

BLI Performance Evaluation

JANUARY 2018

Ink/Toner Yield Analysis When Printing in Standard Mode (with Arial) versus Ecofont

Test Objective

Keypoint Intelligence - Buyers Lab was commissioned by Ecofont B.V. to conduct confidential black ink/toner yield testing using a single-page, text-based document set in 12pt Arial font with two brands of test printers. The tests were comprised of two print workflows. BLI compared the black ink/toner yield results obtained when printing the test target using the Ecofont typeface with results obtained when printing the test target in its original form using the printers in their standard print mode. Two cartridges were expended per workflow using HP LaserJet P2055 and Canon PIXMA TS8150 devices. All testing was conducted at BLI's European test facility in Wokingham, UK.

Executive Summary

Businesses are continually seeking ways to improve their purchasing decisions and make cost savings. Optimising consumable usage can help achieve maximum efficiency, and Ecofont is designed to help businesses do just that by converting all text characters in a document into an ink-saving equivalent just before it is printed. Text will exhibit incomplete fill in printed characters, but the outer character definition is preserved to enhance text legibility. In theory, the lower ink or toner consumption would extend the life of printer cartridges and produce more pages than 'normal' printing using a typical font.

Test results obtained in BLI's comprehensive lab evaluation clearly show that more pages are produced through use of the Ecofont font than with a document's standard (Arial) font, regardless of whether the device used is an inkjet or a laser model. Based on average page yields, 49.5% more pages were printed when using Ecofont on the Canon PIXMA TS8150 inkjet than when printing in standard mode (with Arial font). An impressive 86.8% extra pages were printed using Ecofont on the HP laser model versus standard print mode (with Arial font).

For text-based, document-intensive environments that demand high page yields and seek to maximise efficiencies, it's well worth considering Ecofont for its toner/ink saving benefits.

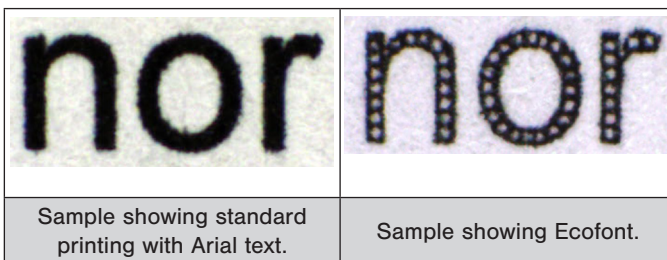
Page Yield

BLI conducted its page yield tests using a proprietary test target document. Two cartridges were used on inkjet and laser test devices until they were exhausted. Page yields were recorded when the devices were subjected to two different printing workflows: a standard workflow where the text document was printed in its original state, and one where the Ecofont typeface was used.

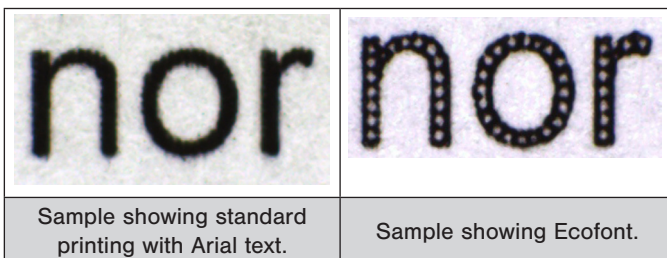


BLI's original test target document with text set in 12pt Arial.

Examples of print quality achieved when printing in standard mode and with Ecofont on the Canon PIXMA TS8150.



Examples of print quality achieved when printing in standard mode and with Ecofont on the HP LaserJet P2055.

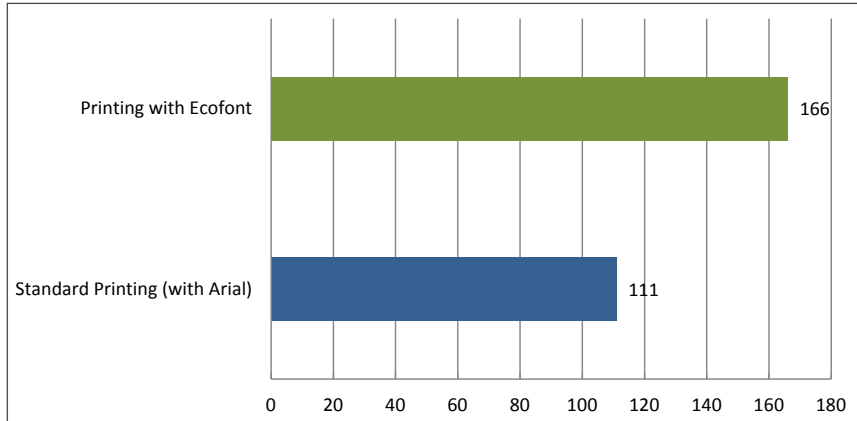


Black Page Yield Test Summary (Results Averaged Across Two Cartridges)

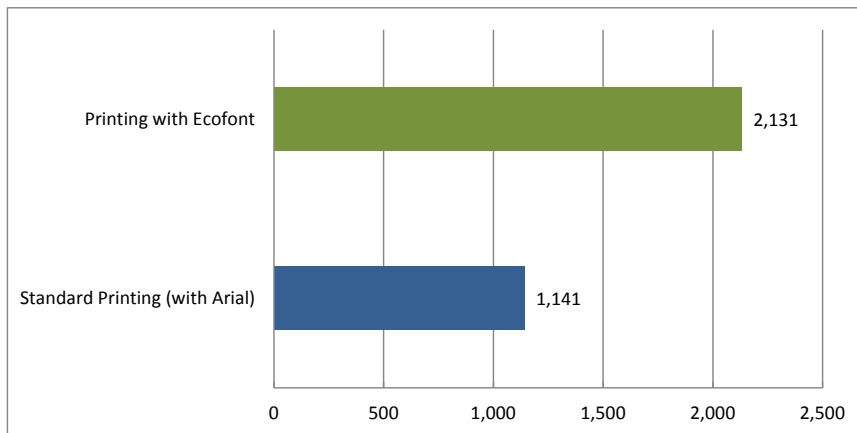
Standard printing (with Arial)		Printing with Ecofont	
Canon PIXMA TS8150	HP LaserJet P2055	Canon PIXMA TS8150	HP LaserJet P2055
111	1,141	166	2,131

Standard printing means the test printers were run in their standard default print settings using the text-based document set in Arial.

Average Tested Page Yield (Canon PIXMA TS8150)

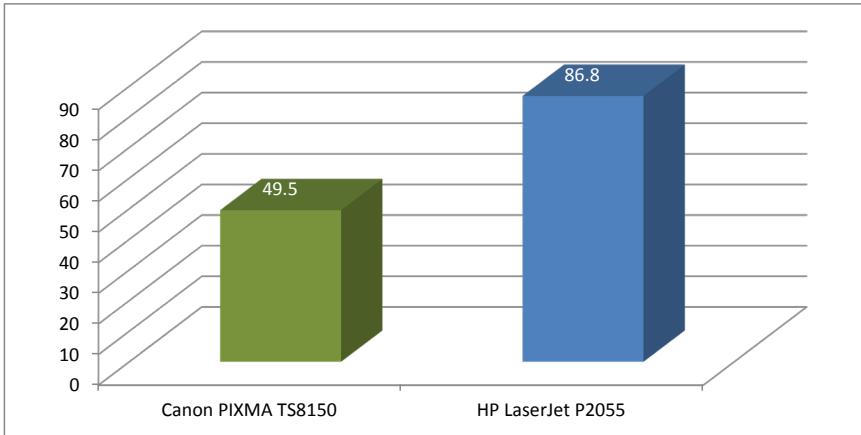


Average Tested Page Yield (HP LaserJet P2055)



Regardless of printer model used, it's clear that when using the Ecofont typeface more pages are produced than with the standard print workflow using the Arial font, in particular with the HP laser model. Results are closer with the Canon inkjet device, but the advantage still lies with Ecofont.

% More Pages with Ecofont



Based on the results of BLI's testing, it's clear that printing with Ecofont delivers higher page yields.

Supporting Test Data

Ink/Toner Yield Data (Fully exhausted ink/toner cartridge results)

Canon PIXMA TS8150	Cartridge 1		Cartridge 2	
	Standard Printing	Ecofont	Standard Printing	Ecofont
Start weight	28.9	28.9	28.8	28.8
End weight	19.0	18.9	19.3	19.3
Net weight	9.9	10.0	9.6	9.4
Total printed pages	114	167	107	165

HP LaserJet P2055	Cartridge 1		Cartridge 2	
	Standard Printing	Ecofont	Standard Printing	Ecofont
Start weight	789.3	788.8	785.9	785.8
End weight	696.2	705.5	698.4	699.2
Net weight	93.1	83.3	87.5	86.6
Total printed pages	1,234	2,159	1,047	2,103

Standard printing means the test printers were run in their standard default print settings using the text-based document set in Arial.

Test Environment/Conditions

All testing was conducted in a controlled environment at BLI's test facility located at Unit 11, The Business Centre, Molly Millars Lane, Wokingham, RG41 2QZ per the following conditions:

- A. Temperature was maintained at 22°C, +/-2.7°C with daily conditions monitored and logged 24/7 by a Seven-Day Temperature/Humidity Chart Recorder.
- B. Relative humidity was maintained within 45% +/- 10% with daily conditions monitored and logged 24/7 by a Seven-Day Temperature/Humidity Chart Recorder.
- C. Materials conditioning: Printers, paper and cartridges were acclimatized to the above conditions for a minimum of 24 hours prior to testing. Prior to acclimatization, packaging and shipping materials were opened in a manner that prevented light damage from occurring to the print cartridge during acclimatization. Paper was acclimatized in a ream wrapper.

About 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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