

ISO/IEC 24734 Printing Productivity Report: Office Category

Full Detailed Test Report - LETTER

HP Color LaserJet Enterprise M653x

Printing device and settings

Test Start Date and Time	9/26/2017 10:54
Tester	TQW
Machine name/model	HP Color LaserJet Enterprise M653x
Colour or B&W	Colour
FW Version	2403298_006038
Temperature and Humidity	73 degF / 23 degC 20.0 %rH
Voltage	110V
Test End Date and Time	10/4/2017 11:04

Item	Value	
Mode and Setting	Driver Version	UPD 6.4.0
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	Print in Grayscale
	Duplex B&W Settings	Print in Grayscale
	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

Summary Report: Letter

Office Category	Test for Color Device	FSOT (seconds)	ESAT (ipm)
Color	Simplex	8.7	60.3
	Duplex	10.7	60.5
B&W	Simplex	8.1	60.3
	Duplex	10.2	60.3

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)	
Color Mode	Simplex - Adobe Reader	9.48	25.34 (1 set)	52.39 (9 sets)	57.98 (63 sets)	60.37
	Simplex - Word	8.25	29.08 (1 set)	53.79 (9 sets)		60.36
	Simplex - Excel	8.37	28.68 (1 set)	53.74 (9 sets)		60.39
	Simplex - Average	8.7	27.7	53.3	57.9	60.3
	Duplex - Adobe Reader	11.32	21.18 (1 set)	49.74 (10 sets)		60.84
	Duplex - Word	10.33	23.22 (1 set)	50.38 (9 sets)		60.02
	Duplex - Excel	10.39	23.10 (1 set)	50.56 (9 sets)		60.76
	Duplex - Average	10.7	22.5	50.2		60.5
B&W mode <small>(optional for color device)</small>	Simplex - Adobe Reader	8.52	28.16 (1 set)	53.17 (9 sets)	58.19 (63 sets)	60.38
	Simplex - Word	7.85	30.59 (1 set)	54.53 (9 sets)		60.34
	Simplex - Excel	7.86	30.55 (1 set)	54.34 (9 sets)		60.38
	Simplex - Average	8.1	29.7	54.0	58.1	60.3
	Duplex - Adobe Reader	10.58	22.68 (1 set)	52.30 (11 sets)		61.28
	Duplex - Word	9.80	24.48 (1 set)	50.98 (10 sets)		59.78
	Duplex - Excel	9.98	24.04 (1 set)	52.24 (11 sets)		60.08
	Duplex - Average	10.2	23.7	51.8		60.3

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 Enterprise M653x

Printing device and settings		
Test Start Date and Time	9/26/2017 10:54	
Tester	TOW	
Machine name/model	HP Color LaserJet Enterprise M653x	
Colour or B&W	Colour	
FW Version	2403298_006038	
Temperature and Humidity	73 degF / 23 degC 20.0 %rH	
Voltage	110V	
Test End Date and Time	10/4/2017 11:04	

	Item	Value
Mode and Setting	Driver Version	UPD 6.4.0
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	Print in Grayscale
	Duplex B&W Settings	Print in Grayscale
	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		8.9	56.9
	Duplex		11.2	57.5
B&W	Simplex		8.4	57.0
	Duplex		10.5	57.5

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: A4						
	Office Category	FSOT (secs)	EFTP (ipm)			ESAT (ipm)
			1 set only (1 set)	1 set only (1 set)	1 set + 30sec (# of sets)	
Colour Mode	Simplex - Adobe Reader	9.45	25.40 (1 set)	49.64 (9 sets)	54.72 (59 sets)	57.00
	Simplex - Word	8.50	28.24 (1 set)	51.15 (9 sets)		56.98
	Simplex - Excel	8.58	27.98 (1 set)	51.03 (9 sets)		57.00
	Simplex - Average	8.9	27.2	50.6	54.7	56.9
	Duplex - Adobe Reader	11.79	20.36 (1 set)	46.70 (9 sets)		57.54
	Duplex - Word	10.80	22.22 (1 set)	47.98 (9 sets)		57.56
	Duplex - Excel	10.81	22.18 (1 set)	48.18 (9 sets)		57.56
	Duplex - Average	11.2	21.5	47.6		57.5
B&W mode (optional for color device)	Simplex - Adobe Reader	8.77	27.38 (1 set)	50.75 (9 sets)	52.37 (60 sets)	56.99
	Simplex - Word	8.09	29.66 (1 set)	50.57 (9 sets)		57.00
	Simplex - Excel	8.07	29.75 (1 set)	51.65 (9 sets)		57.01
	Simplex - Average	8.4	28.9	50.9	52.3	57.0
	Duplex - Adobe Reader	10.90	22.00 (1 set)	48.70 (10 sets)		57.60
	Duplex - Word	10.20	23.52 (1 set)	49.12 (9 sets)		57.56
	Duplex - Excel	10.20	23.52 (1 set)	48.90 (9 sets)		57.56
	Duplex - Average	10.5	23.0	48.9		57.5

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

Feature Performance Full Report - Office Feature Performance Test

HP Color LaserJet Enterprise M653x

Printing device and settings		
Test Start Date and Time	9/26/2017 10:54	
Tester	TOW	
Machine name/model	HP Color LaserJet Enterprise M653x	
Colour or B&W	Colour	
FW Version	2403298_006038	
Temperature and Humidity	73 degF / 23 degC 20.0 %RH	
Voltage	110V	
Test End Date and Time	10/4/2017 11:04	
Item	Value	
Mode and Setting	Driver Version	UPD 6.4.0
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	Print in Grayscale
	Duplex B&W Settings	Print in Grayscale
	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

ISO Print Productivity Report: Feature Performance Test Summary

Printing Modes (Feature Adobe Reader - Office test file)		Feature Performance Ratio	
		A5 and Legal	
		FSOT (base)	ESAT (feature)
		FSOT (feature)	ESAT (base)
A5 Landscape Feed - Colour	Simplex	105%	131%
A5 Portrait Feed - Colour	Simplex	31%	8%
Legal - Colour	Simplex		
Legal - Colour	Duplex		
A5 Landscape Feed - B/W	Simplex	107%	132%
A5 Portrait Feed - B/W	Simplex	30%	8%
Legal - B/W	Simplex		
Legal - B/W	Duplex		

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			
			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	14.36	56.99	13.7	74.9	105%	131%
Simplex A5 Portrait Feed - Colour	14.36	56.99	47.64	4.7	31%	8%
Legal Simplex - Colour	14.36	56.99				
Legal Duplex - Colour	14.36	56.99				
Simplex A5 Landscape Feed - B/W	13.47	56.99	12.62	75.5	107%	132%
Simplex A5 Portrait Feed - B/W	13.47	56.99	46.42	4.7	30%	8%
Legal Simplex - B/W	13.47	56.99				
Legal Duplex - B/W	13.47	56.99				

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	
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 Enterprise M653x	
Printing device and settings	
Test Start Date and Time	9/26/2017 10:54
Tester	TOW
Machine name/model	HP Color LaserJet Enterprise M653x
Colour or B&W	Colour
FW Version	2403298_006038
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	10/4/2017 11:04

	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	5.39
	Duplex	
B&W	Simplex	4.90
	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	5.03	5.32	5.81	5.39	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			13.11		105 Minutes
	Recovery Time			7.3		
	FPOT from Off - Simplex			158.86		
	Warm-up Time			153.05		
B&W Mode	FPOT from Ready - Simplex	4.56	4.94	5.20	4.90	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			12.93		105 Minutes
	Recovery Time			7.7		
	FPOT from Off - Simplex			157.49		
	Warm-up Time			152.29		
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	13.11	13.20	13.02	N/A	Adobe Reader	105 Minutes
	FPOT from Sleep (15 minutes)	7.95	7.93	7.97	N/A	Adobe Reader	15 Minutes
	HP/Non ISO Test						
B&W Mode	FPOT from Sleep	12.93	12.80	13.06	N/A	Adobe Reader	105 Minutes
	FPOT from Sleep (15 minutes)	7.83	7.88	7.77	N/A	Adobe Reader	15 Minutes
	HP/Non ISO Test						
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 DH16aCSHR 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
	Print Driver	Adobe Reader 10.1.4 UPD 6.4.0

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

Full Detailed Test Report - A4

HP Color LaserJet Enterprise M653x

Printing device and settings	
Test Start Date and Time	9/26/2017 10:54
Tester	TQW
Machine name/model	HP Color LaserJet Enterprise M653x
Colour or B&W	Colour
FW Version	2403298_006038
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	10/4/2017 11:04

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 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	5.69
	Duplex	
B&W	Simplex	5.04
	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	5.42	5.49	6.16	5.69	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			13.02		105 Minutes
	Recovery Time			6.9		
	FPOT from Off - Simplex			157.86		
	Warm-up Time			151.70		
B&W Mode	FPOT from Ready - Simplex	4.79	5.03	5.29	5.04	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			12.66		105 Minutes
	Recovery Time			7.4		
	FPOT from Off - Simplex			157.06		
	Warm-up Time			151.77		

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	13.02	12.97	13.06	N/A	Adobe Reader	105 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	7.95	7.94	7.95	N/A	Adobe Reader	15 Minutes
	FPOT from Sleep	12.66	12.61	12.71	N/A	Adobe Reader	105 Minutes
B&W Mode	FPOT from Sleep	12.66	12.61	12.71	N/A	Adobe Reader	105 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	7.56	7.51	7.60	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 DH16aCSHR 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
	Print Driver	Adobe Reader 10.1.4 UPD 6.4.0