

Agosto 2026

Valutazione comparativa grande formato: Canon imagePROGRAF TM-610M e multifunzione HP DesignJet T850 a confronto

Obiettivo del test

Canon Europe ha incaricato Keypoint Intelligence di condurre un test confidenziale relativo alle prestazioni di 36" Canon imagePROGRAF TM-610M e multifunzione HP DesignJet T850. Keypoint redigerà un report comparativo dei relativi punti di forza e debolezza dei due prodotti in termini di qualità dell'immagine, produttività, stampa di banner e poster, semplicità di utilizzo indipendente da computer, invio Direct Print, funzionalità del dispositivo, funzionalità del driver e consumo di inchiostro. Tutti i test devono essere eseguiti nel laboratorio di test europeo di Keypoint a Wokingham, Regno Unito.

Riassunto esecutivo

Categoria	Canon imagePROGRAF TM-610M	Multifunzione HP DesignJet T850
Qualità della stampa	✓	
Qualità della copia	✓	
Qualità acquisizione scansione	✓	
Produttività di stampa	✓	
Produttività di copia	✓	
Produttività di scansione	✓	
Stampa banner	✓	
Stampa poster	✓	
Invio Direct Print	=	=
Semplicità d'uso indipendente da computer	✓	
Funzionalità di impilatura	✓	
Impostazione delle funzionalità del dispositivo	✓	
Impostazione funzionalità del driver di stampa	✓	
Consumo di inchiostro	✓	

✓ indica un vantaggio del modello; = indica parità di prestazioni.

Canon imagePROGRAF TM-610M ha dimostrato netti vantaggi rispetto al multifunzione HP DesignJet T850 in diversi aspetti fondamentali relativi alle prestazioni, in particolare in termini di qualità delle immagini e produttività. Complessivamente, la qualità di stampa è risultata migliore su Canon, con una riproduzione più nitida di testo e line art, sbavature d'inchiostro meno visibili, riempimenti mezzitoni più uniformi e risultati migliori nella stampa AEC, GIS e fotografica. HP ha comunque garantito buoni risultati nella stampa AEC, GIS e fotografica, ma non è riuscita a eguagliare la definizione delle linee più nitida, il contrasto e la profondità superiori di Canon, né la riproduzione fotografica più luminosa e vivace osservata in tutte le modalità testate. In alcuni ambiti i risultati misurabili sono stati più simili: la scala di colori su carta comune è stata simile in modalità predefinita, mentre Canon ha offerto volumi di scala più ampi con le impostazioni di massima qualità sia su carta comune che su supporti patinati opachi. Anche la qualità di copia ha generalmente favorito Canon, che ha prodotto un testo più scuro e meglio definito, mezzitoni più uniformi e densità di riempimento più elevate in modalità Alta/Migliore, mentre il suo Delta E medio di fedeltà del colore è risultato inferiore sia con le impostazioni di massima qualità che con quelle Standard/Normale.

La qualità di acquisizione scansione è stata oggetto di una contesa più serrata, sebbene Canon abbia mantenuto un vantaggio in diversi ambiti importanti. La stampa ha mostrato in genere un testo più nitido e una riproduzione più uniforme delle linee sottili, oltre a garantire una precisione geometrica leggermente superiore. HP ha ottenuto buoni risultati con i mezzitoni, conservando meglio i dettagli in alcune aree ombreggiate e producendo gradazioni tonali uniformi; offre inoltre una modalità di scansione in scala di grigi che non è disponibile sul modello Canon. Le differenze sono diventate più evidenti con originali particolarmente impegnativi: Canon ha prodotto correttamente scansioni prive di pieghe dei campioni di giornali e riviste sgualciti, oltre a una scansione nitida e pulita su carta da lucido, mentre HP ha subito un inceppamento con la rivista leggera e la sua scansione del giornale ha presentato evidenti pieghe su tutta l'immagine. Entrambe hanno ottenuto buoni risultati con il manoscritto sbiadito: HP ha prodotto un'immagine più luminosa, mentre Canon ha smussato le pieghe più evidenti in modo più efficace. Anche la nuova impostazione Carta da lucido di Canon ha dato risultati particolarmente soddisfacenti, producendo una scansione CAD nitida e pulita dell'originale su carta da lucido, con linee sottili ben definite e uno sfondo bianco pulito, mentre nella scansione di HP erano visibili ombreggiature se osservata con un ingrandimento.

La produttività è stata uno dei principali punti di forza di Canon TM-610M. Nel test con flussi di lavoro misti, ha stampato il carico di lavoro con una velocità superiore del 56,4% in modalità predefinita, del 42,3% in modalità Standard/Normale e dell'80,4% con l'impostazione di qualità massima, registrando al contempo notevoli vantaggi nei flussi di lavoro DWF sia a colori che in bianco e nero. Canon si è dimostrata più veloce in tutti i test di uscita prima copia in formato A1 e A0, con vantaggi che in genere variavano dal 22% circa al 58%, e si è rivelata significativamente più veloce nei flussi di lavoro di scansione in PDF e in JPEG, con alcuni dei miglioramenti più significativi registrati a 600 dpi. Anche nella stampa di poster Canon ha dato il meglio di sé in tutte le modalità testate e l'impostazione unidirezionale ha eliminato in gran parte le lievi striature riscontrate in modalità Veloce, una funzione non disponibile sul modello HP. Canon ha completato correttamente il test sul banner da 106 pollici senza riscontrare problemi visibili nella qualità dell'immagine, mentre HP non è riuscita a portare a termine il test nonostante diversi tentativi. HP ha registrato il tempo più veloce per l'uscita prima pagina dopo un weekend di mancato utilizzo, anche se Canon è risultata notevolmente più veloce dallo stato di pronto.

TM-610M introduce inoltre un nuovo design dello scanner integrato, caratterizzato da una configurazione più piatta e compatta e da un'area di appoggio dei documenti più ampia, il tutto completato da uno schermo tattile da 5 pollici inclinabile e personalizzabile. In confronto, HP ha uno schermo tattile più piccolo e fisso che non è personalizzabile. Tra gli altri vantaggi offerti da Canon figurano i serbatoi d'inchiostro hot-swap, il monitoraggio dei supporti in rotolo tramite codici a barre, la stampa in rotolo realmente senza bordi, un ingombro ridotto, funzionalità dei driver più complete e, in particolare, una migliore raccolta delle stampe A0 ciclo lungo nel cestino standard. HP mantiene notevoli vantaggi in termini di utilizzabilità e funzionalità, tra cui un vassoio per fogli singoli multipli che può funzionare senza rimuovere fisicamente il rotolo installato, la scansione in batch (che consente agli utenti di acquisire e creare documenti PDF multi-pagina, particolarmente utile in ambienti di scansione più impegnativi), il supporto per i file di scansione TIFF, la stampa USB diretta, un telaio più leggero e un consumo energetico attivo nominale inferiore. L'invio stampa diretto e i flussi di lavoro su dispositivi mobili hanno dato ottimi risultati su entrambi i dispositivi. I test sul consumo di inchiostro hanno dimostrato che HP ha consumato meno inchiostro nella prova del progetto architettonico, mentre Canon ne ha consumato il 15,7% in meno per il poster ISO e il 31,2% in meno per la mappa GIS.

Nel complesso, la combinazione di una qualità dell'immagine complessivamente superiore, una produttività notevolmente più elevata in termini di stampa, copia e scansione, una gestione più affidabile degli originali difficili da acquisire e una serie di vantaggi in termini di flusso di lavoro e utilizzabilità ha permesso a Canon imagePROGRAF TM-610M di ottenere il primato assoluto nella valutazione di Keypoint Intelligence.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Print Quality

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Text	✓	
Fine Lines	✓	
Halftone Range	=	=
Halftone Fill	✓	
Solid Density	✓	
AEC Graphics	✓	
GIS Graphics	✓	
Colour Photographic Images	✓	
Monochrome Photographic Images	✓	
Colour Gamut (Plain Paper, Various Tested Modes)	✓	
Colour Gamut (Matte Coated Paper, High/Best)	✓	

✓ denotes a model advantage; = denotes parity in performance. Image quality testing was conducted on Canon 1570B Standard Paper FSC 90 gsm and HP Universal Bond in default (Fast/Normal) and highest quality (High/Best) settings.

- The Canon TM-610M delivered the stronger overall colour and monochrome print image quality, producing higher optical CM and Black densities and cleaner reproduction of text and line art, and less visible ink bleed. Its advantage with higher black densities was reflected in its text output, showing dark, distinct characters. Both devices performed highly for halftone range, but Canon produced smoother fill areas overall. The TM-610M produced larger colour gamuts at the highest quality settings whether on plain or on matte coated paper; in default settings on plain paper both models' gamuts were comparable. Canon delivered stronger AEC, GIS, and photographic output overall, with better contrast, brighter colours, and more consistent reproduction of fine detail compared with HP's output.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Visual Print Quality Summary

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP	Comparative Finding
Text	Clean, crisp serif text, legible to 3-pt. level with no visible bleed in default and highest quality modes. Sans serif text displayed slight ink bleed in default but clean and sharp in highest quality	Dark serif text, legible to 3-pt. in default and highest quality modes; sans serif text fully formed at 4-pt. level in default and 3-pt. in highest quality. Overall, character definition was slightly fuzzy due to ink bleed in both modes	Canon advantage
Positive (Black-on-White) Fine Lines	Very good 0.1-pt. fine lines; clean, smooth	Slight bleed in default; less distinct 0.1-pt fine lines	Canon advantage
Circles	Smooth and distinct 0.1-pt circles in default and highest quality modes	0.1-pt circles faint with some stair-stepping in default; improved in highest quality but not as distinct as Canon's	Canon advantage
1x1 Pixel Grids	Consistent coverage; crisp uniform dark dots in all modes	Intact 1x1 grids but dots were faint; grids displayed inconsistent dot laydown in highest quality	Canon advantage
Reverse (White-on-Black) Line Artwork	0.1-pt fine lines & circle visible and fully formed; 1x1 pixel grid intact in both modes but inconsistent dot laydown in default	0.25-pt fine lines and circles visible but fuzzy; unable to reproduce 1x1 grids; 2x2 grids displayed inconsistent laydown and dot formation	Canon advantage
Halftone Range	Clear transitions across 10% to 100% dot-fill levels	Clear transitions across 10% to 100% dot-fill levels	Comparable
Halftone Fill	Very good smooth CMY and neutral grey halftones	Neutral grey halftones that were slightly grainy at the 10%-50% dot fills. Colour fills were smooth but not as bright as Canon's	Canon advantage
AEC Graphics	High level of details with dark text and fine lines; slight ink bleed visible under magnification in default but eliminated in highest quality	Good details; bolder lines; slight ink bleed in default and highest quality under magnification, meaning spacing between fine lines is less distinct in all modes	Canon advantage
GIS Graphics	High reproduction standard; excellent details, better contrast, and depth of field in default and highest quality	High reproduction standard; very good colours and contours but contrast in some light areas was less pronounced	Canon advantage
Colour Photographic Images	Very good quality overall. In default, colours are slightly oversaturated (salmon); realistic metallics; warm (reddish) skin tones; good detailing and minimal banding in some areas. In highest quality mode, banding is eliminated; bright, punchy colours, vivid metallics with depth, sharp detailing, and smooth tones. Warm skin tones	Quality improves with highest quality mode. In default, images lack vibrancy and contrast; slightly grainy tonal gradations and some banding. Cool, dull skin tones in default which improve to warm and natural-looking in highest quality. Colours improve and are brighter overall; metallics remain flat but are richer in colour	Canon advantage

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP	Comparative Finding
Monochrome Photographic Images	True neutral grey tones in all modes; smooth tonal gradations; very good detailing in light areas in particular. Minimal banding only in default mode	True neutral grey tones in all modes. Very good detailing and contrast in light/dark areas in default while in highest quality some darker areas lose fine detailing; slight graininess in tones in all modes	Canon advantage

Measurable Print Quality Summary

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP	Comparative Finding
Colour Optical Density	Higher CM, K densities in default and highest quality modes	Higher Y densities in default and highest quality modes	Canon advantage
Black Optical Density	Higher density in default and highest quality modes	-	Canon advantage
Colour Gamut (Plain Paper, Default Mode)	274,518 (Fast)	278,370 (Normal)	Comparable
Colour Gamut (Plain Paper, Highest Quality Mode)	336,770	319,140	Canon 5.5% larger
Colour Gamut (Matte Coated Paper, Highest Quality Mode)	379,579	358,871	Canon 5.8% larger

Comparative Wide Format Evaluation:
Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP



Fruits and vegetables

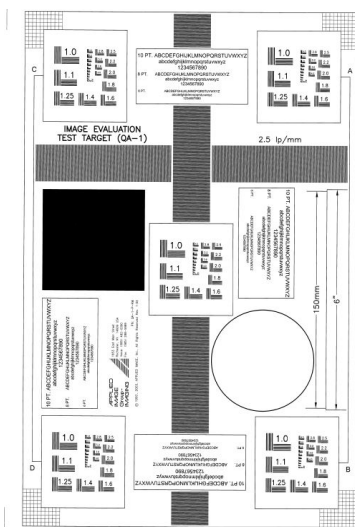


Keypoint Intelligence's Colour and Greyscale Halftone Test Targets

Copy Quality

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Text	✓	
Fine Lines	=	=
Solid Density	✓	
Halftone Reproduction	✓	
Colour Fidelity	✓	

✓ denotes a model advantage; = denotes parity in performance.

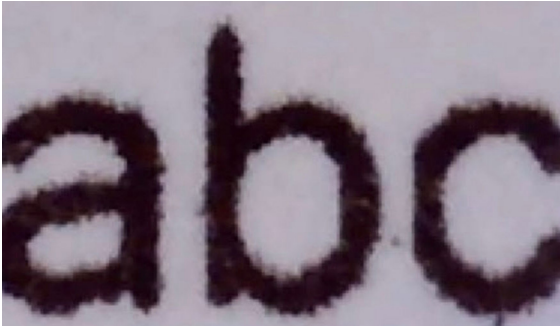
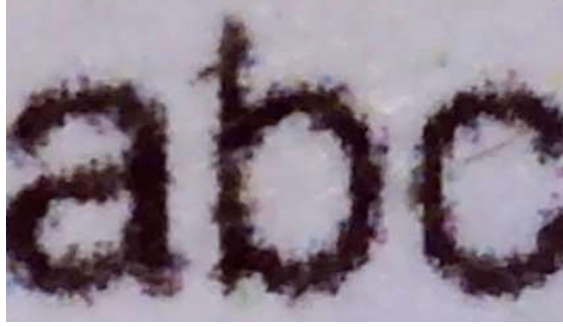


QA-1 and TL-5003 Test Charts Used for Copy and Scan Image Quality

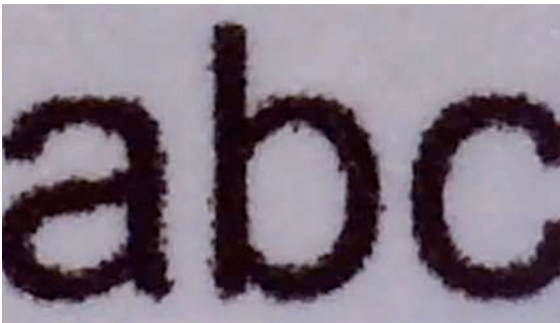
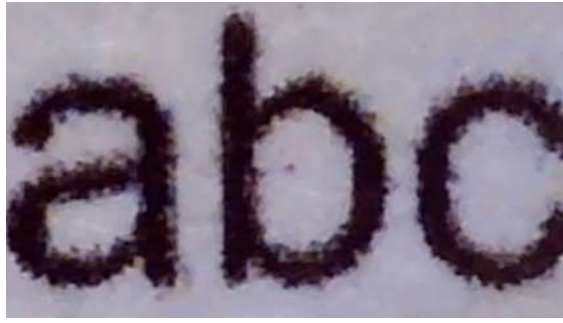
Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

- In High/Best mode, both devices produced fully formed copied text that remained legible down to the smallest 6-pt. size. However, the Canon TM-610M delivered darker, more distinct, and smoother characters, while slight ink bleed on the HP T850 MFP reduced character definition.
- In Standard/Normal mode, copied text from both devices remained clear and legible at the smallest 6-pt. Although some ink bleed was visible on both under magnification, it was more pronounced on the HP output, giving the Canon an advantage in character definition and smoothness.

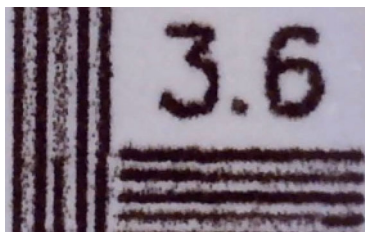
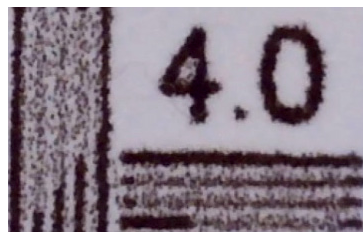
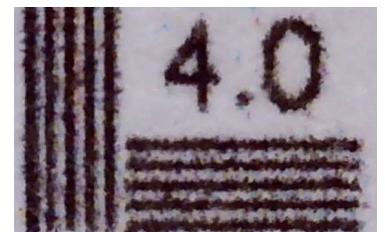


6-pt. copied text in Standard 300 dpi (Canon, left and Normal 300 dpi (HP, right); characters are fully formed; HP's text is less well defined due to more ink bleed.



6-pt. copied text in High 600 dpi (Canon, left) and Best 600 dpi (HP, right); character definition has improved and text is more distinct when viewed under magnification. Canon's text is smoother, while HP's has more ink bleed, when viewed under magnification.

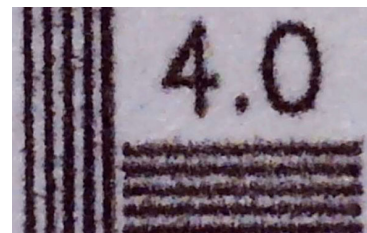
- When evaluating fine lines using the same QA-1 test chart (where the emphasis is on whether there is a clear distinction between lines rather than the rendering of each line), the fine lines produced by the Canon in Standard mode remained distinct up to the 3.6 cpm (cycles per millimeter) level, compared with up to 4.0 cpm for the HP in Normal mode.
- In High/Best mode, the Canon model produced clearer and more distinct fine lines up to 5.0 cpm, compared with up to 4.0 for the HP.



Fine lines in Standard (Canon, left and centre) and Normal 300 dpi (HP, right) at the most distinct level. The Canon maintained clear line separation at 3.6 cpm but not at 4.0 cpm, while the HP retained clear spacing at the higher 4.0 cpm level.

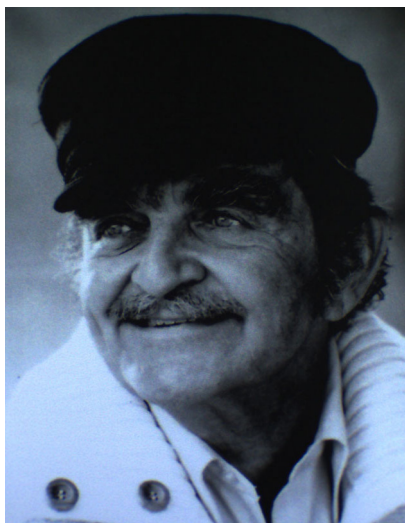
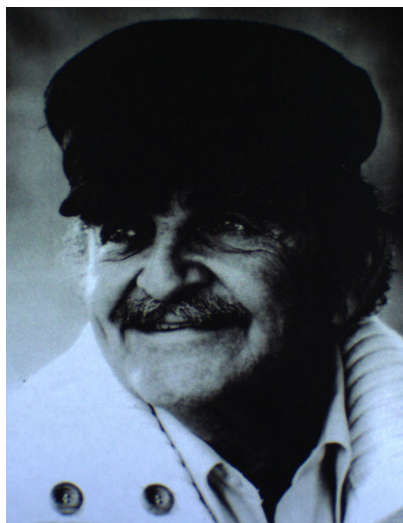
Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP



Fine lines in High (Canon, left) and Best 600 dpi (HP, centre) at the 5.0 cpm level. The Canon maintained clear line separation at the 5.0 cpm level, whereas the HP unit could not; it retained clear spacing at the lower 4.0 cpm level (right).

- Solid density was higher for all colours in High/Best quality mode for the Canon TM-610M; in Standard/Normal and Fast, the Canon had higher cyan and magenta densities while yellow and black were comparable to the HP's results in Standard/Normal and lower in Fast.
- Halftones produced by the Canon unit were generally well graduated in High and Standard copy modes and showed good detailing and smoother tonal transitions from light to dark areas; in Fast mode, halftones were smooth and slightly darker overall. The HP's halftones were slightly darker in Best mode, and as a consequence detailing was lost in the shadow areas, however fine details in the light contrast areas were better defined in Standard and Fast quality modes. HP.



Halftone copy quality in High (Canon, left) and Best 600 dpi (HP, right). HP's image is overly dark and loses fine detailing in shadows, while Canon's image has better tonal transitions overall.



Halftone copy quality in Standard (Canon, left) and Normal (HP, right)



Halftone copy quality in Fast (Canon, left, HP, right)

- In colour fidelity testing, which is based on a select range of 12 PANTONE shades for corporate logos, the Canon device had a lower (4.9) average Delta E measurement compared with 5.4 for the HP unit in High/Best mode. In Standard/Normal mode, the Canon, again, had a lower average Delta E of 5.5 versus 6.6 for the HP.

Scan Capture Quality

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Resolution and Sharpness at Optical Resolution	✓	
Text	✓	
Fine Lines	✓	
Geometric Accuracy Halftone Reproduction	✓	
Halftone Capture Quality	=	=
Creased/Folded & Tracing Paper Original	✓	

✓ denotes a model advantage; = denotes parity in performance.

- Under magnification, Canon's scan output exhibited smooth, clean text that remained legible at the smallest 6-pt. level in the highest quality scan setting in black mode. HP's characters appeared comparatively bold and less smooth. HP text produced in greyscale mode (not available on the Canon) was slenderer and better defined, though with some visible stair stepping.
- In colour 600 dpi, Canon text output was distinct and dark, while HP's text is less clear under magnification, with background pixel noise reducing the contrast between the text and surrounding areas, slightly impairing character clarity.

abcd abcd abcd

Canon 600 dpi B&W

HP 600 dpi Greyscale

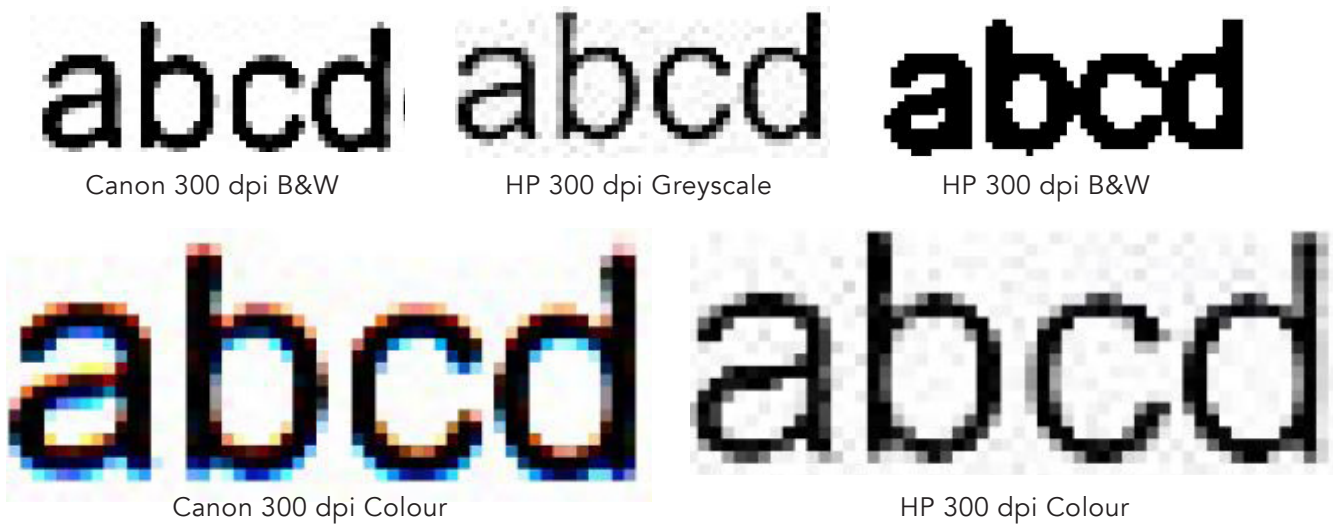
HP 600 dpi B&W

abcd abcd

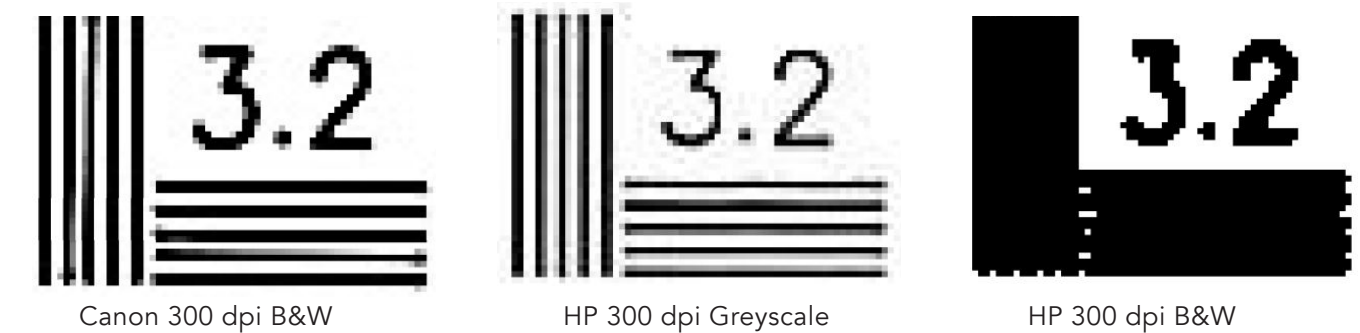
Canon 600 dpi Colour

HP 600 dpi Colour

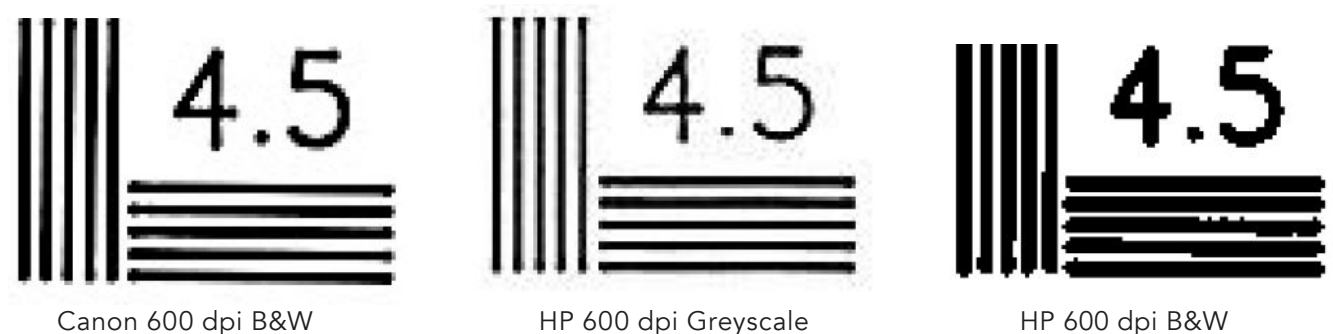
- Text produced by both models at 300-dpi resolution was perfectly legible at the smallest 6-pt. level, however, although clear differences were apparent when viewed under magnification. Canon's black-mode output produced dark characters with some fringing reducing smoothness. HP's greyscale output showed greater stair-stepping around its slimmer characters, while background pixel noise reduced contrast and slightly impaired clarity and legibility. In 300 dpi black mode, HP's characters appeared overly dark and blocky.
- In colour 300 dpi, Canon's text was dark and distinct, with some colour fringing, while HP's text was less well-defined, again, owing to background pixel noise.



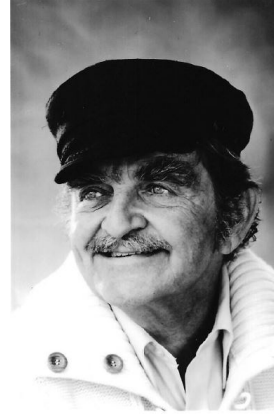
- Fine lines at 300 dpi resolution were far more consistent in output produced by the Canon unit (in black) compared with the HP model (in greyscale), with distinct and even spacing between the lines.



- At 600 dpi, the Canon device produced cleaner separation between fine lines at the 4.5 level in black mode than the HP, although the HP produced comparable results in greyscale mode.

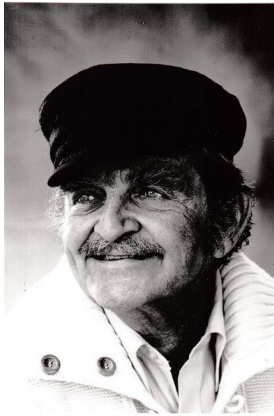
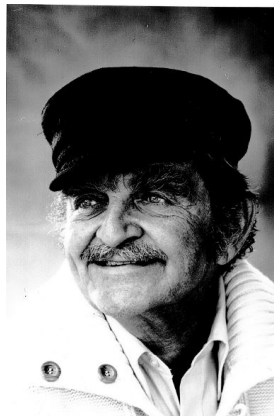


- The Adobe Photoshop Measuring Tool was used to assess geometric accuracy, defined as the variation between the actual length of the document and the length of the scanned image. Both devices delivered very good accuracy, although the Canon held the overall advantage, with variations of 0.3 mm in landscape and 0.2 mm in portrait orientation, compared with variations of 0.6 mm and 0.4 mm, respectively, for the HP T850 MFP (see Supporting Test Data).
- When scanning the TL-5003 mixed text/image test chart in full colour at 300 dpi and 600 dpi, both devices delivered very good fine detailing. Canon's output was darker overall; fine detail was retained particularly well in lighter contrast areas, including the jumper's knitted textures, the wispy white hair on the left side of man's face, and details around the facial hair and eyes. However, the dark contrast areas suffered from some loss of detailing. HP's output exhibited very good details in shadow areas, such as the man's right cheek and neck, as well as delivering smoother, more subtle tonal gradations.



Half-tone capture in full colour at 300 dpi with Canon output (left) and HP output (right)

Half-tone capture in B&W/Greyscale at 300 dpi with Canon output (left) and HP output (right)



Half-tone capture in full colour at 600 dpi with Canon output (left) and HP output (right)

Half-tone capture B&W/Greyscale at 600 dpi with Canon output (left) and HP output (right)

Creased/Folded & Tracing Paper Output Quality

To assess scan image quality when handling creased originals, technicians scanned a creased newspaper, a lightweight weekly magazine sample and a faded manuscript (an ordinance map printed on linen) to evaluate how effectively each device minimized the appearance of wrinkles and folds. Originals were scanned using the default 300 dpi settings. Keypoint also used a CAD drawing printed on tracing paper to assess scan image quality using Canon's Tracing Paper and HP's Translucent preset document type setting.



Keypoint's Test Targets: Newspaper (left), Magazine (centre), and Faded Manuscript

Newspaper

- While there was some show-through from the reverse-side text, the Canon TM-610M's scanned output quality was very good overall, and creases and wrinkles were eliminated when viewed under magnification.
- Unlike the Canon, the HP T850 MFP was unable to scan the newsprint original in landscape orientation due to a jam. It successfully scanned the document in portrait, but the original fed through skewed, and the resulting image showed pronounced creasing and noticeably poorer overall reproduction quality.



Canon produced a wrinkle-free scanned image of the creased newsprint original



HP's newsprint scan showed prominent creases and that it was skewed during the scan process

Lightweight Magazine

- When scanning a lightweight, creased magazine original, the Canon produced a good-quality scan with bright colours, and the wrinkles in the original were not visible in the resulting image.
- Scan quality could not be assessed on the HP T850 MFP, as the original jammed in both landscape and portrait orientations, including when scanned at the slower 600 dpi setting.



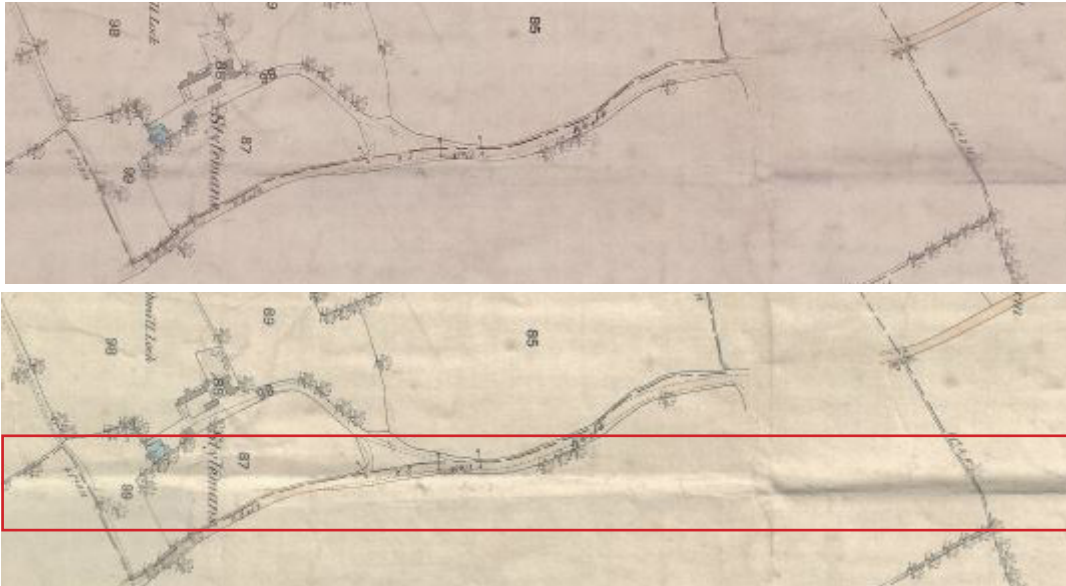
Canon's scan of a creased magazine double page spread, with no visible wrinkles or folds

Faded Manuscript

- When scanning a faded and creased 1879 ordinance manuscript printed on cloth, both devices produced smooth, good-quality results overall. The HP output had a brighter appearance, making features such as the blue river more prominent; however, under magnification, creases and folds were less pronounced in the Canon scan, while three prominent vertical folds remained clearly visible across the HP image.



Canon (left) and HP (right) scan image output of the faded manuscript

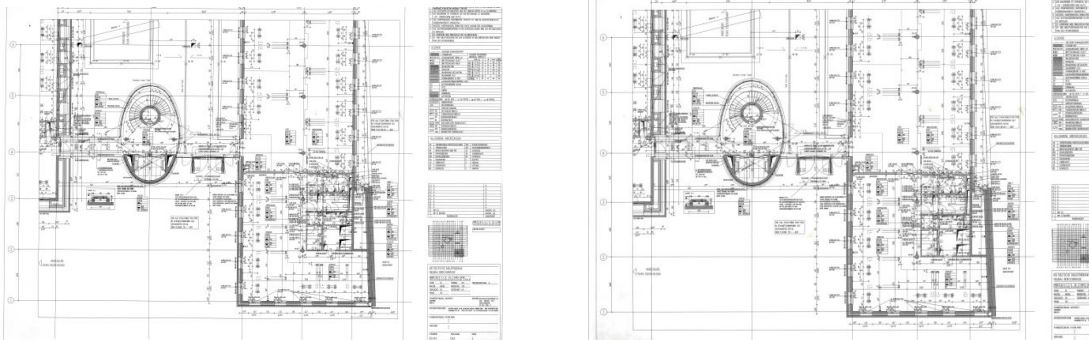


Cross-section close up taken from the Canon scanned image (top) shows the crease lines have been smoothed out, whereas the folds are much more pronounced on the HP scan (bottom).

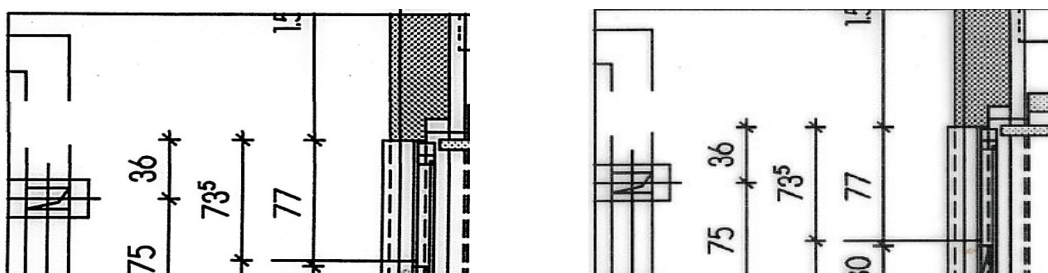
Tracing Paper

Using the Canon's Tracing Paper setting and HP's Translucent setting, Keypoint Intelligence scanned a CAD original printed on translucent tracing paper at 300 dpi.

- The Canon produced clean, crisp output with clearly defined fine lines, strong contrast, and a clean white background in non-image areas.
- The HP output was good and clean overall, however under magnification there was some shadowing visible around lines and text which reduced fine-detail clarity and definition.



Canon (left) and HP (right) scans of a CAD original printed on tracing paper



Cross-section taken from the Canon (left) and HP (right)

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Print Productivity

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
First Page Out from Weekend Non-Use		✓
First Page Out from Ready State	✓	
Throughput Speed (Default Mode)	✓	
Throughput Speed (Standard/Normal Mode)	✓	
Throughput Speed (Highest-Quality Mode)	✓	
Job Stream	✓	
A0 Throughput Speed (Standard/Quality)	✓	

✓ denotes a model advantage; = denotes parity in performance.

- After a weekend of non-use, the Canon TM-610M's first-page-out time was 9.4% slower than that of the HP T850 MFP (92.47 seconds versus 84.56 seconds) when printing in Fast/Normal mode. Start-up time before printing began was also slower at 58.41 seconds, compared with 12.63 seconds for the HP unit.
- The Canon's first-page-out from ready state result was 41.6% faster—50.24 seconds for the Canon compared with 86.00 seconds for the HP in Fast/Normal mode. Start-up time was slightly slower for the Canon (17.06 seconds versus 14.00 seconds for the HP).
- In the job stream test, which simulates a typical mixed large-format workflow, the Canon TM-610M was significantly faster than the HP T850 MFP across all tested modes, completing the workflow over twice as fast (56.4%) in default Fast/Normal mode, 42.3% faster in Standard/Normal mode, and 80.4% faster in High/Best mode.
- In the 12-page colour DWF test, the Canon model was 65.3% faster than the HP in default Fast/Normal mode, 43.3% faster in Standard/Normal mode, and 77.7% faster in High/Best mode.
- Similarly, when printing the 12-page DWF test file in monochrome, the Canon TM-610M was 46.4% faster in default Fast/Normal mode; 8.5% faster in Standard/Normal mode, and 77.8% faster in High/Best mode than the HP device.
- Results in the A0-size test were in Canon's favour: in default settings, it delivered the faster first-page-out time, at 79.7 seconds versus 152.1 seconds for the HP, while over the five-page run, the Canon unit was twice as fast, completing the job in 339.6 seconds compared with 761.3 seconds for the HP.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Copy Productivity

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
A1 (Landscape) First Page Out	✓	
A0 First Page Out	✓	

✓ denotes a model advantage; = denotes parity in performance.

The Canon TM-610M does not support greyscale in copy mode, while the HP T850 MFP does. Copy productivity was judged on copy quality that was comparable to the following quality modes: Fast, Standard/Normal, and High/Best.

- The Canon TM-610M delivered faster first-copy-out times than the HP across all tested A1 and A0 tests conducted in monochrome and colour mode. In A1 landscape testing, Canon was 34.5% faster in monochrome and 45.2% faster in colour in Fast mode in default dpi settings, 23.5% and 50.9% faster, respectively, in Standard/Normal mode, and 55.5% and 57.1% faster at the highest-quality 600 dpi setting.
- The first-copy-out performance advantage was similarly consistent at A0 size, with Canon 38.2% faster in monochrome and 48.2% faster in colour in Fast mode, 22.0% and 53.4% faster in Standard/Normal mode, and 55.1% and 58.0% faster, respectively, at the highest-quality 600 dpi setting.

Scan Productivity

Category – Files Set to Save As PDFs	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
A1 Single-Page Scanning (Monochrome/Colour Modes)	✓	
A0 Single-Page Scanning (Monochrome /Colour Modes)	✓	
First Page Out to Desktop (Monochrome/Colour Modes)	✓	

✓ denotes a model advantage; = denotes parity in performance.

Category – Files Set to Save As JPEGs	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
A1 Single-Page Scanning (Monochrome/Colour Modes)	✓	
A0 Single-Page Scanning (Monochrome/Colour Modes)	✓	
First Page Out to Desktop (Monochrome/Colour Modes)	✓	

✓ denotes a model advantage; = denotes parity in performance.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

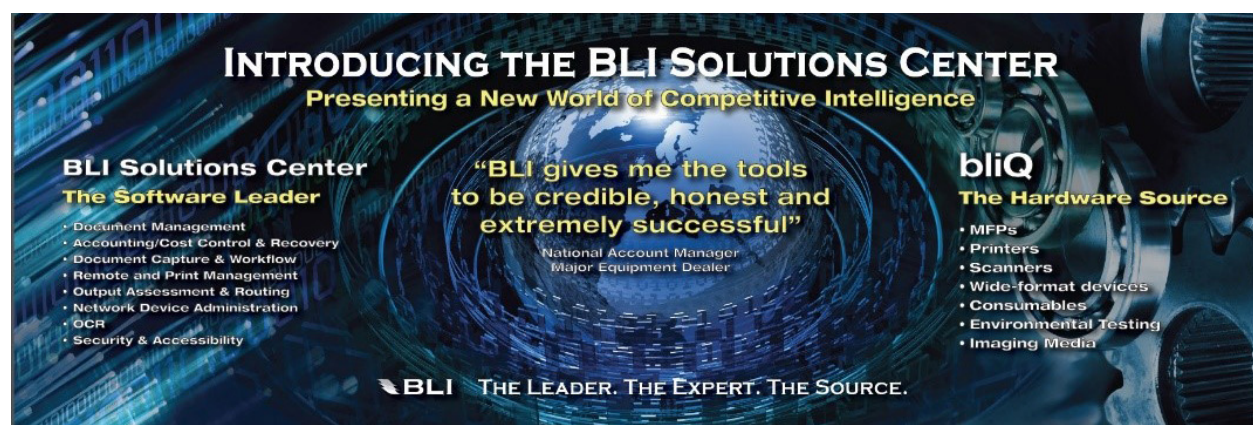
The Canon TM-610M does not support greyscale in copy mode, while the HP T850 MFP does. The Canon TM-610M default scan file format is JPEG, while the HP's default is PDF.

- In A1 (Landscape) scan-to-PDF throughput testing, timings were taken from initiation to the document exiting the scanner. The Canon TM-610M had a clear speed advantage in all modes tested. Canon's speeds were 42.4% faster in monochrome at 200 dpi, 42.3% faster at 300 dpi, and 65.8% faster at 600 dpi; in colour mode, the Canon's performance was 52.8% faster at 200 dpi, 46.6% faster at 300 dpi, and 63.0% faster at 600 dpi than the HP model.
- In A0 scan-to-PDF throughput testing the Canon TM-610M was, again, significantly faster model in all quality and colour modes. It was 36.6% faster in monochrome at 200 dpi, 54.8% faster at 300 dpi, and 66.4% faster at 600 dpi; in colour mode, it was 63.3% faster at 200 dpi, 52.7% faster at 300 dpi, and 68.1% faster at 600 dpi than the HP model.
- In A1 scan-to-PDF desktop testing, measuring the time taken from initiation to the scan appearing at the desktop, the Canon was faster than the HP model in all of the modes tested. It was 56.4% faster in monochrome at 200 dpi, 66.9% faster at 300 dpi, and 75.0% faster at 600 dpi; in colour mode, the Canon's performance was 60.0% faster at 200 dpi, 53.2% faster at 300 dpi, 70.0% faster at 600 dpi.
- Similarly, in A0 scan-to-PDF desktop testing, the Canon device outperformed the HP T850 MFP in all monochrome and colour workflow tests.
- When the evaluation was repeated with files set to save as JPEGs (default on the Canon), Canon was faster across all A1 and A0 colour workflows (monochrome workflow not supported on the HP), with the strongest gains seen at the highest dpi resolution where the Canon was over 70% faster.

Banner Printing

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Banner Printing Capability	✓	
Productivity	✓	

✓ denotes a model advantage; = denotes parity in performance.



Keypoint Intelligence's 106" x 36" Banner Test Target (4,955-KB PDF)

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

- The Canon TM-610M successfully completed the banner print test, generating a desktop preview in 10.9 seconds and taking a further 6 minutes, 6.4 seconds from preview to final paper cut. In Fast mode, no image quality issues were observed on the printed banner.
- The HP T850 MFP did not generate a preview and was unable to complete the banner test successfully in Fast mode. Across several attempts, the device either advanced and cut approximately 105 inches of blank media or printed only around six inches of the banner before cutting the sheet and reporting that the file has been printed.

Poster Printing

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Image Quality	✓	
Productivity (Fast/Normal)	✓	
Productivity (Standard/Normal)	✓	
Productivity (High/Best)	✓	

✓ denotes a model advantage; = denotes parity in performance.



Keypoint Intelligence's A1 Poster Test Target

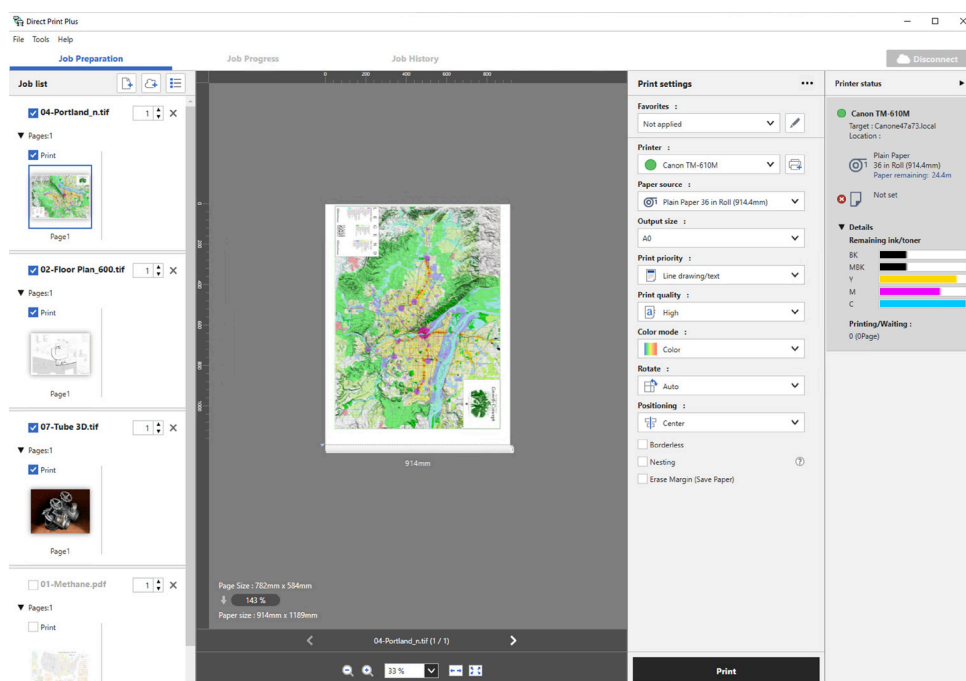
- The Canon TM-610M was faster at printing the A1-sized Poster test target in all modes, completing the job in 50.4 seconds in default Fast mode, 57.1 seconds in Standard mode, and 2 minutes, 18.6 seconds in High mode. The corresponding HP times were 1 minute, 29.4 seconds in default Normal mode, and 5 minutes, 7.6 seconds in Best mode.
- Banding was evident on output printed in default mode by both models (minimal for the Canon). When unidirectional printing was selected, banding was largely eliminated on the Canon output with a print time of 54.9 seconds. The HP model does not support unidirectional printing.
- At the higher quality modes, there was no observable banding on output from both models.

Direct Print Submission

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Direct Print Submission	=	=
Mobile App Integration	=	=

✓ denotes a model advantage; = denotes parity in performance.

- Canon's Direct Print Plus uses a proprietary PDF engine to support direct printing of PDF, JPEG, TIFF, and HPGL/2 files without requiring native applications or print drivers. Its Job Preparation screen brings together job settings, previews, and printer status information, as well as cloud file access from services like Dropbox, OneDrive, Google Drive, and Box for added convenience. Bidirectional communication with the printer minimizes the risk of media mismatches.
- The utility also supports job reprints, real-time progress tracking, and integration with Canon Accounting Manager for project cost monitoring. Its Shortcut Print function allows users to create multiple drag-and-drop desktop shortcuts with predefined settings, providing a simple hot folder-style workflow for repetitive jobs.

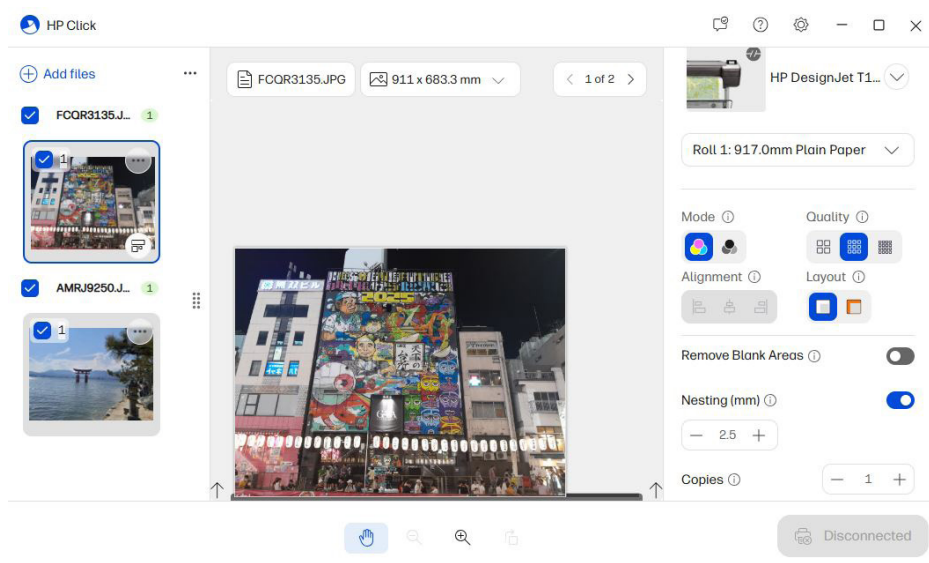


Canon Direct Print Plus

- HP Click printing software, available as a free download, offers direct printing of PDF, JPEG, TIFF, PNG, PRN, and HPGL/2 files from the desktop without requiring native applications or print drivers. It provides basic print settings, along with options to preview, resize, and align images, as well as automatic nesting to minimize waste (although it lacks the precise job positioning controls found in Canon's tool). Users can see the status of the documents sent to print within the tool. Posters created in the HP Application Centre can be dragged and dropped into HP Click for easy print workflows.

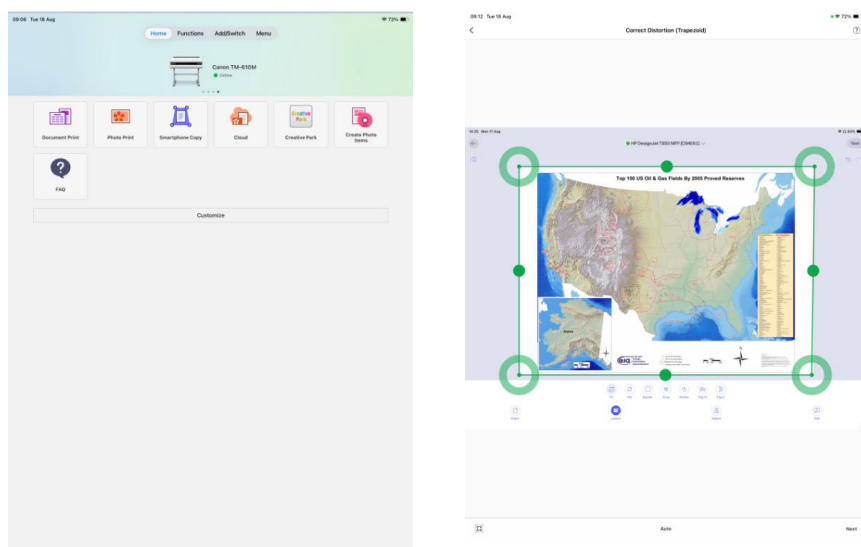
Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

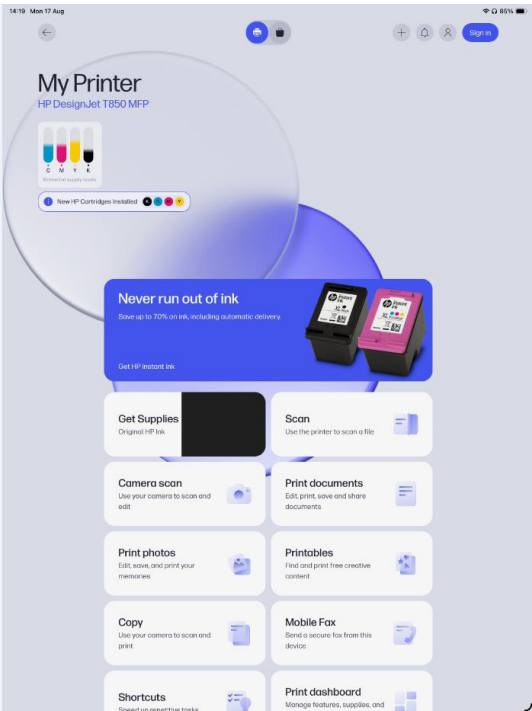


HP Click

- Both Canon PRINT app and HP app (formerly known as HP Smart) enable wireless printing to compatible large-format printers on the same WiFi network. With clean interfaces, extensive print settings, and integration with cloud storage services like Dropbox, Box, and Google Drive, the apps streamline mobile printing.
- The TM-610M supports IPP Everywhere, enabling direct printing from Chromebooks without a Canon-specific printer driver, and Mopria, enabling direct print support from Android devices; HP app supports both iOS and Android.
- Both models support mobile printing via AirPrint for added convenience; we were able to connect and print to each device easily using this method.
- The HP's ePrint functionality enables users to send print jobs remotely by email from a workstation or mobile device, supporting PDF, TIFF, and JPEG files up to 10 MB in size.



Canon PRINT mobile app's home screen and image editor



HP App offers extensive features to manage all HP devices in one place, offering printer status notifications, the ability to set up print, scan, copy shortcuts, and tech support.

Walk Up Ease of Use

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Interface	✓	
Scan Media Handling	✓	
Original (Delicate) Documents Handling	✓	
Print Media Loading	=	=
User Maintenance/Consumables Replacement	=	=
Copy Job Programming	=	=
Scan Job Programming	=	=
Stored Job Reprinting		✓

✓ denotes a model advantage; = denotes parity in performance.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Interface

- Both models offer easy-to-navigate colour touchscreens. However, the Canon TM-610M features a larger (5-inch) touchscreen than the HP's (4.3 inch), providing a more spacious interface for viewing settings and navigating menus. It is also tiltable (not supported on the HP), which aids accessibility.
- Canon's touchscreen supports customizable home screens, allowing frequently used functions and workflows to be tailored to different user environment; HP's touchscreen is not customizable.



Canon TM-610M touchscreen



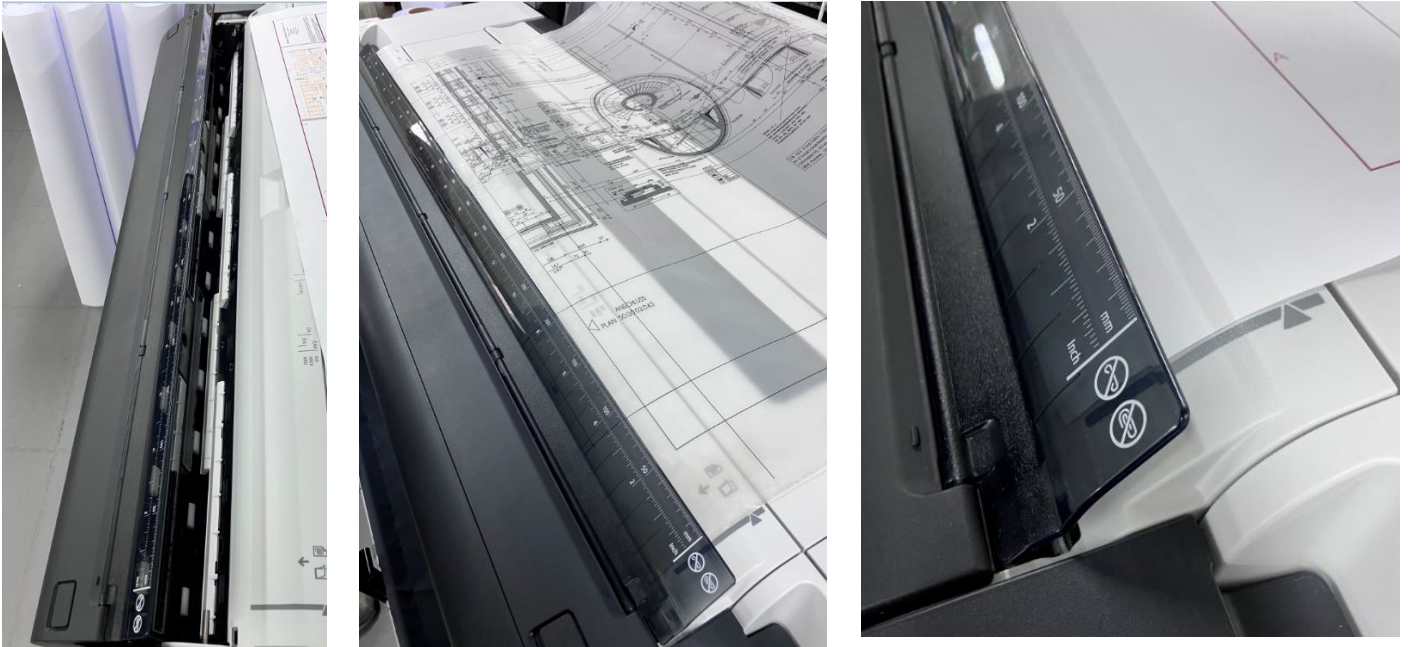
HP T850MFP touchscreen

Scan Media Handling

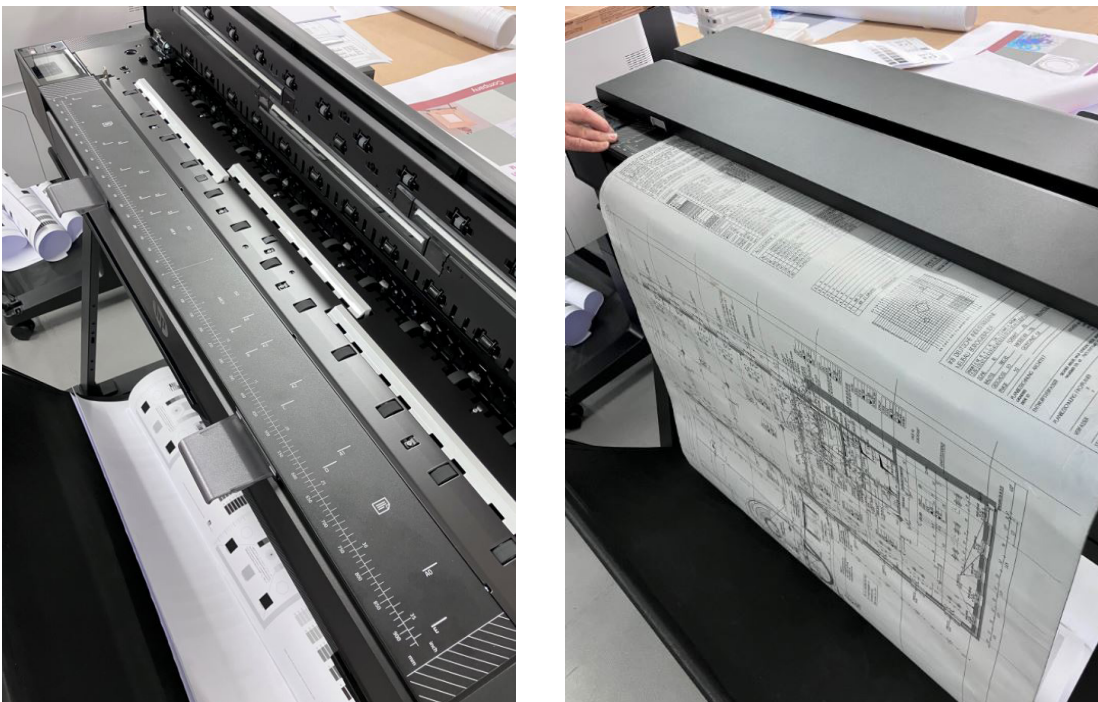
- The TM-610M comes with a new integrated scanner design, which is intended to simplify installation while creating a flatter, more compact MFP footprint than the competing model configuration.
- The Canon's scanner-loading area has been redesigned with a flatter roll cover and a large flat surface provides space to support and feed documents, helping make walk-up scanning more straightforward.
- The HP offers a much narrower (4-inch) area to rest originals, which makes it more awkward to position and feed them into the scanner and can leave longer documents trailing over the printer with the risk of causing wear and tear.
- The Canon offers front-feed and top-down insertion combined to make originals easier to load and protect during handling. Documents are loaded via slide in insertion method on the HP's scanner which can potentially make it more difficult to feed an original with curled edges.
- The HP device includes an automatic scan deskew function, which is on by default, allowing skew to be compensated for prior to the file being scanned to the desktop; the Canon model does not possess this capability; however we experienced no issues during testing.
- Loading an original into the Canon scanner is straightforward: users align the right-hand edge with the grey and white guides and feed the leading edge into the input slot until the scanner takes hold and positions it automatically. Care should be taken with the central flap, which could potentially cause a jam if closed during scanning.
- HP users must position and feed their document centrally on the scanner, rather than use a right-hand alignment guide. Keypoint Intelligence technicians found this slightly less intuitive, although standard-size marker guides help with accurate positioning. Once inserted, the scanner takes hold of the original automatically, though longer documents may remain partly unsupported or hang over the edge as they feed through; scanned originals emerge below the scanner.

Comparative Wide Format Evaluation: Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

- Once the scan is completed on the Canon, the original is held rather than immediately released by default, allowing the user to eject it when ready. This hold/eject function can be changed on the control panel. The HP will hold on to the original until the user presses the eject button.



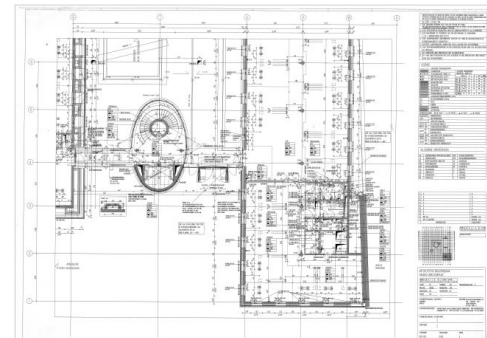
The Canon TM-610M new integrated scanner employs a staggered 5-band array of RGB LEDs; a large area helps users to rest and position documents flat for scanning (centre).



HP's scanner uses a staggered 3-band RGB LED array (left); its narrower document-support area provides less space for positioning and feeding large or long originals, making preparation more cumbersome (right).

Original (Delicate) Documents Handling

To assess the devices' ability to handle delicate originals, Keypoint Intelligence technicians scanned a selection of challenging document types on each device using the default 300 dpi settings. These included a double-page newspaper spread, a creased lightweight consumer magazine, a tracing-paper CAD original, and a faded manuscript.

Newspaper	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
	Successfully scanned in portrait and landscape orientation with no handling issues	Successfully completed a scan in portrait orientation, however the original skewed during the feeding process; when feeding the original in landscape orientation, the HP experienced a jam
Lightweight Creased Magazine	Successfully scanned in portrait; jammed when fed in landscape orientation, but with no damage to original	Experienced a jam when fed in both portrait and landscape orientation
		
Tracing Paper	Using 'Tracing Paper' original type setting, successfully scanned with no handling issues	Using 'Translucent' as original type, the document was successfully scanned at 300 dpi with no handling issues
		
Faded Manuscript (Ordinance Map on Heavyweight Linen)	Successfully scanned with no handling issues	Successfully scanned with no handling issues
		

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Print Media Handling

- Both the Canon and HP models support cut sheet media but there are some key differences. The Canon accepts one sheet (maximum size A0) at a time but users will need to remove roll media before inserting the cut sheet.
- The HP T850 MFP includes a multi-sheet tray with a capacity to hold up to 50 A3 sheets; the printer is able to switch automatically between roll and tray media meaning the roll does not need to be removed when printing from the tray, mixed-sized workflows can run simultaneously, the operator will spend less time at the device feeding media.
- Larger single sheets use the same input path as roll media. If a roll is already loaded, the HP automatically unloads/retracts the roll from the paper path before the sheet is inserted, so users do not have to physically remove the roll from the spindle.
- Keypoint technicians found loading cut-sheet media to be equally straightforward on both models. The Canon model has an adjustable insertion guide that makes inserting cut-sheet media an easy process, For the T850 tray, users extend the tray to suit the paper length, load sheets print-side out, and adjust the guides to the paper width.
- Loading a media roll on the Canon is straightforward: rolls are mounted on a spindle and secured with a lockable flange. Once installed, the leading edge is fed into the paper slot until the printer takes it, after which the roll cover can be closed and the device completes the loading process automatically. HP offers a similar spindle loading process.
- For new rolls, the Canon's built-in sensors will auto detect paper type and thickness, whereas HP users must confirm paper type and length on the touchscreen.
- The Canon TM-610M can print media type, remaining roll length, and a barcode onto partially-used rolls. When the roll is reloaded with media tracking enabled, the barcode is read automatically, allowing the printer to retrieve the stored media information and complete setup with minimal user intervention. This functionality is not available with the HP, instead media type and size are selected manually on the touchscreen.
- The Canon can warn users when the loaded roll does not contain enough media to complete a job prior to commencing; the user can set the remaining-roll threshold at which the alert is triggered in the Paper Related menu under Roll Amount Warning setting. Users are offered the option to continue, replace the media before printing, or cancel the job, which helps to minimize disruption. If the roll is depleted during printing, the device resumes from the start of the interrupted page once new media is loaded, helping to minimize unnecessary ink and paper waste.
- When media runs out mid-job on the HP, an alert is displayed prompting users to reload paper. Once a new roll is loaded, the HP will resume printing the job from the page it had stopped at which helps to minimize on ink and paper usage.
- The catch baskets of both models enable most printed sheets to be stacked neatly. However, near the end of the media rolls, the tightly curled output from both devices tended to spill out of the basket.



Roll media is loaded onto a spindle for both devices (Canon, left; HP, right)

User Maintenance/Consumable Replacement

- Ink cartridges can be replaced during operation with the Canon model but not with the HP, helping to reduce downtime for Canon users.
- Ink replacement on both devices is straightforward. On the Canon model, users simply lift the ink housing cover on the printer's right (C,M,Y) or left (MBK, K) sides, then unlatch and remove the ink tank and replace it. Each slot is colour coded to prevent users from inserting a cartridge in the wrong positions.
- The HP offers a similarly straightforward process, with the ink cartridges located at the top rear of the device. Users simply lift out the spent cartridge and insert the replacement; each slot is clearly marked with a colour-coded letter matching the corresponding cartridge to help prevent installation errors.

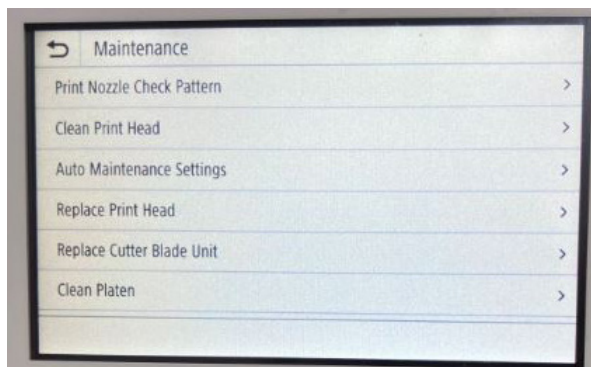
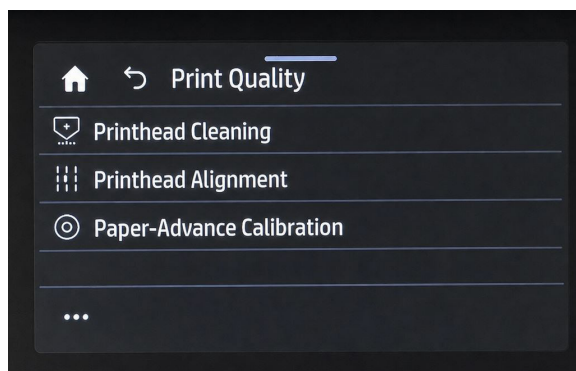


Ink replacement on the Canon TM-610M



Ink replacement on the HP T850 MFP

- Each model's printhead is user replaceable, helping to reduce downtime.
- The Canon uses a maintenance cartridge that requires periodic replacement and cannot be changed during printing
- HP specifies two maintenance kits for components requiring replacement after extended use, with replacement carried out by a service engineer when prompted by the device.
- The Canon offers comprehensive maintenance functions that are easy to locate under Adjustment/Maintenance. Comparable HP print-quality maintenance functions are found under Menu > Tools > Troubleshooting > Print Quality. Keypoint Intelligence technicians found these settings less immediately discoverable on the HP, as the Maintenance menu itself is reserved for functions such as Restore Settings, Firmware and Service Package options.
- Canon Status Monitor provides feedback on consumable levels; Canon's Remote UI is a browser-based utility that lets users remotely monitor printer status and consumables, review job information, and configure device and network settings from the desktop.
- Printer status and error conditions can be monitored remotely through HP's embedded web server, which displays general device status and active alerts. Status information and error messages are also available from the control panel, while the print queue can provide job-related warnings.



Maintenance menu settings (Canon, left); maintenance options are located in the Troubleshooting > Print Quality menu on the HP (right)

Copy Job Programming

- Performing a copy job on the Canon TM-610M is straightforward, user-friendly process thanks to its clear menu design and settings, with most typical settings found on the Copy screen and advanced settings listed under Other Settings. After scanning the original, Canon users must remove it from the device before the copy job continues.
- Copy programming on the HP T850 MFP is straightforward, with commonly used settings accessible from the copy menu. Users can select content type, colour mode, paper source, output quality and scaling, while additional controls include lighter/darker adjustment, background colour and noise removal, automatic deskew, and edge-to-edge copying.
- The HP also offers default and user-created Quick Sets, which can be configured remotely through the embedded web server and used to streamline frequently repeated copy, scan, and print workflows. Quick sets appear within the relevant function screen on the control panel.
- Canon offers the ability to create and save custom job settings directly on the control panel for fast repeat work.



Copy screens offering typical settings (Canon, left; HP right)

Scan Job Programming

- Setting up a scan job on both devices is straightforward, with clear menus providing access to commonly used settings as well as more detailed image-adjustment options. On both devices, users are first presented with destination choices, after which settings such as scan size, file format, density, contrast, and saturation are displayed.

Comparative Wide Format Evaluation:Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

- When scanning to desktop/network folder, users must set up the file destination either on the control panel or the web browser.
- Scan previews are not available with either model, hence both entail a similar workflow of Scan/Print/Check Print/Change Settings and Re-Scan/Reprint/Repeat as necessary.
- Users are unable to directly scan to cloud on the Canon TM-610M or HP T850 MFP, however scan to email is supported on both devices.
- Canon and HP users can edit and rename scan filenames which makes it easier for users to identify files when back at the desktop or searching the USB drive. The filenames include date and time automatically.

Stored Job Reprinting (including via USB key and cloud)

- Printing directly from a USB drive is not supported on the Canon TM-610M. The HP T850 MFP does support direct USB printing, giving walk-up users greater flexibility to print portable files without first sending them from a PC. Users can browse subfolders and JPEGs are displayed as thumbnail previews.
- Neither device includes a hard drive, so print jobs cannot be stored on the printer for later reprinting.
- Jobs that need reprinting on the Canon can quickly and easily be resubmitted from an external device, including via AirPrint or Chromebook-supported workflows.
- The Canon PRINT mobile app lets users print directly from their mobile device to a TM-series printer model. Similarly, the HP app allows users to print directly from an iOS or Android smart device to a compatible HP large-format device. (See the section on Direct Print Submission).

Stacking Functionality

Keypoint Intelligence ran a test using 50 A0-sized prints to assess how effectively each device's output basket collected and collated longer print runs.

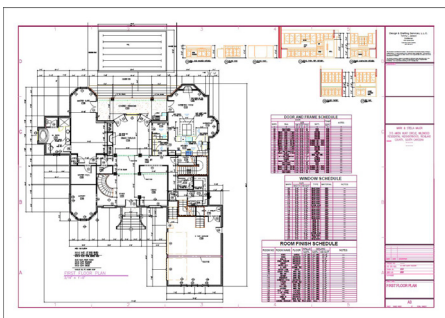
- The Canon stacked the prints in a neat, well-aligned stack that was easy to remove. By comparison, the HP's prints were less orderly, with around half of the output left curled in the basket and the remainder stacked unevenly, with some areas resting on the floor.
- Canon users would need to attend the device less frequently during longer print runs, while HP users would need to monitor output more closely and remove prints at regular intervals to reduce the risk of them becoming creased, damaged, or soiled.
- HP offers an optional Sheet Organizer & Stacker Kit designed to separate and collect cut-sheet and large-format roll output, helping to keep finished prints organized and reduce output clutter. Depending on media size and configuration, the system can hold up to 40 large-format prints or 50 cut sheets.



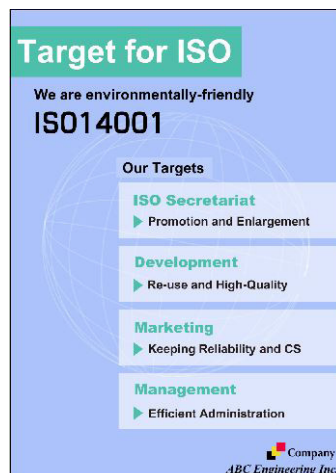
Fifty A0-sized prints were collected neatly in the Canon output basket (left), while the HP output was less orderly, with prints curling in the basket and some extending towards the floor as the basket tips over (right), making the basket better suited to shorter print runs.

Ink Consumption

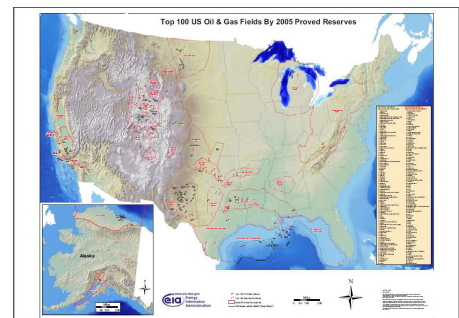
Keypoint Intelligence technicians noted that the inherent variability of inkjet technology—such as, unpredictable head flushing and calibration routines—can lead to differing test results at different times. While every effort is made to ensure fair and consistent testing, the results should be seen as indicative of likely performance rather than a precise prediction of actual ink consumption in real-world conditions.



Cottage Architectural Plan Test Document



ISO Office Poster



GIS Map Test Document

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Overall Weight of Ink Used (in Grams)

Document Type	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Cottage Architectural Plan	30.6	23.0
ISO Office Poster	116.5	138.2
GIS Map	84.8	123.2

Results are averaged across three sets of 50-page A0 printing in Fast for the Cottage Architectural Plan and Standard/Normal mode for the other document types.

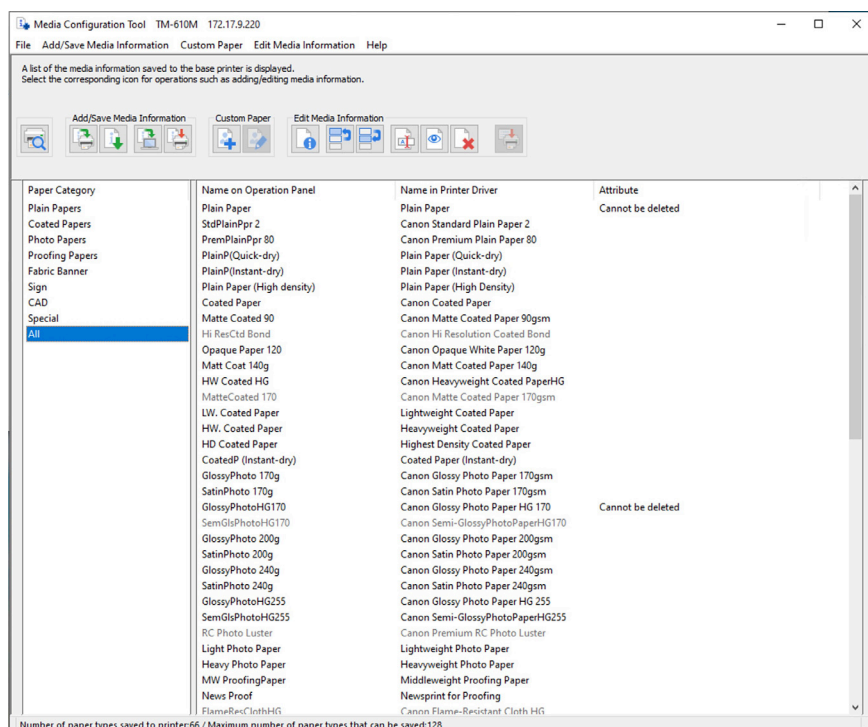
- The Canon used 33% more ink than the HP when printing the Cottage Architectural Plan test target on plain media. This translates to the Canon device using 1.9% of its total available ink, while the HP used 1.8%.
- In the ISO Poster test conducted on matte coated media, the Canon unit used 15.7% less ink compared with the HP device. In this print scenario, it used 7.3% of its total available ink, while the HP used 11.1%.
- In the GIS Map test conducted on matte coated media, the Canon TM-610M used 31.2% less ink compared with the HP device; it used 5.3% of its total available ink, while the HP model used 9.9%.

Device Feature Set

- The Canon TM-610M's rated scan speeds are much higher, at 5 inches/sec in colour and 10 inches/sec in monochrome, compared with 1.5 and 4.5 inches/sec, respectively, for the HP DesignJet T850M.
- The Canon supports longer scan originals, at up to 8.304 m, while the HP is specified for 7 m originals.
- The Canon scanner handles media up to 0.8 mm thick, compared with a maximum of 0.3 mm for the HP
- The HP supports TIFF in addition to JPEG and PDF scan formats, with the Canon supporting JPEG and PDF formats.
- The Canon offers a broader selection of preset document types and allows users to save custom scan presets, a capability not available on the HP control panel (although HP users can create custom job settings via the embedded web server).
- The HP provides batch scanning (which helps boost productivity for users in scan-intensive environments); this is not supported on the Canon.
- Canon has introduced a new controller platform derived from its Satara series, bringing additional MFP functionality and management capabilities to the TM platform. There are some limitations with the new controller, however, which include: no multipage PDF scanning, no scan-to-FTP, and no Remote UI firmware update.
- Canon's new 5-inch tiltable touchscreen supports customizable home screens, allowing frequently used functions and workflows to be tailored to different user environment; HP's smaller 4.3-inch non-tiltable touchscreen is not customizable.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

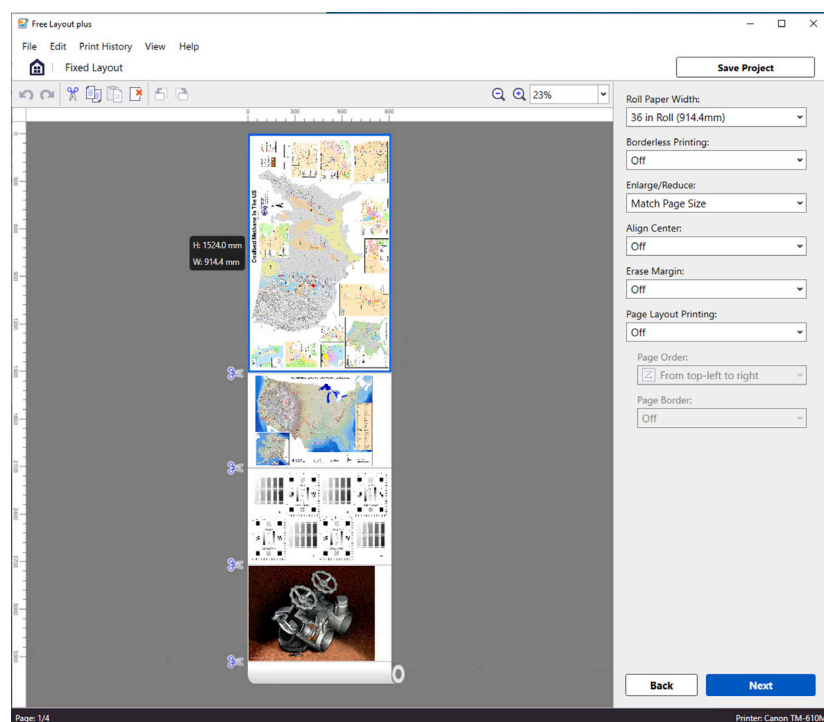


Canon Accounting Manager

- The Canon accommodates larger-diameter rolls, at up to 150 mm compared with 100 mm for the HP, and supports roll media up to 0.8 mm thick versus 0.3 mm on the HP.
- The HP offers an optional Sheet Organizer and Stacker Kit for managing large-format output, whereas the Canon is supplied with its standard basket arrangement.
- The Canon has a narrower footprint at 1,285 mm wide compared with 1,407 mm for the HP, although the HP is lighter at 60 kg versus 77 kg.
- The HP has lower active power consumption, rated at 35 W compared with 76 W for the Canon; Canon has the lower specified standby consumption at 2.2 W versus less than 3.5 W.
- Both devices incorporate recycled materials, with Canon and HP each stating at least 35% recycled plastic content; Canon additionally specifies 5% recycled iron and EPS-free packaging, while HP carries ENERGY STAR, EPEAT and UL ECOLOGO credentials and supports cartridge recycling through HP Planet Partners.
- Both models provide a broad range of network and device security features, including TLS 1.3, SNMP v3, IEEE 802.1X, IPv4/IPv6, WPA3, Secure Boot, security-event logging and administrator controls. Canon adds SIEM connectivity and predefined Recommended Security Settings for centralized administration; the HP T850 MFP incorporates HP Wolf Pro Security for built-in protection against cyberthreats.

Driver Feature Set

- The Canon driver provides a broader selection of predefined print profiles and 48 media profiles plus 10 user-customizable options, compared with 38 media profiles on the HP.
- Canon provides a unidirectional printing option to help address banding, while this setting is not available in the HP driver.
- Canon provides a profile-settings overview within the driver, a feature not available on the HP.
- The Canon driver supports watermarking, page stamping, up to 16-up printing, and 2 × 2 poster printing; these functions are not available in the HP driver.
- The HP offers broader image-rotation options, supporting automatic rotation and 0°, 90°, 180°, and 270° settings, compared with 90° and 180° on the Canon.
- Canon provides CMY balance, brightness, and contrast controls together with advanced colour-management options; these adjustments are not provided in the HP driver.
- Canon's Free Layout plus software allows TM-series users to scale, resize, and group files from different applications into a single job directly from the printer driver. With drag-and-drop functionality, images can be precisely positioned on a single page, reducing paper waste. The HP unit offers a similar nesting feature which can be activated from the touchscreen directly, from the print driver, or when using HP Click. However, users do not have the same precise control over the positioning of jobs, rather jobs are randomly positioned to print across the width of a page, either in the order of submission or in 'optimized' layout order.
- Canon's Free Layout plus has superseded the Print Plug-In for Office function, allowing for the direct printing from Microsoft Office applications supporting the plugin to Free Layout plus. Custom sizes in large-format printing can be set in a wizard interface from Microsoft Word and Microsoft PowerPoint and automatically within Excel. HP offers no equivalent software.



Canon Free Layout plus

- Canon's web-based PosterArtist is a user-friendly tool for creating posters and signage. It provides access to stock photo services like Pixabay, Pexels, and Unsplash, and a wide selection of royalty-free images. The software also offers a variety of pictographic icons and templates sorted by type and event, and supports multi-language poster creation with 900 common expressions across 10 languages.
- Within PosterArtist, users can use Free Layout plus tool enables efficient media use by allowing custom arrangement of files and correct double-sided printing orientation for when folding is required.
- Canon's Accounting Manager, accessible through the Status Monitor, provides detailed accounting for all print jobs. Users can input ink and media costs to automatically calculate and display job costs, along with media type, print area, ink usage, and total print time. Detailed reports can be generated by selecting individual or multiple jobs, with data exportable in .CSV format for use in Excel. HP offers accounting management through the Accounting tab on the device's embedded web server.

Canon Accounting Manager

File View Tools Help

Move Page: |< < 1/1 > >|

Job Cost Displayed	Cost [€]	Printer Name	Document Name	Printing Results	Media Type	Printer Paper Size	Paper Consumed...	Ink Consumed [...]	Paper Cost [€]
TM-610M	0.268	TM-610M	FloorPLAN_A0.pdf	Complete	Plain Paper	A0	1.0871	0.325	0.086
Job Cost Hidden	0.268	TM-610M	FloorPLAN_A0.pdf	Complete	Plain Paper	A0	1.0871	0.325	0.086
	0.093	TM-610M	NEW BLI IMAGE QUALITY TEST TA...	Complete	Plain Paper	A4	0.1919	0.133	0.016
	0.113	TM-610M	NEW BLI IMAGE QUALITY TEST TA...	Complete	Plain Paper	A4	0.1919	0.171	0.016
	0.111	TM-610M	NEW BLI IMAGE QUALITY TEST TA...	Complete	Plain Paper	A4	0.1919	0.166	0.016
	0.095	TM-610M	NEW BLI IMAGE QUALITY TEST TA...	Complete	Plain Paper	A4	0.1919	0.138	0.016
	0.116	TM-610M	NEW BLI IMAGE QUALITY TEST TA...	Complete	Plain Paper	A4	0.1919	0.176	0.016
	0.119	TM-610M	NEW BLI IMAGE QUALITY TEST TA...	Complete	Plain Paper	A4	0.1919	0.180	0.016
	0.203	TM-610M	Architectural drawing in A1 size.pdf	Complete	Plain Paper	A1	0.5430	0.285	0.043
	0.588	TM-610M	topfields.pdf	Complete	Plain Paper	A1	0.5430	0.836	0.043
	1.045	TM-610M	MAIN TEST CHART.pdf	Complete	Plain Paper	A1	0.5430	1.803	0.043
	1.207	TM-610M	MAIN TEST CHART.pdf	Complete	Plain Paper	A1	0.5430	2.096	0.043
	0.222	TM-610M	Architectural drawing in A1 size.pdf	Complete	Plain Paper	A1	0.5430	0.119	0.043
	0.590	TM-610M	topfields.pdf	Complete	Plain Paper	A1	0.7689	0.951	0.061
	0.567	TM-610M	topfields.pdf	Complete	Plain Paper	A1	0.5430	0.941	0.043
	0.609	TM-610M	topfields.pdf	Complete	Plain Paper	A1	0.5430	1.018	0.043
	0.238	TM-610M	Architectural drawing in A1 size.pdf	Complete	Plain Paper	A1	0.5430	0.148	0.043
	1.257	TM-610M	MAIN TEST CHART.pdf	Complete	Plain Paper	A1	0.5430	2.188	0.043
	0.081	TM-610M	NEW BLI IMAGE QUALITY TEST TA...	Complete	Plain Paper	A4	0.1919	0.112	0.016
	0.088	TM-610M	NEW BLI IMAGE QUALITY TEST TA...	Complete	Plain Paper	A4	0.2714	0.115	0.022
	0.084	TM-610M	NEW BLI IMAGE QUALITY TEST TA...	Complete	Plain Paper	A4	0.1919	0.118	0.016
	0.917	TM-610M	MAIN TEST CHART.pdf	Complete	Plain Paper	A1	0.5430	1.572	0.043
	0.905	TM-610M	MAIN TEST CHART.pdf	Complete	Plain Paper	A1	0.5430	1.552	0.043
	0.951	TM-610M	MAIN TEST CHART.pdf	Complete	Plain Paper	A1	0.5430	1.634	0.043
	0.106	TM-610M	Colour gamut test target.EPS.tif	Complete	Plain Paper	A4	0.2714	0.146	0.022
	0.120	TM-610M	Colour gamut test target.EPS.tif	Complete	Plain Paper	A4	0.2714	0.173	0.022
	0.164	TM-610M	Colour gamut test target.EPS.tif	Complete	Plain Paper	A4	0.2714	0.252	0.022
	0.219	TM-610M	Architectural drawing in A1 size.pdf	Complete	Plain Paper	A1	0.5430	0.313	0.043
	0.204	TM-610M	Architectural drawing in A1 size.pdf	Complete	Plain Paper	A1	0.7689	0.253	0.061
	0.244	TM-610M	Architectural drawing in A1 size.pdf	Complete	Plain Paper	A1	0.7689	0.327	0.061
	0.346	TM-610M	Architectural drawing in A1 size.pdf	Complete	Plain Paper	A1	0.7689	0.329	0.061

Target Period:
All Periods

Filter Job Logs

Job(s): 1/151 Date of Last Update: 20/08/2026 09:35:56

Canon Accounting Manager

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

SUPPORTING TEST DATA
Print Productivity
Job Stream (in Seconds)

Canon imagePROGRAF TM-610M		HP DesignJet T850 MFP	
Fast	694.7	Normal	1,592.9
Standard	919.0	Normal	1,592.9
High	1,660.6	Best	8,476.8

Keypoint Intelligence's job stream consists of nine files, including PDF, TIFF, and DWF files, for a total of 19 pages, all at Arch D-size, ensuring that the files are set to fit to page. This test replicates the type of traffic a typical wide-format device might experience in a real-world, multi-user environment. All files are submitted to the controller in a specific order and sent to the printer as a group, at which time the stopwatch begins; timing ends when the last page of the last file exits the device. Both devices were loaded with 914 mm rolls, with each file set to auto-rotate to save media.

Colour Output (in Seconds)

Canon imagePROGRAF TM-610M		HP DesignJet T850 MFP	
Fast	352.6	Normal	1,015.3
Standard	575.6	Normal	1,015.3
High	1,010.5	Best	4,529.7

The 12-page DWF test file was printed using the device driver set to the plain paper/colour setting. Both devices were loaded with 914-mm rolls. The actual time indicated is the time it took to RIP, image, and deliver all pages of the test document to the collection bin.

Monochrome Output (in Seconds)

Canon imagePROGRAF TM-610M		HP DesignJet T850 MFP	
Fast	339.0	Normal	632.3
Standard	578.5	Normal	632.3
High	1,009.8	Best	4,545.1

The 12-page DWF test file was printed with the Canon driver set to the plain paper/monochrome setting and the HP driver set to plain paper, black mode. Both devices were loaded with 914-mm rolls. The actual time indicated is the time it took to RIP, image, and deliver all pages of the test document to the collection bin.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

First-Page-Out Time After Weekend Non-Use (in Seconds)

	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Time Before Printing Commences	58.41	12.83
First Page Out	92.47	84.56

First-Page-Out Time from Ready State (in Seconds)

	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Time Before Printing Commences	17.06	14.00
First Page Out	50.24	86.00

First-page-out time was measured by printing an Arch D-size PDF in Fast/Normal mode, timed from job release to page out. The Canon driver was set to plain paper/monochrome, the HP driver to plain paper/black mode, with both devices loaded with 914-mm rolls.

A0 First-Page-Out and Throughput Times (in Seconds)

	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
First Page Out	79.7	152.08
Five Pages Out	339.6	761.33

A single-page A0-size Cottage Architectural Plan DWG TrueView Drawing test file was printed with the device driver set to the plain paper/colour setting in Fast/Normal mode. The actual time indicated is the time it took to RIP, image, and deliver five pages of the test document to the collection bin.

Copy Productivity
A1 (Landscape) First-Copy-Out Productivity (in Seconds)

	Canon imagePROGRAF TM-610M		HP DesignJet T850 MFP	
Mono	Fast	43.9	Fast	67.0
	Standard	50.7	Normal	66.3
	High	181.0	Best	406.9
Greyscale	Fast	*	Fast	64.6
	Standard	*	Normal	99.7
	High	*	Best	424.6
Colour	Fast	45.9	Fast	83.7
	Standard	59.6	Normal	464.0
	High	199.1	Best	464.0

The single-page A1 (L) document was set to copy at 300-dpi scan resolution (Fast and Standard/Normal modes) and 600-dpi (High/Best quality mode) with document size set to A1 (Landscape), and print settings set to the various test modes. Times were recorded from scan

A0 First-Copy-Out Productivity (in Seconds)

	Canon imagePROGRAF TM-610M		HP DesignJet T850 MFP	
Mono	Fast	68.0	Fast	110.2
	Standard	85.4	Normal	109.4
	High	340.7	Best	758.8
Greyscale	Fast	*	Fast	109.3
	Standard	*	Normal	178.8
	High	*	Best	792.8
Colour	Fast	72.4	Fast	139.7
	Standard	97.4	Normal	209.0
	High	375.6	Best	895.0

The single-page A0 document was set to copy at 300-dpi scan resolution (Fast and Standard/Normal modes) and 600-dpi (High/Best quality mode) with document size set to A0, and print settings set to the various test modes. Times were recorded from scan initiation to page exiting. *Not supported.

Scan Productivity

Scan to PDF Workflow

A1 Single-Page Scanning Productivity (in Seconds)

	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Black 200 dpi	11.0	19.1
Black 300 dpi	12.5	21.6
Black 600 dpi	22.9	66.9
Grey 200 dpi	*	12.5
Grey 300 dpi	*	22.0
Grey 600 dpi	*	66.8
Full Colour 200 dpi	13.9	29.4
Full Colour 300 dpi	20.6	38.6
Full Colour 600 dpi	40.7	109.9

The single-page A1 document was scanned with document size set to A1 (Landscape) and colour mode and resolution changes as reflected in the table above. Applications were set to save jobs as PDFs on the test PC with auto-naming enabled. Each test was conducted twice and an average reading reported. Timing taken from initiation to when the page exited the scanner. *Not supported.

A1 Single-Page Scan to Desktop Productivity (in Seconds)

	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Black 200 dpi	10.0	22.9
Black 300 dpi	11.2	33.7
Black 600 dpi	22.9	91.5
Grey 200 dpi	*	22.4
Grey 300 dpi	*	31.6
Grey 600 dpi	*	90.9
Full Colour 200 dpi	12.6	31.5
Full Colour 300 dpi	23.9	51.1
Full Colour 600 dpi	43.8	145.8

The single-page A1 document was scanned with document size set to A1 (Landscape) and colour mode and resolution changes as reflected in the table above. Applications were set to save jobs as PDFs on the test PC with auto-naming enabled. Each test was conducted twice and an average reading reported. Timing was taken from initiation to the page being accessible at the desktop. *Not supported.

A0 Single-Page Scanning Productivity (in Seconds)

	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Black 200 dpi	13.2	20.9
Black 300 dpi	15.8	35.0
Black 600 dpi	40.7	121.1
Grey 200 dpi	*	22.6
Grey 300 dpi	*	35.4
Grey 600 dpi	*	121.3
Full Colour 200 dpi	18.4	50.5
Full Colour 300 dpi	31.5	66.7
Full Colour 600 dpi	68.7	215.1

The single-page A0 document was scanned with document size set to A0 and colour mode and resolution changes as reflected in the table above. Applications were set to save jobs as PDFs on the test PC with auto-naming enabled. Each test was conducted twice and an average reading reported. Timing was taken from initiation to the page exiting the scanner. *Not supported.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

A0 Single-Page Scan to Desktop Productivity (in Seconds)

	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Black 200 dpi	12.3	28.4
Black 300 dpi	14.7	47.4
Black 600 dpi	39.7	161.0
Grey 200 dpi	*	30.2
Grey 300 dpi	*	46.9
Grey 600 dpi	*	155.0
Full Colour 200 dpi	17.4	58.8
Full Colour 300 dpi	34.0	85.6
Full Colour 600 dpi	73.1	275.6

The single-page A0 document was scanned with document size set to A0 and colour mode and resolution changes as reflected in the table above. Applications were set to save jobs as PDFs on the test PC with auto-naming enabled. Each test was conducted twice and an average reading reported. Timing was taken from initiation to the page being accessible at the desktop. *Not supported.

Scan to JPEG Workflow
A1 Single-Page Scanning Productivity (in Seconds)

	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Black 200 dpi	11.0	*
Black 300 dpi	12.6	*
Black 600 dpi	24.1	*
Grey 200 dpi	*	17.4
Grey 300 dpi	*	23.9
Grey 600 dpi	*	69.4
Full Colour 200 dpi	13.9	33.7
Full Colour 300 dpi	20.8	38.4
Full Colour 600 dpi	41.1	140.9

The single-page A1 document was scanned with document size set to A1 (Landscape) and colour mode and resolution changes as reflected in the table above. Applications were set to save jobs as JPEGs on the test PC with auto-naming enabled. Each test was conducted twice and an average reading reported. Timing was taken from initiation to when the page exited the scanner. *Not supported.

A1 Single-Page Scan to Desktop Productivity (in Seconds)

	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Black 200 dpi	10.5	*
Black 300 dpi	12.3	*
Black 600 dpi	23.7	*
Grey 200 dpi	*	15.3
Grey 300 dpi	*	25.4
Grey 600 dpi	*	79.8
Full Colour 200 dpi	12.6	29.2
Full Colour 300 dpi	20.3	36.7
Full Colour 600 dpi	42.7	142.9

The single-page A1 document was scanned with document size set to A1 (Landscape) and colour mode and resolution changes as reflected in the table above. Applications were set to save jobs as JPEGs on the test PC with auto-naming enabled. Each test was conducted twice and an average reading reported. Timing taken from initiation to the page being accessible at the desktop. *Not supported.

A0 Single-Page Scanning Productivity (in Seconds)

	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Black 200 dpi	13.8	*
Black 300 dpi	15.9	*
Black 600 dpi	41.0	*
Grey 200 dpi	*	27.1
Grey 300 dpi	*	38.1
Grey 600 dpi	*	125.4
Full Colour 200 dpi	18.4	52.3
Full Colour 300 dpi	30.8	65.3
Full Colour 600 dpi	68.8	251.5

The single-page A0 document was scanned with document size set to A0 and colour mode and resolution changes as reflected in the table above. Applications were set to save jobs as JPEGs on the test PC with auto-naming enabled. Each test was conducted twice and an average reading reported. Timing was taken from initiation to the page exiting the scanner. *Not supported.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

A0 Single-Page Scan to Desktop Productivity (in seconds)

Canon imagePROGRAF TM-610M		HP DesignJet T850 MFP
Black 200 dpi	12.4	*
Black 300 dpi	14.9	*
Black 600 dpi	42.9	*
Grey 200 dpi	*	27.8
Grey 300 dpi	*	37.7
Grey 600 dpi	*	125.5
Full Colour 200 dpi	17.2	50.2
Full Colour 300 dpi	31.9	65.5
Full Colour 600 dpi	73.1	270.2

The single-page A0 document was scanned with document size set to A0 and colour mode and resolution changes as reflected in the table above. Applications were set to save jobs as JPEGs on the test PC with auto-naming enabled. Each test was conducted twice and an average reading reported. Timing was taken from initiation to the page being accessible at the desktop. *Not supported.

Colour Print Quality

Optical solid density and colour gamut were tested with colour correction disabled on both the Canon and HP models; all other image quality was assessed with colour correction enabled.

Solid Density

Canon imagePROGRAF TM-610M						
Fast			Standard		High	
	50%	100%	50%	100%	50%	100%
Cyan	0.52	1.07	0.54	1.20	0.61	1.24
Magenta	0.50	1.02	0.52	1.20	0.55	1.27
Yellow	0.39	0.82	0.40	0.94	0.53	0.99
Black	0.60	1.52	0.59	1.51	0.51	1.48

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

HP DesignJet T850 MFP						
	Fast		Normal		Best	
	50%	100%	50%	100%	50%	100%
Cyan	0.43	0.68	0.46	0.69	0.51	0.78
Magenta	0.54	0.91	0.52	0.89	0.56	1.01
Yellow	0.53	0.85	0.63	0.94	0.60	1.04
Black	0.62	1.45	0.62	1.46	0.59	1.41

Colour density was measured by printing a Keypoint Intelligence proprietary PDF test target on plain paper using default colour settings across all quality modes. Density readings for 100% and 50% dot fills were taken with an XRite 508 and XRite exact[®] densitometer.

Colour Gamut Cubic L*a*b* Unit Volume Comparisons

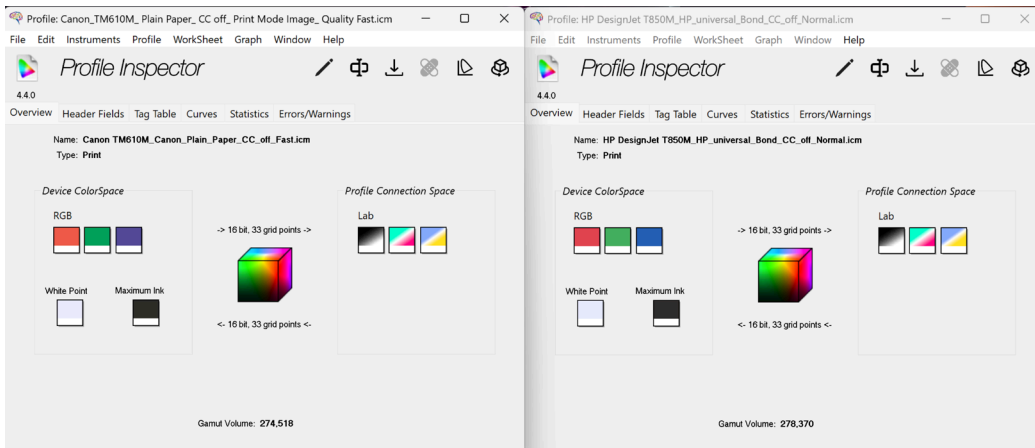
Media Type/Settings	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Plain Paper (Default)	274,518 (Fast)	278,370 (Normal)
Plain Paper High/Best	336,770	319,140
Matte Coated Paper High/Best	379,579	358,871



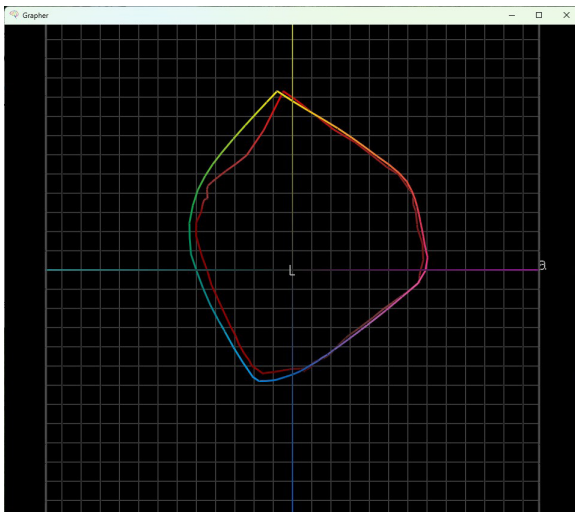
Canon TM-610M colour gamut on plain paper in Fast settings (shown chromatically) versus HP T850 MFP colour gamut (shown in red) on plain paper in Normal settings.

Comparative Wide Format Evaluation:

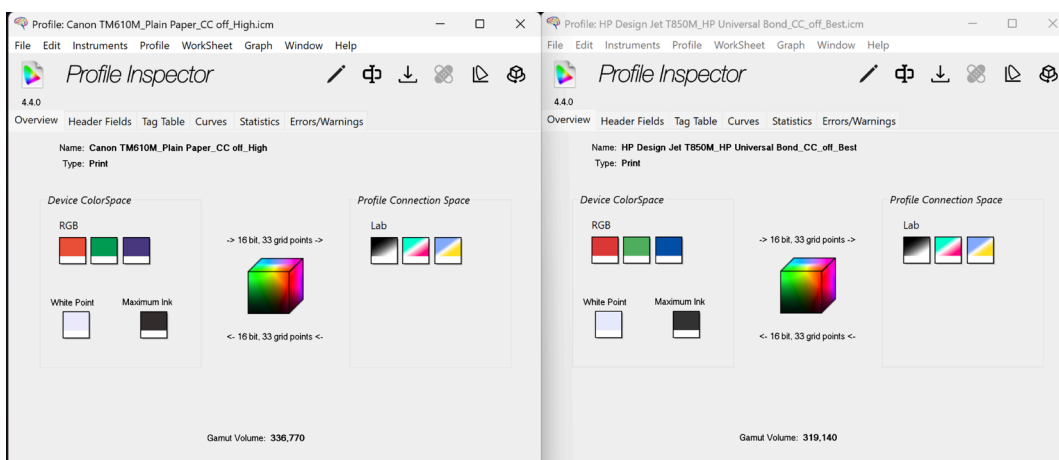
Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP



Colour gamut profile for Canon TM-610M (left) and HP T850 MFP (right) on plain paper in Fast/Normal mode.

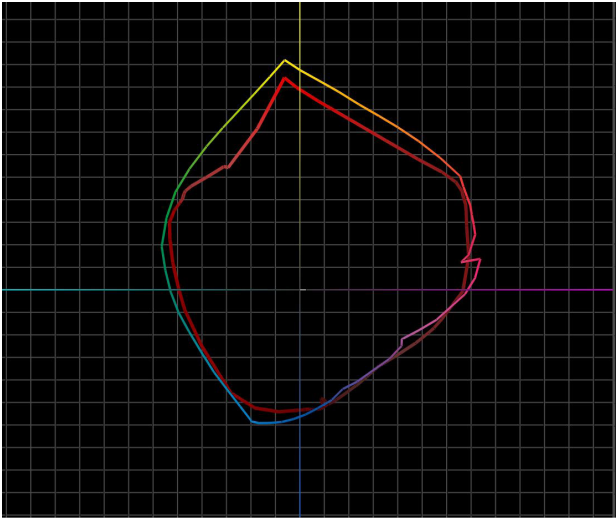


Canon TM-610M colour gamut on plain paper in High settings (shown chromatically) versus HP T850 MFP colour gamut (shown in red) on plain paper in Best settings.

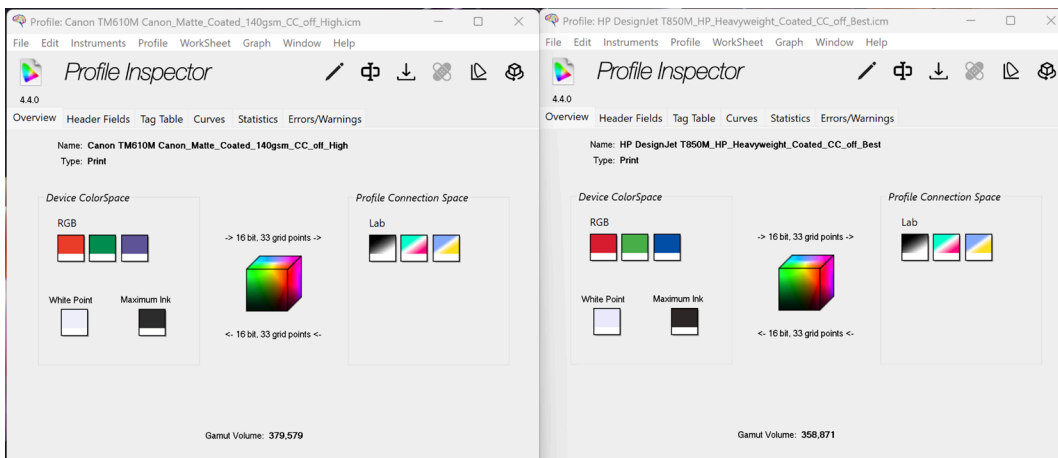


Colour gamut profile for Canon TM-610M (left) and HP T850 MFP (right) on plain paper in High/Best mode.

Comparative Wide Format Evaluation:
Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP



Canon TM-610M colour gamut on matte coated paper in High settings (shown chromatically) versus HP T850 MFP colour gamut (shown in red) on matte coated paper in Best settings.



Colour gamut profile for Canon TM-610M (left) and HP T850 MFP (right) on matte coated paper in High/ Best mode.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Black Print Quality

Solid Density

Canon imagePROGRAF TM-610M				HP DesignJet T850 MFP		
Density Block						
	Fast	Standard	High	Fast	Normal	Best
1	1.53	1.52	1.49	1.45	1.47	1.37
2	1.52	1.52	1.49	1.46	1.49	1.37
3	1.51	1.51	1.50	1.43	1.47	1.38
4	1.52	1.51	1.49	1.42	1.49	1.40
Average	1.52	1.52	1.49	1.44	1.48	1.38

Solid black density measurements are based on four readings taken from a Keypoint Intelligence proprietary PDF test target file corresponding to four different 100% solid black locations on the output. The output was assessed at all quality settings available, with the Canon driver set to plain paper/mono-chrome setting and the HP driver set to plain paper, black mode. Density was measured using an XRite 508 densitometer and XRite exact^{xp} densitometer.

Copy Quality

Solid Density in Fast Mode

	Original Target	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Cyan	1.57	1.07	0.82
Magenta	1.54	1.01	0.91
Yellow	1.12	0.83	0.86
Black	1.84	1.49	1.53

Note: Solid density measurements in Fast Mixed Colour copy mode based on copying a Katun test original containing blocks of all solid colours (based on an average of two readings for each colour) printed on plain paper. Density was measured using an XRite exact^{xp} densitometer.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Solid Density in Standard/Normal Mode

	Original Target	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Cyan	1.57	1.21	0.93
Magenta	1.54	1.19	0.98
Yellow	1.12	0.97	0.99
Black	1.84	1.51	1.51

Note: Solid density measurements in Standard/Normal Mixed Colour copy mode based on copying a Katun test original containing blocks of all solid colours (based on an average of two readings for each colour) printed on plain paper. Density was measured using an XRite exact^{xp} densitometer.

Solid Density in High/Best Mode

	Original Target	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Cyan	1.57	1.26	1.06
Magenta	1.54	1.26	1.18
Yellow	1.12	1.00	1.10
Black	1.84	1.48	1.44

Note: Solid density measurements in High/Best Mixed Colour copy mode based on copying a Katun test original containing blocks of all solid colours (based on an average of two readings for each colour) printed on plain paper. Density was measured using an XRite exact^{xp} densitometer.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Colour Fidelity (Highest Quality Settings)

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
McDonalds	1.96	1.97
Coca Cola Red	5.78	7.25
FedEx Blue	4.68	8.57
FedEx Green	9.55	4.19
Microsoft	1.44	4.33
Sun Microsystems	1.71	7.77
IKEA Blue	4.79	7.83
IKEA Yellow	2.02	2.00
Time Fortune 500	9.55	7.38
Quark	5.77	2.55
Viewsonic	10.00	8.16
T-Mobile Red	1.68	3.22
AVERAGE	4.9	5.4

Keypoint's PANTONE test chart was used for copy image quality testing, conducted in High/Best quality settings using 24-bit colour in the case of both models. Delta E measurements recorded the accuracy with which 12 PANTONE colours were reproduced.

Colour Fidelity (Default Settings)

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
McDonalds	2.17	3.77
Coca Cola Red	5.46	8.77
FedEx Blue	6.58	9.13
FedEx Green	8.30	4.01
Microsoft	1.39	5.43
Sun Microsystems	2.82	8.45
IKEA Blue	7.07	8.95
IKEA Yellow	2.22	1.85
Time Fortune 500	9.87	10.48
Quark	5.78	2.76
Viewsonic	11.10	9.23
T-Mobile Red	2.97	5.91
AVERAGE	5.5	6.6

Keypoint's PANTONE test chart was used for copy image quality testing, conducted in Standard/Normal settings using 24-bit colour in the case of both models. Delta E measurements recorded the accuracy with which 12 PANTONE colours were reproduced.

Dimensional Accuracy

Category	Canon imagePROGRAF TM-610M	HP DesignJet T850 MFP
Variation in Line Length in mm (Scanned in Landscape)	0.3	0.6
Variation in Line Length in mm (Scanned in Portrait)	0.2	0.4

Dimensional Accuracy was determined using the Applied Images QA-1 Test Chart (150 mm line length) and the Adobe Photoshop Measuring Tool. Charts were scanned in both Portrait and Landscape mode using the highest resolution available (600 dpi) with both devices set to B&W mode and saved as PDF files.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Device Feature Set

Category	Canon imagePROGRAF TM-610M	Advantage ✓		HP DesignJet T850 MFP
SCANNER FEATURES				
Rated Colour Scanning Speed	5 inch/sec (200 dpi)	✓		1.5 inch/sec (200 dpi)
Rated Black Scanning Speed	10 inch/sec (200 dpi)	✓		4.5 inch/sec (200 dpi)
Scanning Mode	Colour/B&W		✓	Colour/B&W/Greyscale
Maximum Document Scan Size	120 mm to 8.304 m	✓		Up to 7 m
Maximum Thickness of Paper	0.8 mm	✓		0.3 mm
File Save Formats	JPEG; PDF		✓	JPEG; TIFF; PDF
Preset Document Types	Poster/Photo; CAD; Drawing/Map; Blueprint; Blueprint Inverted; Tracing Paper	✓		Image; Lines; Blueprint; Translucent
Ability to Save Custom Presets	Yes	✓		No (quick sets created and saved in the EWS)
Deskew	No		✓	Yes (on by default)
Batch Scanning	No		✓	Yes
PRINTER FEATURES				
User Interface	5" touchscreen; tiltable	✓		4.3" touchscreen; non-tiltable
Ink Tanks Replaceable During Operation	Yes	✓		No
Ink Drop Size	Minimum 5 picoliter	✓		6 picoliter (CMY); 12.6 picoliter (mK)
Number of Nozzles	MBK: 5,120 nozzles; CMYK: 2,560 nozzles each; 15,360 in total	✓		1,376 per colour; 5,505 in total
Borderless (0 mm) Printing	Yes (Roll only)	✓		True borderless printing not supported
Maximum Outside Diameter of Roll Paper	150 mm	✓		100 mm

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Category	Canon imagePROGRAF TM-610M	Advantage ✓		HP DesignJet T850 MFP
Maximum Printable Paper Roll Length	18 m (depending on OS and application)			INA
Maximum Media Thickness for Roll Paper	0.8 mm	✓		Up to 0.3 mm
Optional Media Handling	2- and 3-inch roll holder set	✓		3-inch core adapter
High-Capacity Stacker Assembly	N/A		✓	Sheet Organizer and Stacker Kit
Product Dimensions	1,285 mm (W) x 885 mm (D*) *Basket open position	✓		1,407 mm (W) x 914 mm (D*) *Basket open position
Net Weight (Unpacked)	77 kg (including Roll Holder Set, excluding printhead and inks)		✓	60 kg
Power Consumption (Standby)	2.2 W	✓		<3.5 W
Power Consumption (Active)	76 W		✓	35 W
Acoustic Power	Operation: 6.2 Bels		✓	Operation: 5.8 B(A); Standby: <3.4 dB (A)

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Driver Feature Set

Category	Canon imagePROGRAF TM-610M	Advantage ✓		HP DesignJet T850 MFP
Predefined Profiles	Default, Photo (Color), Poster, CAD Color Line Drawing, CAD Mono Line Drawing, and Perspective, GIS, Custom	✓		Factory defaults; Black-and-white photo; CAD; GIS; Photo
Overview of Profile Settings Provided	Yes	✓		No
Media Profiles	48 + 10 user customizable special options	✓		38
Watermark	Yes	✓		No
Multi-Up Printing	Yes (2 to 16)	✓		No
Poster Print Mode	Yes (2 by 2)	✓		No
Page Stamping	Yes	✓		No
Image Rotation	90 degrees and 180 degrees		✓	Auto, 0, 90, 180, 270 degrees
CMYK Balance Adjustment	Yes (CMY only)	✓		No
Brightness Adjustment	Yes	✓		No
Contrast Adjustment	Yes	✓		No
Advanced Colour Management Options	Yes	✓		No
Free Layout Capability	Yes (flexible placement)	✓		Yes (automatic placement)
MS Office Plug-In	Yes	✓		No
Accounting Capability	Yes			INA
Unidirectional Printing Option	Yes	✓		No

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Ink Consumption
Canon imagePROGRAF TM-610M: Amount of Ink Used in Each Cartridge (in Grams)

Category	Black	Matte Black	Yellow	Magenta	Cyan
Weight of Cartridge Prior to Installation	390.3	395.8	388.1	394.8	389.9
Weight of Cartridge at End of Life	74.7	74.7	74.7	74.7	74.7
Net Weight of Ink	315.6	321.1	313.4	320.1	315.2
Total Ink Weight Across Five Cartridges					1,585.4

HP DesignJet T850 MFP: Amount of Ink Used in Each Cartridge (in Grams)

Category	Black	Matte Black	Yellow	Black
Weight of Cartridge Prior to Installation	418.3	419.6	418.1	419.3
Weight of Cartridge at End of Life	107.6	107.6	107.6	107.6
Net Weight of Ink	310.7	312.0	310.5	311.7
Total Ink Weight Across Four Cartridges				1,244.9

Canon imagePROGRAF TM-610M: Ink Used in Three 50-Page Runs of Cottage Architectural Plan Test Document in Fast Mode (in Grams)

Category	Black	Matte Black	Yellow	Magenta	Cyan
Test Run 1: Net Weight of Ink Used	1.3	21.2	0.9	2.3	4.6
Test Run 2: Net Weight of Ink Used	1.5	21.1	1.0	2.3	4.9
Test Run 3: Net Weight of Ink Used	1.3	20.9	1.2	2.5	4.7
Average Amount of Ink Used Across Three Runs	1.4	21.1	1.0	2.4	4.7
Total Ink Weight Across Five Cartridges for 50-Page Run (Based on Averages)					30.6

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

HP DesignJet T850 MFP: Ink Used in Three 50-Page Runs of Cottage Architectural Plan Test Document in Fast Mode (in Grams)

Category	Cyan	Magenta	Yellow	Black
Test Run 1: Net Weight of Ink Used	3.7	2.6	0.6	16.8
Test Run 2: Net Weight of Ink Used	3.2	2.8	0.7	16.0
Test Run 3: Net Weight of Ink Used	3.5	2.5	0.5	16.0
Average Amount of Ink Used Across Three Runs	3.5	2.6	0.6	16.3
Total Ink Weight Across Four Cartridges for 50-Page Run (Based on Averages)				23.0

Canon imagePROGRAF TM-610M: Ink Used in Three 50-Page Runs of ISO Poster Test Document in Standard Mode (in Grams)

Category	Black	Matte Black	Yellow	Magenta	Cyan
Test Run 1: Net Weight of Ink Used	1.6	16.0	2.5	25.4	70.8
Test Run 2: Net Weight of Ink Used	1.7	16.5	2.2	25.7	70.9
Test Run 3: Net Weight of Ink Used	1.7	16.0	2.6	25.7	70.1
Average Amount of Ink Used Across Three Runs	1.7	16.2	2.4	25.6	70.6
Total Ink Weight Across Five Cartridges for 50-Page Run (Based on Averages)					116.5

HP DesignJet T850 MFP: Ink Used in Three 50-Page Runs of ISO Poster Test Document in Normal Mode (in Grams)

Category	Cyan	Magenta	Yellow	Black
Test Run 1: Net Weight of Ink Used	87.5	22.5	7.8	21.9
Test Run 2: Net Weight of Ink Used	87.7	21.7	7.7	18.3
Test Run 3: Net Weight of Ink Used	88.1	22.8	9.0	19.6
Average Amount of Ink Used Across Three Runs	87.8	22.3	8.2	19.9
Total Ink Weight Across Four Cartridges for 50-Page Run (Based on Averages)				138.2

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Canon imagePROGRAF TM-610M: Ink Used in Three 50-Page Runs of GIS Map Test Document in Standard Mode (in Grams)

Category	Black	Matte Black	Yellow	Magenta	Cyan
Test Run 1: Net Weight of Ink Used	1.2	26.7	16.9	14.3	26.3
Test Run 2: Net Weight of Ink Used	1.6	26.3	16.6	14.8	25.8
Test Run 3: Net Weight of Ink Used	1.2	26.6	15.9	14.9	25.4
Average Amount of Ink Used Across Three Runs	1.3	26.5	16.5	14.7	25.8
Total Ink Weight Across Five Cartridges for 50-Page Run (Based on Averages)					84.8

HP DesignJet T850 MFP: Ink Used in Three 50-Page Runs of GIS Map Test Document in Normal Mode (in Grams)

Category	Cyan	Magenta	Yellow	Black
Test Run 1: Net Weight of Ink Used	60.1	25.1	27.0	10.0
Test Run 2: Net Weight of Ink Used	59.7	25.1	27.5	10.6
Test Run 3: Net Weight of Ink Used	60.5	25.3	27.4	11.3
Average Amount of Ink Used Across Three Runs	60.1	25.2	27.3	10.6
Total Ink Weight Across Four Cartridges for 50-Page Run (Based on Averages)				123.2

Test Methodology

Ink Consumption: Keypoint Intelligence analyzed ink consumption using three different document types: a Cottage Architectural Plan, an ISO Office Poster, and a GIS map. Each document was formatted as a PDF file except for the Cottage Architectural Plan, which was formatted as a DWG TrueView Drawing, and all were sized at ISO A0.

In Keypoint Intelligence's lab, the Canon imagePROGRAF TM-610M, with the latest "1.00" firmware (as of August 2026) was connected to a Windows 10 64-bit workstation via a 1000BaseT connection and maintained in default configuration for testing. Using the Canon imagePROGRAF Printer Driver Version 6.4.1, the documents were set to print at actual size. The Cottage Architectural Plan was printed in Fast mode on plain paper with print priority settings set to Line Drawing/Text; the ISO Poster and the GIS map were both printed in Standard mode on 140 gsm matte coated media with print priority settings set to Image.

The HP DesignJet T850 MFP was installed with the latest "6.37.1.9-202605071508" level of firmware and connected to a Windows 10 64-bit workstation via a 1000BaseT connection and maintained in default configuration for testing. Using the HP DesignJet HPGL/2 driver in default colour setting, the documents were set to print at actual size. The Cottage Architectural Plan was printed in Fast mode on plain paper; the ISO Poster and the GIS map were both printed in Normal mode on HP Heavy Weight coated media.

Comparative Wide Format Evaluation:

Canon imagePROGRAF TM-610M vs. HP DesignJet T850 MFP

Lab technicians weighed each ink cartridge before installation (with the weight of each ink with all packaging removed recorded) and after every 50-print test run, calculated the weight of ink used for each colour. To account for the Canon model's sub-tank, a procedure was followed to ensure that the sub-tank level was at its maximum before the print run commenced and again after the print run was completed, thereby ensuring that ink replenishment of the sub-tanks was considered for each print run. For both models, one cartridge was then run to exhaustion and the weight of the empty cartridge was recorded.

Test Environment: Products were tested in Keypoint Intelligence's environmentally controlled UK test lab, which replicates typical office conditions.

Test Equipment: Keypoint Intelligence's dedicated test network in Europe, consisting of Windows 10 Professional workstations, 10/100/1000BaseTX network switches and CAT5e/6 cabling.

Test Procedures: Keypoint Intelligence employs proprietary procedures and industry-standard test procedures in its lab test methods. In addition to a number of proprietary test documents, Keypoint Intelligence uses industry-standard files including an ASTM monochrome test document for evaluating black image quality. Alongside a visual observation, colour print quality and gamut size are evaluated using XRite i1 profile software and an i1 Pro colour spectrophotometer and analysed using i1i0 Advanced Scanning Table. Density of black and colour output was measured using XRite 508 and XRite exact^{xp} densitometers.

ABOUT KEYPOINT INTELLIGENCE

For over 60 years, clients in the digital imaging industry have relied on [Keypoint Intelligence](https://www.keypointintelligence.com) for independent hands-on testing, lab data, and extensive market research to drive their product and sales success. Keypoint Intelligence has been recognized as the industry's most trusted resource for unbiased information, analysis, and awards due to decades of analyst experience. Customers have harnessed this mission-critical knowledge for strategic decision-making, daily sales enablement, and operational excellence to improve business goals and increase bottom lines. With a central focus on clients, Keypoint Intelligence continues to evolve as the industry changes by expanding offerings and updating methods, while intimately understanding and serving manufacturers', channels', and their customers' transformation in the digital printing and imaging sector.

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