



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: Massage chair

Test Model: CGMEMCG-2301

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Joker Hu
Supervised by:	Nick Peng





B.1 DTS Bandwidth

Test Result

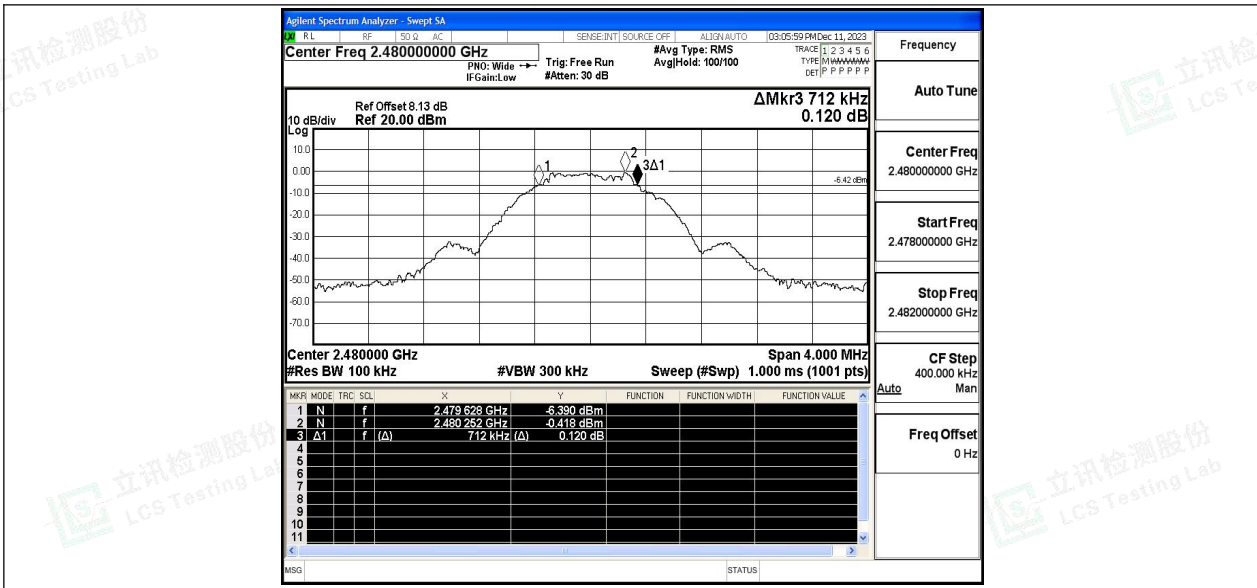
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.696	2401.632	2402.328	0.5	PASS
		2440	0.684	2439.632	2440.316	0.5	PASS
		2480	0.712	2479.628	2480.340	0.5	PASS





Test Graphs







B.2 Maximum conducted output power

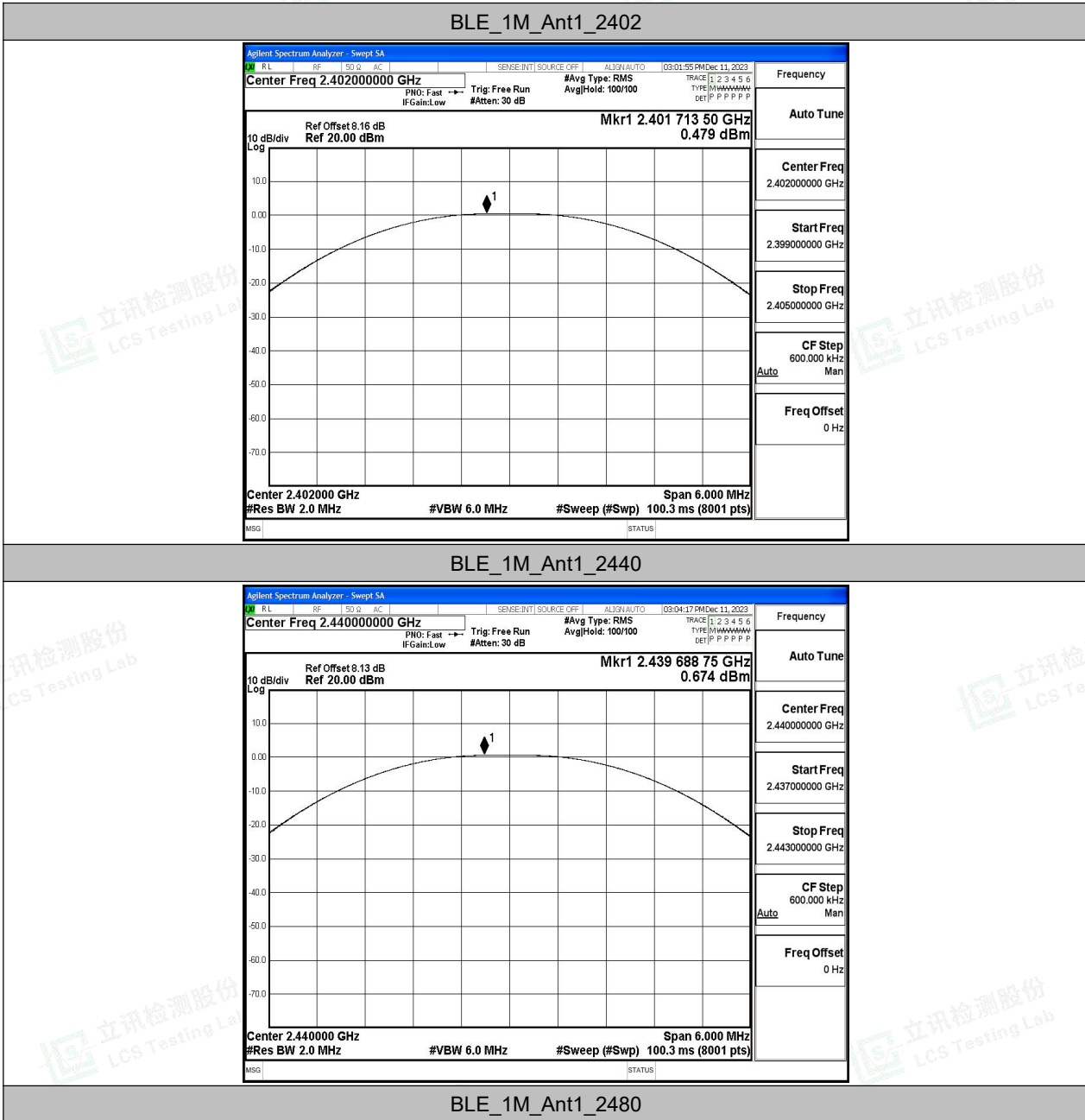
Test Result

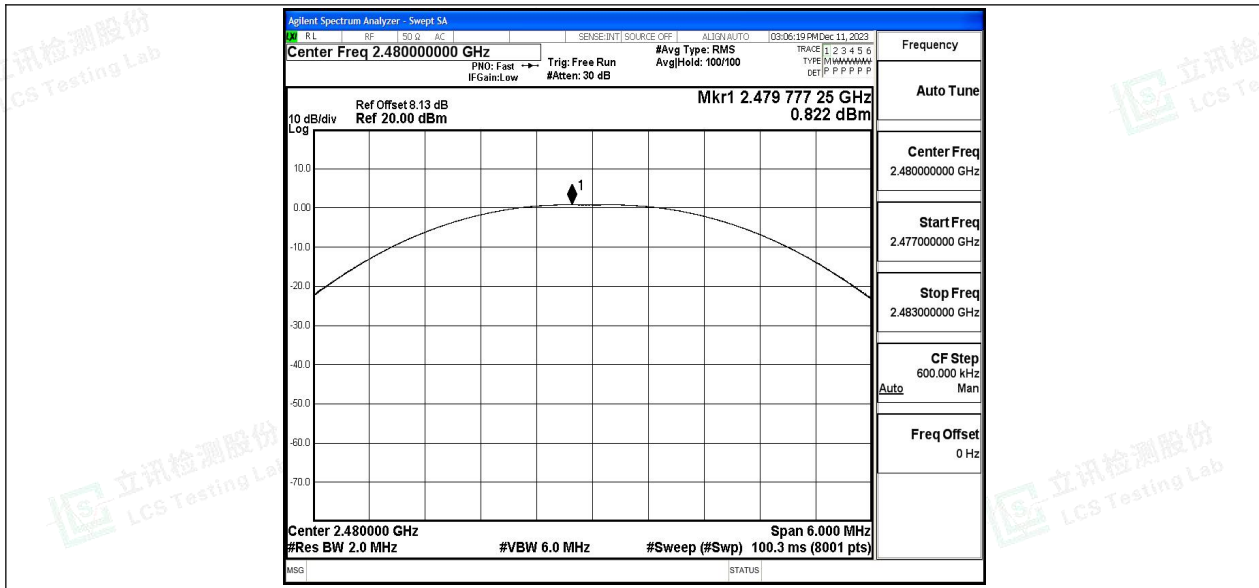
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.48	≤30	PASS
		2440	0.67	≤30	PASS
		2480	0.82	≤30	PASS





Test Graphs







B.3 Maximum power spectral density

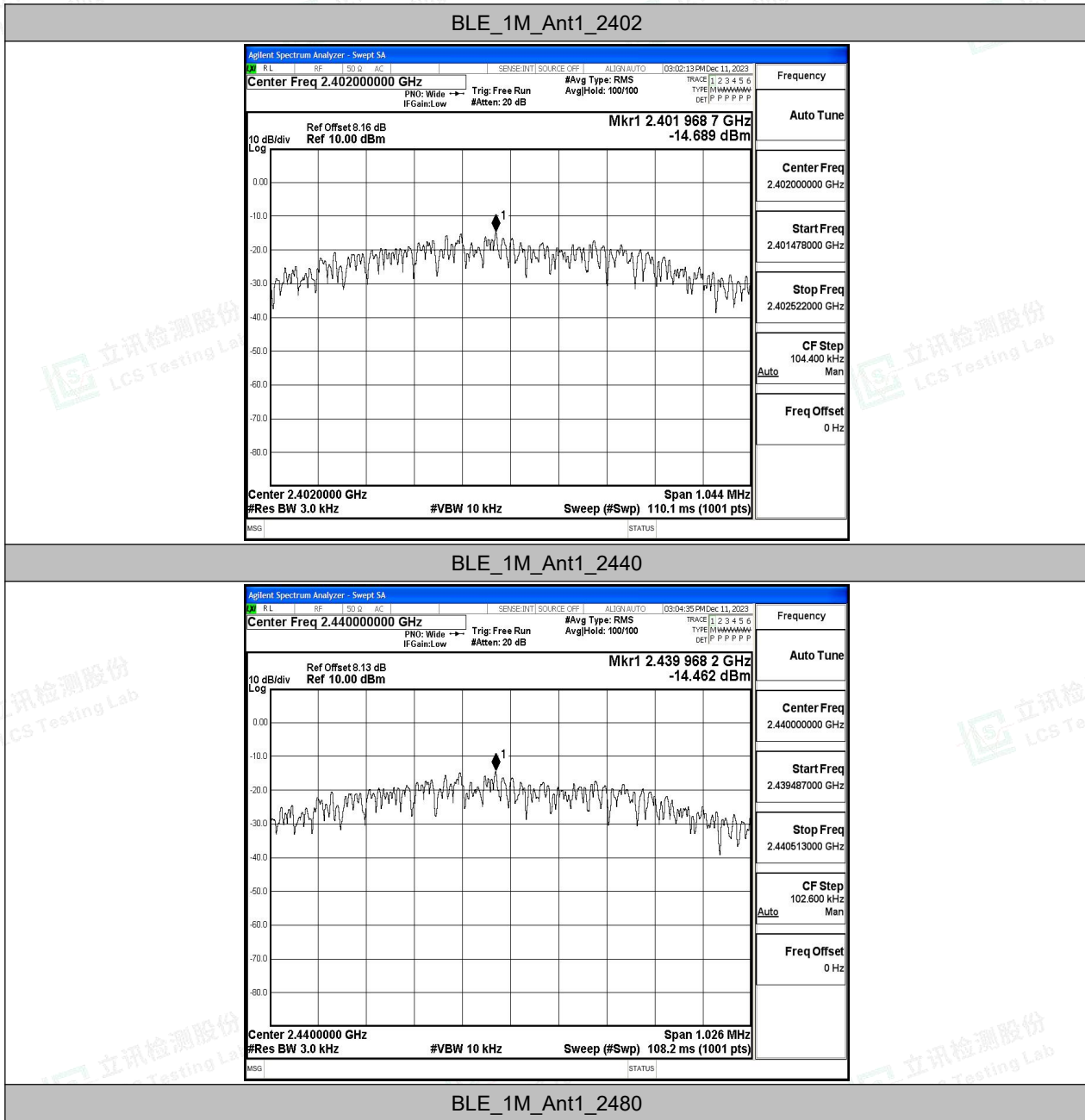
Test Result

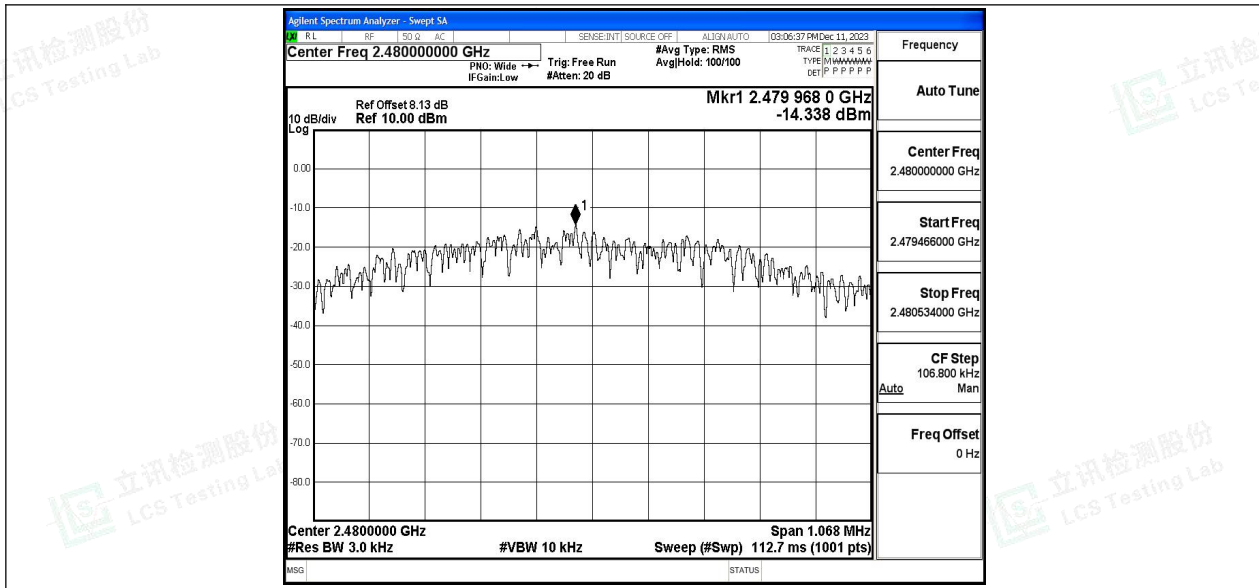
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.69	≤8.00	PASS
		2440	-14.46	≤8.00	PASS
		2480	-14.34	≤8.00	PASS





Test Graphs







B.4 Band edge measurements

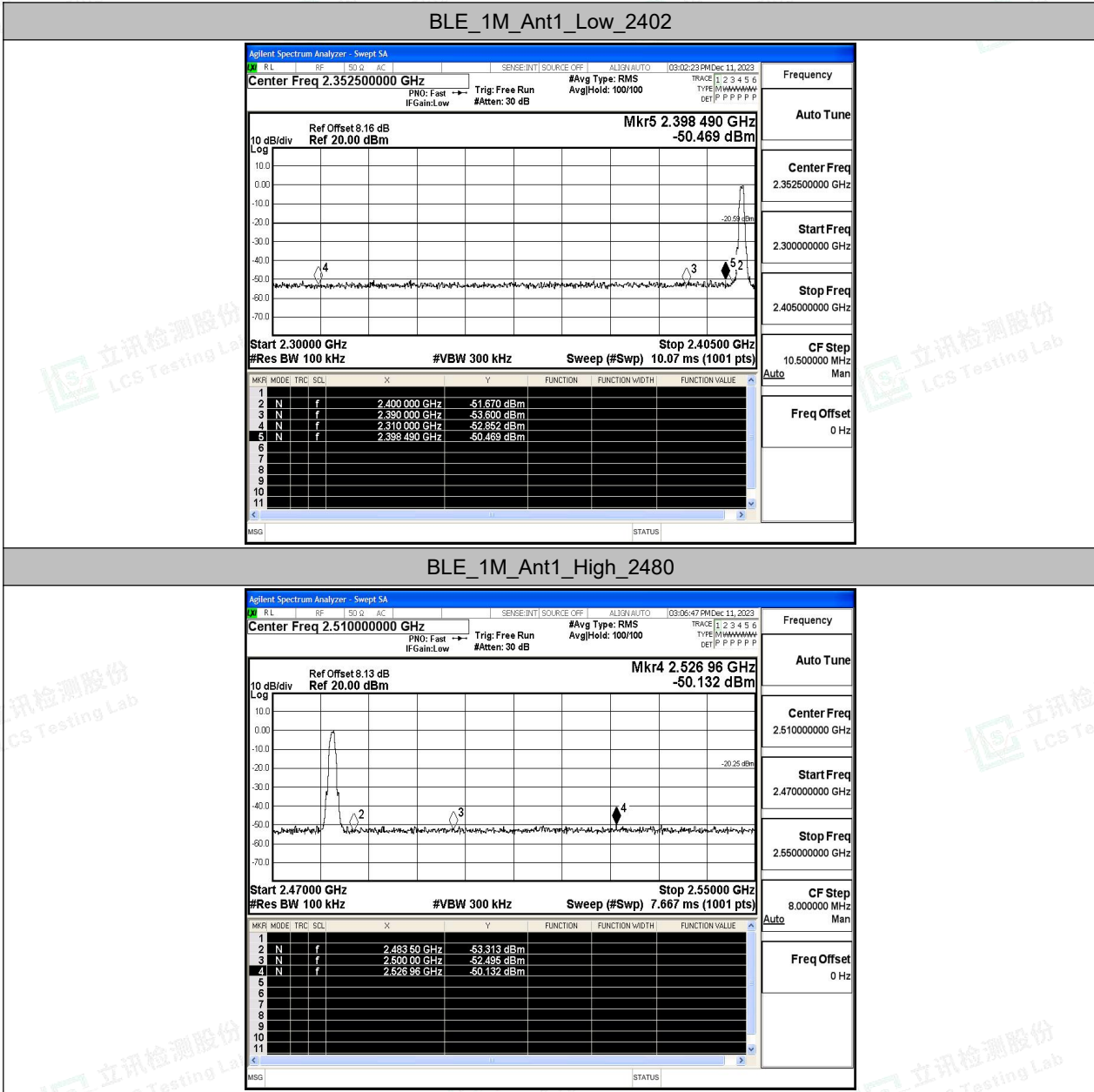
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.59	-50.47	≤-20.59	PASS
		High	2480	-0.25	-50.13	≤-20.25	PASS





Test Graphs





B.5 Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	30~1000	-0.59	-61.07	≤-20.59	PASS
			1000~26500	-0.59	-48.75	≤-20.59	PASS
		2440	30~1000	-0.42	-62	≤-20.42	PASS
			1000~26500	-0.42	-41.13	≤-20.42	PASS
		2480	30~1000	-0.25	-61.79	≤-20.25	PASS
			1000~26500	-0.25	-49.42	≤-20.25	PASS

Reference level measurement

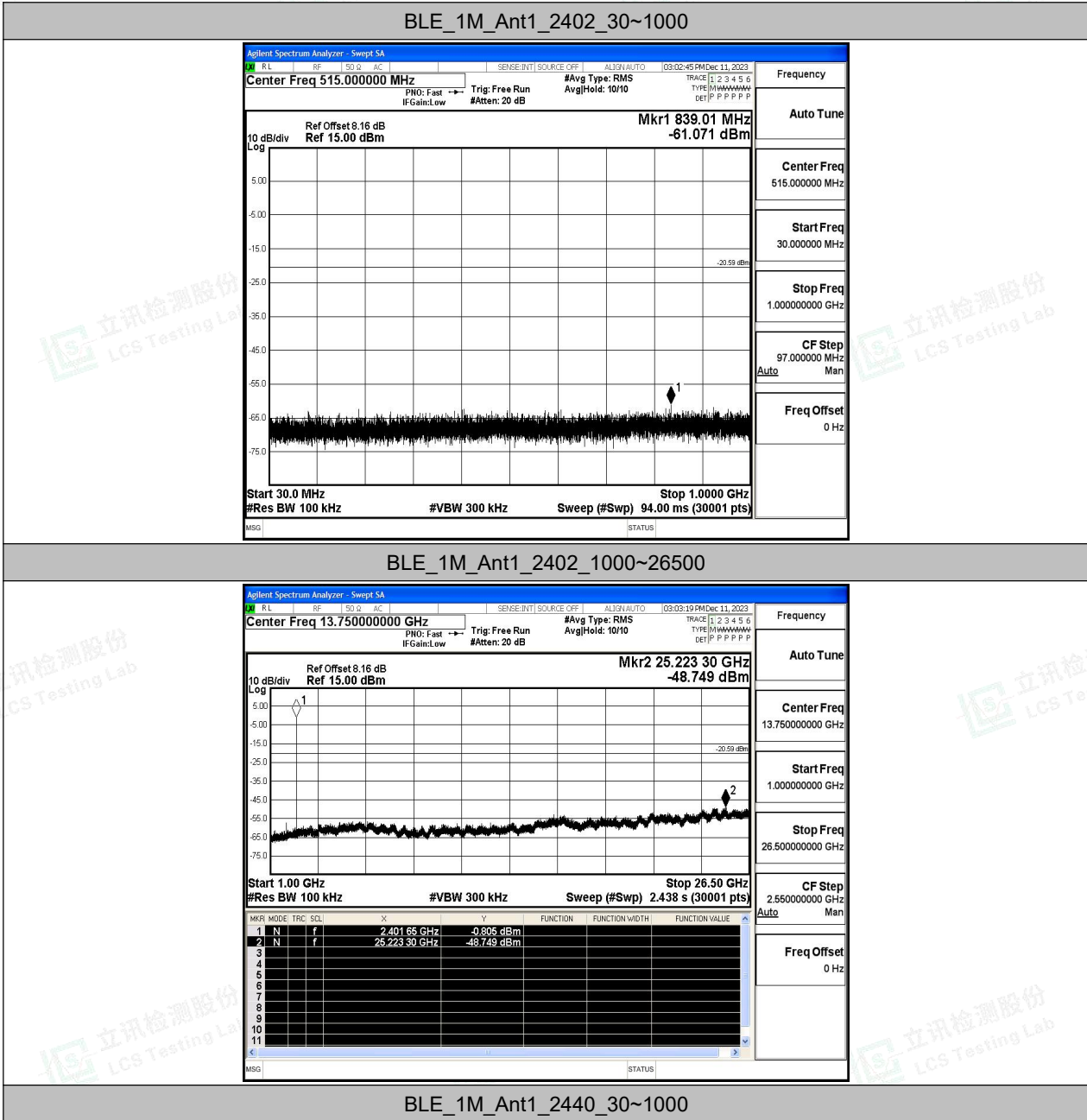
Test Result

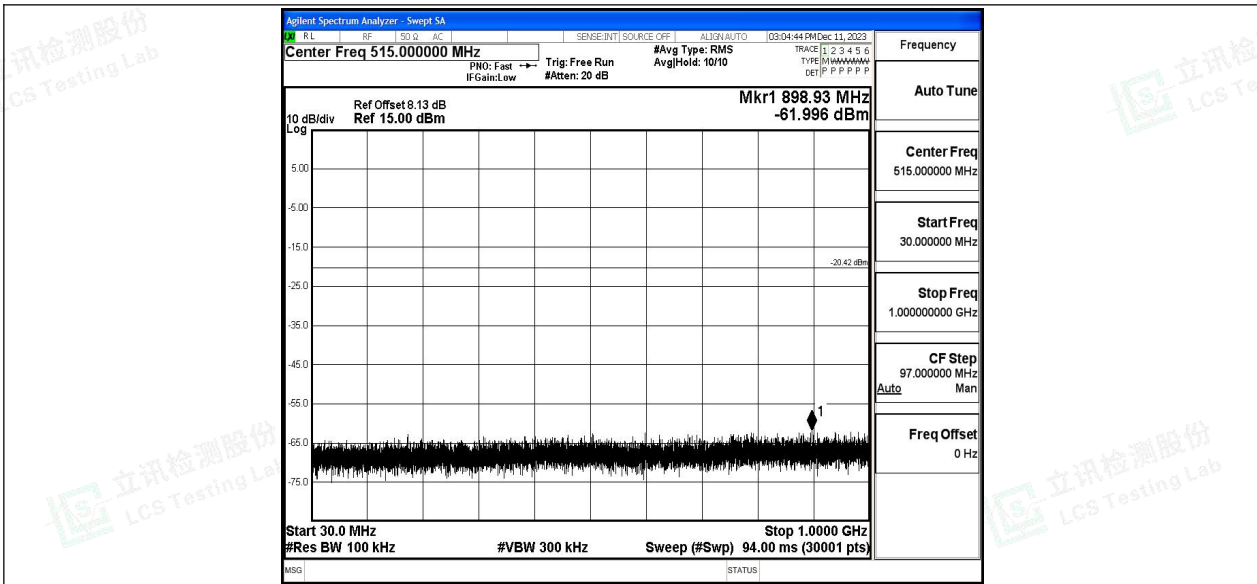
TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
BLE_1M	Ant1	2402	2402.23	-0.59
		2440	2440.24	-0.42
		2480	2480.24	-0.25



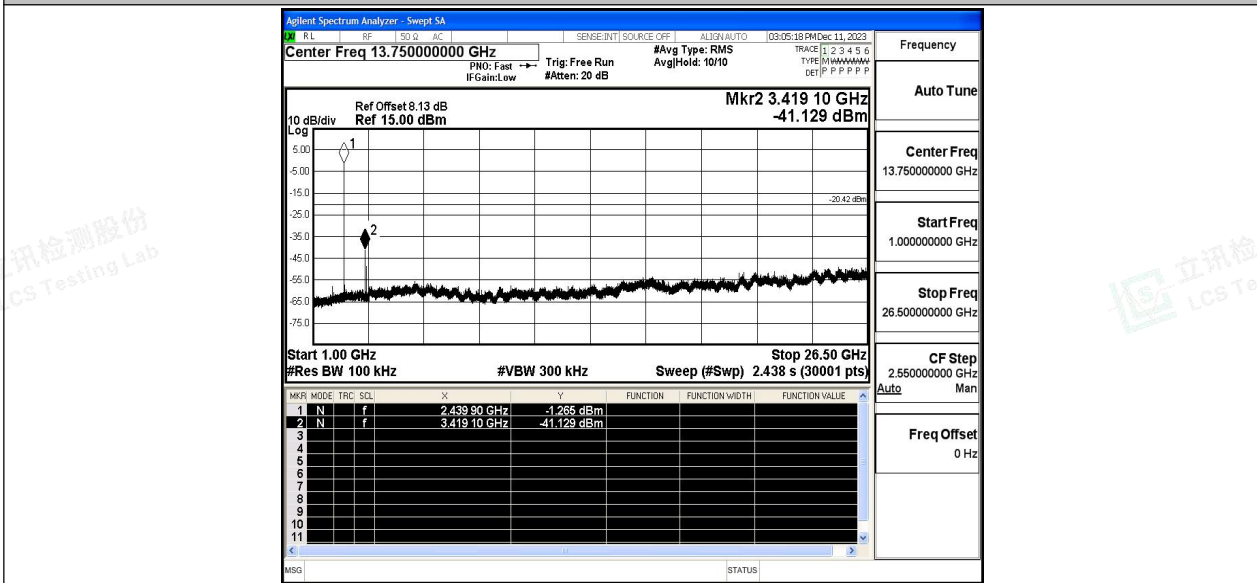


Test Graphs



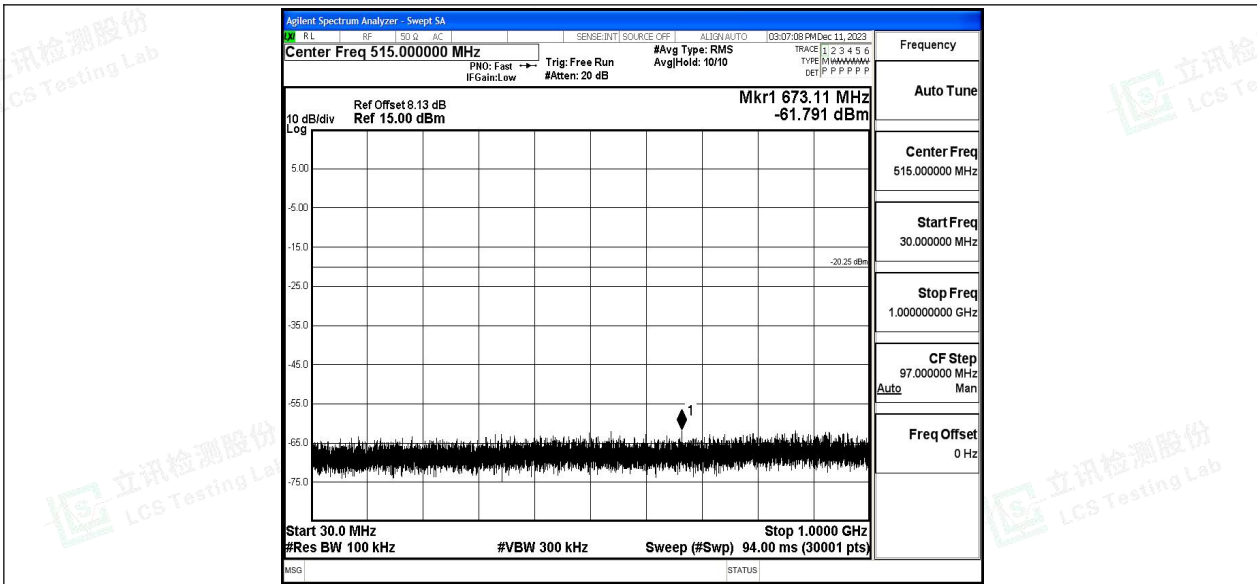


BLE_1M_Ant1_2440_1000~26500

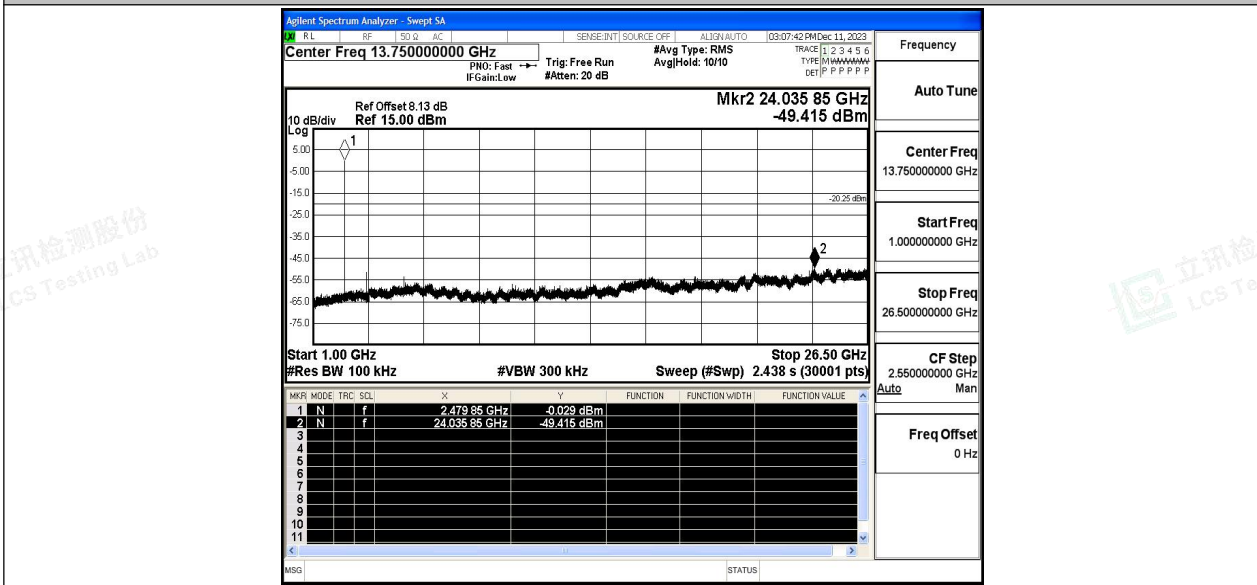


BLE_1M_Ant1_2480_30~1000



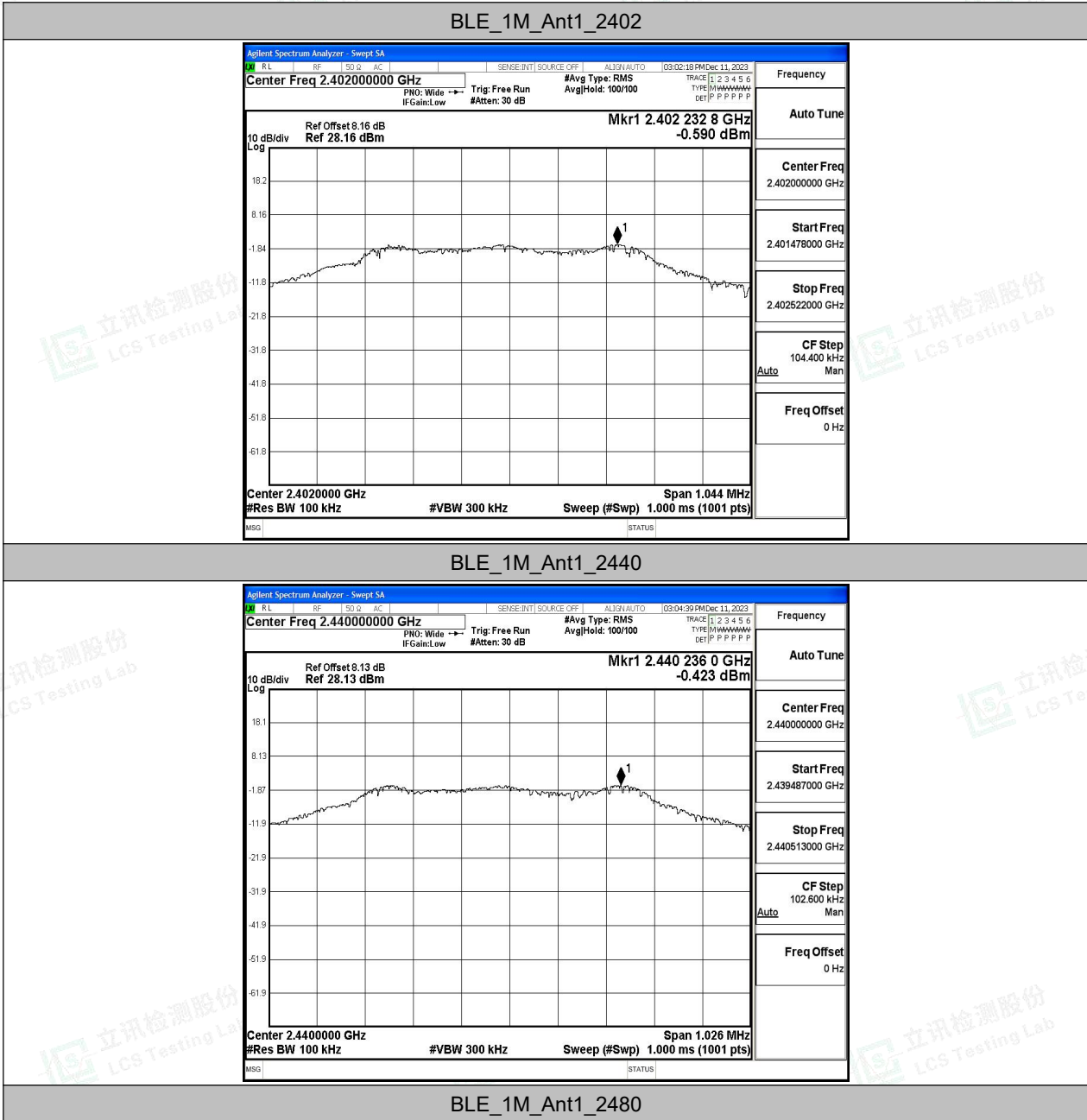


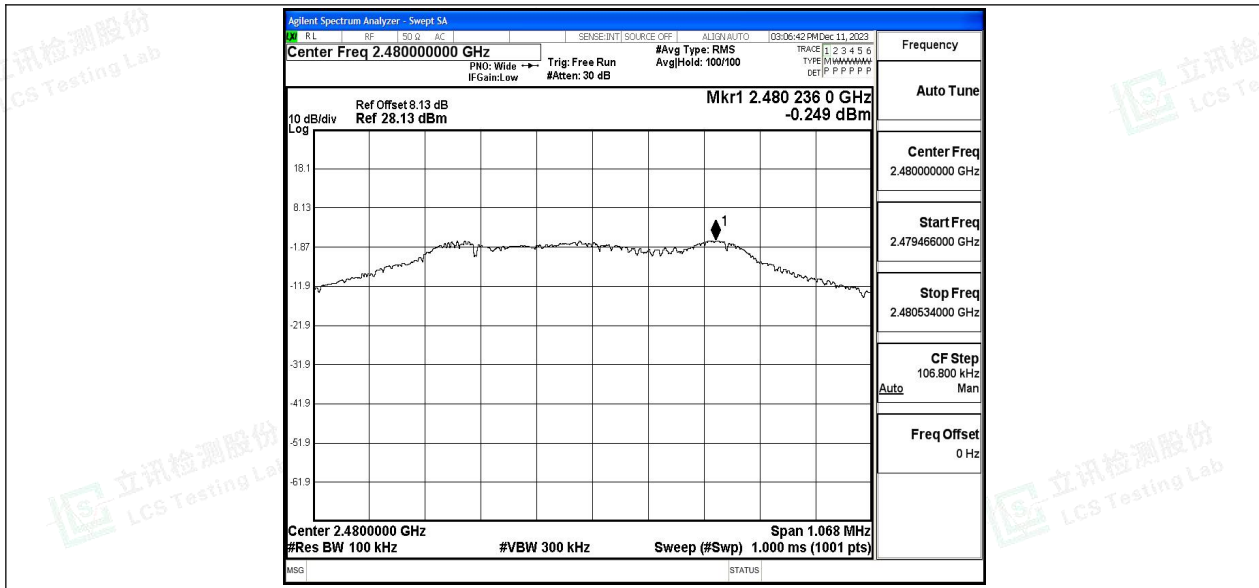
BLE_1M_Ant1_2480_1000~26500





Test Graphs







B.6 Duty Cycle

Test Result

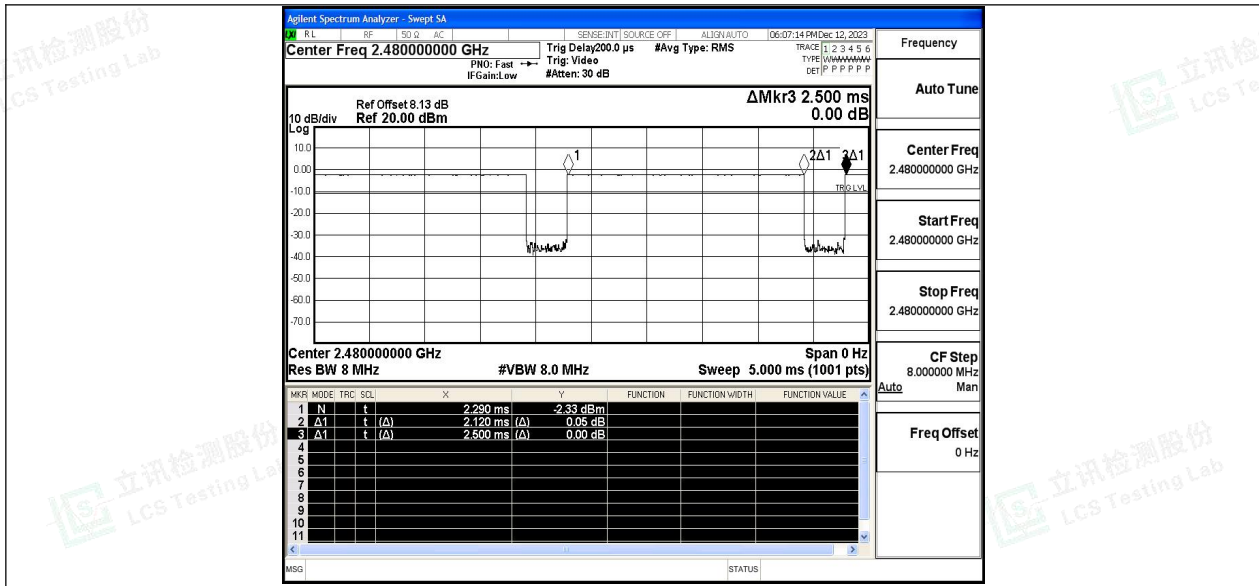
TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[dB]
BLE_1M	Ant1	2402	2.12	2.50	84.80	0.72	0.47
		2440	2.12	2.50	84.80	0.72	0.47
		2480	2.12	2.50	84.80	0.72	0.47





Test Graphs







B.7 Emissions in Restricted Bands

Test Result

Test Mode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1 M	Ant1	Low	2402	AV	2310.000	-49.19	≤-41.20	46.01	≤54	PASS
				AV	2389.985	-48.67	≤-41.20	46.53	≤54	PASS
				AV	2390.000	-48.67	≤-41.20	46.53	≤54	PASS
				Peak	2310.000	-41.06	≤-21.20	54.14	≤74	PASS
				Peak	2310.080	-38.73	≤-21.20	56.47	≤74	PASS
				Peak	2390.000	-40.76	≤-21.20	54.44	≤74	PASS
		High	2480	AV	2483.500	-48.55	≤-41.20	46.65	≤54	PASS
				AV	2483.520	-48.55	≤-41.20	46.65	≤54	PASS
				AV	2500.000	-48.67	≤-41.20	46.53	≤54	PASS
				Peak	2483.500	-41.33	≤-21.20	53.87	≤74	PASS
				Peak	2485.680	-38.99	≤-21.20	56.21	≤74	PASS
				Peak	2500.000	-42.52	≤-21.20	52.68	≤74	PASS

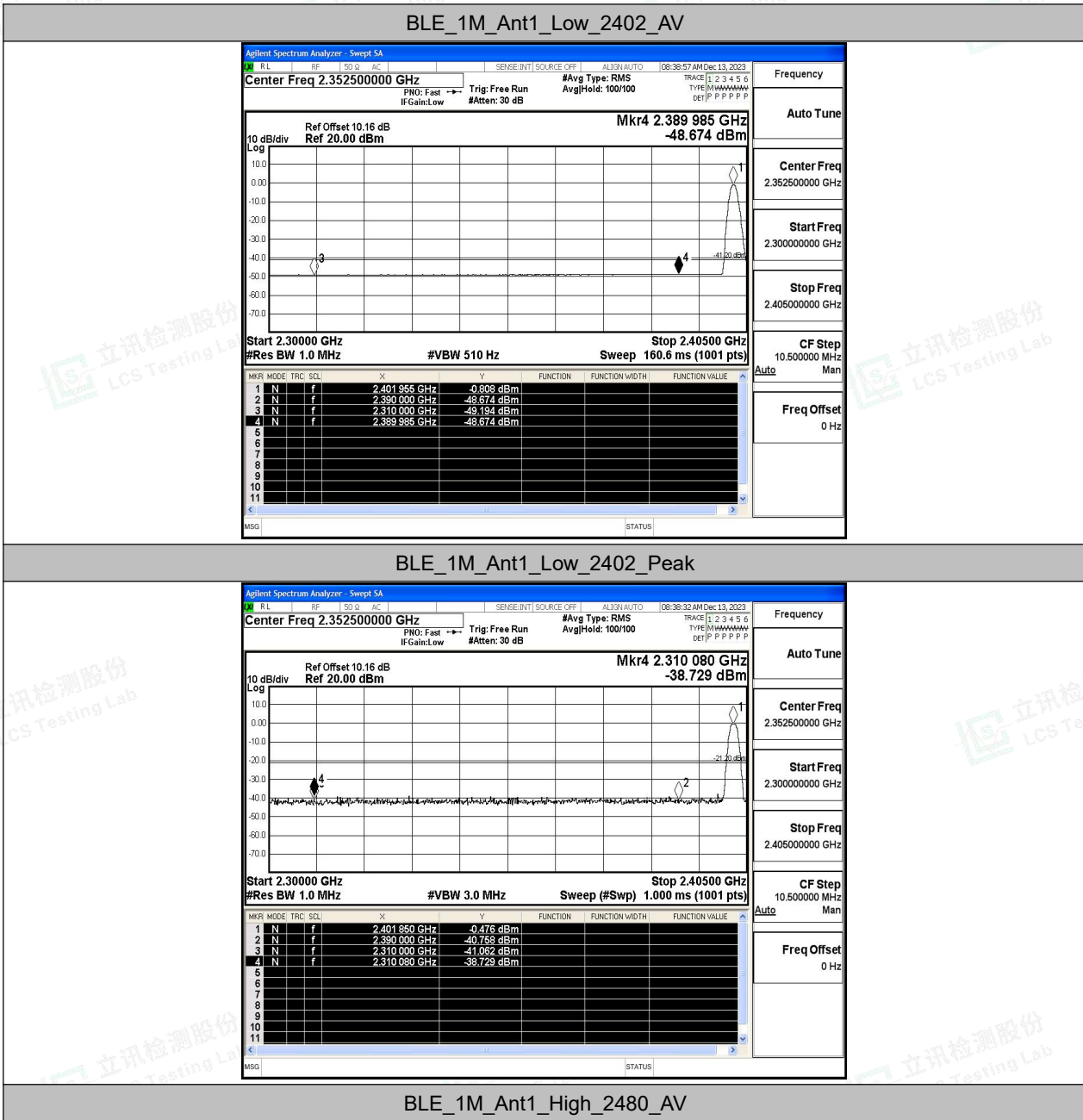
Note:

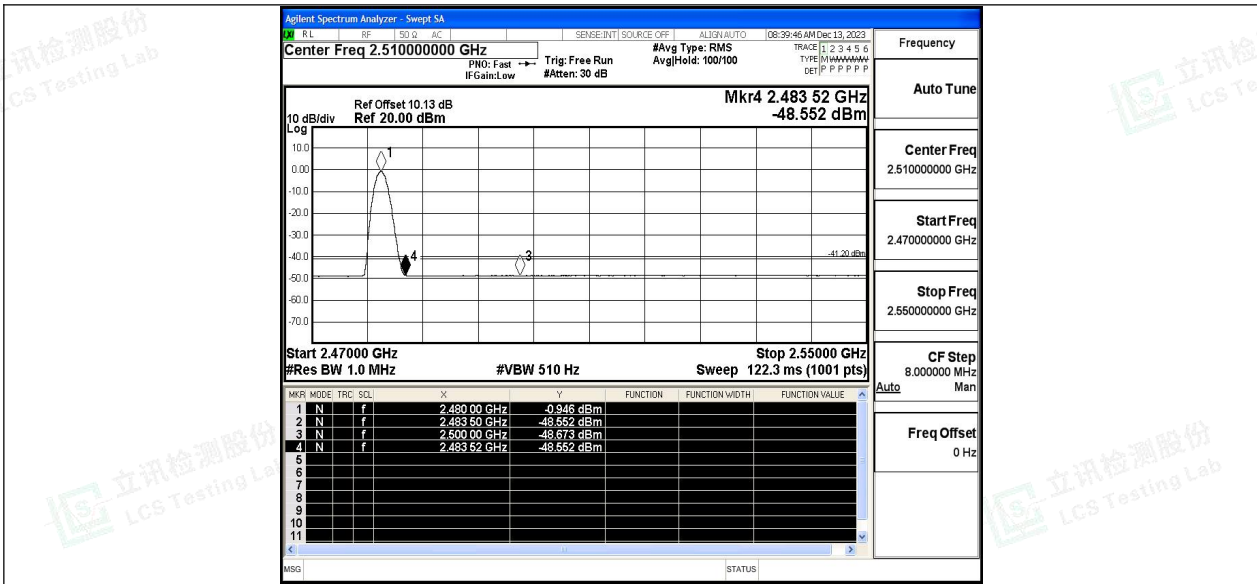
- The Antenna Gain is compensated in the graph.
- The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.





Test Graphs





BLE_1M_Ant1_High_2480_Peak

