



Appendix A

RF Test Data for BLE (Conducted Measurement)

Product Name: Treadmill

Test Model: BA03

Environmental Conditions

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



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A.1 DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.664	2401.664	2402.328	0.5	PASS
		2440	0.660	2439.664	2440.324	0.5	PASS
		2480	0.660	2479.664	2480.324	0.5	PASS



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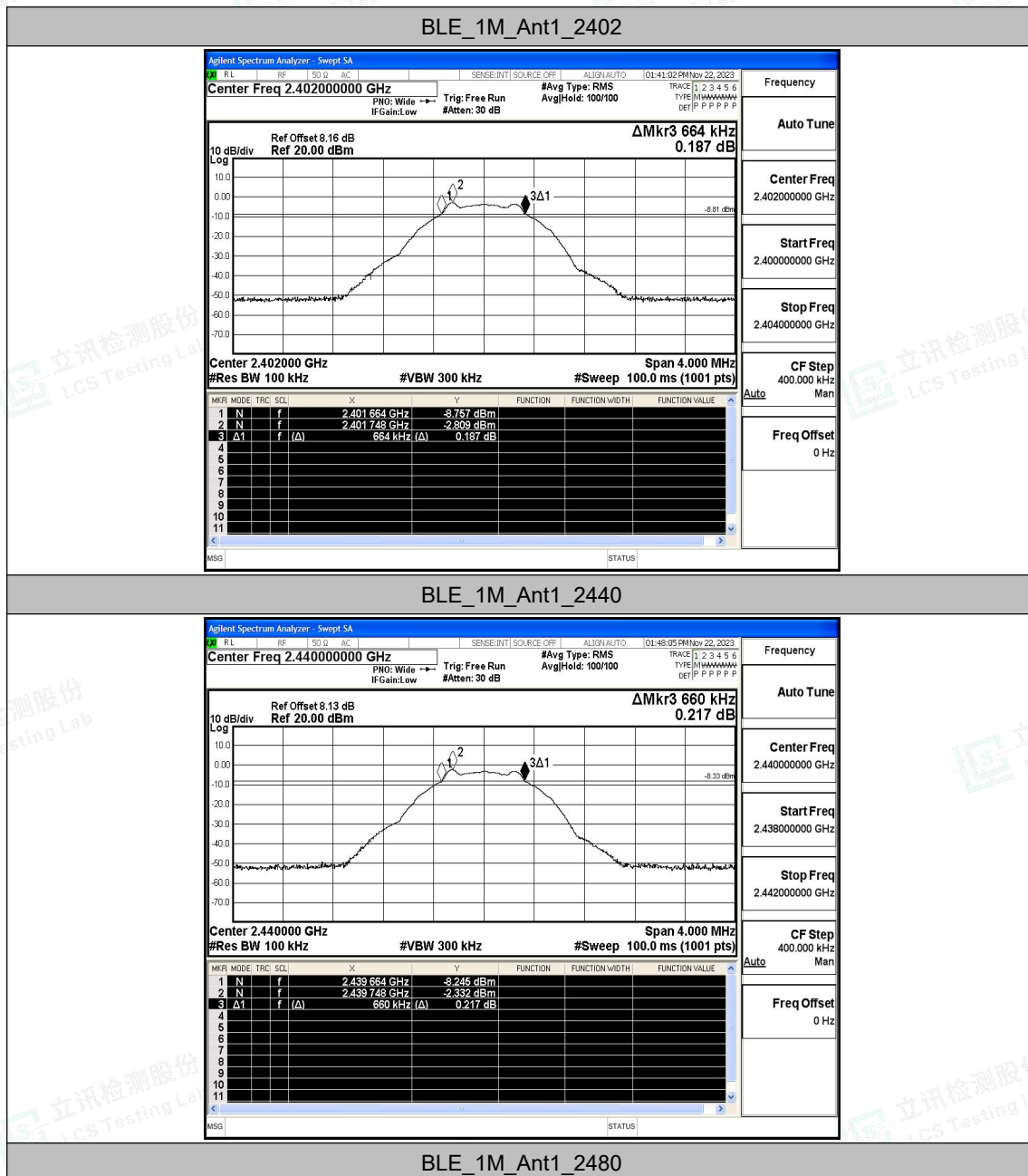
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Test Graphs

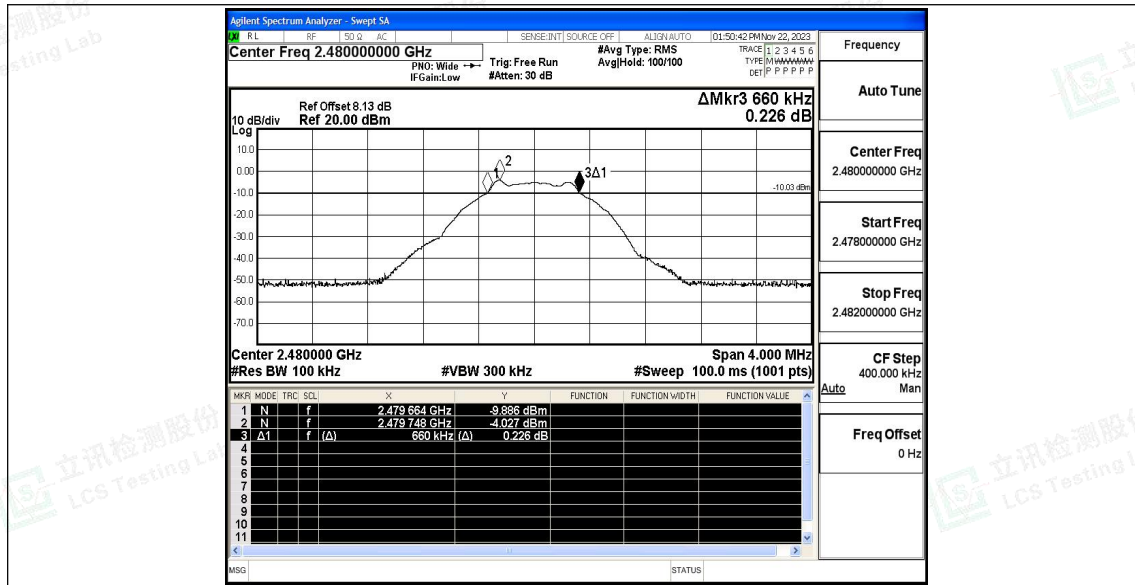


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A.2 Maximum Peak Conducted Output Power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-2.33	≤30	PASS
		2440	-1.97	≤30	PASS
		2480	-3.65	≤30	PASS



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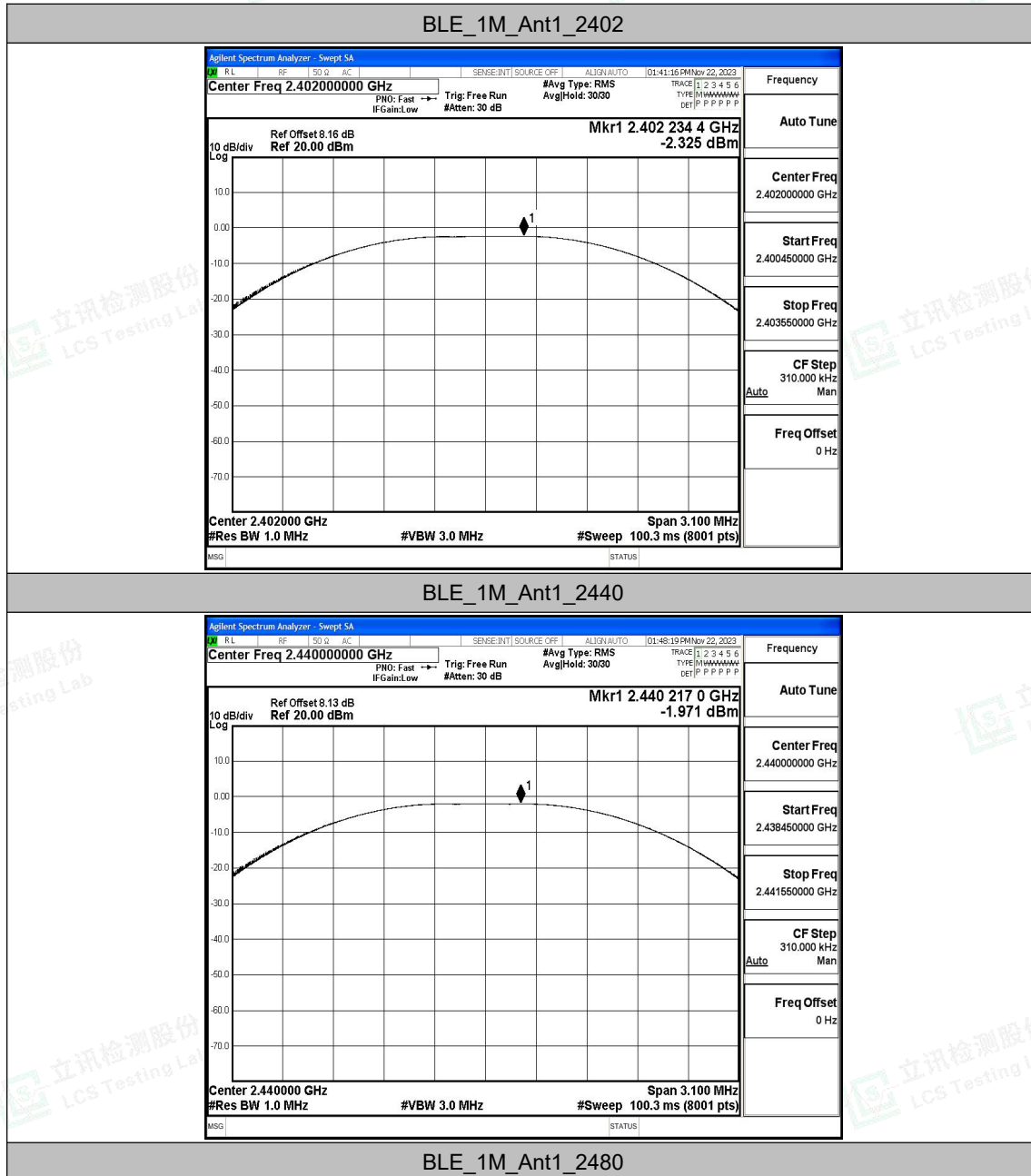
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Test Graphs

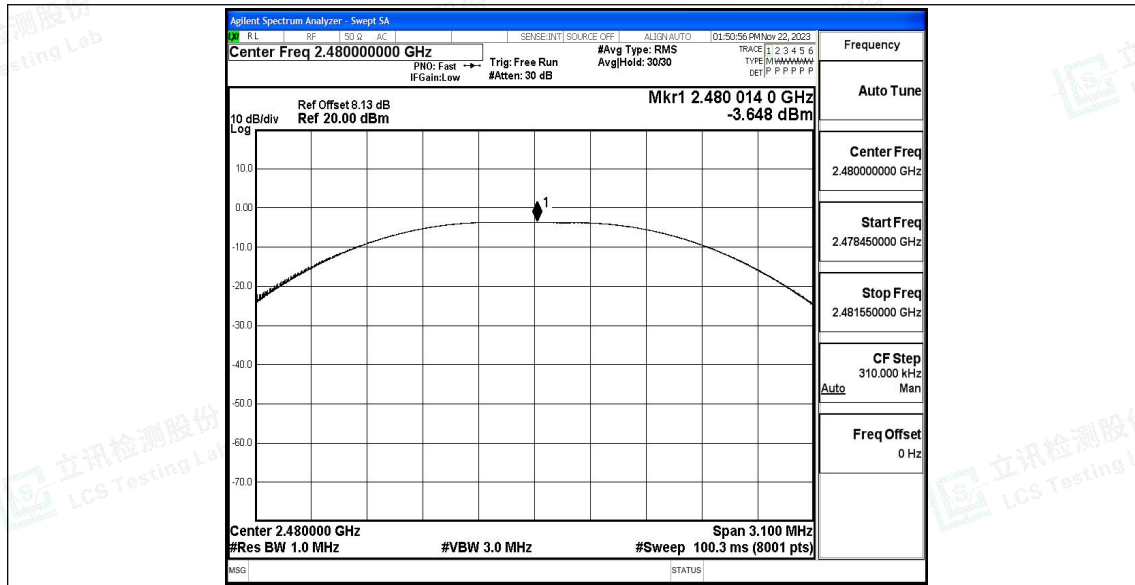


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A.3 Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-18.72	≤8.00	PASS
		2440	-18.35	≤8.00	PASS
		2480	-19.96	≤8.00	PASS



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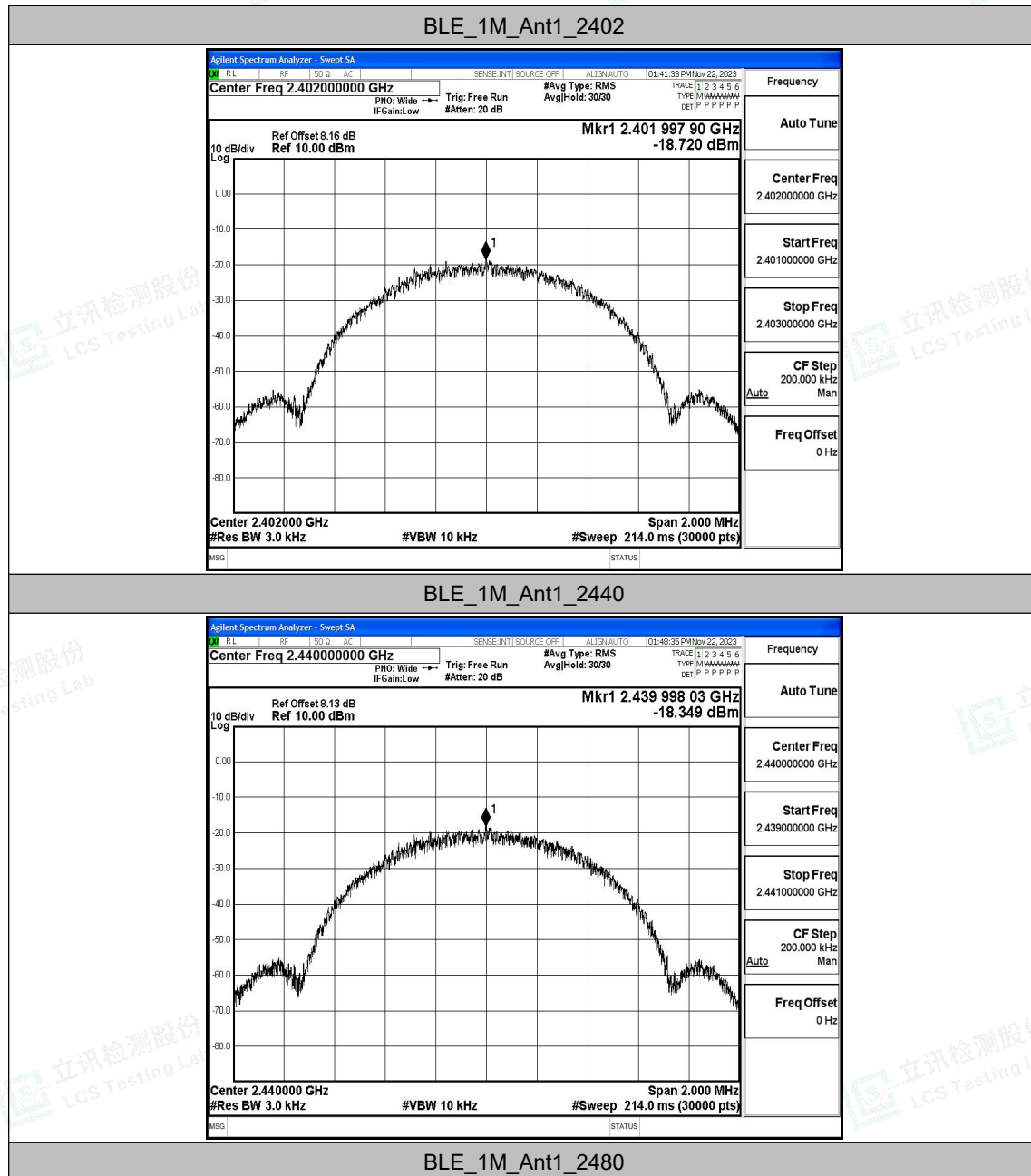
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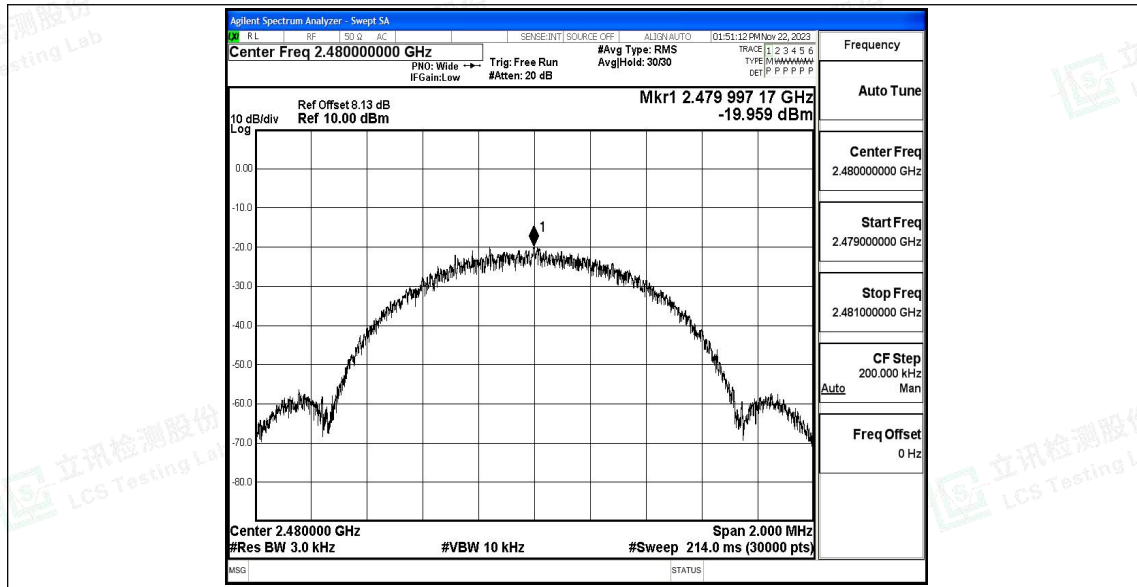


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A.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.82	-60.74	≤-22.82	PASS
		High	2480	-4.52	-58.77	≤-24.52	PASS



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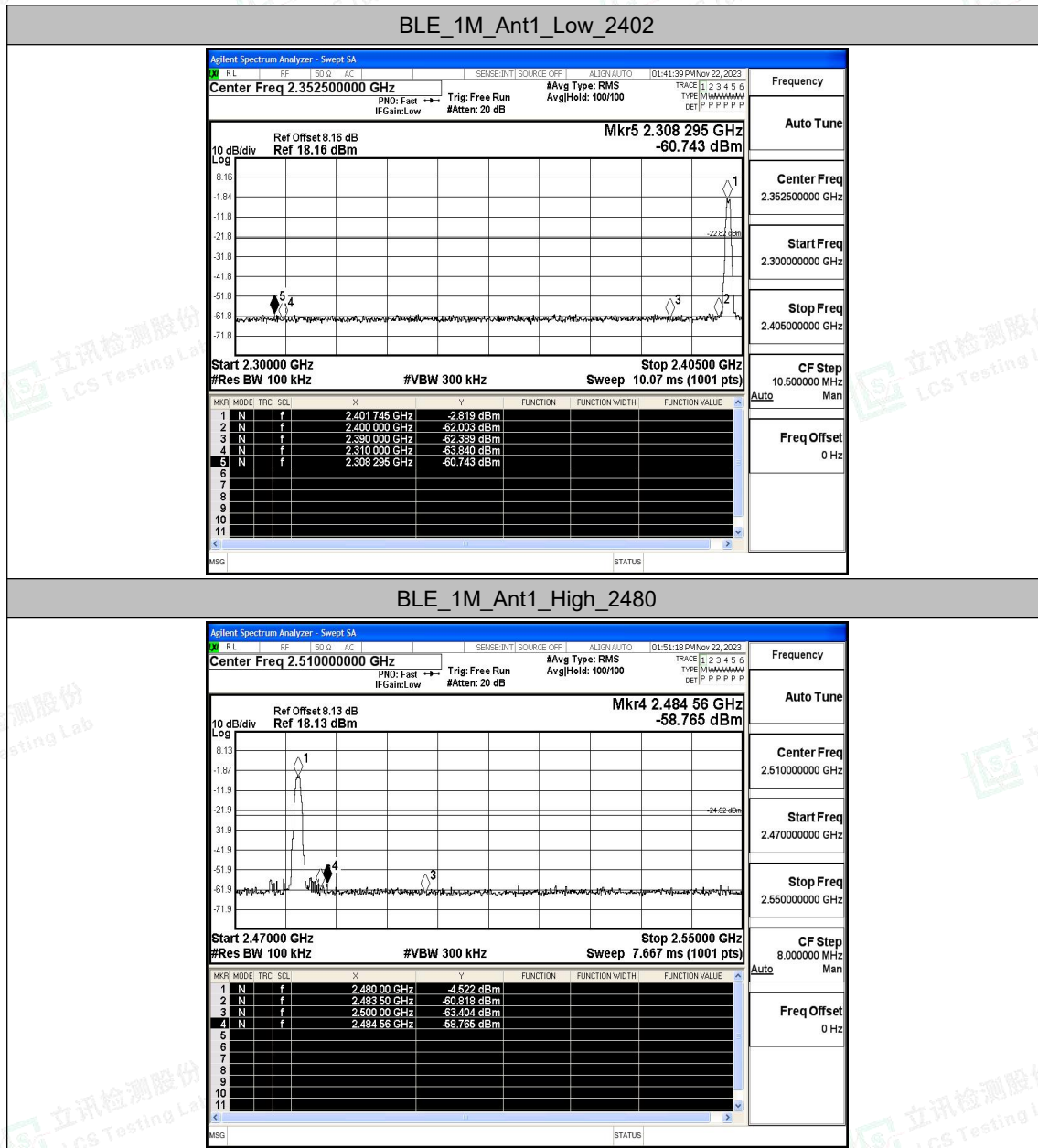
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Test Graphs



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A.5 Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-2.82	-2.82	---	PASS
			30~1000	-2.82	-61.93	≤-22.82	PASS
			1000~26500	-2.82	-49.41	≤-22.82	PASS
		2440	Reference	-2.34	-2.34	---	PASS
			30~1000	-2.34	-61.72	≤-22.34	PASS
			1000~26500	-2.34	-48.81	≤-22.34	PASS
		2480	Reference	-4.05	-4.05	---	PASS
			30~1000	-4.05	-61.48	≤-24.05	PASS
			1000~26500	-4.05	-48.68	≤-24.05	PASS



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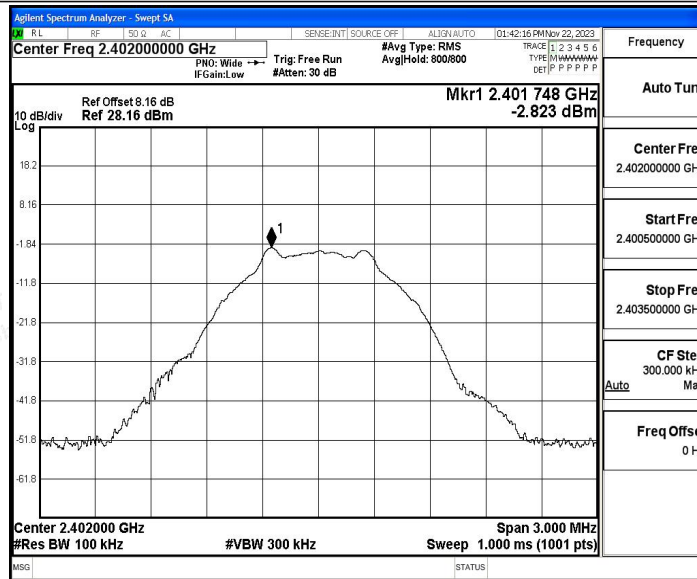
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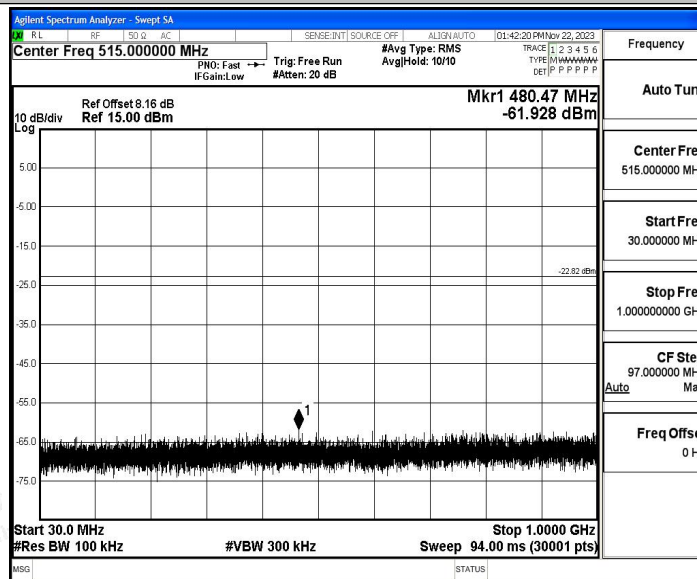


Test Graphs

BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



BLE_1M_Ant1_2402_1000~26500

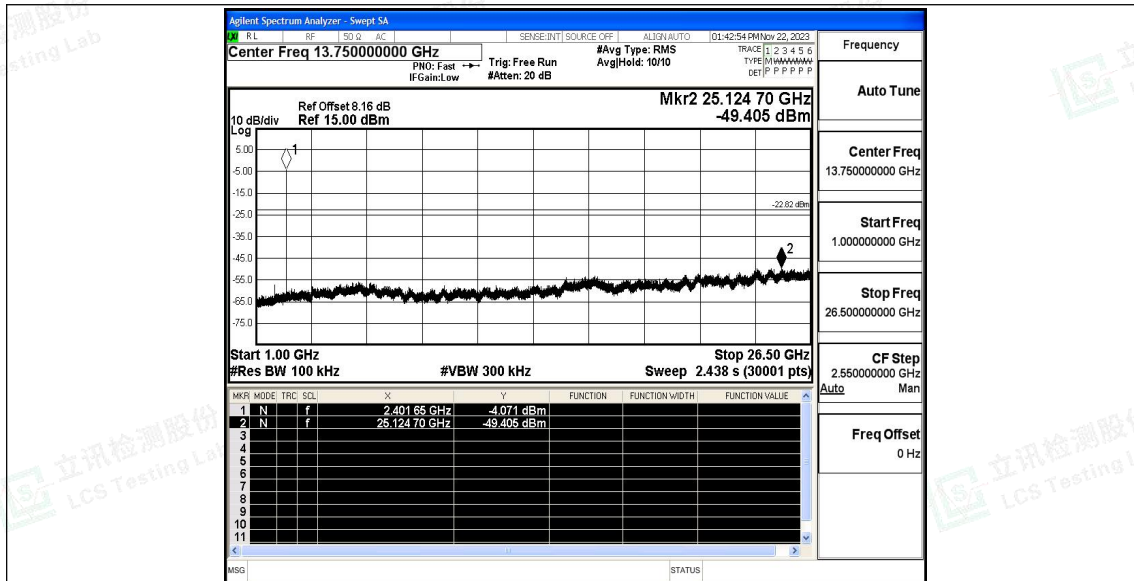


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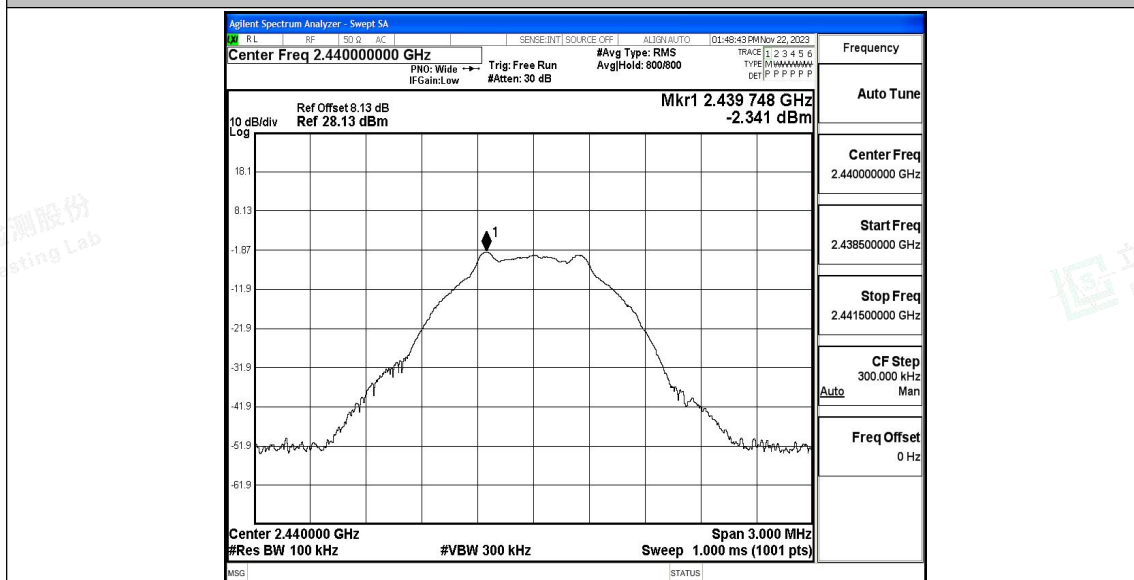
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BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000

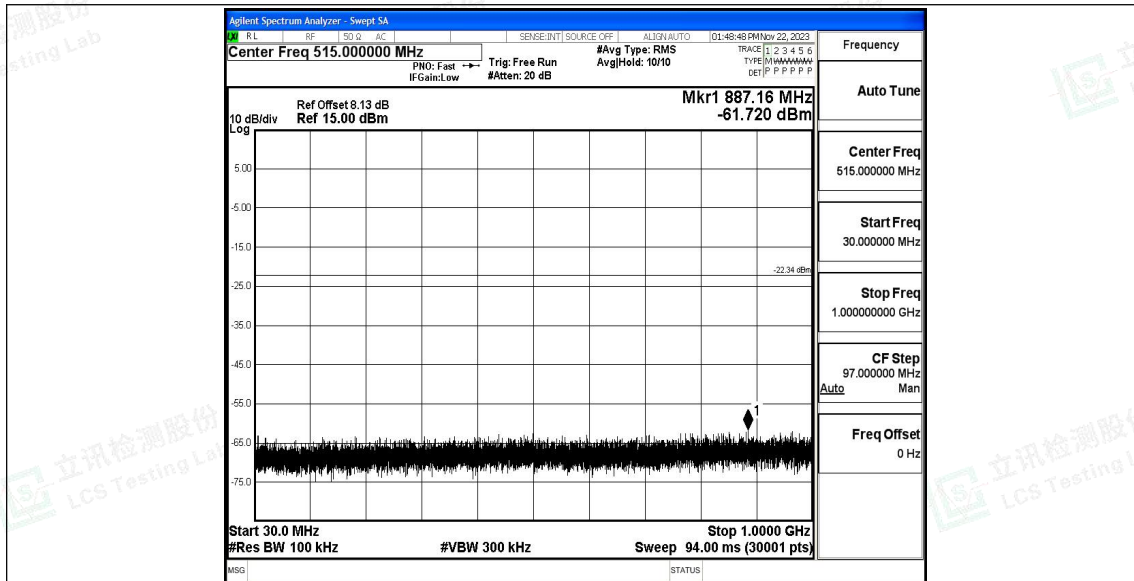


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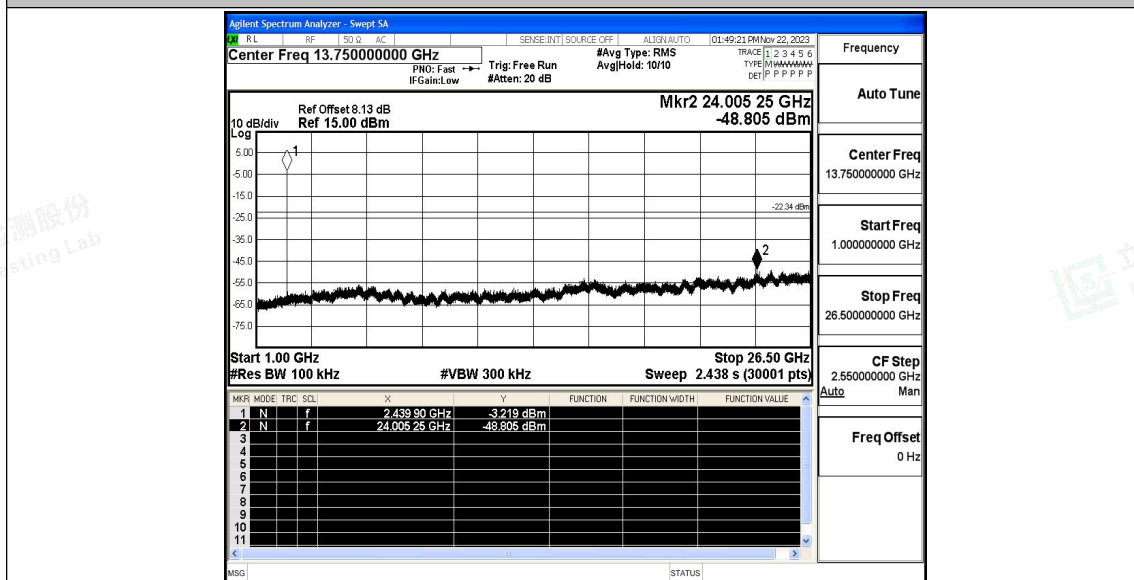
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BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference

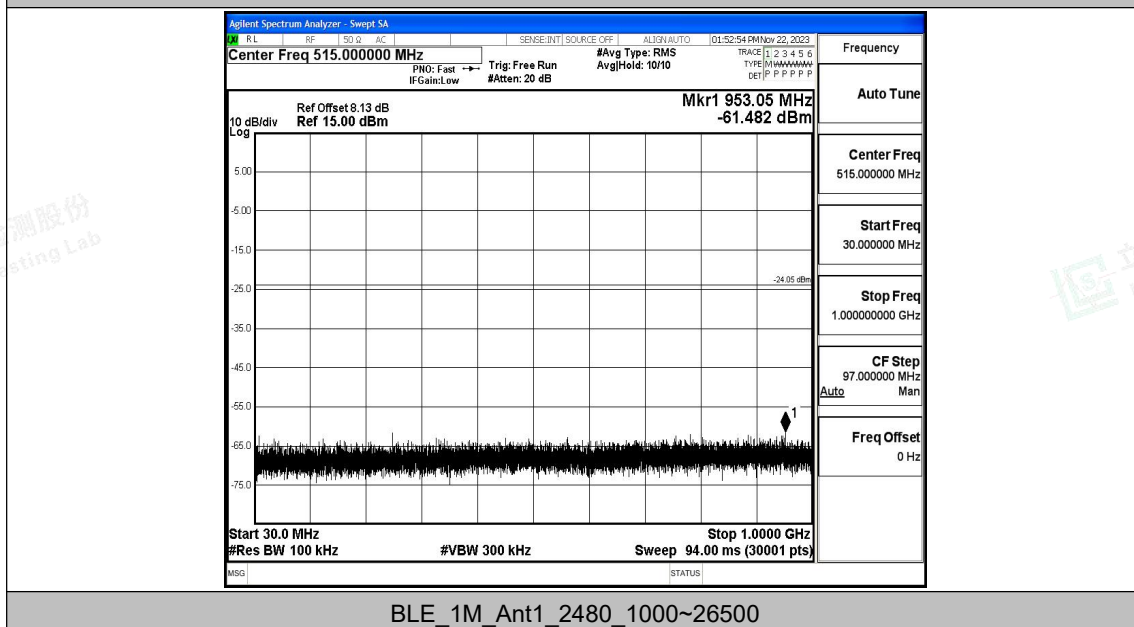
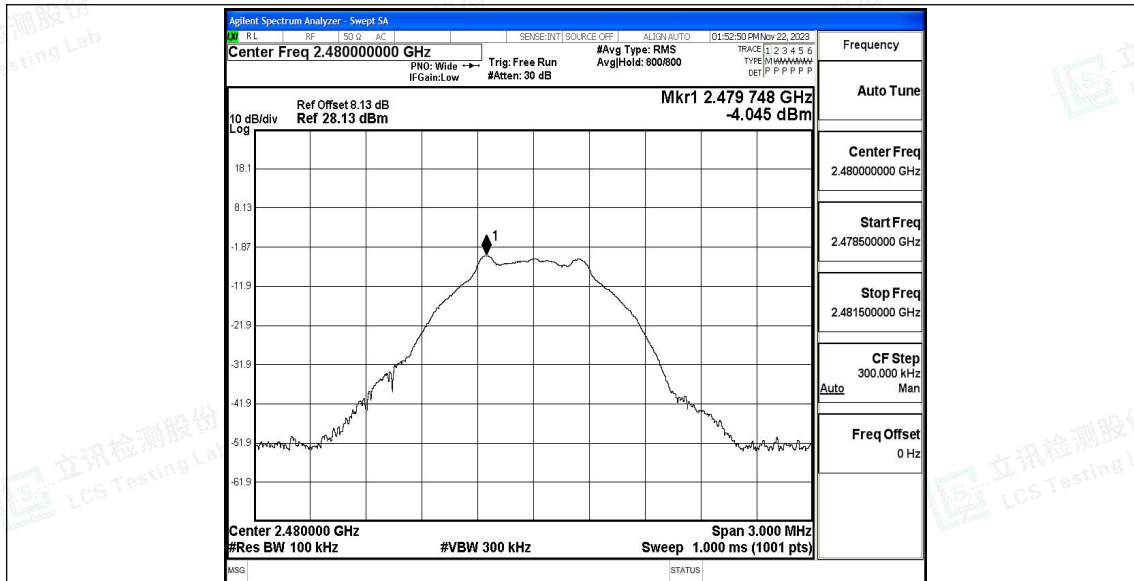


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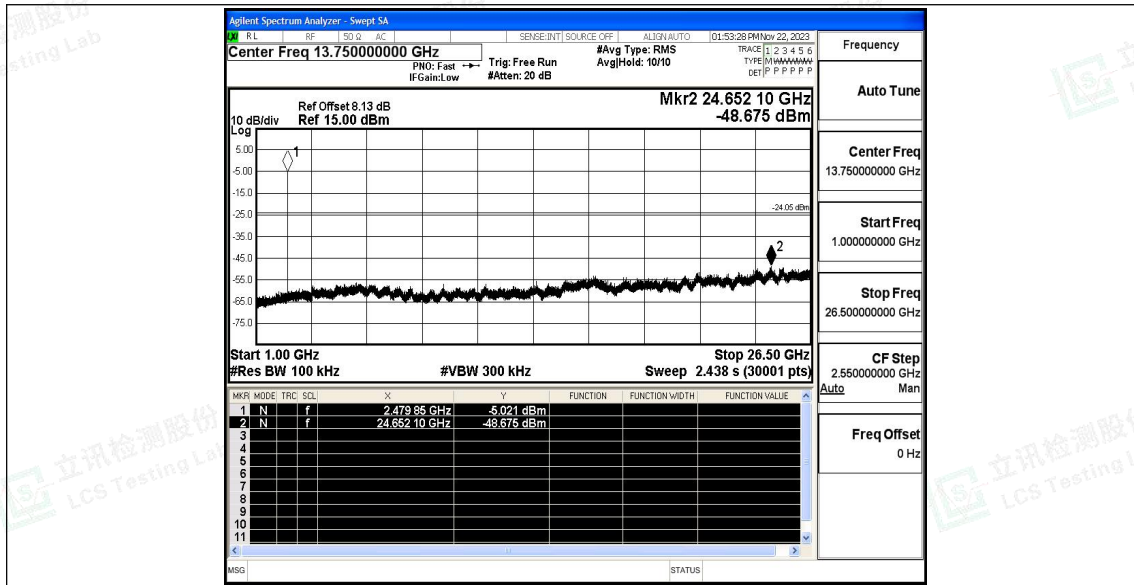


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A.6 Duty Cycle

Test Result

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	DC [%]	xFactor	1/T	Limit	Verdict
BLE_1M	Ant1	2402	1.64	1.88	87.36	0.59	0.61	---	---
		2440	1.64	1.88	87.39	0.59	0.61	---	---
		2480	1.64	1.88	87.39	0.59	0.61	---	---



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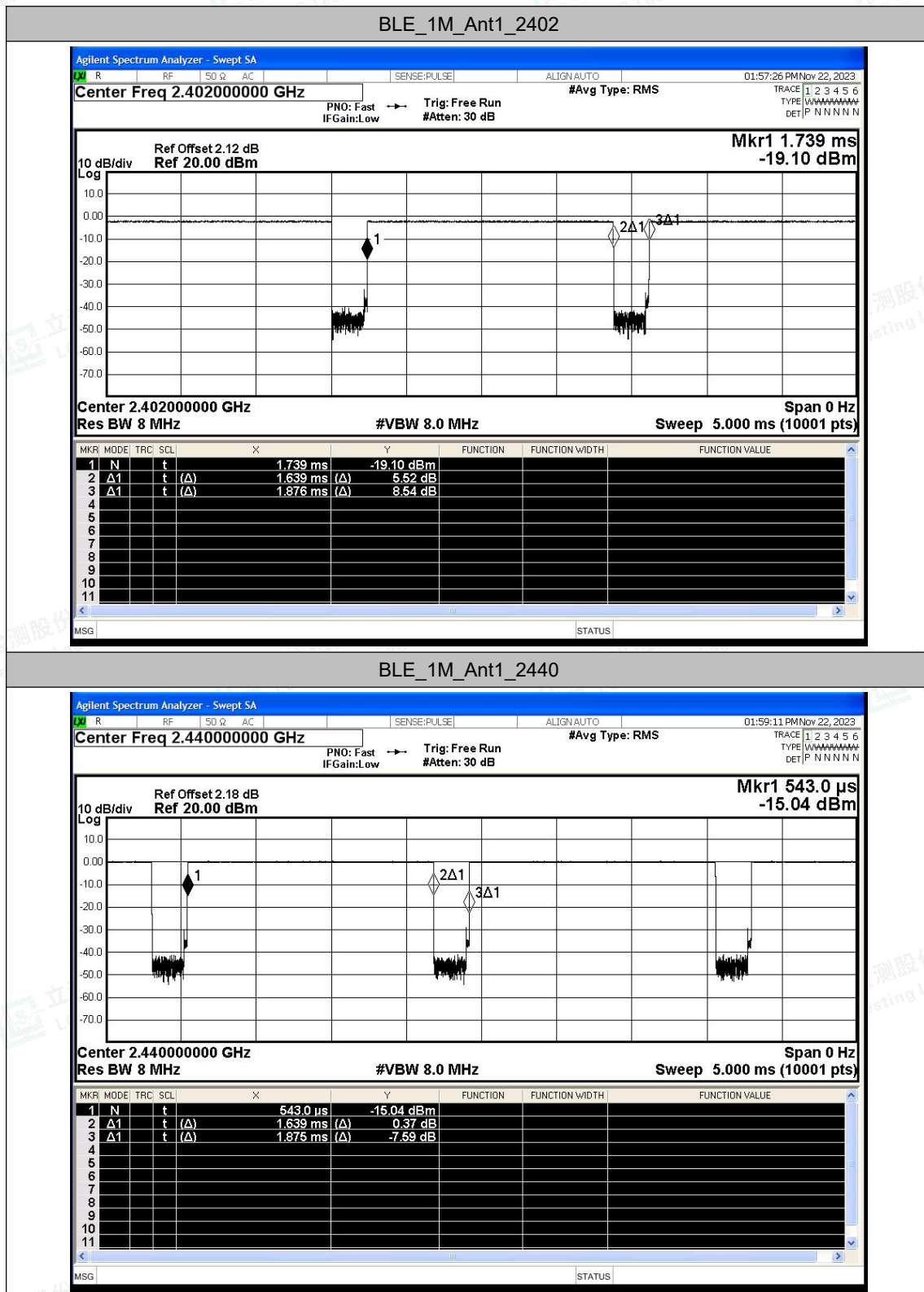
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Test Graphs

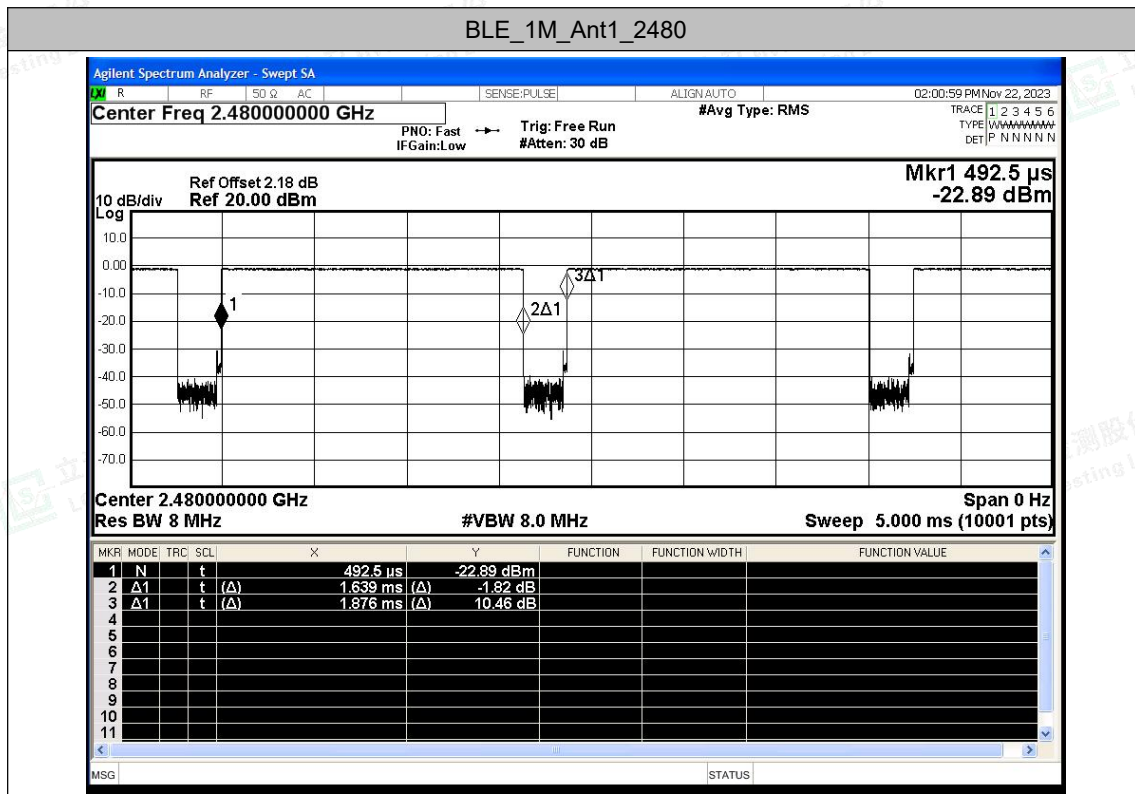


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A.7 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-58.82	≤-41.20	36.38	≤54	PASS
				AV	2386.415	-58.49	≤-41.20	36.71	≤54	PASS
				AV	2390.000	-58.61	≤-41.20	36.59	≤54	PASS
				Peak	2310.000	-52.3	≤-21.20	42.90	≤74	PASS
				Peak	2387.990	-48.73	≤-21.20	46.47	≤74	PASS
				Peak	2390.000	-52.53	≤-21.20	42.67	≤74	PASS
		High	2480	AV	2483.500	-57.41	≤-41.20	37.79	≤54	PASS
				AV	2483.520	-57.41	≤-41.20	37.79	≤54	PASS
				AV	2500.000	-59.05	≤-41.20	36.15	≤54	PASS
				Peak	2483.500	-52.75	≤-21.20	42.45	≤74	PASS
				Peak	2495.600	-49.2	≤-21.20	46.00	≤74	PASS
				Peak	2500.000	-54.21	≤-21.20	40.99	≤74	PASS

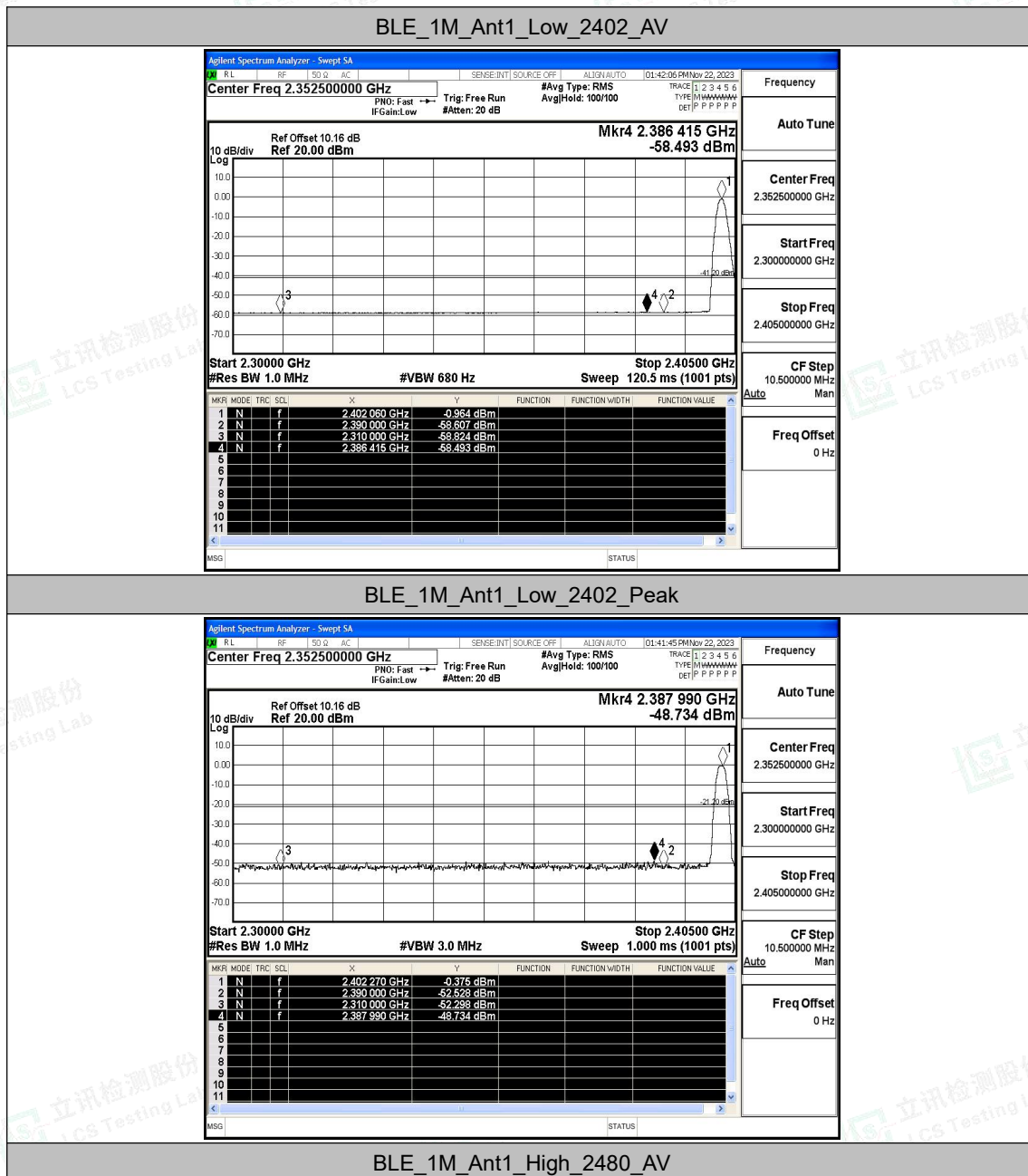
Note:

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

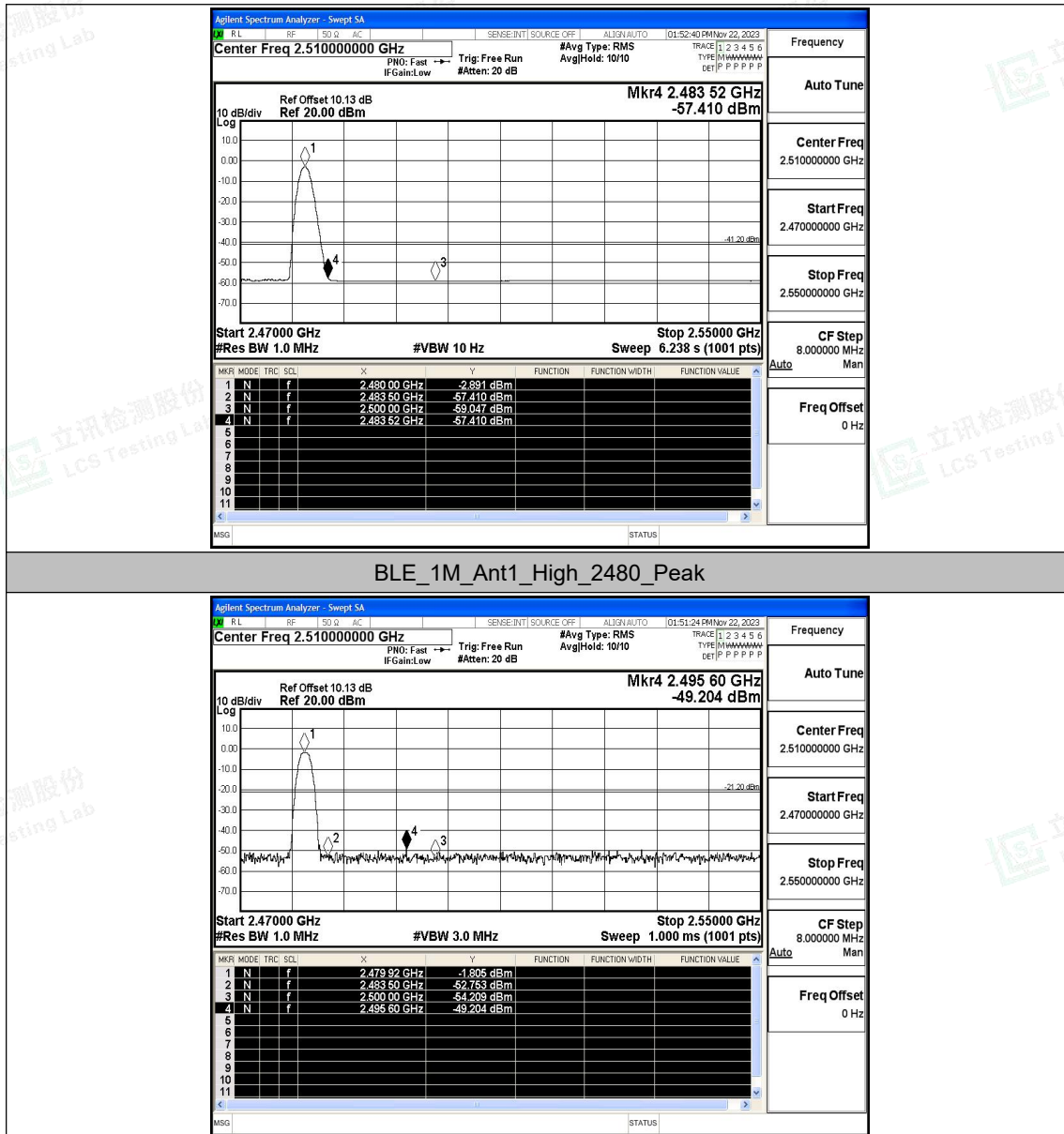


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