

Title: Official Canon Report on LUCIA Ink Longevity Canon Internal and Wilhelm Imaging Research Testing Results

Model: iPF5000, iPF8000, iPF9000

Note: This information sheet is intended for end users.

Canon Internal Test Result

Media Name	Colorfastness (years)	
	Light	Gas
Plain Paper	110	100
Canon Heavyweight Coated Paper	>100	80
Canon Premium Matte Paper	>90	80
Canon Glossy Photo Paper	>90	70
Canon Semi-glossy Photo Paper	>90	70
Canon Fine Art Photo Rag by Hahnemühle (Color)	90	80
Canon Fine Art Photo Rag by Hahnemühle (B/W)	>150	n/a
Hahnemühle Canvas Artist 340gsm	90	50

Canon Internal Print Longevity Test Conditions

Light fastness

White fluorescent light (70,000 Lux), Temperature 24°C, 60%RH
Assuming 500 Lux × 10 hours is the light amount for one day

Gas fastness

Temperature (24°C) and humidity (60%RH) are controlled in an environment of mixed gasses of O₃, NO_x and SO_x. The ratio of the gases is typical to indoor air composition (O₃ : NO_x : SO_x = 3:19:1) with 100 times concentration in order to accelerate color fading, assuming 72 hours are exposed amount for one year.

Print conditions

Printer driver setting: default mode for each media
No color adjustment
Colors: Bk, C, M, Y; Optical density: 1.0 and 0.6

Endpoint criteria

There are the following pre-determined optical density loss criteria. Color fastness is expressed in years, which is derived from the actual exposed time when either of the following criteria is reached.

Endpoints of optical density loss for C, M, Y

Cyan: 35 % Magenta: 25 % Yellow: 30 %

Endpoint of optical density loss for BK

Optical density loss for each composite color

Cyan: 25 % Magenta: 20 % Yellow: 35 %

Endpoint of color composition imbalance due to difference in color loss among C, M and Y

C - M: 12 %, M - C: 15 %, C - Y: 18 %, Y - C: 18 %, Y - M: 18 %, M - Y: 18 %

Wilhelm Imaging Research Light Resistance Testing Result (Ongoing*)

Media Name	Test Result (years)
Canon Heavyweight Coated Paper	>100 (ongoing)
Canon Premium Matte Paper	96.9 (final)
Canon Glossy Photo Paper	95.8 (final)
Canon Semi-glossy Photo Paper	97.7 (final)
Canon Fine Art Photo Rag by Hahnemuhle	95.4 (final)

*The Wilhelm Imaging Research Light Resistance Testing is ongoing. Canon Heavyweight Coated Paper has not reached its endpoint yet (as of March 2007).

Wilhelm Imaging Research Light Resistance Testing Conditions

WIR Display Permanence Ratings are based on accelerated testing for framed prints, under glass with a 5mm air gap. Testing is conducted at 24°C, 60% relative humidity and with a 35,000 lux light source. Display Permanence Ratings assume an average daily exposure of 450 lux for 12 hours per day and are calculated using WIR Version 3.0 endpoint criteria. Canon cannot guarantee the longevity of prints. Results may vary depending on the printed image, drying time, display/storage conditions, temperature, humidity, and other environmental factors.

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