

PERFORMANCE ASSESSMENT TOOLKIT

EXECUTIVE SUMMARY

The goal of this document is to explain step-by-step how to run the Windows Assessment Toolkit to generate results for Boot, Standby Resume, Microsoft Edge and Battery life.

TEST METHODOLOGY AND SETUP

TOOLS

Windows Assessment Toolkit (ADK)

- <https://docs.microsoft.com/en-us/windows-hardware/get-started/adk-install>

ASSESSMENTS

- Boot performance (Fast Startup)
- Standby performance
 - If supported by the device then run Modern Standby Performance
- Edge Security Software impact
- Battery Life local full screen video playback

METHODOLOGY

1. Complete the Out of Box Experience of Windows
2. Launch Store and check for and install all available updates
3. Launch settings, navigate to Windows Update, check for and install all available updates
4. Restart the system if prompted
5. Download and install the Windows Assessment Toolkit
6. Launch an administrative command prompt:
 - a. Press the Windows logo
 - b. Type CMD
 - c. Right-click the Command Prompt
 - d. Click Run as administrator
7. Type `Cmd.exe /c start /wait Rundll32.exe advapi32.dll,ProcessIdleTasks`
 - a. Do not interact with the system until the command completes
 - b. After the command completes, wait 5 minutes before running the assessment
8. Launch the Windows Assessment Console
9. Select the Startup and Shutdown experience, select Boot performance (Fast Startup), and click Run
 - a. When the result dialog appears, record the results.
 - b. Repeat steps 8 & 9 for the remaining tests
 - c. Startup and Shutdown experience, Standby performance
 - i. If supported by the device then Modern Standby Performance should be run

- d. Browsing Experience, Edge Security Software impact
 - e. Battery Life during local full screen video playback, Windows 10 Full Screen Media Playback Workload
10. Additional notes
- a. Fast Startup, Standby and Edge assessments perform 10 iterations each run and displays the average
 - b. Battery Life performance runs once

DEVICES TESTED AND RESULTS

MODEL	PROCESSOR	MEMORY	DRIVE
Acer Swift 1 14"	Intel Pentium	4GB	64GB eMMC
Lenovo Flex 6	Intel Core i3	8GB	128GB SSD
Lenovo Ideapad 330S 14"	Intel Core i5	4GB	256GB SSD
Lenovo Yoga 720 12"	Intel Core i3	4GB	128GB SSD
HP Pavilion x360 14"	Intel Core i5	8GB	256GB SSD
Lenovo Yoga 720 12"	Intel Core i5	4GB	128GB SSD
ASUS VivoBook S 14"	Intel Core i7	8GB	256GB SSD

Test Results	Acer Swift 1 14"	Lenovo Flex 6	Lenovo Ideapad 330S 14"	Lenovo Yoga 720 12" (Core i3)	HP Pavilion x360 14"	Lenovo Yoga 720 12" (Core i5)	ASUS VivoBook S 14"
Fast Startup (secs)	22.13	15.09	18.89	20.22	10.49	13.86	11.93
Edge Launch (secs)	2.11	1.44	1.27	2.11	1.26	1.12	1.19
LFSVP Battery Life (hrs)	19.0	11.3	11.63	7.85	8.65	7.35	8.12