Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Smart Speaker Table

Test Model: FREDONNER NNAS-2

Environmental Conditions

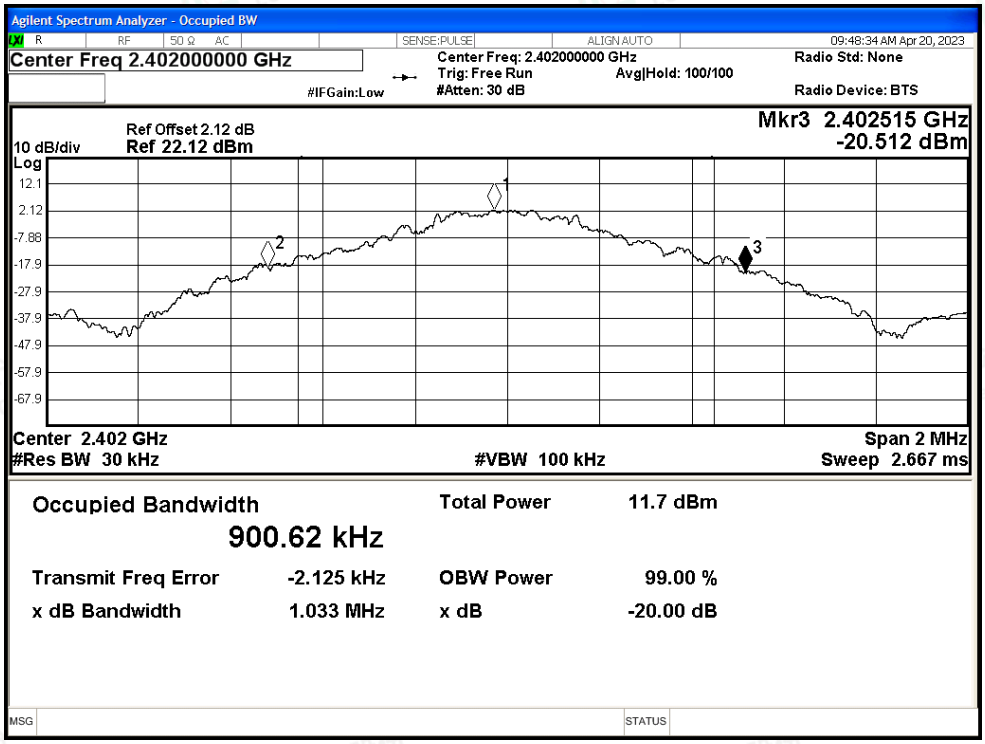
Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng
Supervised by:	Ling Zhu

A.1 -20dB Bandwidth

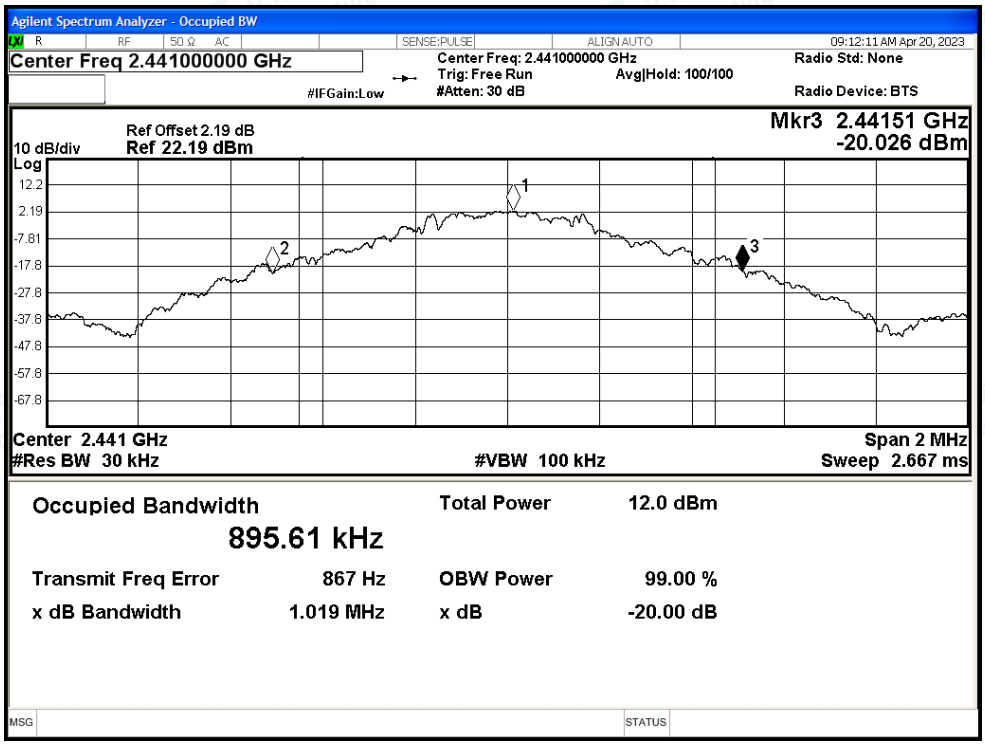
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	1.033	N/A	Pass
NVNT	1-DH5	2441	Ant1	1.019	N/A	Pass
NVNT	1-DH5	2480	Ant1	1.029	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.314	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.306	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.325	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.282	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.306	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.312	N/A	Pass

Test Graphs

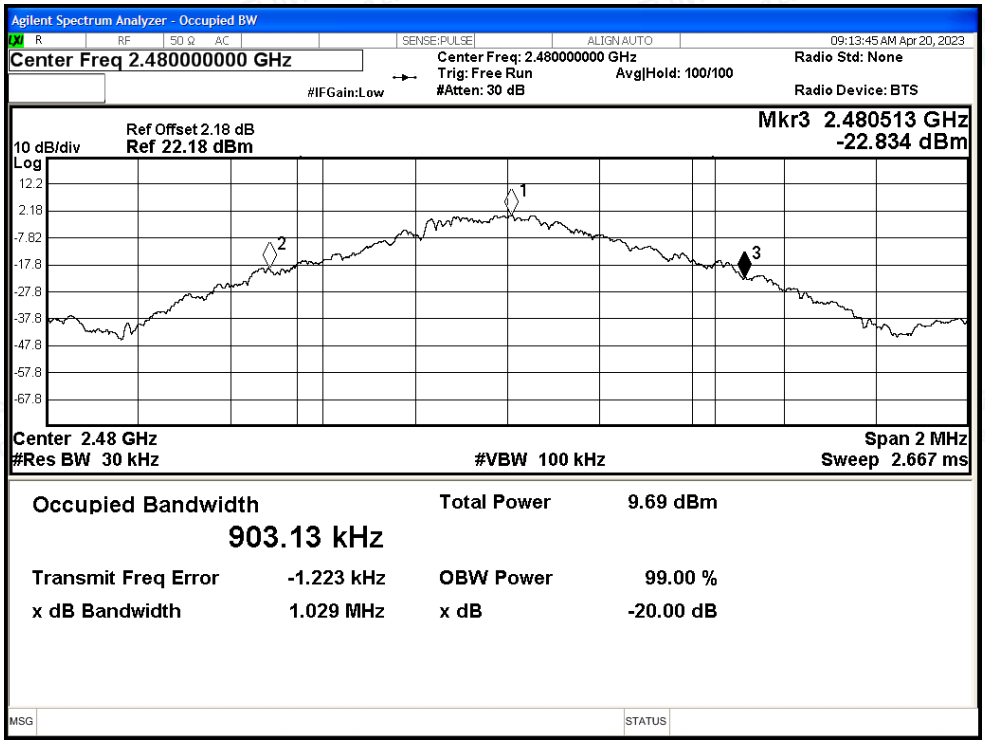
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



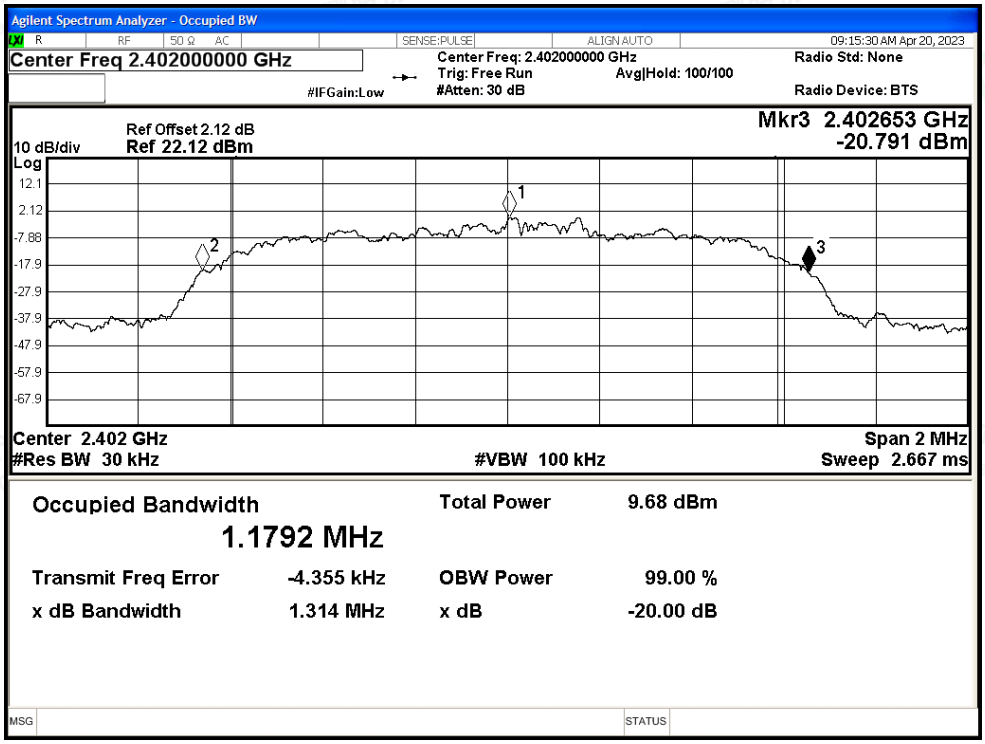
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



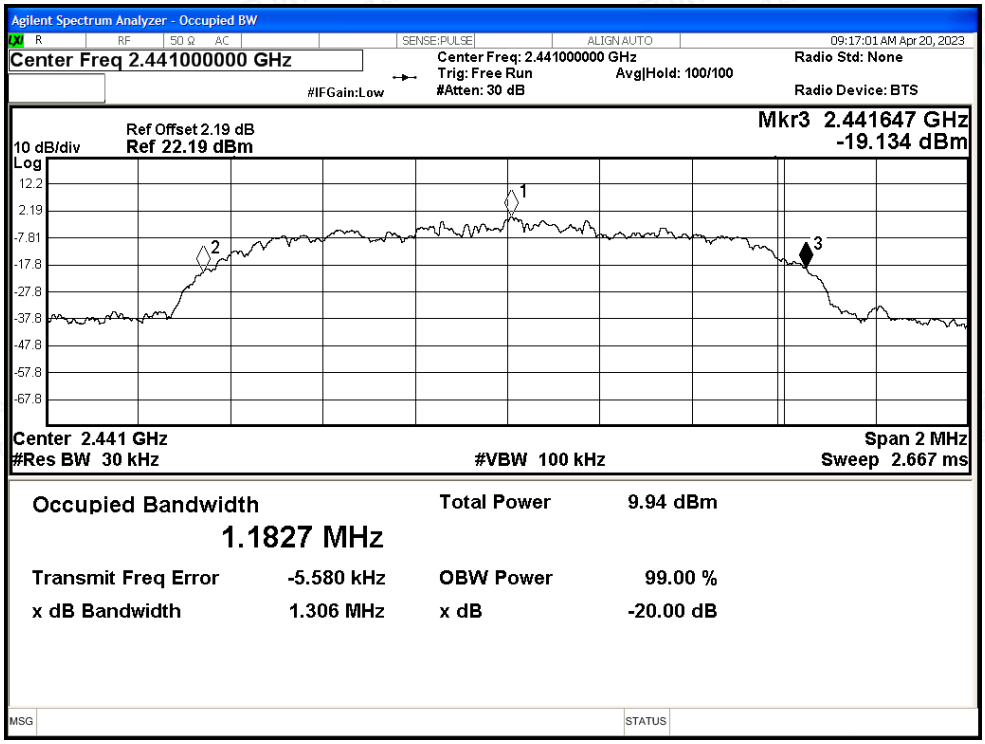
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



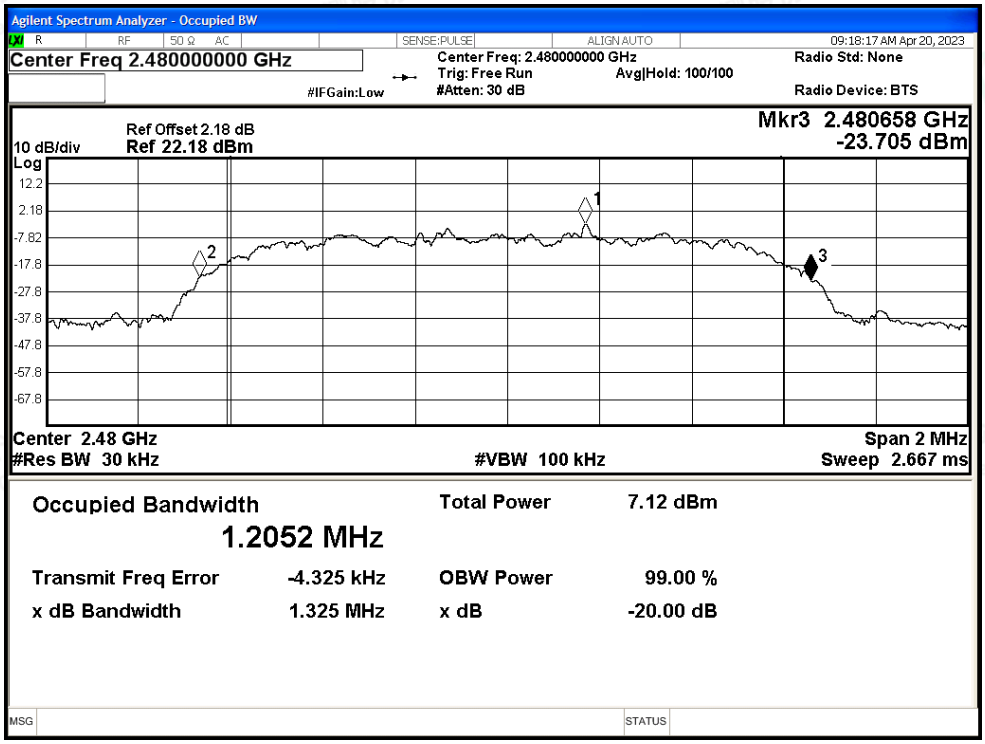
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



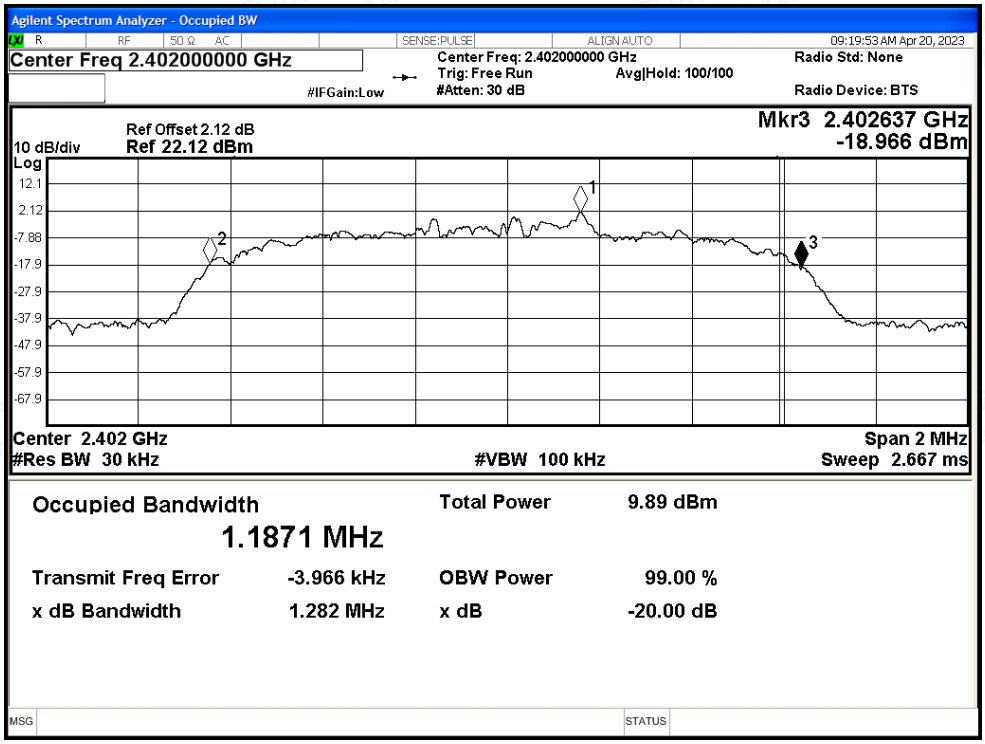
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



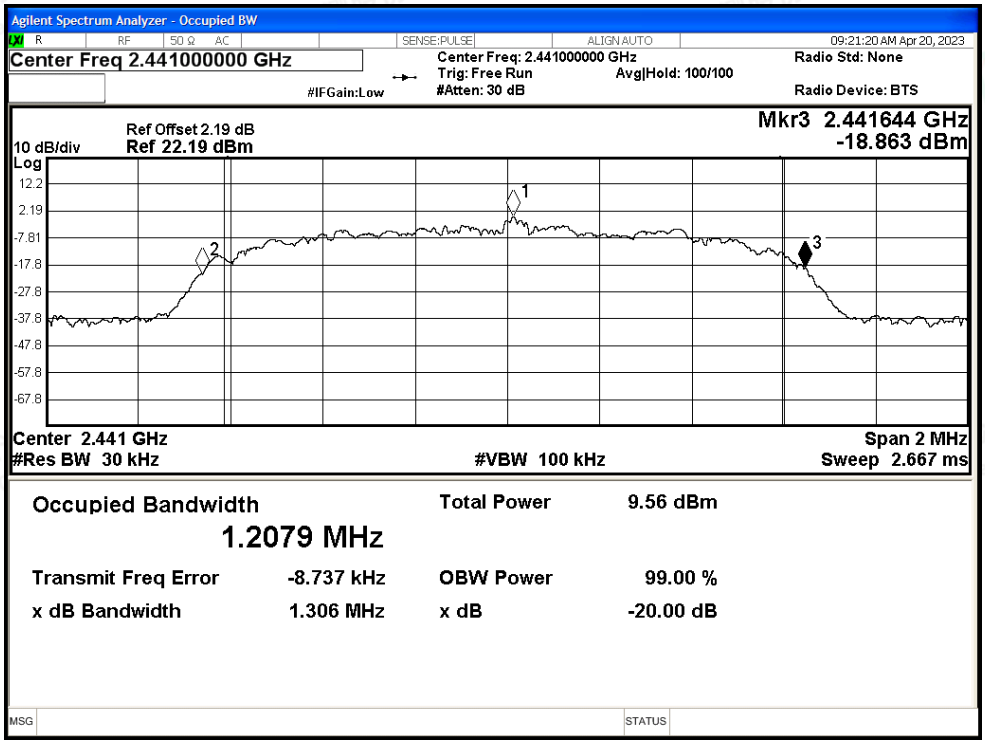
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



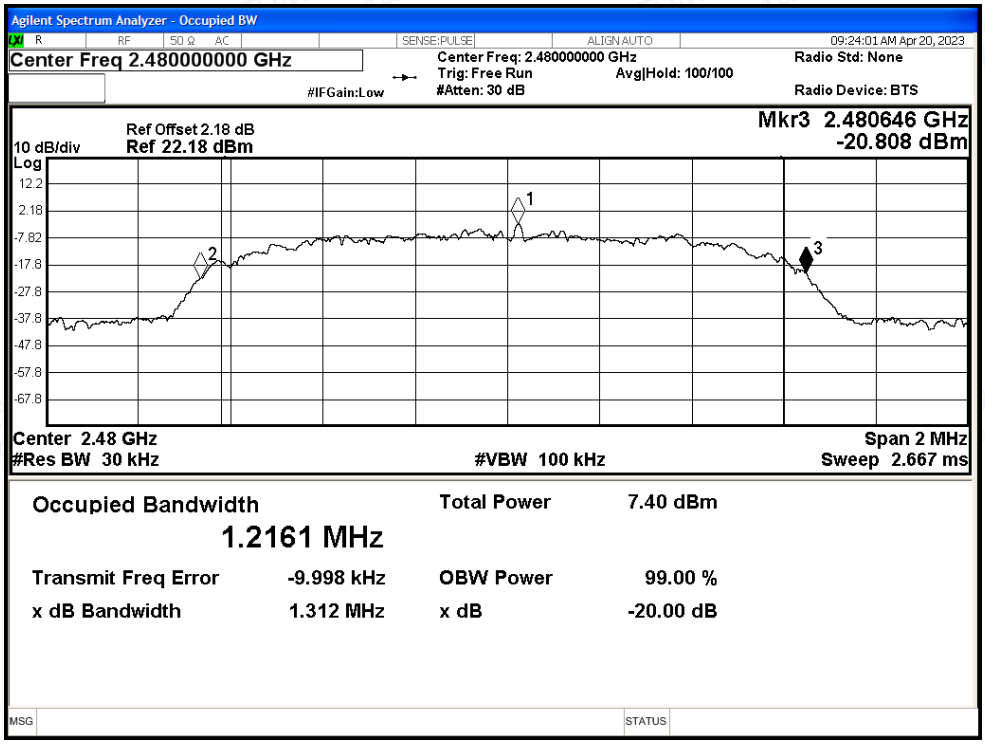
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1

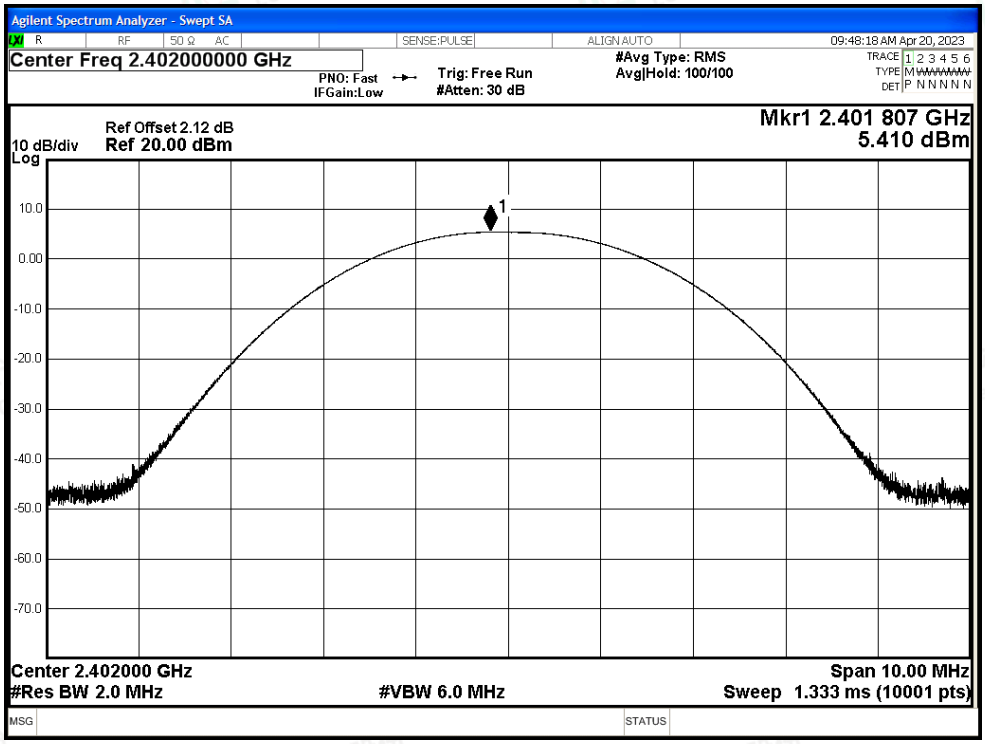


A.2 Maximum Conducted Output Power

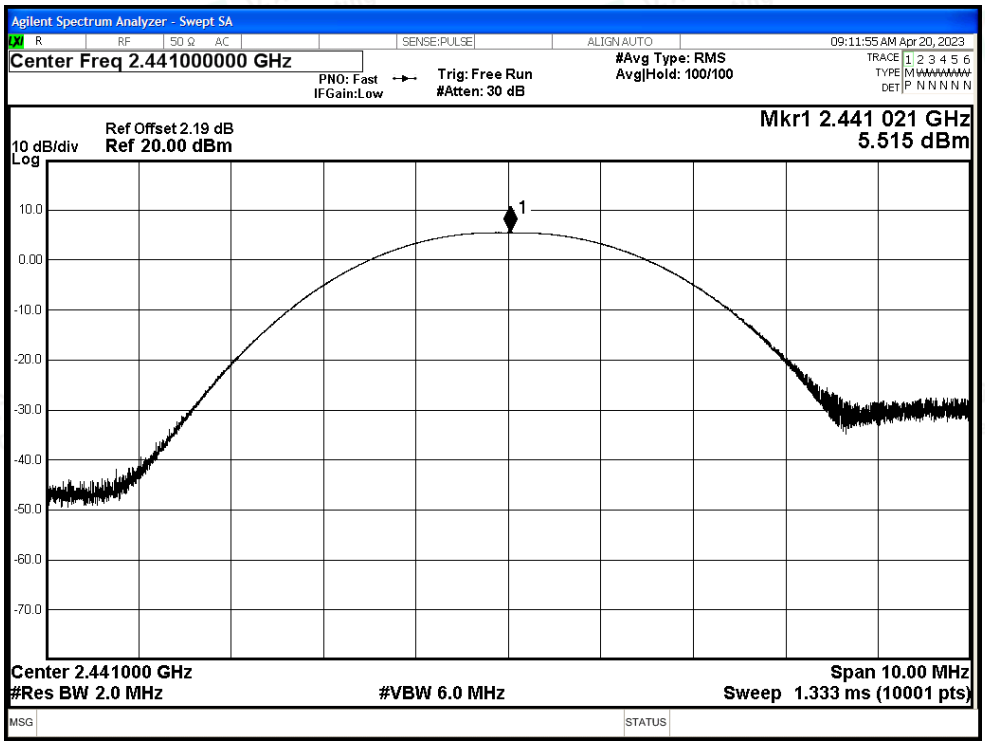
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	5.41	21	Pass
NVNT	1-DH5	2441	Ant1	5.52	21	Pass
NVNT	1-DH5	2480	Ant1	3.41	21	Pass
NVNT	2-DH5	2402	Ant1	4.73	21	Pass
NVNT	2-DH5	2441	Ant1	4.82	21	Pass
NVNT	2-DH5	2480	Ant1	2.79	21	Pass
NVNT	3-DH5	2402	Ant1	4.72	21	Pass
NVNT	3-DH5	2441	Ant1	4.91	21	Pass
NVNT	3-DH5	2480	Ant1	2.89	21	Pass

Test Graphs

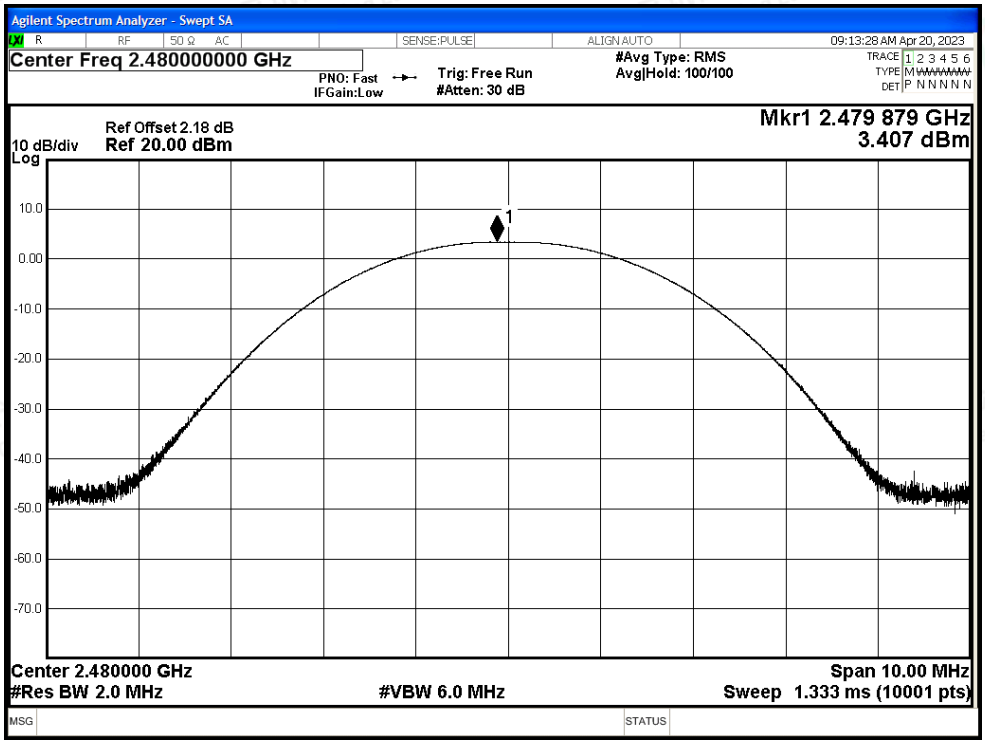
Power NVNT 1-DH5 2402MHz Ant1



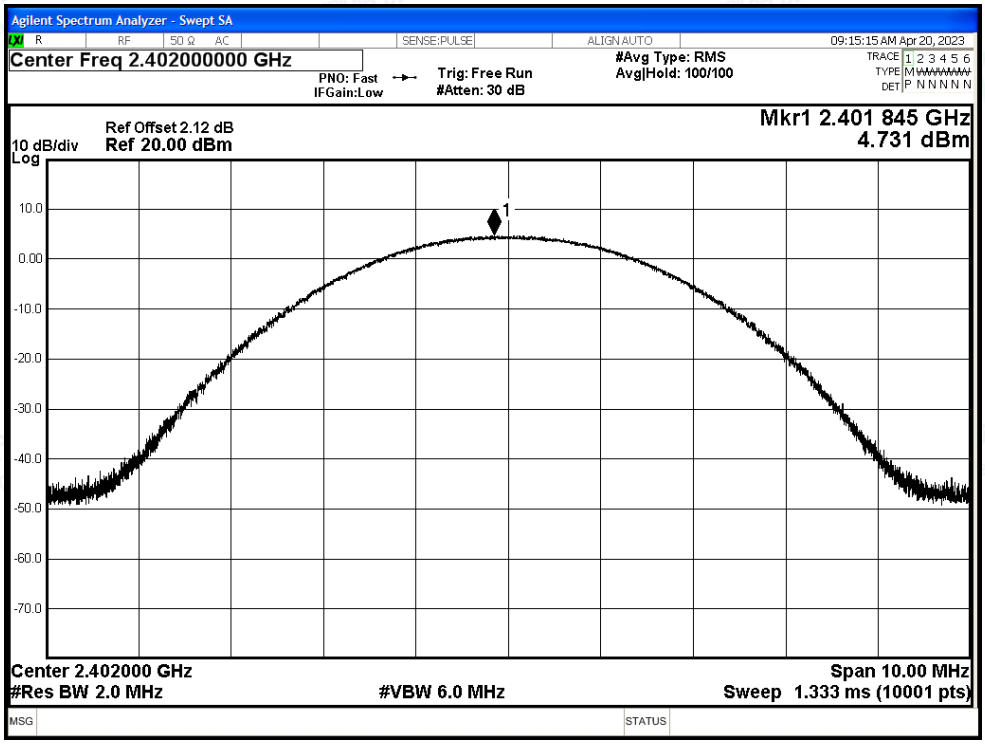
Power NVNT 1-DH5 2441MHz Ant1



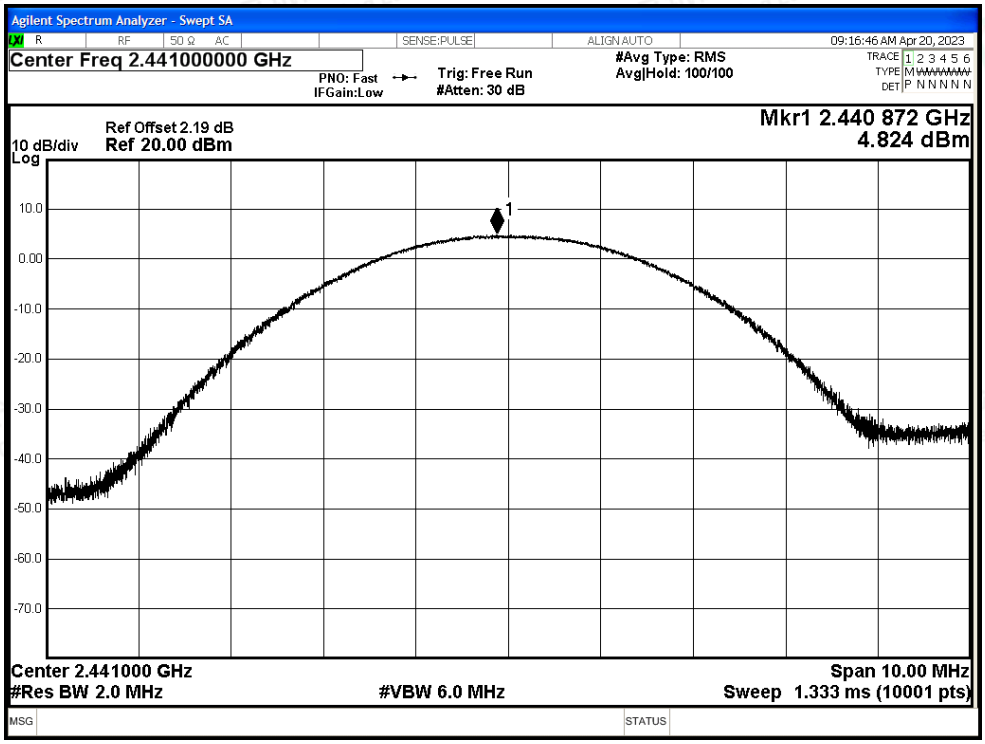
Power NVNT 1-DH5 2480MHz Ant1



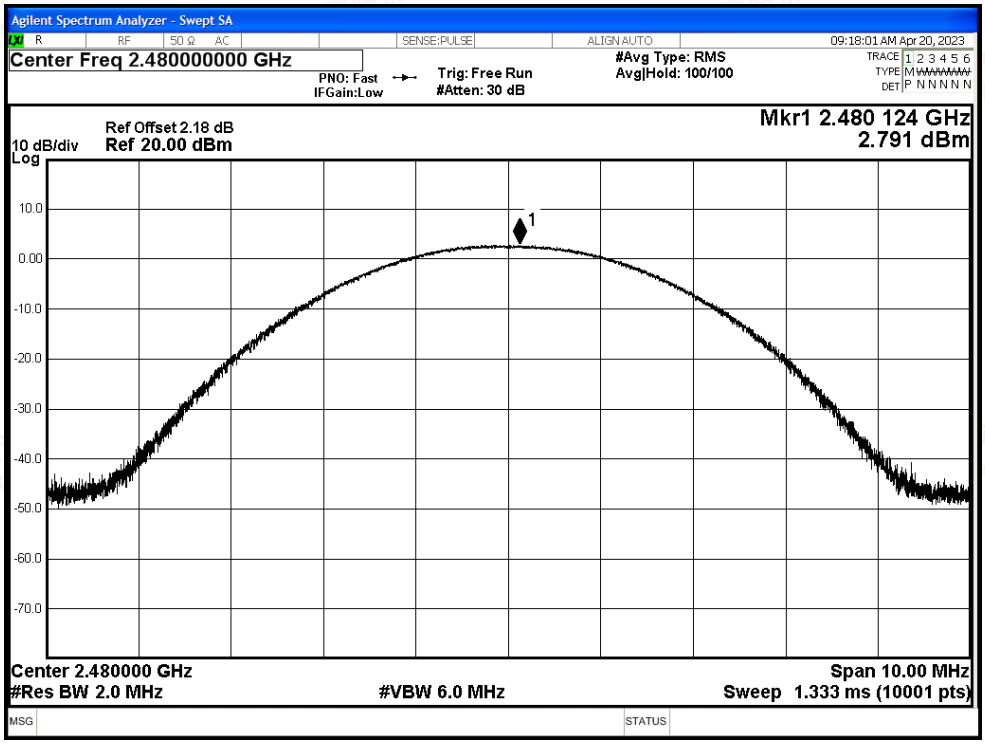
Power NVNT 2-DH5 2402MHz Ant1



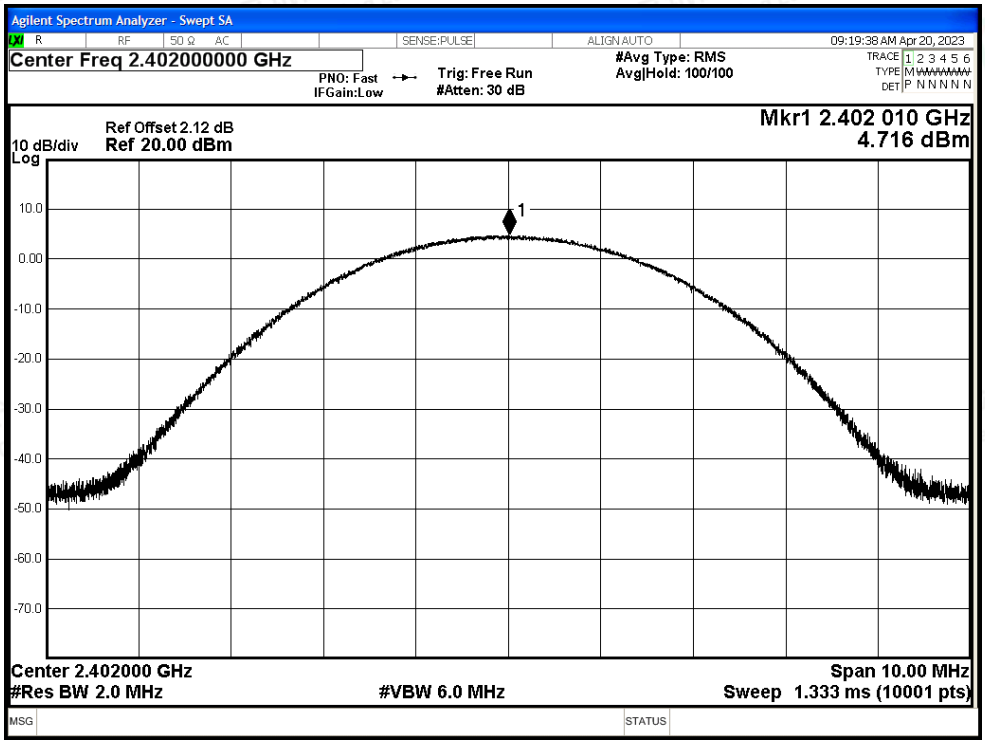
Power NVNT 2-DH5 2441MHz Ant1



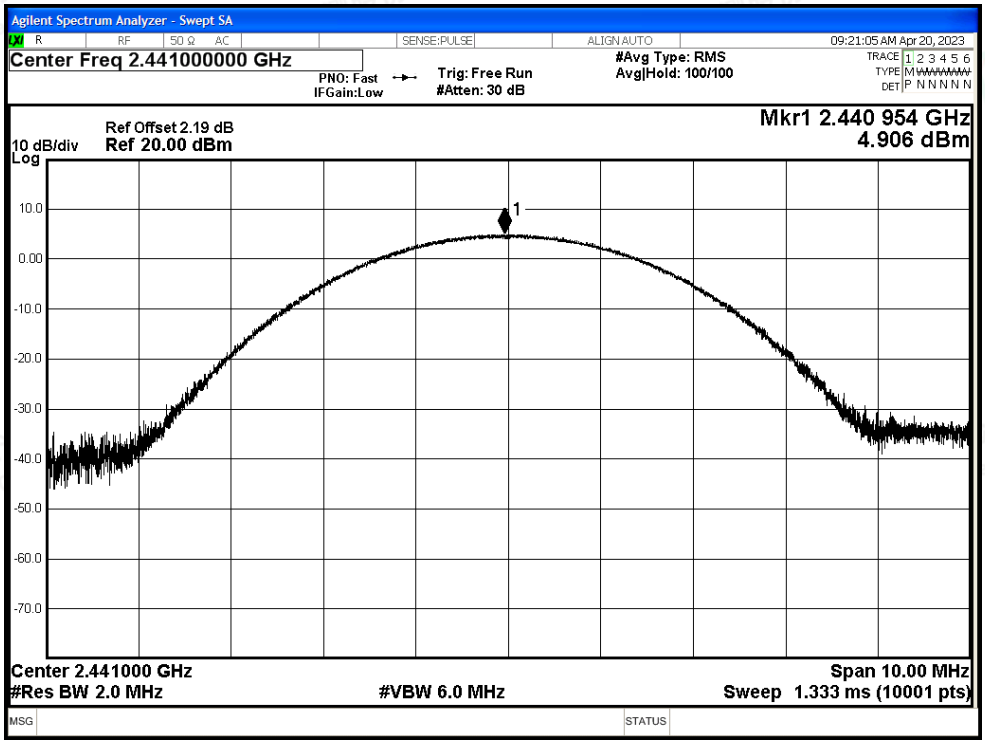
Power NVNT 2-DH5 2480MHz Ant1



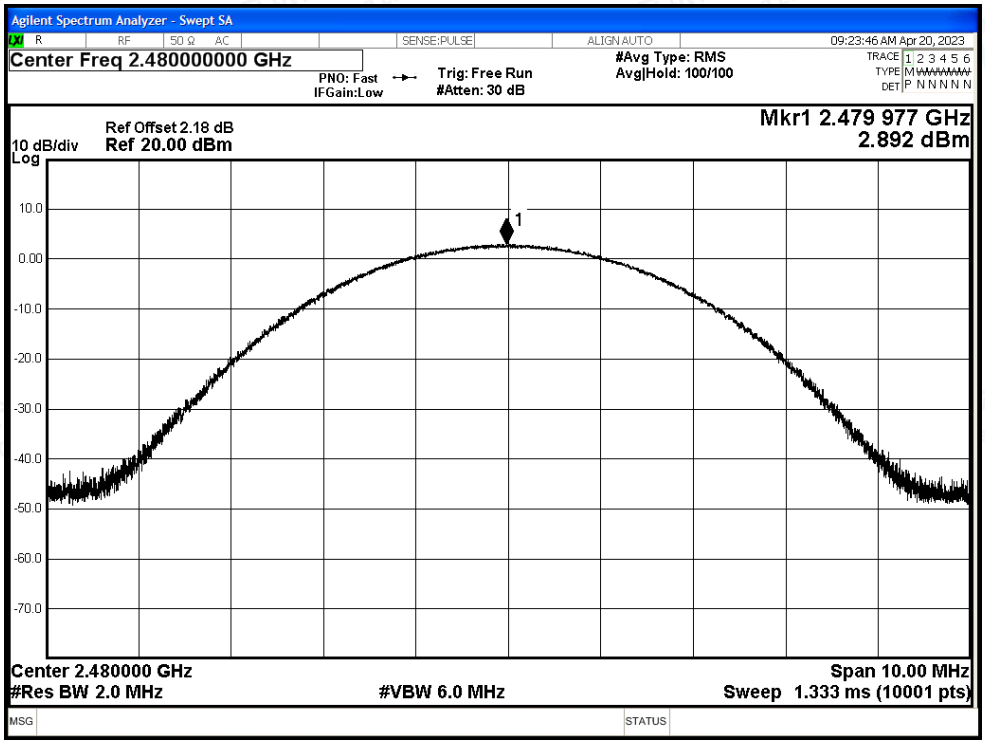
Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



Power NVNT 3-DH5 2480MHz Ant1

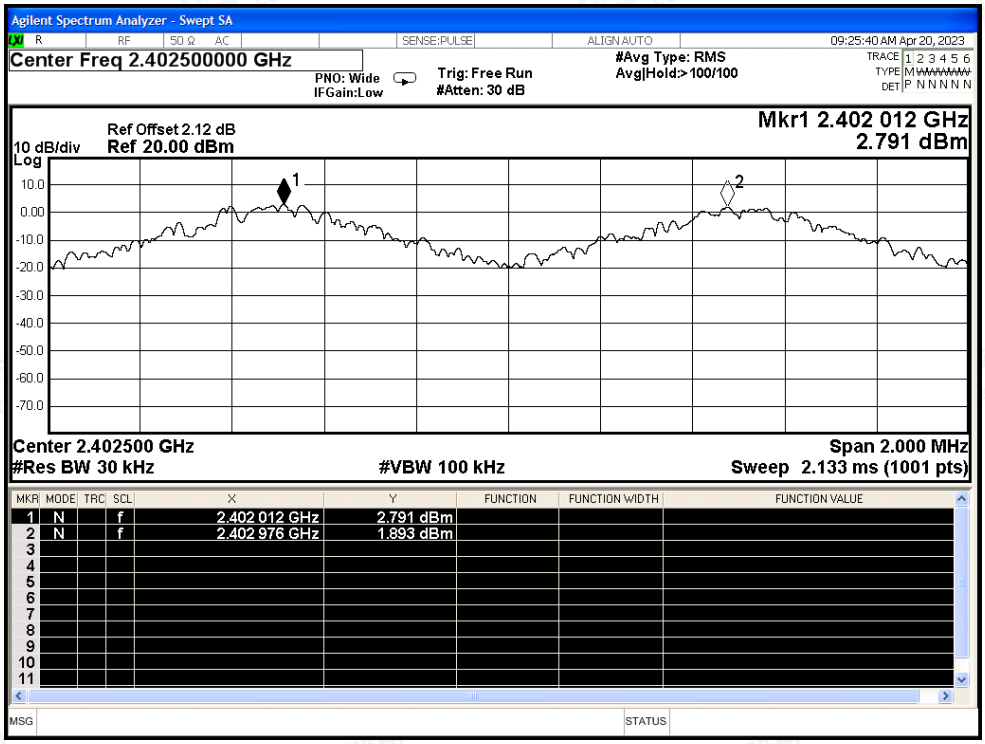


A.3 Carrier Frequencies Separation

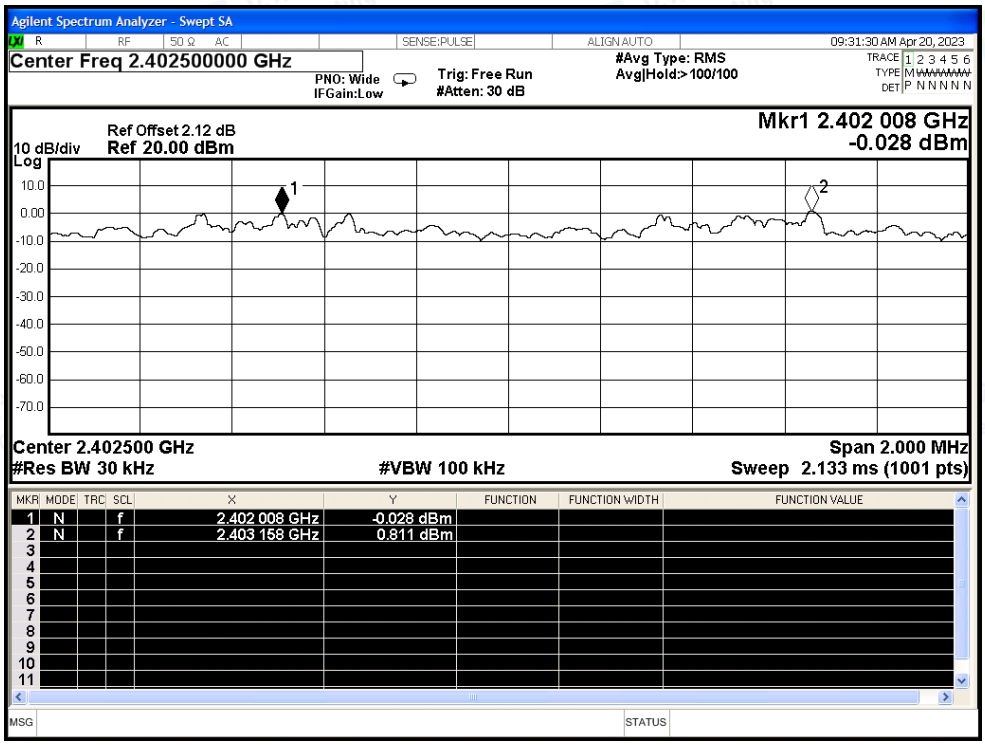
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.012	2402.976	0.964	0.689	Pass
NVNT	2-DH5	Ant1	2402.008	2403.158	1.150	0.883	Pass
NVNT	3-DH5	Ant1	2402.014	2403.162	1.148	0.875	Pass

Test Graphs

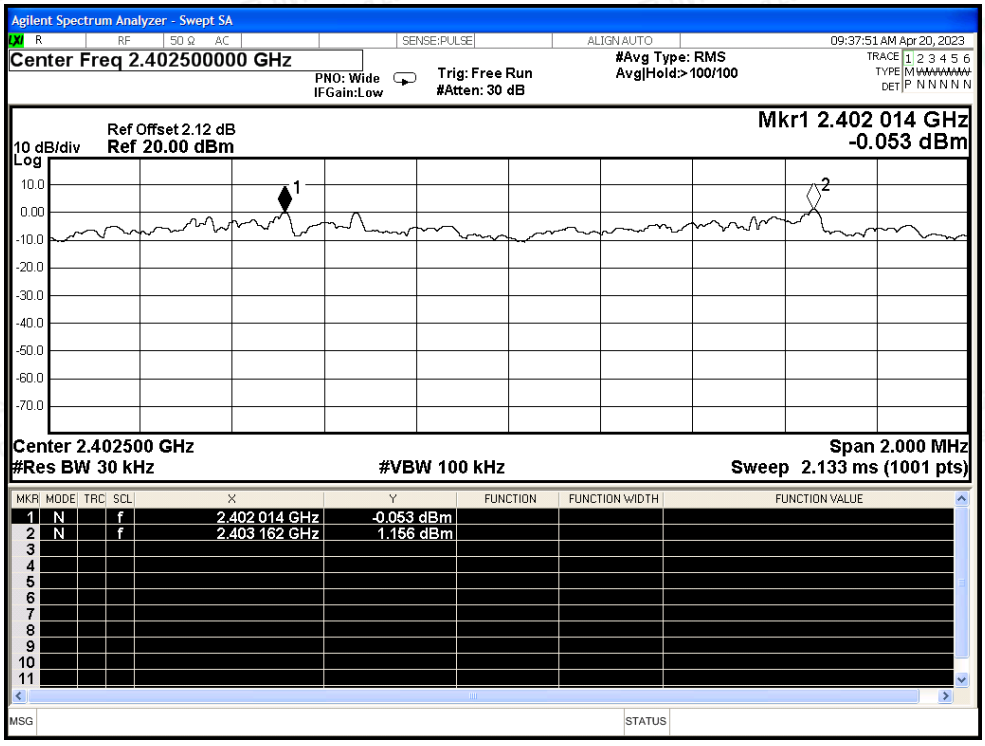
CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2402MHz Ant1

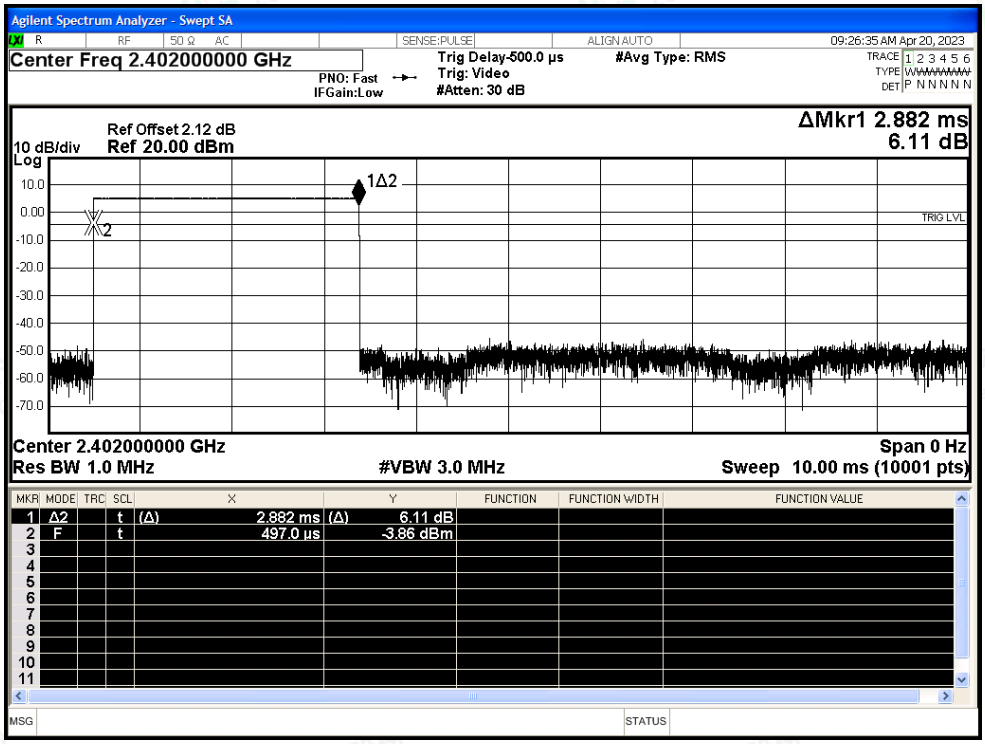


A.4 Dwell Time

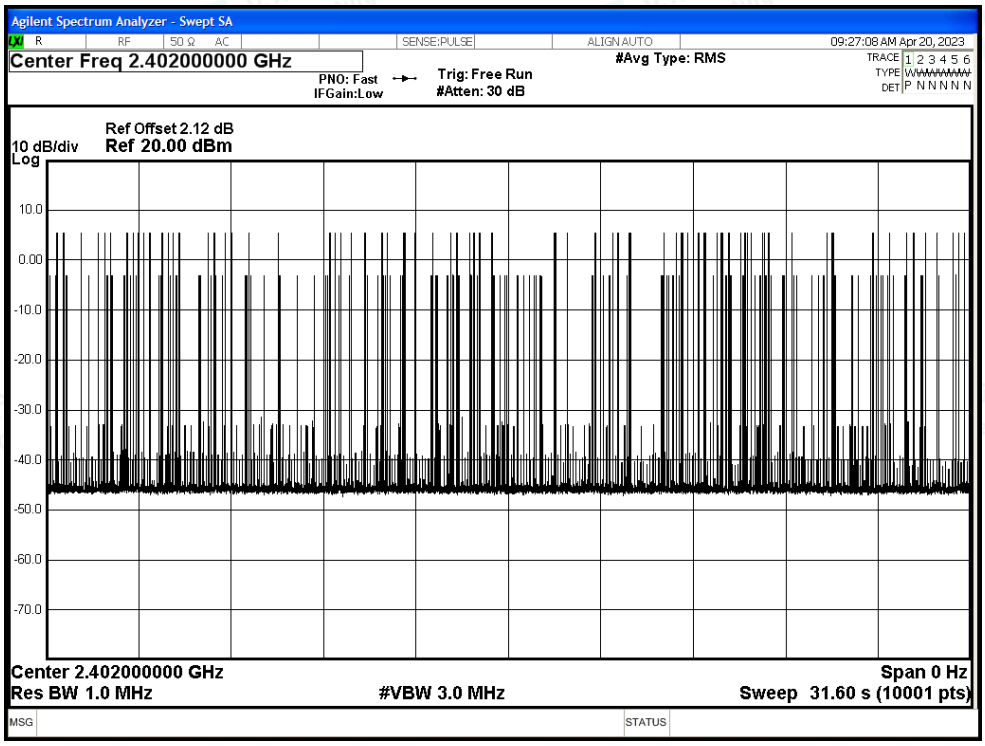
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.882	270.908	94	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.885	297.155	103	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.886	288.6	100	31600	400	Pass

Test Graphs

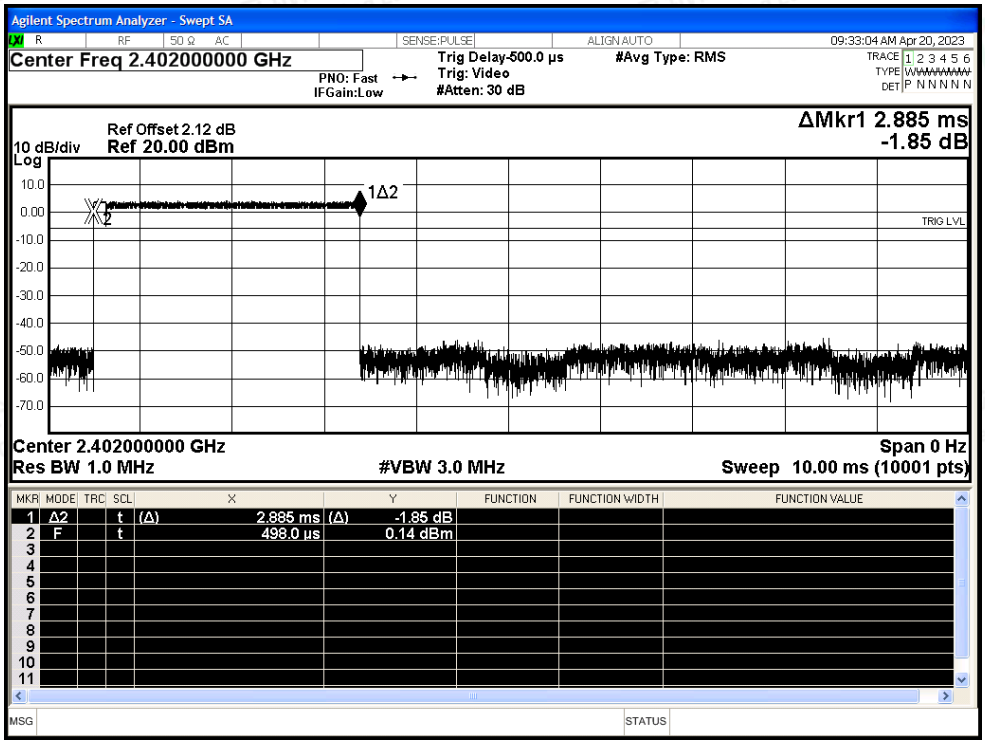
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



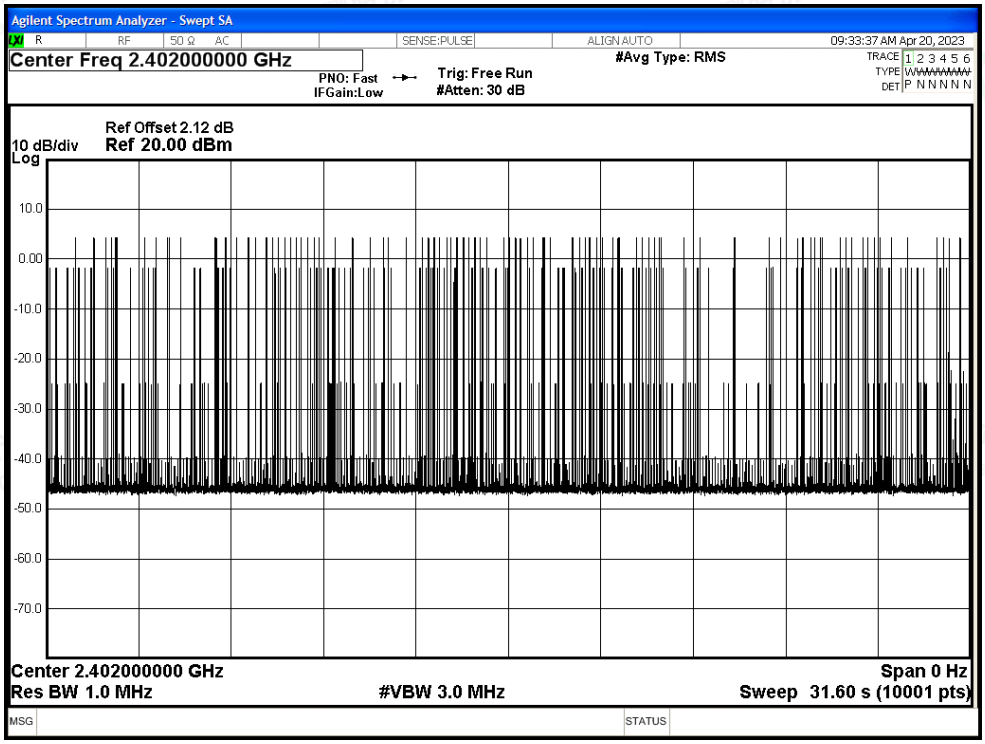
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



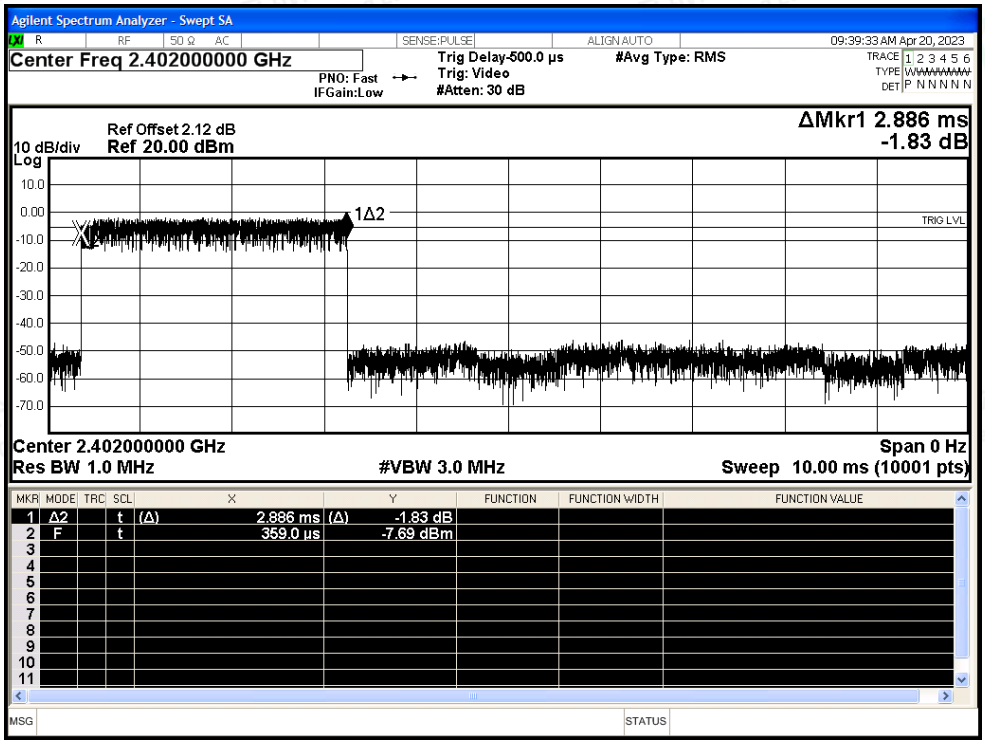
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



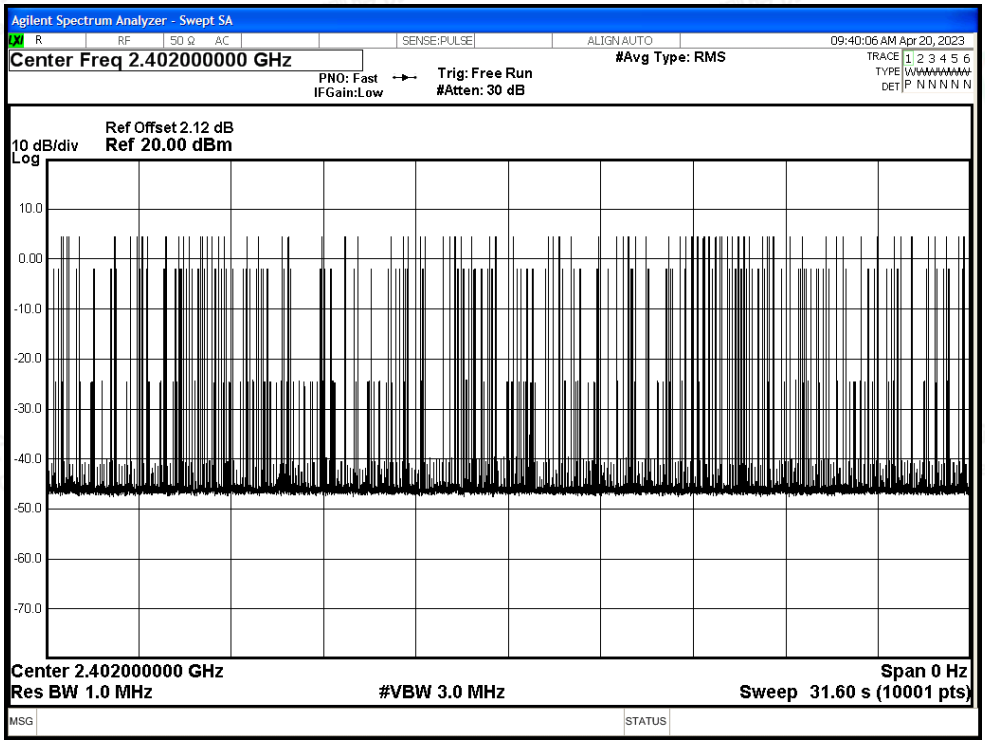
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated

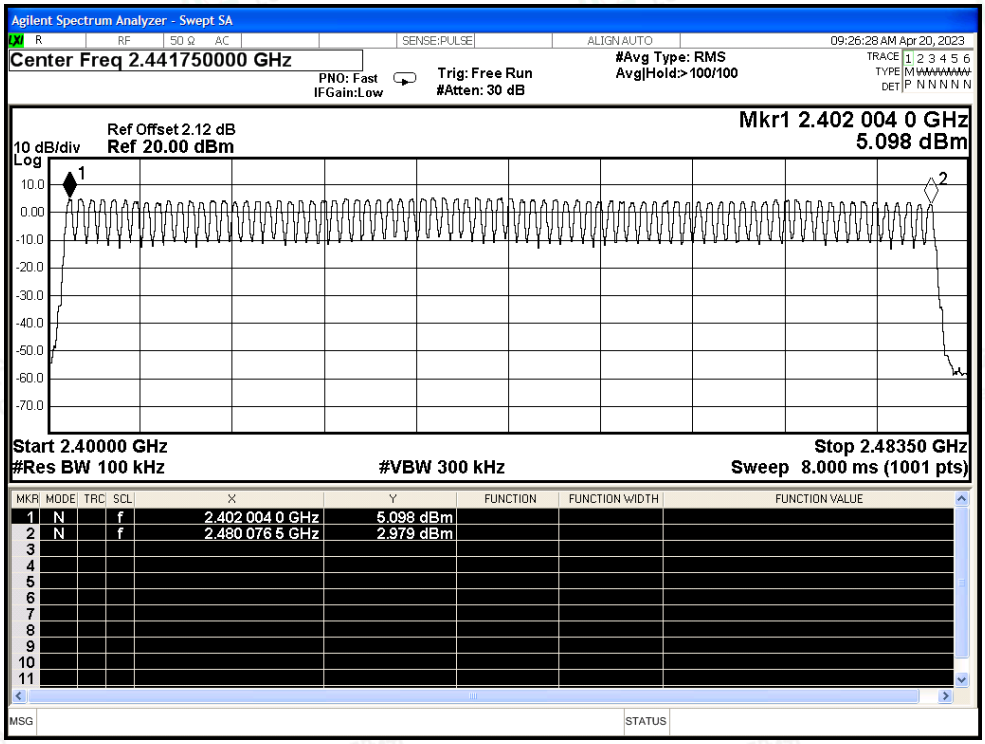


A.5 Number of Hopping Channel

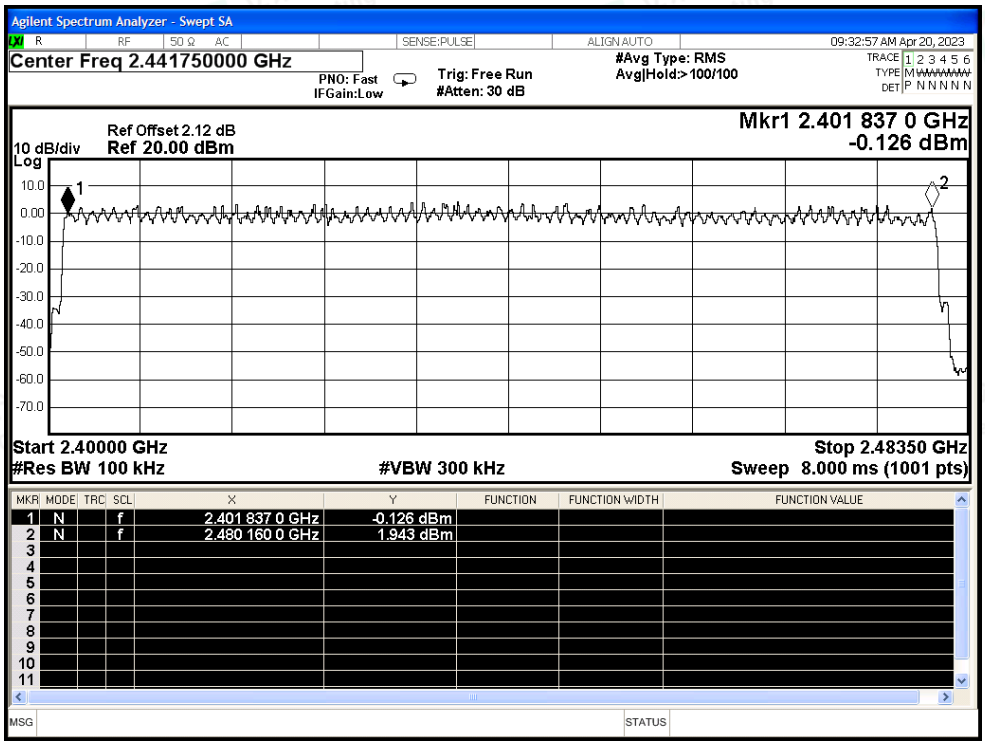
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

Test Graphs

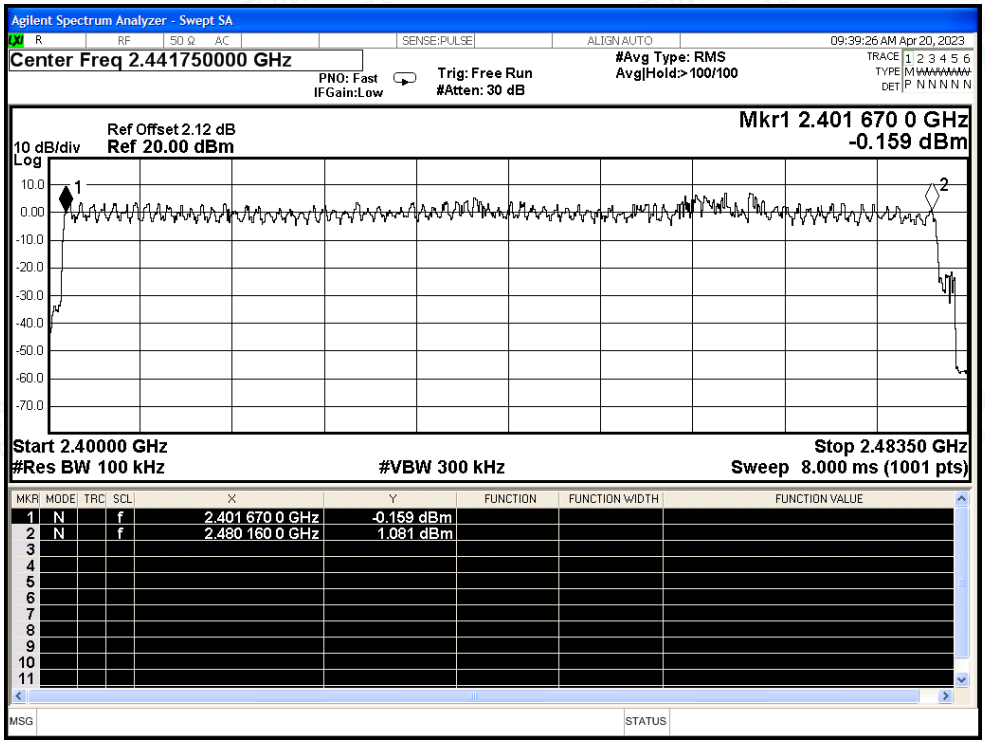
Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



Hopping No. NVNT 3-DH5 2402MHz Ant1

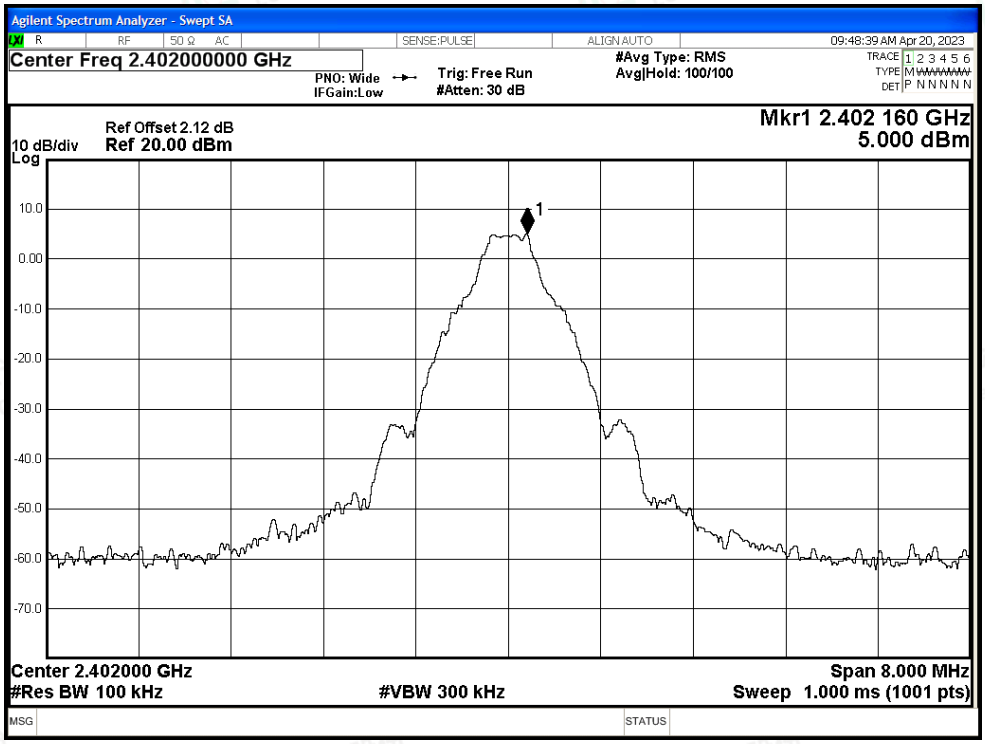


A.6 Band Edge

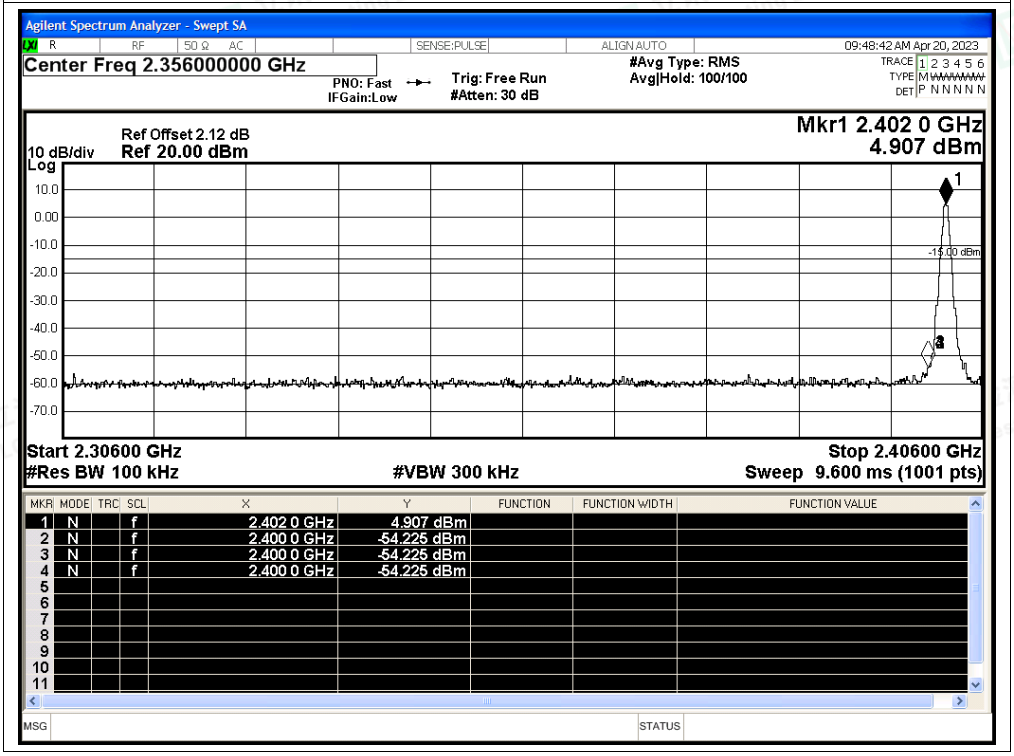
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-59.23	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-59.66	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-56.31	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-57.74	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-55.6	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-59.08	-20	Pass

Test Graphs

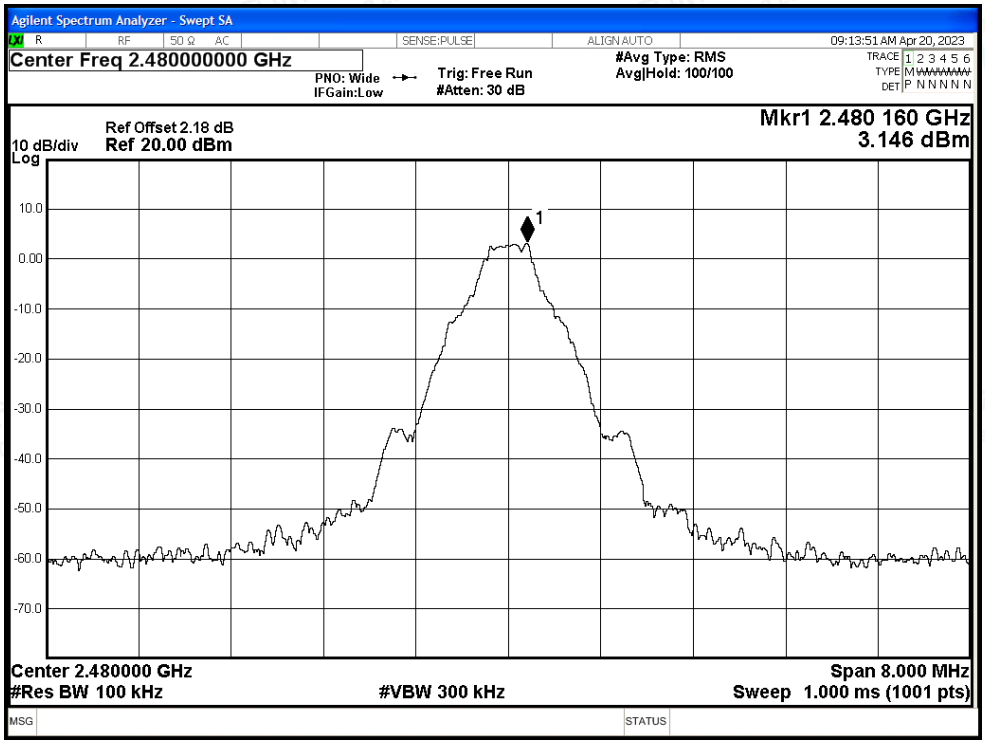
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



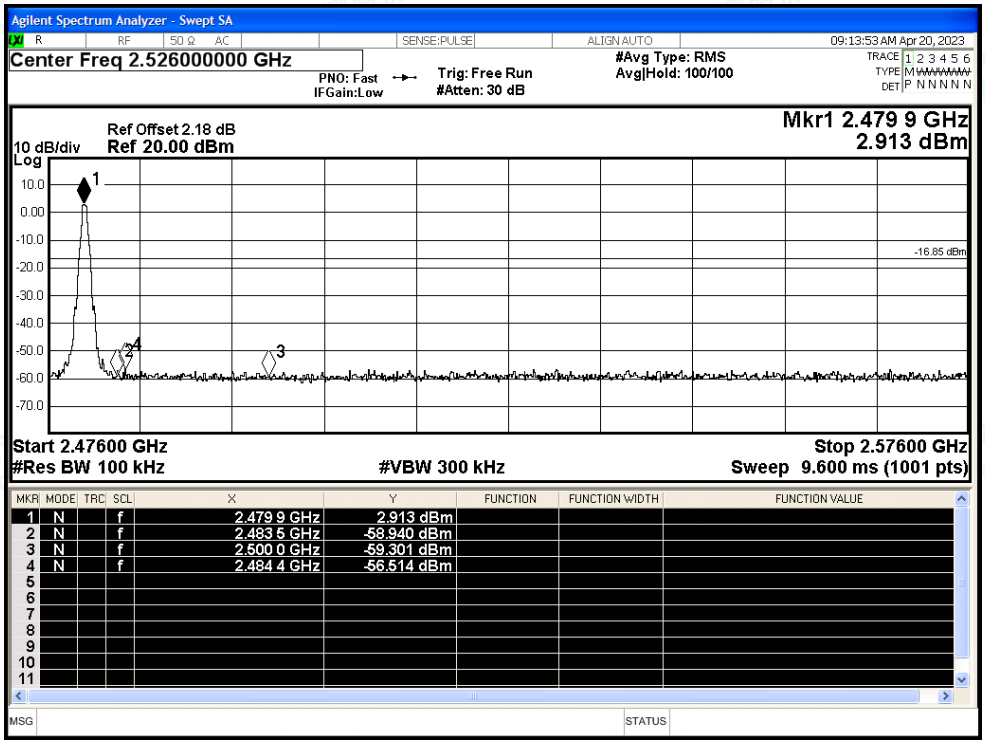
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



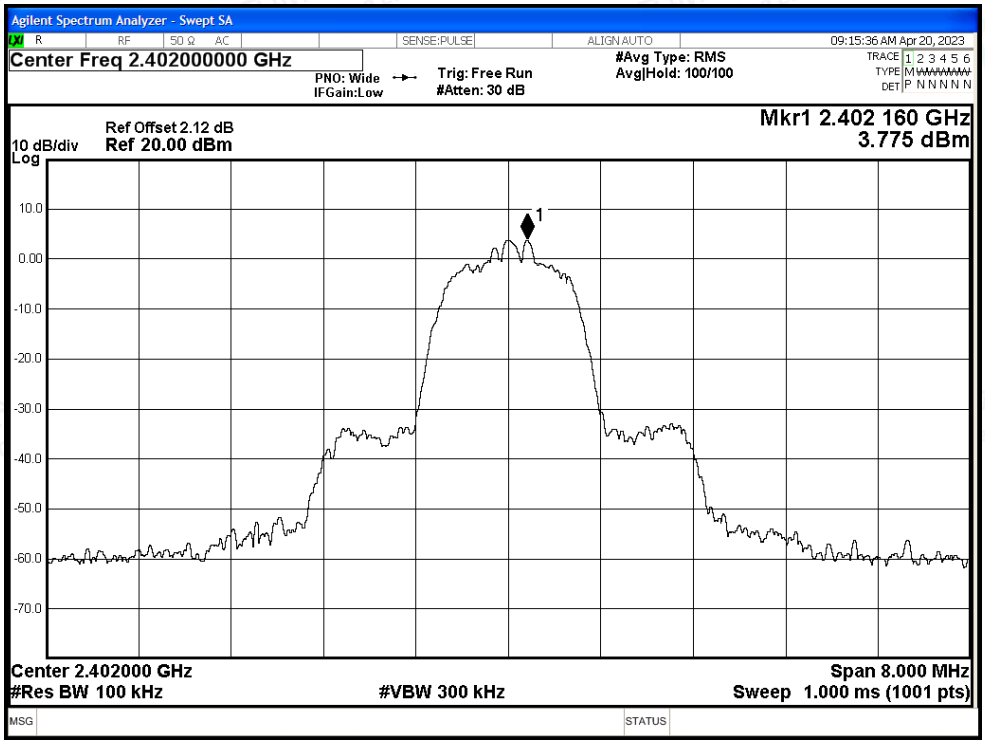
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



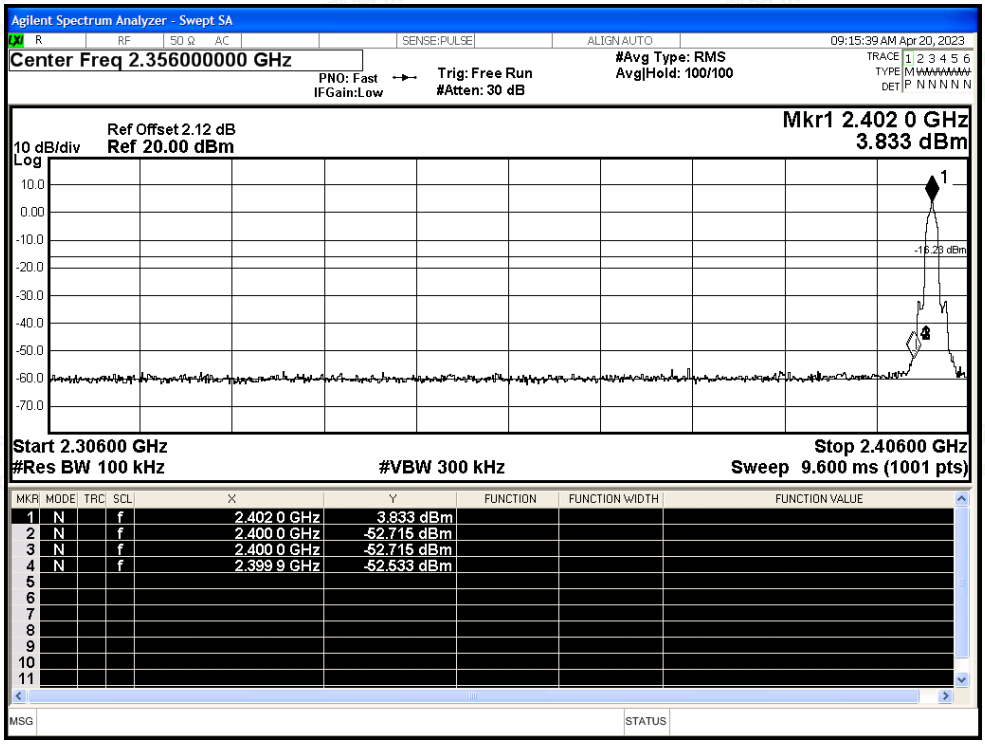
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



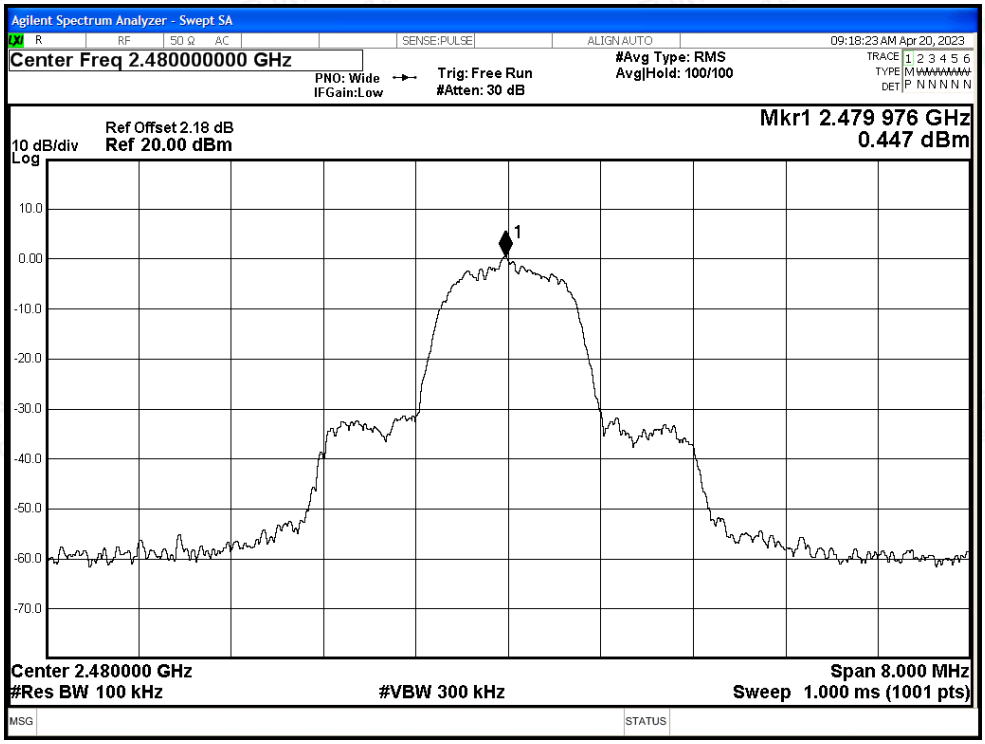
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



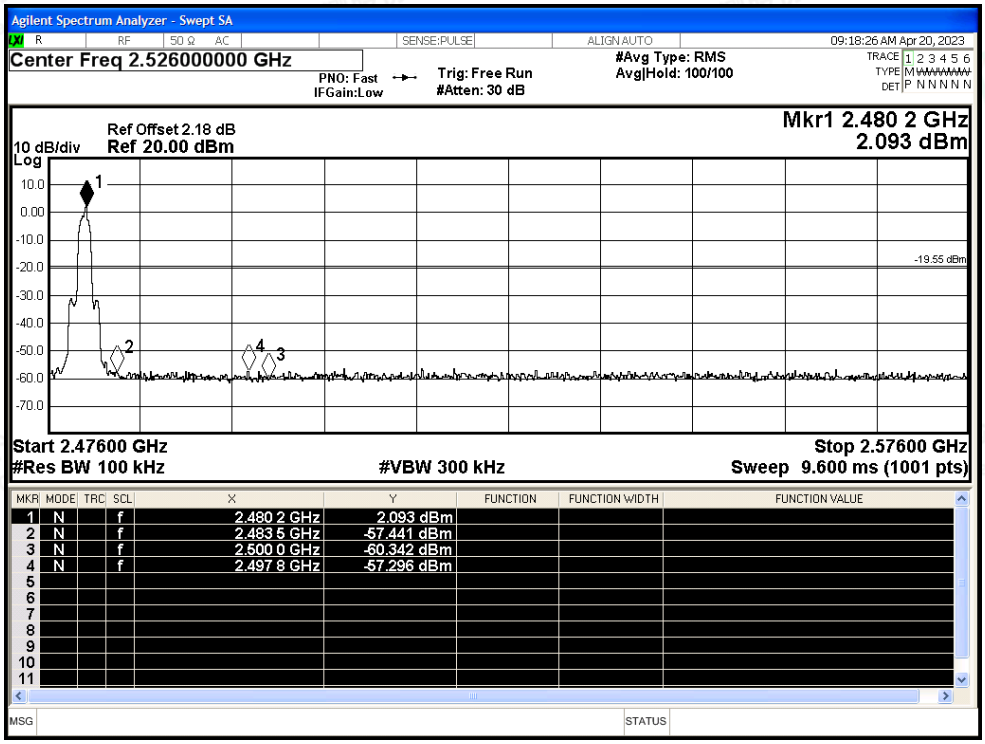
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



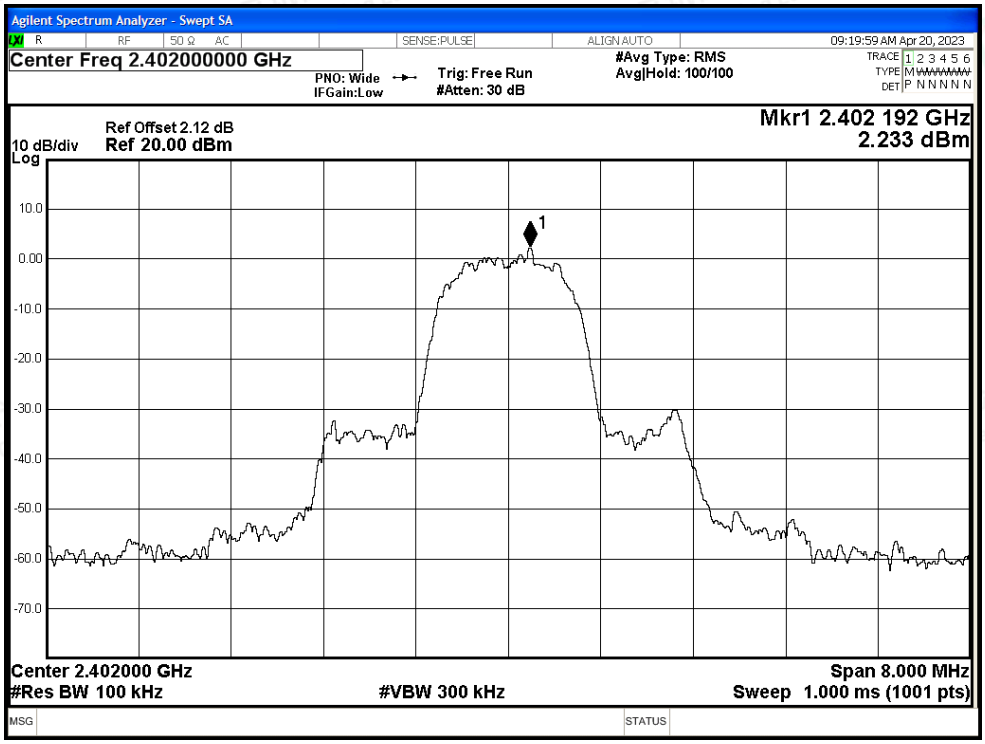
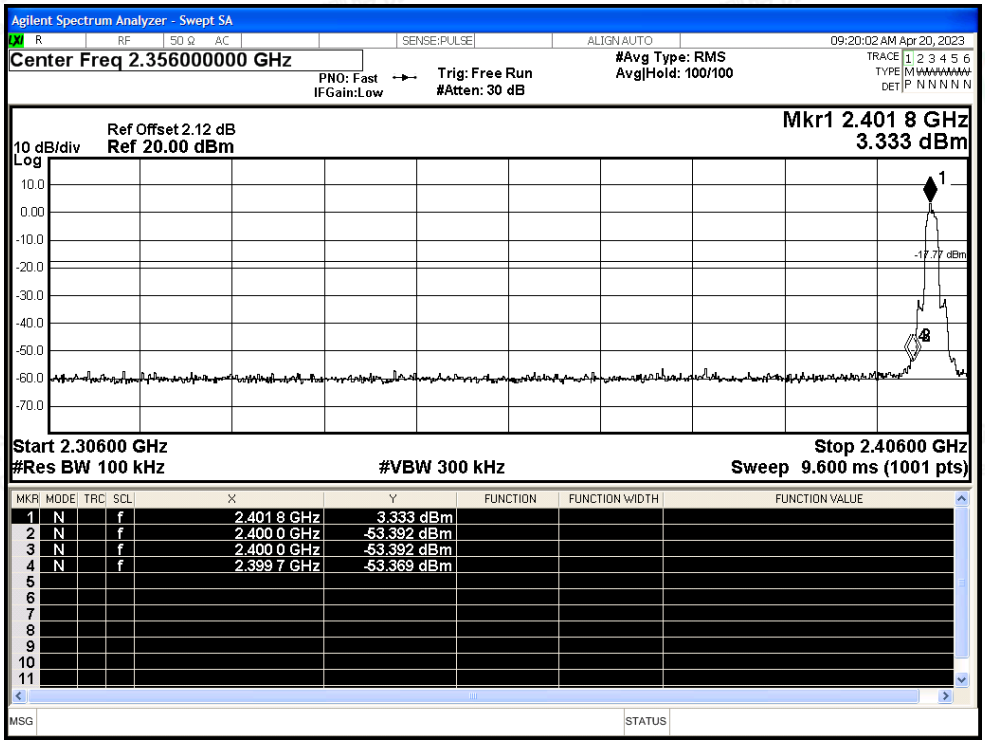
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



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