



## Appendix B

### RF Test Data for BLE (Conducted Measurement)

Product Name: WIMU PRO EVO

Test Model: WT200

#### Environmental Conditions

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





## B.1 DTS Bandwidth

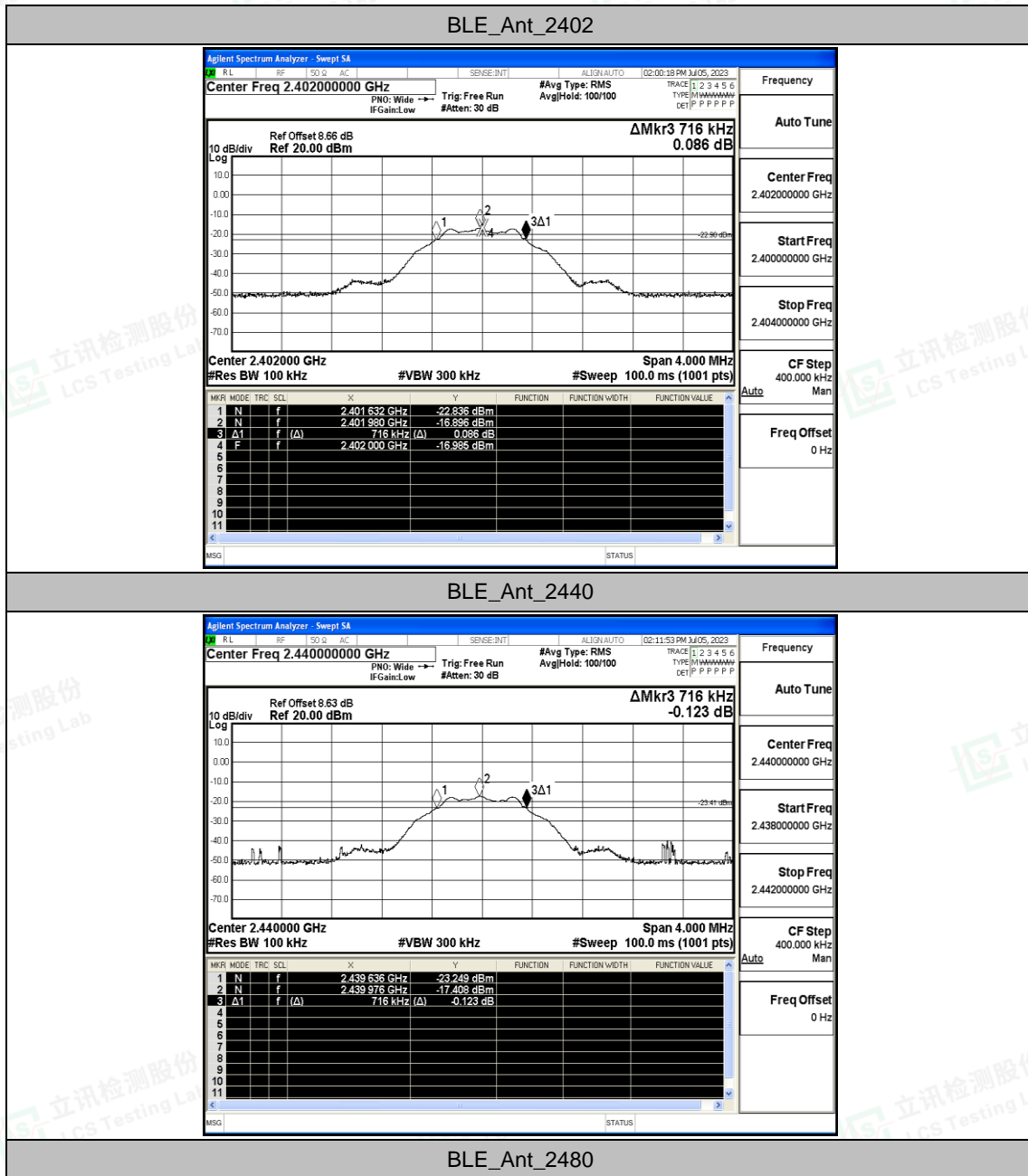
### Test Result

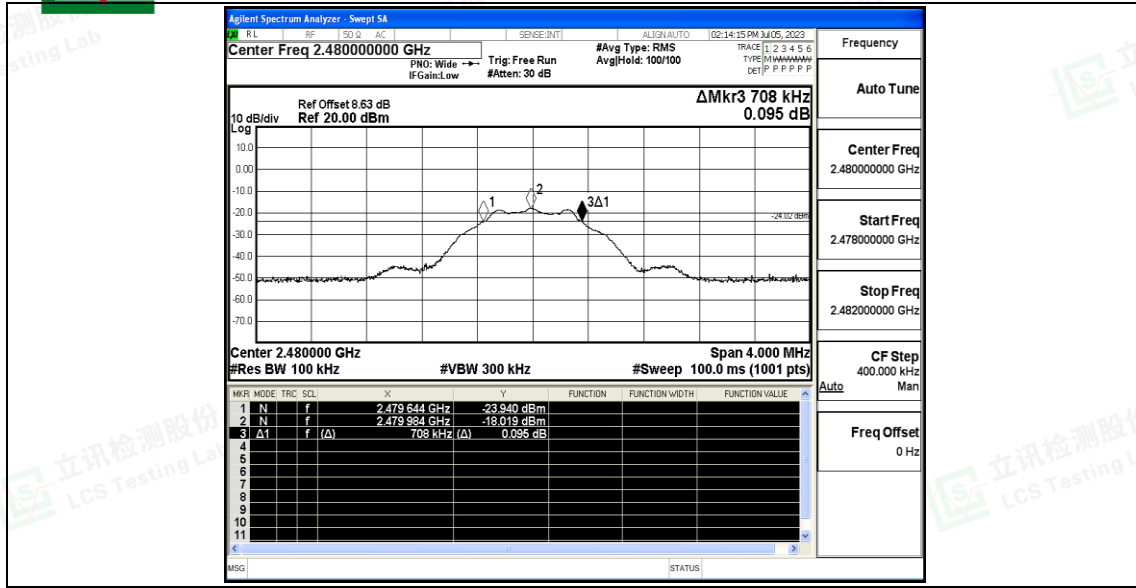
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant	2402	0.716	2401.632	2402.348	0.5	PASS
		2440	0.716	2439.636	2440.352	0.5	PASS
		2480	0.708	2479.644	2480.352	0.5	PASS





Test Graphs







## B.2 Maximum conducted output power

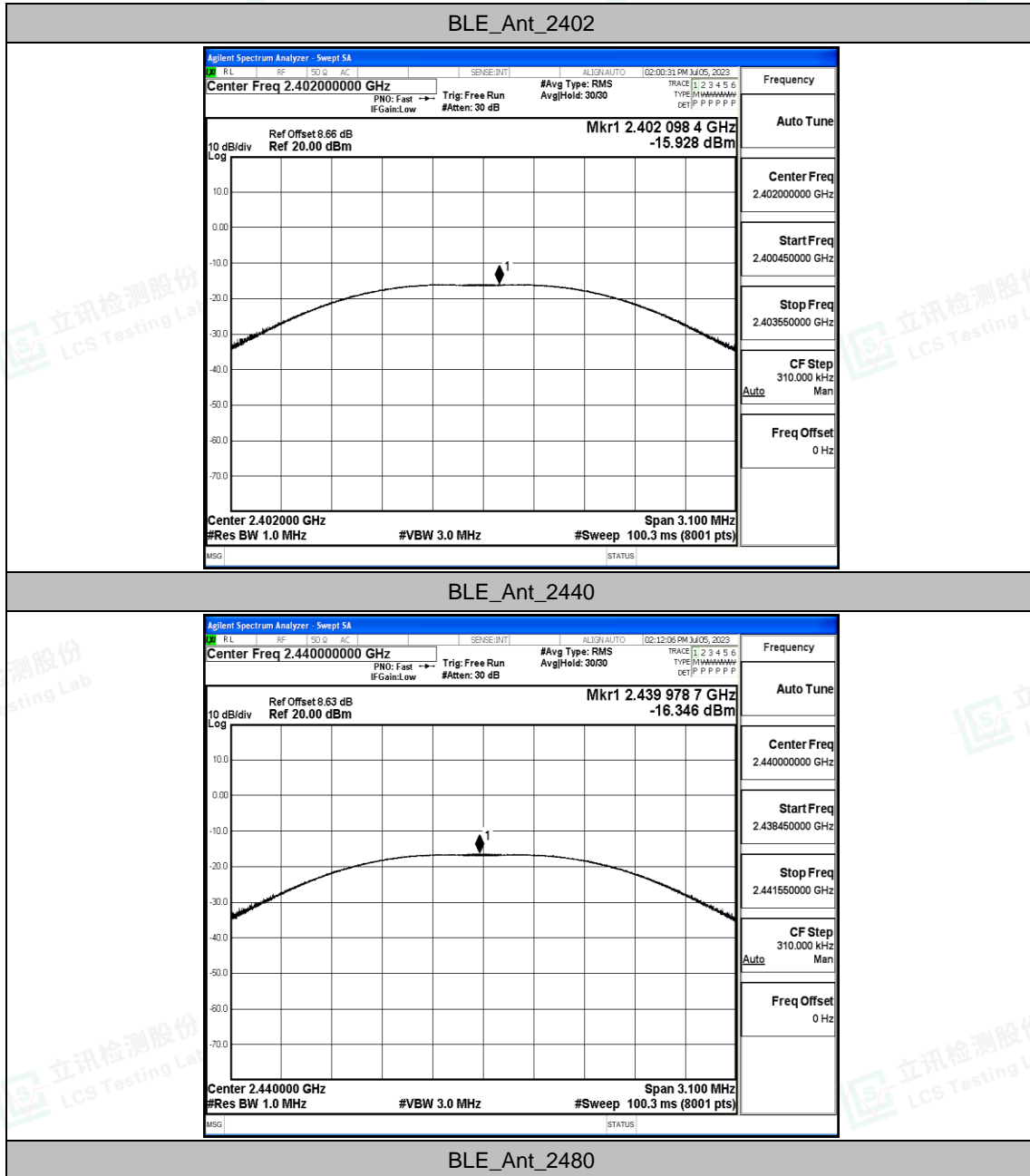
### Test Result

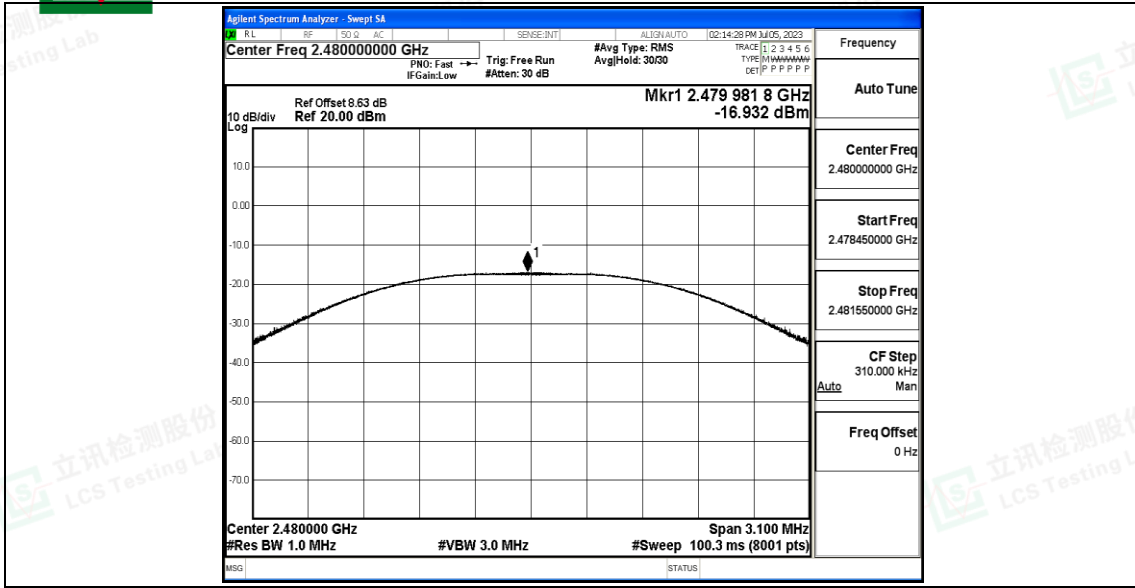
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant	2402	-15.93	≤30	PASS
		2440	-16.35	≤30	PASS
		2480	-16.93	≤30	PASS





### Test Graphs





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### B.3 Maximum power spectral density

#### Test Result

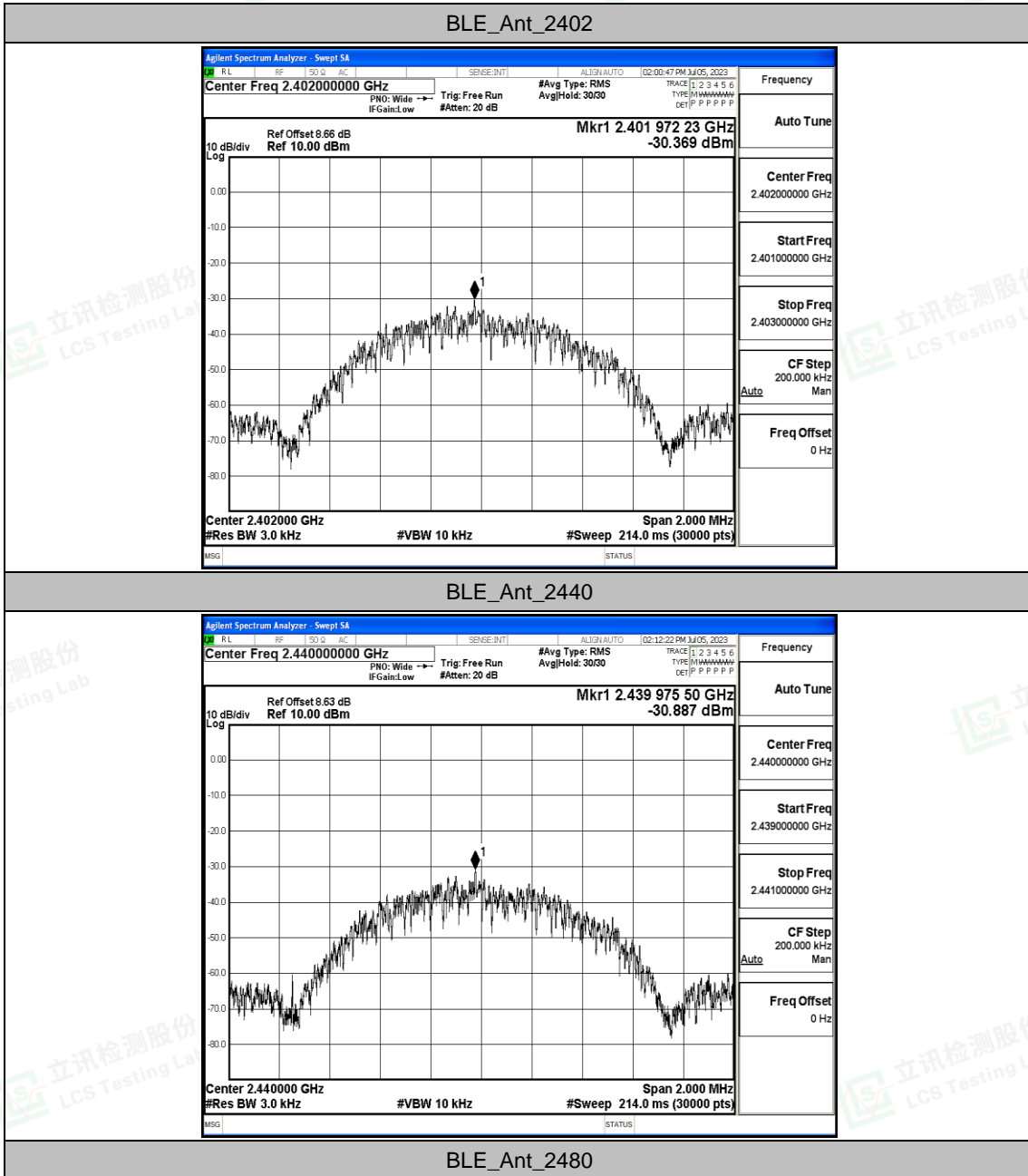
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE	Ant	2402	-30.37	≤8.00	PASS
		2440	-30.89	≤8.00	PASS
		2480	-31.62	≤8.00	PASS

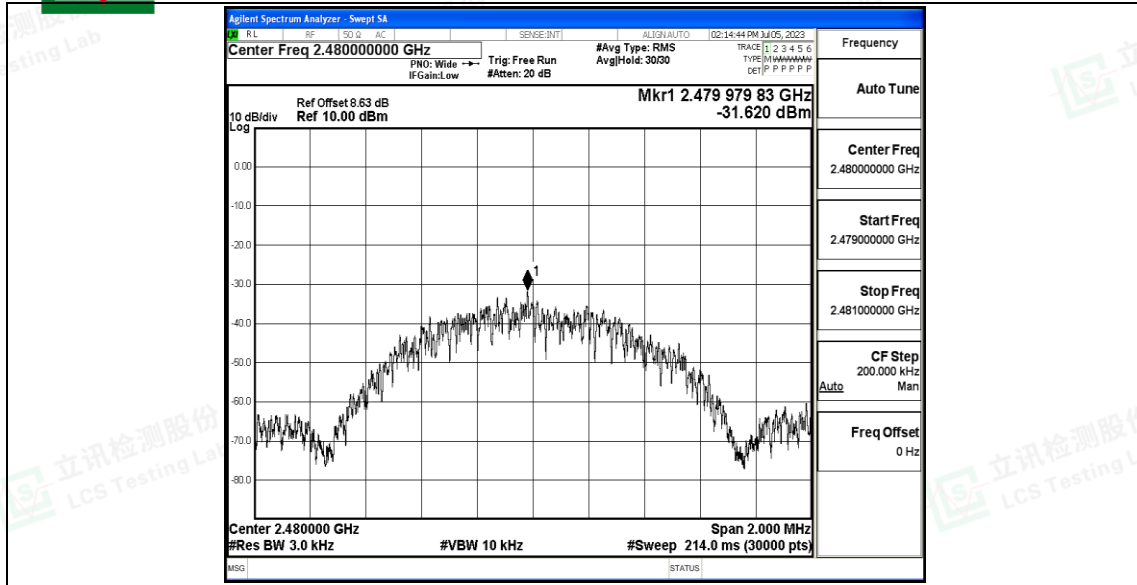






### Test Graphs







## B.4 Band edge measurements

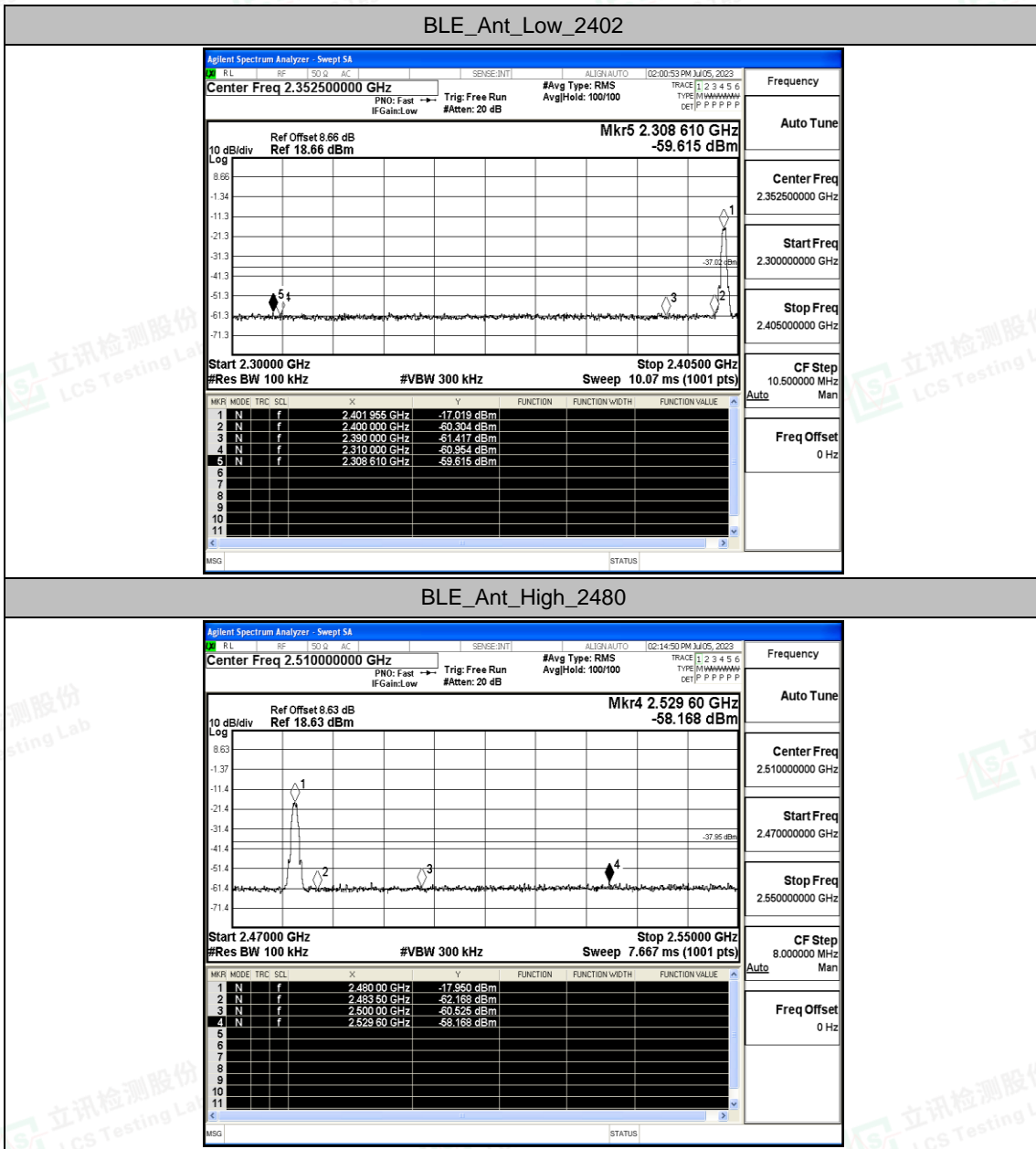
### Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant	Low	2402	-17.02	-59.62	≤-37.02	PASS
		High	2480	-17.95	-58.17	≤-37.95	PASS





Test Graphs





## B.5 Conducted Spurious Emission

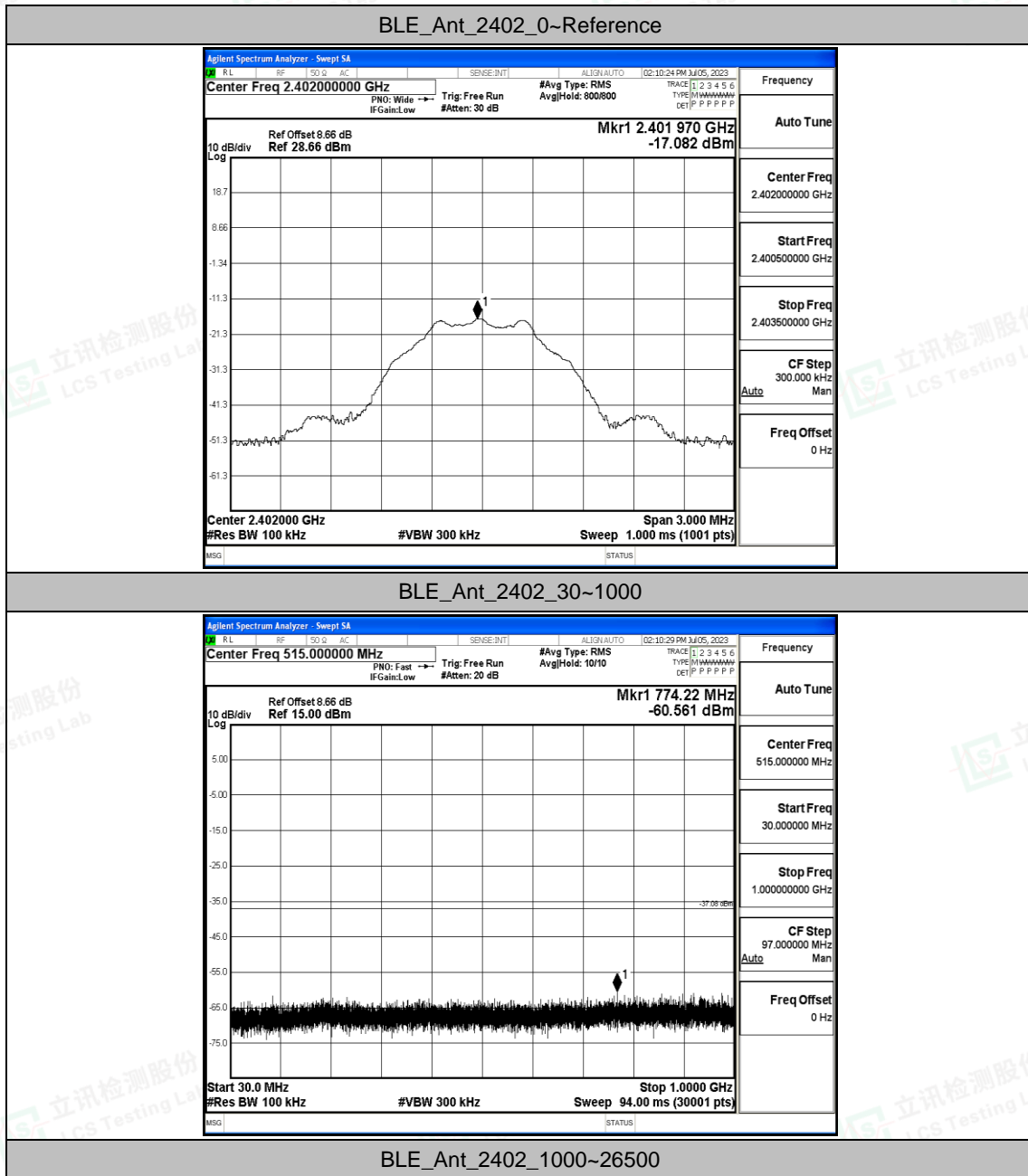
### Test Result

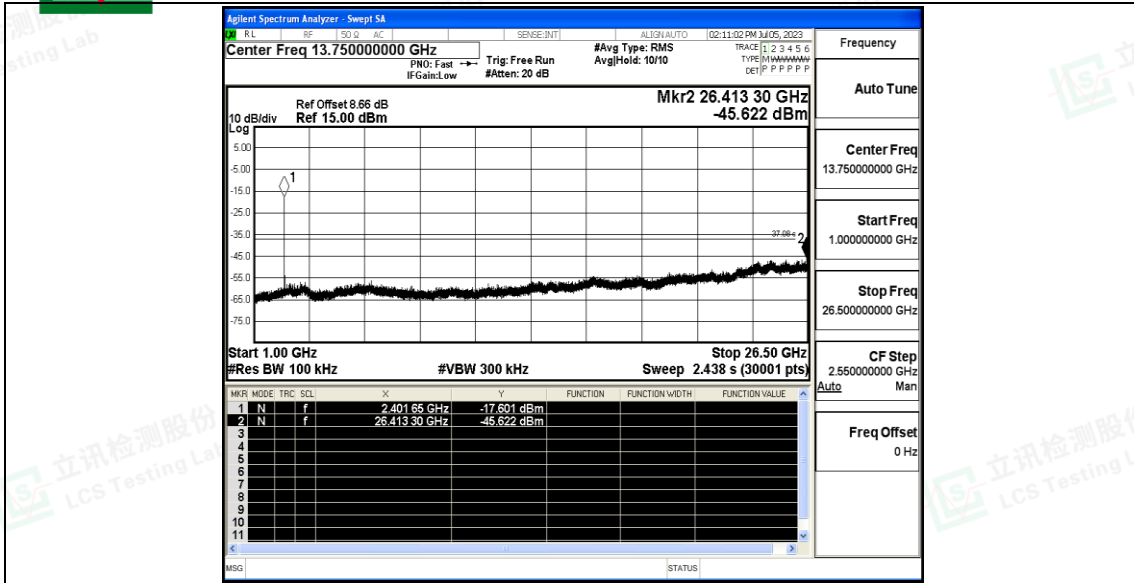
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant	2402	Reference	-17.08	-17.08	---	PASS
			30~1000	-17.08	-60.56	≤-37.08	PASS
			1000~26500	-17.08	-45.62	≤-37.08	PASS
		2440	Reference	-17.55	-17.55	---	PASS
			30~1000	-17.55	-60.81	≤-37.55	PASS
			1000~26500	-17.55	-46.25	≤-37.55	PASS
		2480	Reference	-18.20	-18.20	---	PASS
			30~1000	-18.20	-60.91	≤-38.2	PASS
			1000~26500	-18.20	-44.53	≤-38.2	PASS



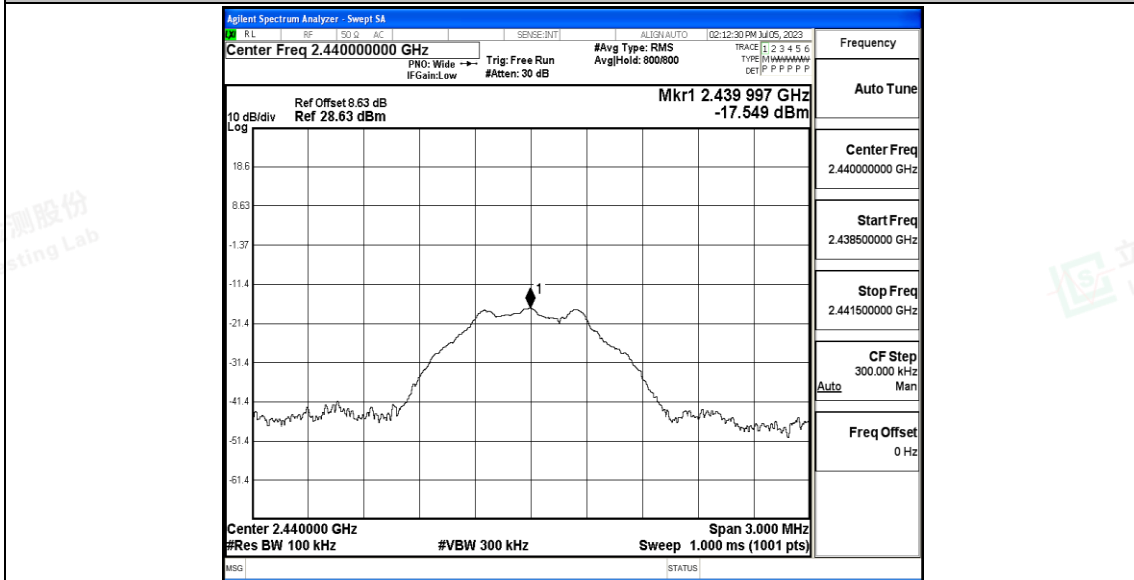


Test Graphs



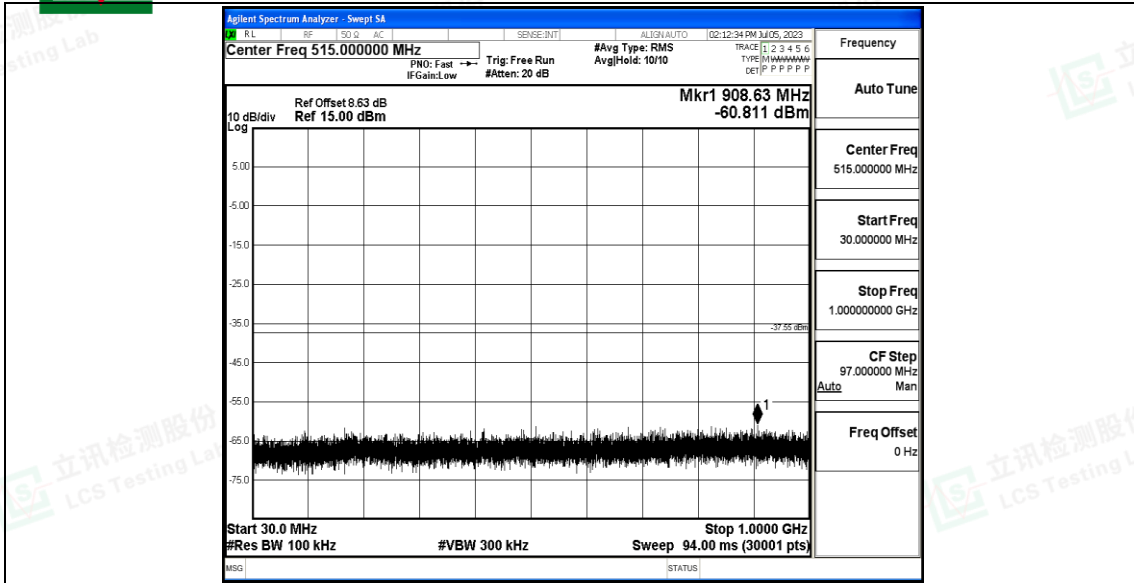


BLE\_Ant\_2440\_0~Reference

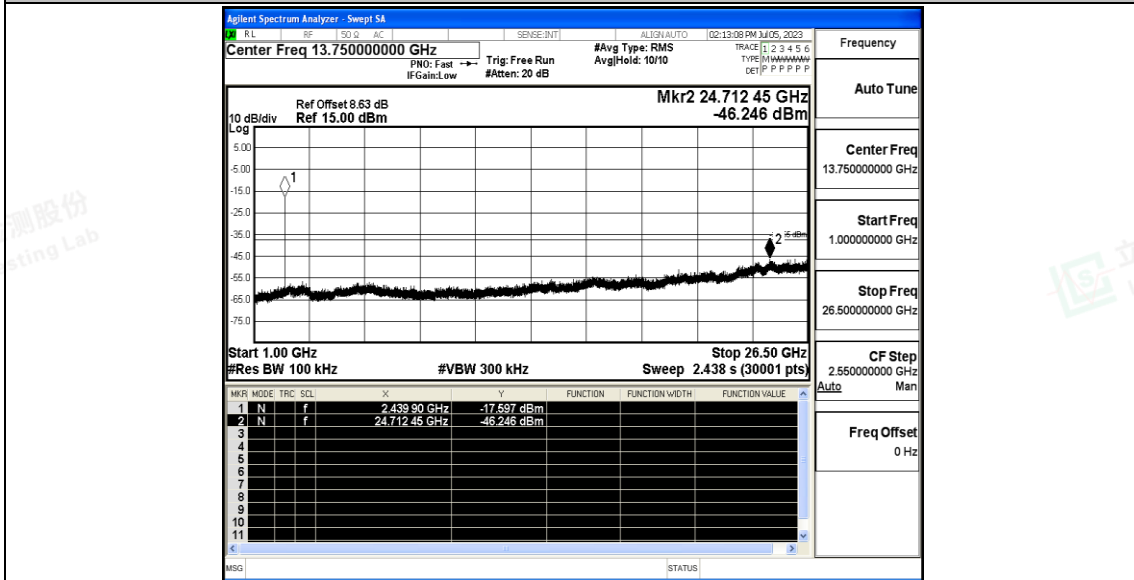


BLE\_Ant\_2440\_30~1000





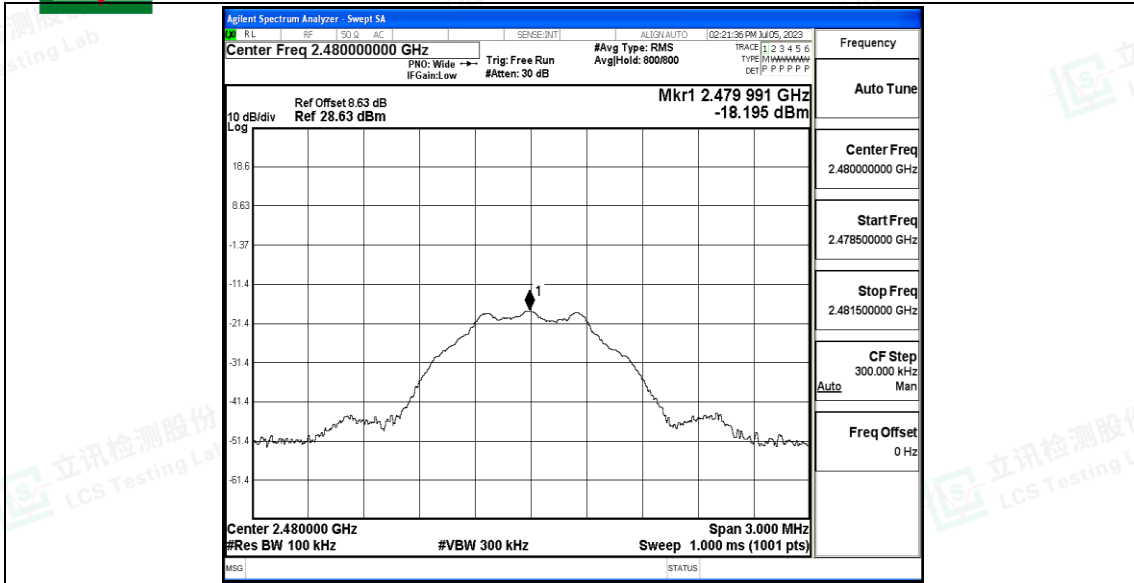
BLE\_Ant\_2440\_1000~26500



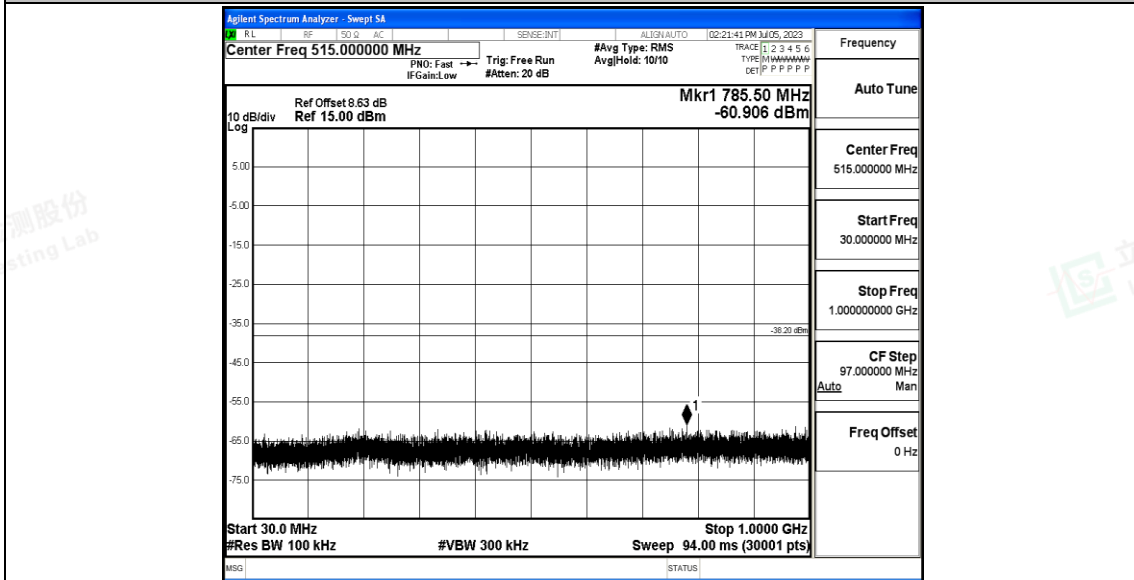
BLE\_Ant\_2480\_0~Reference





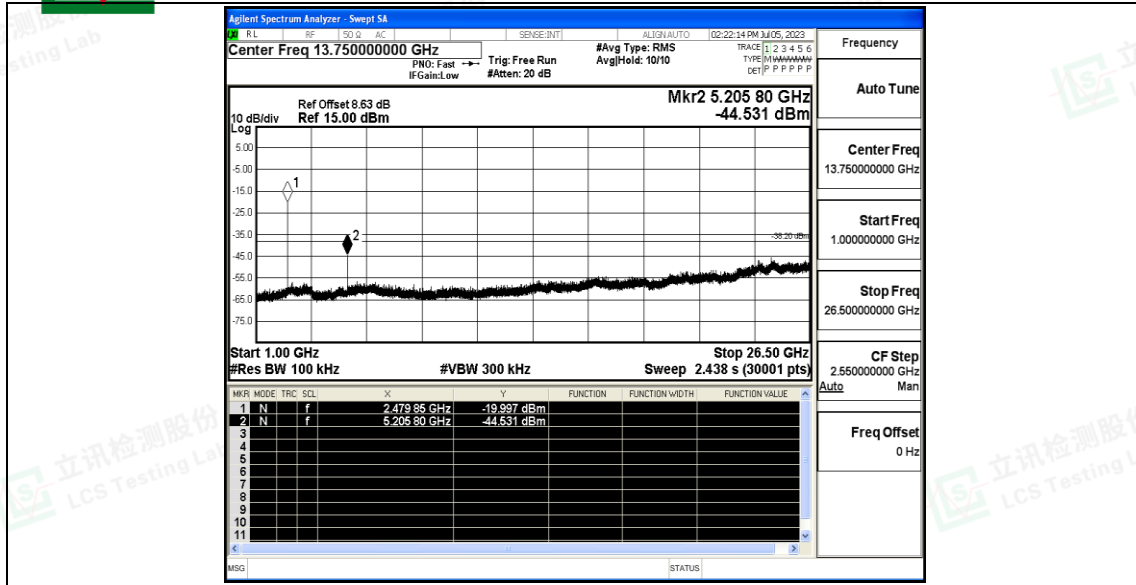


BLE\_Ant\_2480\_30~1000



BLE\_Ant\_2480\_1000~26500







## B.6 Duty Cycle

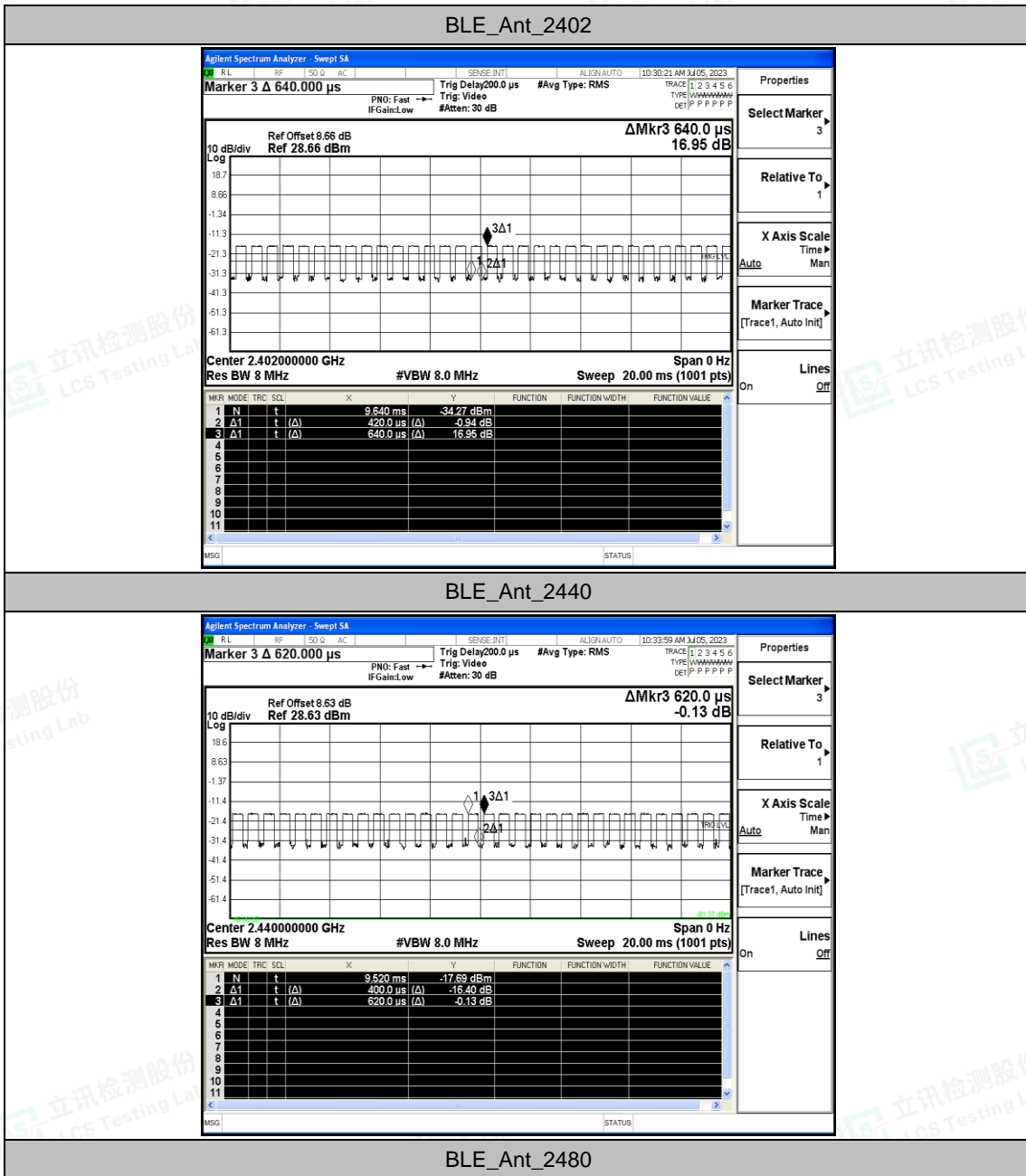
### Test Result

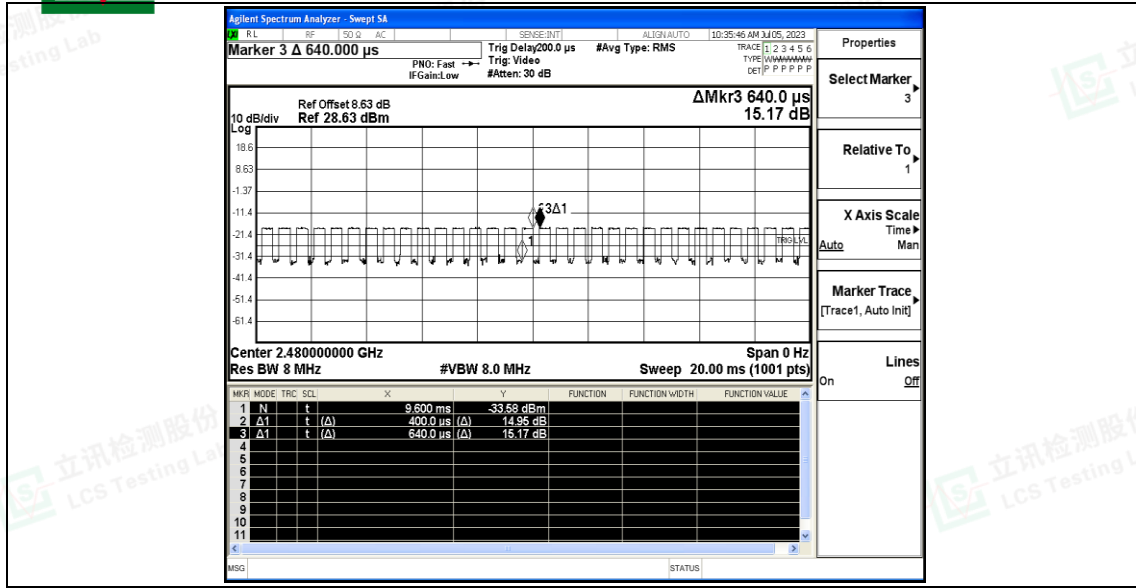
TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	1/T (KHz)	Limit	Verdict
BLE	Ant	2402	0.42	0.62	2.38	---	---
		2440	0.40	0.62	2.50	---	---
		2480	0.40	0.64	2.50	---	---





Test Graphs







## B.7 Emissions in Restricted Bands

### Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE	Ant	Low	2402	AV	2310.000	-58.23	≤-41.20	36.97	≤54	PASS
				AV	2389.250	-57.82	≤-41.20	37.38	≤54	PASS
				AV	2390.000	-57.84	≤-41.20	37.36	≤54	PASS
				Peak	2310.000	-53.18	≤-21.20	42.02	≤74	PASS
				Peak	2349.875	-48.05	≤-21.20	47.15	≤74	PASS
				Peak	2390.000	-53.62	≤-21.20	41.58	≤74	PASS
		High	2480	AV	2483.500	-57.53	≤-41.20	37.67	≤54	PASS
				AV	2499.680	-57.37	≤-41.20	37.83	≤54	PASS
				AV	2500.000	-57.38	≤-41.20	37.82	≤54	PASS
				Peak	2483.500	-52.79	≤-21.20	42.41	≤74	PASS
				Peak	2495.040	-48.45	≤-21.20	46.75	≤74	PASS
				Peak	2500.000	-51.17	≤-21.20	44.03	≤74	PASS

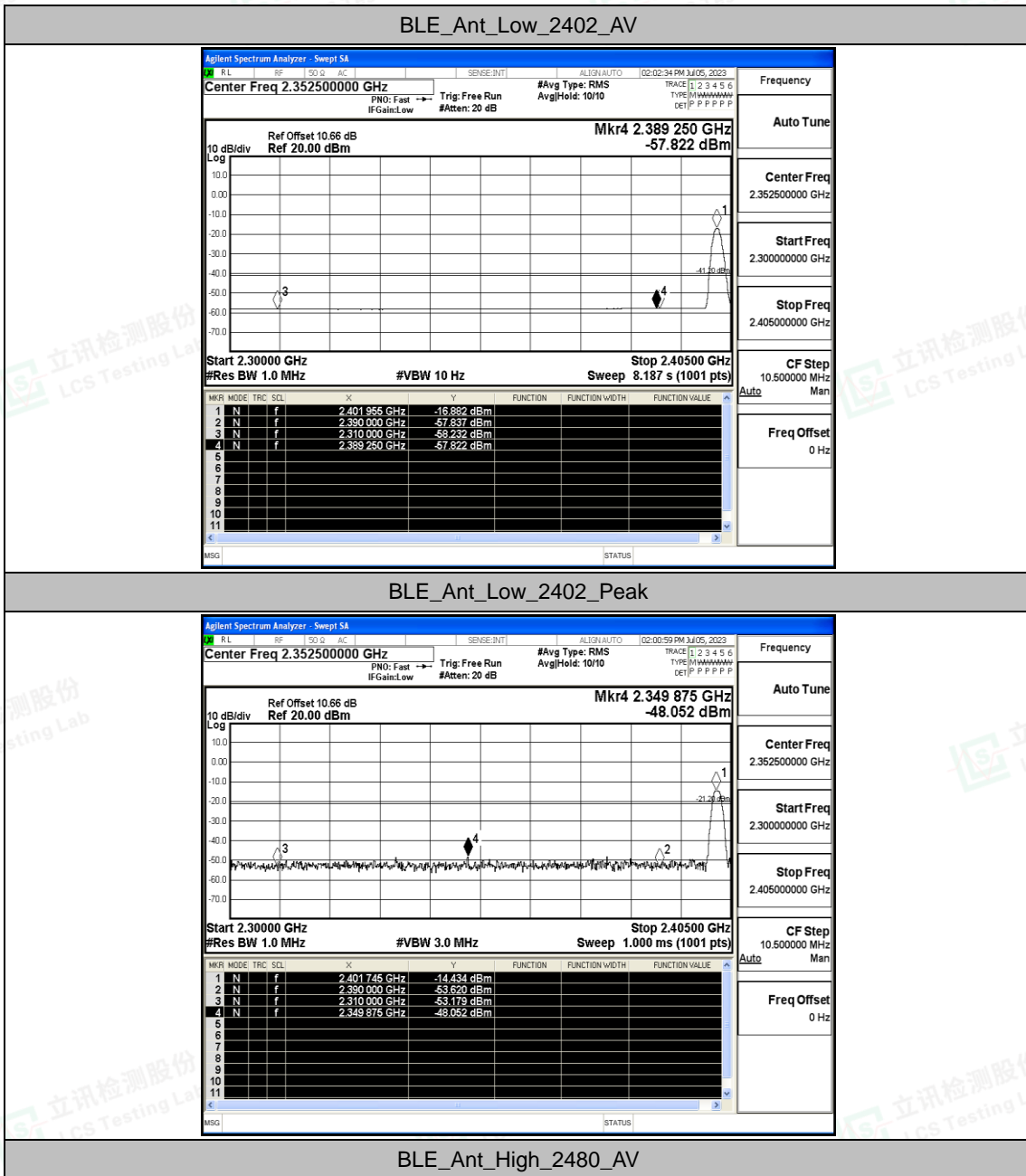
Note:

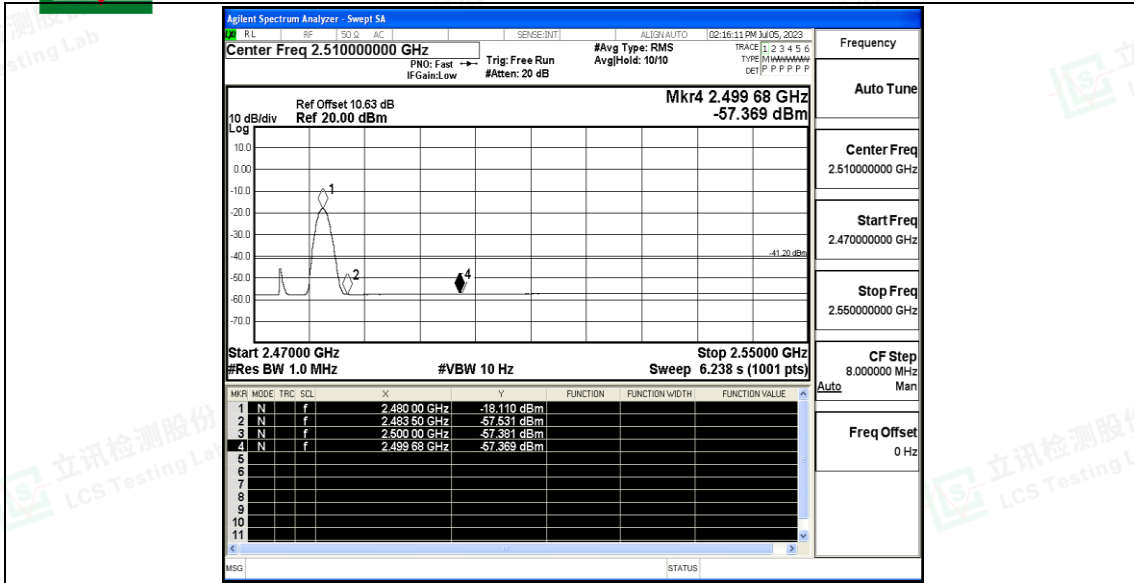
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.





Test Graphs





BLE\_Ant\_High\_2480\_Peak

