

# BLI Lab Test Report

December 2016 | A Comprehensive BLI Laboratory Evaluation

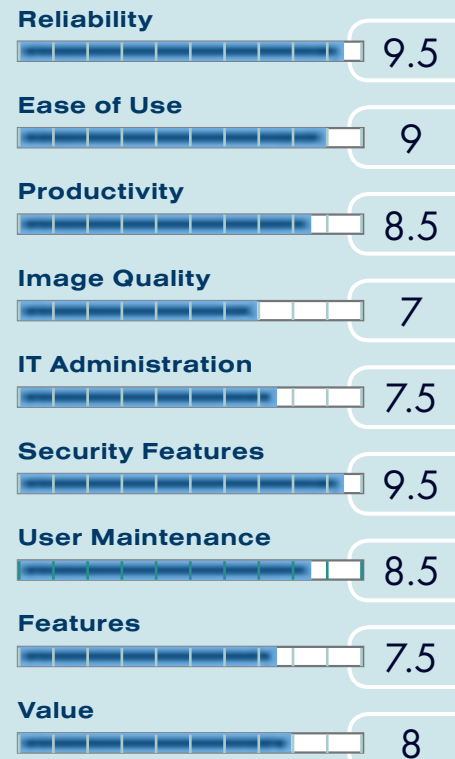


**Sharp**

**MX-5070N**

50 PPM Color/Black  
Print • Scan • Copy • Fax

The Sharp MX-5070N proved to be an ideal choice for mid-size to large workgroups. Highly reliable, easy to use and very productive in all modes tested, the unit promises minimal downtime. For users, the device's drivers and user interface have been completely redesigned, making programming jobs and building workflows a breeze. Plus, the device still features Sharp's standard retractable keyboard for simple data entry. And for administrators, the redesigned web utility is extremely easy to use and now includes an intuitive search function, as well as shortcut creation for fast selection of common administrator tasks. The device also outperformed the competition in numerous productivity tests in print, copy and scan modes. All this, combined with the device's simple routine maintenance procedures means users can expect to experience very little downtime while executing their daily tasks. Output for both print and copy was above average and consistent over the course of the test, so users are ensured that their jobs will be high quality day in and out. Support for Sharp OSA technology allows users to access software solutions and cloud services right at the control panel to streamline multi-step processes, save money and boost security. Plus, the Sharp Cloud Portal Office app, along with Sharpdesk Mobile, let users work virtually anywhere and still collaborate with their team via PCs, tablets, mobile devices and AQUOS BOARD Interactive Display Systems. What's more, the device offers all of this functionality for a slightly lower than average purchase price. BLI highly recommends the Sharp MX-5070N for environments with monthly volumes of up to 23,000 impressions.



## AT A GLANCE

**Test duration:** Two months, including a 200,000-impression and 20,000-scan durability test.

**Maximum monthly duty cycle:** 200,000 impressions.

The maximum monthly duty cycle is the maximum volume, as specified by the vendor, that the unit is capable of producing in a month; however, it isn't recommended that it be run at this volume on a regular basis.

**Recommended monthly volume:** 23,000 impressions

Please visit [bliQ \(www.buyerslab.com/bliQ\)](http://www.buyerslab.com/bliQ) for more information on the Sharp MX-5070N.

The gauges above represent Excellent (9-10), Very Good (7-8.5), Good (4-6.5), Fair (1.5-3.5) and Poor (0-1).



**STRENGTHS**

- Maximize uptime with outstanding reliability
- Streamline daily tasks with highly intuitive and easy to use control panel and drivers
- Minimize downtime even further with impressive productivity performance in scan, copy and especially print mode
- Produce high-quality output in print and copy modes
- Simplify data entry with standard retractable keyboard
- Effectively manage the device with extremely easy to use web utility
- Minimize user maintenance with simple procedures for adjusting drawers, loading media, clearing misfeeds and replacing toner
- Conveniently view and control machine operations remotely via Sharp’s remote front panel feature
- Easily and flexibly prioritize jobs in queue
- Complete large jobs faster via standard tandem printing
- Better manage workflow with Sharp OSA technology for integration with network applications and cloud services
- Make separation of pages easier and cut back on consumable usage via stapleless staple feature
- Enhance value proposition with a strong feature set that includes high memory, hard drive and maximum paper capacities, plus heavy paper weight support through the drawers



**WEAKNESSES**

- Slower than average first print time for Word files

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## RELIABILITY

### HIGHLY RELIABLE

High rated developer yields may mean less downtime for maintenance

Test duration	200,000 impressions
Output/Scan misfeeds	2
Misfeed rate	1 per 100,000 impressions
Service calls	0

In the second half of testing BLI technicians found that the waste toner container was overfilling. A firmware upgrade (version# O4.00.Z1.00) corrected the problem.

#### Consumables Rated Yields | Competitive Average

USER-REPLACEABLE		
Black Toner	<b>40,000</b>	38,646
Color Toner	<b>24,000</b>	24,890
SERVICE-REPLACEABLE		
Black Photoconductor	<b>250,000</b>	186,261
Color Photoconductor	<b>200,000</b>	146,826
Black Developer	<b>500,000</b>	358,929
Color Developer	<b>400,000</b>	336,786

In most cases, replacement of developer and photoconductor is handled under a service contract. The manufacturer doesn't set a PM interval for this unit.

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## EASE OF USE

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### EASE OF USE—PRINT

Driver selections are clearly labeled and typical features are selectable from the first tab

Device graphic in drivers provides point-and-click paper selection and displays all configured accessories

Favorites can be added from every tab to streamline workflow

Robust image quality adjustments

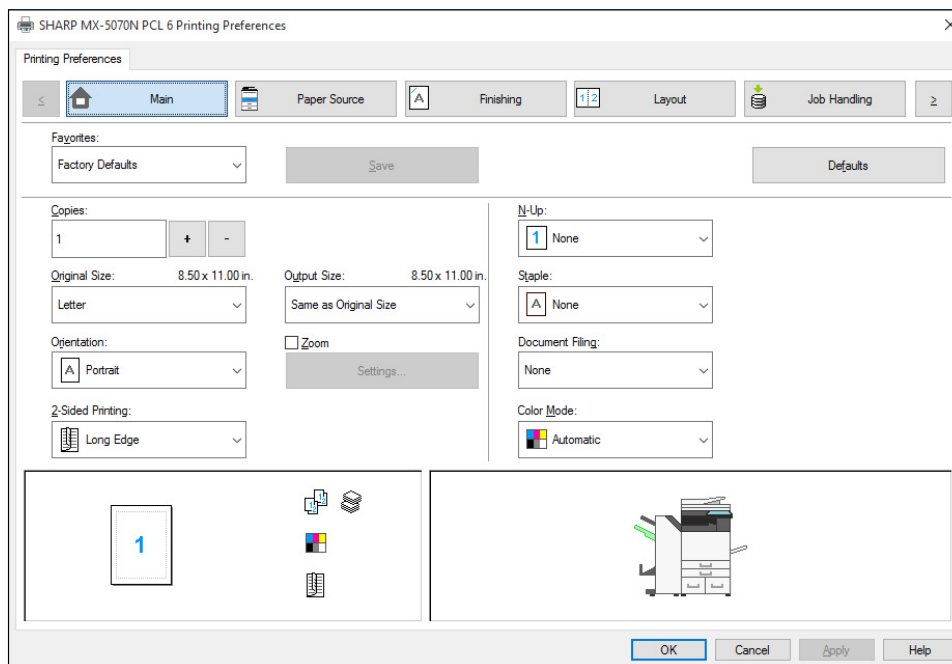
#### Driver Navigation

GENERAL	
Standard drivers	PCL, PostScript, PPD
Similarity of appearance	Identical
Feature labeling	Icons with text
Clarity of labeling	Easily understandable

Commonly used features programmable from main tab	Quantity, Paper size, Duplex, Color mode, Orientation, Stapling
Point-and-click for input/output source	Yes
Job review	Yes (easy-to-understand icons)
Job status	No
Error prevention/guidance	Incompatible settings aren't selectable and users are prompted to correct settings to avoid mistakes
<b>CUSTOMIZATION</b>	
Number of features that can be added to main tab	0 (but users can set up favorites)
Order of tabs can be rearranged	No
Customize an entire tab	Yes (individual users; by using Favorites setting)
<b>CLICK TESTS</b>	
Number to program typical print job (multiple sets, with duplex and stapling, from the second drawer)	4
Number to program booklet print job (multiple sets, from the second drawer)	10

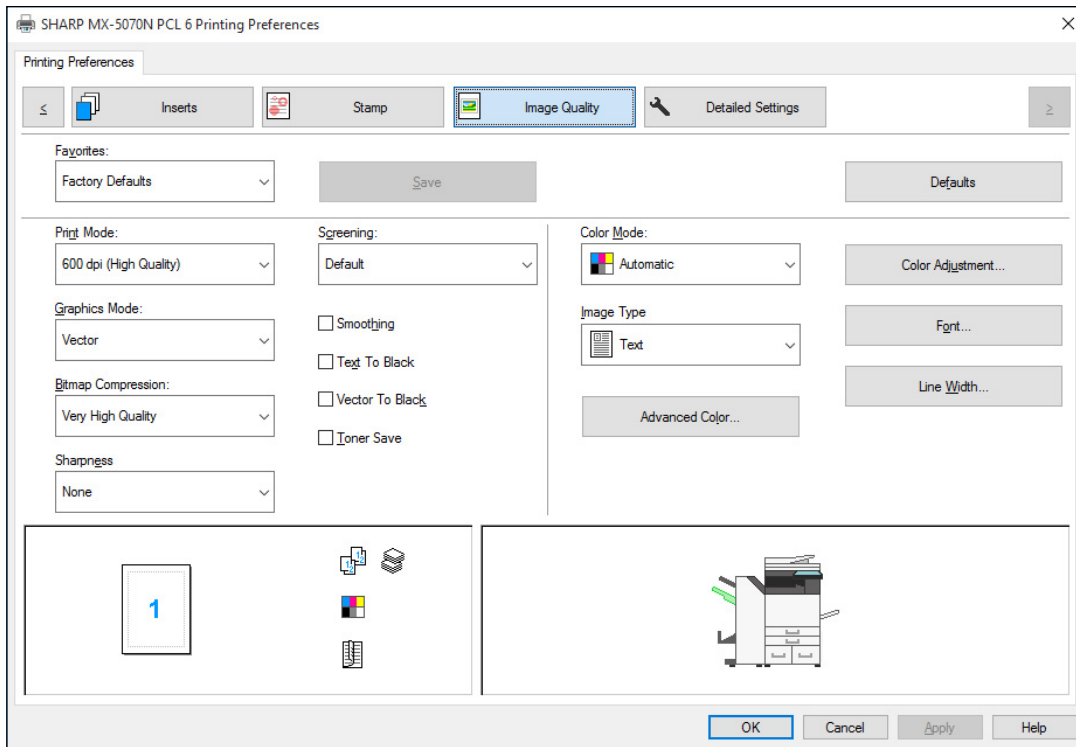
The PCL and PostScript drivers are identical and very easy to use. Features are clearly labeled and include icons and text. Icons change to reflect selected settings on the lower half of every tab. The device graphic accurately depicts the full configuration of the installed device. Users can select all paper cassettes, as well as the bypass tray and upper and lower finisher. Incompatible settings aren't selectable, plus users are prompted with instructions on how to make an inactive feature active. Users can also conveniently restore default settings for every individual tab from that tab.

**Each tab includes point-and-click selection of input and output source.**



The order of tabs cannot be rearranged and an entire tab cannot be customized. However, Favorites can be created at any time from any tab to store currently selected settings to streamline workflow of commonly selected jobs.

The Image Quality tab offers a number of color adjustment capabilities. These include adjusting brightness, contrast, red, green and blue color strength, hue and saturation. Image type adjustments include Text, Presentation, Photo, CAD, Scan, Colorimetric and Custom.



**The Image Quality tab allows users to adjust brightness, contrast, red, green and blue color strength, hue and saturation.**

A recommended enhancement would be to select the booklet tray and have a pop-up with instructions on how to create a booklet job.

**PCL Driver Features**

Banner pages	No
Blank-page removal	Yes
Booklet print	Yes
Saddle-stitch finishing without imposition layer	Not applicable
Carbon-copy mode	Yes (only with PostScript)
Collate	Yes
Color modes	Auto color, Full color, Black
Cover mode	Yes (front/back) (also supported for other pages; must be entered separated by commas)
Sources supported	All paper sources supported

Dedicated tab for "green" features	No
Available features	Toner Save Mode
Delayed/Scheduled print	No
Display device configuration	Yes
Duplex print by default	Yes
Envelope mode	Yes
Sources supported	bypass
Exception page-range printing	No
Mixplex	Yes
Sub-set finishing	No
Graphical changes	Yes
Max paper sources per job	5
N-up printing	2-16 and 2-19 Repeat
Overlay	Yes (Stamp tab)
Paper gauge	Yes (Paper Source tab)
Accuracy confirmed	Yes (embedded web server and control panel)
Poster mode	Yes
Grid size	2x2, 3x3, 4x4
Supports print all text as black	Yes
Print and hold	Yes
Priority levels supported	No
Proof/sample print	Yes
Quantity (maximum)	9,999
Reduction/Enlargement	25%-400%
Resolution (dpi)	600, 1200 and High Quality
Save settings	Yes
Built-in preset settings	No
Number of settings	N/A
Secure print	Yes
Print onto tab extensions	Yes
Tab extension text programming	Yes
Preprinted tab insertion	Yes
Toner gauge	No
Accuracy confirmed	Not applicable
Toner-save mode	Yes
Watermarks/Custom watermarks	Yes (image stamp and hidden pattern also available)

Tab extension text programming is supported. Users enter the text to be printed on the tabs, as well as configure detailed settings such as the size of the tabs, starting position, distance between tabs and page number where tab paper will be inserted.

**Secure Print**

RELEASE	
Process	Intuitive
Where jobs are accessed	HDD Retrieve
During print/scan/copy job	Yes
Number of keystrokes to release one job	3 (plus PIN code)
Output multiple jobs at once with same PIN	No
Output multiple sets at once with same PIN	Yes
FEATURES	
Change quantity	Yes
Change simplex/duplex	Yes
Select paper size and source	Yes
Apply corner stapling	Yes
POTENTIAL ISSUES	
Username invisible in secure queue before user identification	Yes
Filename invisible in secure queue before user identification	Yes
Filename invisible in main queue upon release	Yes
Secure print jobs can only be deleted with a PIN	Yes

The process for sending and retrieving secure print jobs is intuitive overall. However, PIN codes must be 5 characters or more and the user does not know this until late in the initial process. In addition, filenames are visible in the main queue upon release and any user can delete a secure print job without PIN entry once the job is released.

As a convenience for users and businesses, Sharp offers two different levels of document protection when printing. First is PIN printing, which allows users to release their print job at the MFP with a PIN. This feature allows the user to change both the file name and user name when setting up the job in the driver. The job appears in the Main folder or a custom folder of the document filing system, not in the job status screen. The second level of document protection is user authentication, which allows the logged in user to see their own jobs only.

**Print from USB**

Menu auto-populated on display	Yes
Browse into subfolders	Yes
Formats supported	PDF, JPEG, TIFF, DOCX, XLSX, PPTX
Preview files	Yes
Output multiple jobs at once	Yes
Output multiple sets at once	Yes
Change quantity	Yes
Change simplex/duplex	Yes
Change color/mono	Yes
Select paper size and source	Yes
Blank-page removal	No

Apply corner stapling	Yes
Booklet layout printing	Yes
Printing PIN-protected PDFs	Yes (need to go into queue to release)
Number of clicks to release a PIN-protected PDF	9
Release multiple PIN-protected PDFs with a single PIN	No

### Direct Printing

Source	Embedded web server
Formats supported	PDF, JPEG, TIFF, DOC, XLS, PPT, JPE, JIFF, PCL, PNG, PS
Output multiple jobs at once	Yes (Batch Print)
Output multiple sets at once	Yes
Change quantity	Yes
Change simplex/duplex	Yes
Change color/mono	Yes
Select paper size and source	Yes
Blank-page removal	No
Apply corner stapling	Yes
Create profiles	Yes (Custom PIN-protected folders can be created too)

Direct print capabilities are pretty robust. Users can output multiple jobs and sets at once, and change quantity, simplex/duplex, paper size and source. Users can also apply corner stapling and create custom PIN-protected folders.

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## Ease of Use—Scan

- Scan preview function is easy to navigate and supports multi-page and single-page views and on-screen editing
- Standard integrated keyboard makes entering data easier
- Intuitive USB port location and robust USB feature set
- Destination addresses entered manually at the control panel can be added to the device-resident address book on the fly

### Display for Scanning

KEYS	
Layout	QWERTY (Hard keyboard pulls out from behind control panel)
Comfortably spaced	Yes
Ease of entering data	Easy
Stylus can be utilized	Yes



FEATURES	
CC/BCC	Yes (only CC)
Dedicated "@" and "." keys on main screen	Yes
Ability to store extensions (.com, .net)	Yes
Typical domains (@gmail.com, ) as a one-touch key	Yes
Programmable default domain	No
Number of programmable domains	N/A
Number of short messages that can be stored	30 pre-set messages (or the user can free type into the Body Entry box)
Stylus provided	No
Keyboard	Standard integrated



Entering data is easy thanks to a standard hard keyboard that pulls out from behind the control panel. Up to 30 pre-set messages can also be stored. There are dedicated "@" and "." keys on the keyboard too.

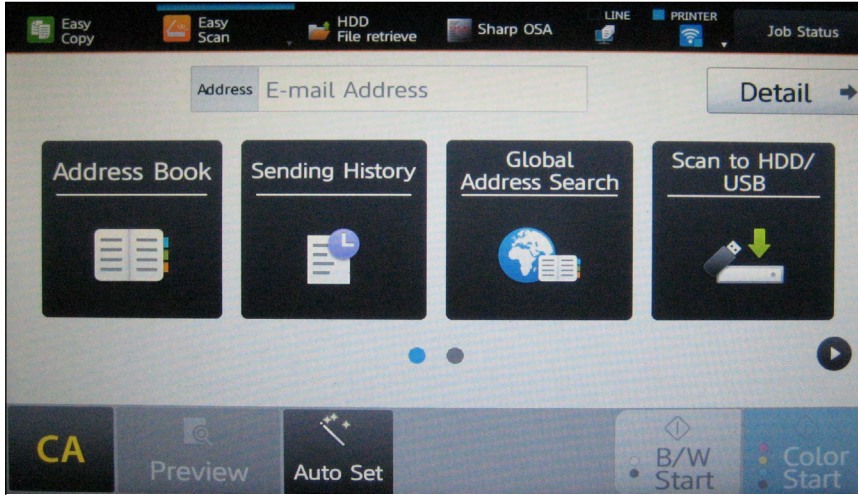
The device's Send to Group mode enables users to send a broadcast to a mixed group of different types of destinations, such as e-mail addresses and network folders, in a single operation. Many competing models have separate keys for various types of sending operations, which creates duplicate work for users who need to send a single job to multiple types of destinations.

### Scan Features

Commonly used features programmable from main screen	Color mode, Resolutions, Format, Compact PDF, Duplex, Preview
Default color mode	Auto color
Other modes	Auto color, Full color, Black, Grayscale

Resolutions (dpi)	100, 150, 200, 300, 400, 600
Formats supported	PDF, PDF/A, Compact PDF, Encrypted PDF, Searchable PDF, JPEG, TIFF, DOCX, XLSX, PPTX, XPS, RTF, TXT (UTF-8)
Default color compression mode	Middle
Other modes	Low, Middle, High and BK Letter Emphasis
Auto-split by file size	No
Destination types	Network Folder (Group), Email, FTP/Desktop
Number of types supported in one session	All
Create subfolders for storing files on the hard drive	Yes
Network folder browsing	No
Thumbnail view of selected features	No (can press Function Review key (blue check mark) to view selected settings)
Background suppression	Yes
Color-dropout mode	Yes
Blank-page removal	Yes
Duplex	Yes
Long document support (minimum of 28")	Yes (Long Size Mode in Scan Size Settings)
Embed URL in email	Yes
Scan while out of paper	Yes
<b>PREVIEW</b>	
Automatic	No (Separate Preview button available)
Ability to view more than just one page	Yes
Navigation of pages	Swipe
Enlarge view	Yes (pinch and enlarge; only works in single page view)
Onscreen editing (masking)	Yes
Move pages	Yes
Page rotation	Yes
Page deletion	Yes
Page replacement	No

A separate Preview button is available. Users are provided with both a multi-page view and single-page view and can swipe through pages. Pinch and enlarge is also supported, but only in the single-page view. All pages or individual pages can be rotated. Preview also supports onscreen editing including erase, delete, move and erase specified range.



The Easy Scan screen allows users to access the most commonly used scan functions from one location.

### Scan to USB

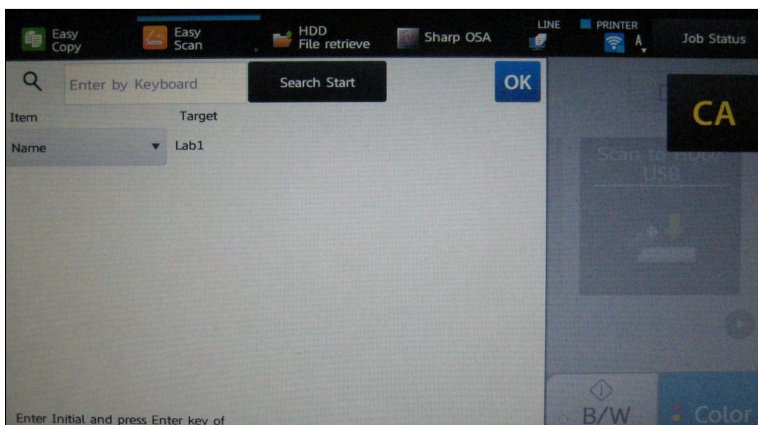
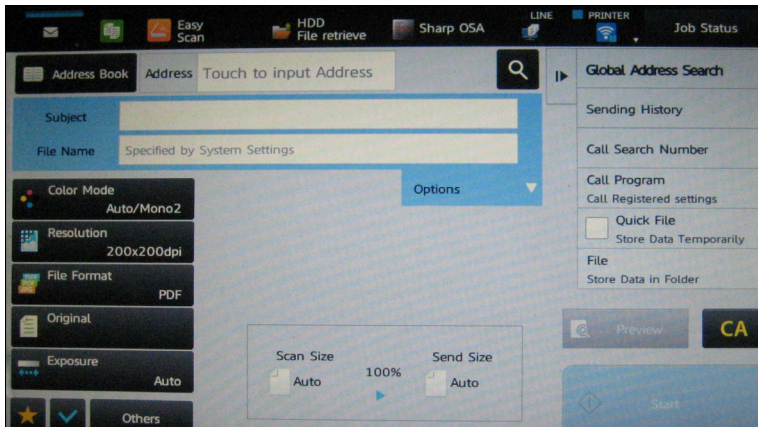
Intuitive port location	Yes
Port location	Front of unit
Menu auto-populated	Yes
Similarities between scan to email and scan to USB features	Similar appearance
Commonly used features programmable from main screen	Color mode, Resolutions, Format, Compact PDF, Duplex, Preview
Default color mode	Auto color
Other modes	Auto color, Full color, Black, Grayscale
Resolutions (dpi)	100, 150, 200, 300, 400, 600
Formats supported	PDF, PDF/A, Compact PDF, Encrypted PDF, Searchable PDF, JPEG, TIFF, DOC, XLS, PPT, RTF, TXT (UTF-8), PDF/A-1-a, PDF/A-1-b
Default color compression mode	Middle
Other modes	Low, Middle, High and BK Letter Emphasis
Auto-split by file size	No
Thumbnail view of selected features	No (can press Function Review key (blue check mark) to view selected settings)
Background suppression	Yes
Color-dropout mode	No
Blank-page removal	Yes
Duplex	Yes
Long document support (minimum of 28")	No
Preview	Yes
Ability to name files	Yes
Store into subfolders	Yes
Create folders from device	No

The USB port is located in the center front of the unit, making it very easy to access. The menu is also auto-populated upon USB insertion. In addition to PDF, PDF/A, Compact PDF, JPEG and TIFF, encrypted and searchable PDF are supported, as are DOC, XLS and PPT. Selected settings can be viewed via the Function Review button. Files can also be named and stored into subfolders. But folders cannot be created from the device.

### LDAP/Local Address Book

Intuitive LDAP search	Yes
Number of LDAP servers	6
Multiple destinations can be selected during a single search	Yes
LDAP addresses can be stored to the local address book after retrieval	Yes
Manually entered addresses can be stored to the local address book	Yes
Users, not just administrators, can program destinations	Yes
Store multi-destination types into a one-touch address book entry	Yes (only administrators can; password required)
Favorites list available	Yes

LDAP search is intuitive. Up to six LDAP servers are supported.



**Destination addresses entered manually at the control panel can be added to the device-resident address book on the fly.**

### Job Build for Scanning

Mix pages from platen and DF	Yes
Mixed-size original feeding	Yes
Mixplex changes between batches	Yes
Image quality changes between batches	Yes (Erase, Timer, Blank Page Skip, Color Drop Out, File and Quick File settings available)

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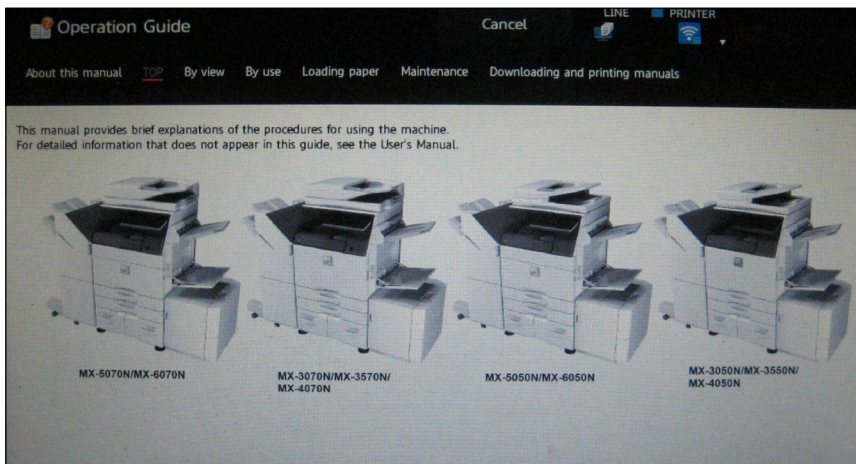
## Ease of Use—Copy

Highly intuitive, large touchscreen control panel with Cloud Portal, Google Drive, Gmail and Sharp OSA (embedded software platform) accessible right from the main screen

Choice of two copy menus (Easy Copy and advanced copy) that users can easily switch between

### Control Panel

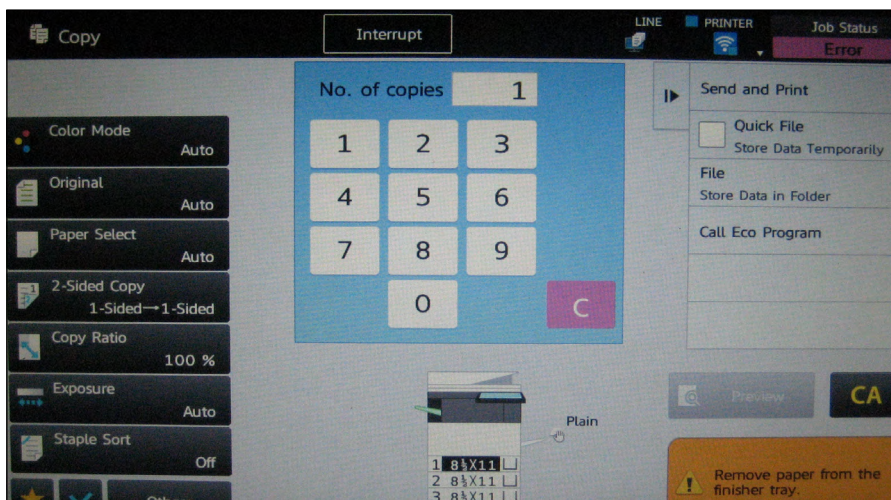
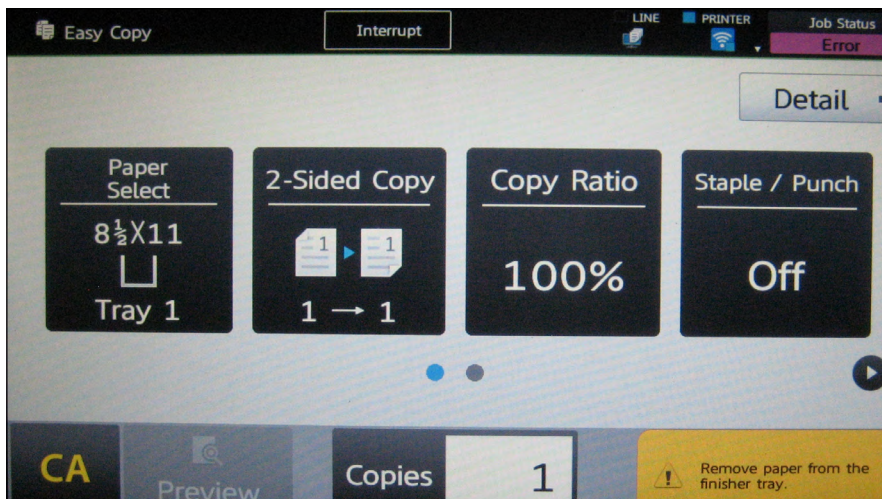
FEATURES	
Proof/Sample copy	Yes
Job review	Yes (Function Review (blue checkmark); not available using Easy Copy mode)
HELP	
Level of guidance	Above average
Index of terms	No
Context-sensitive	No
Step-by-step instructions	Yes
Provided as	Text, Graphics, Animation



**Although there's no index of terms and it's not context-sensitive, the device's Help functions are neatly categorized into sections and the instructions provided are extensive.**

**Display for Copying**

<b>TOUCHSCREEN/LCD</b>	
Dimension (diagonal)	10.1"
Color	Yes
Default brightness	Bright
Method of adjusting brightness	On main screen
<b>NAVIGATION</b>	
Typical interface for manufacturer	No (redesigned control panel)
Default screen	Copy
Commonly used features programmable from main screen	Duplex, Paper source, Color mode, Reduction, Enlargement, Finishing (from Easy Copy, paper source, duplex, rotation and staple are programmable from main screen)
Enlarged text mode	Yes
Alternate screens available	Yes (Easy Copy)
Easy access when switching from main copy screen to an alternative screen	Yes
Ease of programming jobs from the main screen	Intuitive
Ease of programming jobs from an alternate screen	Intuitive
Keys/Buttons labeled with text and icons	Yes
Clarity of labeling	Easily understandable
Slide/Swipe navigation	Yes (arrow keys available too)
Paper/Toner status	On main screen (toner); in Copy menu (paper)
<b>CUSTOMIZATION</b>	
Only administrators can customize	Yes
Customized on a user-by-user basis	Yes
Any screen can be customized	No
Order of features can be rearranged	No
Submenu features can be moved to main screen	No
Number of one-touch programs	18 (can be shown on one screen of advanced copy menu)
Ease of creating saved programs	
<b>CLICK TESTS</b>	
Number to program typical job from main copy screen (multiple sets, with duplex, reduction and stapling)	10 (advanced Copy Screen)
Number to program the same job from alternative screen	12 (Easy Copy Screen)
Number to program booklet job from main screen (multiple sets, from the second drawer)	9



**Conveniently, the device offers a choice of two copy menus; the Easy Copy menu for quick, simple programming and an advanced Copy menu, which includes all available copy selections for more advanced programming.**

Both the Easy Copy and advanced Copy menus are well laid out and easy to navigate. Most copy functions are clearly labeled; BLI technicians only noted that the function review icon, which is a blue checkmark, could be a bit clearer. To switch from the Easy Copy menu to the advanced copy menu, users simply need to press the Detail button. After doing so, they are warned that they're about to leave the Easy Copy screen.

Administrators can add Favorite copy settings to the advanced Copy menu (star icon). Administrators can also customize the settings on the main screen and submenus of the copy menu and control panel, but they cannot change the order of selections or move selections from submenus to the main screen. From the advanced Copy screen, users can store data in folders (including temporary storage in a quick folder via Quick File, which, once pressed, warns the user not to store confidential data). From this screen, users also have the option to send and print from the address book.

### Job Build for Copying

Mix pages from platen and DF	Yes
Mixed-size original feeding	Yes
Mixplex changes between batches	Yes
Image quality changes between batches	Yes
Subset stapling	Yes

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## Ease of Use—Job Management

Jobs can be moved to the top or one slot at a time  
 Jobs can be modified for quantity and paper tray

### Job List

GENERAL	
Key type	Soft
List type for jobs	Combined (print and copy)
DETAILS	
Username/ID	Yes
Number of originals	Yes
Number of output pages in a job	Yes
Number of sets in a job	Yes
Time remaining until job completion	No
Jobs that are completed	Yes
Jobs that are incomplete	Yes
Date	No
Time submitted/completed	No
Filename	Yes

### Queue

FEATURES	
Number of jobs that can be displayed	9 (per screen)
Move print/copy jobs	Yes
Name of key	Priority Change (appears on main screen once more than one job is available)
Increments	To top and one slot at a time
Scan jobs appear in same queue with print/copy	No
Modify jobs (beyond quantity)	Yes (can select different paper tray via Reselect Paper)



JOB DELETION	
User prompted/warned	Yes
More than one job at once	Yes (Multi-selection mode from dropdown menu on the right or Select All Jobs button)
Only authorized users can delete	No

The main Screen of the Print/Copy Job Queue shows the user, progress/sets and status. Additional information is available when users select the Check details of job key. Associated finishing settings are also shown in the details view.

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## Ease of Use—Multitasking

Standard tandem printing allows for large jobs to be distributed between two devices for faster completion

### Capabilities

Print jobs accepted by the device	Based on resources
Secure print job can be released while a print job is output	Yes
Able to send files to multiple destination types	Yes
Access to display blocked for scan/copy jobs while scanning originals	Yes
Slowdown in scanning during a print job	No (slowdown for copy jobs, but not scan to email)
Scan during a misfeed	Yes
Copy reserves	Based on resources
Settings auto-clear when programming ahead the next scan or copy job	Yes (after 60 seconds, by default)
Default priority mode	First-in, first-out
Other priority modes	Not applicable
Prioritization of print jobs prior to submission	No

### Interrupt Mode

Identical for a print or copy job	Yes
Device continues to run interrupted job while the next job is programmed	No
Auto-resumes interrupted job after how long	Immediately

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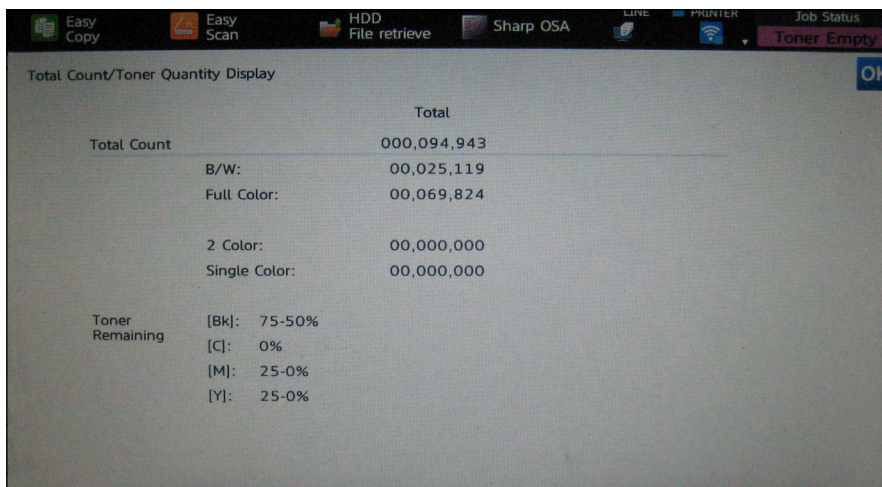
## Ease of Use—Feedback

Support for both print job completion and deletion notifications

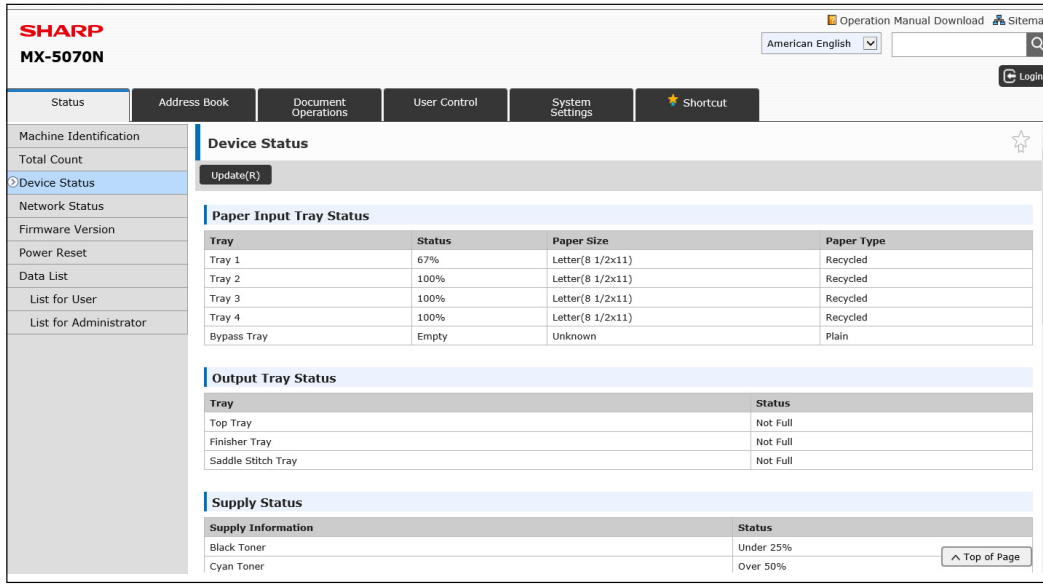
Paper supply information can be viewed from the print driver

UTILITY	
Name and version number	Printer Status Monitor 4.2
Range of conditions covered in pop-up messages	Average

Pop-ups appear in one window	Yes
Print job completion notification	Yes
Print job deletion notification	Yes
Distinct color changes to icon	Yes
Link to embedded web server	No
<b>CONSUMABLES STATUS</b>	
In feedback utility/embedded web server/fleet management utility	Only in embedded web server
Driver	Feedback directly in driver (paper only)
<b>STATUS IN EMBEDDED WEB SERVER</b>	
Paper size	Text
Paper	Yes
Indicator	Text (percent)
Toner	Yes
Indicator	Gauge and text
Drum	Not Available
Waste toner container	Not Available
Staple cartridge	Yes
Fuser	Not Available
<b>ALERTS</b>	
Email	Configured through embedded web server
Conditions covered	Jam, Toner Low, Toner Empty, Paper Empty, Service Request, PM Request, Waste Toner Almost Full, Waste Toner Full, Job Log Full
Maximum number of recipients	3
Different alerts for different users/groups	No



The control panel's counter includes the amount of toner remaining in 25 percent increments.



The web utility provides the amount of paper remaining in each drawer in 33 percent increments, the size and type of paper in each drawer and toner status in 25 percent increments.

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PRODUCTIVITY

8.5

PRINT PRODUCTIVITY

- Fastest of the competitive group when printing single sets in all modes tested (black, color, simplex and duplex)
- Fast first-print time from sleep mode and faster than average when printing multiple sets, as well as when printing booklets in black
- Faster than average speeds when printing BLI’s job stream test in color mode from the PCL driver (fastest of the group using the PostScript driver in both black and color modes)

The MX-5070 gave a standout performance in many print productivity tests, proving it can be counted on to more than meet the demands of busy workgroups. And environments that frequently print in color will appreciate its especially impressive performance in color tests. Whether a long- or short-run job, the MX-5070 demonstrated it will have no problem keeping work moving, even during the busiest periods of the day.

SHORT-RUN JOBS

Recovery Times | Competitive Average

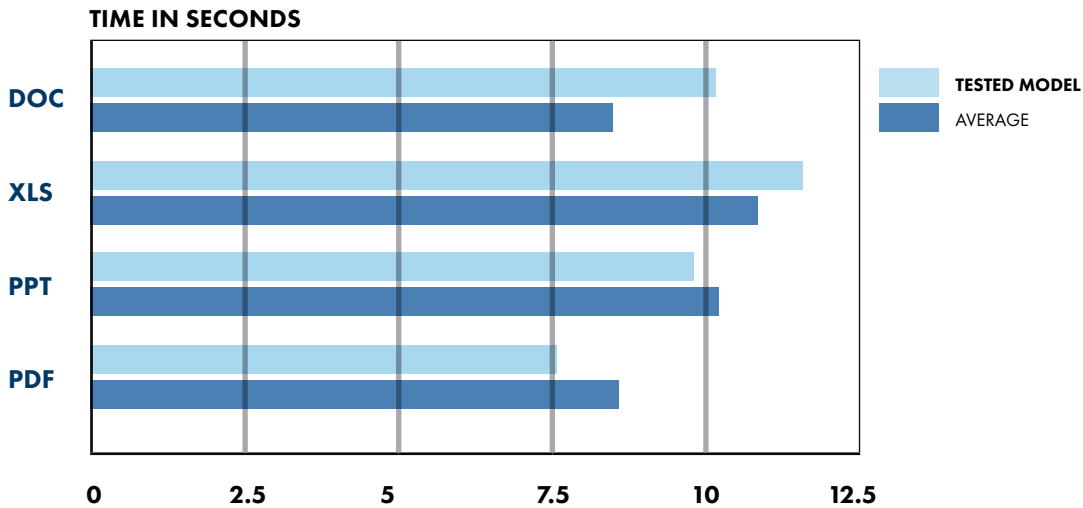
Energy Save	16.50	16.61
Daytime Sleep	18.14	25.61

Recovery time in seconds indicates the time it took to warm up, process, RIP the 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**

FORMAT	TYPE	TIME IN SECONDS	
Word DOC	Black text	<b>10.09</b>	8.48
Excel XLS	Color graphic/text	<b>11.63</b>	10.86
PowerPoint PPT	Color graphic/text	<b>9.79</b>	10.23
Acrobat PDF	Black graphic/text	<b>7.73</b>	8.57

First-print time indicates the time it took to RIP the image and deliver the first page of the test document set to the output tray. The unit was tested using the PCL driver.



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

MODE	SPEED IN PPM		PERCENT OF RATED SPEED	
AUTO COLOR				
1:1	<b>32.4</b>	25.4	<b>64.9</b>	52.1
1:2	<b>31.3</b>	21.7	<b>62.7</b>	44.3
BLACK				
1:1	<b>36.1</b>	30.2	<b>72.2</b>	60.5
1:2	<b>34.2</b>	24.9	<b>68.4</b>	49.9

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.

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

MODE	SPEED IN PPM		PERCENT OF RATED SPEED	
Auto Color 1:2	<b>14.4</b>	10.3	<b>28.7</b>	21.2

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**

DRIVER/MODE	SPEED IN PPM		PERCENT OF RATED SPEED	
<b>PCL</b>				
Auto Color	<b>38.1</b>	31.4	<b>76.1</b>	64.6
Black	<b>41.6</b>	37.8	<b>83.1</b>	75.5
<b>POSTSCRIPT</b>				
Auto Color	<b>34.7</b>	25.3	<b>69.5</b>	52.5
Black	<b>39.7</b>	29.6	<b>79.3</b>	59.5

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 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. 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.

**LONG-RUN JOBS**

**Average Multi-Set Print Productivity | Competitive Average**

MODE	SPEED IN PPM		PERCENT OF RATED SPEED	
<b>AUTO COLOR</b>				
1:1	<b>41.7</b>	36.0	<b>83.5</b>	73.8
1:2	<b>40.6</b>	33.5	<b>81.2</b>	68.7
<b>BLACK</b>				
1:1	<b>43.4</b>	39.5	<b>86.8</b>	79.1
1:2	<b>42.5</b>	36.0	<b>85.1</b>	72.1

Productivity is tested using a 10-page mixed-color-and-black document and a 10-page black document. BLI obtains the overall efficiency (percent of rated speed) for each mode 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 (10 sets). The unit was tested using the PCL driver.

**Average Booklet Print Productivity | Competitive Average**

	SPEED IN PPM		PERCENT OF RATED SPEED	
Auto Color	<b>40.2</b>	35.8	<b>80.4</b>	74.0
Black	<b>41.9</b>	36.6	<b>83.8</b>	73.4

Productivity is tested by having the device fold, saddle-stitch and output 10 sets of a 16-page PDF file. BLI obtains the efficiency (percent of rated speed) for each mode by averaging the efficiency ratings (derived by dividing the tested speed of the device by the rated speed and then multiplying by 100). The closer the rate is to 100%, or if it exceeds 100%, the more efficient the device. The unit was tested using the PCL driver.

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## Scan Productivity

Fast duplex scan speeds  
Small color file sizes

Scan-intensive environments will appreciate the MX-5070's strong performance in this area. Duplex scan speeds are faster than average in both color and black modes and users should have no problem sending and storing color files, as file sizes are smaller than average.

### Scan Speed in IPM | Competitive Average

COLOR		
1:1	<b>71.3</b>	64.4
2:2	<b>141.7</b>	100.7
BLACK		
1:1	<b>70.8</b>	68.2
2:2	<b>141.7</b>	109.5

Testing is conducted with a 10-page file scanned in default mode at 300 dpi in PDF format.

### Scan File Size in KB | Competitive Average

COLOR		
Default compression	<b>826</b>	999.36
Best compression	<b>146</b>	256.34
BLACK		
Default compression	<b>43.2</b>	210.40
Best compression	<b>43.2</b>	36.26

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

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## Copy Productivity

Most productive of the group when copying single duplex sets in all modes tested (1:2, 2:2, color and black modes)  
Most productive or among the most productive of the group when copying multiple duplex sets in all modes tested (1:2, 2:2, color and black modes)

The MX-5070N surpassed the competition in every duplex copy test and kept up with the competition otherwise, proving it can be counted on to more than meet the demands of busy workgroup environments.

**SHORT-RUN JOBS**

**First-Copy Times in Seconds | Competitive Average**

AUTO COLOR		
Platen	<b>9.01</b>	8.49
Document Feeder	<b>9.25</b>	9.36
BLACK		
Platen	<b>5.52</b>	5.58
Document Feeder	<b>7.28</b>	6.69

**Single-Set Copy Productivity | Competitive Average**

MODE	SPEED IN PPM		PERCENT OF RATED SPEED	
AUTO COLOR				
1:1	<b>26.7</b>	24.4	<b>53.4</b>	49.9
1:2	<b>25.3</b>	18.7	<b>50.6</b>	38.3
2:2	<b>34.5</b>	25.9	<b>69.1</b>	53.1
BLACK				
1:1	<b>32.9</b>	33.3	<b>65.8</b>	66.5
1:2	<b>29.9</b>	24.1	<b>59.9</b>	48.3
2:2	<b>40.0</b>	30.1	<b>79.9</b>	60.3

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.

**LONG-RUN JOBS**

**Average Multi-Set Copy Productivity | Competitive Average**

MODE	SPEED IN PPM		PERCENT OF RATED SPEED	
AUTO COLOR				
1:1	<b>38.6</b>	34.2	<b>77.1</b>	70.1
1:2	<b>37.6</b>	29.8	<b>75.2</b>	61.3
2:2	<b>41.7</b>	34.9	<b>83.5</b>	71.5
BLACK				
1:1	<b>41.9</b>	41.1	<b>83.8</b>	82.1
1:2	<b>40.1</b>	35.9	<b>80.3</b>	71.8
2:2	<b>44.9</b>	39.5	<b>89.8</b>	79.1

Productivity is tested using a 10-page mixed-color-and-black document and a 10-page black document. BLI obtains the overall efficiency (percent of rated speed) for each mode 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 and 10 sets).

Average Booklet Copy Productivity | Competitive Average

	SPEED IN PPM		PERCENT OF RATED SPEED	
Auto Color	<b>45.0</b>	35.7	<b>90.1</b>	73.9
Black	<b>46.5</b>	37.2	<b>93.0</b>	74.5

Productivity is tested by having the device fold, saddle-stitch and output 10 sets of a 16-page PDF file. BLI obtains the efficiency (percent of rated speed) for each mode by averaging the efficiency ratings (derived by dividing the tested speed of the device by the rated speed and then multiplying by 100). The closer the rate is to 100%, or if it exceeds 100%, the more efficient the device.

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## IMAGE QUALITY

7

### PRINT QUALITY

- Well-reproduced background colors
- Bright saturation of colors
- Sharp colors for business output
- Crisp text, broad grayscale range and bold solids
- Slightly yellowish flesh tones

The device earned very good marks for its output in both the color business graphics and photographic images categories, and will meet the needs of environments that require color in their general office documents. Backgrounds were well reproduced, and colors were smooth and bright. Flesh tones were slightly yellowish, however.

Organizations can also rest assured that this device will produce print output that will more than meet the needs of general office environments in black and white, regardless of the type of document being printed. Characters were dark and fully formed. The device also exhibited smooth transitions from light to dark shades, and bold solids will easily attract attention for your marketing materials.

#### Color Print Quality

BUSINESS GRAPHICS	VERY GOOD
Coverage of solids	Slight mottling
Saturation	Bright
Fine detail	Sharp
Reproduction of light backgrounds	Well produced
PHOTOGRAPHIC IMAGES	VERY GOOD
Flesh tones	Slightly reddish
Smoothness	Minimal graininess
Fine detail	Average
Half-tone range	10% to 90%



### Black Print Quality

TEXT	VERY GOOD
Characters	Fully formed
Darkness	Above average
Sharpness	Above average
Curves/Serifs	Average
LINE ART	GOOD
Closely spaced fine lines	Average
Line thickness	Slightly inconsistent
Circles	Minimal breakup
Stair-stepping of diagonal lines	Moderate
HALFTONE RANGE	VERY GOOD
Range (10% to 100%, in 10 increments)	10% to 100%
Separation between levels	All
HALFTONE FILL	VERY GOOD
Smoothness	Minimal graininess
Banding	None
SOLIDS	VERY GOOD
Darkness	Above average
Coverage	Slight mottling

### Print Density | Competitive Average

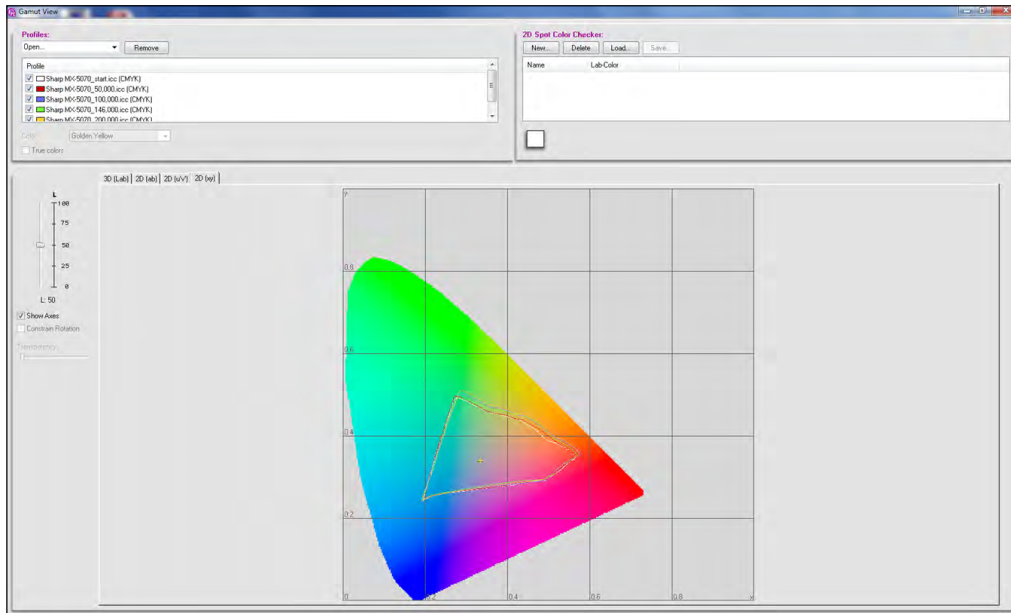
Cyan	<b>1.08</b>	1.08
Magenta	<b>1.14</b>	1.18
Yellow	<b>0.92</b>	0.90
Black	<b>1.50</b>	1.48

Density of a printed image with blocks of all solid colors, based on the average of two readings each for cyan, magenta and yellow, and four different locations on the output for black. The higher the reading, the darker the image.

### Gamut Variance Readings

TEST POINT	DELTA E	RATING
50,000	1.65	<b>Excellent</b>
100,000	3.28	<b>Very Good</b>
146,000	2.96	<b>Very Good</b>
200,000	3.79	<b>Very Good</b>
AVERAGE	2.92	<b>Very Good</b>

Delta E is a colorimetric measurement assessing the distance between colors. The readings reflect the average shift of four specific color points within the color gamut from the previous measured point.



Sharp MX-5070 Gamut

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## Copy Quality

- Well produced background reproduction
- Bright saturation of colors
- Bold solids
- lightly reddish flesh tones

While the device’s copied output was not produced at the same high level as print, it will meet the need of most general offices in both color and black modes. Color backgrounds were well reproduced, and colors were bright. Flesh tones appeared slightly reddish, however. In black mode, bold solids will help your marketing materials stand out. Half-tone patterns were smooth and displayed no evidence of banding.

### Color Copy Quality

BUSINESS GRAPHICS	VERY GOOD
Coverage of solids	Consistent
Saturation	Bright
Fine detail	Average
Reproduction of light backgrounds	Well produced
PHOTOGRAPHIC IMAGES	GOOD
Flesh tones	Slightly reddish
Smoothness	Minimal graininess
Fine detail	Average
Halftone range	10% to 90%

**Black Copy Quality**

TEXT	GOOD
Characters	Minimal breakup
Darkness	Average
Sharpness	Average
Curves/Serifs	Average
LINE ART	VERY GOOD
Closely spaced fine lines	Average
Line thickness	Slightly inconsistent
Stair-stepping of diagonal lines	None
HALFTONE RANGE	GOOD
Range (15% to 100%, in eight increments)	29% to 100%
Separation between levels	Most
HALFTONE FILL	VERY GOOD
Smoothness	Minimal graininess
Banding	None
SOLIDS	VERY GOOD
Darkness	Above average
Coverage	Slight mottling

**Copy Density**

COLOR	ORIGINAL	TESTED COPY	AVERAGE
Cyan	1.33	<b>1.20</b>	1.28
Magenta	1.29	<b>1.28</b>	1.23
Yellow	0.99	<b>0.98</b>	0.87
Black	1.91	<b>1.49</b>	1.51

Density of a printed image with blocks of all solid colors, based on the average of two readings each for cyan, magenta and yellow, and two different locations on the output for black. The higher the reading, the darker the image.

7.5

IT ADMINISTRATION

7

**IT ADMINISTRATION—SETUP**

Drivers can be pushed out to multiple PCs during install

**Installation**

<b>DRIVERS</b>	
Method	Download
Multiple drivers can be installed simultaneously	Yes
Installed with feedback utility	No
File size of driver download	21,466
Can be pushed out to multiple PCs	Yes
Auto-configuration of accessories	No user intervention required
<b>DISCS INCLUDED</b>	
Number	0 (download)
Contains	Download contains PostScript, PCL and PPD drivers
Auto-launches	Not applicable
<b>OTHER FEATURES</b>	
Auto-creation of port	Yes
Install utility has built-in test page printing	No
One-to-one/One-to-many cloning	Yes
Remote server connection test button	Yes (SMTP and LDAP)
Network browsing for scan-to-folder setup	No
LDAP support for programming destinations remotely to the local address book	Yes
Multiple utilities can be installed simultaneously	No
From how many discs	Not applicable
Allows for remote access while in sleep mode	Yes

Multiple drivers can be installed at the same time. In addition, the drivers auto-configure with no need to set up. Sharp Remote Device Manager (SRDM) fleet management utility is available as a download from Sharp’s web site. The link to download SRDM is very easy to locate.

**7.5**

**IT Administration—Utilities**

Intuitive and easy to use web utility

Web utility Search function allows for administrative tasks to be located quickly

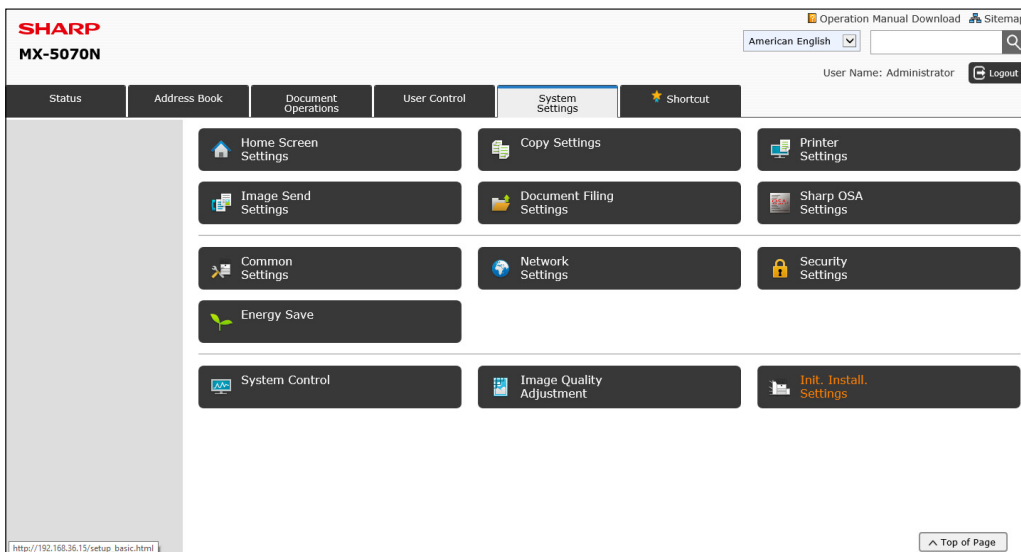
Web utility Shortcut creation allows for fast selection of common administrator tasks; administrators can also access shortcuts right from the control panel

**Embedded Web Server**

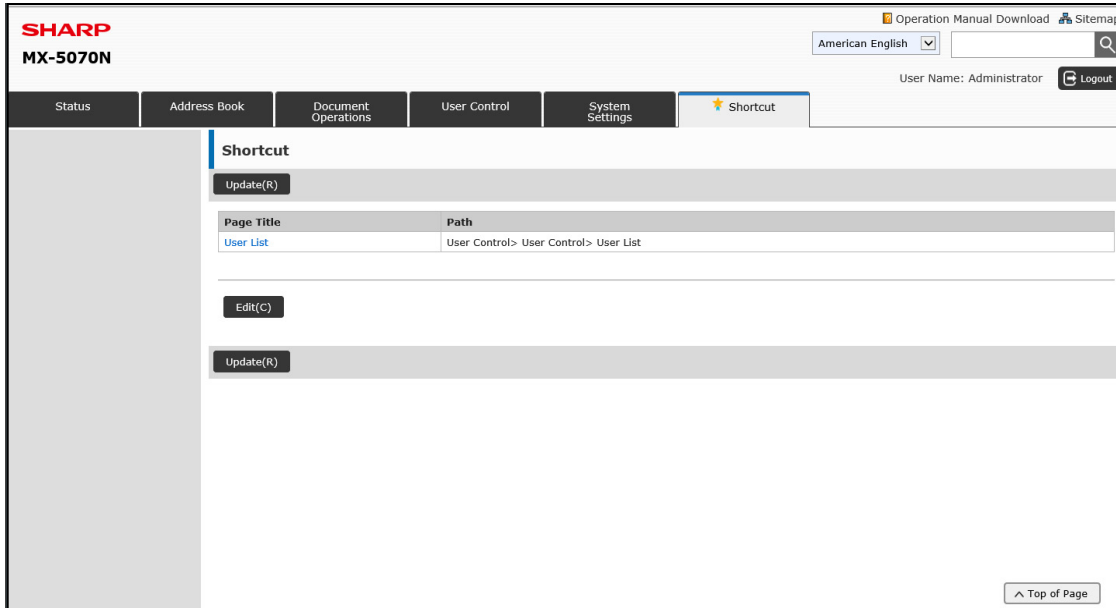
<b>FEATURES</b>	
Logically organized/Easy to use	Yes
Supports searching LDAP	Yes
Ability to add addresses	Yes
Favorites/Frequently used settings	Yes

Device can be restarted remotely	Yes
Can access and save settings when device is in use	Yes
Can access in sleep mode	Yes
JOB LISTS	
Print	Yes
Scan	Yes
Copy	Yes
Current jobs	No
History available	Yes
History can be exported	Yes (by email from 1,000 to 60,000 pages)
Details provided in queue	Job ID, User Name, Login Name, Total Count, Sets, Pages, Sender Name, Sender Address, File Name, Data Size, Original Size, Original Type, Original Count, Paper Size, Paper Type, Paper Property, Duplex Type, Resolution, Model Name, Unit Serial Number, Name, Machine Location, Machine ID (all selectable before viewing)

The device’s web utility was extremely easy to use. The web utility provides the status of toner and paper on the first screen. The web utility also includes a search function that allows you not only to search a subject but click on that subject to bring you directly to it. An administrator can also create a shortcut when on a tab or settings page frequently used. Simply click on the star icon in the upper right side of the page, name it and save it for future use. What’s more, administrators can also access these shortcuts right from the control panel. Customizing settings is very simple too under the System Settings tab. Administrators can add functions to the Home screen, and adjust settings for copy, printer, Image Send, Document Filing, Sharp OSA and more.



**Via the web utility administrators can add functions to the Home screen and adjust settings for copy, printer, Image Send, Document Filing, Sharp OSA and more.**



An administrator can create a shortcut when on a tab or settings page frequently used; simply click on the star icon in the upper right side of the page, name it and save it for future use.

An administrator can create a shortcut when on a tab or settings page frequently used; simply click on the star icon in the upper right side of the page, name it and save it for future use.

### Fleet Management Utility

Name/Version number	Sharp Remote Device Manager 2.3.3
Types of devices supported	SNMP-compliant networked printers and MFPs
Discovery via SNMP/IP broadcast/Active Directory	Yes/Yes/No
Discovers third-party devices	Yes
Discovers non-networked devices	No
Flags devices with errors	Yes
Alerts administrators about errors via email	Yes
Different email alerts can be sent to different people	Yes
Administrators can remotely see/manipulate control panel	Yes
Supports remote access to device's service mode	Yes
Provides map view of devices/access to web utility	No/Yes
Supports remote firmware upgrades/driver installation/remote embedded application installation for OEM's devices	Yes/Yes/Information not available
Restrict user access to color output	No
Restrict user access to scanning	No
Service logs/device error history	Yes/Yes
Number of included report templates	None
Plug-ins available	No

Sharp Remote Device Manager is easy to set up and very easy to use thanks to a clean, streamlined interface that makes it easy to find common tasks. In testing, the utility executed a quick, accurate device discovery on BLI's network. Consumables (toner and paper) information and meter data was very complete and accurate for Sharp devices; as with most other management utilities, SRDM delivered less granular consumables information and meter data for devices from other manufacturers.

Unique among device management utilities BLI has tested to date is SRDM's Remote Front Panel functionality, a feature supported by some Sharp devices that enables the user not only to remotely view the device's control panel (a feature supported by some other management utilities), but also control the panel from within the utility. SRDM also supports advanced management features such as device cloning, remote firmware upgrades and electronic printer driver distribution.

However, SRDM does leave room for improvement compared to the device management utilities from other leading OEMs. For example, there are fewer attributes available to display on the device list compared to most others BLI has evaluated. Also, SRDM could benefit from more complete reporting capabilities, such as built-in chart templates and advanced analysis such as cost-per-page reports. In addition, other utilities offer end-user management (to restrict users' access to color printing, for example) either natively or via a plug-in, which would be a welcome addition to SRDM.

9.5

## SECURITY

Standard end-of-lease feature wipes out all data at the end of a lease for no extra charge

AUTHENTICATION	
Network user authentication at control panel	Standard
Windows	Yes
Novell NetWare NDPS	No
LDAP	Yes
Kerberos	Yes
802.1x wireless	Yes
SMTP	Yes
POP before SMTP	Yes
Biometric	Yes
ID Card	Optional
HID	Yes
Common Access	No
Other	INA
Registered department or user ID codes	Standard
Number	1,000

<b>ACCESS CONTROL</b>	
Restrict color	Standard
Control panel lock/disablement	Standard
Restrict access to address book	Standard
Restrict USB port	Standard
Restrict direct printing	Standard
Restrict other	Standard
<b>HARD DRIVE</b>	
Encryption	Standard
Maximum level	AES 256
Overwrite	Standard
Method	Random, Custom, DOD 5220.00-M
Maximum number after a job	10
Maximum number at end of lease	10
Lock	No
Removable	No
Password-protected mailboxes	Yes
Data auto-deletion in mailboxes	No
<b>JOB TRACKING</b>	
Job logs	Standard
Digital signature	Yes
Verify document came from device	Yes
Verify document came from specific user	No
<b>JOB PROTECTION</b>	
Encrypted secure print	Standard
Secure print	Standard
Encrypted scanning	Standard
Maximum level	256-bit
For scan to USB	No
Unauthorized scan/copy protection block (watermark)	Standard
Compatible with same-brand devices	Yes
Compatible with third-party devices	No
<b>NETWORK SECURITY/PROTOCOLS</b>	
Protocol disablement	Standard
Port disablement	Standard
IP address filtering	Standard
MAC address filtering	Standard
HTTPS	Standard
Self-signed certificate	Yes
Certificate signing request	Yes
IPsec	Standard
IPv6	Standard



Secure Sockets Layer (SSL)	Standard
S/MIME encryption	Standard
SNMPv3 support	Yes
Transport Layer Security (TLS)	Yes
Trusted Platform Module (TPM)	Yes
<b>CERTIFICATIONS</b>	
Common Criteria	Pending
EAL level	INA
Capabilities certified	INA
FIPS 140-2	No
Level	INA
IEEE 2600	Yes
<b>OTHER</b>	
Administrator password length	5-255 digits
Password-protected web server	By default
Additional features	Embedded webpage search; Admin Log; Sys Log; firmware update; authentication failure
Third-party features	Google Drive; Gmail via OAUTH

INA: The vendor declined to provide this information

NA: Not applicable

8.5

## USER MAINTENANCE

Very simple procedures for adjusting drawers, loading media, clearing misfeeds and replacing toner

### Adjusting Paper Drawers

Process for user-adjustable drawers	Simple
Length guide	Slide in sync
Width guides	Slide in sync
Locking mechanism for guides	Yes
Auto-detect paper size	Yes
Easily accessible paper type selections	Yes
Finding media selections for bypass	Auto-populated

### Loading Media

<b>DRAWERS</b>	
Rollers or guides that could get in the way	No
Easy-to-see limit indicators in drawers	Yes
Locking guides to prevent shifting	Yes
Users must confirm paper type	No

<b>LCT</b>	
Auto-lowers	Not applicable
Supports multiple reams	Not applicable
Locking guides to prevent shifting	Not applicable

**Clearing Misfeeds**

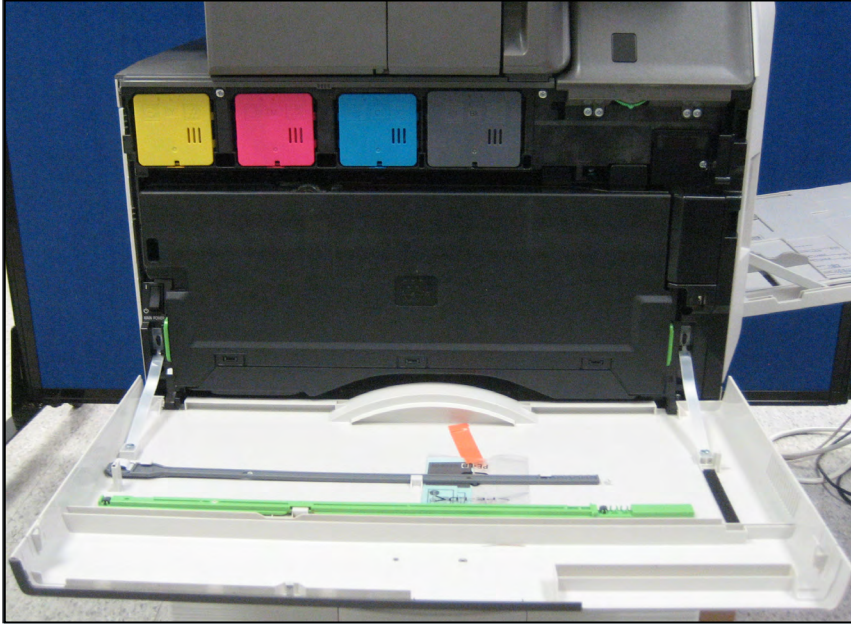
Process	Simple
<b>LOCATIONS</b>	
Number in front	2 (internal finisher slides out)
Number on right	3 (lift gray handle)
Number on left	0
Clearly accessible misfeed areas/Drawers pull out far enough to allow access	Yes
Easy to identify locations inside	Yes (all misfeed handles are bright green)
Lighted paper path	No
Auto-purging of non-misfed sheets	No
<b>INSTRUCTIONS</b>	
Level of guidance on display	Extensive
Provided on display as	Text/Graphics/Animation/Video
Step by step	Yes
Method	Must press button

Extensive, step-by-step instructions are provided for clearing misfeeds. A clear, precise video walks the user through every step of the process.

**Replacing Toner**

<b>GENERAL</b>	
Process	Simple and clean
On-the-fly change	Yes
<b>INSTRUCTIONS</b>	
Level of guidance on display	Extensive
Provided on display as	Text/Graphics
Inside of cover/door	No
On packaging	Yes
<b>PART NUMBER(S)/ITEM CODE(S)</b>	
Shown on display	No
Inside of cover/door	No
On packaging	Yes
On cartridge(s)	Yes

The control panel alerts users when toner needs to be replaced. An almost-empty toner cartridge cannot be changed, resulting in no wasted toner.



**When the toner compartment is opened, the empty cartridges pop out automatically so there's no guessing involved.**

### Replacing Other Consumables

Imaging units/drums	Service-replaceable
Waste container	Simple
Fuser	Service-replaceable
Method	Not applicable
Document feeder roller	Service-replaceable
Feed roller	Service-replaceable
Transfer roller	Service-replaceable
Ozone filter	Service-replaceable

### Other Routine Maintenance

Charger cleaner	Yes
Lens cleaner	No
Users are prompted on display to use a cleaner at periodic intervals (for optical area)	No
Users are prompted on display to clean the platen at periodic intervals	No

7.5

## FEATURES

7.5

### FEATURES—SPECIFICATIONS

Much higher than average memory and hard drive capacities aid in job processing and storage

Heavy media weight support through the drawers and higher than average maximum paper capacity. Stapleless finishing options, which bind sheets together without using staples, keeping them intact and reducing environmental impact.

#### Low standard paper capacity

MEMORY	
Standard/Maximum	5 GB
Hard drive	Standard 500 GB
MEDIA HANDLING	
Standard/Maximum	550/6,300 sheets
Bypass	100 sheets
Standard/Maximum paper sources	1/6
Minimum/Maximum weights through drawers	18-lb. bond to 110-lb. cover
Minimum/Maximum weights through bypass	16-lb. bond to 110-lb. cover
Minimum/Maximum paper sizes	5.5" x 8.5" / 12" x 18"
Number of sources that support envelopes	1 (bypass)
DOCUMENT FEEDER	
Type	Standard DSPF
Capacity	150 sheets
Minimum/Maximum paper weights	Information not available
Minimum/Maximum paper sizes	Information not available
OTHER	
Tandem print	Yes
ID card copy	Yes
Wireless interface	Standard

#### Hard Drive Storage

Method	Via scan
Accessing files	At device and via embedded web server
Thumbnail views	Yes (list view by default)
Capabilities	Add/Delete (plus Move, Check Image, Print and Zoom)

While standard paper capacity is below average, the device remains competitively priced with its peers even when an additional 550-sheet paper tray is added. The single-tray configuration also gives Sharp flexibility by offering a single tray configuration that can also accommodate a rolling stand. Finishing options include a 500-sheet in-

ner finisher with stapling up to 50 sheets; booklet finishers with capacities of 1,000- and 3,000-sheets and stapling up to 50- and 65-sheets, respectively; and 1,000- and 3,000-sheet finishers with stapling of up to 50 and 65 sheets, respectively. Stapeless stapling of up to five sheets is available for the 500-sheet inner finisher and 3,000-sheet finishers. All finishers offer three-position stapling and optional three-hole punch.

The full specifications record for this device is available on bliQ.

**Accessibility**

Accessibility handle	No*
Audible alerts	Yes
Braille label kit	Yes
Dedicated mode keys	Soft keys on LCD
Document feeder can be positioned on a desk	No
Enlarged display mode for scan/copy menus	Yes (Easy Copy and Easy Scan)
Method of opening paper drawers	Handle
Remote operator software	Yes
Tilting control panel	Yes
Number of angles	Left, right, up down (almost 90 degrees)
Swiveling control panel	No
Voice guidance (audible instructions)	No
Voice operation (responds to commands)	No

\*MX-DE29 low profile stand meets ADA requirement.  
 INA: The vendor declined to provide this information  
 NA: Not applicable

**Features—Solutions**

**NOT RATED**

The device supports Sharp OSA (Open Systems Architecture) Technology, which lets businesses automate tasks with seamless integration between the device and network applications and cloud services accessed directly from the control panel. Popular cloud applications supported include Microsoft OneDrive, SharePoint Online and Google Drive.

The device also supports Sharp Cloud Portal Office, which enables users to collaborate and store documents in the cloud using MFPs and other networked devices such as Apple iPads and iPhones, computers and Sharp AQUOS BOARDS.

Sharp’s serverless Print Release function allows a user to send a job to one device and print it on another where it’s more convenient. Sharpdesk Mobile is a free downloadable app allows users to conveniently scan and print files from tablets and smart phones. In testing, Sharpdesk Mobile was found to be easy to use with both iPad/iPhone and Android devices. With both device types, users can print selected files, photos and web pages and print emails. Settings available include quantity, duplex, color mode (Auto,

Color and Grayscale), Paper Size, Paper Type, Finishing (Binding Edge and Staple (1 or 2 staples), N-up (1-4), and retention (Hold only or pin code).

Via the web utility, customers also have access to My Sharp, a unique and very useful training website customized to the customer’s specific configuration, which enables end users to access information on how to use certain features at any time.

**Full specification records, Solutions Briefs and Solutions Test Reports are available on BLI Solutions Center.**

## Features—Environmental

**NOT RATED**

<b>FEATURES</b>	
Specified capable of running 30/50/100% post-consumer recycled paper	Yes
Instant/Quick fusing	Yes
Automatic duplexing	Standard
Toner-save mode	Yes
RoHS-compliant	Yes
Hardware remanufacturing program for this product	No
Prepaid label to return cartridges/bottles	Yes (prepaid collection boxes)
Ability to program environmental features over a fleet	No
<b>ECO-LABEL CERTIFICATIONS</b>	
ENERGY STAR	Yes
Other	Canada EcoLogo; Germany Blue Angel; Nordic Swan; Taiwan Green Mark; Taiwan Energy Label
<b>RATED ENERGY CONSUMPTION LEVELS (watts)</b>	
Ready/Idle	134
Energy Save	0.9
Sleep	0.1
During printing	1920
<b>FASTEST PROGRAMMABLE TIMES TO ENTER LOW-POWER MODES (seconds)</b>	
Energy Save	At job end
Sleep	60
Walk-up users can change these settings	Yes

INA: The vendor declined to provide this information

NA: Not applicable

**More extensive information, including test results, can be found in the device’s Environmental Test Report.**

## VALUE

The Sharp MX-5070N is priced slightly lower than average compared to comparably equipped models in its speed range. Taking into account pricing combined with the device's impressive overall performance and strong feature set, the MX-5070N offers a very good overall value.

## 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 XP and 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 half of 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:** Lab tested the Sharp MX-5070N base unit, plus MX-FN31 booklet finisher.

**Test Procedures:** BLI's lab testing includes both BLI proprietary and industry-standard test procedures and documents. In addition to a visual image quality evaluation, optical density of primary color (CMYK) solid fill output is measured using a densitometer, and color gamut and consistency are evaluated using a color spectrophotometer. The reliability test is conducted using Georgia Pacific and Boise paper in the US, and UPM, Data Copy and Mondi paper in the UK. In both labs, 30 percent of the paper is recycled. The media used for image quality testing is Georgia Pacific Printing Paper (24 lb., 96 brightness) in the US and UPM Future ImageTech 100 gsm in the UK.

**Competitive Group:** The analysis in this report compares the tested device to a group of all other currently available like models (e.g., color vs. color, copied-based vs. copier-based) in the same speed range (5 ppm up and down from the speed of the tested device) with support for the same media size. For test performance categories, the results are compared with those of currently available tested models in the group, whereas for feature set and pricing, the comparison is made against all currently available models in the group, whether tested or not. The pricing analysis is for devices comparably configured with accessories and the most common options.

**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 #: 6513455400

**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.

# CERTIFICATE OF RELIABILITY

Awarded to

Sharp Imaging and Information Company of America

for the performance of the

**Sharp MX-5070N**

in BLI's in-house durability test



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

GERRY STOIA, CEO

DECEMBER 2016

DATE

This is to certify that when subjected to a 200,000-impression and 20,000-scan Buyers Lab durability test, the Sharp MX-5070N proved to be a highly reliable product.

**BUYERS LABORATORY LLC**

THE LEADING INDEPENDENT OFFICE PRODUCTS TEST LAB AND BUSINESS CONSUMER ADVOCATE

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