



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: HYbook
Test Model: HT14CCIC46EG

Environmental Conditions

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





A.1 20dB Emission Bandwidth

Test Result

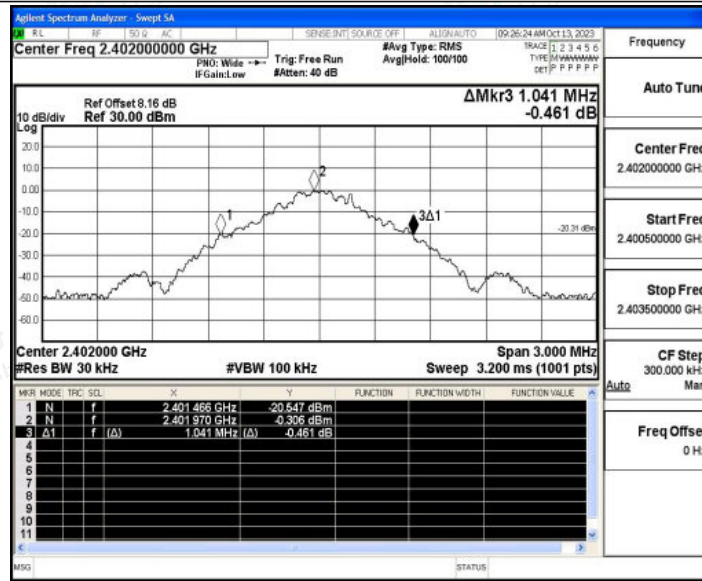
TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.041	2401.466	2402.507	---	---
		2441	0.966	2440.535	2441.501	---	---
		2480	0.951	2479.526	2480.477	---	---
2DH5	Ant1	2402	1.293	2401.355	2402.648	---	---
		2441	1.290	2440.358	2441.648	---	---
		2480	1.278	2479.358	2480.636	---	---
3DH5	Ant1	2402	1.302	2401.343	2402.645	---	---
		2441	1.296	2440.349	2441.645	---	---
		2480	1.311	2479.340	2480.651	---	---



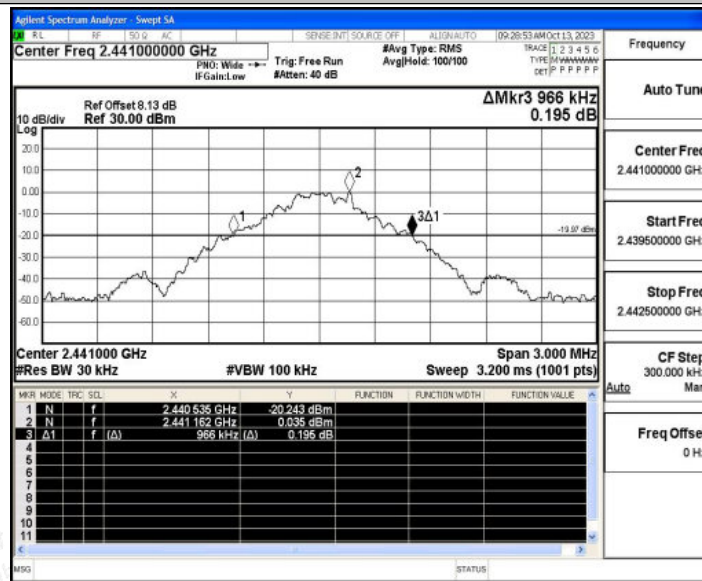


Test Graphs

DH5_Ant1_2402

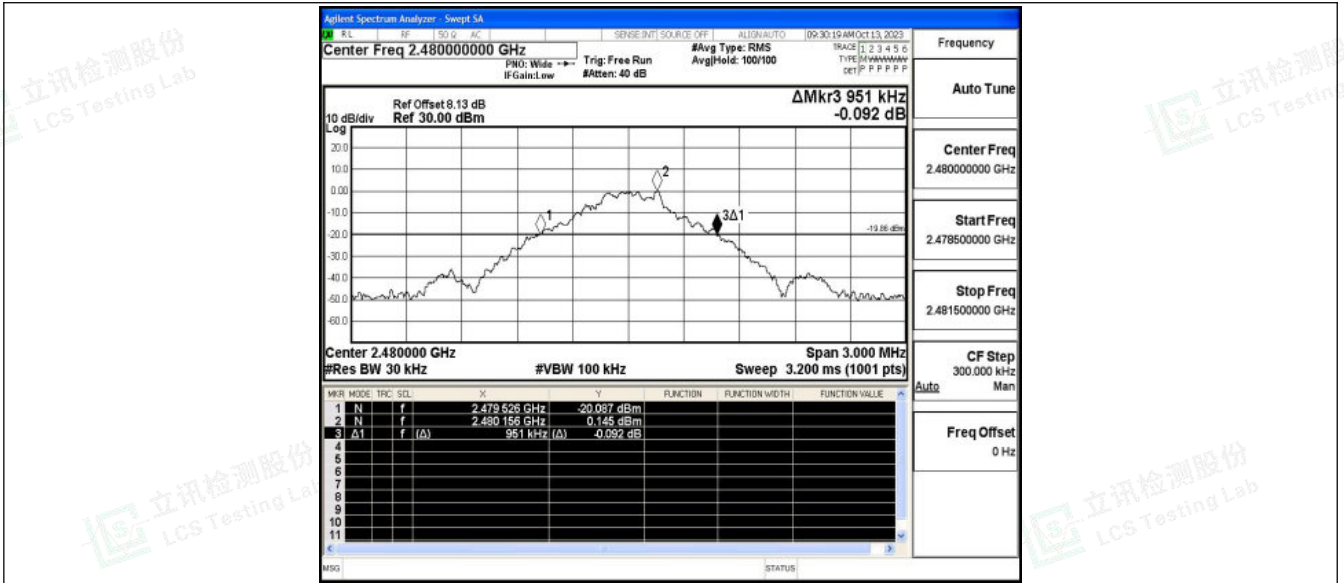


DH5_Ant1_2441

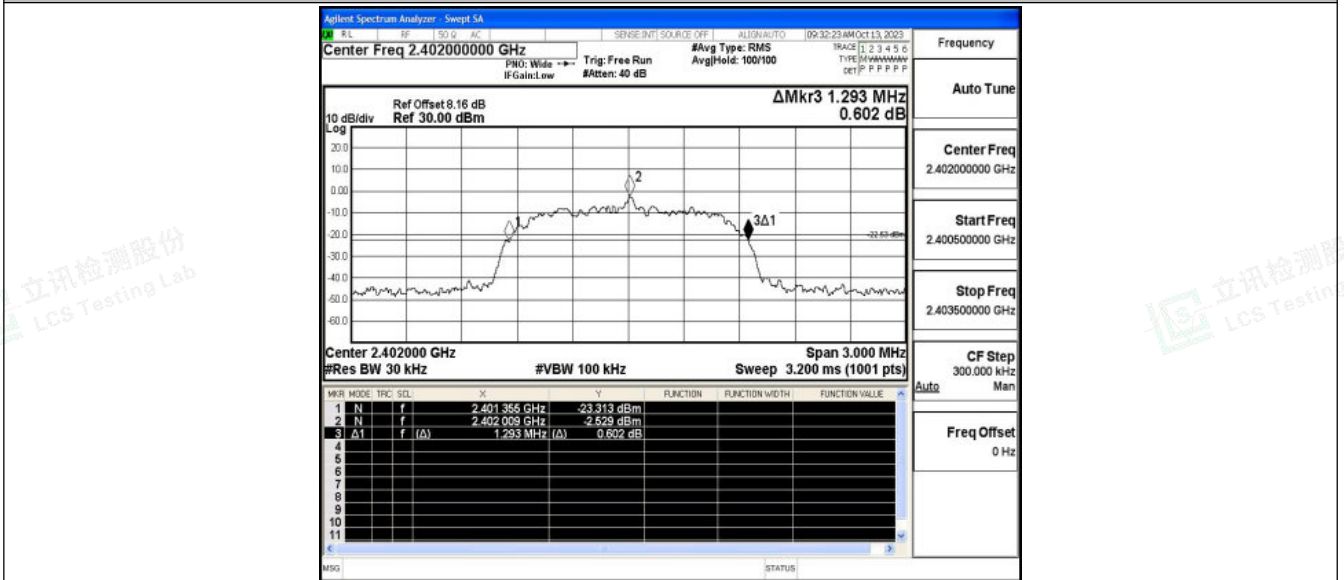


DH5_Ant1_2480



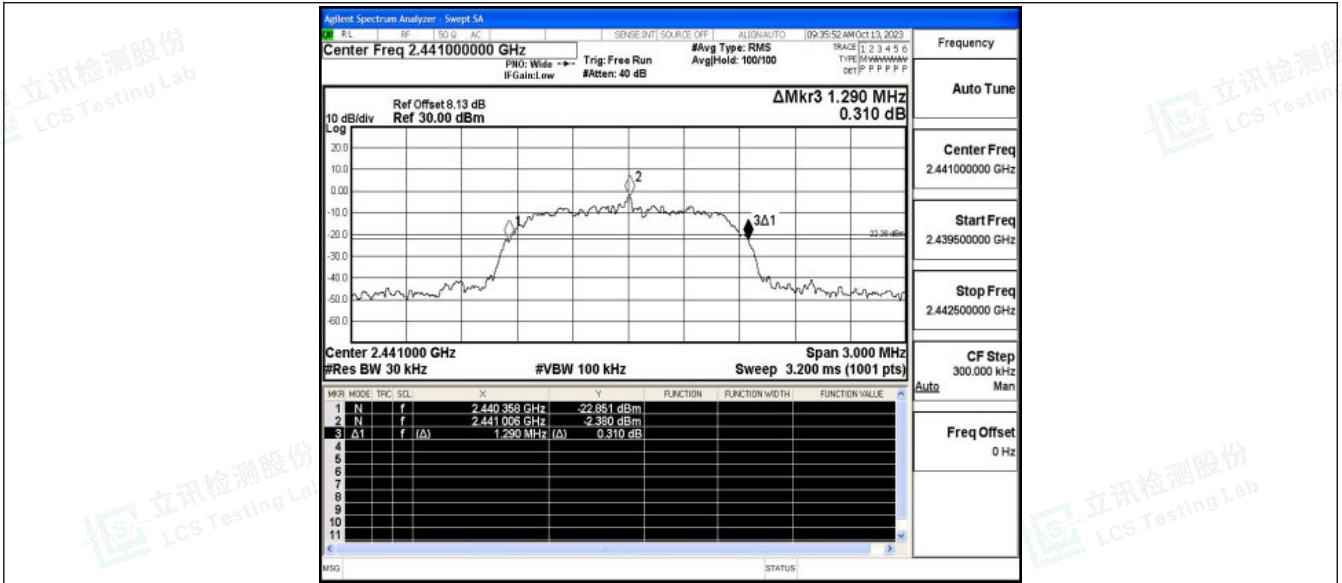


2DH5_Ant1_2402

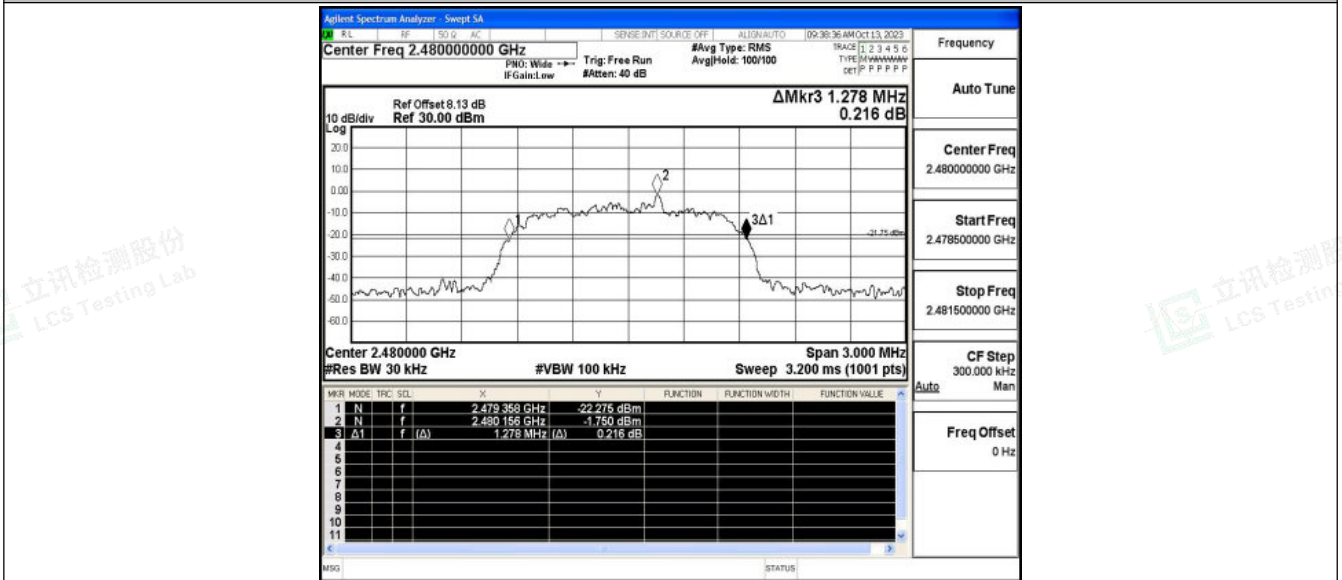


2DH5_Ant1_2441



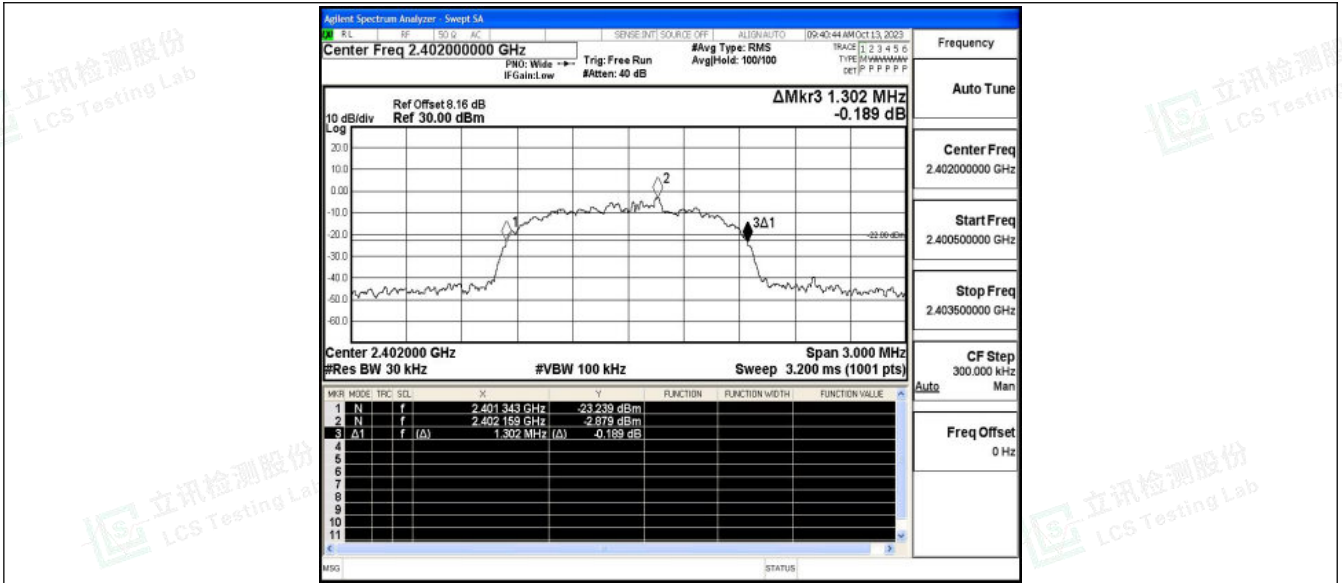


2DH5_Ant1_2480

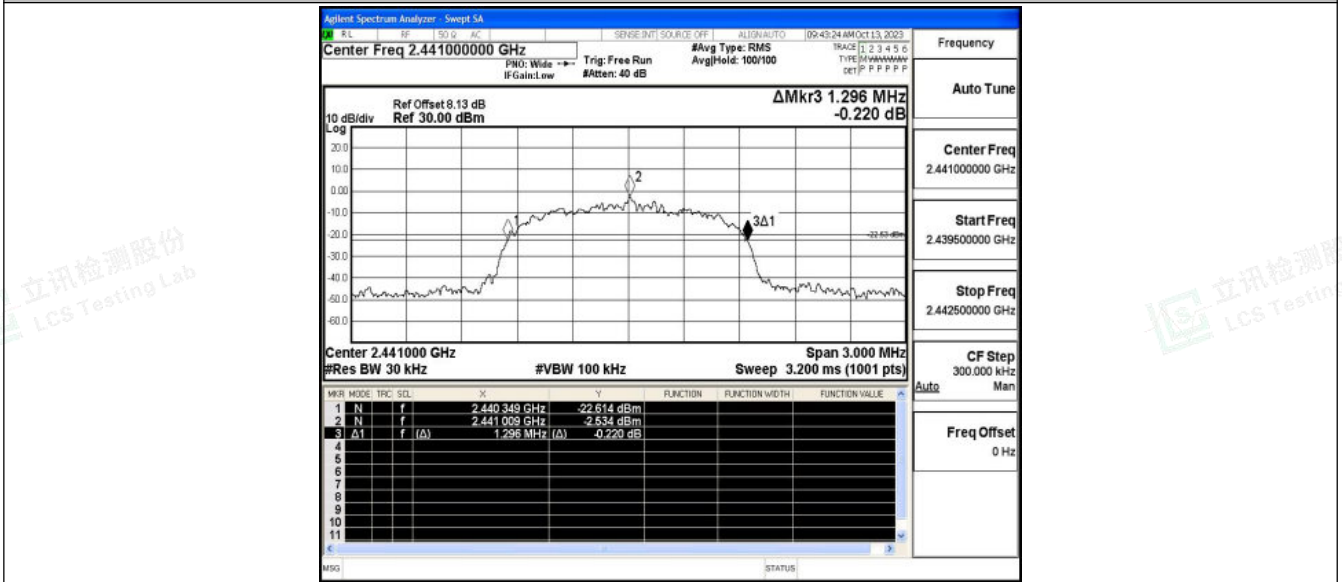


3DH5_Ant1_2402



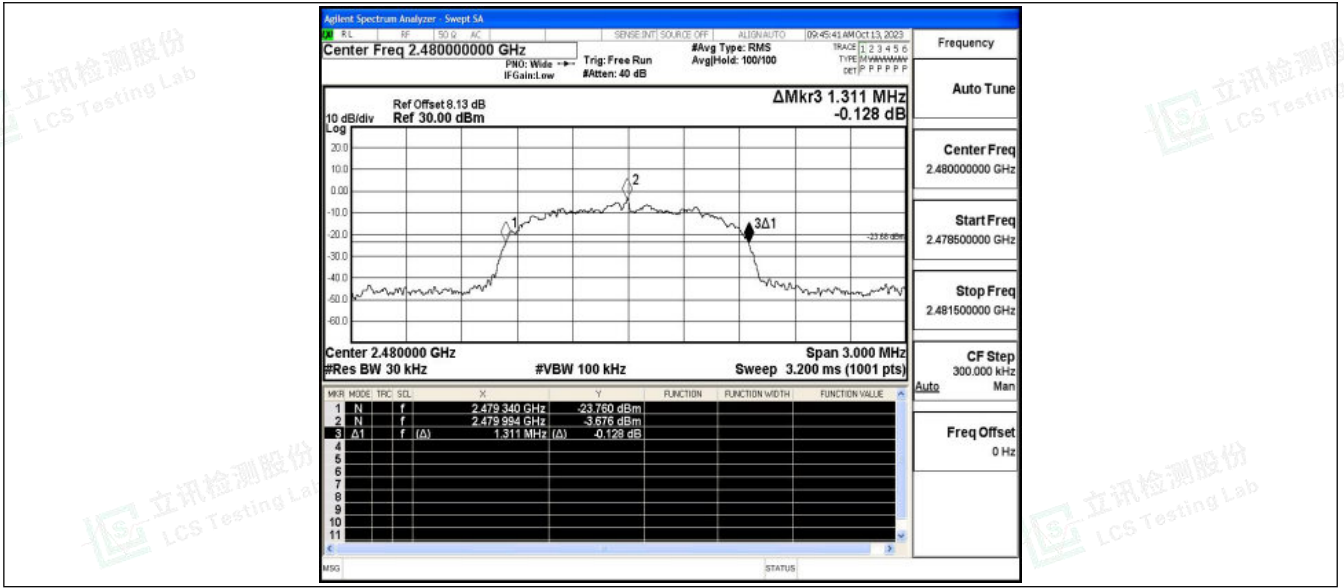


3DH5_Ant1_2441



3DH5_Ant1_2480







A.2 Maximum conducted output power

Test Result Peak

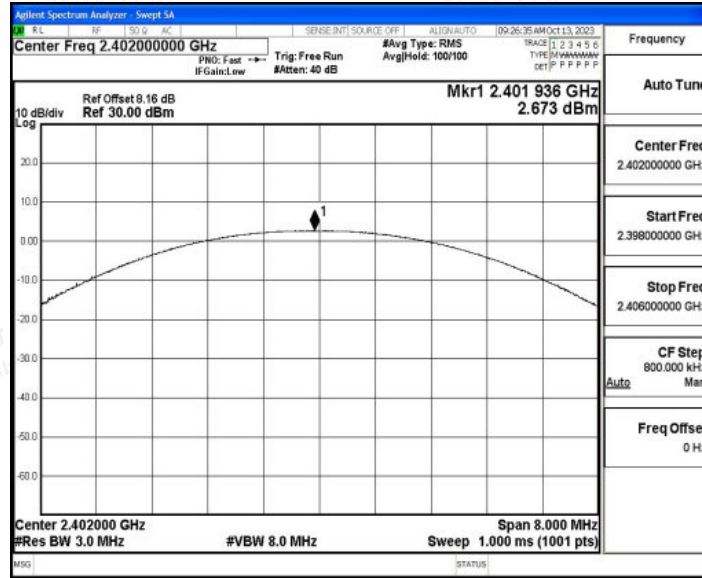
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	2.67	≤20.97	PASS
		2441	2.79	≤20.97	PASS
		2480	2.7	≤20.97	PASS
2DH5	Ant1	2402	2.26	≤20.97	PASS
		2441	2.53	≤20.97	PASS
		2480	2.27	≤20.97	PASS
3DH5	Ant1	2402	2.29	≤20.97	PASS
		2441	2.51	≤20.97	PASS
		2480	2.46	≤20.97	PASS



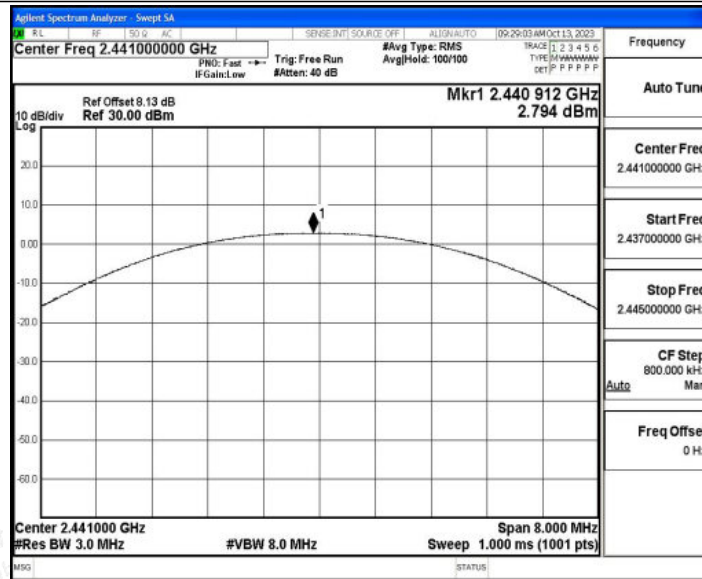


Test Graphs

DH5_Ant1_2402

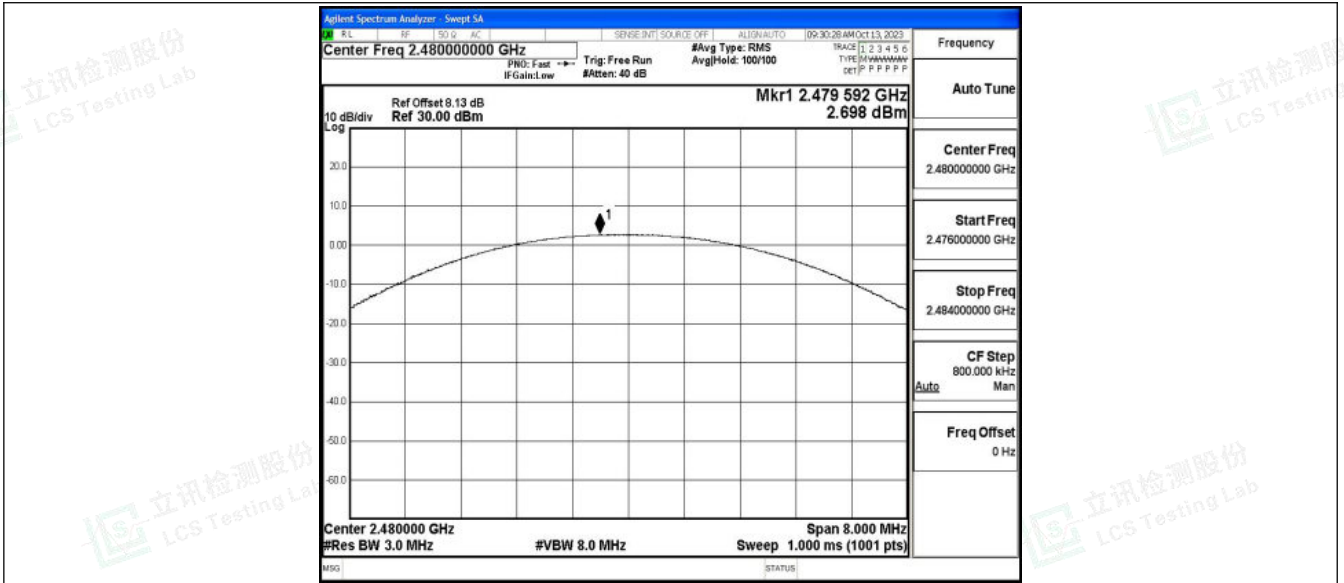


DH5_Ant1_2441

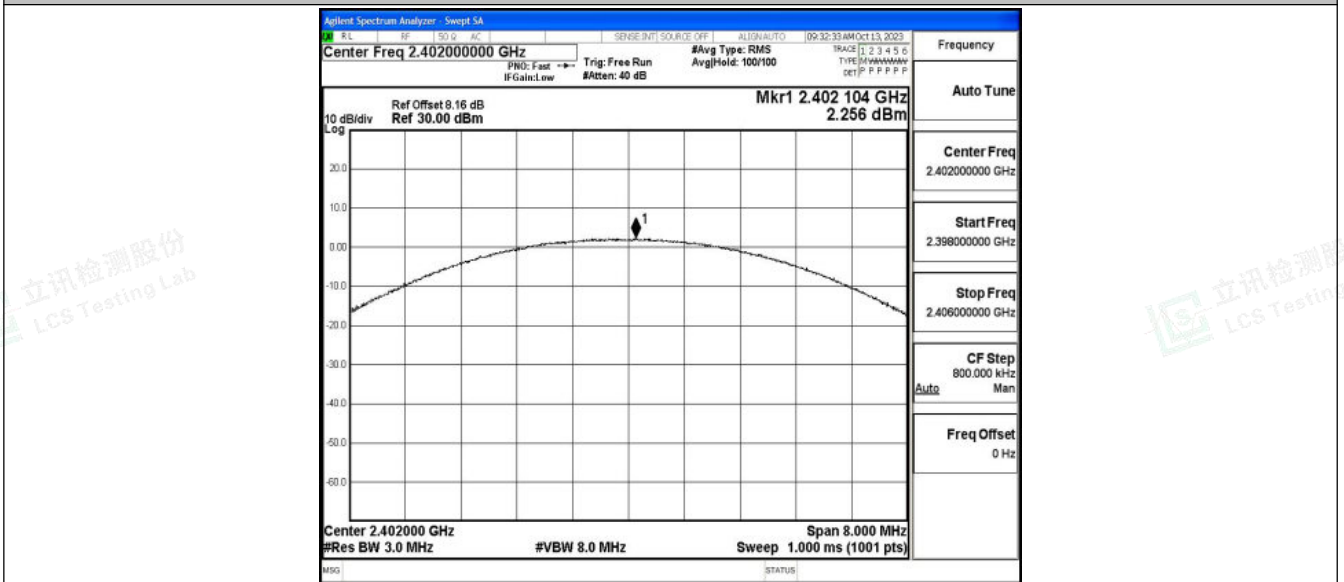


DH5_Ant1_2480



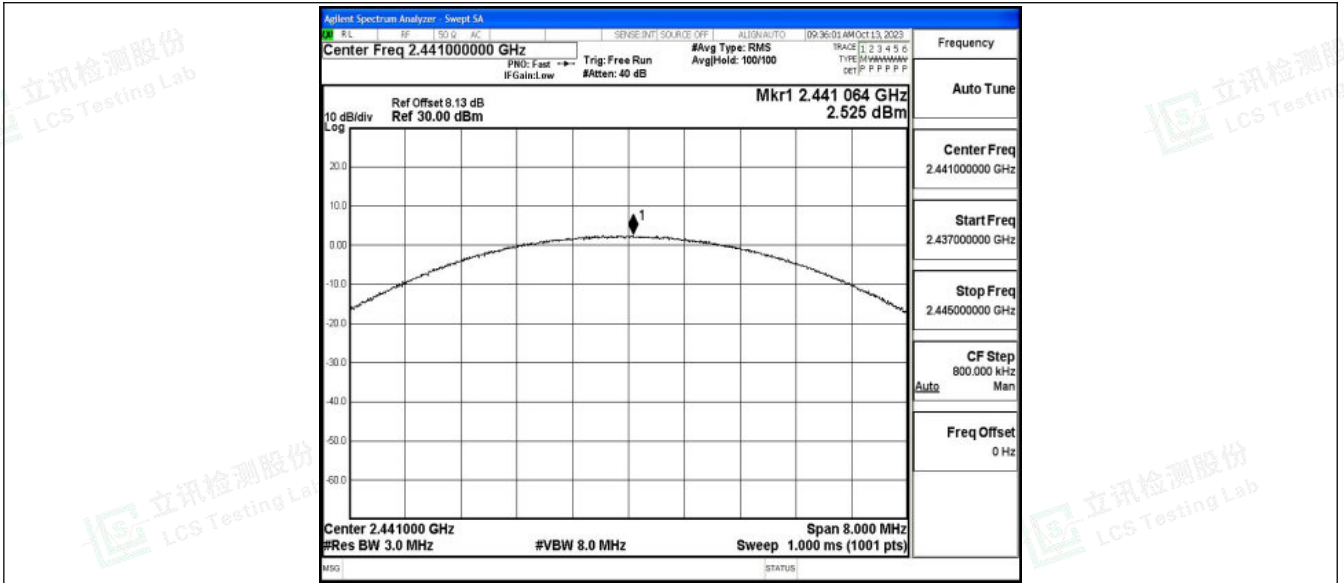


2DH5_Ant1_2402

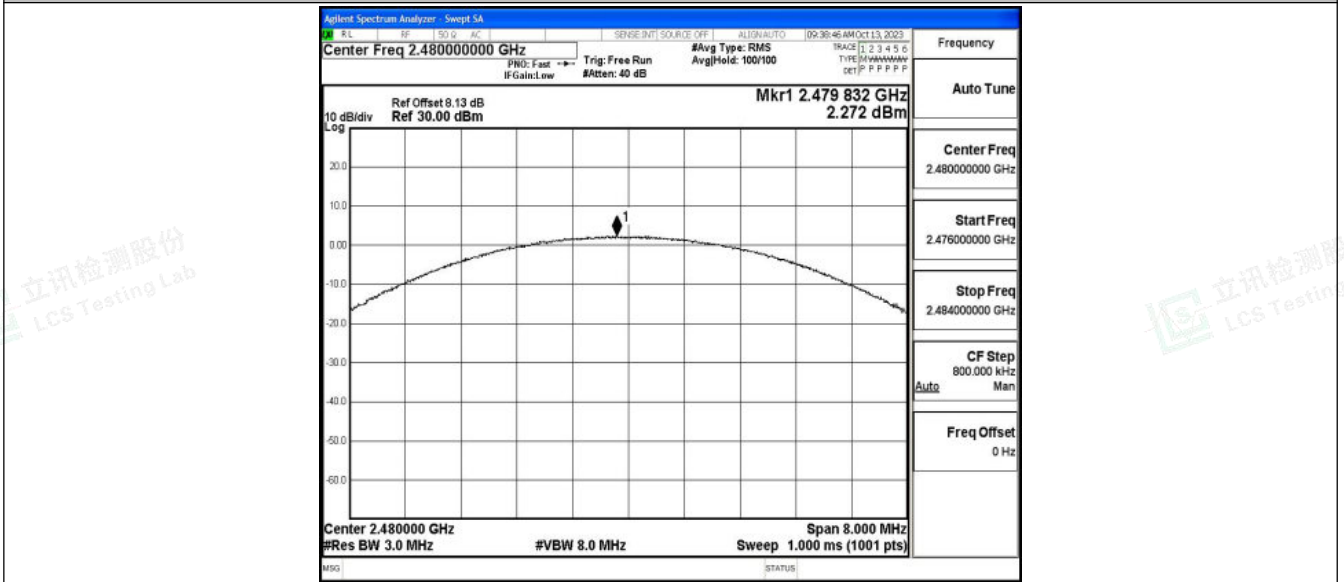


2DH5_Ant1_2441



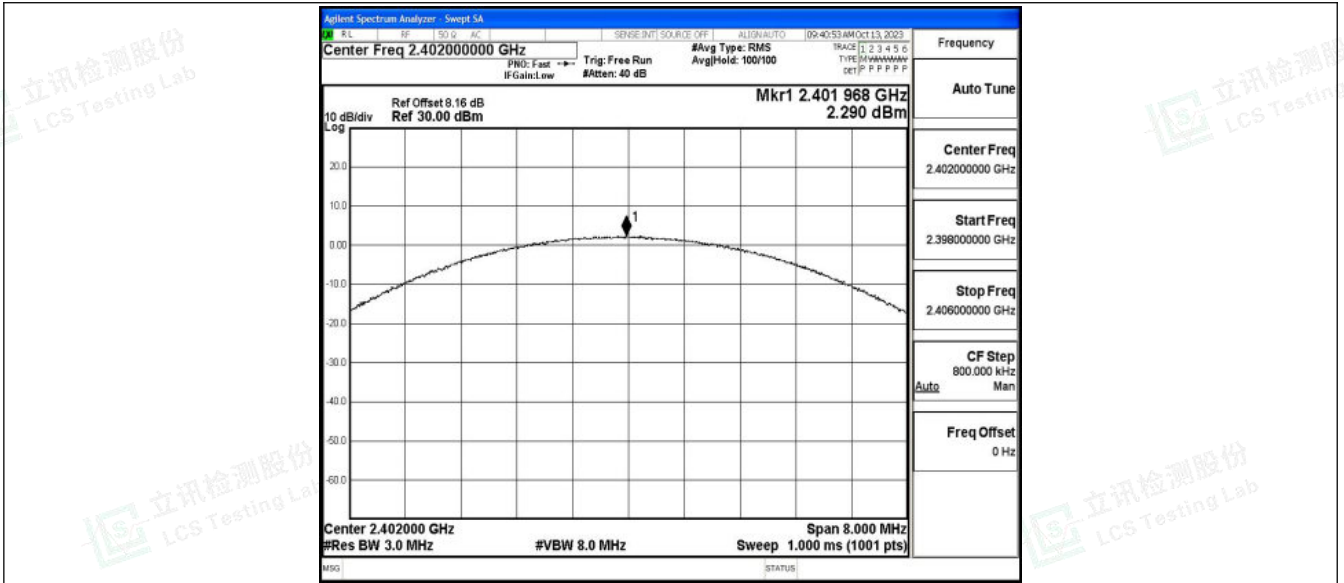


2DH5_Ant1_2480

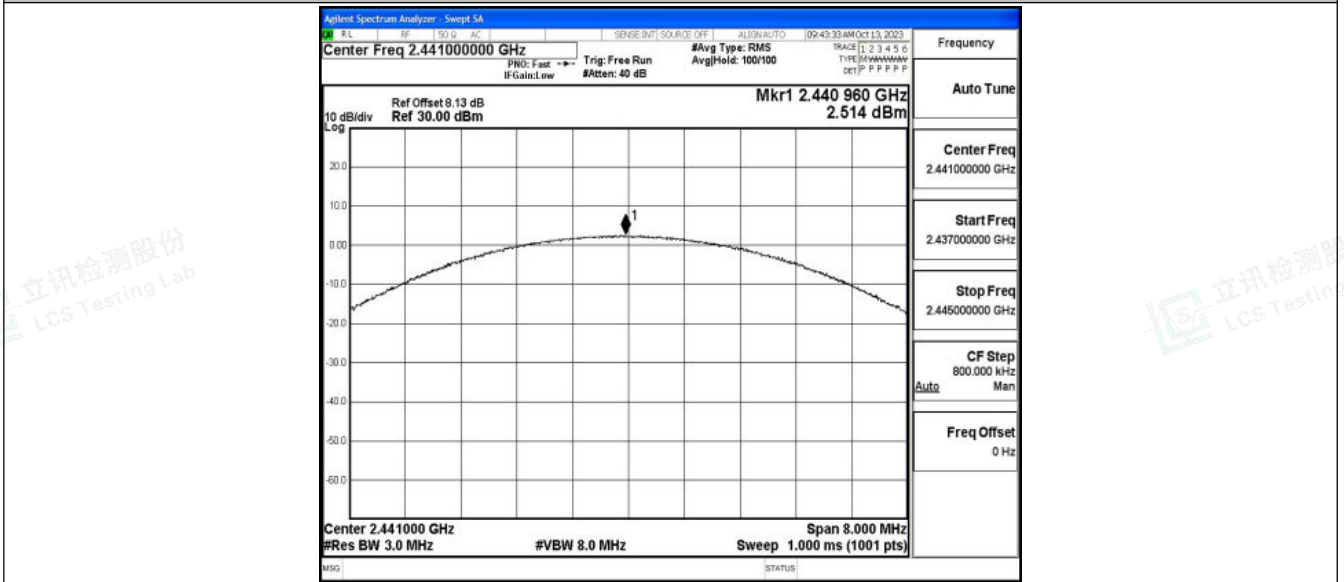


3DH5_Ant1_2402



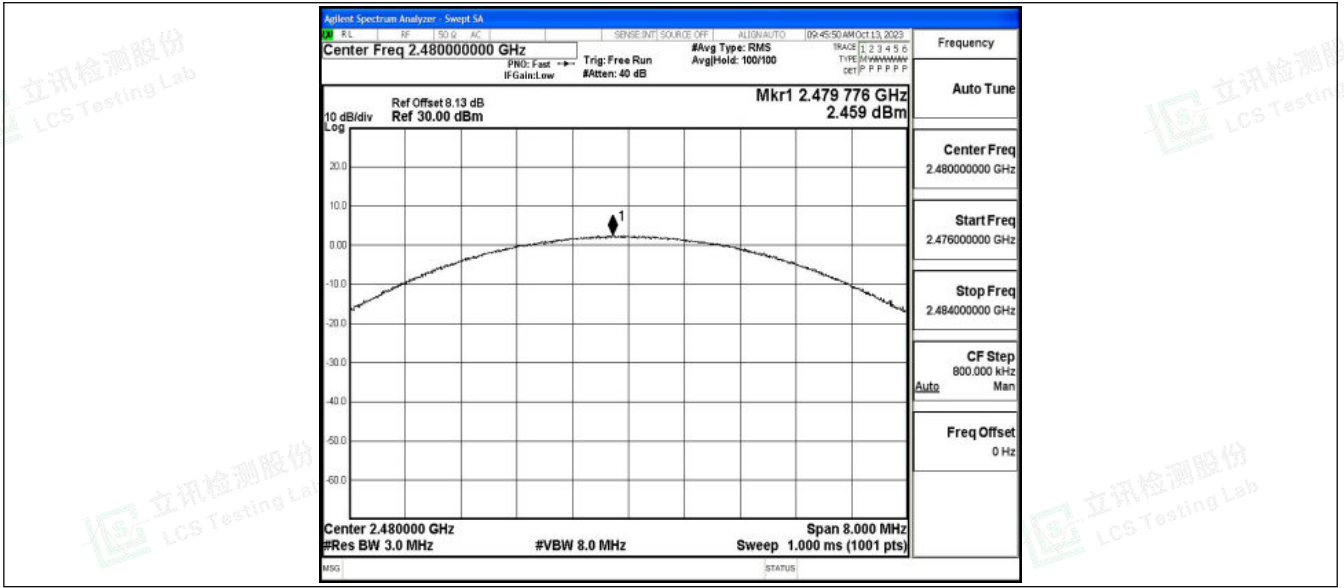


3DH5_Ant1_2441



3DH5_Ant1_2480







A.3 Carrier frequency separation

Test Result

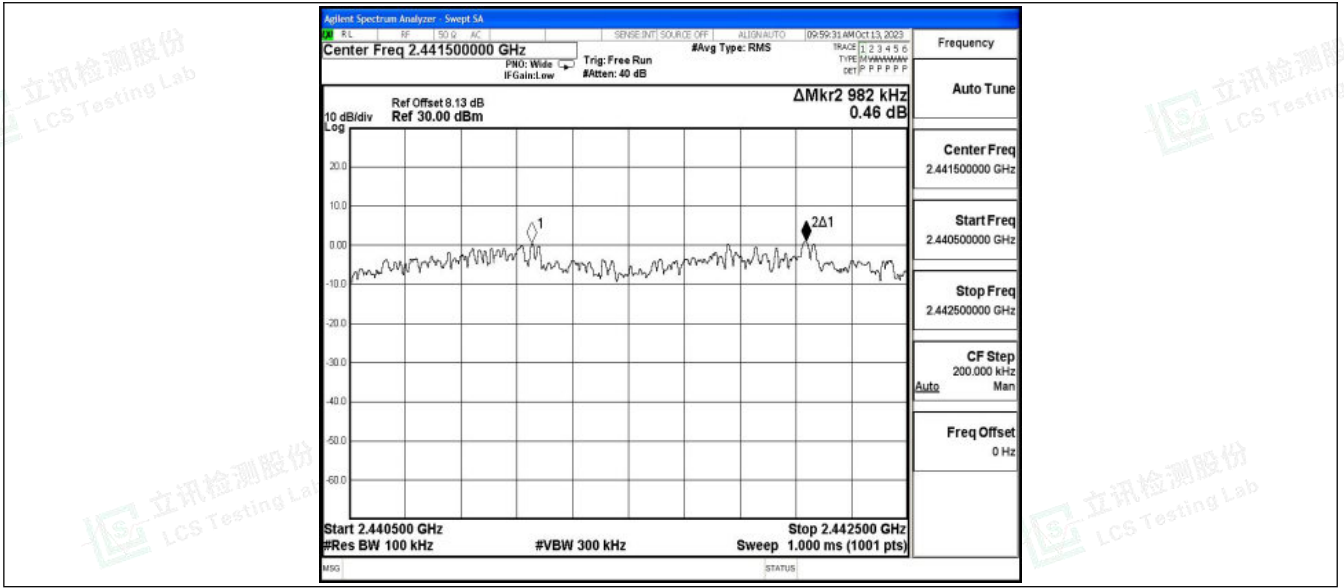
TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.118	≥0.694	PASS
2DH5	Ant1	Hop	1.194	≥0.862	PASS
3DH5	Ant1	Hop	0.982	≥0.874	PASS





Test Graphs







A.4 Time of occupancy

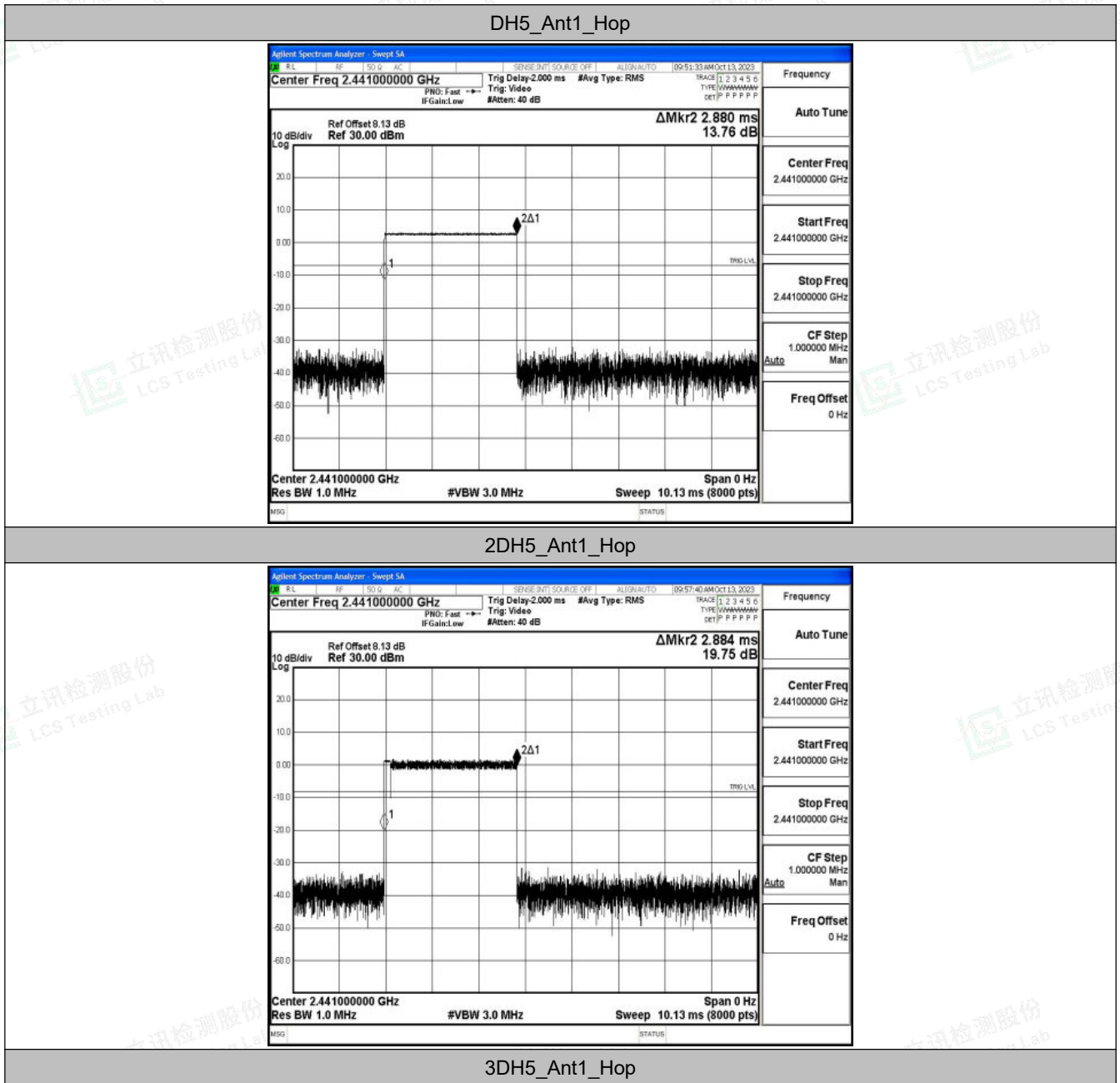
Test Result

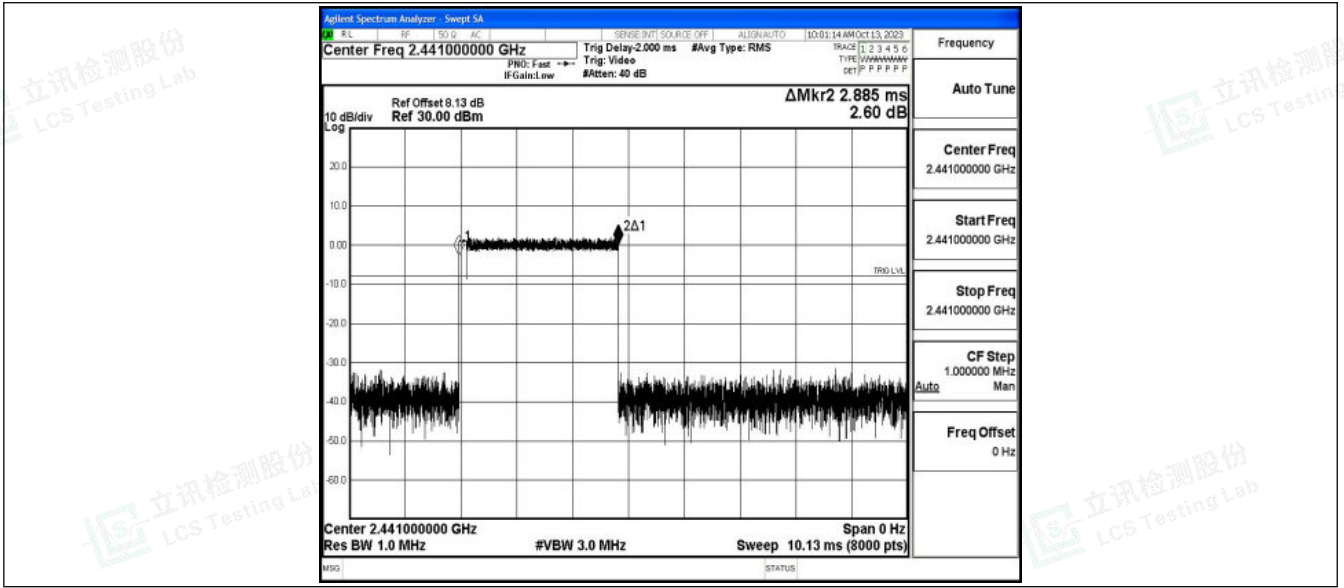
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.880	106.67	0.307	≤0.4	PASS
2DH5	Ant1	Hop	2.884	106.67	0.308	≤0.4	PASS
3DH5	Ant1	Hop	2.885	106.67	0.308	≤0.4	PASS





Test Graphs







A.5 Number of hopping channels

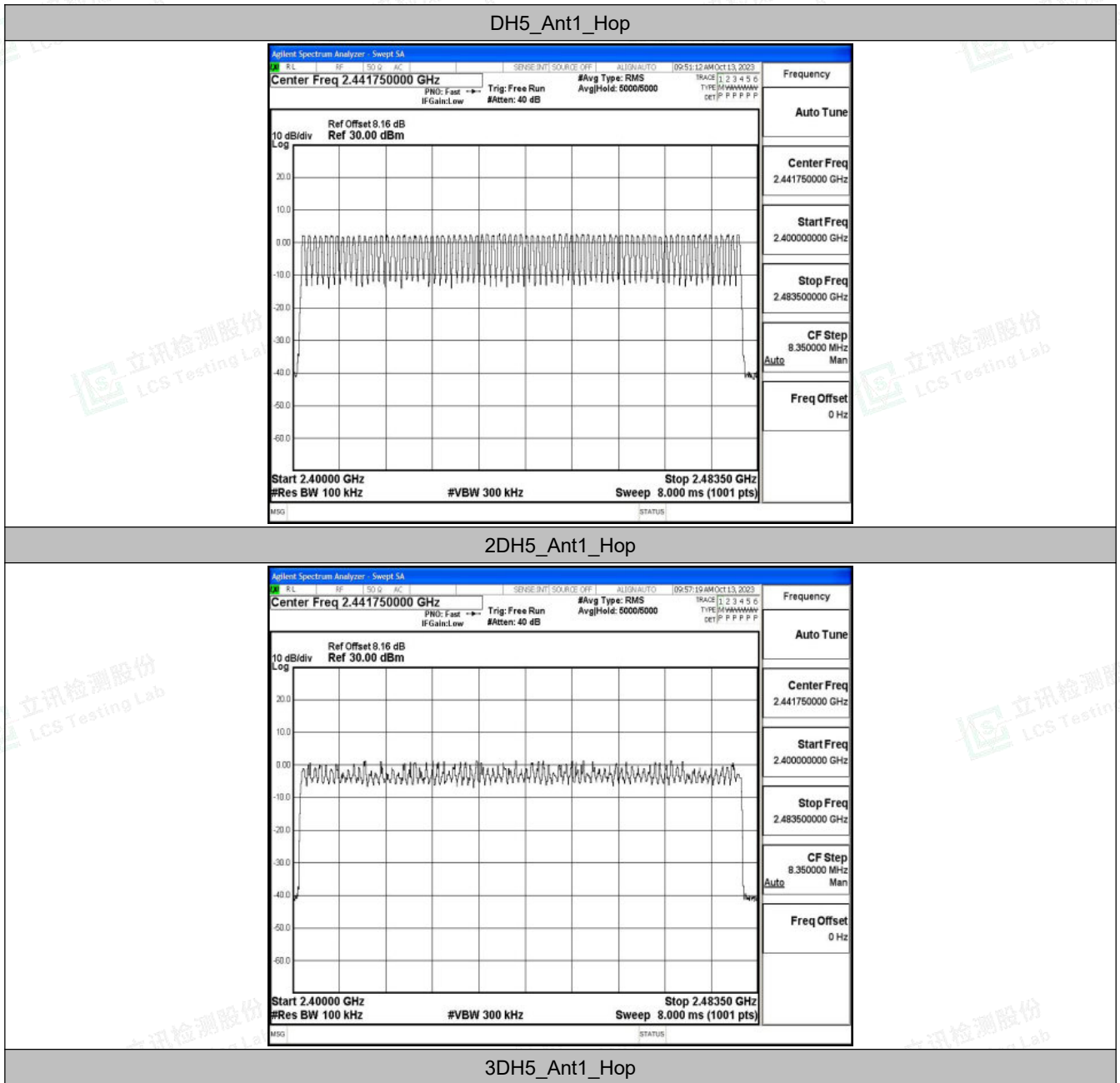
Test Result

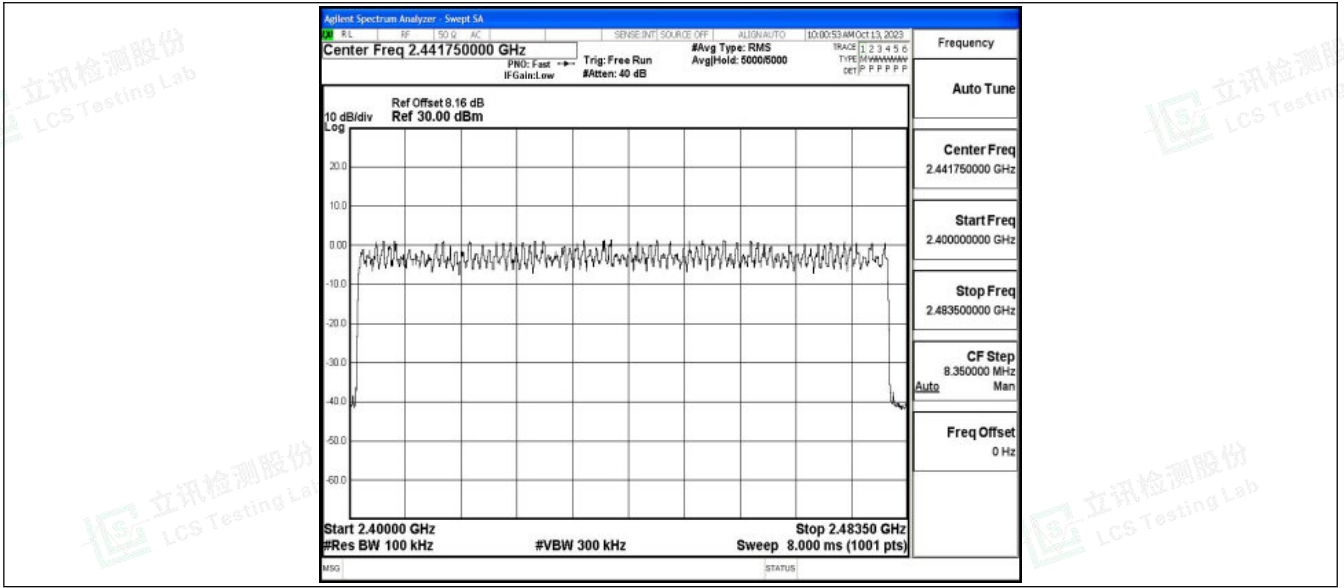
TestMode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS





Test Graphs







A.6 Band edge measurements

Test Result

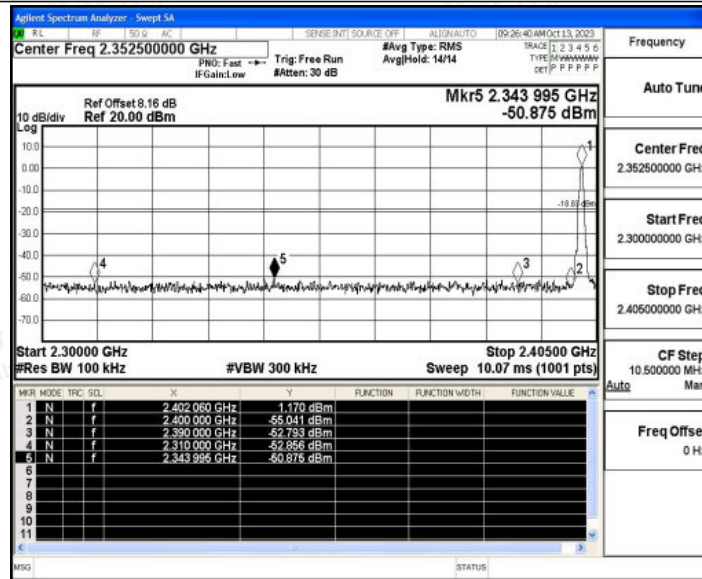
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.17	-50.88	≤-18.83	PASS
		High	2480	1.54	-50.99	≤-18.46	PASS
		Low	Hop_2402	1.56	-50.2	≤-18.44	PASS
		High	Hop_2480	2.36	-49.28	≤-17.64	PASS
2DH5	Ant1	Low	2402	0.46	-50.79	≤-19.54	PASS
		High	2480	-2.82	-50.34	≤-22.82	PASS
		Low	Hop_2402	-1.00	-49.64	≤-21	PASS
		High	Hop_2480	0.43	-49.23	≤-19.57	PASS
3DH5	Ant1	Low	2402	-1.44	-51.38	≤-21.44	PASS
		High	2480	-0.54	-51.28	≤-20.54	PASS
		Low	Hop_2402	-2.70	-48.82	≤-22.7	PASS
		High	Hop_2480	-0.48	-49.02	≤-20.48	PASS



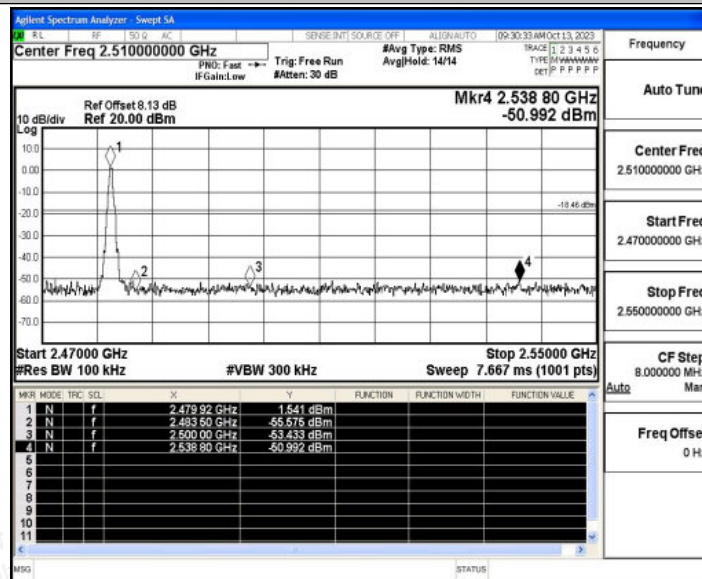


Test Graphs

DH5_Ant1_Low_2402

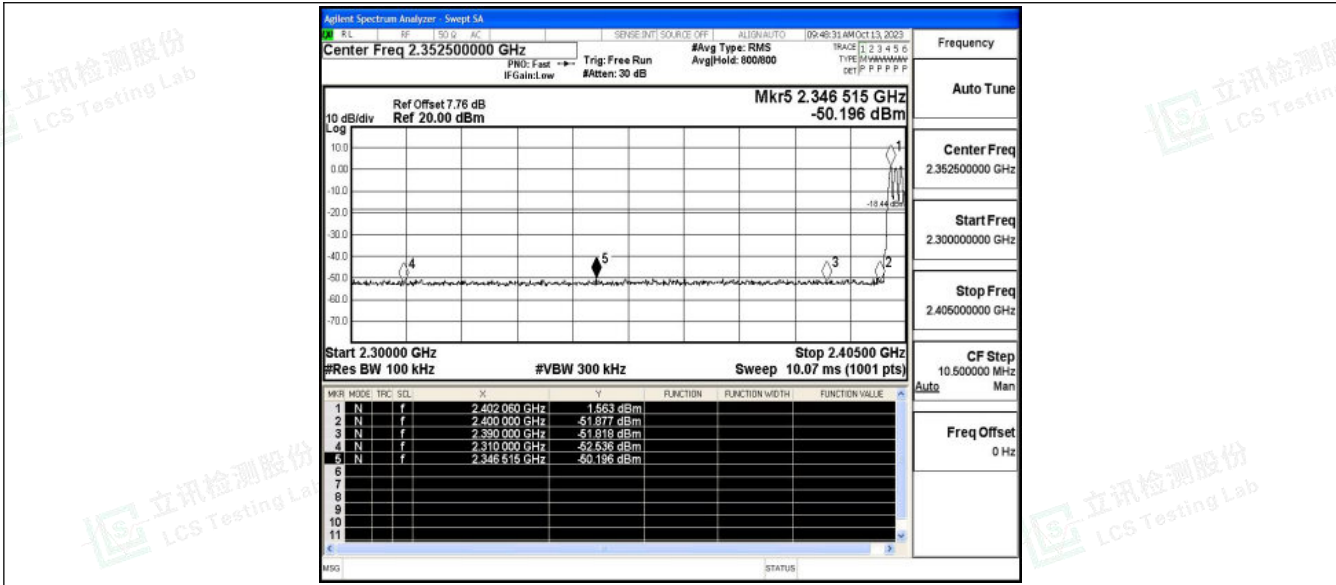


DH5_Ant1_High_2480

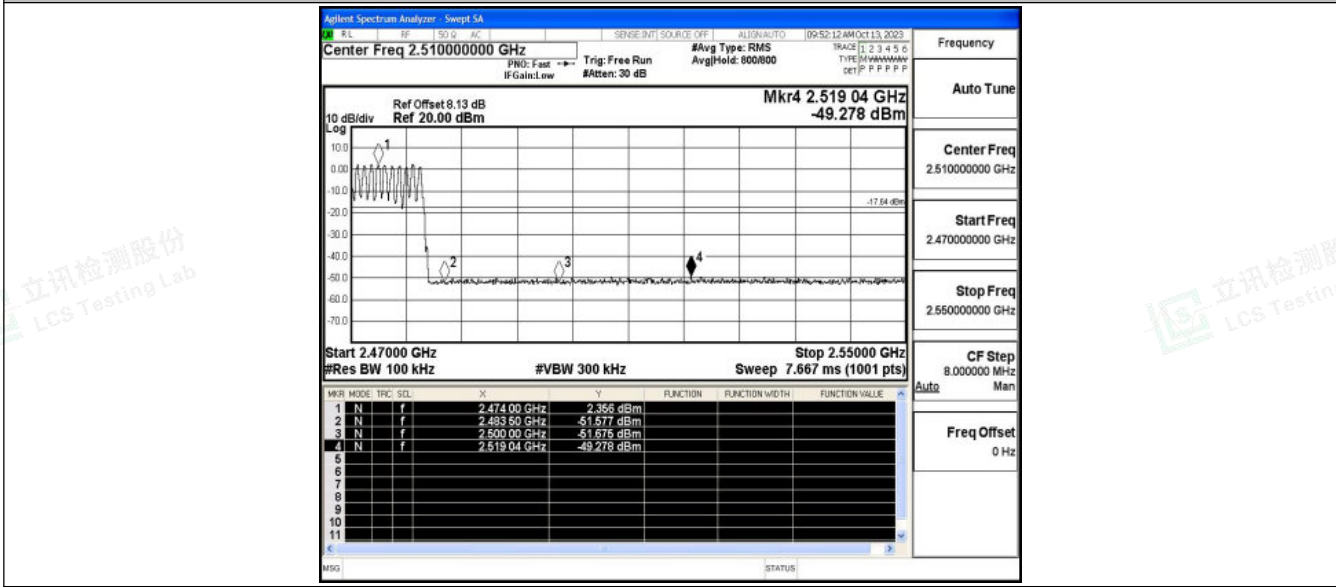


DH5_Ant1_Low_Hop_2402



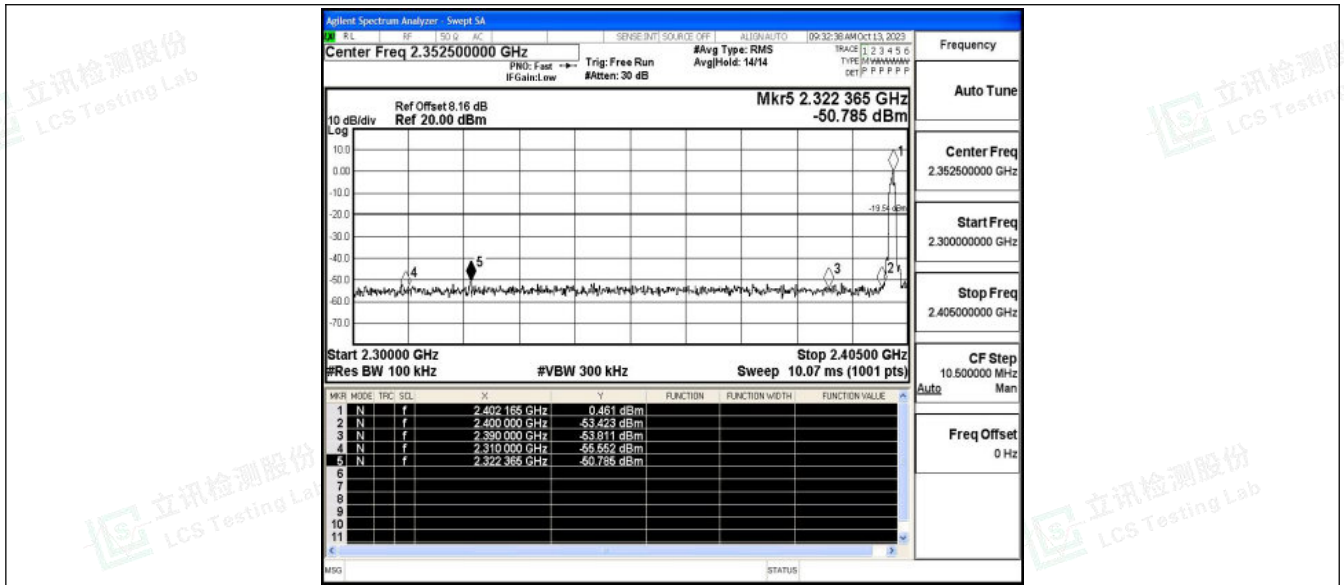


DH5_Ant1_High_Hop_2480

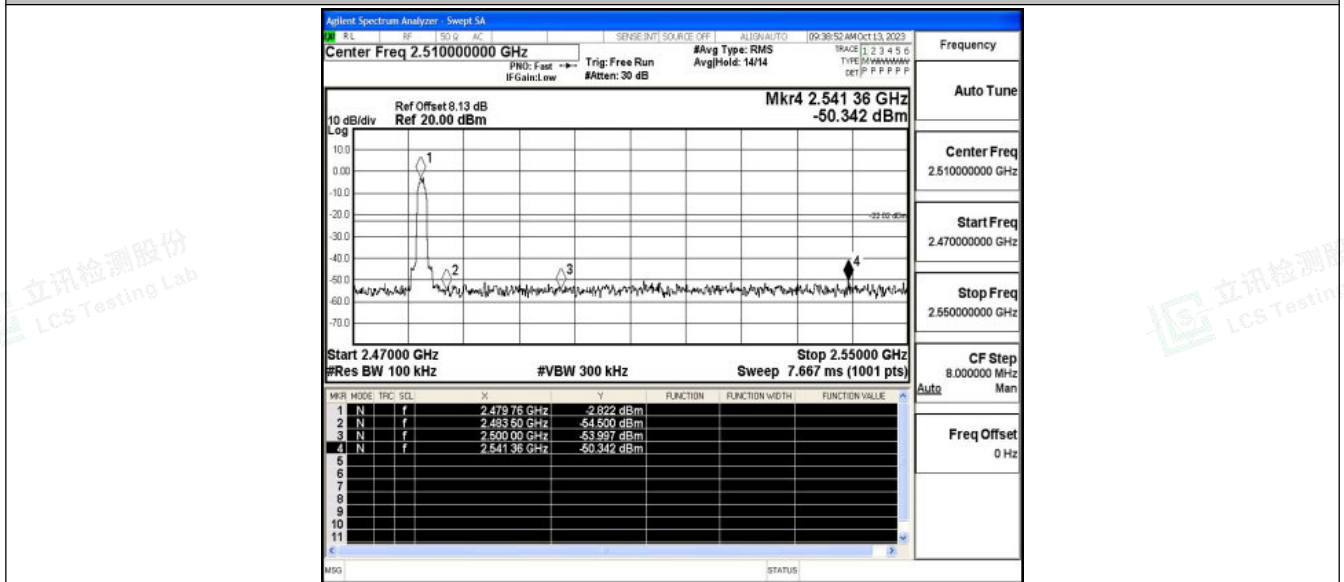


2DH5_Ant1_Low_2402





2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402

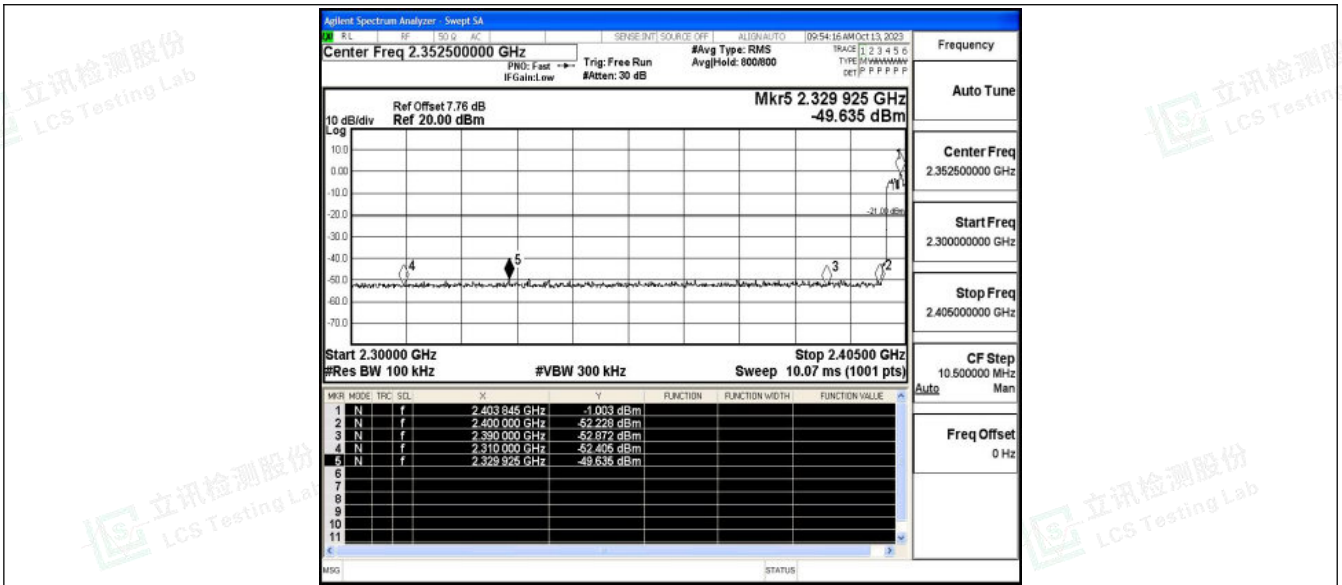


Shenzhen LCS Compliance Testing Laboratory Ltd.

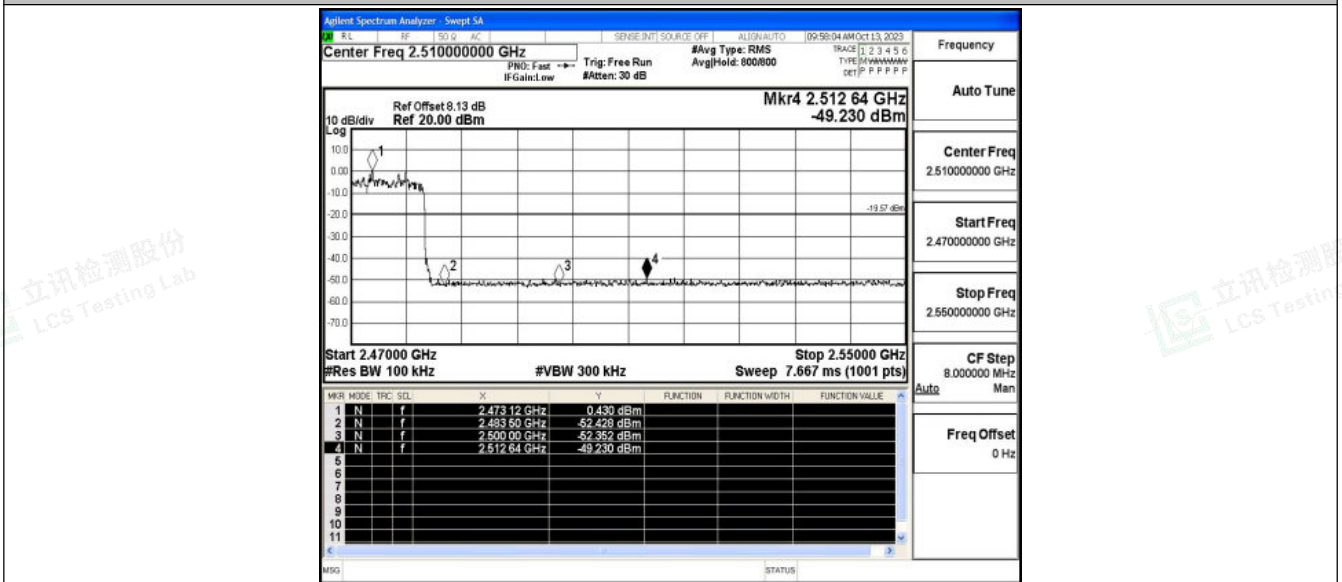
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



2DH5_Ant1_High_Hop_2480



3DH5_Ant1_Low_2402

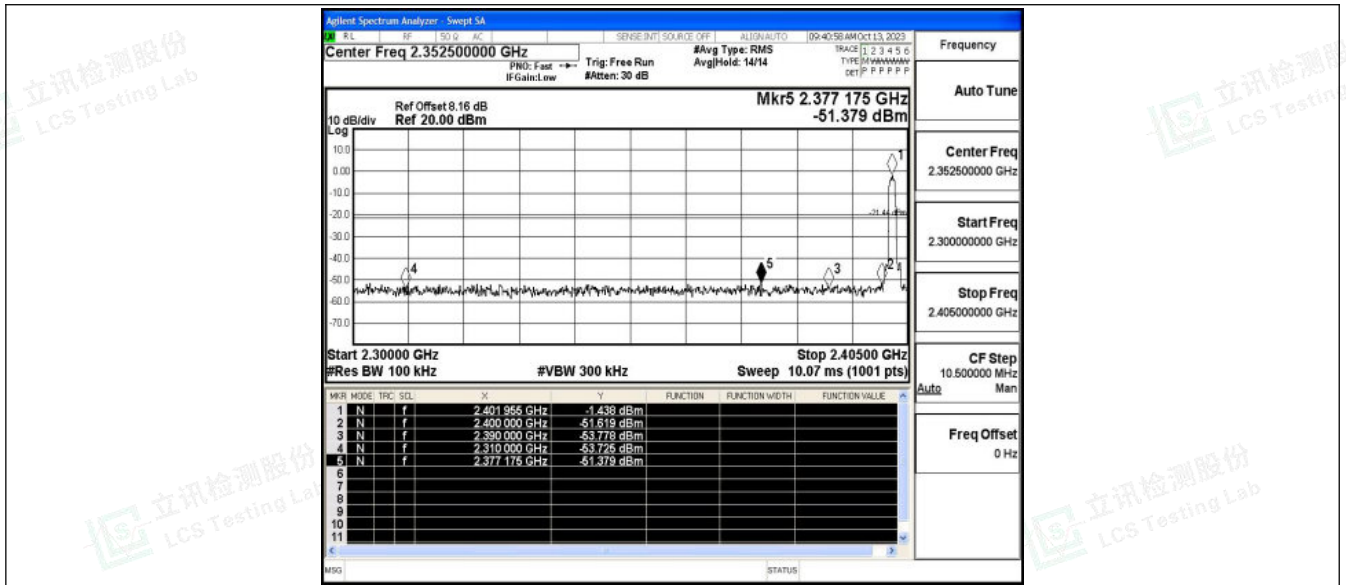


Shenzhen LCS Compliance Testing Laboratory Ltd.

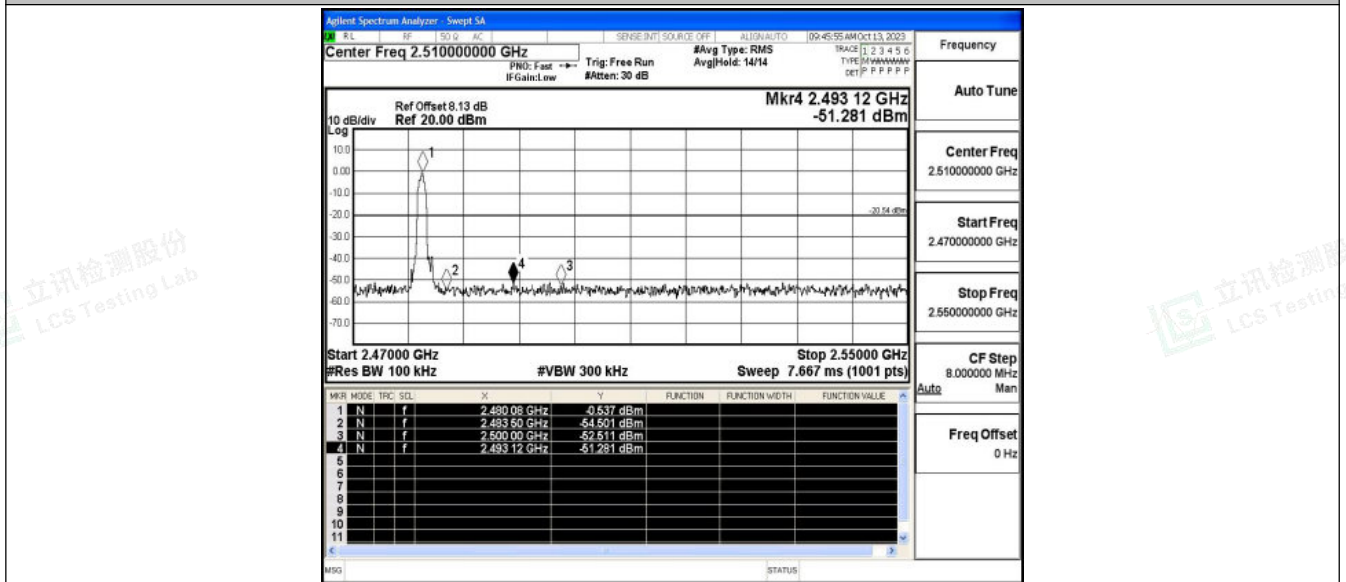
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402

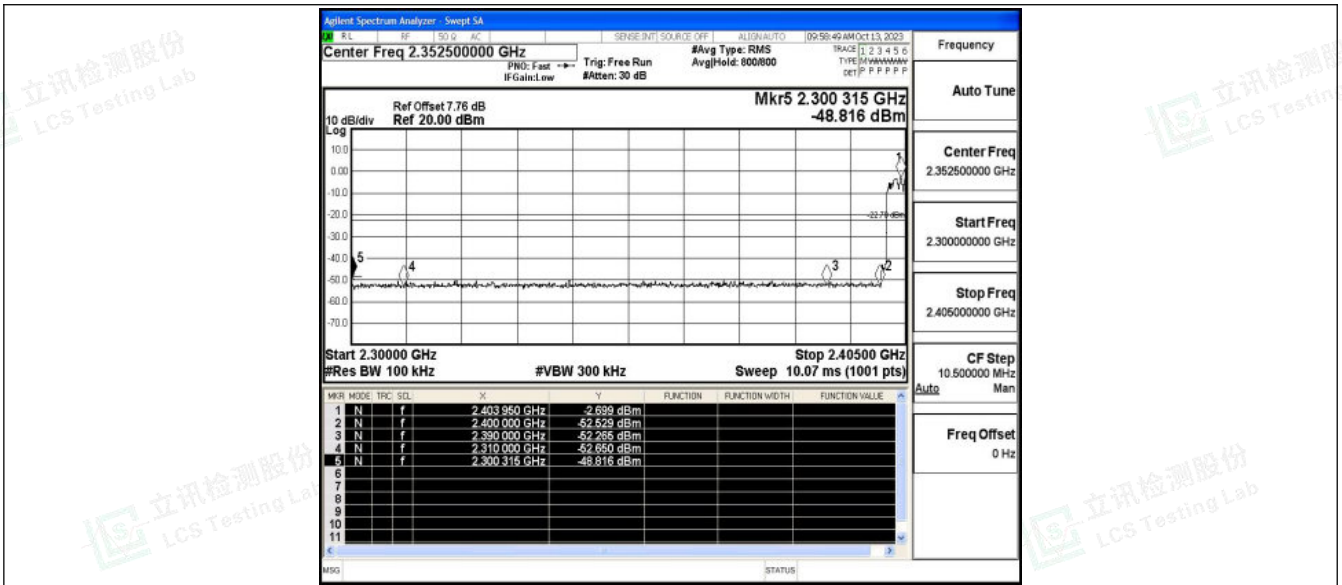


Shenzhen LCS Compliance Testing Laboratory Ltd.

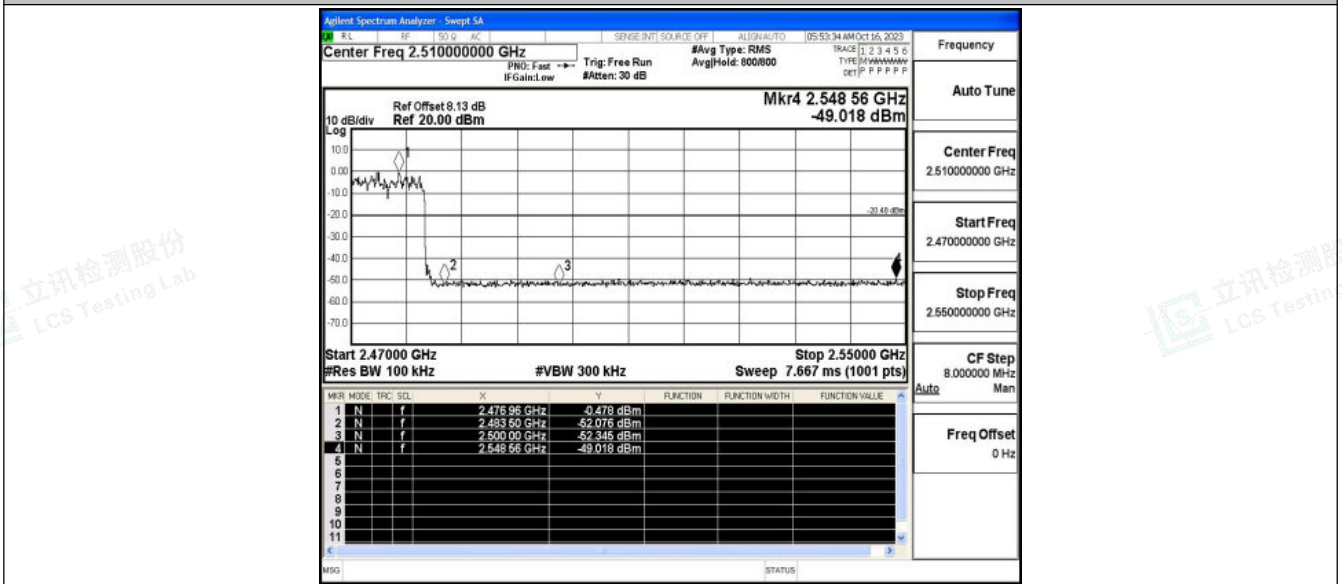
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



3DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

Test Result

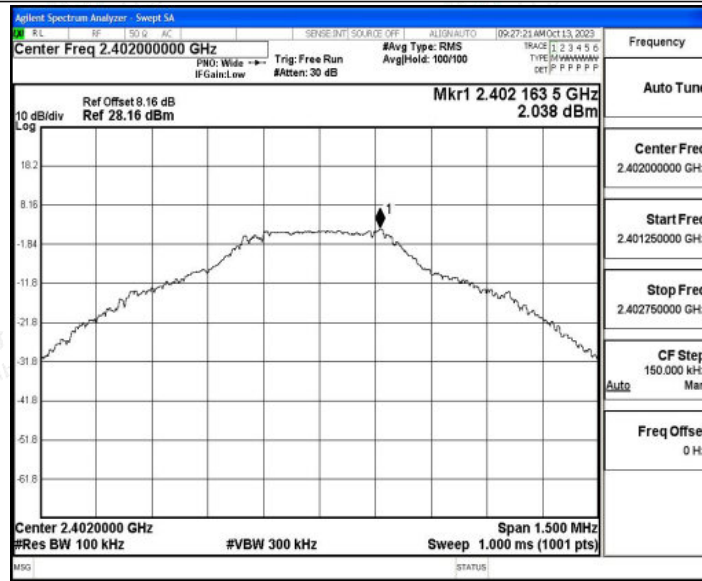
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	2.04	2.04	---	PASS
			30~1000	2.04	-61.92	≤-17.96	PASS
			1000~26500	2.04	-48.87	≤-17.96	PASS
		2441	Reference	1.71	1.71	---	PASS
			30~1000	1.71	-61.6	≤-18.29	PASS
			1000~26500	1.71	-49.34	≤-18.29	PASS
		2480	Reference	1.85	1.85	---	PASS
			30~1000	1.85	-61.28	≤-18.15	PASS
			1000~26500	1.85	-48.91	≤-18.15	PASS
2DH5	Ant1	2402	Reference	0.29	0.29	---	PASS
			30~1000	0.29	-60.98	≤-19.71	PASS
			1000~26500	0.29	-48.92	≤-19.71	PASS
		2441	Reference	1.00	1.00	---	PASS
			30~1000	1.00	-61.82	≤-19	PASS
			1000~26500	1.00	-48.58	≤-19	PASS
		2480	Reference	-2.32	-2.32	---	PASS
			30~1000	-2.32	-61.78	≤-22.32	PASS
			1000~26500	-2.32	-48.99	≤-22.32	PASS
3DH5	Ant1	2402	Reference	0.82	0.82	---	PASS
			30~1000	0.82	-61.03	≤-19.18	PASS
			1000~26500	0.82	-49.17	≤-19.18	PASS
		2441	Reference	0.99	0.99	---	PASS
			30~1000	0.99	-61.4	≤-19.01	PASS
			1000~26500	0.99	-48.74	≤-19.01	PASS
		2480	Reference	0.38	0.38	---	PASS
			30~1000	0.38	-61.51	≤-19.62	PASS
			1000~26500	0.38	-49.25	≤-19.62	PASS



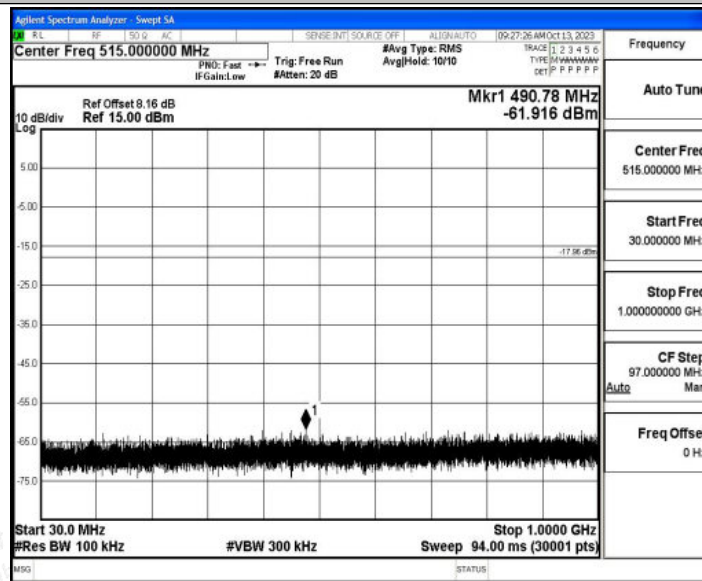


Test Graphs

DH5_Ant1_2402_0~Reference

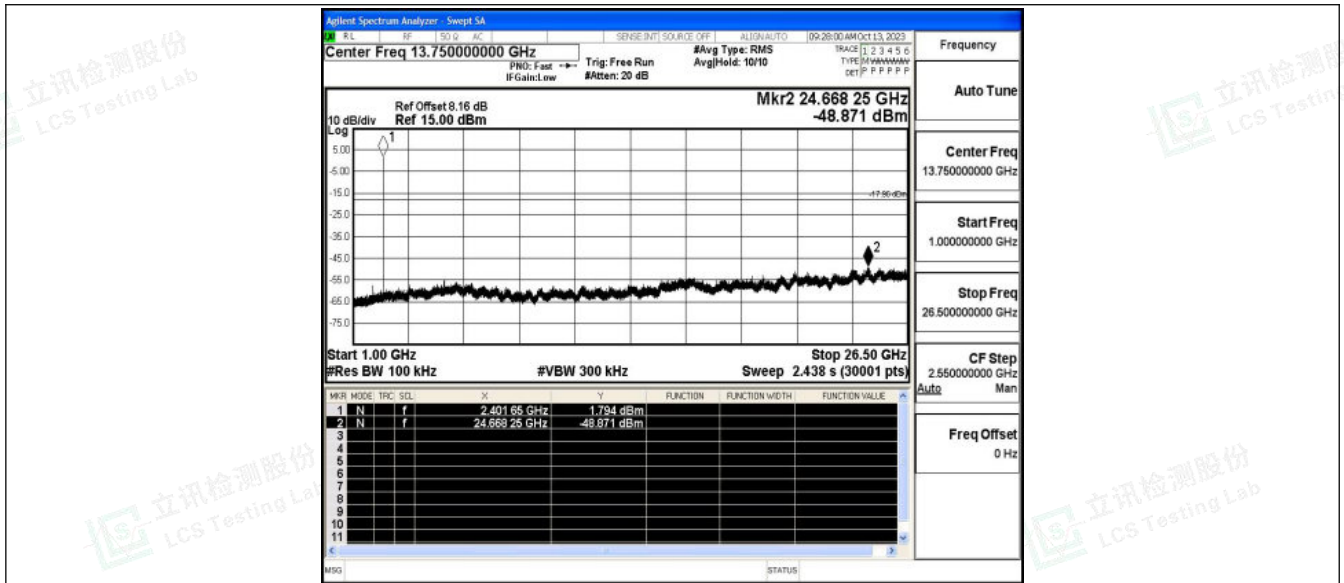


DH5_Ant1_2402_30~1000

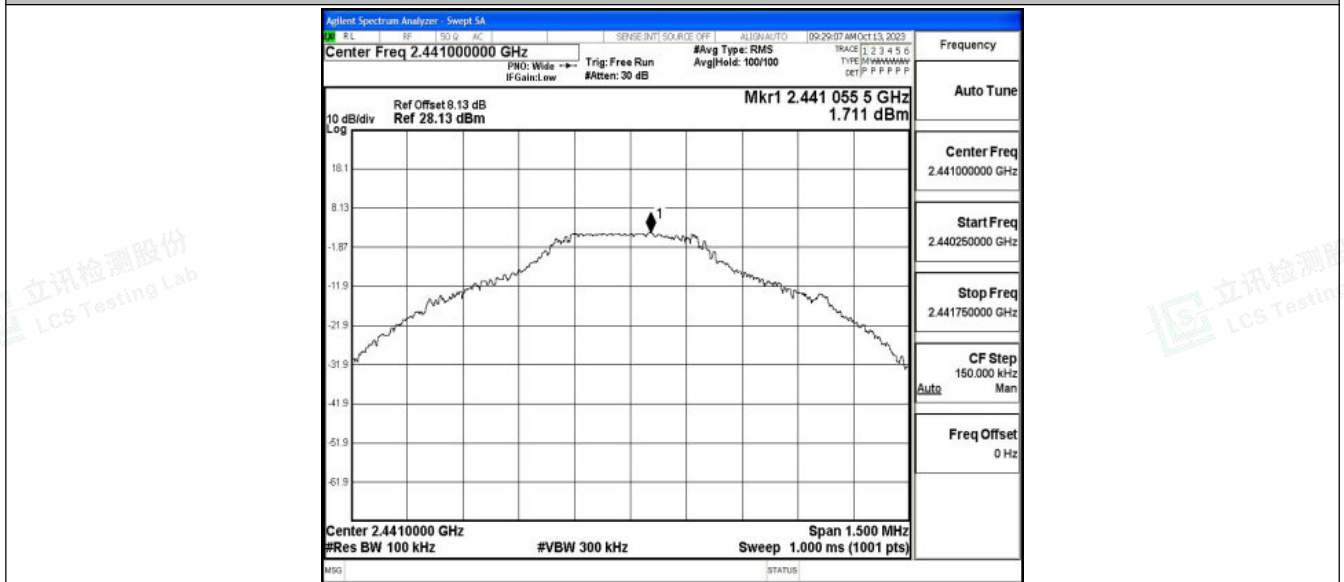


DH5_Ant1_2402_1000~26500



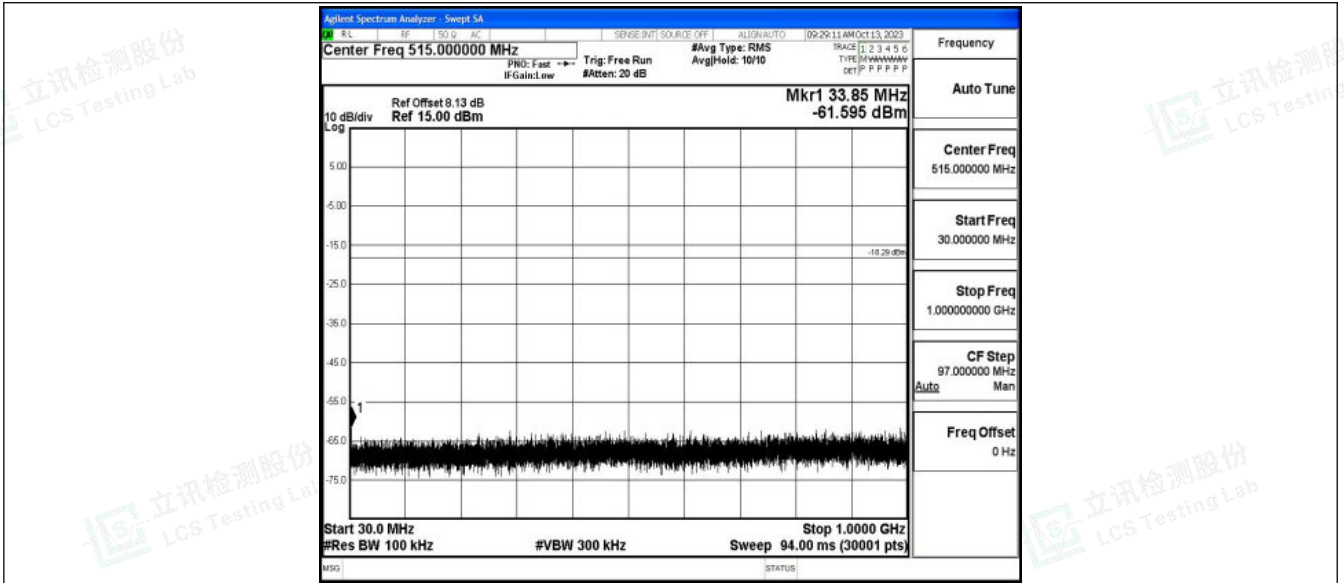


DH5_Ant1_2441_0~Reference

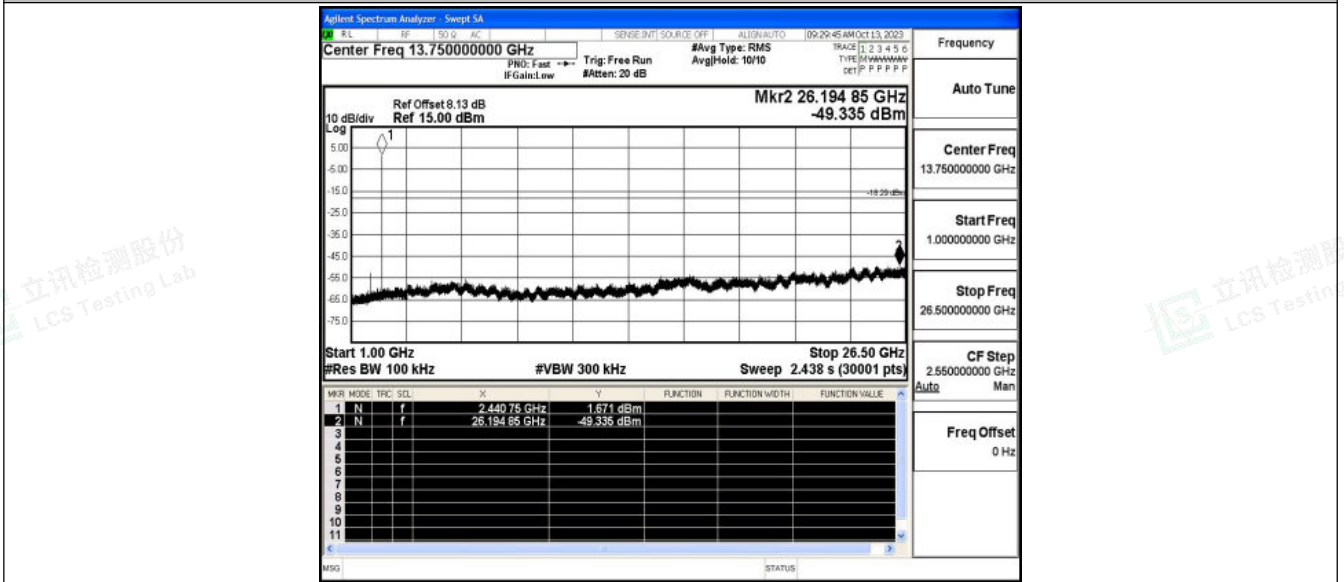


DH5_Ant1_2441_30~1000



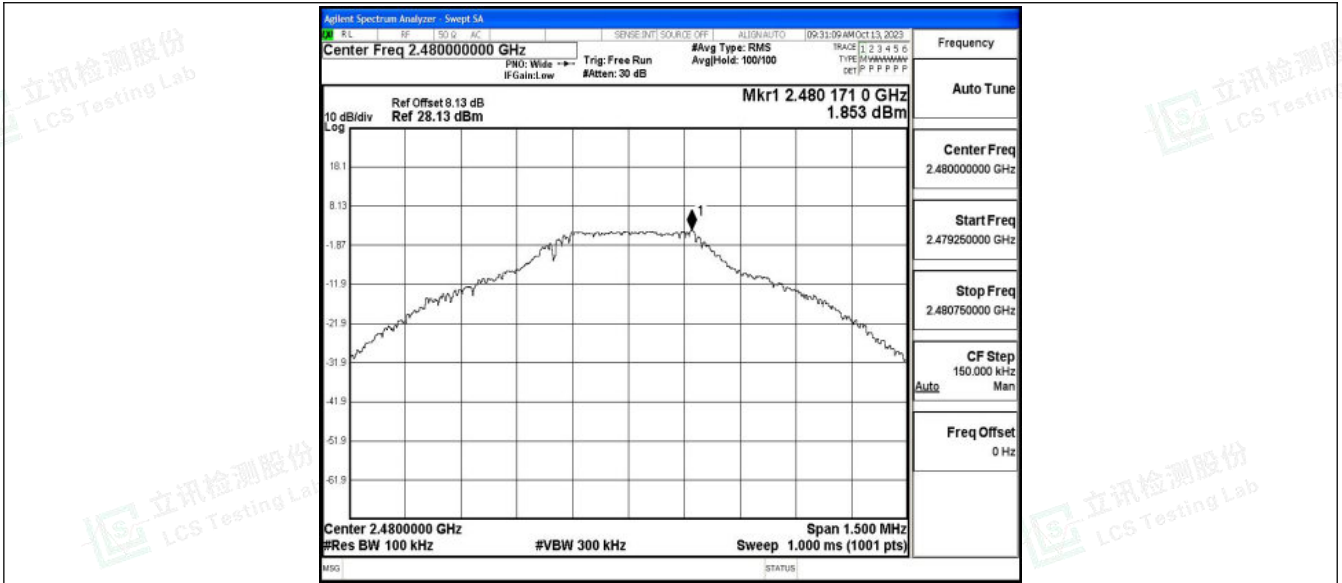


DH5_Ant1_2441_1000~26500

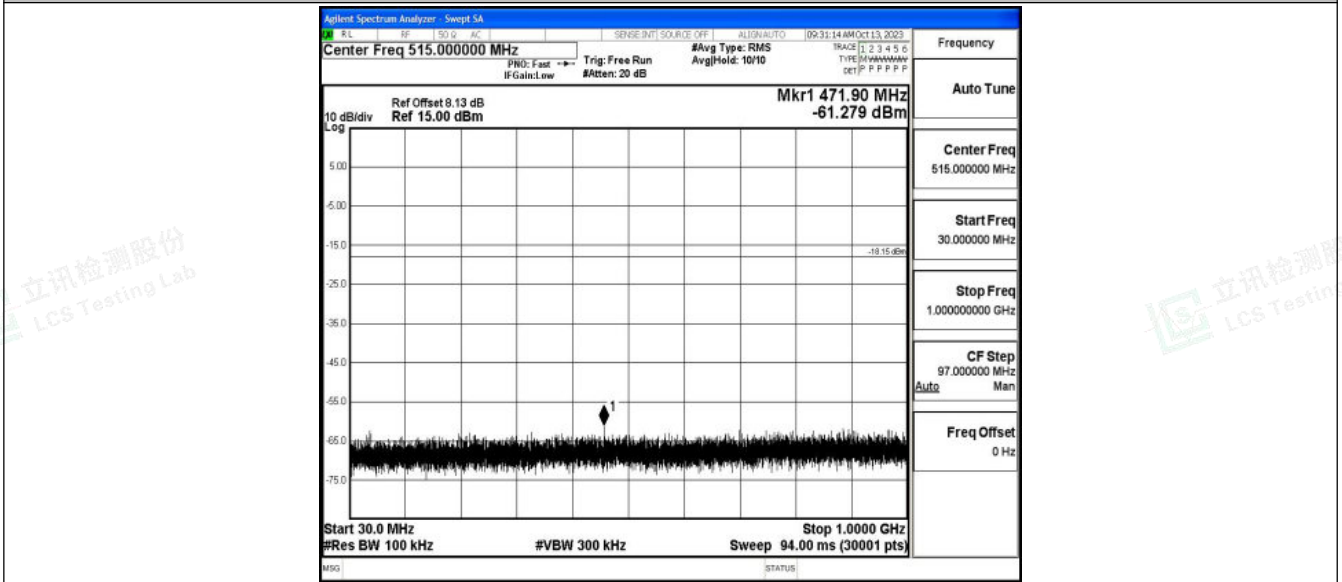


DH5_Ant1_2480_0~Reference



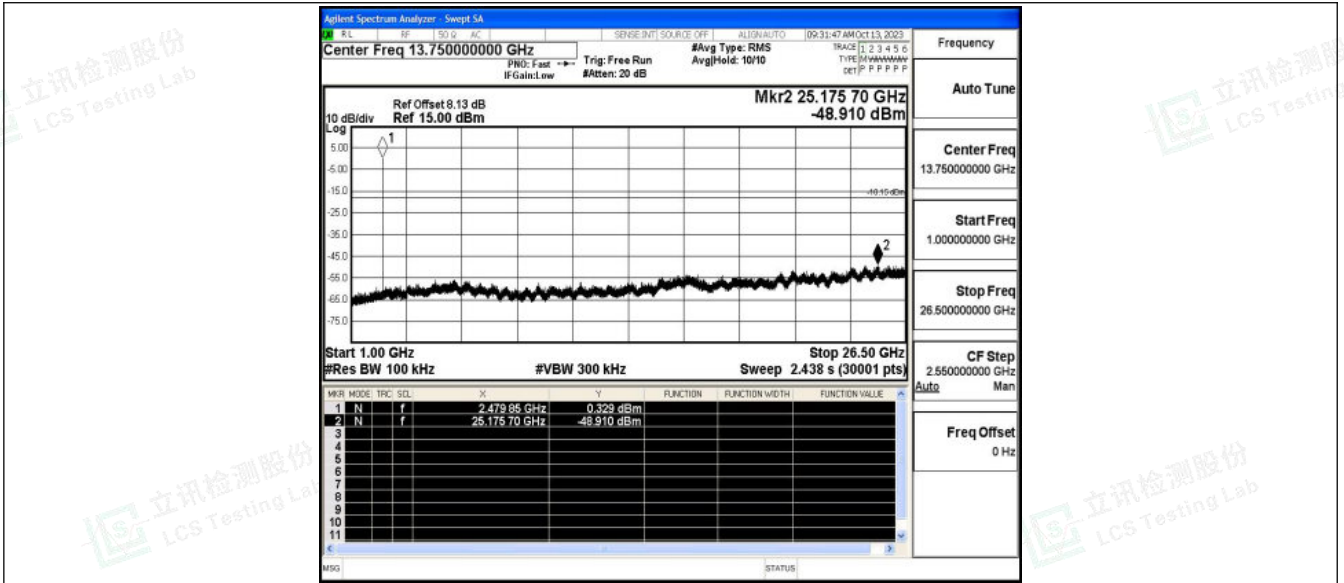


DH5_Ant1_2480_30~1000

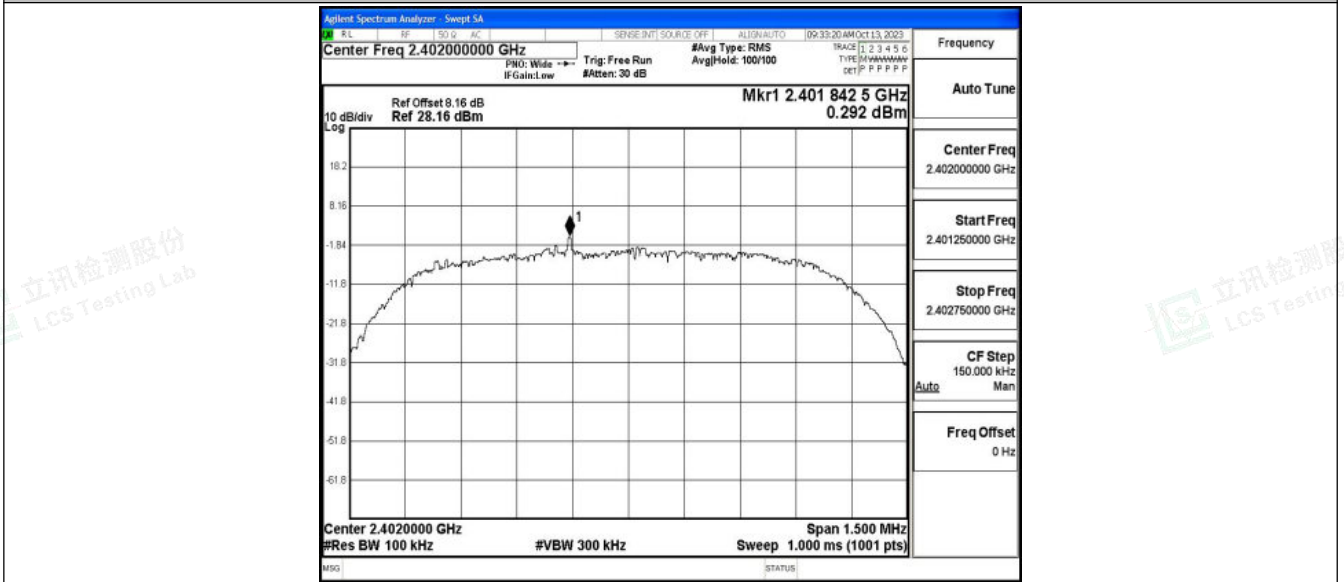


DH5_Ant1_2480_1000~26500



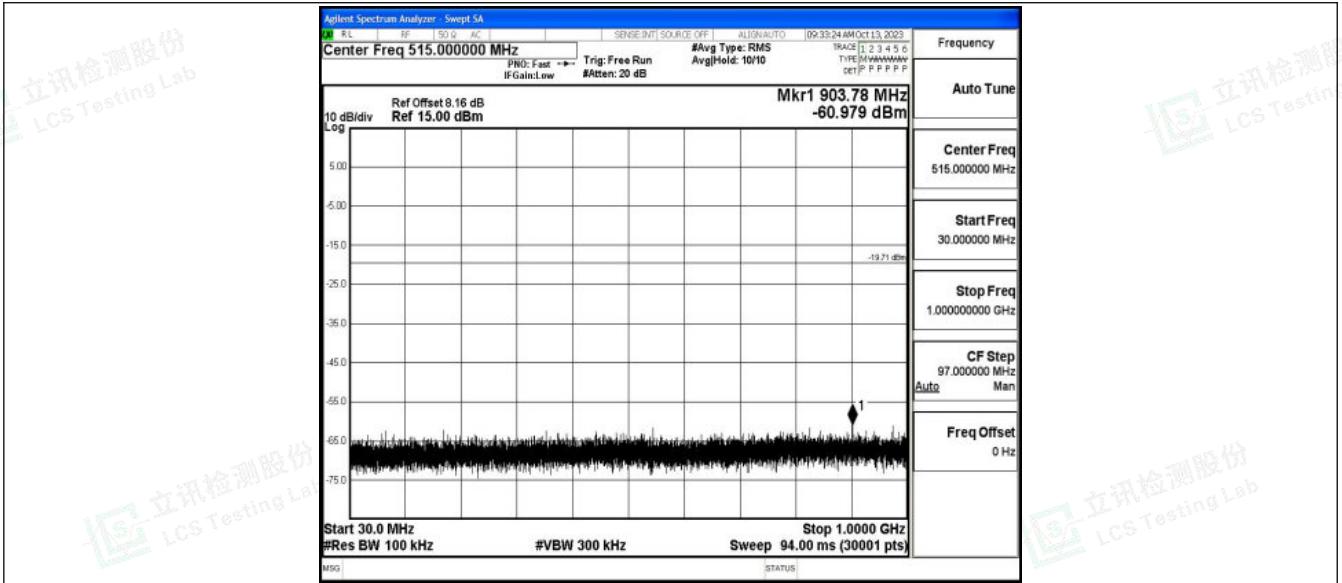


2DH5_Ant1_2402_0~Reference

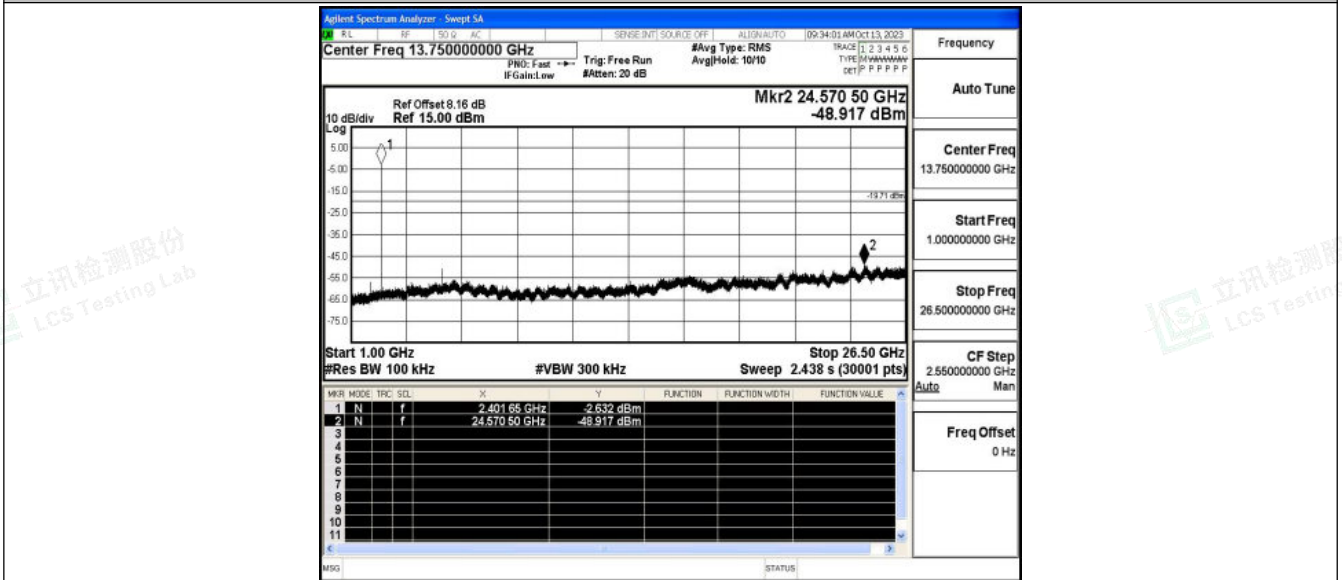


2DH5_Ant1_2402_30~1000



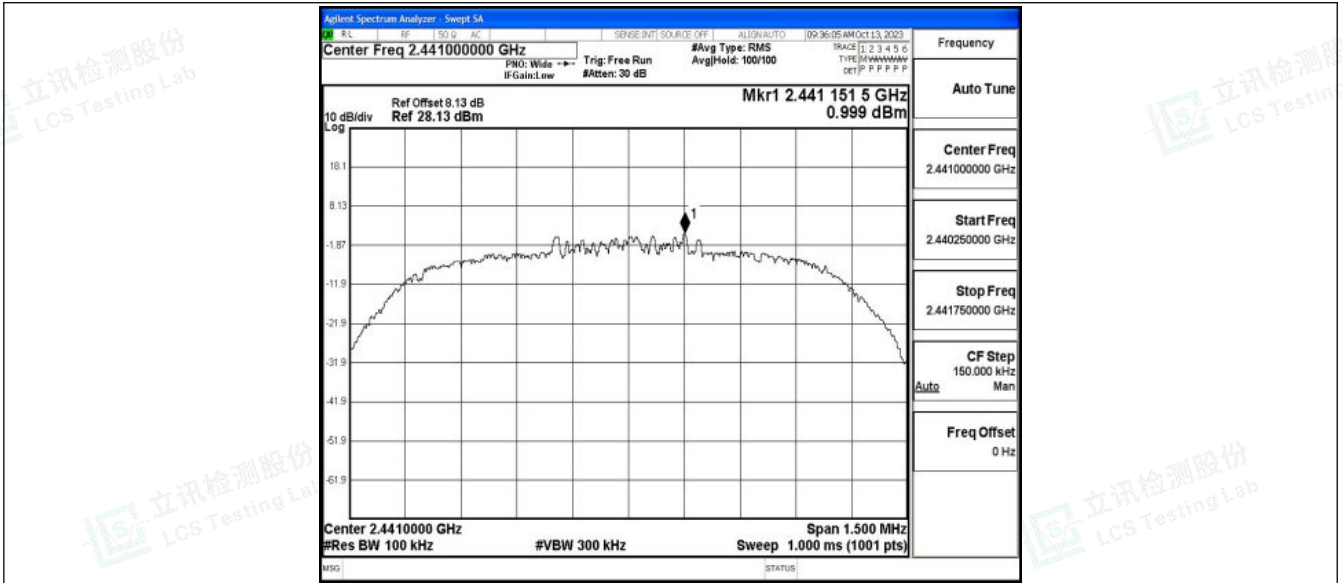


2DH5_Ant1_2402_1000~26500

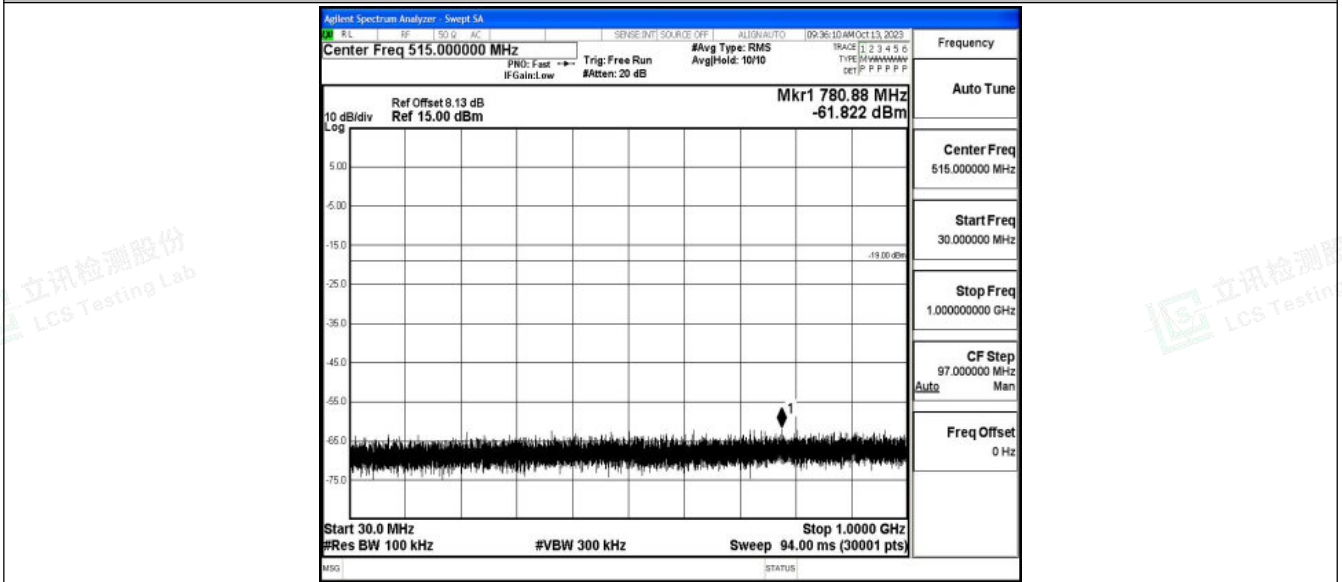


2DH5_Ant1_2441_0~Reference



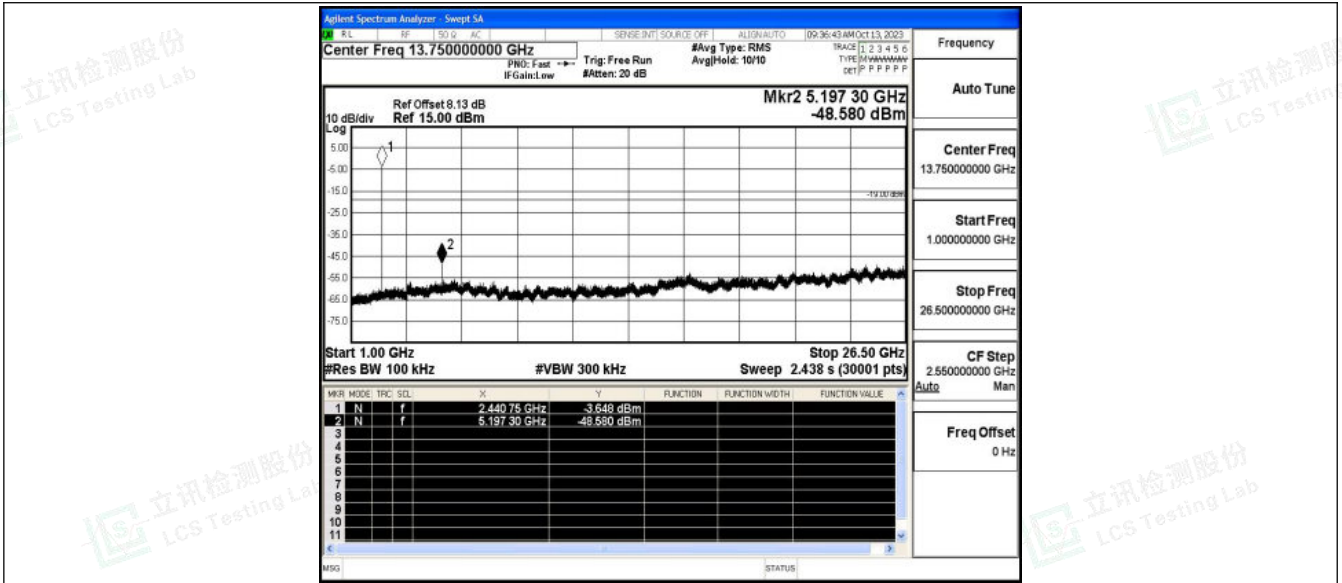


2DH5_Ant1_2441_30~1000

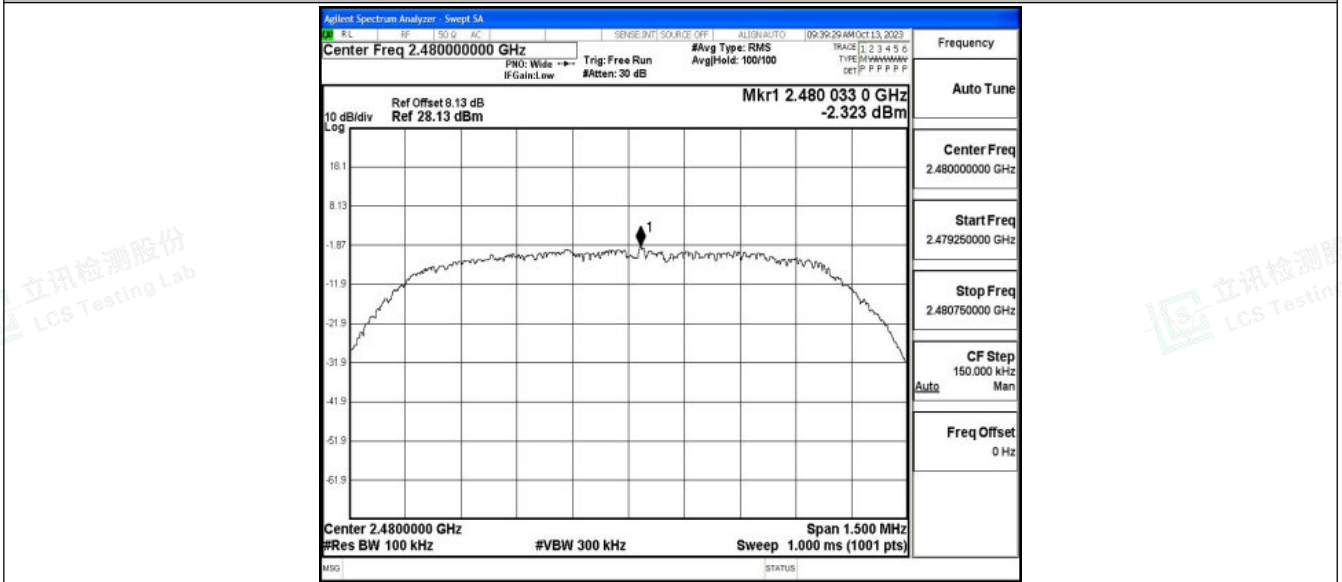


2DH5_Ant1_2441_1000~26500



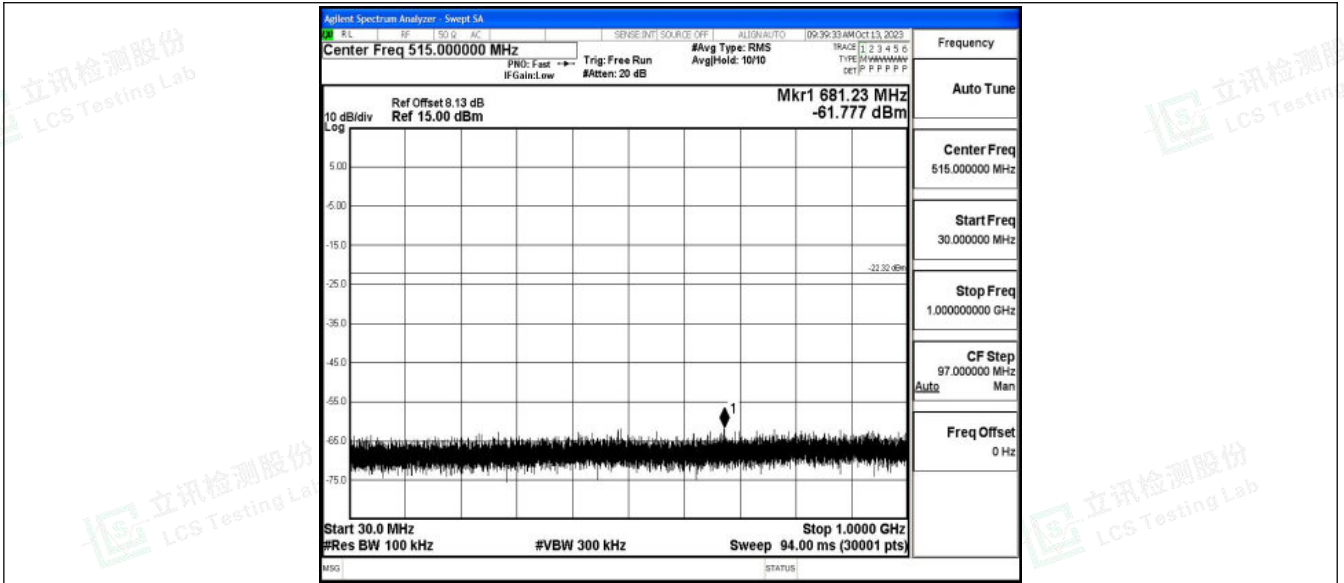


2DH5_Ant1_2480_0~Reference

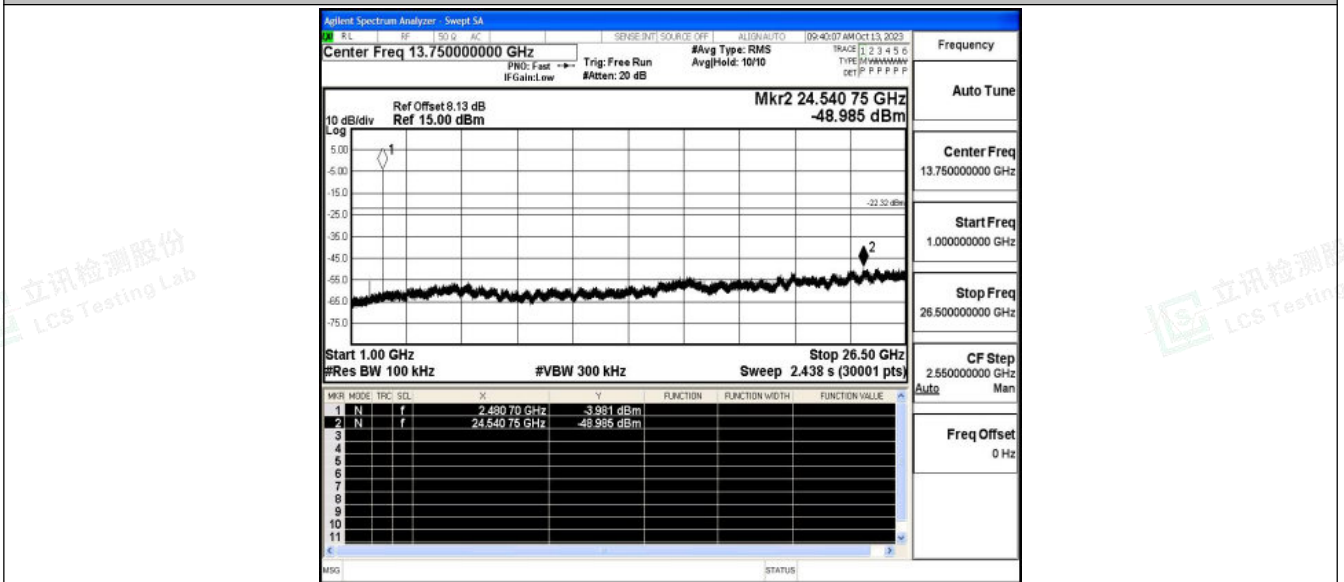


2DH5_Ant1_2480_30~1000



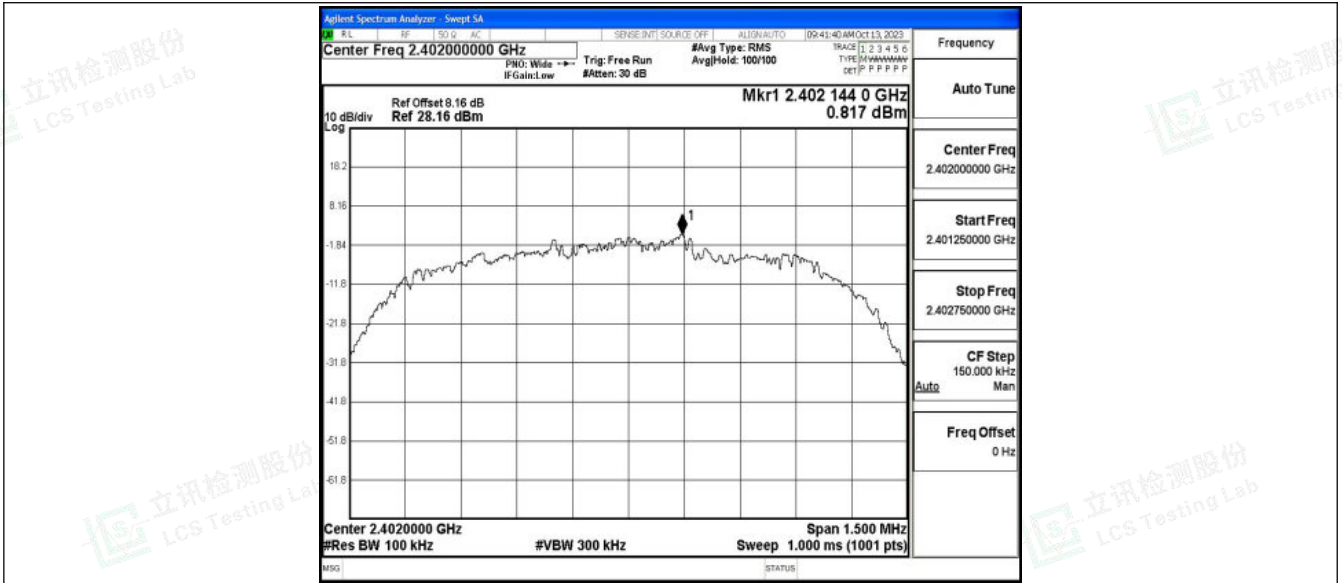


2DH5_Ant1_2480_1000~26500

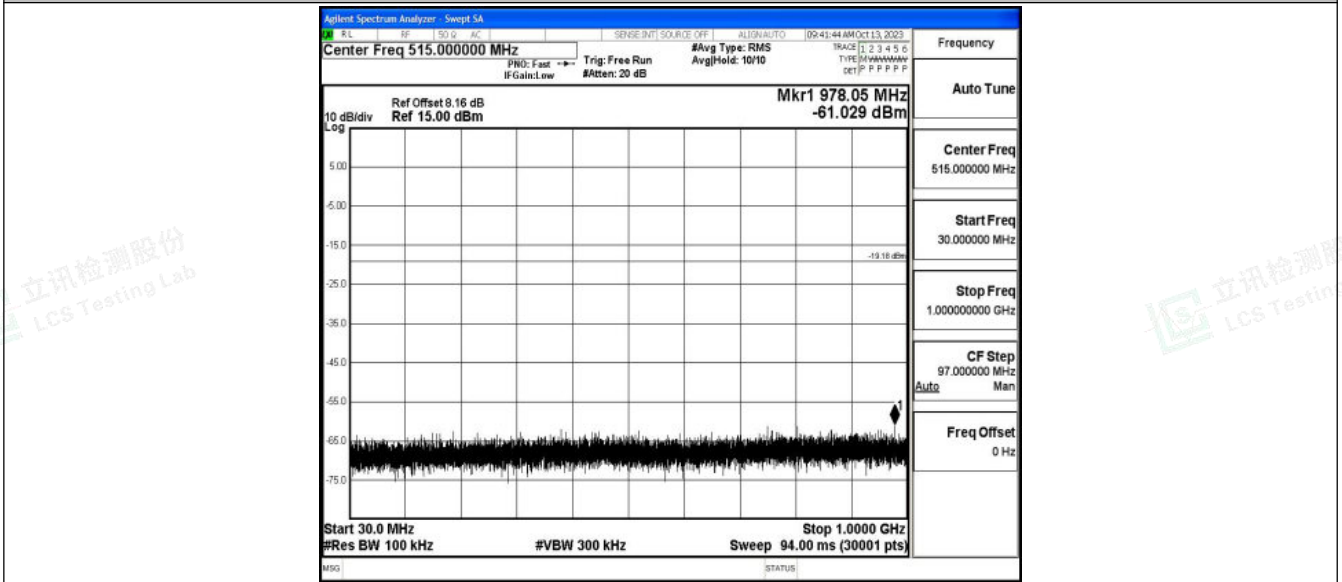


3DH5_Ant1_2402_0~Reference



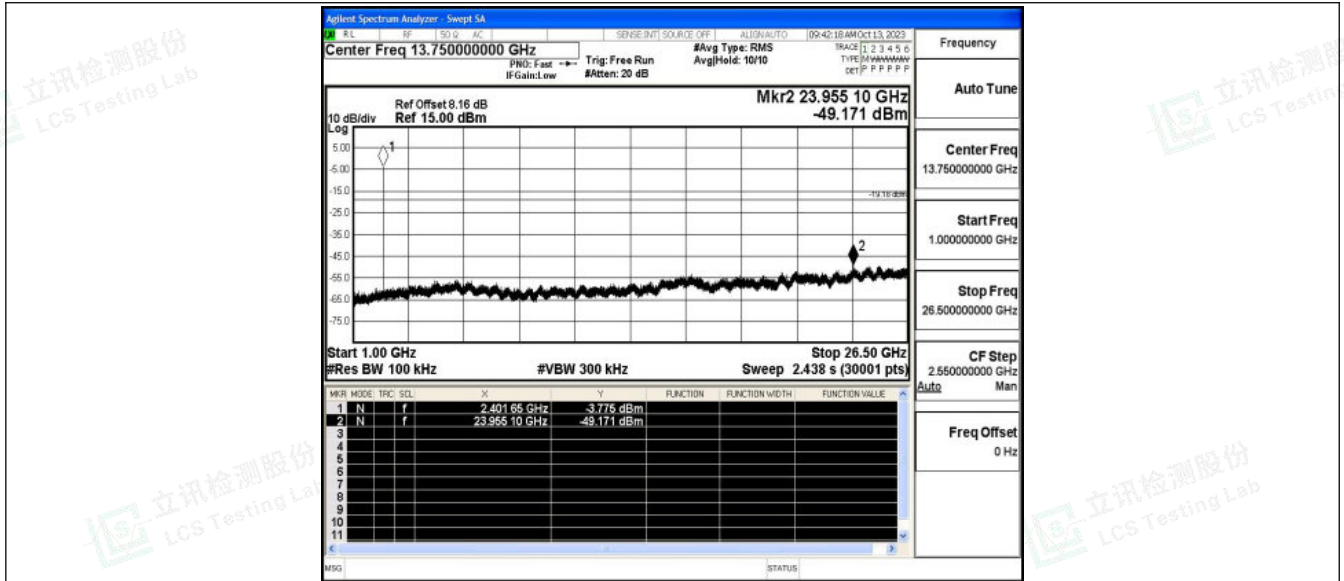


3DH5_Ant1_2402_30~1000

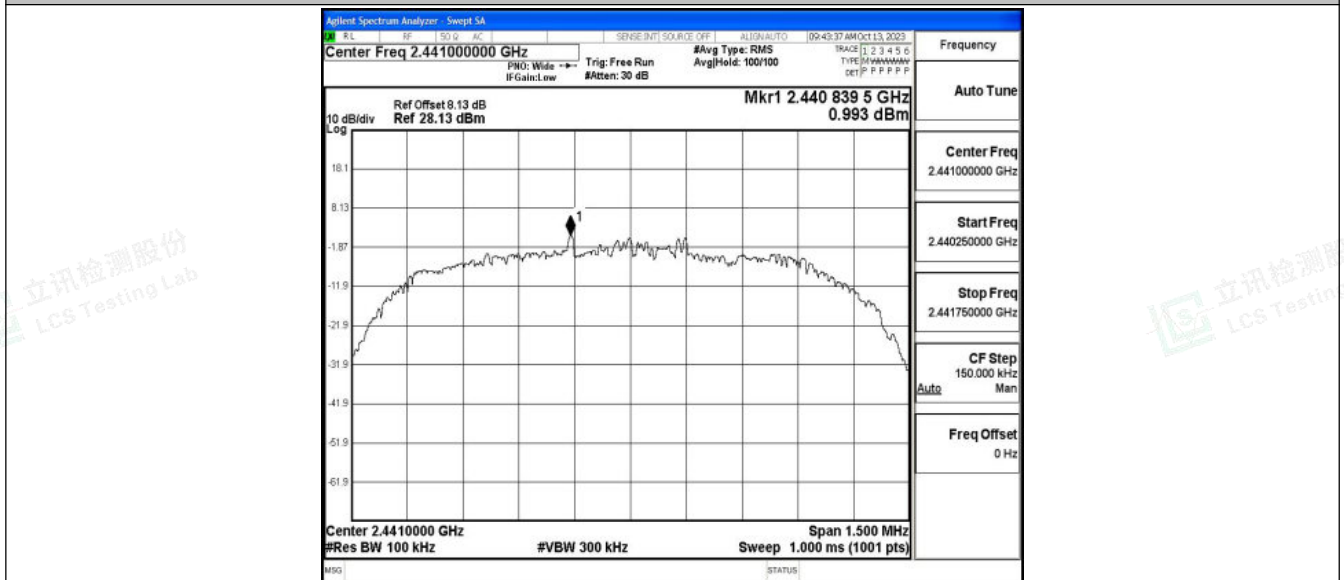


3DH5_Ant1_2402_1000~26500



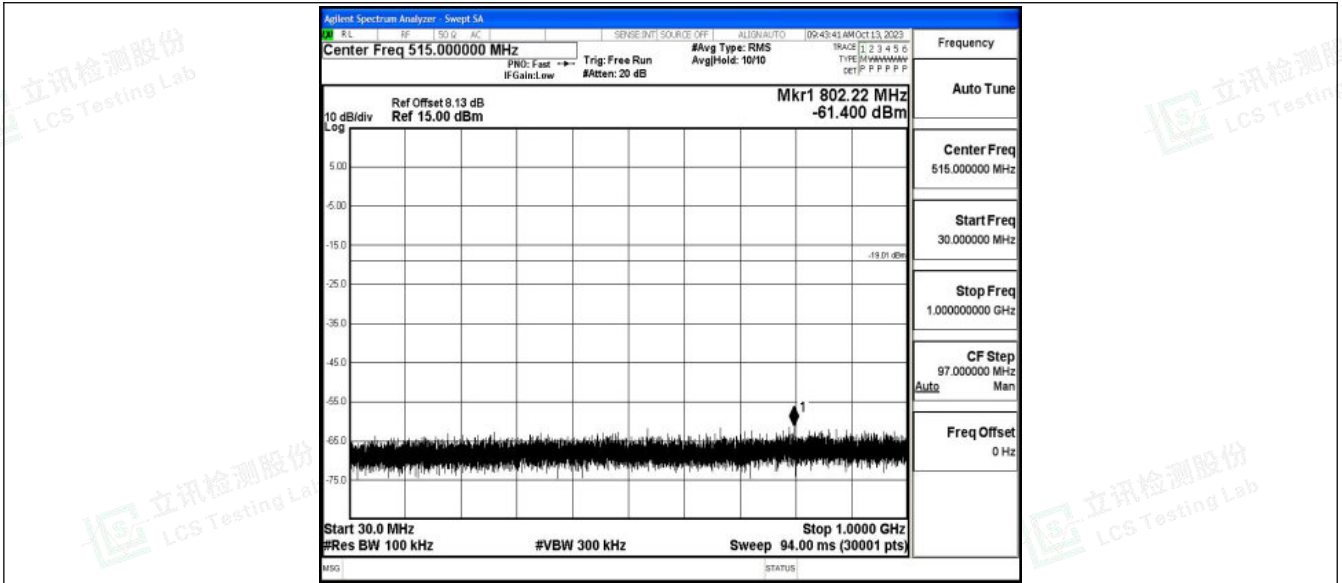


3DH5_Ant1_2441_0~Reference

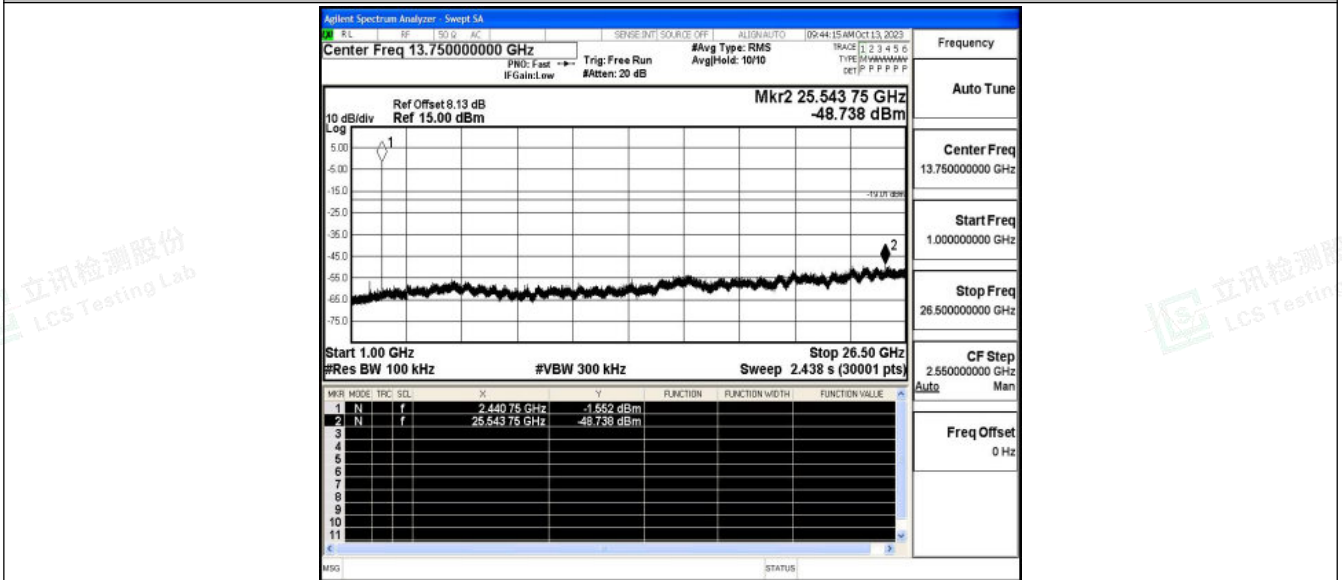


3DH5_Ant1_2441_30~1000



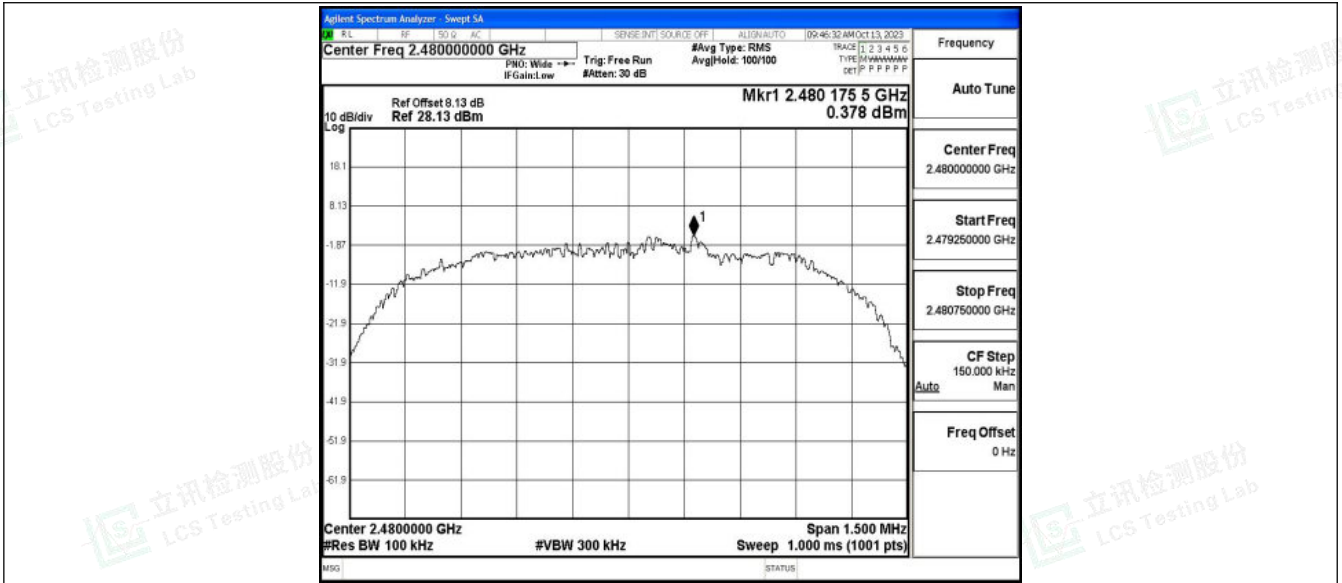


3DH5_Ant1_2441_1000~26500

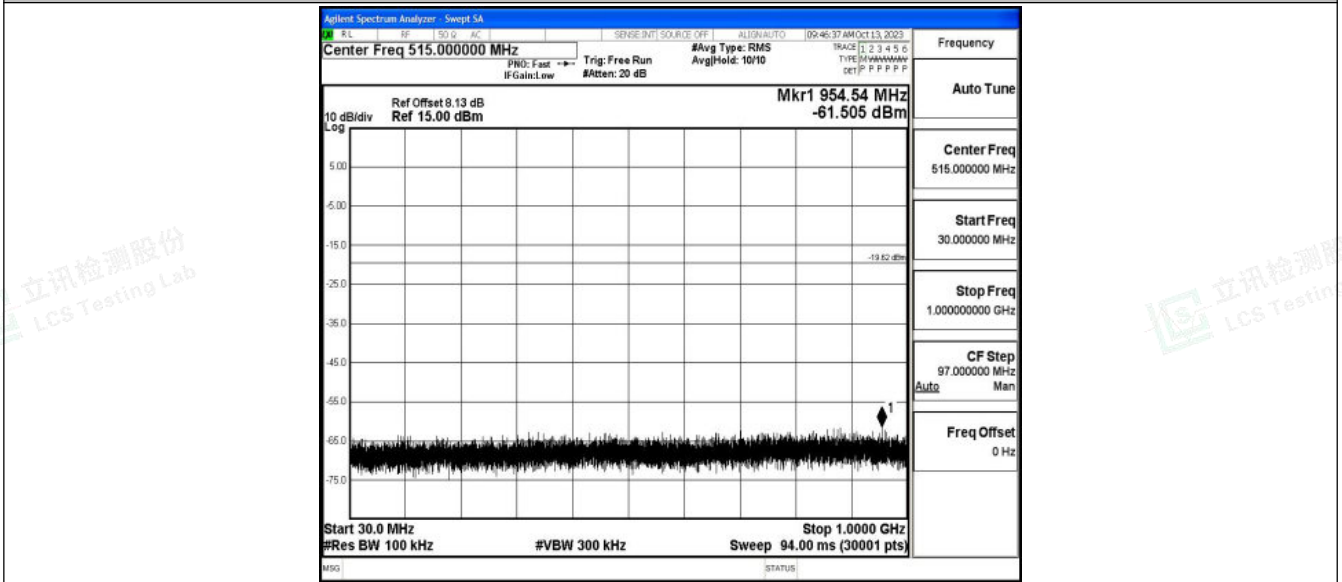


3DH5_Ant1_2480_0~Reference



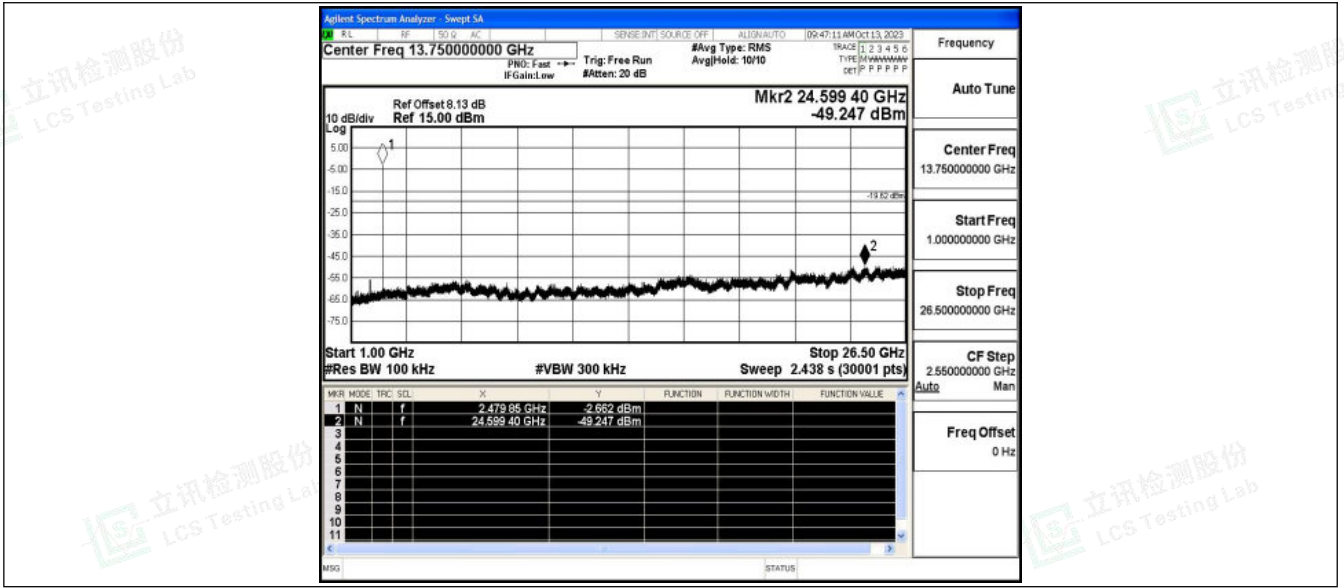


3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500







A.8 Emissions in Restricted Bands

Test Result

TestMode	Antenna	Channel	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-48.92	≤-41.20	46.28	≤54	PASS
				AV	2385.365	-48.51	≤-41.20	46.69	≤54	PASS
				AV	2390.000	-48.66	≤-41.20	46.54	≤54	PASS
				Peak	2310.000	-45.14	≤-21.20	50.06	≤74	PASS
				Peak	2365.415	-39.92	≤-21.20	55.28	≤74	PASS
				Peak	2390.000	-43.62	≤-21.20	51.58	≤74	PASS
		High	2480	AV	2483.500	-48.18	≤-41.20	47.02	≤54	PASS
				AV	2483.520	-48.18	≤-41.20	47.02	≤54	PASS
				AV	2500.000	-48.61	≤-41.20	46.59	≤54	PASS
				Peak	2483.500	-42.43	≤-21.20	52.77	≤74	PASS
				Peak	2486.240	-39.92	≤-21.20	55.28	≤74	PASS
				Peak	2500.000	-41.37	≤-21.20	53.83	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-48.86	≤-41.20	46.34	≤54	PASS
				AV	2365.520	-48.55	≤-41.20	46.65	≤54	PASS
				AV	2390.000	-48.74	≤-41.20	46.46	≤54	PASS
				Peak	2310.000	-42.69	≤-21.20	52.51	≤74	PASS
				Peak	2385.680	-39.29	≤-21.20	55.91	≤74	PASS
				Peak	2390.000	-43.44	≤-21.20	51.76	≤74	PASS
		High	2480	AV	2483.500	-48.15	≤-41.20	47.05	≤54	PASS
				AV	2483.520	-48.15	≤-41.20	47.05	≤54	PASS
				AV	2500.000	-48.62	≤-41.20	46.58	≤54	PASS
				Peak	2483.500	-44.27	≤-21.20	50.93	≤74	PASS
				Peak	2491.440	-40.35	≤-21.20	54.85	≤74	PASS
				Peak	2500.000	-41.6	≤-21.20	53.60	≤74	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-49.05	≤-41.20	46.15	≤54	PASS
				AV	2386.415	-48.58	≤-41.20	46.62	≤54	PASS
				AV	2390.000	-48.76	≤-41.20	46.44	≤54	PASS
				Peak	2310.000	-44.4	≤-21.20	50.80	≤74	PASS
				Peak	2388.935	-39.37	≤-21.20	55.83	≤74	PASS
				Peak	2390.000	-44.61	≤-21.20	50.59	≤74	PASS
		High	2480	AV	2483.500	-48.15	≤-41.20	47.05	≤54	PASS
				AV	2483.520	-48.15	≤-41.20	47.05	≤54	PASS
				AV	2500.000	-48.62	≤-41.20	46.58	≤54	PASS
				Peak	2483.500	-41.4	≤-21.20	53.80	≤74	PASS
				Peak	2488.000	-39.47	≤-21.20	55.73	≤74	PASS
				Peak	2500.000	-44.08	≤-21.20	51.12	≤74	PASS



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Scan code to check authenticity



Note:

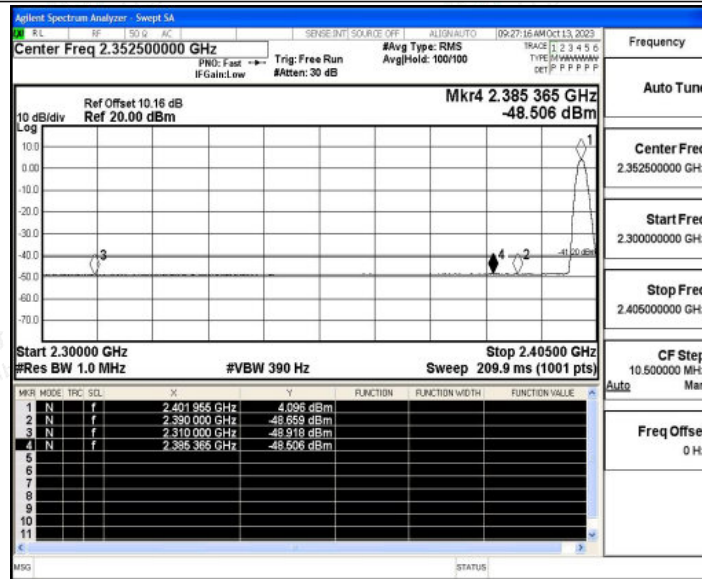
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



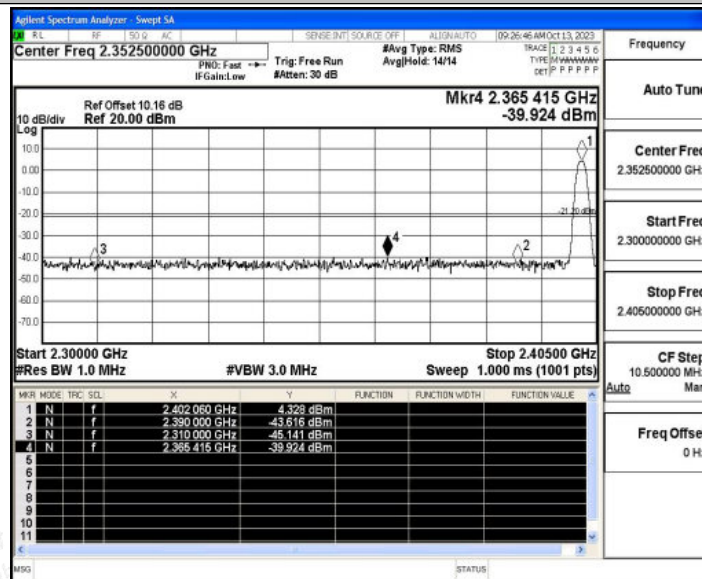


Test Graphs

DH5_Ant1_Low_2402_AV

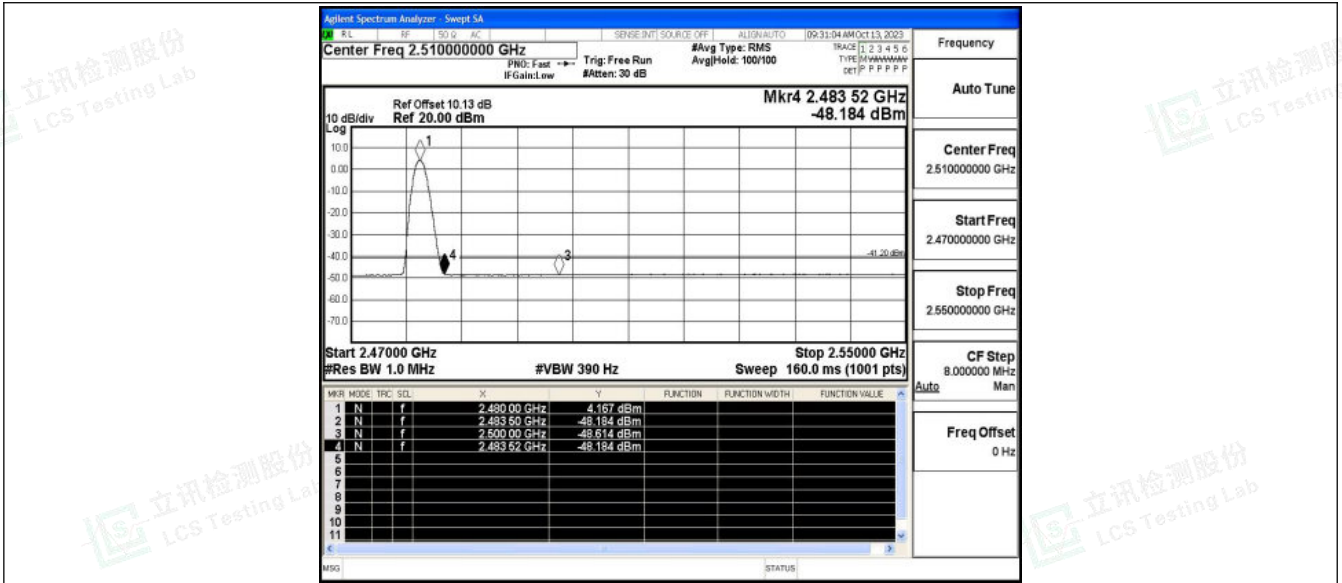


DH5_Ant1_Low_2402_Peak

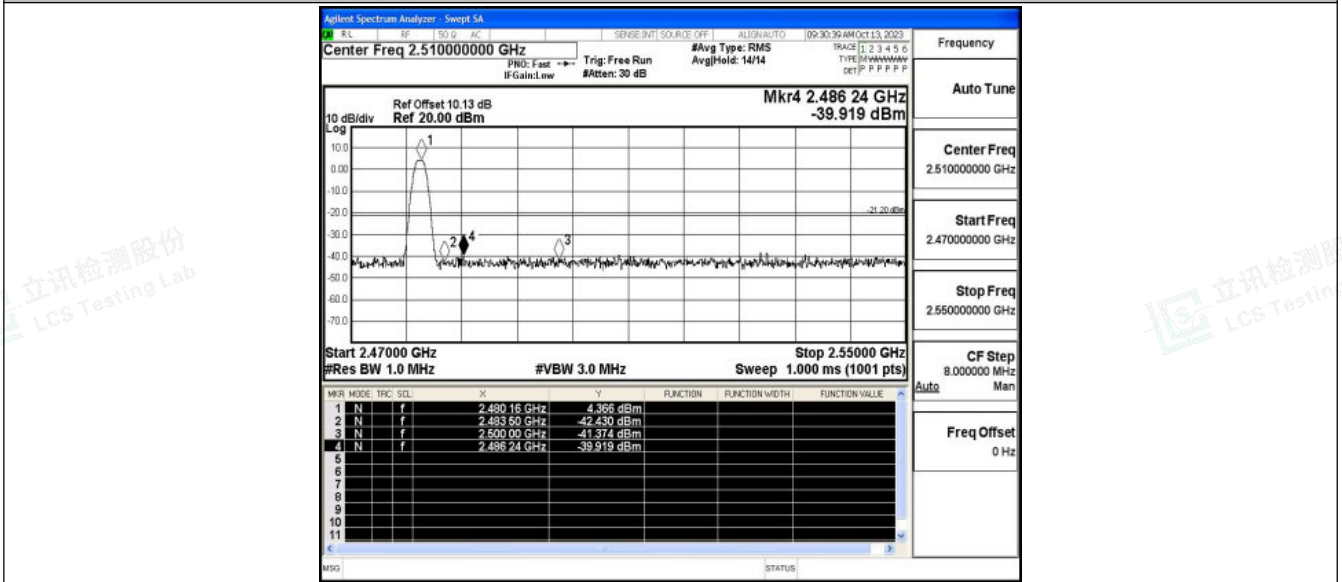


DH5_Ant1_High_2480_AV



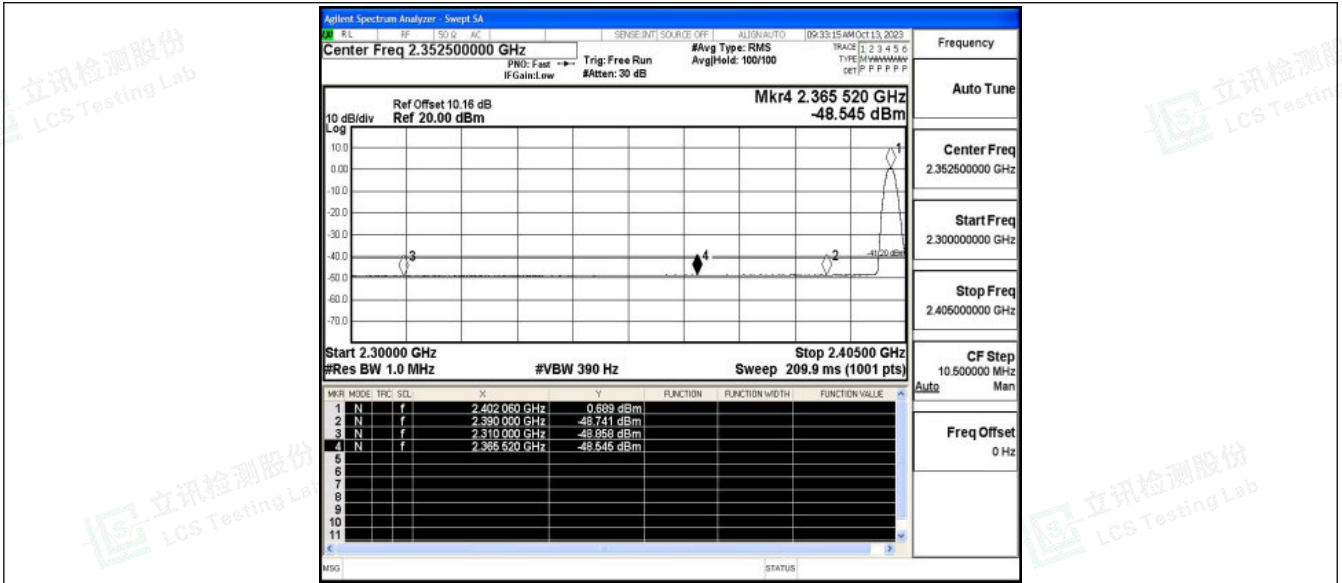


DH5_Ant1_High_2480_Peak

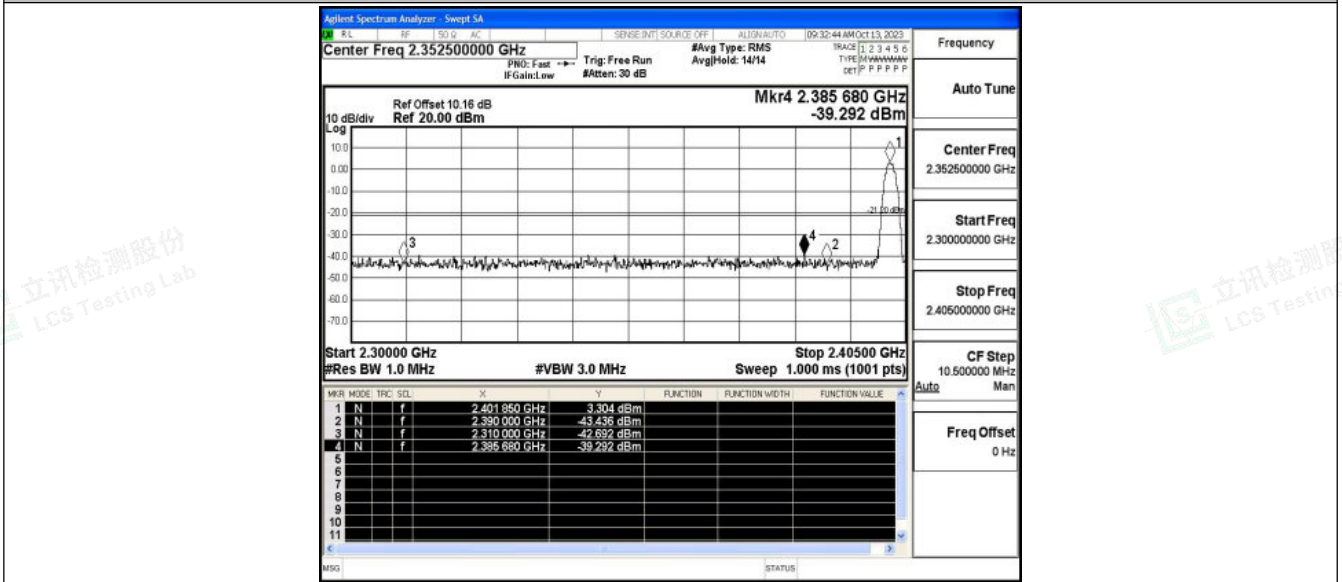


2DH5_Ant1_Low_2402_AV





2DH5_Ant1_Low_2402_Peak



2DH5_Ant1_High_2480_AV

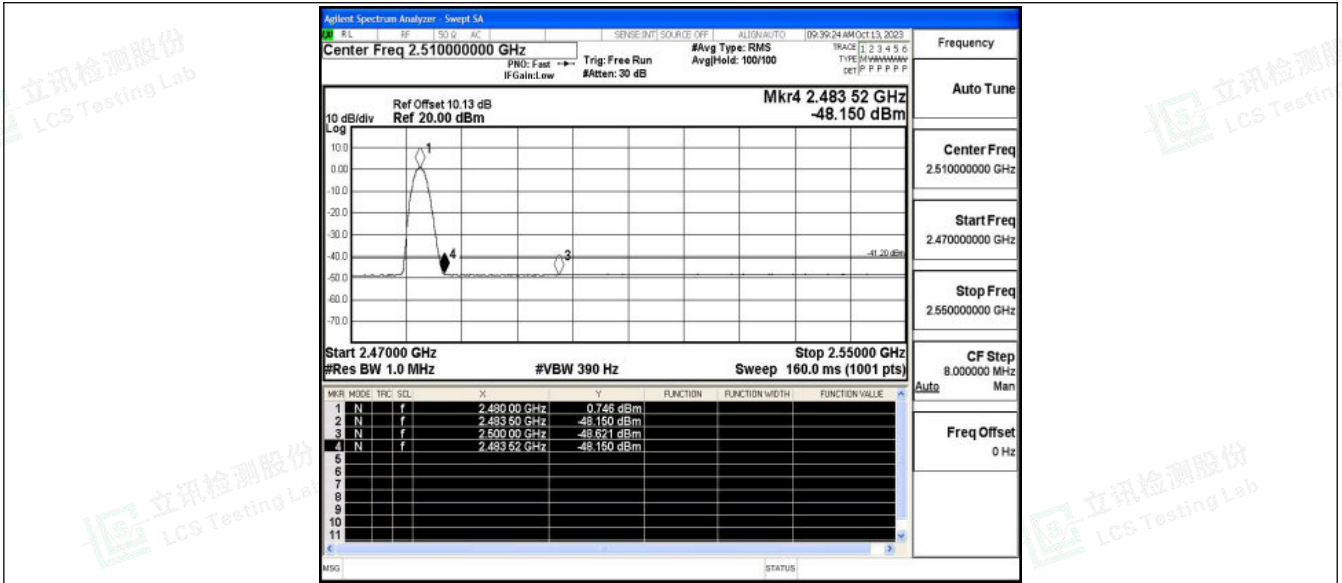


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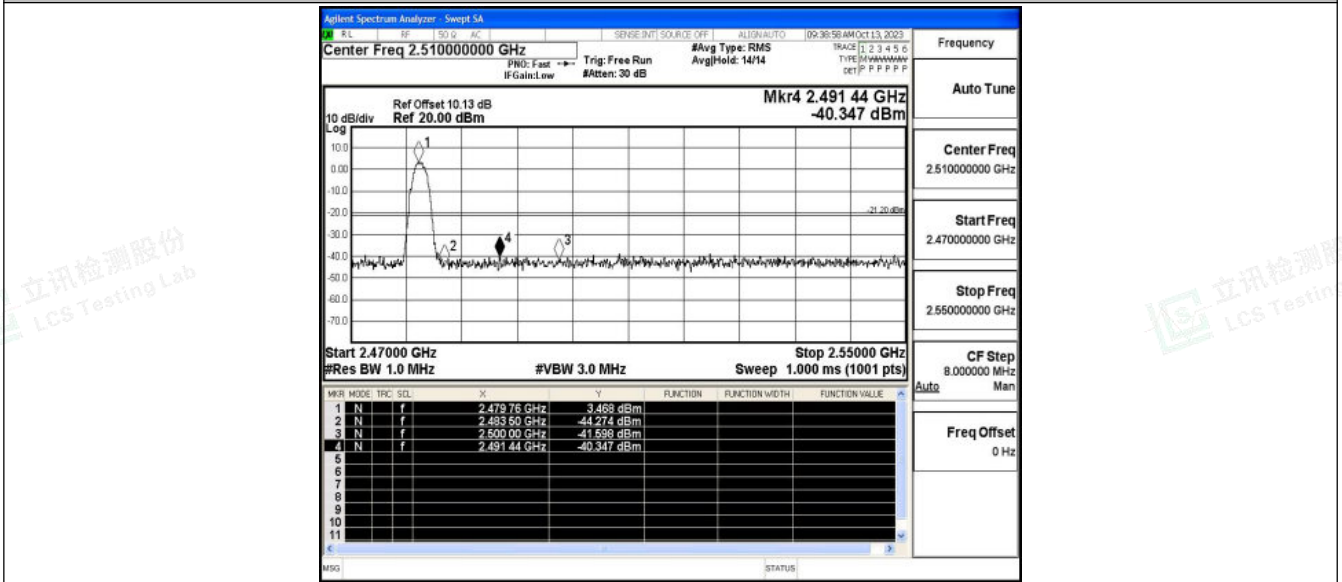
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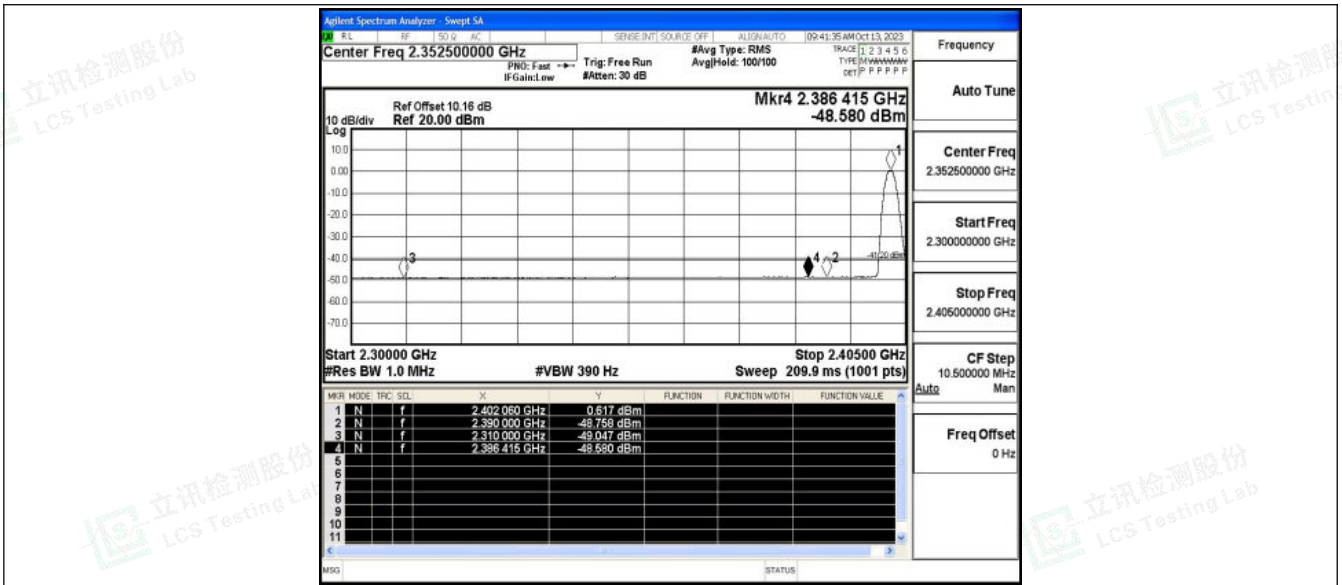


2DH5_Ant1_High_2480_Peak

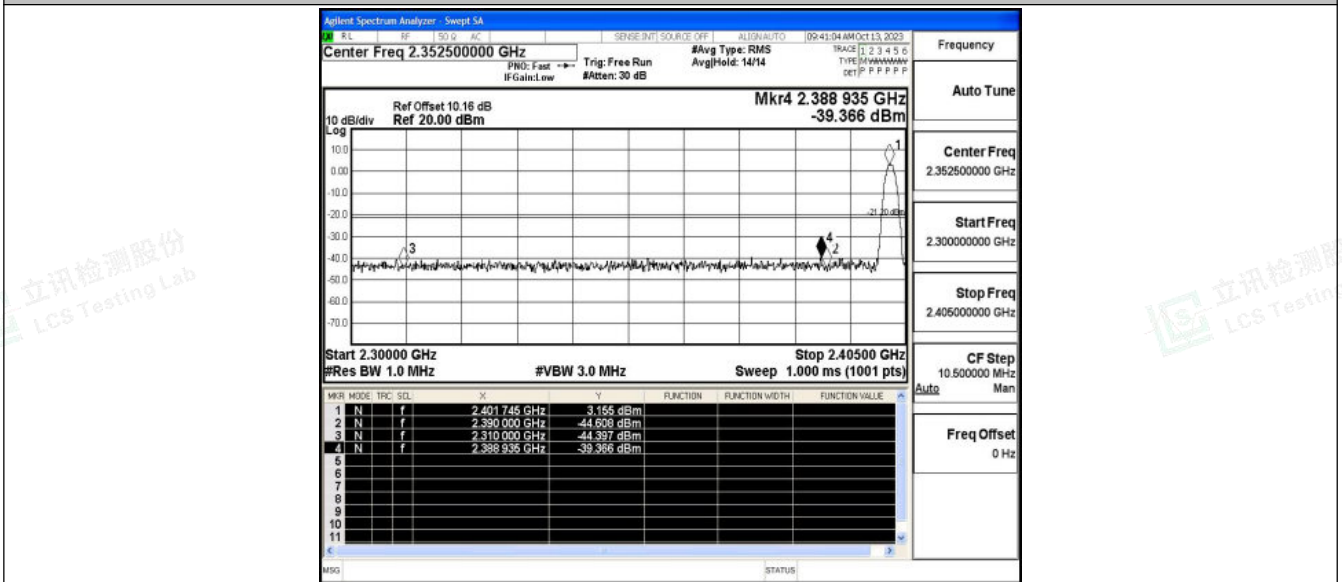


3DH5_Ant1_Low_2402_AV



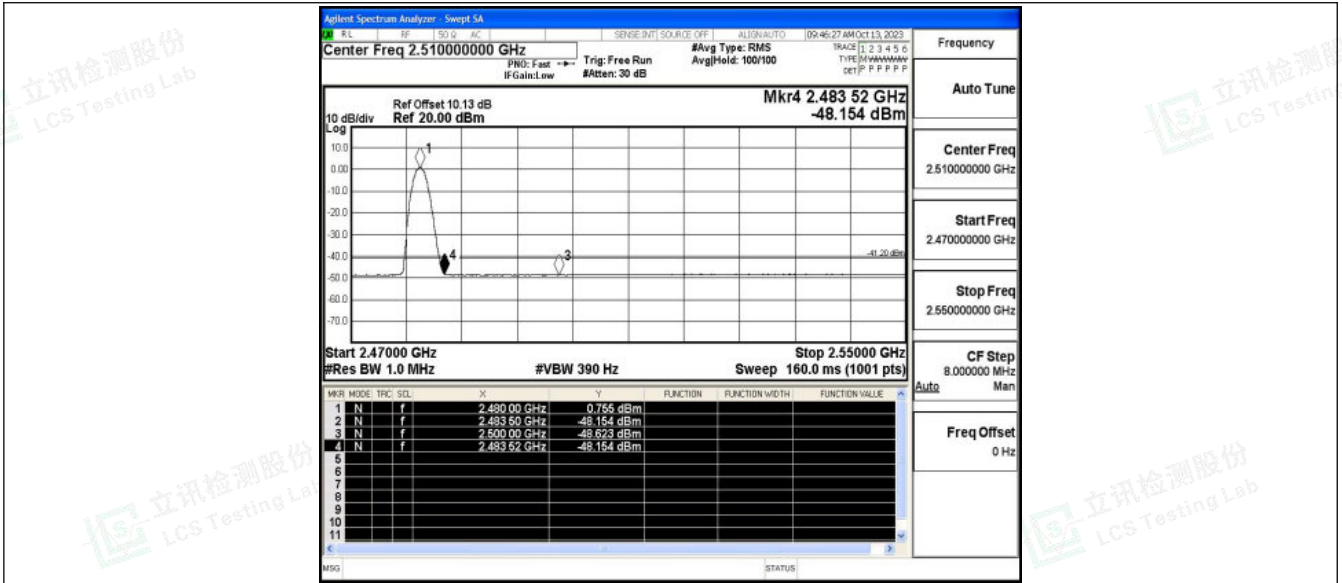


3DH5_Ant1_Low_2402_Peak

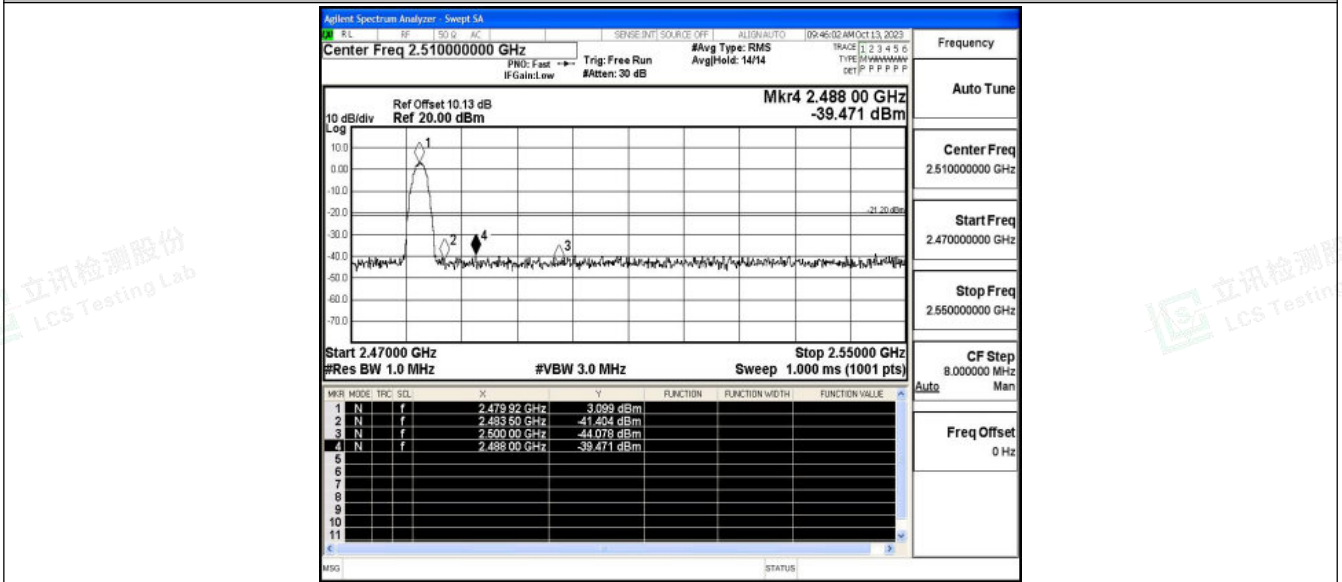


3DH5_Ant1_High_2480_AV





3DH5_Ant1_High_2480_Peak



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