



**Cost of Ink Per Page Analysis
United States**

January 2009

Includes ink cartridge pricing provided by  IDC

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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-3 and ESP-5 All-in-One Printers to 16 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 IDC**, a premier global provider of market intelligence. IDC provided the manufacturer's suggested retail price (MSRP) for each of the cartridges in the test based on information collected through December 2008. Current pricing was verified and updated wherever possible from manufacturer's websites by QualityLogic in January 2009. Kodak provided cartridge pricing for their printers. 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.

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.

** IDC 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 (December 2008).

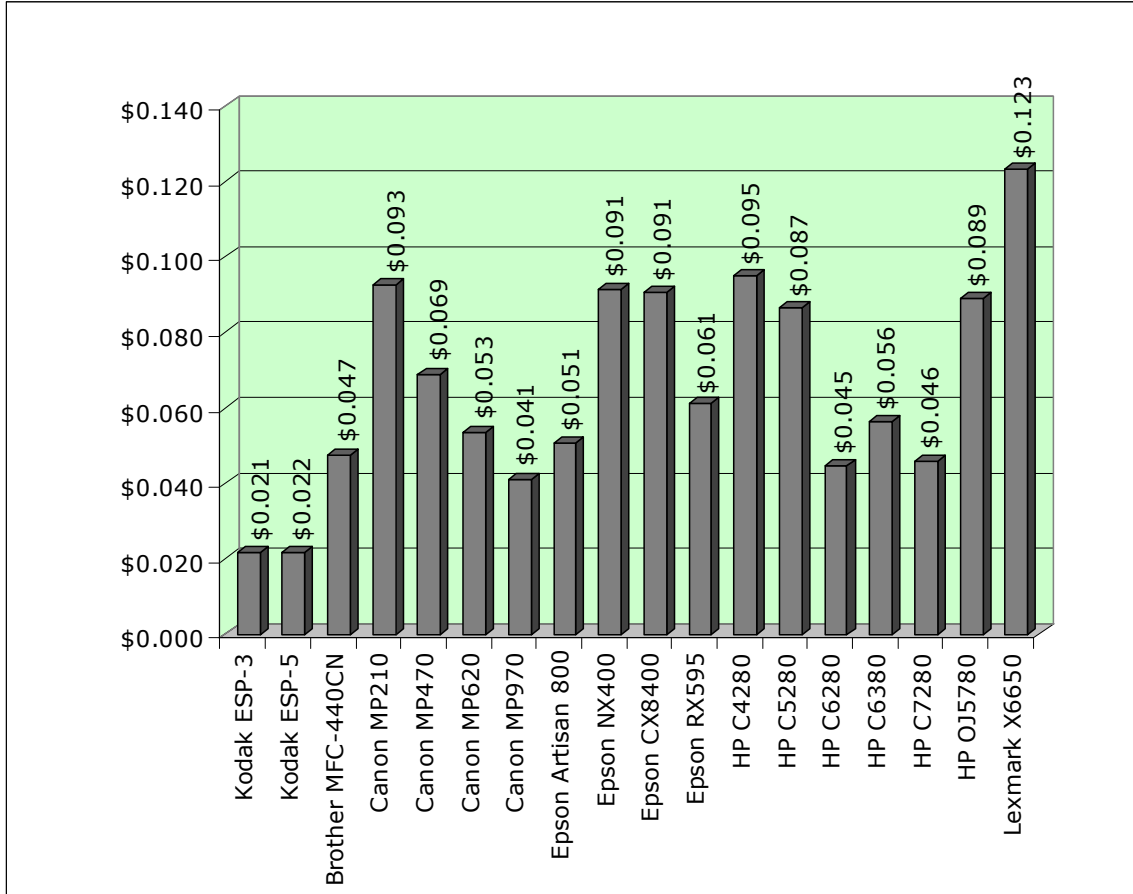
The following printers and corresponding ink cartridges were included in this Cost of Ink Per Page analysis:

Company	Printer	Cartridges
Kodak	ESP-3 ESP-5	Black Ink Cartridge 10, Color Ink Cartridge 10 Black Ink Cartridge 10, Color Ink Cartridge 10
Brother	MFC-440CN	LC51BK, LC51C, LC51M, LC51Y
Canon	Canon Pixma MP210 Canon Pixma MP470 Canon Pixma MP620 Canon Pixma MP970	PG-30, CL-31 PG-40, CL-41 PGI-220BK, CLI-221C, CLI-221M, CLI-221Y, CLI-221BK PGI-5, CLI-8C, CLI-8M, CLI-8Y, CLI-8PC, CLI- 8PM, CLI-8Bk
Epson	Epson Artisan 800 Epson Stylus NX400 Epson Stylus CX8400 Epson Stylus Photo RX595	T0981, T0982, T0983, T0984, T0985, T0986 T0691, T0692, T0693, T0694 T0691, T0692, T0693, T0694 T0781, T0782, T0783, T0784, T0785, T0786
Hewlett-Packard	Photosmart C4280 Photosmart C5280 Photosmart C6280 Photosmart C6380 Photosmart C7280 OfficeJet J5780	HP74, HP75 HP74, HP75 HP02 C8721WN, HP02 C8771WN, HP02 C8772WN HP02 C8773WN, HP02 C8774WN, HP02 C8775WN HP 564 CB316WN, HP 564 CB318WN, HP 564 CB319WN, HP 564 CB320WN, HP 564 CB317WN, HP02 C8721WN, HP02 C8771WN, HP02 C8772WN, HP02 C8773WN, HP02 C8774WN, HP02 C8775WN HP74, HP75
Lexmark	X6650	36A, 37A

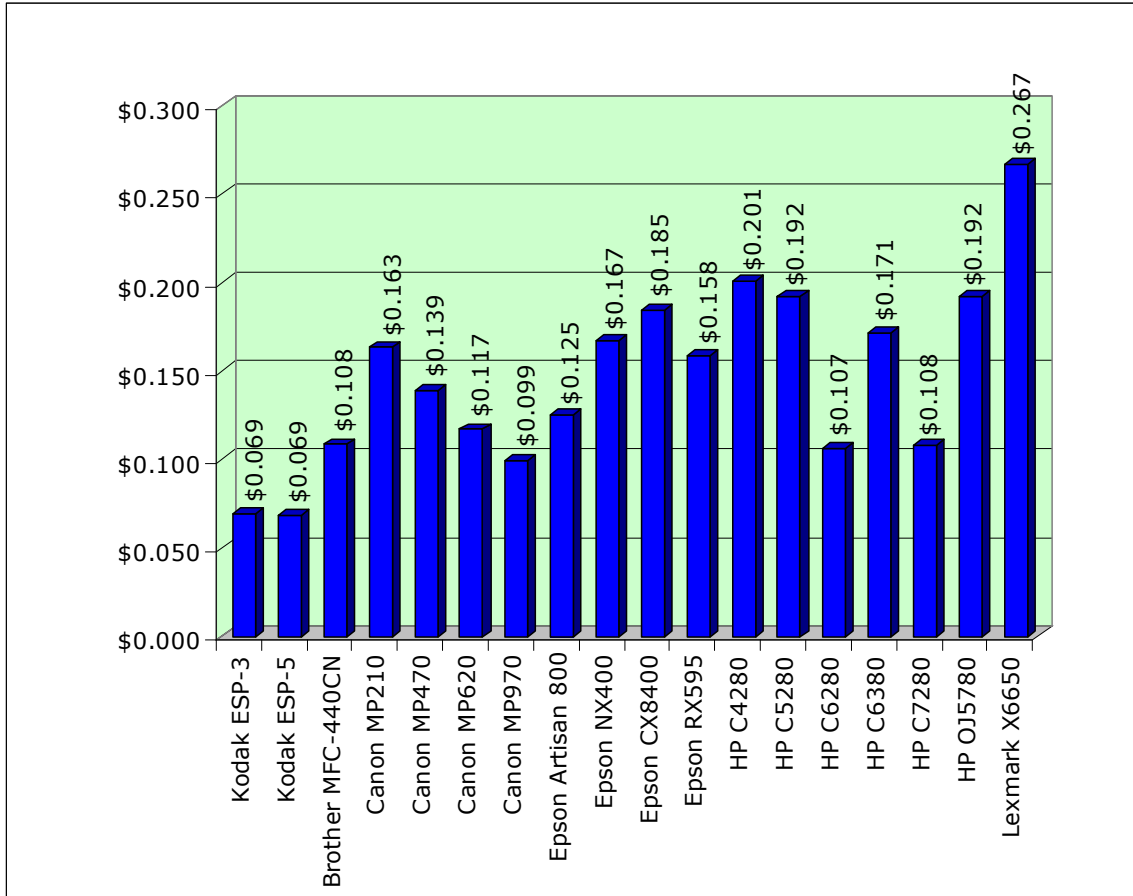
Cost of Ink Per Page

The following charts summarize the Cost of Ink Per Page for the printers tested using cartridge prices from The United States. 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.

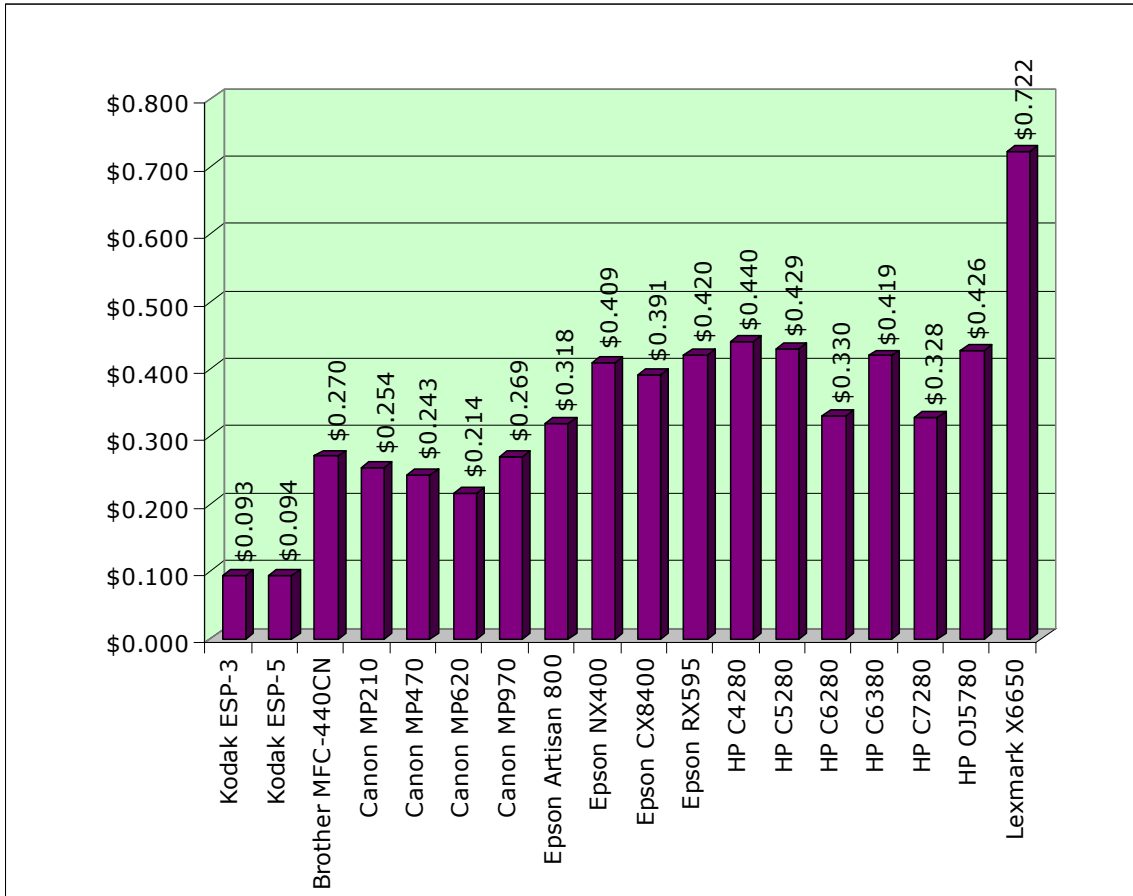
United States: Mono - Cost of Ink Per Page



United States: Color - Cost of Ink Per Page



United States: Photo - Cost of Ink Per Page



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.

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 IDC, 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			
Brother MFC-440CN		7898	9450	8982	548			
Canon MP210	1114				230			
Canon MP470	2588				358			
Canon MP620		3228	3498	4551	366	6866		
Canon MP970		9509	8178	7671	529	11788	16852	18016
Epson Artisan 800		1971	1915	6642	601		1891	2321
Epson NX400		1237	1608	1541	259			
Epson CX8400		1424	2257	2158	240			
Epson RX595		3307	2926	5037	378		3197	3862
HP C4280	979				201			
HP C5280	1016				224			
HP C6280		1402	813	1323	1504		15204	13302
HP C6380		2411	2445	2520	294	3031		
HP C7280		1421	804	1306	1389		14765	14293
HP OJ5780	1529				198			
Lexmark X6650	13196				198			

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			
Brother MFC-440CN		648	530	671	528			
Canon MP210	233				232			
Canon MP470	333				346			
Canon MP620		565	539	546	344	5141		
Canon MP970		931	702	711	490	6369	9420	9207
Epson Artisan 800		969	453	674	574		340	688
Epson NX400		400	299	430	255			
Epson CX8400		349	263	395	239			
Epson RX595		1038	497	581	349		380	766
HP C4280	166				186			
HP C5280	169				203			
HP C6280		411	393	488	728		11956	11827
HP C6380		291	268	231	268	867		
HP C7280		411	383	483	713		12126	11632
HP OJ5780	178				188			
Lexmark X6650	188				195			

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			
Brother MFC-440CN		132	152	157	6134			
Canon MP210	89				949			
Canon MP470	113				1637			
Canon MP620		201	217	213	1952	610		
Canon MP970		791	545	333	2225	1164	224	166
Epson Artisan 800		496	357	241	593		102	112
Epson NX400		90	91	123	479			
Epson CX8400		93	92	120	812			
Epson RX595		390	298	205	448		102	112
HP C4280	47				1002			
HP C5280	48				1154			
HP C6280		289	323	146	892		142	133
HP C6380		94	130	98	723	85		
HP C7280		306	326	152	775		141	134
HP OJ5780	49				811			
Lexmark X6650	38				2111			

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

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. Ink Cartridge Pricing

Cartridge prices used in this Cost of Ink Per Page analysis were researched and provided to QualityLogic by IDC as of May 2008. Kodak provided the pricing for Kodak cartridges. IDC'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. 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	\$14.99				\$9.99			
Kodak ESP-5	\$14.99				\$9.99			
Brother MFC-440CN		\$12.99	\$12.99	\$12.99	\$23.49			
Canon MP210	\$20.99				\$16.99			
Canon MP470	\$25.99				\$20.99			
Canon MP620		\$12.99	\$12.99	\$12.99	\$14.99	\$12.99		
Canon MP970		\$14.99	\$14.99	\$14.99	\$17.25	\$14.99	\$14.99	\$14.99
Epson Artisan 800		\$10.44	\$10.44	\$10.44	\$17.09		\$10.44	\$10.44
Epson NX400		\$12.34	\$12.34	\$12.34	\$16.99			
Epson CX8400		\$12.34	\$12.34	\$12.34	\$16.99			
Epson RX595		\$12.99	\$12.99	\$12.99	\$16.14		\$12.99	\$12.99
HP C4280	\$19.99				\$14.99			
HP C5280	\$19.99				\$14.99			
HP C6280		\$10.99	\$10.99	\$10.99	\$19.99		\$10.99	\$10.99
HP C6380		\$9.99	\$9.99	\$9.99	\$11.99	\$9.99		
HP C7280		\$10.99	\$10.99	\$10.99	\$19.99		\$10.99	\$10.99
HP OJ5780	\$19.99				\$14.99			
Lexmark X6650	\$26.99				\$23.99			

Source: Kodak for Kodak, IDC all others

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 IDC’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

	Mono Ink Cost							
	CMY	C	M	Y	K1	K2	LC	LM
Kodak ESP-3	\$0.003				\$0.018			
Kodak ESP-5	\$0.003				\$0.018			
Brother MFC-440CN		\$0.002	\$0.001	\$0.001	\$0.043			
Canon MP210	\$0.019				\$0.074			
Canon MP470	\$0.010				\$0.059			
Canon MP620		\$0.004	\$0.004	\$0.003	\$0.041	\$0.002		
Canon MP970		\$0.002	\$0.002	\$0.002	\$0.033	\$0.001	\$0.001	\$0.001
Epson Artisan 800		\$0.005	\$0.005	\$0.002	\$0.028		\$0.006	\$0.004
Epson NX400		\$0.010	\$0.008	\$0.008	\$0.066			
Epson CX8400		\$0.009	\$0.005	\$0.006	\$0.071			
Epson RX595		\$0.004	\$0.004	\$0.003	\$0.043		\$0.004	\$0.003
HP C4280	\$0.020				\$0.075			
HP C5280	\$0.020				\$0.067			
HP C6280		\$0.008	\$0.014	\$0.008	\$0.013		\$0.001	\$0.001
HP C6380		\$0.004	\$0.004	\$0.004	\$0.041	\$0.003		
HP C7280		\$0.008	\$0.014	\$0.008	\$0.014		\$0.001	\$0.001
HP OJ5780	\$0.013				\$0.076			
Lexmark X6650	\$0.002				\$0.121			

Color Cost of Ink Per individual Cartridge per Page

	Color Ink cost							
	CMY	C	M	Y	K1	K2	LC	LM
Kodak ESP-3	\$0.040				\$0.029			
Kodak ESP-5	\$0.040				\$0.029			
Brother MFC-440CN		\$0.020	\$0.025	\$0.019	\$0.044			
Canon MP210	\$0.090				\$0.073			
Canon MP470	\$0.078				\$0.061			
Canon MP620		\$0.023	\$0.024	\$0.024	\$0.044	\$0.003		
Canon MP970		\$0.016	\$0.021	\$0.021	\$0.035	\$0.002	\$0.002	\$0.002
Epson Artisan 800		\$0.011	\$0.023	\$0.015	\$0.030		\$0.031	\$0.015
Epson NX400		\$0.031	\$0.041	\$0.029	\$0.067			
Epson CX8400		\$0.035	\$0.047	\$0.031	\$0.071			
Epson RX595		\$0.013	\$0.026	\$0.022	\$0.046		\$0.034	\$0.017
HP C4280	\$0.120				\$0.081			
HP C5280	\$0.118				\$0.074			
HP C6280		\$0.027	\$0.028	\$0.023	\$0.027		\$0.001	\$0.001
HP C6380		\$0.034	\$0.037	\$0.043	\$0.045	\$0.012		
HP C7280		\$0.027	\$0.029	\$0.023	\$0.028		\$0.001	\$0.001
HP OJ5780	\$0.112				\$0.080			
Lexmark X6650	\$0.144				\$0.123			

Photo Cost of Ink Per individual Cartridge per Page

	Photo Ink Cost							
	CMY	C	M	Y	K1	K2	LC	LM
Kodak ESP-3	\$0.087				\$0.007			
Kodak ESP-5	\$0.087				\$0.007			
Brother MFC-440CN		\$0.098	\$0.085	\$0.083	\$0.004			
Canon MP210	\$0.236				\$0.018			
Canon MP470	\$0.230				\$0.013			
Canon MP620		\$0.065	\$0.060	\$0.061	\$0.008	\$0.021		
Canon MP970		\$0.019	\$0.028	\$0.045	\$0.008	\$0.013	\$0.067	\$0.090
Epson Artisan 800		\$0.021	\$0.029	\$0.043	\$0.029		\$0.102	\$0.093
Epson NX400		\$0.137	\$0.136	\$0.100	\$0.035			
Epson CX8400		\$0.133	\$0.134	\$0.103	\$0.021			
Epson RX595		\$0.033	\$0.044	\$0.063	\$0.036		\$0.127	\$0.116
HP C4280	\$0.425				\$0.015			
HP C5280	\$0.416				\$0.013			
HP C6280		\$0.038	\$0.034	\$0.075	\$0.022		\$0.077	\$0.083
HP C6380		\$0.106	\$0.077	\$0.102	\$0.017	\$0.118		
HP C7280		\$0.036	\$0.034	\$0.072	\$0.026		\$0.078	\$0.082
HP OJ5780	\$0.408				\$0.018			
Lexmark X6650	\$0.710				\$0.011			

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.

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.

Mono Cost of Ink Per Individual Cartridge and Total Cost of Ink Per Page

	Mono Ink Cost								Mono CoIPP
	CMY	C	M	Y	K1	K2	LC	LM	
Kodak ESP-3	\$0.003				\$0.018				\$0.021
Kodak ESP-5	\$0.003				\$0.018				\$0.022
Brother MFC-440CN		\$0.002	\$0.001	\$0.001	\$0.043				\$0.047
Canon MP210	\$0.019				\$0.074				\$0.093
Canon MP470	\$0.010				\$0.059				\$0.069
Canon MP620		\$0.004	\$0.004	\$0.003	\$0.041	\$0.002			\$0.053
Canon MP970		\$0.002	\$0.002	\$0.002	\$0.033	\$0.001	\$0.001	\$0.001	\$0.041
Epson Artisan 800		\$0.005	\$0.005	\$0.002	\$0.028		\$0.006	\$0.004	\$0.051
Epson NX400		\$0.010	\$0.008	\$0.008	\$0.066				\$0.091
Epson CX8400		\$0.009	\$0.005	\$0.006	\$0.071				\$0.091
Epson RX595		\$0.004	\$0.004	\$0.003	\$0.043		\$0.004	\$0.003	\$0.061
HP C4280	\$0.020				\$0.075				\$0.095
HP C5280	\$0.020				\$0.067				\$0.087
HP C6280		\$0.008	\$0.014	\$0.008	\$0.013		\$0.001	\$0.001	\$0.045
HP C6380		\$0.004	\$0.004	\$0.004	\$0.041	\$0.003			\$0.056
HP C7280		\$0.008	\$0.014	\$0.008	\$0.014		\$0.001	\$0.001	\$0.046
HP OJ5780	\$0.013				\$0.076				\$0.089
Lexmark X6650	\$0.002				\$0.121				\$0.123

Color Cost of Ink Per Individual Cartridge and Total Cost of Ink Per Page

	Color Ink cost								Color CoIPP
	CMY	C	M	Y	K1	K2	LC	LM	
Kodak ESP-3	\$0.040				\$0.029				\$0.069
Kodak ESP-5	\$0.040				\$0.029				\$0.069
Brother MFC-440CN		\$0.020	\$0.025	\$0.019	\$0.044				\$0.108
Canon MP210	\$0.090				\$0.073				\$0.163
Canon MP470	\$0.078				\$0.061				\$0.139
Canon MP620		\$0.023	\$0.024	\$0.024	\$0.044	\$0.003			\$0.117
Canon MP970		\$0.016	\$0.021	\$0.021	\$0.035	\$0.002	\$0.002	\$0.002	\$0.099
Epson Artisan 800		\$0.011	\$0.023	\$0.015	\$0.030		\$0.031	\$0.015	\$0.125
Epson NX400		\$0.031	\$0.041	\$0.029	\$0.067				\$0.167
Epson CX8400		\$0.035	\$0.047	\$0.031	\$0.071				\$0.185
Epson RX595		\$0.013	\$0.026	\$0.022	\$0.046		\$0.034	\$0.017	\$0.158
HP C4280	\$0.120				\$0.081				\$0.201
HP C5280	\$0.118				\$0.074				\$0.192
HP C6280		\$0.027	\$0.028	\$0.023	\$0.027		\$0.001	\$0.001	\$0.107
HP C6380		\$0.034	\$0.037	\$0.043	\$0.045	\$0.012			\$0.171
HP C7280		\$0.027	\$0.029	\$0.023	\$0.028		\$0.001	\$0.001	\$0.108
HP OJ5780	\$0.112				\$0.080				\$0.192
Lexmark X6650	\$0.144				\$0.123				\$0.267

Photo Cost of Ink Per Individual Cartridge and Total Cost of Ink Per Page

	Photo Ink Cost								Photo CoIPP
	CMY	C	M	Y	K1	K2	LC	LM	
Kodak ESP-3	\$0.087				\$0.007				\$0.093
Kodak ESP-5	\$0.087				\$0.007				\$0.094
Brother MFC-440CN		\$0.098	\$0.085	\$0.083	\$0.004				\$0.270
Canon MP210	\$0.236				\$0.018				\$0.254
Canon MP470	\$0.230				\$0.013				\$0.243
Canon MP620		\$0.065	\$0.060	\$0.061	\$0.008	\$0.021			\$0.214
Canon MP970		\$0.019	\$0.028	\$0.045	\$0.008	\$0.013	\$0.067	\$0.090	\$0.269
Epson Artisan 800		\$0.021	\$0.029	\$0.043	\$0.029		\$0.102	\$0.093	\$0.318
Epson NX400		\$0.137	\$0.136	\$0.100	\$0.035				\$0.409
Epson CX8400		\$0.133	\$0.134	\$0.103	\$0.021				\$0.391
Epson RX595		\$0.033	\$0.044	\$0.063	\$0.036		\$0.127	\$0.116	\$0.420
HP C4280	\$0.425				\$0.015				\$0.440
HP C5280	\$0.416				\$0.013				\$0.429
HP C6280		\$0.038	\$0.034	\$0.075	\$0.022		\$0.077	\$0.083	\$0.330
HP C6380		\$0.106	\$0.077	\$0.102	\$0.017	\$0.118			\$0.419
HP C7280		\$0.036	\$0.034	\$0.072	\$0.026		\$0.078	\$0.082	\$0.328
HP OJ5780	\$0.408				\$0.018				\$0.426
Lexmark X6650	\$0.710				\$0.011				\$0.722

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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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.

Printer Identifier	ESP-3 All-in-One Printer
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

Printer Identifier	ESP-3 All-in-One Printer
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 1/2" 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

Printer Identifier	ESP-5 All-in-One Printer
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

Printer Identifier	ESP-5 All-in-One Printer
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 1/2" 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

Printer Identifier	Brother MFC-440CN
Printer Manufacturer	Brother
Cartridge Identifier	LC51
Cartridge Type	Separate ink supply and print head
Date Tested	October 10, 2007 to October 24, 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	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	The driver was downloaded from Brother's Service and Support web site. Driver Version= Version 5.02 for Windows 2000/XP 05 Apr 2006 The drivers default settings were used for testing.

Declaration of Yield

Inkjet Cartridge Yield when tested in Brother MFC-440CN:

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

- Average K (Black) Cartridge Yield – Up to 528 standard pages
- Average Cyan Cartridge Yield – Up to 648 standard pages
- Average Magenta Cartridge Yield – Up to 530 standard pages
- Average Yellow Cartridge Yield – Up to 671 standard pages

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

- Average K (Black) Cartridge Yield – Up to 548 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 7,898 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 9,450 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 8,982 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
LC51BK	K (Black)	554	41	528	9/12	Primary
LC51C	Cyan	674	43	648	9/11	Primary
LC51M	Magenta	537	11	530	9/12	Primary
LC51Y	Yellow	691	32	671	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
LC51BK	K (Black)	568	33	548	9/9	Primary
LC51C	Cyan	8,445	325	7,898	3/3	Supplemental
LC51M	Magenta	9,900	267	9,450	3/3	Supplemental
LC51Y	Yellow	9,678	413	8,982	3/3	Supplemental

Printer Identifier	Brother MFC-440CN
Printer Manufacturer	Brother
Cartridge Identifier	LC51
Cartridge Type	Separate ink supply and print head
Date Tested	October 1, 2007 to October 9, 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 8 ½" x 11" photo paper
Media used	Innobella™ Premium Glossy Photo Paper (BP61GLL)
Driver version	The driver was downloaded from Brother's Service and Support web site. Driver Version= Version 5.02 for Windows 2000/XP 05 Apr 2006 The following driver settings were changed from default: Media Type = Changed to Brother Premium Glossy Photo Paper from Plain Paper Quality = Changed to Photo from Normal

Declaration of Yield

Inkjet Cartridge Yield when tested in Brother MFC-440CN:

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

- Average Cyan Cartridge Yield – Up to 132 standard pages
- Average Magenta Cartridge Yield – Up to 152 standard pages
- Average Yellow Cartridge Yield – Up to 157 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 6,134 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
LC51C	Cyan	137	8	132	9/15	Primary
LC51M	Magenta	156	8	152	9/15	Primary
LC51Y	Yellow	161	6	157	9/12	Primary
LC51BK	K (Black)	8,530	1,421	6,134	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.

Printer Identifier	Canon PIXMA MP210
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

Printer Identifier	Canon PIXMA MP210
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 1/2" x 11" photo paper
Media used	PP-101, Photo Paper Plus Glossy
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

Printer Identifier	Canon PIXMA MP470
Printer Manufacturer	Canon
Cartridge Identifier	PG-40, CL-41
Cartridge Type	Integral ink supply and print head
Date Tested	October 16, 2007 to October 18, 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	DriverVer=04/02/2007, 2.10.2.30 The driver default settings were used for testing.

Declaration of Yield

Inkjet Cartridge Yield when tested in Canon PIXMA MP470:

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

- Average K (Black) Cartridge Yield – Up to 346 standard pages
- Average Tri-color Cartridge Yield – Up to 333 standard pages

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

- Average K (Black) Cartridge Yield – Up to 358 standard pages
- Estimated supplemental Tri-color Cartridge Yield – Up to 2,588 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-40	K (Black)	351	8	346	9/12	Primary
CL-41	Tri-color	339	10	333	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
PG-40	K (Black)	364	10	358	9/9	Primary
CL-41	Tri-color	2,763	104	2,588	3/3	Supplemental

Printer Identifier	Canon PIXMA MP470
Printer Manufacturer	Canon
Cartridge Identifier	PG-40, CL-41
Cartridge Type	Integral ink supply and print head
Date Tested	October 18, 2007 to October 19, 2007
EOL Criteria	Fade was used as the EOL criteria.
Print mode used	Continuous
Paper Size	4" x 6" borderless photo on 8 1/2" x 11" photo
Media used	Canon Photo Paper Plus Glossy, PP-101
Driver version	DriverVer=04/02/2007, 2.10.2.30 The following driver settings were changed from default: Media Type = Changed to Photo Paper Plus Glossy from Plain Paper Print Quality = Changed to High from Standard

Declaration of Yield

Inkjet Cartridge Yield when tested in Canon PIXMA MP470:

Using the QualityLogic Color Photo Suite:

Average Tri-color Cartridge Yield – Up to 113 standard pages

Estimated supplemental K (Black) Cartridge Yield – Up to 1,637 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-41	Tri-color	115	3	113	9/9	Primary
PG-40	K (Black)	1,697	35	1,637	3/3	Supplemental

Printer Identifier	Canon PIXMA MP620
Printer Manufacturer	Canon
Cartridge Identifier	PGI-220BK, CLI-221C, CLI-221Y, CLI-221M, CLI-221BK
Cartridge Type	Separate ink supply and print head
Date Tested	October 8, 2008 to October 14, 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=06/12/2008, 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 344 standard pages
- Average Cyan Cartridge Yield – Up to 565 standard pages
- Average Magenta Cartridge Yield – Up to 539 standard pages
- Average Yellow Cartridge Yield – Up to 546 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 5,141 standard pages

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

- Average K (Pigment Black) Cartridge Yield – Up to 366 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 3,228 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 3,498 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 4,551 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 6,866 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-220BK	K (Pigment Black)	348	7	344	13/19	Primary
CLI-221C	Cyan	583	30	565	9/12	Primary
CLI-221M	Magenta	549	16	539	9/15	Primary
CLI-221Y	Yellow	558	19	546	9/15	Primary
CLI-221BK	K (Black)	5,986	501	5,141	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-220BK	K (Pigment Black)	374	12	366	9/9	Primary
CLI-221C	Cyan	3,289	36	3,228	3/3	Supplemental
CLI-221M	Magenta	3,597	59	3,498	3/3	Supplemental
CLI-221Y	Yellow	4,726	104	4,551	3/3	Supplemental
CLI-221BK	K (Black)	7,115	148	6,866	3/3	Supplemental

Printer Identifier	Canon PIXMA MP620
Printer Manufacturer	Canon
Cartridge Identifier	PGI-220BK, CLI-221C, CLI-221Y, CLI-221M, CLI-221BK
Cartridge Type	Separate ink supply and print head
Date Tested	October 15, 2008 to October 17, 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 1/2" x 11" photo paper
Media used	Canon Photo Paper Plus Glossy II, (PP-201)
Driver version	DriverVer=06/12/2008, 2.21.2.20 The following driver settings were changed from default: Media Type = Changed to Photo Paper Plus Glossy II from Plain Paper Print Quality = Changed to High from Standard

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 201 standard pages

Average Magenta Cartridge Yield – Up to 217 standard pages

Average Yellow Cartridge Yield – Up to 213 standard pages

Estimated supplemental K (Black) Cartridge Yield – Up to 610 standard pages

Estimated supplemental K (Pigment Black) Cartridge Yield – Up to 1,952 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-221C	Cyan	204	6	201	9/12	Primary
CLI-221M	Magenta	222	8	217	9/10	Primary
CLI-221Y	Yellow	219	9	213	9/11	Primary
CLI-221BK	K (Black)	658	29	610	3/4	Supplemental
PGI-220BK	K (Pigment Black)	2,015	37	1,952	3/3	Supplemental

Printer Identifier	Canon PIXMA MP970
Printer Manufacturer	Canon
Cartridge Identifier	PGI-5BK, CLI-8C, CLI-8M, CLI-8Y, CLI-8PC, CLI-8PM, CLI-8BK
Cartridge Type	Separate ink supply and print head
Date Tested	September 8, 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	DriverVer=05/22/2007, 2.11.2.20

Declaration of Yield

Inkjet Cartridge Yield when tested in Canon PIXMA MP970:

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

- Average K (Black 5) Cartridge Yield – Up to 490 standard pages
- Average Cyan Cartridge Yield – Up to 931 standard pages
- Average Magenta Cartridge Yield – Up to 702 standard pages
- Average Yellow Cartridge Yield – Up to 711 standard pages
- Estimated supplemental Photo Cyan Cartridge Yield – Up to 9,420 standard pages
- Estimated supplemental Photo Magenta Cartridge Yield – Up to 9,207 standard pages
- Estimated supplemental K (Black 8) Cartridge Yield – Up to 6,369 standard pages

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

- Average K (Black 5) Cartridge Yield – Up to 529 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 9,509 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 8,178 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 7,671 standard pages
- Estimated supplemental Photo Cyan Cartridge Yield – Up to 16,852 standard pages
- Estimated supplemental Photo Magenta Cartridge Yield – Up to 18,016 standard pages
- Estimated supplemental K (Black 8) Cartridge Yield – Up to 11,788 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 5)	503	28	490	15/21	Primary
CLI-8C	Cyan	946	24	931	9/12	Primary
CLI-8M	Magenta	710	13	702	10/16	Primary
CLI-8Y	Yellow	722	18	711	10/16	Primary
CLI-8PC	Photo Cyan	9,944	311	9,420	3/6	Supplemental
CLI-8PM	Photo Magenta	10,197	587	9,207	3/6	Supplemental
CLI-8BK	K (Black 8)	6,879	302	6,369	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-5BK	K (Black 5)	543	21	529	9/9	Primary
CLI-8C	Cyan	9,741	137	9,509	3/3	Supplemental
CLI-8M	Magenta	8,664	288	8,178	3/3	Supplemental
CLI-8Y	Yellow	8,231	332	7,671	3/3	Supplemental
CLI-8PC	Photo Cyan	17,779	550	16,852	3/3	Supplemental
CLI-8PM	Photo Magenta	18,562	324	18,016	3/3	Supplemental
CLI-8BK	K (Black 8)	12,190	238	11,788	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.

Printer Identifier	Canon PIXMA MP970
Printer Manufacturer	Canon
Cartridge Identifier	PGI-5BK, CLI-8C, CLI-8M, CLI-8Y, CLI-8PC, CLI-8PM, CLI-8BK
Cartridge Type	Separate ink supply and print head
Date Tested	October 7, 2008 to October 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 1/2" 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 Print Quality = Changed to High from Standard

Declaration of Yield

Inkjet Cartridge Yield when tested in Canon PIXMA MP970:

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

- Average Cyan Cartridge Yield – Up to 791 standard pages
- Average Magenta Cartridge Yield – Up to 545 standard pages
- Average Yellow Cartridge Yield – Up to 333 standard pages
- Average Photo Cyan Cartridge Yield – Up to 224 standard pages
- Average Photo Magenta Cartridge Yield – Up to 166 standard pages
- Estimated supplemental K (Black 5) Cartridge Yield – Up to 2,225 standard
- Estimated supplemental K (Black 8) Cartridge Yield – Up to 1,164 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	817	42	791	9/9	Primary
CLI-8M	Magenta	551	12	545	12/15	Primary
CLI-8Y	Yellow	337	8	333	21/24	Primary
CLI-8PC	Photo Cyan	226	7	224	31/34	Primary
CLI-8PM	Photo Magenta	167	4	166	42/45	Primary
PGI-5BK	K (Black 5)	2,386	96	2,225	3/6	Supplemental
CLI-8BK	K (Black 8)	1,179	18	1,164	6/8	Supplemental

Printer Identifier	Epson Artisan 800
Printer Manufacturer	Epson
Cartridge Identifier	T0981, T0992, T0993, T0994, T0995, T0996
Cartridge Type	Separate ink supply and print head
Date Tested	September 23, 2008 to October 1, 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= Epson Color Printing System 6.62

Declaration of Yield

Inkjet Cartridge Yield when tested in Epson Artisan 800:

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

- Average K (Black) Cartridge Yield – Up to 574 standard pages
- Average Cyan Cartridge Yield – Up to 969 standard pages
- Average Magenta Cartridge Yield – Up to 453 standard pages
- Average Yellow Cartridge Yield – Up to 674 standard pages
- Average supplemental Light Cyan Cartridge Yield – Up to 340 standard pages
- Average supplemental Light Magenta Cartridge Yield – Up to 668 standard pages

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

- Average K (Black) Cartridge Yield – Up to 601 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 1,971 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 1,915 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 6,642 standard pages
- Estimated supplemental Light Cyan Cartridge Yield – Up to 1,891 standard pages
- Estimated supplemental Light Magenta Cartridge Yield – Up to 2,321 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
T0981	K (Black)	580	14	574	15/21	Primary
T0992	Cyan	989	32	969	9/12	Primary
T0993	Magenta	461	20	453	18/24	Primary
T0994	Yellow	690	30	674	12/18	Primary
T0995	Light Cyan	344	11	340	24/30	Supplemental
T0996	Light Magenta	680	23	668	12/18	Supplemental

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
T0981	K (Black)	609	13	601	9/9	Primary
T0992	Cyan	2,138	99	1,971	3/3	Supplemental
T0993	Magenta	2,193	165	1,915	3/3	Supplemental
T0994	Yellow	6,793	89	6,642	3/3	Supplemental
T9005	Light Cyan	1,999	64	1,891	3/3	Supplemental
T0996	Light Magenta	2,532	125	2,321	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.

Printer Identifier	Epson Artisan 800
Printer Manufacturer	Epson
Cartridge Identifier	T0981, T0992, T0993, T0994, T0995, T0996
Cartridge Type	Separate ink supply and print head
Date Tested	October 1, 2008 to October 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	Epson Ultra Premium Photo Paper, Glossy (S042175)
Driver version	Driver Version= Epson Color Printing System 6.62 Paper and Quality Options = Changed to Ultra Premium Photo Paper Glossy from Plain Paper / Bright White Paper Changed to Photo RPM (Max dpi) from Normal

Declaration of Yield

Inkjet Cartridge Yield when tested in Epson Artisan 800:

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

- Average Cyan Cartridge Yield – Up to 496 standard pages
- Average Magenta Cartridge Yield – Up to 357 standard pages
- Average Yellow Cartridge Yield – Up to 241 standard pages
- Average Light Cyan Cartridge Yield – Up to 102 standard pages
- Average Light Magenta Cartridge Yield – Up to 112 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 593 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
T0992	Cyan	505	15	496	9/9	Primary
T0993	Magenta	364	12	357	12/15	Primary
T0994	Yellow	245	8	241	17/20	Primary
T0995	Light Cyan	102	3	102	43/45	Primary
T0996	Light Magenta	113	4	112	40/43	Primary
T0981	K (Black)	634	50	593	6/9	Supplemental

Printer Identifier	Epson Stylus NX400
Printer Manufacturer	Epson
Cartridge Identifier	T0691, T0692, T0693, T0694
Cartridge Type	Separate ink supply and print head
Date Tested	September 4, 2008 to September 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	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	Driverver=02/26/2008, 6.60.00.00 The following driver settings were changed from default: Color Ink test: None Mono Ink test: Quality Option = Changed to Text from Text & Image The "Black Ink Only" option was enabled in Print Options

Declaration of Yield

Inkjet Cartridge Yield when tested in Epson Stylus NX400:

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

- Average K (Black) Cartridge Yield – Up to 255 standard pages
- Average Cyan Cartridge Yield – Up to 400 standard pages
- Average Magenta Cartridge Yield – Up to 299 standard pages
- Average Yellow Cartridge Yield – Up to 430 standard pages

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

- Average K (Black) Cartridge Yield – Up to 259 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 1,237 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 1,608 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 1,541 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
T0691	K (Black)	261	13	255	15/21	Primary
T0692	Cyan	413	20	400	9/15	Primary
T0693	Magenta	307	16	299	12/18	Primary
T0694	Yellow	444	22	430	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
T0691	K (Black)	269	16	259	9/9	Primary
T0692	Cyan	1,698	274	1,237	3/3	Supplemental
T0693	Magenta	2,440	494	1,608	3/3	Supplemental
T0694	Yellow	2,439	532	1,541	3/3	Supplemental

Printer Identifier	Epson Stylus NX400
Printer Manufacturer	Epson
Cartridge Identifier	T0691, T0692, T0693, T0694
Cartridge Type	Separate ink supply and print head
Date Tested	September 12, 2008 to September 19, 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 1/2" x 11" photo paper
Media used	Epson Premium Photo Paper, Glossy (S041286)
Driver version	Driverver=02/26/2008, 6.60.00.00 The following driver settings were changed from default: Paper Options Type = Changed to Premium Photo Paper Glossy from Plain Paper / Bright White paper Quality Option = Changed to Photo RPM (Max dpi) from Text & Image

Declaration of Yield

Inkjet Cartridge Yield when tested in Epson Stylus NX400:

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 91 standard pages
- Average Yellow Cartridge Yield – Up to 123 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 479 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
T0692	Cyan	95	8	90	12/15	Primary
T0693	Magenta	95	7	91	11/13	Primary
T0694	Yellow	128	8	123	9/9	Primary
T0691	K (Black)	527	29	479	3/3	Supplemental

Printer Identifier	Epson Stylus CX8400
Printer Manufacturer	Epson
Cartridge Identifier	T0691, T0692, T0693, T0694
Cartridge Type	Separate ink supply and print head
Date Tested	October 18, 2007 to October 24, 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	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	DriverVer=04/16/2007, 6.50.00 Color Ink test - The driver's default settings were used. Mono Ink Test - The following driver settings were changed from default: Quality Option = Changed to Text from Text & Image. The Black Ink Only option was enabled in the Advanced tab.

Declaration of Yield

Inkjet Cartridge Yield when tested in Epson Stylus CX8400:

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

- Average K (Black) Cartridge Yield – Up to 239 standard pages
- Average Cyan Cartridge Yield – Up to 349 standard pages
- Average Magenta Cartridge Yield – Up to 263 standard pages
- Average Yellow Cartridge Yield – Up to 395 standard pages

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

- Average K (Black) Cartridge Yield – Up to 240 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 1,424 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 2,257 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 2,158 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
T0691	K (Black)	243	6	239	14/21	Primary
T0692	Cyan	373	38	349	9/15	Primary
T0693	Magenta	274	22	263	12/18	Primary
T0694	Yellow	412	26	395	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
T0691	K (Black)	246	8	240	9/9	Primary
T0692	Cyan	1,517	55	1,424	3/3	Supplemental
T0693	Magenta	2,290	19	2,257	3/3	Supplemental
T0694	Yellow	2,334	104	2,158	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.

Printer Identifier	Epson Stylus CX8400
Printer Manufacturer	Epson
Cartridge Identifier	T0691, T0692, T0693, T0694
Cartridge Type	Separate ink supply and print head
Date Tested	October 25, 2007 to October 26, 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 8 ½" x 11" photo
Media used	Epson Premium Photo Paper Glossy (S041286)
Driver version	DriverVer=04/16/2007, 6.50.00.00 The following driver settings were changed from default: Quality Option = Changed to Best Photo from Text & Image. Paper Type = Changed to Premium Photo Paper Glossy from Plain Paper / Bright White Paper

Declaration of Yield

Inkjet Cartridge Yield when tested in Epson Stylus CX8400:

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

- Average Cyan Cartridge Yield – Up to 93 standard pages
- Average Magenta Cartridge Yield – Up to 92 standard pages
- Average Yellow Cartridge Yield – Up to 120 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 812 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
T0692	Cyan	103	17	93	10/13	Primary
T0693	Magenta	94	4	92	10/13	Primary
T0694	Yellow	121	2	120	9/9	Primary
T0691	K (Black)	872	36	812	3/3	Supplemental

Printer Identifier	Epson Stylus Photo RX595
Printer Manufacturer	Epson
Cartridge Identifier	T0781, T0782, T0783, T0784, T0785, T0786
Cartridge Type	Separate ink supply and print head
Date Tested	October 2, 2007 to October 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	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	DriverVer=05/09/2007, 6.50.00.00 The drivers default settings were used for testing.

Declaration of Yield

Inkjet Cartridge Yield when tested in Epson Stylus Photo RX595:

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

- Average K (Black) Cartridge Yield – Up to 349 standard pages
- Average Cyan Cartridge Yield – Up to 1,038 standard pages
- Average Magenta Cartridge Yield – Up to 497 standard pages
- Average Yellow Cartridge Yield – Up to 581 standard pages
- Average supplemental Light Cyan Cartridge Yield – Up to 380 standard pages
- Average supplemental Light Magenta Cartridge Yield – Up to 766 standard pages

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

- Average K (Black) Cartridge Yield – Up to 378 standard pages
- Estimated supplemental Cyan Cartridge Yield – Up to 3,307 standard pages
- Estimated supplemental Magenta Cartridge Yield – Up to 2,926 standard pages
- Estimated supplemental Yellow Cartridge Yield – Up to 5,037 standard pages
- Estimated supplemental Light Cyan Cartridge Yield – Up to 3,197 standard pages
- Estimated supplemental Light Magenta Cartridge Yield – Up to 3,862 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
T0781	K (Black)	354	14	349	26/27	Primary
T0782	Cyan	1,057	30	1,038	9/9	Primary
T0783	Magenta	506	22	497	18/21	Primary
T0784	Yellow	594	28	581	15/18	Primary
T0785	Light Cyan	385	15	380	24/27	Supplemental
T0786	Light Magenta	780	26	766	12/15	Supplemental

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
T0781	K (Black)	399	35	378	9/12	Primary
T0782	Cyan	3,638	197	3,307	3/6	Supplemental
T0783	Magenta	3,261	199	2,926	3/6	Supplemental
T0784	Yellow	5,289	149	5,037	3/6	Supplemental
T0785	Light Cyan	3,469	161	3,197	3/6	Supplemental
T0786	Light Magenta	4,183	191	3,862	3/6	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.

Printer Identifier	Epson Stylus Photo RX595
Printer Manufacturer	Epson
Cartridge Identifier	T0781, T0782, T0783, T0784, T0785, T0786
Cartridge Type	Separate ink supply and print head
Date Tested	October 5, 2007 to October 12, 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 8 ½" x 11" photo
Media used	Epson Ultra Premium Photo Paper Glossy (S041935)
Driver version	DriverVer=05/09/2007, 6.50.00.00 The following driver settings were changed from default: Quality Option = Changed to Best Photo from Text. Paper Type = Changed to Ultra Premium Photo Paper Glossy from Plain Paper / Bright White Paper

Declaration of Yield

Inkjet Cartridge Yield when tested in Epson Stylus Photo RX595:

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

- Average Cyan Cartridge Yield – Up to 390 standard pages
- Average Magenta Cartridge Yield – Up to 298 standard pages
- Average Yellow Cartridge Yield – Up to 205 standard pages
- Average Light Cyan Cartridge Yield – Up to 102 standard pages
- Average Light Magenta Cartridge Yield – Up to 112 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 448 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
T0782	Cyan	397	11	390	9/9	Primary
T0783	Magenta	304	10	298	9/12	Primary
T0784	Yellow	208	6	205	15/18	Primary
T0785	Light Cyan	103	3	102	33/36	Primary
T0786	Light Magenta	113	3	112	30/33	Primary
T0781	K (Black)	458	12	448	6/9	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.

Printer Identifier	HP Photosmart C4280
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP74, HP75
Cartridge Type	Integral ink supply and print head
Date Tested	June 14, 2007 to June 18, 2007
EOL Criteria	Fade
Print mode used	Continuous
Paper Size	Letter
Media used	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	Driver Version = 12/26/2006,61.063.247.00 The driver's default setting was used: Quality = Normal Paper = Plain

Declaration of Yield

Inkjet Cartridge Yield when tested in Hewlett-Packard Photosmart C4280:

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

Average K (Black) Cartridge Yield – Up to 186 standard pages

Average Tri-color Cartridge Yield – Up to 166 standard pages

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

Average K (Black) Cartridge Yield – Up to 201 standard pages

Estimated supplemental Tri-color Cartridge Yield Up to 979 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)	197	17	186	9/9	Primary
HP75	Tri-color	171	7	166	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
HP74	K (Black)	204	5	201	9/9	Primary
HP75	Tri-color	1,109	77	979	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.

Printer Identifier	HP Photosmart C4280
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP74, HP75
Cartridge Type	Integral ink supply and print head
Date Tested	June 19, 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 = 12/26/2006,61.063.247.00 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 C4280:

Using the QualityLogic Color Photo test suite provides the following results:
Average Tri-color Cartridge Yield – Up to 47 standard pages
Estimated supplemental K (Black) Cartridge Yield – Up to 1,002 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
HP74	Tri-color	48	1	47	9/9	Primary
HP75	K (Black)	1,104	60	1,002	3/3	Supplemental

Printer Identifier	HP Photosmart C5280
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.

Printer Identifier	HP Photosmart C5280
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

Printer Identifier	HP Photosmart C6280
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP02 System
Cartridge Type	Separate ink supply and print head
Date Tested	September 21, 2007 to November 2, 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	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	Driver Version=61.071.244.00 The following driver settings were changed from default: Paper Type = Changed to Plain paper from Automatic

Declaration of Yield

Inkjet Cartridge Yield when tested in HP Photosmart C6280:

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

- Average K (Black) Cartridge Yield – Up to 728 standard pages
- Average Cyan Cartridge Yield – Up to 411 standard pages
- Average Magenta Cartridge Yield – Up to 393 standard pages
- Average Yellow Cartridge Yield – Up to 488 standard pages
- Estimated supplemental Light Cyan Cartridge Yield – Up to 11,956 standard pages
- Estimated supplemental Light Magenta Cartridge Yield – Up to 11,827 standard pages

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

- Average K (Black) Cartridge Yield – Up to 1,504 standard pages
- Average supplemental Cyan Cartridge Yield – Up to 1,402 standard pages
- Average supplemental Magenta Cartridge Yield – Up to 813 standard pages
- Average supplemental Yellow Cartridge Yield – Up to 1,323 standard pages
- Estimated supplemental Light Cyan Cartridge Yield – Up to 15,204 standard pages
- Estimated supplemental Light Magenta Cartridge Yield – Up to 13,302 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
HP02 C8721WN	K (Black)	738	33	728	30/33	Primary
HP02 C8771WN	Cyan	424	52	411	51/57	Primary
HP02 C8772WN	Magenta	404	47	393	53/59	Primary
HP02 C8773WN	Yellow	502	54	488	42/48	Primary
HP02 C8774WN	Light Cyan	13,512	923	11,956	3/6	Supplemental
HP02 C8775WN	Light Magenta	12,547	427	11,827	3/6	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.

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP02 C8721WN	K (Black)	1,534	86	1,504	23/25	Primary
HP02 C8771WN	Cyan	1,501	271	1,402	22/26	Supplemental
HP02 C8772WN	Magenta	843	113	813	41/45	Supplemental
HP02 C8773WN	Yellow	1,388	184	1,323	24/28	Supplemental
HP02 C8774WN	Light Cyan	17,167	1,164	15,204	3/4	Supplemental
HP02 C8775WN	Light Magenta	15,433	1,264	13,302	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.

Printer Identifier	HP Photosmart C6280
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP02 System
Cartridge Type	Separate ink supply and print head
Date Tested	October 23, 2007 to November 2, 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 8 1/2" x 11" photo
Media used	HP Premium Plus Photo Paper, high gloss (Q1785A)
Driver version	Driver Version=61.071.244.00 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 C6280:

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

- Average Cyan Cartridge Yield – Up to 289 standard pages
- Average Magenta Cartridge Yield – Up to 323 standard pages
- Average Yellow Cartridge Yield – Up to 146 standard pages
- Average Light Cyan Cartridge Yield – Up to 142 standard pages
- Average Light Magenta Cartridge Yield – Up to 133 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 892 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
HP02 C8771WN	Cyan	333	72	289	9/13	Primary
HP02 C8772WN	Magenta	365	67	323	9/10	Primary
HP02 C8773WN	Yellow	158	30	146	19/23	Primary
HP02 C8774WN	Light Cyan	150	22	142	21/25	Primary
HP02 C8775WN	Light Magenta	141	22	133	21/25	Primary
HP02 C8721WN	K (Black)	895	2	892	3/7	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.

Printer Identifier	HP Photosmart C6380
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.

Printer Identifier	HP Photosmart C6380
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 1/2" x 11" photo
Media used	HP Premium Plus Photo Paper (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

Printer Identifier	HP Photosmart C7280
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP02 System
Cartridge Type	Separate ink supply and print head
Date Tested	October 3, 2007 to November 1, 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	Xerox Business 4200, 92 Brightness 20lb. weight
Driver version	Driver Version=61.071.244.00 The following driver settings were changed from default: Paper Type = Changed to Plain paper from Automatic

Declaration of Yield

Inkjet Cartridge Yield when tested in HP Photosmart C7280:

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

- Average K (Black) Cartridge Yield – Up to 713 standard pages
- Average Cyan Cartridge Yield – Up to 411 standard pages
- Average Magenta Cartridge Yield – Up to 383 standard pages
- Average Yellow Cartridge Yield – Up to 483 standard pages
- Estimated supplemental Light Cyan Cartridge Yield – Up to 12,126 standard pages
- Estimated supplemental Light Magenta Cartridge Yield – Up to 11,632 standard pages

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

- Average K (Black) Cartridge Yield – Up to 1,389 standard pages
- Average supplemental Cyan Cartridge Yield – Up to 1,421 standard pages
- Average supplemental Magenta Cartridge Yield – Up to 804 standard pages
- Average supplemental Yellow Cartridge Yield – Up to 1,306 standard pages
- Estimated supplemental Light Cyan Cartridge Yield – Up to 14,765 standard pages
- Estimated supplemental Light Magenta Cartridge Yield – Up to 14,293 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
HP02 C8721WN	K (Black)	723	34	713	30/30	Primary
HP02 C8771WN	Cyan	426	60	411	49/52	Primary
HP02 C8772WN	Magenta	396	58	383	53/56	Primary
HP02 C8773WN	Yellow	502	71	483	42/45	Primary
HP02 C8774WN	Light Cyan	14,069	1,153	12,126	3/3	Supplemental
HP02 C8775WN	Light Magenta	13,642	1,193	11,632	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.

Using 19752 Test Page						
Cartridge Identifier	Color	Average (pages)	Standard Deviation (pages)	90% Lower Confidence (pages)	Number used in calculations/test	Primary/ Supplemental
HP02 C8721WN	K (Black)	1,441	151	1,389	24/27	Primary
HP02 C8771WN	Cyan	1,499	208	1,421	21/27	Supplemental
HP02 C8772WN	Magenta	853	183	804	39/45	Supplemental
HP02 C8773WN	Yellow	1,365	169	1,306	24/30	Supplemental
HP02 C8774WN	Light Cyan	15,669	536	14,765	3/6	Supplemental
HP02 C8775WN	Light Magenta	14,609	187	14,293	3/6	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.

Printer Identifier	HP Photosmart C7280
Printer Manufacturer	Hewlett-Packard
Cartridge Identifier	HP02 System
Cartridge Type	Separate ink supply and print head
Date Tested	November 1, 2007 to November 6, 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 8 1/2" x 11" photo
Media used	HP Premium Plus Photo Paper, high gloss (Q1785A)
Driver version	Driver Version=61.071.244.00 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 C7280:

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

- Average Cyan Cartridge Yield – Up to 306 standard pages
- Average Magenta Cartridge Yield – Up to 326 standard pages
- Average Yellow Cartridge Yield – Up to 152 standard pages
- Average Light Cyan Cartridge Yield – Up to 141 standard pages
- Average Light Magenta Cartridge Yield – Up to 134 standard pages
- Estimated supplemental K (Black) Cartridge Yield – Up to 775 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
HP02 C8771WN	Cyan	342	58	306	9/11	Primary
HP02 C8772WN	Magenta	345	30	326	9/10	Primary
HP02 C8773WN	Yellow	163	29	152	18/21	Primary
HP02 C8774WN	Light Cyan	151	25	141	19/22	Primary
HP02 C8775WN	Light Magenta	143	26	134	21/24	Primary
HP02 C8721WN	K (Black)	903	76	775	3/6	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.

Printer Identifier	HP Officejet J5780
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
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

Printer Identifier	HP Officejet J5780
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
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.

Printer Identifier	Lexmark X6650 Wireless 4-in-1
Printer Manufacturer	Lexmark
Cartridge Identifier	36A, 37A
Cartridge Type	Integral ink supply and print head
Date Tested	September 23, 2008 to September 29, 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=05/23/2008,1.2.6.2 The following driver settings were changed from default: Color Ink Test: Media Type = Changed to Plain Paper from Automatic Mono Ink Test: Media Type = Changed to Plain Paper from Automatic "Print in Black and White" was enabled on the Print Setup tab.

Declaration of Yield

Inkjet Cartridge Yield when tested in Lexmark X6650 Wireless 4-in-1:

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

Average K (Black) Cartridge Yield – Up to 195 standard pages

Average Tri-Color Cartridge Yield – Up to 188 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 13,196 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
36A	K (Black)	203	12	195	9/12	Primary
37A	Tri-color	194	9	188	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
36A	K (Black)	207	15	198	9/9	Primary
37A	Tri-color	16,500	1,960	13,196	3/3	Supplemental

Printer Identifier	Lexmark X6650 Wireless 4-in-1
Printer Manufacturer	Lexmark
Cartridge Identifier	36A, 37A
Cartridge Type	Integral ink supply and print head
Date Tested	September 30, 2008 to October 1, 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=05/23/2008,1.2.6.2 The following driver settings were changed from default: Media Type = Changed to Lexmark Premium Photo Paper from Automatic Print Setup = Changed to Best from Automatic

Declaration of Yield

Inkjet Cartridge Yield when tested in Lexmark X6650 Wireless 4-in-1:

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

Average Tri-Color Cartridge Yield – Up to 38 standard pages

Estimated supplemental K (Black) Cartridge Yield – Up to 2,111 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
37A	Tri-color	40	4	38	9/9	Primary
36A	K (Black)	2,236	74	2,111	3/3	Supplemental

Sub-Appendix A1 – Test Pages

ISO/ ISO/IEC 24712 Test Suite



ISO/IEC 19752 Test Page



QualityLogic Photo Test Suite

