# Xerox Phaser 8860 vs. HP Color LaserJet 4700

# Cost-per-Print Comparison: Canadian cents Color for the cost of Black & White

Spencer & Associates Publishing, Ltd.
David R Spencer, President

SpencerLAB DIGITAL COLOR LABORATORY
Catherine Fiasconaro, Vice President, Operations / Director
Melville, New York
1.631.367.6655



# Spencerial Tester

# Independent Testing Confirmed the Xerox Phaser 8860 can indeed deliver Documents in Color for the cost of Black & White

— spencerLAB

We printed a set of color documents on the Phaser 8860 and found ...

> Printing in *color* had essentially *the same cost* as in merely black-and-white

We printed the same documents on a color laser (the HP Color LaserJet 4700) ...

- ➤ Printing them on the Phaser 8860 in *color* yielded essentially *the same cost* as printing in black-and-white on the color laser
- ➤ Printing them on the Phaser 8860 in *color* was **2.4 times less expensive** than printing them in *color* on the color laser

Independent testing by SpencerLab Digital Color Laboratory was commissioned by Xerox Corporation



# Xerox Phaser 8860 *vs.* HP Color LaserJet 4700 Cost-per-Print Comparison: *Canadian cents*







4-page Test Suite
MIXED TEXT & GRAPHICS

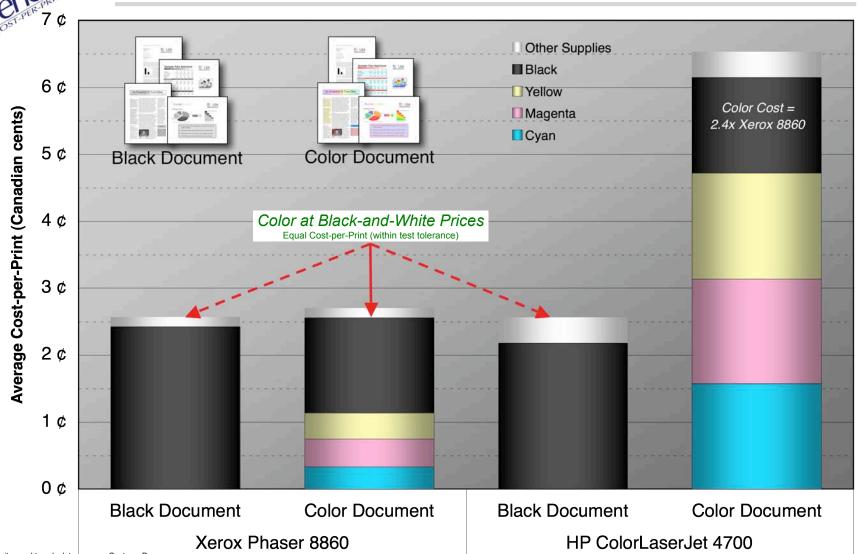
Average Cost-per-Page*				
Mode	Black & White Color			
Xerox Phaser 8860	2.57¢ ±0.09	2.71¢ ±0.14		
HP ColorLaserJet 4700	2.57¢ ±0.32	6.53¢ ±0.14		

\*Cost-per-Suite used to calculate average Cost-per-Page.
Cost-per-Page includes supplies other than ink/toner like user-replaceable consumables.
All testing performed using default driver settings for Plain paper for Color and Black & White printing.

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# Methodology

#### **Determine Ink Yields**

Tested Devices (assumed to be representative)

- ° Xerox Phaser 8860 Printer
- ° HP Color LaserJet 4700 Printer

#### Test Document

- Office user representative 4-page Suite
- ° Test Suite, with reasonable color balance (part of ISO/IEC 24712 Test Suite)
- ° Almost 25,000 printed pages (6250 4-page Suites)

### Measure average number of Suites per each color ink pack<sup>†</sup>/ toner cartridge

- ° Print in DEFAULT settings for Plain Paper via Adobe Reader (8.1.0)
  - For black & white output, 'Black and White' option was selected in the Xerox driver, 'Print in Grayscale' for HP
- ° Print semi-continuously to End-of-Life
  - · Semi-continuously: stops for paper replenishment, overnight, etc.
  - End-of-Life: earlier of INK/TONER OUT signal, or visible defects (fade) attributable to ink/toner supply
     Phaser 8860 and CLJ 4700 have a hard stop at INK/TONER OUT; no visible defects were observed prior to hard stop
- ° Measure number of usable Suites per each color ink pack / toner cartridge
  - · Usable suite is defined as full four-pages; if printing stops mid-suite, the last full suite printed is used for yield computation
- ° Controlled Environment
  - Test laboratory temperature was maintained at typical office ambient 23.0°C ±2.0°C and RH of 50% ±10%
  - Staples 20# Copy Paper and ink / toner sets were acclimated for a minimum of eight hours



<sup>&</sup>lt;sup>†</sup> Xerox solid ink sticks packaged with 6 sticks per ink pack

## Methodology (cont'd)

## **Determine Component Costs**

Calculate average ink / toner component costs

- ° Divide each ink pack / toner cartridge cost by the corresponding ink / toner yield
  - Average suites-per-ink pack or average suites-per-toner cartridge

### Calculate user-replaceable component costs

- ° Include user-replaceable components rated for less than the life of the printer
  - Xerox Phaser 8860 has a user-replaceable Maintenance Kit
  - HP Color LaserJet 4700 has a user-replaceable Image Transfer Kit and a Fuser Kit
- ° Component contributions to total Cost-per-Suite based upon manufacturer-rated yields

Component Costs		CYAN	MAGENTA	YELLOW	BLACK
Xerox Phaser 8860	Ink Pack (6 sticks)	\$76.00	\$76.00	\$76.00	\$209.00
	Maintenance Kit	\$43.00			
HP Color LaserJet 4700	Toner	\$253.33	\$253.33	\$253.33	\$179.00
	Image Transfer Kit	\$233.00			
	Fuser Kit	\$285.00			

Pricing (excl. VAT) as per GAP Intelligence, provided by Xerox as of 11/15/07

## **Calculate Average Cost-per-Page**

Calculate Cost-per-Suite

° Sum the per-Suite component costs to obtain total Cost-per-Suite (four pages)

## Calculate Average Cost-per-Page

° Divide the Cost-per-Suite by 4 (four-page Suite) to calculate average Cost-per-Page

