Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Wireless Microphone

Test Model: ZQS-Microphone

Environmental Conditions

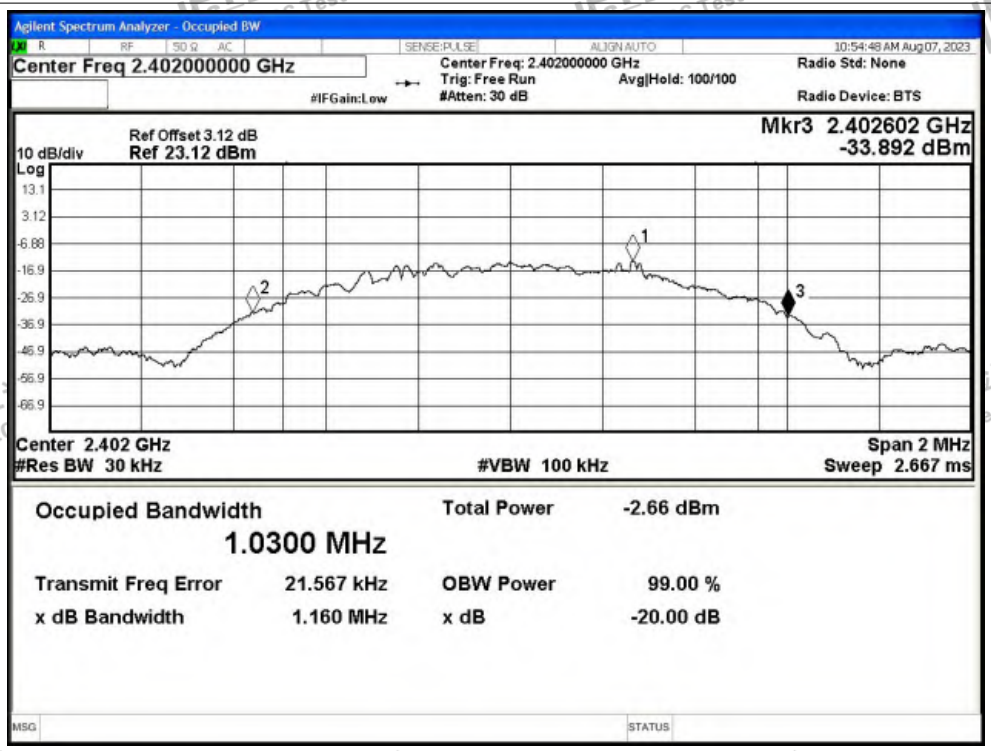
Temperature:	23.8 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng Nick Peng
Supervised by:	Ling Zhu Ling Zhu

A.1 -20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	1.16	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.945	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.941	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.316	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.267	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.306	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.264	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.246	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.266	N/A	Pass

Test Graphs

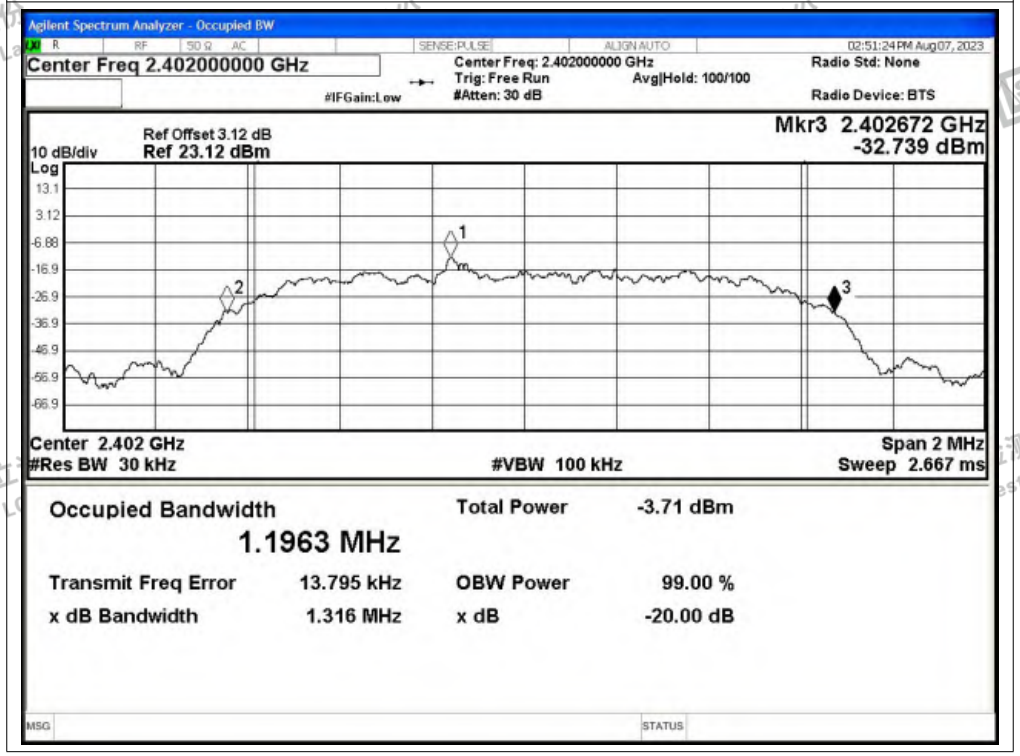
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



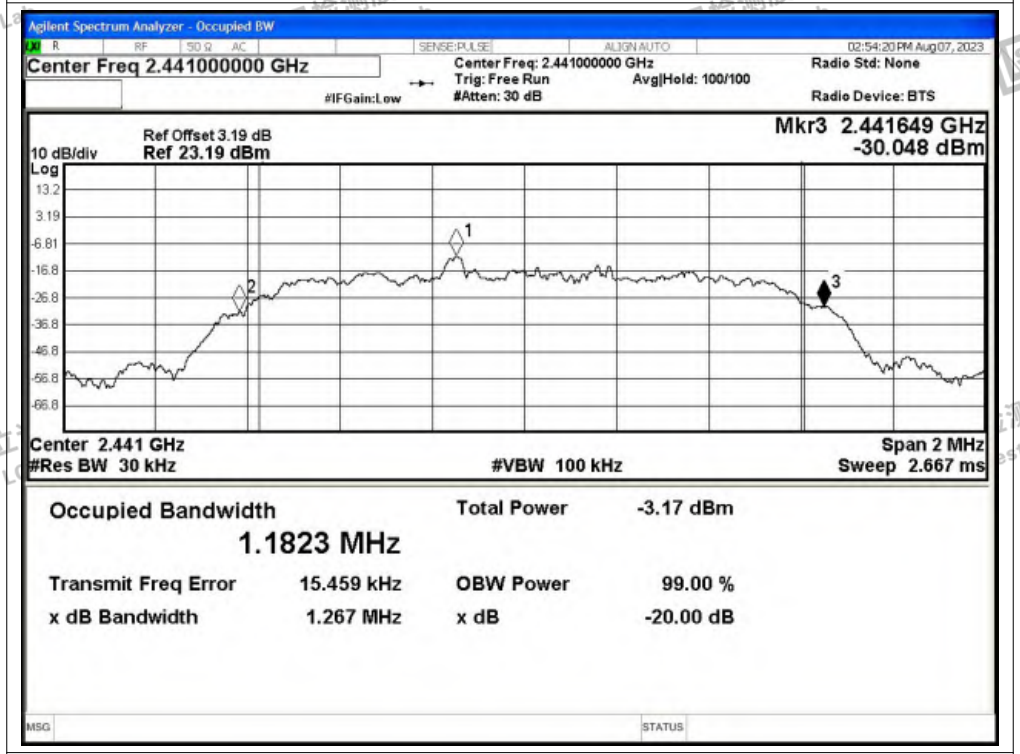
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

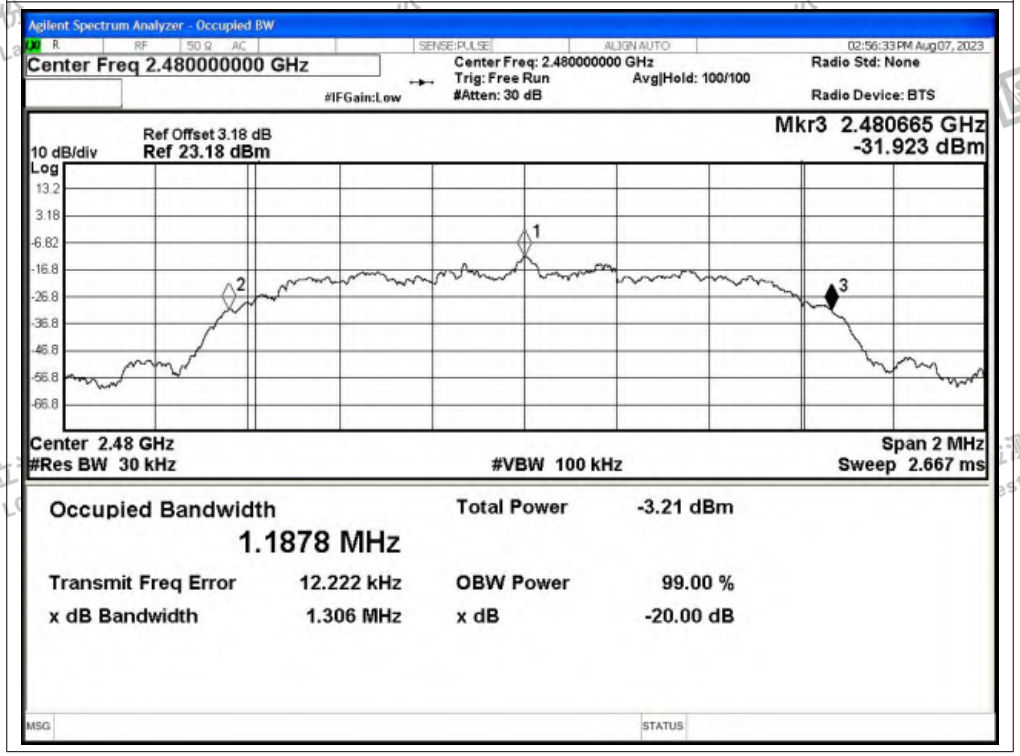
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



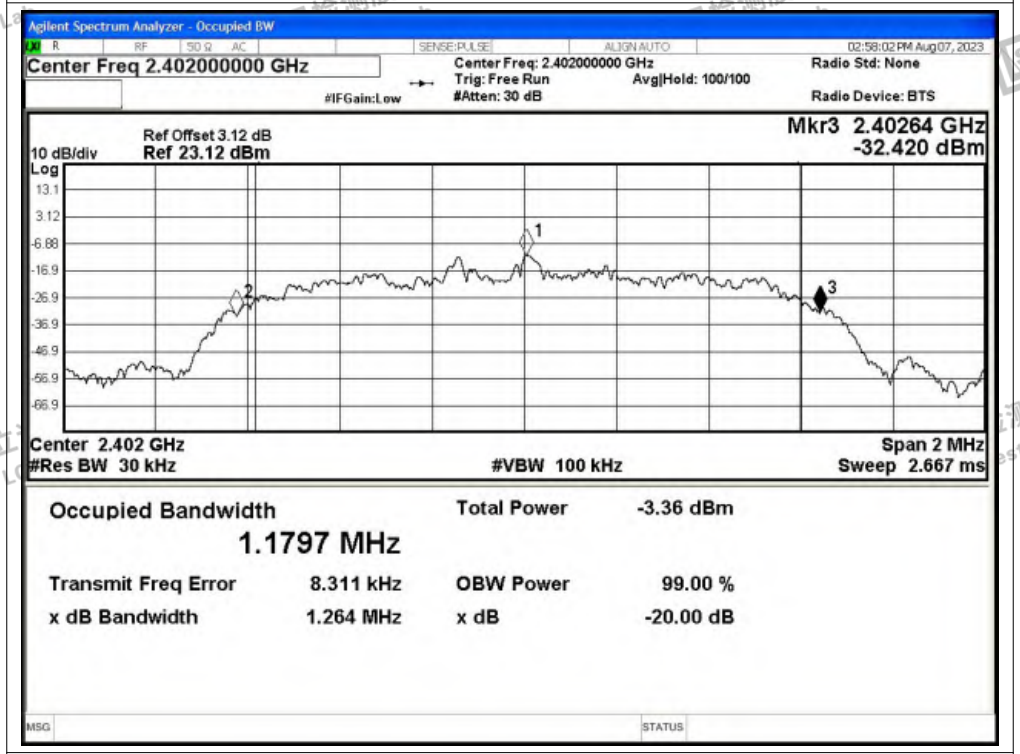
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



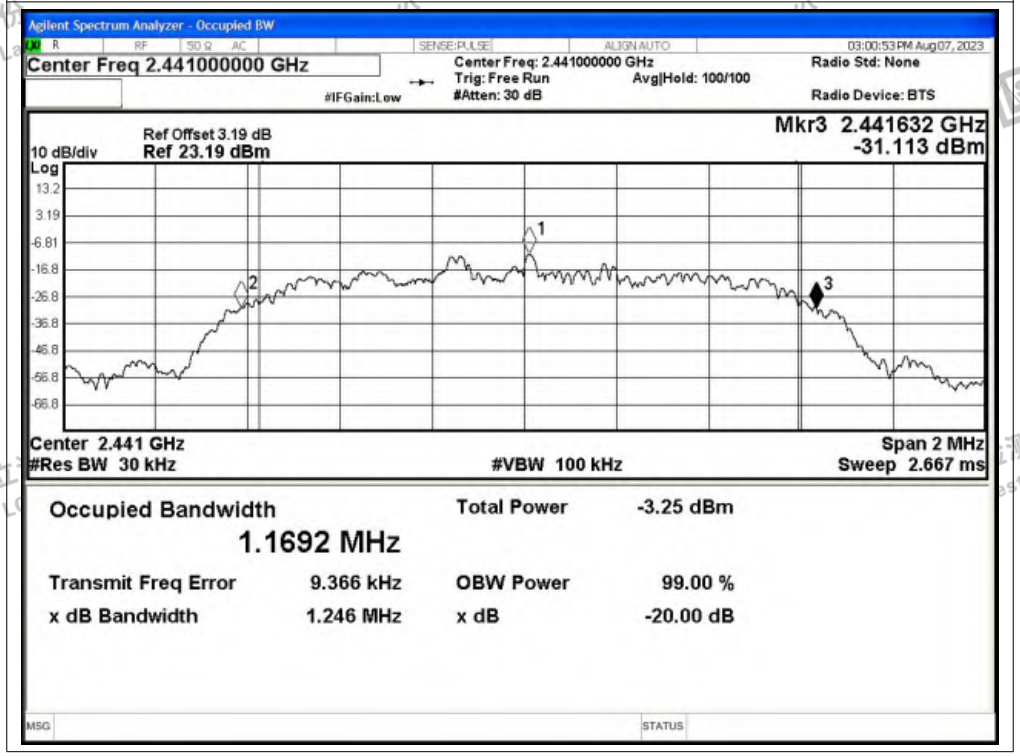
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



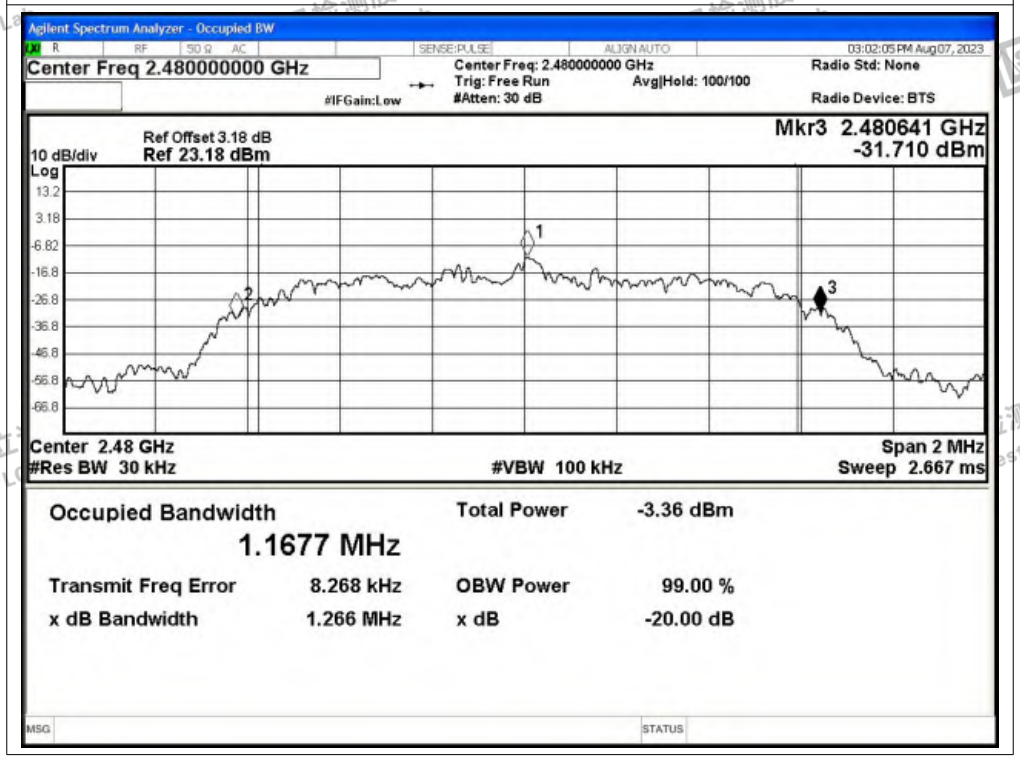
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1

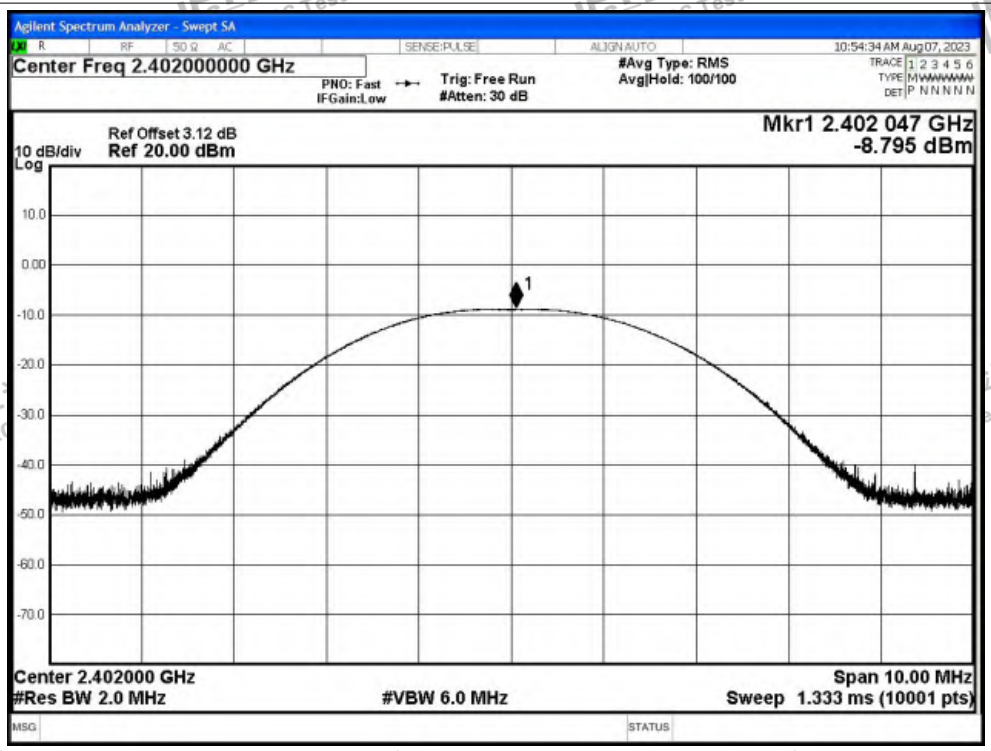


A.2 Maximum Conducted Output Power

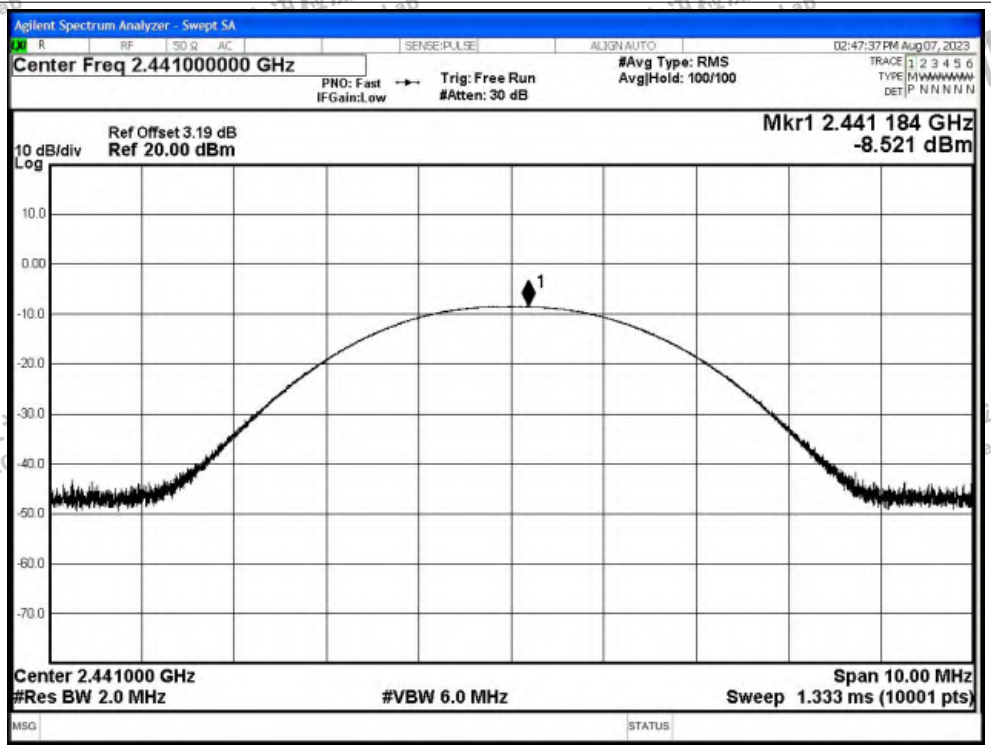
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-8.8	21	Pass
NVNT	1-DH5	2441	Ant1	-8.52	21	Pass
NVNT	1-DH5	2480	Ant1	-8.68	21	Pass
NVNT	2-DH5	2402	Ant1	-7.93	21	Pass
NVNT	2-DH5	2441	Ant1	-7.73	21	Pass
NVNT	2-DH5	2480	Ant1	-7.89	21	Pass
NVNT	3-DH5	2402	Ant1	-7.88	21	Pass
NVNT	3-DH5	2441	Ant1	-7.56	21	Pass
NVNT	3-DH5	2480	Ant1	-7.79	21	Pass

Test Graphs

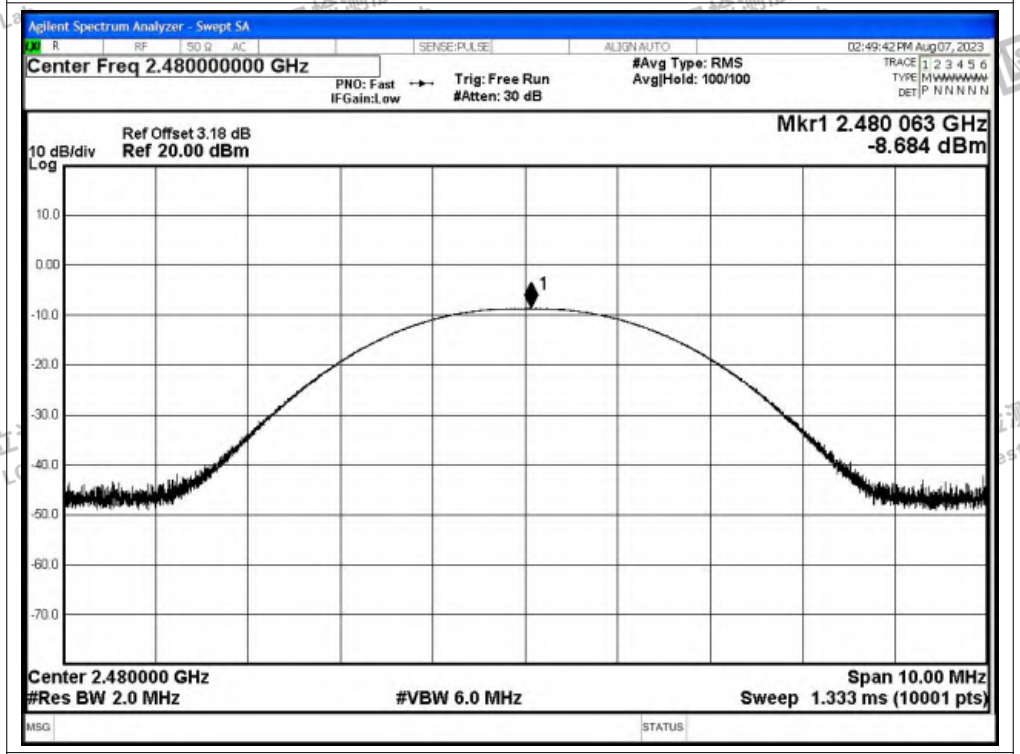
Power NVNT 1-DH5 2402MHz Ant1



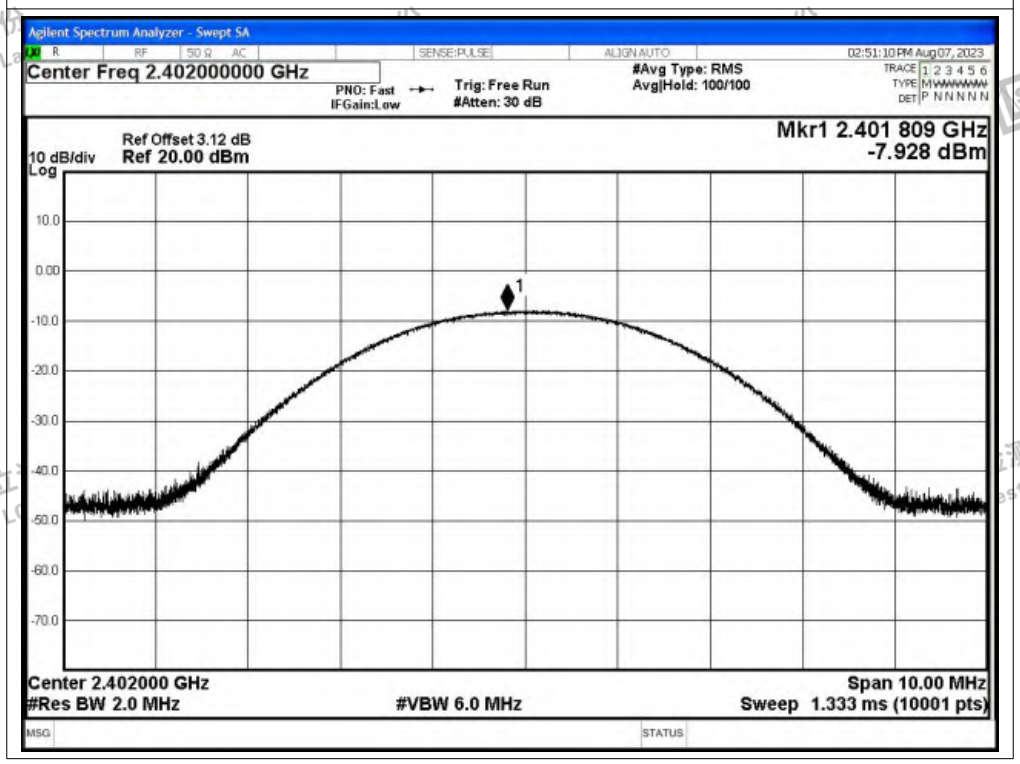
Power NVNT 1-DH5 2441MHz Ant1



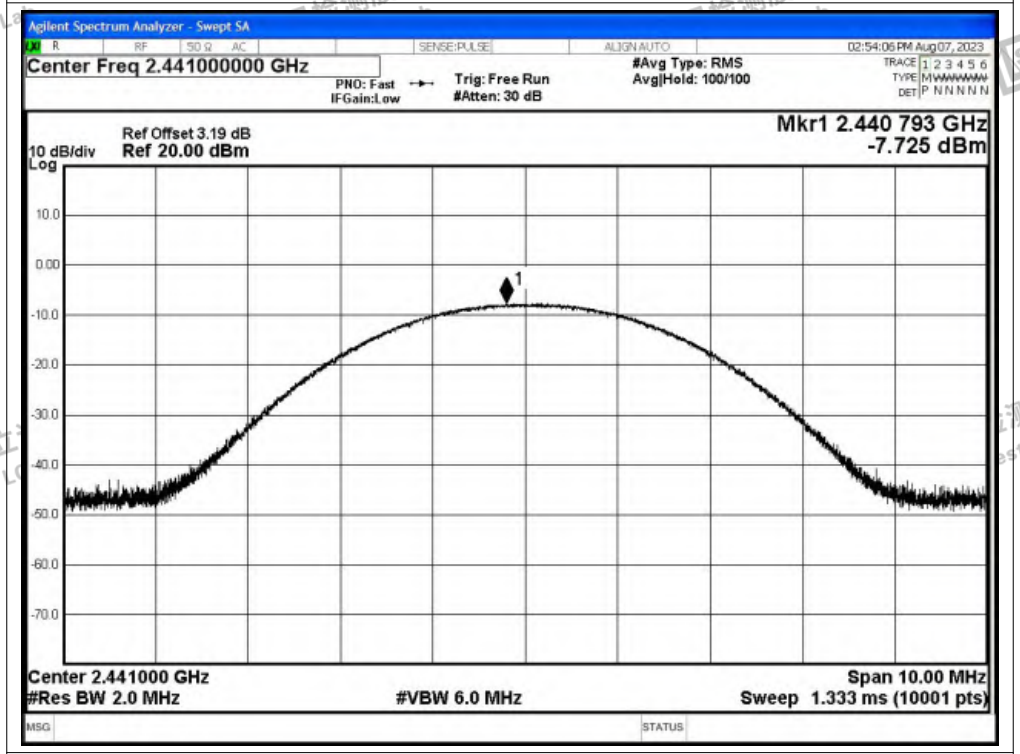
Power NVNT 1-DH5 2480MHz Ant1



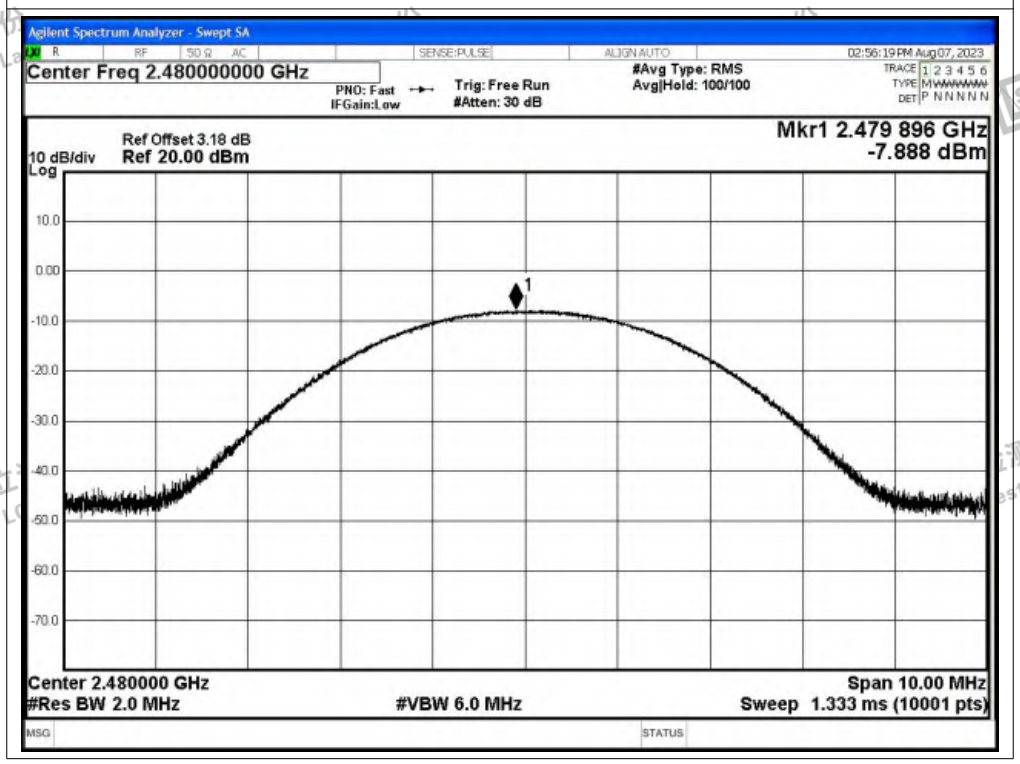
Power NVNT 2-DH5 2402MHz Ant1



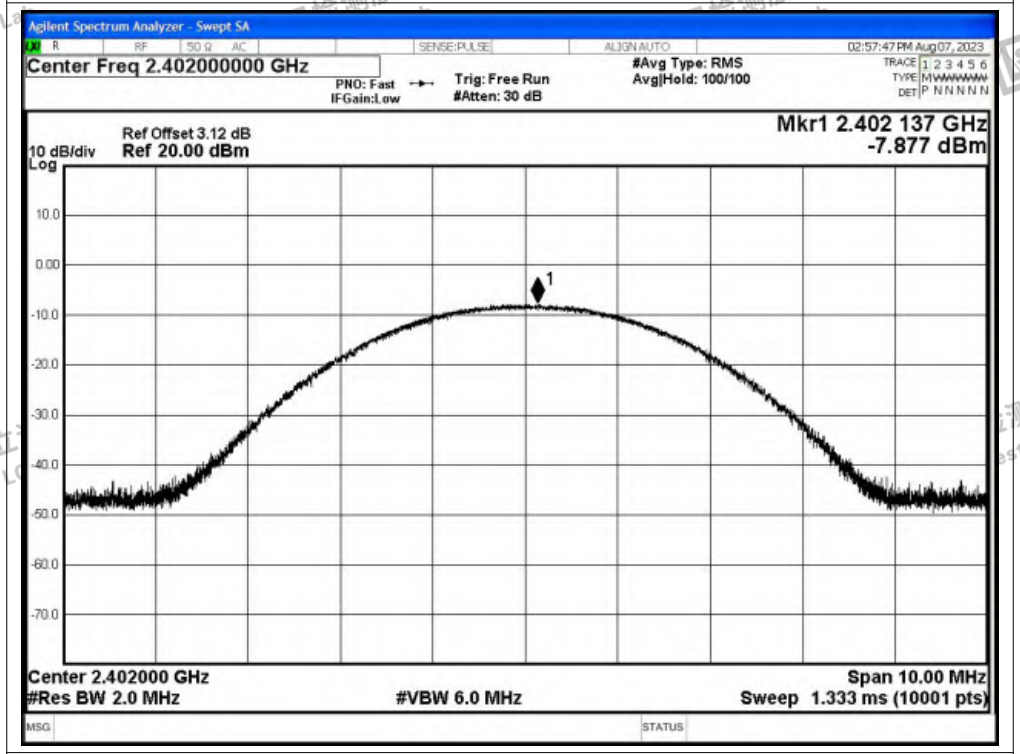
Power NVNT 2-DH5 2441MHz Ant1



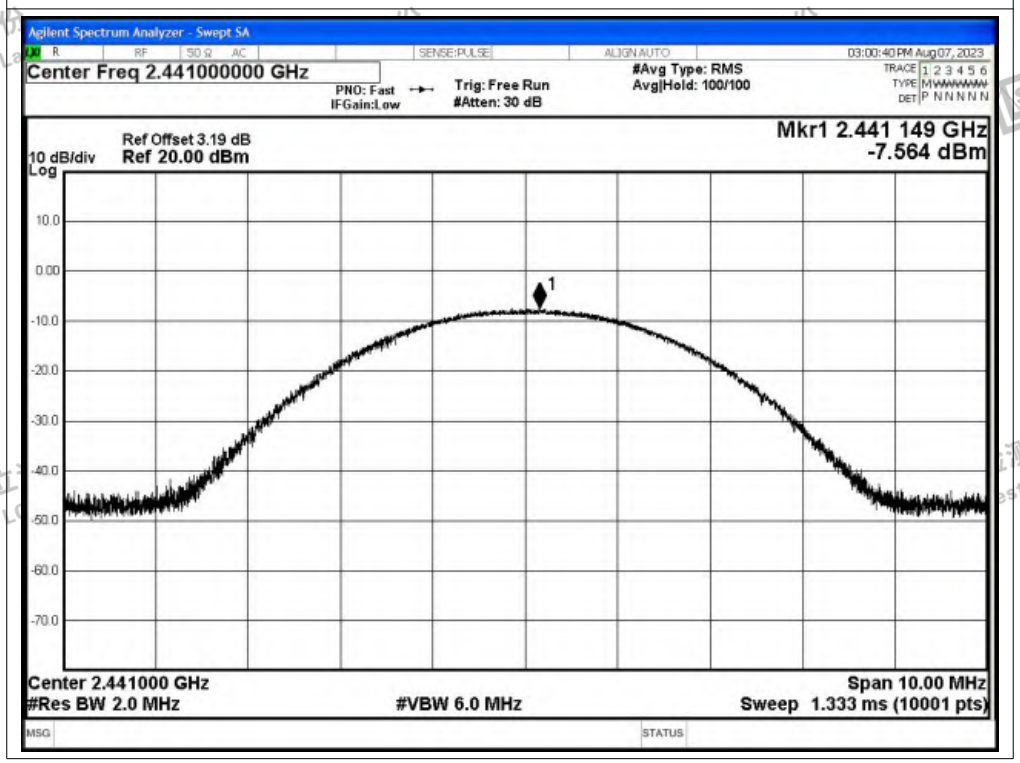
Power NVNT 2-DH5 2480MHz Ant1



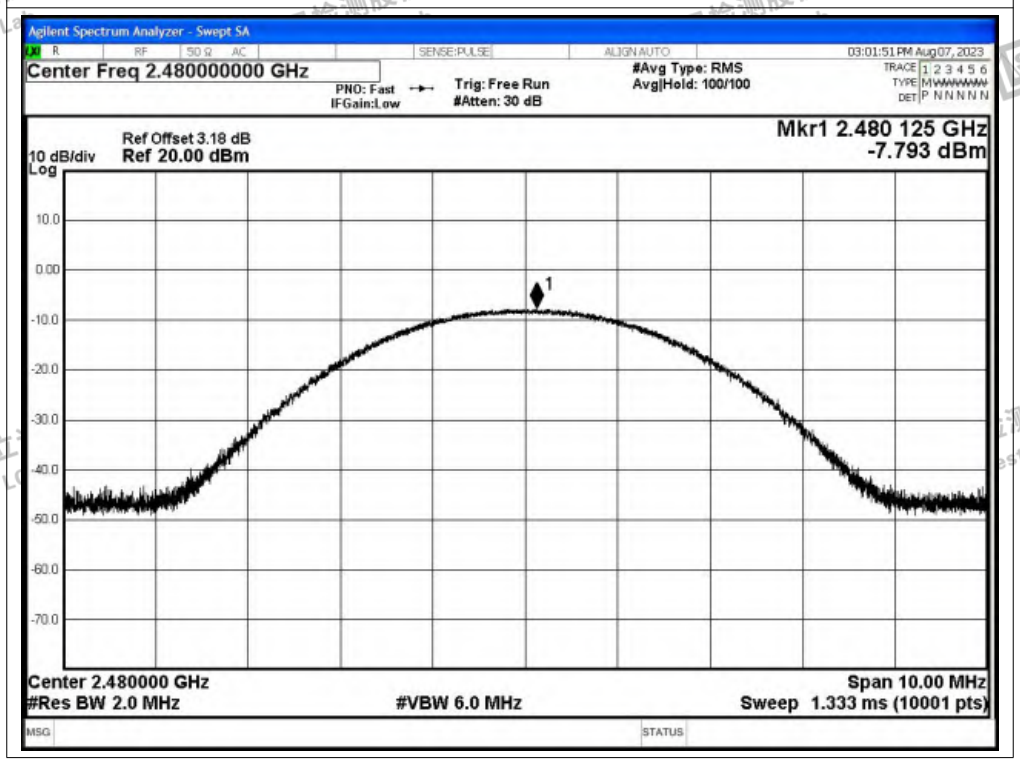
Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



Power NVNT 3-DH5 2480MHz Ant1

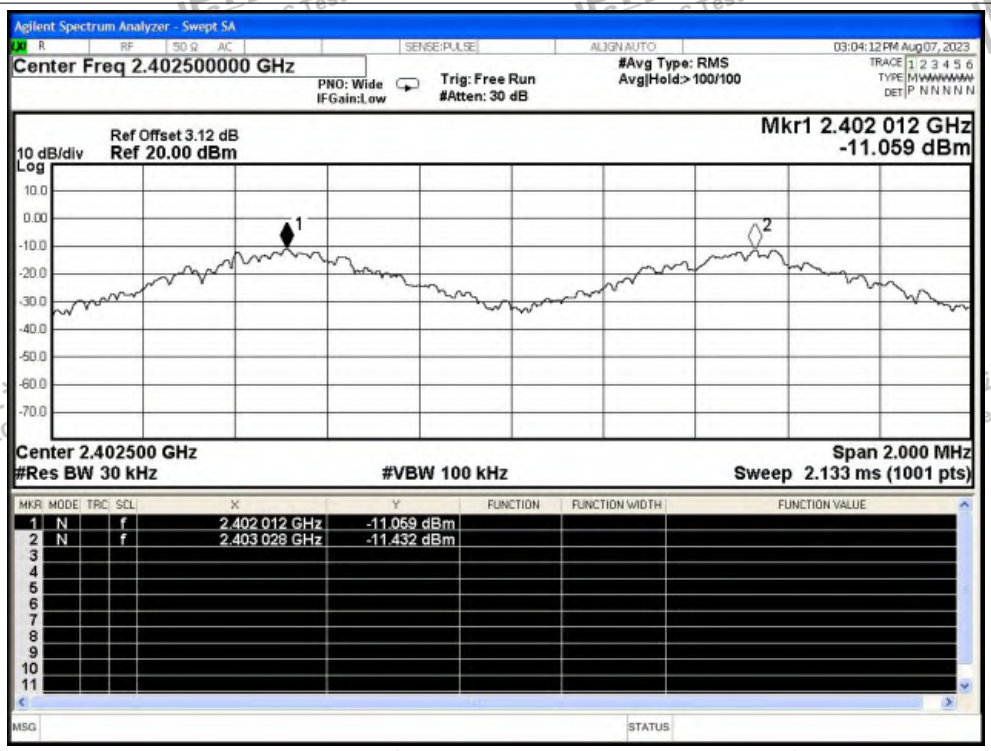


A.3 Carrier Frequencies Separation

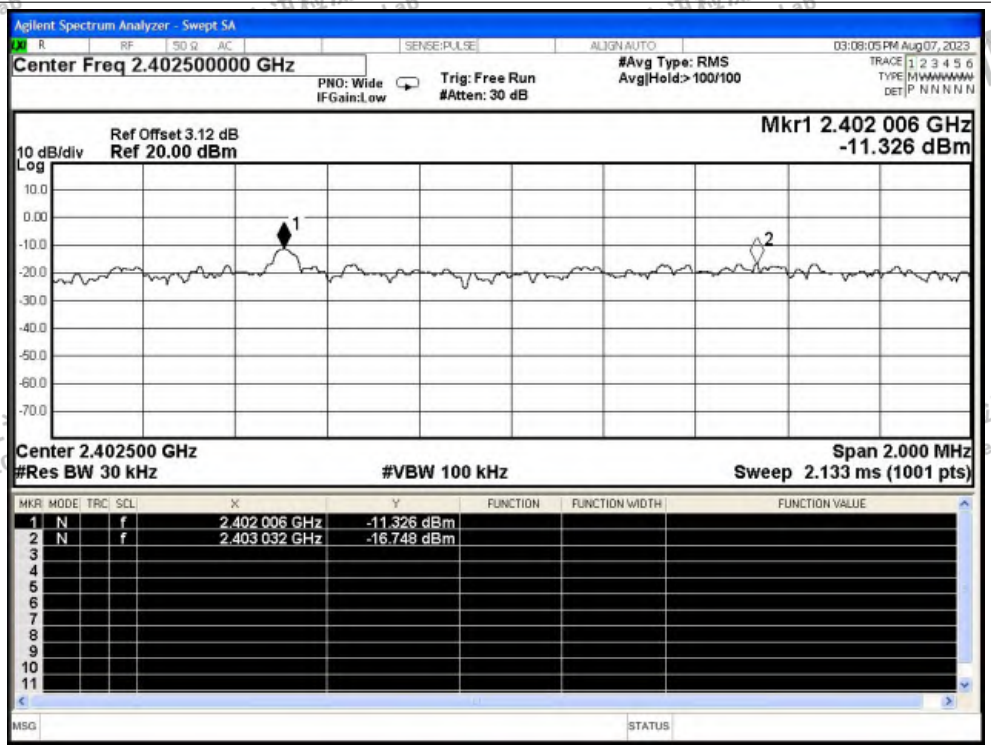
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.012	2403.028	1.016	0.773	Pass
NVNT	2-DH5	Ant1	2402.006	2403.032	1.026	0.877	Pass
NVNT	3-DH5	Ant1	2401.874	2403.006	1.132	0.844	Pass

Test Graphs

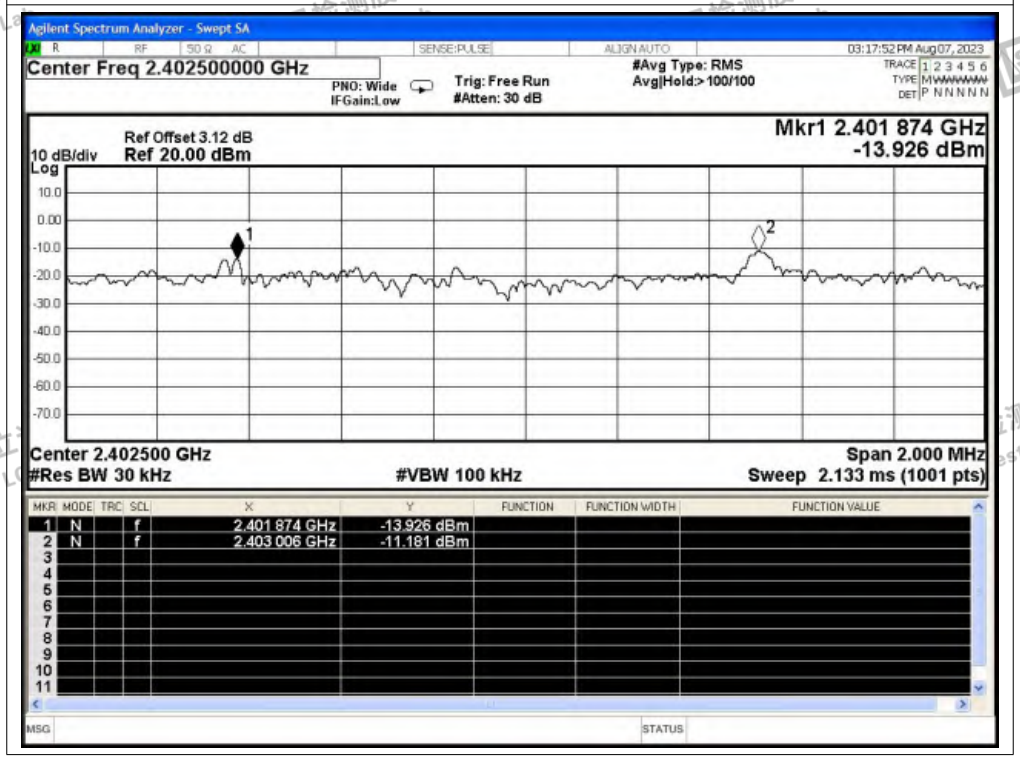
CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2402MHz Ant1

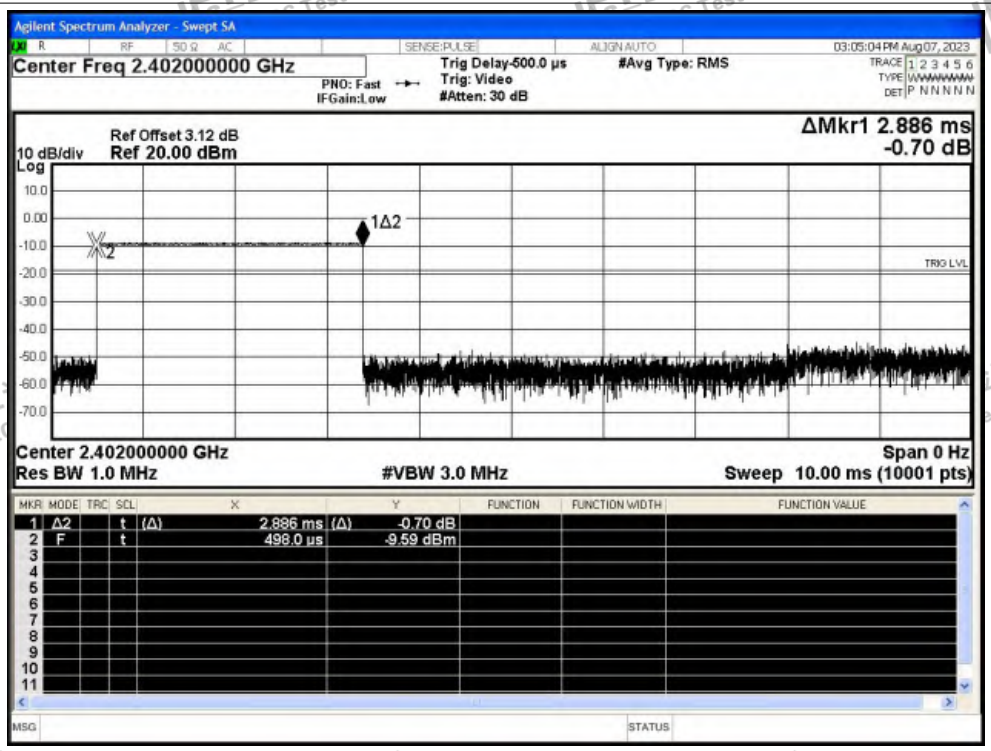


A.4 Dwell Time

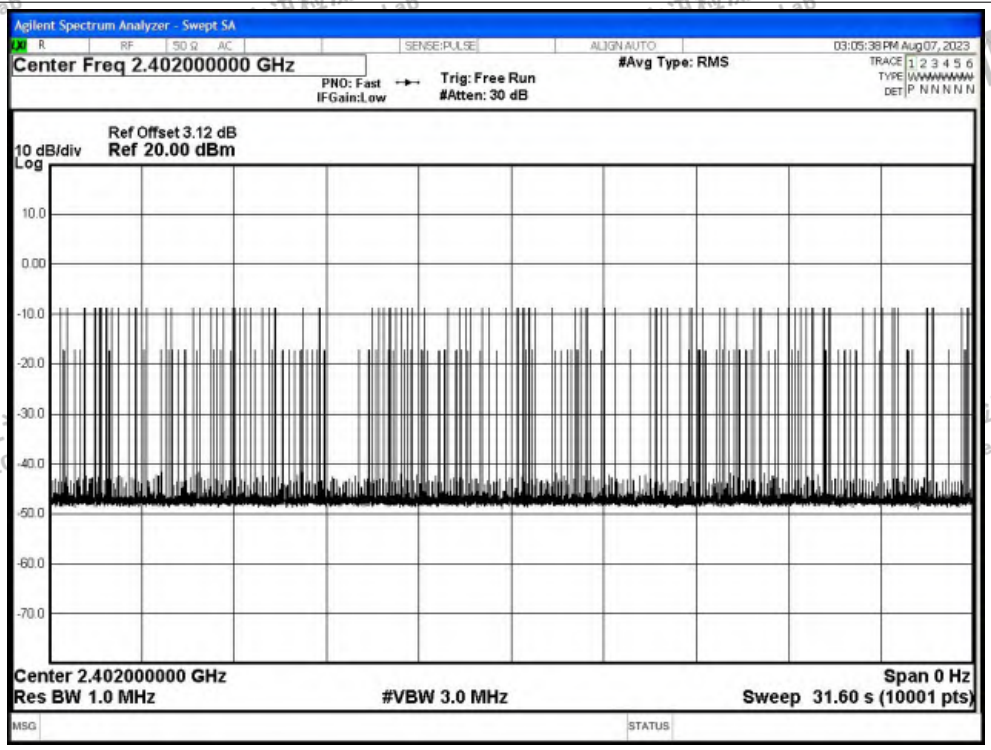
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.886	291.486	101	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.891	286.209	99	31600	400	Pass
NVNT	3-DH5	2402	Ant1	0.894	98.34	110	31600	400	Pass

Test Graphs

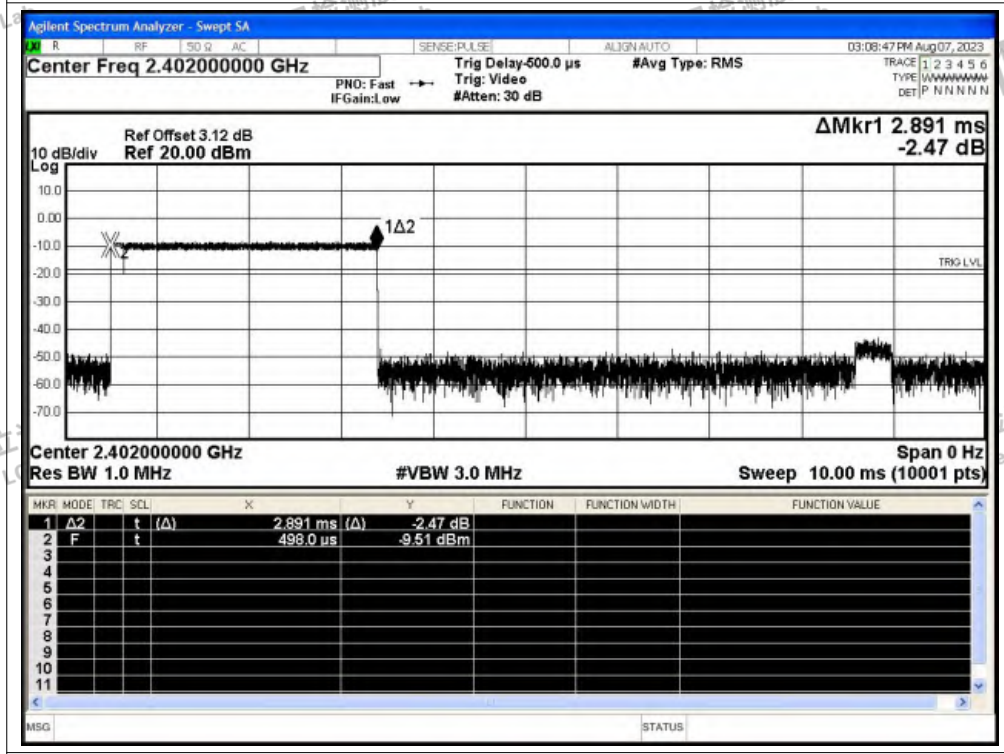
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



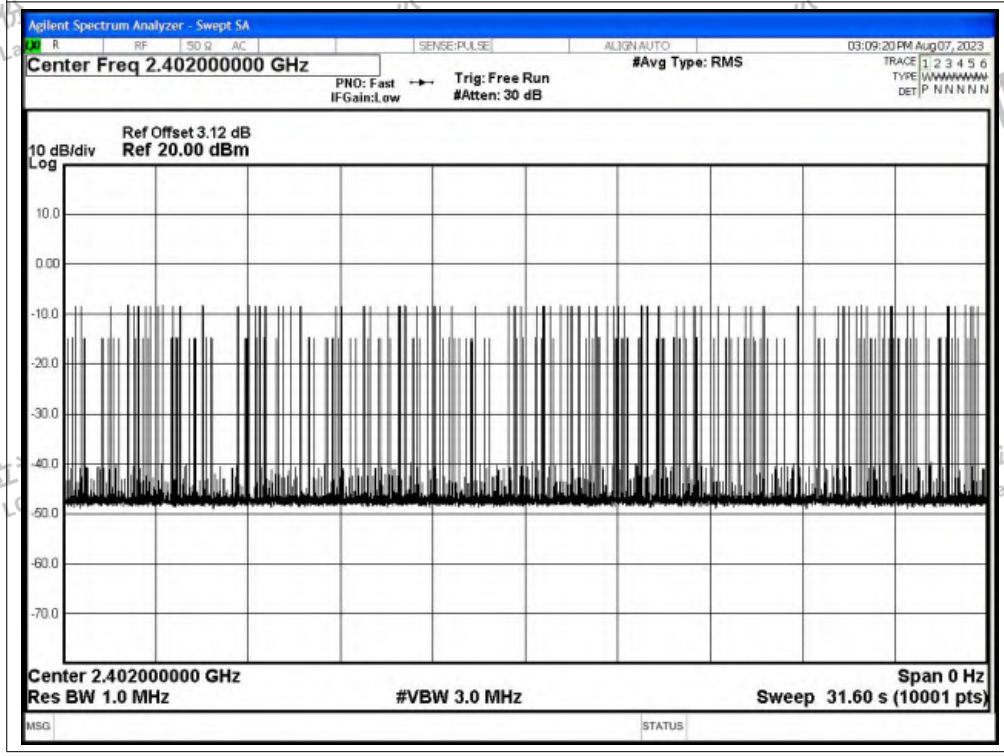
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



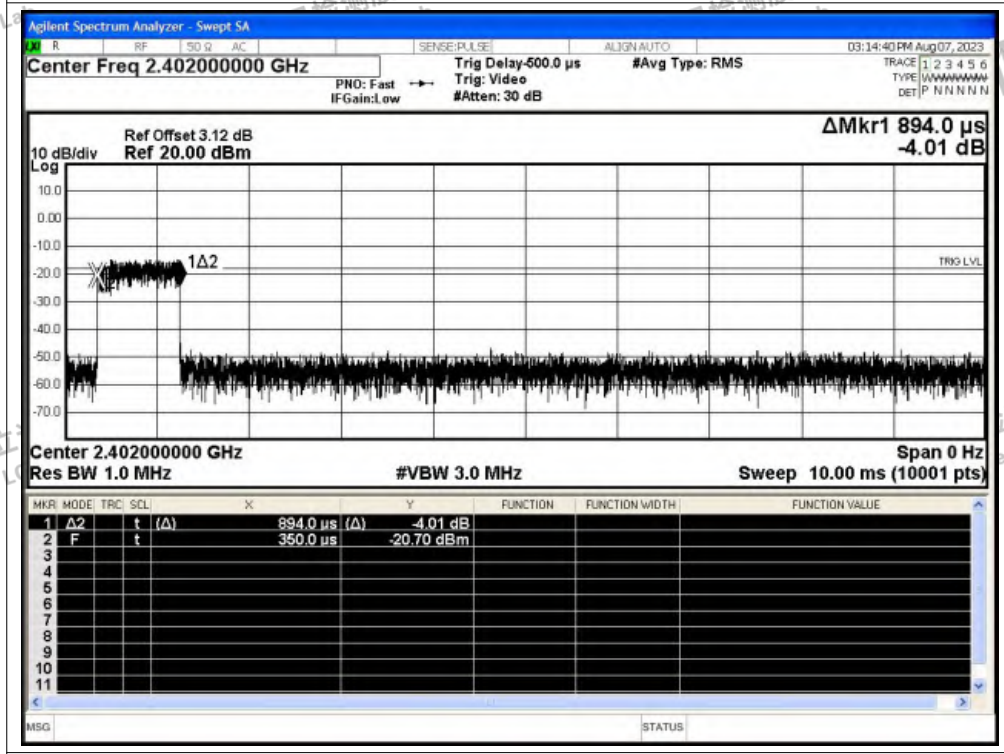
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



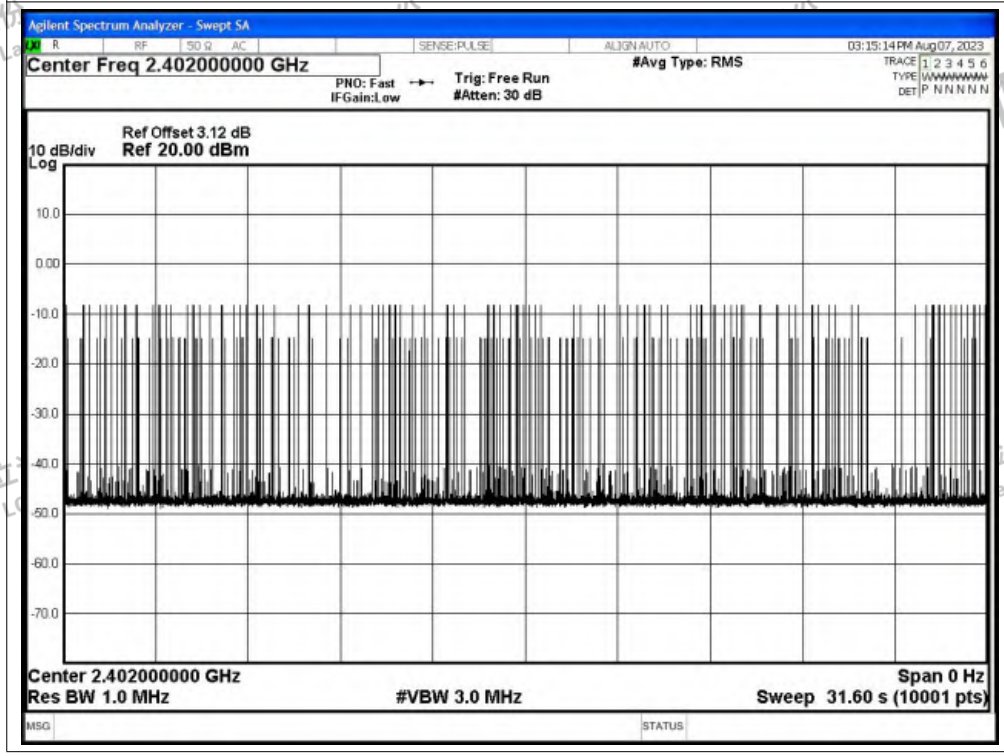
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated

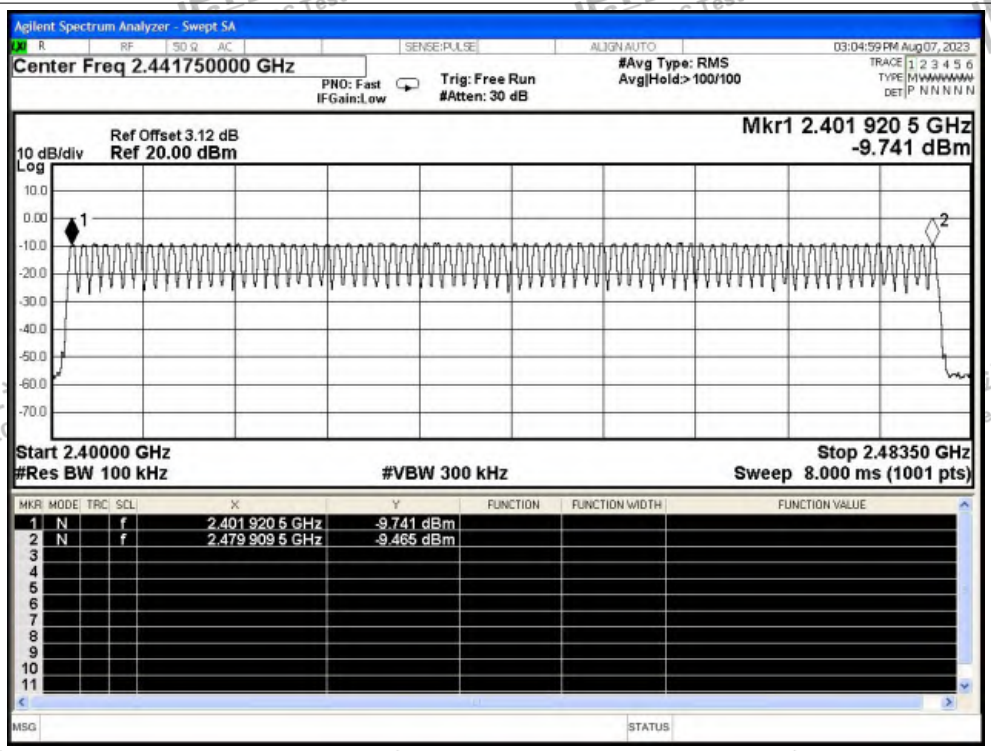


A.5 Number of Hopping Channel

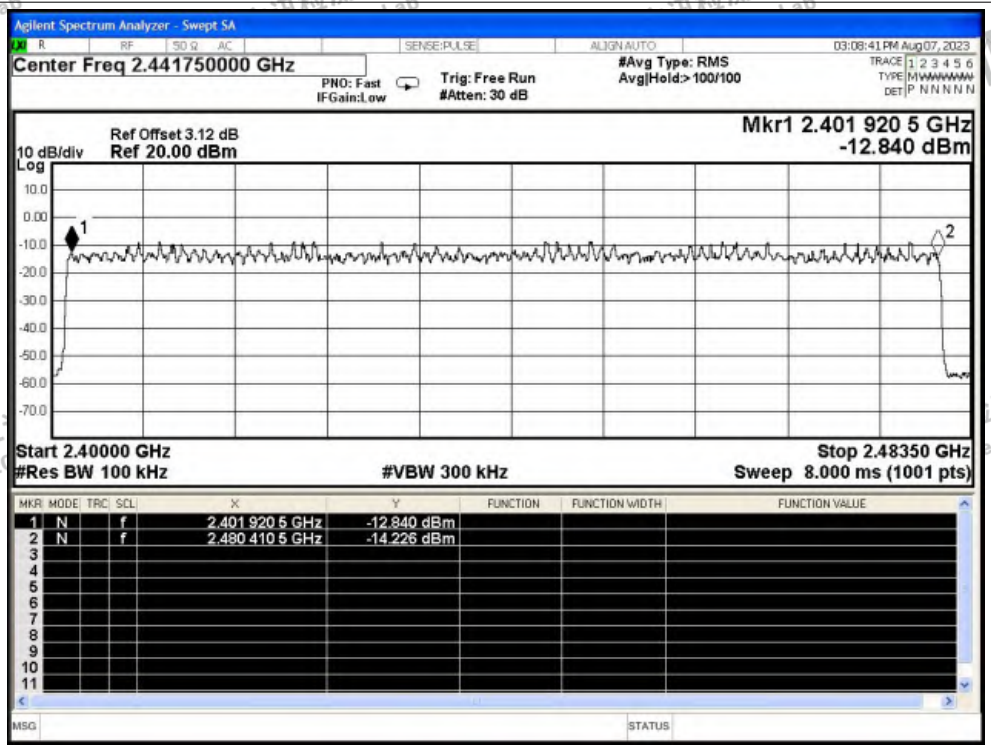
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

Test Graphs

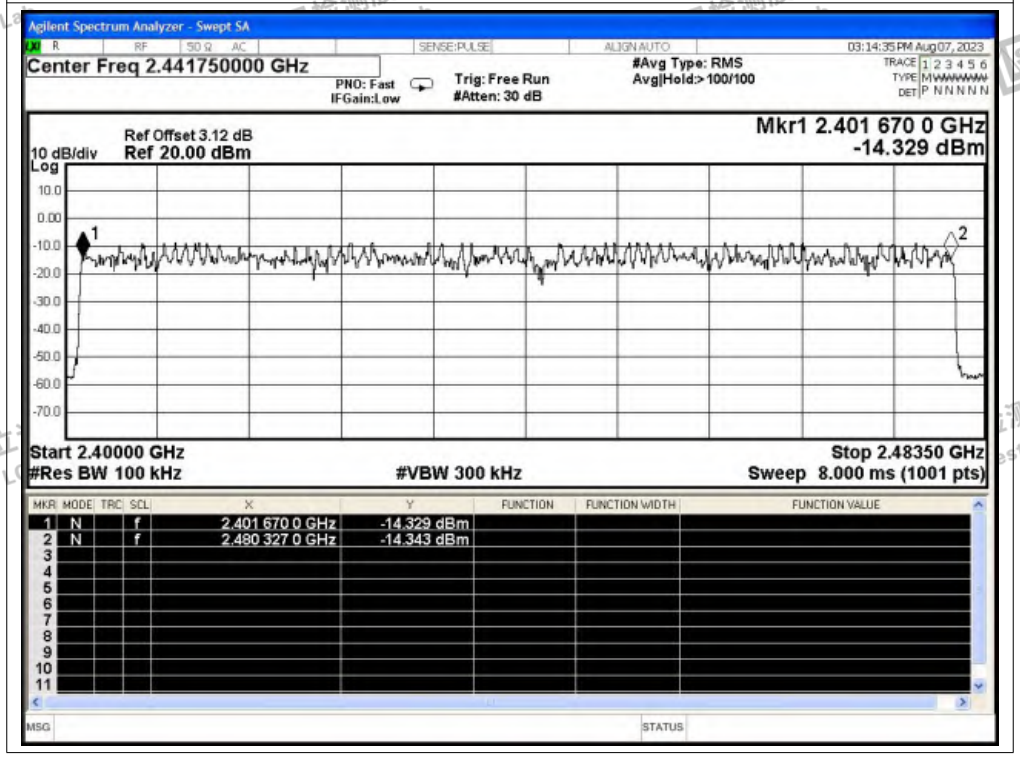
Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



Hopping No. NVNT 3-DH5 2402MHz Ant1

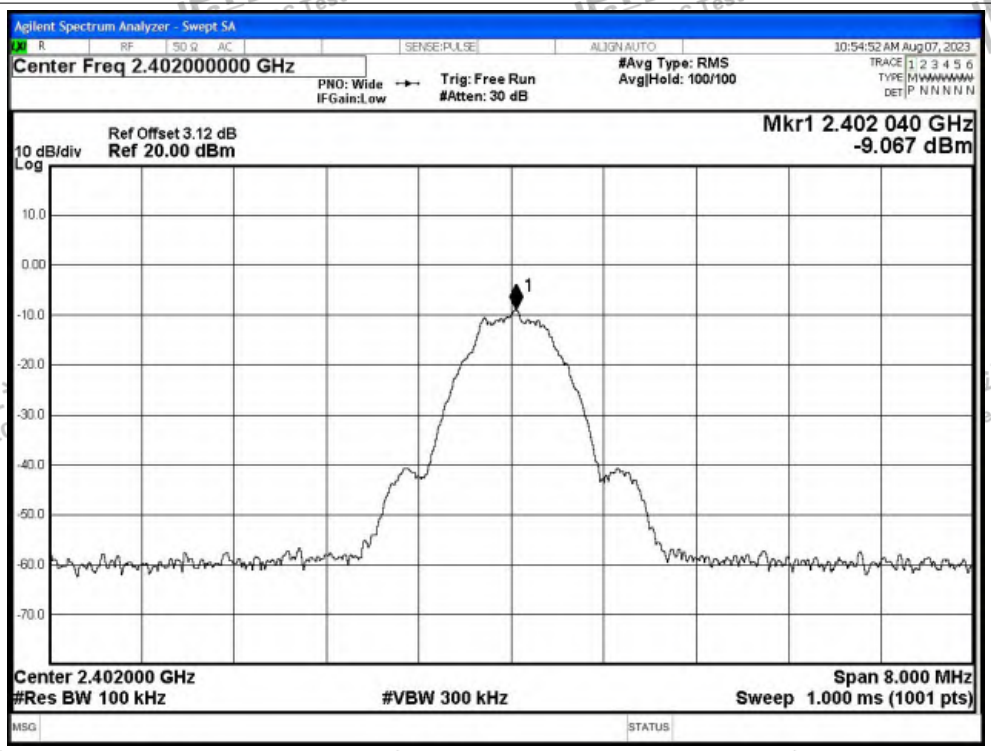


A.6 Band Edge

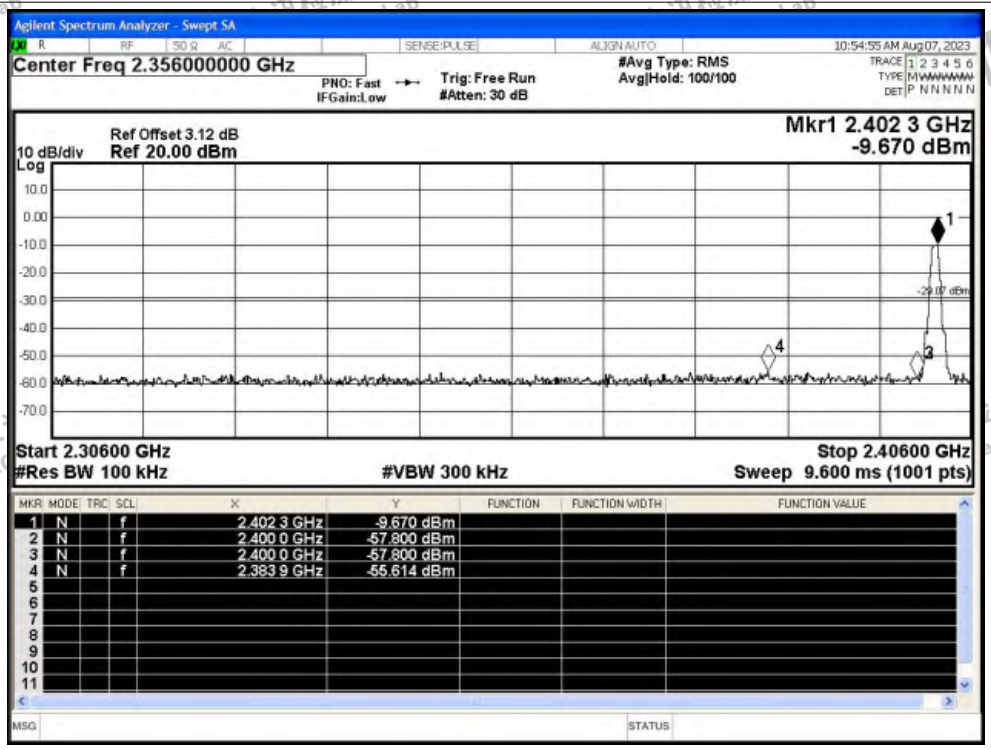
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-46.55	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-46.24	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-45.19	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-43.87	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-46.67	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-43.08	-20	Pass

Test Graphs

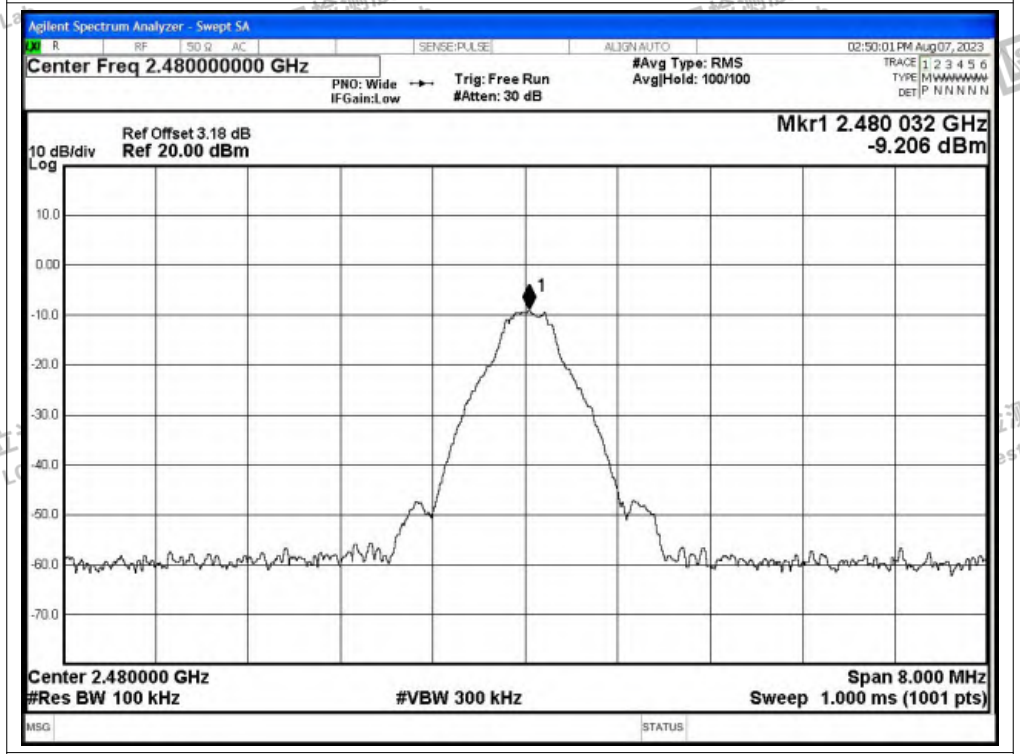
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



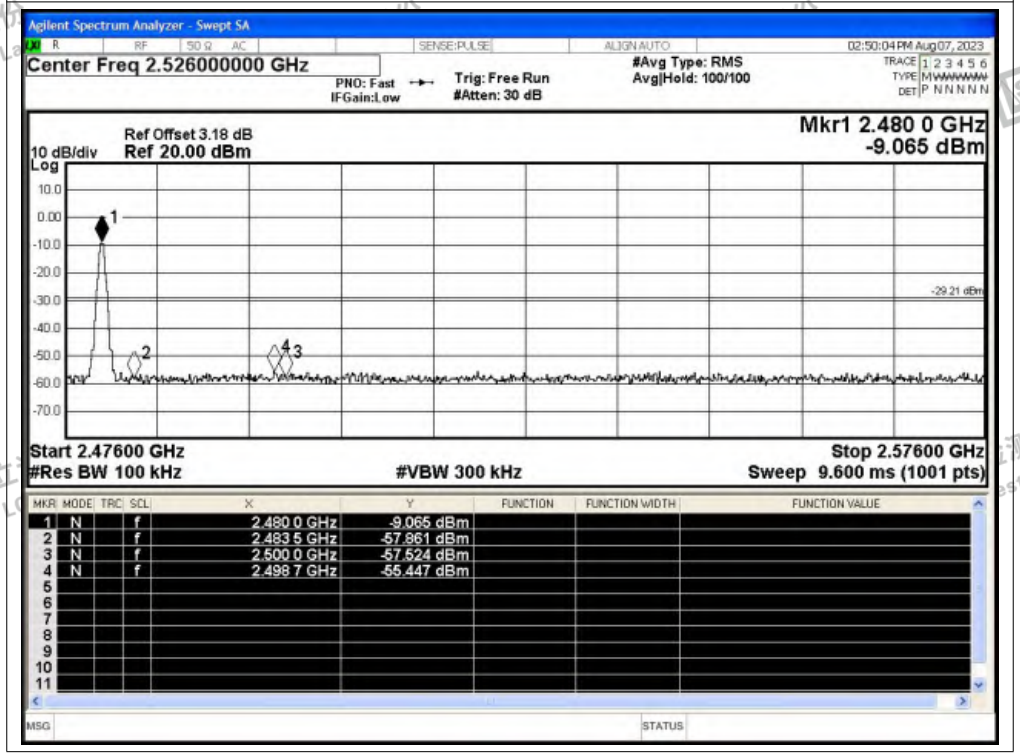
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



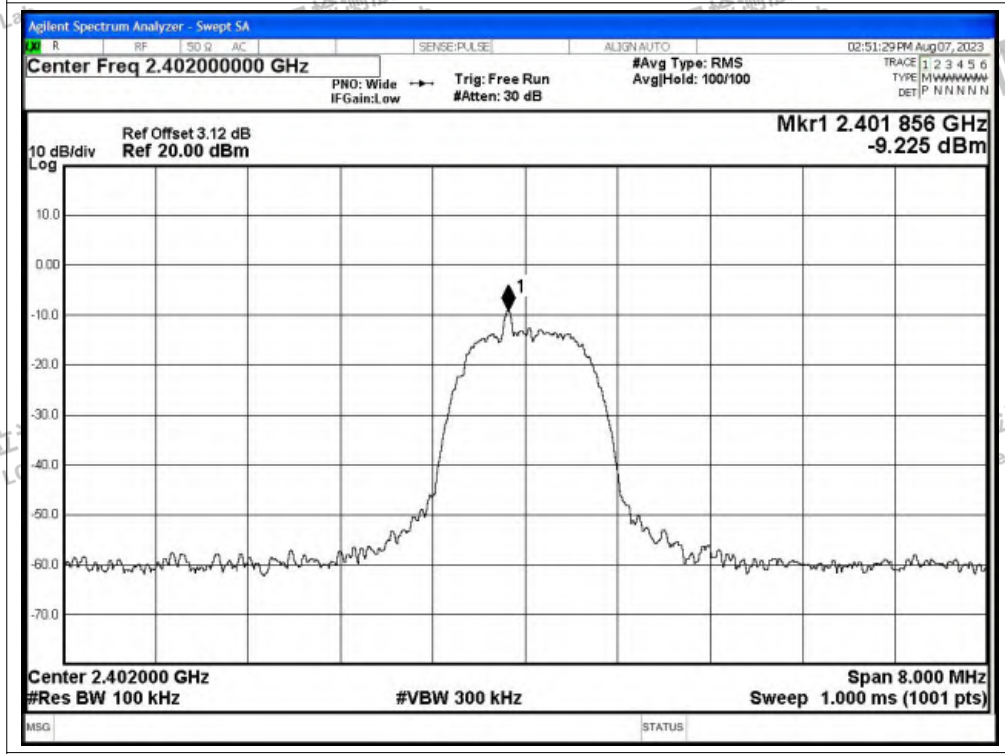
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



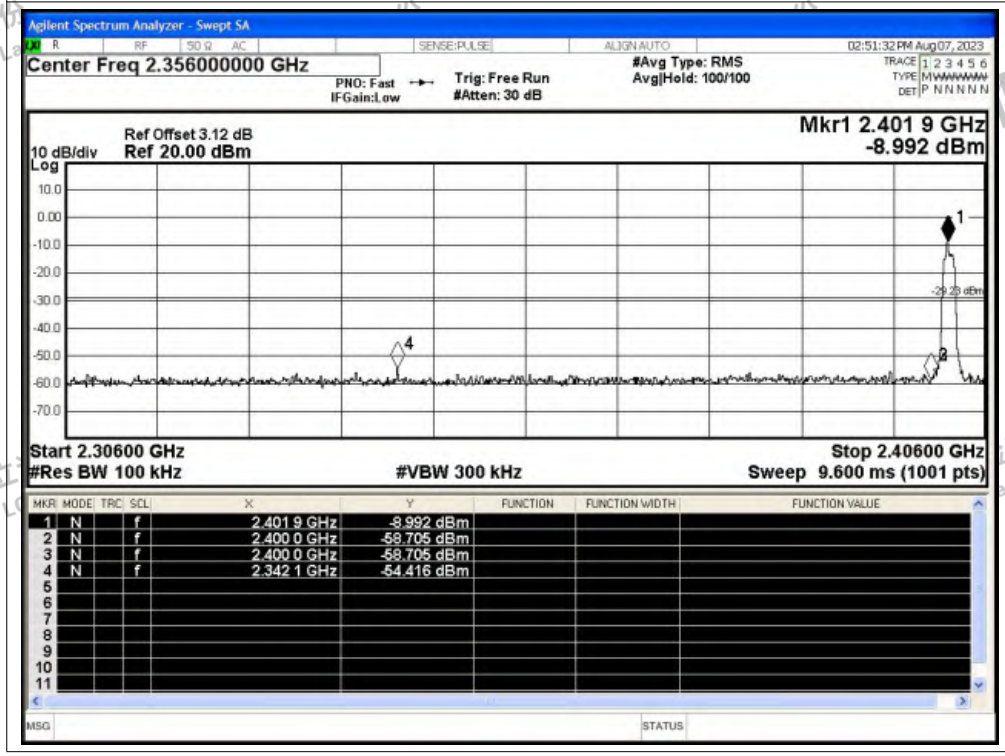
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



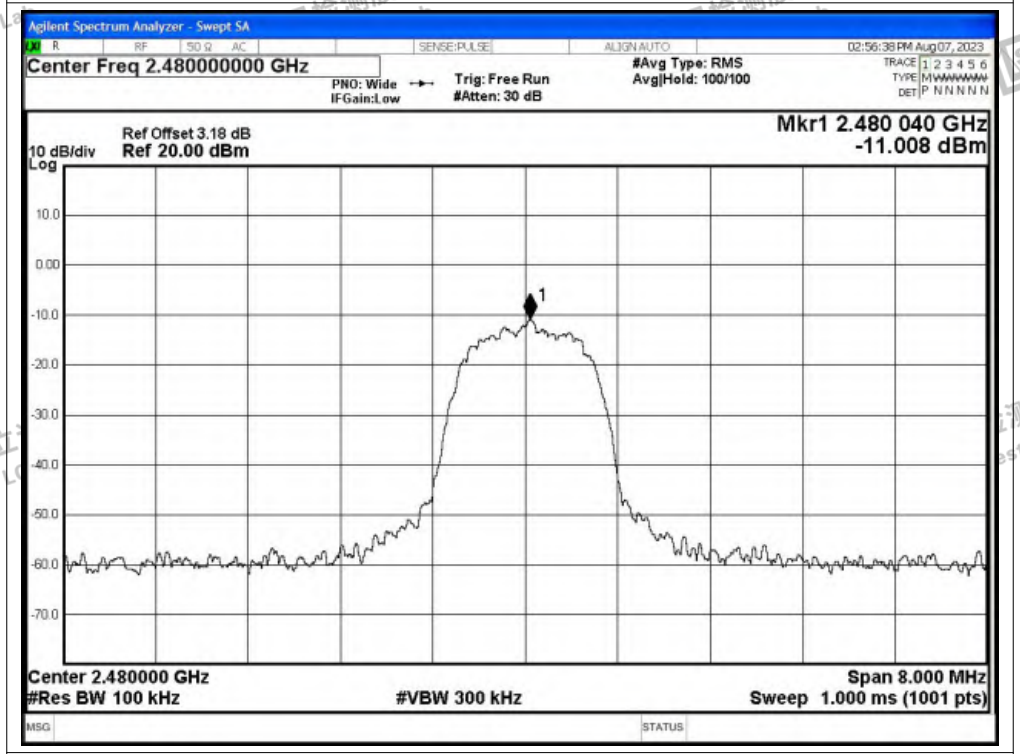
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



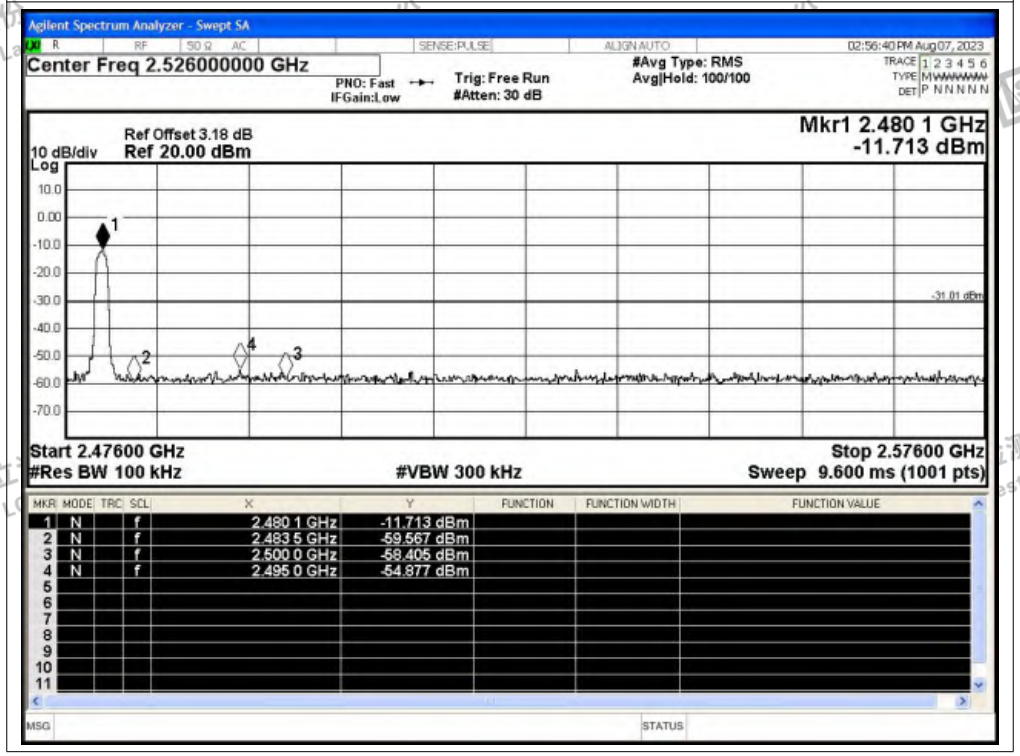
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



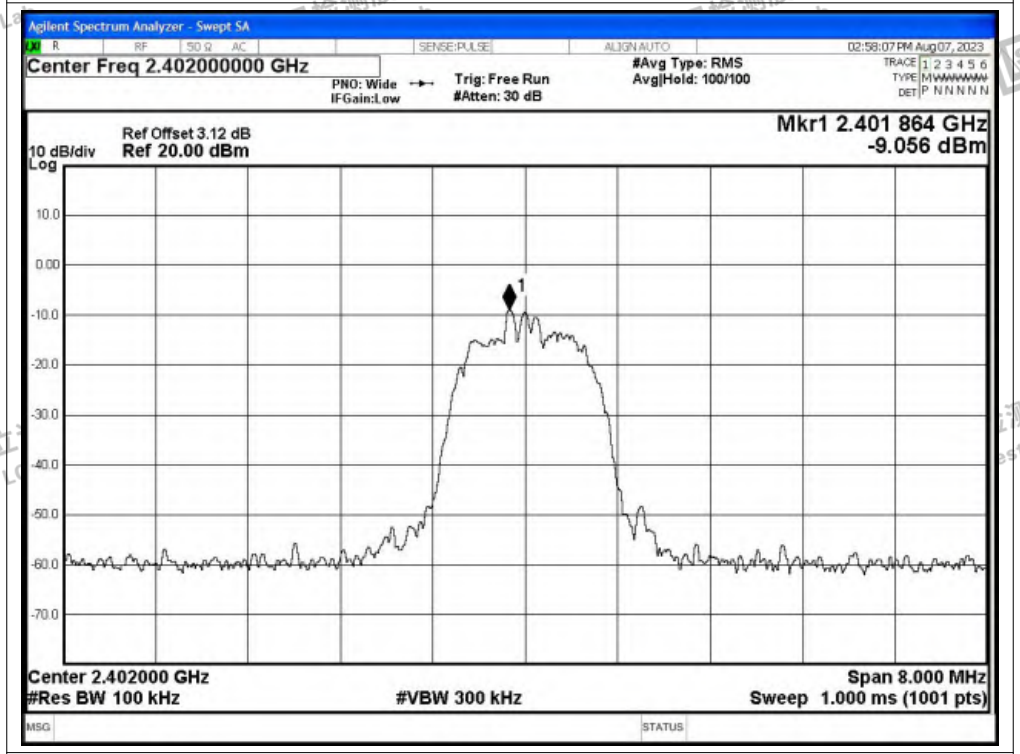
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



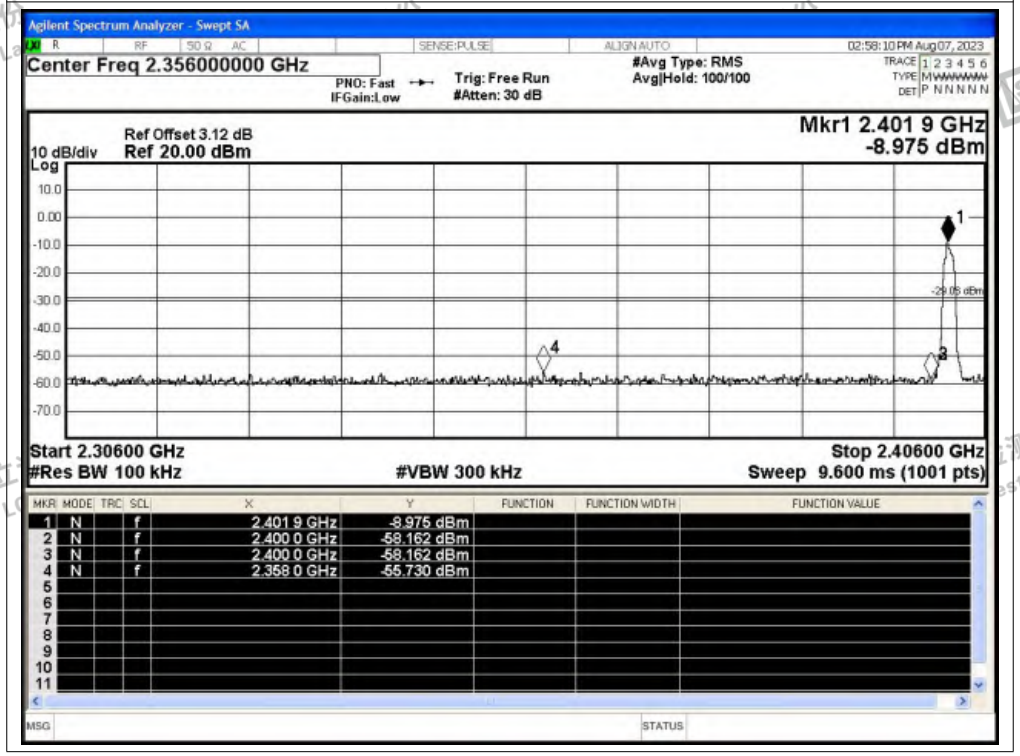
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



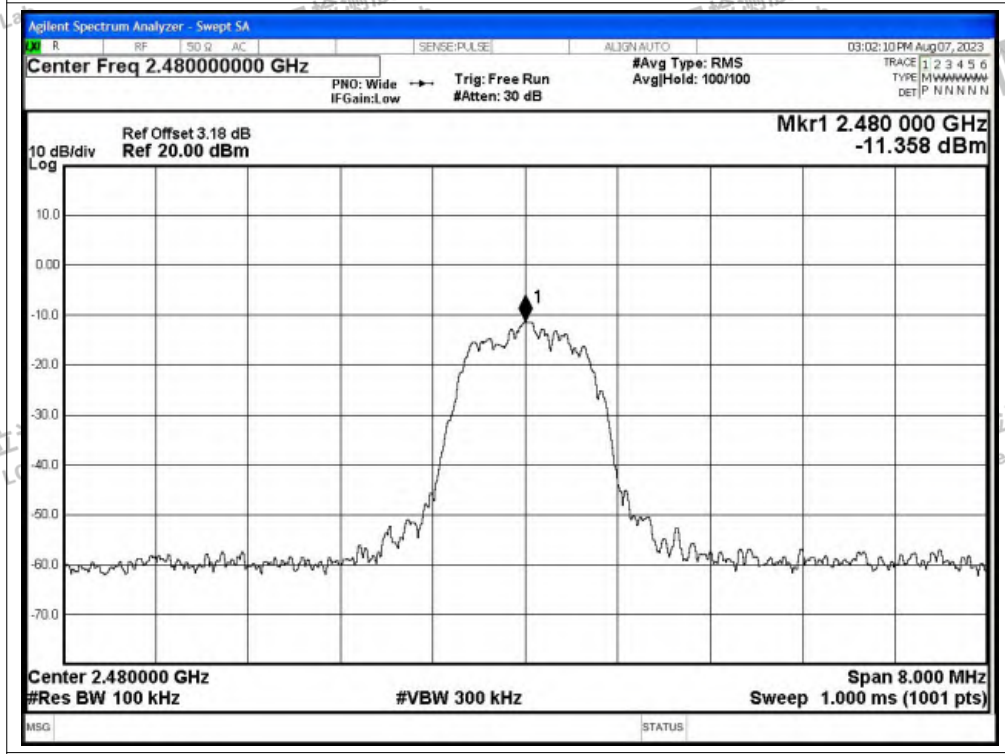
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



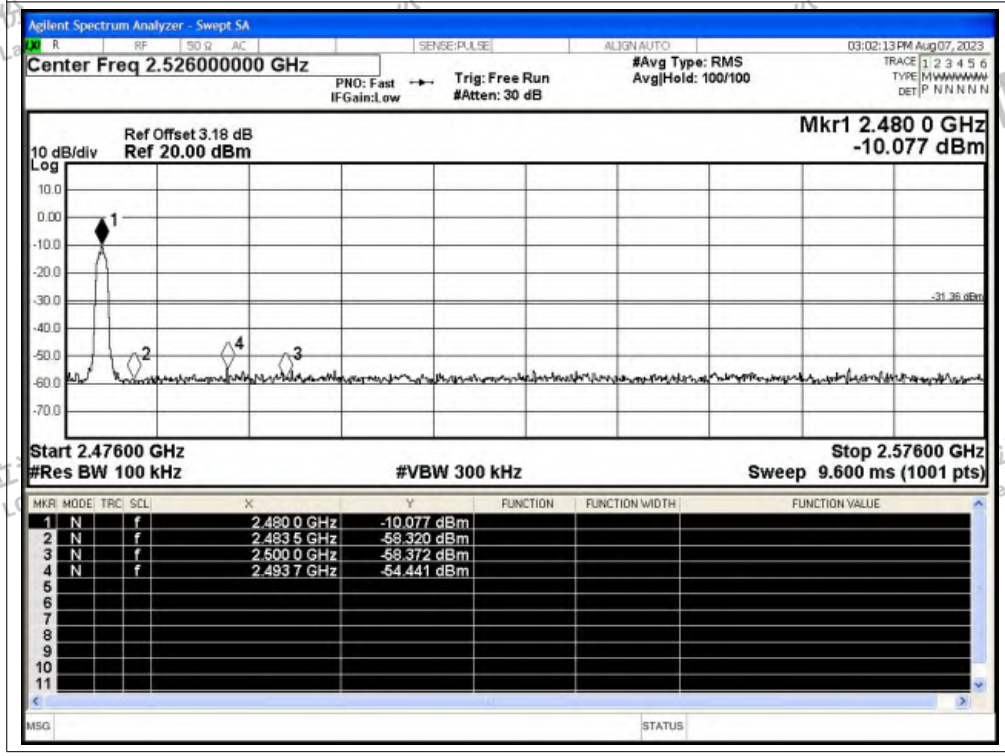
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



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



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

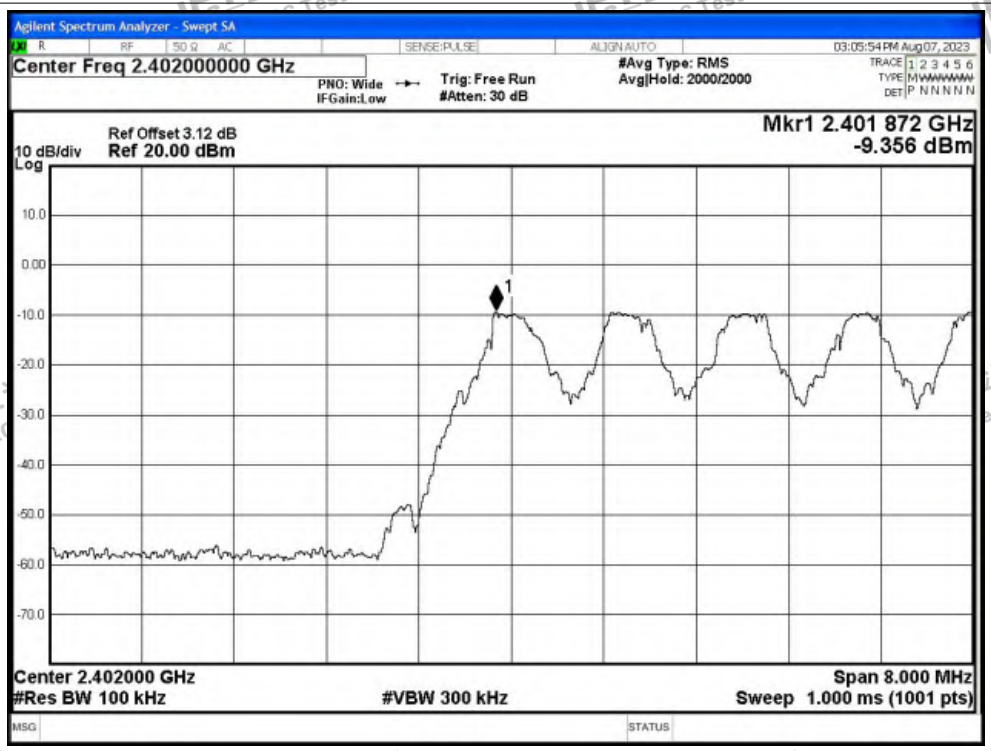


(Hopping)

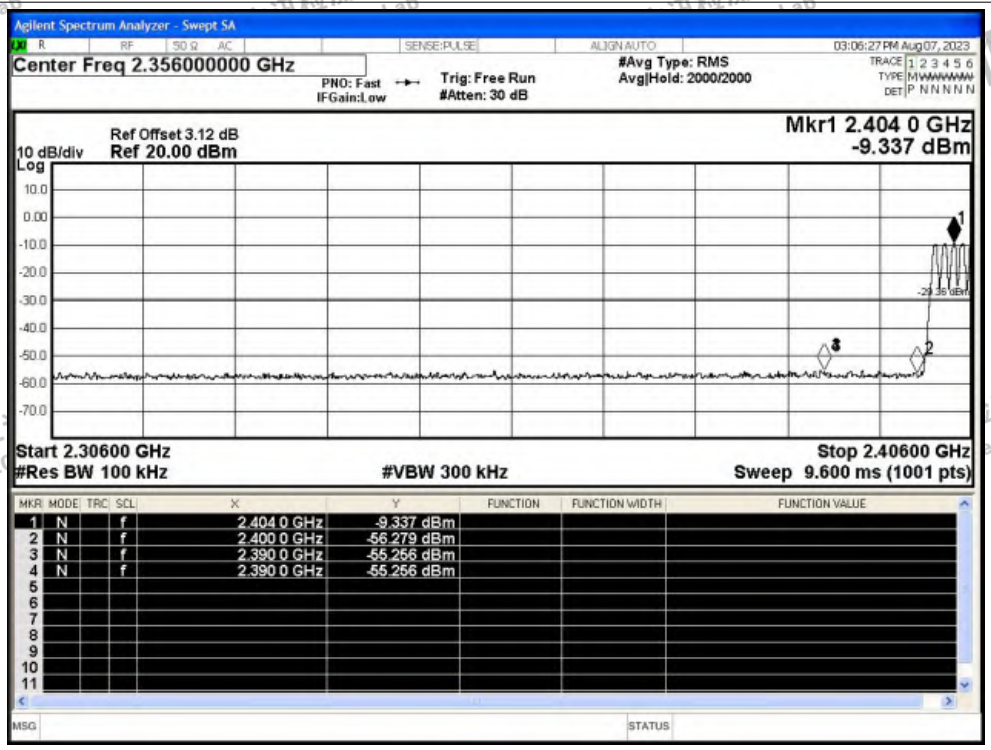
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-45.9	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-44.43	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-45.48	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-45.37	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-46.29	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-46.03	-20	Pass

Test Graphs

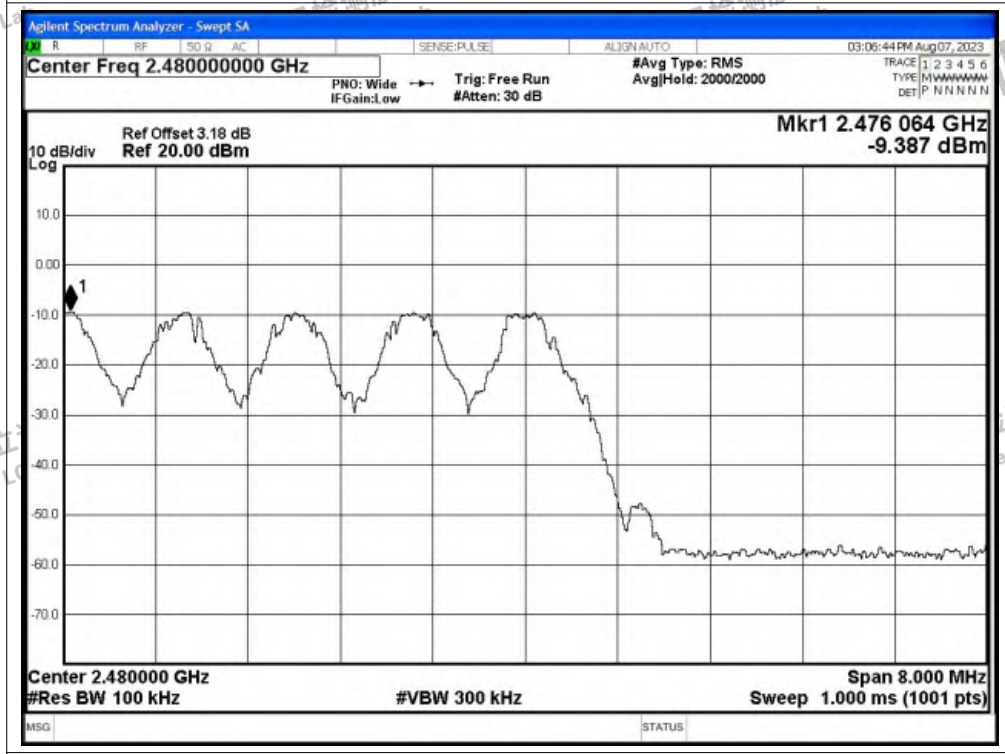
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



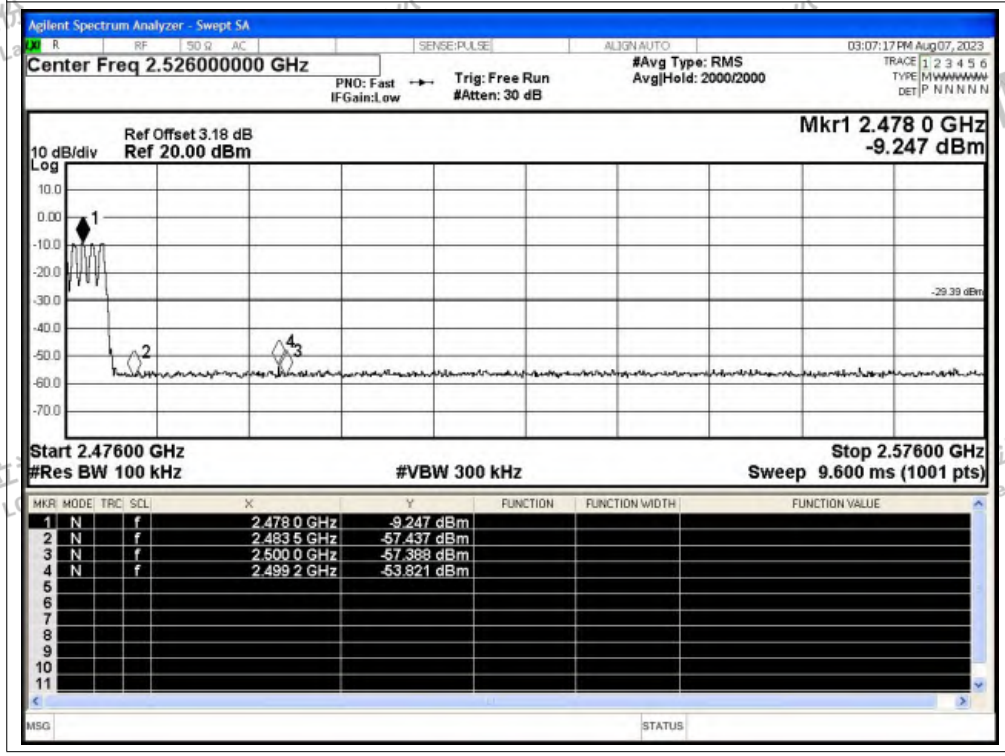
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



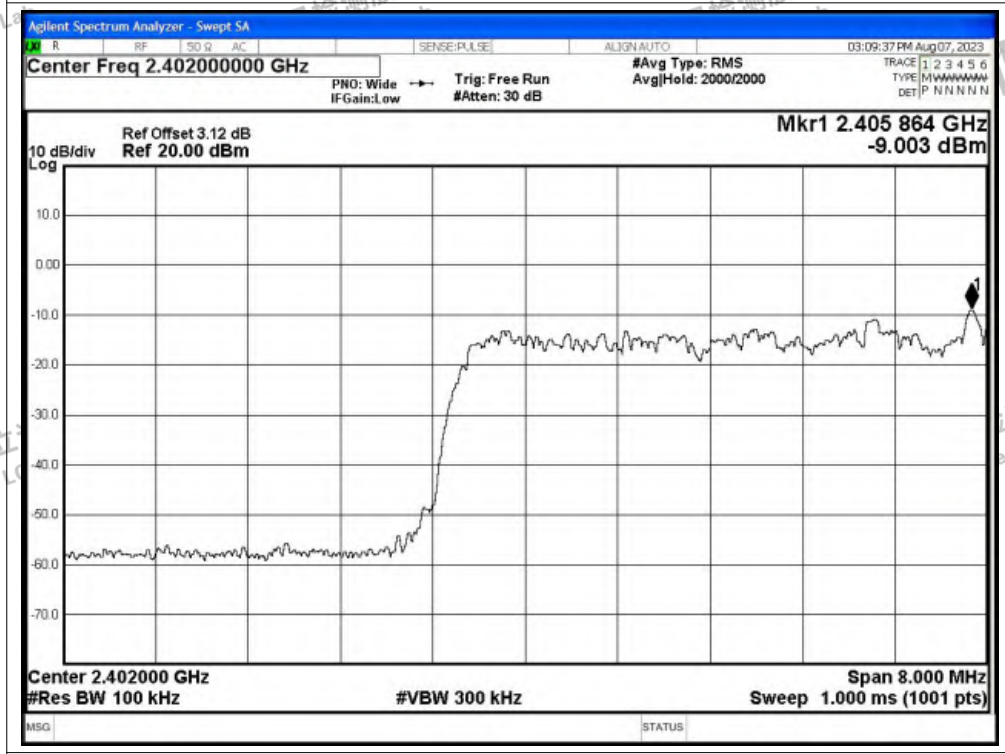
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



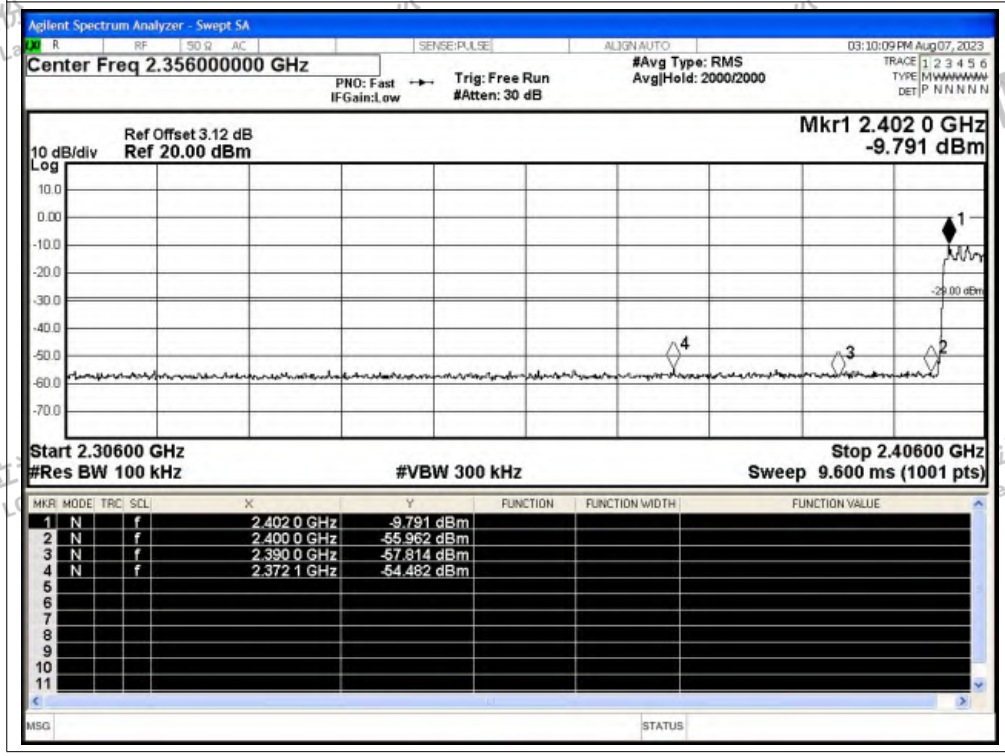
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



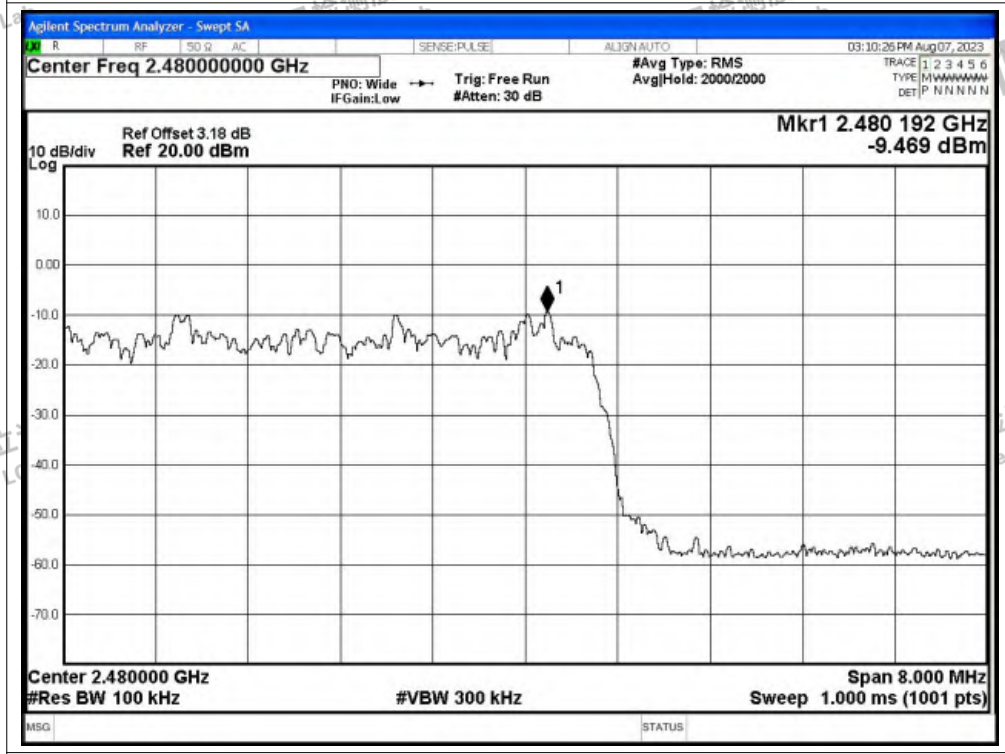
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



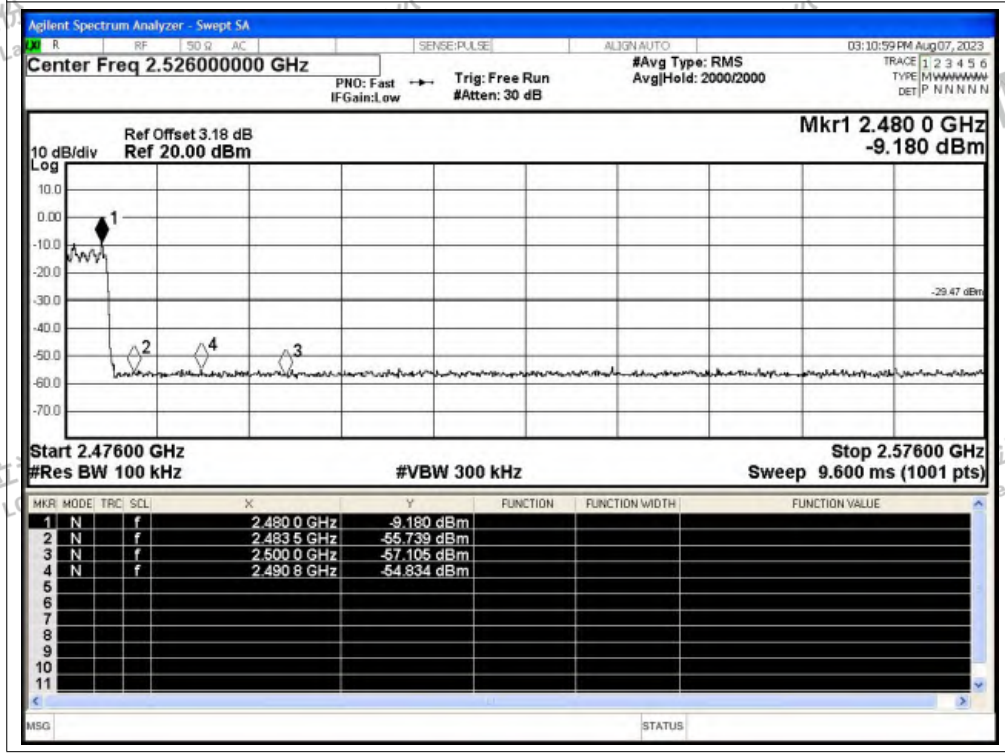
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



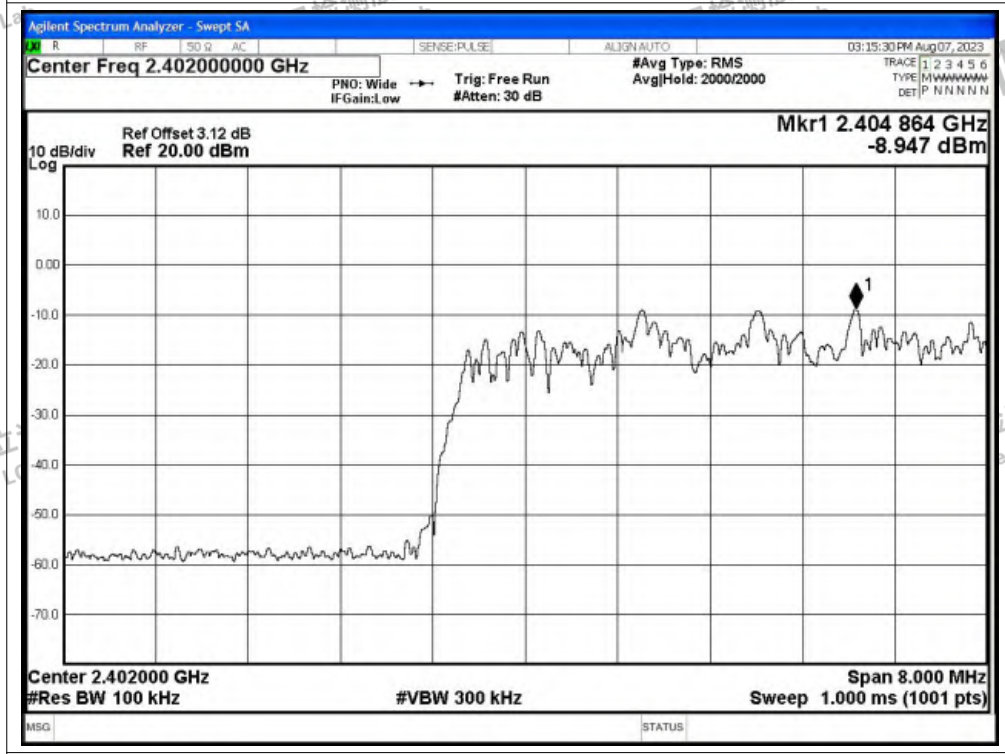
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



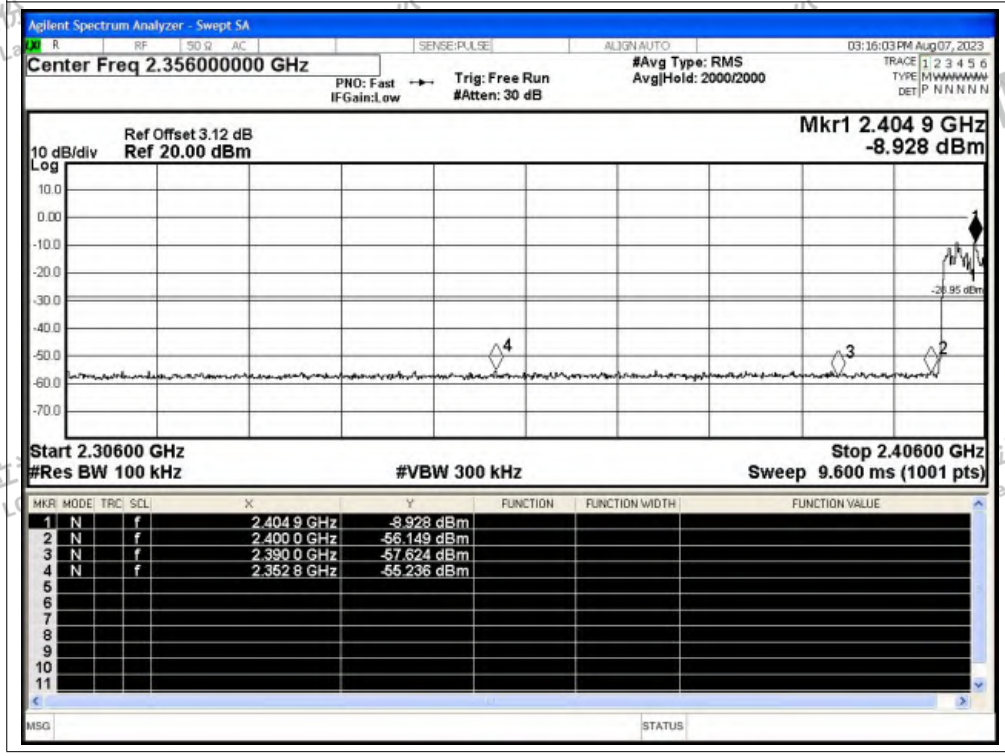
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



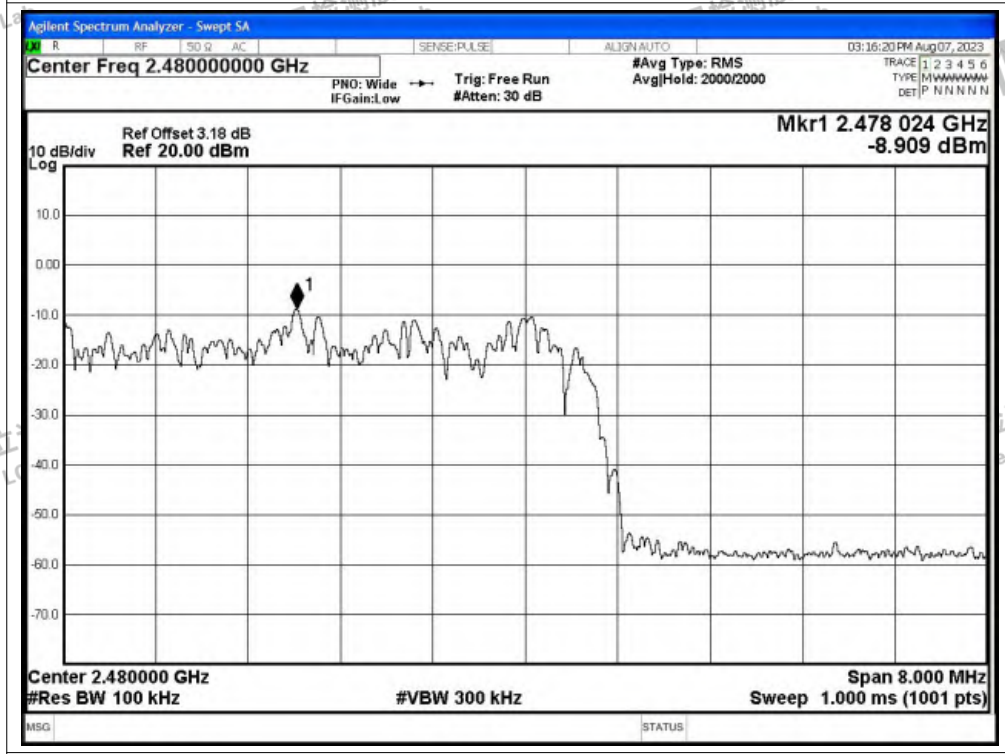
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



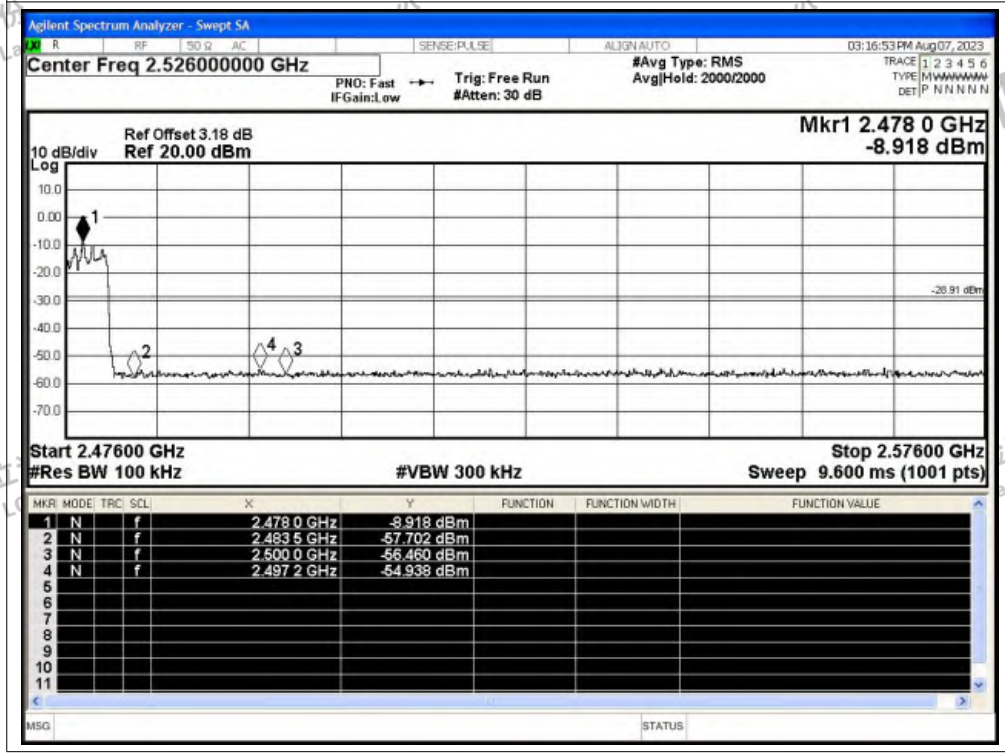
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission



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



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

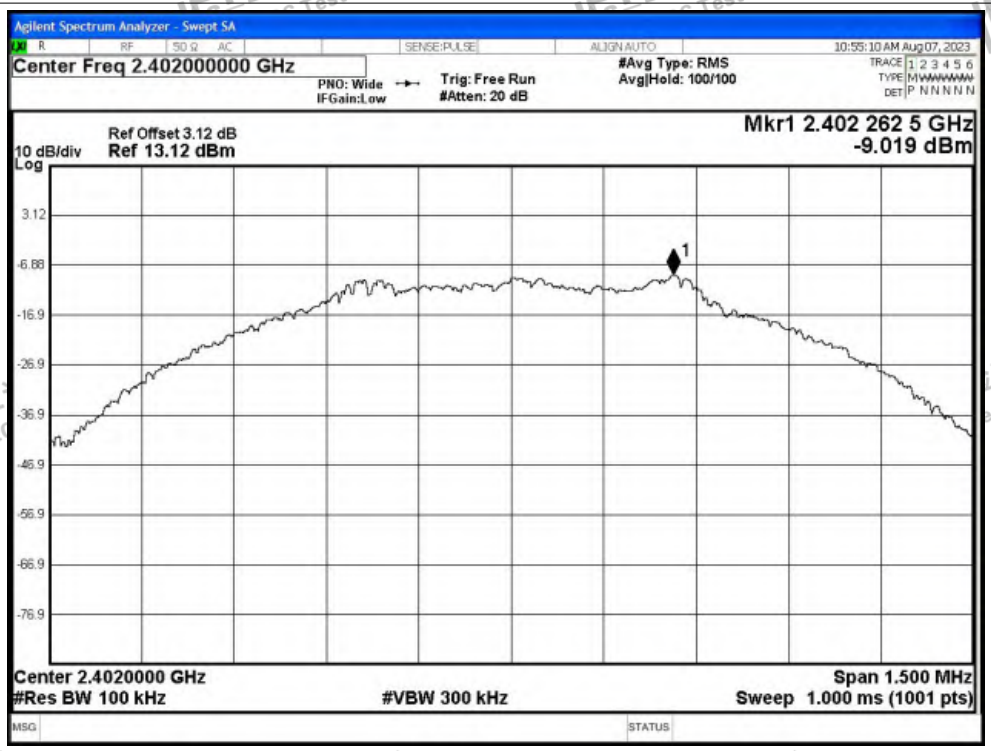


A.7 Conducted RF Spurious Emission

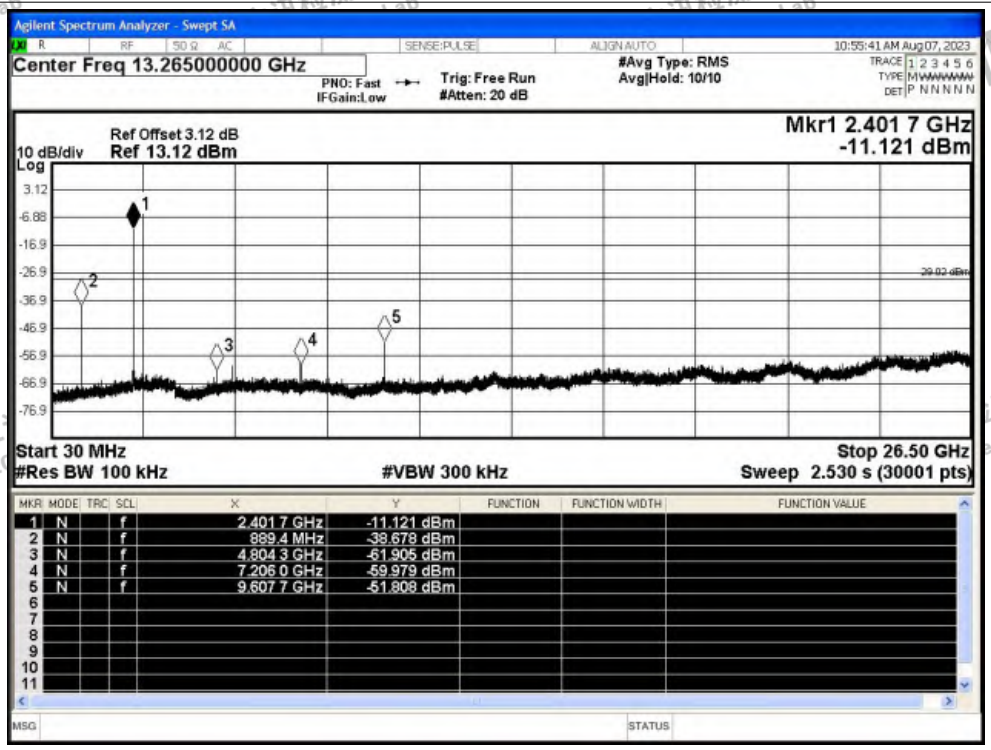
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-29.66	-20	Pass
NVNT	1-DH5	2441	Ant1	-44.01	-20	Pass
NVNT	1-DH5	2480	Ant1	-43.97	-20	Pass
NVNT	2-DH5	2402	Ant1	-43.22	-20	Pass
NVNT	2-DH5	2441	Ant1	-44.34	-20	Pass
NVNT	2-DH5	2480	Ant1	-43.12	-20	Pass
NVNT	3-DH5	2402	Ant1	-43.45	-20	Pass
NVNT	3-DH5	2441	Ant1	-45.1	-20	Pass
NVNT	3-DH5	2480	Ant1	-44.77	-20	Pass

Test Graphs

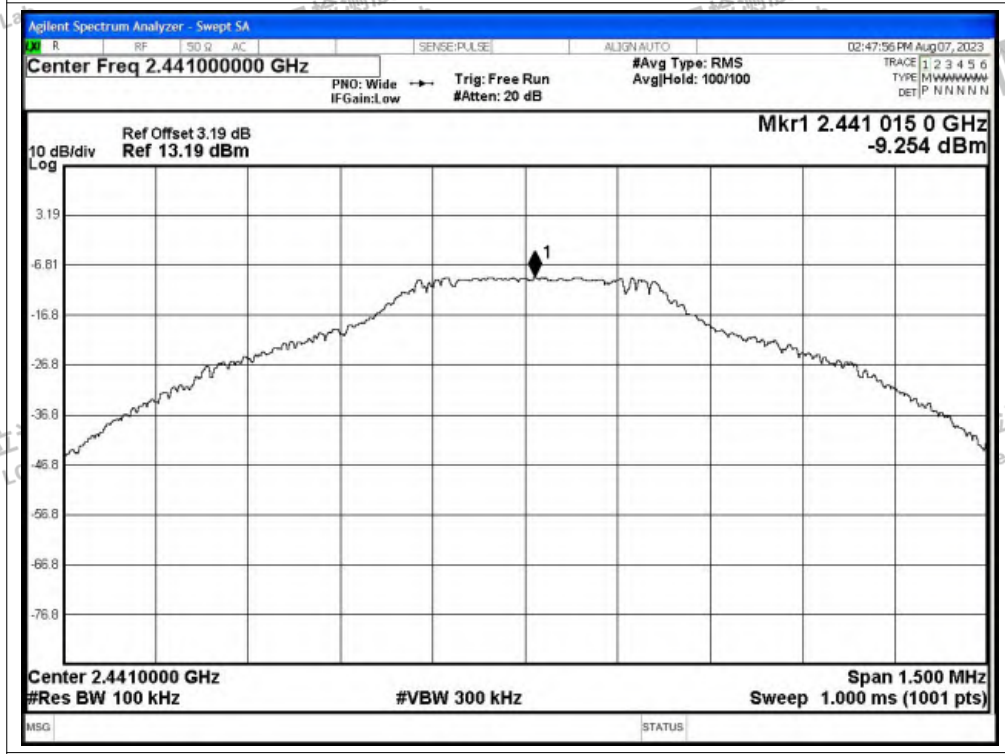
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



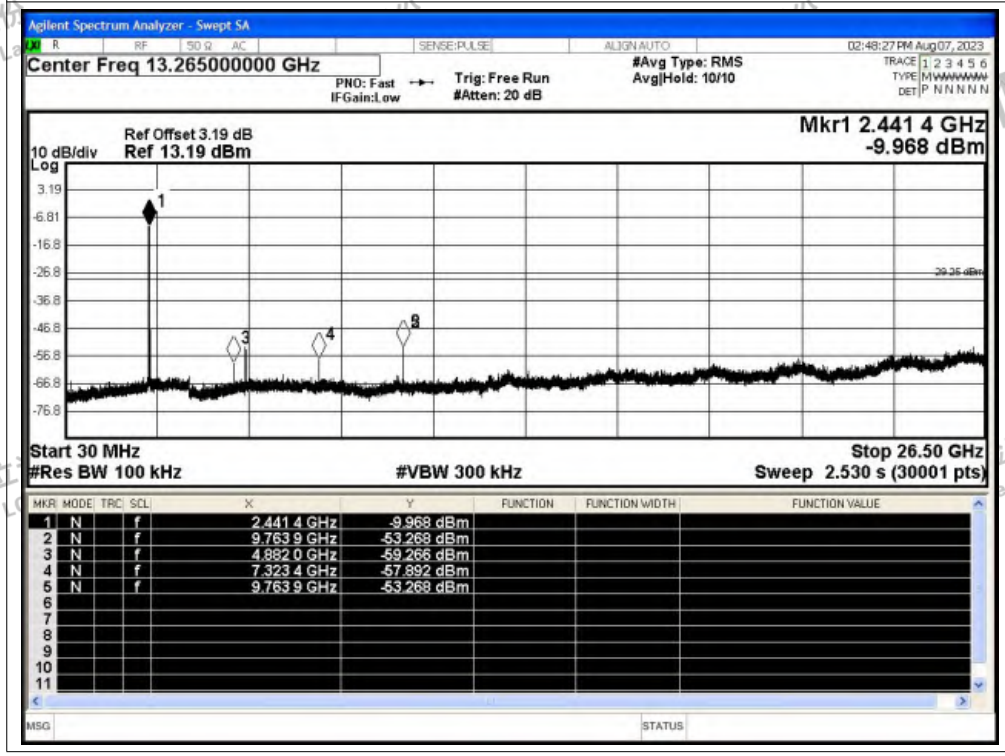
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



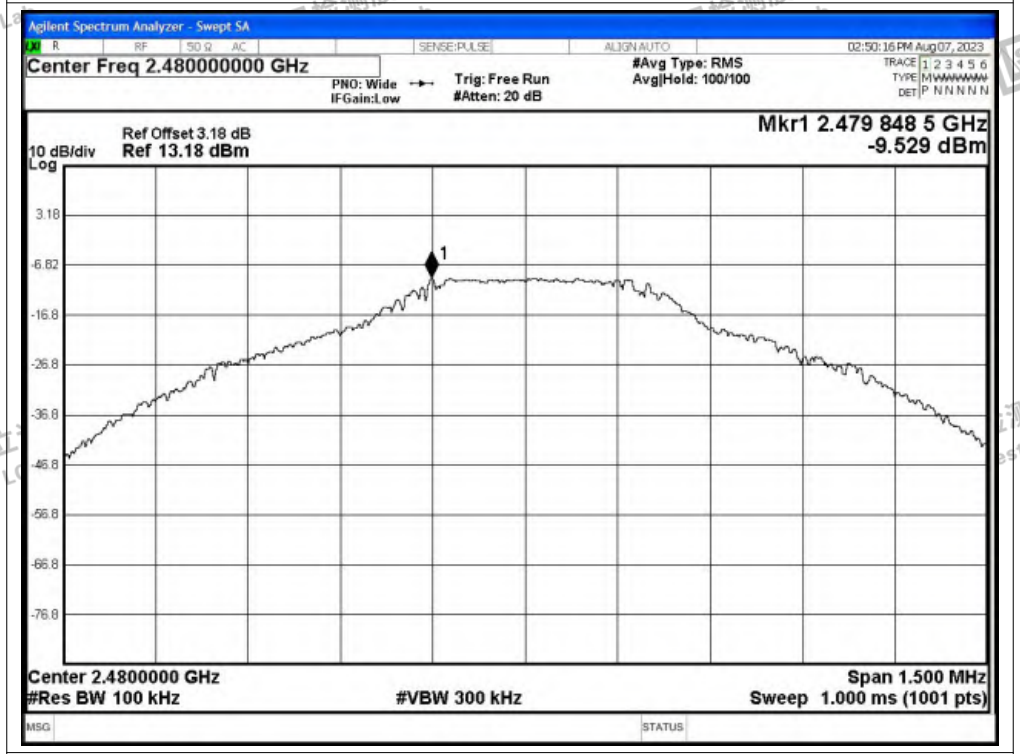
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



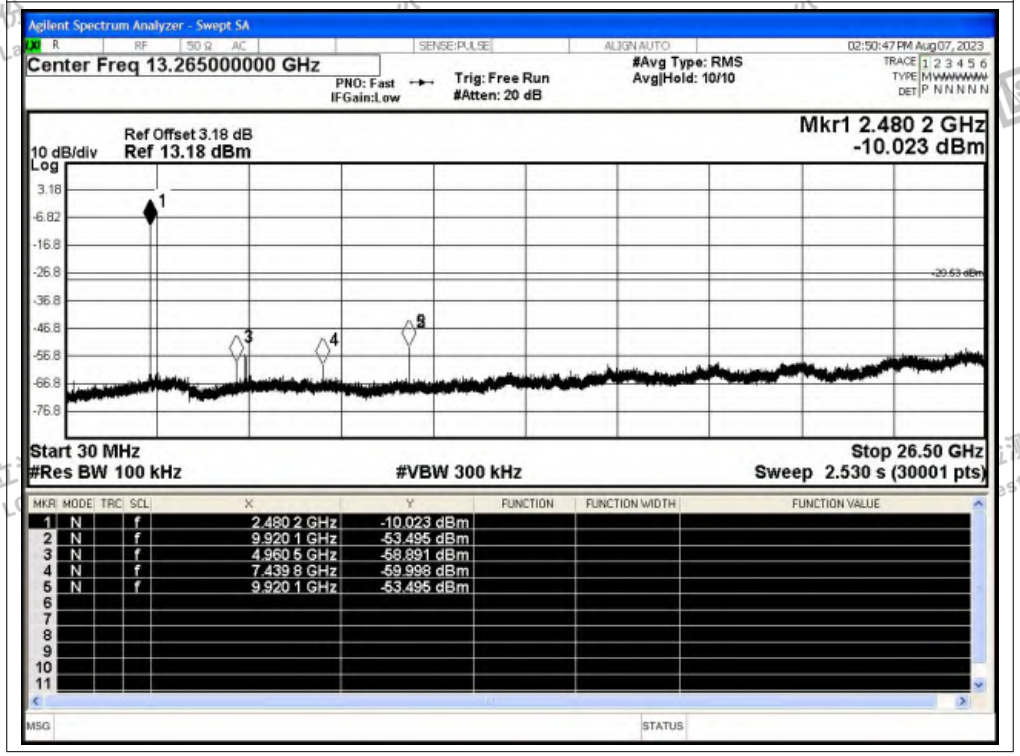
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



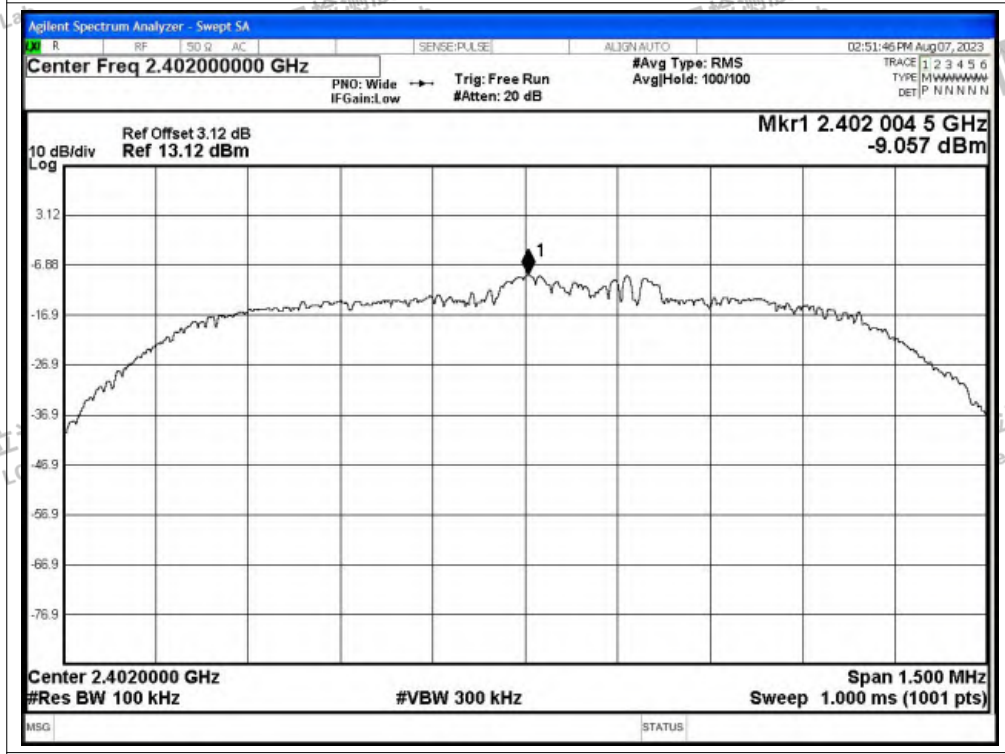
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



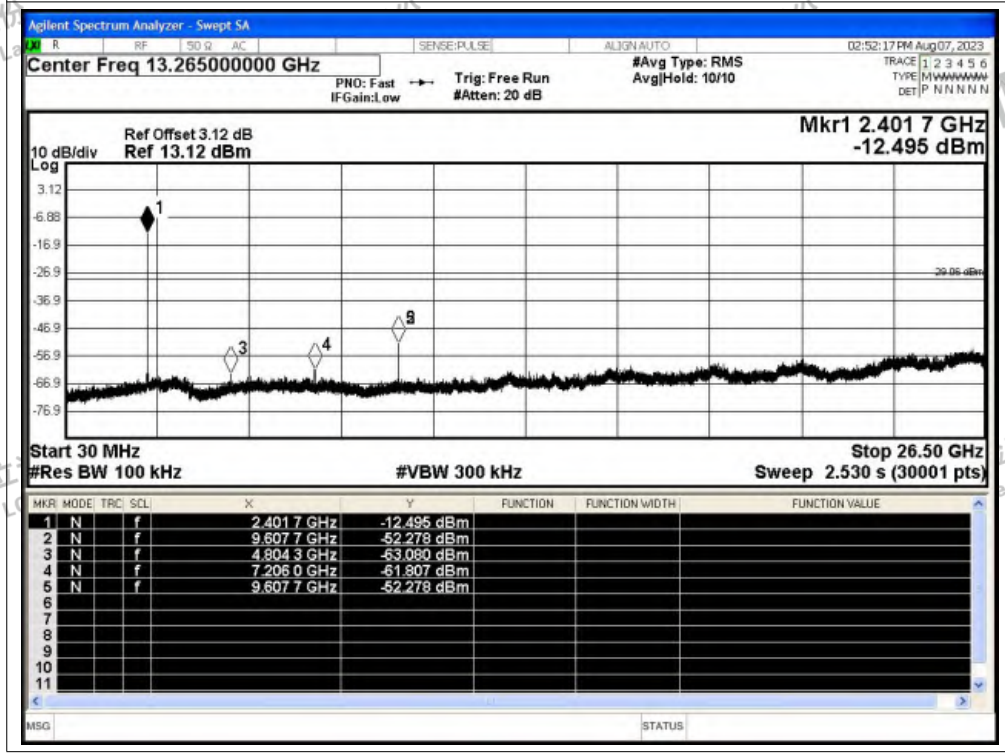
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



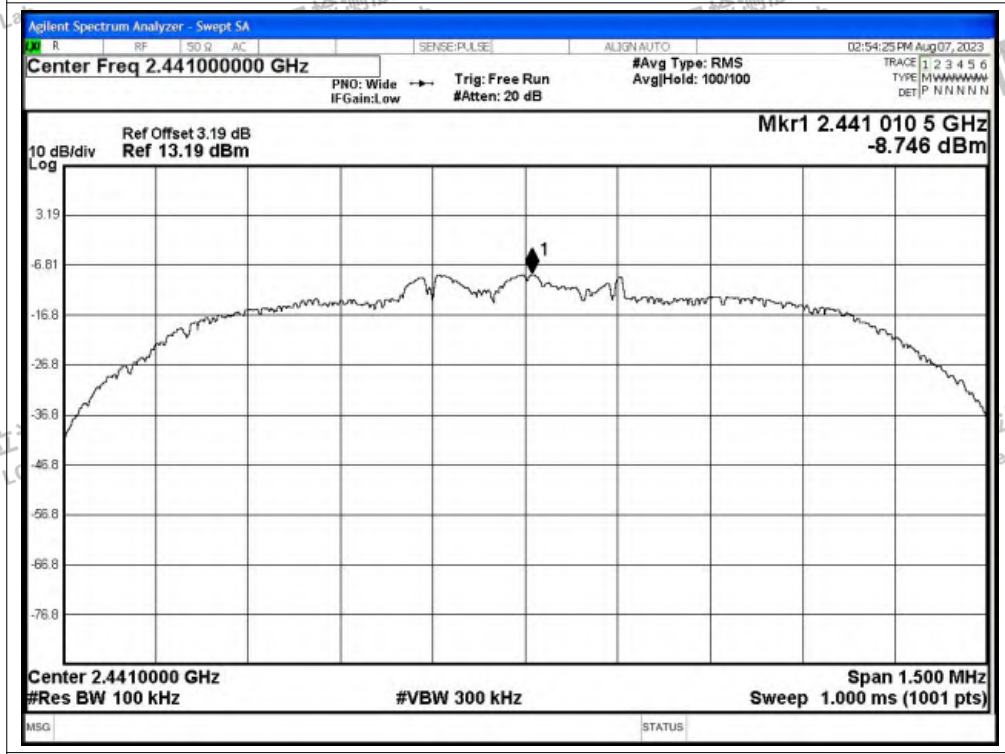
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



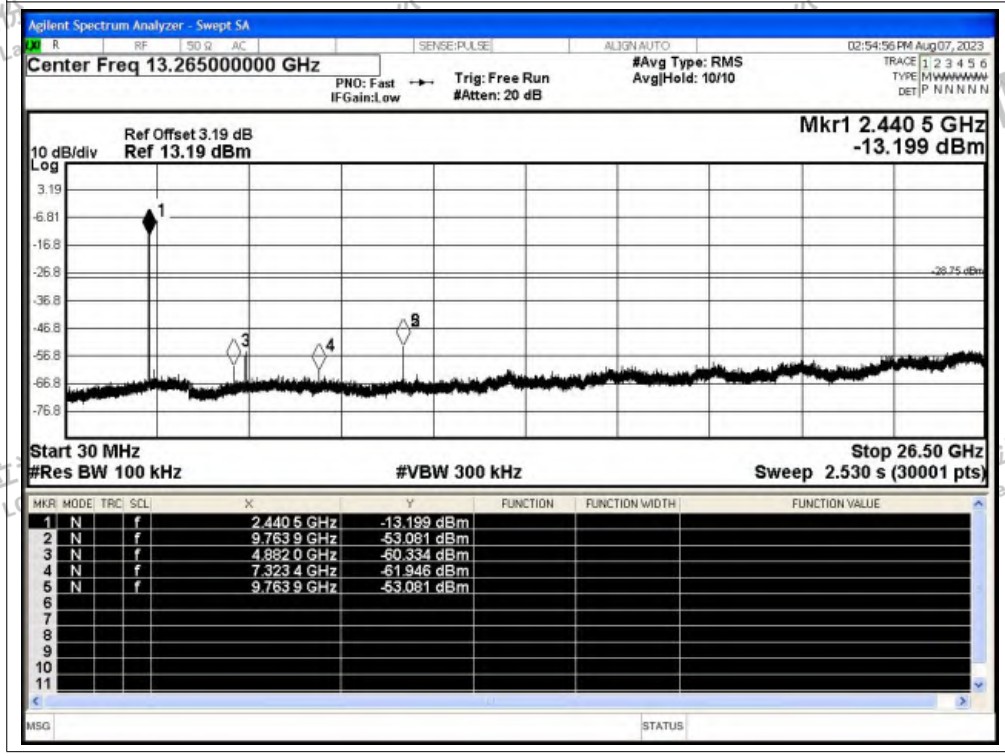
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



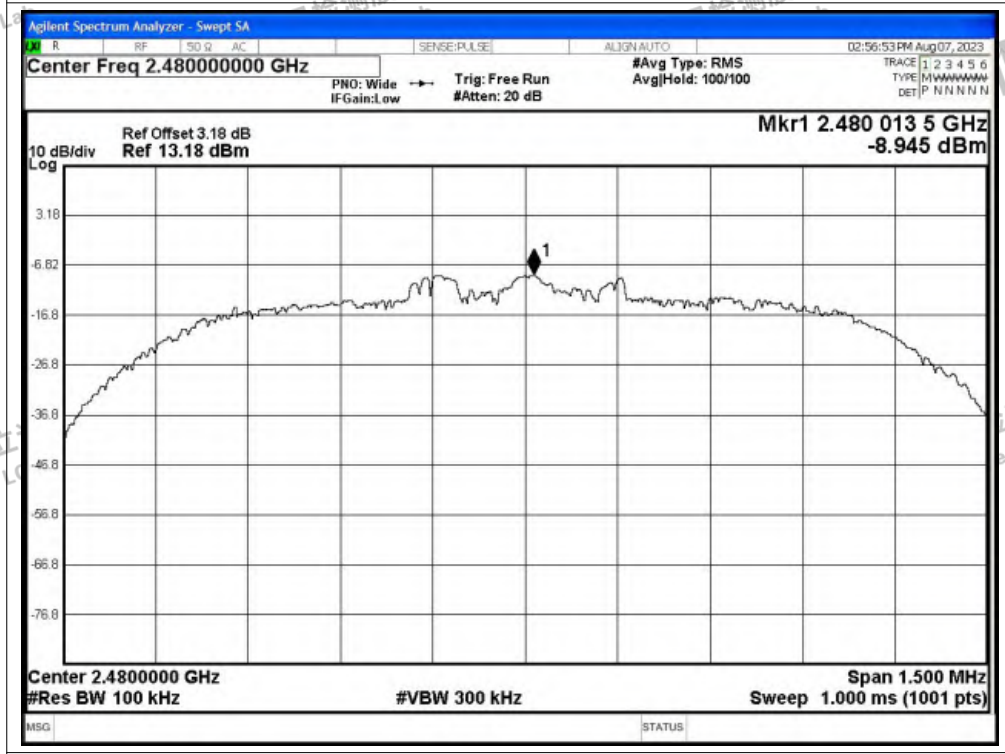
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



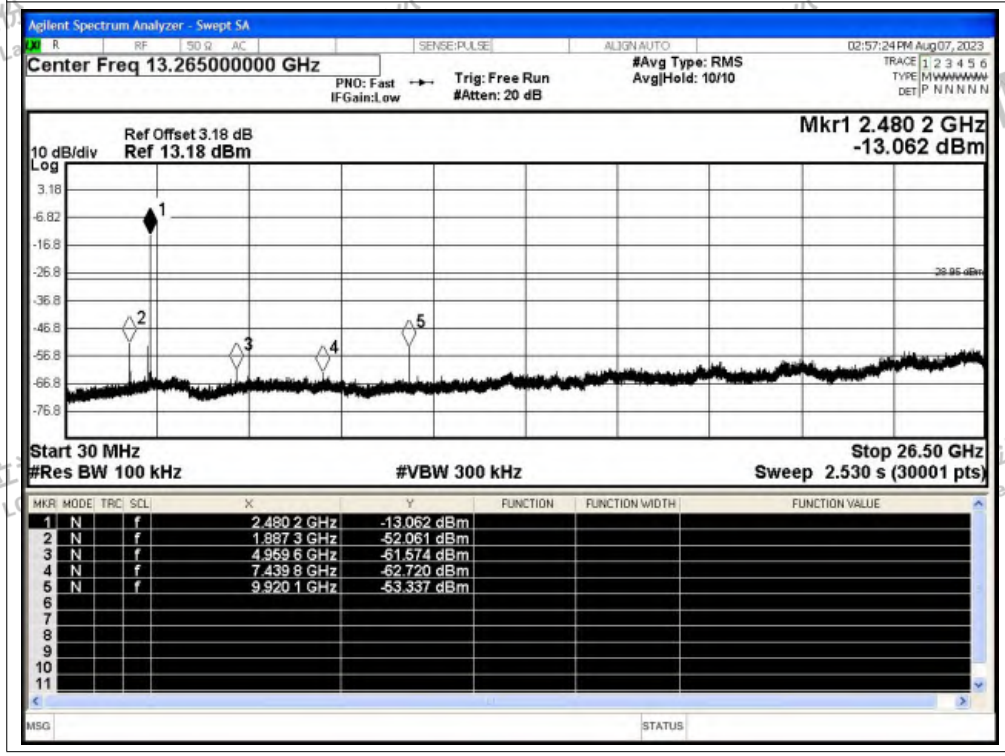
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



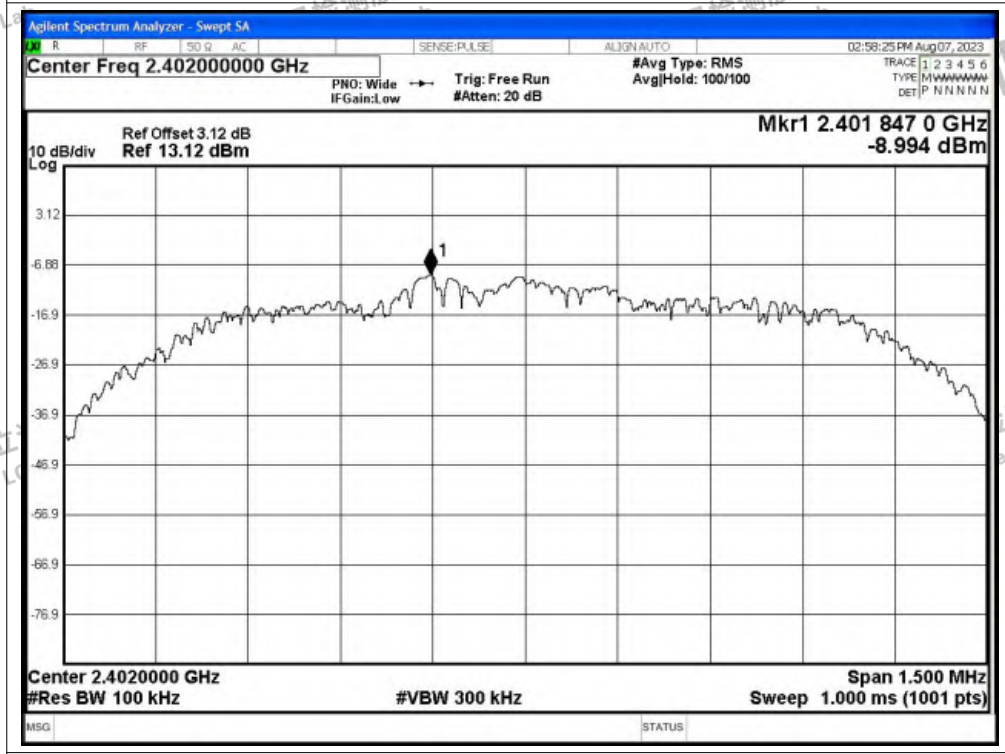
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



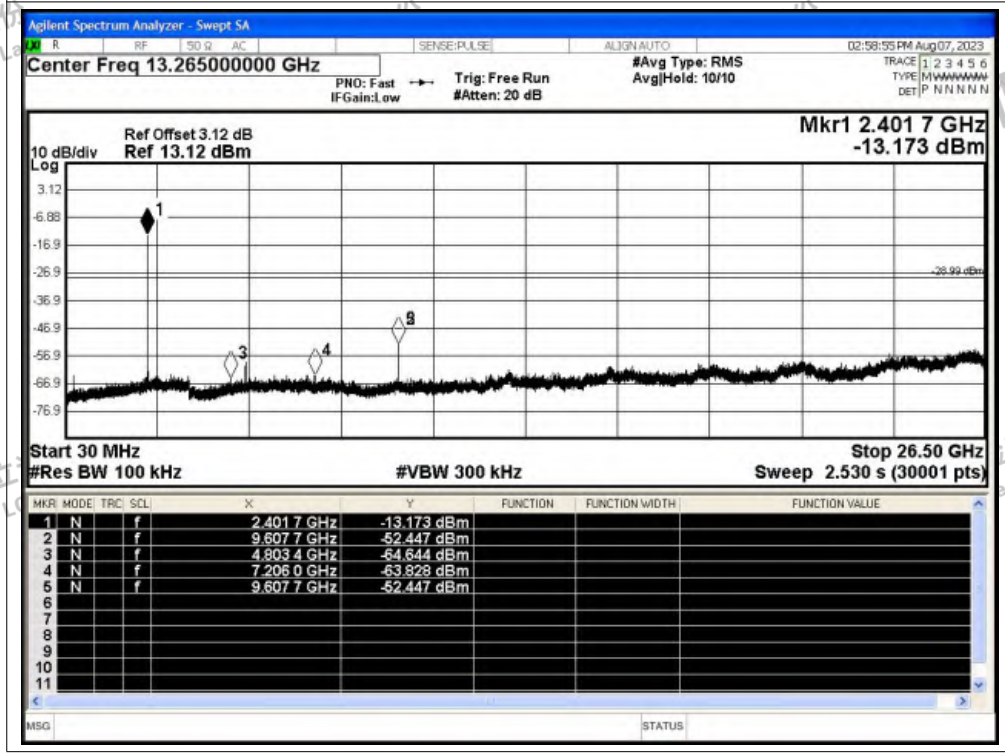
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



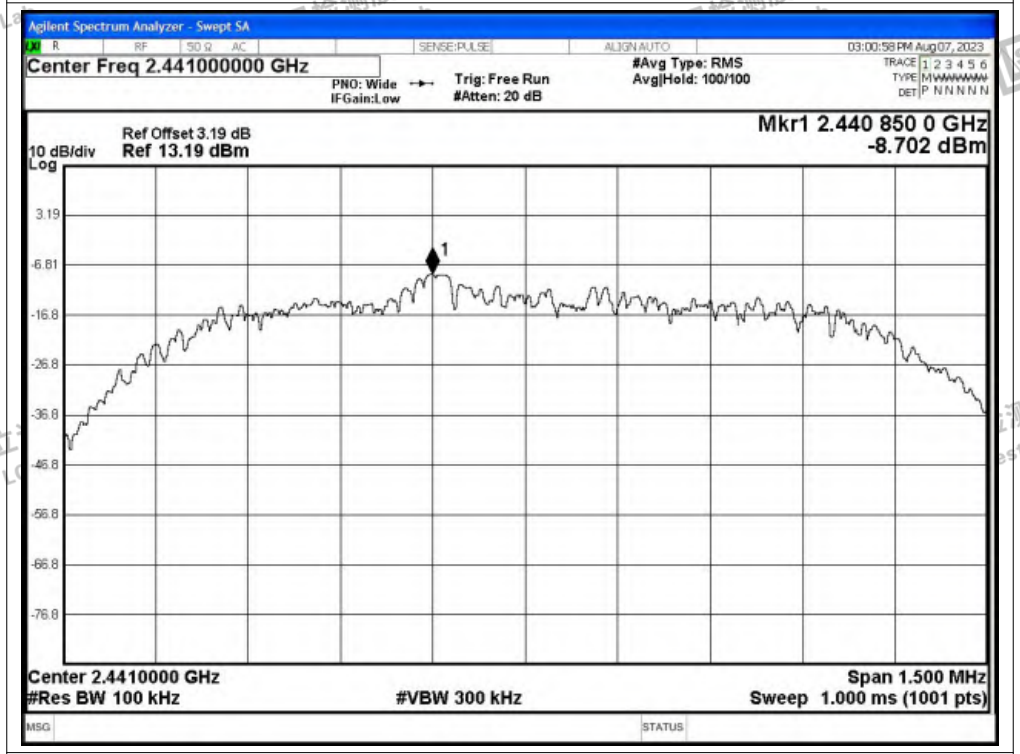
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



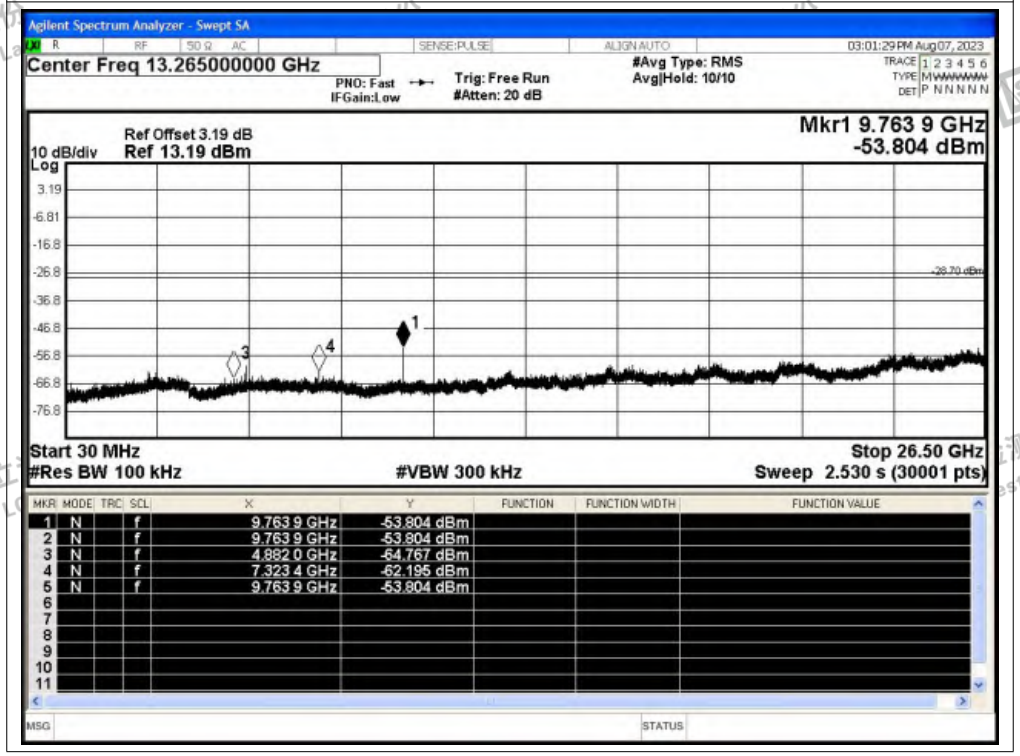
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



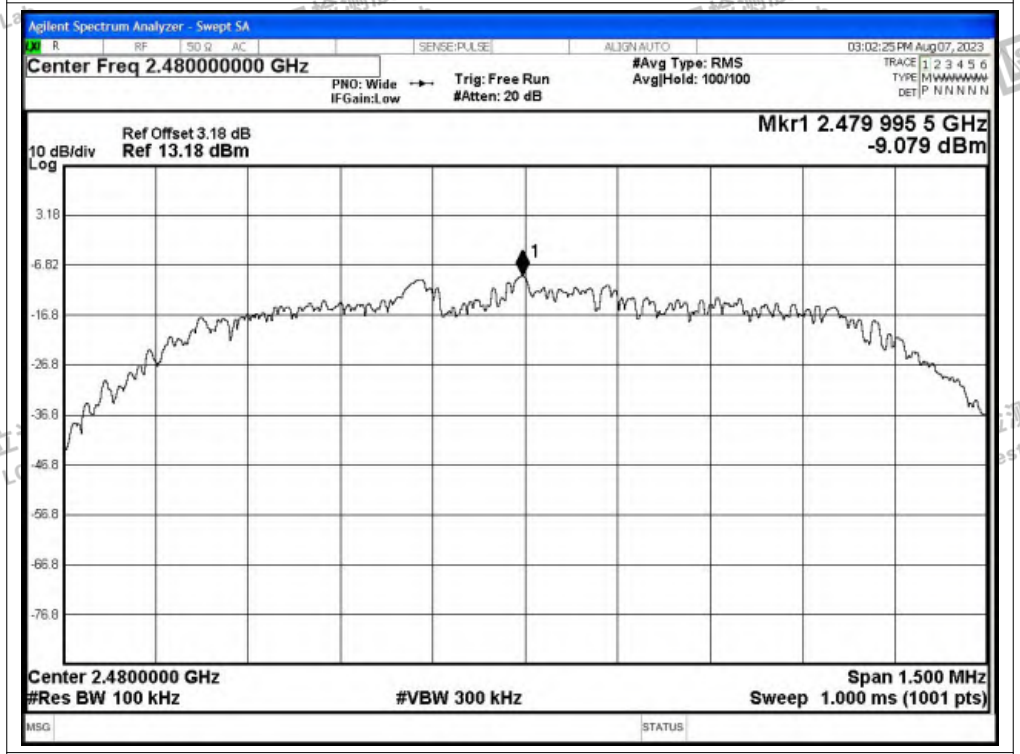
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



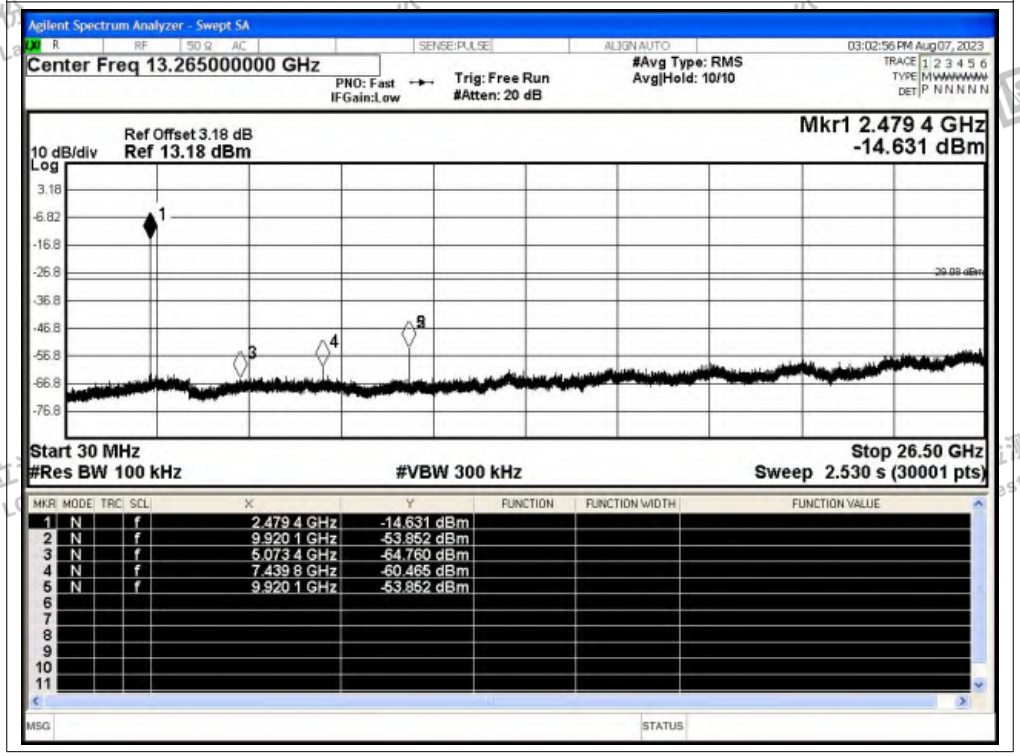
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

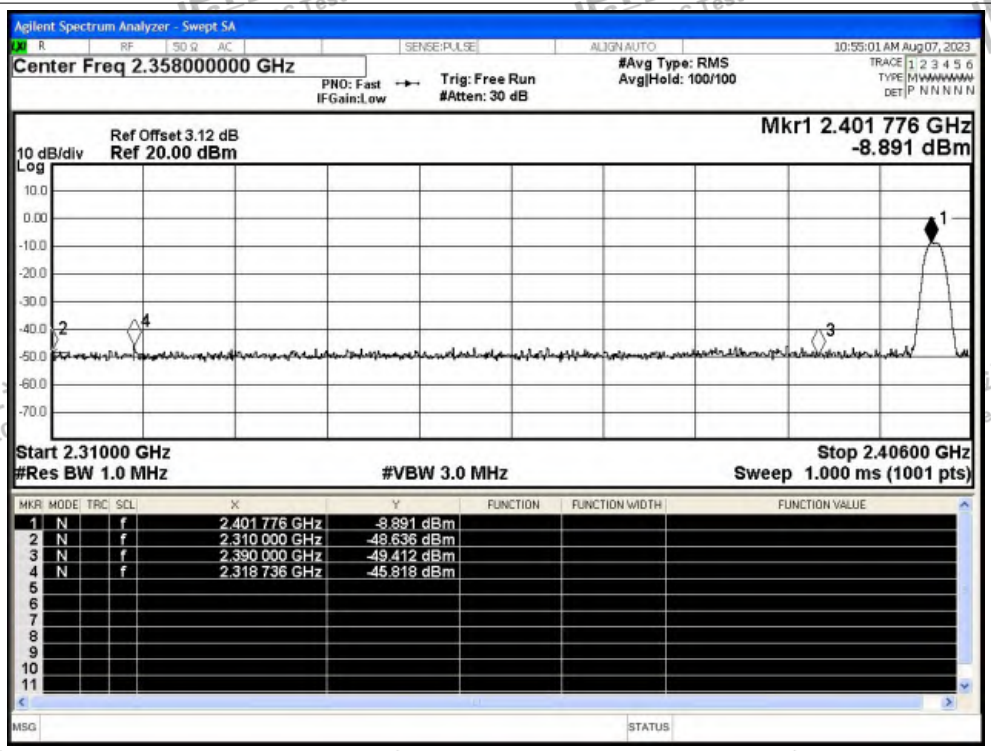


A.8 Restrict Band

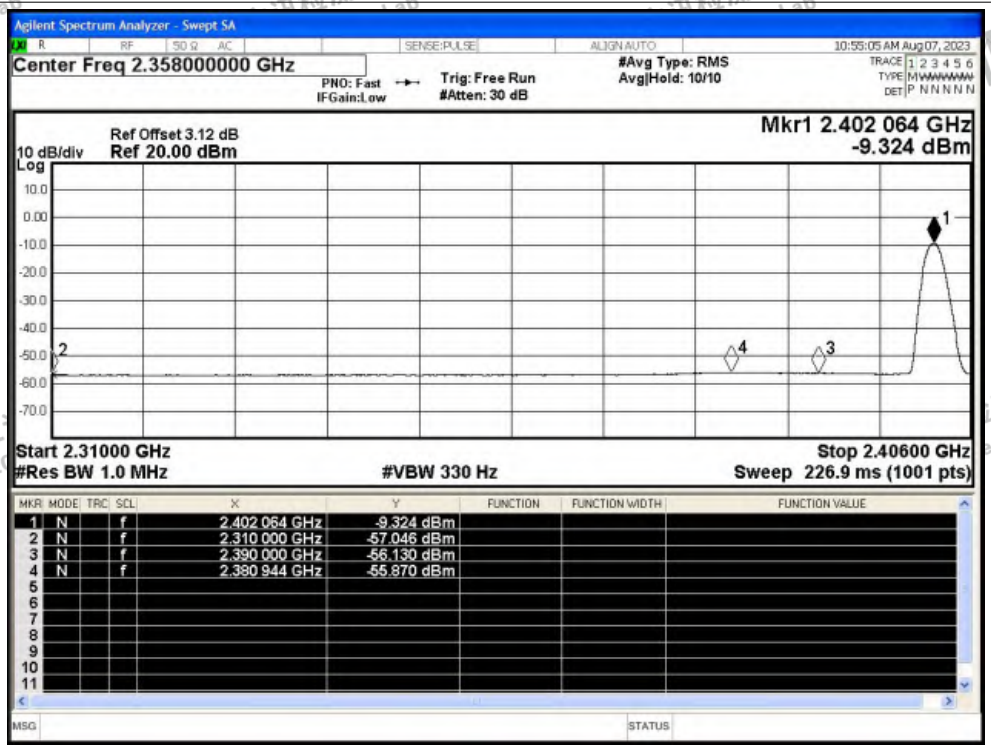
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-48.64	2	48.62	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-57.05	2	40.21	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2318.736	-45.82	2	51.44	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2380.944	-55.87	2	41.39	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.41	2	47.85	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-56.13	2	41.13	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-49.18	2	48.08	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-56.21	2	41.05	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2497.648	-45.32	2	51.94	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2499.784	-55.45	2	41.81	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-48.65	2	48.61	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-55.84	2	41.42	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-50.59	2	46.67	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-57.05	2	40.21	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2353.872	-46.43	2	50.83	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2385.744	-55.86	2	41.4	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-48.96	2	48.3	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-56.24	2	41.02	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-49.33	2	47.93	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-55.99	2	41.27	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2488.288	-44.73	2	52.53	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2498.944	-55.53	2	41.73	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-48.89	2	48.37	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-55.66	2	41.6	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-48.61	2	48.65	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-56.93	2	40.33	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2362.608	-46.22	2	51.04	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2382.768	-55.94	2	41.32	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-48.64	2	48.62	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-56.35	2	40.91	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-48.32	2	48.94	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-56.26	2	41	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2495.368	-45.32	2	51.94	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2499.952	-55.54	2	41.72	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-48.62	2	48.64	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-55.72	2	41.54	Average	54	Pass

Test Graphs

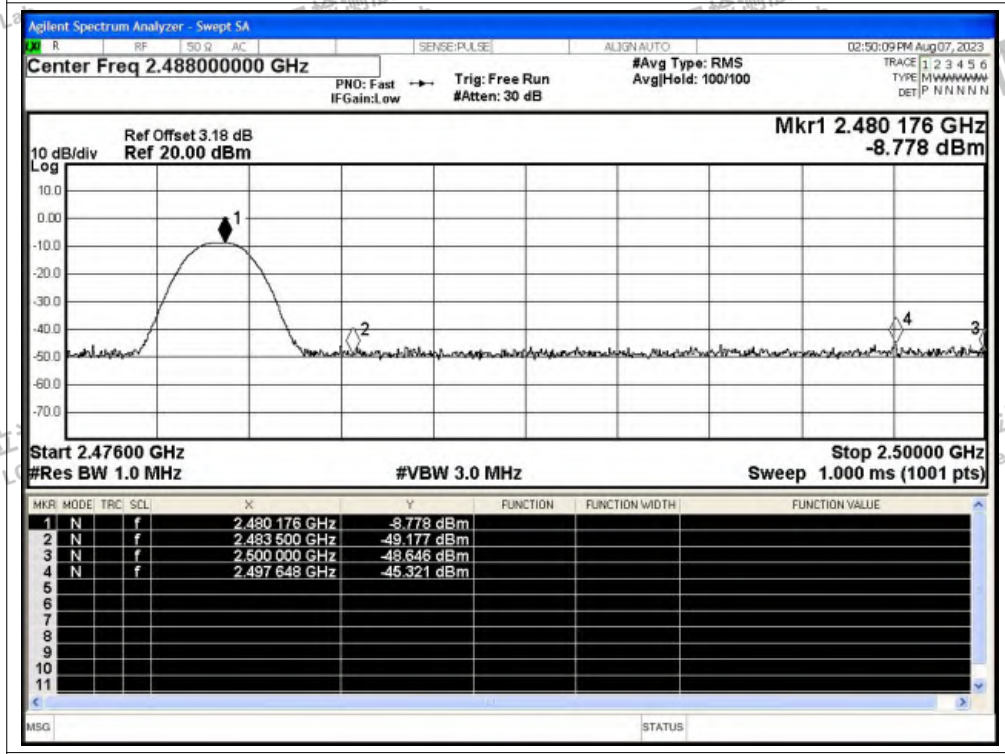
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



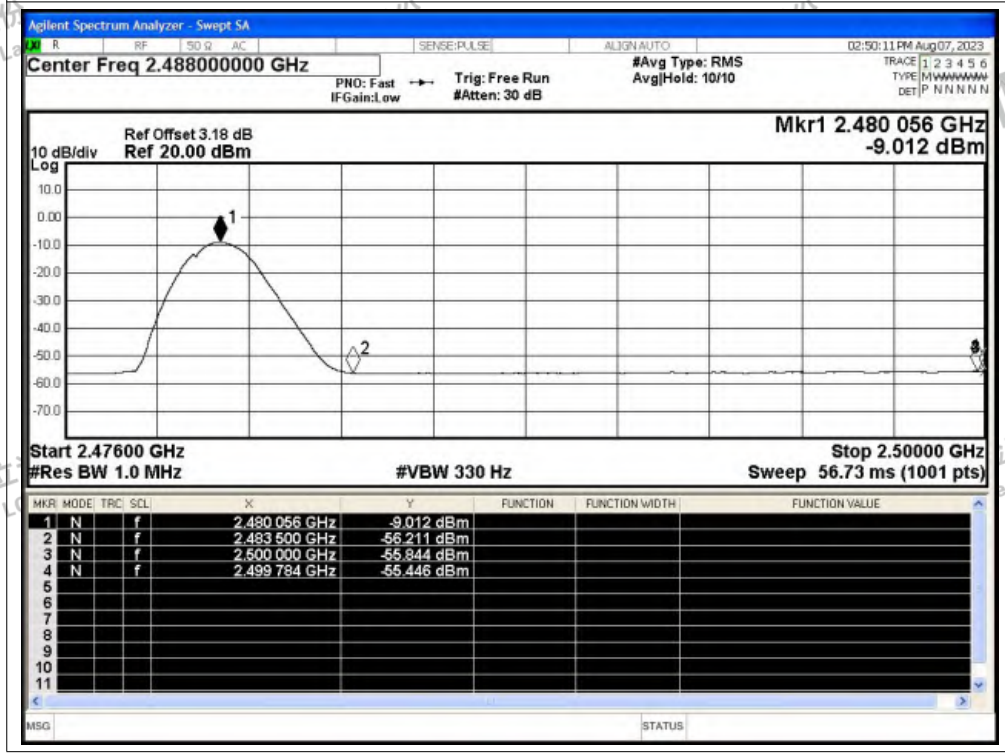
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



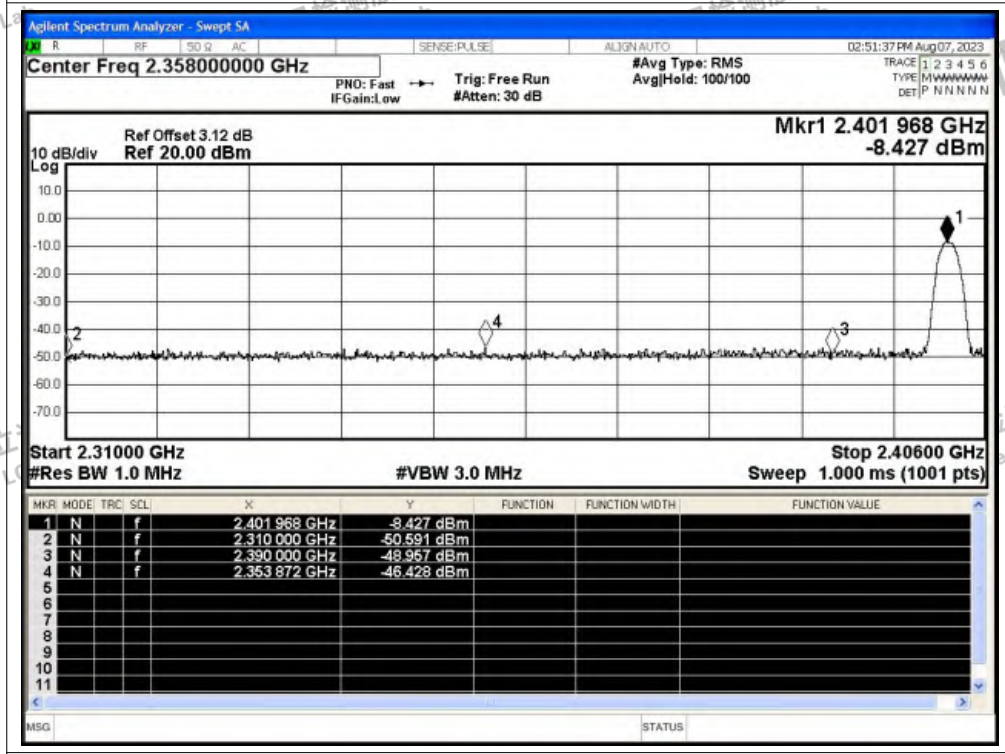
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



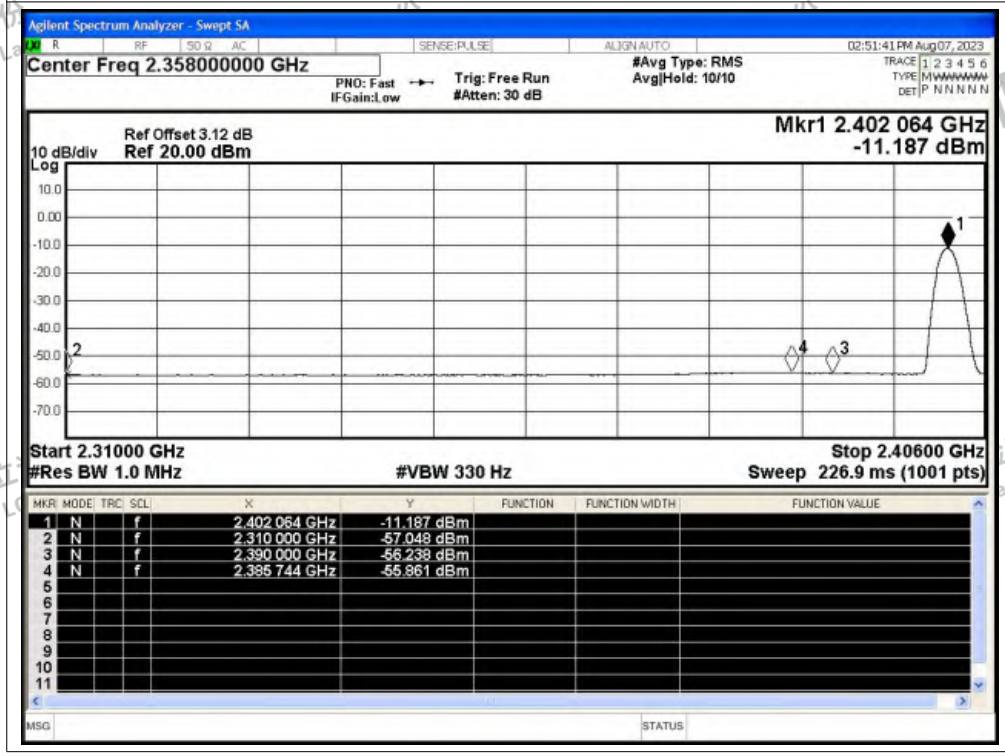
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



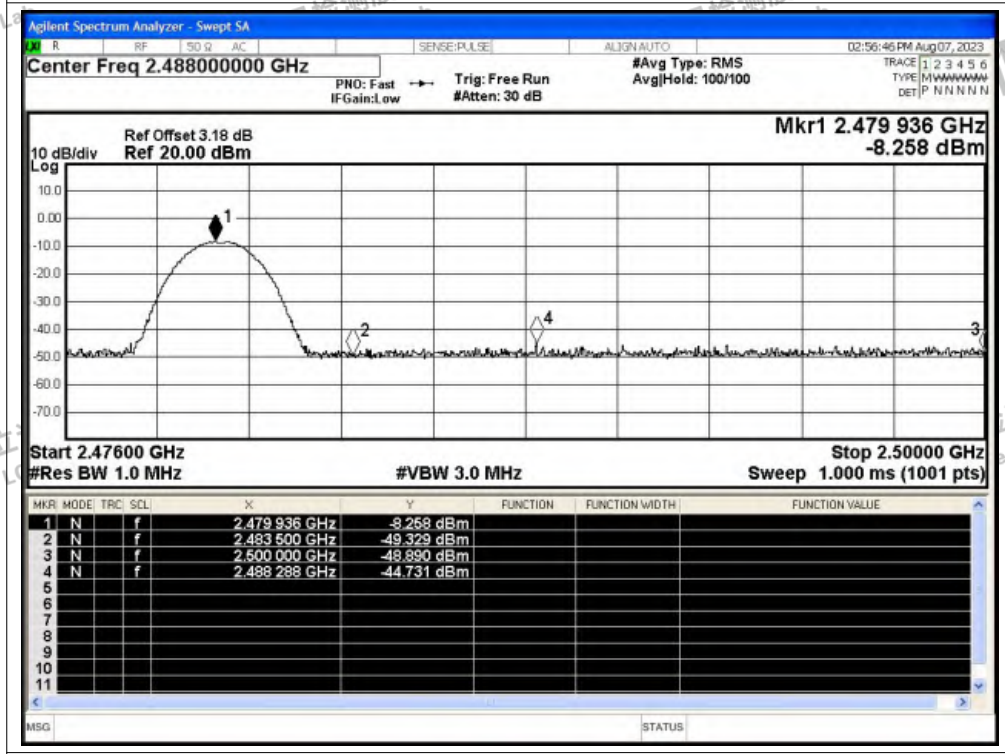
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



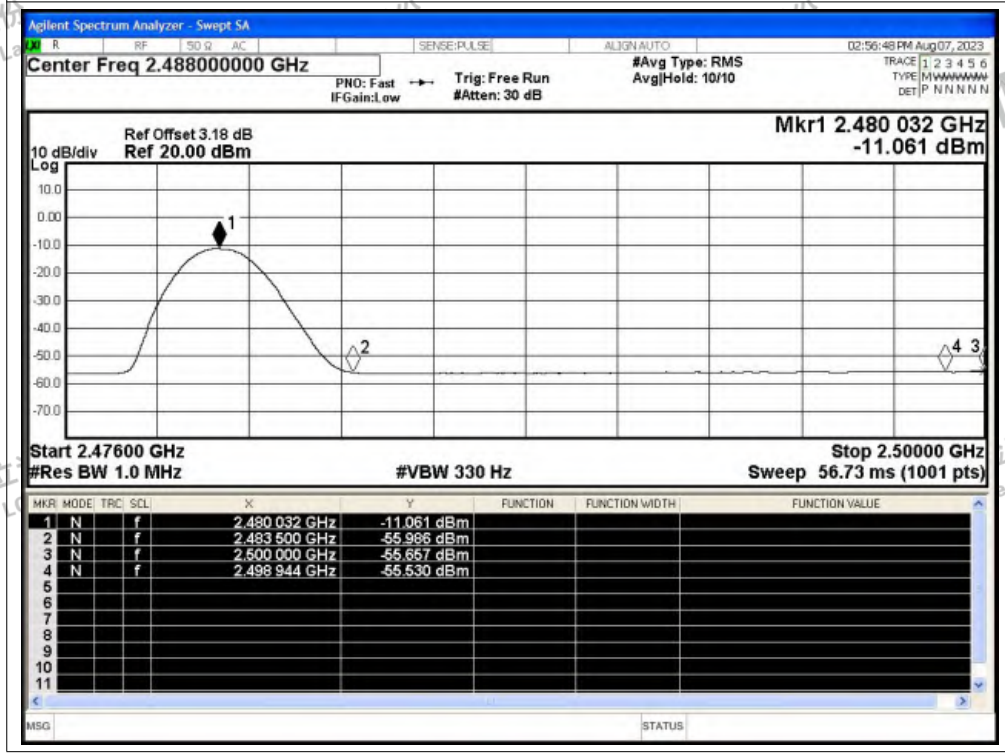
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average



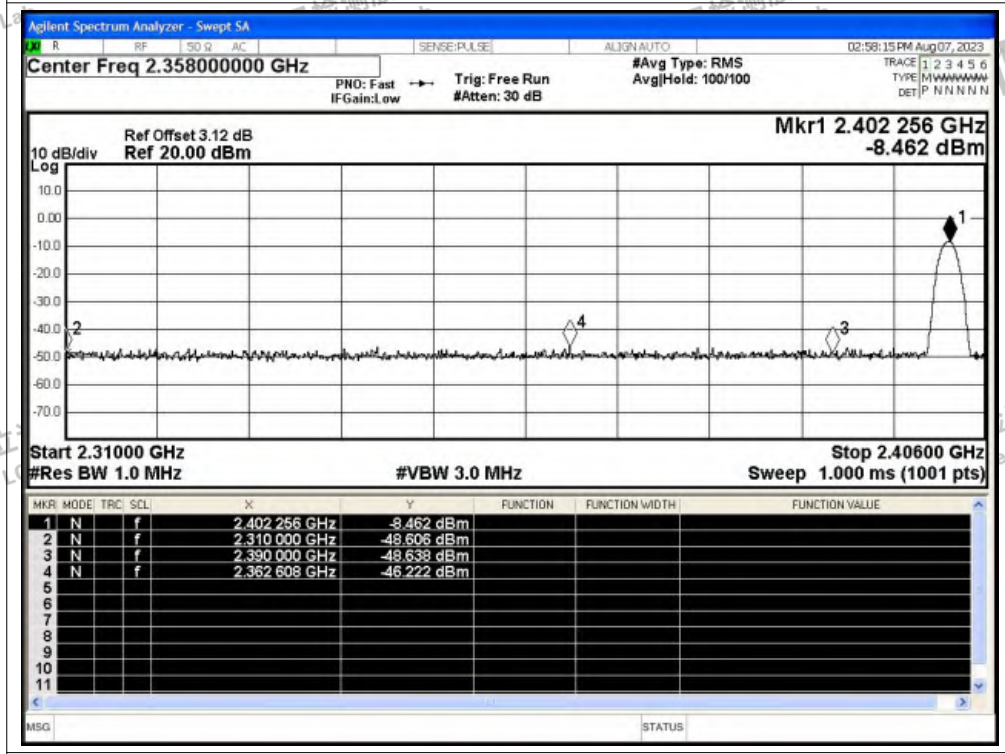
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



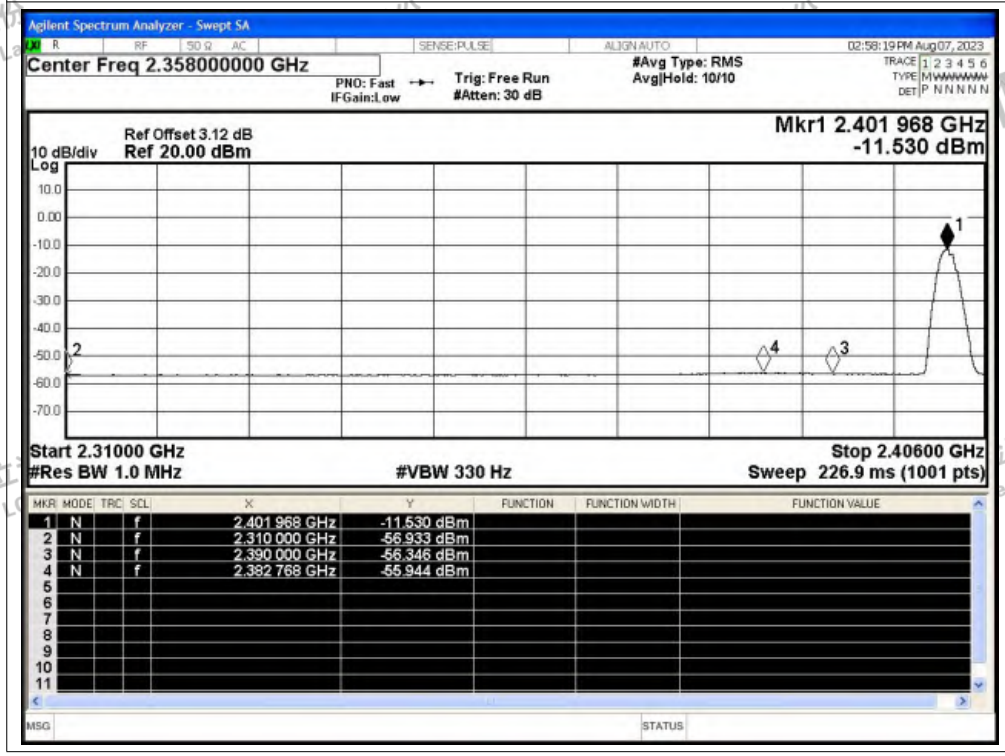
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average



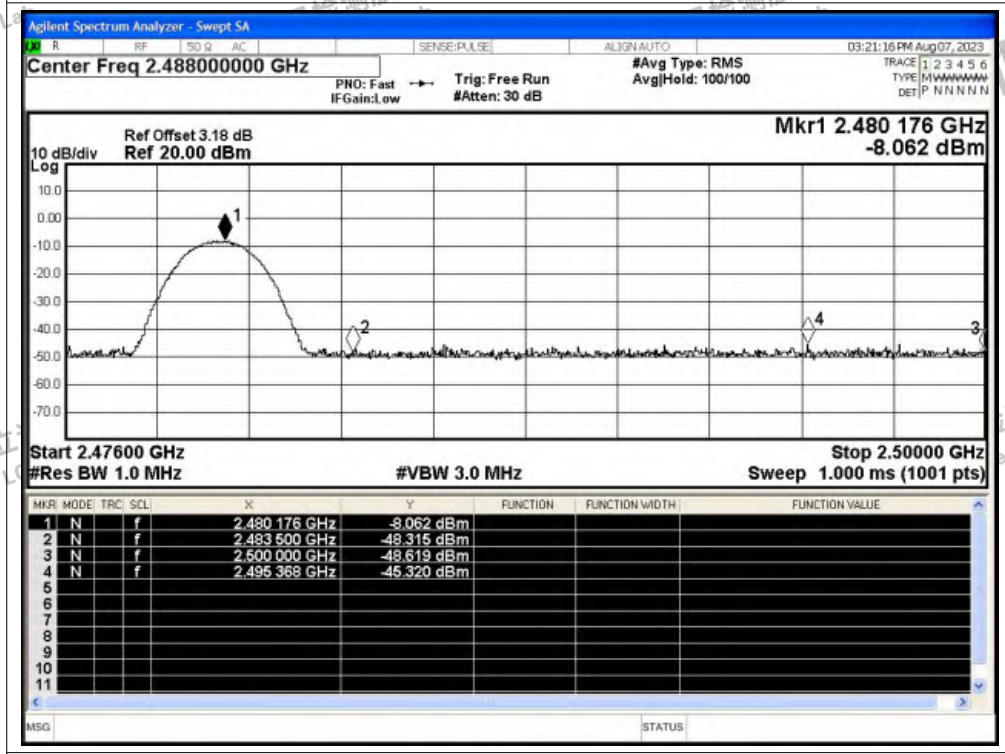
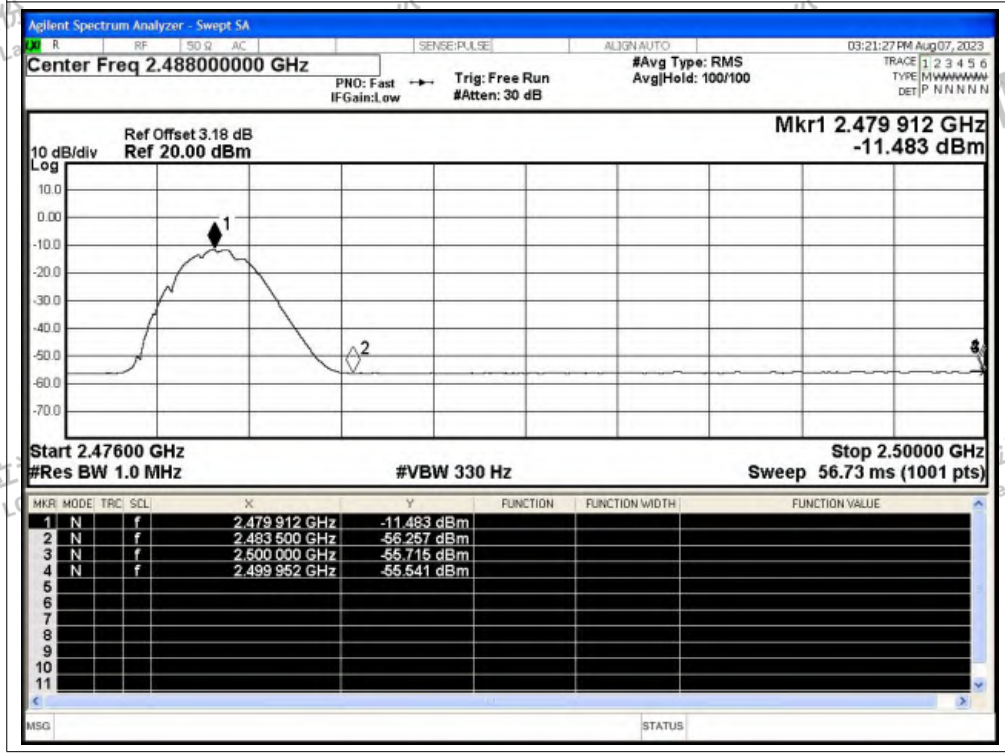
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak



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