



Appendix B

RF Test Data for BLE (Conducted Measurement)

Product Name: Tablet

Test Model: 10LA2

Environmental Conditions

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



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B.1 DTS Bandwidth

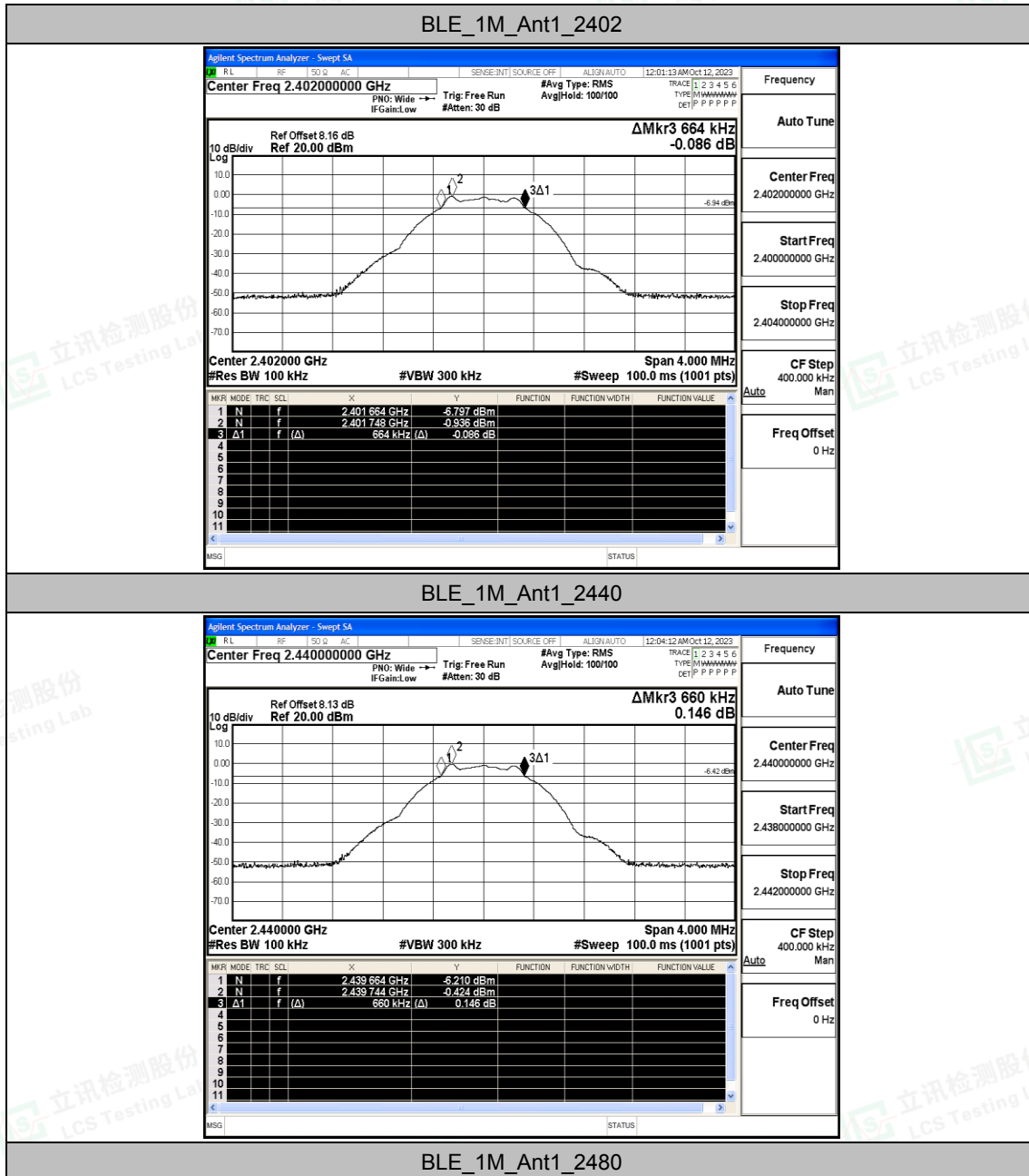
Test Result

TestMode	Antenna	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
BLE_2M	Ant1	2402	1.156	2401.408	2402.564	0.5	PASS
		2440	1.156	2439.408	2440.564	0.5	PASS
		2480	1.156	2479.404	2480.560	0.5	PASS





Test Graphs

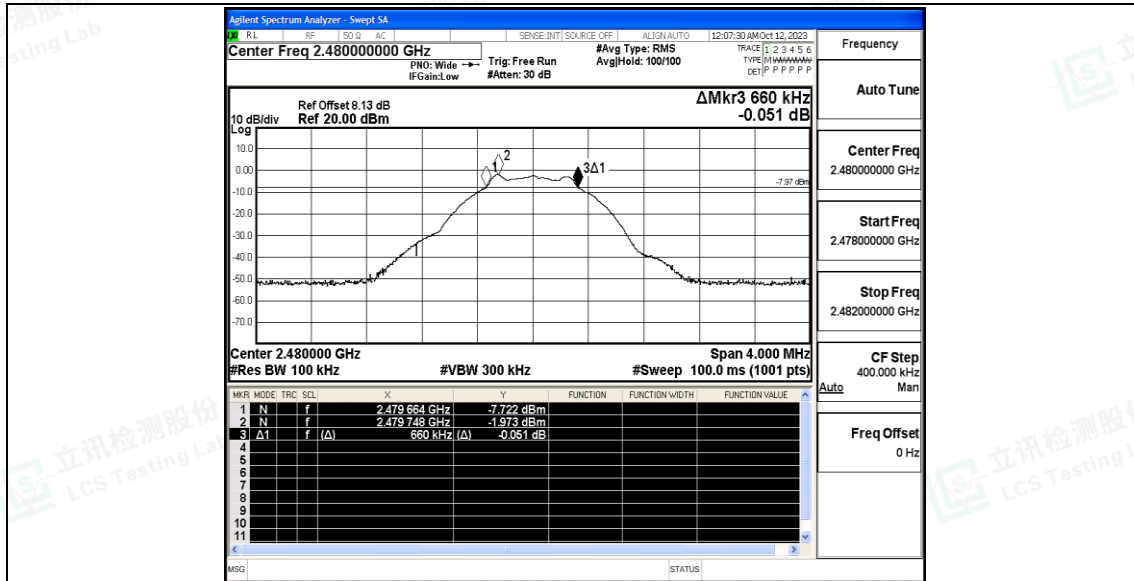


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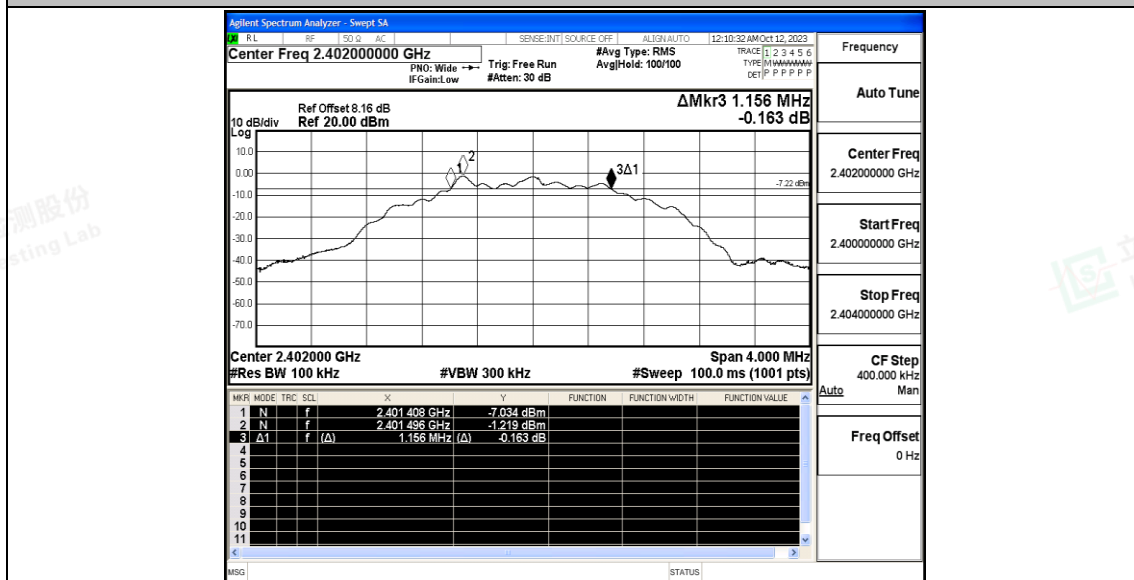
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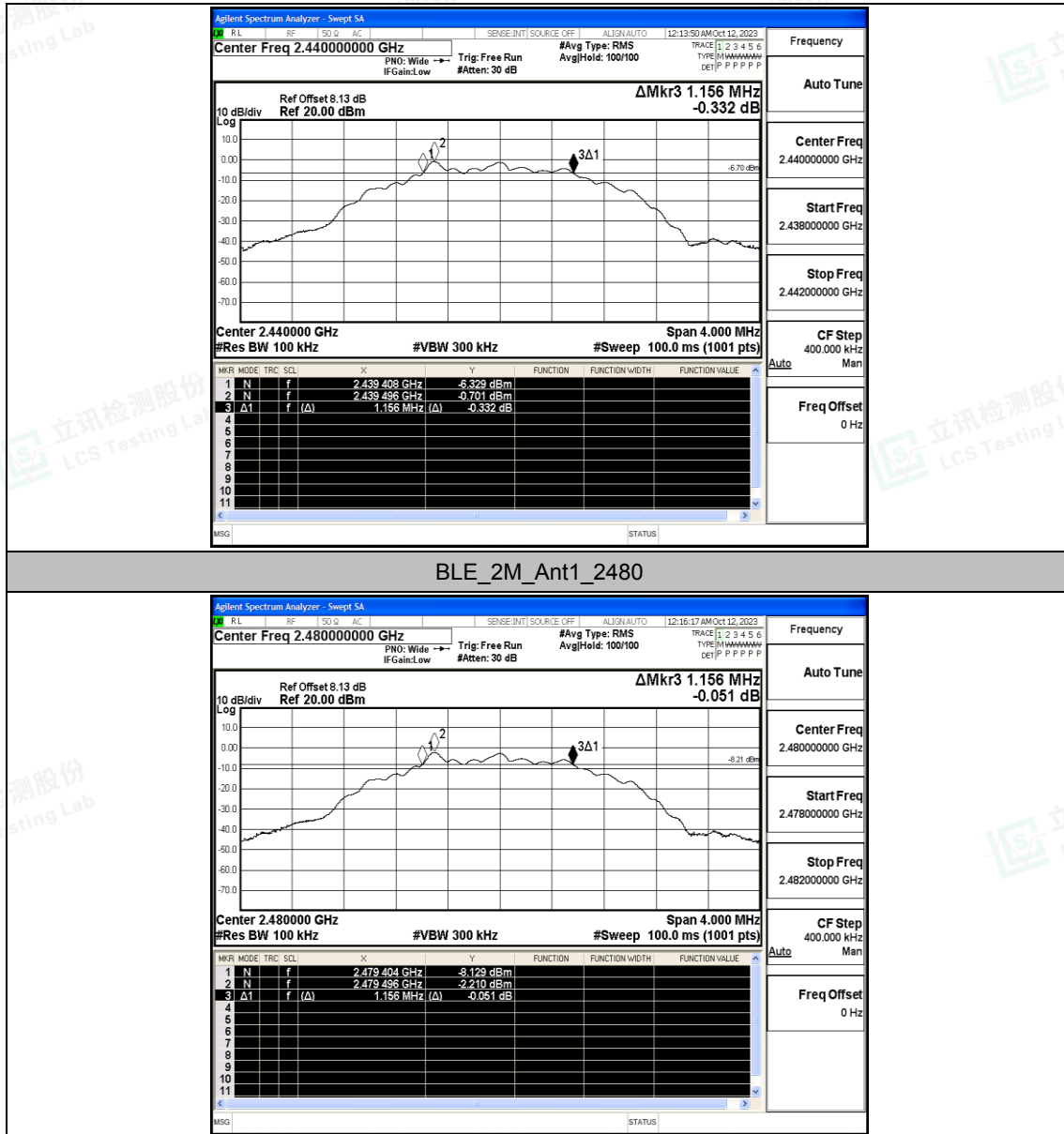


BLE_2M_Ant1_2402



BLE_2M_Ant1_2440





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B.2 Maximum conducted output power

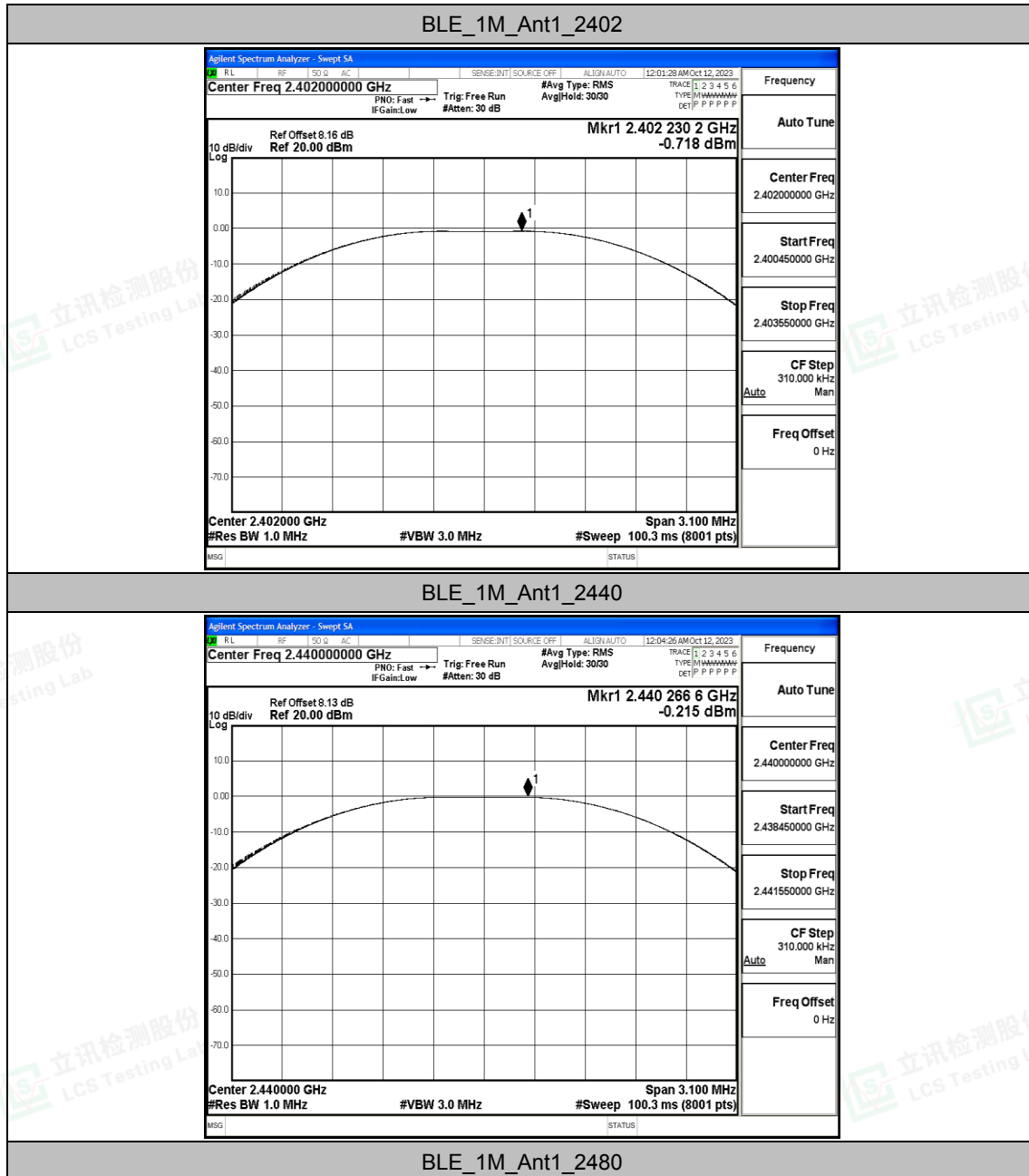
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.72	≤30	PASS
		2440	-0.22	≤30	PASS
		2480	-1.73	≤30	PASS
BLE_2M	Ant1	2402	-0.67	≤30	PASS
		2440	-0.22	≤30	PASS
		2480	-1.72	≤30	PASS





Test Graphs

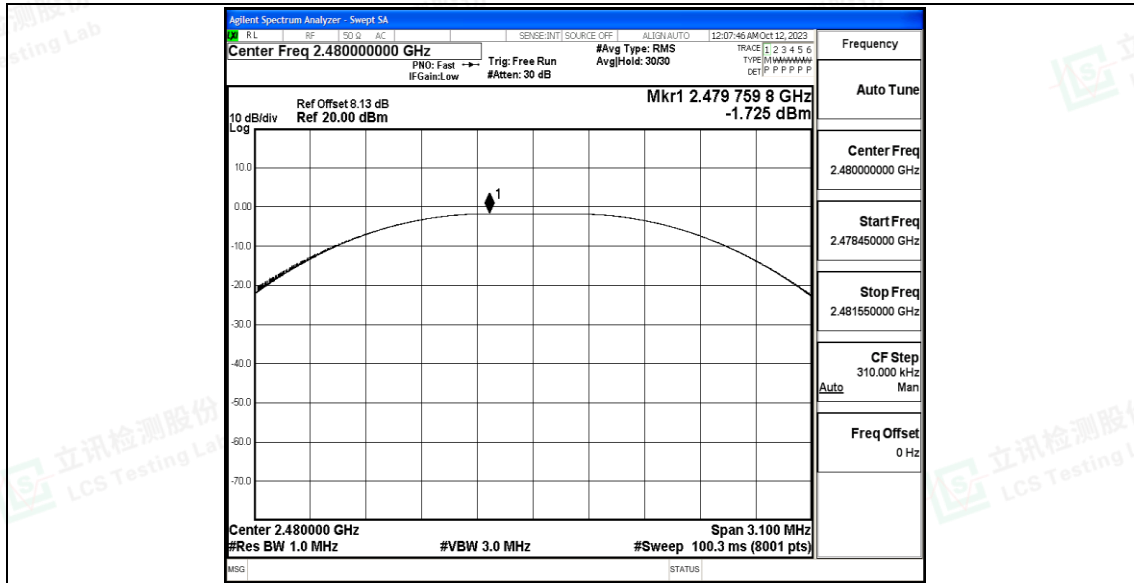


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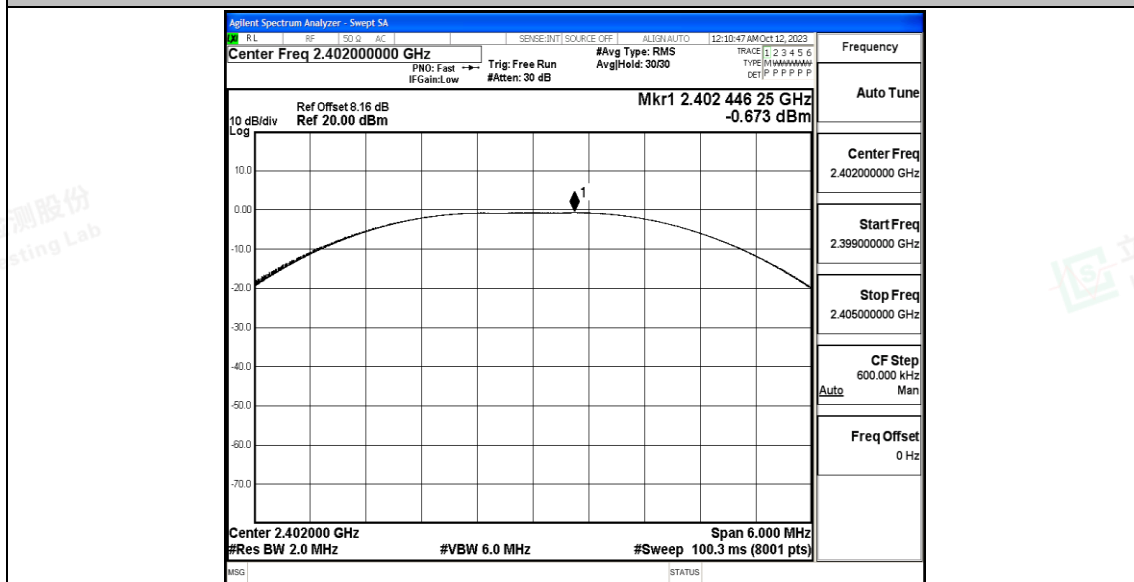
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BLE_2M_Ant1_2402



BLE_2M_Ant1_2440

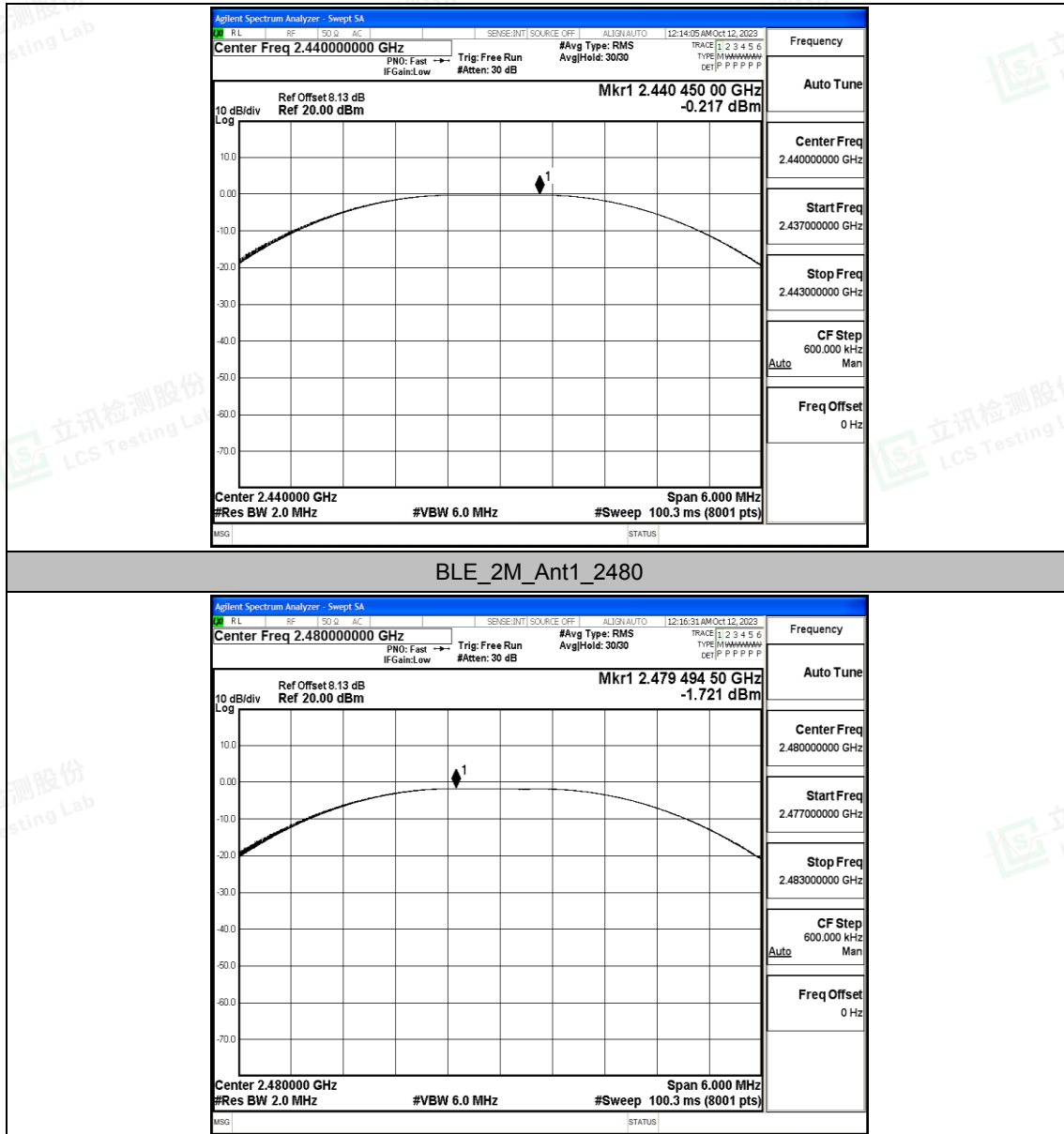


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B.3 Maximum power spectral density

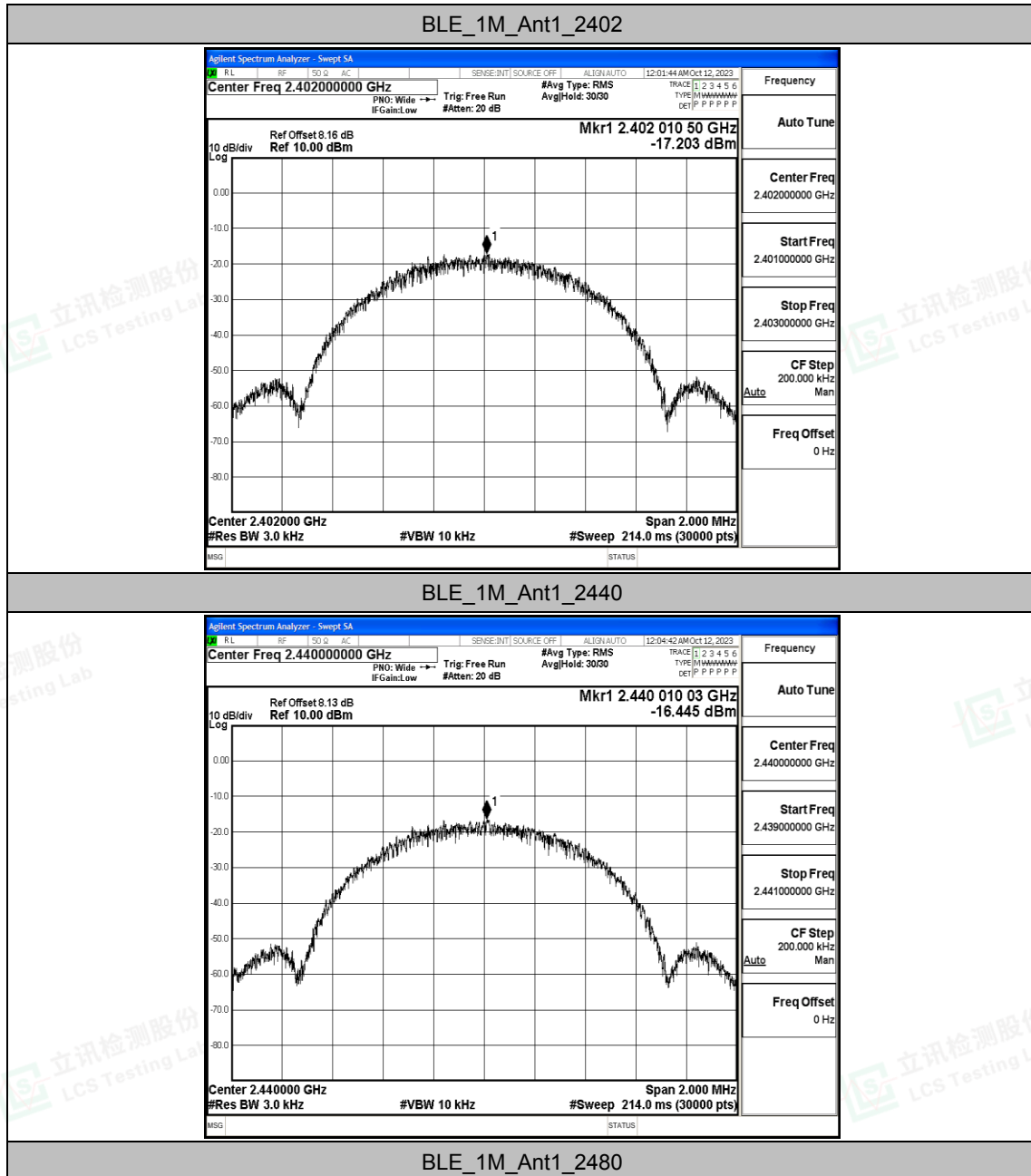
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-17.2	≤8.00	PASS
		2440	-16.45	≤8.00	PASS
		2480	-18.09	≤8.00	PASS
BLE_2M	Ant1	2402	-20.2	≤8.00	PASS
		2440	-20	≤8.00	PASS
		2480	-21.42	≤8.00	PASS





Test Graphs

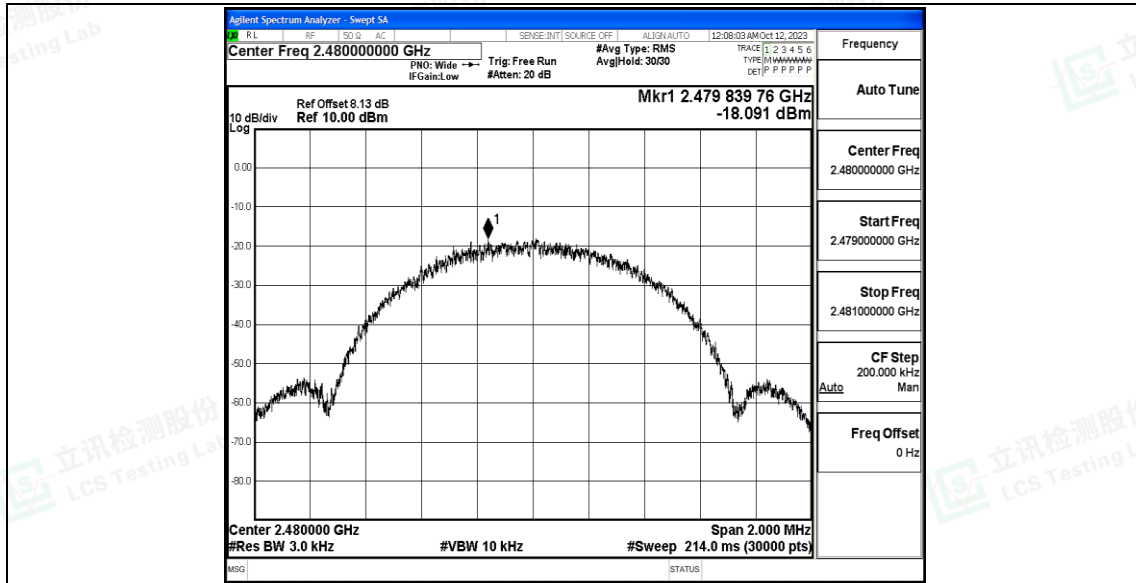


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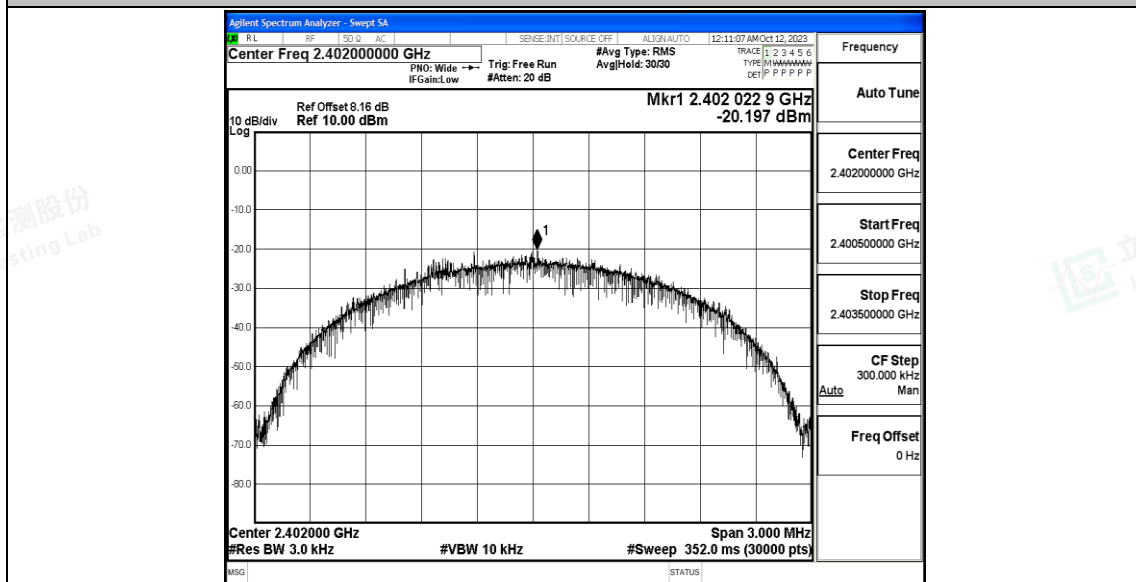
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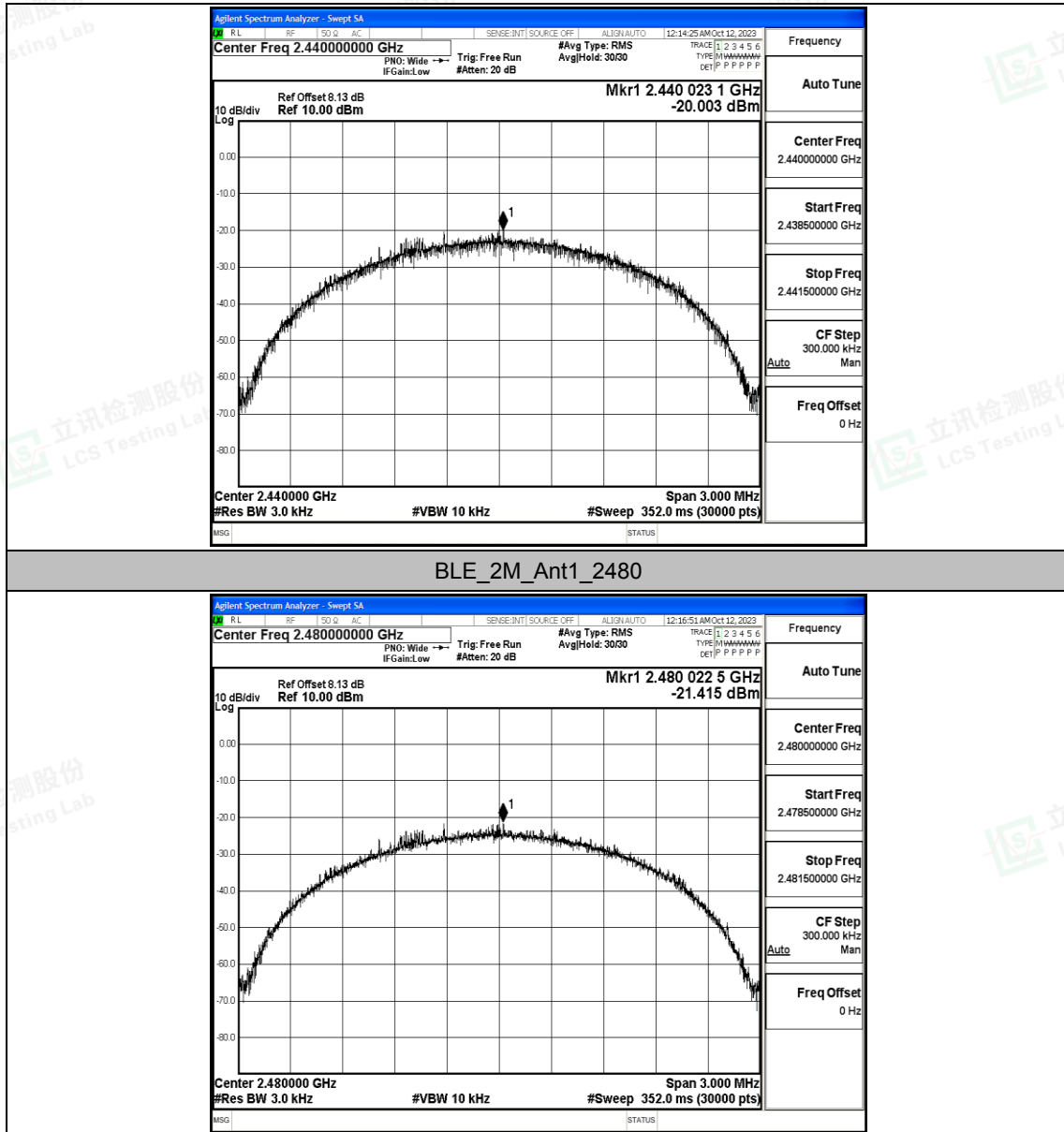


BLE_2M_Ant1_2402



BLE_2M_Ant1_2440







B.4 Band edge measurements

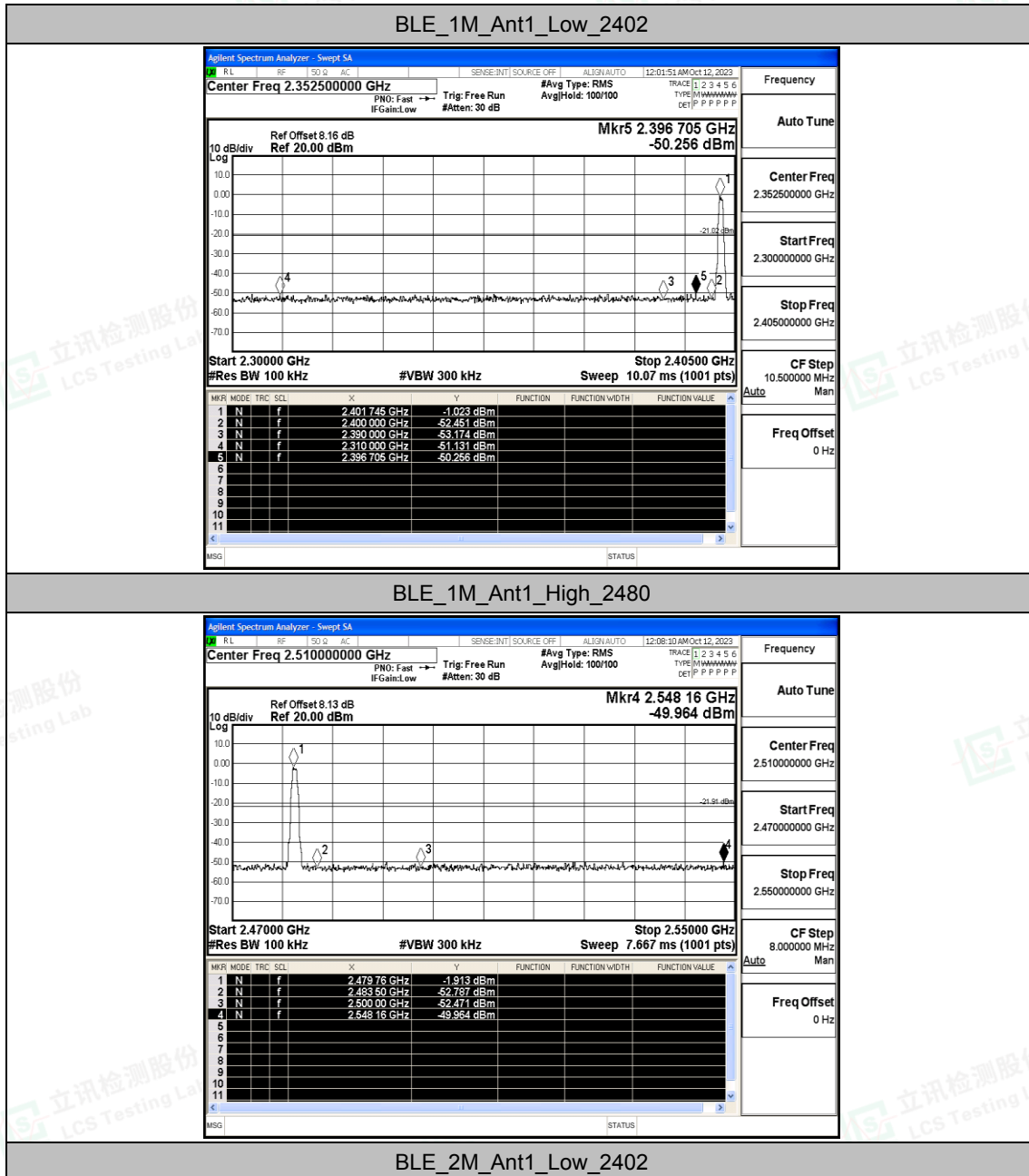
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-1.02	-50.26	≤ -21.02	PASS
		High	2480	-1.91	-49.96	≤ -21.91	PASS
BLE_2M	Ant1	Low	2402	-3.50	-46.4	≤ -23.5	PASS
		High	2480	-4.08	-50.11	≤ -24.08	PASS





Test Graphs

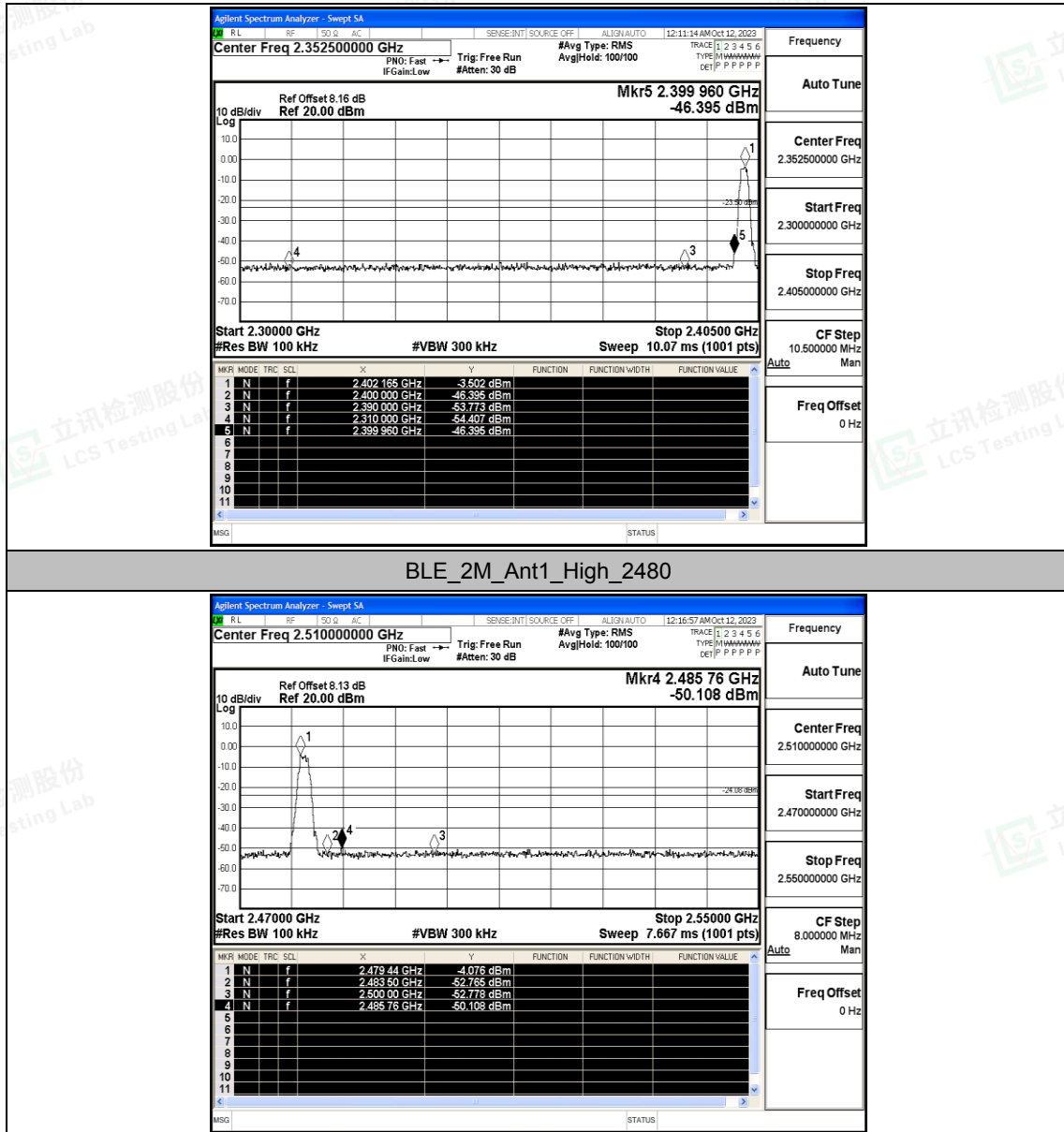


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B.5 Conducted Spurious Emission

Test Result

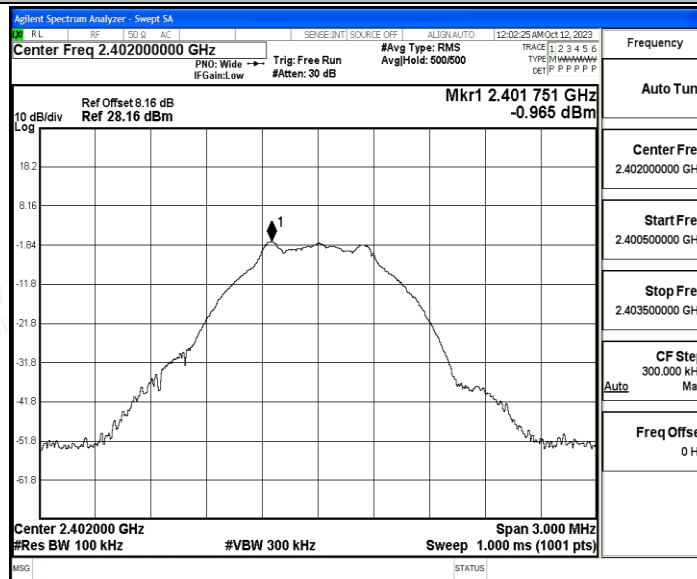
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.97	-0.97	---	PASS
			30~1000	-0.97	-61.79	≤-20.97	PASS
			1000~26500	-0.97	-48.12	≤-20.97	PASS
		2440	Reference	-0.41	-0.41	---	PASS
			30~1000	-0.41	-59.93	≤-20.41	PASS
			1000~26500	-0.41	-49.23	≤-20.41	PASS
		2480	Reference	-1.97	-1.97	---	PASS
			30~1000	-1.97	-61.75	≤-21.97	PASS
			1000~26500	-1.97	-49.04	≤-21.97	PASS
BLE_2M	Ant1	2402	Reference	-1.32	-1.32	---	PASS
			30~1000	-1.32	-61.6	≤-21.32	PASS
			1000~26500	-1.32	-49.08	≤-21.32	PASS
		2440	Reference	-0.70	-0.70	---	PASS
			30~1000	-0.70	-61.62	≤-20.7	PASS
			1000~26500	-0.70	-49.03	≤-20.7	PASS
		2480	Reference	-2.56	-2.56	---	PASS
			30~1000	-2.56	-61.73	≤-22.56	PASS
			1000~26500	-2.56	-48.9	≤-22.56	PASS



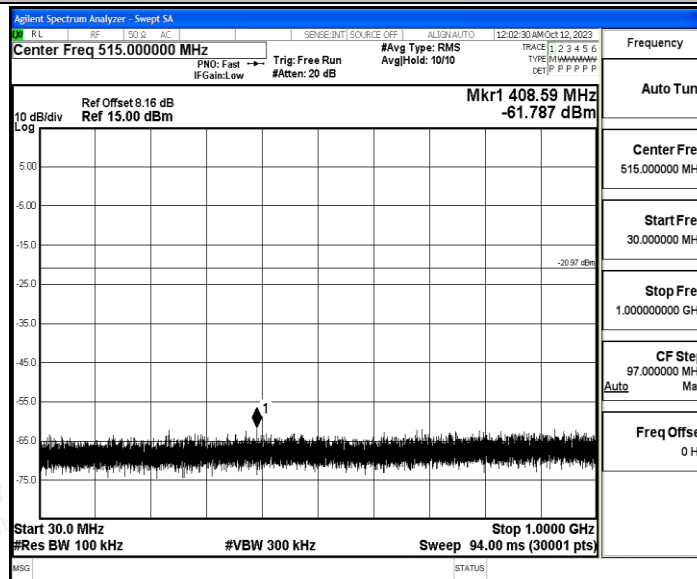


Test Graphs

BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



BLE_1M_Ant1_2402_1000~26500

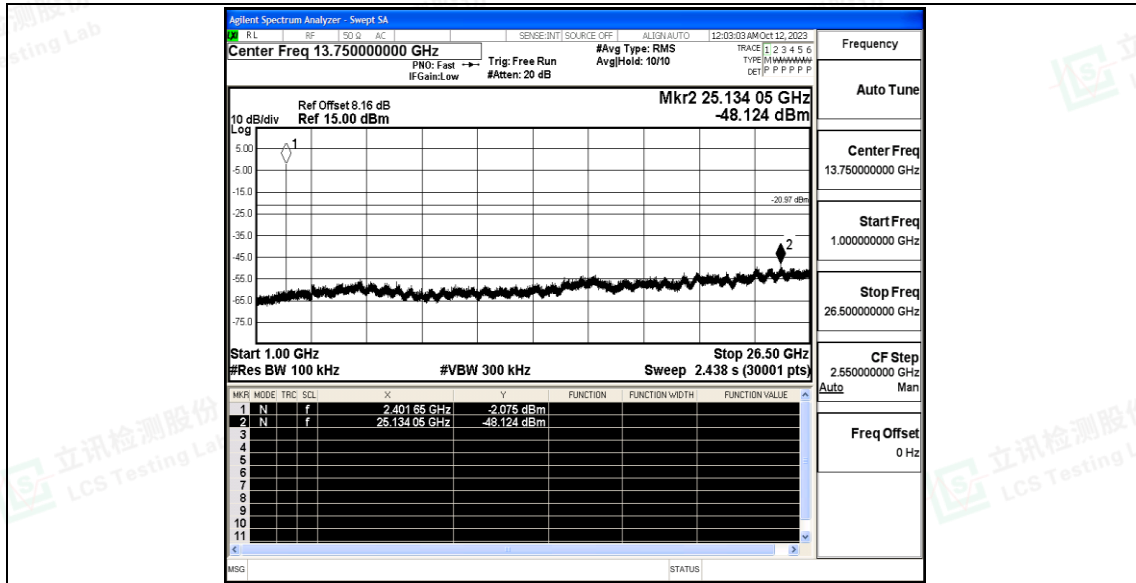


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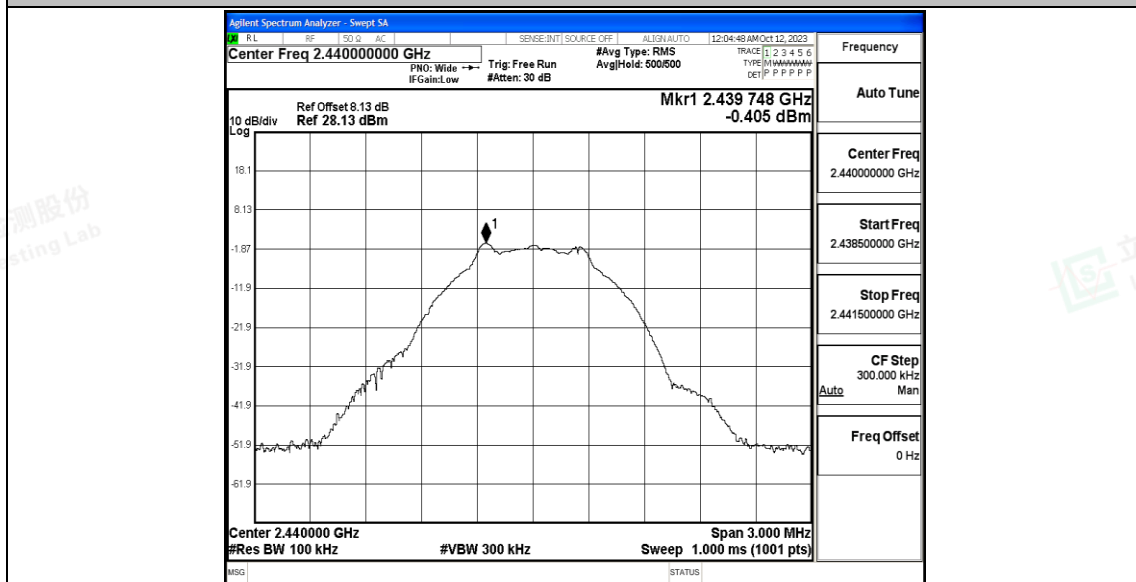
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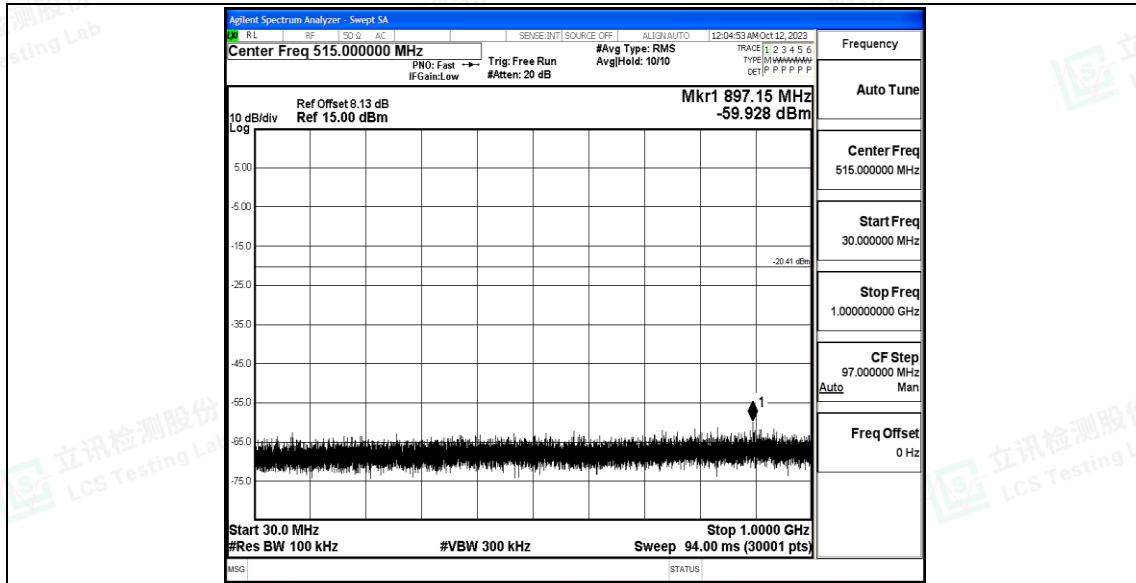


BLE_1M_Ant1_2440_0~Reference

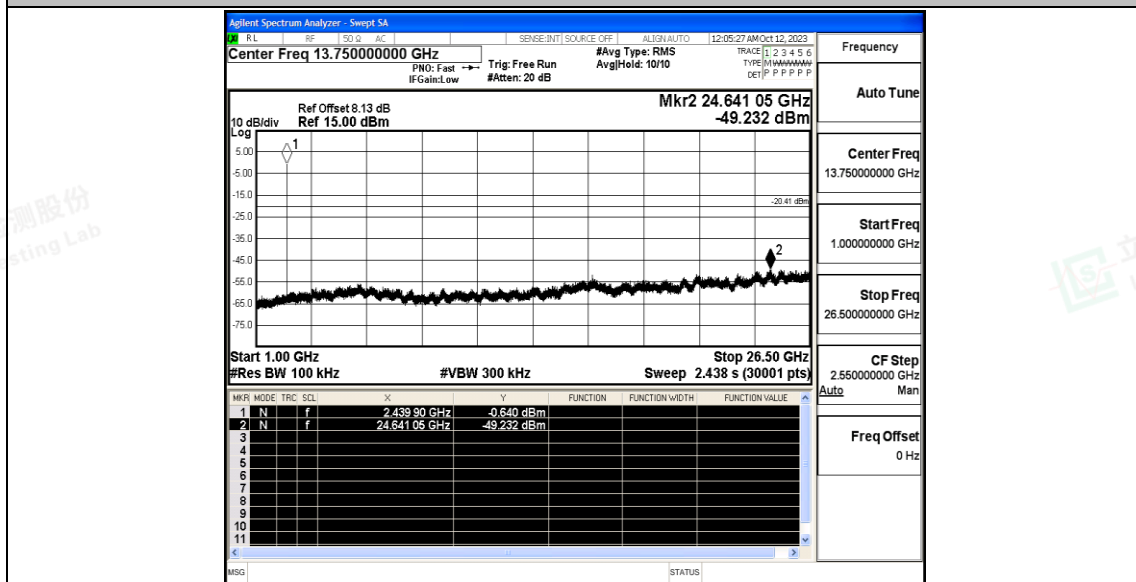


BLE_1M_Ant1_2440_30~1000



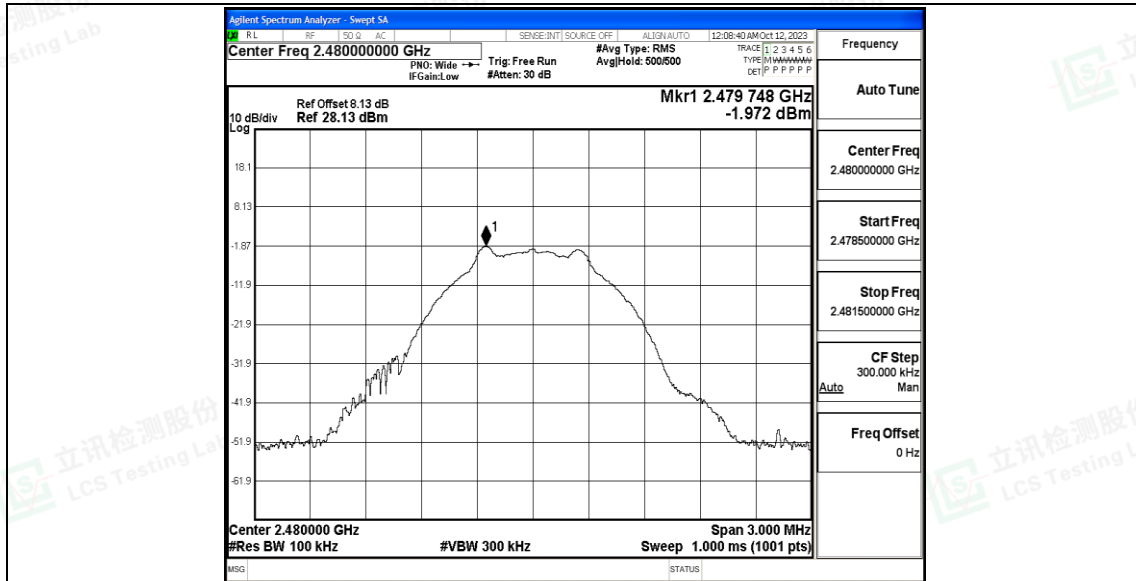


BLE_1M_Ant1_2440_1000~26500

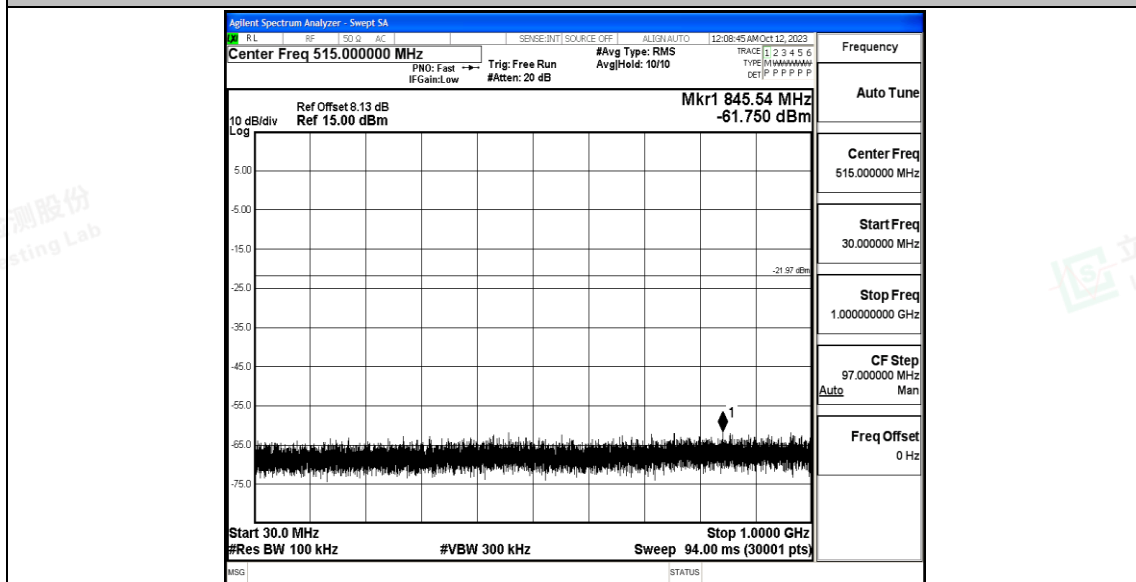


BLE_1M_Ant1_2480_0~Reference



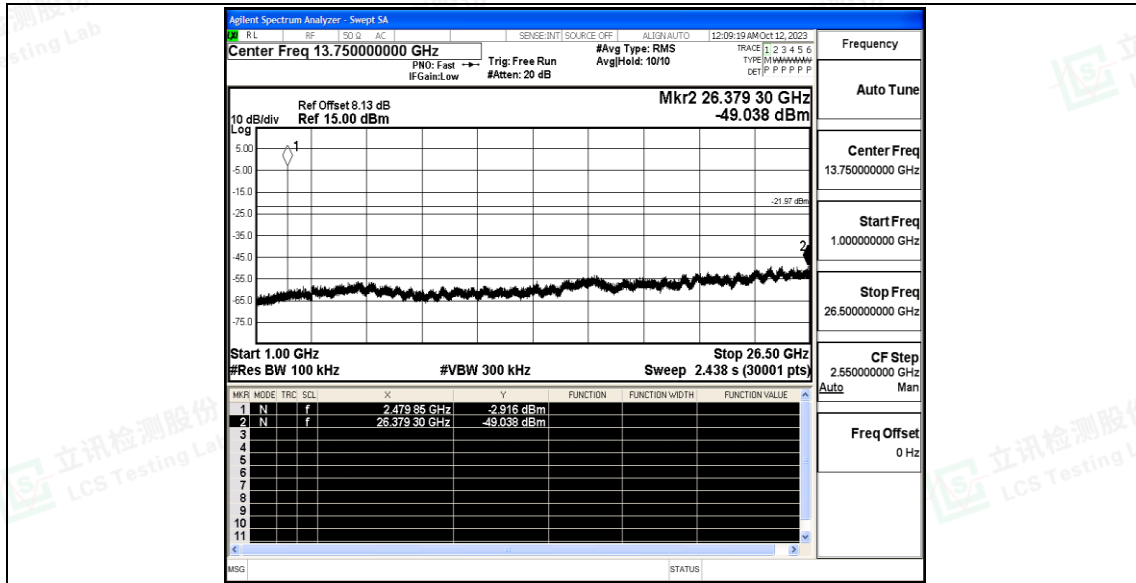


BLE_1M_Ant1_2480_30~1000

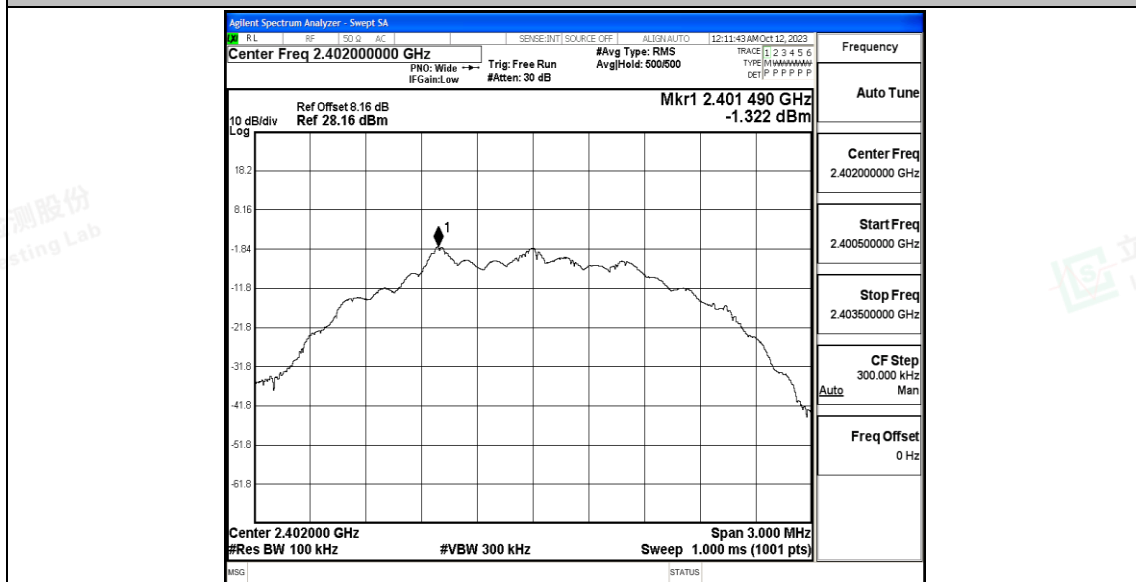


BLE_1M_Ant1_2480_1000~26500



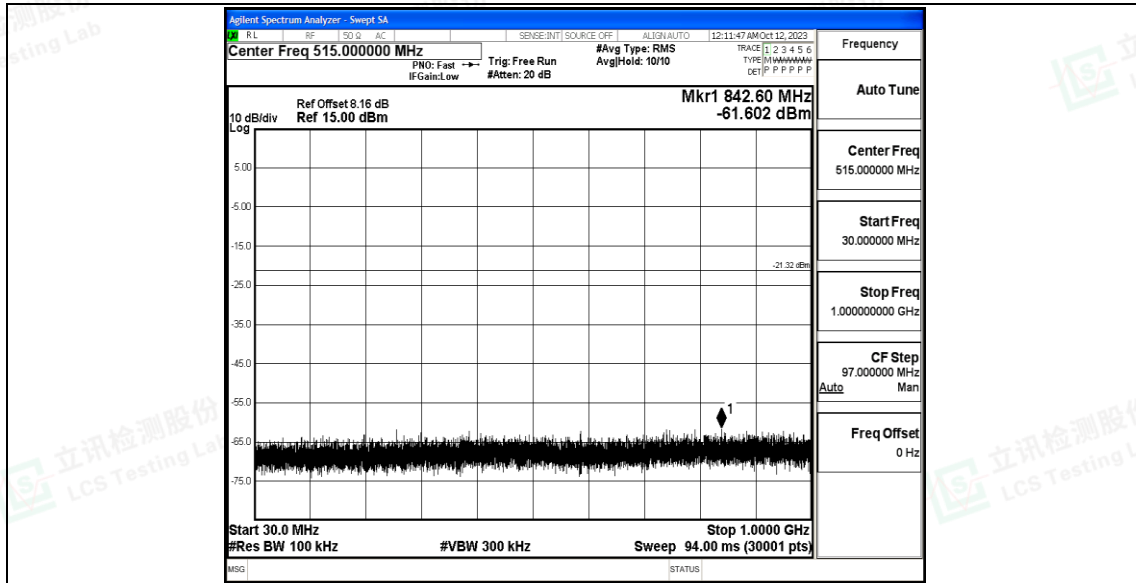


BLE_2M_Ant1_2402_0~Reference

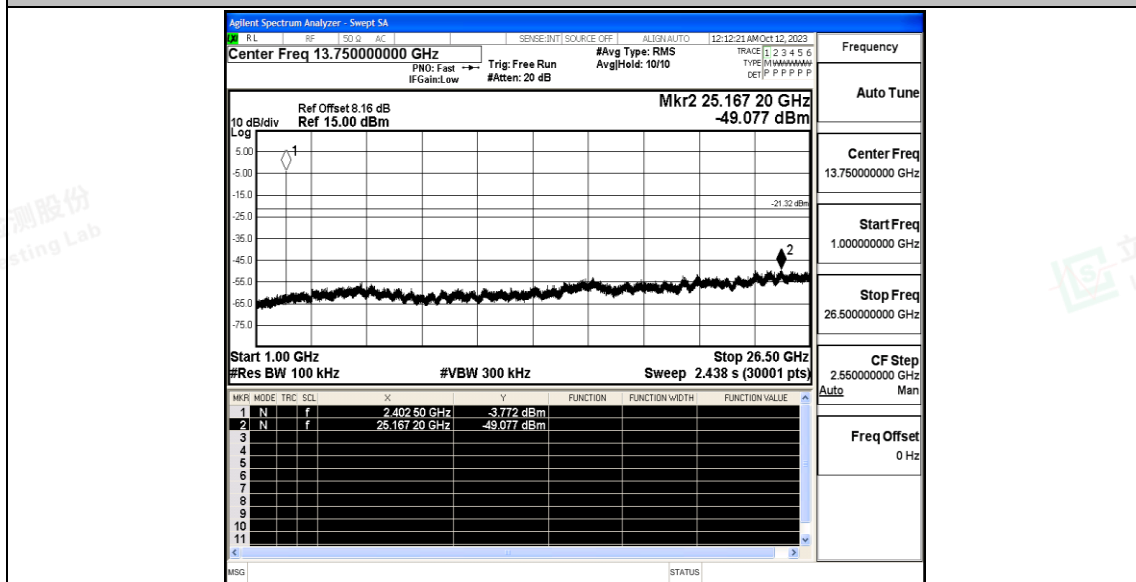


BLE_2M_Ant1_2402_30~1000



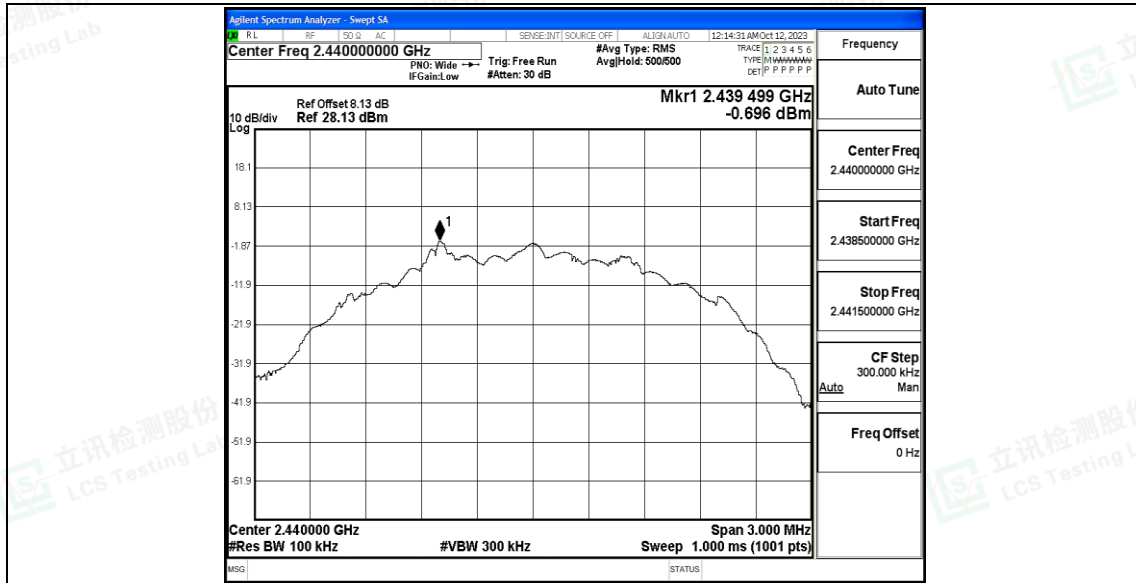


BLE_2M_Ant1_2402_1000~26500

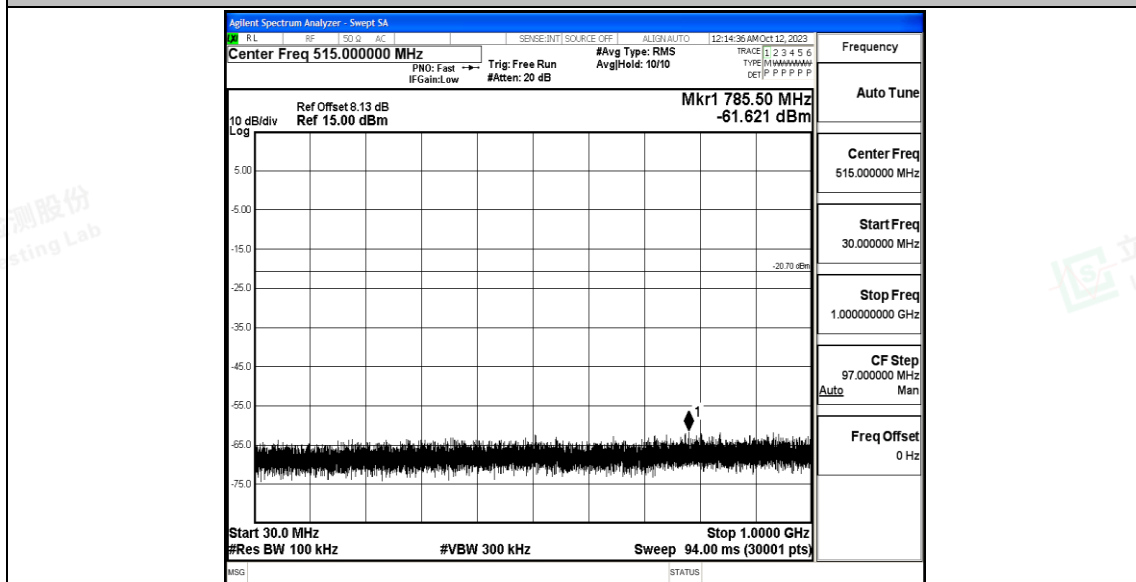


BLE_2M_Ant1_2440_0~Reference



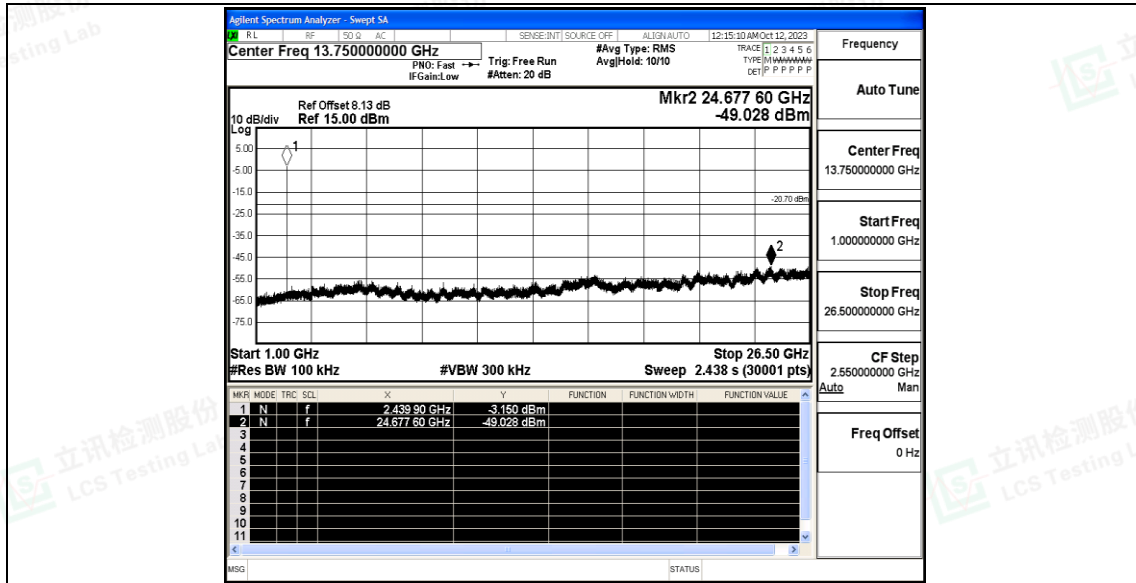


BLE_2M_Ant1_2440_30~1000

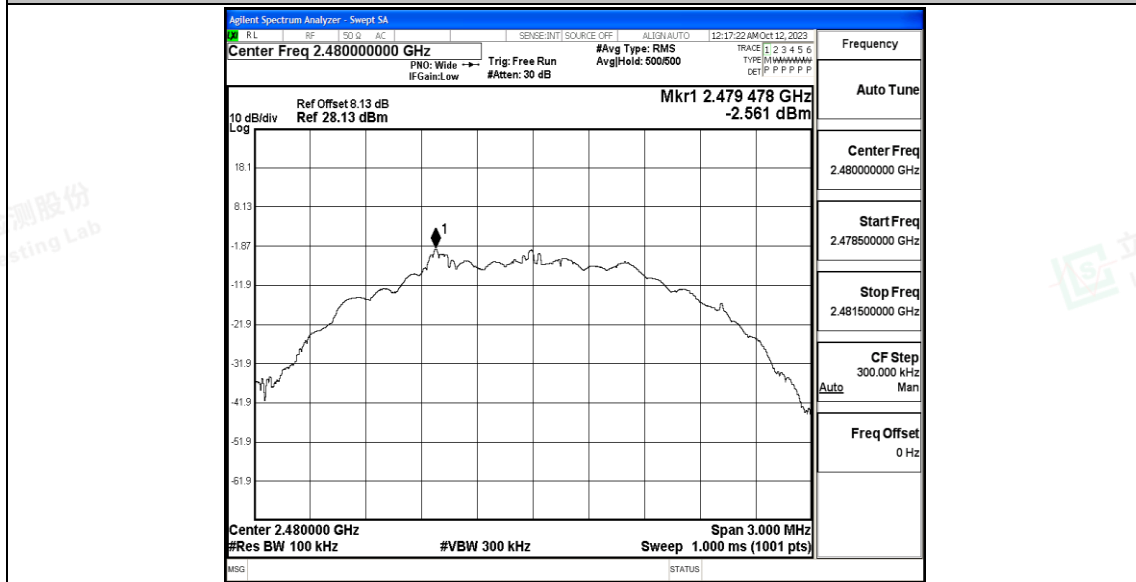


BLE_2M_Ant1_2440_1000~26500



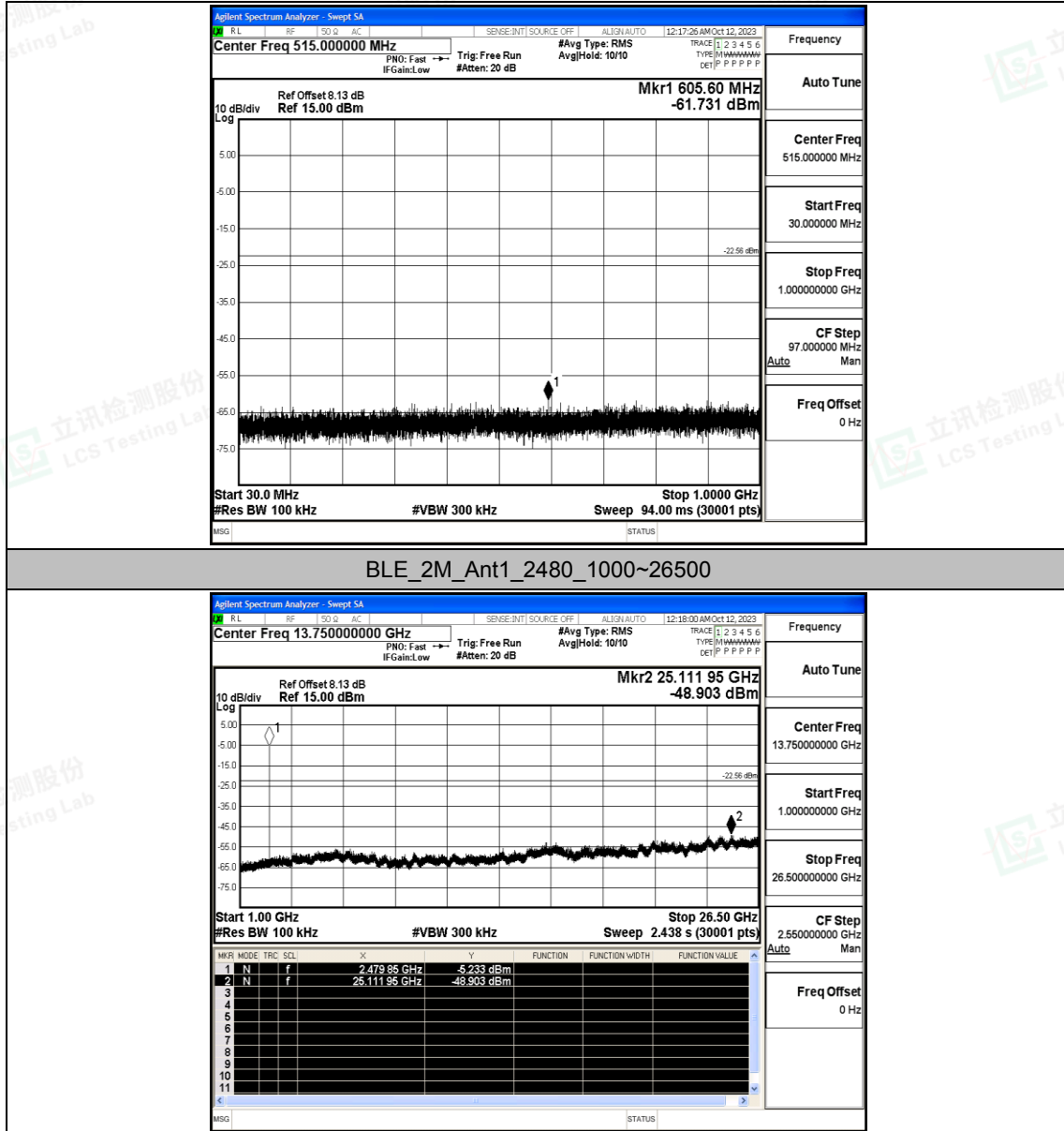


BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000







B.6 Duty Cycle

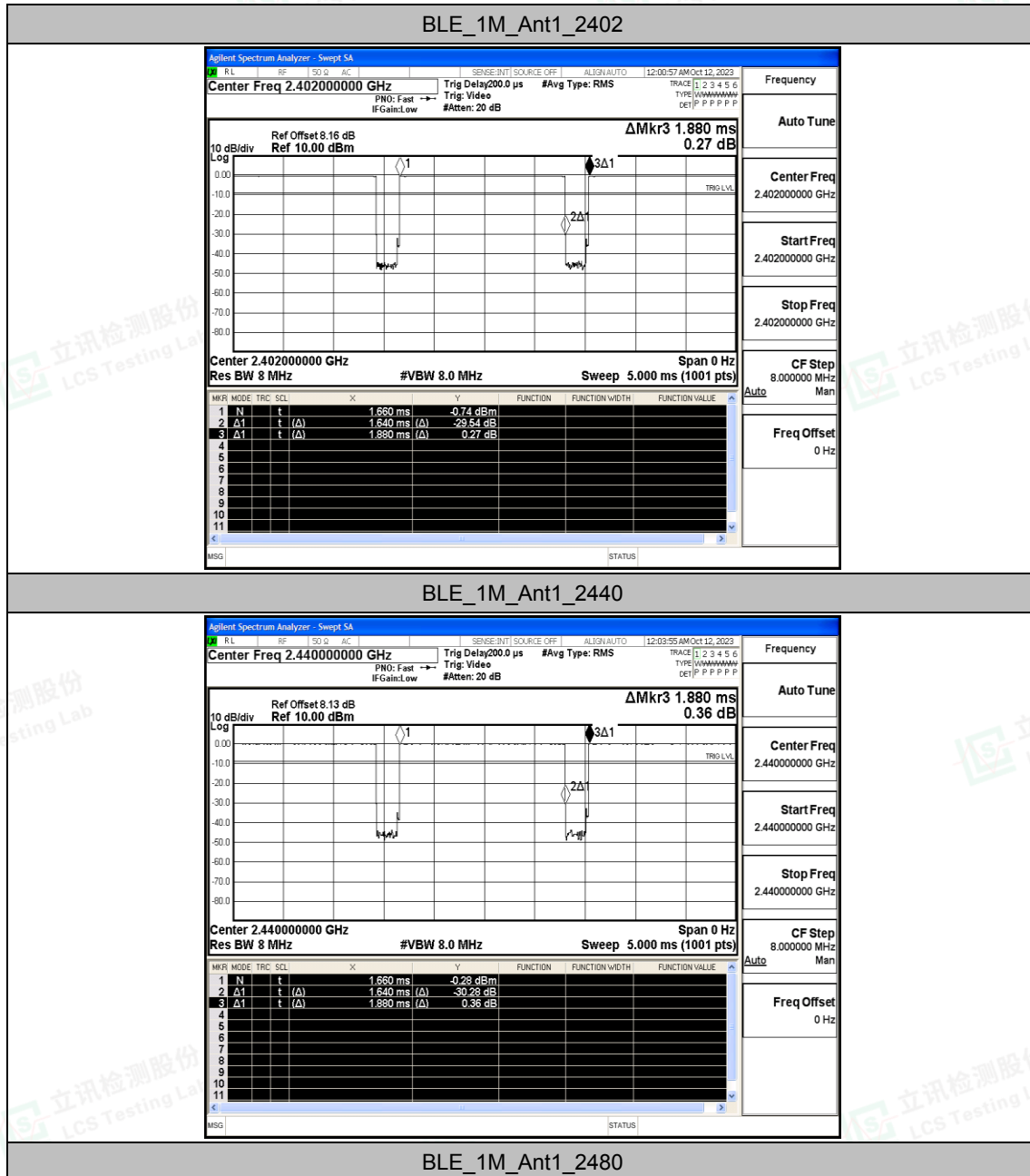
Test Result

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	1/T	Limit	Verdict
BLE_1M	Ant1	2402	1.64	1.88	0.8723	87.23	0.59	0.61	---	---
		2440	1.64	1.88	0.8723	87.23	0.59	0.61	---	---
		2480	1.64	1.88	0.8723	87.23	0.59	0.61	---	---
BLE_2M	Ant1	2402	0.82	1.25	0.6560	65.60	1.83	1.22	---	---
		2440	0.82	1.25	0.6560	65.60	1.83	1.22	---	---
		2480	0.82	1.25	0.6560	65.60	1.83	1.22	---	---





Test Graphs

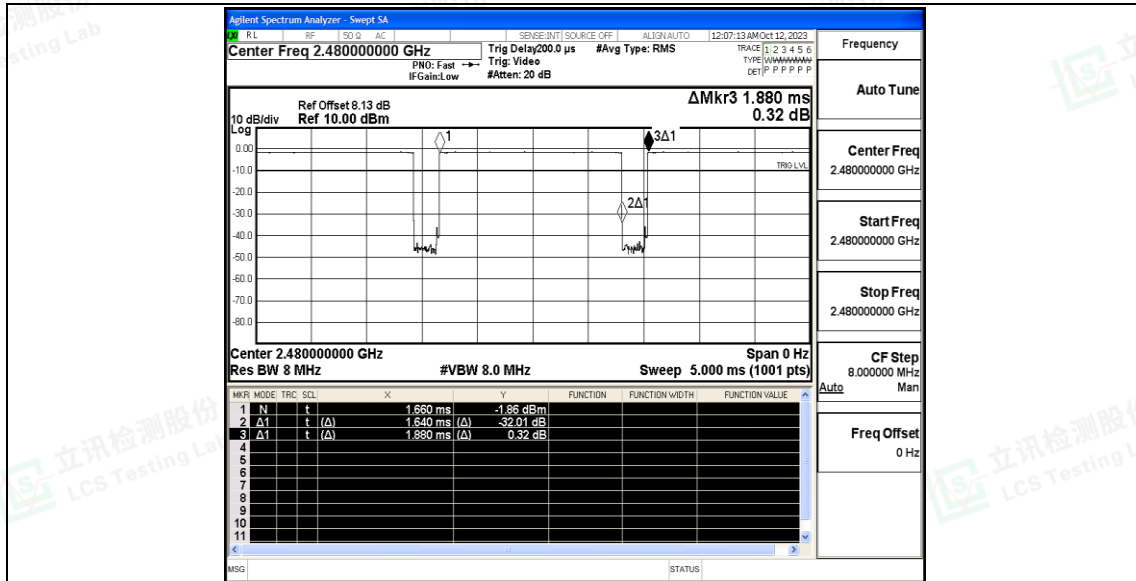


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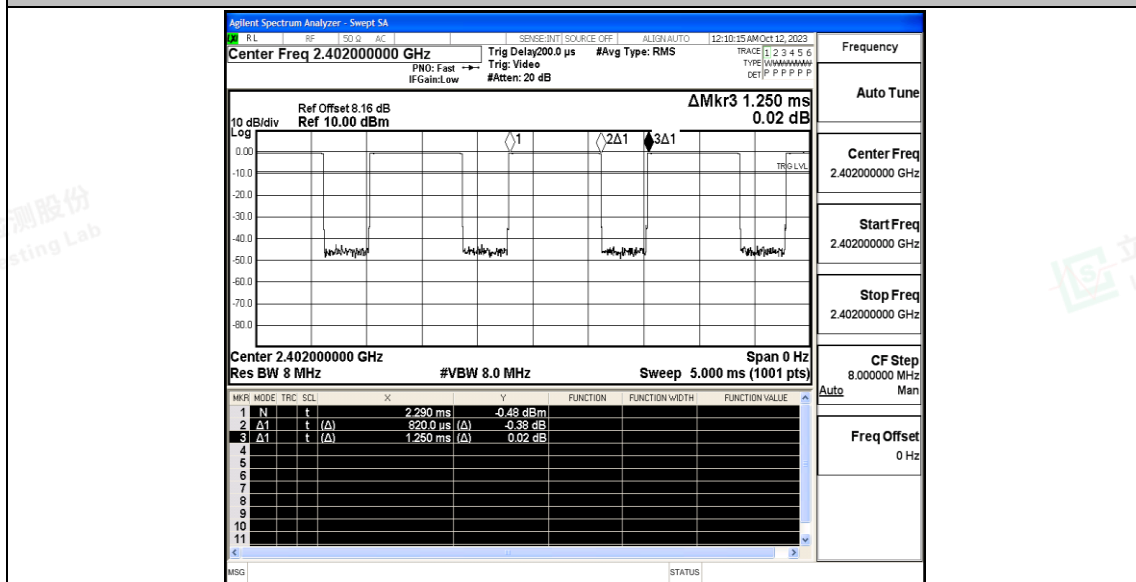
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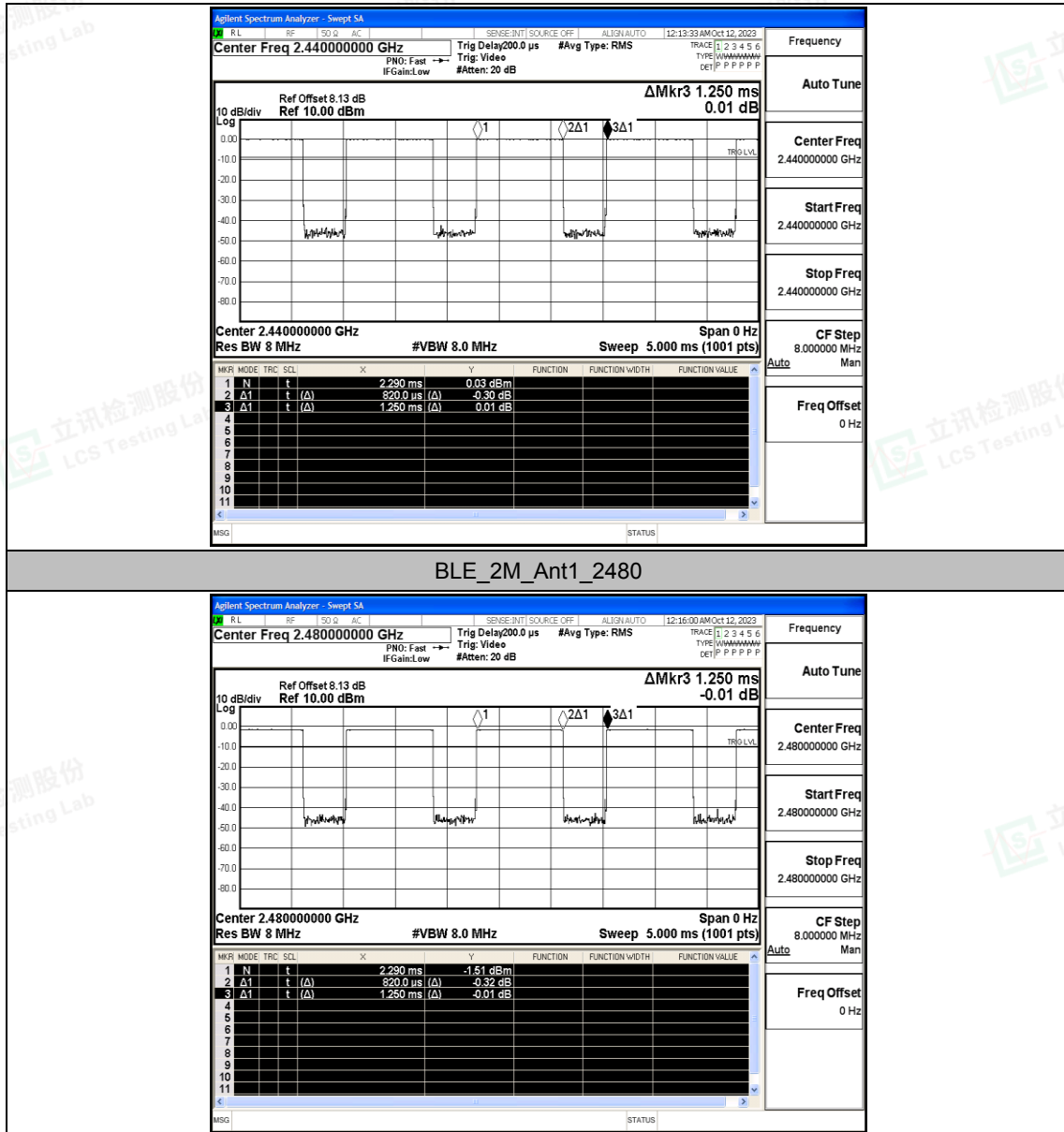


BLE_2M_Ant1_2402



BLE_2M_Ant1_2440







B.7 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.75	≤-41.20	PASS
				AV	2385.890	-48.27	≤-41.20	PASS
				AV	2390.000	-48.58	≤-41.20	PASS
				Peak	2310.000	-39.93	≤-21.20	PASS
				Peak	2349.770	-39.08	≤-21.20	PASS
				Peak	2390.000	-41.44	≤-21.20	PASS
		High	2480	AV	2483.500	-48.08	≤-41.20	PASS
				AV	2483.520	-48.08	≤-41.20	PASS
				AV	2500.000	-48.27	≤-41.20	PASS
				Peak	2483.500	-40.49	≤-21.20	PASS
				Peak	2499.040	-39.47	≤-21.20	PASS
				Peak	2500.000	-39.1	≤-21.20	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-48.66	≤-41.20	PASS
				AV	2381.690	-48.11	≤-41.20	PASS
				AV	2390.000	-48.31	≤-41.20	PASS
				Peak	2310.000	-41.42	≤-21.20	PASS
				Peak	2389.460	-37.92	≤-21.20	PASS
				Peak	2390.000	-42.53	≤-21.20	PASS
		High	2480	AV	2483.500	-47.54	≤-41.20	PASS
				AV	2483.520	-47.54	≤-41.20	PASS
				AV	2500.000	-48.14	≤-41.20	PASS
				Peak	2483.500	-41.25	≤-21.20	PASS
				Peak	2491.760	-38.53	≤-21.20	PASS
				Peak	2500.000	-42.17	≤-21.20	PASS

Note:

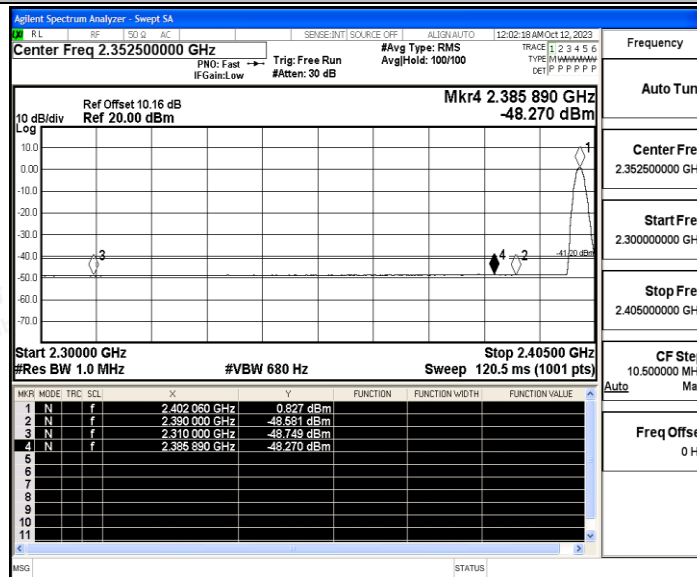
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



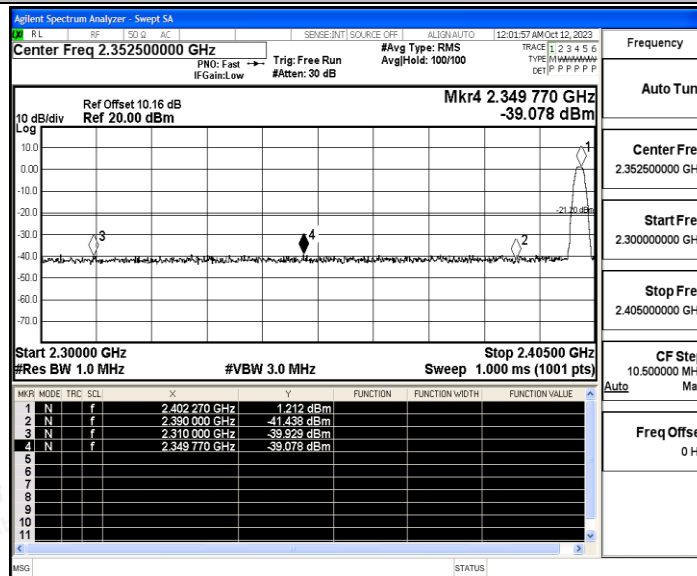


Test Graphs

BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV

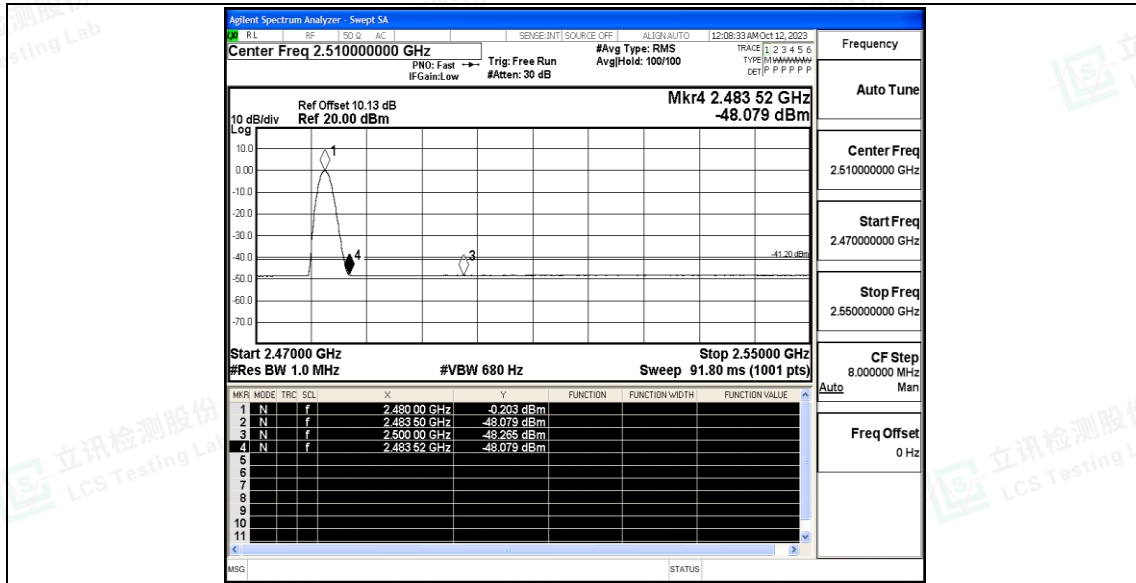


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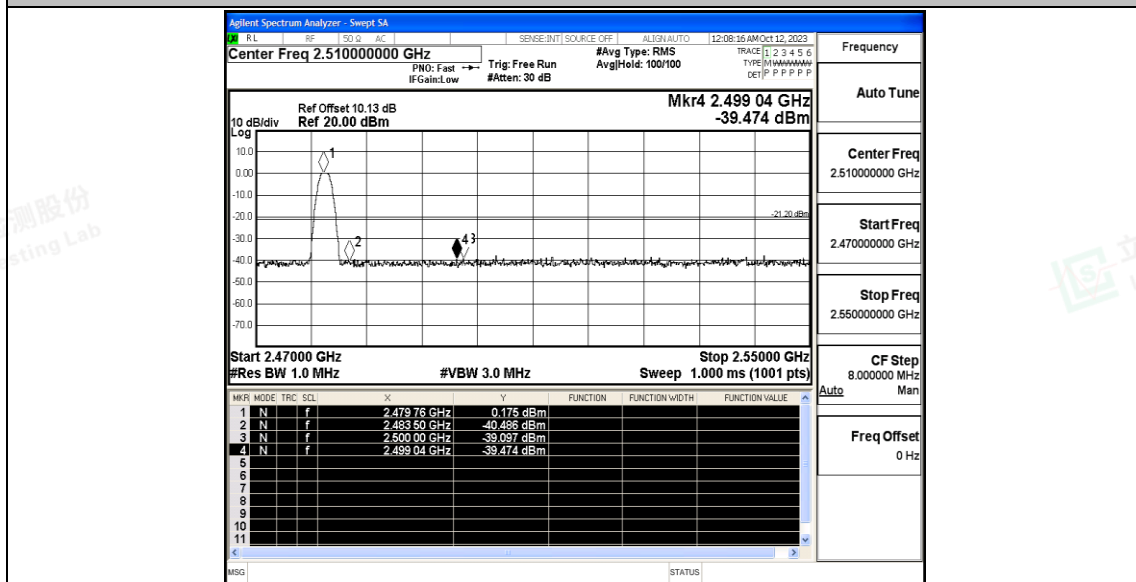
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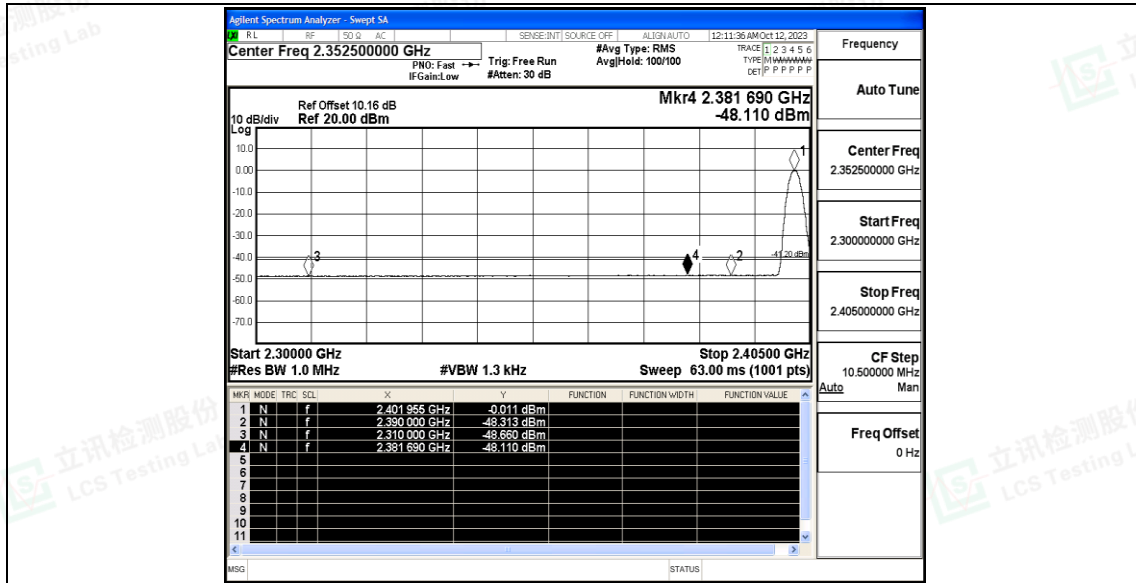


BLE_1M_Ant1_High_2480_Peak

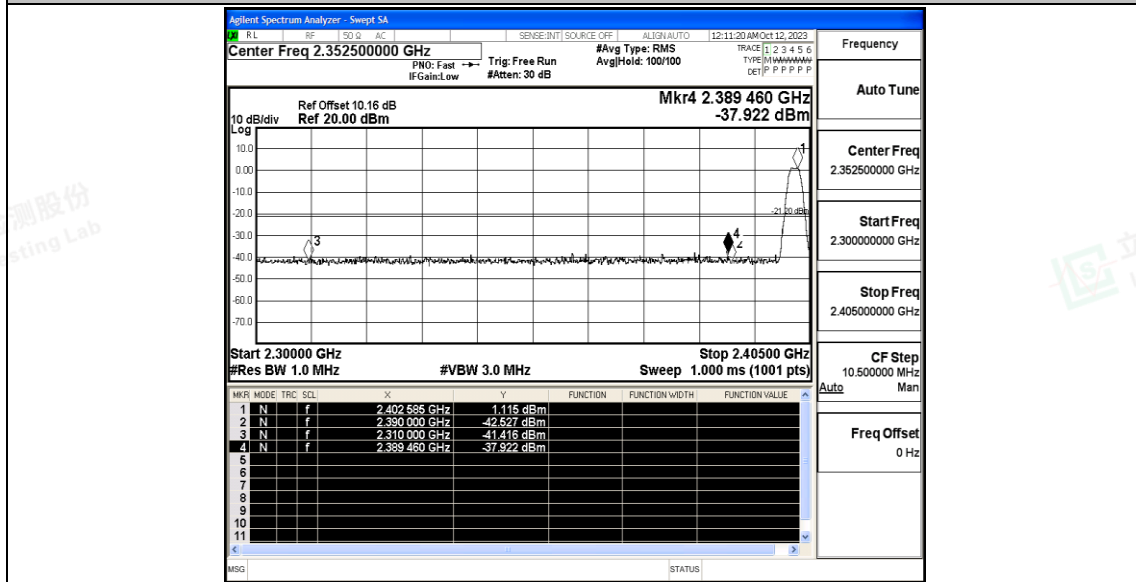


BLE_2M_Ant1_Low_2402_AV



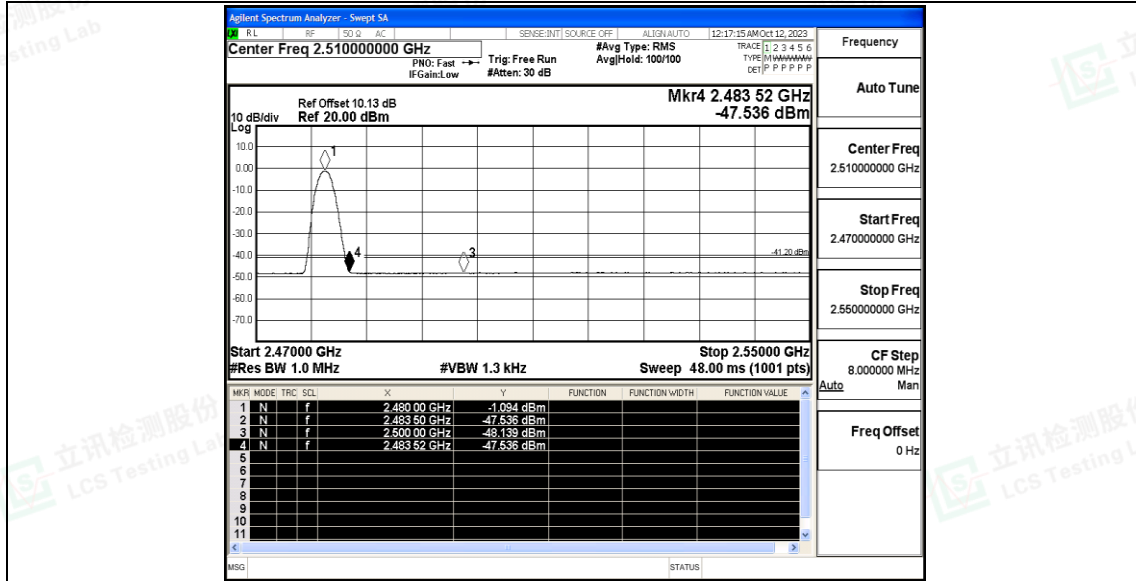


BLE_2M_Ant1_Low_2402_Peak



BLE_2M_Ant1_High_2480_AV





BLE_2M_Ant1_High_2480_Peak

