



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Smart Watch

Test Model: Lunar Connect Pro

Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	<i>Nick Peng</i> Nick Peng
Supervised by:	<i>Ling Zhu</i> Ling Zhu





A.1 -20dB Bandwidth

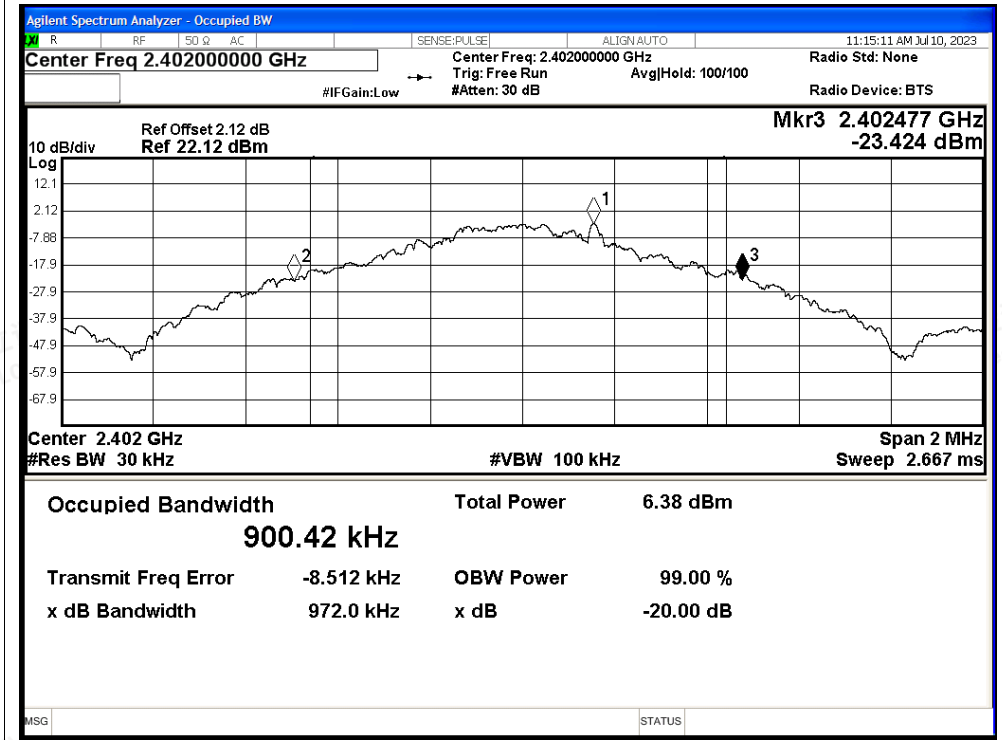
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.972	N/A	Pass
NVNT	1-DH5	2441	Ant1	1.005	N/A	Pass
NVNT	1-DH5	2480	Ant1	1.032	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.275	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.278	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.282	N/A	Pass





Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

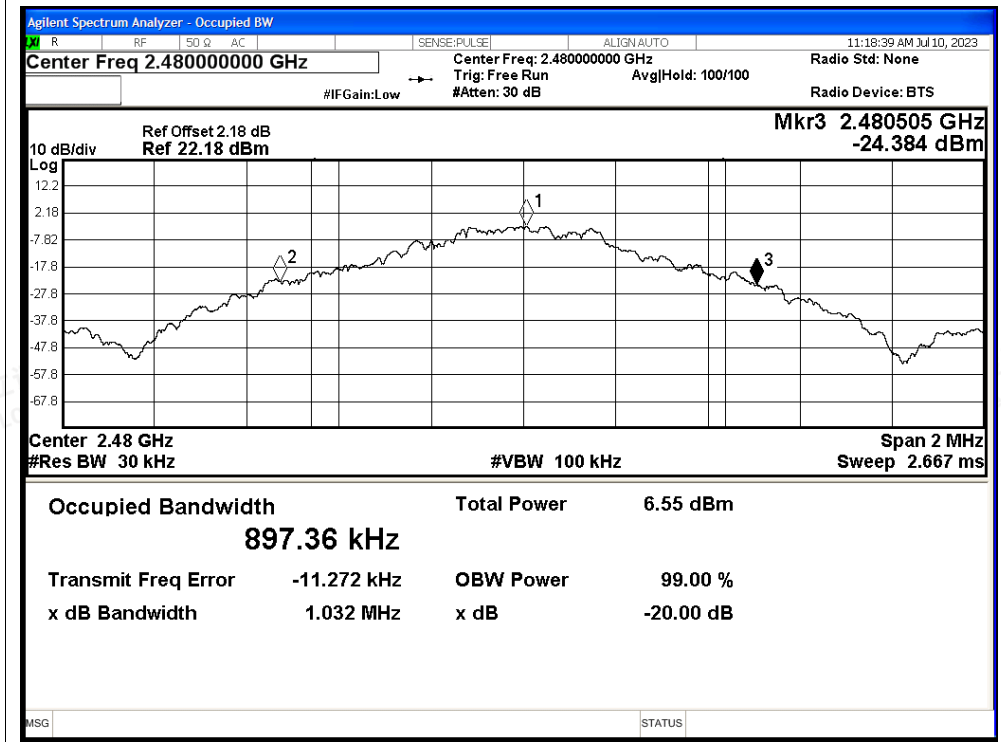


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

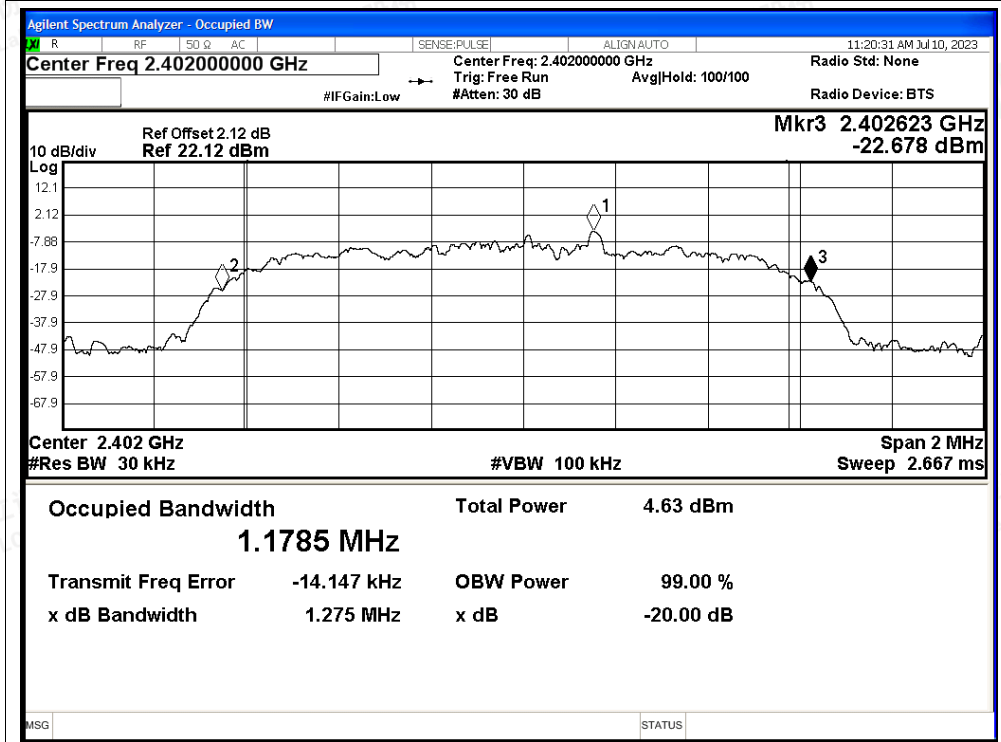




-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

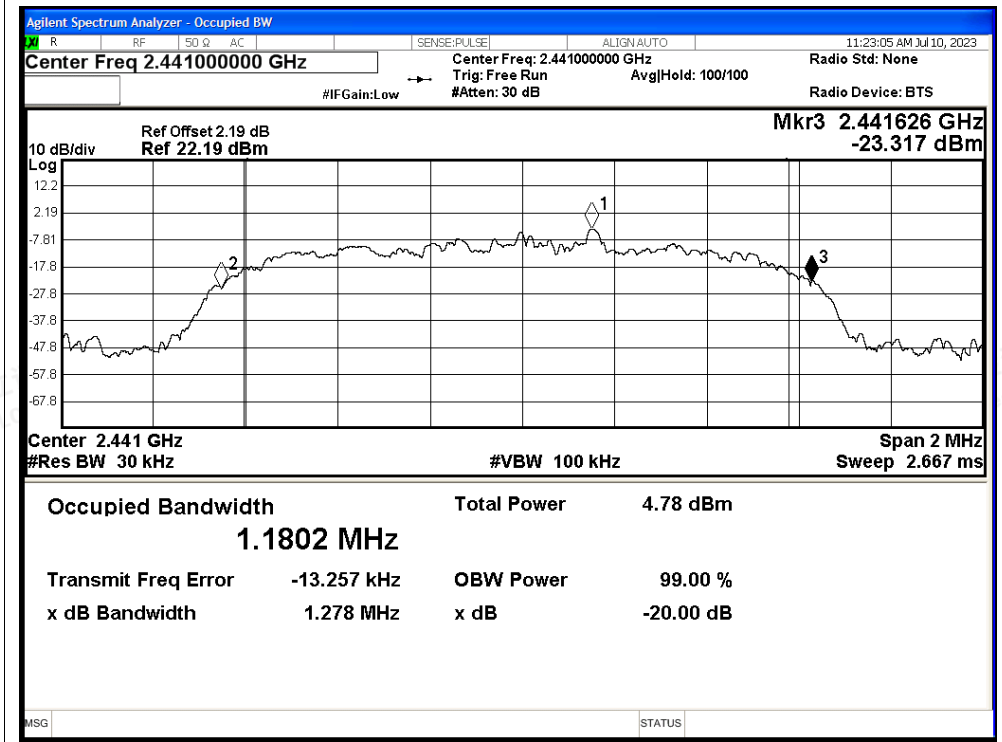


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1

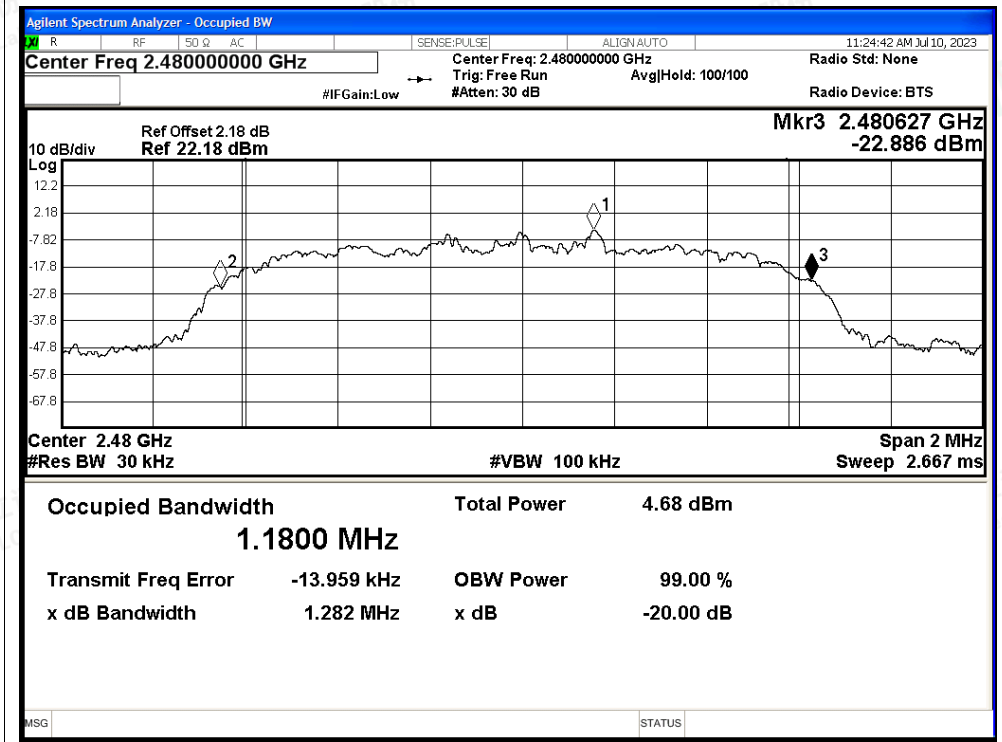




-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1





A.2 Maximum Conducted Output Power

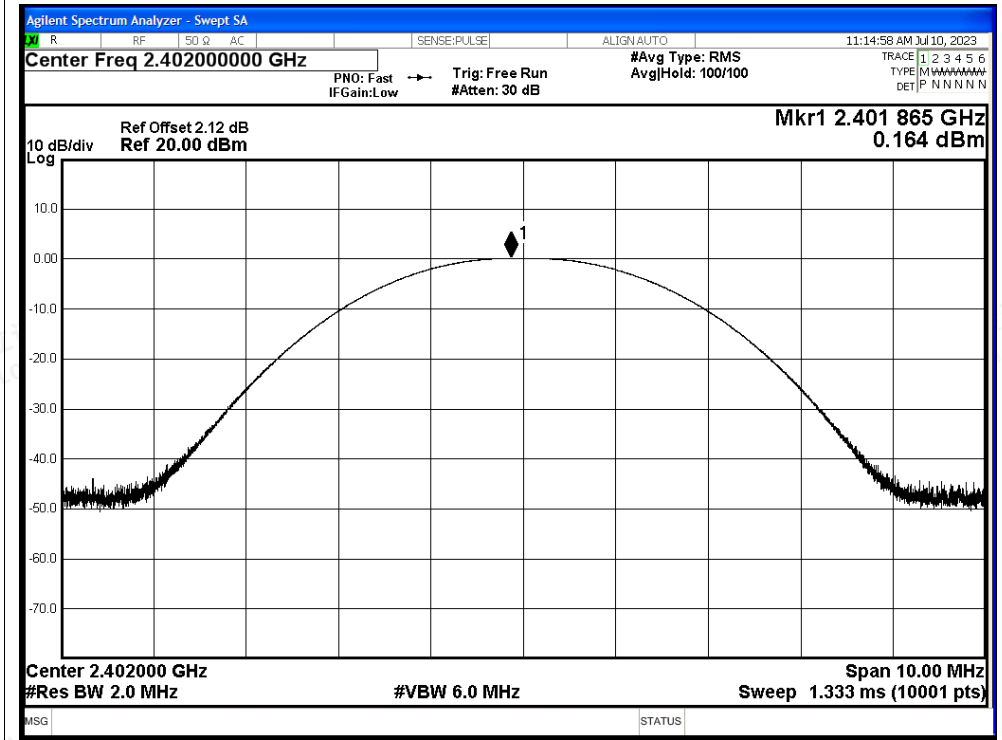
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.16	21	Pass
NVNT	1-DH5	2441	Ant1	0.37	21	Pass
NVNT	1-DH5	2480	Ant1	0.33	21	Pass
NVNT	2-DH5	2402	Ant1	-0.09	21	Pass
NVNT	2-DH5	2441	Ant1	0.15	21	Pass
NVNT	2-DH5	2480	Ant1	0.13	21	Pass



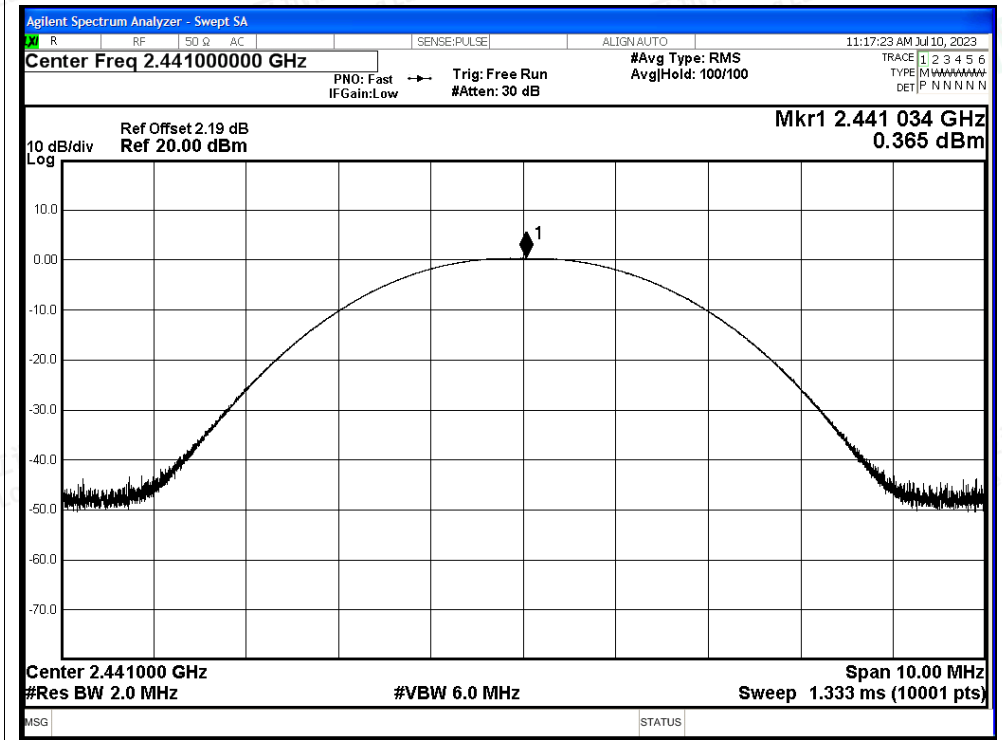


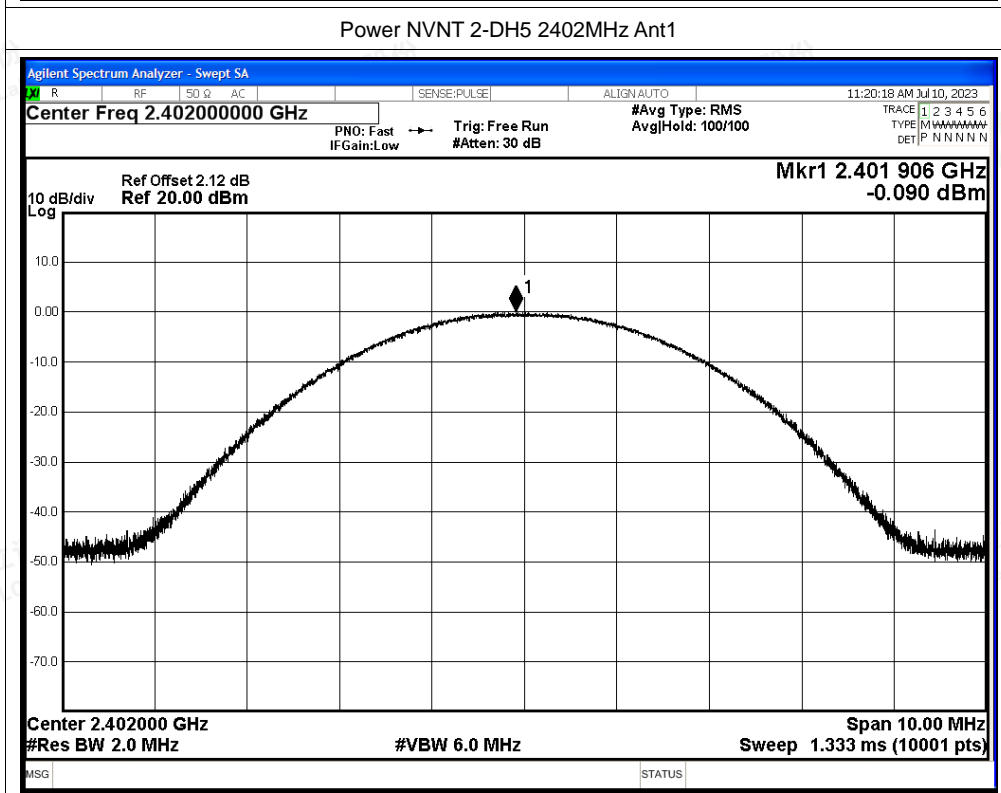
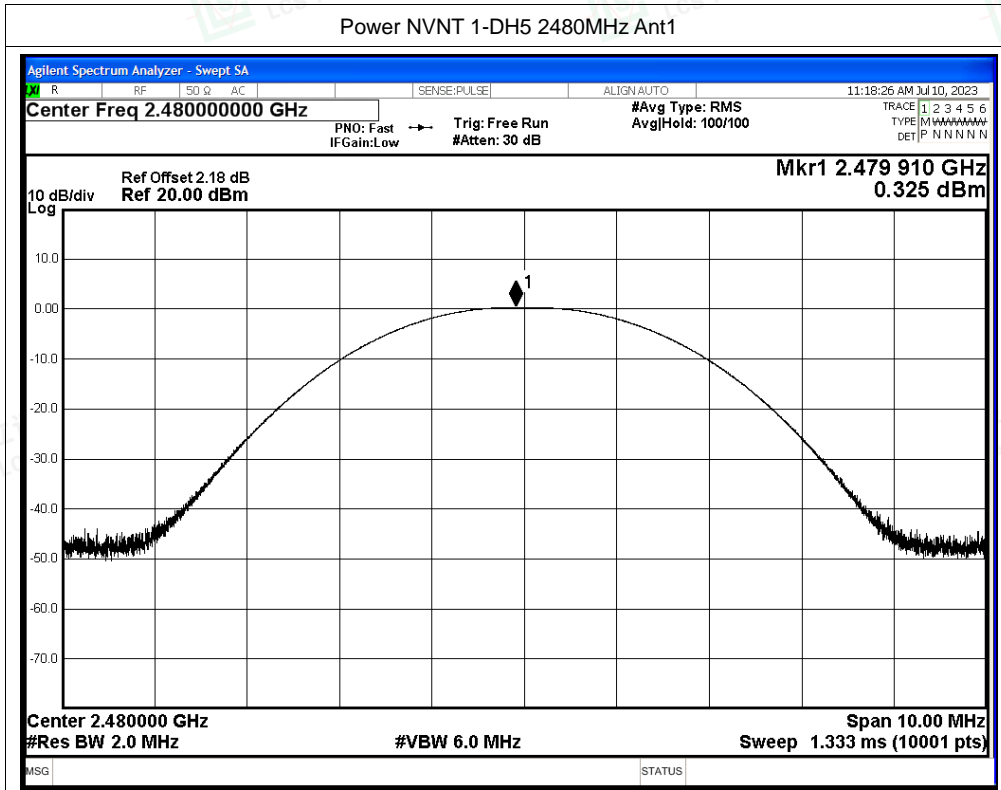
Test Graphs

Power NVNT 1-DH5 2402MHz Ant1



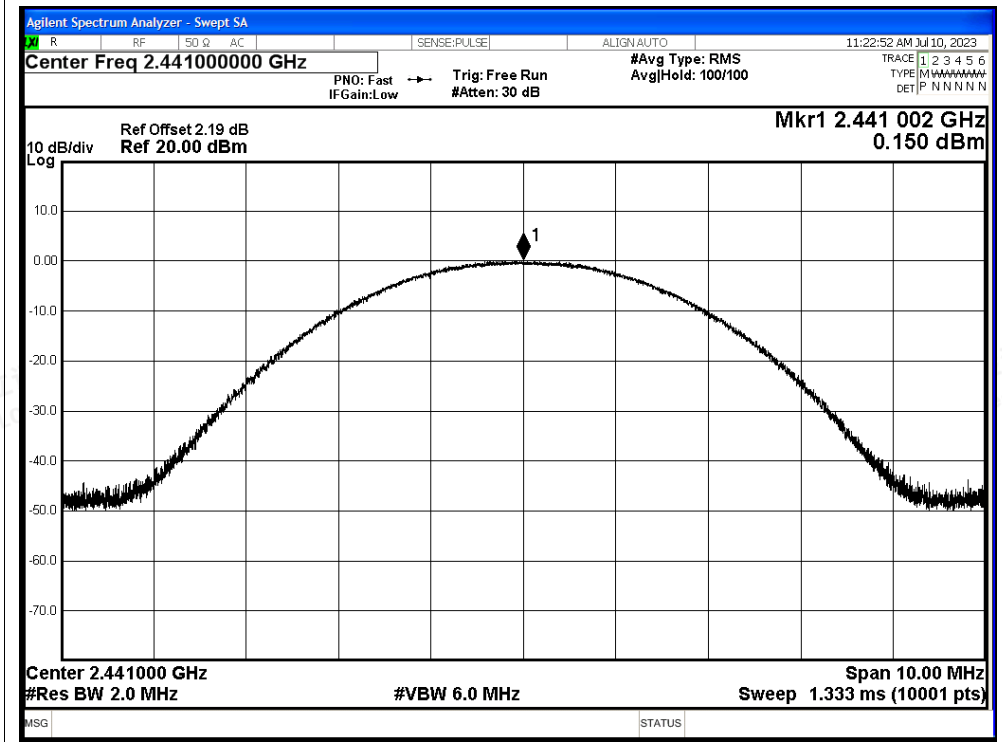
Power NVNT 1-DH5 2441MHz Ant1



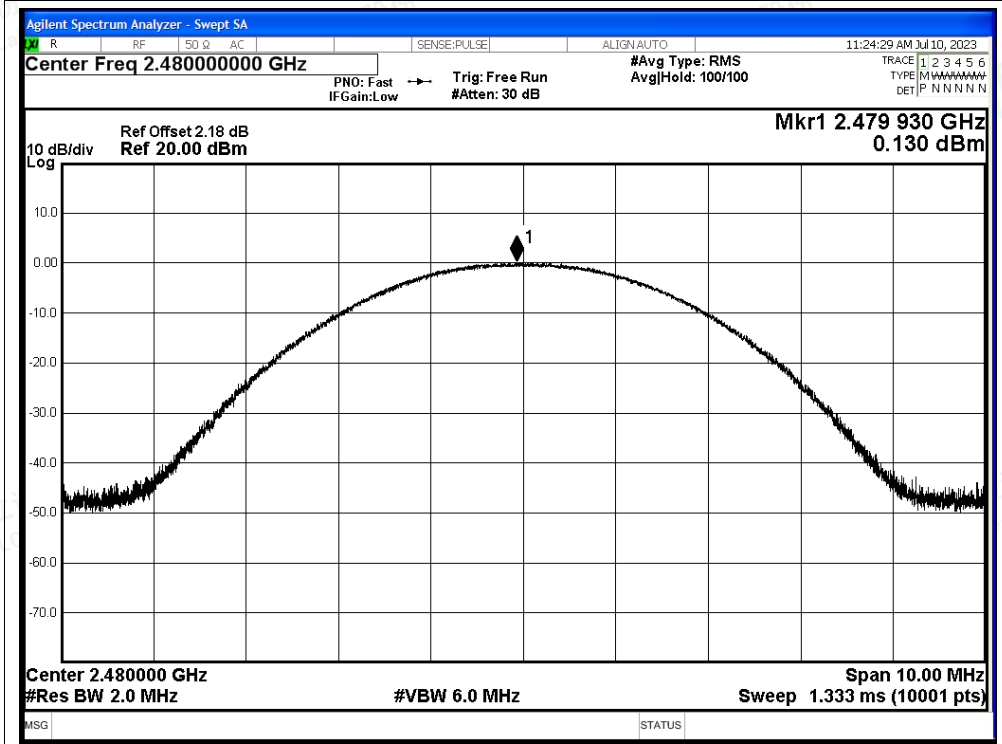




Power NVNT 2-DH5 2441MHz Ant1



Power NVNT 2-DH5 2480MHz Ant1





A.3 Carrier Frequencies Separation

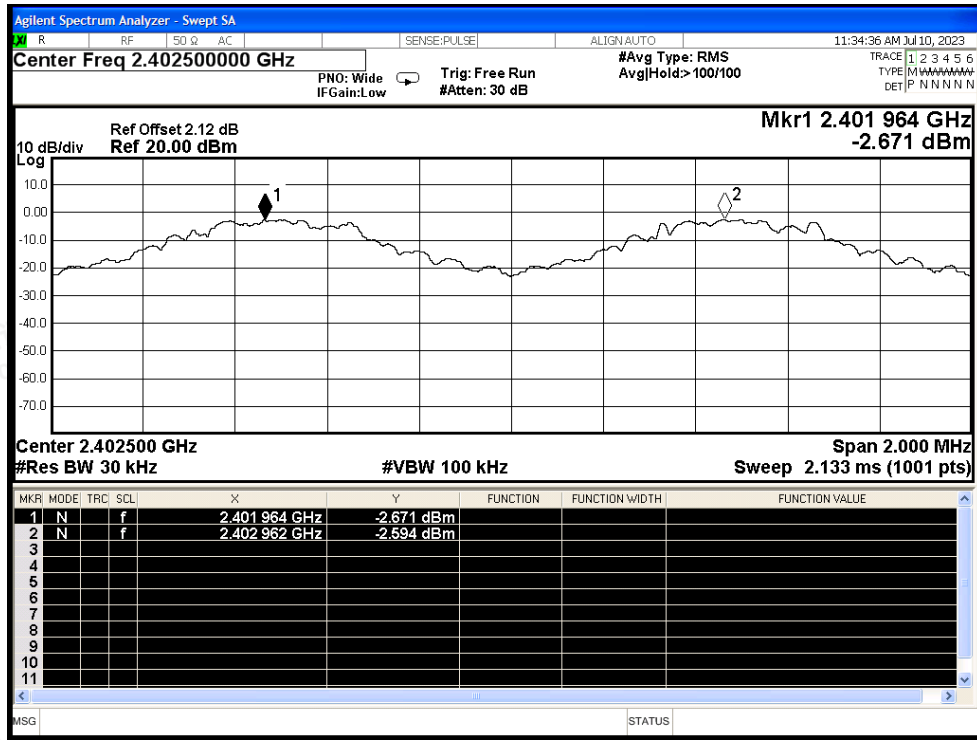
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.964	2402.962	0.998	0.688	Pass
NVNT	2-DH5	Ant1	2402.002	2403.15	1.148	0.855	Pass



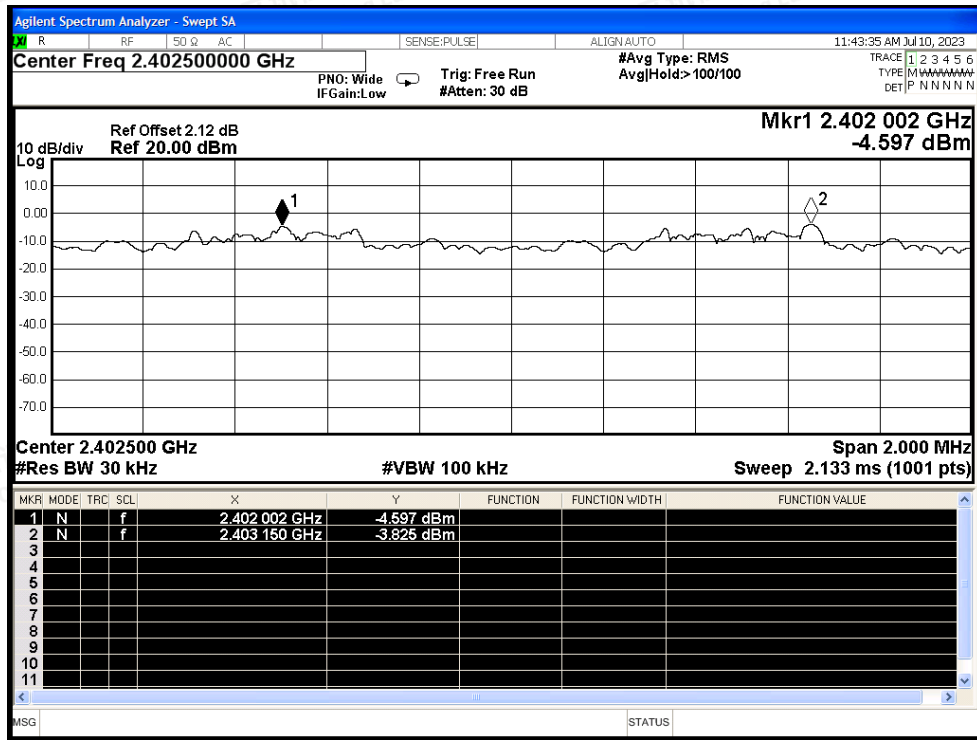


Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1





A.4 Dwell Time

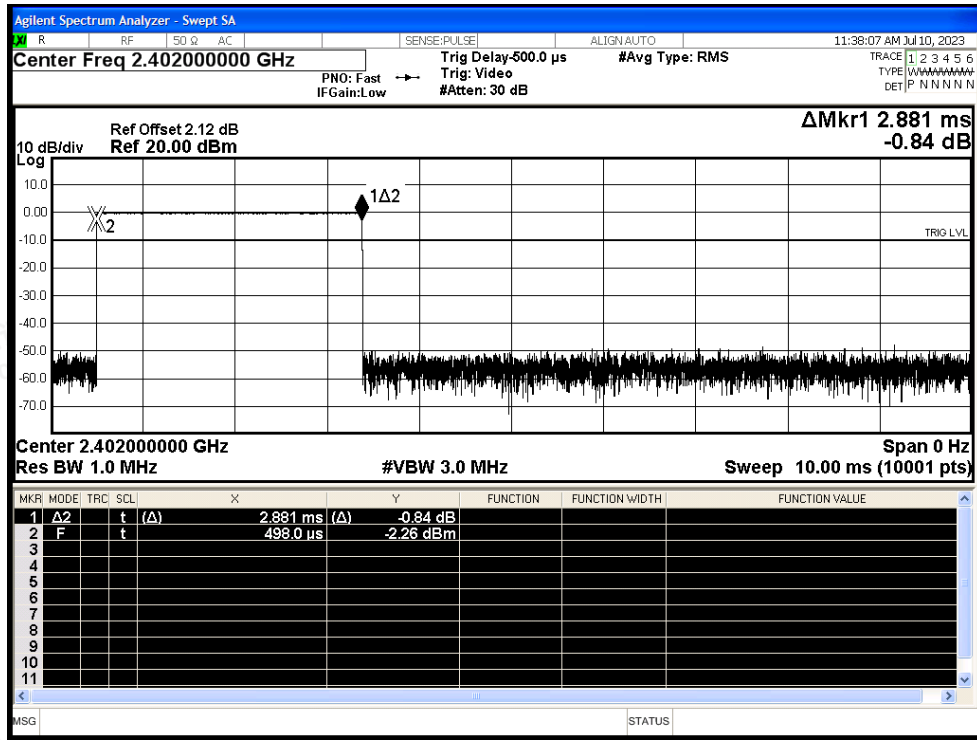
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.881	293.862	102	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.88	256.32	89	31600	400	Pass



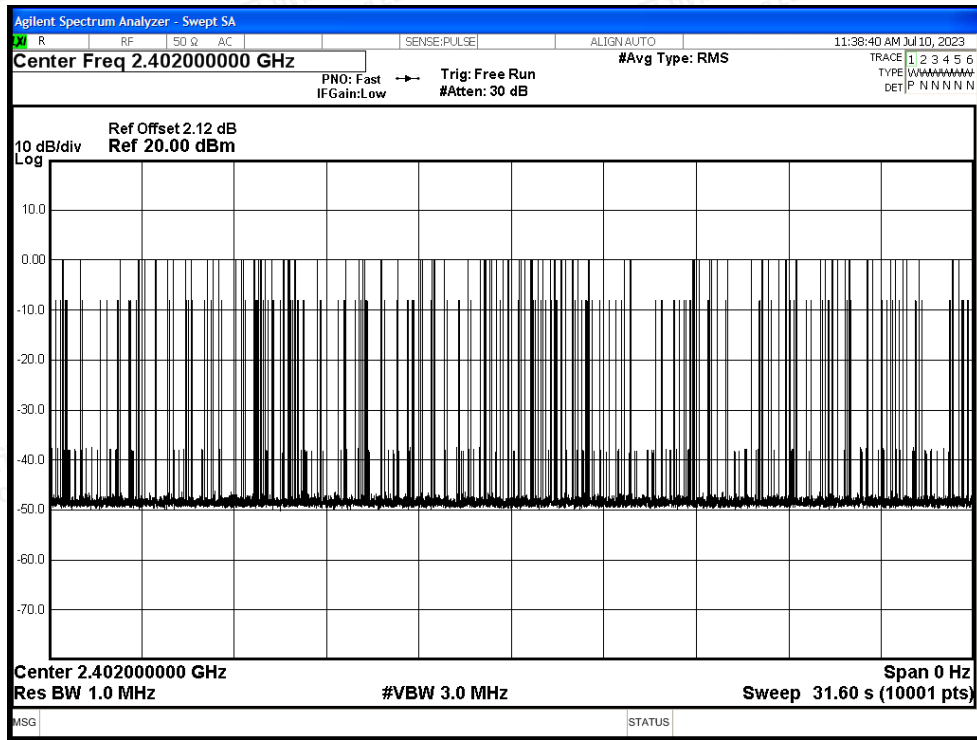


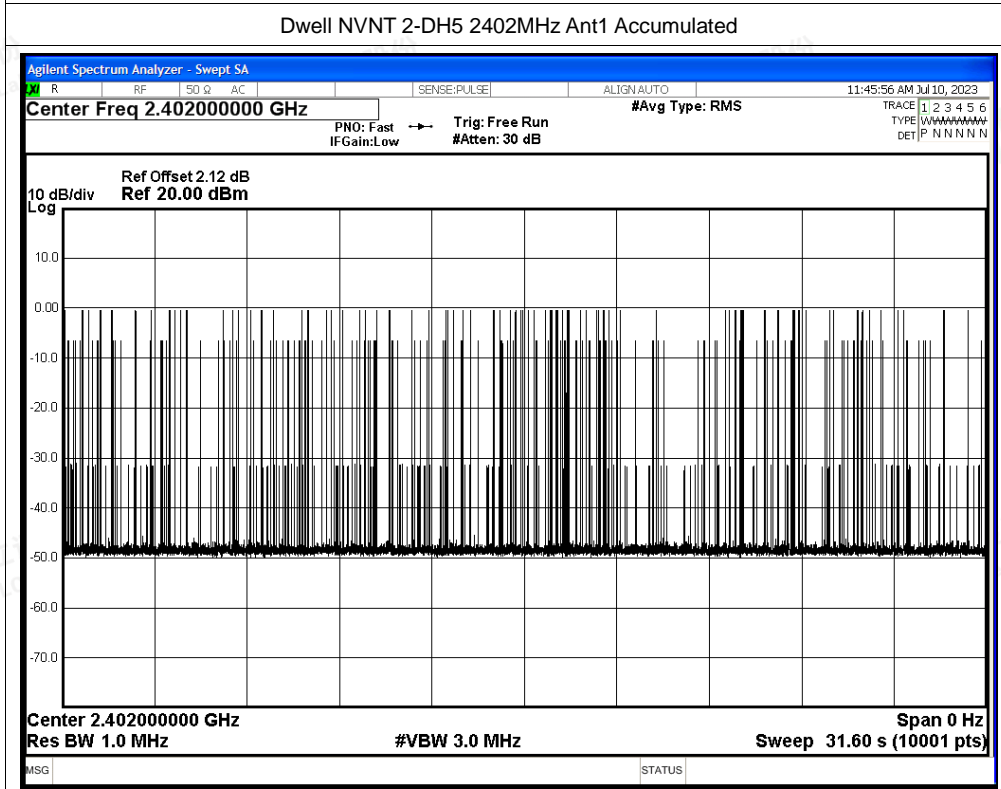
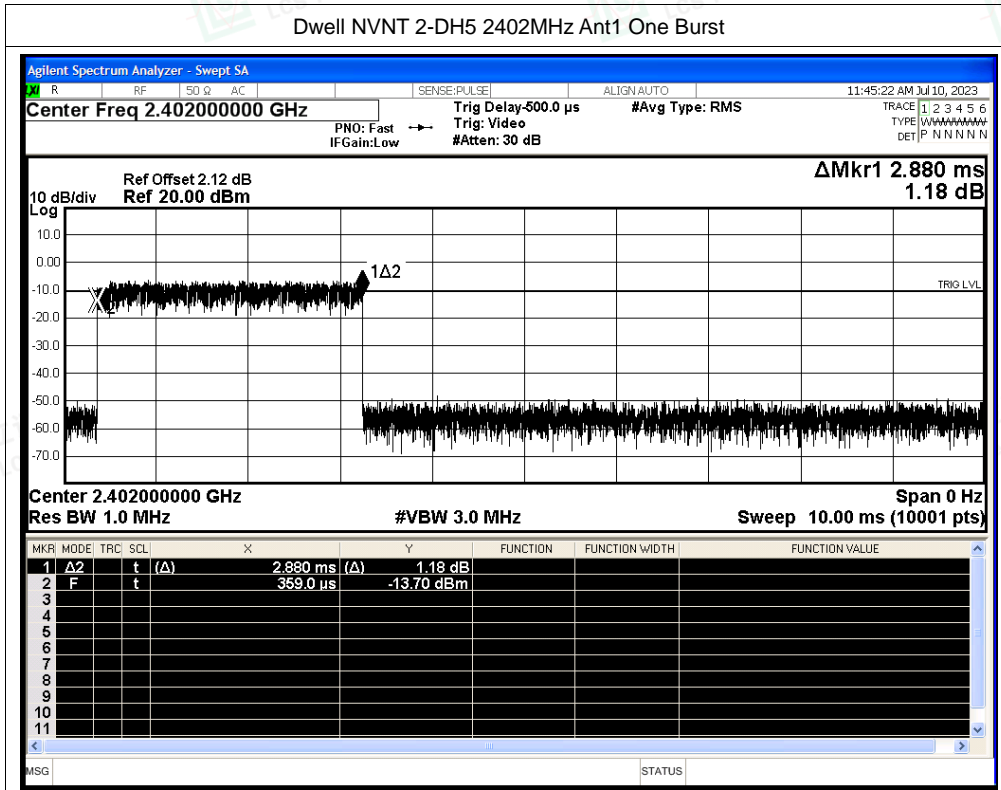
Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated







A.5 Number of Hopping Channel

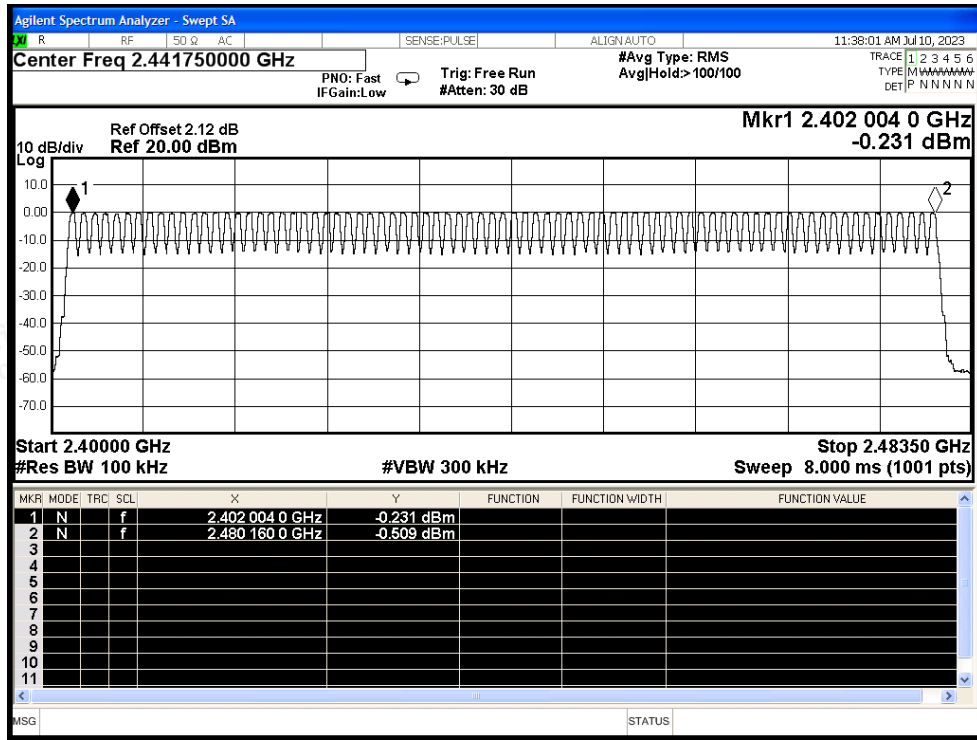
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass



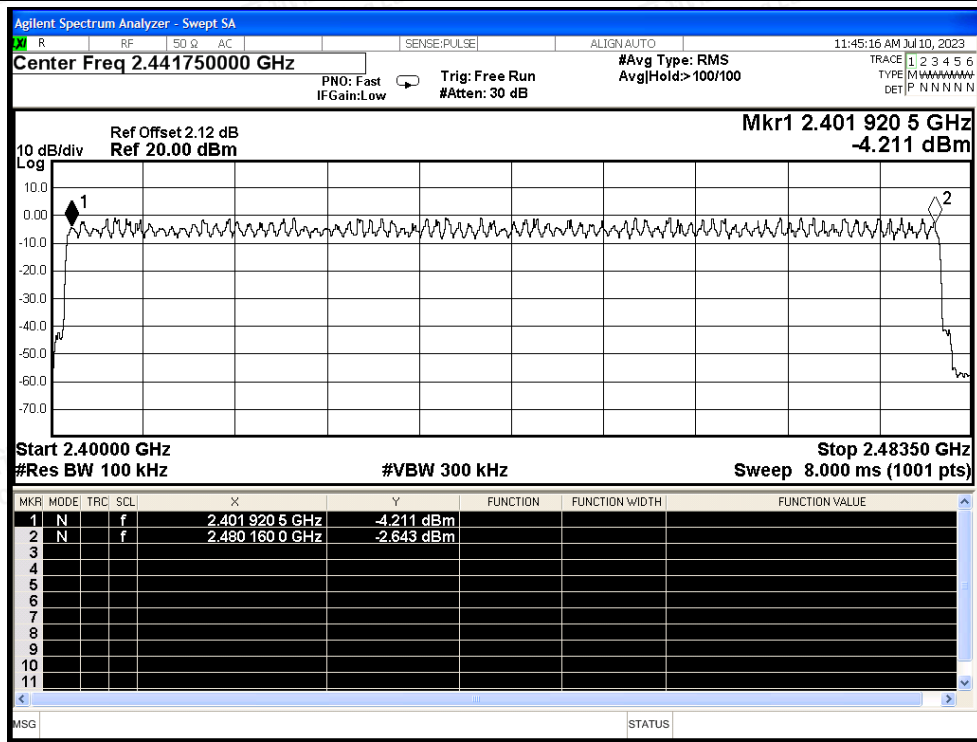


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1





A.6 Band Edge

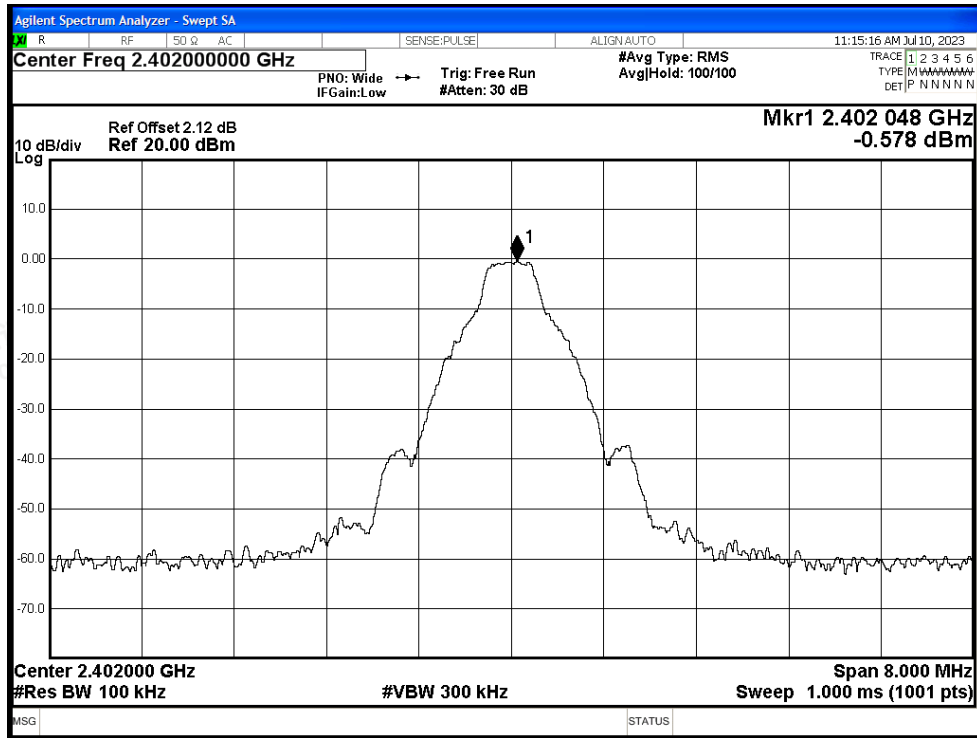
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-56.35	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-56.65	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-51.12	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-56.73	-20	Pass



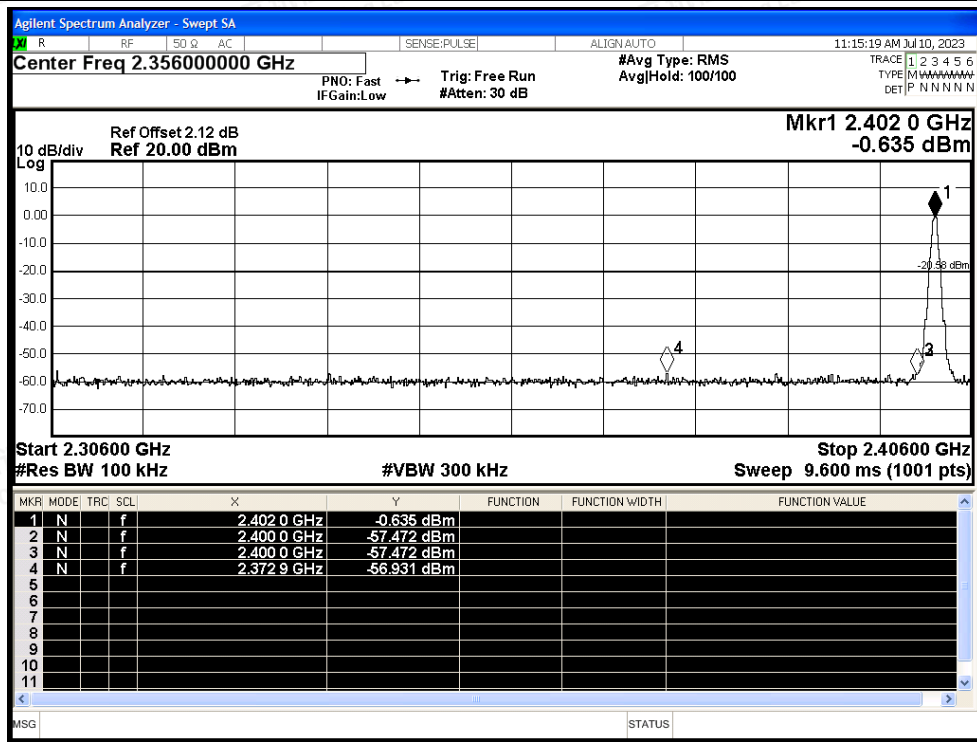


Test Graphs

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

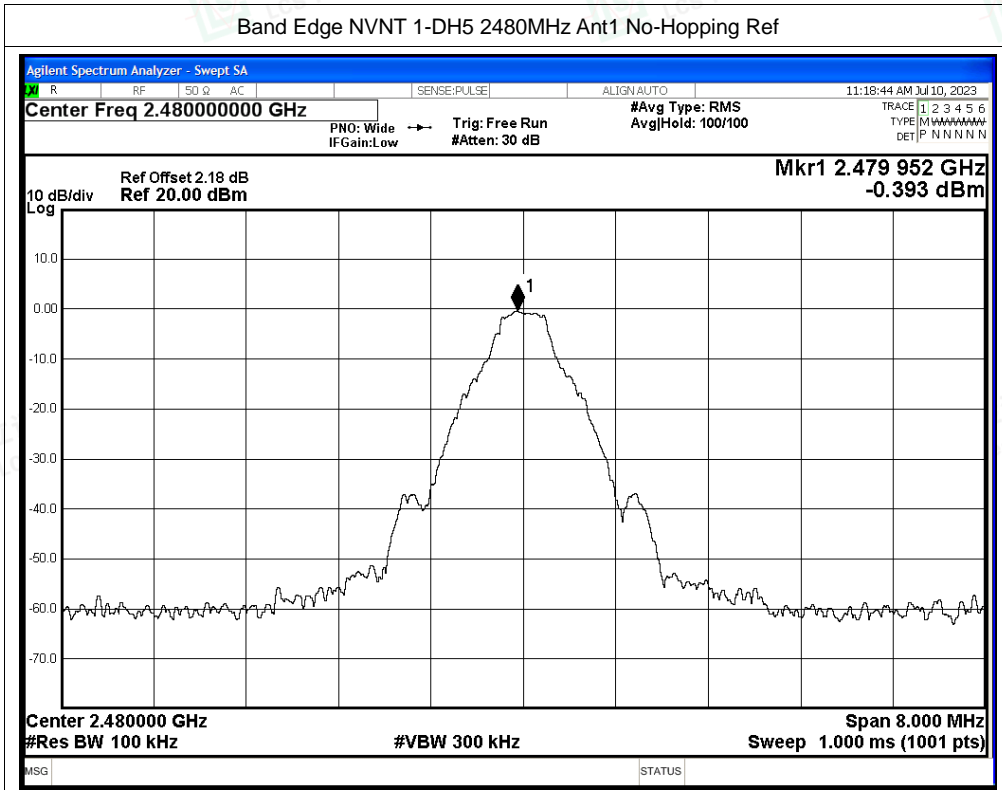


Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

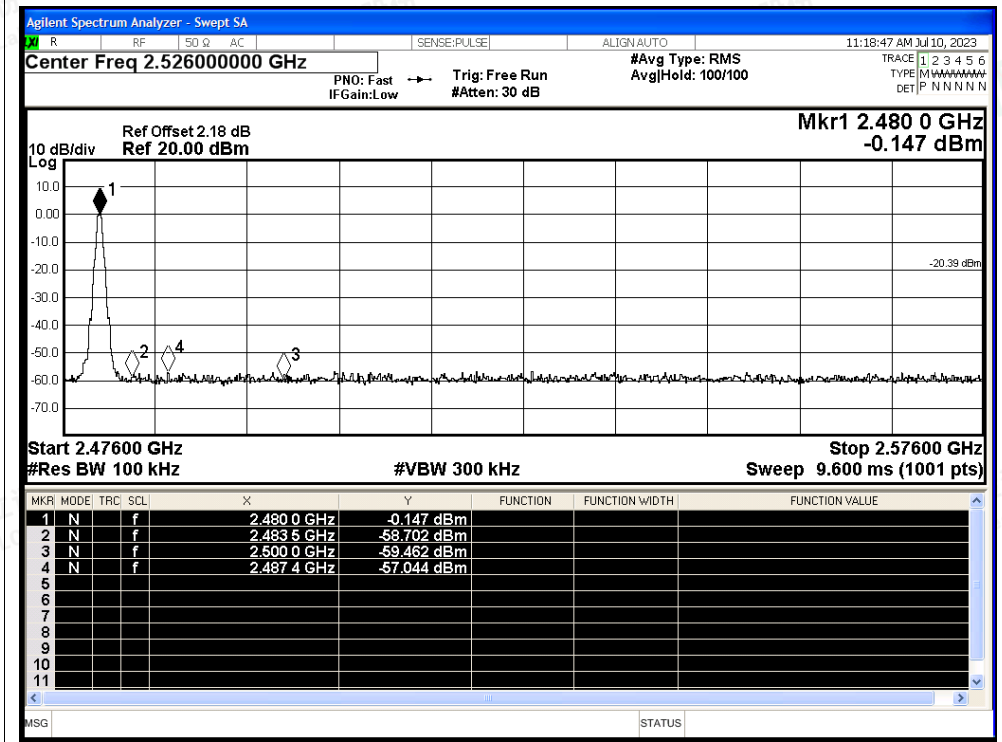




Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

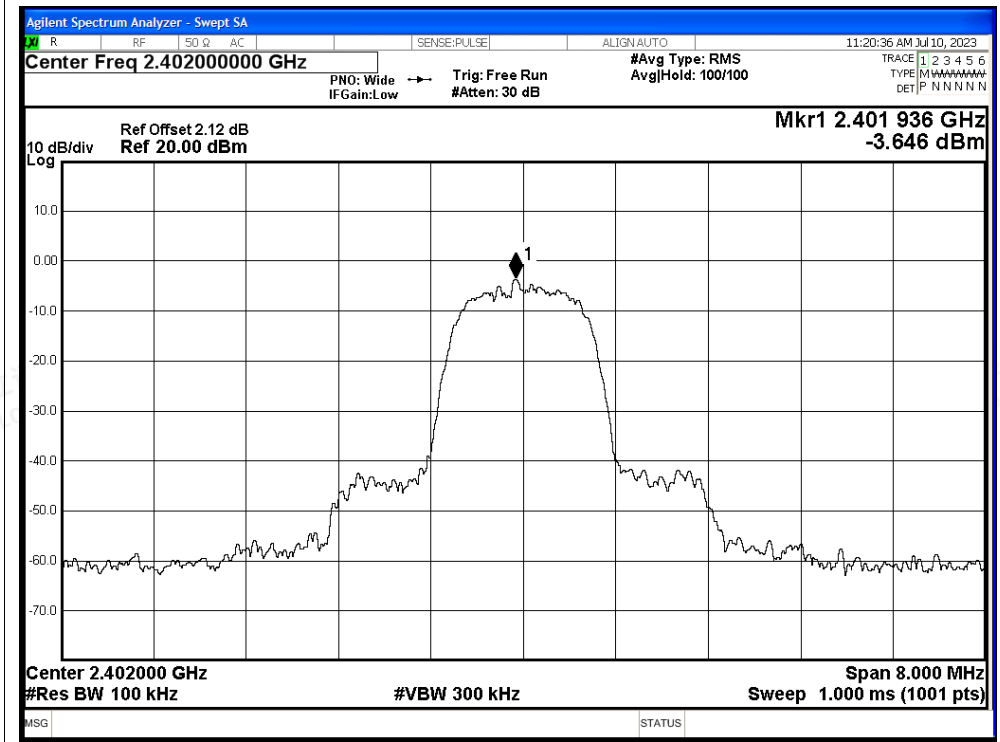


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

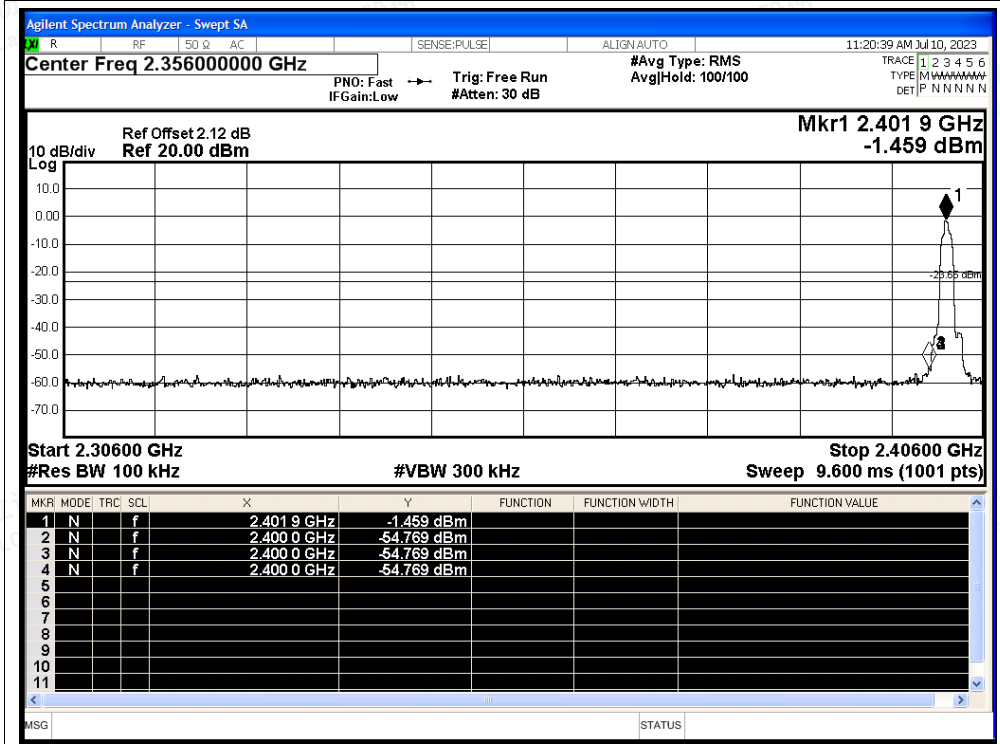




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref

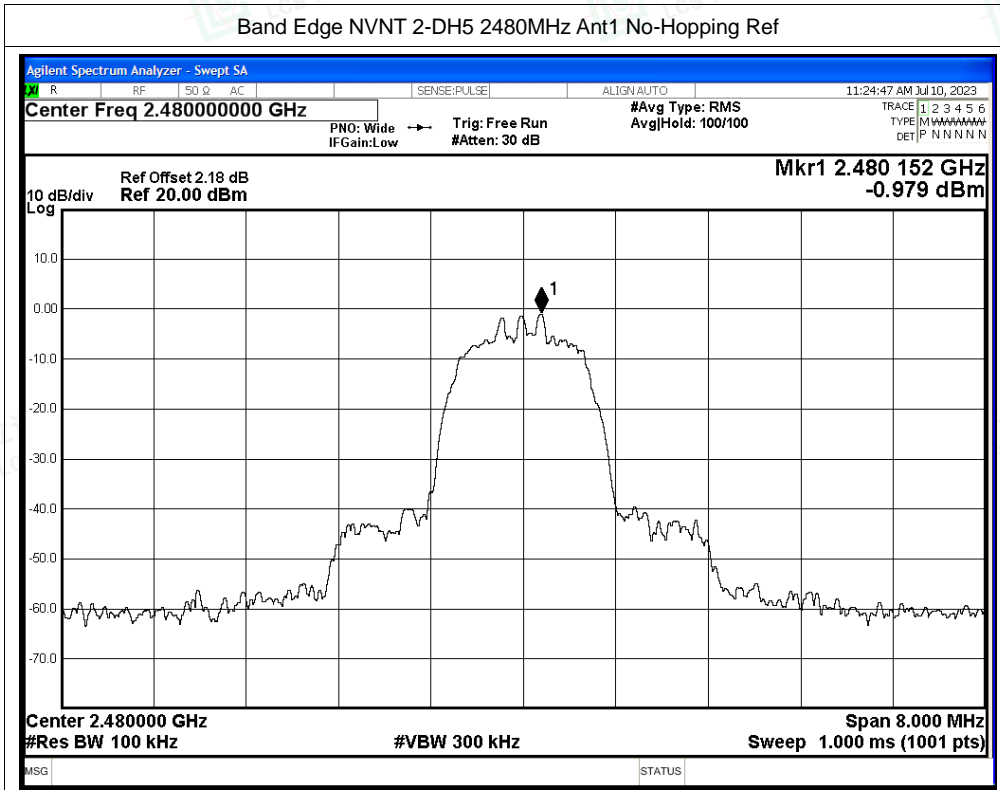


Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

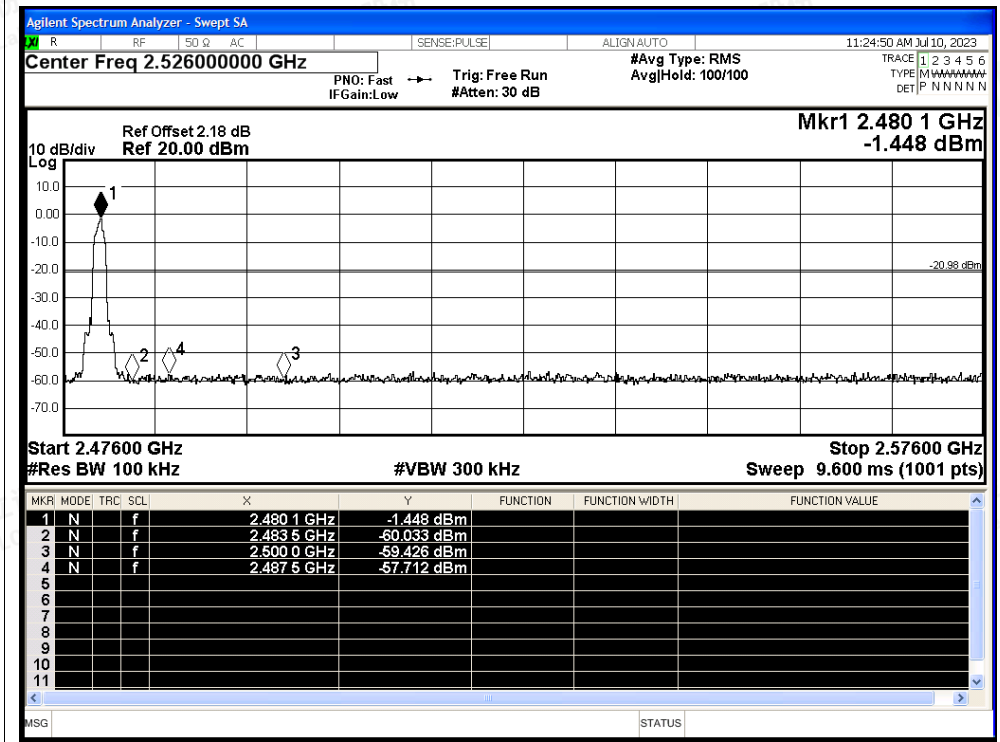




Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



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





(Hopping)

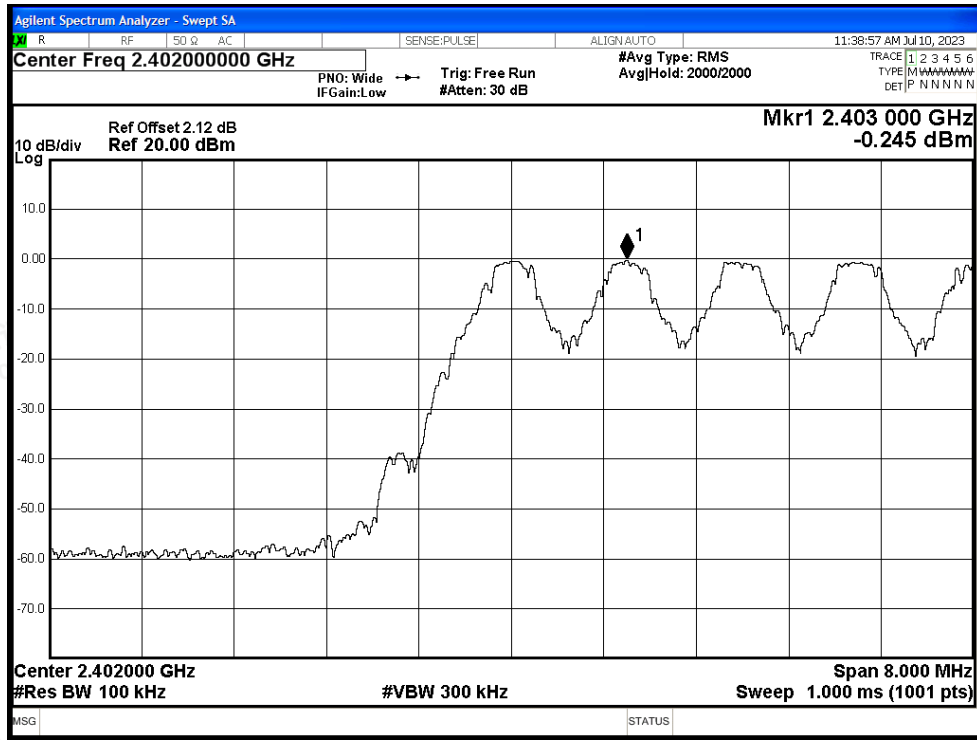
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-55.97	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-55.67	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-53.81	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-54.41	-20	Pass



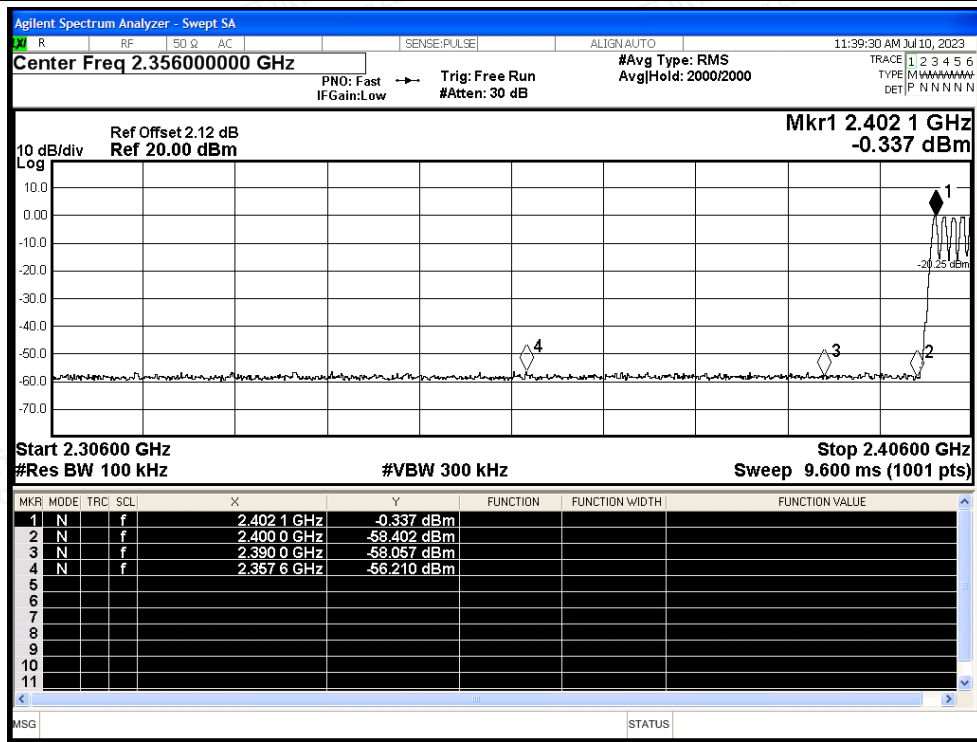


Test Graphs

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

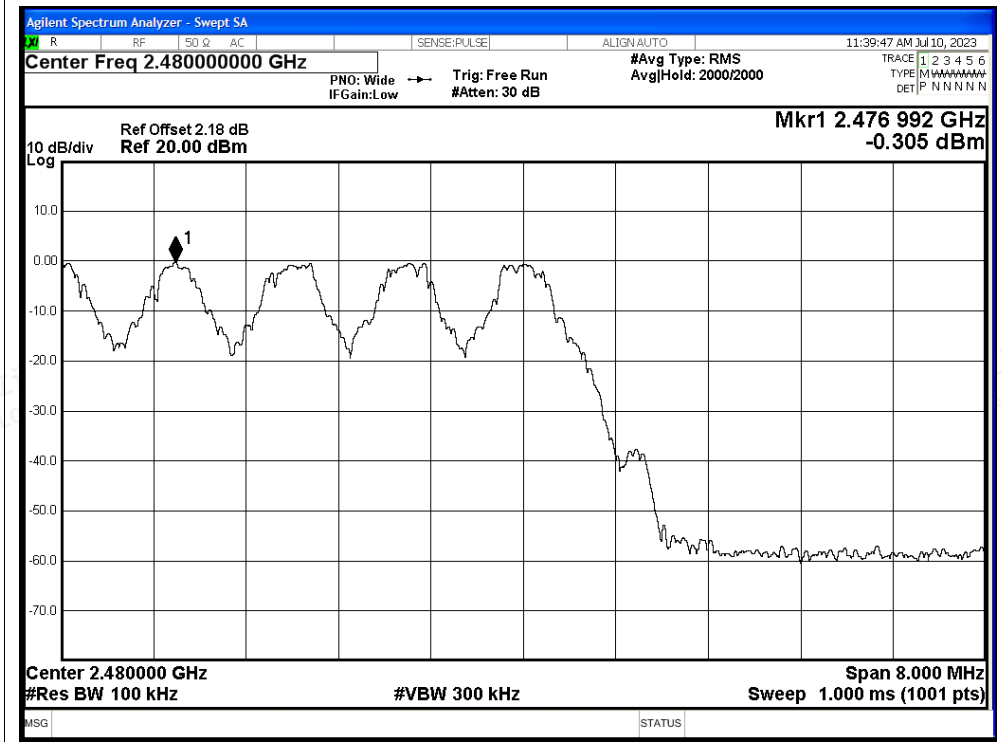


Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission

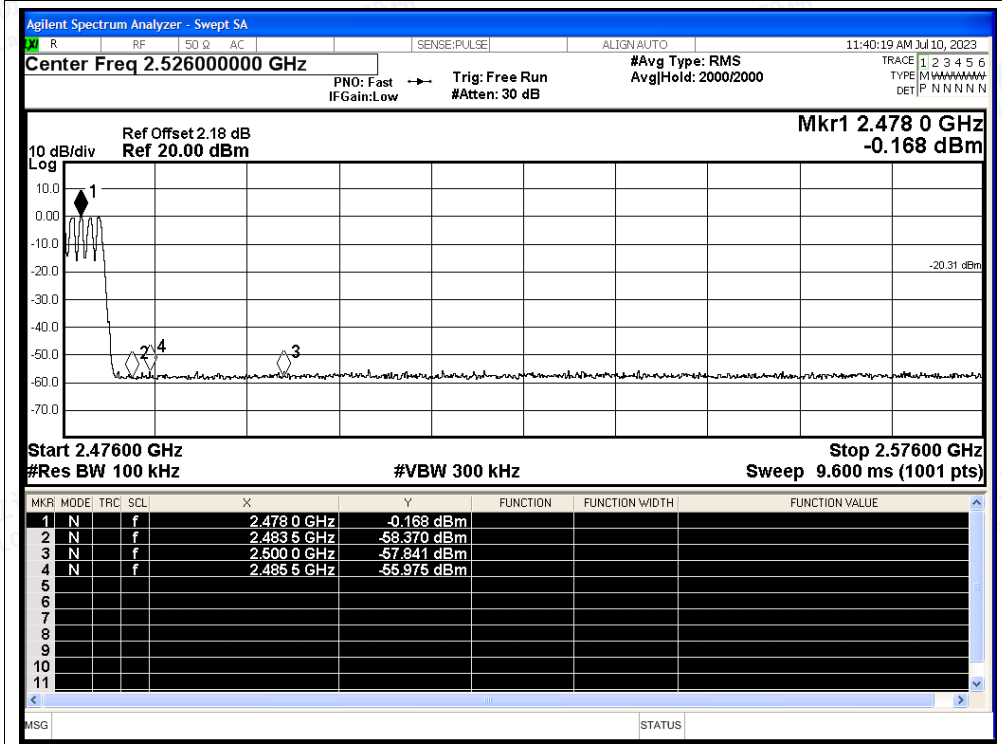




Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



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

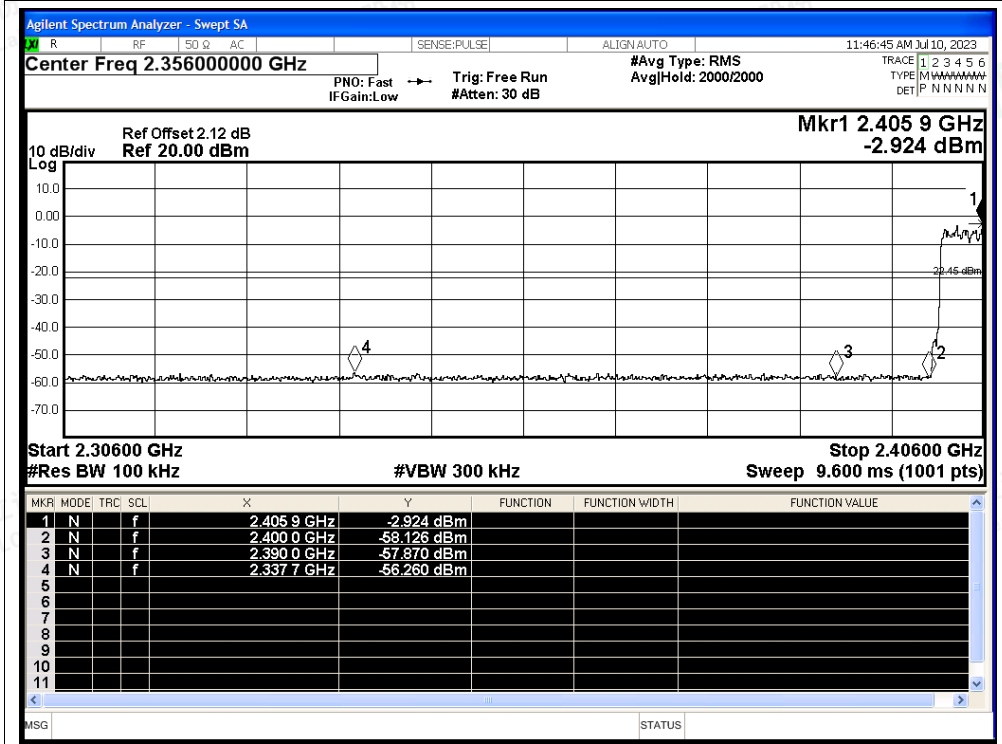




Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref

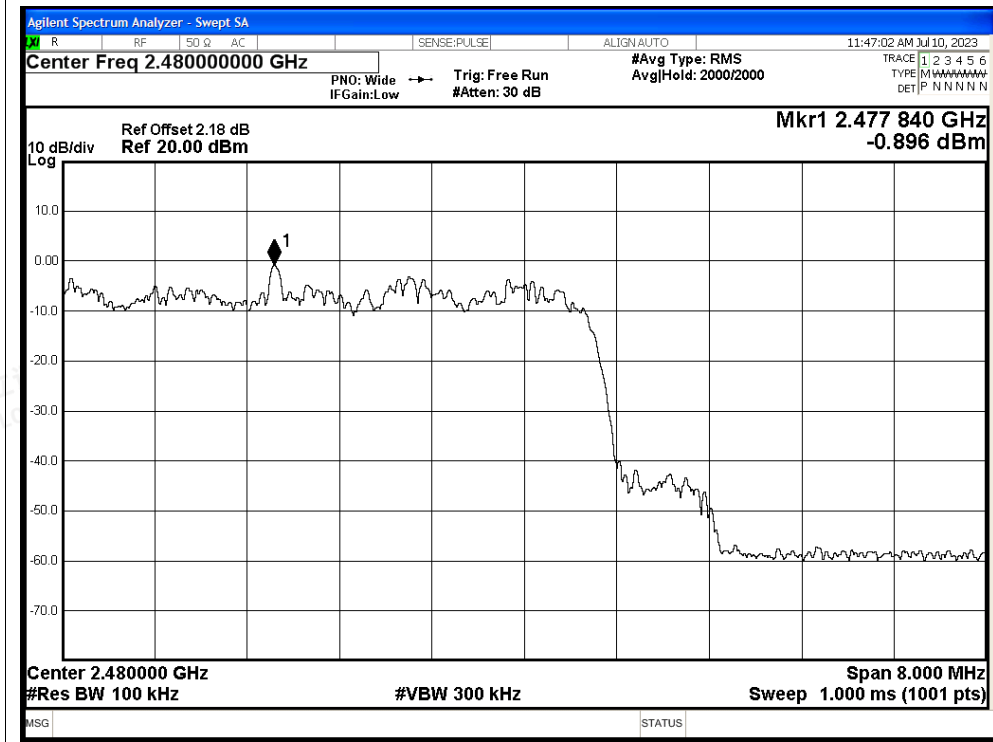


Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission

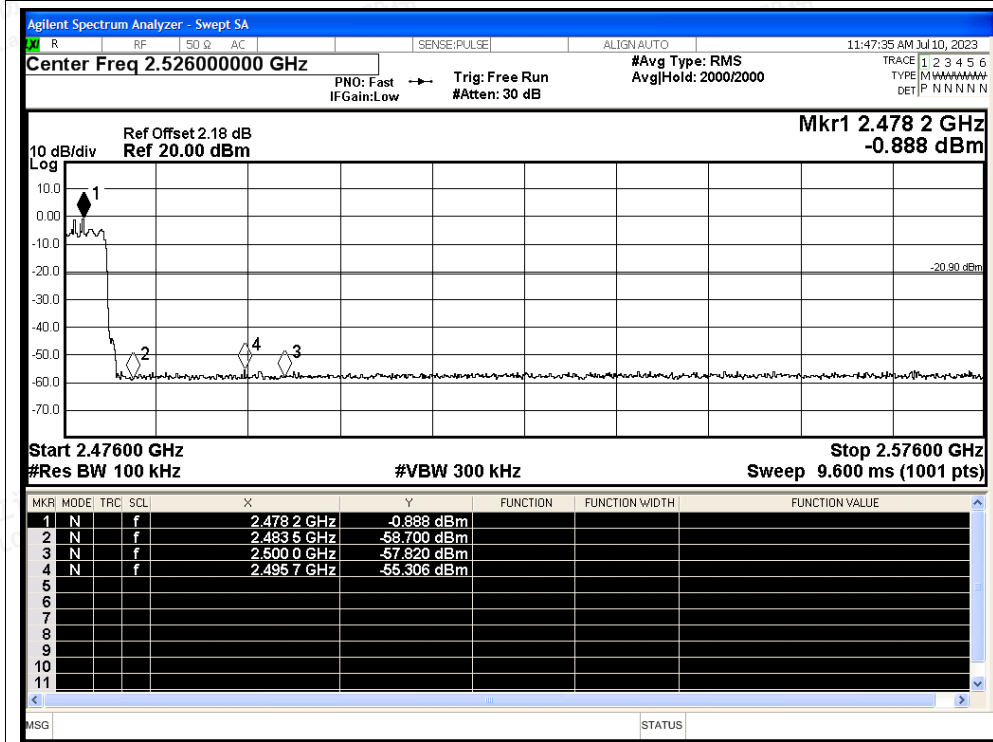




Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



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





A.7 Conducted RF Spurious Emission

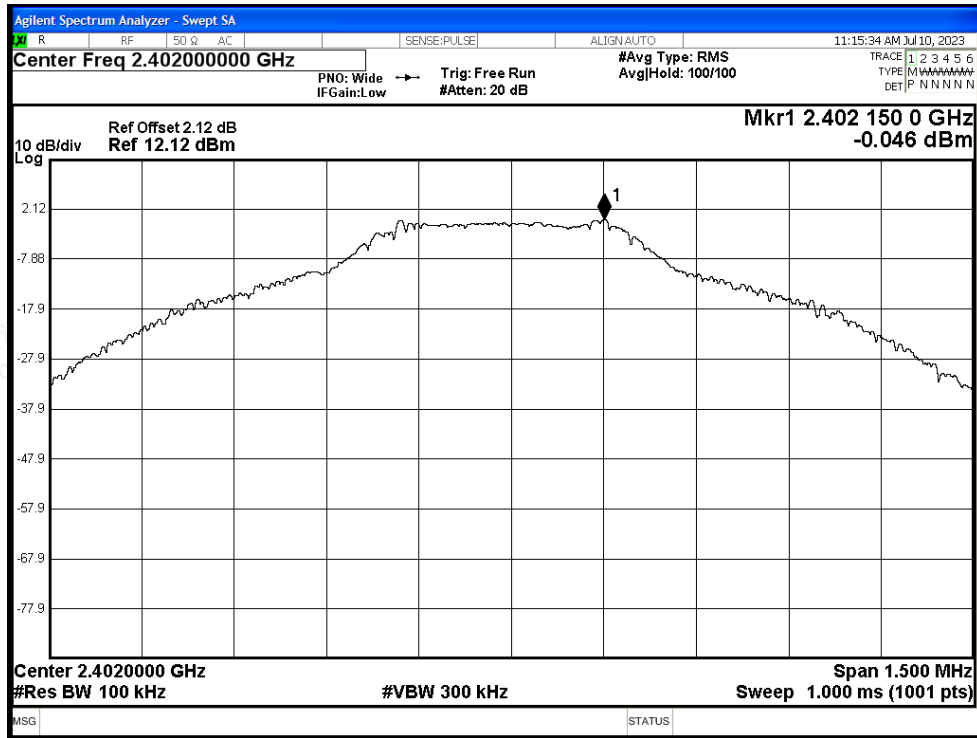
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-55.29	-20	Pass
NVNT	1-DH5	2441	Ant1	-55.73	-20	Pass
NVNT	1-DH5	2480	Ant1	-55.48	-20	Pass
NVNT	2-DH5	2402	Ant1	-53.87	-20	Pass
NVNT	2-DH5	2441	Ant1	-54.23	-20	Pass
NVNT	2-DH5	2480	Ant1	-54.98	-20	Pass



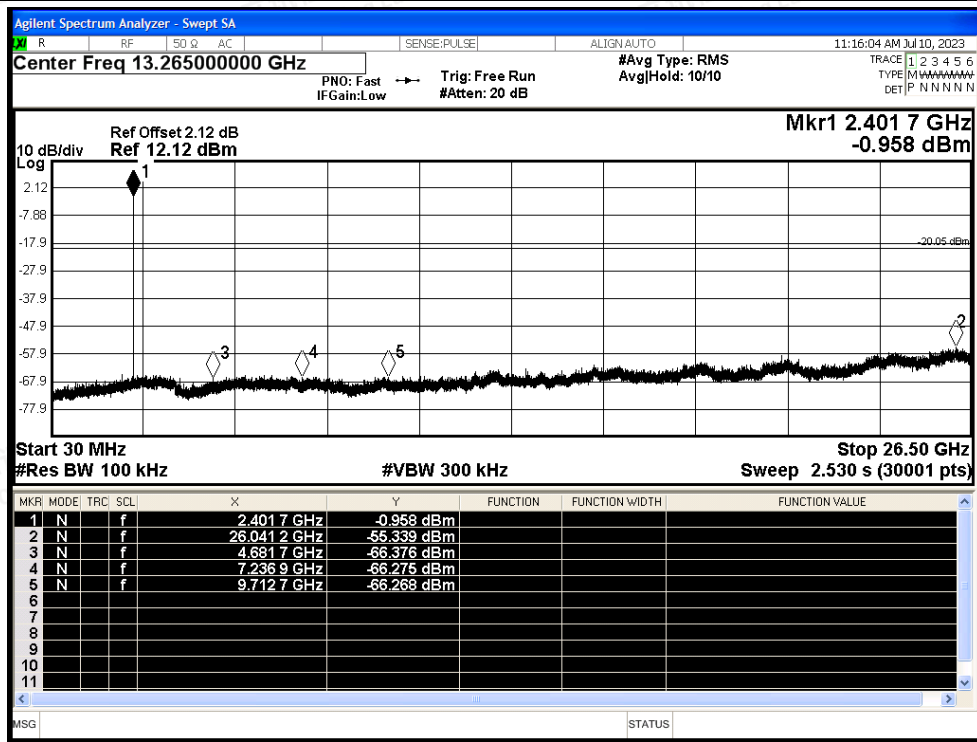


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

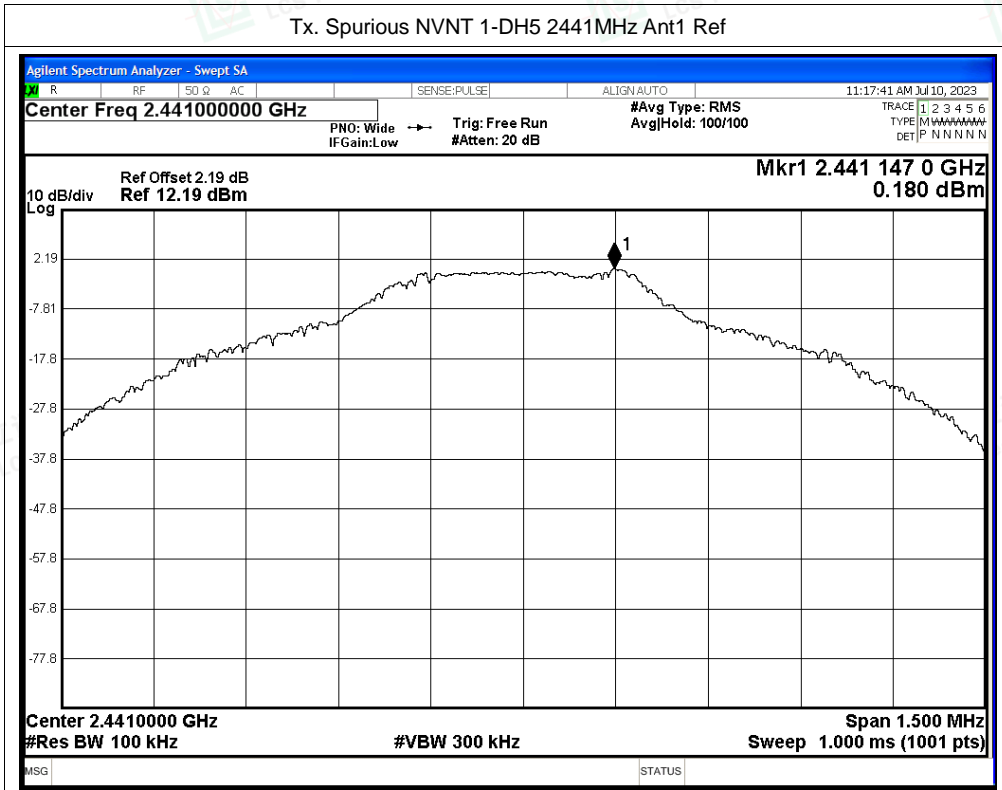


Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

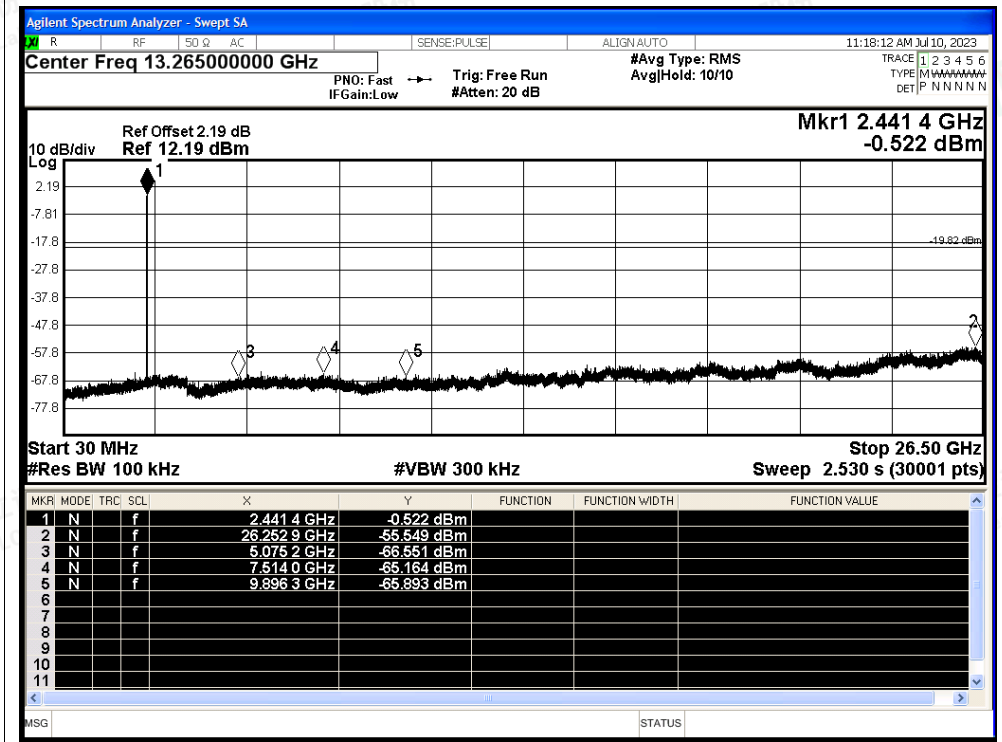




Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

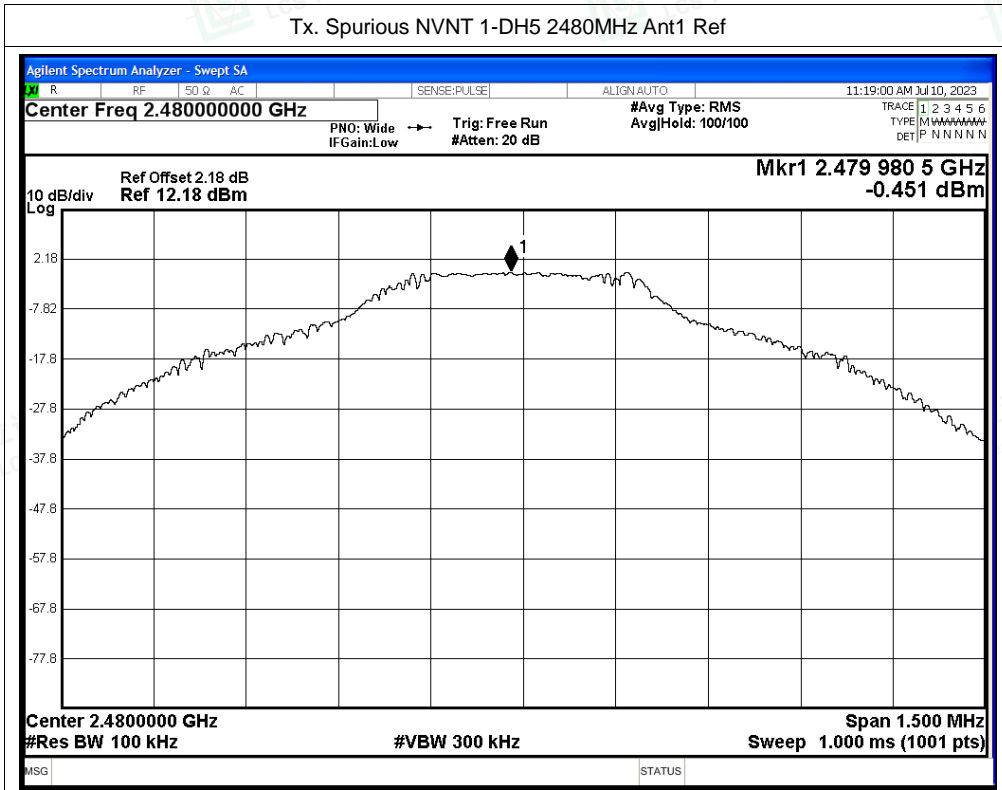


Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

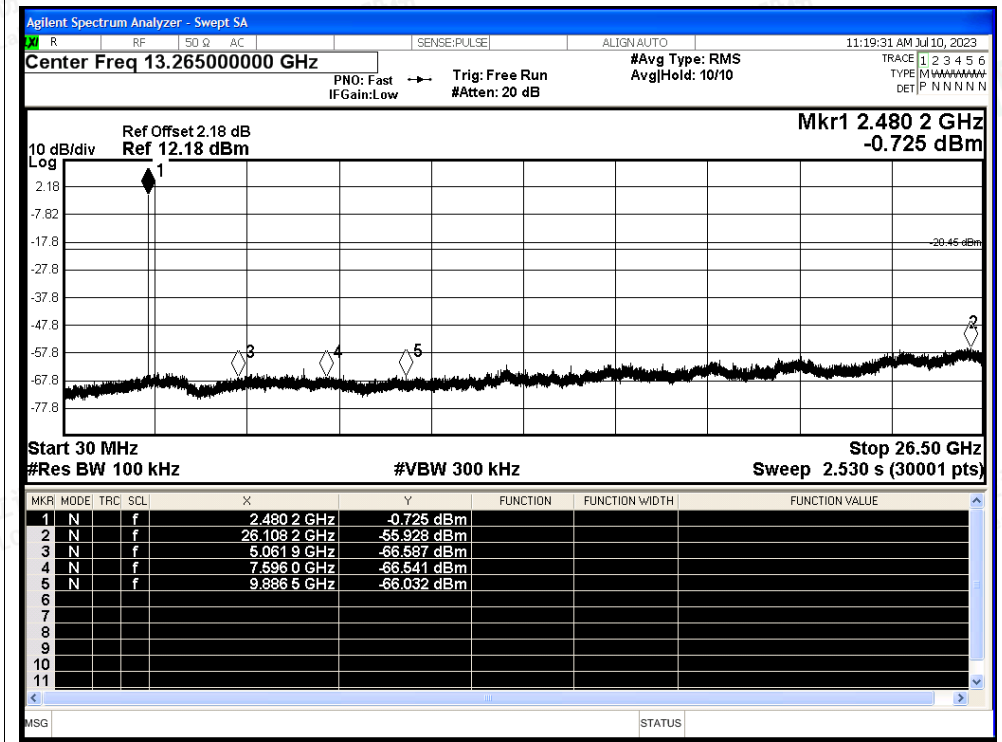




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

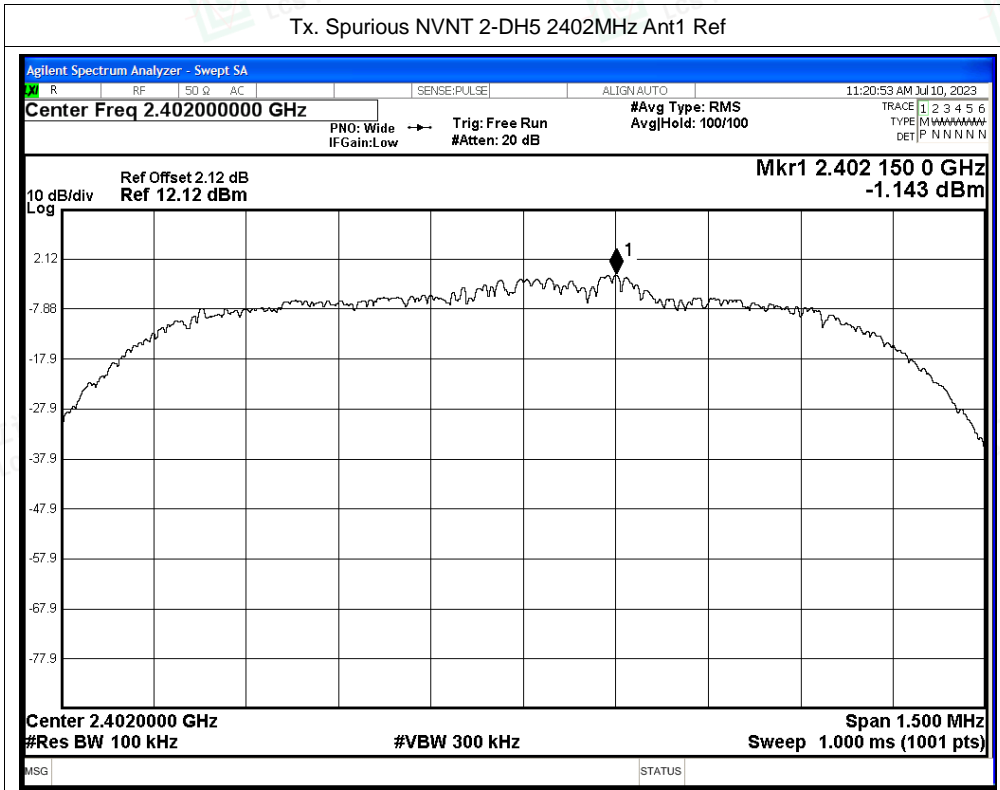


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

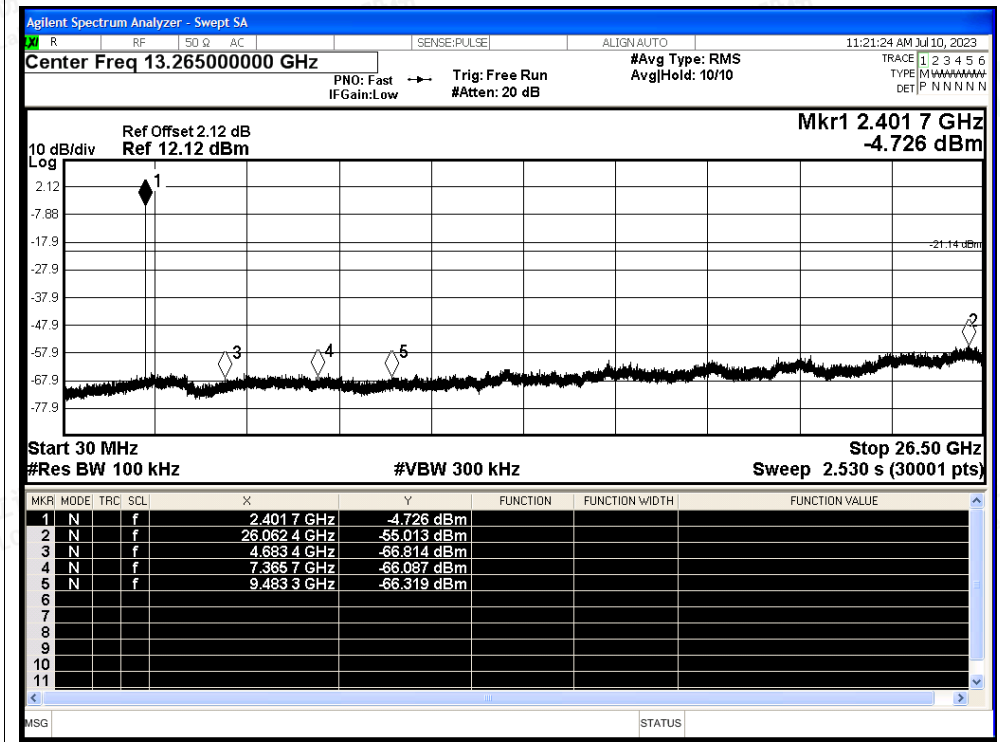




Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref

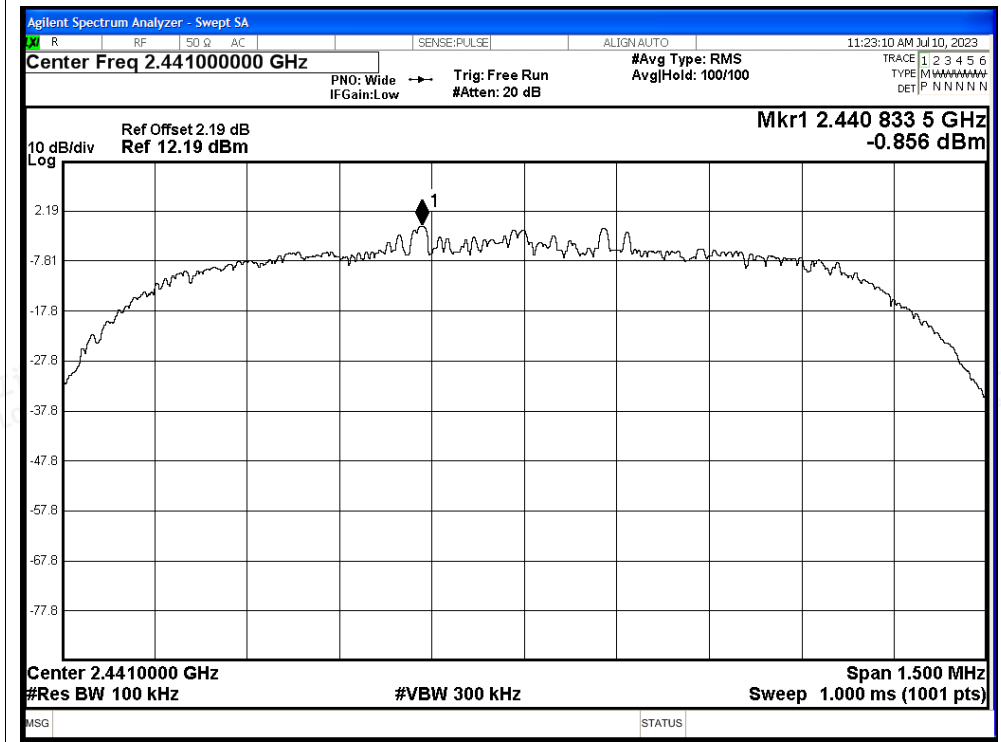


Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission

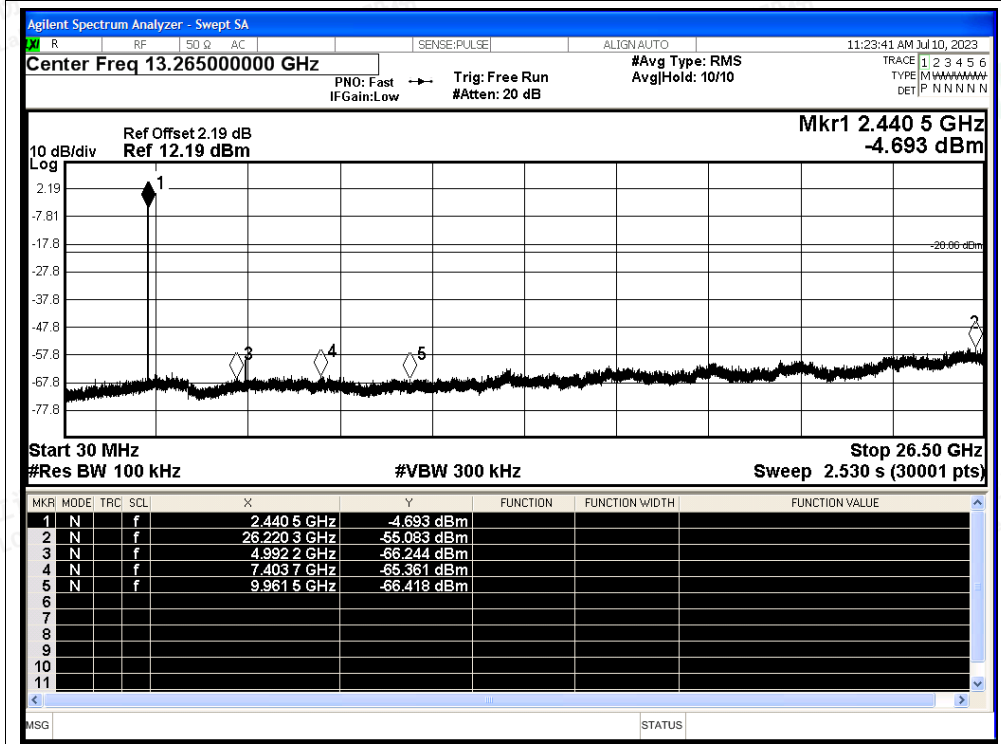




Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref

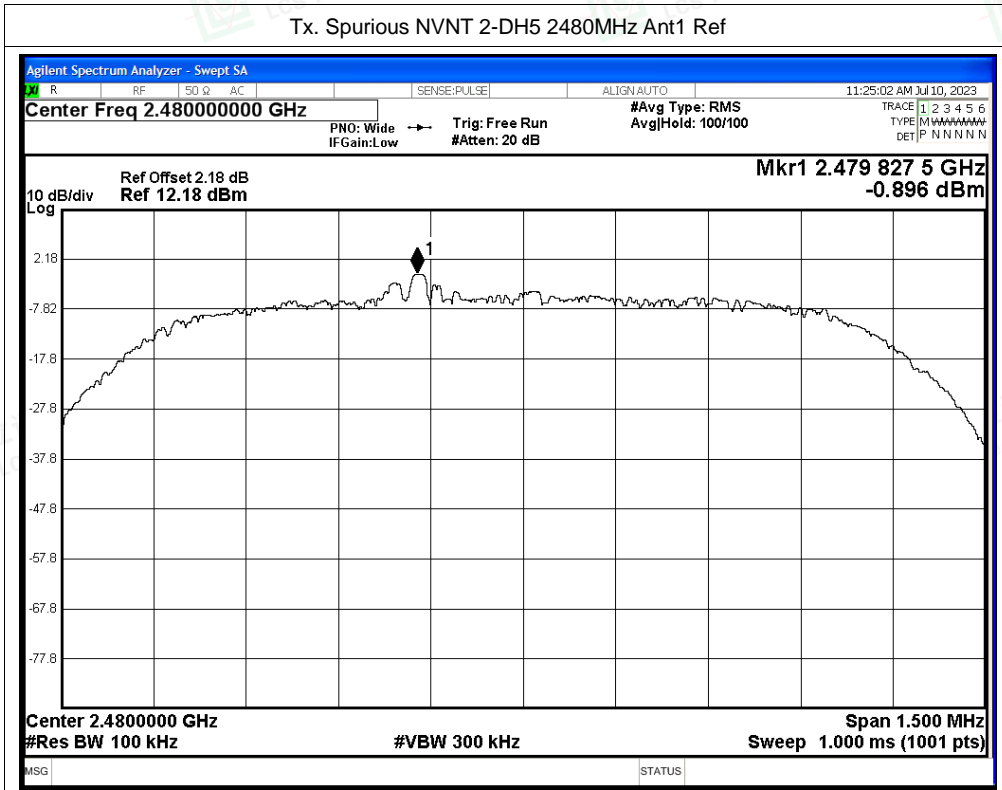


Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission

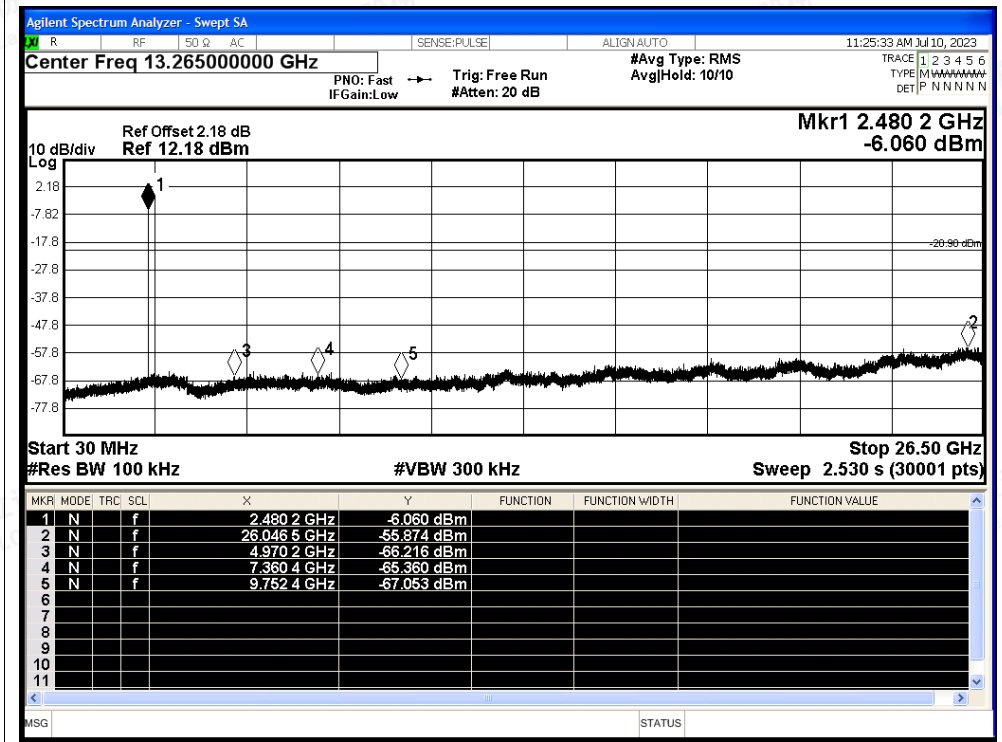




Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission





A.8 Restrict Band

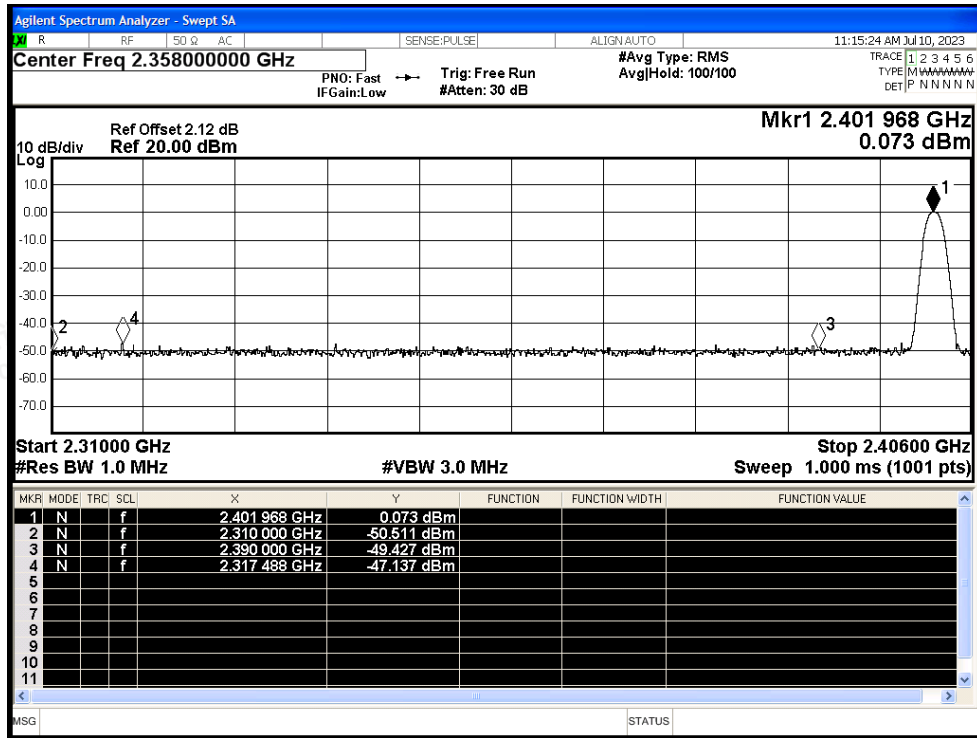
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-50.51	2	46.75	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-57.97	2	39.29	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2317.488	-47.14	2	50.12	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2383.44	-57.49	2	39.77	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.43	2	47.83	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-57.69	2	39.57	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.18	2	47.08	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-55.8	2	41.46	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2486.416	-46.93	2	50.33	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.512	-55.8	2	41.46	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-49.54	2	47.72	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-57.43	2	39.83	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-51.19	2	46.07	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-57.87	2	39.39	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2326.224	-48.12	2	49.14	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2374.608	-57.54	2	39.72	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-49.67	2	47.59	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-57.74	2	39.52	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-49.83	2	47.43	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-55.72	2	41.54	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2486.632	-46.62	2	50.64	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.512	-55.72	2	41.54	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-51.11	2	46.15	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-57.29	2	39.97	Average	54	Pass



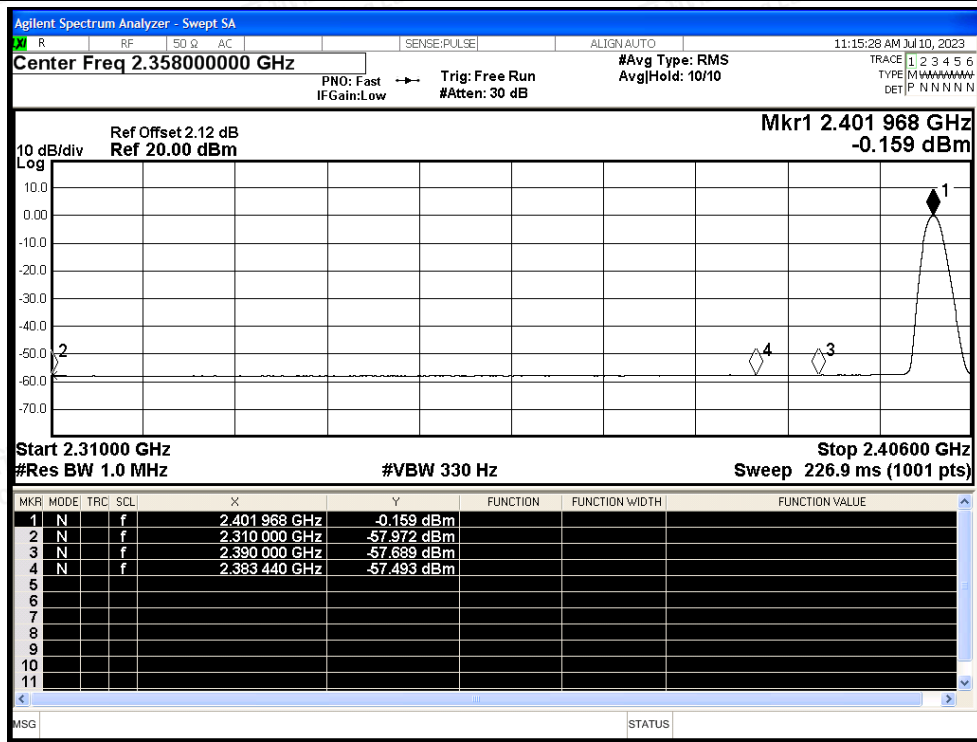


Test Graphs

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

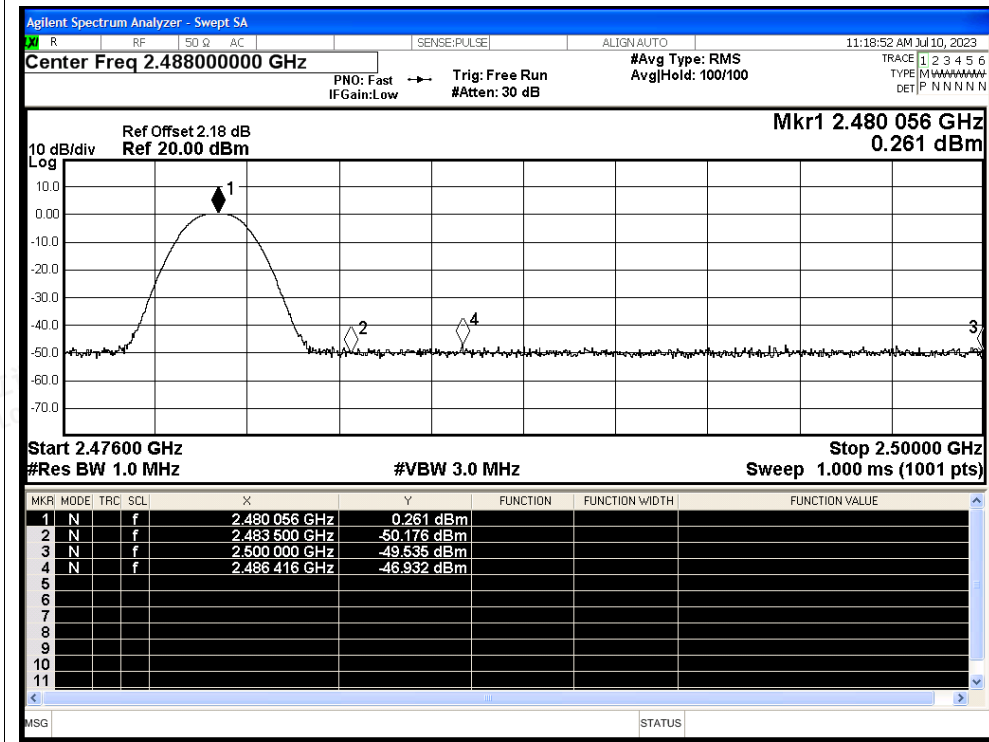


Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

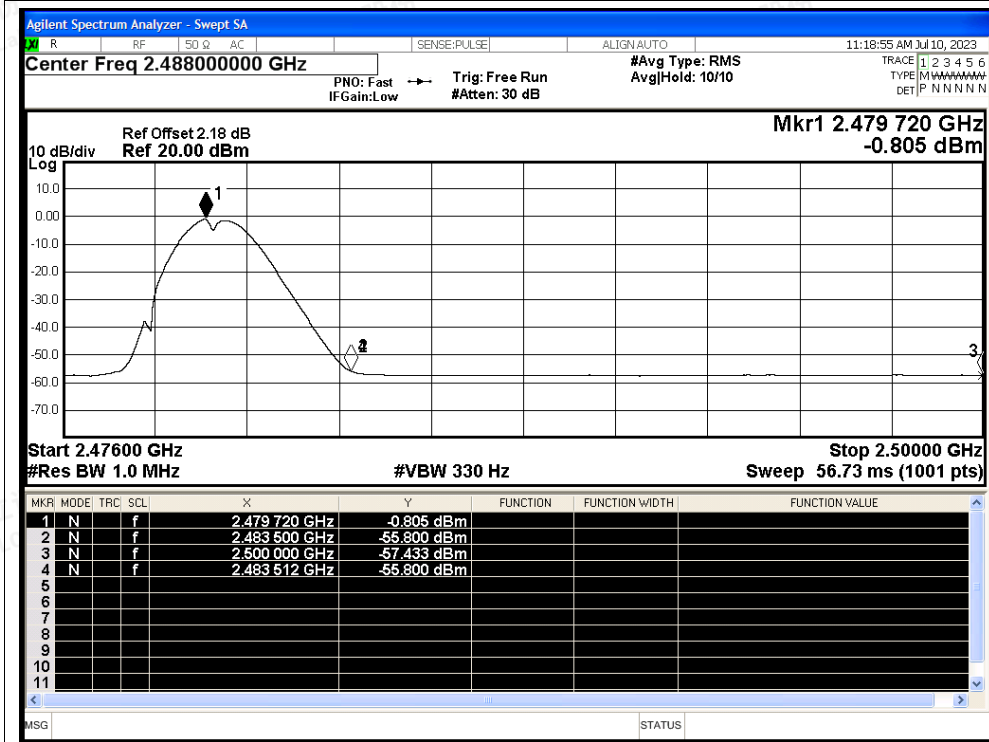




Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak

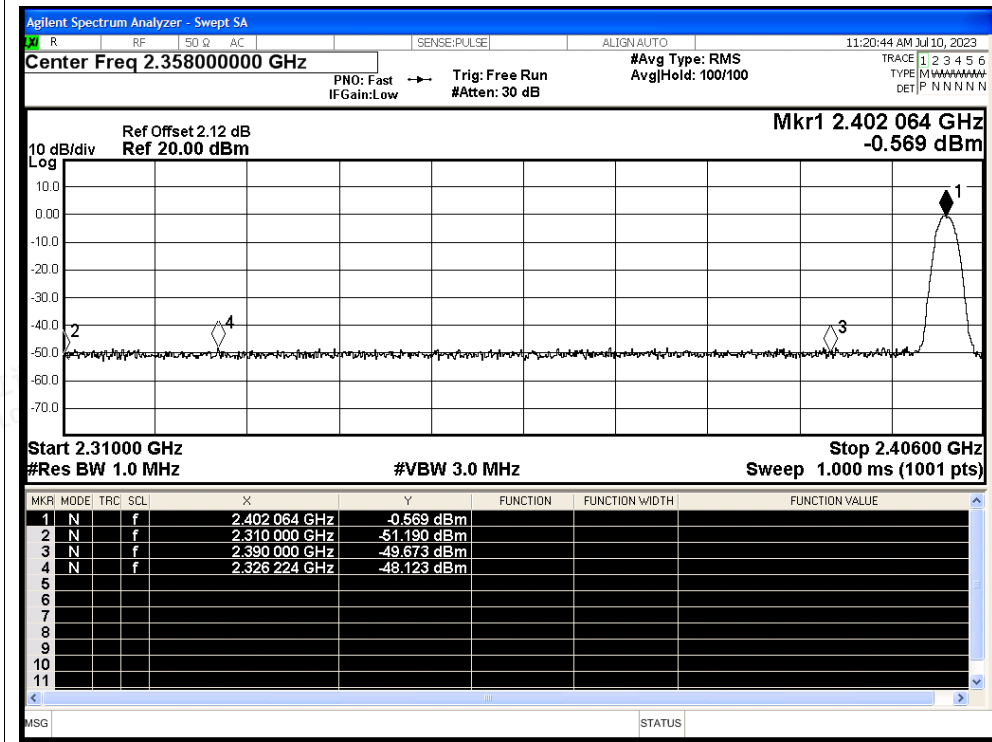


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

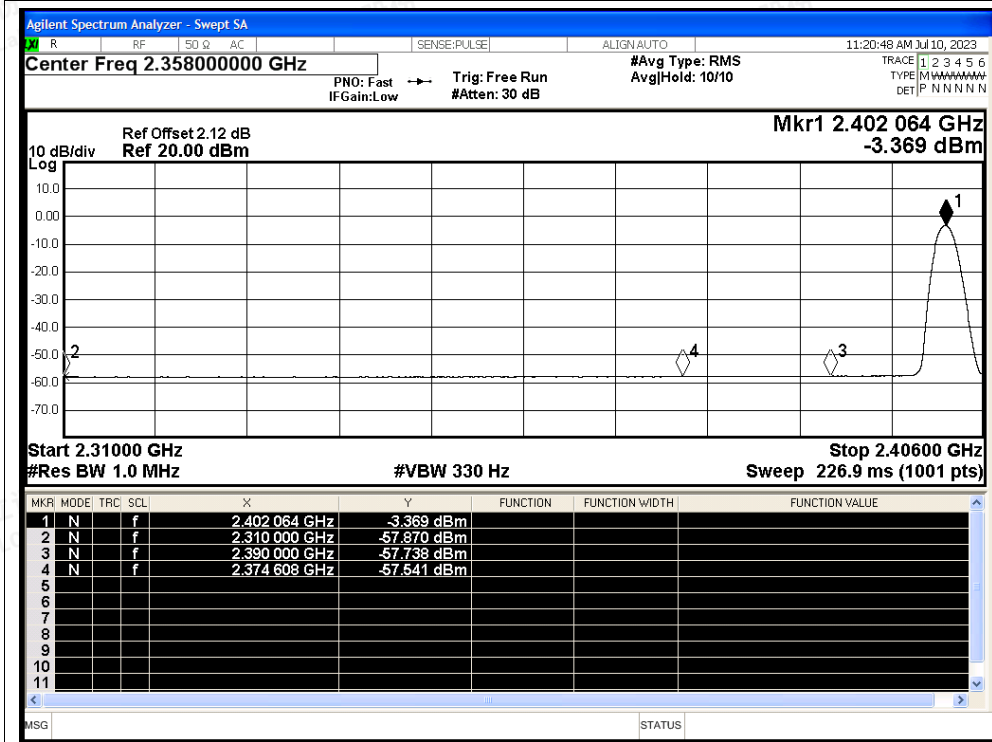




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak

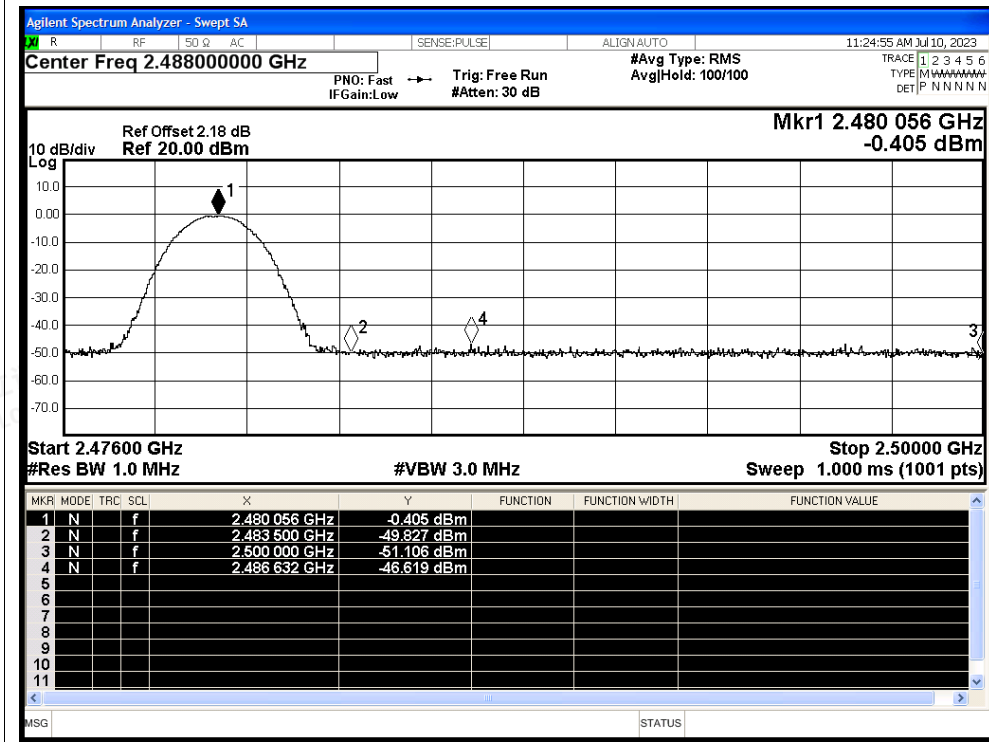


Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average





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



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

