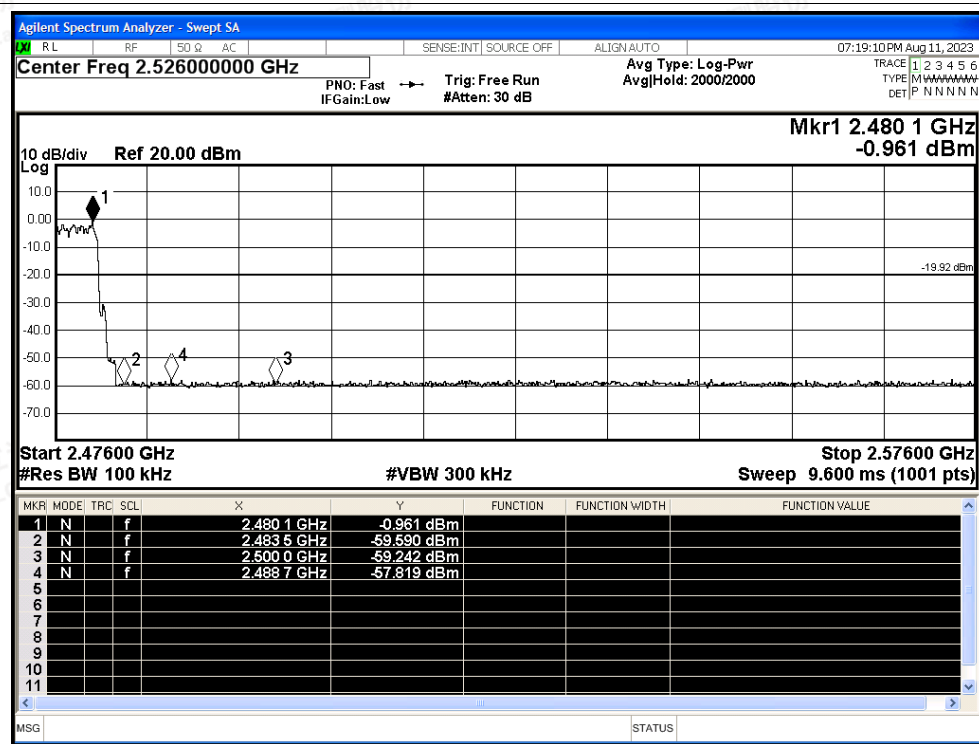
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Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



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	-60.49	-20	Pass
NVNT	1-DH5	2441	Ant1	-53.68	-20	Pass
NVNT	1-DH5	2480	Ant1	-59.19	-20	Pass
NVNT	2-DH5	2402	Ant1	-51.42	-20	Pass
NVNT	2-DH5	2441	Ant1	-60.4	-20	Pass
NVNT	2-DH5	2480	Ant1	-51.46	-20	Pass

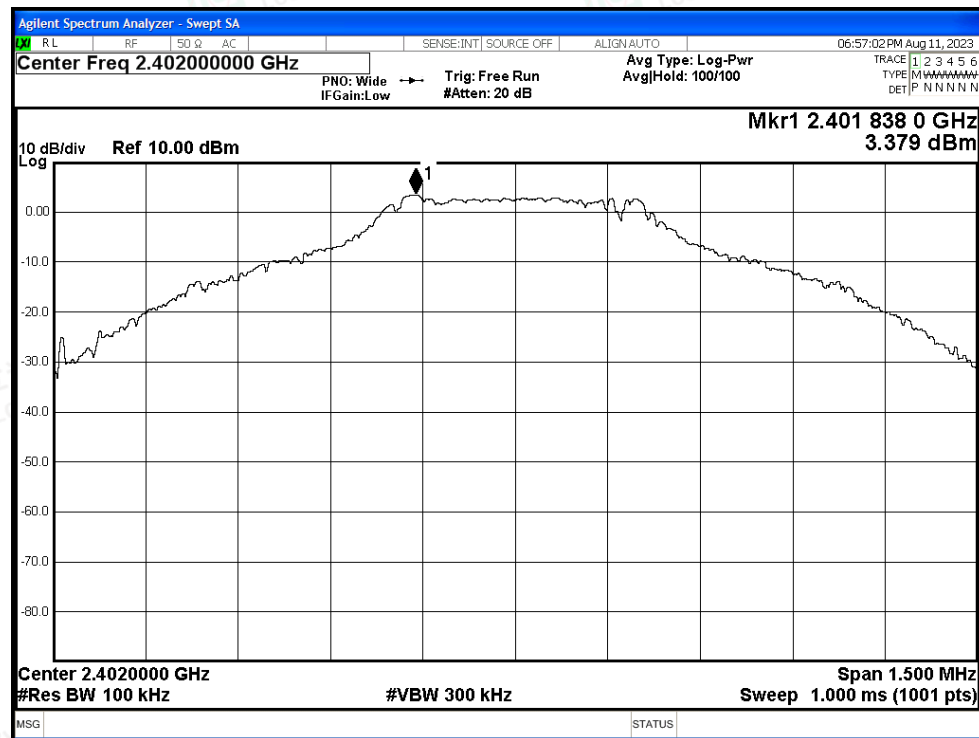


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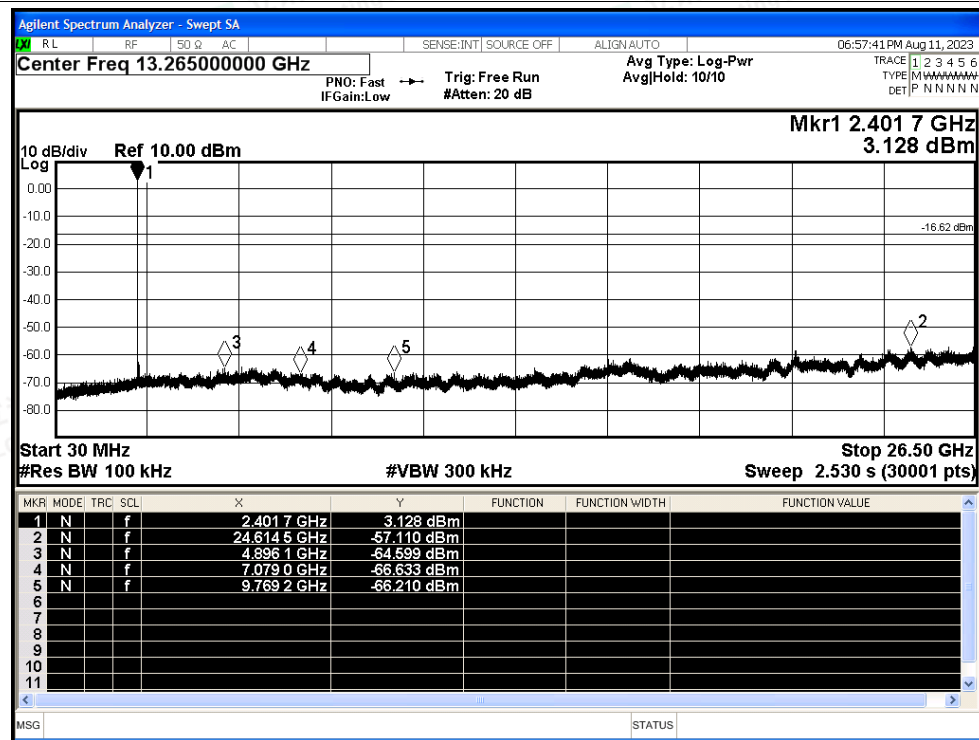


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



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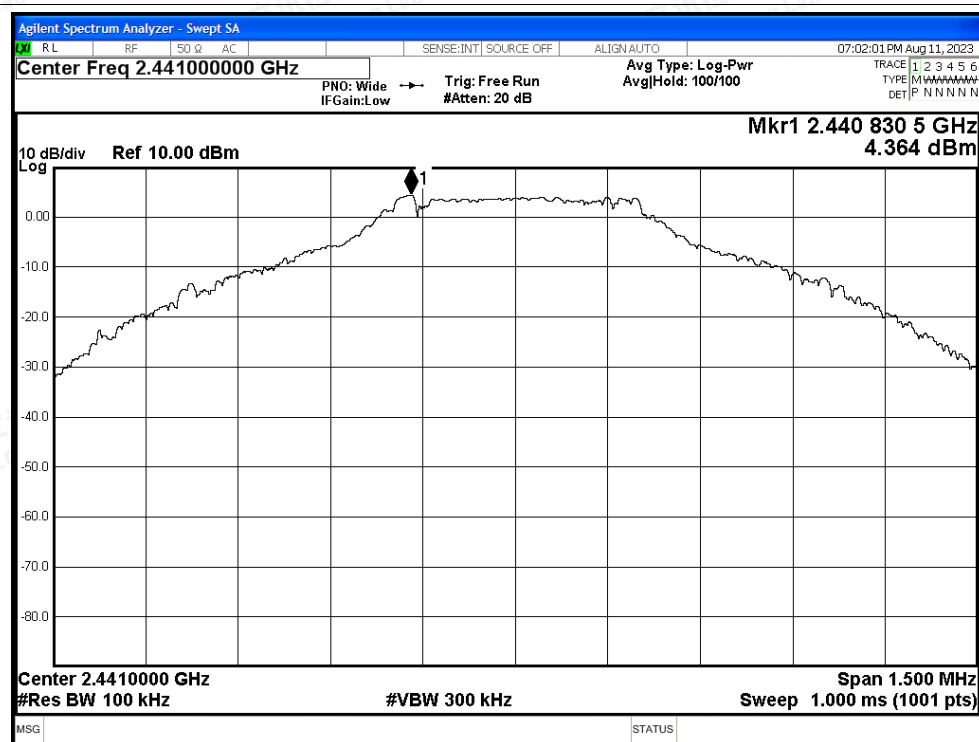
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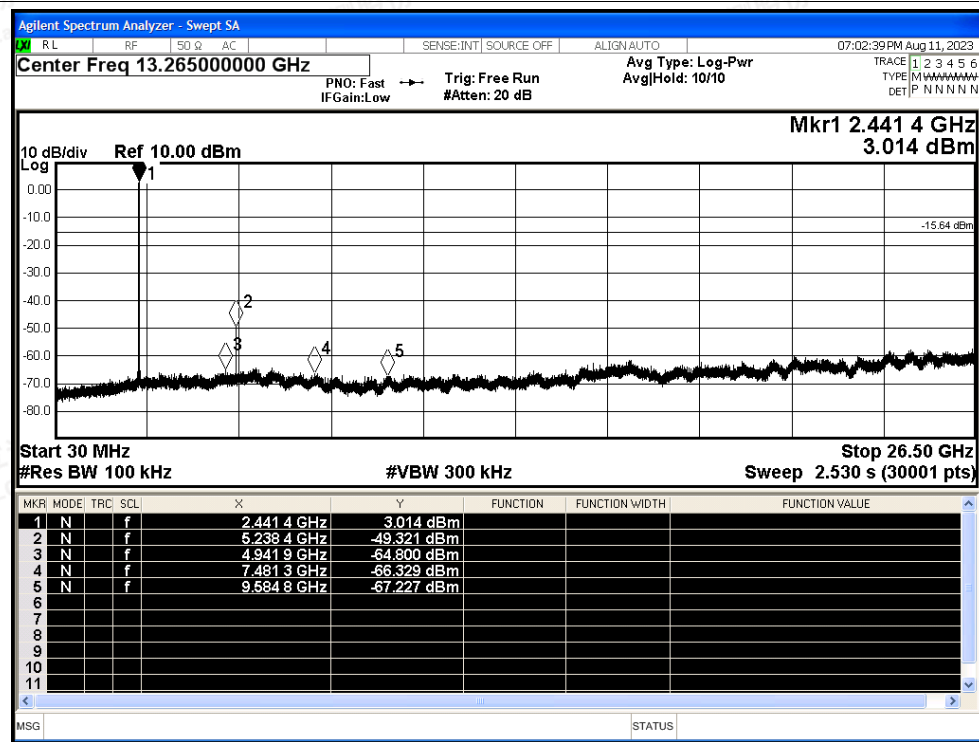
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Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

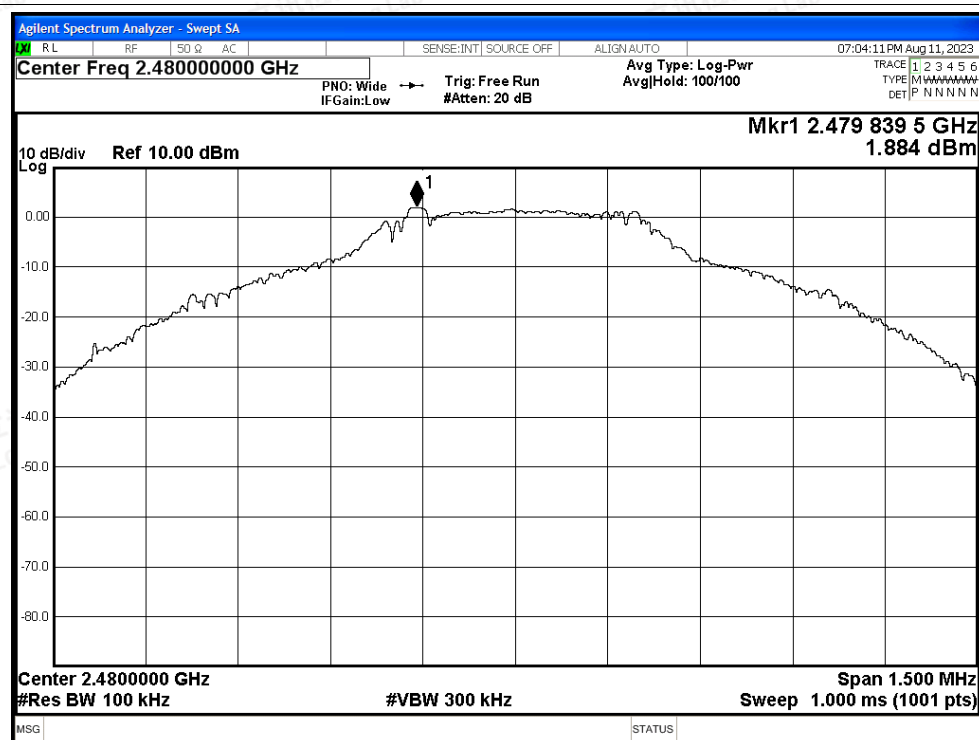


Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

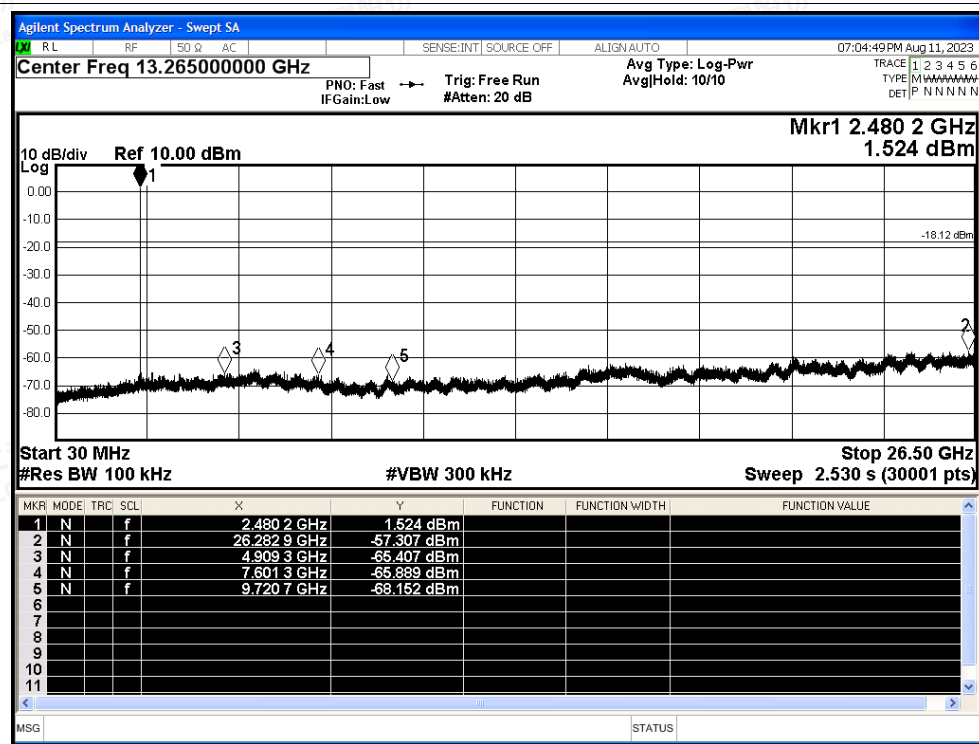




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

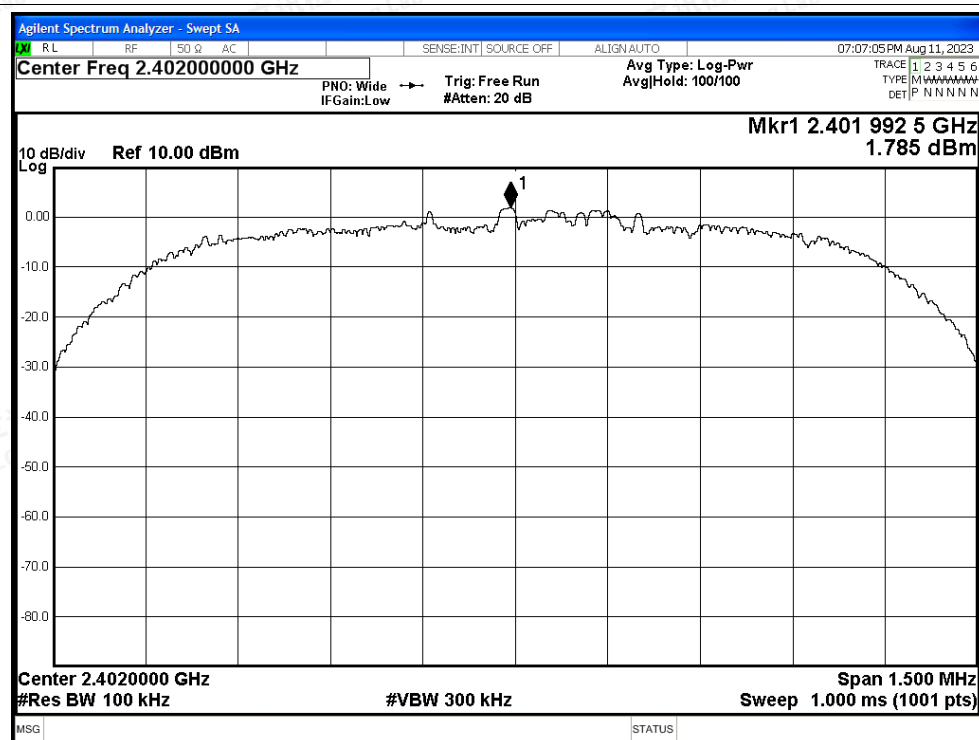
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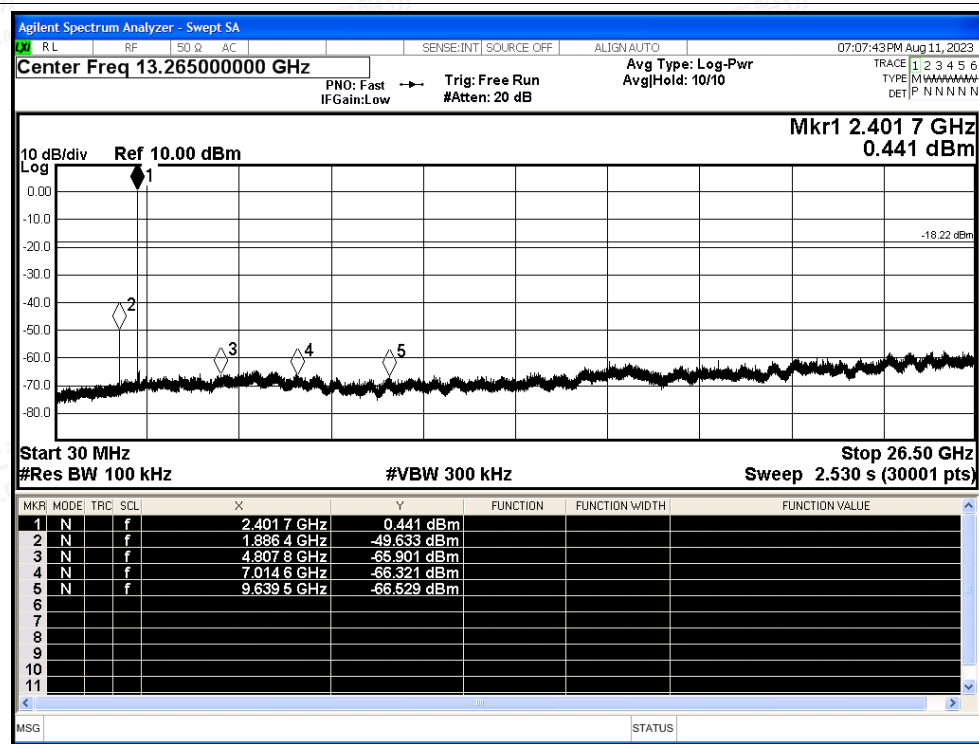
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Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



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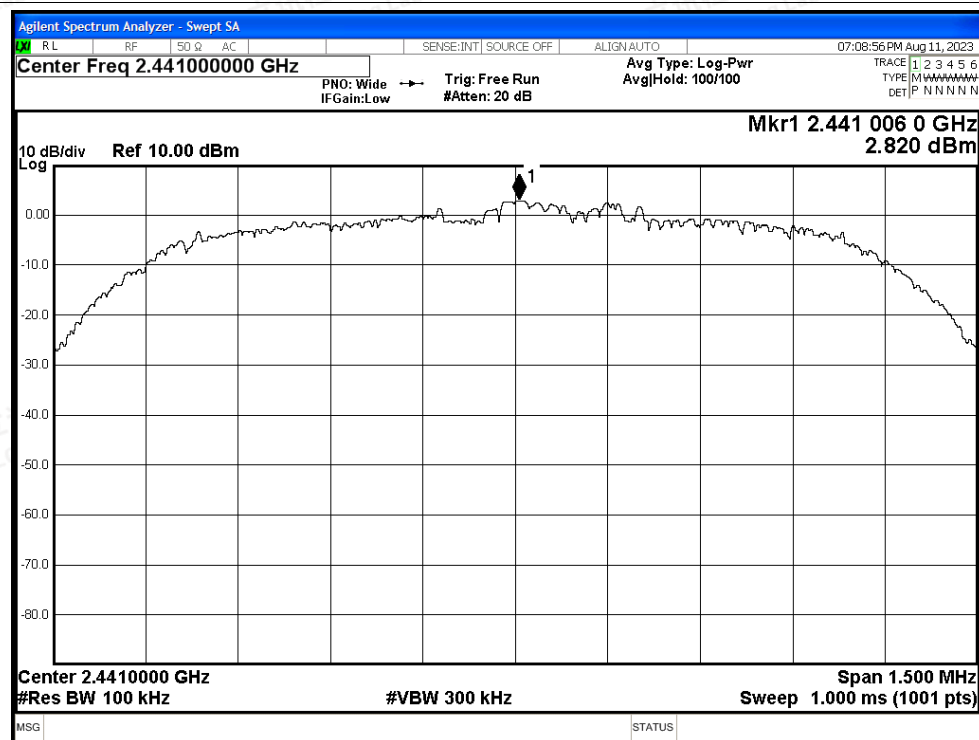
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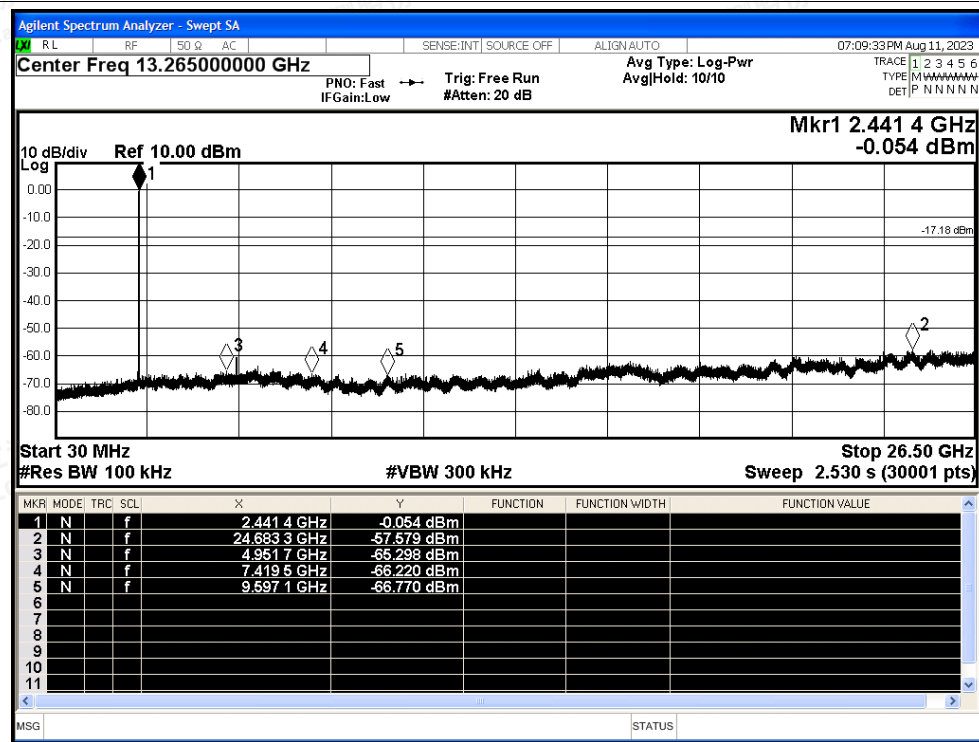
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Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref

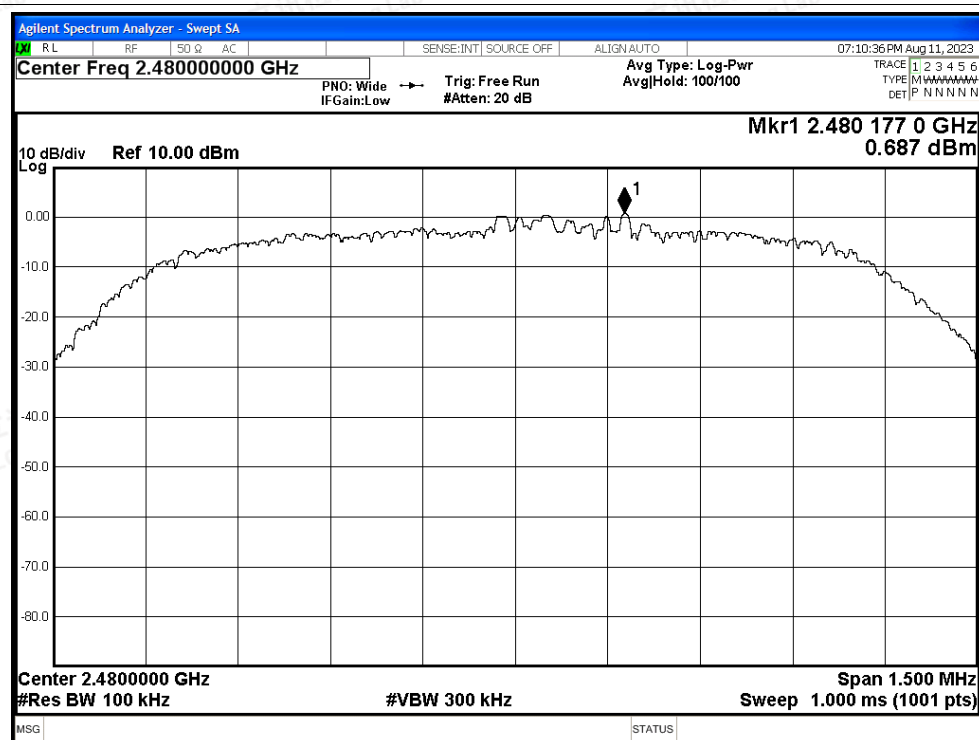


Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission

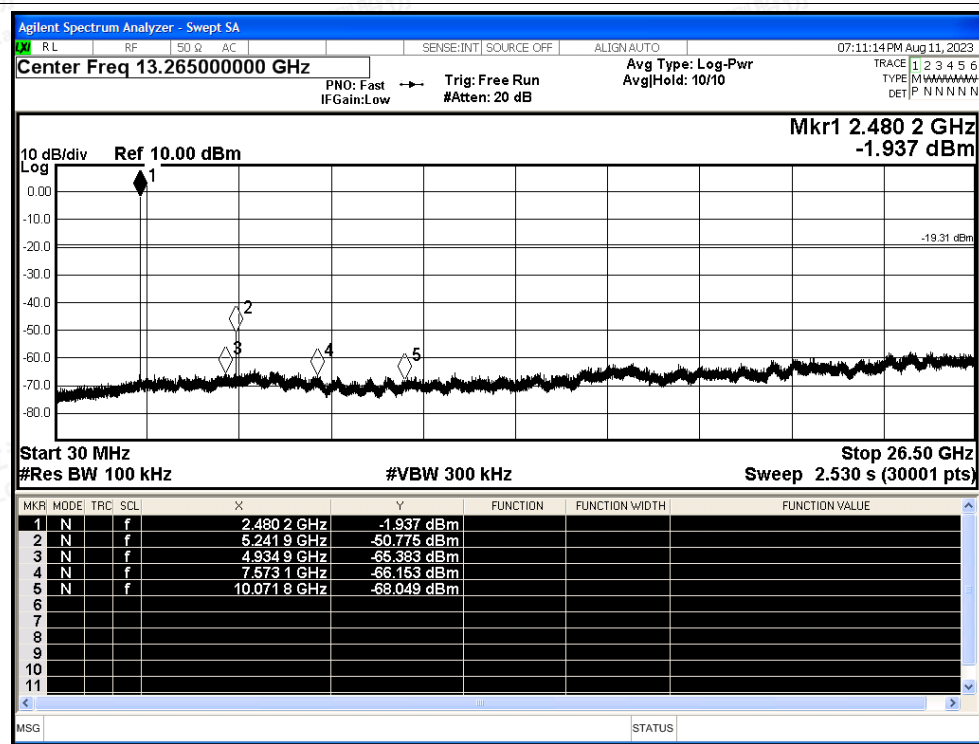




Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



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A.8 Restrict Band

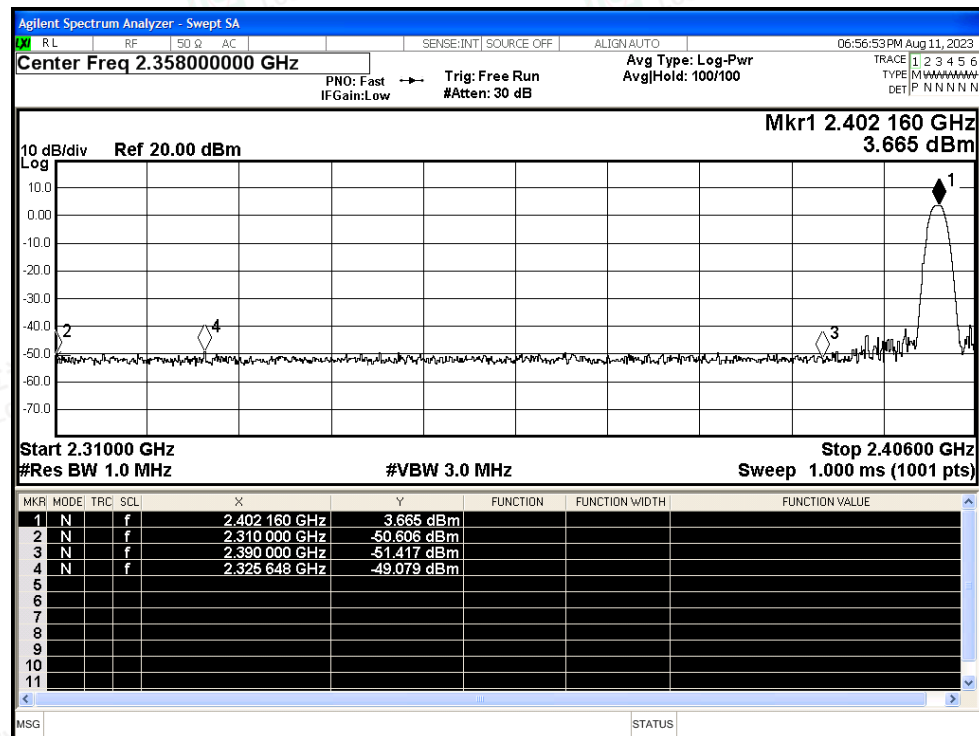
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-50.61	2	46.65	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-62.07	2	35.19	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2325.648	-49.08	2	48.18	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2384.208	-61.57	2	35.69	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-51.42	2	45.84	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-61.72	2	35.54	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-51.13	2	46.13	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-60.76	2	36.5	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2484.568	-43.97	2	53.29	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.752	-60.72	2	36.54	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-51.67	2	45.59	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-61.48	2	35.78	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-52.14	2	45.12	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-61.97	2	35.29	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2374.8	-49.26	2	48	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2380.08	-61.41	2	35.85	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-51.7	2	45.56	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-61.76	2	35.5	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-48.49	2	48.77	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-60.03	2	37.23	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.896	-43.52	2	53.74	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.536	-60.03	2	37.23	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-52.11	2	45.15	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-61.57	2	35.69	Average	54	Pass



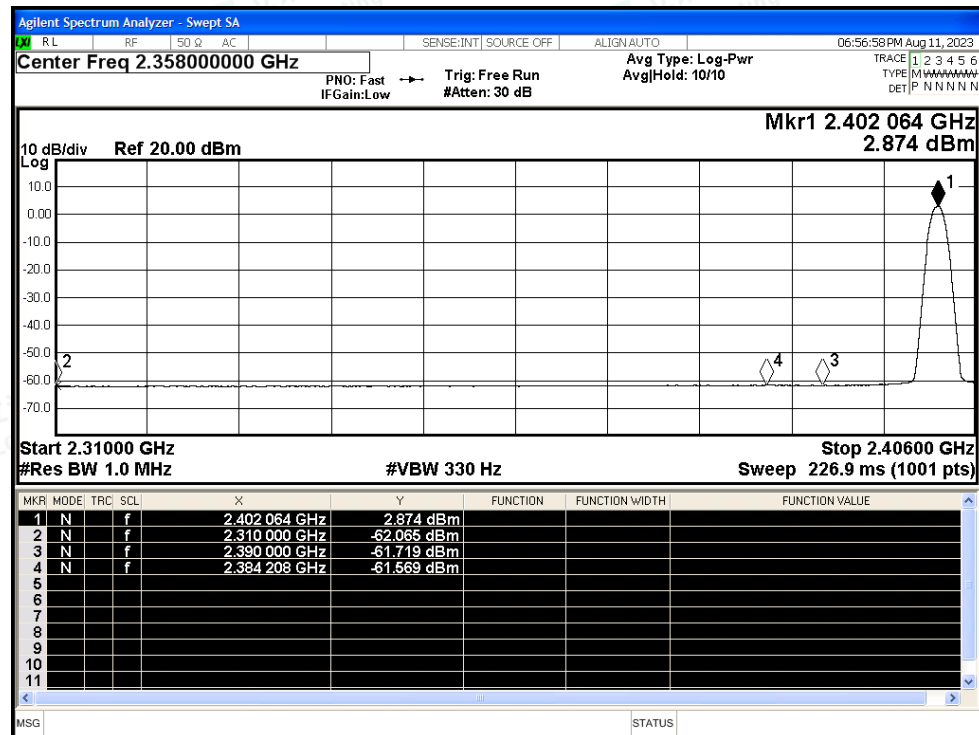


Test Graphs

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



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



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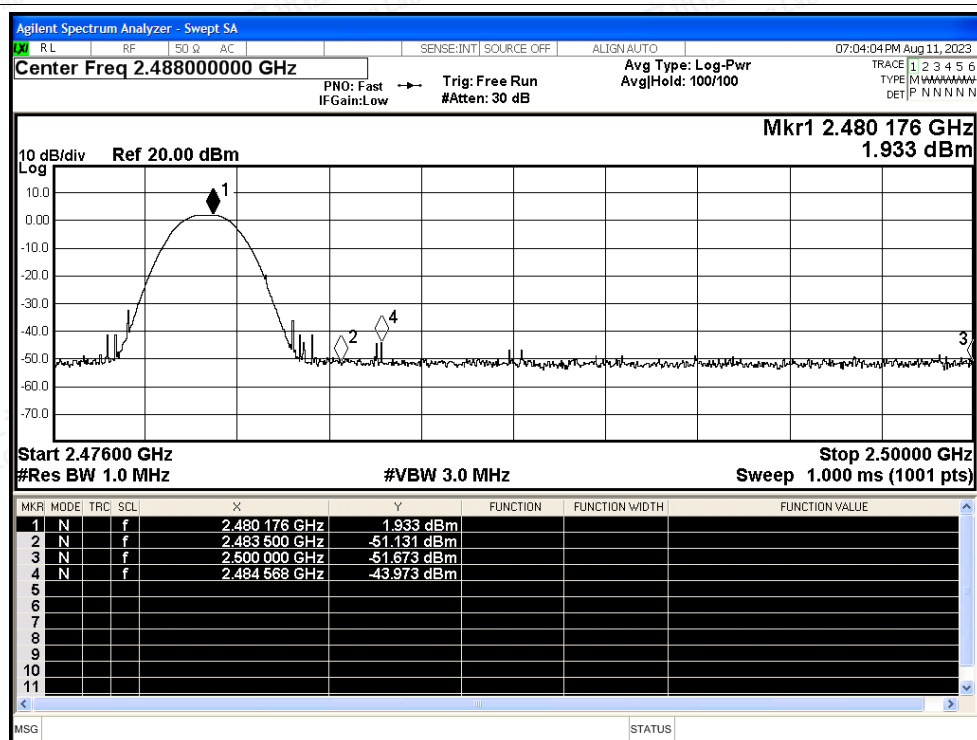
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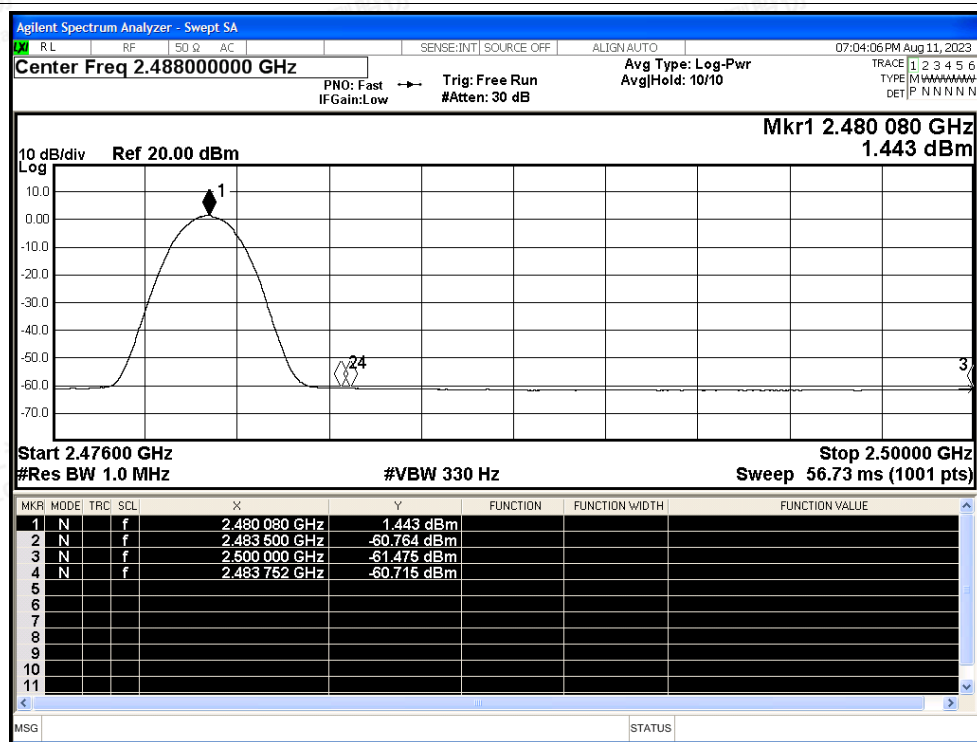
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Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak

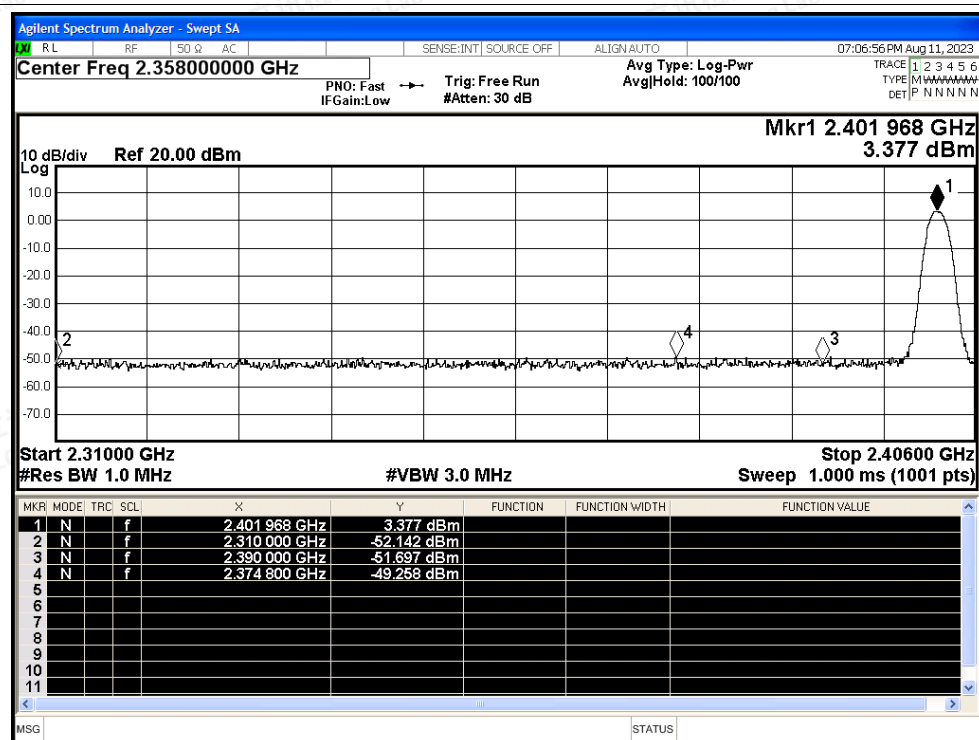


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

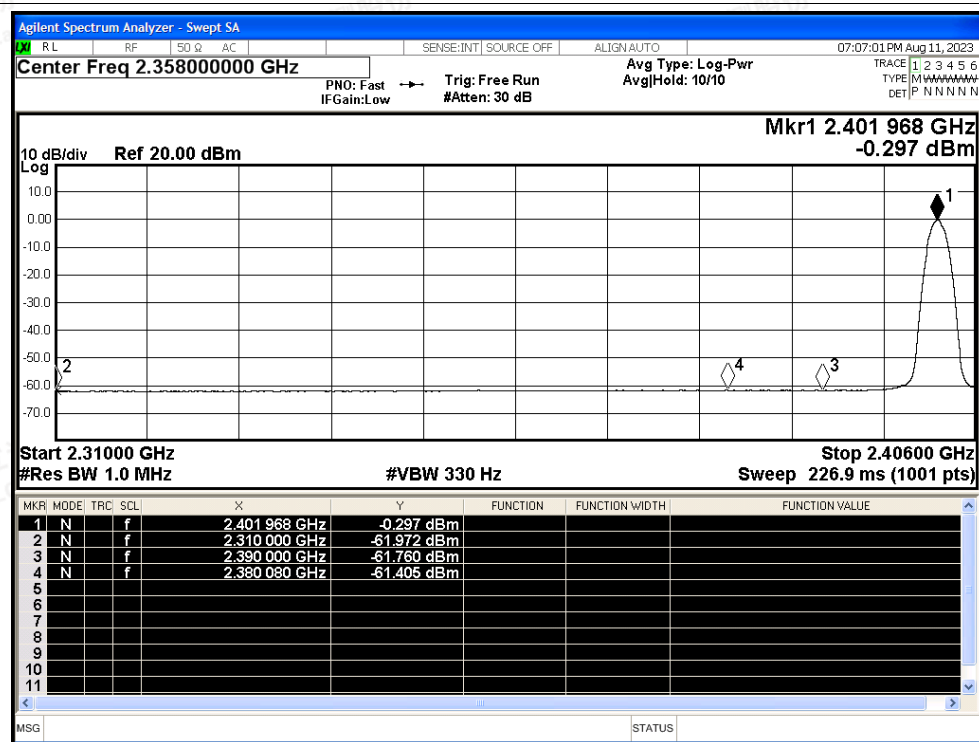




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



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



Shenzhen LCS Compliance Testing Laboratory Ltd.

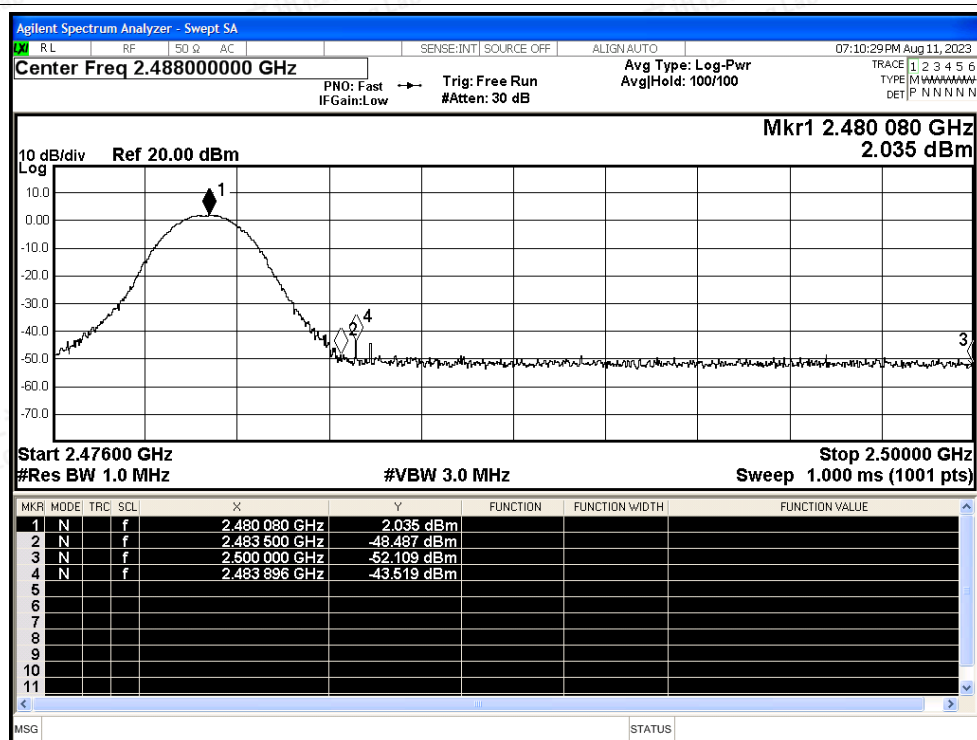
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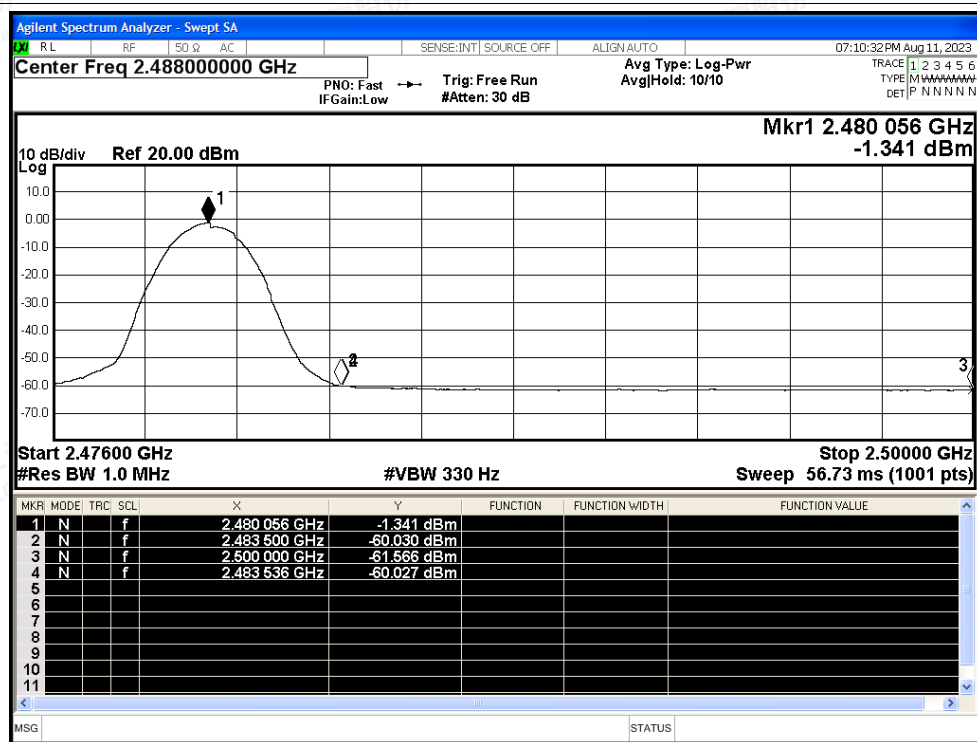
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Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



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



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