The science behind the report:

Power your workdays with longer battery life and better performance

This document describes what we tested, how we tested, and what we found. To learn how these facts translate into real-world benefits, read the report Power your workdays with longer battery life and better performance.

We concluded our hands-on testing on July 30, 2025. During testing, we determined the appropriate hardware and software configurations and applied updates as they became available. The results in this report reflect configurations that we finalized on June 20, 2025 or earlier. Unavoidably, these configurations may not represent the latest versions available when this report appears.

Our results

To learn more about how we have calculated the wins in this report, go to http://facts.pt/calculating-and-highlighting-wins. Unless we state otherwise, we have followed the rules and principles we outline in that document.

Table 1: Results of our general performance benchmark testing. Higher scores are better.

	Dell™ Pro 14 Plus	Dell Latitude™ 5440	Dell Latitude 7430	Percentage win vs Latitude 5540	Percentage win vs Latitude 7430
PugetBench for Creators: Adobe® Premier®e Pro Standard					
Overall score	1,969	1,551	1,135	26.95%	73.48%
LongGOP score	21.2	17.5	13.8	21.14%	53.62%
Intraframe score	25.2	16.7	13.3	50.89%	89.47%
RAW score	33.5	42.5	25.1	-21.17%	33.46%
GPU effects score	8.4	4.7	3.6	79.87%	132.68%
3DMark® Steel Nomad					
Graphics score	361	113	109	219.46%	231.19%
CrossMark® v1.0.1.95					
Overall score	1,592	1,459	1,321	9.11%	20.51%
Productivity score	1,557	1,489	1,320	4.56%	17.95%
Creativity score	1,719	1,494	1,397	15.06%	23.04%
Responsiveness score	1,351	1,282	1,119	5.38%	20.73%

	Dell™ Pro 14 Plus	Dell Latitude™ 5440	Dell Latitude 7430	Percentage win vs Latitude 5540	Percentage win vs Latitude 7430
Procyon Office Productivity Benchmark					
Overall rating	6,086	5,231	4,620	16.34%	31.73%
Word score	6,076	5,223	4,169	16.33%	45.74%
Excel score	5,686	4,835	4,549	17.60%	24.99%
PowerPoint score	7,346	6,159	5,784	19.27%	27.00%
Outlook score	4,804	4,433	3,738	8.36%	28.51%
Procyon Photo Editing Benchmark v1.2.411 using Adobe® Photoshop® v26.6.1 & Lightroom Classic v14.3.1					
Overall score	4,530	4,160	2,916	8.89%	55.34%
Image retouching score	5,991	5,491	4,148	9.10%	44.43%
Batch processing score	3,426	3,152	2,050	8.69%	67.12%
Procyon Video Editing Benchmark v1.2.411 using Adobe Premiere® Pro v25.2.3					
Score	4,864	3,435	2,951	41.60%	64.82%
Cinebench 2024					
CPU multi-core score	539	426	378	26.52%	42.59%

Table 2: Results of our AI performance benchmark testing. Higher scores are better, unless otherwise noted.

	Dell Pro 14 Plus	Dell Latitude 5440	Dell Latitude 7430	Percentage win vs Latitude 5440	Percentage win vs Latitude 7430
Procyon AI Computer Vision Benchmark - float32					
Overall score	159	105	93	51.42%	70.96%
MobileNet V3 total inference count	43,612	20,111	21,108	116.85%	106.61%
ResNet 50 total inference count	7,509	4,814	4,208	55.98%	78.44%
Inception V4 total inference count	2,063	1,567	1,429	31.65%	44.36%
YOLO V3 total inference count	997	724	584	37.70%	70.71%
Real-ESRGAN total inference count	32	22	17	45.45%	88.23%
Procyon AI Computer Vision Benchmark - float16					
Overall score	367	177	160	107.34%	129.37%
MobileNet V3 total inference count	64,240	28,485	28,621	125.52%	124.45%
ResNet 50 total inference count	18,822	7,692	7,141	144.69%	163.57%
Inception V4 total inference count	5,711	2,471	2,282	131.12%	150.26%
YOLO V3 total inference count	2,983	1,262	1,050	136.37%	184.09%
Real-ESRGAN total inference count	106	40	35	165.00%	202.85%

	Dell Pro 14 Plus	Dell Latitude 5440	Dell Latitude 7430	Percentage win vs Latitude 5440	Percentage win vs Latitude 7430
Procyon AI Computer Vision Benchmark - Integer					
Overall score	678	314	295	115.92%	129.83%
MobileNet V3 total inference count	76,256	35,613	34,946	114.12%	118.21%
ResNet 50 total inference count	33,478	12,190	11,931	174.63%	180.59%
Inception V4 total inference count	10,222	4,494	4,389	127.45%	132.90%
YOLO V3 total inference count	5,662	2,446	2,227	131.47%	154.24%
Real-ESRGAN total inference count	233	77	67	202.59%	247.76%
Procyon AI Image Generation Benchmark - Stable Diffusion 1.5 (INT8)					
Overall score	1,296	523	464	147.80%	179.31%
Overall duration in seconds	192.83	477.38	538.36	59.60%	64.18%
Overall image generation speed (seconds/image)	24.10	59.67	67.30	59.60%	64.18%
Average UNET Speed (iterations//second)	2.16	0.86	0.77	150.63%	182.09%
Procyon AI Text Generation Benchmark					
PHI 3.5 overall score	294	213	164	38.02%	79.26%
Average TTFT in seconds	4.79	5.92	8.24	19.08%	41.86%
Average OTS (tokens/second)	16.15	10.46	8.60	54.39%	87.79%
Load time in seconds	5.44	18.17	18.56	70.06%	70.68%
MISTRAL 7B overall score	257	178	134	44.38%	91.79%
Average TTFT in seconds (lower is better)	7.58	9.95	13.55	23.81%	44.05%
Average OTS (tokens/second)	10.99	6.88	5.30	59.73%	107.35%
Load time in seconds	10.33	10.88	13.71	5.05%	24.65%
LLAMA 3.1 overall score	245	165	131	48.48%	87.02%
Average TTFT in seconds	6.71	9.42	11.55	28.76%	41.90%
Average OTS (tokens/second)	9.91	6.32	4.90	56.80%	102.24%
Load time in seconds	13.41	21.91	16.93	38.79%	20.79%

	Dell Pro 14 Plus	Dell Latitude 5440	Dell Latitude 7430	Percentage win vs Latitude 5440	Percentage win vs Latitude 7430
Geekbench AI GPU					
Full Precision score	5,461	3,391	3,251	61.04%	67.97%
Half Precision score	8,881	4,770	4,614	86.18%	92.47%
Quantized score	13,482	7,665	7,372	75.89%	82.88%
Geekbench AI CPU					
Full Precision score	2,807	2,354	1,948	19.24%	44.09%
Half Precision score	9,039	2,361	1,923	282.84%	370.04%
Quantized score	13,919	4,753	4,053	192.84%	243.42%

Table 3: Results of our battery life testing. Higher scores are better.

	Dell Pro 14 Plus	Dell Latitude 5440	Dell Latitude 7430	Percentage win vs Latitude 5440	Percentage win vs Latitude 7430
MobileMark 30 v1.0.0.17					
Battery life (hh:mm)	8:30	5:47	5:39	46.97%	50.44%
Minutes per Whr	9.3	6.4	5.8	44.30%	58.64%
DC performance score	807	740	788	9.05%	2.41%
Index score	411	257	267	59.92%	53.93%
UL Procyon® Battery Life Benchmark (Office Productivity)					
Battery life (hh:mm)	7:49	4:53	6:50	60.06%	14.39%
Minutes per Whr	8.5	5.4	7.1	57.15%	20.62%
Microsoft Teams 3x3 video conference					
Battery life (hh:mm)	5:58	4:11	4:03	42.62%	47.32%
Minutes per Whr	6.5	4.6	4.2	40.03%	55.36%

System configuration information

Table 4: Detailed information on the systems we tested.

System configuration information	Dell Pro 14 Plus	Dell Latitude 5440	Dell Latitude 7430
Processor			
Vendor	Intel®	Intel®	Intel®
Model number	Core™ Ultra 5 235U	Core™ i5-1345U	Core™ i5-1245U
Core frequency (GHz)	2.0-4.9	1.6–4.7	1.6–4.4
Number of cores	12	10	10
Number of threads	14	12	12
Memory			
Amount (GB)	16	16	16
Type	LPDDR5x	DDR4	DDR4
Graphics			
Vendor	Intel®	Intel®	Intel®
Model number	Graphics	Iris® Xe Graphics	Iris® Xe Graphics
Storage			
Amount (GB)	256	256	512
Type	NVMe® SSD	NVMe SSD	NVMe SSD
Connectivity/expansion			
Wireless internet	Intel® Wi-Fi 6E AX211	Intel® Wi-Fi 6E AX211	Intel® Wi-Fi 6E AX211
Battery			
Rated capacity (Whr)	55	54	58
Display			
Size (in.)	14	14	14
Resolution	1,920 x 1,200	1,920 x 1,080	3,840 x 2,160
Operating system			
Vendor	Microsoft	Microsoft	Microsoft
Name	Windows 11 Pro	Windows 11 Pro	Windows 11 Pro
Version	24H2 (Build 26100.4351)	24H2 (Build 26100.3775)	24H2 (Build 26100.3775)
Dimensions			
Height (in.)	8.80	8.35	8.22
Width (in.)	12.30	12.65	12.65
Depth (in.)	0.78	0.75	0.71
Weight (lb.)	3.09	3.06	2.79

How we tested

Setting up the systems

Setting up and updating the OEM image

1. Boot the system.
2. Follow the on-screen instructions to complete installation, using the default selections when appropriate.
3. Set the Windows (plugged in) Power Mode to Best Performance.
4. Set Screen and Sleep options to Never:
    a. Right-click the desktop, and select Display settings.
    b. From the left column, select System.
    c. Click Power & Battery.
    d. For all power options listed under Screen and Sleep, select Never.
5. Disable User Account Control notifications:
    a. Select Windows Start, type UAC, and press the Enter key.
    b. Move the slider control to Never notify, and click OK.
6. Run Windows Update, and install all updates available.
7. Run the OEM's Support Assistant utility, and install all recommended BIOS and driver updates available.
8. Verify the date and time are correct, and synchronize the system clock with the time server.
9. Pause Automatic Windows Updates:
    a. Click the Windows Start button.
    b. Type `Windows Update settings` and press the Enter key.
    c. From the Pause updates drop-down menu, select Pause for 5 weeks.

Capturing an image

1. Connect an external HDD to the system.
2. Click Windows Menu button, and type `Control Panel` in the search bar. Click Control Pane l → System and Security → Backup and Restore (Windows 7) → Create a system image.
3. Verify that the external HDD is selected as the save drive, and click Next.
4. Verify that all drives are selected to back up, and click Next.
5. Click Start backup.
6. When you see the prompt to create a system repair disc, select No, and close the dialogs.

Restoring an image

1. Connect an external HDD to the system.
2. Press and hold the Shift key while restarting the system.
3. Select Troubleshoot.
4. Select Advanced options.
5. Select See more recovery options.
6. Select System image recovery.
7. Select the User account.
8. Enter the system password, and click Continue.
9. At the Restore system files and settings screen, select Next.
10. Verify that the external HDD is selected, and click Next.
11. Once the recovery has completed, click Finish.

Testing with 3DMark Steel Nomad

Setting up the test

1. Download 3DMark from http://www.futuremark.com/benchmarks/3dmark/all.
2. To install 3DMark with the default options, double-click the 3DMark installer.exe file.
3. To launch 3DMark, double-click the 3DMark desktop icon.
4. Enter the registration code, and click Register.
5. Install the Steel Nomad benchmark.
6. Exit 3DMark.

Running the test

1. To launch the benchmark, double-click the 3DMark desktop icon.
2. At the 3DMark Home screen, click the More Tests button.
3. Select the Steel Nomad benchmark.
4. Move the slider button to turn off the "Include Demo" feature.
5. Click Run.
6. When the benchmark run completes, record the results.
7. Perform steps 1 through 6 twice more.

Testing with Cinebench 2024

Setting up the test

1. Download and install Cinebench 2024 from https://www.maxon.net/en/downloads/cinebench-2024-downloads.
2. Launch Cinebench 2024.
3. Select File → Advanced benchmark.
4. From the Minimum Test Duration drop-down menu, select Off.

Running the multi-core test

1. Launch Cinebench 2024.
2. Click Start next to CPU (Multi Core).
3. Record the result.
4. Wait 10 minutes before rerunning.
5. Repeat steps 1 through 4 twice more.

Testing with CrossMark

Setting up the test

1. Install a licensed version of CrossMark Enterprise.

Running the test

1. Boot the system.
2. Launch CrossMark.
3. Click Run Benchmark.
4. When the benchmark completes, record the results.
5. Repeat steps 1 through 4 twice more.

Testing with Geekbench AI

Setting up the test

1. Purchase and download a Geekbench AI Pro license from https://www.geekbench.com/ai/download/.
2. Using all the defaults, run the installer, and install the benchmark.

Running the test

1. Launch Geekbench AI.
2. Enter the license key.
3. For CPU/NPU testing, select:
   - AI Framework: OpenVINO™
   - AI Backend: CPU
   - AI Device: processor
4. For GPU testing, select:
   - AI Framework: OpenVINO™
   - AI Backend: GPU
   - AI Device: graphics card
5. Click Run AI Benchmark.
6. Wait 5 minutes, and repeat steps twice more.

Testing with the Procyon AI Computer Vision Benchmark

Setting up the test

1. Purchase and download the Procyon AI Computer Vision benchmark from https://benchmarks.ul.com/procyon.
2. Install the Procyon benchmark.
3. Double-click the installer.
4. Click Next.
5. Click to agree to the EULA, and click Next.
6. Click Next.
7. Launch Procyon.
8. Select Settings, and input the license key.
9. Close Procyon.

Running the test

1. Launch Procyon.
2. Select the Computer Vision test.
3. For all tests, select the Intel OpenVINO tab.
4. Choose the GPU, and select Float32.
5. To begin the test, click Run.
6. When the test completes, record the results, and wait 15 minutes before rerunning.
7. When 3 runs have been completed complete 3 runs of GPU and Float16 on systems with no NPU and Float16 and NPU on systems with an NPU.
8. When 3 runs have been completed complete 3 runs of GPU and integer on systems with no NPU and integer and NPU on systems with an NPU.
9. When the test completes, record the results, and wait 15 minutes before rerunning.
10. Complete 3 runs.

Testing with the Procyon AI Image Generation Benchmark

Setting up the test

1. Purchase and download the Procyon AI Image Generation benchmark from https://benchmarks.ul.com/procyon.
2. Install the Procyon benchmark.
3. Double-click the installer.
4. Click Next.
5. Click to agree to the EULA, and click Next.
6. Click Next.
7. Launch Procyon.
8. Select Settings, and input the license key.
9. Close Procyon.

Running the test

1. Launch Procyon.
2. Select the Image Generation Benchmark test.
3. Under the Stable Diffusion 1.5 (FP16) test option, select Intel OpenVINO for the AI Inference Engine and select the graphics device name to be used.
4. To begin the test, click Run.
5. Complete and record 3 runs.
6. Under the Stable Diffusion 1.5 (INT8) test option, select Intel OpenVINO for the AI Inference Engine and if the system has an NPU, select Intel® AI Boost as the device name. Otherwise, select the graphics device.
7. To begin the test, Click Run.
8. Complete and record 3 runs.
9. Under the Stable Diffusion XL (FP16) test option, select Intel OpenVINO for the AI inference Engine and select the graphics device name to be used.
10. To begin the test, click Run.
11. Complete and record 3 runs.

Testing with the Procyon AI Text Generation Benchmark

Setting up the test

1. Purchase and download the Procyon AI Text Generation benchmark from https://benchmarks.ul.com/procyon.
2. Install the Procyon benchmark.
3. Double-click the installer.
4. Click Next.
5. Click to agree to the EULA, and click Next.
6. Click Next.
7. Launch Procyon.
8. Select Settings, and input the license key.
9. Close Procyon.

Running the test

1. Launch Procyon.
2. Select the Text Generation Benchmark test.
3. For the AI Inference Engine, select Intel OpenVINO.
4. For Workloads to run, select All.
5. To begin the test, click Run.
6. When the test completes, record the results, and wait 15 minutes before rerunning.
7. Repeat steps 1 through 6 twice more.

Testing with the Procyon Office Productivity Benchmark

Setting up the test

1. Install a licensed version of Microsoft 365, and verify the system is signed into the following apps: Excel, PowerPoint, and Word.
2. Purchase and download the Procyon Benchmark Suite from https://benchmarks.ul.com/procyon.
3. Install the Procyon benchmark.
4. Double-click the installer.
5. Click Next.
6. Click to agree to the EULA, and click Next.
7. Click Next.
8. Launch Procyon.
9. Select Settings, and input the license key.
10. Close Procyon.

Running the test

1. Launch Procyon.
2. Select the Office Productivity Benchmark.
3. To begin the test, click the Office Productivity Benchmark Run button.
4. When the test completes, record the results, and wait 15 minutes before rerunning.
5. Repeat steps 3 and 4 twice more.

Testing with the Procyon Photo Editing Benchmark

Setting up the test

1. Download and install Procyon.
2. Open Procyon.
3. Click Photo Editing Benchmark.
4. Click Register.
5. Enter the license key, and click Register.
6. Before running the benchmarks, make sure to install licensed versions of Adobe Photoshop 22.0 or higher and Adobe Lightroom Classic 10.0 or higher.

Running the test

1. Launch Procyon.
2. Click Photo Editing Benchmark.
3. Click Run.
4. When the benchmark is complete, record the results.
5. Wait 15 minutes before rerunning the benchmark.
6. Repeat steps 3 through 5 twice more.

Testing with the Procyon Video Editing Benchmark

Setting up the test

1. Download and install Procyon.
2. Open Procyon.
3. Click Video Editing Benchmark.
4. Click Register.
5. Enter the license key, and click Register.
6. Before running the benchmarks, make sure to install licensed versions of Adobe Premiere Pro v14.5 or higher.

Running the test

1. Launch Procyon.
2. Click Video Editing Benchmark.
3. Click Run.
4. When the benchmark is complete, record the results.
5. Wait 15 minutes before rerunning the benchmark.
6. Repeat steps 3 through 5 twice more.

Testing with PugetBench for Creators: Premiere Pro

Setting up the test

1. Launch Adobe Premiere Pro v25.2.3.
2. Click through the Tutorial pop-up tips.
3. Close Adobe Premiere Pro.
4. Purchase a PugetBench for Creators license from https://www.pugetsystems.com/pugetbench/creators/.
5. Click Download PugetBench for Creators for Windows.
6. After the download completes, double-click the installation file to install PugetBench.
7. Enter the license key in the license field, and click Activate.
8. Click Download Assets.

Running the test

1. Boot the system.
2. Open PugetBench for Creators.
3. On the left side of the app, select the Premiere Pro test.
4. Click Start Test.
5. When the benchmark finishes, record the overall score.
6. Close PugetBench for Creators, and restart the system under test.
7. Wait 30 minutes before performing the next run.
8. Repeat steps 1 through 7 twice more.

Measuring battery life with MobileMark 30

This test requires an X-Rite - i1Display Plus colorimeter. We performed this test in Best power efficiency modes.

Avoiding antivirus software conflicts

MobileMark 30 is not compatible with any virus-scanning software, so we uninstalled any such software present on the PCs before we installed the benchmark.

Avoiding pre-installed software conflicts

MobileMark 30 installs the following applications, which its test scripts employ:

Productivity

- Corel WinZip 26.0 Enterprise
- Microsoft Excel 2021 Professional Plus
- Microsoft Outlook 2021 Professional Plus
- Microsoft PowerPoint 2021 Professional Plus
- Microsoft Word 2021 Professional Plus

Creativity

- Adobe Photoshop CC

If any of these applications already exist on the system under test, they could cause problems with the benchmark due to software conflicts. To avoid any such issues, we uninstalled all conflicting pre-installed software applications—including different versions of any of the programs MobileMark 30 uses—before we installed the benchmark.

Using the MobileMark built-in configuration tool

This tool supports three levels of configuration:

1. Only makes changes that are REQUIRED for the benchmark to run.
2. Additionally, makes changes that are RECOMMENDED for repeatable results.
3. Additionally, makes OPTIONAL changes that help ensure best results.

The configuration tool makes the following configuration changes at each of the three levels:

Level 1 - Required

- Disables User Account Control (UAC)
- Set DPI Scaling to 100%
- Disables Low Battery Actions
- Disables Network Proxies
- Disables System Sleep and Hibernate
- Disables Windows Update
- Enables Windows Search
- Disables WinSAT

Level 2 - Recommended

- Create BAPCo power scheme
- Set Power Plan Type to Balanced
- Set CPU Adaptive Mode
- Disables Battery Saver Dimming
- Verifies Battery Saver Threshold
- Disables Disk Defrag
- Disables Windows Error Reporting
- Disables Windows Lock Screen
- Disables Screen Saver and Monitor Timeout
- Set Font Smoothing

Level 3 - Optional

- Disables Battery Saver
- Disables Hard Disk Timeout
- Disables System Restore
- Ignores Laptop Lid Close
- Enables Dark Mode

For Balanced runs, we choose the official BAPCo "Run Benchmark" default as outlined in the BAPCo MobileMark30 User Guide (https://bapco.com/wp-content/uploads/2024/04/BAPCo-MobileMark30_User-Guide-v1.0.pdf), which runs the benchmark using the Required and Recommended options. **For Best power efficiency runs, we disable the recommended options for "Set Power Plan Type to balanced" and "Verify Battery Saver Threshold" options.**

Setting up the performance-qualified battery life test

1. On a separate PC, install the i1Profiler software from https://www.xrite.com/categories/formulation-and-quality-assurance-software/i1profiler, and connect the X-Rite - i1Display Plus colorimeter to that PC.
2. On the system under test, verify that the wireless adapter is disabled.
3. For the Best power efficiency battery life runs:
    a. Select Windows Start, type `Power, sleep, and battery settings`, and press the Enter key.
    b. From the Power mode drop-down menu select Best power efficiency.
    c. Select Windows Start, type `Battery saver`, and press the Enter key.
    d. From the Battery saver drop-down menu select Turns on at Always (100%), click the down arrow. Next to Lower screen brightness when using battery saver, toggle the button to Off.
4. On the system under test, verify that the volume is set to 50%.
5. Disable Intel DPST to prevent the screen from dynamically changing the screen brightness based on content:
    a. Open the Intel Graphics Command Center. Press the Windows key, type `Intel` and choose Intel Graphics Command Center.
    b. Select System → Power.
    c. In On Battery, set Display Power Savings to Off.
6. Verify the system is no less than 250 nits.
7. On the system under test, install MobileMark 30 with the default options.

Running the performance-qualified battery life test

1. Boot the system.
2. Launch MobileMark 30.
3. Click Run Benchmark.
4. Click the Brightness Profiler button.
5. Allow the white screen to warm up for 30 minutes. After 30 minutes, click Skip.
6. At the Panel Dark Luminance pop-up, select Yes to use the value that is queried from the display.
7. Place the X-Rite - i1Display Plus colorimeter in the outlined spot on the screen.
8. On the test PC, toggle the F1 button to turn off the test overlay.
9. On the colorimeter PC, start i1Profiler program, and select Advanced.
10. Click Display, and click Profiling.
11. Next to Luminance, click the drop-down menu, and select Measure.
12. In the drop-down menu that appears below, select Paper in booth.
13. In the box with the image that says "Place your paper in the light booth," scroll down, and click the Measure button.
14. On the test PC, adjust the slider until the Target White luminance is met on the colorimeter PC.
15. Once the correct Target White luminance is met on the test PC, click Done.
16. The test will begin immediately. When prompted, unplug the AC power adapter.

The benchmark is complete when the PC has fully depleted its battery and is no longer operational when running on battery power.

We executed the MobileMark 30 benchmark three times on the system and took the median battery life score run as the representative performance score result for that test.

Measuring battery life with the Procyon Office Productivity Battery Life Benchmark

Setting up the test

1. Boot the system.
2. Verify the following display and power settings:
    a. Right-click the desktop, and select Display settings.
    b. Uncheck the box next to Change brightness automatically when lighting changes, if available.
    c. Uncheck the box next to Change brightness based on content, if available.
    d. In the Scale drop-down menu, select 100%.
    e. From the pane on the left, select System.
    f. Click Power & Battery.
    g. For all power options listed under Screen and Sleep, select Never.
    h. Set Power mode while unplugged to the desired setting (i.e., Best power efficiency).
3. Disable Intel DPST to prevent the screen from dynamically changing the screen brightness based on content:
    a. Open the Intel Graphics Command Center. Press the Windows key, type `Intel`, and choose Intel Graphics Command Center.
    b. Select System → Power.
    c. In On Battery, set the Display Power Savings to Off.
4. To bring up a white screen, open a web browser, and type `about:blank` into the address bar.
5. Unplug the system.
6. Using a nit meter, adjust the screen brightness to as close to 200 nits as possible.
7. Plug in the system.
8. Download and install Procyon.
9. Open Procyon.
10. Click Battery Life Office Productivity Benchmark.
11. Click Register.
12. Enter the license key, and click Register.
13. Close Procyon.
14. Before running the benchmark, make sure to install a licensed version of Microsoft 365; open Word, Excel, PowerPoint, and Outlook applications; and disable tips when possible.

Running the test

1. Boot the system.
2. Ensure the system is fully charged.
3. Launch Procyon.
4. Select the Procyon Battery Life option.
5. Under the Office Productivity tab, click Run.
6. When prompted, unplug the system.
7. When the benchmark completes, plug in and power up the system.
8. Record the results.
9. Repeat steps 2 through 8 twice more.

Measuring battery life with Microsoft Teams collaboration (3x3 gallery view)

This test requires the following:

- Nine non-testing systems as permanent meeting attendees; one of these with a licensed account to host.
- Microsoft Teams
- PT internal battery life logger

Setting up the test

1. Boot the systems under test.
2. Verify the following display and power settings:
    a. Right-click the desktop, and select Display settings.
    b. Uncheck the box next to Change brightness automatically when lighting changes, if available.
    c. Uncheck the box next to Change brightness based on content, if available.
    d. In the Scale drop-down menu, select 100%.

e. From the pane on the left, select System.
f. Click Power & Battery.
g. For all power options listed under Screen and Sleep, select Never.
h. Set Power mode while unplugged to the desired setting.

3. To bring up a white screen, open a web browser, and type `about:blank` into the address bar.
4. Unplug the system.
5. Using a nit meter, adjust the screen brightness to as close to 250 nits as possible.
6. Plug in the system.
7. Open Settings, and click Bluetooth & Devices.
8. Click Cameras, and click the built-in connected camera.
9. Under Windows Studio Effects, turn on all settings.
10. Copy the battery life logger to each system under test.
11. Open PowerShell as administrator, and run `Set-ExecutionPolicy Unrestricted`
12. On one of the non-testing systems, launch Teams, and log into a licensed Microsoft account.
13. In the pane on the left, click Calendar.
14. Click Meet Now, and click Start Meeting.
15. Ensure the camera is turned on, and click Join now.
16. In the top toolbar, click More, and click Meeting Info.
17. Note the Meeting ID and Passcode.
18. On the remaining eight non-testing systems, launch Teams, and click Join a meeting.
19. Enter the Meeting ID and Passcode, and click Join meeting.
20. Ensure the camera is turned on, and click Join now.

Running the test

1. Verify that the system's battery is fully charged.
2. Launch Teams, and click Join a meeting.
3. Enter the Meeting ID and Passcode, and click Join meeting.
4. Ensure the camera and audio are turned on, and click Join now.
5. In the top toolbar, click View.
6. Ensure Gallery View is selected, and set the Max Gallery Size to 9 people.
7. Open PowerShell as administrator, and navigate to the directory containing the battery life logger script.
8. Type `.\<battery_script_name>.ps1` and press Enter to run the script.
9. Unplug the system when prompted, and switch back to the Teams meeting.
10. When the system has shut down, plug in the system, and start it.
11. In Explorer, navigate to C:\ProgramData\ptbat\.
12. Open the folder corresponding with the date and time of the test, and record the results from batresults_minutes.txt.
13. Repeat steps 1 through 12 twice more.

Read the report at https://facts.pt/H49Nehr ▶

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