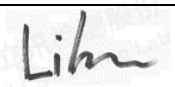
Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Earphone Bluetooth

Test Model: B1 Max

Environmental Conditions

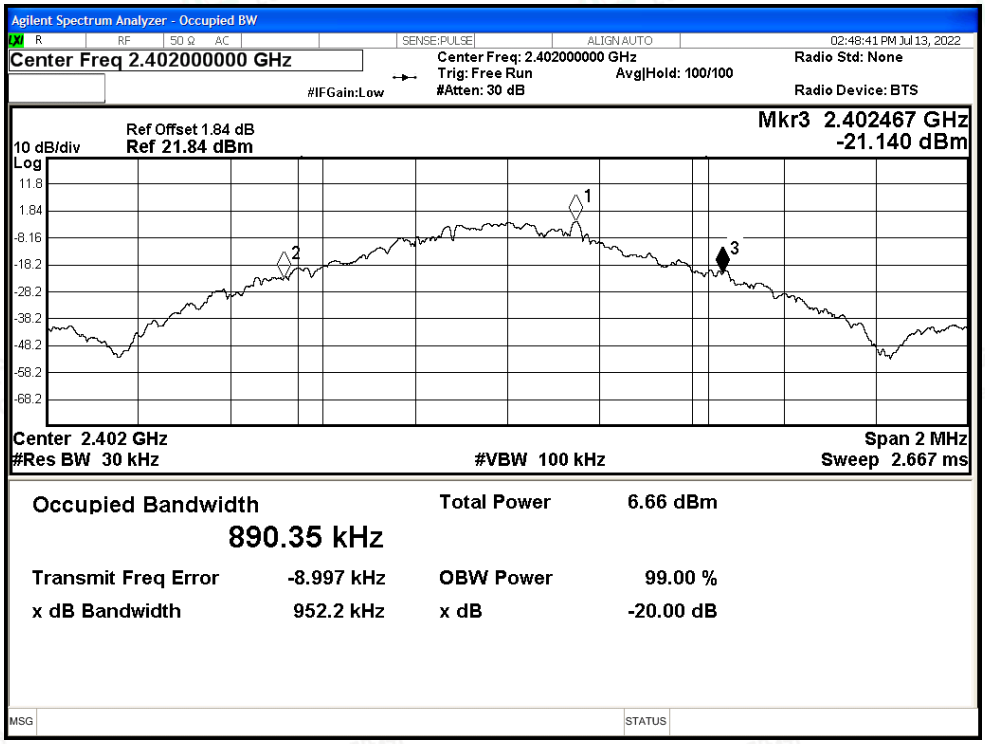
Temperature:	23.9 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng
Supervised by:	 Li Huan

A.1 -20dB Bandwidth

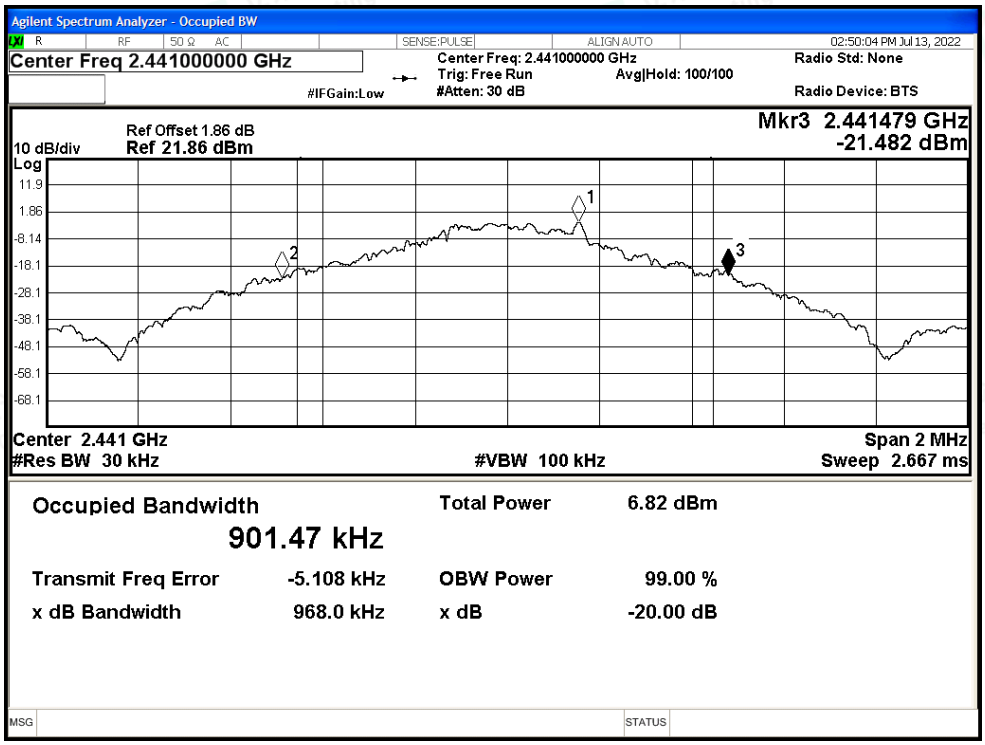
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.952	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.968	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.972	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.287	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.285	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.28	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.297	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.279	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.279	N/A	Pass

Test Graphs

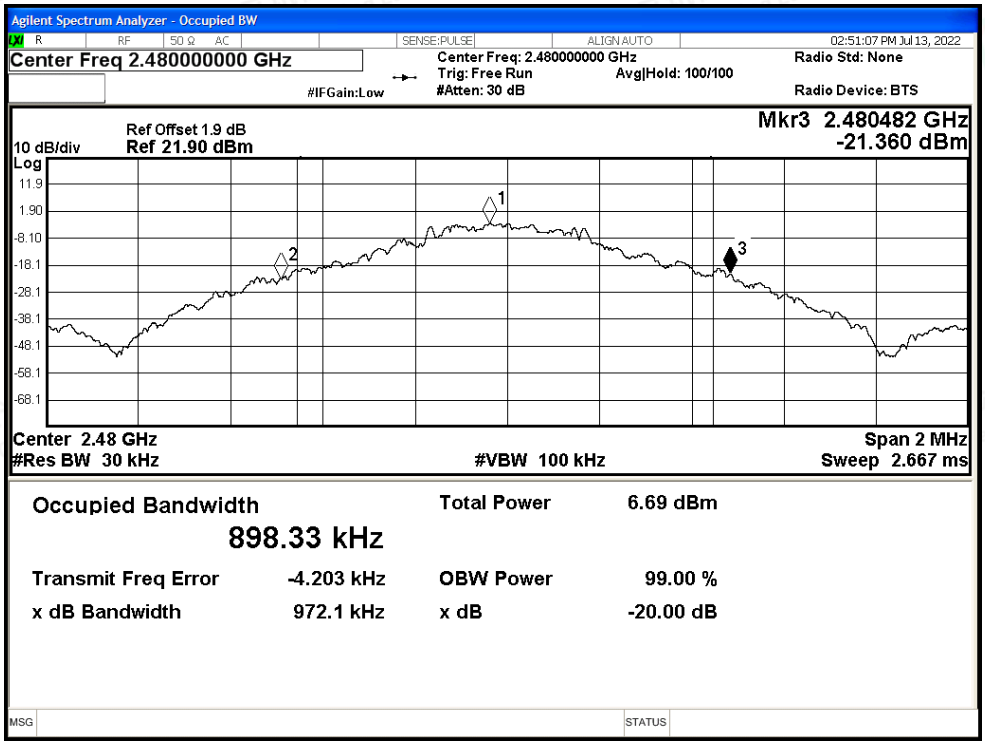
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



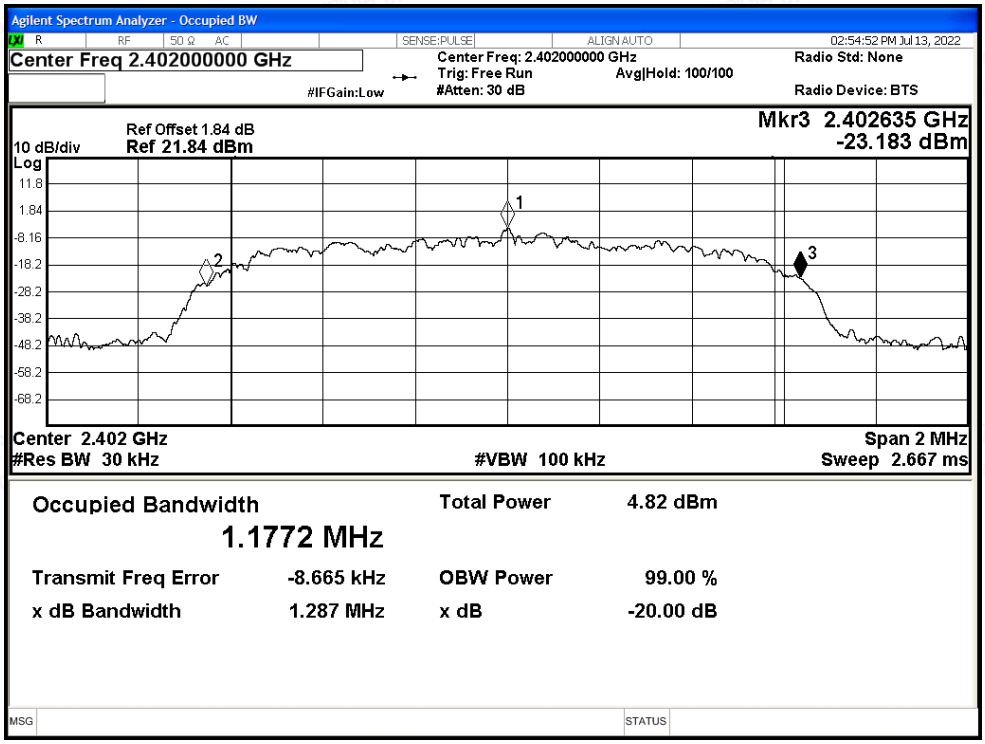
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



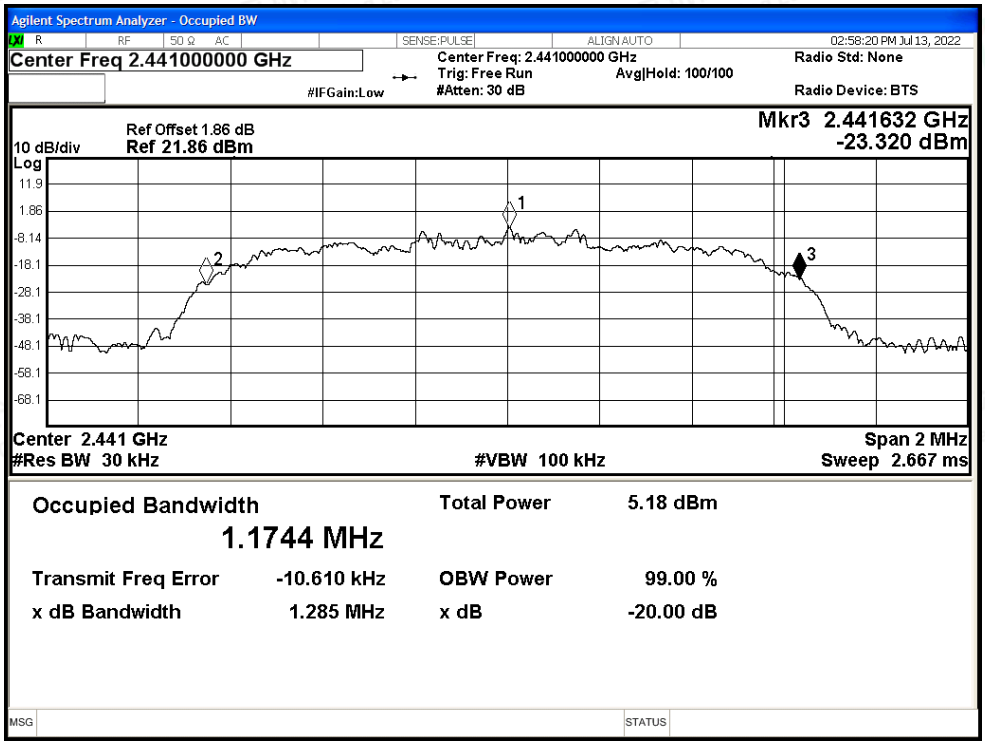
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



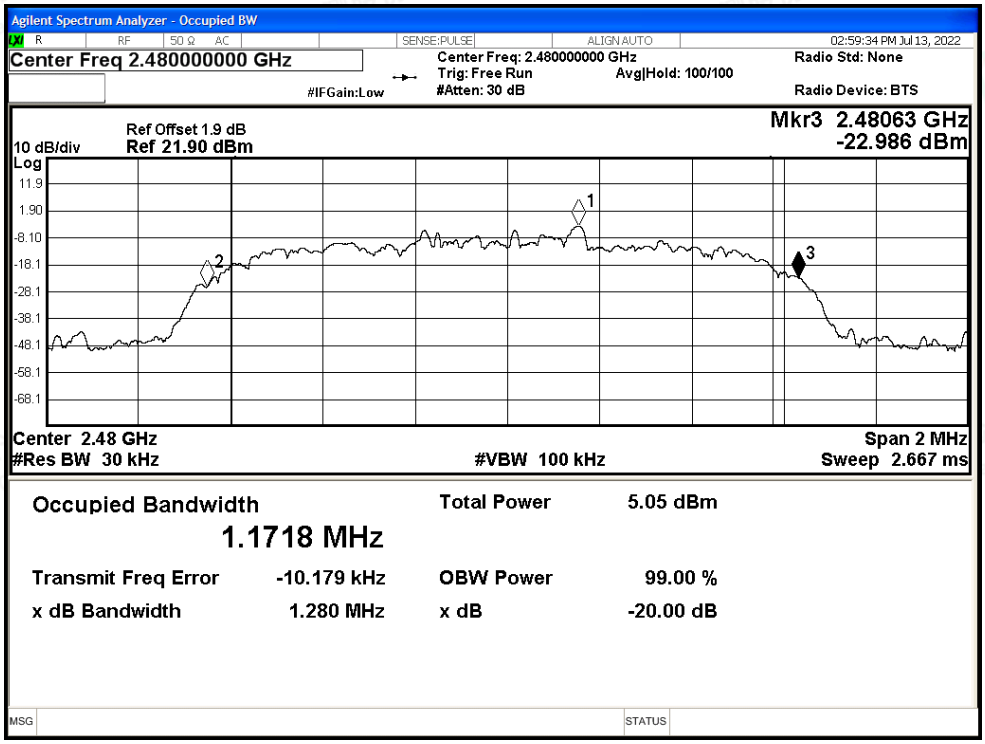
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



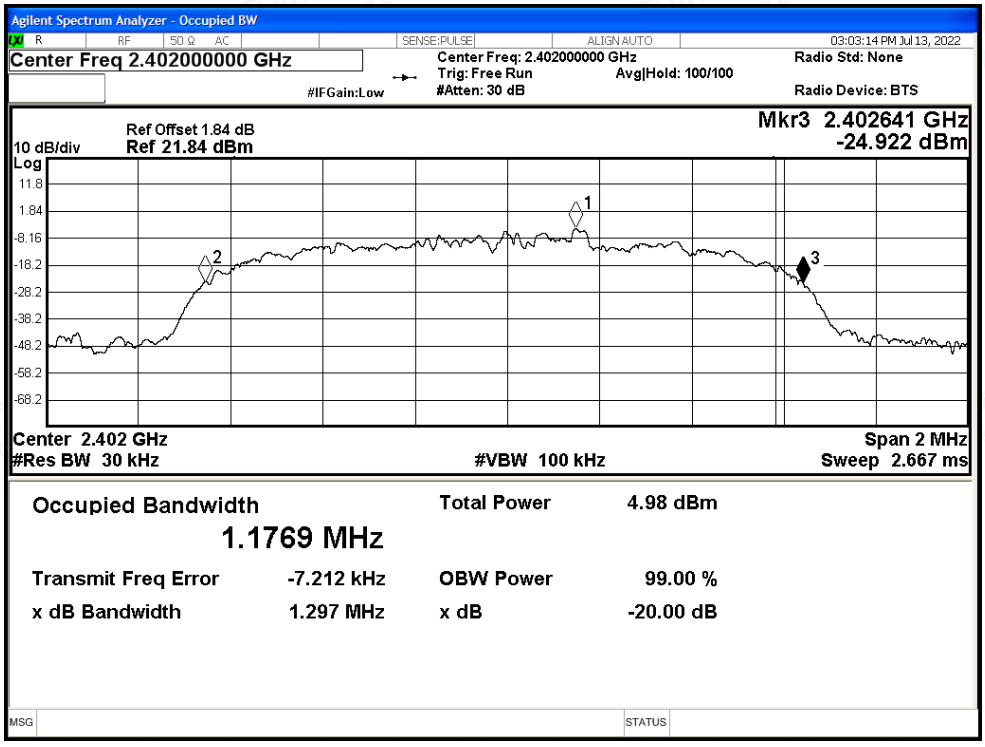
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



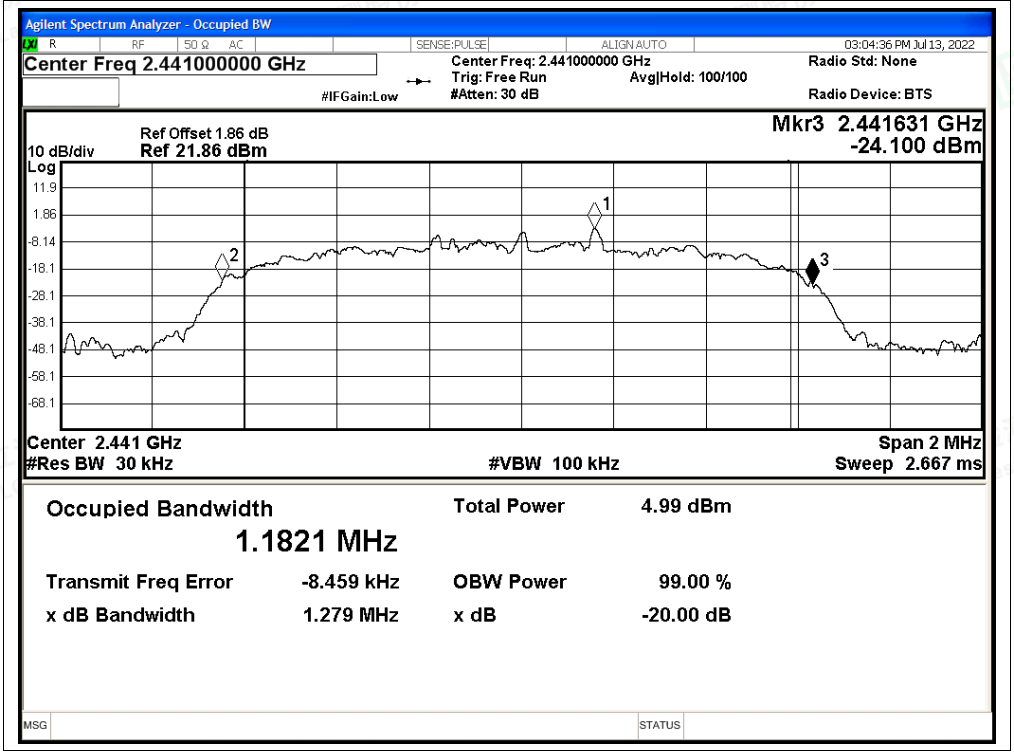
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



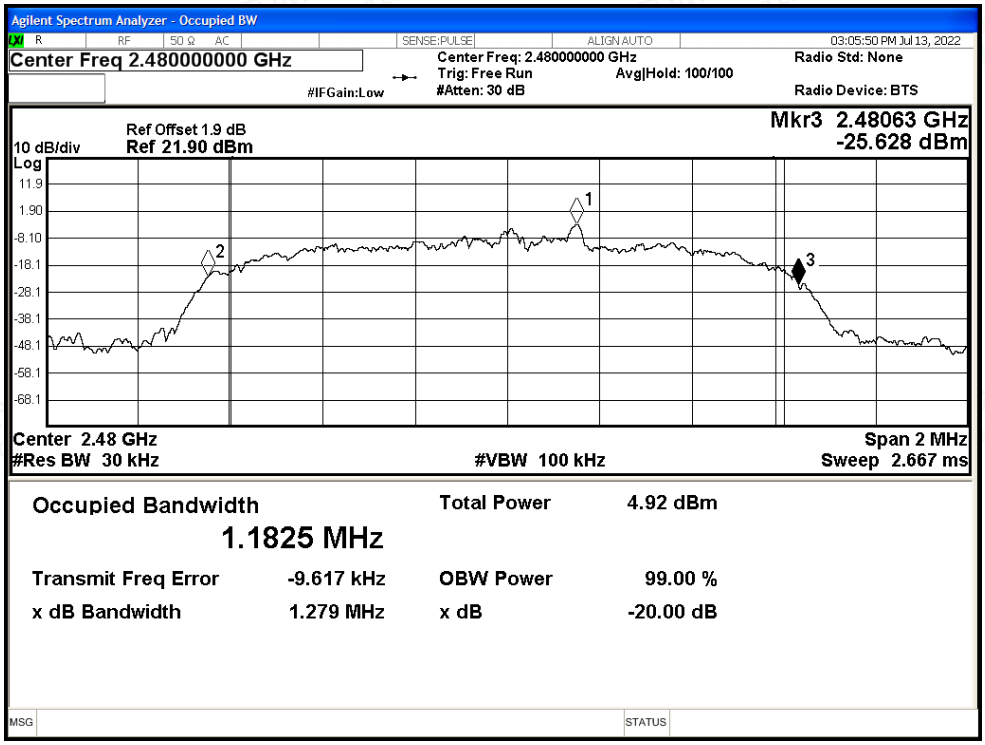
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1

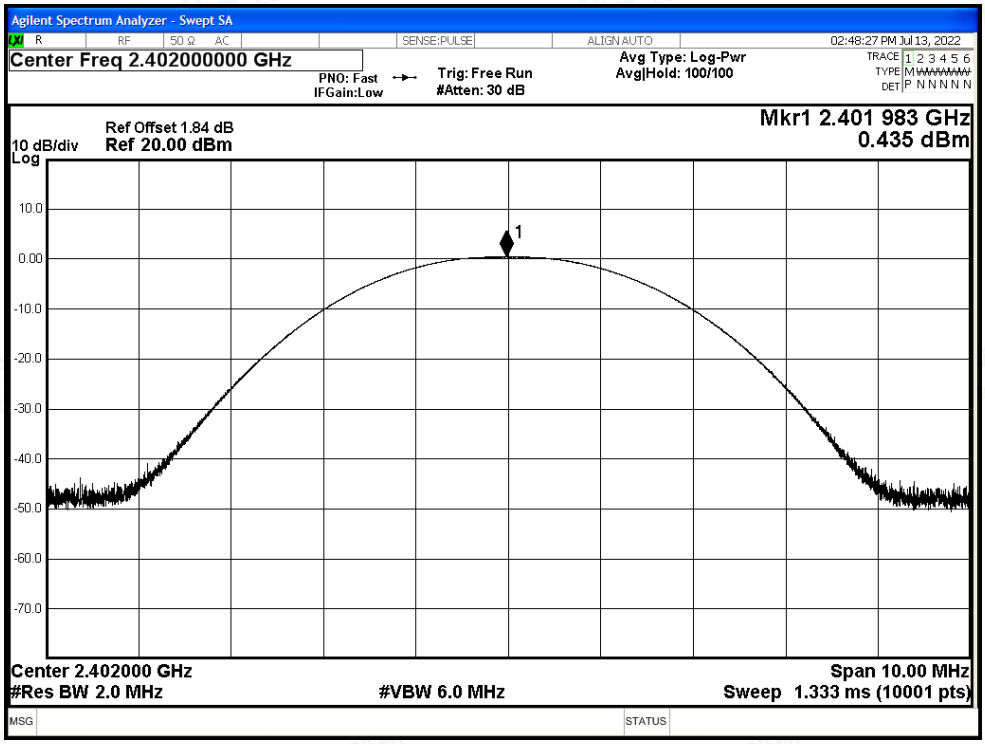


A.2 Maximum Peak Conducted Output Power

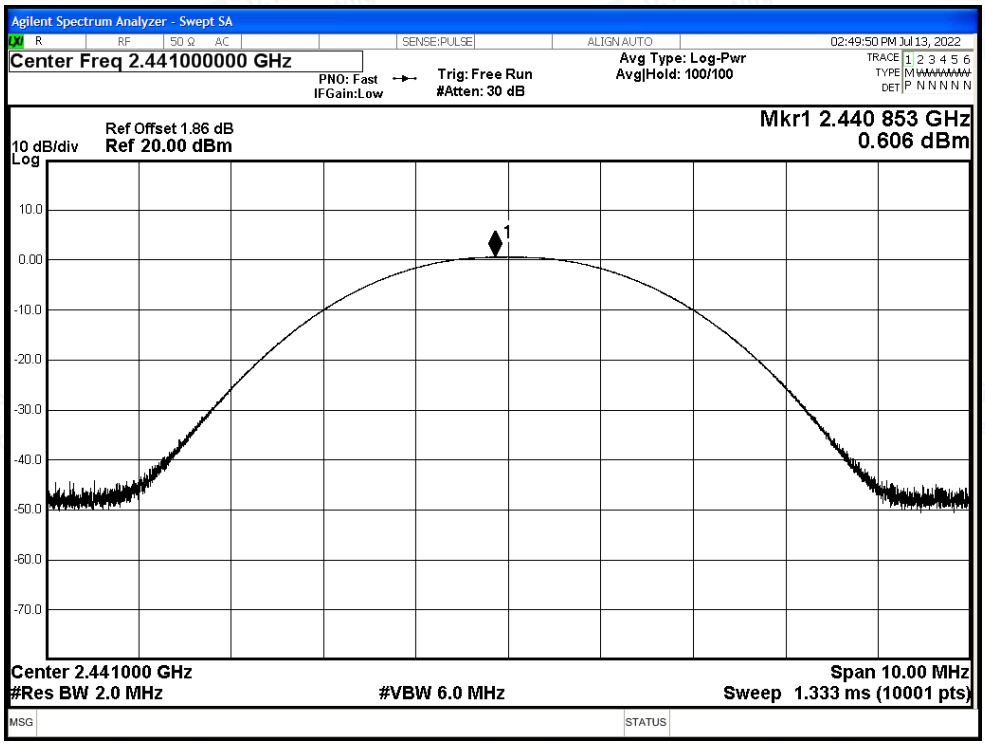
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.44	21	Pass
NVNT	1-DH5	2441	Ant1	0.61	21	Pass
NVNT	1-DH5	2480	Ant1	0.39	21	Pass
NVNT	2-DH5	2402	Ant1	0.34	21	Pass
NVNT	2-DH5	2441	Ant1	0.45	21	Pass
NVNT	2-DH5	2480	Ant1	0.16	21	Pass
NVNT	3-DH5	2402	Ant1	0.4	21	Pass
NVNT	3-DH5	2441	Ant1	0.55	21	Pass
NVNT	3-DH5	2480	Ant1	0.34	21	Pass

Test Graphs

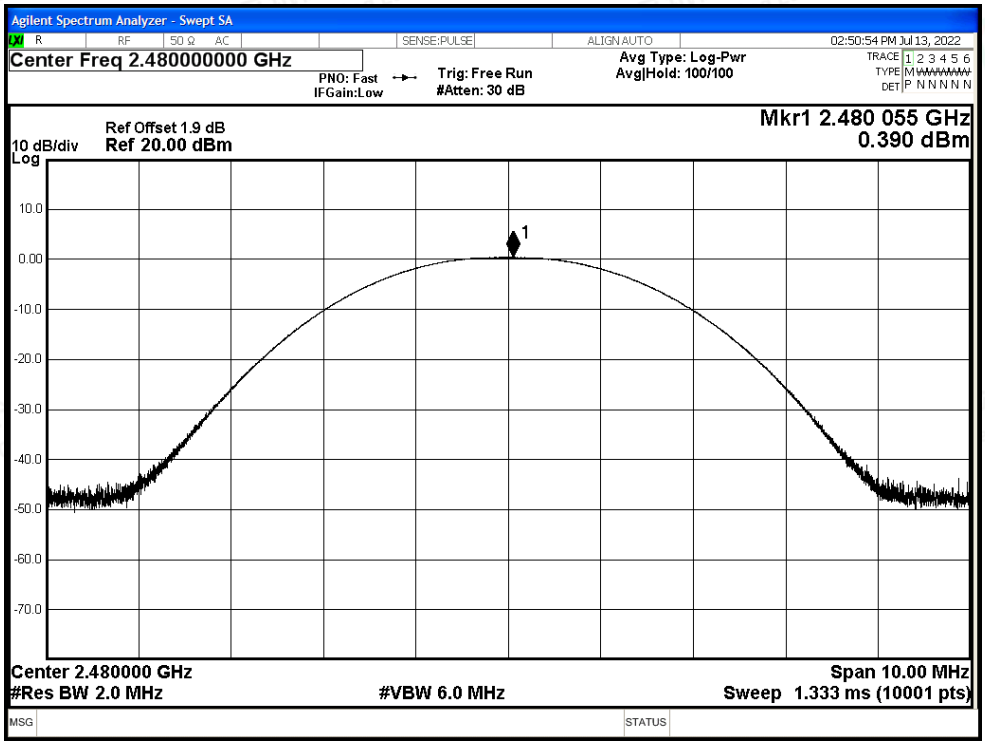
Power NVNT 1-DH5 2402MHz Ant1



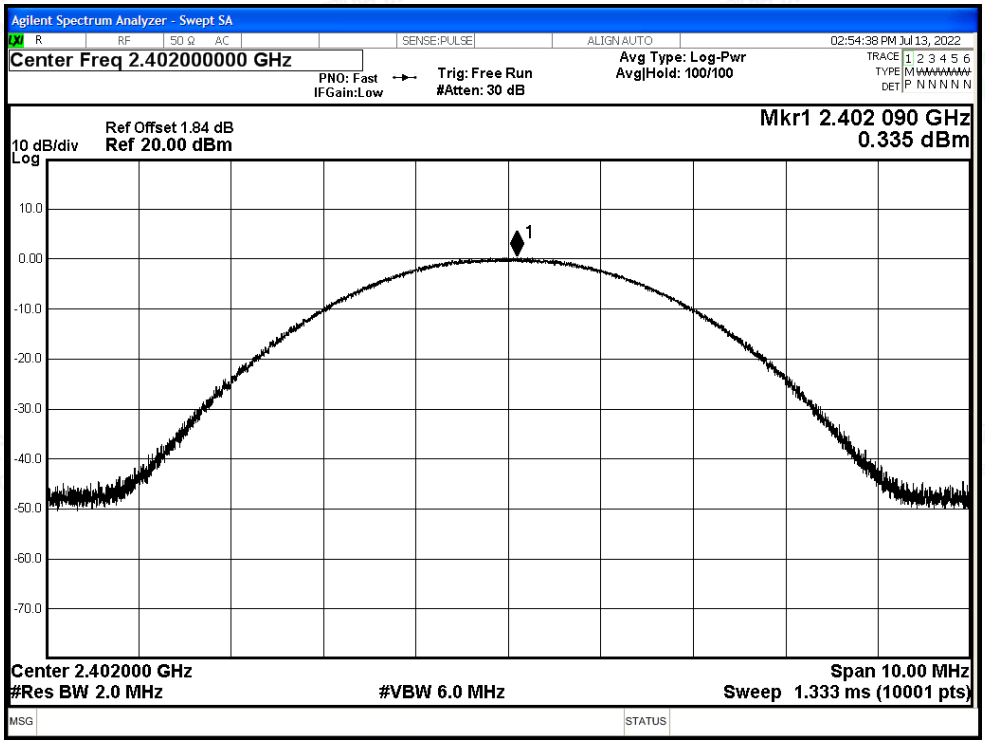
Power NVNT 1-DH5 2441MHz Ant1



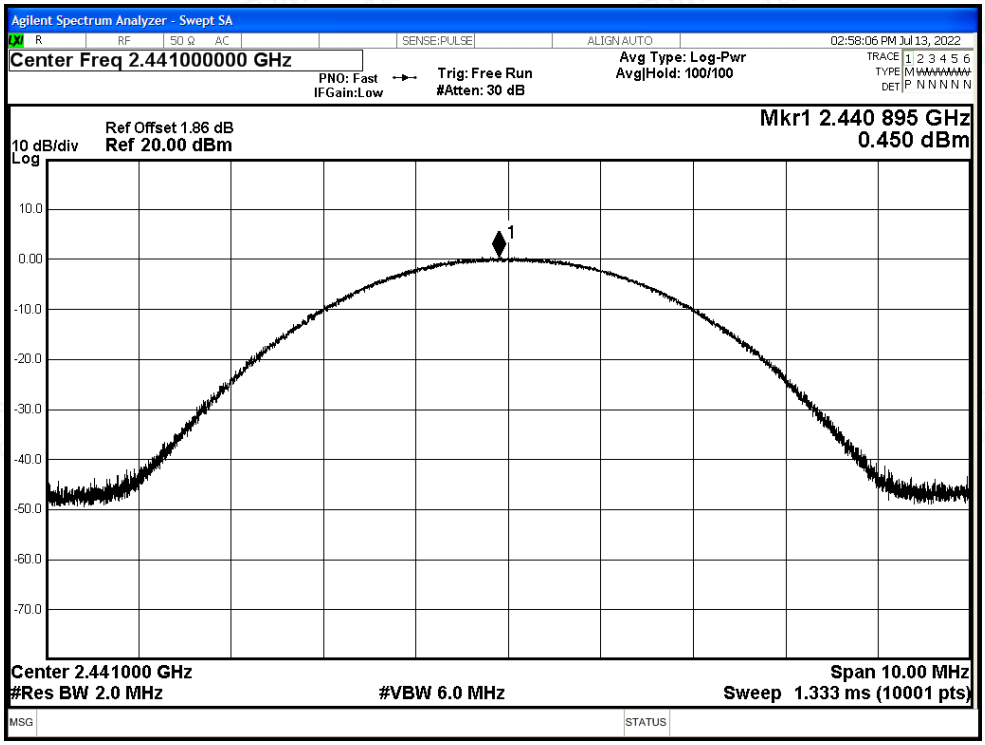
Power NVNT 1-DH5 2480MHz Ant1



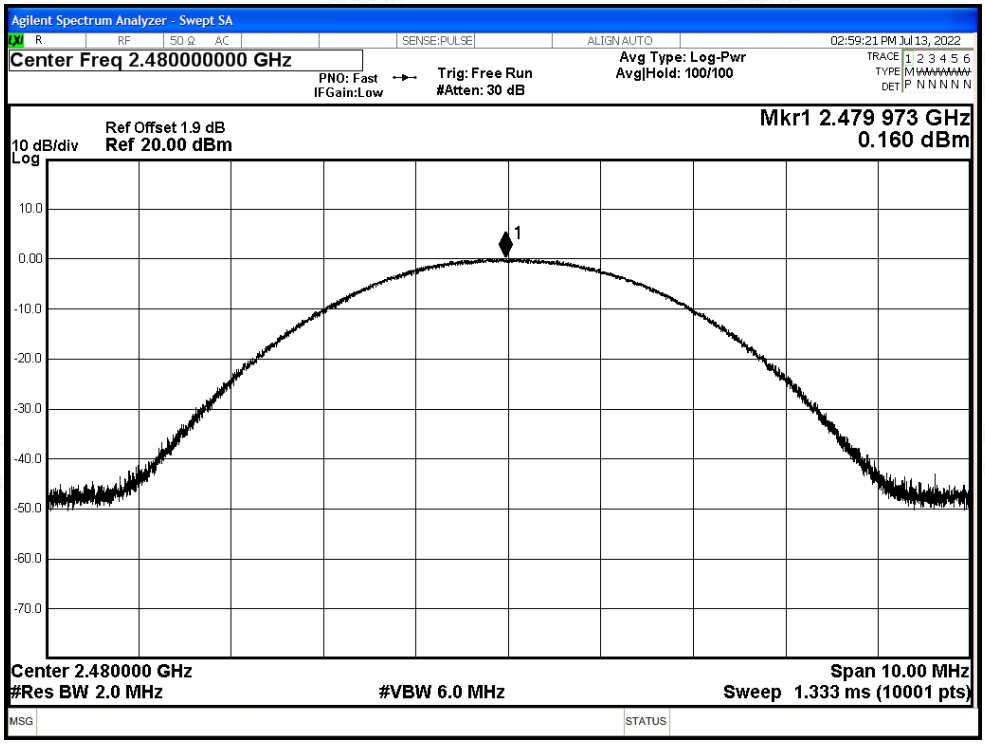
Power NVNT 2-DH5 2402MHz Ant1



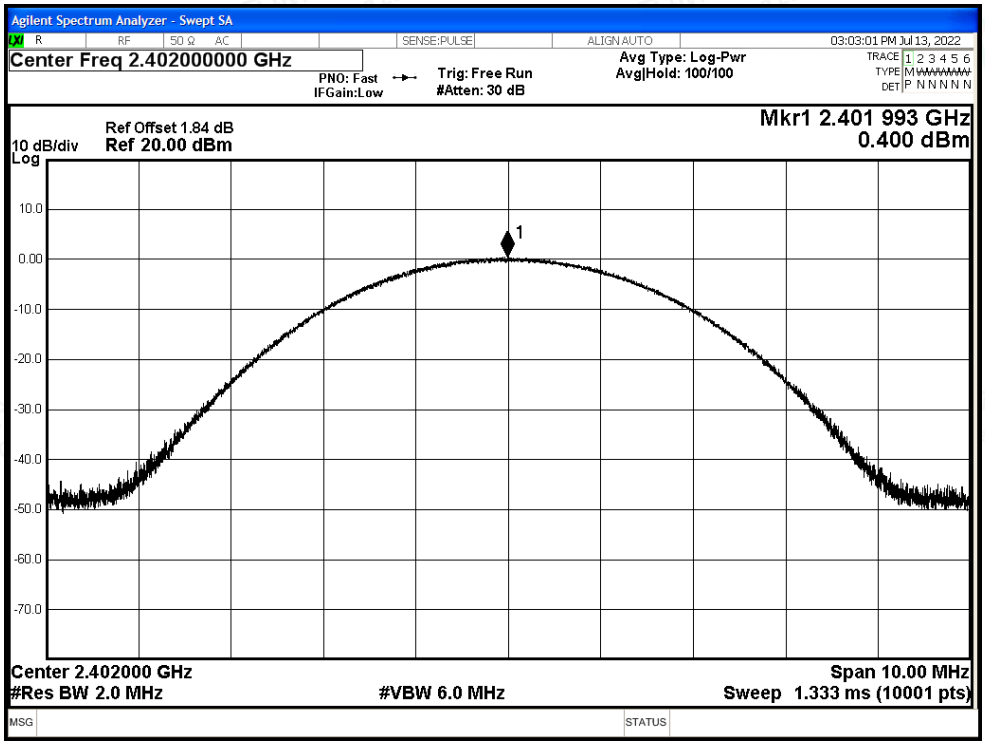
Power NVNT 2-DH5 2441MHz Ant1



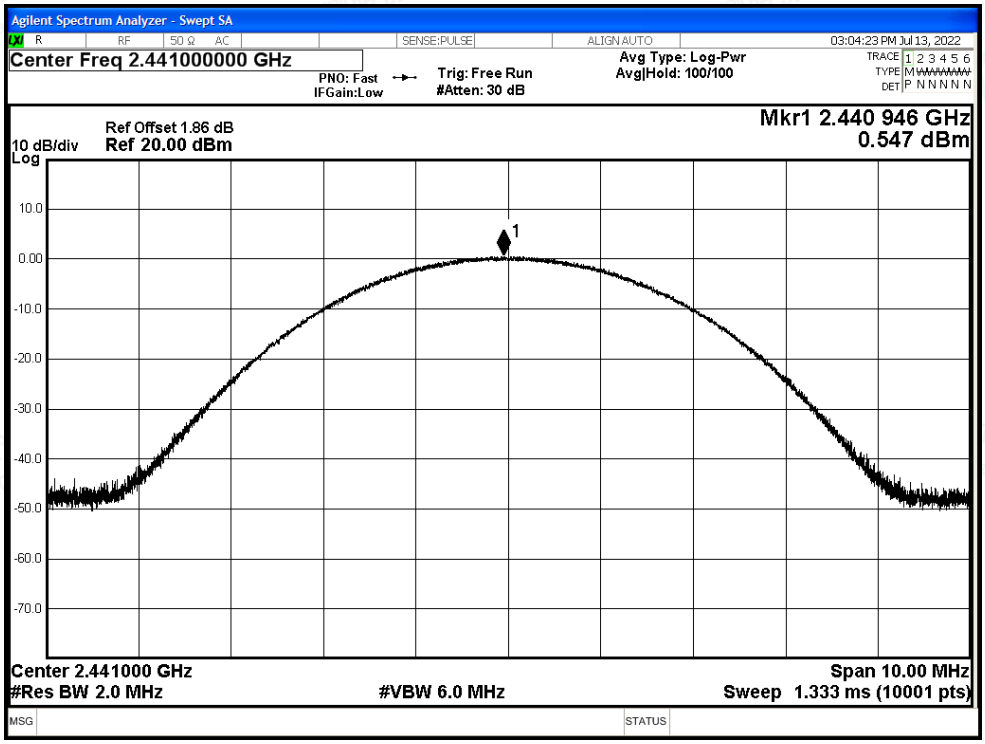
Power NVNT 2-DH5 2480MHz Ant1



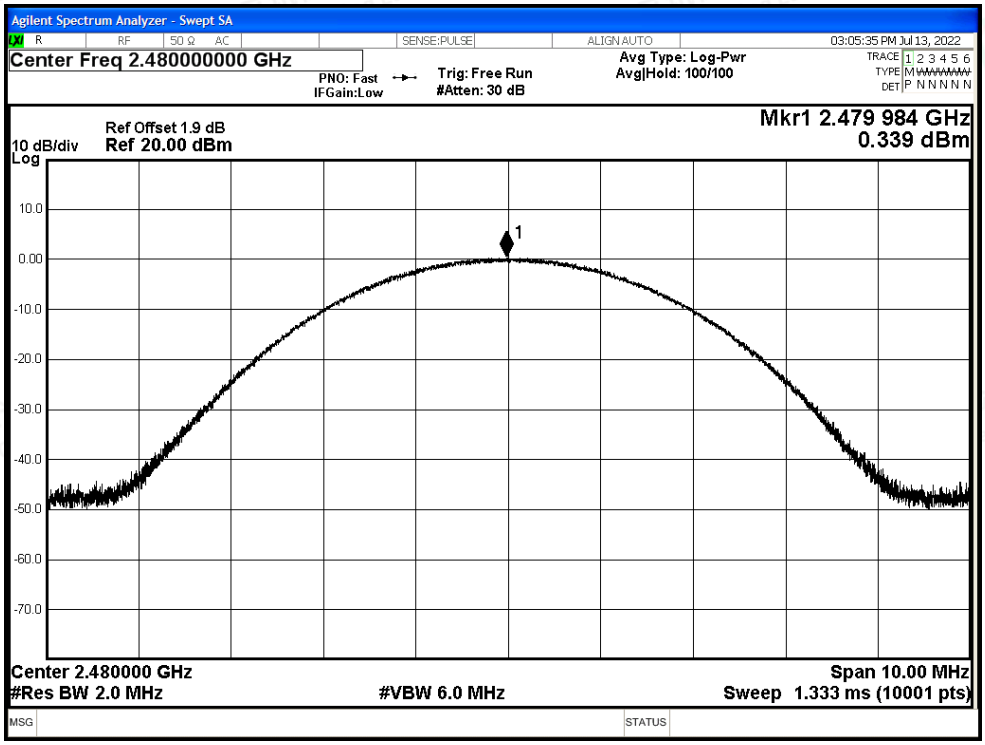
Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



Power NVNT 3-DH5 2480MHz Ant1

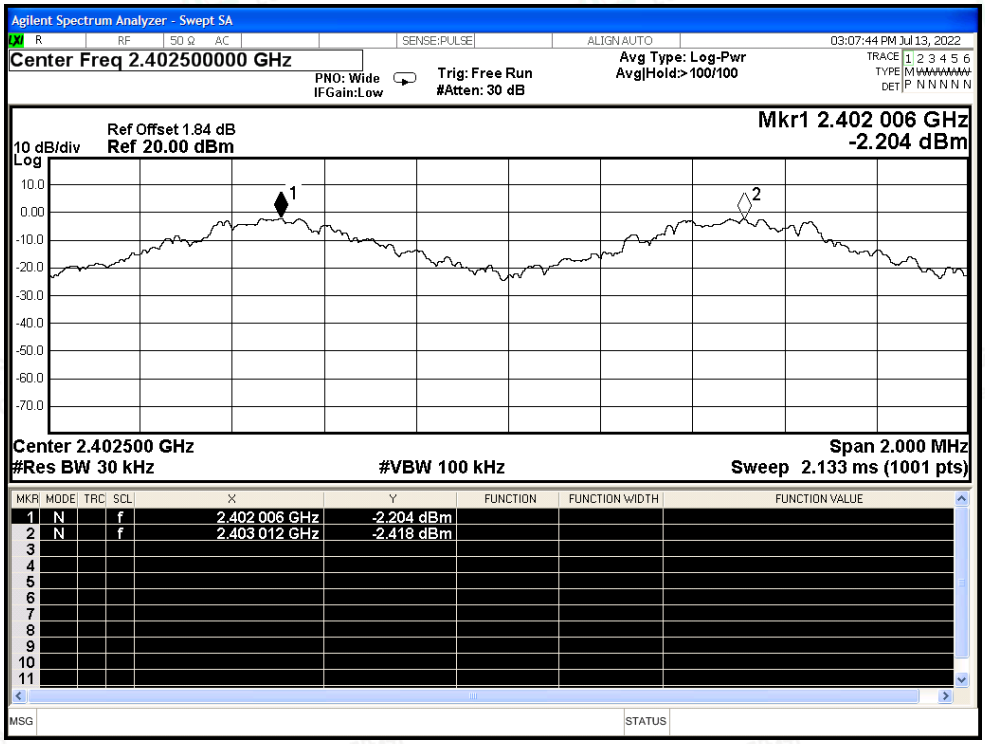


A.3 Carrier Frequencies Separation

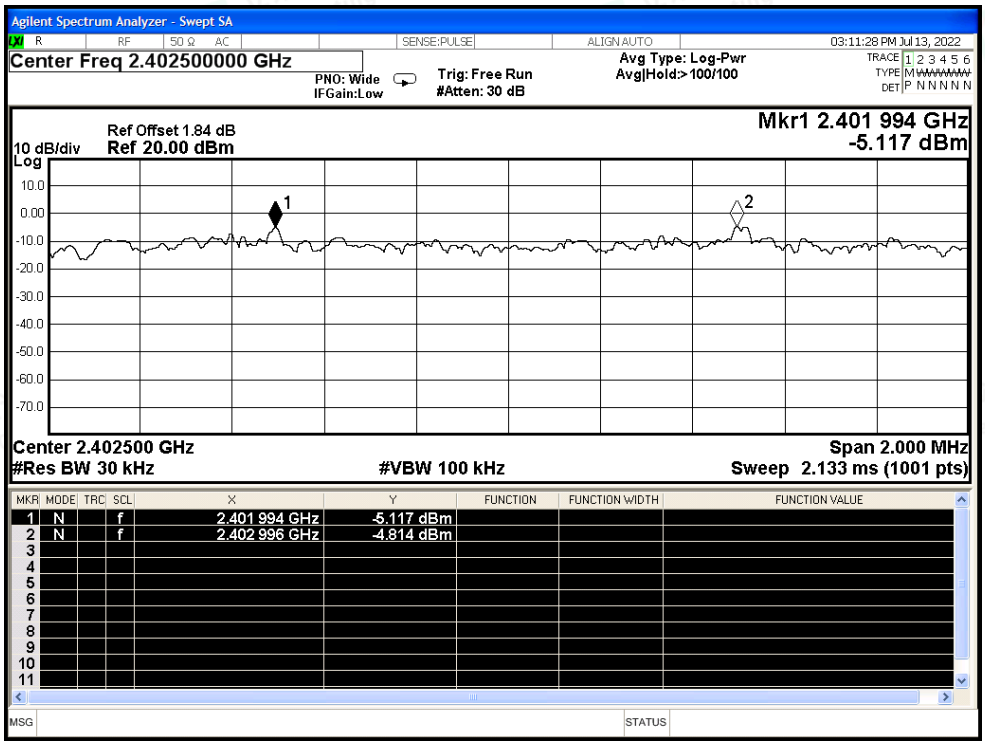
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.006	2403.012	1.006	0.635	Pass
NVNT	2-DH5	Ant1	2401.994	2402.996	1.002	0.858	Pass
NVNT	3-DH5	Ant1	2402.008	2403.006	0.998	0.865	Pass

Test Graphs

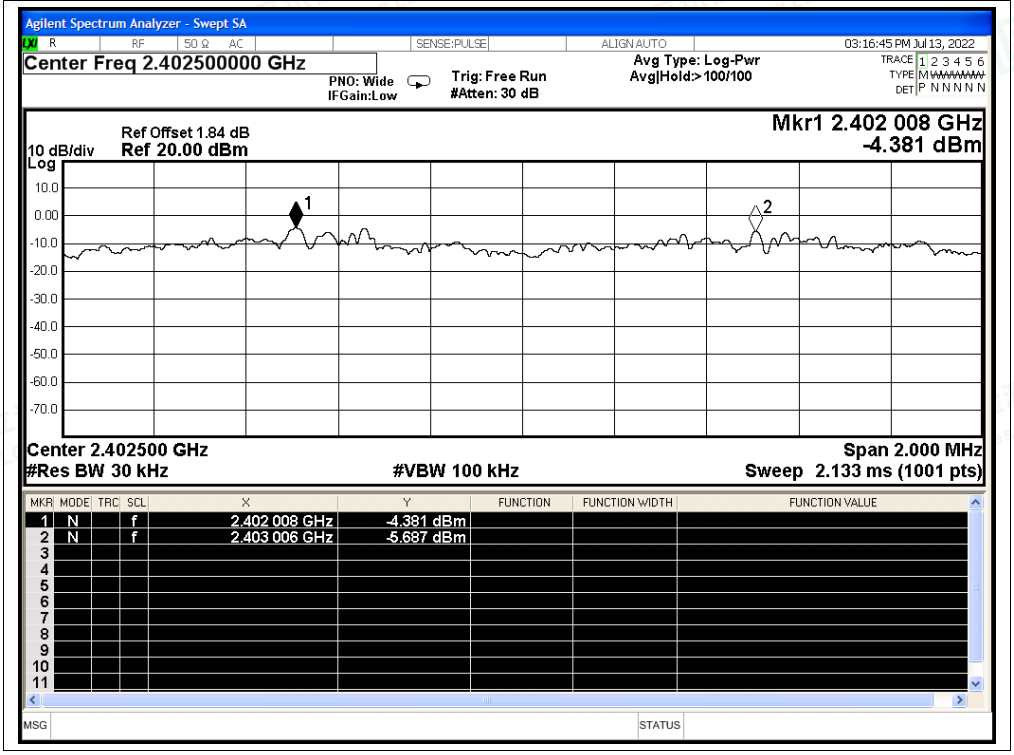
CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2402MHz Ant1

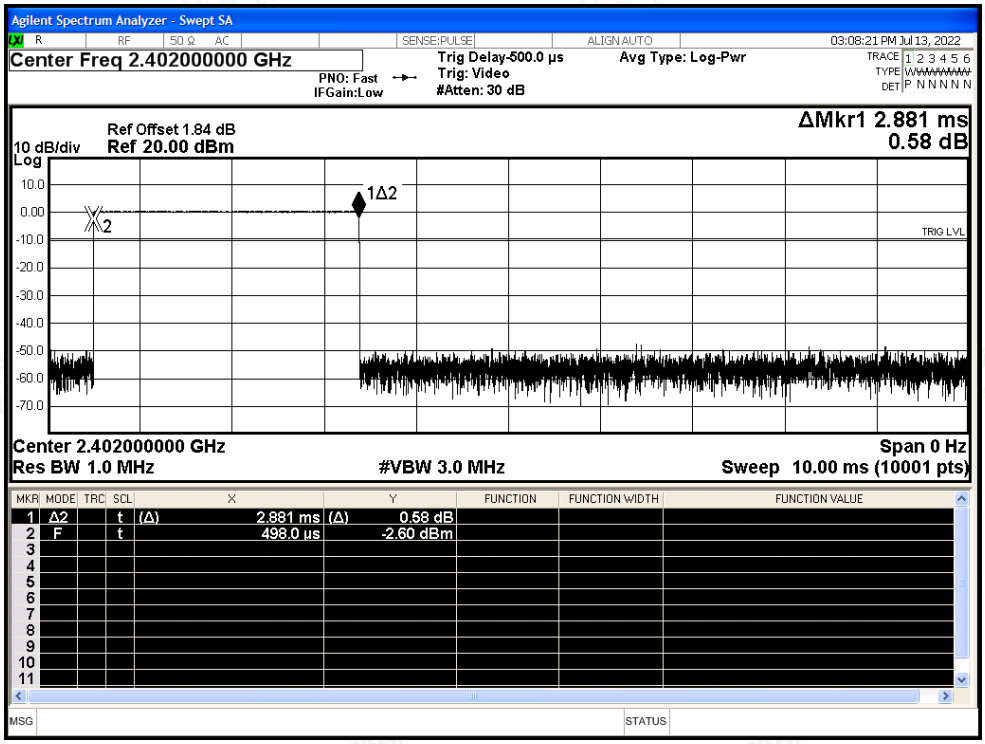


A.4 Dwell Time

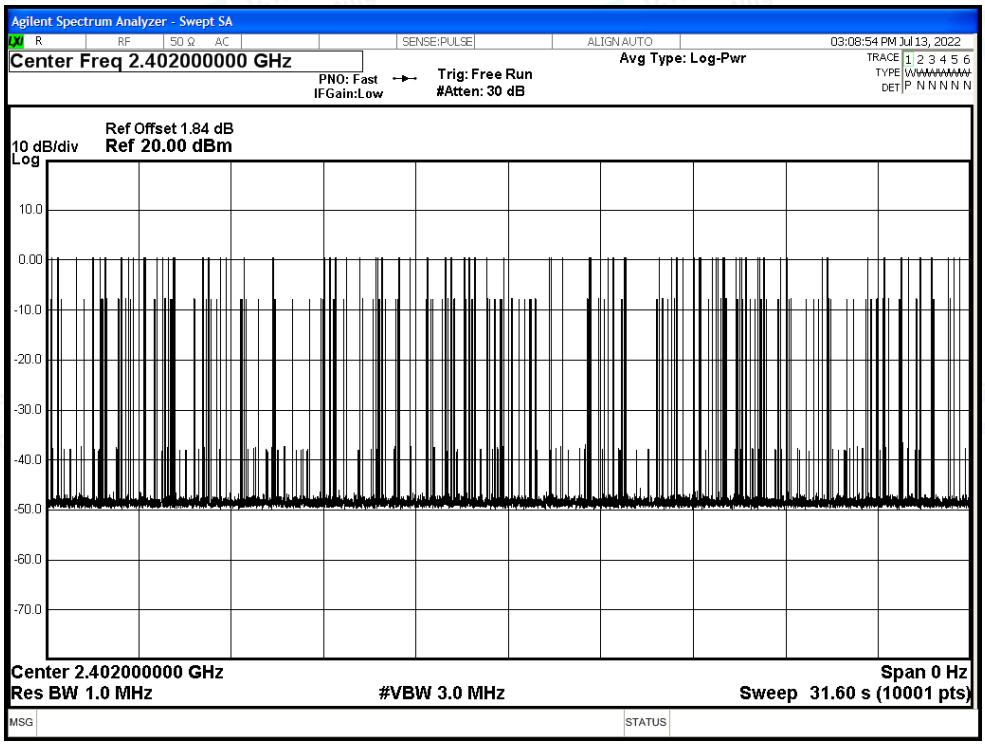
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.881	270.814	94	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.88	322.56	112	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.887	300.248	104	31600	400	Pass

Test Graphs

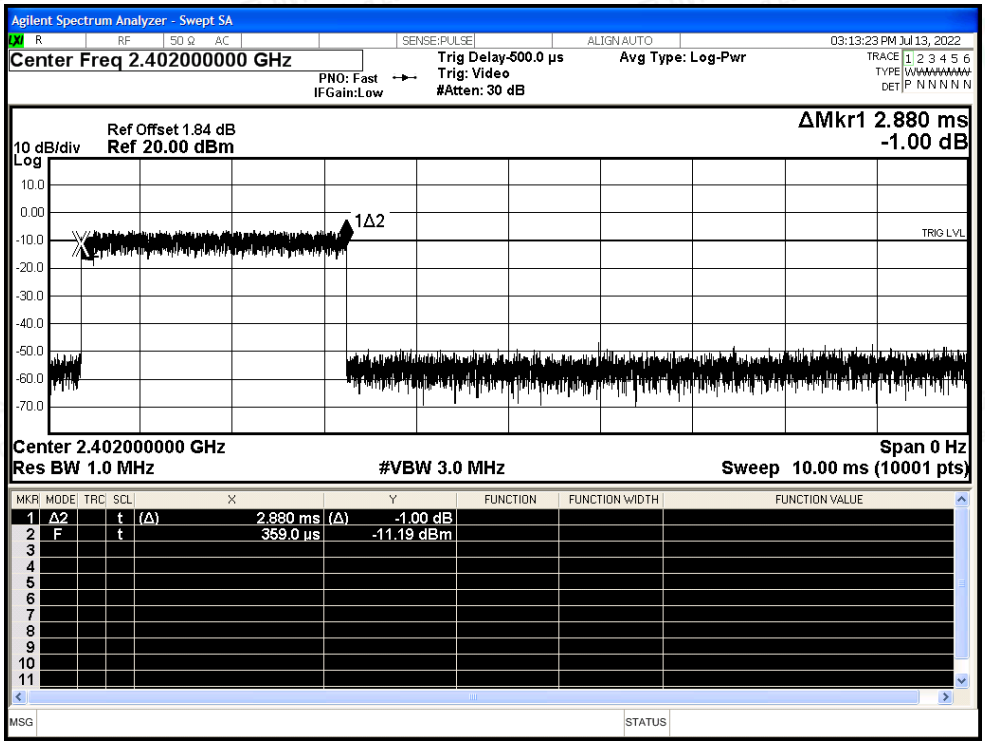
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



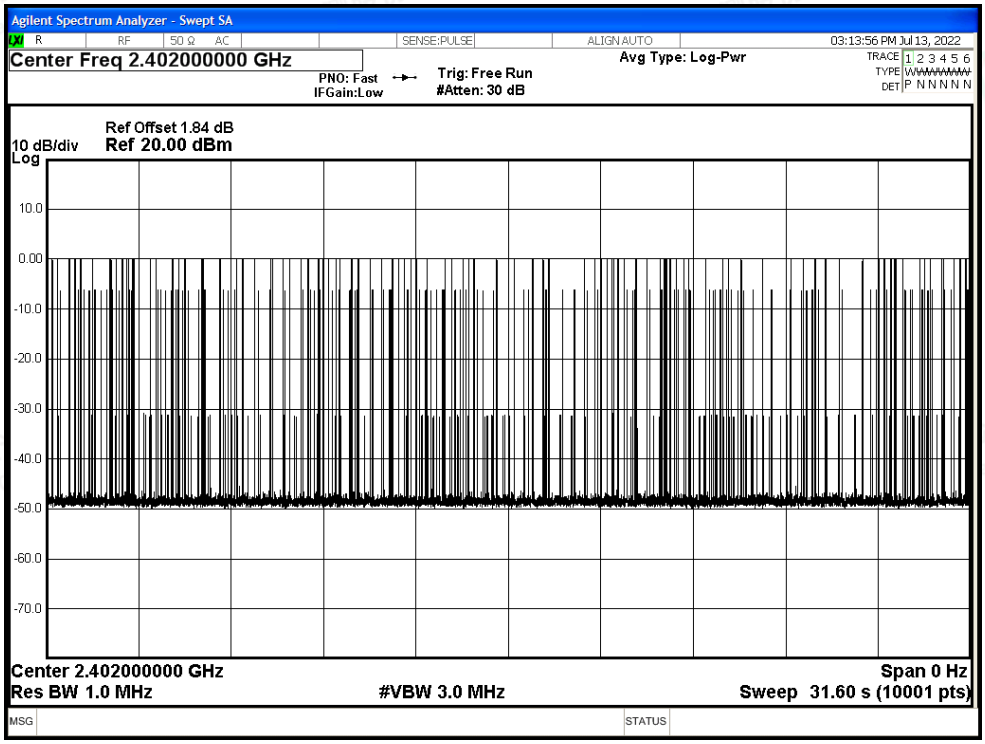
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



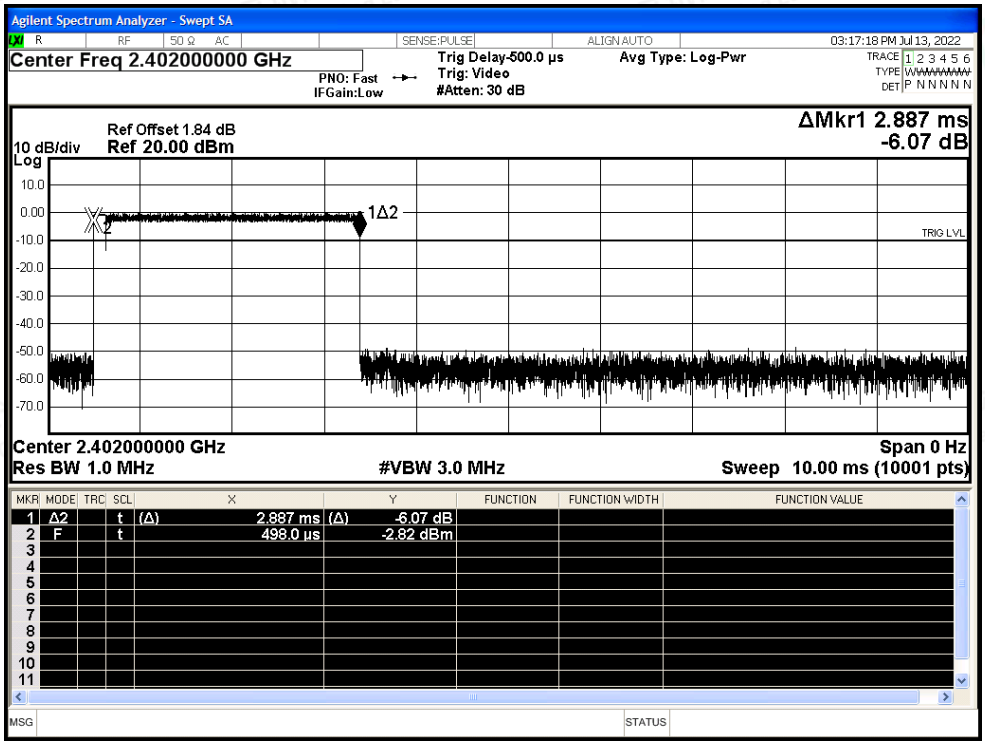
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



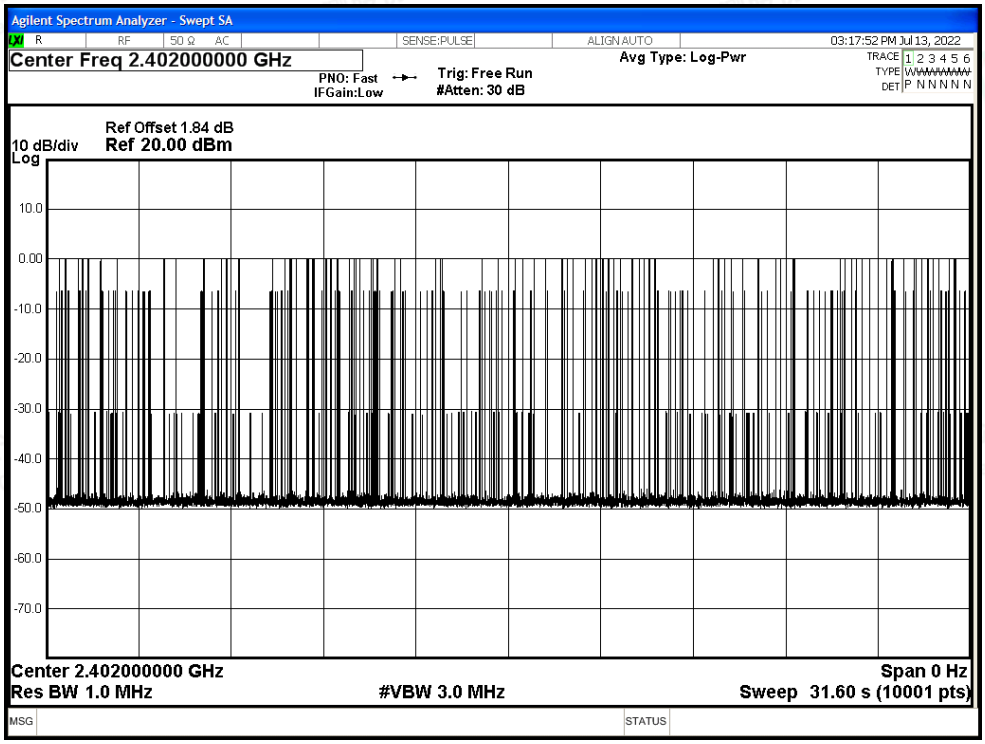
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated

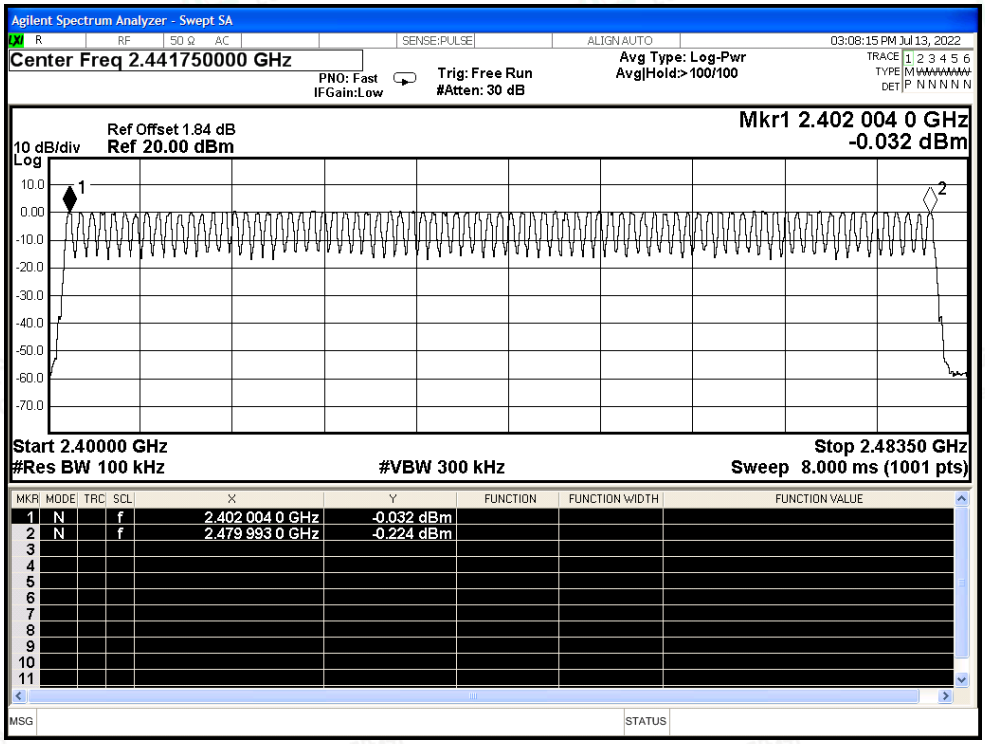


A.5 Number of Hopping Channel

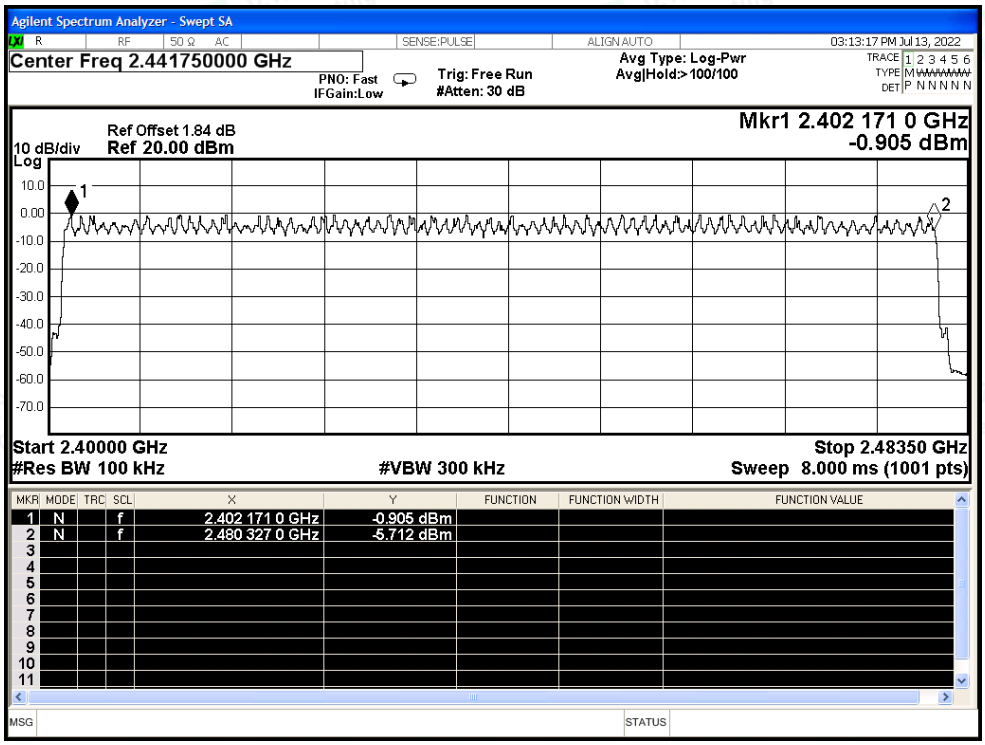
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

Test Graphs

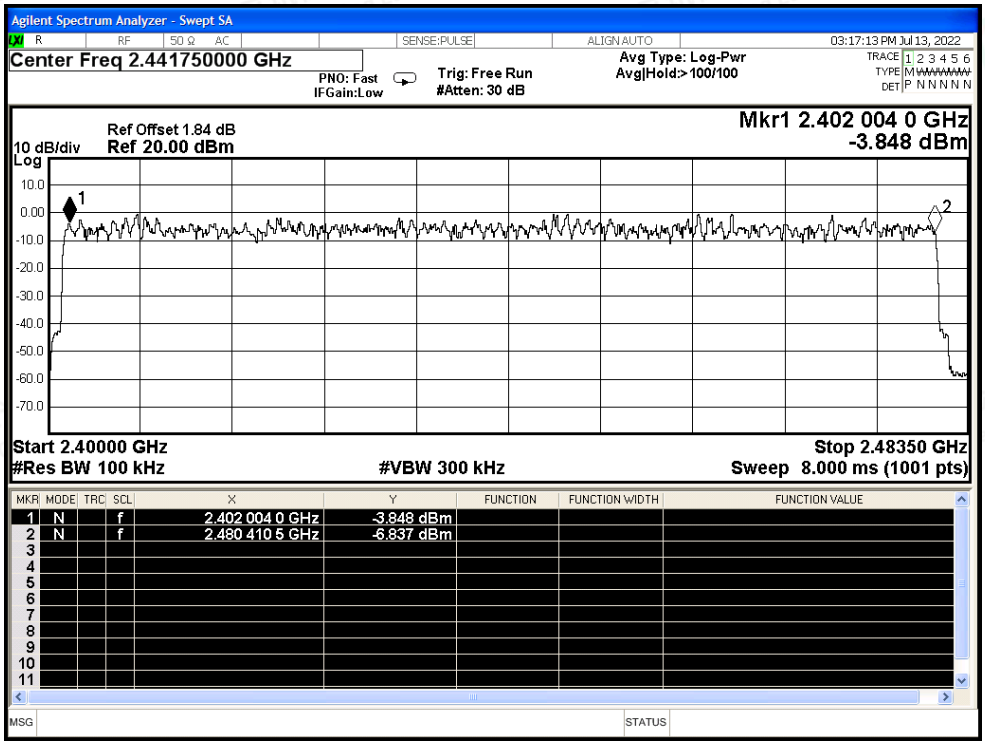
Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



Hopping No. NVNT 3-DH5 2402MHz Ant1

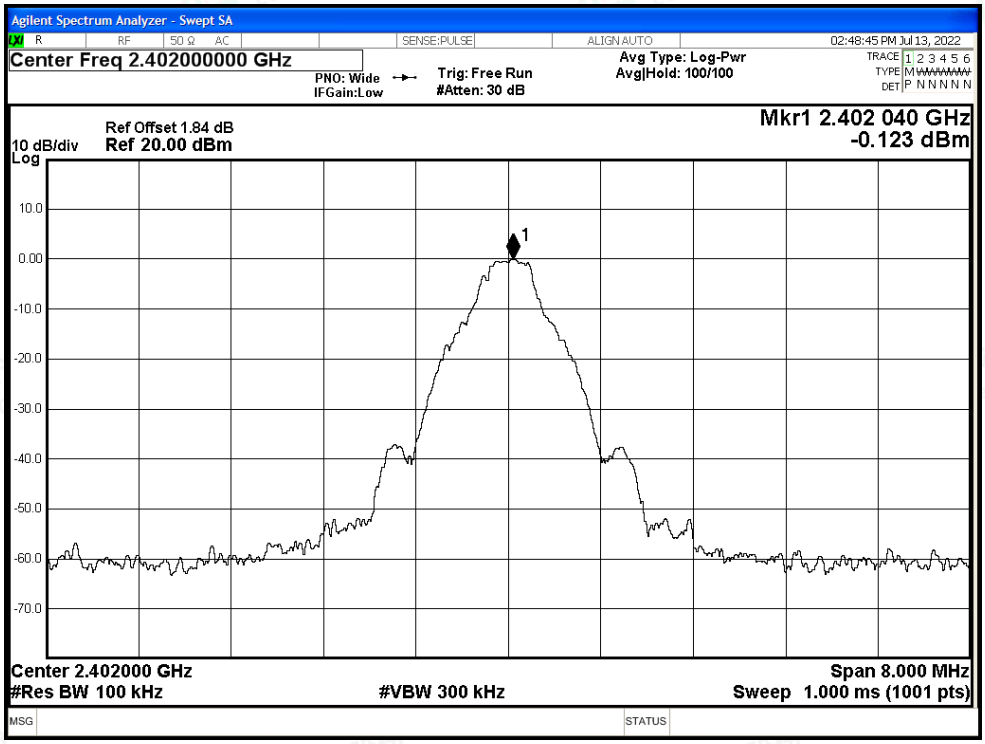


A.6 Band Edge

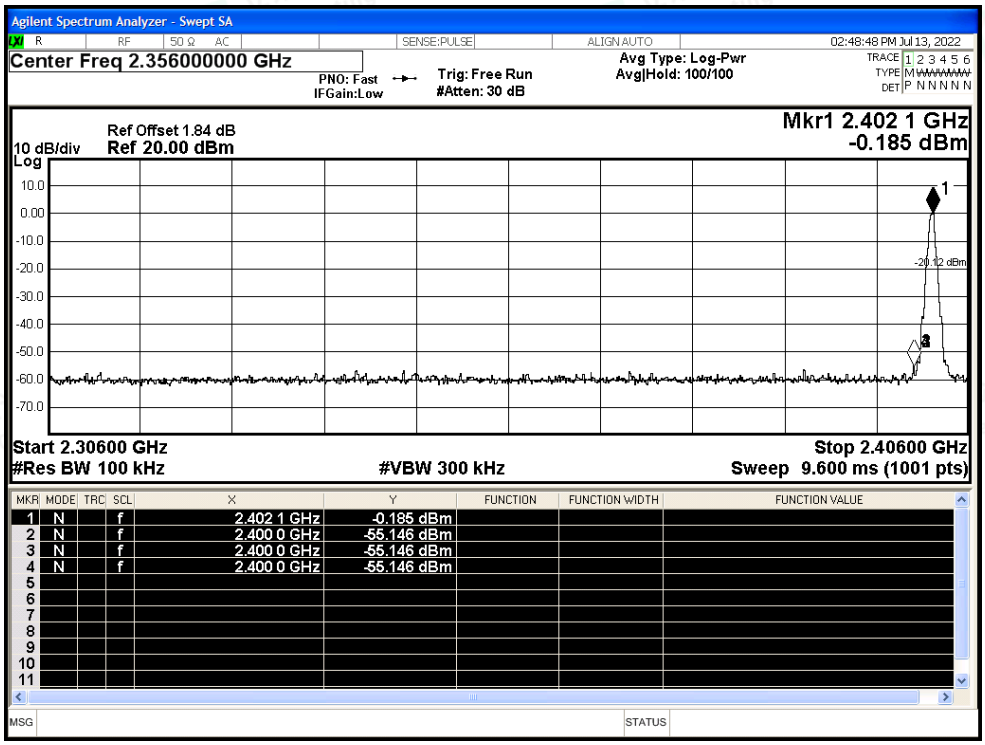
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-55.02	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-56.36	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-53.54	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-55.75	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-55.32	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-55.51	-20	Pass

Test Graphs

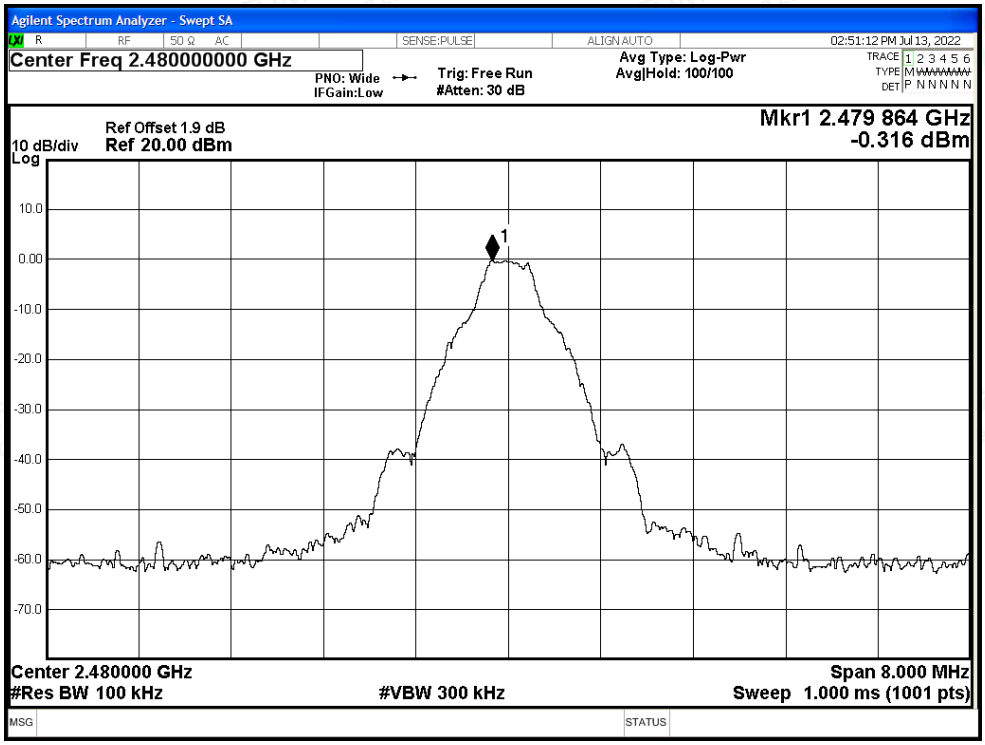
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



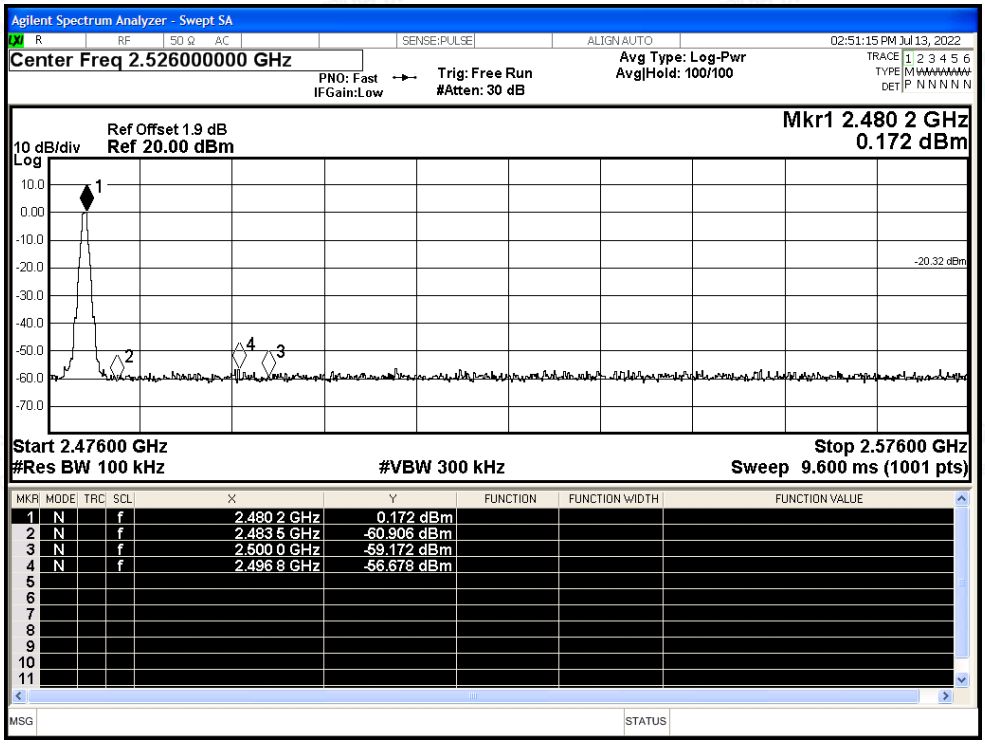
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



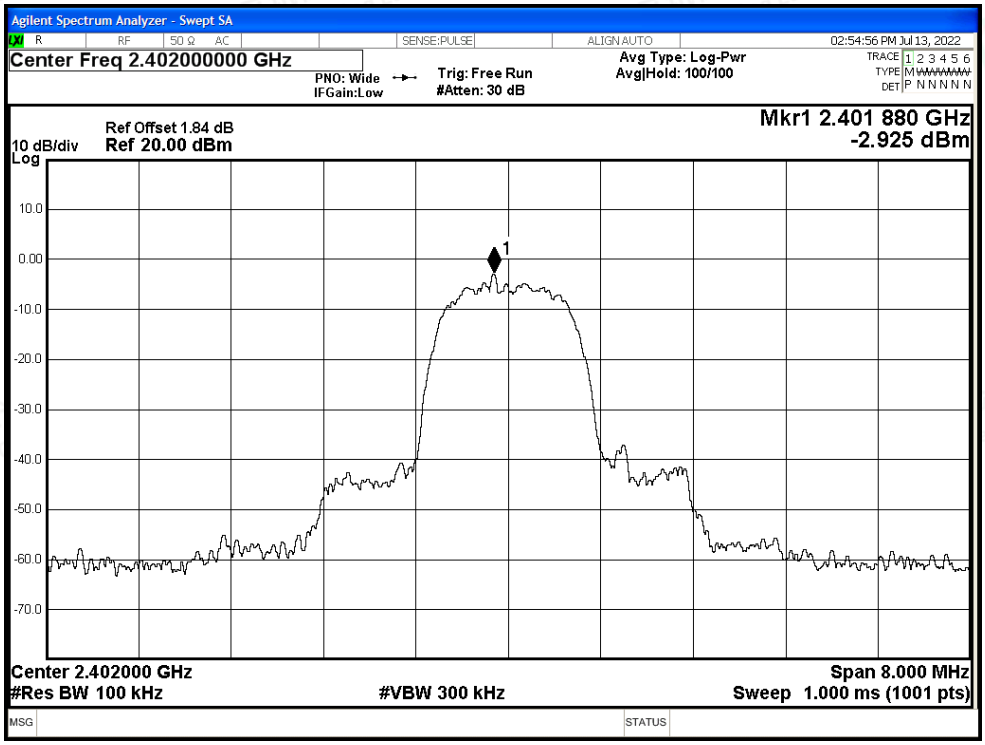
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



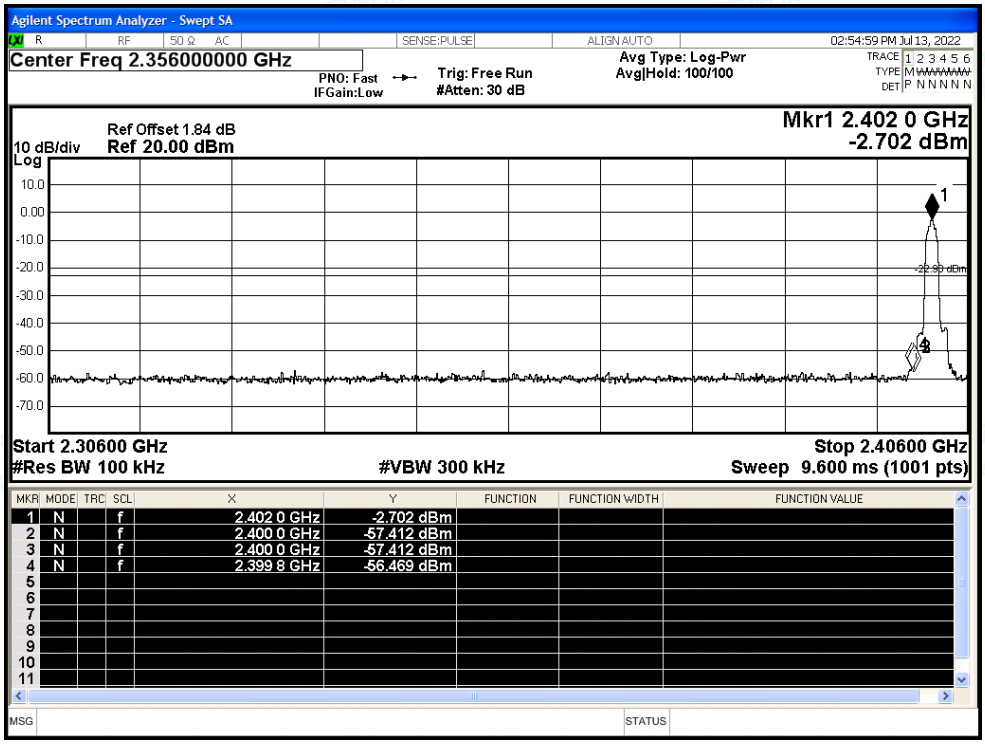
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



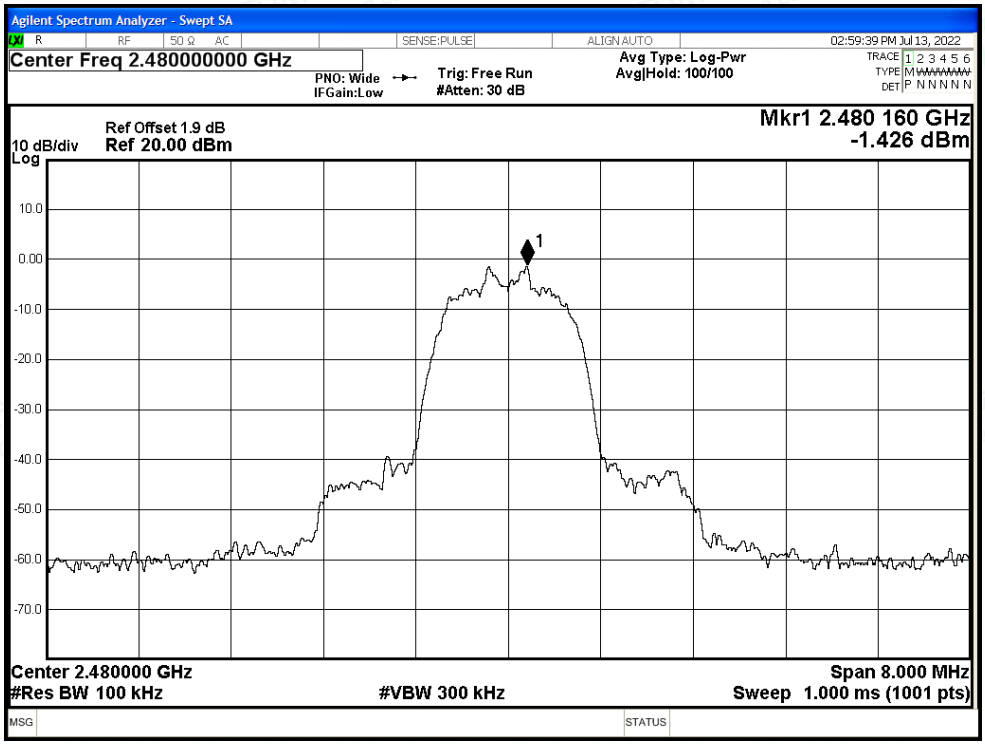
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



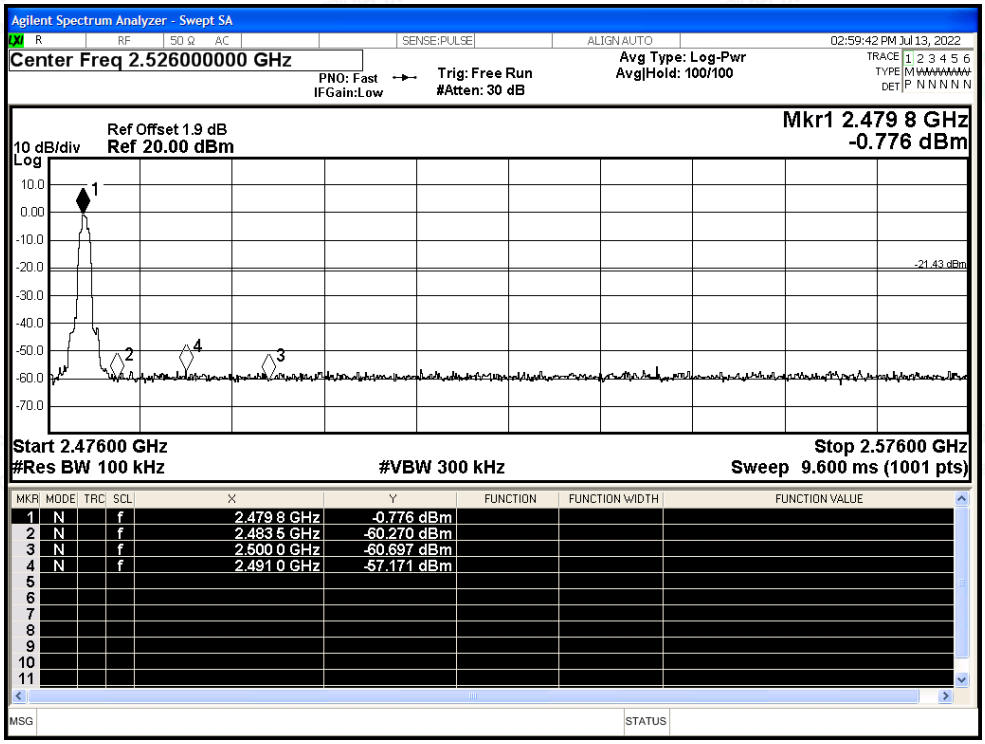
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



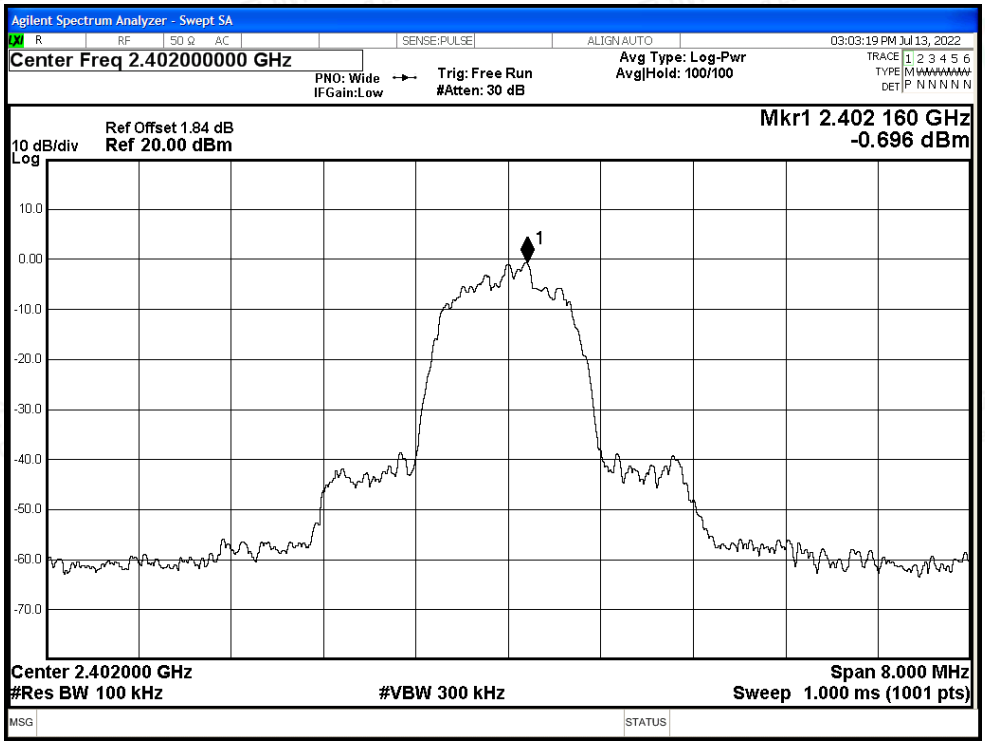
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



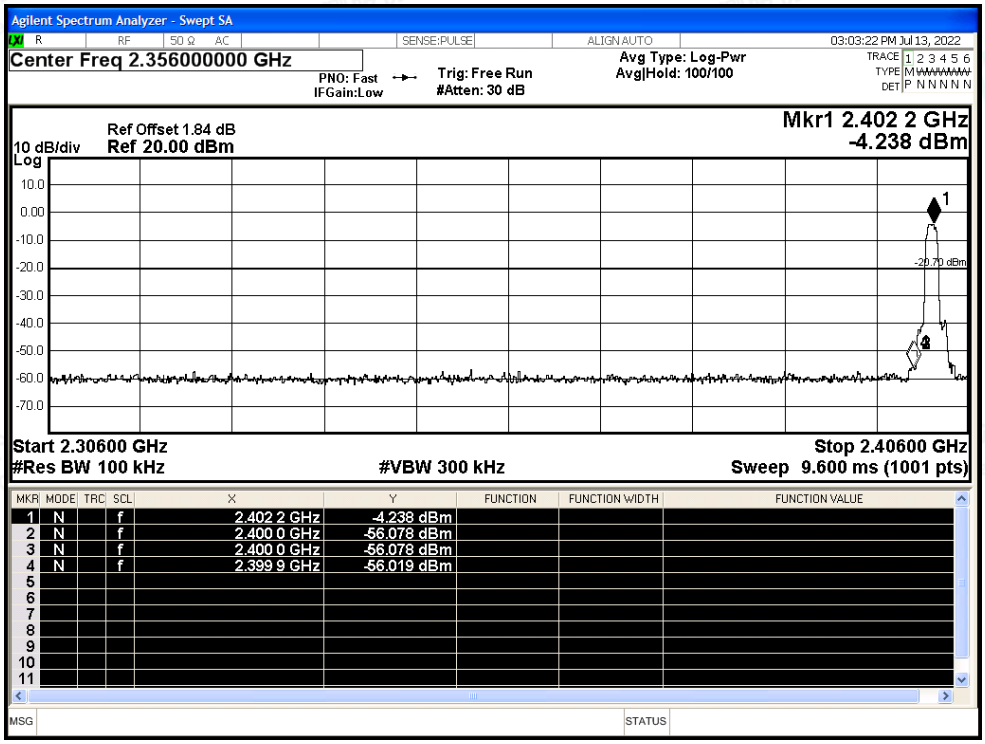
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



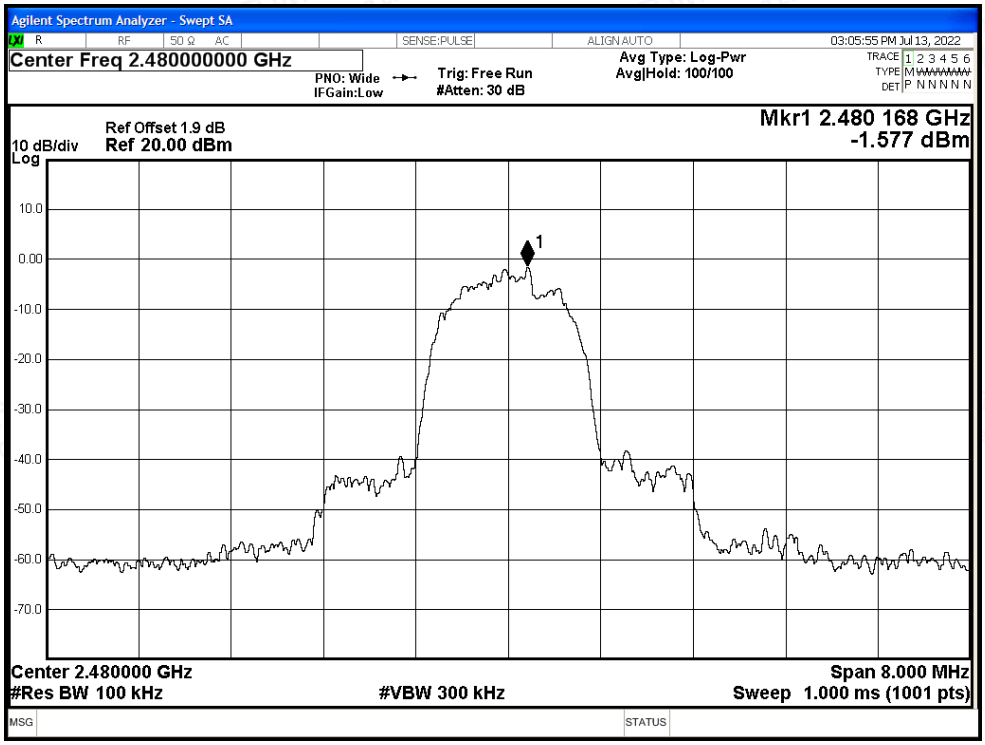
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



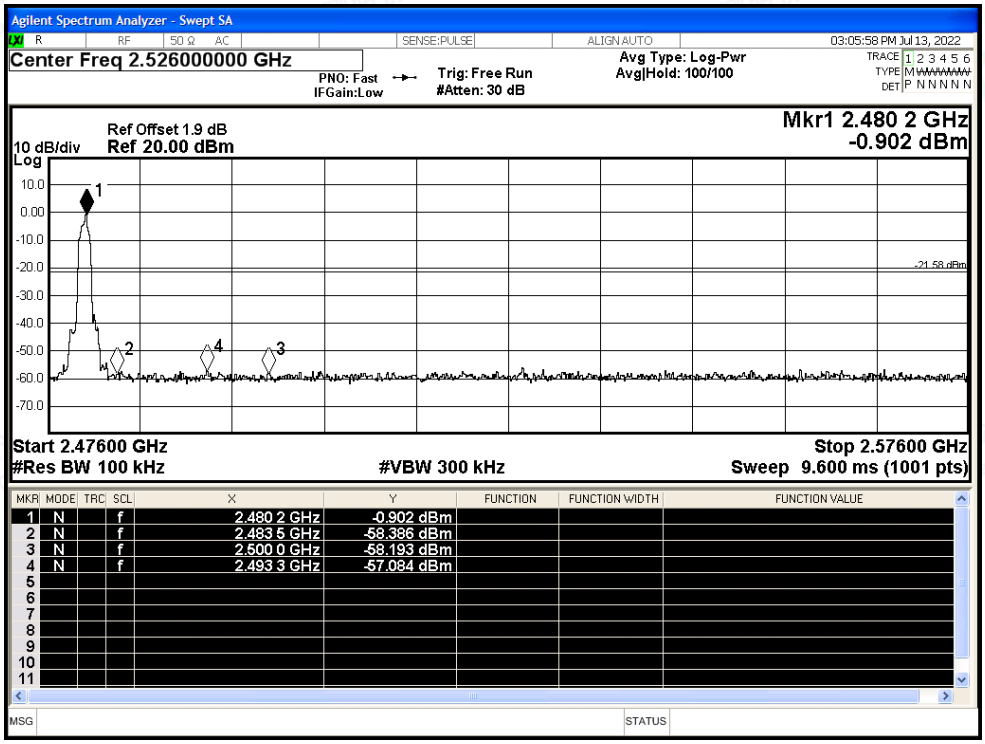
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



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



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

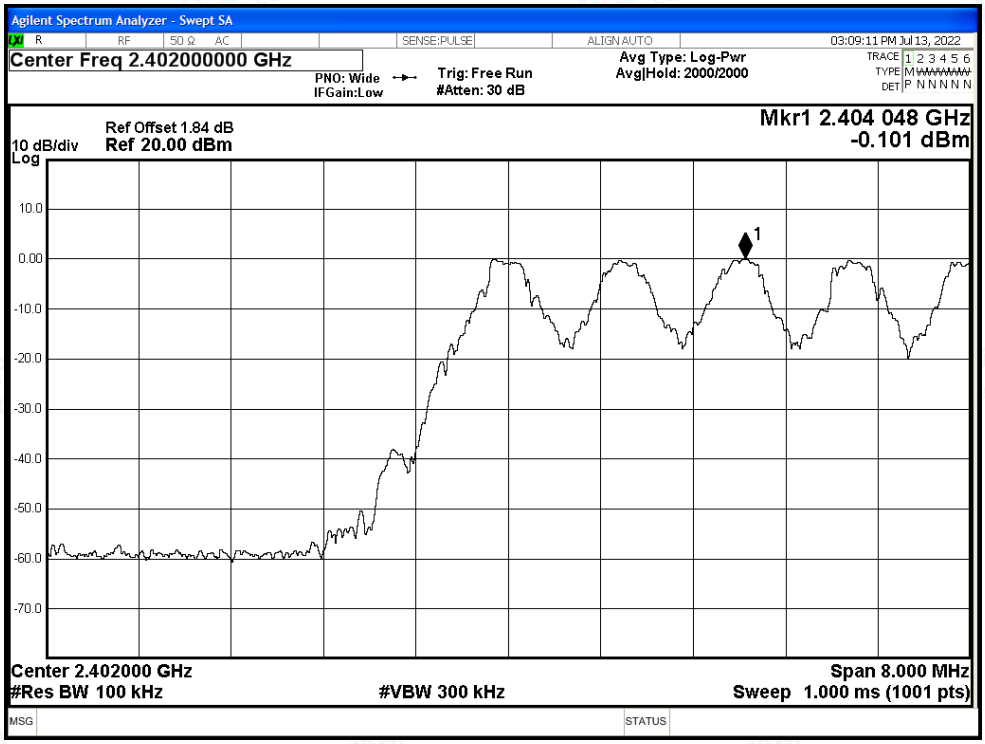


(Hopping)

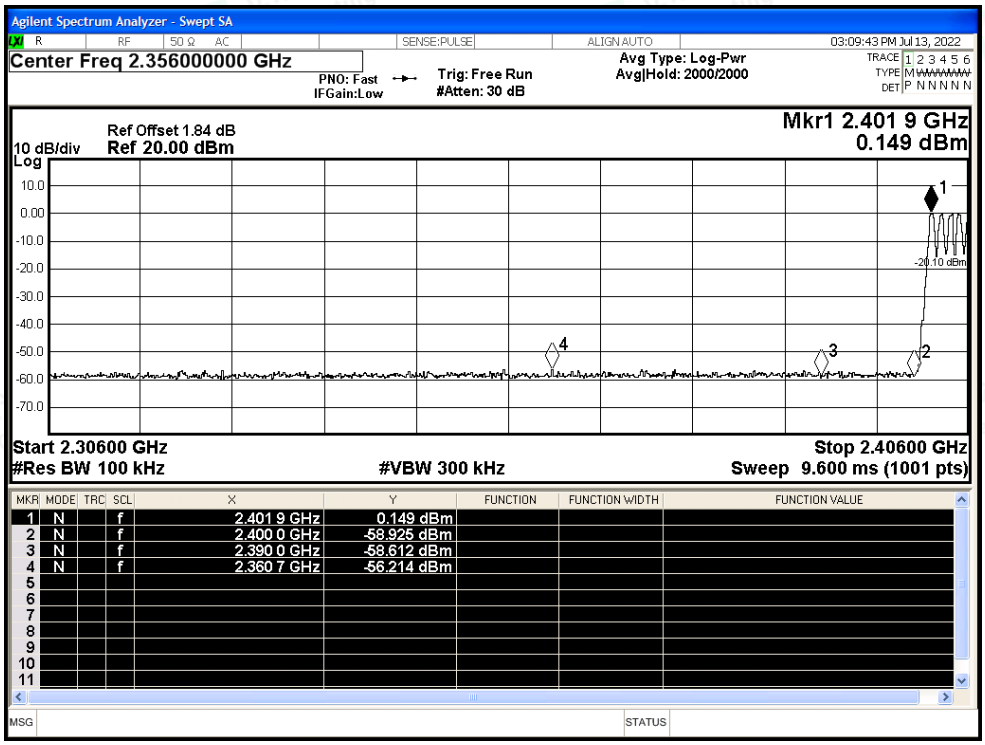
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-56.11	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.37	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-54.61	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-55.6	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-55.25	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-55.34	-20	Pass

Test Graphs

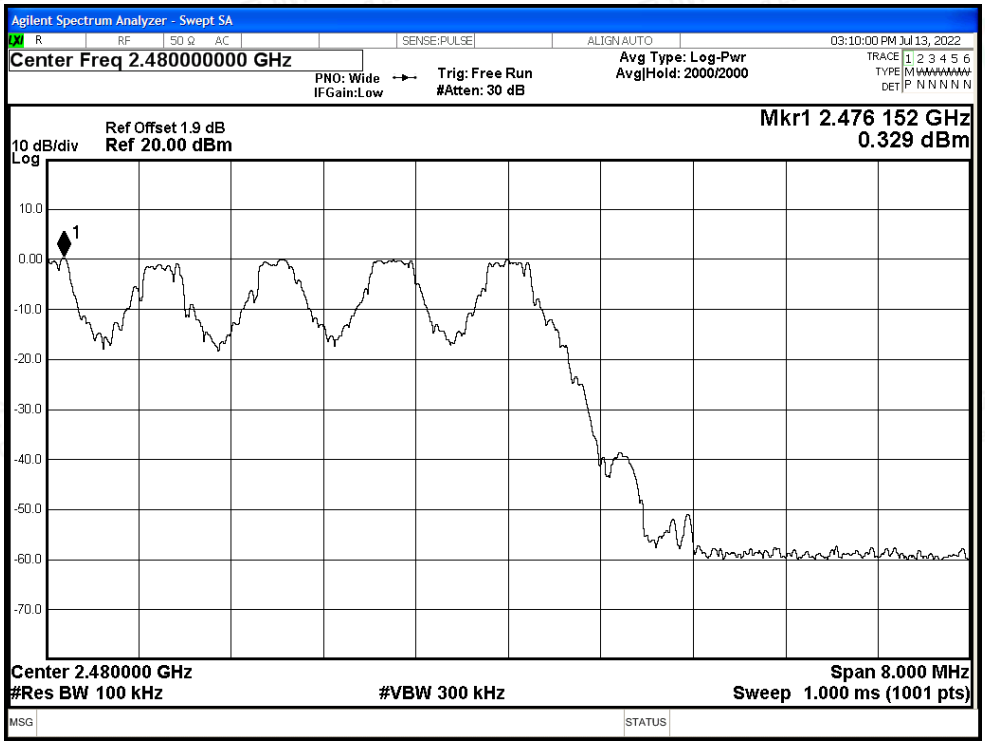
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



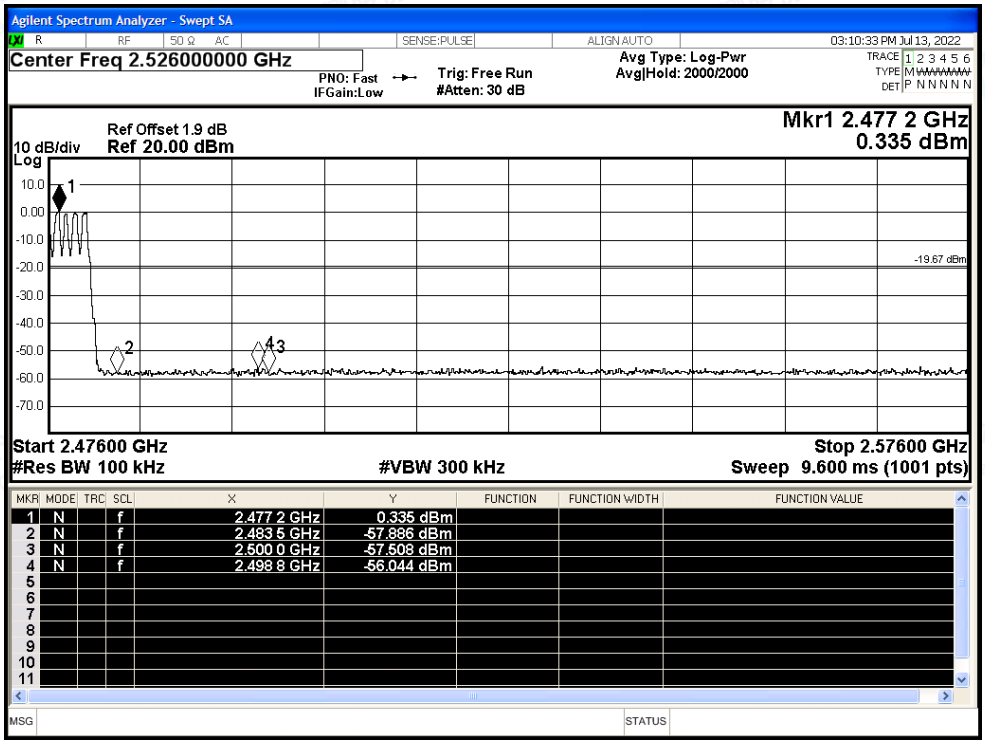
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



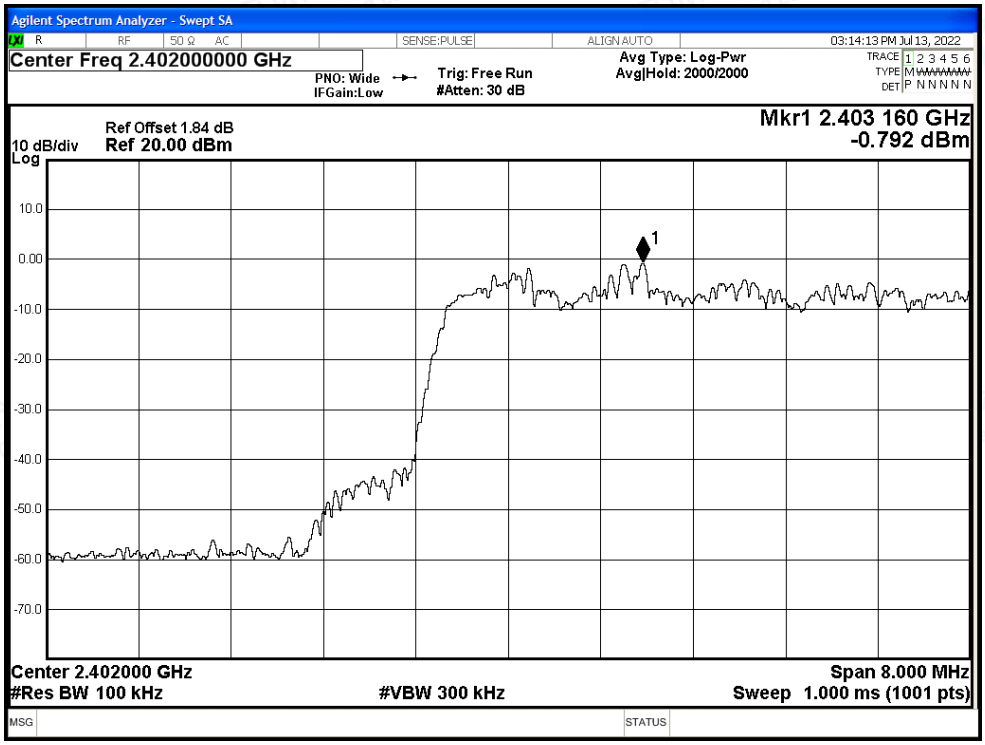
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



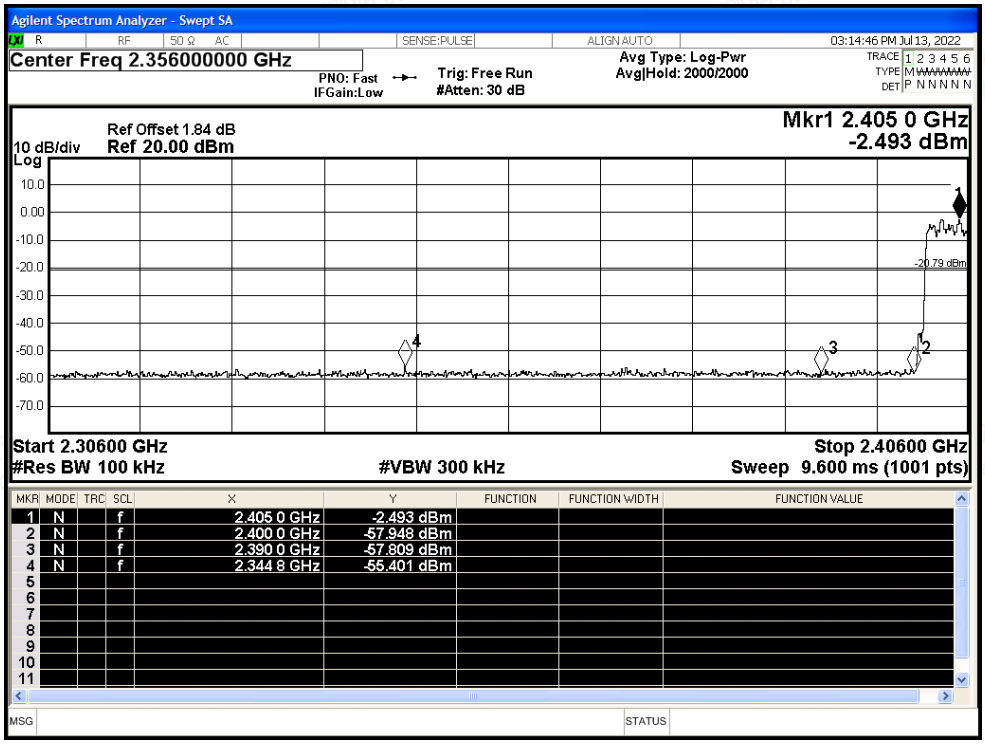
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



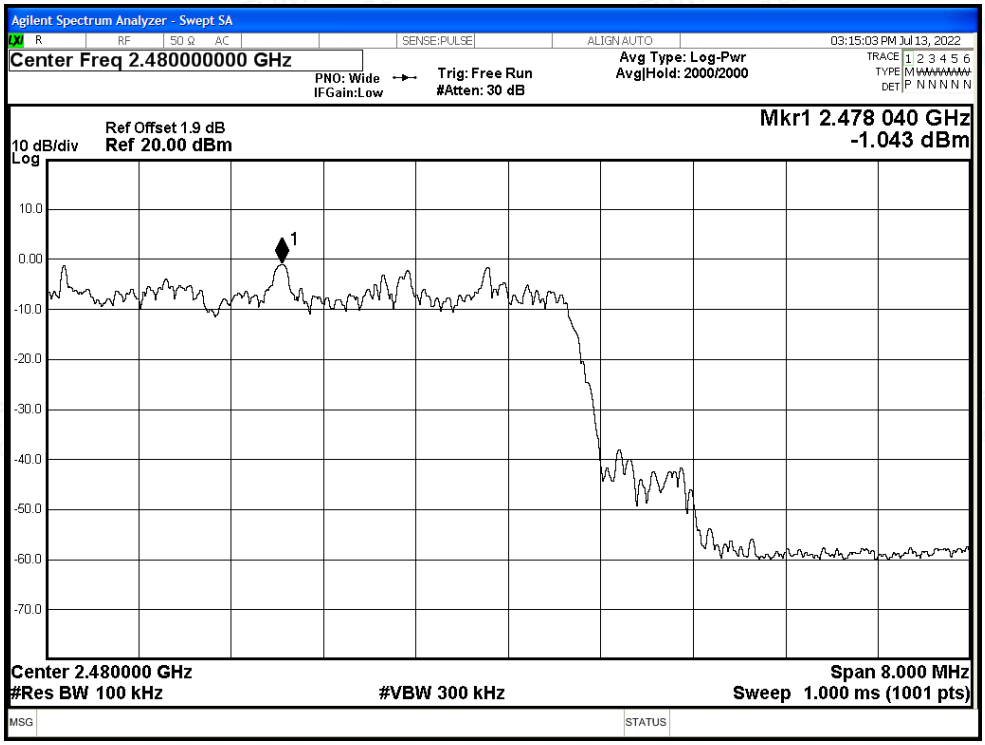
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



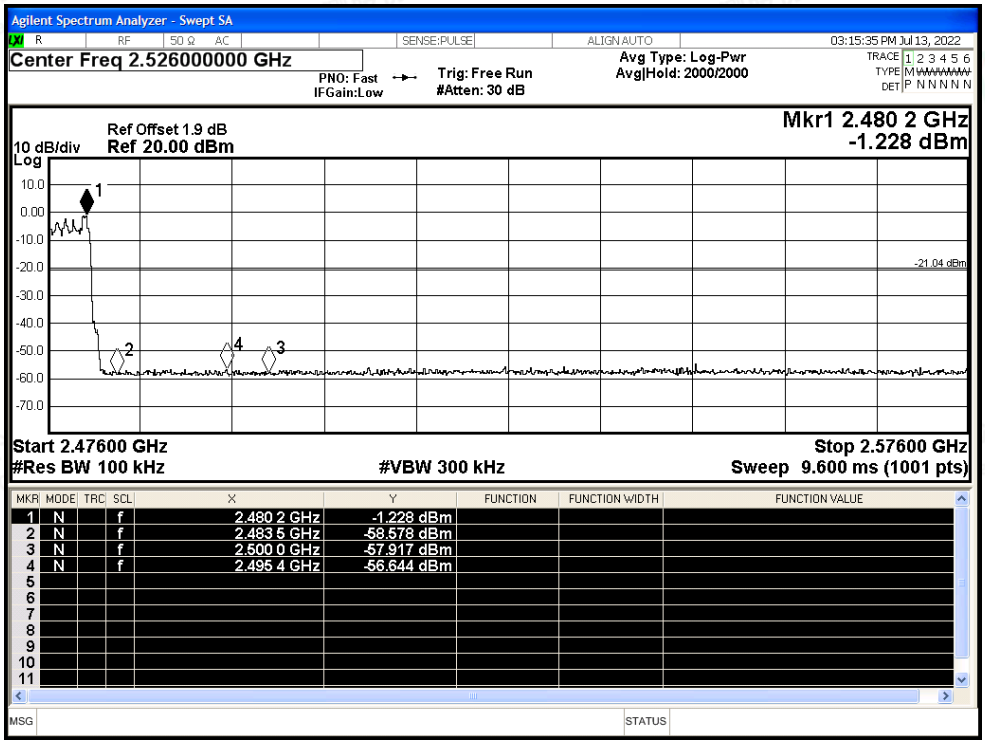
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



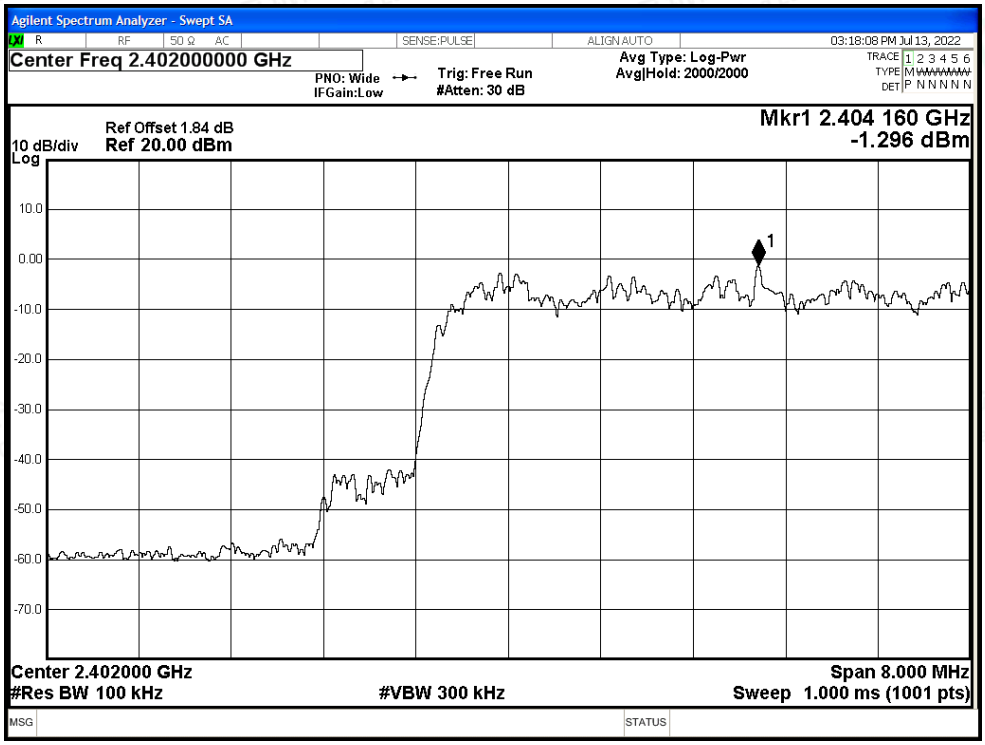
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



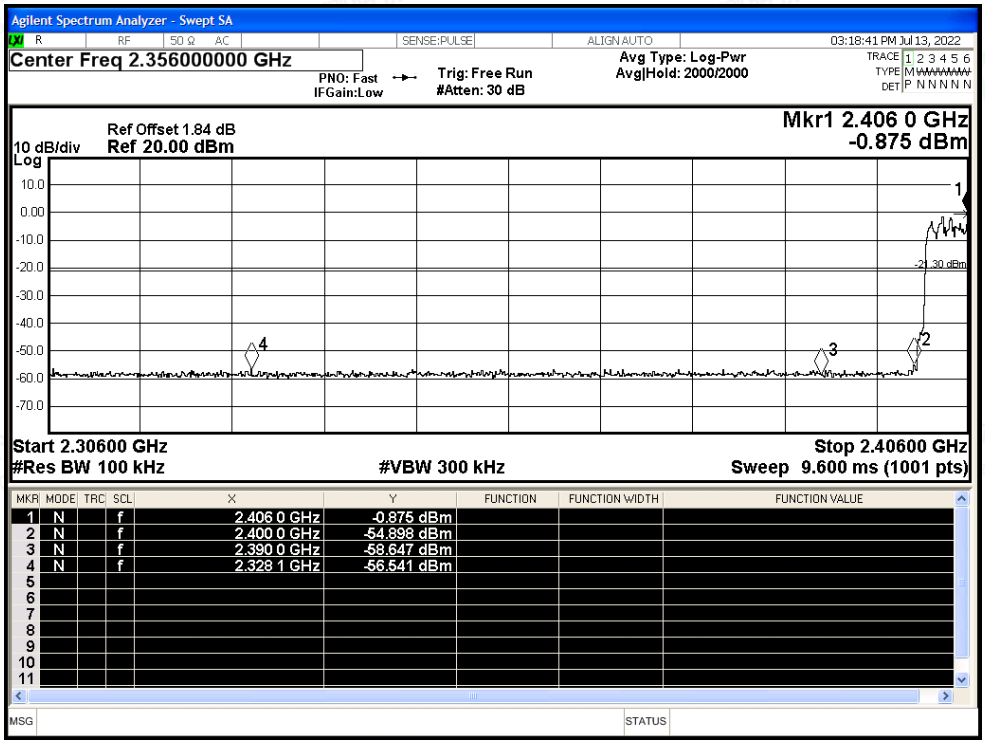
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



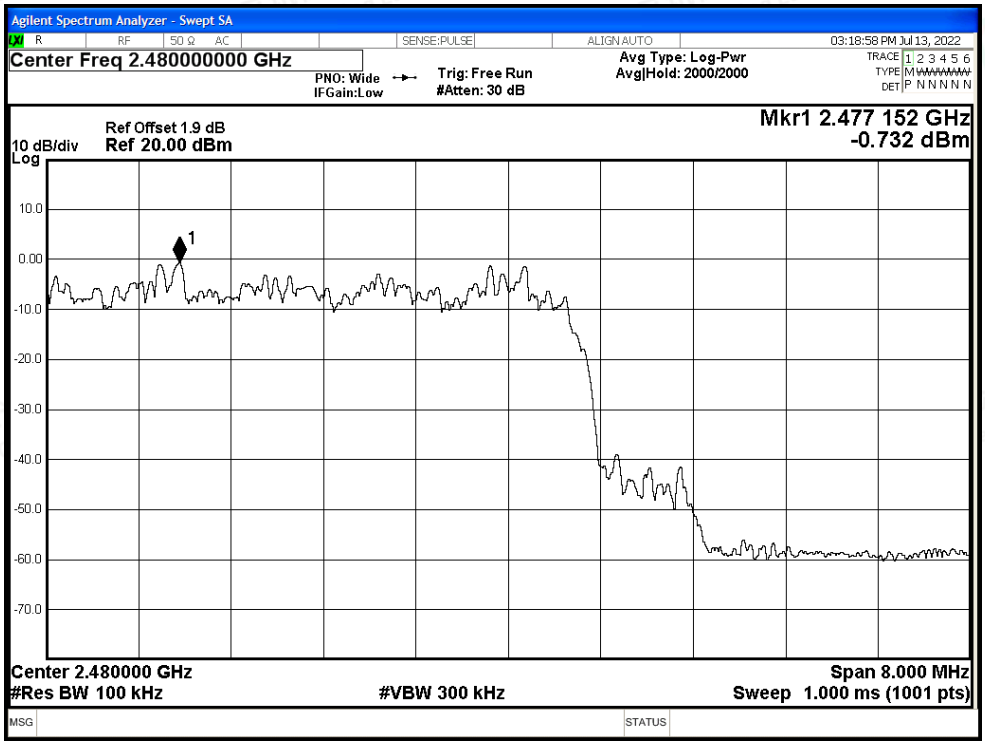
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



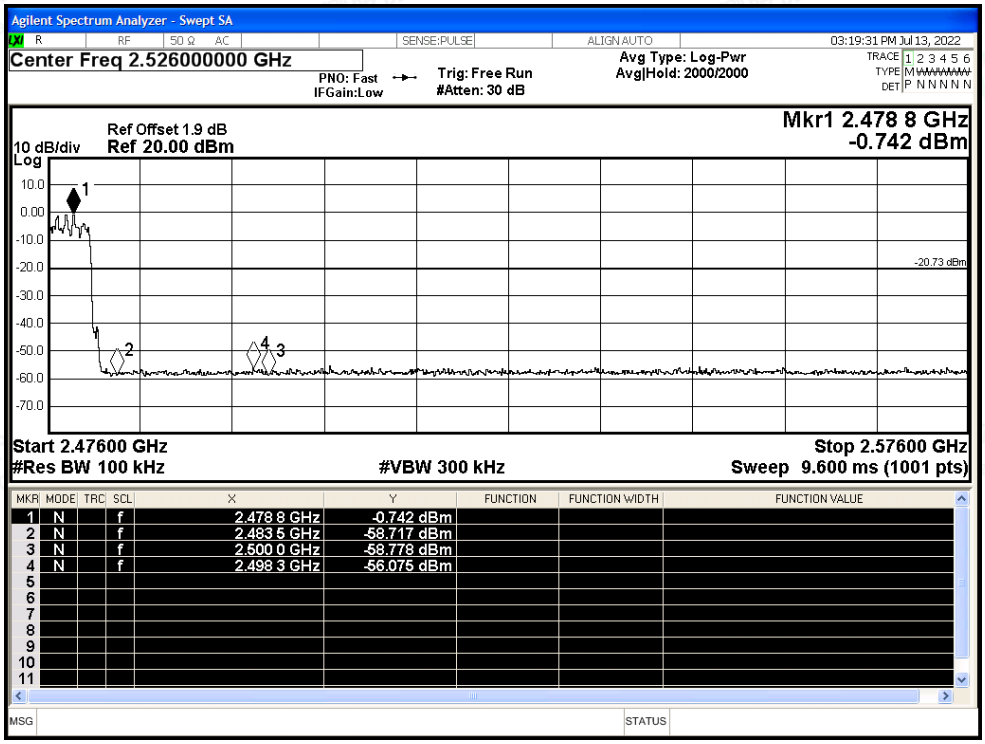
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission



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



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

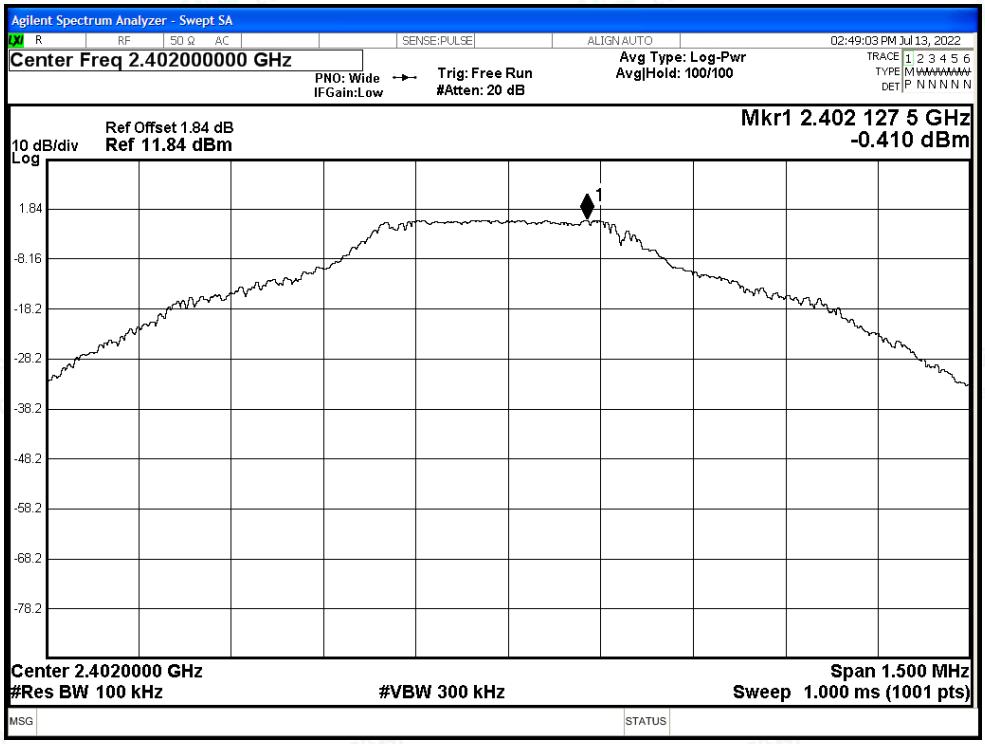


A.7 Conducted RF Spurious Emission

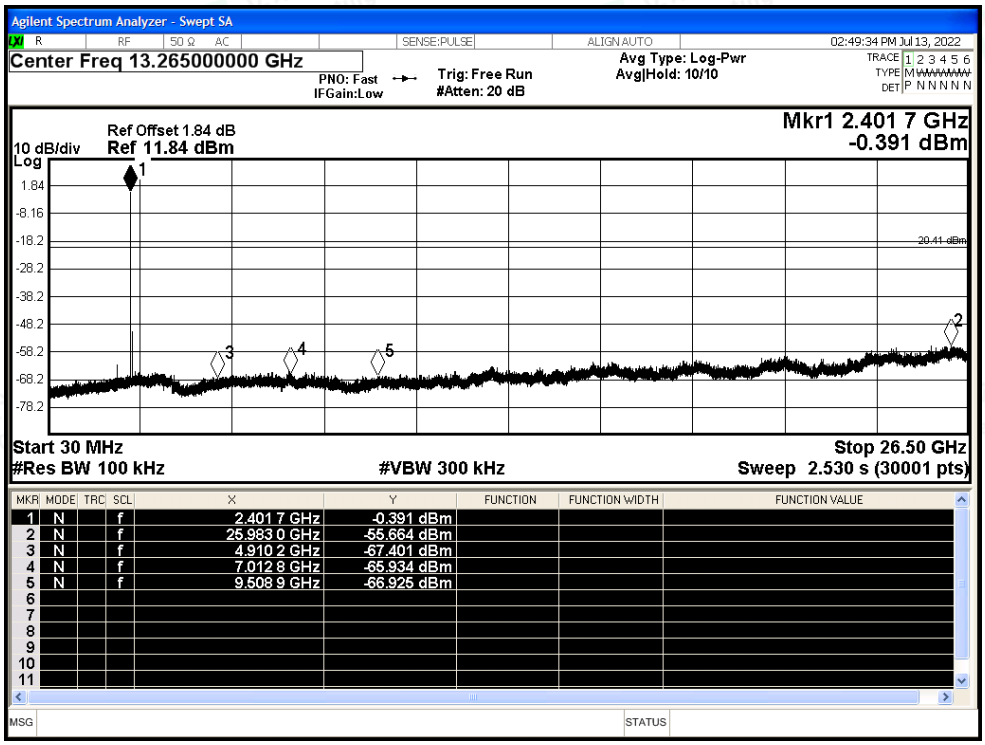
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-55.25	-20	Pass
NVNT	1-DH5	2441	Ant1	-55.09	-20	Pass
NVNT	1-DH5	2480	Ant1	-55.81	-20	Pass
NVNT	2-DH5	2402	Ant1	-50.15	-20	Pass
NVNT	2-DH5	2441	Ant1	-51.7	-20	Pass
NVNT	2-DH5	2480	Ant1	-54.35	-20	Pass
NVNT	3-DH5	2402	Ant1	-53.46	-20	Pass
NVNT	3-DH5	2441	Ant1	-54.24	-20	Pass
NVNT	3-DH5	2480	Ant1	-54.7	-20	Pass

Test Graphs

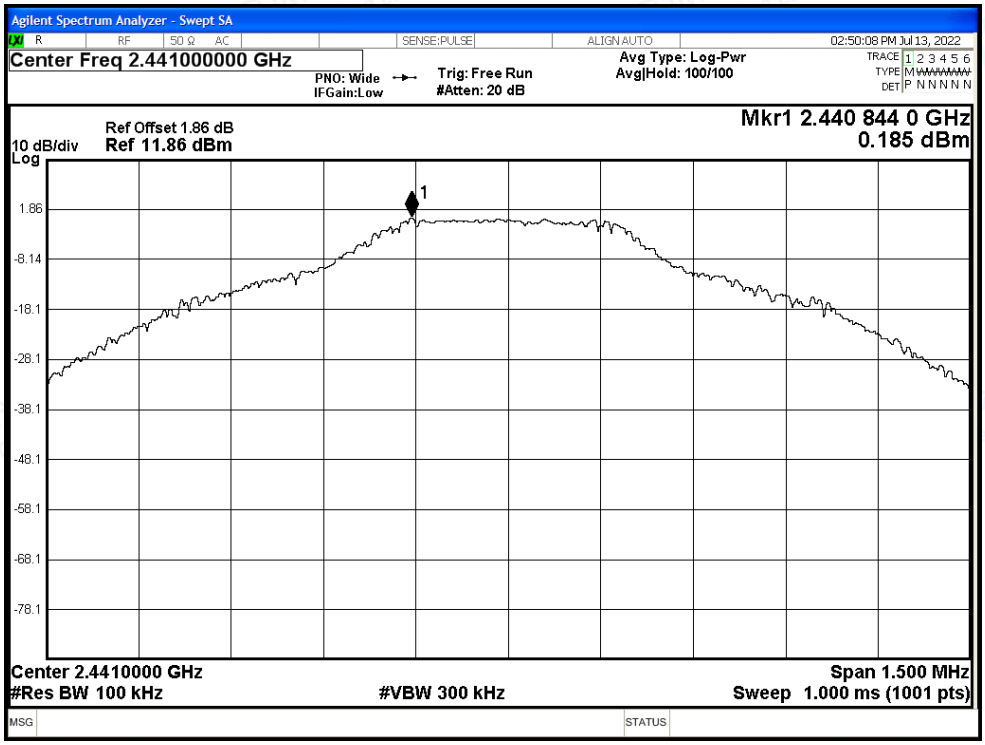
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



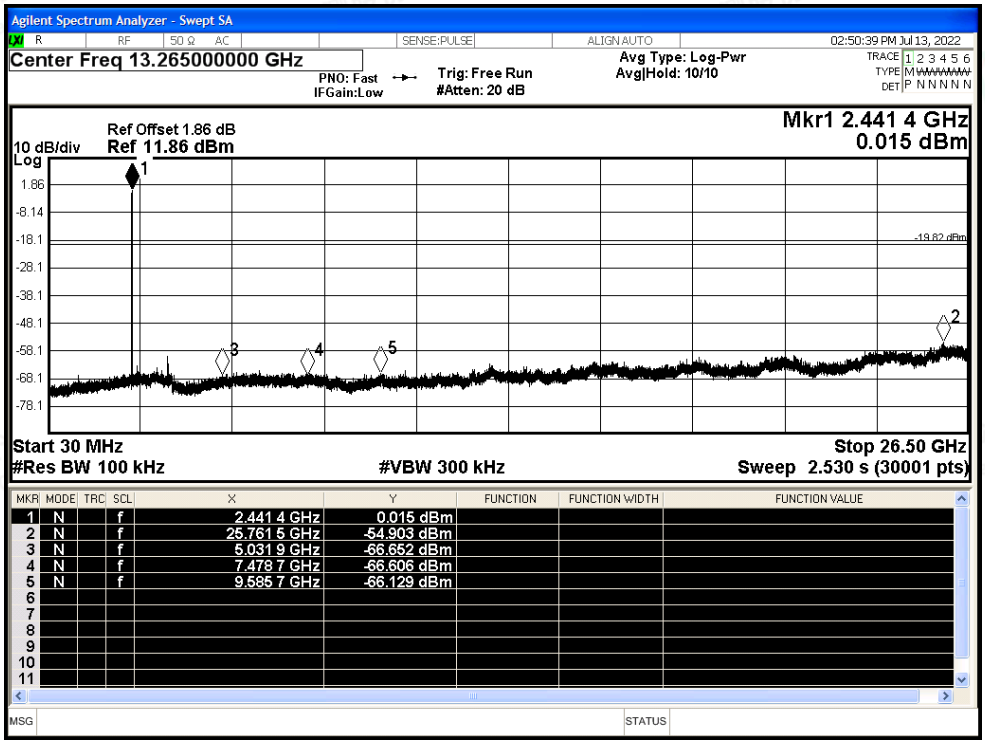
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



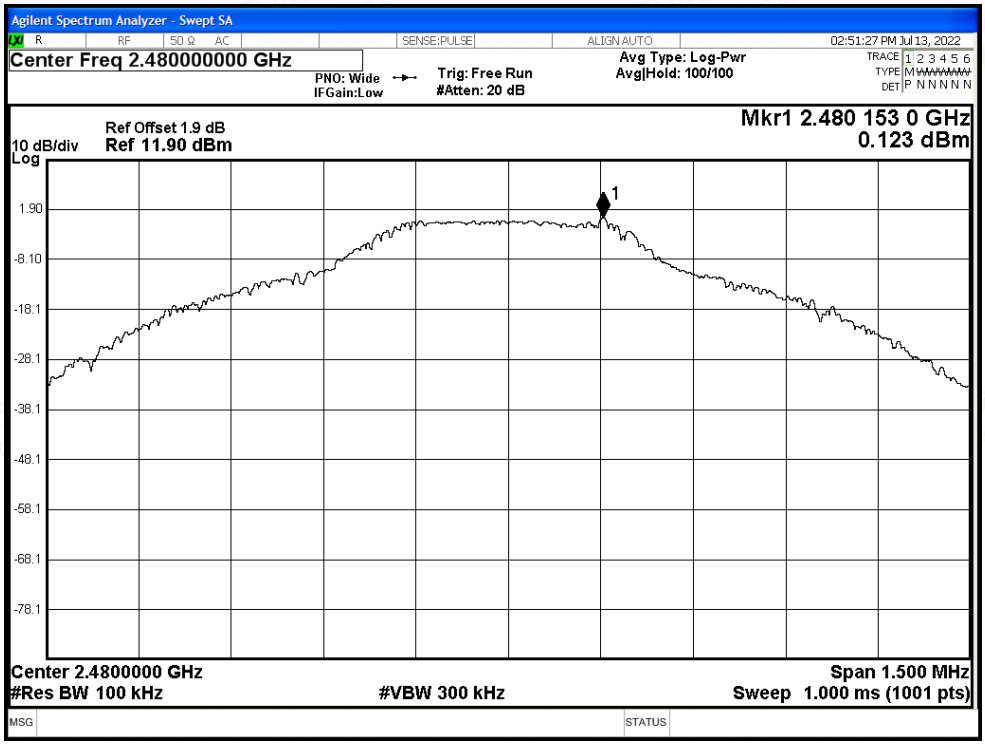
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



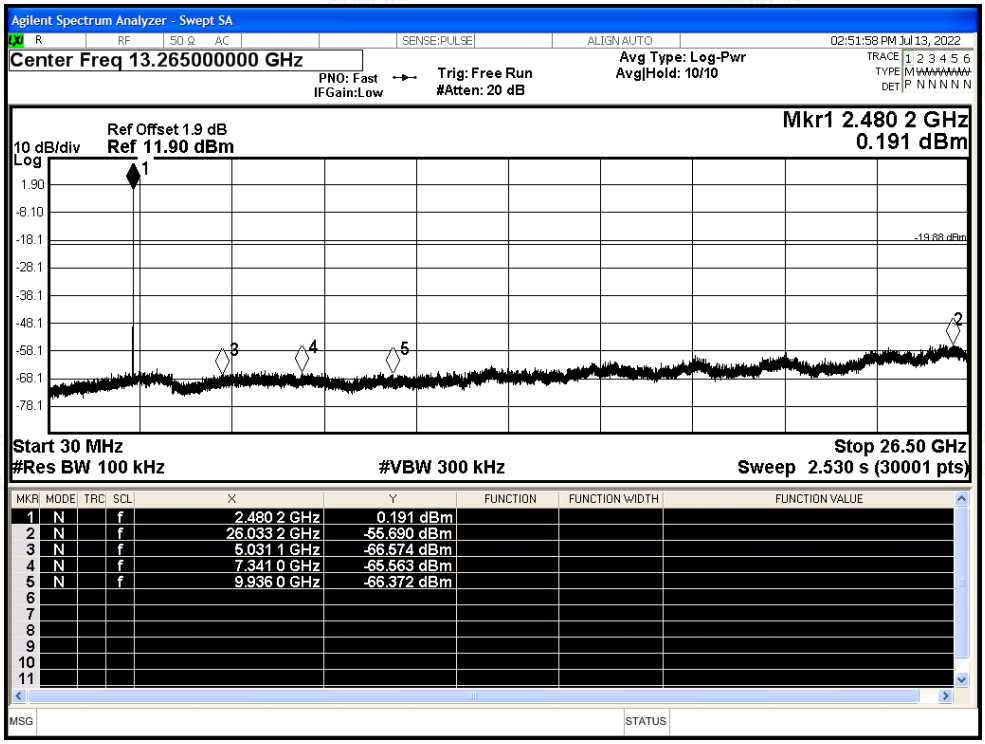
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



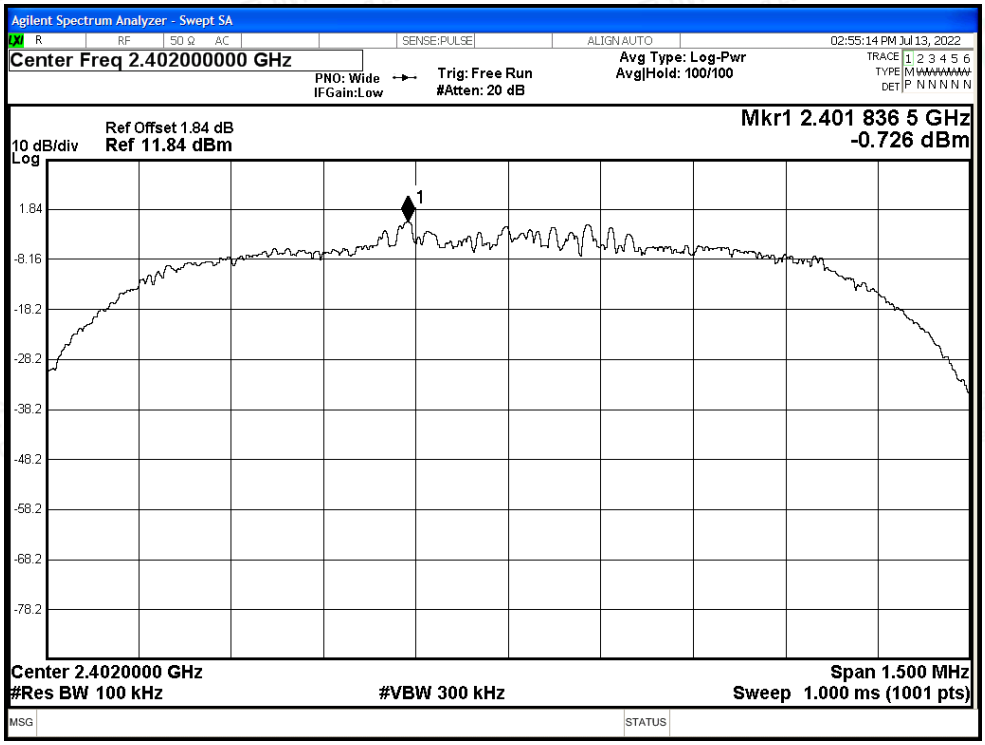
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



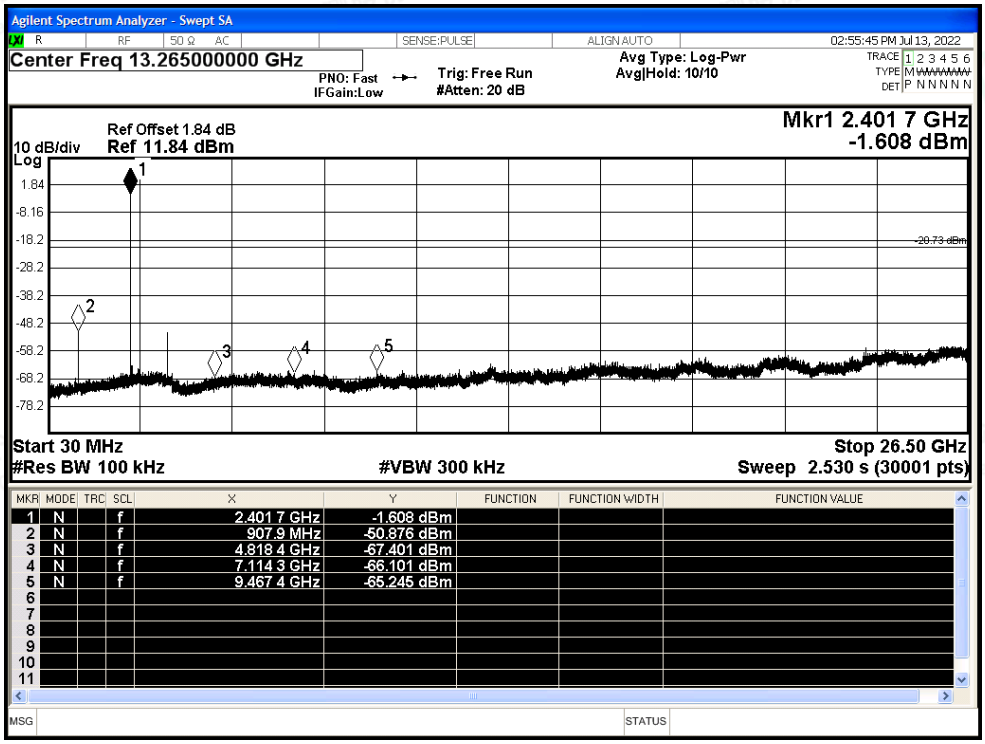
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



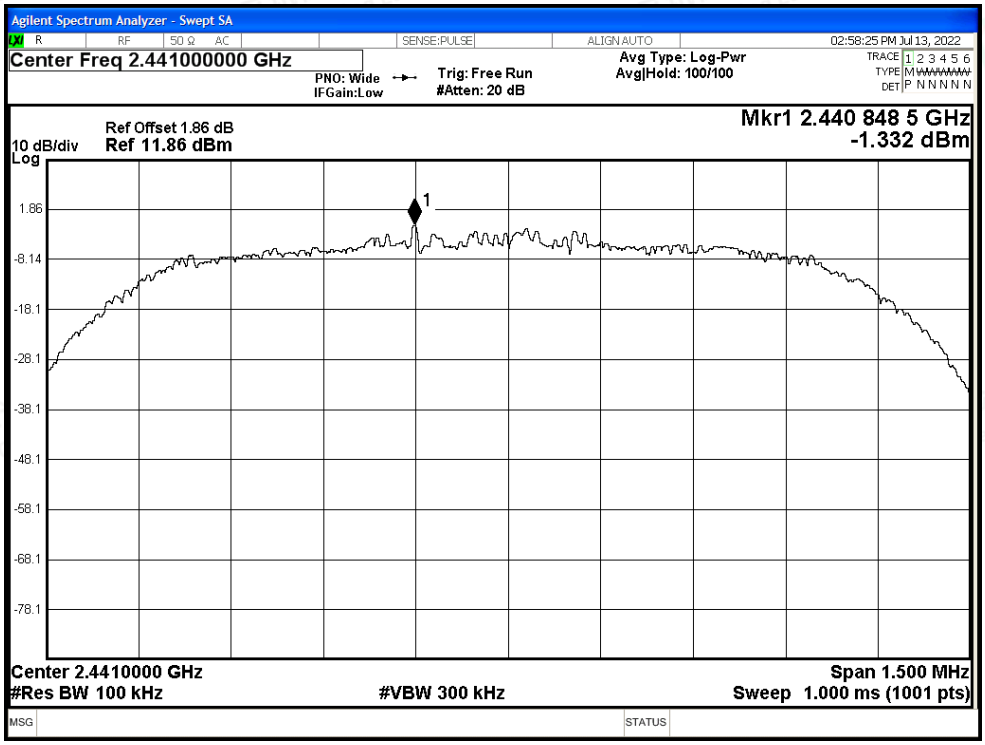
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



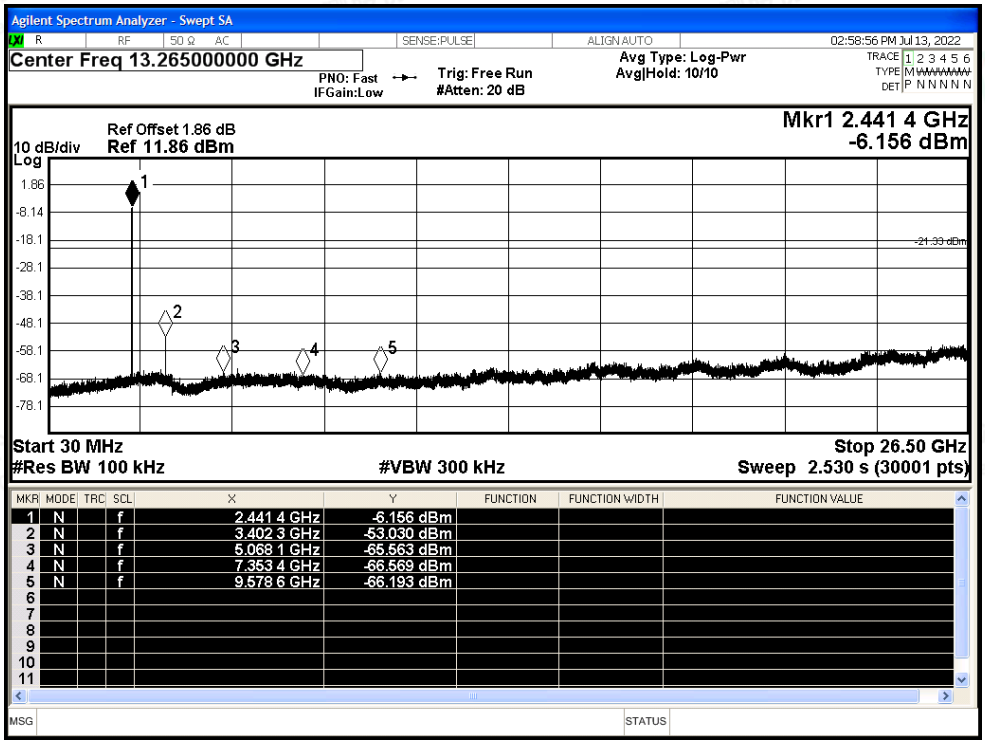
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



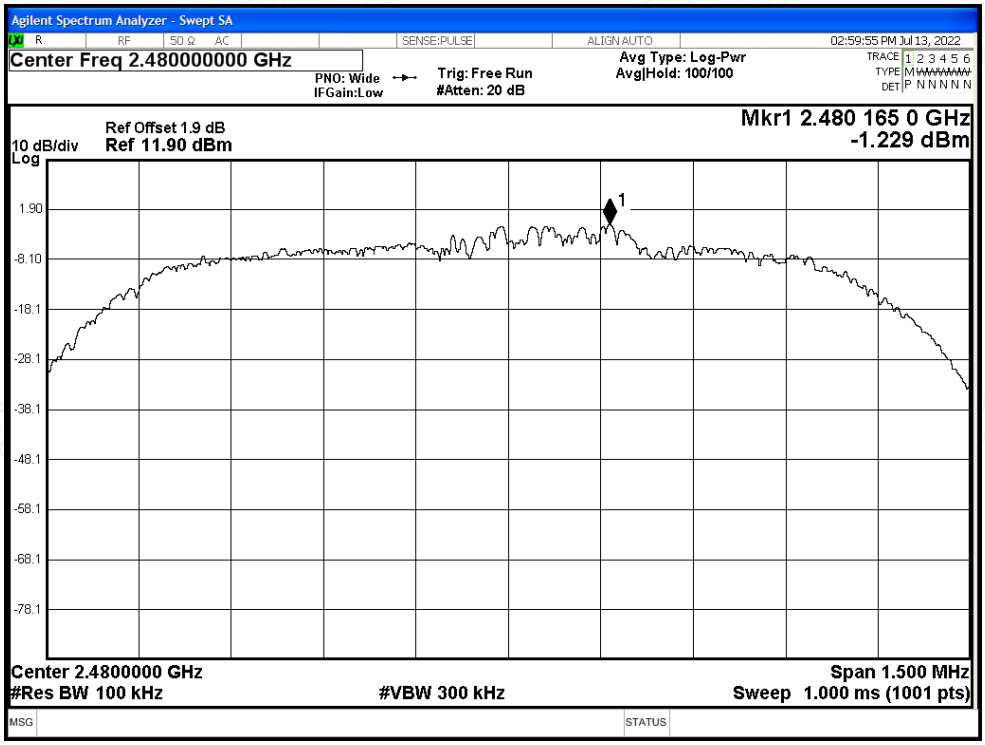
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



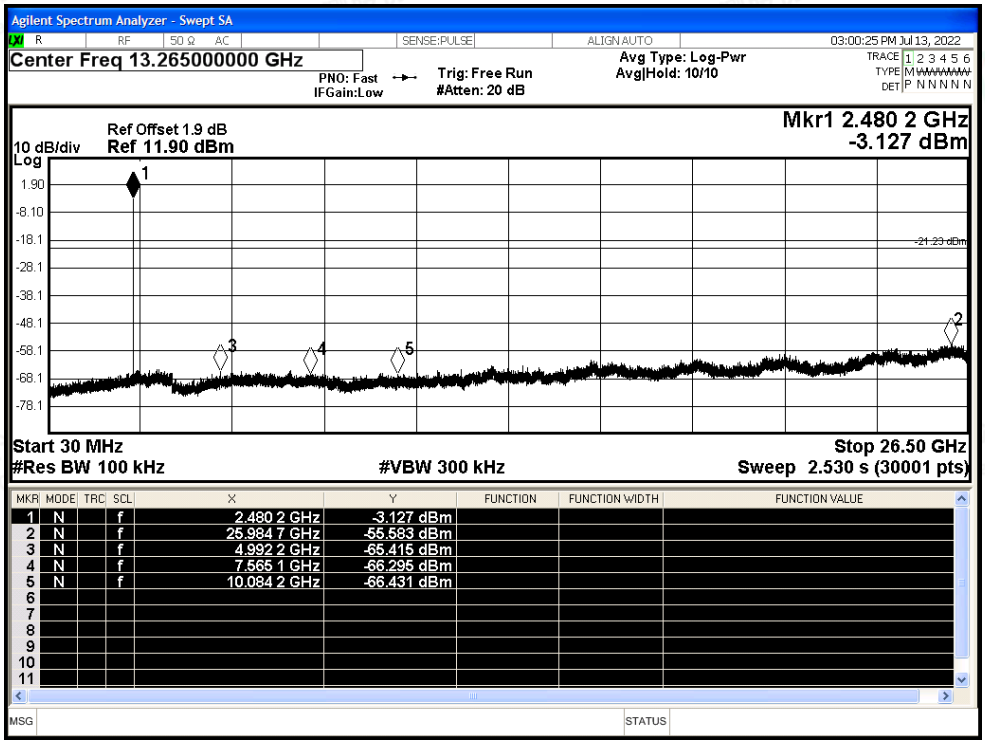
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



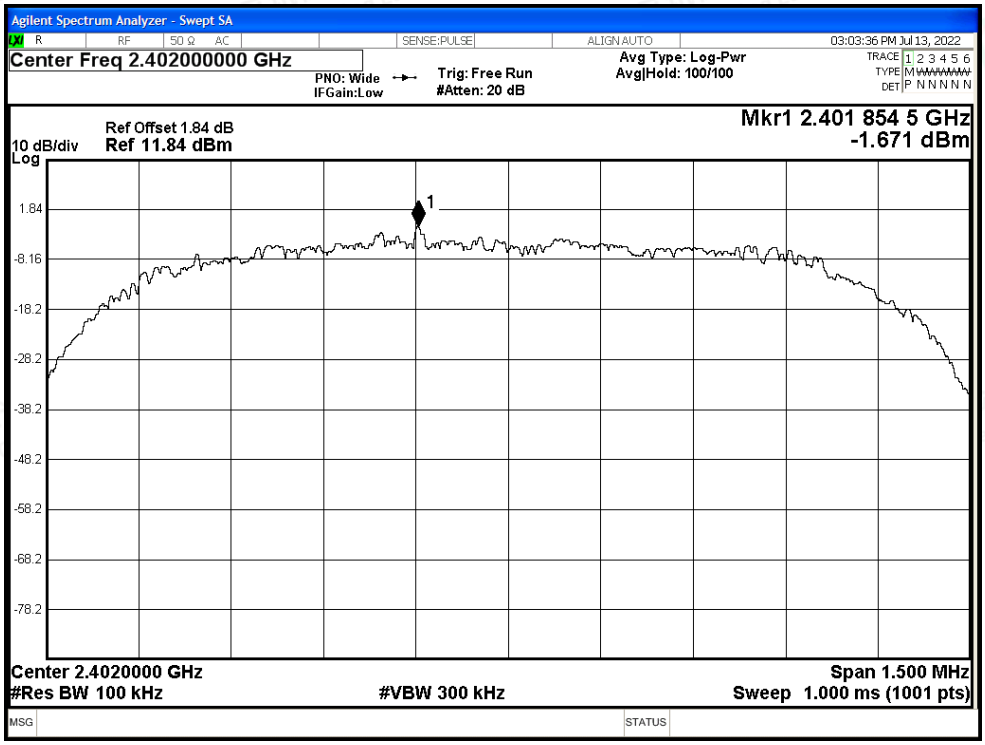
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



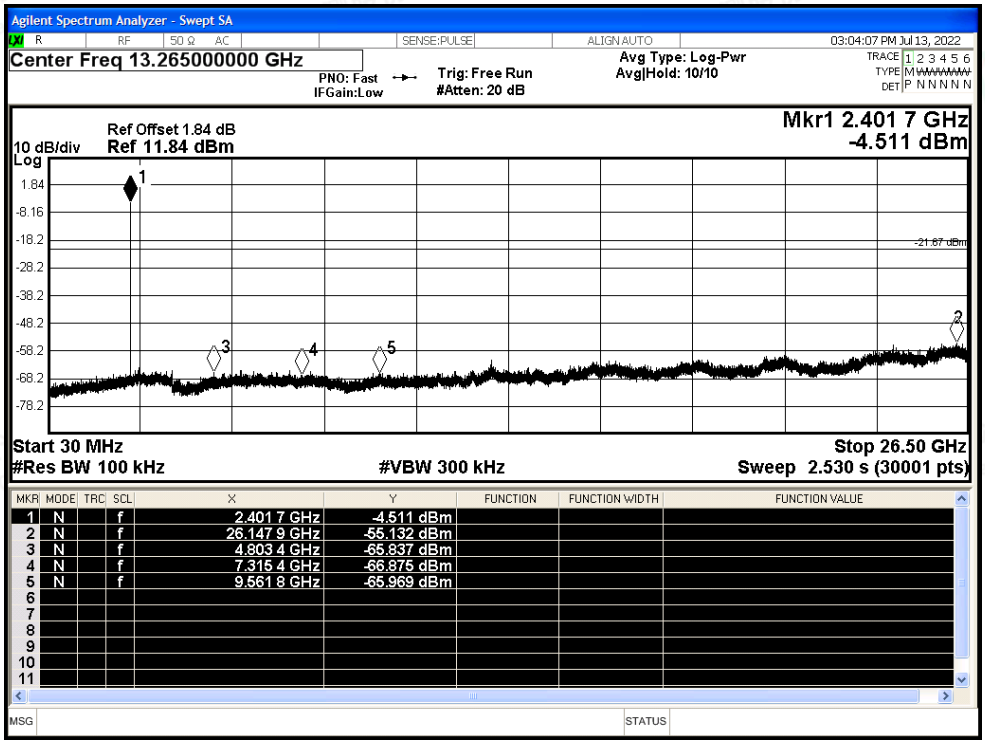
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



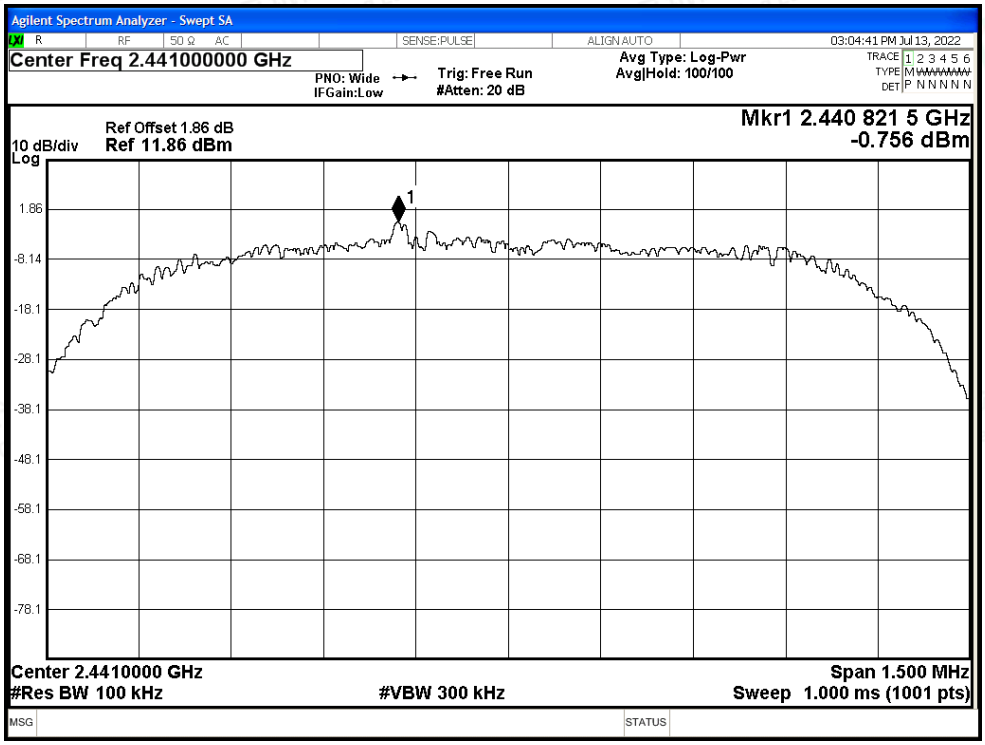
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



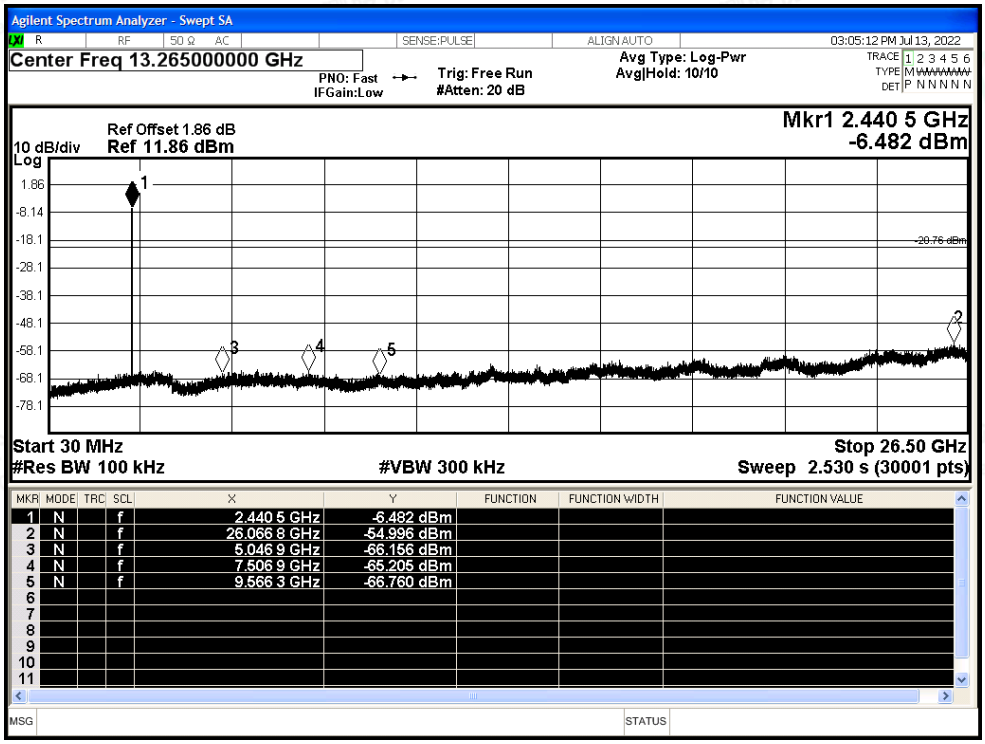
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



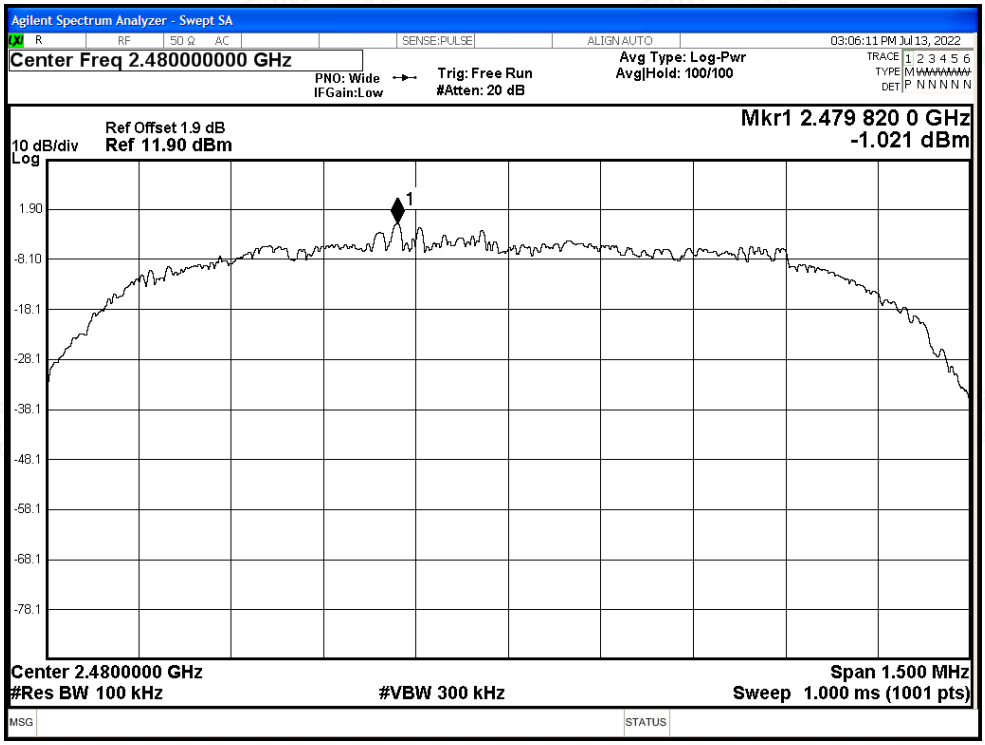
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



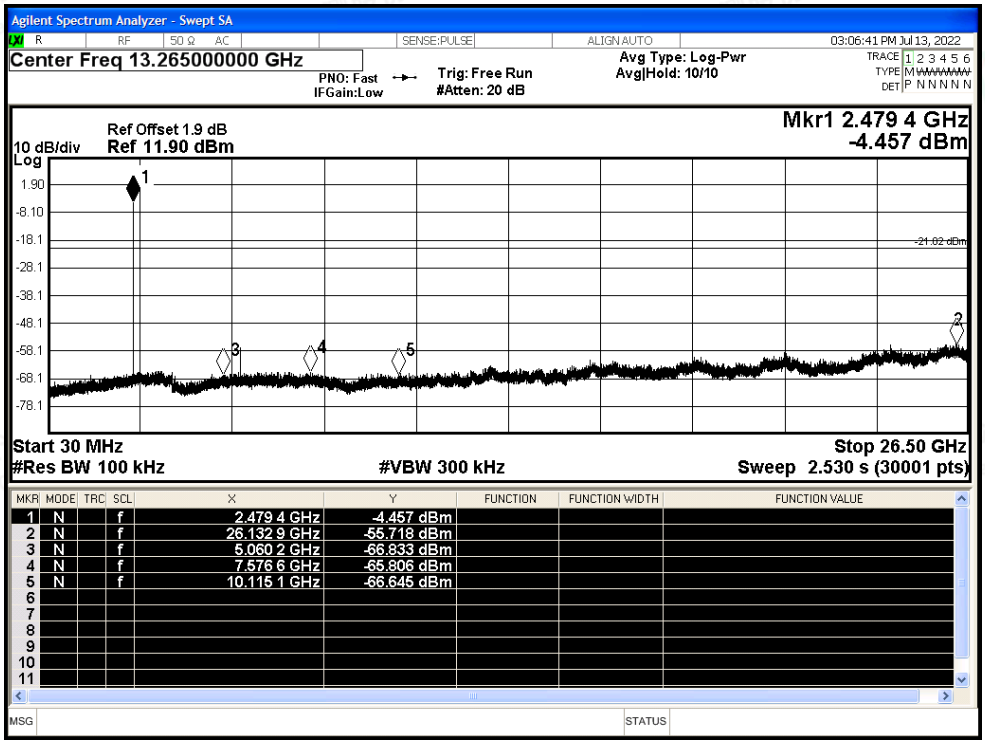
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

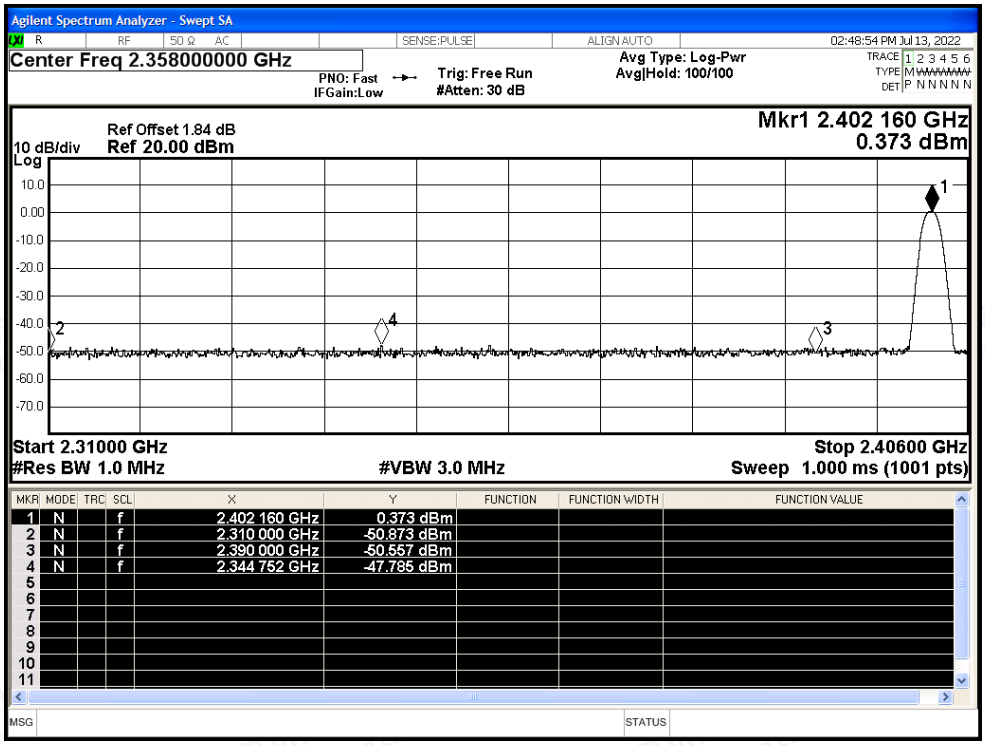


A.8 Restrict Band

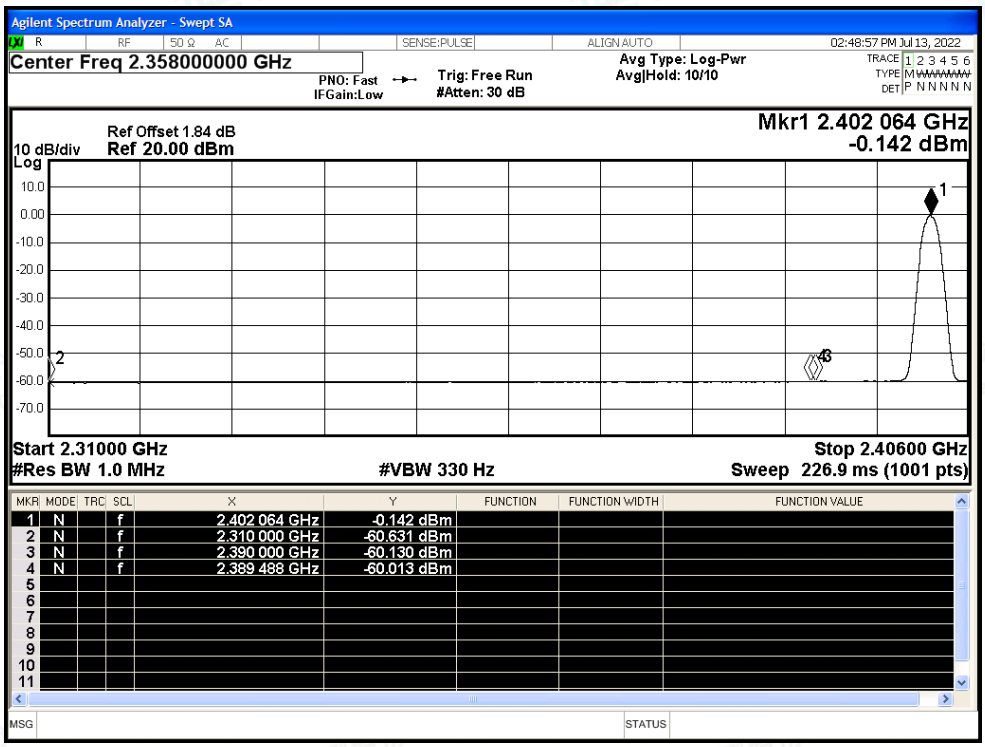
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-50.87	2	46.39	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-60.63	2	36.63	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2344.752	-47.79	2	49.47	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2389.488	-60.01	2	37.25	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.69	2	47.57	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-60.2	2	37.06	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.57	2	46.69	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-59.82	2	37.44	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2497	-46.99	2	50.27	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2486.824	-59.68	2	37.58	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-50.93	2	46.33	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-59.91	2	37.35	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-51.17	2	46.09	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-60.48	2	36.78	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2374.32	-46.95	2	50.31	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2385.552	-59.98	2	37.28	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-50.42	2	46.84	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-60.12	2	37.14	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-50.23	2	47.03	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-59.74	2	37.52	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2491.96	-46.99	2	50.27	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2492.512	-59.66	2	37.6	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-51.06	2	46.2	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-59.73	2	37.53	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-51.38	2	45.88	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-60.53	2	36.73	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2358.288	-46.83	2	50.43	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2384.4	-60.02	2	37.24	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-51.49	2	45.77	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-60.27	2	36.99	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-49.95	2	47.31	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-59.81	2	37.45	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2489.272	-46.67	2	50.59	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2484.424	-59.62	2	37.64	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-50.44	2	46.82	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-59.79	2	37.47	Average	54	Pass

Test Graphs

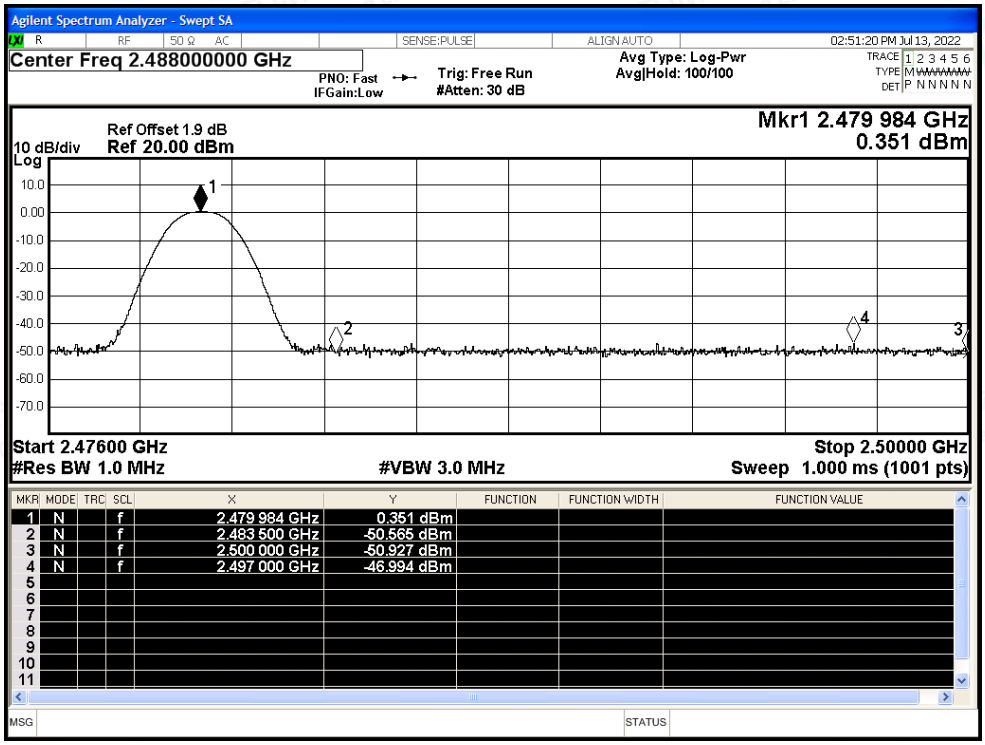
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



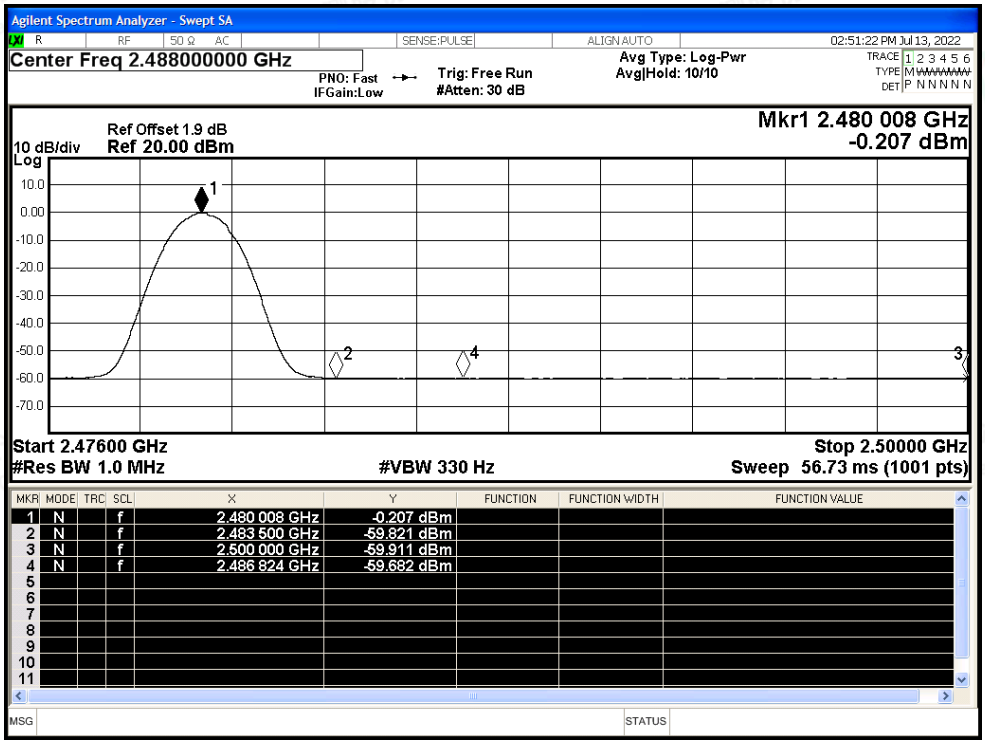
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



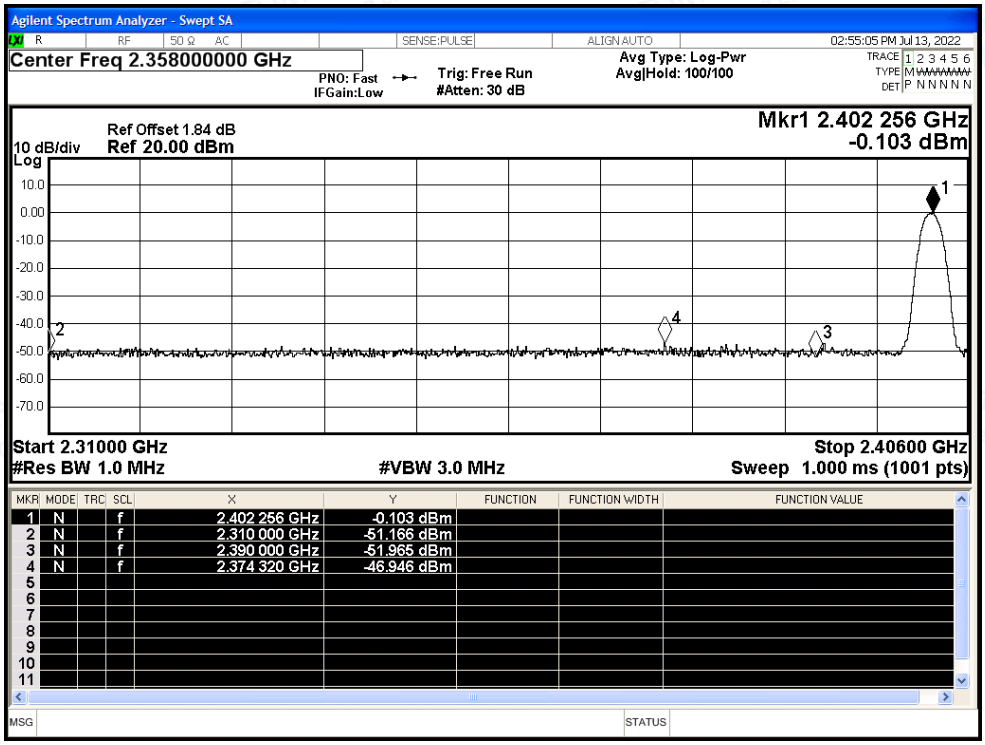
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



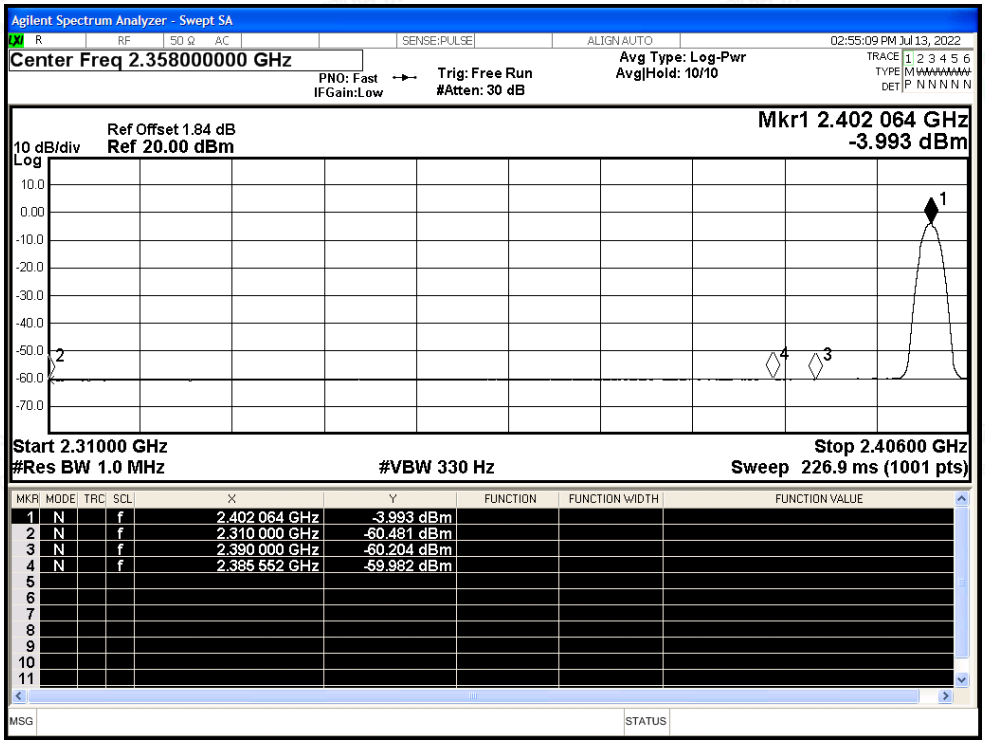
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



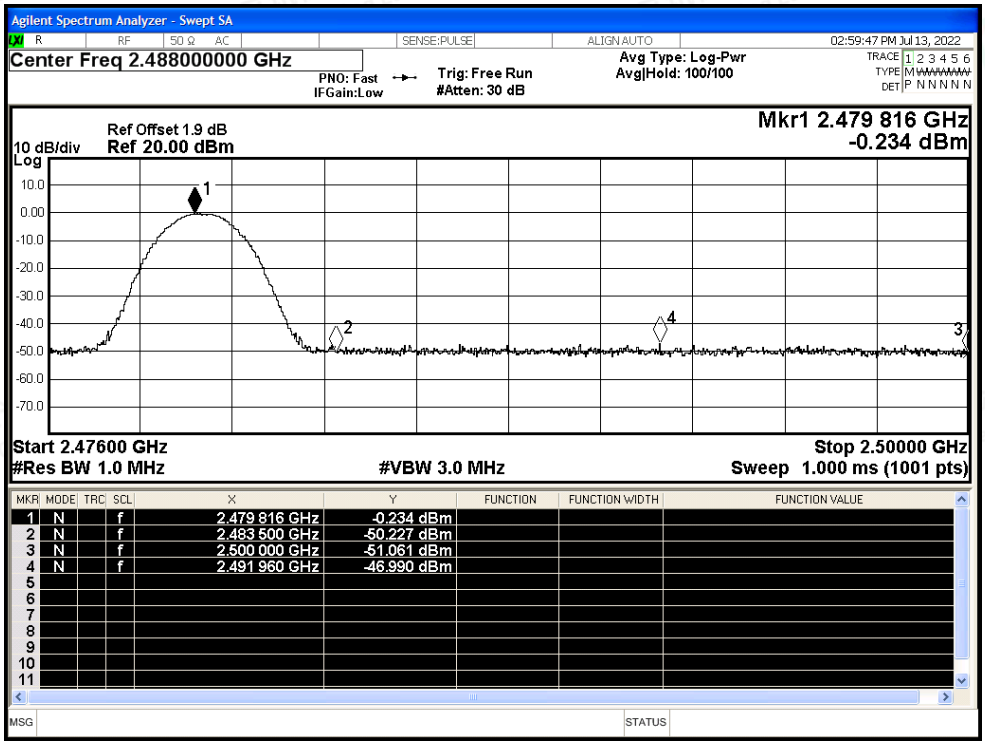
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



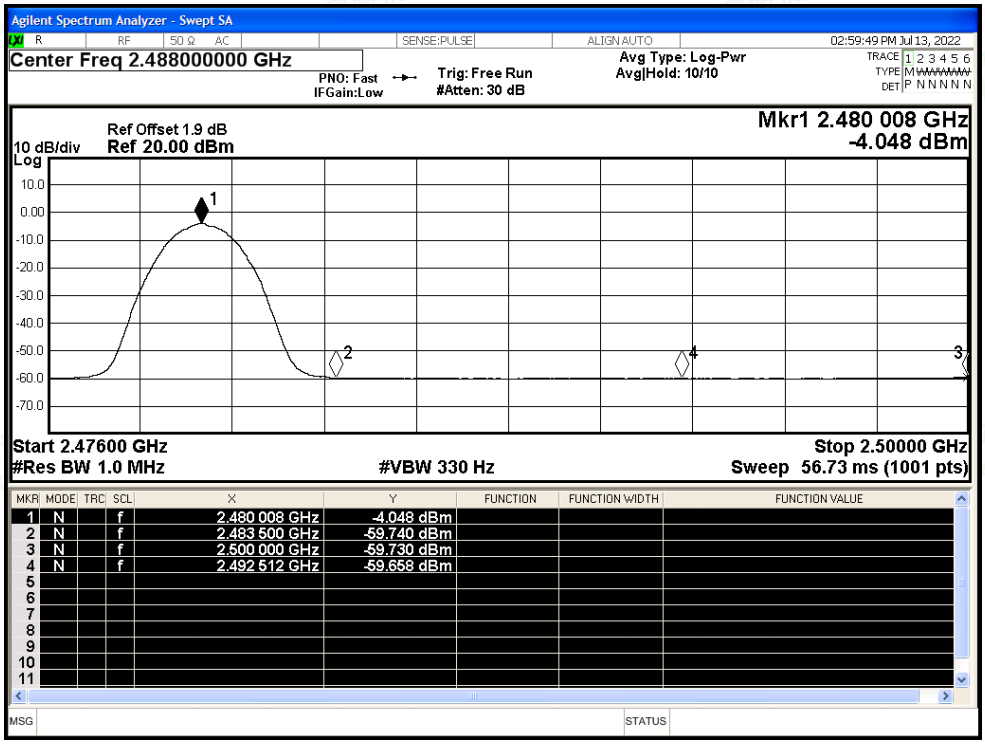
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average



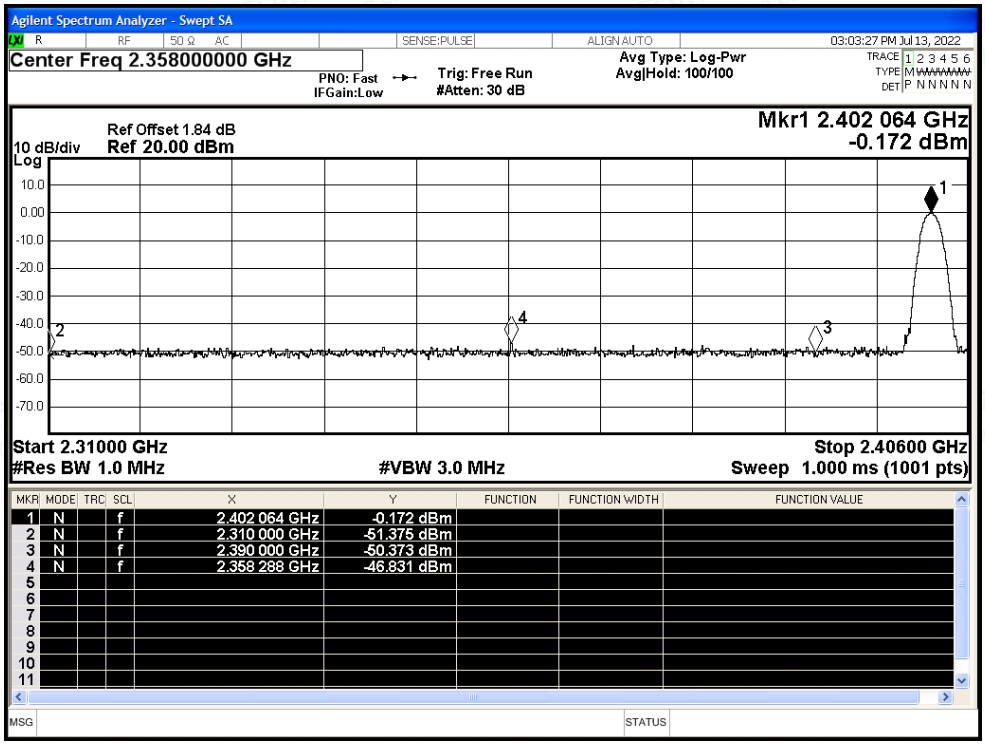
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



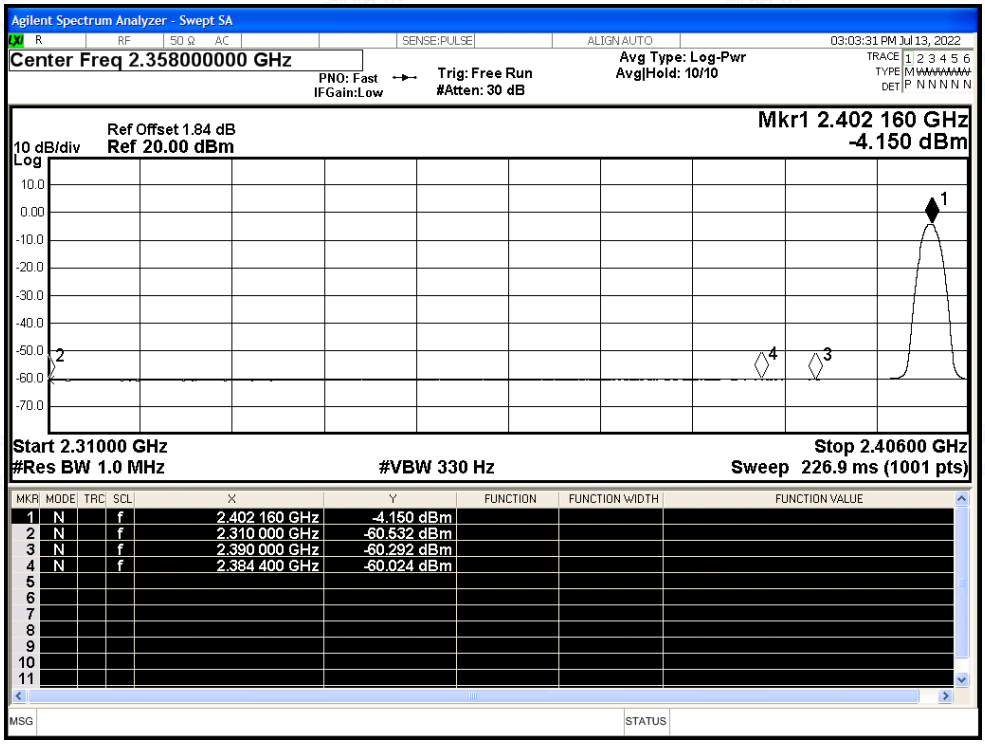
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average



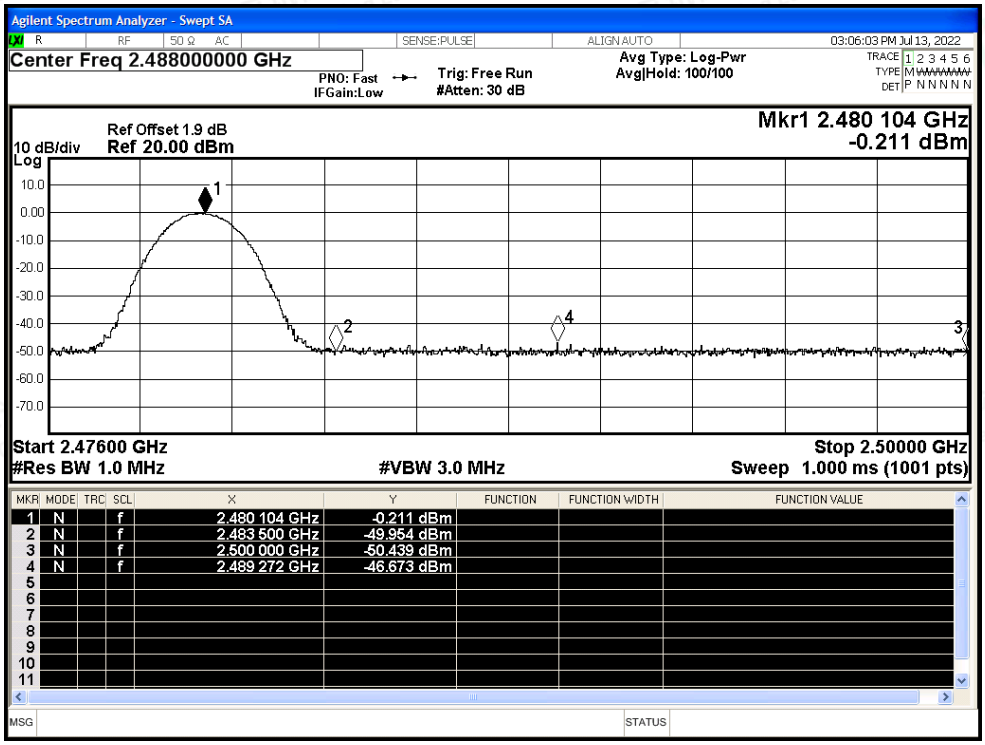
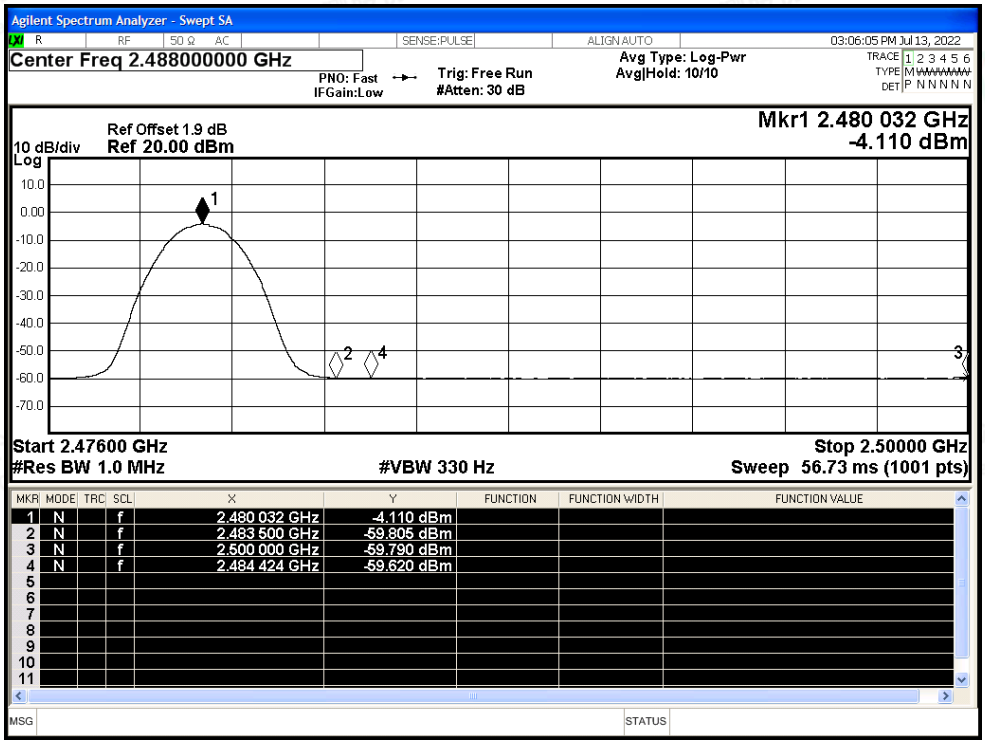
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak



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