



Sustain higher performance with less toll on battery life with the Dell Latitude 7440 Ultralight Laptop

Get better benchmark performance, longer battery life, and better thermal and acoustic experiences than with a Lenovo ThinkPad X1 Carbon Gen 11



For many office workers relying on their laptops, good performance and strong battery life are both critical. Fast, responsive systems can help maintain high productivity, but they're less useful if everyday tasks drain the battery quickly. This is especially true for a hybrid workforce that may be working at home, taking a device on the road, or in an office space with hot-desking. And when any environment might become a work environment, users who carry their laptop around as a constant companion may also wish to consider a system's portability and heat and acoustic output.

We kept these considerations in mind as we tested the Dell Latitude 7440 Ultralight Laptop against the Lenovo ThinkPad X1 Carbon Gen 11. Our testing covered several performance benchmarks and a battery life test as well as thermal and acoustic measurements. We found that not only did the Dell system deliver equivalent or better performance than the Lenovo system in our benchmark testing, but it did so while requiring minimal or no additional battery life to accomplish that work. It also provided a cooler and quieter experience, plus twelve hours and two minutes of battery life—more than a full workday.



Over 12 hours of battery life



47% higher web browsing score unplugged while draining a nearly equivalent amount of battery life*



Cooler and quieter under load*

*Dell Latitude 7440 Ultralight Laptop vs. Lenovo ThinkPad X1 Carbon Gen 11

How we tested

To assess the performance of two laptops:



Dell Latitude 7440 Ultralight Laptop

- Windows 11 Pro
- Intel Core i7-1365U
- 16GB integrated memory
- 1TB NVMe SSD
- 57 WHr battery
- 400-nit non-touch display
- Starts at 2.33 lb., or 1.06 kg¹ (the laptop we tested weighed 2.58 lb., or 1.17 kg)



Lenovo ThinkPad X1 Carbon Gen 11

- Windows 11 Pro
- Intel Core i7-1365U
- 16GB integrated memory
- 1TB NVMe SSD
- 57 WHr battery
- 400-nit touchscreen display
- Starts at 2.48 lb., or 1.12 kg² (the laptop we tested weighed 2.54 lb., or 1.15 kg)

For a look at the experience a user might expect from each laptop, we performed four kinds of tests:

- **Performance benchmark testing:** We ran five benchmarks, each of which offers a different window into the kind of everyday performance users might expect.
- **Battery life testing:** We ran the MobileMark 25 benchmark, which gives a real-world measure of battery life.
- **Thermal testing:** We measured the temperatures of each laptop's keyboard deck and underside of chassis while an intense workload was running.
- **Acoustic testing:** We measured how much noise each laptop emitted while idle and while running an intense workload.

Because we wanted to determine how everyday work might affect battery life, we tested each device while it was unplugged. We ran all tests in the Balanced power mode, except for the acoustic testing, where we used Performance mode. For more details on our workloads and configurations, see the [science behind the report](#).

About the Dell Latitude 7440 Ultralight Laptop

With a starting weight of 2.33 lb. (1.05 kg), the Dell Latitude 7440 Ultralight Laptop comes equipped with Windows 11 Pro, Intel Iris® Xe graphics, optional Intel vPro®, and 13th Gen Intel Core i5 or i7 processors. According to Dell, it is the “world’s smallest and lightest 11” commercial laptop” that also offers the “world’s first premium commercial laptop with optional battery-saving Mini-LED backlit technology.”³ To learn more, visit <https://www.dell.com/en-us/shop/dell-laptops/latitude-7440-laptop-or-2-in-1/spd/latitude-14-7440-2-in-1-laptop>.

Better performance on real-world benchmarks—with minimal extra battery cost

SYSmark 25

We used the SYSmark 25 benchmark to evaluate the performance users can expect from these two devices for everyday business work. Figure 1 highlights the overall ratings that the two devices achieved, with the Dell Latitude 7440 Ultralight Laptop delivering a 24.3 percent higher overall rating. These results indicate that users could see better responsiveness while performing everyday tasks, which could translate to smoother user experiences.

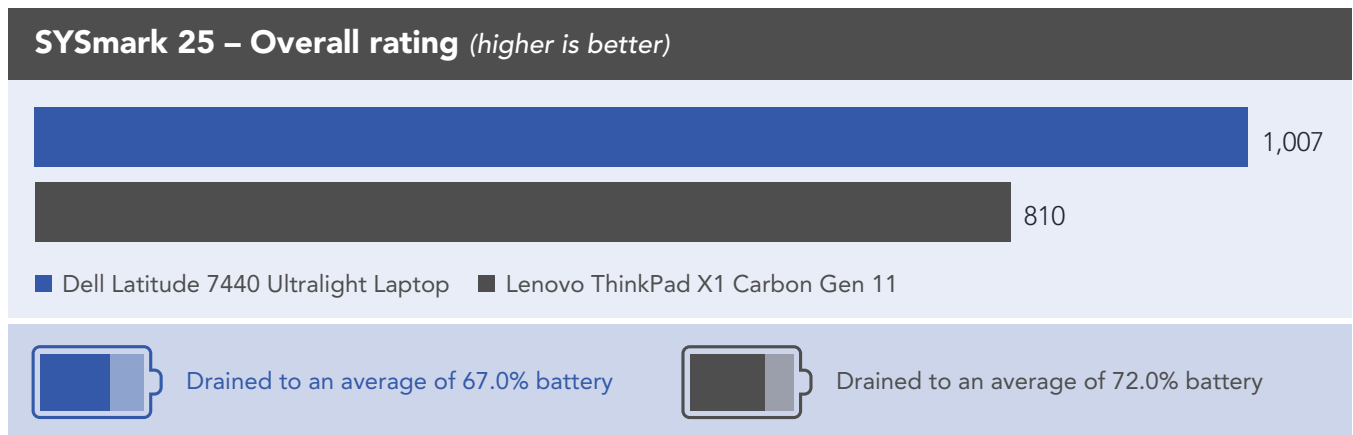


Figure 1: SYSmark 25 Overall rating. Higher is better. Source: Principled Technologies.

Running this test drained the Dell system’s battery to an average of 67 percent, while the battery of the Lenovo laptop drained to an average of 72 percent. Though the Dell laptop required more battery life to run the test, the difference in battery consumption was only 5 percent, while the performance difference was nearly five times that—meaning that the Dell system delivered more performance at a lower battery life cost.



SYSmark 25

According to BAPCo, the SYSmark 25 benchmark test “measures and compares system performance using real-world applications and workloads.”⁴ The Productivity Scenario measures office task performance, the Creativity Scenario measures content creation performance, and the Responsiveness Scenario “models ‘pain points’ in the user experience.”⁵

CrossMark

As another way of assessing performance, we used the CrossMark benchmark, which measures overall real-world performance and responsiveness. Compared to the Lenovo ThinkPad X1 Carbon Gen 11, the Dell Latitude 7440 Ultralight Laptop scored 27.4 percent higher in this test, as Figure 2 shows. Both laptops used the same amount of battery charge during this test, indicating that the Dell system's higher performance required no battery life sacrifice in this test. With a higher-scoring device—in this case, the Dell system—users might see better system responsiveness while performing office tasks without that responsiveness costing any additional battery life. This could pave the way for increased productivity.

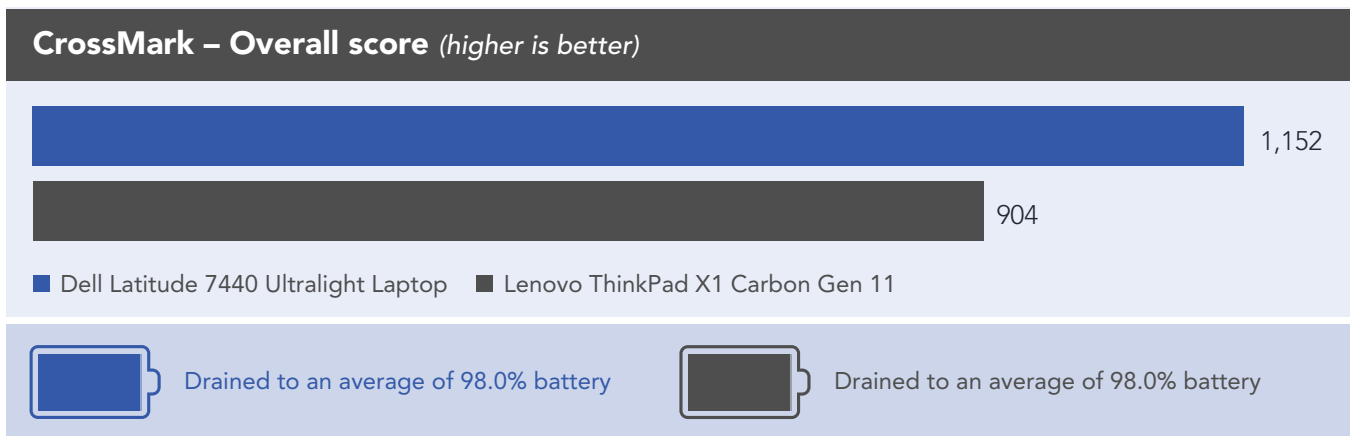
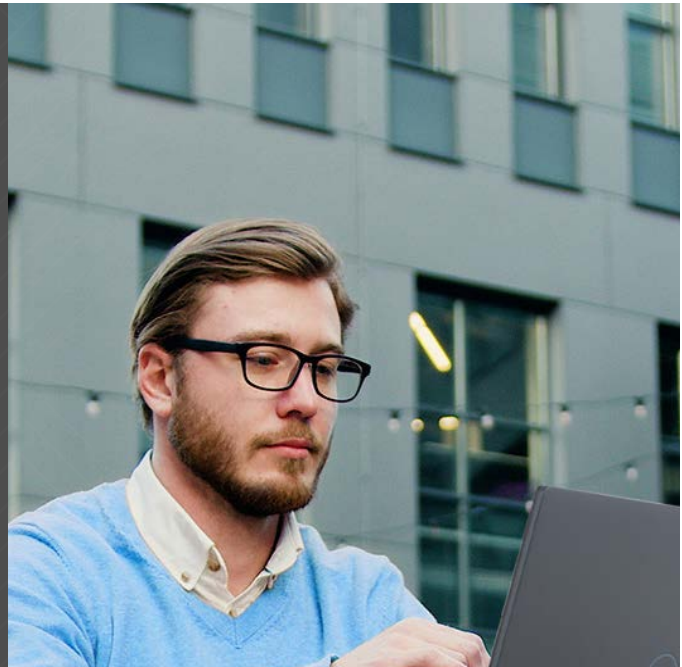


Figure 2: CrossMark overall score. Higher is better. Source: Principled Technologies.

CrossMark

According to BAPco, developers of the CrossMark benchmark test, it is a “native cross-platform benchmark that measures the overall system performance and system responsiveness using models of real-world applications.”⁶



WebXPRT

Web browsing is a necessary part of many office workers' daily tasks. Online research, web-based apps, and streaming from websites all benefit from fast web browsing capabilities. On WebXPRT, a real-world web browsing benchmark, Figure 3 shows that the Dell Latitude 7440 Ultralight Laptop delivered an overall score that was 47 percent higher than that of the Lenovo ThinkPad X1 Carbon Gen 11. And it did so while consuming nearly the same amount of battery life: The Dell system drained to an average of 98.3 percent during this test, while the Lenovo system drained to an average of 98.7 percent.

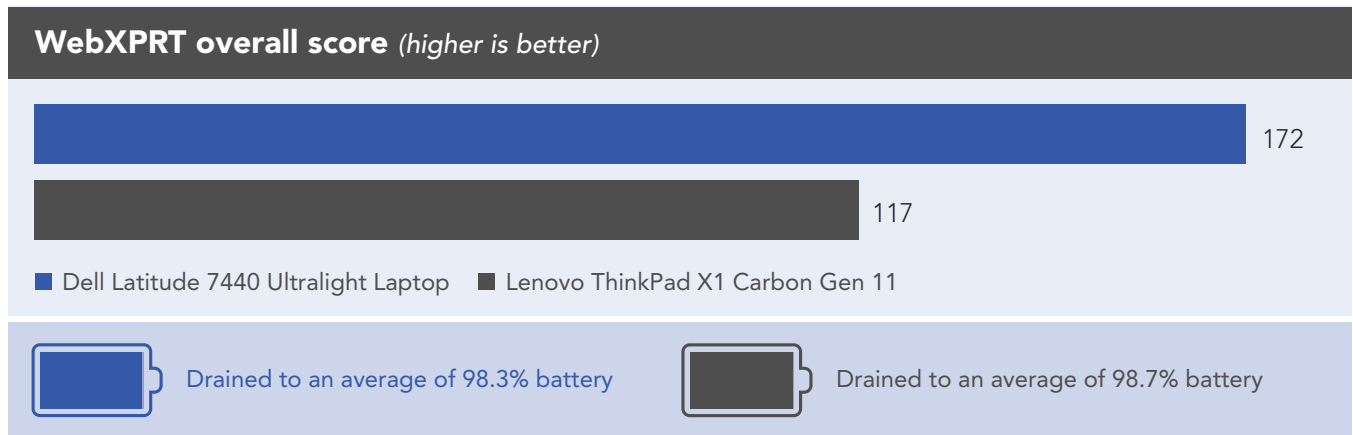
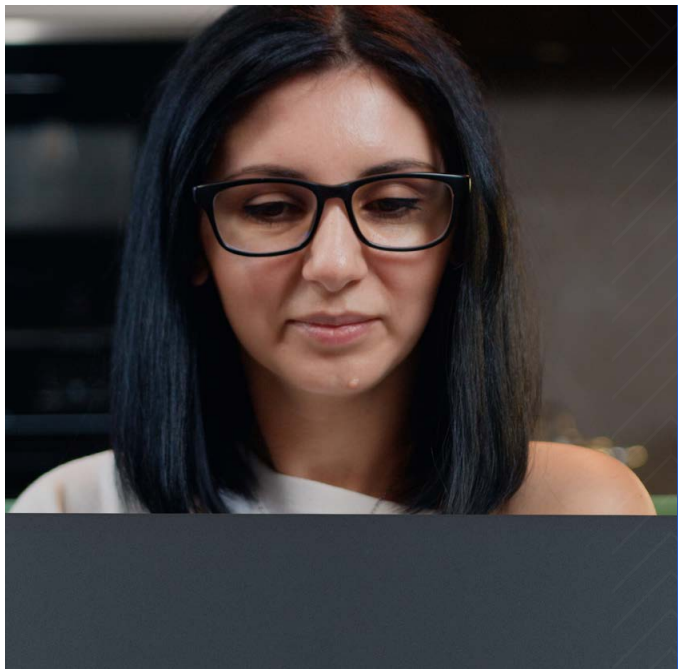


Figure 3: WebXPRT 4 overall score. Higher is better. Source: Principled Technologies.



WebXPRT

WebXPRT 4 is an industry-standard browser benchmark that compares the performance of web-enabled devices when executing real-world tasks. It contains HTML5, JavaScript, and WebAssembly-based scenarios that mirror activities users perform: Photo Enhancement, Organize Album Using AI, Stock Option Pricing, Encrypt Notes and OCR Scan using WASM, Sales Graphs, and Online Homework.⁷

Procyon Office Productivity

Whether users are creating slide decks, documenting workflows, or sending emails, Microsoft Office apps are an integral part of many workdays. The Procyon Office Productivity benchmark measures the responsiveness of a system while completing real-world tasks in these apps. In this test, the Dell Latitude 7440 Ultralight Laptop achieved a 41.7 percent higher score than the Lenovo ThinkPad X1 Carbon Gen 11 (Figure 4). It did so while consuming nearly the same amount of battery—after this test, the Dell system was down to an average of 91.0 percent battery, and the Lenovo system was down to an average of 91.3 percent.

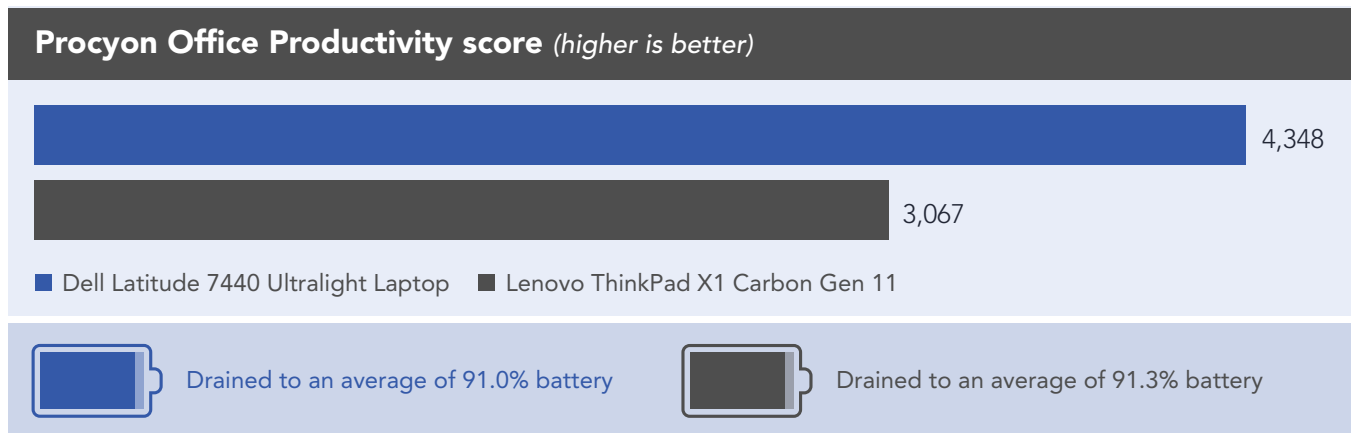


Figure 4: Procyon Office Productivity benchmark score. Higher is better. Source: Principled Technologies.

Procyon Office Productivity

The Procyon benchmark suite from UL comprises five benchmarks that target “professional users in industry, enterprise, government, retail and press.”⁸ The Office Productivity Benchmark can measure Windows or macOS device performance for office productivity work using Microsoft Office apps.

Cinebench R23

The Cinebench R23 benchmark runs 3D graphics workloads to help indicate how a system might perform during taxing, intensive tasks. In single-core testing, both systems consumed similar amounts of battery: The Dell system showed an average of 96 percent battery, and the Lenovo system showed an average of 97 percent battery. Again, however, the Dell system achieved a higher Cinebench R23 score, this time earning a score 27.3 percent higher than the Lenovo system (Figure 5). In the multi-core test, both systems drained to an average of 99 percent battery, but the Dell Latitude 7440 Ultralight Laptop achieved a 5.7 percent higher score (Figure 5).

Not everyone uses their system to manipulate 3D graphics, but many business users run compute-intensive workloads in the course of their normal work. These Cinebench R23 results indicate that for heavy workloads, the Dell Latitude 7440 Ultralight Laptop can offer performance on par with or higher than the Lenovo system—without taking a hit to battery life.

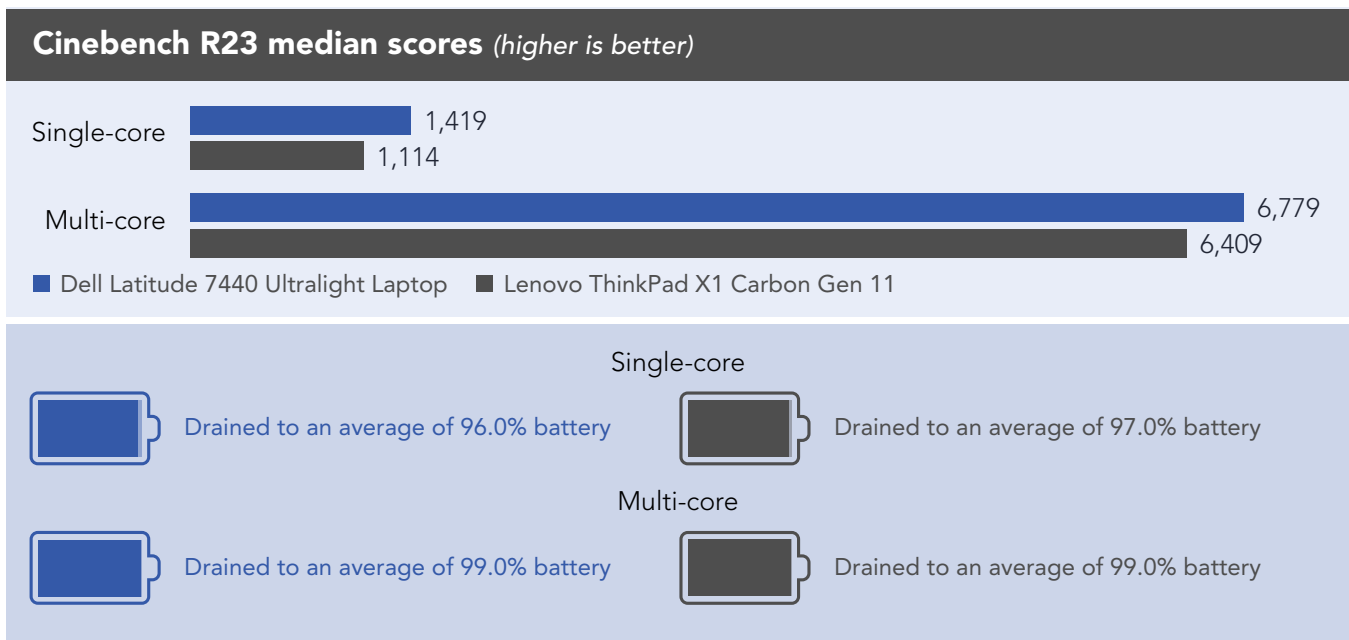


Figure 5: Cinebench R23 benchmark median scores. Higher is better. Source: Principled Technologies.

Cinebench R23

According to Maxon, “Cinebench offers a real-world benchmark that incorporates a user’s common tasks within Cinema 4D to measure a system’s performance.”⁹ Outputting scores for both single-core and multi-core CPU performance, Cinebench measures how a device runs under a high CPU load, allows you to gauge how well the cooling system works during longer tasks, and tests how the device works with intensive 3D tasks.¹⁰ Higher scores could indicate faster PC response times on graphics-intensive games, product development and design software, and scientific simulations.



Get more time for productivity with better battery life

In today's hybrid work environments, it may not be feasible for workers to keep their laptops plugged in all day—and themselves tethered to their desks. Whether they're rushing between meetings at the office or moving from home to coffee shop to airport as they work remotely, they need a lightweight laptop that's charged and ready to go. A longer battery life can help employees stay productive and focused, whatever their workday looks like and wherever they're working.

Under the MobileMark 25 benchmark load, the Dell Latitude 7440 Ultralight Laptop delivered more than twelve hours of battery life—over an hour and a half beyond what the Lenovo ThinkPad X1 Carbon Gen 11 could offer (Figure 6). This may be due in part to the touchscreen display of the Lenovo ThinkPad X1 Carbon Gen 11. Some studies suggest that with touchscreen digitizers—the extra layer of glass that converts touch input into digital signals—touchscreen devices can use more battery life than those with non-touch displays.¹¹ Additionally, Dell claims that the Mini-LED backlit technology “reduces keyboard power usage by up to 75% and increases battery life.”¹² As our tests demonstrate, the Dell Latitude 7440 Ultralight Laptop can help users stay productive from morning to evening with a workday and a half of battery life.

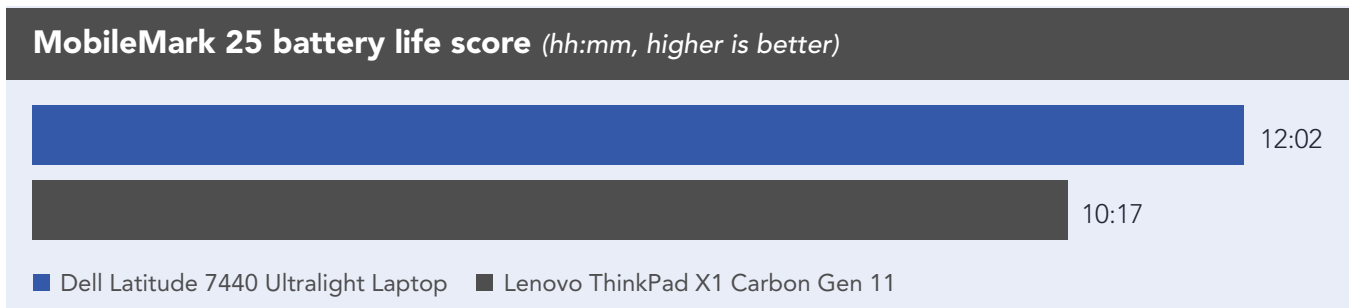


Figure 6: Battery life, in hours and minutes, according to the MobileMark 25 benchmark. More time is better. Source: Principled Technologies.

Stay cool under pressure

When remote and hybrid workers are empowered to work from anywhere, they may take the name “laptop” literally and choose to rest their systems on their laps as they work from couches or during commutes. In these cases—or even when they’re simply typing or moving their laptop cursors with the laptop on a desk—a device that’s hot to the touch can be a distraction or, worse, a source of discomfort. An ideal device would offer high performance and plentiful battery life while remaining cool to the touch.

We ran a sustained Cinebench R23 workload—five consecutive multi-core tests—on both systems. This kind of intensive workload not only heats up a laptop as it works, but that heat can throttle the system’s processor, which in turn can negatively affect performance.¹³

We measured two hot spots on the top and the bottom of each device: the keyboard deck and the underside of the laptop. We found that while both laptops heated up under load, the Dell Latitude 7440 Ultralight Laptop offered nearly the same performance as the Lenovo ThinkPad X1 Carbon Gen11—achieving an average score 1.8 percent lower—it maintained notably cooler temperatures. As Figure 7 shows, the top hot spot was 15.8 degrees (F) cooler, and the bottom hot spot was 12.6 degrees (F) cooler. Figures 8 and 9 also show thermal images from the median workload run. And with the Dell system’s rear ventilation, a user might feel less heat at their fingertips and on their hands as they worked.

The Dell Latitude 7440 Ultralight Laptop also sustained slightly more battery life while this test was running. Under the sustained Cinebench R23 workload, the Dell system drained to an average 70 percent battery, while the Lenovo system drained to an average of 67 percent battery. By running cooler and requiring a little less battery for nearly the same performance, the Dell Latitude 7440 Ultralight Laptop can offer multiple advantages to remote workers relying on demanding applications.

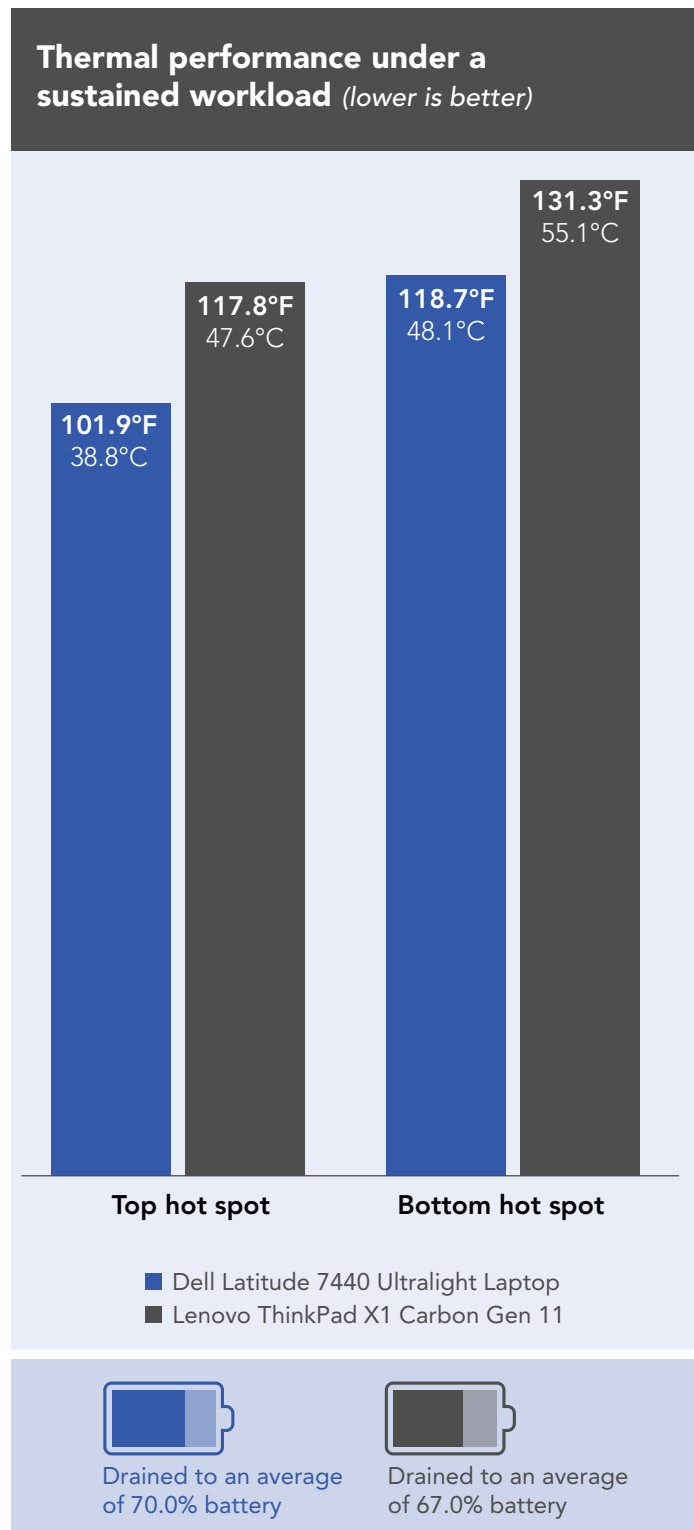


Figure 7: Average temperatures under a sustained Cinebench R23 workload, in degrees Fahrenheit, at two hot spots on the devices we tested. Lower temperatures are better. Source: Principled Technologies.

Dell Latitude 7440 Ultralight Laptop thermal image

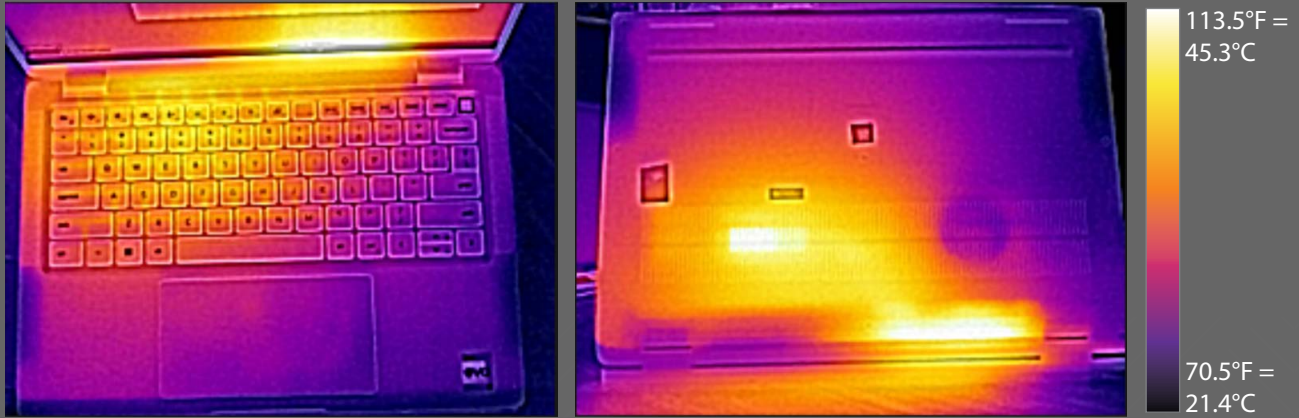


Figure 8: Thermal image of the Dell Latitude 7440 Ultralight Laptop during the sustained Cinebench R23 workload. Source: Principled Technologies.

Lenovo ThinkPad X1 Carbon Gen 11 thermal images

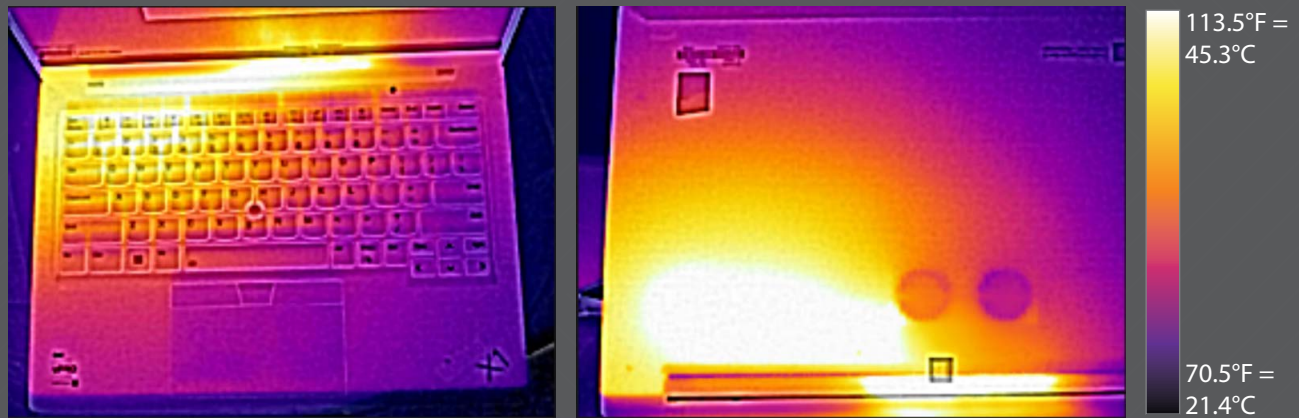


Figure 9: Thermal image of the Lenovo ThinkPad X1 Carbon Gen 11 during the sustained Cinebench R23 workload. Source: Principled Technologies.

Minimize distracting noise

A user's laptop should be a tool for productivity, not a hindrance to it. A system that emits high levels of sound can be a distracting interruption to workflows. To see what noise levels each system produced, we measured the decibel levels in the room while the laptops were idle and while they were running a Cinebench workload. To increase the load on the systems and therefore potentially increase noise, we ran these tests while the laptops were in Performance mode.

While neither of the two laptops made significant noise above baseline room noise when idle, the Dell Latitude 7440 Ultralight Laptop was a bit quieter than the Lenovo ThinkPad X1 Carbon Gen 11 under load. With a quieter laptop, users have one fewer distraction to worry about.

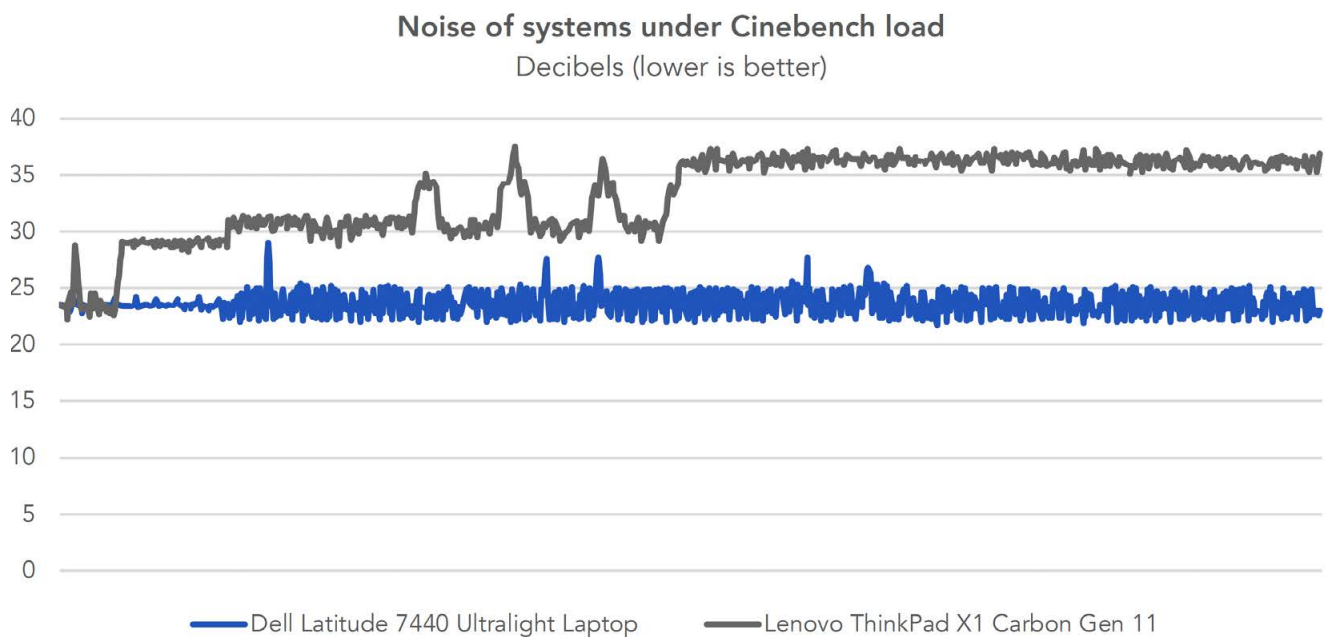


Figure 10: The sound levels, in decibels, that each system emitted under a Cinebench workload over the course of 20 minutes. Note that the baseline for the room noise without either system running was 23.6 decibels. Lower is better. Source: Principled Technologies.



Conclusion

For hybrid and remote workers who transport devices from place to place, any environment has the potential to become a work environment. A high-performing, portable laptop can be key to a positive user experience, and so can longer battery life, lower heat output, and quieter acoustics. According to publicly available information, the Dell Latitude Ultralight 7440 starts at a weight 0.15 lb. (or .06 kg) less than the starting weight of the Lenovo ThinkPad X1 Carbon Gen 11.^{14,15} When we ran tests on both laptops, we kept the systems unplugged to measure what kind of performance and battery consumption a user might expect during their workday. The Dell system achieved performance equivalent to or better than the Lenovo system while requiring minimal to no additional battery life to do so. We found that not only did it deliver 12 hours and 2 minutes of battery life—a workday and a half—but it also ran quieter in our tests. Our testing also showed that the Dell system ran cooler under an intensive workload, potentially reducing processor throttling to deliver better performance. Whatever the work environment, these results indicate that the Dell Latitude 7440 Ultralight Laptop could be a wise option for your workforce.

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Read the science behind this report at <https://facts.pt/S0h1h9c> ▶



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