

Comparative Performance Testing

MAY 2018

Epson L4160

vs. HP Ink Tank Wireless 415 and Canon PIXMA G3010 Single-Page Productivity Test

Overview

Keypoint Intelligence – Buyers Lab was commissioned by Seiko Epson Corporation to conduct a comparative performance test to assess the single-page productivity performance of the Epson L4160 with that of the HP Ink Tank Wireless 415 and Canon PIXMA G3010. Buyers Lab measured the time taken to print a single page on each machine using a suite of 12 test targets and compared the results. Testing was undertaken at Epson's Hirooka facility, with all devices set to their default settings.

Executive Summary

The Epson L4160 proved to be the fastest when printing each single-page test file, compared to the HP Ink Tank Wireless 415 and Canon PIXMA G3010. This was true whether the test file being output was a low-, medium-, or high-coverage file.

When printing the file with the heaviest page coverage, the Epson L4160 printed the file in just 26.24 seconds. Both the Canon and HP models were at a disadvantage when printing Test File 3, taking around three to four times as long to print the file. Even when printing documents with lower coverage, the Epson L4160 still beat the competition.

Based on Buyers Lab's testing, the Epson L4160 is the fastest of the three devices when printing a variety of single-page files.

Productivity

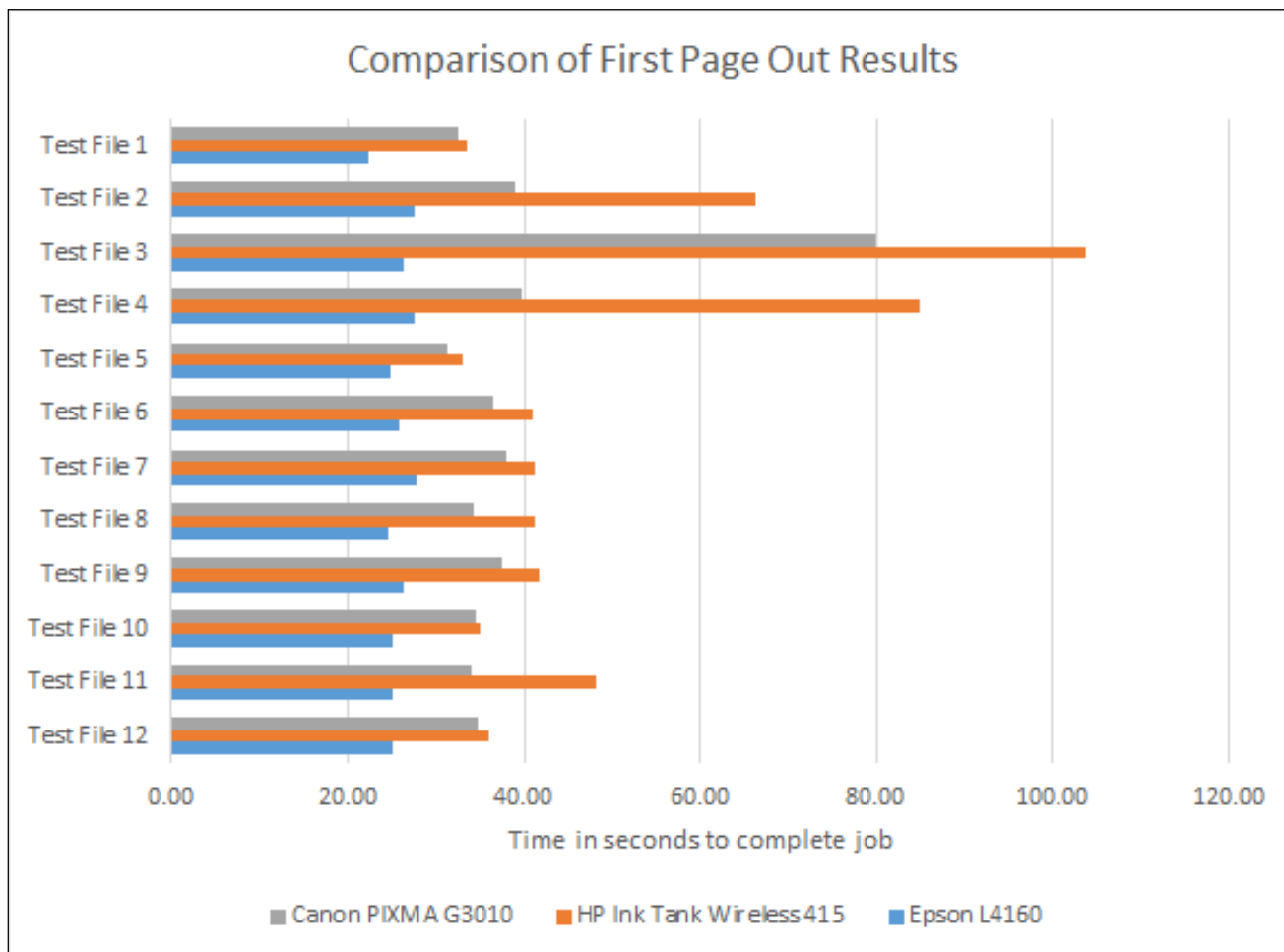
To test the single-page productivity of each printer, Buyers Lab printed 12 single-page documents on each device. The 12 test documents range from low-coverage to high-coverage pages.

The Epson L4160 proved to be the fastest, whether printing low-, medium-, or high-coverage files. Its closest rival in these tests was the Canon PIXMA G3010, as its average time to print a page was 13.70 seconds slower than that of the L4160. The smallest difference between job completion times was 6.59 seconds, and the highest was 53.81 seconds.

More pronounced was the difference between the Epson L4160 and the HP Ink Tank Wireless 415. The smallest difference in completion time was 8.26 seconds, while the highest was 77.63 seconds.

	Time Taken to Print Test Files		
	Epson L4160	HP Ink Tank Wireless 415	Canon PIXMA G3010
Test File 1	22.40	33.62	32.55
Test File 2	27.53	66.43	39.07
Test File 3	26.24	103.87	80.05
Test File 4	27.56	84.96	39.71
Test File 5	24.83	33.09	31.42
Test File 6	25.81	41.06	36.60
Test File 7	27.71	41.13	38.09
Test File 8	24.48	41.34	34.21
Test File 9	26.28	41.68	37.43
Test File 10	25.00	35.11	34.56
Test File 11	25.00	48.23	33.92
Test File 12	25.02	36.11	34.70
AVERAGE	25.66	50.55	39.36
MIN	22.40	33.09	31.42
MAX	27.71	103.87	80.05
DIFFERENCE	5.31	70.78	48.63

Each test file was printed on a test device twice, with both times recorded compared to make sure they were within +/-5% of each other. The fastest time in which each test device printed each test file appears here.



Time in seconds indicates the time elapsed from when the print command was issued to when the trail edge of the page completely exits the device.

Supporting Information





12 low-, medium-, and high-coverage PDF files were printed on each printer, and each file is displayed below. All of the test files are single-page documents.

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2016 InfoTrends Digital Imaging Conference

Ed Lee
Group Director, Consumer and Professional Imaging
February 16, 2016



InfoTrends

Test File One

Test File Two

Test File Three

MOVE YOUR BUSINESS FORWARD WITH INKJET PRINTING

The time for a better quality, more reliable printing solution for your business is now—move your business forward with the new **Vibrant Pro** business print range. As Epson® has optimized our unique print head technology for business applications, Vibration-free, high-resolution, needs-conscious inkjet technology, the efficiency, simplicity and economy of inkjet printing actually provides businesses with a number of advantages over other.

Simple mechanism / Complex mechanism

The unique design of the print head and the inkjet mechanism, which is the heart of the print head, is the key to the simple, reliable, and easy print performance that inkjet printing provides. However, such a simple print performance that inkjet printing provides, exposure, development, transfer and fixing, residual layer and other complex processes are required to print the inkjet mechanism.

Uses no heat / Uses heat

Inkjet printing is a non-thermal printing system of inkjet printing, controlled mechanical movement is used to transfer ink, high temperature heat is required to be transferred to the paper.

No contact with paper / Contact with paper

Inkjet printing is a non-contact and requires no contact between the print head and paper. Inkjet printing is a non-contact and requires no contact between the print head and paper. Inkjet printing is a non-contact and requires no contact between the print head and paper.

Liquid ink / Powdered ink (toner)

Inkjet printing is a liquid inkjet printing. The ink is a liquid and is applied directly to the paper surface. The ink is a liquid and is applied directly to the paper surface. The ink is a liquid and is applied directly to the paper surface. The ink is a liquid and is applied directly to the paper surface. The ink is a liquid and is applied directly to the paper surface.

Business Inkjet

Later



Test File Four




Models shown: **WF-8000WF**
with optional cassette and environmental

WorkForce Pro WF-8000WF



Key features and connectivity features

- A0 colour print
- Print up to 364ppm
- EO print at 60x24.5ppm
- Up to 1,800 sheet capacity
- Automatic duplex
- 12.7 cm colour touch screen







Recommended solutions*




Epson EcoTank Ink System



Epson Smart Panel

* Epson EcoTank Ink System is an optional extra.



Models shown: **WF-8000WF**
with optional cassette and environmental


WorkForce Pro WF-8000WF

Key features and connectivity features

- A0 colour print
- Print up to 364ppm
- EO print at 60x24.5ppm
- Up to 1,800 sheet capacity
- Automatic duplex
- 6.0 cm colour touch screen












Recommended solutions*



Epson EcoTank Ink System



Epson Smart Panel

* Epson EcoTank Ink System is an optional extra.

* These features are recommended for purchasing up to 4 units. Please check specifications for compatibility.

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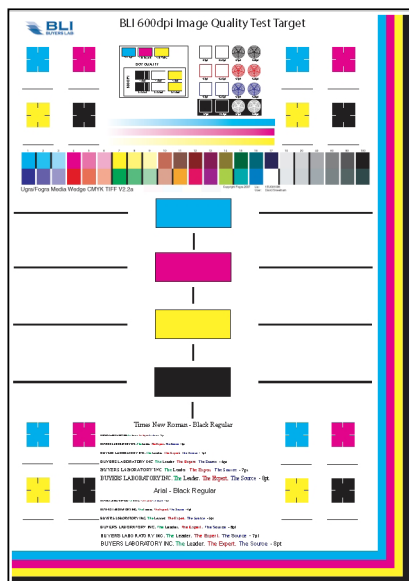
Test File Five

[illegible]

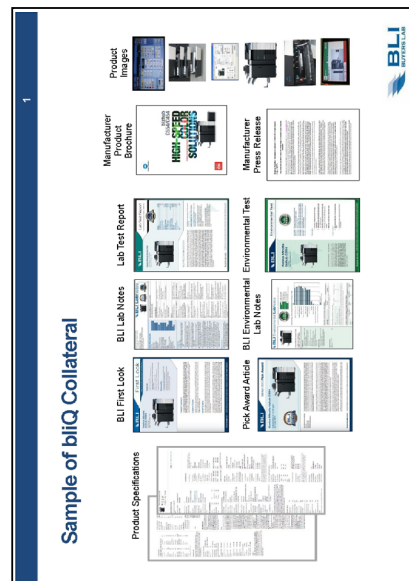
Test File Six



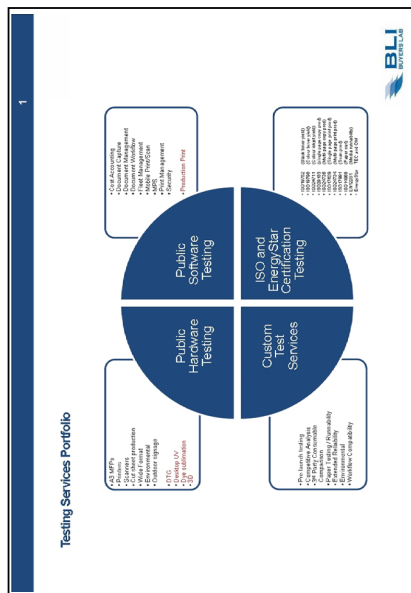
Test File Seven



Test File Eight



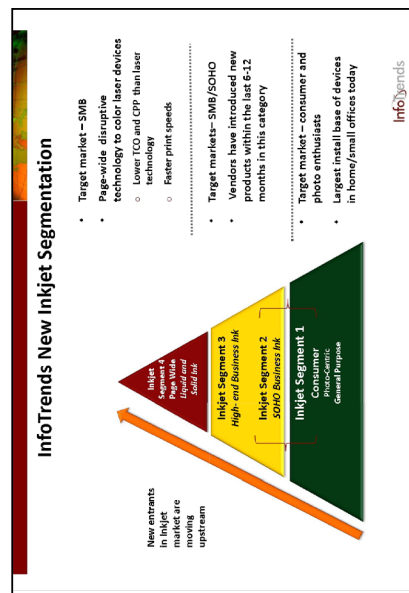
Test File Nine



Test File 10



Test File 11



Test File 12

Test Environment/Conditions:

Testing was undertaken at Epson's Hirooka facility at 80 Hirookahara Shinden, Shiojiri, Nagano Prefecture 399-0706 Japan

Conditioning:

Printers, paper, and cartridges were acclimatized to the above conditions for a minimum of two hours prior to testing, and were set up and pre-tested by Buyers Lab. Paper was acclimatized in ream wrappers. Printers, printer components, paper, and cartridges were handled in a manner that prevented exposure to condensation.

Test Equipment: Buyers Lab technicians used a laptop running Windows 10 Pro, a USB cable, and a stopwatch.

Test Procedures: Buyers Lab's technicians printed 12 single-page PDF documents to each device. Each device was in its ready state when a print job was sent to it. Each document was printed twice on a test device, with the time taken to print each copy noted and compared to make sure the times were within +/-5% of each other. If the times were beyond these bounds the test was undertaken again.

About Keypoint Intelligence - Buyers Lab

Keypoint Intelligence is a one-stop shop for the digital imaging industry. With our unparalleled tools and unmatched depth of knowledge, we cut through the noise of data to offer clients the unbiased insights and responsive tools they need in those mission-critical moments that define their products and empower their sales.

For over 50 years, Buyers Lab has been the global document imaging industry's resource for unbiased and reliable information, test data, and competitive selling tools. What started out as a consumer-based publication about office equipment has become an all-encompassing industry resource. Buyers Lab evolves in tandem with the ever-changing landscape of document imaging solutions, constantly updating our methods, expanding our offerings, and tracking cutting-edge developments.

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