



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: IP PHONE

Test Model: CIP291PLUS

Environmental Conditions

Temperature:	23.2°C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jerry Chu
Supervised by:	Can Kun





B.1 DTS Bandwidth

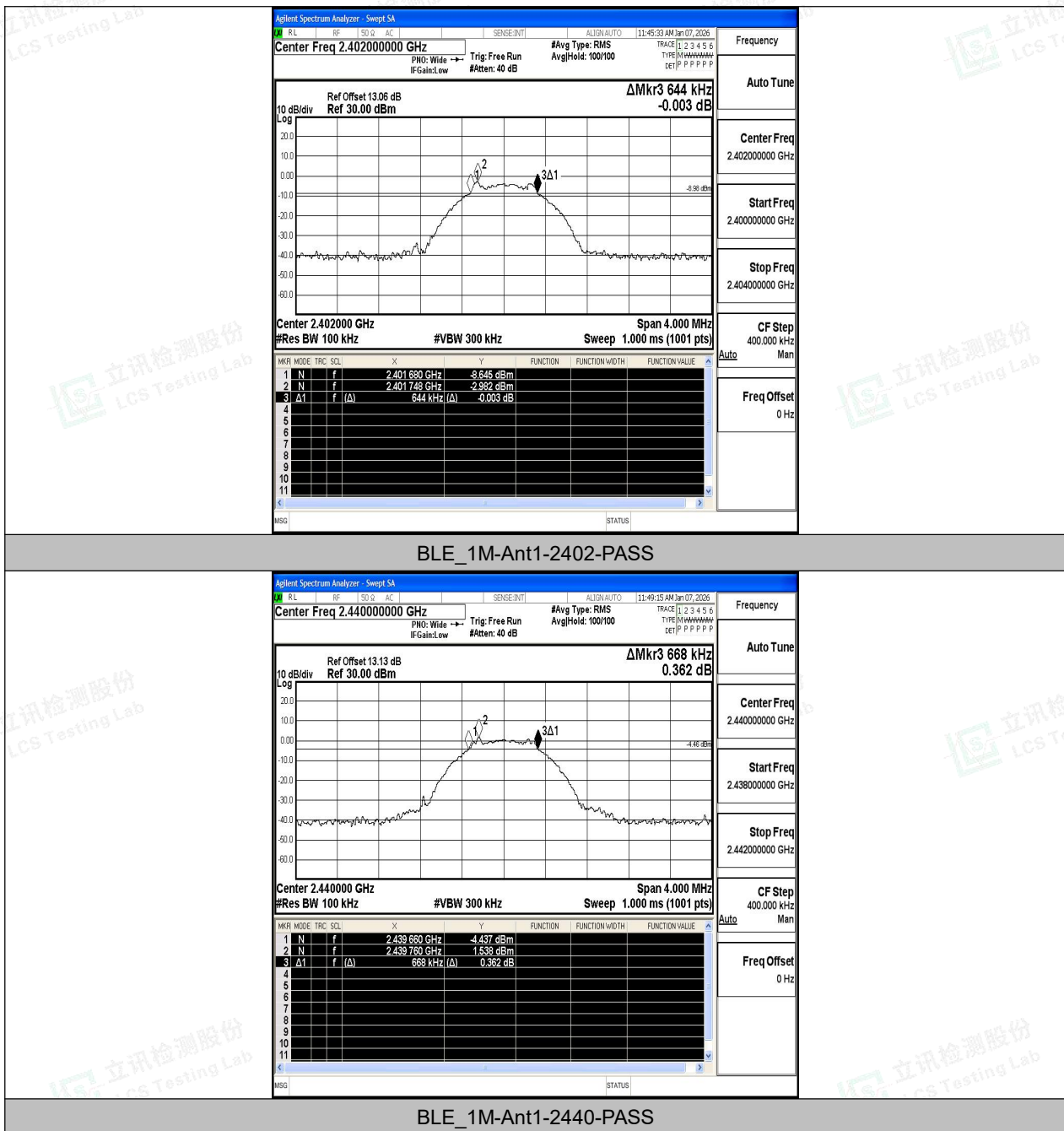
Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.644	2401.680	2402.324	0.5	PASS
BLE_1M	Ant1	2440	0.668	2439.660	2440.328	0.5	PASS
BLE_1M	Ant1	2480	0.656	2479.672	2480.328	0.5	PASS





Test Graphs

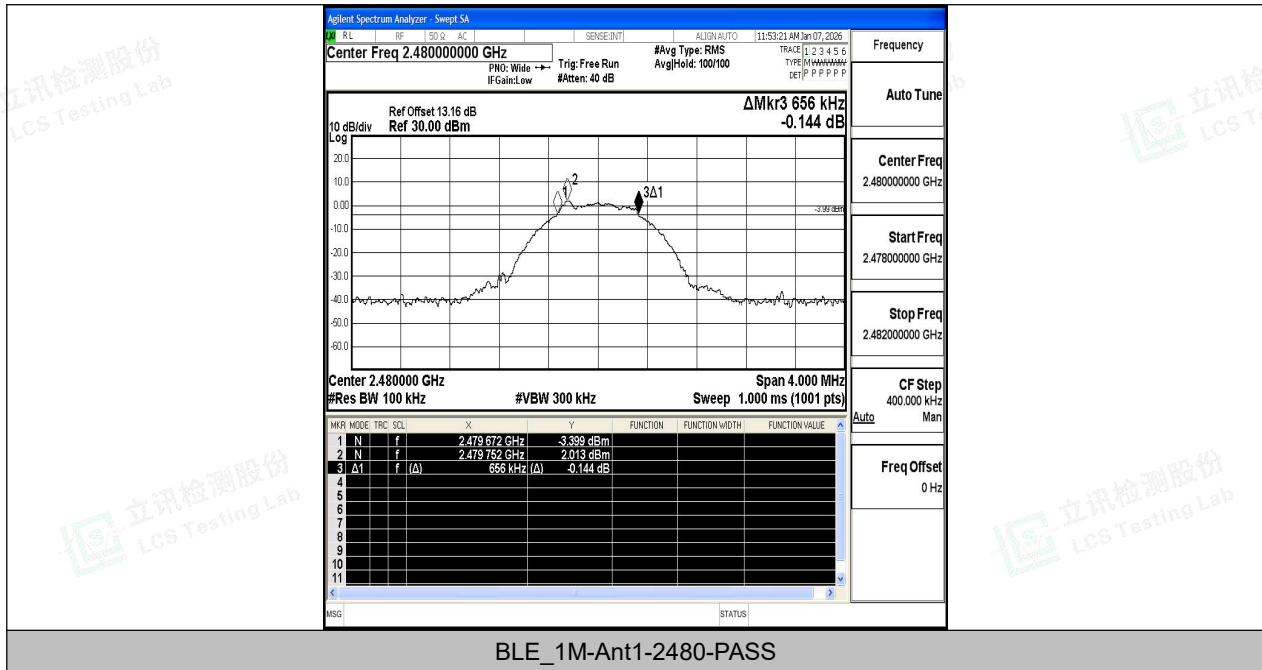


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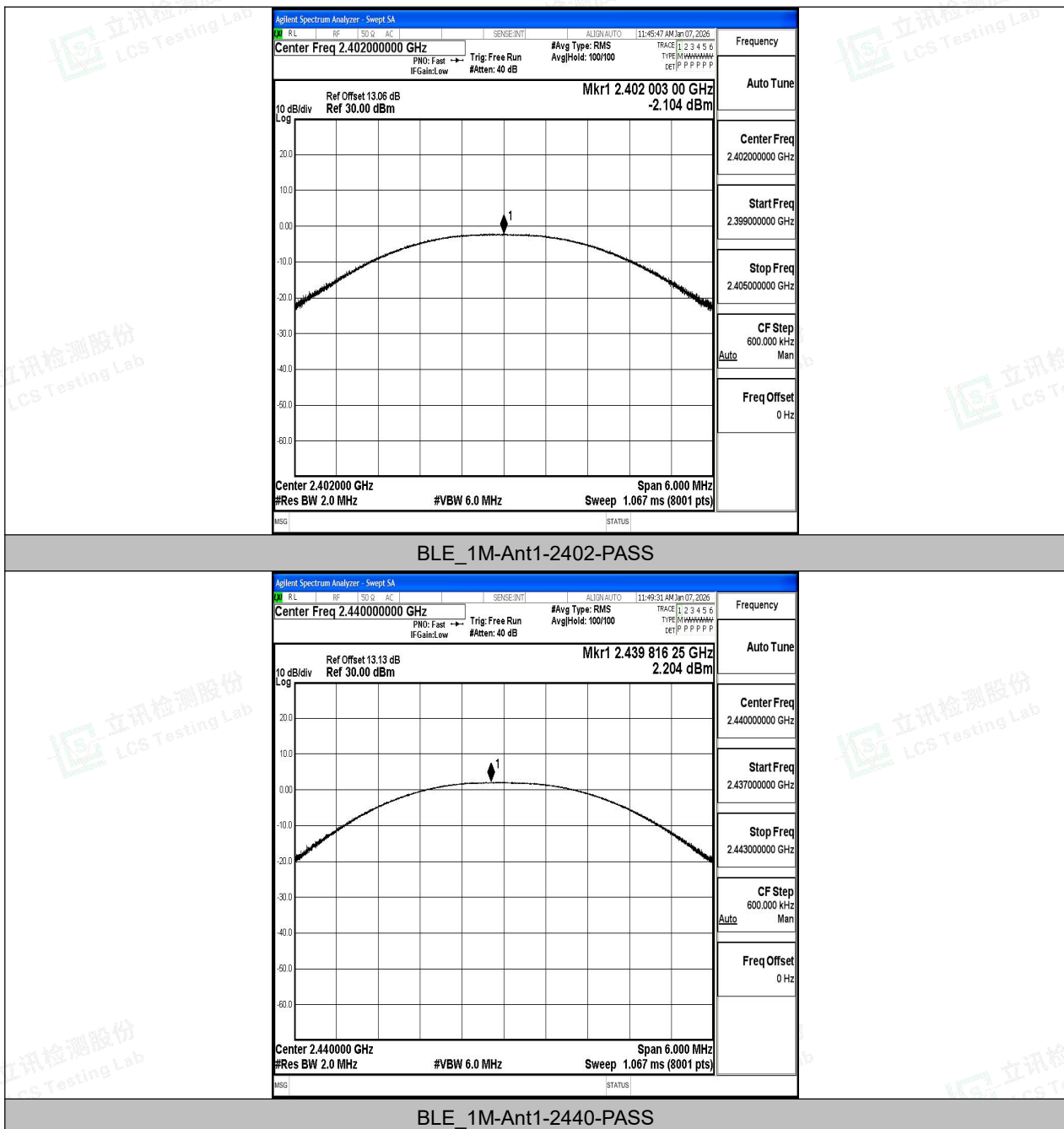


B.2 Maximum conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-2.10	≤30	PASS
BLE_1M	Ant1	2440	2.20	≤30	PASS
BLE_1M	Ant1	2480	2.58	≤30	PASS

Test Graphs Peak

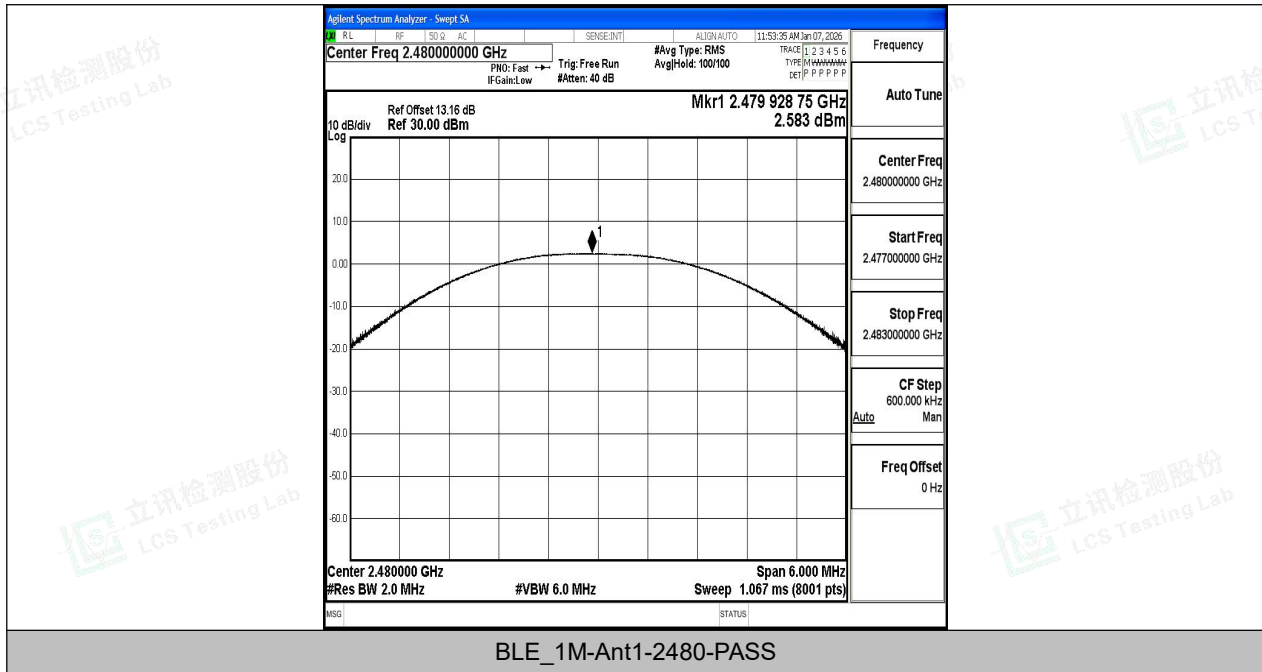


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B.3 Maximum power spectral density

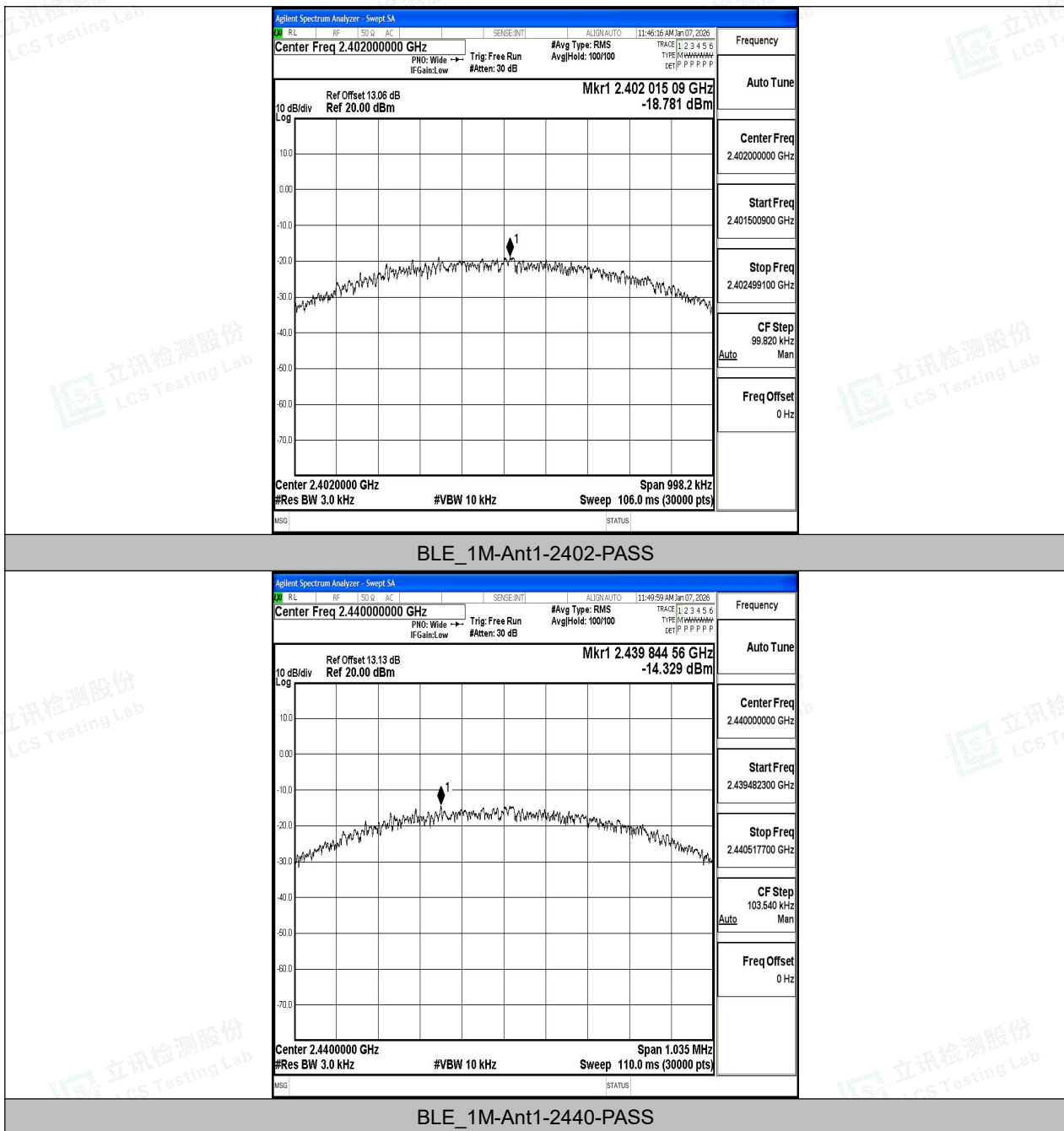
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-18.78	≤8.00	PASS
BLE_1M	Ant1	2440	-14.33	≤8.00	PASS
BLE_1M	Ant1	2480	-13.86	≤8.00	PASS





Test Graphs

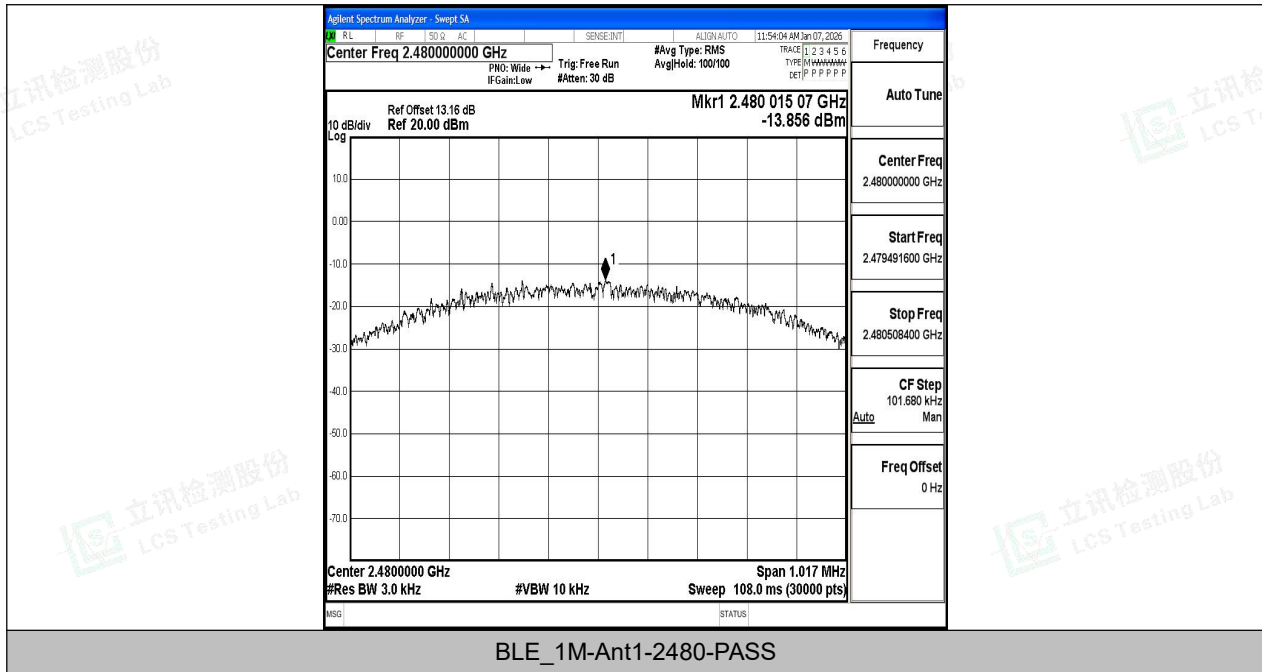


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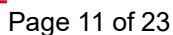


B.4 Band edge measurements

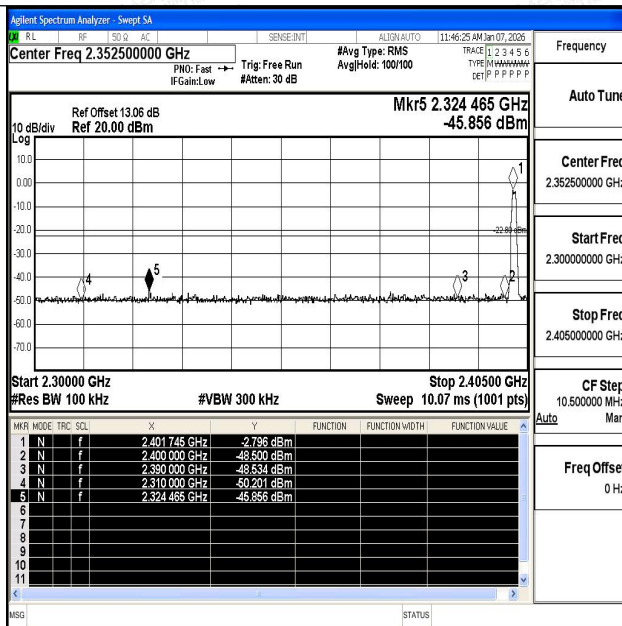
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.80	-45.86	≤-22.8	PASS
BLE_1M	Ant1	High	2480	2.04	-46.5	≤-17.96	PASS

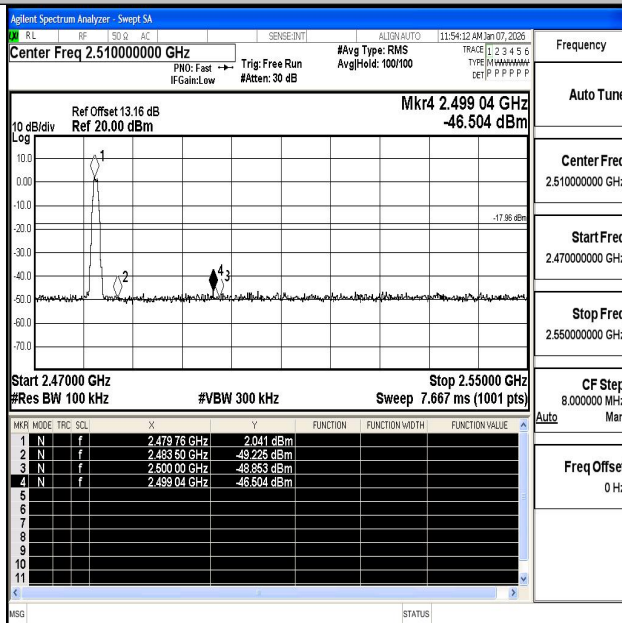




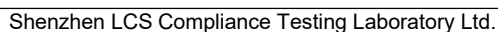
Test Graphs



BLE 1M-Ant1-2402-PASS



BLE 1M-Ant1-2480-PASS



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B.5 Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	-3.32	-3.32	---	PASS
BLE_1M	Ant1	2402	30~1000	-3.32	-57.14	≤-23.32	PASS
BLE_1M	Ant1	2402	1000~26500	-3.32	-44.89	≤-23.32	PASS
BLE_1M	Ant1	2440	0~Reference	1.52	1.52	---	PASS
BLE_1M	Ant1	2440	30~1000	1.52	-56.97	≤-18.48	PASS
BLE_1M	Ant1	2440	1000~26500	1.52	-44.28	≤-18.48	PASS
BLE_1M	Ant1	2480	0~Reference	0.86	0.86	---	PASS
BLE_1M	Ant1	2480	30~1000	0.86	-56.94	≤-19.14	PASS
BLE_1M	Ant1	2480	1000~26500	0.86	-43.52	≤-19.14	PASS



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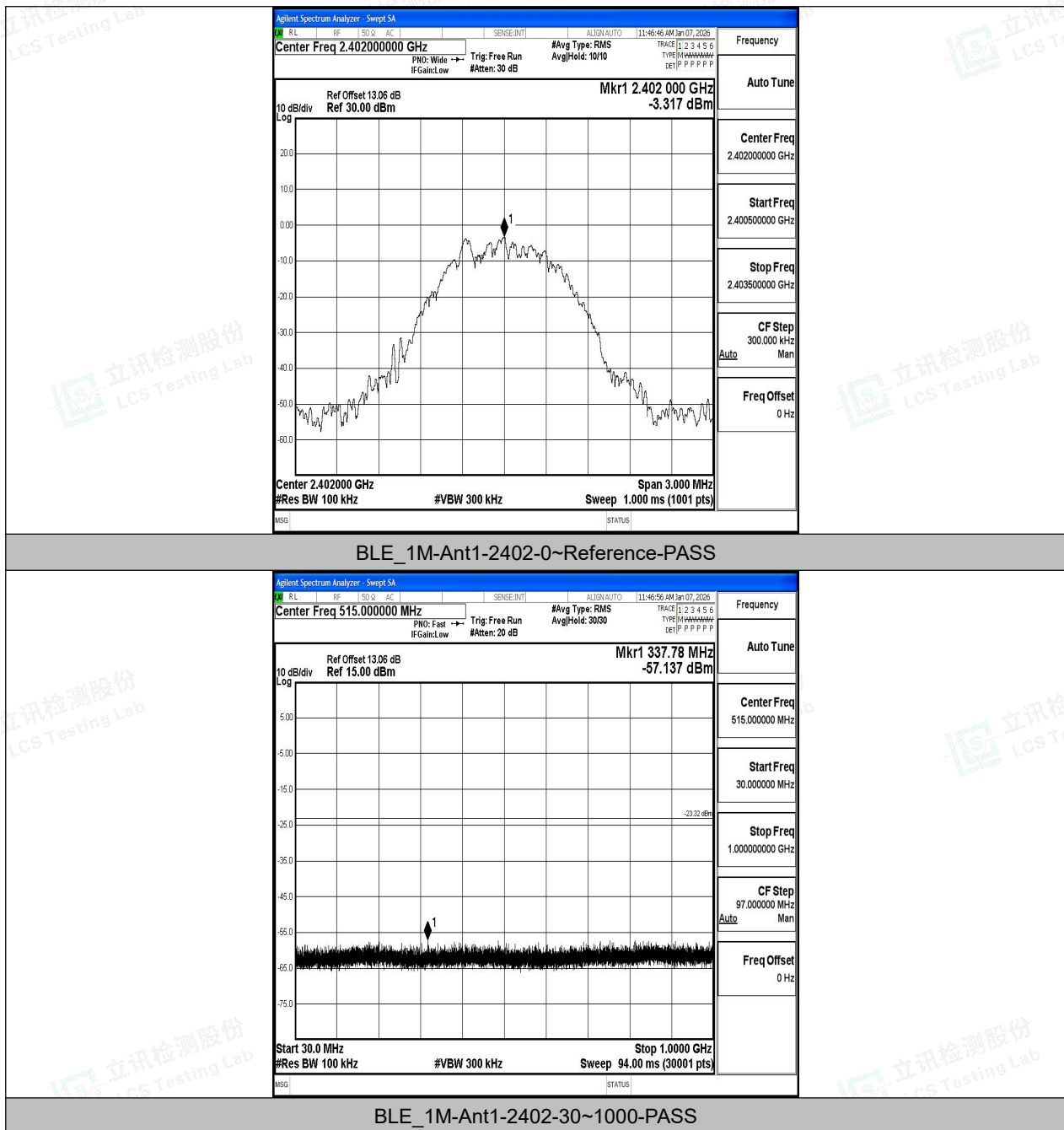
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Test Graphs

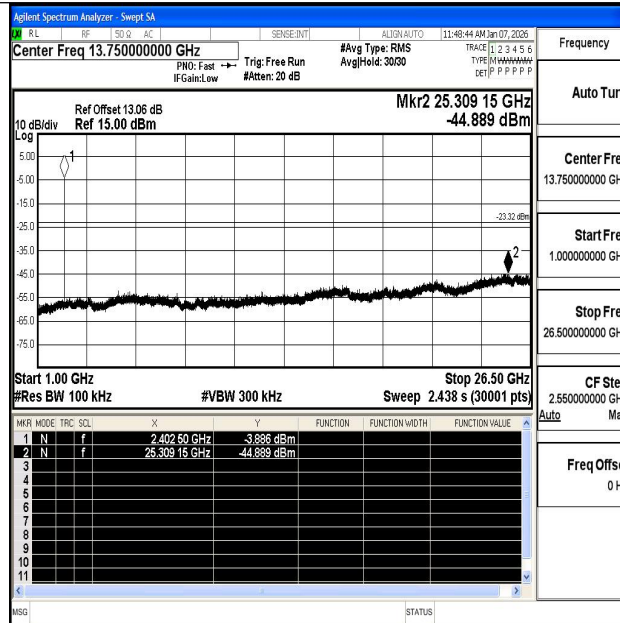


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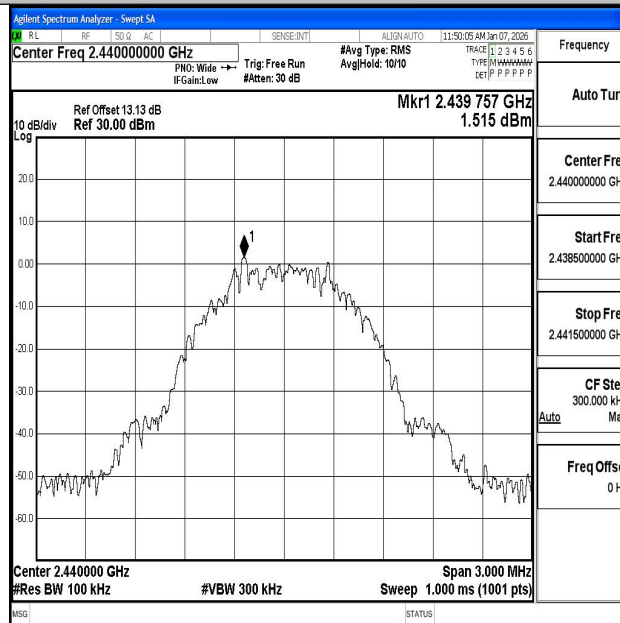
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BLE_1M-Ant1-2402-1000~26500-PASS



BLE_1M-Ant1-2440-0~Reference-PASS

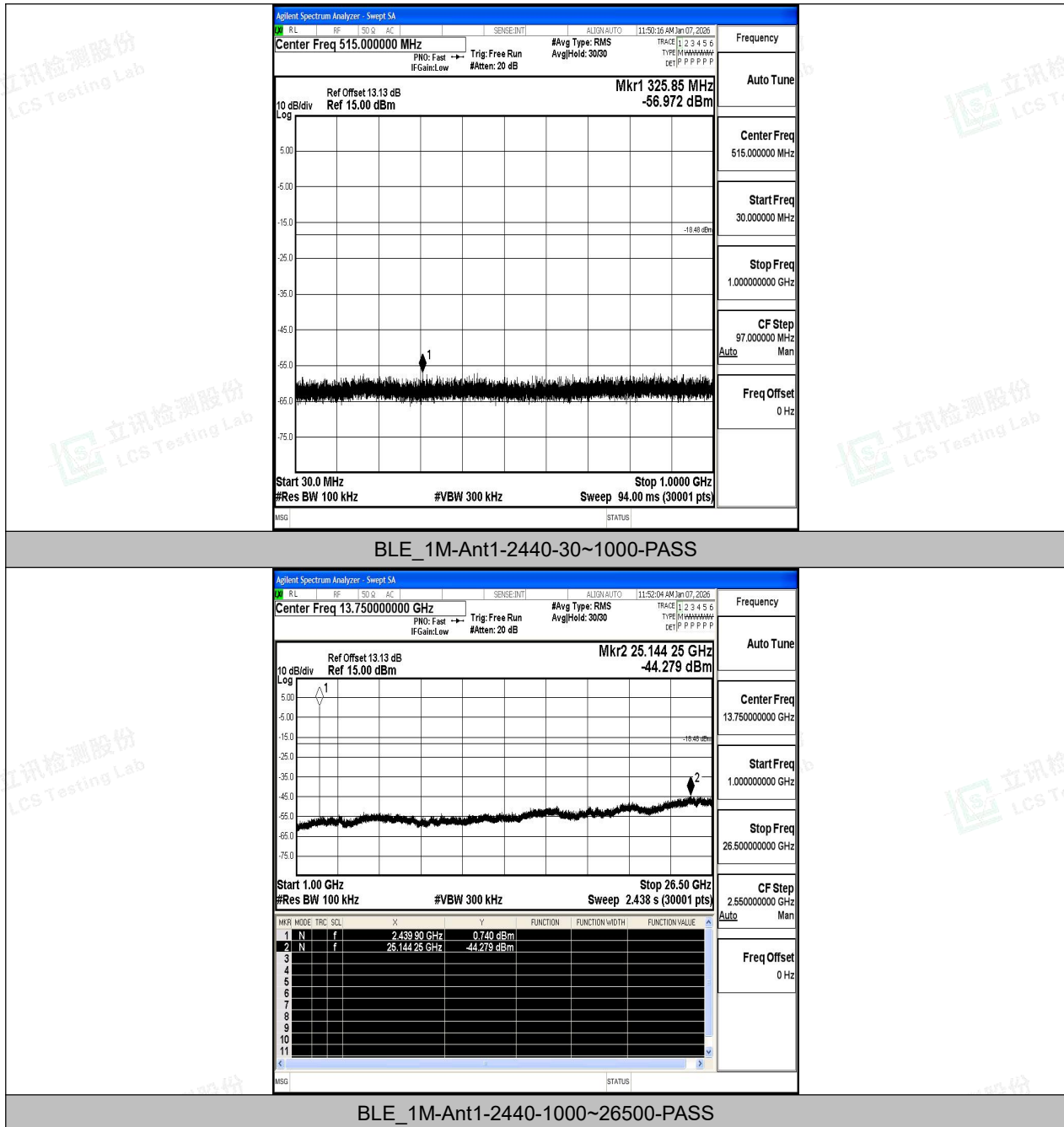


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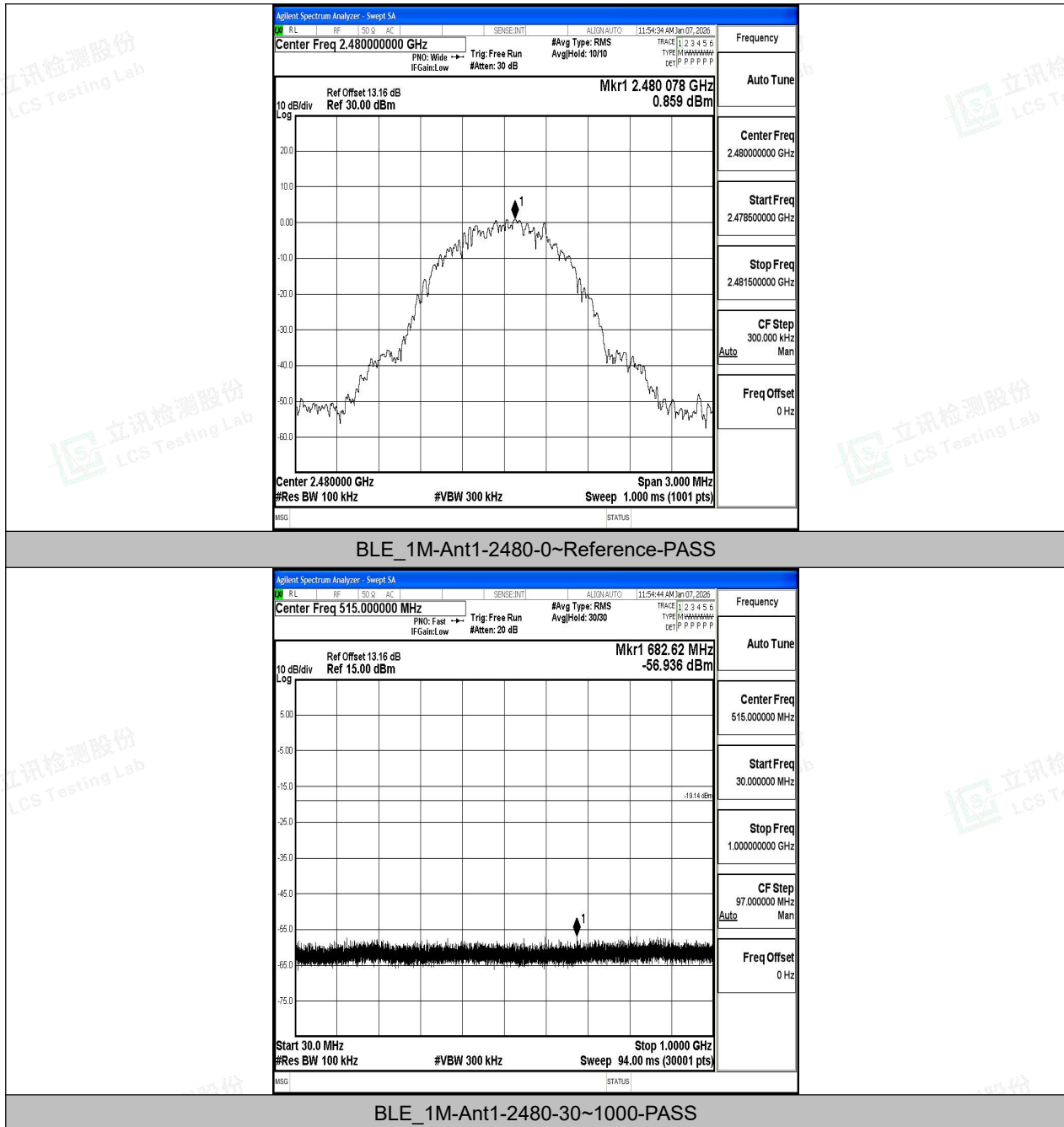


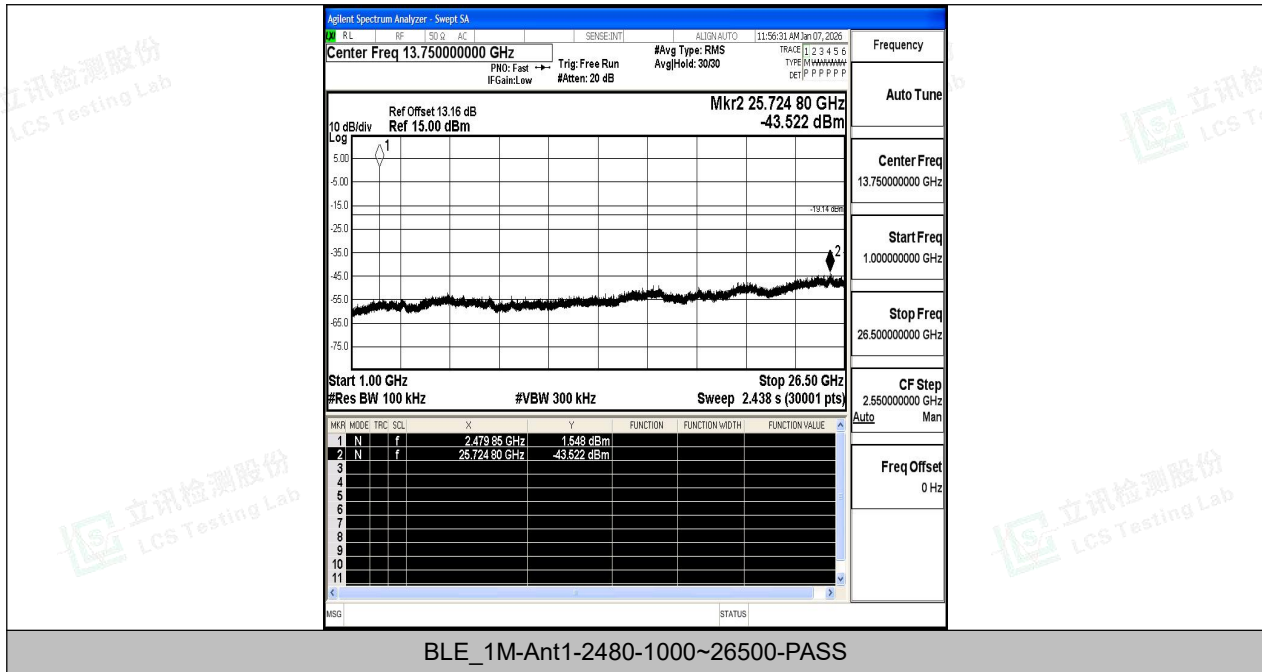
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B.6 Duty Cycle

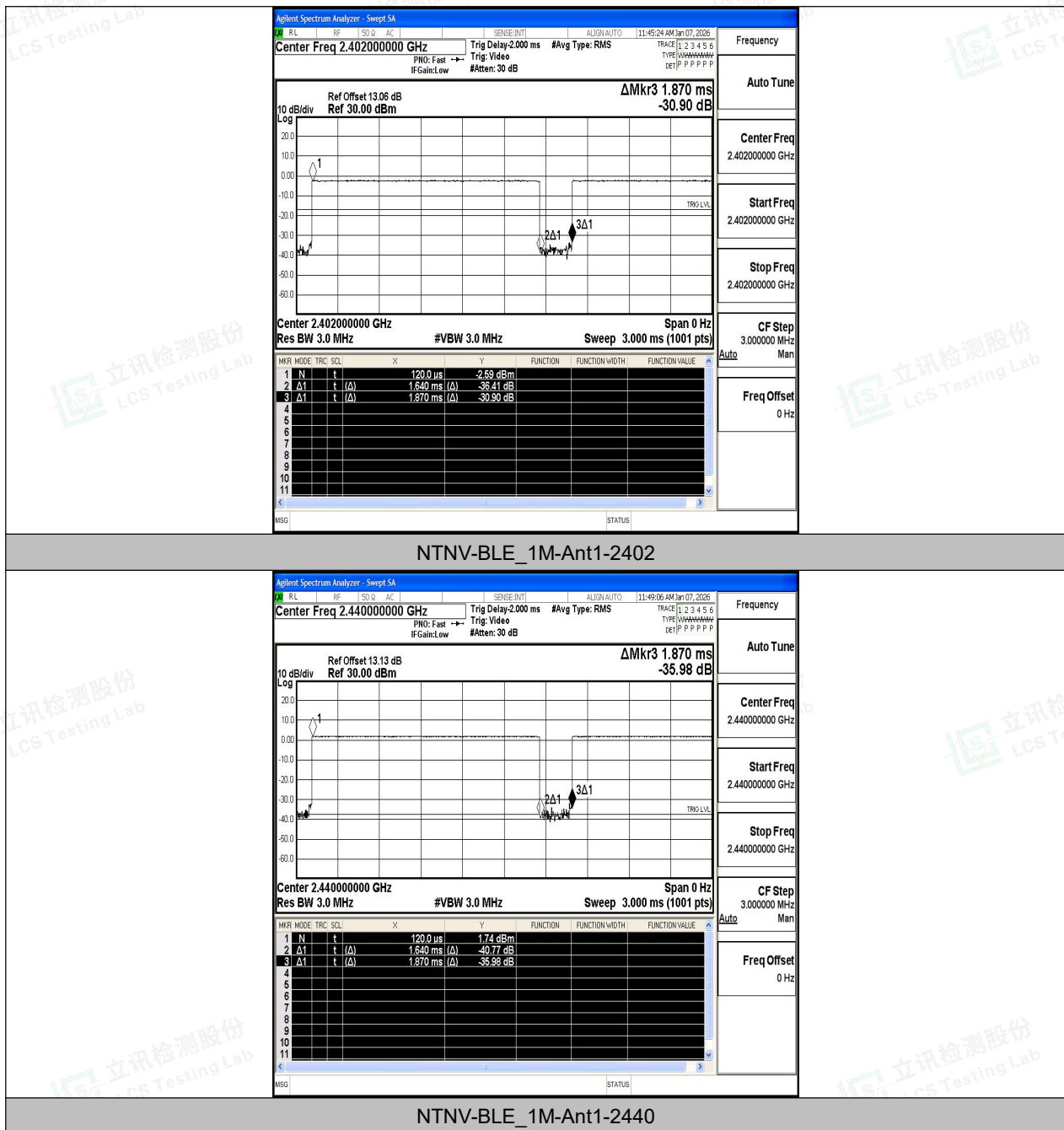
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	1.64	1.87	87.70	0.57
BLE_1M	Ant1	2440	1.64	1.87	87.70	0.57
BLE_1M	Ant1	2480	1.64	1.87	87.70	0.57





Test Graphs

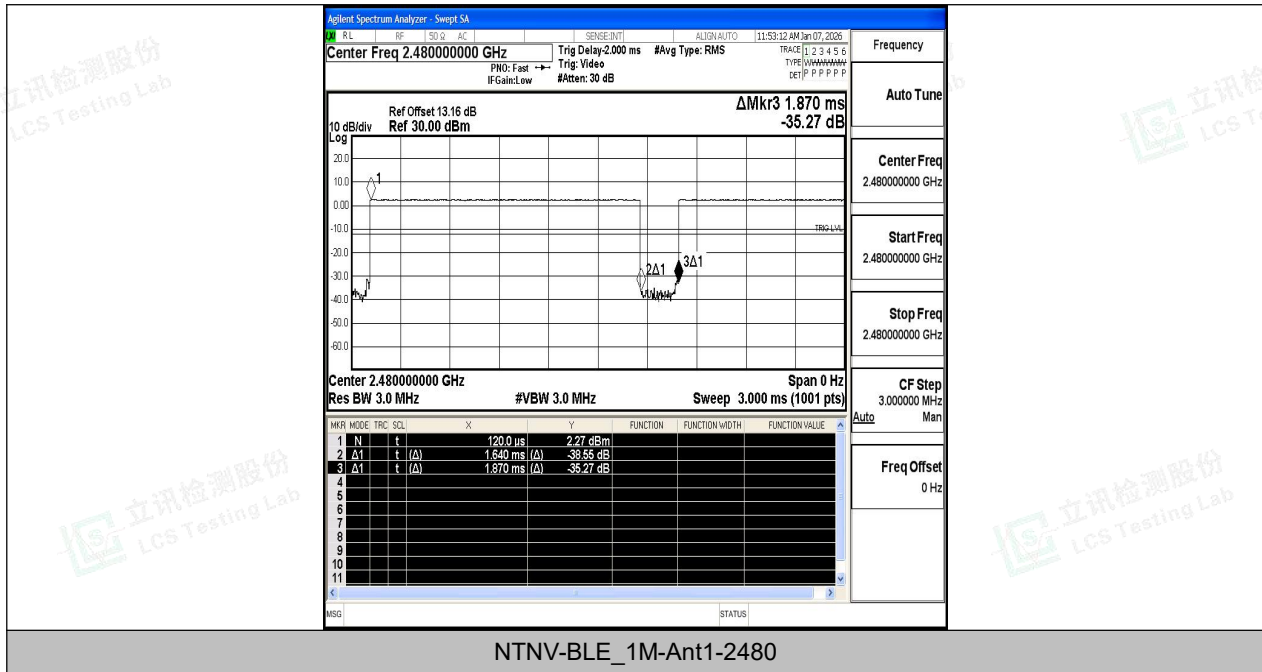


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B.7 Emissions in Restricted Bands

Test Result

TestMode	Antenna	Channel Name	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	Peak	2390.000	-37.66	≤-21.20	57.54	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2310.000	-38.48	≤-21.20	56.72	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2376.020	-35.07	≤-21.20	60.13	≤74	PASS
BLE_1M	Ant1	Low	2402	AV	2390.000	-45.93	≤-41.20	49.27	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2310.000	-46.32	≤-41.20	48.88	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2373.920	-44.99	≤-41.20	50.21	≤54	PASS
BLE_1M	Ant1	High	2480	Peak	2483.500	-38.49	≤-21.20	56.71	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2500.000	-39.23	≤-21.20	55.97	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2487.920	-35.37	≤-21.20	59.83	≤74	PASS
BLE_1M	Ant1	High	2480	AV	2483.500	-45.77	≤-41.20	49.43	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2500.000	-45.72	≤-41.20	49.48	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2490.640	-45.13	≤-41.20	50.07	≤54	PASS

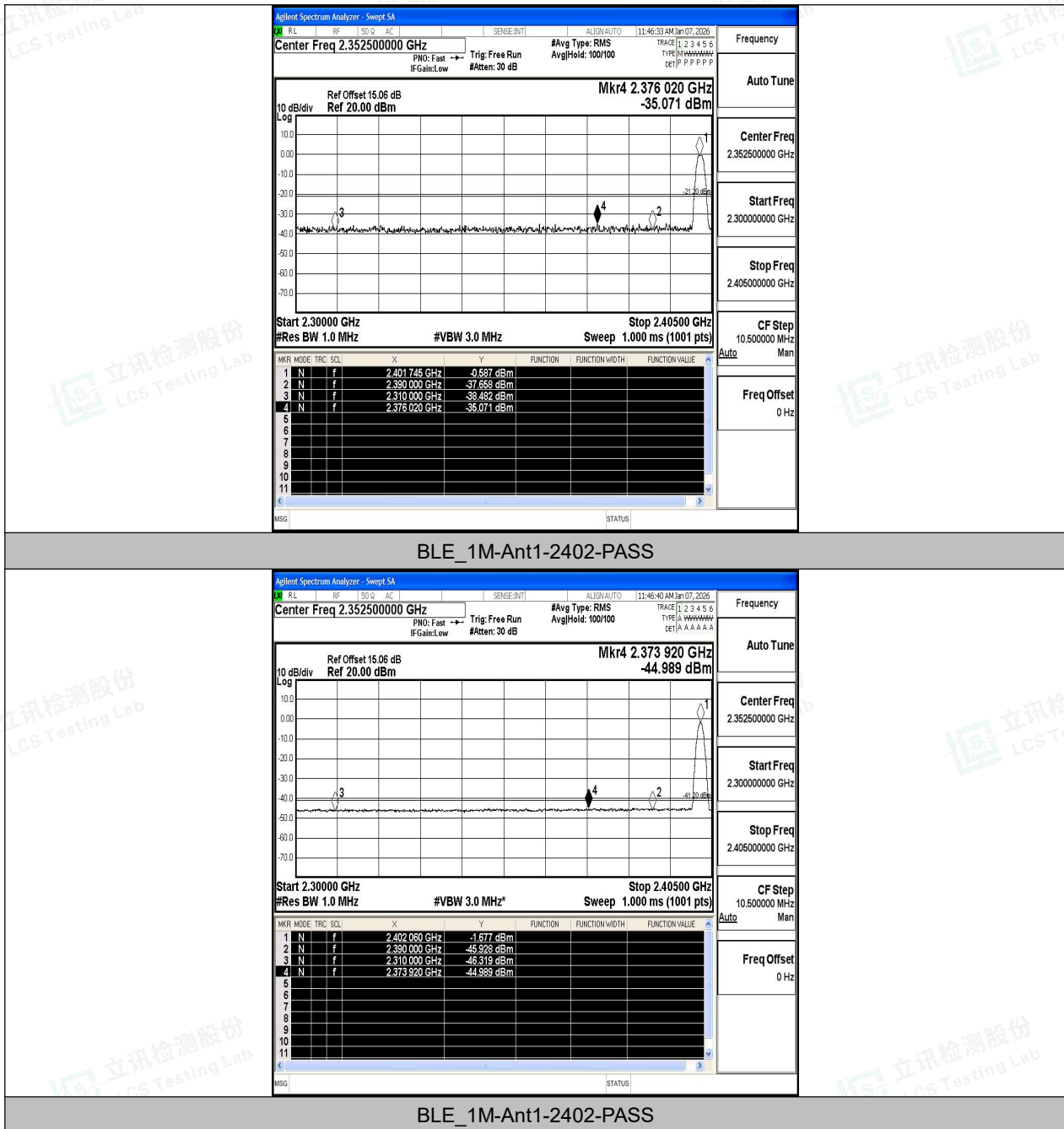
Note:

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

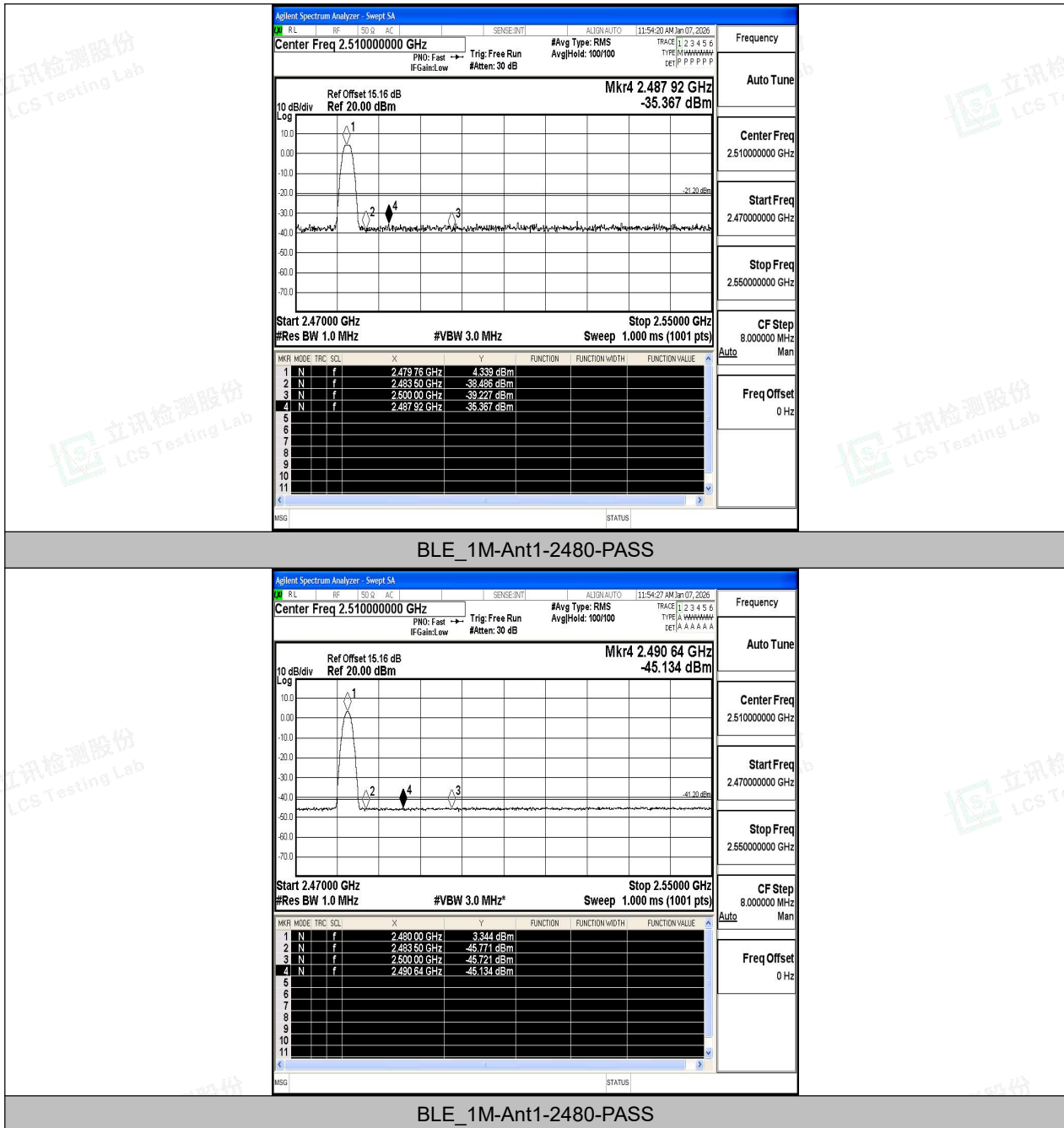


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