



## Appendix A

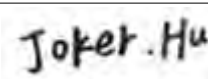

### RF Test Data for BT (Conducted Measurement)

Product Name: Smart Android Car TV

Test Model: AT133



#### Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Joker Hu
	
Supervised by:	Ling Zhu
	





### A.1 -20dB Bandwidth

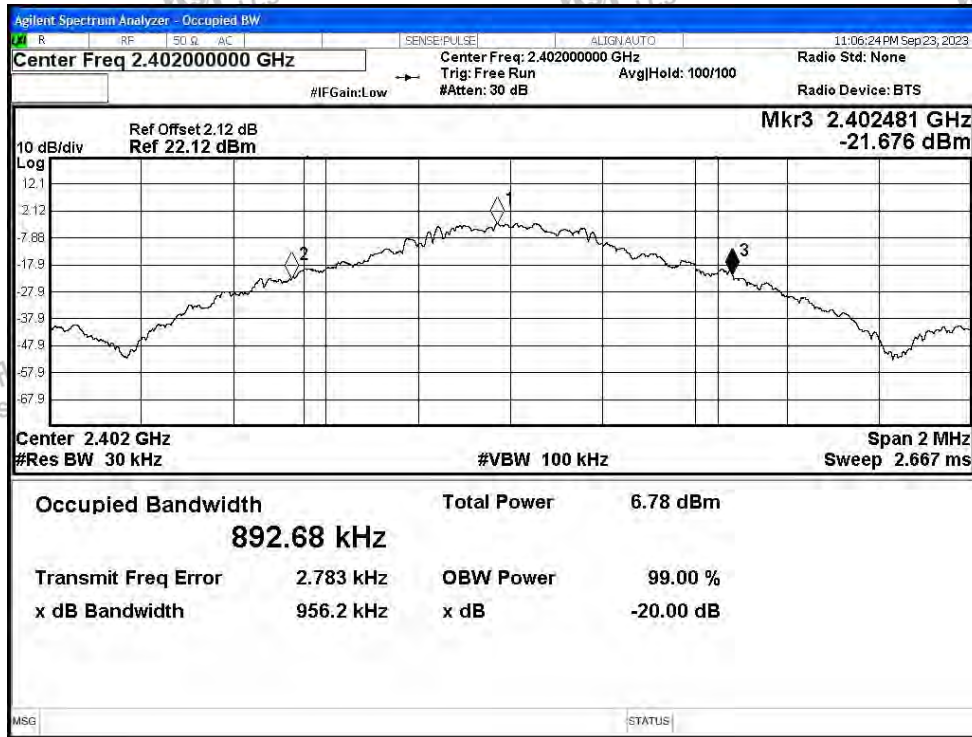
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.956	N/A	Pass
NVNT	1-DH5	2441	Ant1	1.02	N/A	Pass
NVNT	1-DH5	2480	Ant1	1.018	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.289	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.287	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.289	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.277	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.285	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.278	N/A	Pass



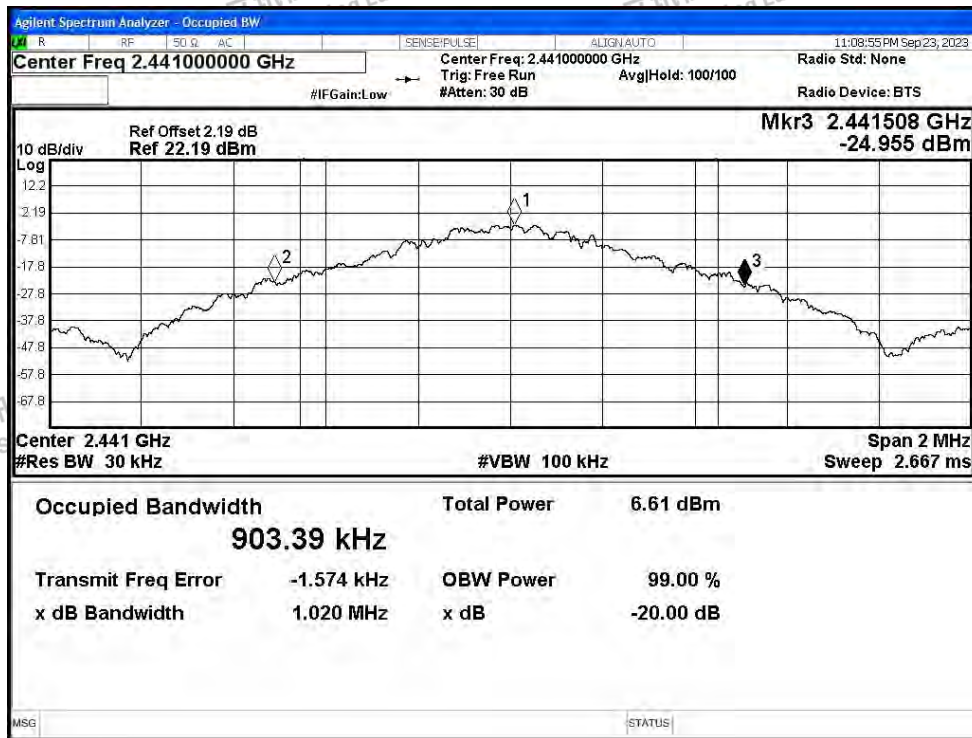


Test Graphs

-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



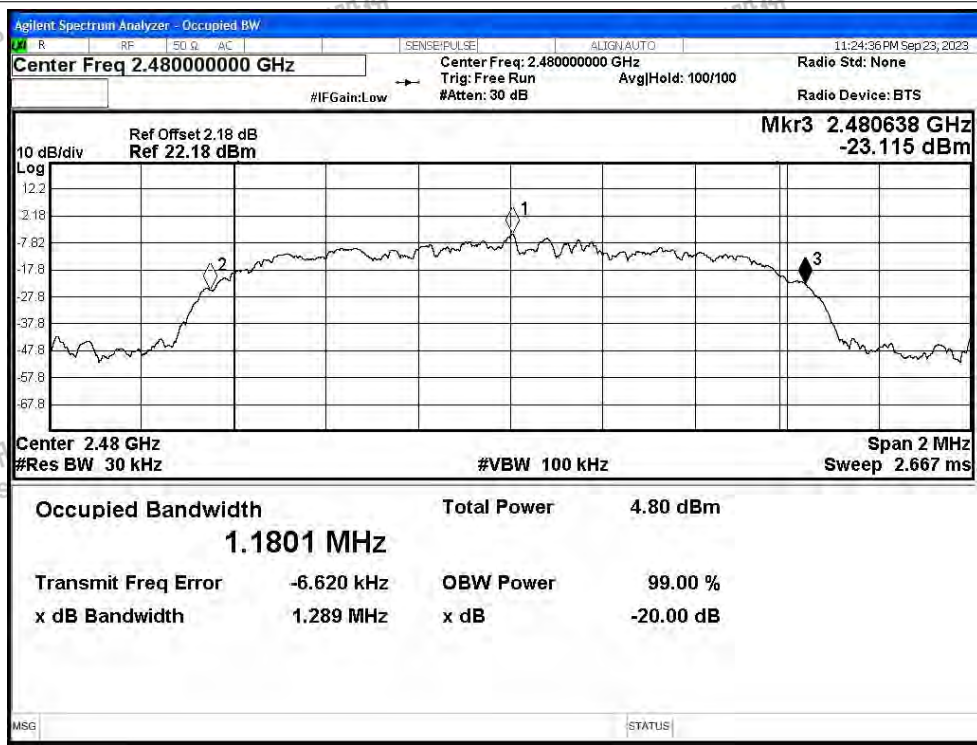




-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



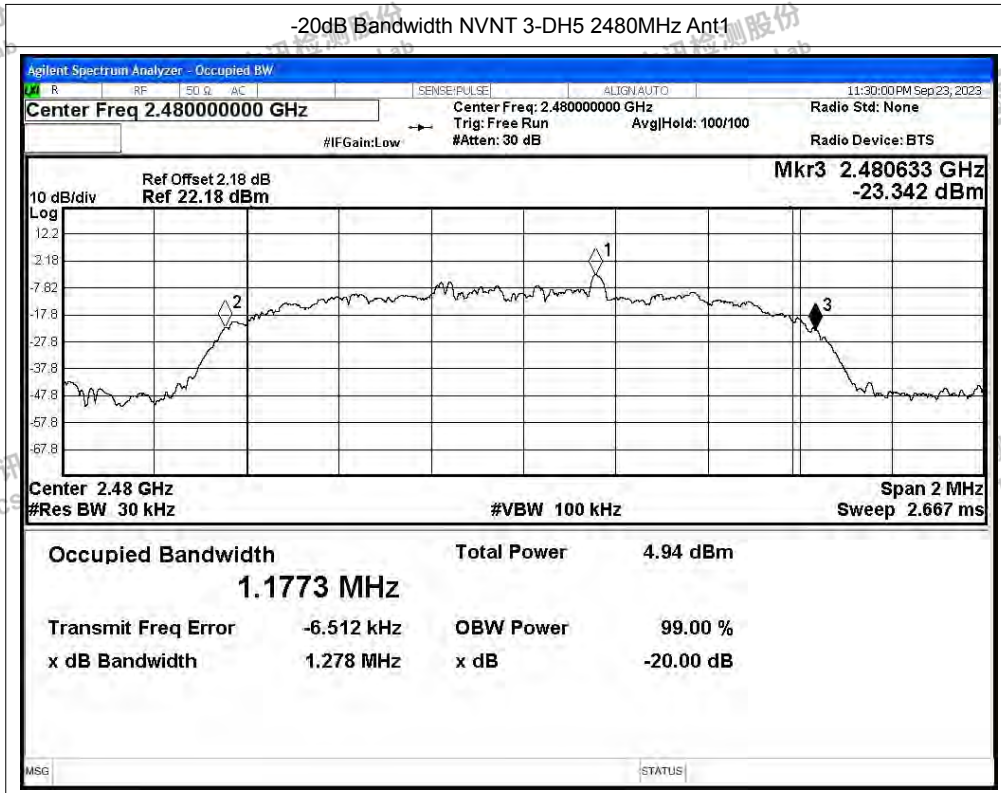


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1







## A.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.46	21	Pass
NVNT	1-DH5	2441	Ant1	0.55	21	Pass
NVNT	1-DH5	2480	Ant1	0.54	21	Pass
NVNT	2-DH5	2402	Ant1	0.07	21	Pass
NVNT	2-DH5	2441	Ant1	0.29	21	Pass
NVNT	2-DH5	2480	Ant1	0.32	21	Pass
NVNT	3-DH5	2402	Ant1	0.22	21	Pass
NVNT	3-DH5	2441	Ant1	0.39	21	Pass
NVNT	3-DH5	2480	Ant1	0.43	21	Pass

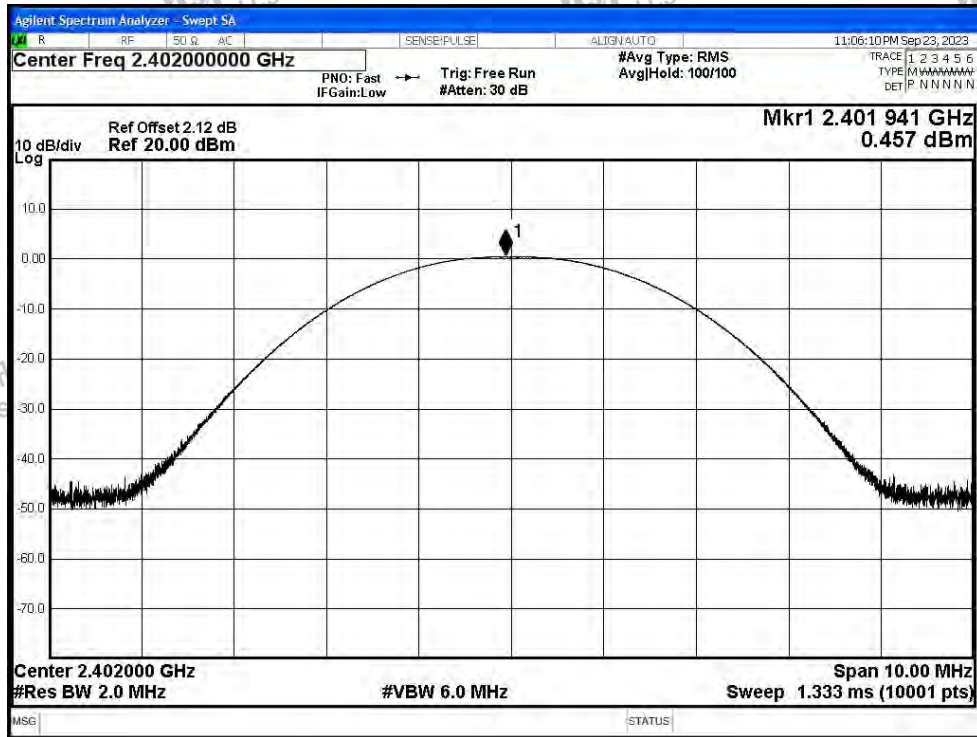




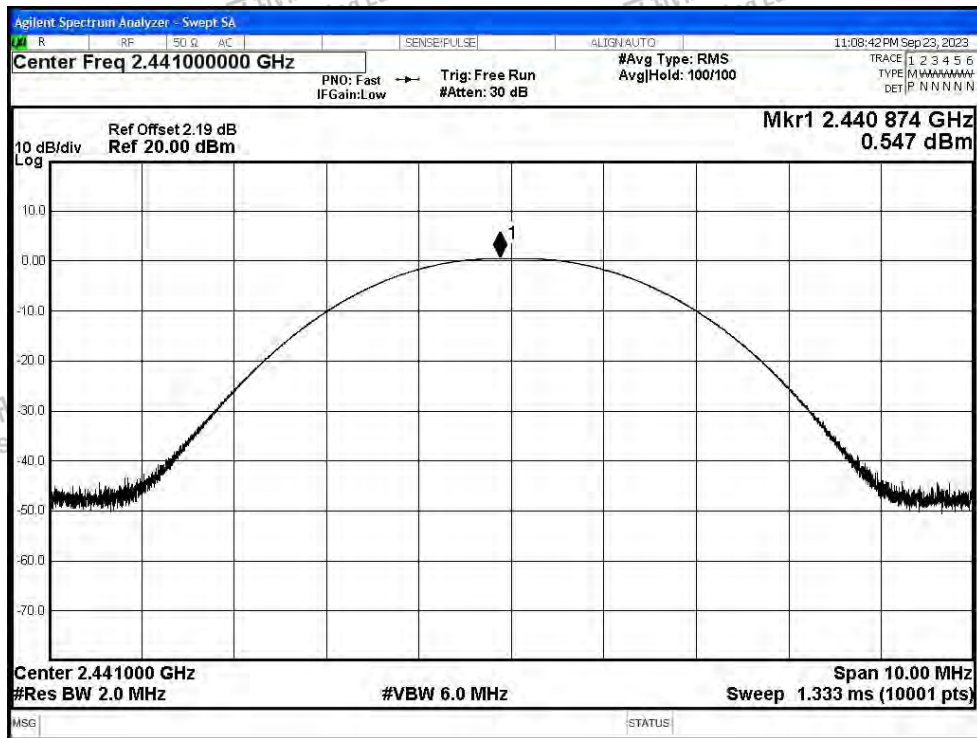


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

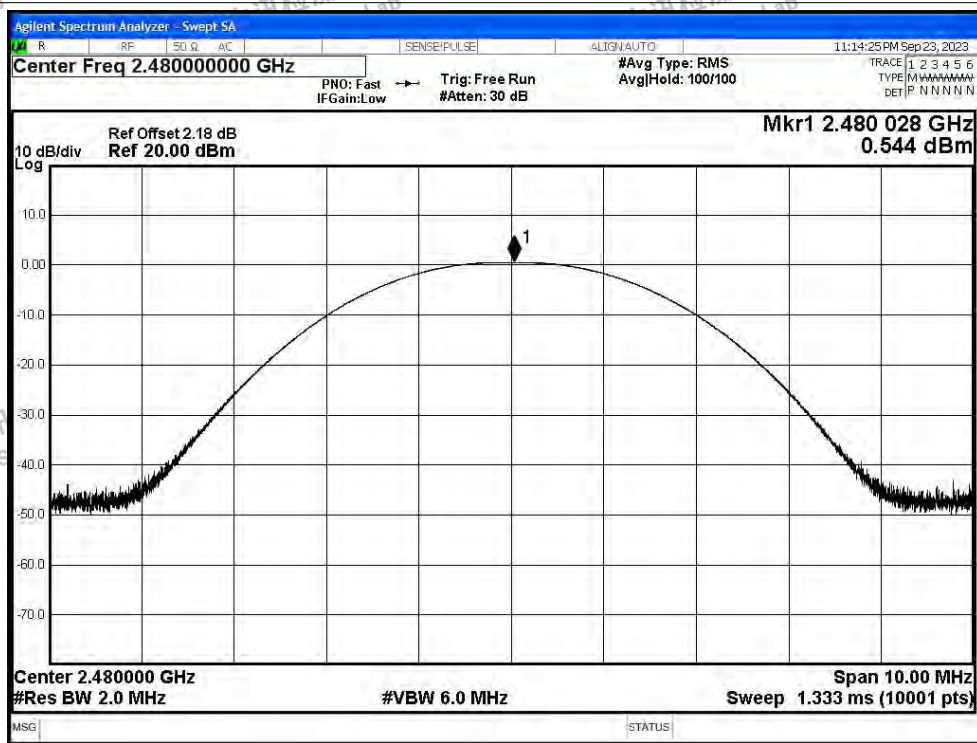


Power NVNT 1-DH5 2441MHz Ant1

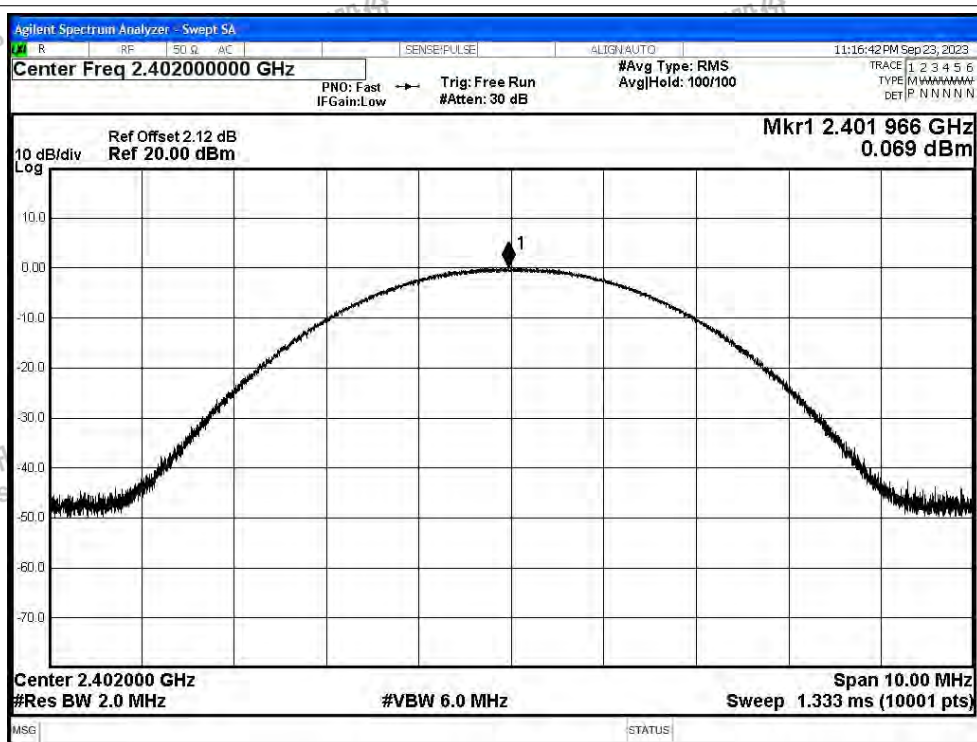




Power NVNT 1-DH5 2480MHz Ant1

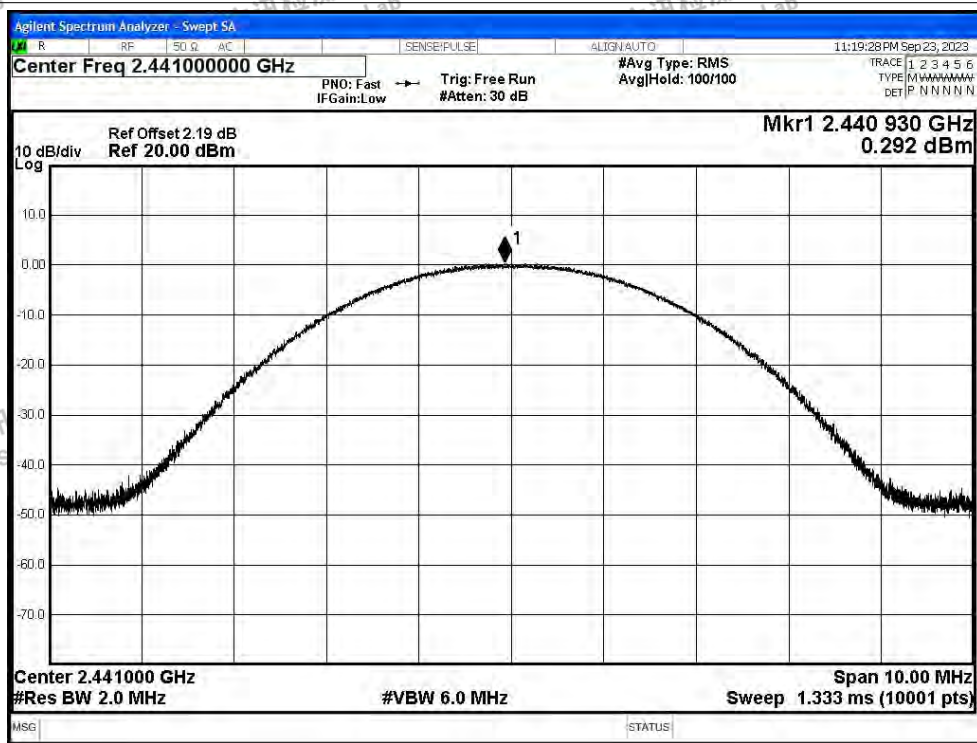


Power NVNT 2-DH5 2402MHz Ant1

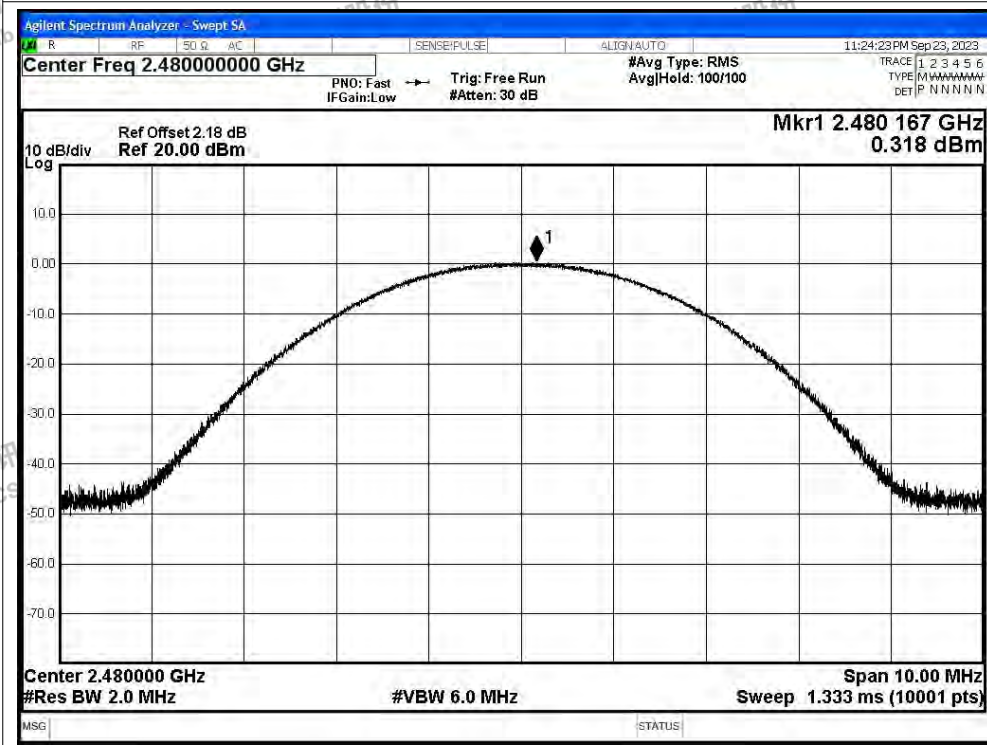




Power NVNT 2-DH5 2441MHz Ant1



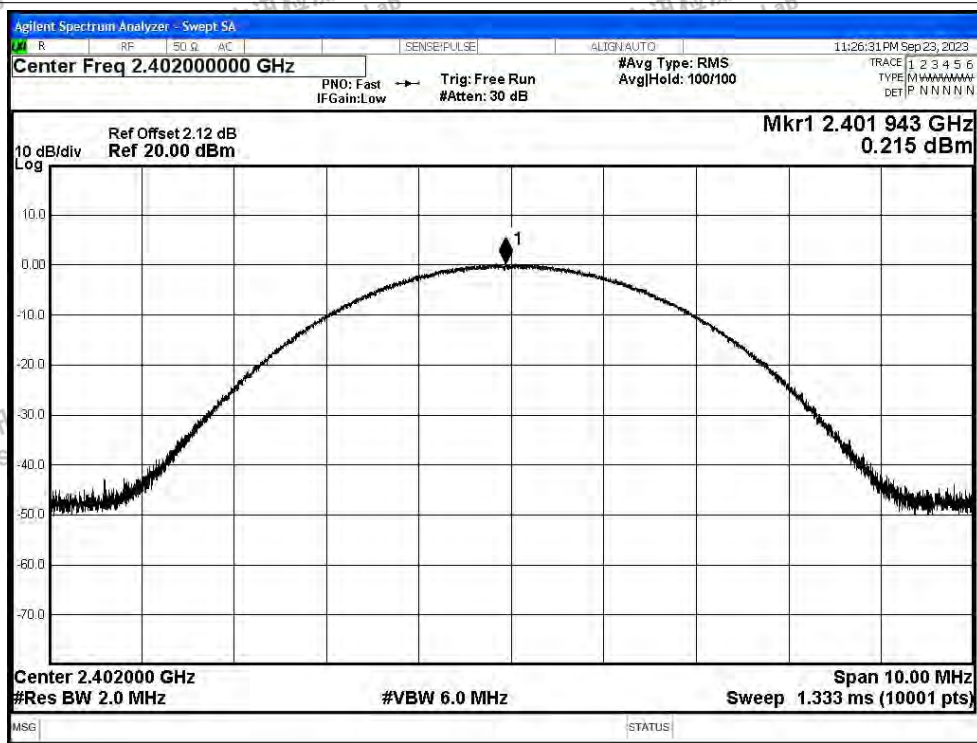
Power NVNT 2-DH5 2480MHz Ant1



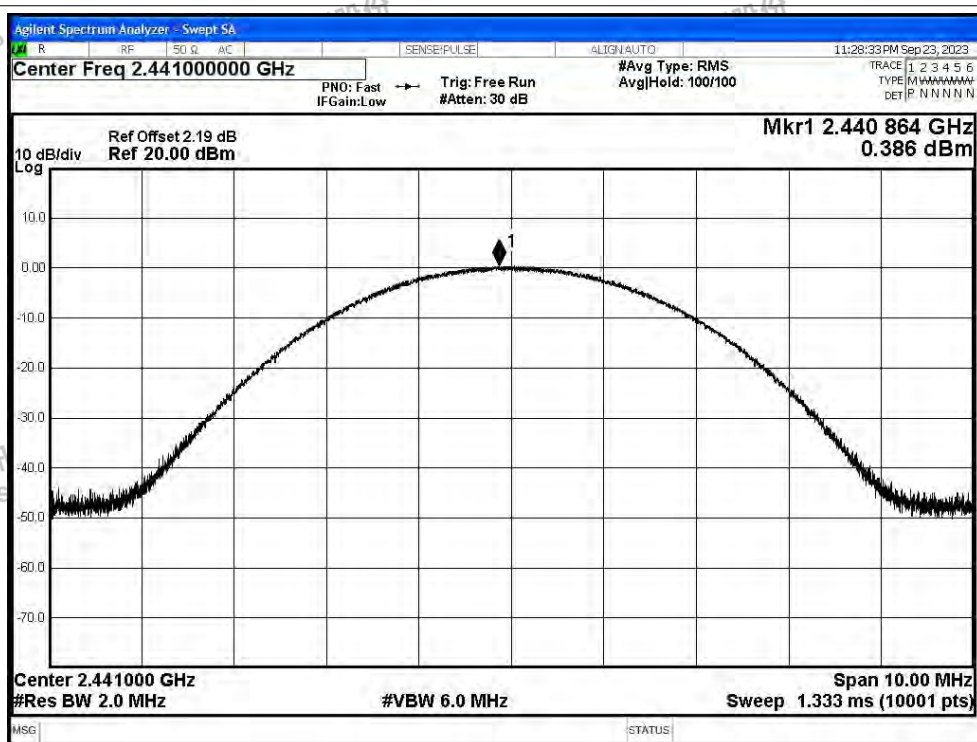




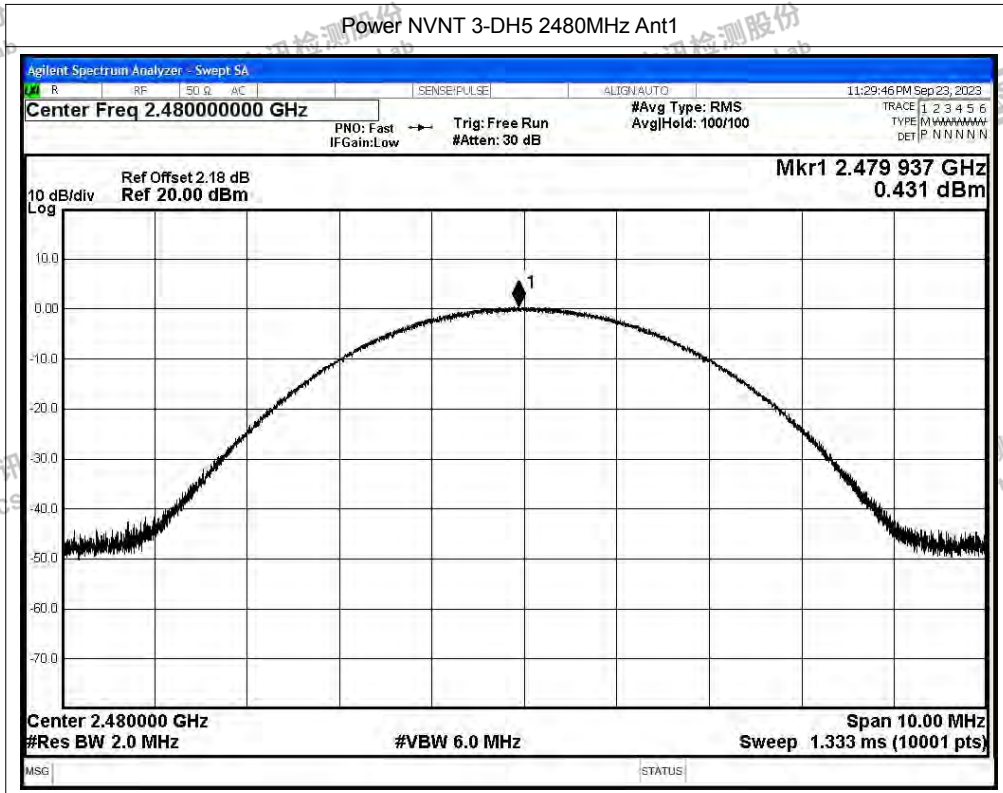
Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1









### A.3 Carrier Frequencies Separation

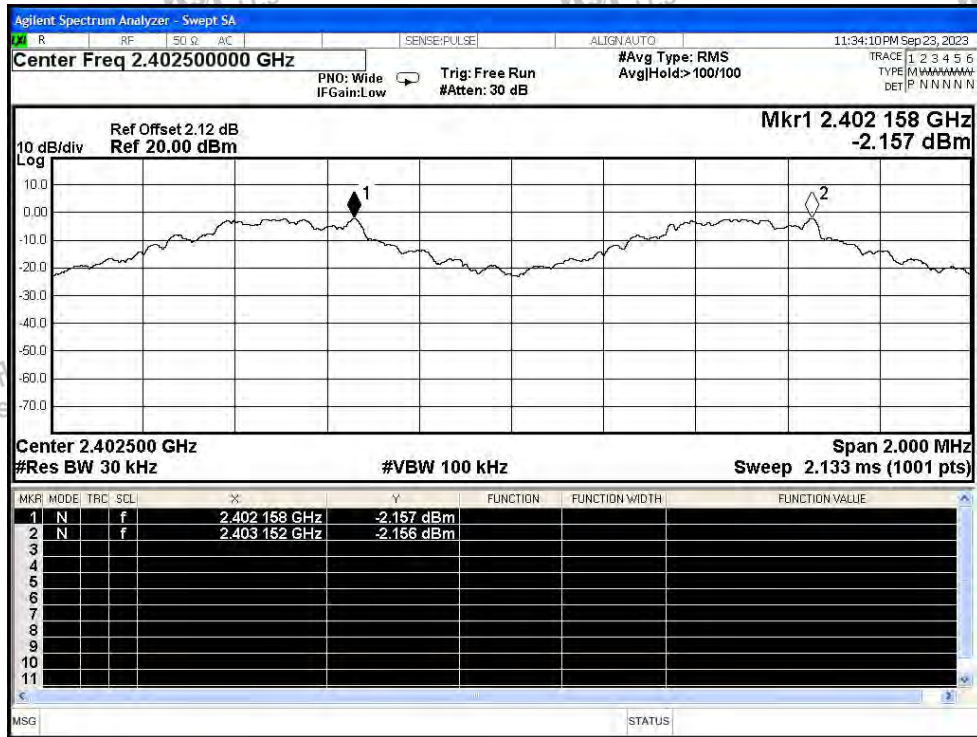
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.158	2403.152	0.994	0.680	Pass
NVNT	2-DH5	Ant1	2402.02	2403.01	0.99	0.859	Pass
NVNT	3-DH5	Ant1	2402.012	2403.022	1.01	0.857	Pass



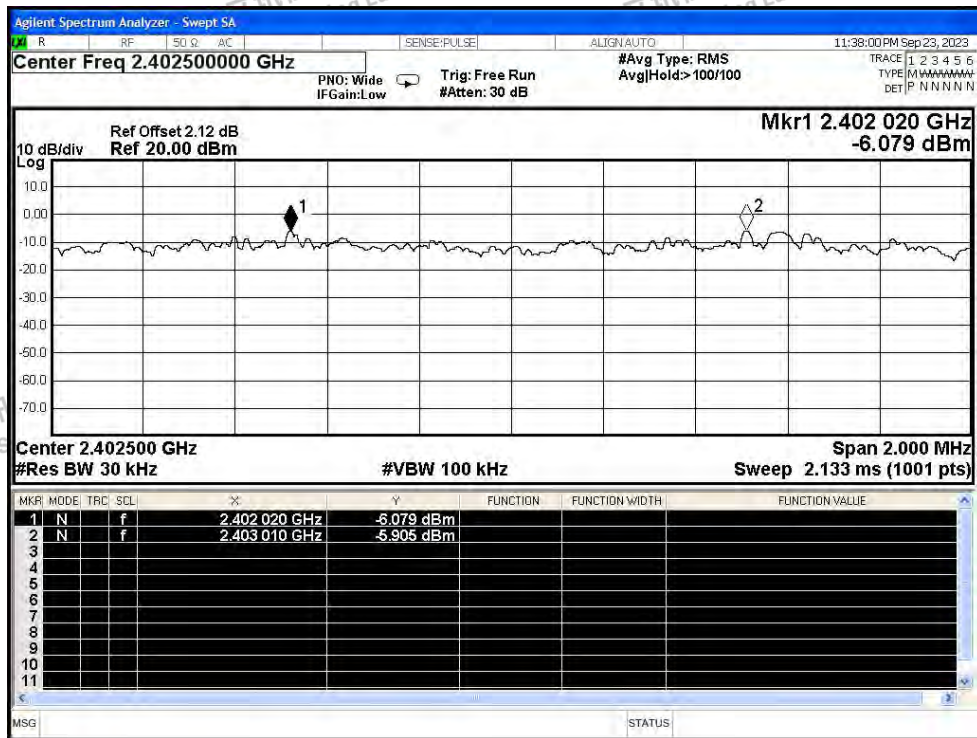


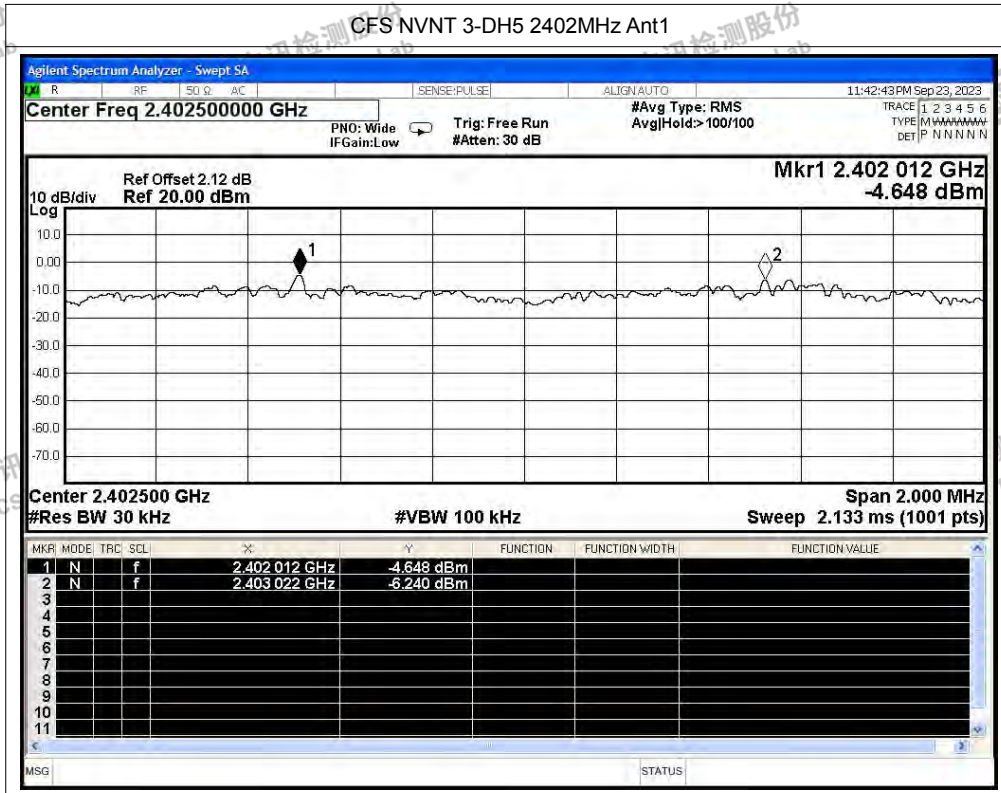
Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1









### A.4 Dwell Time

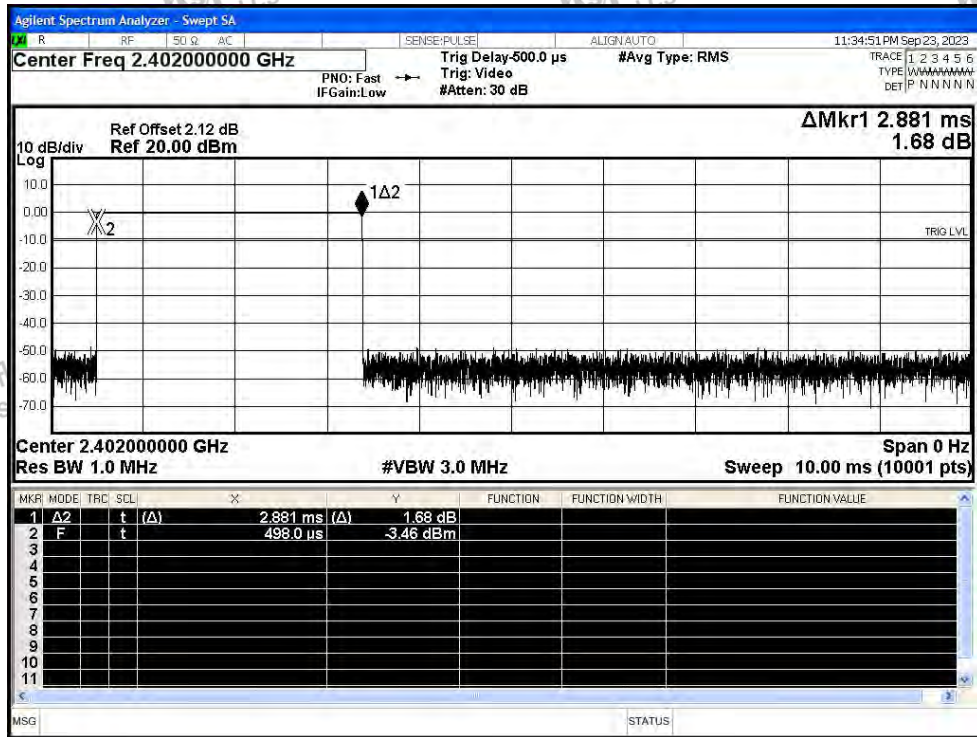
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.881	305.386	106	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.88	293.76	102	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.887	303.135	105	31600	400	Pass



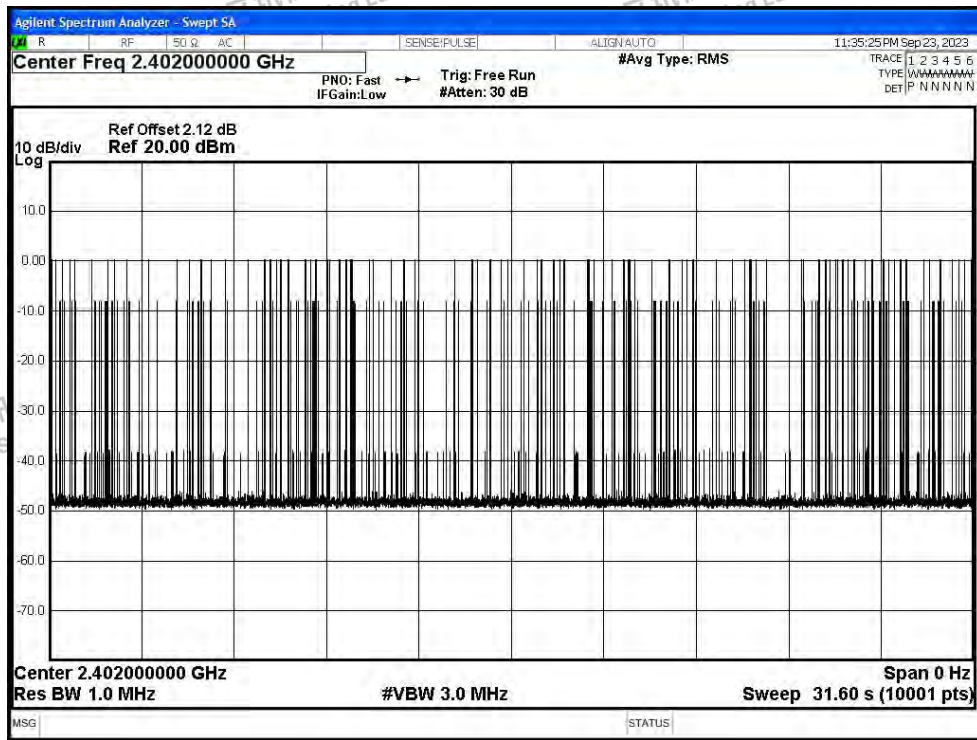


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

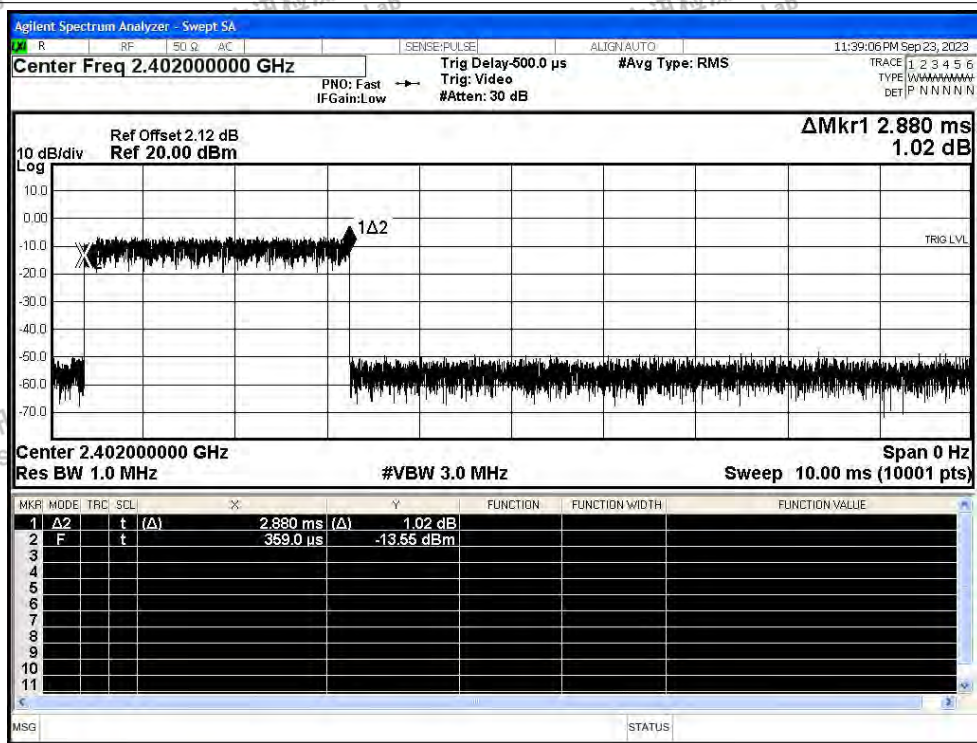


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

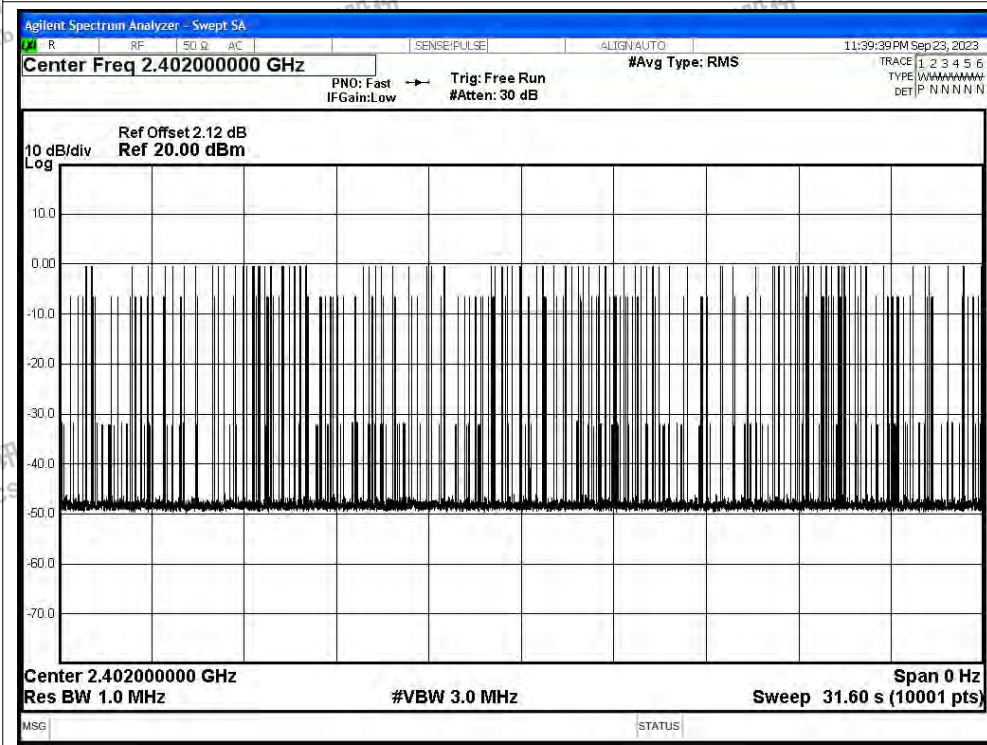




Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



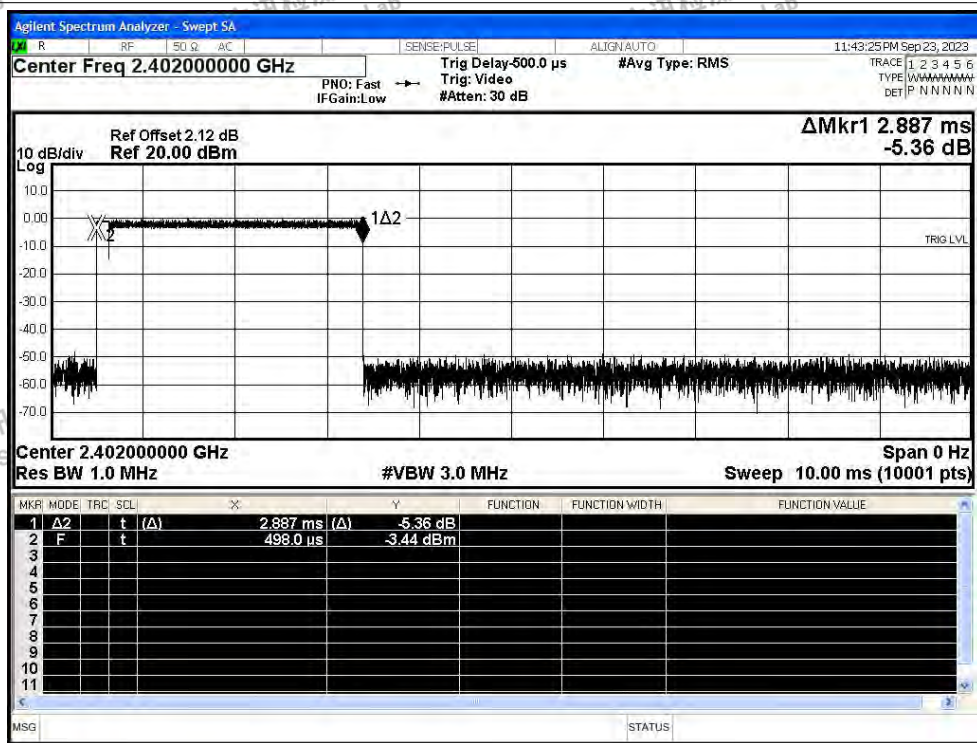
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



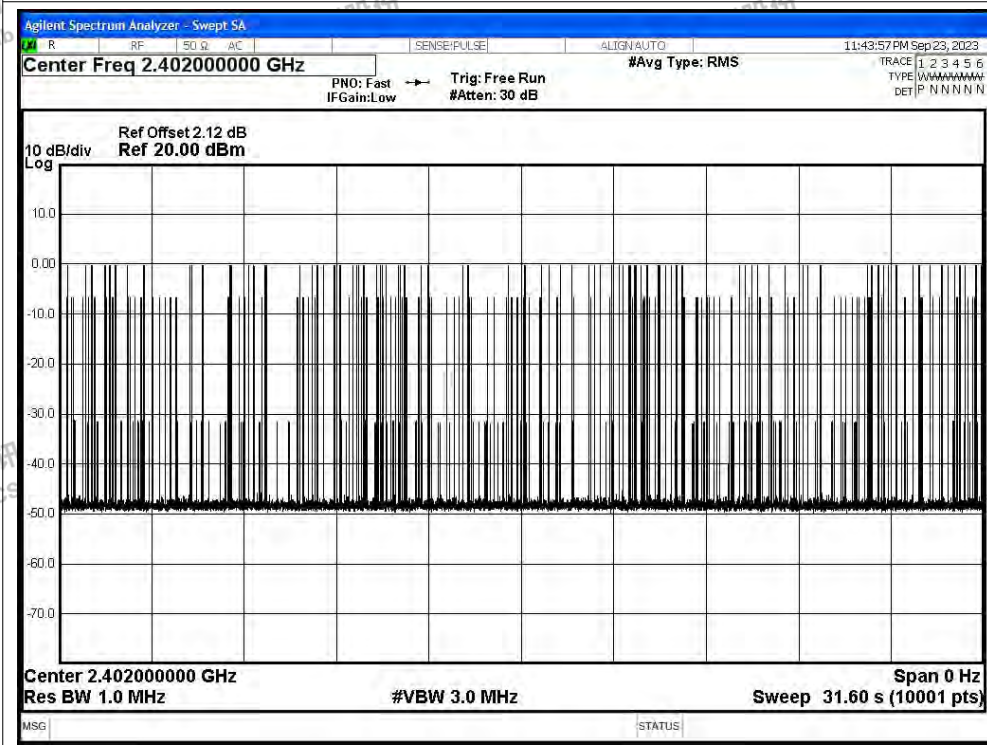




Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated







## A.5 Number of Hopping Channel

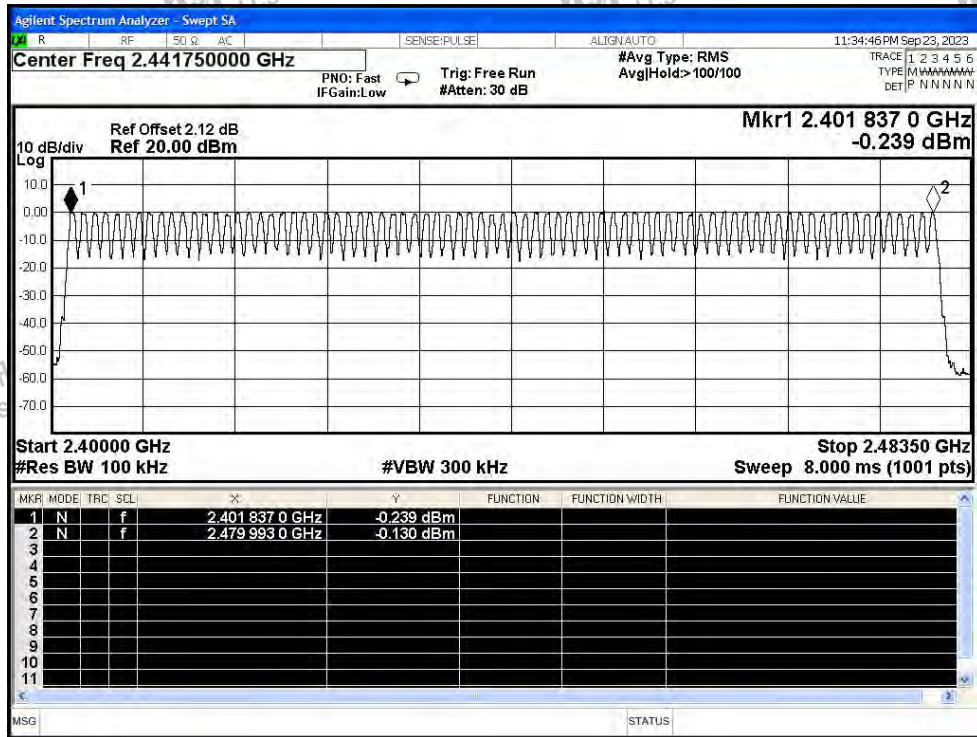
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass



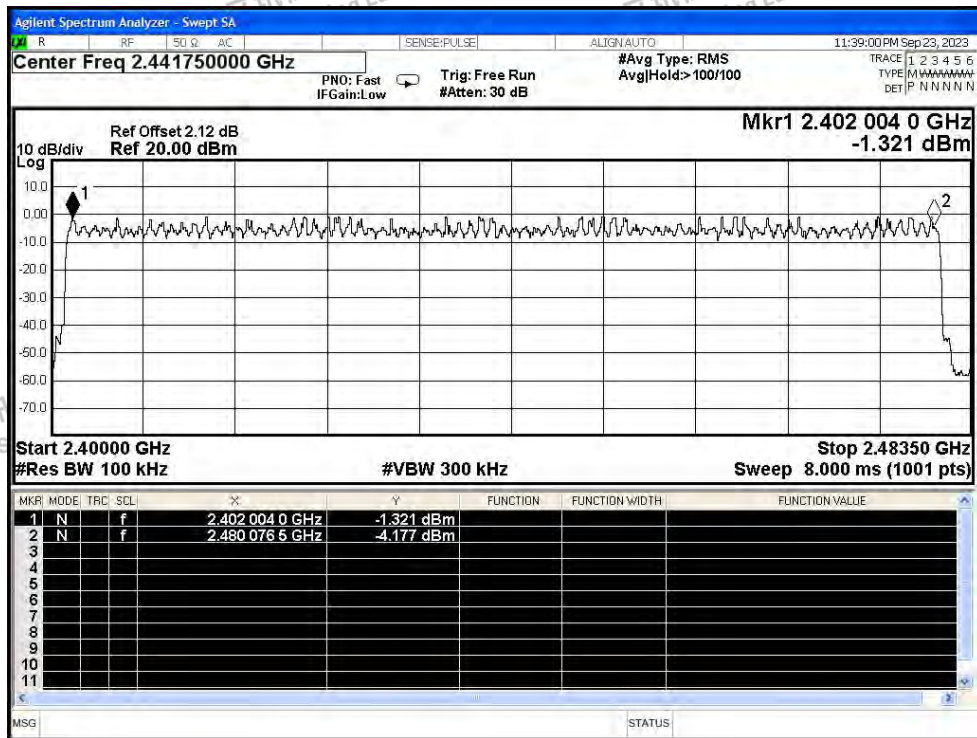


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1

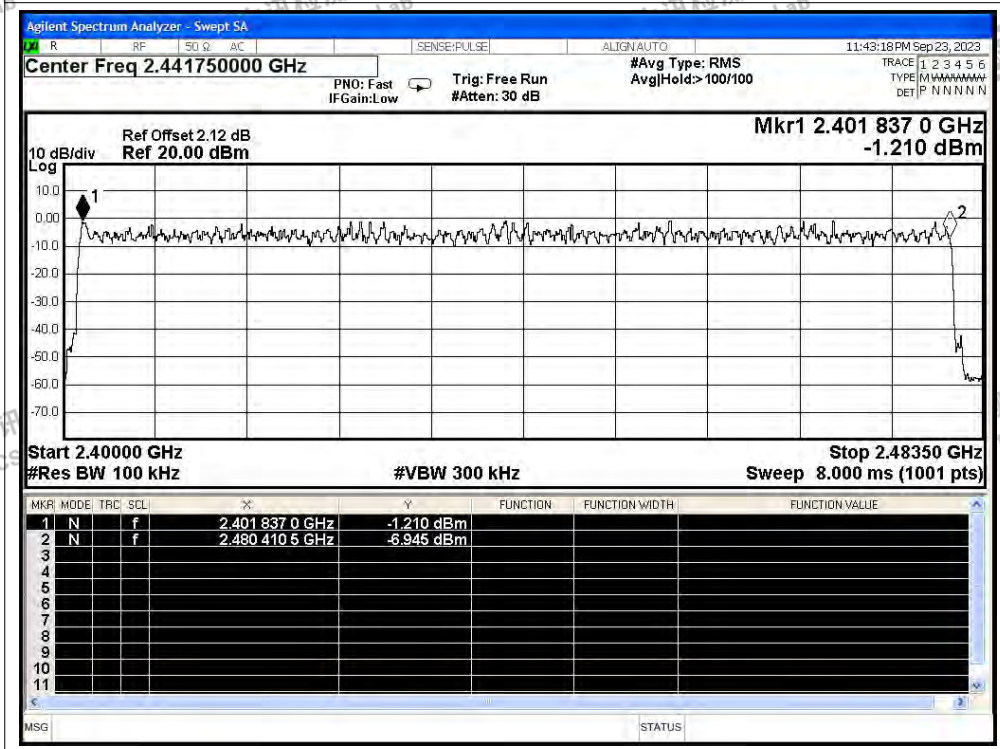


Hopping No. NVNT 2-DH5 2402MHz Ant1





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	-55.66	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-57.12	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-54.74	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-54.58	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-53.1	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-56.24	-20	Pass

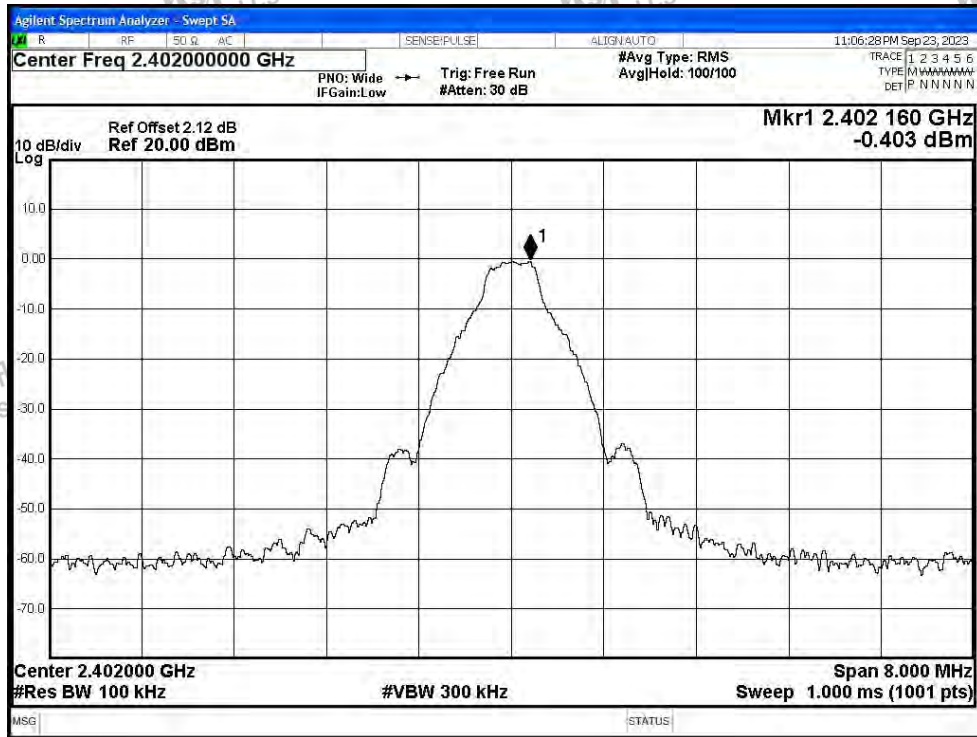




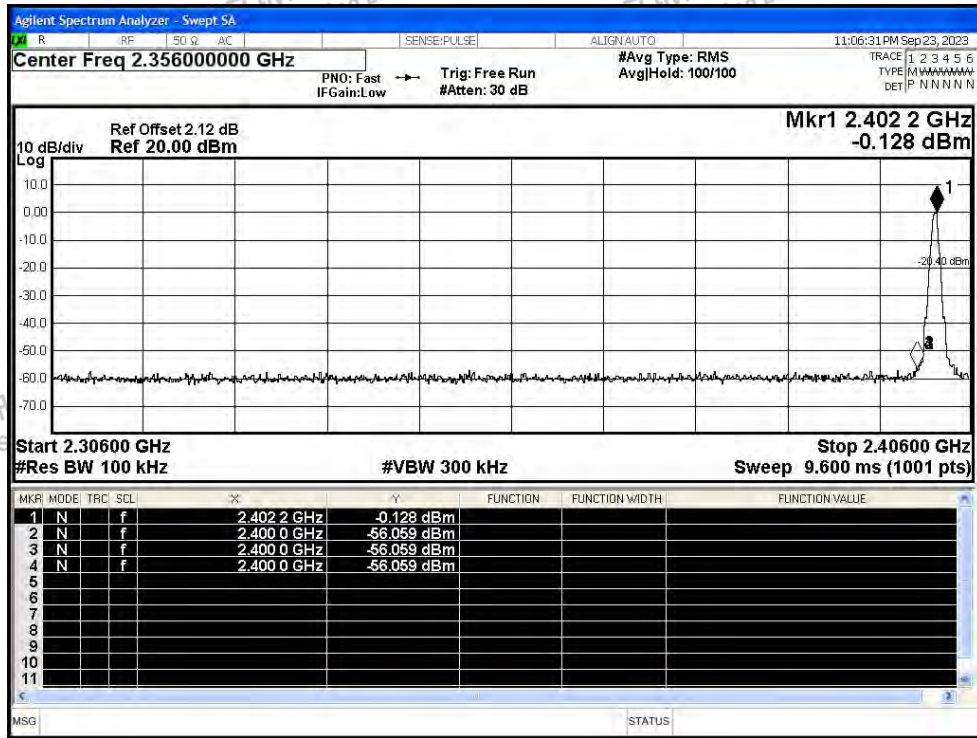


Test Graphs

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

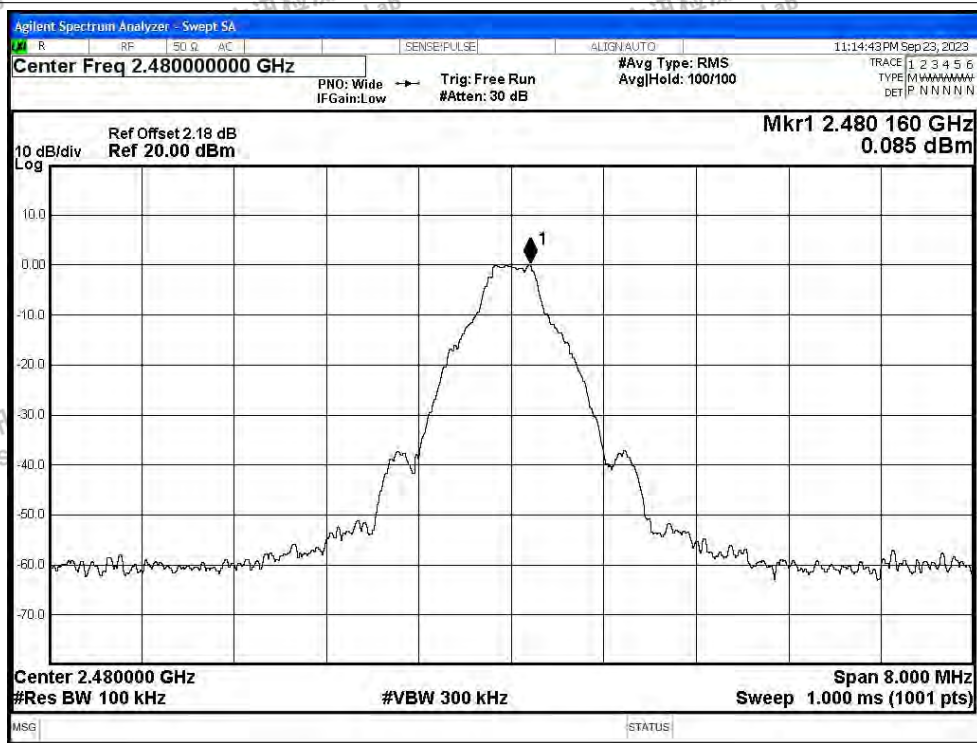


Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

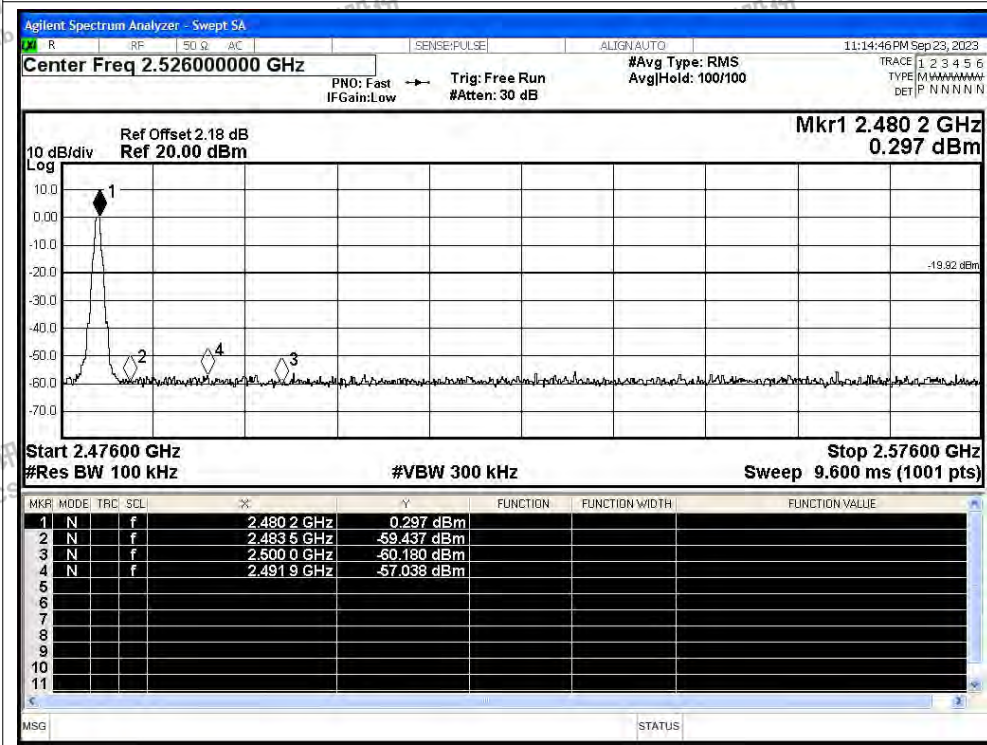




Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

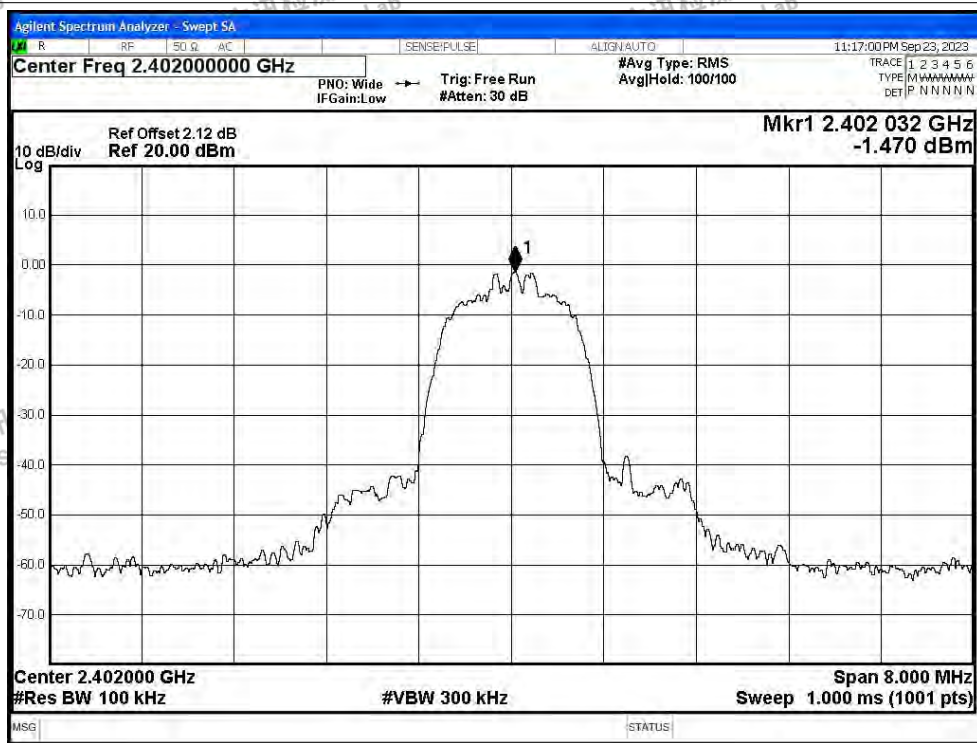


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

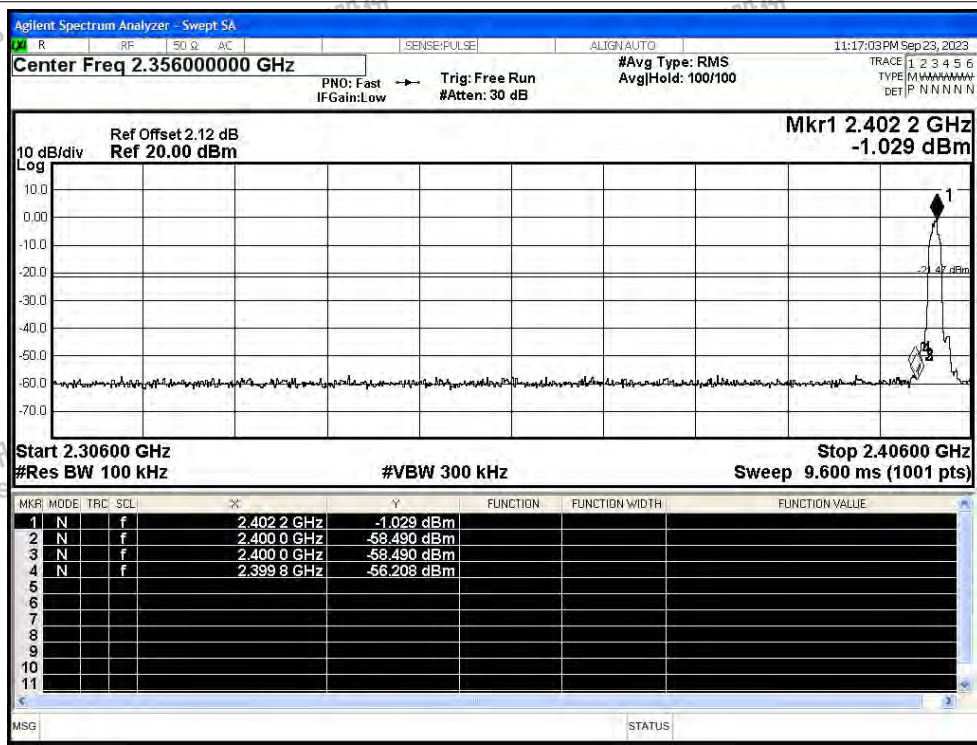




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



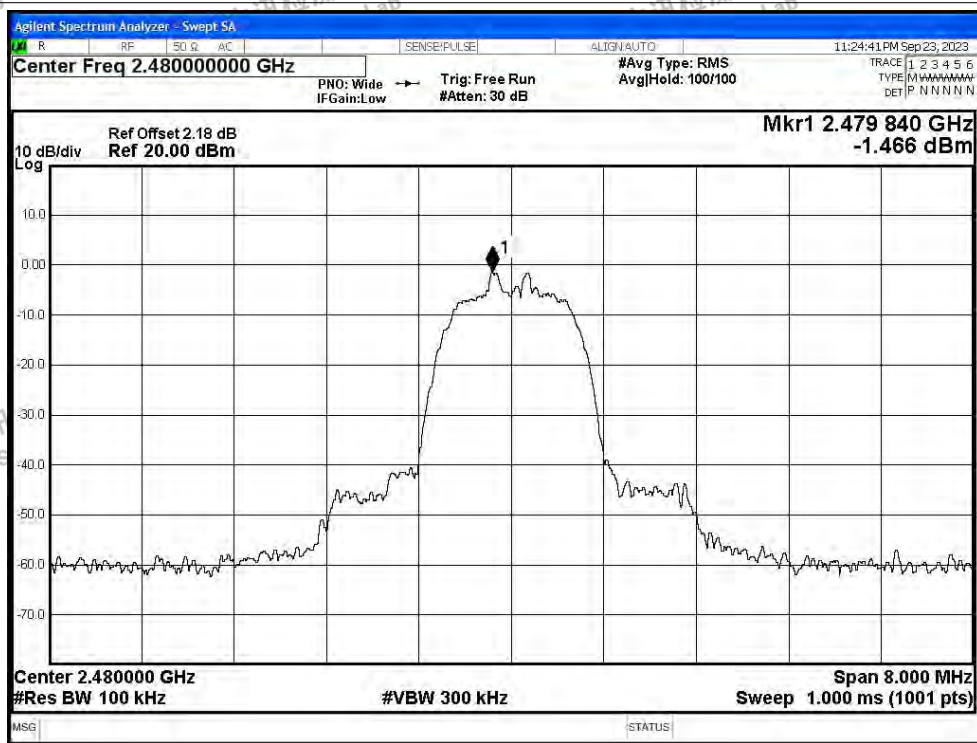
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



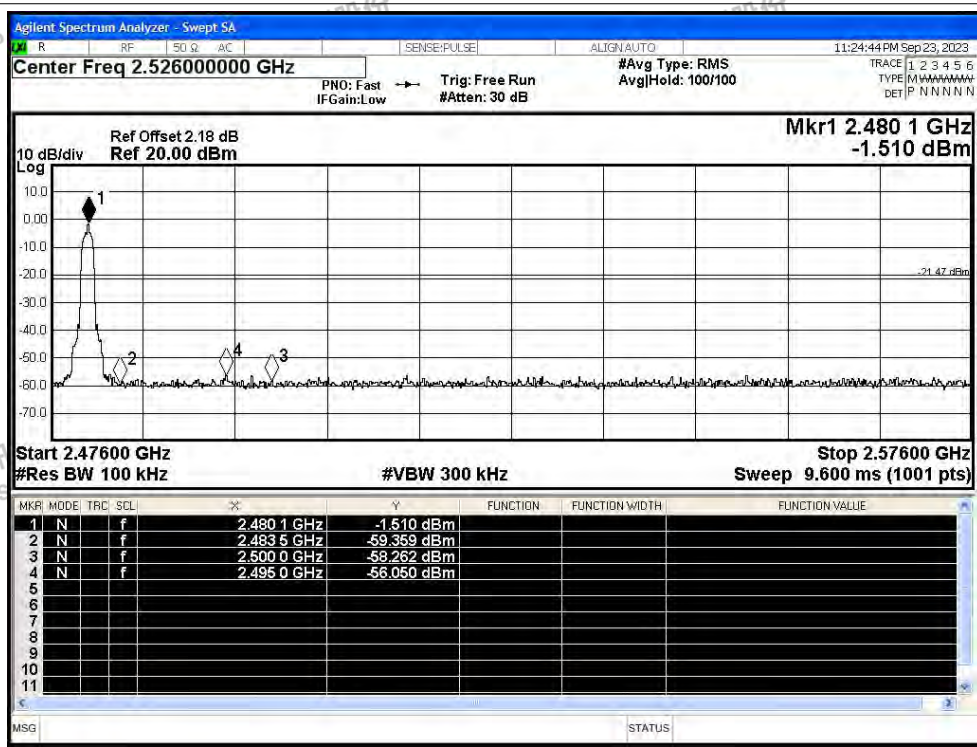




Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



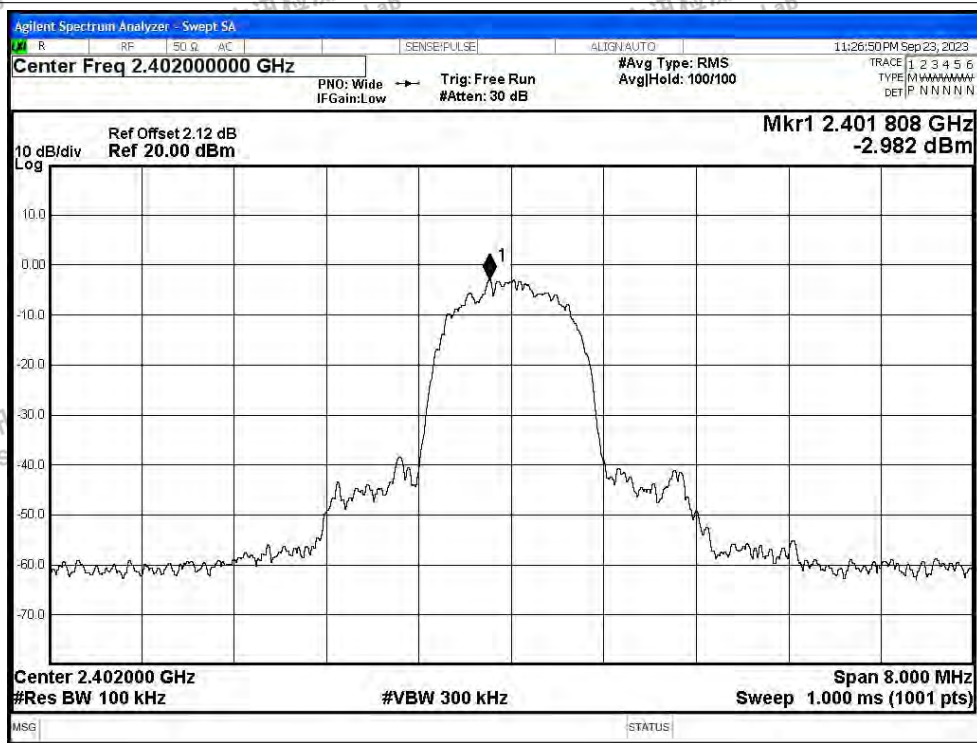
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



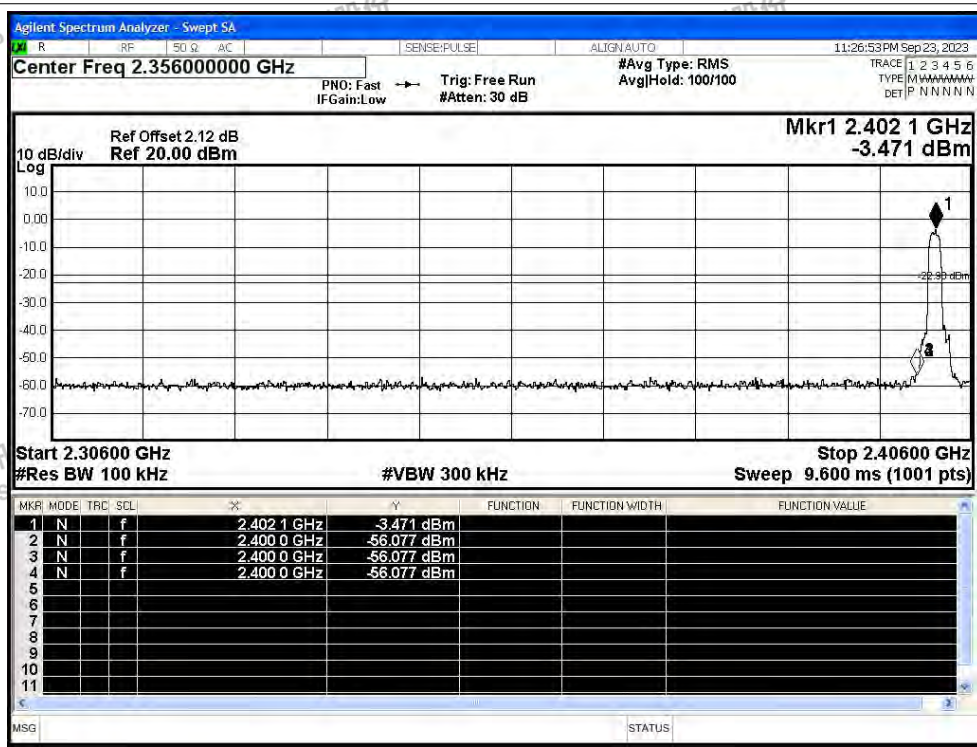




Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref

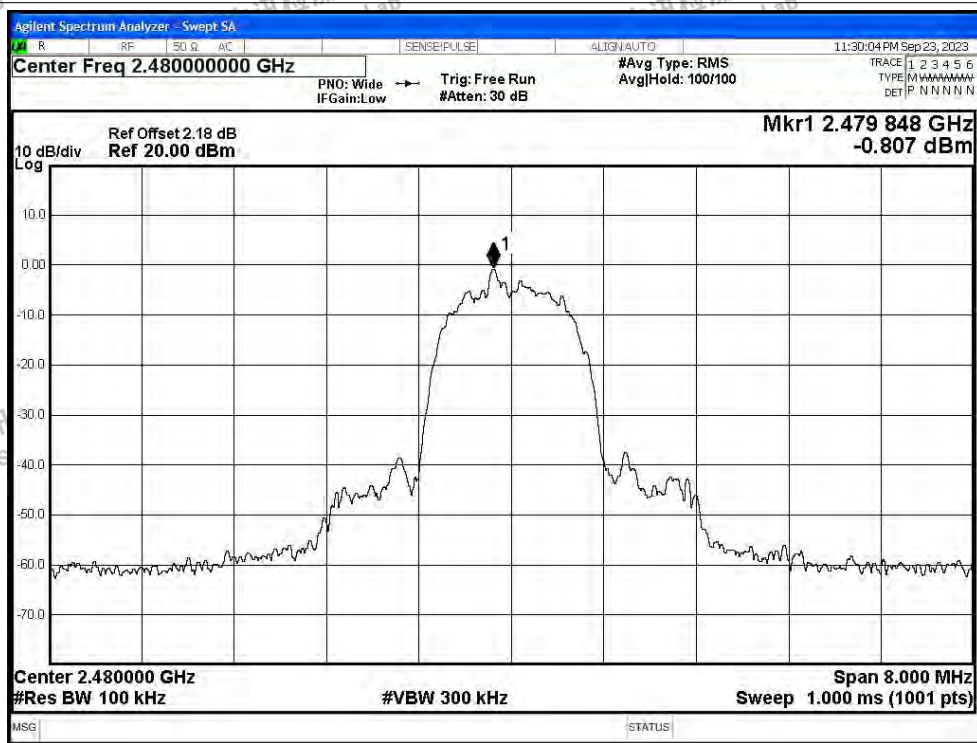


Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission

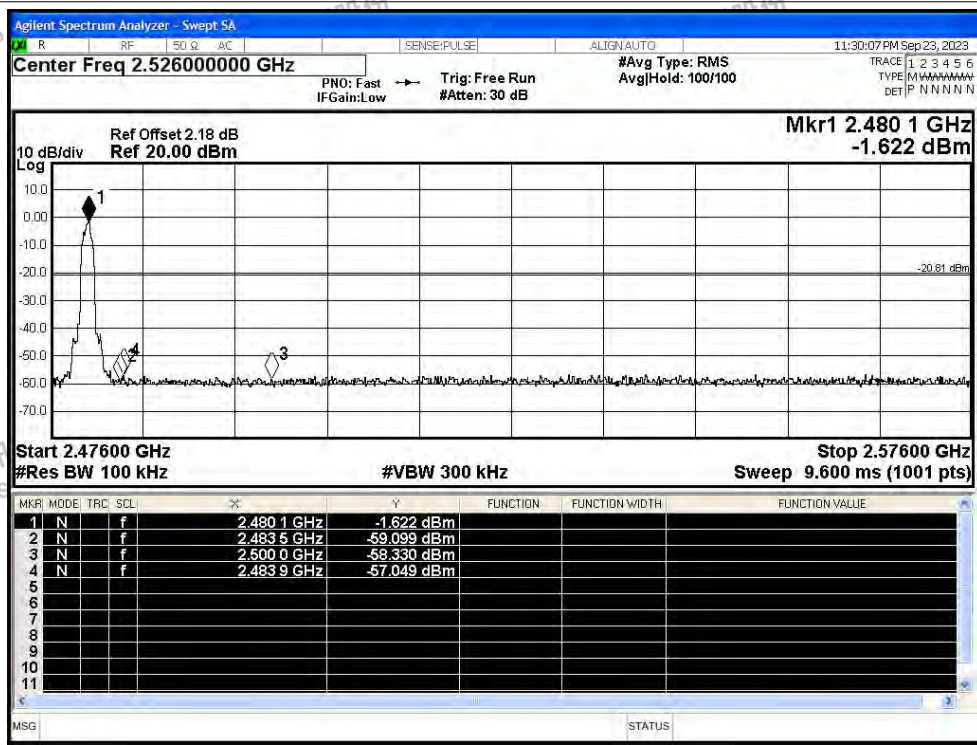




Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



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	-55.71	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.3	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-54.69	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-54.73	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-54.28	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-55.12	-20	Pass

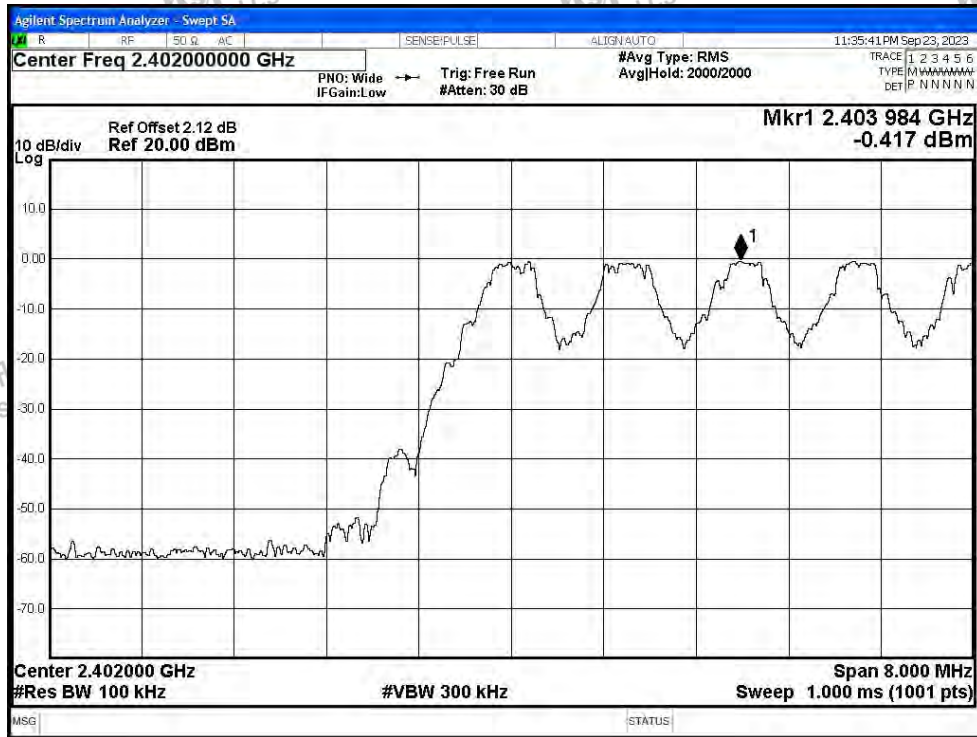




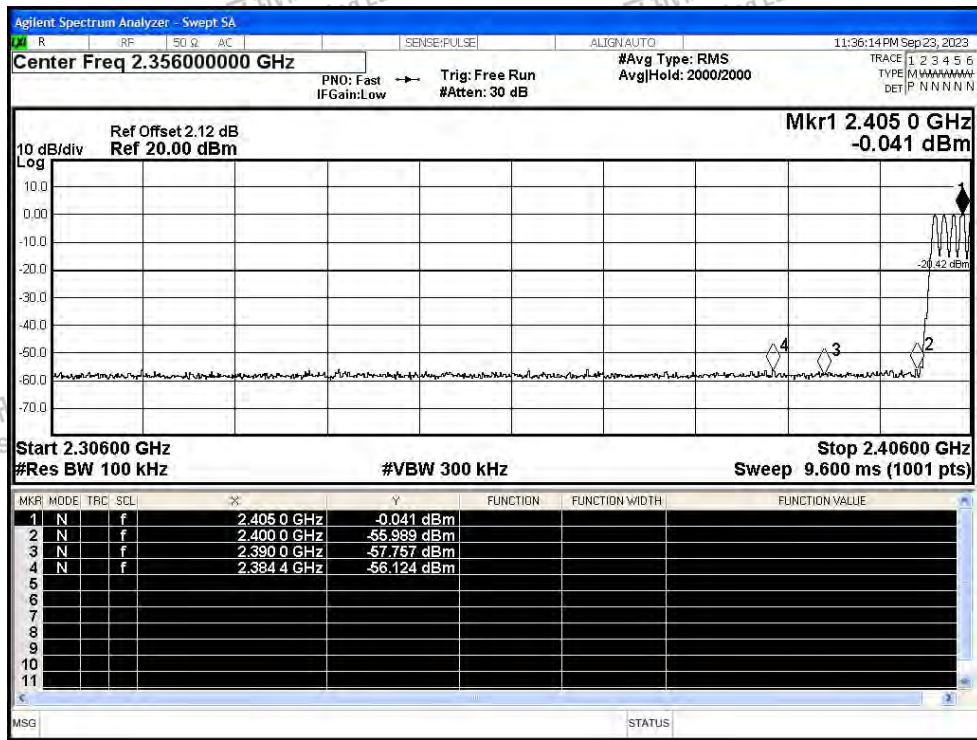


Test Graphs

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



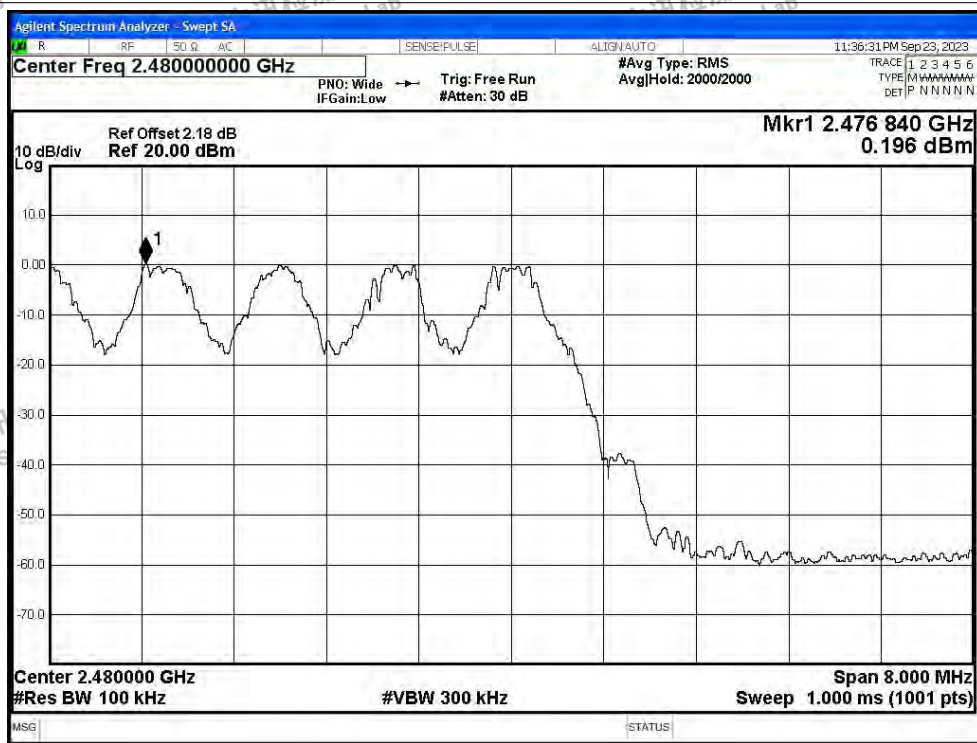
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



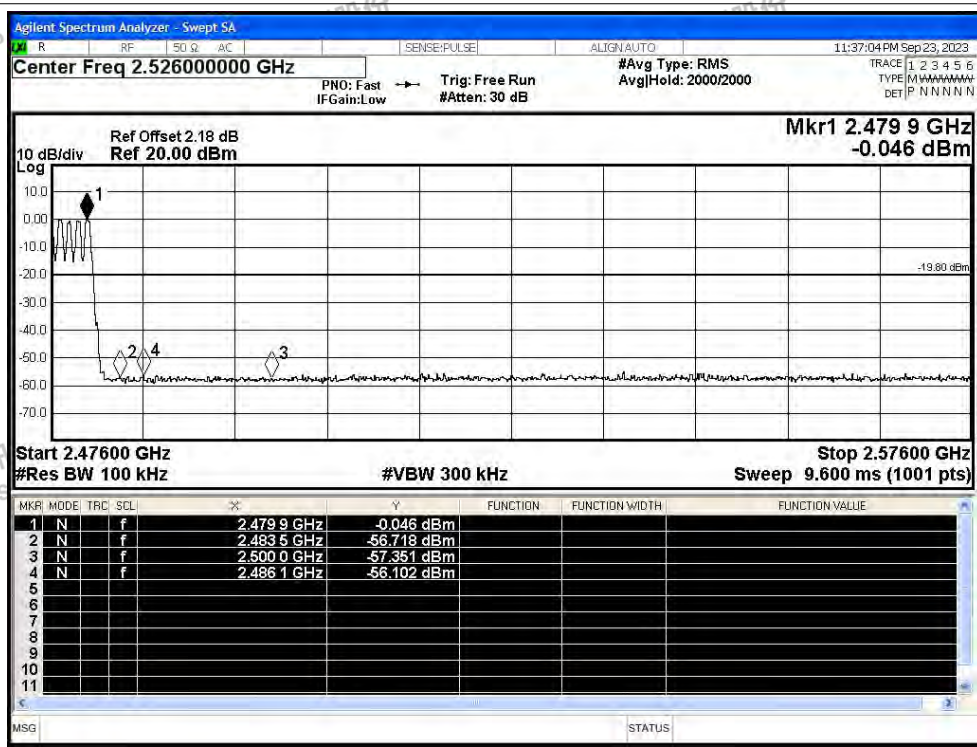




Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref

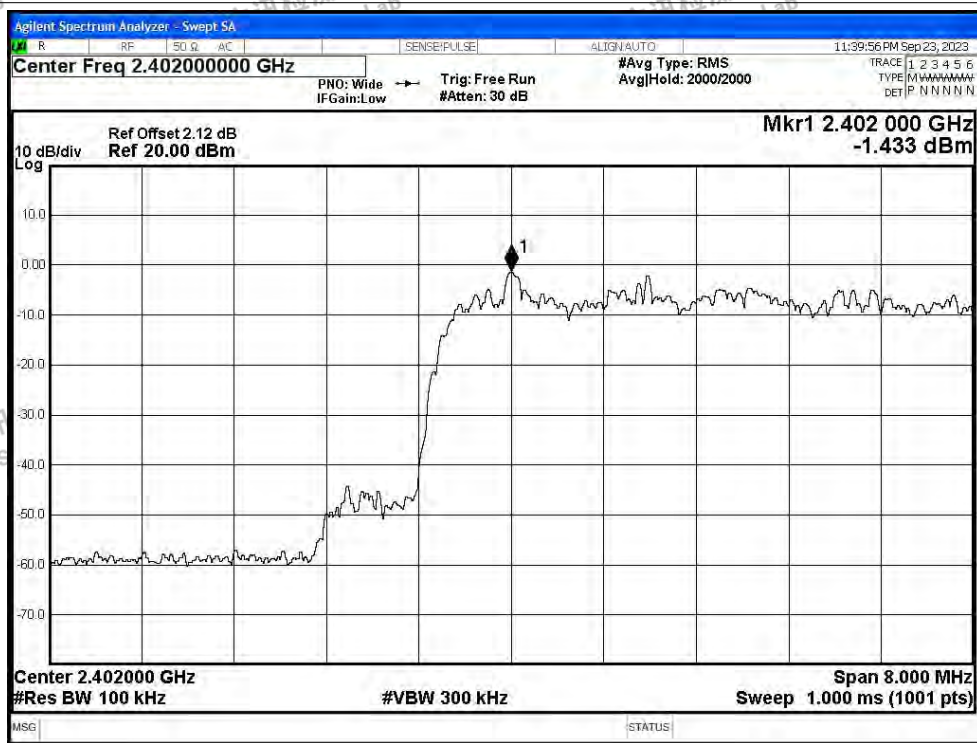


Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission

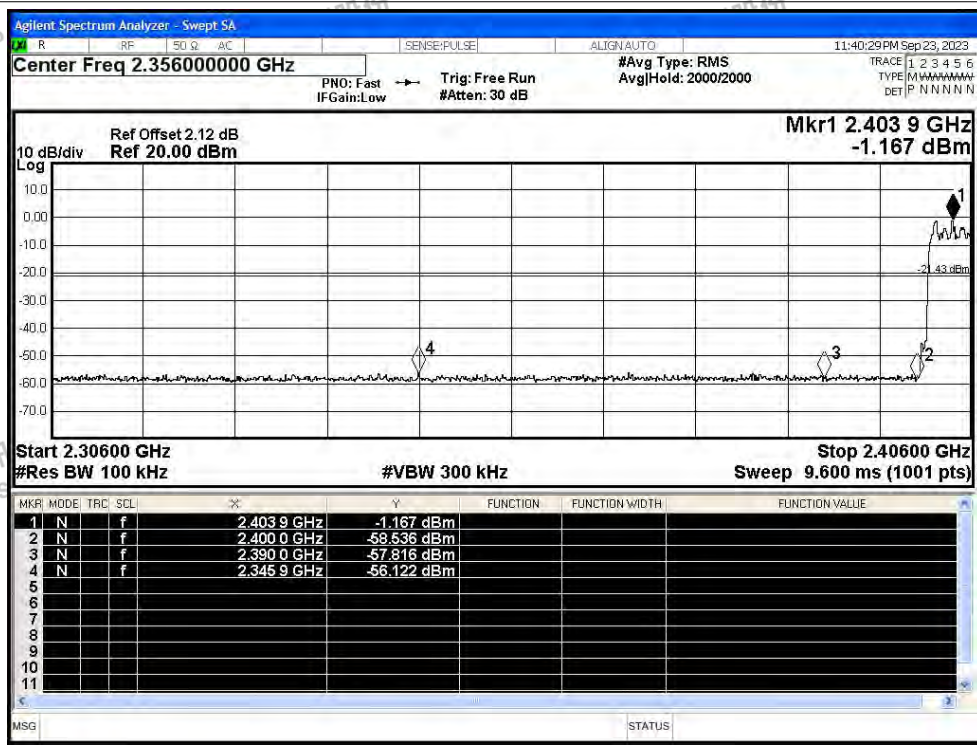




Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref

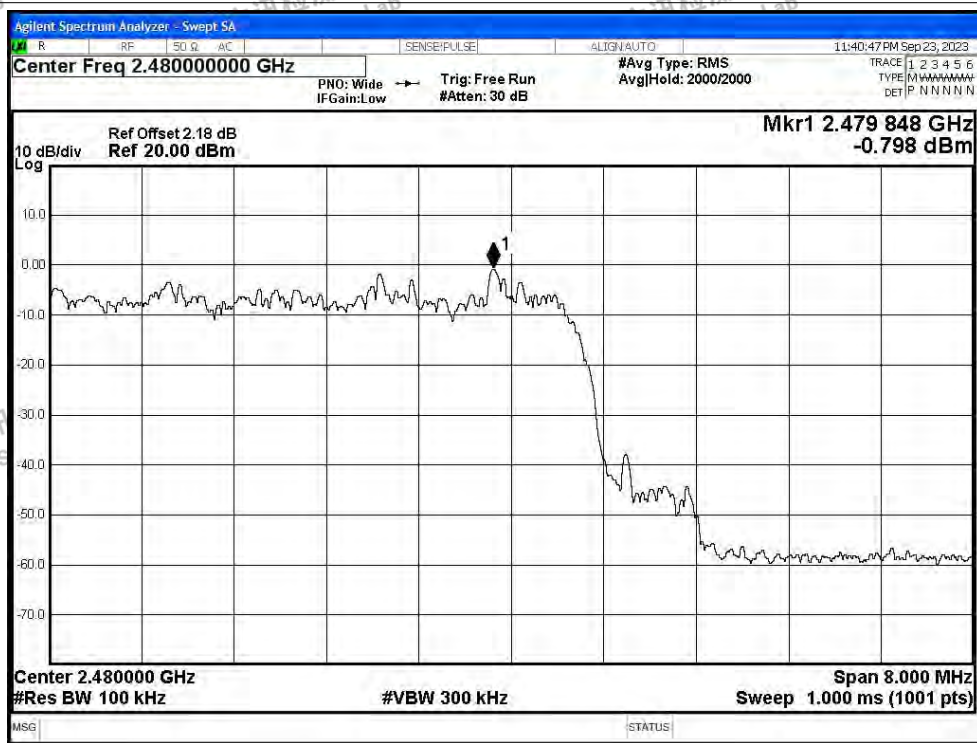


Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission

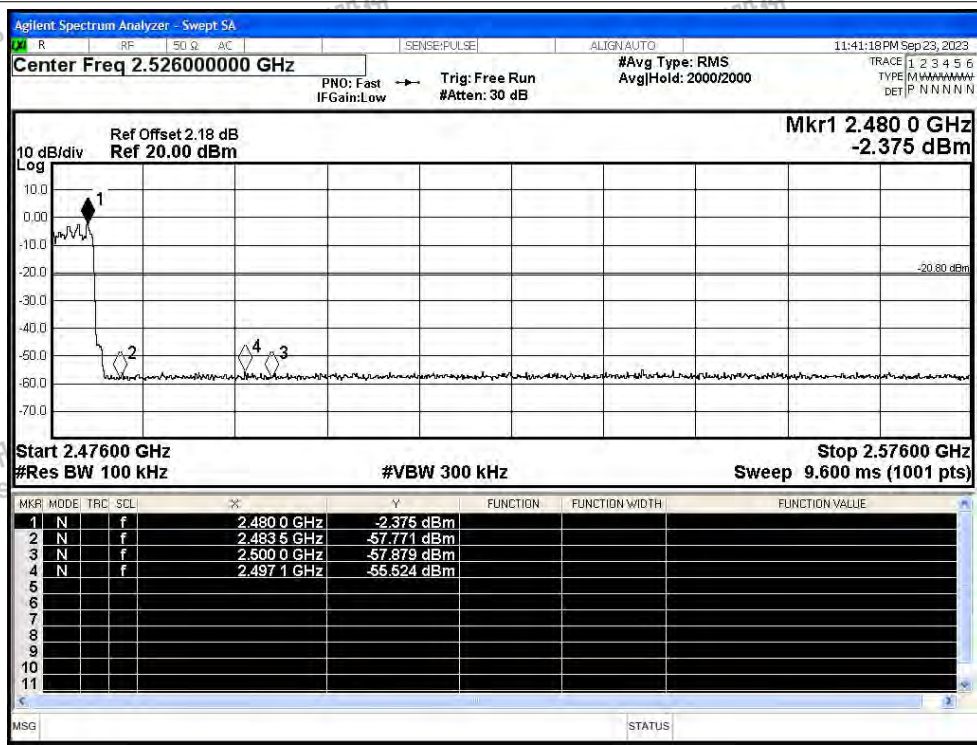




Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



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



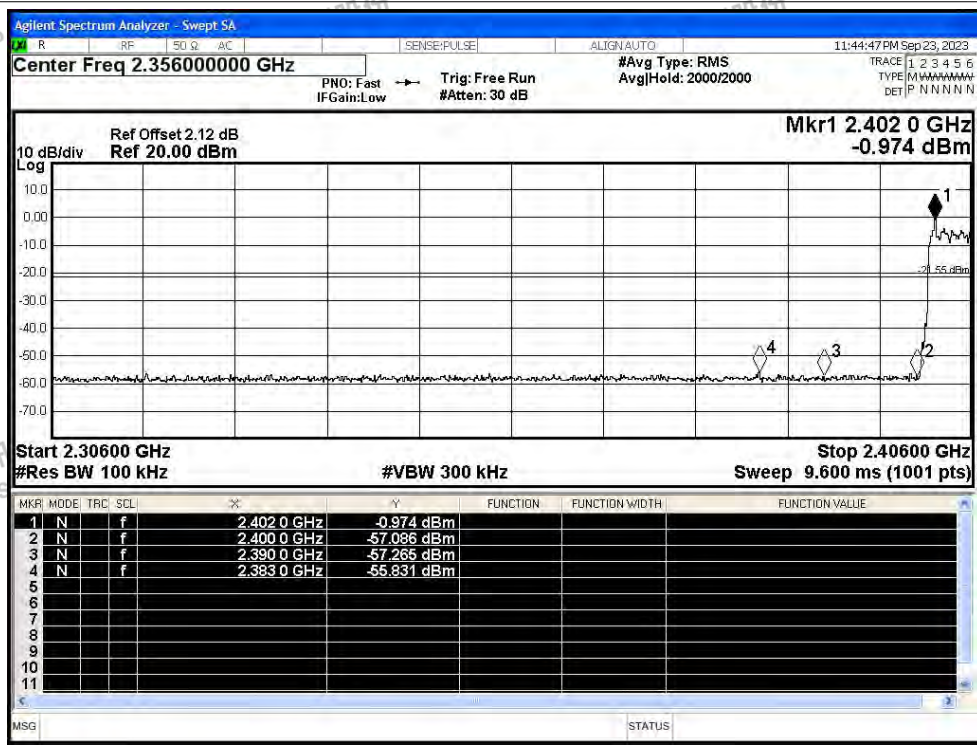




Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



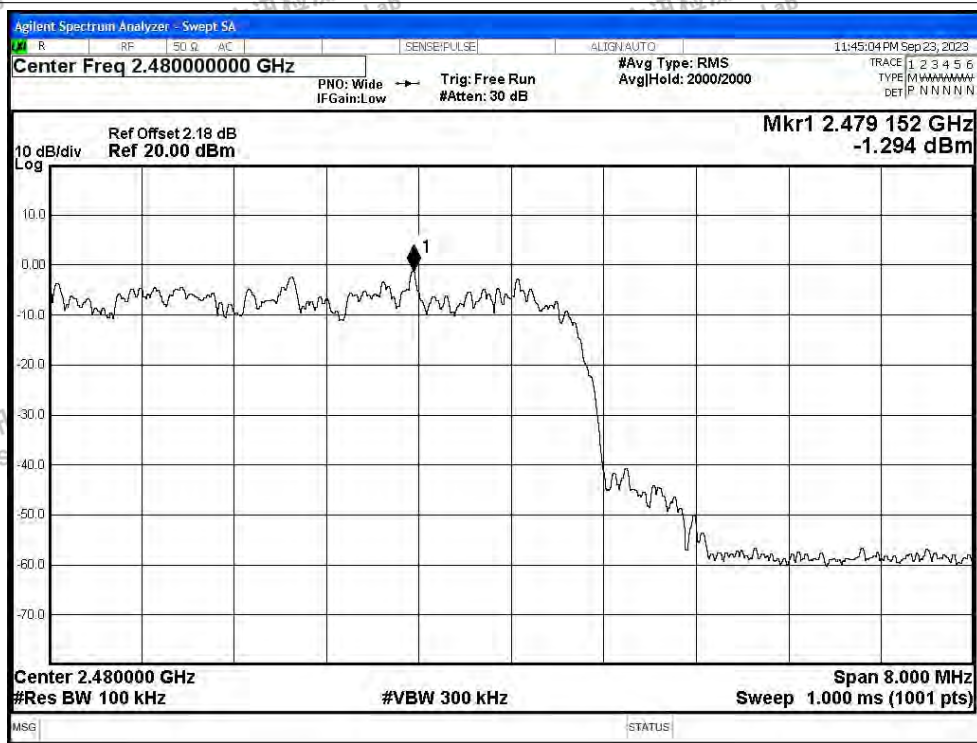
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission



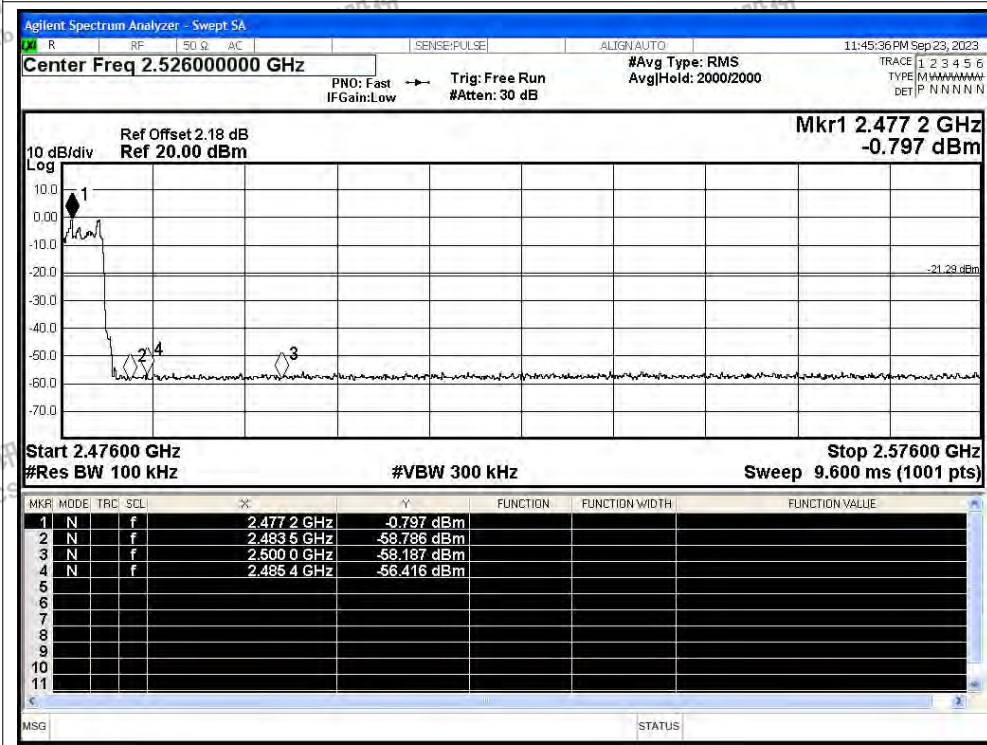




Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



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





### A.7 Conducted RF Spurious Emission

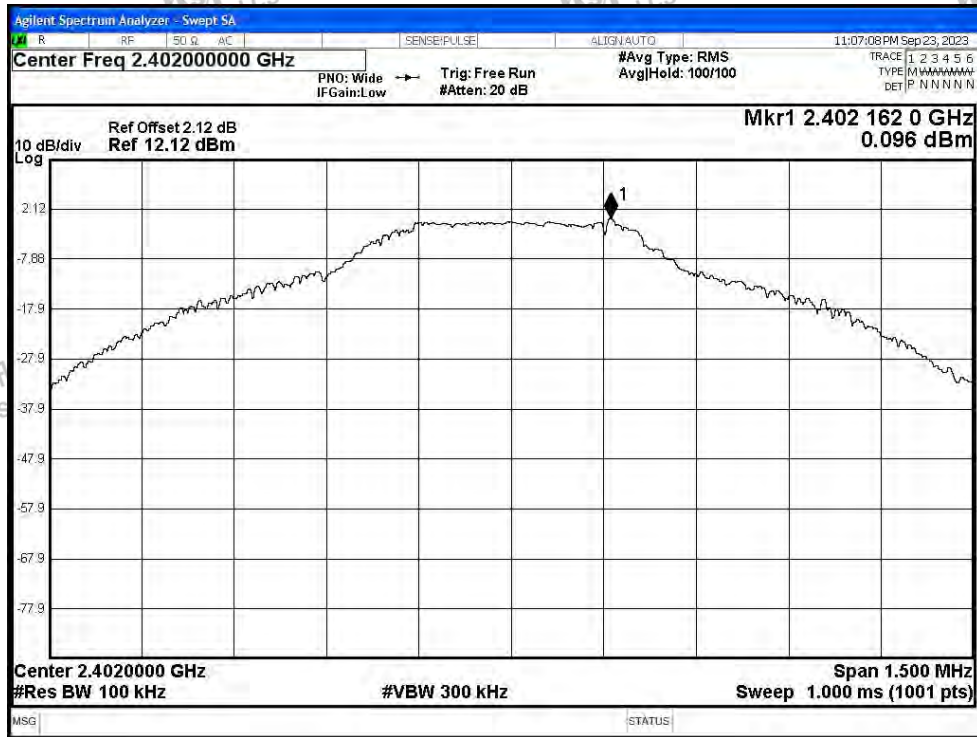
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-55.33	-20	Pass
NVNT	1-DH5	2441	Ant1	-54.95	-20	Pass
NVNT	1-DH5	2480	Ant1	-55.15	-20	Pass
NVNT	2-DH5	2402	Ant1	-53.43	-20	Pass
NVNT	2-DH5	2441	Ant1	-54.69	-20	Pass
NVNT	2-DH5	2480	Ant1	-53.92	-20	Pass
NVNT	3-DH5	2402	Ant1	-53.4	-20	Pass
NVNT	3-DH5	2441	Ant1	-54.48	-20	Pass
NVNT	3-DH5	2480	Ant1	-53.01	-20	Pass



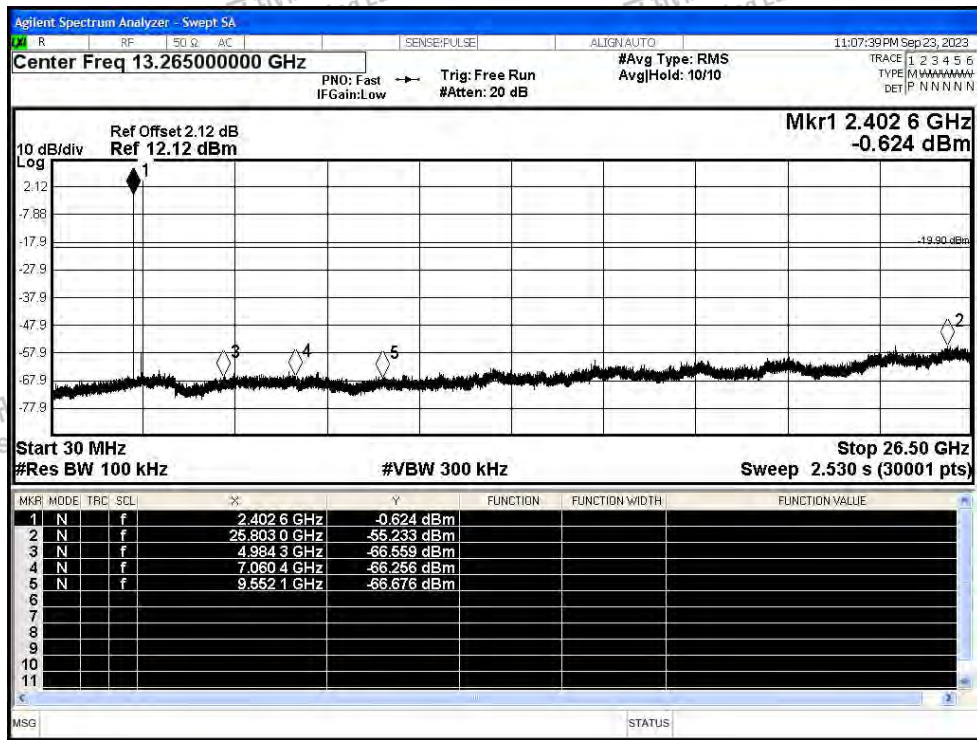


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



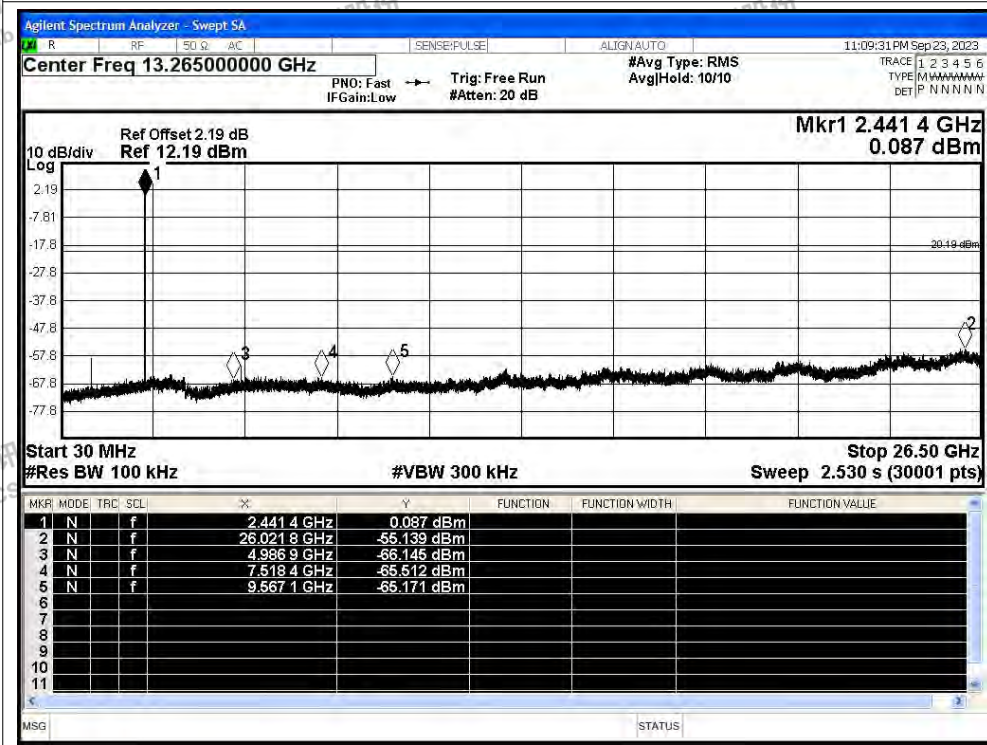




Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



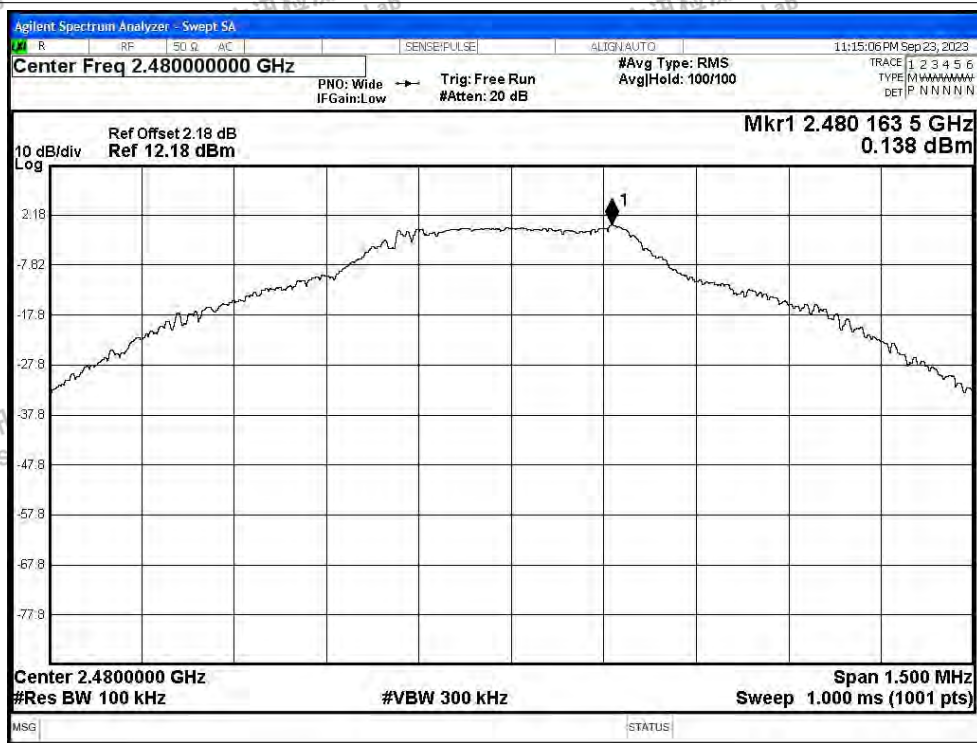
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



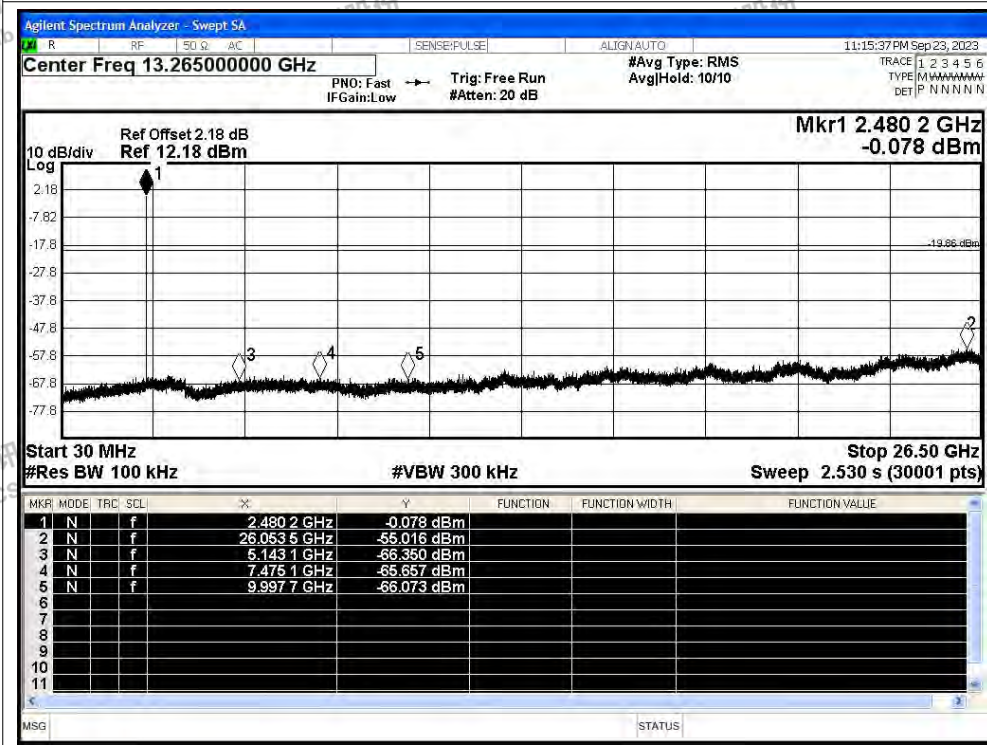




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

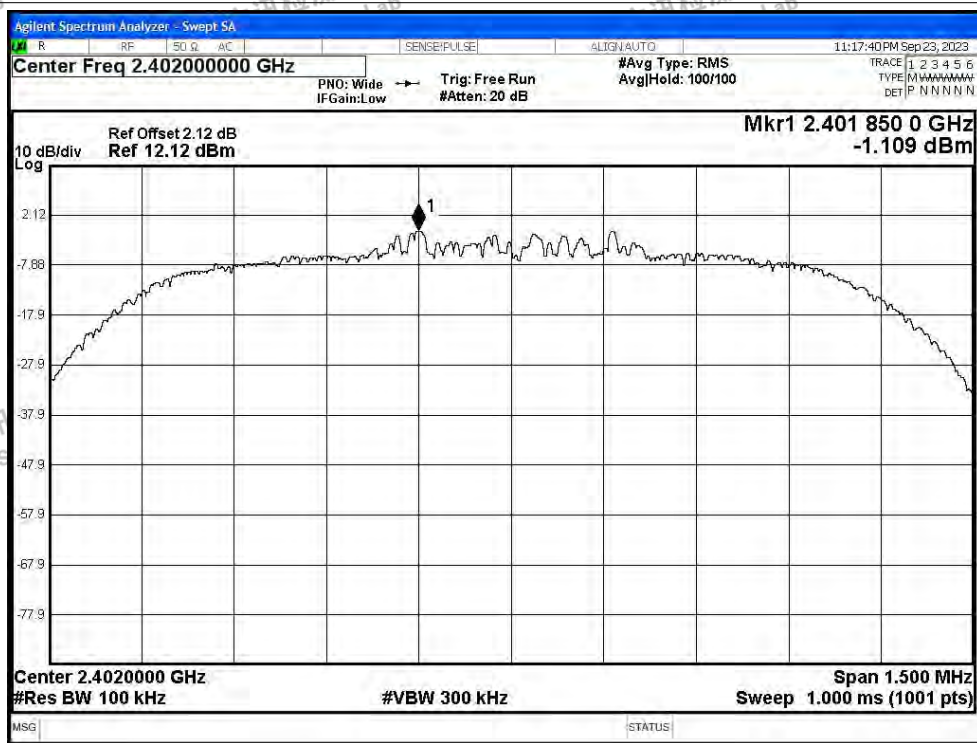


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

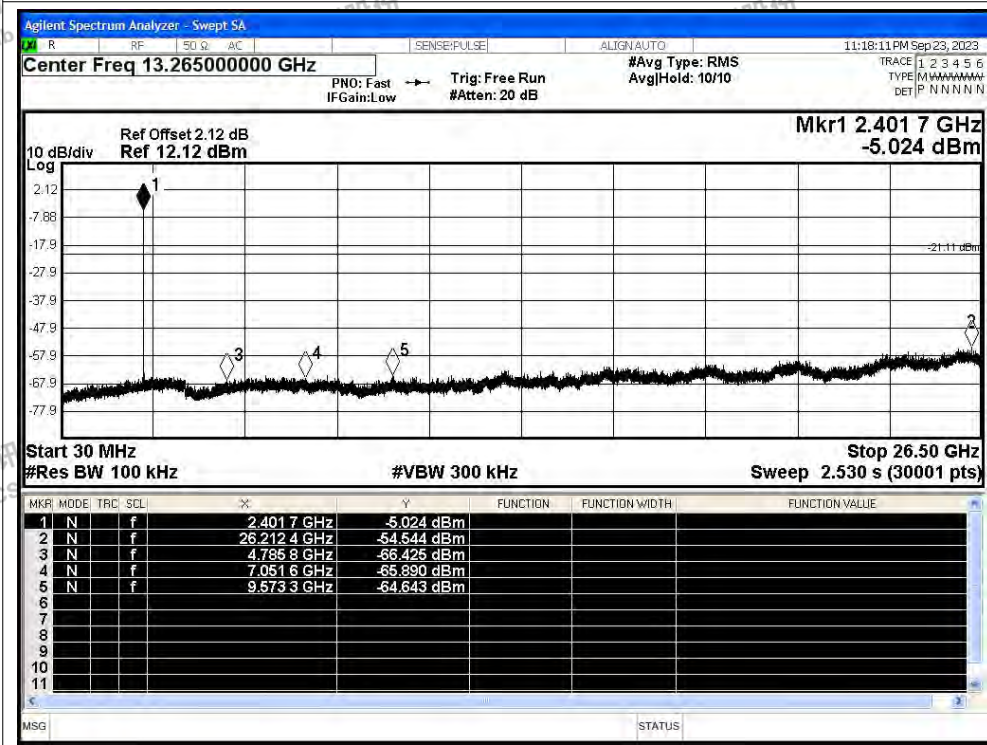




Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref

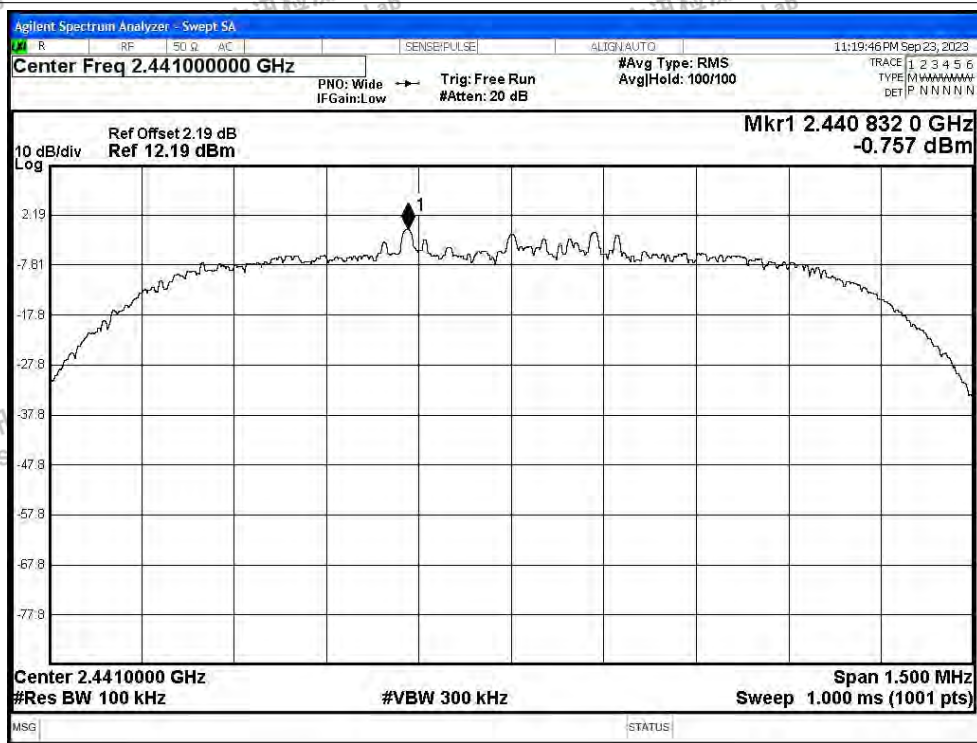


Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission

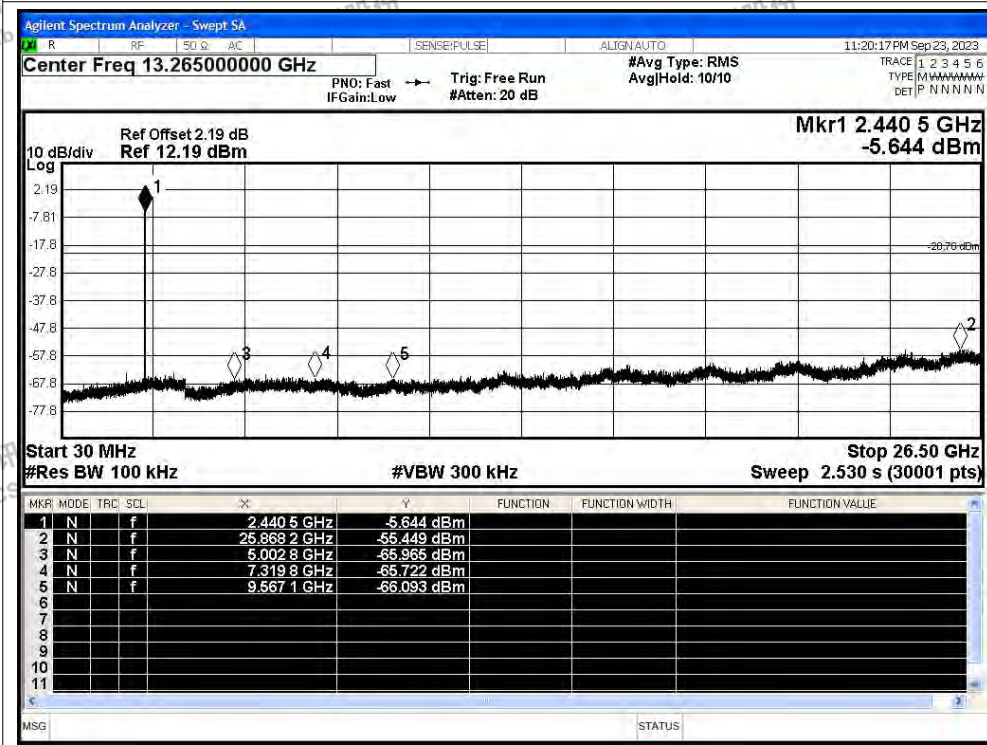




Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



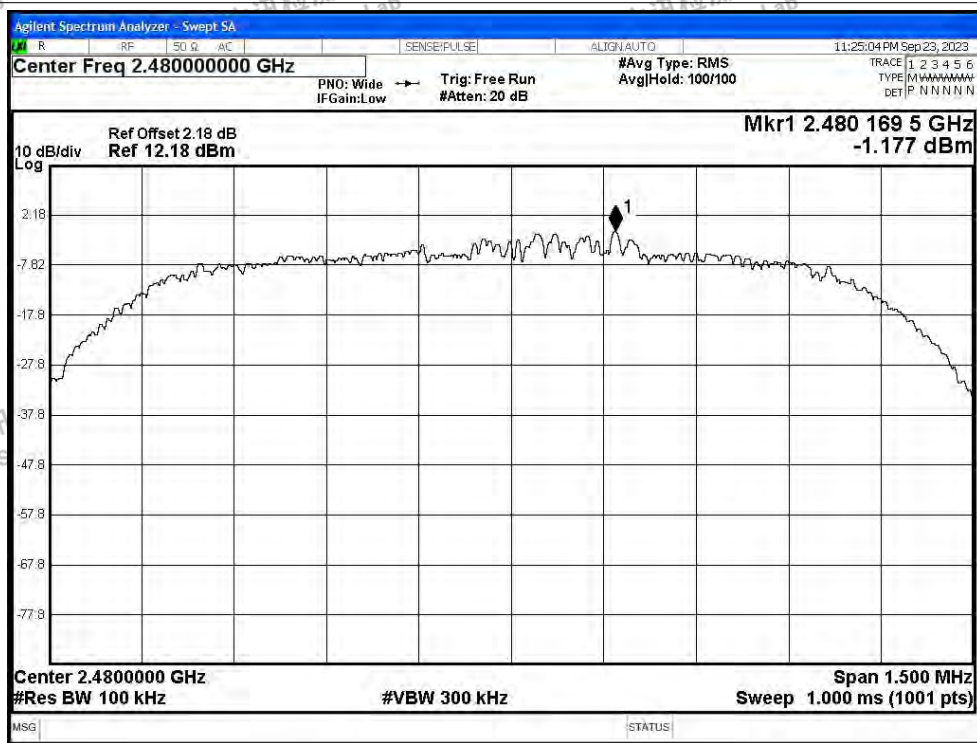
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



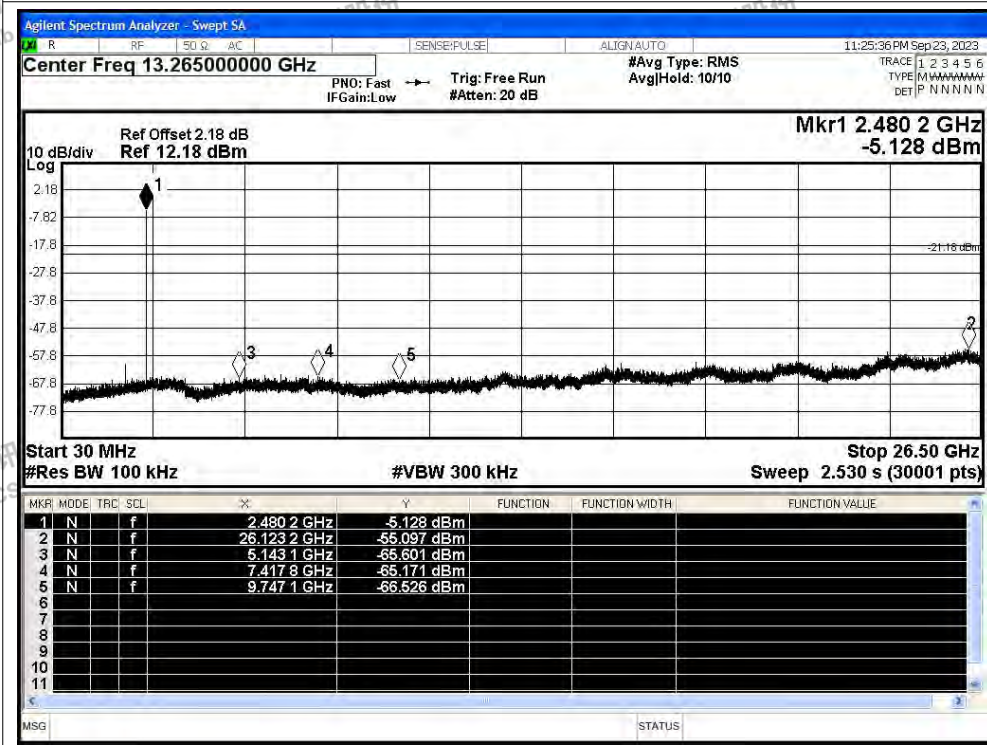




Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



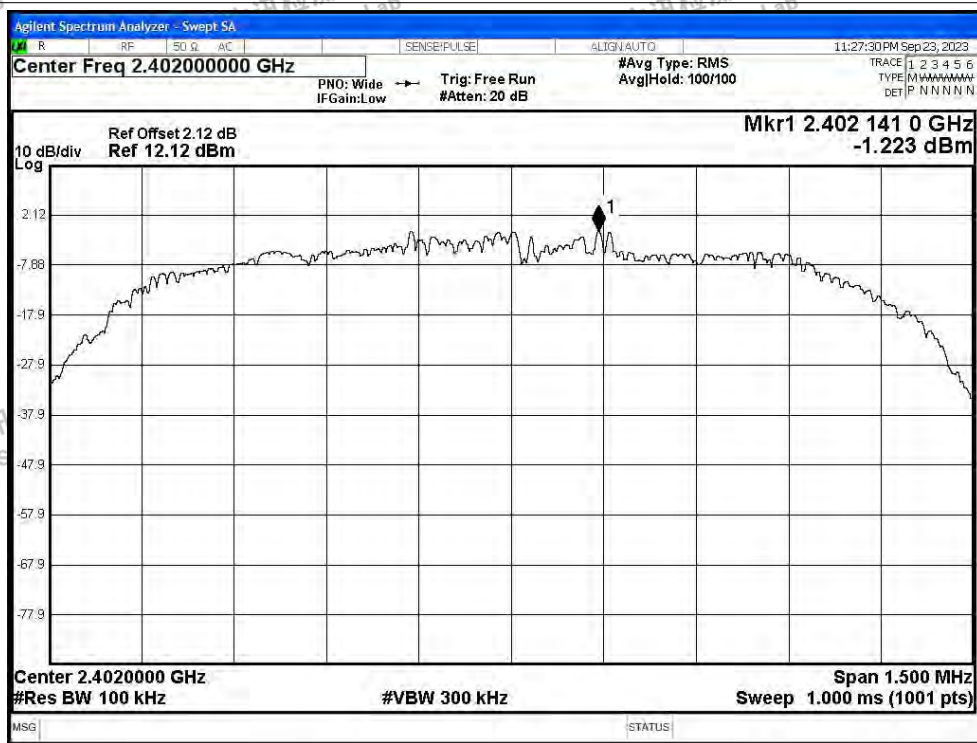
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



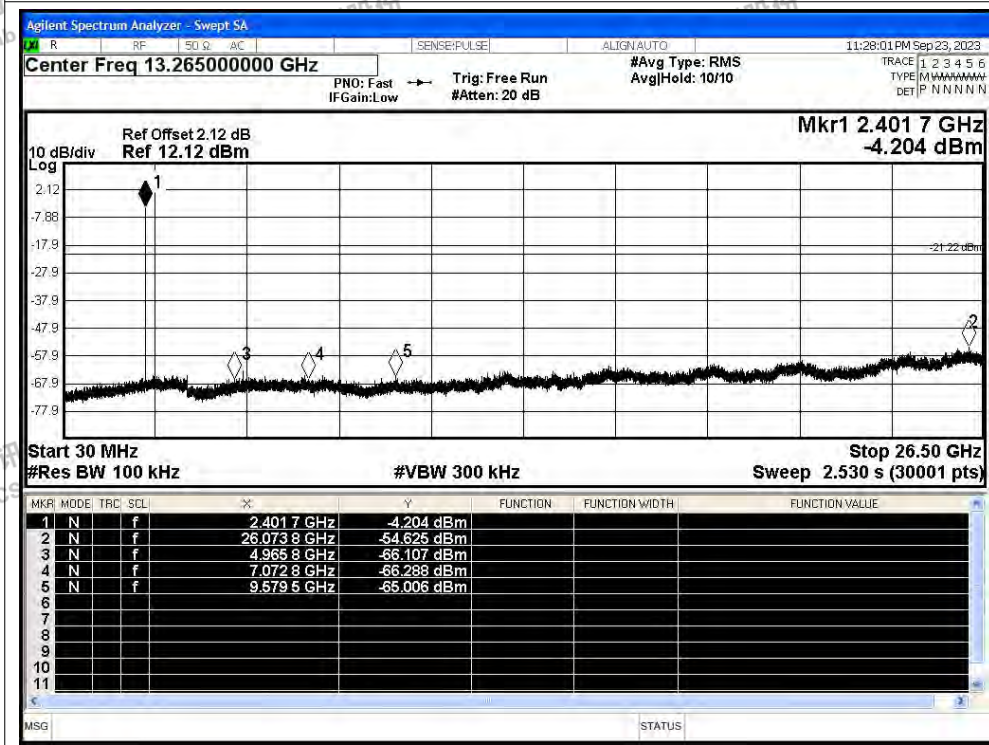




Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref

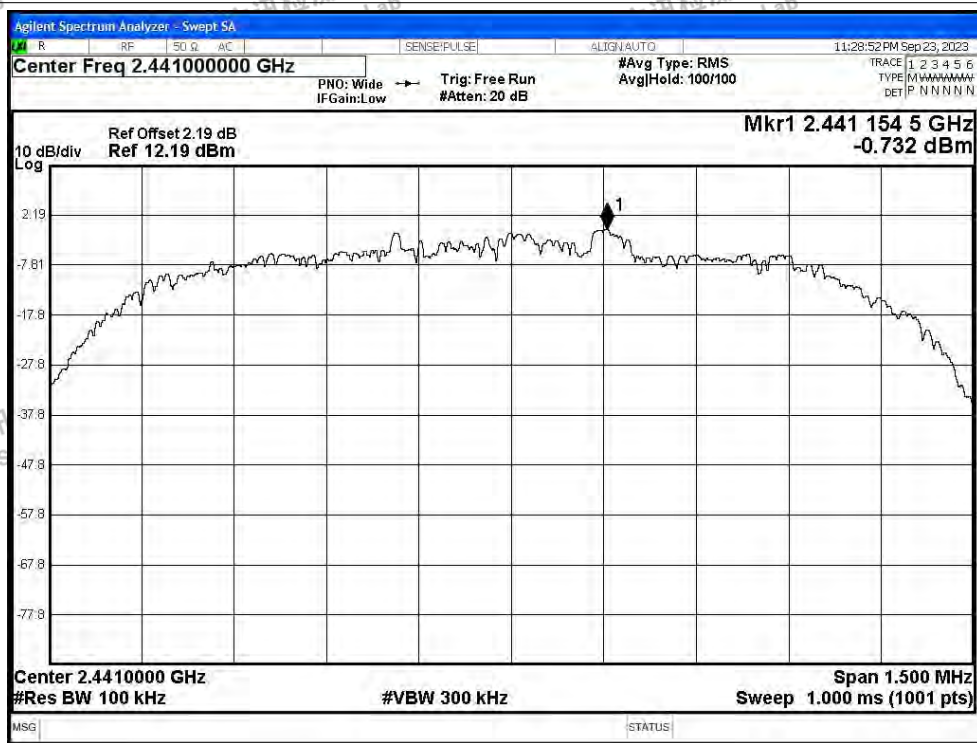


Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission

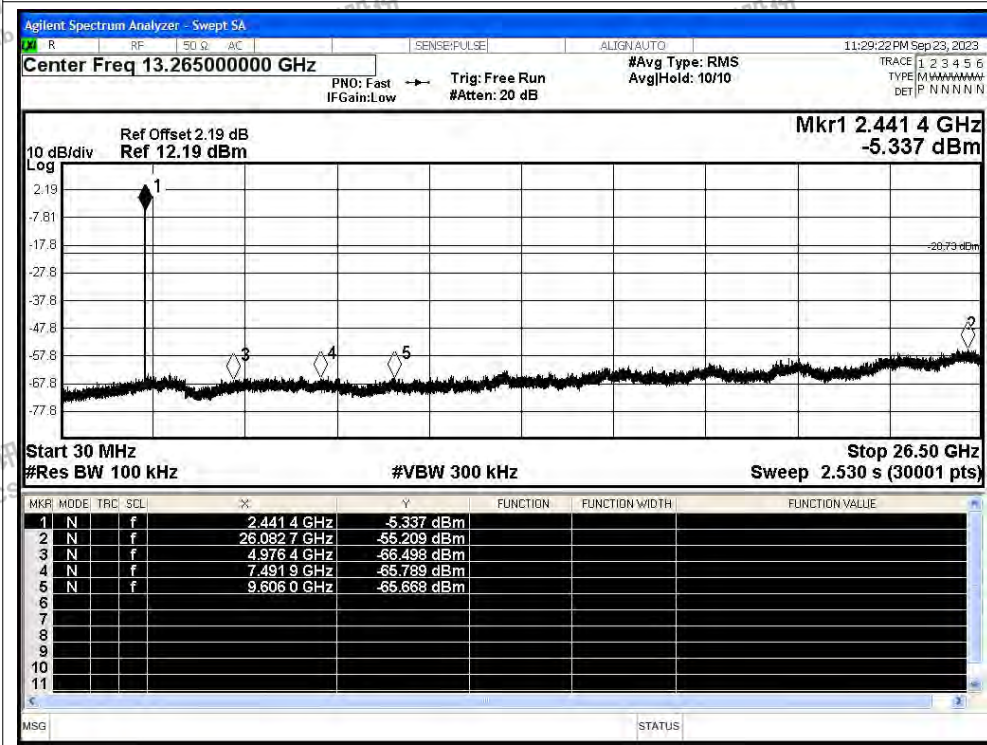




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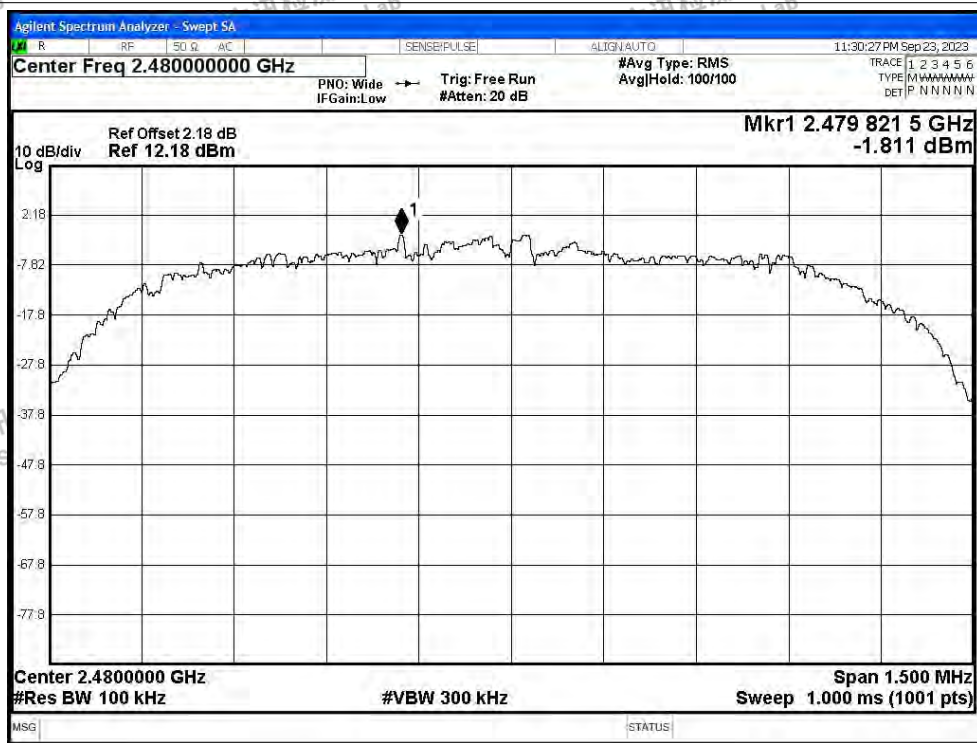


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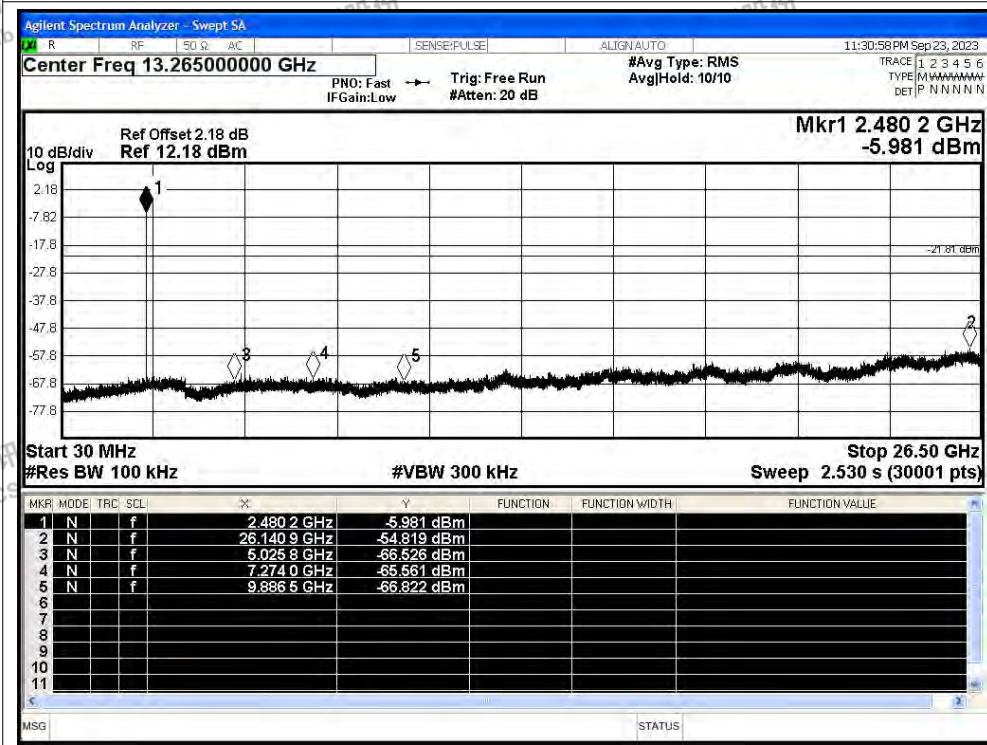




Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission







### A.8 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	-51.06	2	46.2	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-57.74	2	39.52	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2349.936	-47.83	2	49.43	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2388.432	-57.31	2	39.95	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-50.6	2	46.66	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-57.42	2	39.84	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.98	2	46.28	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-55.74	2	41.52	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2485.312	-46.87	2	50.39	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.512	-55.74	2	41.52	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-50.79	2	46.47	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-57.09	2	40.17	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-50.22	2	47.04	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-57.78	2	39.48	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2389.296	-47.27	2	49.99	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2384.784	-57.27	2	39.99	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-49.49	2	47.77	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-57.34	2	39.92	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-49.05	2	48.21	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-55.6	2	41.66	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2486.368	-47.19	2	50.07	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.512	-55.6	2	41.66	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-49.65	2	47.61	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-57.17	2	40.09	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-51.65	2	45.61	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-57.71	2	39.55	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2357.616	-47.2	2	50.06	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2389.296	-57.14	2	40.12	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-48.22	2	49.04	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-57.37	2	39.89	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-49.63	2	47.63	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-55.53	2	41.73	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2499.976	-47.27	2	49.99	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.512	-55.53	2	41.73	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-49.18	2	48.08	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-56.99	2	40.27	Average	54	Pass

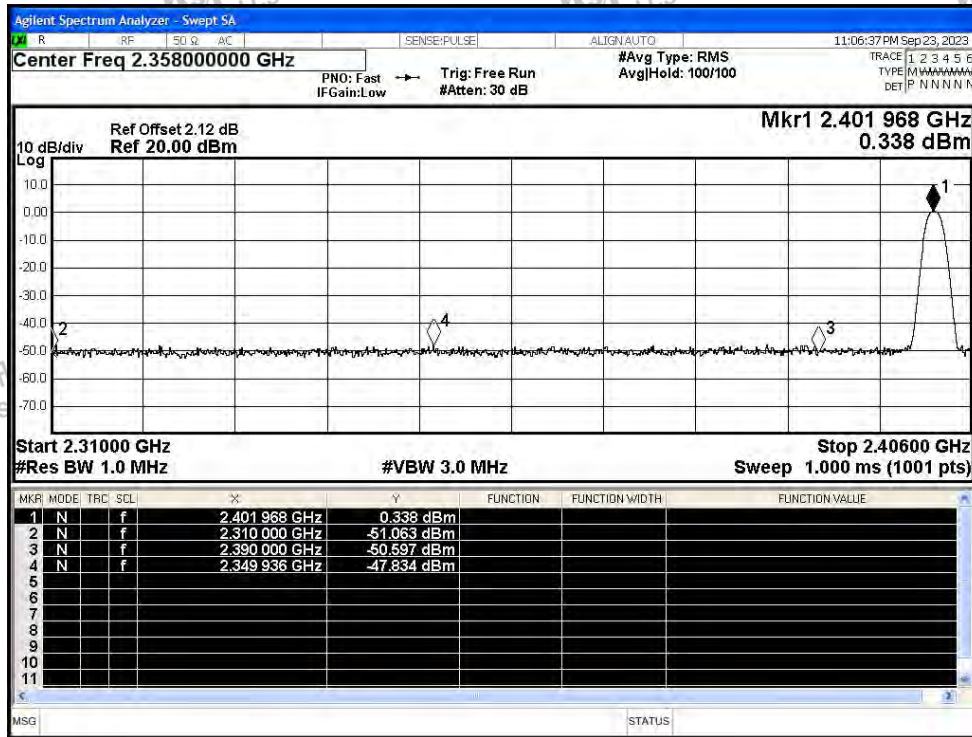




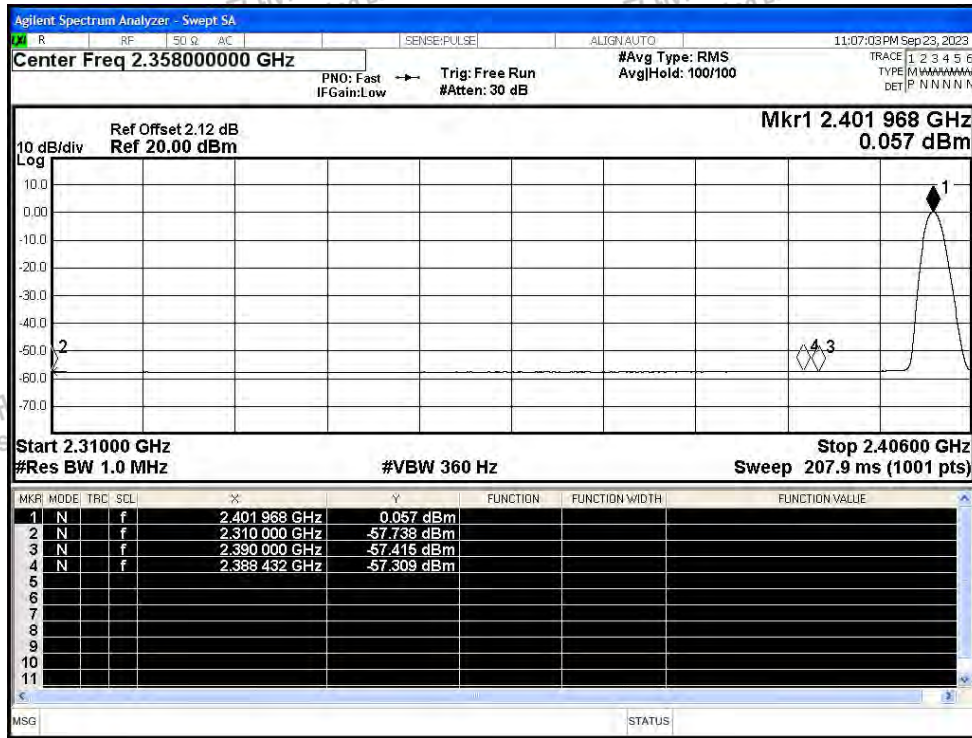


Test Graphs

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

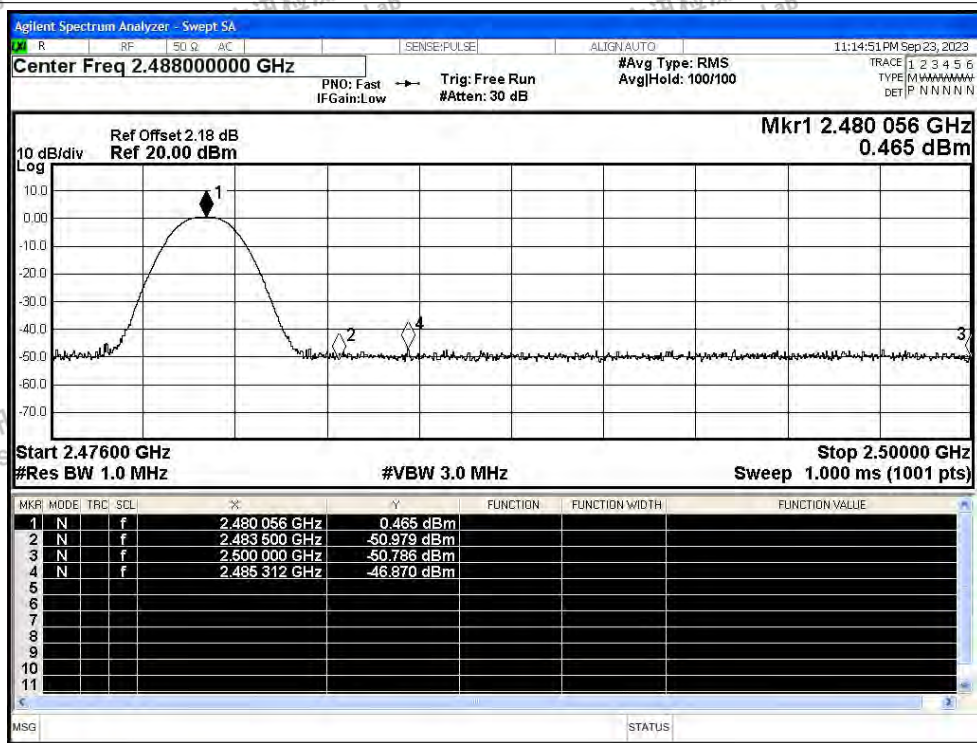


Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

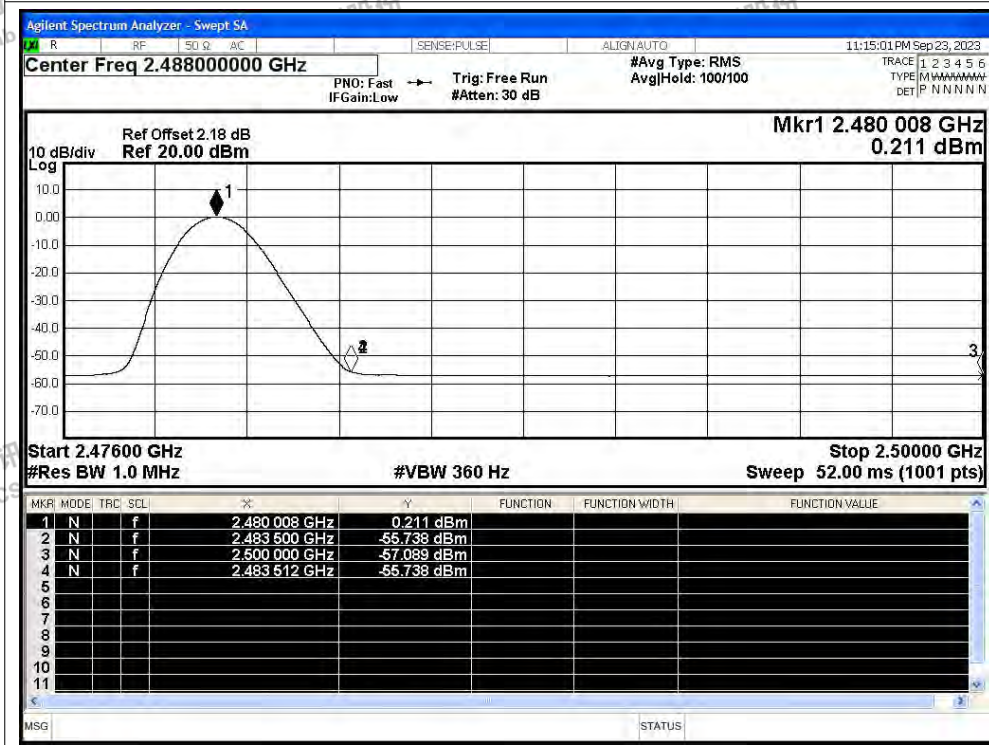




Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak

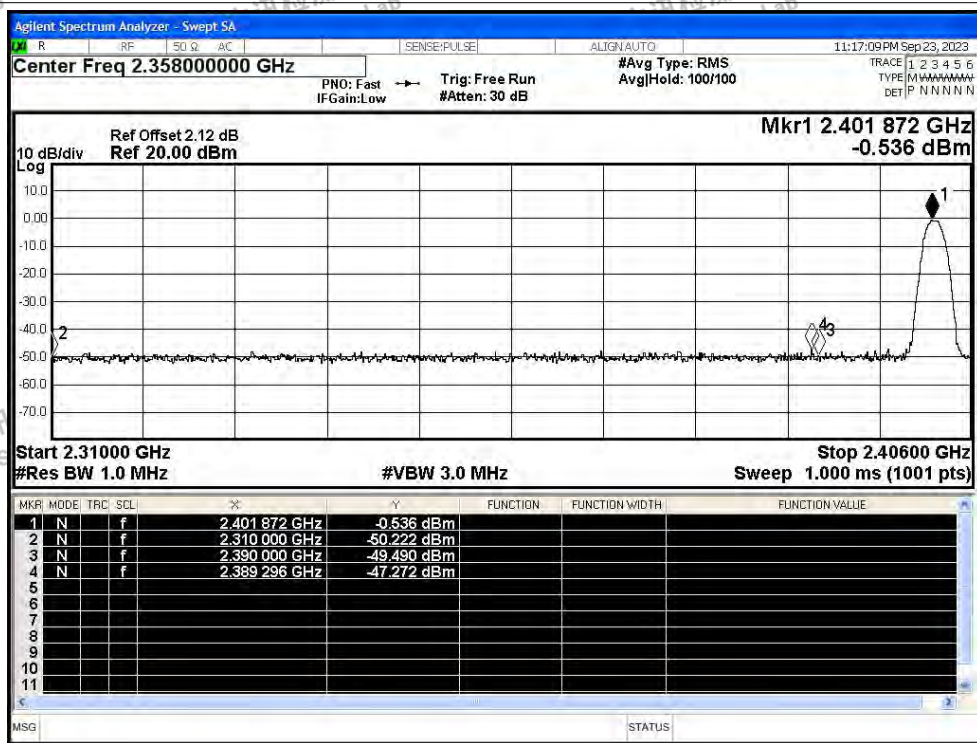


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

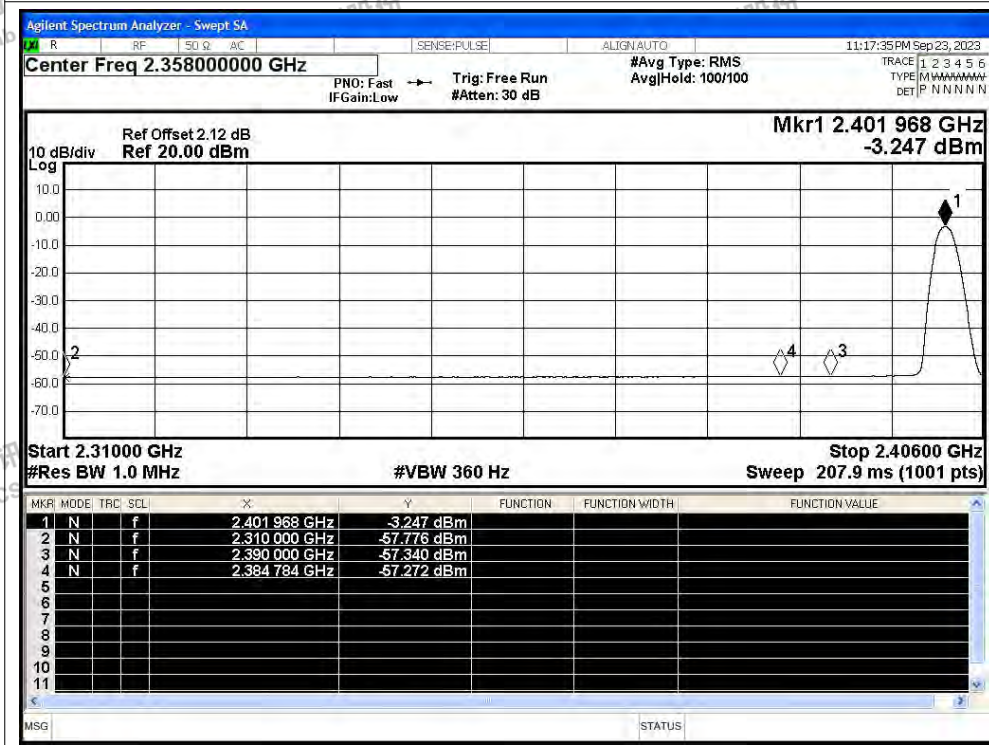




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



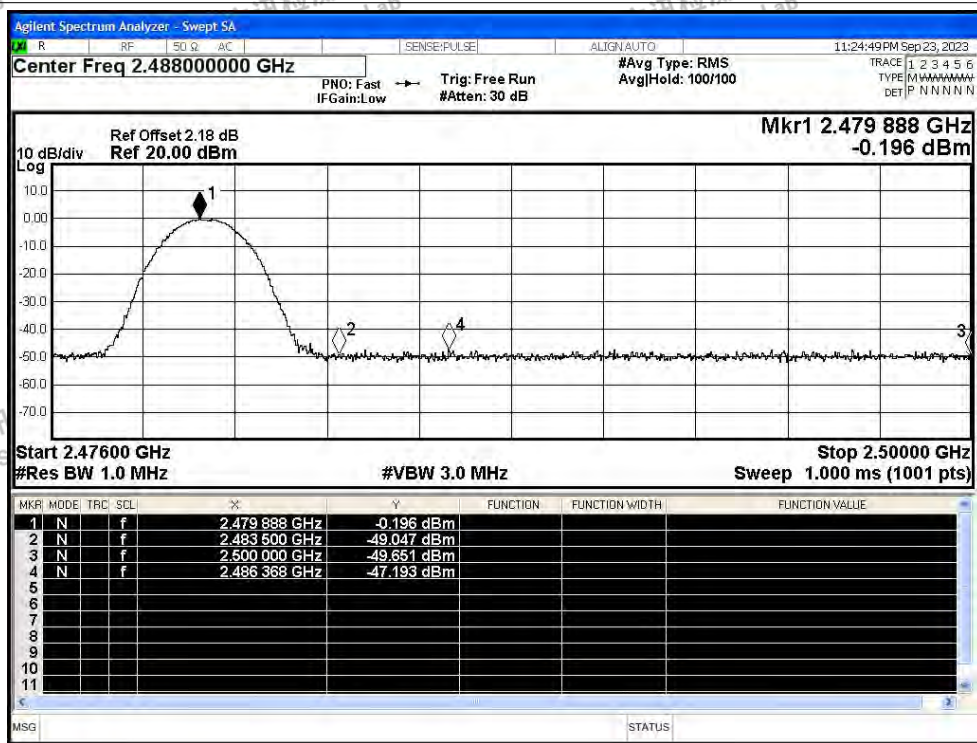
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average



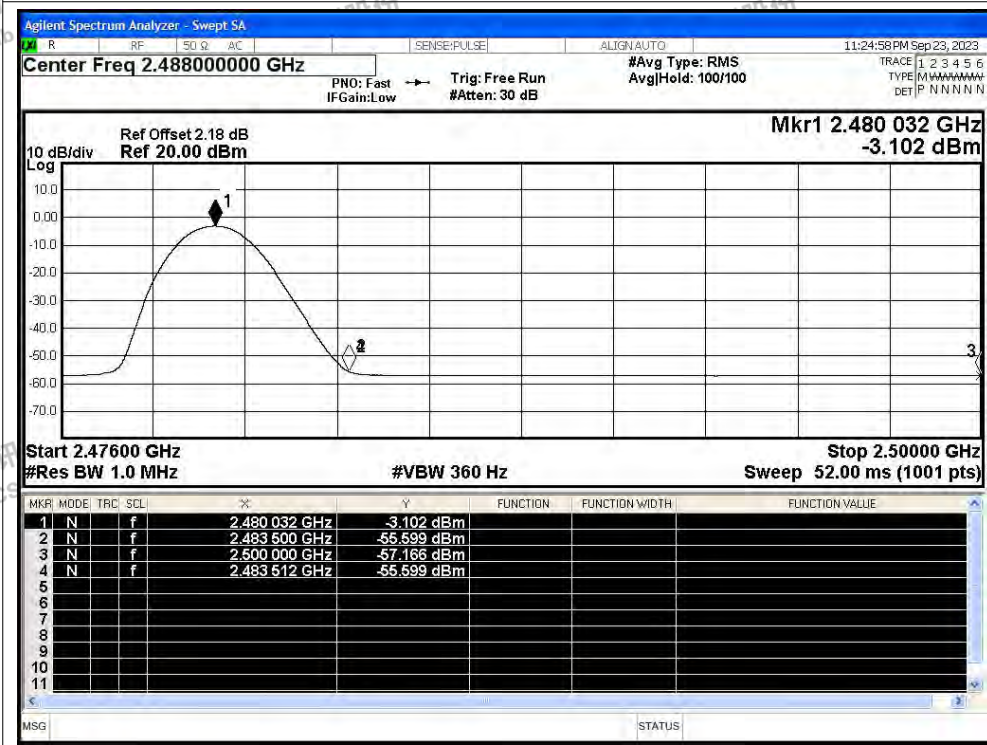




Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



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

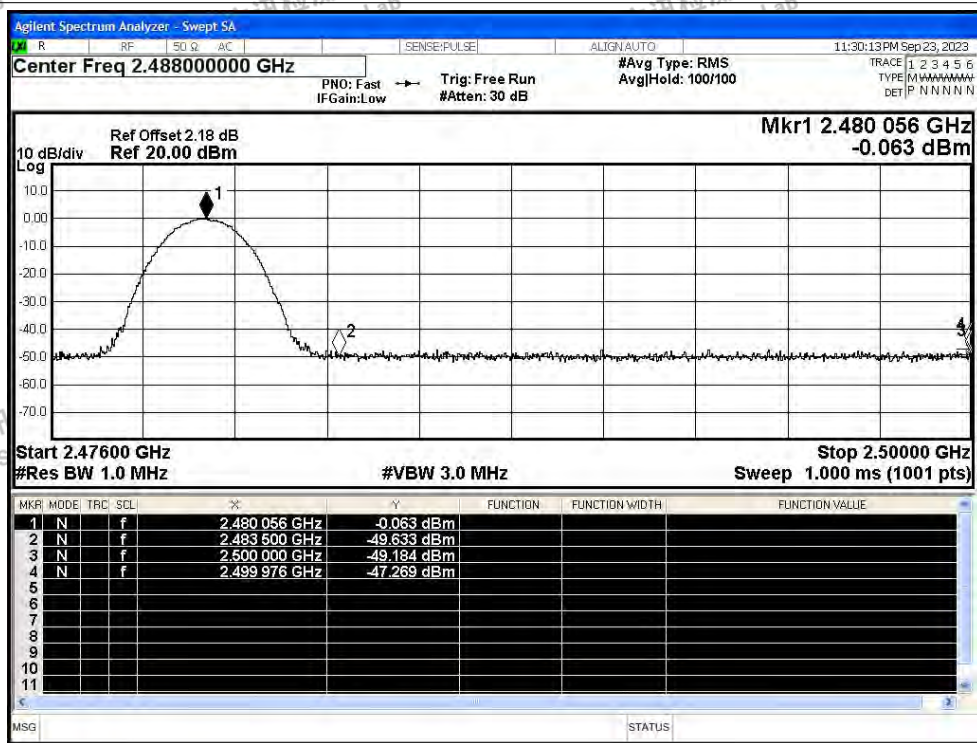








Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Peak



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

