



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: laptop

Test Model: FZTK142

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan





A.1 20dB Emission Bandwidth

Test Result

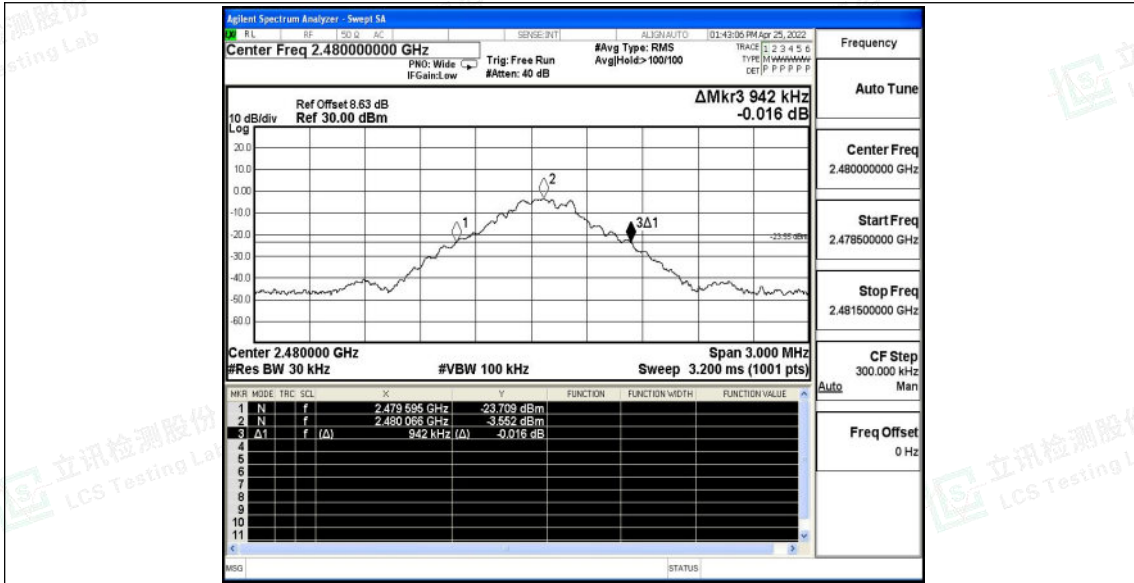
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.595	2402.540	---	---
		2441	0.948	2440.592	2441.540	---	---
		2480	0.942	2479.595	2480.537	---	---
2DH5	Ant1	2402	1.320	2401.388	2402.708	---	---
		2441	1.320	2440.391	2441.711	---	---
		2480	1.323	2479.388	2480.711	---	---
3DH5	Ant1	2402	1.314	2401.397	2402.711	---	---
		2441	1.317	2440.397	2441.714	---	---
		2480	1.314	2479.400	2480.714	---	---



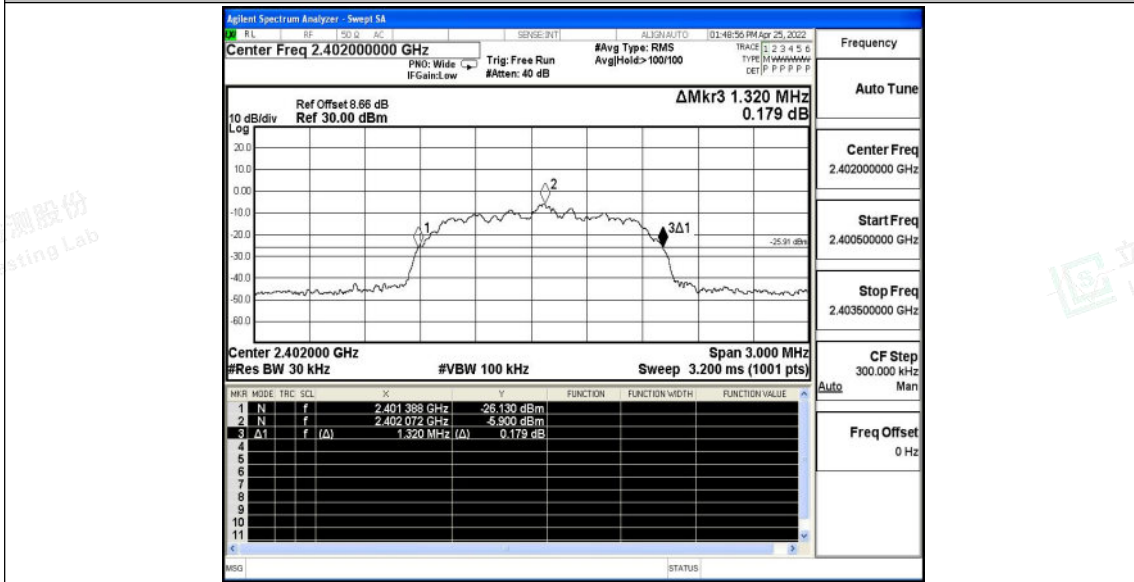


Test Graphs



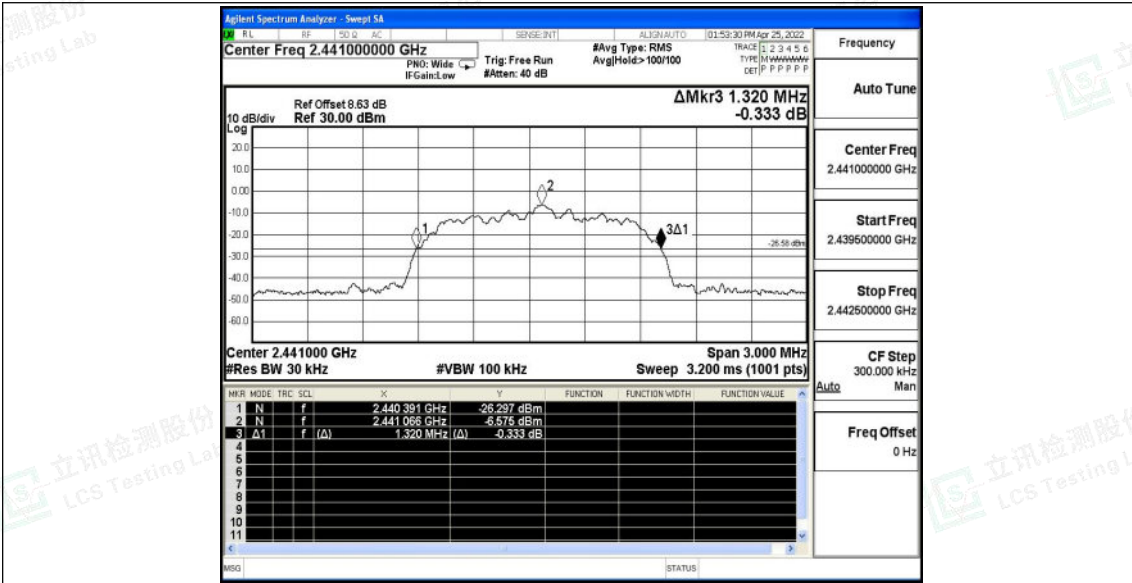


2Dh5_Ant1_2402

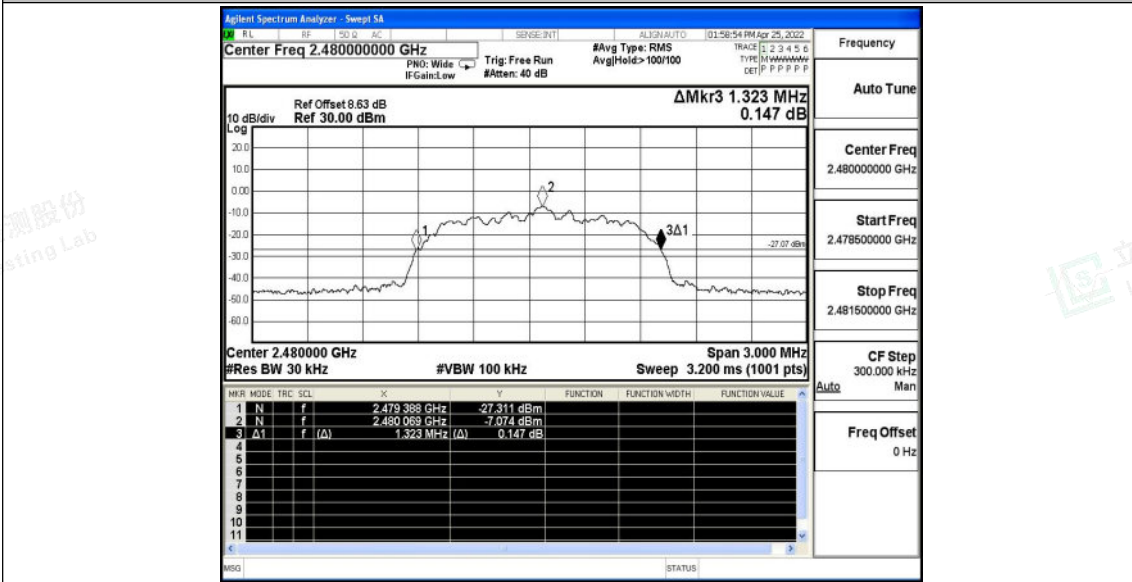


2Dh5_Ant1_2441



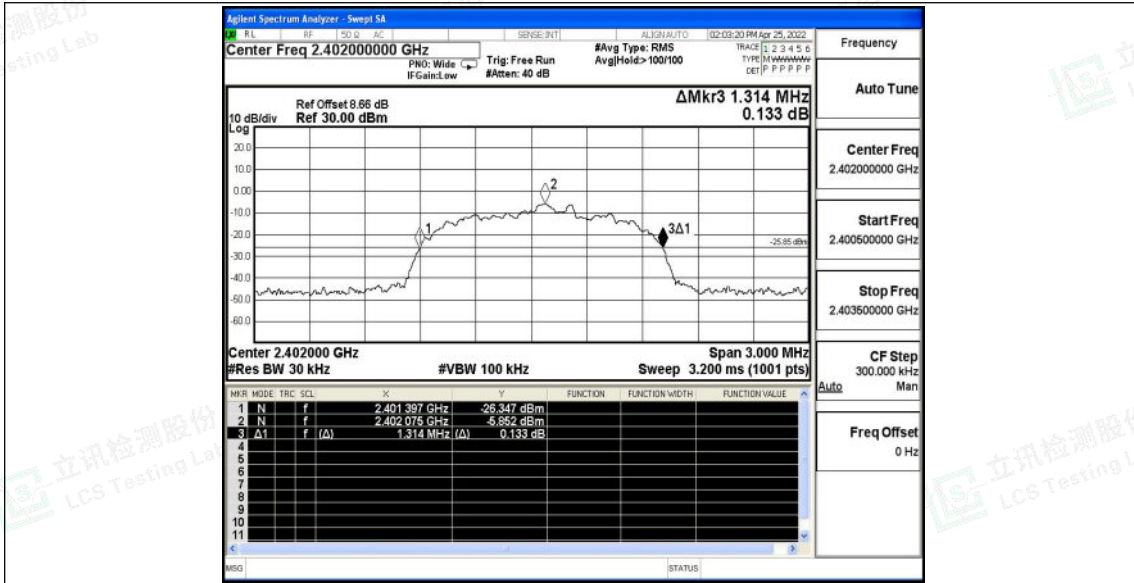


2D H5_Ant1_2480

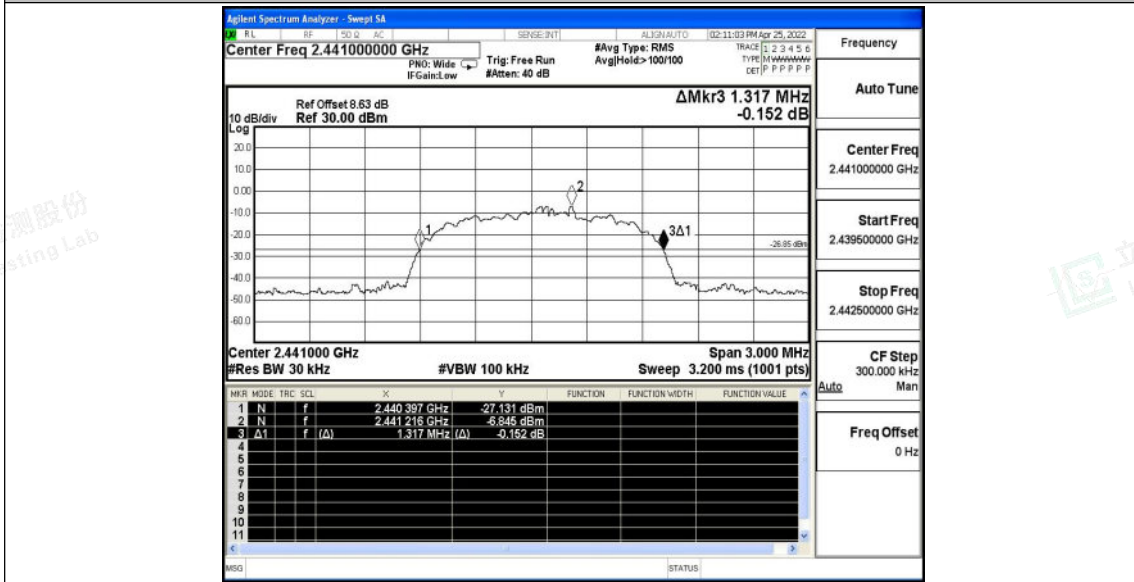


3D H5_Ant1_2402



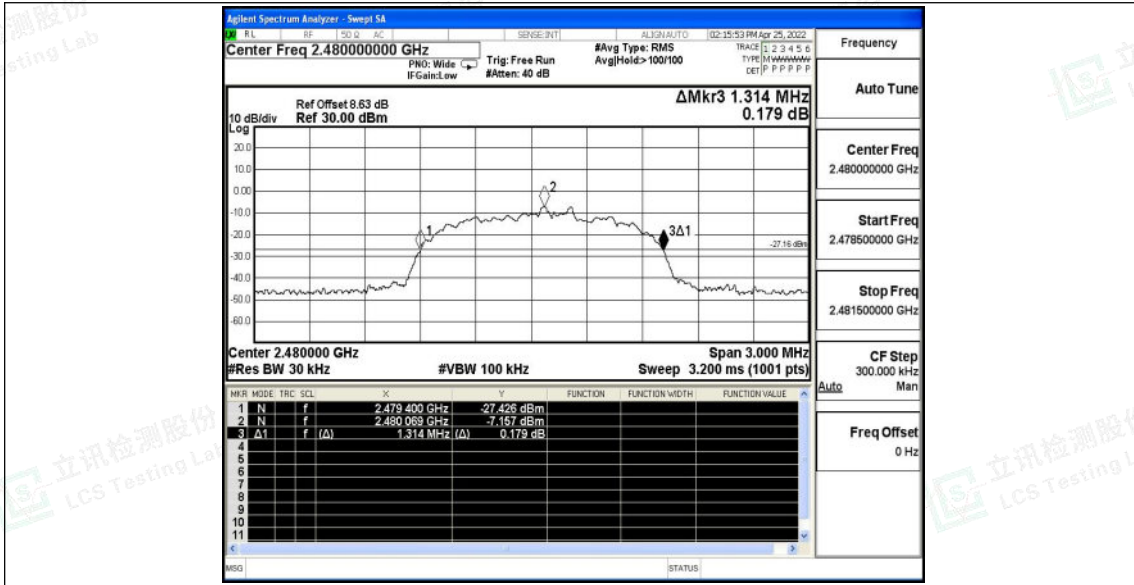


3DH5_Ant1_2441



3DH5_Ant1_2480







A.2 Maximum conducted output power

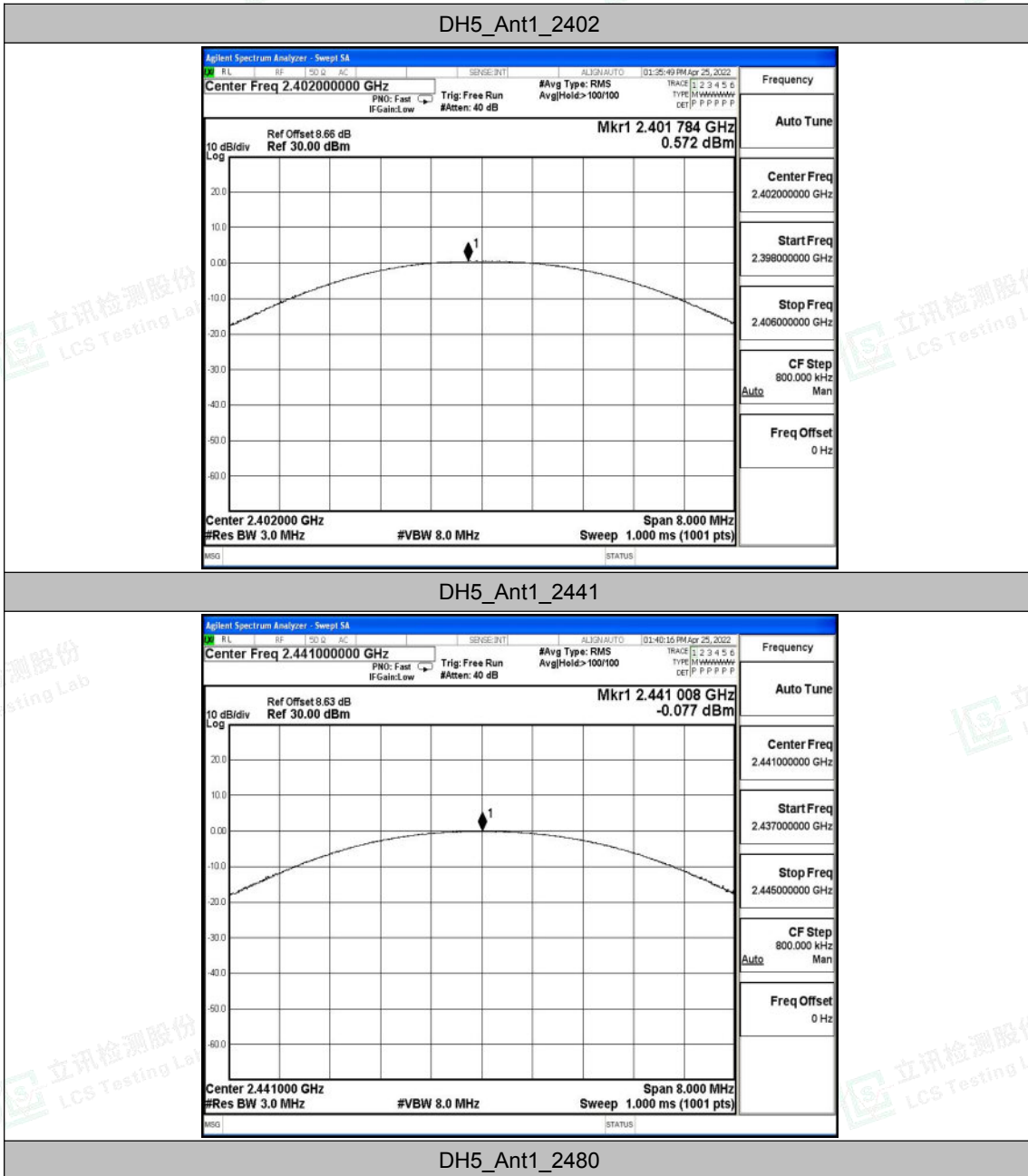
Test Result

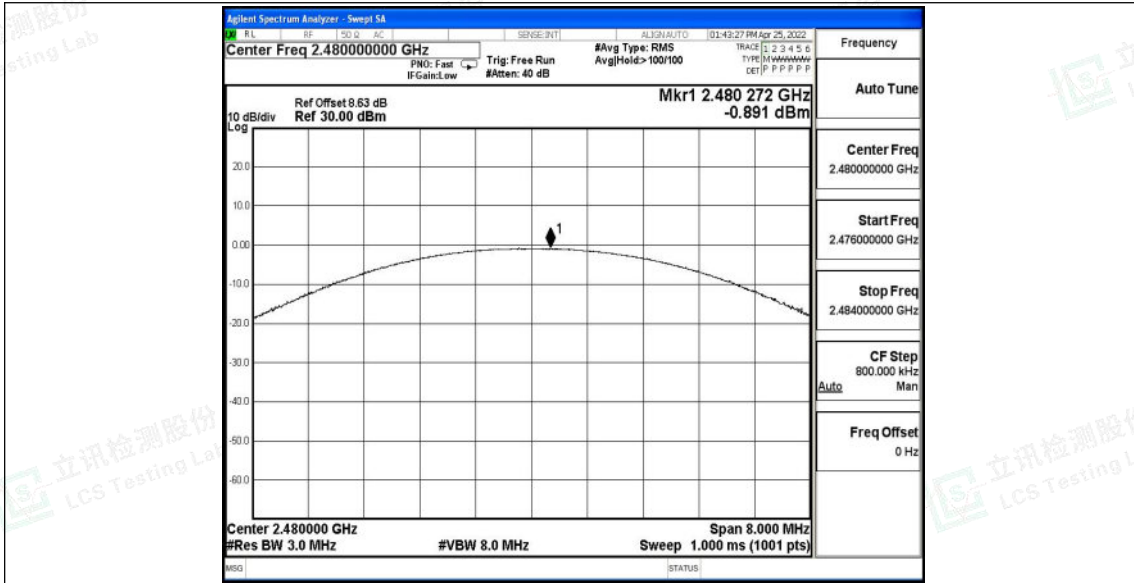
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	0.57	≤30.0	PASS
		2441	-0.08	≤30.0	PASS
		2480	-0.89	≤30.0	PASS
2DH5	Ant1	2402	-0.36	≤20.97	PASS
		2441	-0.96	≤20.97	PASS
		2480	-1.62	≤20.97	PASS
3DH5	Ant1	2402	-0.04	≤20.97	PASS
		2441	-0.57	≤20.97	PASS
		2480	-1.09	≤20.97	PASS



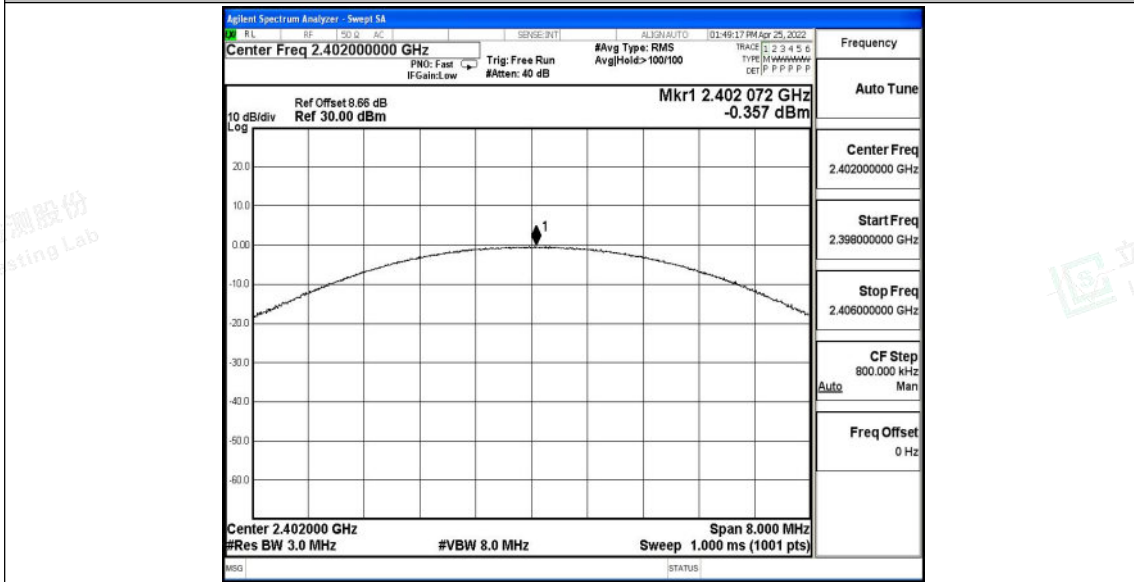


Test Graphs



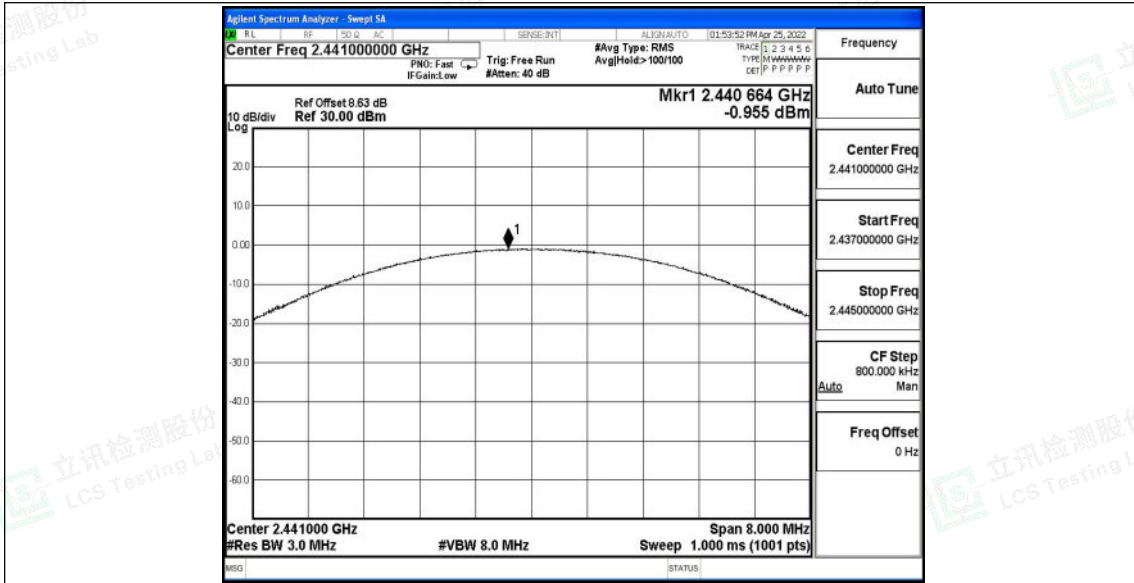


2DH5_Ant1_2402

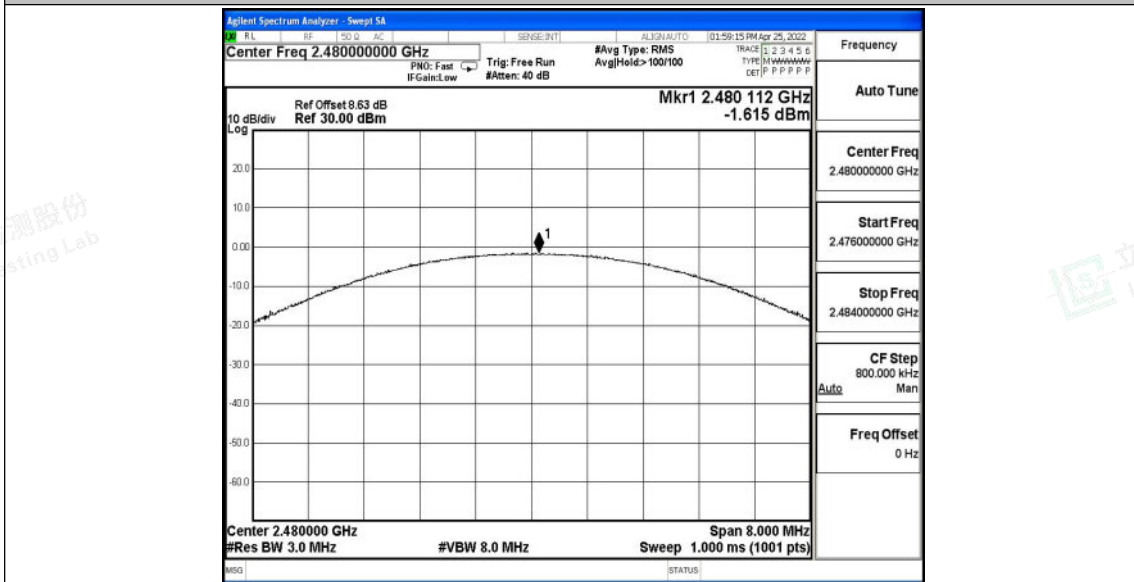


2DH5_Ant1_2441



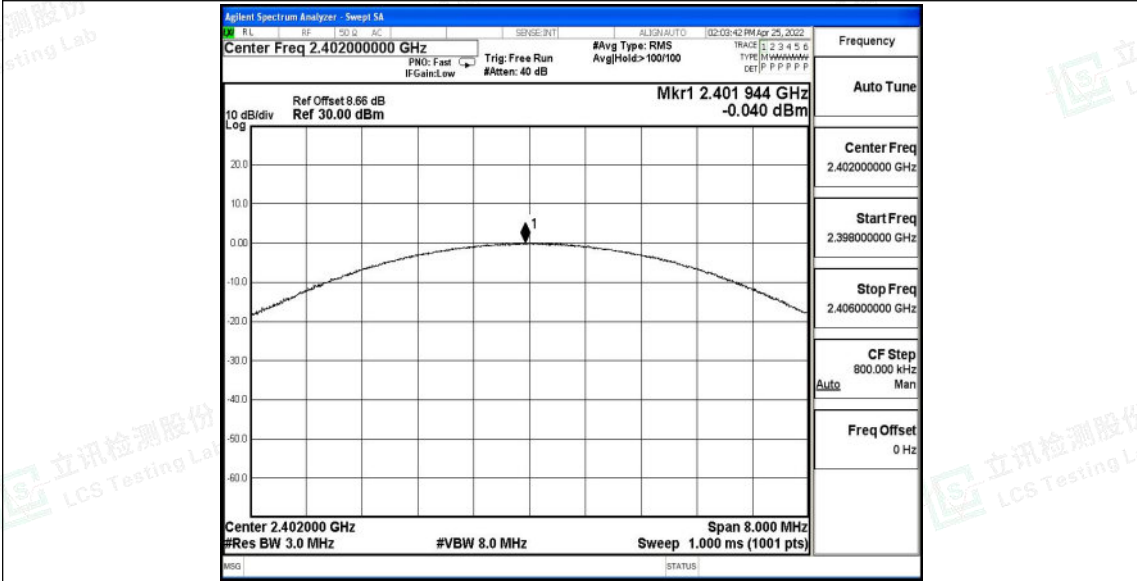


2DH5_Ant1_2480

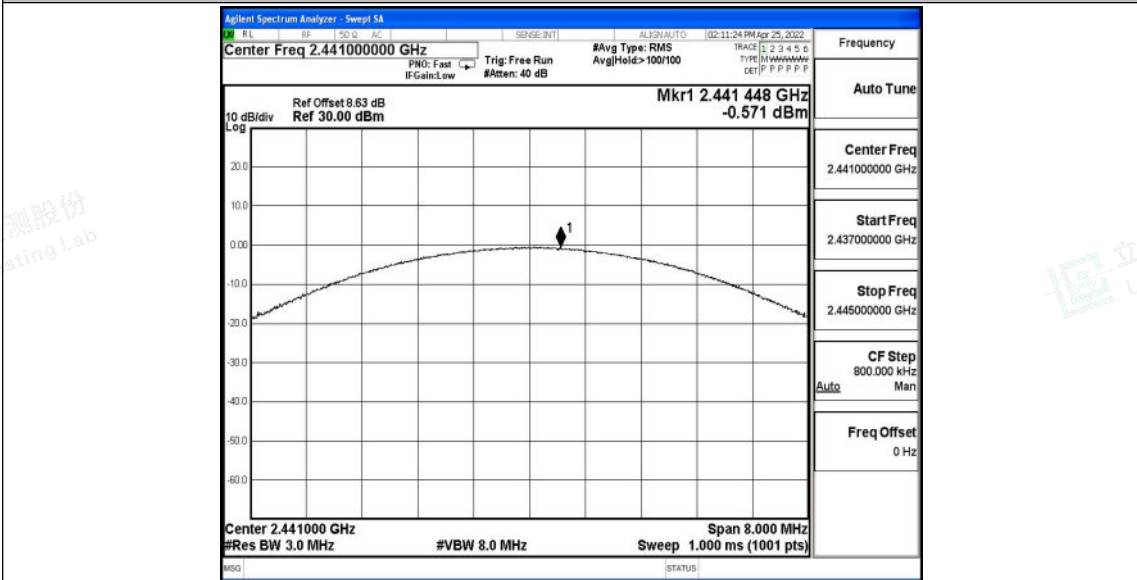


3DH5_Ant1_2402



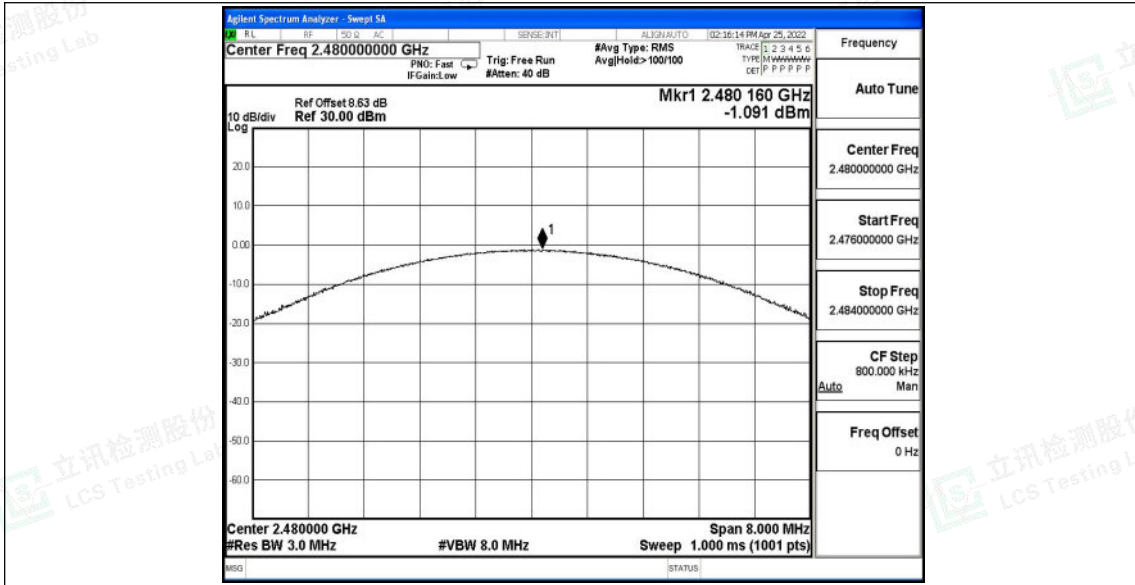


3DH5_Ant1_2441



3DH5_Ant1_2480







A.3 Carrier frequency separation

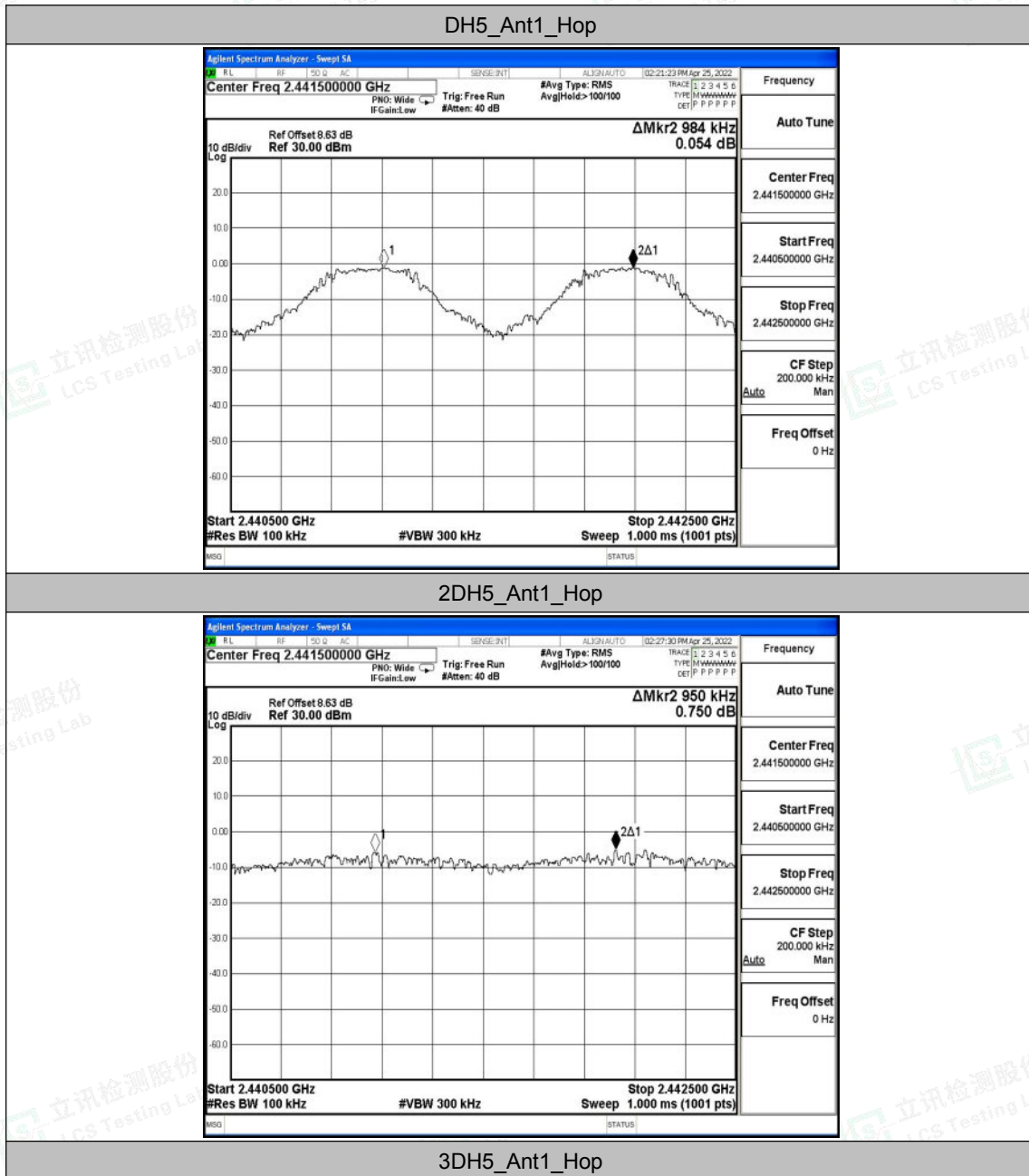
Test Result

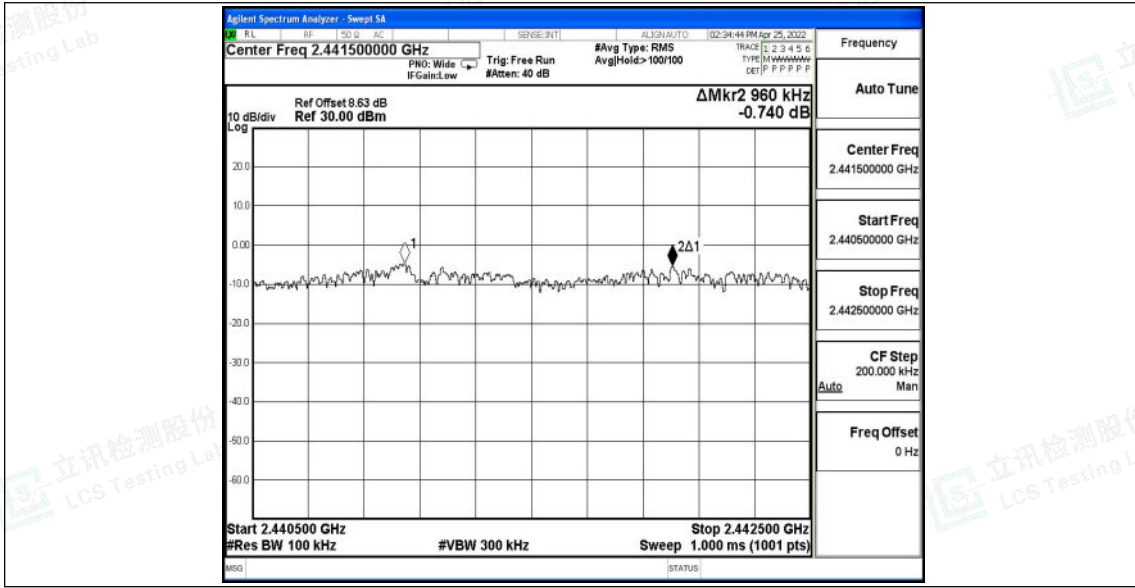
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.984	≥0.948	PASS
2DH5	Ant1	Hop	0.95	≥0.882	PASS
3DH5	Ant1	Hop	0.96	≥0.878	PASS





Test Graphs







A.4 Time of occupancy

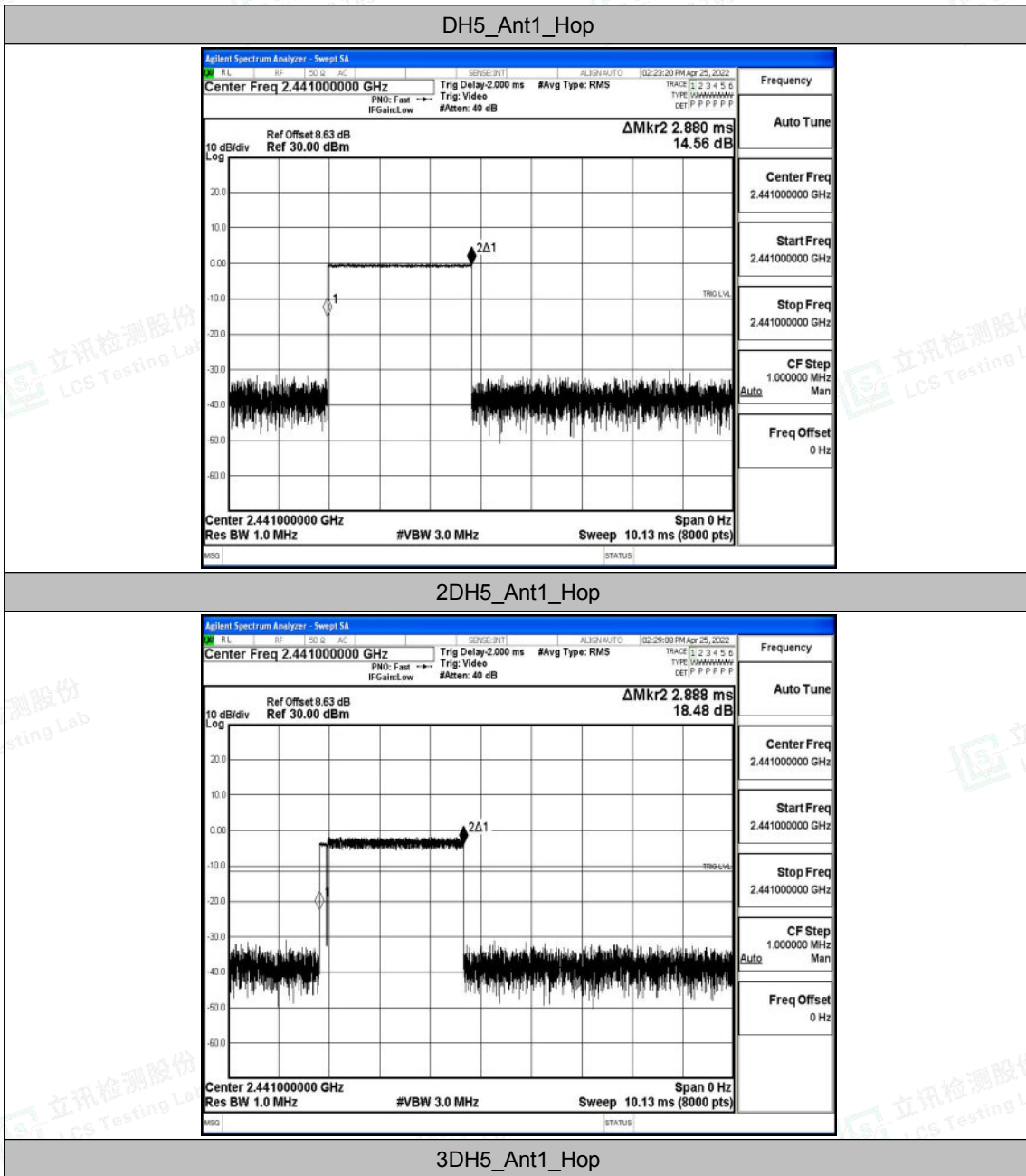
Test Result

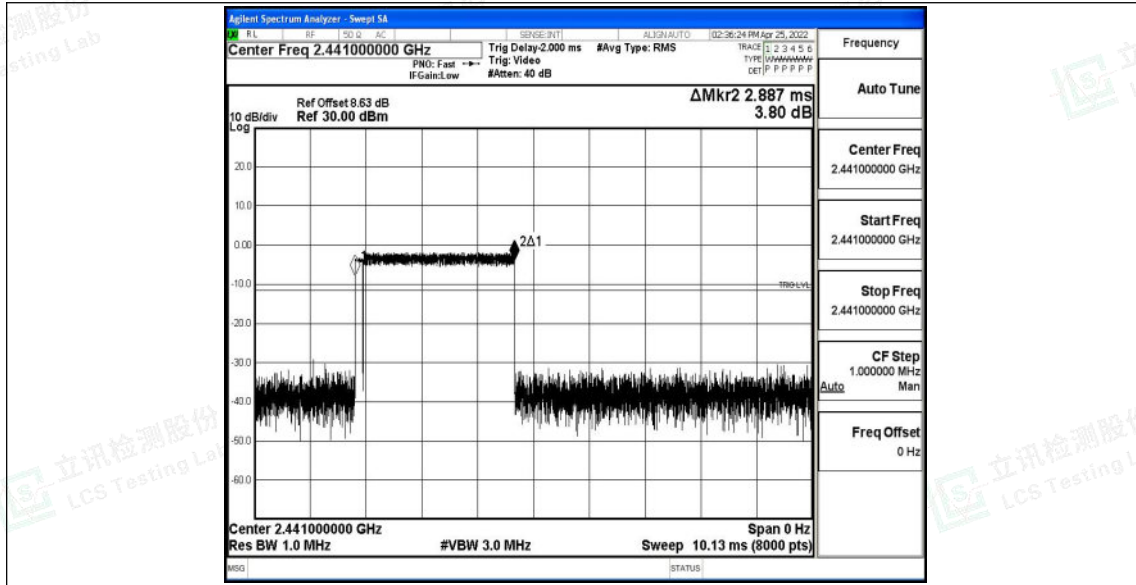
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	106.67	0.307	≤0.4	PASS
2DH5	Ant1	Hop	2.89	106.67	0.308	≤0.4	PASS
3DH5	Ant1	Hop	2.89	106.67	0.308	≤0.4	PASS





Test Graphs







A.5 Number of hopping channels

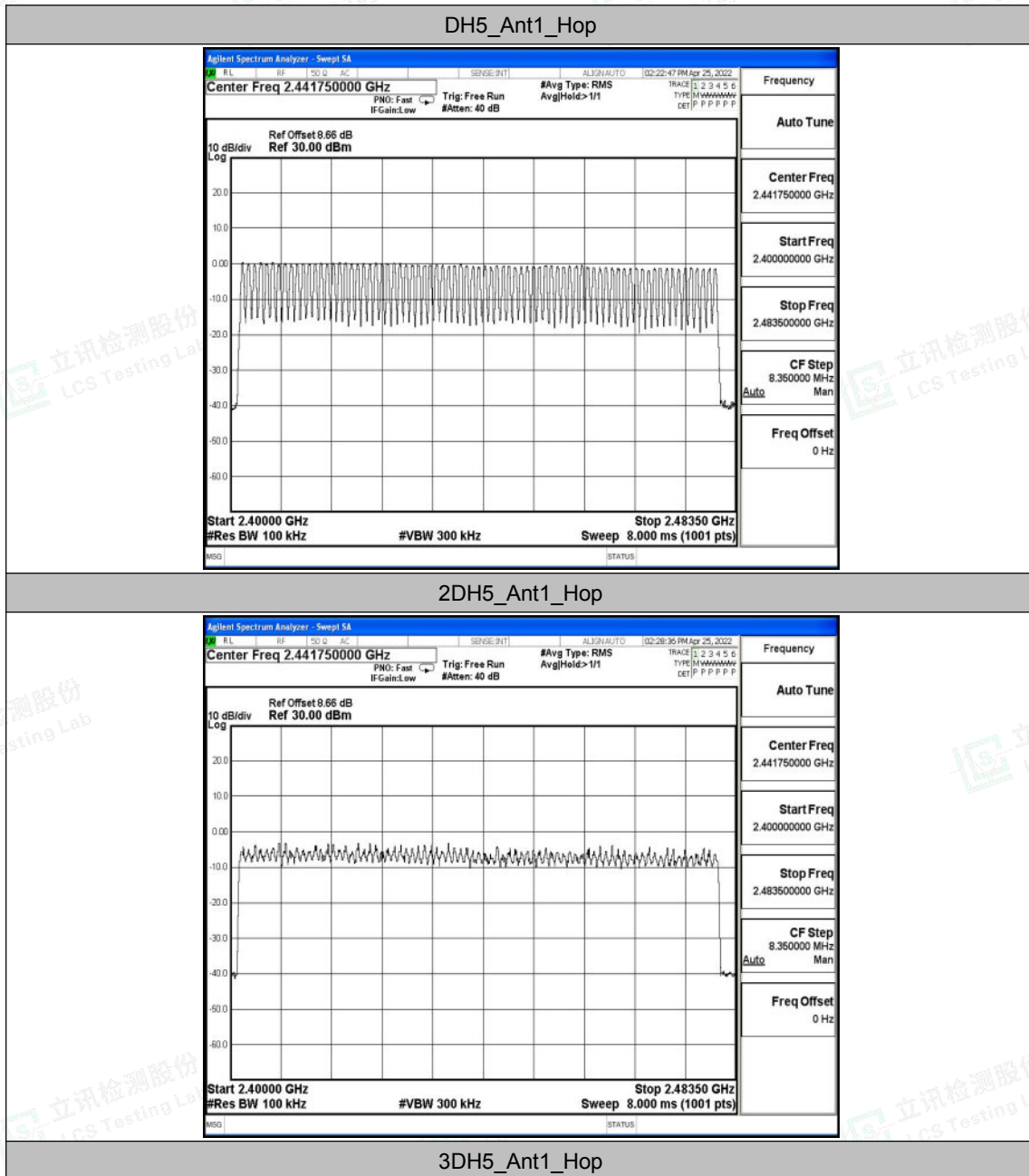
Test Result

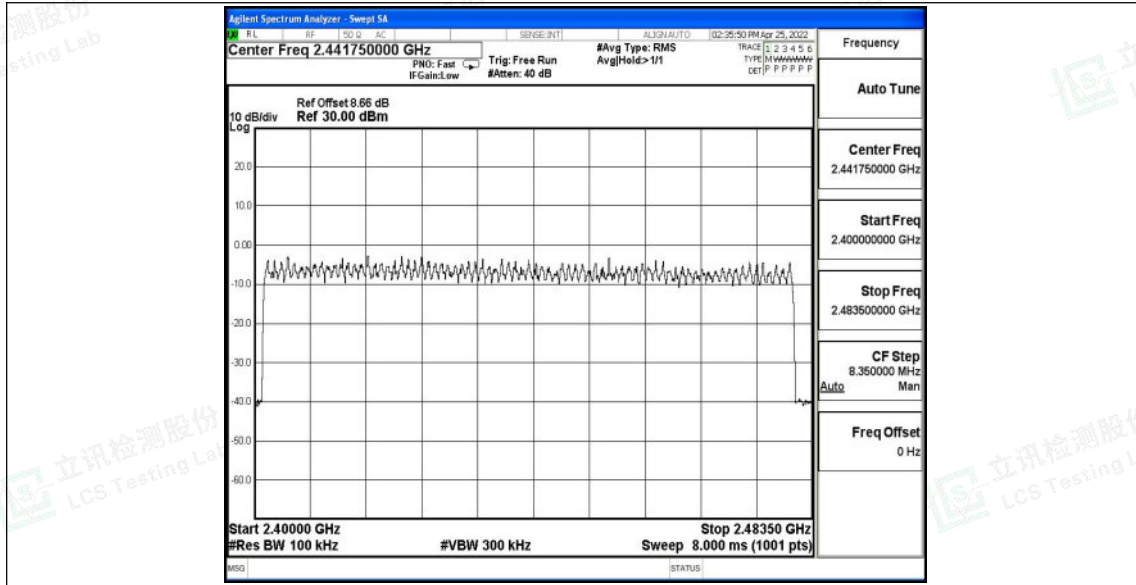
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS





Test Graphs







A.6 Band edge measurements

Test Result

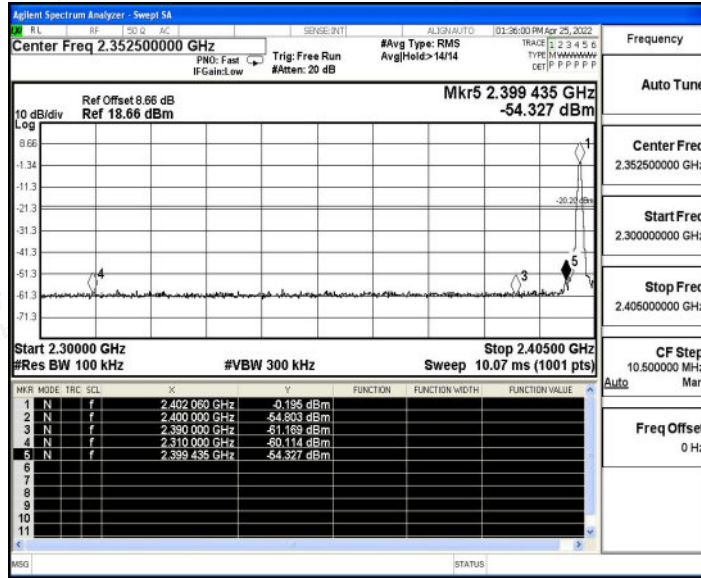
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.20	-54.33	≤-20.2	PASS
		High	2480	-1.67	-57.96	≤-21.67	PASS
		Low	Hop_2402	-1.09	-58.5	≤-21.09	PASS
		High	Hop_2480	-1.29	-57.63	≤-21.29	PASS
2DH5	Ant1	Low	2402	-3.12	-57.67	≤-23.12	PASS
		High	2480	-4.58	-57.59	≤-24.58	PASS
		Low	Hop_2402	-6.09	-59.18	≤-26.09	PASS
		High	Hop_2480	-4.93	-57.97	≤-24.93	PASS
3DH5	Ant1	Low	2402	-3.43	-56.99	≤-23.43	PASS
		High	2480	-4.23	-57.56	≤-24.23	PASS
		Low	Hop_2402	-3.62	-58.98	≤-23.62	PASS
		High	Hop_2480	-4.41	-57.67	≤-24.41	PASS



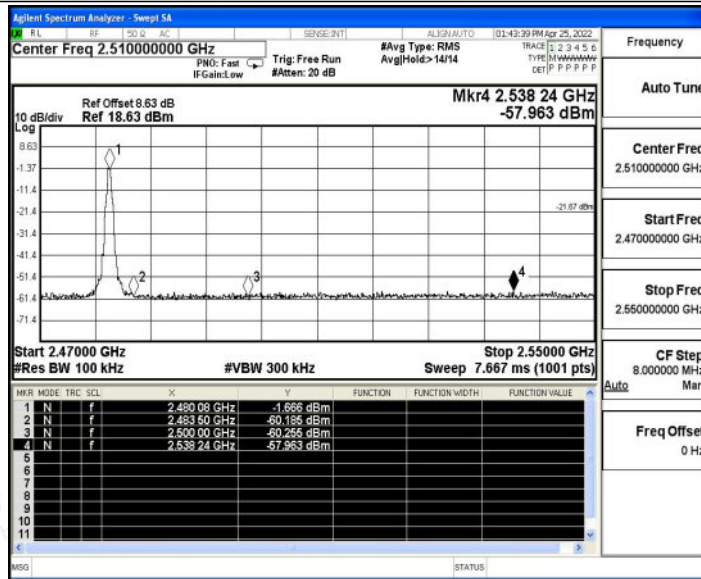


Test Graphs

DH5_Ant1_Low_2402

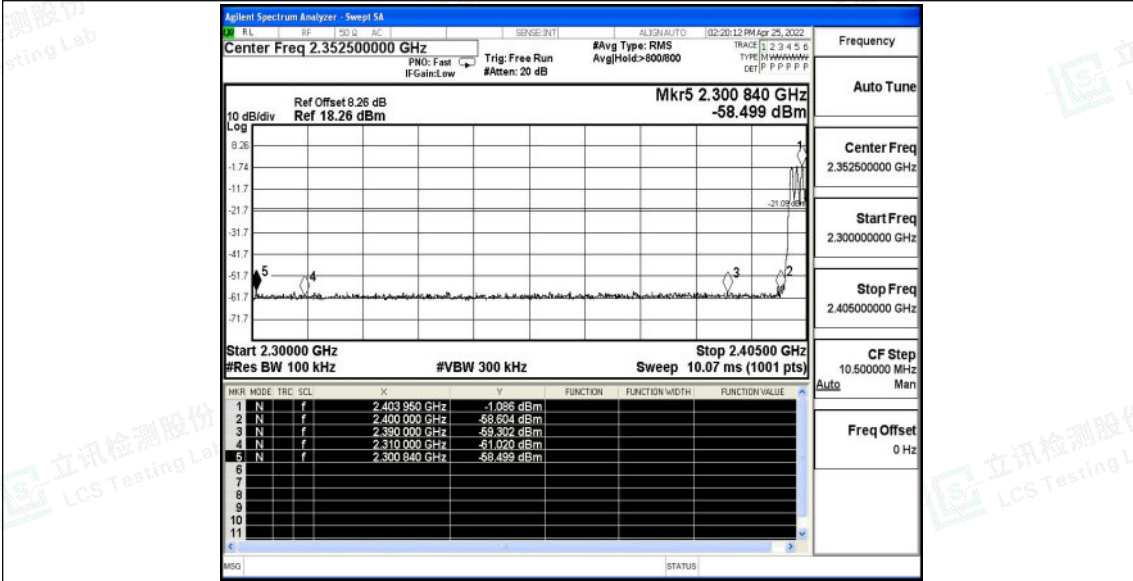


DH5_Ant1_High_2480

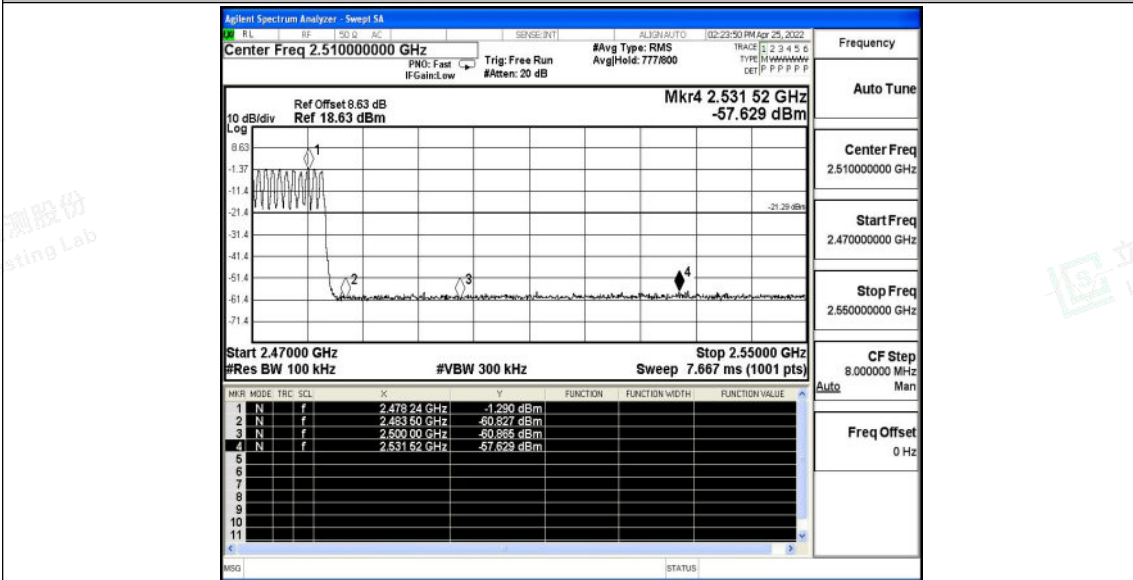


DH5_Ant1_Low_Hop_2402



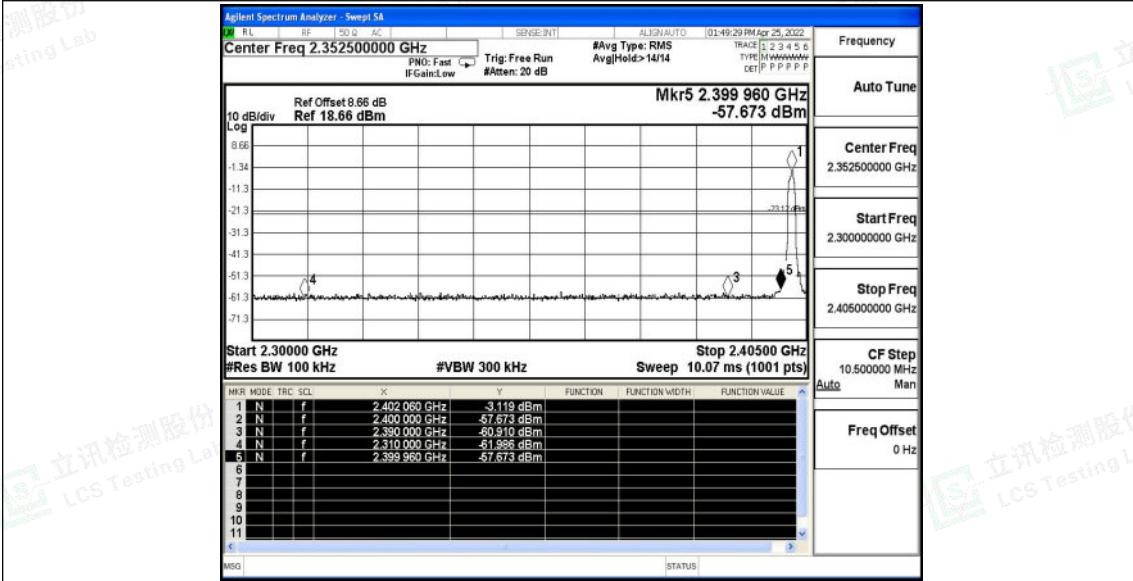


DH5_Ant1_High_Hop_2480

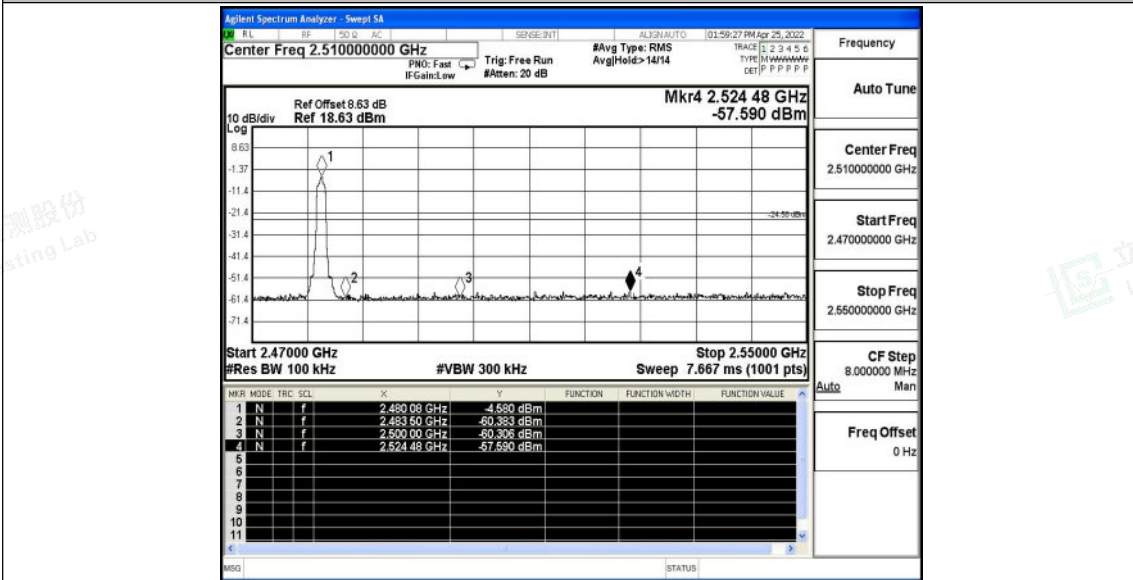


2DH5_Ant1_Low_2402



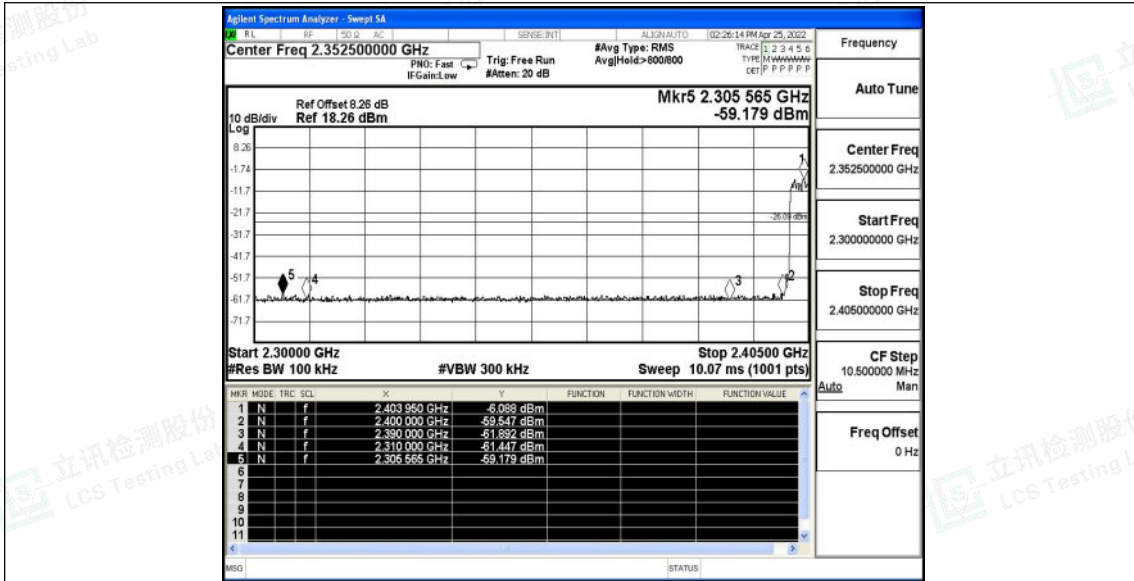


2DH5_Ant1_High_2480

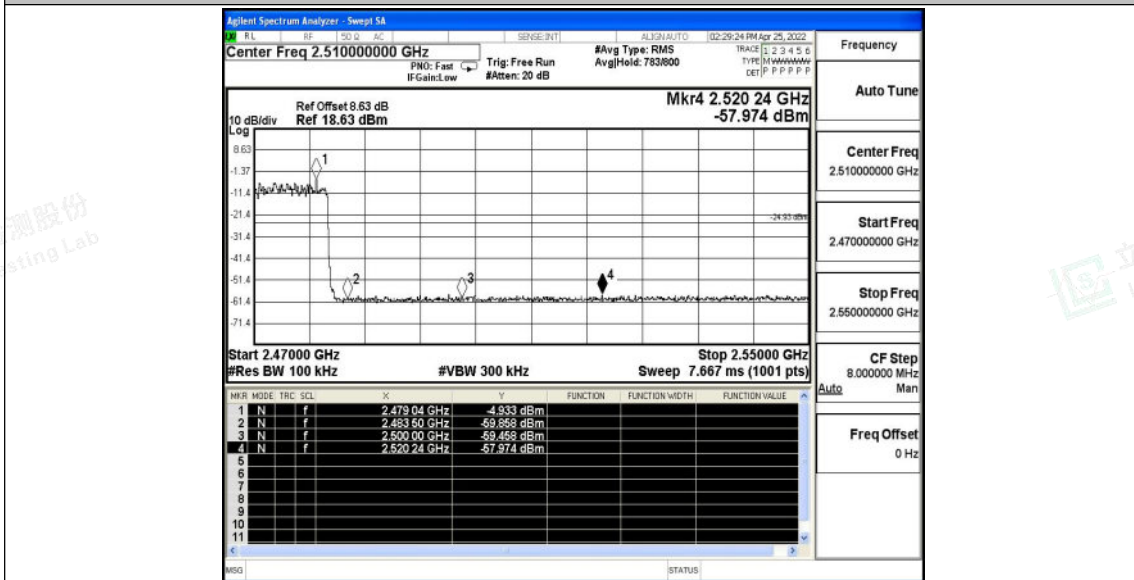


2DH5_Ant1_Low_Hop_2402



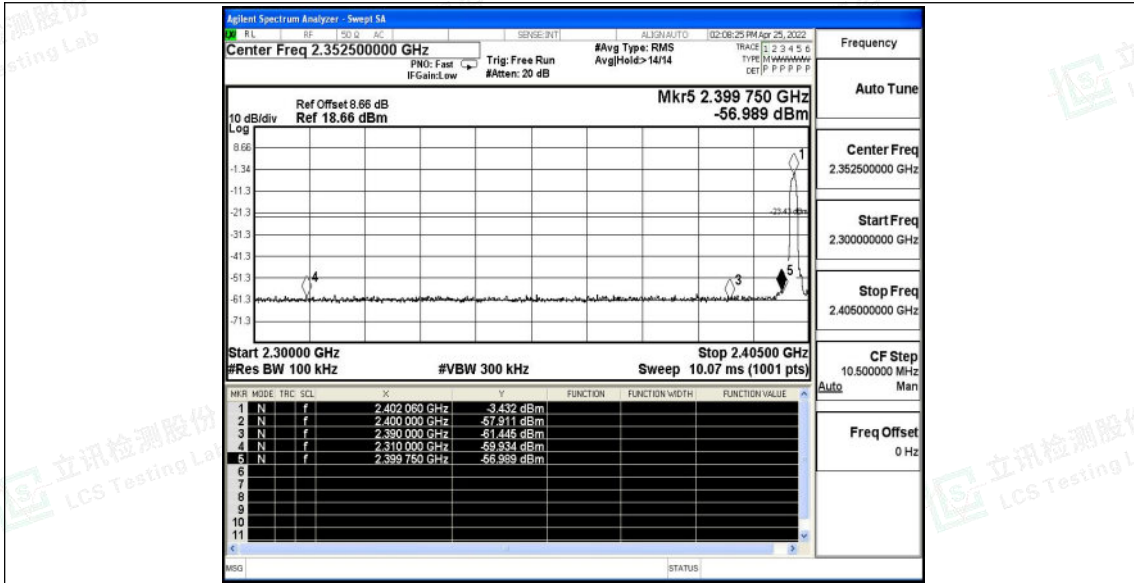


2DH5_Ant1_High_Hop_2480

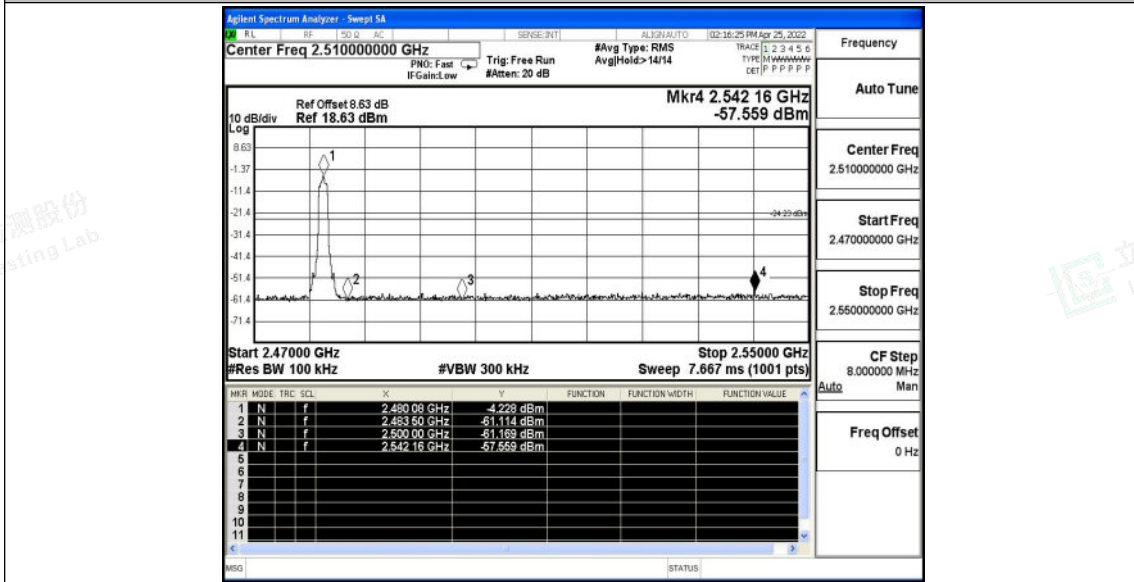


3DH5_Ant1_Low_2402



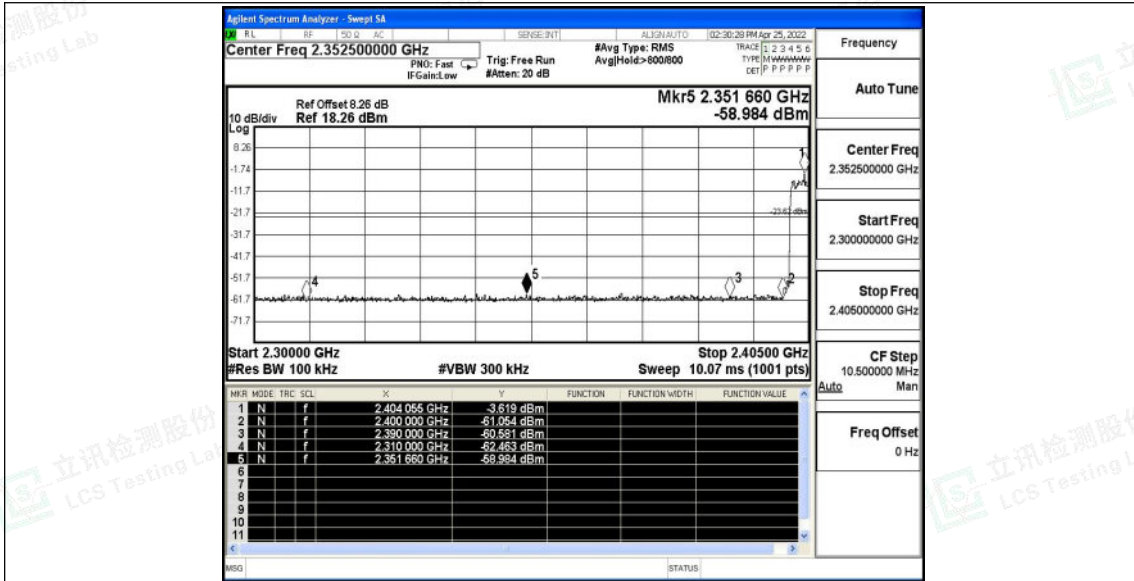


3DH5_Ant1_High_2480

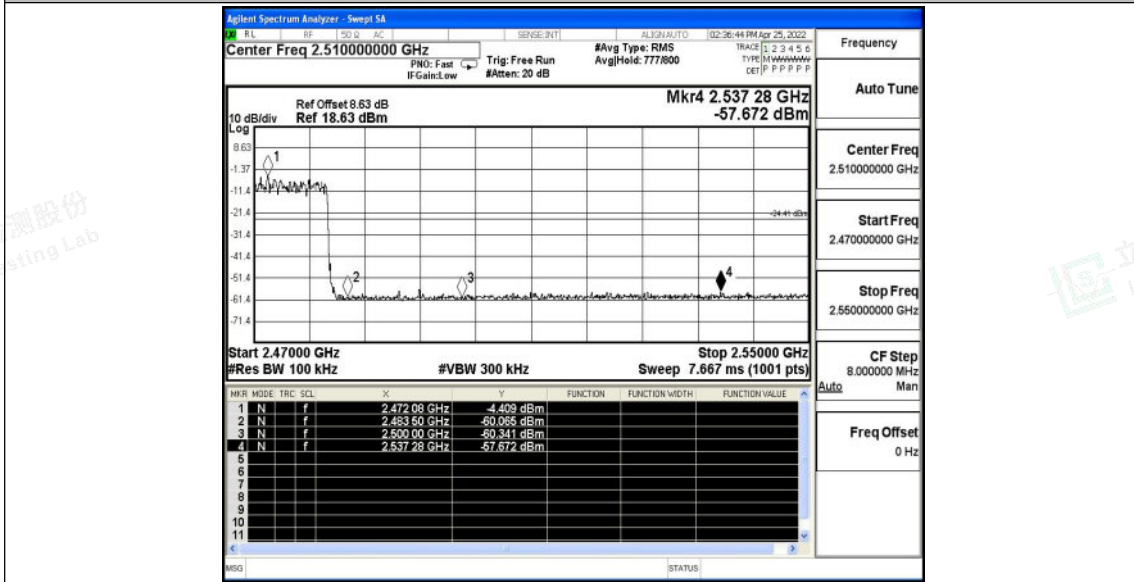


3DH5_Ant1_Low_Hop_2402





3DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

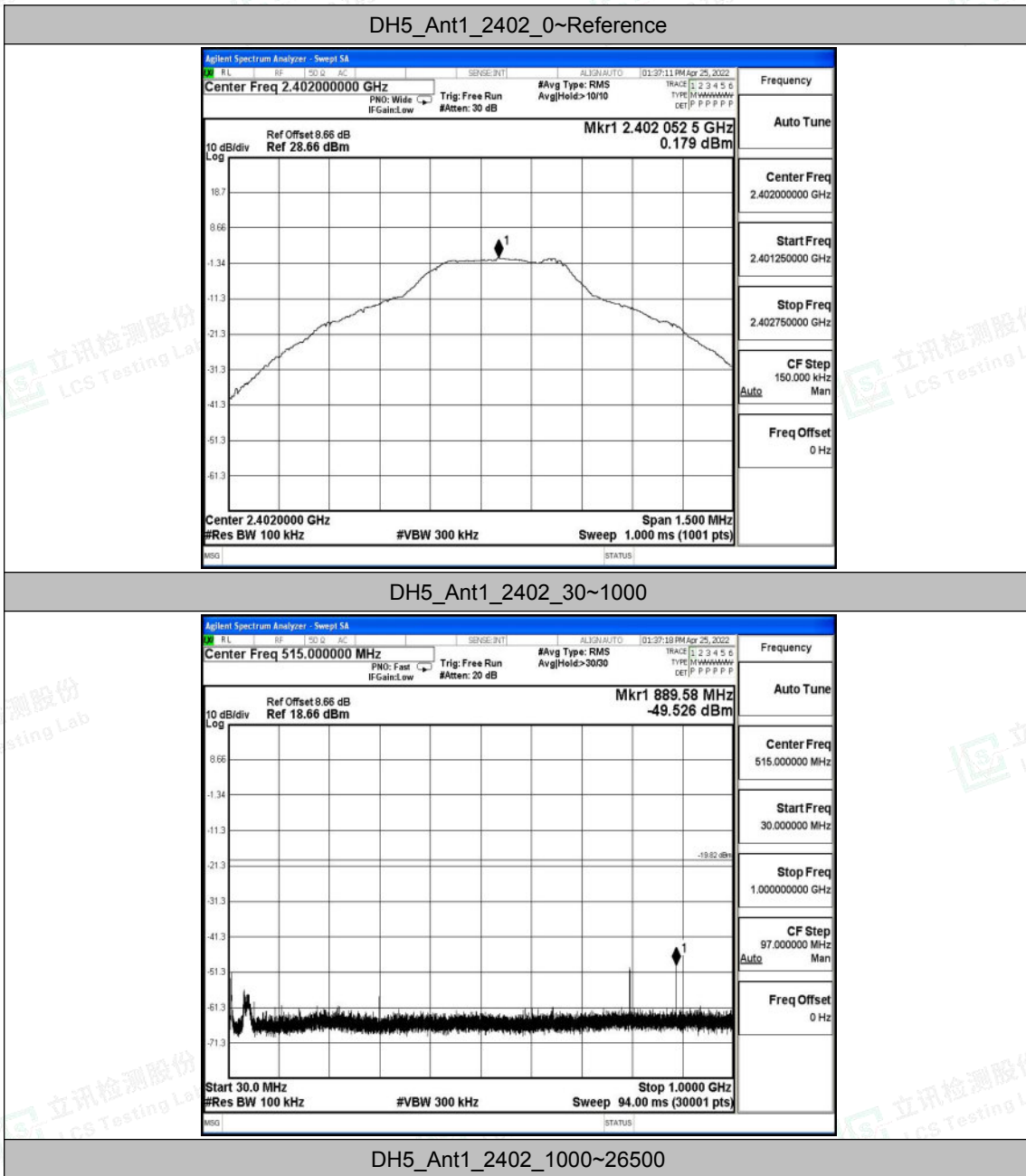
Test Result

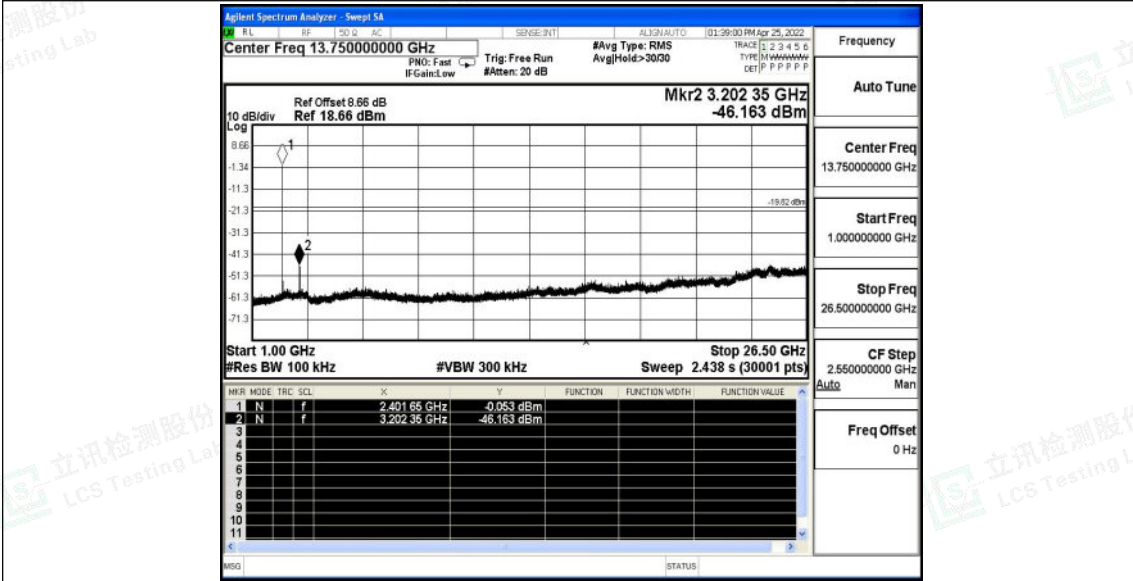
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.18	0.18	---	PASS
			30~1000	0.18	-49.53	≤-19.82	PASS
			1000~26500	0.18	-46.16	≤-19.82	PASS
		2441	Reference	-0.75	-0.75	---	PASS
			30~1000	-0.75	-44.53	≤-20.75	PASS
			1000~26500	-0.75	-46.36	≤-20.75	PASS
		2480	Reference	-1.32	-1.32	---	PASS
			30~1000	-1.32	-49.89	≤-21.32	PASS
			1000~26500	-1.32	-46.01	≤-21.32	PASS
2DH5	Ant1	2402	Reference	-3.24	-3.24	---	PASS
			30~1000	-3.24	-38.61	≤-23.24	PASS
			1000~26500	-3.24	-46.14	≤-23.24	PASS
		2441	Reference	-4.77	-4.77	---	PASS
			30~1000	-4.77	-50.76	≤-24.77	PASS
			1000~26500	-4.77	-46.17	≤-24.77	PASS
		2480	Reference	-4.39	-4.39	---	PASS
			30~1000	-4.39	-42.75	≤-24.39	PASS
			1000~26500	-4.39	-46.34	≤-24.39	PASS
3DH5	Ant1	2402	Reference	-3.29	-3.29	---	PASS
			30~1000	-3.29	-51.58	≤-23.29	PASS
			1000~26500	-3.29	-46.05	≤-23.29	PASS
		2441	Reference	-3.69	-3.69	---	PASS
			30~1000	-3.69	-51.7	≤-23.69	PASS
			1000~26500	-3.69	-46.41	≤-23.69	PASS
		2480	Reference	-4.55	-4.55	---	PASS
			30~1000	-4.55	-50	≤-24.55	PASS
			1000~26500	-4.55	-46.54	≤-24.55	PASS



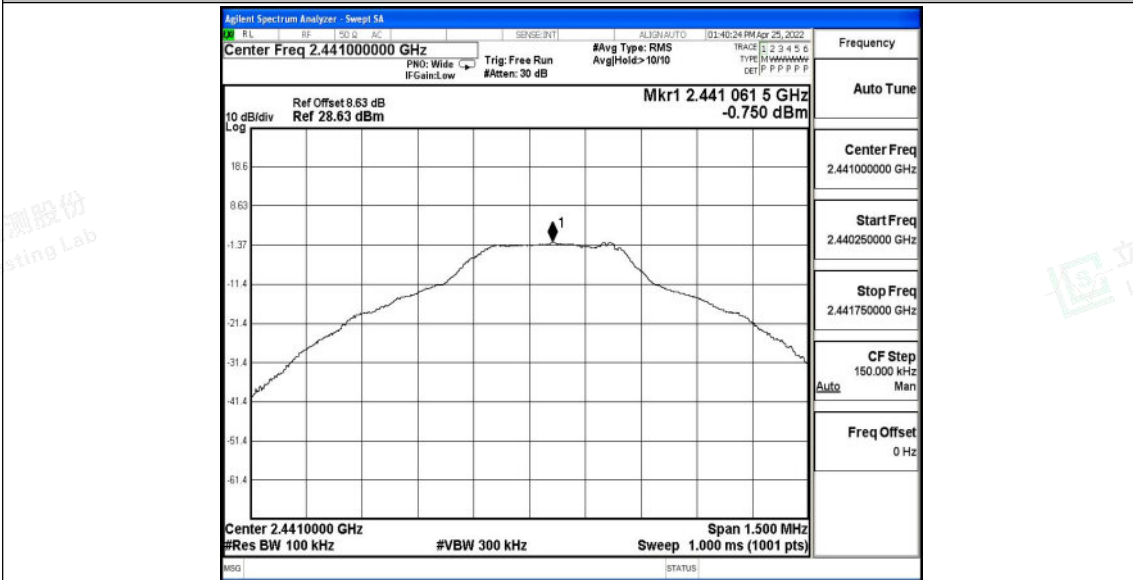


Test Graphs



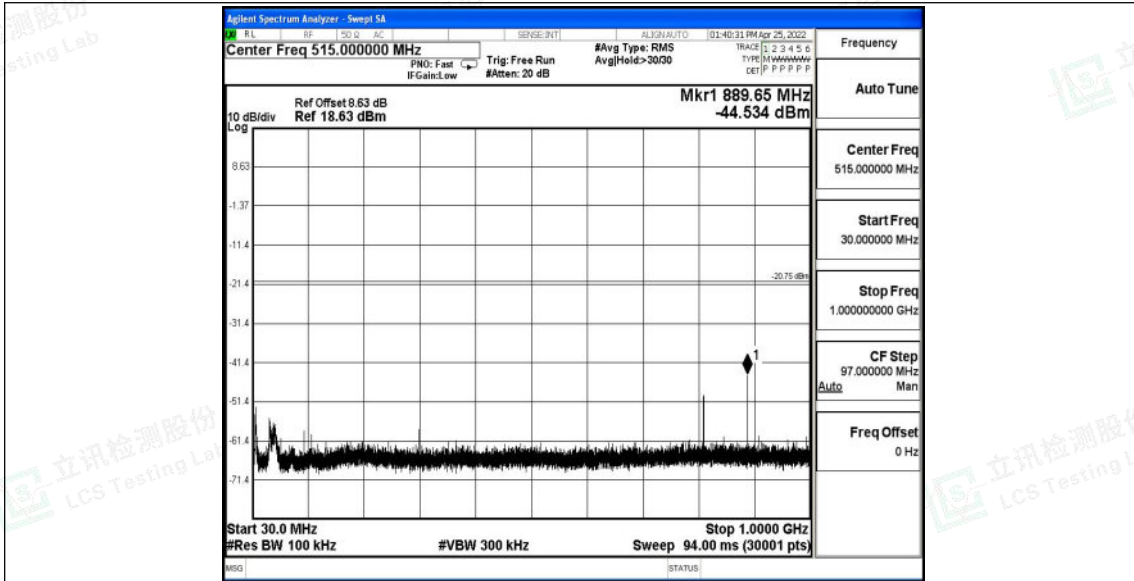


DH5_Ant1_2441_0~Reference

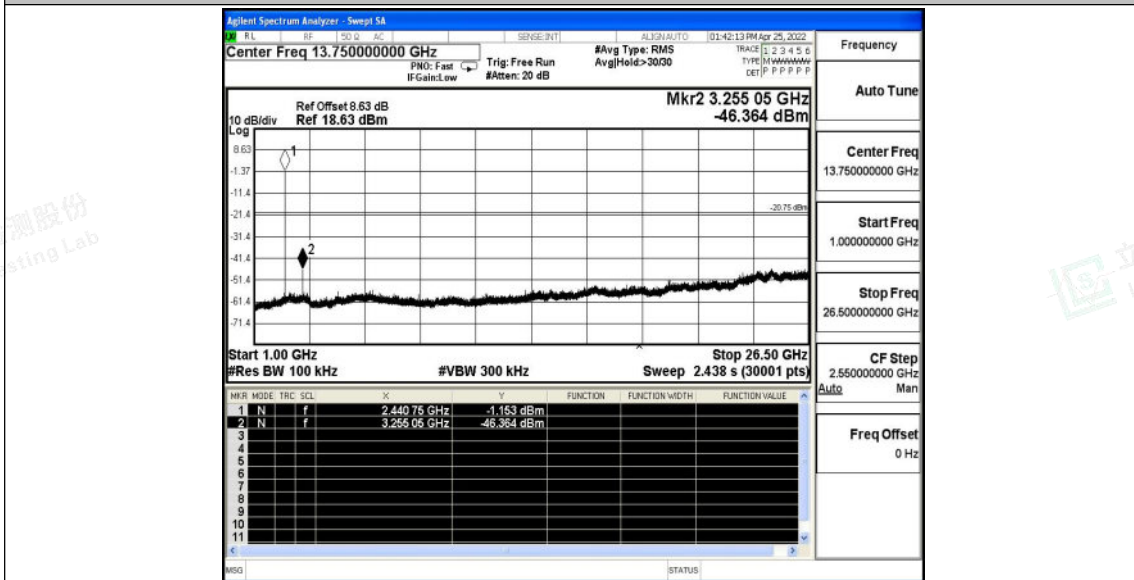


DH5_Ant1_2441_30~1000



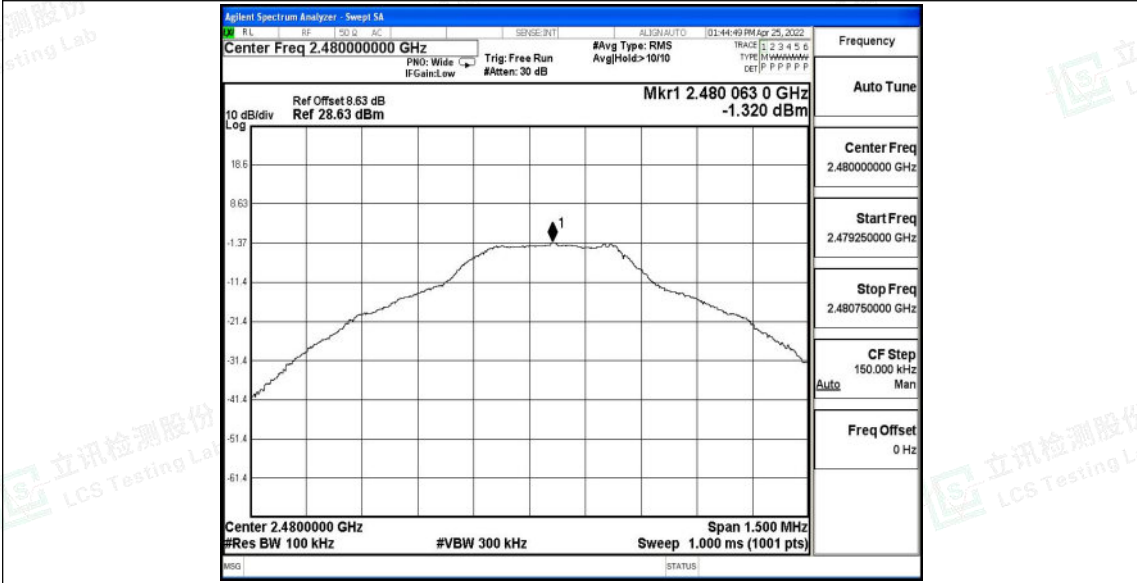


DH5_Ant1_2441_1000~26500

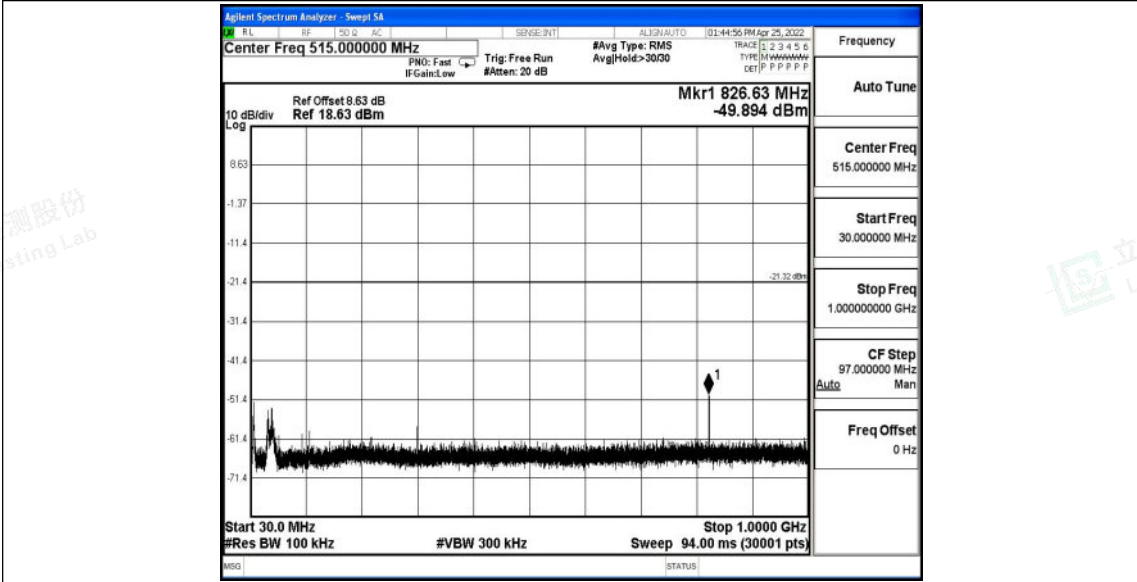


DH5_Ant1_2480_0~Reference



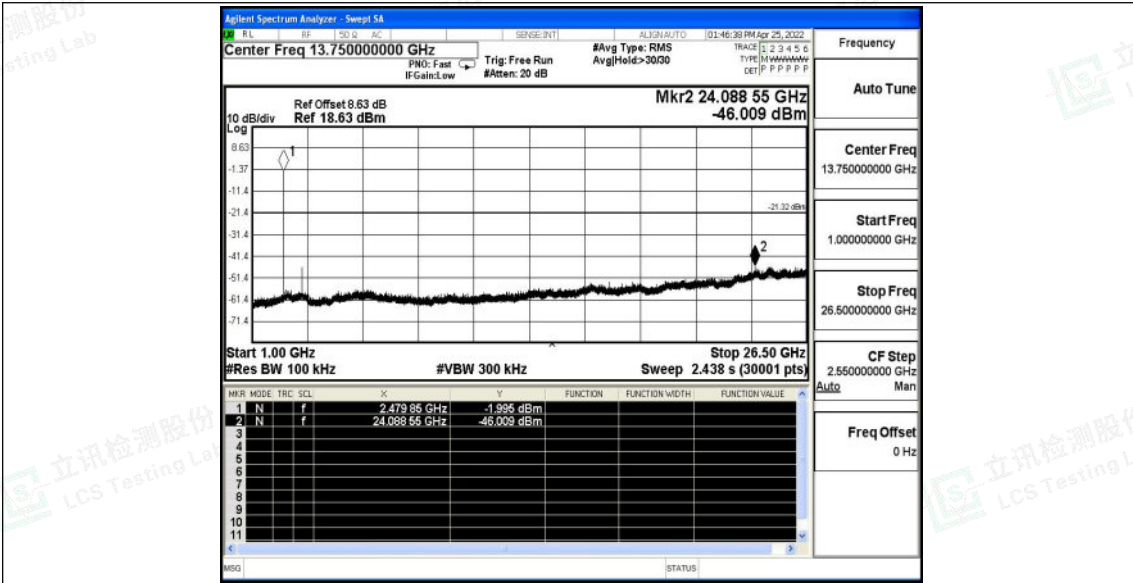


DH5_Ant1_2480_30~1000

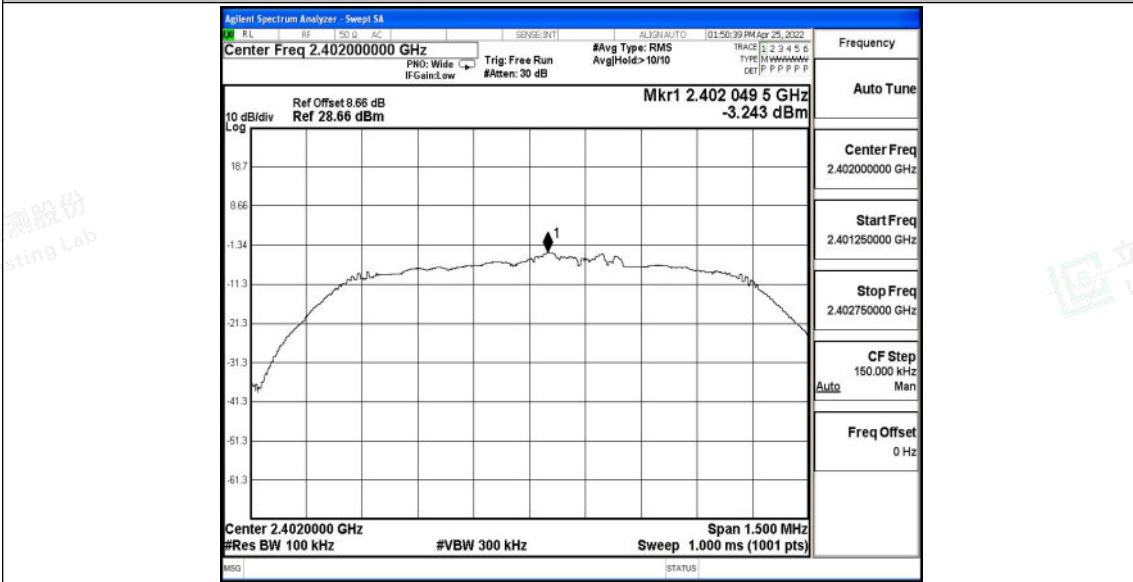


DH5_Ant1_2480_1000~26500



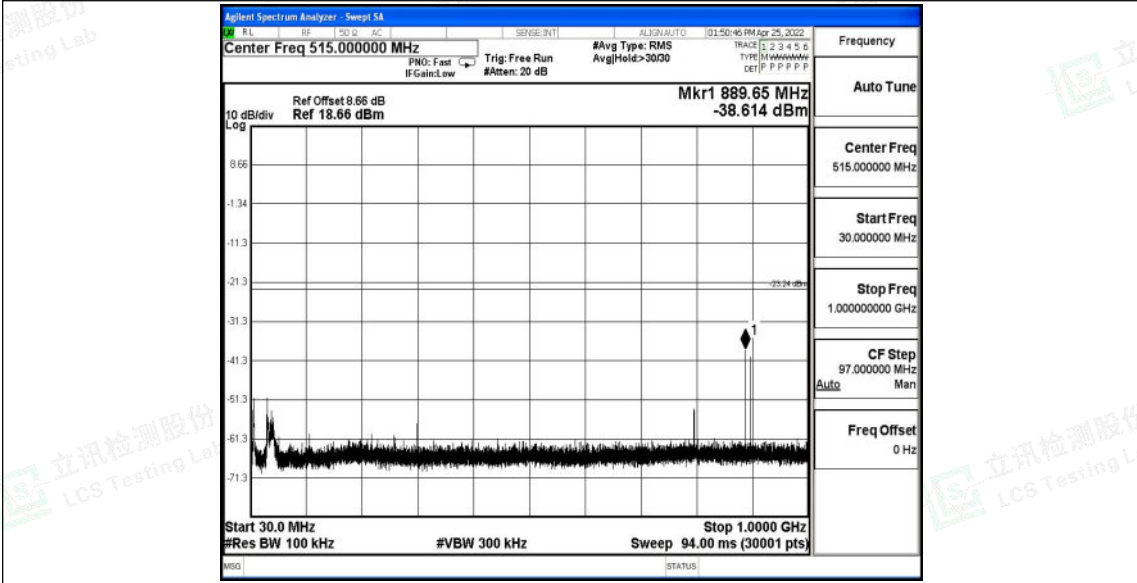


2DH5_Ant1_2402_0~Reference

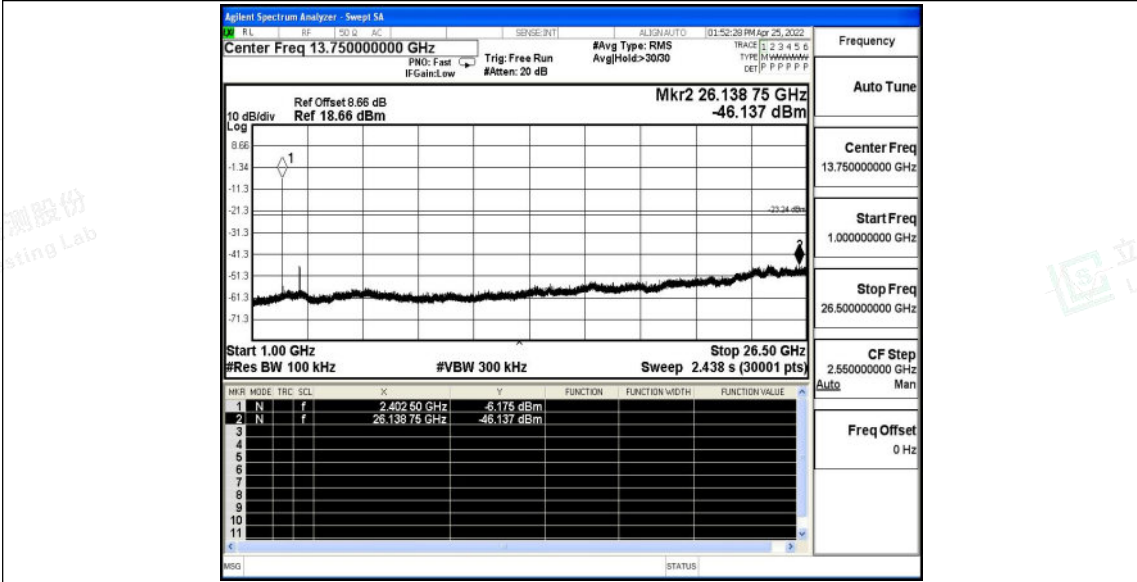


2DH5_Ant1_2402_30~1000



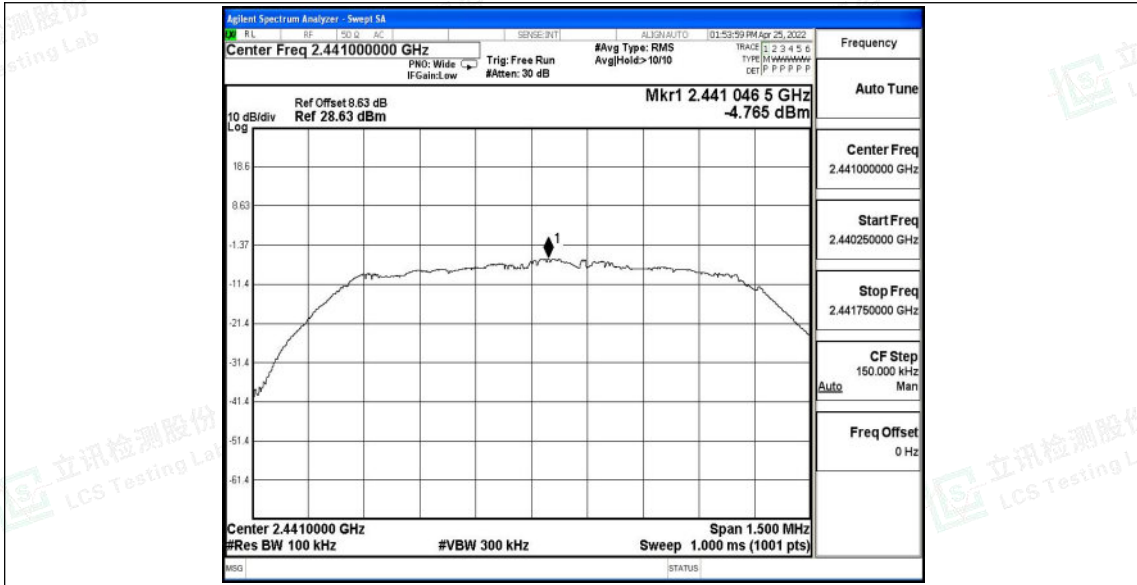


2DH5_Ant1_2402_1000~26500

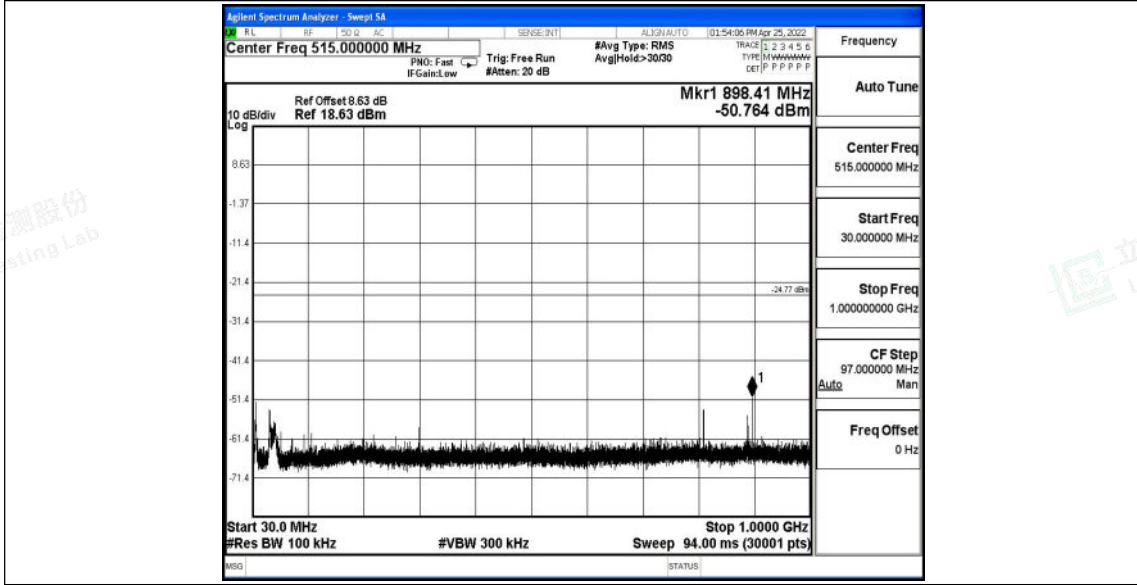


2DH5_Ant1_2441_0~Reference



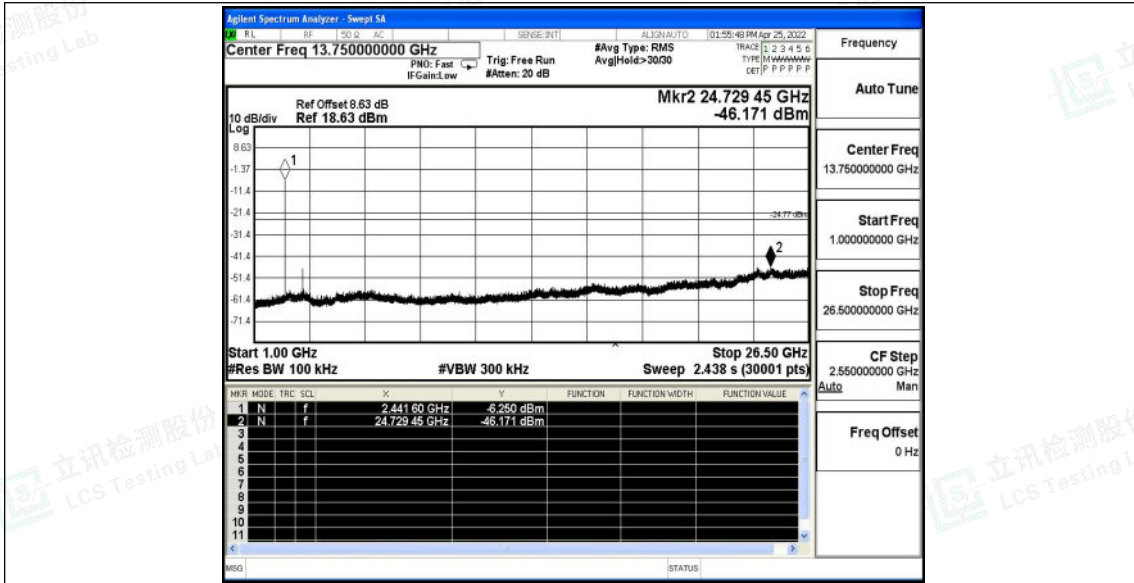


2DH5_Ant1_2441_30~1000

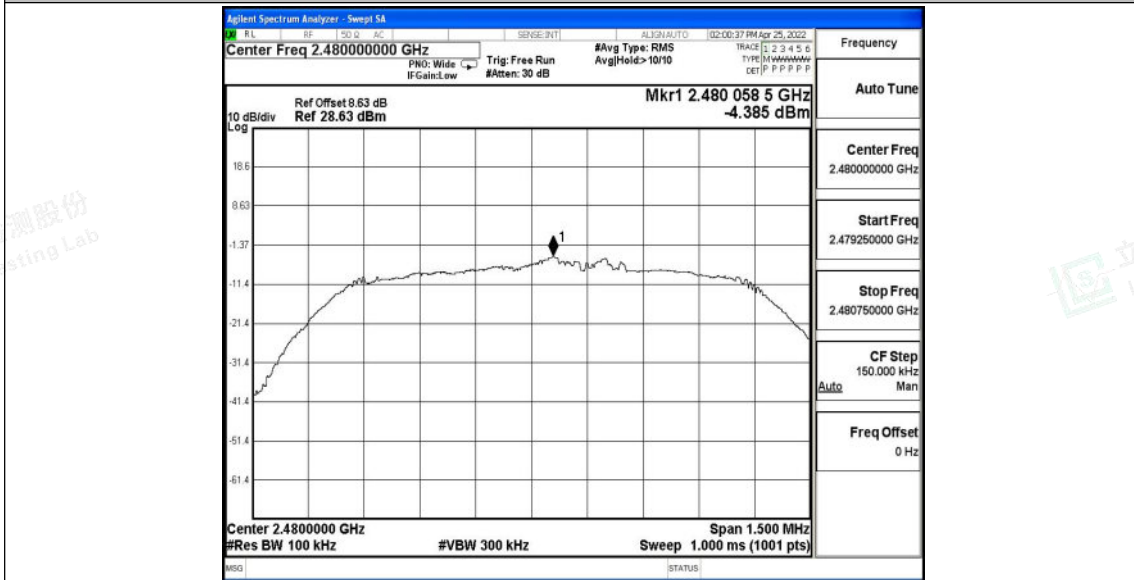


2DH5_Ant1_2441_1000~26500



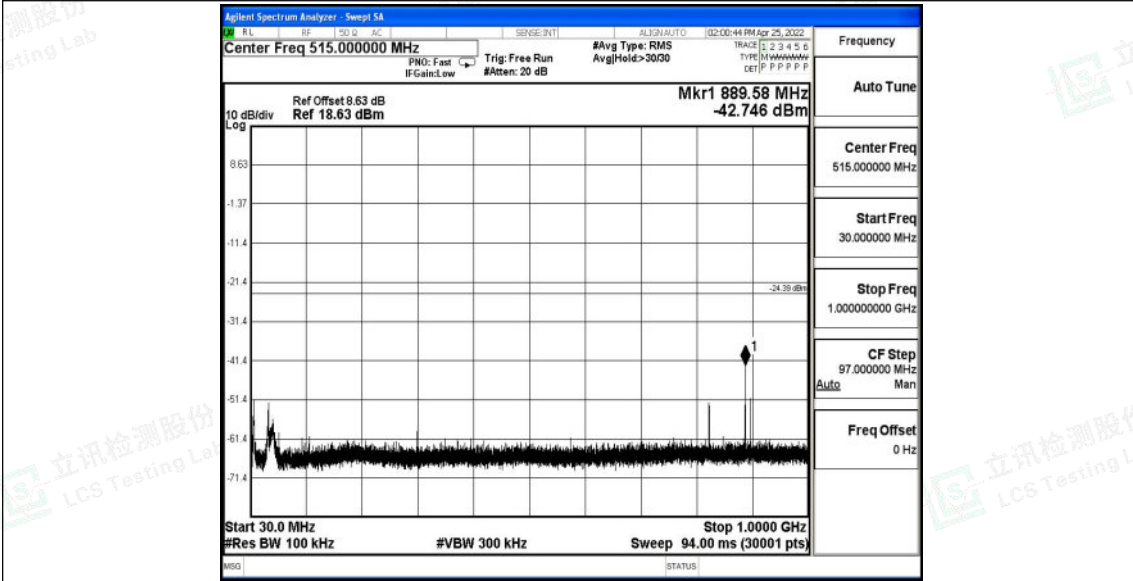


2DH5_Ant1_2480_0~Reference

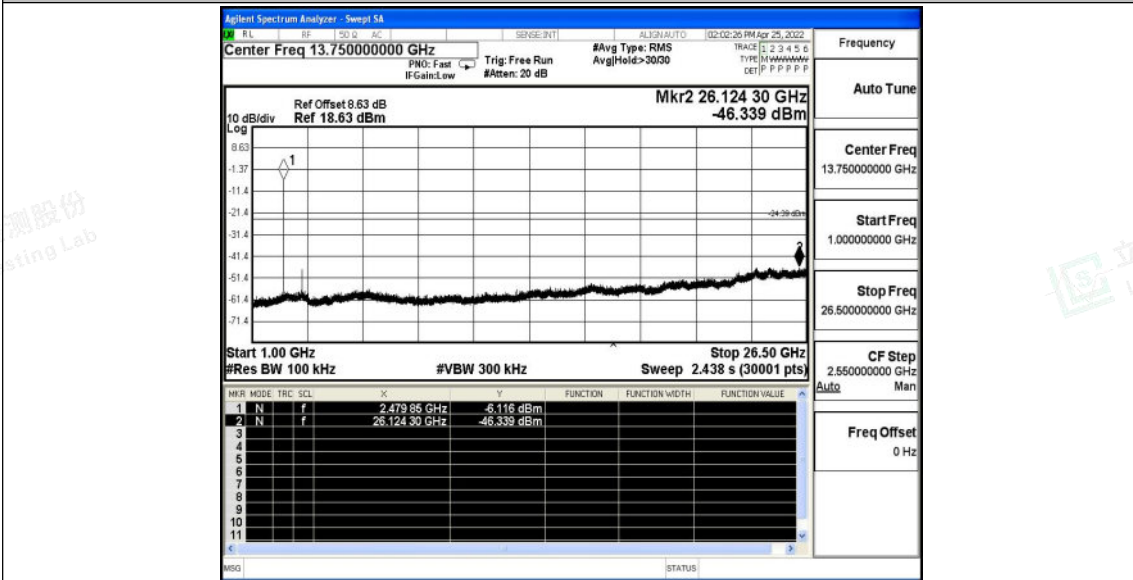


2DH5_Ant1_2480_30~1000



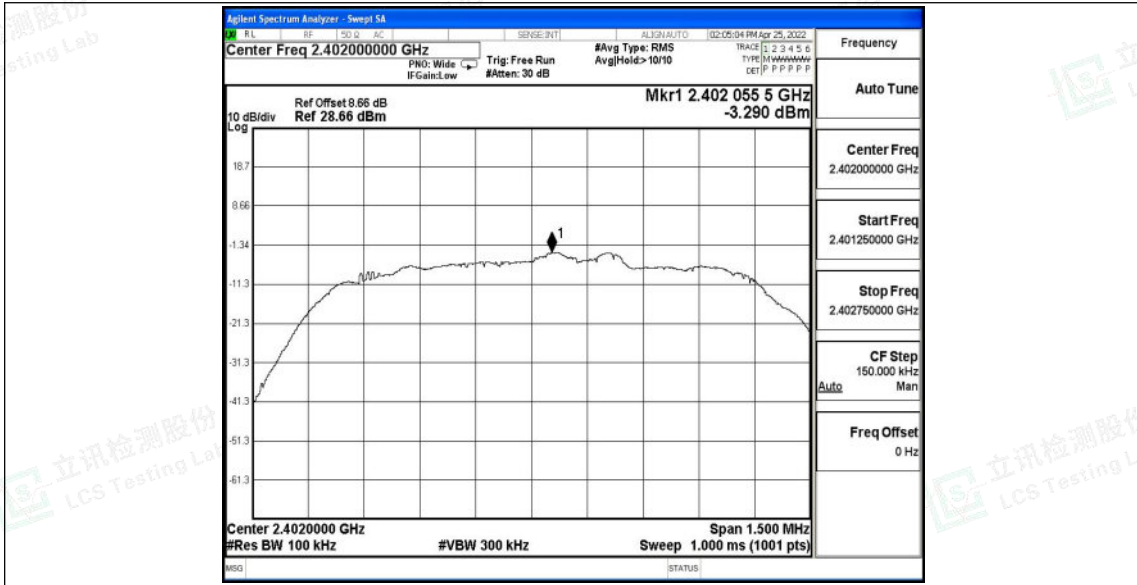


2DH5_Ant1_2480_1000~26500

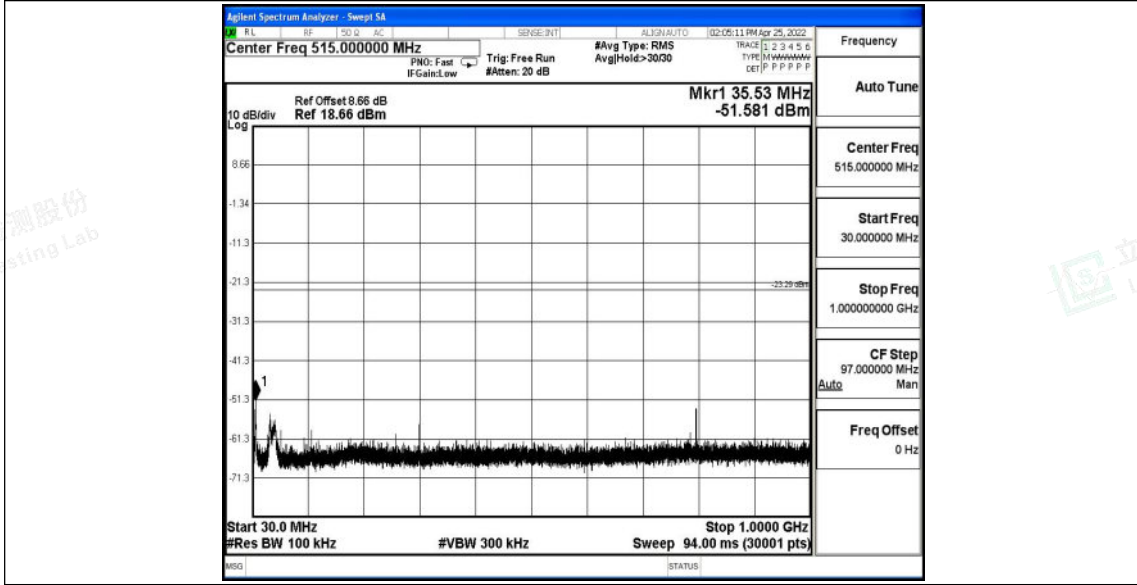


3DH5_Ant1_2402_0~Reference



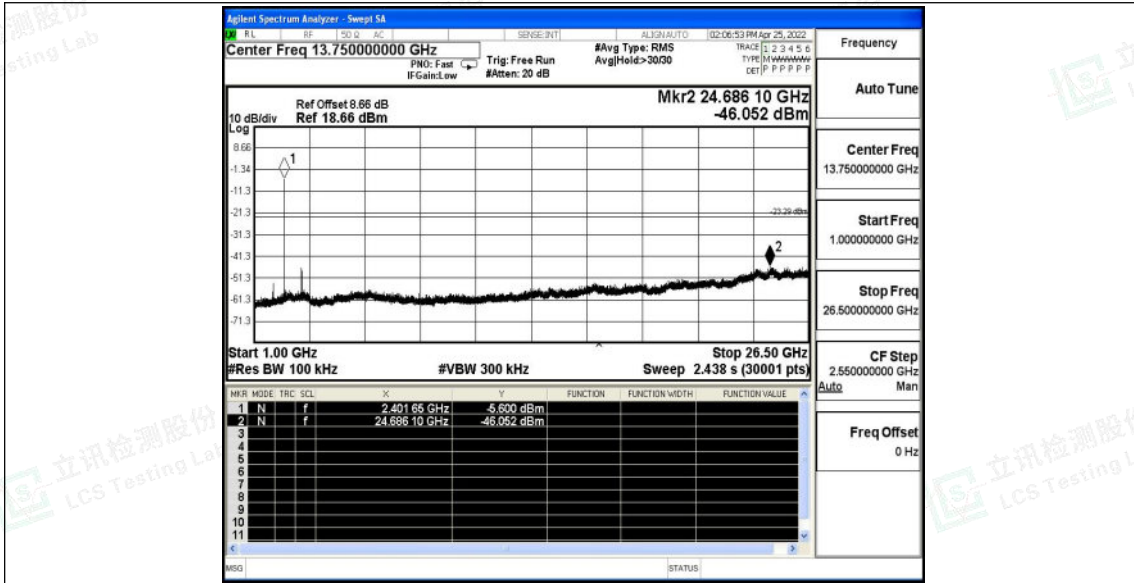


3DH5_Ant1_2402_30~1000

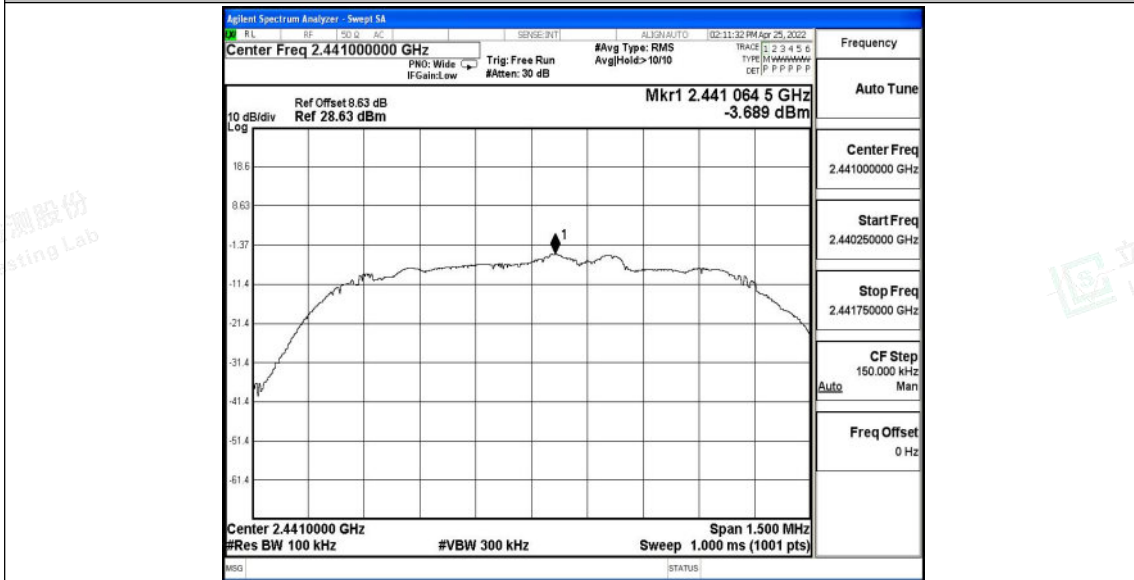


3DH5_Ant1_2402_1000~26500



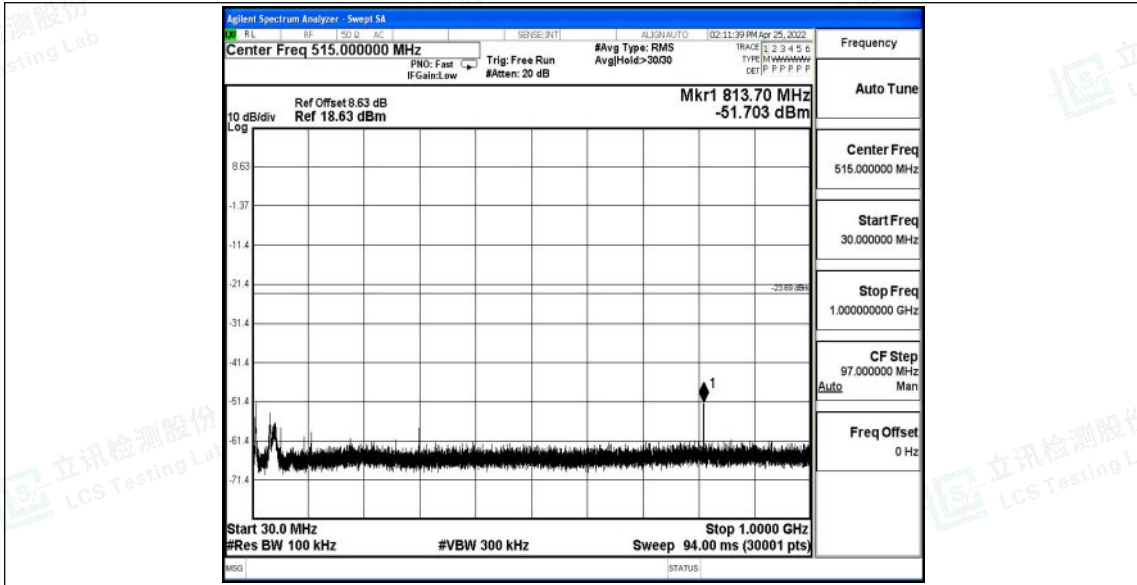


3DH5_Ant1_2441_0~Reference

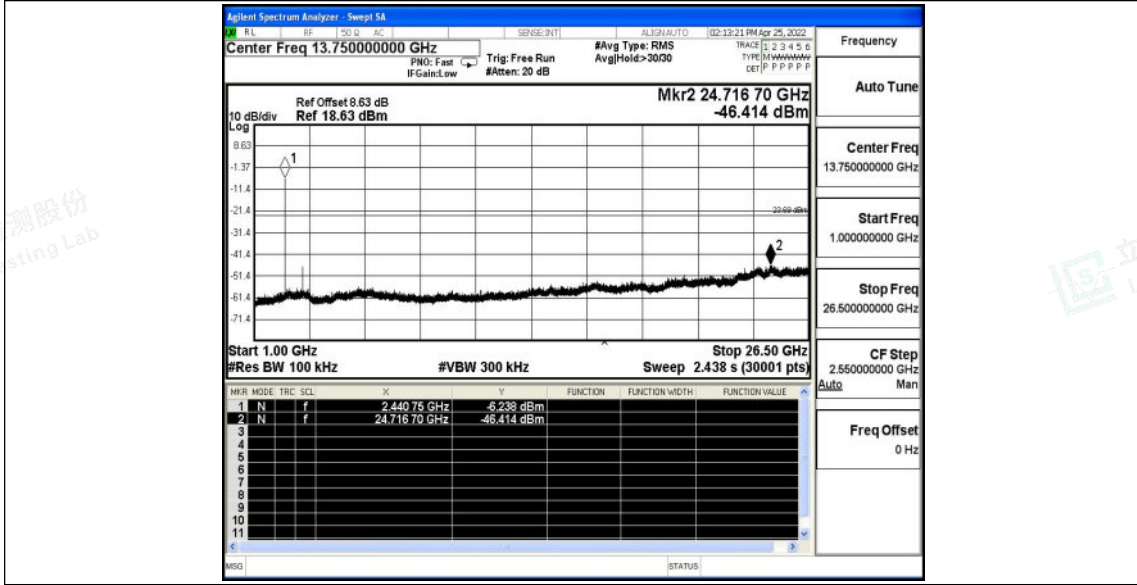


3DH5_Ant1_2441_30~1000



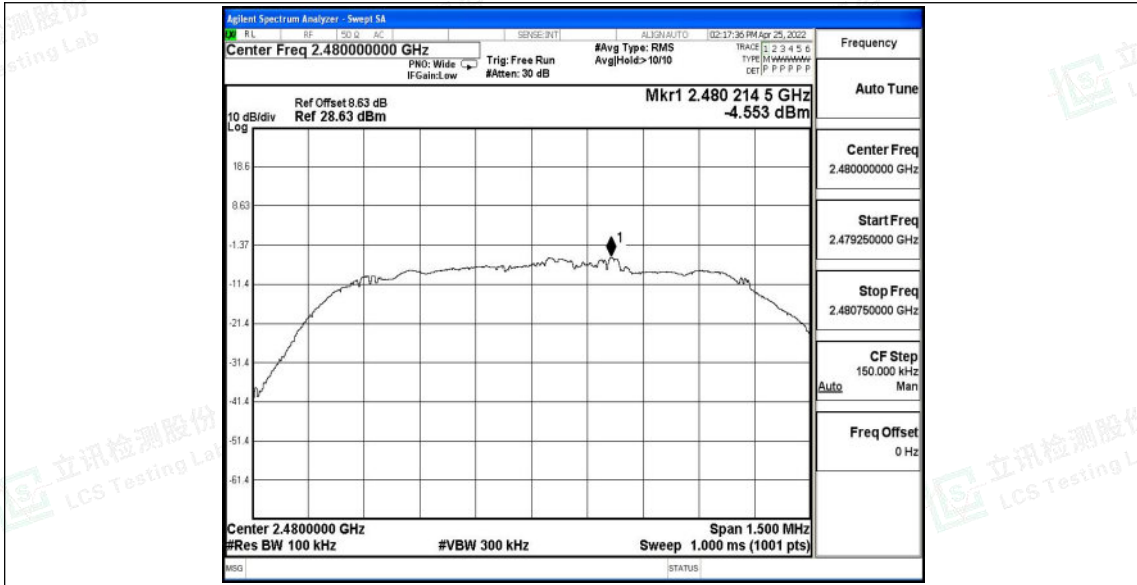


3DH5_Ant1_2441_1000~26500

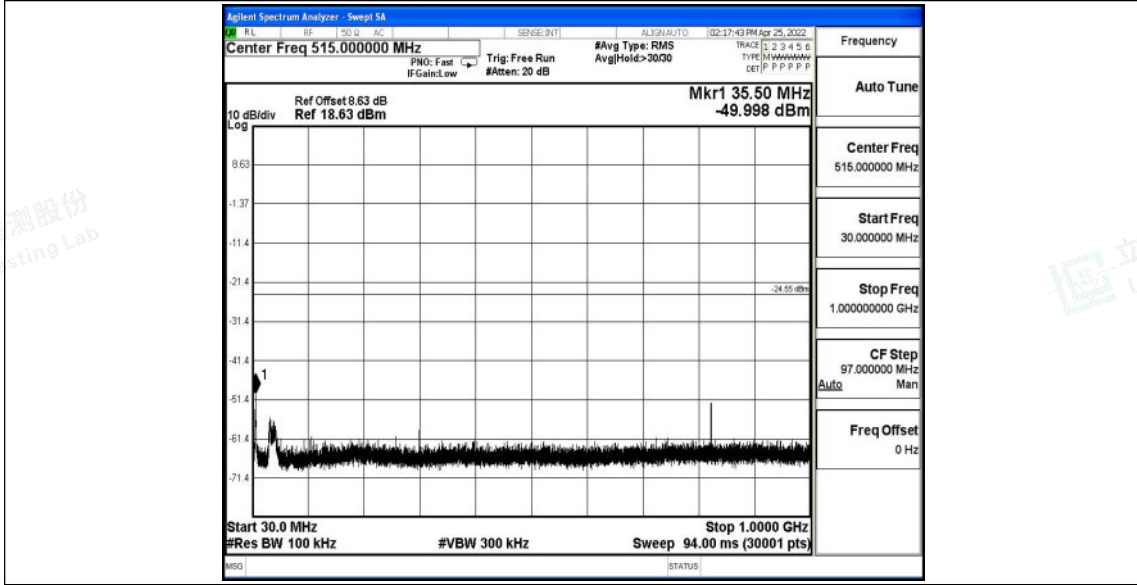


3DH5_Ant1_2480_0~Reference



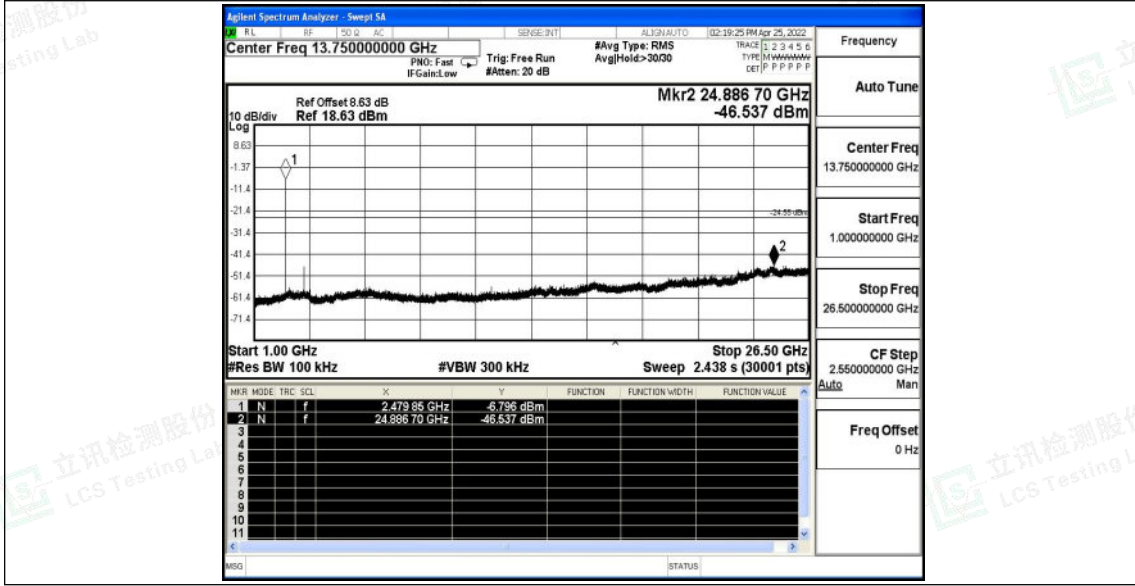


3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500







A.8 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-57.89	≤-41.20	37.31	≤54	PASS
				AV	2379.485	-57.27	≤-41.20	37.93	≤54	PASS
				AV	2390.000	-57.48	≤-41.20	37.72	≤54	PASS
				Peak	2310.000	-48.2	≤-21.20	47.00	≤74	PASS
				Peak	2377.490	-46.35	≤-21.20	48.85	≤74	PASS
				Peak	2390.000	-47.53	≤-21.20	47.67	≤74	PASS
		High	2480	AV	2483.500	-55.18	≤-41.20	40.02	≤54	PASS
				AV	2483.520	-55.2	≤-41.20	40.00	≤54	PASS
				AV	2500.000	-57	≤-41.20	38.20	≤54	PASS
				Peak	2483.500	-46.41	≤-21.20	48.79	≤74	PASS
				Peak	2486.640	-45.95	≤-21.20	49.25	≤74	PASS
				Peak	2500.000	-47.83	≤-21.20	47.37	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-58.14	≤-41.20	37.06	≤54	PASS
				AV	2388.515	-57.6	≤-41.20	37.60	≤54	PASS
				AV	2390.000	-57.75	≤-41.20	37.45	≤54	PASS
				Peak	2310.000	-49.06	≤-21.20	46.14	≤74	PASS
				Peak	2374.235	-45.78	≤-21.20	49.42	≤74	PASS
				Peak	2390.000	-48.76	≤-21.20	46.44	≤74	PASS
		High	2480	AV	2483.500	-55.51	≤-41.20	39.69	≤54	PASS
				AV	2483.520	-55.51	≤-41.20	39.69	≤54	PASS
				AV	2500.000	-57.23	≤-41.20	37.97	≤54	PASS
				Peak	2483.500	-47.24	≤-21.20	47.96	≤74	PASS
				Peak	2497.200	-46.2	≤-21.20	49.00	≤74	PASS
				Peak	2500.000	-48.23	≤-21.20	46.97	≤74	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-57.99	≤-41.20	37.21	≤54	PASS
				AV	2384.315	-57.46	≤-41.20	37.74	≤54	PASS
				AV	2390.000	-57.54	≤-41.20	37.66	≤54	PASS
				Peak	2310.000	-48.34	≤-21.20	46.86	≤74	PASS
				Peak	2347.985	-46.59	≤-21.20	48.61	≤74	PASS
				Peak	2390.000	-48.76	≤-21.20	46.44	≤74	PASS
		High	2480	AV	2483.500	-55.56	≤-41.20	39.64	≤54	PASS
				AV	2483.520	-55.56	≤-41.20	39.64	≤54	PASS
				AV	2500.000	-57.23	≤-41.20	37.97	≤54	PASS
				Peak	2483.500	-47.9	≤-21.20	47.30	≤74	PASS
				Peak	2485.440	-45.75	≤-21.20	49.45	≤74	PASS
				Peak	2500.000	-47.83	≤-21.20	47.37	≤74	PASS





				Peak	2500.000	-48.03	≤-21.20	47.17	≤74	PASS
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Note:

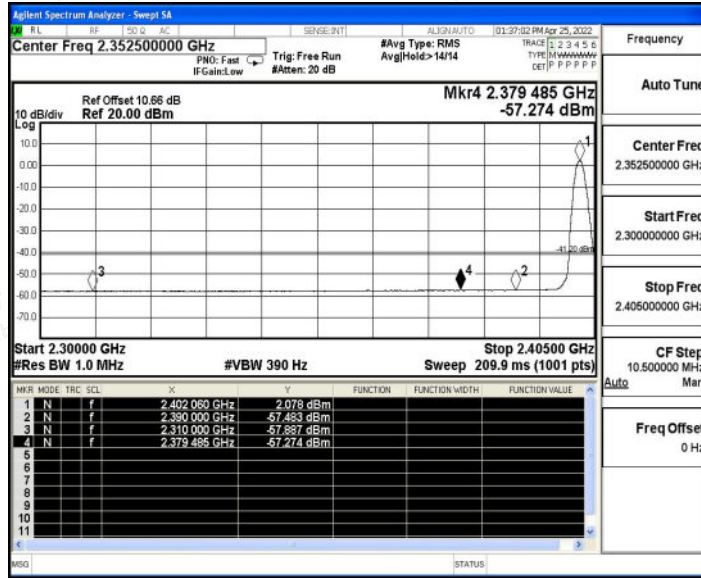
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



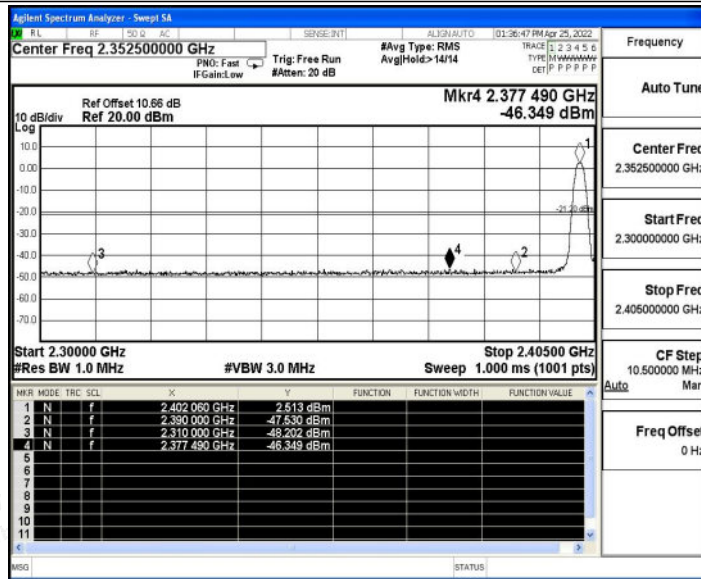


Test Graphs

DH5_Ant1_Low_2402_AV

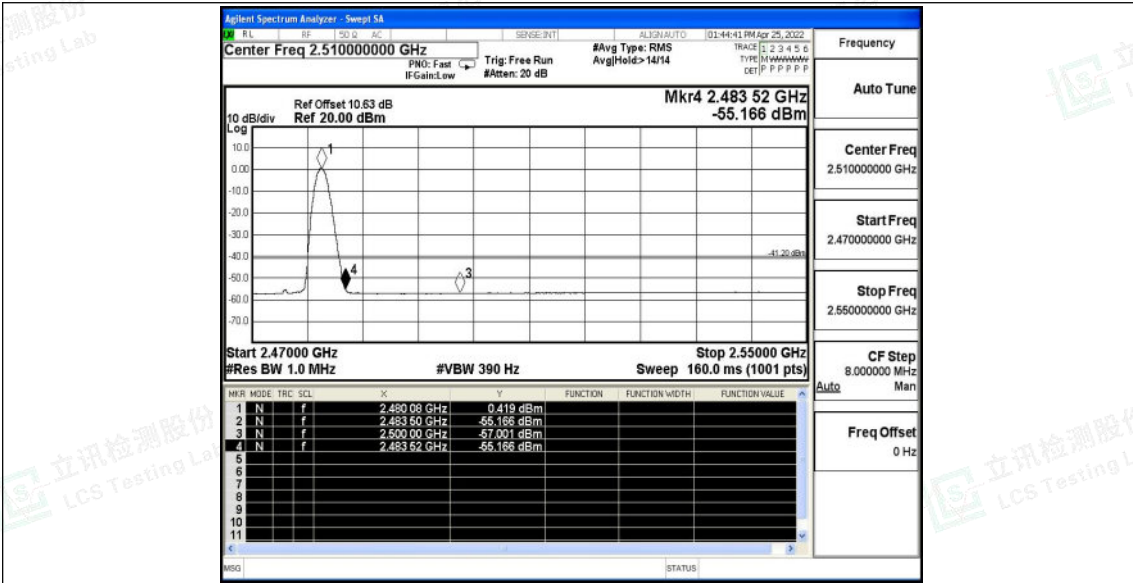


DH5_Ant1_Low_2402_Peak

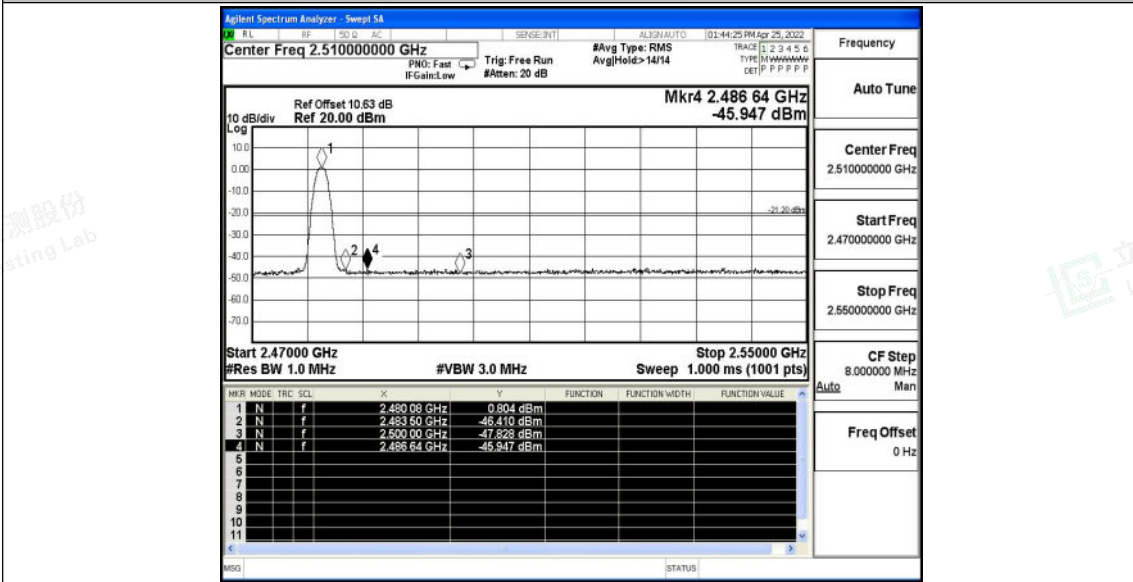


DH5_Ant1_High_2480_AV



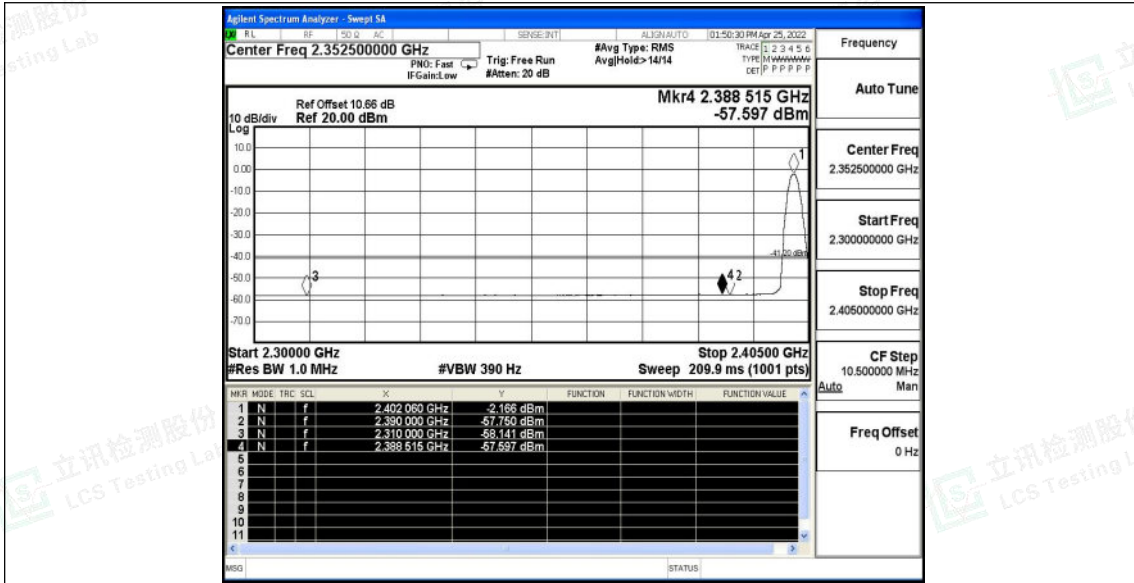


DH5_Ant1_High_2480_Peak

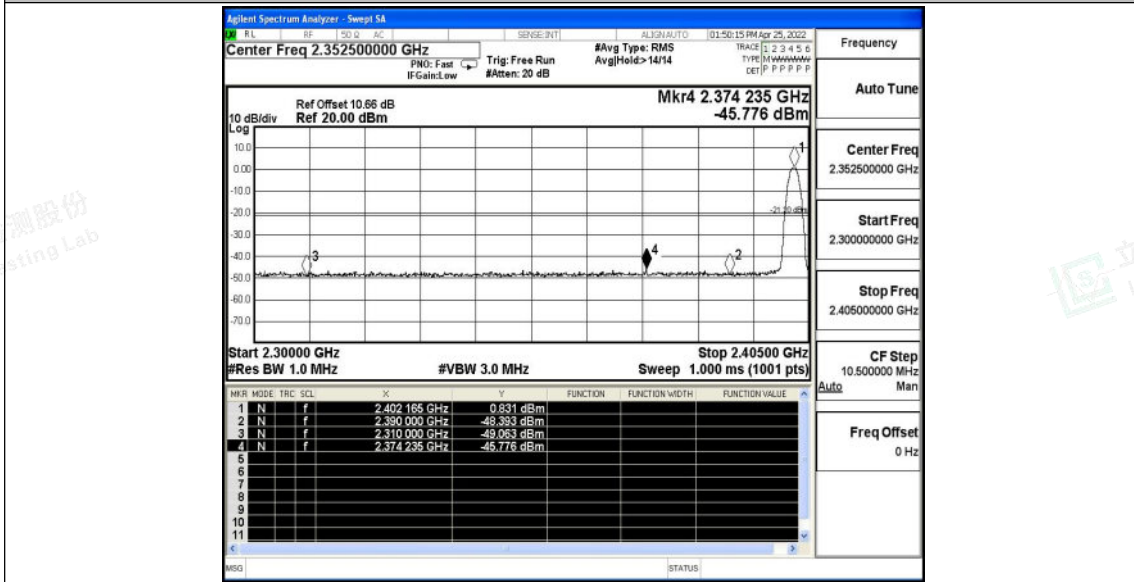


2DH5_Ant1_Low_2402_AV



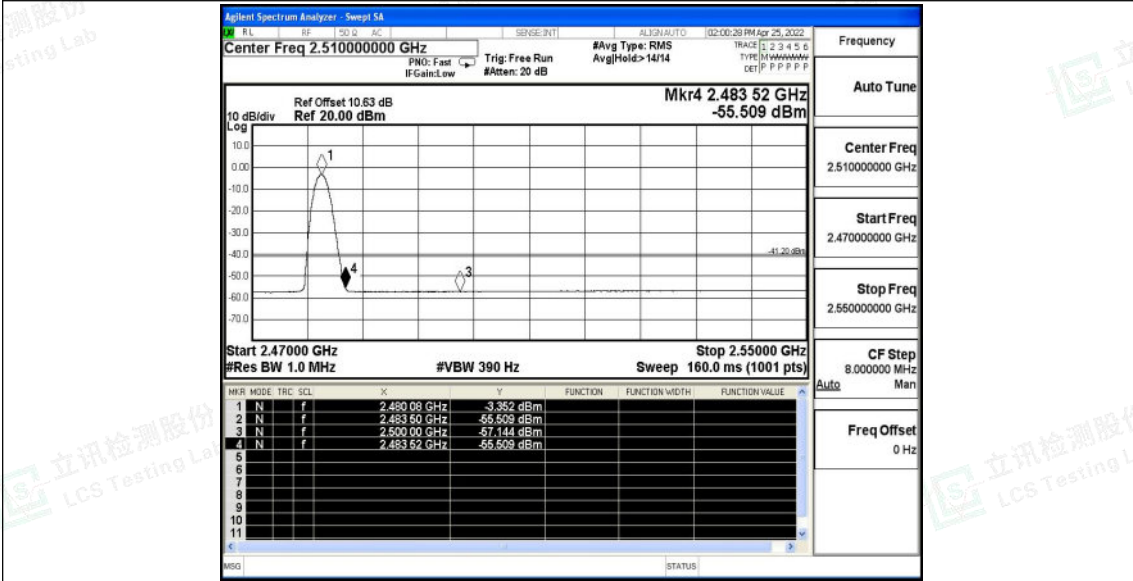


2DH5_Ant1_Low_2402_Peak

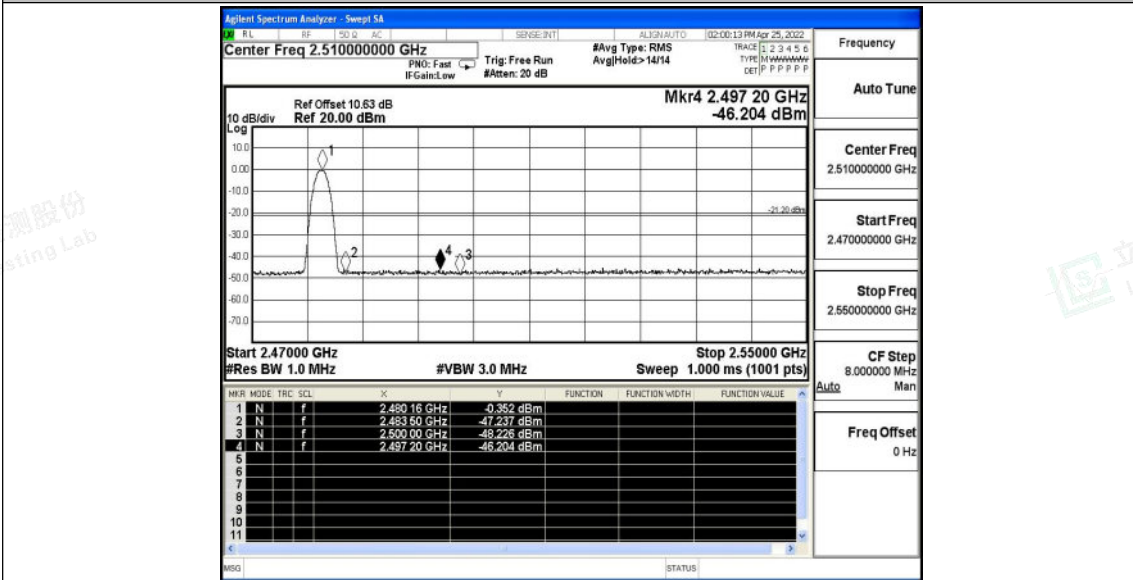


2DH5_Ant1_High_2480_AV



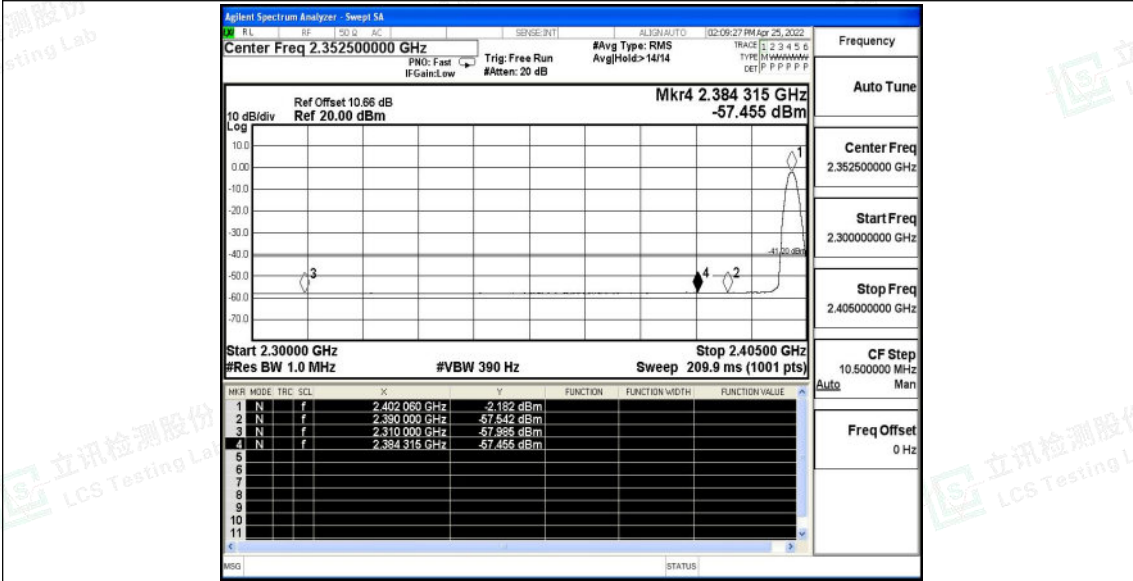


2DH5_Ant1_High_2480_Peak

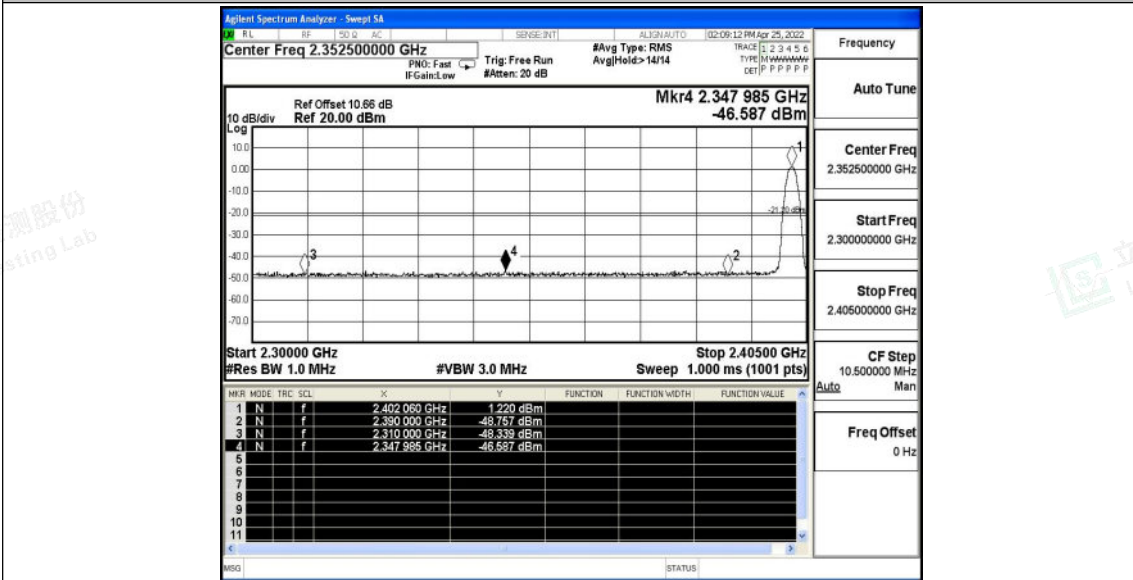


3DH5_Ant1_Low_2402_AV



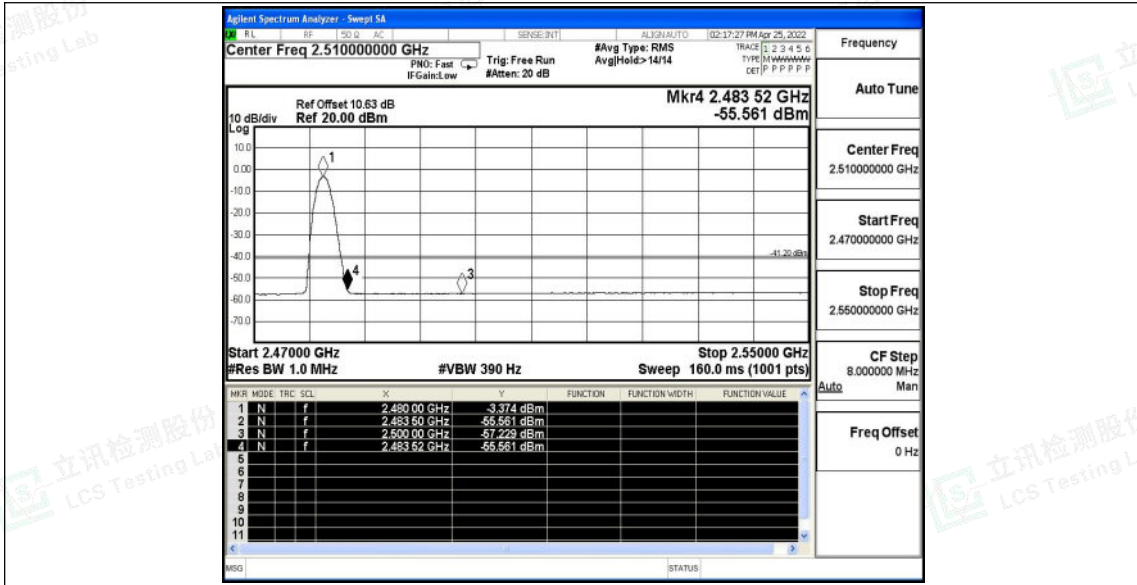


3DH5_Ant1_Low_2402_Peak



3DH5_Ant1_High_2480_AV





3DH5_Ant1_High_2480_Peak

