

Dell Latitude 9430 Significantly Outperforms the HP EliteBook 1040 G9 and Lenovo X1 Gen 10

Source: Strategic Thermal Labs: Notebook Thermodynamics Part 2/2

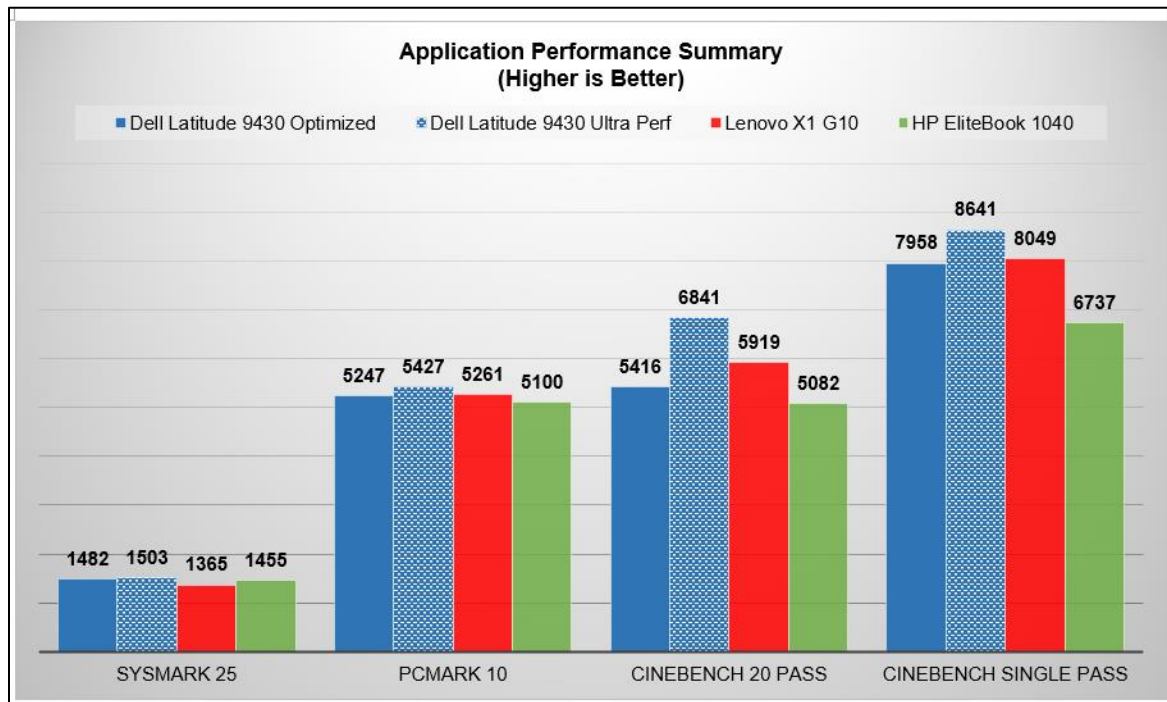
Business-class notebook shakedown: Intel Alder Lake

By Andrew Glinka, Vice President of Competitive Intelligence, Dell Technologies | Oct. 2022

In a recent study, Strategic Thermal Labs tested Dell, HP, and Lenovo ultra-premium business-class notebooks for application and battery performance, temperature, and sound output¹. The study found that the Dell Latitude 9430 won three out of four Thermal Performance Indicator categories and is faster, quieter, and has longer battery life when compared to HP EliteBook 1040 G9 and Lenovo X1 Gen 10. Following are a few highlights from the testing research.

Application Performance

Whether you want to run the occasional quick photo rendering job or are primarily working with general Office applications, Dell Latitude 9430 has the upper hand in all four application performance benchmarks that evaluate how “fast” the system performs certain tasks. For example, the Dell Latitude 9430 beat HP EliteBook 1040 G9 by 34% in the Cinebench R23 category which tests the 3D graphics rendering performance of the CPU.



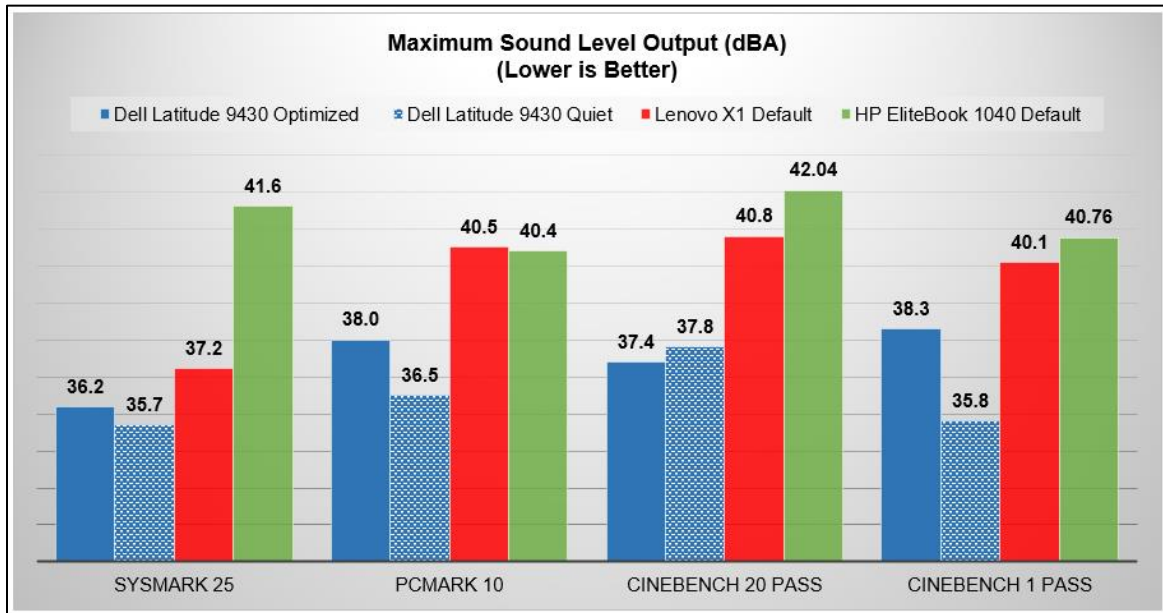
Sound Output

Sound output refers to how loud the system is under various conditions. With Dell's exclusive User Selectable Thermal Tables (USTTs) feature, which HP and Lenovo do not offer, you are just one click away from your notebook being best in class in

whichever category you need at that moment. Latitude 9430's USTTs allow users to optimize these three areas:

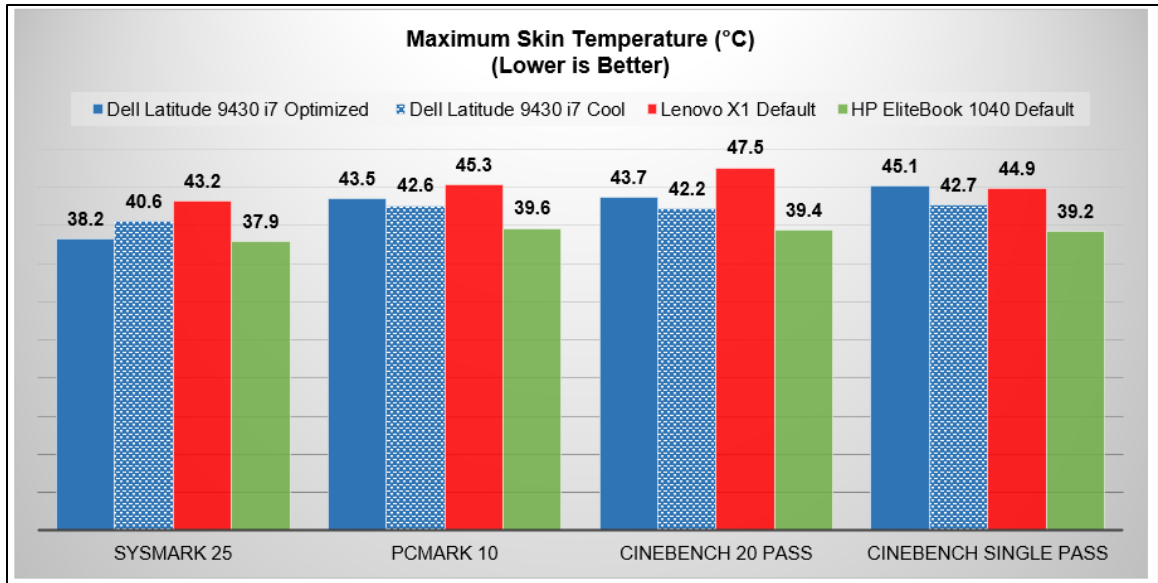
- Cool mode makes the laptop's surface cooler to the touch
- Quiet mode makes the system fans spin slower and reduces noise output
- Ultra-Performance mode boosts the CPU's performance while running processor-intensive applications such as rendering 3D graphics.

Overall, Dell Latitude 9430 is the quietest in all four tested application performance benchmarks and is almost 6 dBA quieter (6 dBA is approximately a 60% decrease in volume) than the HP EliteBook 1040 G9 in the SYSMark 25 Office benchmark.



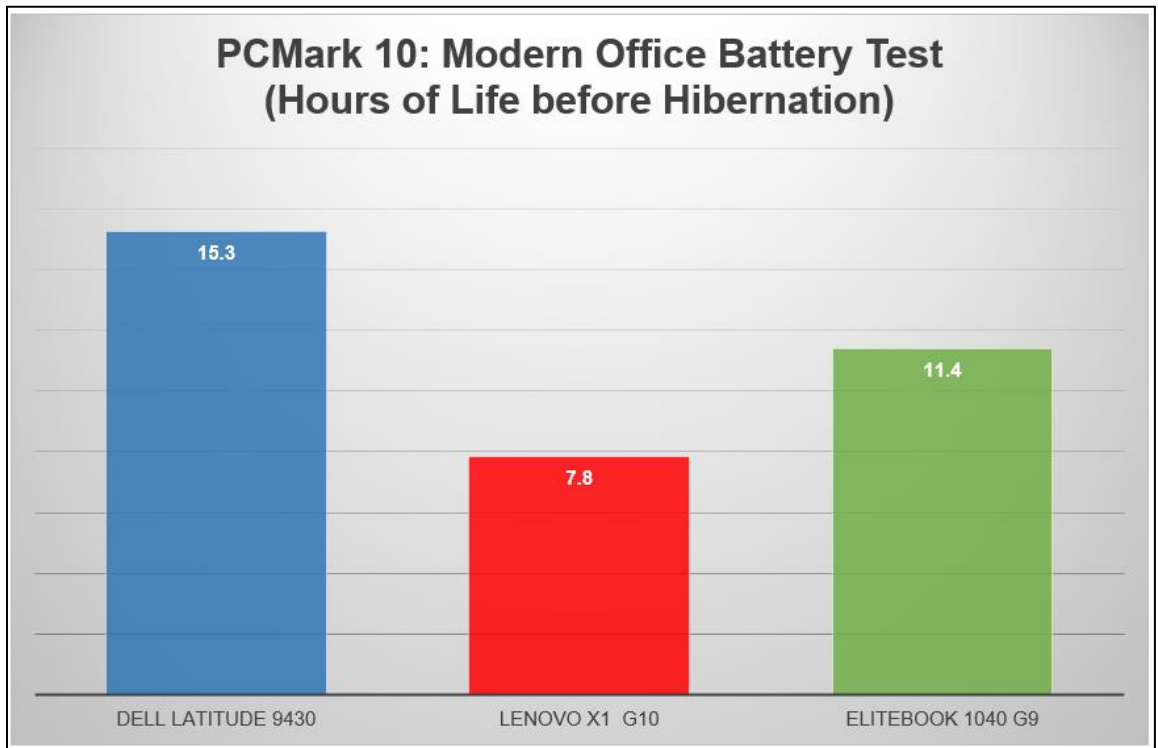
Skin Temperature

Skin temperature refers to how hot the surface is to the touch. The Dell Latitude 9430 stayed cooler than Lenovo X1 Gen 10 across most tested benchmarks during the skin temperature test. While HP EliteBook 1040 G9 technically wins the skin temperature category, it does so at the expense of application performance and has the loudest fan among the systems tested.



Battery Performance

Battery performance refers to how much time you can remain productive while unplugged. The Dell Latitude 9430 dominates the battery life test with over 15 hours of true mobile productivity, which is almost twice the battery life of the Lenovo X1 Gen 10. This effectively amounts to getting work done for the entirety of a flight that's traveling halfway around the world without ever needing to search for an outlet.



For More Information

Dell never stops innovating. Our engineers and design teams are committed to delivering the best possible experience while using our award-winning, ultra-premium Latitude laptops. This study shows that the [Dell Latitude 9430](#)'s thermal design and overall performance are clearly differentiated from comparable systems offered up by our competitors. View the detailed report here:

- [Full Report: Dell Latitude 9430 vs. HP EliteBook 1040 G9 and Lenovo X1 Gen 10](#)



About the author: Andrew Glinka is Vice President, Competitive Intelligence at Dell Technologies. Andrew is an 11-year Dell Technologies veteran and brings over 23 years of experience in technology sales, management, and operations. Prior to assuming his current role, Andrew served as Global Director of Sales Strategy for the Data Protection Solutions Division. He has also managed the Global Software Sales team as well as other sales teams in the Data Protection Solutions Division. Prior to joining Dell through the EMC acquisition, Andrew owned and operated an IT Managed Services business in Virginia for over 8 years before successfully selling the company.

¹ Based on "Notebook Thermodynamics Business-class notebook shakedown: Intel Alder Lake," a Strategic Thermal Labs report, October 2022

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