

# ISO/IEC 24734 Printing Productivity Report: Office Category

## Full Detailed Test Report - LETTER

HP Color LaserJet MFP M681F

### Printing device and settings

Test Start Date and Time	6/19/2017 14:41
Tester	JB
Machine name/model	HP Color LaserJet MFP M681F
Colour or B&W	Colour
FW Version	2403298_006039
Temperature and Humidity	73 degF / 23 degC 20.0 %rH
Voltage	110V
Test End Date and Time	7/6/2017 10:14

	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: Letter

Office Category	Test for Color Device	FSOT (seconds)	ESAT (ipm)
Color	Simplex	10.1	50.2
	Duplex	12.7	50.6
B&W	Simplex	9.6	50.2
	Duplex	11.8	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)	1 set + 4min (# of sets)	1 set + 30sec
Color Mode	Simplex - Adobe Reader	10.60	22.64 ( 1 set )	43.75 ( 9 sets )	48.16 ( 54 sets )	50.32
	Simplex - Word	9.76	24.60 ( 1 set )	44.10 ( 8 sets )		50.23
	Simplex - Excel	9.86	24.35 ( 1 set )	44.22 ( 8 sets )		50.25
	Simplex - Average	10.1	23.8	44.0	48.1	50.2
	Duplex - Adobe Reader	13.20	18.18 ( 1 set )	41.64 ( 9 sets )		50.64
	Duplex - Word	12.44	19.28 ( 1 set )	42.70 ( 9 sets )		50.64
	Duplex - Excel	12.41	19.32 ( 1 set )	42.26 ( 9 sets )		50.64
	Duplex - Average	12.7	18.9	42.2		50.6
B&W mode (optional for color device)	Simplex - Adobe Reader	10.11	23.77 ( 1 set )	44.87 ( 9 sets )	47.70 ( 54 sets )	50.33
	Simplex - Word	9.24	25.98 ( 1 set )	45.62 ( 9 sets )		50.32
	Simplex - Excel	9.24	25.98 ( 1 set )	45.03 ( 8 sets )		50.21
	Simplex - Average	9.6	25.2	45.1	47.7	50.2
	Duplex - Adobe Reader	12.22	19.62 ( 1 set )	42.18 ( 9 sets )		50.64
	Duplex - Word	11.55	20.76 ( 1 set )	43.12 ( 9 sets )		50.64
	Duplex - Excel	11.50	20.86 ( 1 set )	43.24 ( 9 sets )		50.66
	Duplex - Average	11.8	20.4	42.8		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
TCP/IP	TCP/IP 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

## Full Detailed Test Report - A4

HP Color LaserJet MFP M681F

Printing device and settings	
Test Start Date and Time	6/19/2017 14:41
Tester	JB
Machine name/model	HP Color LaserJet MFP M681F
Colour or B&W	Colour
FW Version	2403298_006039
Temperature and Humidity	73 degF / 23 degC 20.0 %rH
Voltage	110V
Test End Date and Time	7/6/2017 10:14
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
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: A4			
Office Category Test for Color Device		FSOT (seconds)	ESAT (ipm)
Colour	Simplex	10.7	47.5
	Duplex	13.2	47.9
B&W	Simplex	9.7	47.5
	Duplex	12.1	47.9
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 <a href="http://www.hp.com/go/printerclaims">http://www.hp.com/go/printerclaims</a> .			
4) Port 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	10.94	21.95 ( 1 set )	41.57 ( 9 sets )	44.80 ( 51 sets )	47.51
	Simplex - Word	10.56	22.75 ( 1 set )	42.65 ( 9 sets )		47.50
	Simplex - Excel	10.51	22.83 ( 1 set )	42.60 ( 9 sets )		47.51
	Simplex - Average	10.7	22.5	42.2	44.8	47.5
	Duplex - Adobe Reader	13.56	17.68 ( 1 set )	39.18 ( 9 sets )		47.96
	Duplex - Word	13.00	18.46 ( 1 set )	40.44 ( 9 sets )		47.96
	Duplex - Excel	12.76	18.80 ( 1 set )	40.46 ( 9 sets )		47.98
	Duplex - Average	13.2	18.3	40.0		47.9
B&W mode (optional for color device)	Simplex - Adobe Reader	10.15	23.64 ( 1 set )	42.58 ( 9 sets )	45.75 ( 51 sets )	47.51
	Simplex - Word	9.29	25.82 ( 1 set )	43.04 ( 9 sets )		47.51
	Simplex - Excel	9.54	25.15 ( 1 set )	43.28 ( 9 sets )		47.51
	Simplex - Average	9.7	24.8	42.9	45.7	47.5
	Duplex - Adobe Reader	12.50	19.20 ( 1 set )	40.40 ( 9 sets )		47.96
	Duplex - Word	11.80	20.32 ( 1 set )	40.94 ( 9 sets )		47.96
	Duplex - Excel	11.91	20.14 ( 1 set )	40.84 ( 9 sets )		47.98
	Duplex - Average	12.1	19.8	40.7		47.9
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 <a href="http://www.hp.com/go/printerclaims">http://www.hp.com/go/printerclaims</a> .						
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
TCP/IP	TCP/IP 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 MFP M681F

### Printing device and settings

Test Start Date and Time	6/19/2017 14:41
Tester	JB
Machine name/model	HP Color LaserJet MFP M681F
Colour or B&W	Colour
FW Version	2403298_006039
Temperature and Humidity	73 degF / 23 degC 20.0 %rH
Voltage	110V
Test End Date and Time	7/6/2017 10:14

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 20lb / 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	124%	161%
A5 Portrait Feed - Colour	Simplex	86%	15%
Legal - Colour	Simplex		
Legal - Colour	Duplex		
A5 Landscape Feed - B/W	Simplex	128%	158%
A5 Portrait Feed - B/W	Simplex	84%	10%
Legal - B/W	Simplex		
Legal - B/W	Duplex		

### Notes

- 1) All printing device and driver settings w ere default mode.
- 2) Test conducted w ith 8-paper Office Feature Performance file.
- 3) For more information see <http://w w w .hp.com/go/printerclaims>.
- 4) Pprt 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			
			A5 and Legal			
	FSOT Base	ESAT Base	1 set FSOT (secs)	1 set + 30 sec ESAT (ipm)	FSOT (base) FSOT (feature)	ESAT (feature) ESAT (base)
Simplex A5 Landscape Feed - Colour	16.28	47.32	13.2	76.2	124%	161%
Simplex A5 Portrait Feed - Colour	16.28	47.32	19.05	7.3	86%	15%
Legal Simplex - Colour	16.28	47.32				
Legal Duplex - Colour	16.28	47.32				
Simplex A5 Landscape Feed - B/W	15.7	47.28	12.34	74.9	128%	158%
Simplex A5 Portrait Feed - B/W	15.7	47.28	18.89	5.0	84%	10%
Legal Simplex - B/W	15.7	47.28				
Legal Duplex - B/W	15.7	47.28				

### Notes

- 1) All printing device and driver settings w ere default mode.
- 2) Test conducted w ith 8-paper Office Feature Performance file.
- 3) For more information see <http://w w w .hp.com/go/printerclaims>.
- 4) Pprt 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
Software	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 17629 First Print Out Time Report: Office Category

## Full Detailed Test Report - LETTER

HP Color LaserJet MFP M681F

Printing device and settings	
Test Start Date and Time	8/19/2017 14:41
Tester	JB
Machine name/model	HP Color LaserJet MFP M681F
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	73 degF / 23 degC 20.0 %rH
Voltage	110V
Test End Date and Time	7/6/2017 10:14

Item	Value
Mode and Setting	PDL and driver version
	UPD 6.4.0
	Print Quality mode
	default
Paper	B&W settings
	default
	Paper feed orientation
Paper Path	Short Edge
	Paper type setting
	default
	Paper feeding
	Standard cassette
	Paper exit
	Standard exit tray
	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	6.35
	Duplex	
B&W	Simplex	5.62
	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: LETTER						
		Word (seconds)	Excel (seconds)	Adobe Reader (seconds)	Average (seconds)	Delay Time
Color Mode	FPOT from Ready - Simplex	6.23	6.14	6.66	6.35	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			13.80		105 Minutes
	Recovery Time			7.1		
	FPOT from Off - Simplex			173.88		
	Warm-up Time			167.22		
B&W Mode	FPOT from Ready - Simplex	5.19	5.40	6.27	5.62	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			13.44		105 Minutes
	Recovery Time			7.2		
	FPOT from Off - Simplex			171.17		
	Warm-up Time			164.90		

### 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: LETTER							
		FPOT Avg (secs)	FPOT (secs) Iteration 1	FPOT (secs) Iteration 2	FPOT (secs) Iteration 3	Application	Delay Time
Color Mode	FPOT from Sleep	13.80	13.67	13.92	N/A	Adobe Reader	105 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	8.89	8.87	8.91	N/A	Adobe Reader	15 Minutes
	FPOT from Sleep	13.44	13.48	13.40	N/A	Adobe Reader	105 Minutes
B&W Mode	FPOT from Sleep (15 minutes) HP/Non ISO Test	8.45	8.35	8.54	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
Printing Device Connection	Hard Drive Subsystem
	Standard disk drive (Seagate)
	Video Subsystem
	AMD Radeon HD 6350
	Optical Drive
	HP DVD A DH16aCSHR ATA
Software	I/O Subsystem
	Builton
Printing Device Connection	USB Subsystem
	USB 2.0/3.0
	TCP/IP
Software	10/1000
	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 MFP M681F

Printing device and settings	
Test Start Date and Time	8/19/2017 14:41
Tester	JB
Machine name/model	HP Color LaserJet MFP M681F
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	73 degF / 23 degC 20.0 %rH
Voltage	110V
Test End Date and Time	7/6/2017 10:14

Item	Value
Mode and Setting	PDL and driver version
	UPD 6.4.0
	Print Quality mode
	default
Paper	B&W settings
	default
	Paper feed orientation
Paper Path	Short Edge
	Paper type setting
	default
	Paper feeding
	Standard cassette
	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	6.38
	Duplex	
B&W	Simplex	5.56
	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	6.10	6.14	6.90	6.38	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			13.73		105 Minutes
	Recovery Time			6.8		
	FPOT from Off - Simplex			175.03		
	Warm-up Time			168.13		
B&W Mode	FPOT from Ready - Simplex	5.28	5.44	5.95	5.56	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			13.19		105 Minutes
	Recovery Time			7.2		
	FPOT from Off - Simplex			172.86		
	Warm-up Time			166.91		

### 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	13.73	13.61	13.84	N/A	Adobe Reader	105 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	8.68	8.35	9.00	N/A	Adobe Reader	15 Minutes
	FPOT from Sleep	13.19	13.07	13.31	N/A	Adobe Reader	105 Minutes
B&W Mode	FPOT from Sleep (15 minutes) HP/Non ISO Test	8.36	8.39	8.32	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
Printing Device Connection	Hard Drive Subsystem
	Standard disk drive (Seagate)
	Video Subsystem
	AMD Radeon HD 6350
	Optical Drive
	HP DVD A DH16aCSHR ATA
Software	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

### Full Detailed Test Report - LETTER

HP Color LaserJet MFP M681F

Summary Report: <b>Letter</b>		
	<b>sFCOT</b>	<b>sESAT (ipm)</b>
<b>Color</b>	6.7	50.2
<b>B&amp;W</b>	5.5	50.3
Notes		
First Copy Out and Copy Speed measured using ISO/IEC 29183, excludes first set of test documents. For more information see <a href="http://w ww .hp.com/go/printerclaims">http://w ww .hp.com/go/printerclaims</a> . 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	6.70	8.95	41.43 29 sets	47.90 211 sets	50.21
	B					
	C					
	D					
	Average	6.7	9.0	41.4	47.9	50.2
B&W	A	5.54	10.83	42.34 29 sets	49.05 211 sets	50.25
	B					
	C					
	D					
	Average	5.5	10.8	42.3	49.1	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 MFP M681F

### Machine Setup Information

	Test Start Date and Time	6/21/2017 16:57
	Tester	JB
	Machine name/model	HP Color LaserJet MFP M681F
	Colour or B&W	Colour
	FW Version	2403298_006039
	Configuration (options)	Not Specified
	Temperature and Humidity	73 degF / 23 degC 20.0 %rH
	Test End Date and Time:	6/26/2017 9:27

	Pre-set Item	Pre-set Value
<b>Mode</b>	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
<b>Paper</b>	Paper Sending Direction	Default
	Paper Type Setting	Default
<b>Paper Path</b>	Paper Feeding	Tray 2
	Paper Exit	Default
	Face Up Exit	Default (face down)
<b>Temporary Stop</b>	Fixing Capability	Default
	Image Quality Stability	Default
	Capacity of Paper	Default
	Others	None
<b>Paper</b>	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)
<b>Colour</b>	7.1	47.8
<b>B&amp;W</b>	5.6	47.8

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	
<b>Colour</b>	A	7.05	8.51	39.23 27 sets	45.20 198 sets	47.79
	B					
	C					
	D					
	Average	7.1	8.5	39.2	45.2	47.8
<b>B&amp;W</b>	A	5.59	10.74	39.80 27 sets	44.68 199 sets	47.78
	B					
	C					
	D					
	Average	5.6	10.7	39.8	44.7	47.8

#### 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

### Full Detailed Test Report - LETTER

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	11.27	21.35	43.23	48.12	50.34
			( 1 set )	9 sets	54 sets	
	1:2	14.54	16.50	40.78		50.64
			( 1 set )	9 sets		
	2:2	15.39	15.58	39.46		50.66
			( 1 set )	9 sets		
B&W mode	1:1	11.35	21.15	43.51	47.70	50.34
				9 sets	54 sets	
	1:2	13.60	17.64	41.46		50.64
				9 sets		
	2:2	14.77	16.24	40.36		50.64
				9 sets		

Notes  
 Reports located: <http://www.hp.com/go/printerclaims>



## Full Detailed Test Report - 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	11.14	21.54	40.35	44.30	47.52
			( 1 set )	9 sets	51 sets	
	1:2	17.11	14.02	39.04		47.96
			( 1 set )	9 sets		
	2:2	15.93	15.06	37.94		47.96
			( 1 set )	9 sets		
B&W mode	1:1	10.82	22.17	41.82	43.39	47.51
				9 sets	51 sets	
	1:2	16.11	14.88	39.62		47.94
				9 sets		
	2:2	15.23	15.76	38.38		47.96
			9 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	6/28/2017 16:11
	Tester	JB
	Machine name/model	HP Color LaserJet MFP M681F
	Colour or B&W	Colour
	Configuration (options)	Default
	Temperature and Humidity	73 degF / 23 degC 20.0 %rH
	Voltage	110V
	Test End Date and Time	6/29/2017 10:36

	Preset Item	Preset Value
Mode and Setting	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	78.81
			double sided	126.72
B&W	PDF 1.4	200	single sided	78.15
			double sided	126.70

#### 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	60.00	4.02	12.00
			double sided	72.00	6.78	18.00
B&W	PDF 1.4	200	single sided	62.60	2.18	12.00
			double sided	76.46	3.43	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	38.49	72.88	78.81
			double sided	48.30	115.76	126.72
B&W	PDF 1.4	200	single sided	38.83	72.08	78.15
			double sided	41.94	116.03	126.7

#### 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	28.33	60.00	4.02	12
			double sided	26.66	72.00	6.78	18
B&W	PDF 1.4	200	single sided	28.33	62.60	2.18	12
			double sided	28.33	76.46	3.43	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
Scanning Device Connection	Operating System	Windows 7 Business/Ultimate, 64 bit, Build 7601, SP 1
	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

## ISO/IEC 17991 Scanning Productivity Report

### Full Detailed Test Report - A4

Machine Setup Information		
	Test Start Date and Time	6/28/2017 16:11
	Tester	JB
	Machine name/model	HP Color LaserJet MFP M681F
	Colour or B&W	Colour
	Configuration (options)	Default
	Temperature and Humidity	73 degF / 23 degC 20.0 %rH
	Voltage	110V
	Test End Date and Time	6/29/2017 10:36

Preset Item		Preset Value
Mode and Setting	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: A4

	Scanning Mode			Measurement result
	File format version	Resolution	Scanning side	scESAT 30secA (ipm)
Colour	PDF 1.4	200	single sided	74.15
			double sided	122.17
B&W	PDF 1.4	200	single sided	73.81
			double sided	121.81

#### 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	55.58	3.81	11.00
			double sided	77.89	5.99	18.00
B&W	PDF 1.4	200	single sided	60.63	2.26	12.00
			double sided	74.48	3.04	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	36.36	67.87	74.15
			double sided	47.94	112.26	122.17
B&W	PDF 1.4	200	single sided	36.72	68.72	73.81
			double sided	41.12	112.27	121.81

#### 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	22.90	55.58	3.81	11
			double sided	26.66	77.89	5.99	18
B&W	PDF 1.4	200	single sided	25.33	60.63	2.26	12
			double sided	26.66	74.48	3.04	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	Built-in
	USB Subsystem	USB 2.0/3.0
Scanning Device Connection	Operating System	Windows 7 Business/Ultimate, 64 bit, Build 7601, SP 1
	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