



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: Game Controller

Test Model: P48

Environmental Conditions

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





B.1 DTS Bandwidth

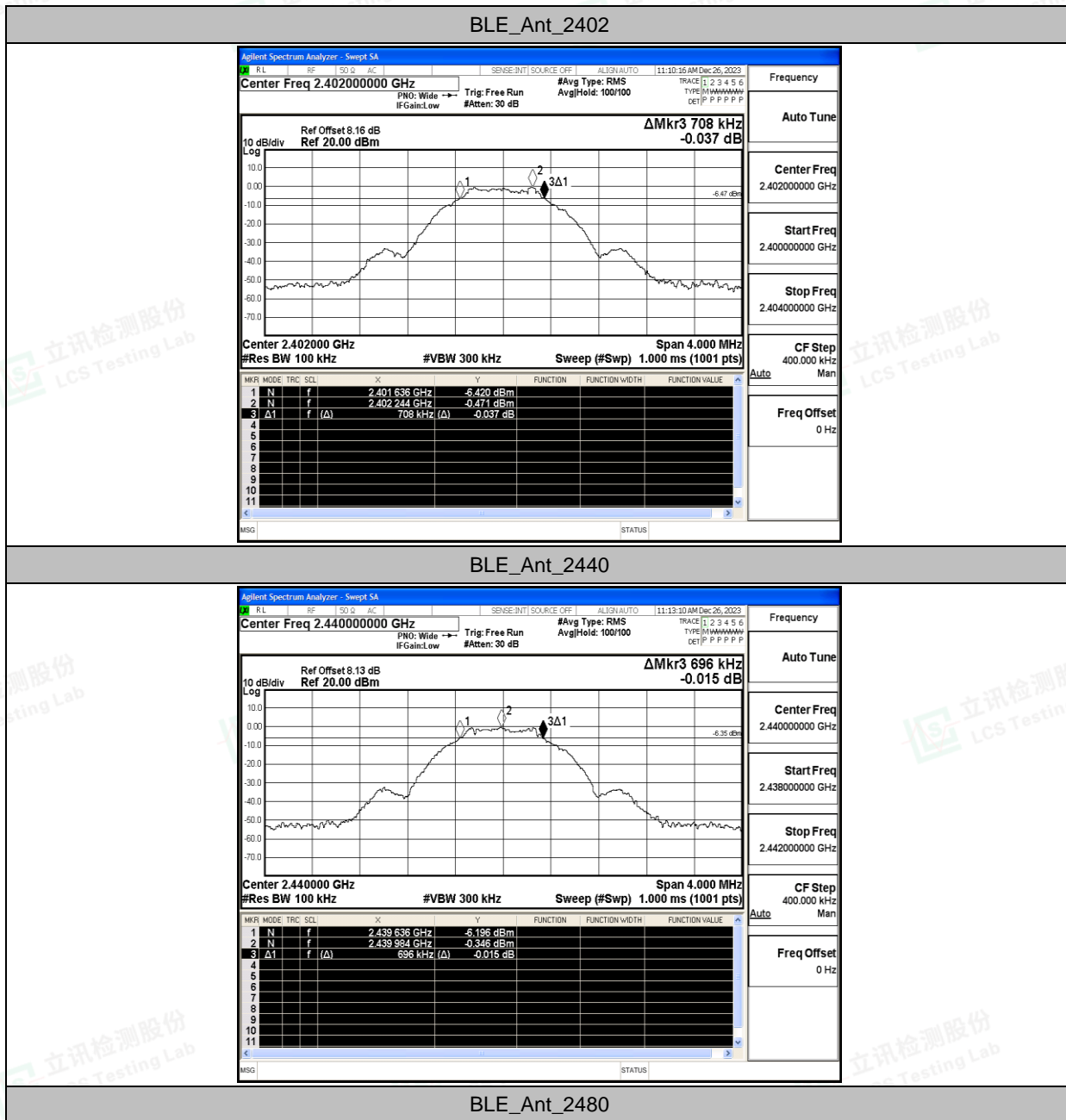
Test Result

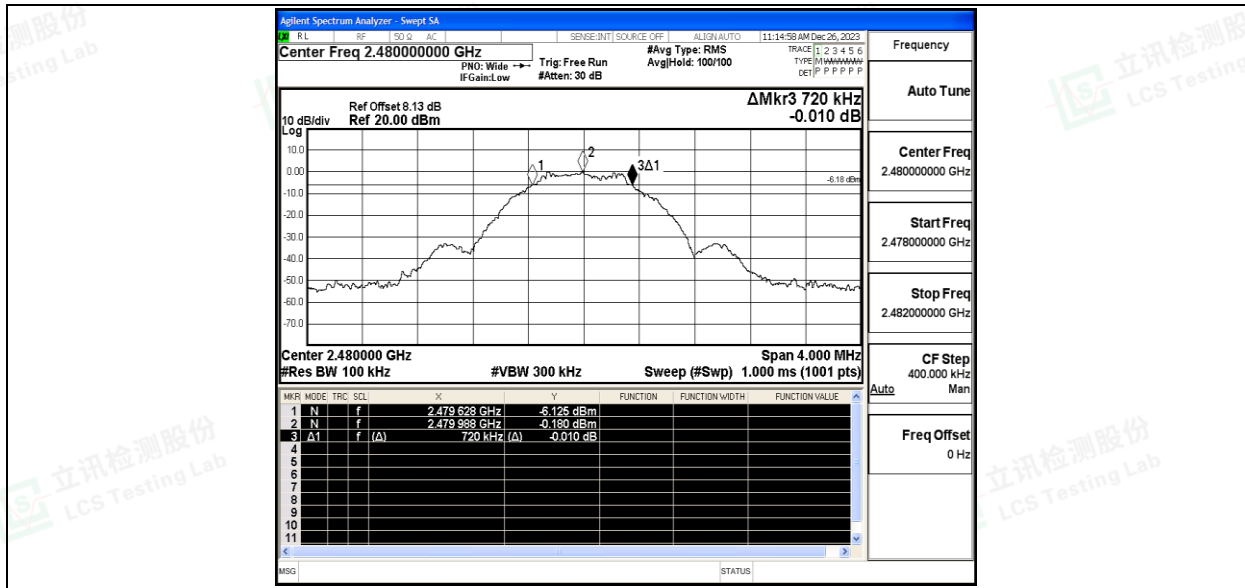
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant	2402	0.708	2401.636	2402.344	0.5	PASS
		2440	0.696	2439.636	2440.332	0.5	PASS
		2480	0.720	2479.628	2480.348	0.5	PASS





Test Graphs







B.2 Maximum conducted output power

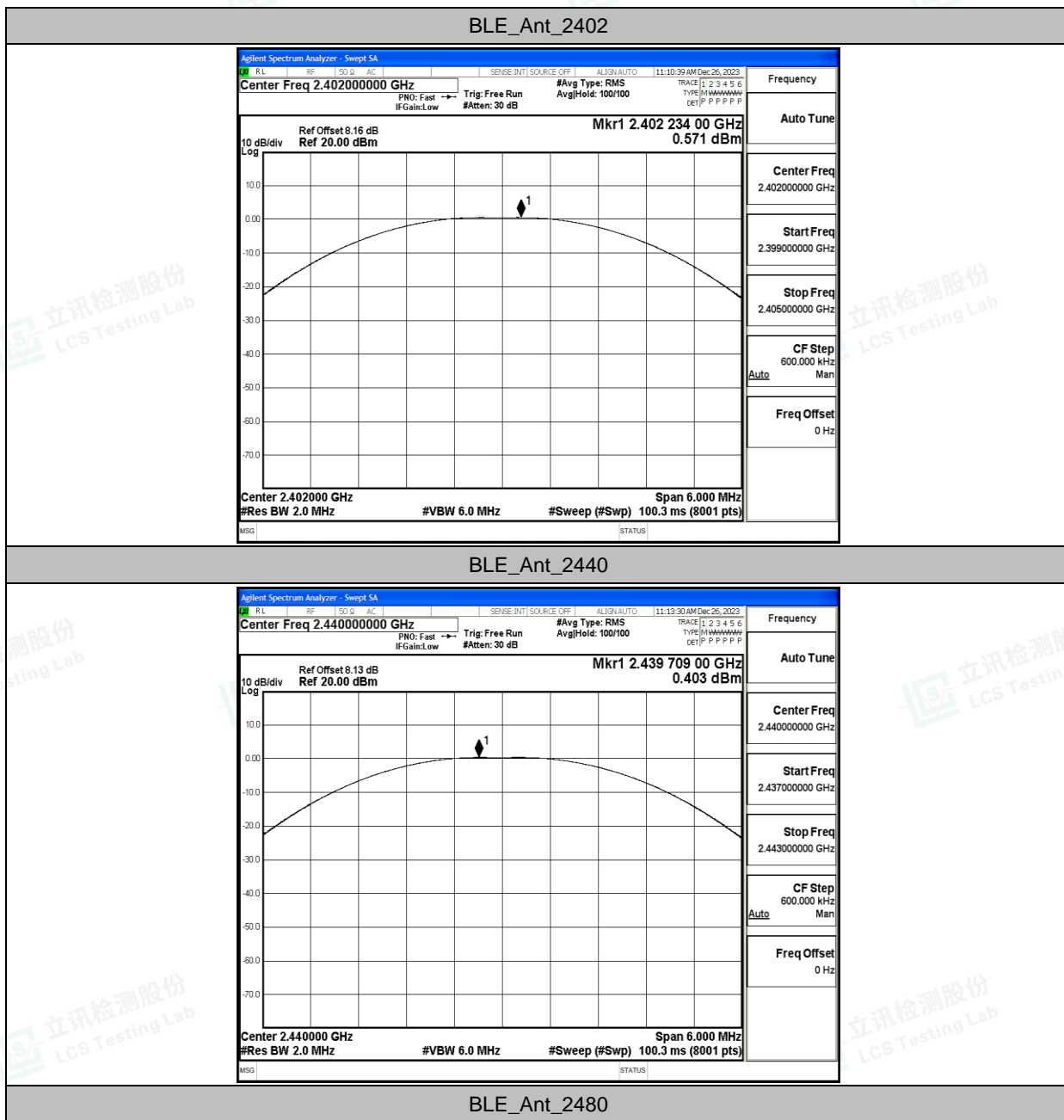
Test Result

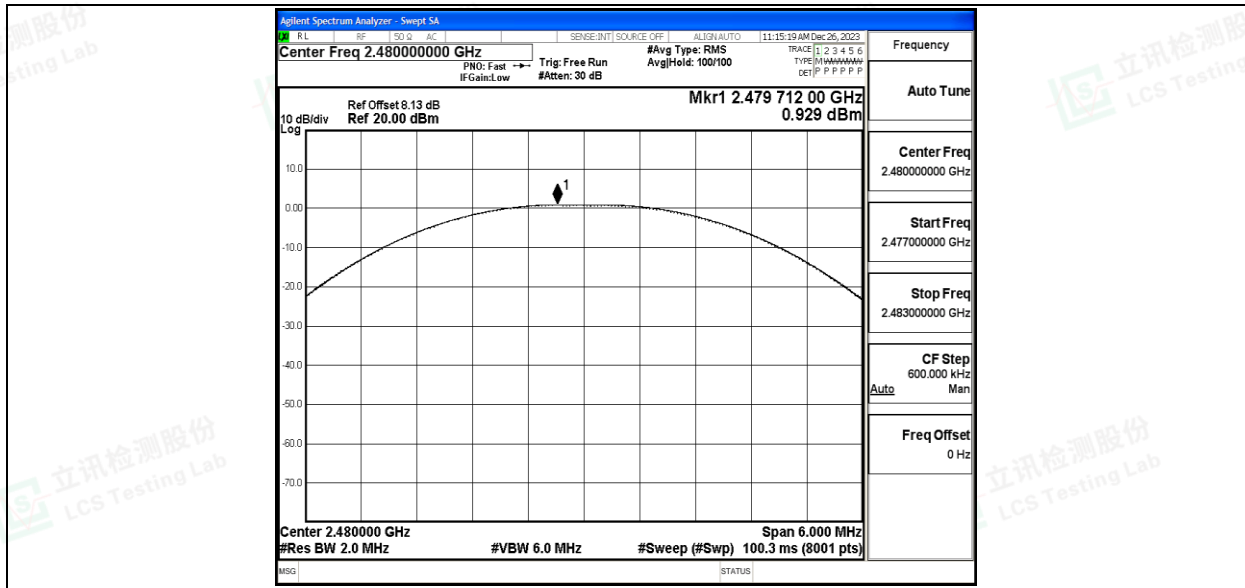
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant	2402	0.57	≤30	PASS
		2440	0.4	≤30	PASS
		2480	0.93	≤30	PASS





Test Graphs







B.3 Maximum power spectral density

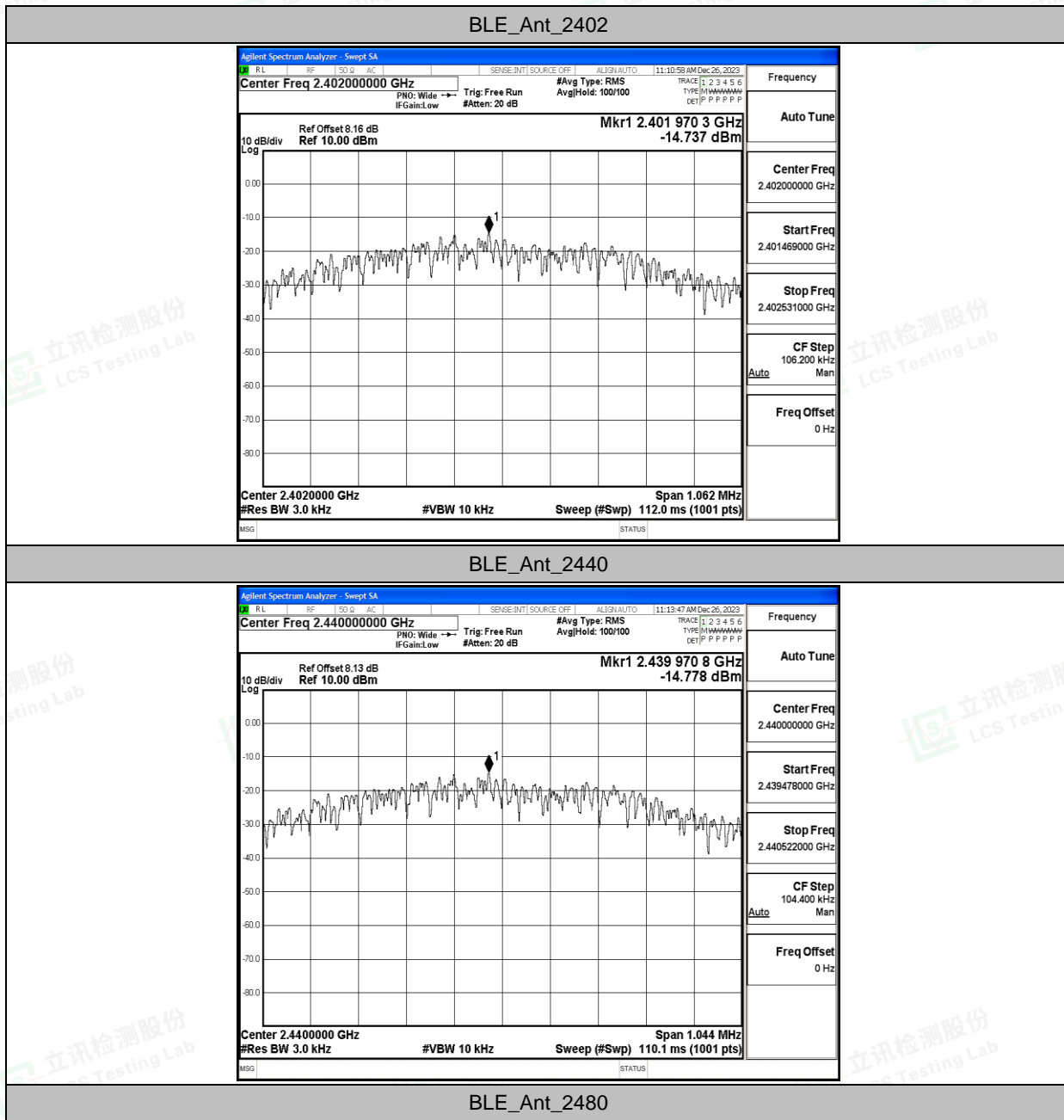
Test Result

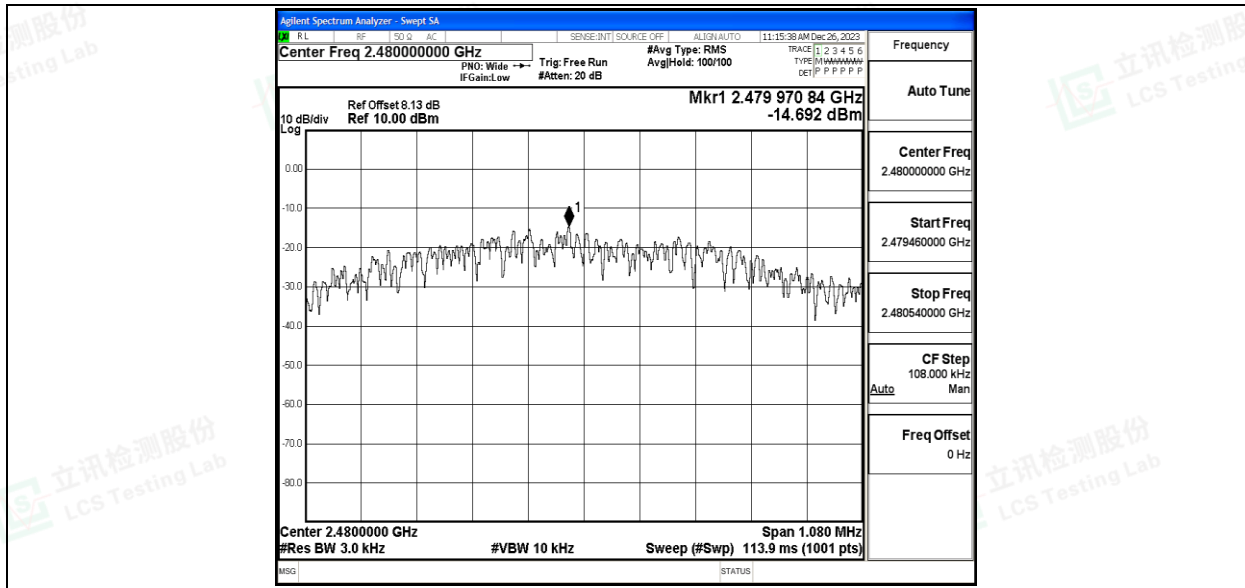
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE	Ant	2402	-14.74	≤8.00	PASS
		2440	-14.78	≤8.00	PASS
		2480	-14.69	≤8.00	PASS





Test Graphs







B.4 Band edge measurements

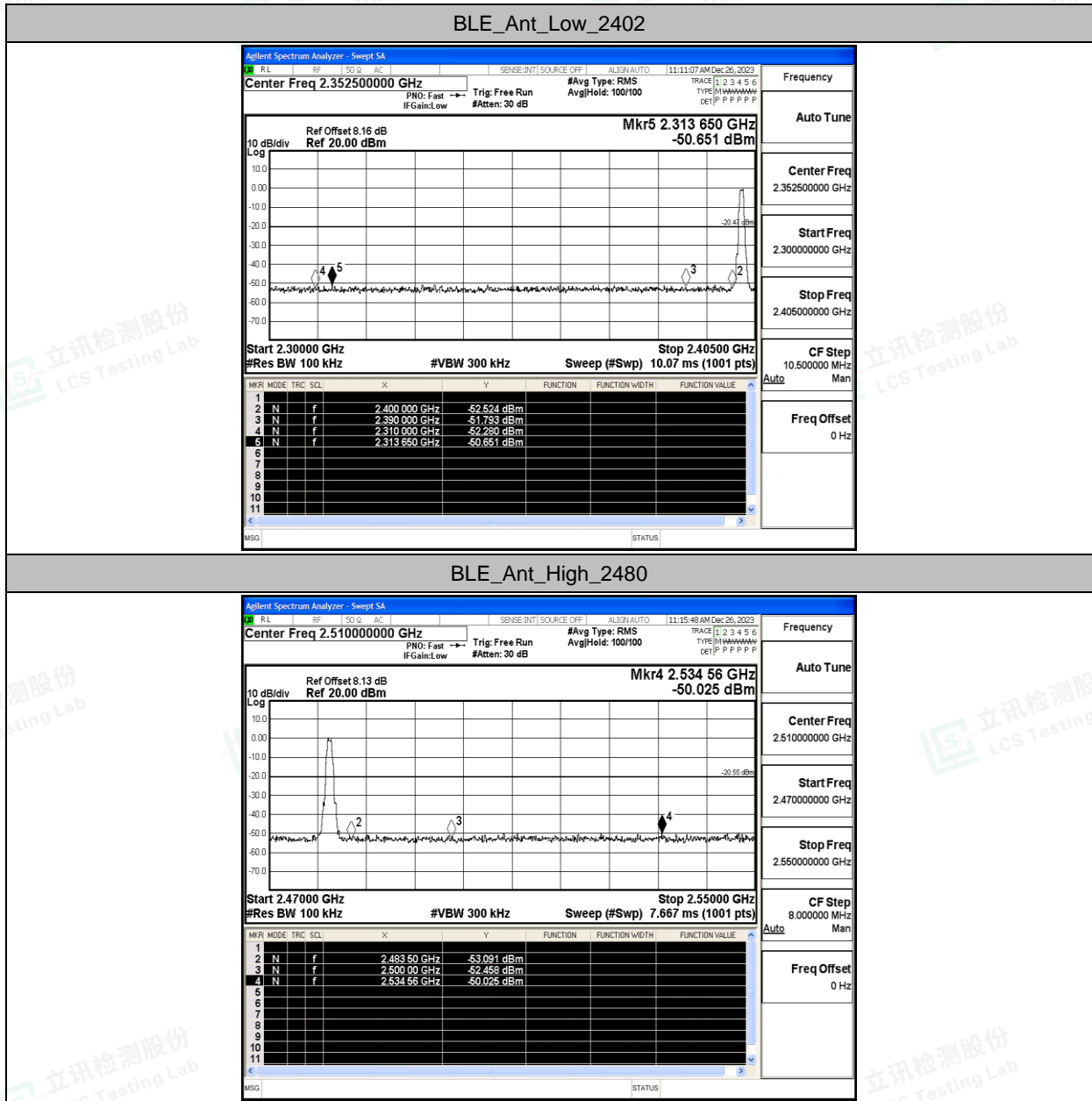
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant	Low	2402	-0.47	-50.65	≤-20.47	PASS
		High	2480	-0.55	-50.03	≤-20.55	PASS





Test Graphs





Reference level measurement

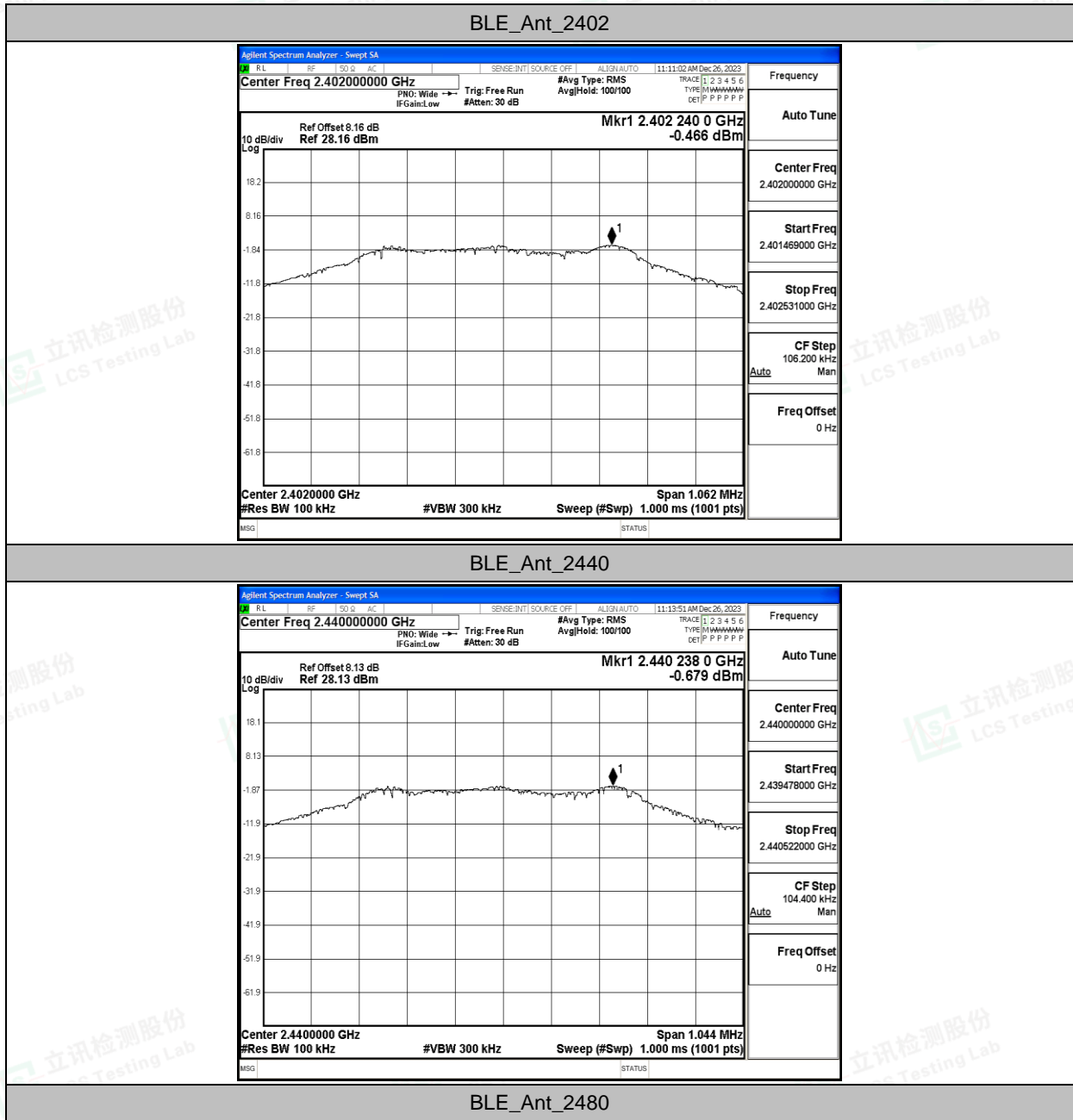
Test Result

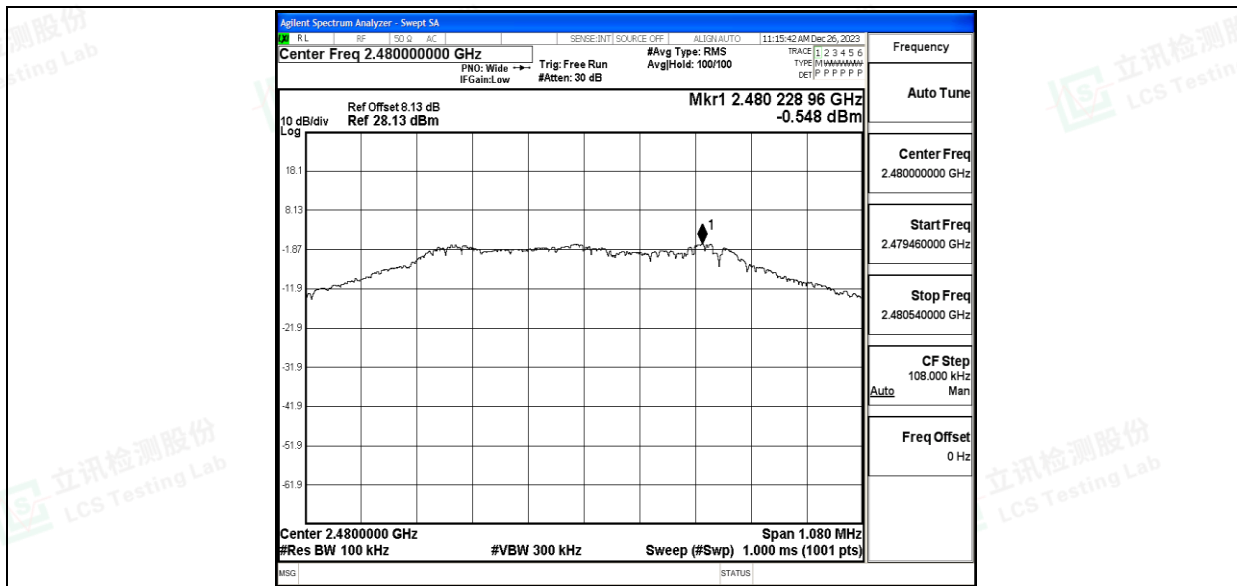
TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
BLE	Ant	2402	2402.24	-0.47
		2440	2440.24	-0.68
		2480	2480.23	-0.55





Test Graphs







B.5 Conducted Spurious Emission

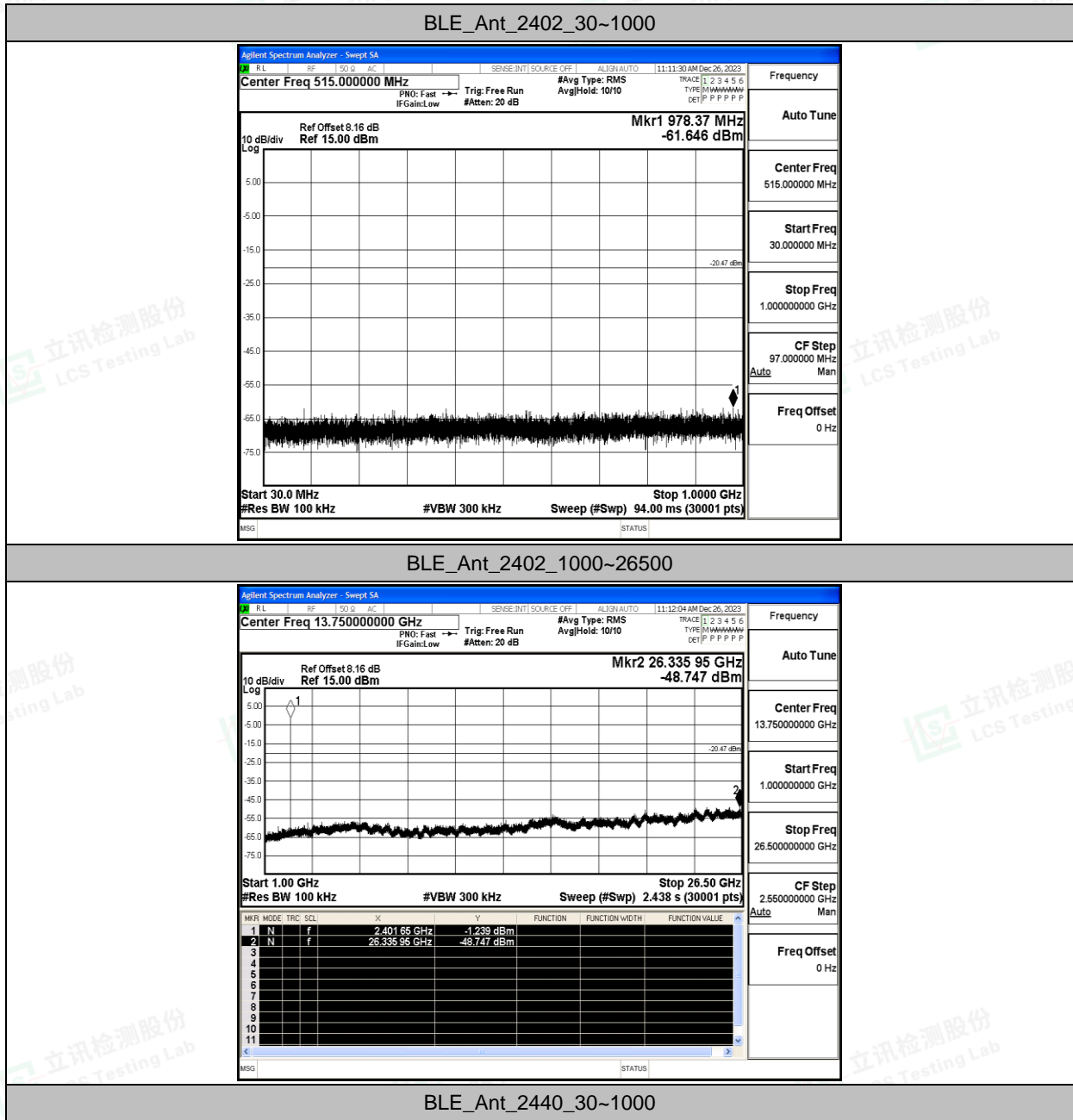
Test Result

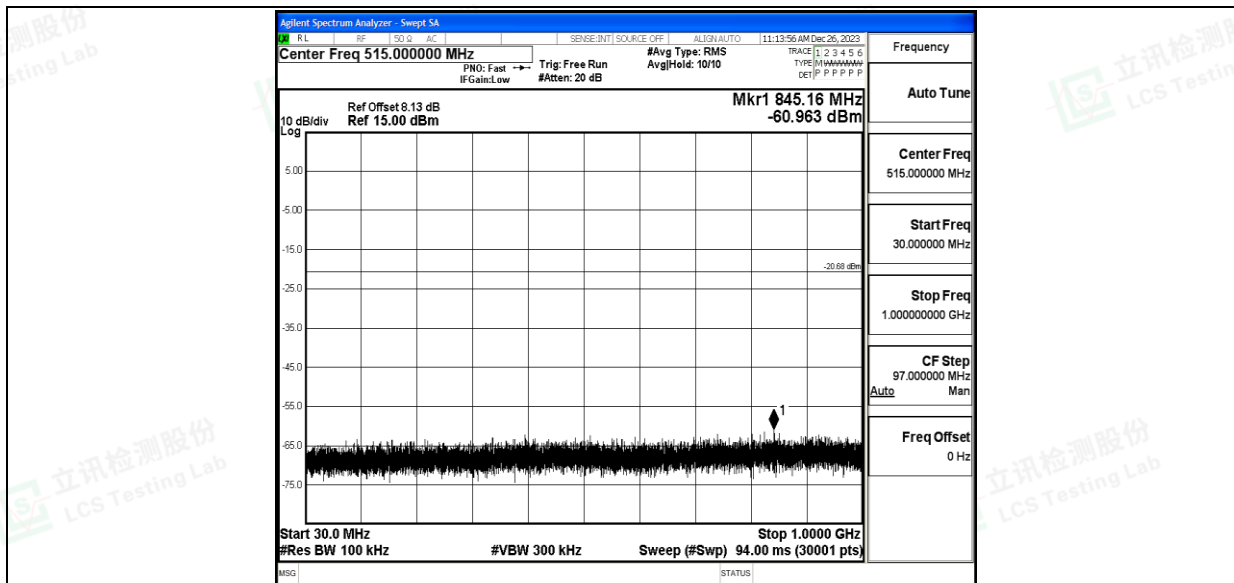
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant	2402	30~1000	-0.47	-61.65	≤-20.47	PASS
			1000~26500	-0.47	-48.75	≤-20.47	PASS
		2440	30~1000	-0.68	-60.96	≤-20.68	PASS
			1000~26500	-0.68	-49.3	≤-20.68	PASS
		2480	30~1000	-0.55	-61.62	≤-20.55	PASS
			1000~26500	-0.55	-41.19	≤-20.55	PASS



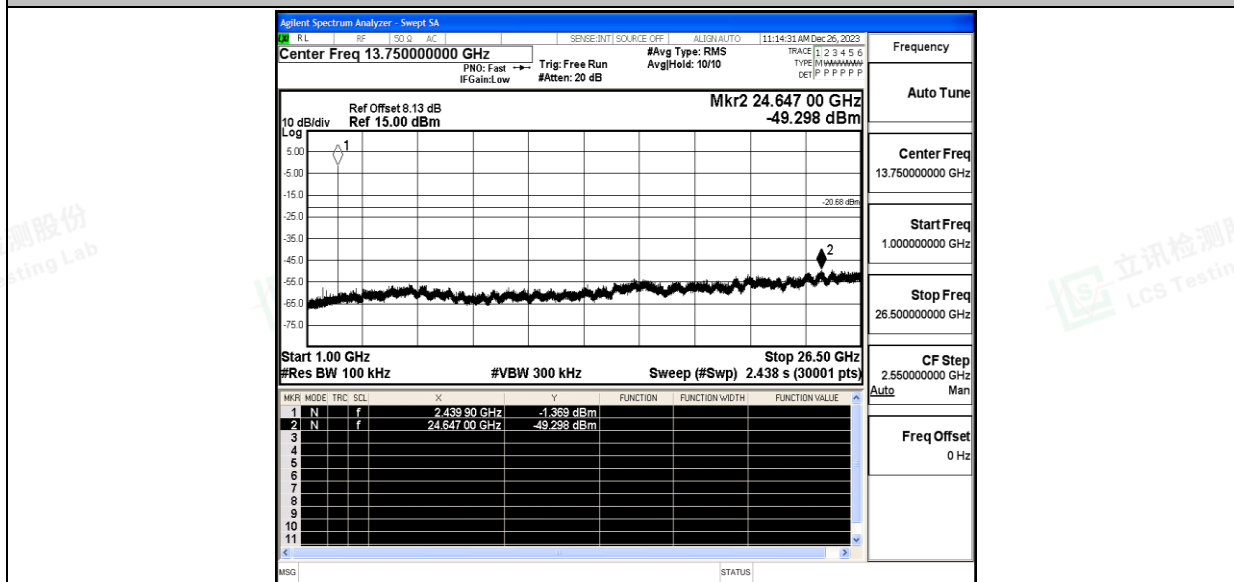


Test Graphs



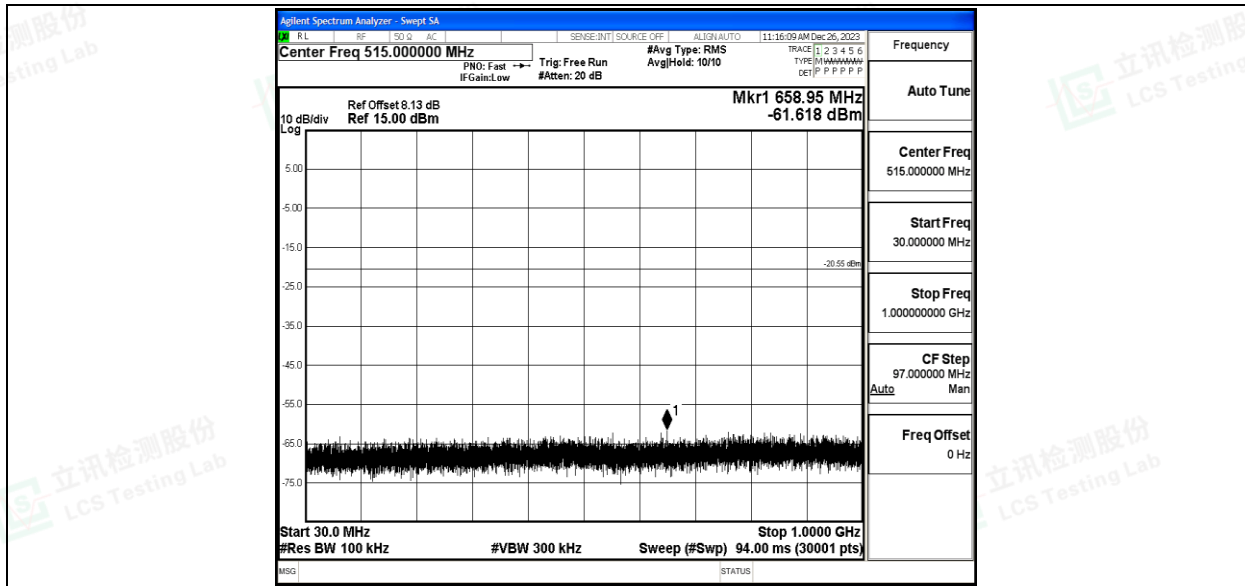


BLE_Ant_2440_1000~26500

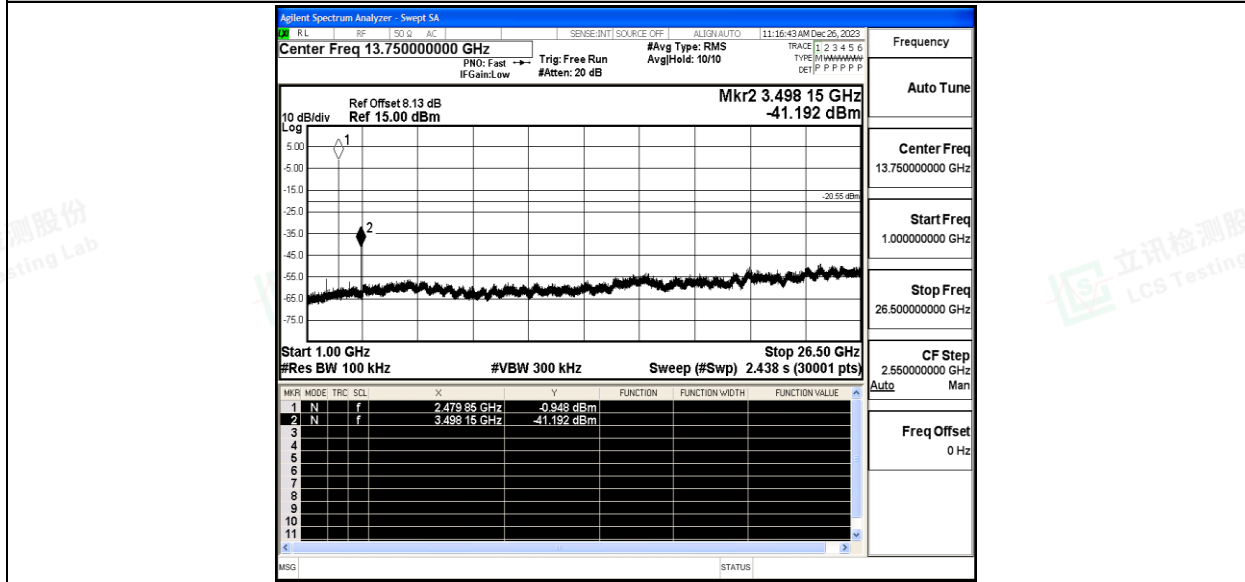


BLE_Ant_2480_30~1000





BLE_Ant_2480_1000~26500





B.6 Duty Cycle

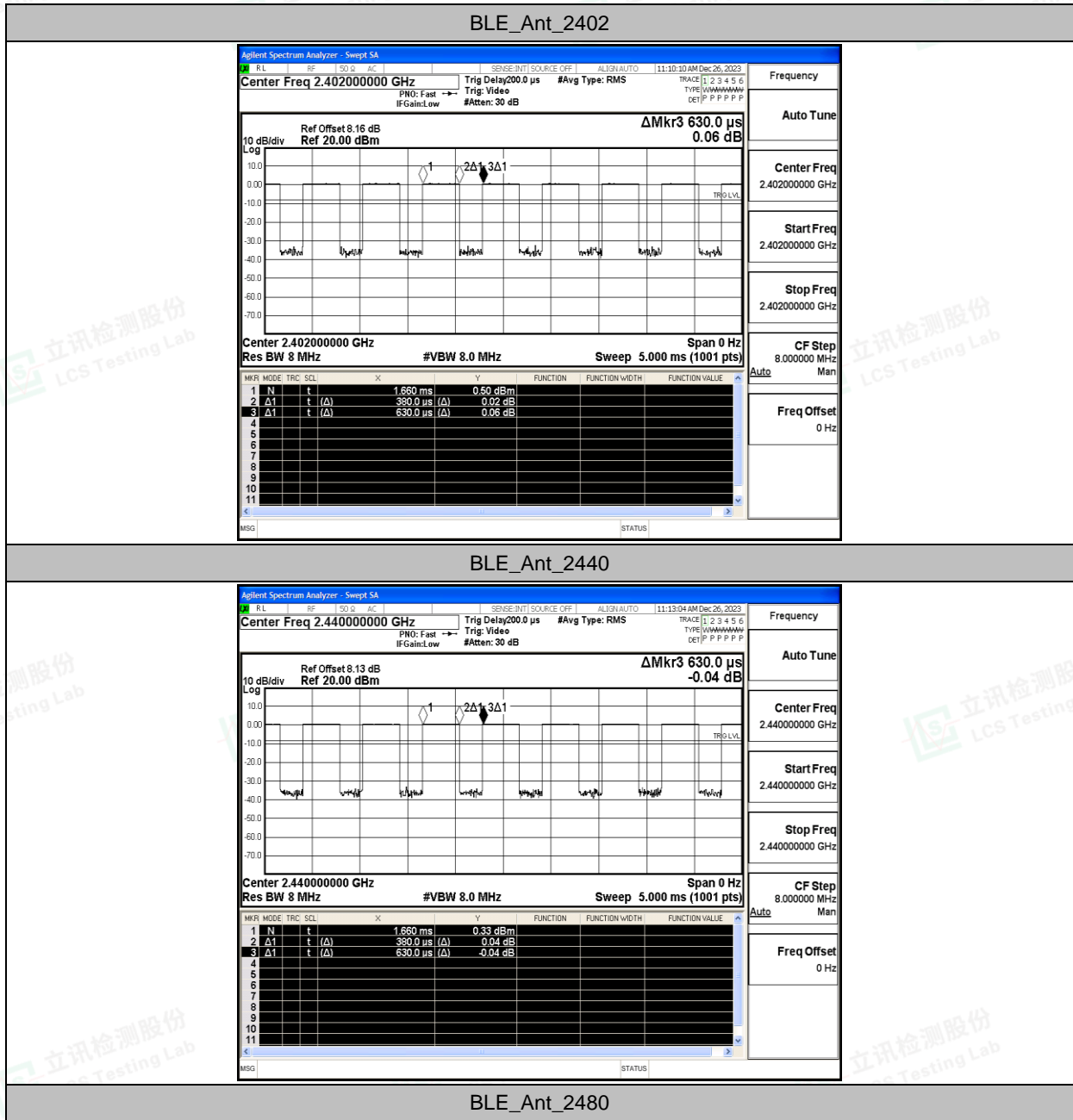
Test Result

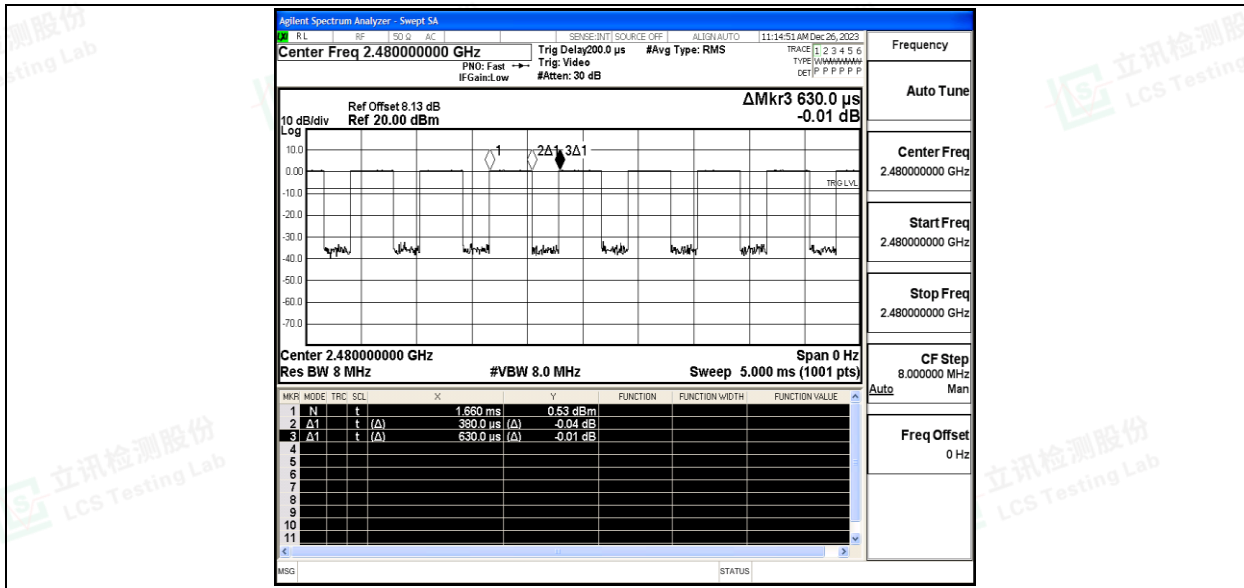
TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[dB]
BLE	Ant	2402	0.38	0.63	60.32	2.20	2.63
		2440	0.38	0.63	60.32	2.20	2.63
		2480	0.38	0.63	60.32	2.20	2.63





Test Graphs







B.7 Emissions in Restricted Bands

Test Result

TestMode	Antenna	Channel Name	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE	Ant	Low	2402	AV	2310.000	-48.34	≤-41.20	46.86	≤54	PASS
				AV	2379.695	-47.72	≤-41.20	47.48	≤54	PASS
				AV	2390.000	-48.2	≤-41.20	47.00	≤54	PASS
				Peak	2310.000	-41.55	≤-21.20	53.65	≤74	PASS
				Peak	2324.465	-39.05	≤-21.20	56.15	≤74	PASS
				Peak	2390.000	-42.55	≤-21.20	52.65	≤74	PASS
		High	2480	AV	2483.500	-47.73	≤-41.20	47.47	≤54	PASS
				AV	2487.280	-47.51	≤-41.20	47.69	≤54	PASS
				AV	2500.000	-47.92	≤-41.20	47.28	≤54	PASS
				Peak	2483.500	-41.56	≤-21.20	53.64	≤74	PASS
				Peak	2486.560	-37.96	≤-21.20	57.24	≤74	PASS
				Peak	2500.000	-40.81	≤-21.20	54.39	≤74	PASS

Note:

- The Antenna Gain is compensated in the graph. The Correction Factor is compensated in the graph.
- 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.



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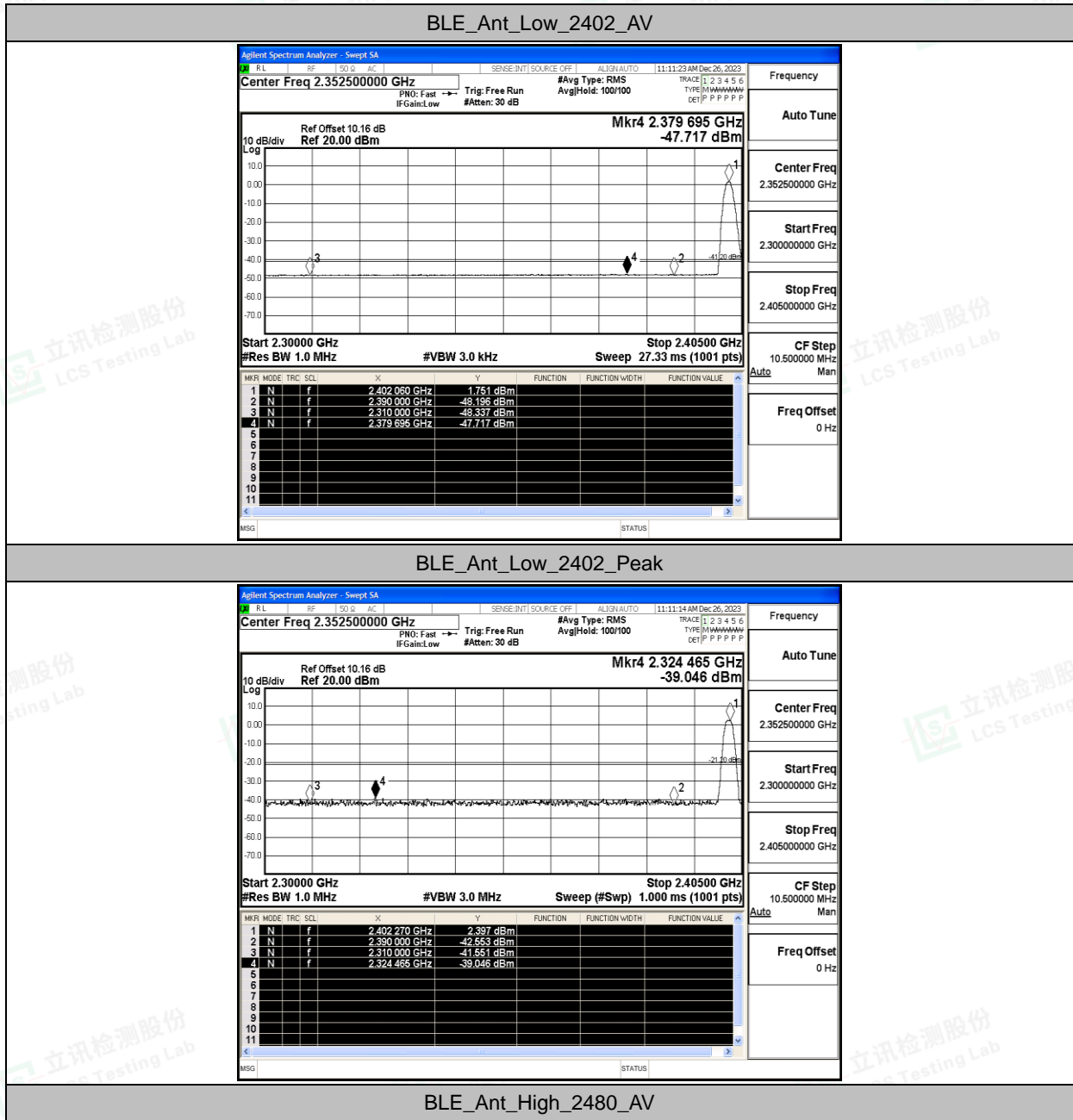
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

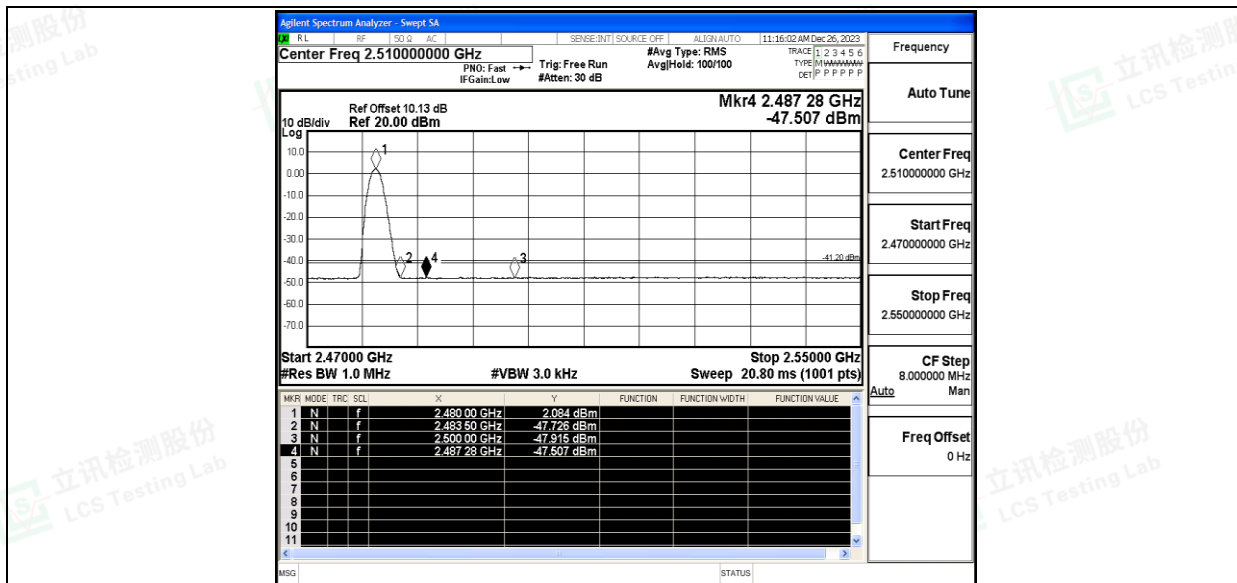
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



Test Graphs





BLE_Ant_High_2480_Peak

