



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Bluetooth AI Voice Translator

Test Model: G5

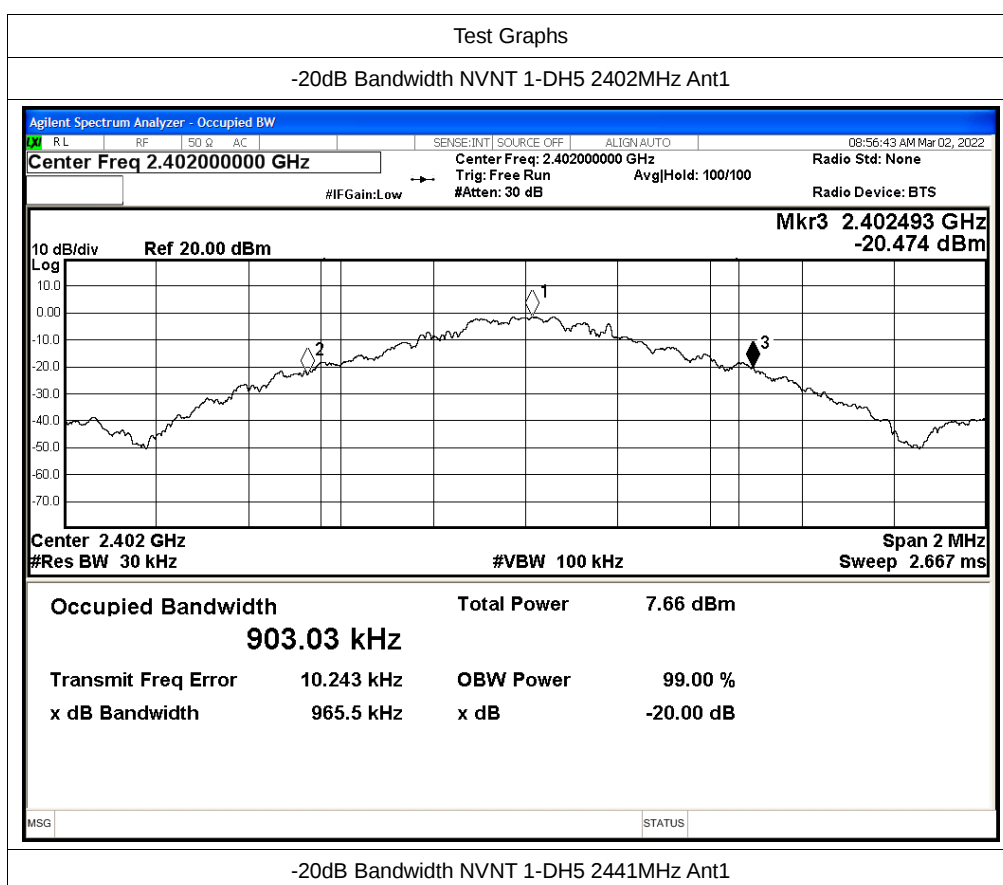
Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Bill Zhu
Supervised by:	Li Huan



A.1 -20dB Bandwidth

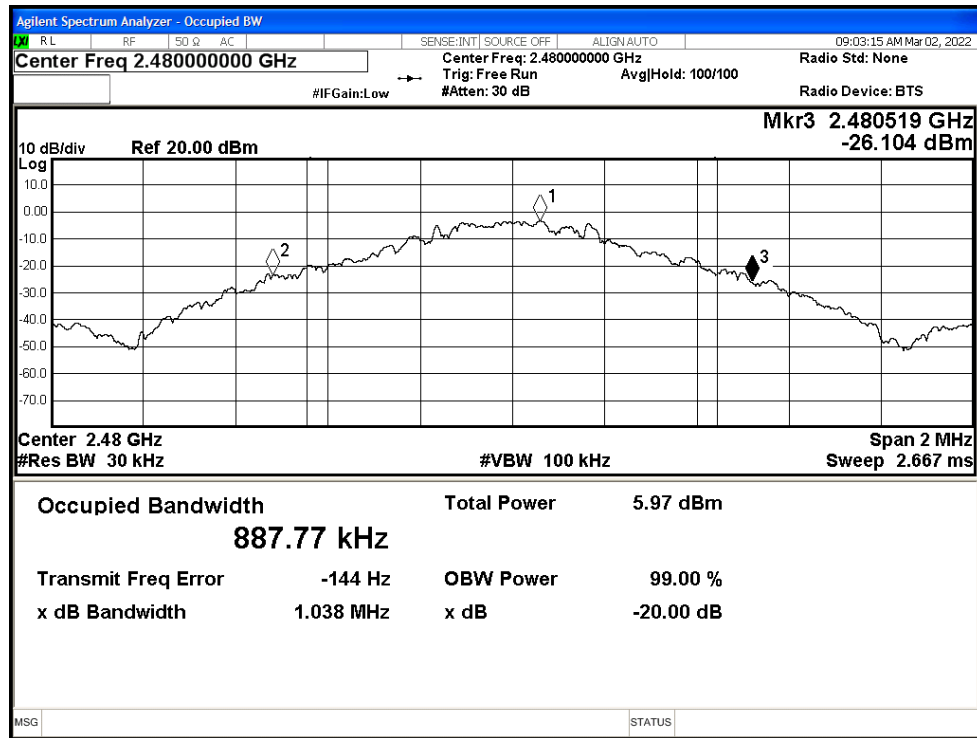
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.966	---	Pass
NVNT	1-DH5	2441	Ant1	1.028	---	Pass
NVNT	1-DH5	2480	Ant1	1.038	---	Pass
NVNT	2-DH5	2402	Ant1	1.306	---	Pass
NVNT	2-DH5	2441	Ant1	1.313	---	Pass
NVNT	2-DH5	2480	Ant1	1.304	---	Pass
NVNT	3-DH5	2402	Ant1	1.307	---	Pass
NVNT	3-DH5	2441	Ant1	1.311	---	Pass
NVNT	3-DH5	2480	Ant1	1.285	---	Pass



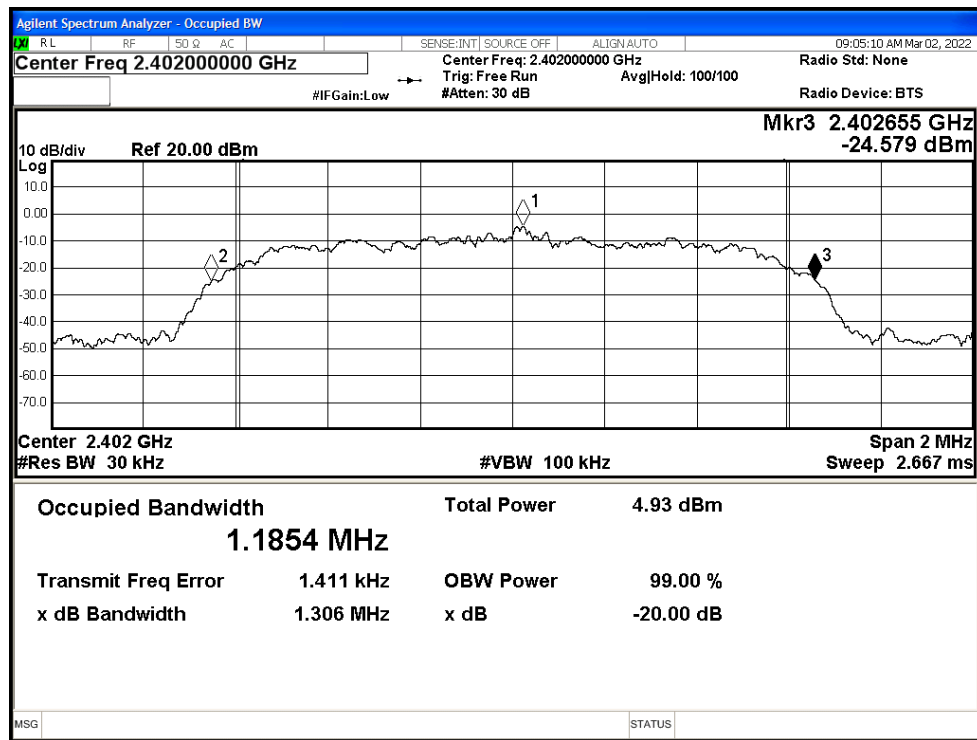




-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

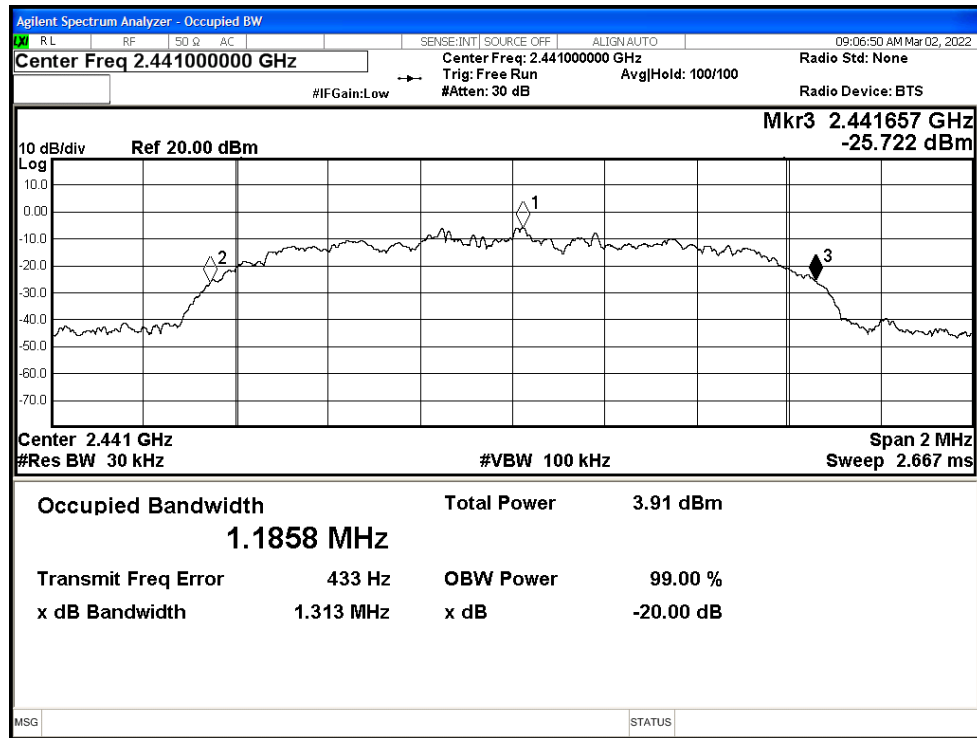


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1

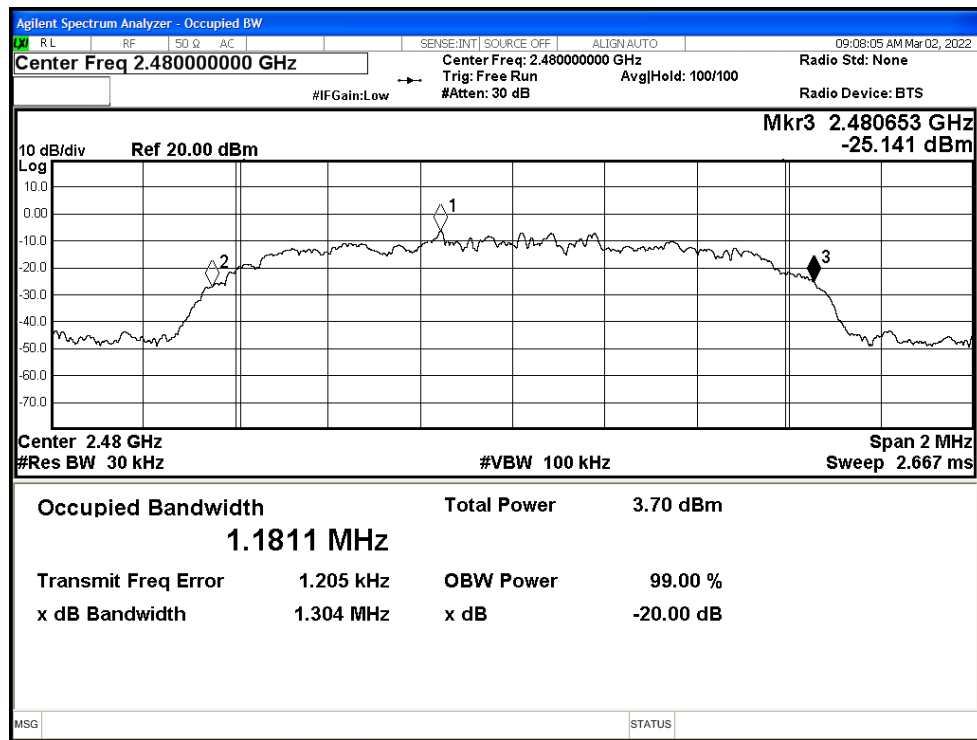




-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1

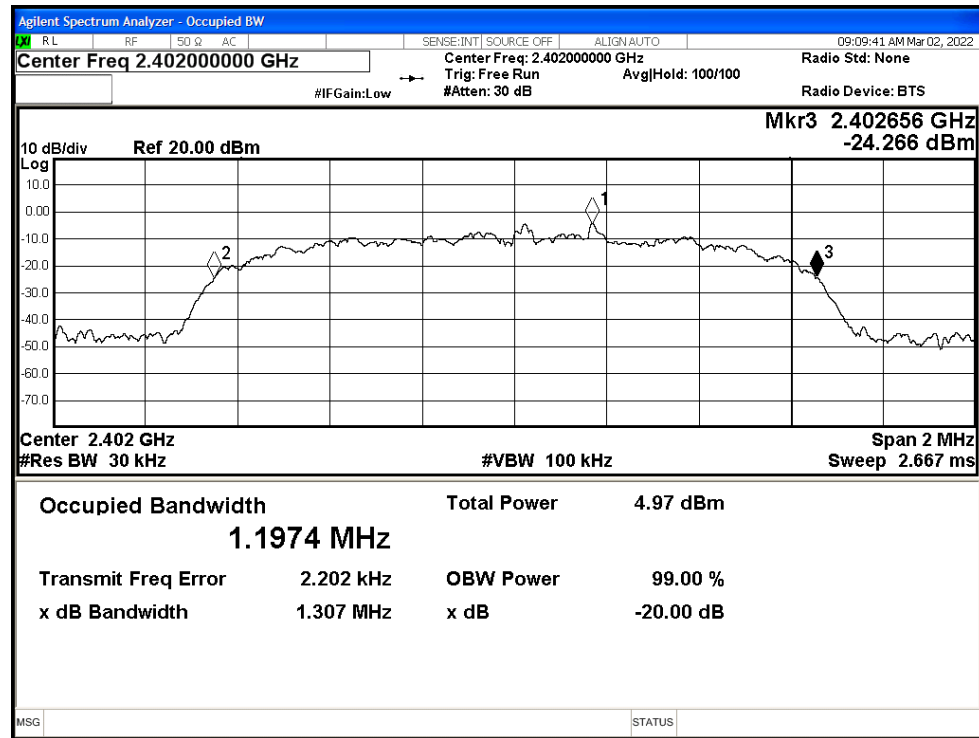


-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

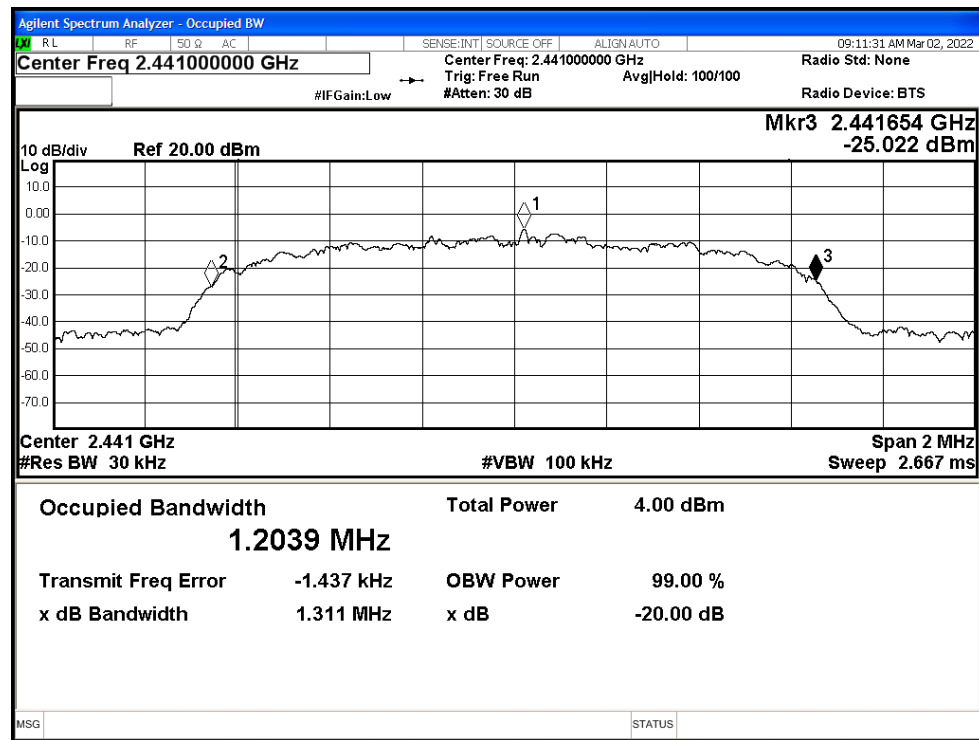


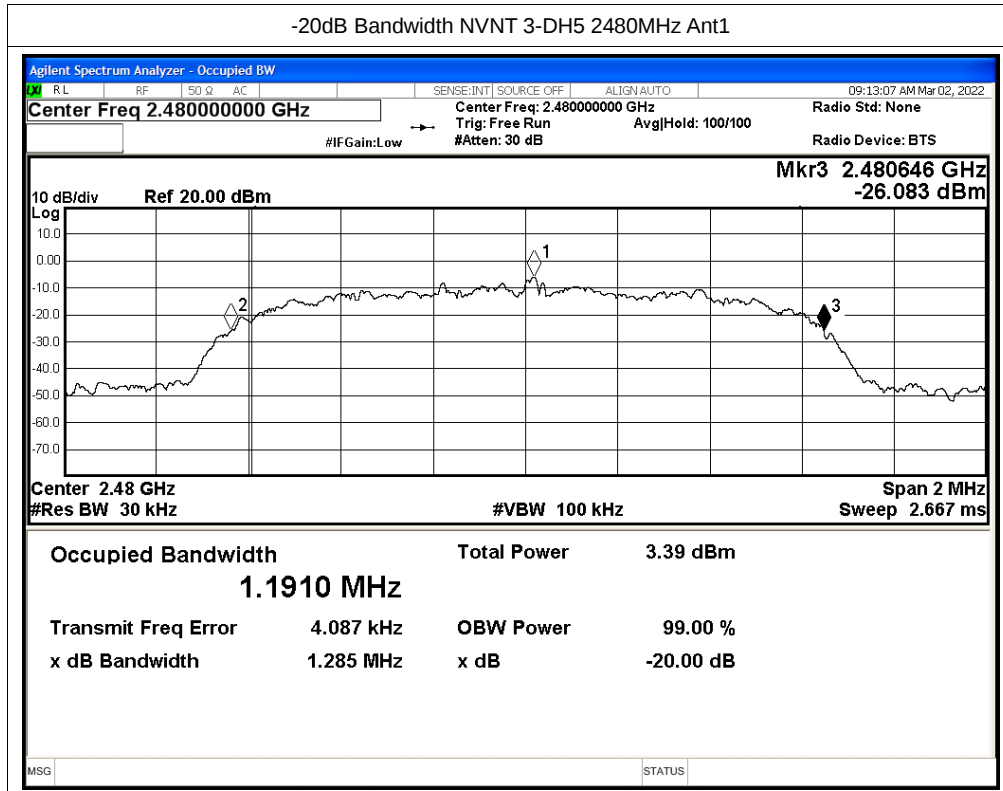


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1







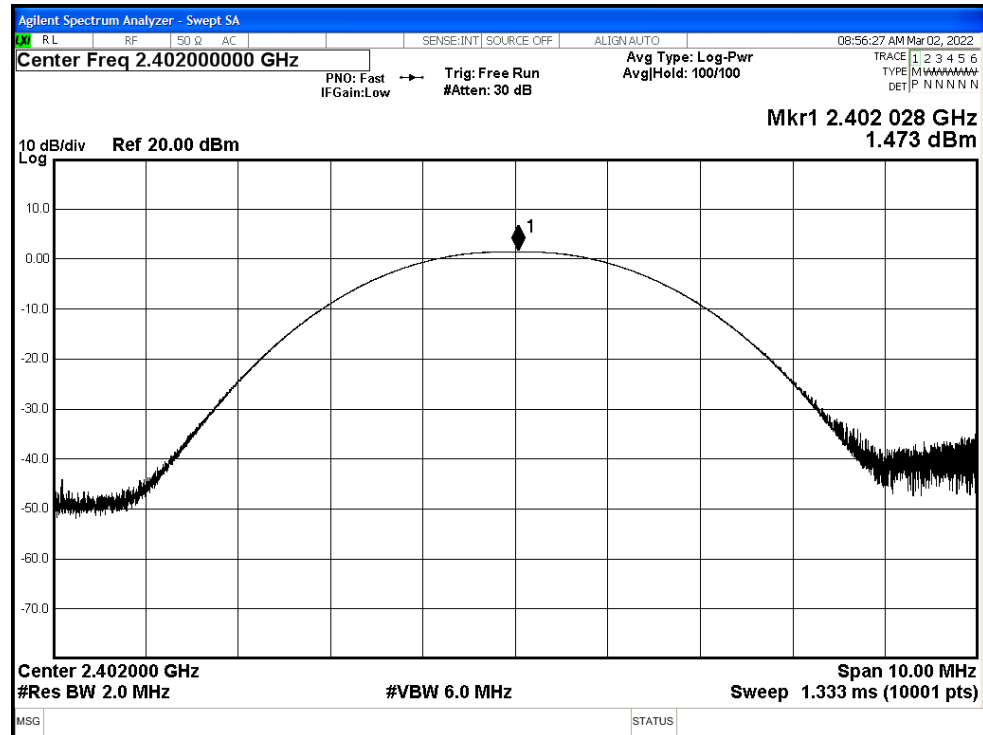
A.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	1.47	0	1.47	21	Pass
NVNT	1-DH5	2441	Ant1	-0.38	0	-0.38	21	Pass
NVNT	1-DH5	2480	Ant1	-0.32	0	-0.32	21	Pass
NVNT	2-DH5	2402	Ant1	0.41	0	0.41	21	Pass
NVNT	2-DH5	2441	Ant1	-1.05	0	-1.05	21	Pass
NVNT	2-DH5	2480	Ant1	-1.13	0	-1.13	21	Pass
NVNT	3-DH5	2402	Ant1	0.52	0	0.52	21	Pass
NVNT	3-DH5	2441	Ant1	-0.87	0	-0.87	21	Pass
NVNT	3-DH5	2480	Ant1	-0.96	0	-0.96	21	Pass

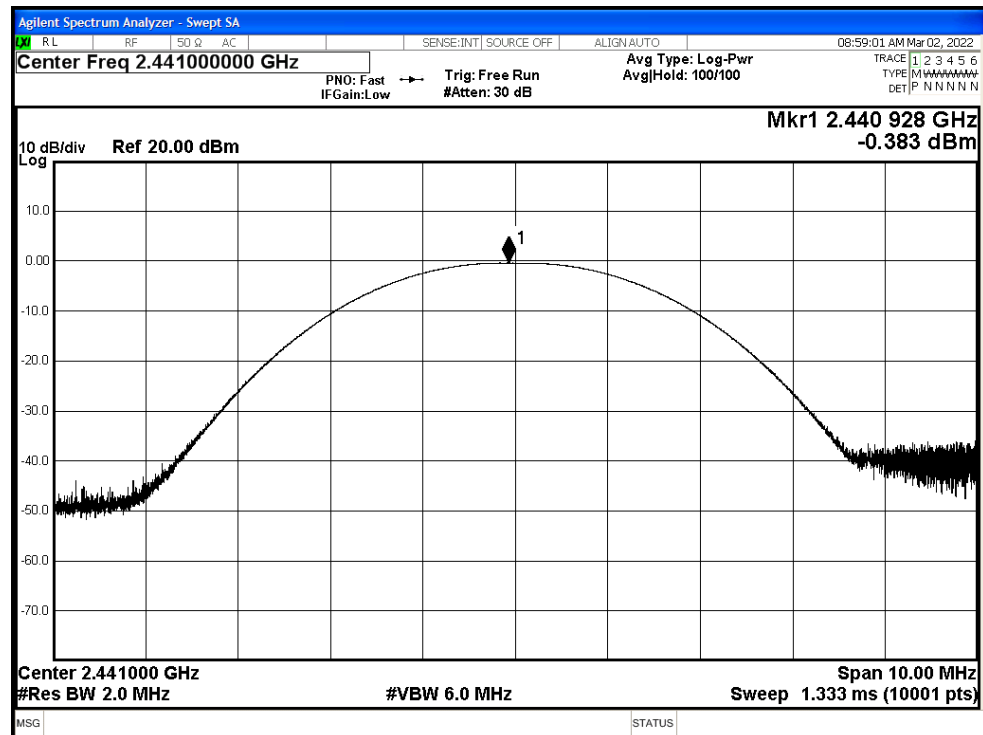


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

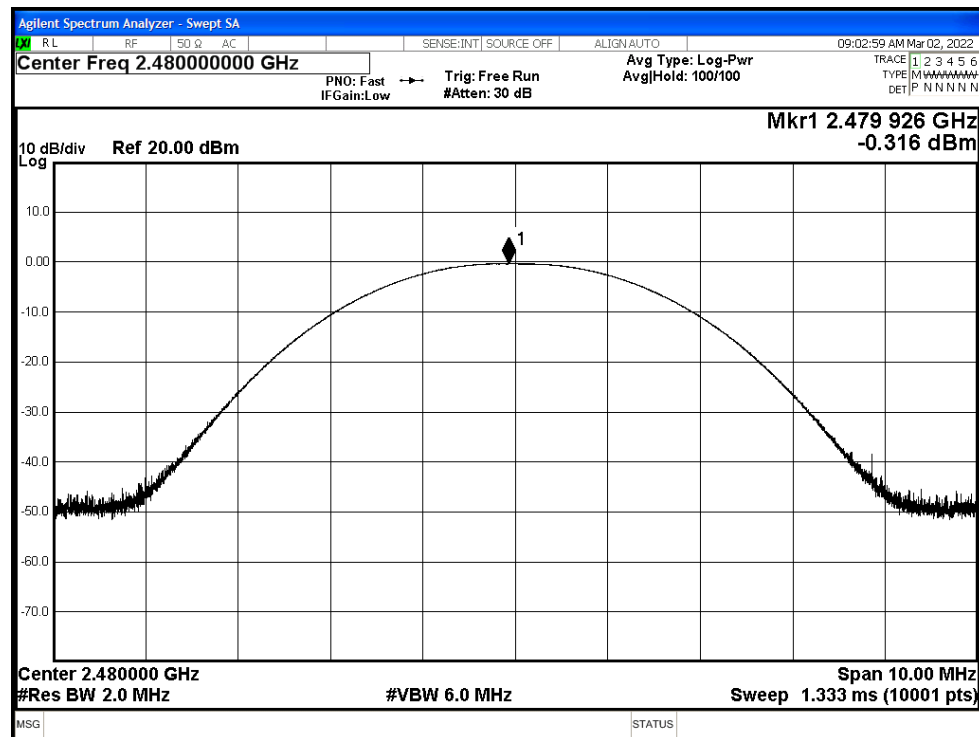


Power NVNT 1-DH5 2441MHz Ant1

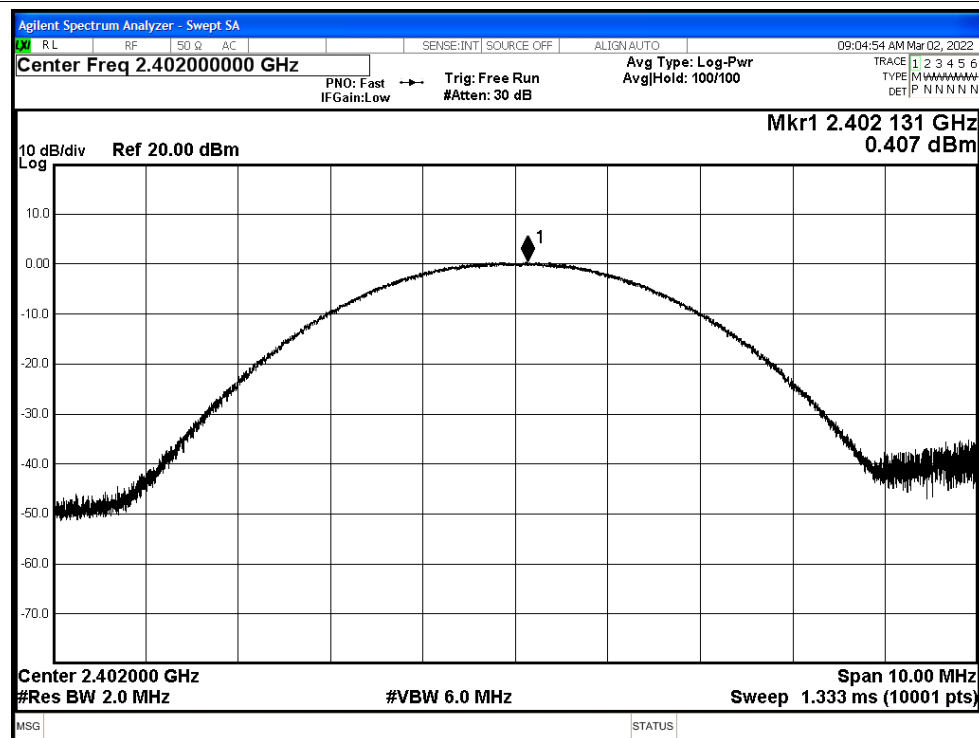




Power NVNT 1-DH5 2480MHz Ant1

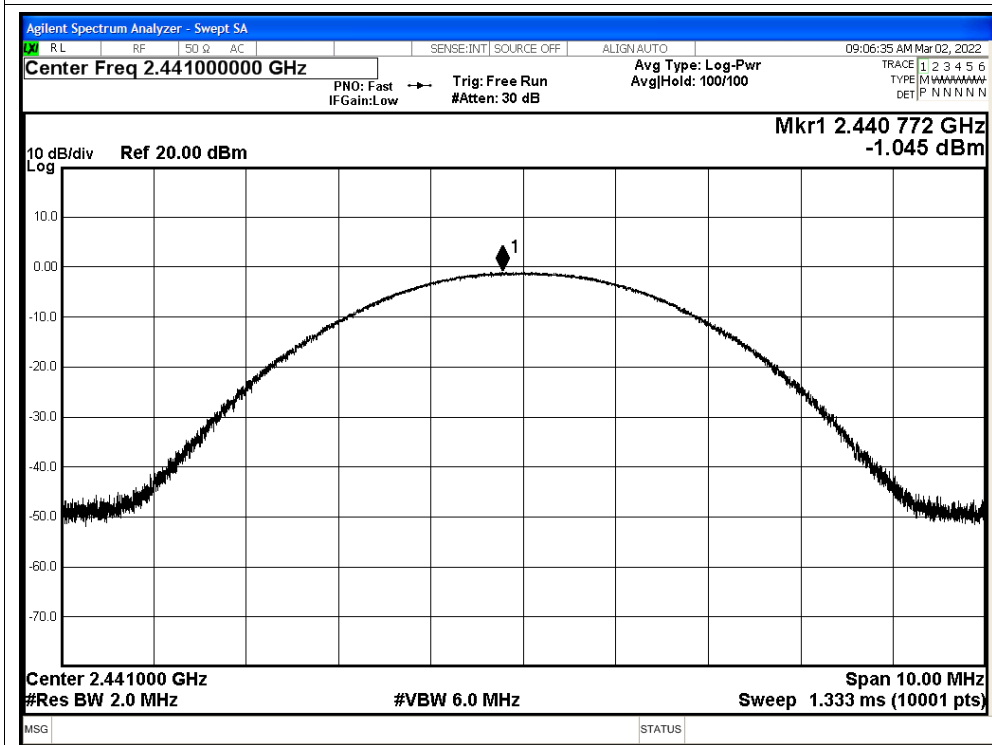


Power NVNT 2-DH5 2402MHz Ant1

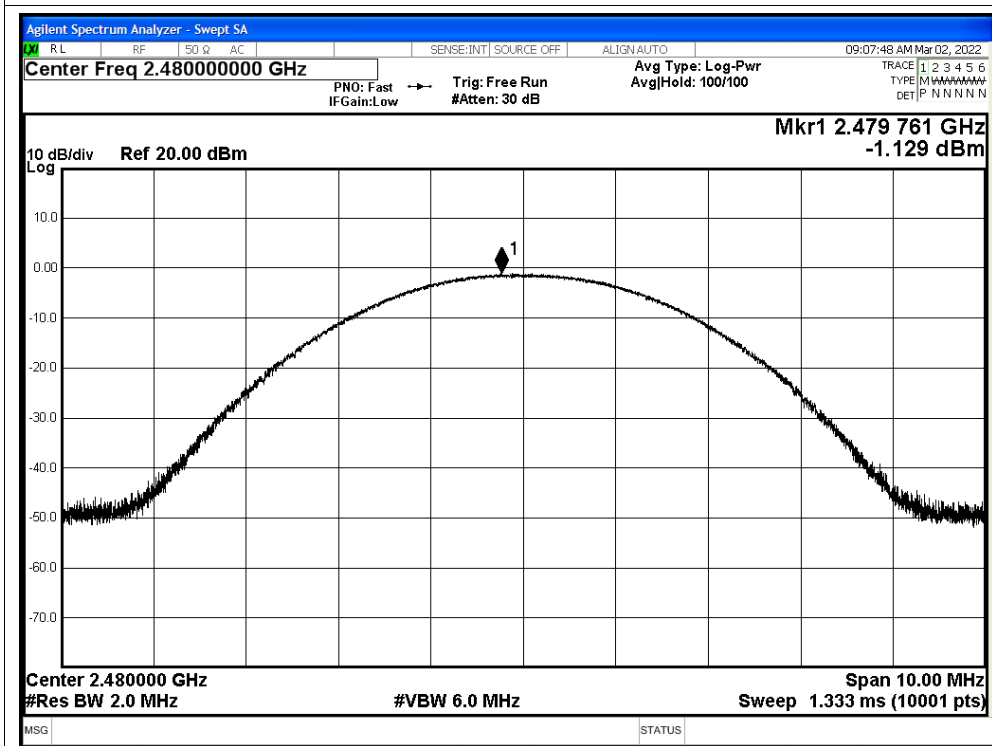




Power NVNT 2-DH5 2441MHz Ant1

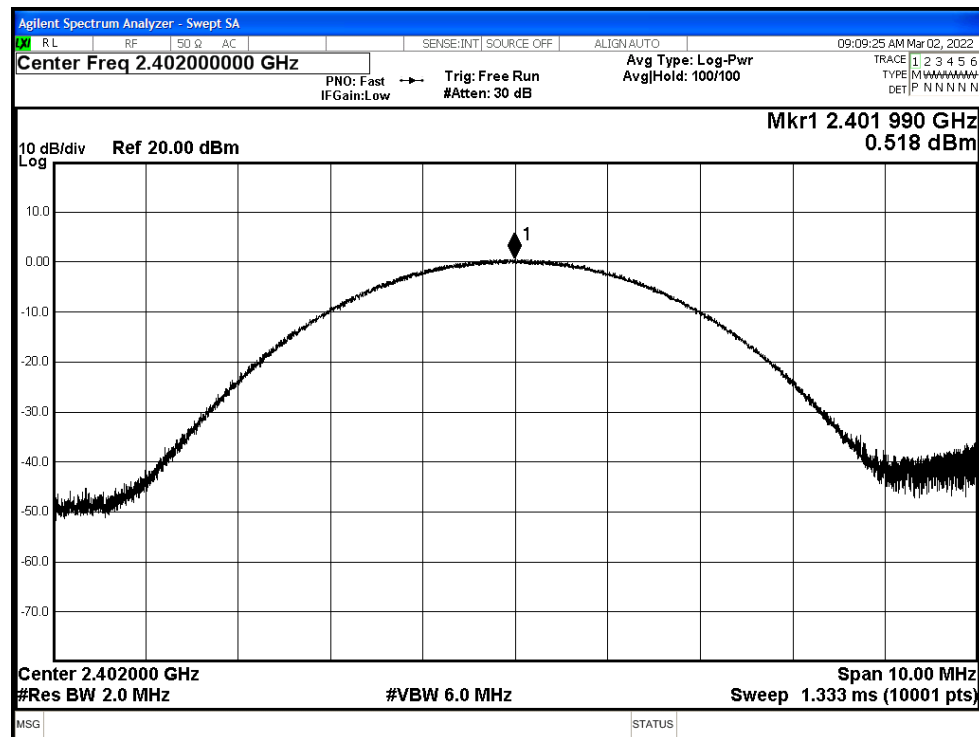


Power NVNT 2-DH5 2480MHz Ant1

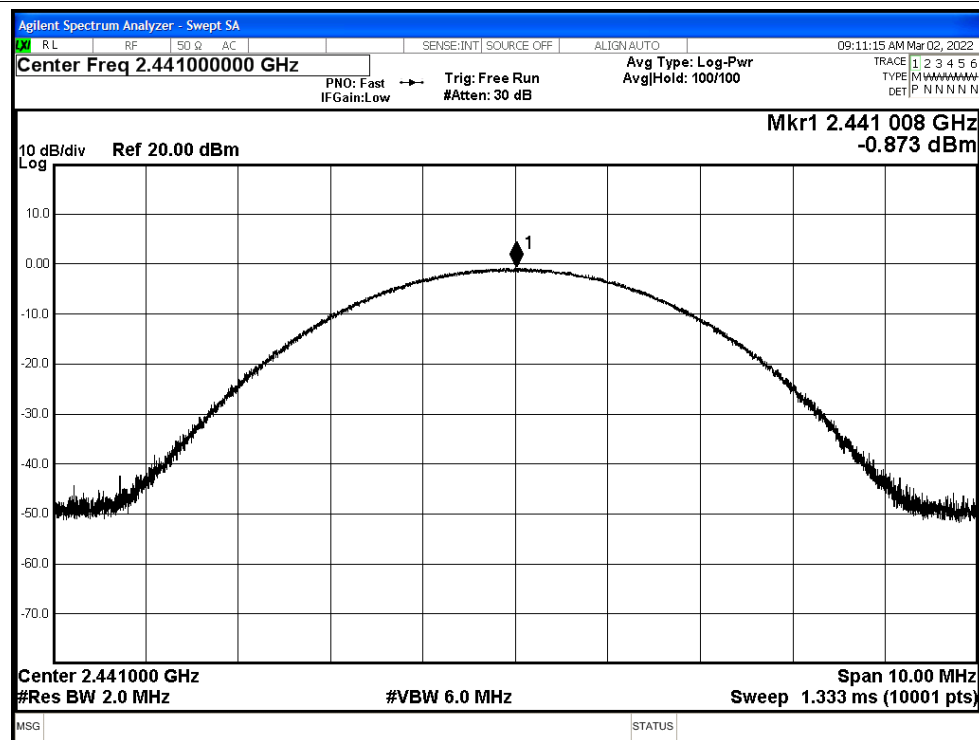


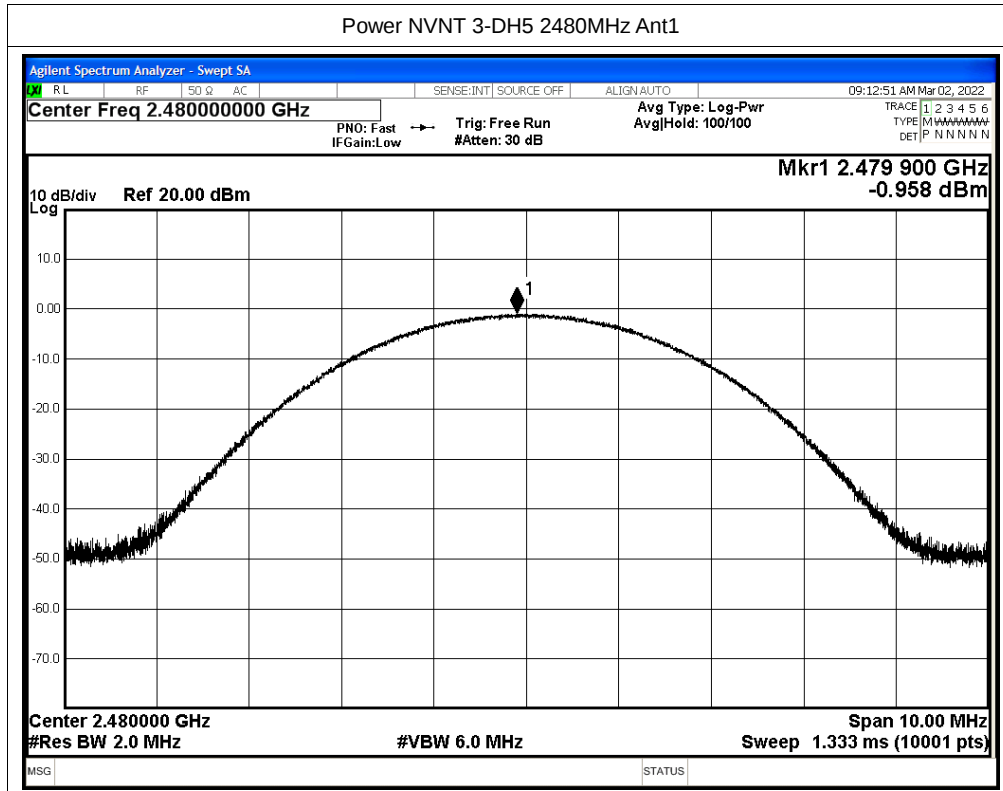


Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1







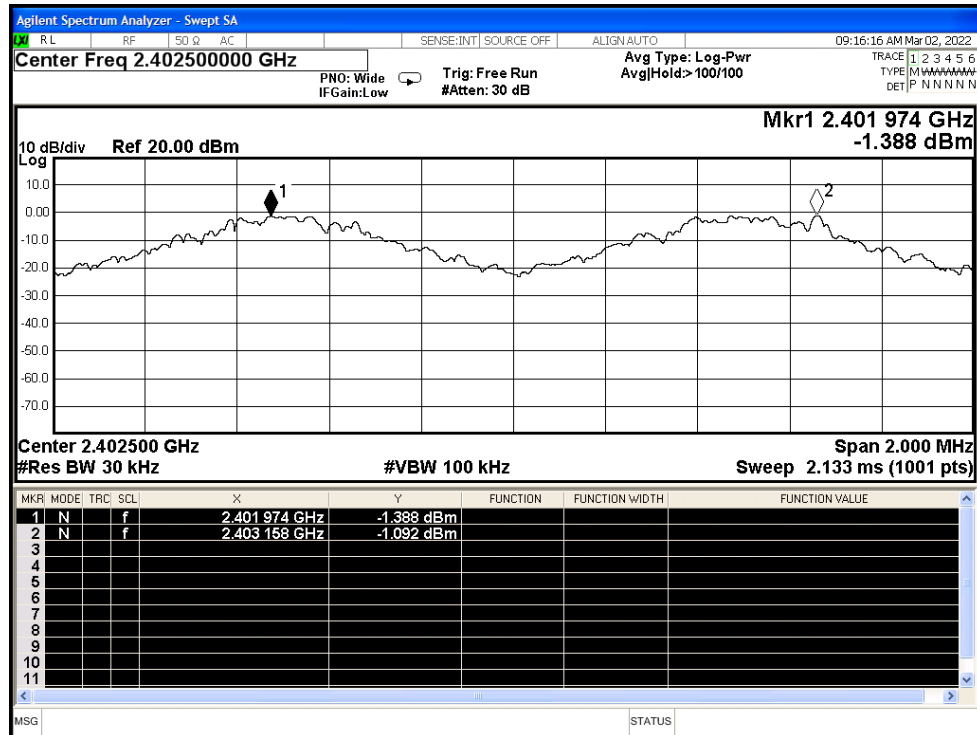
A.3 Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.974	2403.158	1.184	0.644	Pass
NVNT	1-DH5	Ant1	2441	2442.018	1.018	0.685	Pass
NVNT	1-DH5	Ant1	2478.992	2480.02	1.028	0.692	Pass
NVNT	2-DH5	Ant1	2401.842	2403.156	1.314	0.871	Pass
NVNT	2-DH5	Ant1	2441.004	2442.164	1.16	0.875	Pass
NVNT	2-DH5	Ant1	2478.842	2480.162	1.32	0.869	Pass
NVNT	3-DH5	Ant1	2402.17	2403.162	0.992	0.871	Pass
NVNT	3-DH5	Ant1	2441.158	2442.164	1.006	0.874	Pass
NVNT	3-DH5	Ant1	2479.164	2480.166	1.002	0.857	Pass

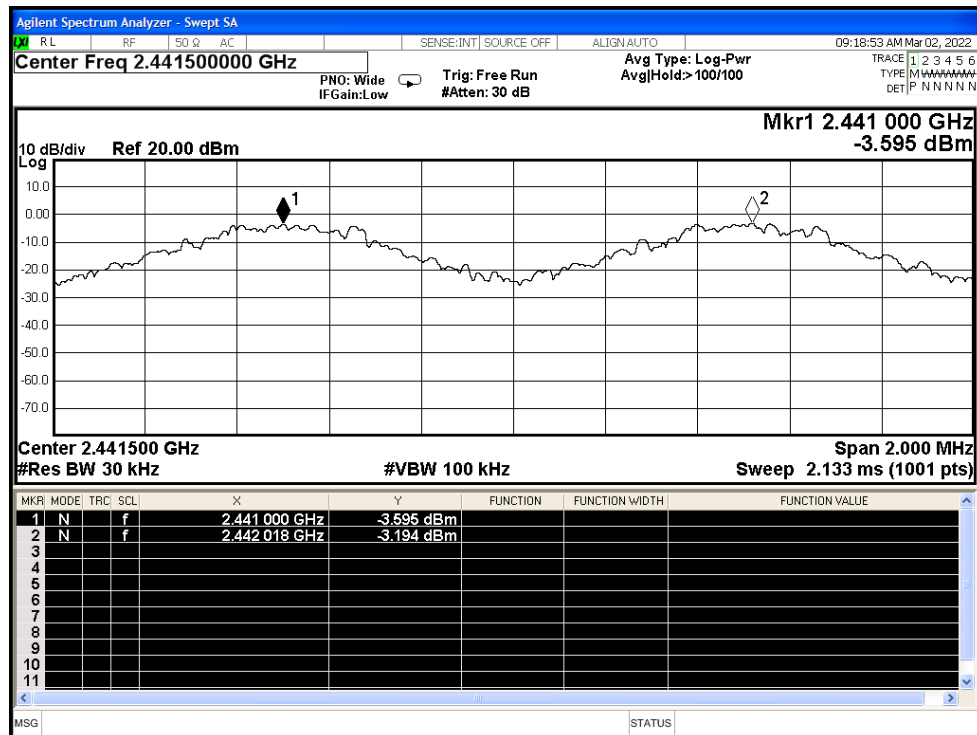


Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1

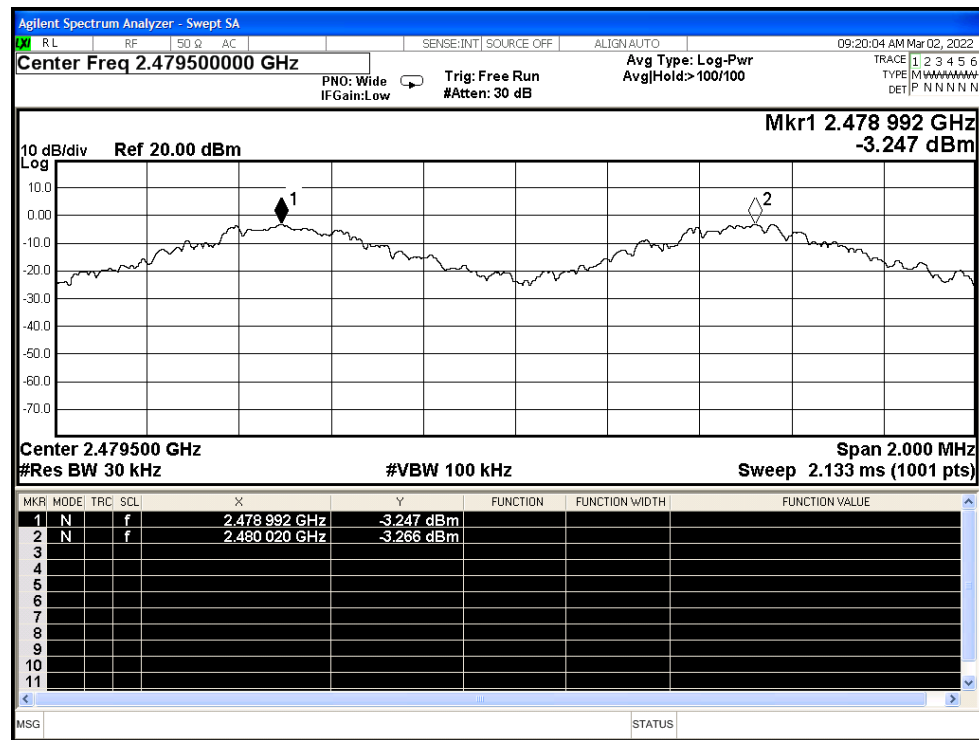


CFS NVNT 1-DH5 2441MHz Ant1

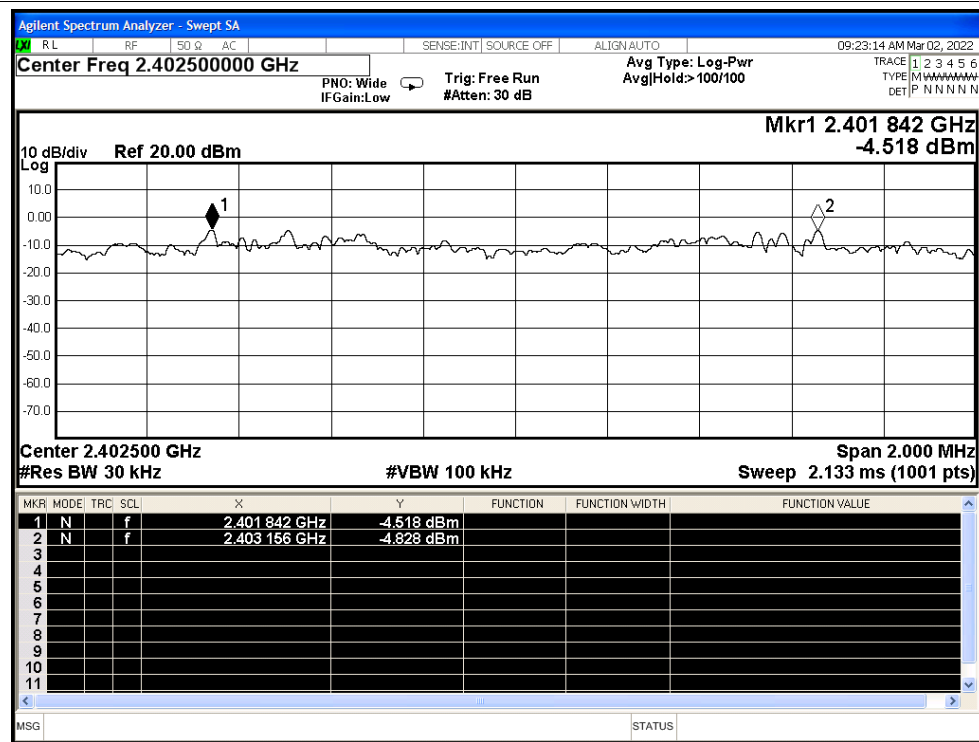


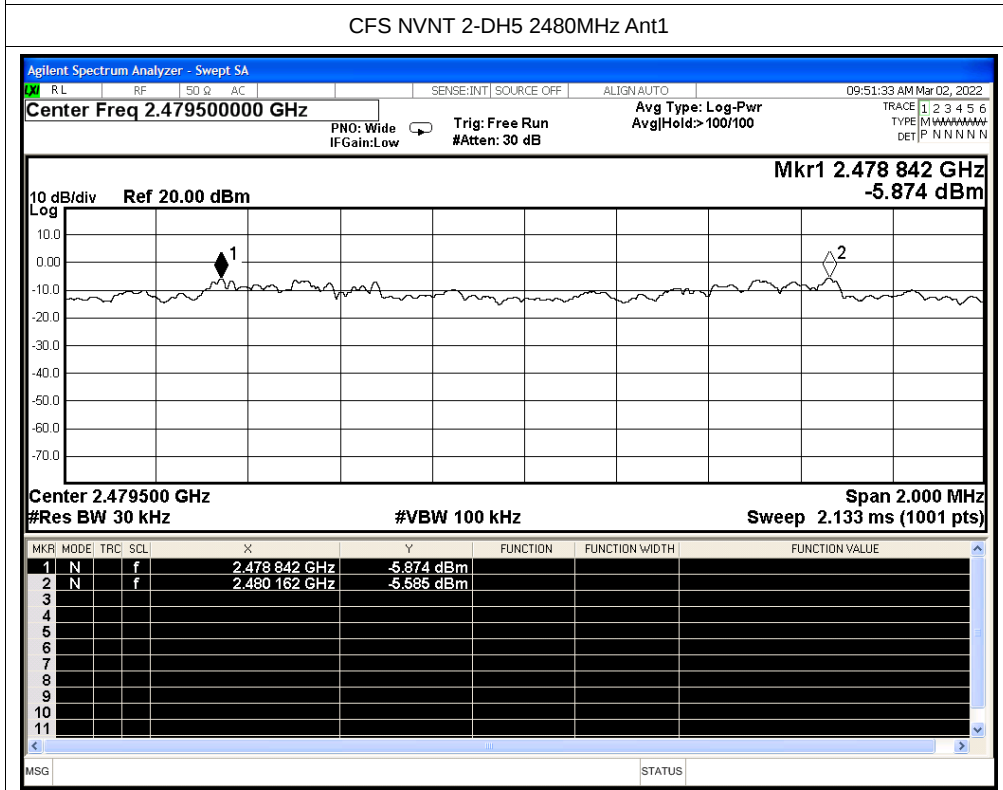
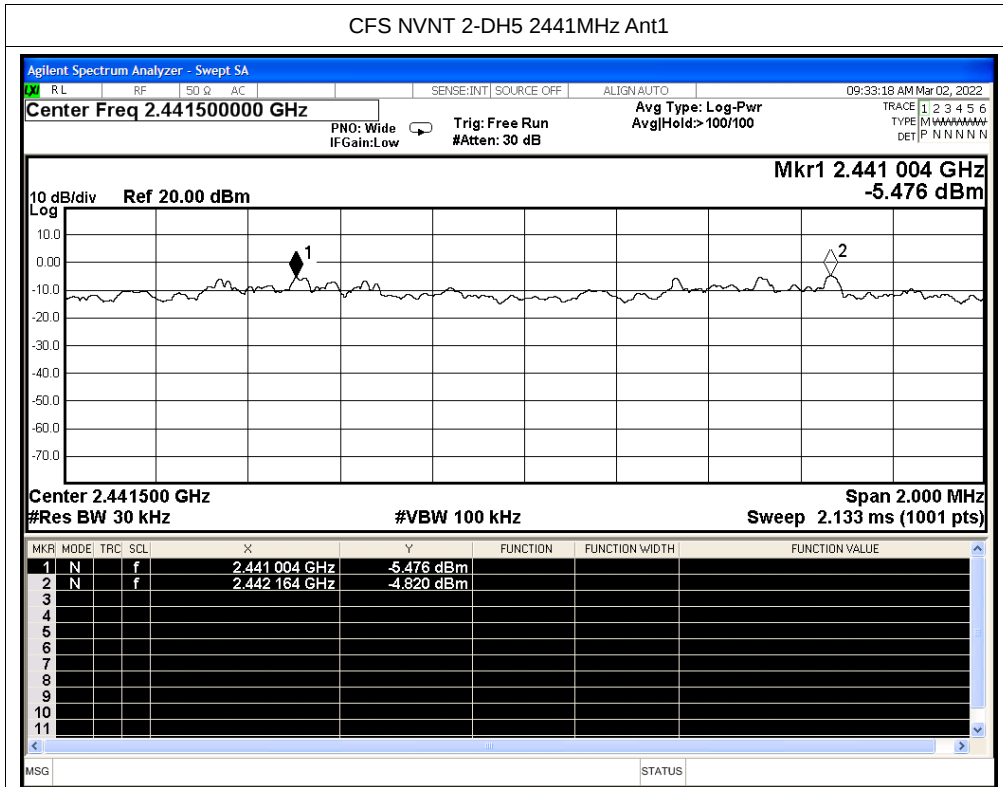


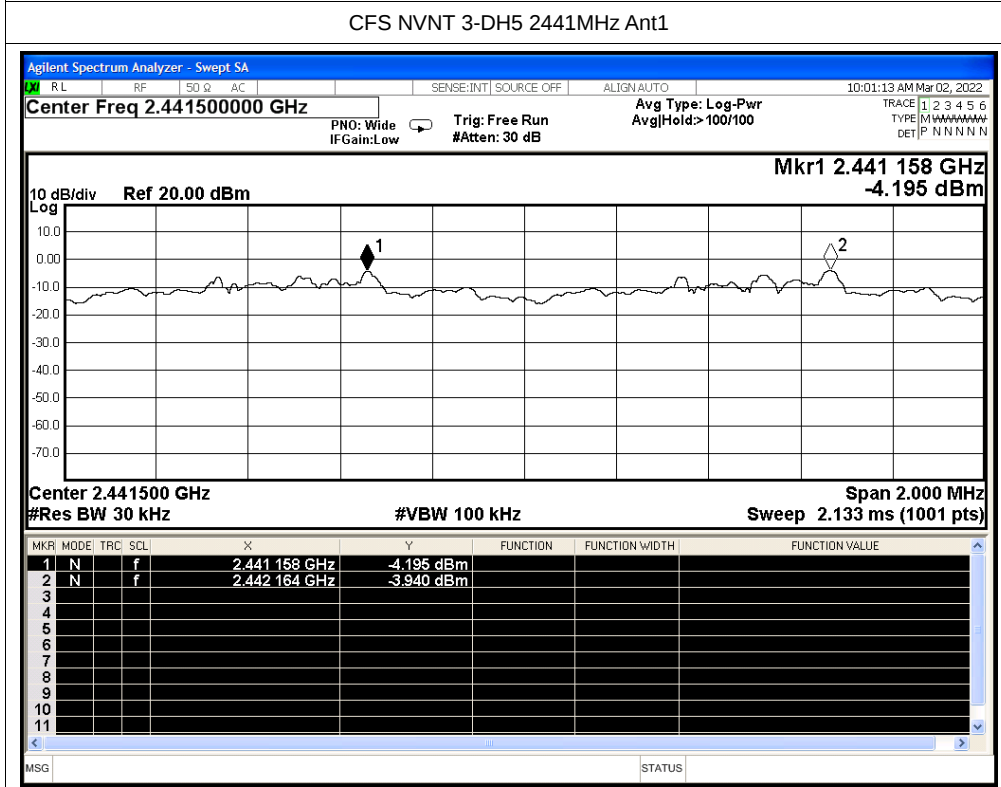
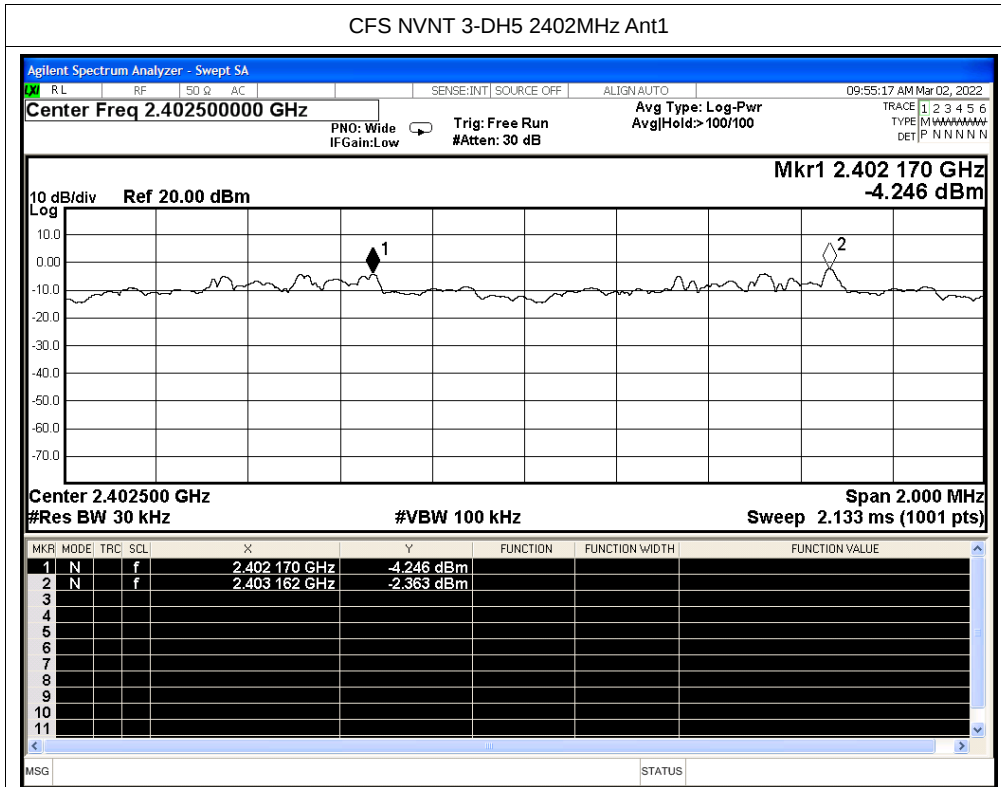
CFS NVNT 1-DH5 2480MHz Ant1

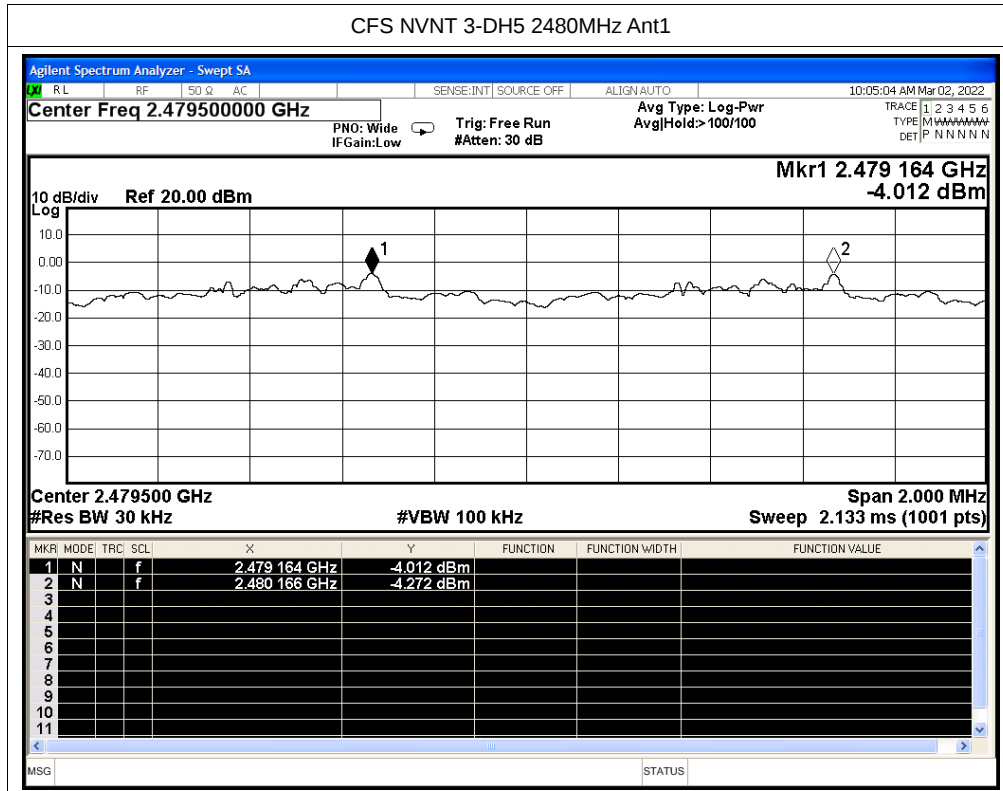


CFS NVNT 2-DH5 2402MHz Ant1











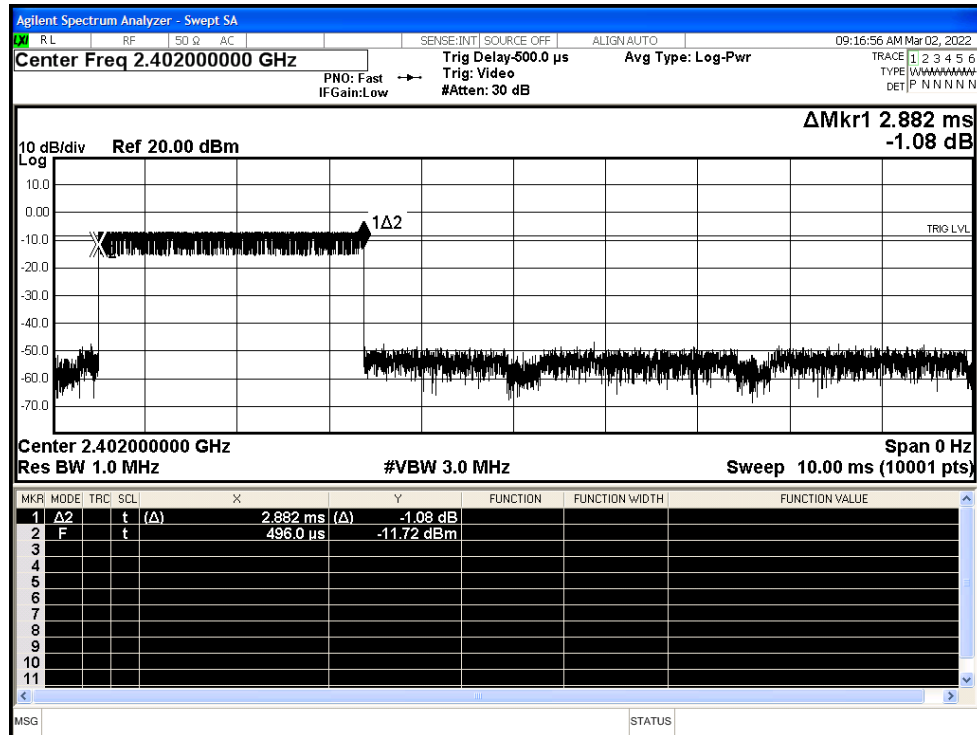
A.4 Dwell Time

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	334.312	116	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.882	357.368	124	31600	400	Pass
NVNT	1-DH5	2480	Ant1	2.882	331.43	115	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.881	348.601	121	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.88	331.2	115	31600	400	Pass
NVNT	2-DH5	2480	Ant1	2.885	337.545	117	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.887	343.553	119	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.887	303.135	105	31600	400	Pass
NVNT	3-DH5	2480	Ant1	2.885	297.155	103	31600	400	Pass

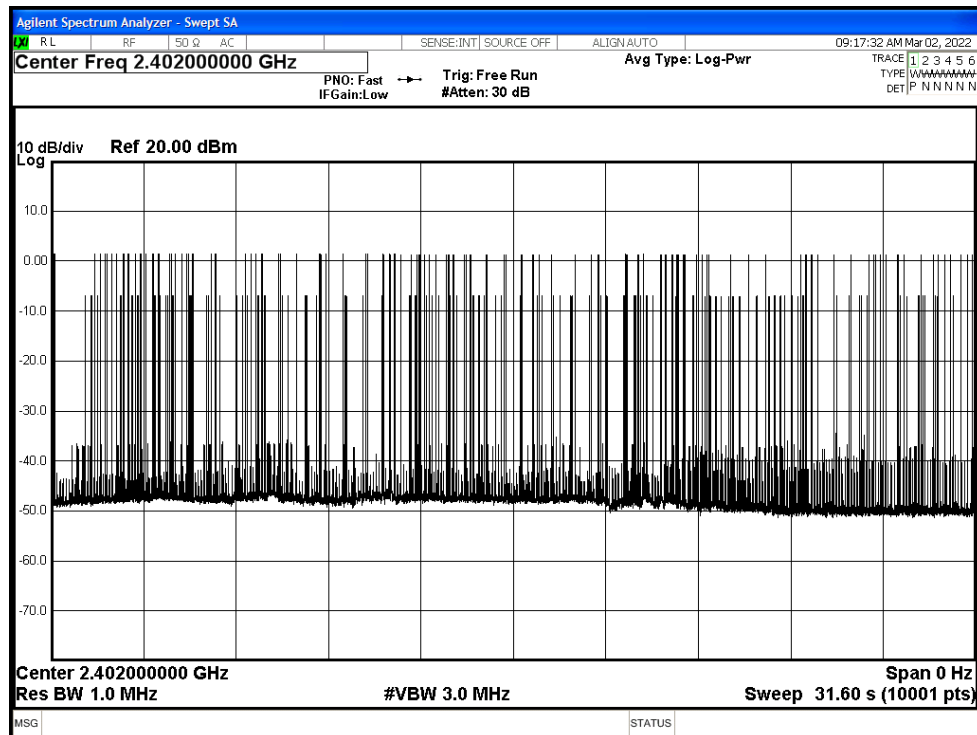


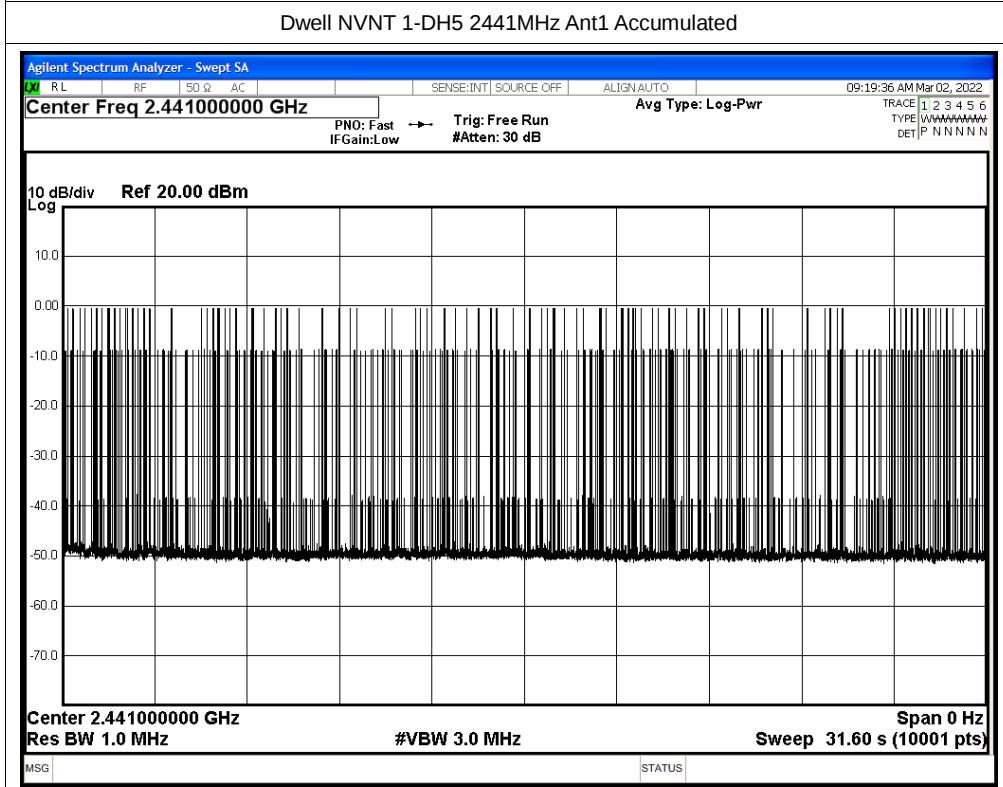
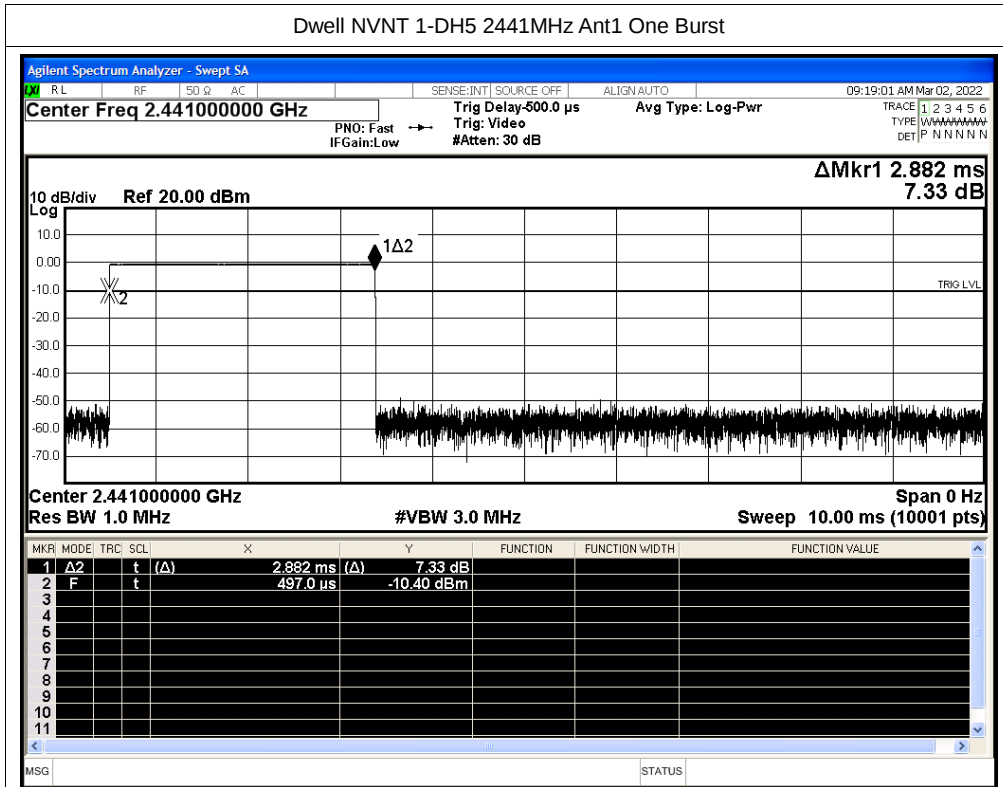
Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



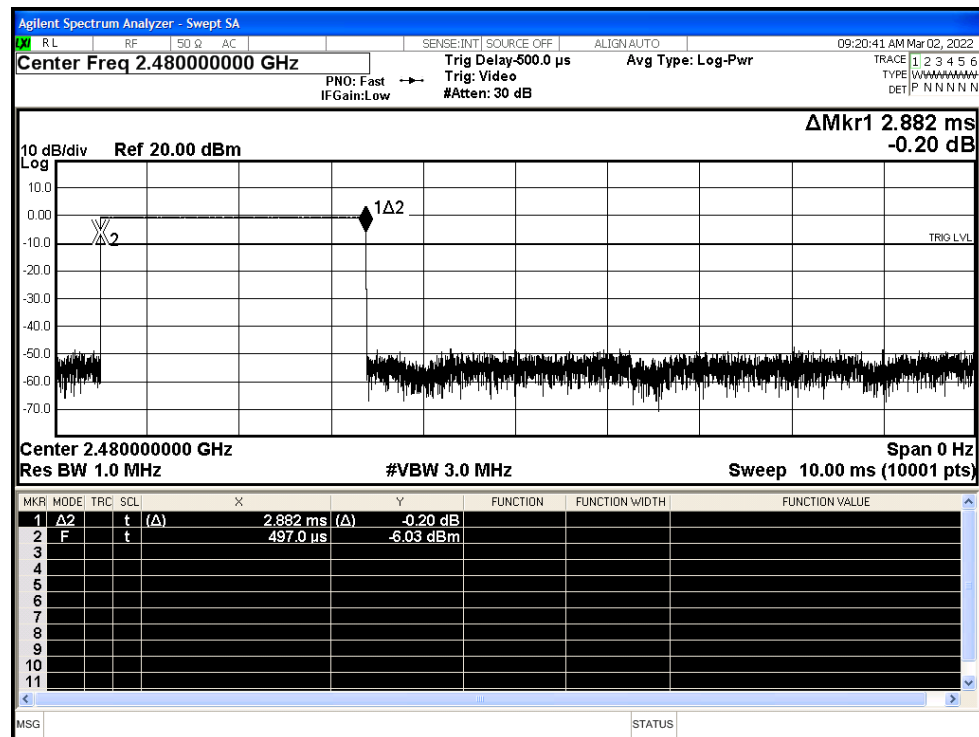
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



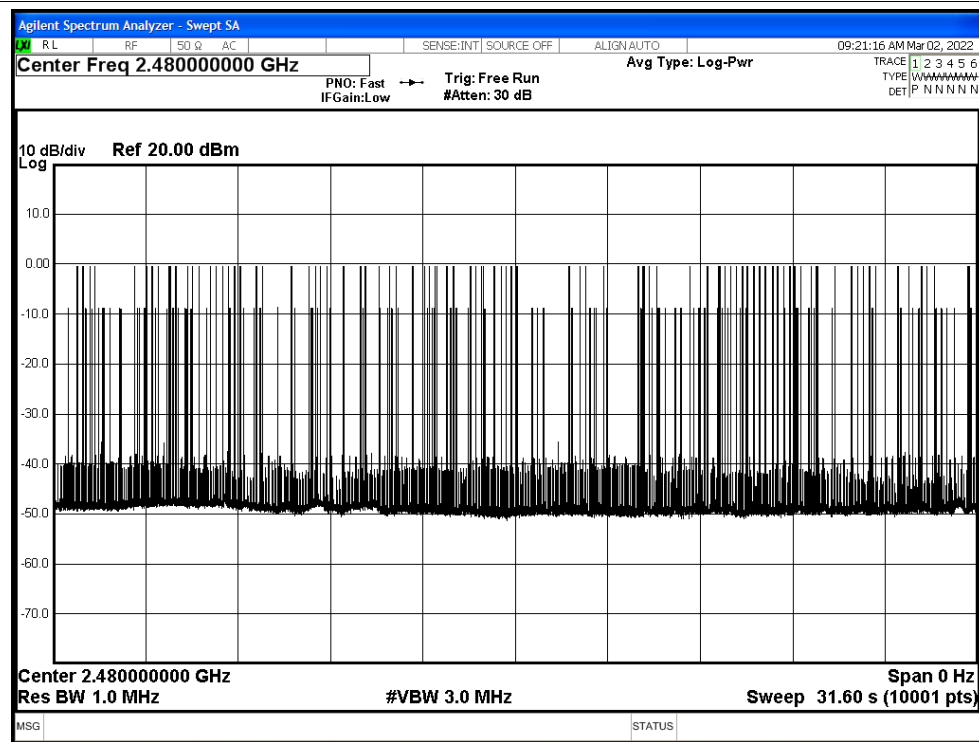


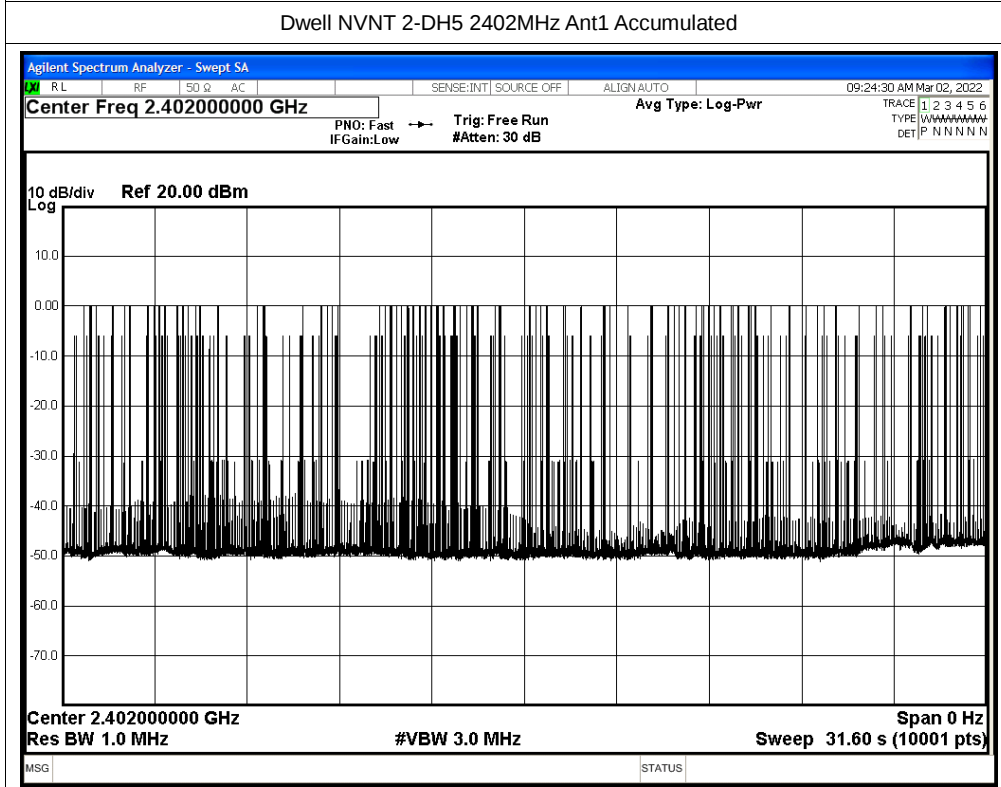
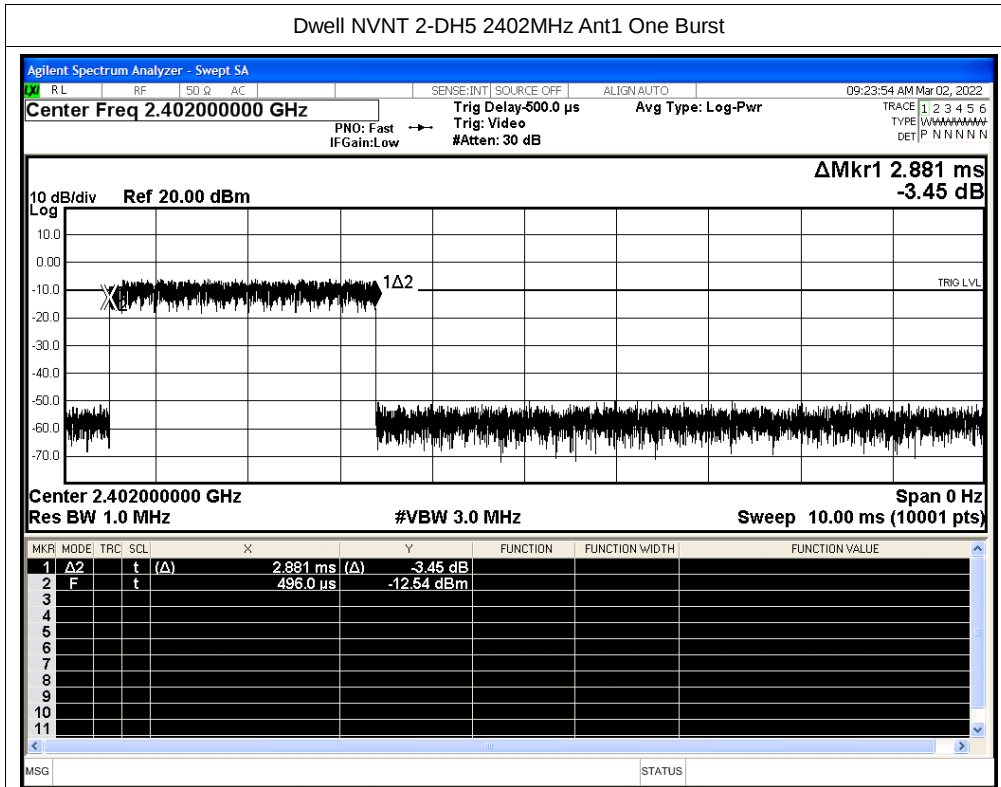


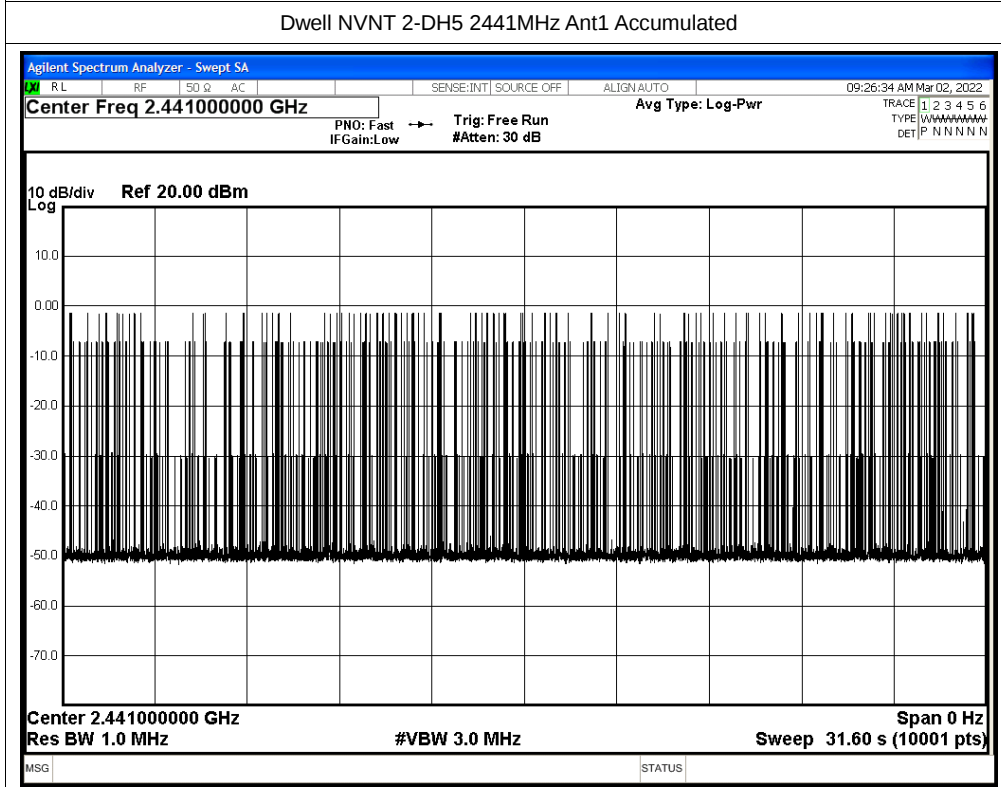
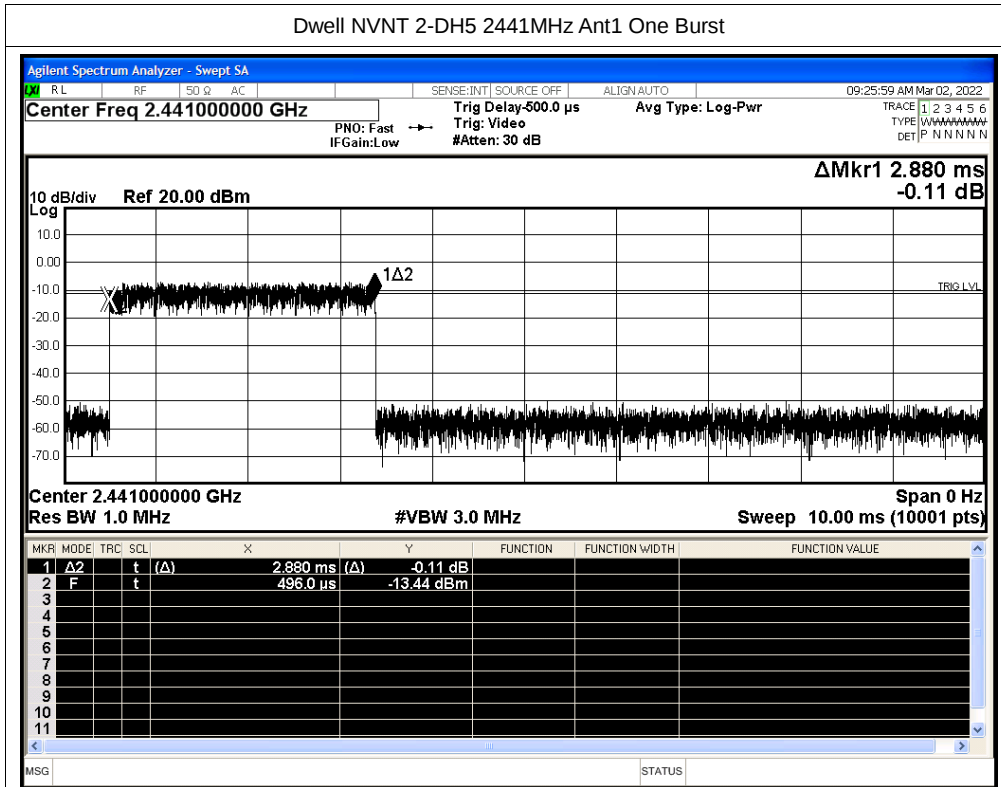
Dwell NVNT 1-DH5 2480MHz Ant1 One Burst



Dwell NVNT 1-DH5 2480MHz Ant1 Accumulated

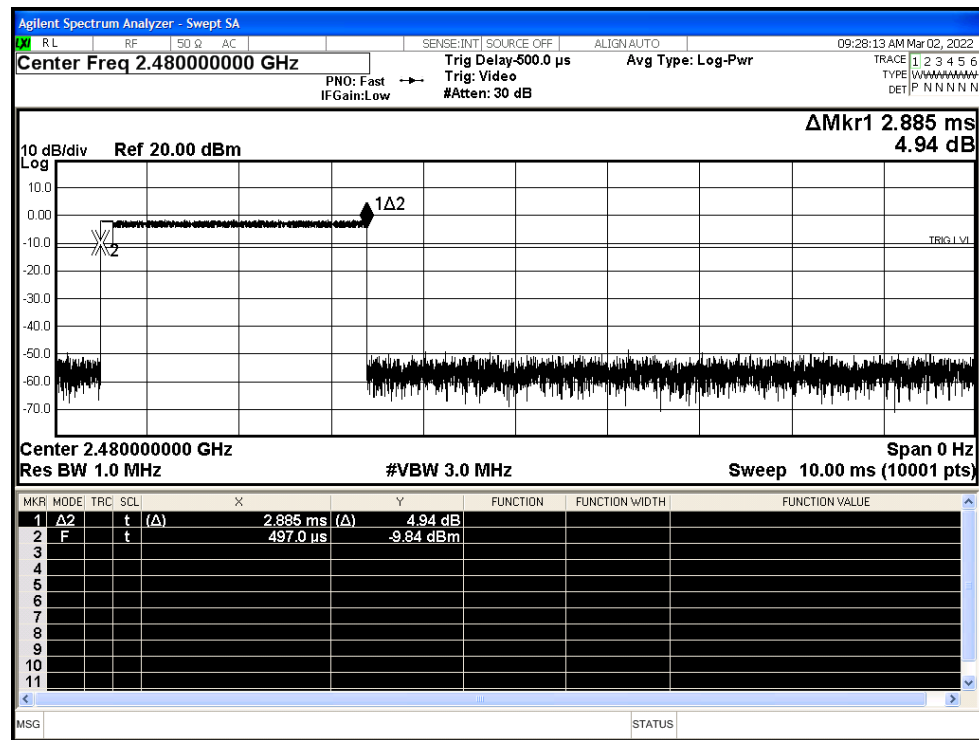




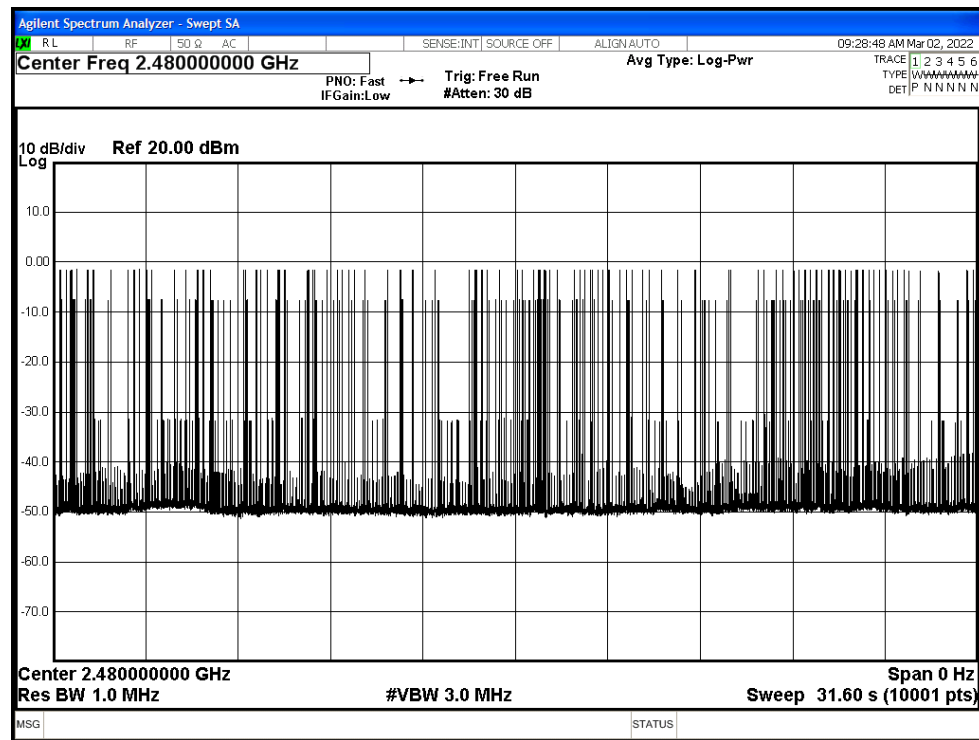




Dwell NVNT 2-DH5 2480MHz Ant1 One Burst

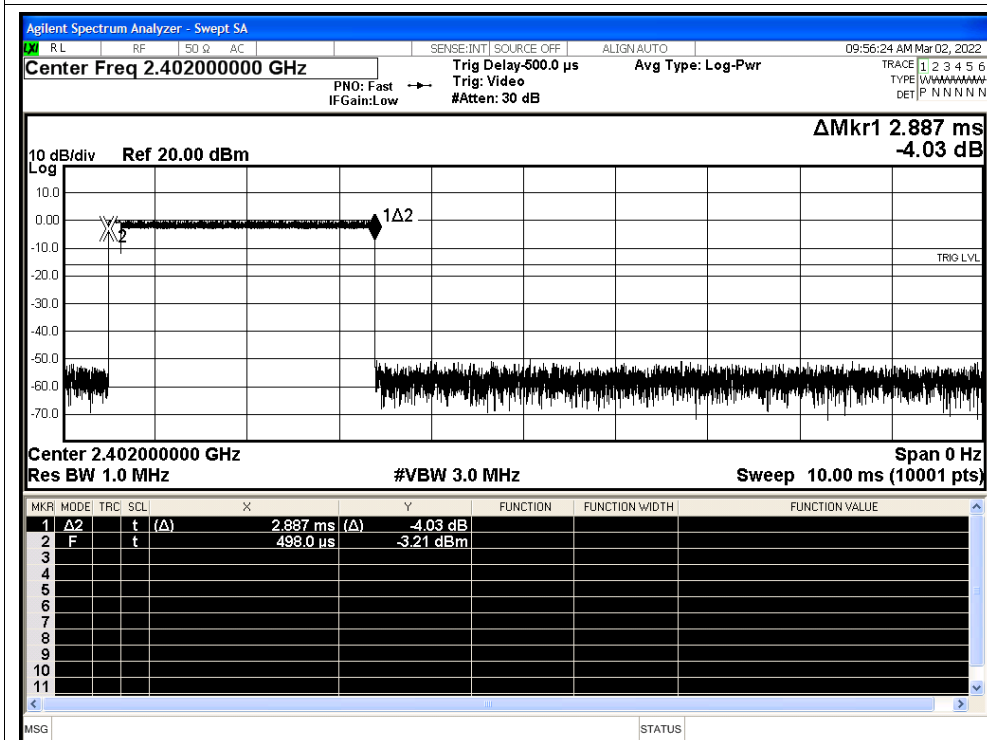


Dwell NVNT 2-DH5 2480MHz Ant1 Accumulated

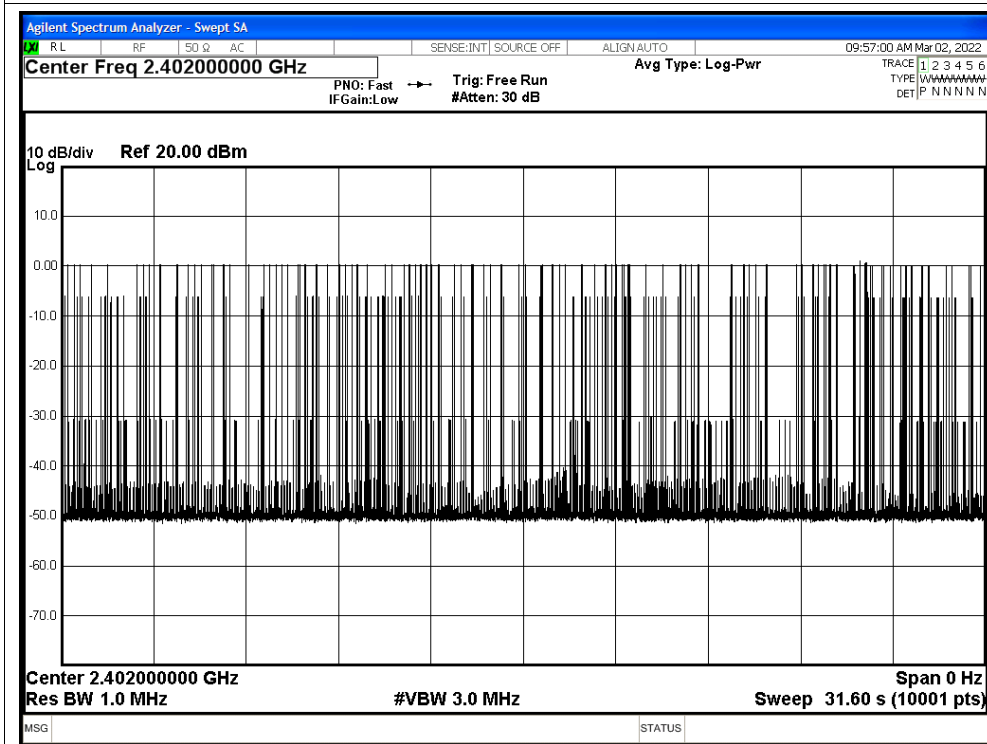


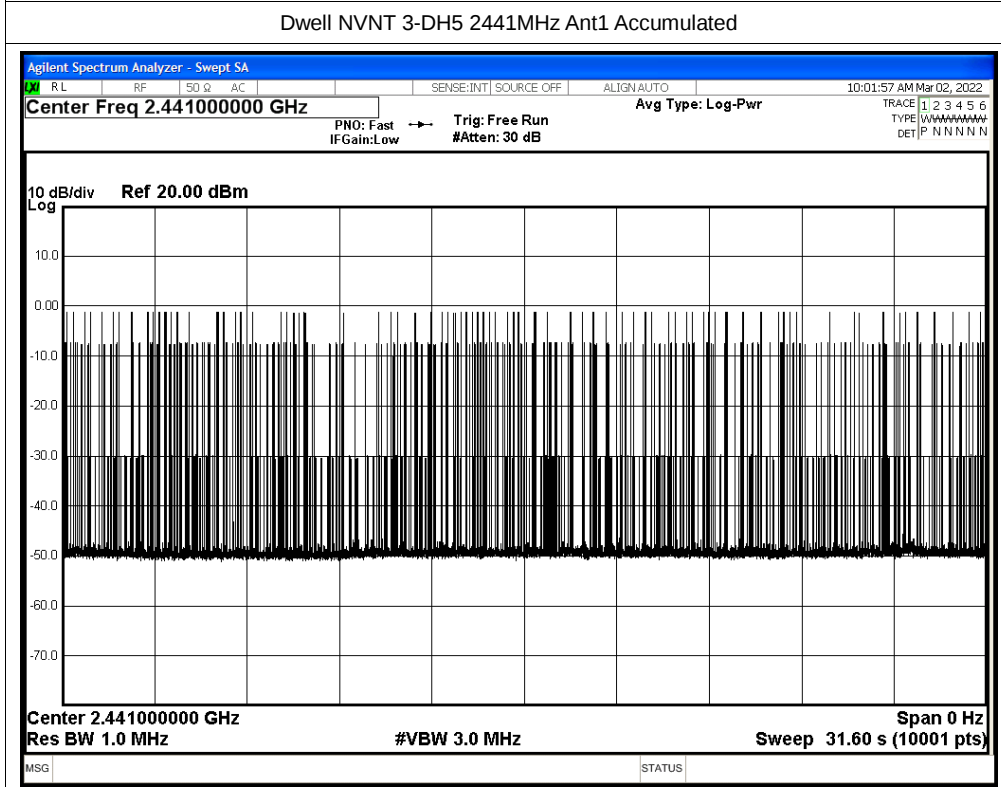
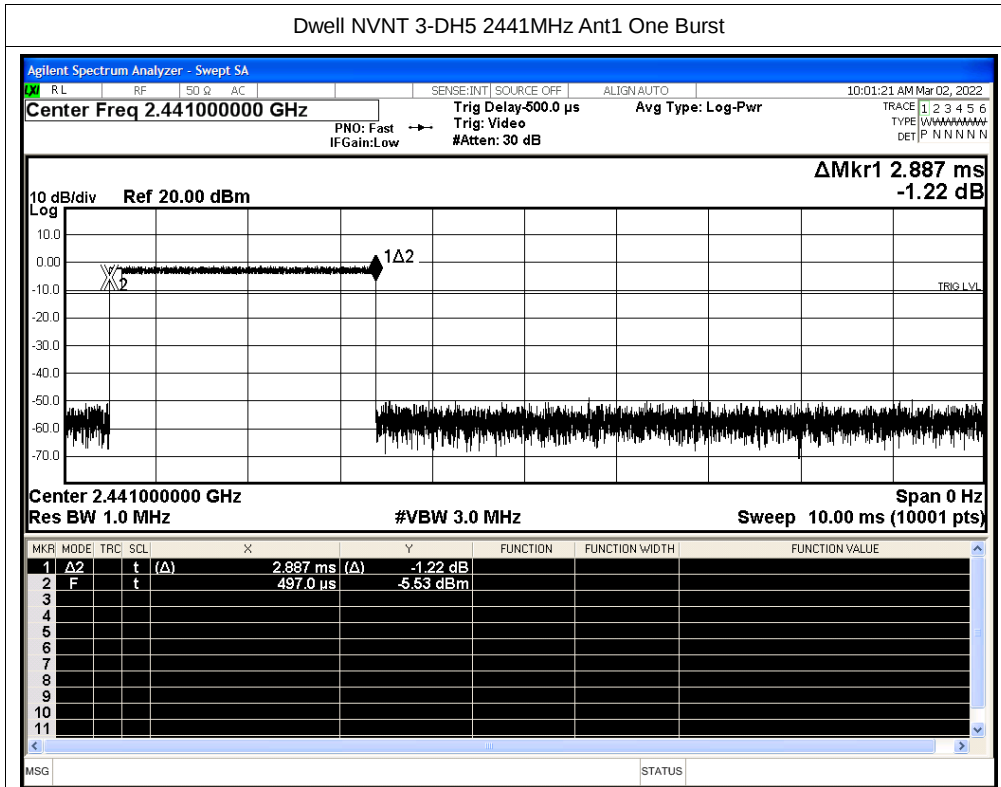


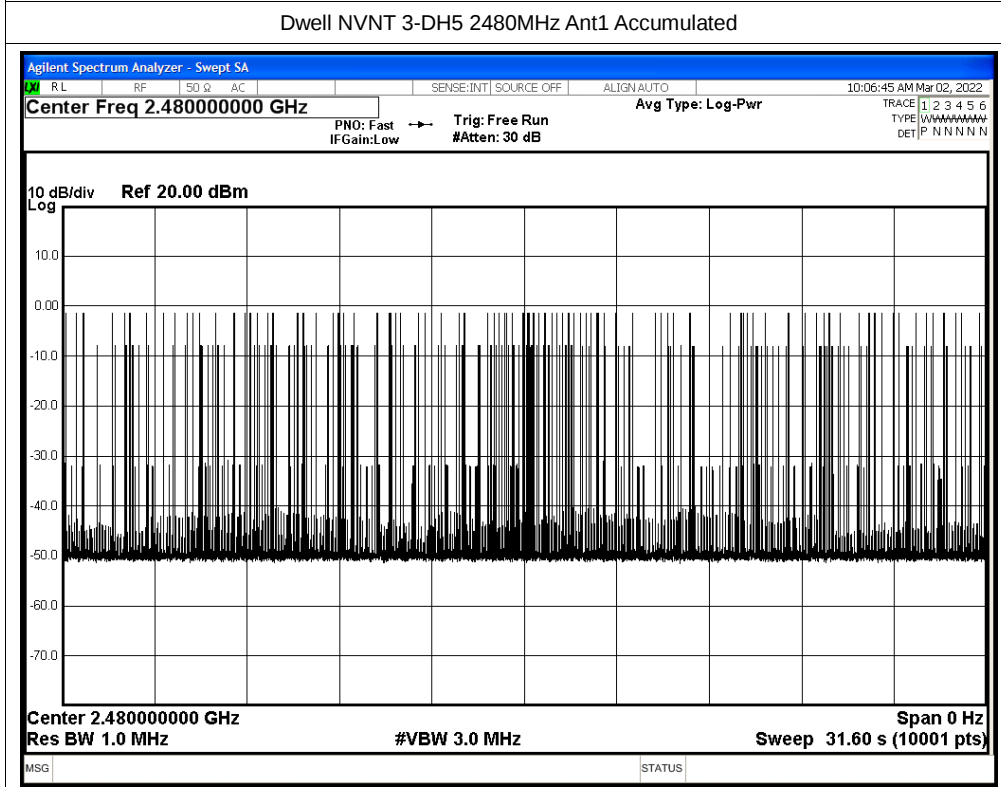
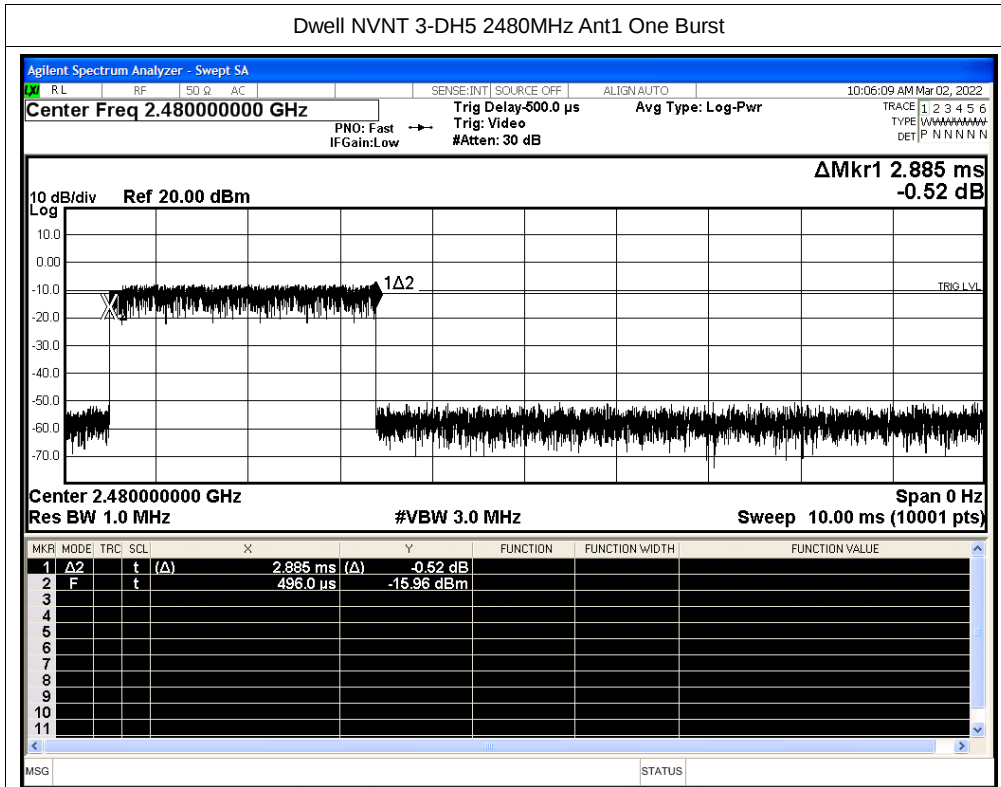
Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated









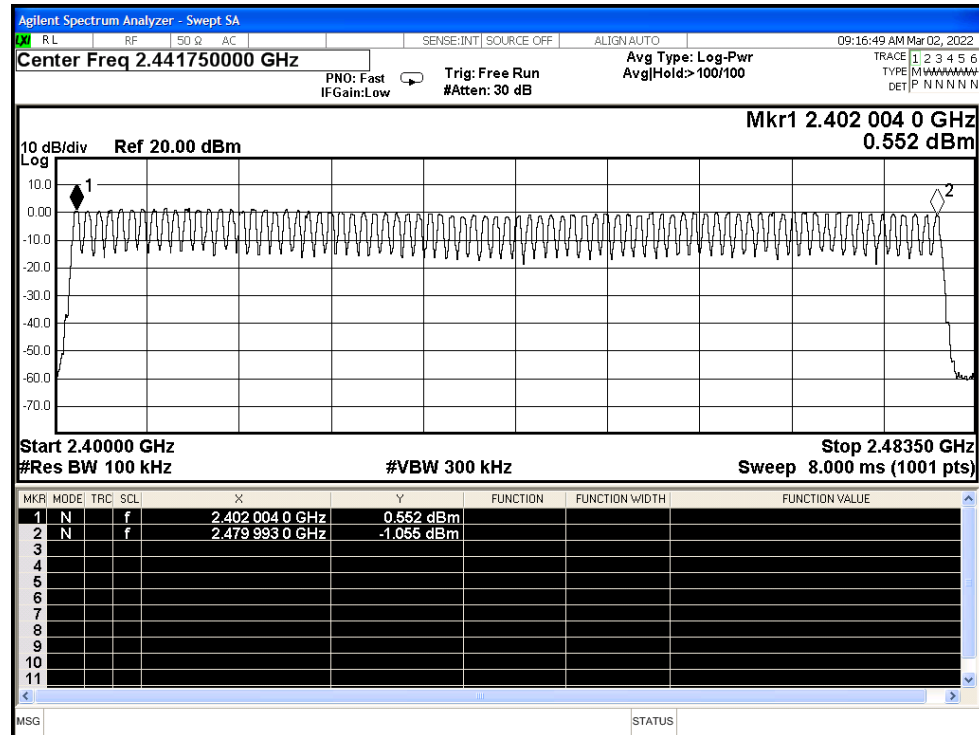
A.5 Number of Hopping Channel

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

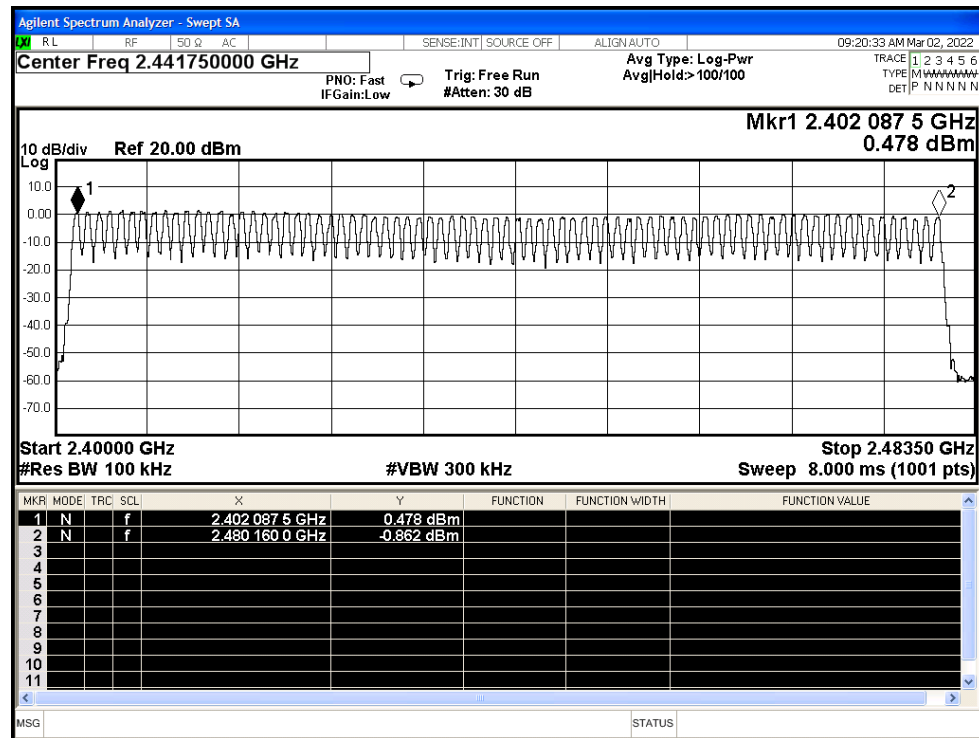


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1

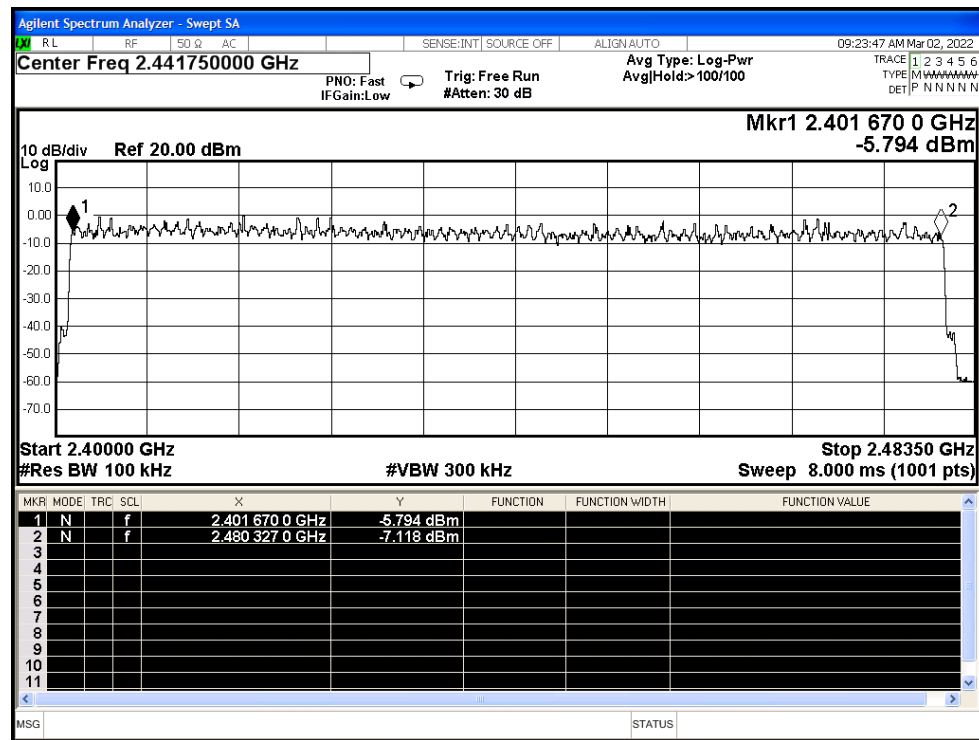


Hopping No. NVNT 1-DH5 2480MHz Ant1

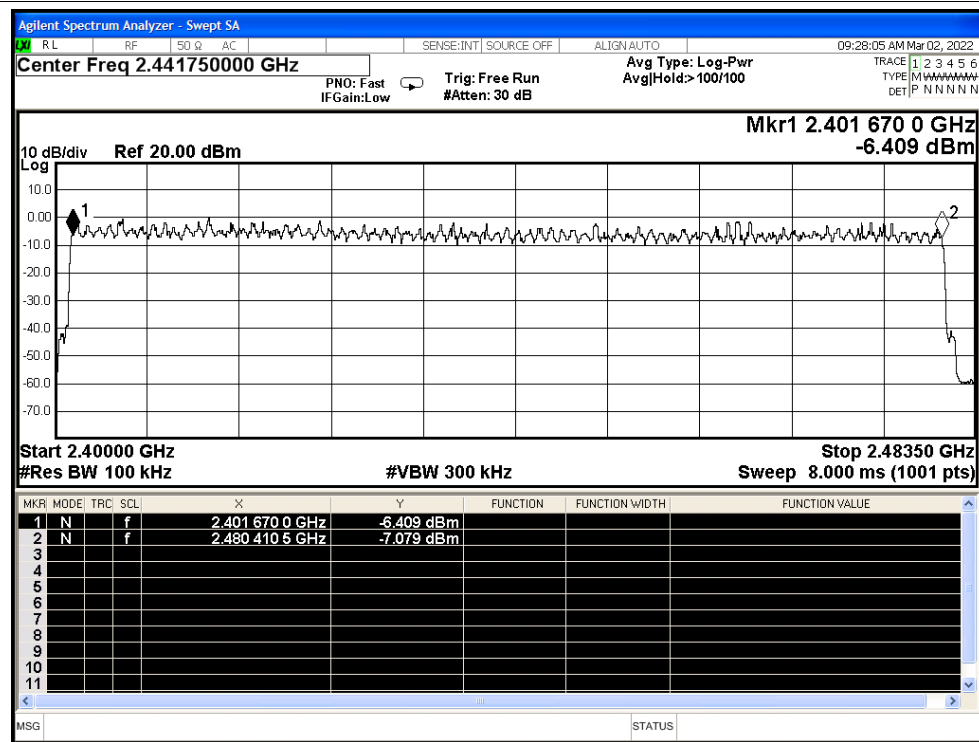




Hopping No. NVNT 2-DH5 2402MHz Ant1

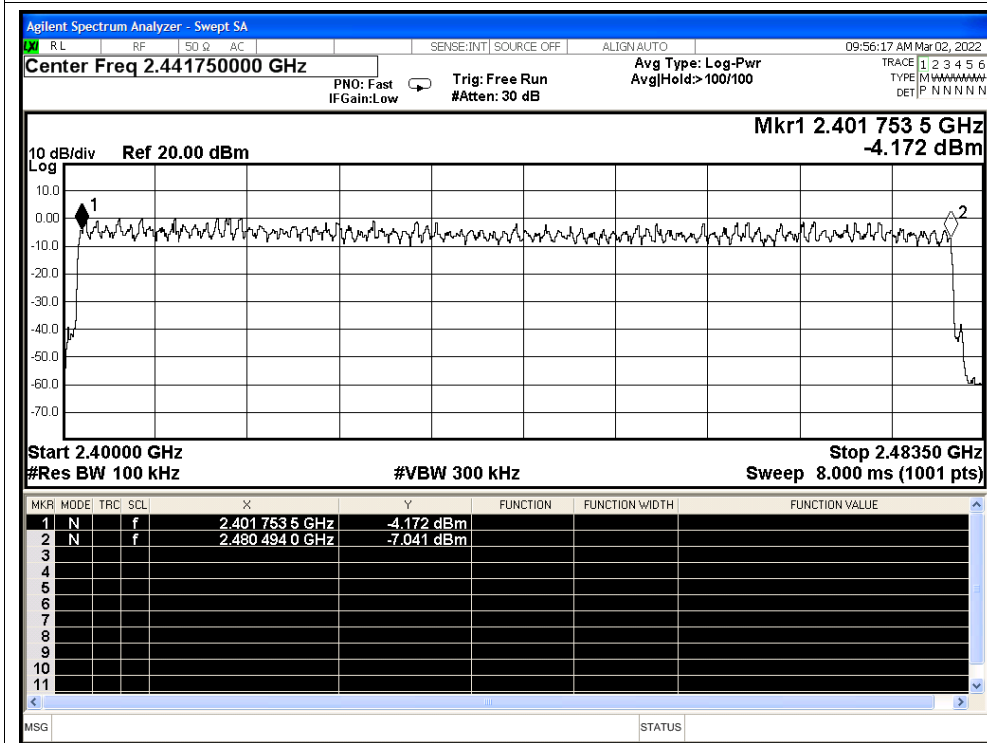


Hopping No. NVNT 2-DH5 2480MHz Ant1

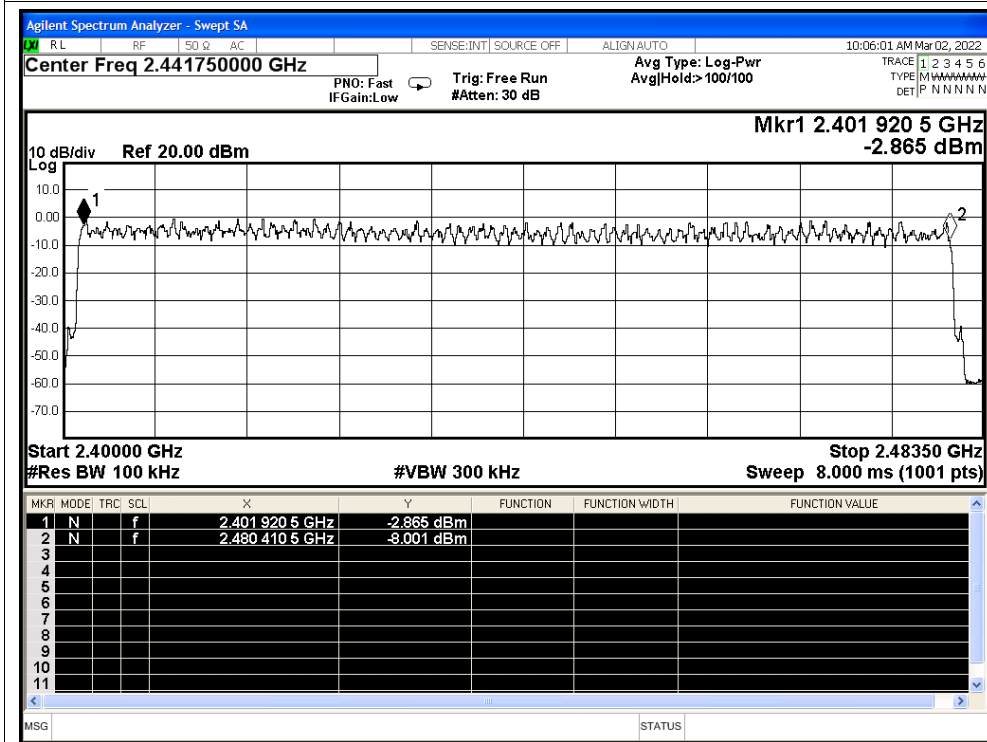




Hopping No. NVNT 3-DH5 2402MHz Ant1



Hopping No. NVNT 3-DH5 2480MHz Ant1





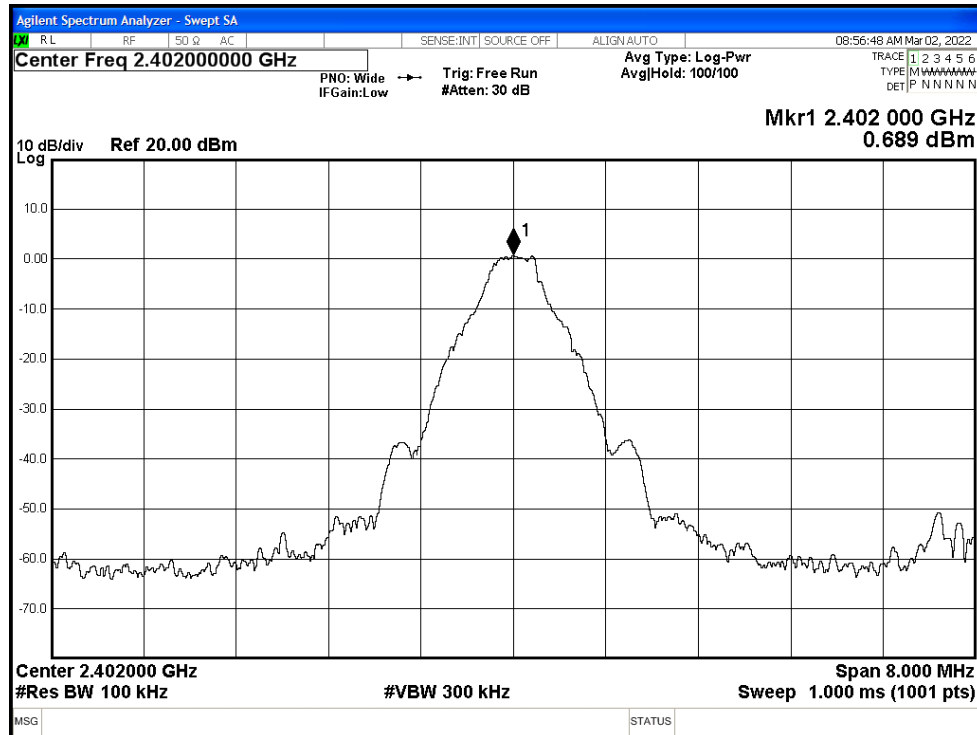
A.6 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-56.1	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-56.89	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-53.12	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-54.25	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-55.77	-20	Pass
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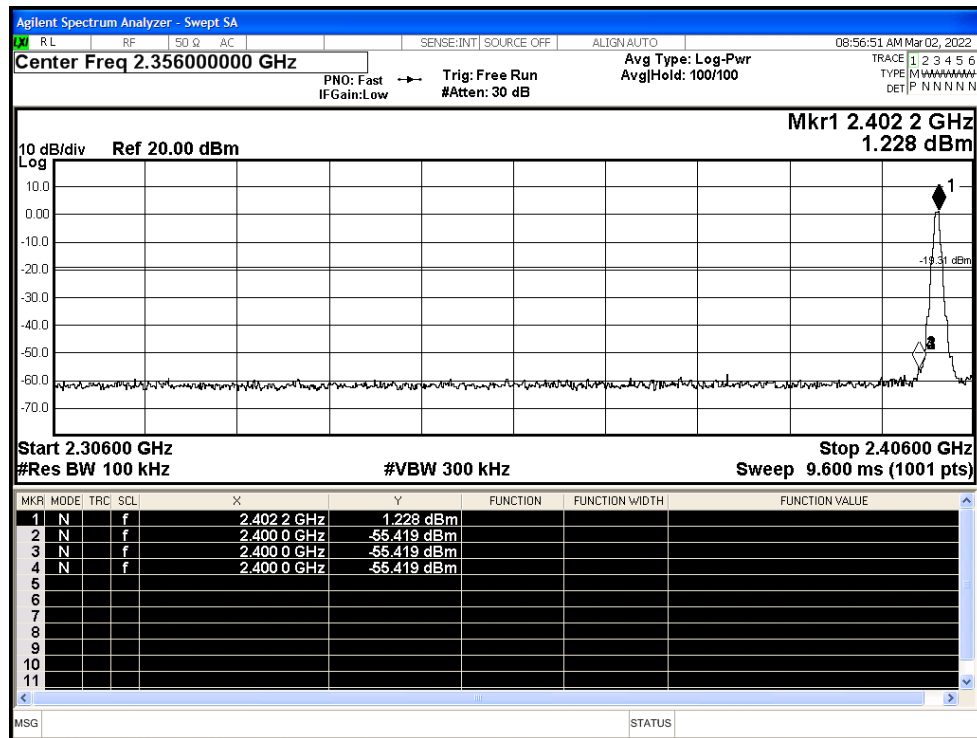


Test Graphs

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

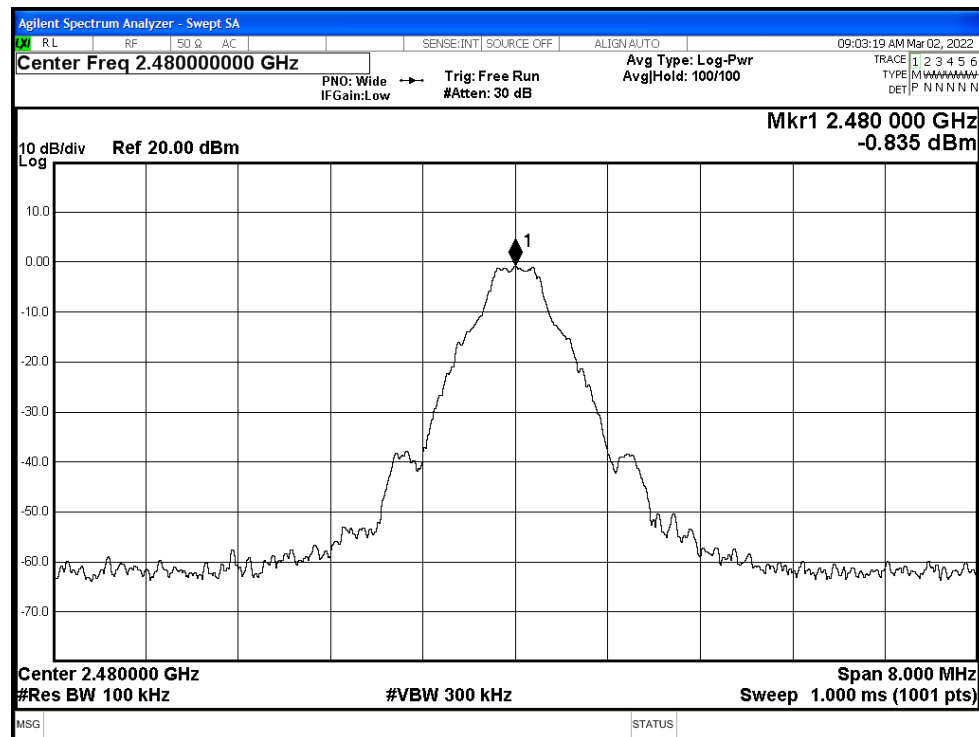


Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

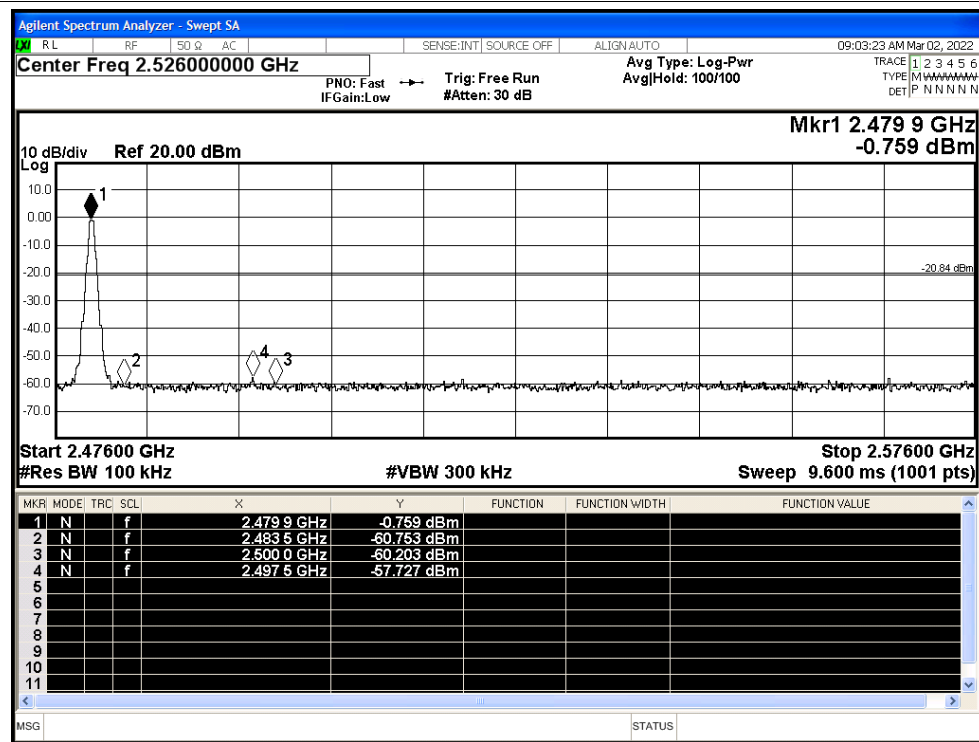




Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

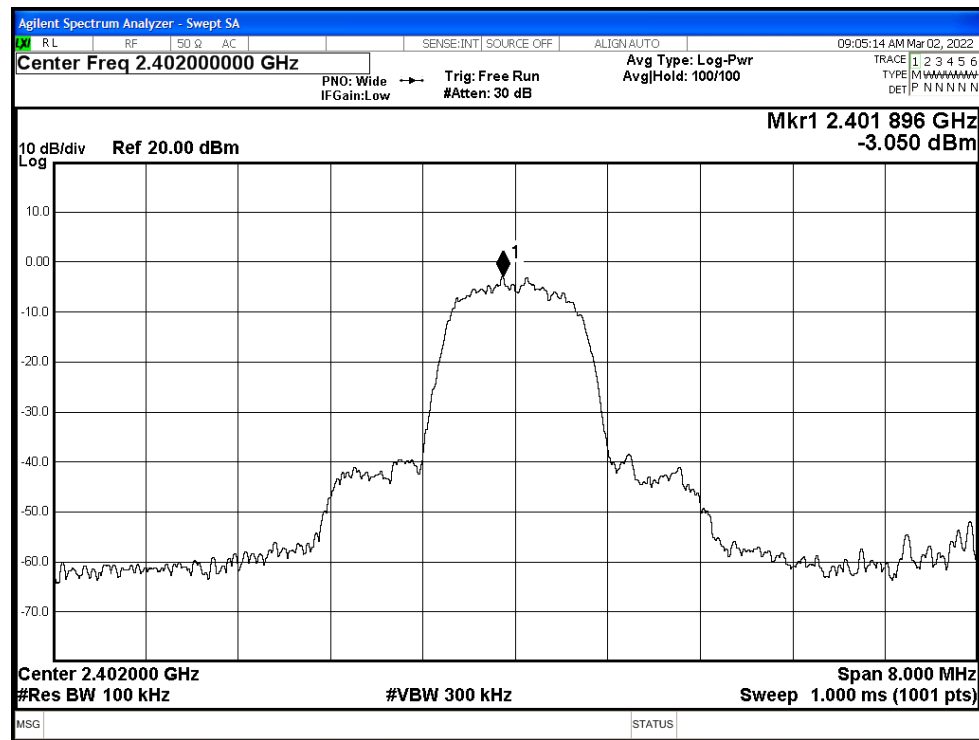


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

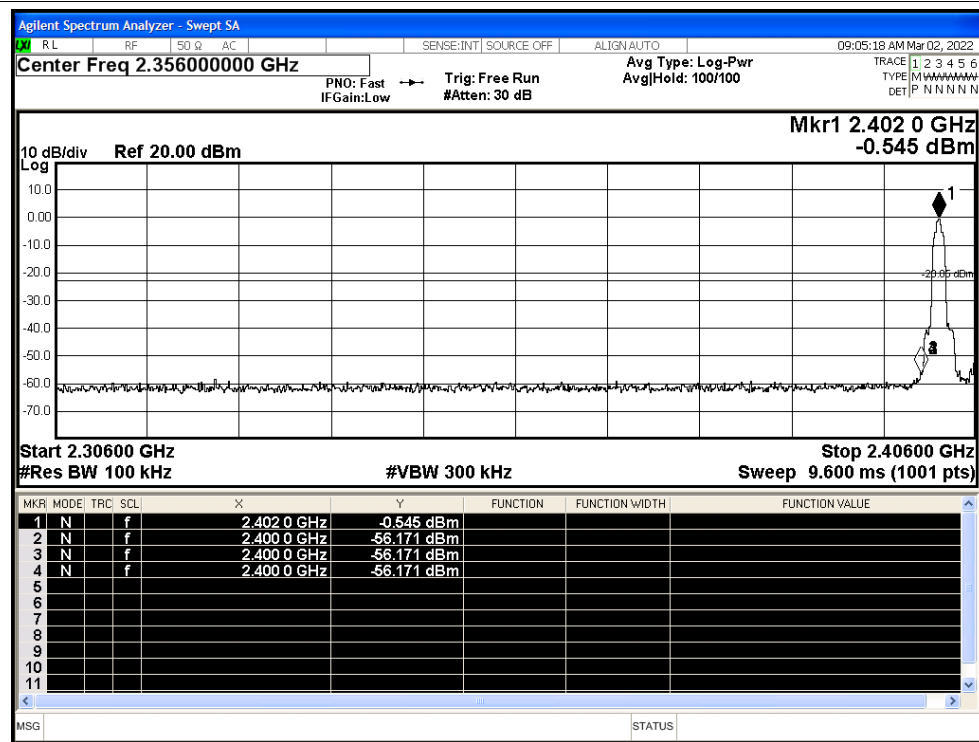




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref

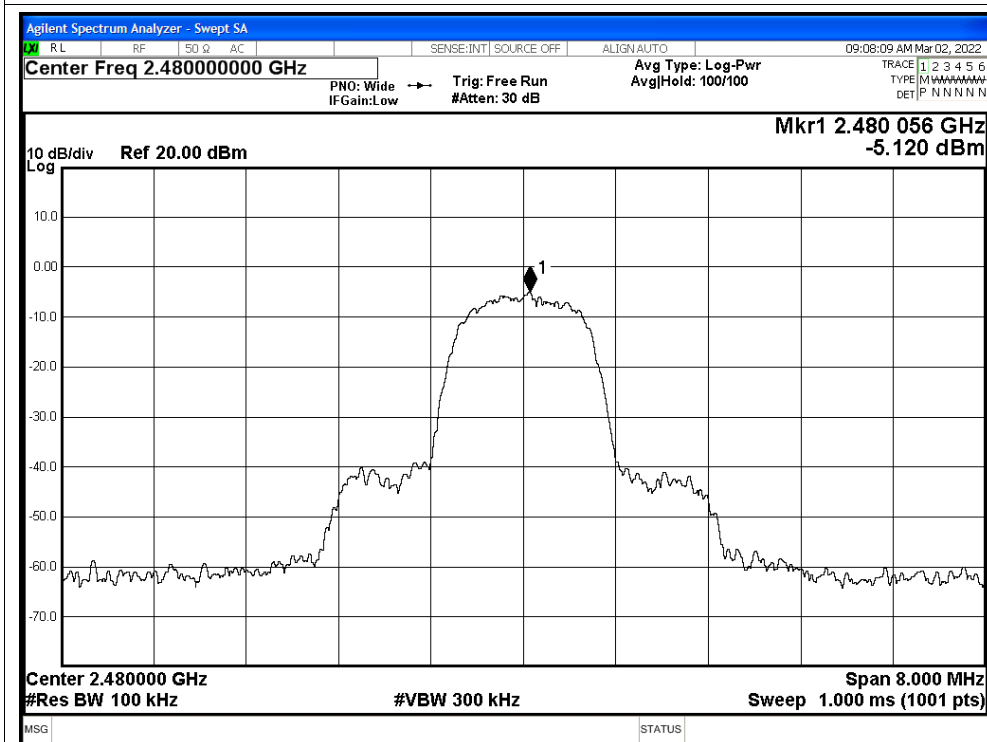


Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

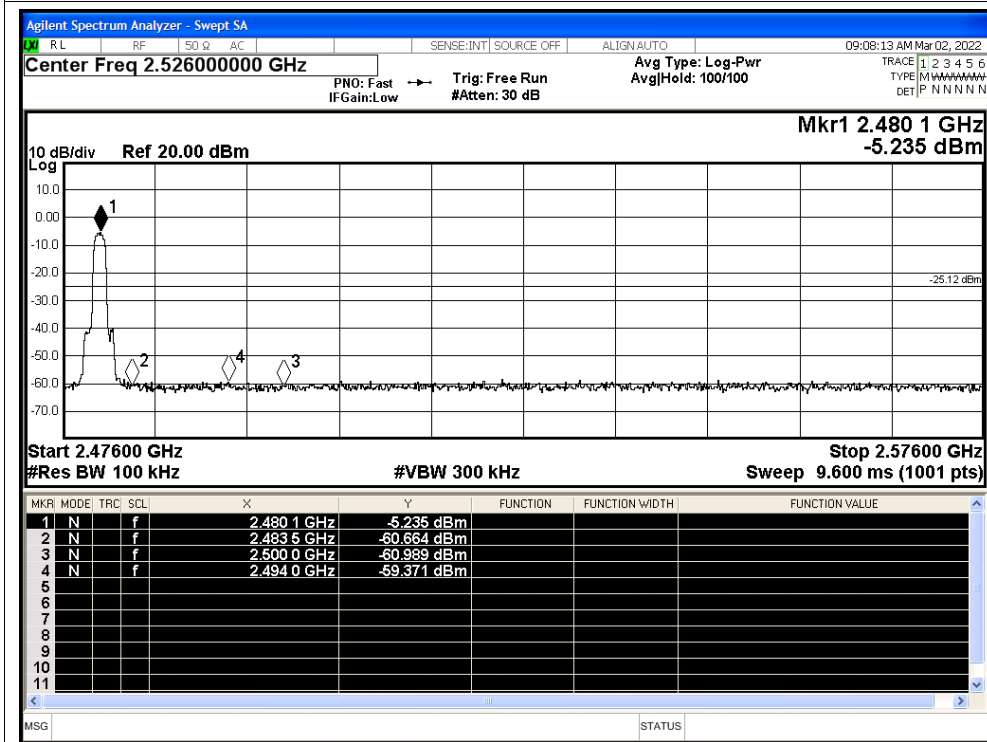




Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref

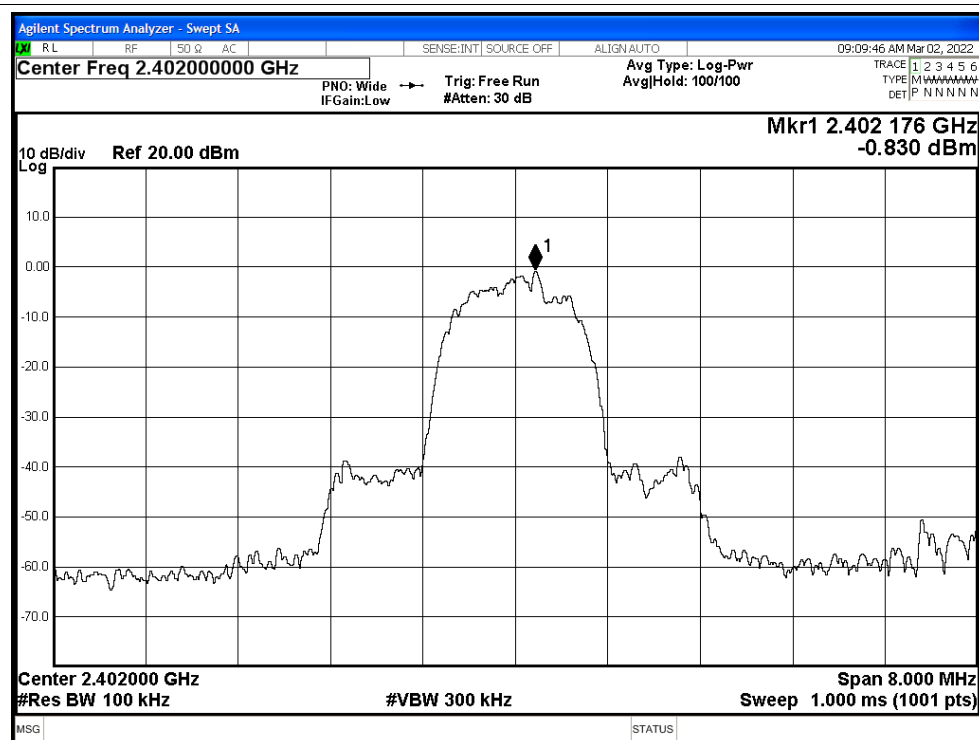


Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission

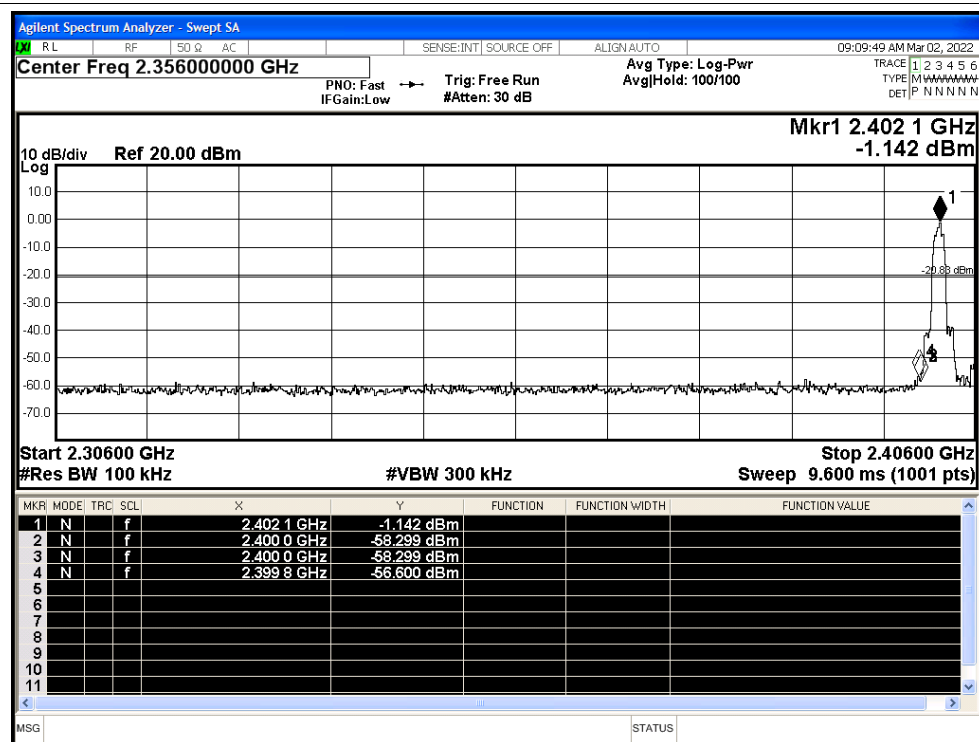




Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref

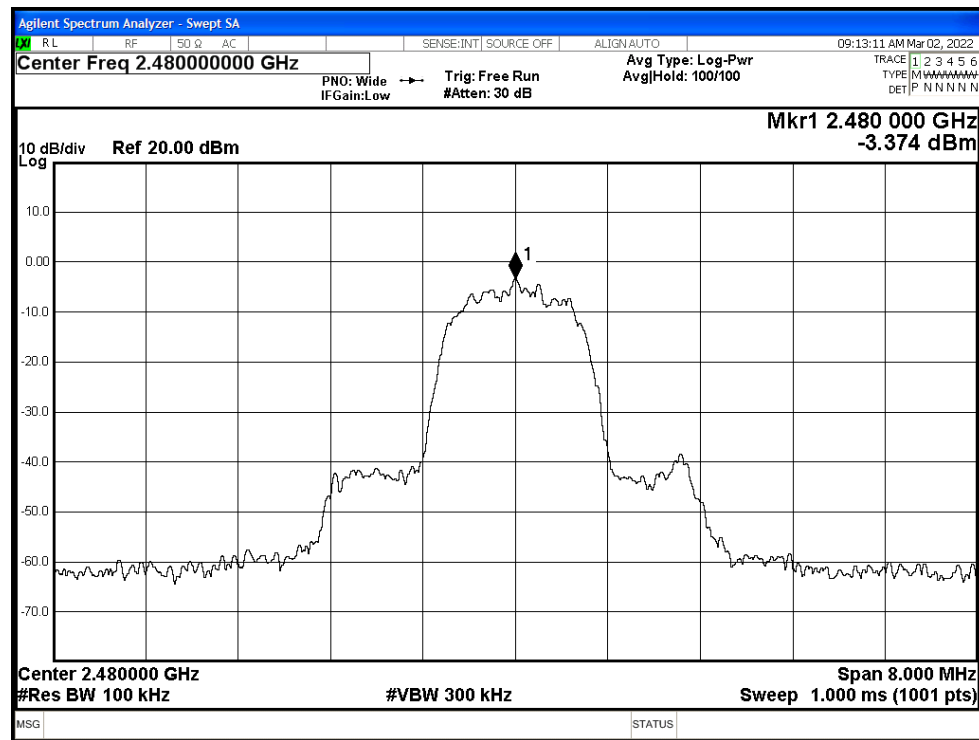


Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission

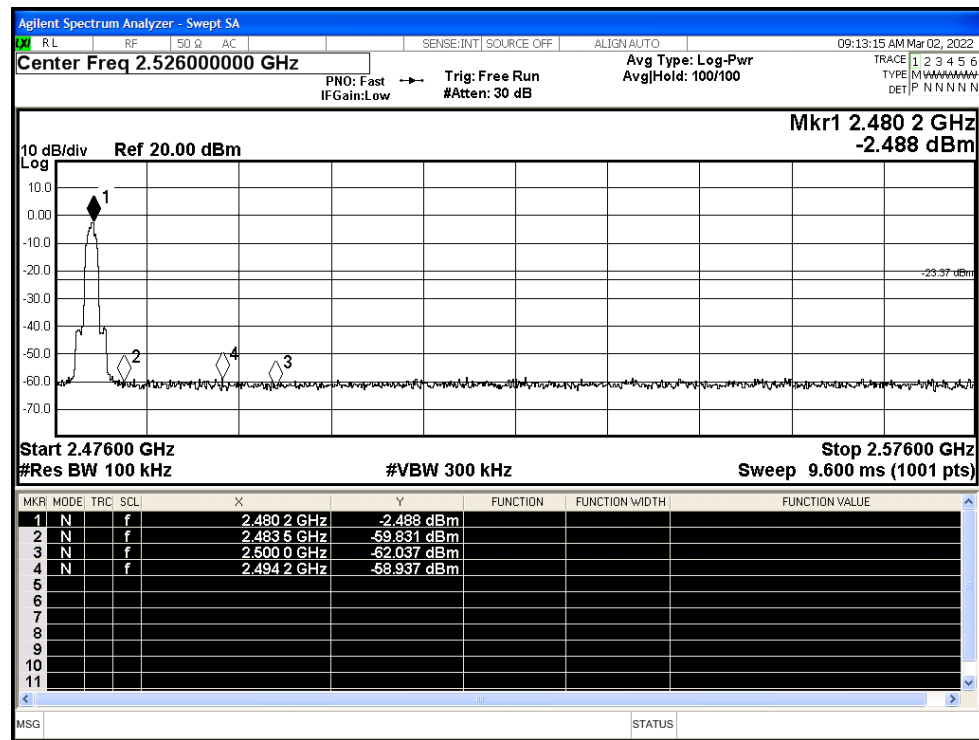




Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



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





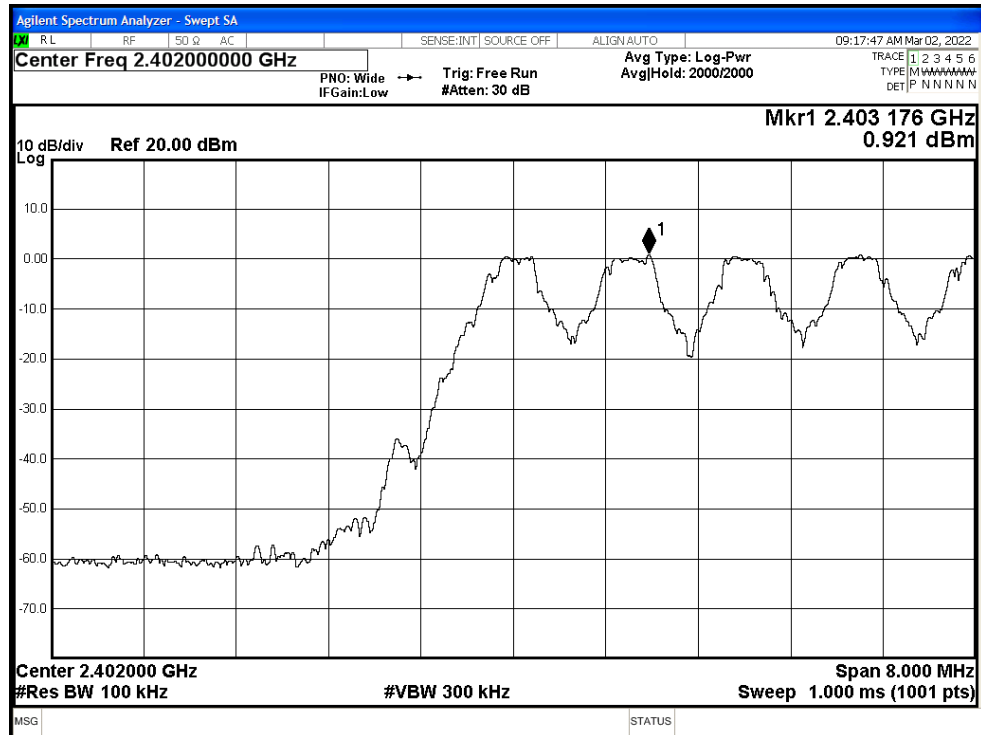
(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-58.79	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.89	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-55.48	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-55.95	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-56.31	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-56	-20	Pass

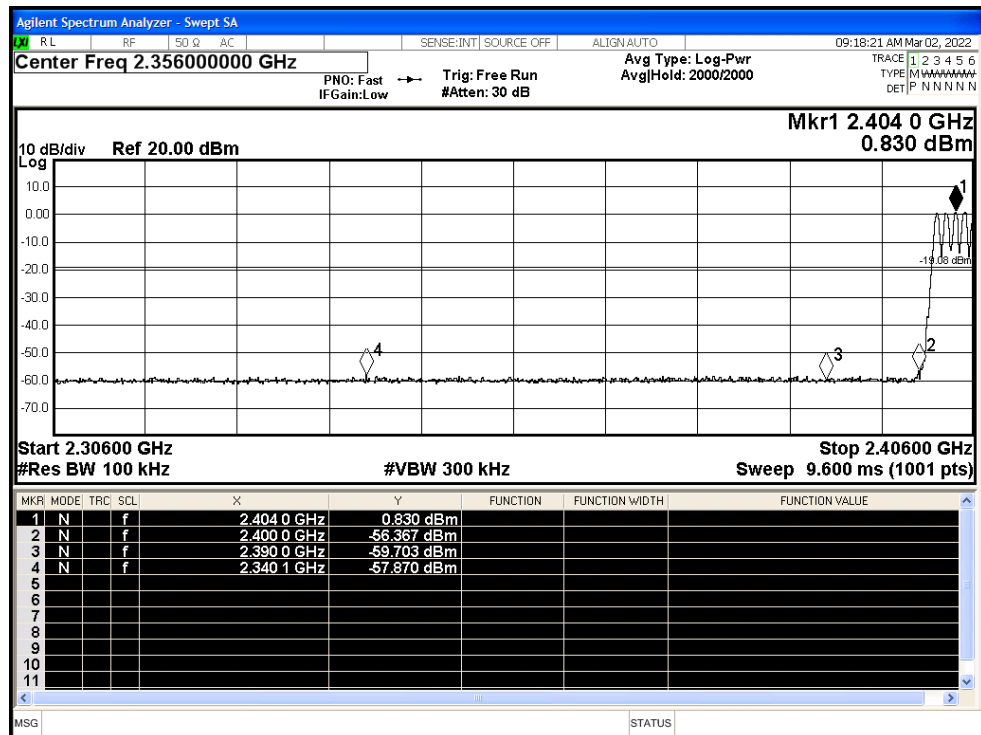


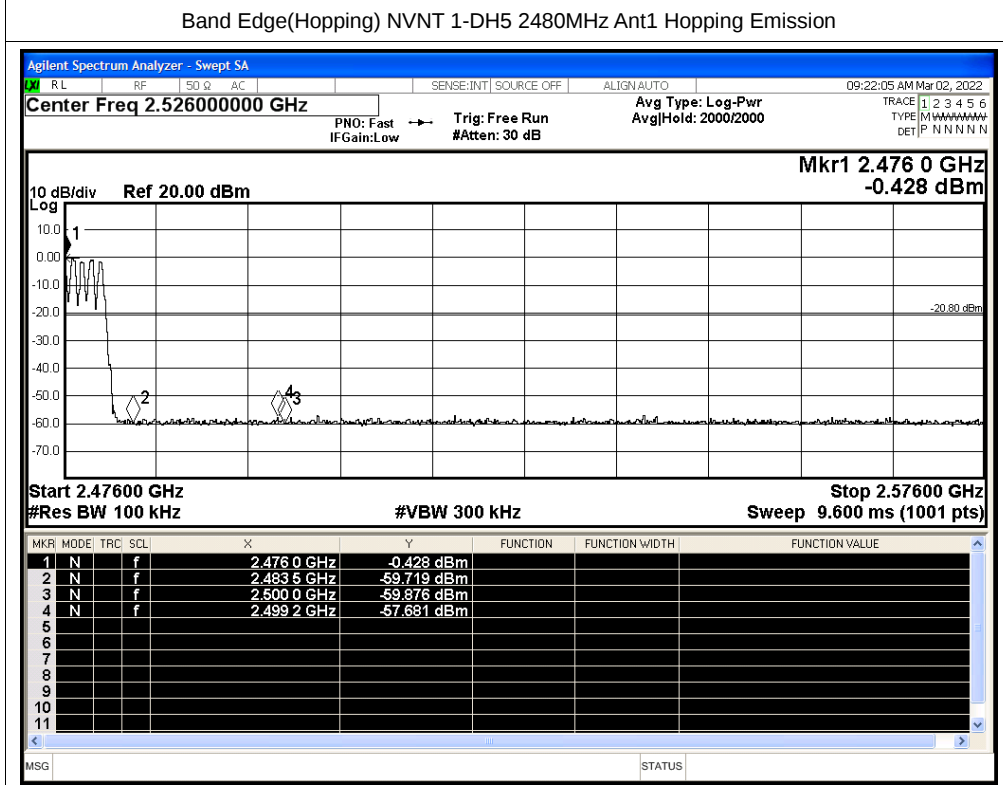
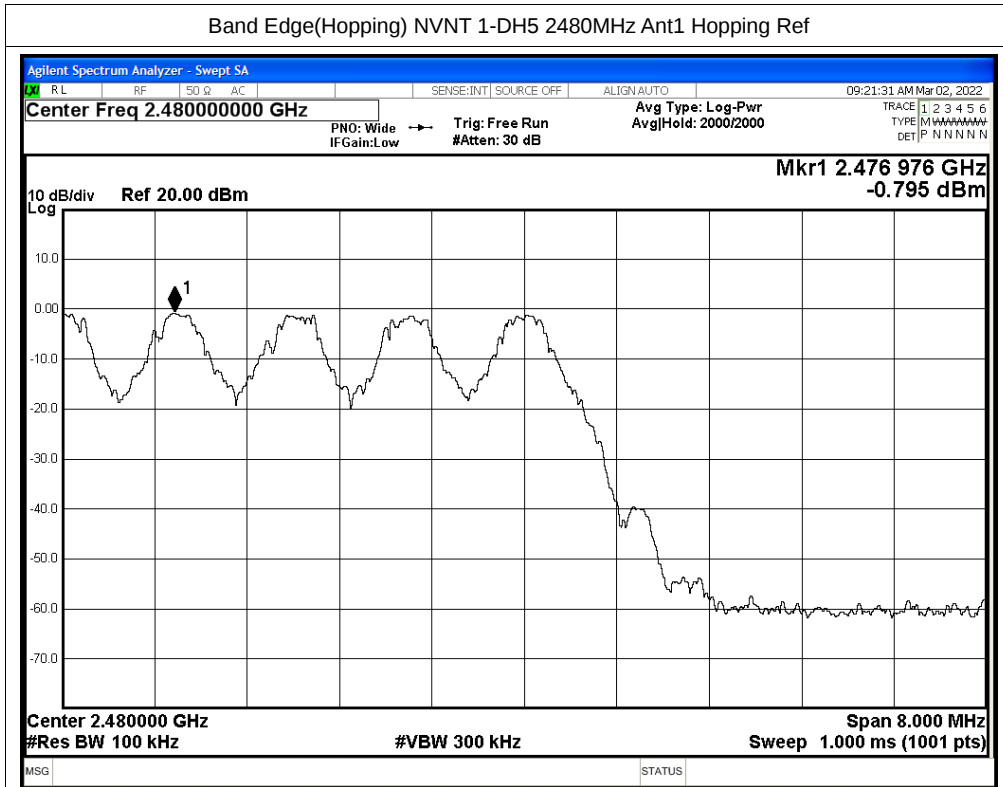
Test Graphs

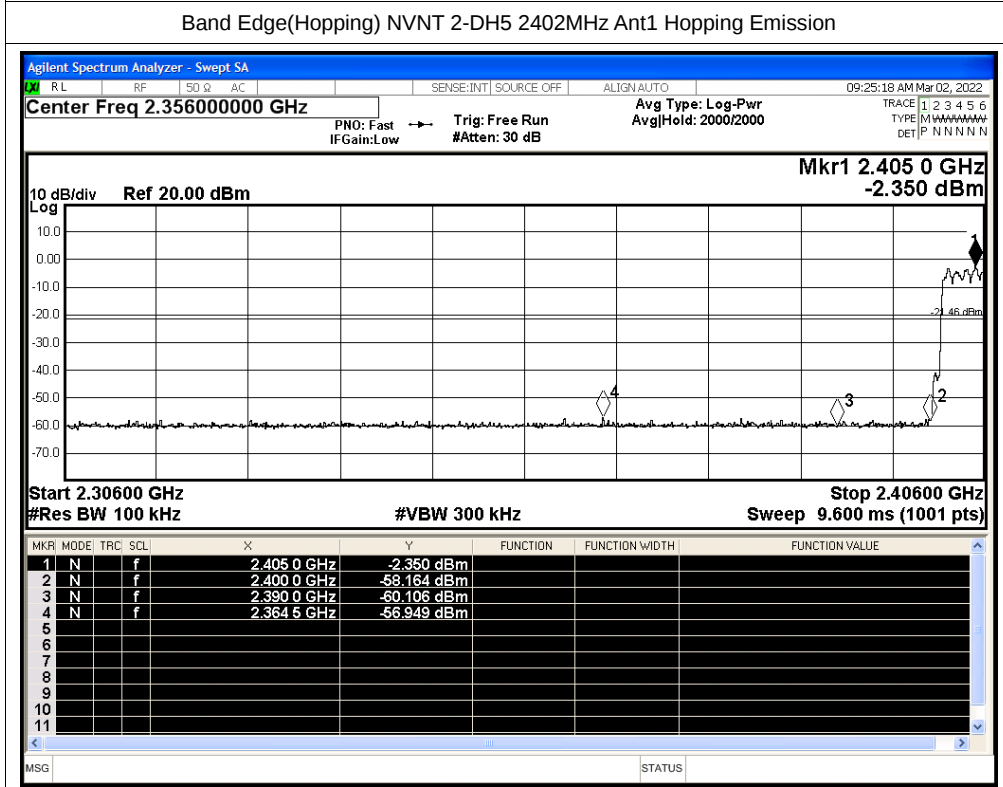
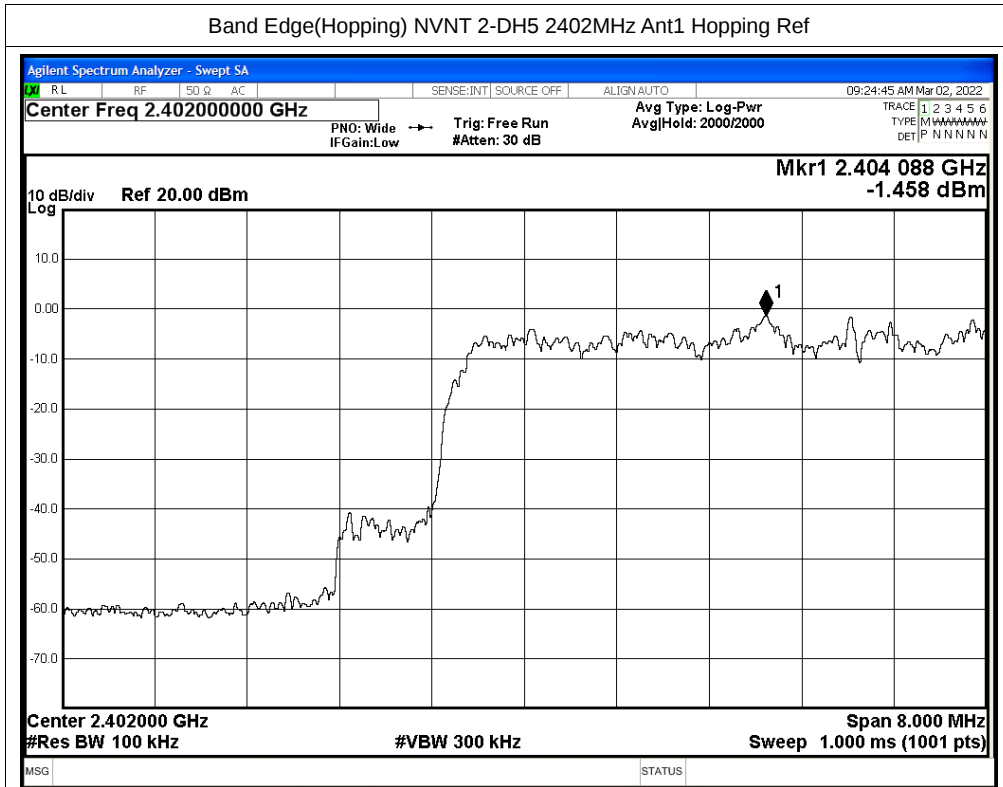
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref

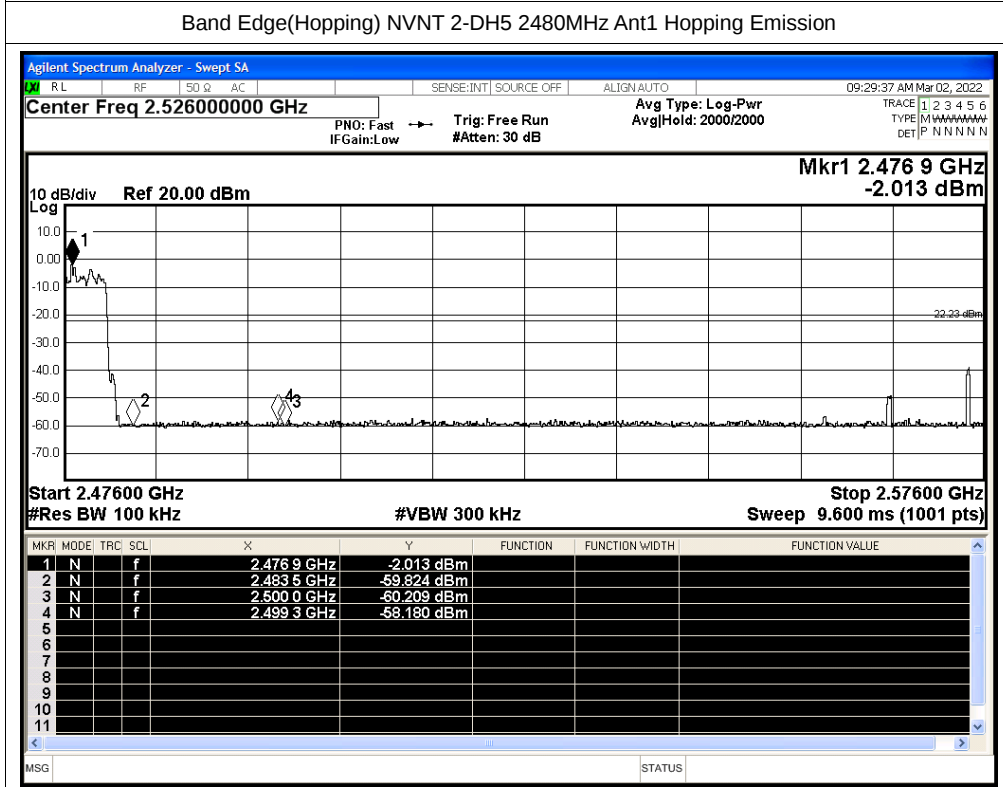
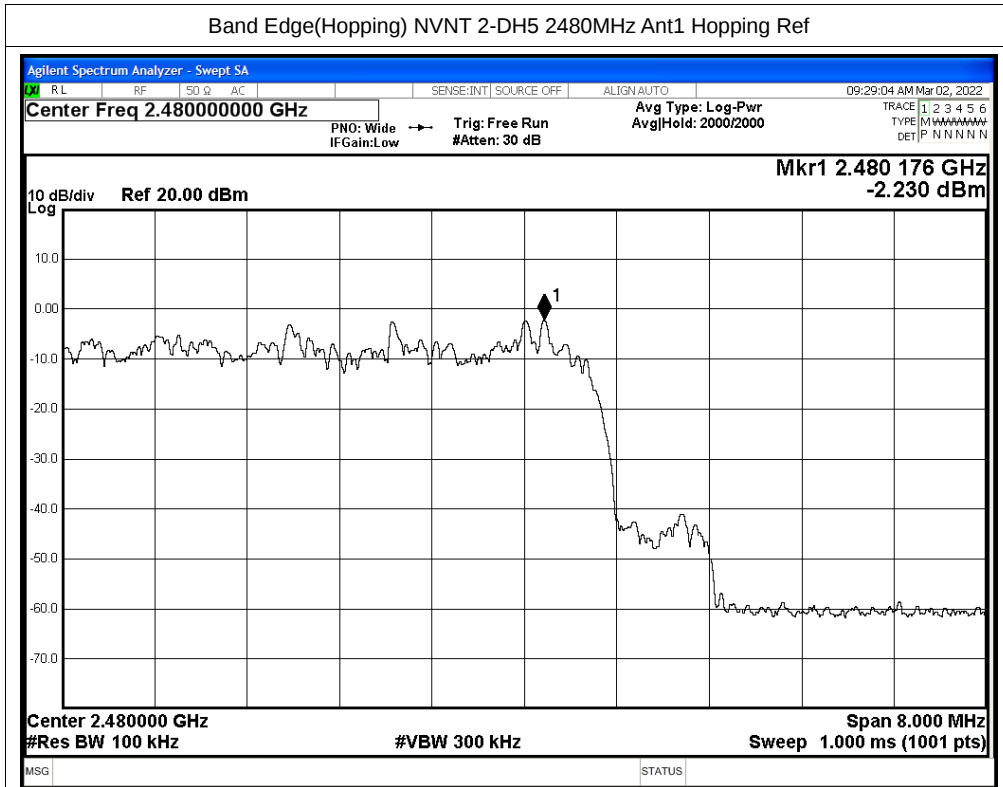


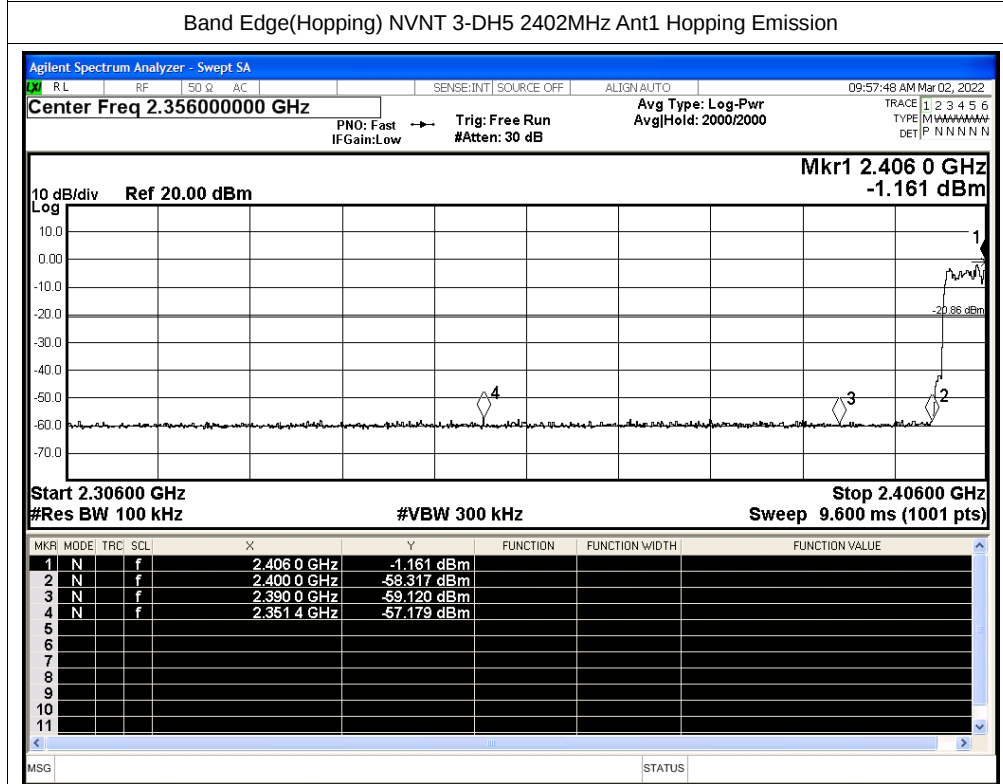
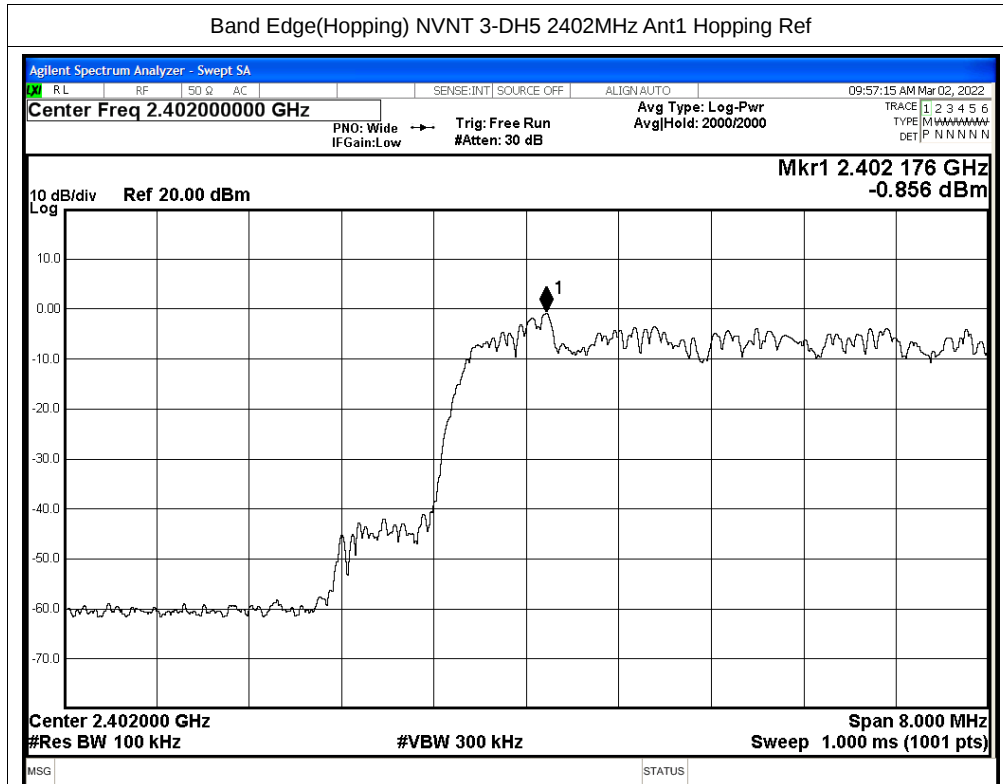
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission

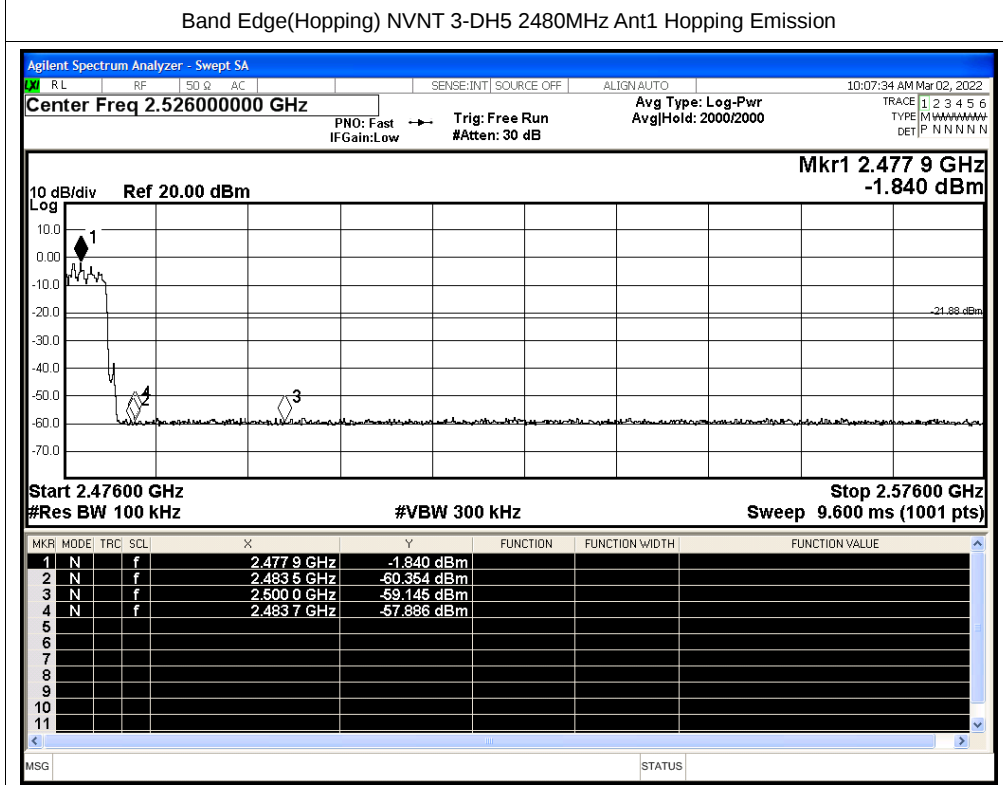
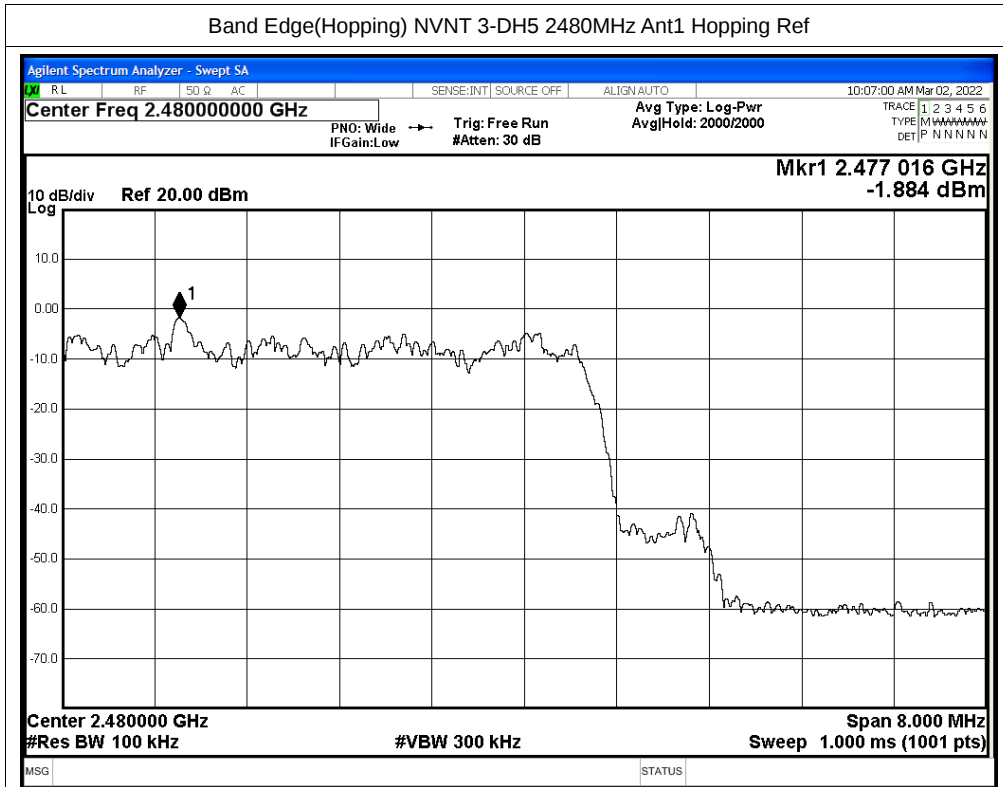














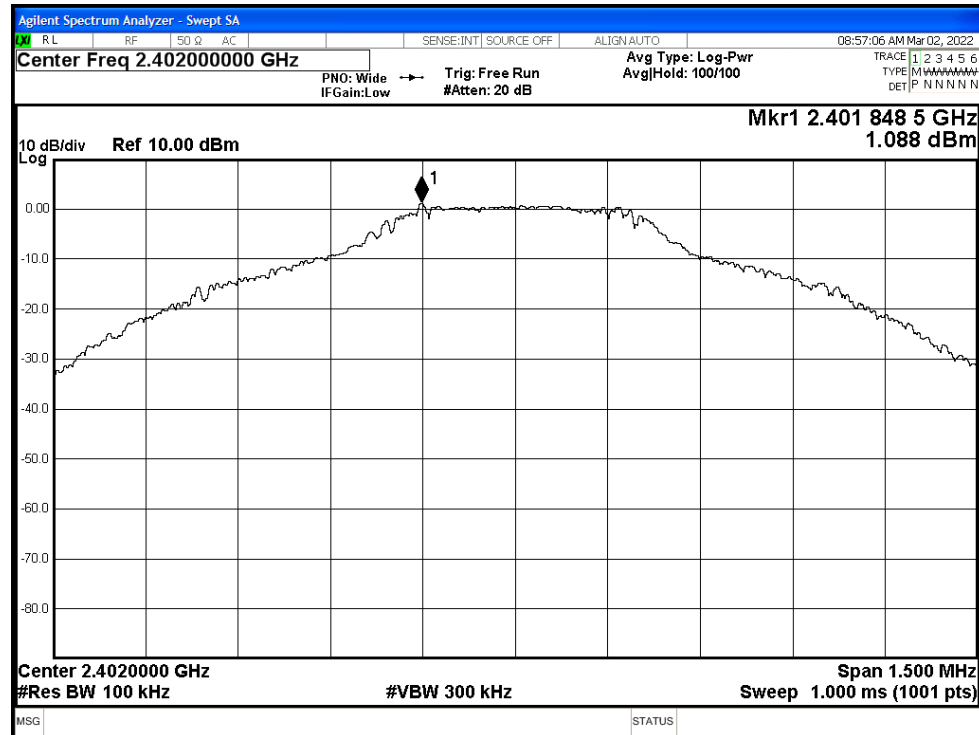
A.7 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-47.4	-20	Pass
NVNT	1-DH5	2441	Ant1	-35.12	-20	Pass
NVNT	1-DH5	2480	Ant1	-22.89	-20	Pass
NVNT	2-DH5	2402	Ant1	-38.36	-20	Pass
NVNT	2-DH5	2441	Ant1	-34.89	-20	Pass
NVNT	2-DH5	2480	Ant1	-55.42	-20	Pass
NVNT	3-DH5	2402	Ant1	-56.91	-20	Pass
NVNT	3-DH5	2441	Ant1	-28.13	-20	Pass
NVNT	3-DH5	2480	Ant1	-26.88	-20	Pass

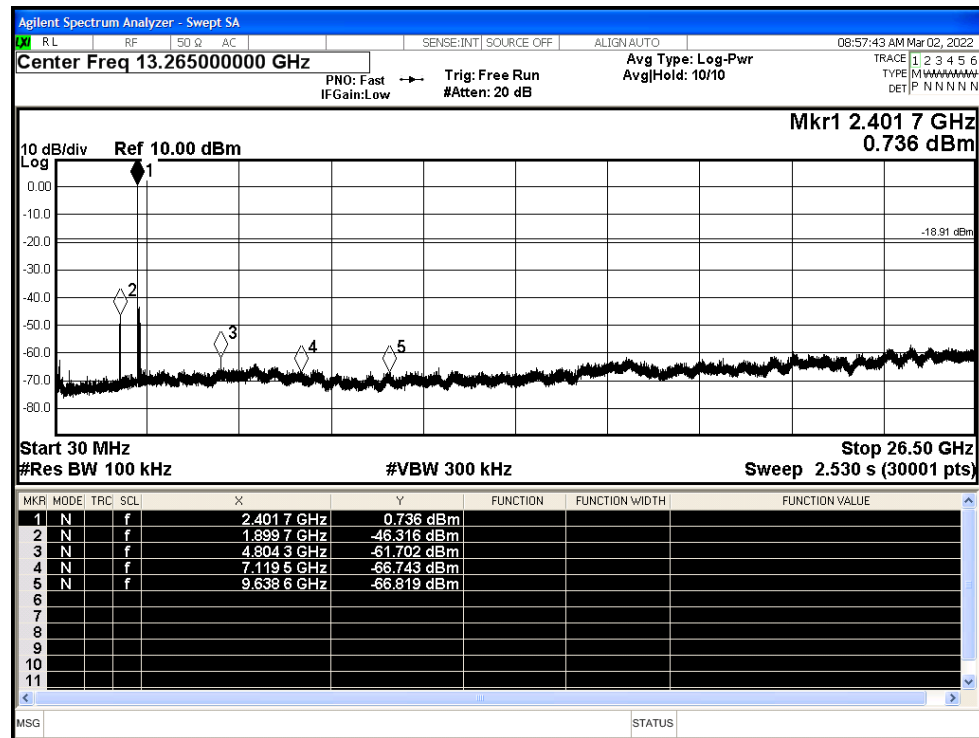


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

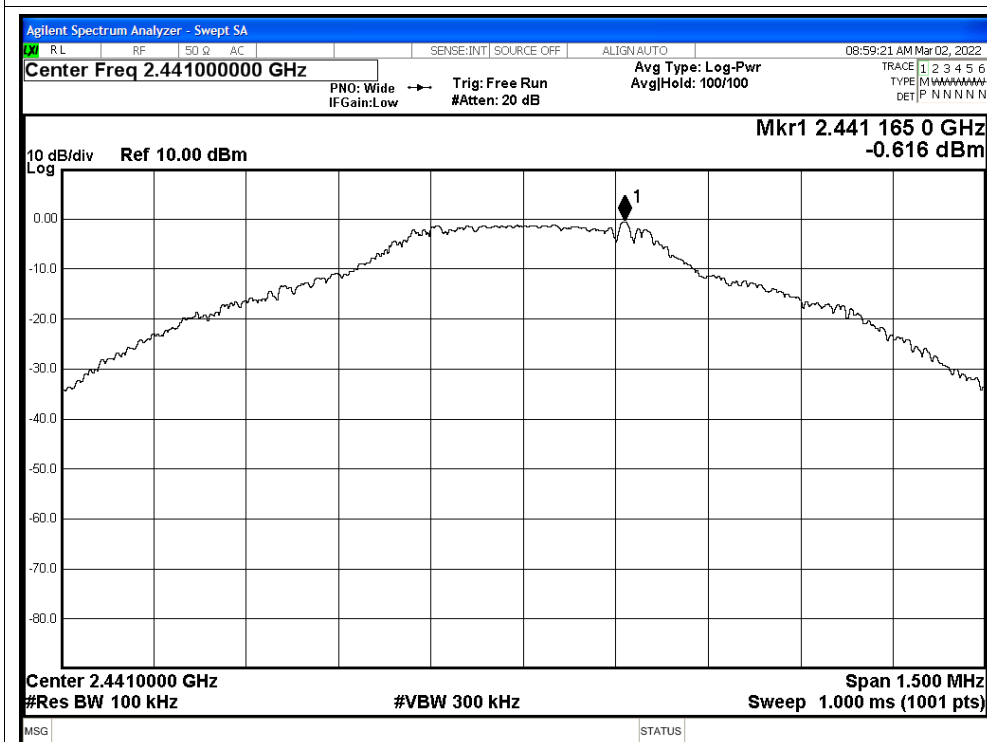


Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

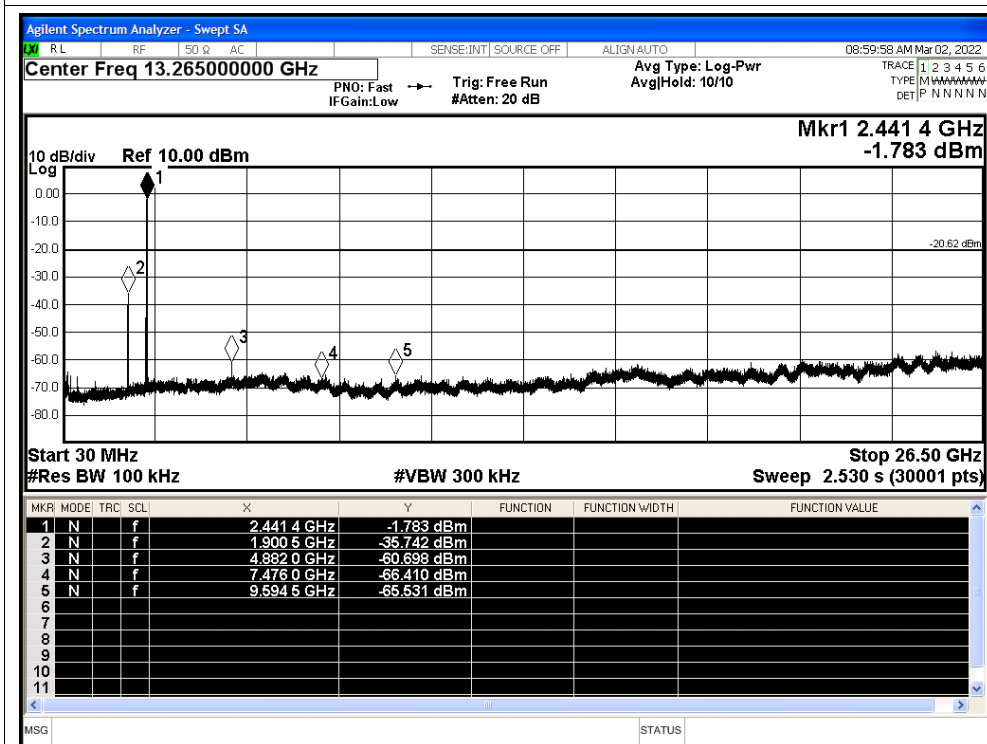




Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

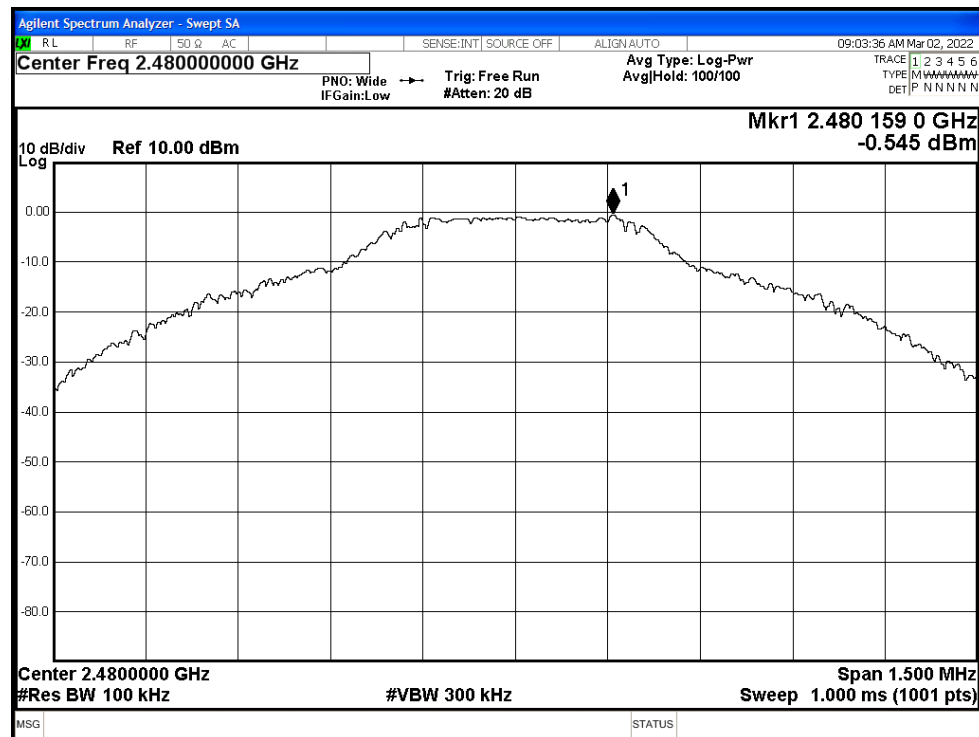


Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

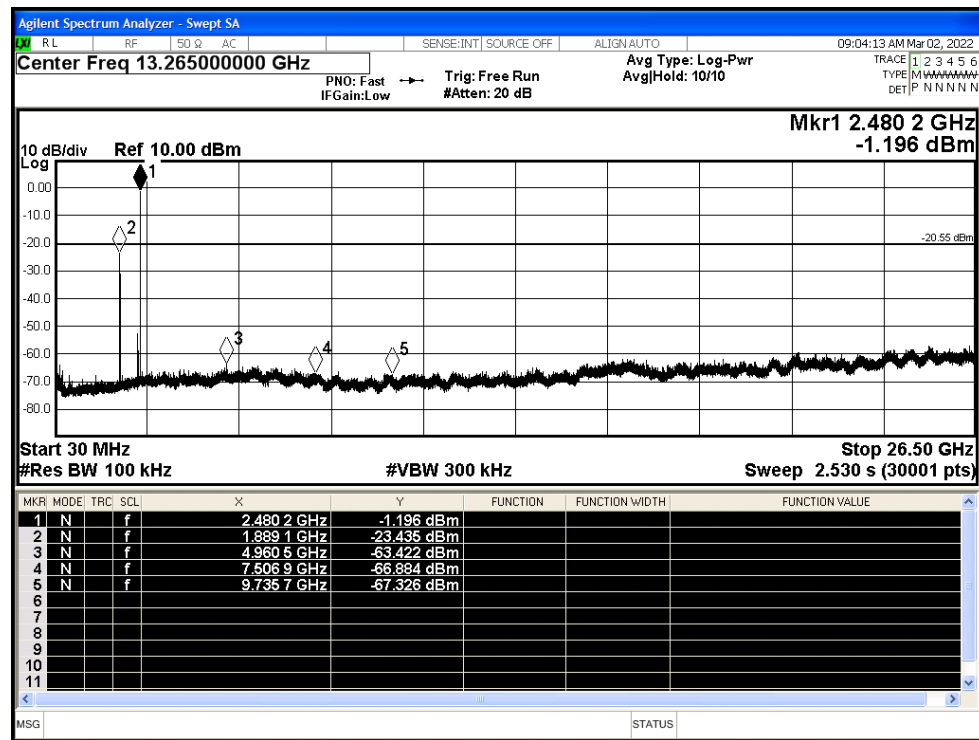




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

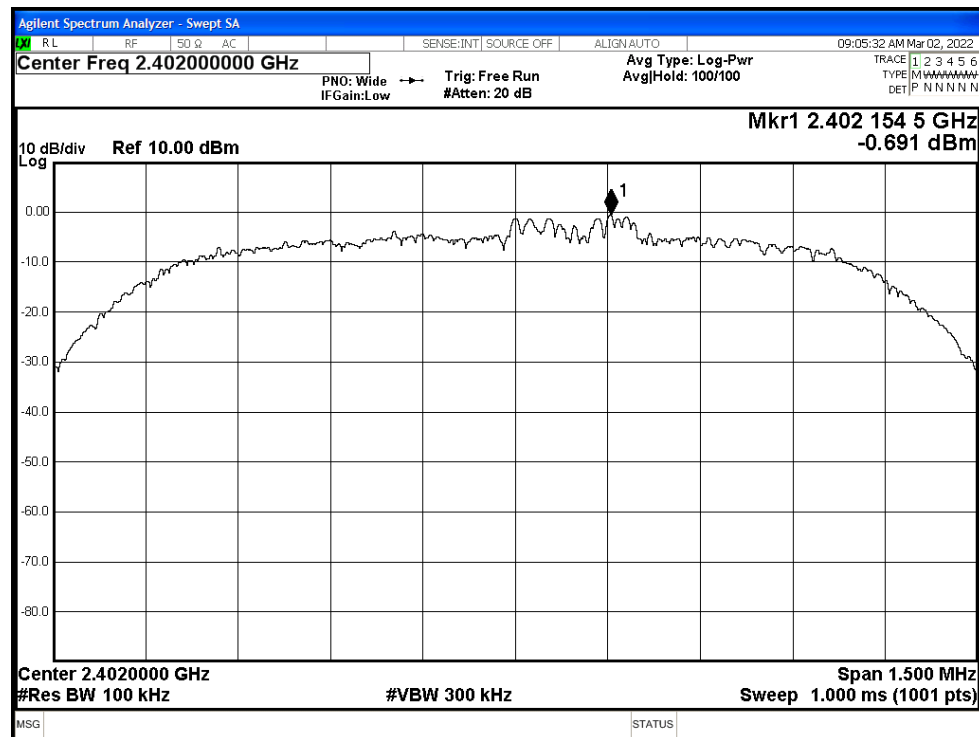


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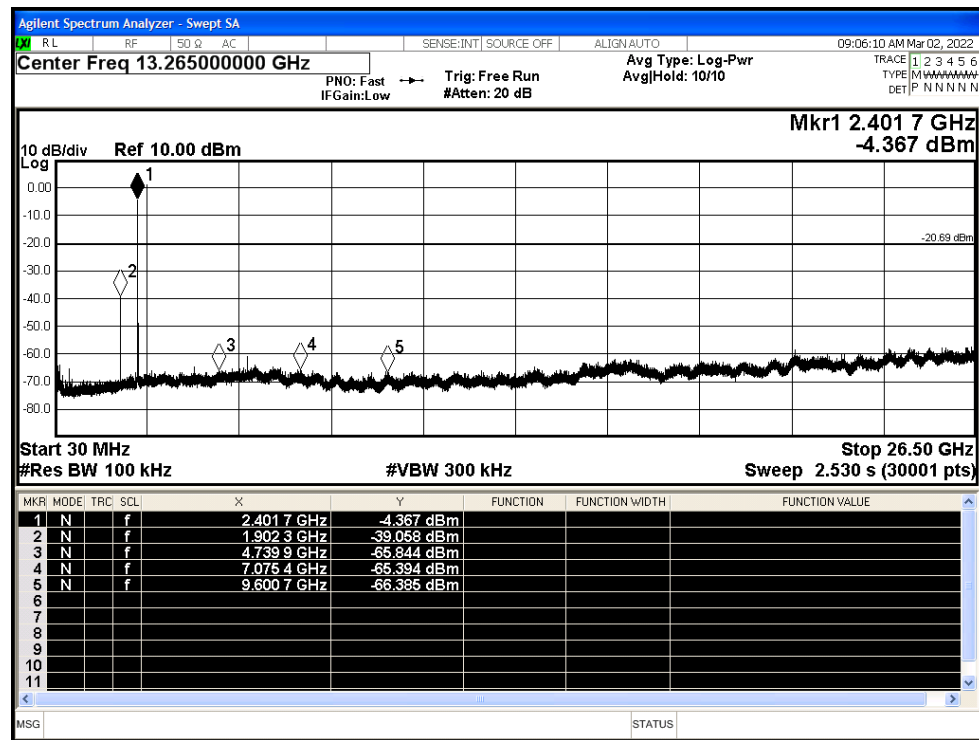




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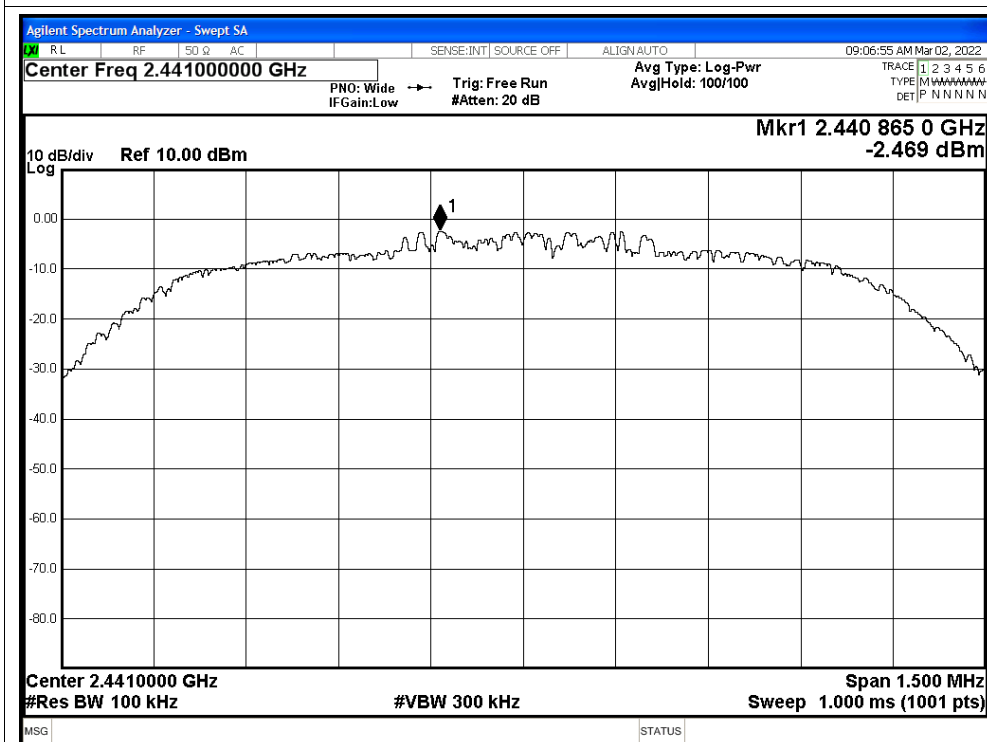


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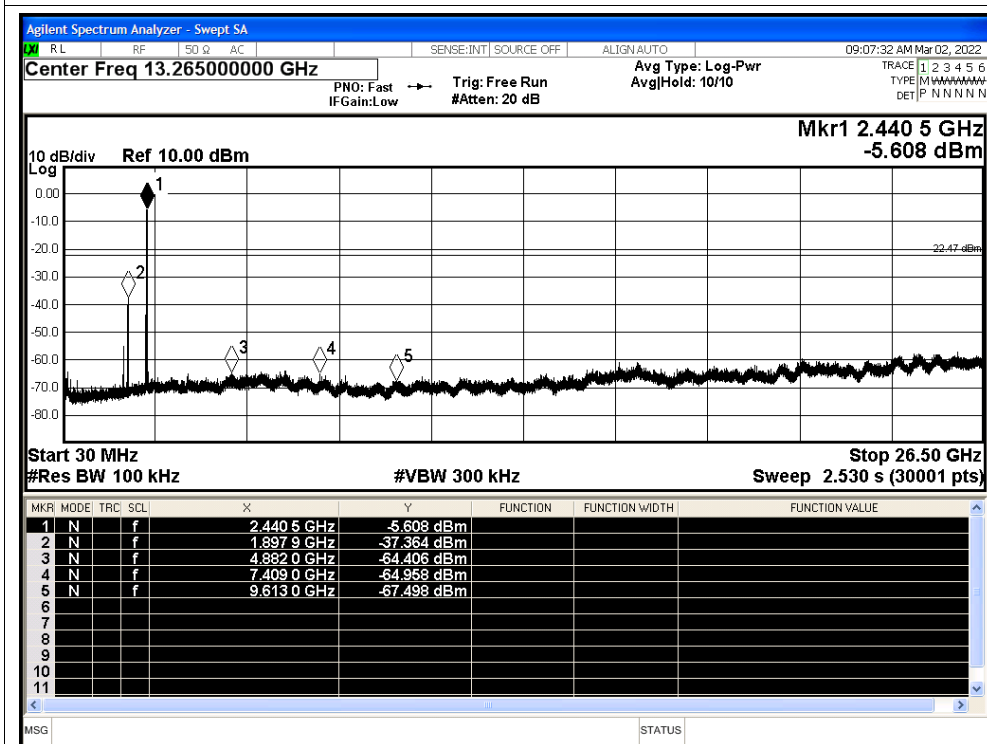




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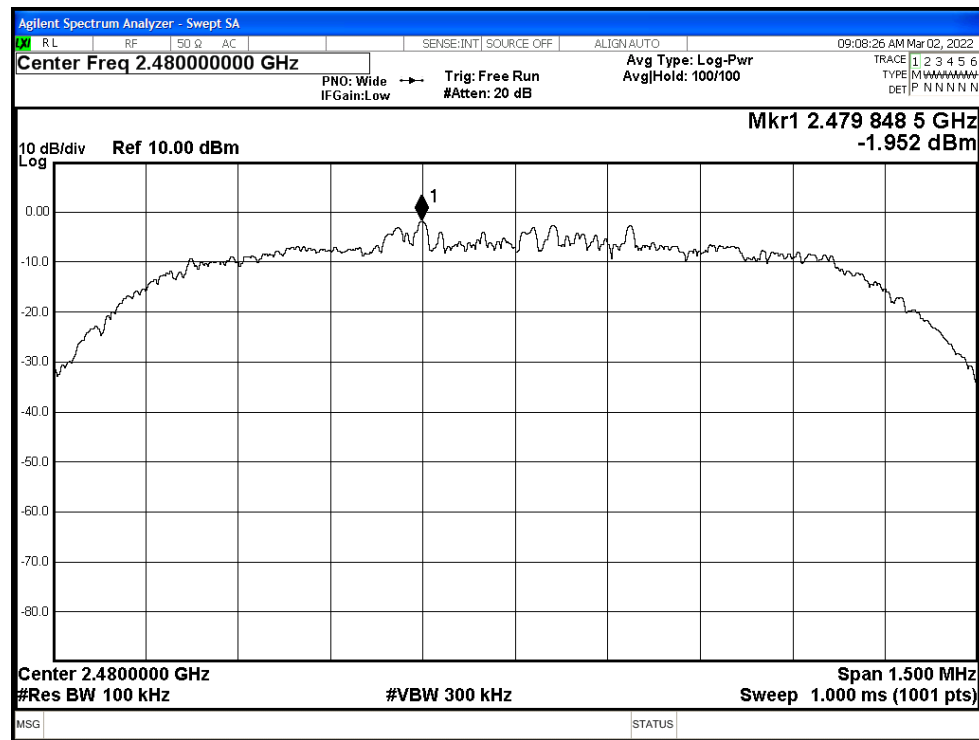


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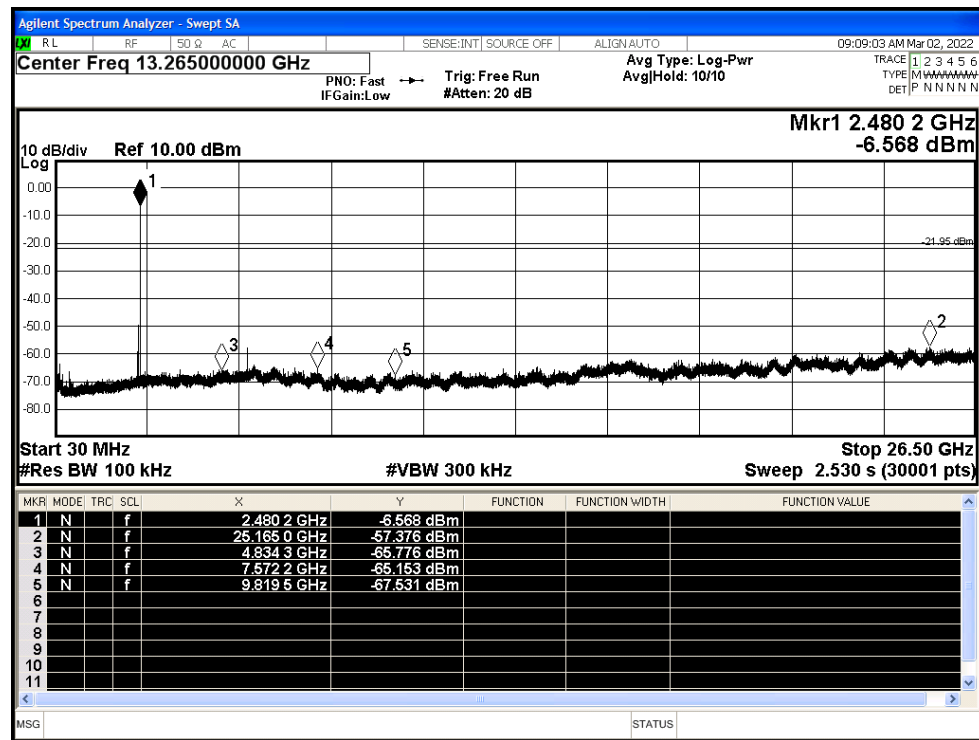




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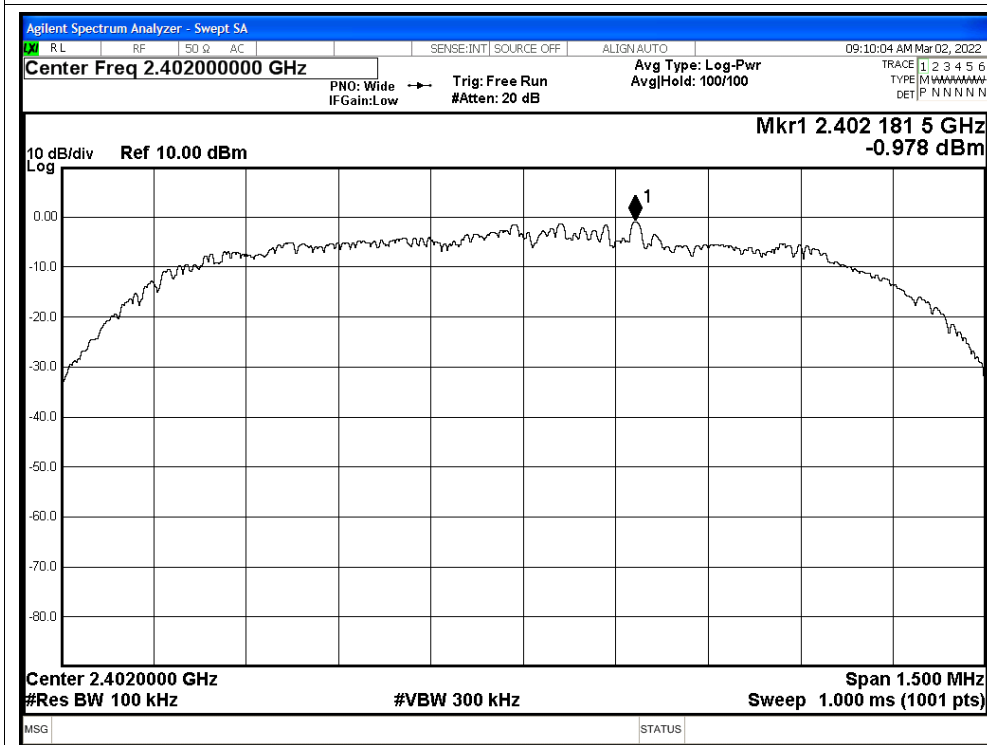


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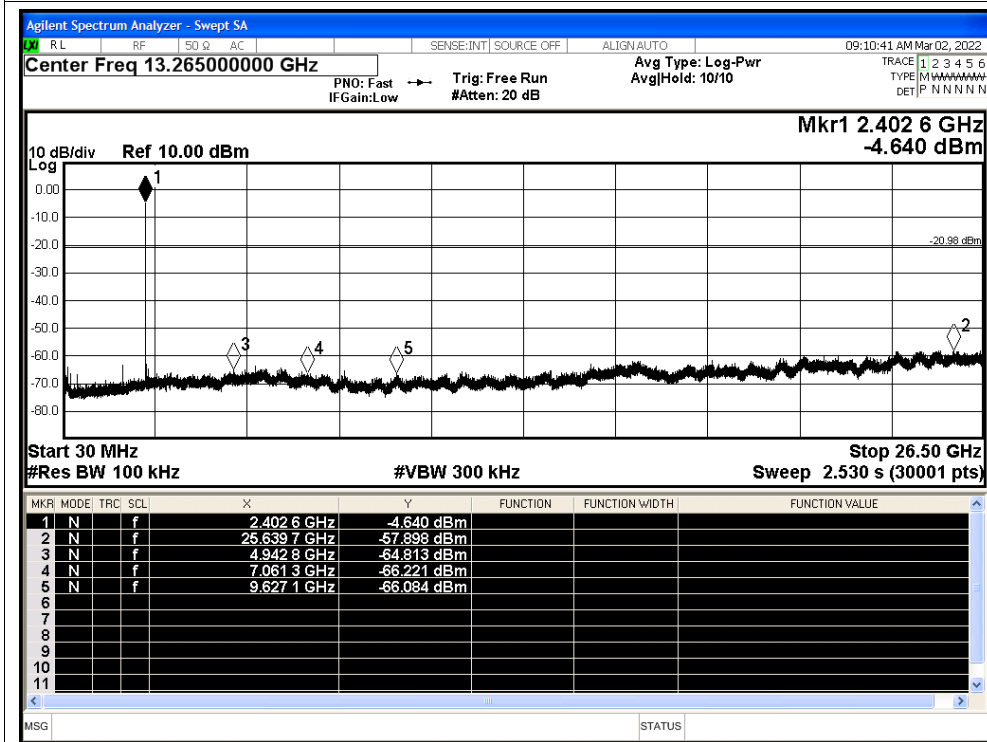




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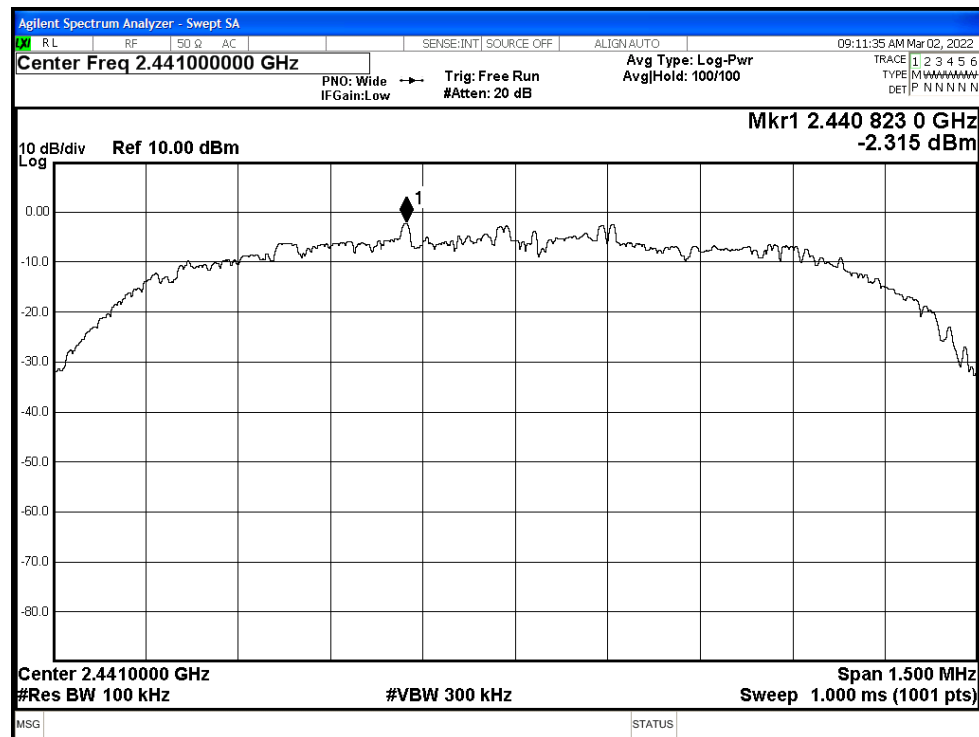


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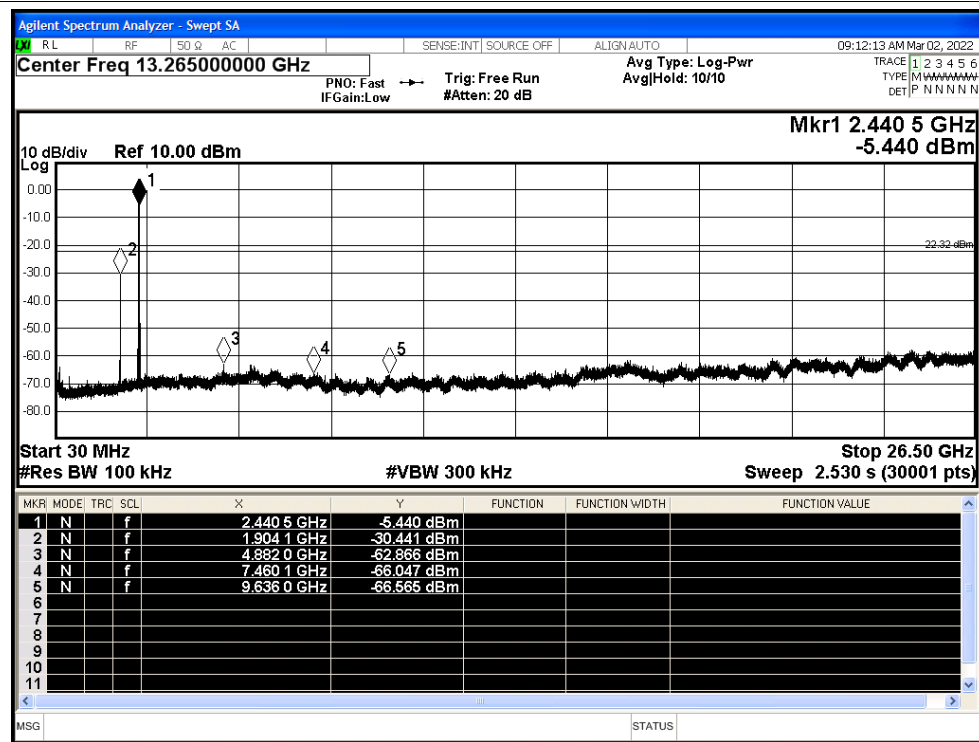




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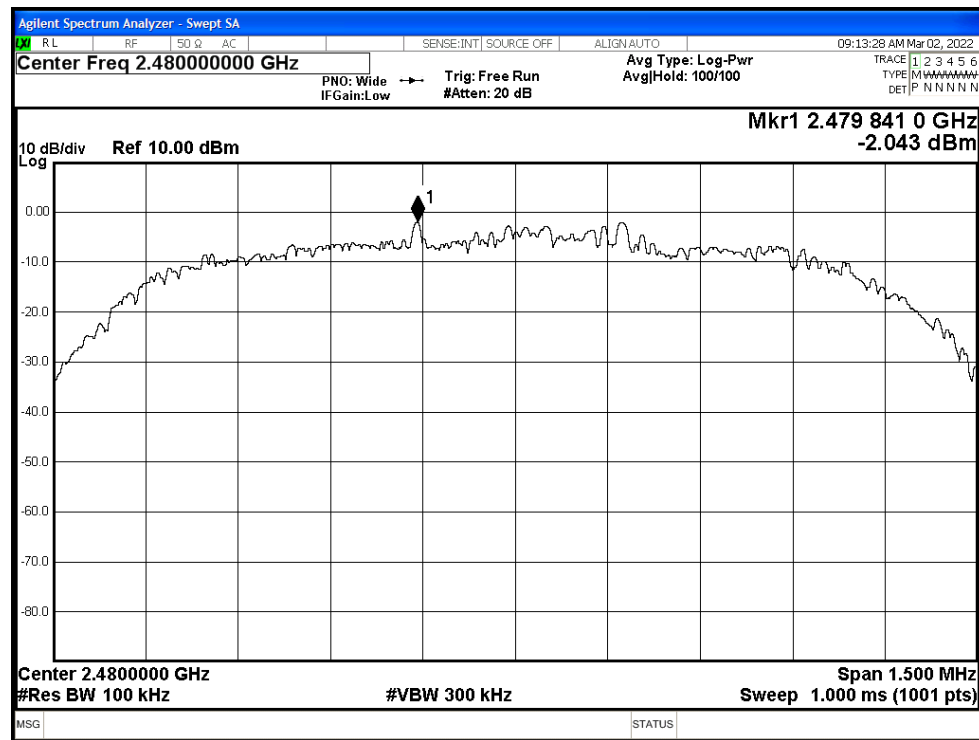


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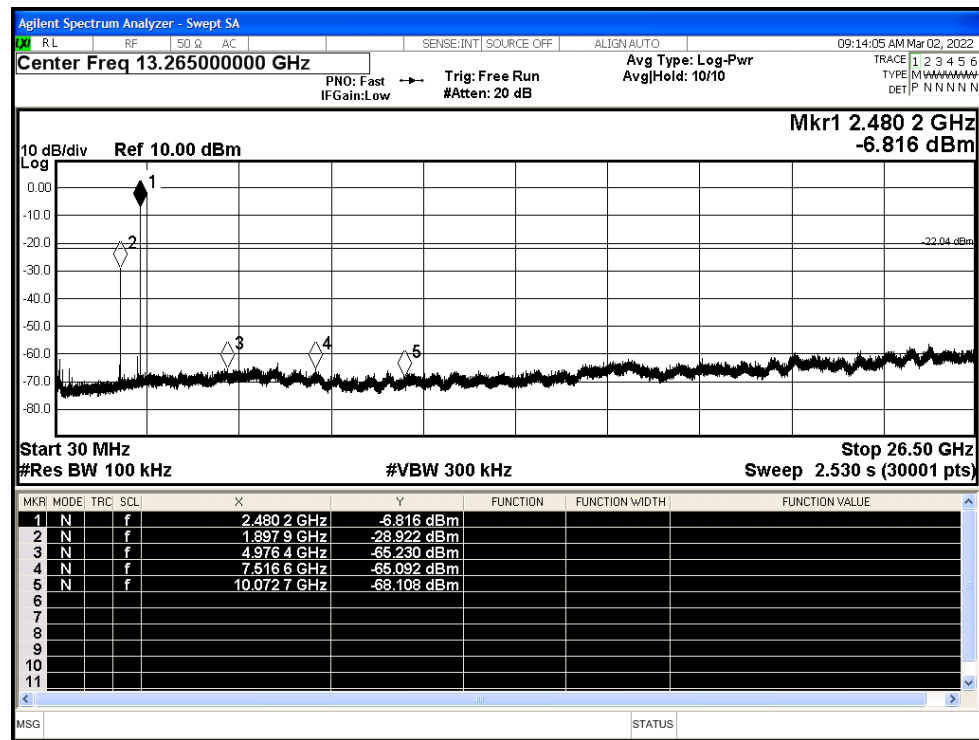




Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission





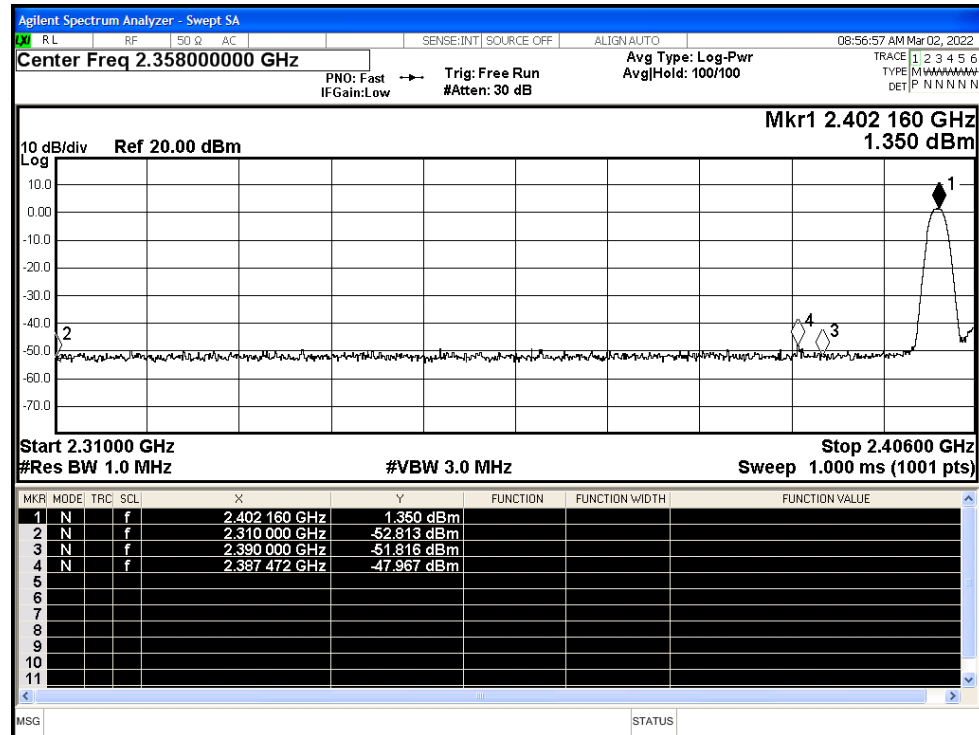
A.8 Emissions at Restricted Band

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	-52.81	2	44.45	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-62.15	2	35.11	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2387.472	-47.96	2	49.3	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2385.744	-61.56	2	35.7	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-52.07	2	45.19	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-61.61	2	35.65	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-52.26	2	45	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-61.17	2	36.09	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2485.984	-49	2	48.26	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.512	-61.17	2	36.09	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-52.53	2	44.73	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-61.64	2	35.62	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-53.04	2	44.22	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-61.94	2	35.32	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2343.888	-48.51	2	48.75	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2386.704	-61.51	2	35.75	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-49.75	2	47.51	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-61.69	2	35.57	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-50.92	2	46.34	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-61.24	2	36.02	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2484.496	-49.19	2	48.07	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.68	-61.1	2	36.16	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-51.67	2	45.59	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-61.7	2	35.56	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-52.48	2	44.78	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-62.02	2	35.24	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2326.896	-48.58	2	48.68	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2389.008	-61.51	2	35.75	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-51.41	2	45.85	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-61.61	2	35.65	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-51.65	2	45.61	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-61.06	2	36.2	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2490.352	-48.62	2	48.64	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.728	-61	2	36.26	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-50.35	2	46.91	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-61.71	2	35.55	Average	54	Pass

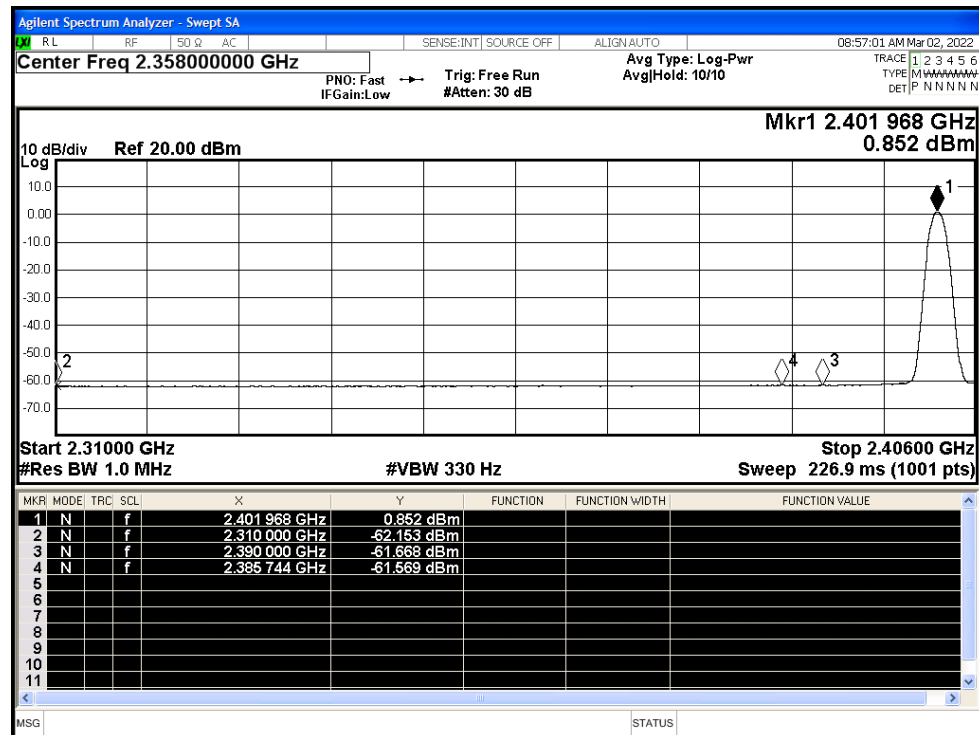


Test Graphs

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

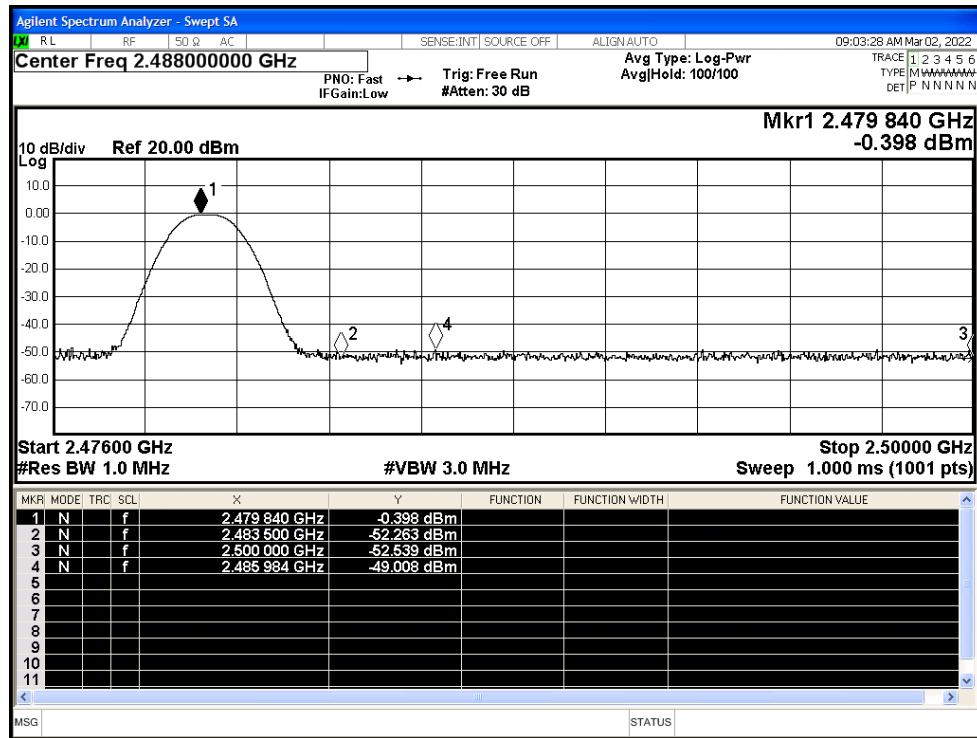


Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

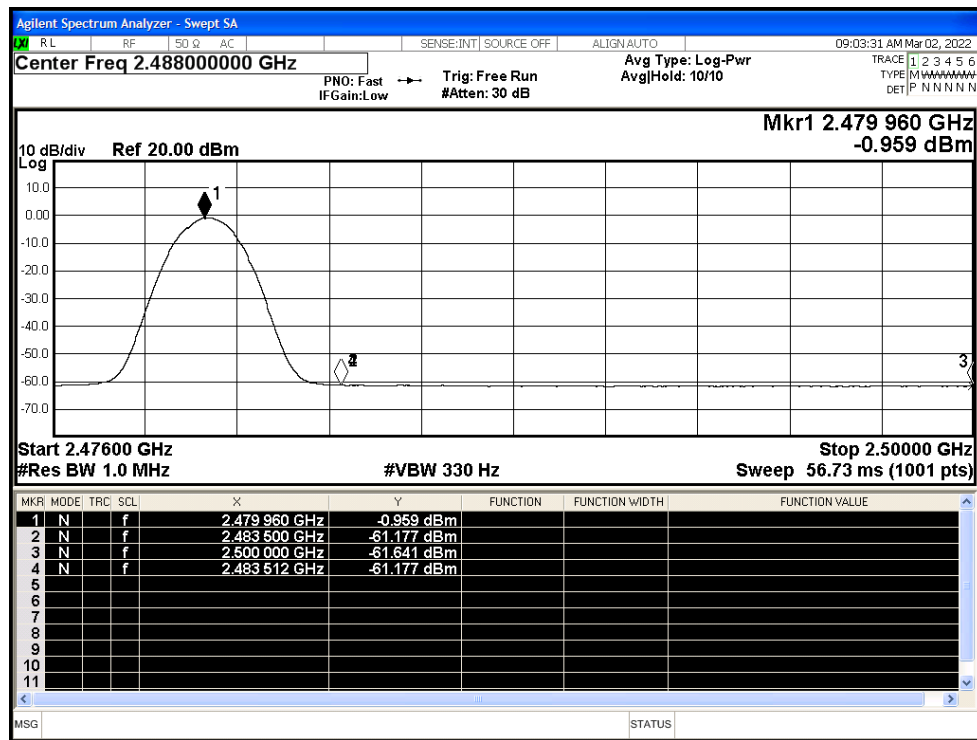




Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak

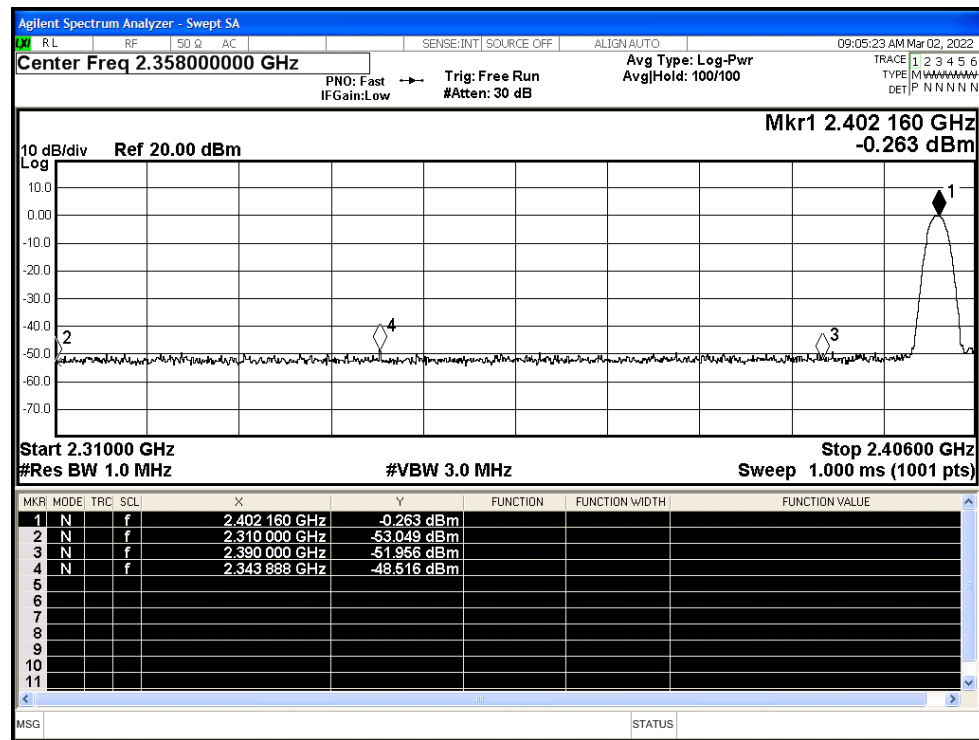


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

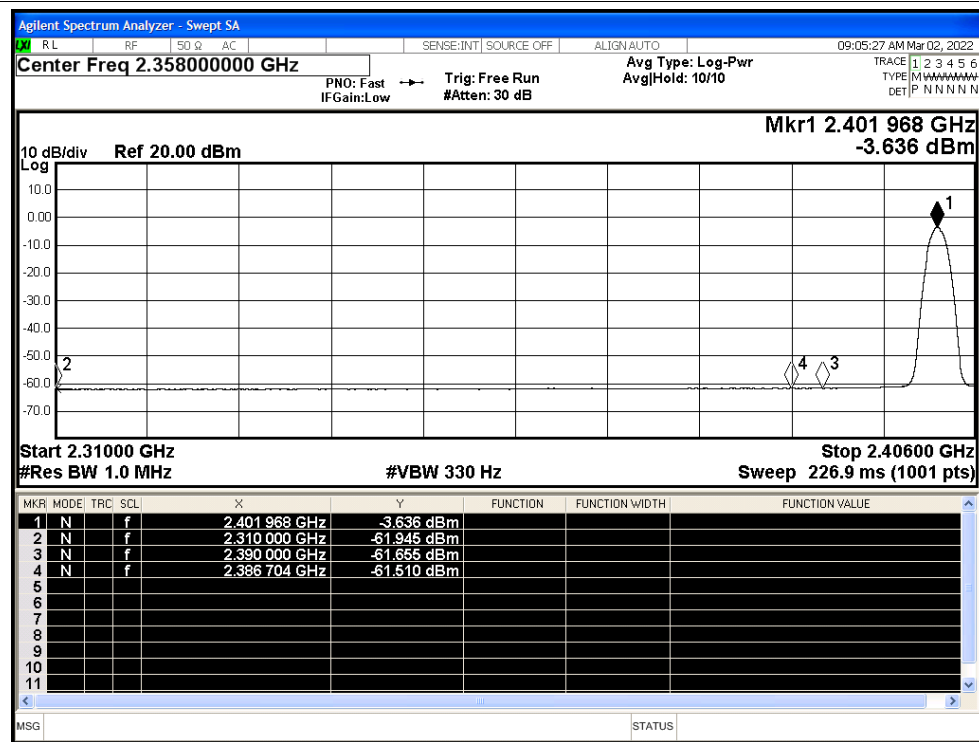




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak

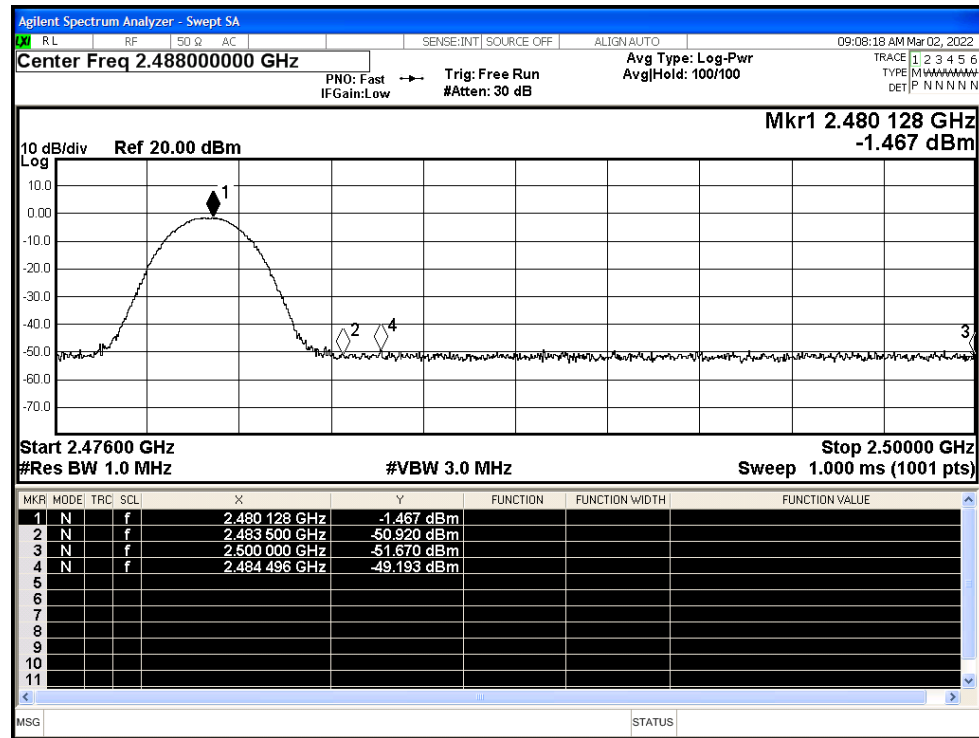


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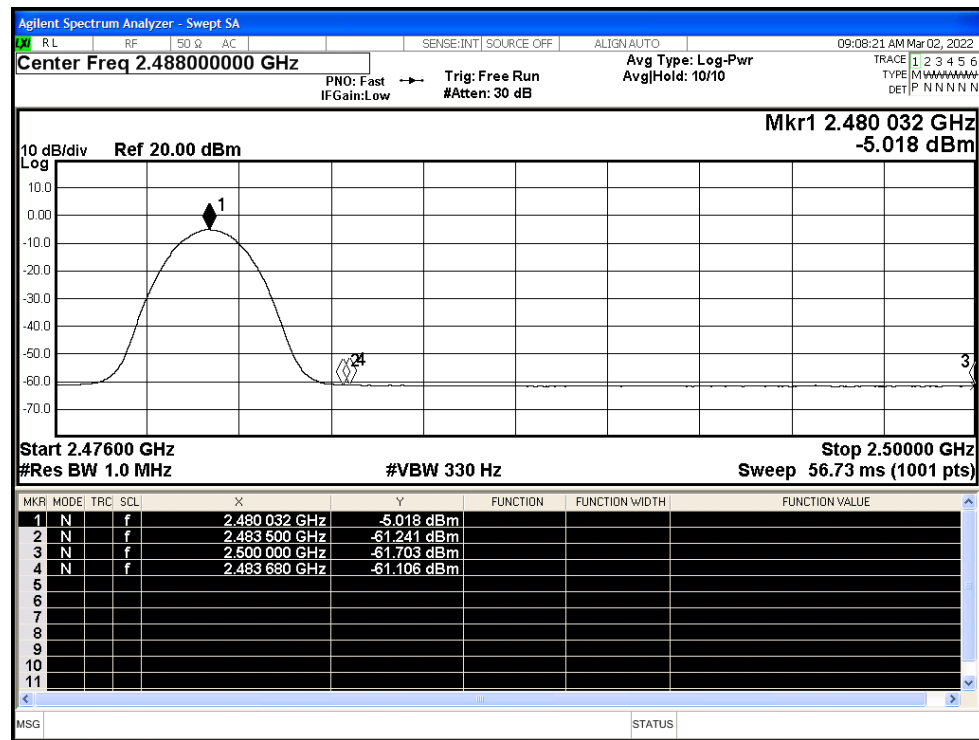




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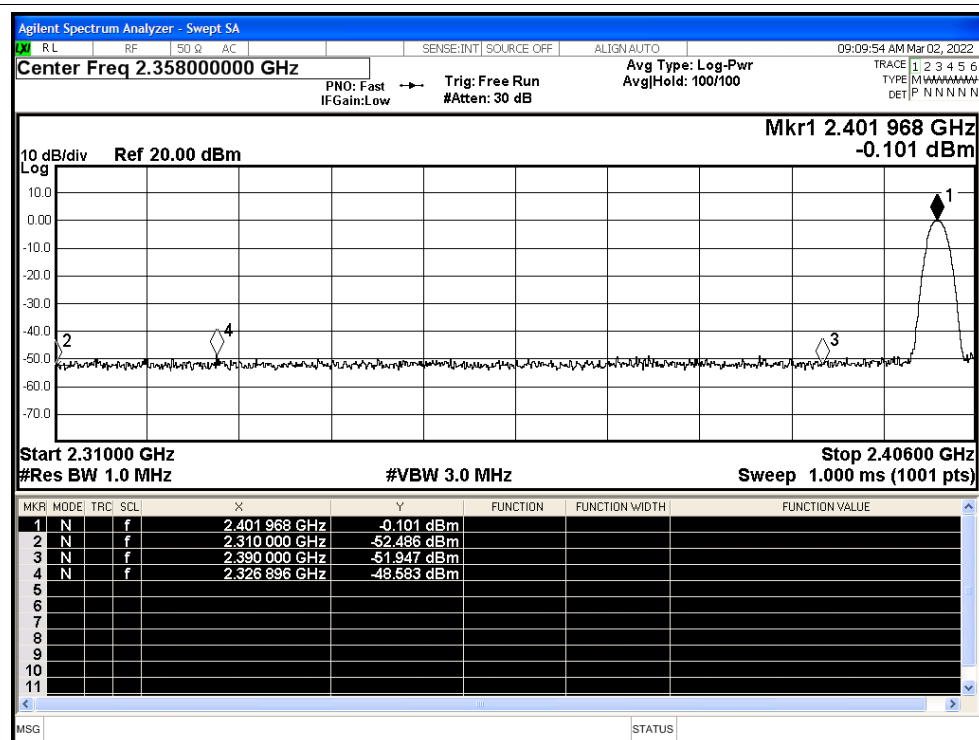


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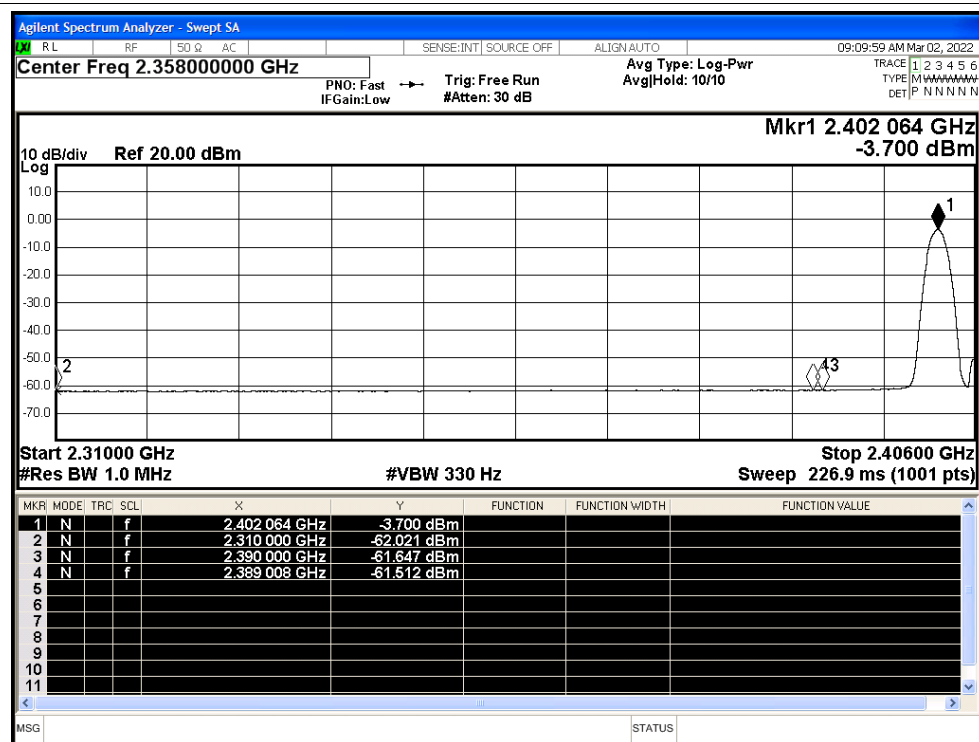




Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak

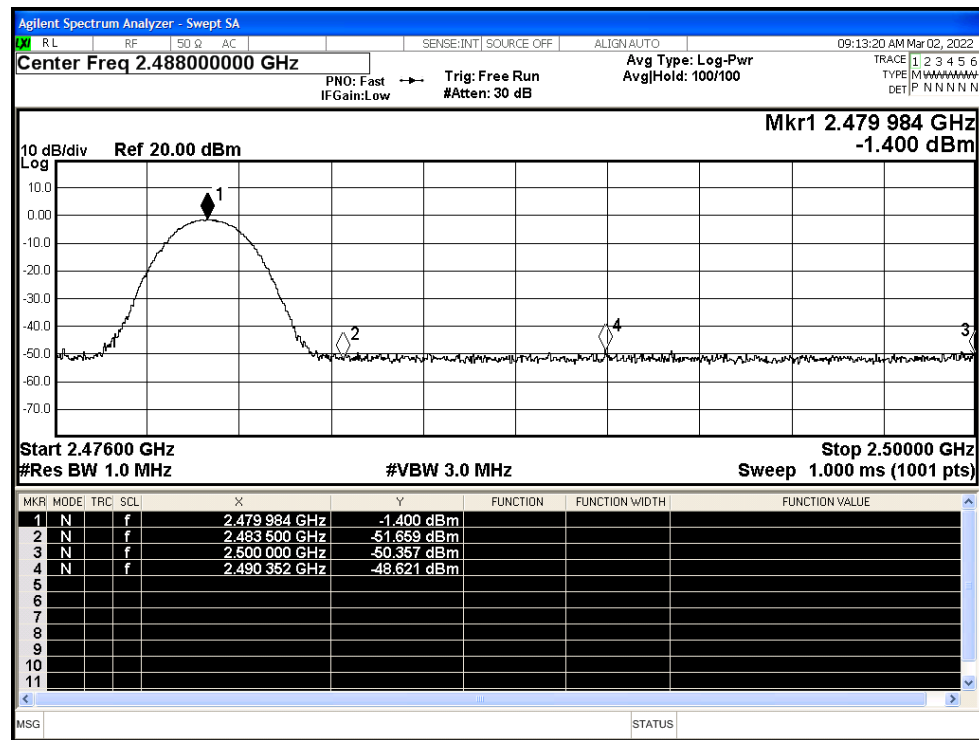


Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Average





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



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

