



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: WCDMA digital mobile phone

Test Model: XS15

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng
Supervised by:	Ling Zhu



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B.1 DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.708	2401.624	2402.332	0.5	PASS
		2440	0.712	2439.620	2440.332	0.5	PASS
		2480	0.712	2479.620	2480.332	0.5	PASS



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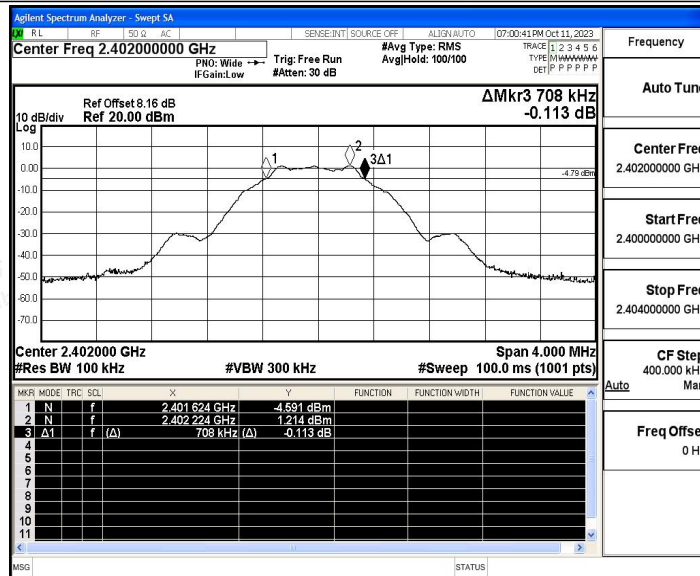
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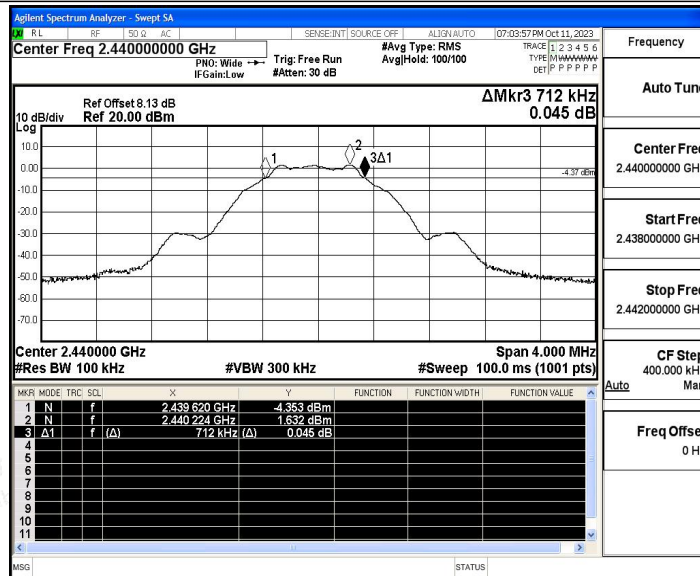


Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

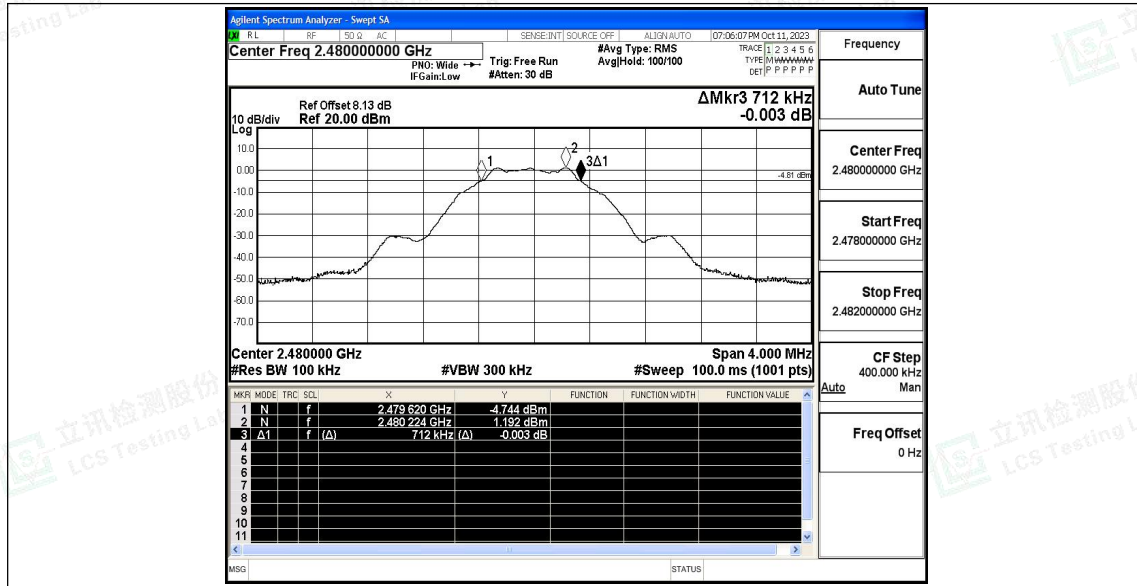


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B.2 Maximum conducted output power

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	2.24	≤30	PASS
		2440	2.66	≤30	PASS
		2480	2.23	≤30	PASS



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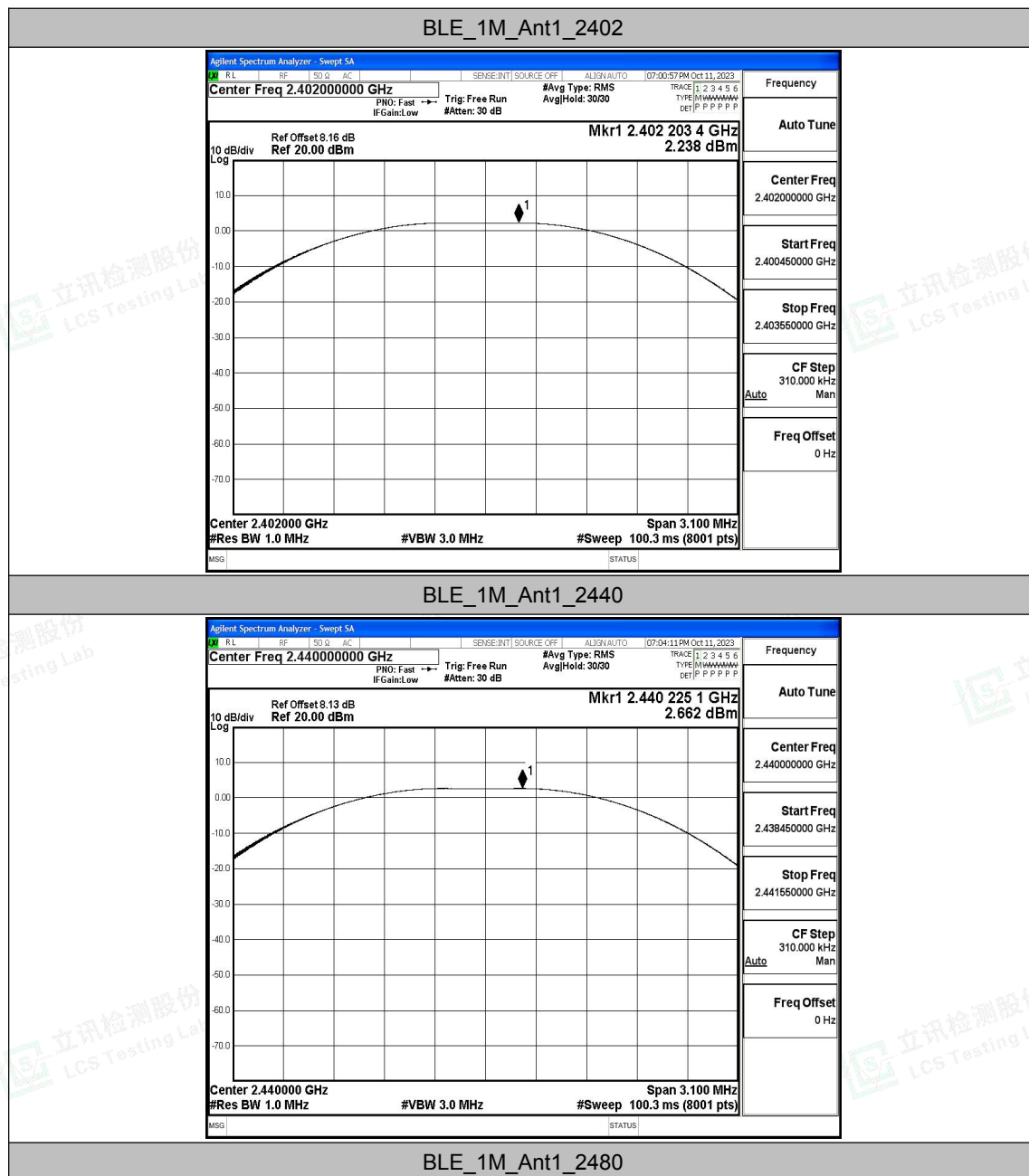
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Test Graphs

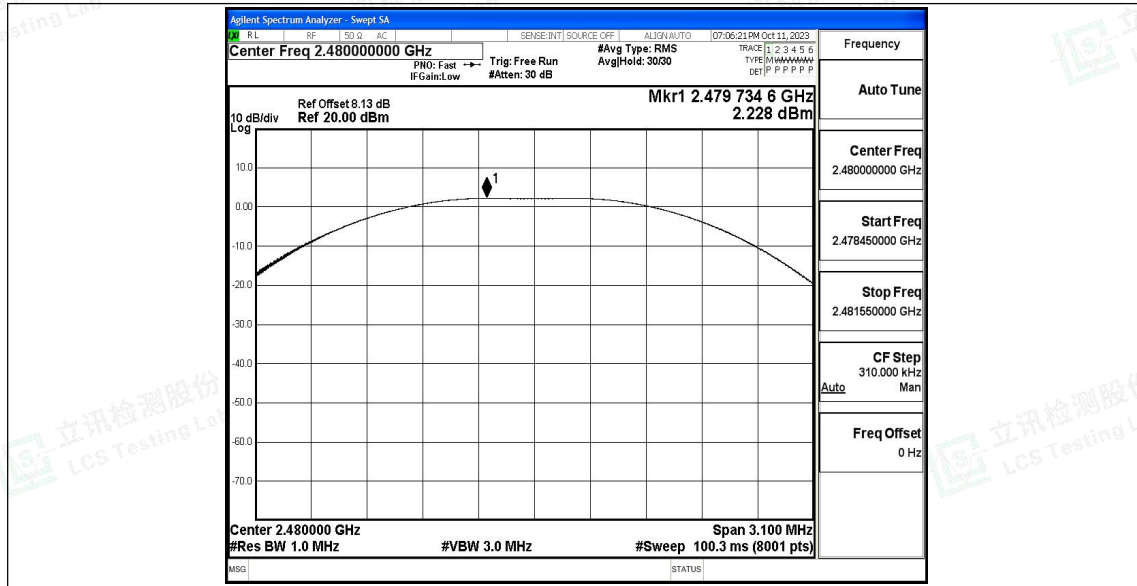


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B.3 Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-13.17	≤8.00	PASS
		2440	-12.69	≤8.00	PASS
		2480	-13.13	≤8.00	PASS



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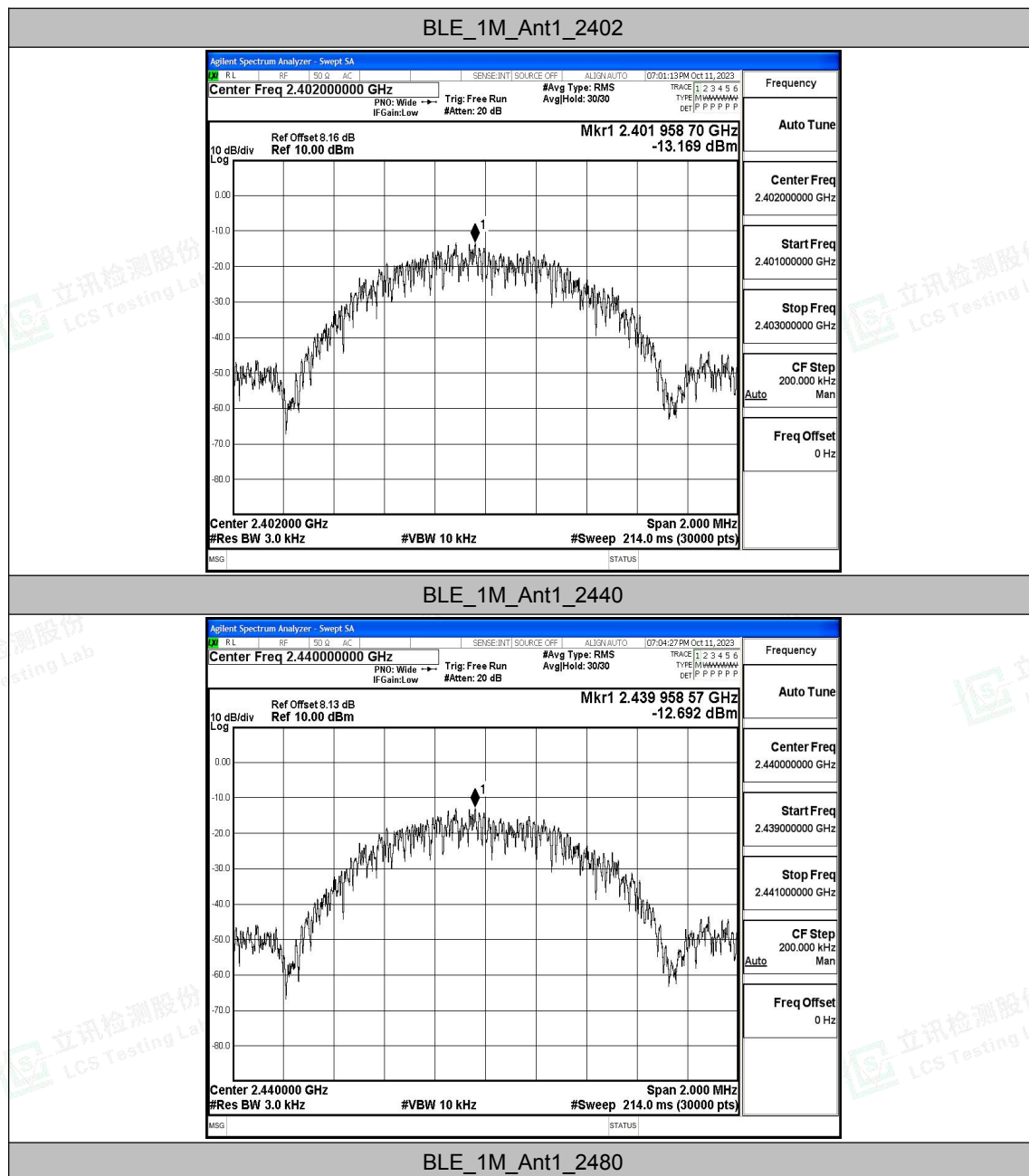
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Test Graphs

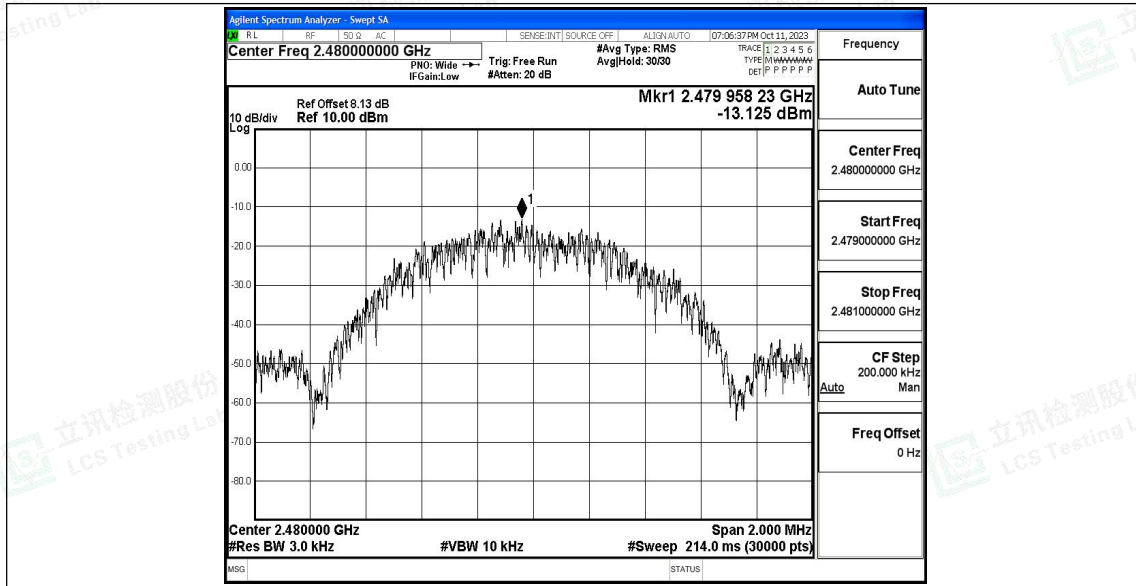


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B.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.25	-60.02	≤-18.75	PASS
		High	2480	1.40	-59.4	≤-18.6	PASS



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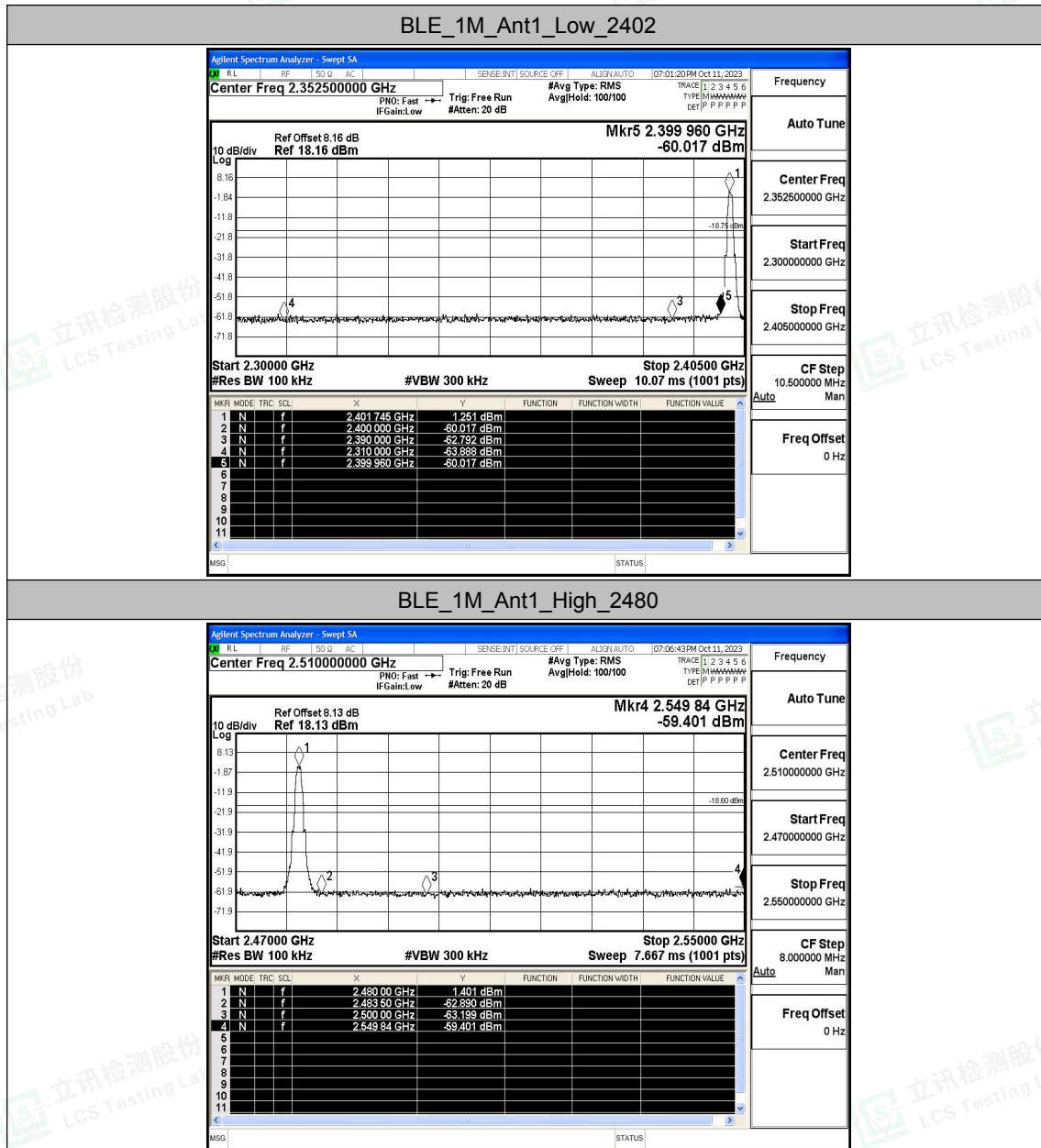
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Test Graphs



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B.5 Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	1.22	1.22	---	PASS
			30~1000	1.22	-60.71	≤-18.78	PASS
			1000~26500	1.22	-48.64	≤-18.78	PASS
		2440	Reference	1.65	1.65	---	PASS
			30~1000	1.65	-52.34	≤-18.35	PASS
			1000~26500	1.65	-48.61	≤-18.35	PASS
		2480	Reference	1.20	1.20	---	PASS
			30~1000	1.20	-60.95	≤-18.8	PASS
			1000~26500	1.20	-48.69	≤-18.8	PASS



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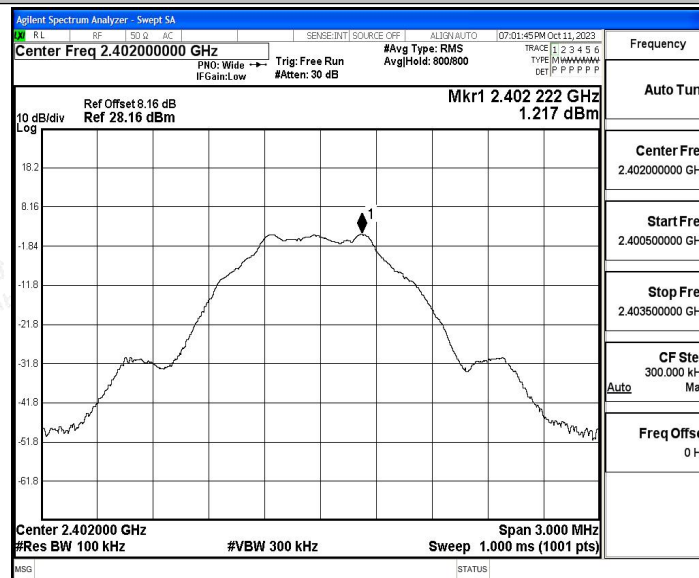
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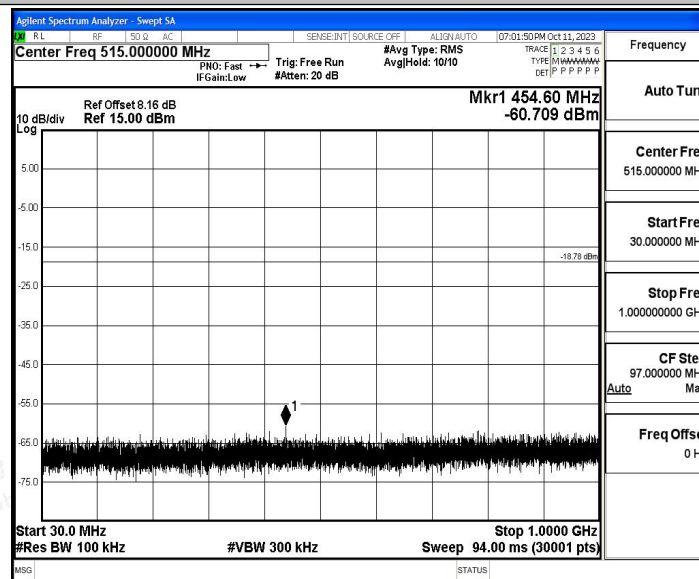


Test Graphs

BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



BLE_1M_Ant1_2402_1000~26500

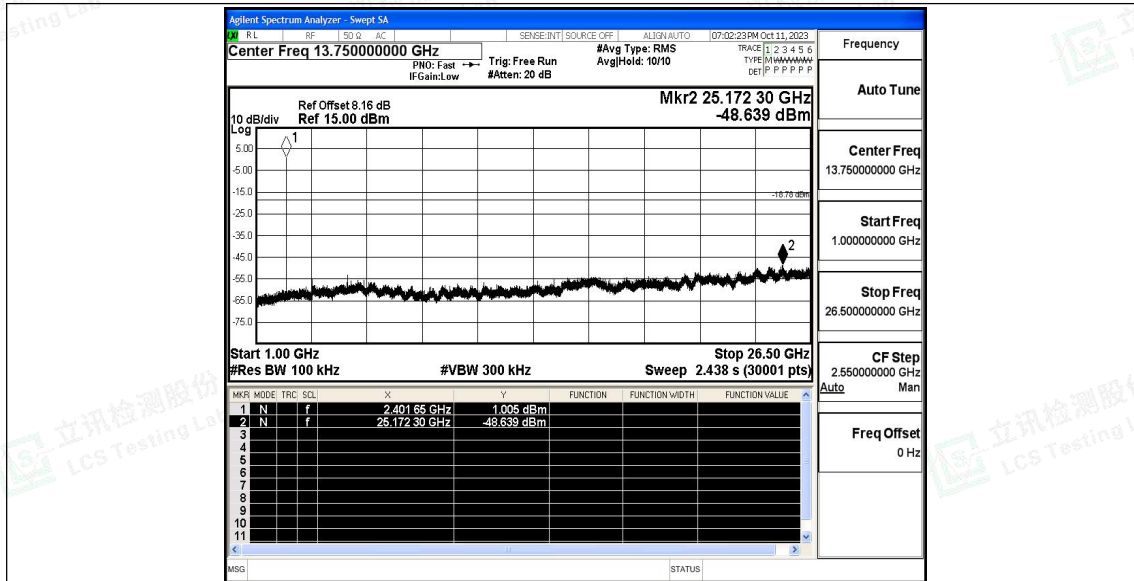


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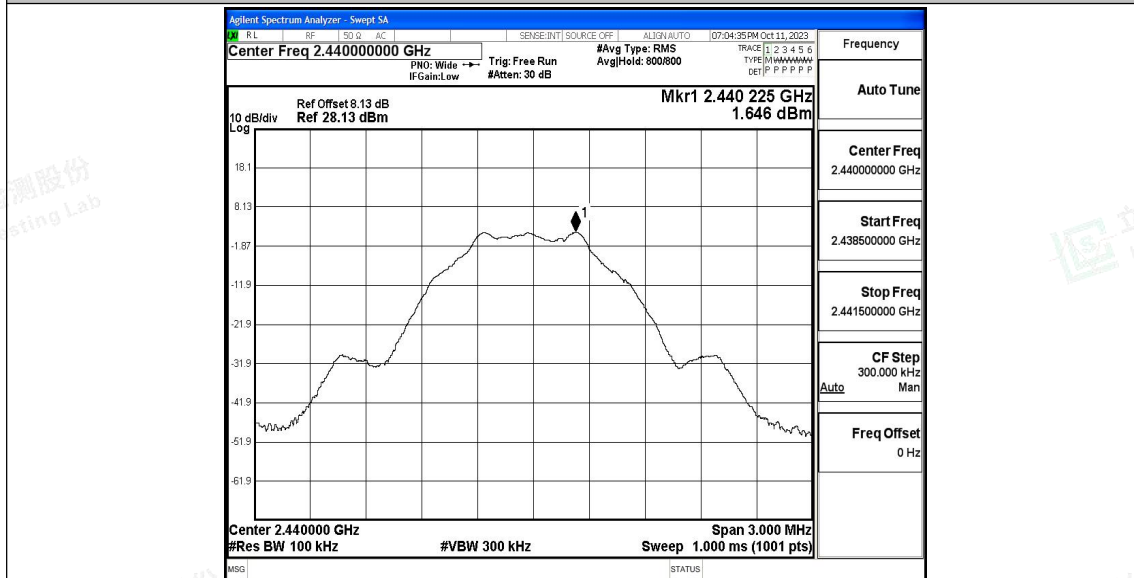
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BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000

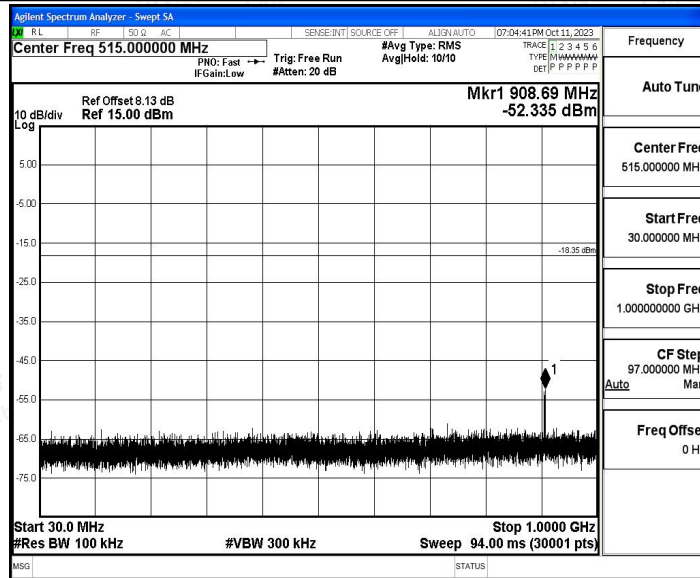


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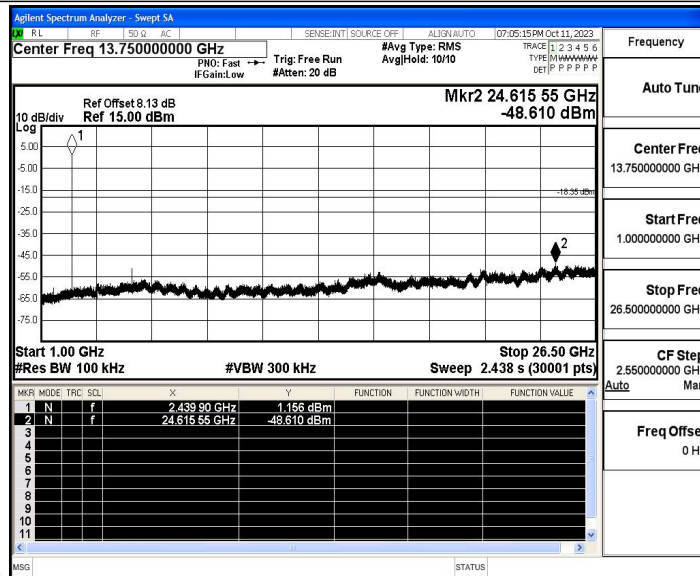
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BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference

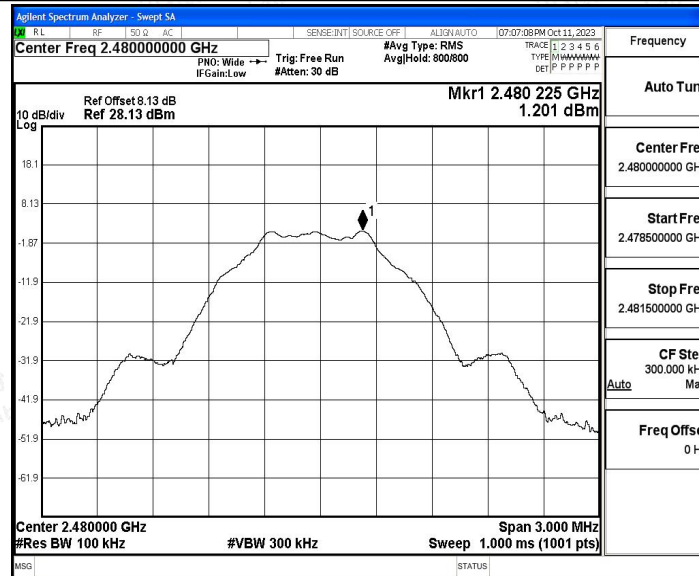


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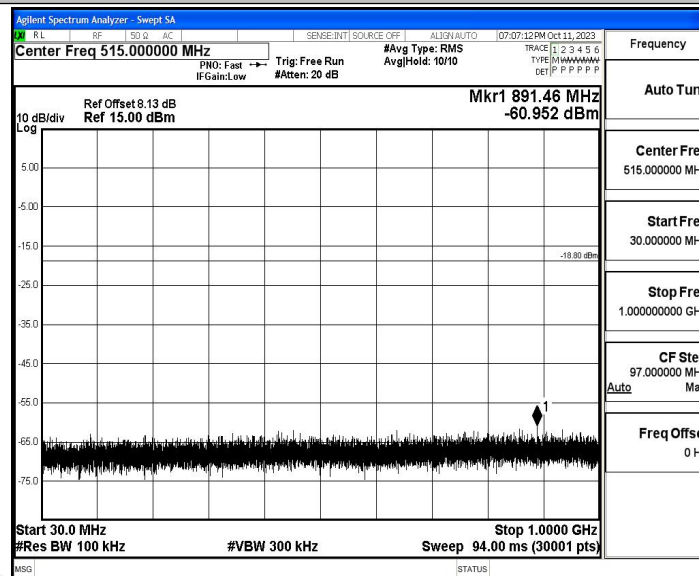
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BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

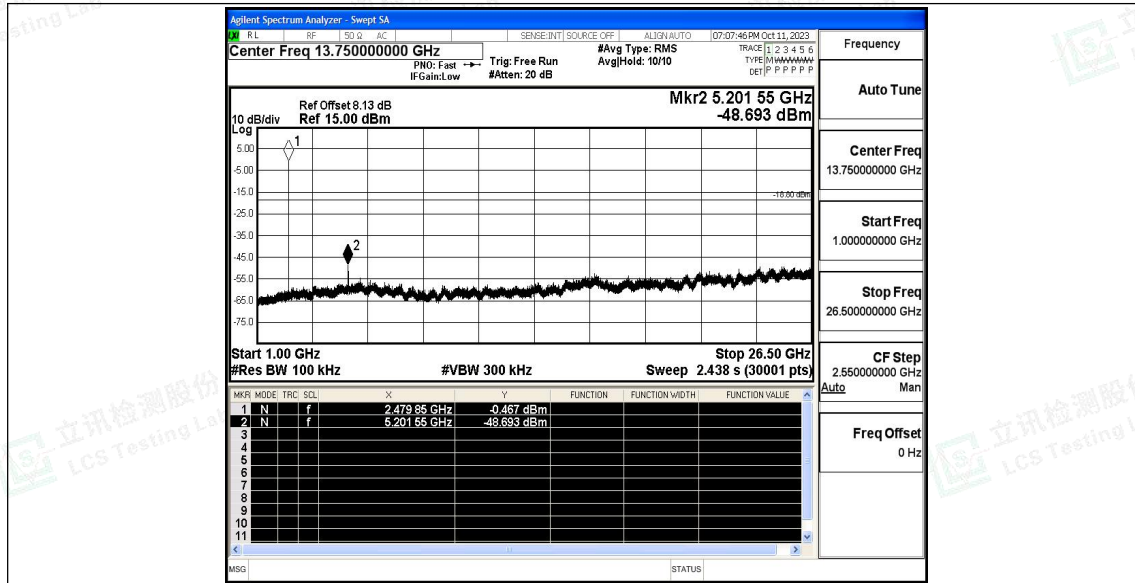


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B.6 Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	1/T	Limit	Verdict
BLE_1M	Ant1	2402	0.38	0.63	0.6032	60.32	2.20	2.63	---	---
		2440	0.38	0.63	0.6032	60.32	2.20	2.63	---	---
		2480	0.38	0.63	0.6032	60.32	2.20	2.63	---	---



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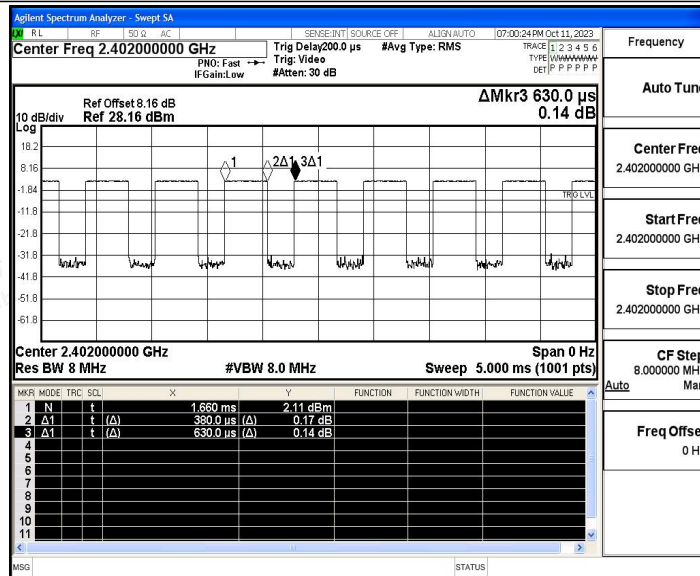
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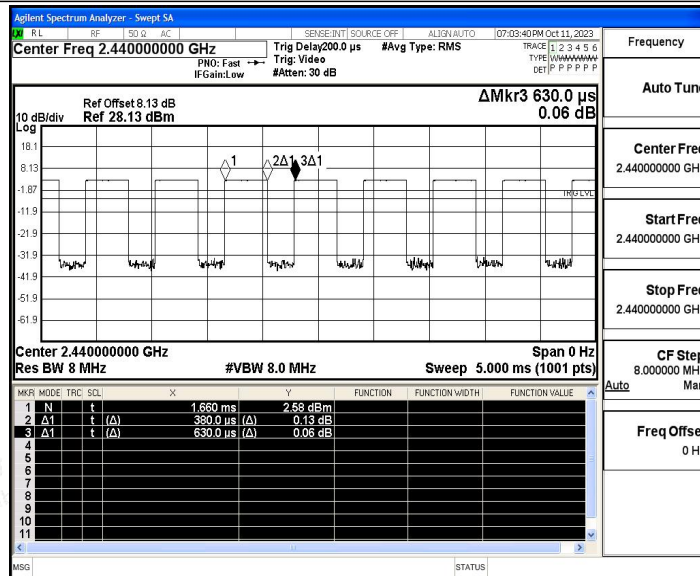


Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

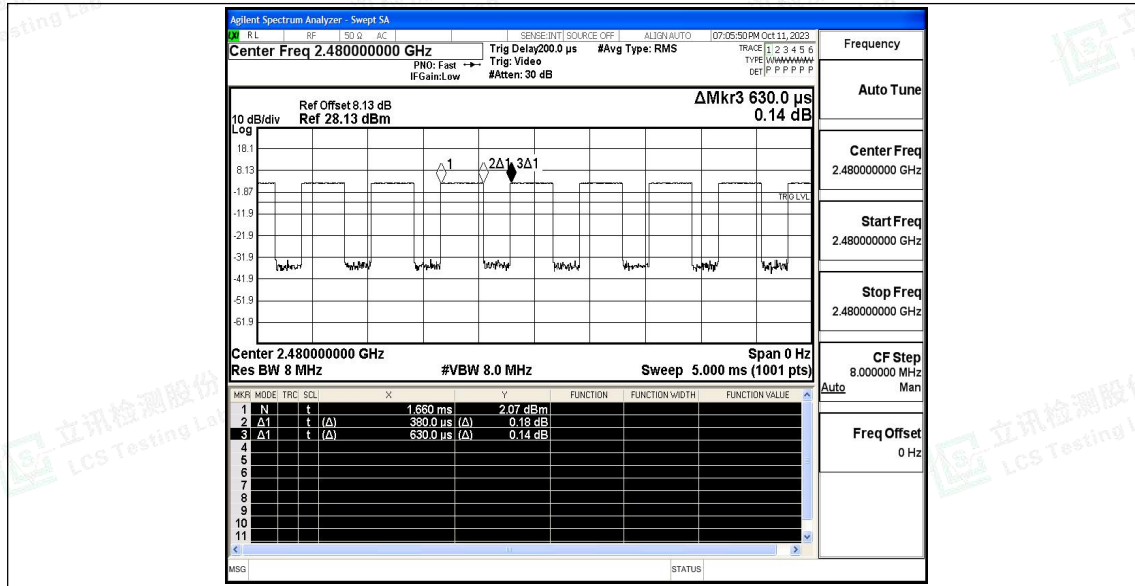


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B.7 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-58.05	≤-41.20	37.15	≤54	PASS
				AV	2382.005	-57.35	≤-41.20	37.85	≤54	PASS
				AV	2390.000	-57.98	≤-41.20	37.22	≤54	PASS
				Peak	2310.000	-51.82	≤-21.20	43.38	≤74	PASS
				Peak	2321.000	-48.97	≤-21.20	46.23	≤74	PASS
				Peak	2390.000	-50.96	≤-21.20	44.24	≤74	PASS
		High	2480	AV	2483.500	-52.72	≤-41.20	42.48	≤54	PASS
				AV	2483.520	-52.72	≤-41.20	42.48	≤54	PASS
				AV	2500.000	-57.9	≤-41.20	37.30	≤54	PASS
				Peak	2483.500	-52.31	≤-21.20	42.89	≤74	PASS
				Peak	2486.000	-49.05	≤-21.20	46.15	≤74	PASS
				Peak	2500.000	-51.54	≤-21.20	43.66	≤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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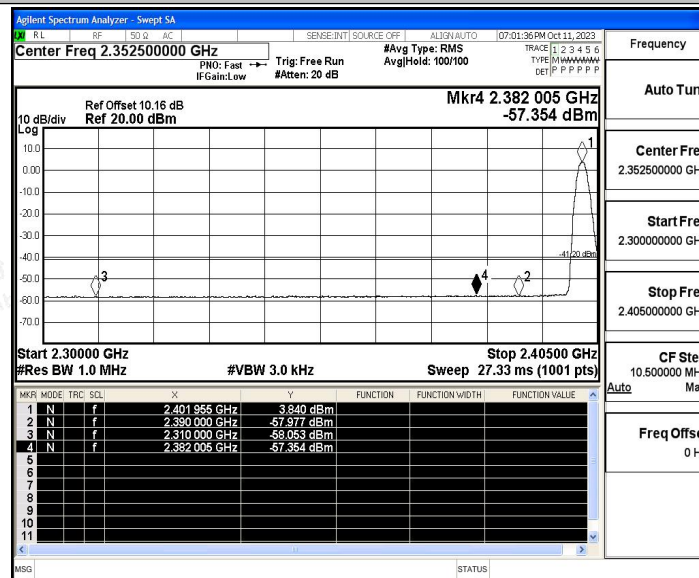
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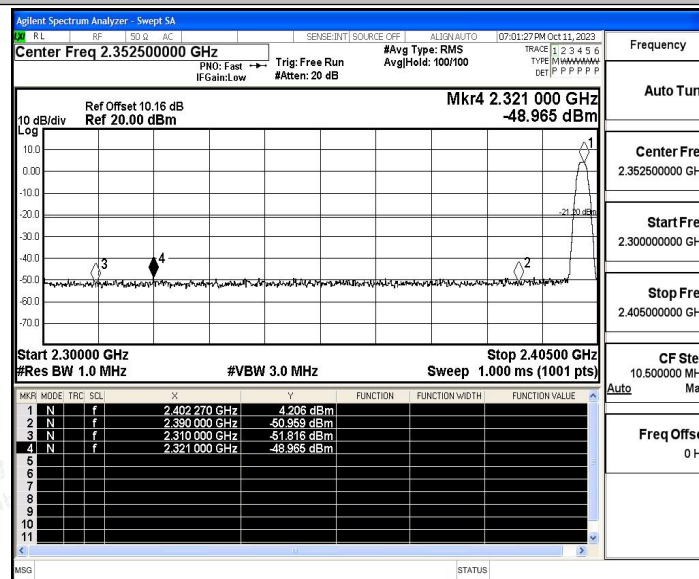


Test Graphs

BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV

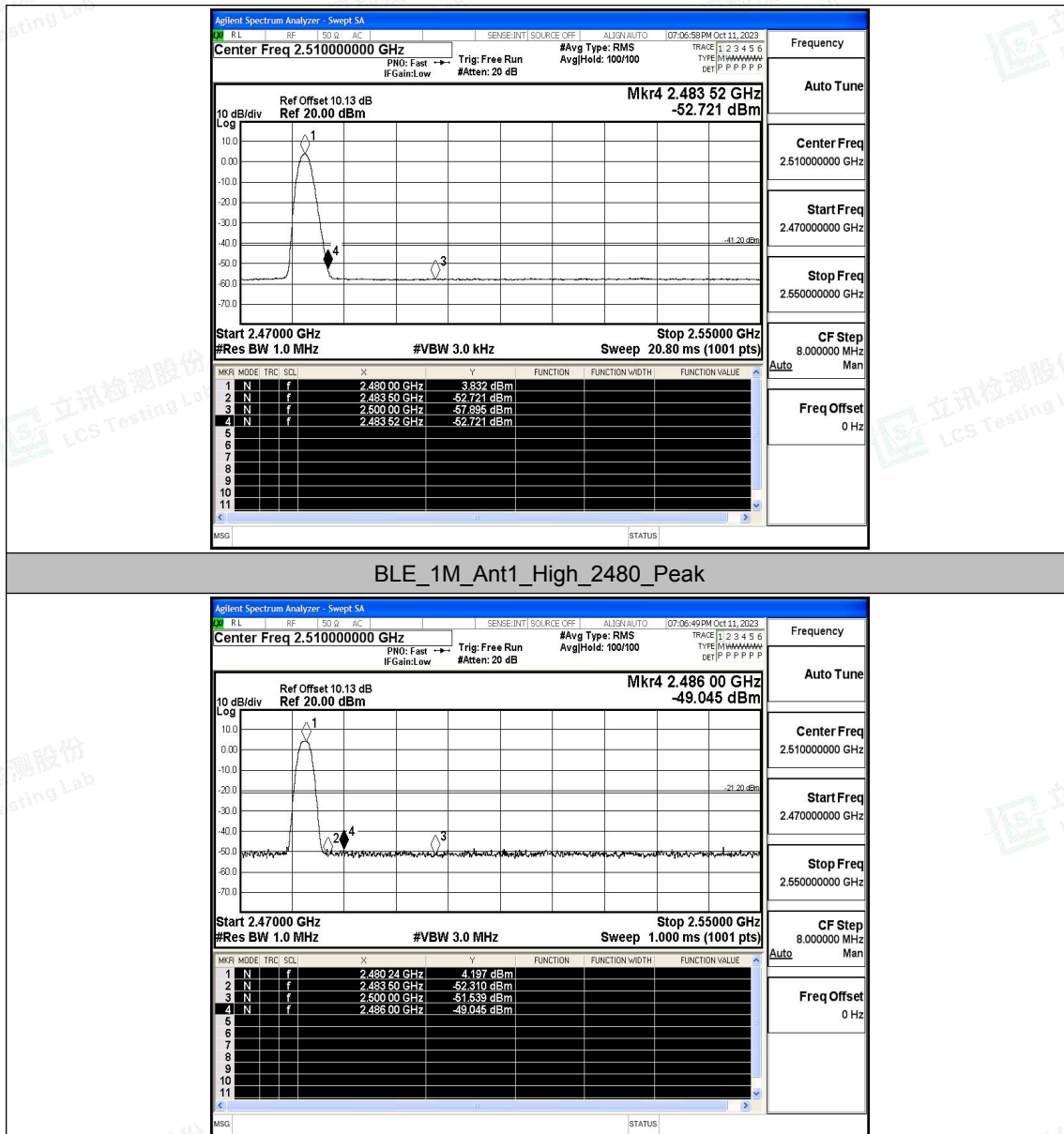


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