AUGUST 2025

Comparative Ink Tank Device Performance: **Canon PIXMA G3570 vs. Epson EcoTank ET-2850**

Background

Keypoint Intelligence was commissioned by Canon Europe Ltd. to conduct a confidential head-to-head performance evaluation between the Canon PIXMA G3570 printer and the Epson EcoTank ET-2850. The aim of this study was to assess each device's performance across several critical metrics, including page yield, reliability, and image quality.

To ensure a consistent and controlled testing environment, each device was operated independently using identical test protocols and conditions. Both printers were subjected to a rigorous daily usage simulation in simplex mode, operating for up to seven hours per day with a designated one-hour inactivity break to mimic typical office workflows. The ISO/IEC 24711 methodology served as the foundation for page yield testing, utilizing the ISO 24712 five-page test suite printed in 100-set batches (500 pages total per batch). Page 5 of each 100th batch was retained to monitor image consistency and check for nozzle blockage throughout the test duration.

Device reliability was evaluated by tracking nozzle performance, recording the frequency and success of cleaning routines, and logging any printer anomalies such as paper jams, system errors, or early end-of-life ink depletion. A nozzle was deemed permanently blocked only if vendor-recommended maintenance procedures failed to restore function. Test continuation in such cases proceeded with standard nozzle checks and documentation of any spontaneous recovery.

Image quality was assessed at baseline and at defined intervals throughout testing using both visual inspection and quantitative analysis. Evaluation parameters included halftone integrity, text and fine-line sharpness, and colour reproduction, with output printed on plain and photo media. Assessments were conducted using visual grading scales, X-Rite spectrophotometers, and ColorThink Pro profiling software. Additional analysis was performed in each device's designated eco or ink-saving mode, with OCR legibility testing conducted to gauge font recognition fidelity under reduced ink usage conditions.

Executive Summary

Testing revealed significant performance advantages in favor of the Canon device across virtually every category assessed:

Key Comparative Findings:

	Canon PIXMA G3750	Epson EcoTank ET-2850	Canon Advantage
Blocked Nozzle Events	8 events (30K impressions)	11 events (30K impressions)	27% fewer interruptions
Cleaning Control	K or CMYK selective	All colours flushed	Targeted cleaning saves ink
Plain Paper Output	Bolder text, punchier colours	Grainy, lower contrast	Clearer, more professional visuals
Greyscale Reproduction	Smooth, neutral greys	Cyan-tinged, grainier	More accurate grayscale tone
Small Font & Fine Line Clarity	Minimal wicking/bleed; clearer edges	More wicking/bleed; less clarity	Sharper detail, better small text
OCR Accuracy (Eco Mode)	90-91% (matches standard mode)	Drops to 73-75%	Up to +18% better readability
External Use (Eco Mode)	Still suitable (no visible loss)	Unsuitable (quality drop)	Business-ready even in eco mode
Colour Gamut Loss in Eco Mode	No perceptible change observed	69% colour space loss	Retains nearly full colour gamut

From a reliability standpoint, the Canon PIXMA G3570 recorded fewer blocked nozzle events than the Epson ET-2850 over the course of 30,000 impressions (8 versus 11), with Canon requiring no ink-intensive power cleans. Like its MAXIFY counterpart, the G3570 benefits from user-selectable cleaning modes that isolate black (K) or CMY channels. This targeted maintenance routine reduces unnecessary ink waste—unlike Epson's all-or-nothing cleaning process, which flushes all colour channels regardless of which one is affected.

In terms of image quality, the Canon G3570 proved to be the superior performer on plain paper. Canon's output delivered sharper business graphics with richer text rendering, punchier colour fills, and more visually pleasing neutral greyscales. While Epson's output appeared grainier and more exhibited a noticeable cyan tint, Canon preserved clarity even in small fonts and fine lines, with fewer issues stemming from ink wicking or edge bleed.

OCR accuracy results underscored Canon's advantage in economy mode. The G3570 achieved a consistent 90–91% text recognition success rate whether printing in standard or eco mode—suggesting little to no compromise in text legibility when saving ink. In contrast, Epson's OCR performance declined sharply when switching to economy mode, dropping from competitive standard-mode scores to a more limited 73–75% range.

Eco mode quality preservation was another key differentiator. The Epson device showed a substantial drop in output rendering quality when ink-saving mode was engaged, rendering documents unsuitable for external or professional distribution. Canon's output, by comparison, remained suitable for business use even in eco mode. However, it should be noted that initial testing on the Canon G3570's economy setting yielded results that were nearly indistinguishable from standard mode in both visual output and colour gamut measurements. This unexpected parity raised questions about whether the eco mode was functioning as intended, prompting Keypoint Intelligence to dig deeper and assess different drivers and device modes. Regardless, the resulting benefit to end users is clear: there was no observed sacrifice in output quality when using Canon's eco setting.

While the Epson ET-2850 did demonstrate higher ink yields, the Canon PIXMA G3570 offered more efficient maintenance, sharper print output, and better text integrity in ink-saving when it comes to the majority of general office and mixed-content applications.

Overall, Canon's design advantages in maintenance efficiency, clarity of output, and eco-mode reliability position the PIXMA G3570 as the more dependable and professional-grade solution for users seeking quality and operational flexibility in a low-cost ink tank platform.

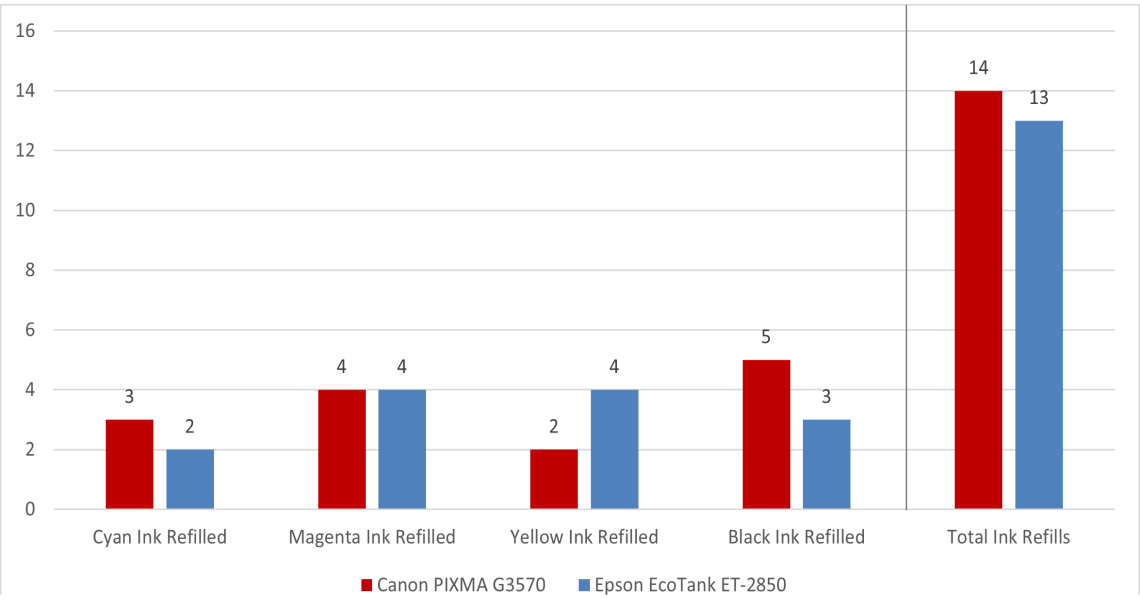
While this test was conducted using the Canon PIXMA G3570 and Epson EcoTank ET-2850 models, the findings may also be considered representative of functionally equivalent models sold in other non-European-Union countries/regions. The Canon G3570 is equivalent to the Canon G3470, while the Epson ET-2850 shares core specifications with the Epson Eco-Tank L4260, L3250, L3260, L3270, and L3280 models—all of which feature the same print head and performance characteristics, with only minor differences such as the inclusion of a screen display.

Reliability

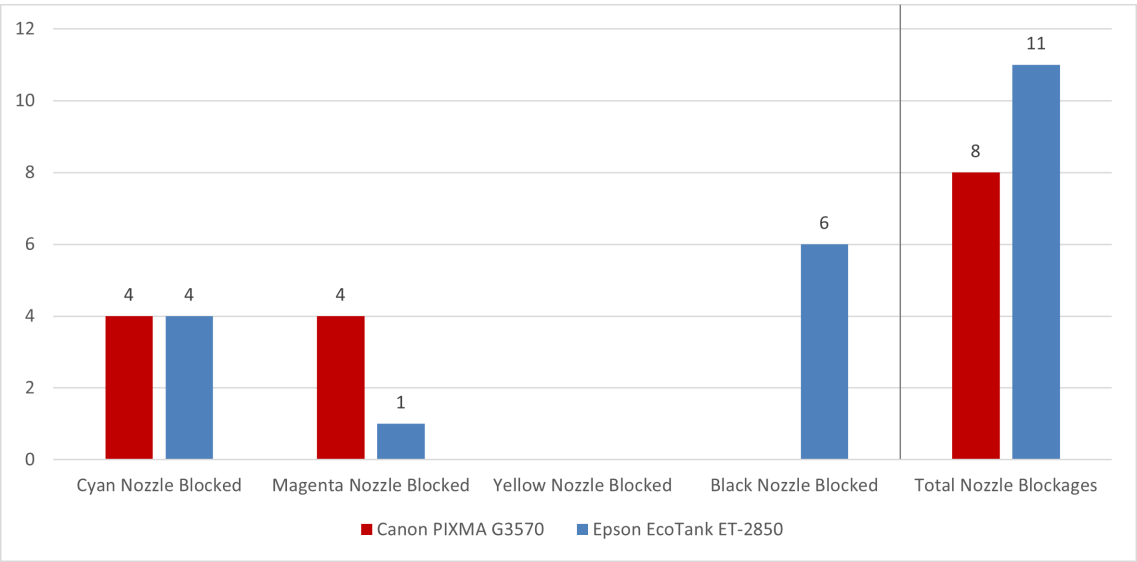
Although neither the Canon PIXMA G3570 nor the Epson EcoTank ET-2850 experienced any paper jams, error codes, or permanently blocked nozzles throughout the testing period, the PIXMA G3570 exhibited better reliability in terms of nozzle performance and head maintenance efficiency.

The PIXMA G3570 recorded a total of eight blocked nozzles over the test period compared to 11 nozzle blockages for the Epson ET-2850. Plus, while both devices required several standard cleaning routines, the Epson model relied exclusively on all-channel CMYK cleaning—resulting in 10 full clean cycles—whereas the Canon device used 8 more targeted CMY-only cleans. Epson's device also required a power clean, a more aggressive and ink-intensive procedure not necessary for the Canon model. The Canon's flexibility in cleaning routines—allowing users to initiate maintenance on just the K or CMY channels—further reduced ink waste and unnecessary downtime.

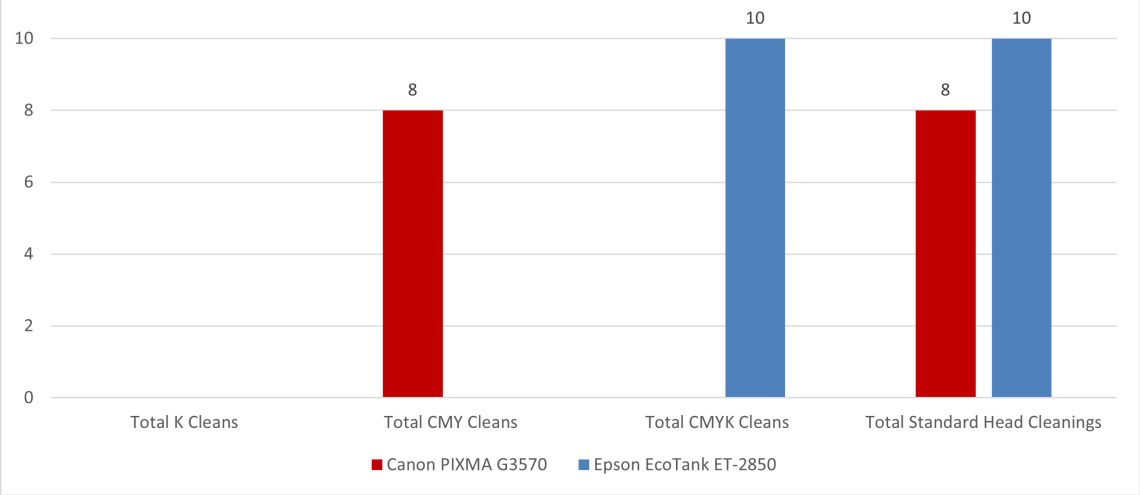
of Tank Refills by Device Per Ink Colour



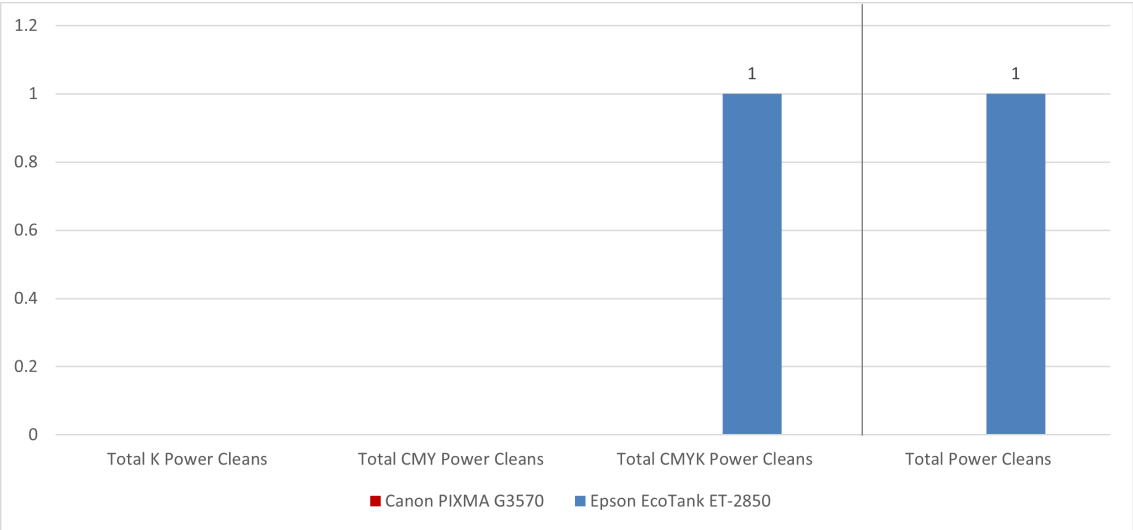
of Blocked Nozzles by Device Per Ink Colour



of Standard Head Cleanings by Device Per Ink Colour

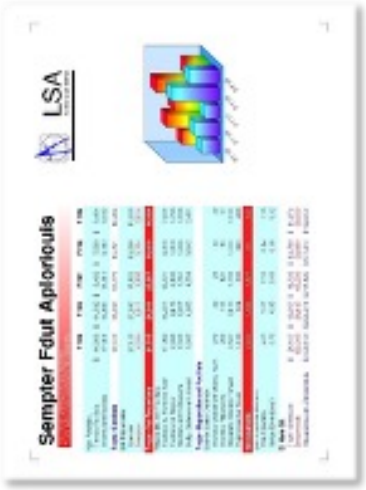
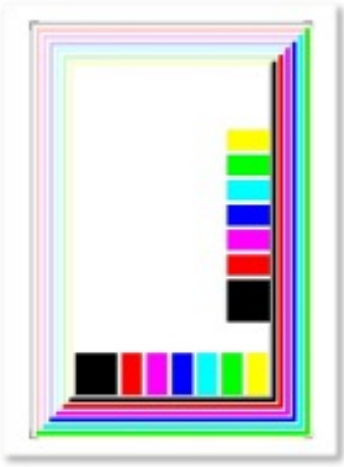


of Power Cleanings by Device Per Ink Colour



Page Yield

Keypoint Intelligence conducted its page yield tests using the ISO 24712 test targets (shown below).

		
ISO 24712 Test Target Page 1	ISO 24712 Test Target Page 2	ISO 24712 Test Target Page 3
		
ISO 24712 Test Target Page 4	ISO 24712 Test Target Page 5	

Excluding starter inks and any unfinished final cartridges, black ink yields from the EcoTank ET-2850 were about 11% higher than the PIXMA G3570. For CMY, the PIXMA G3570 achieved an average yield of 7,803 pages versus the Epson's 7,943 pages (roughly 2% more pages from Epson). Average CMYK yields were also slightly in favour of the EcoTank ET-2850, with about 4% more pages than the PIXMA G3570 (8,019 pages versus 7,717 pages, respectively).

Average Page Yield by Device Per Colour

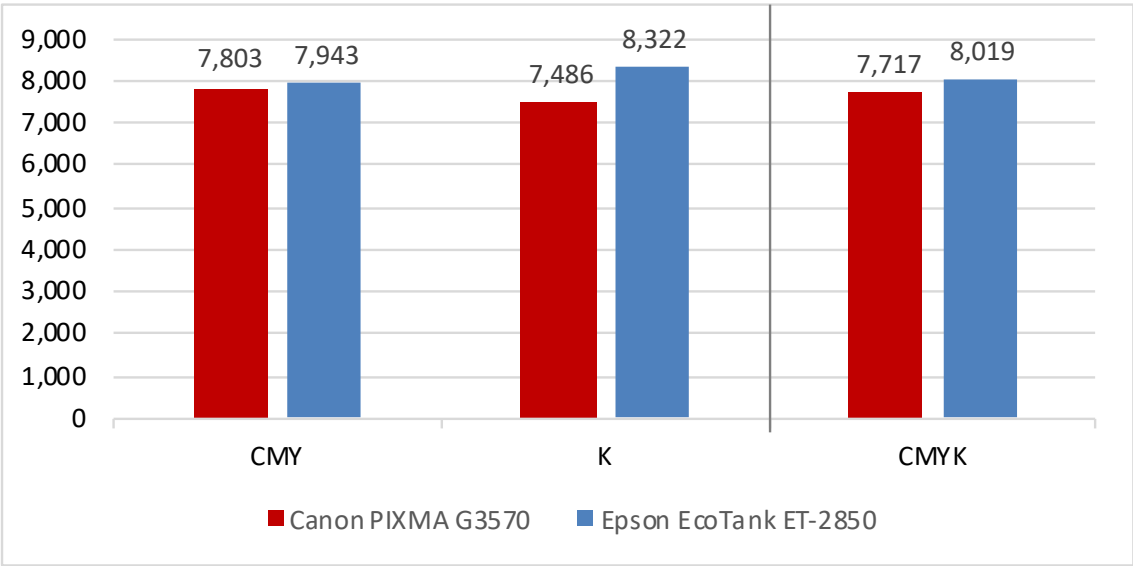


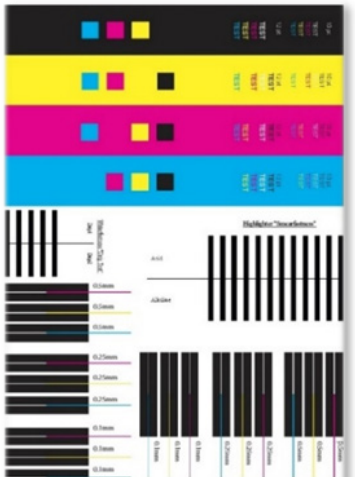
Image Quality

Keypoint Intelligence assessed the image quality of the ink cartridge brands tested using its own proprietary image quality test targets (shown below). Image quality is assessed on halftone integrity, text and fine-line sharpness, and colour reproduction, with output printed on plain and photo media.

Keypoint Intelligence Image Quality Test Targets

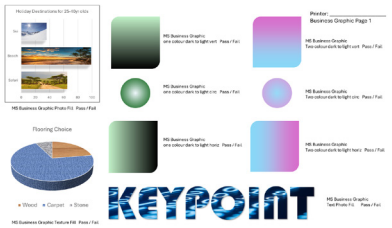
IQ Test Target One

IQ Test Target Two



IQ Test Target Three

IQ Test Target Four



IQ Test Target Five

IQ Test Target Six

IQ Test Target Seven

Text Quality Ratings

	Canon PIXMA G3750	Epson ET-2850
Boldness (darkness)	Good	Good
Sharpness	Very Good	Good
Fully Formed (no breakup)	Very Good	Fair
Smoothness (curves, serifs, lines)	Good	Fair
Overspray (w/mag)	Avg	None
Overspray (w/o mag)	None	None
Halo (w/mag)	None	None
Halo (w/o mag)	None	None

Both devices performed well overall in text reproduction, but the Canon PIXMA G3570 had a slight edge in rendering sharp, well-formed, and smooth characters. The PIXMA G3570 scored higher than the EcoTank ET-2850 for fullness, sharpness, and smoothness, producing clean, legible text with no signs of breakup. The ET-2850, while also rated "Good" for boldness, received a "Fair" for smoothness, indicating less refinement in fine text detail. Overspray and haloing were minimal for both, though the Canon showed minor overspray under magnification.

Line Art Quality Ratings

	Canon PIXMA G3750	Epson ET-2850
Stair-Stepping of Diagonal Lines	Avg	Avg
Overspray w/mag	Avg	None
Overspray w/o mag	None	None
Halo w/mag	None	None
Halo w/o mag	None	None
Fine Lines w/mag	Very Good	Good
Fine Lines w/o mag	Very Good	Very Good
Line Consistency w/mag	Good	Fair
Line Consistency w/o mag	Very Good	Good
Circles Fully Formed w/mag	Very Good	Fair
Circles Fully Formed w/o mag	Very Good	Good

The Canon PIXMA G3570 outperformed the Epson in line art reproduction as well. The PIXMA G3570 received "Very Good" ratings for fine line reproduction (both with and without magnification), line consistency, and circle formation. Its output showed minimal toner overspray and no visible haloing, suggesting solid ink control and visual clarity in detailed vector-based content. Stair-stepping in diagonal lines was limited and only mildly present, resulting in an overall clean appearance.

The Epson ET-2850, while competitive, displayed more variability. It received a mix of "Good" and "Fair" ratings across the same line art subcategories. Fine lines remained distinct but exhibited slightly more inconsistency in thickness and formation compared to Canon's output.

Halftone Pattern & Range Ratings

	Canon PIXMA G3750	Epson ET-2850
Smoothness (lack of graininess)	Good	Fair
Banding	None	Min
Distinct Separation Between Halftone Levels	Most	Most

Canon maintained its lead in halftone rendering with a smoother, grain-free output and no banding. Epson showed a "Fair" rating in this area and minimal banding, meaning tonal transitions were acceptable but not as seamless as Canon's. Both devices were rated "Very Good" for halftone range separation with evident distinctions across most tonal steps, suggesting comparable performance in reproducing grayscale gradients or photographic detail transitions.

Solids Ratings

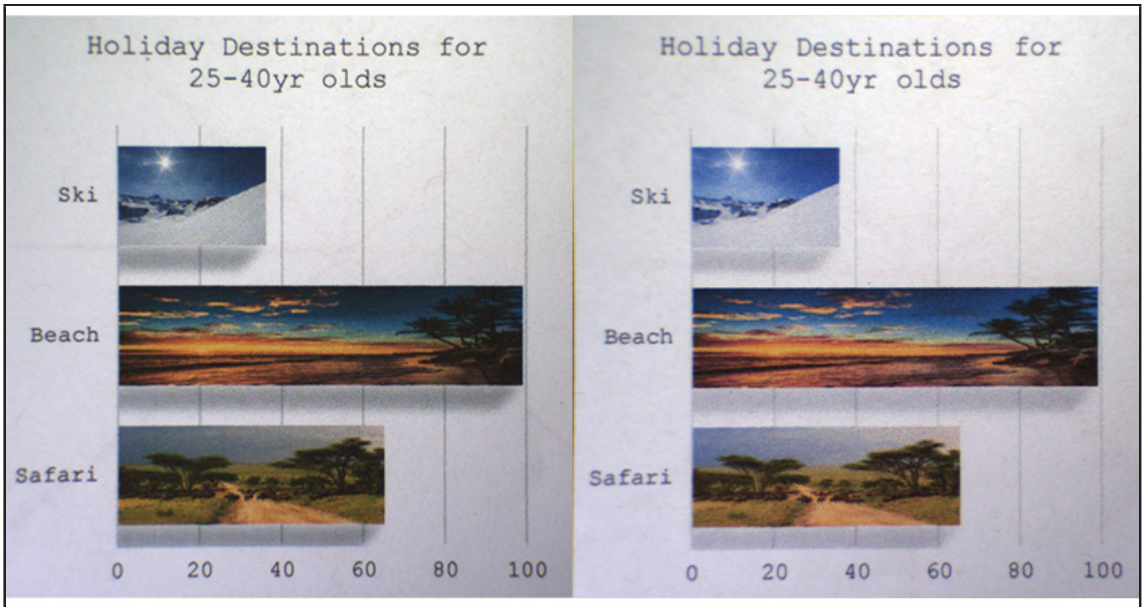
	Canon PIXMA G3750	Epson ET-2850
Visible Darkness/Boldness	Good	Good
Consistent coverage (lack of mottling)	Good	Good

In the solids category, the Canon PIXMA G3570 and Epson EcoTank ET-2850 scored similarly, with both devices earning "Good" ratings for visible darkness and coverage uniformity, indicating that solid areas—such as large blocks of colour or black fills—were rendered with strong density and minimal mottling on both printers.

Colour Business Graphics Ratings

	Canon PIXMA G3750	Epson ET-2850
Sharpness/Fine Detail	Very Good	Fair
Pastel Shades	Good	Good
Background Reproduction	Very Good	Good

Both printers produced business graphics that were considered generally good and usable, but Canon delivered more controlled output. Canon received “Very Good” to “Good” across all metrics, including colour consistency, fine detail, pastel shade accuracy, and background rendering. Epson’s output was rated “Good”, and its saturation was noted as “Overly Bright,” which could result in unnatural or less professional colour representation.



PIXMA G3570 output (left) against EcoTank ET-2850; sharper text from Canon, and greater saturation from the Epson’s output .

Colour Photo Image Ratings

	Canon PIXMA G3750	Epson ET-2850
FLESH TONES	Slightly Yellow and Dark	Slightly Yellow
Smoothness—lack of graininess	Good	Good
Ability to produce Wide Range of Shades	Very Good	Good
Colour Halftone Range	Very Good	Very Good
Separation between Levels	Good	Good

Here, the Canon PIXMA G3570 slightly outperformed the Epson EcoTank ET-2850. The Epson received "Good" ratings in all but one subcategory, revealing a noticeable gap in photographic rendering quality. However, and while both printers displayed a slight yellow cast in flesh tones, Canon's output was slightly darker than that of the Epson. .

Eco/Ink Save Mode Image Quality

In eco or ink-saving modes, image quality testing showed a clear distinction between the Canon PIXMA G3570 and Epson EcoTank ET-2850. Text output from the Canon remained sharp, dense, and legible across fonts and point sizes, while the Epson's economy output displayed considerable fading, compromising both visual clarity and Optical Character Recognition (OCR) reliability. Canon's output in economy mode preserved near-parity with its standard print mode, while Epson's quality degraded to levels unsuitable for professional documentation or external communications.

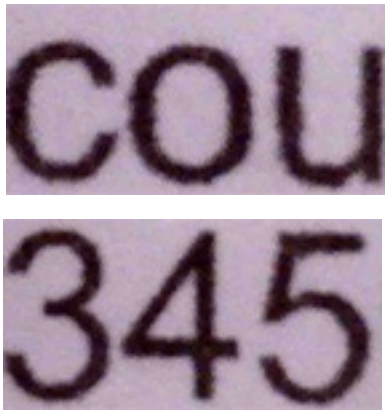
In addition to qualitative assessments, below are Canon's official print yield estimates that illustrate the efficiency gains in its economy mode for the PIXMA G3570:

- **Black ink yield:**
  - Standard mode: 6,000 pages
  - Economy mode: 7,600 pages (+21% claimed increase)
- **Colour ink yield:**
  - Standard mode: 7,700 pages
  - Economy mode: 8,100 pages (+5% claimed increase)

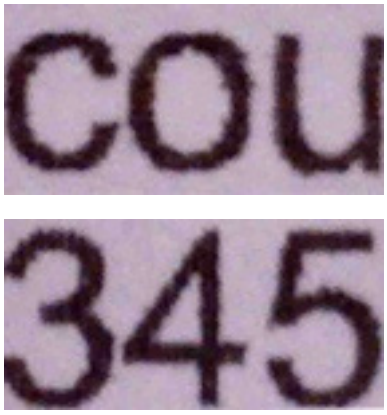
These figures suggest that Canon's economy mode may deliver meaningful ink savings without sacrificing functional quality. While these yield values were not independently verified during this test cycle, they provide useful context—especially in contrast to Epson's economy mode, which showed a clear visual reduction in ink coverage and experienced a dramatic drop in OCR accuracy.

It is important to note that Keypoint Intelligence did not validate Canon's quoted page yields under economy settings during this evaluation, and we recommend readers interpret these figures as manufacturer-stated claims. However, when paired with the observed image quality consistency in eco mode, Canon's stated efficiencies strengthen the argument for its economy setting as a viable low-cost, high-output solution.

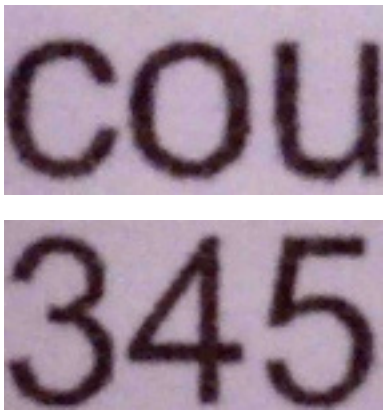
Canon PIXZMA G3570 (Default)



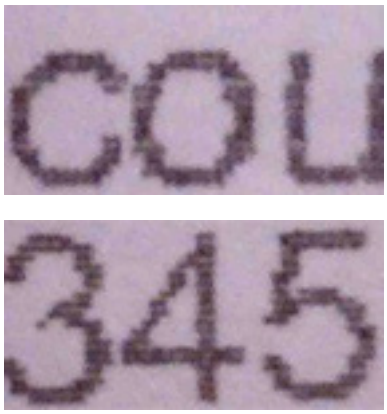
Epson EcoTank ET-2850 (Default)



Canon PIXZMA G3570 (Eco/Ink Save Mode)

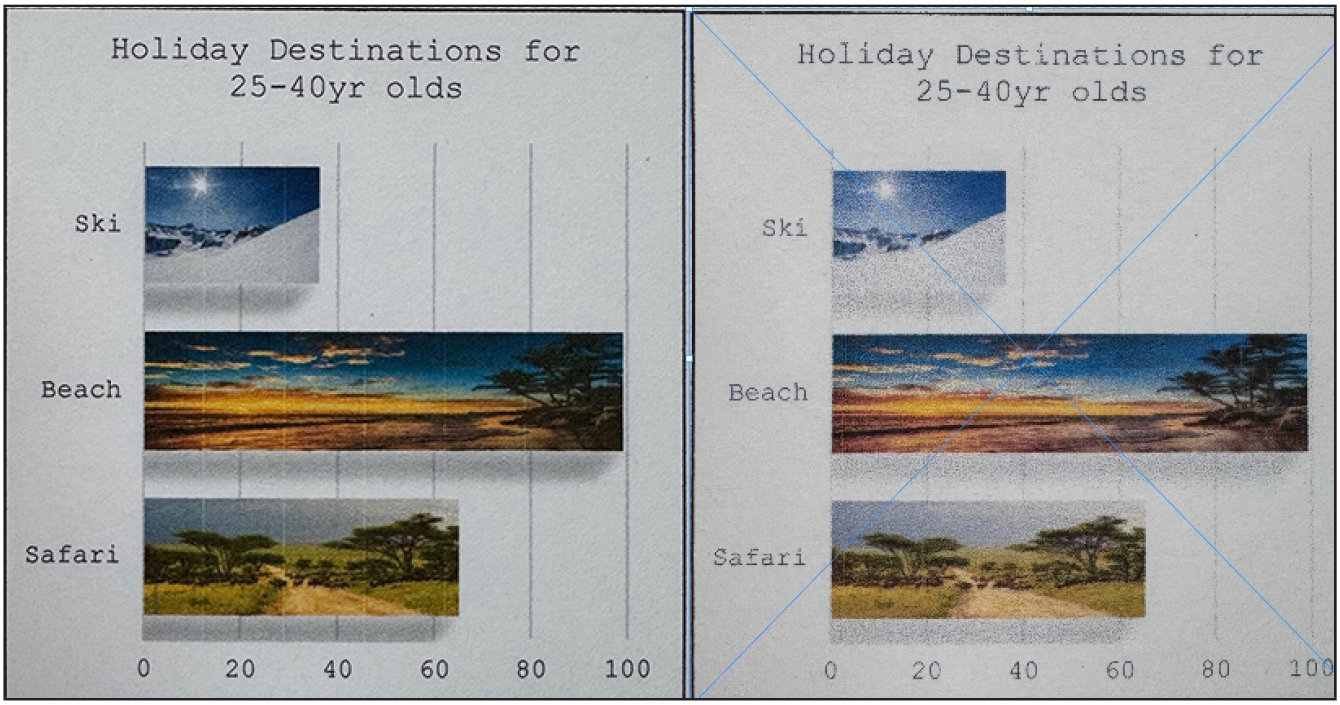


Epson EcoTank ET-2850 (Eco/Ink Save Mode)



Graphics Sample 1 : Canon PIXZMA G3570 (Eco) vs Epson EcoTank ET-2850 (Default)

Graphics Sample 2: Canon PIXZMA G3570 (Eco) vs Epson EcoTank ET-2850 (Default)



OCR Accuracy

Optical Character Recognition (OCR) performance was evaluated under both standard and economy print modes to determine how well each device preserved machine-readable text across different quality and ink consumption settings.

In standard mode, both the Canon PIXMA G3570 and the Epson EcoTank ET-2850 delivered strong OCR performance.

Precision-based OCR tests—those emphasizing accurate character shape and font retention—produced recognition rates above 90% for both devices.

Canon slightly edged out Epson in both test categories, scoring 90.42% for text-only documents and 90.29% for mixed text and photo output, compared to Epson's 89.99% and 90.38%, respectively.

Speed-optimized recognition results were also close, with Canon scoring 75.80% on text and 74.52% on mixed-content documents. Epson came in just slightly higher on the text-only test (75.89%) but lower on mixed content (71.23%).

These results indicate that both devices are highly compatible with OCR workflows in standard print mode, with only minor fluctuations between them in overall accuracy and text readability.

However, the gap widened significantly in economy mode, where the Canon G3570 preserved near-standard levels of OCR performance while the Epson ET-2850 saw a notable decline.

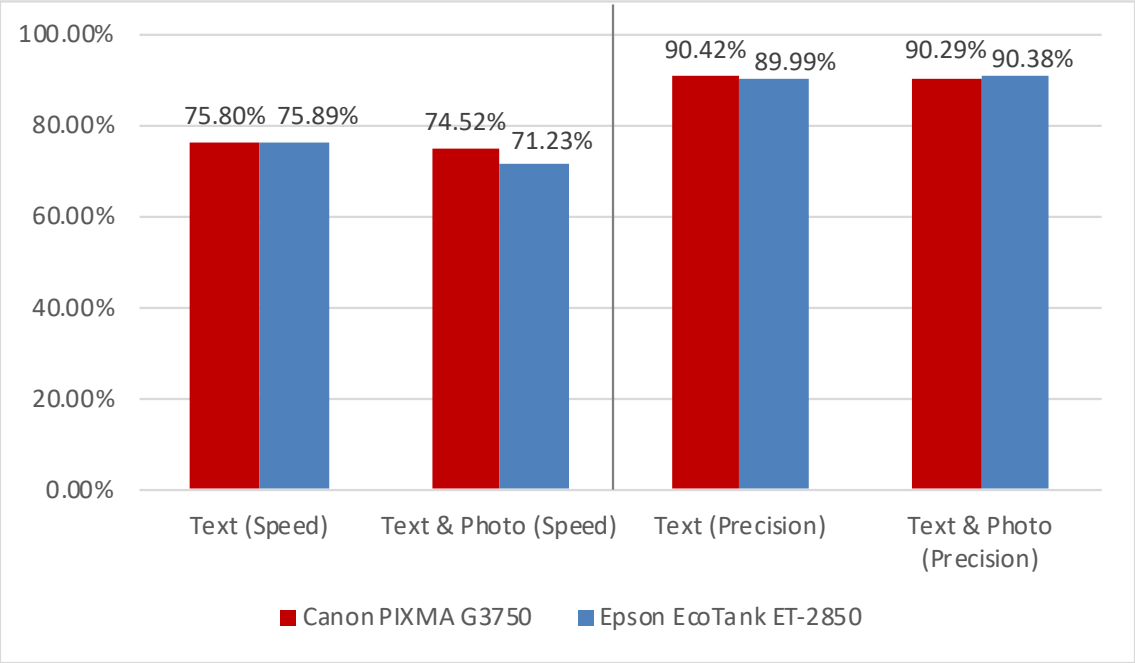
Canon maintained impressive accuracy across both speed and precision tests, with recognition rates ranging from 74.60% to 90.45%, suggesting minimal compromise to character integrity or document legibility. In contrast, Epson's OCR performance dropped substantially.

Speed-based recognition fell to 59.28% for text-only content and 49.15% for text with photos—reductions of more than 20 percentage points in some cases.

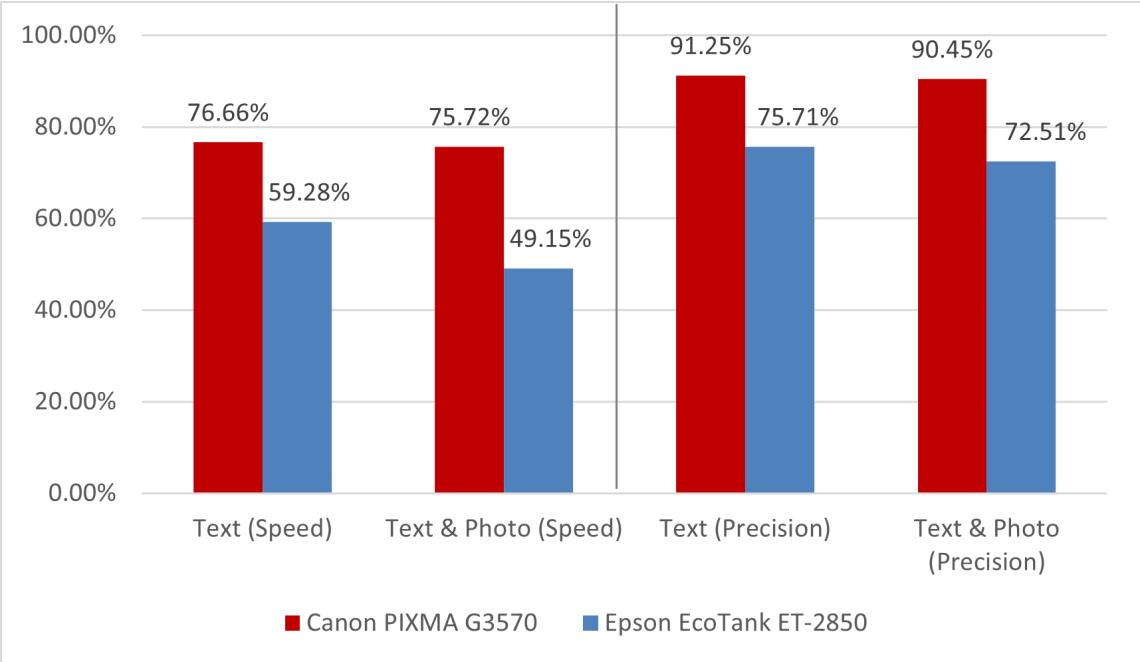
Even in precision-focused evaluations, where fonts are typically easier to parse, Epson failed to exceed 75.71% (text-only) and 72.51% (text + photo), marking a significant decline from its standard mode performance.

These results demonstrate that while both devices are suitable for OCR-driven applications in default print mode, the Canon PIXMA G3570 offers a more reliable option for users who require OCR compatibility even when using ink-saving or economy settings.

OCR Accuracy (Default)



OCR Accuracy (Economy/Ink Save)



Test Methodology

Test Methodology: Keypoint Intelligence to run each printer for up to seven hours per day in simplex model with an hour of inactivity in the middle of each day. The primary test target to be used throughout testing is the ISO24711 test suite. Jobs to be submitted in 100-set batches (500 pages total). Page 5 of the 100th batch shall be retained throughout testing to provide an IQ record throughout the entire test. The page shall also be checked for any nozzle blockages. Should a blockage be detected Keypoint Intelligence shall follow the vendor recommended maintenance routine until the head blockage is remedied retaining the reprinted page-5 sheet after blockage clearance as proof of resolution. Where a nozzle blockage cannot be remedied after following all the vendor's recommended countermeasures the nozzle shall be deemed to be permanently blocked. Testing shall then continue with maintenance measures only enacted when a new nozzle blockage is detected. It shall be recorded if the permanently blocked nozzle does over time remedy itself.

A) Page Yield:

Each refill ink cartridge will be run until the ink out notification is generated with page count recorded. Only fully exhausted refill cartridges shall be included in the overall yield average calculations. The ink yields of the first ink bottles shall be recorded separately and not used in the overall average yield calculation due to ink loss due to initial feed tube filling.

B) Reliability:

In addition to the recording of ink yield and nozzle maintenance procedures and permanent nozzle blockages, Keypoint Intelligence shall also record any other incidences of reliability failures including error codes, paper jams etc.

C) Image Quality

Keypoint Intelligence shall conduct an extensive image quality evaluation of the devices at the start of testing including the following metrics using the default quality mode (mode used for ISO speed rating)

Metric	Assessment Type	Paper Used
Fine lines and fonts	Visual and OCR accuracy	Plain
Colour Gamut	IT8 chart, spectro and ColorThink Pro software	Plain and Photo paper
Business Graphics	Visual	Plain
Photographic and halftone graphics	Visual	Plain and Photo paper

D) Eco Mode Image Quality

The above image quality evaluation to be conducted using the vendor's eco mode / ink saving setting. Font reproduction to be extended to include an OCR accuracy evaluation following Keypoint Intelligence's standard OCR test procedures.

Test Environment: Testing conducted under ambient conditions of 22°C (+/-2.7°C) and 45% RH (+/-10%), monitored daily by Dickson Seven-Day Temperature/Humidity Chart Recorder, in Keypoint Intelligence's test facility at Unit 11 The Business Centre, Wokingham, Berkshire RG41 2QZ. All testing will be held strictly confidential.

ABOUT KEYPOINT INTELLIGENCE

Keypoint Intelligence is a one-stop shop for the digital imaging industry. With our unparalleled tools and unmatched depth of knowledge, we cut through the noise of data to offer clients the unbiased insights and responsive tools they need in those mission-critical moments that define their products and empower their sales.

For over 60 years, Keypoint Intelligence has been the global document imaging industry's resource for unbiased and reliable information, test data, and competitive selling tools. What started out as a consumer-based publication about office equipment has become an all-encompassing industry resource. Keypoint Intelligence evolves in tandem with the ever-changing landscape of document imaging solutions, constantly updating our methods, expanding our offerings, and tracking cutting-edge developments.

For more information, please call David Sweetnam at +44 (0) 118 977 2000 or email him at david.sweetnam@keypointintelligence.com