



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Electric Wind Instrument

Test Model: EWIL1

Environmental Conditions

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





A.1 20dB Emission Bandwidth

Test Result

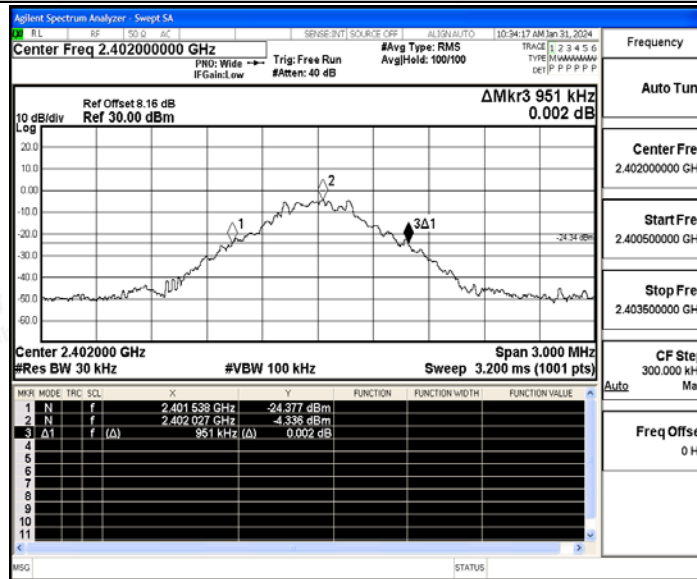
TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.951	2401.538	2402.489	---	---
		2441	0.945	2440.541	2441.486	---	---
		2480	1.029	2479.478	2480.507	---	---
2DH5	Ant1	2402	1.311	2401.346	2402.657	---	---
		2441	1.290	2440.364	2441.654	---	---
		2480	1.338	2479.331	2480.669	---	---
3DH5	Ant1	2402	1.296	2401.343	2402.639	---	---
		2441	1.305	2440.349	2441.654	---	---
		2480	1.305	2479.349	2480.654	---	---



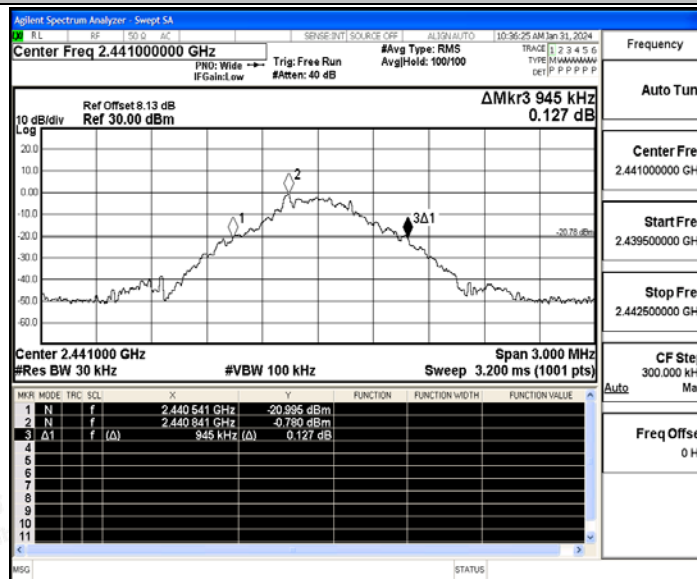


Test Graphs

DH5_Ant1_2402

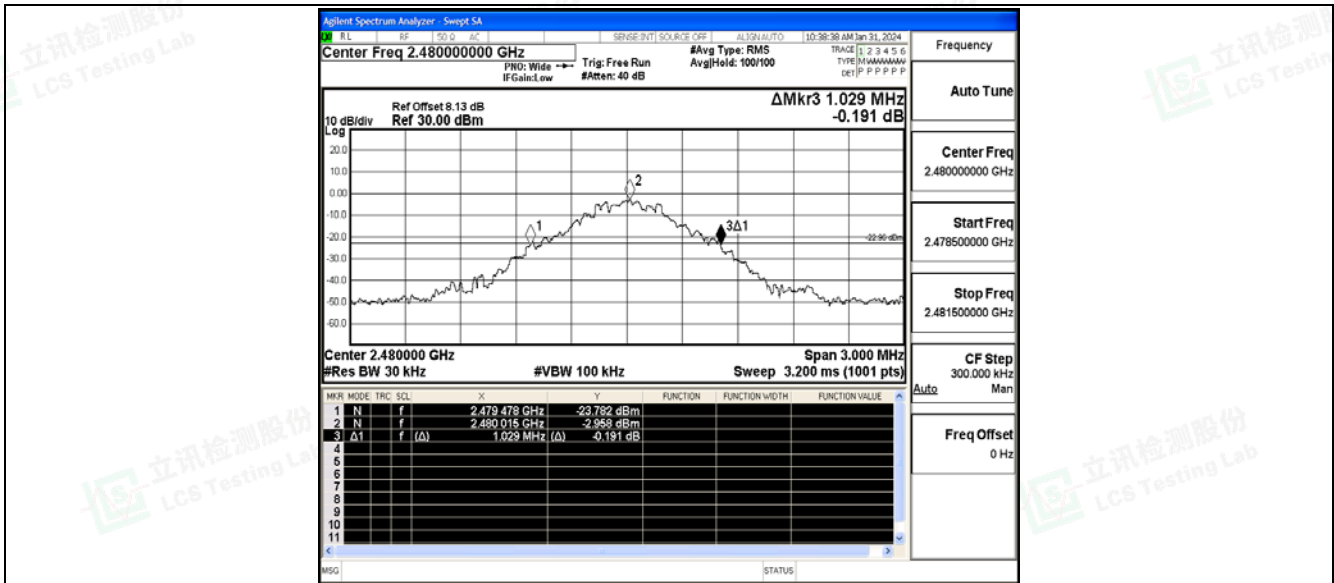


DH5_Ant1_2441

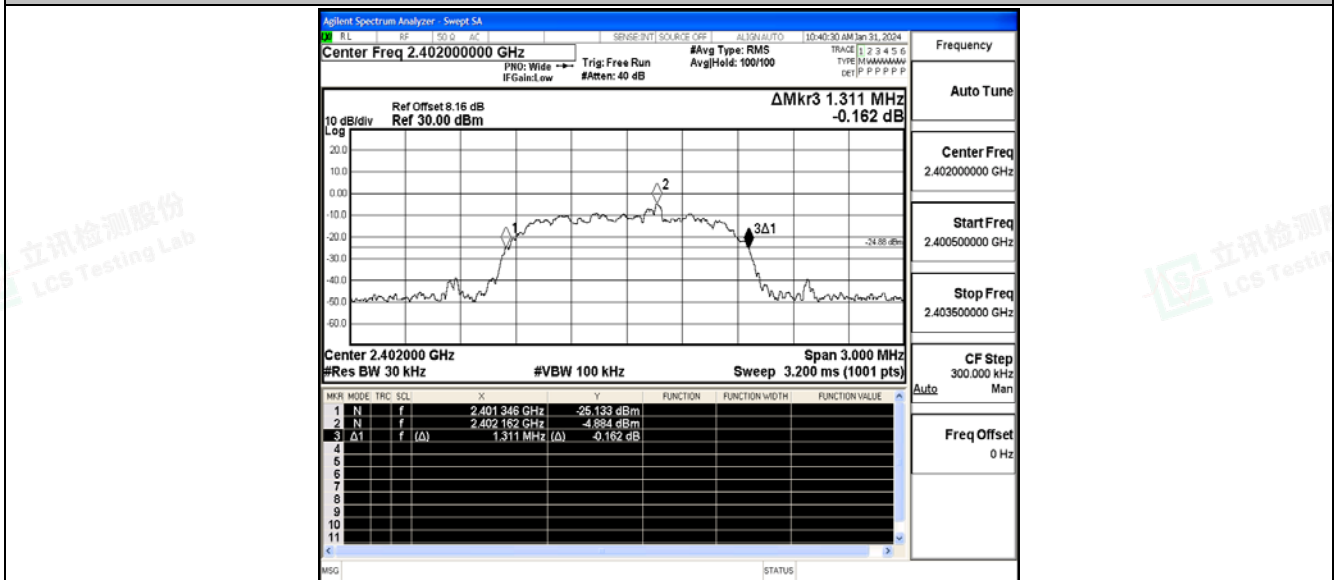


DH5_Ant1_2480



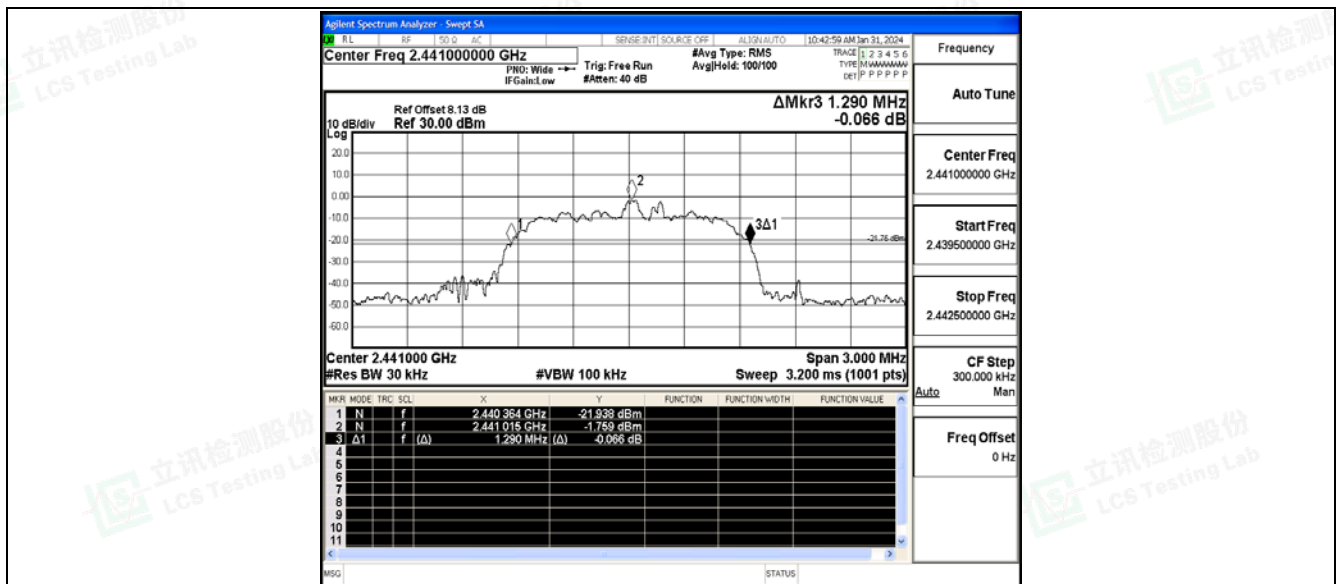


2DH5_Ant1_2402

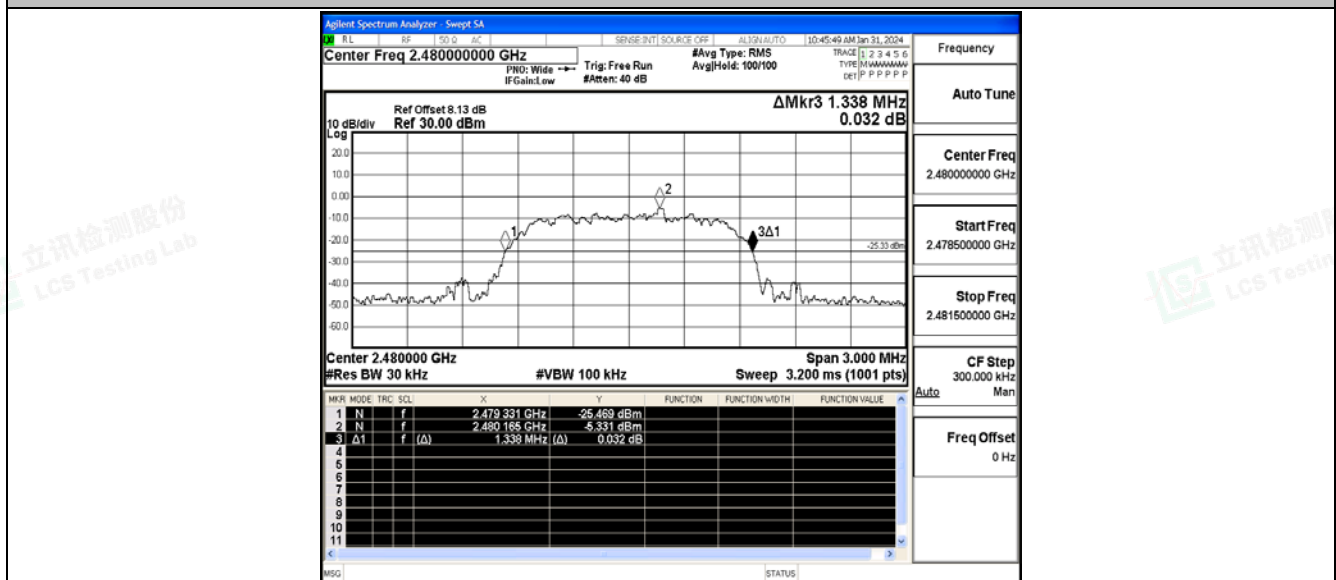


2DH5_Ant1_2441



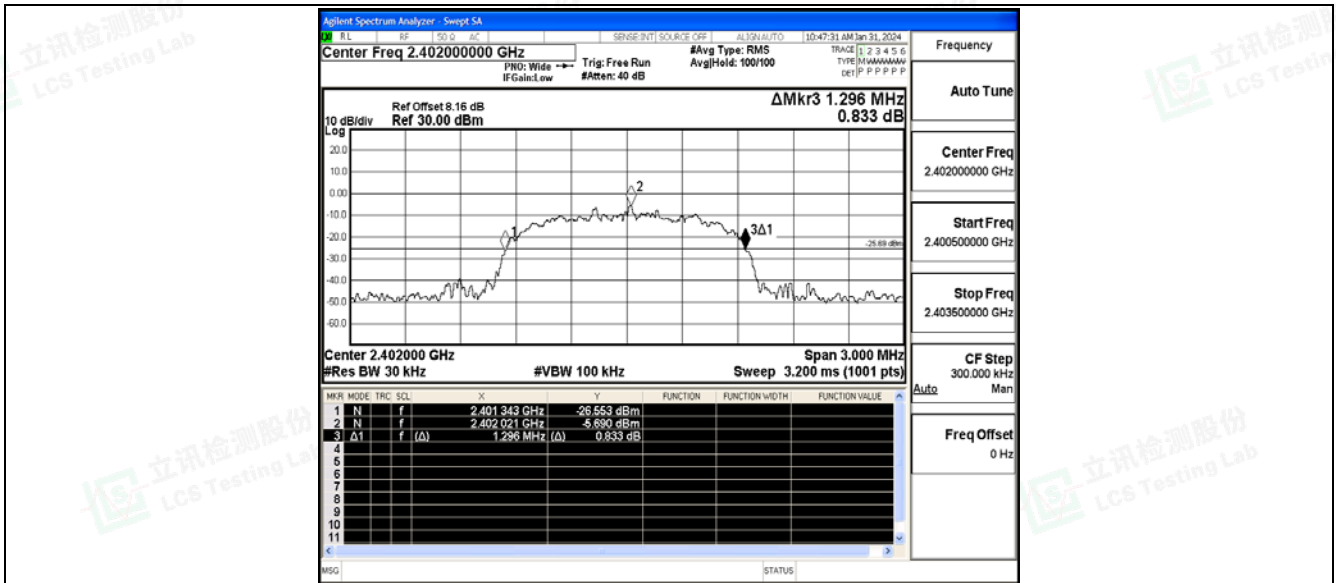


2DH5_Ant1_2480

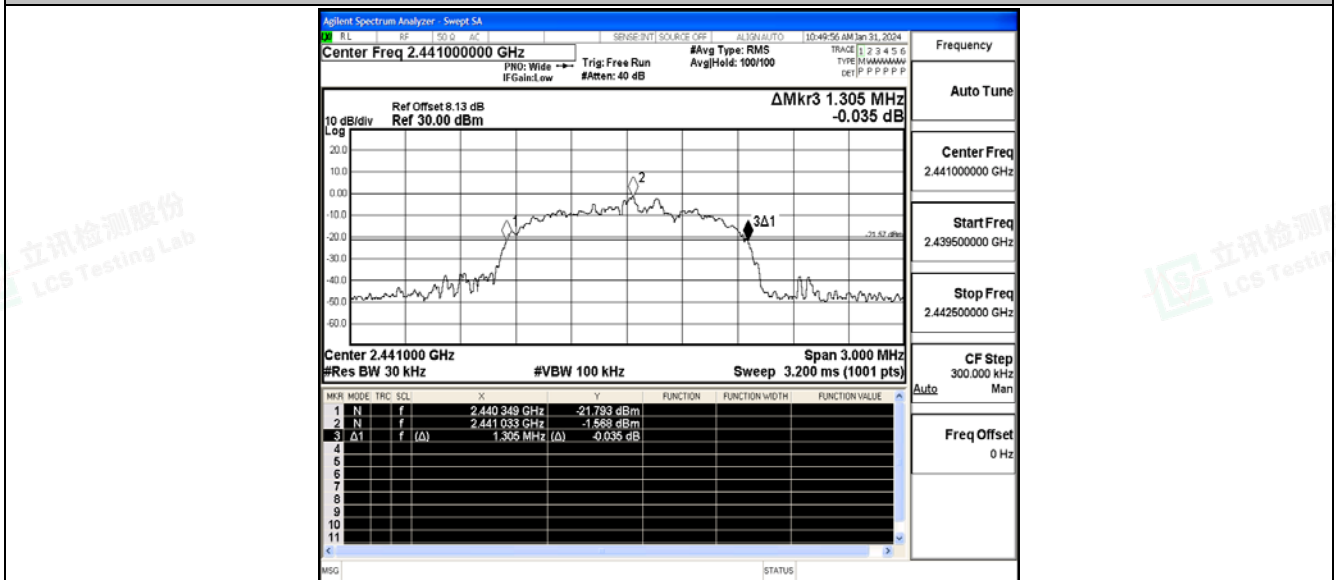


3DH5_Ant1_2402



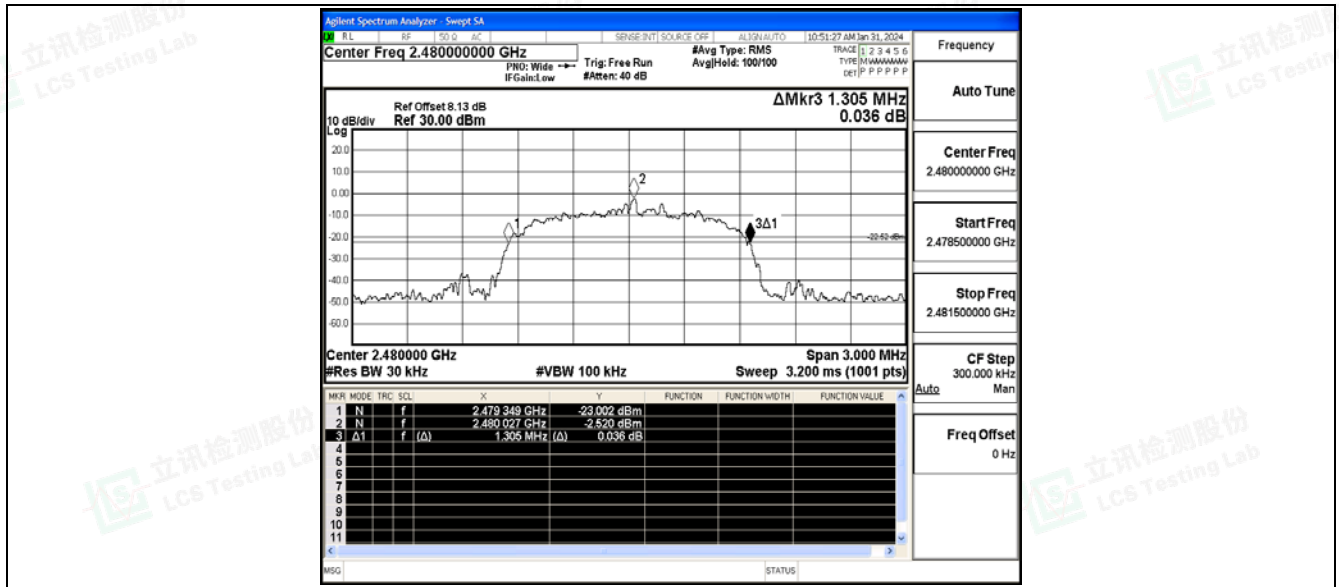


3DH5_Ant1_2441



3DH5_Ant1_2480







A.2 Maximum conducted output power

Test Result Peak

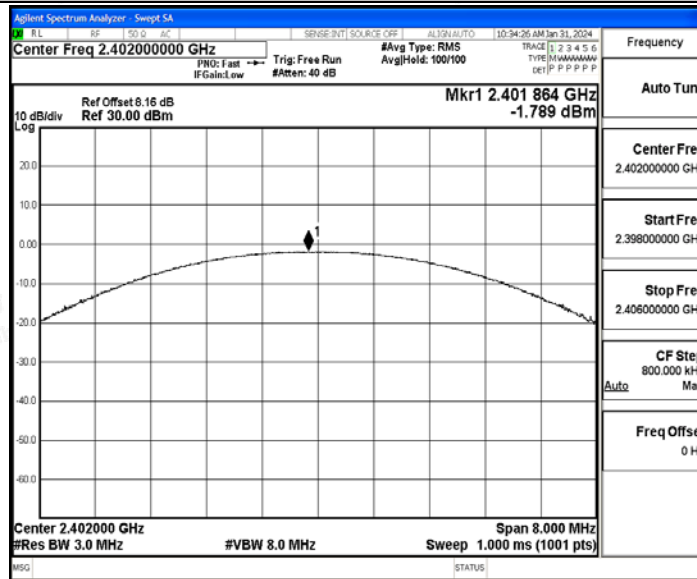
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-1.79	≤20.97	PASS
		2441	0.71	≤20.97	PASS
		2480	0.08	≤20.97	PASS
2DH5	Ant1	2402	0.17	≤20.97	PASS
		2441	2.63	≤20.97	PASS
		2480	1.48	≤20.97	PASS
3DH5	Ant1	2402	0.56	≤20.97	PASS
		2441	2.88	≤20.97	PASS
		2480	1.74	≤20.97	PASS



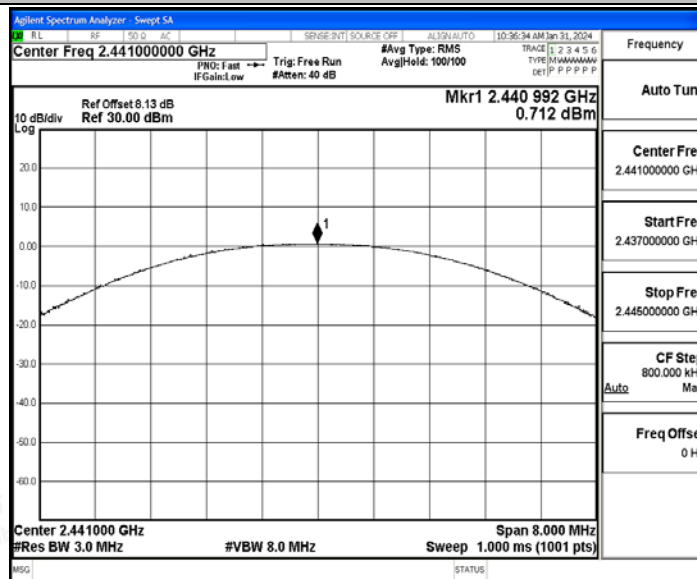


Test Graphs

DH5_Ant1_2402

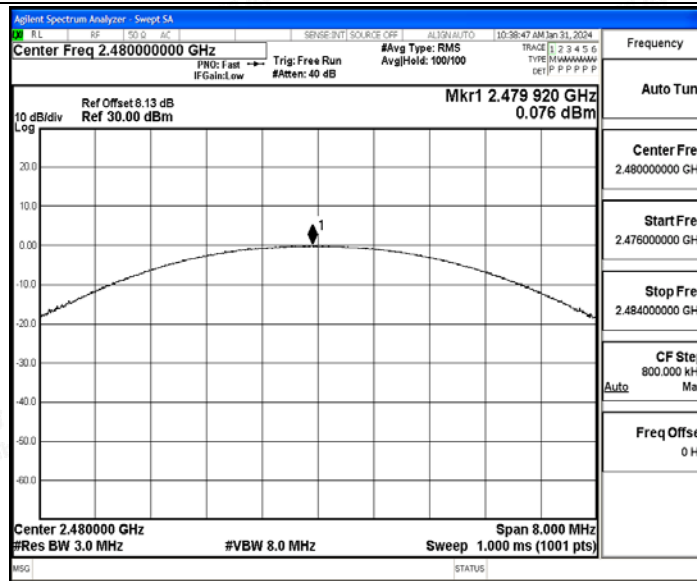


DH5_Ant1_2441

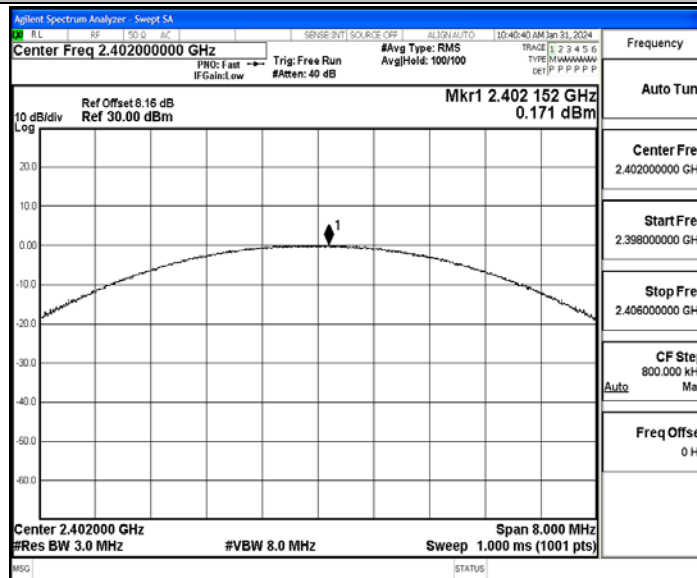


DH5_Ant1_2480



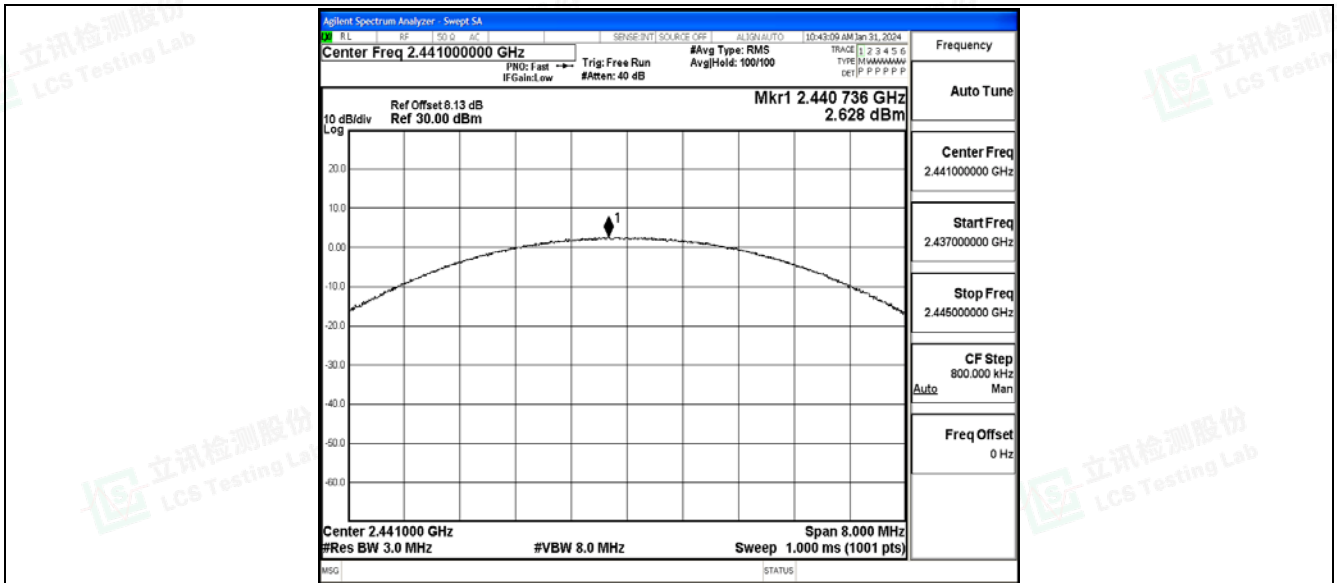


2DH5_Ant1_2402

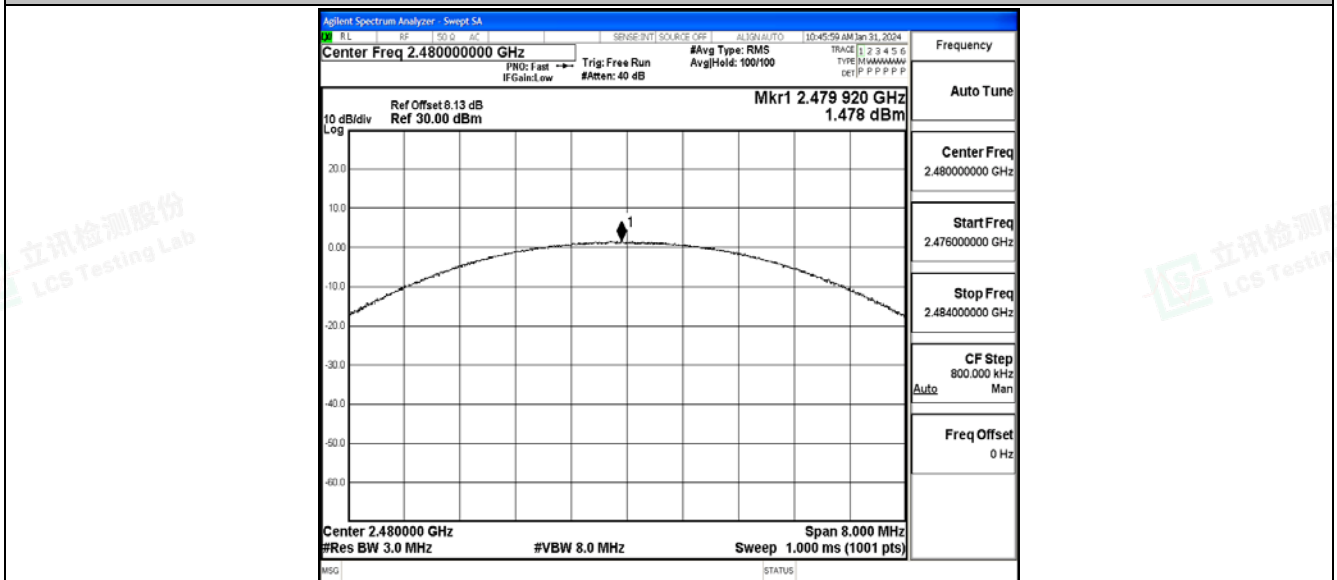


2DH5_Ant1_2441



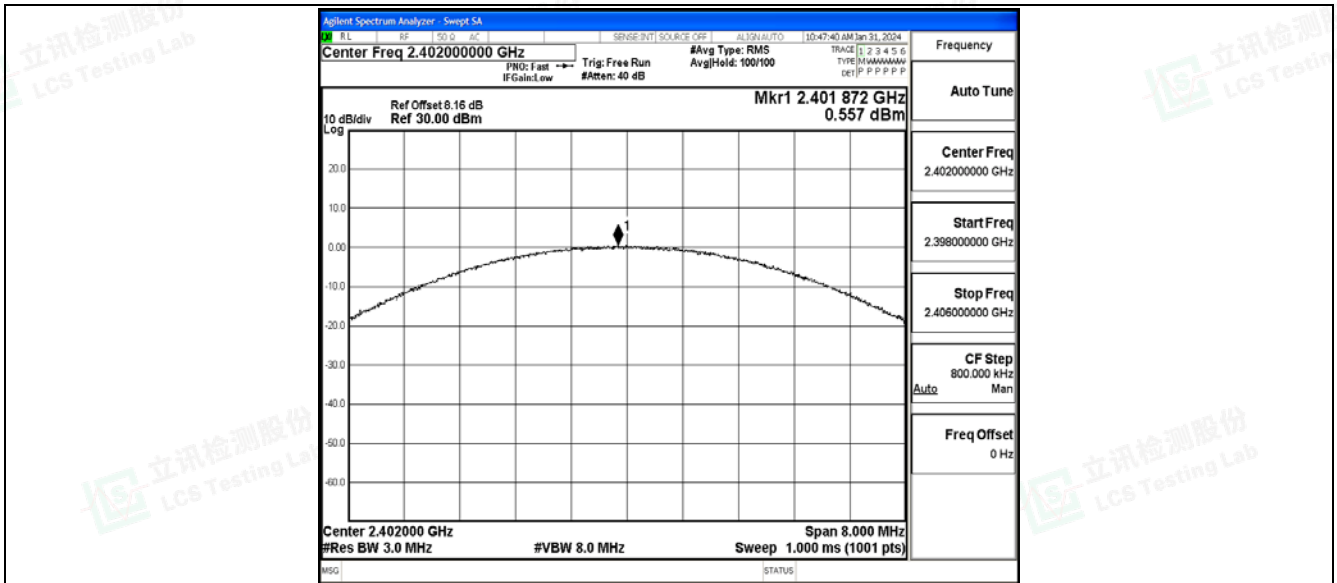


2DH5_Ant1_2480

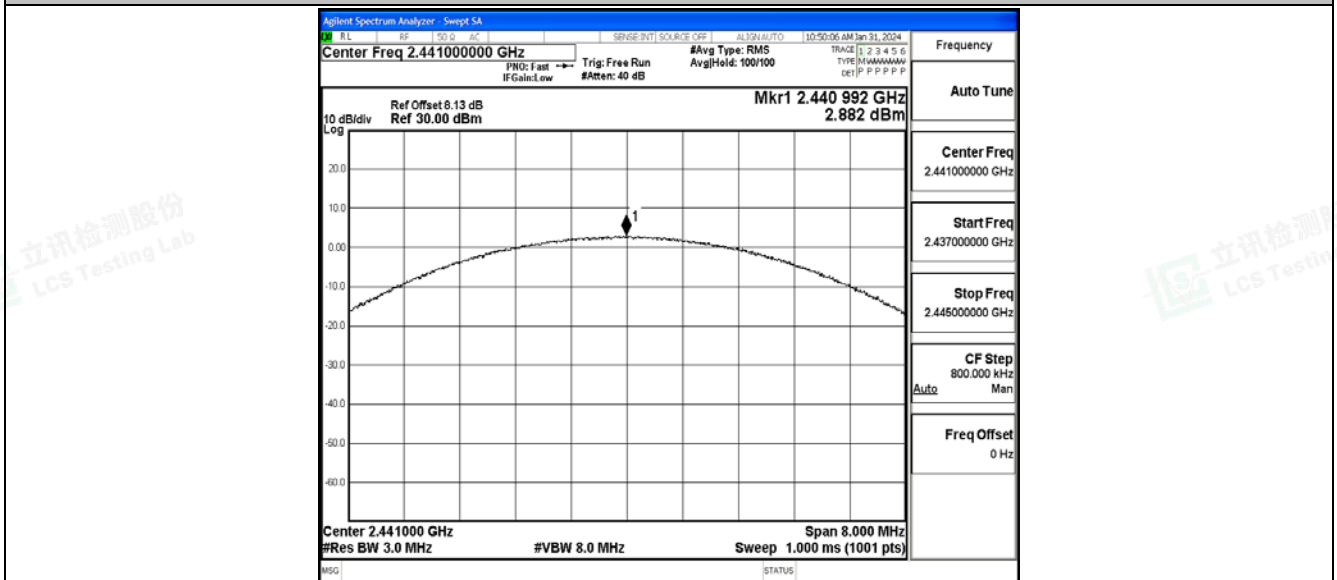


3DH5_Ant1_2402



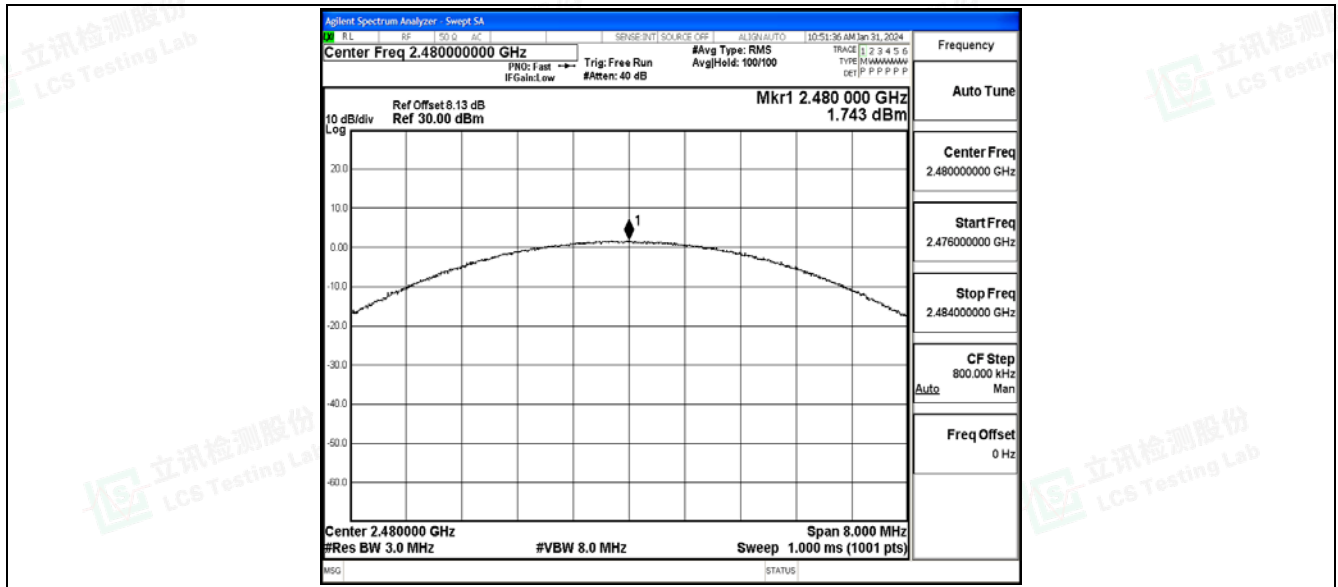


3DH5_Ant1_2441



3DH5_Ant1_2480







A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.012	≥0.686	PASS
2DH5	Ant1	Hop	1.042	≥0.892	PASS
3DH5	Ant1	Hop	0.99	≥0.870	PASS

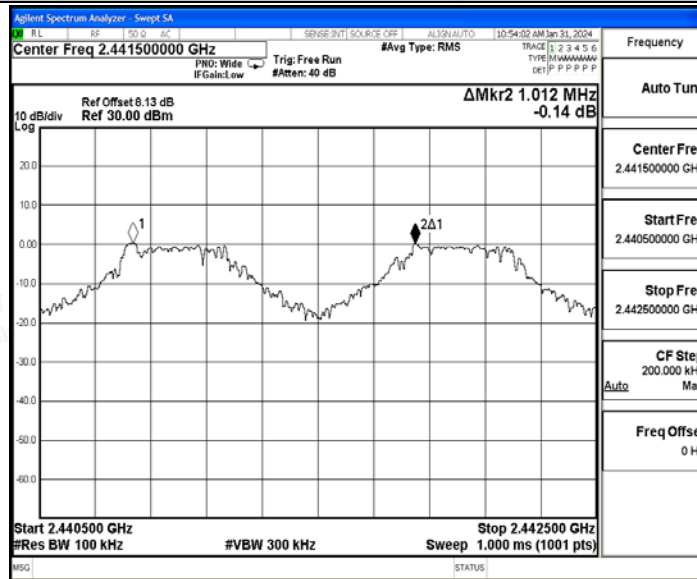


Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

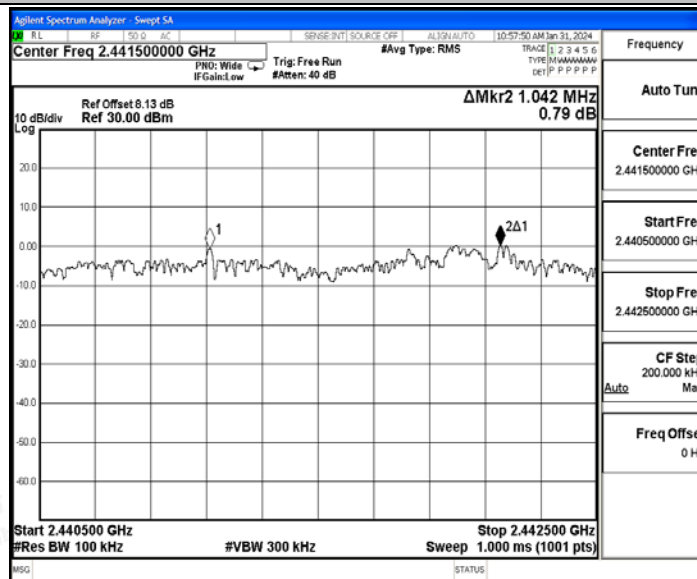


Test Graphs

DH5_Ant1_Hop

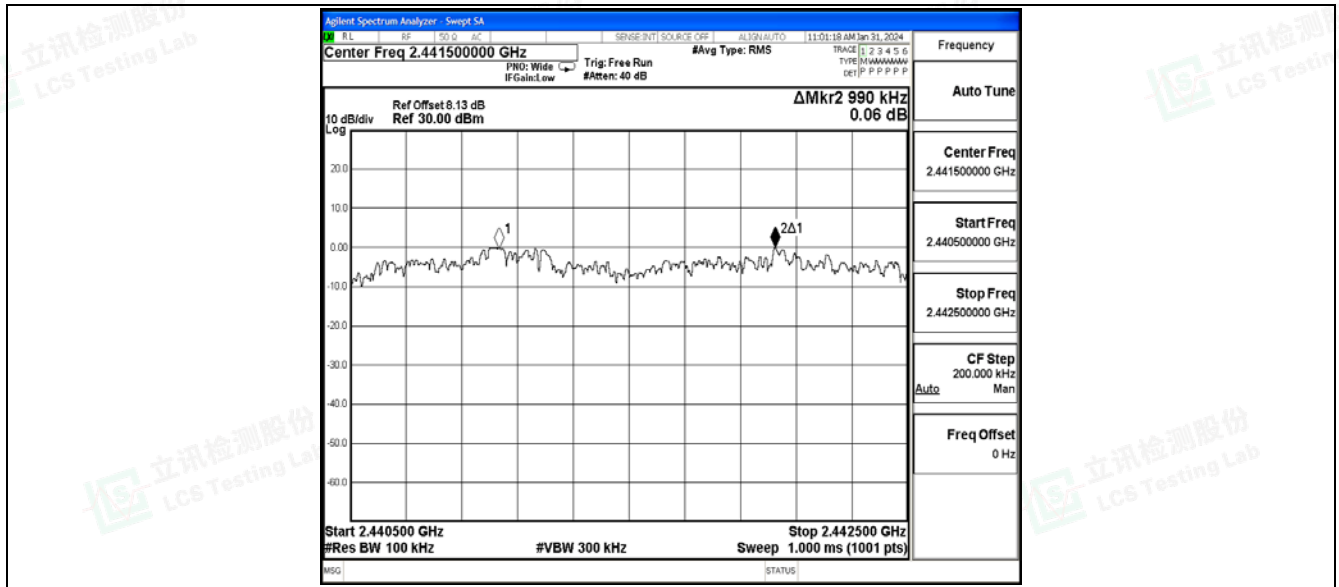


2DH5_Ant1_Hop



3DH5_Ant1_Hop







A.4 Time of occupancy

Test Result

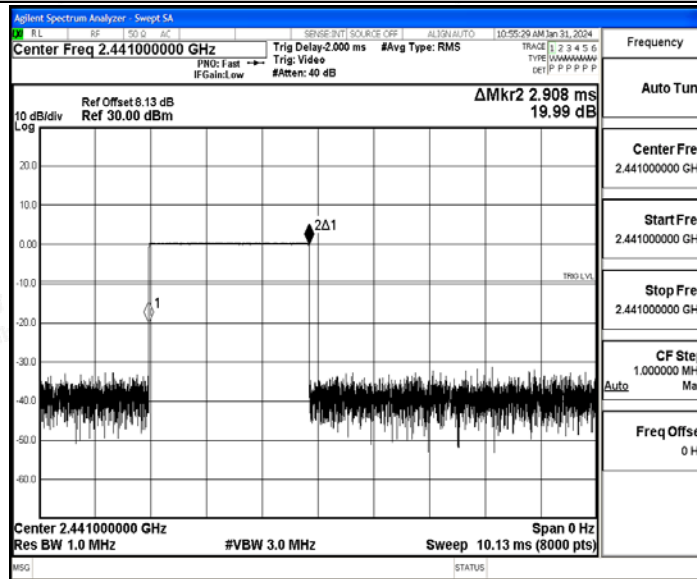
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.908	106.67	0.31	≤0.4	PASS
2DH5	Ant1	Hop	2.897	106.67	0.309	≤0.4	PASS
3DH5	Ant1	Hop	2.896	106.67	0.309	≤0.4	PASS



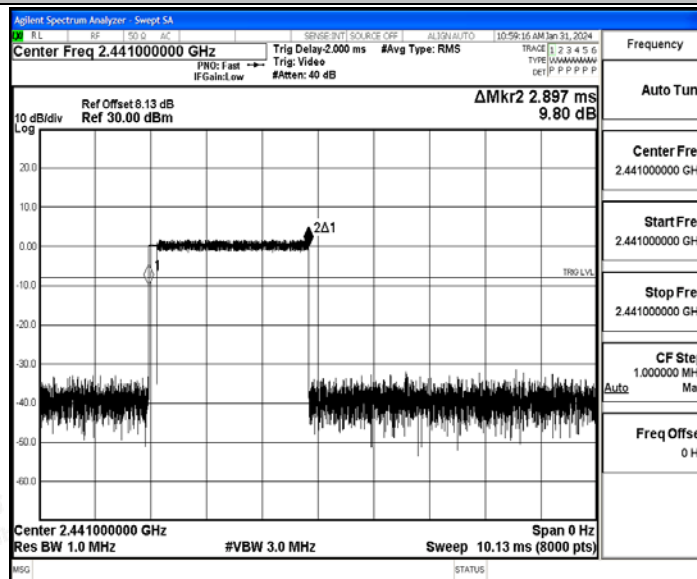


Test Graphs

DH5_Ant1_Hop

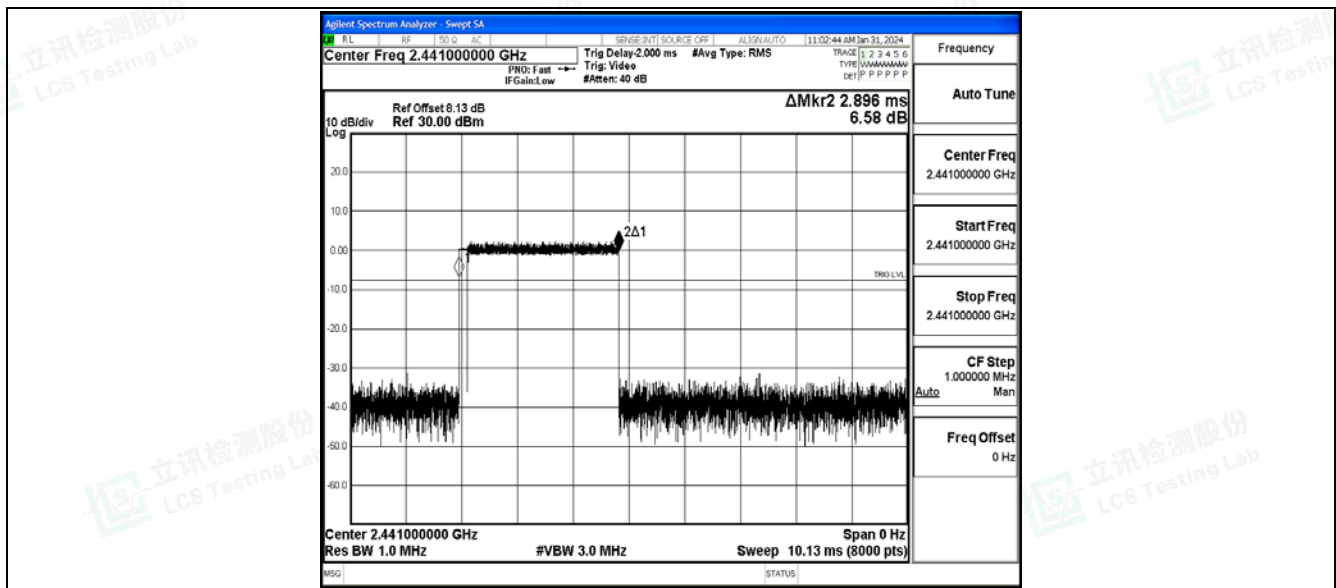


2DH5_Ant1_Hop



3DH5_Ant1_Hop







A.5 Number of hopping channels

Test Result

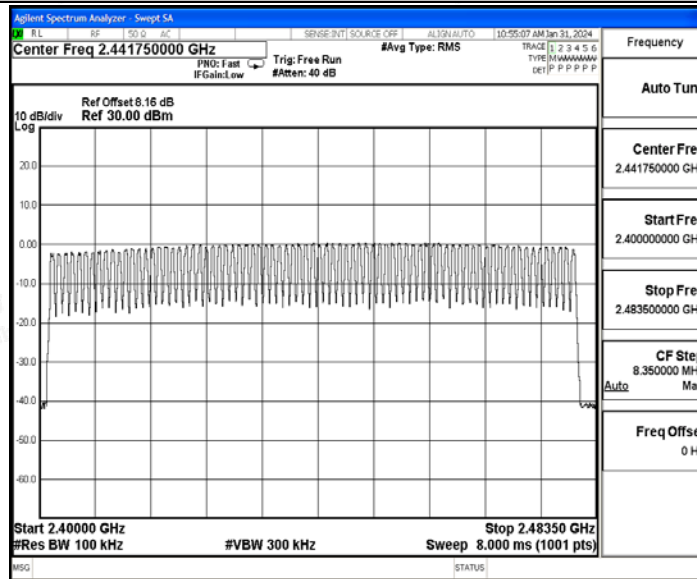
TestMode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS



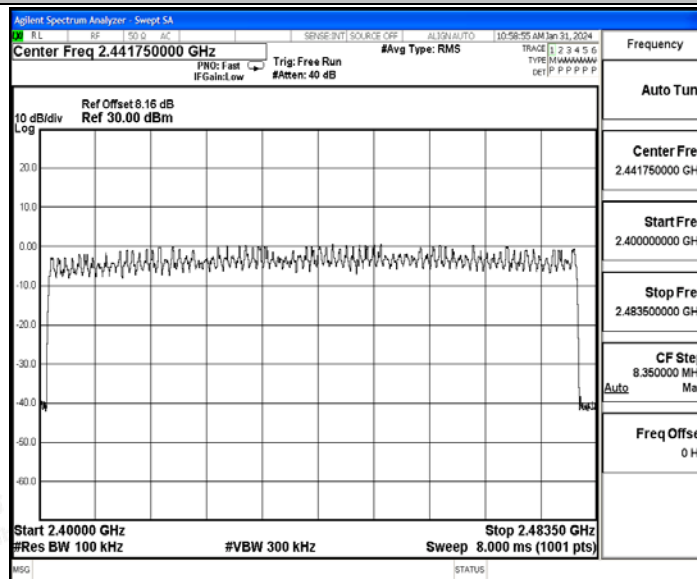


Test Graphs

DH5_Ant1_Hop

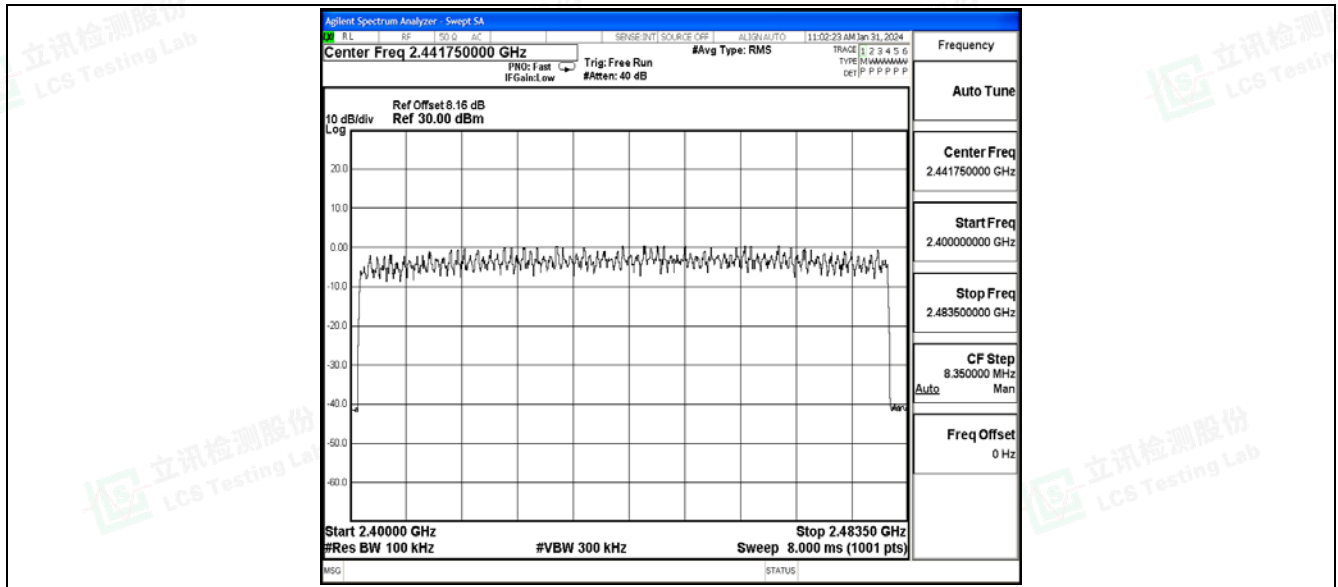


2DH5_Ant1_Hop



3DH5_Ant1_Hop







A.6 Band edge measurements

Test Result

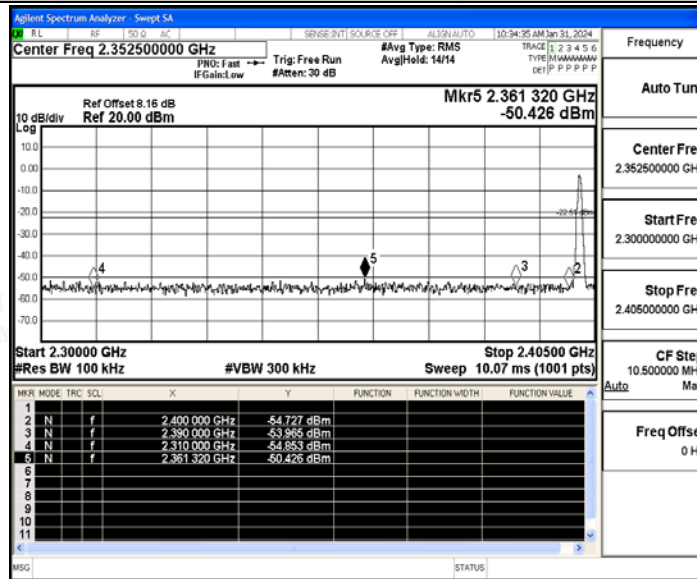
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-2.51	-50.43	≤ -22.51	PASS
		High	2480	-0.73	-50.59	≤ -20.73	PASS
		Low	Hop_2402	-2.69	-49.5	≤ -22.69	PASS
		High	Hop_2480	-0.58	-49.22	≤ -20.58	PASS
2DH5	Ant1	Low	2402	-3.10	-50.13	≤ -23.1	PASS
		High	2480	-0.70	-50.3	≤ -20.7	PASS
		Low	Hop_2402	-3.80	-49.79	≤ -23.8	PASS
		High	Hop_2480	-1.35	-49.42	≤ -21.35	PASS
3DH5	Ant1	Low	2402	-2.34	-50.76	≤ -22.34	PASS
		High	2480	-1.87	-50.66	≤ -21.87	PASS
		Low	Hop_2402	-3.42	-49.99	≤ -23.42	PASS
		High	Hop_2480	-1.18	-49.48	≤ -21.18	PASS



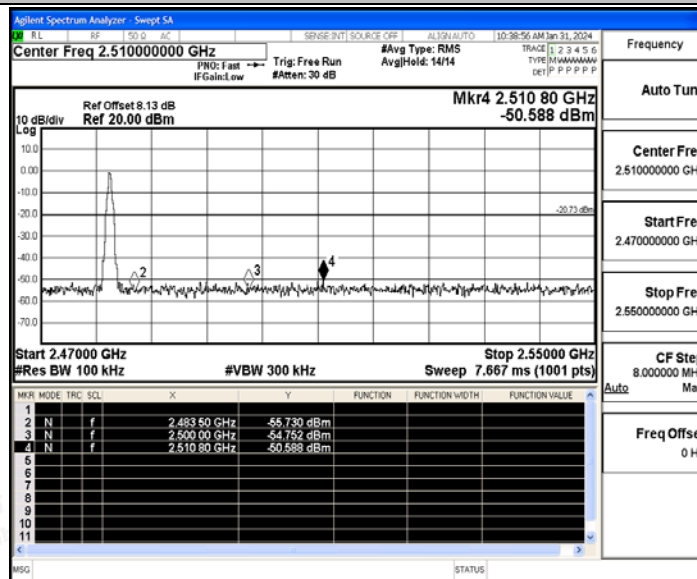


Test Graphs

DH5_Ant1_Low_2402

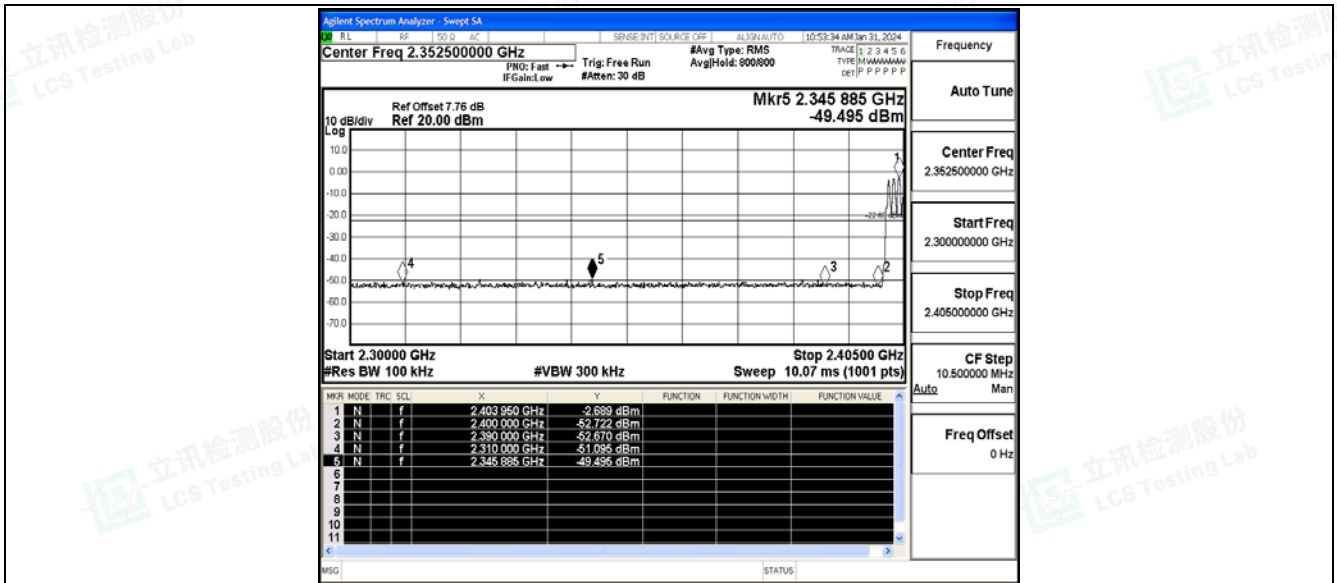


DH5_Ant1_High_2480

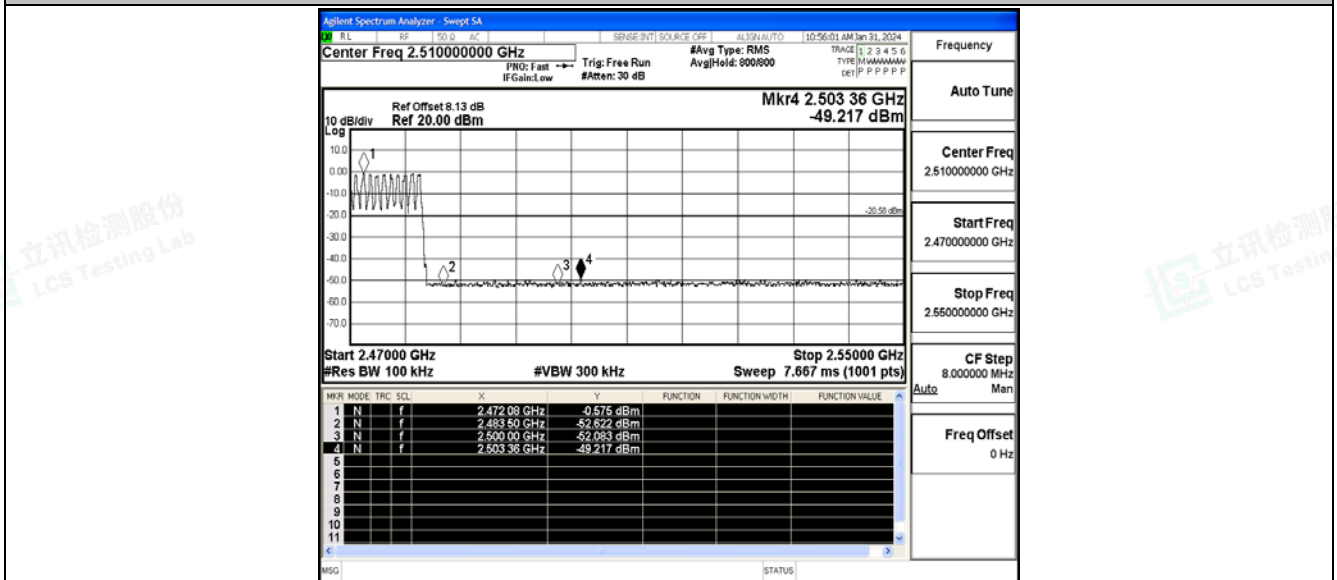


DH5_Ant1_Low_Hop_2402



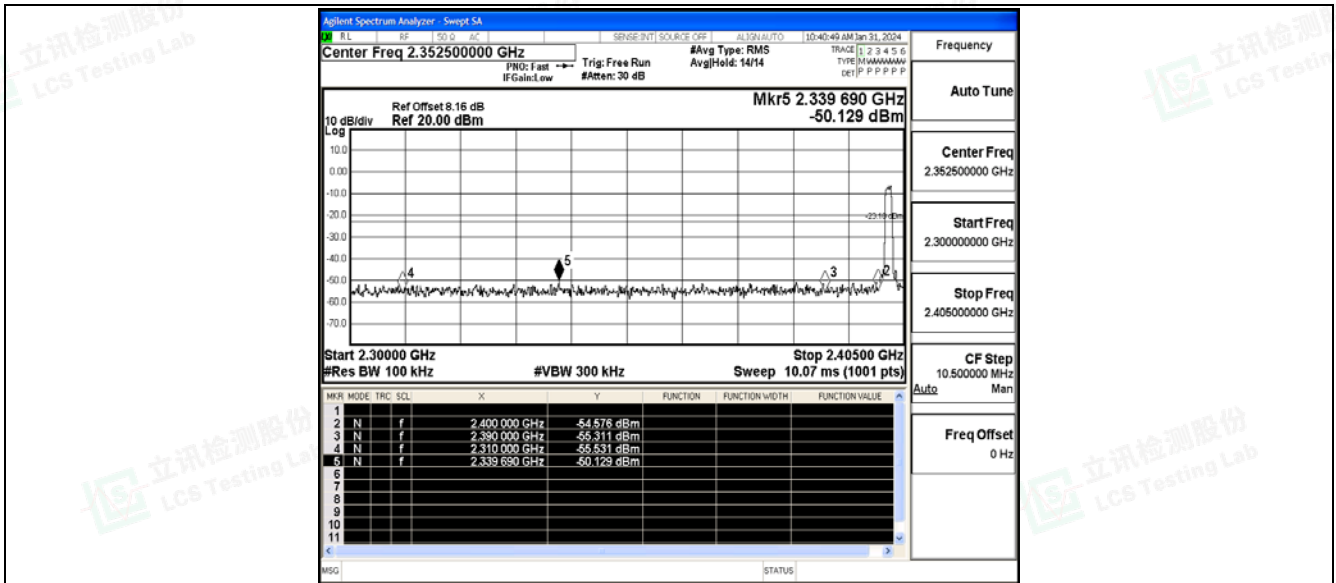


DH5_Ant1_High_Hop_2480

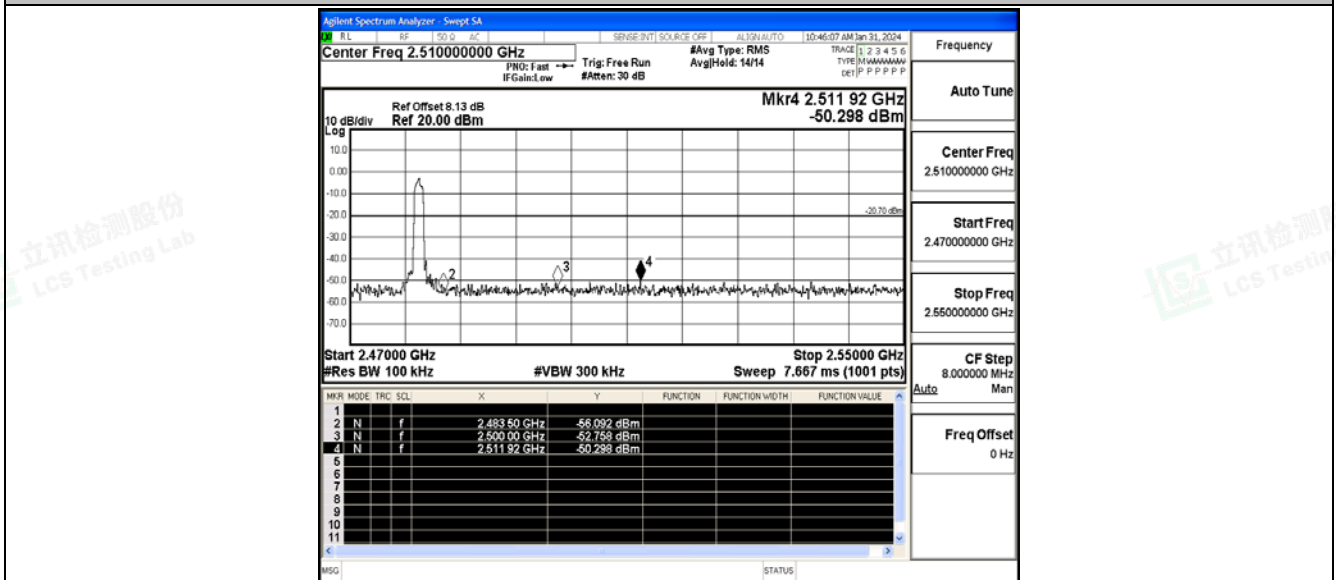


2DH5_Ant1_Low_2402



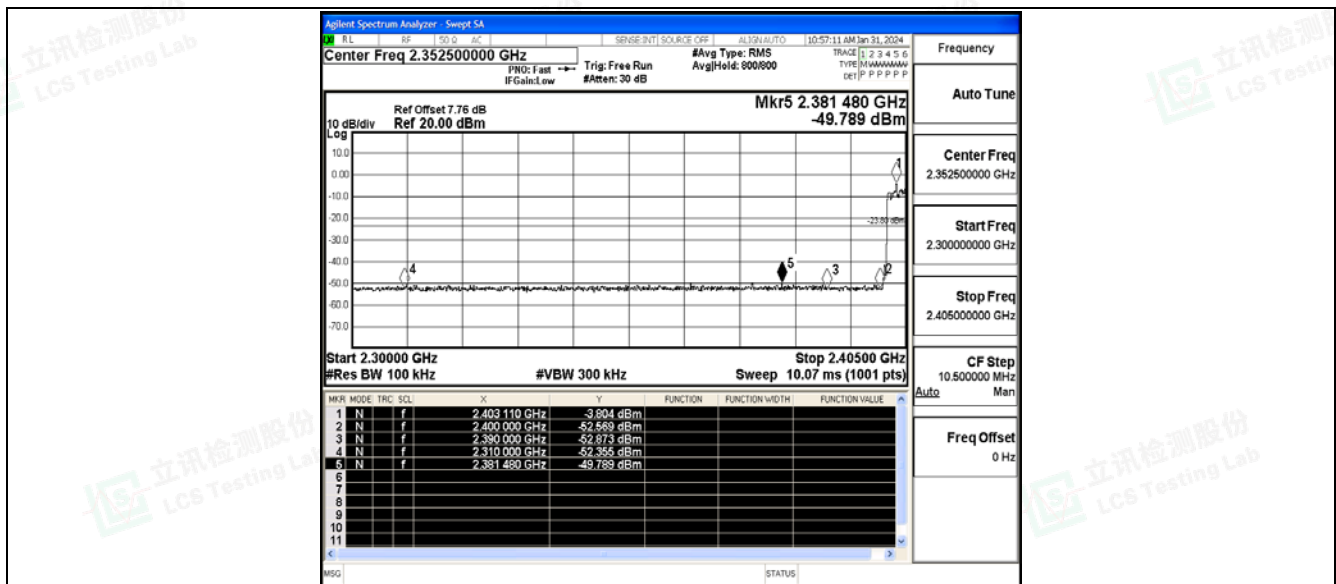


2DH5_Ant1_High_2480

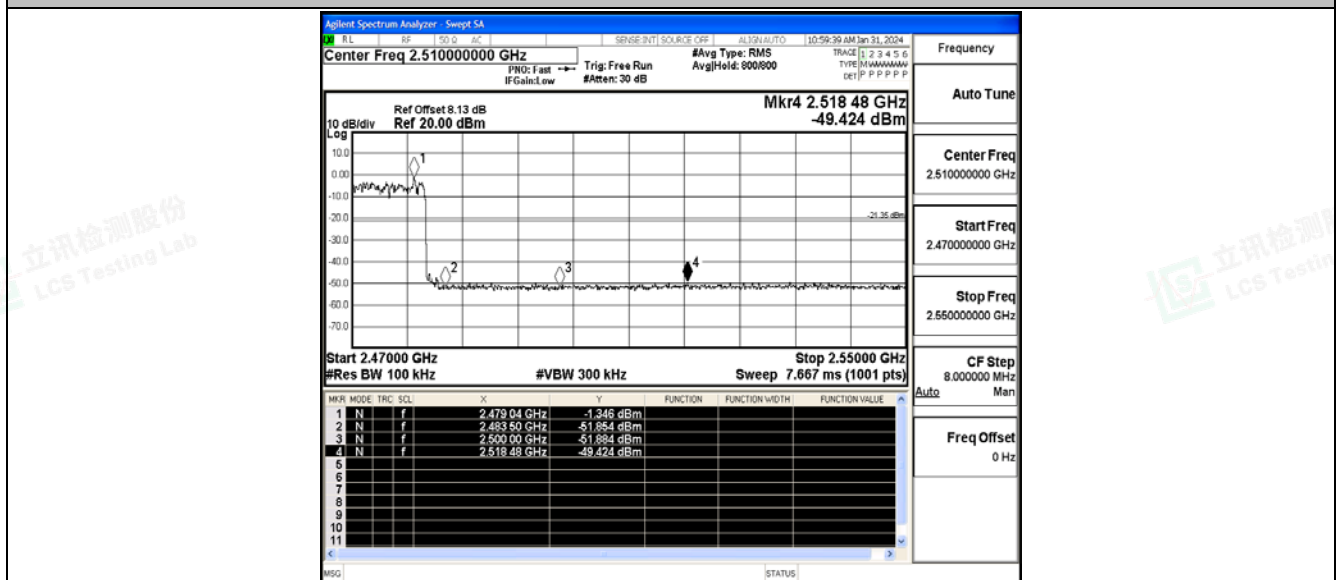


2DH5_Ant1_Low_Hop_2402



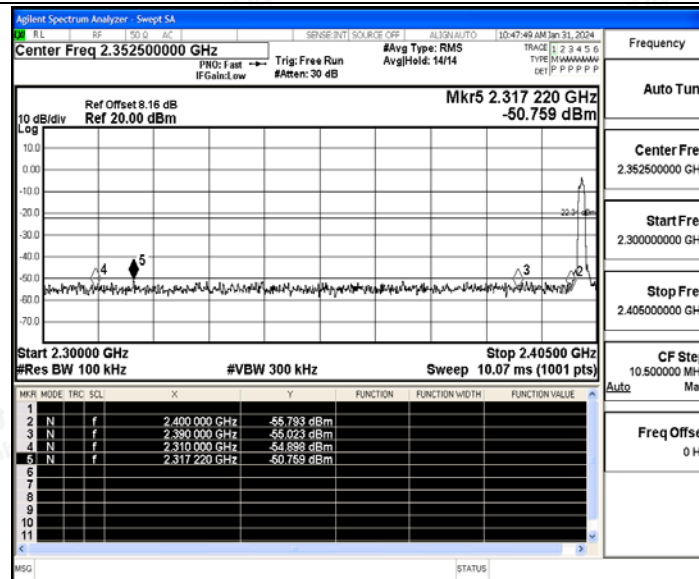


2DH5_Ant1_High_Hop_2480

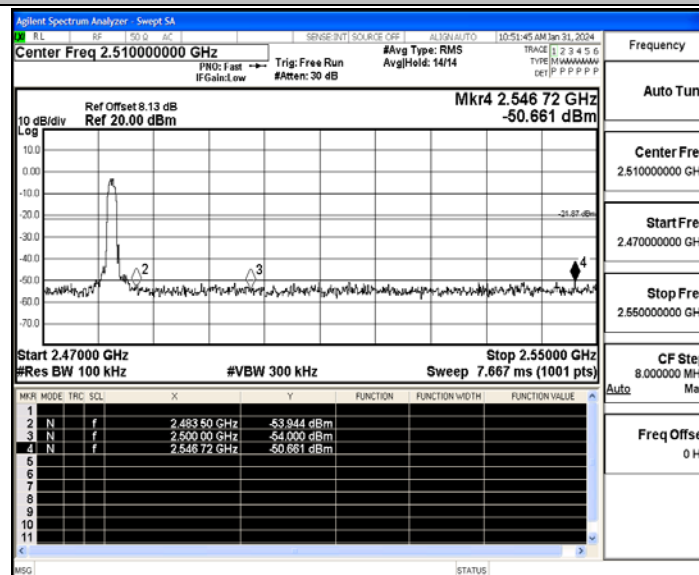


3DH5_Ant1_Low_2402



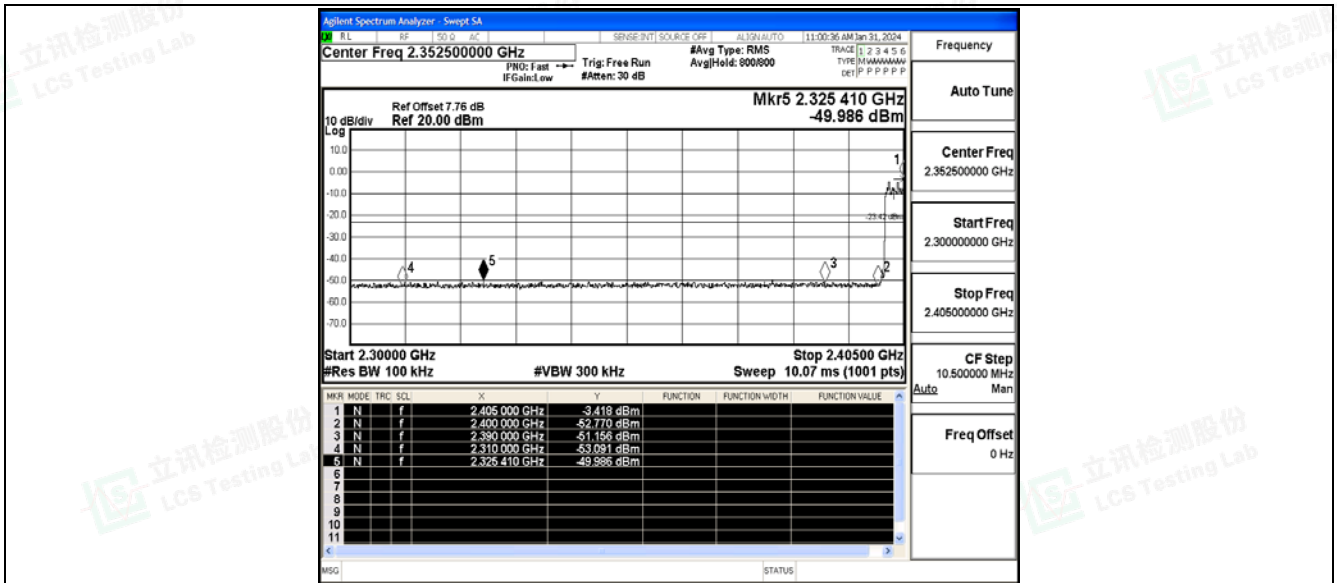


3DH5_Ant1_High_2480

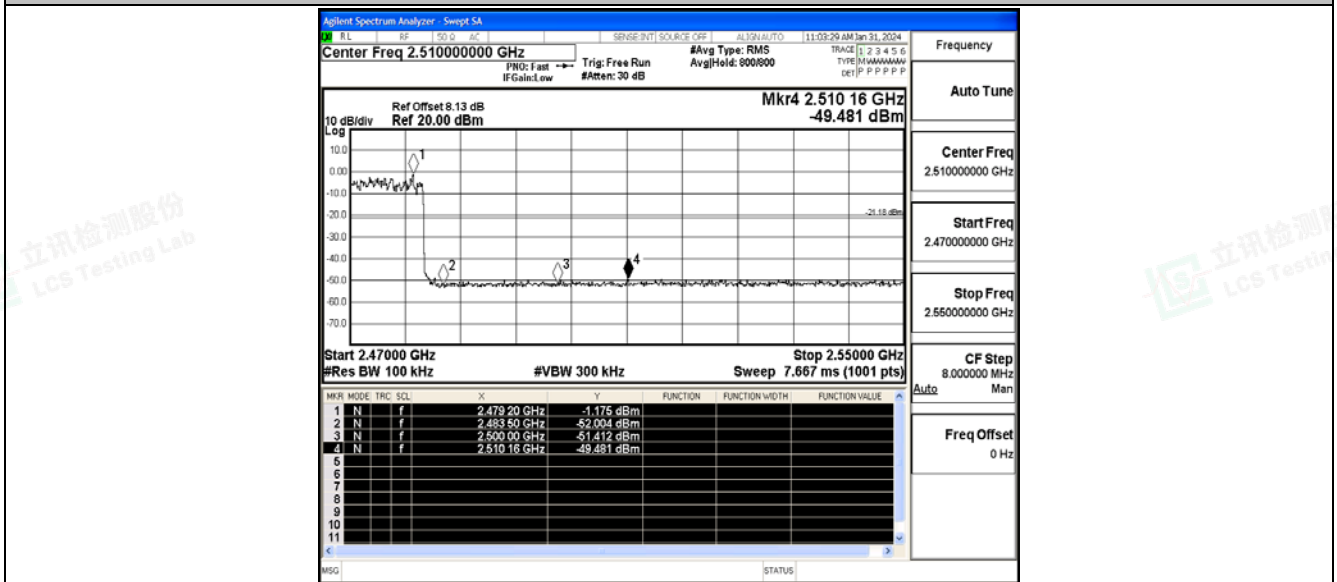


3DH5_Ant1_Low_Hop_2402





3DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	30~1000	-2.51	-61.85	≤-22.51	PASS
			1000~26500	-2.51	-49.13	≤-22.51	PASS
		2441	30~1000	0.26	-61.93	≤-19.74	PASS
			1000~26500	0.26	-49.29	≤-19.74	PASS
		2480	30~1000	-0.73	-61.87	≤-20.73	PASS
			1000~26500	-0.73	-49.05	≤-20.73	PASS
2DH5	Ant1	2402	30~1000	-3.10	-61.96	≤-23.1	PASS
			1000~26500	-3.10	-49.39	≤-23.1	PASS
		2441	30~1000	-0.34	-62.01	≤-20.34	PASS
			1000~26500	-0.34	-49.17	≤-20.34	PASS
		2480	30~1000	-0.70	-61.99	≤-20.7	PASS
			1000~26500	-0.70	-48.82	≤-20.7	PASS
3DH5	Ant1	2402	30~1000	-2.34	-60.53	≤-22.34	PASS
			1000~26500	-2.34	-49.3	≤-22.34	PASS
		2441	30~1000	-1.01	-61.82	≤-21.01	PASS
			1000~26500	-1.01	-49.24	≤-21.01	PASS
		2480	30~1000	-1.87	-61.54	≤-21.87	PASS
			1000~26500	-1.87	-48.99	≤-21.87	PASS

Reference Level

Test Result

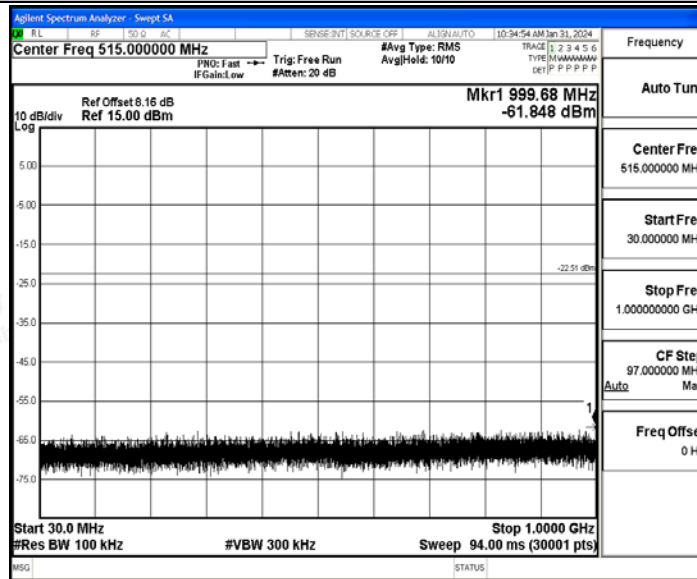
TestMode	Antenna	ChName	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	2401.84	-2.51	---	PASS
		2441	2440.84	0.26	---	PASS
		2480	2480.16	-0.73	---	PASS
2DH5	Ant1	2402	2401.86	-3.10	---	PASS
		2441	2440.85	-0.34	---	PASS
		2480	2480.17	-0.70	---	PASS
3DH5	Ant1	2402	2401.85	-2.34	---	PASS
		2441	2440.99	-1.01	---	PASS
		2480	2479.99	-1.87	---	PASS



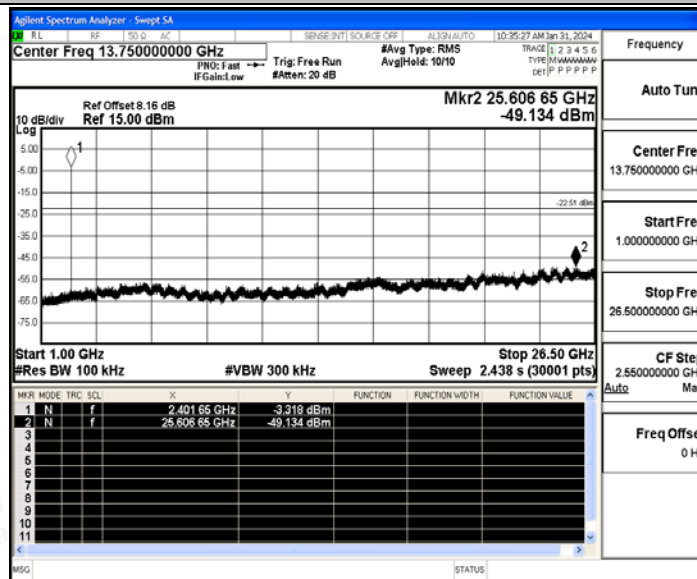


Test Graphs

DH5_Ant1_2402_30~1000

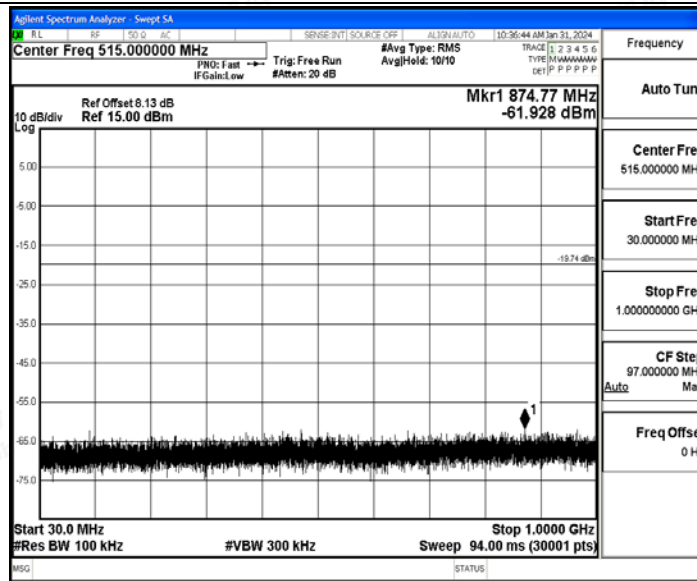


DH5_Ant1_2402_1000~26500

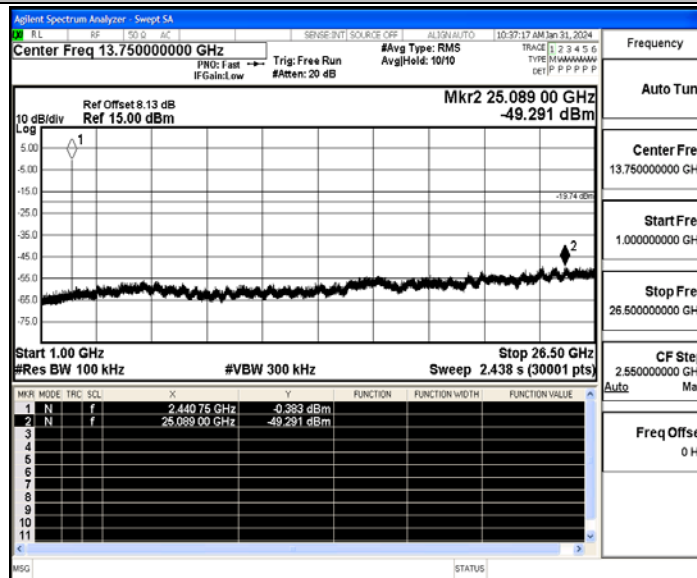


DH5_Ant1_2441_30~1000



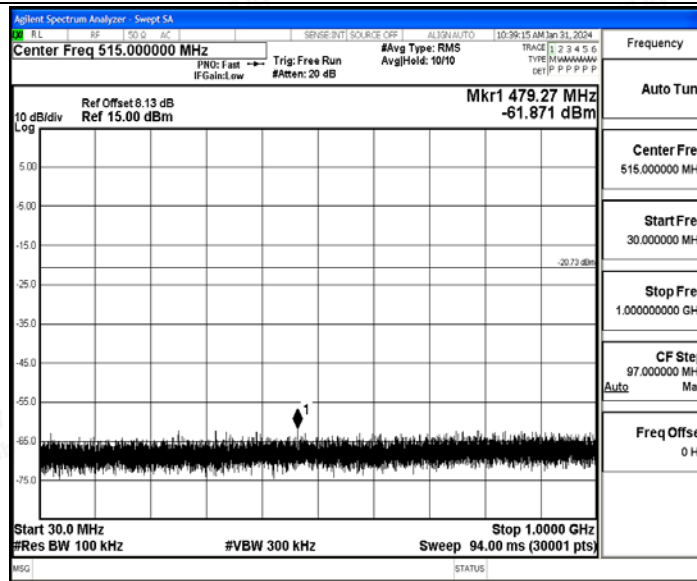


DH5_Ant1_2441_1000~26500

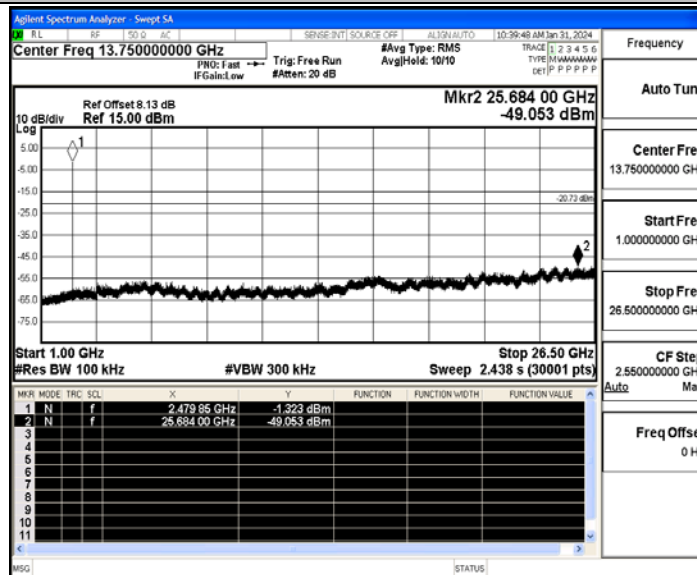


DH5_Ant1_2480_30~1000



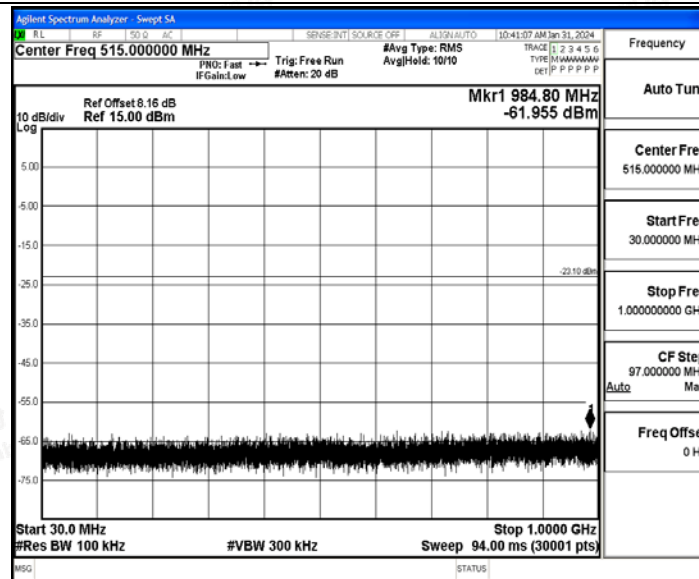


DH5_Ant1_2480_1000~26500

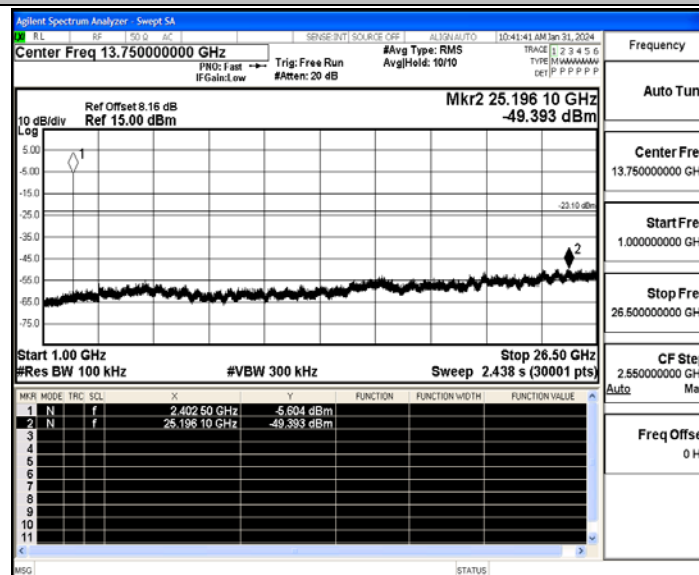


2DH5_Ant1_2402_30~1000



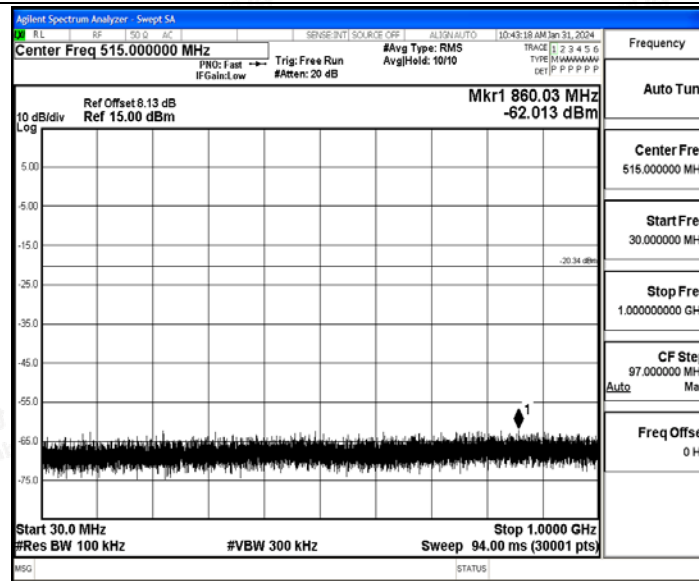


2DH5_Ant1_2402_1000~26500

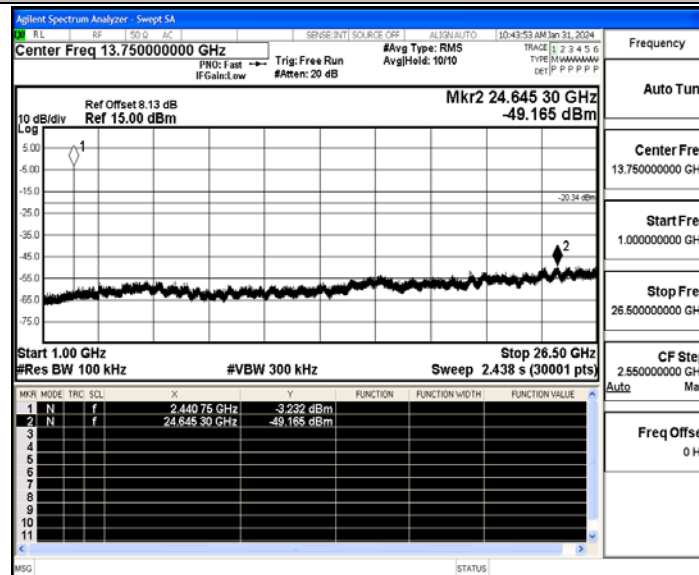


2DH5_Ant1_2441_30~1000



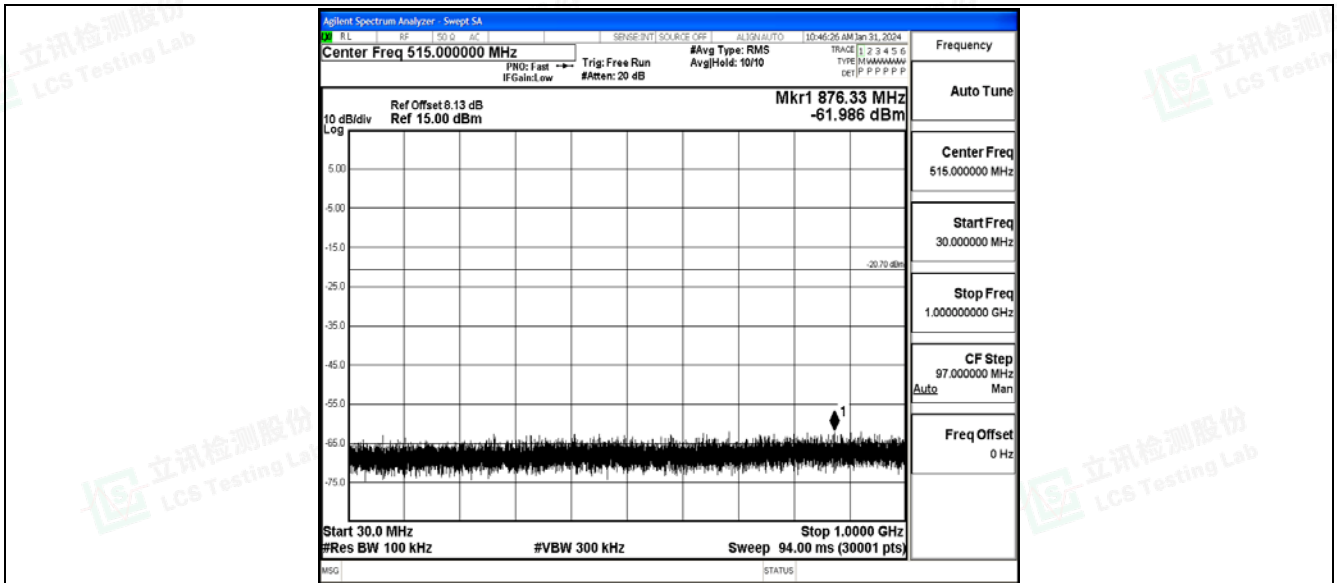


2DH5_Ant1_2441_1000~26500

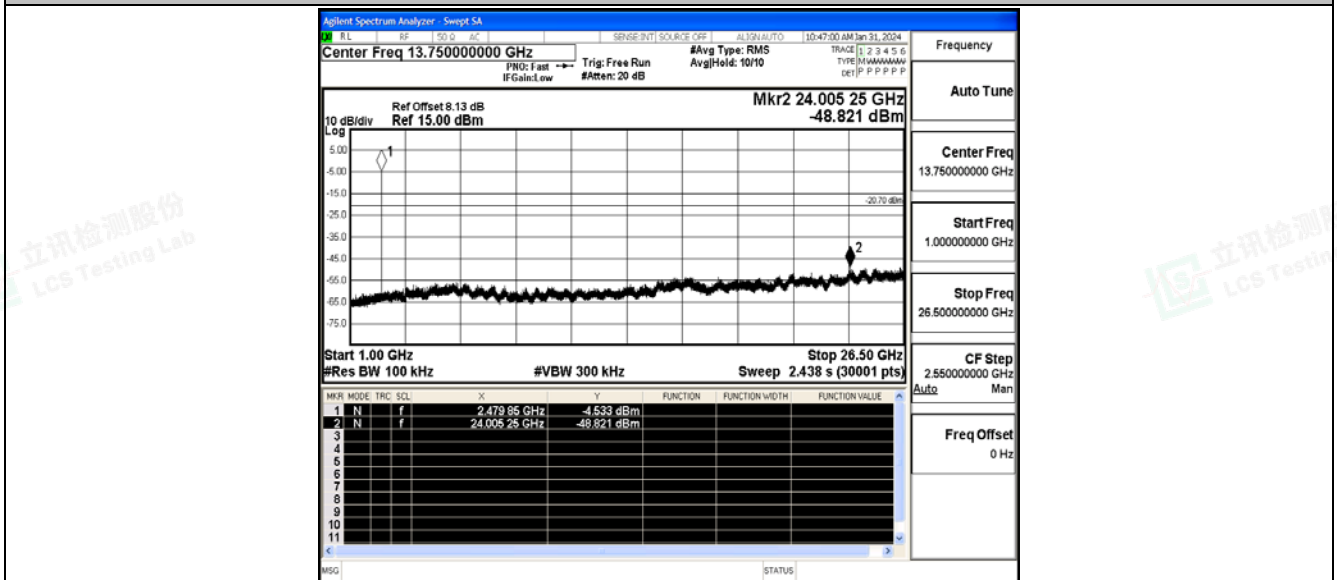


2DH5_Ant1_2480_30~1000



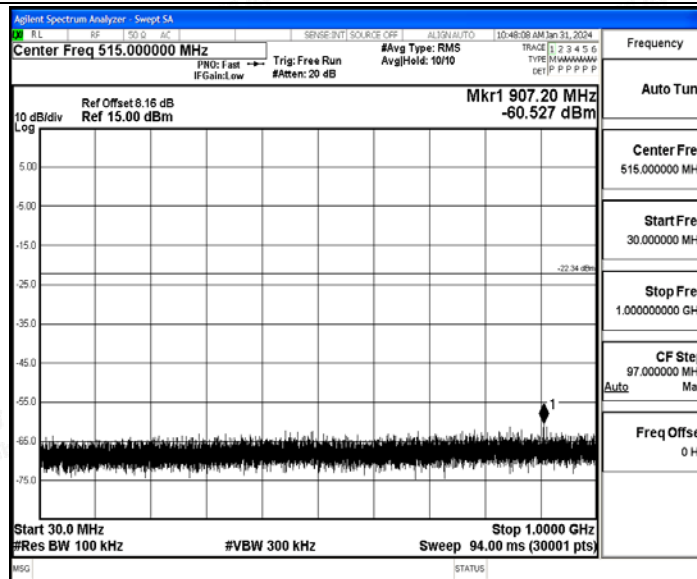


2DH5_Ant1_2480_1000~26500

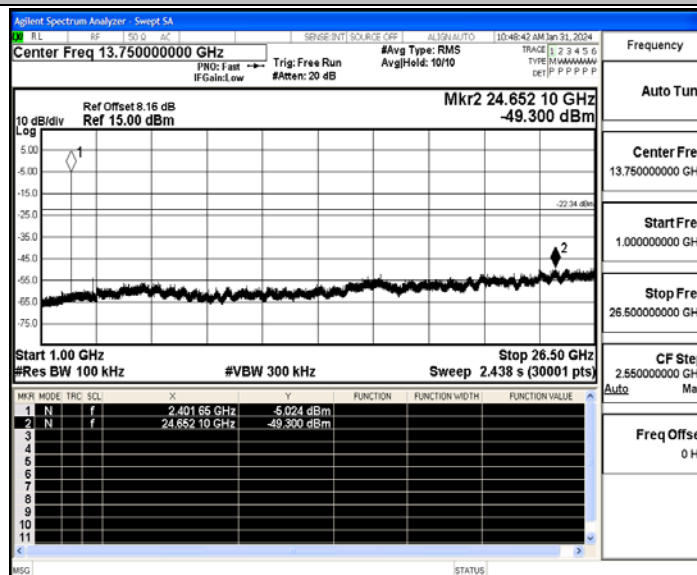


3DH5_Ant1_2402_30~1000



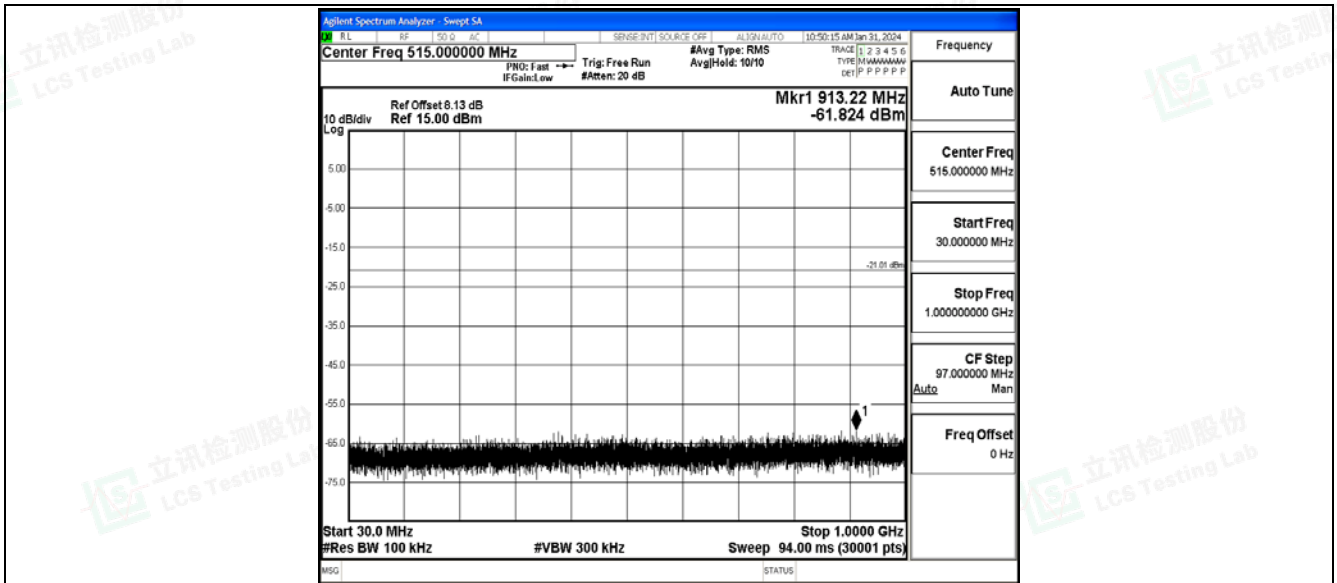


3DH5_Ant1_2402_1000~26500

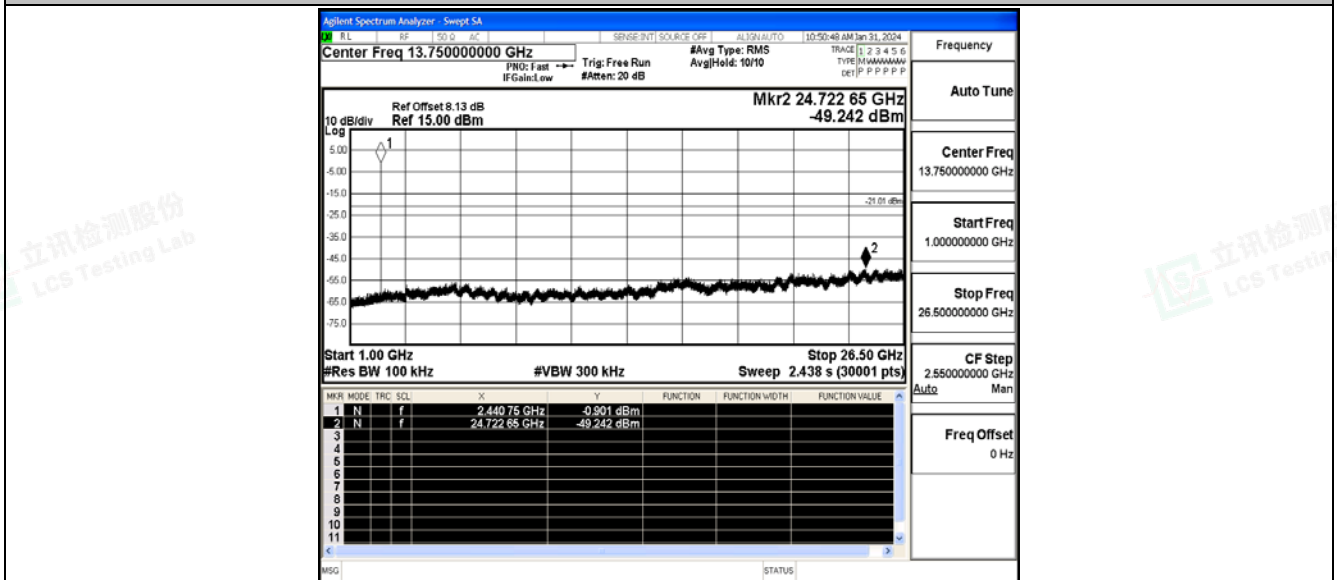


3DH5_Ant1_2441_30~1000



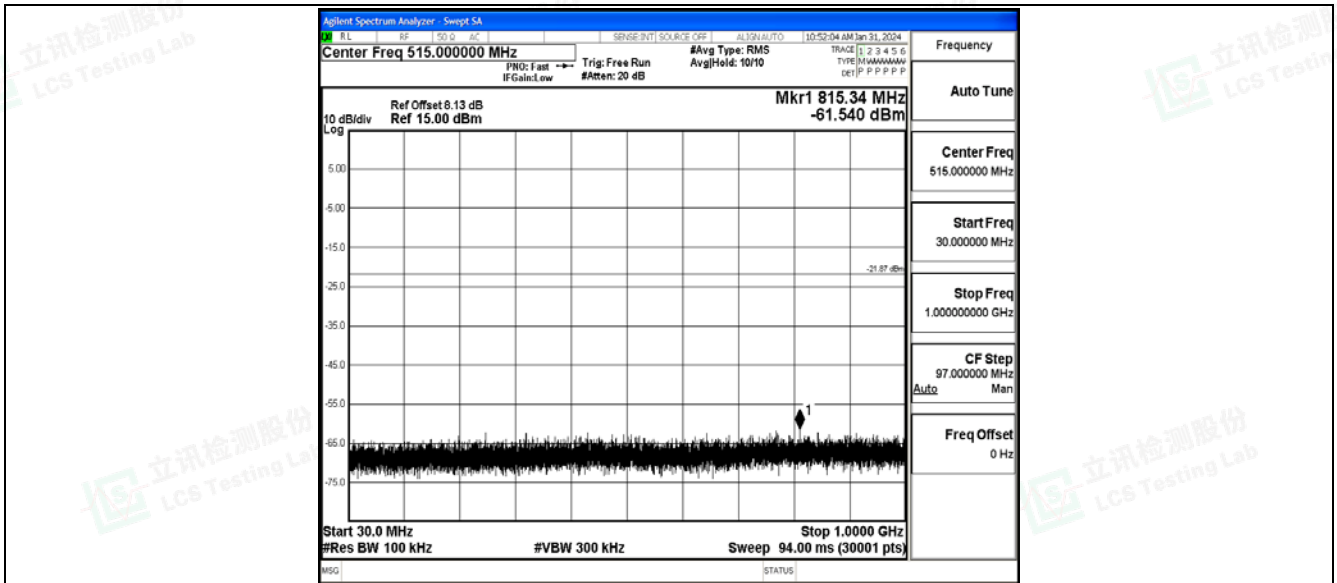


3DH5_Ant1_2441_1000~26500

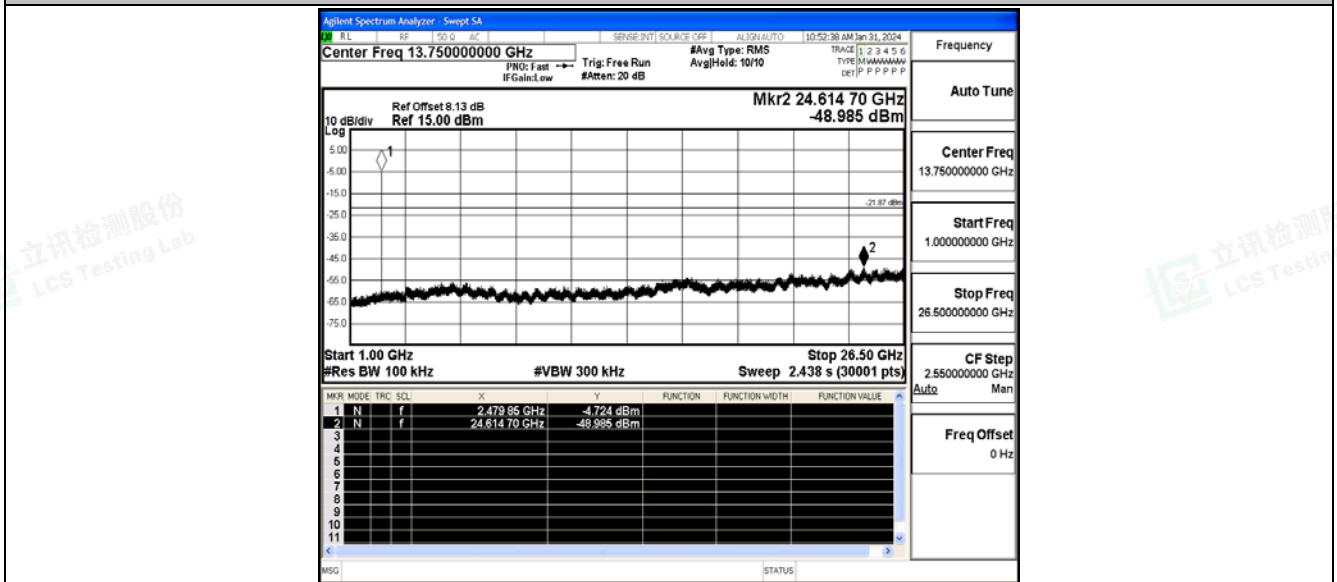


3DH5_Ant1_2480_30~1000





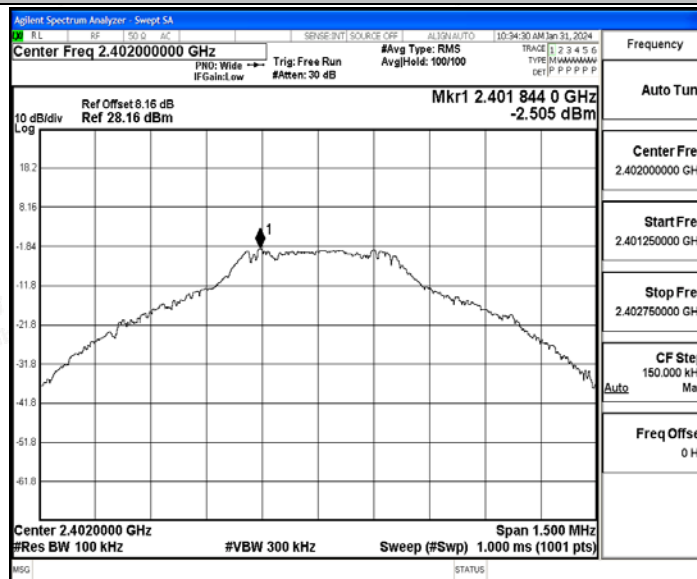
3DH5_Ant1_2480_1000-26500



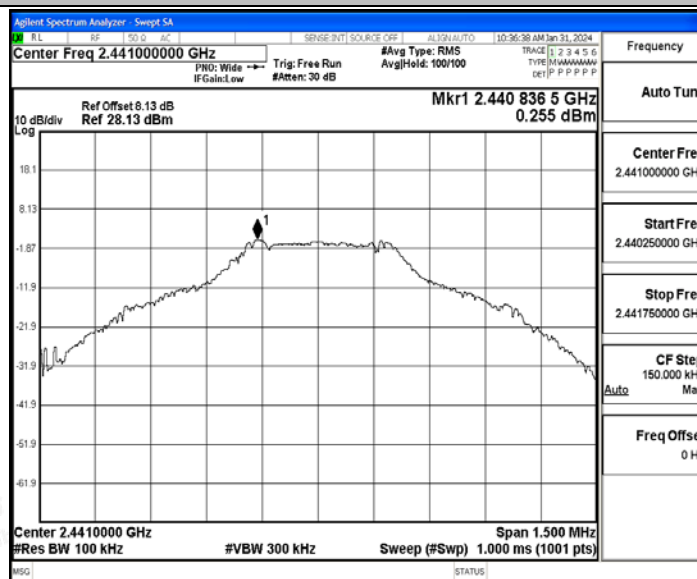


Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480

