Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Foil Christmas Tree with White/Multicolor LEDs and Speaker

Test Model: LTJ133L-CC

Environmental Conditions

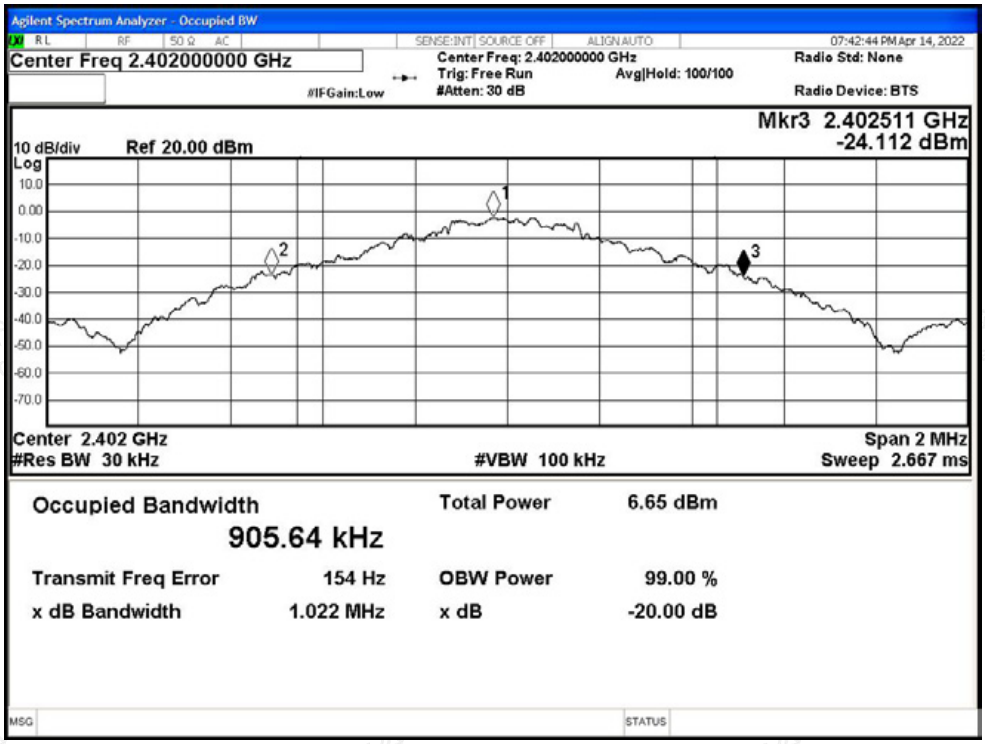
Temperature:	23.5 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Bill Zhu
Supervised by:	Li huan

A.1 20dB Bandwidth

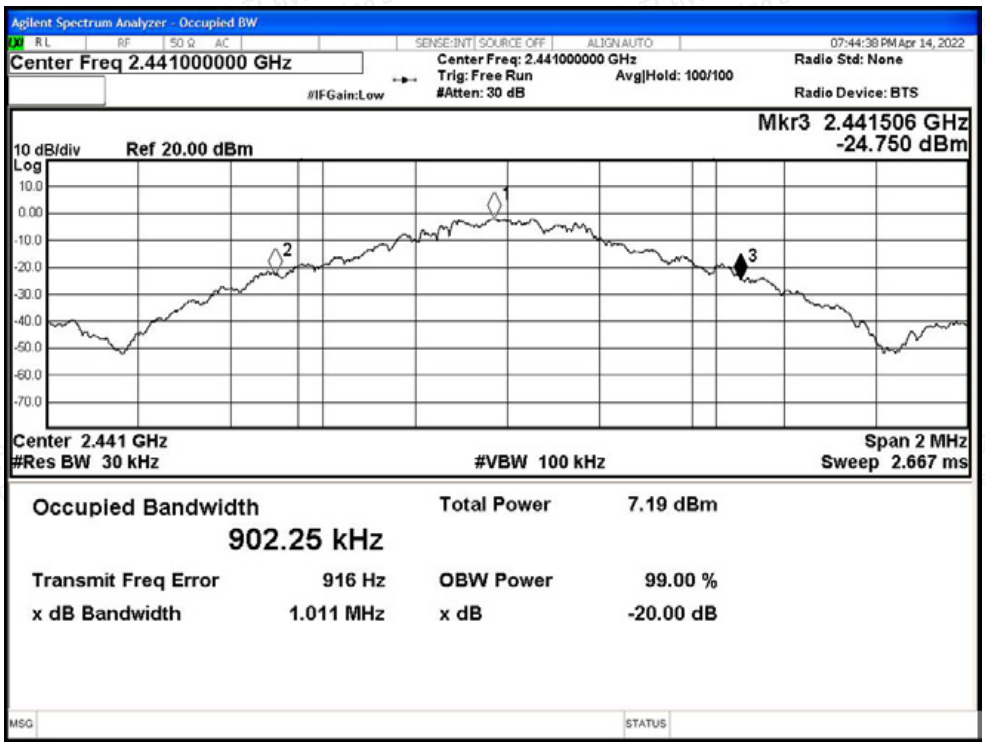
Condition	Mode	Frequency (MHz)	Antenna	20 dB Bandwidth (MHz)	Limit 20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	1.022	0	Pass
NVNT	1-DH5	2441	Ant1	1.011	0	Pass
NVNT	1-DH5	2480	Ant1	0.962	0	Pass
NVNT	2-DH5	2402	Ant1	1.333	0	Pass
NVNT	2-DH5	2441	Ant1	1.29	0	Pass
NVNT	2-DH5	2480	Ant1	1.274	0	Pass
NVNT	3-DH5	2402	Ant1	1.276	0	Pass
NVNT	3-DH5	2441	Ant1	1.279	0	Pass
NVNT	3-DH5	2480	Ant1	1.299	0	Pass

Test Graphs

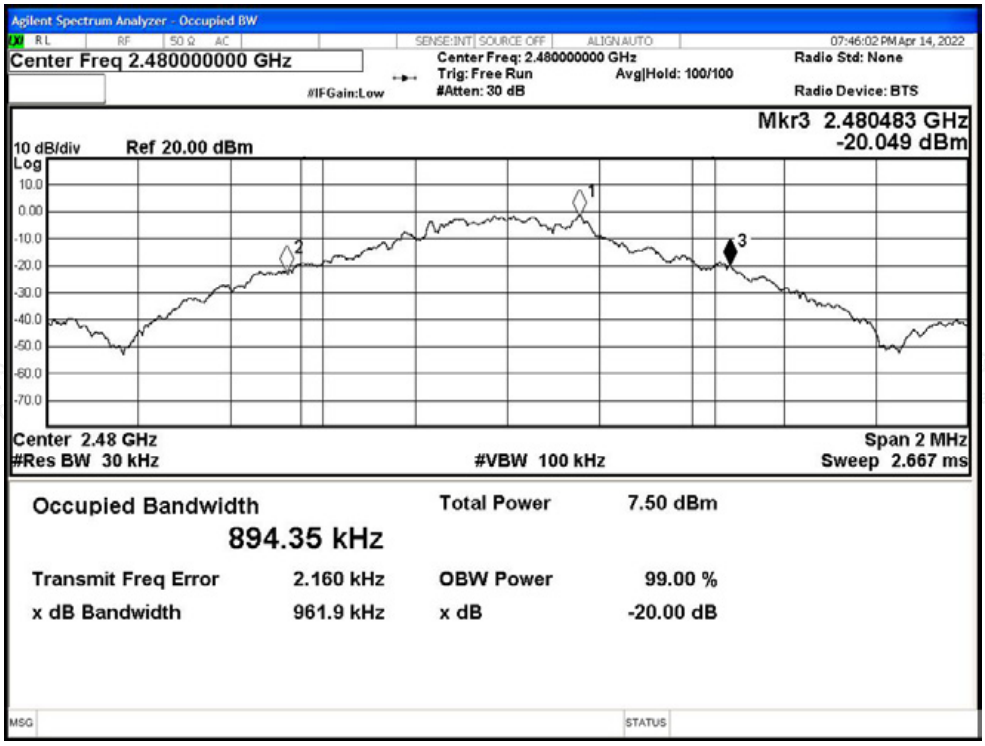
20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



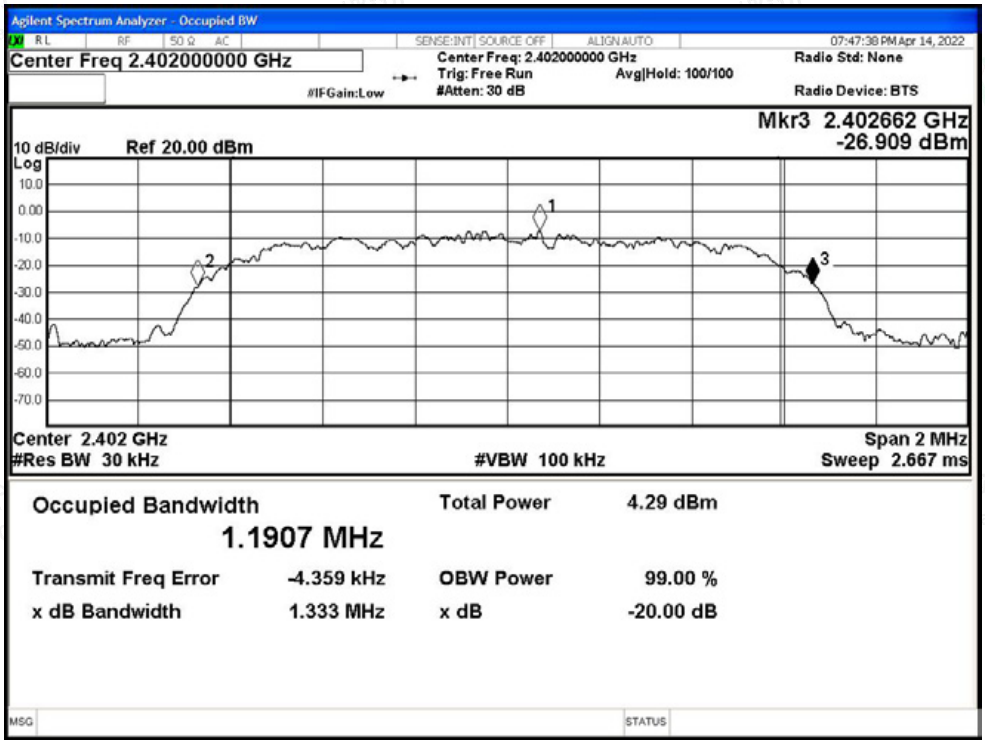
20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



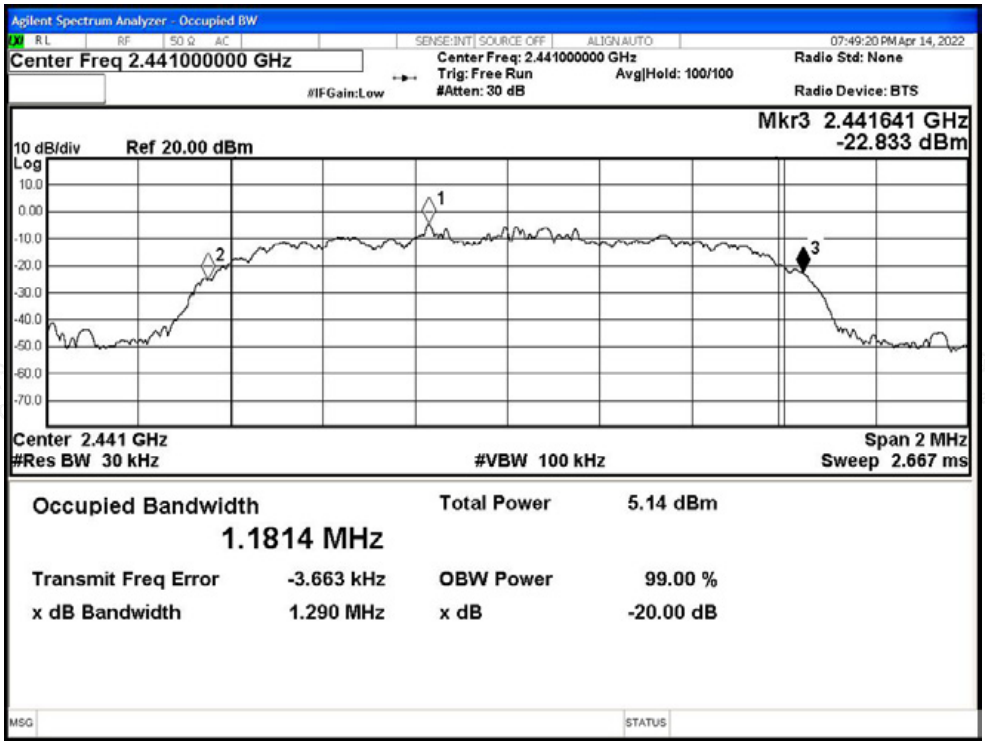
20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



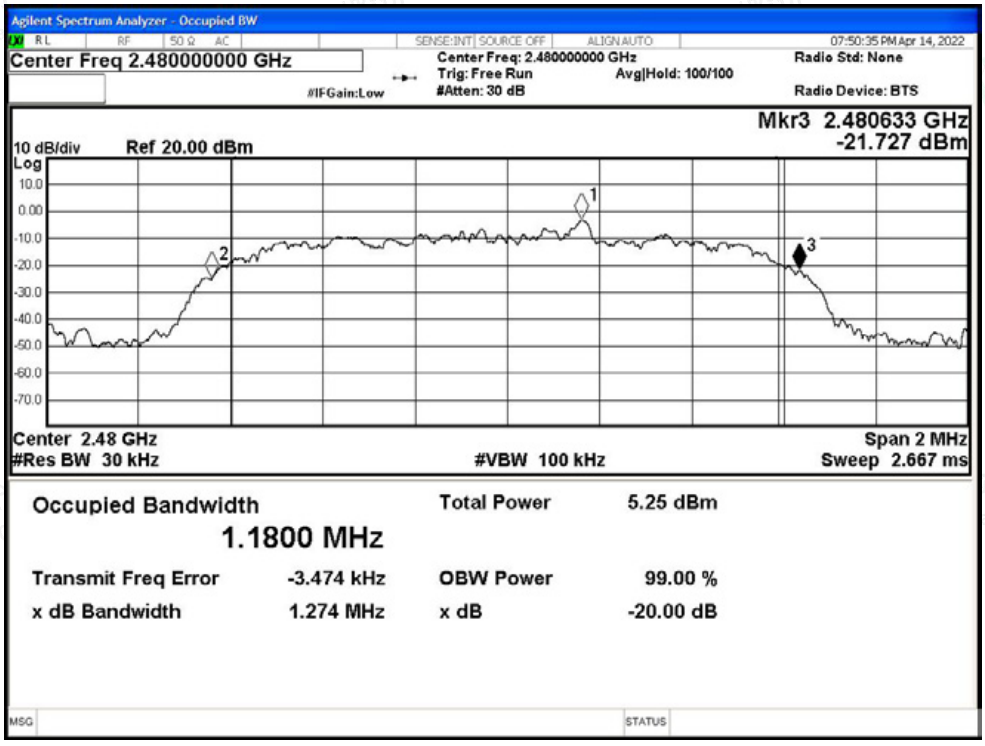
20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



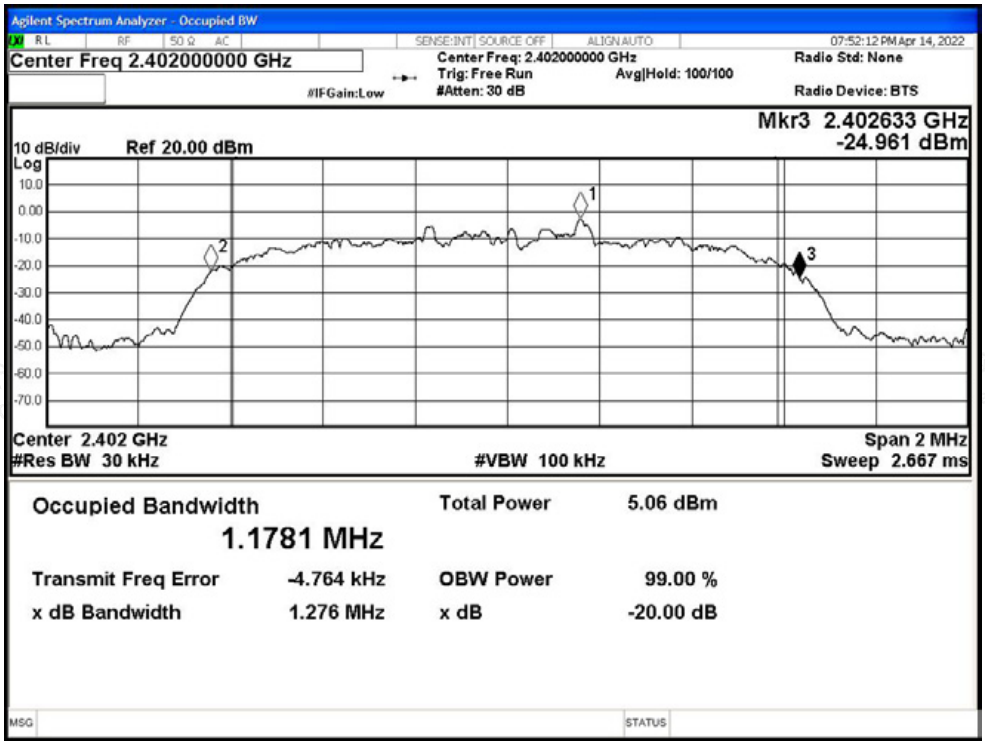
20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



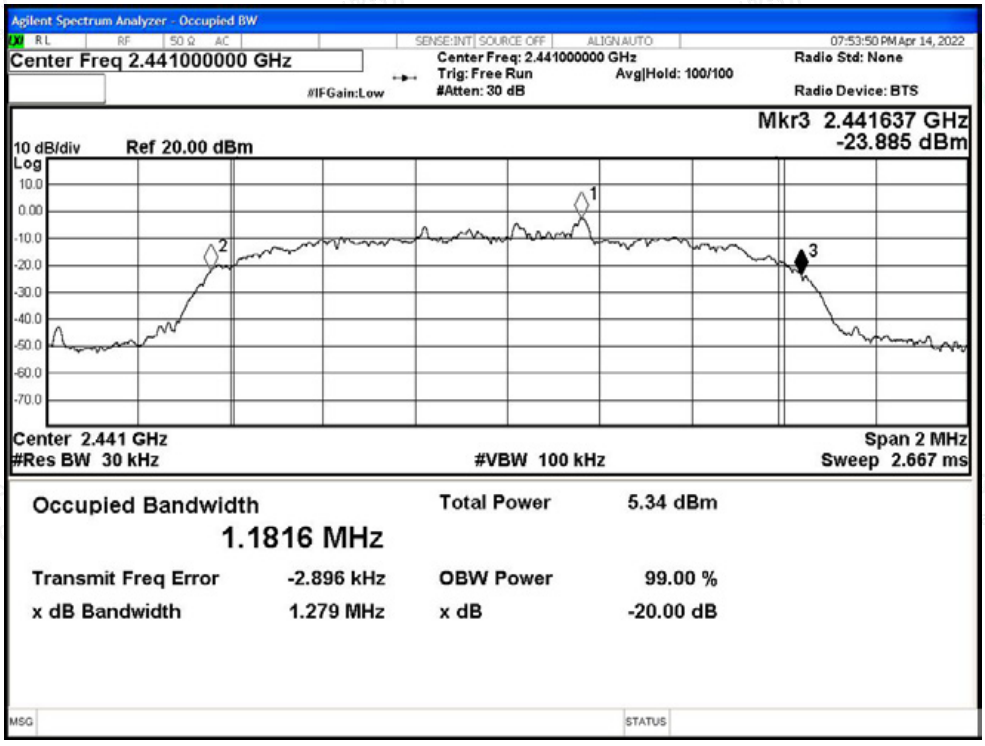
20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



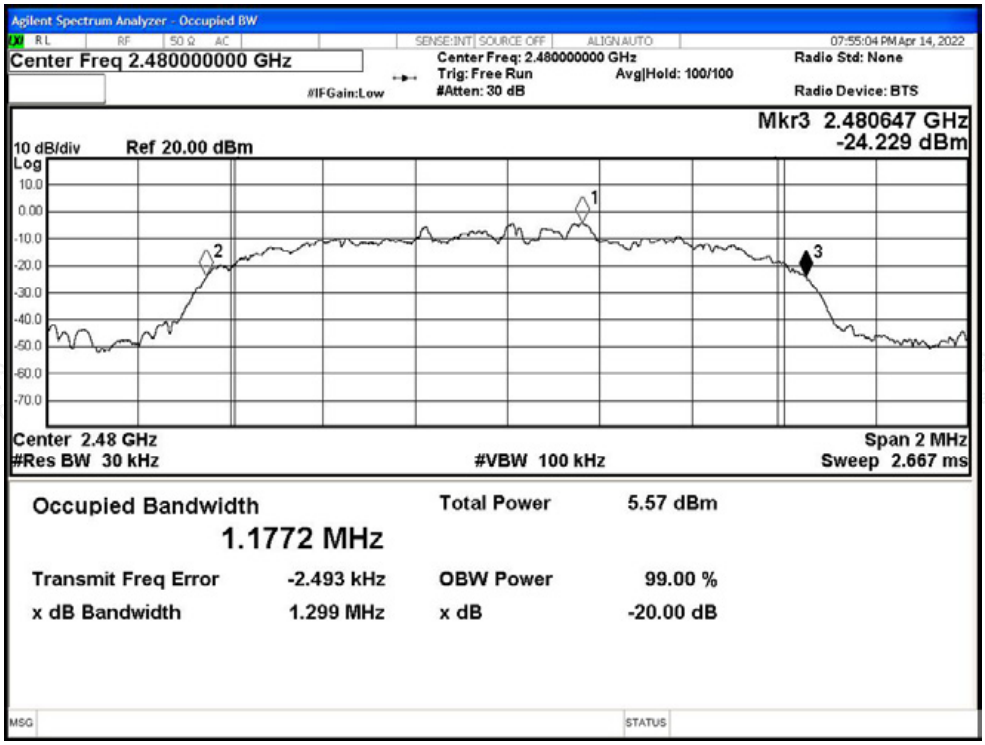
20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



20dB Bandwidth NVNT 3-DH5 2480MHz Ant1

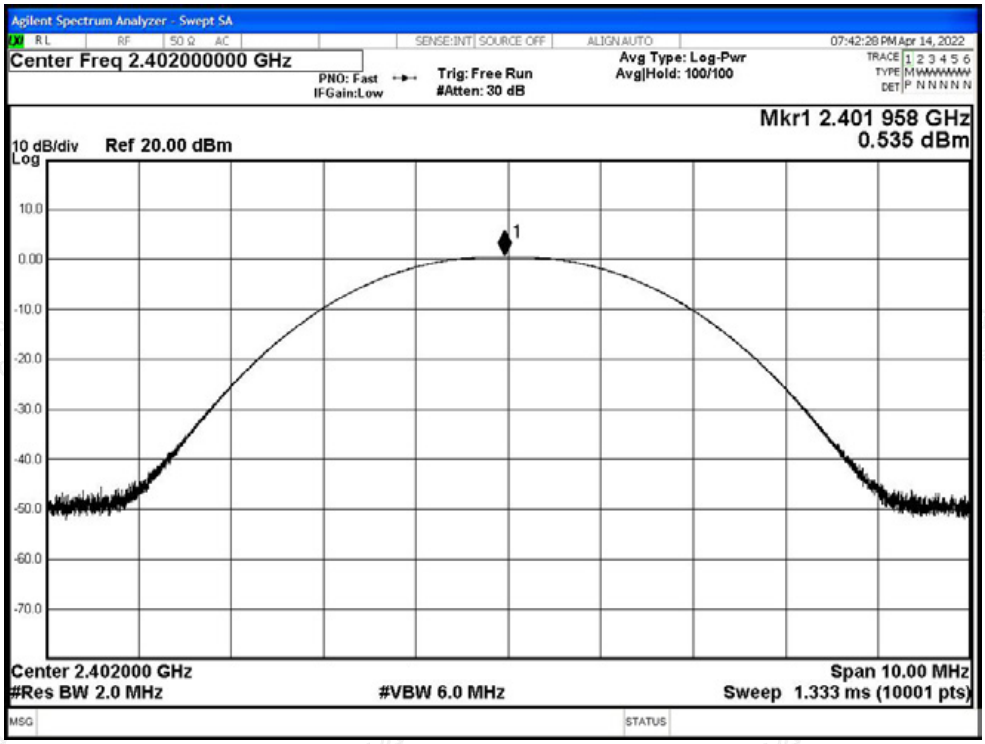


A.2 Maximum Conducted Output Power

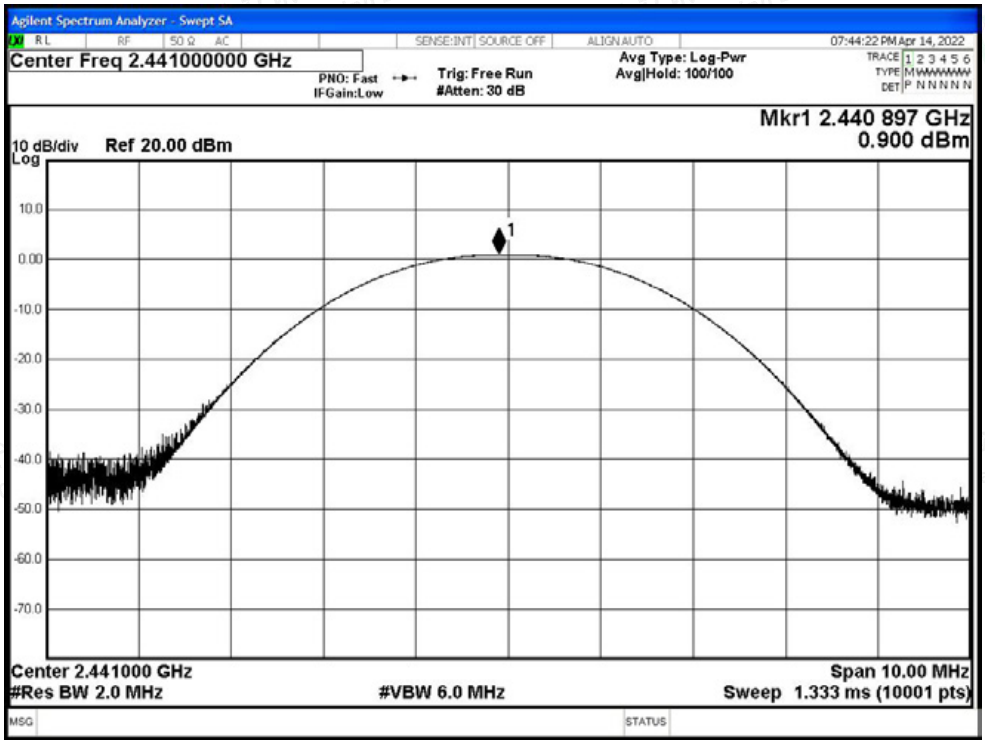
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.54	21	Pass
NVNT	1-DH5	2441	Ant1	0.9	21	Pass
NVNT	1-DH5	2480	Ant1	0.93	21	Pass
NVNT	2-DH5	2402	Ant1	0.33	21	Pass
NVNT	2-DH5	2441	Ant1	0.72	21	Pass
NVNT	2-DH5	2480	Ant1	0.72	21	Pass
NVNT	3-DH5	2402	Ant1	0.43	21	Pass
NVNT	3-DH5	2441	Ant1	0.83	21	Pass
NVNT	3-DH5	2480	Ant1	0.83	21	Pass

Test Graphs

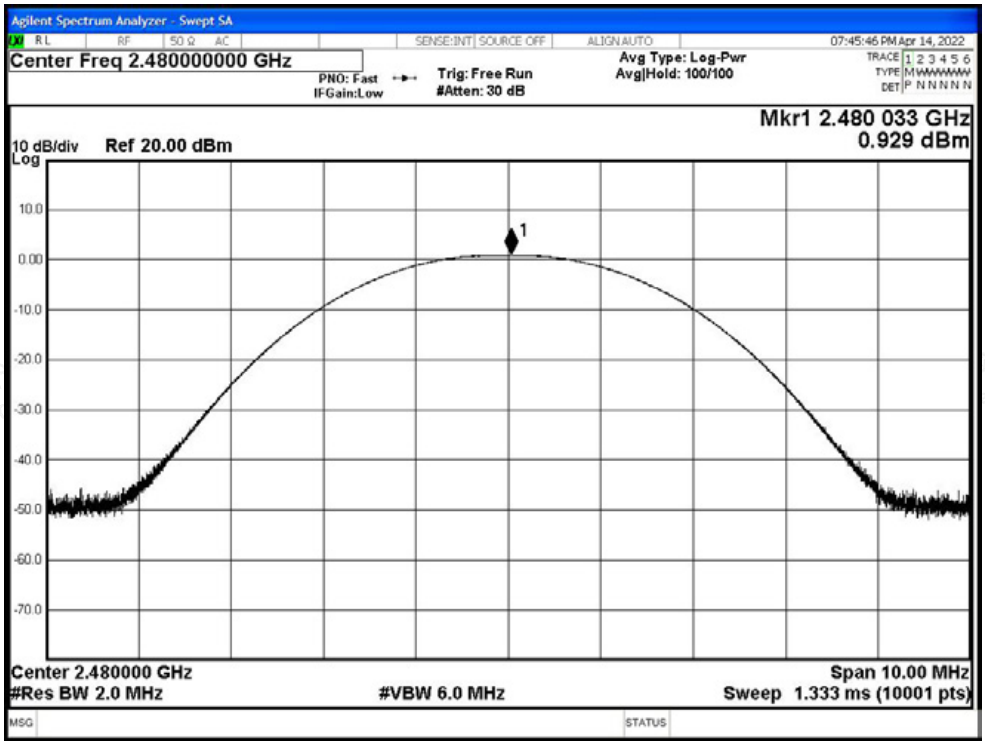
Power NVNT 1-DH5 2402MHz Ant1



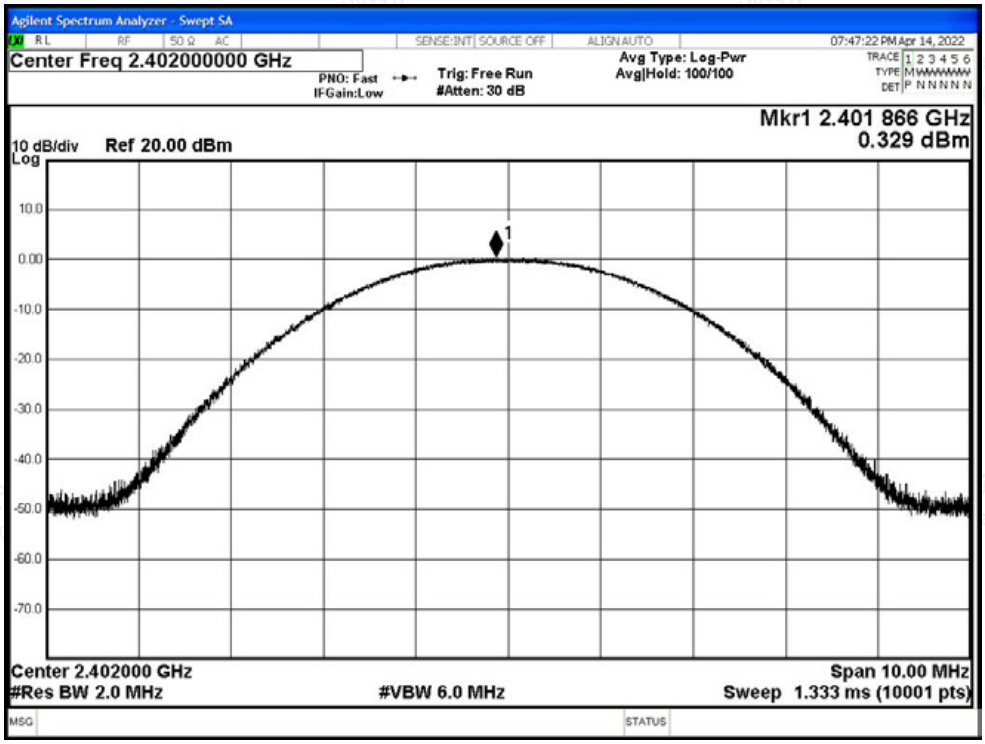
Power NVNT 1-DH5 2441MHz Ant1



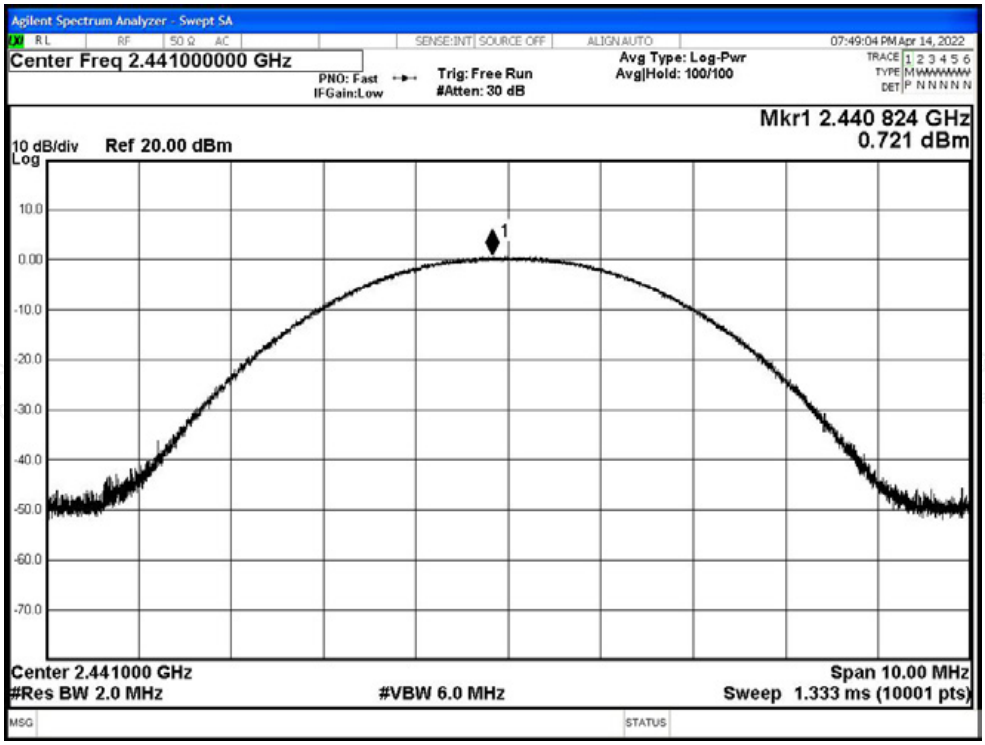
Power NVNT 1-DH5 2480MHz Ant1



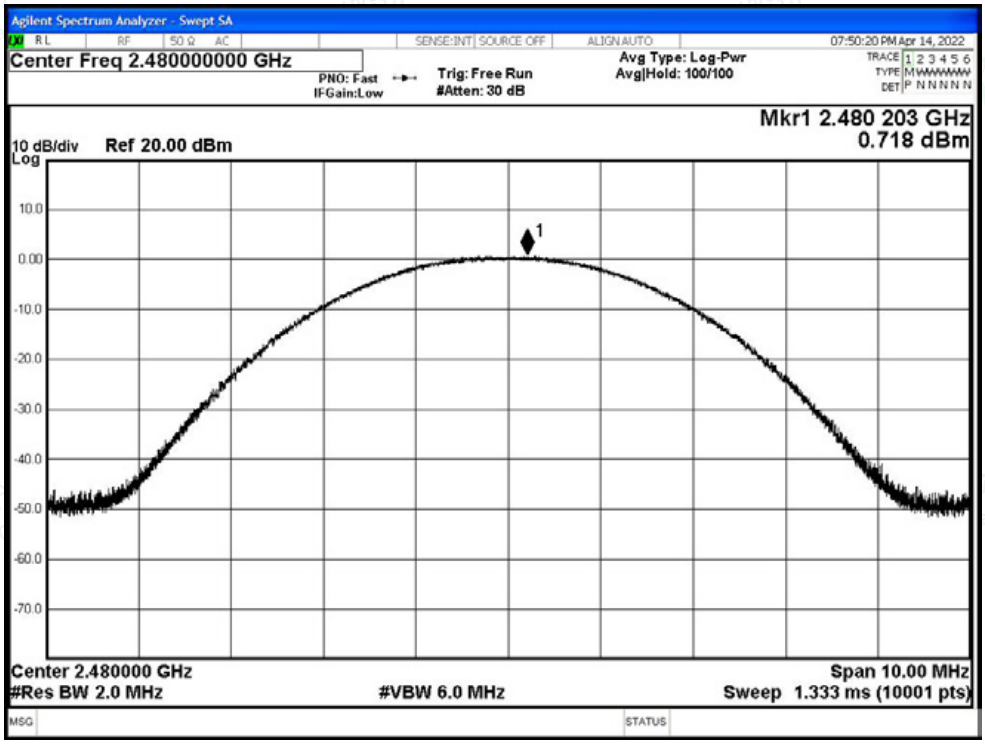
Power NVNT 2-DH5 2402MHz Ant1



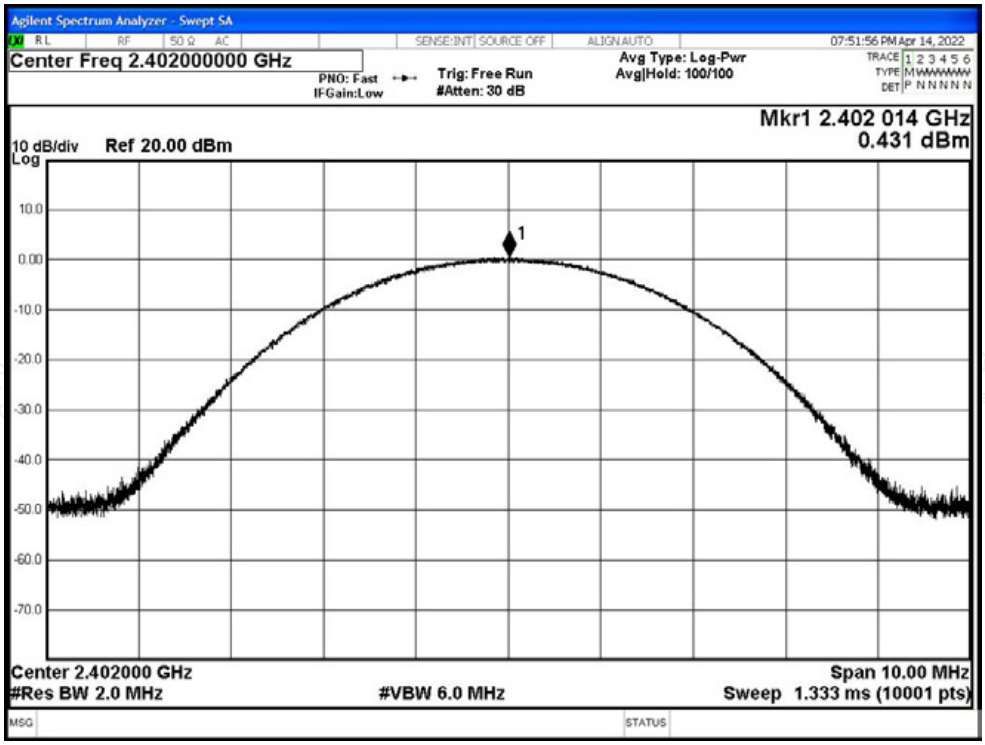
Power NVNT 2-DH5 2441MHz Ant1



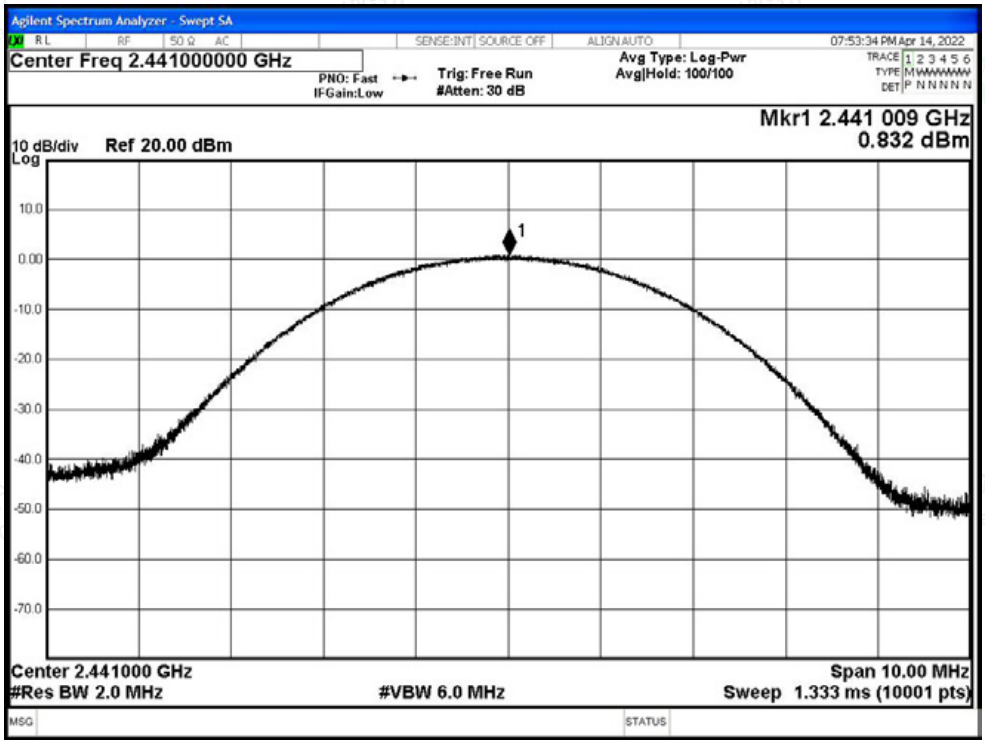
Power NVNT 2-DH5 2480MHz Ant1



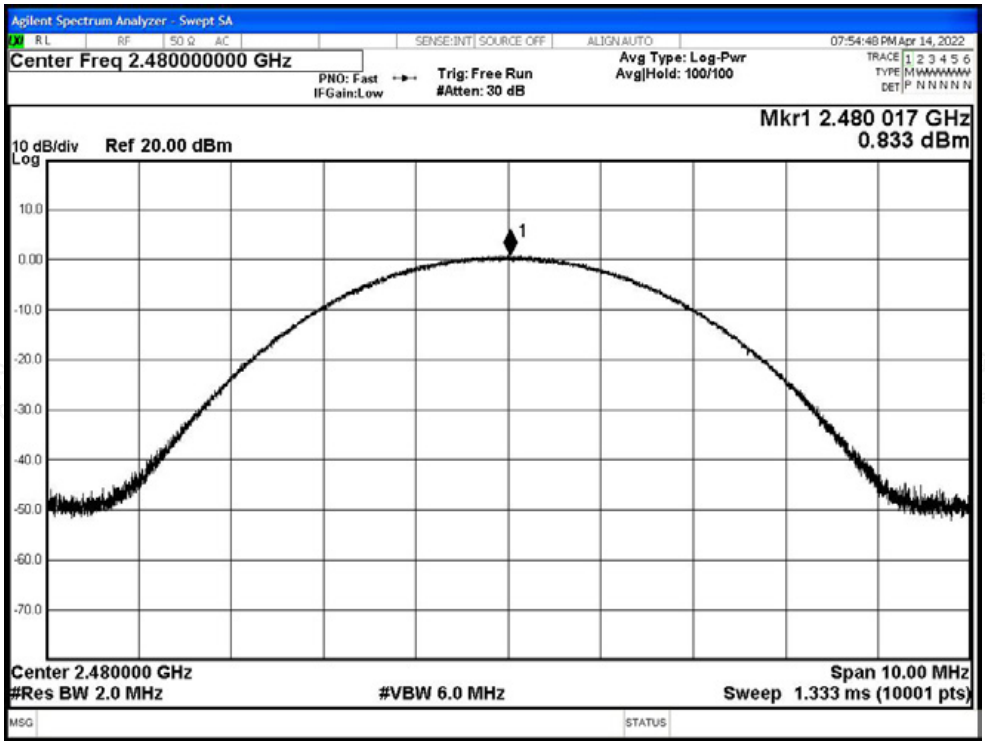
Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



Power NVNT 3-DH5 2480MHz Ant1

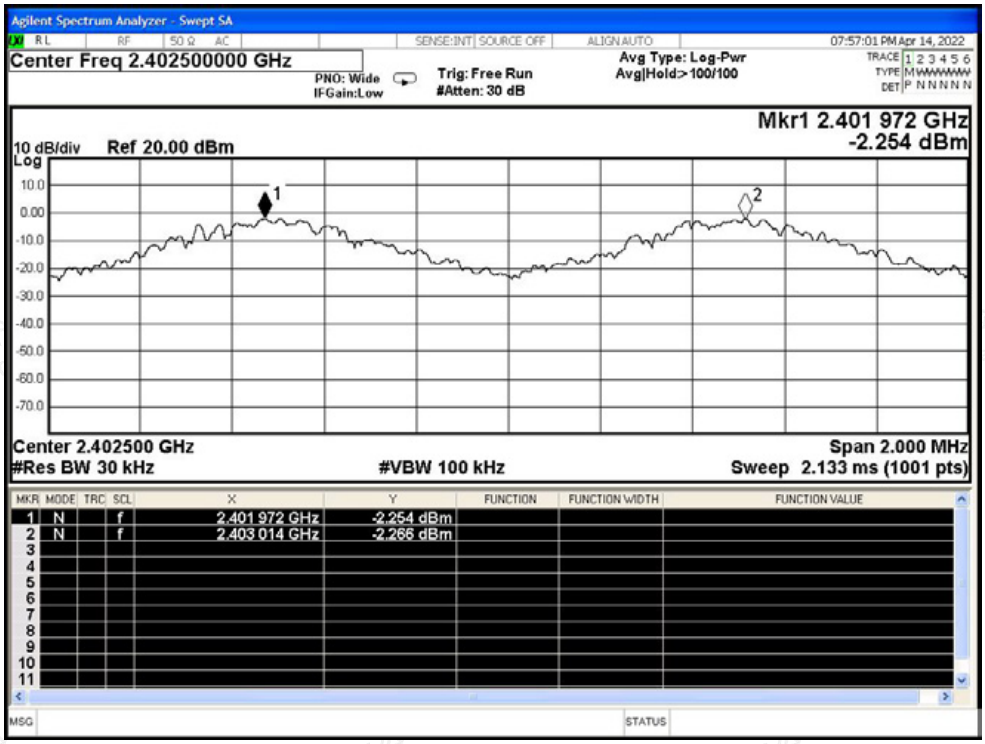


A.3 Carrier Frequencies Separation

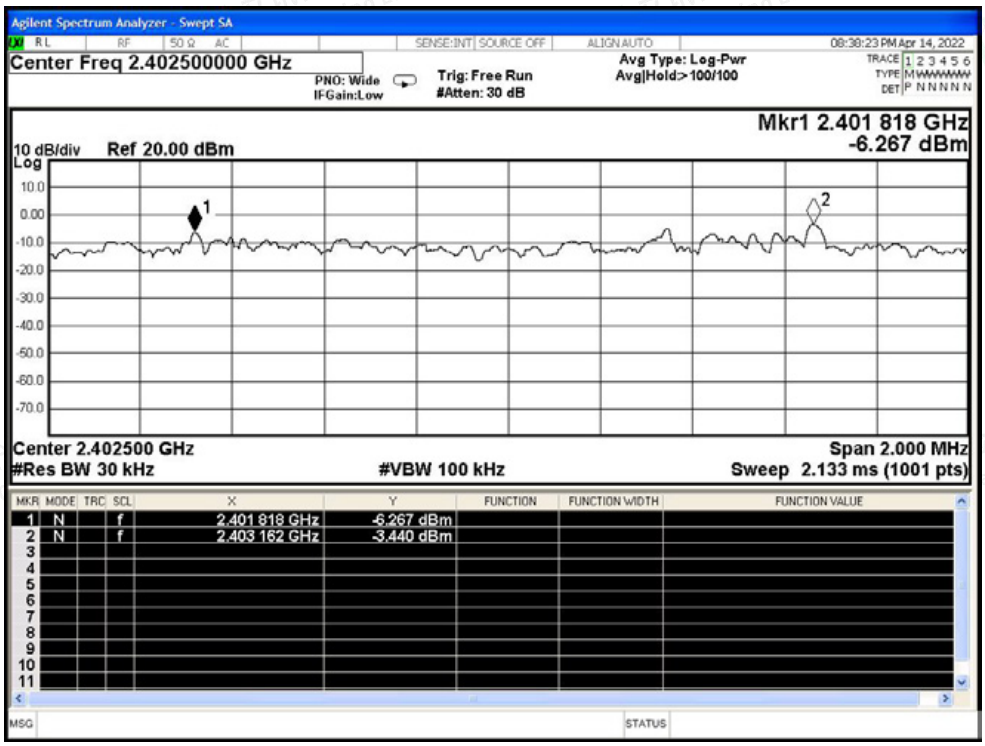
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.972	2403.014	1.042	0.681	Pass
NVNT	2-DH5	Ant1	2401.818	2403.162	1.344	0.889	Pass
NVNT	3-DH5	Ant1	2402.148	2403.102	0.954	0.851	Pass

Test Graphs

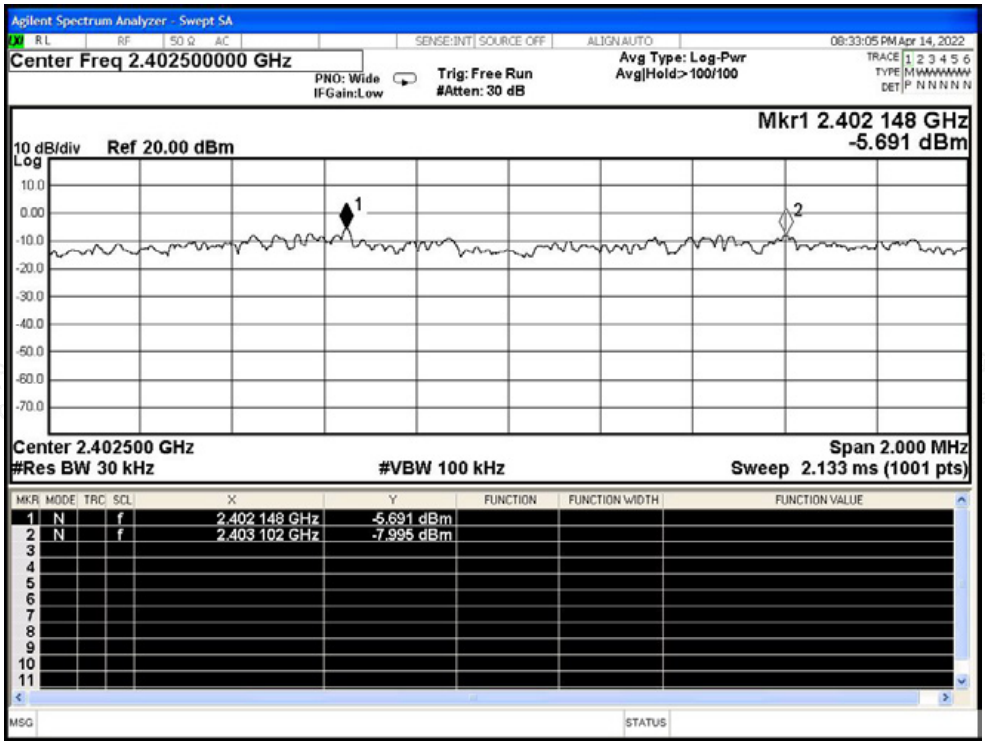
CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2402MHz Ant1

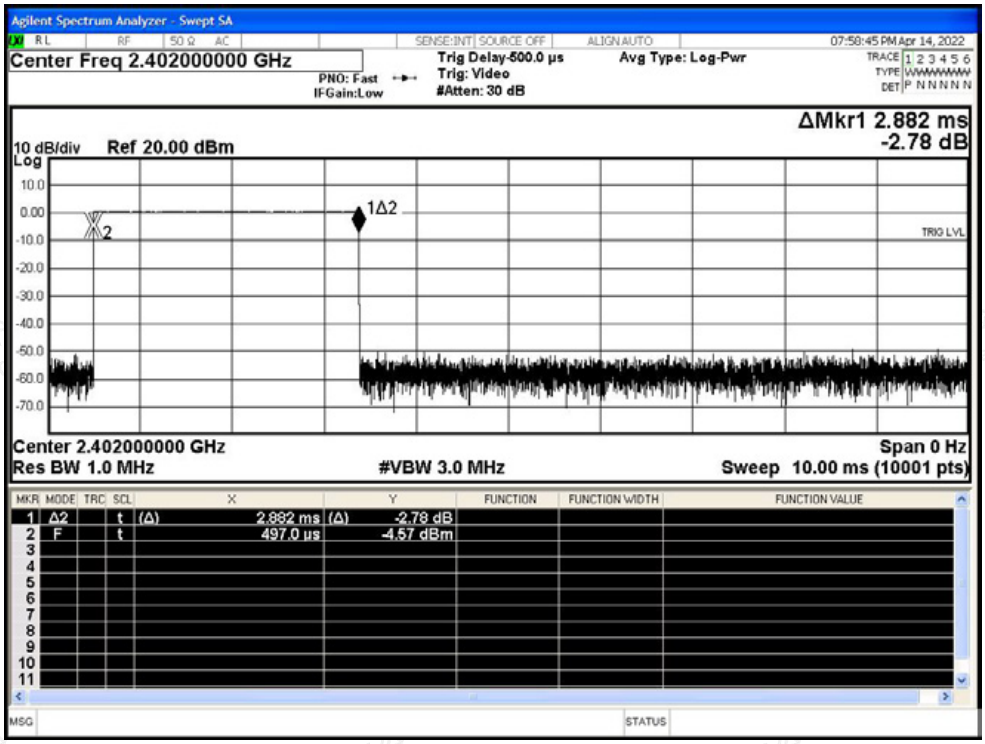


A.4 Dwell Time

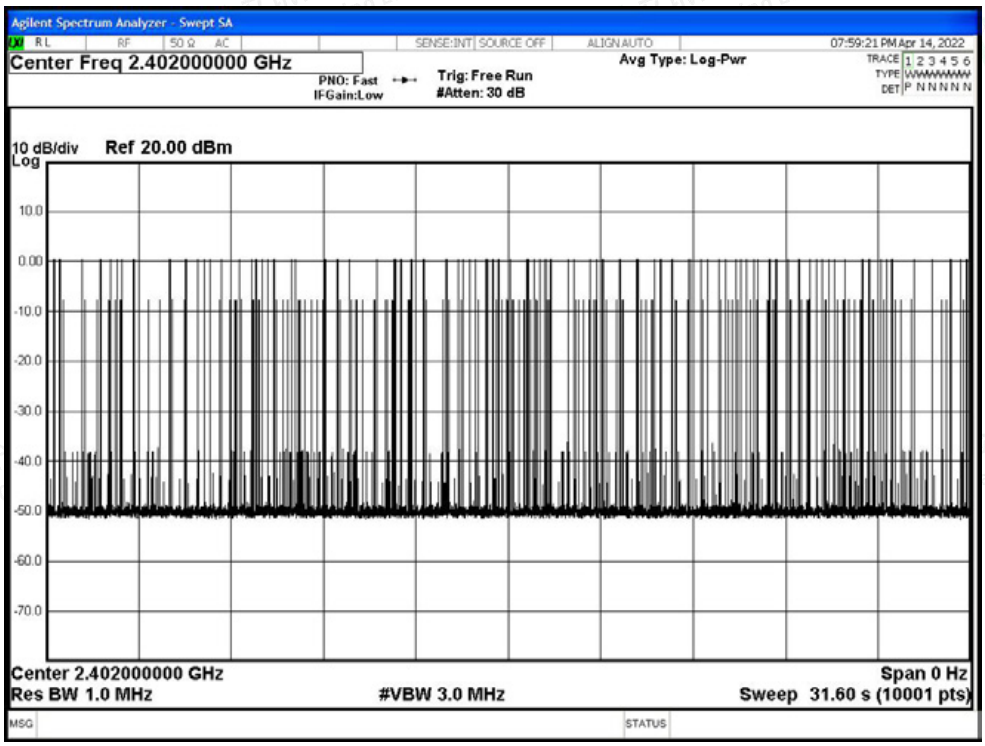
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.882	293.964	102	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.879	293.658	102	31600	400	Pass
NVNT	1-DH5	2480	Ant1	2.882	262.262	91	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.885	271.19	94	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.883	259.47	90	31600	400	Pass
NVNT	2-DH5	2480	Ant1	2.885	326.005	113	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.887	308.909	107	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.887	317.57	110	31600	400	Pass
NVNT	3-DH5	2480	Ant1	2.884	273.98	95	31600	400	Pass

Test Graphs

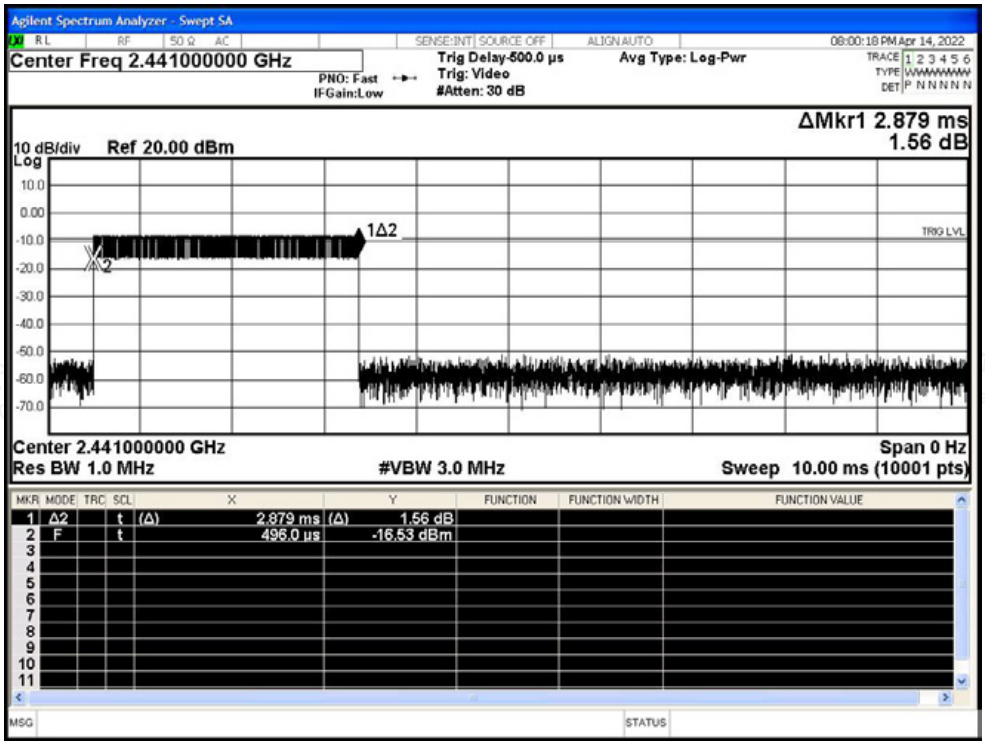
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



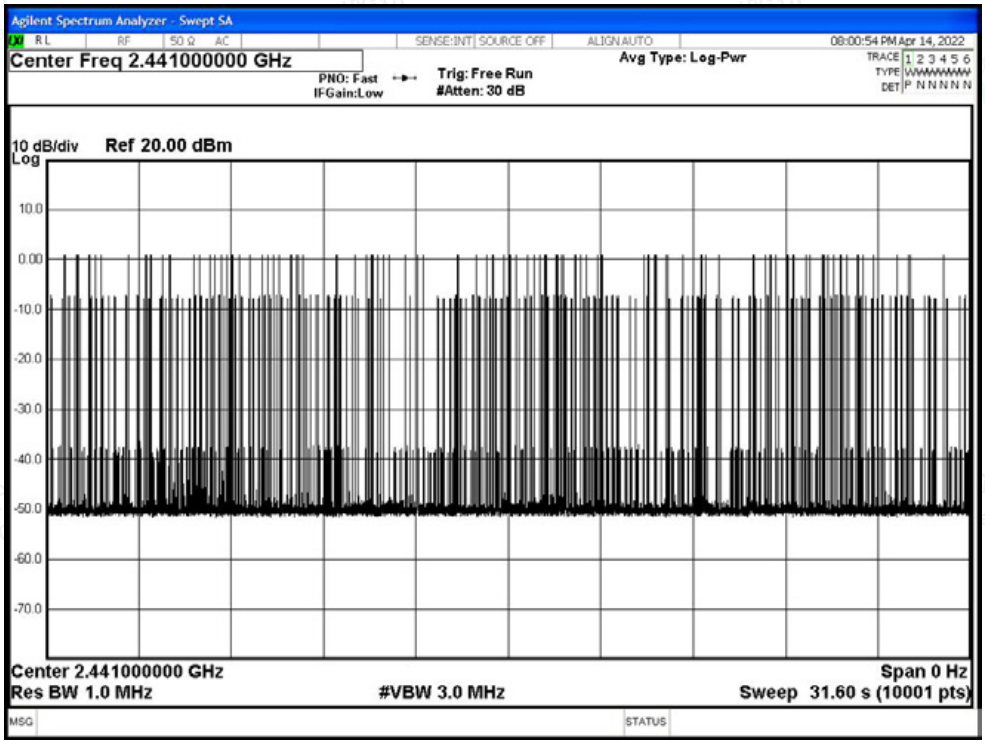
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



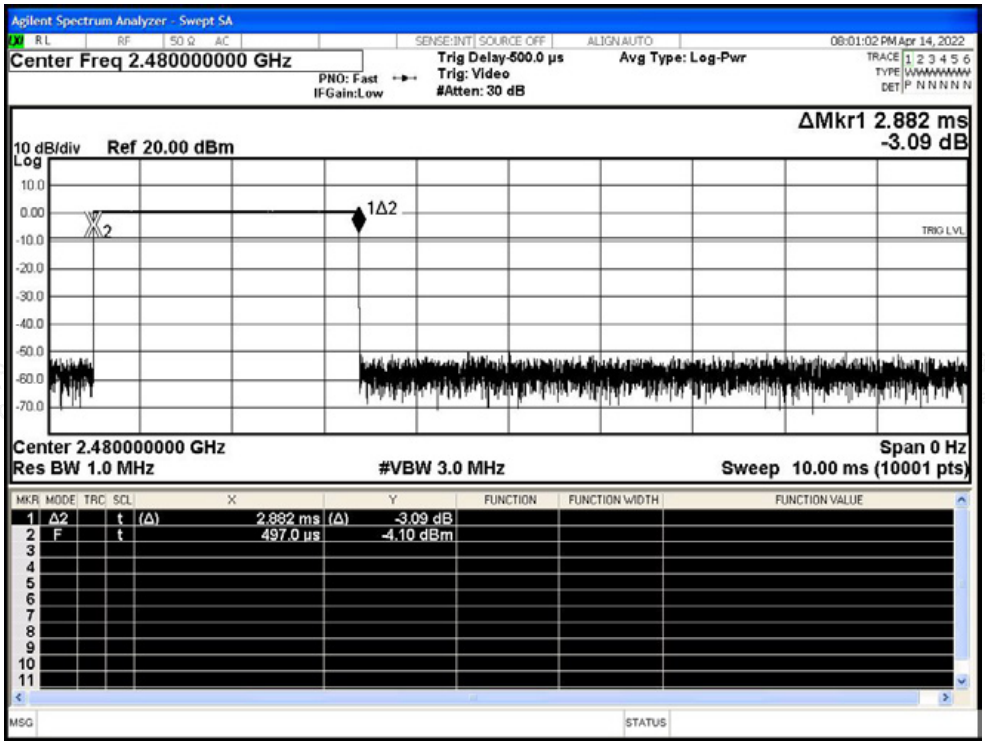
Dwell NVNT 1-DH5 2441MHz Ant1 One Burst



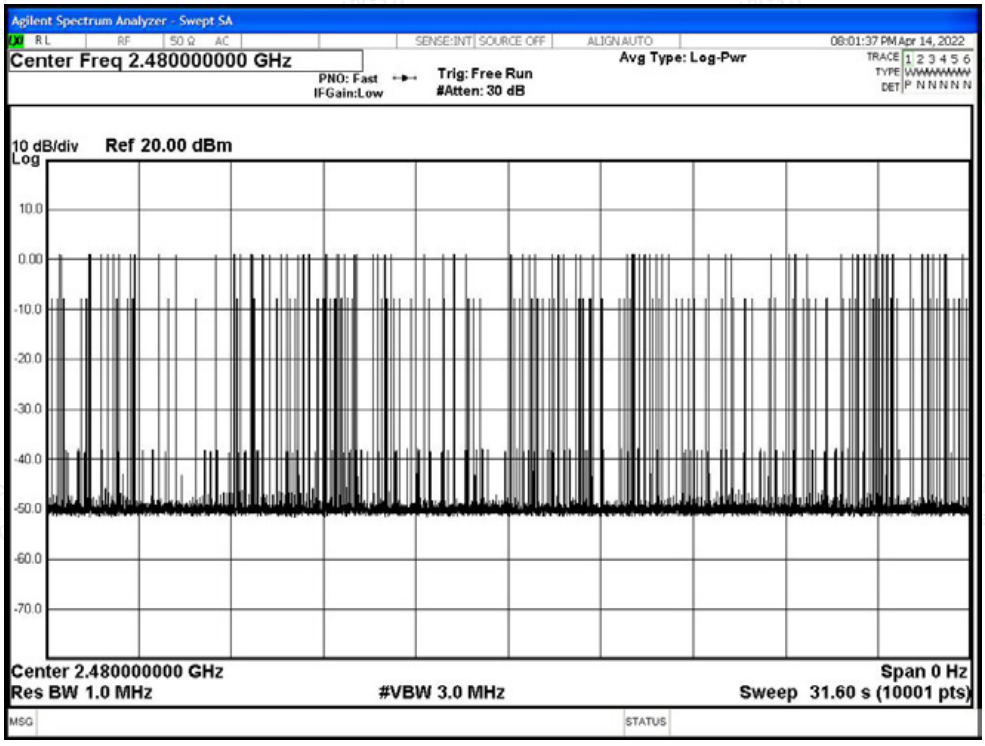
Dwell NVNT 1-DH5 2441MHz Ant1 Accumulated



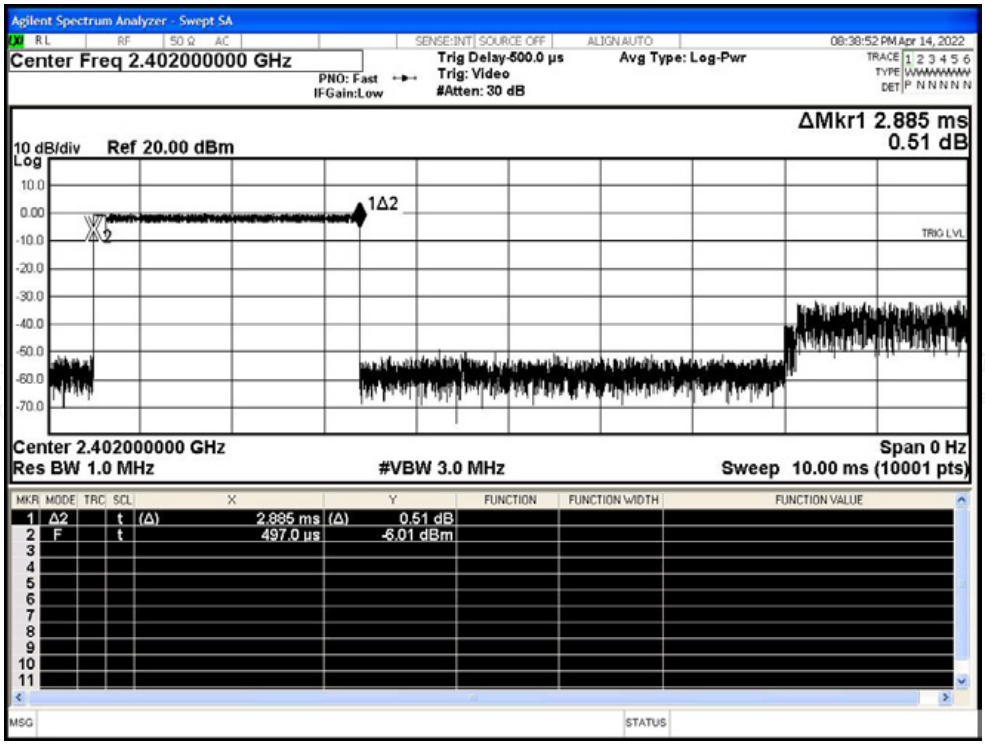
Dwell NVNT 1-DH5 2480MHz Ant1 One Burst



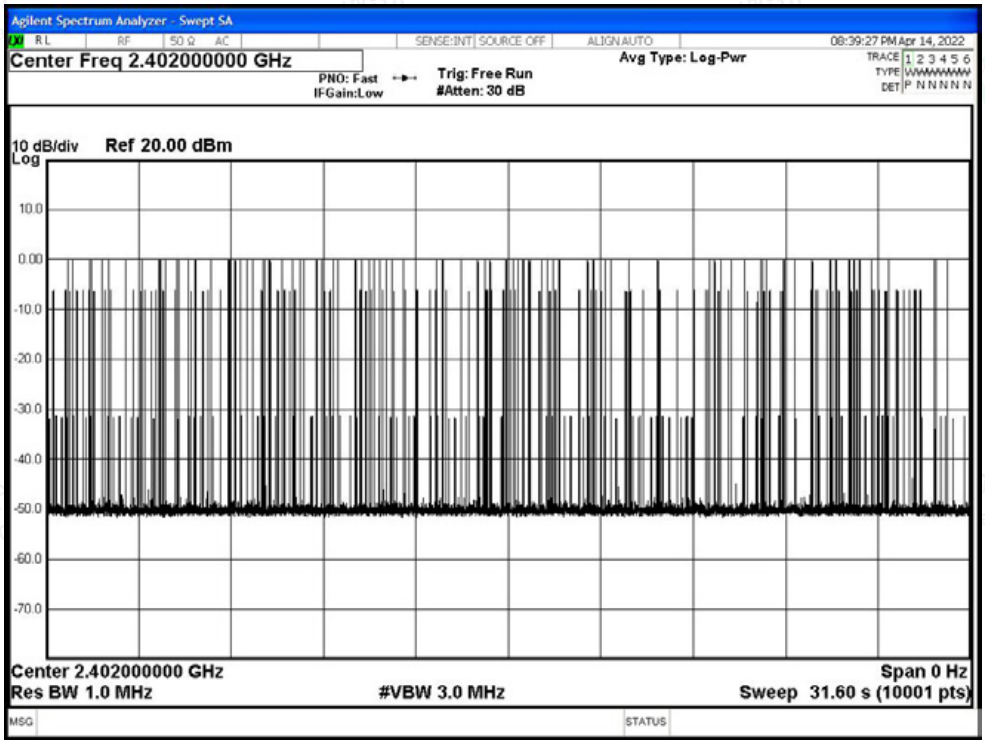
Dwell NVNT 1-DH5 2480MHz Ant1 Accumulated



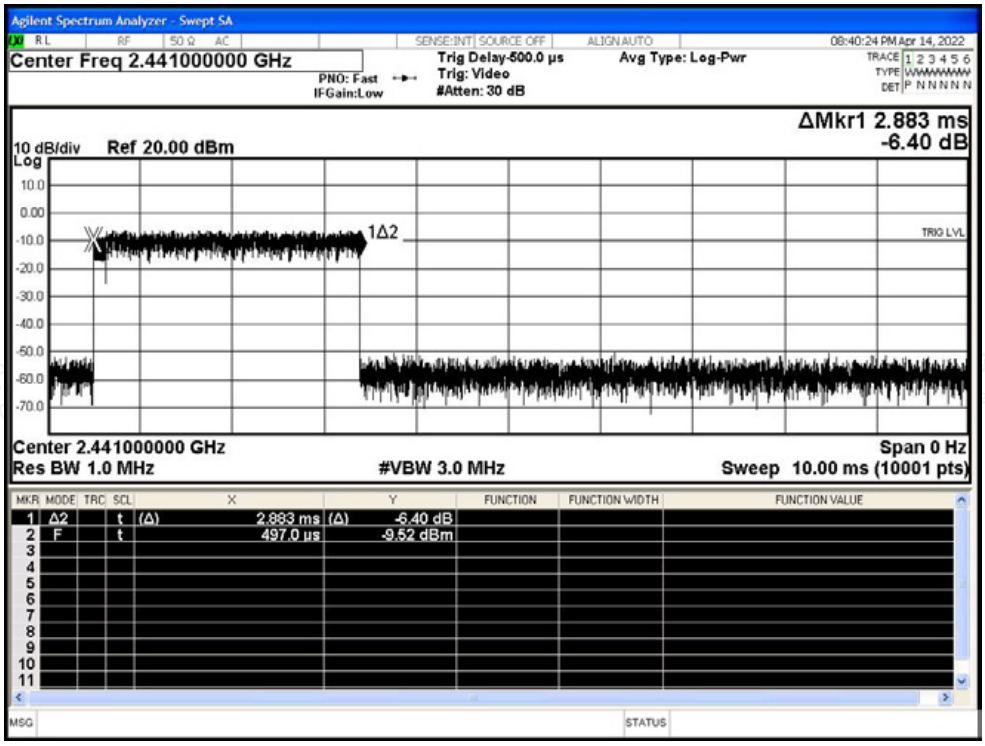
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



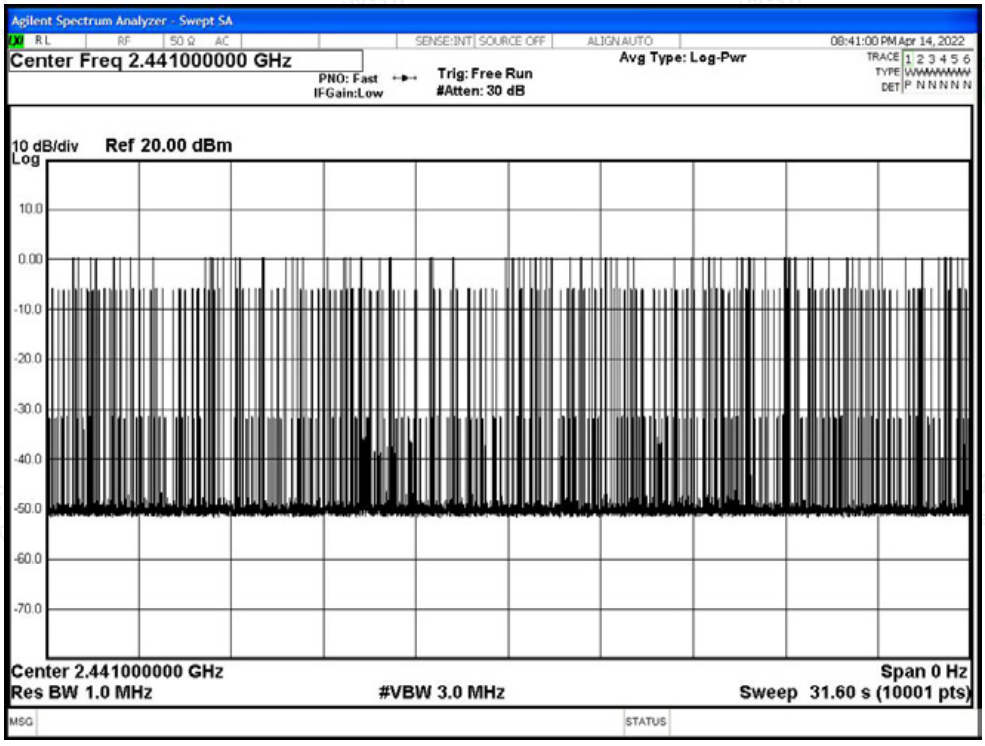
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



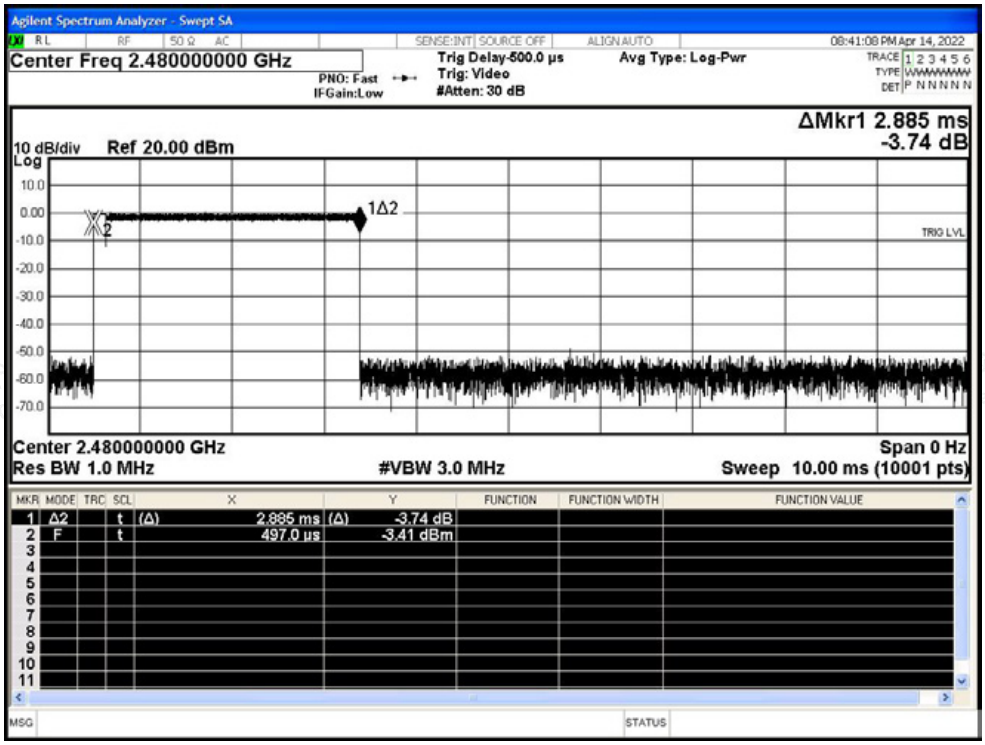
Dwell NVNT 2-DH5 2441MHz Ant1 One Burst



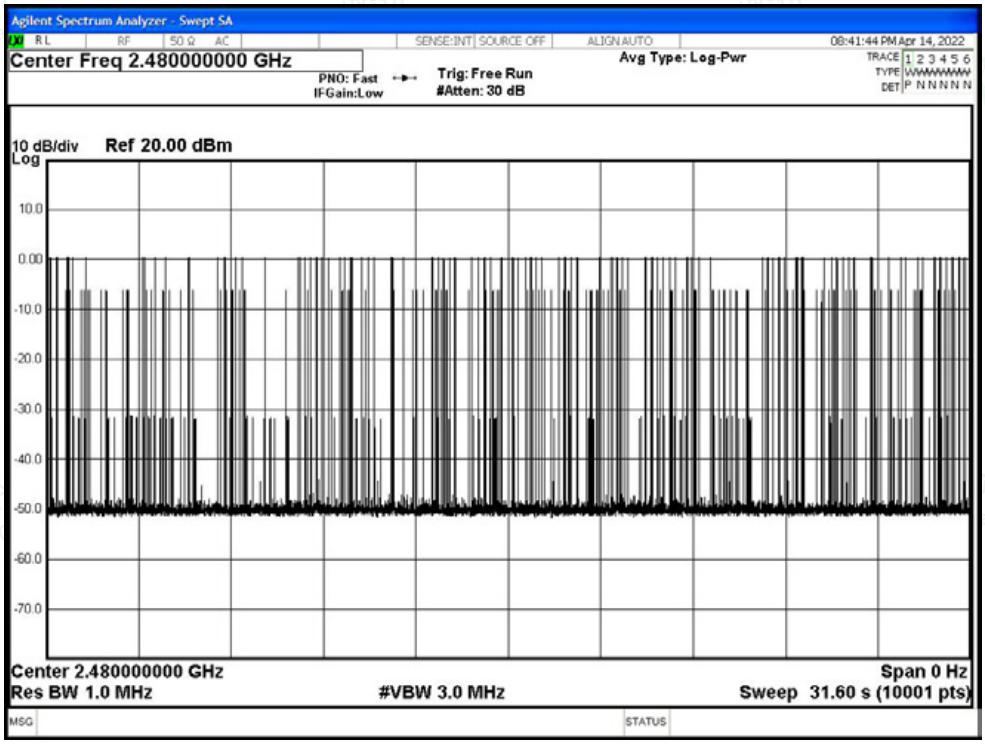
Dwell NVNT 2-DH5 2441MHz Ant1 Accumulated



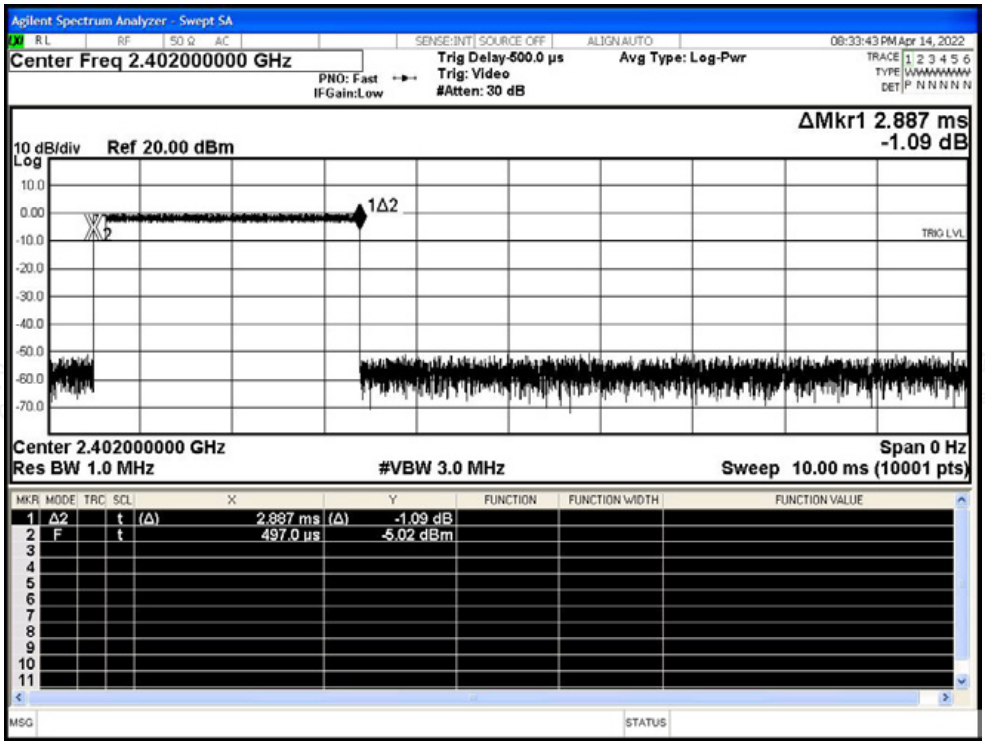
Dwell NVNT 2-DH5 2480MHz Ant1 One Burst



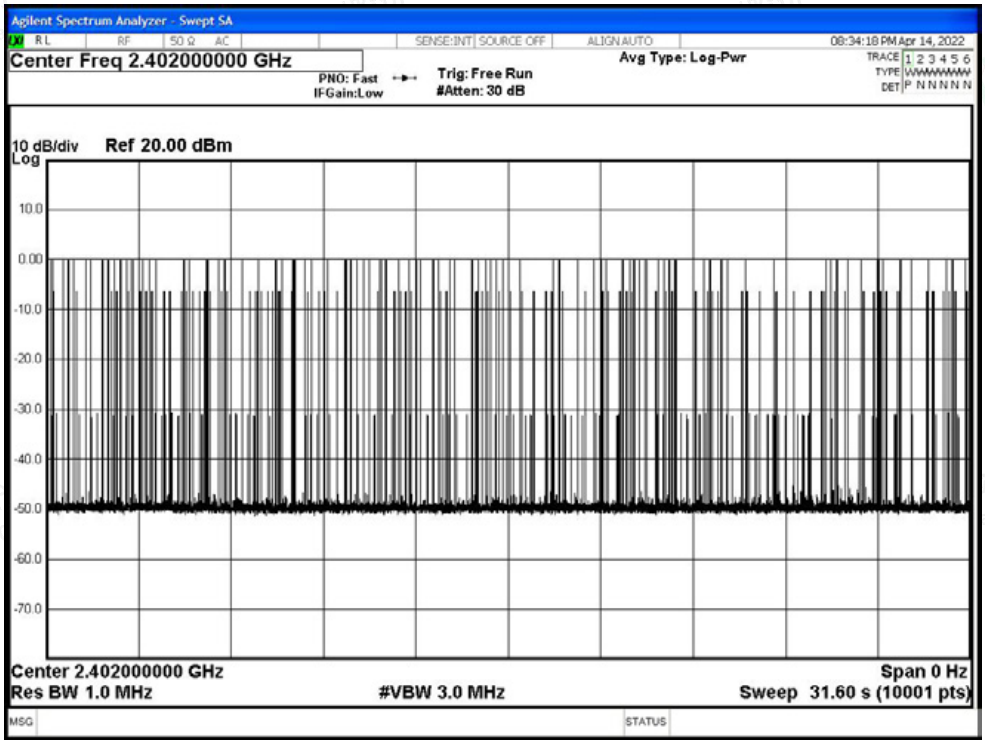
Dwell NVNT 2-DH5 2480MHz Ant1 Accumulated



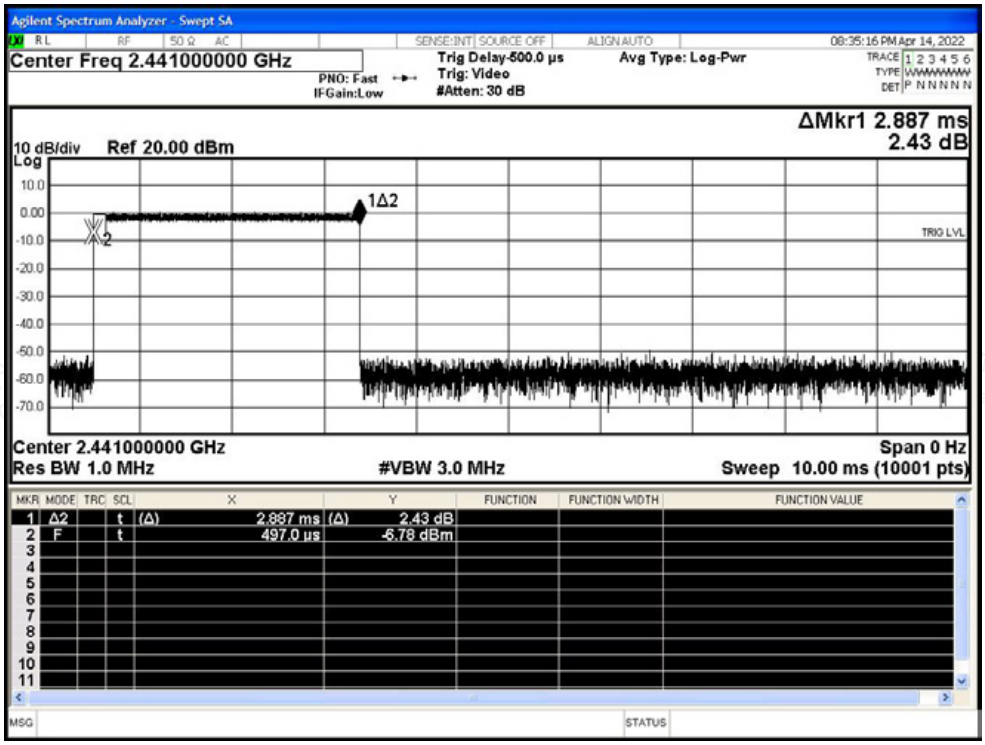
Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



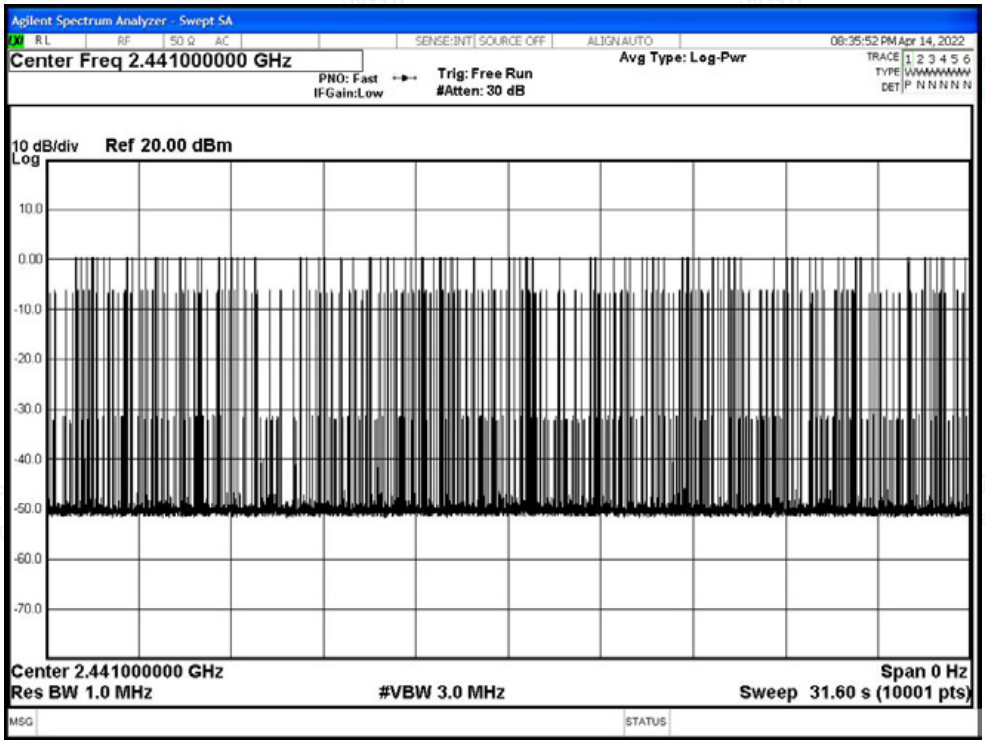
Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated



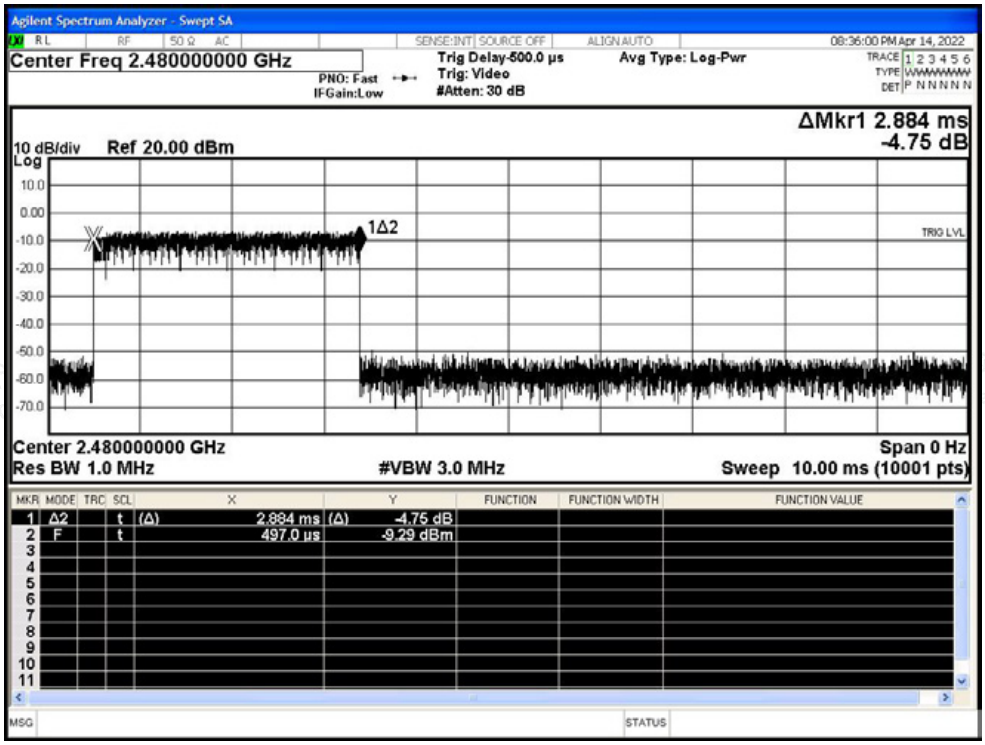
Dwell NVNT 3-DH5 2441MHz Ant1 One Burst



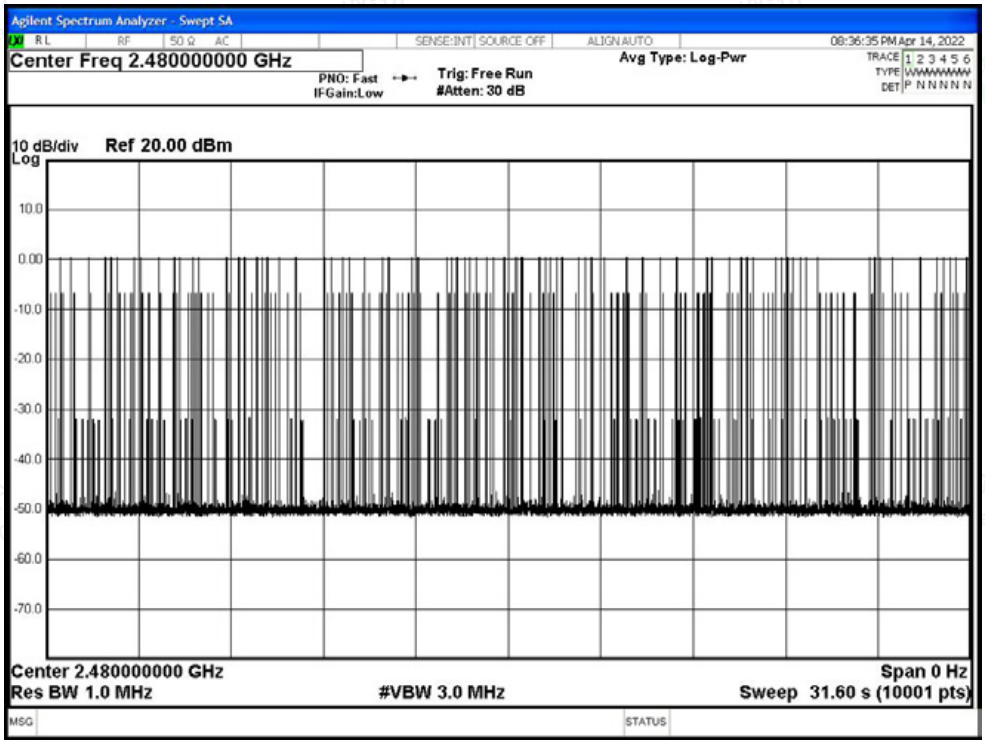
Dwell NVNT 3-DH5 2441MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2480MHz Ant1 One Burst



Dwell NVNT 3-DH5 2480MHz Ant1 Accumulated

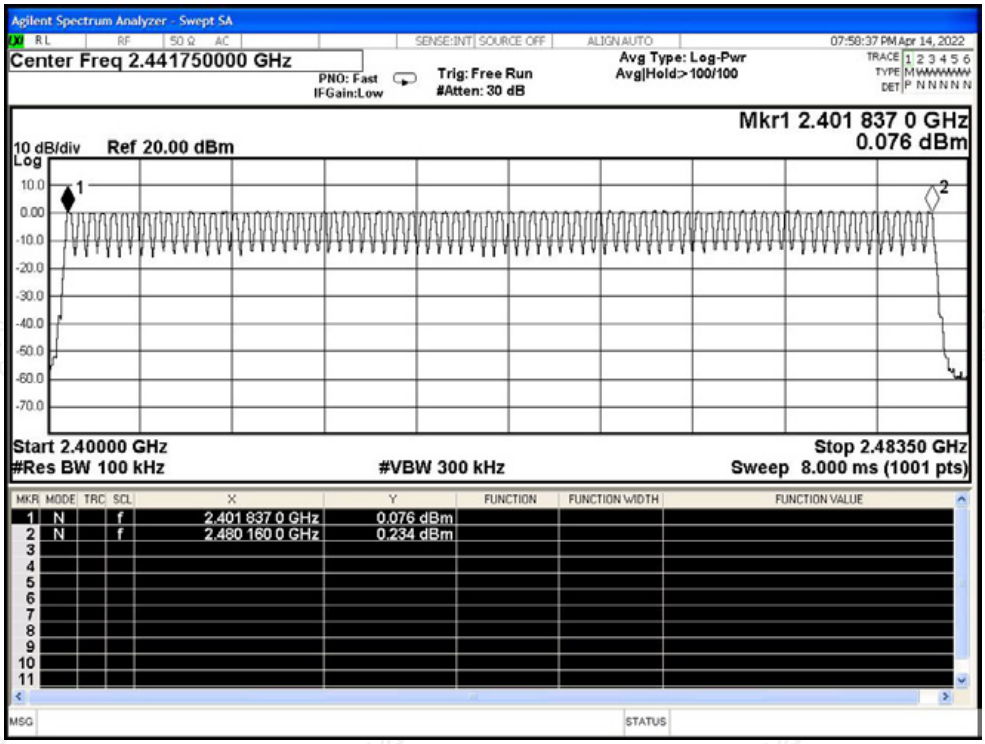


A.5 Number of Hopping Channel

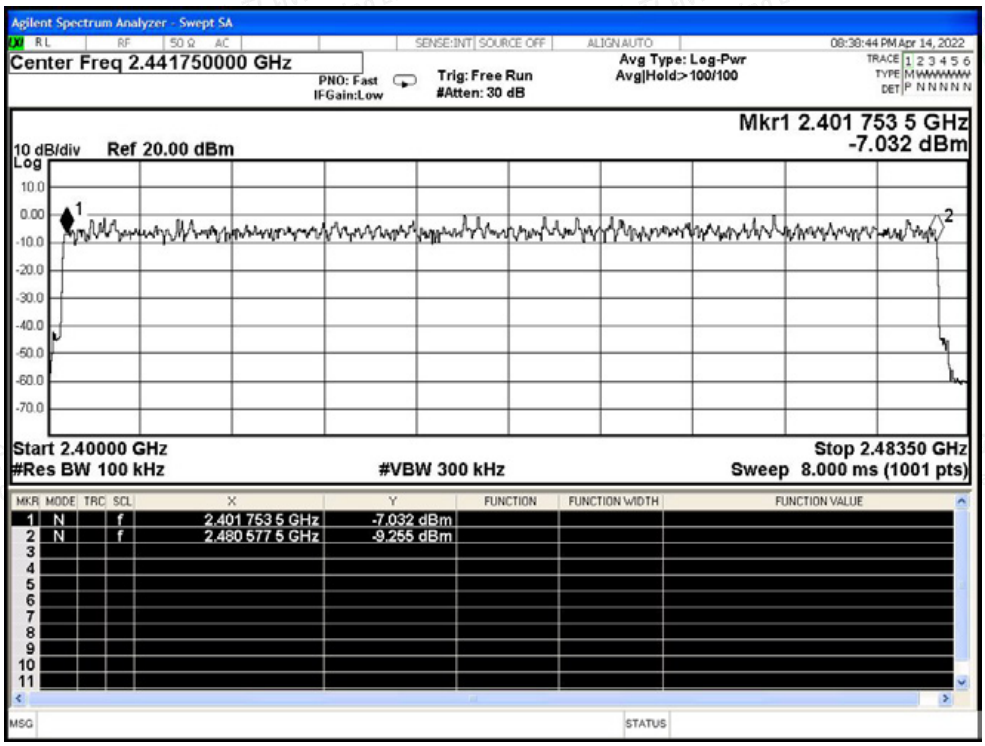
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

Test Graphs

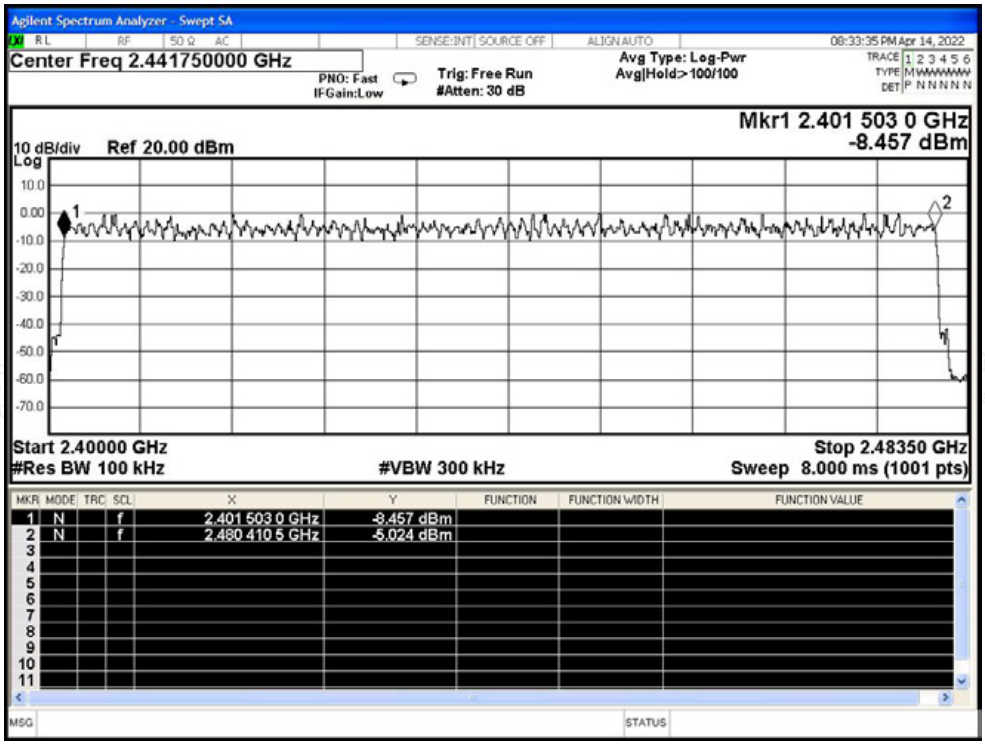
Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



Hopping No. NVNT 3-DH5 2402MHz Ant1

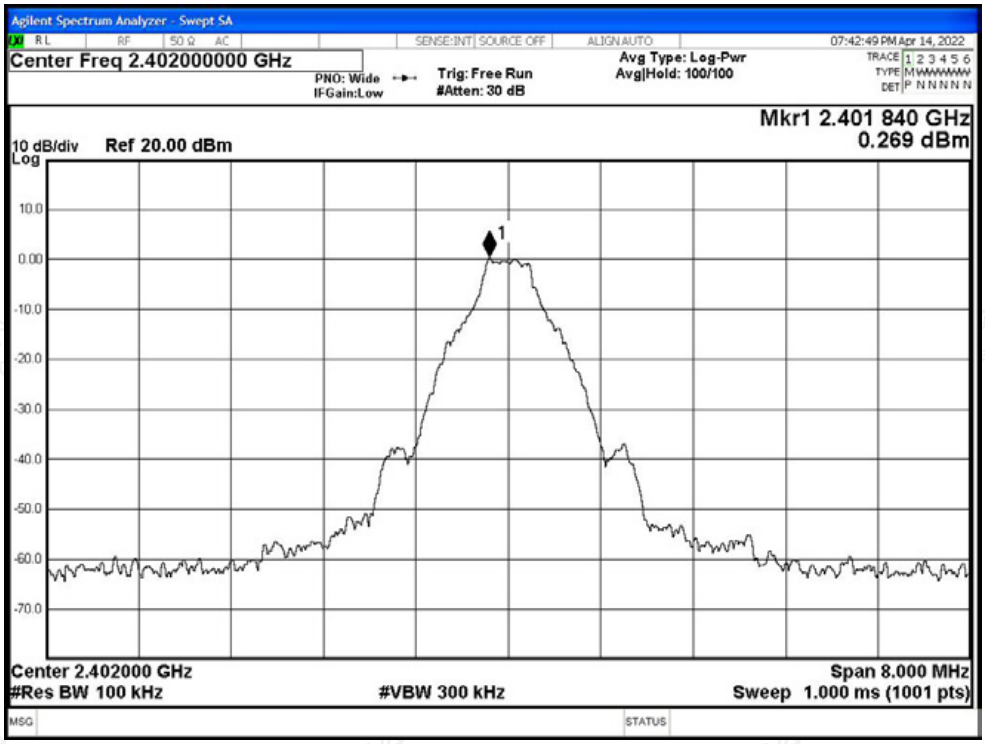


A.6 Band Edge

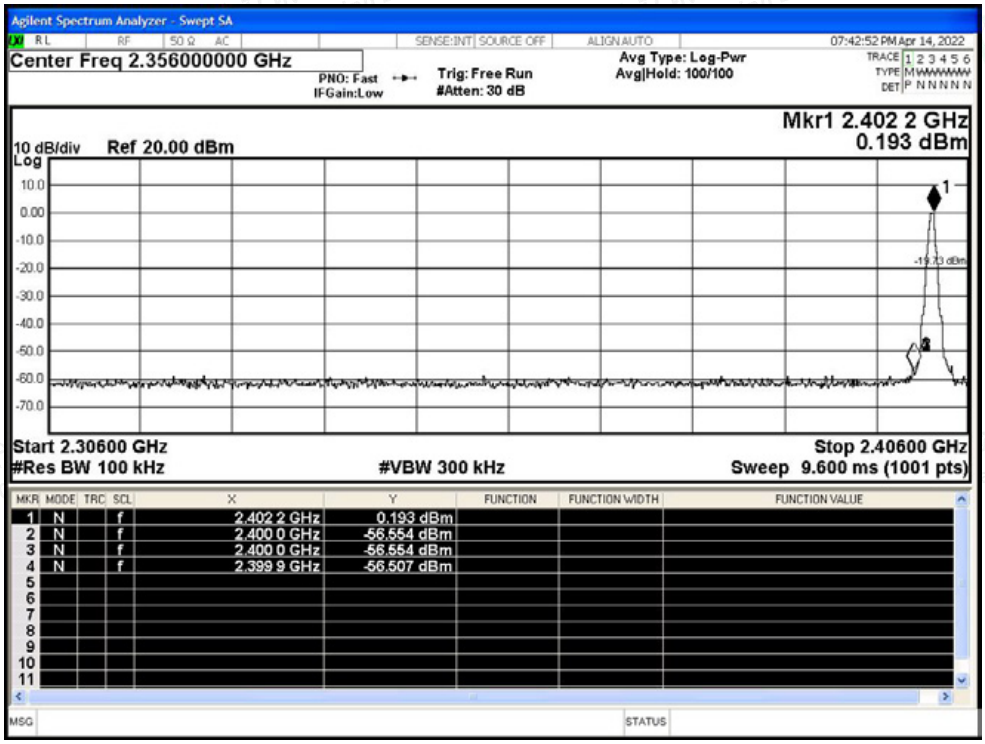
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-56.77	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-59.58	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-53.65	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-56.6	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-54.93	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-55.21	-20	Pass

Test Graphs

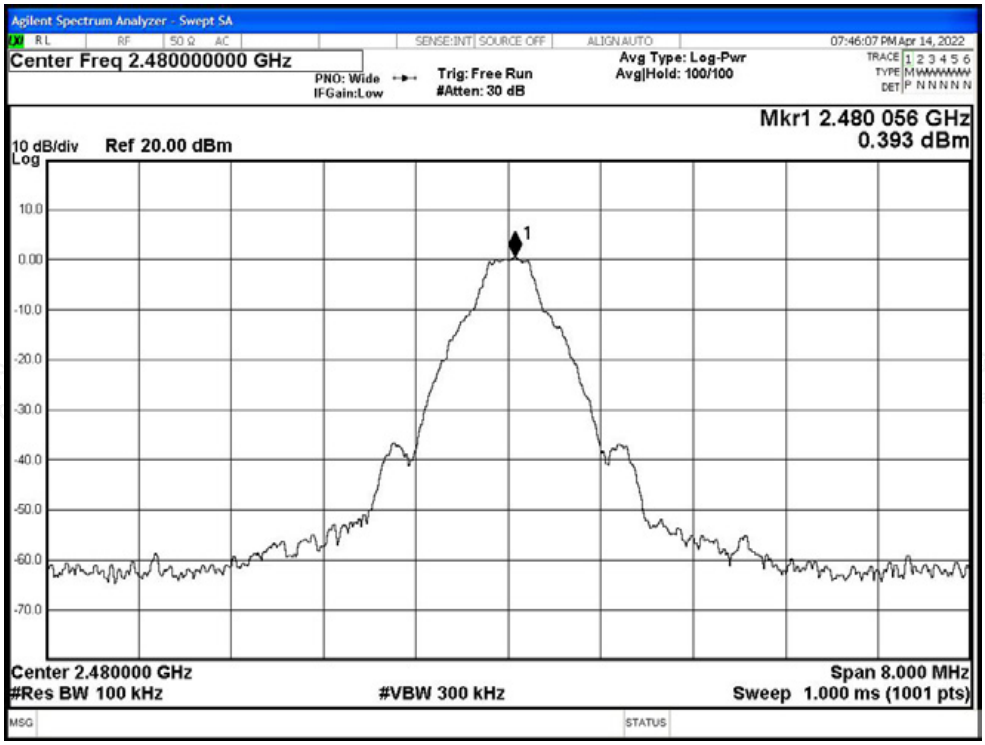
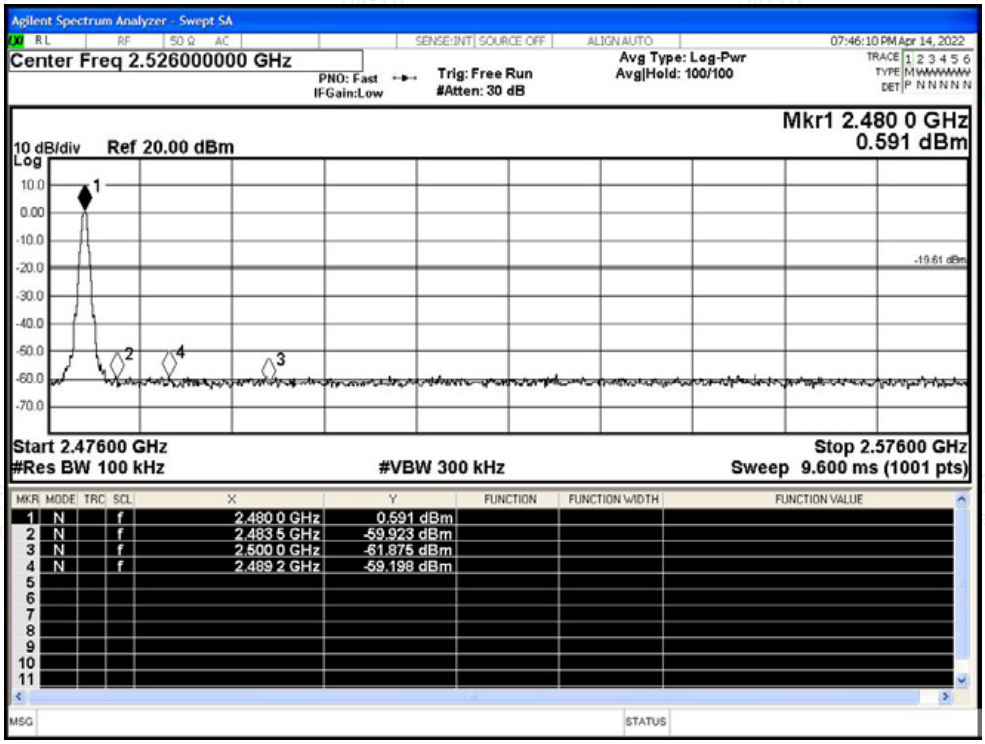
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



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