



## **Cost of Ink Per Page Analysis Australia**

**June 2009**

Includes ink cartridge pricing provided by



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## Summary and Scope of Analysis

For more than 23 years, QualityLogic Inc. has been a premier developer and provider of essential testing solutions to companies that design, build, or purchase printers and printing technology. Our products and services help our customers understand how the products they make or buy conform to specifications, or compare to reference implementations or competing products. We are active members of international standards organizations including ISO and Ecma International, and provide testing assistance to leading technology publications who publish printer reviews.

At the request of Eastman Kodak Company, QualityLogic calculated and compared the Cost of Ink Per Page (CoIPP) of the ESP series of All-in-One Printers to 15 competing printers selected by Kodak. Kodak's intent was to select printers with significant market share from leading manufacturers.

Monochrome and color cartridge yields for all printers were determined following ISO yield standards, and photo yields were determined using QualityLogic's photo yield methodology\*.

Ink prices for printers in the test were provided to QualityLogic by GAP Intelligence\*\*, a premier global provider of market intelligence. GAP provided the manufacturer's suggested retail price (MSRP) for each of the cartridges in the test based on information collected in Q1 & Q2 2009. If the cartridge price wasn't available on the manufacturer's website, GAP Intelligence provided an average of three reseller street prices. Pricing includes Australian GST. For this report, only standard as-shipped-in-box cartridges or the standard-yield ink cartridges in single quantity pricing (i.e. no multi-packs, high yield, combo packs, value packs or special promotions) were evaluated for the purpose of making like-basis comparisons between all printers. The only exception to this was that High Yield cartridges were tested for the HP OJ6500.

Although there are many factors in total cost of ownership, Cost of Ink Per Page (CoIPP) is an important factor when evaluating total cost of ownership with printer systems.

Cost of Ink Per Page was calculated by dividing these cartridge prices by the yield of each cartridge in the test.

\* All references of 'photo' in this report refer to 4x6 inch (approximately 10 x 15 cm) borderless photos.

\*\* GAP believes that the list pricing information provided is accurate; however, it is not responsible for any errors, inaccuracies, or variances caused by changes made outside of its defined survey period (Q1 2009).

The following printers and corresponding ink cartridges were included in this Cost of Ink Per Page analysis:

Company	Printer	Cartridges
Kodak	ESP-3 ESP-5 ESP-7 ESP-9	Black Ink Cartridge 10, Color Ink Cartridge 10 Black Ink Cartridge 10, Color Ink Cartridge 10 Black Ink Cartridge 10, Color Ink Cartridge 10 Black Ink Cartridge 10, Color Ink Cartridge 10
Brother	MFC-240C <sup>1</sup> MFC-5490cn	LC-1000BK, LC-1000C, LC-1000M, LC-1000Y LC61BK, LC61C, LC61M, LC61Y
Canon	PIXMA MP210 PIXMA MP620  PIXMA MX700	PG-30, CL-31 PGI-520BK, CLI-521C, CLI-521M, CLI-521Y, CLI-521BK PGI-5BK, CLI-8C, CLI-8M, CLI-8Y
Epson	Stylus CX8300	T0731, T0732, T0733, T0734
Hewlett-Packard	Photosmart C4480 Photosmart C5280 Photosmart C6380  Photosmart D5460  OfficeJet J4580 OfficeJet J5780 OfficeJet 6500 <sup>2</sup>	HP74, HP75 HP74, HP75 HP 564 - CB316WN, CB318WN, CB319WN, CB320WN, CB317WN HP 564 - CB316WN, CB318WN, CB319WN, CB320WN, CB317WN HP 901 - CC653AN, CC656AN HP74, HP75 HP 920XL - CD975AE, CD972AE, CD973AE, CD974AE
Lexmark	X4850 <sup>3</sup> X5470	41A, 42A 32, 33

<sup>1</sup> The Brother MFC-240C tested and reported here is a North American model. In this report, pricing for this printer models cartridges are based on equivalent European cartridges and associated pricing for the same model in Australia. Kodak intends to commission the testing of these same European models and cartridges shortly.

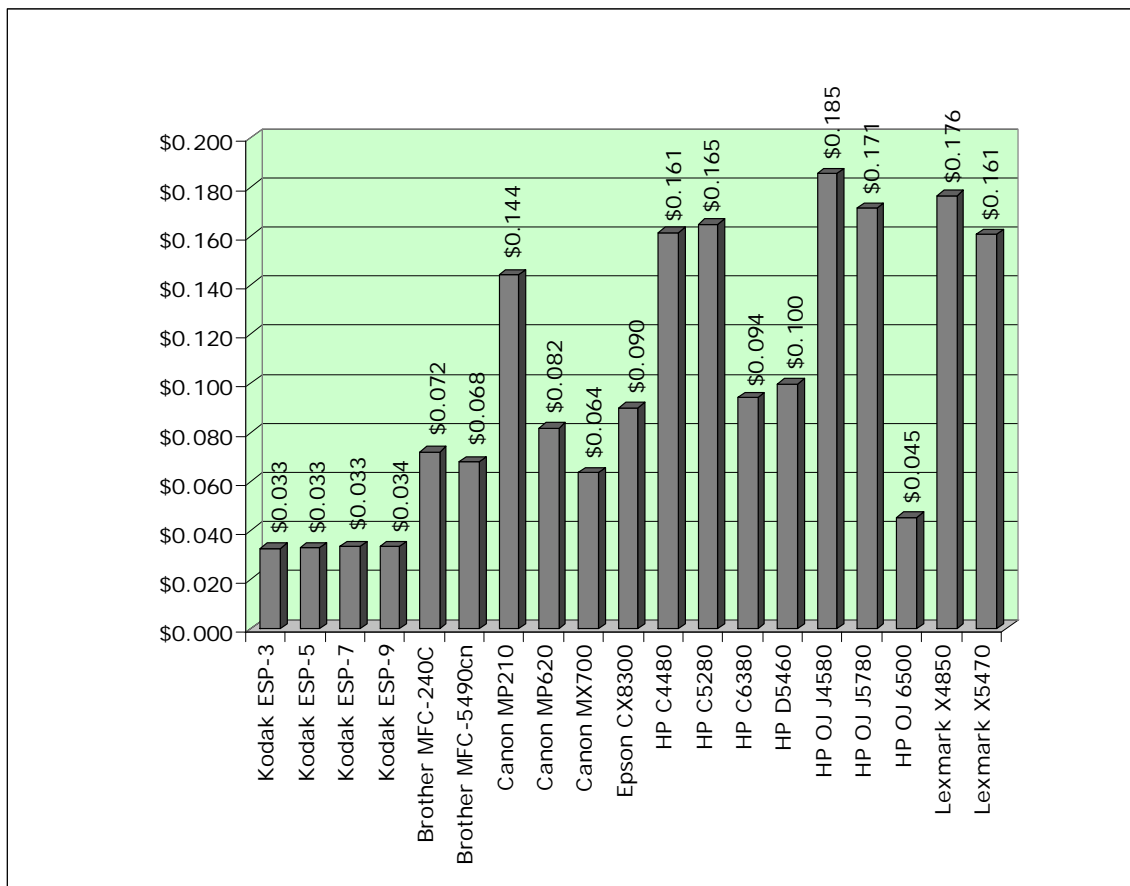
<sup>2</sup> The HP OJ 6500 was tested with High Yield cartridges from Europe with the designation ending in AE while pricing in this report is for the cartridges ending in AN.

<sup>3</sup> The Lexmark X4850 was tested with 41A and 42A cartridges but pricing was only available for the 41 and 42 cartridges. The two versions have the same stated yield but the 41 and 42 cartridges are lower cost returnable cartridges.

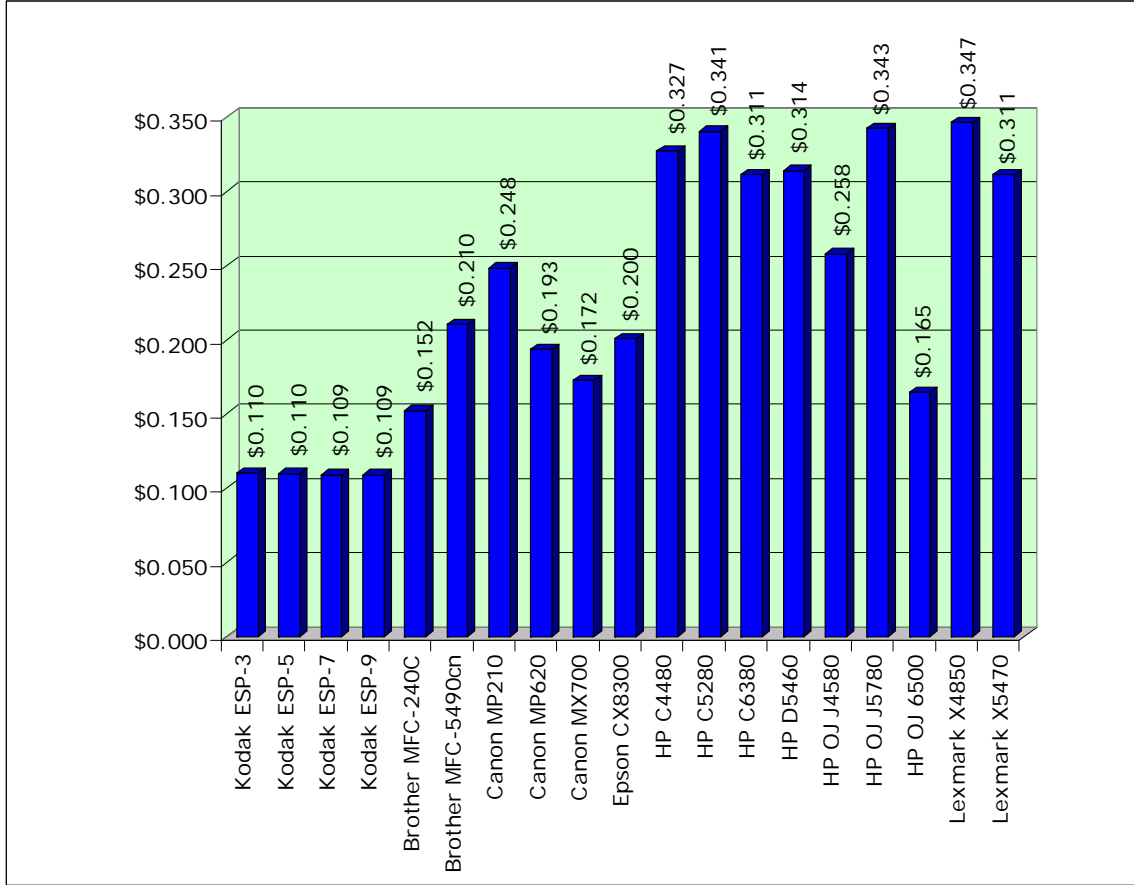
## Cost of Ink Per Page

The following charts summarize the Cost of Ink Per Page for the printers tested using cartridge prices from Australia. There are three charts presented: separate charts for monochrome, color and photo printing. Details of how these costs were calculated can be found in the "Methodology for Calculation of Cost of Ink Per Page" following these graphs.

### Australia: Mono - Cost of Ink Per Page (AUSTRALIAN Dollars)

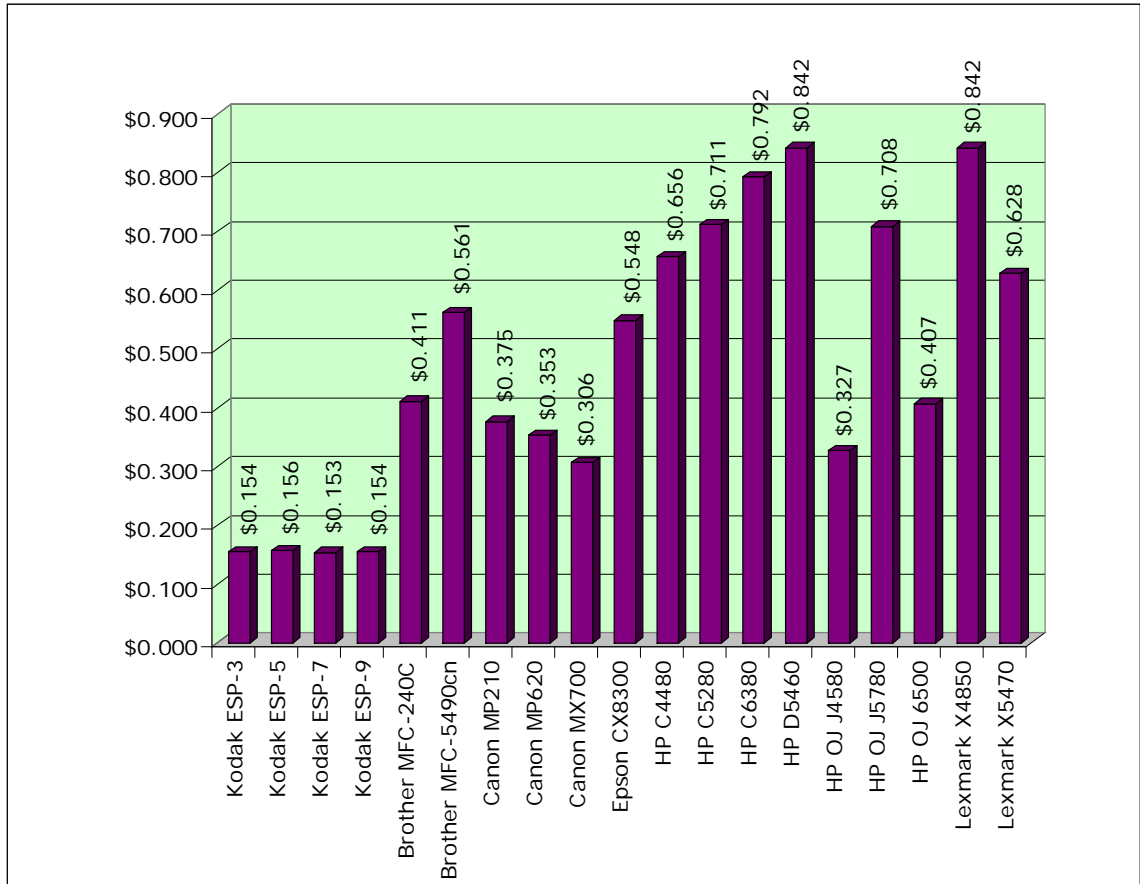


## Australia: Color - Cost of Ink Per Page (AUSTRALIAN Dollars)



Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

## Australia: Photo - Cost of Ink Per Page (AUSTRALIAN Dollars)



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## Methodology for Calculation of Cost of Ink Per Page

The following is a step-by-step outline of how QualityLogic, using standardized yield testing methodologies and standard pricing information provided by GAP, executed this 'Cost of Ink Per Page' test for Kodak.

### A. QualityLogic Yield Declarations

Yield testing is a process by which the target printers are operated with their ink or toner cartridges to exhaust the amount of ink/toner, and then pages printed are counted to determine the number of pages each cartridge yields. The requirements and operating conditions of such testing are determined by a standard set of testing criteria that will provide an objective and repeatable result.

QualityLogic is a leader worldwide in providing yield testing services. We support and follow the ISO (International Standards Organization) standards for mono and color testing. Use of using the ISO standards for yield testing is also supported by leading manufacturers, including Canon, Dell, Epson, HP, IBM, Kodak, Lexmark, Oki Data, Pitney Bowes, Ricoh, Toshiba, Xerox, and others.

ISO is currently working on a standard for photo ink. Until this standard is released, QualityLogic uses a methodology we developed that closely follows the current ISO standards approach.

Key provisions of these standards include:

- Standard test suites
- Minimum of nine cartridges across three printers representative of products in open market
- Clear, objective end-of-life criteria
- Controlled test environment – temperature, humidity, continuous printing
- Yield reporting requirement well defined

The following pages contain tables that relate to yield testing results. The tables show the number of pages per cartridge that can be expected with 90 percent confidence based on our testing. Numbers in black indicate primary cartridges – any cartridge where a minimum of nine cartridges across three printers could be exhausted. Supplemental cartridges are indicated by red numbers and represent those cartridges that are secondary to the purpose of the test. Although supplemental cartridges are not the key focus in the tests as shown, they are included in the test reports to ensure we get a complete understanding of the ink being used.

Generally, the 'primary' cartridges for each category of testing are:

- Mono ink – the black cartridge
- Color ink – all full density cartridges containing cyan, magenta, or yellow
- Photo ink – color cartridges or others where nine cartridges were exhausted

QualityLogic performed yield tests and provided yield test reports for all cartridges for models listed below (with some of the same models also available in Europe and in North America). Each table has abbreviated sub-headings that represent the specific ink cartridge types as follows:

- CMY = A single cartridge containing cyan, magenta and yellow \*
- C = Cyan
- M = Magenta
- Y = Yellow
- K1 = Black
- K2 = A second black cartridge
- LC = Light or photo cyan
- LM = Light or photo magenta

These yield numbers apply to printers included in this analysis. Yields of primary and supplemental cartridges are reported, and the details of these results can be found in Appendix C.

	Mono Ink yield							
	CMY	C	M	Y	K1	K2	LC	LM
Kodak ESP-3	4313				555			
Kodak ESP-5	4395				551			
Kodak ESP-7	4332				542			
Kodak ESP-9	4357				539			
Brother MFC-240C		7012	8594	8253	545			
Brother MFC-5490cn		7056	8572	7709	568			
Canon MP210	1114				230			
Canon MP620		3095	3463	4514	359	6882		
Canon MX700		7768	7161	9551	533			
Epson CX8300		1465	2114	2312	247			
HP C4480	1575				211			
HP C5280	1016				224			
HP C6380		2411	2445	2520	294	3031		
HP D5460		1698	1688	1917	316	2603		
HP OJ J4580	1313				175			
HP OJ J5780	1529				198			
HP OJ 6500		5624	5992	6726	1126			
Lexmark X4850	2759				223			
Lexmark X5470	2504				287			

Note: Kodak's color cartridge includes black and protective inks.

	Color Ink yield							
	CMY	C	M	Y	K1	K2	LC	LM
Kodak ESP-3	379				340			
Kodak ESP-5	379				342			
Kodak ESP-7	385				342			
Kodak ESP-9	385				342			
Brother MFC-240C		734	645	807	544			
Brother MFC-5490cn		448	360	326	521			
Canon MP210	233				232			
Canon MP620		542	518	527	325	3737		
Canon MX700		873	676	691	488			
Epson CX8300		390	289	411	245			
HP C4480	180				205			
HP C5280	169				203			
HP C6380		291	268	231	268	867		
HP D5460		305	270	236	231	1022		
HP OJ J4580	367				178			
HP OJ J5780	178				188			
HP OJ 6500		528	532	506	1089			
Lexmark X4850	258				214			
Lexmark X5470	272				274			

Note: Kodak's color cartridge includes black and protective inks.

	Photo Ink yield							
	CMY	C	M	Y	K1	K2	LC	LM
Kodak ESP-3	173				1509			
Kodak ESP-5	172				1371			
Kodak ESP-7	174				1546			
Kodak ESP-9	174				1405			
Brother MFC-240C		154	152	170	3595			
Brother MFC-5490cn		88	110	91	24117			
Canon MP210	89				949			
Canon MP620		197	219	212	1772	571		
Canon MX700		348	248	276	2809			
Epson CX8300		85	86	114	468			
HP C4480	52				1249			
HP C5280	48				1154			
HP C6380		94	130	98	723	85		
HP D5460		90	126	94	684	76		
HP OJ J4580	124				1632			
HP OJ J5780	49				811			
HP OJ 6500		148	206	159	7487			
Lexmark X4850	56				3262			
Lexmark X5470	71				4378			

Note: Kodak's color cartridge includes black and protective inks.

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## B. Ink Cartridge Pricing

Cartridge prices used in this Cost of Ink Per Page analysis were researched and provided to QualityLogic by GAP as of Q1 2009. GAP's methodology for data collection used the manufacturer's website for each country. Only standard as-shipped-in-box cartridges or the standard-yield ink cartridges in single quantity pricing (i.e., no multi-packs, high yield, combo packs, value packs or special promotions) were evaluated for the purpose of making like-basis comparisons between all printers. The only exception to this was that High Yield cartridges were tested for the HP OJ6500. Below is the summary of the ink cartridges and their individual prices.

Ink Cartridge Pricing								
	CMY	C	M	Y	K1	K2	LC	LM
Kodak ESP-3	\$24.99				\$14.99			
Kodak ESP-5	\$24.99				\$14.99			
Kodak ESP-7	\$24.99				\$14.99			
Kodak ESP-9	\$24.99				\$14.99			
Brother MFC-240C		\$21.15	\$21.15	\$21.15	\$34.92			
Brother MFC-5490cn		\$17.81	\$17.81	\$17.81	\$34.64			
Canon MP210	\$30.90				\$26.80			
Canon MP620		\$21.22	\$21.22	\$21.22	\$21.96	\$20.48		
Canon MX700		\$27.64	\$28.28	\$28.28	\$28.31			
Epson CX8300		\$15.99	\$15.99	\$15.99	\$15.99			
HP C4480	\$32.90				\$29.65			
HP C5280	\$32.90				\$29.65			
HP C6380		\$19.00	\$19.00	\$19.00	\$19.00	\$19.00		
HP D5460		\$19.00	\$19.00	\$19.00	\$19.00	\$19.00		
HP OJ J4580	\$38.41				\$27.30			
HP OJ J5780	\$32.90				\$29.65			
HP OJ 6500		\$22.41	\$22.51	\$22.41	\$38.70			
Lexmark X4850	\$46.53				\$35.57			
Lexmark X5470	\$43.95				\$41.05			

AUSTRALIAN Dollars

Source: GAP

**C. Cost of Ink Per Page – Per Cartridge**

QualityLogic then calculated the Cost of Ink Per Page per cartridge by dividing the price of each cartridge (as defined by GAP's localized cartridge price, noted above in Section B) by the yield for each cartridge in each model (as defined above in Section A). This calculation results in the Cost of Ink Per Page per cartridge for each test mode: mono, color and photo.

$$\frac{\text{Price per cartridge}}{\text{Ink yield (in number of pages/photos)}} = \text{Cost of Ink Per Page – per cartridge}$$

**Mono Cost of Ink Per Individual Cartridge per Page**  
(AUSTRALIAN Dollars)

	Mono Ink Cost							
	CMY	C	M	Y	K1	K2	LC	LM
Kodak ESP-3	\$0.006				\$0.027			
Kodak ESP-5	\$0.006				\$0.027			
Kodak ESP-7	\$0.006				\$0.028			
Kodak ESP-9	\$0.006				\$0.028			
Brother MFC-240C		\$0.003	\$0.002	\$0.003	\$0.064			
Brother MFC-5490cn		\$0.003	\$0.002	\$0.002	\$0.061			
Canon MP210	\$0.028				\$0.117			
Canon MP620		\$0.007	\$0.006	\$0.005	\$0.061	\$0.003		
Canon MX700		\$0.004	\$0.004	\$0.003	\$0.053			
Epson CX8300		\$0.011	\$0.008	\$0.007	\$0.065			
HP C4480	\$0.021				\$0.141			
HP C5280	\$0.032				\$0.132			
HP C6380		\$0.008	\$0.008	\$0.008	\$0.065	\$0.006		
HP D5460		\$0.011	\$0.011	\$0.010	\$0.060	\$0.007		
HP OJ J4580	\$0.029				\$0.156			
HP OJ J5780	\$0.022				\$0.150			
HP OJ 6500		\$0.004	\$0.004	\$0.003	\$0.034			
Lexmark X4850	\$0.017				\$0.160			
Lexmark X5470	\$0.018				\$0.143			

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

**Color Cost of Ink Per individual Cartridge per Page**  
(AUSTRALIAN Dollars)

	Color Ink cost							
	CMY	C	M	Y	K1	K2	LC	LM
Kodak ESP-3	\$0.066				\$0.044			
Kodak ESP-5	\$0.066				\$0.044			
Kodak ESP-7	\$0.065				\$0.044			
Kodak ESP-9	\$0.065				\$0.044			
Brother MFC-240C		\$0.029	\$0.033	\$0.026	\$0.064			
Brother MFC-5490cn		\$0.040	\$0.049	\$0.055	\$0.066			
Canon MP210	\$0.133				\$0.116			
Canon MP620		\$0.039	\$0.041	\$0.040	\$0.068	\$0.005		
Canon MX700		\$0.032	\$0.042	\$0.041	\$0.058			
Epson CX8300		\$0.041	\$0.055	\$0.039	\$0.065			
HP C4480	\$0.183				\$0.145			
HP C5280	\$0.195				\$0.146			
HP C6380		\$0.065	\$0.071	\$0.082	\$0.071	\$0.022		
HP D5460		\$0.062	\$0.070	\$0.081	\$0.082	\$0.019		
HP OJ J4580	\$0.105				\$0.153			
HP OJ J5780	\$0.185				\$0.158			
HP OJ 6500		\$0.042	\$0.042	\$0.044	\$0.036			
Lexmark X4850	\$0.180				\$0.166			
Lexmark X5470	\$0.162				\$0.150			

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**Photo Cost of Ink Per individual Cartridge per Page**  
(AUSTRALIAN Dollars)

	Photo Ink Cost							
	CMY	C	M	Y	K1	K2	LC	LM
Kodak ESP-3	\$0.144				\$0.010			
Kodak ESP-5	\$0.145				\$0.011			
Kodak ESP-7	\$0.144				\$0.010			
Kodak ESP-9	\$0.144				\$0.011			
Brother MFC-240C		\$0.137	\$0.139	\$0.124	\$0.010			
Brother MFC-5490cn		\$0.202	\$0.162	\$0.196	\$0.001			
Canon MP210	\$0.347				\$0.028			
Canon MP620		\$0.108	\$0.097	\$0.100	\$0.012	\$0.036		
Canon MX700		\$0.079	\$0.114	\$0.102	\$0.010			
Epson CX8300		\$0.188	\$0.186	\$0.140	\$0.034			
HP C4480	\$0.633				\$0.024			
HP C5280	\$0.685				\$0.026			
HP C6380		\$0.202	\$0.146	\$0.194	\$0.026	\$0.224		
HP D5460		\$0.211	\$0.151	\$0.202	\$0.028	\$0.250		
HP OJ J4580	\$0.310				\$0.017			
HP OJ J5780	\$0.671				\$0.037			
HP OJ 6500		\$0.151	\$0.109	\$0.141	\$0.005			
Lexmark X4850	\$0.831				\$0.011			
Lexmark X5470	\$0.619				\$0.009			

**D. Cost of Ink Per Page**

Cost of Ink Per Page for each printer is calculated by summing the Cost of Ink Per Page per cartridge for each cartridge tested in a given printer model (as determined above in Section C).

$$\text{Cost of Ink Per Page} = \text{CMY} + \text{C} + \text{M} + \text{Y} + \text{K1} + \text{K2} + \text{LC} + \text{LM}$$

The Cost of Ink Per Page per printer is reflected below. Note that, due to rounding, the total CoIPP may not match the individual ink cartridge costs.

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**Mono Cost of Ink Per Individual Cartridge and Total Cost of Ink Per Page**  
(AUSTRALIAN Dollars)

	Mono Ink Cost								Mono
	CMY	C	M	Y	K1	K2	LC	LM	CoIPP
Kodak ESP-3	\$0.006				\$0.027				\$0.033
Kodak ESP-5	\$0.006				\$0.027				\$0.033
Kodak ESP-7	\$0.006				\$0.028				\$0.033
Kodak ESP-9	\$0.006				\$0.028				\$0.034
Brother MFC-240C		\$0.003	\$0.002	\$0.003	\$0.064				\$0.072
Brother MFC-5490cn		\$0.003	\$0.002	\$0.002	\$0.061				\$0.068
Canon MP210	\$0.028				\$0.117				\$0.144
Canon MP620		\$0.007	\$0.006	\$0.005	\$0.061	\$0.003			\$0.082
Canon MX700		\$0.004	\$0.004	\$0.003	\$0.053				\$0.064
Epson CX8300		\$0.011	\$0.008	\$0.007	\$0.065				\$0.090
HP C4480	\$0.021				\$0.141				\$0.161
HP C5280	\$0.032				\$0.132				\$0.165
HP C6380		\$0.008	\$0.008	\$0.008	\$0.065	\$0.006			\$0.094
HP D5460		\$0.011	\$0.011	\$0.010	\$0.060	\$0.007			\$0.100
HP OJ J4580	\$0.029				\$0.156				\$0.185
HP OJ J5780	\$0.022				\$0.150				\$0.171
HP OJ 6500		\$0.004	\$0.004	\$0.003	\$0.034				\$0.045
Lexmark X4850	\$0.017				\$0.160				\$0.176
Lexmark X5470	\$0.018				\$0.143				\$0.161

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**Color Cost of Ink Per Individual Cartridge and Total Cost of Ink Per Page**  
(AUSTRALIAN Dollars)

	Color Ink cost								Color
	CMY	C	M	Y	K1	K2	LC	LM	CoIPP
Kodak ESP-3	\$0.066				\$0.044				\$0.110
Kodak ESP-5	\$0.066				\$0.044				\$0.110
Kodak ESP-7	\$0.065				\$0.044				\$0.109
Kodak ESP-9	\$0.065				\$0.044				\$0.109
Brother MFC-240C		\$0.029	\$0.033	\$0.026	\$0.064				\$0.152
Brother MFC-5490cn		\$0.040	\$0.049	\$0.055	\$0.066				\$0.210
Canon MP210	\$0.133				\$0.116				\$0.248
Canon MP620		\$0.039	\$0.041	\$0.040	\$0.068	\$0.005			\$0.193
Canon MX700		\$0.032	\$0.042	\$0.041	\$0.058				\$0.172
Epson CX8300		\$0.041	\$0.055	\$0.039	\$0.065				\$0.200
HP C4480	\$0.183				\$0.145				\$0.327
HP C5280	\$0.195				\$0.146				\$0.341
HP C6380		\$0.065	\$0.071	\$0.082	\$0.071	\$0.022			\$0.311
HP D5460		\$0.062	\$0.070	\$0.081	\$0.082	\$0.019			\$0.314
HP OJ J4580	\$0.105				\$0.153				\$0.258
HP OJ J5780	\$0.185				\$0.158				\$0.343
HP OJ 6500		\$0.042	\$0.042	\$0.044	\$0.036				\$0.165
Lexmark X4850	\$0.180				\$0.166				\$0.347
Lexmark X5470	\$0.162				\$0.150				\$0.311

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

**Photo Cost of Ink Per Individual Cartridge and Total Cost of Ink Per Page**  
(AUSTRALIAN Dollars)

	Photo Ink Cost								Photo CoIPP
	CMY	C	M	Y	K1	K2	LC	LM	
Kodak ESP-3	\$0.144				\$0.010				\$0.154
Kodak ESP-5	\$0.145				\$0.011				\$0.156
Kodak ESP-7	\$0.144				\$0.010				\$0.153
Kodak ESP-9	\$0.144				\$0.011				\$0.154
Brother MFC-240C		\$0.137	\$0.139	\$0.124	\$0.010				\$0.411
Brother MFC-5490cn		\$0.202	\$0.162	\$0.196	\$0.001				\$0.561
Canon MP210	\$0.347				\$0.028				\$0.375
Canon MP620		\$0.108	\$0.097	\$0.100	\$0.012	\$0.036			\$0.353
Canon MX700		\$0.079	\$0.114	\$0.102	\$0.010				\$0.306
Epson CX8300		\$0.188	\$0.186	\$0.140	\$0.034				\$0.548
HP C4480	\$0.633				\$0.024				\$0.656
HP C5280	\$0.685				\$0.026				\$0.711
HP C6380		\$0.202	\$0.146	\$0.194	\$0.026	\$0.224			\$0.792
HP D5460		\$0.211	\$0.151	\$0.202	\$0.028	\$0.250			\$0.842
HP OJ J4580	\$0.310				\$0.017				\$0.327
HP OJ J5780	\$0.671				\$0.037				\$0.708
HP OJ 6500		\$0.151	\$0.109	\$0.141	\$0.005				\$0.407
Lexmark X4850	\$0.831				\$0.011				\$0.842
Lexmark X5470	\$0.619				\$0.009				\$0.628

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

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### Gap Intelligence - Company Overview

Gap intelligence is a global leader in providing timely, actionable competitive intelligence solutions to help manufacturers in the digital imaging space stay ahead of the competition. Our printer hardware and supplies databases are updated on a weekly basis with street pricing and promotional data. Dedicated industry analysts publish insightful, analytical reports and tools to help our clients make smarter decisions and respond to market changes faster.

## **Appendix A: QualityLogic Declared Yield Test Results**

The following data was extracted from the Yield Reports for each product tested. Complete reports are available from QualityLogic upon request.

# ISO Test Results - Summary

## Test Methodology

In order to obtain these yield results, two different methodologies were used in combination with three test suites. This section will detail the common areas between the methodologies, the differences between them, and highlight some key terms from ISO/IEC 24711, 24712, and 19752 that are particularly important to understand when reviewing these yield claims.

### Common Methodology and Definitions

Number of Printers Tested	Minimum of three
Number of Cartridges Tested	Minimum of nine of each color
Temperature	Testing room average 23.0°C ± 2°C with all running average temperatures between 20.0°C and 26.0°C
Fade	Phenomenon in which a significant reduction in uniformity occurs due to ink depletion
Ink Out	Signal generated by the printing system when the usable ink in the system is depleted and the printer stops printing
End of Life (EOL)	A condition determined by one of two mechanisms: fade or ink out (only if ink out stops printing)
Semi-Continuous Printing	Printing in a continuous manner, pausing only for intra-job servicing, printer calibrations, paper changes, breaks, and end of work days
Declared Cartridge Yield	Cartridge Yield (in pages) that is at or below the lower 90% confidence bound of the average yield
Estimated Supplemental Cartridge Yield	Estimated yield for a supplemental cartridge (real or estimated with use of a proxy) calculated with at least three cartridges
Average Supplemental Cartridge Yield	Average yield for a supplemental cartridge where EOL was reached on at least nine cartridges (three per printer)
Proxy Cartridge	A primary cartridge of the same physical size as a supplemental cartridge which had a starting weight within +/- 10% of the supplemental cartridge starting weight.

**Mono Ink Methodology and Definitions –  
In accordance with ISO/IEC 24711, ISO/IEC 19752**

Test Suite	ISO/IEC 19752
Driver Set-up	See Color Ink Methodology. In addition, if a “Black Only” or “Text Only” mode was available in the driver, it was enabled.
Paper	A4 or 8 ½" x 11" (see individual test reports).
Semi-Continuous Printing	Each copy of the test suite was printed as a separate one-page print job allowing for some intra-job servicing and calibration to take place.
Primary Cartridge	The black cartridge or, if no black cartridge was present, the color cartridges that were used to develop composite black.
Supplemental Cartridge	Any installed cartridge except the full density black cartridge, including the full density Cyan, Magenta, and Yellow cartridges, as well as any photo cartridges.
Individual Cartridge Yield	The number of test pages printed between cartridge installation and end of life.

**Color Ink Methodology and Definitions –  
In accordance with ISO/IEC 24711, ISO IEC 24712**

Test Suite	ISO/IEC 24712
Driver Set-up	All image and print quality modifiers were set to their factory pre-set configuration for the printer and default installed condition for the driver. If auto media detection was available on the printer, it was disabled and media-type set to plain paper.
Paper	A4 or 8 ½" by 11" (see individual test reports).
Semi-Continuous Printing	Each copy of the test suite was printed as a separate five-page print job allowing for some intra-job servicing and calibration to take place.
Primary Cartridge	Cartridge containing full density black, cyan, magenta, or yellow, or a combination of full density cyan, magenta and yellow.
Supplemental Cartridge	Cartridge other than the full density cyan, magenta, yellow and black cartridges.
Individual Cartridge Yield	Value determined by counting the number of diagnostic pages (last page of the test page suite) printed between cartridge installation and end of life, and multiplying by five.

**Photo Ink Methodology and Definitions –  
In accordance with QualityLogic Color Photo Cartridge Yield Test  
Methodology**

Test Suite	QualityLogic Color Photo Suite.
Driver Set-up	The highest print quality mode readily available in the driver was used.
Paper	The best photo paper recommended by each manufacturer. A4 or 8 ½" x 11" papers were used to print a borderless 4" x 6" (approximately 10 x 15 cm) photo. (See individual test reports).
Semi-Continuous Printing	Each copy of the test suite was printed as a separate 10-page print job allowing for some intra-job servicing and calibration to take place.
Primary Cartridge	Cyan, Magenta, Yellow and Photo cartridges or any cartridges containing these colors were considered as primary cartridges. In addition, any other cartridge that exhausted nine or more cartridges during the execution of nine of the above cartridges was considered as primary.
Supplemental Cartridge	Any cartridge installed in the printer while printing photos that did not meet the definition of a primary cartridge was considered a supplemental cartridge.
Individual Cartridge Yield	The number of test pages printed between cartridge installation and end of life.

The following data was extracted from the Yield Reports for each product tested – complete reports are available upon request.

<b>Printer Identifier</b>	<b>ESP-3 All-in-One Printer</b>
Printer Manufacturer	Kodak
Cartridge Identifier	Black Ink Cartridge 10 & Color Ink Cartridge 10
Cartridge Type	Separate ink supply and print head
Date Tested	September 10, 2008 to September 22, 2008
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness, 20lb. weight
Driver version	Driver Version=07/17/2008, 2.07.0151.0 Color Ink test: The driver's default settings were used. Mono Ink Test: Print color as = Changed to Black and White from Color

**Declaration of Yield**

**Inkjet Cartridge Yield when tested in Kodak ESP-3 All-in-One Printer:**

Using the test suite defined in ISO/IEC 24712 provides the following results:

Average K (Black) Cartridge Yield – Up to 340 standard pages

Average Color Cartridge Yield – Up to 379 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

Average K (Black) Cartridge Yield – Up to 555 standard pages

Estimated supplemental Color Cartridge Yield – Up to 4,313 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

**Using 24712 Test Suite**

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Black Ink Cartridge 10	K (Black)	345	9	340	9/12	Primary
Color Ink Cartridge 10	Color	386	11	379	9/9	Primary

**Using 19752 Test Page**

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Black Ink Cartridge 10	K (Black)	557	7	555	25/26	Primary
Color Ink Cartridge 10	Color	4,758	264	4,313	3/3	Supplemental

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

<b>Printer Identifier</b>	<b>ESP-3 All-in-One Printer</b>
Printer Manufacturer	Kodak
Cartridge Identifier	Black Ink Cartridge 10 & Color Ink Cartridge 10
Cartridge Type	Separate ink supply and print head
Date Tested	September 10, 2008 to September 22, 2008
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	KODAK Ultra Premium Photo Paper High Gloss
Driver version	Driver Version=07/17/2008, 2.07.0151.0 The driver's default settings were used.

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Kodak ESP-3 All-in-One Printer:

Using the QualityLogic Color Photo test suite provides the following results:

Average Color Cartridge Yield – Up to 173 standard pages

Estimated supplemental K (Black) Cartridge Yield – Up to 1,509 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Color Ink Cartridge 10	Color	173	1	173	9/9	Primary
Black Ink Cartridge 10	K (Black)	1,719	124	1,509	3/3	Supplemental

<b>Printer Identifier</b>	<b>ESP-5 All-in-One Printer</b>
Printer Manufacturer	Kodak
Cartridge Identifier	Black Ink Cartridge 10 & Color Ink Cartridge 10
Cartridge Type	Separate ink supply and print head
Date Tested	August 25, 2008 to September 4, 2008
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness, 20lb. weight
Driver version	Driver Version=07/17/2008, 2.07.0151.0 Color Ink test: The driver's default settings were used. Mono Ink Test: Print color as = Changed to Black and White from Color

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Kodak ESP-5 All-in-One Printer:

Using the test suite defined in ISO/IEC 24712 provides the following results:

Average K (Black) Cartridge Yield – Up to 342 standard pages

Average Color Cartridge Yield – Up to 379 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

Average K (Black) Cartridge Yield – Up to 551 standard pages

Estimated supplemental Color Cartridge Yield – Up to 4,395 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Black Ink Cartridge 10	K (Black)	347	8	342	9/12	Primary
Color Ink Cartridge 10	Color	387	13	379	9/9	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Black Ink Cartridge 10	K (Black)	552	2	551	24/24	Primary
Color Ink Cartridge 10	Color	4,415	12	4,395	3/3	Supplemental

<b>Printer Identifier</b>	<b>ESP-5 All-in-One Printer</b>
Printer Manufacturer	Kodak
Cartridge Identifier	Black Ink Cartridge 10 & Color Ink Cartridge 10
Cartridge Type	Separate ink supply and print head
Date Tested	September 4, 2008 to September 8, 2008
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	KODAK Ultra Premium Photo Paper High Gloss
Driver version	Driver Version=07/17/2008, 2.07.0151.0 The driver's default settings were used.

**Declaration of Yield**

**Inkjet Cartridge Yield when tested in Kodak ESP-5 All-in-One Printer:**

Using the QualityLogic Color Photo test suite provides the following results:

Average Color Cartridge Yield – Up to 172 standard pages

Estimated supplemental K (Black) Cartridge Yield – Up to 1,371 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Color Ink Cartridge 10	Color	173	1	172	9/9	Primary
Black Ink Cartridge 10	K (Black)	1,677	182	1,371	3/3	Supplemental

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

<b>Printer Identifier</b>	<b>ESP-7 All-in-One Printer</b>
Printer Manufacturer	Kodak
Cartridge Identifier	Black Ink Cartridge 10 & Color Ink Cartridge 10
Cartridge Type	Separate ink supply and print head
Date Tested	March 19, 2009 to April 9, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness, 20lb. weight
Driver version	DriverVer=07/18/2008, 2.07.151.0 Mono Ink Test: Print colors as (Advanced Tab) = Changed to Black and White from Color.

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Kodak ESP-7 All-in-One Printer:

Using the test suite defined in ISO/IEC 24712 provides the following results:

Average K (Black) Cartridge Yield – Up to 342 standard pages

Average Color Cartridge Yield – Up to 385 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

Average K (Black) Cartridge Yield – Up to 542 standard pages

Estimated supplemental Color Cartridge Yield – Up to 4,332 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Black Ink Cartridge 10	K (Black)	347	8	342	9/13	Primary
Color Ink Cartridge 10	Color	390	9	385	9/10	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Black Ink Cartridge 10	K (Black)	548	18	542	23/25	Primary
Color Ink Cartridge 10	Color	4,358	15	4,332	3/4	Supplemental

<b>Printer Identifier</b>	<b>ESP-7 All-in-One Printer</b>
Printer Manufacturer	Kodak
Cartridge Identifier	Black Ink Cartridge 10 & Color Ink Cartridge 10
Cartridge Type	Separate ink supply and print head
Date Tested	March 19, 2009 to April 10, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	KODAK Ultra Premium Photo Paper High Gloss
Driver version	DriverVer=07/18/2008, 2.07.151.0

**Declaration of Yield**

**Inkjet Cartridge Yield when tested in Kodak ESP-7 All-in-One Printer:**

Using the QualityLogic Color Photo test suite provides the following results:

Average Color Cartridge Yield – Up to 174 standard pages

Estimated supplemental K (Black) Cartridge Yield – Up to 1,546 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Color Ink Cartridge 10	Color	174	1	174	9/10	Primary
Black Ink Cartridge 10	K (Black)	1,591	26	1,546	3/4	Supplemental

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

<b>Printer Identifier</b>	<b>ESP-9 All-in-One Printer</b>
Printer Manufacturer	Kodak
Cartridge Identifier	Black Ink Cartridge 10 & Color Ink Cartridge 10
Cartridge Type	Separate ink supply and print head
Date Tested	April 13, 2009 to April 24, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness, 20lb. weight
Driver version	DriverVer=08/21/2008,3.1.3.0 Mono Ink Test: Print colors as (Advanced Tab) = Changed to Black and White from Color.

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Kodak ESP-9 All-in-One Printer:

Using the test suite defined in ISO/IEC 24712 provides the following results:

Average K (Black) Cartridge Yield – Up to 342 standard pages

Average Color Cartridge Yield – Up to 385 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

Average K (Black) Cartridge Yield – Up to 539 standard pages

Estimated supplemental Color Cartridge Yield – Up to 4,357 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

#### Using 24712 Test Suite

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Black Ink Cartridge 10	K (Black)	346	7	342	9/15	Primary
Color Ink Cartridge 10	Color	392	11	385	9/12	Primary

#### Using 19752 Test Page

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Black Ink Cartridge 10	K (Black)	546	19	539	24/24	Primary
Color Ink Cartridge 10	Color	4,365	5	4,357	3/3	Supplemental

<b>Printer Identifier</b>	<b>ESP-9 All-in-One Printer</b>
Printer Manufacturer	Kodak
Cartridge Identifier	Black Ink Cartridge 10 & Color Ink Cartridge 10
Cartridge Type	Separate ink supply and print head
Date Tested	April 24, 2009 to April 28, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	KODAK Ultra Premium Photo Paper High Gloss
Driver version	DriverVer=08/21/2008,3.1.3.0

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Kodak ESP-9 All-in-One Printer:

Using the QualityLogic Color Photo test suite provides the following results:

Average Color Cartridge Yield – Up to 174 standard pages

Estimated supplemental K (Black) Cartridge Yield – Up to 1,405 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
Color Ink Cartridge 10	Color	175	2	174	9/9	Primary
Black Ink Cartridge 10	K (Black)	1,718	185	1,405	3/3	Supplemental

<b>Printer Identifier</b>	<b>Brother MFC-240C</b>
Printer Manufacturer	Brother
Cartridge Identifier	LC-1000BK, LC-1000C, LC-1000M, LC-1000Y
Cartridge Type	Separate ink supply and print head
Date Tested	May 22, 2007 to May 30, 2007
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Hammermill Fore MP-White, 96 Brightness 20lb. weight
Driver version	Driver Version = 5.02 for Windows 2000/XP The following driver settings were used: Quality = Normal Media Type = Plain Paper Page Size = A4

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Brother MFC-240C:

Using the test suite defined in ISO/IEC 24712 provides the following results:

- Average K (Black) Cartridge Yield – Up to 544 standard pages
- Average Cyan Cartridge Yield – Up to 734 standard pages
- Average Magenta Cartridge Yield – Up to 645 standard pages
- Average Yellow Cartridge Yield – Up to 807 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

- Average K (Black) Cartridge Yield – Up to 545 standard pages
- Estimated supplemental Cyan Cartridge Yield Up to 7,012 standard pages
- Estimated supplemental Magenta Cartridge Yield Up to 8,594 standard pages
- Estimated supplemental Yellow Cartridge Yield Up to 8,253 standard pages

Values obtained by continuous printing. Declared yield value in accordance with ISO/IEC 24711.

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
LC-1000BK	K (Black)	549	10	544	12/18	Primary
LC-1000C	Cyan	778	71	734	9/15	Primary
LC-1000M	Magenta	656	17	645	9/15	Primary
LC-1000Y	Yellow	829	37	807	9/12	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
LC-1000BK	K (Black)	553	13	545	9/9	Primary
LC-1000C	Cyan	7,715	417	7,012	3/3	Supplemental
LC-1000M	Magenta	8,988	234	8,594	3/3	Supplemental
LC-1000Y	Yellow	8,797	323	8,253	3/3	Supplemental

<b>Printer Identifier</b>	<b>Brother MFC-240C</b>
Printer Manufacturer	Brother
Cartridge Identifier	LC-1000BK, LC-1000C, LC-1000M, LC-1000Y
Cartridge Type	Separate ink supply and print head
Date Tested	June 8, 2007 to June 15, 2007
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 210 x 297 mm photo paper
Media used	Innobella™ A4 Premium Glossy Photo Paper (BP61GLA)
Driver version	Driver Version = 5.02 for Windows 2000/XP The following driver settings were used: Quality = Highest Media Type = Brother Premium Glossy Photo Paper Page Size = A4

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Brother MFC-240C:

Using the QualityLogic Color Photo Suite:

Average Cyan Cartridge Yield – Up to 154 standard pages

Average Magenta Cartridge Yield – Up to 152 standard pages

Average Yellow Cartridge Yield – Up to 170 standard pages

Estimated supplemental K (Black) Cartridge Yield – Up to 3,595 standard pages

Values obtained by continuous printing. Declared yield value in accordance with QualityLogic Color Photo Cartridge Yield Test Methodology.

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
LC-1000C	Cyan	160	8	154	9/12	Primary
LC-1000M	Magenta	160	13	152	9/12	Primary
LC-1000Y	Yellow	177	11	170	9/9	Primary
LC-1000BK	K (Black)	3,707	67	3,595	3/3	Supplemental

<b>Printer Identifier</b>	<b>Brother MFC-5490cn</b>
Printer Manufacturer	Brother
Cartridge Identifier	LC61BK, LC61C, LC61M, LC61Y
Cartridge Type	Separate ink supply and print head
Date Tested	March 23, 2009 to March 31, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	Driver Version= Brother MFC-5490CN Printer Version 5.02/Version 5.1 (Build 2600 Service pack 3)

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Brother MFC-5490cn:

Using the test suite defined in ISO/IEC 24712 provides the following results:

- Average K (Black) Cartridge Yield – Up to 521 standard pages
- Average Cyan Cartridge Yield – Up to 448 standard pages
- Average Magenta Cartridge Yield – Up to 360 standard pages
- Average Yellow Cartridge Yield – Up to 326 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

- Average K (Black) Cartridge Yield – Up to 568 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 7,056 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 8,572 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 7,709 standard pages

Values obtained by continuous printing. Declared yield value in accordance with ISO/IEC 24711.

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
LC61BK	K (Black)	529	14	521	9/12	Primary
LC61C	Cyan	462	22	448	9/15	Primary
LC61M	Magenta	368	14	360	12/18	Primary
LC61Y	Yellow	331	9	326	12/18	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
LC61BK	K (Black)	592	38	568	9/9	Primary
LC61C	Cyan	9,059	1,188	7,056	3/3	Supplemental
LC61M	Magenta	13,211	2,752	8,572	3/3	Supplemental
LC61Y	Yellow	11,236	2,092	7,709	3/3	Supplemental

<b>Printer Identifier</b>	<b>Brother MFC-5490cn</b>
Printer Manufacturer	Brother
Cartridge Identifier	LC61BK, LC61C, LC61M, LC61Y
Cartridge Type	Separate ink supply and print head
Date Tested	March 31, 2009 to April 2, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	Brother Premium Glossy Photo Paper (BP61GLL)
Driver version	Driver Version= Brother MFC-5490CN Printer Version 5.02/Version 5.1 (Build 2600 Service pack 3) The following driver settings were changed from default: Media Type = Changed to BP61 Photo Paper from Plain Paper.

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Brother MFC-5490cn:

Using the QualityLogic Color Photo test suite provides the following results:

- Average Cyan Cartridge Yield – Up to 88 standard pages
- Average Magenta Cartridge Yield – Up to 110 standard pages
- Average Yellow Cartridge Yield – Up to 91 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 24,117 standard pages

Values obtained by continuous printing. Declared yield value in accordance with QualityLogic Color Photo Cartridge Yield Test Methodology.

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
LC61C	Cyan	92	6	88	10/14	Primary
LC61M	Magenta	117	10	110	9/9	Primary
LC61Y	Yellow	93	4	91	10/13	Primary
LC61BK	K (Black)	32,665	5,071	24,117	3/3	Supplemental

<b>Printer Identifier</b>	<b>Canon PIXMA MP210</b>
Printer Manufacturer	Canon
Cartridge Identifier	PG-30 & CL-31
Cartridge Type	Integral ink supply and print head
Date Tested	September 4, 2008 to September 10, 2008
EOL Criteria	Fade
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness, 20lb. weight
Driver version	DriverVer=02/06/2008, 2.10.2.11

## Declaration of Yield

### Inkjet Cartridge Yield when tested in Canon PIXMA MP210:

Using the test suite defined in ISO/IEC 24712 provides the following results:

Average K (Black) Cartridge Yield: Up to 232 standard pages

Average Tri-color Cartridge Yield: Up to 233 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

Average K (Black) Cartridge Yield: Up to 230 standard pages

Estimated supplemental Tri-color Cartridge Yield: Up to 1,114 standard pages

Values obtained by continuous printing. Declared yield value in accordance with ISO/IEC 24711.

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
PG-30	K (Black)	237	7	232	9/15	Primary
CL-31	Tri-color	243	16	233	9/12	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
PG-30	K (Black)	242	19	230	9/9	Primary
CL-31	Tri-color	1,194	47	1,114	3/3	Supplemental

<b>Printer Identifier</b>	<b>Canon PIXMA MP210</b>
Printer Manufacturer	Canon
Cartridge Identifier	PG-30 & CL-31
Cartridge Type	Integral ink supply and print head
Date Tested	September 11, 2008 to September 12, 2008
EOL Criteria	Fade
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	Canon Photo Paper Plus Glossy, PP-101
Driver version	DriverVer=02/06/2008, 2.10.2.11 The following driver settings were changed from default: Media Type = Photo Paper Plus Glossy from Plain Paper Print Quality = High from Standard

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Canon PIXMA MP210:

Using the QualityLogic Color Photo Suite:

Average Tri-color Cartridge Yield: Up to 89 standard pages

Estimated supplemental K (Black) Cartridge Yield: Up to 949 standard pages

Values obtained by continuous printing. Declared yield value in accordance with QualityLogic Color Photo Cartridge Yield Test Methodology.

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
CL-31	Tri-color	91	3	89	9/9	Primary
PG-30	K (Black)	1,002	31	949	3/3	Supplemental

<b>Printer Identifier</b>	<b>Canon PIXMA MP620</b>
Printer Manufacturer	Canon
Cartridge Identifier	PGI-520BK, CLI-521C, CLI-521Y, CLI-521M, CLI-521BK
Cartridge Type	Separate ink supply and print head
Date Tested	March 6, 2009 to March 13, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	A4
Media used	Hammermill Fore Multi-Purpose, 96 Brightness 20lb. weight
Driver version	DriverVer=10/21/2008, 2.21.2.20

## Declaration of Yield

### Inkjet Cartridge Yield when tested in Canon PIXMA MP620:

Using the test suite defined in ISO/IEC 24712 provides the following results:

- Average K (Pigment Black) Cartridge Yield – Up to 325 standard pages
- Average Cyan Cartridge Yield – Up to 542 standard pages
- Average Magenta Cartridge Yield – Up to 518 standard pages
- Average Yellow Cartridge Yield – Up to 527 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 3,737 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

- Average K (Pigment Black) Cartridge Yield – Up to 359 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 3,095 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 3,463 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 4,514 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 6,882 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

#### Using 24712 Test Suite

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
PGI-520BK	K (Pigment Black)	334	20	325	14/19	Primary
CLI-521C	Cyan	563	33	542	9/12	Primary
CLI-521M	Magenta	538	32	518	9/15	Primary
CLI-521Y	Yellow	543	26	527	9/15	Primary
CLI-521BK	K (Black)	4,589	505	3,737	3/6	Supplemental

#### Using 19752 Test Page

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
PGI-520BK	K (Pigment Black)	366	12	359	9/9	Primary
CLI-521C	Cyan	3,215	72	3,095	3/3	Supplemental
CLI-521M	Magenta	3,601	82	3,463	3/3	Supplemental
CLI-521Y	Yellow	4,653	83	4,514	3/3	Supplemental
CLI-521BK	K (Black)	7,079	117	6,882	3/3	Supplemental

<b>Printer Identifier</b>	<b>Canon PIXMA MP620</b>
Printer Manufacturer	Canon
Cartridge Identifier	PGI-520BK, CLI-521C, CLI-521Y, CLI-521M, CLI-521BK
Cartridge Type	Separate ink supply and print head
Date Tested	March 16, 2009 to March 18, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 210 x 297mm photo paper
Media used	Canon Photo Paper Plus Glossy II, (PP-201)
Driver version	DriverVer=10/21/2008, 2.22.2.20 The following driver settings were changed from default: Media Type = Changed to Photo Paper Plus Glossy II from Plain Paper. Paper Source = Changed to Rear Tray from Automatically Select. Print Quality = Changed to High from Standard. Paper Size = Changed to A4 from Letter

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Canon PIXMA MP620:

Using the QualityLogic Color Photo test suite provides the following results:

- Average Cyan Cartridge Yield – Up to 197 standard pages
- Average Magenta Cartridge Yield – Up to 219 standard pages
- Average Yellow Cartridge Yield – Up to 212 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 1,772 standard pages
- Estimated supplemental K (Pigment Black) Cartridge Yield – Up to 571 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
CLI-521C	Cyan	203	9	197	9/12	Primary
CLI-521M	Magenta	224	9	219	9/9	Primary
CLI-521Y	Yellow	218	9	212	9/12	Primary
CLI-521BK	K (Black)	1,873	60	1,772	3/3	Supplemental
PGI-520BK	K (Pigment Black)	636	38	571	3/6	Supplemental

<b>Printer Identifier</b>	<b>Canon PIXMA MX700</b>
Printer Manufacturer	Canon
Cartridge Identifier	PGI-5BK, CLI-8C, CLI-8M, CLI-8Y
Cartridge Type	Separate ink supply and print head
Date Tested	March 6, 2009 to March 18, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	DriverVer=05/22/2007, 2.11.2.20

## Declaration of Yield

### Inkjet Cartridge Yield when tested in Canon PIXMA MX700:

Using the test suite defined in ISO/IEC 24712 provides the following results:

- Average K (Black) Cartridge Yield – Up to 488 standard pages
- Average Cyan Cartridge Yield – Up to 873 standard pages
- Average Magenta Cartridge Yield – Up to 676 standard pages
- Average Yellow Cartridge Yield – Up to 691 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

- Average K (Black) Cartridge Yield – Up to 533 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 7,768 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 7,161 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 9,551 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
PGI-5BK	K (Black)	493	11	488	15/21	Primary
CLI-8C	Cyan	897	38	873	9/12	Primary
CLI-8M	Magenta	688	20	676	9/15	Primary
CLI-8Y	Yellow	699	14	691	9/15	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
PGI-5BK	K (Black)	541	12	533	9/9	Primary
CLI-8C	Cyan	8,143	223	7,768	3/3	Supplemental
CLI-8M	Magenta	7,228	40	7,161	3/3	Supplemental
CLI-8Y	Yellow	9,792	143	9,551	3/3	Supplemental

<b>Printer Identifier</b>	<b>Canon PIXMA MX700</b>
Printer Manufacturer	Canon
Cartridge Identifier	PGI-5BK, CLI-8C, CLI-8M, CLI-8Y
Cartridge Type	Separate ink supply and print head
Date Tested	March 18, 2009 to March 25, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	Canon Photo Paper Plus Glossy II, (PP-201)
Driver version	DriverVer=05/22/2007, 2.11.2.20 The following driver settings were changed from default: Media Type = Changed to Photo Paper Plus Glossy II from Plain Paper. Paper Source = Changed to Rear Tray from Paper Feed Switch. Print Quality = Changed to High from Standard.

## Declaration of Yield

### Inkjet Cartridge Yield when tested in Canon PIXMA MX700:

Using the QualityLogic Color Photo test suite provides the following results:

- Average Cyan Cartridge Yield – Up to 348 standard pages
- Average Magenta Cartridge Yield – Up to 248 standard pages
- Average Yellow Cartridge Yield – Up to 276 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 2,809 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
CLI-8C	Cyan	354	10	348	9/9	Primary
CLI-8M	Magenta	252	7	248	12/15	Primary
CLI-8Y	Yellow	280	6	276	9/12	Primary
PGI-5BK	K (Black)	2,901	55	2,809	3/3	Supplemental

<b>Printer Identifier</b>	<b>Epson Stylus CX8300</b>
Printer Manufacturer	Epson
Cartridge Identifier	T0731, T0732, T0733, T0734
Cartridge Type	Separate ink supply and print head
Date Tested	April 3, 2008 to April 7, 2008
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	DriverVer=5/11/2007, 6.50.00.00 The following driver settings were changed from default: Mono Ink Test: Calidad de impresion = Changed to Texto from Texto e imagenes. The "Solo tinta negra" option was enabled in the Avanzado tab.

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Epson Stylus CX8300:

Using the test suite defined in ISO/IEC 24712 provides the following results:

- Average K (Black) Cartridge Yield: Up to 245 standard pages
- Average Cyan Cartridge Yield: Up to 390 standard pages
- Average Magenta Cartridge Yield: Up to 289 standard pages
- Average Yellow Cartridge Yield: Up to 411 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

- Average K (Black) Cartridge Yield: Up to 247 standard pages
- Estimated Supplemental Cyan Cartridge Yield: Up to 1,465 standard pages
- Estimated Supplemental Magenta Cartridge Yield: Up to 2,114 standard pages
- Estimated Supplemental Yellow Cartridge Yield: Up to 2,312 standard pages

Values obtained by continuous printing. Declared yield value in accordance with ISO/IEC 24711.

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
T0731	K (Black)	249	10	245	15/20	Primary
T0732	Cyan	399	15	390	9/15	Primary
T0733	Magenta	297	15	289	12/18	Primary
T0734	Yellow	422	18	411	9/12	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
T0731	K (Black)	254	12	247	9/9	Primary
T0732	Cyan	1,713	147	1,465	3/3	Supplemental
T0733	Magenta	2,526	245	2,114	3/3	Supplemental
T0734	Yellow	2,536	133	2,312	3/3	Supplemental

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

<b>Printer Identifier</b>	<b>Epson Stylus CX8300</b>
Printer Manufacturer	Epson
Cartridge Identifier	T0731, T0732, T0733, T0734
Cartridge Type	Separate ink supply and print head
Date Tested	April 8, 2008 to April 11, 2008
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	Epson Premium Photo Paper Glossy (S041286)
Driver version	DriverVer=5/11/2007, 6.50.00.00 The following driver settings were changed from default: Calidad de impresion = Changed to Foto superior from Texto e imagenes. Papel = Changed to Premium Photo Paper Glossy from Papel normal / Bright White paper. Opciones de papel y calidad de impresion = Changed to Photo RPM from Normal.

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Epson Stylus CX8300:

Using the QualityLogic Color Photo test suite provides the following results:

- Average Cyan Cartridge Yield – Up to 85 standard pages
- Average Magenta Cartridge Yield – Up to 86 standard pages
- Average Yellow Cartridge Yield – Up to 114 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 468 standard pages

Values obtained by continuous printing. Declared yield value in accordance with QualityLogic Color Photo Cartridge Yield Test Methodology.

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
T0731	Cyan	88	4	85	11/13	Primary
T0732	Magenta	88	3	86	10/12	Primary
T0733	Yellow	118	5	114	9/9	Primary
T0734	K (Black)	535	40	468	3/3	Supplemental

<b>Printer Identifier</b>	<b>HP Photosmart C4480</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP74, HP75
Cartridge Type	Integral ink supply and print head
Date Tested	April 13, 2009 to April 16, 2009
EOL Criteria	Fade
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	Driver version = 61.73.245.0 The following driver settings were changed from default: Mono Ink test = "Print All Text as Black" was enabled on the Advanced tab.

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Hewlett-Packard Photosmart C4480:

Using the test suite defined in ISO/IEC 24712 provides the following results:

Average K (Black) Cartridge Yield – Up to 205 standard pages

Average Tri-color Cartridge Yield – Up to 180 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

Average K (Black) Cartridge Yield – Up to 211 standard pages

Estimated supplemental Tri-color Cartridge Yield – Up to 1,575 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP74	K (Black)	210	8	205	9/12	Primary
HP75	Tri-color	183	4	180	9/15	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP74	K (Black)	216	7	211	9/9	Primary
HP75	Tri-color	1,699	74	1,575	3/3	Supplemental

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

<b>Printer Identifier</b>	<b>HP Photosmart C4480</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP74, HP75
Cartridge Type	Integral ink supply and print head
Date Tested	April 16, 2009 to April 17, 2009
EOL Criteria	Fade
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	HP Premium Plus Photo Paper, High Gloss (Q1785A)
Driver version	Driver version = 61.73.245.0 The following driver settings were changed from default: Paper type = Changed to HP Premium Plus Photo papers from Plain paper.

### Declaration of Yield

#### **Inkjet Cartridge Yield when tested in Hewlett-Packard Photosmart C4480:**

Using the QualityLogic Color Photo test suite provides the following results:

Average Tri-color Cartridge Yield – Up to 52 standard pages

Estimated supplemental K (Black) Cartridge Yield – Up to 1,249 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP75	Tri-color	53	1	52	9/9	Primary
HP74	K (Black)	1,332	49	1,249	3/3	Supplemental

<b>Printer Identifier</b>	<b>HP Photosmart C5280</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP74, HP75
Cartridge Type	Integral ink supply and print head
Date Tested	June 28, 2007 to July 5, 2007
EOL Criteria	Fade
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	Driver Version = 3/15/2007,61.071.244.00 The driver's default setting was used: Quality = Normal Paper = Plain

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Hewlett-Packard Photosmart C5280:

Using the test suite defined in ISO/IEC 24712 provides the following results:

Average K (Black) Cartridge Yield – Up to 203 standard pages

Average Tri-color Cartridge Yield – Up to 169 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

Average K (Black) Cartridge Yield – Up to 224 standard pages

Estimated supplemental Tri-color Cartridge Yield Up to 1,016 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

#### Using 24712 Test Suite

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP74	K (Black)	209	10	203	9/12	Primary
HP75	Tri-color	174	7	169	9/15	Primary

#### Using 19752 Test Page

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP74	K (Black)	228	7	224	9/9	Primary
HP75	Tri-color	1,020	2	1,016	3/3	Supplemental

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

<b>Printer Identifier</b>	<b>HP Photosmart C5280</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP74, HP75
Cartridge Type	Integral ink supply and print head
Date Tested	July 6, 2007
EOL Criteria	Fade
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	HP Premium Plus High-gloss Photo Paper (Q1785A)
Driver version	Driver Version = 03/15/2007,61.071.244.00 The following settings were used: Photo printing-with white borders Print Quality = Best Paper Type = HP Premium Plus Photo Paper

**Declaration of Yield**

**Inkjet Cartridge Yield when tested in Hewlett-Packard Photosmart C5280:**

Using the QualityLogic Color Photo test suite provides the following results:  
Average Tri-color Cartridge Yield – Up to 48 standard pages  
Estimated supplemental K (Black) Cartridge Yield – Up to 1,154 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP75	Tri-color	48	1	48	9/9	Primary
HP74	K (Black)	1,197	26	1,154	3/3	Supplemental

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

<b>Printer Identifier</b>	<b>HP Photosmart C6380</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP564 - CB316WN, CB317WN, CB318WN, CB319WN, CB320WN
Cartridge Type	Separate ink supply and print head
Date Tested	September 11, 2008 to September 22, 2008
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	Driver Version = 61.81.2311.0 The following driver settings were changed from default: Color Ink Test: Paper type = Changed to Plain paper from Automatic Mono Ink Test: Paper type = Changed to Plain paper from Automatic Print all text as black was enabled in the Advanced tab.

## Declaration of Yield

### Inkjet Cartridge Yield when tested in HP Photosmart C6380 All-in One:

Using the test suite defined in ISO/IEC 24712 provides the following results:

- Average K (Black) Cartridge Yield – Up to 268 standard pages
- Average Cyan Cartridge Yield – Up to 291 standard pages
- Average Magenta Cartridge Yield – Up to 268 standard pages
- Average Yellow Cartridge Yield – Up to 231 standard pages
- Estimated supplemental K (Photo Black) Cartridge Yield – Up to 867 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

- Average K (Black) Cartridge Yield – Up to 294 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 2,411 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 2,445 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 2,520 standard pages
- Estimated supplemental K (Photo Black) Cartridge Yield – Up to 3,031 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 564 (CB316WN)	K (Black)	286	29	268	9/14	Primary
HP 564 (CB318WN)	Cyan	297	9	291	9/14	Primary
HP 564 (CB319WN)	Magenta	269	2	268	9/15	Primary
HP 564 (CB320WN)	Yellow	238	11	231	10/16	Primary
HP 564 (CB317WN)	K (Photo Black)	902	21	867	3/7	Supplemental

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 564 (CB316WN)	K (Black)	312	28	294	9/9	Primary
HP 564 (CB318WN)	Cyan	2,508	57	2,411	3/3	Supplemental
HP 564 (CB319WN)	Magenta	2,526	47	2,445	3/3	Supplemental
HP 564 (CB320WN)	Yellow	2,621	59	2,520	3/3	Supplemental
HP 564 (CB317WN)	K (Photo Black)	3,148	70	3,031	3/3	Supplemental

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

<b>Printer Identifier</b>	<b>HP Photosmart C6380</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP564 - CB316WN, CB317WN, CB318WN, CB319WN, CB320WN
Cartridge Type	Separate ink supply and print head
Date Tested	September 23, 2008 to September 26, 2008
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo
Media used	HP Premium Plus Photo Paper, High Gloss (Q1785A)
Driver version	Driver Version = 61.81.2311.0 The following driver settings were changed from default: Paper type = Changed to HP Premium Plus Photo papers from Automatic Print quality = Changed to Best from Automatic

## Declaration of Yield

### Inkjet Cartridge Yield when tested in HP Photosmart C6380 All-in One:

Using the QualityLogic Color Photo test suite provides the following results:

- Average Cyan Cartridge Yield – Up to 94 standard pages
- Average Magenta Cartridge Yield – Up to 130 standard pages
- Average Yellow Cartridge Yield – Up to 98 standard pages
- Average K (Photo Black) Cartridge Yield – Up to 85 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 723 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 564 (CB318WN)	Cyan	96	4	94	12/15	Primary
HP 564 (CB319WN)	Magenta	134	7	130	9/9	Primary
HP 564 (CB320WN)	Yellow	99	2	98	12/15	Primary
HP 564 (CB317WN)	K (Photo Black)	89	8	85	12/15	Primary
HP 564 (CB316WN)	K (Black)	784	36	723	3/3	Supplemental

<b>Printer Identifier</b>	<b>HP Photosmart D5460</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP564 - CB316WN, CB317WN, CB318WN, CB319WN, CB320WN
Cartridge Type	Separate ink supply and print head
Date Tested	July 31, 2008 to August 13, 2008
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	Driver Version = 61.81.239.0 The following driver settings were changed from default: Color Ink Test: Paper type = Changed to Plain paper from Automatic Mono Ink Test: Paper type = Changed to Plain paper from Automatic Print all text as black was enabled in the Advanced tab.

## Declaration of Yield

### Inkjet Cartridge Yield when tested in HP Photosmart D5460:

Using the test suite defined in ISO/IEC 24712 provides the following results:

- Average K (Black) Cartridge Yield – Up to 231 standard pages
- Average Cyan Cartridge Yield – Up to 305 standard pages
- Average Magenta Cartridge Yield – Up to 270 standard pages
- Average Yellow Cartridge Yield – Up to 236 standard pages
- Estimated supplemental K (Photo Black) Cartridge Yield – Up to 1,022 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

- Average K (Black) Cartridge Yield – Up to 316 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 1,698 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 1,688 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 1,917 standard pages
- Estimated supplemental K (Photo Black) Cartridge Yield – Up to 2,603 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP564 (CB316WN)	K (Black)	239	13	231	9/15	Primary
HP564 (CB318WN)	Cyan	305	-	305	9/12	Primary
HP564 (CB319WN)	Magenta	277	10	270	9/15	Primary
HP564 (CB320WN)	Yellow	246	15	236	9/15	Primary
HP564 (CB317WN)	K (Photo Black)	1,106	50	1,022	3/6	Supplemental

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP564 (CB316WN)	K (Black)	328	20	316	9/9	Primary
HP564 (CB318WN)	Cyan	1,832	80	1,698	3/3	Supplemental
HP564 (CB319WN)	Magenta	1,869	107	1,688	3/3	Supplemental
HP564 (CB320WN)	Yellow	1,955	23	1,917	3/3	Supplemental
HP564 (CB317WN)	K (Black Photo)	2,994	232	2,603	3/3	Supplemental

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

<b>Printer Identifier</b>	<b>HP Photosmart D5460</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP564 - CB316WN, CB317WN, CB318WN, CB319WN, CB320WN
Cartridge Type	Separate ink supply and print head
Date Tested	August 7, 2008 to August 12, 2008
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo
Media used	HP Premium Plus Photo Paper (Q1785A)
Driver version	Driver Version = 61.81.239.0 The following driver settings were changed from default: Paper type = Changed to HP Premium Plus Photo papers from Automatic Print quality = Changed to Best from Automatic

## Declaration of Yield

### Inkjet Cartridge Yield when tested in HP Photosmart D5460:

Using the QualityLogic Color Photo test suite provides the following results:

- Average Cyan Cartridge Yield – Up to 90 standard pages
- Average Magenta Cartridge Yield – Up to 126 standard pages
- Average Yellow Cartridge Yield – Up to 94 standard pages
- Average K (Photo Black) Cartridge Yield – Up to 76 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 684 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP564 (CB318WN)	Cyan	92	4	90	12/16	Primary
HP564 (CB319WN)	Magenta	133	12	126	9/9	Primary
HP564 (CB320WN)	Yellow	96	3	94	12/15	Primary
HP564 (CB317WN)	K (Photo Black)	82	12	76	12/15	Primary
HP564 (CB316WN)	K (Black)	730	28	684	3/3	Supplemental

<b>Printer Identifier</b>	<b>HP Officejet J4580</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP 901 (CC653AN), HP 901 (CC656AN)
Cartridge Type	Integral ink supply and print head
Date Tested	June 9, 2008 to June 16, 2008
EOL Criteria	Fade was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	DriverVer=11/05/2007,61.073.242.00 The drivers default settings were used for testing.

### Inkjet Cartridge Yield when tested in HP Officejet J4580 All-in-One:

Using the test suite defined in ISO/IEC 24712 provides the following results:

Average K (Black) Cartridge Yield – Up to 178 standard pages

Average Tri-color Cartridge Yield – Up to 367 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

Average K (Black) Cartridge Yield – Up to 175 standard pages

Estimated supplemental Tri-color Cartridge Yield – Up to 1,313 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 901 (CC653AN)	K (Black)	182	10	178	17/23	Primary
HP 901 (CC656AN)	Tri-color	381	22	367	9/12	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 901 (CC653AN)	K (Black)	181	9	175	9/9	Primary
HP 901 (CC656AN)	Tri-color	1,387	44	1,313	3/3	Supplemental

<b>Printer Identifier</b>	<b>HP Officejet J4580</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP 901 (CC653AN), HP 901 (CC656AN)
Cartridge Type	Integral ink supply and print head
Date Tested	June 16, 2008 to June 19, 2008
EOL Criteria	Fade was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	HP Premium Plus Photo paper, high gloss (Q1785A)
Driver version	DriverVer=11/05/2007,61.073.242.00 The following driver settings were changed from default: Paper type = Changed to HP Premium Plus Photo Papers from Plain The Print quality setting automatically changed to Best from Normal after Paper type was configured for HP Premium Plus Photo papers.

### Inkjet Cartridge Yield when tested in HP Officejet J4580 All-in-One:

Using the QualityLogic Color Photo test suite provides the following results:

Average Tri-color Cartridge Yield – Up to 124 standard pages

Estimated supplemental K (Black) Cartridge Yield – Up to 1,632 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 901 (CC656AN)	Tri-color	127	6	124	9/9	Primary
HP 901 (CC653AN)	K (Black)	1,741	65	1,632	3/3	Supplemental

<b>Printer Identifier</b>	<b>HP Officejet J5780</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP74, HP75
Cartridge Type	Integral ink supply and print head
Date Tested	May 3, 2007 to May 5, 2007
EOL Criteria	Fade was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	Driver Version = 09/01/2006,60.062.241.00 The driver's default setting was used: Quality = Normal Paper = Plain

### Inkjet Cartridge Yield when tested in Hewlett-Packard Officejet J5780:

Using the test suite defined in ISO/IEC 24712 provides the following results:

Average K (Black) Cartridge Yield – Up to 188 standard pages

Average Tri-color Cartridge Yield – Up to 178 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

Average K (Black) Cartridge Yield – Up to 198 standard pages

Estimated supplemental Tri-color Cartridge Yield Up to 1,529 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

#### Using 24712 Test Suite

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 74	K (Black)	195	12	188	9/13	Primary
HP 75	Tri-color	181	5	178	9/14	Primary

#### Using 19752 Test Page

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 74	K (Black)	201	4	198	9/9	Primary
HP 75	Tri-color	1,700	101	1,529	3/3	Supplemental

<b>Printer Identifier</b>	<b>HP Officejet J5780</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP74, HP75
Cartridge Type	Integral ink supply and print head
Date Tested	May 7, 2007 to May 8, 2007
EOL Criteria	Fade was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	HP Premium Plus High-gloss Photo Paper (Q1785A)
Driver version	Driver Version = 09/01/2006,60.062.241.00 The following settings were used: Photo printing-with white borders Print Quality = Best Paper Type = HP Premium Plus Photo Paper

### Inkjet Cartridge Yield when tested in Hewlett-Packard Officejet J5780:

Using the QualityLogic Color Photo test suite provides the following results:  
Average Tri-color Cartridge Yield – Up to 49 standard pages  
Estimated supplemental K (Black) Cartridge Yield – Up to 811 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 75	Tri-color	51	3	49	9/10	Primary
HP 74	K (Black)	861	30	811	3/3	Supplemental

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

<b>Printer Identifier</b>	<b>HP Officejet 6500</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP 920XL - CD975AE, CD972AE, CD973AE, CD974AE
Cartridge Type	Separate ink supply and print head
Date Tested	May 8, 2009 to May 20, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	A4
Media used	Hammermill Fore Multi-Purpose, 96 Brightness 20lb. weight
Driver version	Driver version = 70.82.15.0 The following driver settings were changed from default: Paper type = Changed to Plain paper from Automatic. Paper sizes = Changed to A4 from Letter.

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in HP Officejet 6500 All-in-One:

Using the test suite defined in ISO/IEC 24712 provides the following results:

- Average K (Black) Cartridge Yield – Up to 1,089 standard pages
- Average Cyan Cartridge Yield – Up to 528 standard pages
- Average Magenta Cartridge Yield – Up to 532 standard pages
- Average Yellow Cartridge Yield – Up to 506 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

- Average K (Black) Cartridge Yield – Up to 1,126 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 5,264 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 5,992 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 6,726 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 920XL (CD975AE)	K (Black)	1,091	4	1,089	9/12	Primary
HP 920XL (CD972AE)	Cyan	531	6	528	18/24	Primary
HP 920XL (CD973AE)	Magenta	535	8	532	18/24	Primary
HP 920XL (CD974AE)	Yellow	509	8	506	18/24	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 920XL (CD975AE)	K (Black)	1,130	5	1,126	9/9	Primary
HP 920XL (CD972AE)	Cyan	5,531	158	5,264	3/3	Supplemental
HP 920XL (CD973AE)	Magenta	6,204	126	5,992	3/3	Supplemental
HP 920XL (CD974AE)	Yellow	7,081	211	6,726	3/3	Supplemental

Test results and cost information provided by QualityLogic. Tests were performed under laboratory conditions and end-user's results may vary. Test results, ink cartridge pricing and cost per page pricing subject to change without notice by QualityLogic. All test results and cost information are provided "as-is," "as available," and all warranties, expressed or implied are hereby disclaimed. Users of the information contained herein assume full responsibility and risk of loss resulting from usage thereof.

<b>Printer Identifier</b>	<b>HP Officejet 6500</b>
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP 920XL - CD975AE, CD972AE, CD973AE, CD974AE
Cartridge Type	Separate ink supply and print head
Date Tested	May 20, 2009 to May 22, 2009
EOL Criteria	This printer has Ink Out which stops printing. Whichever came first, either Ink Out or Fade, was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 210 x 297mm photo paper
Media used	HP Premium Plus Photo Paper, Q1786A
Driver version	Driver version = 70.82.15.0 The following driver settings were changed from default: Paper type = Changed to HP Premium Plus Photo Papers from Automatic. Print quality = Changed to Best from Automatic Paper sizes = Changed to A4 from Letter

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in HP Officejet 6500:

Using the QualityLogic Color Photo test suite provides the following results:

- Average Cyan Cartridge Yield – Up to 148 standard pages
- Average Magenta Cartridge Yield – Up to 206 standard pages
- Average Yellow Cartridge Yield – Up to 159 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 7,487 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP 920XL (CD972AE)	Cyan	150	3	148	12/15	Primary
HP 920XL (CD973AE)	Magenta	206	1	206	9/9	Primary
HP 920XL (CD974AE)	Yellow	159	-	159	9/12	Primary
HP 920XL (CD975AE)	K (Black)	8,106	367	7,487	3/3	Supplemental

<b>Printer Identifier</b>	<b>Lexmark X4850 Wireless All-In-One</b>
Printer Manufacturer	Lexmark
Cartridge Identifier	41A, 42A
Cartridge Type	Integral ink supply and print head
Date Tested	March 17, 2008 to March 20, 2008
EOL Criteria	Fade was used as the EOL criteria.
Print mode used	Continuous
Paper Size	A4
Media used	HammerMill Fore MP-White, 96 Brightness 20lb. weight
Driver version	Driver Version=05/29/2007, 1.0.5.1 The following driver settings were changed from default: Paper Type = Changed to Use my choice: Plain from Use printer sensor Paper Size = Changed to A4 from Letter

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Lexmark X4850 Wireless All-In-One:

Using the test suite defined in ISO/IEC 24712 provides the following results:

Average K (Black) Cartridge Yield – Up to 214 standard pages

Average Tri-Color Cartridge Yield – Up to 258 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

Average K (Black) Cartridge Yield – Up to 223 standard pages

Estimated supplemental Tri-Color Cartridge Yield – Up to 2,759 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
42A	K (Black)	228	23	214	9/12	Primary
41A	Tri-color	274	26	258	9/10	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
42A	K (Black)	232	13	223	9/9	Primary
41A	Tri-color	2,985	134	2,759	3/3	Supplemental

<b>Printer Identifier</b>	<b>Lexmark X4850 Wireless All-In-One</b>
Printer Manufacturer	Lexmark
Cartridge Identifier	41A, 42A
Cartridge Type	Integral ink supply and print head
Date Tested	March 3, 2008 to March 4, 2008
EOL Criteria	Fade was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 210 x 297mm photo paper
Media used	Lexmark PerfectFinish Photo Paper (19Y0205)
Driver version	Driver Version=05/29/2007, 1.0.5.1 The following driver settings were changed from default: Quality/Speed = Changed to Photo from Automatic Paper Type = Changed to Use my choice: Lexmark PerfectFinish Photo from Use paper sensor Paper Size = Changed to A4 from Letter

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Lexmark X4850 Wireless All-In-One :

Using the QualityLogic Color Photo test suite provides the following results:

Average Tri-Color Cartridge Yield – Up to 56 standard pages

Estimated supplemental K (Black) Cartridge Yield – Up to 3,262 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
41A	Tri-color	58	3	56	9/12	Primary
42A	K (Black)	3,593	196	3,262	3/3	Supplemental

<b>Printer Identifier</b>	<b>Lexmark X5470</b>
Printer Manufacturer	Lexmark
Cartridge Identifier	32, 33
Cartridge Type	Integral ink supply and print head
Date Tested	October 22, 2007 to October 29, 2007
EOL Criteria	Fade was used as the EOL criteria.
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	Printer Driver = 3.117.0.0 The following driver settings were changed from default: Paper Type = Changed to Plain from Sensed

## Declaration of Yield

### Inkjet Cartridge Yield when tested in Lexmark X5470:

Using the test suite defined in ISO/IEC 24712 provides the following results:

Average K (Black) Cartridge Yield – Up to 274 standard pages

Average Tri-Color Cartridge Yield – Up to 272 standard pages

Using the test page defined in ISO/IEC 19752 provides the following results:

Average K (Black) Cartridge Yield – Up to 287 standard pages

Estimated supplemental Tri-Color Cartridge Yield – Up to 2,504 standard pages

Values obtained by continuous printing. Declared yield values in accordance with ISO/IEC 24711

Using 24712 Test Suite						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
32 (18C0032)	K (Black)	287	20	274	9/15	Primary
33 (18C0033)	Tri-color	287	24	272	9/14	Primary

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
32 (18C0032)	K (Black)	300	20	287	9/10	Primary
33 (18C0033)	Tri-color	2,684	107	2,504	3/3	Supplemental

<b>Printer Identifier</b>	<b>Lexmark X5470</b>
Printer Manufacturer	Lexmark
Cartridge Identifier	32, 33
Cartridge Type	Integral ink supply and print head
Date Tested	October 30, 2007 to November 5, 2007
EOL Criteria	Fade was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 ½" x 11" photo paper
Media used	Lexmark Premium Photo Paper (21G1740)
Driver version	Printer Driver = 3.117.0.0 The following driver settings were changed from default: Quality = Changed to Photo from Automatic Type = Changed to Lexmark Premium Photo Paper from Sensed

### Declaration of Yield

#### Inkjet Cartridge Yield when tested in Lexmark X5470:

Using the QualityLogic Color Photo test suite provides the following results:

Average Tri-color Cartridge Yield – Up to 71 standard pages

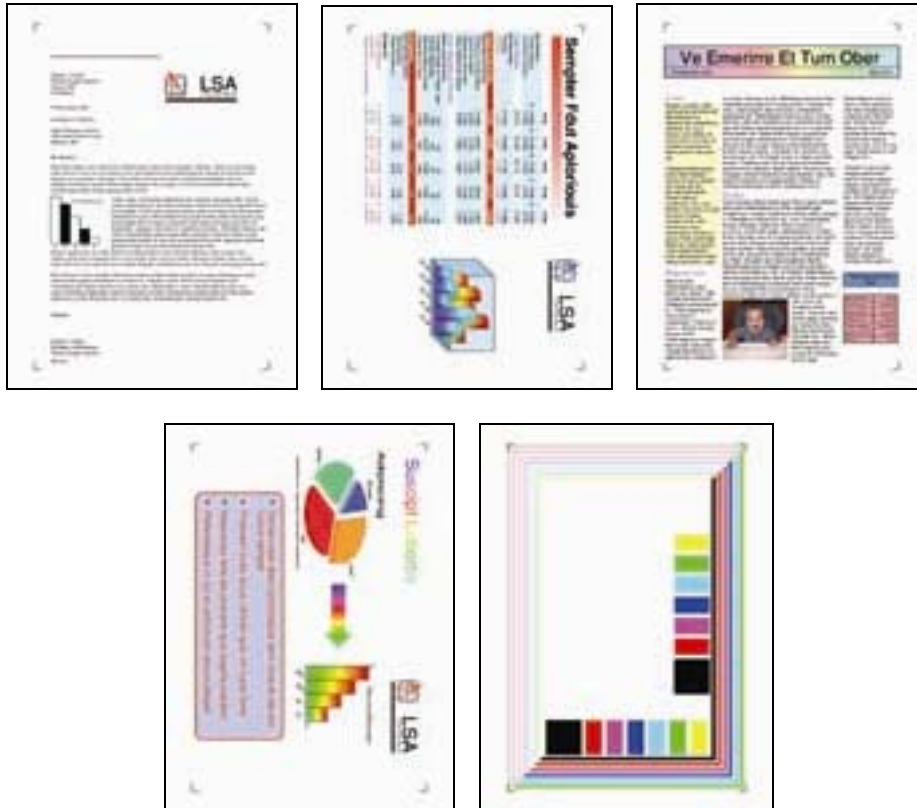
Estimated supplemental K (Black) Cartridge Yield – Up to 4,378 standard pages

Values obtained by continuous printing. Declared yield values in accordance with QualityLogic Color Photo Yield Test Methodology

Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
33 (18C0033)	Tri-color	73	6	71	26/28	Primary
32 (18C0032)	K (Black)	5,420	618	4,378	3/3	Supplemental

## Sub-Appendix A1 – Test Pages

### ISO/ ISO/IEC 24712 Test Suite



### ISO/IEC 19752 Test Page



## QualityLogic Photo Test Suite

