



Appendix B

RF Test Data for BLE (Conducted Measurement)

Product Name: Bluetooth Headset

Test Model: A102

Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Jack Cheng
Supervised by:	Li huan





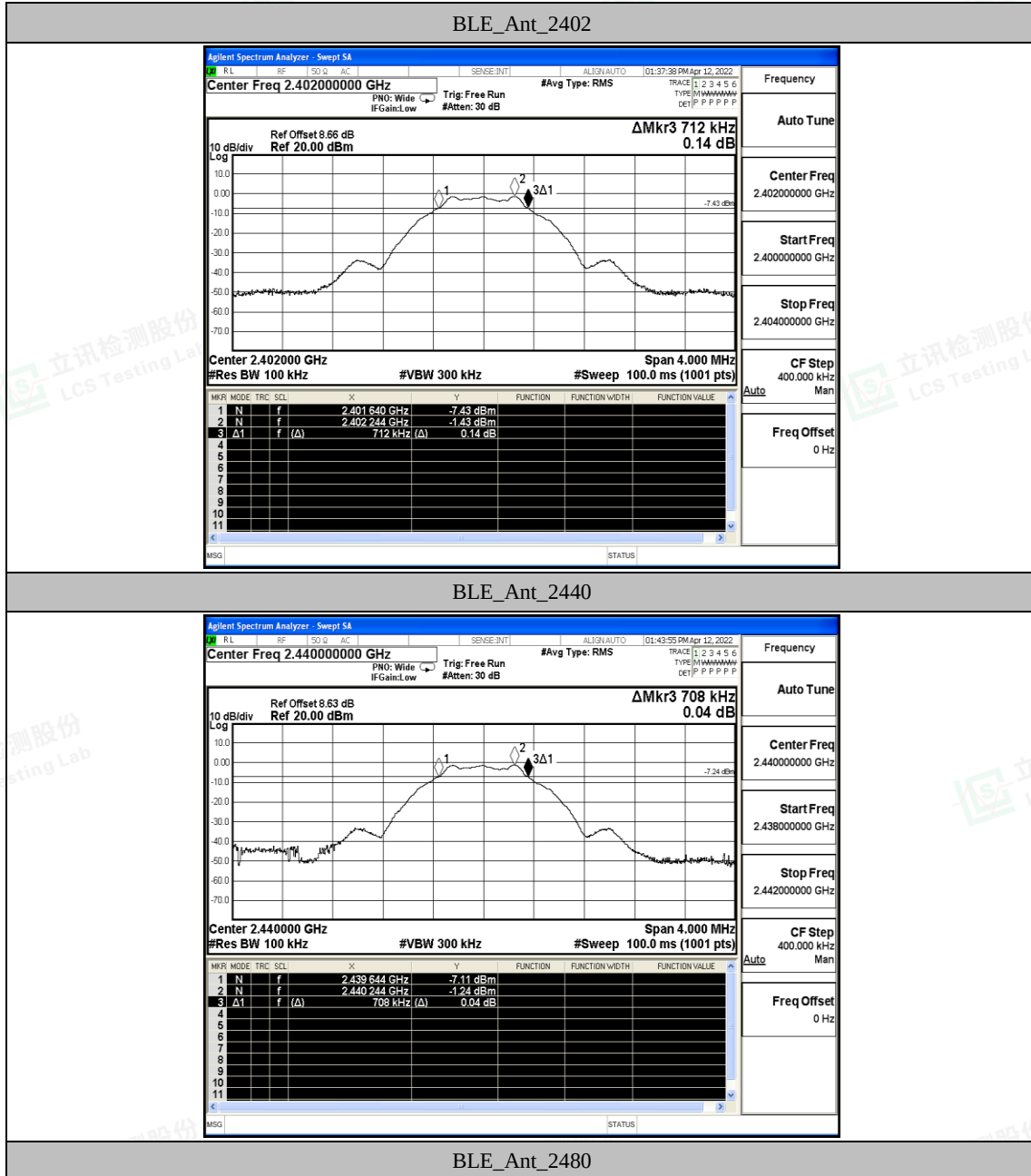
B.1 6dB Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant	2402	0.712	2401.640	2402.352	0.5	PASS
		2440	0.708	2439.644	2440.352	0.5	PASS
		2480	0.716	2479.640	2480.356	0.5	PASS



Test Graphs

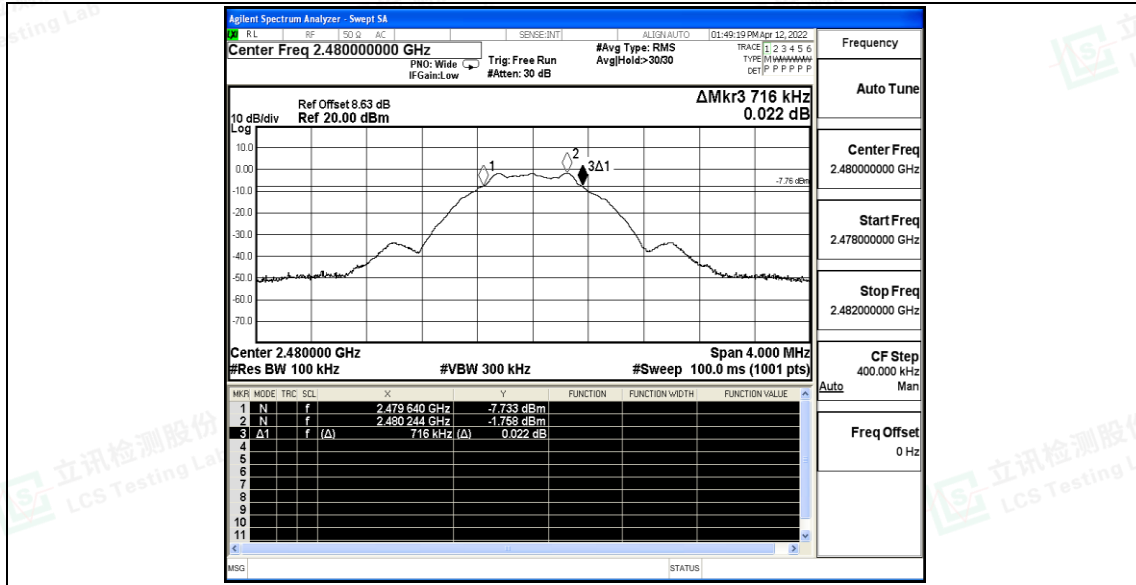


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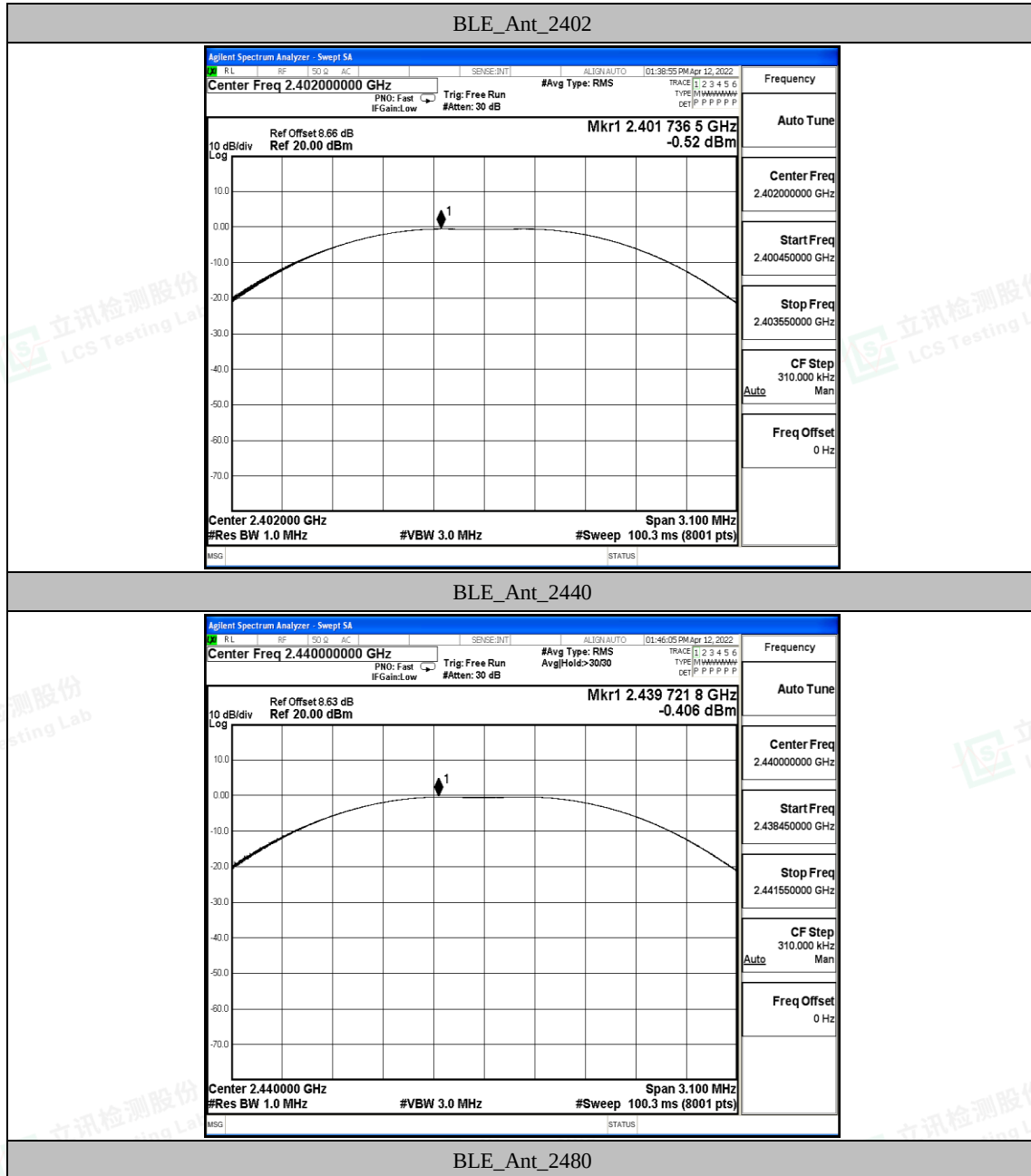
B.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant	2402	-0.52	≤30	PASS
		2440	-0.41	≤30	PASS
		2480	-0.95	≤30	PASS



Test Graphs

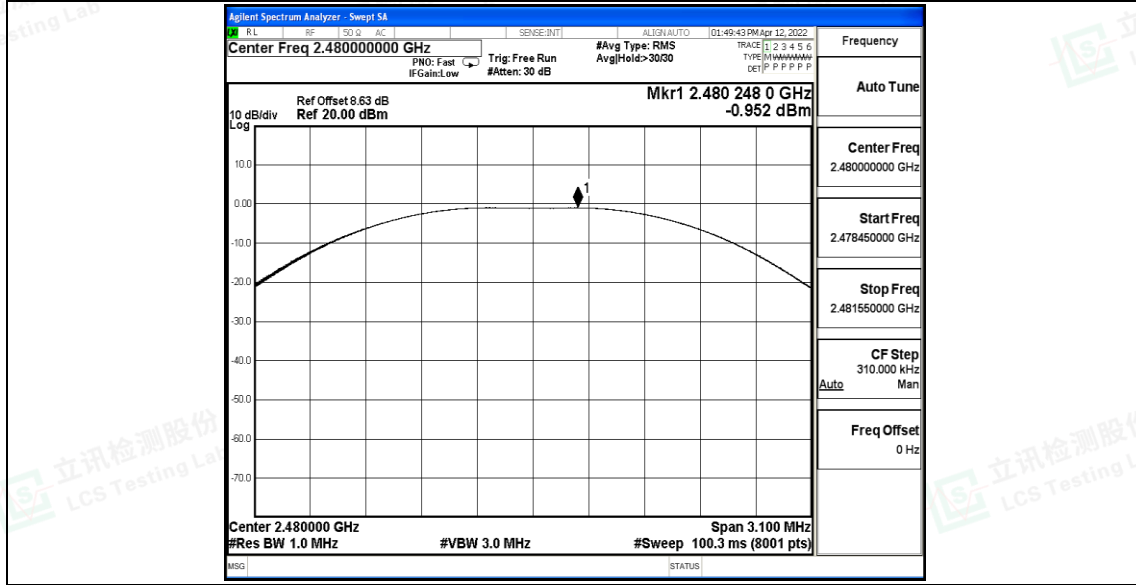


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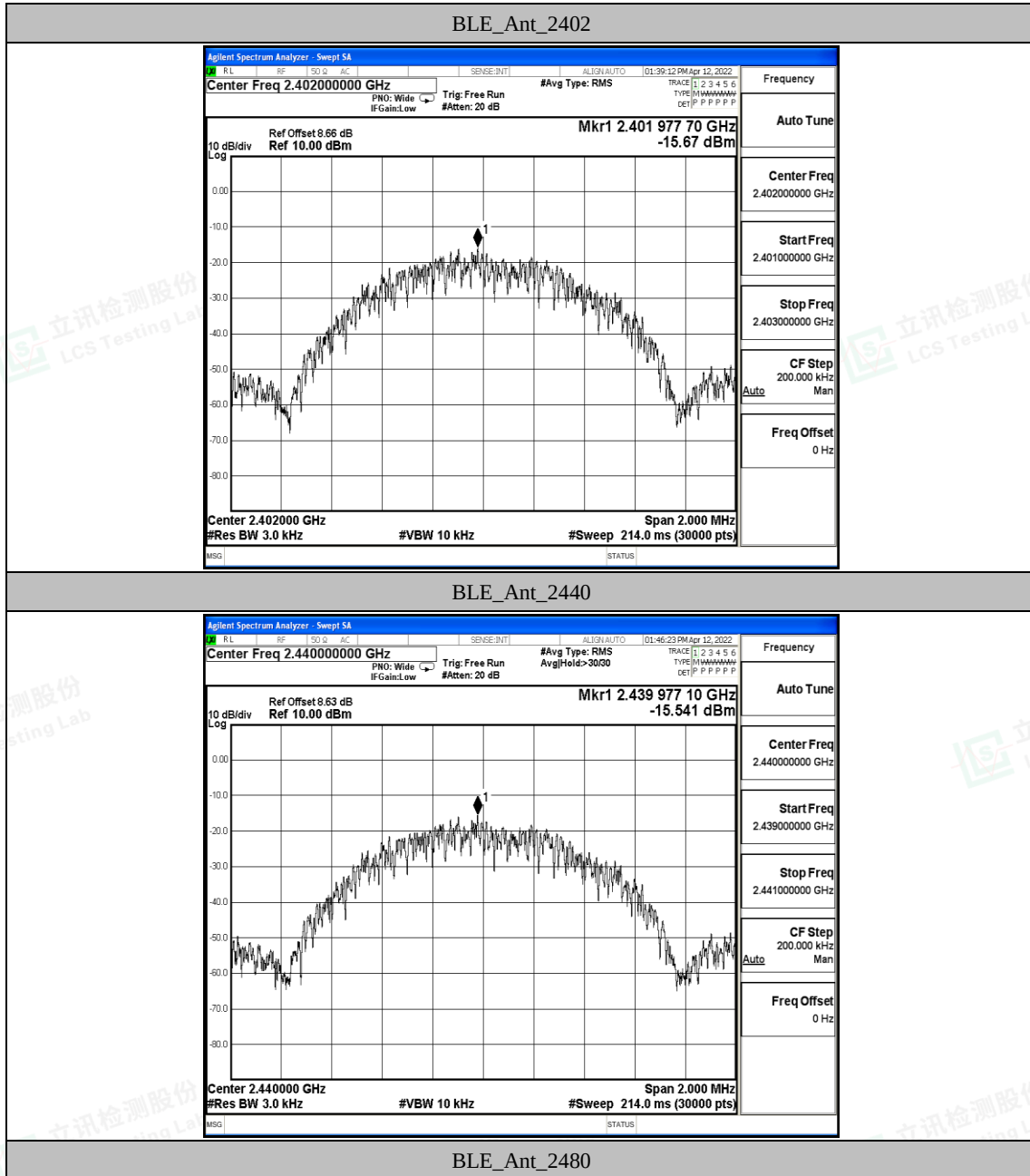
B.3 Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE	Ant	2402	-15.67	≤ 8.00	PASS
		2440	-15.54	≤ 8.00	PASS
		2480	-16.27	≤ 8.00	PASS



Test Graphs

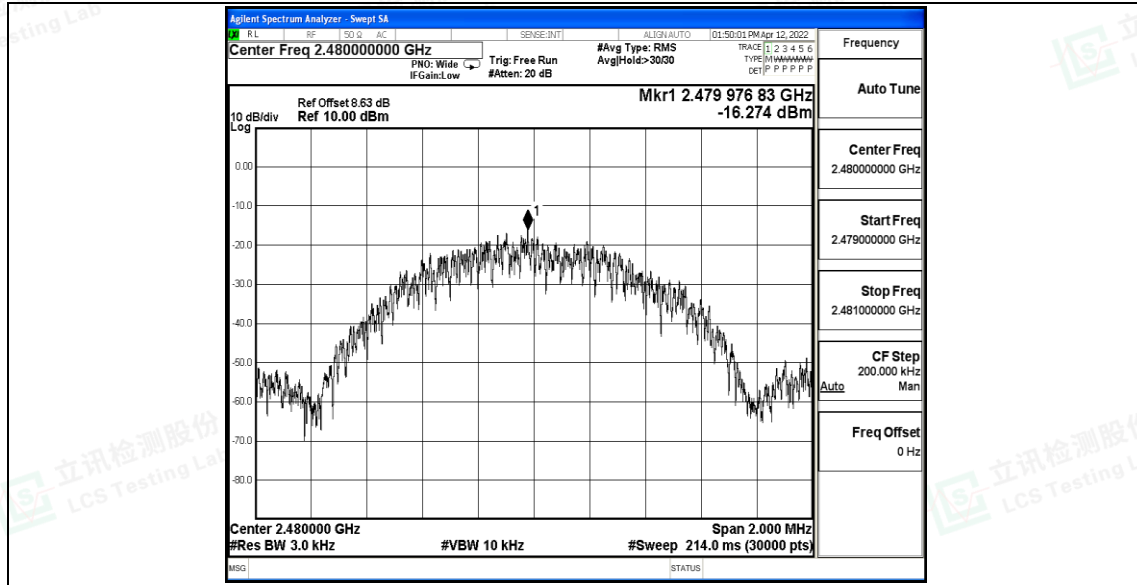


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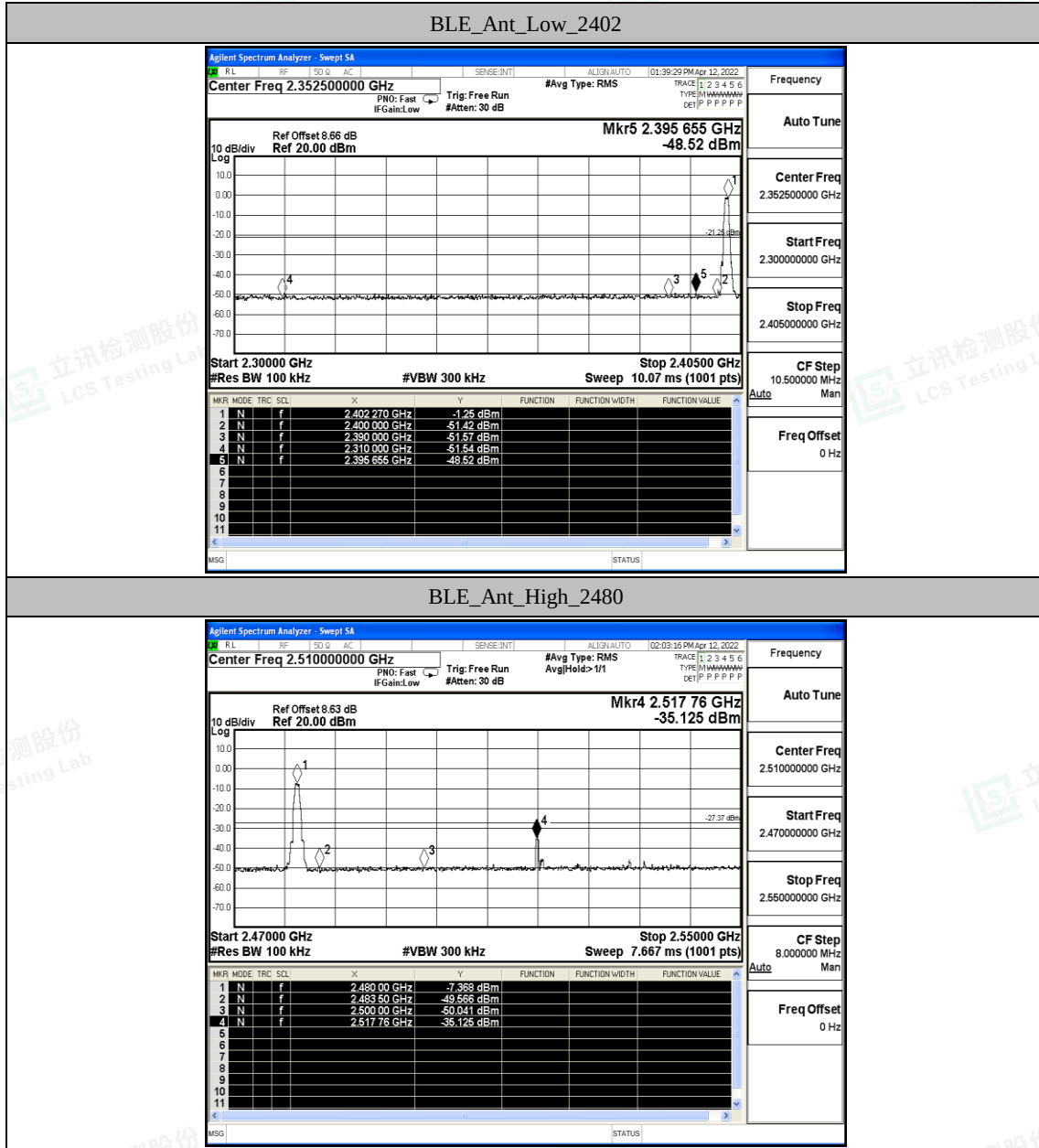
B.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant	Low	2402	-1.25	-48.52	≤ -21.25	PASS
		High	2480	-7.37	-35.13	≤ -27.37	PASS



Test Graphs



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B.5 Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant	2402	Reference	-1.54	-1.54	---	PASS
			30~1000	-1.54	-60.11	≤-21.54	PASS
			1000~26500	-1.54	-45.78	≤-21.54	PASS
		2440	Reference	-1.30	-1.30	---	PASS
		2480	Reference	-7.63	-7.63	---	PASS
			30~1000	-7.63	-55.75	≤-27.63	PASS
			1000~26500	-7.63	-46.49	≤-27.63	PASS



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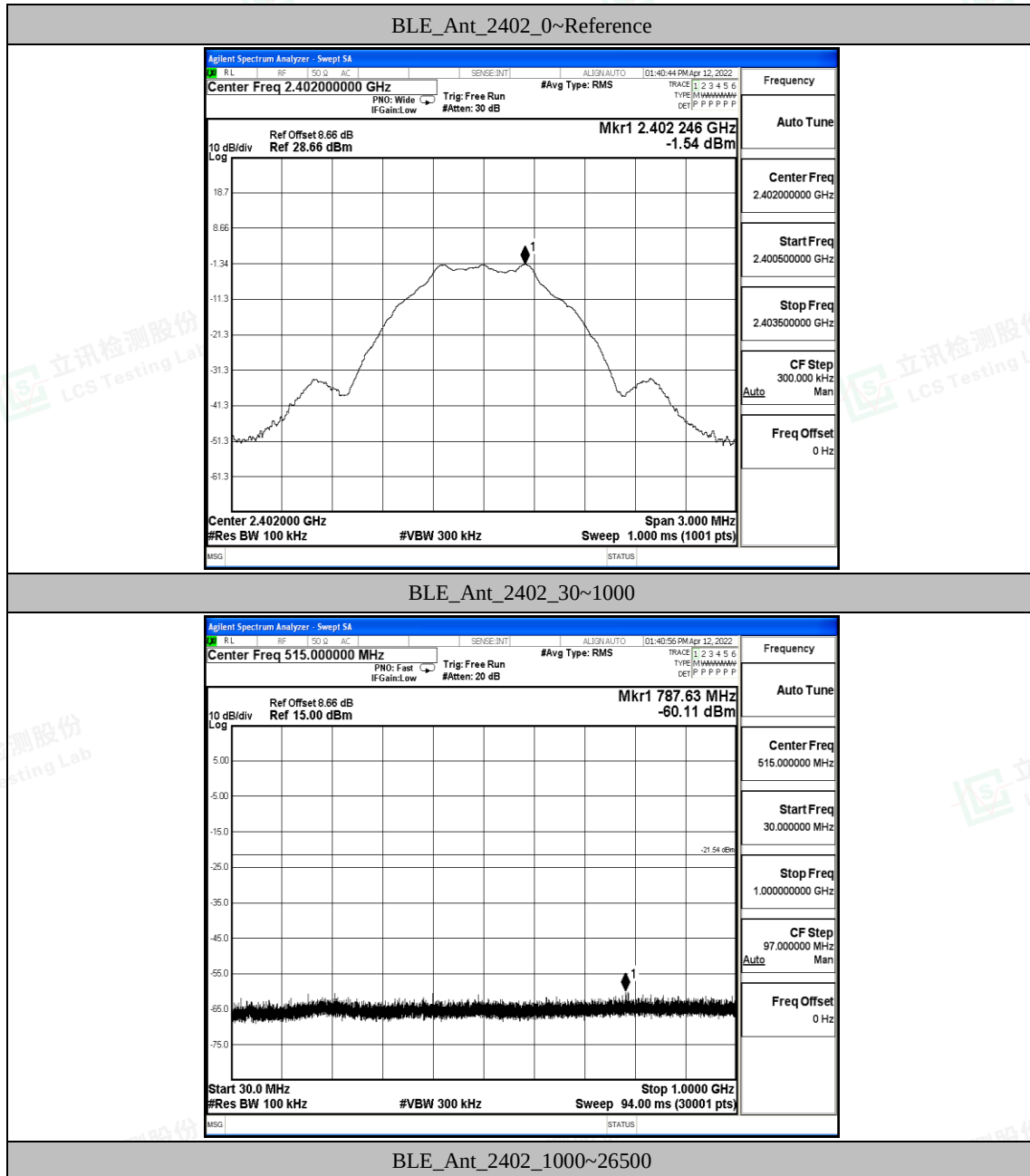
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Test Graphs

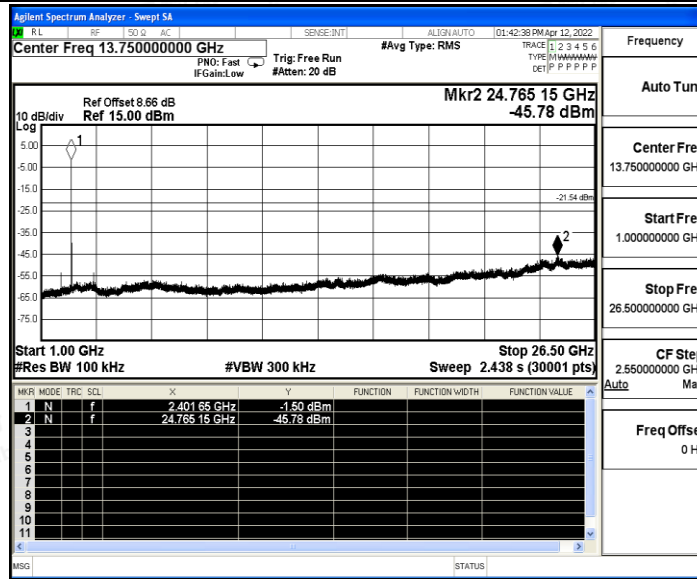


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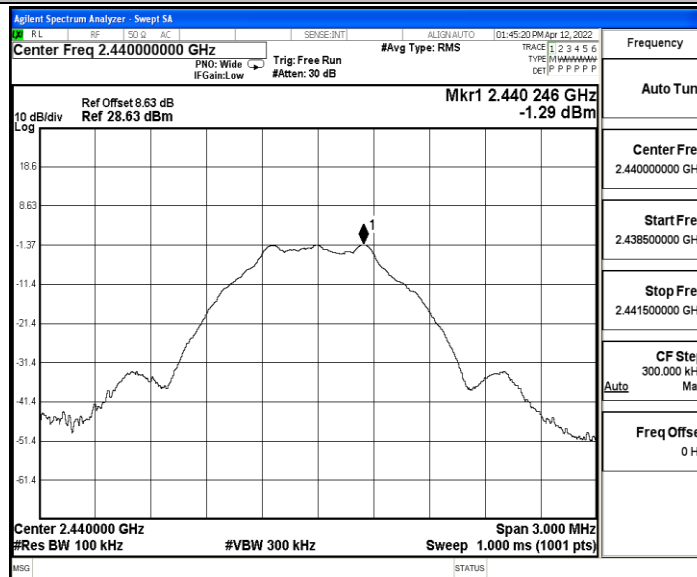
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BLE_Ant_2440_0~Reference



BLE_Ant_2480_0~Reference

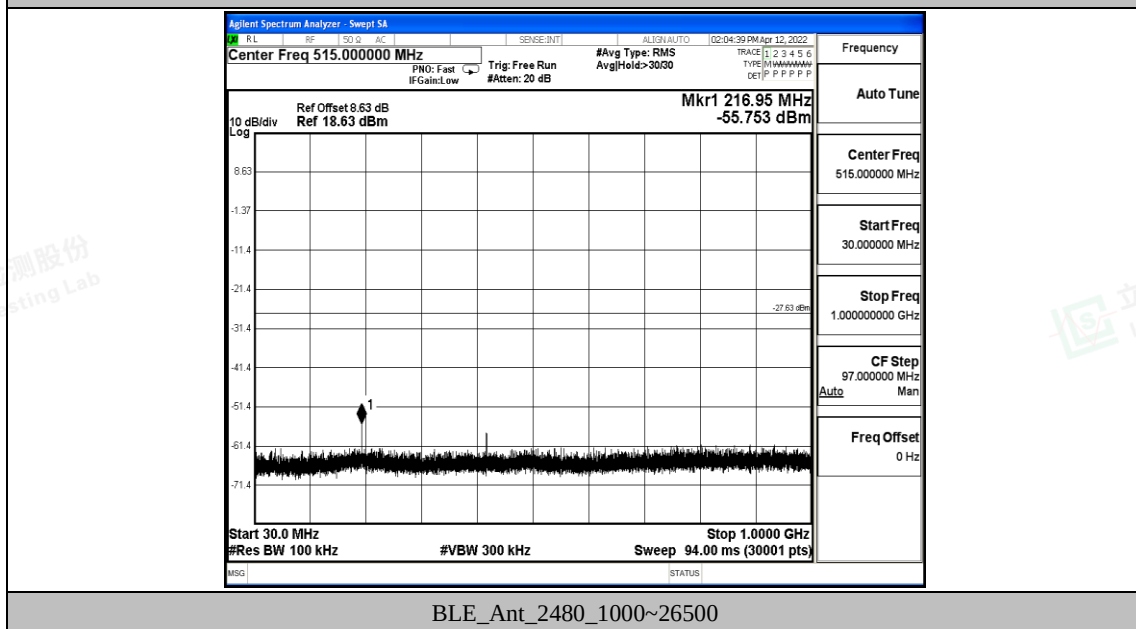
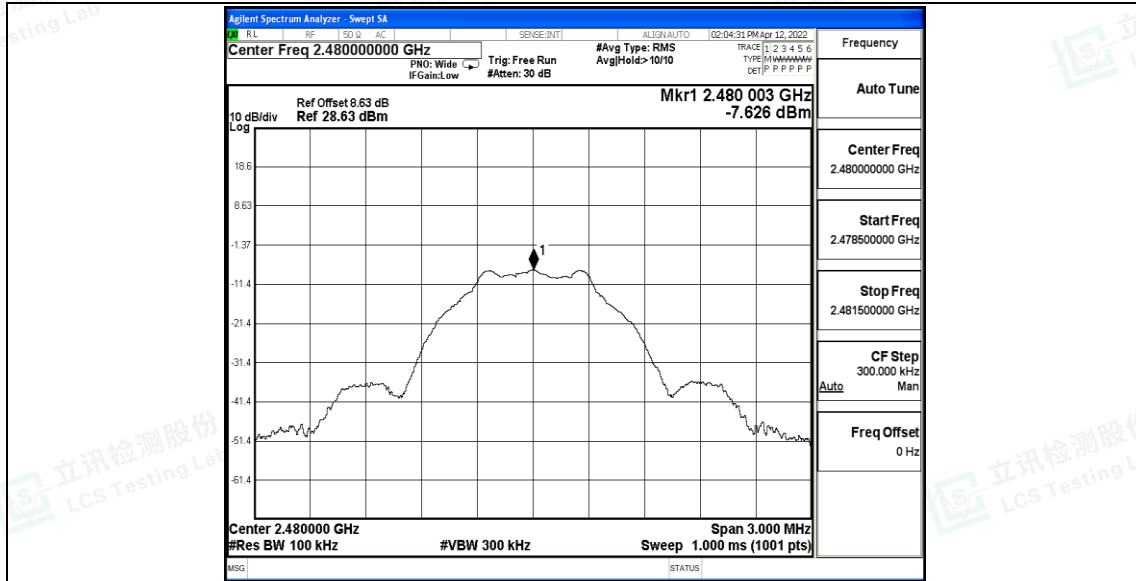


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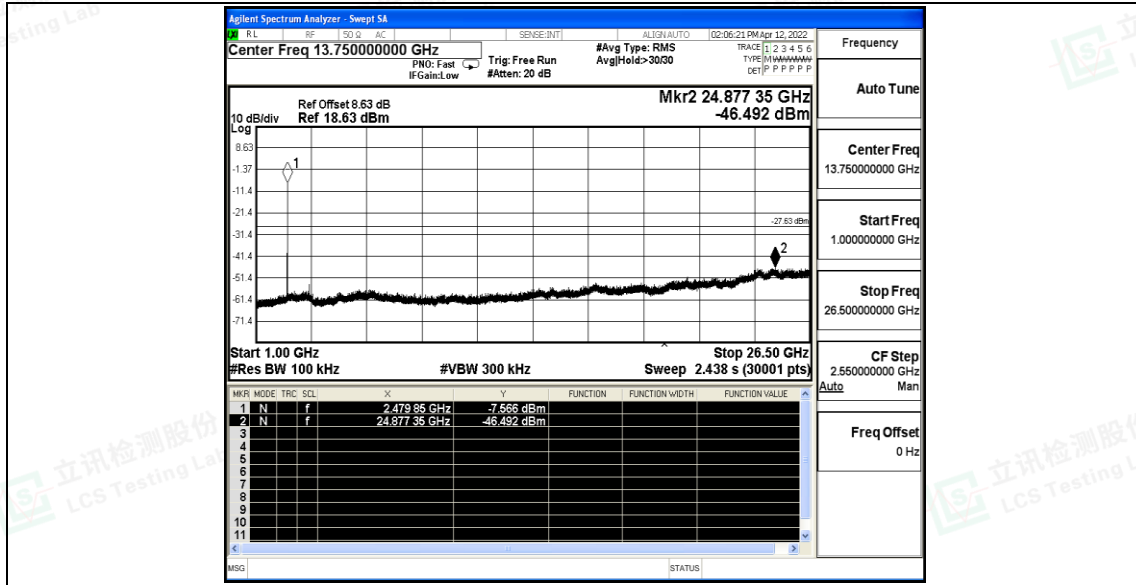


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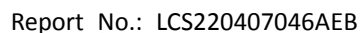
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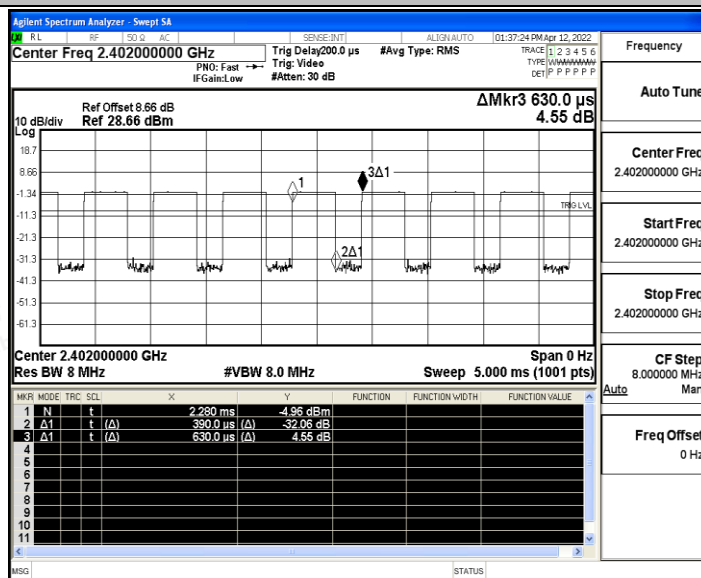
B.6 Duty Cycle

Test Result

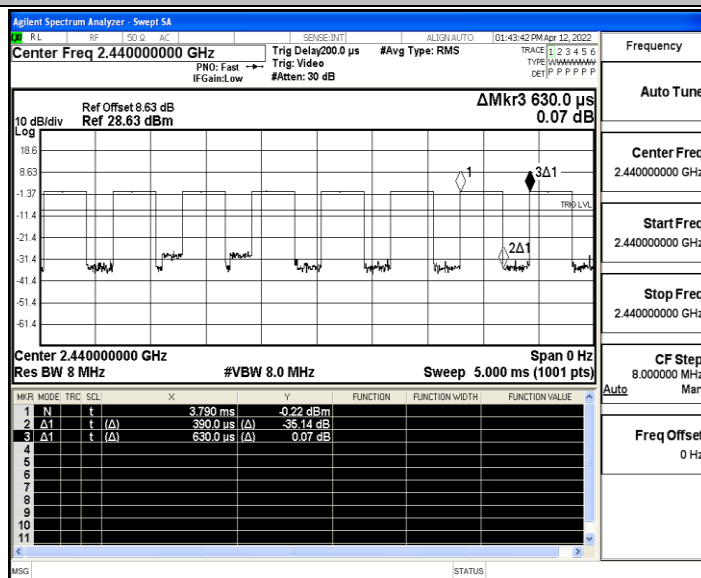
TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE	Ant	2402	0.39	0.63	0.6190	61.90	2.08	---	---
		2440	0.39	0.63	0.6190	61.90	2.08	---	---
		2480	0.38	0.62	0.6129	61.29	2.13	---	---



BLE Ant 2402



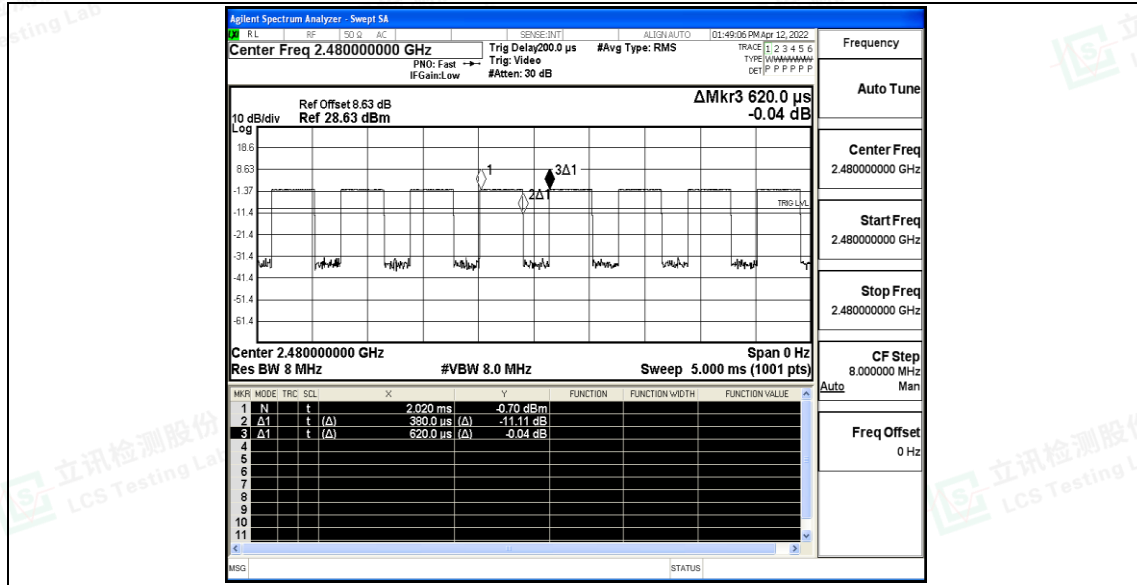
BLE Ant 2440



BLE Ant 2480



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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	-47.53	≤-41.20	47.67	≤54	PASS
				AV	2388.725	-46.91	≤-41.20	48.29	≤54	PASS
				AV	2390.000	-47.33	≤-41.20	47.87	≤54	PASS
				Peak	2310.000	-38.94	≤-21.20	56.26	≤74	PASS
				Peak	2387.150	-36.08	≤-21.20	59.12	≤74	PASS
				Peak	2390.000	-38.77	≤-21.20	56.43	≤74	PASS
		High	2480	AV	2483.500	-46.94	≤-41.20	48.26	≤54	PASS
				AV	2497.200	-46.33	≤-41.20	48.87	≤54	PASS
				AV	2500.000	-46.65	≤-41.20	48.55	≤54	PASS
				Peak	2483.500	-37.46	≤-21.20	57.74	≤74	PASS
				Peak	2497.040	-36.81	≤-21.20	58.39	≤74	PASS
				Peak	2500.000	-38.29	≤-21.20	56.91	≤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.



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Test Graphs

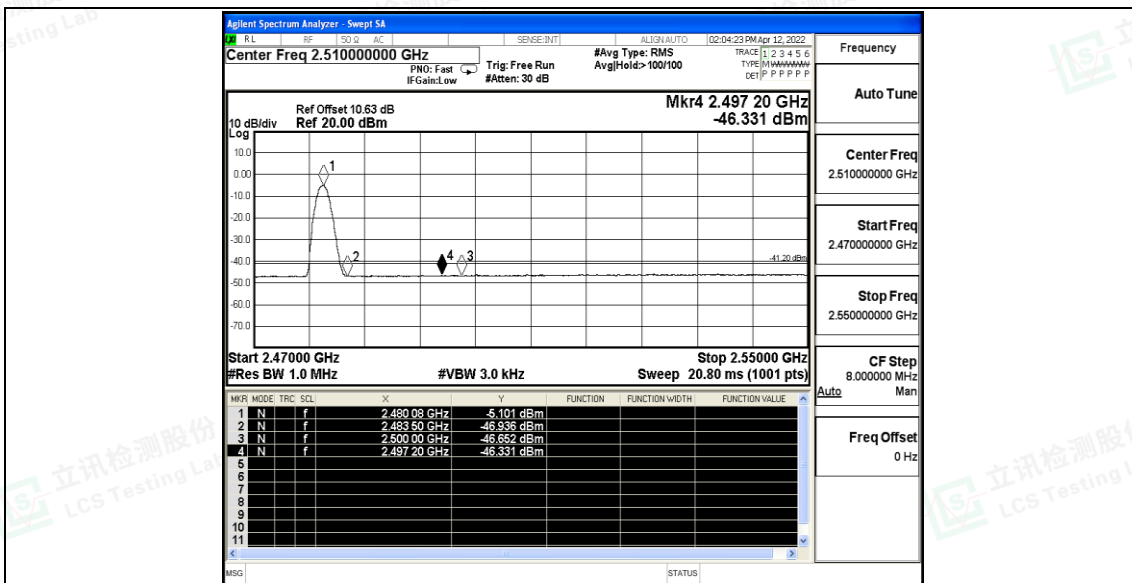


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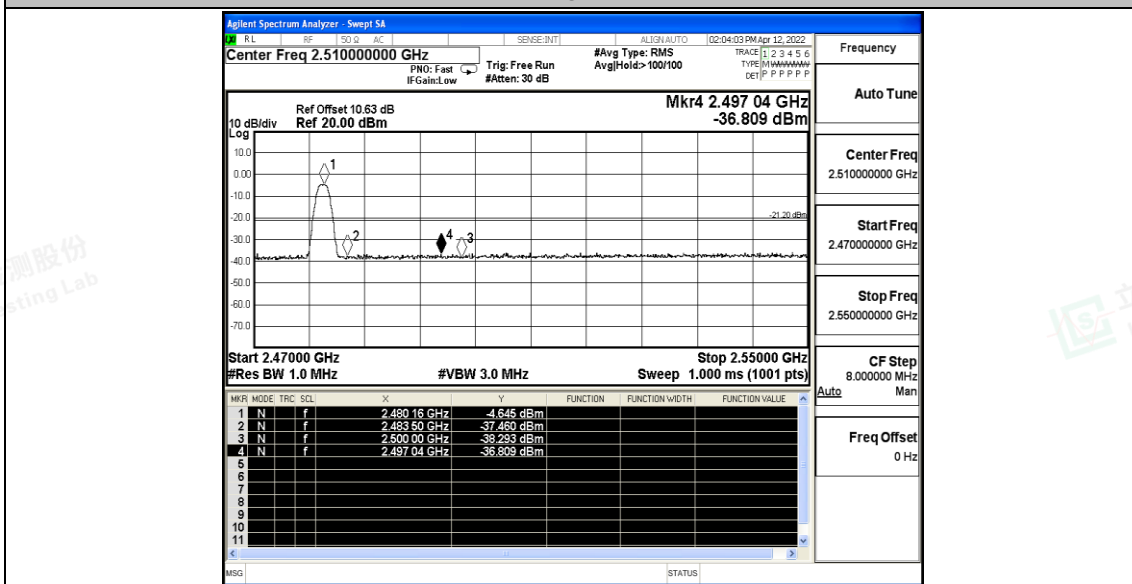
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BLE_Ant_High_2480_Peak



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