



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Bluetooth Emitter

Test Model: YCQ-SC

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	 Joker Hu
Supervised by:	 Li Huan





A.1 -20dB Bandwidth

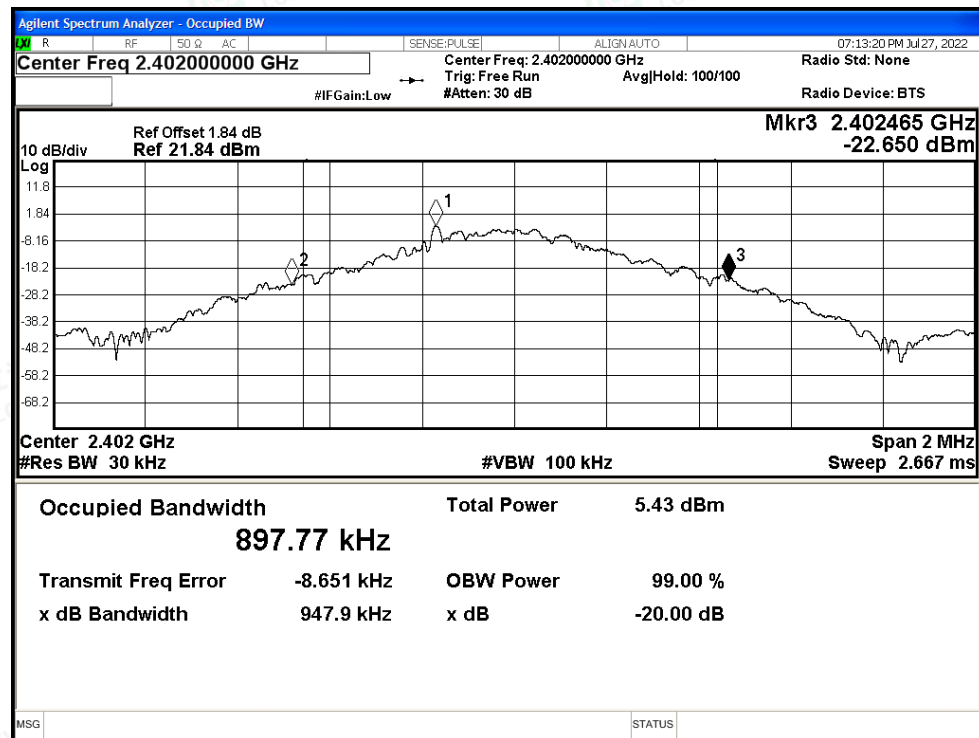
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.948	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.965	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.958	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.272	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.276	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.275	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.296	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.29	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.311	N/A	Pass



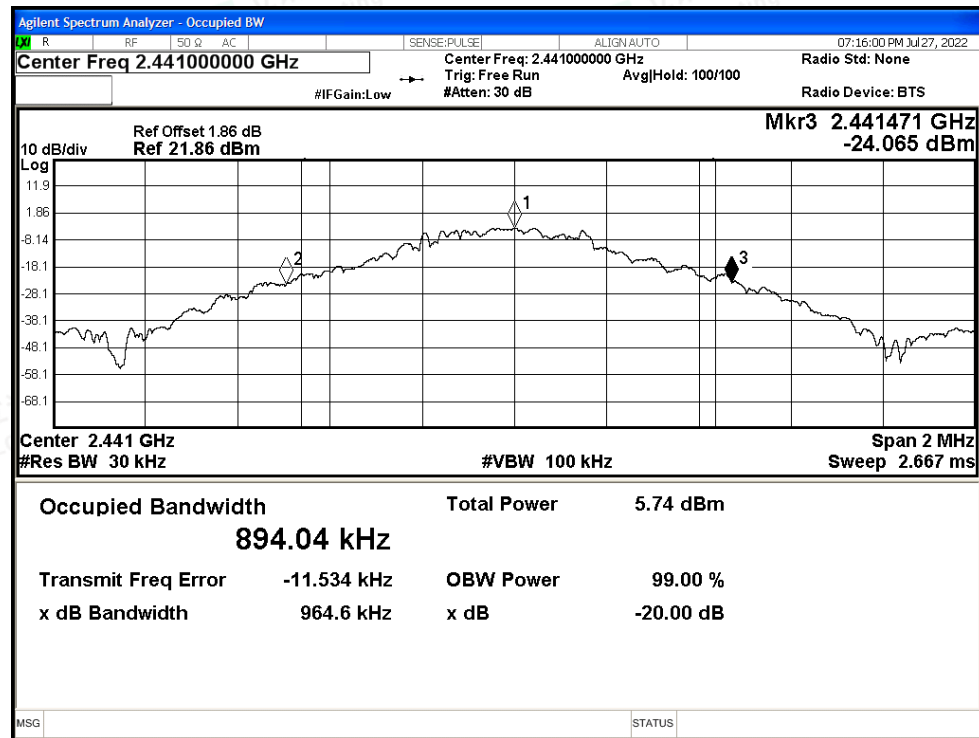


Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

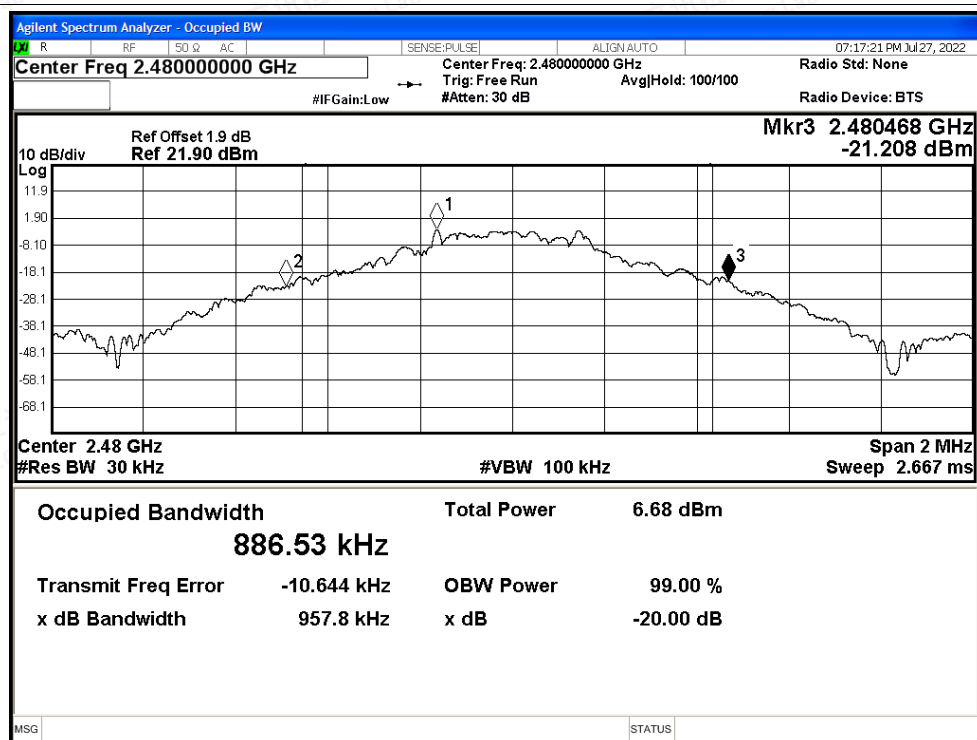


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

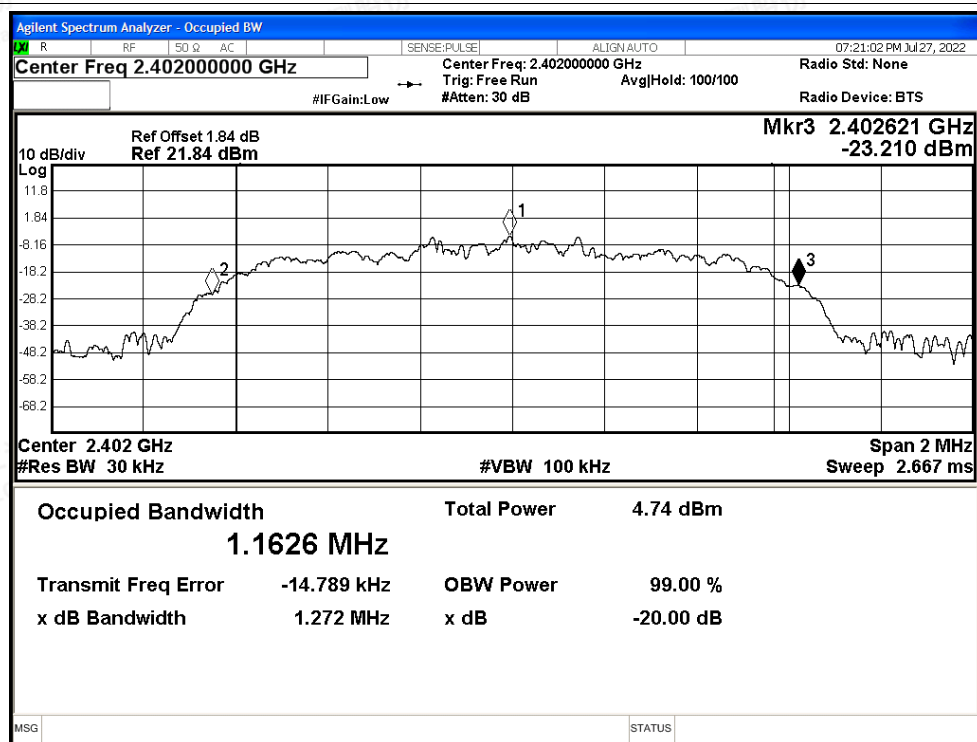




-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



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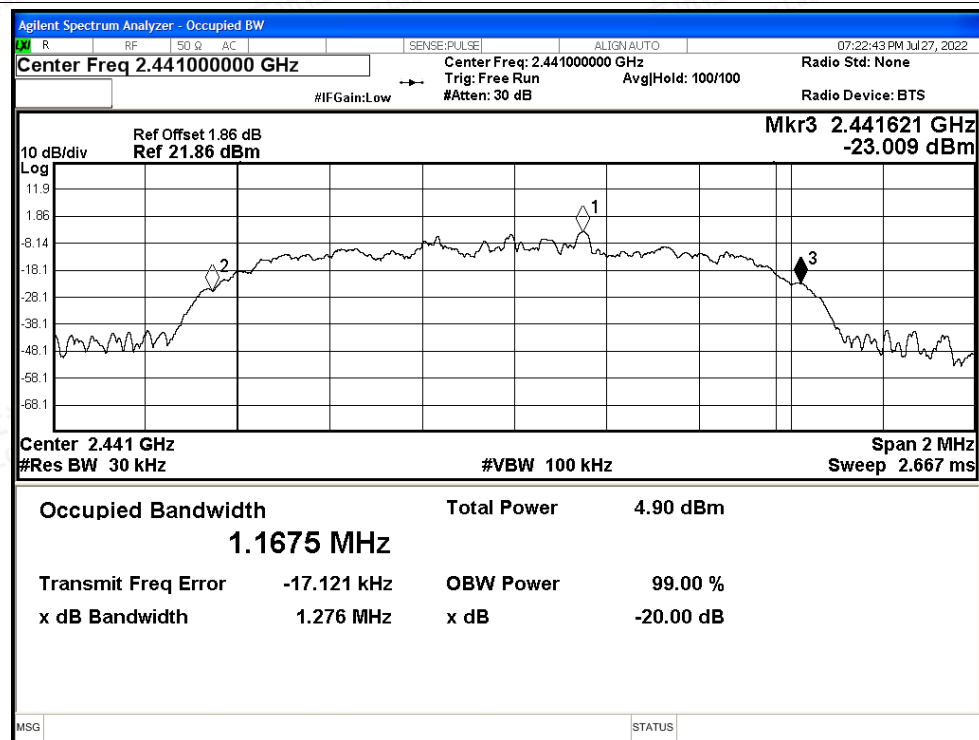
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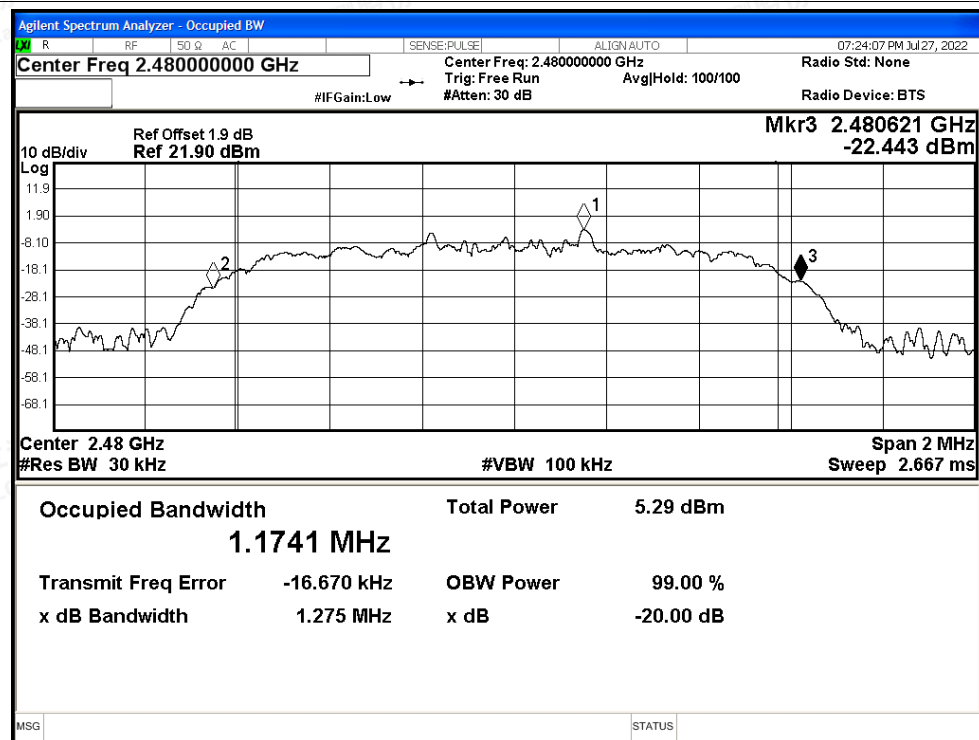
Scan code to check authenticity



-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1

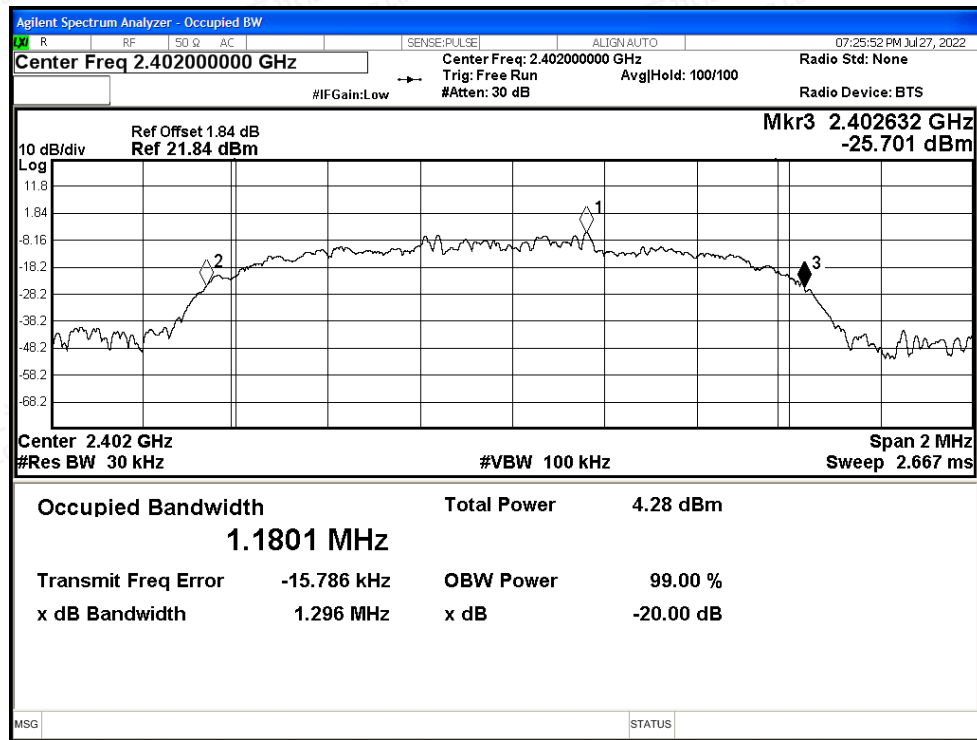


-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

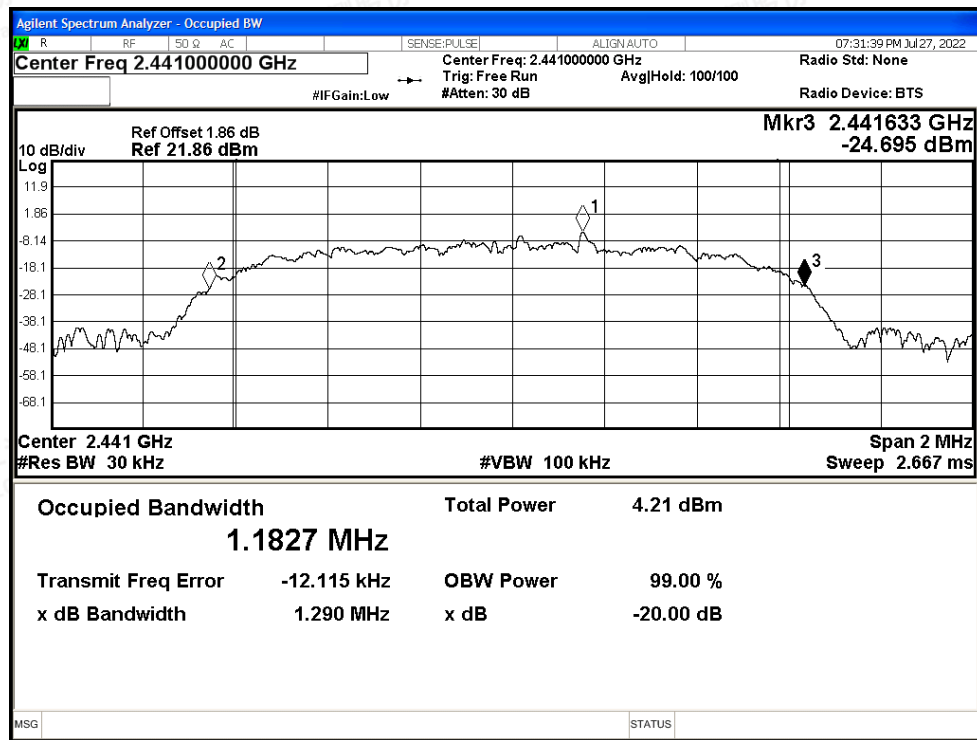


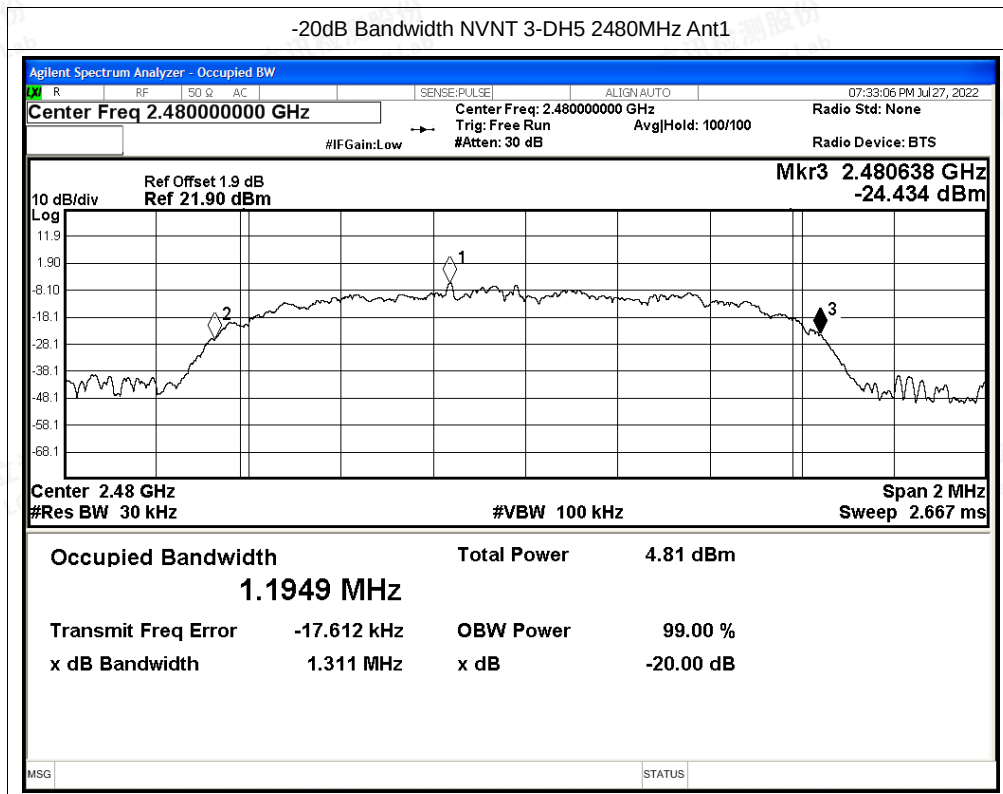


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1







A.2 Maximum Peak Conducted Output Power

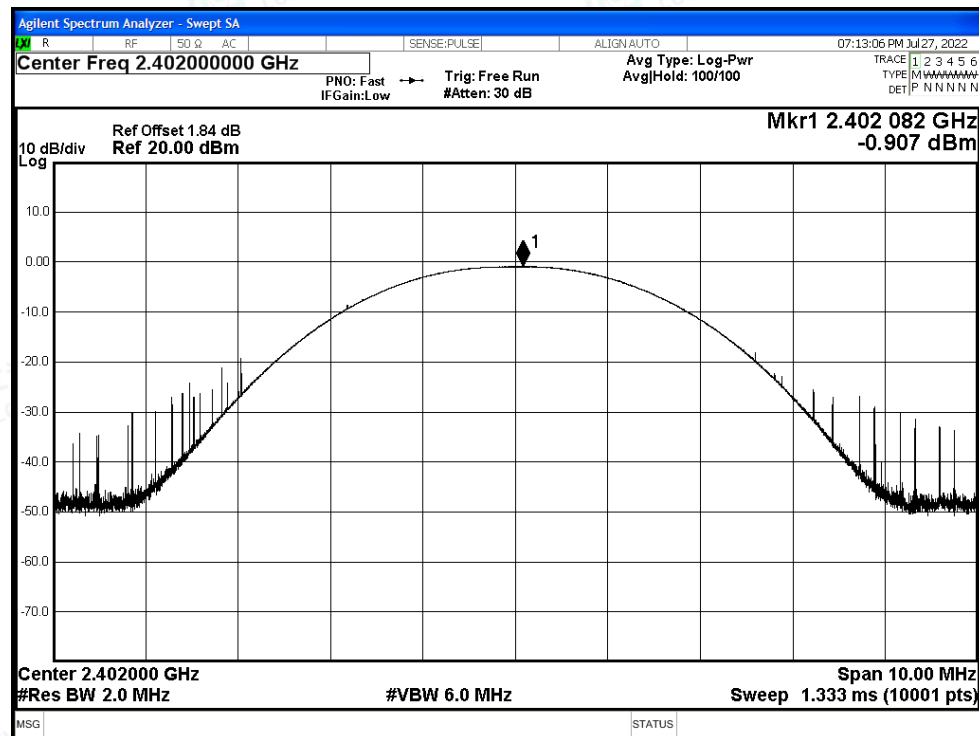
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-0.91	21	Pass
NVNT	1-DH5	2441	Ant1	-0.72	21	Pass
NVNT	1-DH5	2480	Ant1	-0.02	21	Pass
NVNT	2-DH5	2402	Ant1	-0.32	21	Pass
NVNT	2-DH5	2441	Ant1	-0.09	21	Pass
NVNT	2-DH5	2480	Ant1	0.63	21	Pass
NVNT	3-DH5	2402	Ant1	-0.22	21	Pass
NVNT	3-DH5	2441	Ant1	-0.05	21	Pass
NVNT	3-DH5	2480	Ant1	0.68	21	Pass



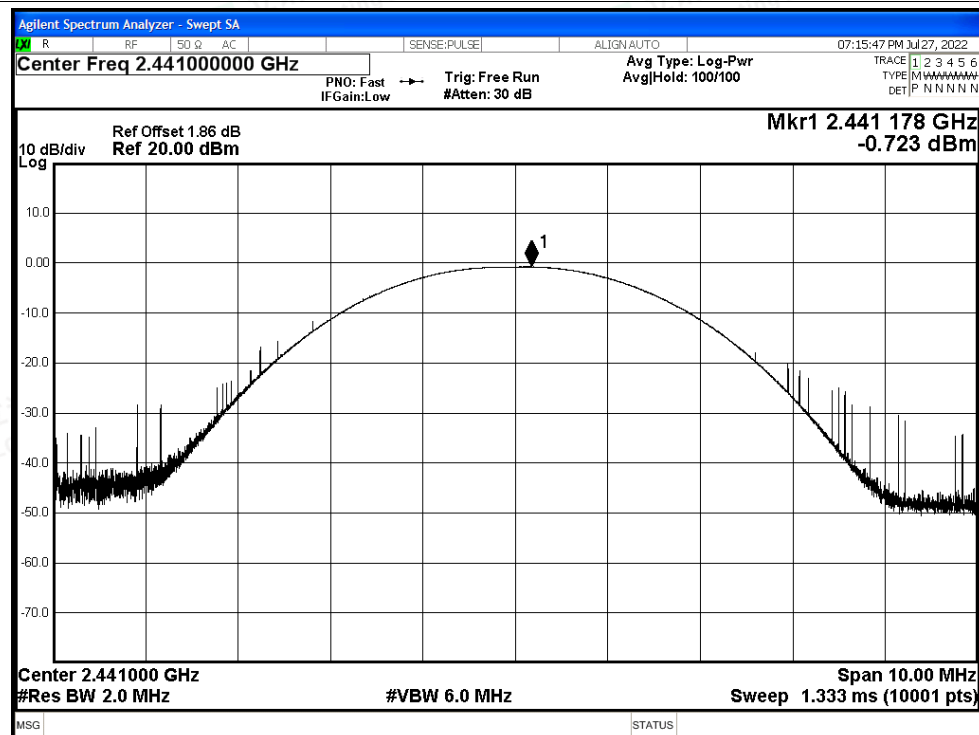


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

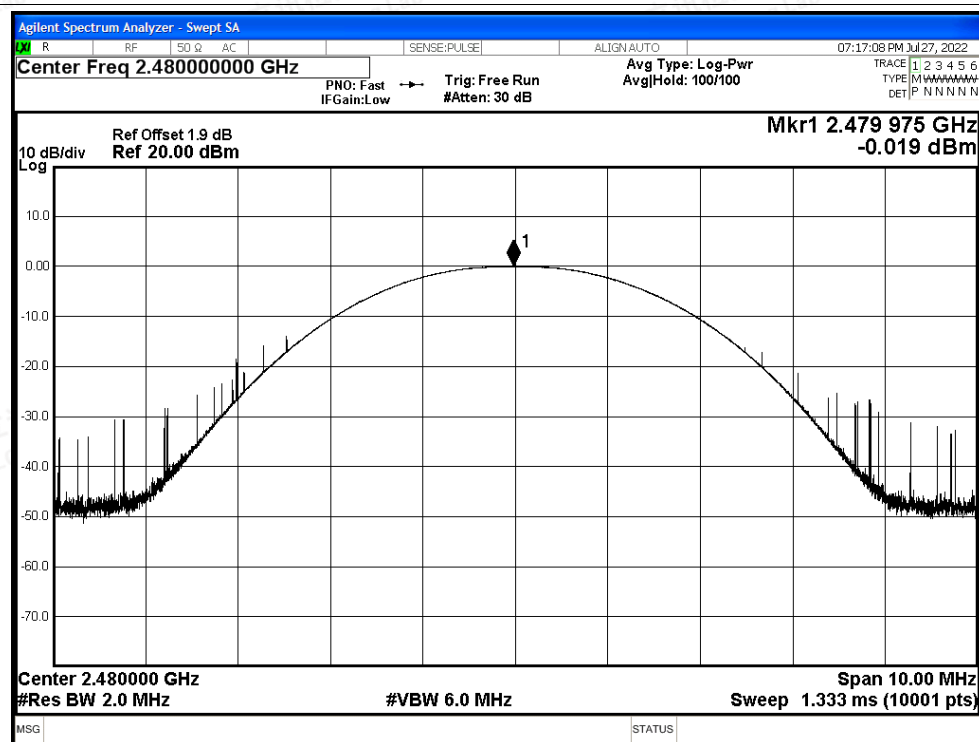


Power NVNT 1-DH5 2441MHz Ant1

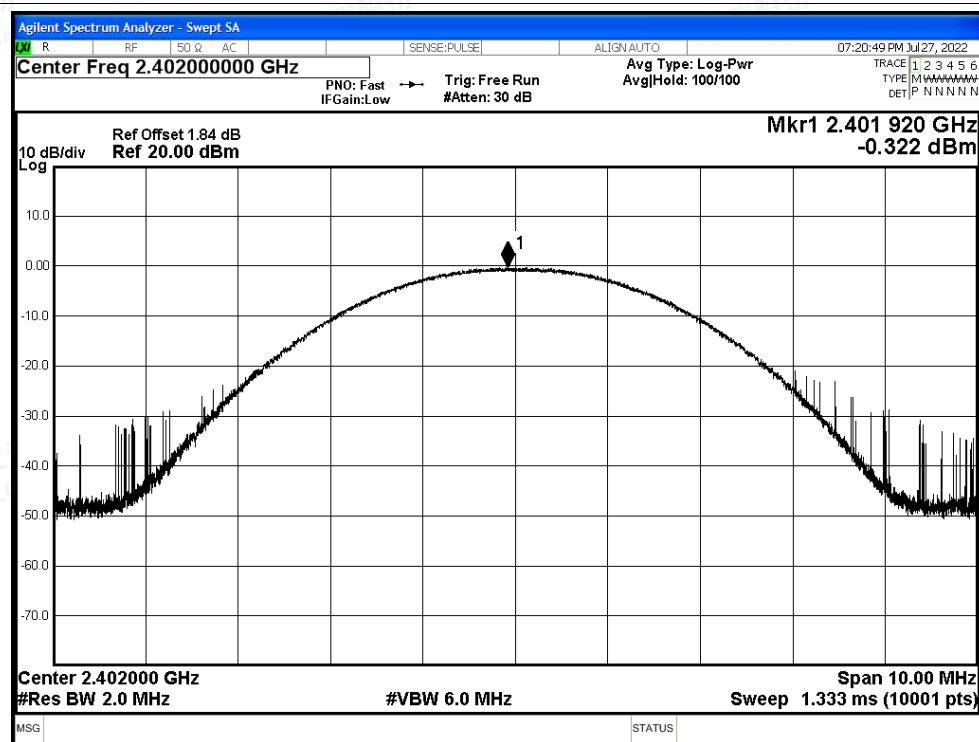


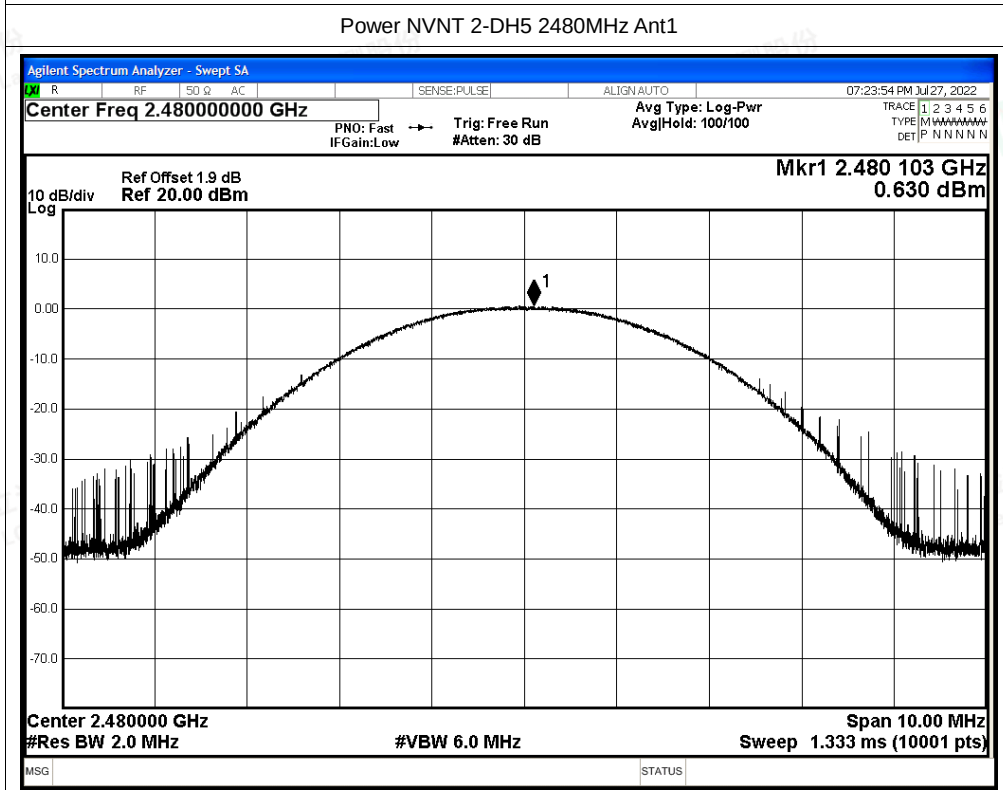
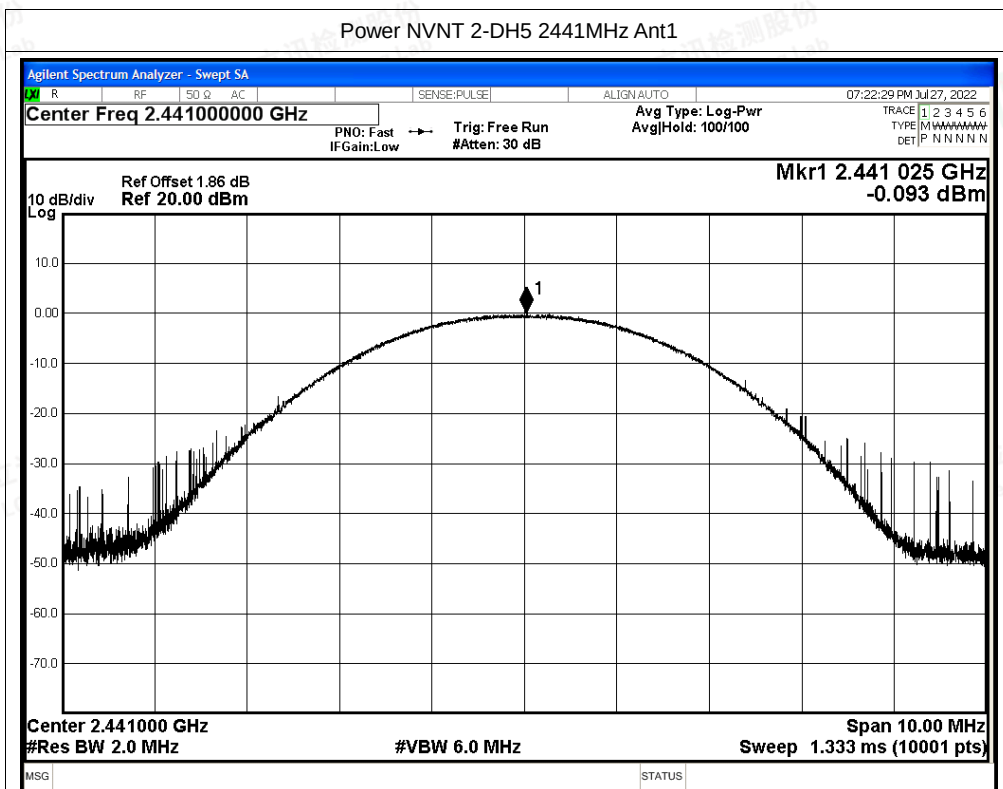


Power NVNT 1-DH5 2480MHz Ant1



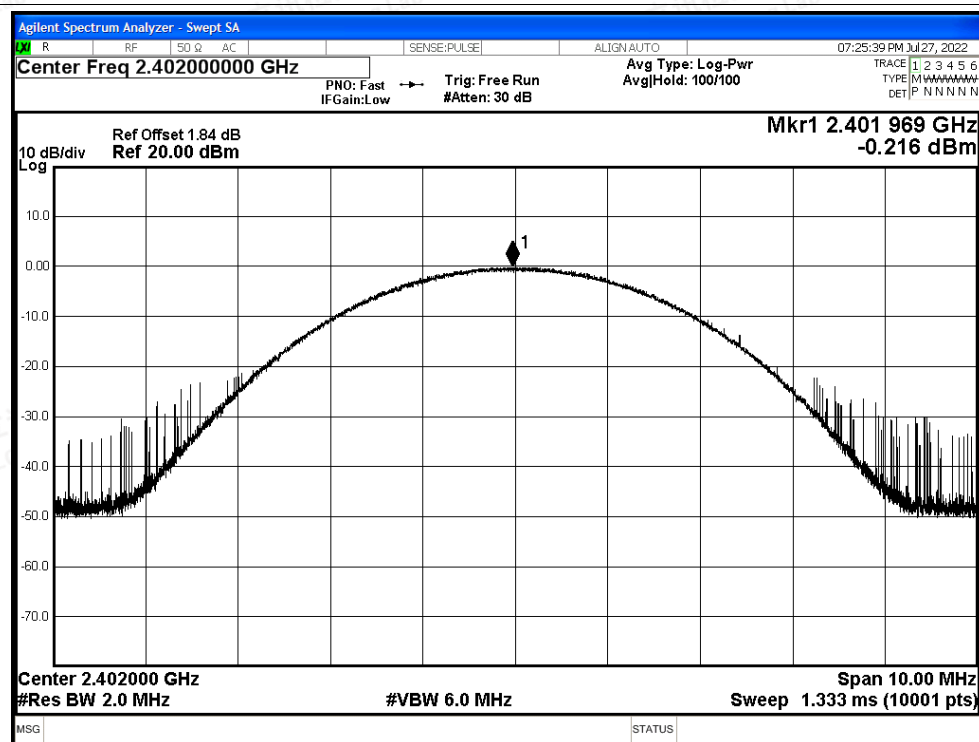
Power NVNT 2-DH5 2402MHz Ant1



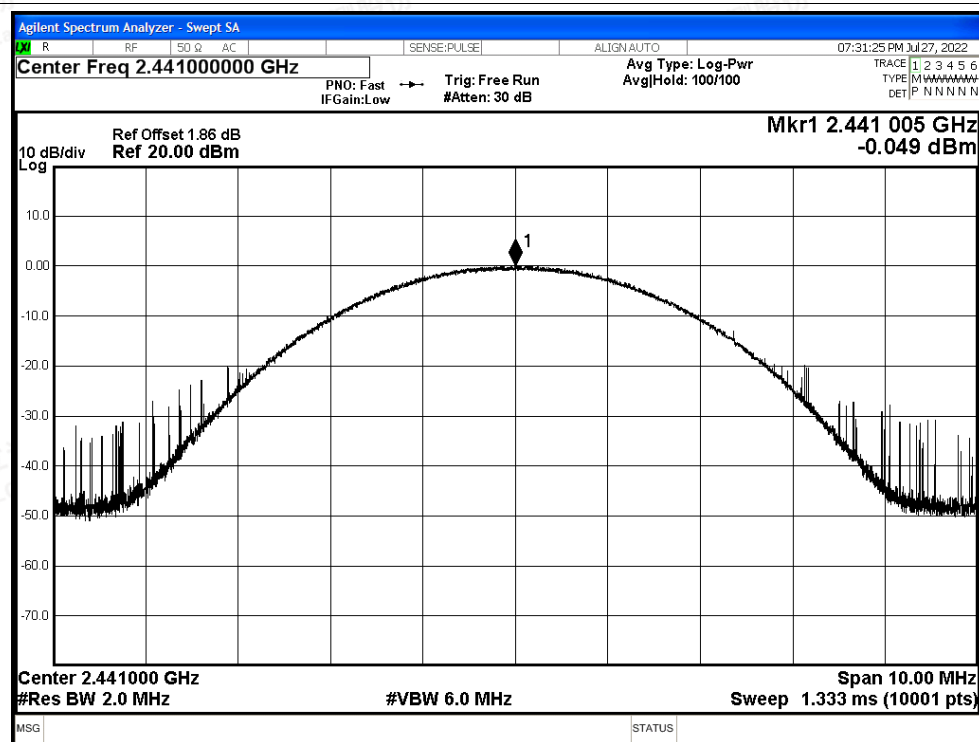


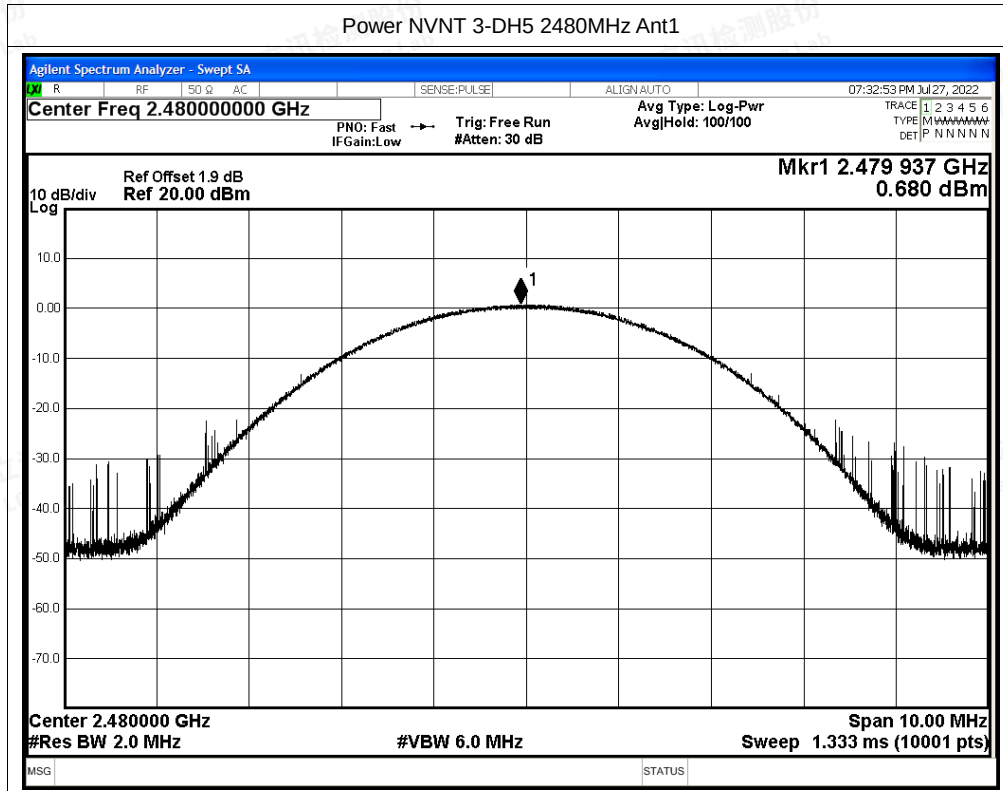


Power NVNT 3-DH5 2402MHz Ant1



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	2401.998	2402.834	0.836	0.632	Pass
NVNT	2-DH5	Ant1	2401.824	2403.144	1.32	0.848	Pass
NVNT	3-DH5	Ant1	2401.994	2402.932	0.938	0.864	Pass

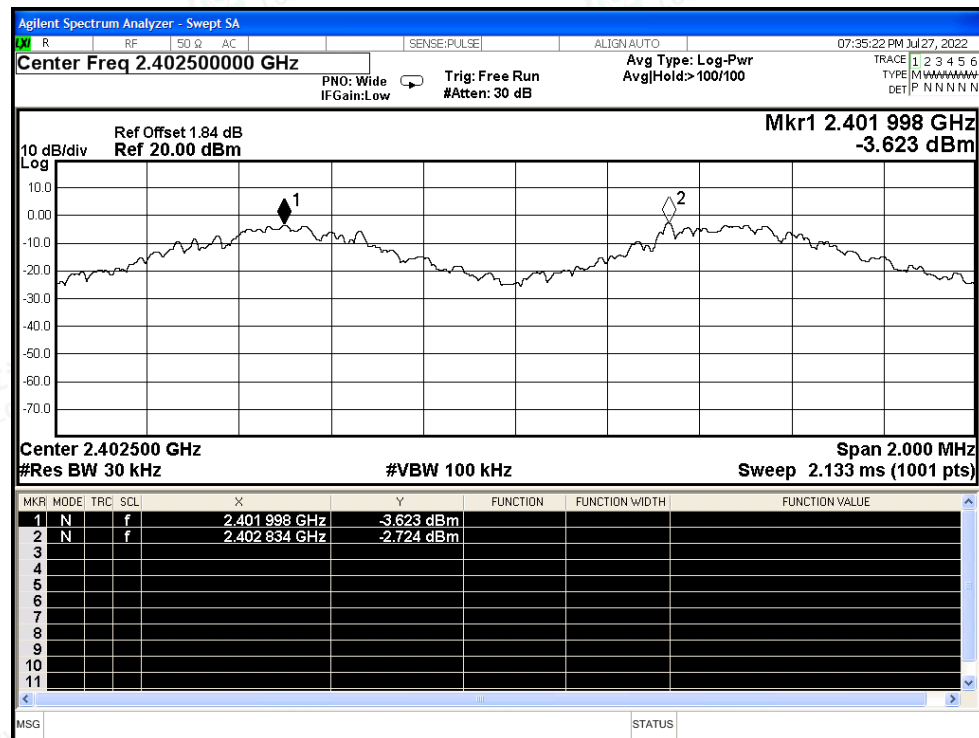


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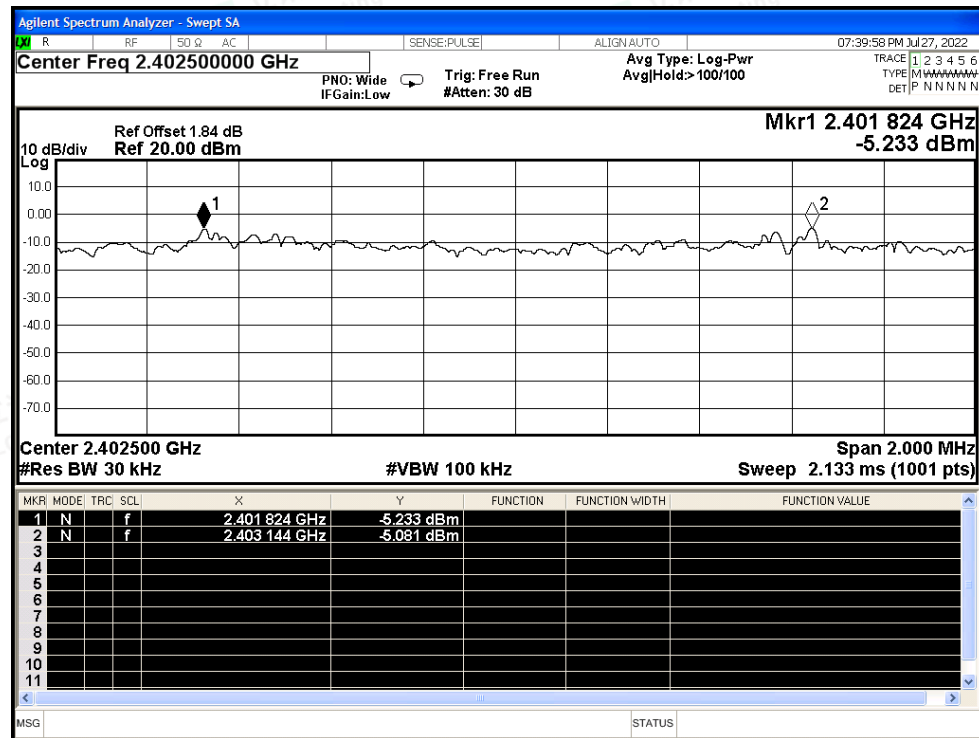


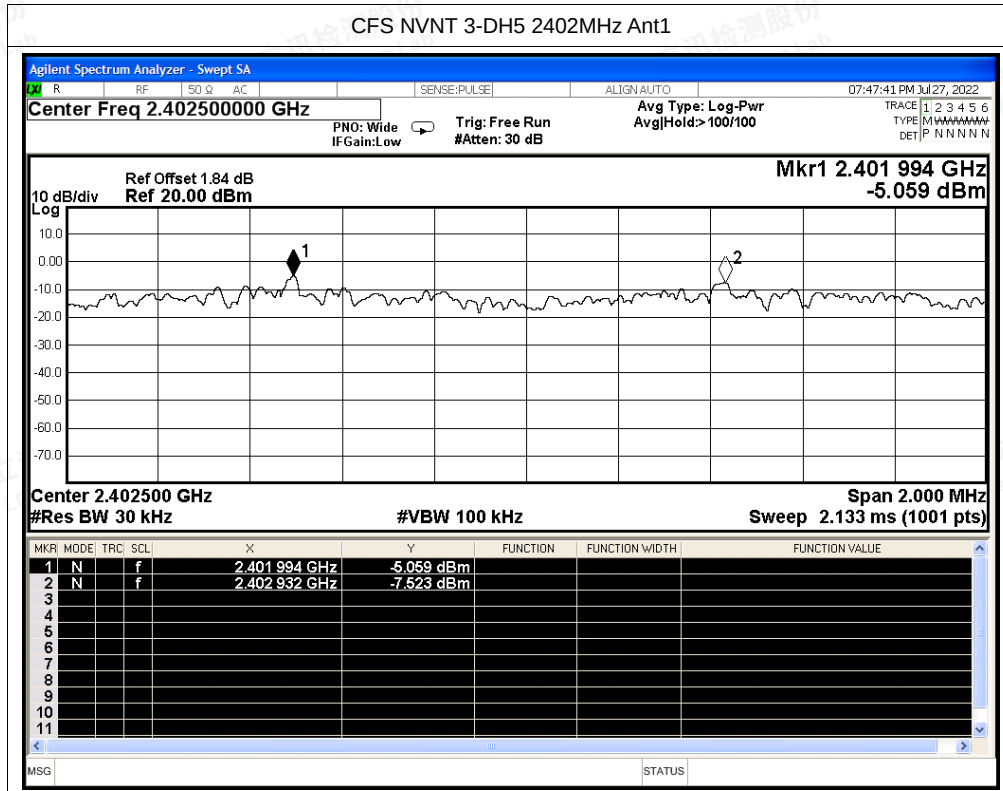
Test Graphs

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	2.897	321.567	111	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.886	314.574	109	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.886	300.144	104	31600	400	Pass

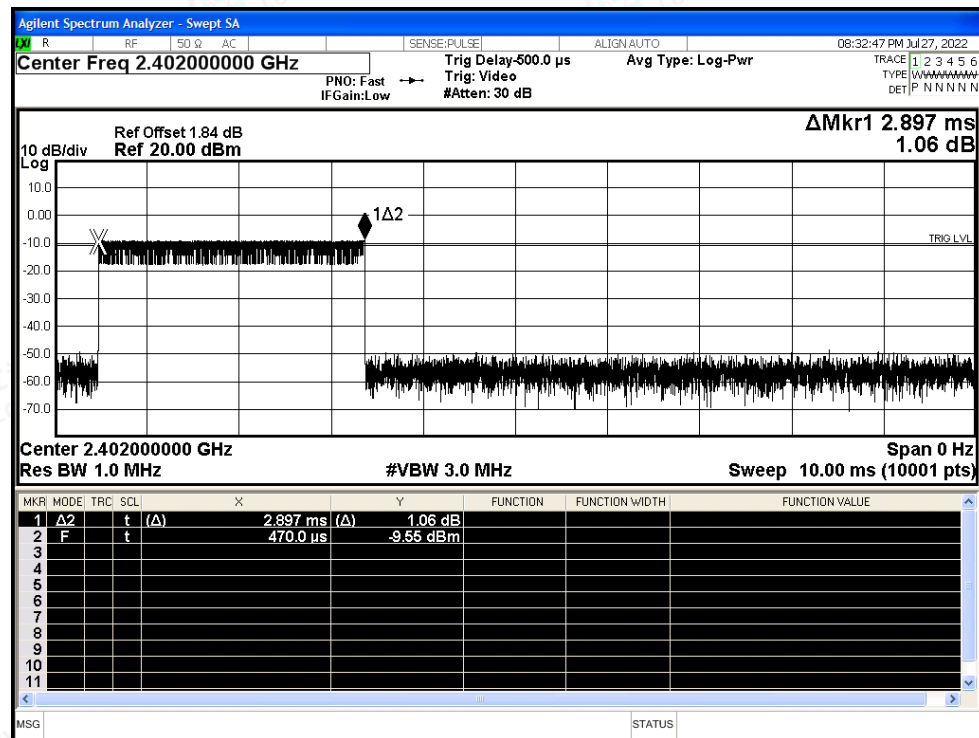


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Scan code to check authenticity

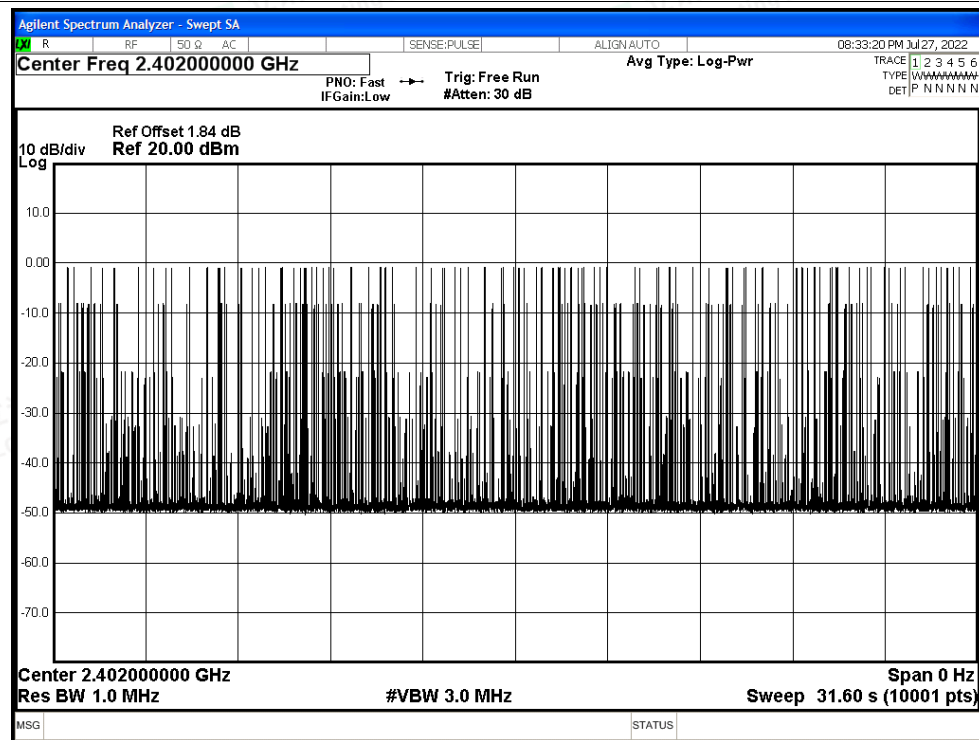


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

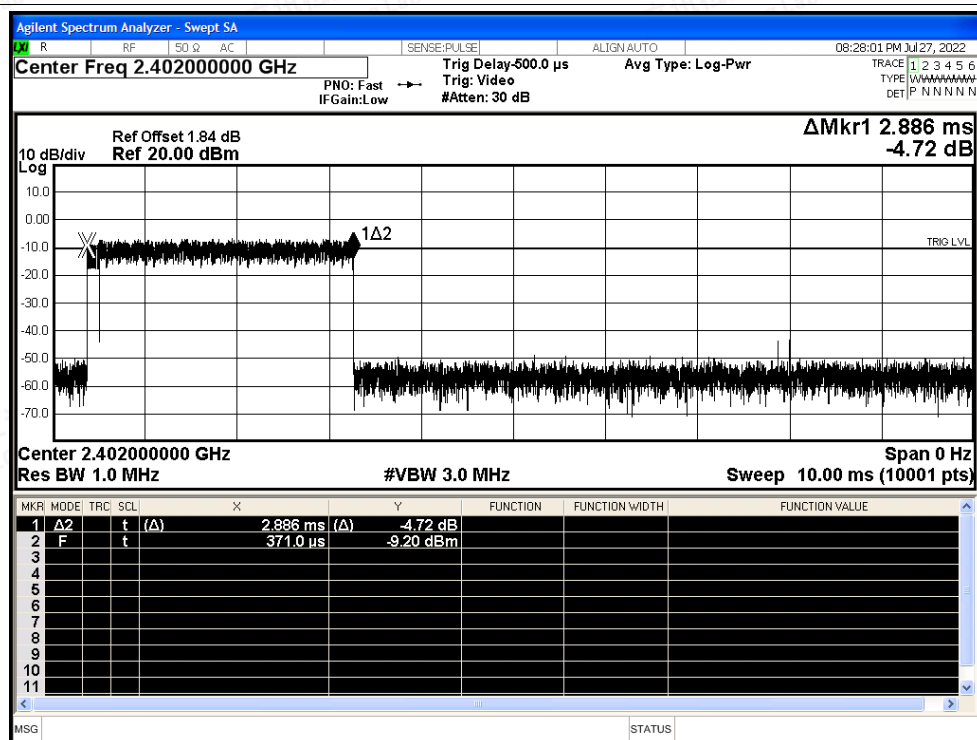


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

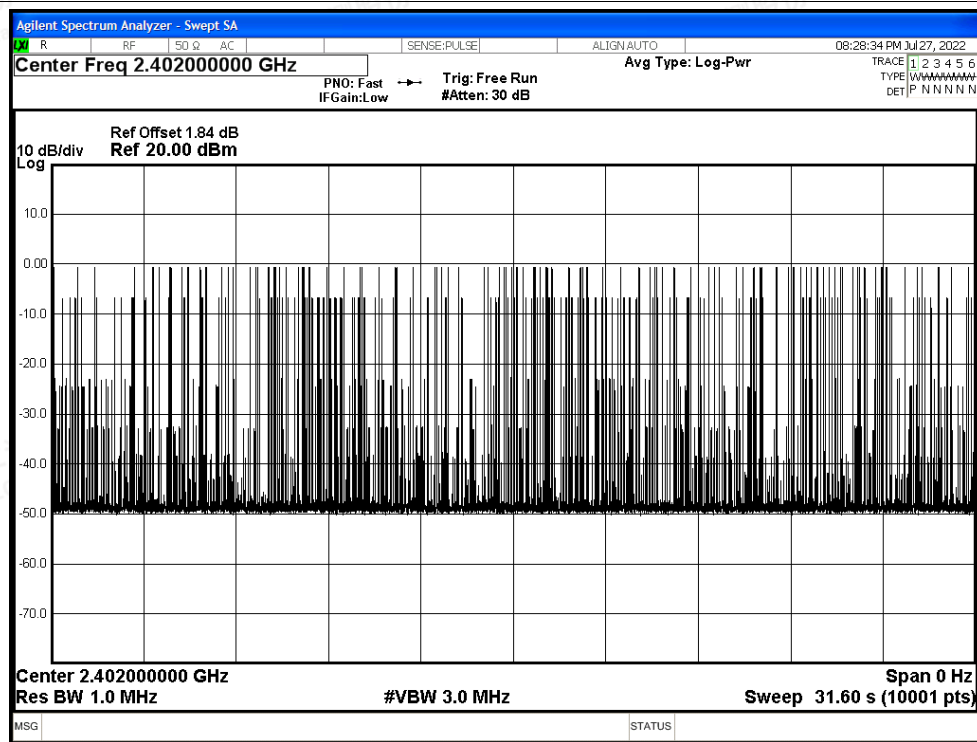




Dwell NVNT 2-DH5 2402MHz Ant1 One Burst

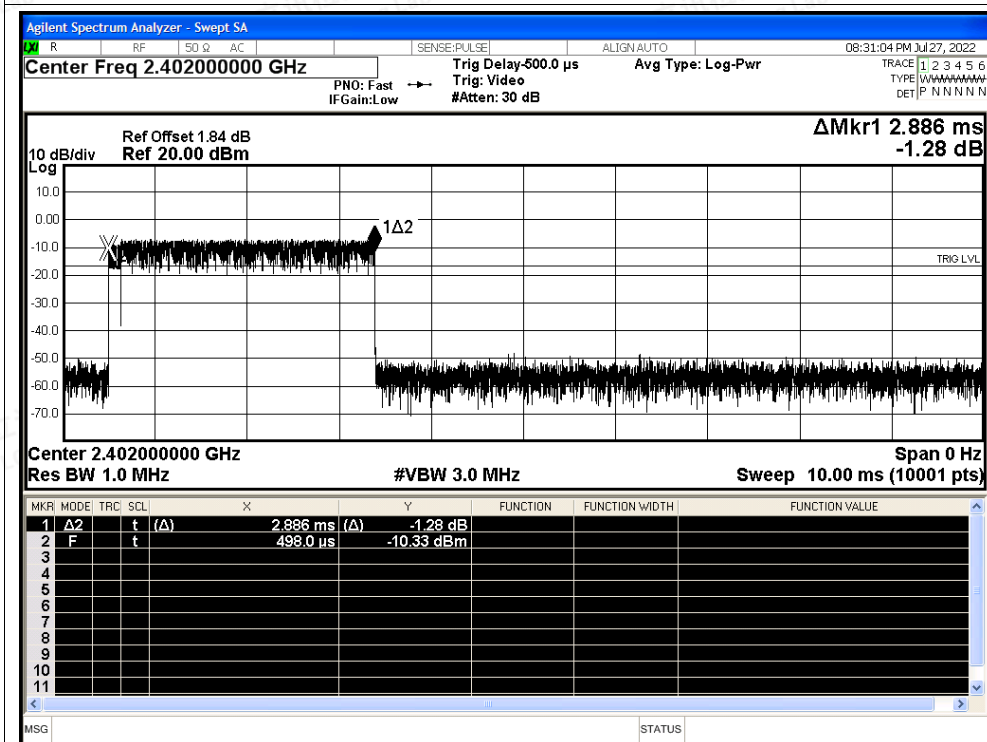


Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated

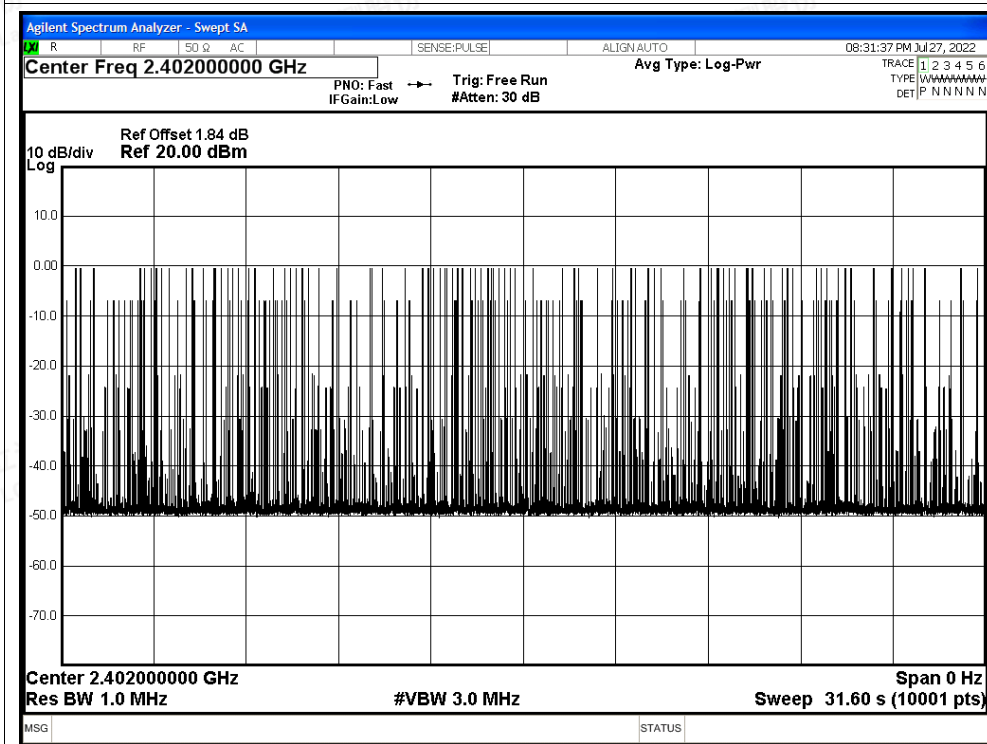




Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated





A.5 Number of Hopping Channel

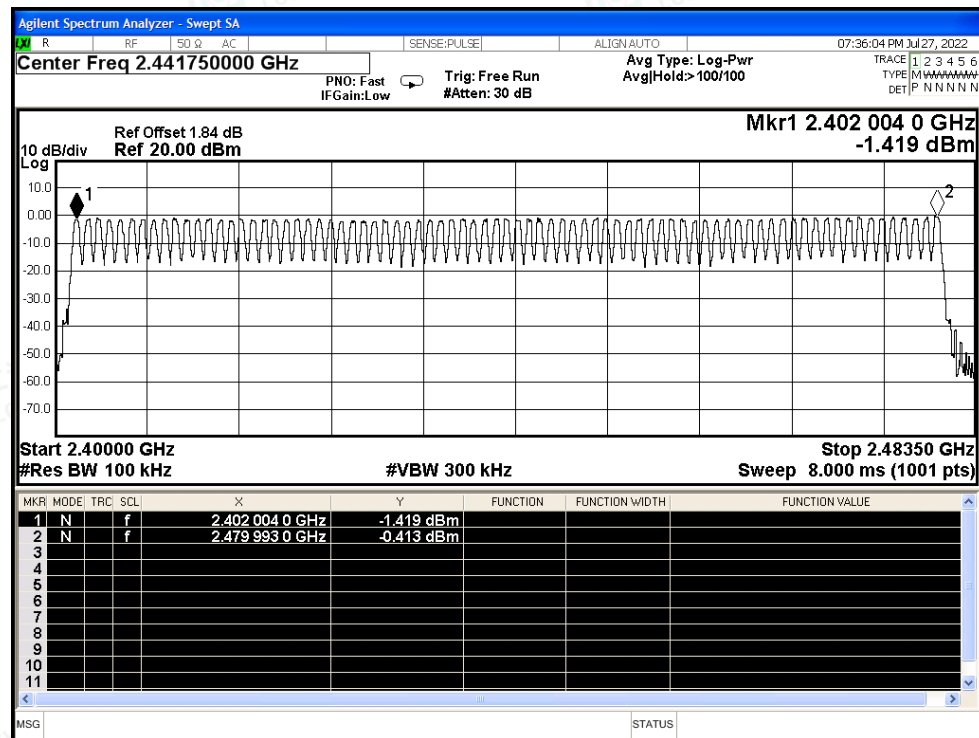
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass



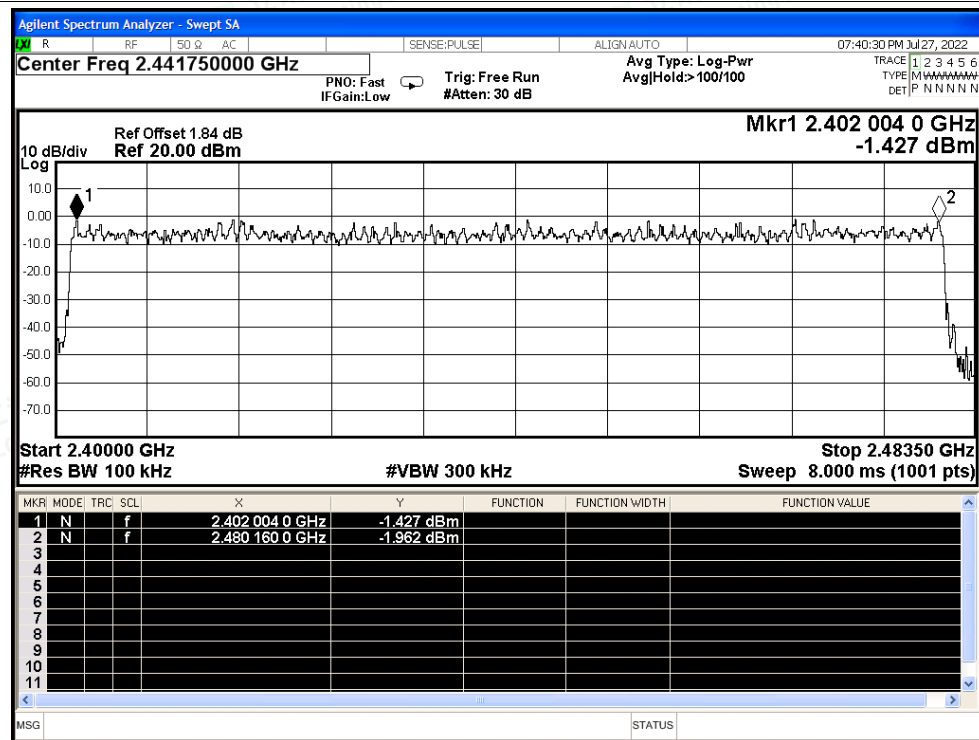


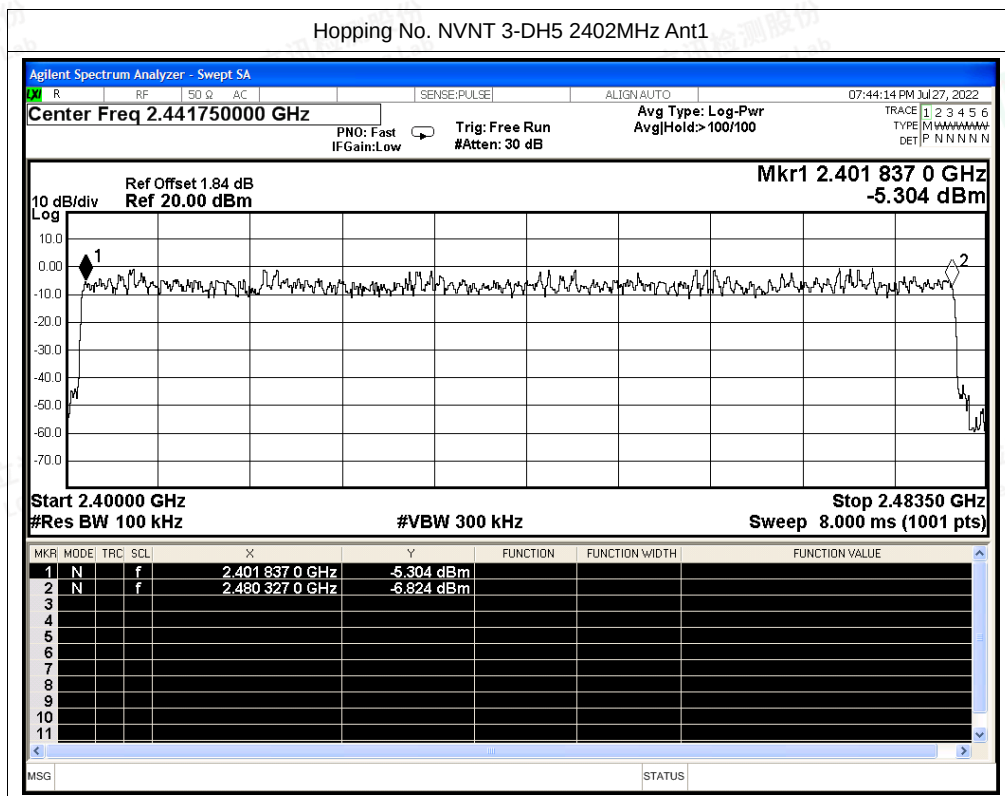
Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1







A.6 Band Edge

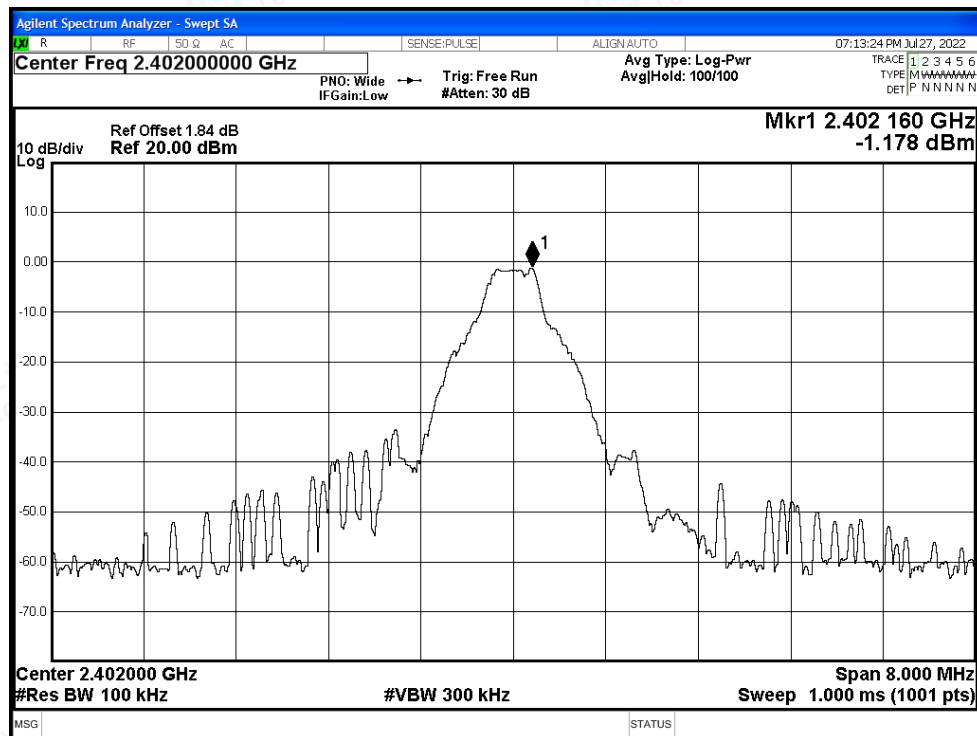
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-44.86	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-53.49	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-44.95	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-52.6	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-44.72	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-54.95	-20	Pass



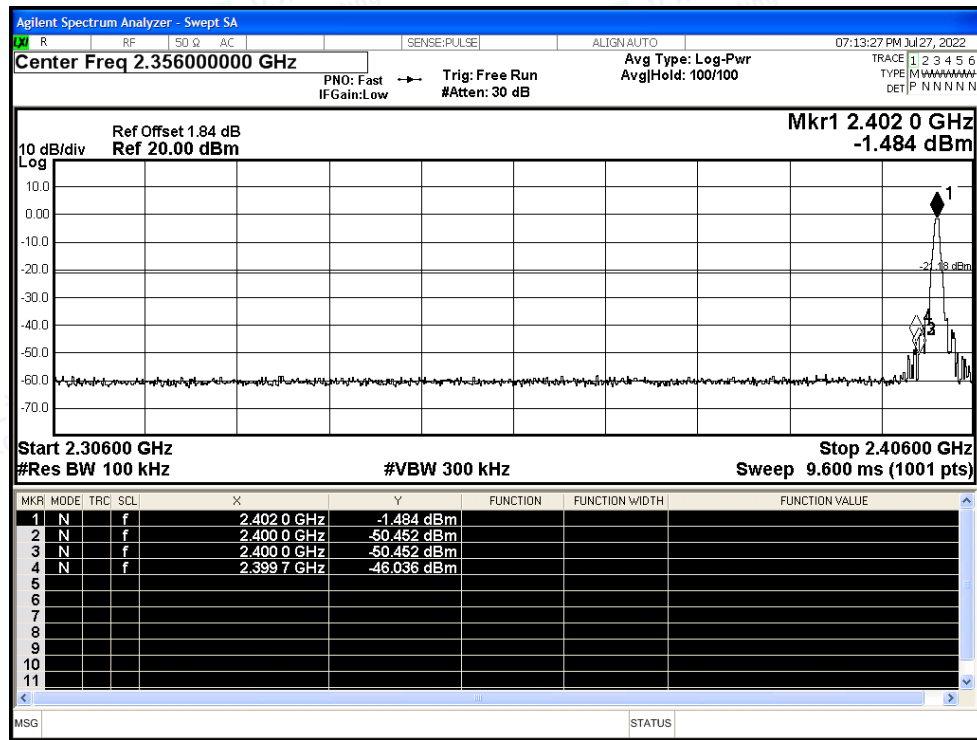


Test Graphs

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

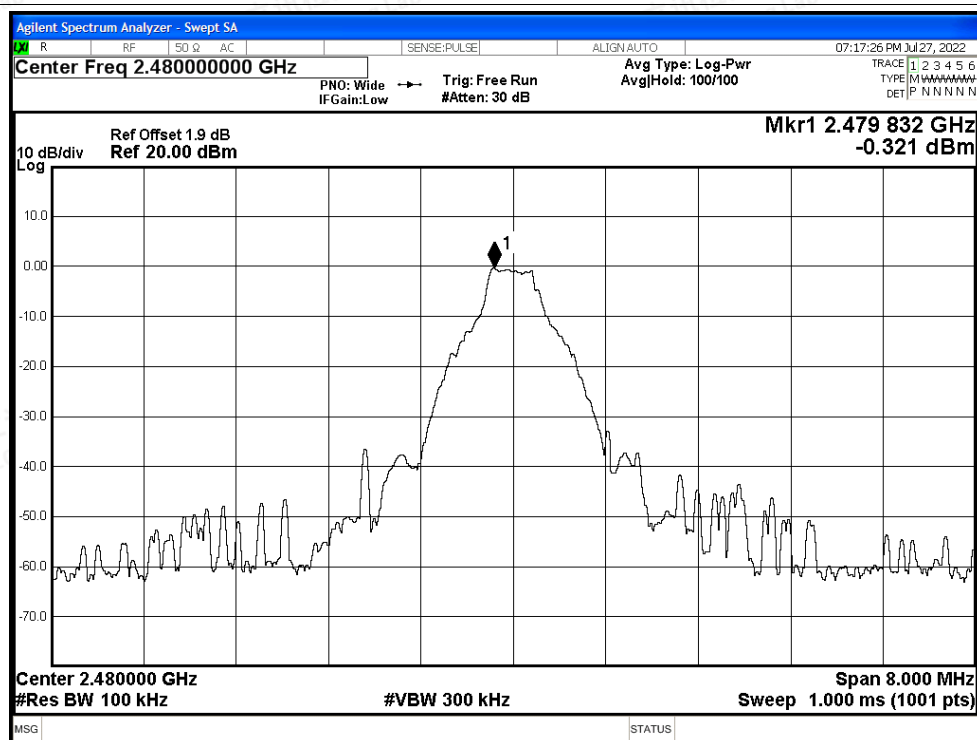


Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

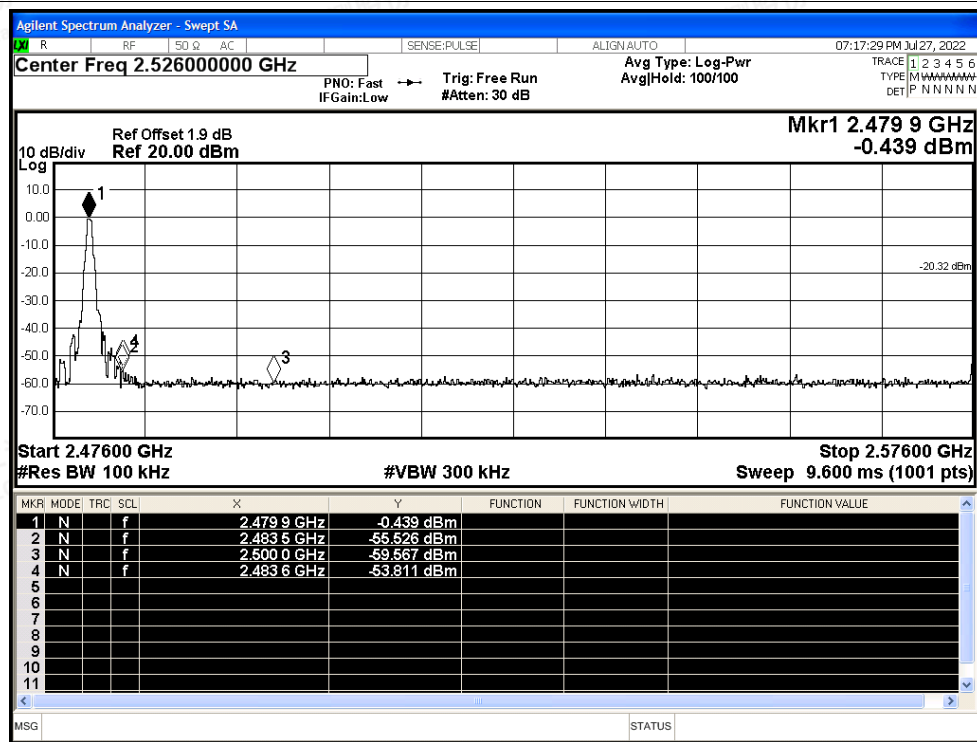




Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

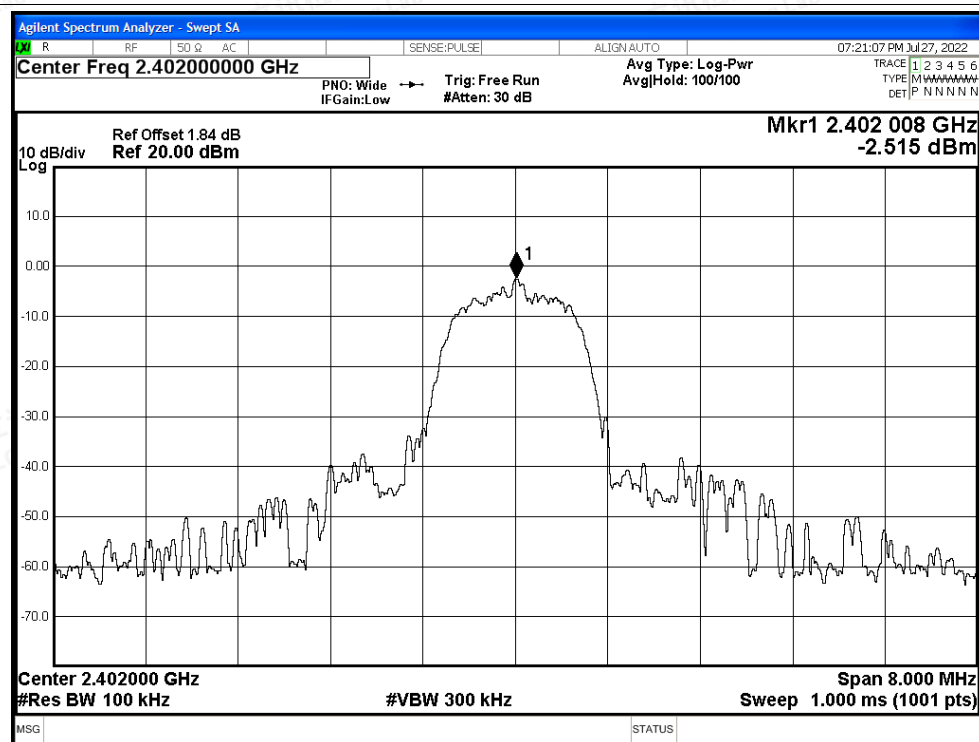


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

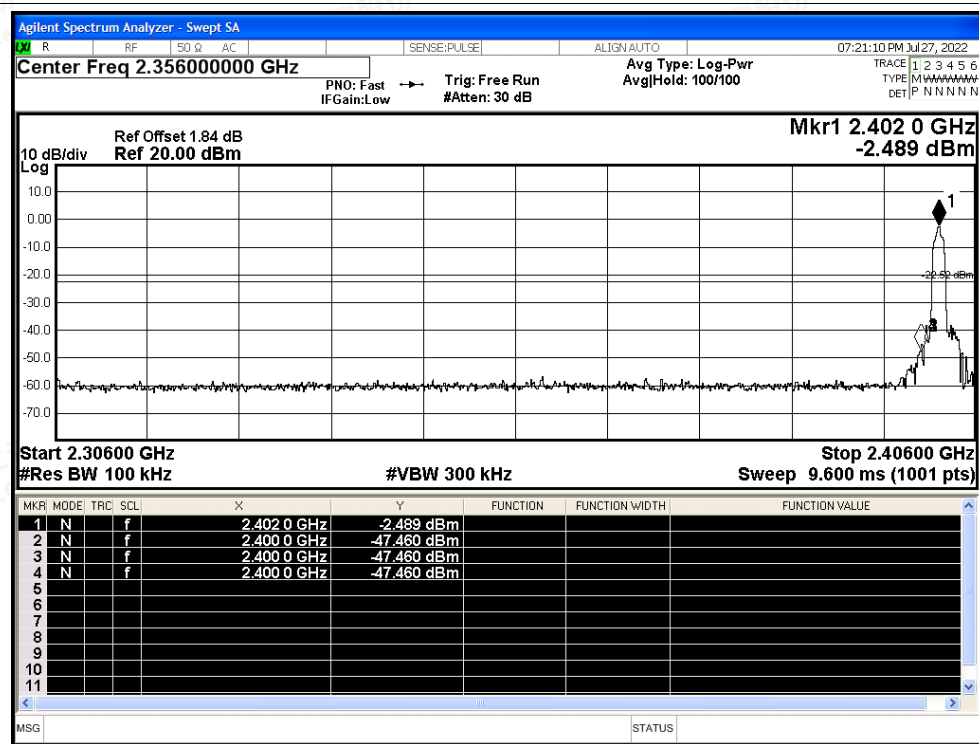




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref

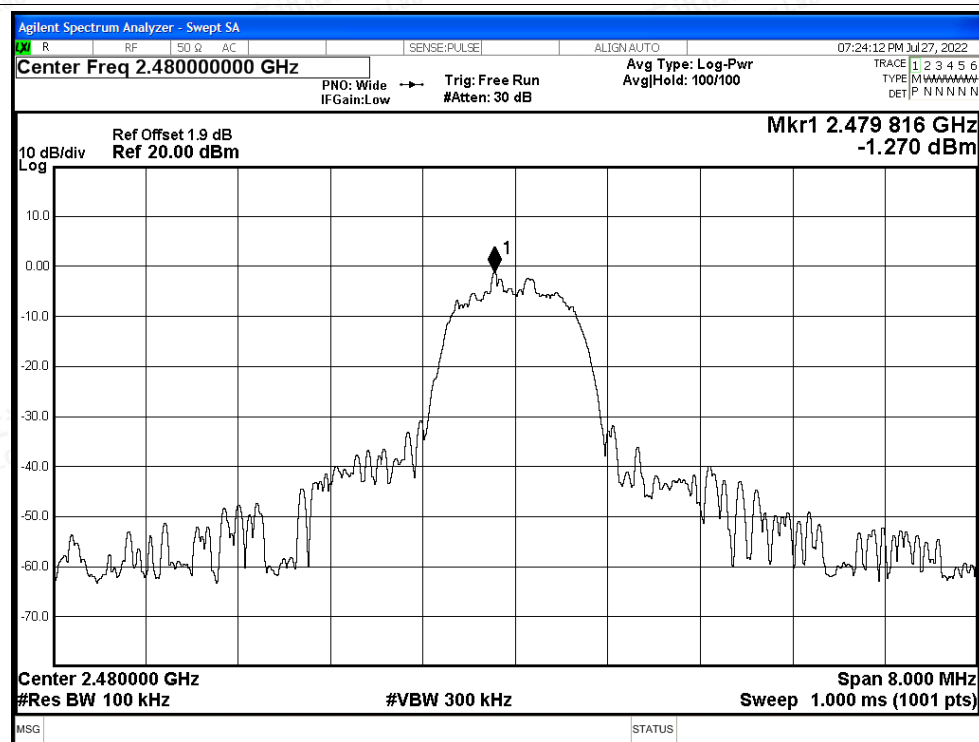


Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

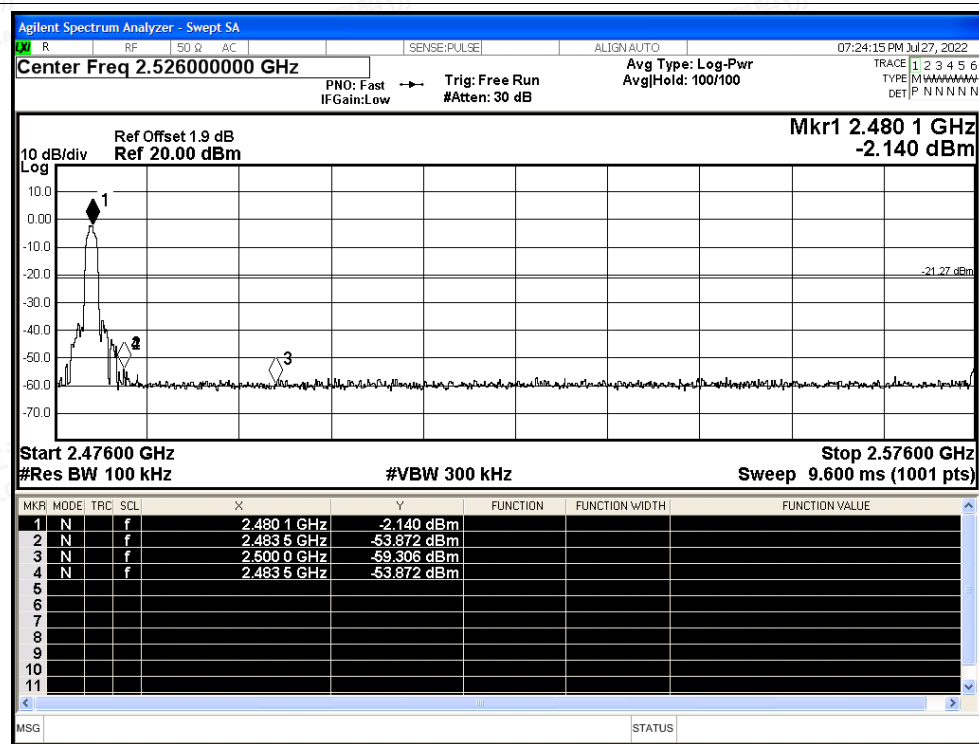




Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref

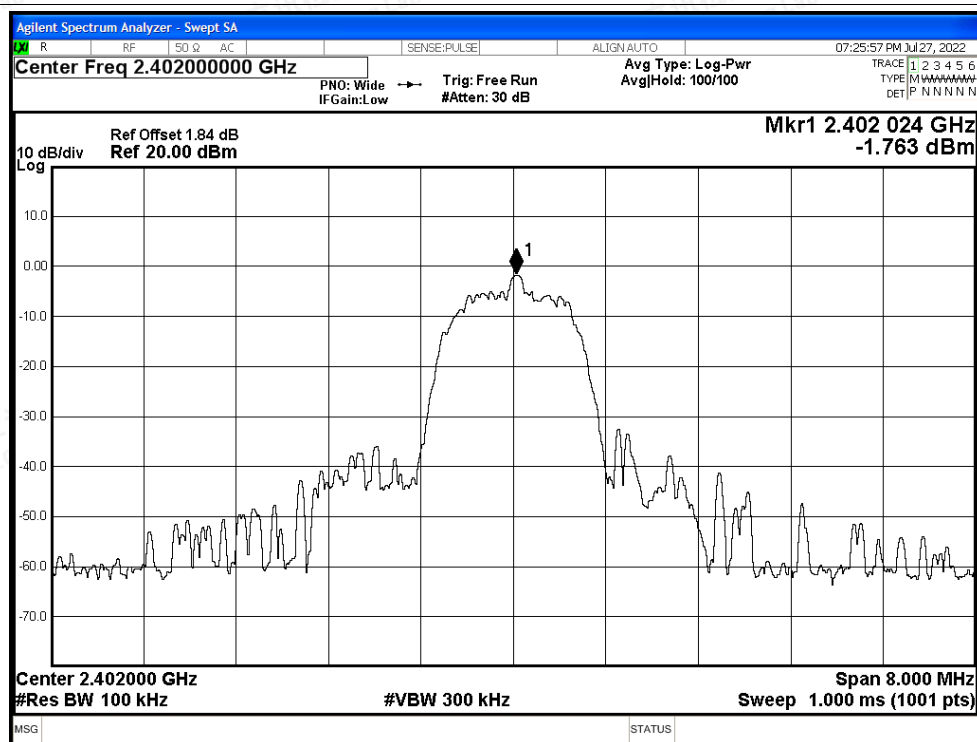


Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission

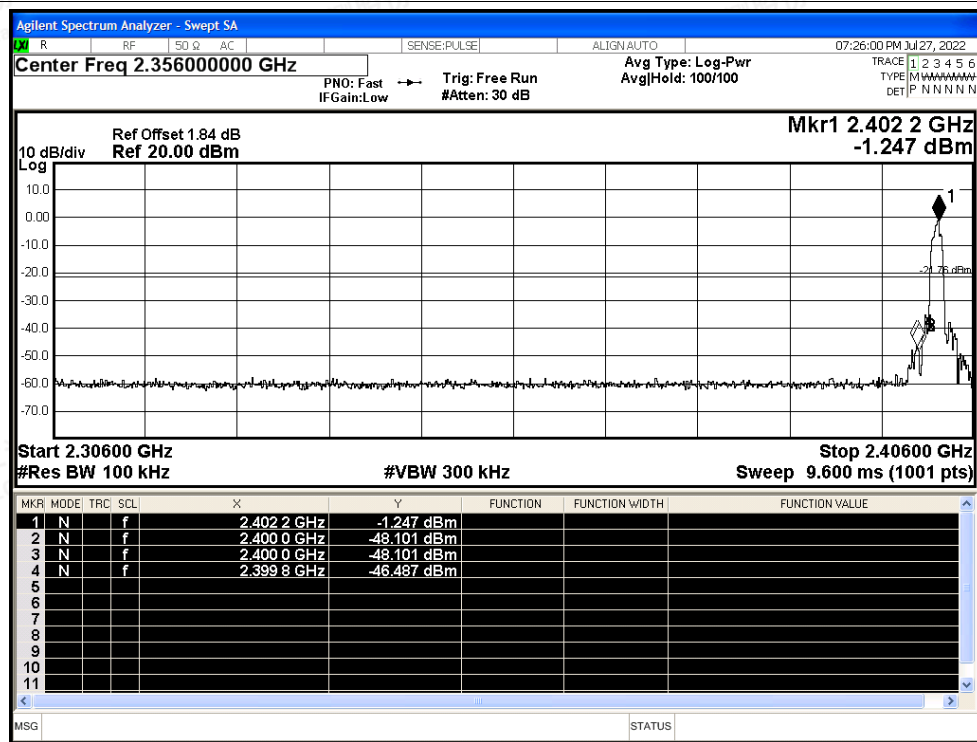




Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref

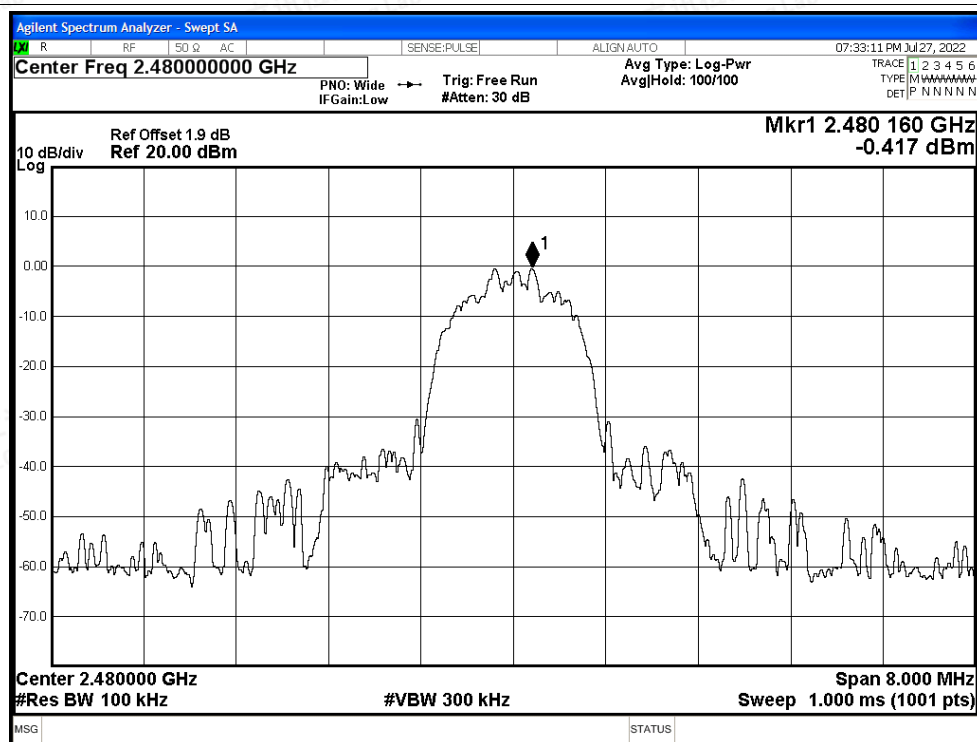


Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission

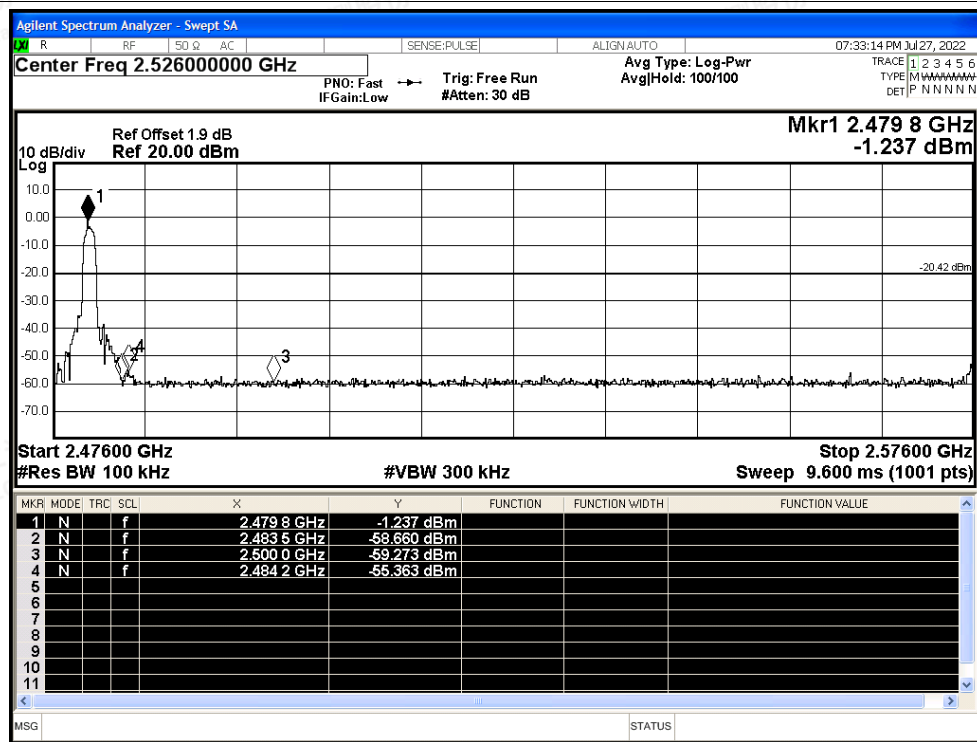




Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



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





(Hopping)

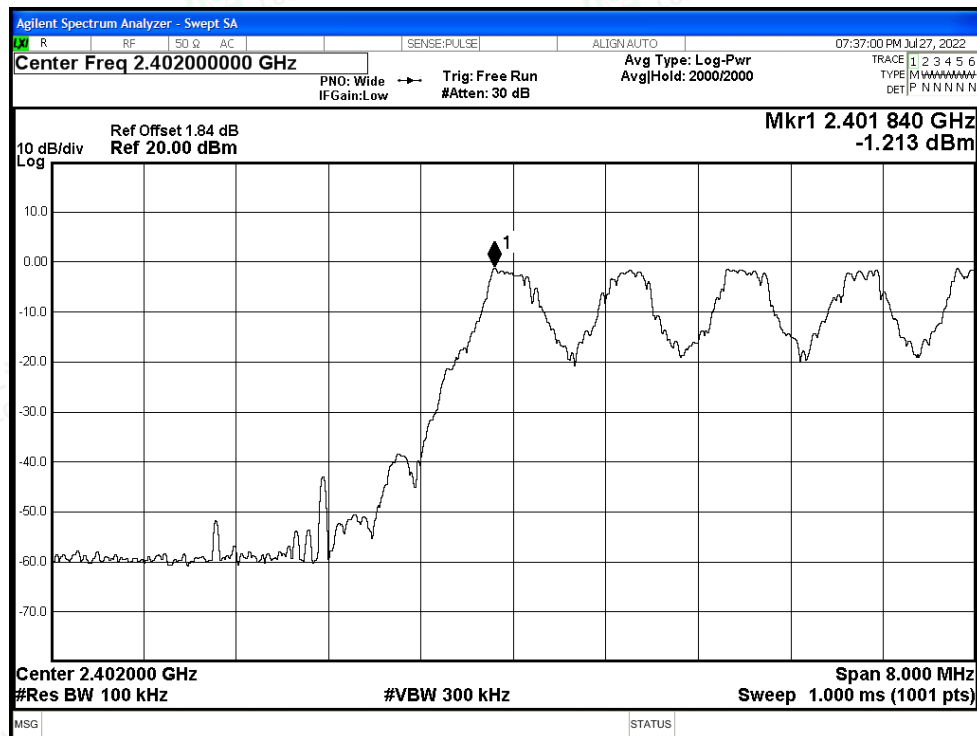
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-52.94	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-50.5	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-52.15	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-51.29	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-53.67	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-51.31	-20	Pass



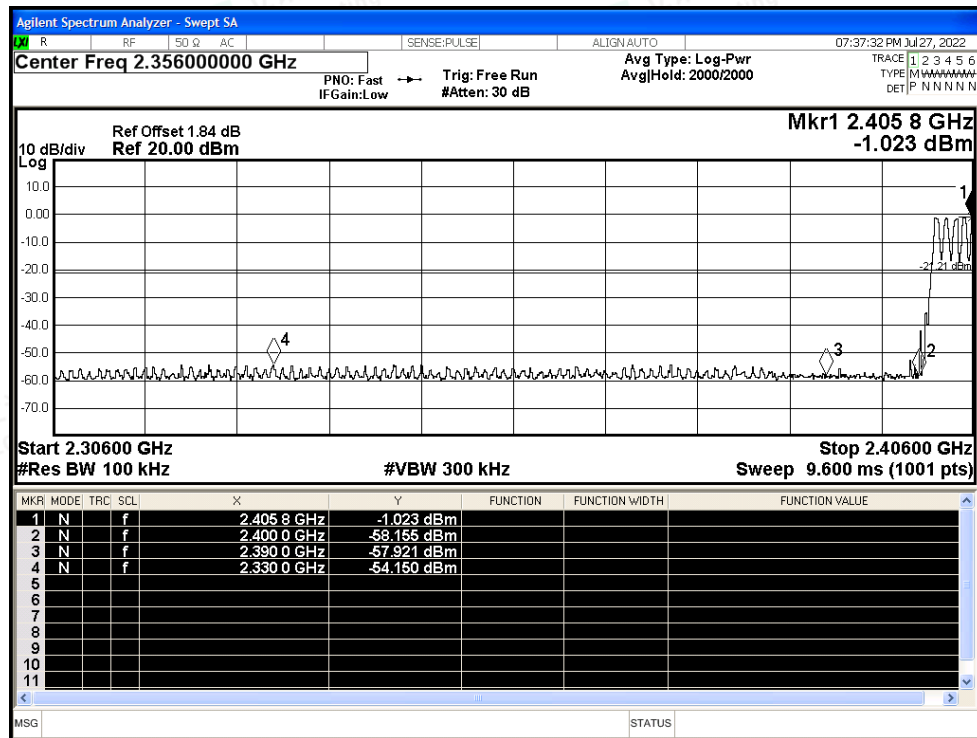


Test Graphs

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



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



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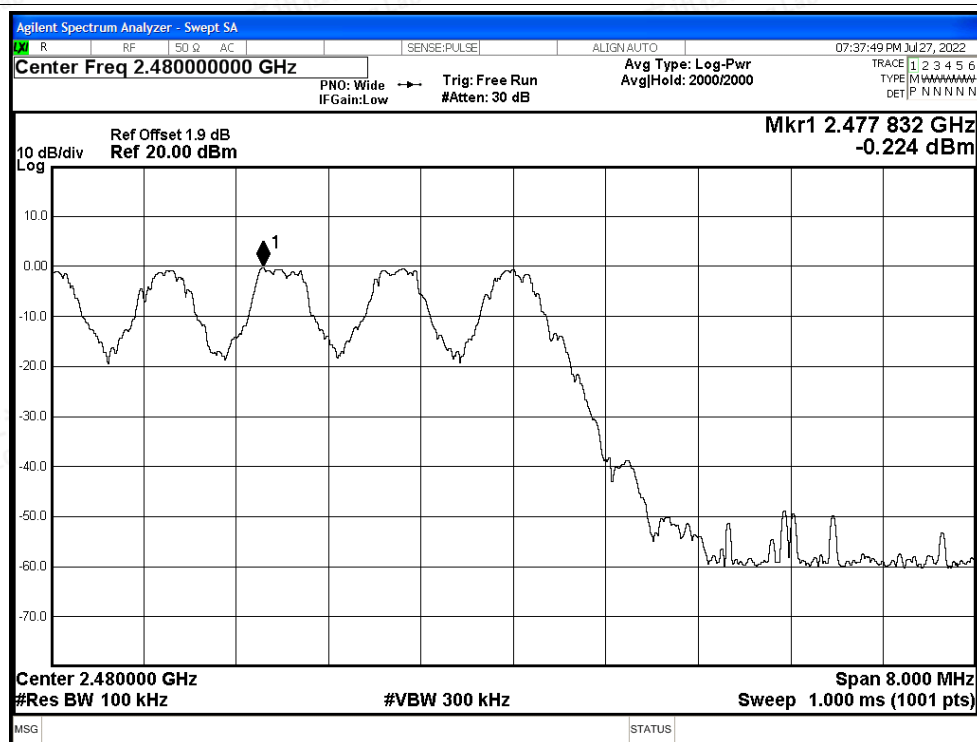
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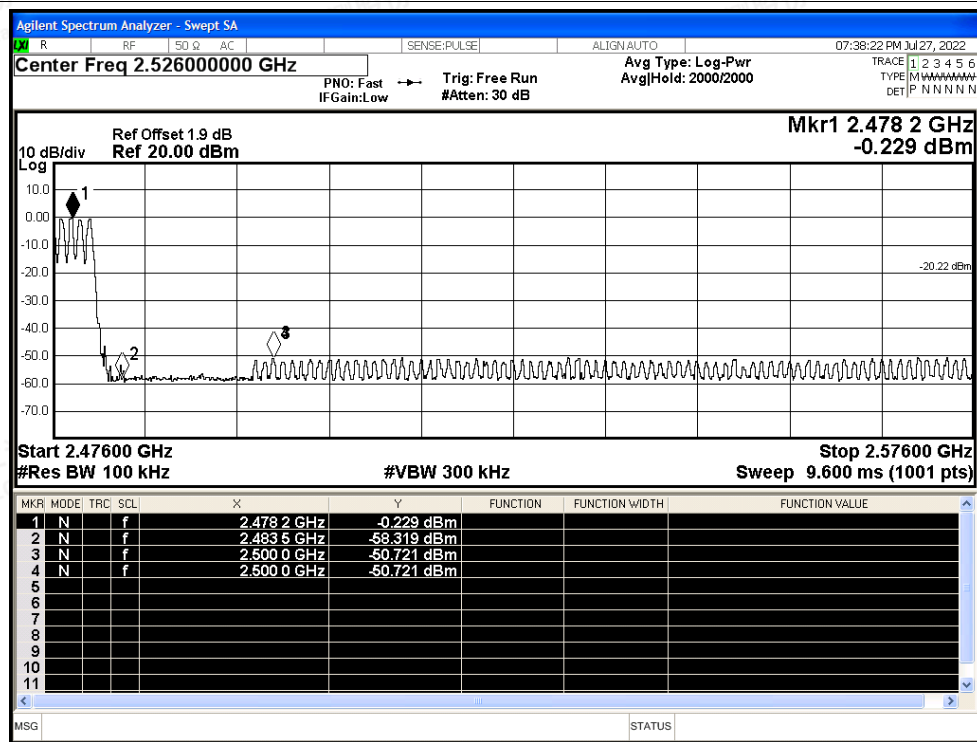
Scan code to check authenticity

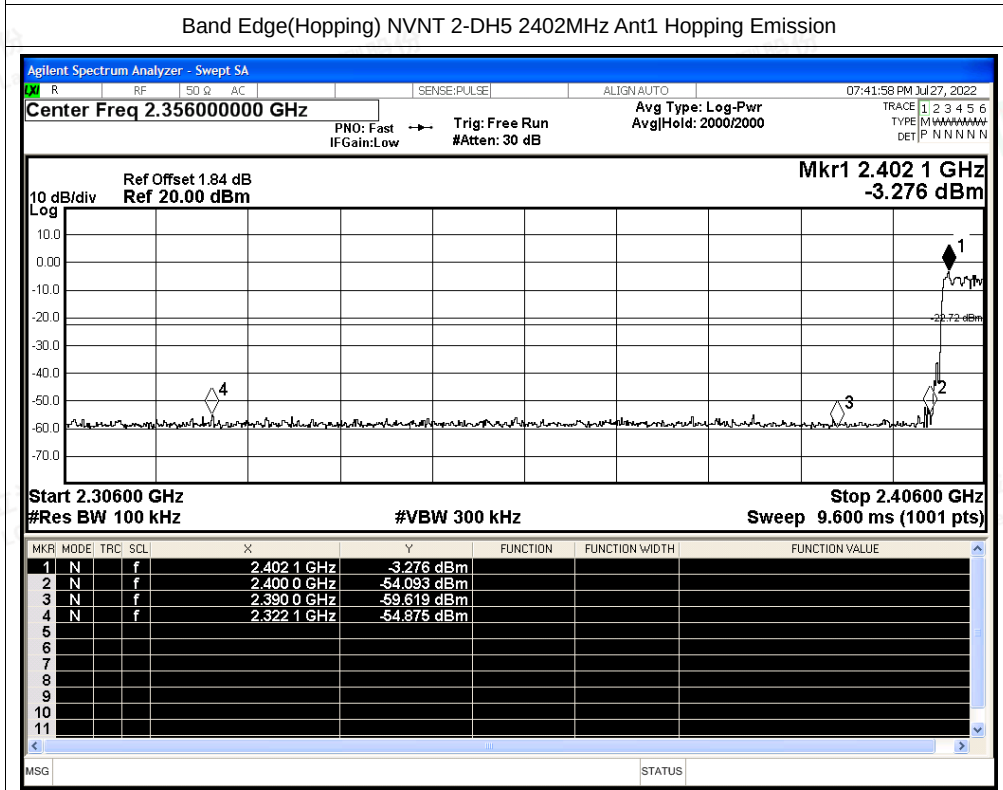
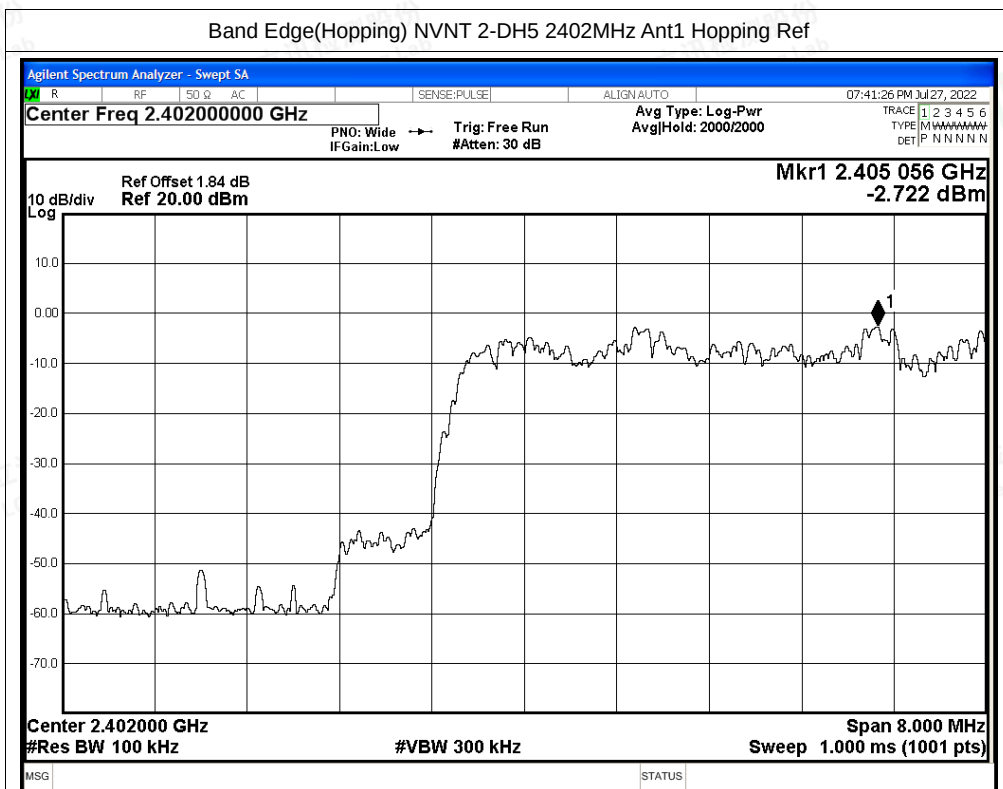


Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



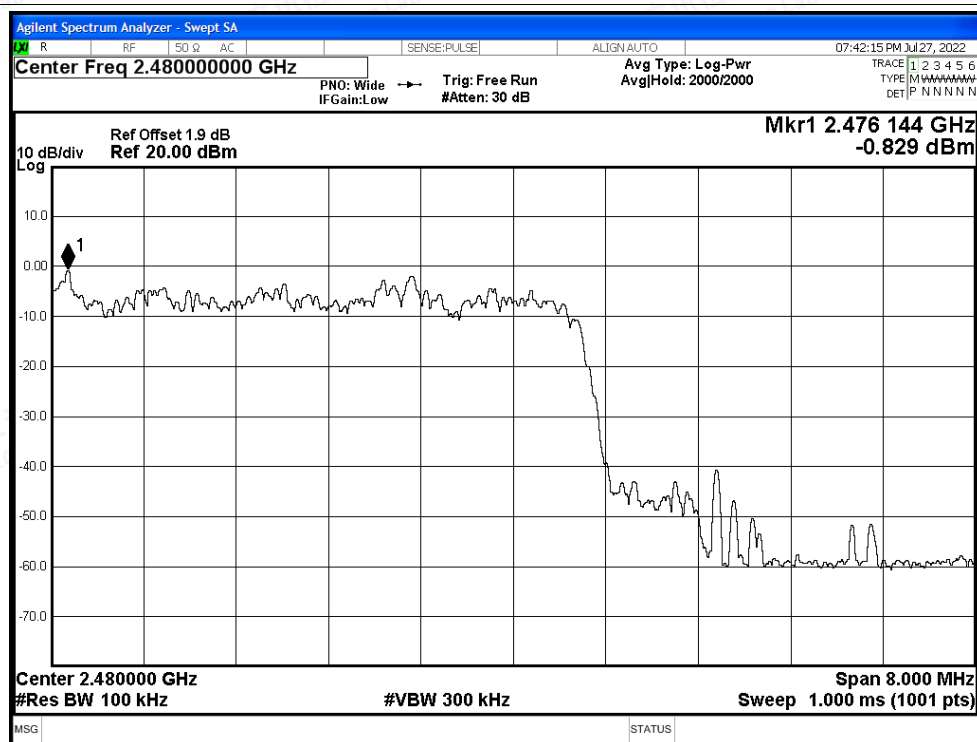
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



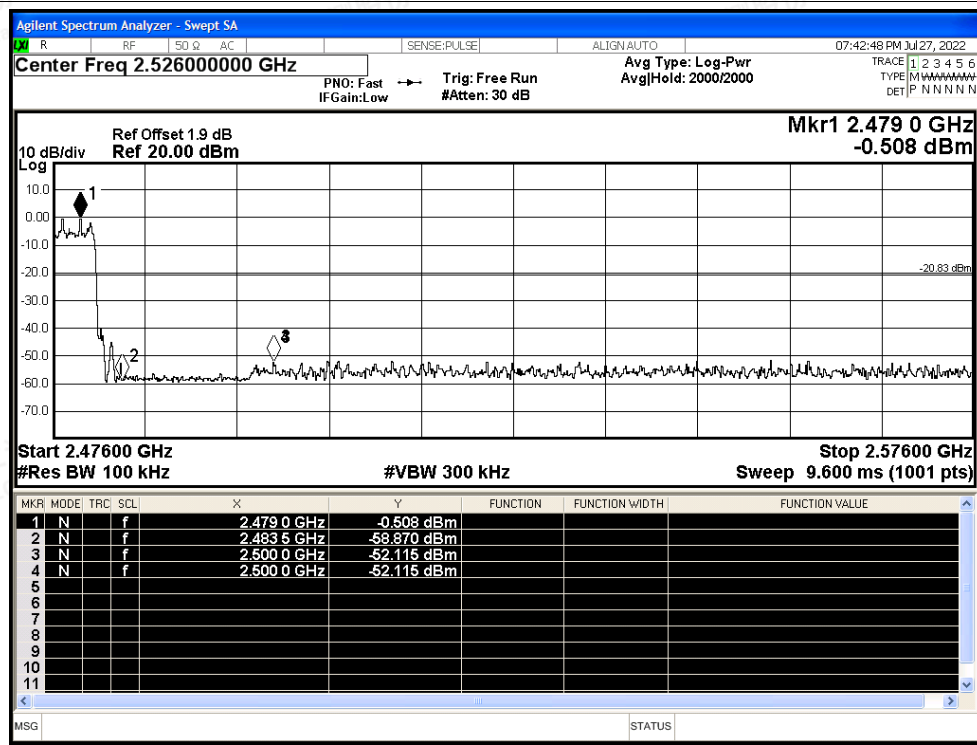


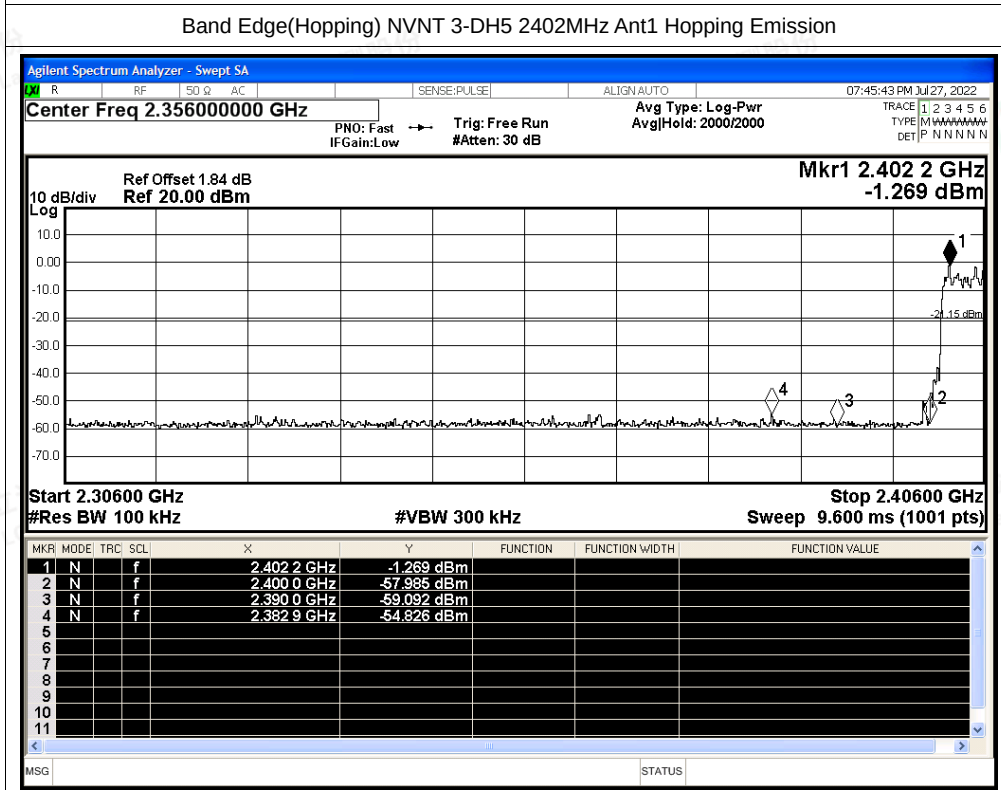
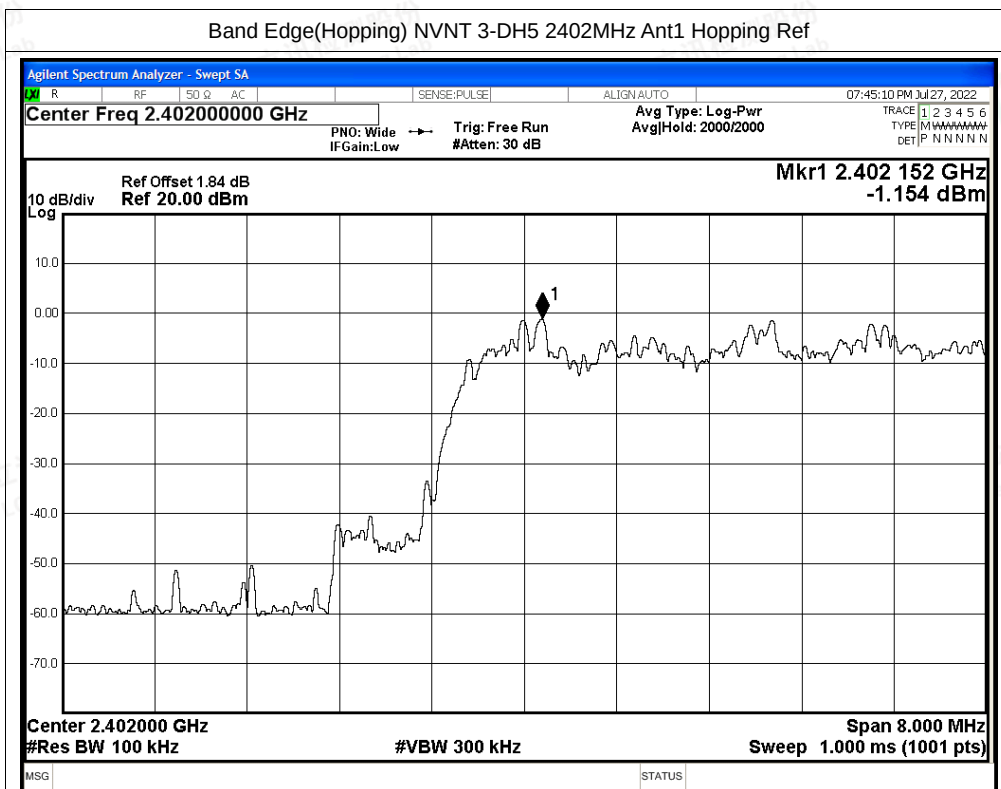


Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



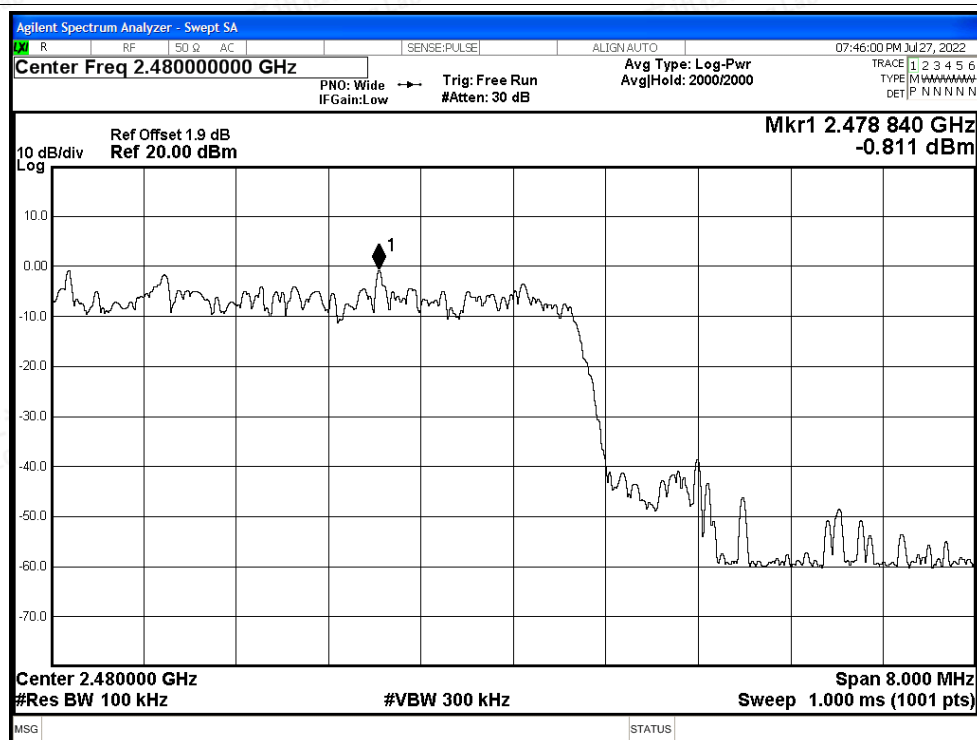
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



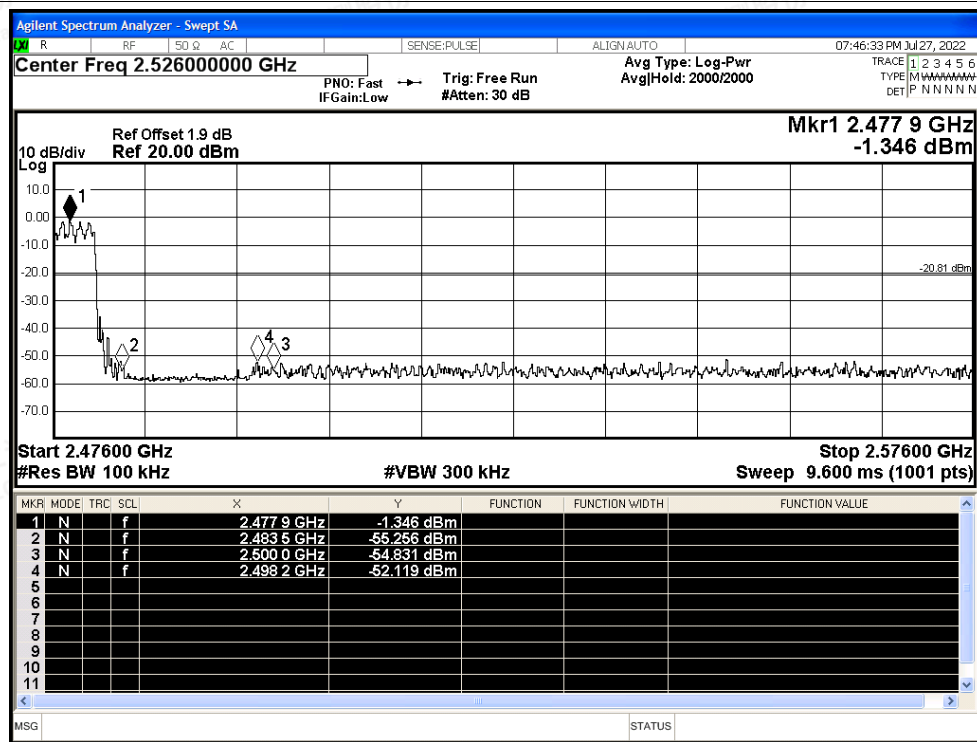




Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



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	-52.42	-20	Pass
NVNT	1-DH5	2441	Ant1	-52.3	-20	Pass
NVNT	1-DH5	2480	Ant1	-52.25	-20	Pass
NVNT	2-DH5	2402	Ant1	-54.11	-20	Pass
NVNT	2-DH5	2441	Ant1	-53.76	-20	Pass
NVNT	2-DH5	2480	Ant1	-54.24	-20	Pass
NVNT	3-DH5	2402	Ant1	-53.55	-20	Pass
NVNT	3-DH5	2441	Ant1	-53.41	-20	Pass
NVNT	3-DH5	2480	Ant1	-53.47	-20	Pass

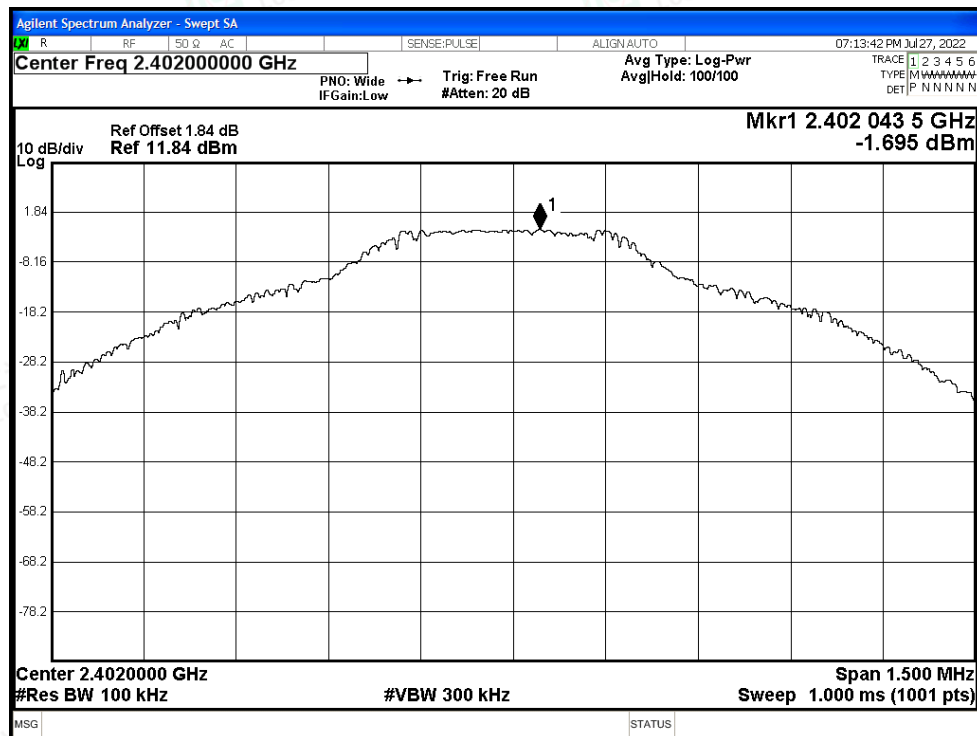


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Scan code to check authenticity

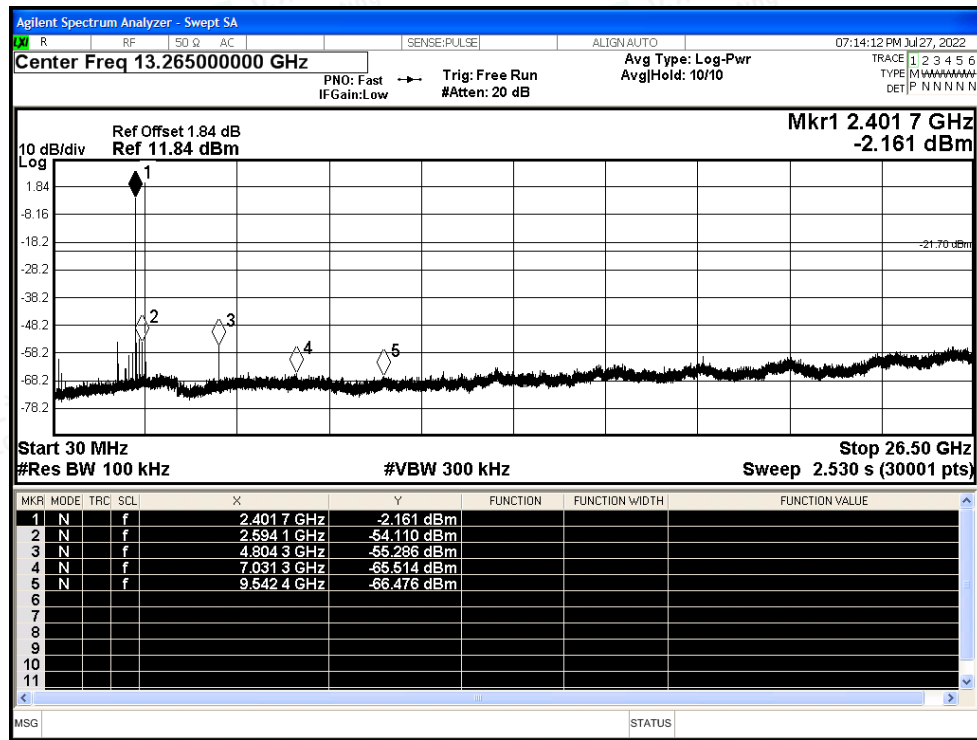


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

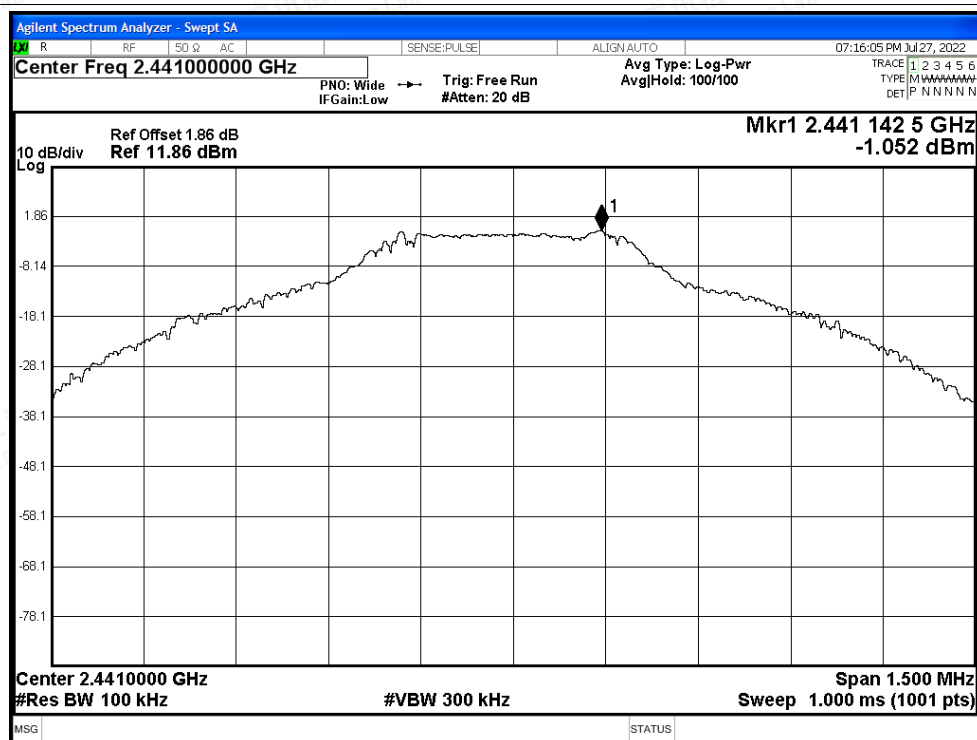


Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

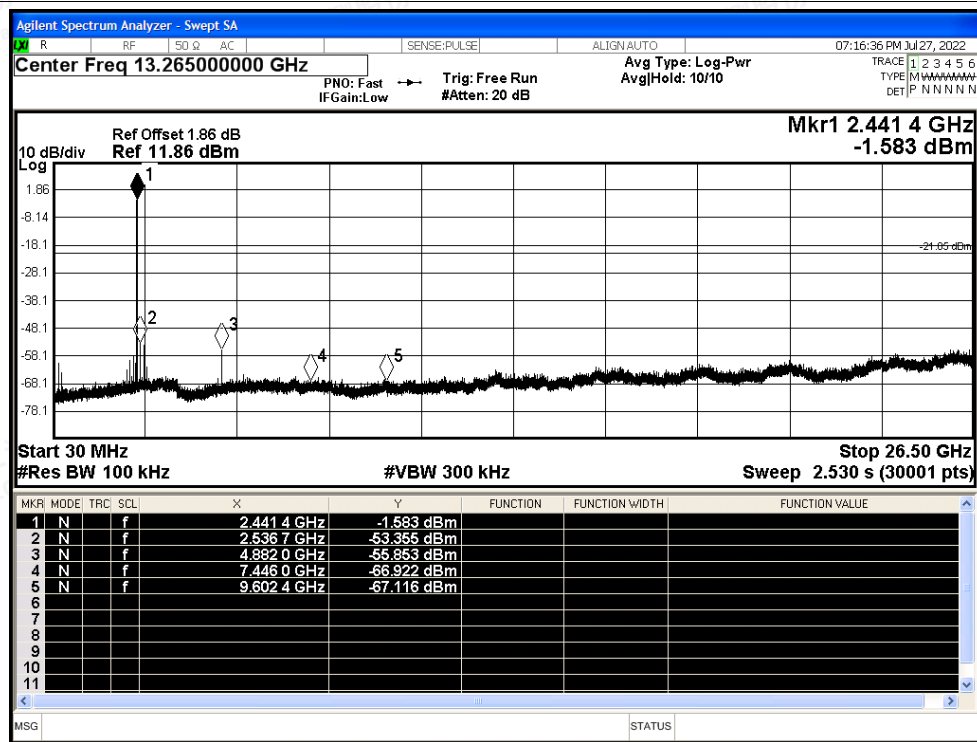




Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

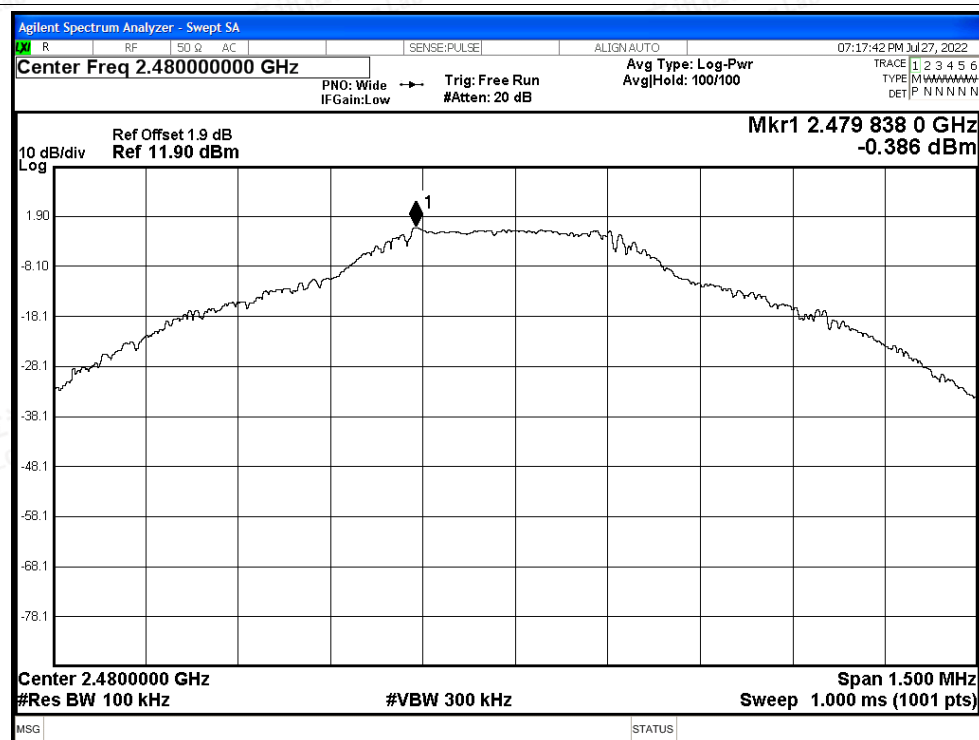


Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

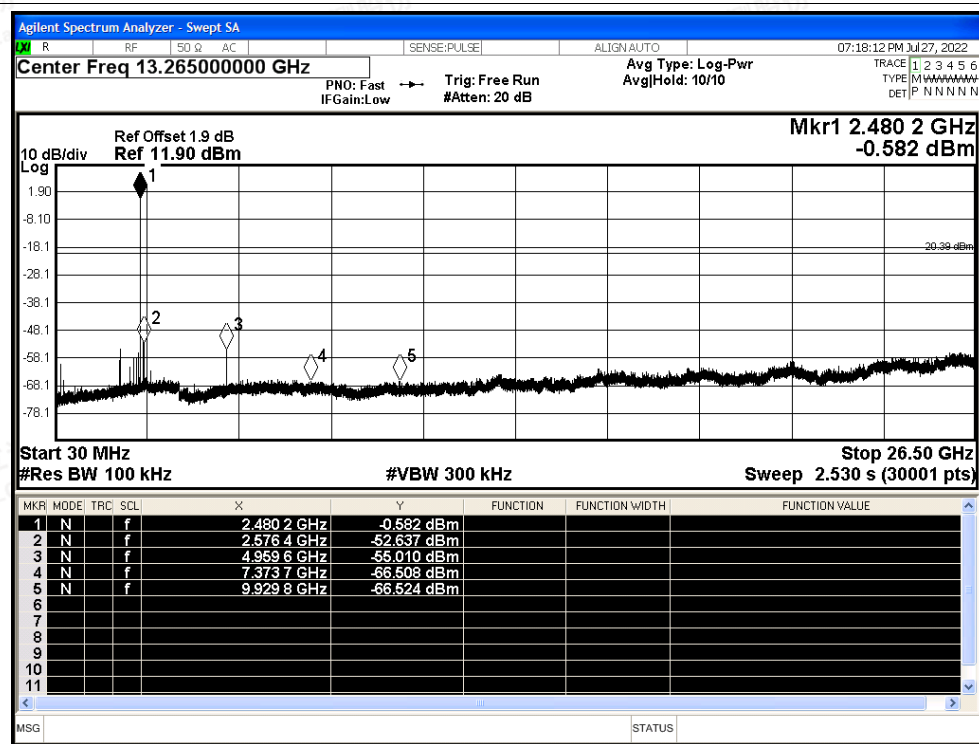




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

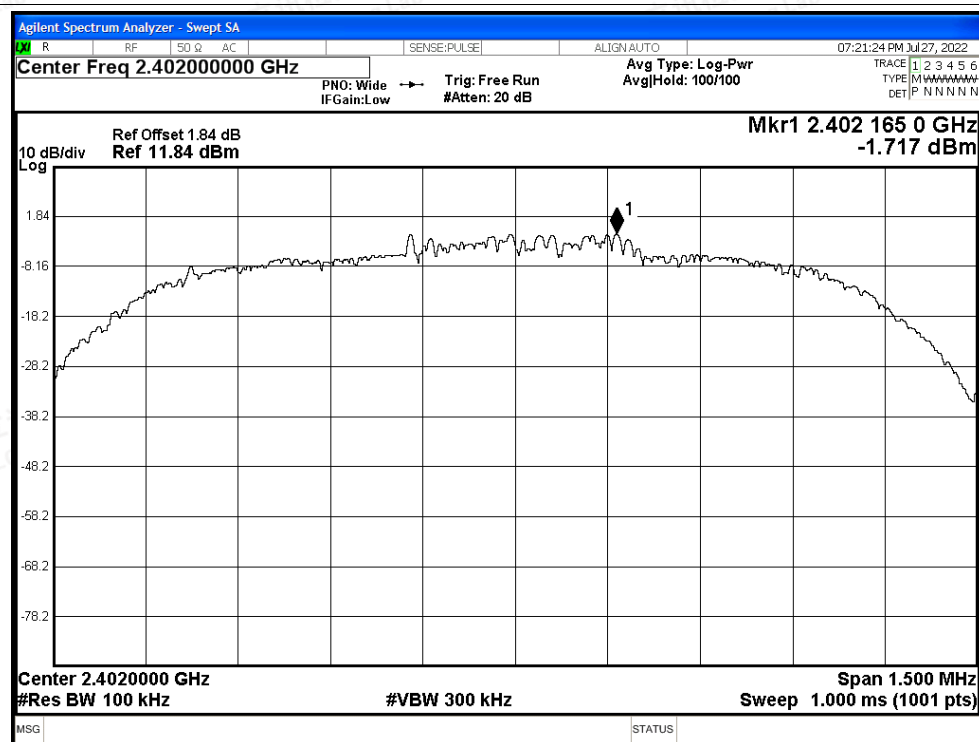


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

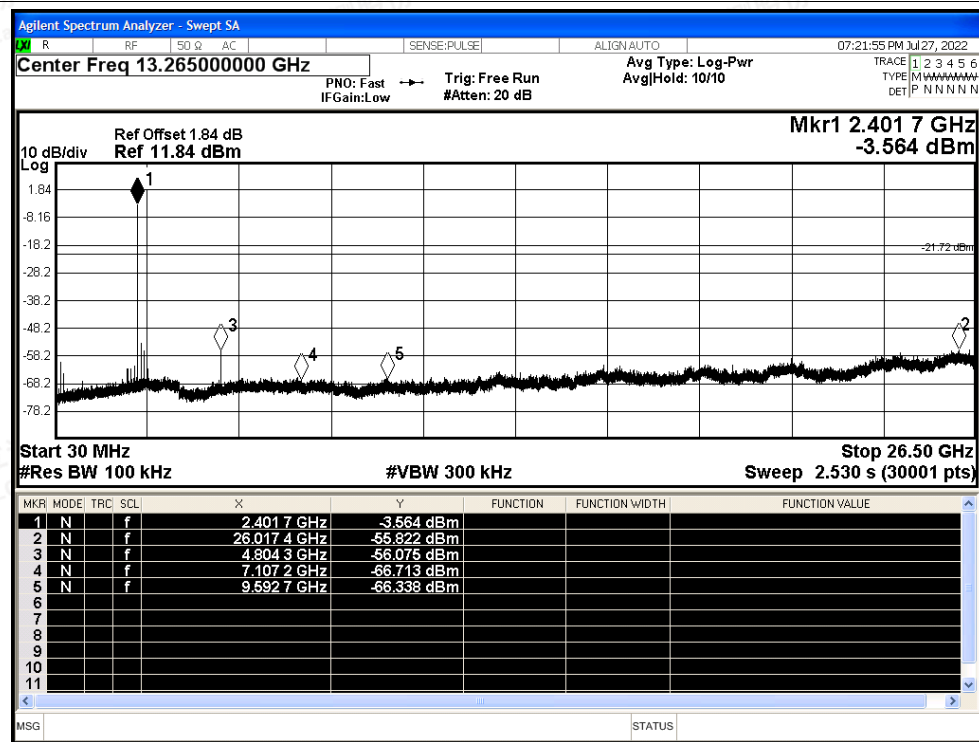




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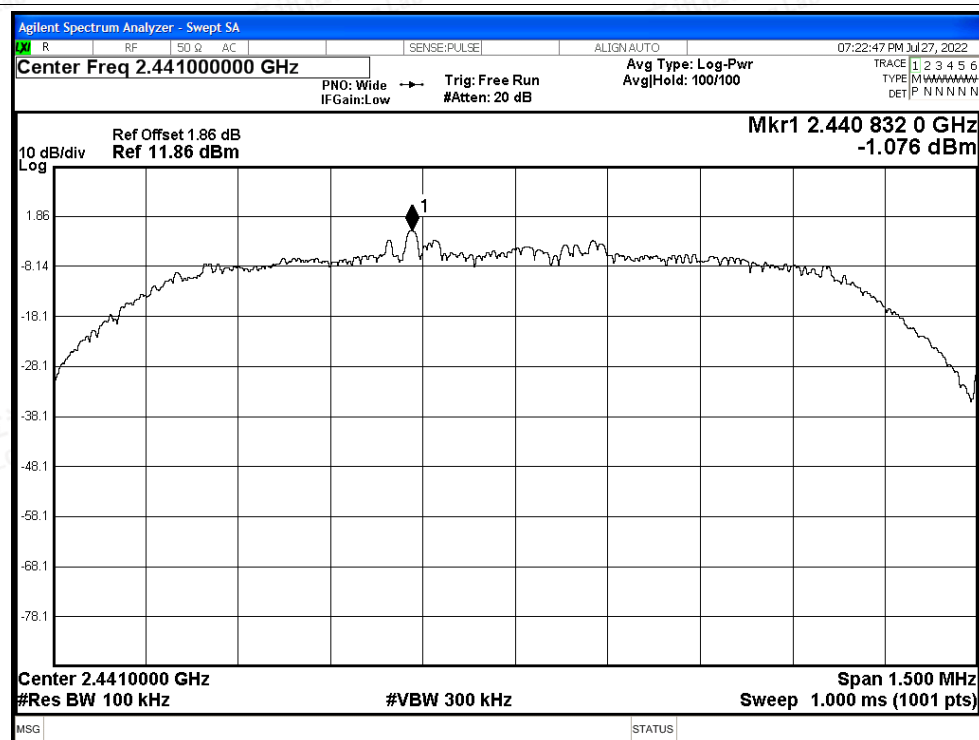


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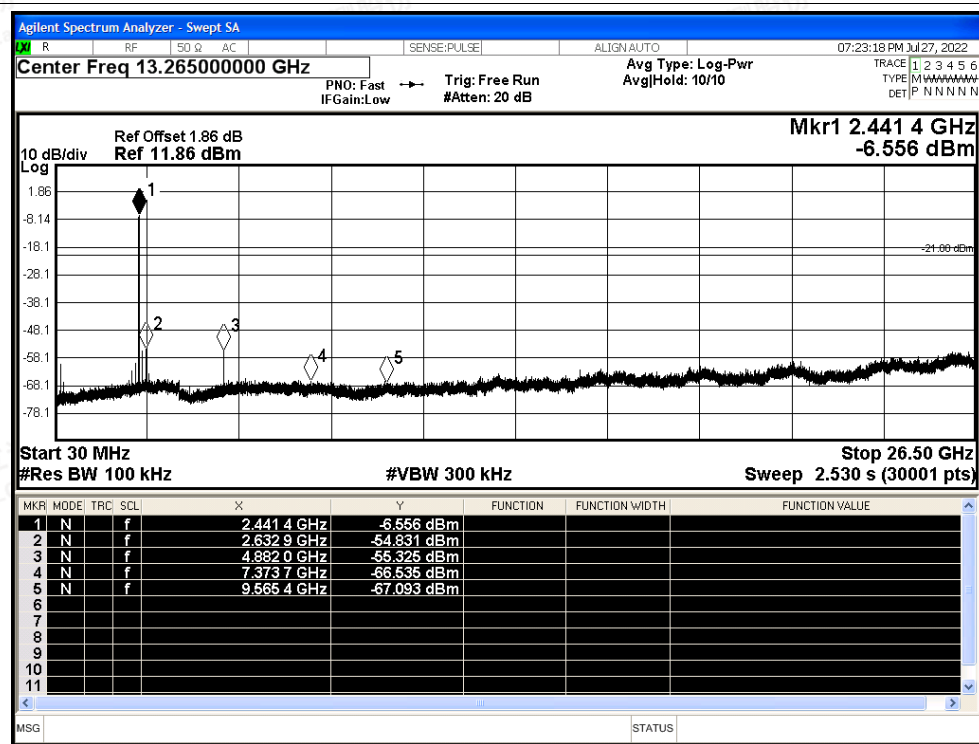




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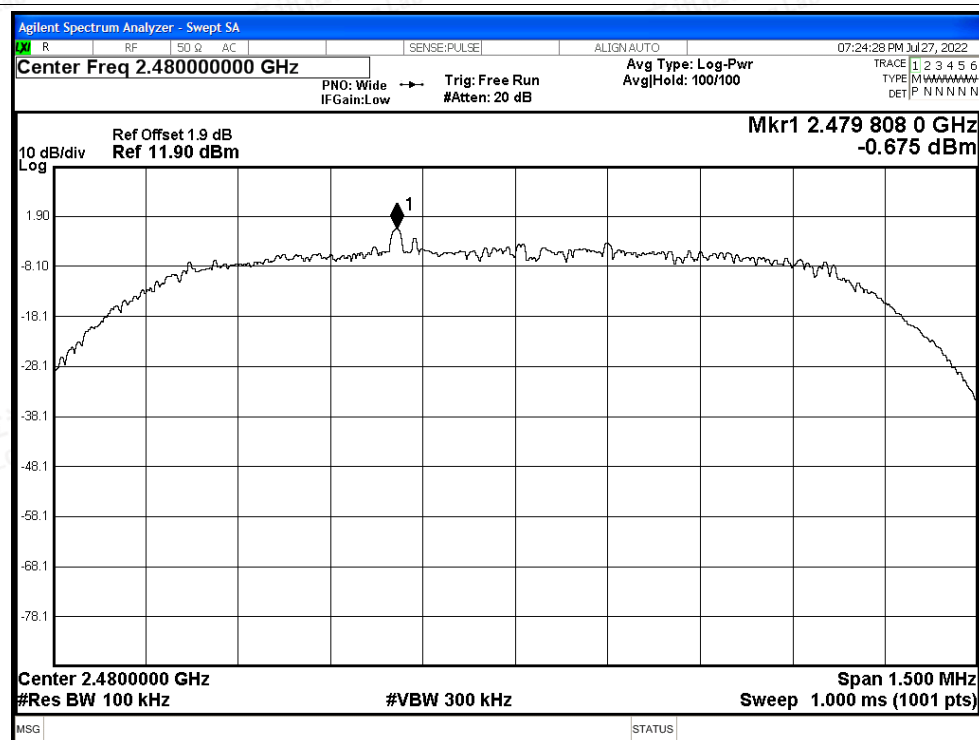


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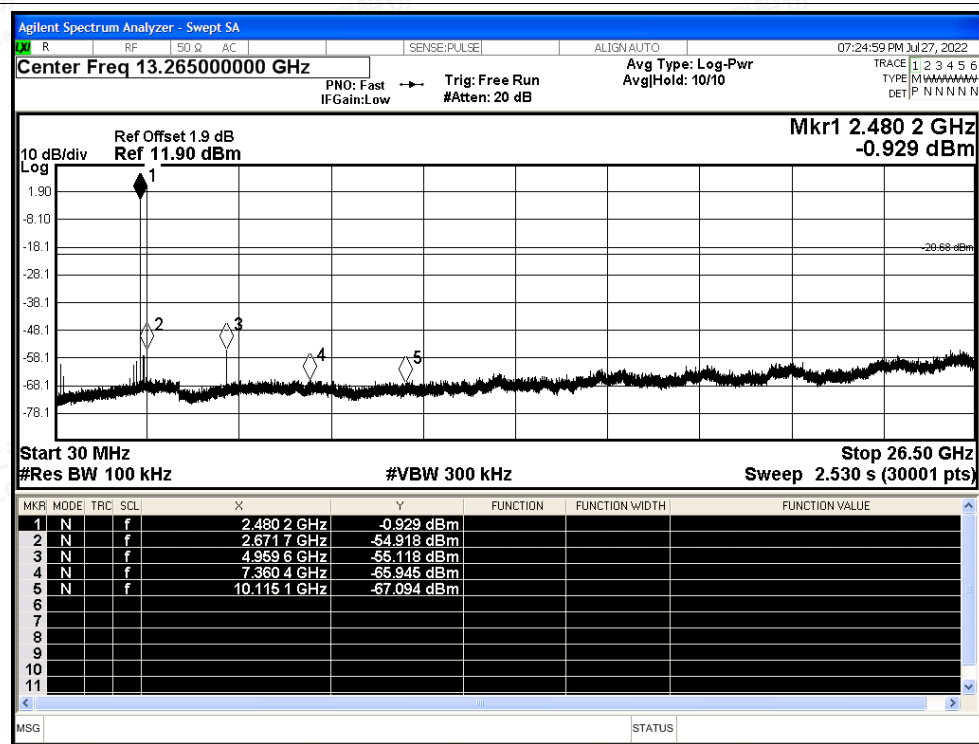




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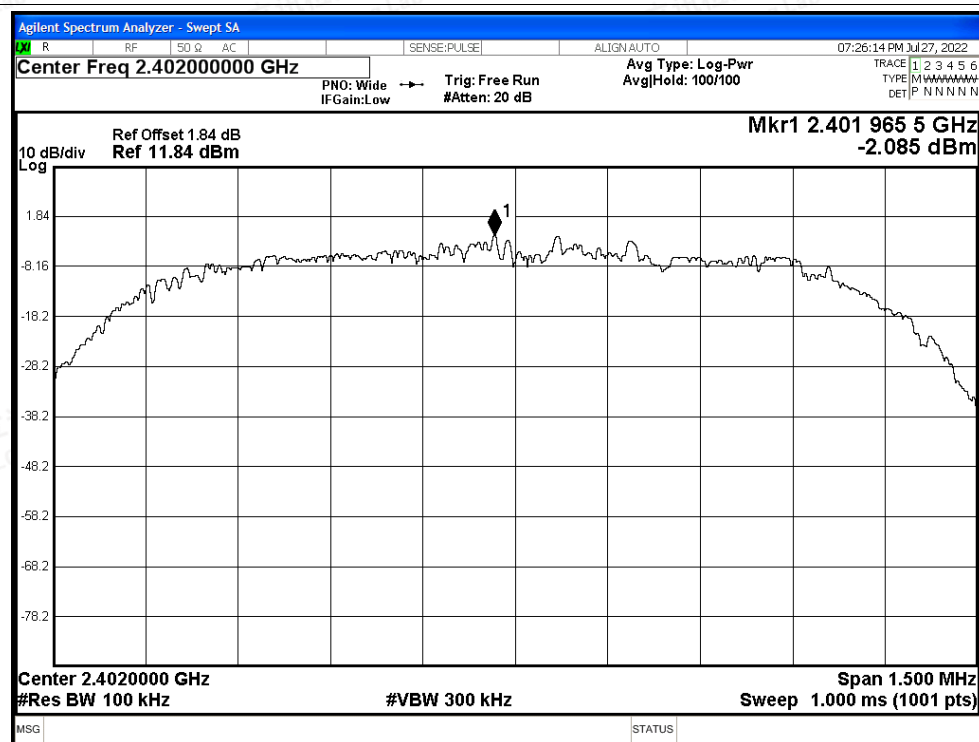


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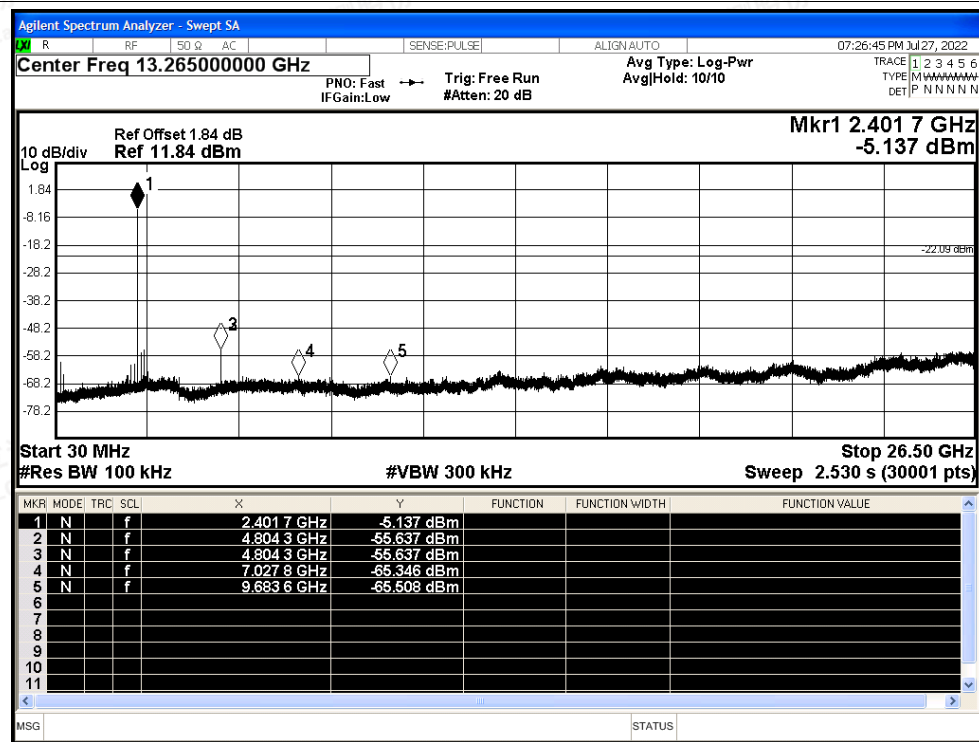




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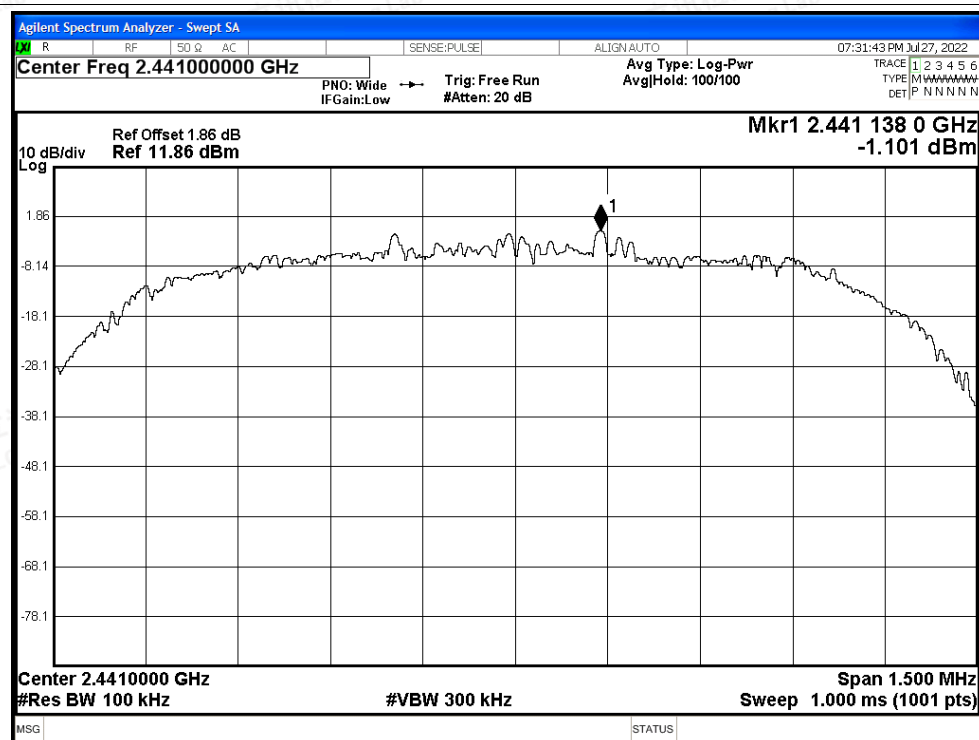


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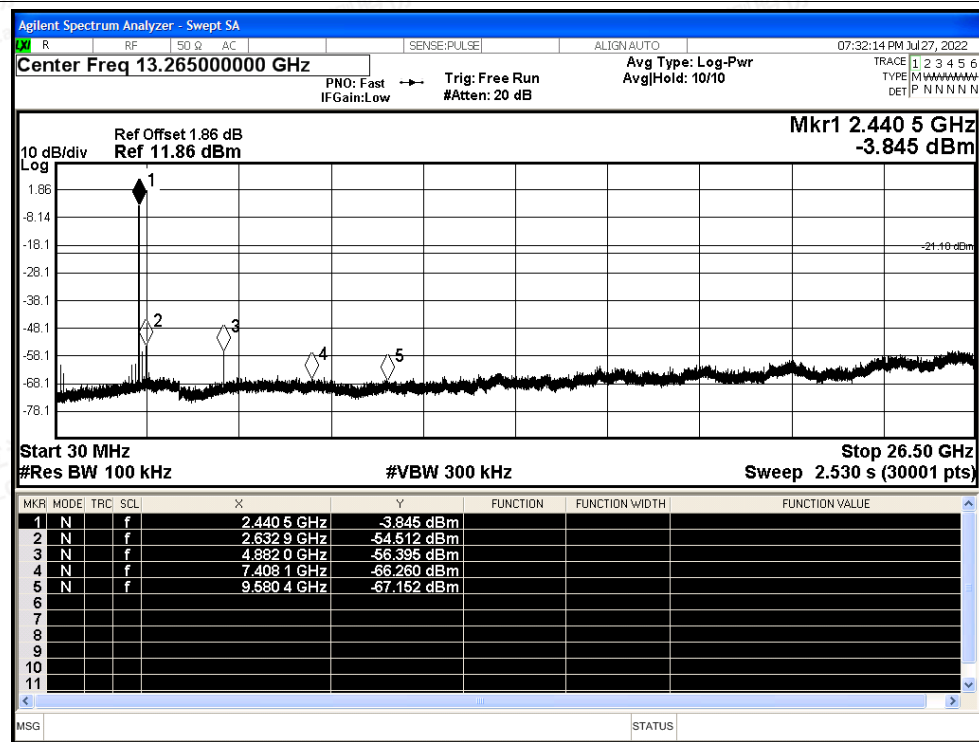




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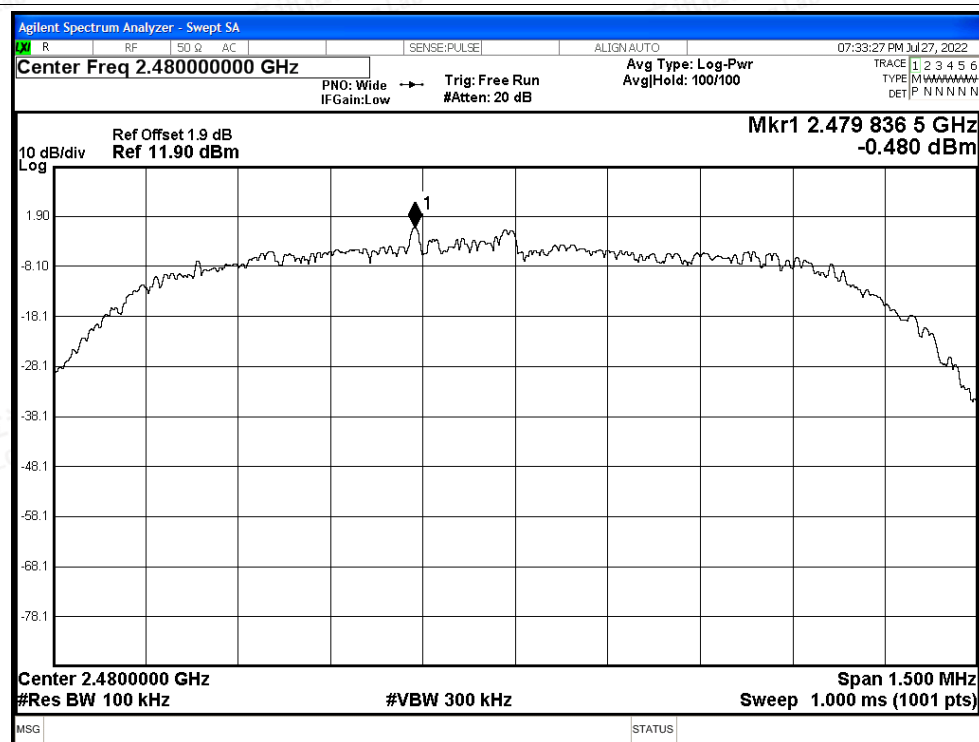


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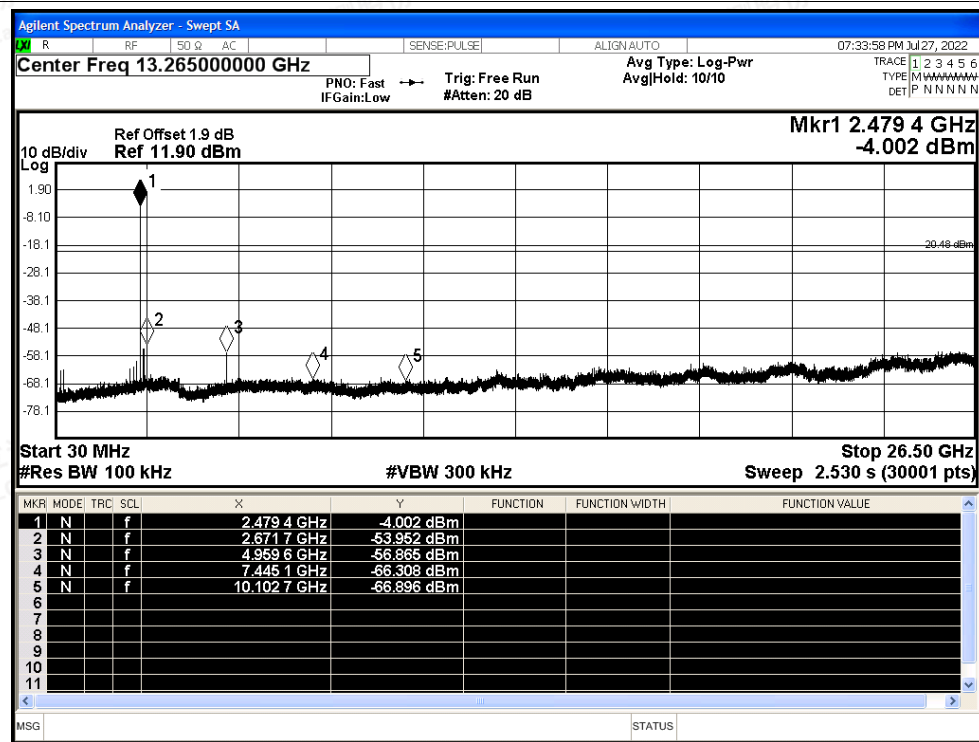




Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



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	-50.87	2	46.39	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-60.89	2	36.37	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2385.36	-47.05	2	50.21	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2386.704	-60.33	2	36.93	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-51	2	46.26	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-60.59	2	36.67	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-49.43	2	47.83	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-60.21	2	37.05	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.608	-36.21	2	61.05	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2497.048	-60.02	2	37.24	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-51.06	2	46.2	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-60.2	2	37.06	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-52.61	2	44.65	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-60.8	2	36.46	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2341.104	-47.68	2	49.58	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2389.008	-60.3	2	36.96	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-52.08	2	45.18	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-60.47	2	36.79	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-50.03	2	47.23	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-59.83	2	37.43	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2484.208	-39.39	2	57.87	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.584	-59.82	2	37.44	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-49.46	2	47.8	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-60.14	2	37.12	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-49.29	2	47.97	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-60.82	2	36.44	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2377.2	-47.56	2	49.7	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2384.784	-60.29	2	36.97	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-48.99	2	48.27	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-60.53	2	36.73	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-50.35	2	46.91	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-59.95	2	37.31	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.8	-34.96	2	62.3	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.656	-59.79	2	37.47	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-49.33	2	47.93	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-60.14	2	37.12	Average	54	Pass

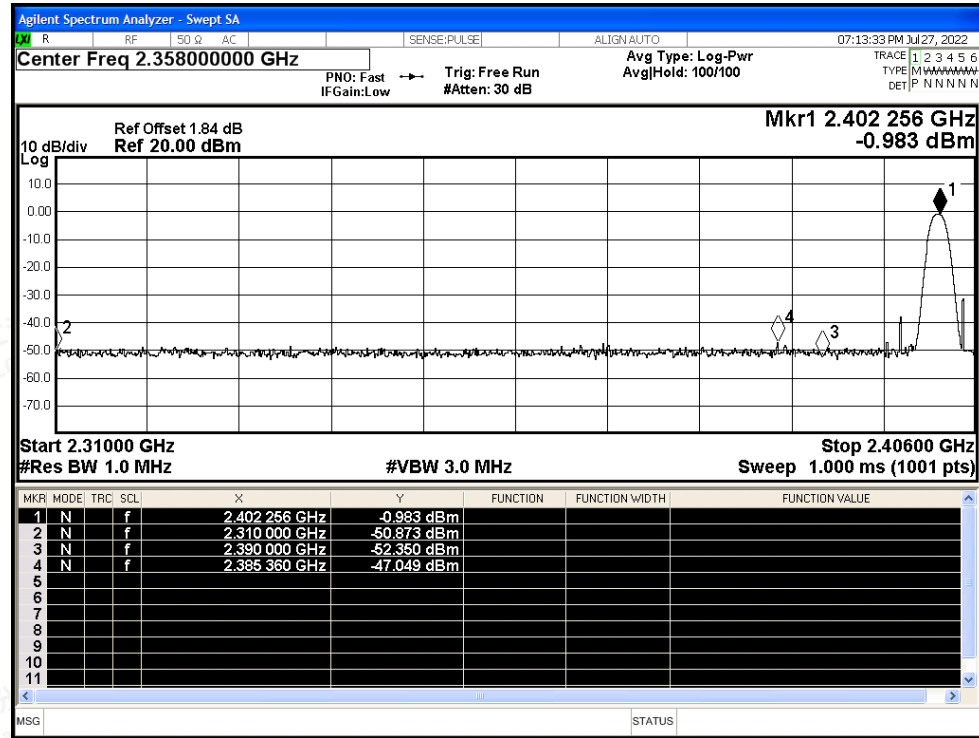


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Scan code to check authenticity

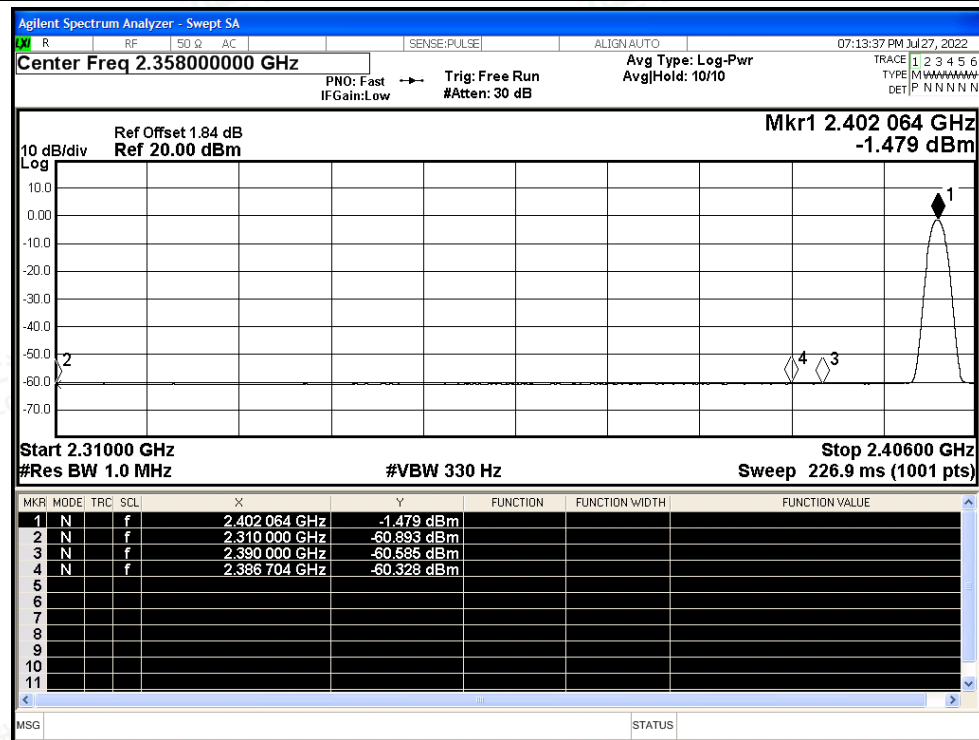


Test Graphs

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

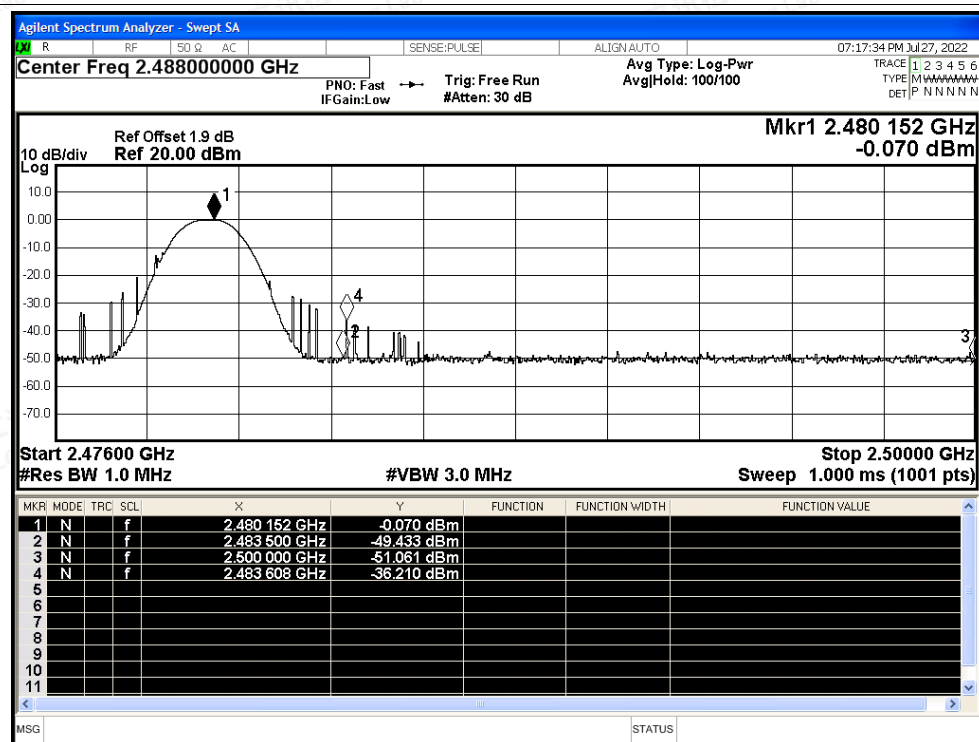


Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

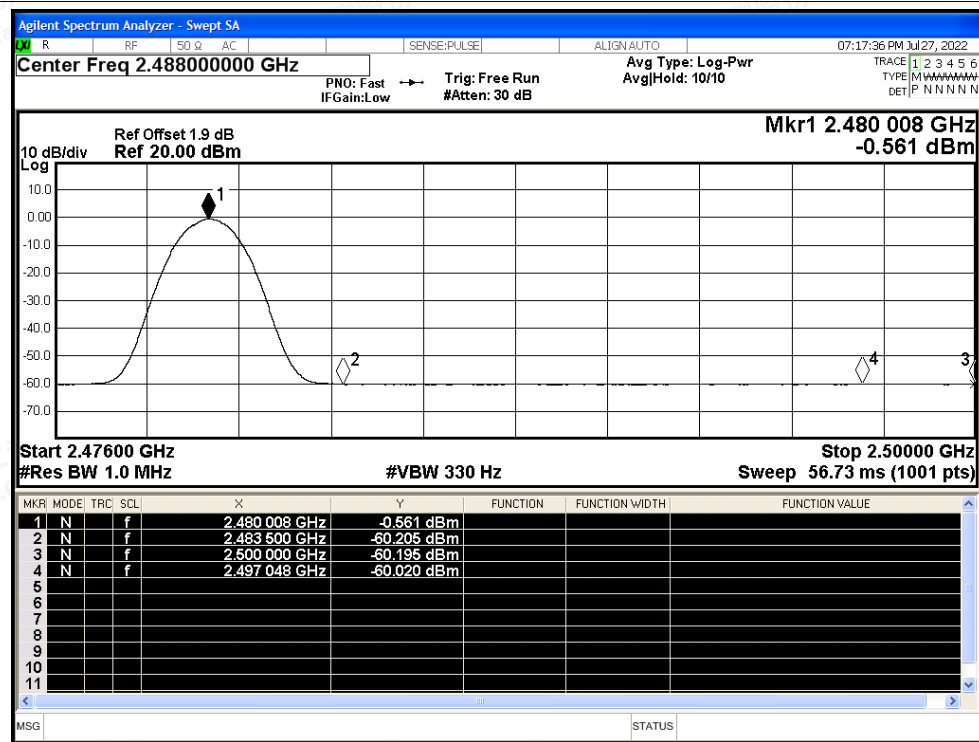




Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak

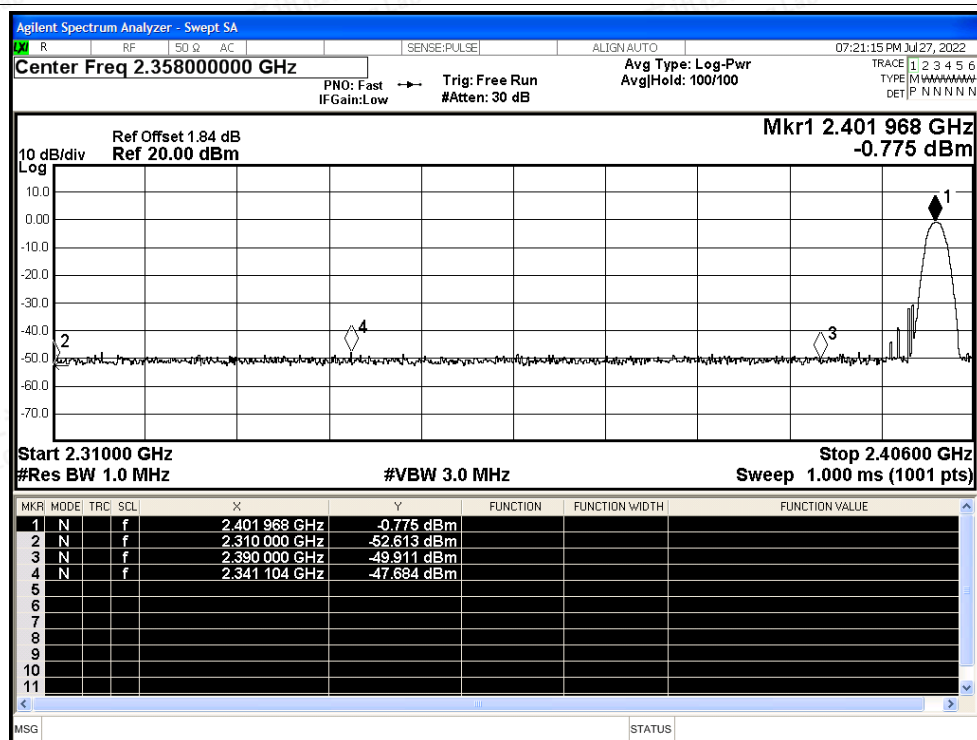


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

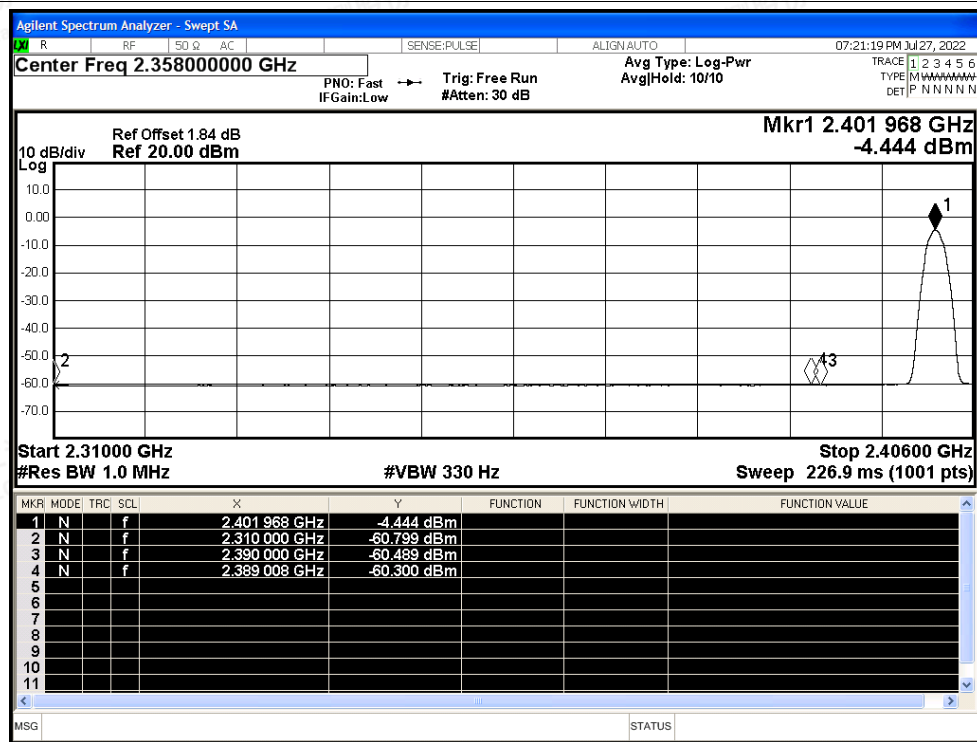




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak

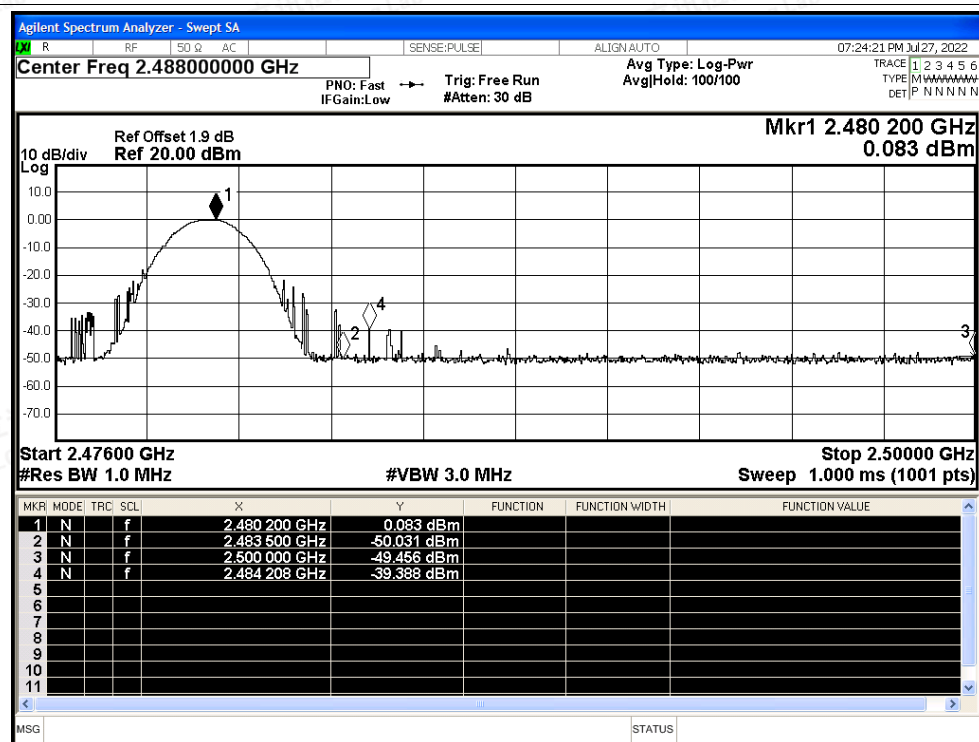


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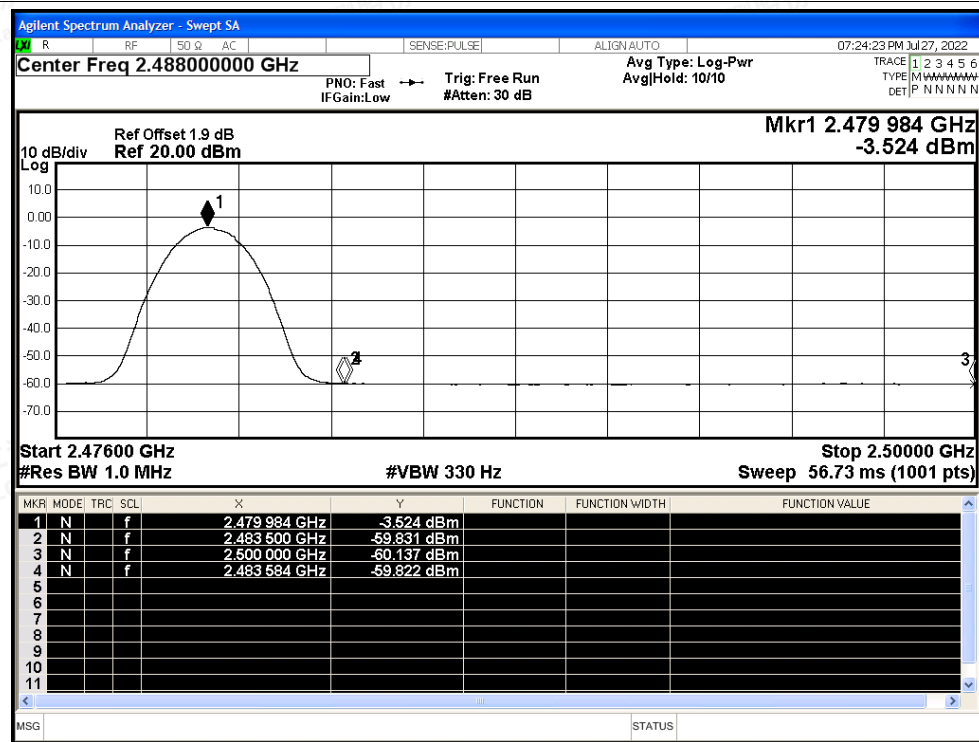




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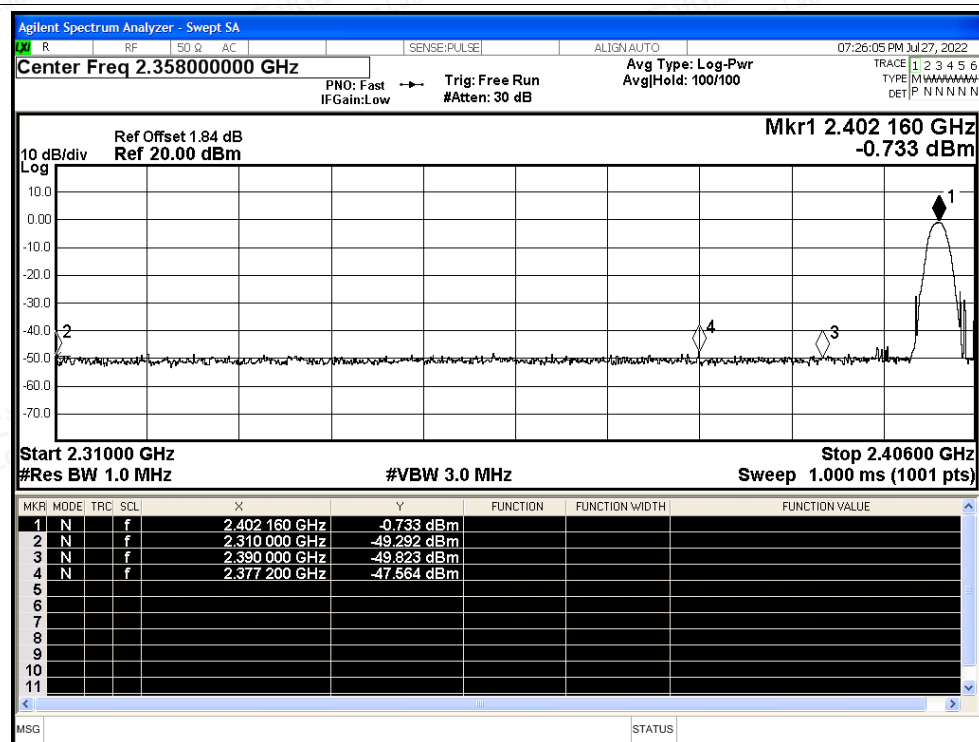


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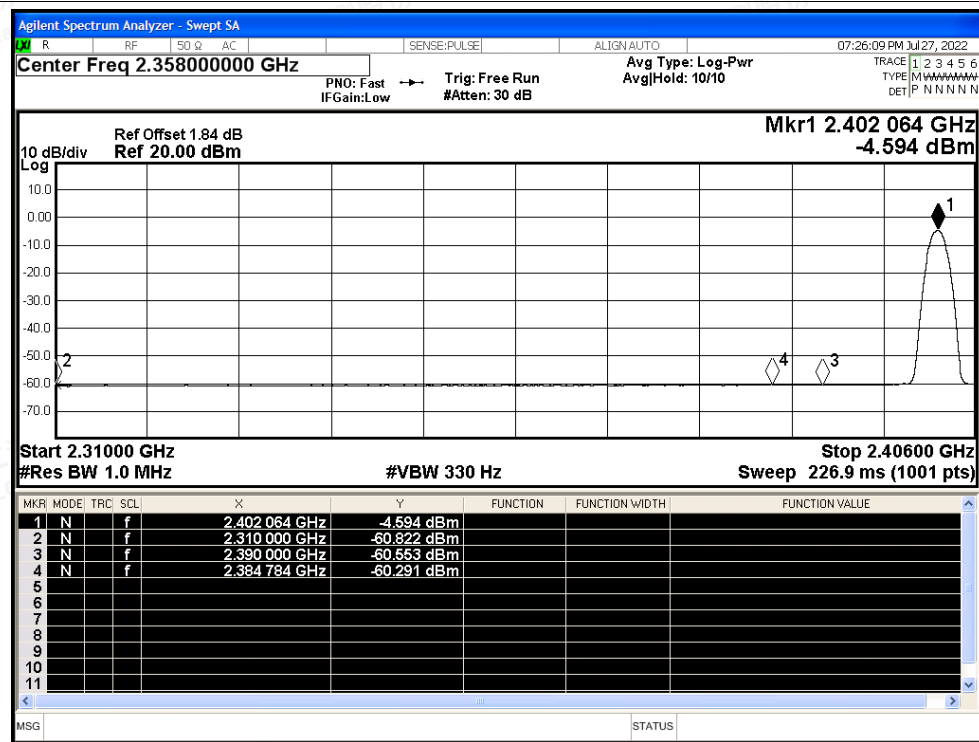




Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak

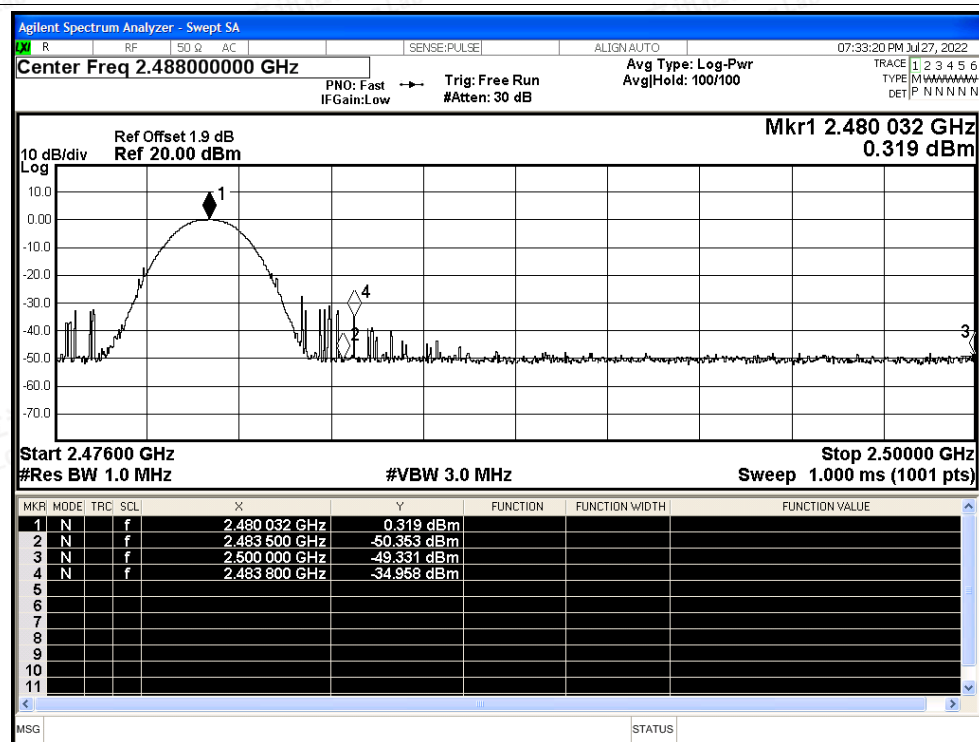


Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Average





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



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

