

ISO/IEC 24734 Printing Productivity Report: Office Category

Full Detailed Test Report - LETTER

HP Color LaserJet Enterprise MFP M681dh

Printing device and settings		
Test Start Date and Time	9/25/2017 13:54	
Tester	AH	
Machine name/model	HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh	
Colour or B&W	Colour	
F/W Version	2403298 006039	
Temperature and Humidity	74 degF / 23 degC 16.6 %rH	
Voltage	110V	
Test End Date and Time	9/26/2017 16:26	

	Item	Value
Mode and Setting	Driver Version	UPD 6.4.0
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	Print in Greyscale
	Duplex B&W Settings	Print in Greyscale
Paper Path	Setting N set count	Application
	Collating function	Activated (application)
	Paper Sending Direction	Default
	Paper Size Setting	Default
	Paper Feeding	Tray 2
	Paper Exit	Standard Exit Tray
Paper	Output Orientation	Default (face down)
	Duplexing Unit (Yes/No)	Yes
	Paper Manufacturer	HP / Xerox
	Paper Weight	20lb / 75 g/m2
	Paper Size	Letter / A4
	Paper type/name	HP Multipurpose Ultra White / HP Office

Summary Report: Letter			
Office Category	Test for Color Device	FSOT (seconds)	ESAT (ipm)
Color	Simplex	10.2	50.2
	Duplex	12.6	50.6
B&W	Simplex	9.5	50.2
	Duplex	12.0	50.6

Notes
 1) All printing device and driver settings were default mode.
 2) For the B/W results, the print driver was set to "print in B/W".
 3) For more information see <http://www.hp.com/go/printerclaims>.
 4) Port monitor not configured to follow device if the IP address changes.

Detailed Report: LETTER						
	Office Category Test	FSOT (secs)	EFTP (ipm)			ESAT (ipm)
			1 set only (1 set)	1 set only (1 set)	1 set + 30sec (# of sets)	
Color Mode	Simplex - Adobe Reader	10.70	22.43 (1 set)	43.06 (8 sets)	48.33 (57 sets)	50.27
	Simplex - Word	9.75	24.61 (1 set)	44.42 (8 sets)		50.25
	Simplex - Excel	9.88	24.31 (1 set)	44.25 (8 sets)		50.25
	Simplex - Average	10.2	23.7	43.9	48.3	50.2
	Duplex - Adobe Reader	13.20	18.18 (1 set)	40.98 (8 sets)		50.64
	Duplex - Word	12.20	19.66 (1 set)	41.48 (8 sets)		50.66
	Duplex - Excel	12.40	19.34 (1 set)	41.74 (8 sets)		50.66
	Duplex - Average	12.6	19.0	41.4		50.6
B&W mode (optional for color device)	Simplex - Adobe Reader	9.83	24.42 (1 set)	44.10 (8 sets)	48.01 (57 sets)	50.26
	Simplex - Word	9.24	26.01 (1 set)	45.18 (8 sets)		50.27
	Simplex - Excel	9.20	26.09 (1 set)	45.03 (8 sets)		50.28
	Simplex - Average	9.5	25.5	44.7	48.0	50.2
	Duplex - Adobe Reader	12.53	19.16 (1 set)	41.66 (8 sets)		50.64
	Duplex - Word	11.62	20.64 (1 set)	42.62 (8 sets)		50.64
	Duplex - Excel	11.65	20.60 (1 set)	42.56 (8 sets)		50.68
	Duplex - Average	12.0	20.1	42.2		50.6

Notes
 1) All printing device and driver settings were default mode.
 2) For the B/W results, the print driver was set to "print in B/W".
 3) For more information see <http://www.hp.com/go/printerclaims>.
 4) Port monitor not configured to follow device if the IP address changes.

Test System Parameters	
Item	Value
Computer	HP Compaq Elite 8300 Small Form Factor
Processor	Intel Core i7 - 3770, 3.4 GHz
System Chip Set	Intel C216 Chipset Family SMBus Host Controller
System Board	system devices, default system BIOS
System Memory	4 GB
Hard Drive Subsystem	Standard disk drive (Seagate)
Video Subsystem	AMD Radeon HD 6350
Optical Drive	HP DVD A DH16aCSHR ATA
I/O Subsystem	Builtin
USB Subsystem	USB 2.0/3.0
CP/IP	10/100
Operating System	Windows 7 64 Bit
Printing Applications	Microsoft Office 2010
Microsoft Office	Office 2010
Adobe Reader	10
Test files and location	Office category files, hard drive

ISO/IEC 24734 Printing Productivity Report: Office Category

Full Detailed Test Report - A4

HP Color LaserJet Enterprise MFP M681dh

Printing device and settings		
Test Start Date and Time	9/25/2017 13:54	
Tester	AH	
Machine name/model	HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh	
Colour or B&W	Colour	
FW Version	2403298_006039	
Temperature and Humidity	74 degF / 23 degC 16.6 %rH	
Voltage	110V	
Test End Date and Time	9/26/2017 16:26	

	Item	Value
Mode and Setting	Driver Version	UPD 6.4.0
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	Print in Greyscale
	Duplex B&W Settings	Print in Greyscale
	Setting N set count	Application
Paper Path	Collating function	Activated (application)
	Paper Sending Direction	Default
	Paper Size Setting	Default
	Paper Feeding	Tray 2
	Paper Exit	Standard Exit Tray
	Output Orientation	Default (face down)
Paper	Duplexing Unit (Yes/No)	Yes
	Paper Manufacturer	HP / Xerox
	Paper Weight	20lb / 75 g/m2
	Paper Size	Letter / A4
	Paper type/name	HP Multipurpose Ultra White / HP Office

Summary Report: A4			
Office Category Test for Color Device		FSOT (seconds)	ESAT (ipm)
Colour	Simplex	10.7	47.4
	Duplex	13.0	48.0
B&W	Simplex	9.7	47.4
	Duplex	12.2	48.0

Notes

- 1) All printing device and driver settings were default mode.
- 2) For the BW results, the print driver was set to "print in B/W".
- 3) For more information see <http://w.w.hp.com/go/printerclaims>.
- 4) Print monitor not configured to follow device if the IP address changes.

Detailed Report: A4							
	Office Category Test	FSOT (secs)	EFTP (ipm)			ESAT (ipm)	
		1 set only (1 set)	1 set only (1 set)	1 set + 30sec (# of sets)	1 set + 4min (# of sets)	1 set + 30sec	
Colour Mode	Simplex - Adobe Reader	11.29	21.26 (1 set)	41.23 (8 sets)	45.42 (50 sets)	47.47	
		Simplex - Word	10.42	23.04 (1 set)	42.19 (8 sets)		47.45
	Simplex - Excel		10.24	23.43 (1 set)	42.09 (8 sets)		47.46
		Simplex - Average	10.7	22.5	41.8	45.4	47.4
	Duplex - Adobe Reader	13.48	17.78 (1 set)	38.68 (8 sets)		48.00	
		Duplex - Word	12.82	18.70 (1 set)	39.64 (8 sets)		48.00
			Duplex - Excel	12.58	19.08 (1 set)	39.86 (8 sets)	
	Duplex - Average	13.0		18.5	39.3		48.0
	B&W mode (optional for color device)	Simplex - Adobe Reader	10.10	23.75 (1 set)	42.10 (8 sets)	43.99 (50 sets)	47.45
Simplex - Word			9.30	25.81 (1 set)	42.79 (8 sets)		47.44
		Simplex - Excel	9.45	25.42 (1 set)	42.17 (8 sets)		47.45
Simplex - Average			9.7	24.9	42.3	43.9	47.4
Duplex - Adobe Reader		12.59	19.04 (1 set)	39.60 (8 sets)		48.00	
		Duplex - Word	11.88	20.20 (1 set)	40.42 (8 sets)		48.00
			Duplex - Excel	12.13	19.78 (1 set)	40.48 (8 sets)	
Duplex - Average		12.2		19.6	40.1		48.0

Notes

- 1) All printing device and driver settings were default mode.
- 2) For the BW results, the print driver was set to "print in B/W".
- 3) For more information see <http://w.w.hp.com/go/printerclaims>.
- 4) Print monitor not configured to follow device if the IP address changes.

Test System Parameters	
Item	Value
Computer	HP Compaq Elite 8300 Small Form Factor
Processor	Intel Core i7 -3770, 3.4 GHz
System Chip Set	Intel C216 Chipset Family SMBus Host Controller
System Board	system devices, default system BIOS
System Memory	4 GB
Hard Drive Subsystem	Standard disk drive (Seagate)
Video Subsystem	AMD Radeon HD 6350
Optical Drive	HP DVD A DH16aCSHR ATA
IO Subsystem	Builtin
USB Subsystem	USB 2.0/3.0
	1CP7/1P 10/1000
Operating System	Windows 7 64 Bit
Printing Applications	Microsoft Office 2010
Microsoft Office	Office 2010
Adobe Reader	10
Test files and location	Office category files, hard drive

ISO/IEC 24734 Printing Productivity Report: Office Category

Feature Performance Full Report - Office Feature Performance Test

HP Color LaserJet Enterprise MFP M681dh

Printing device and settings	
Test Start Date and Time	9/25/2017 13:54
Tester	AH
Machine name/model	HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh
Colour or B&W	Colour
FW Version	2403298_006039
Temperature and Humidity	74 degF / 23 degC 16.6 %rH
Voltage	110V
Test End Date and Time	9/26/2017 16:26

Item	Value	
Mode and Setting	Driver Version	UPD 6.4.0
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	Print in Greyscale
	Duplex B&W Settings	Print in Greyscale
	Setting N set count	Application
Collating function		Activated (application)
Paper Path	Paper Sending Direction	Default
	Paper Size Setting	Default
	Paper Feeding	Tray 2
	Paper Exit	Standard Exit Tray
	Output Orientation	Default (face down)
	Duplexing Unit (Yes/No)	Yes
Paper	Paper Manufacturer	HP / Xerox
	Paper Weight	201b / 75 g/m2
	Paper Size	Letter / A4
	Paper type/name	HP Multipurpose Ultra White / HP Office

ISO Print Productivity Report: Feature Performance Test Summary

Printing Modes (Feature Adobe Reader - Office test file)		Feature Performance Ratio	
		A5 and Legal	
		FSOT (base) FSOT (feature)	ESAT (feature) ESAT (base)
A5 Landscape Feed - Colour	Simplex	129%	157%
A5 Portrait Feed - Colour	Simplex	42%	12%
Legal - Colour	Simplex	89%	83%
Legal - Colour	Duplex	61%	49%
A5 Landscape Feed - B/W	Simplex	125%	158%
A5 Portrait Feed - B/W	Simplex	35%	12%
Legal - B/W	Simplex	90%	83%
Legal - B/W	Duplex	60%	49%

Notes

- 1) All printing device and driver settings were default mode.
- 2) Test conducted with 8-paper Office Feature Performance file.
- 3) For more information see <http://www.hp.com/go/printerclaims>.
- 4) Port monitor not configured to follow device if the IP address changes.

Feature Performance Full Report - Feature Printing Mode: 'Office' Feature Performance Test

Printing Modes Feature Adobe Reader - Office test file (8-page)	Base Printing Mode		Feature Performance			
	FSOT Base	ESAT Base	A5 and Legal			
			1 set FSOT (secs)	1 set + 30 sec ESAT (ipm)	FSOT (base) FSOT (feature)	ESAT (feature) ESAT (base)
Simplex A5 Landscape Feed - Colour	16.55	47.55	12.88	74.9	129%	157%
Simplex A5 Portrait Feed - Colour	16.55	47.55	40.09	6.0	42%	12%
Legal Simplex - Colour	16.55	47.55	18.79	39.9	89%	83%
Legal Duplex - Colour	16.55	47.55	27.39	23.7	61%	49%
Simplex A5 Landscape Feed - B/W	15.7	47.54	12.58	75.2	125%	158%
Simplex A5 Portrait Feed - B/W	15.7	47.54	45.81	6.0	35%	12%
Legal Simplex - B/W	15.7	47.54	17.57	39.8	90%	83%
Legal Duplex - B/W	15.7	47.54	26.34	23.7	60%	49%

Notes

- 1) All printing device and driver settings were default mode.
- 2) Test conducted with 8-paper Office Feature Performance file.
- 3) For more information see <http://www.hp.com/go/printerclaims>.
- 4) Port monitor not configured to follow device if the IP address changes.

Test System Parameters

Item	Value	
Test System	Computer	HP Compaq Elite 8300 Small Form Factor
	Processor	Intel Core i7 -3770, 3.4 GHz
	System Chip Set	Intel C216 Chipset Family SMBus Host Controller
	System Board	system devices, default system BIOS
	System Memory	4 GB
	Hard Drive Subsystem	Standard disk drive (Seagate)
	Video Subsystem	AMD Radeon HD 6350
	Optical Drive	HP DVD A DH16aCSHR ATA
	I/O Subsystem	Builtin
	USB Subsystem	USB 2.0/3.0
I/O	TCP/IP	TCP/IP 10/1000
	Operating System	Windows 7 64 Bit
Software	Printing Applications	Microsoft Office 2010
	Microsoft Office	Office 2010
	Adobe Reader	10
	Test files and location	Office category files, hard drive

ISO/IEC 17629 First Print Out Time Report: Office Category

Full Detailed Test Report - LETTER

HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh

Printing device and settings	
Test Start Date and Time	9/25/2017 13:54
Tester	AH
Machine name/model	HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh
Colour or B&W	Colour
FW Version	2403298_006039
Configuration (options)	Default
Controller	7.143
Printing device page count	Not Specified
Printing supplies page count	Not Specified
Temperature and Humidity	74 degF / 23 degC 16.6 %rH
Voltage	110V
Test End Date and Time	9/26/2017 16:26

Item	Value
Mode and Setting	
PDL and driver version	UPD 6.4.0
Print Quality mode	default
B&W settings	default
Paper feed orientation	Short Edge
Paper	
Paper type setting	default
Paper feeding	Standard cassette
Paper exit	Standard exit tray
Paper Path	
Output orientation	default (face up or face down)

ISO First Page Out Time Summary Report: Office Category

Summary Report: Letter		FPOT from Ready (seconds)
Color	Simplex	6.29
	Duplex	
B&W	Simplex	5.74
	Duplex	

Notes
 1) All printing device and driver settings w ere default mode.
 2) For the B/W results, the print driver w as set to "print in B/W".
 3) For more information see <http://www.hp.com/go/printerclaims>.
 4) Port monitor not configured to follow device if the IP address changes.
 5) Page counts w ere collected after completion of the tests.

ISO First Page Out Time Report: Office Category

Detailed Report: LETTER						
		Word (seconds)	Excel (seconds)	Adobe Reader (seconds)	Average (seconds)	Delay Time
Color Mode	FPOT from Ready - Simplex	5.96	6.19	6.70	6.29	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			13.86		105 Minutes
	Recovery Time			7.2		
	FPOT from Off - Simplex			172.69		
	Warm-up Time			165.99		
B&W Mode	FPOT from Ready - Simplex	5.93	5.43	5.84	5.74	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			13.22		105 Minutes
	Recovery Time			7.4		
	FPOT from Off - Simplex			170.71		
	Warm-up Time			164.87		

Notes
 1) All printing device and driver settings w ere default mode.
 2) For the B/W results, the print driver w as set to "print in B/W".
 3) For more information see <http://www.hp.com/go/printerclaims>.
 4) Port monitor not configured to follow device if the IP address changes.
 5) Page counts w ere collected after completion of the tests.
 6) Details for FPOT from Sleep are show n below.

HP Data Table

Detailed Report: LETTER							
		FPOT Avg (secs)	FPOT (secs) Iteration 1	FPOT (secs) Iteration 2	FPOT (secs) Iteration 3	Application	Delay Time
Color Mode	FPOT from Sleep	13.86	13.93	13.79	N/A	Adobe Reader	105 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	8.87	8.90	8.83	N/A	Adobe Reader	15 Minutes
B&W Mode	FPOT from Sleep	13.22	13.10	13.34	N/A	Adobe Reader	105 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	8.24	8.10	8.38	N/A	Adobe Reader	15 Minutes

Notes
 1) All printing device and driver settings w ere default mode.
 2) For the B/W results, the print driver w as set to "print in B/W".
 3) DLP includes detailed iterations as data measurements may vary run to run.

Test System Parameters		
Item	Value	
Test System	Computer	HP Compaq Elite 8300 Small Form Factor
	Processor	Intel Core i7 -3770, 3.4 GHz
	System Chip Set	Intel C216 Chipset Family SMBus Host Controller
	System Board	s system devices, default system BIOS
	System Memory	4 GB
	Hard Drive Subsystem	Standard disk drive (Seagate)
	Video Subsystem	AMD Radeon HD 6350
	Optical Drive	HP DVD A DH16aC5HR ATA
	I/O Subsystem	Builtin
	USB Subsystem	USB 2.0/3.0
Printing Device Connection	TCP/IP	10/1000
Software	Operating System	Windows 7 Business/Ultimate, 64 bit, Build 7601, SP 1
	Printing Applications	Microsoft Office 2010 SP2 Adobe Reader 10.1.4
	Print Driver	UPD 6.4.0

ISO/IEC 17629 First Print Out Time Report: Office Category

Full Detailed Test Report - A4

HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh

Printing device and settings	
Test Start Date and Time	9/25/2017 13:54
Tester	AH
Machine name/model	HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh
Colour or B&W	Colour
FW Version	2403298_006039
Configuration (options)	Default
Controller	7.143
Printing device page count	Not Specified
Printing supplies page count	Not Specified
Temperature and Humidity	74 degF / 23 degC 16.6 %rH
Voltage	110V
Test End Date and Time	9/26/2017 16:26

Item	Value	
Mode and Setting	PDL and driver version	UPD 6.4.0
	Print Quality mode	default
	B&W settings	default
Paper	Paper feed orientation	Short Edge
	Paper type setting	default
	Paper feeding	Standard cassette
Paper Path	Paper exit	Standard exit tray
	Output orientation	default (face up or face down)

ISO First Page Out Time Summary Report: Office Category

Summary Report: A4		FPOT from Ready (seconds)
Colour	Simplex	6.37
	Duplex	
B&W	Simplex	5.54
	Duplex	

- Notes
- 1) All printing device and driver settings were default mode.
 - 2) For the B/W results, the print driver was set to "print in B/W".
 - 3) For more information see <http://www.hp.com/go/printerclaims>.
 - 4) Port monitor not configured to follow device if the IP address changes.
 - 5) Page counts were collected after completion of the tests.

ISO First Page Out Time Report: Office Category

Detailed Report: A4						
		Word (seconds)	Excel (seconds)	Adobe Reader (seconds)	Average (seconds)	Delay Time
Color Mode	FPOT from Ready - Simplex	6.02	6.19	6.90	6.37	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			13.83		105 Minutes
	Recovery Time			6.9		
	FPOT from Off - Simplex			178.79		
	Warm-up Time			171.89		
B&W Mode	FPOT from Ready - Simplex	5.32	5.37	5.93	5.54	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			13.79		105 Minutes
	Recovery Time			7.9		
	FPOT from Off - Simplex			170.14		
	Warm-up Time			164.21		

- Notes
- 1) All printing device and driver settings were default mode.
 - 2) For the B/W results, the print driver was set to "print in B/W".
 - 3) For more information see <http://www.hp.com/go/printerclaims>.
 - 4) Port monitor not configured to follow device if the IP address changes.
 - 5) Page counts were collected after completion of the tests.
 - 6) Details for FPOT from Sleep are shown below.

HP Data Table

Detailed Report: A4							
		FPOT Avg (secs)	FPOT (secs) Iteration 1	FPOT (secs) Iteration 2	FPOT (secs) Iteration 3	Application	Delay Time
Color Mode	FPOT from Sleep	13.83	13.94	13.72	N/A	Adobe Reader	105 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	8.93	8.97	8.89	N/A	Adobe Reader	15 Minutes
B&W Mode	FPOT from Sleep	13.79	13.92	13.65	N/A	Adobe Reader	105 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	8.65	8.79	8.51	N/A	Adobe Reader	15 Minutes

- Notes
- 1) All printing device and driver settings were default mode.
 - 2) For the B/W results, the print driver was set to "print in B/W".
 - 3) DLP includes detailed iterations as data measurements may vary run to run.

Test System Parameters		
Item	Value	
Test System	Computer	HP Compaq Elite 8300 Small Form Factor
	Processor	Intel Core i7 -3770, 3.4 GHz
	System Chip Set	Intel C216 Chipset Family SMBus Host Controller
	System Board	System devices, default system BIOS
	System Memory	4 GB
	Hard Drive Subsystem	Standard disk drive (Seagate)
	Video Subsystem	AMD Radeon HD 6350
	Optical Drive	HP DVD A DH16aC5HR ATA
	I/O Subsystem	Builtin
	USB Subsystem	USB 2.0/3.0
Printing Device Connection	TCP/IP	10/1000
Software	Operating System	Windows 7 Business/Ultimate, 64 bit, Build 7601, SP 1
	Printing Applications	Microsoft Office 2010 SP2 Adobe Reader 10.1.4
	Print Driver	UPD 6.4.0

ISO/IEC 29183 Copy Productivity Report

Full Detailed Test Report - LETTER

HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh

Machine Setup Information	
Test Start Date and Time	9/27/2017 15:12
Tester	AH
Machine name/model	HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh
Colour or B&W	Colour
FW Version	2403298_006039
Configuration (options)	Not Specified
Temperature and Humidity	74 degF / 23 degC 16.6 %rH
Test End Date and Time:	9/27/2017 16:36

	Pre-set Item	Pre-set Value
Mode	Output Resolution	Default
	Output Quality	Default
	Copying Mode	Colour for Colour and B&W for B&W
	Auto Density Adjustment	Default
	Collating function	Set in Control Panel
Paper	Paper Sending Direction	Default
	Paper Type Setting	Default
Paper Path	Paper Feeding	Tray 2
	Paper Exit	Default
	Face Up Exit	Default (face down)
Temporary Stop	Fixing Capability	Default
	Image Quality Stability	Default
	Capacity of Paper	Default
	Others	None

Paper	Paper Manufacturer	HP / Xerox
	Paper Weight	20lb / 75 g/m2
	Paper Size	Letter / A4
	Paper type/name	HP Multipurpose Ultra White / HP Office

Summary Report: Letter		
	sFCOT	sESAT (ipm)
Color	6.9	50.2
B&W	5.2	50.3

Notes
 First Copy Out and Copy Speed measured using ISO/IEC 29183, excludes first set of test documents. For more information see <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration and document.
 Only Target A was used, all test documents have the same Saturated throughput. Reference ISO/IEC29183:2010 Clause 5, Sections 5.3.1 and 5.3.2

Detailed Report: LETTER						
	Target	sFCOT (secs)	sEFTP (ipm)			sESAT (ipm)
			1copy	1copy+30sec	1copy+4minutes	
Color	A	6.91	8.70	40.57 28 sets	46.41 210 sets	50.23
	B					
	C					
	D					
	Average	6.9	8.7	40.6	46.4	50.2
B&W	A	5.24	11.46	41.87 28 sets	46.58 212 sets	50.25
	B					
	C					
	D					
	Average	5.2	11.5	41.9	46.6	50.3

Notes
 First Copy Out and Copy Speed measured using ISO/IEC 29183, excludes first set of test documents. For more information see <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration and document.
 Only Target A was used, all test documents have the same Saturated throughput. Reference ISO/IEC29183:2010 Clause 5, Sections 5.3.1 and 5.3.2

ISO/IEC 29183 Copy Productivity Report

Full Detailed Test Report - A4

HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh

Machine Setup Information	
Test Start Date and Time	9/27/2017 15:12
Tester	AH
Machine name/model	HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh
Colour or B&W	Colour
FW Version	2403298_006039
Configuration (options)	Not Specified
Temperature and Humidity	74 degF / 23 degC 16.6 %rH
Test End Date and Time:	9/27/2017 16:36

	Pre-set Item	Pre-set Value
Mode	Output Resolution	Default
	Output Quality	Default
	Copying Mode	Colour for Colour and B&W for B&W
	Auto Density Adjustment	Default
	Collating function	Set in Control Panel
Paper	Paper Sending Direction	Default
	Paper Type Setting	Default
Paper Path	Paper Feeding	Tray 2
	Paper Exit	Default
	Face Up Exit	Default (face down)
Temporary Stop	Fixing Capability	Default
	Image Quality Stability	Default
	Capacity of Paper	Default
	Others	None

Paper	Paper Manufacturer	HP / Xerox
	Paper Weight	20lb / 75 g/m2
	Paper Size	Letter / A4
	Paper type/name	HP Multipurpose Ultra White / HP Office

Summary Report: A4		
	sFCOT	sESAT (ipm)
Colour	7.2	48.2
B&W	6.0	48.2

Notes
 First Copy Out and Copy Speed measured using ISO/IEC 29183, excludes first set of test documents. For more information see <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration and document.
 Only Target A was used, all test documents have the same Saturated throughput. Reference ISO/IEC29183:2010 Clause 5, Sections 5.3.1 and 5.3.2

Detailed Report: A4						
	Target	sFCOT (secs)	sEFTP (ipm)			sESAT (ipm)
			1copy	1copy+30sec	1copy+4minutes	
Colour	A	7.16	8.39	39.01 26 sets	45.28 200 sets	48.24
	B					
	C					
	D					
	Average	7.2	8.4	39.0	45.3	48.2
B&W	A	5.96	10.07	39.24 26 sets	45.54 198 sets	48.24
	B					
	C					
	D					
	Average	6.0	10.1	39.2	45.5	48.2

Notes
 First Copy Out and Copy Speed measured using ISO/IEC 29183, excludes first set of test documents. For more information see <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration and document.
 Only Target A was used, all test documents have the same Saturated throughput. Reference ISO/IEC29183:2010 Clause 5, Sections 5.3.1 and 5.3.2

ISO/IEC 24735 Copy Productivity Report

Full Detailed Test Report - LETTER

Machine Setup Information	
Test Start Date and Time	9/27/2017 10:03
Tester	AH
Machine name/model	HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh
Colour or B&W	Colour
FW Version	2403298_006039
Configuration (options)	Not Specified
Temperature and Humidity	74 degF / 23 degC 16.6 %rH
Test End Date and Time:	9/27/2017 14:44
Pre-set Item	
Pre-set Value	
Output Resolution	Default
Output Quality	Default
Copying Mode	Default
Auto Density Adjustment	Default
Collating function	Activated (if not activated in default mode)
Paper Sending Direction	Default
Paper Type Setting	Default
Paper Feeding	Standard cassette
Paper Exit	Standard exit tray
Face Up Exit	Default
Fixing Capability	Default
Image Quality Stability	Default
Capacity of Paper	Default
Others	Default
Paper Manufacturer	HP / Xerox
Paper Weight	20lb / 75 g/m2
Paper Size	Letter / A4

ISO/IEC 24735 Copy Productivity Report						
Detailed Report: LETTER						
	Copying Mode	FSOT (secs)	EFTP (ipm)			ESAT (ipm)
		1 set only	1 set only	1 set + 30sec	1 set + 4min	1 set + 30sec
Color Mode	1:1	10.56	22.73	42.37	45.83	50.27
			(1 set)	8 sets	53 sets	
	1:2	13.99	17.14	40.44	45.83	50.68
			(1 set)	8 sets	53 sets	
	2:2	15.06	15.92	38.62	45.83	50.56
			(1 set)	8 sets	53 sets	
B&W mode	1:1	10.41	23.05	42.31	47.46	50.27
				8 sets	53 sets	
	1:2	13.71	17.50	41.44	47.46	50.66
				8 sets	53 sets	
	2:2	13.50	17.76	40.02	47.46	50.66
				8 sets	53 sets	
Notes						
Reports located: http://www.hp.com/go/printerclaims						

ISO/IEC 24735 Copy Productivity Report

Full Detailed Test Report - A4

Machine Setup Information	
Test Start Date and Time	9/27/2017 10:03
Tester	AH
Machine name/model	HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh
Colour or B&W	Colour
FW Version	2403298_006039
Configuration (options)	Not Specified
Temperature and Humidity	74 degF / 23 degC 16.6 %rH
Test End Date and Time:	9/27/2017 14:44
Pre-set Item	Pre-set Value
Output Resolution	Default
Output Quality	Default
Copying Mode	Default
Auto Density Adjustment	Default
Collating function	Activated (if not activated in default mode)
Paper Sending Direction	Default
Paper Type Setting	Default
Paper Feeding	Standard cassette
Paper Exit	Standard exit tray
Face Up Exit	Default
Fixing Capability	Default
Image Quality Stability	Default
Capacity of Paper	Default
Others	Default
Paper Manufacturer	HP / Xerox
Paper Weight	20lb / 75 g/m2
Paper Size	Letter / A4

ISO/IEC 24735 Copy Productivity Report						
Detailed Report: A4						
	Copying Mode	FSOT (secs)	EFTP (ipm)			ESAT (ipm)
		1 set only	1 set only	1 set + 30sec	1 set + 4min	1 set + 30sec
Colour Mode	1:1	11.22	21.38	40.07	44.87	47.46
			(1 set)	8 sets	50 sets	
	1:2	14.61	16.44	37.80	44.87	48.00
			(1 set)	8 sets	50 sets	
	2:2	15.16	15.82	37.66	44.87	48.00
			(1 set)	8 sets	50 sets	
B&W mode	1:1	11.61	20.71	40.79	45.57	47.46
				8 sets	50 sets	
	1:2	12.95	18.52	38.64	44.87	48.00
				8 sets	50 sets	
	2:2	14.36	16.70	38.04	44.87	48.00
				8 sets	50 sets	
Notes						
Reports located: http://www.hp.com/go/printerclaims						

ISO/IEC 17991 Scanning Productivity Report

Full Detailed Test Report - LETTER

Machine Setup Information	
Test Start Date and Time	10/2/2017 13:07
Tester	AH
Machine name/model	HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh
Colour or B&W	Colour
Configuration (options)	Default
Temperature and Humidity	74 degF / 23 degC 16.6 %rH
Voltage	110V
Test End Date and Time	10/2/2017 16:43

Mode and Setting	Preset Item	Preset Value
	Scanning resolution	default (200 dpi)
Colour or grey scale/B&W	default (colour)	
Duplex / simplex	default (simplex)	
Original page size	default (A4)	
Paper feed orientation	default (long edge)	
Scan destination	default (shared network)	
Storing File Type	default (PDF-multi)	
Auto scan quality adjustment	default (factory preset default setting)	
ADF Paper-path	Paper feed direction	default (long edge)
	Output orientation	default
	Scanning unit	default (duplex ADF)

ISO/IEC 17991 - Scan Summary Report: ADF Productivity Measurement

Summary Report: Letter

	Scanning Mode			Measurement result
	File format version	Resolution	Scanning side	scESAT 30secA (ipm)
Colour	PDF 1.4	200	single sided	79.49
			double sided	127.64
B&W	PDF 1.4	200	single sided	78.94
			double sided	127.38

Notes
 1) For more information see <http://www.hp.com/go/printerclaims>.
 2) For the B/W results, the device scan setting is set to "Scan in B/W".

ISO/IEC 17991 - Scan Summary Report: Network Folder Productivity Measurement

Summary Report: Letter

	Scanning Mode			Measurement result		
	File format version	Resolution	Scanning side	scEFTP 30secF (ipm)	File size 30secF (Mbyte)	Number of Sets (30secF)
Colour	PDF 1.4	200	single sided	56.78	3.83	11.00
			double sided	73.24	6.62	18.00
B&W	PDF 1.4	200	single sided	62.12	2.07	11.00
			double sided	71.44	3.48	18.00

Notes
 1) For more information see <http://www.hp.com/go/printerclaims>.
 2) For the B/W results, the device scan setting is set to "Scan in B/W".

ISO/IEC 17991 - Scan Full Report: ADF Productivity Measurement

Summary Report: Letter

	Scanning Mode			Measurement result		
	File format version	Resolution	Scanning side	scEFTP 1setA (ipm)	scEFTP 30secA (ipm)	scESAT 30secA (ipm)
Colour	PDF 1.4	200	single sided	37.06	70.47	79.49
			double sided	41.55	114.63	127.64
B&W	PDF 1.4	200	single sided	34.28	72.06	78.94
			double sided	47.56	110.41	127.38

Notes
 1) For more information see <http://www.hp.com/go/printerclaims>.
 2) For the B/W results, the device scan setting is set to "Scan in B/W".

ISO/IEC 17991 - Scan Full Report: Network Folder Productivity Measurement

Summary Report: Letter

	Scanning Mode			Measurement result			
	File format version	Resolution	Scanning side	scEFTP 1setF (ipm)	scEFTP 30secF (ipm)	File size 30secF (Mbyte)	Number of Sets (30secF)
Colour	PDF 1.4	200	single sided	26.66	56.78	3.83	11
			double sided	25.33	73.24	6.62	18
B&W	PDF 1.4	200	single sided	25.33	62.12	2.07	11
			double sided	26.66	71.44	3.48	18

Notes
 1) For more information see <http://www.hp.com/go/printerclaims>.
 2) For the B/W results, the device scan setting is set to "Scan in B/W".

Test System Parameters

	Item	Value	
System	Computer name	HP Compaq Elite 8300 Small Form Factor	
	Processor	Intel Core i7 -3770, 3.4 GHz	
	System Chip Set	Intel C216 Chipset Family SMBus Host Controller	
	System Board	System devices, default system BIOS	
	System Memory	4 GB	
	Hard Drive Subsystem	Standard disk drive (Seagate)	
	Video Subsystem	AMD Radeon HD 6350	
	Optical Drive	HP DVD A DH16aCSHR ATA	
	I/O Subsystem	Builtin	
	USB Subsystem	USB 2.0/3.0	
	Operating System	Windows 7 Business/Ultimate, 64 bit, Build 7601, SP 1	
	Scanning Device Connection	Location of network folder	PC
		Internet Protocol Transfer Protocol	IPv4 SMB
Hub		Trendnet Router and Gbit Switch	
Network Speed		TCP 10/1000 Mbit Ethernet	
Connction Cable		Cat6 Straight cable	
Wireless router		No use	
Others		No use	

ISO/IEC 17991 Scanning Productivity Report

Full Detailed Test Report - A4

Machine Setup Information		
Test Start Date and Time	10/2/2017 13:07	
Tester	AH	
Machine name/model	HP Color LaserJet Enterprise MFP M681dh & Managed MFP E67550dh	
Colour or B&W	Colour	
Configuration (options)	Default	
Temperature and Humidity	74 degF / 23 degC 16.6 %rH	
Voltage	110V	
Test End Date and Time	10/2/2017 16:43	

Mode and Setting	Presets Item	Presets Value
		Scanning resolution
Colour or grey scale/B&W		default (colour)
Duplex / simplex		default (simplex)
Original page size		default (A4)
Paper feed orientation		default (long edge)
Scan destination		default (shared network)
Storing File Type		default (PDF-multi)
Auto scan quality adjustment		default (factory preset default setting)
ADF Paper-path	Paper feed direction	default (long edge)
	Output orientation	default
	Scanning unit	default (duplex ADF)

ISO/IEC 17991 - Scan Summary Report: ADF Productivity Measurement

Summary Report: A4

	Scanning Mode			Measurement result
	File format version	Resolution	Scanning side	scESAT 30secA (ipm)
Colour	PDF 1.4	200	single sided	75.57
			double sided	124.16
B&W	PDF 1.4	200	single sided	74.96
			double sided	124.29

Notes
 1) For more information see <http://www.hp.com/go/printerclaims>.
 2) For the B/W results, the device scan setting is set to "Scan in B/W".

ISO/IEC 17991 - Scan Summary Report: Network Folder Productivity Measurement

Summary Report: A4

	Scanning Mode			Measurement result		
	File format version	Resolution	Scanning side	scEFTP 30secF (ipm)	File size 30secF (Mbyte)	Number of Sets (30secF)
Colour	PDF 1.4	200	single sided	56.47	4.40	12.00
			double sided	73.85	6.51	18.00
B&W	PDF 1.4	200	single sided	61.27	2.25	12.00
			double sided	74.48	3.35	18.00

Notes
 1) For more information see <http://www.hp.com/go/printerclaims>.
 2) For the B/W results, the device scan setting is set to "Scan in B/W".

ISO/IEC 17991 - Scan Full Report: ADF Productivity Measurement

Summary Report: A4

	Scanning Mode			Measurement result		
	File format version	Resolution	Scanning side	scEFTP 1setA (ipm)	scEFTP 30secA (ipm)	scESAT 30secA (ipm)
Colour	PDF 1.4	200	single sided	38.39	69.15	75.57
			double sided	51.14	113.29	124.16
B&W	PDF 1.4	200	single sided	37.44	69.97	74.96
			double sided	46.41	112.45	124.29

Notes
 1) For more information see <http://www.hp.com/go/printerclaims>.
 2) For the B/W results, the device scan setting is set to "Scan in B/W".

ISO/IEC 17991 - Scan Full Report: Network Folder Productivity Measurement

Summary Report: A4

	Scanning Mode			Measurement result			
	File format version	Resolution	Scanning side	scEFTP 1setF (ipm)	scEFTP 30secF (ipm)	File size 30secF (Mbyte)	Number of Sets (30secF)
Colour	PDF 1.4	200	single sided	25.33	56.47	4.40	12
			double sided	30.00	73.85	6.51	18
B&W	PDF 1.4	200	single sided	26.66	61.27	2.25	12
			double sided	28.33	74.48	3.35	18

Notes
 1) For more information see <http://www.hp.com/go/printerclaims>.
 2) For the B/W results, the device scan setting is set to "Scan in B/W".

Test System Parameters		
	Item	Value
System	Computer name	HP Compaq Elite 8300 Small Form Factor
	Processor	Intel Core i7 -3770, 3.4 GHz
	System Chip Set	Intel C216 Chipset Family SMBus Host Controller
	System Board	System devices, default system BIOS
	System Memory	4 GB
	Hard Drive Subsystem	Standard disk drive (Seagate)
	Video Subsystem	AMD Radeon HD 6350
	Optical Drive	HP DVD A DH16aCSHR ATA
	I/O Subsystem	Builtin
	USB Subsystem	USB 2.0/3.0
	Operating System	Windows 7 Business/Ultimate, 64 bit, Build 7601, SP 1
Scanning Device Connection	Location of network folder	PC
	Internet Protocol	IPv4
	Transfer Protocol	SMB
	Hub	Trendnet Router and Gbit Switch
	Network Speed	TCP 10/1000 Mbit Ethernet
	Connection Cable	Cat6 Straight cable
	Wireless router	No use
	Others	No use