



The Value of Power Efficient CPUs for Modern AI PCs

Ryan Shrout

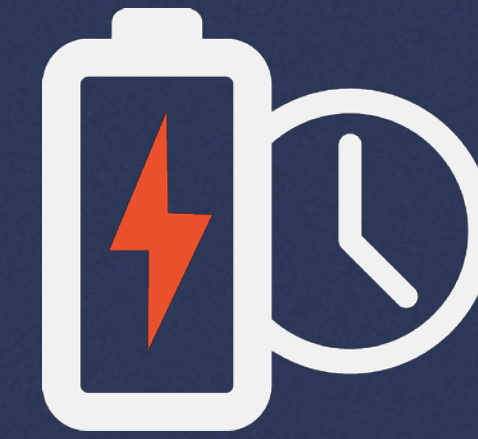
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Contents

3	Introduction	15	Lenovo ThinkPad T14s Results
4	Putting it all to the Test	20	HP OmniBook Results
6	Our Testing Process	25	Conclusion
8	System Configuration States	26	Important Information About this Report
10	Dell XPS 13 Results	27	System Configurations

Introduction



The emergence of AI-enabled personal computers represents a transformation in the Windows laptop ecosystem, extending beyond just the integration of artificial intelligence capabilities. Modern AI PCs, exemplified by systems built around Qualcomm's Snapdragon X Elite processors, are catalyzing improvements in fundamental computing architecture. These systems deliver substantial improvements in general-purpose CPU performance through advanced core designs, implement sophisticated power-efficient system-on-chip (SoC) architectures that optimize thermal management and energy consumption, and achieve improvements in battery life that address longstanding limitations of traditional Windows laptops.

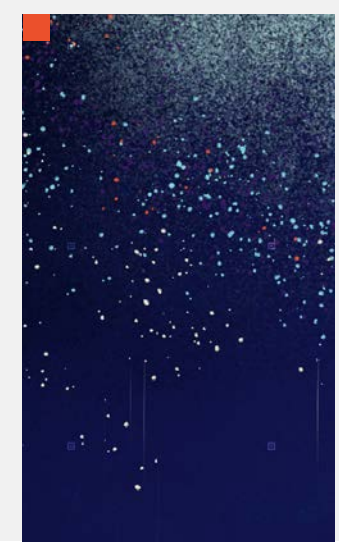
The Snapdragon X Elite, built on a 4nm process node and featuring custom Oryon CPU cores, represents a departure from conventional x86 architectures that have dominated the Windows ecosystem. This architectural evolution enables sustained performance under thermal constraints while still maintaining energy efficiency levels previously not seen in Windows-based systems. The integration of dedicated AI processing capabilities through the Hexagon NPU, combined with optimized power management, establishes a new expectation for portable computing performance and efficiency.

Microsoft's introduction of the Copilot+ PC category in 2024 signaled a strategic repositioning within the laptop market.

Rather than simply augmenting existing x86 processor offerings with AI accelerators, Microsoft put stringent performance requirements that necessitated changes in processor architecture and system design. While the Copilot+ PC specification mandated a minimum of 40 TOPS (trillion operations per second) of AI processing capability, 16GB of unified memory, and 256GB of local storage, there was a secondary desire to compete with the likes of Apple and the M-series of processors across battery life and power efficiency as well.

The implications of this architectural shift are substantial, and extend beyond immediate performance metrics to encompass broader questions of

ecosystem compatibility, software optimization, and market adoption, and more. By adding Arm-derived architectures to the existing x86 ecosystem, Microsoft was hoping to spur advances from ALL silicon partners and providers. However, the potential benefits of improved power efficiency, enhanced thermal characteristics, and extended battery life present compelling arguments for this architectural evolution as mobile computing continues to dominate user workflows and expectations.



Putting it all to the Test

This comparative analysis was commissioned by Qualcomm and conducted by Signal65 to evaluate the battery life and power efficiency characteristics of laptops across different processor architectures and in different settings and states. The primary objective was to establish quantitative performance baselines through direct comparison of systems that maintain identical or near-identical hardware configurations while varying only the processor platform. This approach minimizes variables that typically complicate cross-platform performance assessments, such as differences in display, memory configurations, storage subsystems, and thermal design.

The test methodology employed iso-chassis comparisons wherever possible, utilizing laptop models that manufacturers have released with

multiple processor options. This design approach allows for direct attribution of performance and efficiency differences to the underlying processor. The test suite includes three primary comparison sets: Dell XPS 13 laptops configured with Snapdragon X Elite versus Intel Core Ultra 200V series processors, Lenovo ThinkPad T14s systems comparing the Snapdragon X Elite and the AMD Ryzen AI 9 Pro, and HP OmniBook designs featuring Snapdragon X Elite, Intel Core Ultra 200V, and AMD Ryzen AI processors. These systems represent different market segments and design philosophies, providing insight into how processor efficiency translates across varying thermal envelopes and power budgets.

A key part of this analysis is the distinction between laboratory-optimized testing conditions and real-world user experience. Traditional battery life assessments, including those conducted

by Signal65 and technology press outlets, typically involve extensive system configuration modifications to establish controlled testing environments. These modifications include disabling automatic screen brightness adjustment, configuring specific low-power mode thresholds, standardizing background application behavior, and manually adjusting various power management settings. While these approaches create reproducible testing conditions that enable direct performance comparisons, they do not reflect the experience of typical end users.

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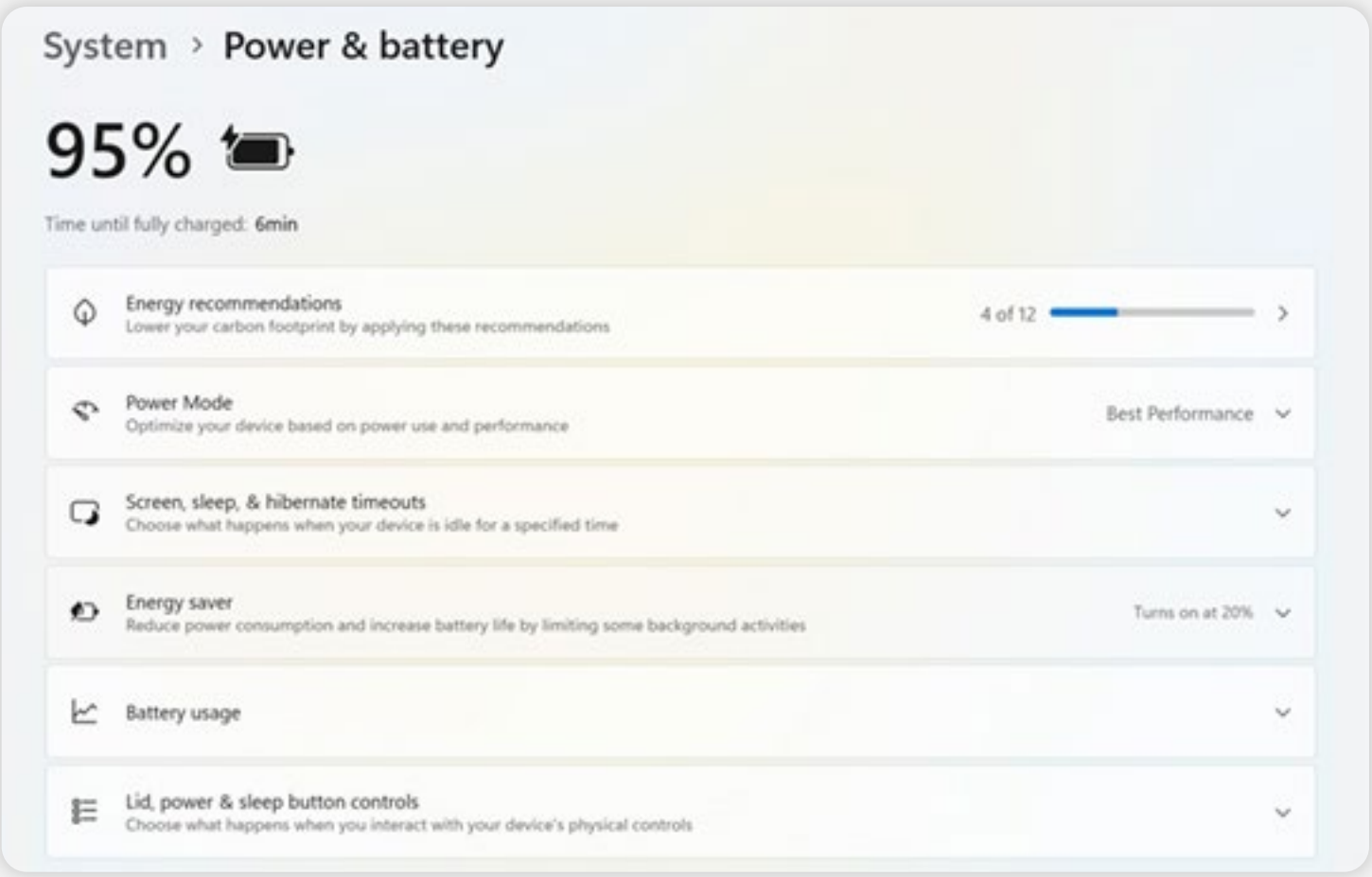
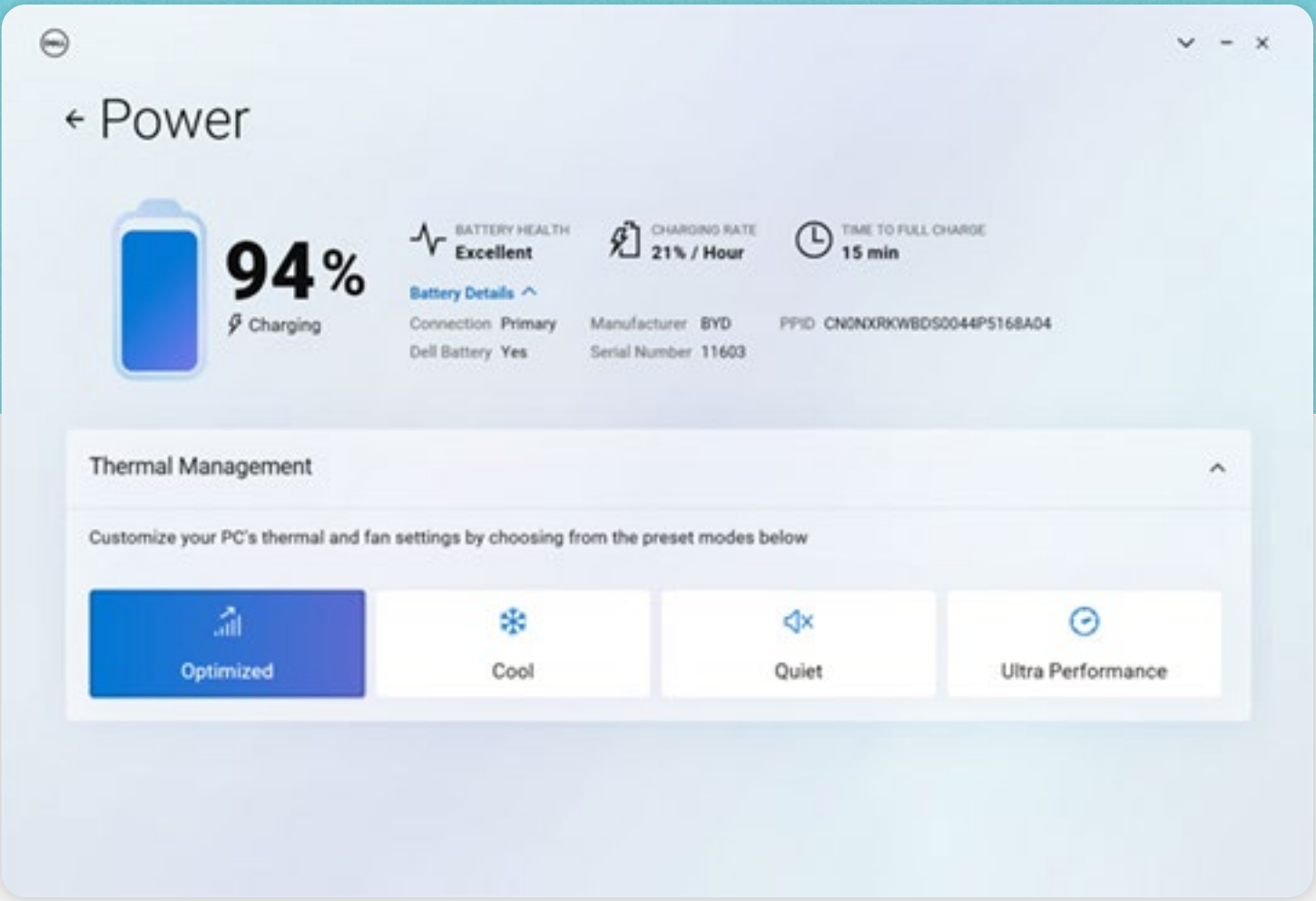
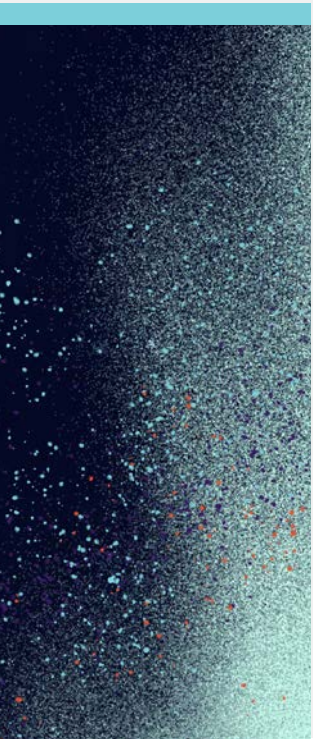
Putting it all to the Test

Most laptop users operate their systems in default configurations, performing minimal customization beyond initial Windows updates and basic application installations. To address this gap between laboratory conditions and practical usage scenarios, this analysis incorporates both out-of-box (OOB) battery life measurements and normalized testing across Windows power management profiles. The OOB testing methodology maintains manufacturer default configurations across all systems, including factory power settings, pre-installed software suites, background services, and automatic power management features. This approach provides insight into the battery life performance that users can expect without technical optimization.

The normalized testing component evaluates system performance across Windows’ three primary power profiles: Best Power Efficiency, Balanced, and Best Performance modes. Each profile represents different trade-offs between performance and power consumption, with Best Power Efficiency prioritizing battery life through aggressive CPU frequency scaling and background process management, Balanced mode providing moderate optimization for both performance and efficiency, and Best Performance mode maintaining maximum processor capability at the expense of power consumption. By testing across these profiles while maintaining consistent environmental conditions and workload

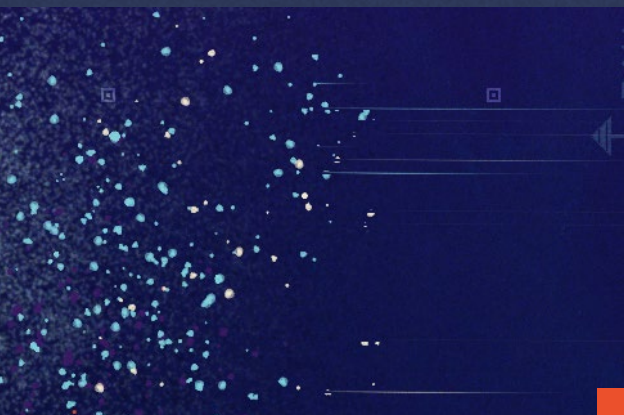
characteristics, the analysis establishes how processor architecture differences manifest across varying power management strategies.

This dual-methodology approach enables evaluation of both absolute efficiency capabilities under controlled conditions and practical performance characteristics under typical usage scenarios, providing readers with data relevant to both technical assessment and end-user experience evaluation.



Our Testing Process

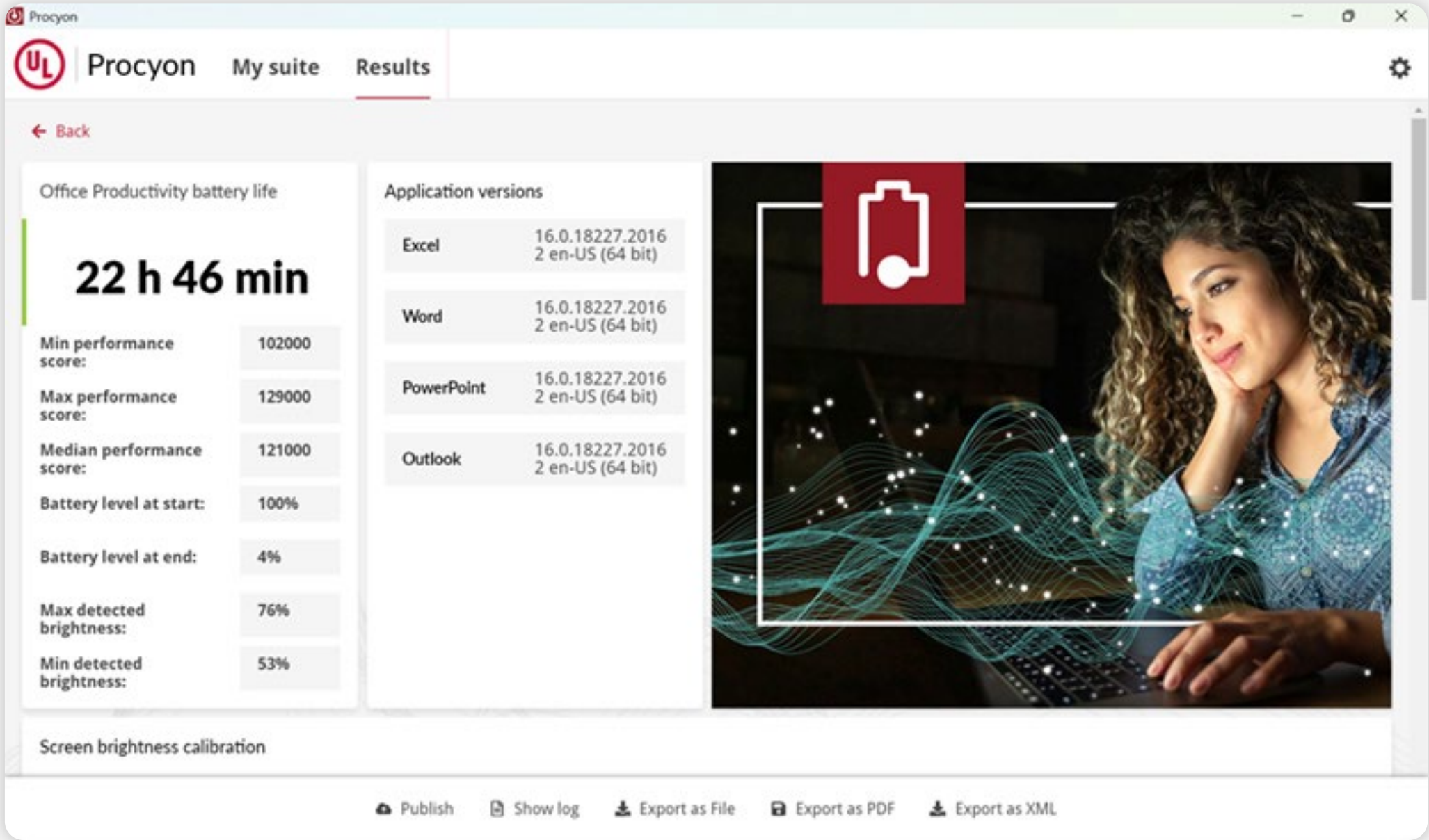
The evaluation methodology incorporates two distinct battery life testing benchmarks, each designed to assess power efficiency under different usage scenarios while capturing corresponding performance metrics that ensure a fair comparison across processor architectures.



Procyon Office Productivity Testing

The primary productivity assessment utilizes the UL Benchmarks Procyon Office Productivity battery life test, which provides a standardized workload representative of typical office computing scenarios. This benchmark simulates real-world productivity tasks through automated interaction with Microsoft Office applications, including document creation and editing in Word, spreadsheet manipulation in Excel, and presentation development in PowerPoint. The test maintains continuous operation across these applications in patterns that reflect common office workflows, including file operations, formatting tasks, data analysis, and content creation activities.

Display brightness was standardized at 200 nits across all test systems, adhering to UL’s recommended testing parameters for the Procyon Office Productivity benchmark. This brightness level represents a typical



indoor office environment setting that balances visibility with power consumption considerations. The test continues until battery depletion, recording both total runtime and system performance characteristics throughout the discharge cycle.

Performance qualification for the productivity testing relies on the Procyon Office median score captured during battery testing execution. This metric provides a normalized

performance indicator that accounts for processor efficiency under sustained workload conditions, enabling direct comparison of computational capability across different processor architectures while operating under power constraints. The median score approach mitigates the impact of performance variation that can occur as battery charge decreases and thermal conditions evolve during extended testing periods.

Our Testing Process

Web Browsing Battery Testing

The web browsing assessment employs a custom-developed testing suite created by Signal65 to evaluate power efficiency under browser-based computing scenarios. This test utilizes Google Chrome as the browser and executes a scripted sequence that progressively opens 15 browser tabs containing diverse web content. The automated script performs user interactions including page scrolling, link navigation, form interaction, and tab cycling to simulate typical web browsing behavior patterns.

The test requires active network connectivity through WiFi to ensure authentic web content loading, including dynamic elements,

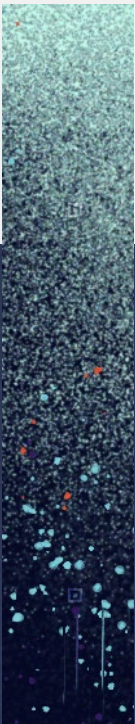
advertisements, and real-time data updates that characterize modern web experiences. This approach provides more realistic power consumption profiles compared to static local content testing, as it accounts for network interface activity, dynamic content rendering, and the computational overhead associated with modern web applications and services.

Display brightness for web browsing testing was set to 150 nits, reflecting the lower brightness levels often preferred for extended screen-based activities and representing a common user configuration for web browsing sessions. The reduced brightness

level compared to productivity testing also helps differentiate power consumption characteristics between different usage scenarios.

Performance qualification for web browsing battery testing utilizes Speedometer 3.1, executed separately in each configured system state. Speedometer 3.1 measures JavaScript performance across a comprehensive suite of modern web application scenarios, providing a standardized metric for web-based computational capability. This benchmark assesses performance across frameworks including React, Vue, Angular, and Vanilla JavaScript implementations, offering insight into

how processor architectures handle the diverse computational demands of contemporary web applications. The Speedometer results serve as the performance baseline for evaluating the efficiency trade-offs inherent in each system configuration during web browsing workloads.



System Configuration States

Each laptop system was evaluated across four distinct configuration states to assess performance and efficiency across different power management approaches.



Out of Box (OOB) Configuration

The OOB state maintains all manufacturer default settings to replicate typical consumer experience. Systems undergo only essential setup procedures including Windows configuration and mandatory updates. No modifications are made to power management settings, OEM utilities, or system configurations, ensuring results reflect the battery life consumers experience without technical optimization.



Best Power Efficiency Configuration

This state combines Windows “Best Power Efficiency” mode with manufacturer-specific maximum battery life settings. All OEM power utilities are configured for highest efficiency operation. Normalized settings include disabled automatic screen brightness, 20% Energy Saver activation threshold, and disabled variable refresh rates to ensure consistent testing conditions across platforms.



Balanced Configuration

The Balanced state uses Windows “Balanced” Power Mode with moderate OEM software settings. This represents the middle-ground approach between performance and efficiency that many users adopt. The same normalized system settings are applied to maintain measurement consistency.



Best Performance Configuration

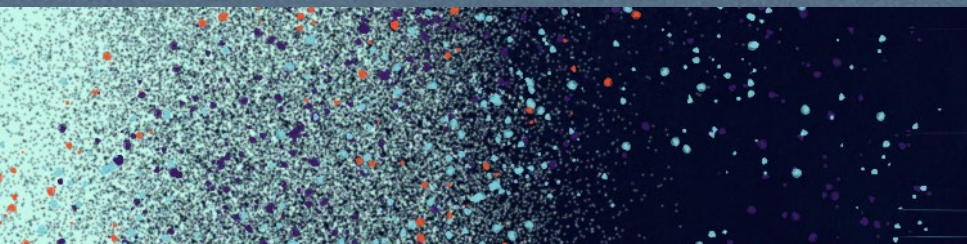
This state prioritizes computational capability using Windows “Best Performance” Power Mode and manufacturer high-performance settings. OEM utilities are configured for maximum performance operation with aggressive cooling profiles and reduced thermal throttling. Normalized settings remain consistent with other configurations to ensure fair comparison.

System Configuration States

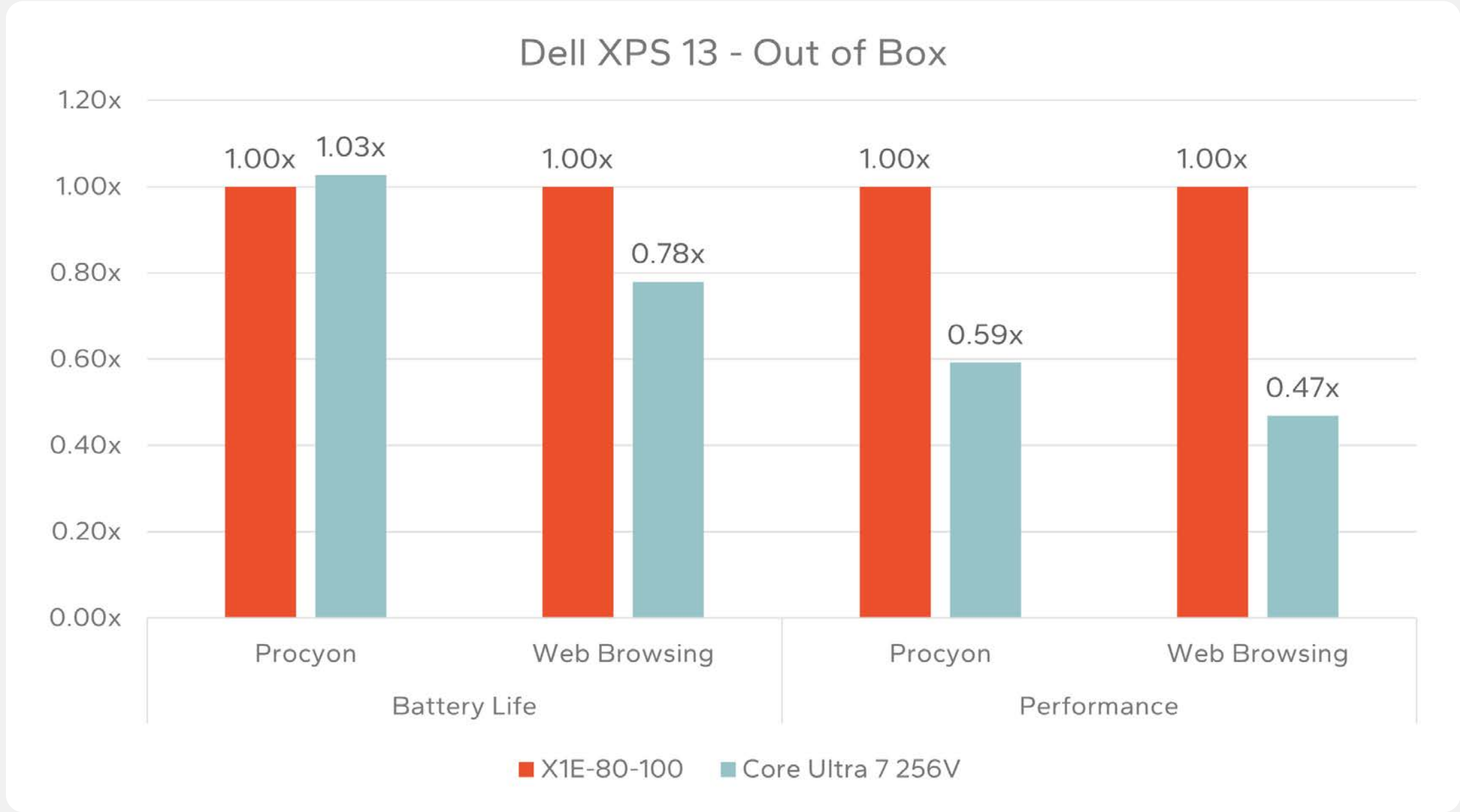
Systems Tested

	Dell XPS 13	Dell XPS 13	ThinkPad T14s Gen 6	ThinkPad T14s Gen 6	HP Omnibook X	HP Omnibook Ultra Flip 14	HP Omnibook Ultra 14
CPU	Qualcomm Snapdragon X Elite 80-100	Intel Core Ultra 7 256V	Qualcomm Snapdragon X Elite 78-100	AMD Ryzen AI 7 Pro 360	Qualcomm Snapdragon X Elite 78-100	Intel Core Ultra 7 256V	AMD Ryzen AI 9 365
Graphics	Qualcomm Adreno X1-85	Intel Arc 140V	Qualcomm Adreno X1-85	AMD Radeon 880M	Qualcomm Adreno X1-85	Intel Arc 140V	AMD Radeon 880M
RAM	16GB LPDDR5X-8448	16GB LPDDR5X-8533	32GB LPDDR5X-8448	32GB LPDDR5X-7500	16GB LPDDR5X-8448	16GB LPDDR5X-8533	32GB LPDDR5X-7500
Storage	512GB Kioxia BG6	512GB Micron 2550	1TB Western Digital SN740	1TB Kioxia KXG8AZNV1T02	1TB Kioxia KGB50ZNV1T02	1TB Micron MFTDKBA1TOQFM-1BD1AABHA	1TB Western Digital Dn560
Display	13" 1920x1200	13" 1920x1200	14" 1920x1080	14" 1920x1080	14" 2240x1400	14" 2880x1800	14" 2240x1400

Dell XPS 13 Results



Out of Box



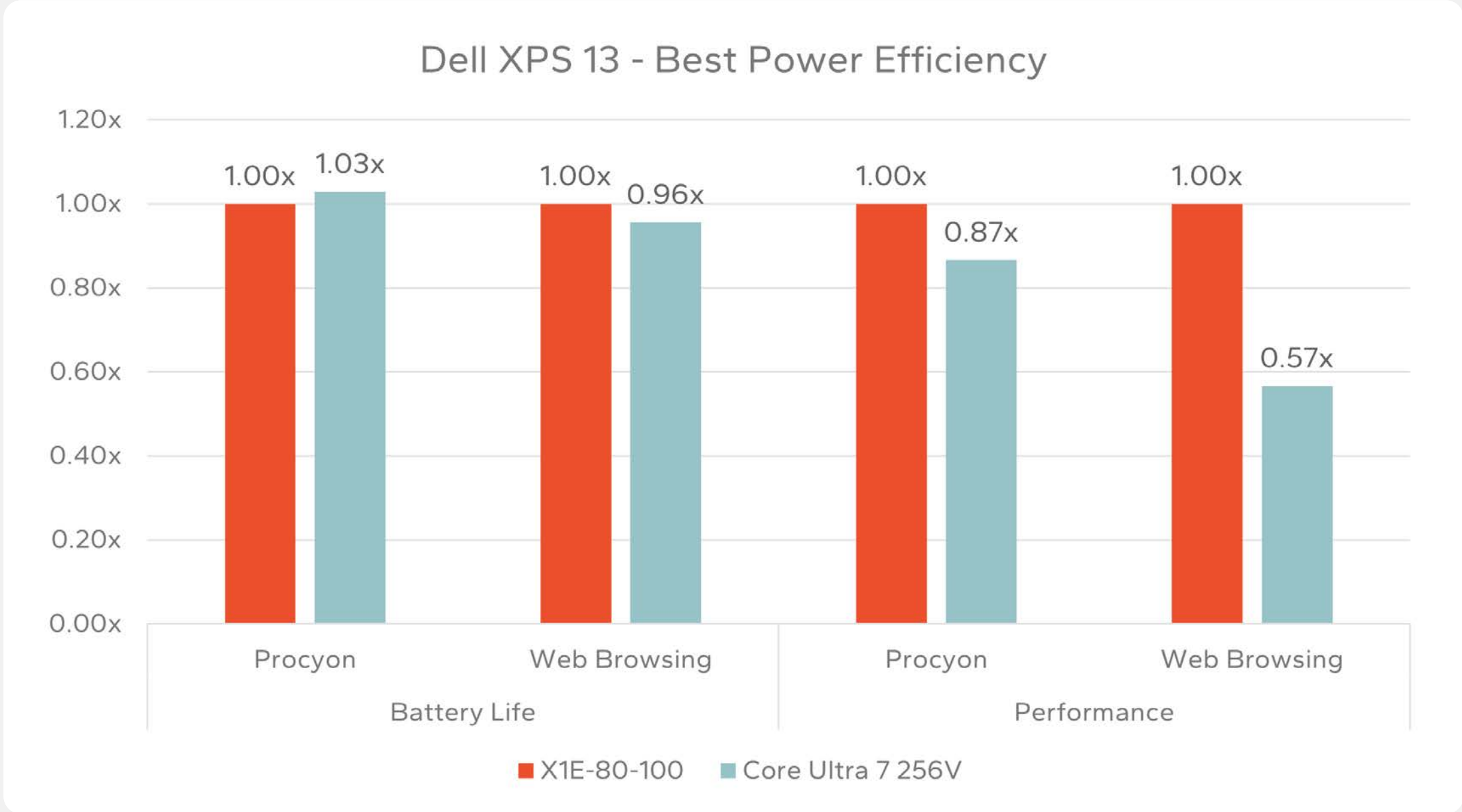
The Dell XPS 13 out-of-box comparison demonstrates significant efficiency advantages for the Snapdragon X Elite over the Intel Core Ultra 7 256V in default configurations. The Snapdragon X Elite delivers equivalent Procyon battery life while providing 28% better web browsing battery life. Performance metrics show the Snapdragon CPU with significantly better productivity performance (69%!) alongside more than double the web browsing performance of the Intel system. This substantial performance-per-watt advantage illustrates the architectural benefits of the Oryon-based design in typical consumer usage scenarios.

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Dell XPS 13 Results



Best Power Efficiency

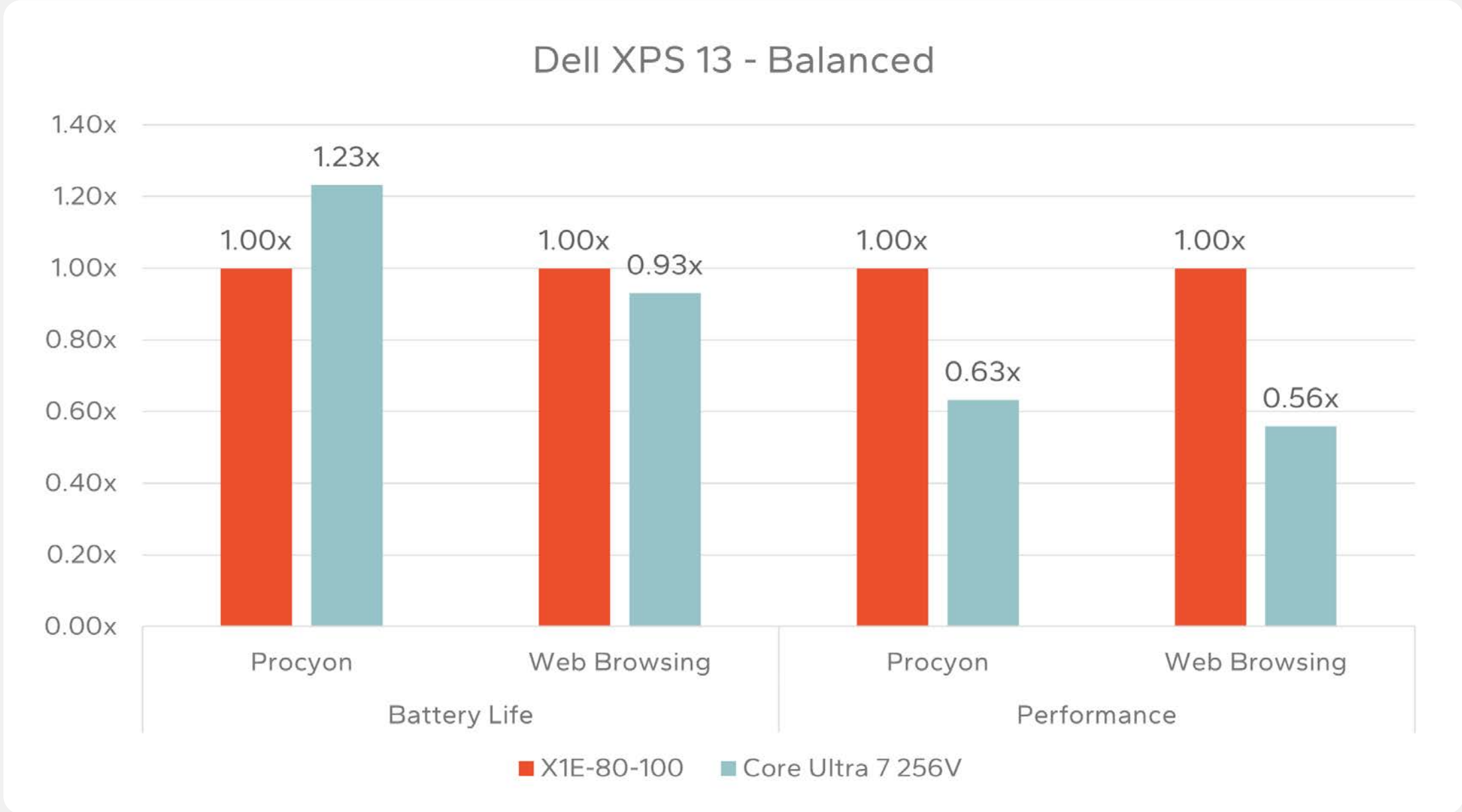


In the Dell XPS 13 Best Power Efficiency configuration, both systems show nearly identical battery life performance across Procyon and web browsing workloads, indicating that aggressive power management settings can largely equalize runtime between the processors. However, the Snapdragon X Elite maintains a performance advantage, delivering 15% better productivity performance and 75% superior web browsing performance compared to the Intel system. This demonstrates that even when battery life is optimized to similar levels, the Snapdragon's architectural efficiency enables better computational performance within the same power envelope.

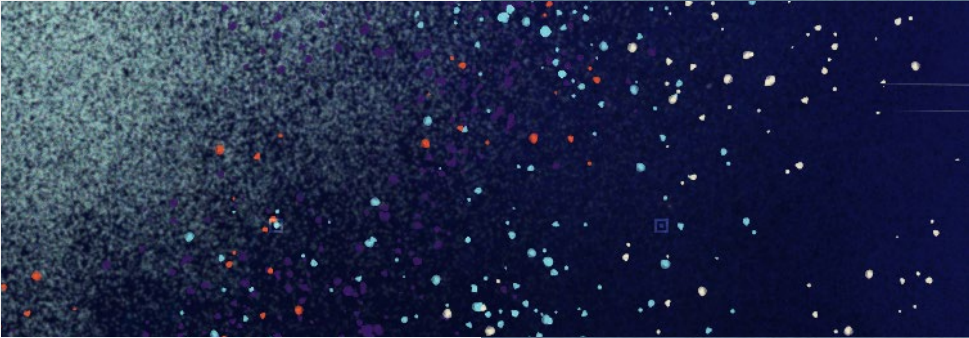


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Dell XPS 13 Results



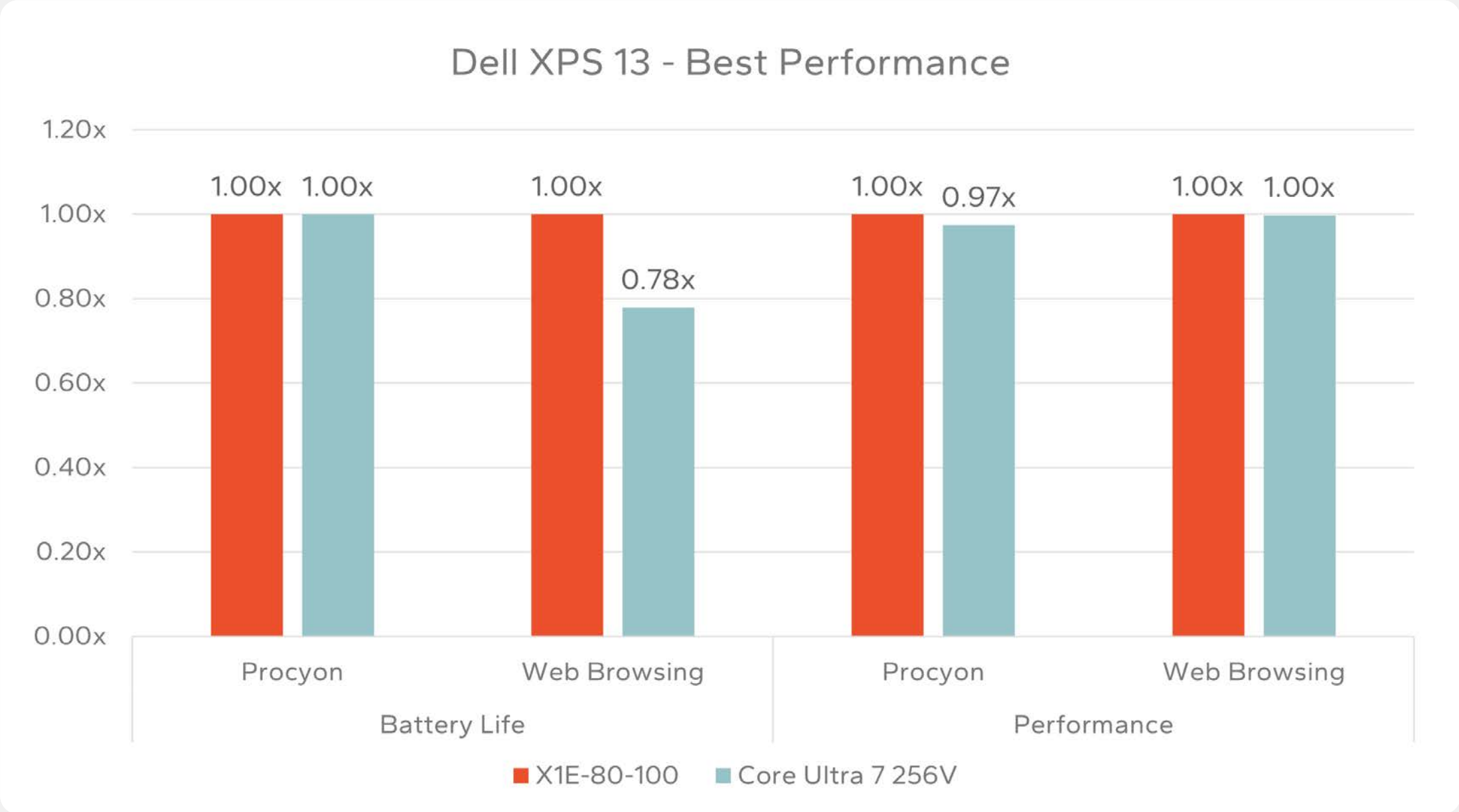
The Dell XPS 13 Balanced configuration reveals an interesting divergence in efficiency characteristics between the processors. The Intel Core Ultra 7 256V achieves 23% longer battery life in the Procyon productivity test, while the Snapdragon X Elite maintains a 7% advantage in web browsing runtime. However, the Snapdragon delivers significantly superior performance across both workloads, with 59% better productivity performance and 79% higher web browsing performance. This suggests that while Dell's balanced power management can extend battery life for Intel in certain scenarios, the Snapdragon's efficiency advantage becomes more pronounced when performance demands increase.



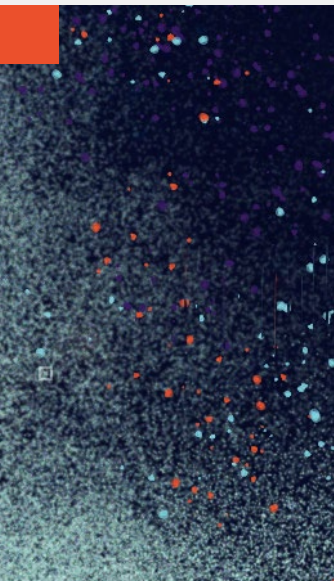
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Dell XPS 13 Results

Best Performance



In the Dell XPS 13 Best Performance configuration, both processors deliver nearly identical battery life and performance across productivity workloads, with the Intel system showing a slight 3% performance advantage in Procyon testing. However, the Snapdragon X Elite maintains a significant 28% battery life advantage in web browsing scenarios while achieving equivalent performance. This indicates that under maximum performance settings, the Snapdragon's efficiency benefits are most apparent in web-based workloads, where its Arm architecture can sustain longer operation without compromising computational capability.

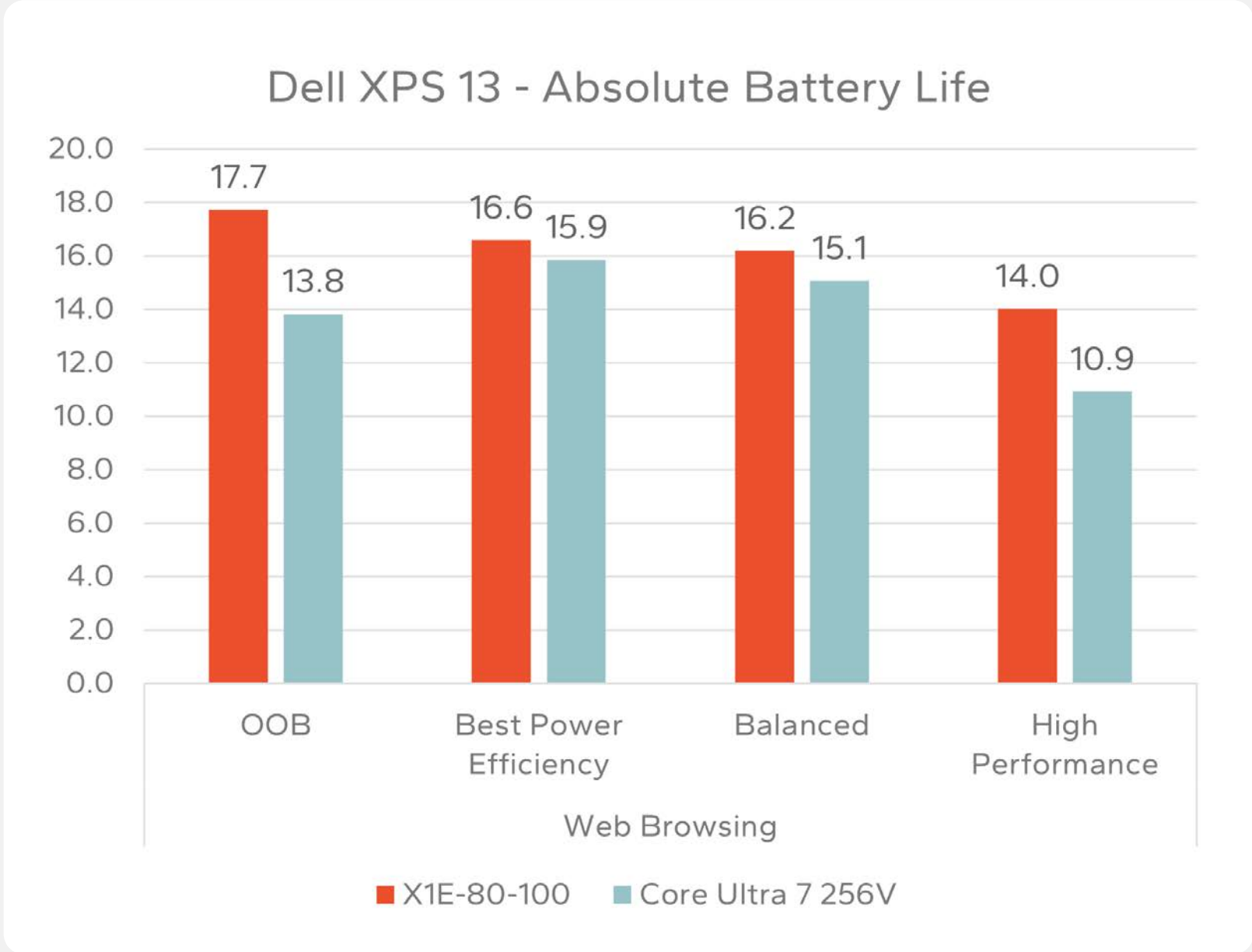
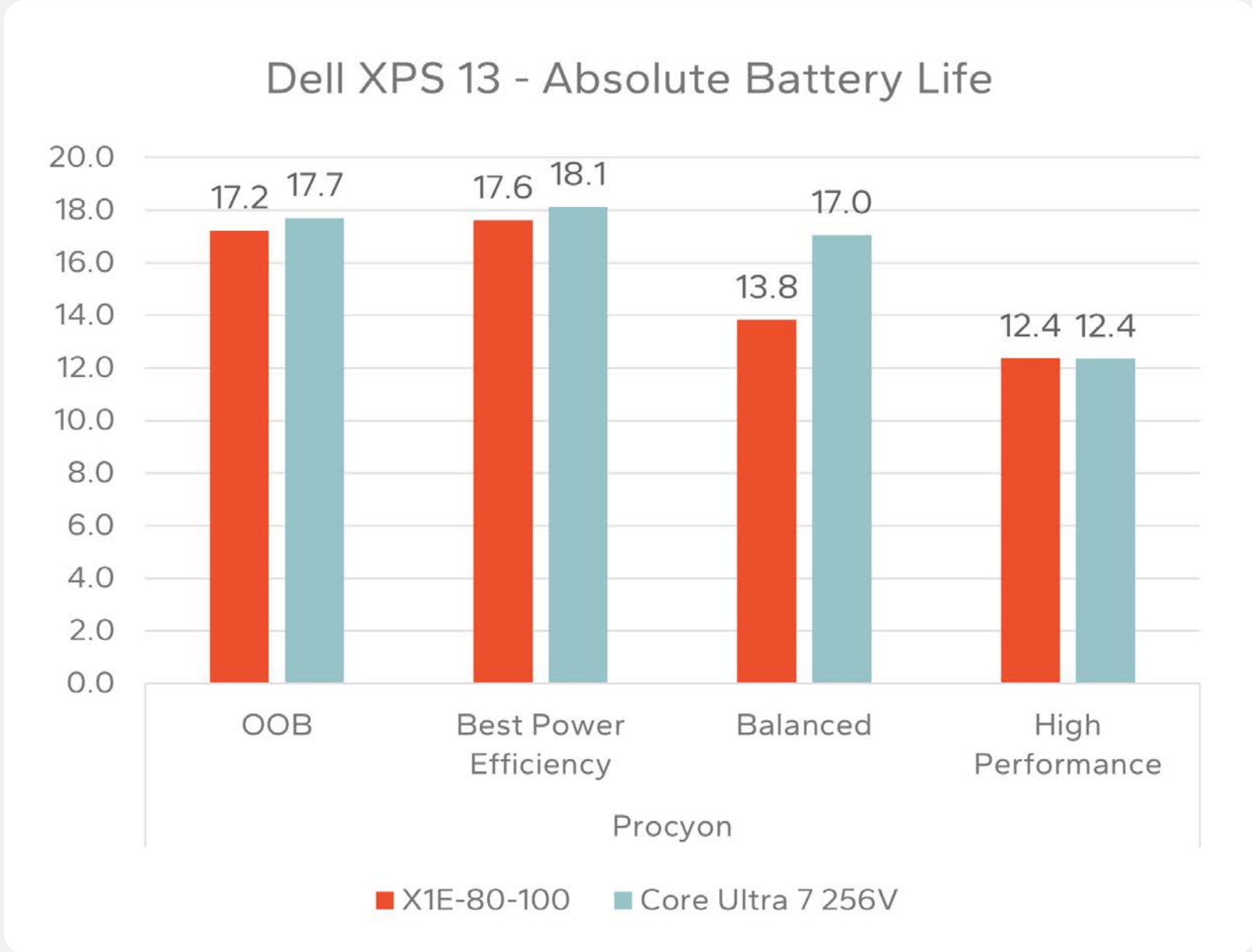


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Dell XPS 13 Results



Absolute Battery Life

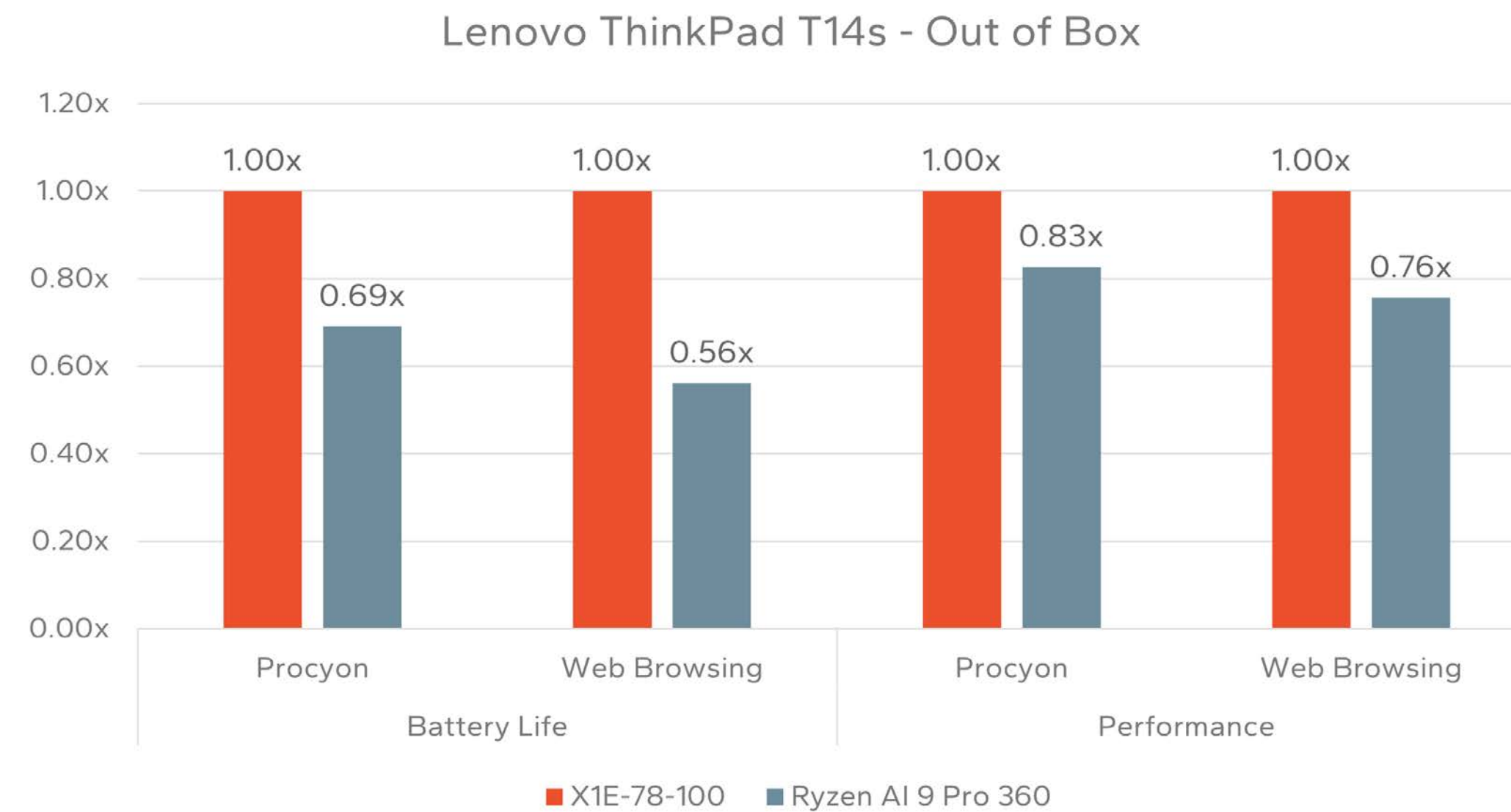


The absolute battery life measurements reveal distinct patterns across workload types and power configurations. In Procyon productivity testing, the Intel Core Ultra 7 256V demonstrates superior battery life in Balanced mode (17.0 vs 13.8 hours) while maintaining parity in other configurations. Conversely, web browsing results consistently favor the Snapdragon X Elite, with particularly notable advantages in out-of-box (17.7 vs 13.8 hours) and high performance (14.0 vs 10.9 hours) configurations. Both processors achieve their longest battery life in Best Power Efficiency mode, reaching over 18 hours in productivity workloads and approaching 16-17 hours in web browsing, demonstrating the effectiveness of aggressive power management optimization.

Lenovo ThinkPad T14s Results



Out of Box



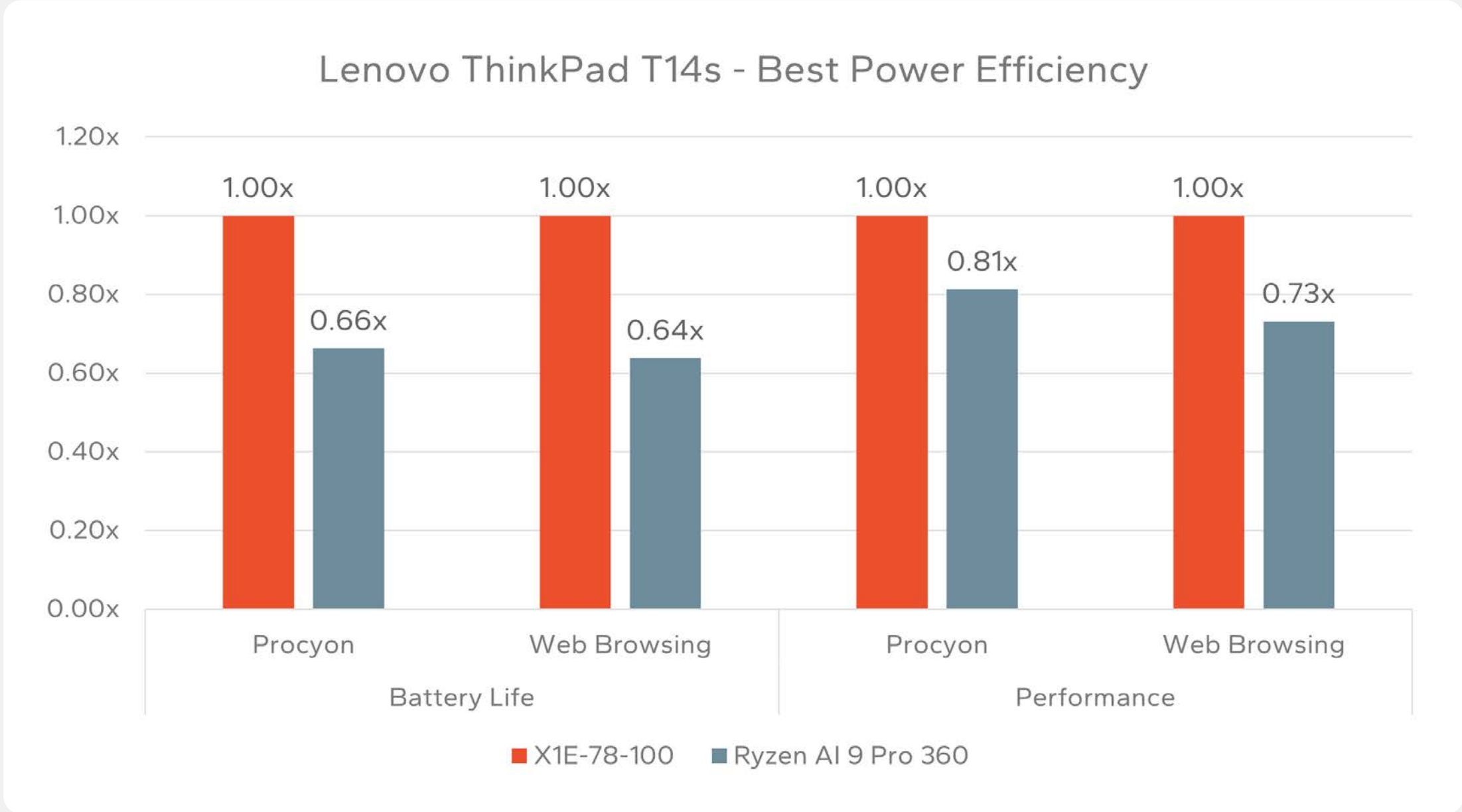
The Lenovo ThinkPad T14s out-of-box comparison shows the Snapdragon X Elite maintaining substantial efficiency advantages over the AMD Ryzen AI 9 Pro 360. Snapdragon delivers 45% longer battery life in Procyon productivity testing and 79% better web browsing runtime. Performance differences are more moderate, with the Snapdragon X Elite showing 20% better productivity performance and 32% superior web browsing performance. This demonstrates that the Oryon-based processor's efficiency benefits are particularly pronounced in default manufacturer configurations, providing significant battery life improvements while maintaining competitive computational performance against AMD's latest AI-enabled processor.

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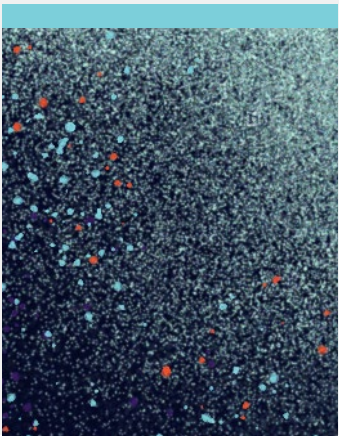
Lenovo ThinkPad T14s Results



Best Power Efficiency

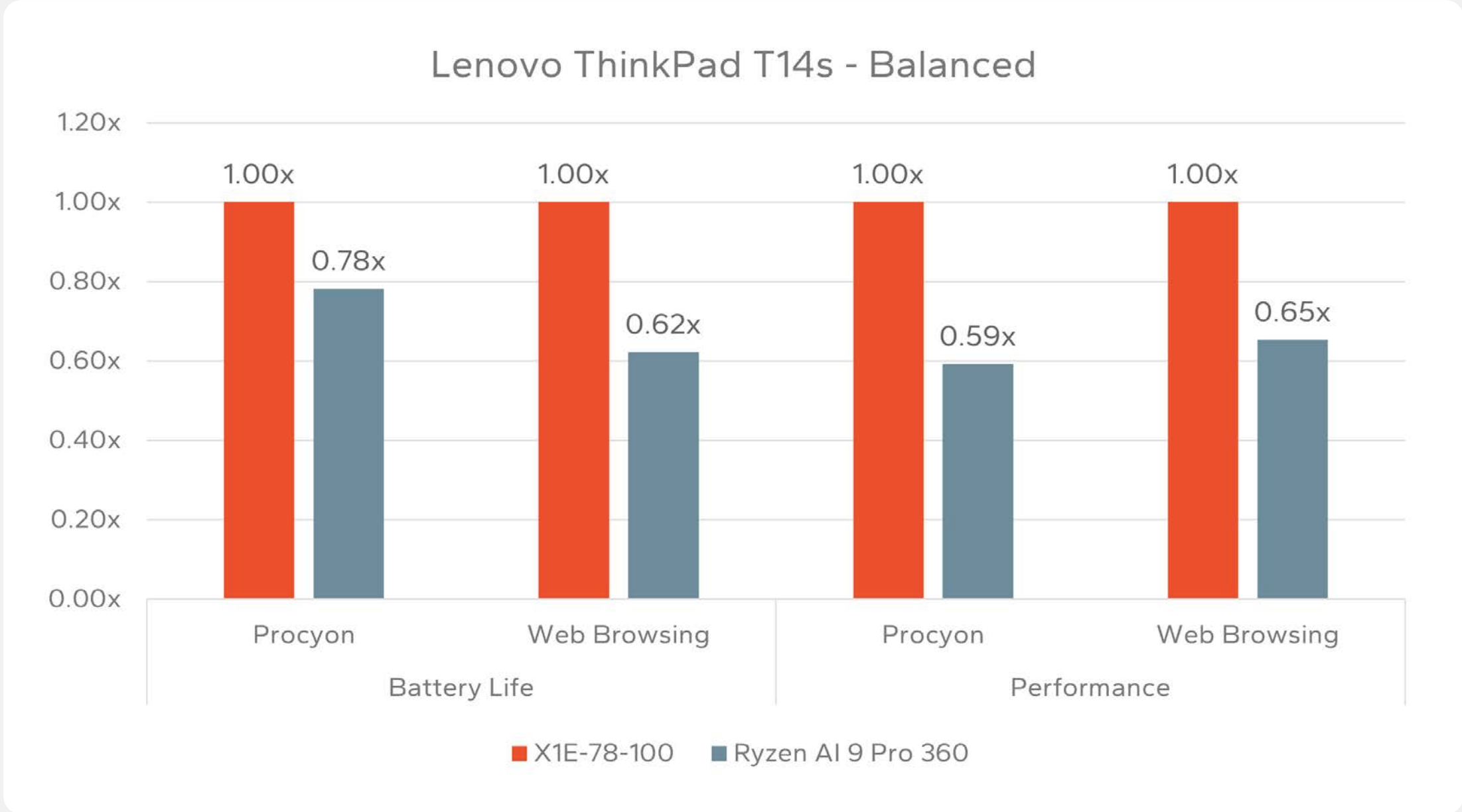


In the Lenovo ThinkPad T14s Best Power Efficiency configuration, the Snapdragon X Elite maintains consistent efficiency advantages over the AMD Ryzen AI 9 Pro 360. The Snapdragon provides 52% longer battery life in Procyon testing and 56% better web browsing runtime, demonstrating that aggressive power management settings amplify the architectural efficiency differences between the processors. Performance gaps remain significant, with the Snapdragon system delivering 23% better productivity performance and 37% superior web browsing performance. These results indicate that even under maximum power optimization, the Arm-based design continues to provide substantial efficiency benefits while maintaining performance leadership over AMD's competing architecture.



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Lenovo ThinkPad T14s Results



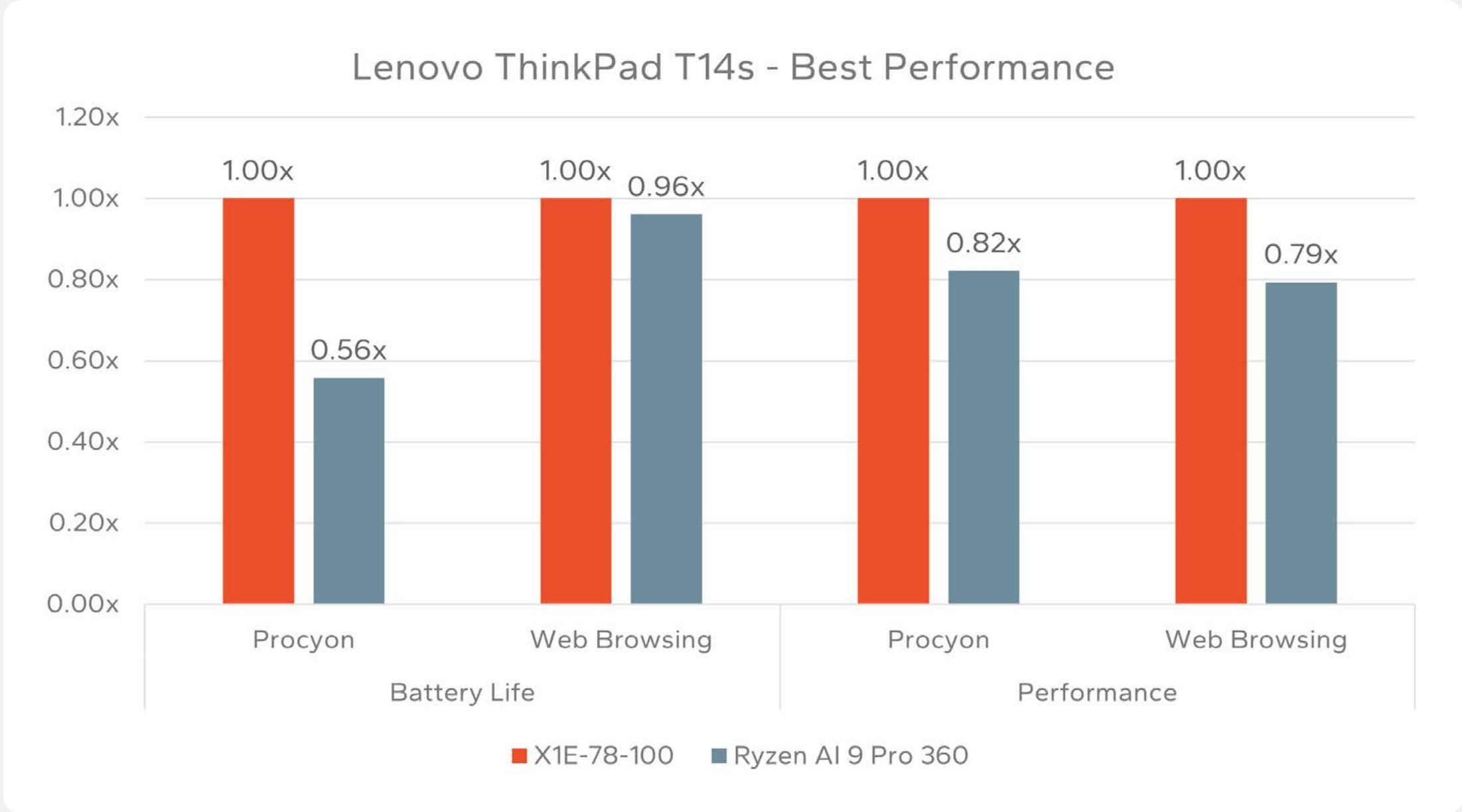
The Lenovo ThinkPad T14s Balanced configuration shows the Snapdragon X Elite maintaining strong efficiency advantages across both workloads. The Snapdragon delivers 28% longer battery life in Procyon productivity testing and 61% better web browsing runtime compared to the AMD Ryzen AI 9 Pro 360. Performance differences are still incredibly impressive in this configuration, with the Snapdragon-based T14s Gen 6 showing 69% better productivity performance and 54% superior web browsing performance. The balanced power management settings appear to favor the Snapdragon’s architectural efficiency, allowing it to sustain better performance while still providing substantial battery life improvements over the AMD system.

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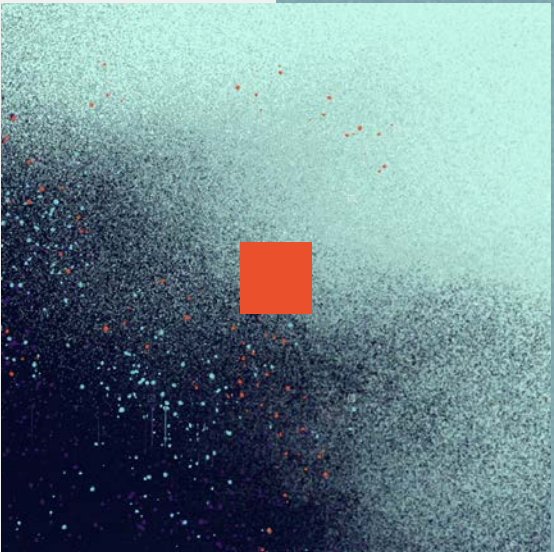
Lenovo ThinkPad T14s Results



Best Performance



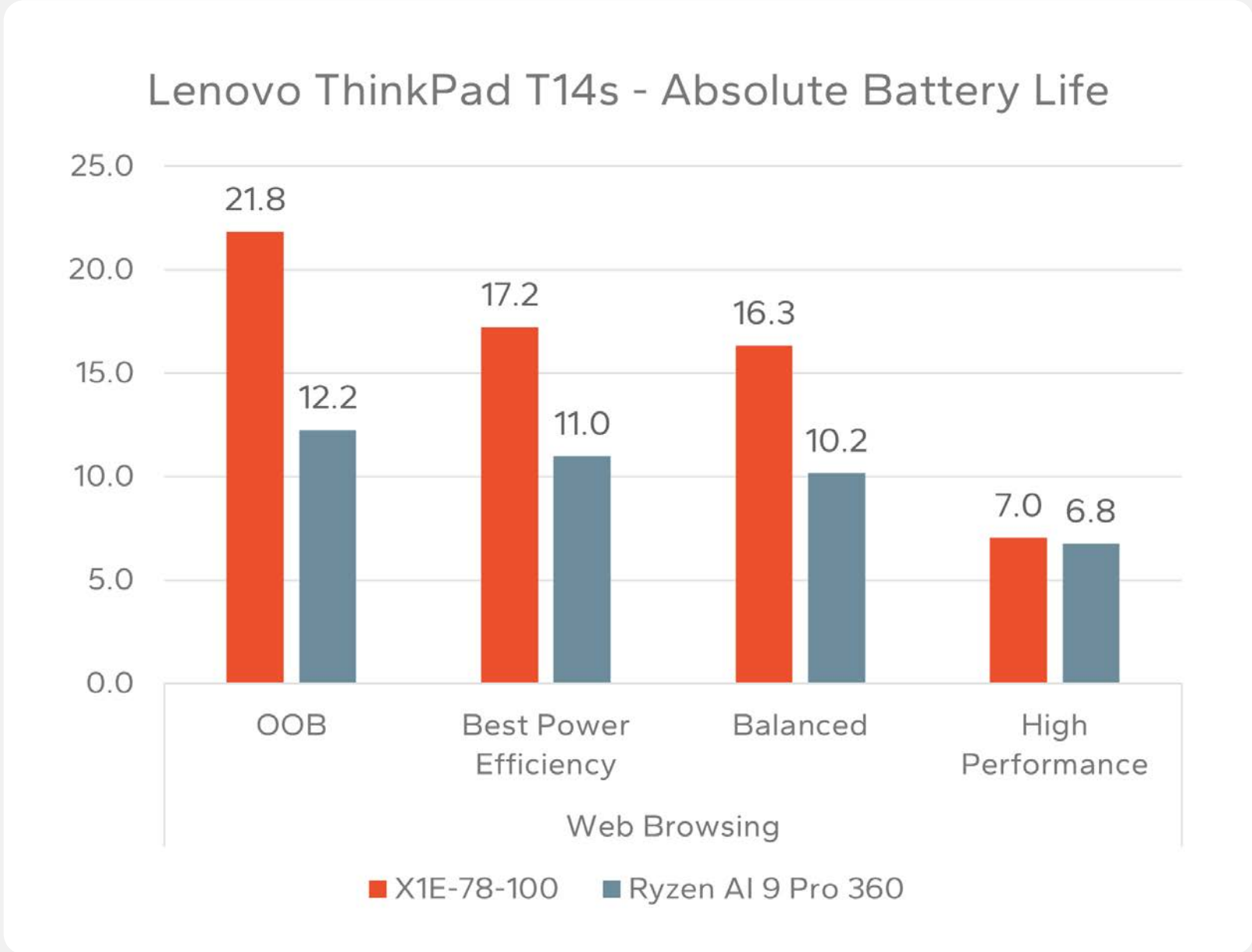
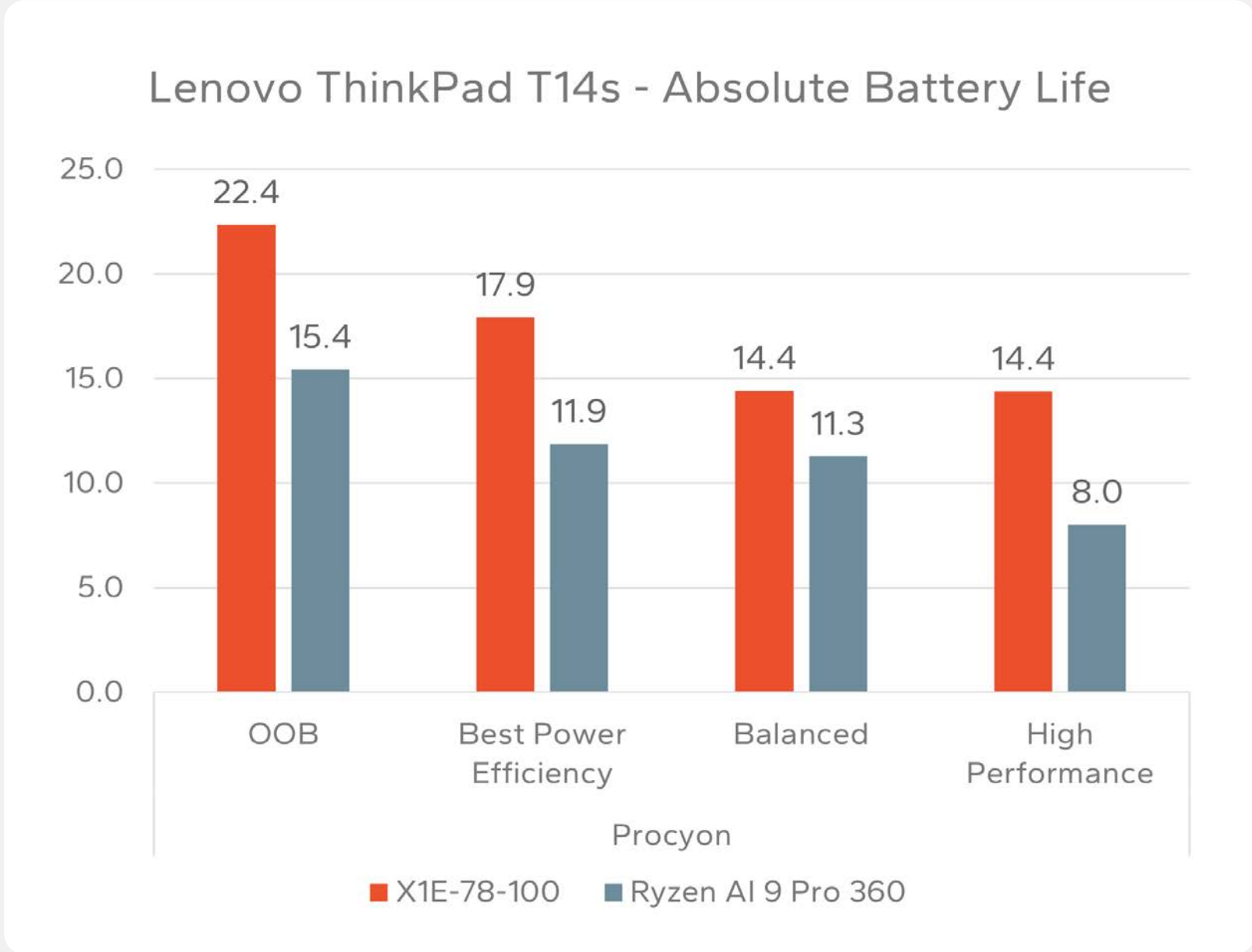
In the Lenovo ThinkPad T14s Best Performance configuration, the Snapdragon X Elite demonstrates substantial efficiency advantages while maintaining performance leadership. The Snapdragon system provides 79% longer battery life in Procyon productivity testing, though web browsing battery life is nearly equivalent between the processors. Performance metrics show the Snapdragon delivering 22% better productivity performance and 27% superior web browsing performance compared to the AMD Ryzen AI 9 Pro 360. This configuration reveals that under maximum performance settings, the Snapdragon’s architectural efficiency becomes most pronounced in sustained productivity workloads, where it can maintain higher performance levels while consuming significantly less power.



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Lenovo ThinkPad T14s Results

Absolute Battery Life

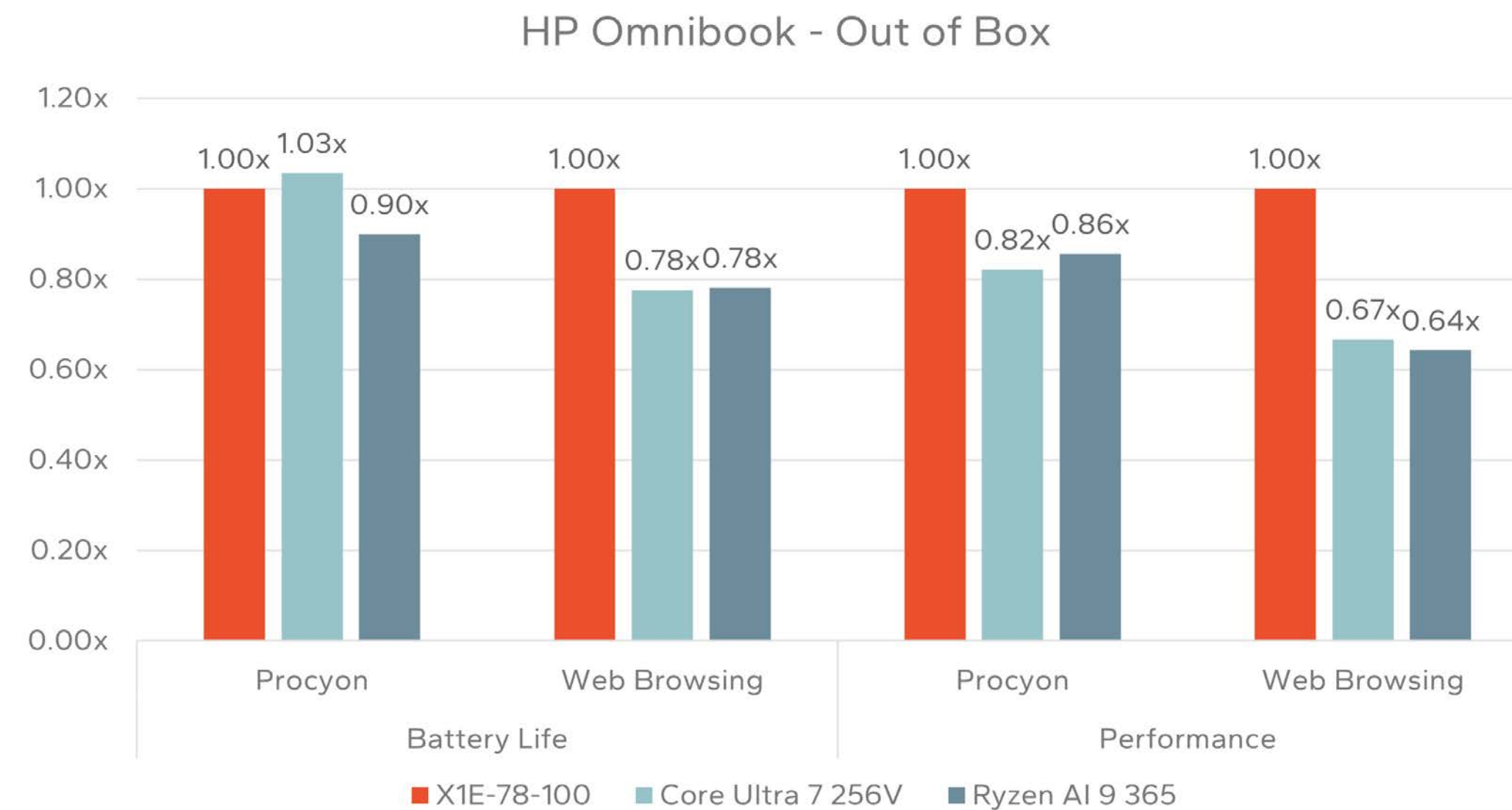


The absolute battery life measurements for the Lenovo ThinkPad T14s show us consistently superior performance from the Snapdragon X Elite across all configurations and workloads. In Procyon productivity testing, the Snapdragon achieves exceptional battery life ranging from 14.4 to 22.4 hours, with particularly impressive out-of-box performance of 22.4 hours compared to the AMD system’s 15.4 hours. Web browsing results show similar advantages, with the Snapdragon delivering 21.8 hours in out-of-box configuration versus 12.2 hours for the AMD processor. Both systems show reduced battery life under high performance settings, but the Snapdragon maintains substantial advantages of 80% in productivity workloads and remains competitive in web browsing scenarios, demonstrating consistent architectural efficiency benefits across the entire power management spectrum.

HP OmniBook Results



Out of Box



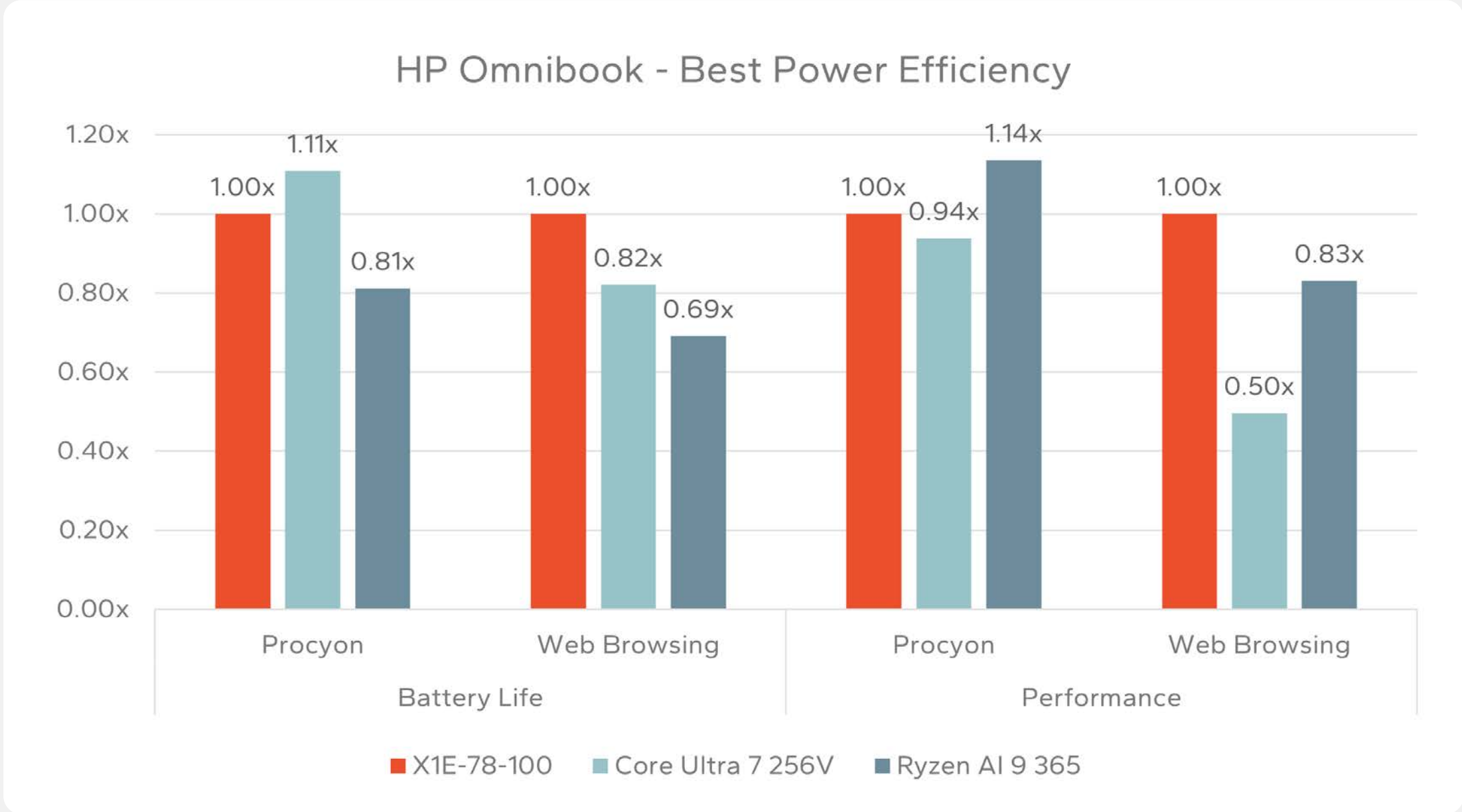
The HP OmniBook out-of-box comparison demonstrates the Snapdragon X Elite's efficiency advantages across three processor architectures. In battery life testing, the Snapdragon system matches Intel's Procyon performance while delivering 28% better web browsing runtime, and provides 11% longer productivity battery life and equivalent web browsing performance compared to AMD. Performance metrics show the Qualcomm system maintaining competitive productivity performance across all processors while delivering superior web browsing performance, with 49% better results than Intel and 56% better than AMD. This three-way comparison highlights the Snapdragon's consistent efficiency and performance advantages in default manufacturer configurations across competing x86 and Arm architectures.

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HP OmniBook Results



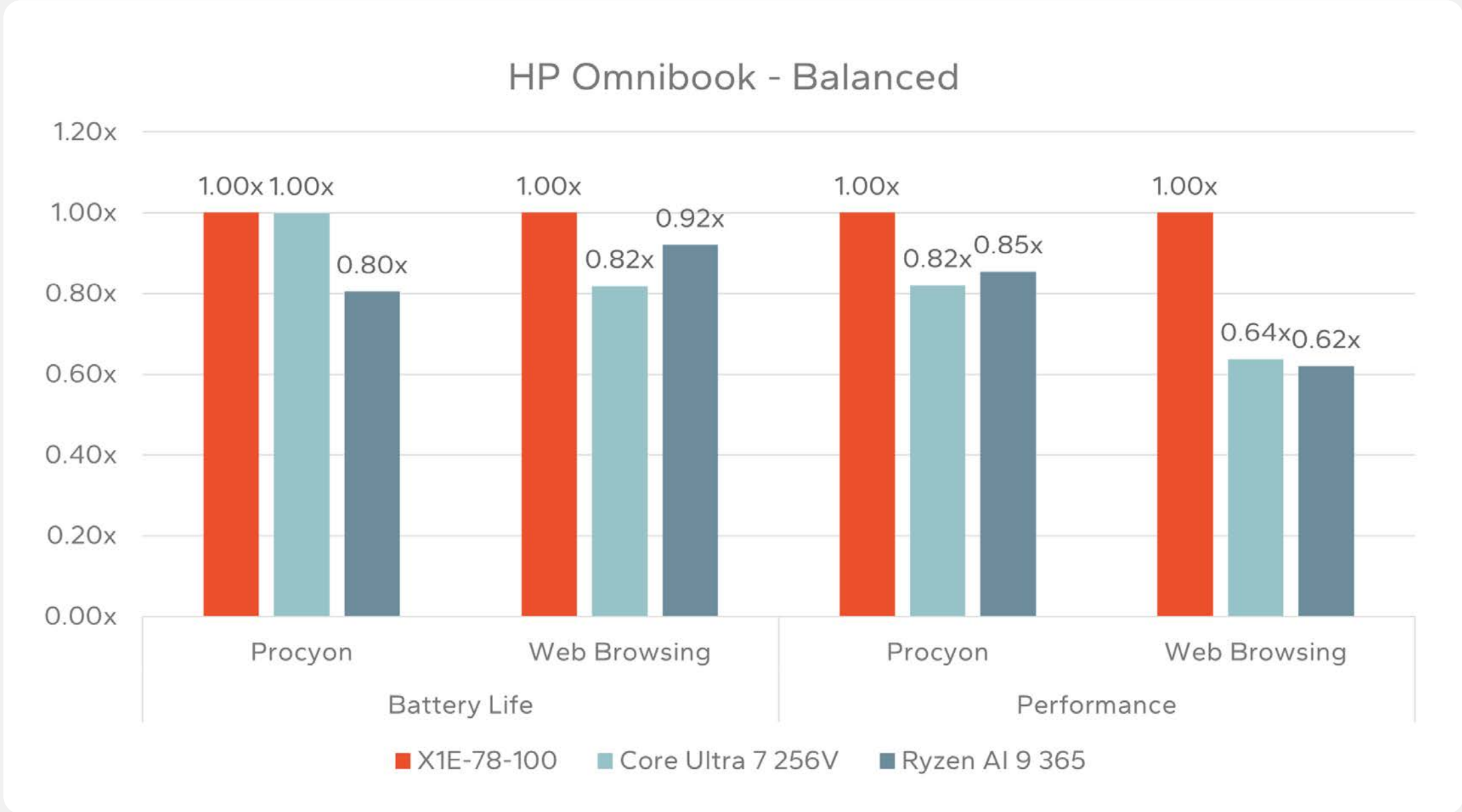
Best Power Efficiency



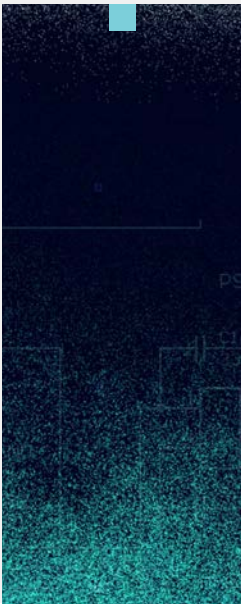
In the HP OmniBook Best Power Efficiency configuration, the Intel Core Ultra 7 256V achieves the longest battery life in Procyon testing (11% better than Snapdragon), while the Snapdragon leads in web browsing runtime with 22% and 45% advantages over Intel and AMD respectively. Performance results show AMD delivering the highest productivity performance (14% better than Snapdragon), while the Snapdragon HP system maintains substantial web browsing performance leadership with 100% and 20% advantages over Intel and AMD. This configuration reveals that aggressive power management can alter the efficiency hierarchy, with each processor demonstrating distinct optimization characteristics under maximum power conservation settings.

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HP OmniBook Results



The HP OmniBook Balanced configuration shows similar battery life performance across all three processors in Procyon testing, with the Snapdragon and Intel achieving identical results while AMD trails by 20%. Web browsing battery life favors the Snapdragon with 22% and 9% advantages over Intel and AMD respectively. Performance metrics reveal equivalent productivity performance between Snapdragon and AMD, both outperforming Intel by 22%. Web browsing performance strongly favors Snapdragon with 56% and 61% advantages over Intel and AMD. This balanced power setting demonstrates how moderate optimization can equalize battery life while the Snapdragon maintains consistent performance leadership in web-based workloads.

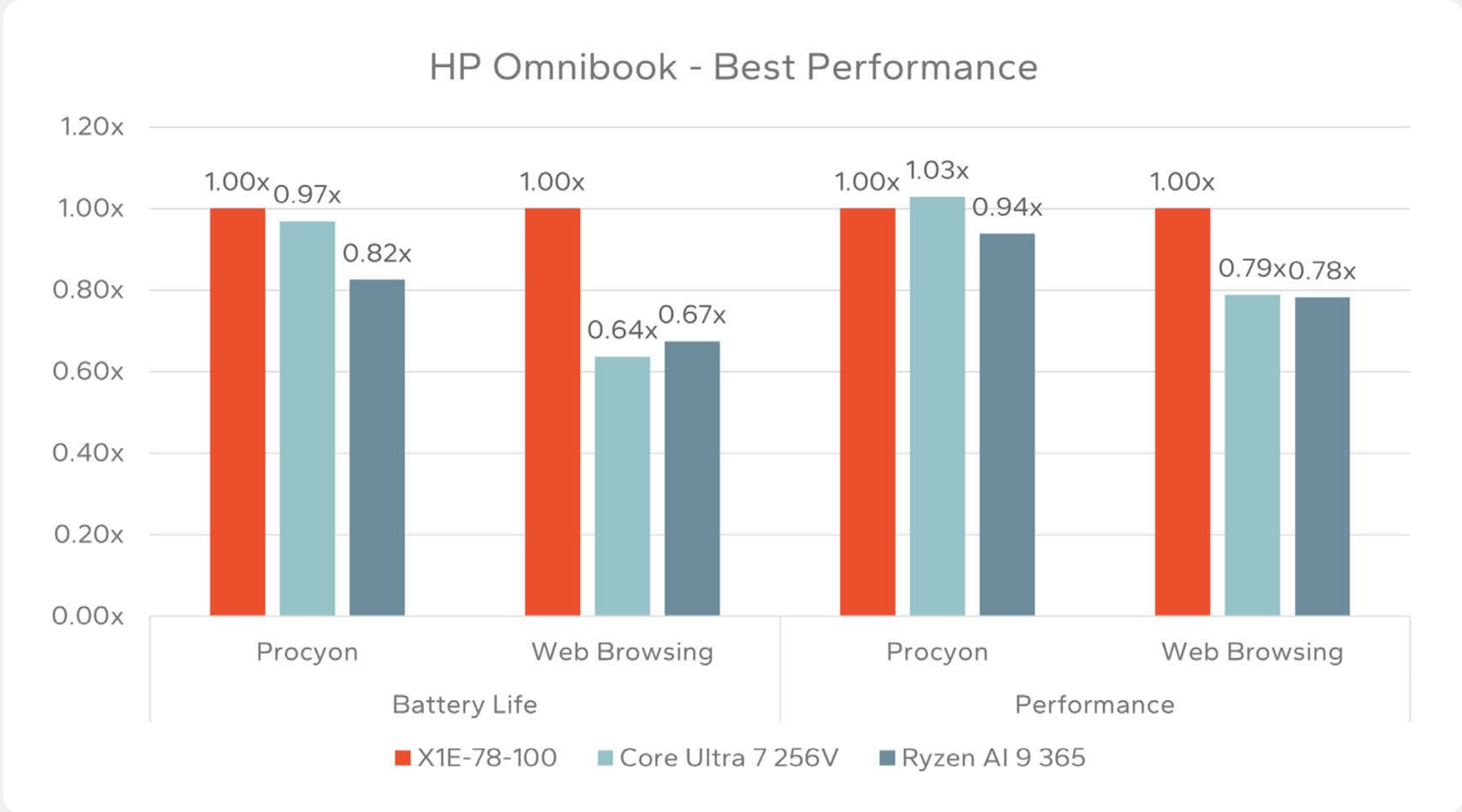


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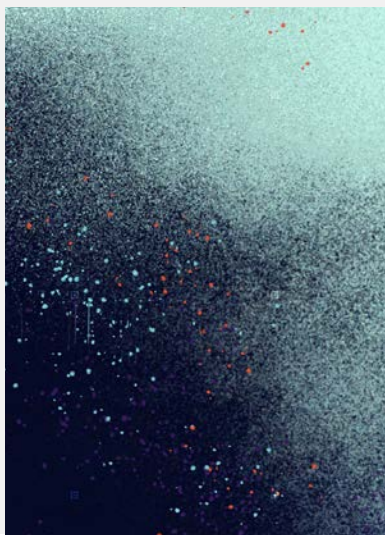
HP OmniBook Results



Best Performance



The HP OmniBook Best Performance configuration shows the Snapdragon X Elite maintaining battery life leadership across both workloads, with modest advantages of 3% and 59% over Intel in Procyon and web browsing respectively, and 22% and 49% improvements over AMD. Performance results reveal closer competition, with Intel achieving 3% better productivity performance than Snapdragon, while AMD trails both by 6%. Web browsing performance continues to favor Snapdragon X Elite with 27% and 28% advantages over Intel and AMD. Under maximum performance settings, the three-way comparison demonstrates that while productivity performance converges, the Snapdragon’s architectural efficiency enables sustained battery life advantages alongside superior web-based computational performance.

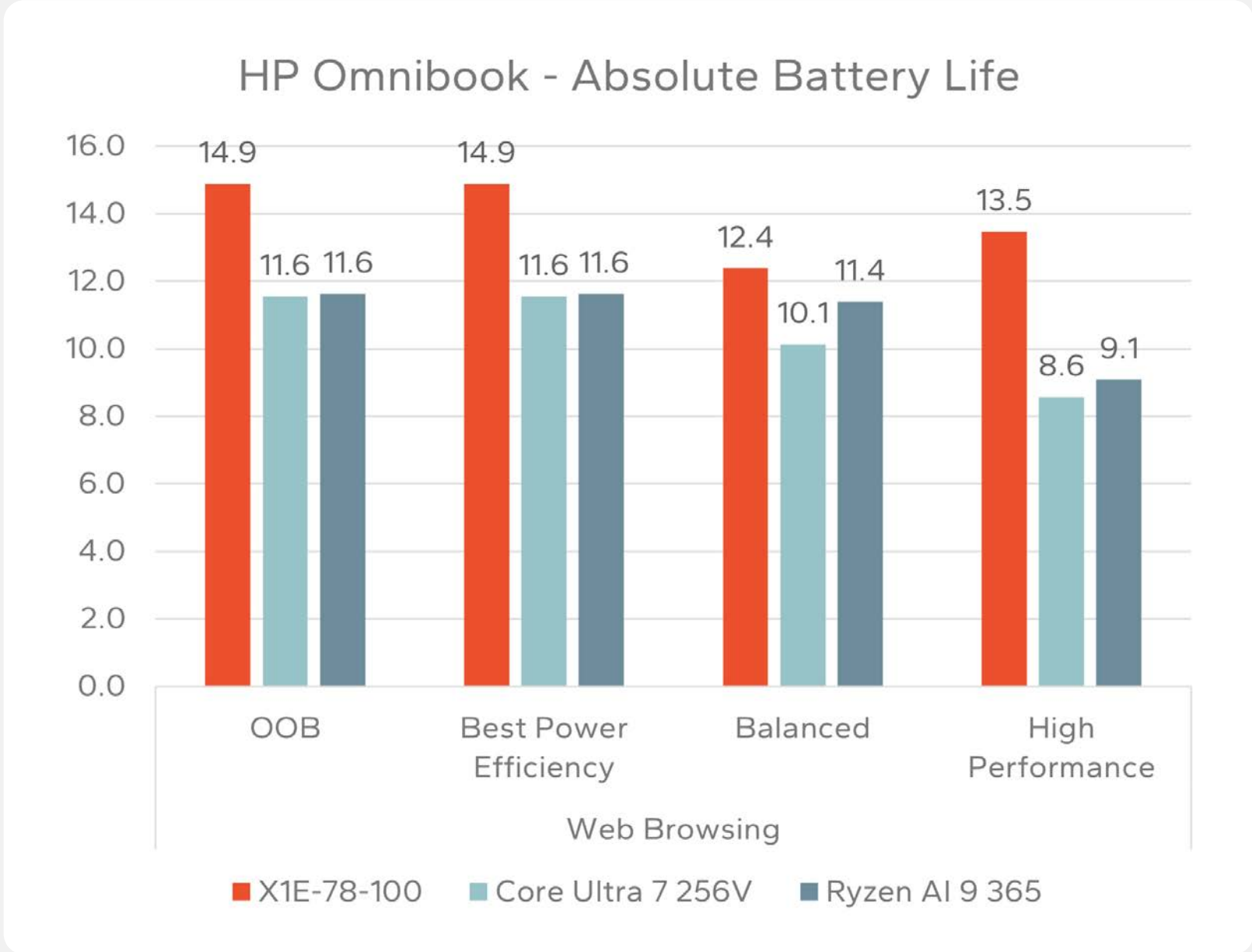
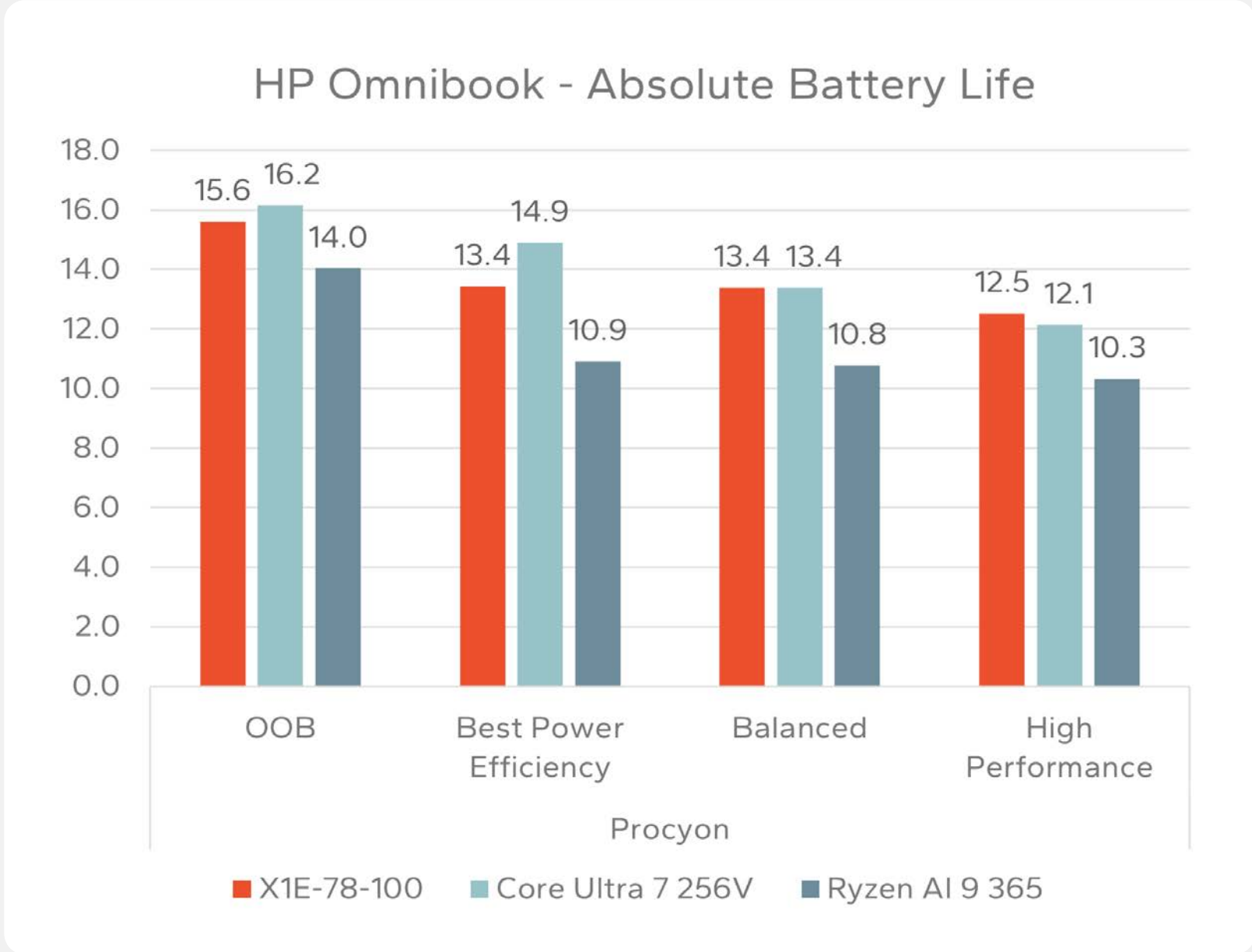


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HP OmniBook Results



Absolute Battery Life



The HP OmniBook absolute battery life measurements demonstrate consistent efficiency advantages for the Snapdragon X Elite across most configurations and workloads. In Procyon productivity testing, the Snapdragon achieves 15.6 hours in out-of-box configuration, closely matched by Intel at 16.2 hours, while AMD delivers 14.0 hours. The processors converge around 13-14 hours in optimized power settings, with performance mode reducing all systems to approximately 10-12 hours. Web browsing results show the Snapdragon maintaining leadership with 14.9 hours in both out-of-box and best power efficiency modes, compared to Intel and AMD at 11.6 hours. Under high performance settings, battery life decreases significantly across all processors, with the Snapdragon achieving 13.5 hours versus 8.6-9.1 hours for the competing architectures, highlighting the processor's efficiency advantages under demanding operating conditions.

Conclusion



The comprehensive battery life and performance analysis across Dell XPS 13, Lenovo ThinkPad T14s Gen 6, and HP OmniBook systems demonstrates the Snapdragon X Elite's consistent efficiency advantages in real-world usage scenarios. The out-of-box experience consistently favors Snapdragon-based systems, delivering better web browsing battery life across all tested platforms while maintaining competitive or superior productivity performance. Even in cases where Procyon battery life approaches parity, such as with the Dell XPS 13 and HP OmniBook configurations, the Snapdragon X Elite provides substantially better computational performance, achieving up to 100% performance improvements in office productivity workloads without compromising power efficiency.

Manual power configuration testing reveals significant variability in the performance-efficiency trade-offs across competing architectures. The Dell XPS 13 Balanced configuration exemplifies this disparity, where the Intel Core Ultra 7 256V achieves 20% longer battery life but operates at only 60% of the Snapdragon

X Elite performance level, representing a substantial computational penalty for modest efficiency gains. Conversely, under Best Performance settings where performance converges, the Snapdragon X Elite system maintains a 22% battery life advantage, demonstrating improved architectural efficiency when performance demands are maximized.

The three-way comparison provided by the HP OmniBook systems offers revealing insights into competitive positioning across processor architectures. In out-of-box configurations, while Procyon battery life remains relatively consistent across all three platforms, the Snapdragon X Elite delivers 15-18% better performance than both Intel and AMD alternatives. Web browsing scenarios show more pronounced advantages, with Snapdragon providing 22% longer battery life alongside 40% superior browser performance compared to competing systems. The HP Balanced mode configuration closely replicates out-of-box performance characteristics, suggesting that manufacturer optimization strategies align well with moderate power management settings.

Absolute battery life measurements consistently demonstrate Snapdragon's web browsing efficiency advantages, maintaining substantial runtime improvements over both Intel and AMD architectures across all power management configurations.

The aggregate findings establish the Snapdragon X Elite as the efficiency leader in the Windows laptop ecosystem, achieving superior power efficiency without performance compromises. Rather than requiring trade-offs between computational capability and battery life, the Oryon-based architecture delivers an enhanced user experience through extended battery runtime in both productivity and web browsing scenarios while providing better performance at equivalent or lower power consumption levels. This combination of improved efficiency and sustained performance represents a fundamental advancement in Windows laptop design, offering users enhanced mobility and productivity without the traditional compromises associated with portable computing power management.

Important Information About this Report

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Contact us if you would like to discuss this report and Signal65 will respond promptly.

Citations

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Signal65 provides research, analysis, advising, and lab services to many high-tech companies, including those mentioned in this paper. Research of this document was commissioned by Qualcomm.

Commissioned by:

The Qualcomm logo, featuring the word "Qualcomm" in a blue, sans-serif font.

About Signal65

Signal65 exists to be a source of data in a world where technology markets and product landscapes create complex and distorted views of product truth. We strive to provide honest and comprehensive feedback and analysis for our clients in order for them to better understand their own competitive positioning and create optimal opportunities to market and message their devices and services.



System Configurations

	Dell XPS 13	Dell XPS 13
CPU	Qualcomm Snapdragon X Elite 80-100	Intel Core Ultra 7 256V
Graphics	Qualcomm Adreno X1-85	Intel Arc 140V
RAM	16GB LPDDR5X-8448	16GB LPDDR5X-8533
Storage	512GB Kioxia BG6	512GB Micron 2550
Display	13" 1920x1200	13" 1920x1200
System BIOS	2.4.0	1.8.0
Operating System	26100.3194	26100.3194
Virtualization Based Security	Enabled	Enabled

	ThinkPad T14s Gen 6	ThinkPad T14s Gen 6
CPU	Qualcomm Snapdragon X Elite 78-100	AMD Ryzen AI 7 Pro 360
Graphics	Qualcomm Adreno X1-85	AMD Radeon 880M
RAM	32GB LPDDR5X-8448	32GB LPDDR5X-7500
Storage	1TB Western Digital SN740	1TB Kioxia KXG8AZNV1T02
Display	14" 1920x1080	14" 1920x1080
System BIOS	2.13	1.08
Operating System	26100.3194	26100.3194
Virtualization Based Security	Enabled	Enabled

	HP Omnibook X	HP Omnibook Ultra Flip 14	HP Omnibook Ultra 14
CPU	Qualcomm Snapdragon X Elite 78-100	Intel Core Ultra 7 256V	AMD Ryzen AI 9 365
Graphics	Qualcomm Adreno X1-85	Intel Arc 140V	AMD Radeon 880M
RAM	16GB LPDDR5X-8448	16GB LPDDR5X-8533	32GB LPDDR5X-7500
Storage	1TB Kioxia KGB50ZNV1T02	1TB Micron MFTDKBA1T0QFM-1BD1AABHA	1TB Western Digital Dn560
Display	14" 2240x1400	14" 2880x1800	14" 2240x1400
System BIOS	F.12	01.01.09	01.01.14
Operating System	26100.3194	26100.3194	26100.3194
Virtualization Based Security	Enabled	Enabled	Enabled

Applications Used

Google Chrome v136.0.7103.114
UL Procyon 2.10.1542
Microsoft Office 2502



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