



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Bluetooth Soundbar

Test Model: SRA2080

Environmental Conditions

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





A.1 20dB Emission Bandwidth

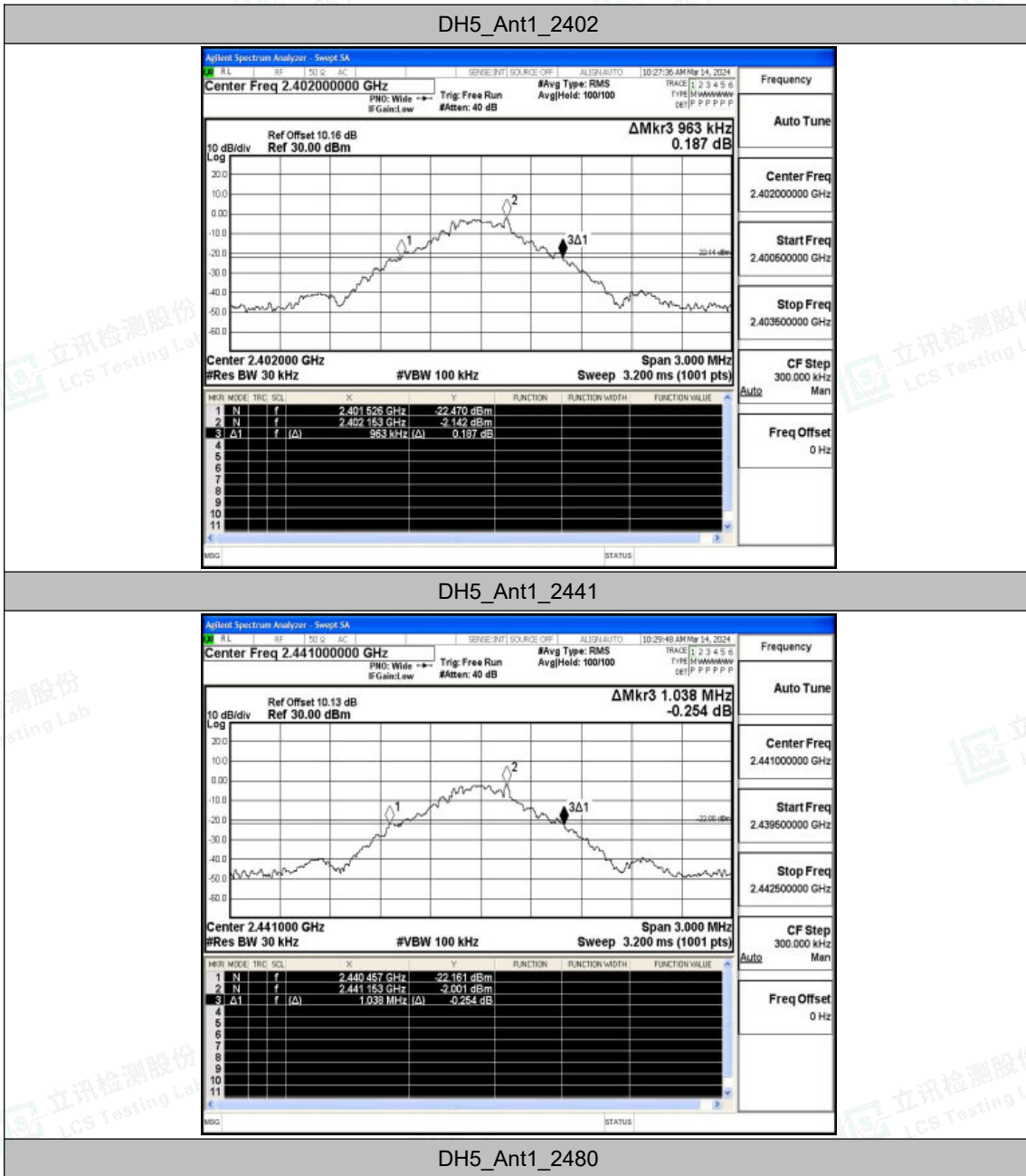
Test Result

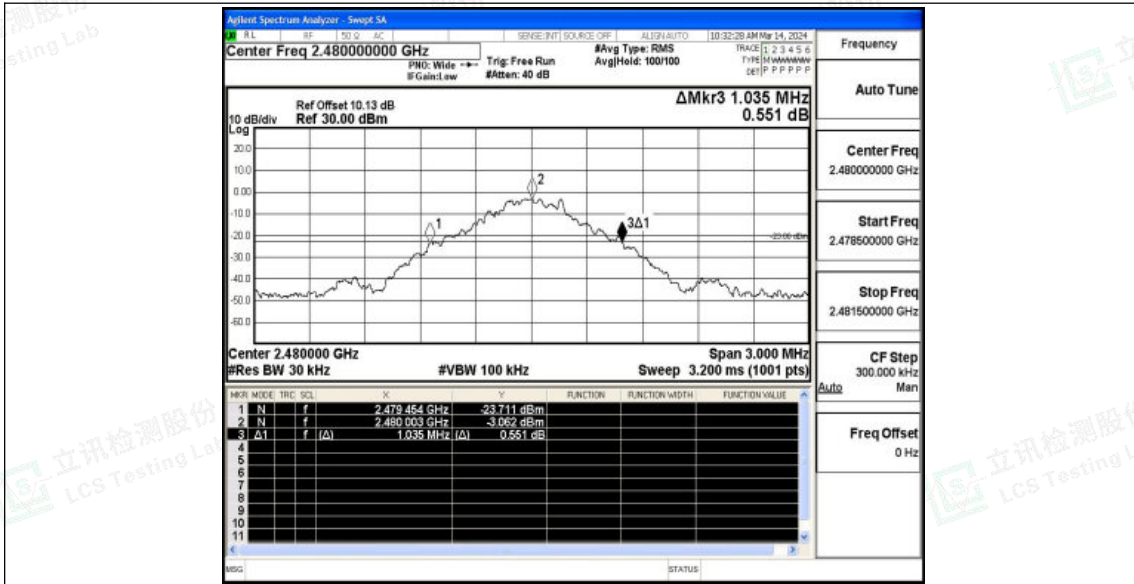
TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.963	2401.526	2402.489	---	---
		2441	1.038	2440.457	2441.495	---	---
		2480	1.035	2479.454	2480.489	---	---
2DH5	Ant1	2402	1.293	2401.349	2402.642	---	---
		2441	1.296	2440.352	2441.648	---	---
		2480	1.296	2479.352	2480.648	---	---



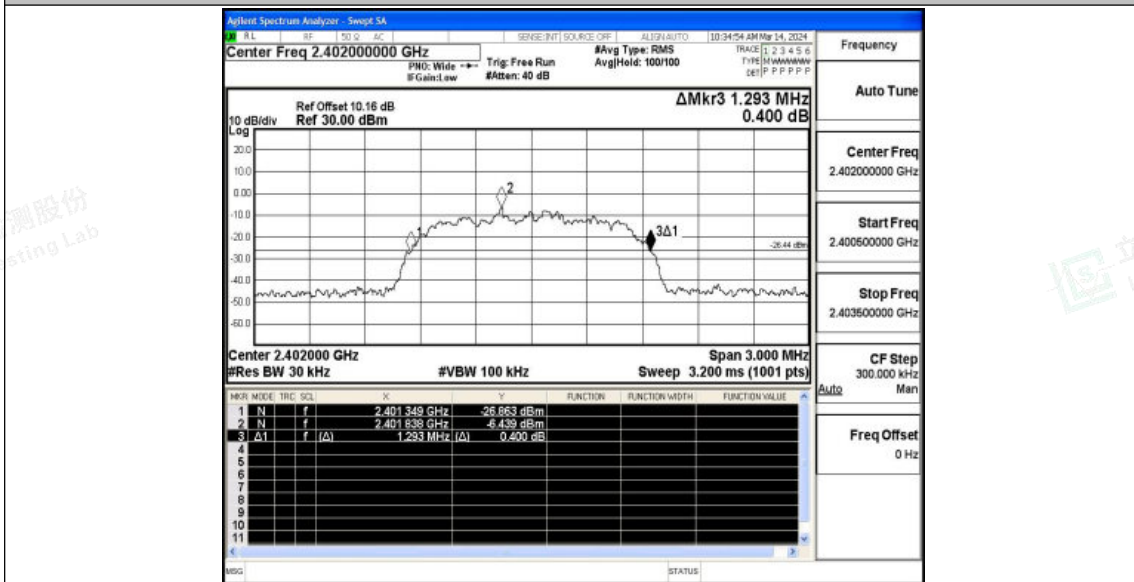


Test Graphs



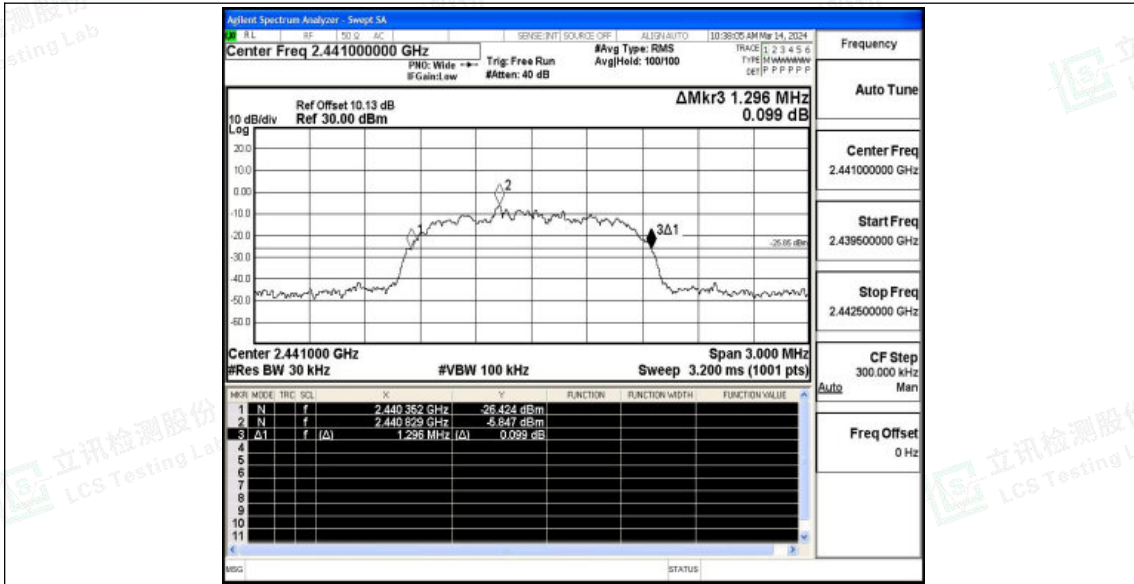


2DH5_Ant1_2402

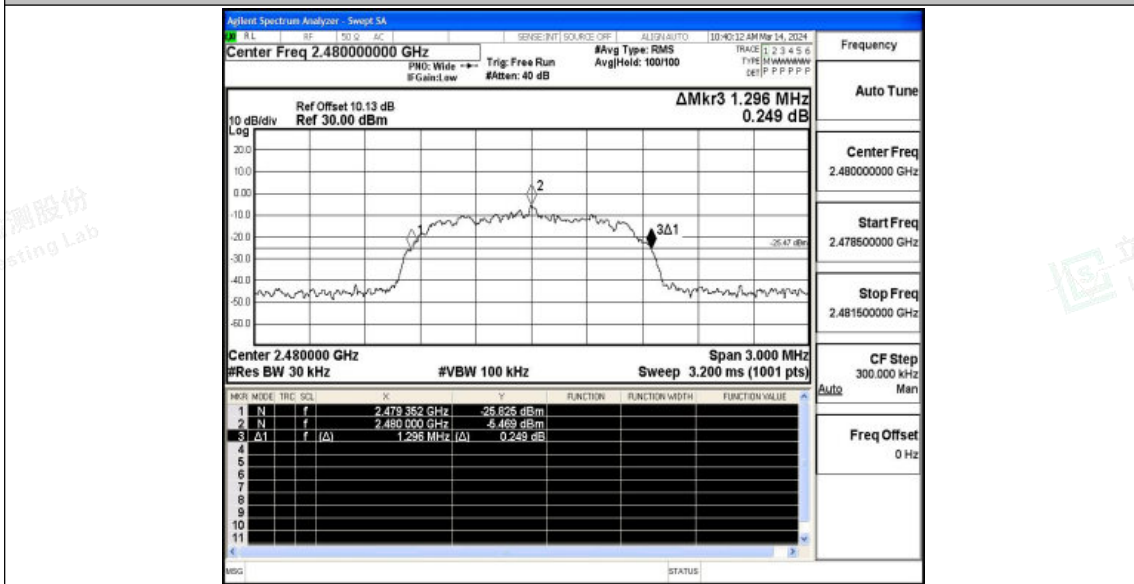


2DH5_Ant1_2441





2DH5_Ant1_2480





A.2 Maximum conducted output power

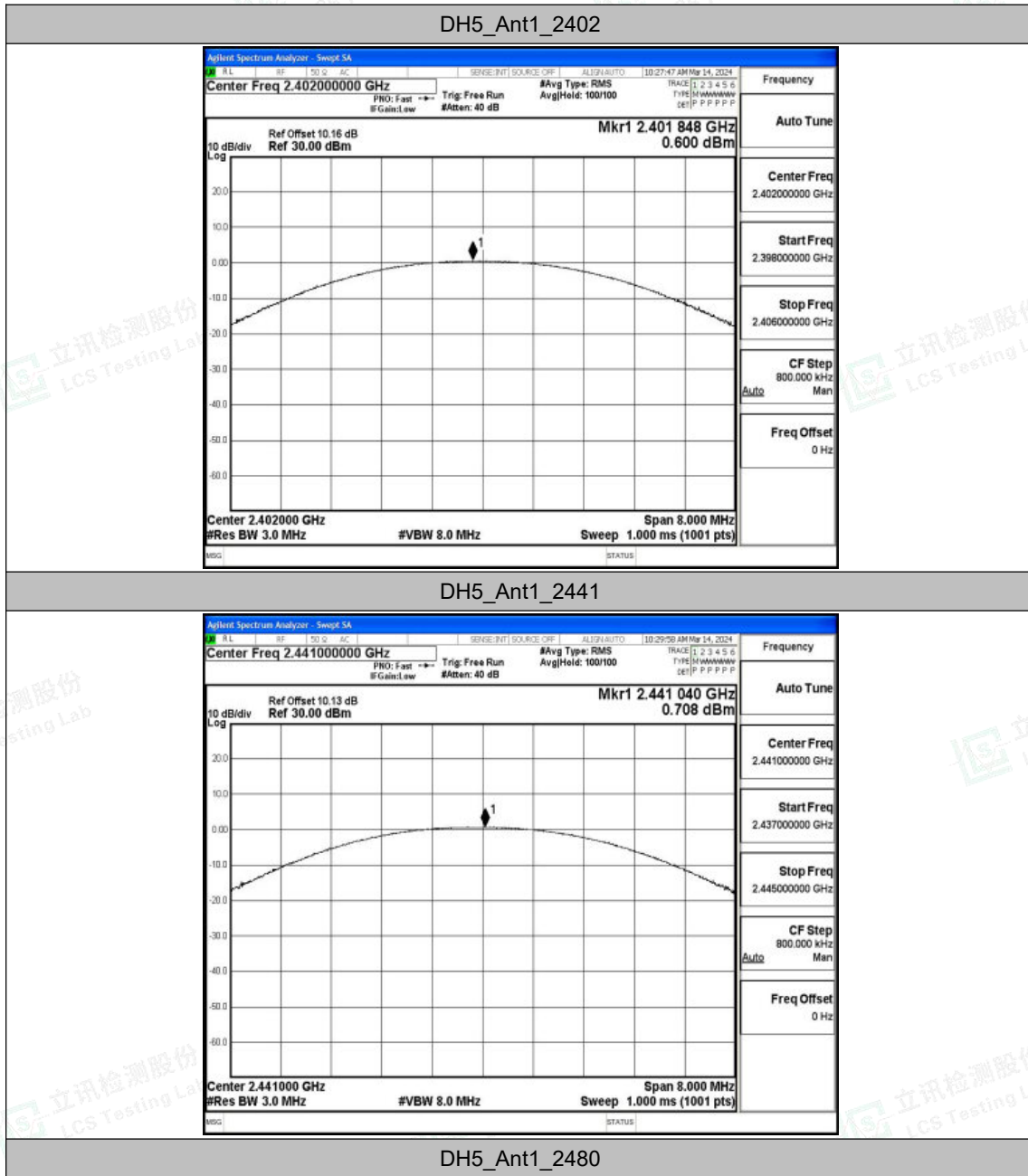
Test Result Peak

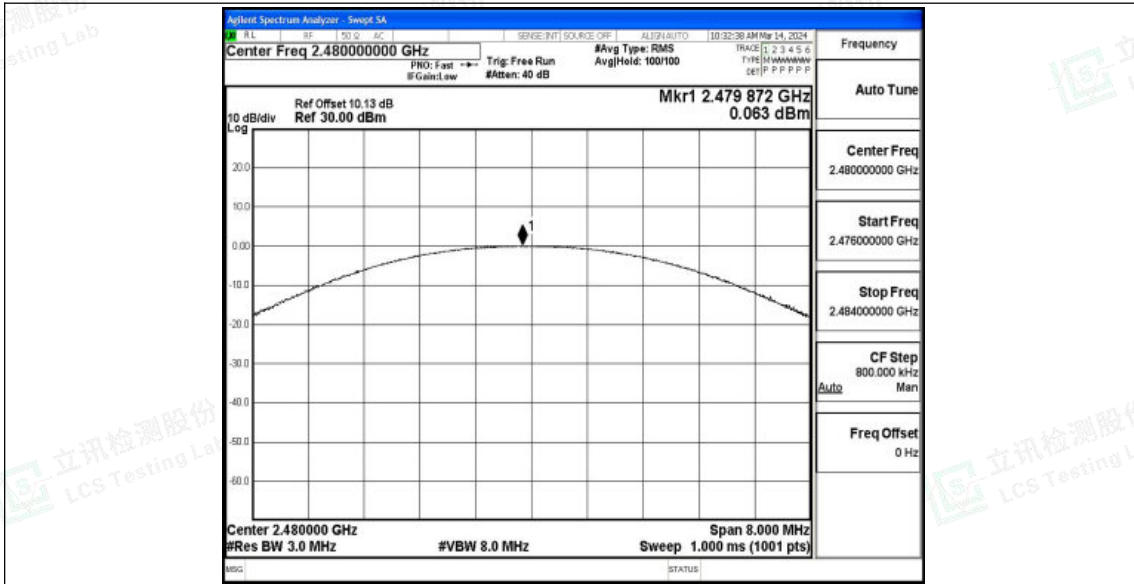
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.60	≤21	PASS
		2441	0.71	≤21	PASS
		2480	0.06	≤21	PASS
2DH5	Ant1	2402	-0.73	≤21	PASS
		2441	-0.48	≤21	PASS
		2480	-0.24	≤21	PASS



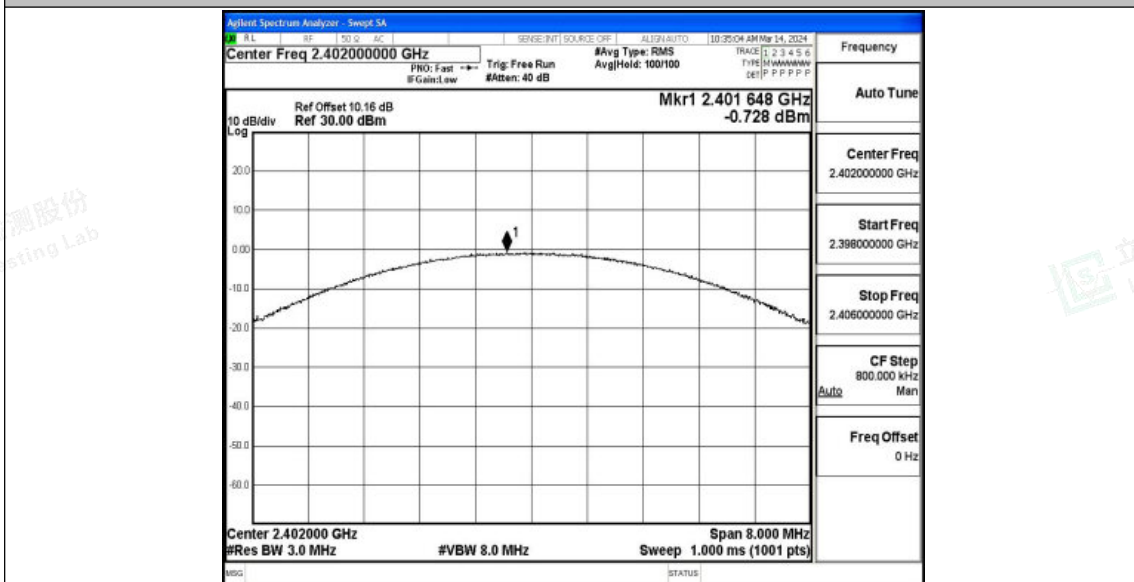


Test Graphs



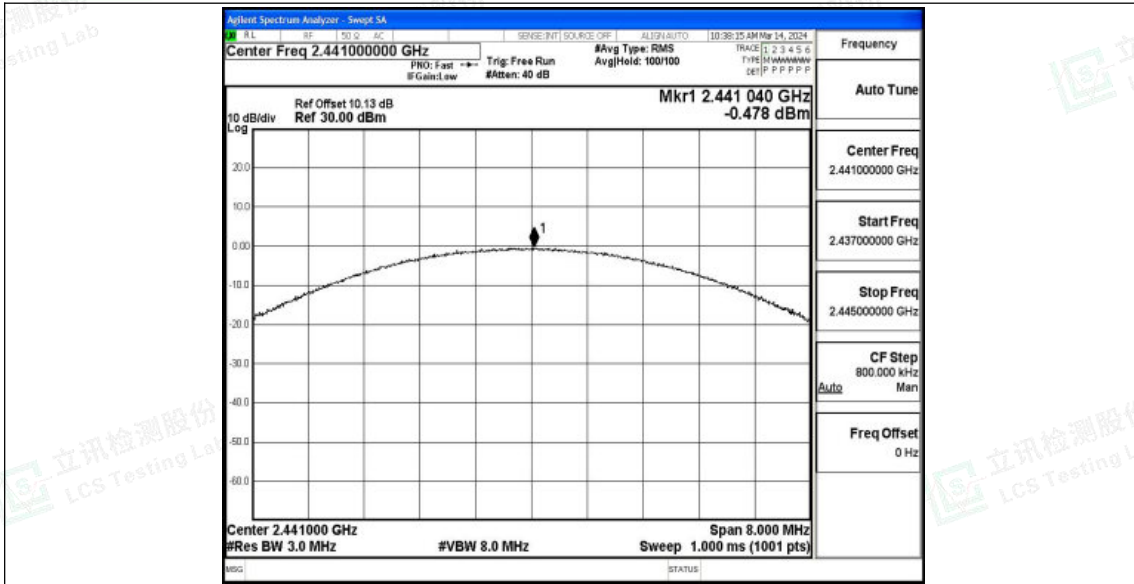


2DH5_Ant1_2402

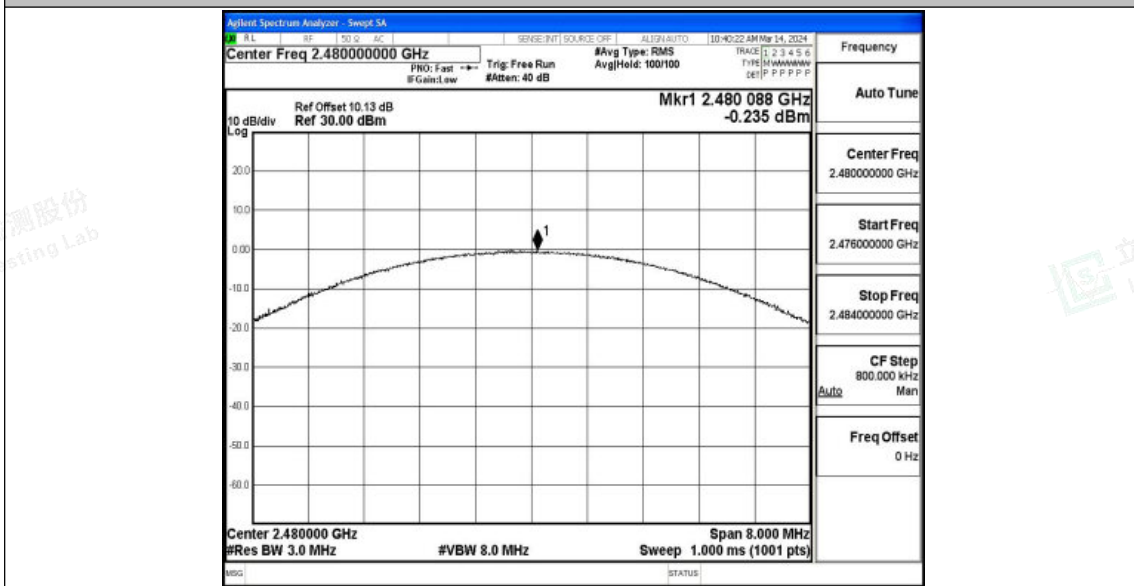


2DH5_Ant1_2441





2DH5_Ant1_2480





A.3 Carrier frequency separation

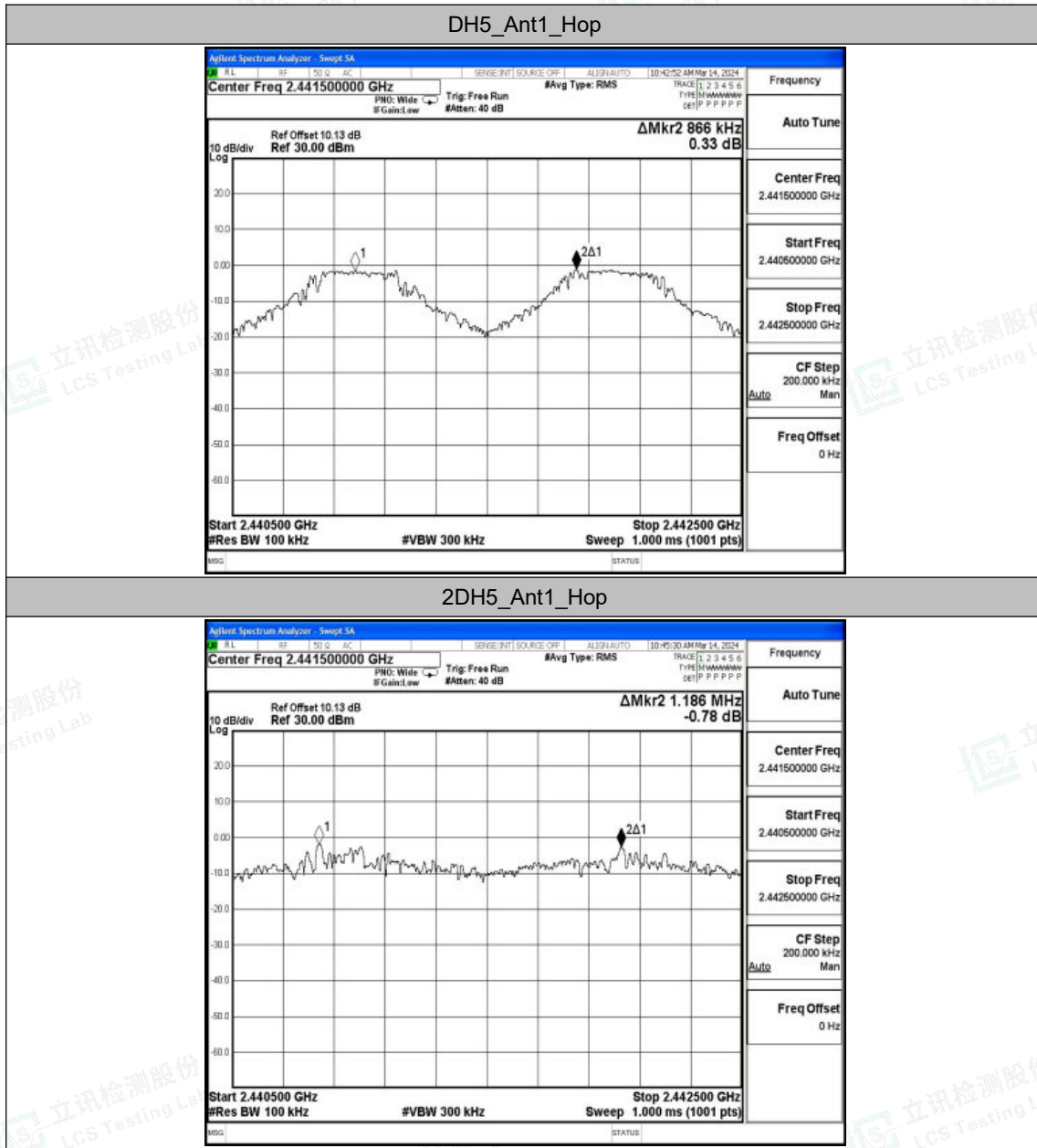
Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.866	≥0.692	PASS
2DH5	Ant1	Hop	1.186	≥0.864	PASS





Test Graphs





A.4 Time of occupancy

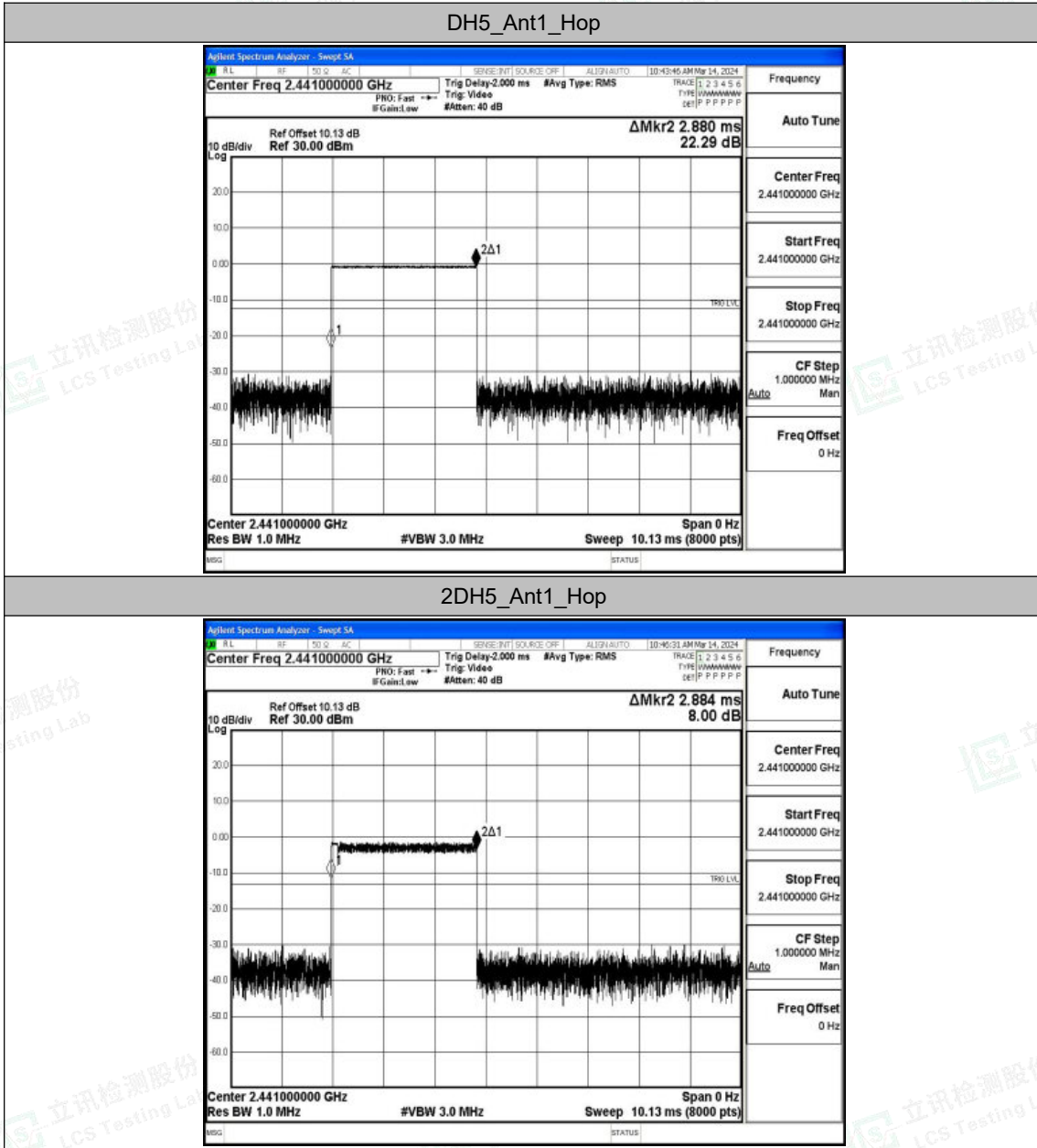
Test Result

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





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





Test Graphs





A.6 Band edge measurements

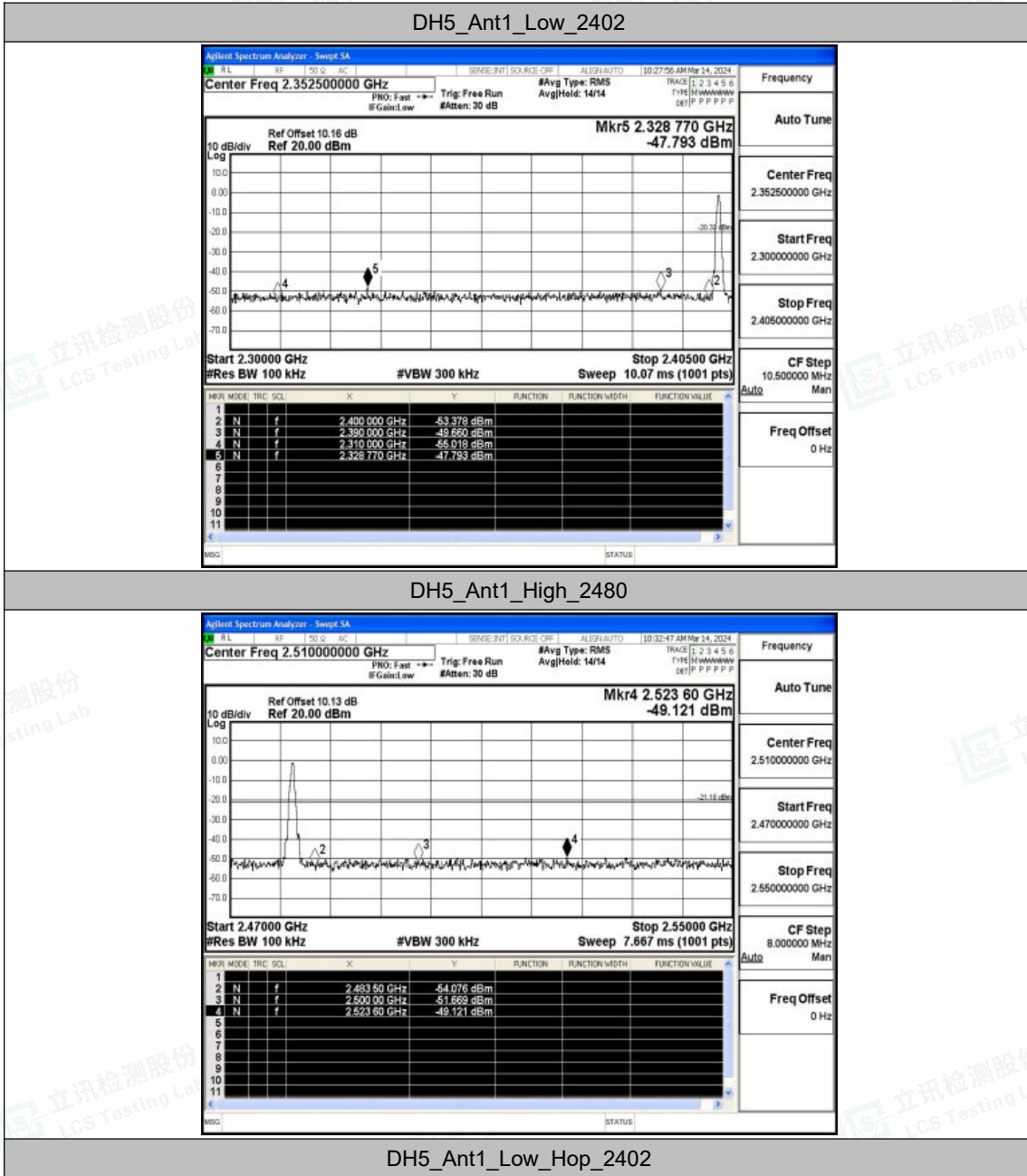
Test Result

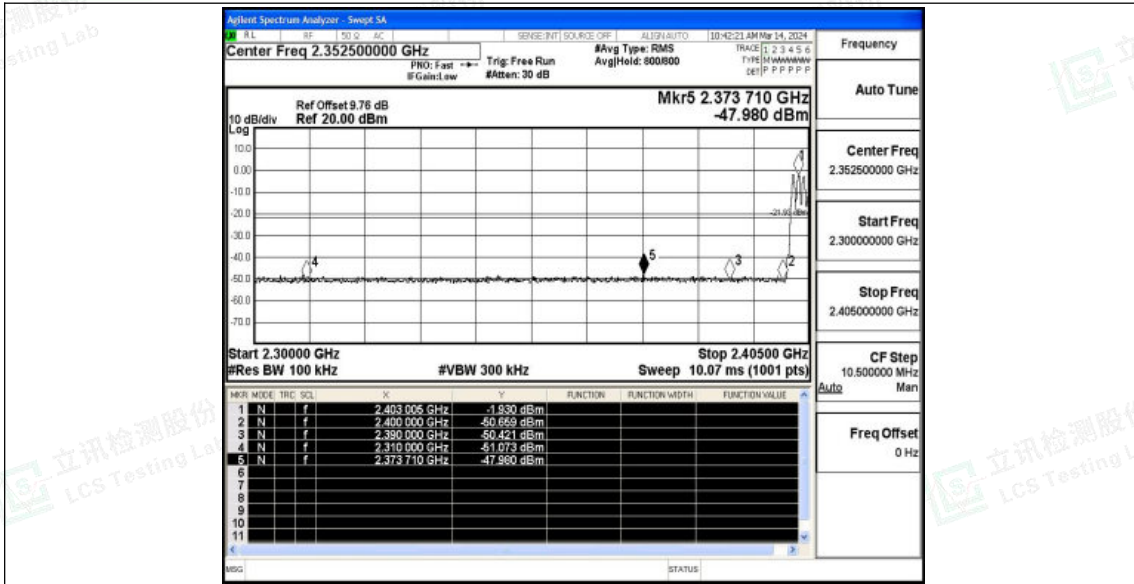
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.33	-47.79	≤-20.33	PASS
		High	2480	-1.18	-49.12	≤-21.18	PASS
		Low	Hop_2402	-1.93	-47.98	≤-21.93	PASS
		High	Hop_2480	-0.77	-47.88	≤-20.77	PASS
2DH5	Ant1	Low	2402	-2.71	-49.25	≤-22.71	PASS
		High	2480	-1.72	-48.17	≤-21.72	PASS
		Low	Hop_2402	-2.98	-47.63	≤-22.98	PASS
		High	Hop_2480	-1.81	-47.01	≤-21.81	PASS



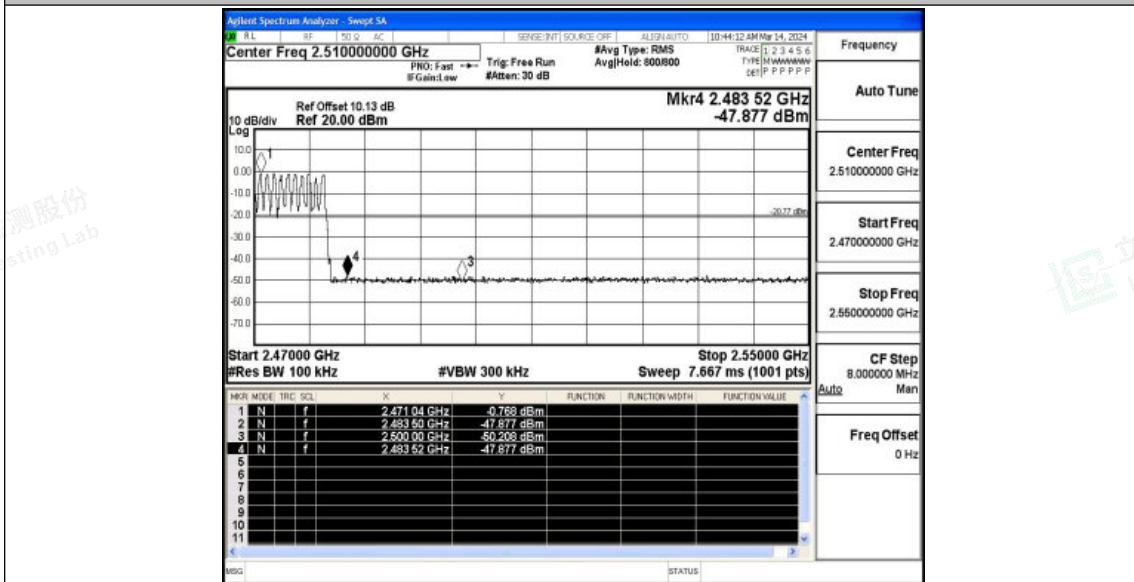


Test Graphs



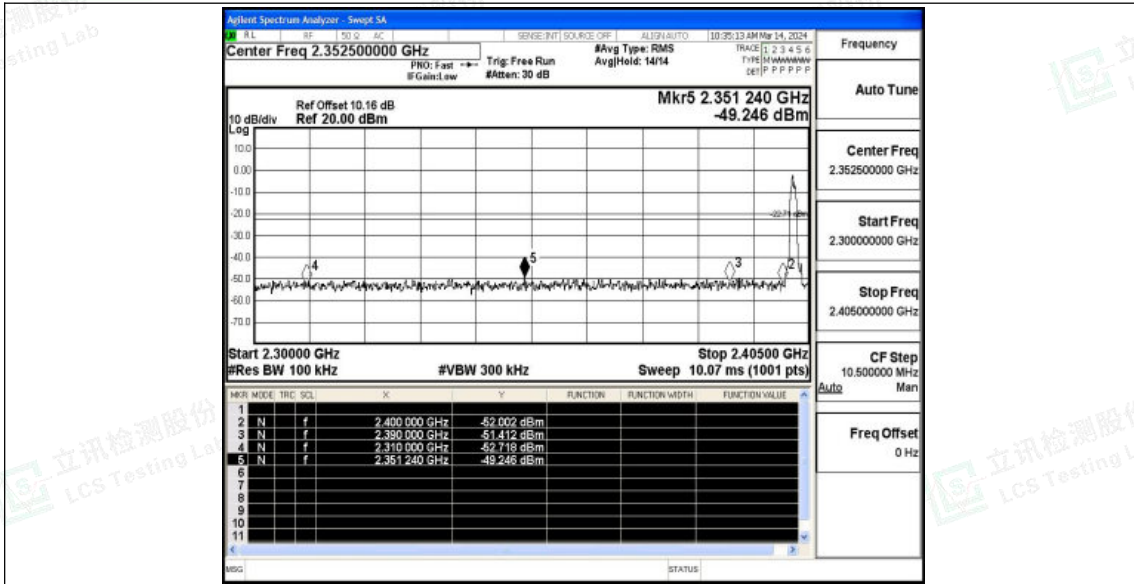


DH5_Ant1_High_Hop_2480

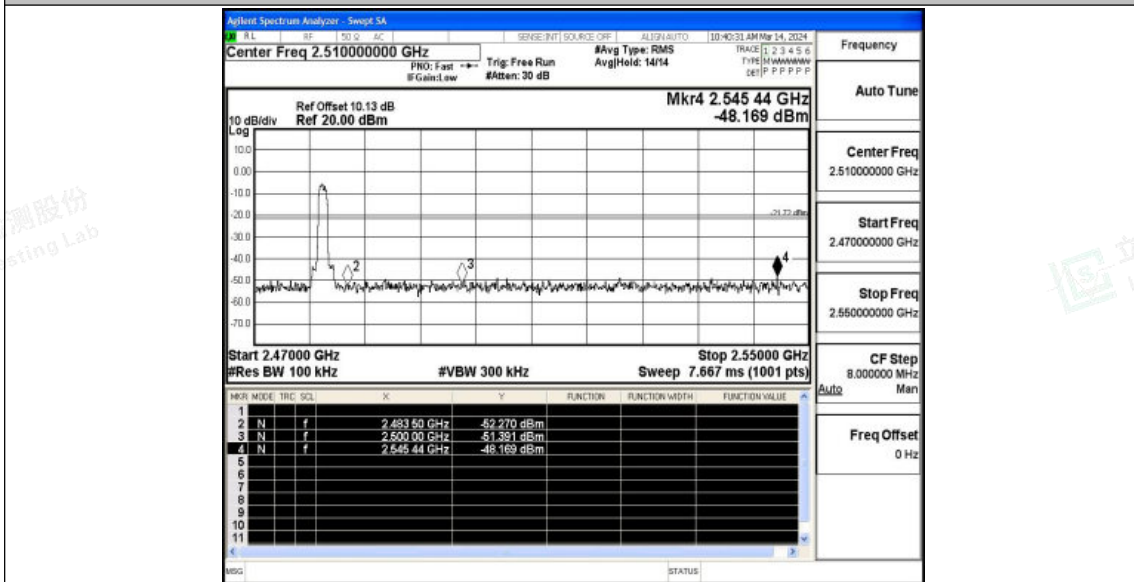


2DH5_Ant1_Low_2402



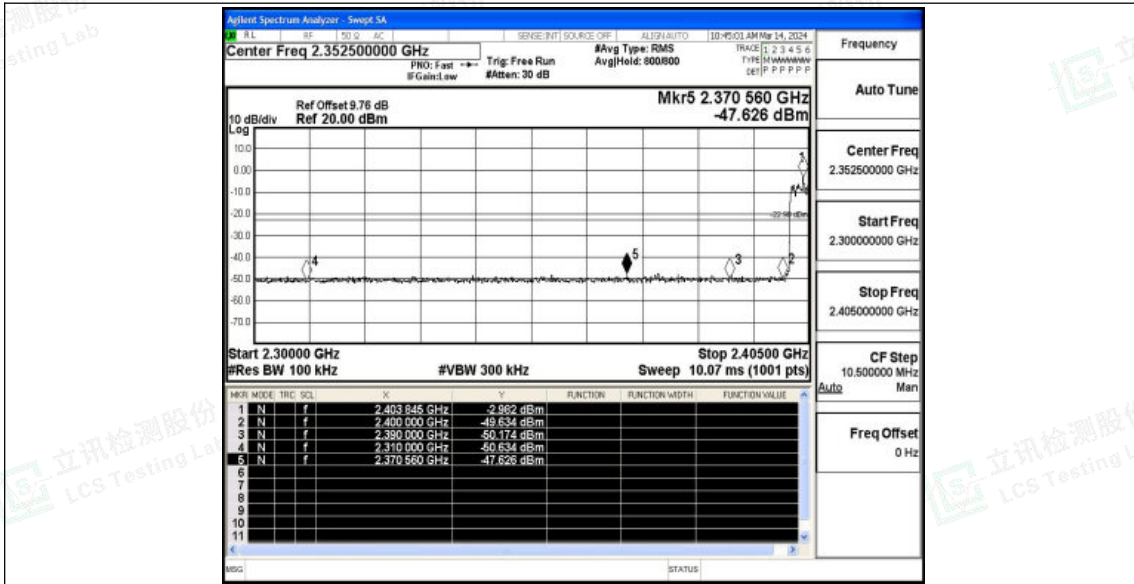


2DH5_Ant1_High_2480

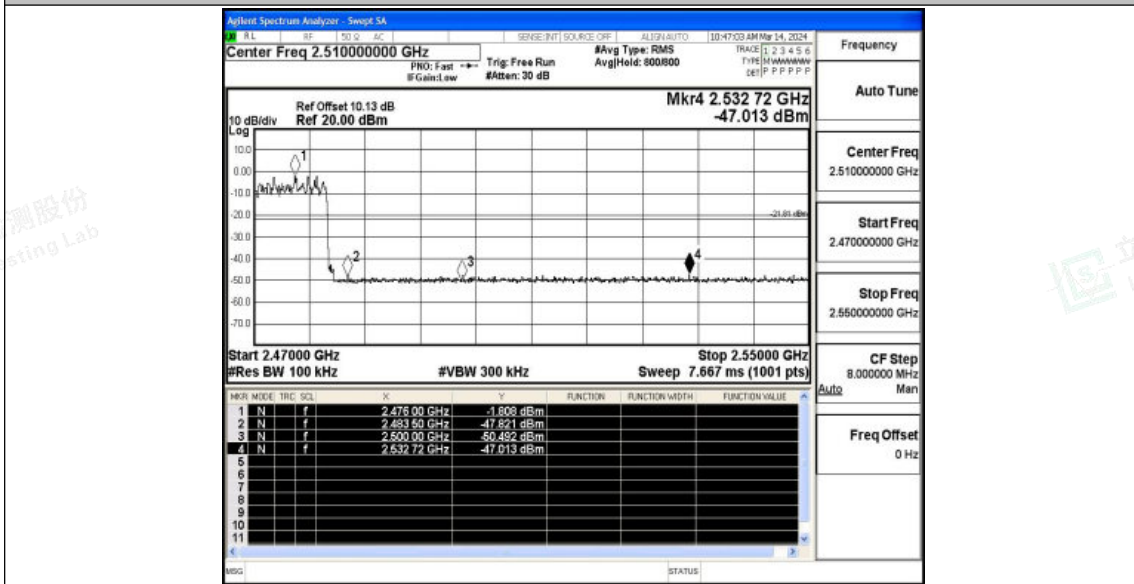


2DH5_Ant1_Low_Hop_2402





2DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

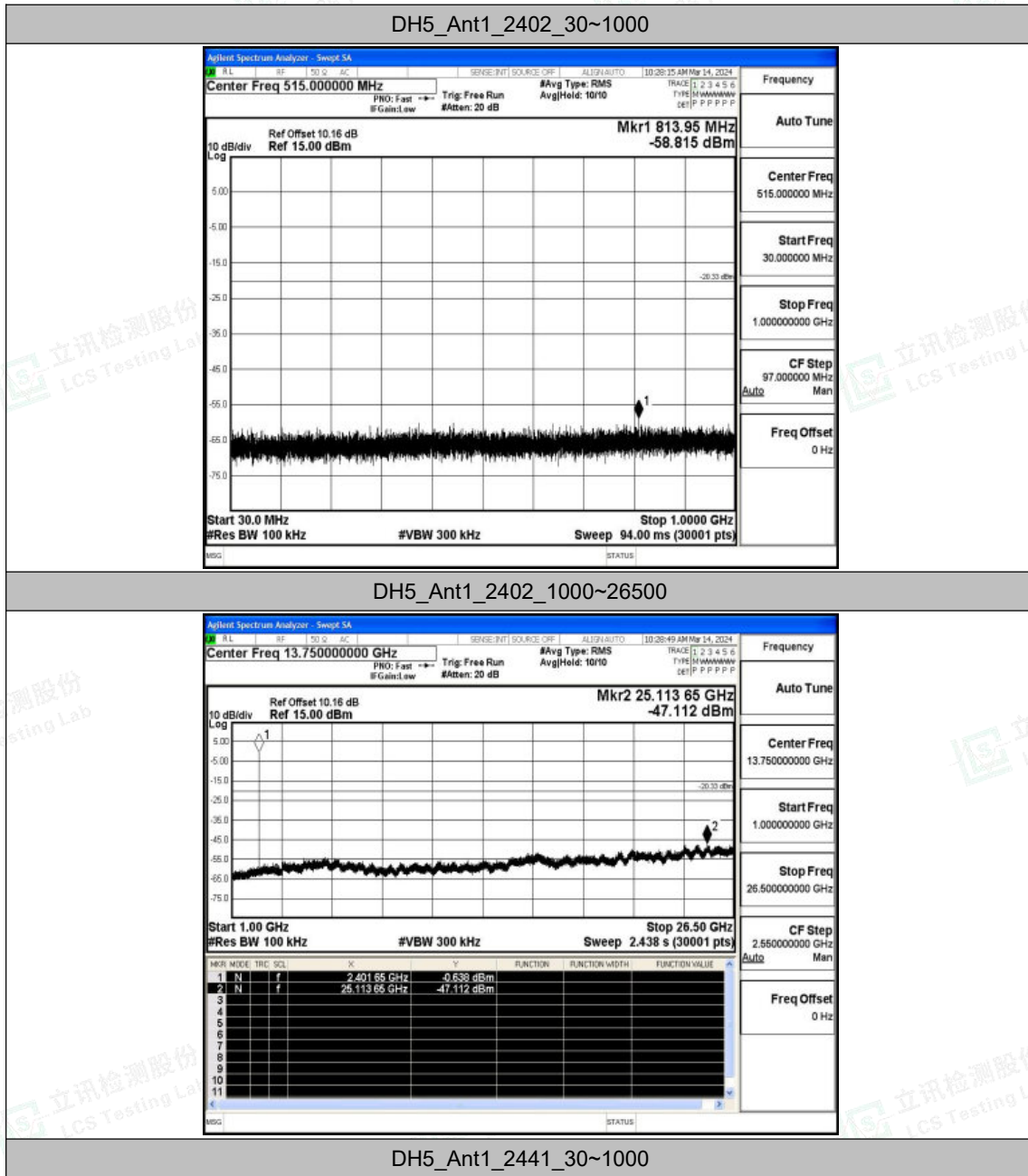
Test Result

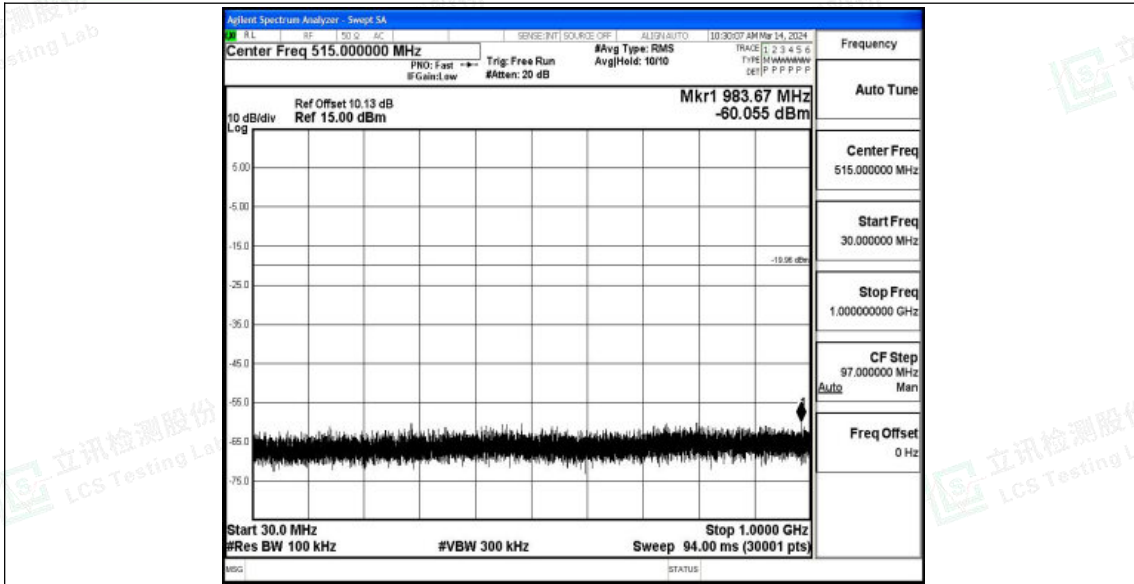
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	30~1000	-0.33	-58.82	≤-20.33	PASS
			1000~26500	-0.33	-47.11	≤-20.33	PASS
		2441	30~1000	0.04	-60.06	≤-19.96	PASS
			1000~26500	0.04	-47.2	≤-19.96	PASS
		2480	30~1000	-1.18	-59.41	≤-21.18	PASS
			1000~26500	-1.18	-47.13	≤-21.18	PASS
2DH5	Ant1	2402	30~1000	-2.71	-59.6	≤-22.71	PASS
			1000~26500	-2.71	-47.4	≤-22.71	PASS
		2441	30~1000	-5.30	-59.67	≤-25.3	PASS
			1000~26500	-5.30	-47.25	≤-25.3	PASS
		2480	30~1000	-1.72	-59.92	≤-21.72	PASS
			1000~26500	-1.72	-46.7	≤-21.72	PASS



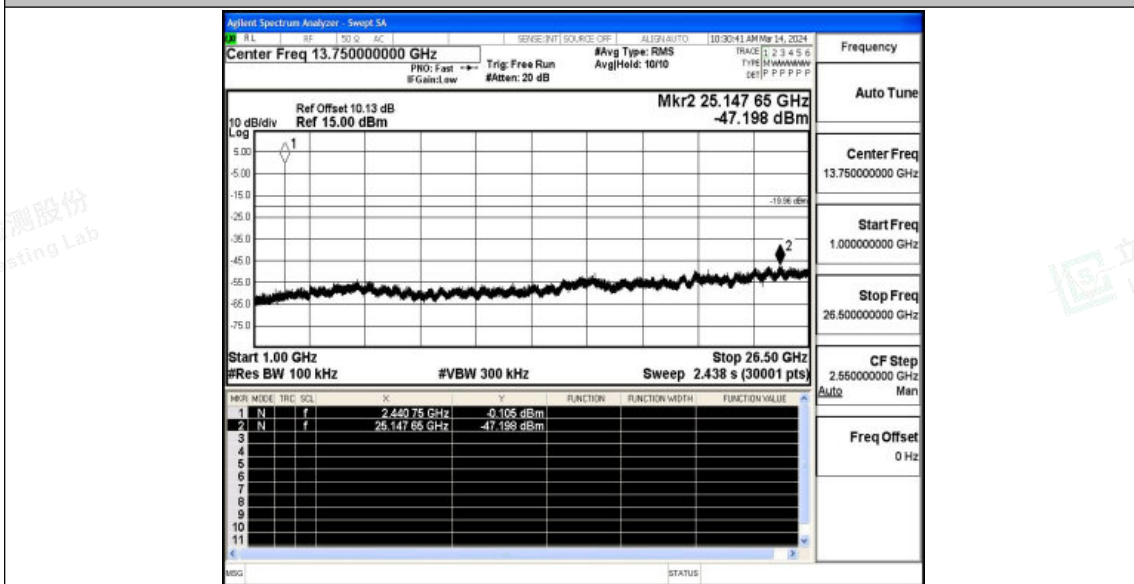


Test Graphs



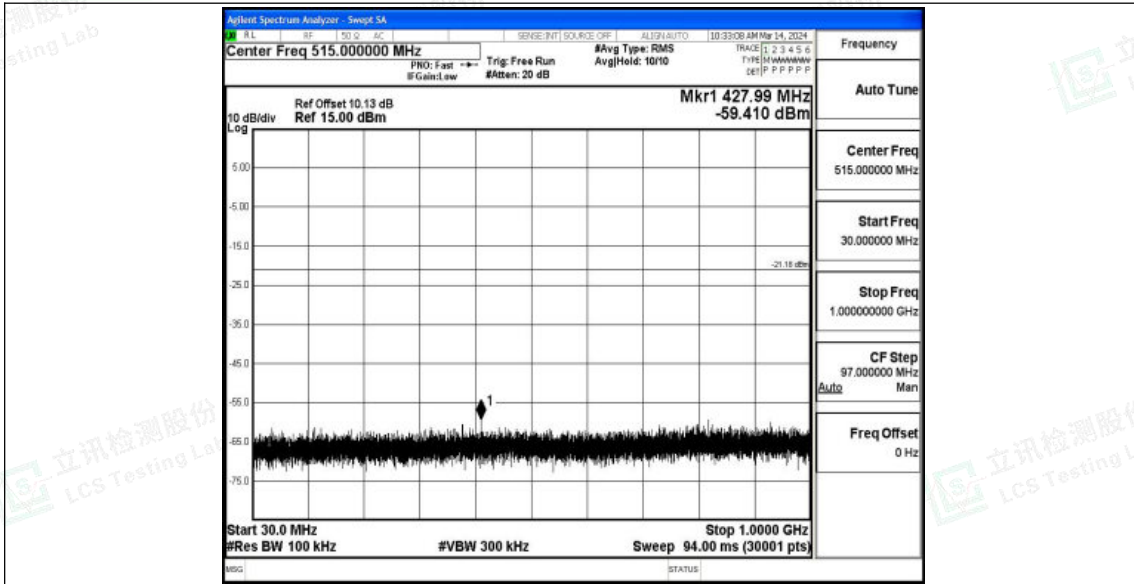


DH5_Ant1_2441_1000~26500

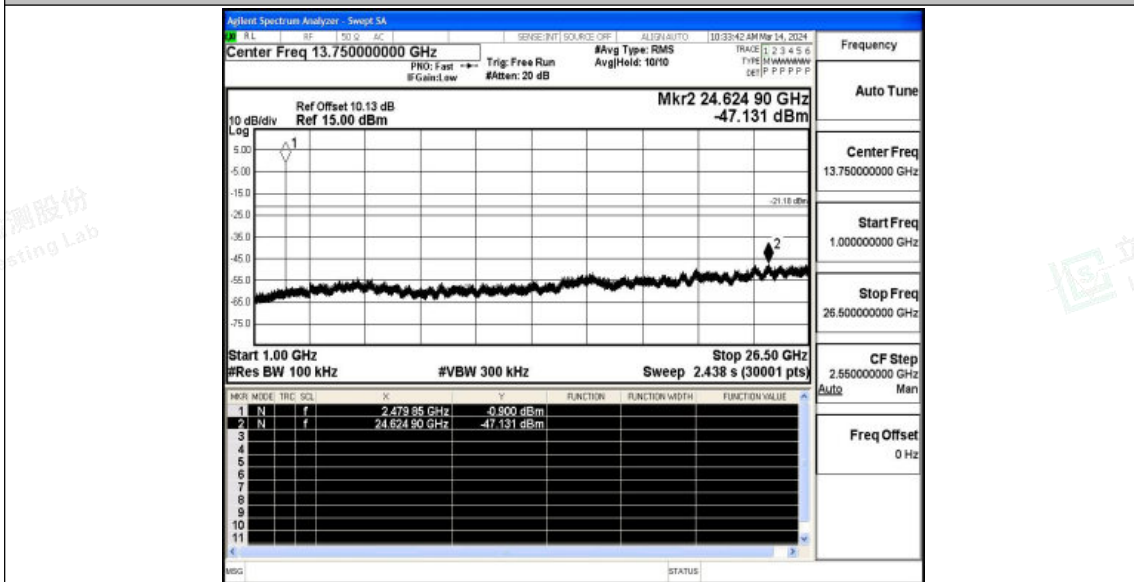


DH5_Ant1_2480_30~1000



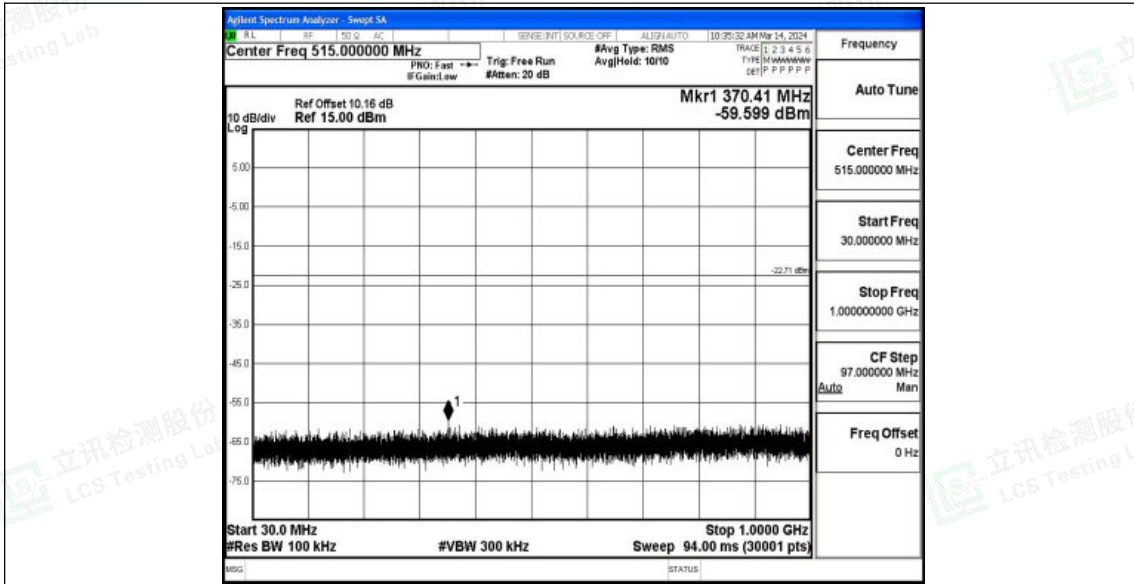


DH5_Ant1_2480_1000~26500

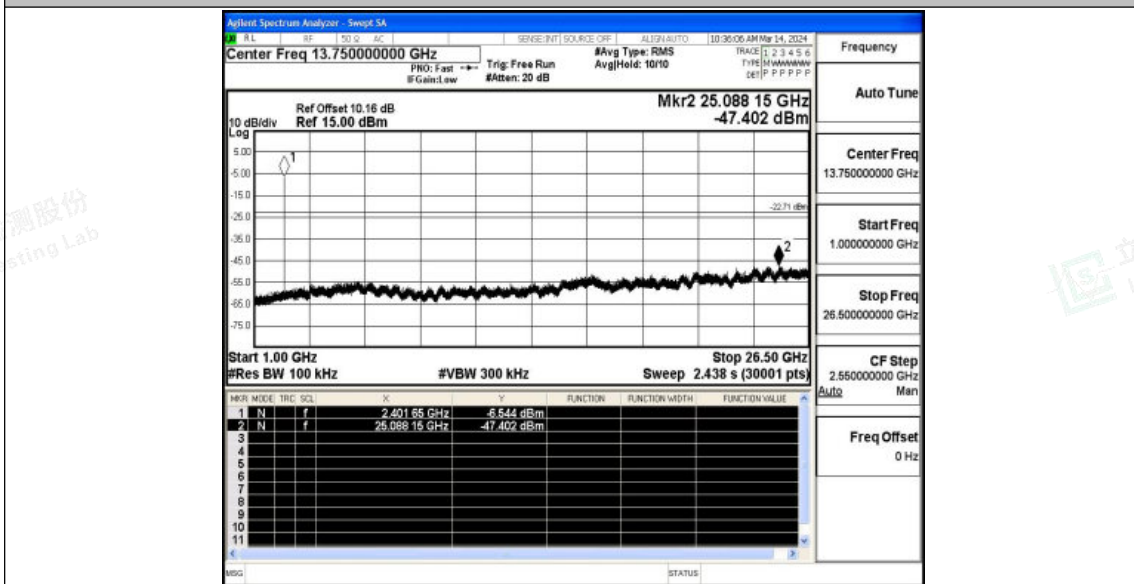


2DH5_Ant1_2402_30~1000



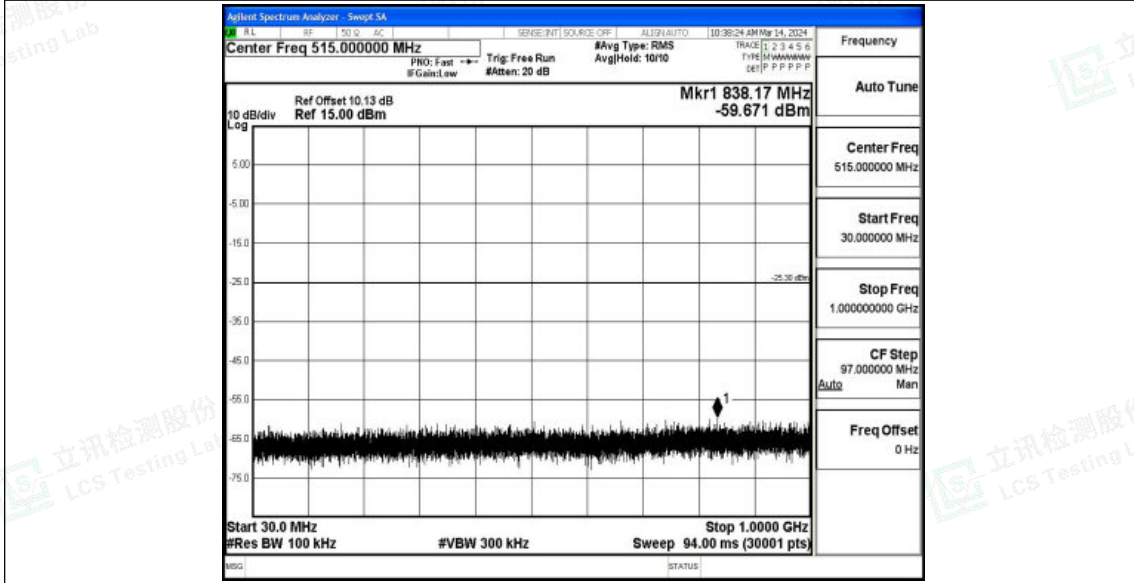


2DH5_Ant1_2402_1000~26500

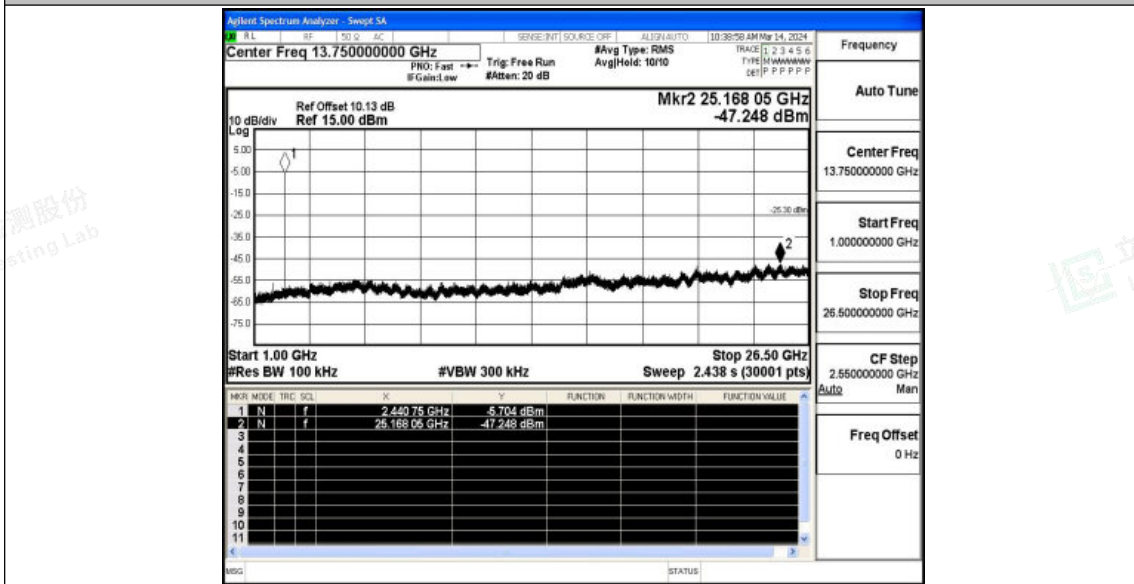


2DH5_Ant1_2441_30~1000



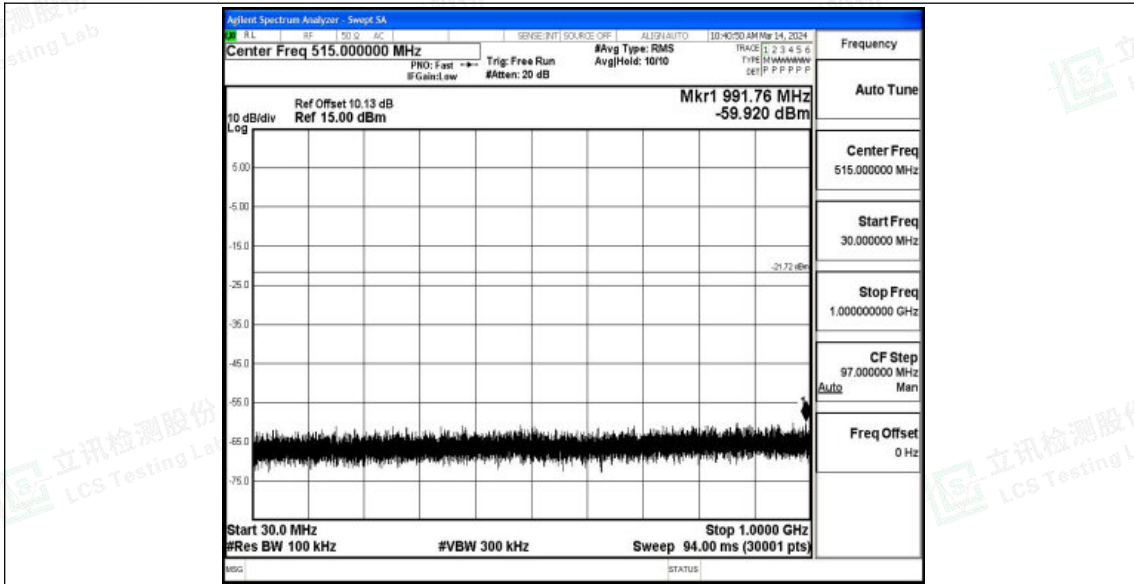


2DH5_Ant1_2441_1000~26500

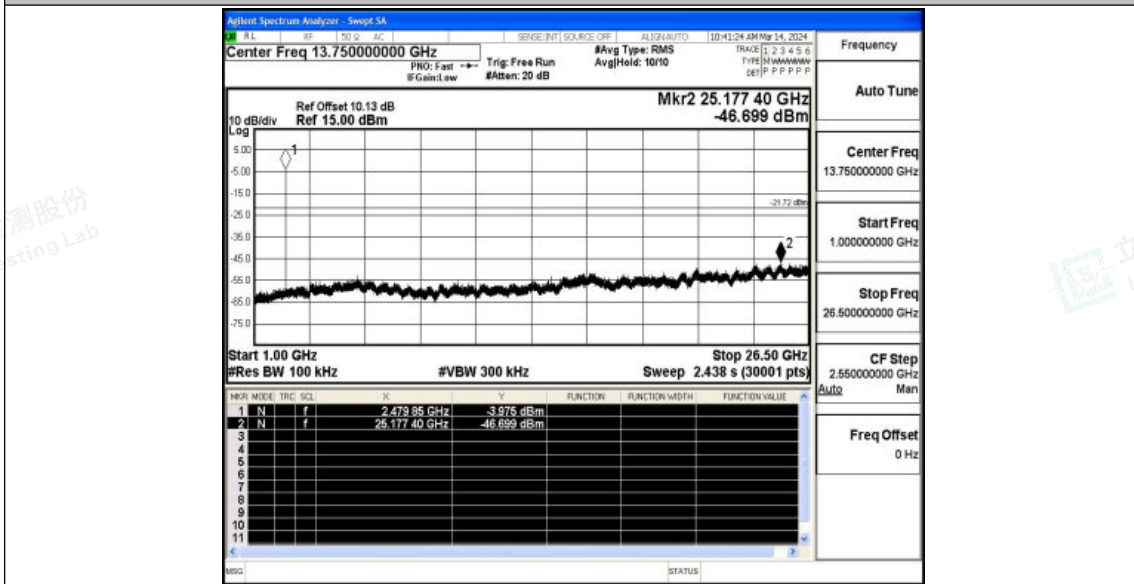


2DH5_Ant1_2480_30~1000





2DH5_Ant1_2480_1000~26500





Reference Level

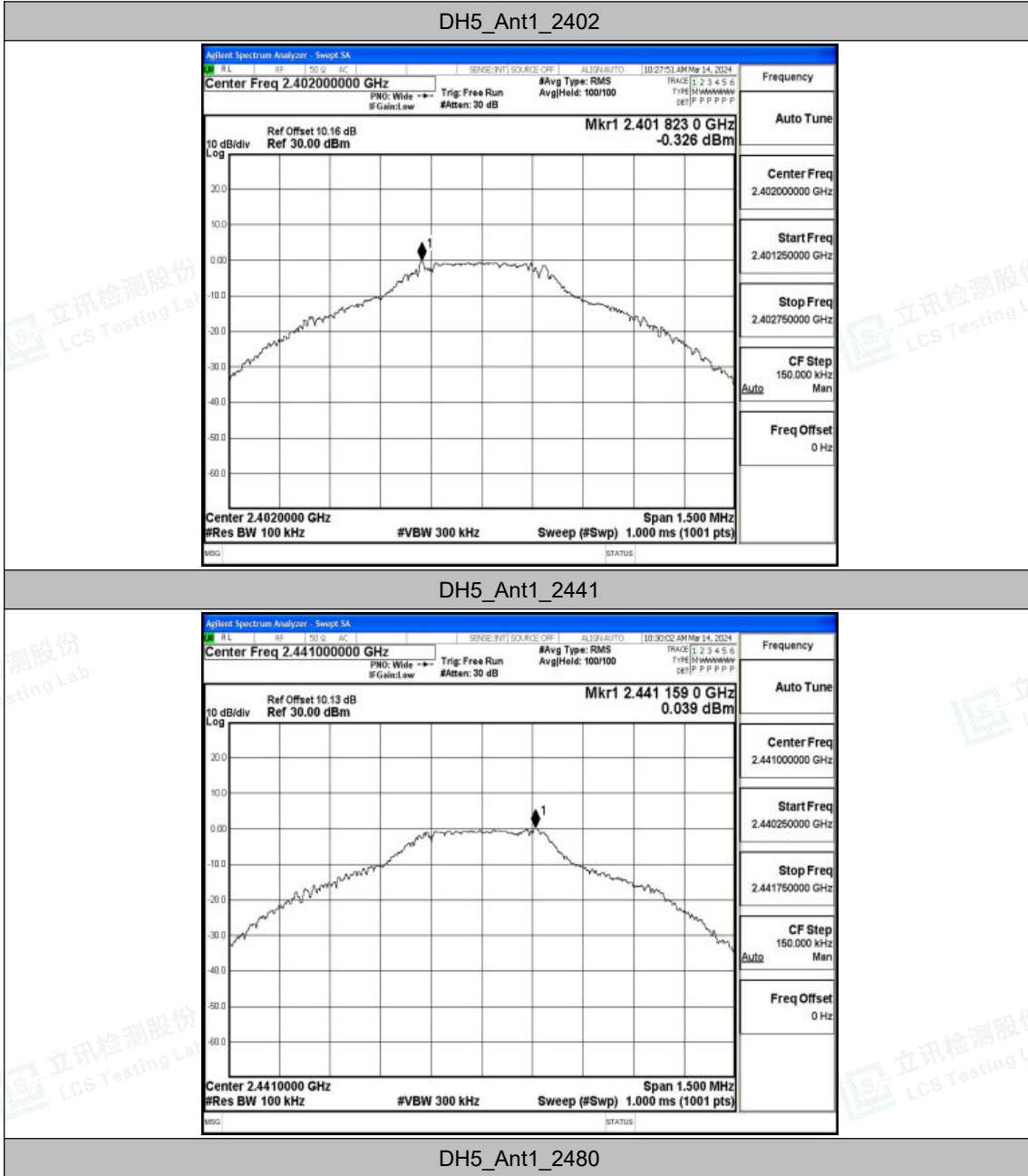
Test Result

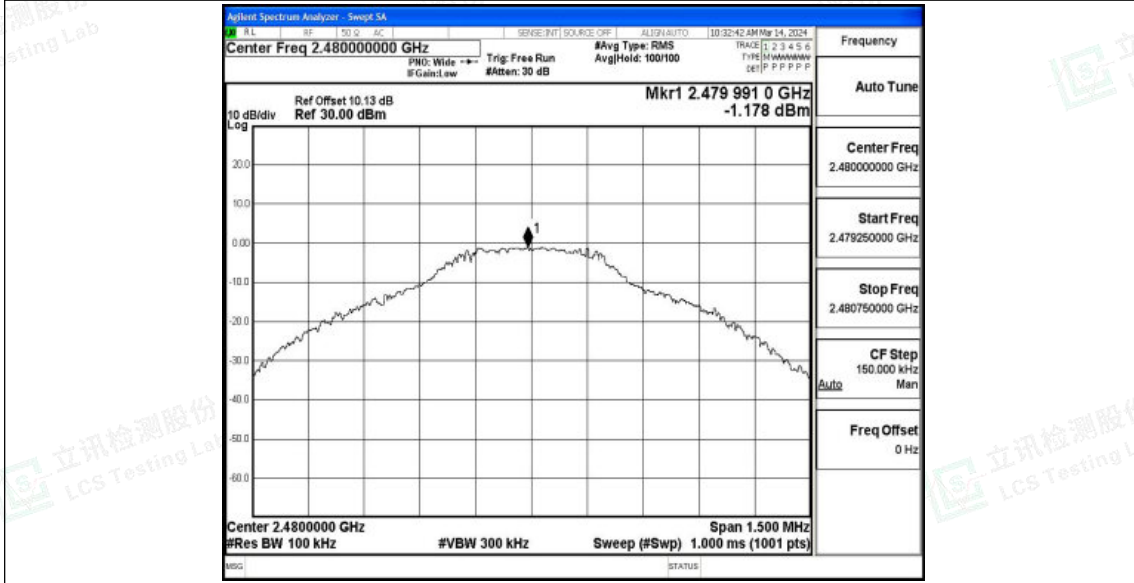
TestMode	Antenna	ChName	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	2401.82	-0.33	---	PASS
		2441	2441.16	0.04	---	PASS
		2480	2479.99	-1.18	---	PASS
2DH5	Ant1	2402	2402.15	-2.71	---	PASS
		2441	2441.02	-5.30	---	PASS
		2480	2479.82	-1.72	---	PASS



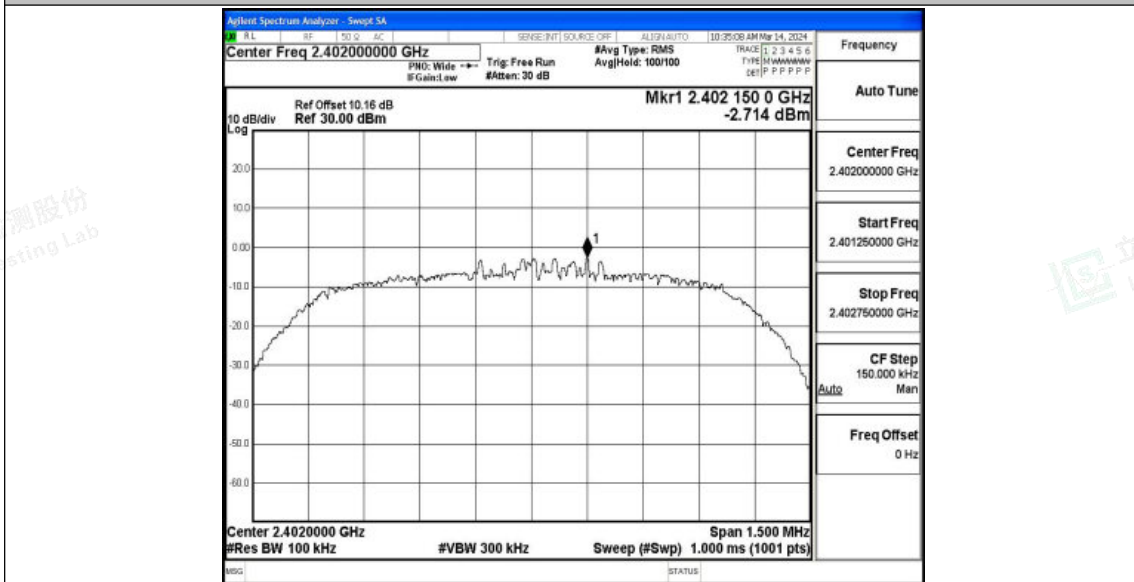


Test Graphs



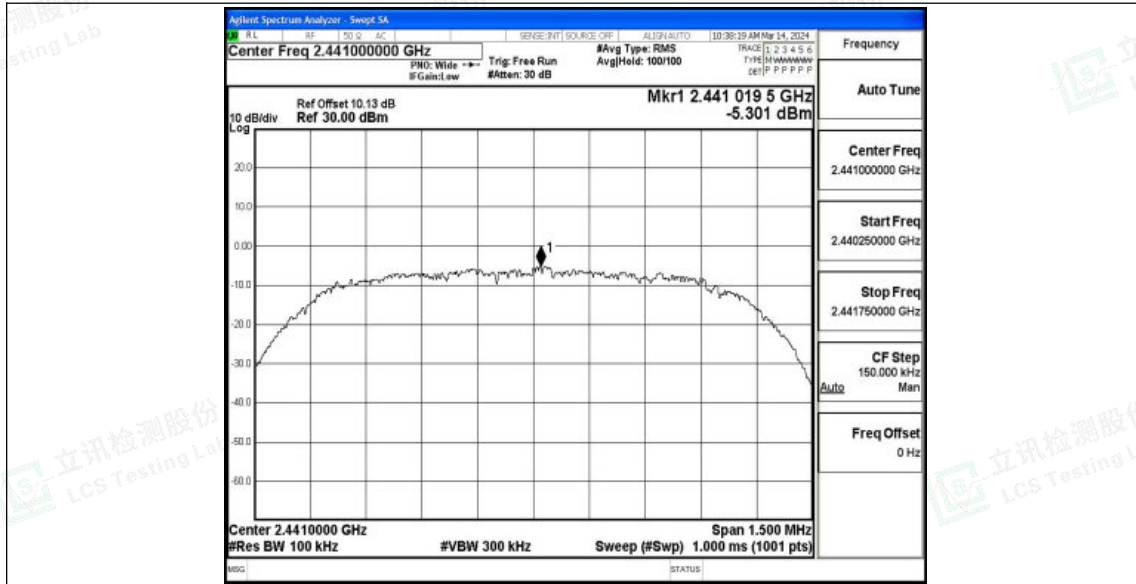


2DH5_Ant1_2402

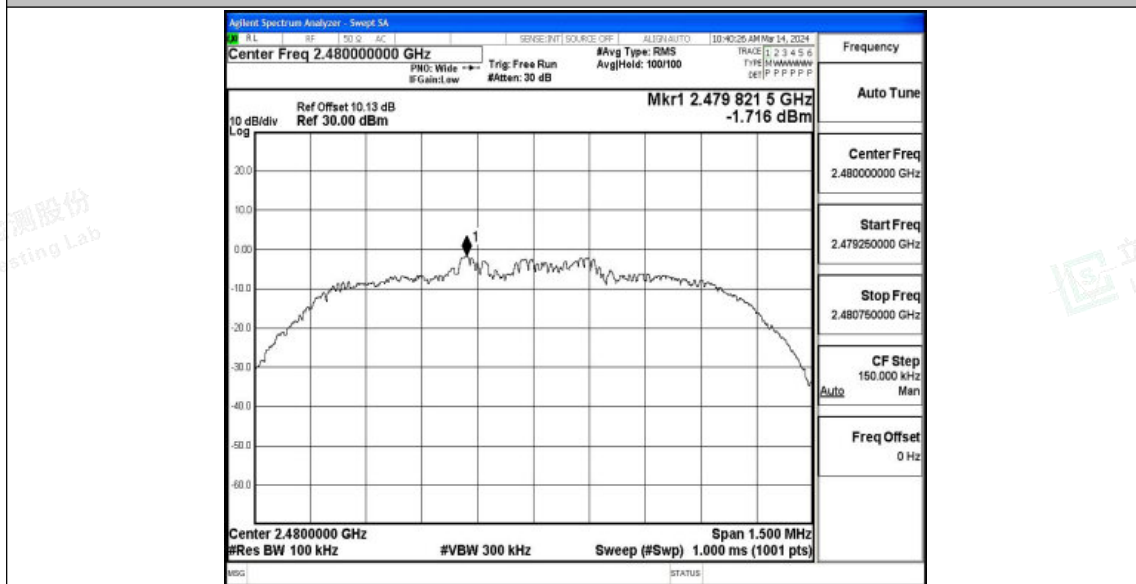


2DH5_Ant1_2441





2DH5_Ant1_2480







A.8 Duty Cycle

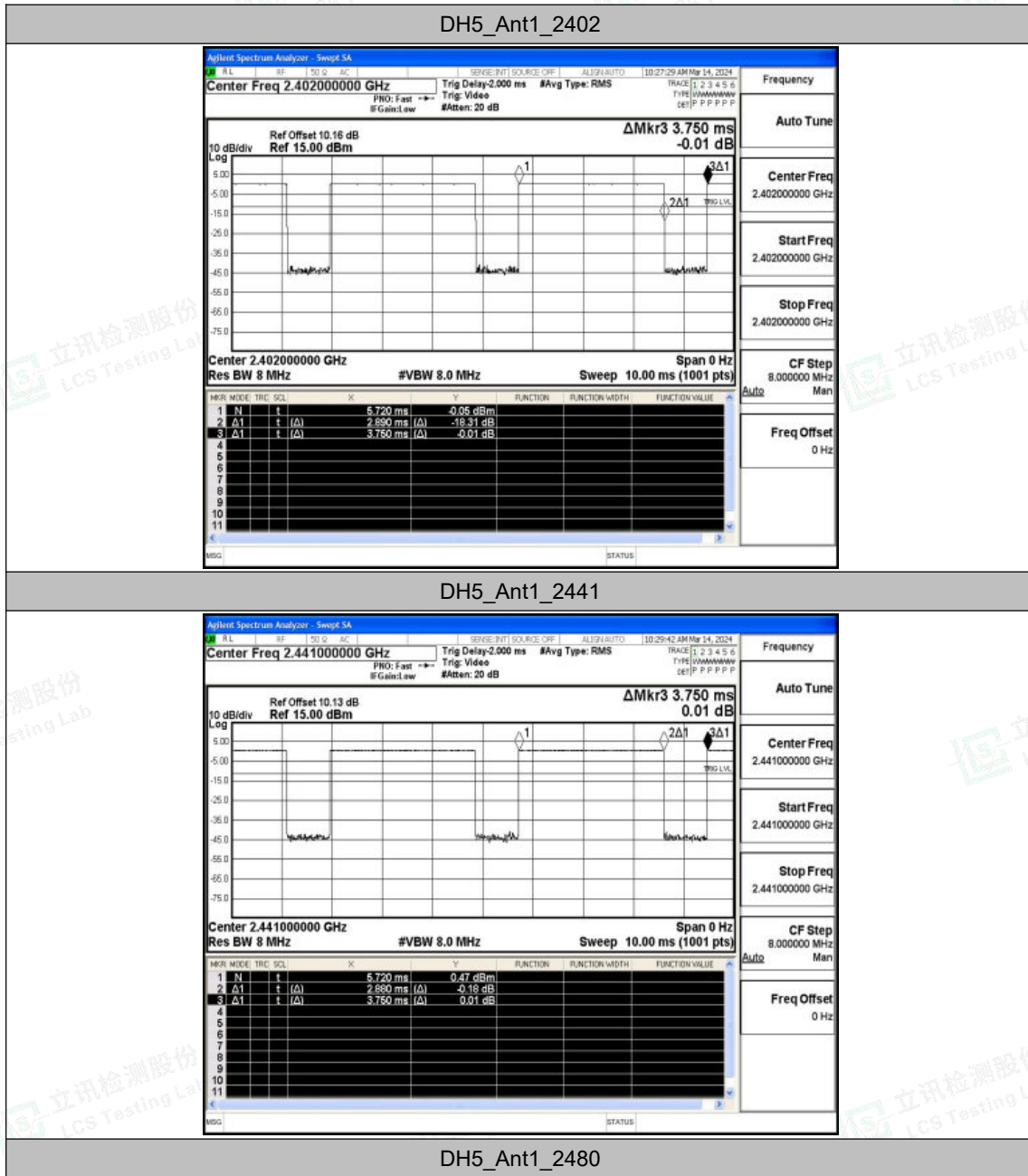
Test Result

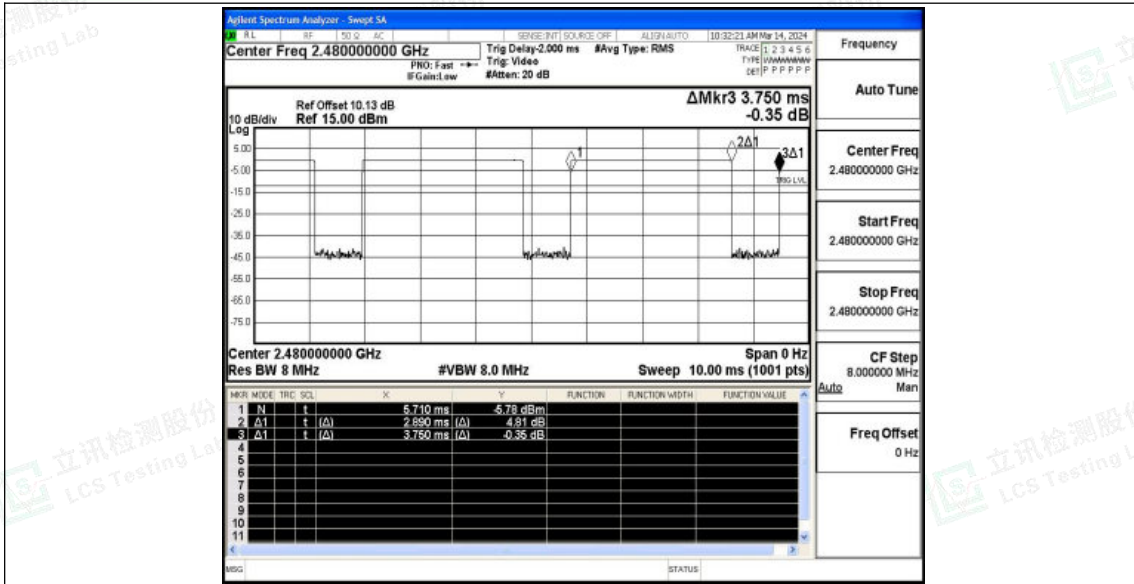
TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[kHz]
DH5	Ant1	2402	2.89	3.75	77.07	1.13	0.35
		2441	2.88	3.75	76.80	1.15	0.35
		2480	2.89	3.75	77.07	1.13	0.35
2DH5	Ant1	2402	2.89	3.75	77.07	1.13	0.35
		2441	2.89	3.75	77.07	1.13	0.35
		2480	2.89	3.75	77.07	1.13	0.35



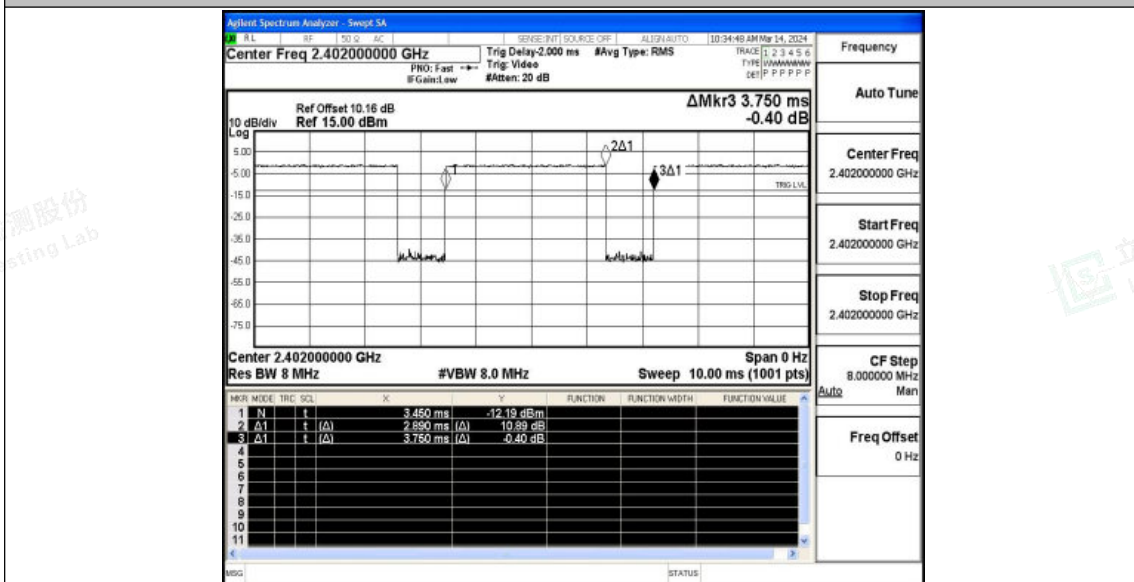


Test Graphs



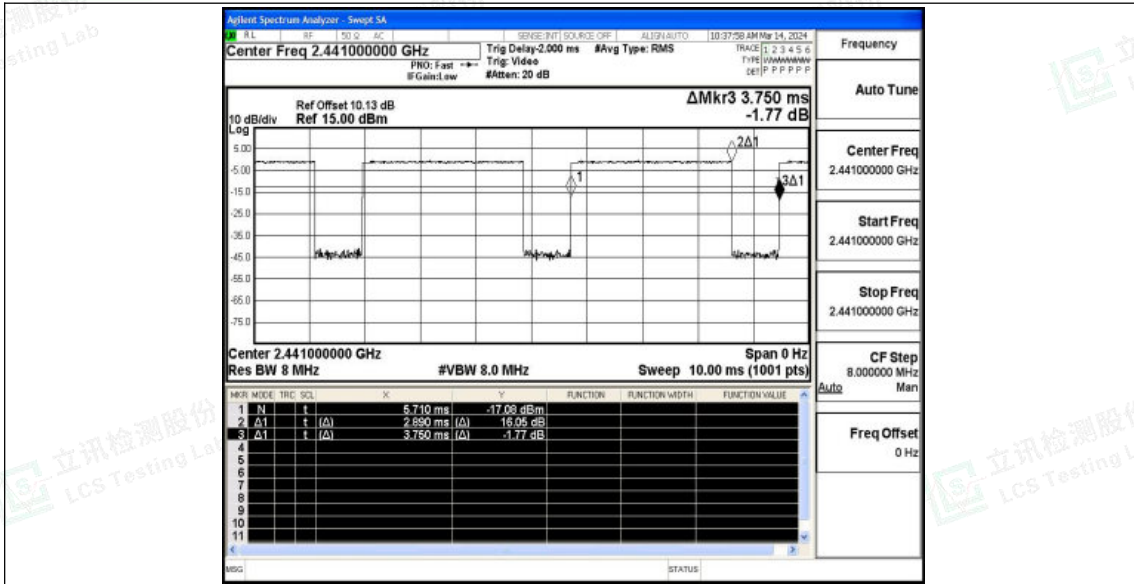


2DH5_Ant1_2402

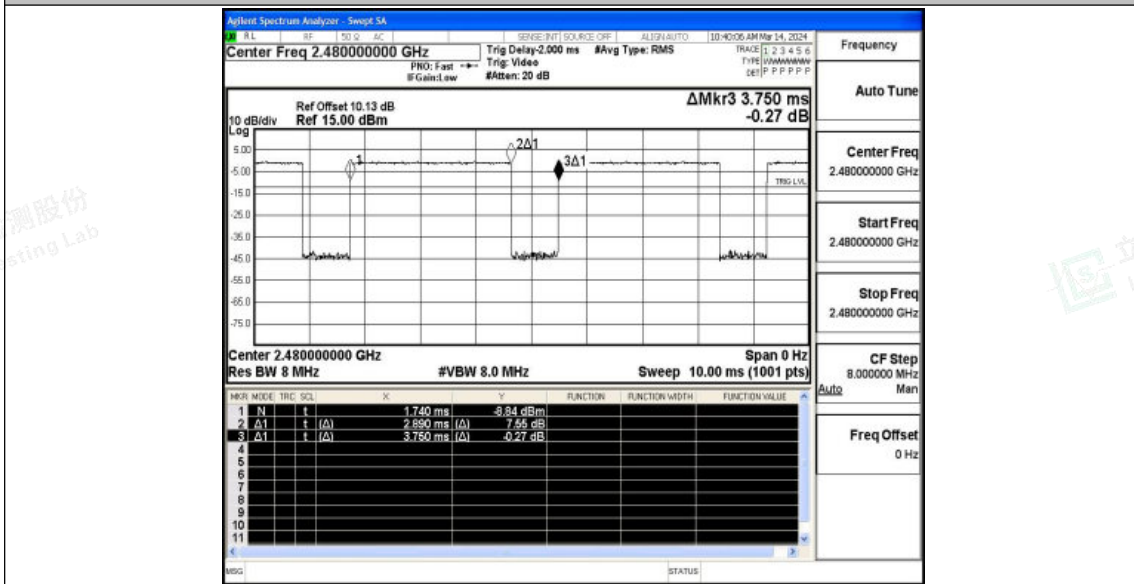


2DH5_Ant1_2441





2DH5_Ant1_2480





A.9 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-47.75	≤-41.20	47.45	≤54	PASS
				AV	2364.785	-45.93	≤-41.20	49.27	≤54	PASS
				AV	2390.000	-47.2	≤-41.20	48.00	≤54	PASS
				Peak	2310.000	-40.34	≤-21.20	54.86	≤74	PASS
				Peak	2364.050	-36.82	≤-21.20	58.38	≤74	PASS
				Peak	2390.000	-39.93	≤-21.20	55.27	≤74	PASS
		High	2480	AV	2483.500	-46.49	≤-41.20	48.71	≤54	PASS
				AV	2498.960	-45.94	≤-41.20	49.26	≤54	PASS
				AV	2500.000	-46.86	≤-41.20	48.34	≤54	PASS
				Peak	2483.500	-39.04	≤-21.20	56.16	≤74	PASS
				Peak	2488.240	-36.69	≤-21.20	58.51	≤74	PASS
				Peak	2500.000	-38.06	≤-21.20	57.14	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-40.07	≤-21.20	55.13	≤74	PASS
				Peak	2344.835	-37.03	≤-21.20	58.17	≤74	PASS
				Peak	2390.000	-40.34	≤-21.20	54.86	≤74	PASS
		High	Hop_2480	Peak	2483.500	-40.35	≤-21.20	54.85	≤74	PASS
				Peak	2496.480	-37.67	≤-21.20	57.53	≤74	PASS
				Peak	2500.000	-39.65	≤-21.20	55.55	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-47.21	≤-41.20	47.99	≤54	PASS
				AV	2323.835	-45.95	≤-41.20	49.25	≤54	PASS
				AV	2390.000	-46.84	≤-41.20	48.36	≤54	PASS
				Peak	2310.000	-40.05	≤-21.20	55.15	≤74	PASS
				Peak	2373.500	-36.06	≤-21.20	59.14	≤74	PASS
				Peak	2390.000	-39.4	≤-21.20	55.80	≤74	PASS
		High	2480	AV	2483.500	-46.9	≤-41.20	48.30	≤54	PASS
				AV	2499.840	-45.82	≤-41.20	49.38	≤54	PASS
				AV	2500.000	-46.62	≤-41.20	48.58	≤54	PASS
				Peak	2483.500	-39.01	≤-21.20	56.19	≤74	PASS
				Peak	2497.120	-37.05	≤-21.20	58.15	≤74	PASS
				Peak	2500.000	-39.44	≤-21.20	55.76	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-40.28	≤-21.20	54.92	≤74	PASS
				Peak	2370.455	-37.45	≤-21.20	57.75	≤74	PASS
				Peak	2390.000	-40.03	≤-21.20	55.17	≤74	PASS
		High	Hop_2480	Peak	2483.500	-39.87	≤-21.20	55.33	≤74	PASS
				Peak	2496.000	-36.75	≤-21.20	58.45	≤74	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



			Peak	2500.000	-37.25	≤-21.20	57.95	≤74	PASS
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Note:

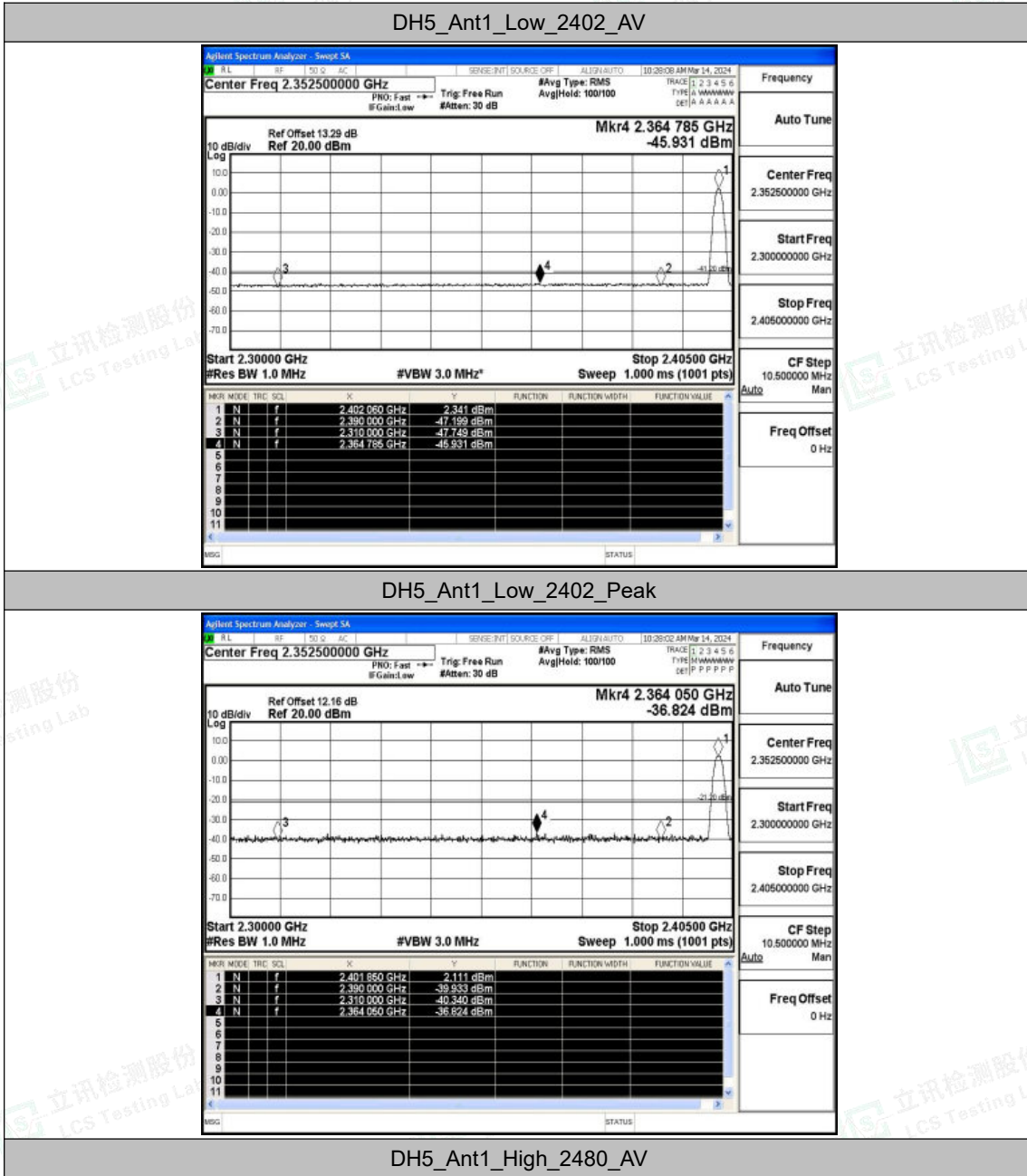
1. The Antenna Gain is compensated in the graph. The Correction Factor is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

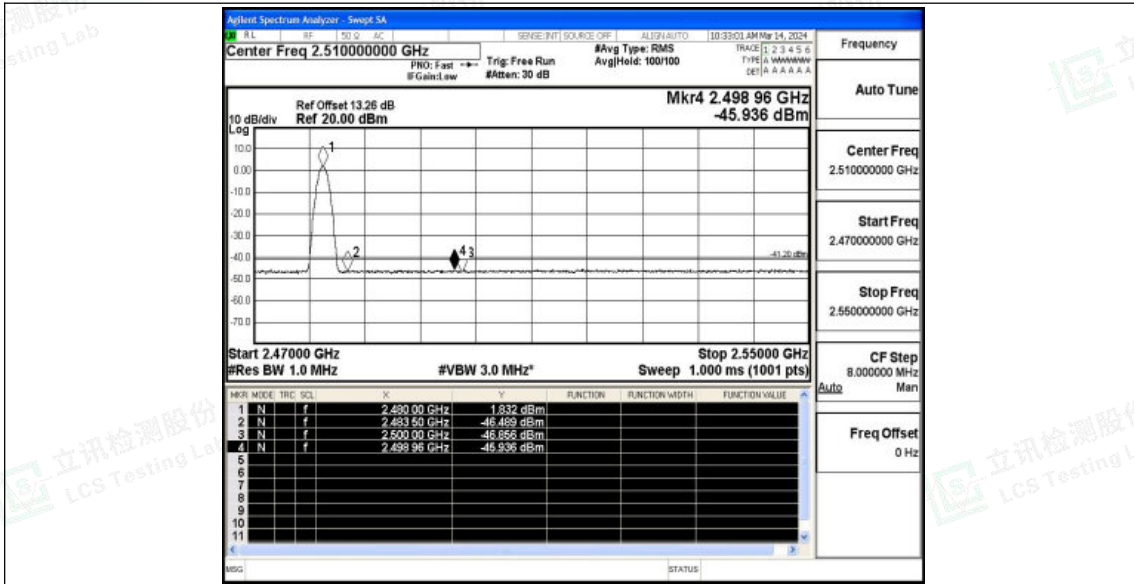


Shenzhen LCS Compliance Testing Laboratory Ltd.
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
 Scan code to check authenticity

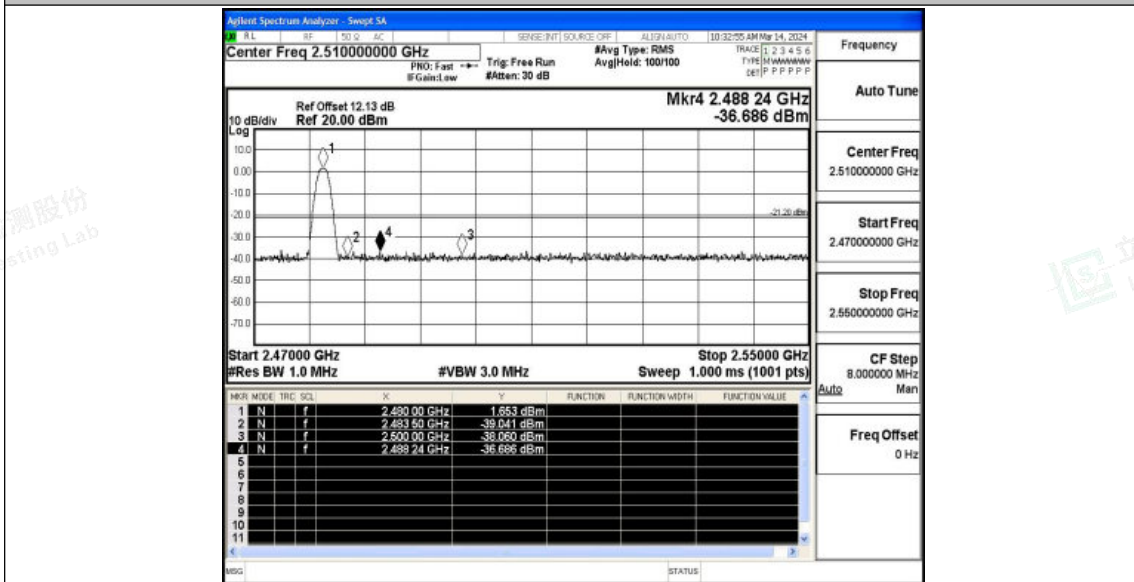


Test Graphs



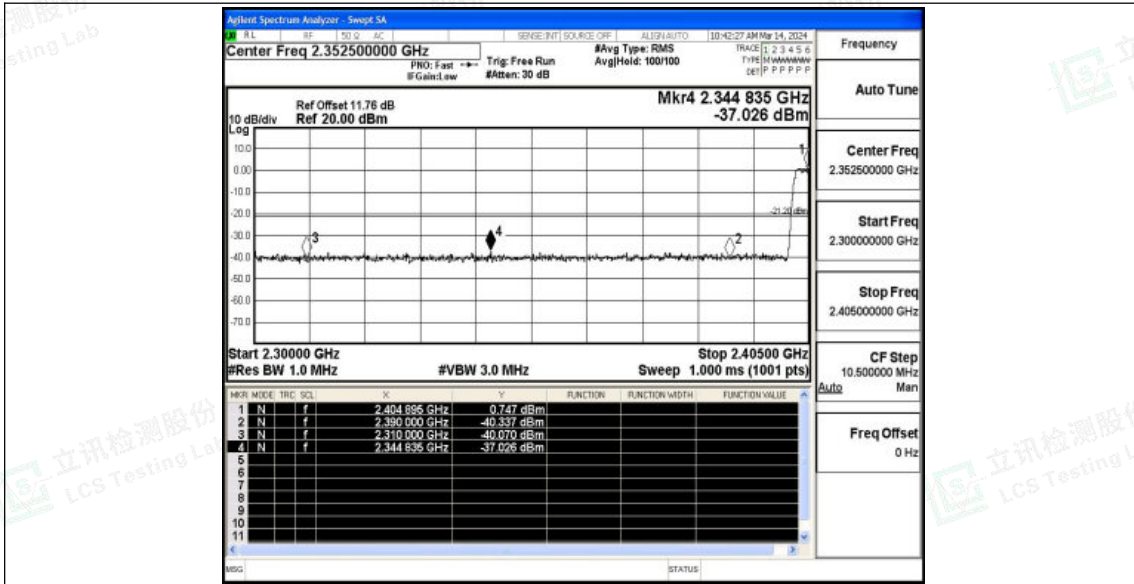


DH5_Ant1_High_2480_Peak

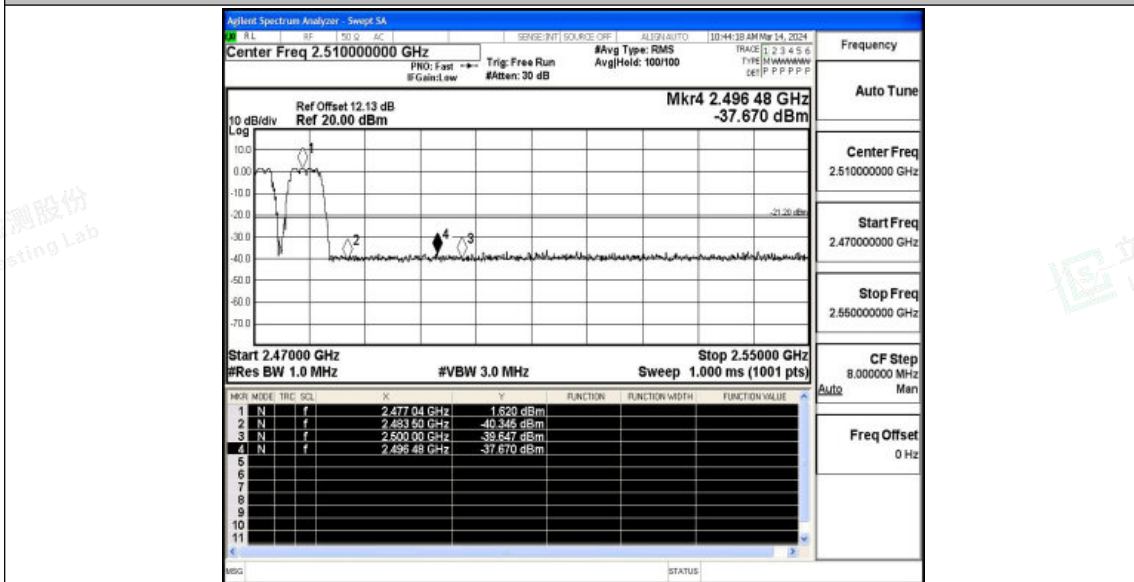


DH5_Ant1_Low_Hop_2402_Peak



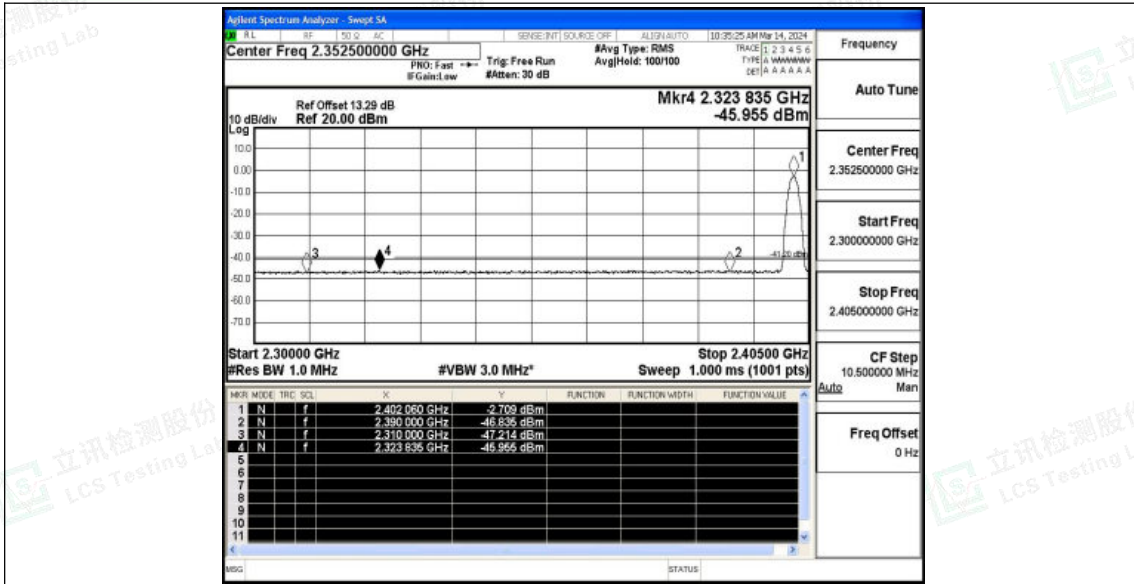


DH5_Ant1_High_Hop_2480_Peak

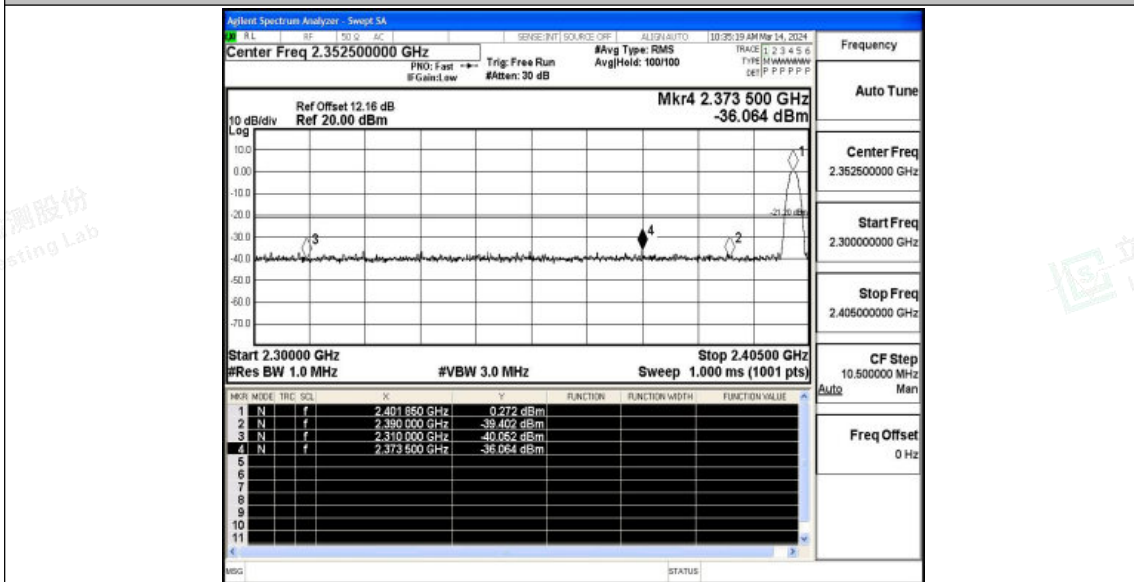


2DH5_Ant1_Low_2402_AV



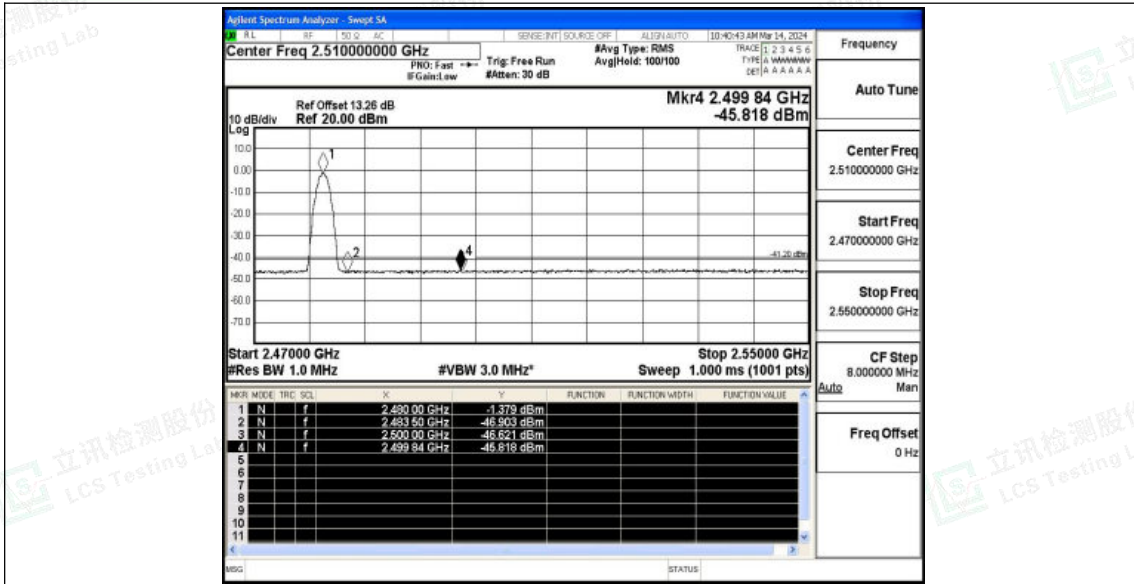


2DH5_Ant1_Low_2402_Peak

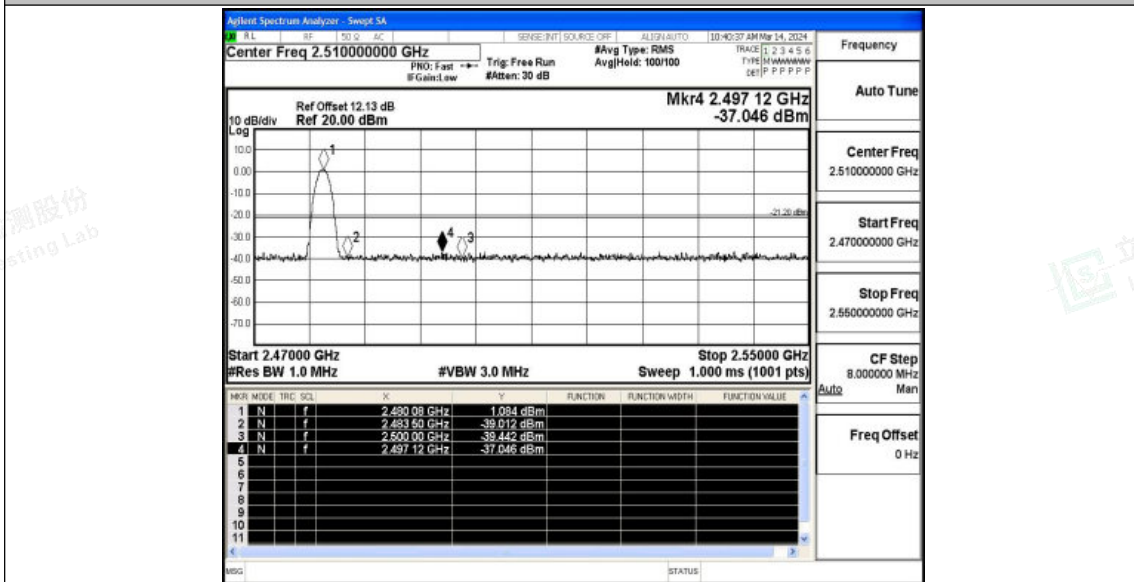


2DH5_Ant1_High_2480_AV



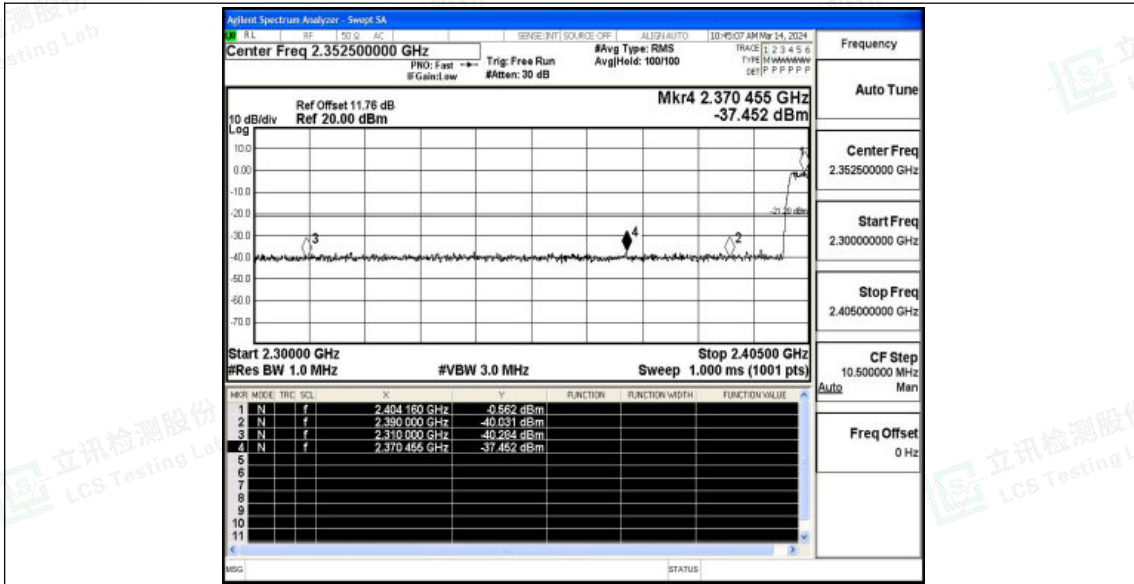


2DH5_Ant1_High_2480_Peak



2DH5_Ant1_Low_Hop_2402_Peak





2DH5_Ant1_High_Hop_2480_Peak

