

Brother MFC-L6900DW

52 PPM Laser Printer • Scanner • Copier • Fax



Reliability.....	Excellent
Multitasking.....	Good
Administrative Utilities	Very Good
Feedback to Workstations	Very Good
Ease of Network Setup.....	Very Good
Print Drivers.....	Good
Scan Functions	Excellent
Print Quality	Very Good
Copy Quality	Good
Print Productivity	Good
Copy Productivity	Good
Ease of Use.....	Very Good
Feature Set	Very Good
Security Features.....	Not Rated
Environmental Features	Not Rated
Cost per Page	1.220¢
Value	Very Good

BLI RECOMMENDATION

Designed for mid-size to large workgroups, the legal-size Brother MFC-L6900DW is a true workhorse printer, evidenced by the fact that it completed BLI's 150,000-impression test with no misfeeds or service interruptions. In addition, BLI technicians noted that the unit continued to output at full engine speed even at peak volumes; many competitive models tested experience a noticeable drop in speed to dissipate excess heat from the fuser. With a paper capacity up to 2,650 sheets, which is among the highest in its class, a high-capacity toner and a separate long-life drum, Brother users can expect less frequent intervention to replenish supplies. Mobile printing is supported via the Brother iPrint&Scan app, Apple AirPrint and Google Cloud Print. With Web Connect, users can quickly scan paper documents deliver them to popular cloud services including OneDrive, Box, Google Drive, Evernote, Dropbox, Facebook, and Flickr; business versions of OneDrive, Box, Dropbox, Evernote and Google Apps for Work are also supported. Users can also select and print files, download files from the cloud to a USB drive, or upload files directly to the cloud, all without a PC. Ease of use is another strength, be it from the desktop (users can save settings for frequently used jobs; the Brother UPD is compatible with the unit) or at the device via the control panel as a walk-up device for copy, scan and fax functions. The MFC-L6900DW includes a single-pass duplex scanner, which not only reduces wear and tear on originals, but also delivers faster than average scan speeds for double-sided documents. While cost of

Test duration: Two months, including a 150,000-impression durability test.

Maximum monthly duty cycle: 150,000 impressions.

Manufacturer's recommended monthly volume: Up to 10,000 impressions.

More information on the Brother MFC-L6900DW is available through bliQ (www.buyerslab.com/bliQ).

ownership, based on the price of the device and supplies over 36 months is competitive, Secure Function Lock can be used to not only boost security, but also limit usage by user login, thereby lowering costs. Combined with its strong feature set, including high paper capacity and mobile print support, the unit's value proposition is very good overall. BLI highly recommends the Brother MFC-L6900DW.

STRENGTHS

- Highly reliable—flawless durability performance
- Strong value proposition based on performance, features, and low cost of ownership
- Robust feature set includes color touchscreen, BSI open architecture platform, built-in NFC for mobile printing and badge authentication, standard wired and wireless interfaces and secure printing
- Supports mobile printing via Brother iPrint&Scan app, Cortado Workplace, Wi-Fi Direct
- Flexible scan-to-cloud features offer support for wide range of services including business versions of OneDrive, Box, Dropbox, Evernote and Google Apps for Work
- Driver has preconfigured job settings and allows users to save their own
- UPD gives users a single interface from which to send print jobs
- Simple procedures for adjusting the tray, clearing misfeeds and replacing toner and the drum
- Administrators can manage a mixed fleet of hardware via BRAdmin Professional
- Standard automatic duplexing and toner-save mode conserve resources and reduce TCO
- High maximum paper capacity
- Produces quality print output, with crisp text and dark solids
- Automated wireless setup simplifies installation

WEAKNESSES

- Memory capacity can't be upgraded

TEST RESULTS AND OBSERVATIONS

+, – and ○ represent positive, negative and neutral attributes, respectively.



RELIABILITY

EXCELLENT

- + The unit is certified highly reliable by BLI after producing 150,000 impressions and 15,000 scans with no misfeeds recorded and no service required.

PMs/Malfunctions	Meter Count (Impressions)	Meter Count (Scans)
Starting Meter Count	0	0
Ending Meter Count	150,000	15,000
Total Misfeeds/Misfeed Rate	0/Not applicable	0/Not applicable
Service Calls	0	0



MULTITASKING

GOOD

- The unit downloads one print job at a time from the network queue, which is common among competitive devices.
- + The unit supports an unlimited (to memory capacity) number of copy reserves.
- Jobs are processed on a first-in, first-out basis. Administrators cannot alter priority settings and users cannot interrupt jobs, which is the norm for all-in-one devices.

Primary Function	Secondary Function	PRINT	SCAN	COPY
PRINT		Yes	Yes	Yes
SCAN		Yes	2	2
COPY		Yes	No ¹	Yes

¹ The device does not allow access.

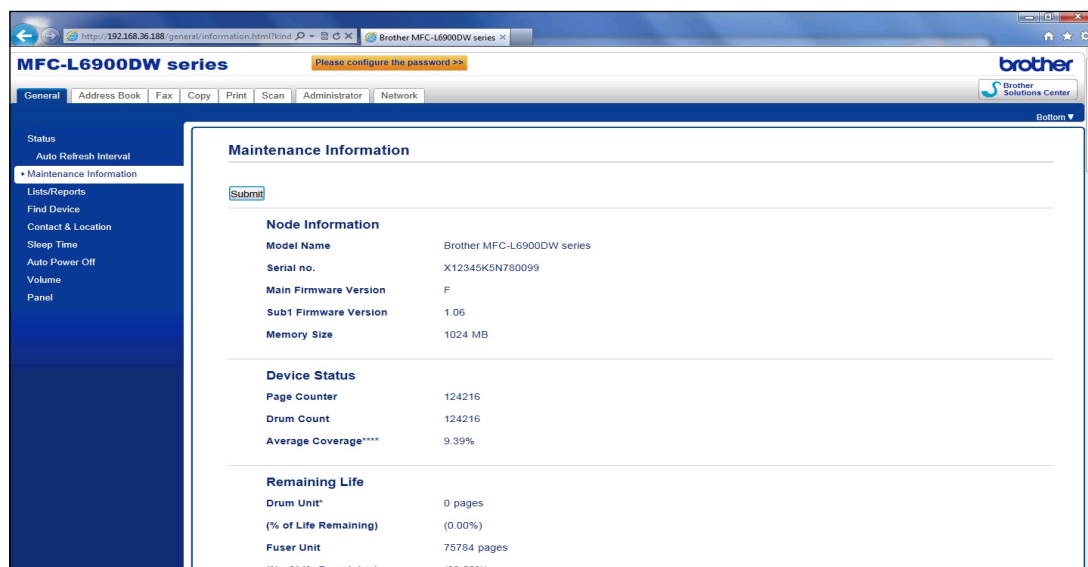
² As soon as the document feeder is free the secondary function can be programmed, but the primary function was already complete.

A "Yes" indicates that the user can initiate the secondary function while the primary function is taking place and that no further user intervention will be required for the secondary function to take place.



ADMINISTRATIVE UTILITIES

VERY GOOD



The screenshot shows the Brother MFC-L6900DW web interface. The browser address bar shows the URL: http://192.168.36.188/general/information.html?kind=... The page title is "MFC-L6900DW series". The navigation menu includes: General, Address Book, Fax, Copy, Print, Scan, Administrator, Network. The "Maintenance Information" section is active, showing a "Submit" button and the following data:

Node Information	
Model Name	Brother MFC-L6900DW series
Serial no.	X1234567890123
Main Firmware Version	F
Sub1 Firmware Version	1.05
Memory Size	1024 MB

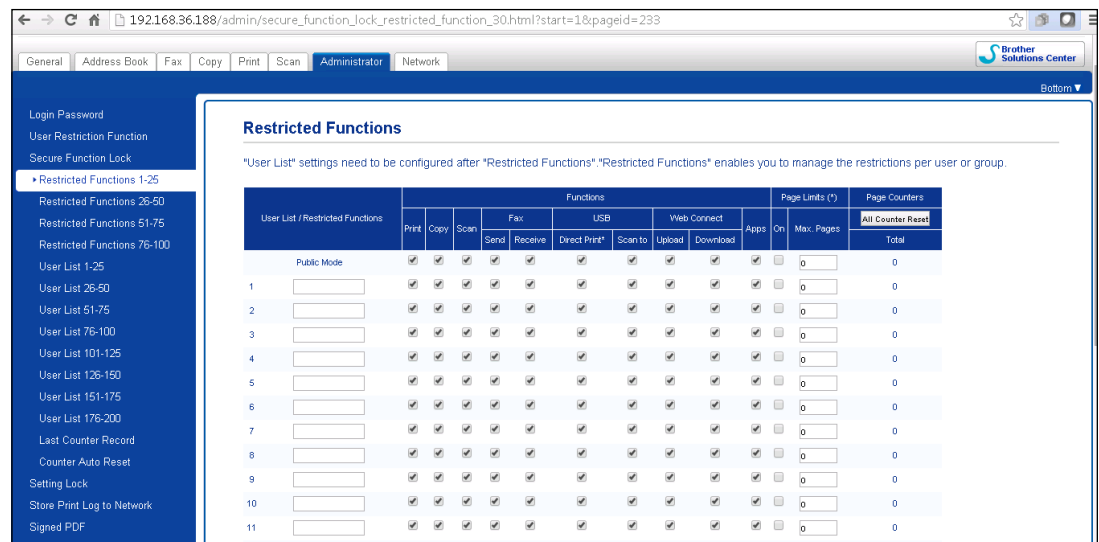
Device Status	
Page Counter	124216
Drum Count	124216
Average Coverage****	9.39%

Remaining Life	
Drum Unit*	0 pages
(% of Life Remaining)	(0.00%)
Fuser Unit	75784 pages
(% of Life Remaining)	(38.00%)

The embedded web server lets administrators change settings and view the page counts.

- + Brother BRAdmin Professional enables administrators to control the network settings of connected devices and access the embedded web server of monitored devices on

the network to check their status. The utility automatically refreshes status every 60 seconds by default; the interval can be changed from anywhere between 10 seconds to nine hours, in one-second increments. Administrators also have the ability to create printer logs that capture page counts and consumables information from all devices. Offering extensive device and/or print job status information, the utility allows administrators to change the configuration settings of any device on the network.



User List / Restricted Functions	Functions										Page Limits (*)		Page Counters	
	Print	Copy	Scan	Fax Send	Fax Receive	Direct Print	Scan to USB	Web Connect Upload	Web Connect Download	Apps On	Max. Pages	Total	All Counter Reset	
Public Mode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	
1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	
2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	
3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	
4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	
5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	
6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	
7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	
8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	
9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	
10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	
11	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	0	<input type="checkbox"/>	

Administrators can also set page limits and restrict usage of device functions (e.g., PC print, Web Connect, etc.) based on user login via Secure Function Lock.

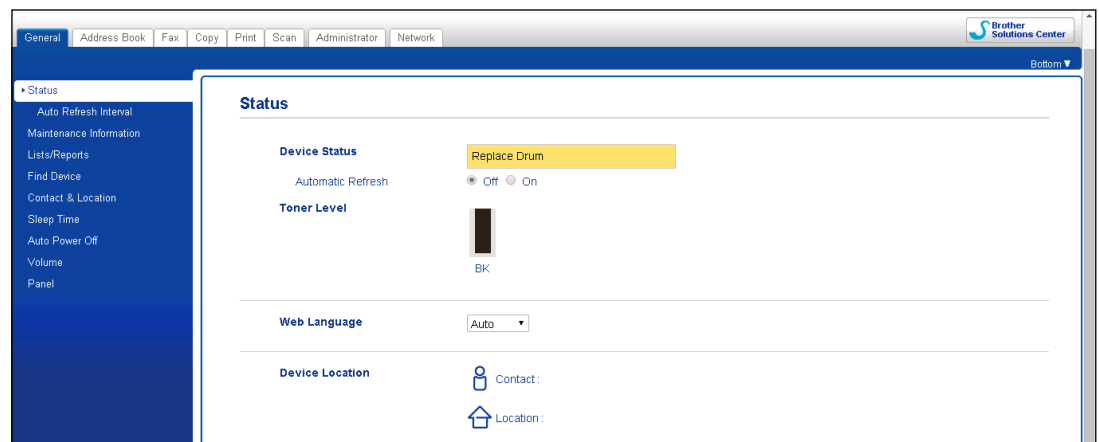
- + BRAdmin Light, which can be used for initial setup of Brother network-connected devices, lets users view status and configure basic network settings such as the IP address.



FEEDBACK TO WORKSTATIONS

VERY GOOD

- + Brother Status Monitor provides pop-up messages for error conditions, including for when toner is low/out or a misfeed has happened. Device status is listed at the top of the window, and remaining life of toner is presented in color-coded gauges. Users can access troubleshooting tips and reorder supplies through the buttons in the pop-up.
- + The icon on the taskbar changes color to indicate errors; when hovering over the icon, a context-sensitive message appears and provides details of the current condition. Users can also click on the icon to open a window with a more detailed explanation of the problem.



The embedded web server offers device status and a gauge that indicates how much toner is left. Administrators can also configure email alerts, to be sent to designated personnel, when an error occurs.

- + Similar status details are available in BRAdmin Professional. The unit can also be set to beep when, for instance, toner is depleted.



EASE OF NETWORK SETUP

VERY GOOD

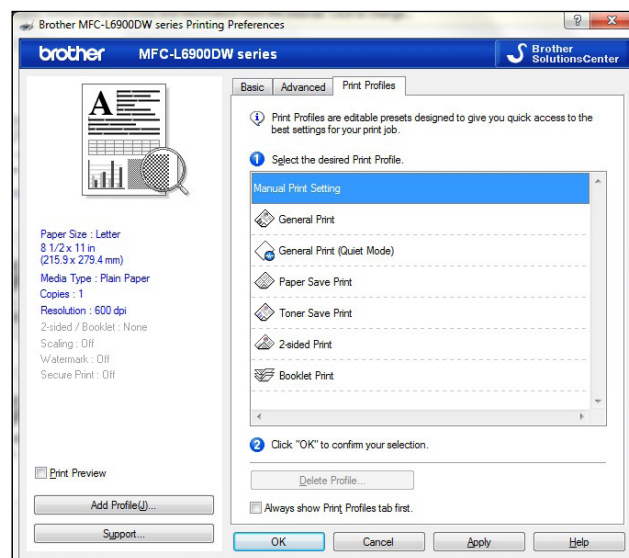
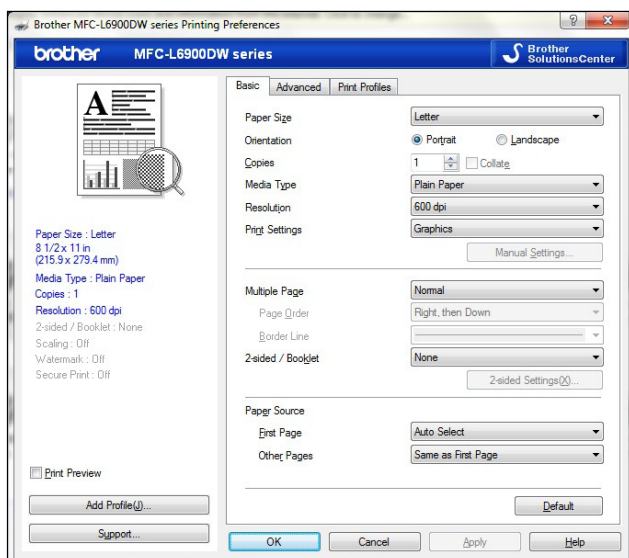
- Physical setup is straightforward as the unit ships fully assembled and is light enough to be lifted from the box and placed in the desired location by a single person; however, for safety reasons, Brother recommends two people lift the unit. Packaging materials aren't excessive. A full-yield toner cartridge (with rated yield of 12,000 pages) is packaged along with the unit and the drum (rated yield of 50,000 pages) is preinstalled; users must remove the drum prior to printing in order to remove the protective seal.
- + The disc launches when inserted in the drive, the IP address is assigned and the port is created, all automatically. Via the default routine, the PCL driver and the included utilities are installed simultaneously, helping users to be up and running in a matter of minutes.
- + Users with wireless access points that support Wi-Fi Protected Setup can automatically configure wireless settings simply and securely by entering a PIN.
- + Administrators can configure the driver and package it out to multiple PCs via the DDW utility.
- + Administrators can copy settings from one device to another through the embedded web server, while copying settings across a group of devices can be done via the fleet management utility; this function can only be done with devices in the same family, which is common.
- BRAdmin Professional 3 can be downloaded for free from Brother's website.



PRINT DRIVERS

GOOD

- The unit comes with a PCL 6 driver that supports Windows and Mac operating systems, as well as environments running Linux.



Users can save settings for frequently used job on the Print Profiles tab, thus reducing programming to a single click. Otherwise, quantity, duplex, orientation and paper size can be selected from the Basic tab.

- While it would appear that the driver offers graphical changes when certain features are selected, the only thing that causes the icon to change is when multi-page is chosen.
- + Toner-save mode is available in the driver, helping reduce both consumables waste and cost of ownership.
- From the driver users can link to Brother Solutions Center, a website that provides FAQs, user guides, driver updates and tips for using the device.
- + The UPD gives users the luxury of printing to nearly any Brother device on the network with a single driver, eliminating the need to install separate ones for multiple pieces of hardware.

Brother MFC-L6900DW Print Driver Features

	PCL 6
Auto Feature/Device Detection	Yes
Booklet Printing	Yes
Collate	Yes
Max Paper Sources per Job	5
Mirror Image	No
Negative Image	No
N-up Printing	2 to 25
Overlay	No
Paper Gauge	No
Print and Hold	No
Proof Print	No
Quantity Selection	Up to 999
Reduction/Enlargement	25% to 400%
Resolution Modes	300 dpi, 600 dpi, 1200 dpi, HQ1200
Save Settings	Yes
Secure Print	Yes
Watermarks/Custom Watermarks	Yes
Cover Mode	No
Poster Mode	Yes
JobReview	Yes
Separator Pages	No
Toner Gauge	No
Toner Save	Yes
Print All Text as Black	Yes

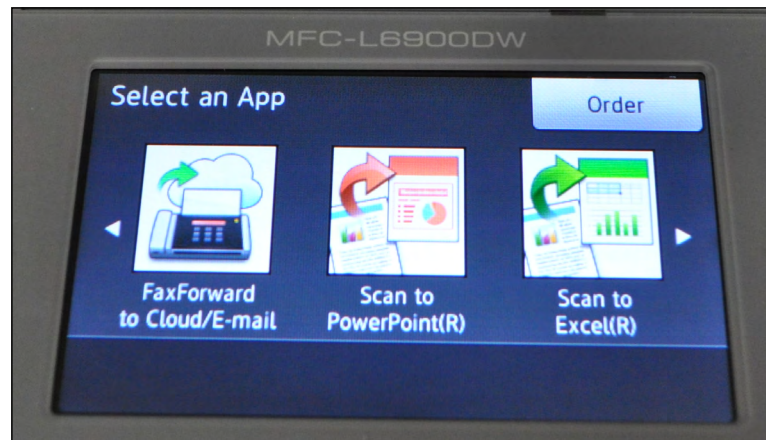
File size stays the same whether selecting collate from either the driver or the print screen within the application.



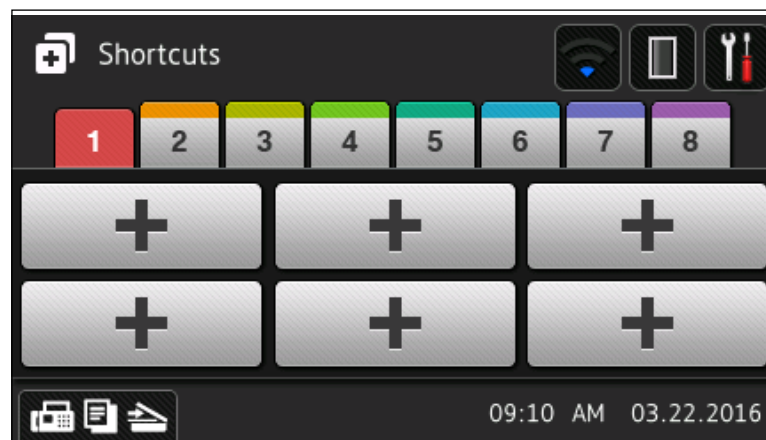
SCAN FUNCTIONS

EXCELLENT

- + The MFC-L6900DW features color and black-and-white scanning to e-mail, Internet fax and network folders via FTP. TWAIN, WIA, ICA, SANE and ISIS scan drivers are also supported. Users can scan at 100, 200, 300 and 600 dpi in PDF, PDF/A, secure PDF, encrypted PDF, signed PDF, TIFF, JPEG, PNG and XPS file formats. In addition, Brother's iPrint&Scan app lets users print from and scan to iOS, Android and Windows Phone 7 & 8 devices on the same wireless network.
- + Brother Web Connect lets users scan documents to, and print documents from, popular online services directly from the control panel of the MFP. With Web Connect, end users can quickly scan paper documents at the MFP and deliver them to services including Box, Google Drive, Evernote, Dropbox, Facebook, and Flickr, as well as business versions of OneDrive, Box, Dropbox, Evernote and Google Apps for Work, which is a wider array of services than is supported by any scan-to-cloud solution BLI has seen to date.



Web Connect also includes standard OCR capabilities, letting users scan to searchable PDF and editable MS Office files right at the panel, eliminating the need for additional processing back at the PC.



Users can quickly and easily create up to 48 shortcuts at the panel, allowing them to perform common jobs without reprogramming settings.

- + The device supports LDAP and Active Directory, which is easy to setup via the device's web page. Users can send a file to multiple e-mail addresses.
- + Scanning to OCR using the included Nuance PaperPort or Presto! PageManager software allows users to convert electronic files into text documents so they can be edited.
- + The ControlCenter software allows users to program up to five scan profiles per tab (there are three tabs) using the Custom Scan option to save their scan settings for one touch scanning.
- + Scan speeds are competitive in simplex mode and faster than average in duplex mode. Scan file sizes are also smaller than average.

Scan Speed in IPM | Competitive Average

Full Color 1:1	18.4	20.5
Full Color 2:2	32.7	19.5
Black 1:1	44.6	34.2
Black 2:2	82.6	31.3

Files are scanned at 300 dpi in PDF format.

Scan-File Size in KB | Competitive Average

Full Color (default mode)	530	1,163
Black (default mode)	101	216

Testing is conducted with single-page files scanned at 300 dpi in PDF format.



PRINT QUALITY

VERY GOOD

- + Characters were fully formed and dark, with average sharpness and competitive smoothness of curves/serifs. Lines were of a consistent weight, circles were fully formed and there was no stair-stepping of diagonal lines, while production of closely spaced fine lines was average (however, vertical fine lines on a dark background was difficult to see in the vertical direction). No overspray was noticed around text and line art. Grayscale was visible over the entire range, with distinct separation between all levels; halftone coverage had average smoothness and minimal banding. Solids were dark and had consistent coverage.

Text	Very Good
Line Art	Good
Halftone Pattern	Very Good
Halftone Range	Very Good
Solids	Very Good

Print Density

	Range	Average
Brother MFC-L6900DW	1.26 to 1.30	1.28
Devices in this class tested to date	1.12 to 1.76	1.43

Measurements are based on four readings corresponding to four different solid black locations on the output. The higher the density reading, the darker the image.

Visible Halftone Range

Brother MFC-L6900DW

10% to 100%

The halftone range test original consists of 10 blocks of increasing dot-fill levels (10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90% and 100%).



COPY QUALITY

GOOD

- Characters were fully formed and dark, with average sharpness and competitive smoothness of curves/serifs, though some jagged edges were visible when output was magnified. Circles were fully formed and there was no stair-stepping of diagonal lines; however, line thickness was inconsistent in closely spaced lines. No overspray was noticed around text and line art. Grayscale was visible over the entire range, with distinct separation between all levels, though halftone coverage exhibited graininess. Solids were dark and had consistent coverage.

Text	Good
Line Art	Good
Halftone Pattern	Fair
Halftone Range	Good
Solids	Good

Print Density

	Range	Average
Original	1.69 to 1.74	1.71
Brother MFC-L6900DW	1.16 to 1.33	1.26
Devices in this class tested to date	1.12 to 1.68	1.41

Measurements are based on four readings corresponding to four different solid black locations on the output. The higher the density reading, the darker the image.

Visible Halftone Range

Brother MFC-L6900DW

10% to 100%

The halftone range test original consists of 10 blocks of increasing dot-fill levels (10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90% and 100%).



PRINT PRODUCTIVITY

GOOD

- First-print time from overnight sleep is slightly faster than average compared with legal-size monochrome laser/LED printers in this class tested to date. First-print times for all three test files are competitive, as are running speeds when printing one set of either a 3-page or 10-page document in all tested modes. Running speed when printing the job stream, which simulates traffic in a workgroup, is competitive, too.
- + When printing 20 sets of a 10-page document, running speed is faster than average in simplex and competitive in duplex mode.

First-Print Time from Overnight Sleep

Brother MFC-L6900DW	15.23
Competitive Average	18.34

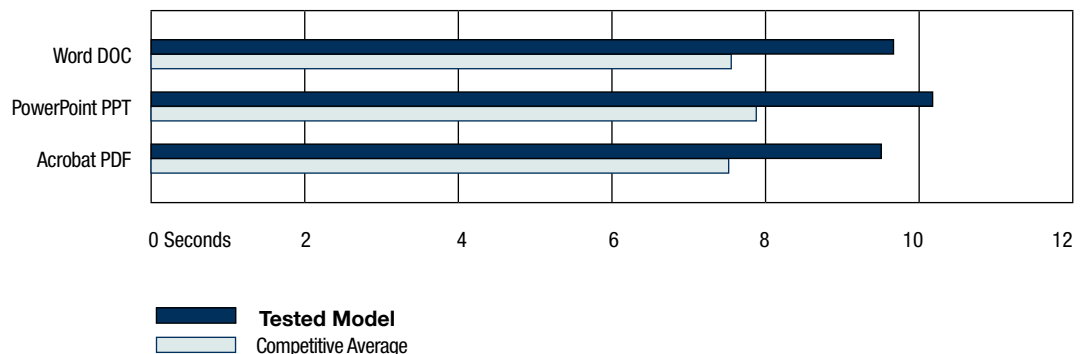
Device sits idle overnight; a single-page black Word document is sent to the device; first-print time in seconds indicates the time it took to warm up, process, image, and deliver a single-page test document to the output tray. The unit was tested with the PCL driver.

First-Print Times by File Type | Competitive Average

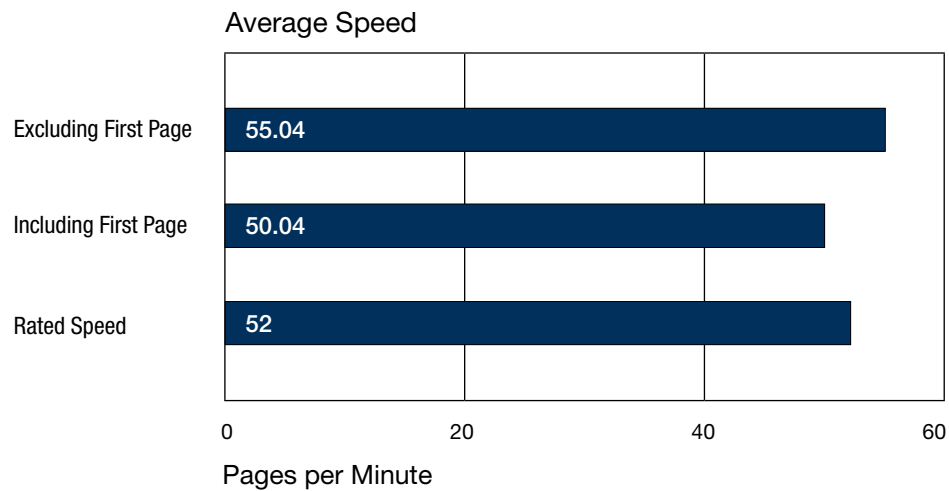
Windows XP		Time in Seconds	
Word DOC	Black Text	9.66	7.55
PowerPoint PPT	Color Graphic/Text	10.20	7.90
Acrobat PDF	Black Graphic/Text	9.51	7.54

First-print time in seconds indicates the time it took to process, image and deliver a single-page test document set to the output tray. The unit was tested using the PCL driver.

First-Print Times by File Type | Competitive Average



BLI's Tested Print Speeds versus Manufacturer's Rated Speed



Print speed is tested using BLI's Monochrome Test Original with 6% page coverage. The test page is printed in a quantity equal to double the vendor's rated print speed for the device in each mode tested (e.g., if the vendor's rated print speed is 20 ppm, 40 pages are printed). The unit's print speeds were tested using the PCL driver.

Average Print Productivity | Competitive Average

	SPEED IN PPM		PERCENT OF RATED SPEED	
	1:1	1:2	1:1	1:2
	43.2	22.2	83.1	42.8
	40.9	23.5	87.6	50.4

Productivity is tested using a 10-page black document. BLI obtains the overall efficiency by averaging the efficiency ratings (derived by dividing the tested speed of the device by the rated speed and then multiplying by 100) for each run length (1, 5, 10 and 20 sets). The unit was tested using the PCL driver.

First-Set Print Productivity (10-Page File) | Competitive Average

MODE	SPEED IN PPM		PERCENT OF RATED SPEED	
	1:1	1:2	1:1	1:2
	28.4	17.3	54.6	33.3
	30.8	19.8	65.8	42.5

Productivity is tested using a 10-page mixed-color-and-black document and a 10-page black document. Efficiency (percent of rated speed) for each mode is derived by dividing the tested speed of the device by the rated speed and then multiplying by 100. The unit was tested using the PCL driver.

First-Set Print Productivity (3-Page File) | Competitive Average

MODE	SPEED IN PPM		PERCENT OF RATED SPEED	
	1:1	1:2	1:1	1:2
	13.7	10.2	26.4	19.7
	19.1	13.5	41.0	29.0

Productivity is tested using a 3-page mixed-color-and-black document. Efficiency (percent of rated speed) is derived by dividing the tested speed of the device by the rated speed and then multiplying by 100. The unit was tested using the PCL driver.

Job Stream | Competitive Average

SPEED IN PPM			PERCENT OF RATED SPEED	
PCL	37.9	37.0	72.9	79.3

BLI's job stream includes Word documents, Outlook email messages, Excel spreadsheets, PowerPoint, HTML and Acrobat PDF files, totaling 19 pages. This test simulates the type of traffic a typical device might experience in a real-world, multi-user environment. All of the files are sent to the device as a group, at which time the stopwatch begins; timing ends when the last page of the last file exits the device. Job stream efficiency is determined by the percentage of the rated speed at which the device operates when producing real-world jobs. The closer the rate is to 100%, or if it exceeds 100%, the more efficient the device.



COPY PRODUCTIVITY

GOOD

- First-copy times from the platen and document feeder are competitive compared with legal-size monochrome laser/LED printers in this class tested to date. Running speed when copying single or multiple sets of a 10-page document is competitive, too.

First-Copy Times | Competitive Average

	Brother MFC-L6900DW	Competitive Average
Platen	8.56	7.54
Document Feeder	8.45	8.26

First-print time in seconds indicates the time it took to process, image and deliver a single-page test document set to the output tray. The unit was tested using the PCL driver.

Average Copy Productivity | Competitive Average

SPEED IN PPM			PERCENT OF RATED SPEED	
1:1	44.0	39.4	84.5	90.8
1:2	21.7	21.2	41.9	48.7
2:2	23.4	21.5	44.9	49.5

Productivity is tested using a 10-page black document. BLI obtains the overall efficiency by averaging the efficiency ratings (derived by dividing the tested speed of the device by the rated speed and then multiplying by 100) for each run length (1, 5, 10 and 20 sets). The unit was tested using the PCL driver.

First-Set Copy Productivity (10-Page File) | Competitive Average

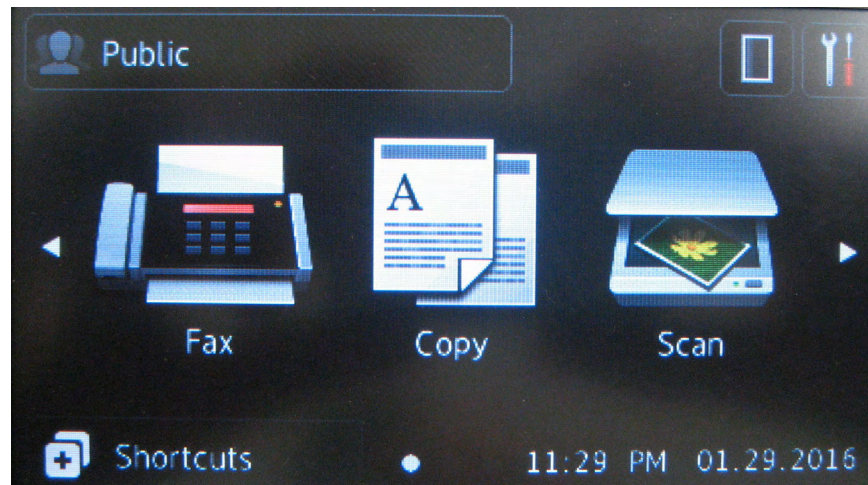
MODE	SPEED IN PPM		PERCENT OF RATED SPEED	
1:1	31.8	28.6	61.1	63.2
1:2	16.0	17.5	30.8	38.7
1:2	19.9	18.1	38.3	39.8

Productivity is tested using a 10-page mixed-color-and-black document and a 10-page black document. Efficiency (percent of rated speed) for each mode is derived by dividing the tested speed of the device by the rated speed and then multiplying by 100. The unit was tested using the PCL driver.



EASE OF USE

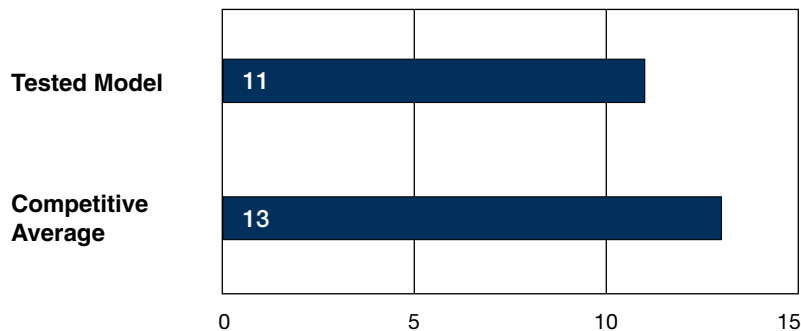
VERY GOOD



The Brother MFC-L6900DW control panel features a small but well-designed color touchscreen display. Menus are intuitively labeled and very easy to navigate.

- + Adjusting the tray for different size media is simple. The length guide slides and the width guides move in sync once the tabs have been pressed; to accommodate legal-size paper, users unlock the tab in the front of the tray and then pull the front of the tray out.
- There's no spring-loaded ramp in the tray, nor are there corner separators to hinder the process of loading paper. A locking mechanism keeps the drawer from inadvertently being pulled out of the machine.
- Typical of devices in this class, users must change paper size on the display when a new size is loaded. Administrators can, however, choose to not make users acknowledge anything paper-related on the display.
- + Clearing a misfeed from any of the three access areas—one each in the front, tray and rear—is easy. Consumables need to be removed if the jam happens in the front, but the drum isn't exposed. And if the misfeed occurs in the duplexer, that piece will have to be taken off and then reattached, but it's still easy. An alert is shown on the display to notify users of a jam.
- + Replacing toner and the drum is clean: Users push the button on the top of the unit to open the cover. The assembly can be pulled out without unlocking anything. To remove the toner portion, users push down on the green lever on the right to release the cartridge. No instructions are provided on the display, packaging or cover, but the process is nearly foolproof.
- Note that when the drum is changed, the unit doesn't sense it; users must reset the drum counter. Simple instructions are included with the drum packaging.
- + Users will have to change consumables less frequently than some with competitive devices tested to date.

Projected 36-Month User Interventions (Over 180,000 impressions)



User interventions are calculated based on manufacturer's declared yields (using the ISO 19752 test targets, printed in a semi-continuous mode), as well as the manufacturer's rated yields for other consumables (drums, developer units, waste containers, etc.). BLI calculates the total number of supplies and maintenance parts that would be required to output 180,000 pages (assumes 5,000 pages per month, which is an average volume for this class of device, over three years). Each individual cartridge or other consumable is counted as one intervention. Long-life maintenance parts, such as fuser kits and rollers, and paper supply replenishments, aren't included in BLI's calculations. Depicted scenario is for illustrative purposes only. The actual number of interventions over three years will vary based on a number of factors, including (but not limited to) page coverage, run lengths, usage patterns, periods of inactivity and calibrations performed.



FEATURE SET

VERY GOOD

- + Brother Solutions Interface, a web-based development platform, enables integration with software developed by Brother or third parties. Open architecture can help in many areas, including document management, workflow and security.
- + The Mopria-certified unit supports the Brother iPrint&Scan app, Cortado Workplace, Apple AirPrint and Wi-Fi Direct, and it also allows users to output files from Google Cloud Print.
- + The standard paper capacity of 570 sheets is above average, while the maximum capacity of 2,650 sheets is among the highest for this class of MFP.
- Bypass and output capacities of 50 and 250 sheets, respectively, are competitive. Media weight accommodation through the tray and bypass, at up to 32- and 53-lb. bond, respectively, is also competitive.
- + The 80-sheet capacity of the standard DSPF is above average.
- Non-upgradeable memory capacity of 1 GB is above average compared with the standard average of the group, but some models in this class offer a higher maximum capacity.
- + Automatic duplexing is standard for print, copy, scan and fax; the document feeder employs dual scan heads that allow both sides of a document to be captured simultaneously for fast duplex scanning.

- + An 802.11b/g/n wireless interface is standard. Only a small group of competitive models offer a standard wireless interface.
- + ID card copy allows users to copy both sides of an ID card onto a single page.
- + A USB Direct Interface allows users to print from or scan to USB flash memory drives.
- + Users can print from a mobile device via AirPrint, Google Cloud Print, Brother iPrint&Scan, Cortado Workplace and Wi-Fi Direct.

SECURITY FEATURES

NOT RATED

AUTHENTICATION	
802.1x wireless	Standard
SMTP	Standard
Biometric	No
ID Card	Standard
HID	Optional third-party
Common Access	No
Other	MIFARE, Felica, Tag-it, my-d move
Registered department or user ID codes	Standard
Number	200 users
ACCESS CONTROL	
Restrict color	NA
Control panel lock/disablement	Standard
Restrict USB port	No
Restrict direct printing	Standard
Restrict other	Copy, Fax, Print
HARD DRIVE	
Encryption	No
Maximum level	NA
Overwrite	NA
Method	NA
Maximum number after a job	NA
Maximum number at end of lease	NA
Lock	NA
Removable	NA
Password-protected mailboxes	NA
Data auto-deletion in mailboxes	NA
JOB TRACKING	
Job logs	Yes, via BRAdmin and Secure Function Lock; email notifications for scanning
Digital signature	No
Verify document came from device	No
Verify document came from specific user	No

JOB PROTECTION	
Encrypted secure print	No
Secure print	Standard
Unauthorized scan/copy protection block (watermark)	No
Compatible with same-brand devices	No
Compatible with third-party devices	No
NETWORK SECURITY/PROTOCOLS	
Protocol disablement	Standard
Port disablement	Standard
IP address filtering	Standard(IPv4 only)
MAC address filtering	No
HTTPS	Standard
Self-signed certificate	Yes
Certificate signing request	Yes
IPsec	Standard
IPv6	Standard
Secure Sockets Layer (SSL)	Standard
S/MIME encryption	No
SNMPv3 support	Standard
Transport Layer Security (TLS)	Standard
Trusted Platform Module (TPM)	No
CERTIFICATIONS	
Common Criteria	No
EAL level	NA
Capabilities certified	NA
FIPS 140-2	No
Level	NA
IEEE 2600	No
OTHER	
Administrator password length	8 - 32 alpha/numeric characters
Password-protected web server	By default
Additional features	Scan to SSH Server
Third-party features	None

INA: The vendor declined to provide this information

NA: Not applicable



ENVIRONMENTAL FEATURES

NOT RATED

Specified capable of running 30% post-consumer recycled paper	Yes
Specified capable of running 50% post-consumer recycled paper	Yes
Specified capable of running 100% post-consumer recycled paper	Yes
Instant/Quick Fusing	Yes
Duplexing	Yes
Toner-save mode	Yes
RoHS compliant	Yes
Percent of product made from previous devices	0.063%

Percent of product made from post-consumer materials	Yes
Percent of product made from pre-consumer materials	Information not available
Percent of product made from bio-based materials	Information not available
Product designed for recycling (easily disassembled, no binding agents)	Yes
Items that can be recycled	All plastic parts weighted more than 25g
Hardware remanufacturing program for this product	No
Cartridge recycling program for this product	Yes
Prepaid label for return of cartridges/bottles for this unit	Yes
Toner recycling system	No
Ability to program features such as duplexing and auto shut-off over entire fleet	Yes
What tool can be used to do this?	DX printing, auto shut off by panel setting. Universal printer driver. 2-in-1 / 4-in-1 Print Function.
Green packaging materials for the product	Yes
Green packaging materials for its consumables	Yes
Packaging materials used	Corrugated fiberboard, High-density polyethylene(HDPE), Low-density Polyethylene(LDPE), Expanded polystyrene(EPS)
Eco-Label Certifications	
ENERGY STAR	Yes
Other	ECMA-370/The Eco Declaration, Germany Blue Angel, Japan Eco Mark, Nordic Swan Label
Tested energy consumption levels of the device (watts)	
Ready/Idle	36
Energy-save	Information not available
Sleep mode	1.8
During Printing	730
How fast can this product be programmed to go into the following modes (seconds)	
Ready/Idle	Information not available
Energy-Save	Information not available
Sleep mode	60
Can the above settings be programmed by a walk-up user?	Yes
First-print time out of sleep mode (seconds)	<13.2
Emissions output from this device for the following substances (mg/h)	
Ozone	<1.5
Styrene	<1.0
Benzene	<0.05
TVOC	<10
Dust	<4.0
Other	NA

INA: The vendor declined to provide this information

NA: Not applicable



VALUE

VERY GOOD

- + The unit carries a purchase price that's lower than average compared with similarly equipped devices in this class, and supplies cost per page is also lower than average versus devices in this class tested to date. Over 36 months, BLI estimates that Brother users could save more than 22 percent when compared to comparable models in this class.

Tested Supplies Cost per Page

Toner Cost per Page	0.900¢
Supplies Cost per Page	1.220¢
COMPETITIVE AVERAGE	1.569¢

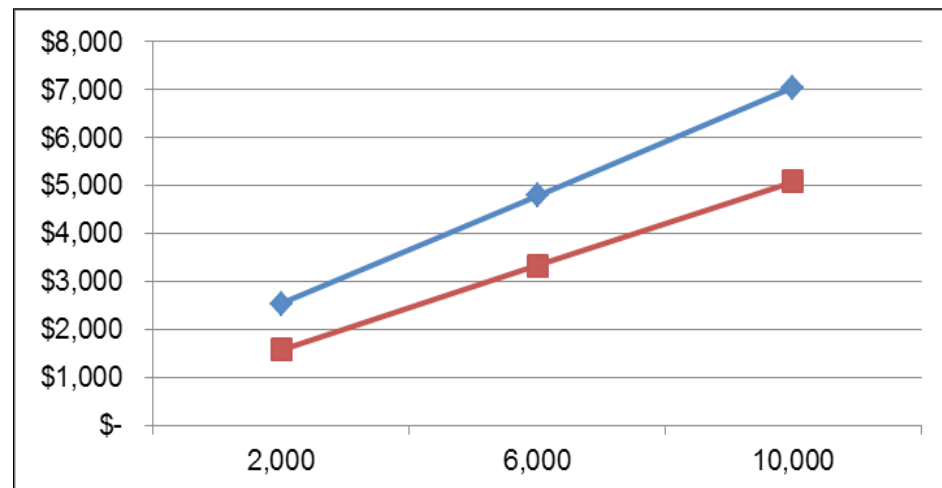
Toner CPP is based on Brother's web pricing for the high-yield cartridge and its rated yield. Supplies CPP adds web pricing for the drum and its rated yield.

36-Month Lifecycle TCO Analysis: Supplies and Hardware Costs

Pages per Month	2,000	6,000	10,000
Brother MFC-L6900DW	\$ 1,577.40	\$ 3,334.20	\$ 5,091.00
COMPETITIVE AVERAGE	\$ 2,530.46	\$ 4,789.43	\$ 7,048.40

Values are in U.S. dollars.

— AVERAGE — Tested Model



Values are in U.S. dollars. The pricing included in this TCO is provided from the manufacturer/distributor or obtained from the reseller websites at the time of publication (pricing may vary in other regions or at a later date). TCO includes supplies CPP (based on BLI's tested yields) multiplied out over 36 months, at stated monthly volumes and the purchase price of the device. Costs for paper, power, and maintenance contracts aren't included in BLI's pricing. For comparative purposes only; actual costs may vary based on page coverage.

SUPPORTING TEST DATA

Test Environment: This product was tested in BLI's 10,000-square-foot U.S. test lab, in an environment monitored by an Extech RH S20 Digital RH/Temperature Recorder and Honeywell Model 61 Seven-Day Temperature/Relative Humidity Chart Recorder. All products lab tested by BLI are powered by dedicated circuits that are protected by ESP (Electronic Systems Protection, Inc.) surge protectors to prevent transient power and communication disturbances from impacting equipment under test.

Test Equipment: BLI's dedicated test network, consisting of Windows 2003 servers, Windows 7 workstations, 10/100BaseTX network switches and CAT5 cabling.

Test Duration: Products are tested for two months, a portion of which consists of a durability test during which the product is run at its manufacturer-rated maximum monthly volume, with varying daily test volumes designed to replicate real-world use over an eight-hour workday. This variable schedule includes a mix of various-size documents, simplex and duplex modes, and a mix of short, moderate and long run lengths, and on/off cycles, throughout the day.

Tested Configuration: Brother MFC-L6900DW base unit.

Test Procedures: The test methods and procedures employed by BLI in its lab testing include BLI's proprietary procedures and industry-standard test procedures, which include a BLI-developed variation of ASTM's 1318-90 Test Method for Determination of Productivity using Electrostatic Copy Machines. In addition to a number of proprietary test documents, BLI uses an industry-standard KATUN test original for evaluating black image quality and test suites from Quality Logic to evaluate applications compatibility. In addition to a visual observation under a Graphiclite D5000 Standard Viewer, color print quality is tested using a color test target, which is read using the X-Rite Eye-One/iO Color Spectrophotometer, and samples are analyzed using the CIE XY Chromaticity Diagram. In addition, density of black and color output is measured using an X-Rite 500 Series Densitometer. Georgia-Pacific Spectrum Multi-Use 20-lb. bond is used in the tests, 10 percent of which is recycled paper containing 30 percent post-consumer content. Image quality is tested using Georgia-Pacific Printing Paper (96 brightness, 22-lb. bond).

About Buyers Laboratory LLC: Buyers Laboratory LLC (BLI) is the world's leading independent provider of analytical information and testing services to the document management industry. For over 50 years, buyers have relied on BLI to help them differentiate products' strengths and weaknesses and make the best purchasing decisions, while industry sales, marketing and product professionals have turned to BLI for insightful competitive intelligence and valued guidance on product development, competitive positioning and sales channel and marketing support. BLI also offers private, for-hire testing services that help manufacturers develop and market better products and consumables.

Note: This report is based on BLI testing one representative test sample at a specific point in time. BLI is not responsible for differences in performance that may be the result of lot-to-lot variation, changes in production and machine modifications implemented by the manufacturer, service issues or any other reason beyond BLI's control. Test unit serial #: G01234567890.

BUYERS LABORATORY LLC • North America • Europe • Asia

Gerry Stoia, CEO
Deanna Flanick, CRO
Brian O'Connor, CFO

EDITORIAL

Daria Hoffman, Managing Editor
daria.hoffman@buyerslab.com

HARDWARE

Dr. Simon Plumtree,
European Managing Editor
simon.plumtree@buyerslab.com

George Mikolay,
Senior Product Editor, A3 MFPs
george.mikolay@buyerslab.com

Marlene Orr, Senior Analyst,
Printers and A4 MFPs
marlene.orr@buyerslab.com

Lisa Reider, Senior Product
Editor, Scanners and
Environmental
lisa.reider@buyerslab.com

Carl Schell, Senior Writer
carl.schell@buyerslab.com

Kaitlin Pendagast,
Associate Editor

kaitlin.pendagast@buyerslab.com
Priya Gohil, Senior Editor
priya.gohil@buyerslab.com

Andrew Unsworth,
Associate Editor
andrew.unsworth@buyerslab.com

SOFTWARE

Jamie Bsales,
Senior Product Editor, Solutions
jamie.bsales@buyerslab.com

Lee Davis, Research Editor
lee.davis@buyerslab.com

Robert Watts, Research Editor
robert.watts@buyerslab.com

LABORATORY

Pete Emory, Director of U.S.
Research and Lab Services

David Sweetnam, Director of EMEA
Research and Lab Services

COMMERCIAL

Gerry O'Rourke,
Director, BLI International

Mike Fergus,
Vice President of Marketing

T.R. Patrick, Art Director

CERTIFICATE OF RELIABILITY

Awarded to
Brother International Corporation

for the performance of the

Brother MFC-L6900DW

in BLI's in-house durability test



A handwritten signature in black ink, appearing to read "G. Stoia".

GERRY STOIA, CEO

MARCH 2016

DATE

This is to certify that when subjected to a 150,000-impression
Buyers Lab durability test, the Brother MFC-L6900DW proved to be
a highly reliable product.

BUYERS LABORATORY LLC

THE LEADING INDEPENDENT OFFICE PRODUCTS TEST LAB AND BUSINESS CONSUMER ADVOCATE

NORTH AMERICA • EUROPE • ASIA • BUYERSLAB.COM

COPYRIGHT ©2016 BUYERS LABORATORY. REPRODUCED WITH THE WRITTEN PERMISSION OF BLI.