



Lab Test Report

A Comprehensive Keypoint Intelligence Laboratory Evaluation

KYOCERA ECOSYS M2735dw

35 PPM Monochrome Print • Copy • Scan • Fax



Reliability
Apps/Onboard Tools
Image Quality

Print Quality Copy Quality

Usability

Serviceability/Management Walk-up Experience Workstation Experience

Mobility
Security

Features

Speed

Print Speed Scan Speed Copy Speed

Power Consumption

Excellent Not Rated Good

> Very Good Good

Very Good

Very Good Very Good

Very Good
Not Rated
Not Rated

Good Good

Good Good Very Good **Not Rated**





OUR TAKE

A compact monochrome laser MFP, the

KYOCERA ECOSYS M2735dw is a very good choice for small and mid-size workgroups. Users can expect minimal downtime, as the unit completed BLI's 10,000-impression durability test without any misfeeds and no service interventions. An intuitive interface design, simple routine maintenance procedures, and higher-than average toner yields all help boost worker productivity. For added convenience, support for Mopria Print Service, KYOCERA Mobile Print, Apple AirPrint, and Google Cloud Print lets users print to the device from their smartphones and tablets. An intuitive and graphical universal KX 7.x print driver means it's very easy to use at the desktop, while the unit is also easy to manage via KYOCERA NetViewer, which can assign specific alerts to different recipients, plus KYOCERA Command Center RX provides administrators with helpful details about device and consumables status. Output produced by the ECOSYS M2735dw will satisfy the needs of general office environments. KYOCERA employs long-life consumables to minimize the unit's environmental impact and further reduce TCO and downtime. BLI highly recommends the KYOCERA ECOSYS M2735dw.

KYOCERA ECOSYS M2735dw Fast Facts

Max Monthly Duty Cycle	20,000 impressions
Manufacturer's Recom- mended Monthly Volume	Info not available
Rated Speed	35 ppm
Std Paper Source(s)	1 drawer + 1 bypass
Std Paper Capacity	250 sheets
Paper Weights	60 to 163gsm
Bypass/Paper Weights	60 to 220gsm
Max Paper Capacity	850 sheets
System Memory (Std/Max)	512-MB RAM/1.5-GB RAM
Document Feeder/ Capacity	RADF/50 originals
PDL/PCL	Information not available
HDD	
Scanner Technology/Speed	CIS/23 ipm color, 40 ipm black
* At time of publication	

Test Duration: Two months, including a 10,000-impression durability test.

More information on the KYOCERA ECOSYS M2735dw is available through bliQ (www.buyerslab.com/bliQ).



BENEFITS

Highly reliable performance, combined with simple routine maintenance, increase uptime

Compact footprint makes the device ideal for space-constrained office environments

Intuitive control panel and LCD display simplify job programming

Crisp text, smooth halftone coverage, and dark solids

The device is Mopria-certified with standard wireless and Wi-Fi Direct interfaces; it supports mobile printing from leading tablets and smartphones via AirPrint, Google Cloud Print, and KYOCERA Mobile Print app

ADVANTAGES

Faster-than-average scan speeds in black and full-colour single-sided mode

Dramatically smaller scan file sizes in both compression modes for black, and in best compression mode for full-colour

LIMITATIONS

More interventions may be required than with competitive models in this class

RELIABILITY

Excellent

The unit is certified highly reliable by Buyers Lab, completing a 10,000-impression durability test and 1,000 scans with no misfeeds recorded and no service required.

Impressions Printed	10,000
Scanned Pages	1,000
Misfeeds	0
Misfeed Rate	NA
Service Calls	0



APPS/ONBOARD TOOLS

Not Rated

KYOCERA's HyPAS platform is not supported on this model.

IMAGE QUALITY

Good

	Print Mode	Copy Mode
Text	Very Good	Good
Line Art	Very Good	Good
Halftone Pattern	Good Good	
Halftone Range	Very Good	Good
Solids	Very Good	Good

PRINT QUALITY

Very Good

Dark, sharp, and fully formed text, with no signs of breakup under magnification

Distinct fine lines, with consistent thickness, smooth circles, and diagonal lines, with no evidence of breakup or stair-stepping

Some overspray and minimal haloing visible around text when viewed under magnification

Distinct separation between all greyscale levels and smooth dot-fill with minimal banding

Dark solids, with no mottling visible

BLACK PRINT DENSITY RANGE

	Density Range	Average Density
KYOCERA ECOSYS M2735dw	1.11 to 1.27	1.22
Competitive Average	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

KYC	DCERA	ECOSYS	M2735dw
			, 55 a.i.

10% to 100%

The halftone range test original consists of 10 blocks of increasing dot-fill levels (10 to 100%, in 10% increments).



COPY QUALITY

Good

Average darkness and sharpness of characters, with smooth curves and serifs (default text mode)

Distinct fine lines with consistent line thickness, fully formed circles, and smooth diagonal lines

Some overspray visible when text or line art was viewed under magnification

Distinct separation between levels; most of the entire range of greyscale (but not at the lowest (10%) level), and smooth dot-fill with minimal banding

Dark solids, with smooth toner coverage in copy mode

COPY DENSITY

	Density Range	Average Density
Original	1.68 to 1.78	1.72
KYOCERA ECOSYS M2735dw	1.34 to 1.40	1.37
Competitive Average	1.12 to 1.68	1.41

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

VISIBLE HALFTONE RANGE

KYOCERA ECOSYS M2735dw

20% to 100%

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

USABILITY

Very Good

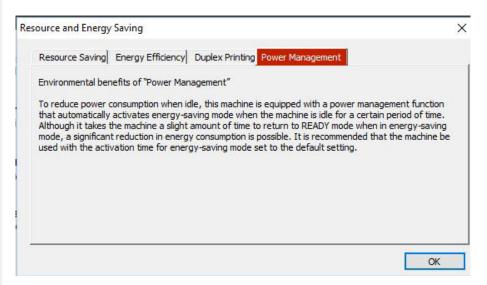
SERVICEABILITY/MANAGEMENT

Very Good

Physical set up is simple; packaging materials are not excessive and just two people can lift the unit out of the box and place it in the desired location. A 1,000-page starter cartridge is preinstalled, but must be removed from the device to dispose of its protective seal.

KYOCERA's Product Library DVD contains the administrative utility suite, which includes KYOCERA Net Viewer, Job Status Monitor, and KYOCERA Command Center RX, the embedded web server, as well as the drivers and documentation. The disc auto-runs and detects available KYOCERA devices on the network (either icon driven or as a list). After selecting the device with the Express Install option, just five clicks are required to install the KX driver, Status Monitor, Fonts, and an Uninstall utility. The port is created automatically. Users should be up and running in minutes.





When the Product Library DVD is inserted, administrators are notified about the best means of ensuring environmental best practice, including power management options (see above), the use of recycled media, and duplex printing.

Net Admin is a unified solution for network device management for KYOCERA and third-party devices. Via Net Admin, administrators can view page counts and device status, as well as view and configure alerts for groups of devices on the network. Administrators can also access detailed information on individual devices such as the amount of toner remaining, configuration settings, and event logs.

Net Admin supports a map view that allows each device to be dragged and dropped to its specific location, allowing faster navigation for technical support.

Net Viewer allows administrators to create groups of products based on reporting or error notification requirements. Within a "report group", an administrator can receive email reports outlining a wide variety of device statistics, including printed page volumes and consumable levels, at time intervals of their choice.

KYOCERA Net Viewer allows administrators to clone device settings from one device to another, plus they can deploy drivers to multiple workstations on the network so that they don't have to be installed on each machine individually.



Command Center RX provides administrators with information about the unit and lets them handle tasks such as changing device settings, viewing device status, and monitoring toner and paper supplies. It also allows administrators to configure email alerts that can be sent to up to three recipients for error conditions, including paper jam, cover open, and add toner/paper

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Misfeed access is either at the front (shown above) or at the rear of the device. If accessed at the front, the drum unit needs to be removed, but the surface of the drum is not exposed to any risk of damage during removal.



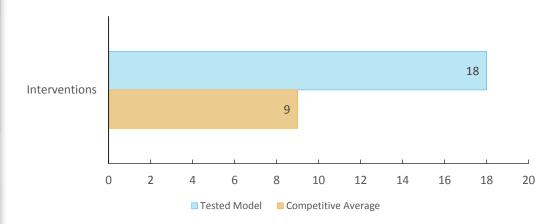
Buyers Lab technicians noted that loading paper trays is easy, with sliding paper guides, which move in sync. As is typical of models in this class, paper sizes must be confirmed on the touchscreen.



Procedures for replacing toner are easy. Although it can't be replaced while the unit is running, the cartridge is accessible from the front and lifts out easily after a blue lever on the left has been released.



Estimated User Interventions (Over 36 Months)



User interventions are calculated based on manufacturer's rated toner yields (in accordance with ISO/IEC 19752), as well as the manufacturer's rated yields for other consumables (drums, developer units, waste containers, etc.). Buyers Lab calculates the total number of supplies and maintenance parts that would be required over 36 months (assuming 1,500 pages per month). Each individual cartridge or other consumable is counted as one intervention. Paper supply replenishments aren't included in Buyers Lab'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.

WALK-UP EXPERIENCE

Very Good

As would be expected of a device in this class, the unit can't perform two functions concurrently. Print jobs are downloaded one at a time from the network queue to the print queue. The unit doesn't support program ahead or copy reserve. Jobs are processed on a first-in, first-out basis; administrators can't change priority.

Print from USB is standard; the port is located on the front of the unit. The USB flash drive is auto-discovered; users can browse folders to select files-PDF, JPEG, XPS or TIFF-to output. Direct PDF encrypted print is also supported.

Scan to USB, PC, email and cloud are all supported; formats include JPEG, PDF (including PDF/A for archiving, standard, compressed or searchable, and TIFF in colour or black at various resolutions from 75 to 600 dpi).

KYOCERA ECOSYS M2735dw Lab Test Report





The control panel's touchscreen display has a variety of icons, including dedicated selections for copy, scan, or fax output. The small touchscreen display is very easy to use.

WORKSTATION EXPERIENCE

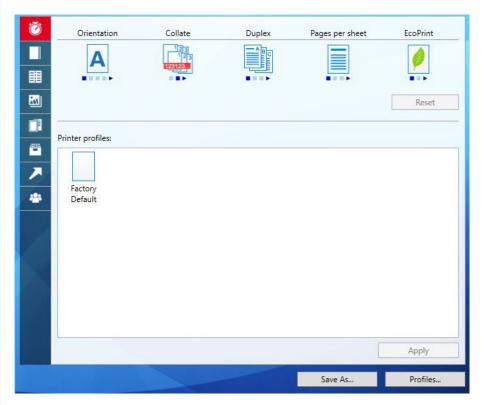
Very Good

The control panel's touchscreen display has a variety of icons, including dedicated selections for copy, scan, or fax output. The small touchscreen display is very easy to use.

KYOCERA Net Viewer allows administrators to create groups of products based on reporting or error notification requirements. Within a "report group", an administrator can receive email reports outlining a wide variety of device statistics, including printed page volumes and consumable levels, at time intervals of their choice.

A software utility, KYOCERA Net Direct Print, is also included on the CD that enables direct printing of PDF, PostScript, PRN, and PRESCRIBE files without having the respective applications installed on the PC. Using this utility, users can send multiple files at one time and alter settings such as quantity, duplexing, N-up printing, and resolution.





The PCL driver is similar in style to the PostScript driver to reduce the learning curve for users who switch between the drivers.

MOBILITY

Not Rated

The device is Mopria-certified with standard wireless and Wi-Fi Direct interfaces; it supports mobile printing from leading tablets and smartphones via AirPrint, Google Cloud Print, and KYOCERA Mobile Print app. A USB host port supports direct printing of a variety of file formats including PDF, JPEG, TIFF, and XPS.



SECURITY

Not Rated

SECURITY FEATURES

AUTHENTICATION		
Network user authentication at control panel	Standard	
Windows	Yes	
Novell NetWare NDPS	NA	
LDAP	No	
Kerberos	Yes	
802.1x wireless	Yes	
SMTP	Yes	
POP before SMTP	Yes	
Biometric	No	
ID Card	Optional	
HID	Yes	
Common Access	INA	
Other	Equitrac, PaSoRi, RFIDEAS, ELATEC, Omnikey	
Registered department or user ID codes	Standard	
Number	100	
ACCESS CONTROL		
Restrict colour	Standard	
Control panel lock/disablement	Standard	
Restrict access to address book	Standard	
Restrict USB port	Standard	
Restrict direct printing	Standard	
Restrict other	Any function using user ID	
HARD DRIVE		
Encryption	NA	
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	Standard	
Digital signature	No	
Verify document came from device	NA	
Verify document came from specific user	NA	





JOB PROTECTION		
Encrypted secure print	Standard	
Secure print	Standard	
Encrypted scanning	Standard	
Maximum level	AES 128-bit	
For scan to USB	Yes	
Unauthorised scan/copy protection block (watermark)	Standard	
Compatible with same-brand devices	Yes	
Compatible with third-party devices	No	
NETWORK SECURITY/PROTOCOLS		
Protocol disablement	Standard	
Port disablement	Standard	
IP address filtering	Standard	
MAC address filtering	No	
HTTPS	Standard	
Self-signed certificate	Yes	
Certificate signing request	Yes	
lPsec	Standard	
IPv6	Standard	
Secure Sockets Layer (SSL)	Standard	
S/MIME encryption	INA	
SNMPv3 support	Standard	
Transport Layer Security (TLS)	Standard	
Trusted Platform Module (TPM)	INA	
CERTIFICATIONS		
Common Criteria	No	
EAL level	NA	
Capabilities certified	NA	
FIPS 140-2	No	
Level	NA	
IEEE 2600	No	
OTHER		
Administrator password length	64	
Password-protected web server	Yes	
Additional features	NA	
Third-party features	NA	
INA: The vendor declined to provide this information NA: Not applicable		



FEATURES

Good

The unit's standard RAM capacity of 512 MB is competitive compared with the standard capacity of A4-size printer MFPs in this class, but its maximum 1.5-GB capacity is above average.

The standard paper capacity of 250 sheets (with an additional 50-sheet bypass) is competitive. It can also be upgraded to a maximum of four paper sources totalling 850 sheets, which is also competitive with in its group.

Media weights accommodated through the drawers (163gsm) and bypass (220gsm), are above average in this class.

SPEED

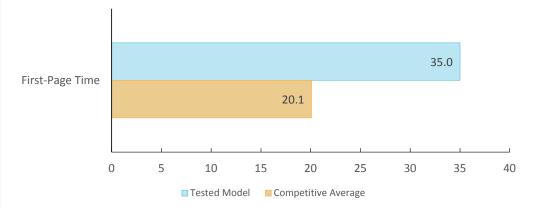
Good

PRINT SPEED

Good

For both short- and long-run jobs in simplex mode, the unit's speed is competitive; in duplex mode, speeds are also competitive.

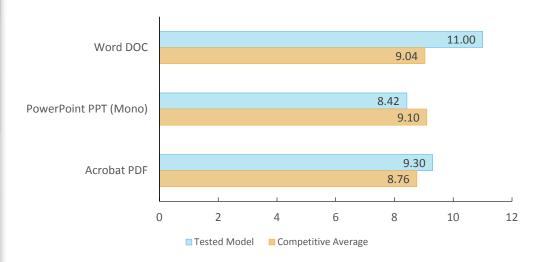
First-Page Print Time from Overnight Sleep (in Seconds)



Device sits idle overnight; a single-page black Word document is sent to the device; first-print time indicates the time it took to RIP the image and deliver the first page of the test document to the output tray.

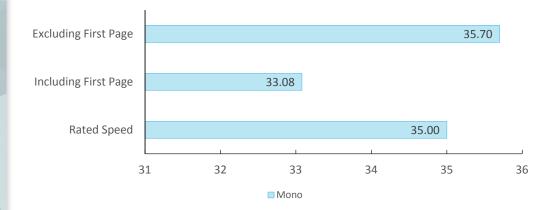


First-Page Print Time from Ready Mode by File Type (in Seconds)



First-print time indicates the time it took to process, image and deliver a single-page test document to the output tray. Files tested include a Word document (.doc; black text), and an Acrobat file (.pdf; black text and graphics). The unit's print speeds were tested at the default 600 dpi using the PCL 6 driver.

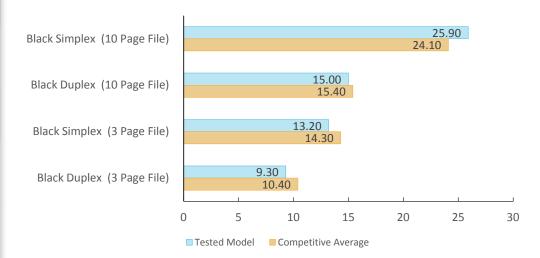
Buyers Lab's Tested Print Speed (in PPM)



Print speed is tested using Buyers Lab'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 6 driver.

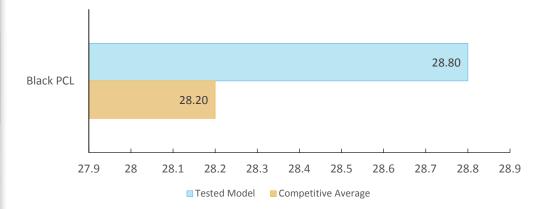


First-Set Print Speed (Single Set; in PPM)



Single-set speed is tested using a 3-page and a 10-page black document. The unit was tested using the PCL driver.

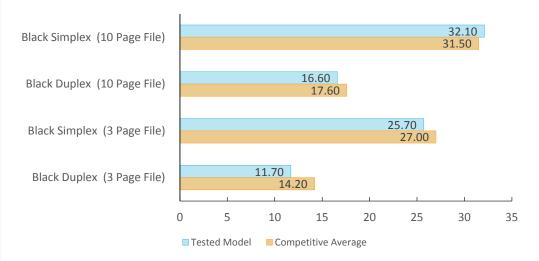
Job Stream (Speed in PPM)



Buyers Lab's job stream includes Word documents, Outlook email messages, Excel spreadsheets, PowerPoint presentations, HTML files, and Acrobat PDF files, totalling 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.



Average Print Speed (Multi-Set; in PPM)



Print speed is tested using a 3-page and a 10-page black document. BLI obtains the overall speed by averaging the tested speed for each run length (1, 5, 10 and 20 sets). The unit was tested using the PCL 6 driver.

SCAN SPEED

Good

The unit is faster than average in black mode and in full-colour when scanning single sided.

In auto-colour mode simplex speeds are competitive but duplex speed is below average.

Dramatically smaller scan file sizes are observed in both compression modes for black, and in best compression mode for full-colour.

Scan Speed (in IPM)



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



SCAN FILE SIZE (IN KB)

	Tested Model	Competitive Average
Full-colour (Default Compression)	593	540
Auto-colour (Default Compression)	593	566
Full-colour (Best Compression)	131	292
Black (Default Compression)	47	218
Black (Best Compression)	47	149

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

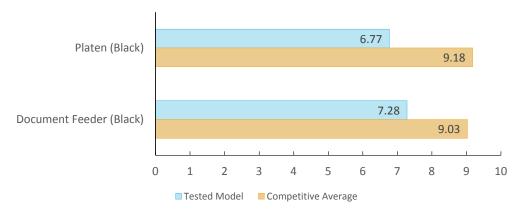
O COPY SPEED

Very Good

First-copy times from the platen and document feeder are both faster than average

Running speed when copying sets in simplex and both duplex modes is competitive.

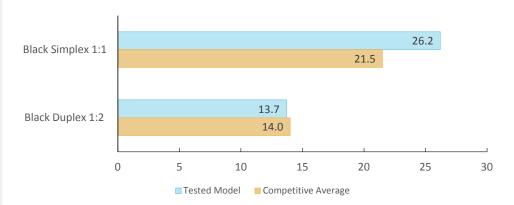
First-Copy Times (in Seconds)



First-copy time is measured as the time it takes for a single copy to completely exit the device when a copy is made from an original placed in the document feeder and on the platen.

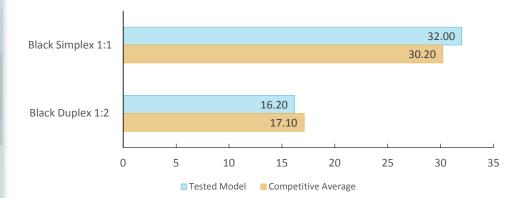


Copy Speed (Single-Set; in CPM)



Single-set copy speed is tested using a 10-page black document. Timing begins as the start button is pressed, pages are scanned through the document feeder, and timing ends when the last page of a single-set of the document exits the device.

Average Copy Speed (Multi-Set; in CPM)



Copy speed is tested using a 3-page and a 10-page black document. Buyers Lab obtains the overall speed by averaging the tested speed for each run length (1, 5, 10 and 20 sets).



POWER CONSUMPTION

Not Rated

PROJECTED ANNUAL ENERGY CONSUMPTION (IN KWH)

Total Annual Energy Consumed	19.4216 kWh
Competitive Average	46.1735 kWh

Calculations based on printing BLI's job stream test suite over a four-hour period, with the machine set to go into its energy-save and/ or sleep modes at the shortest intervals possible. Total yearly energy consumption is calculated based on the total energy used during a typical workday, plus overnight and weekend sleep energy. Total number of pages run is based on a Buyers Lab survey of average monthly volumes by speed range.

Pages Printed: 114 total - 6 jobs of 19 pages each

Test Documents Used: DOC, XLS, PPT, HTML, PDF, Outlook email messages

Output Modes: 50% simplex, 50% duplex

Total number of pages run is based on a BLI survey of average monthly volumes by speed range.

ENVIRONMENTAL FEATURES

Specified capable of running recycled paper (30%/50%/100% post-consumer content)	Yes	
Instant/Quick Fusing	No	
Duplexing	Yes	
Toner-save mode	Yes	
RoHS compliant	Yes	
Toner cartridge recycling program for this product	Yes	
Ability to program features such as duplexing and auto shut-off over entire fleet	Yes	
What tool can be used to do this?	System menu, KX driver, KYOCERA Net Viewer and KYOCERA Net Admin	

Eco-Label Certifications	
ENERGY STAR	Yes
Other	ECMA-370/The Eco Declaration

INA: The vendor declined to provide this information NA: Not applicable



SUPPORTING TEST DATA

Test Environment: This product was tested in Buyers Lab's European test lab, in an environment monitored by two Temp/RH chart recorders, which ensures that the typical office conditions are being maintained. All products lab tested by Buyers Lab are powered by dedicated circuits that are protected by ESP (Electronic Systems Protection, Inc.) surge protectors to prevent transient power and communication disturbances from affecting equipment under test.

Test Equipment: Buyers Lab's dedicated test network in Europe, consisting of Windows 2008 servers, Windows 7, and 8 and 10 workstations, 10/100/1000BaseTX network switches and CAT5e/6 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 25 percent of the test volume comprised of copy jobs and 75 percent comprised of print jobs. Buyers Lab's daily test usage is designed to replicate real-world use over an eight-hour workday, and as such 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. The durability evaluation also includes testing of the document feeder/scanner in simplex and duplex modes for an additional 10 percent of the monthly maximum volume, evenly divided over the course of the test.

Tested Configuration: KYOCERA ECOSYS M2735dw base unit (UK).

Competitive Average Model Group: Buyers Lab defines competitive models as comparably equipped models, that support the same maximum paper size as the tested model, in the same speed range (+/- 5ppm), with a similar duty cycle and target market.

Test Procedures: Buyers Lab's testing includes both Buyers Lab proprietary and industry-standard test procedures and documents. 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.

Note: This report is based on Buyers Lab testing one representative test sample at a specific point in time. Buyers Lab 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 Buyers Lab's control. Test unit serial #: VCC6X00566

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

For over 50 years, Buyers Lab has been the global document imaging industry's resource for unbiased and reliable information, test data, and competitive selling tools. What started out as a consumer-based publication about office equipment has become an all-encompassing industry resource. Buyers Lab evolves in tandem with the everchanging landscape of document imaging solutions, constantly updating our methods, expanding our offerings, and tracking cutting-edge developments.



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CERTIFICATE OF RELIABILITY

Awarded to

KYOCERA Document Solutions Inc.

for the performance of the

KYOCERA ECOSYS M2735dw

in Buyers Lab's in-house durability test



GERRY STOIA, CEO

FEBRUARY 2018

DATE

This is to certify that when subjected to a 10,000-impression Buyers Lab durability test, the KYOCERA ECOSYS M2735dw proved to be a highly reliable product.

BUYERS LABORATORY

THE LEADING INDEPENDENT OFFICE PRODUCTS TEST LAB AND BUSINESS CONSUMER ADVOCATE

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