

# **Xerox Phaser 8860** **vs.** **HP Color LaserJet 4700**

**Cost-per-Print Comparison: Swiss centimes**  
*Color for the cost of Black & White*

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***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 them 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

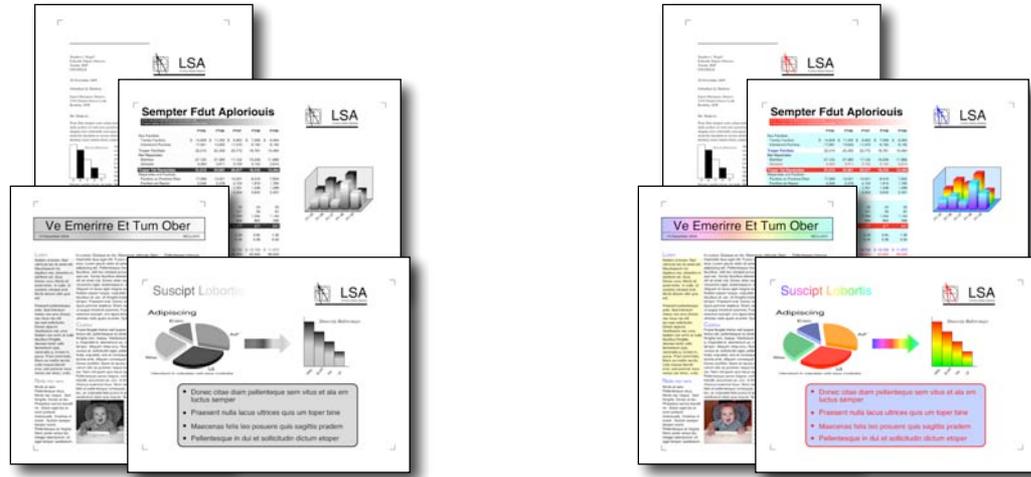
Independent testing by *SpencerLab* Digital Color Laboratory was commissioned by Xerox Corporation



# Xerox Phaser 8860 vs. HP Color LaserJet 4700

## Cost-per-Print Comparison: *Swiss centimes*

**spencerLAB**  
COST-PER-PRINT TESTED



4-page Test Suite  
MIXED TEXT & GRAPHICS

Average Cost-per-Page*		
Mode	Black & White	Color
Xerox Phaser 8860	<b>3.92c ±0.13</b>	<b>3.99c ±0.20</b>
HP Color LaserJet 4700	<b>3.91c ±0.49</b>	<b>10.05c ±0.21</b>

\*Cost-per-Suite used to calculate average Cost-per-Page.

Cost-per-Page includes supplies other than ink/toner like user-replaceable consumables.

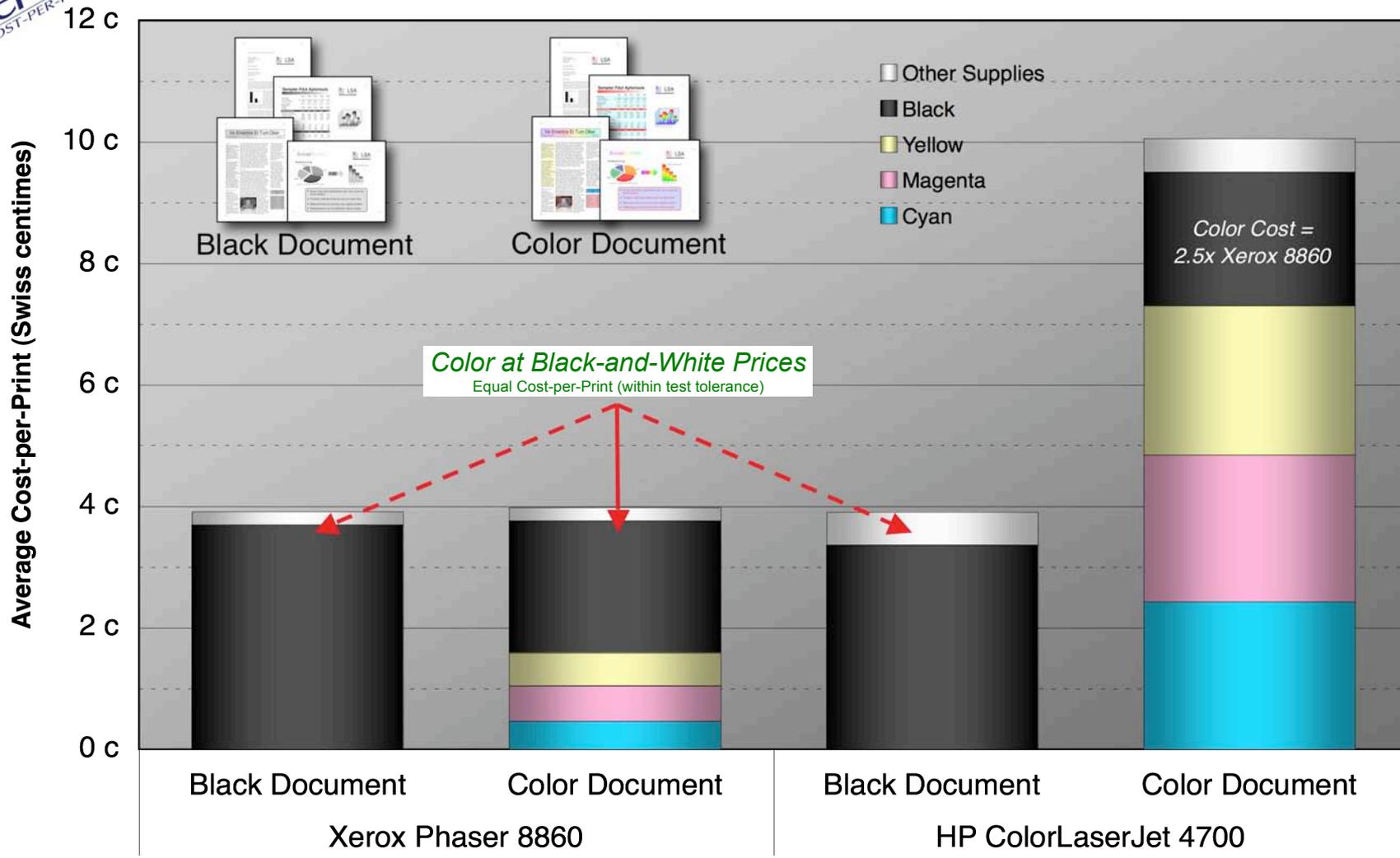
All testing performed using default driver settings for Plain paper for Color and Black & White printing.

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# Methodology

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## 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> 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	<i>Ink Pack (6 sticks)</i>	CHF 106.35	CHF 106.35	CHF 106.35	CHF 319.04
	<i>Maintenance Kit</i>	CHF 65.64			
HP Color LaserJet 4700	<i>Toner</i>	CHF 392.00	CHF 392.00	CHF 392.00	CHF 276.00
	<i>Image Transfer Kit</i>	CHF 328.00			
	<i>Fuser Kit</i>	CHF 409.00			

Pricing as per manufacturers' web sites (incl. VAT) as of 11/29/07

## 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

