

Appendix

Test Data for BTEK250110052A01-T01

Start date	2025/2/7	Finish date	2025/2/7
Temperature	27.5℃	Humidity	45%
RF specifications	BT	Test Engineer	Zora



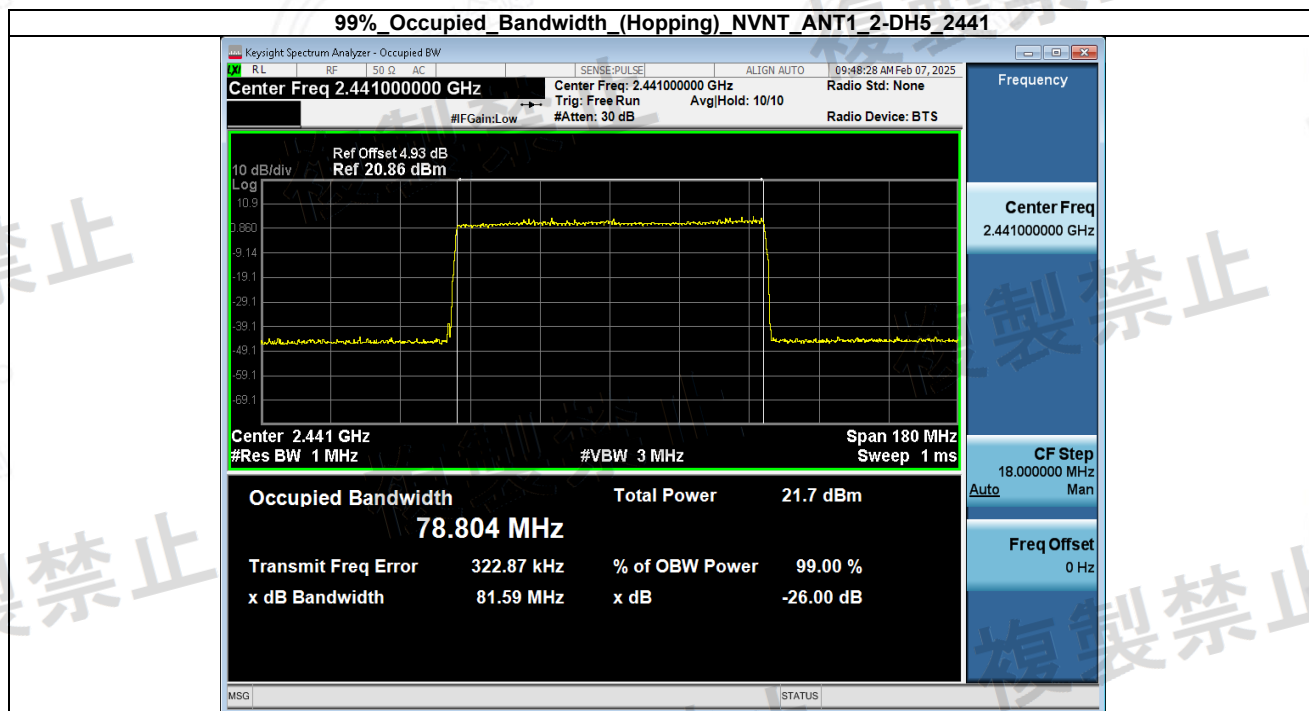
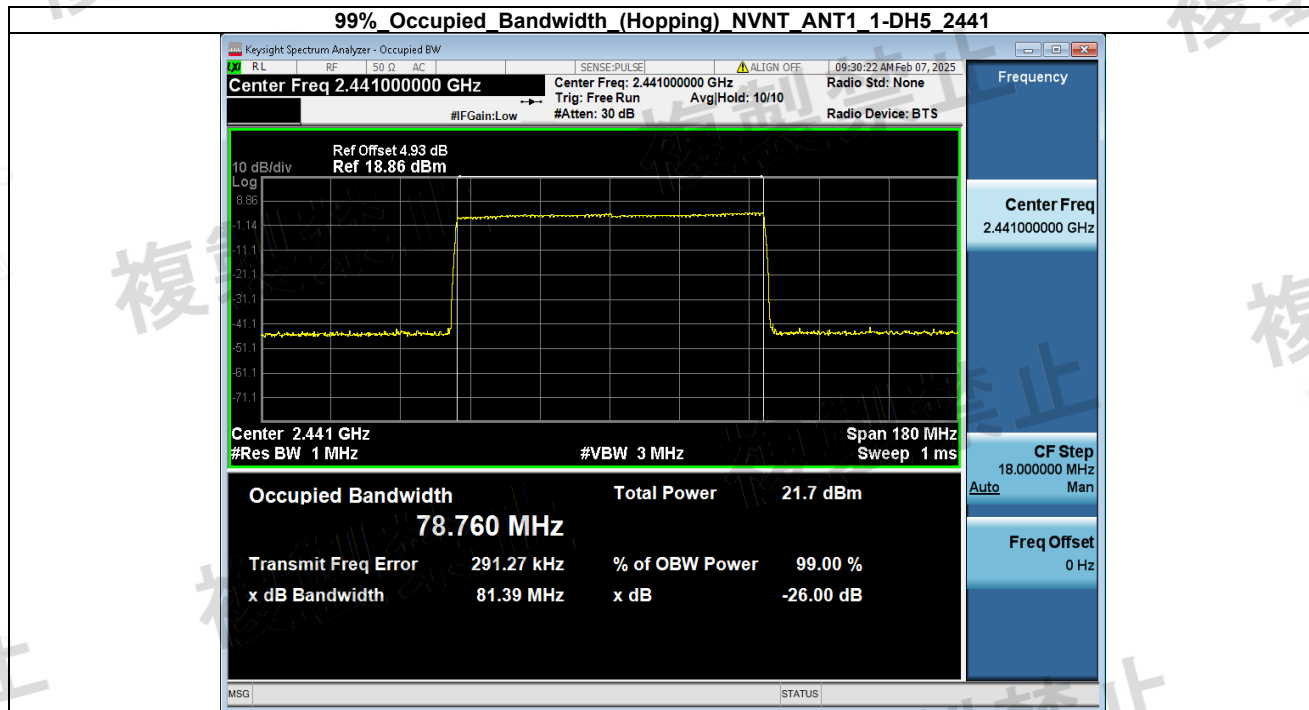
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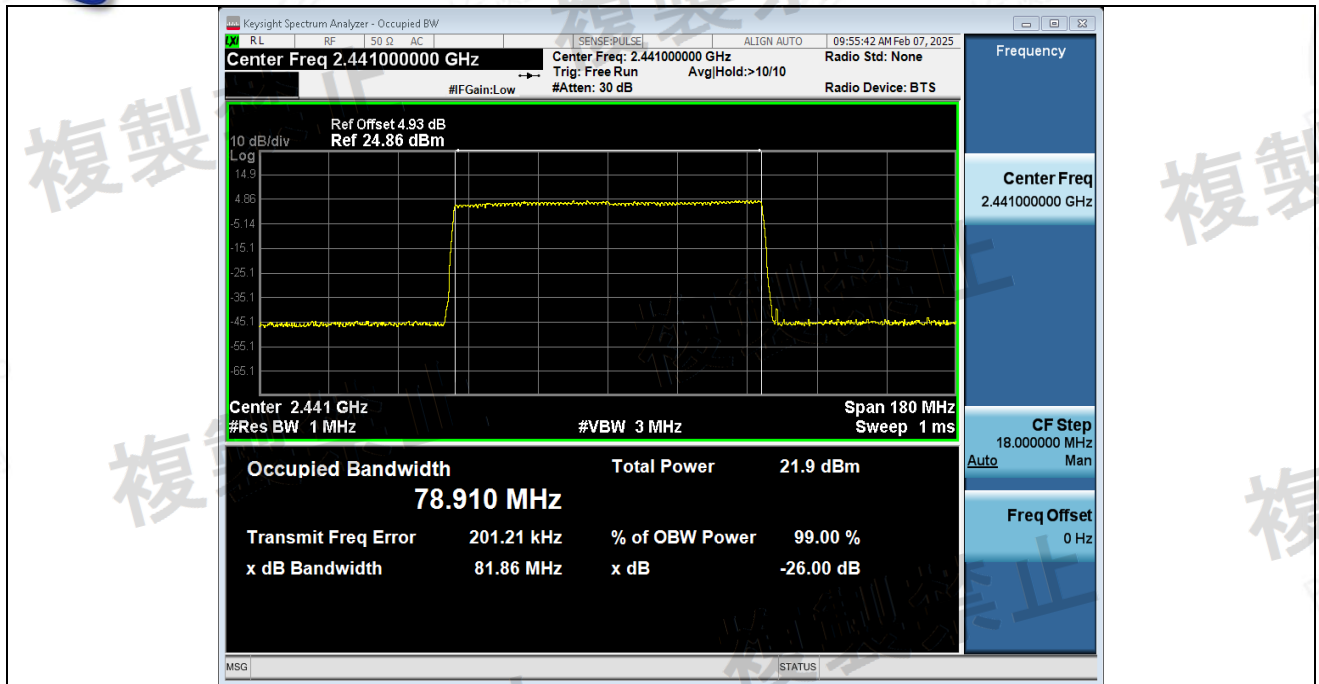
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1. 99% Occupied Bandwidth (Hopping)

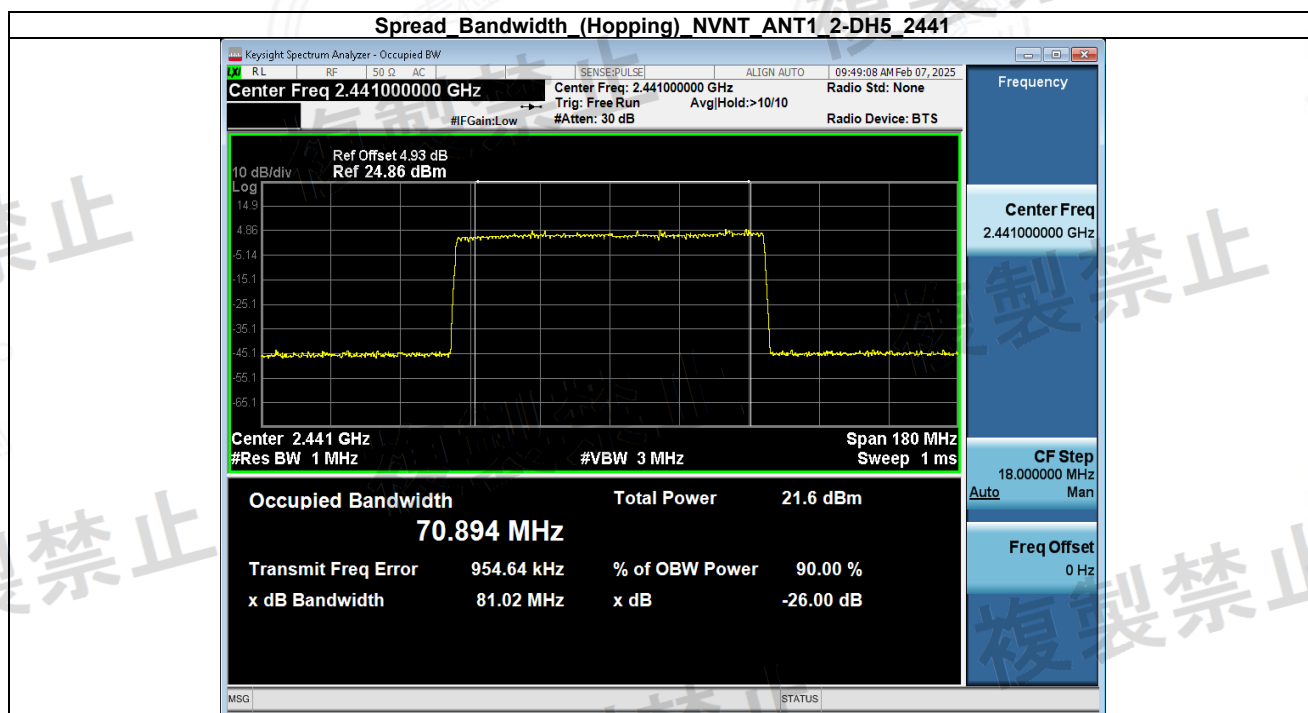
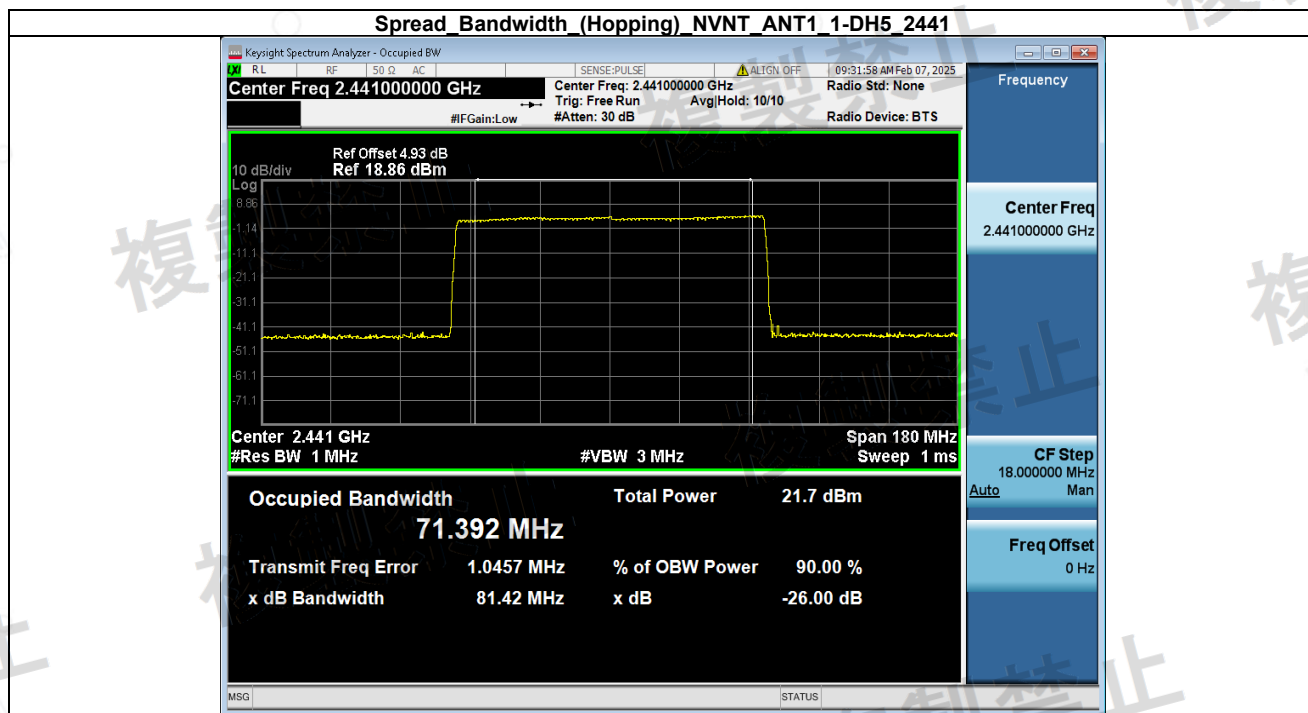
Condition	Antenna	Modulation	mode	Occupied Bandwidth(MHz)	Limit(MHz)	Result
NVNT	ANT1	1-DH5	Hopping	78.76	83.50	Pass
NVNT	ANT1	2-DH5	Hopping	78.80	83.50	Pass
NVNT	ANT1	3-DH5	Hopping	78.91	83.50	Pass





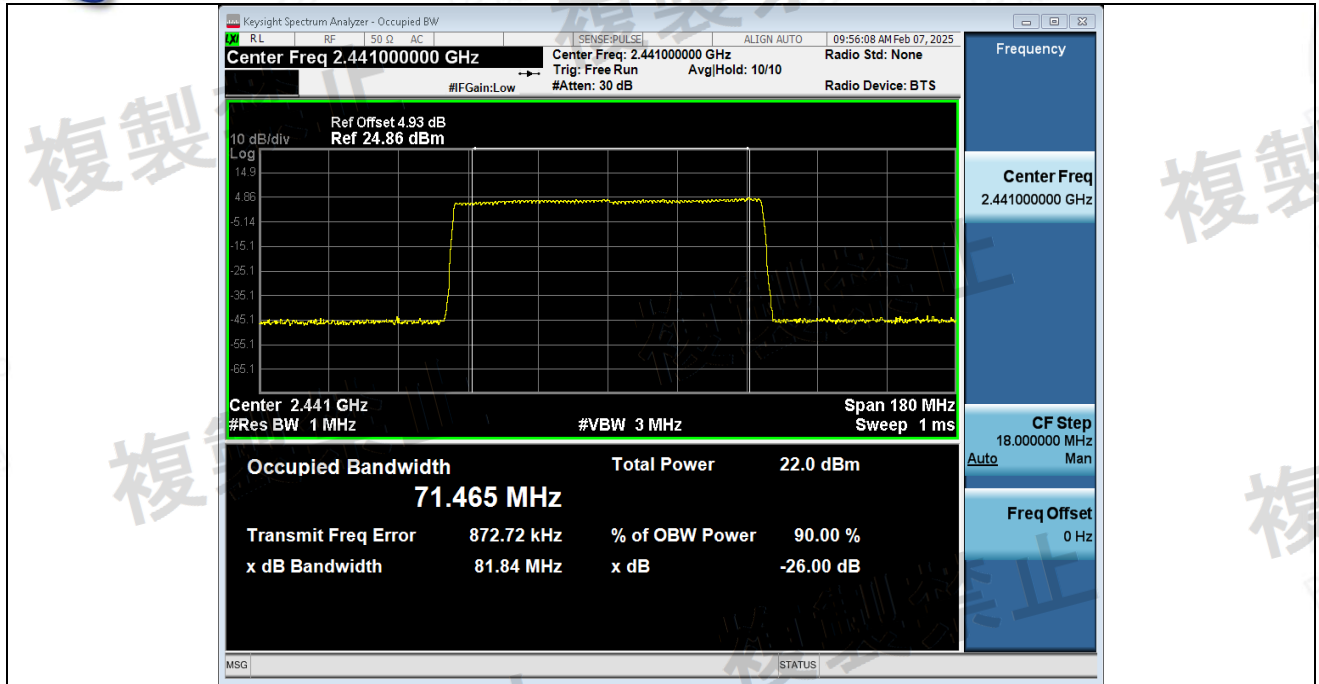
2. Spread Bandwidth (Hopping)

Condition	Antenna	Modulation	mode	Spread Bandwidth(MHz)	Spread Bandwidth Limit(kHz)	Rate(Msymbol/s)	Spread Factor
NVNT	ANT1	1-DH5	Hopping	71.39	500	1	71.39
NVNT	ANT1	2-DH5	Hopping	70.89	500	1	70.89
NVNT	ANT1	3-DH5	Hopping	71.46	500	1	71.46



Spread Bandwidth (Hopping) NVNT ANT1 3-DH5 2441

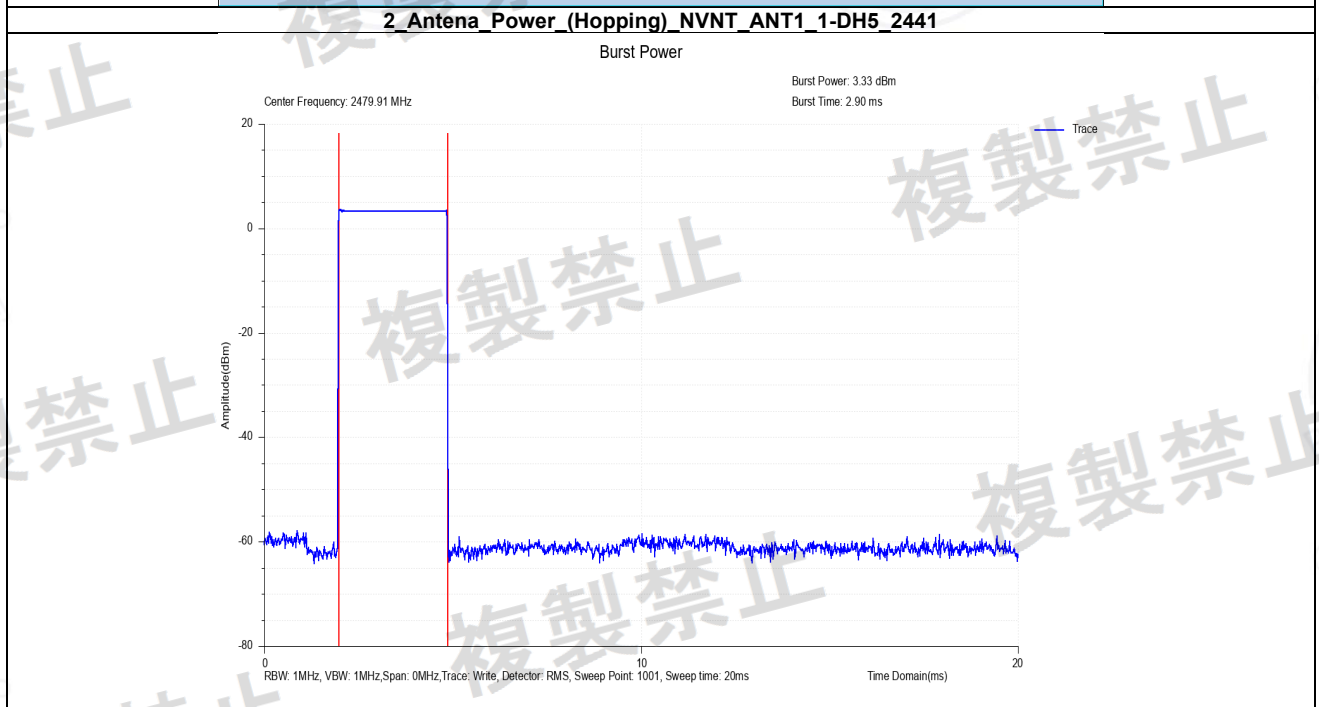
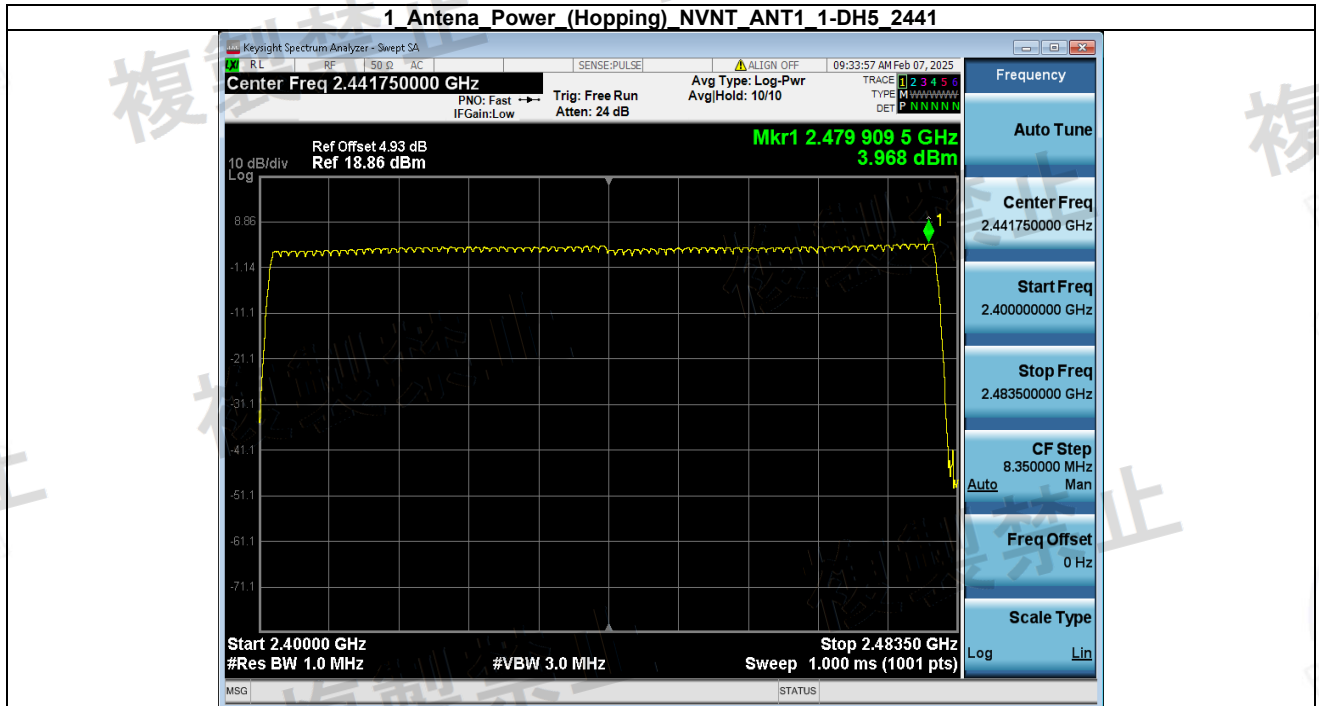




3. Antenna Power (Hopping)

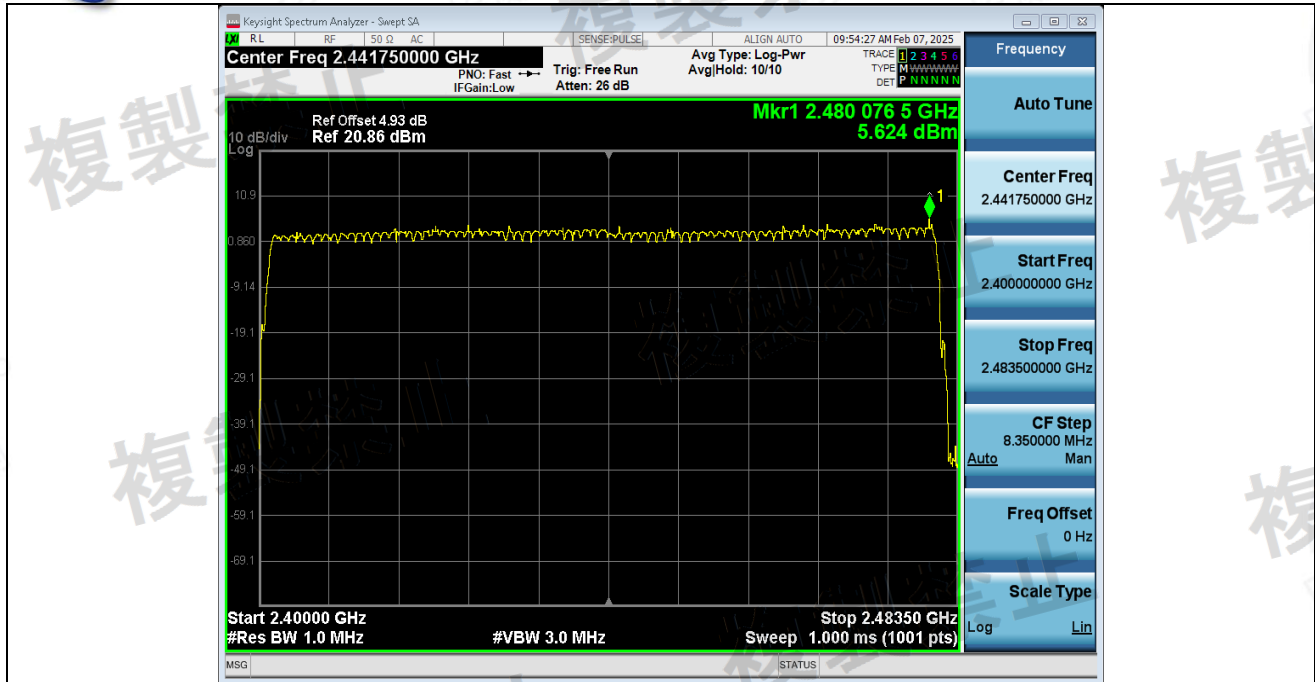
Condition	Antenna	Mode	Frequency	Burst Power(dBm)	Burst Power(mW)	Spread BW(MHz)	Antenna Power(mW/MHz)
NVNT	ANT1	1-DH5	Hopping	3.33	2.15	71.390	0.03
NVNT	ANT1	2-DH5	Hopping	2.93	1.96	70.890	0.03
NVNT	ANT1	3-DH5	Hopping	1.54	1.42	71.460	0.02

Condition	Antenna	Modulation	Mode	Antenna Power(mW/MHz)	Rated Power(mW/MHz)	Power Limit(mW/MHz)	Power Tolerance(%)	Tolerance Limit(%)	Result
NVNT	ANT1	1-DH5	Hopping	0.03	0.03	3	0.54	+20	Pass
NVNT	ANT1	2-DH5	Hopping	0.03	0.03	3	-7.67	+20	Pass
NVNT	ANT1	3-DH5	Hopping	0.02	0.03	3	-33.56	+20	Pass

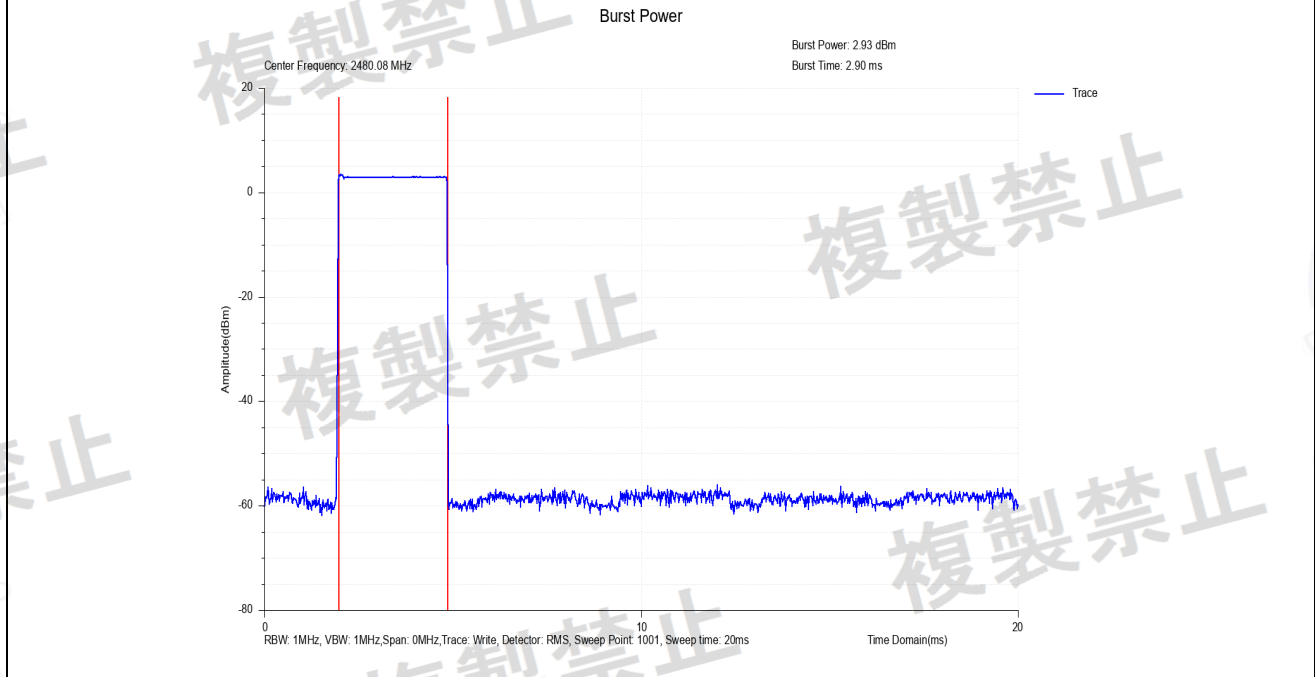


1_Antenna Power (Hopping)_NVNT_ANT1_2-DH5_2441



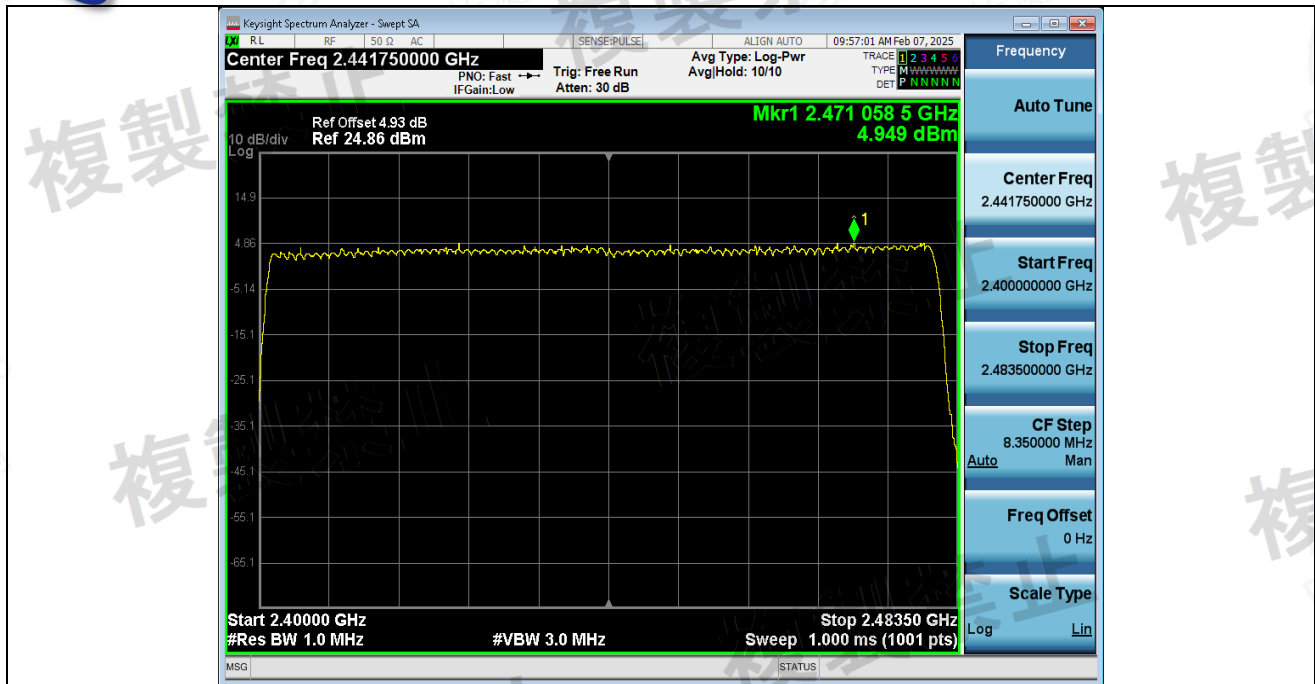


2_Antena_Power_(Hopping)_NVNT_ANT1_2-DH5_2441

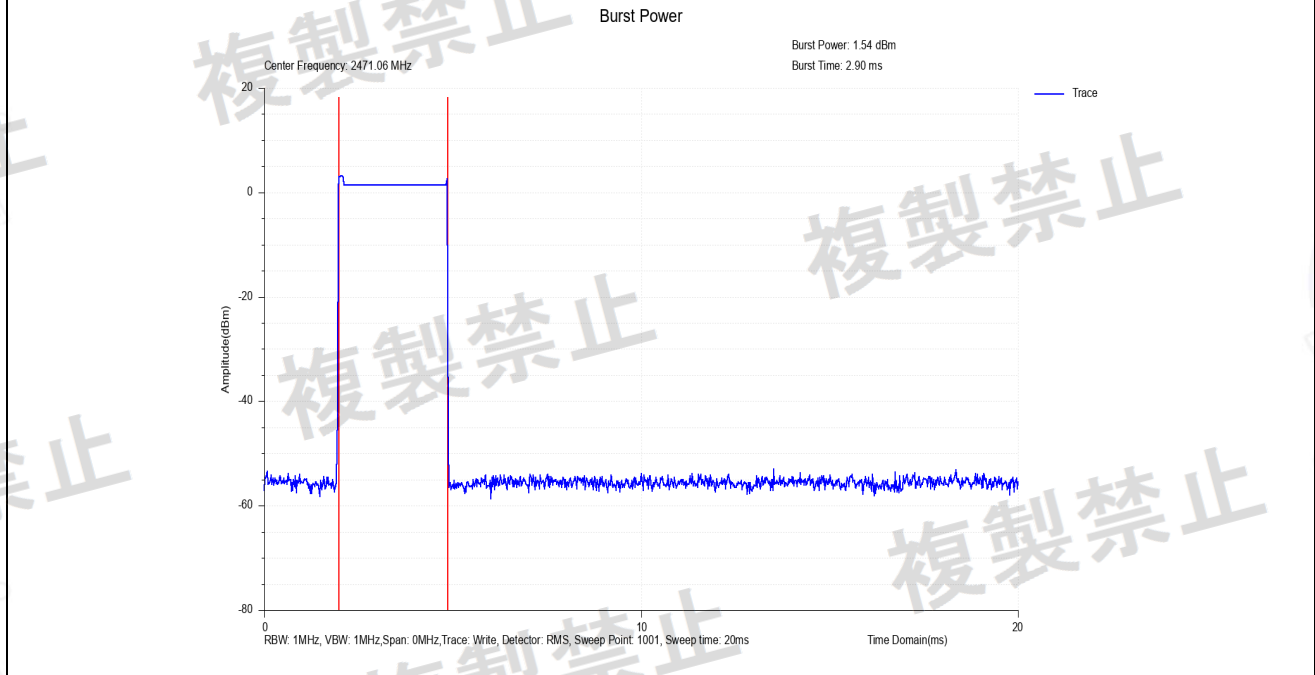


1_Antena_Power_(Hopping)_NVNT_ANT1_3-DH5_2441





2_Antenna_Power_(Hopping)_NVNT_ANT1_3-DH5_2441

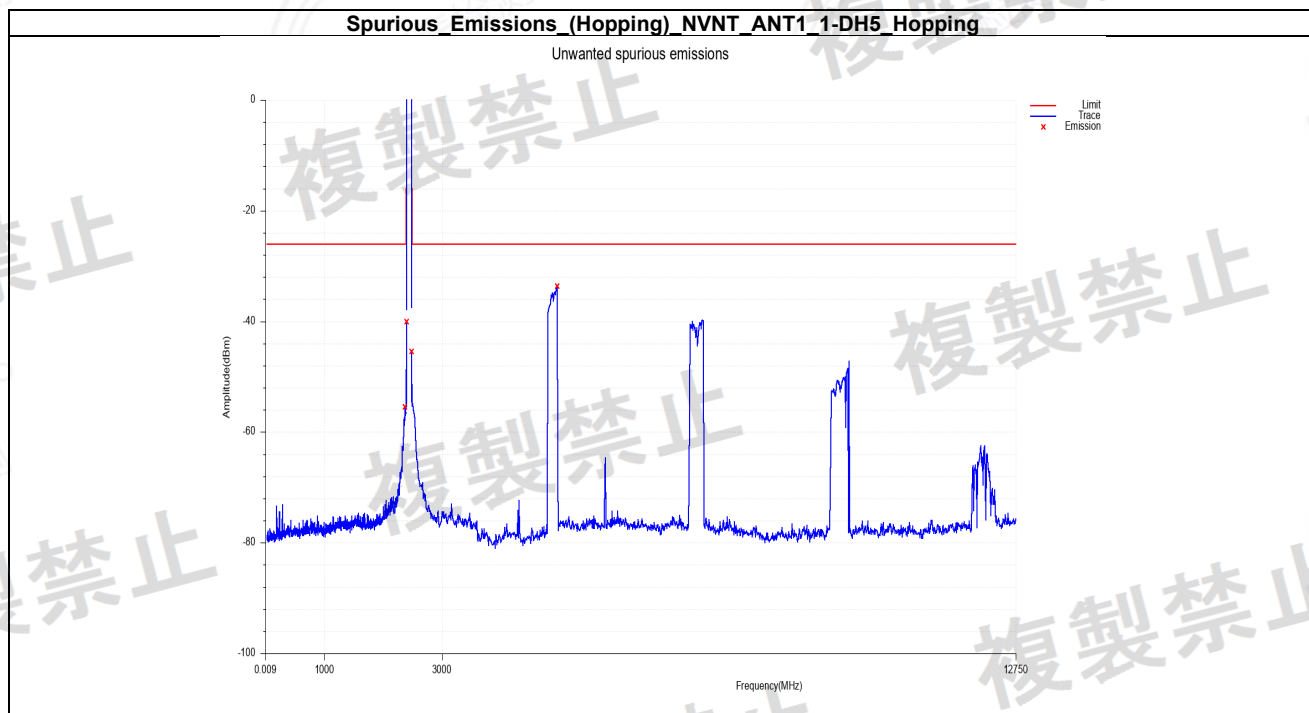


Condition	Antenna	Mode	Frequency	Measured Power(dBm/MHz)	Antenna Gain(dBi)	EIRP(dBm/MHz)	EIRP Limit(dBm/MHz)	Result
NVNT	ANT1	1-DH5	2441.00	-15.21	-2.70	-17.91	6.91	Not Application
NVNT	ANT1	2-DH5	2441.00	-15.58	-2.70	-18.28	6.91	Not Application
NVNT	ANT1	3-DH5	2441.00	-17.00	-2.70	-19.70	6.91	Not Application



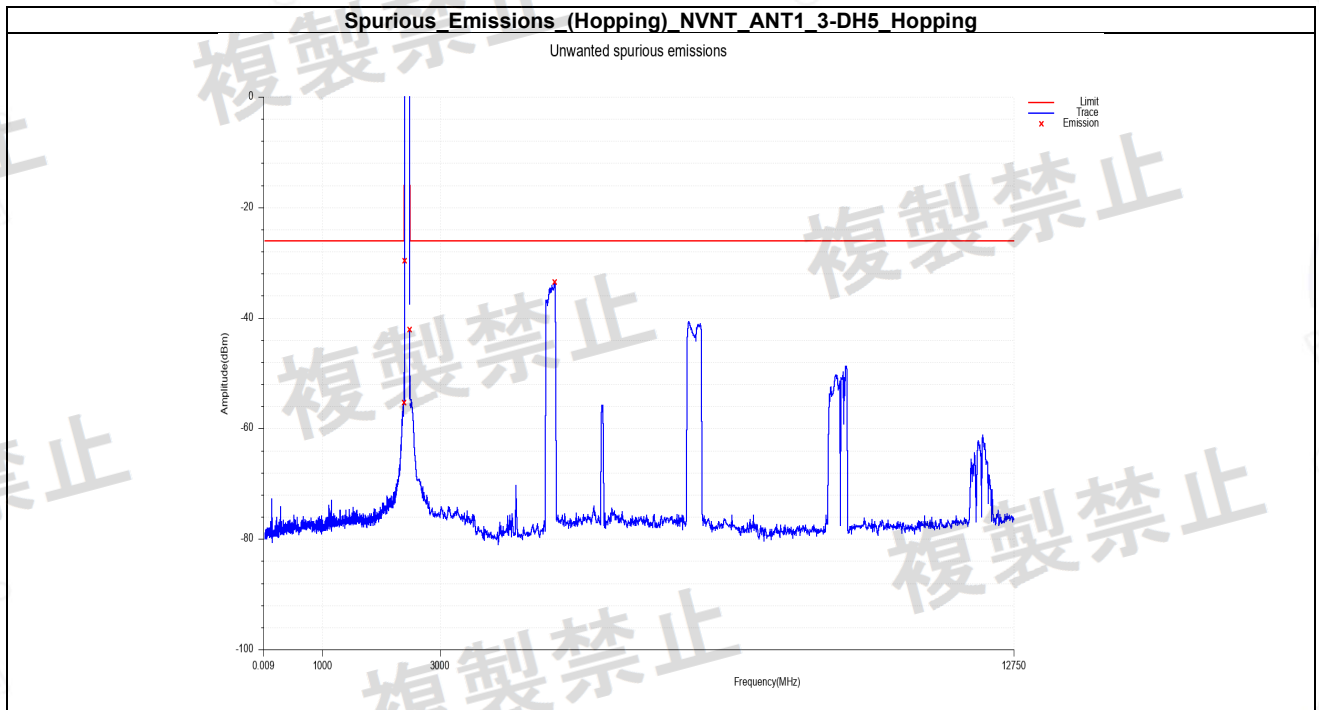
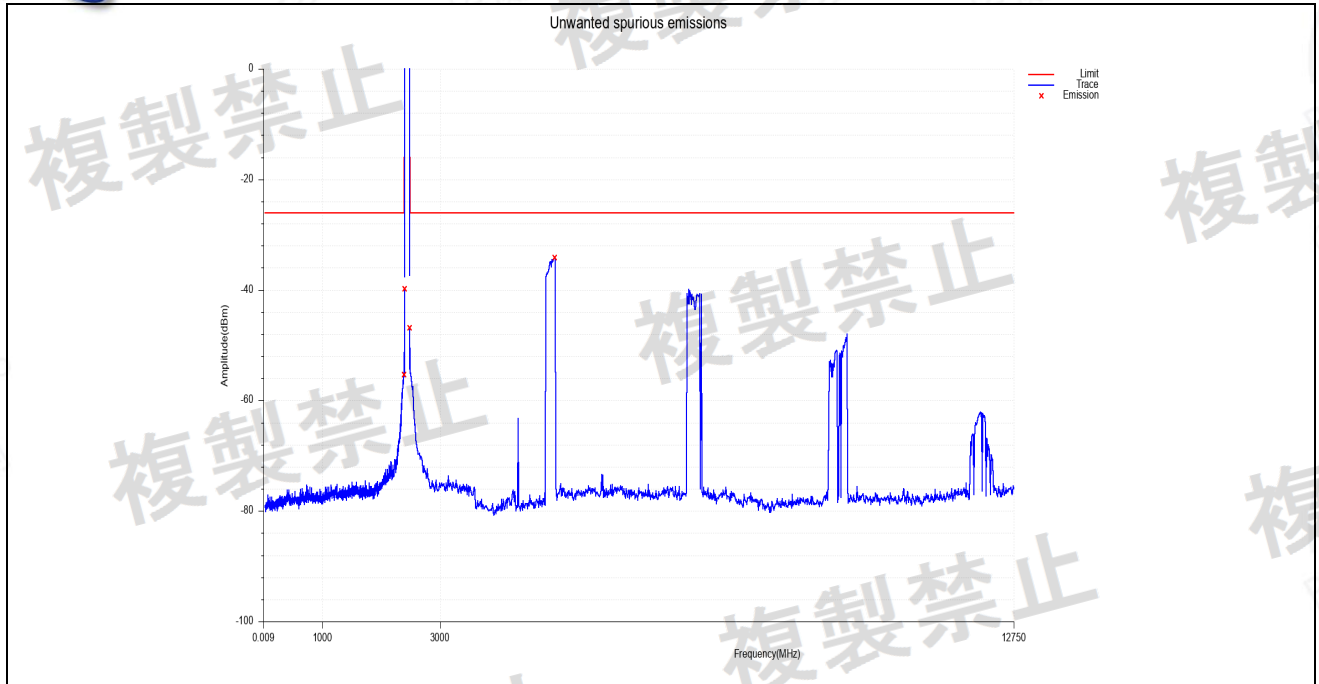
4. Spurious Emissions

Condi on	Anten na	Mod e	Frequency(MHz)	Frequency Area(MHz)	RBW(k Hz)	Spur. Fre.(M Hz)	Spur. Level(dBm/ MHz)	Limit(dBm/M Hz)	Spur. Level	Llimit	Res ult
NVNT	ANT1	1-DH5	Hopping	30.00~2387.00	1000	2375.22	-55.45	-26	0.0028μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	1-DH5	Hopping	2387.00~2400.00	1000	2400.00	-40.08	-16	0.0982μW/MHz	25μW/MHz	Pass
NVNT	ANT1	1-DH5	Hopping	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	1-DH5	Hopping	2483.50~2496.50	1000	2485.80	-45.42	-16	0.0286μW/MHz	25μW/MHz	Pass
NVNT	ANT1	1-DH5	Hopping	2496.50~1275.00	1000	4957.34	-33.65	-26	0.4319μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	2-DH5	Hopping	30.00~2387.00	1000	2387.00	-55.27	-26	0.0029μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	2-DH5	Hopping	2387.00~2400.00	1000	2399.10	-39.86	-16	0.1033μW/MHz	25μW/MHz	Pass
NVNT	ANT1	2-DH5	Hopping	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	2-DH5	Hopping	2483.50~2496.50	1000	2486.35	-46.81	-16	0.0208μW/MHz	25μW/MHz	Pass
NVNT	ANT1	2-DH5	Hopping	2496.50~1275.00	1000	4947.09	-34.15	-26	0.3844μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	3-DH5	Hopping	30.00~2387.00	1000	2387.00	-55.31	-26	0.0029μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	3-DH5	Hopping	2387.00~2400.00	1000	2400.00	-29.71	-16	1.0692μW/MHz	25μW/MHz	Pass
NVNT	ANT1	3-DH5	Hopping	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	3-DH5	Hopping	2483.50~2496.50	1000	2483.79	-42.10	-16	0.0616μW/MHz	25μW/MHz	Pass
NVNT	ANT1	3-DH5	Hopping	2496.50~1275.00	1000	4947.09	-33.54	-26	0.4424μW/MHz	2.5μW/MHz	Pass



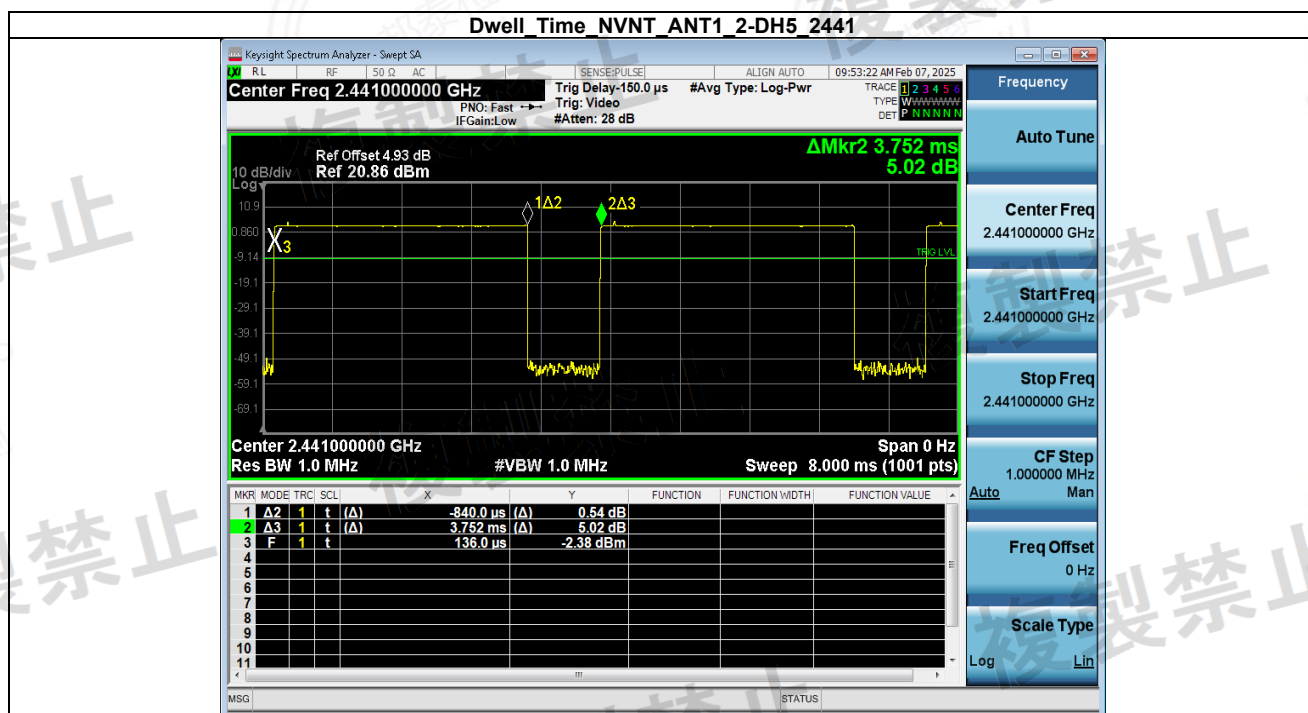
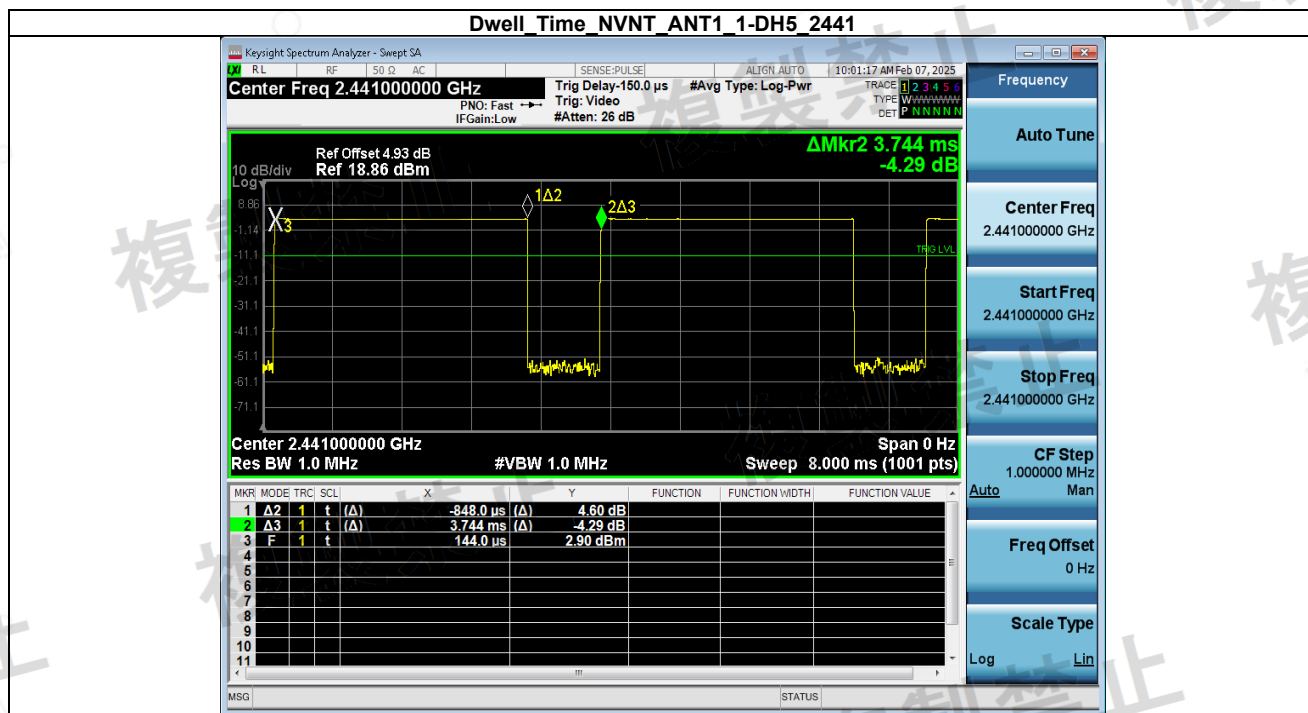
Spurious Emissions (Hopping) NVNT_ANT1_2-DH5_Hopping

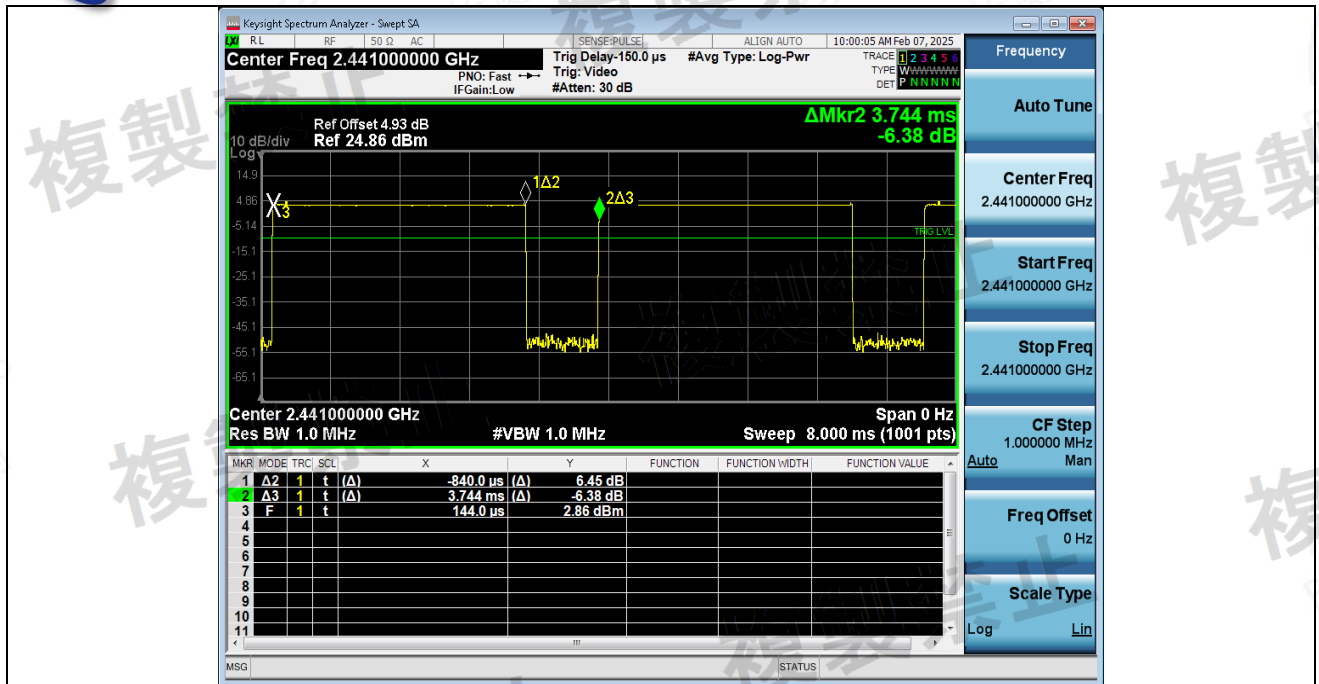




5. Dwell Time

Condition	Antenna	Modulation	mode	Burst Time(ms)	Burst Cycle(ms)	Dwell Time(s)	Limit(s)	Result
NVNT	ANT1	1-DH5	Hopping	2.896	3.744	0.280	0.4	Pass
NVNT	ANT1	2-DH5	Hopping	2.912	3.752	0.279	0.4	Pass
NVNT	ANT1	3-DH5	Hopping	2.904	3.744	0.281	0.4	Pass

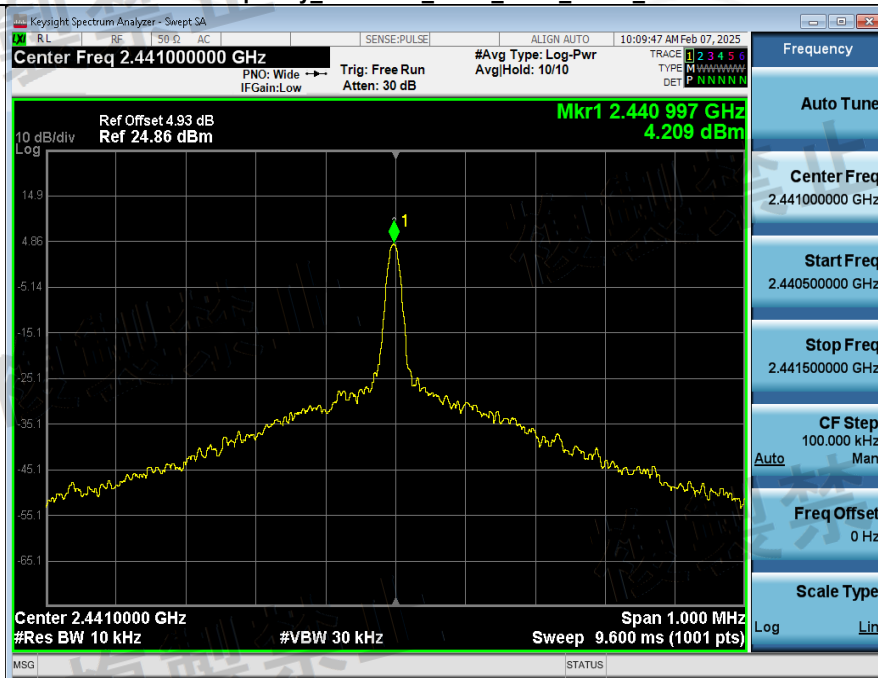




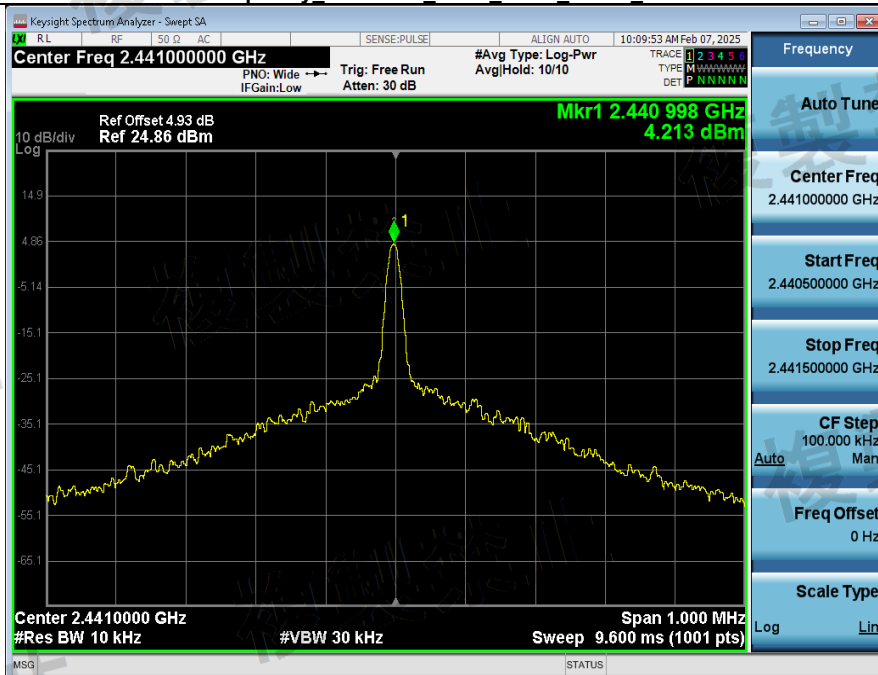
6. Frequency Tolerance

Condition	Antenna	Modulation	Frequency (MHz)	Test Frequency(MHz)	Frequency Tolerance(ppm)	Limit(ppm)	Result
NTNV	ANT1	un-modulation	2441.00	2440.997	-1.229	±50	Pass
NTLV	ANT1	un-modulation	2441.00	2440.998	-0.819	±50	Pass
NTHV	ANT1	un-modulation	2441.00	2440.998	-0.819	±50	Pass
NTNV	ANT1	un-modulation	2402.00	2401.997	-1.249	±50	Pass
NTLV	ANT1	un-modulation	2402.00	2401.997	-1.249	±50	Pass
NTHV	ANT1	un-modulation	2402.00	2401.997	-1.249	±50	Pass
NTNV	ANT1	un-modulation	2480.00	2479.997	-1.210	±50	Pass
NTLV	ANT1	un-modulation	2480.00	2479.997	-1.210	±50	Pass
NTHV	ANT1	un-modulation	2480.00	2479.997	-1.210	±50	Pass

Frequency_Tolerance_NTNV_ANT1_1-DH5_2441

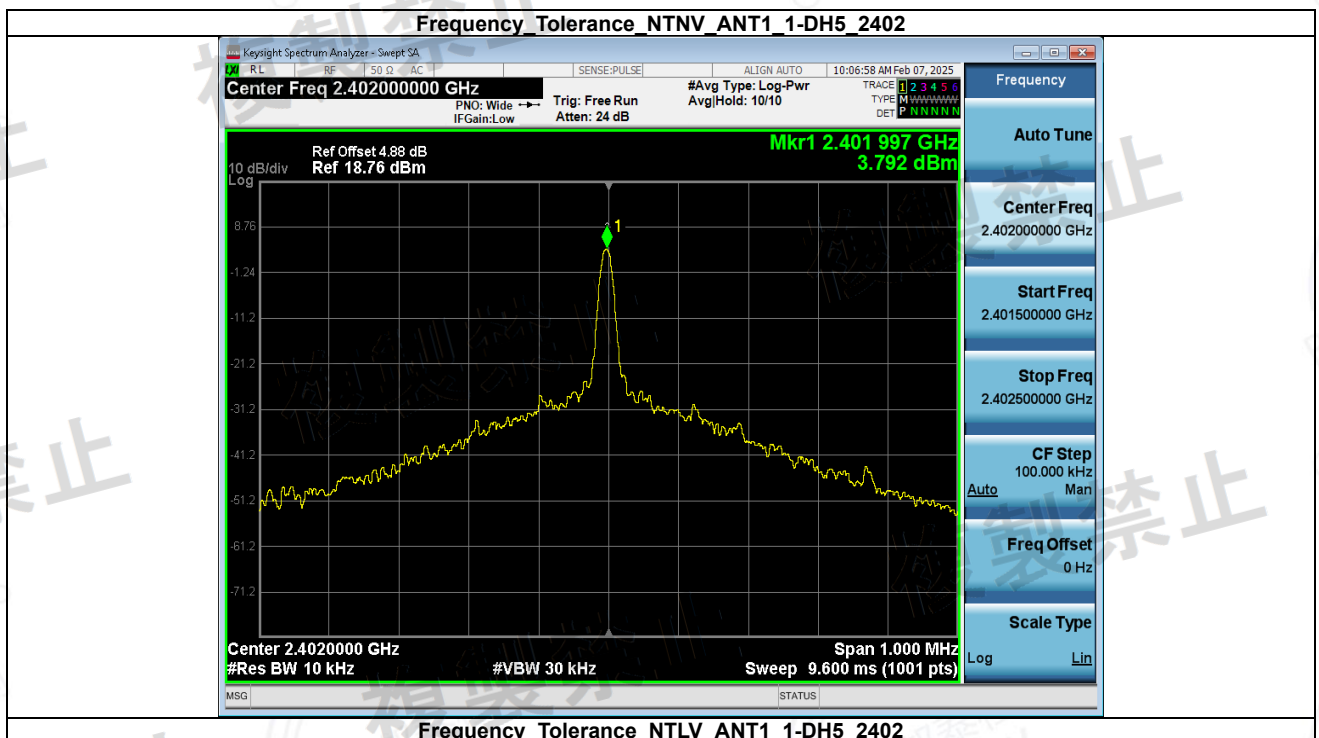
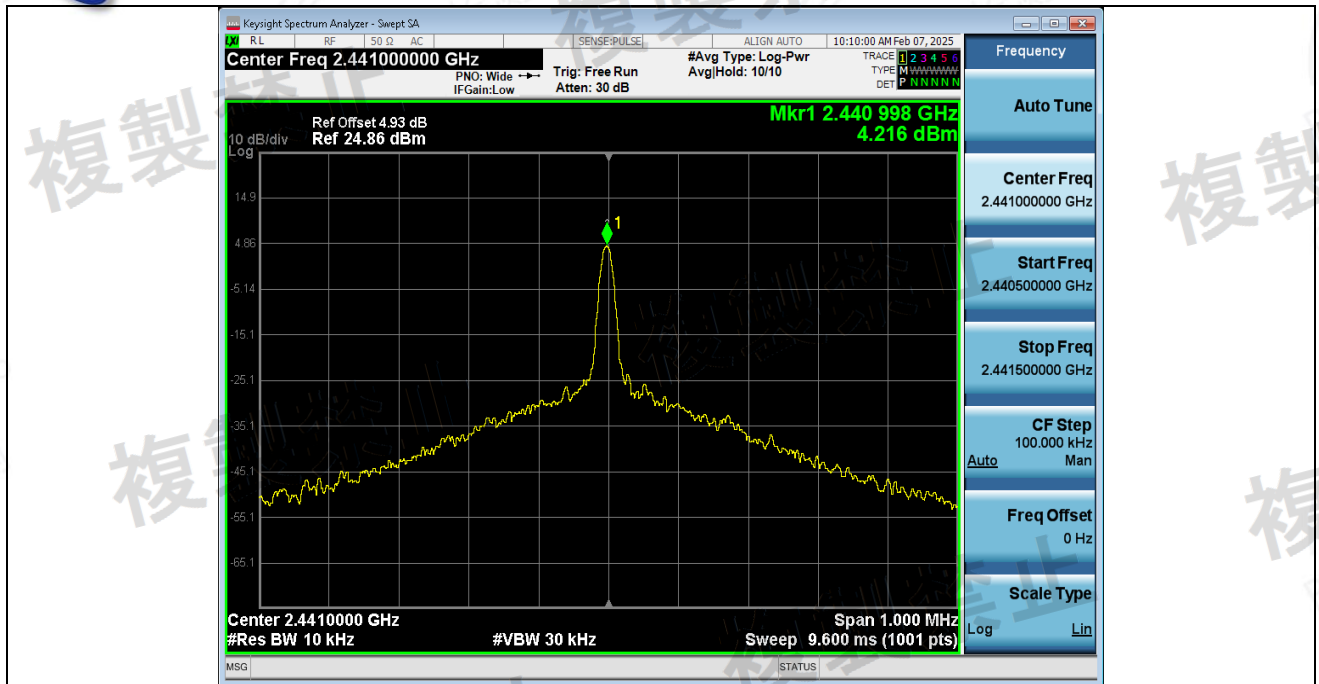


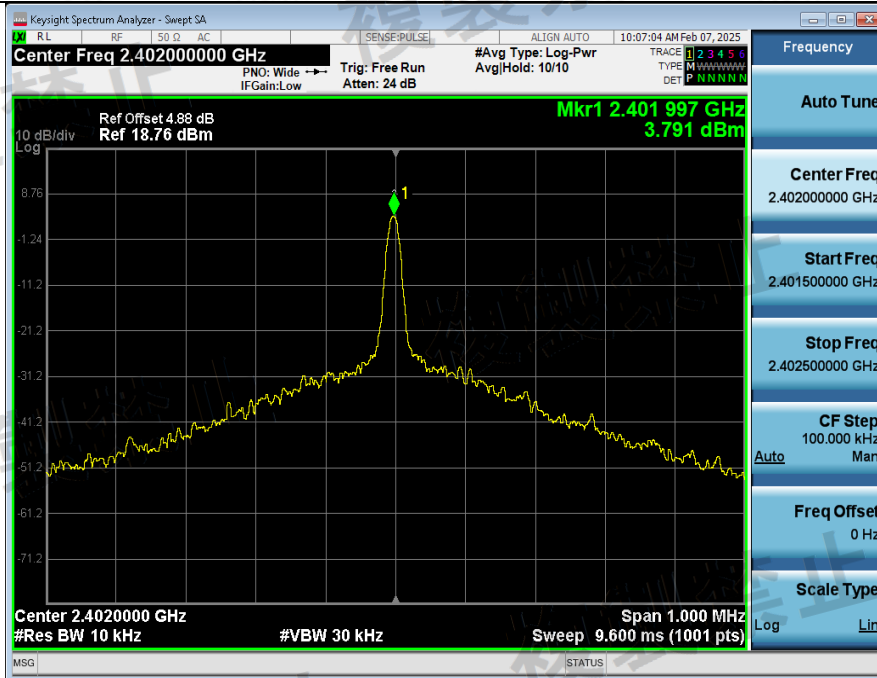
Frequency_Tolerance_NTLV_ANT1_1-DH5_2441



Frequency_Tolerance_NTHV_ANT1_1-DH5_2441





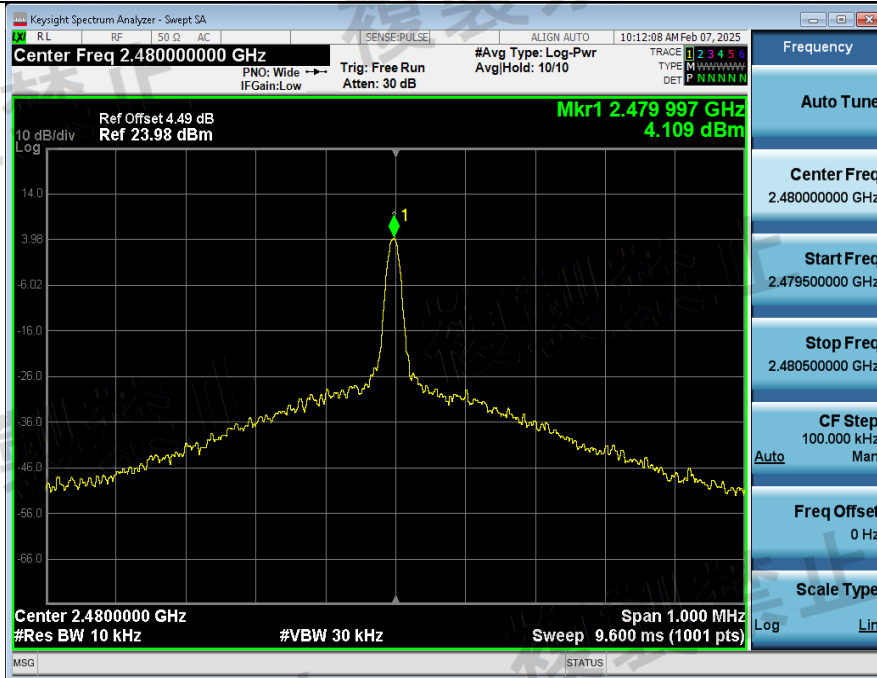


Frequency_Tolerance_NTHV_ANT1_1-DH5_2402

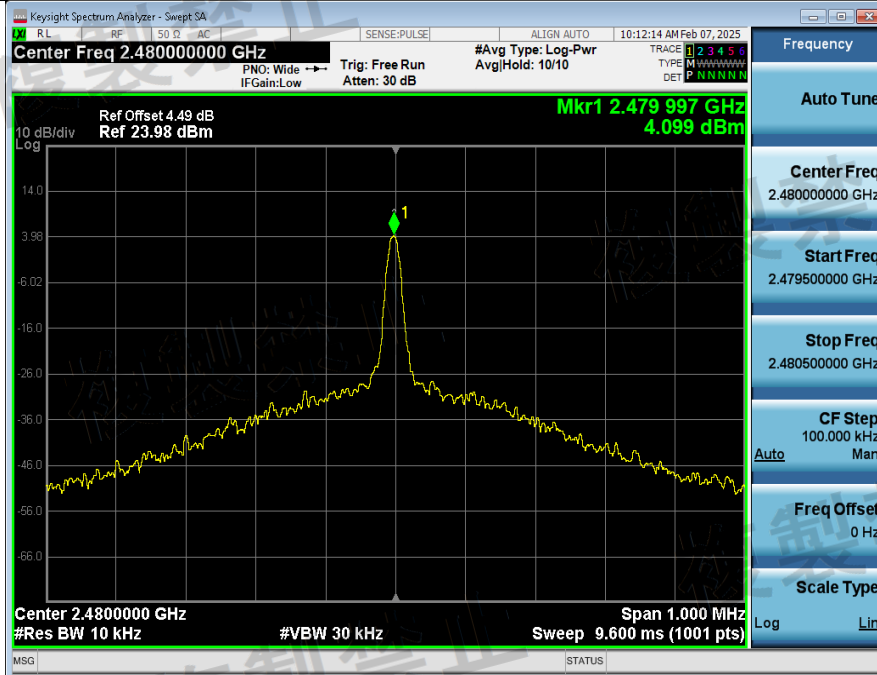


Frequency_Tolerance_NTNV_ANT1_1-DH5_2480



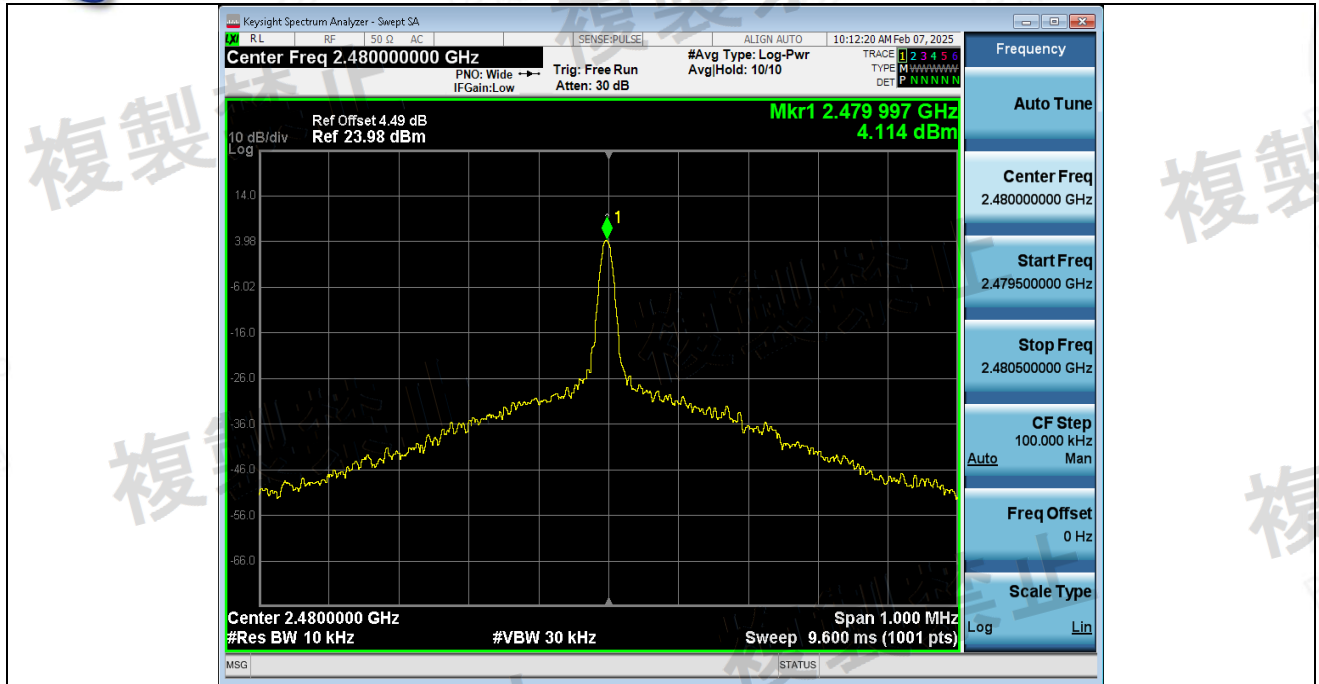


Frequency_Tolerance_NTLV_ANT1_1-DH5_2480



Frequency_Tolerance_NTHV_ANT1_1-DH5_2480

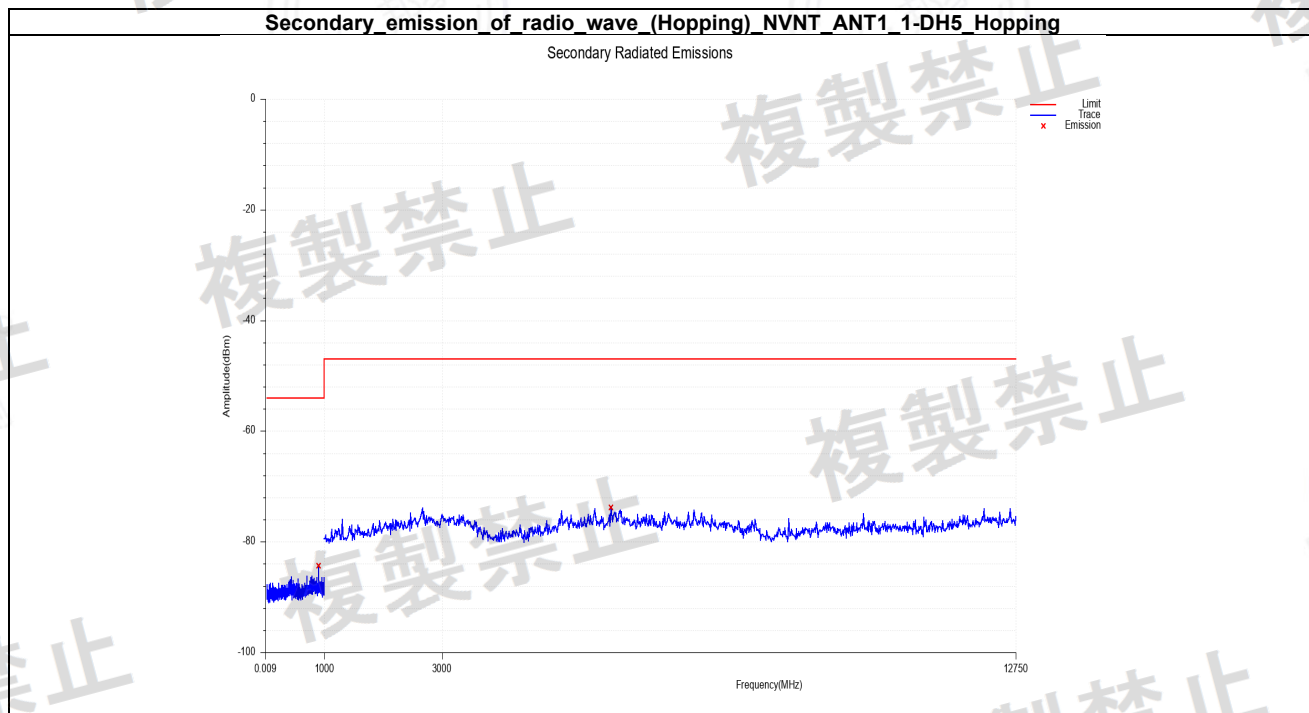




7. Secondary emission of radio wave (Hopping)

Condition	ANT	Mode	Channel	Range(MHz)	RBW(kHz)	Spur. Freq.(MHz)	Spur. Lev.(dBm)	Spur. Lev	Limit	Over 1/10 Limit	Read Lev.(dBm)	Read Lev.	Result
NVNT	ANT 1	1-DH5	Hopping	30.0~1000.0	100	901.06	-84.40	0.0036nW	4nW	NO	/	/	Pass
NVNT	ANT 1	1-DH5	Hopping	1000.0~12750.0	1000	5876.25	-73.79	0.0417nW	20nW	NO	/	/	Pass
NVNT	ANT 1	2-DH5	Hopping	30.0~1000.0	100	825.40	-85.99	0.0025nW	4nW	NO	/	/	Pass
NVNT	ANT 1	2-DH5	Hopping	1000.0~12750.0	1000	6922.00	-74.02	0.0395nW	20nW	NO	/	/	Pass
NVNT	ANT 1	3-DH5	Hopping	30.0~1000.0	100	966.05	-85.54	0.0027nW	4nW	NO	/	/	Pass
NVNT	ANT 1	3-DH5	Hopping	1000.0~12750.0	1000	1940.00	-62.53	0.5586nW	20nW	NO	/	/	Pass

Secondary emission of radio wave (Hopping) NVNT ANT1 1-DH5 Hopping



Secondary emission of radio wave (Hopping) NVNT ANT1 2-DH5 Hopping

