



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Handheld Data Terminal

Test Model: HT330

Environmental Conditions

Temperature:	23.6° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li huan



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A.1 -20dB Bandwidth

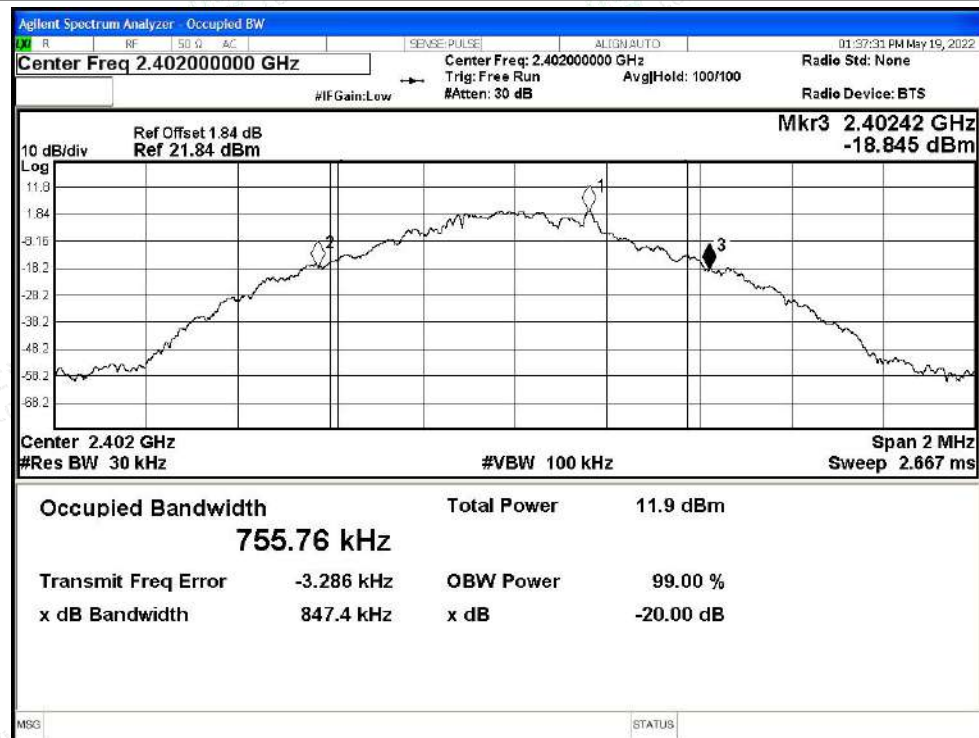
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.847	---	Pass
NVNT	1-DH5	2441	Ant1	0.834	---	Pass
NVNT	1-DH5	2480	Ant1	0.851	---	Pass
NVNT	2-DH5	2402	Ant1	1.284	---	Pass
NVNT	2-DH5	2441	Ant1	1.311	---	Pass
NVNT	2-DH5	2480	Ant1	1.289	---	Pass
NVNT	3-DH5	2402	Ant1	1.267	---	Pass
NVNT	3-DH5	2441	Ant1	1.273	---	Pass
NVNT	3-DH5	2480	Ant1	1.292	---	Pass



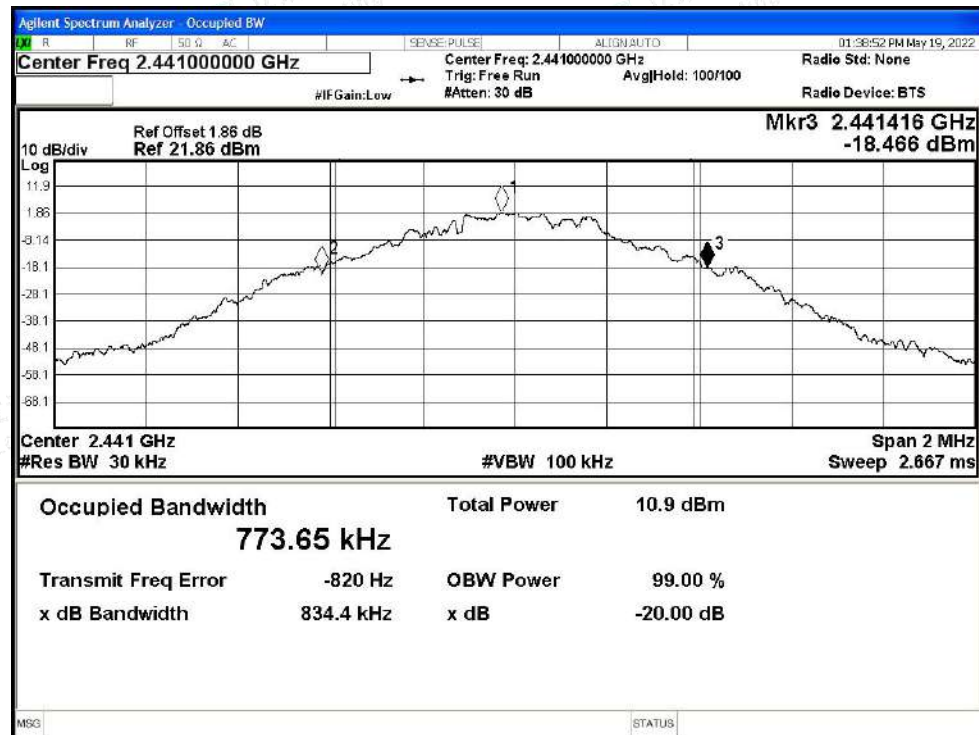


Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

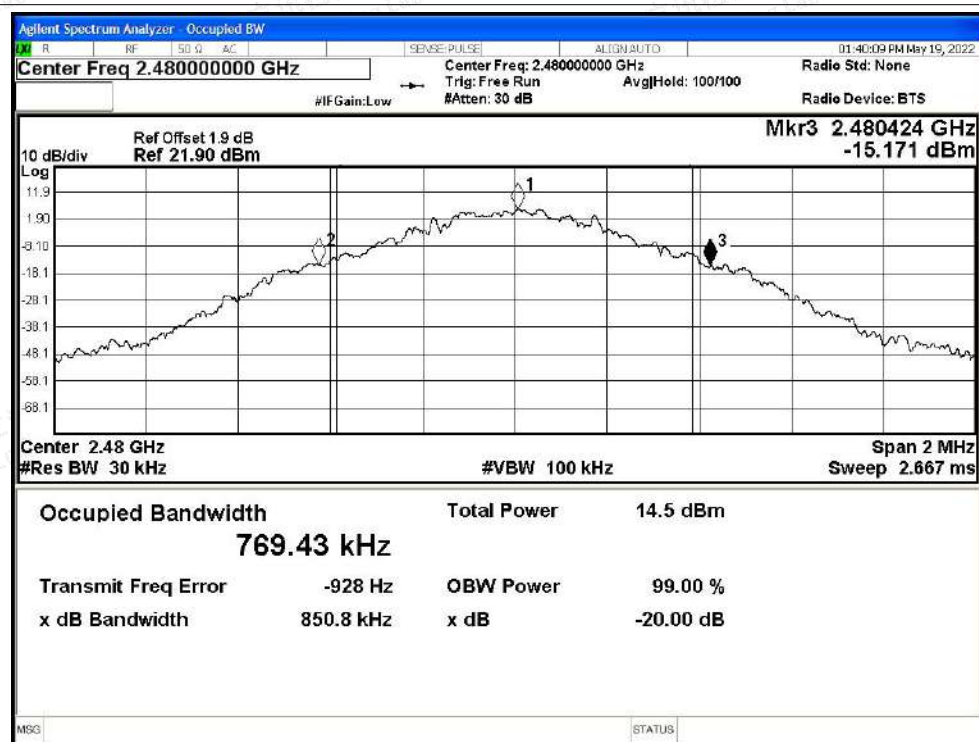


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

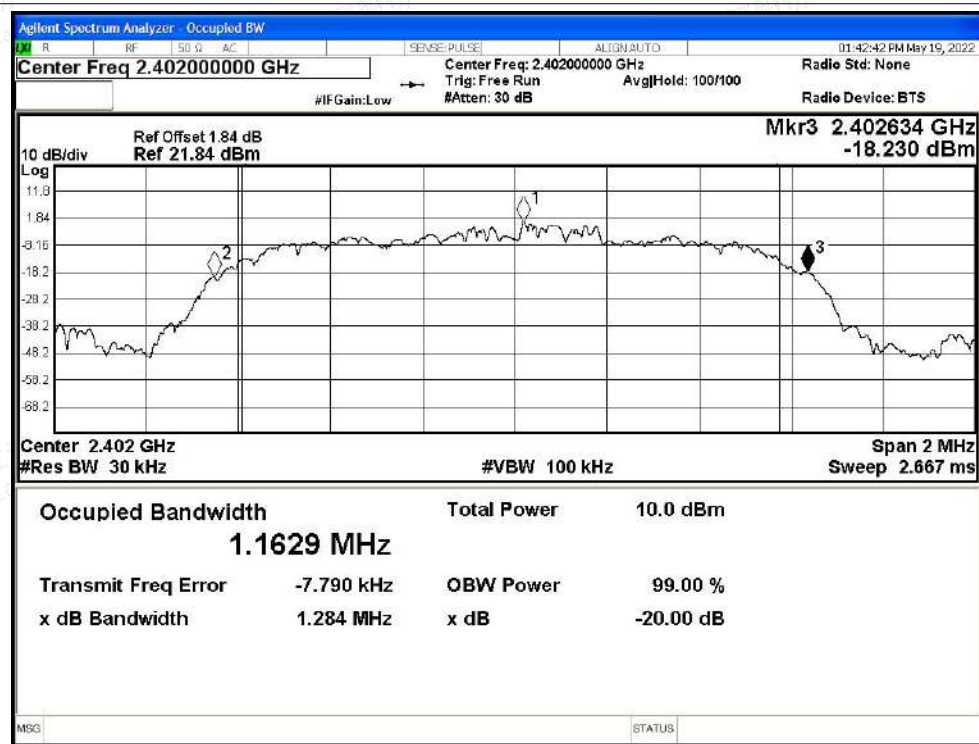




-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

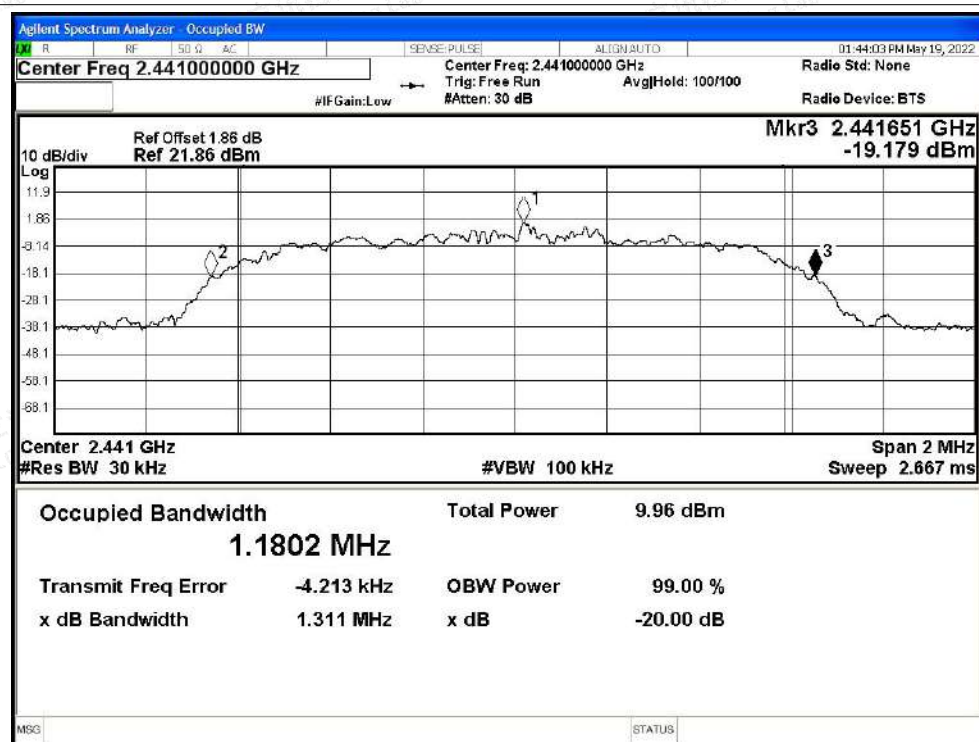


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1

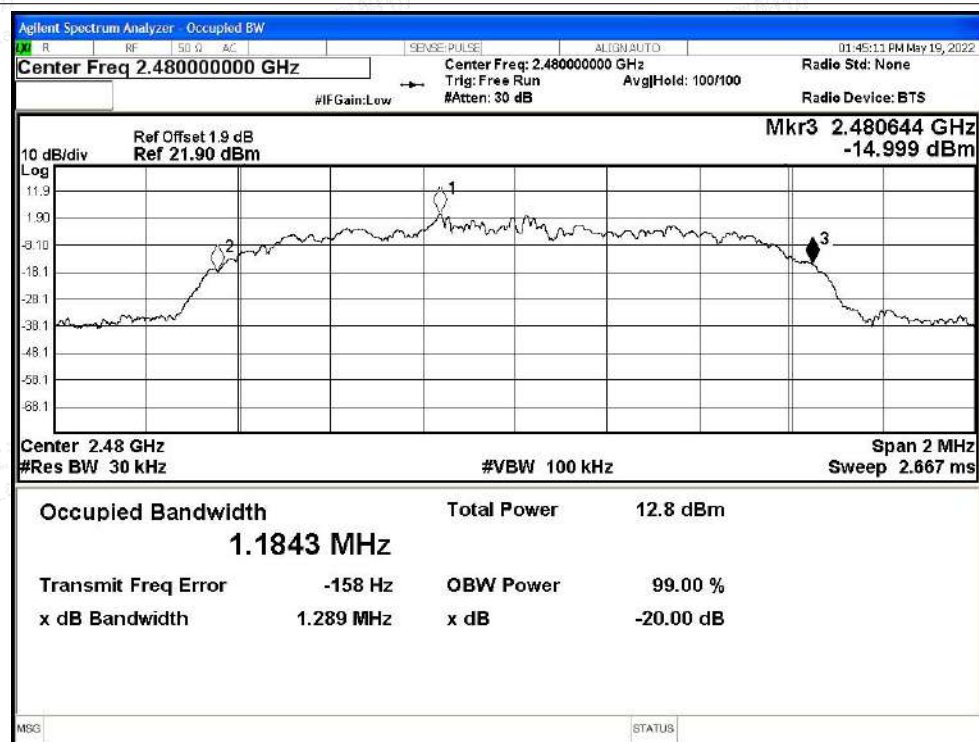




-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1

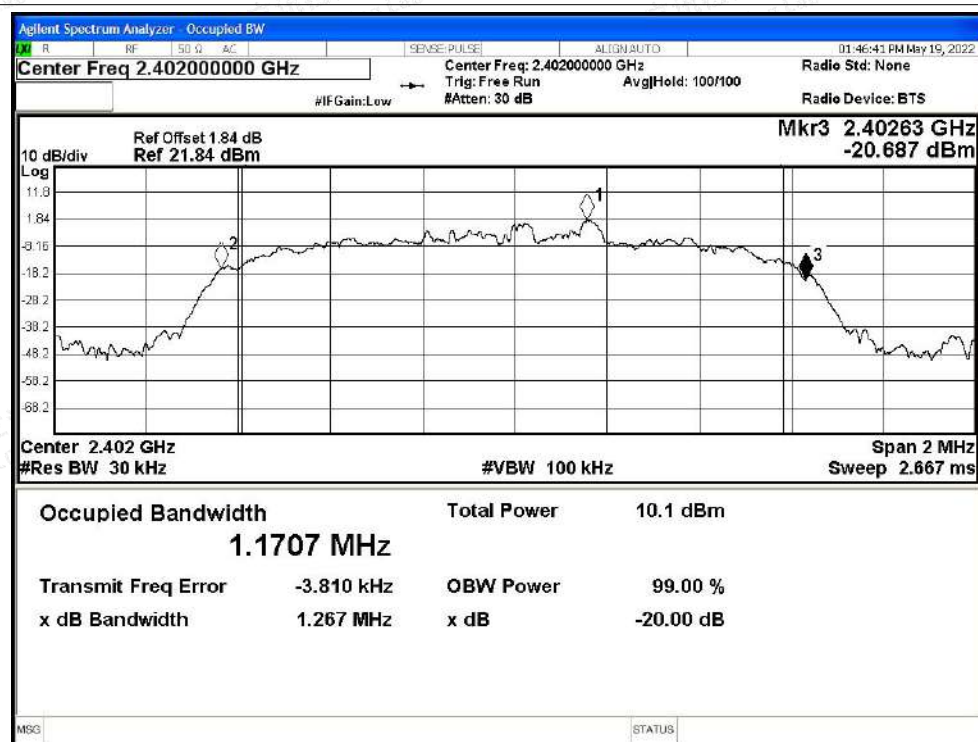


-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

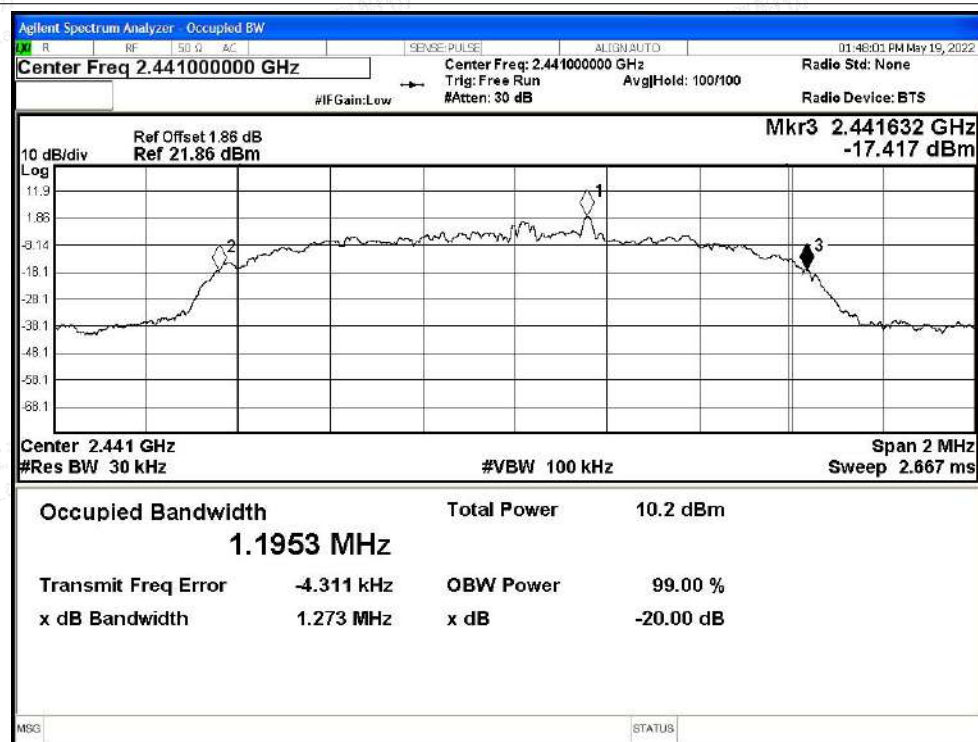


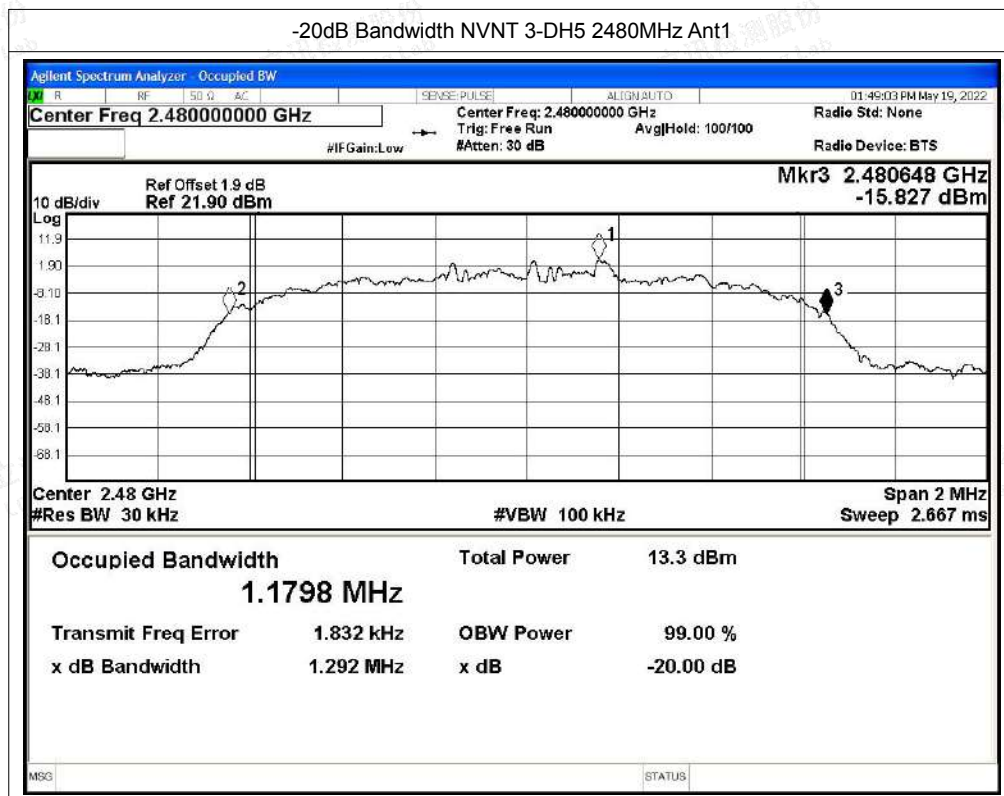


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1







A.2 Maximum Conducted Output Power

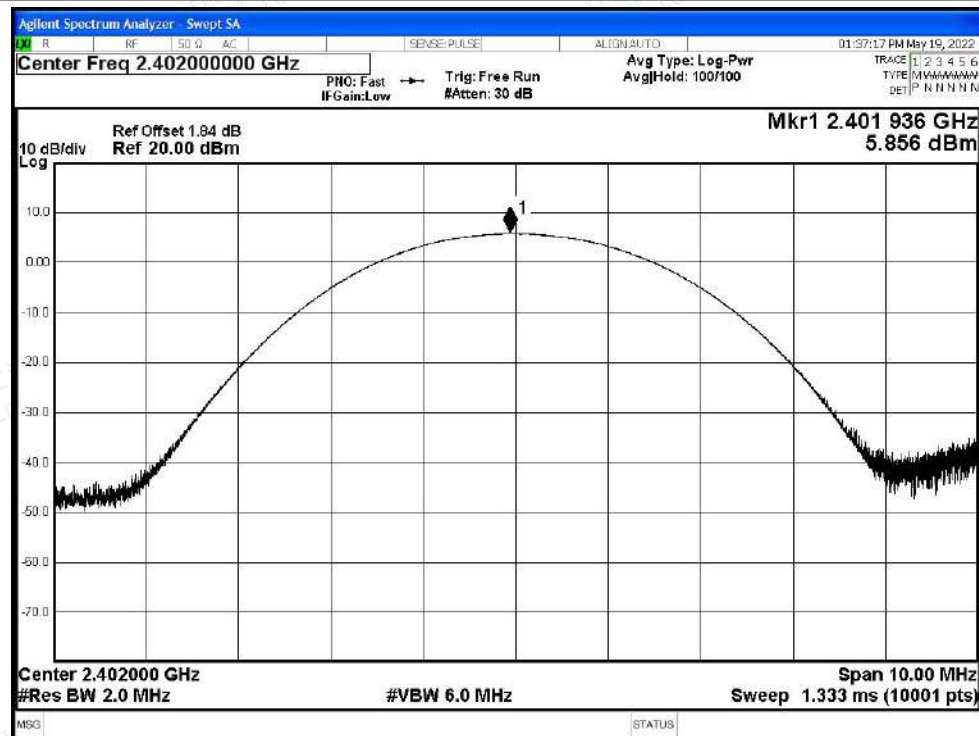
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	5.86	21	Pass
NVNT	1-DH5	2441	Ant1	5.34	21	Pass
NVNT	1-DH5	2480	Ant1	8.74	21	Pass
NVNT	2-DH5	2402	Ant1	5.34	21	Pass
NVNT	2-DH5	2441	Ant1	5.39	21	Pass
NVNT	2-DH5	2480	Ant1	8.59	21	Pass
NVNT	3-DH5	2402	Ant1	5.34	21	Pass
NVNT	3-DH5	2441	Ant1	5.45	21	Pass
NVNT	3-DH5	2480	Ant1	8.53	21	Pass



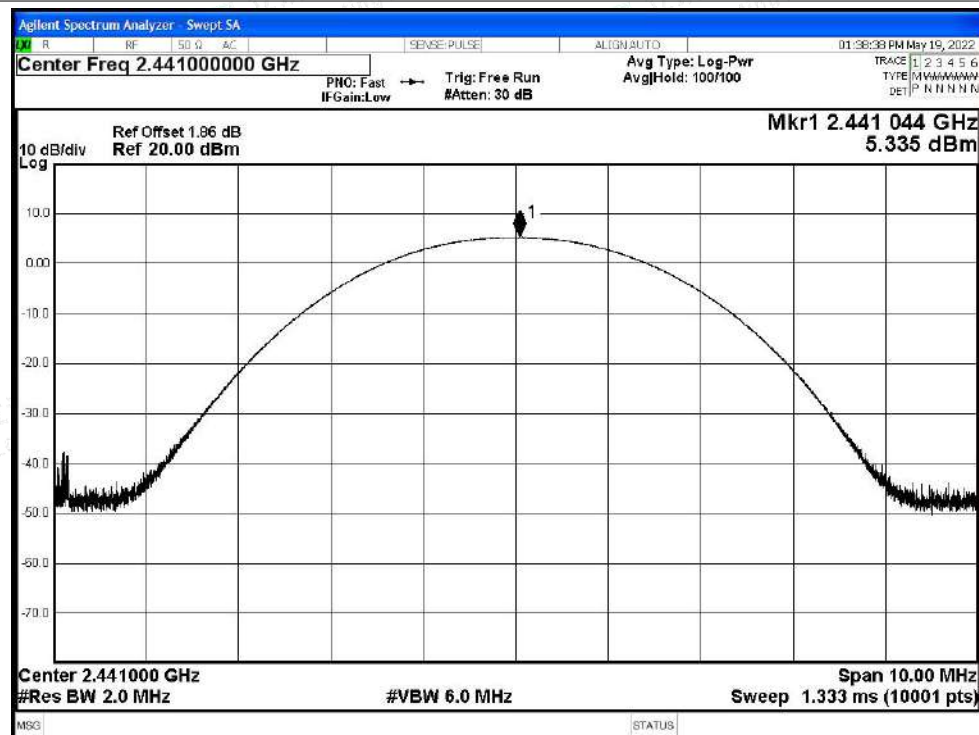


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

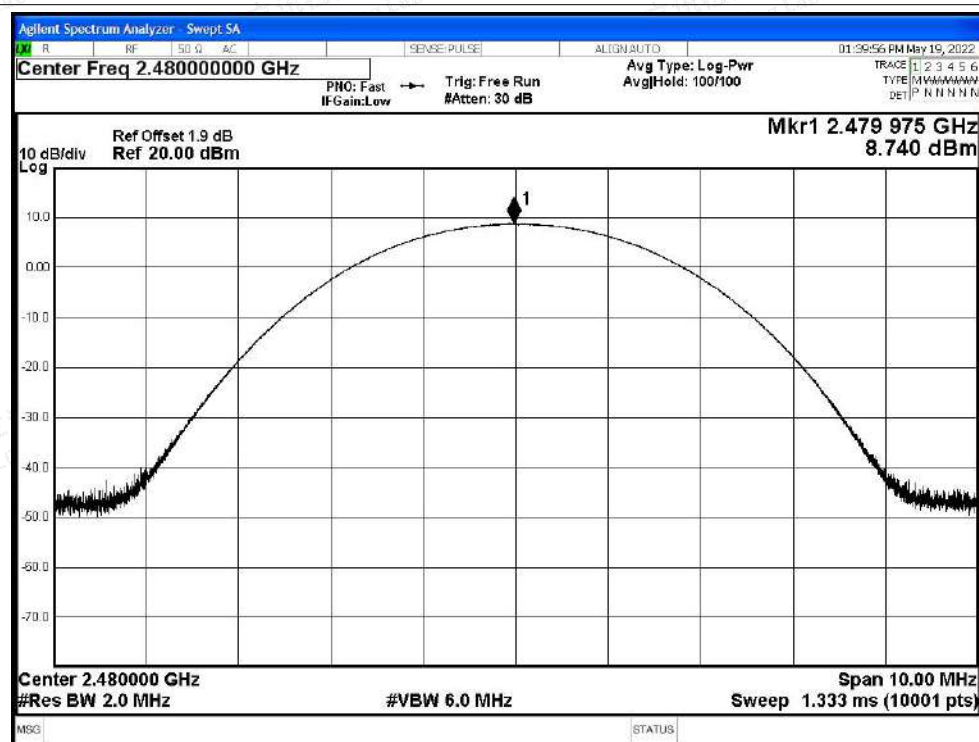


Power NVNT 1-DH5 2441MHz Ant1

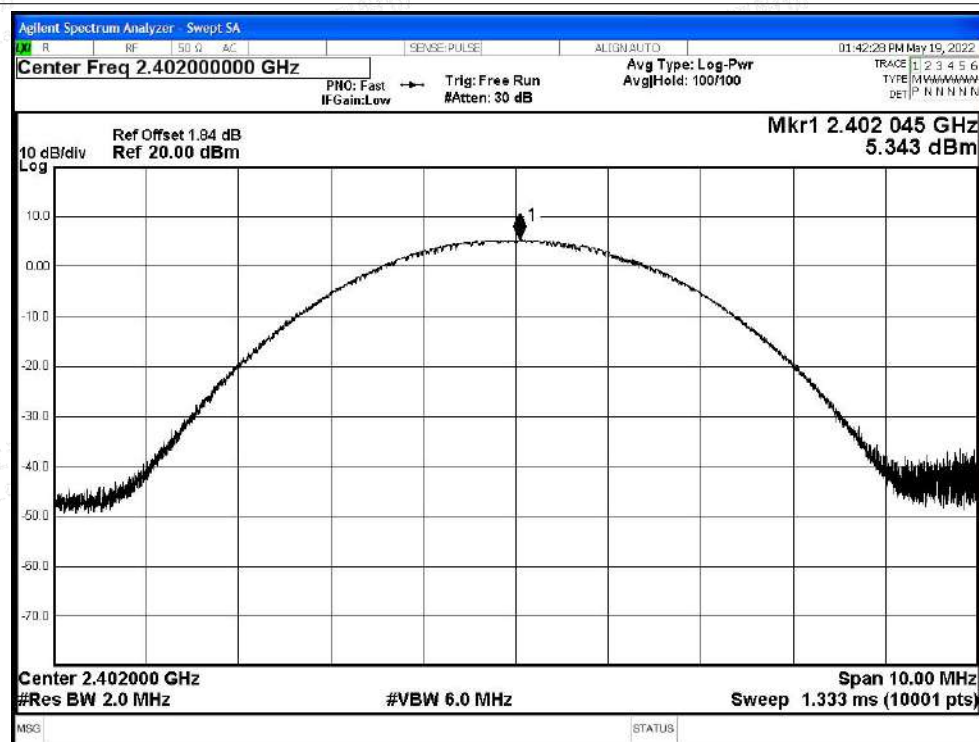




Power NVNT 1-DH5 2480MHz Ant1

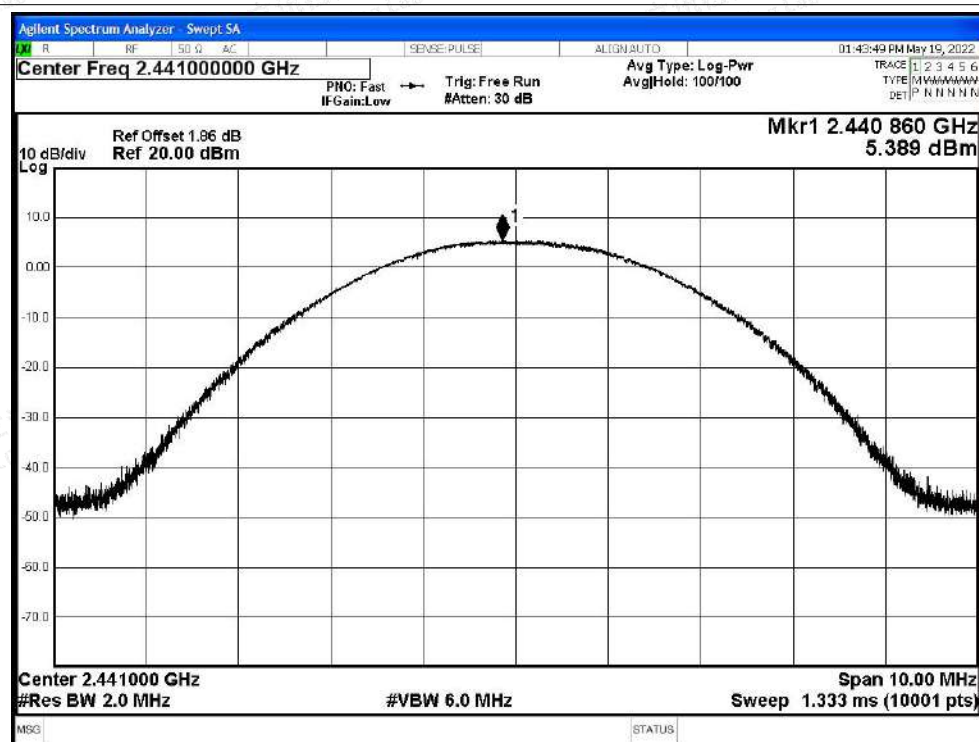


Power NVNT 2-DH5 2402MHz Ant1

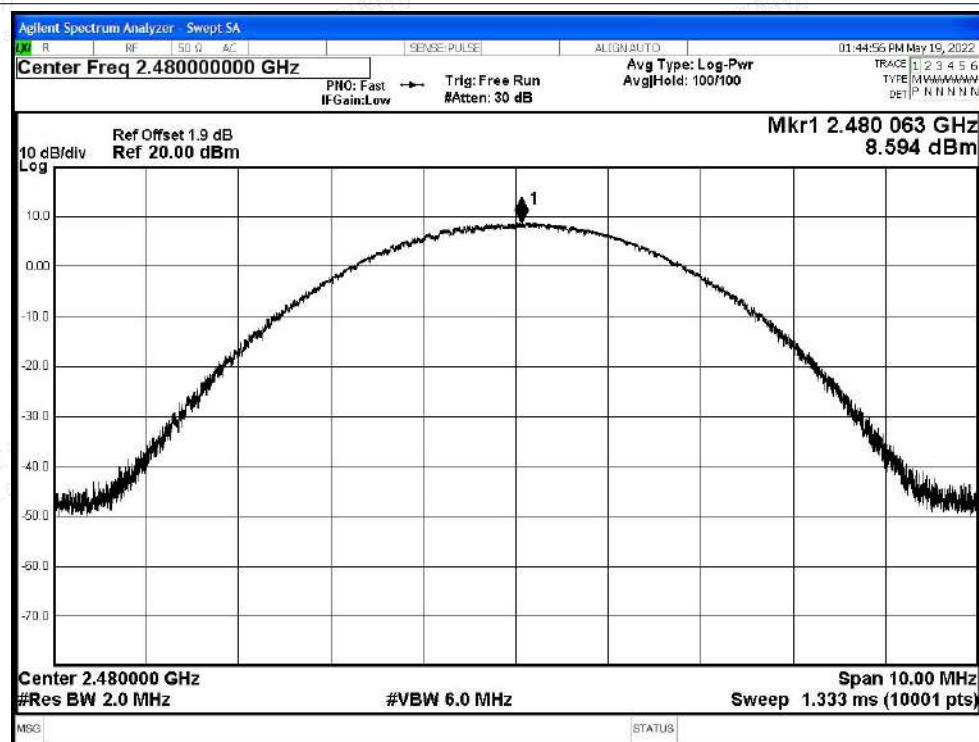




Power NVNT 2-DH5 2441MHz Ant1

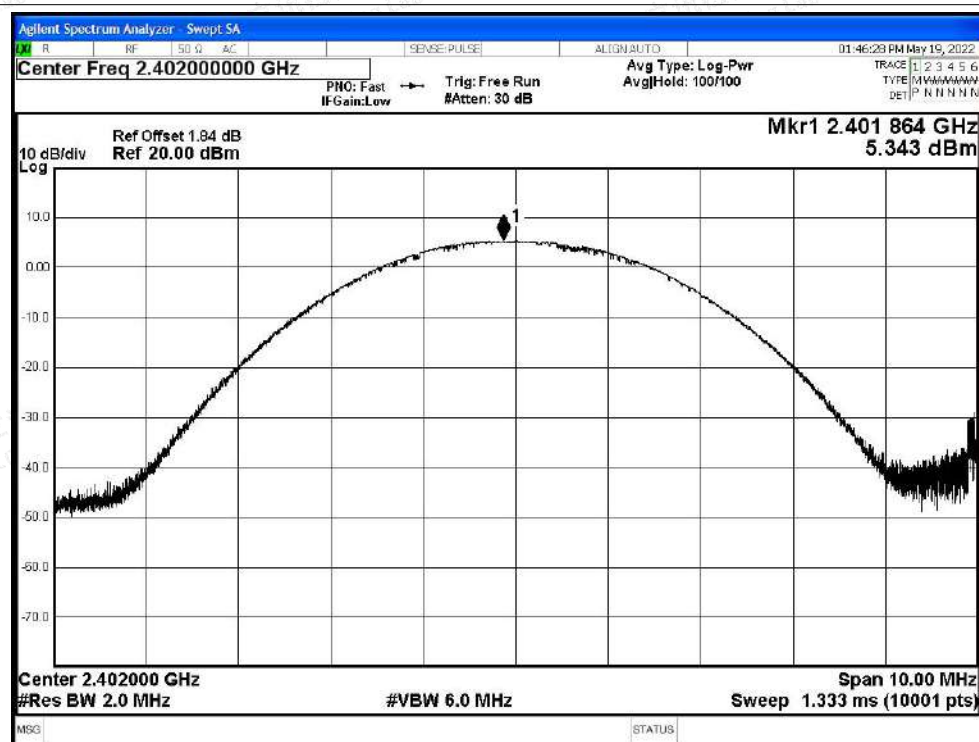


Power NVNT 2-DH5 2480MHz Ant1

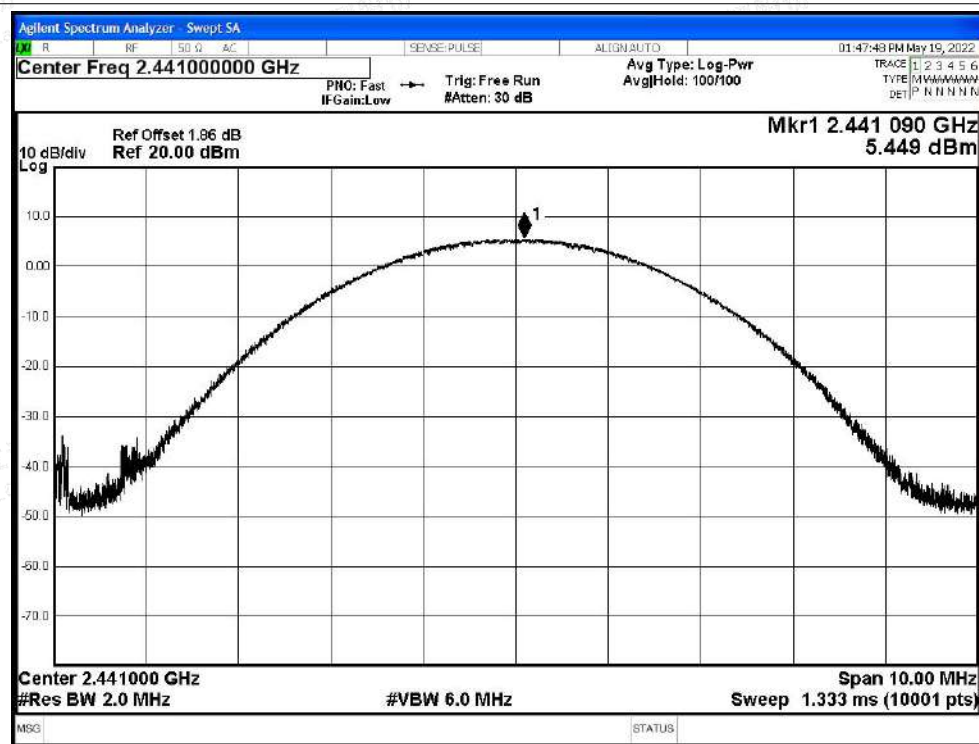


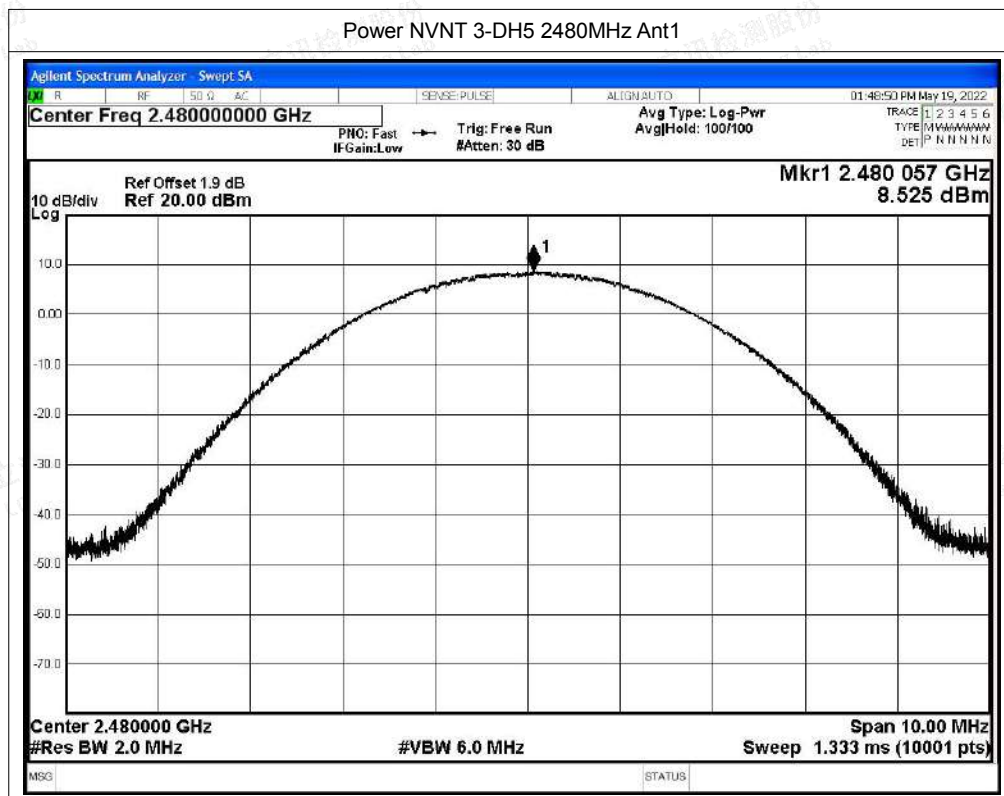


Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1







A.3 Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.012	2402.972	0.96	0.565	Pass
NVNT	2-DH5	Ant1	2401.824	2403.076	1.252	0.856	Pass
NVNT	3-DH5	Ant1	2402.044	2403.158	1.114	0.845	Pass

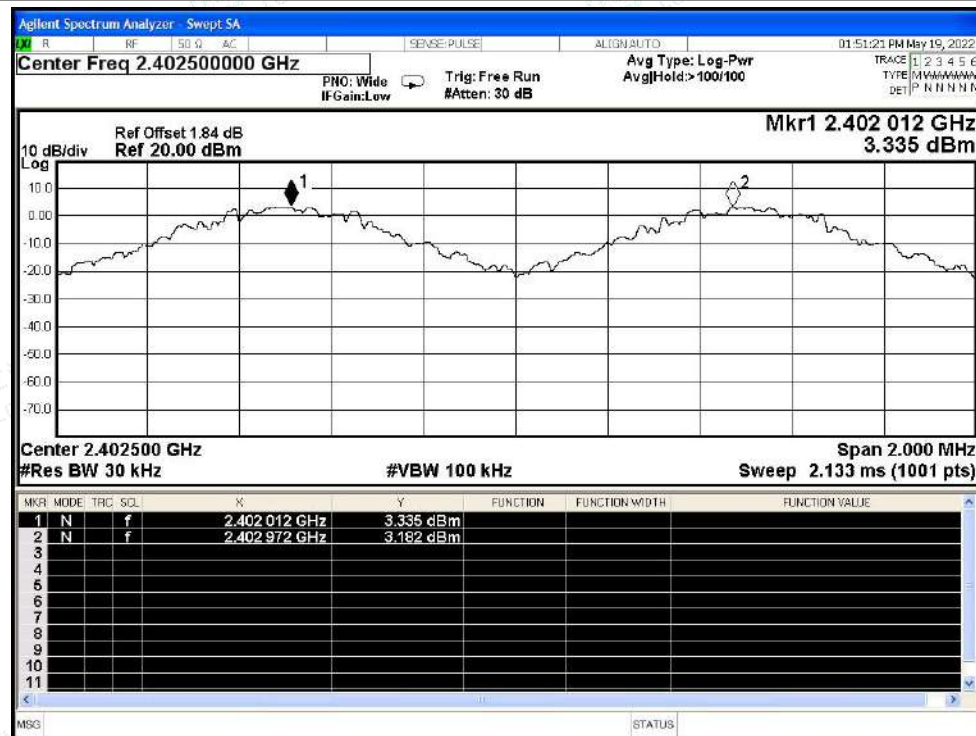


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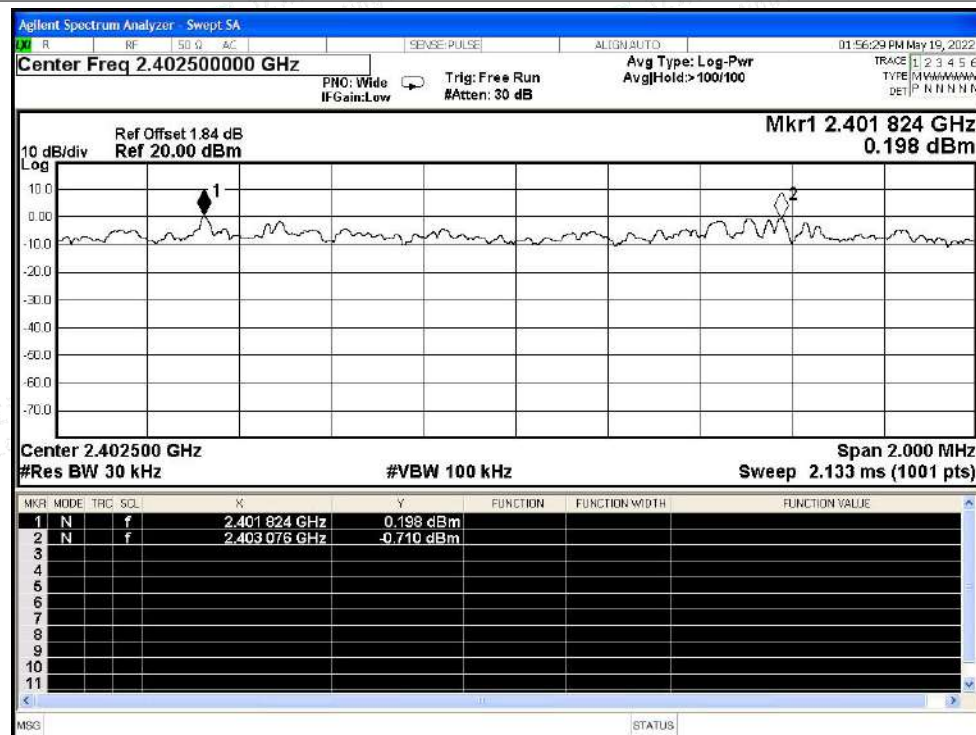


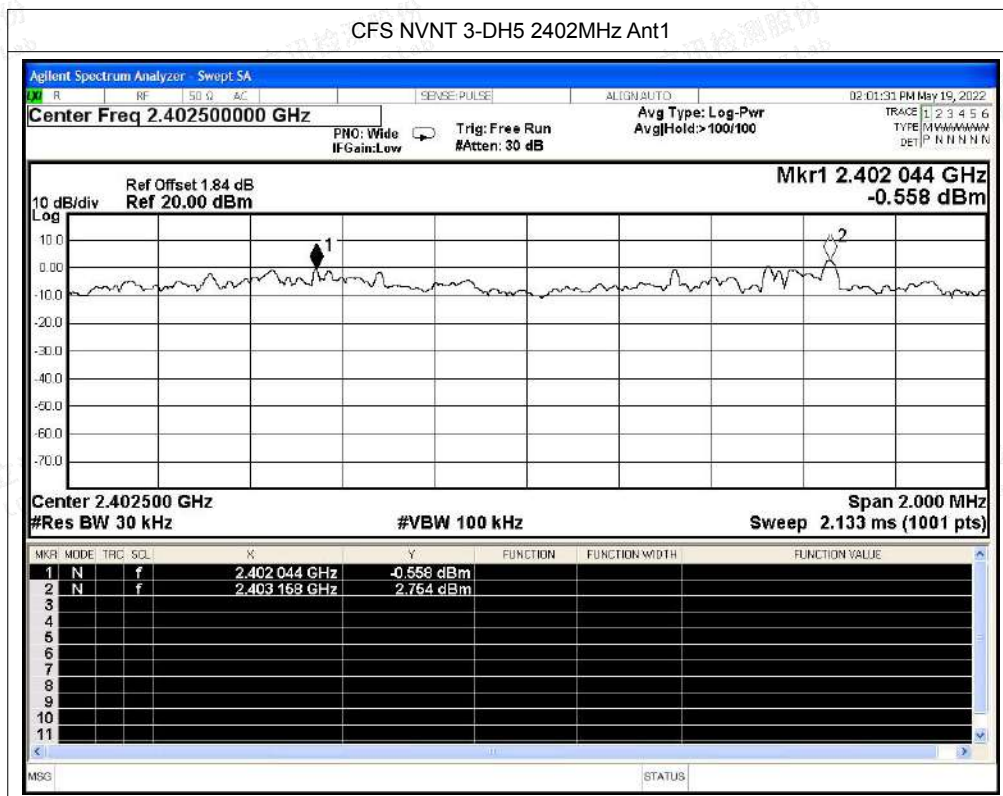
Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1







A.4 Dwell Time

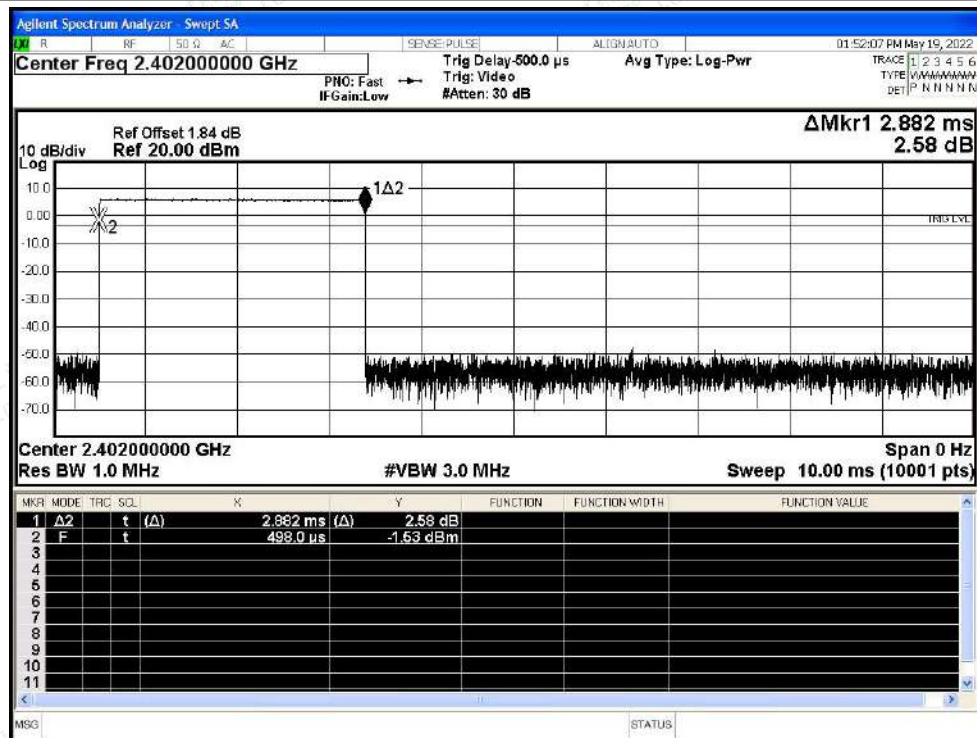
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.882	118.162	41	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.882	112.398	39	31600	400	Pass
NVNT	1-DH5	2480	Ant1	2.88	181.44	63	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.881	118.121	41	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.883	141.267	49	31600	400	Pass
NVNT	2-DH5	2480	Ant1	2.884	121.128	42	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.887	106.819	37	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.887	112.593	39	31600	400	Pass
NVNT	3-DH5	2480	Ant1	2.887	158.785	55	31600	400	Pass



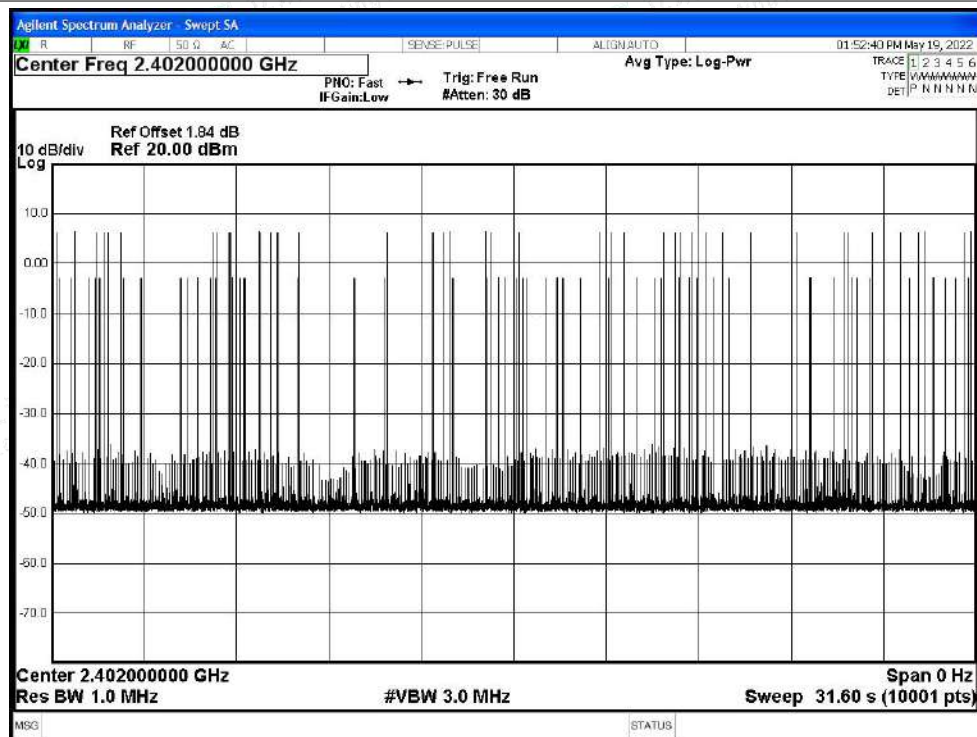


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

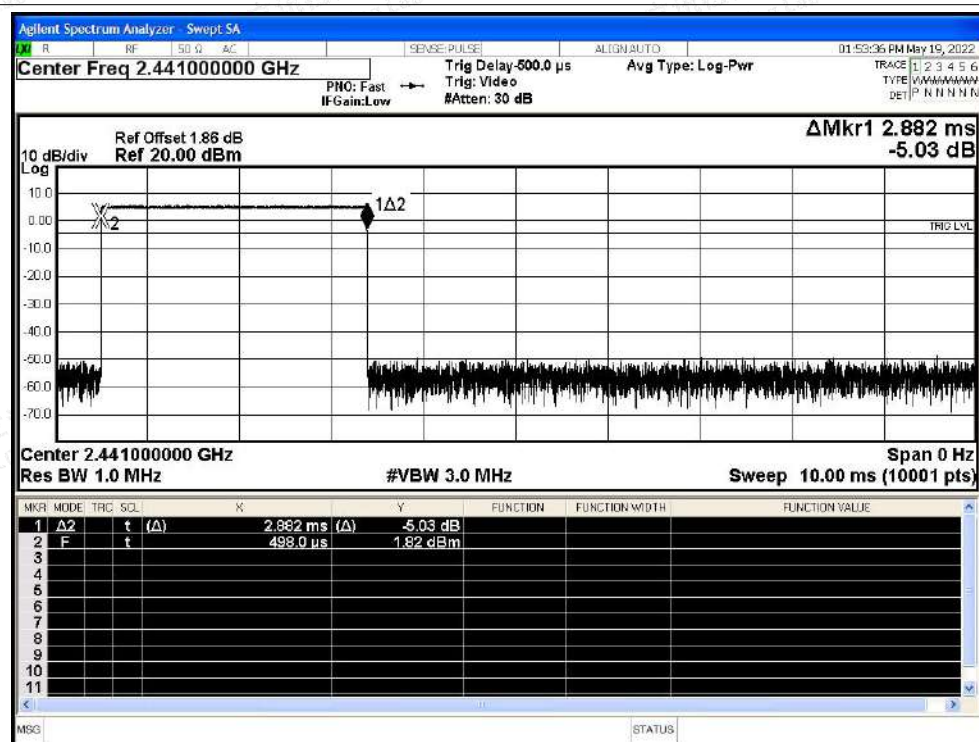


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

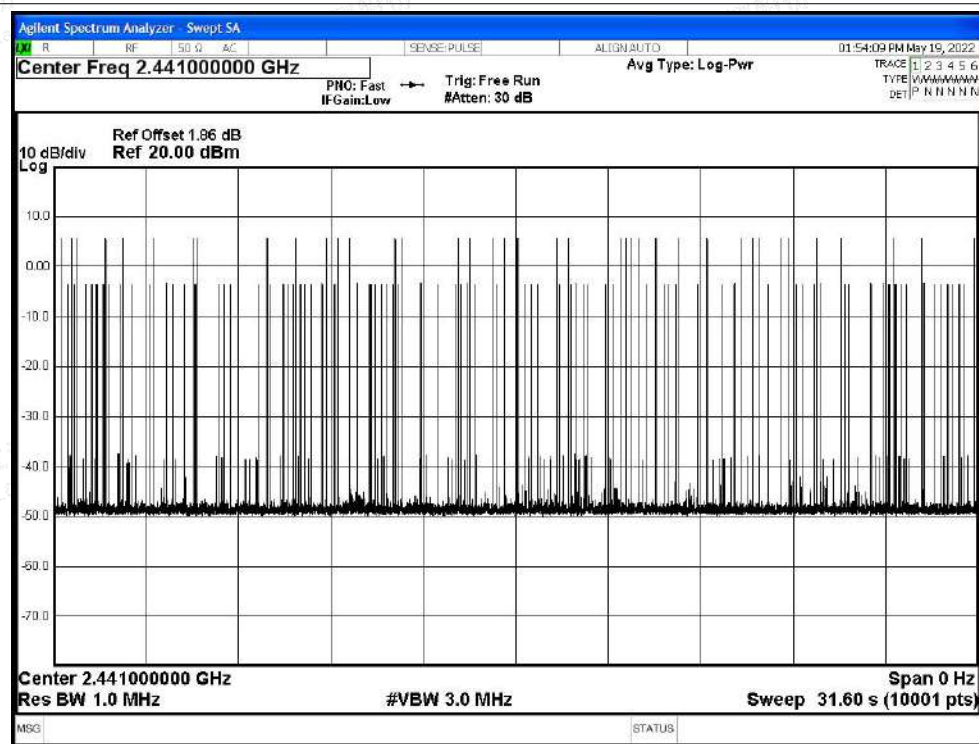




Dwell NVNT 1-DH5 2441MHz Ant1 One Burst

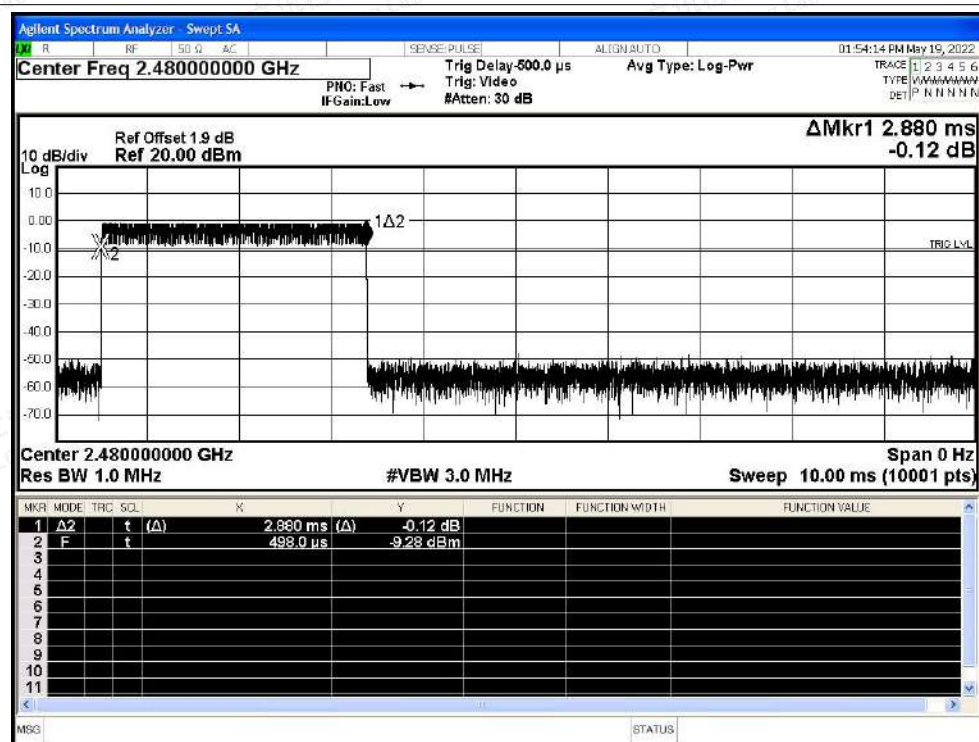


Dwell NVNT 1-DH5 2441MHz Ant1 Accumulated

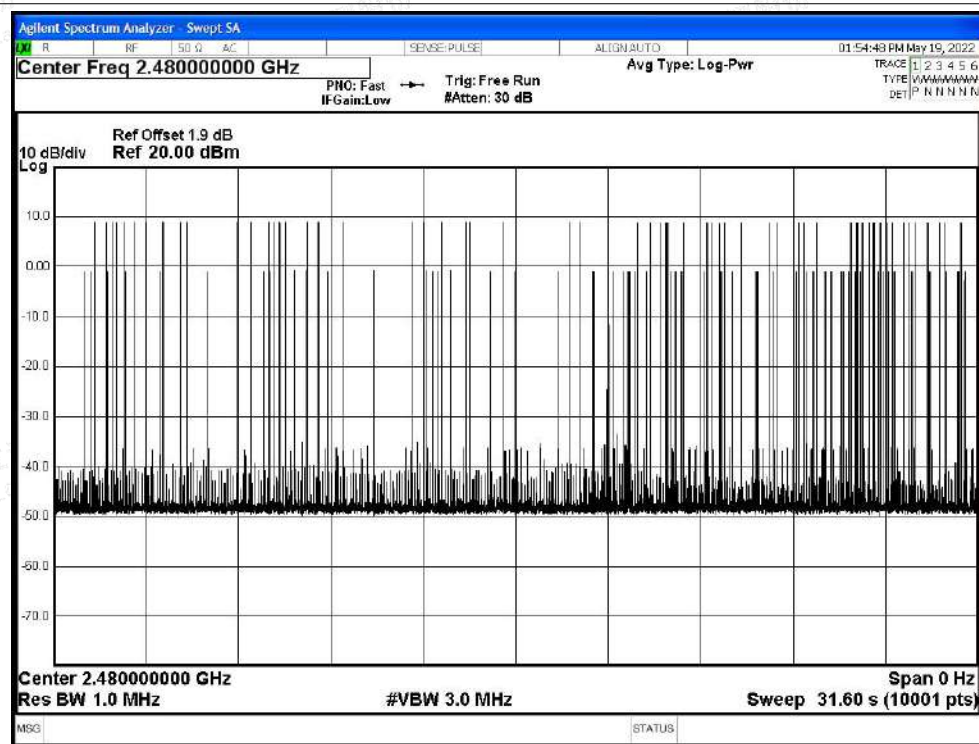




Dwell NVNT 1-DH5 2480MHz Ant1 One Burst

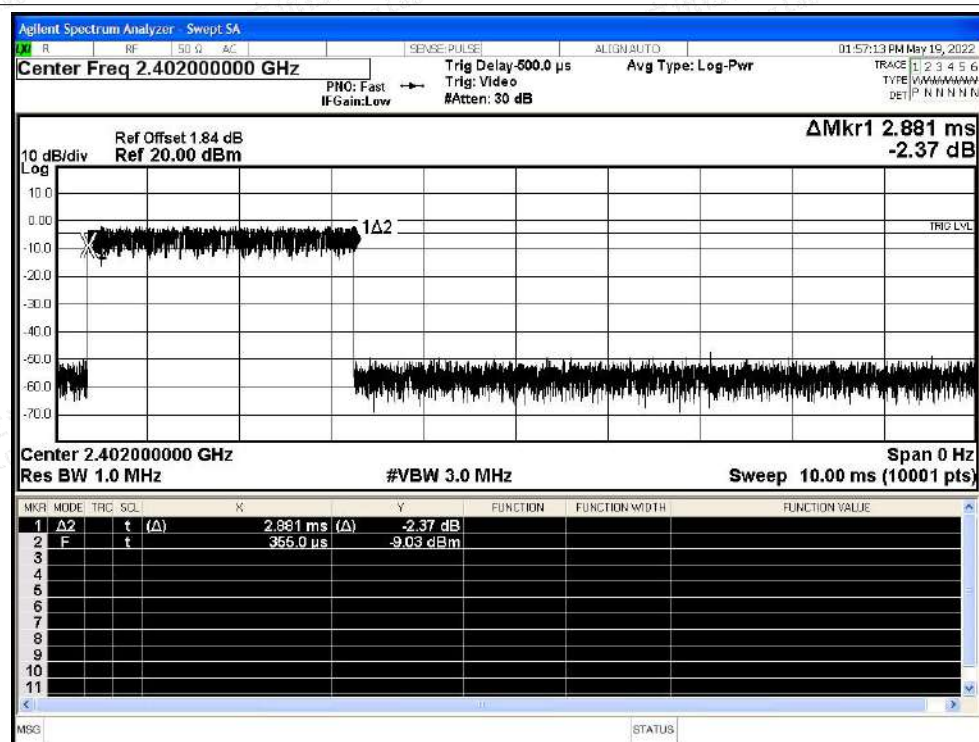


Dwell NVNT 1-DH5 2480MHz Ant1 Accumulated

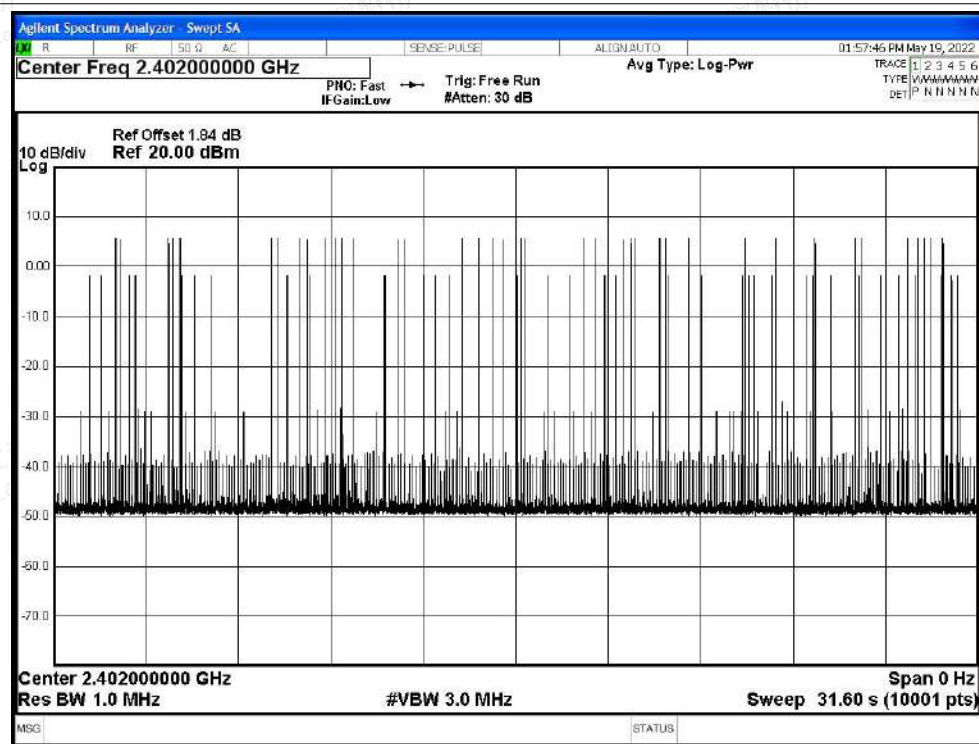




Dwell NVNT 2-DH5 2402MHz Ant1 One Burst

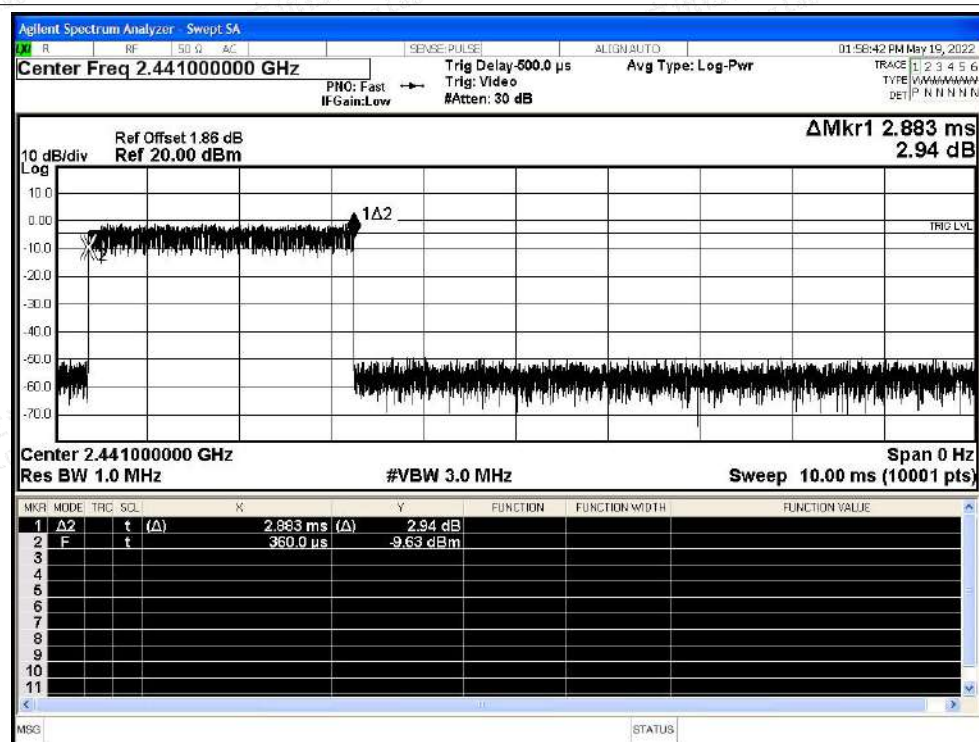


Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated

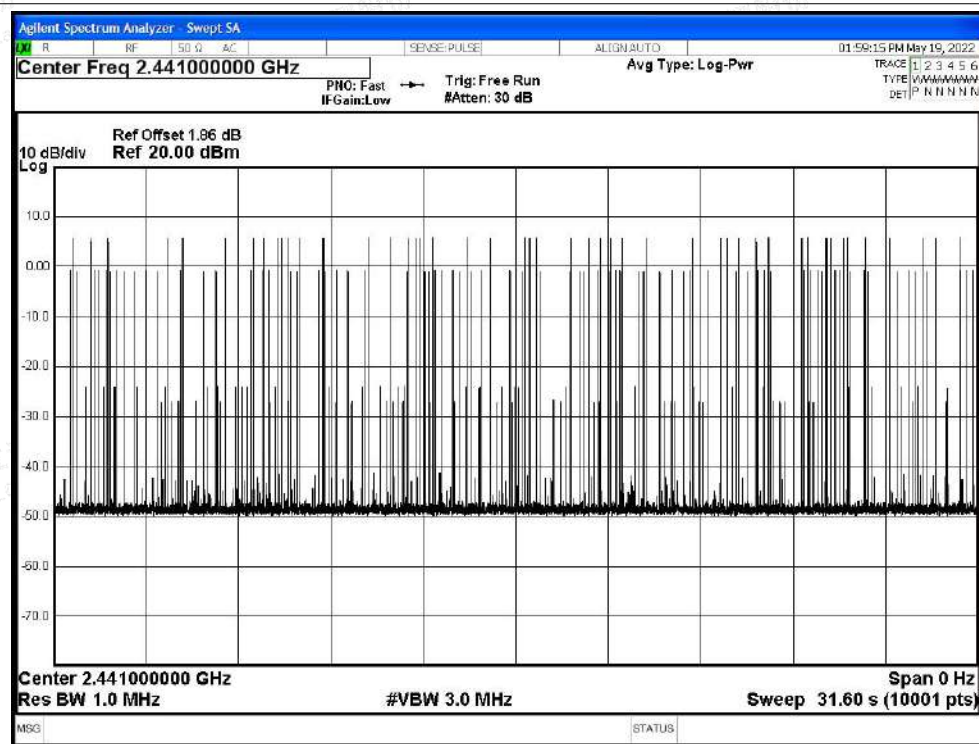




Dwell NVNT 2-DH5 2441MHz Ant1 One Burst

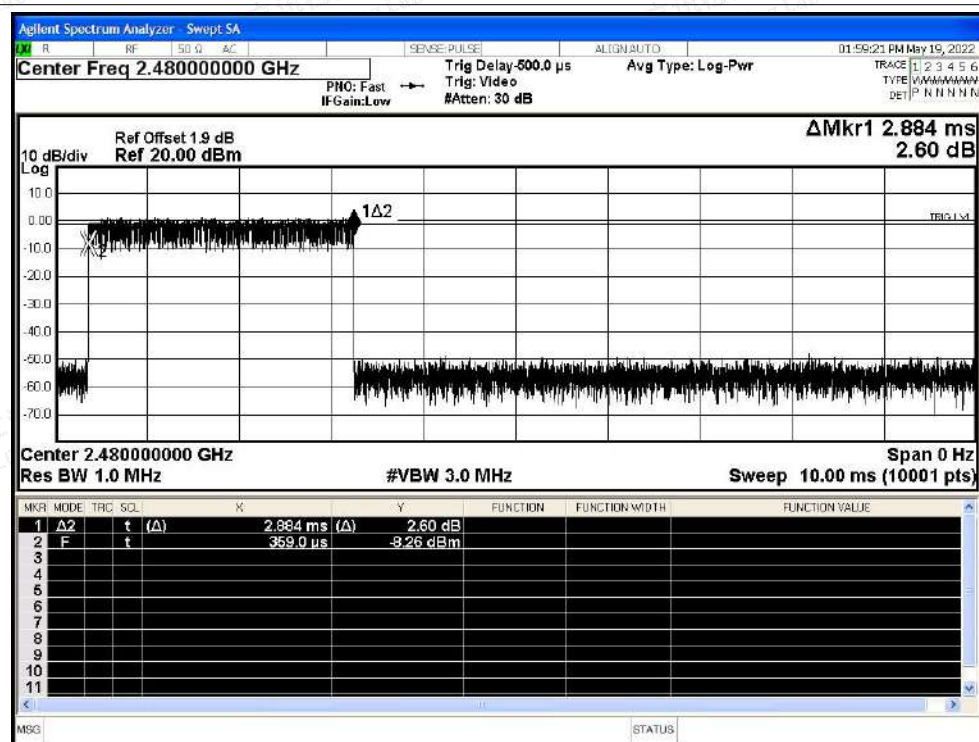


Dwell NVNT 2-DH5 2441MHz Ant1 Accumulated

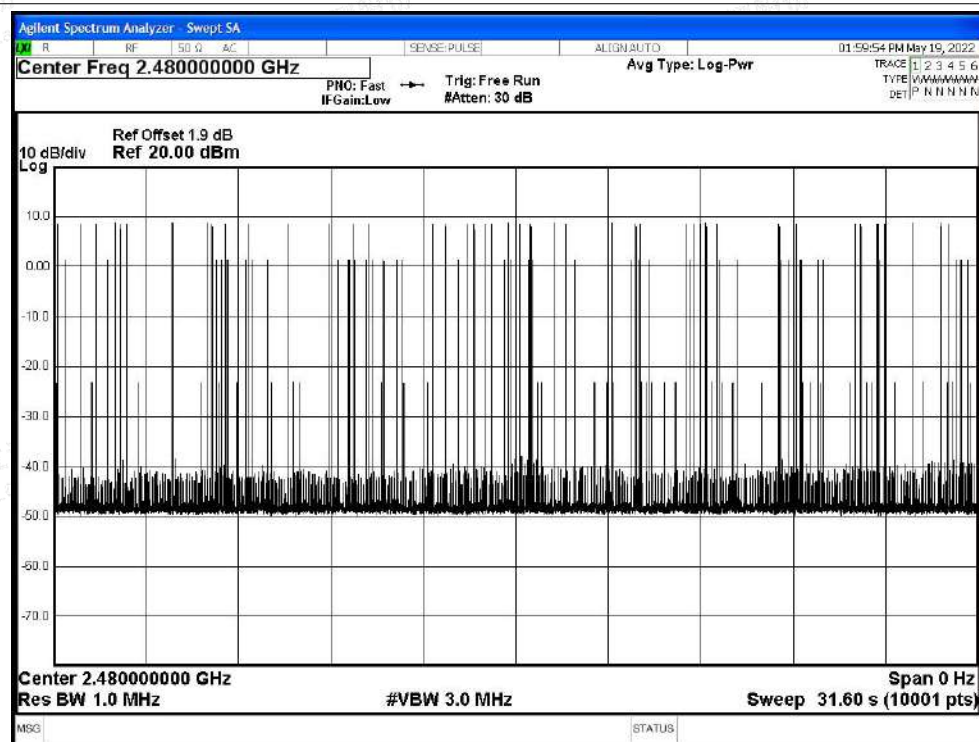




Dwell NVNT 2-DH5 2480MHz Ant1 One Burst

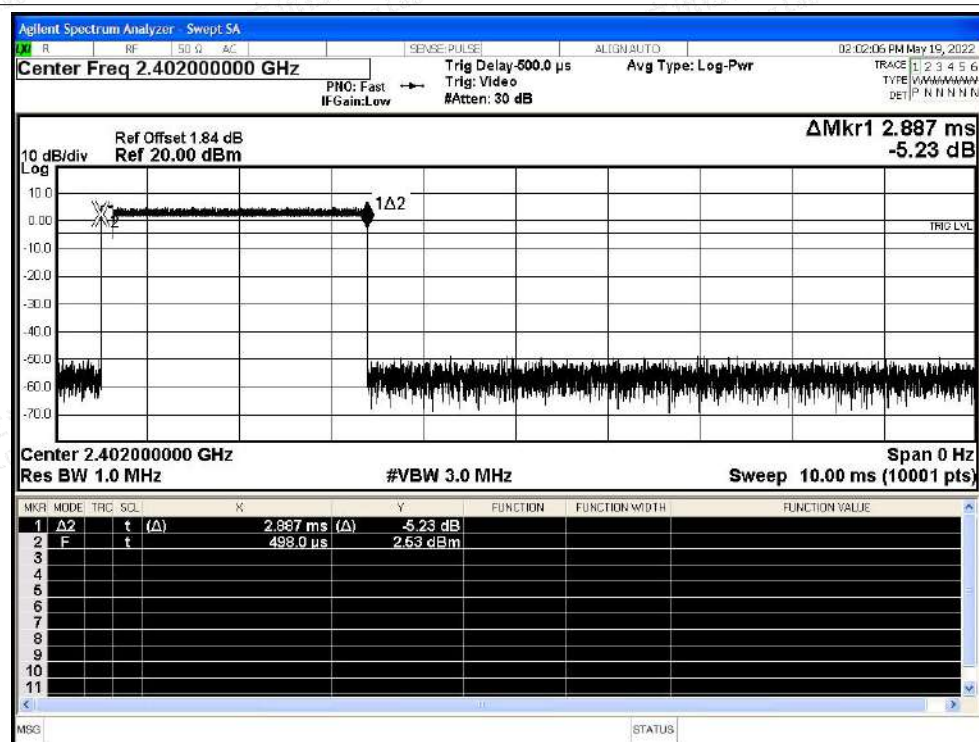


Dwell NVNT 2-DH5 2480MHz Ant1 Accumulated

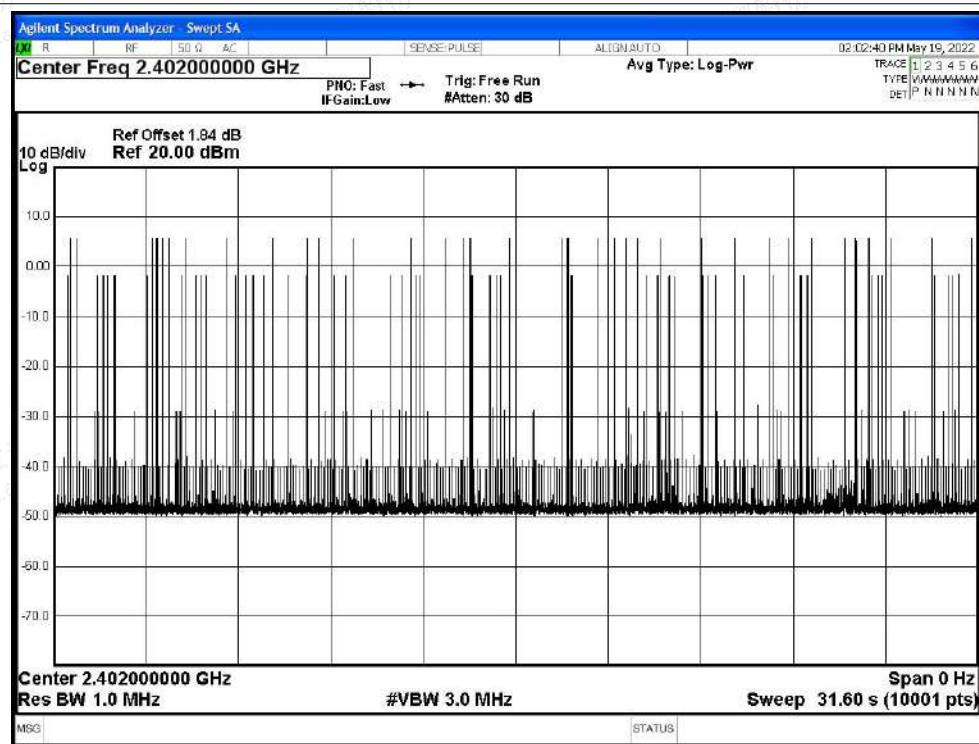




Dwell NVNT 3-DH5 2402MHz Ant1 One Burst

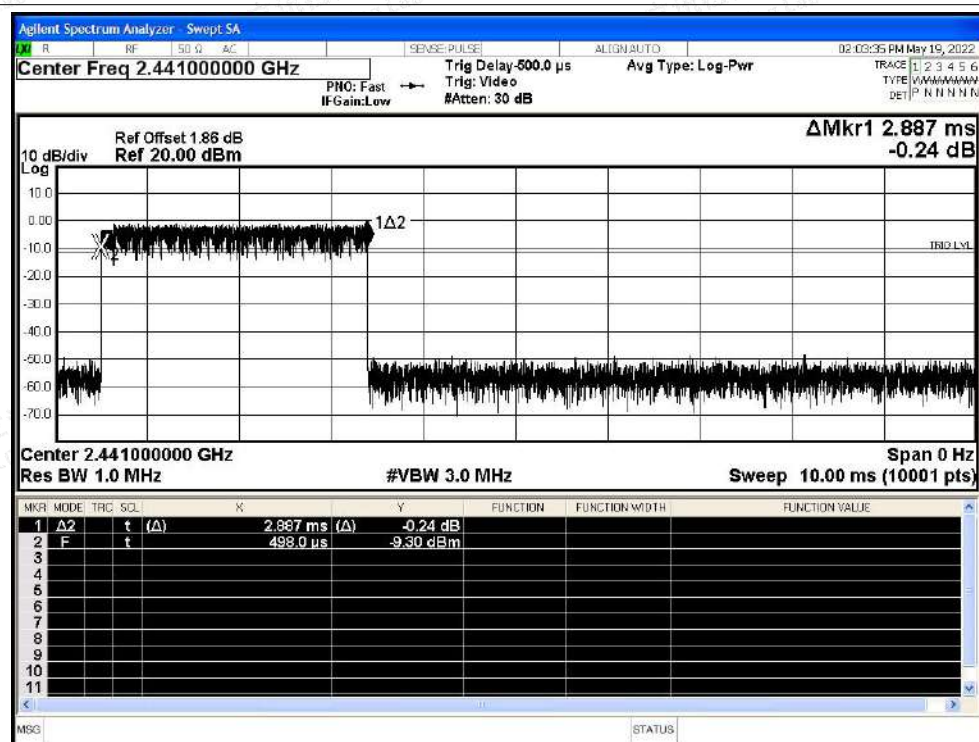


Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated

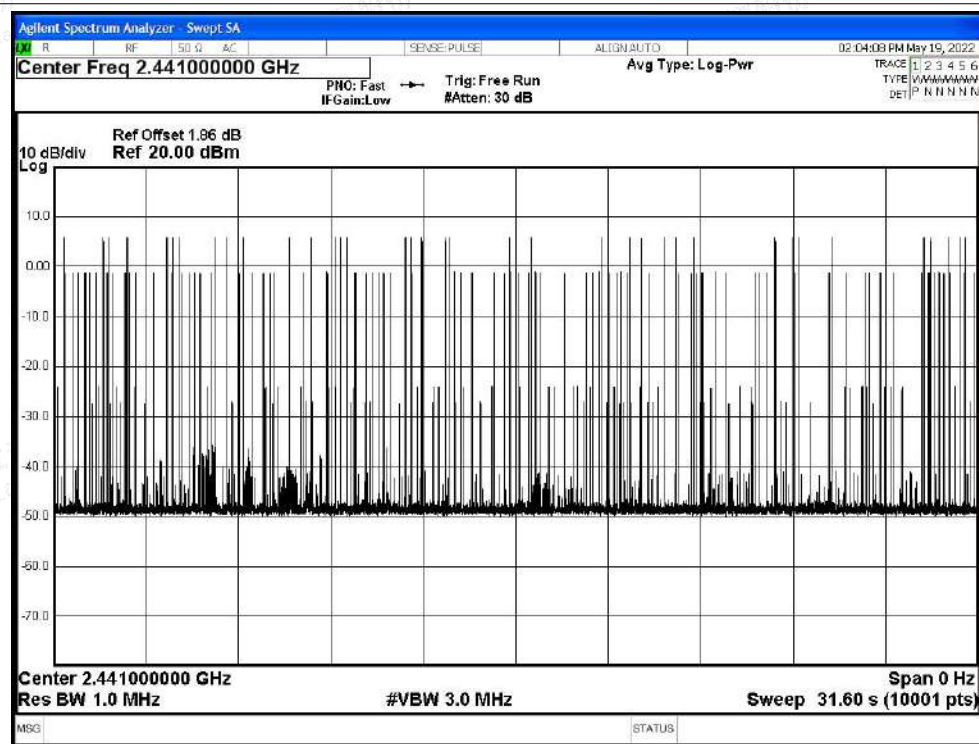




Dwell NVNT 3-DH5 2441MHz Ant1 One Burst

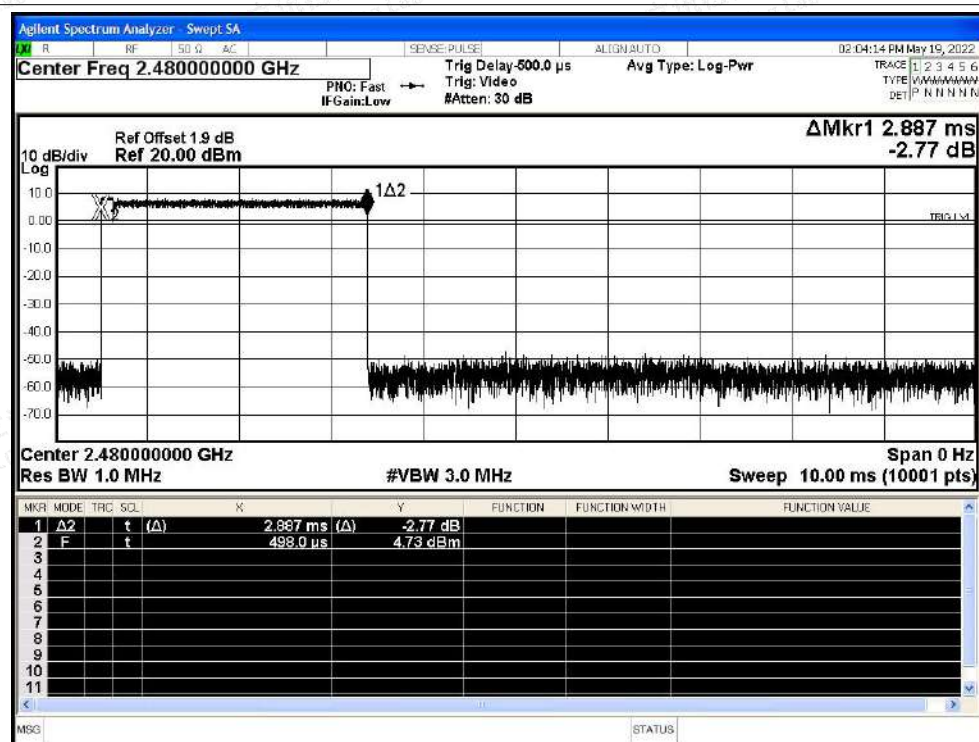


Dwell NVNT 3-DH5 2441MHz Ant1 Accumulated

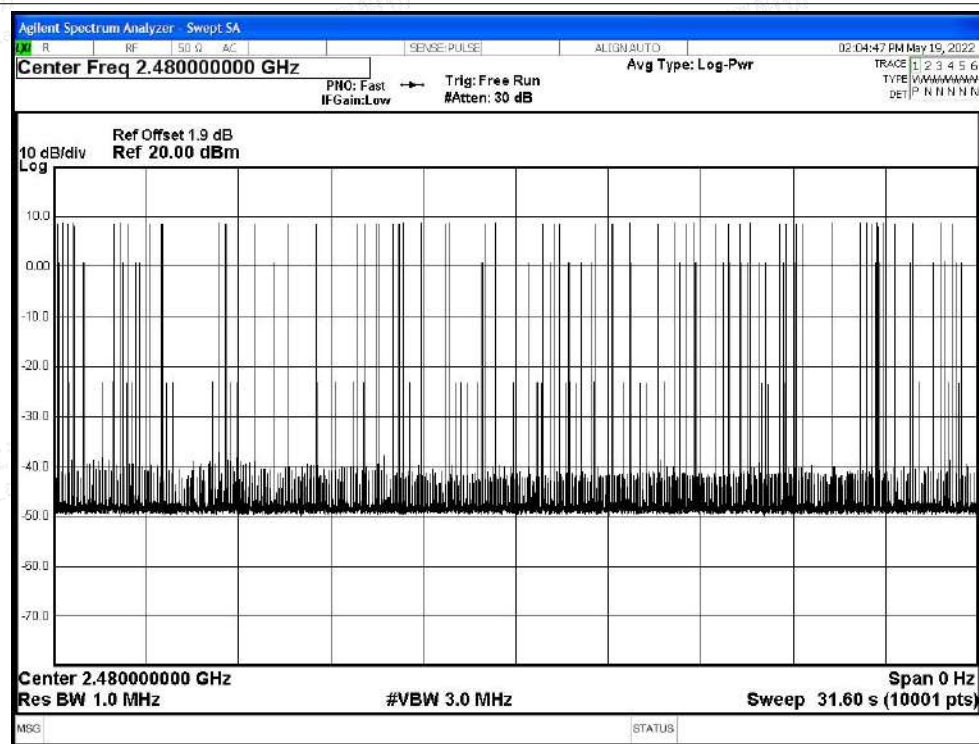




Dwell NVNT 3-DH5 2480MHz Ant1 One Burst



Dwell NVNT 3-DH5 2480MHz Ant1 Accumulated





A.5 Number of Hopping Channel

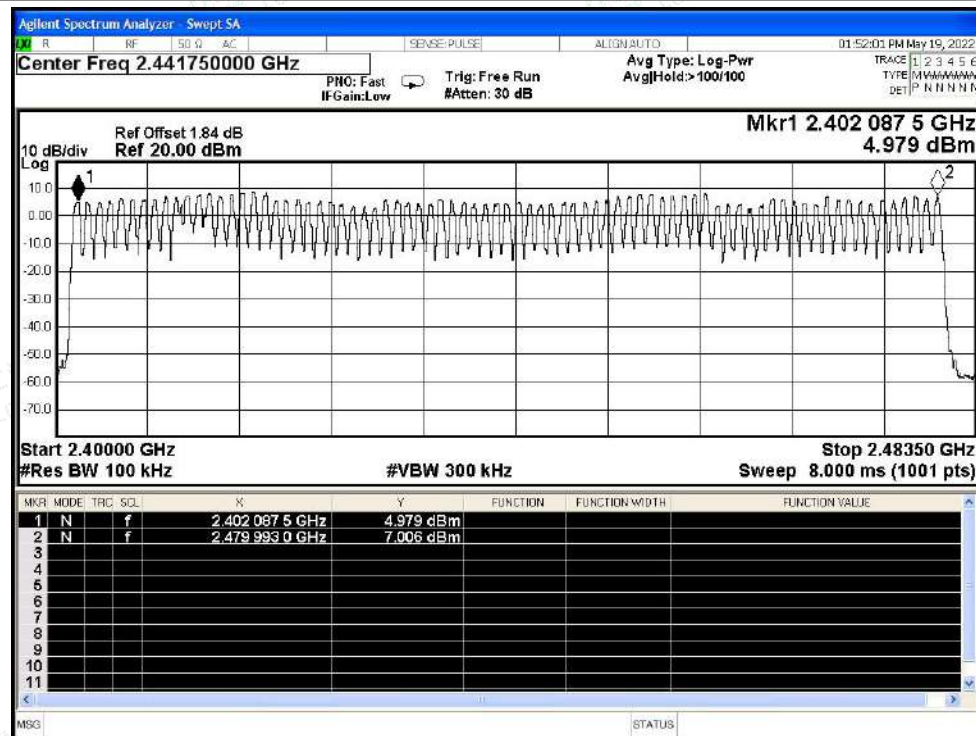
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass



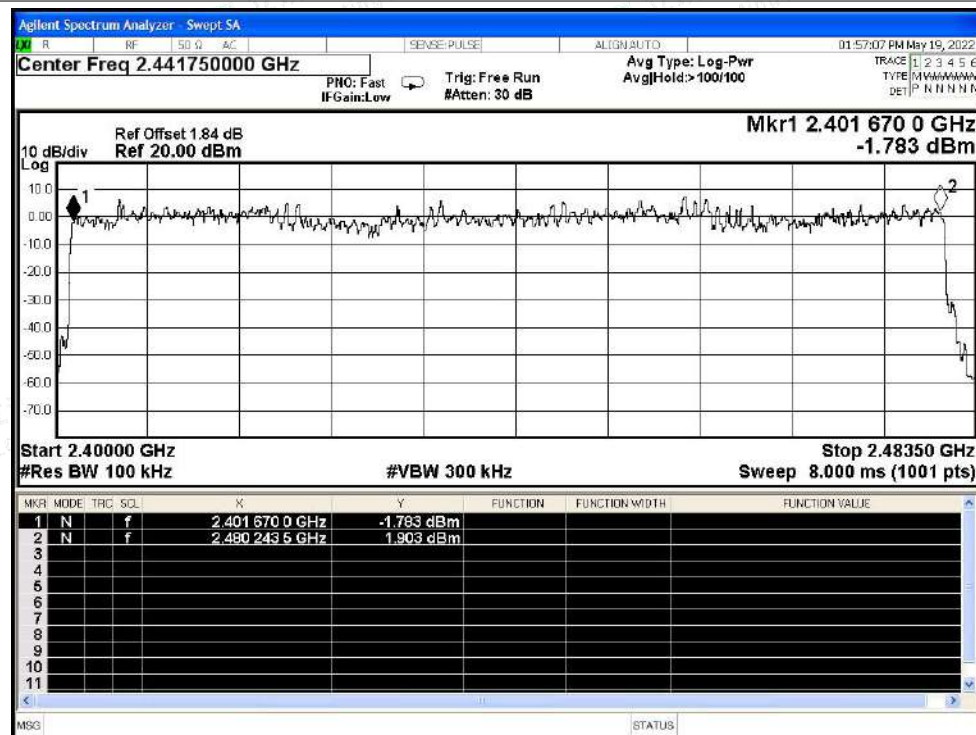


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1

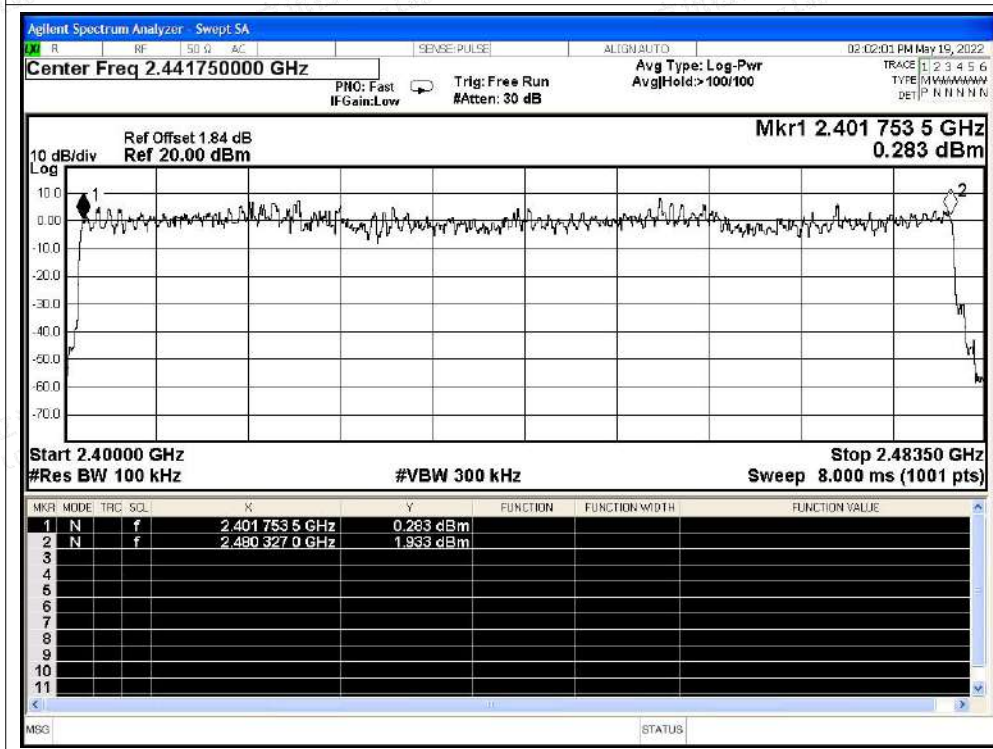


Hopping No. NVNT 2-DH5 2402MHz Ant1





Hopping No. NVNT 3-DH5 2402MHz Ant1





A.6 Band Edge

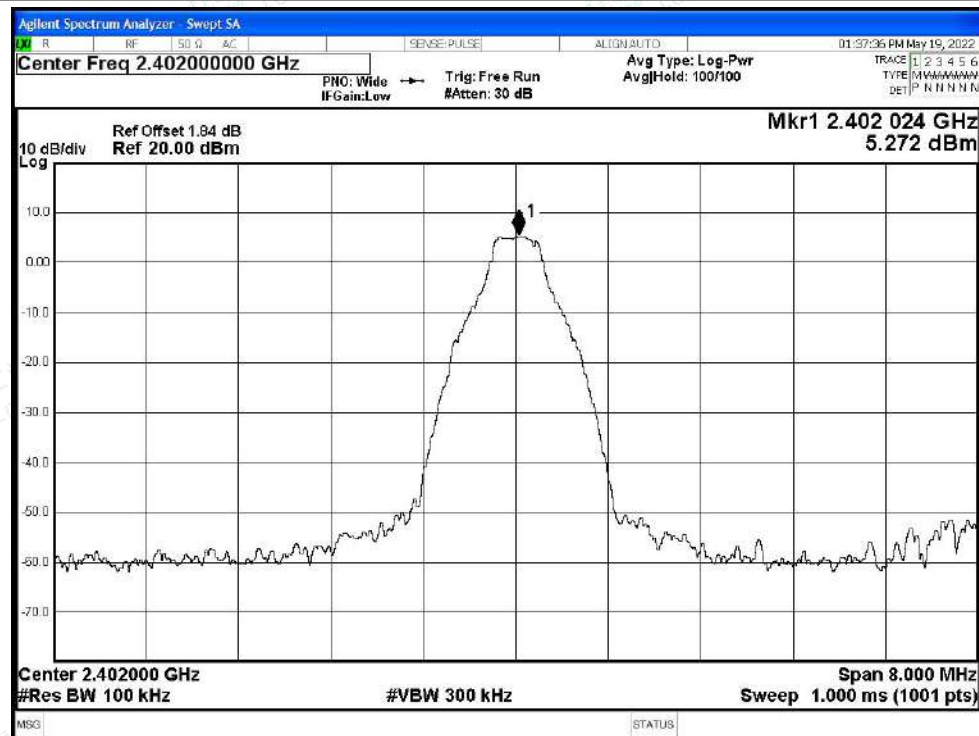
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-61.17	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-65.11	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-60.38	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-63.5	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-60.07	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-63.05	-20	Pass



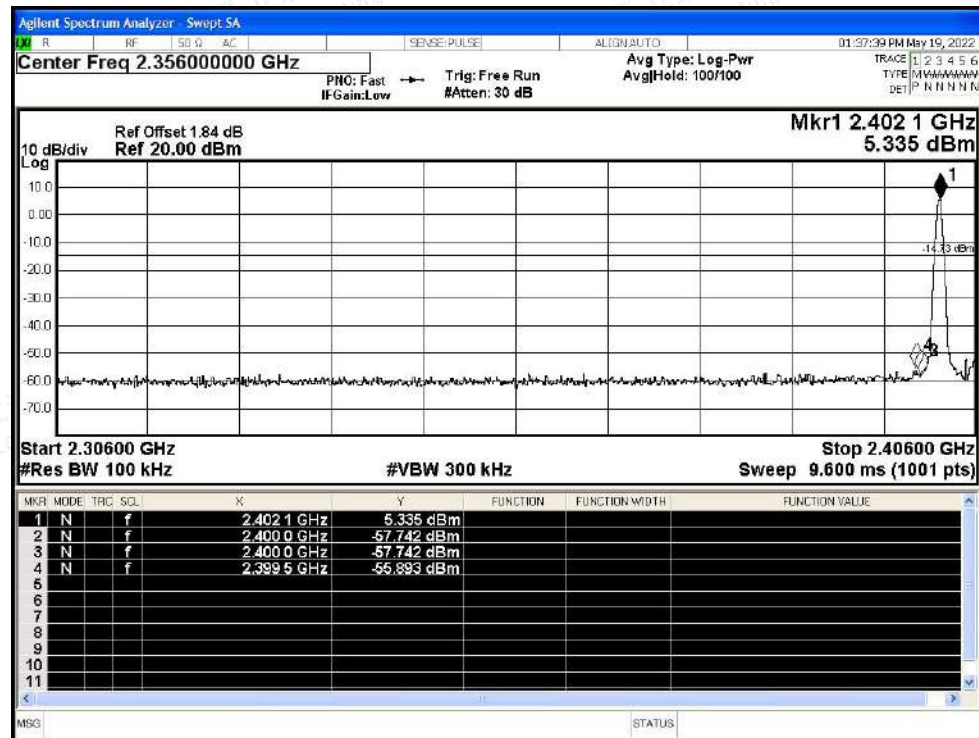


Test Graphs

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



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



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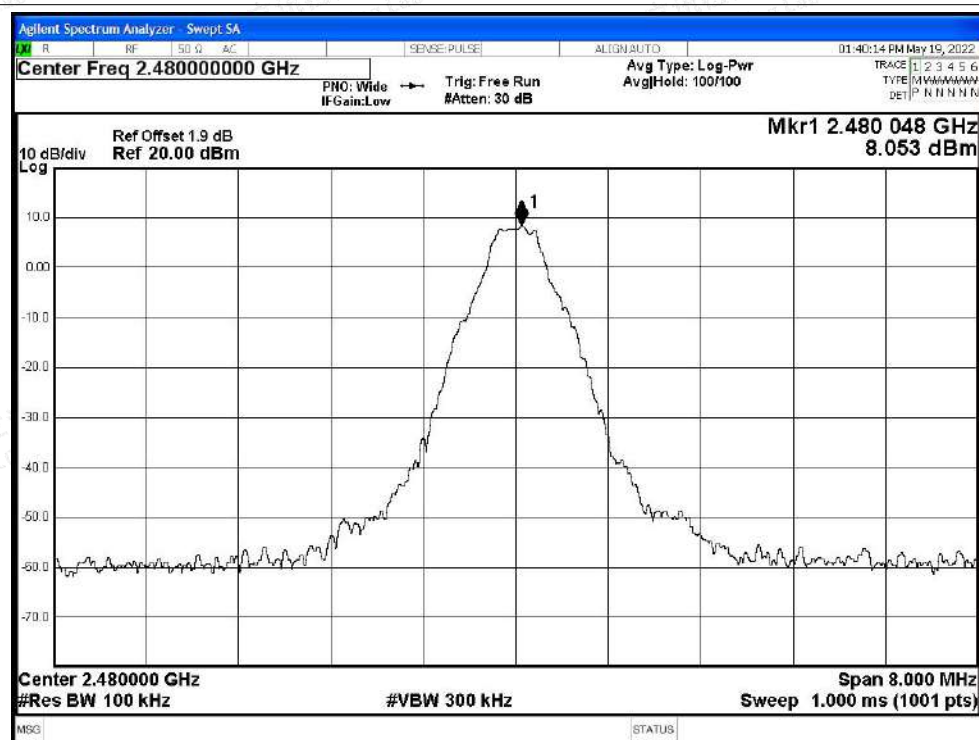
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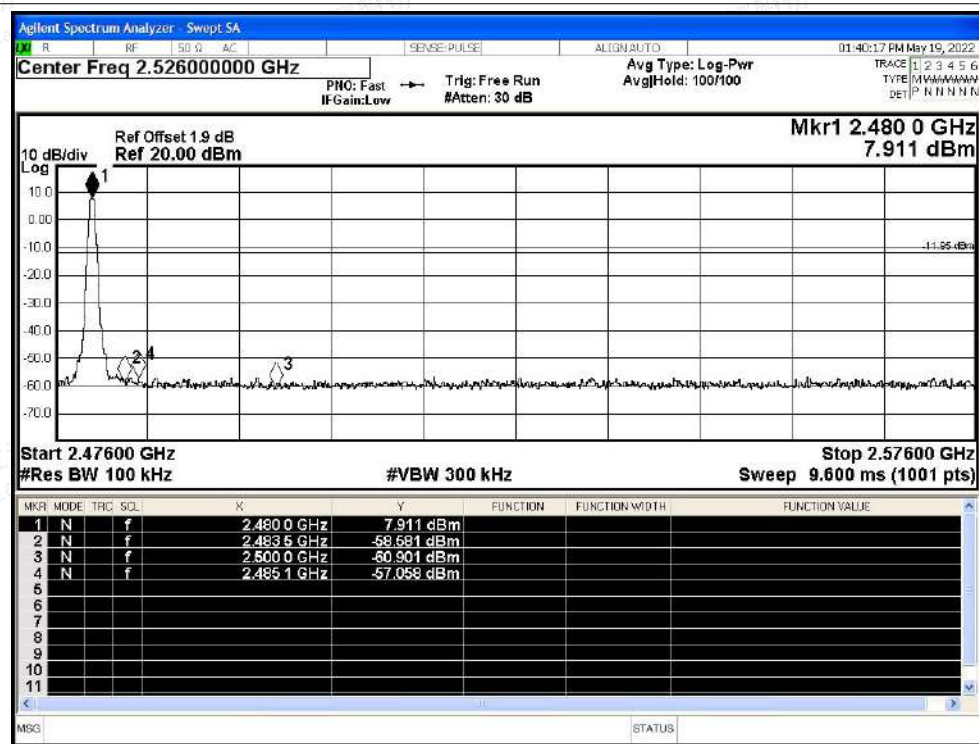
Scan code to check authenticity



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

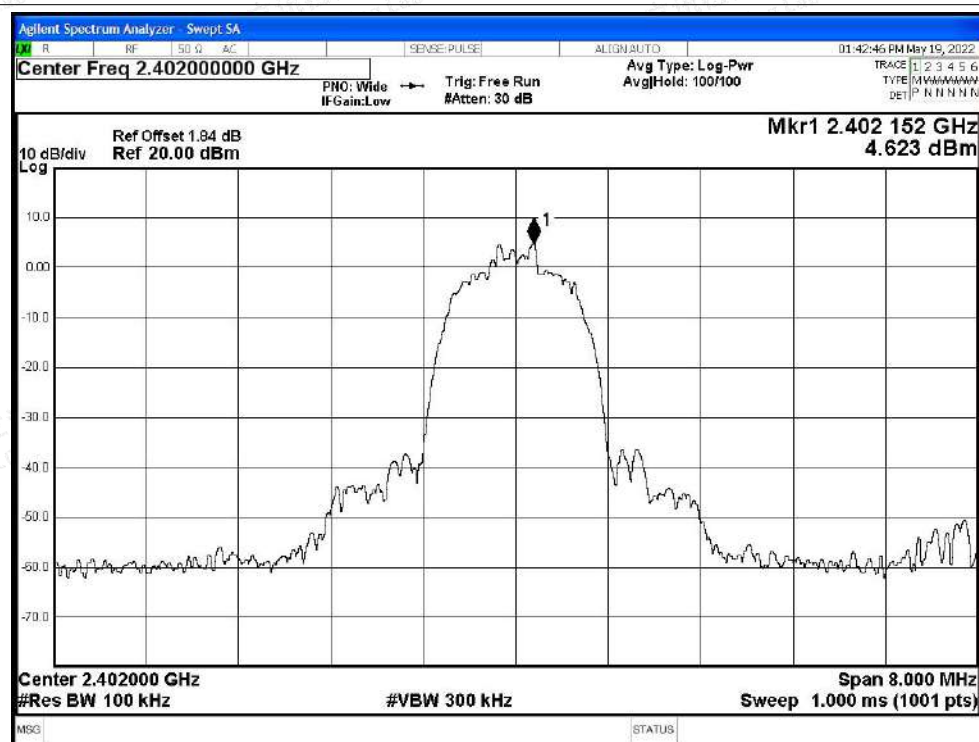


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

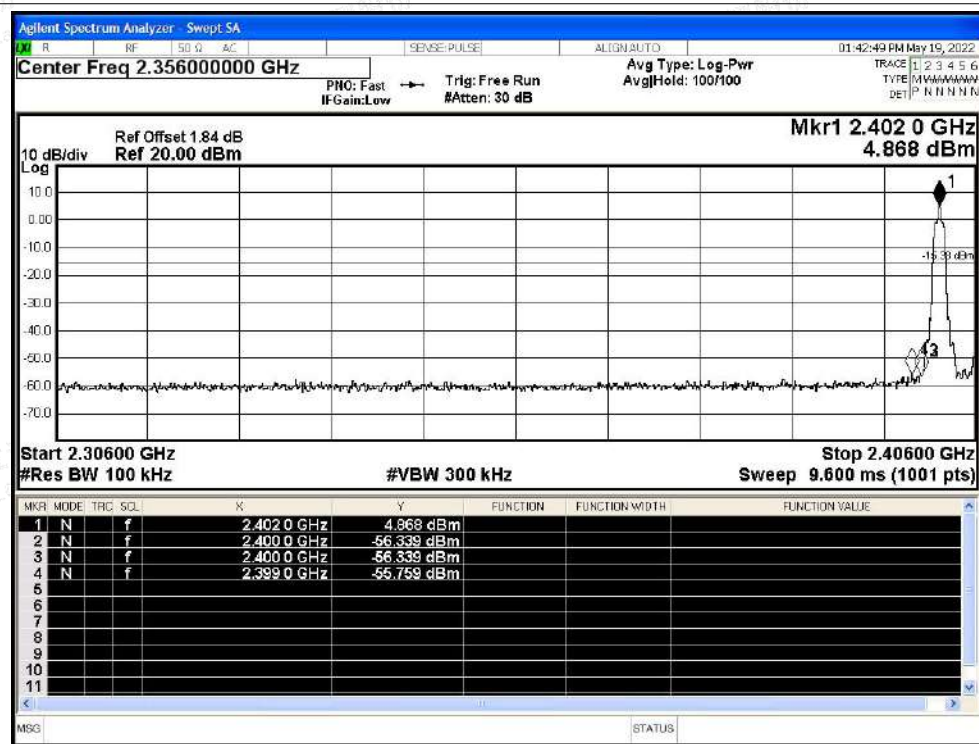




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref

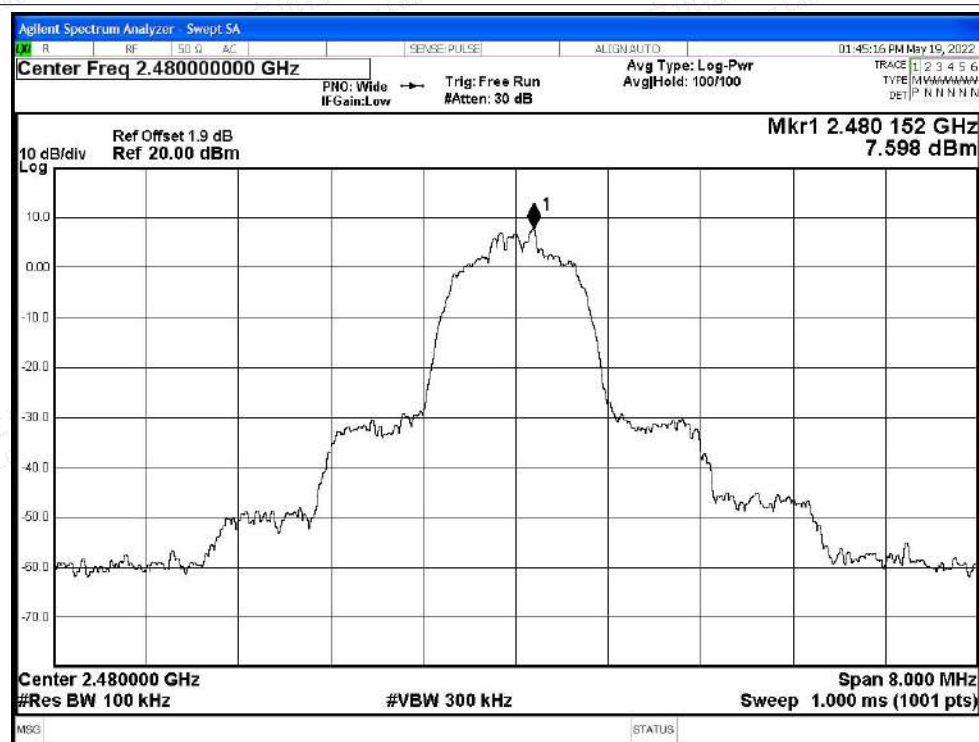


Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

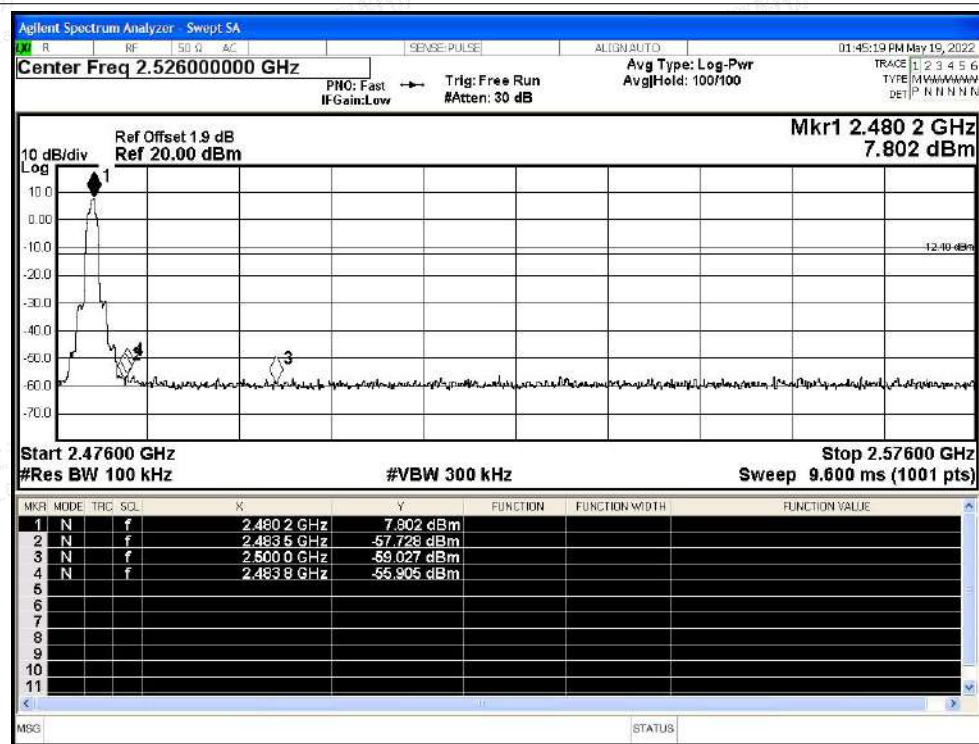




Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref

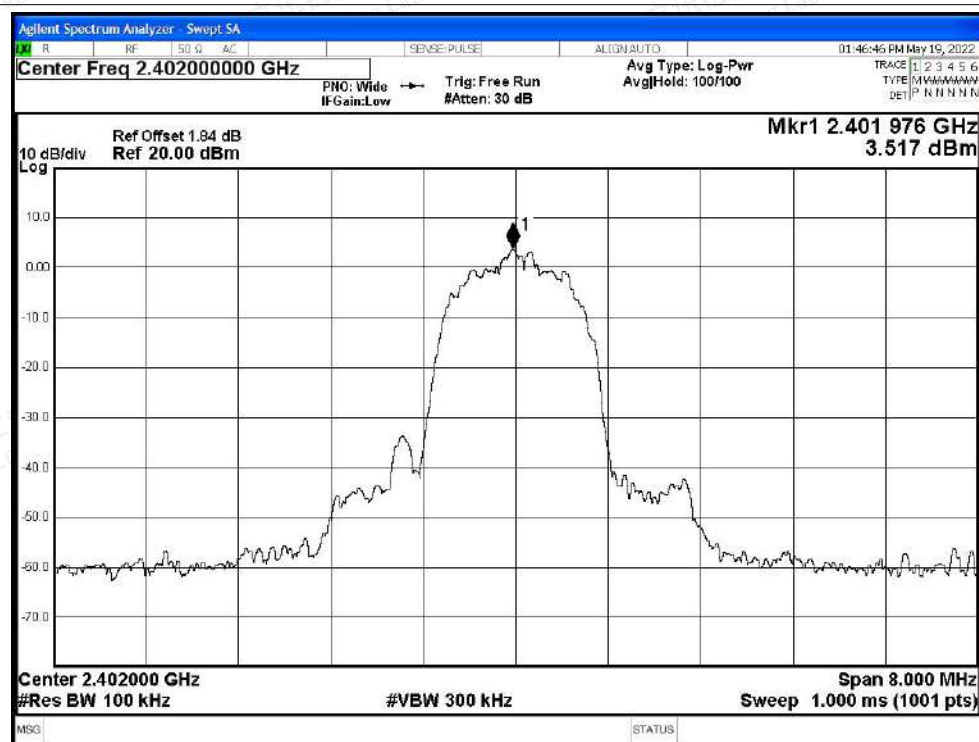


Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission

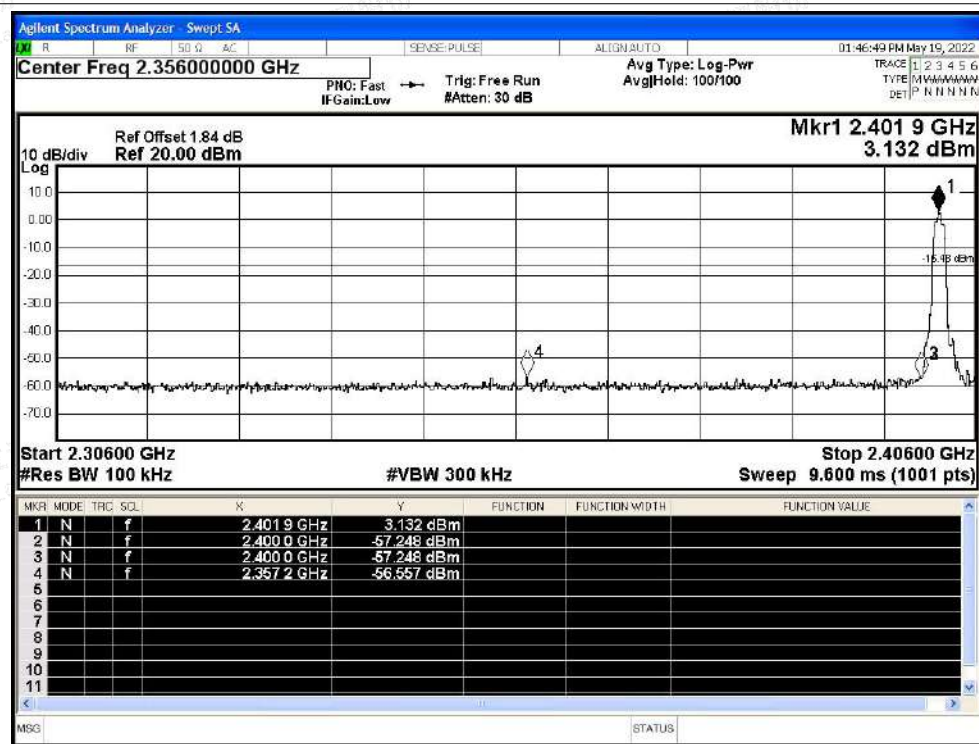




Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



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

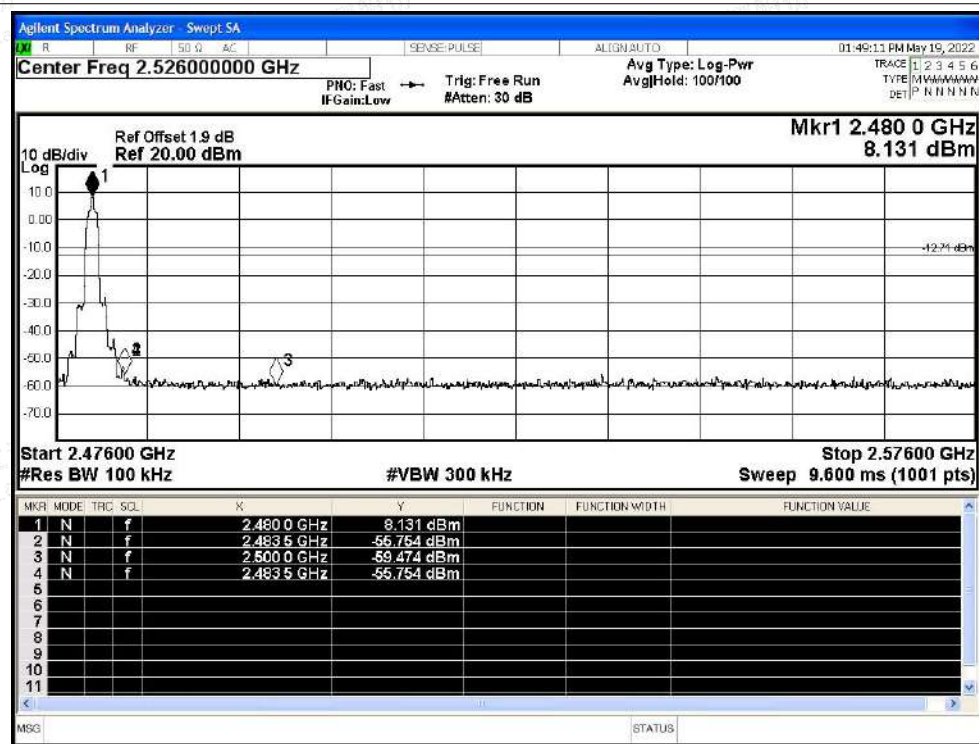




Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



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





(Hopping)

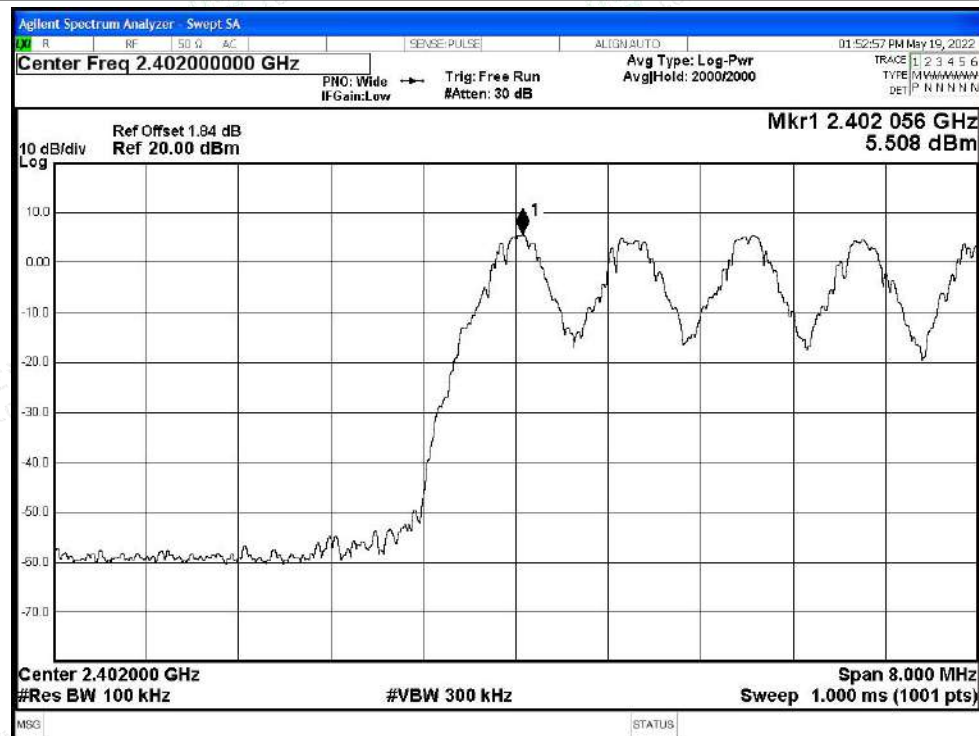
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-61.75	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-53.85	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-59.2	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-49.48	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-59.74	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-60.57	-20	Pass



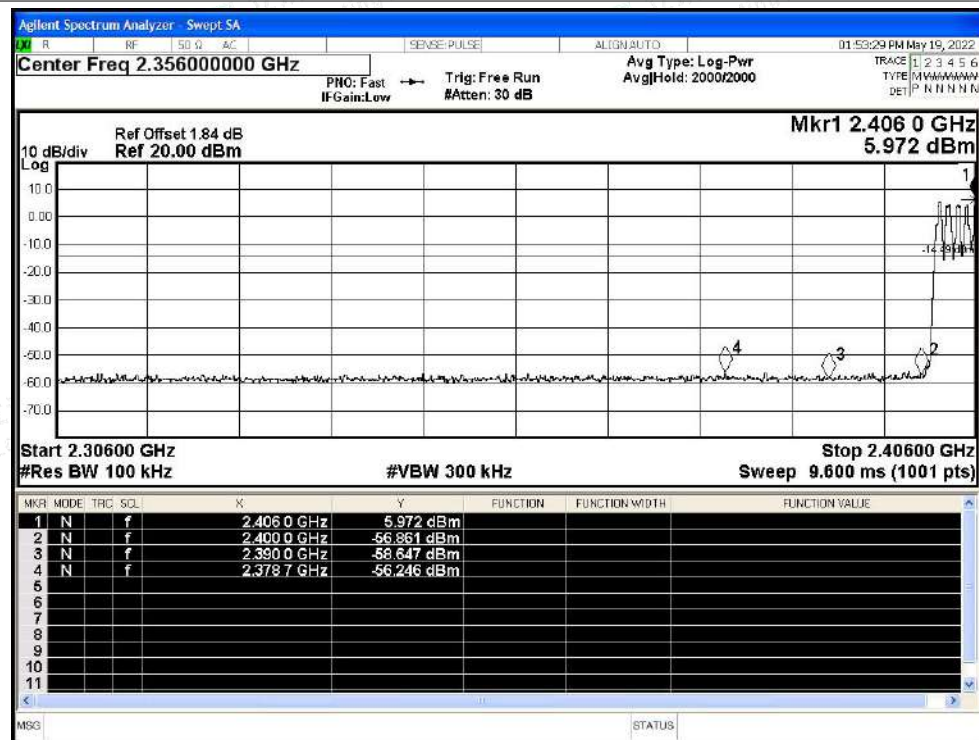


Test Graphs

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



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



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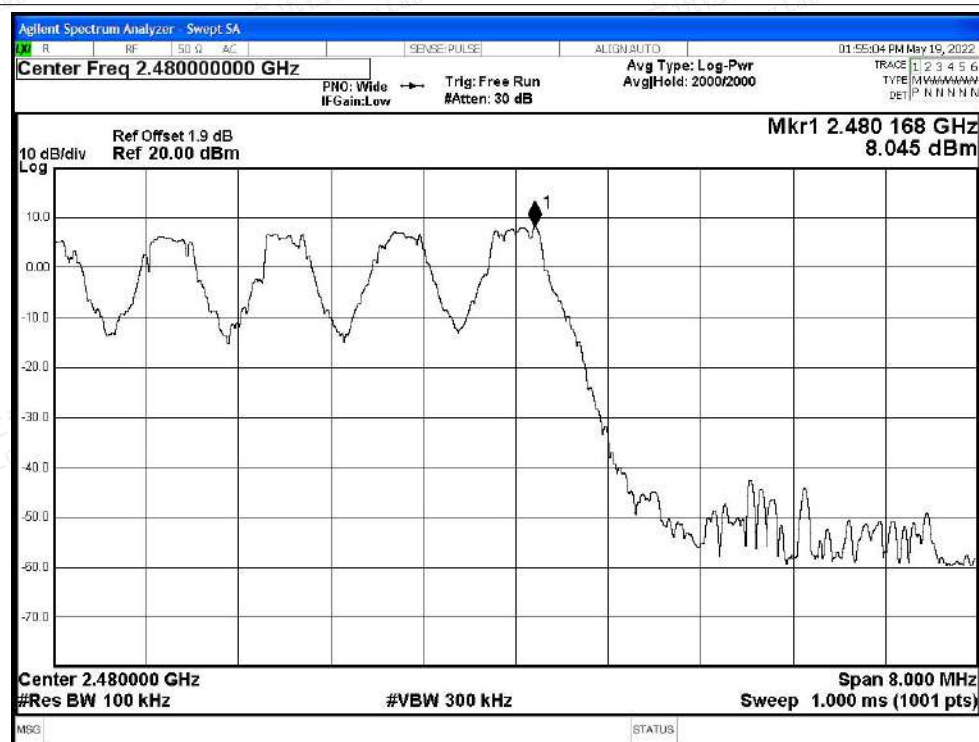
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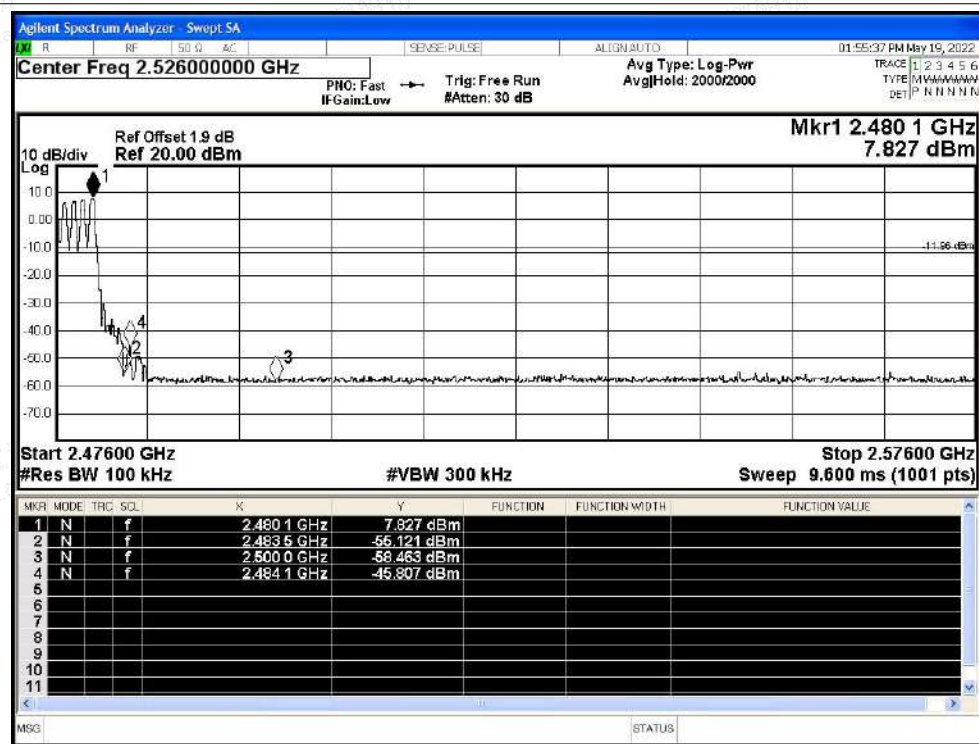
Scan code to check authenticity



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

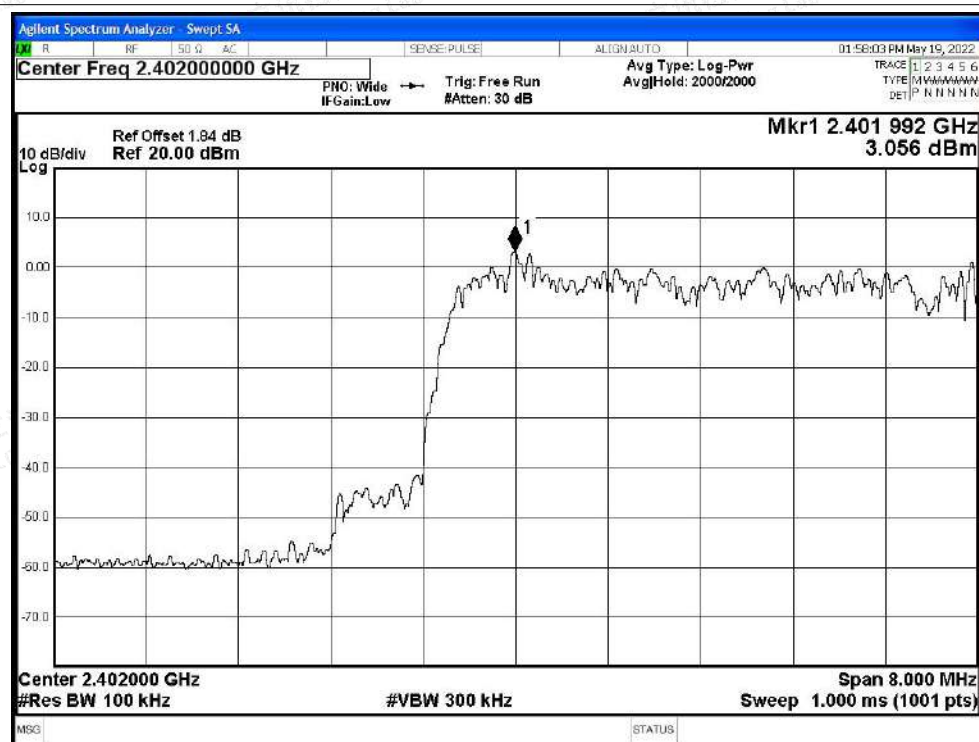


Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission

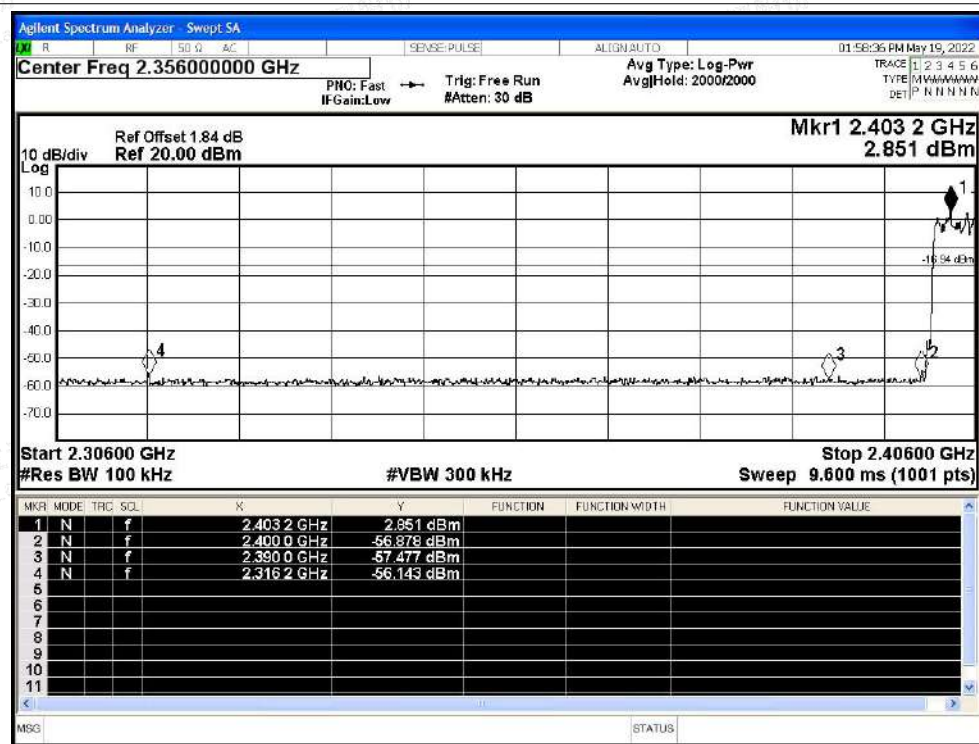




Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



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

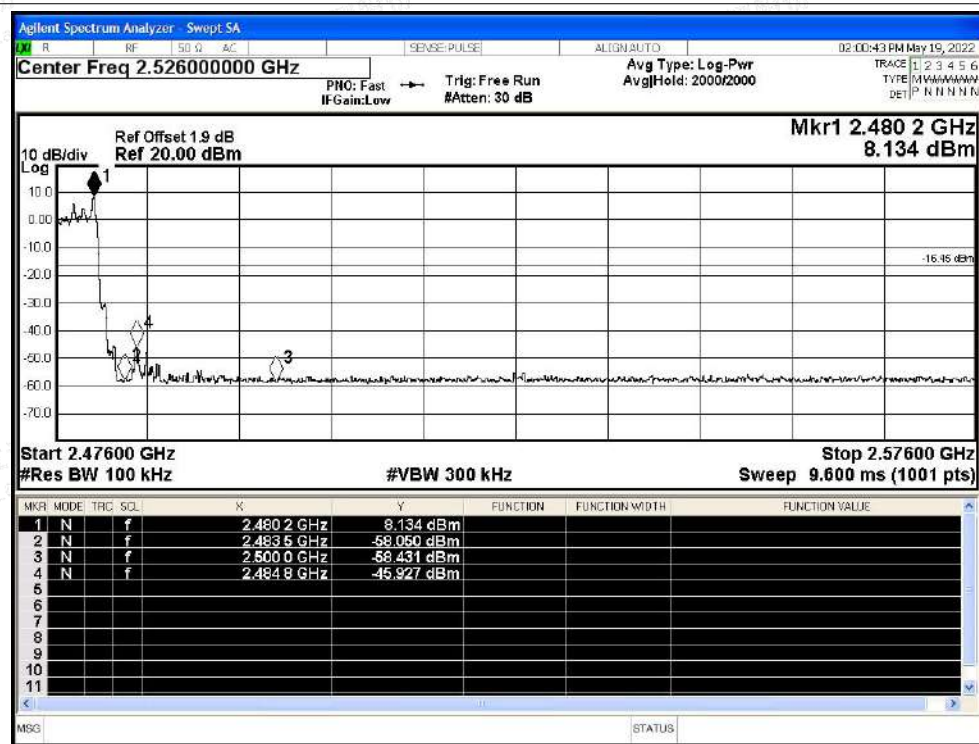




Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



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



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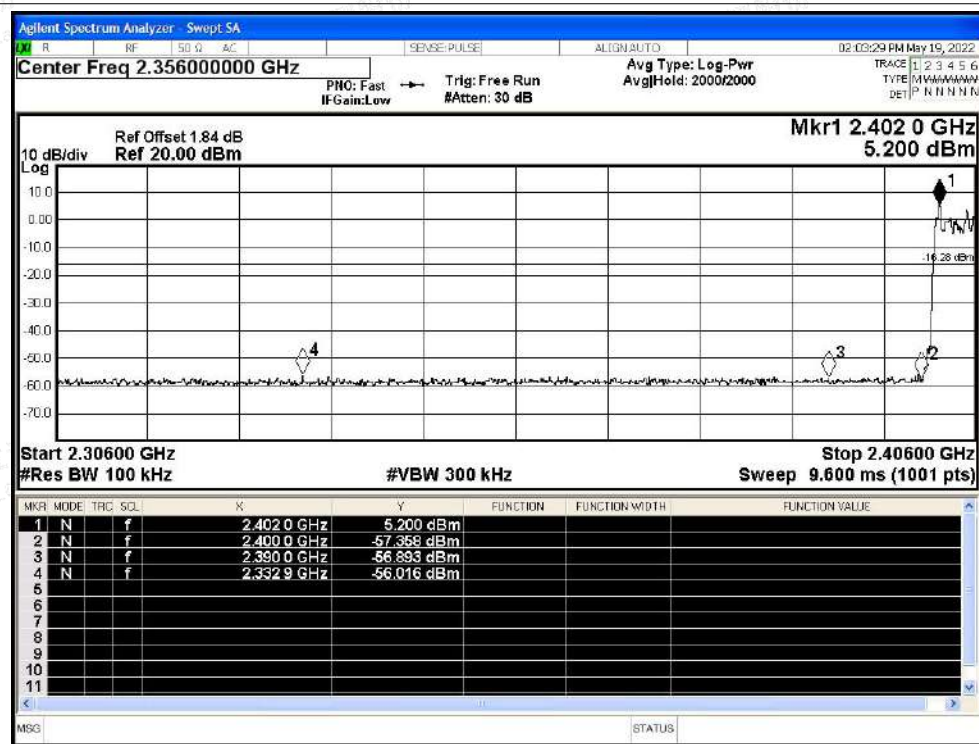
Scan code to check authenticity



Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref

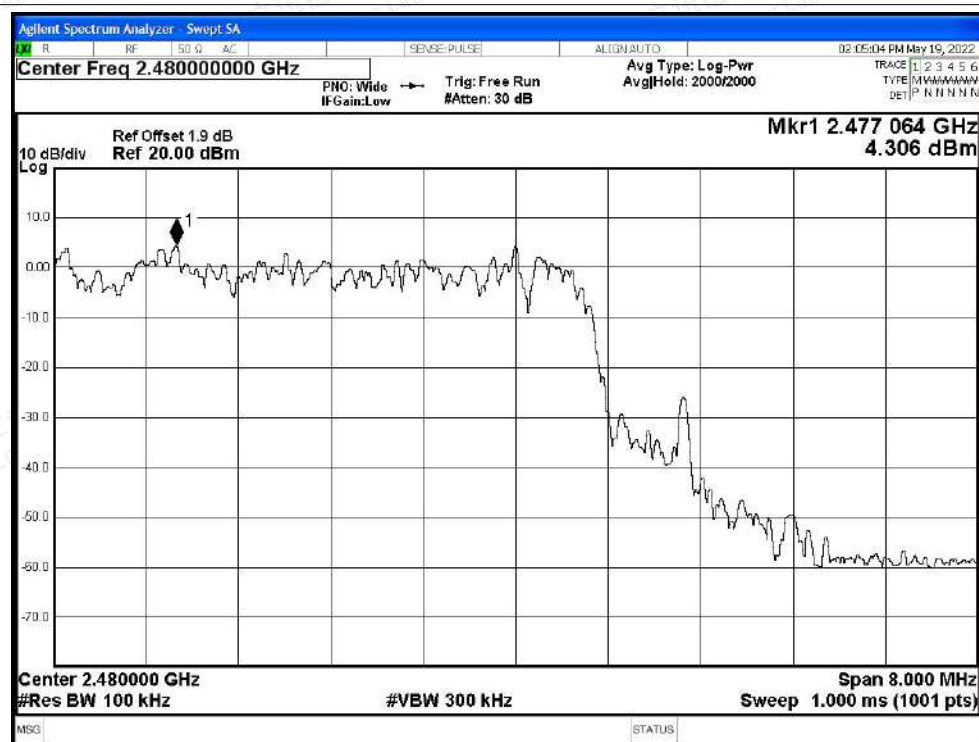


Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission

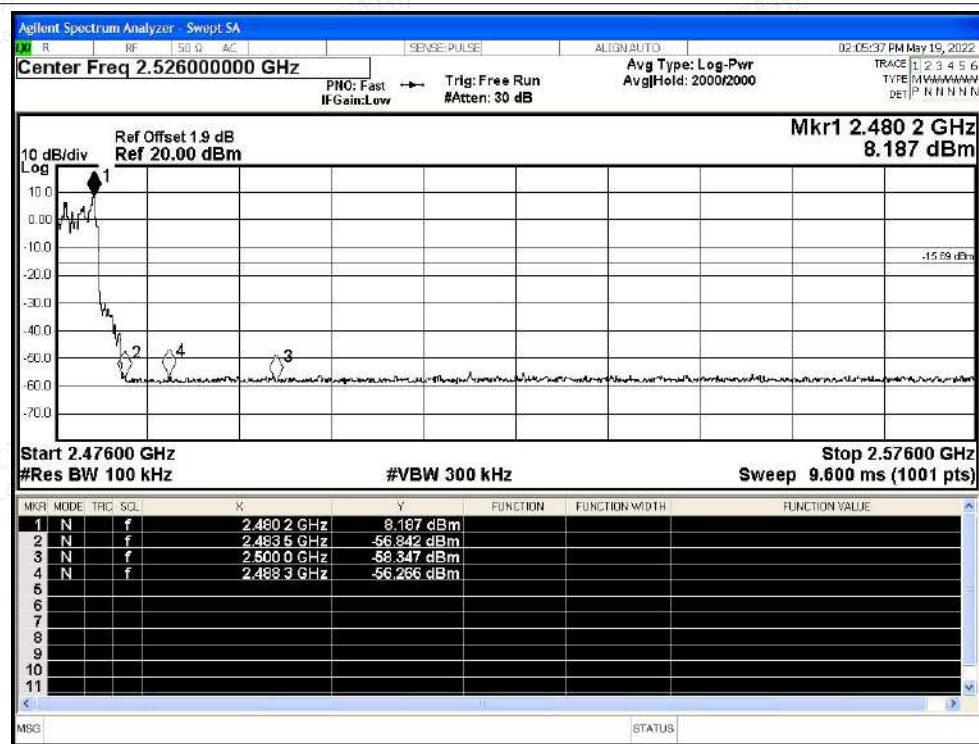




Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Emission





A.7 Conducted RF Spurious Emission

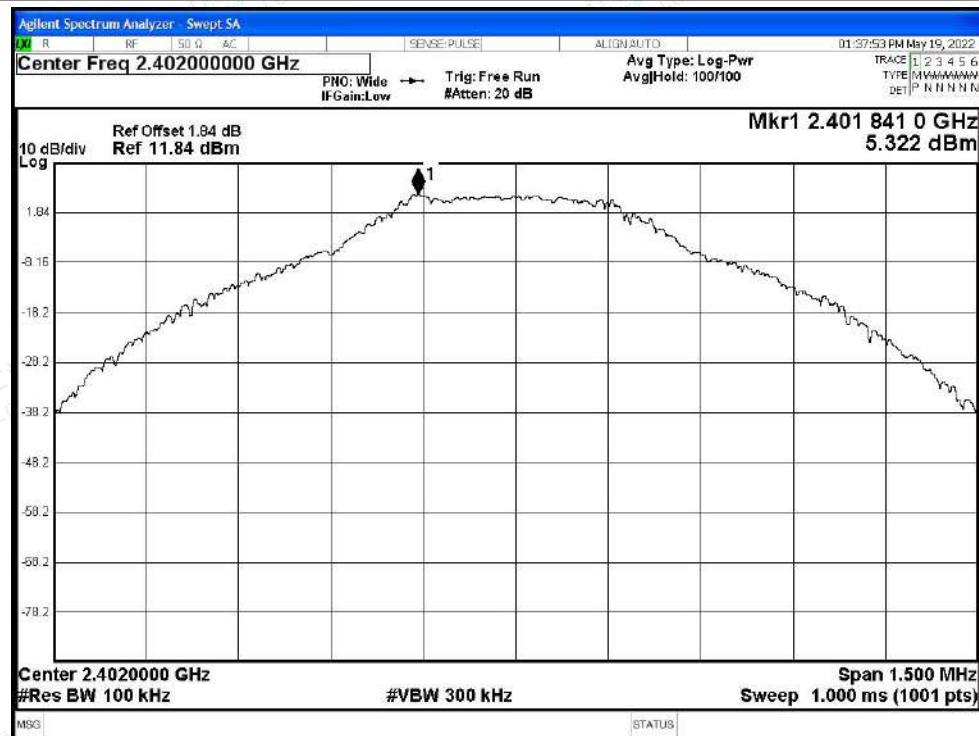
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-51.35	-20	Pass
NVNT	1-DH5	2441	Ant1	-39.13	-20	Pass
NVNT	1-DH5	2480	Ant1	-63.06	-20	Pass
NVNT	2-DH5	2402	Ant1	-58.83	-20	Pass
NVNT	2-DH5	2441	Ant1	-52.5	-20	Pass
NVNT	2-DH5	2480	Ant1	-62.93	-20	Pass
NVNT	3-DH5	2402	Ant1	-60.88	-20	Pass
NVNT	3-DH5	2441	Ant1	-61.1	-20	Pass
NVNT	3-DH5	2480	Ant1	-63.95	-20	Pass



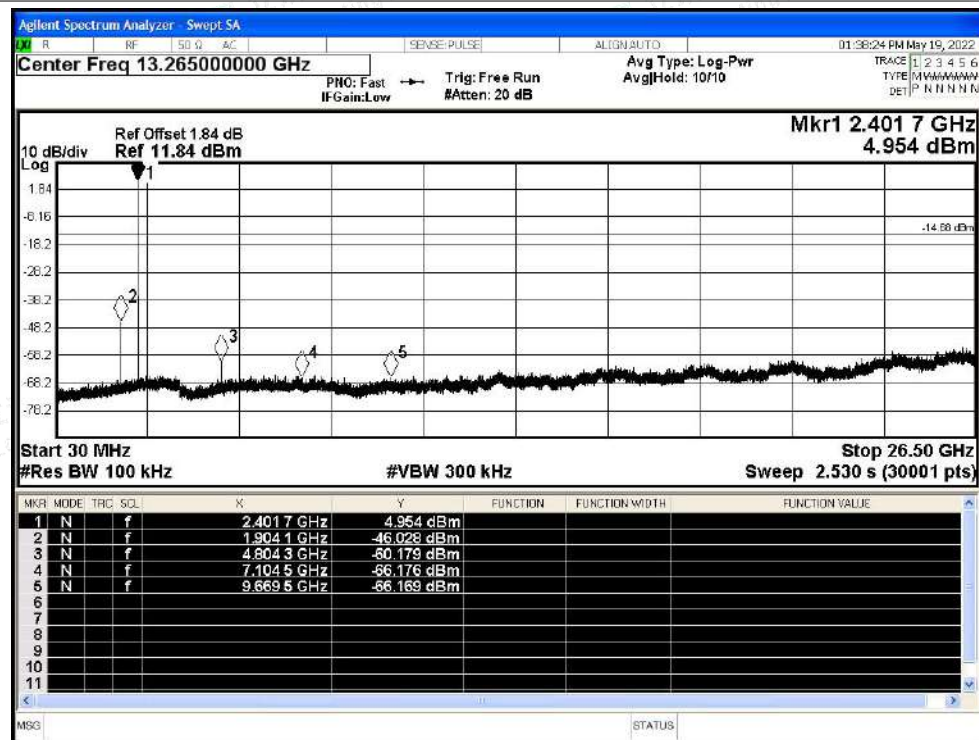


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

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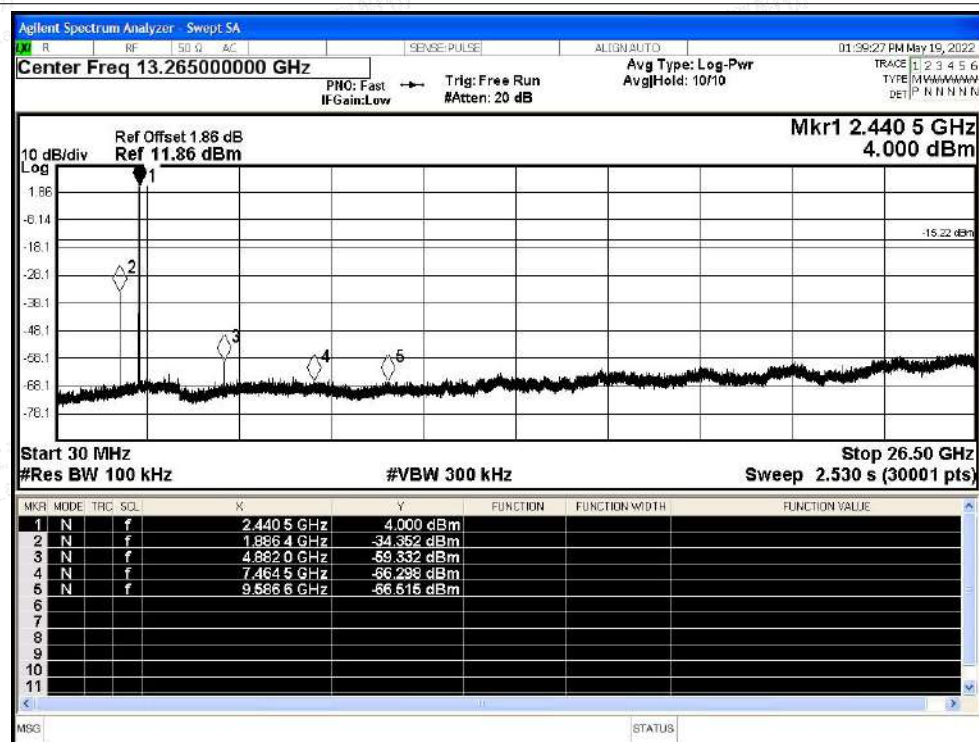
Scan code to check authenticity



Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

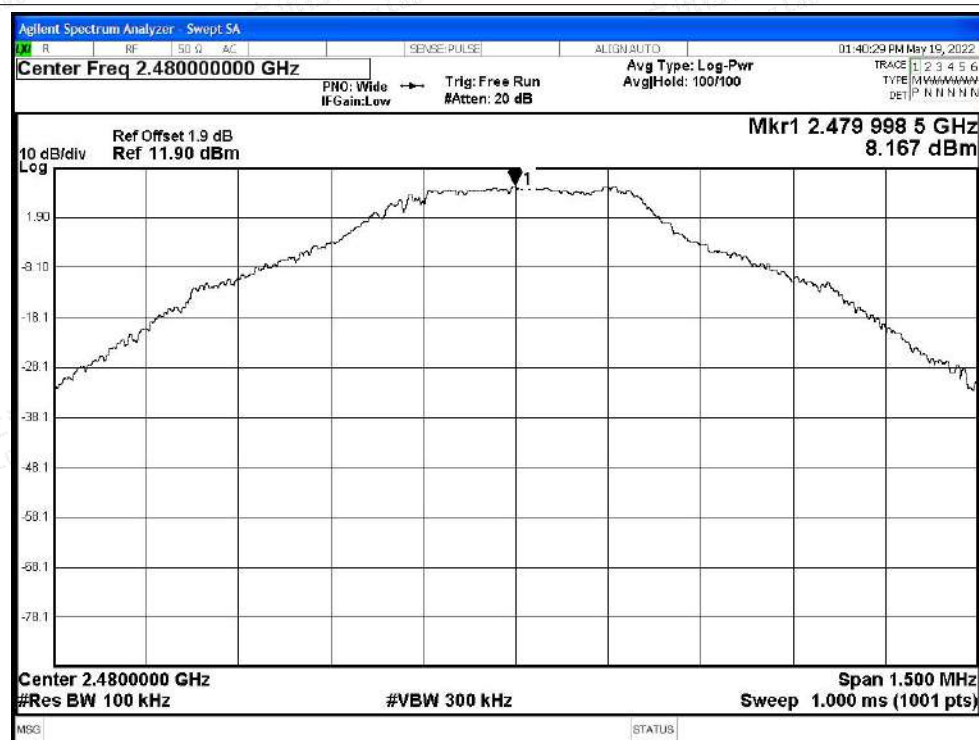


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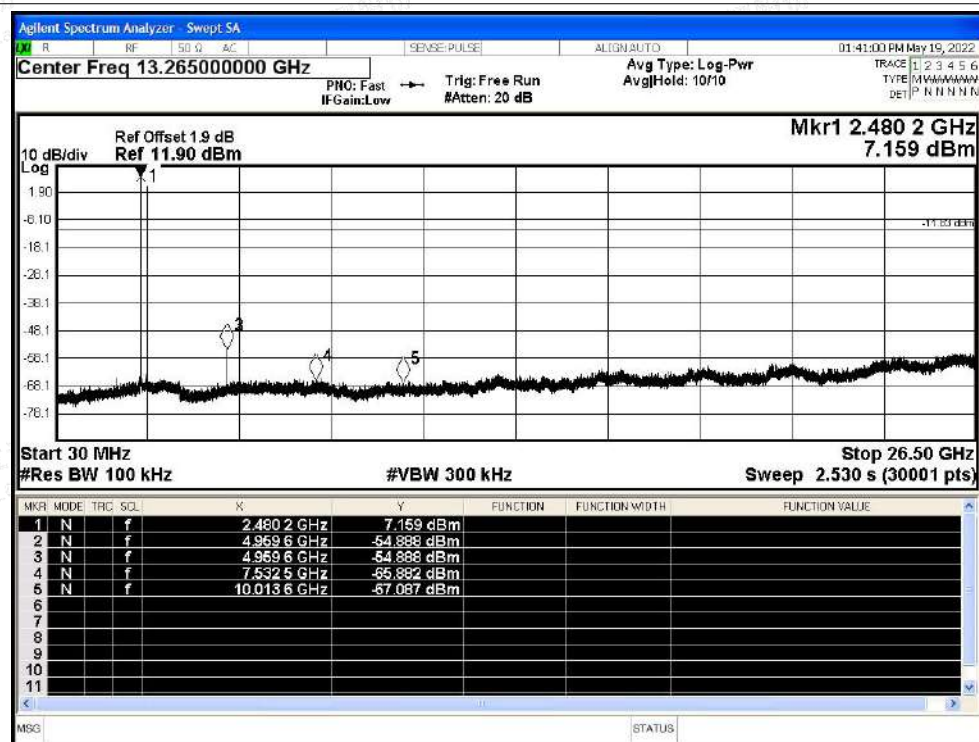




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

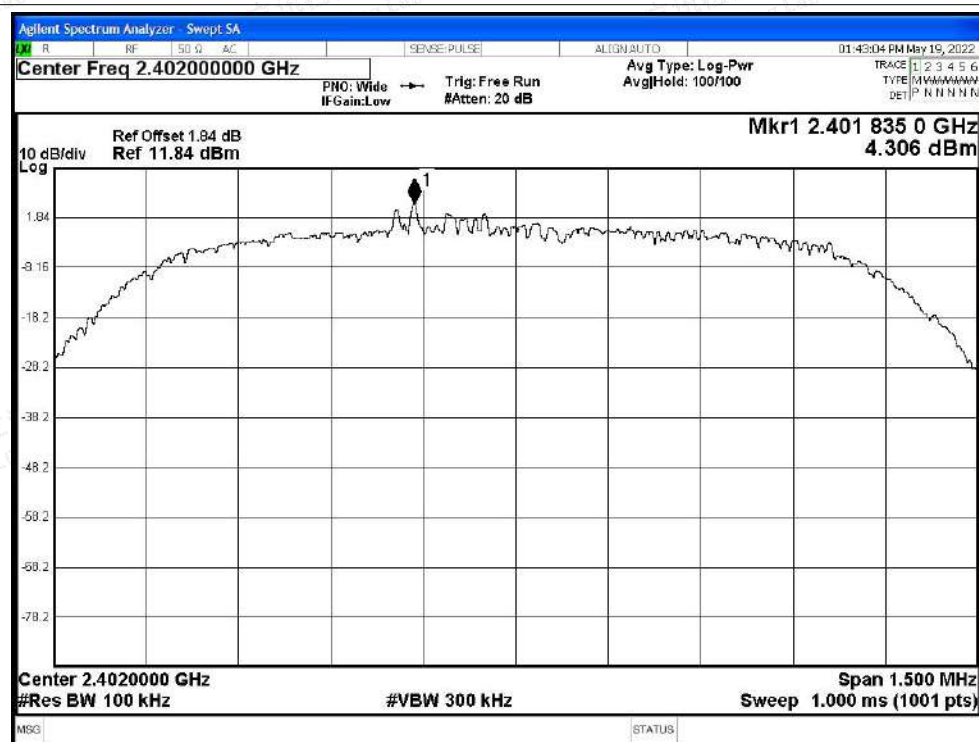


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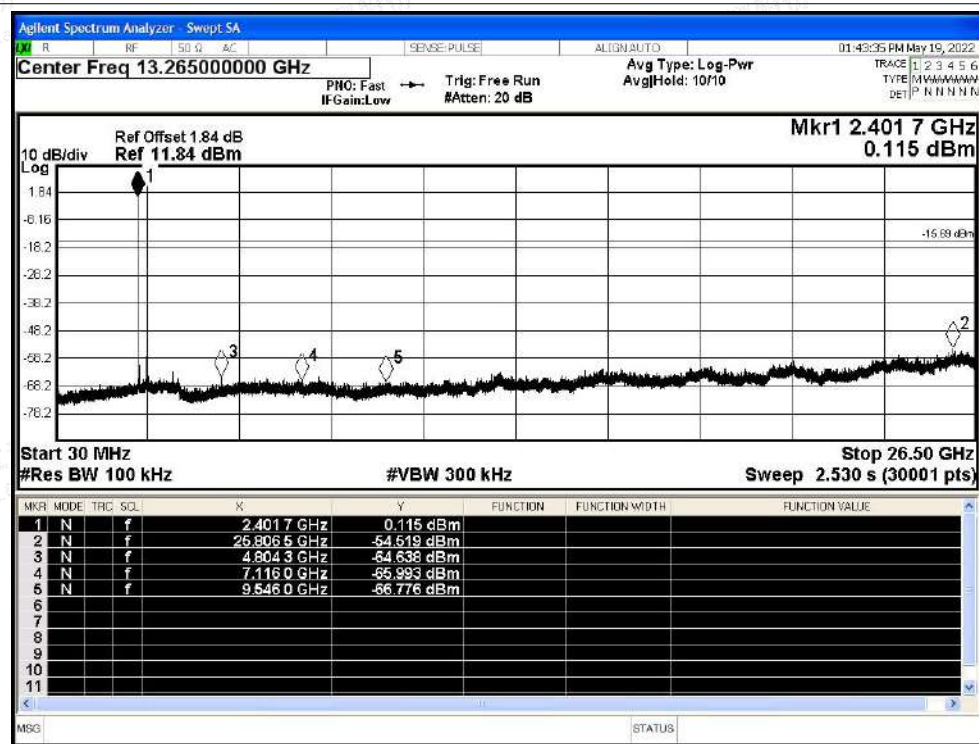




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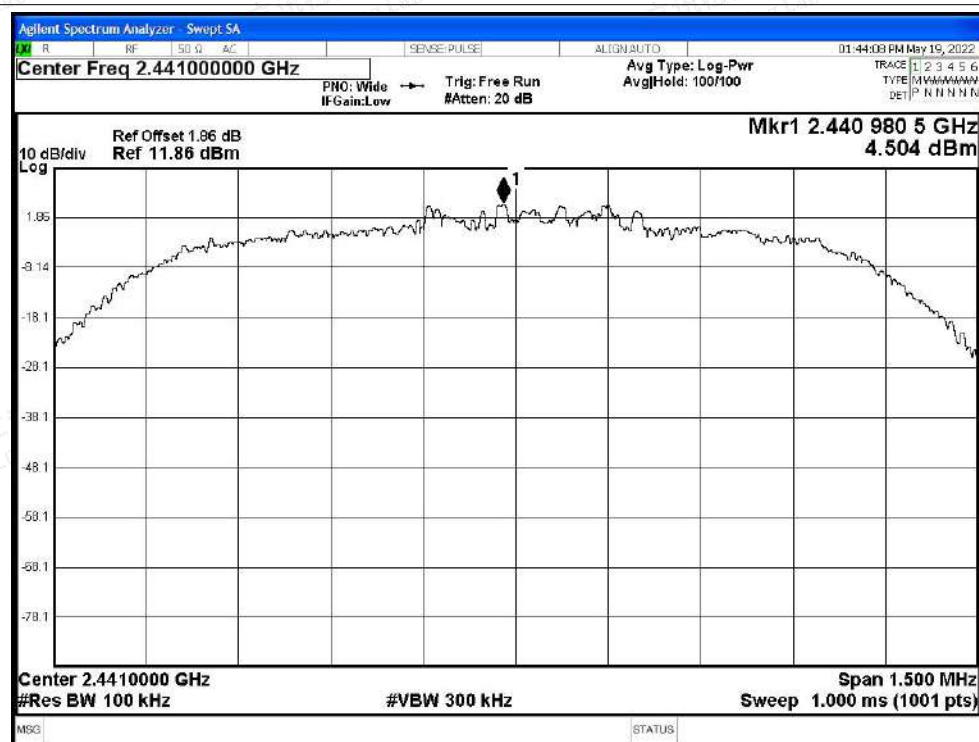


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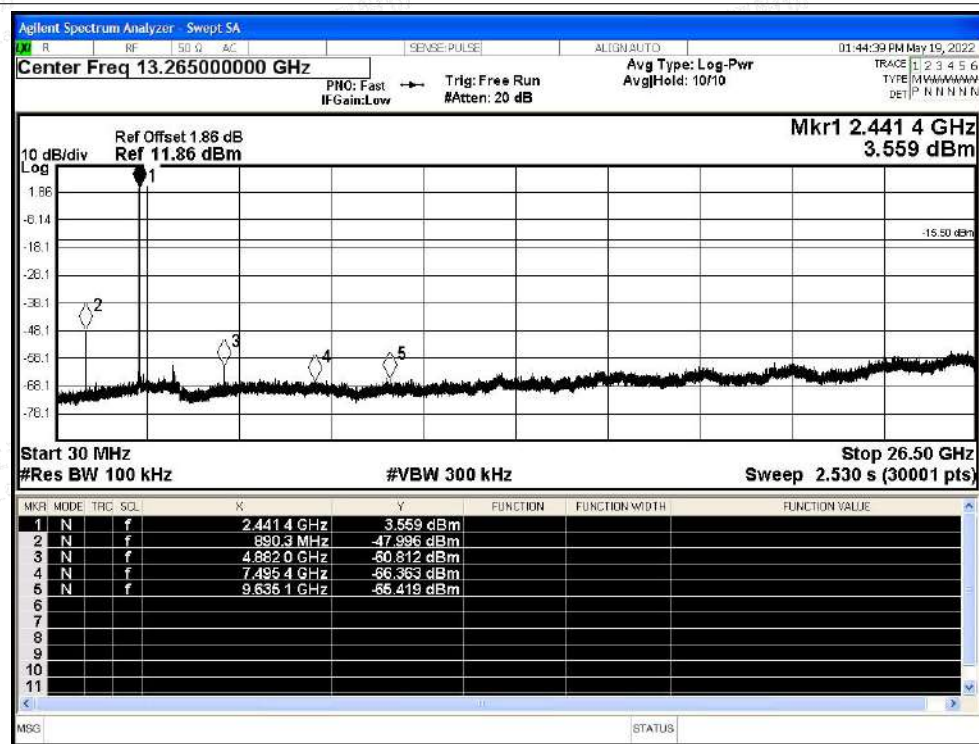




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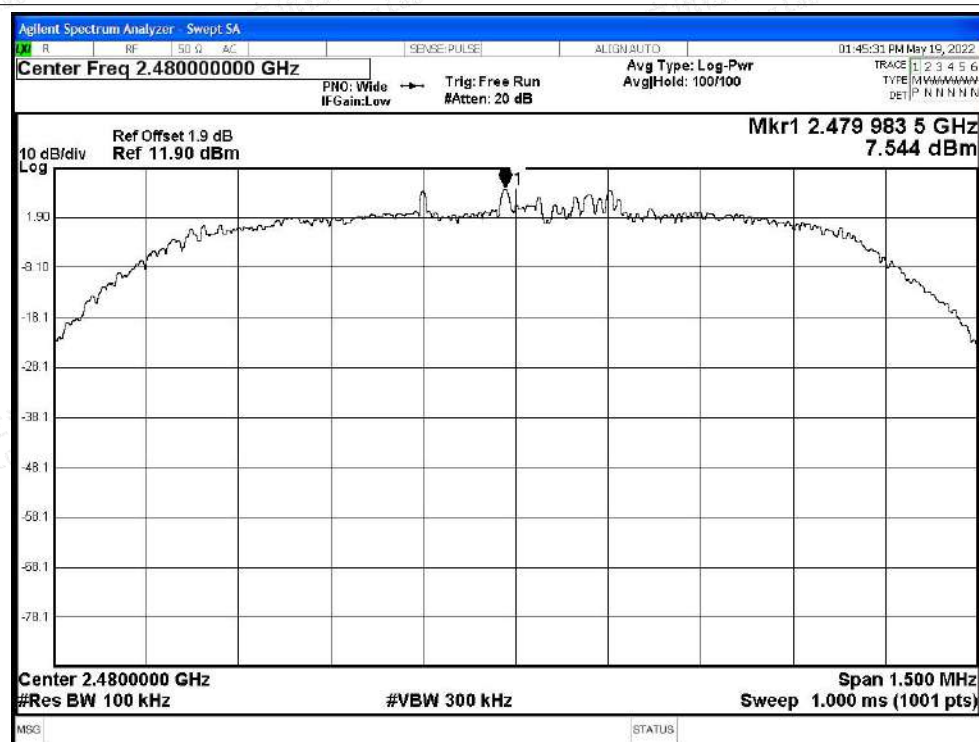


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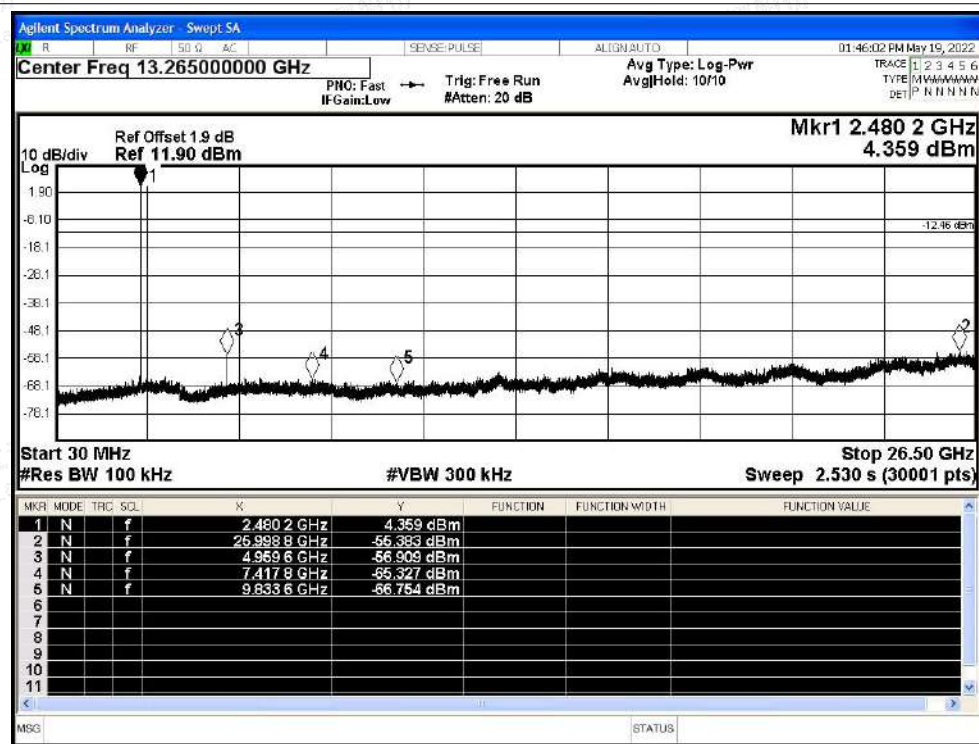




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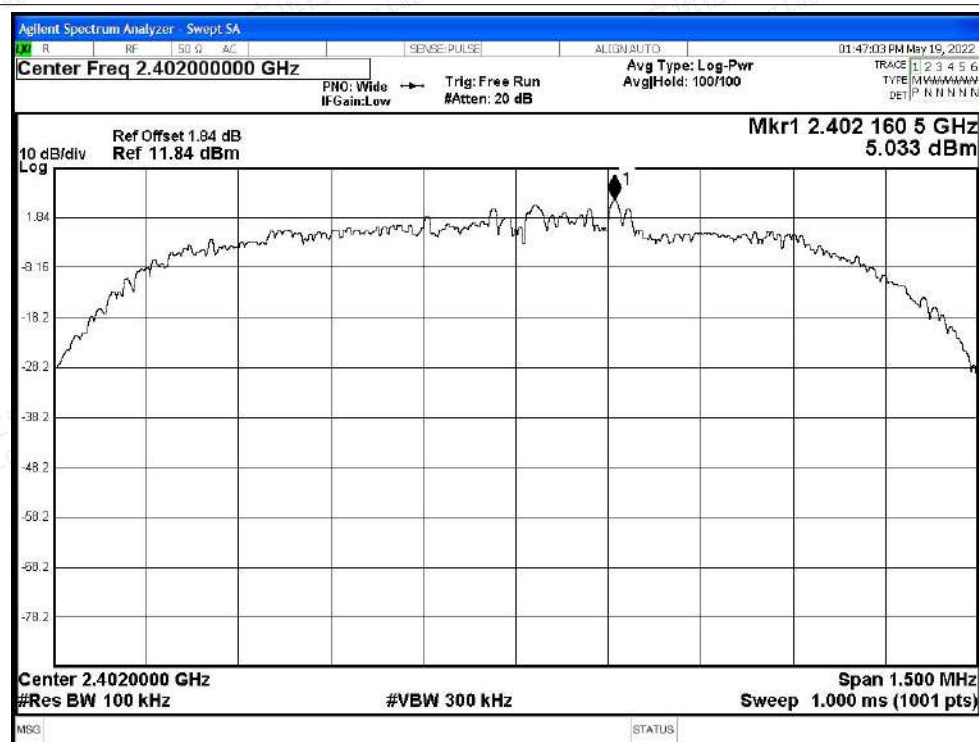


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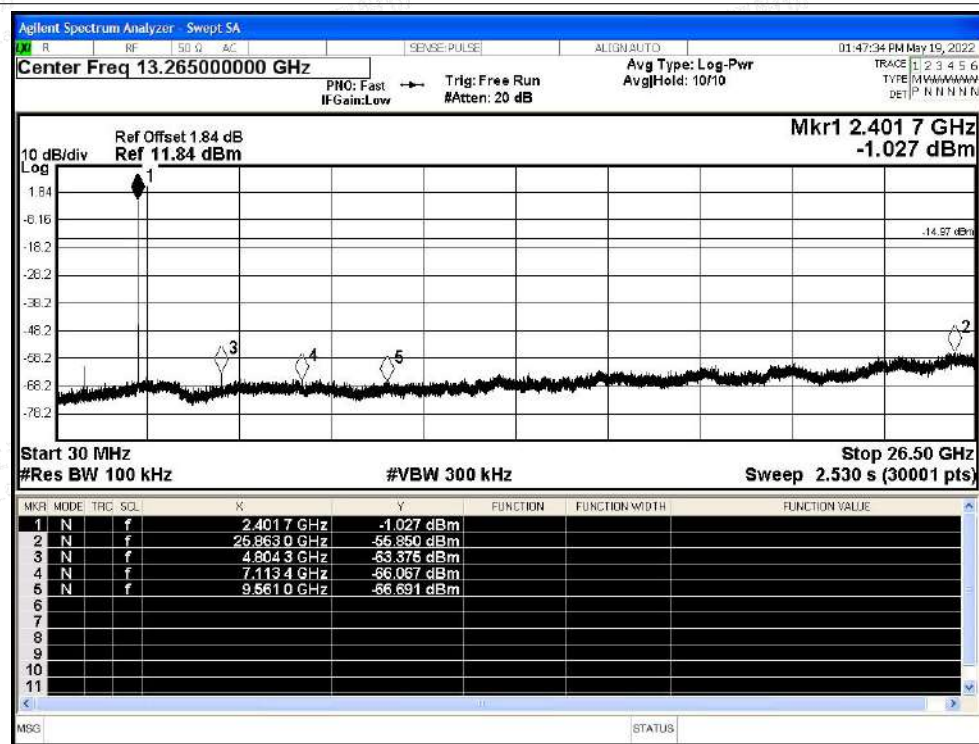




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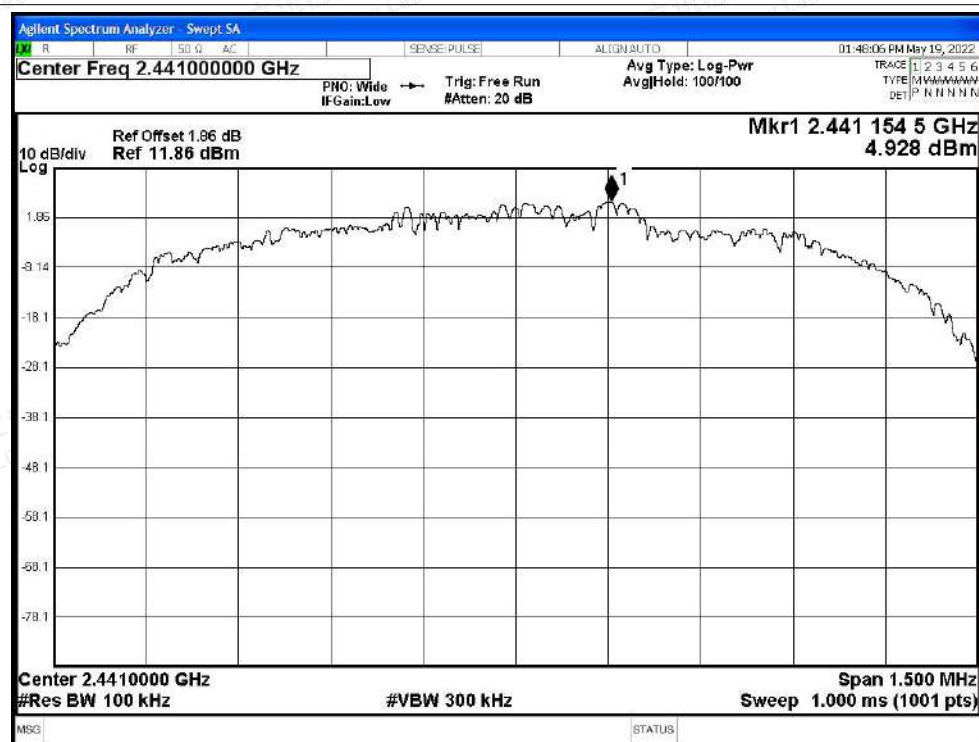


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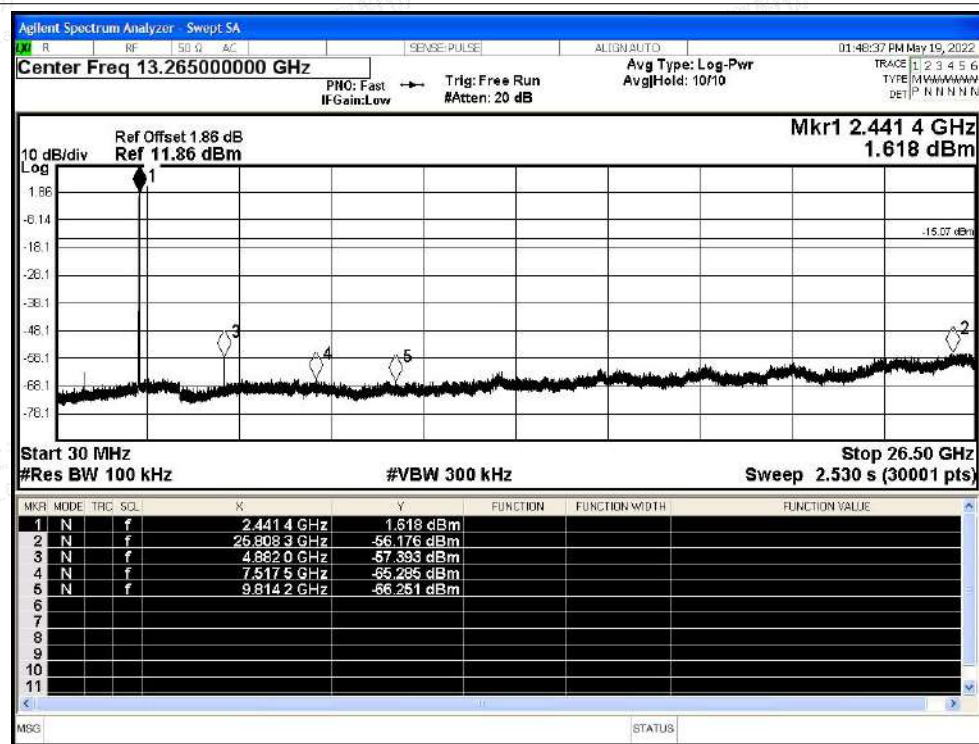




Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission

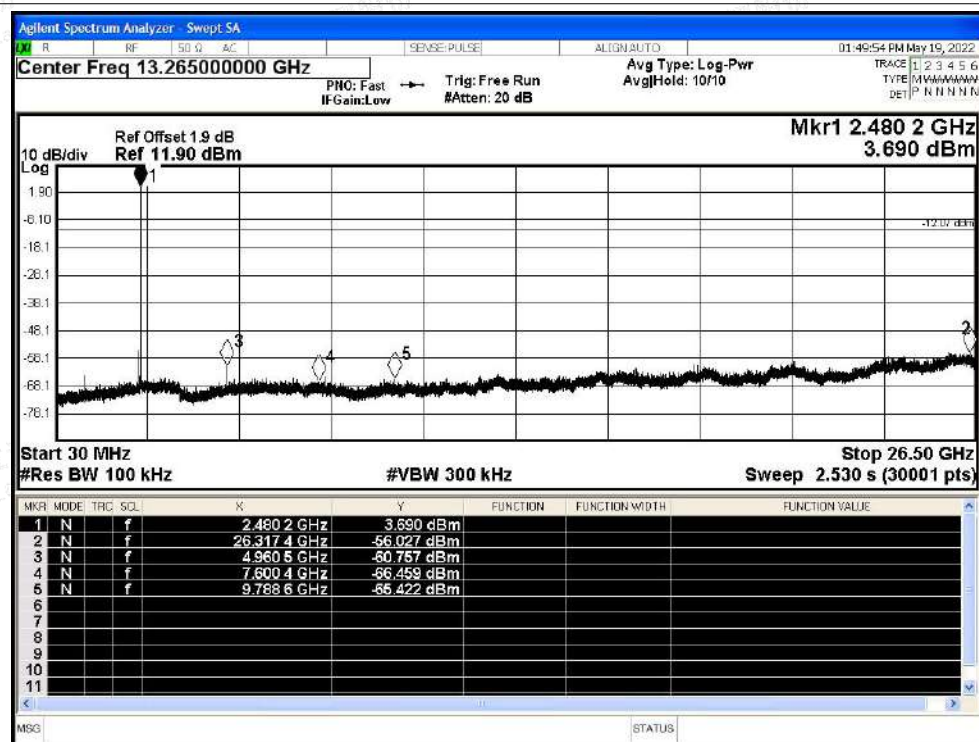




Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission





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	-50.98	2	46.28	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-60.75	2	36.51	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2319.408	-47.66	2	49.6	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2386.416	-59.83	2	37.43	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-50.51	2	46.75	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	-47.71	2	49.55	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-58.07	2	39.19	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2484.376	-45.84	2	51.42	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.512	-58.07	2	39.19	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-50.14	2	47.12	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-59.95	2	37.31	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-51.8	2	45.46	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-60.5	2	36.76	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2347.824	-47.78	2	49.48	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2386.992	-60	2	37.26	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-51.55	2	45.71	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-60.13	2	37.13	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-46.96	2	50.3	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-57.21	2	40.05	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.536	-44.77	2	52.49	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.512	-57.21	2	40.05	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-50.42	2	46.84	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-59.95	2	37.31	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-51.05	2	46.21	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-60.6	2	36.66	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2381.232	-47.59	2	49.67	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2389.584	-59.99	2	37.27	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-50.72	2	46.54	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-60.09	2	37.17	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-45.2	2	52.06	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-56.96	2	40.3	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.512	-45.2	2	52.06	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.512	-56.96	2	40.3	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-50.82	2	46.44	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-59.77	2	37.49	Average	54	Pass

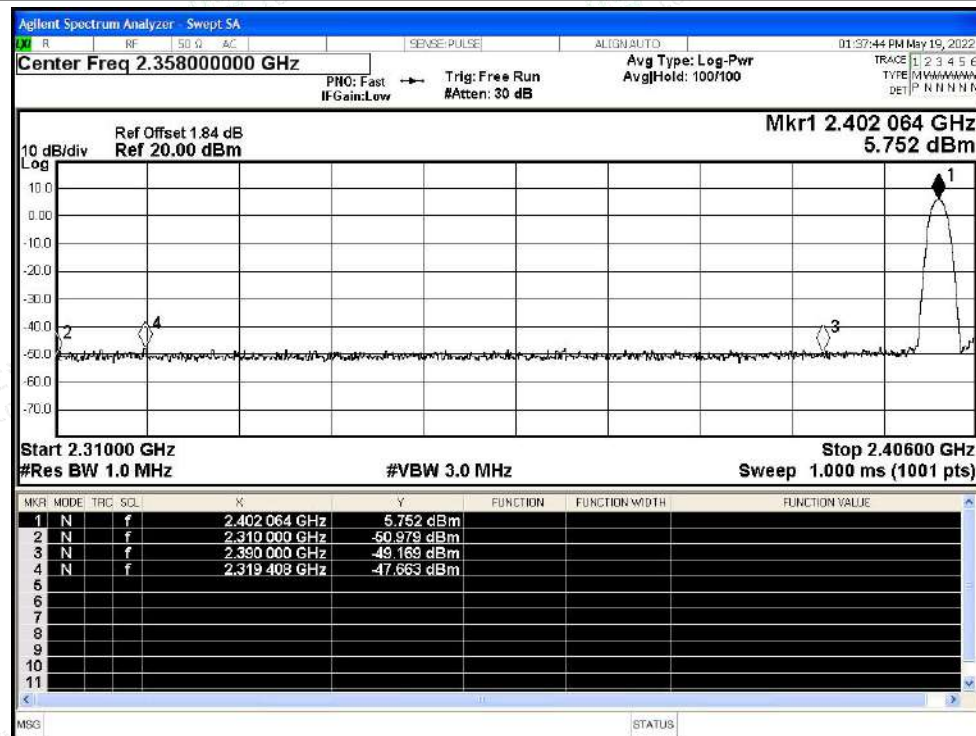


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Scan code to check authenticity

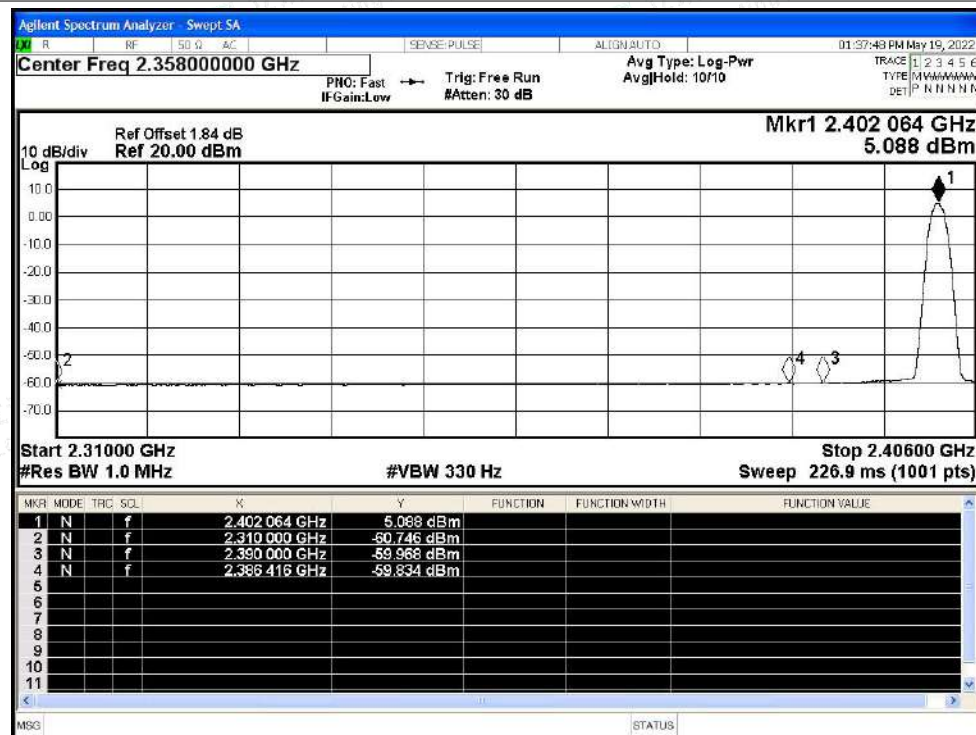


Test Graphs

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

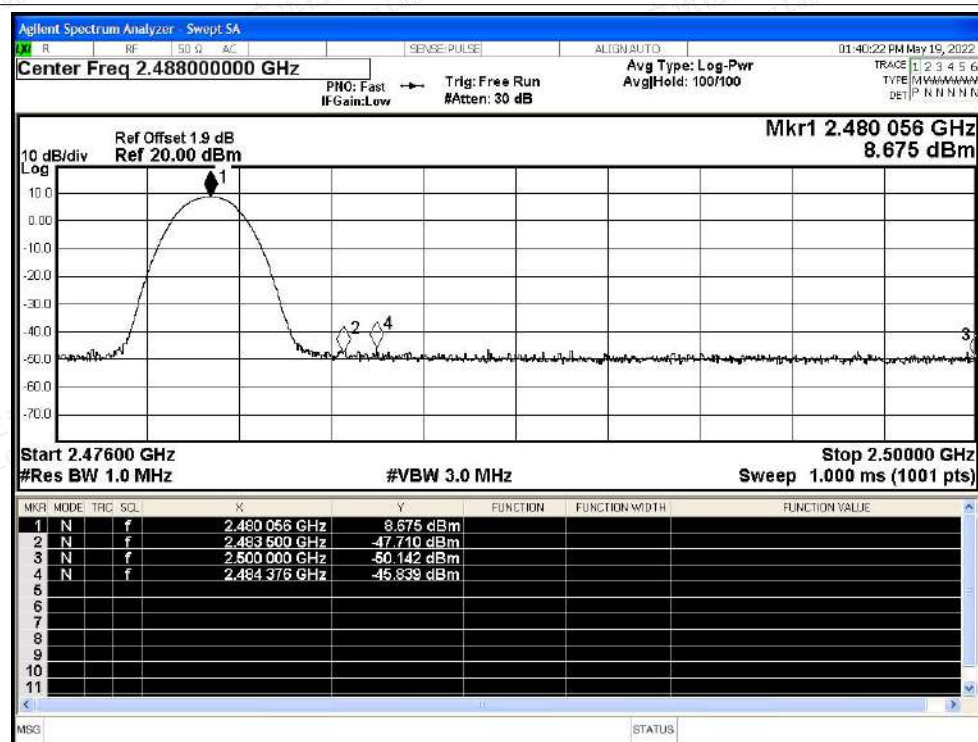


Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

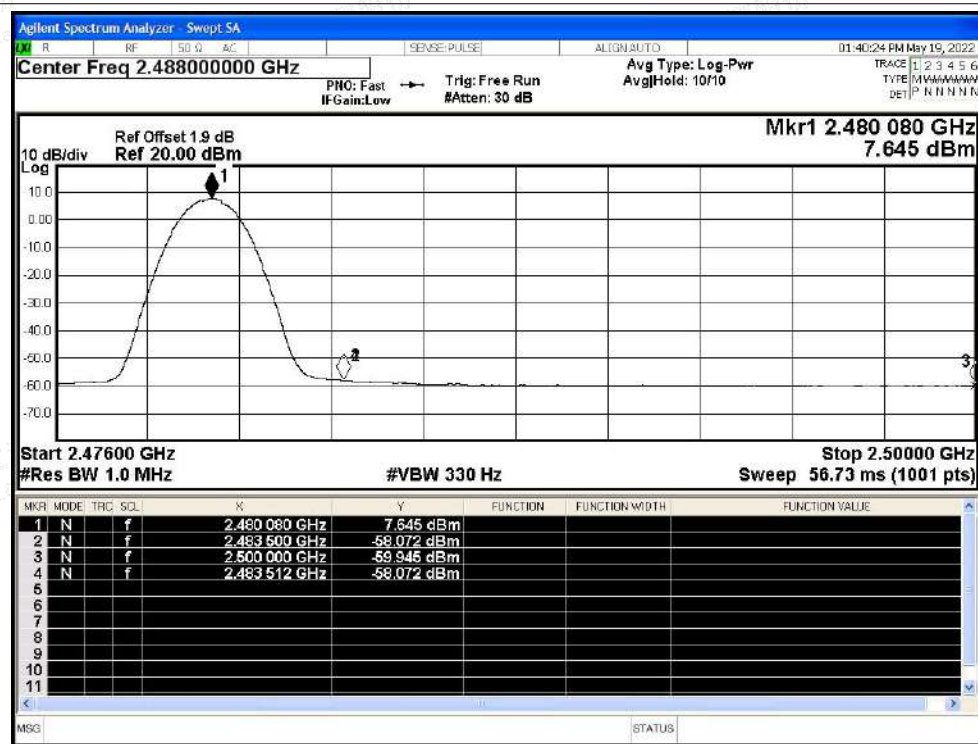




Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak

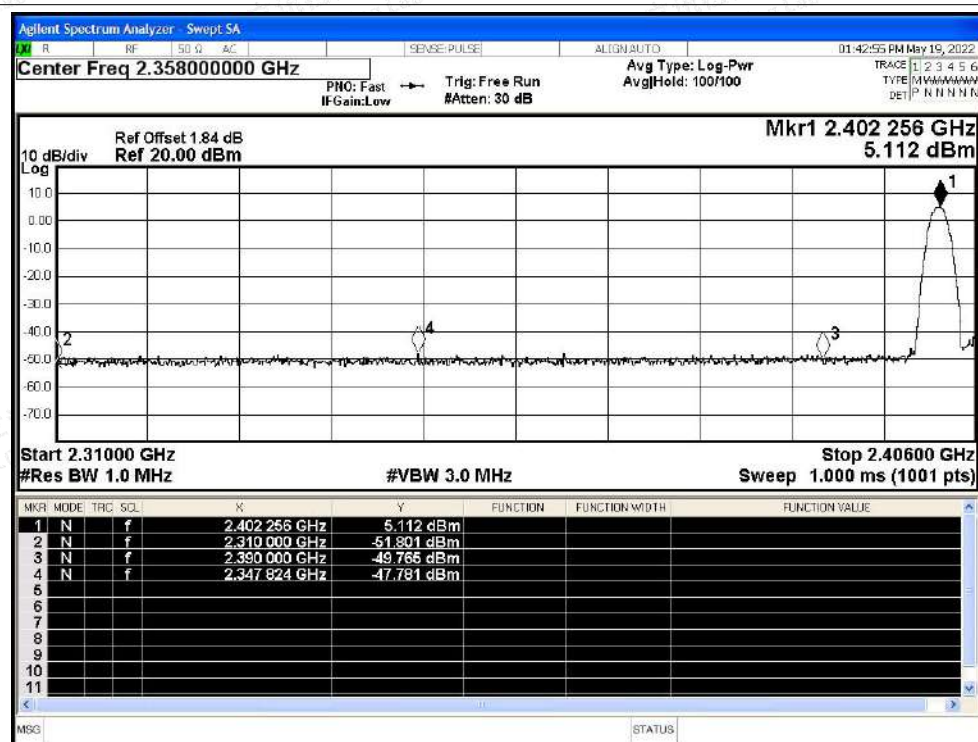


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

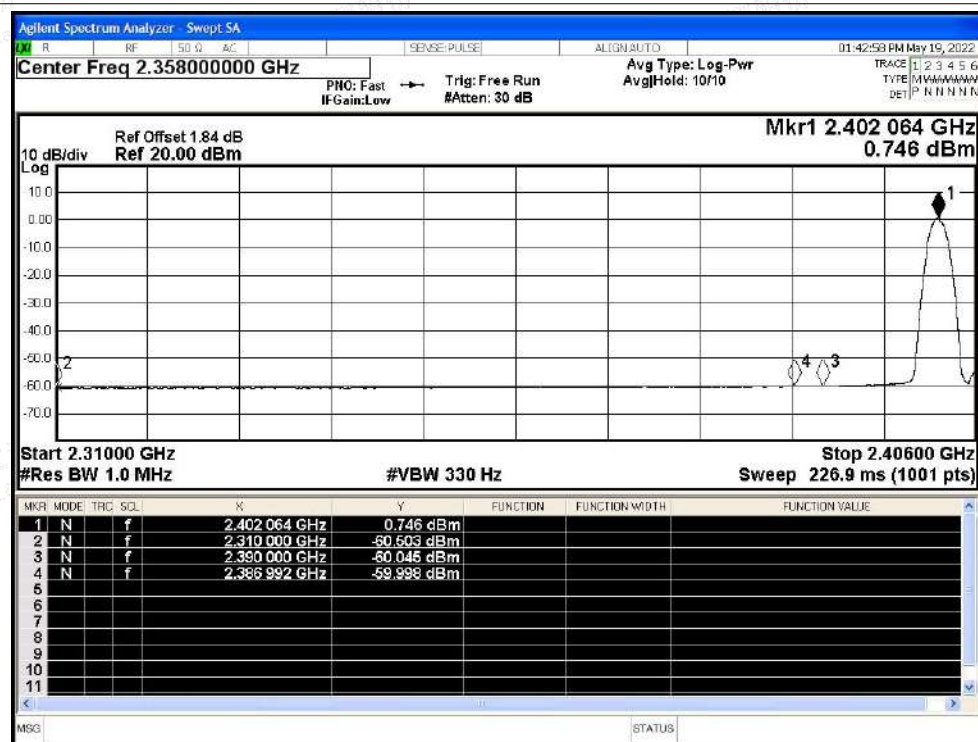




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak

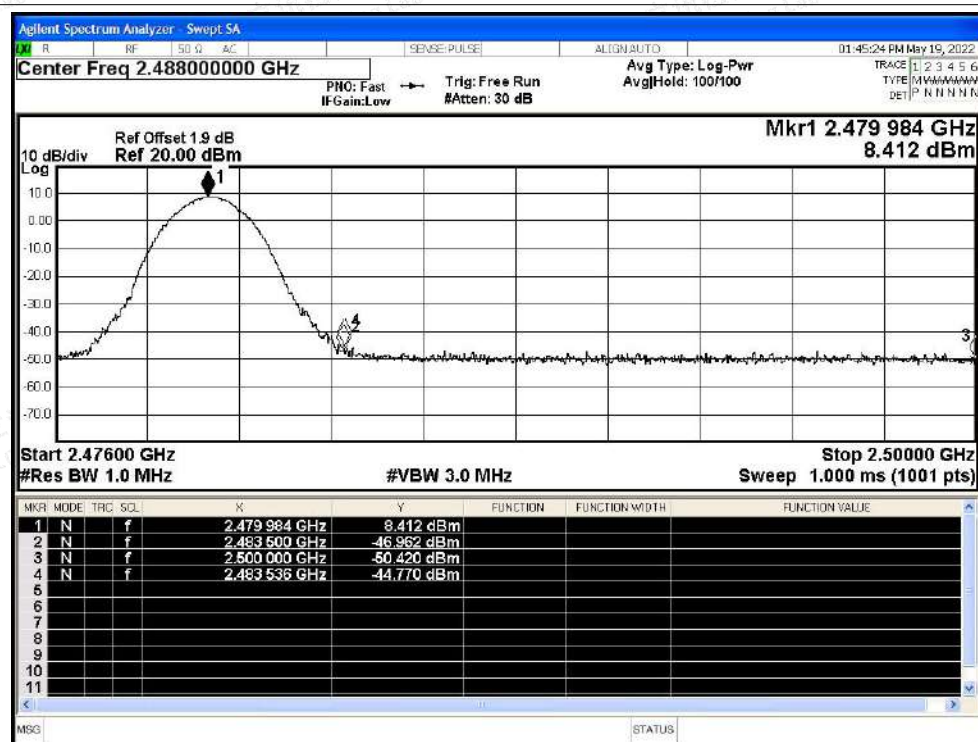


Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average

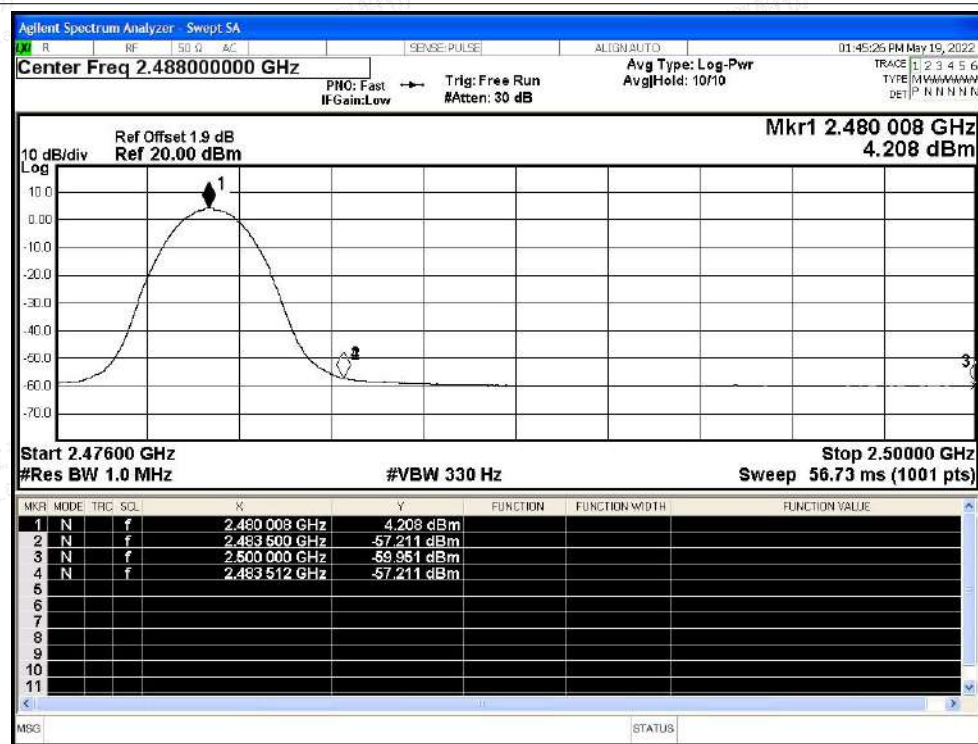




Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak

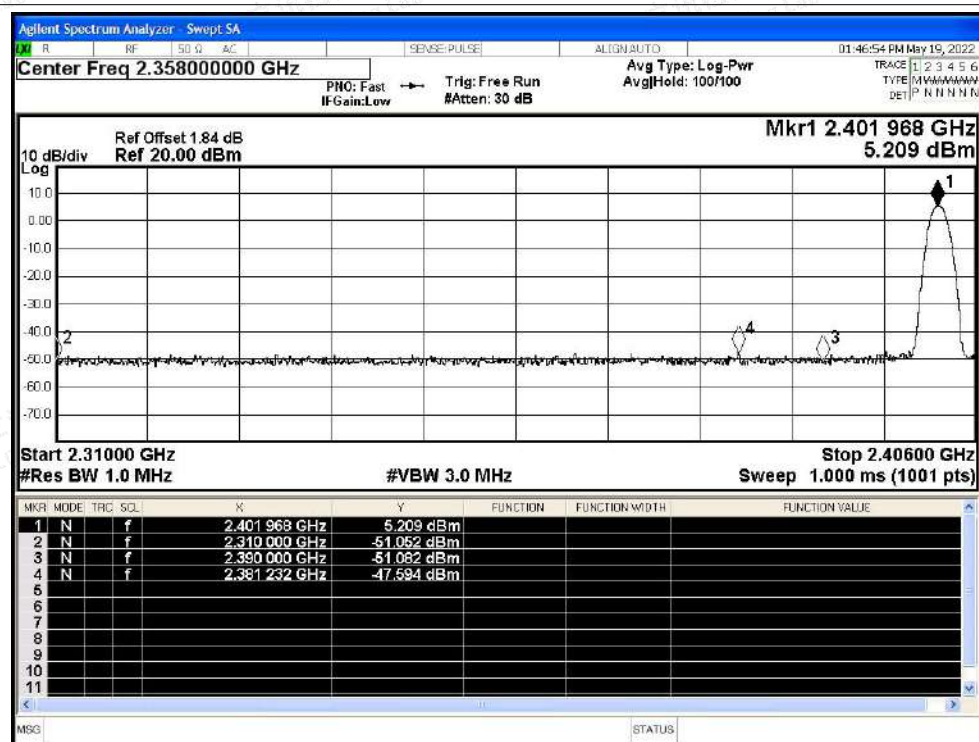


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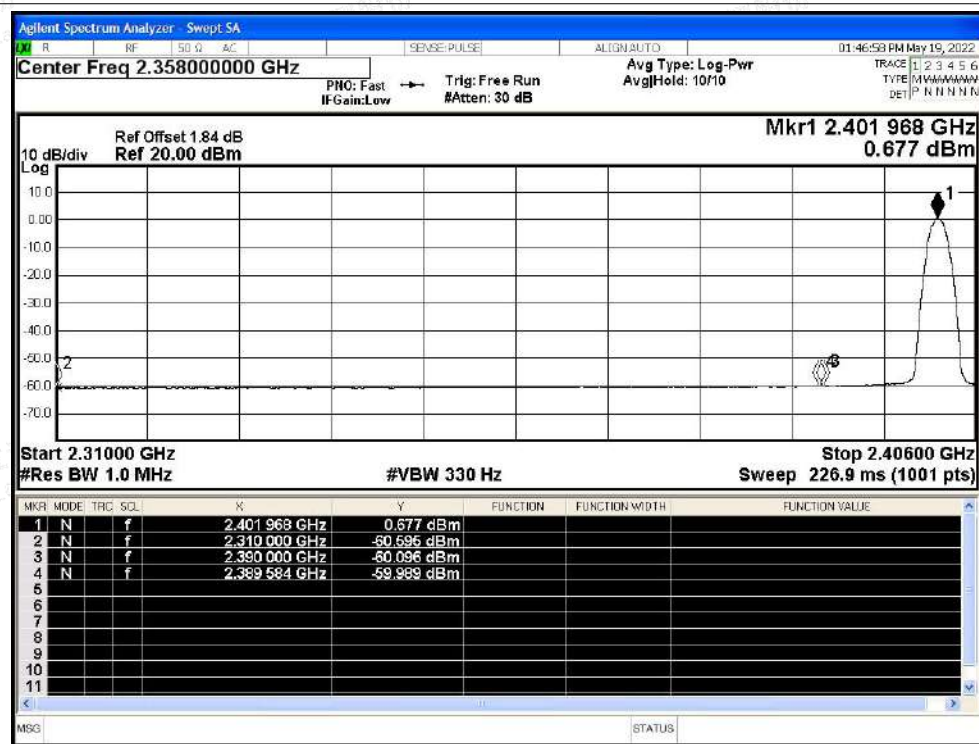




Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak

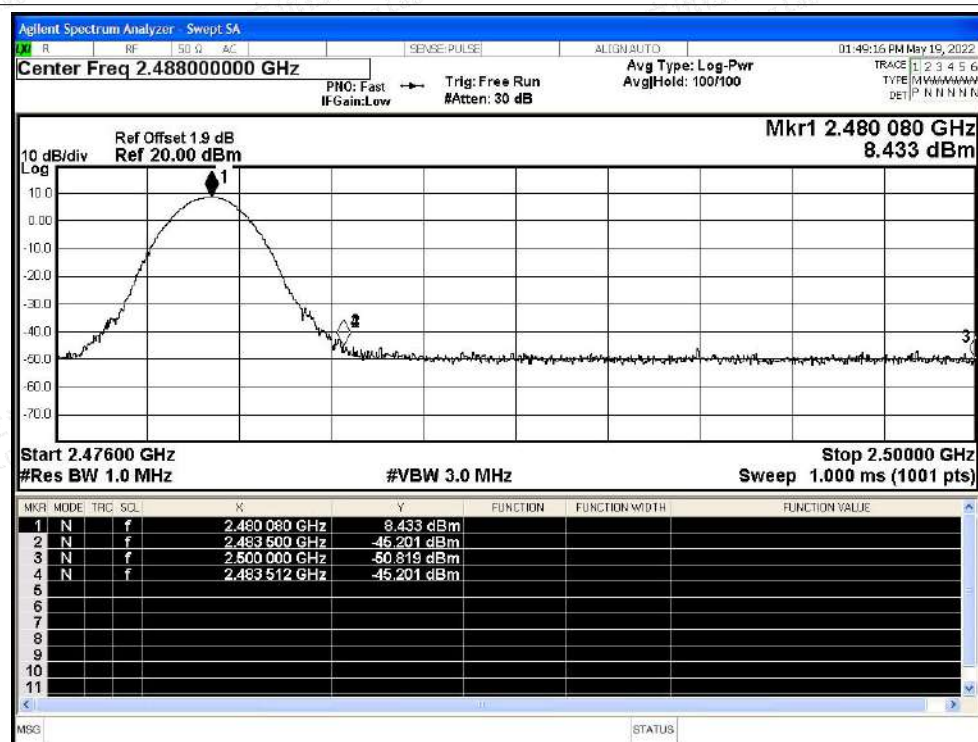


Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Average





Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Average

