

ISO/IEC 24734 Printing Productivity Report: Office Category

Full Detailed Test Report - LETTER

HP Color LaserJet M254dn

Printing device and settings		
Test Start Date and Time	7/10/2017 19:32	
Tester	Susan	
Machine name/model	HP Color LaserJet M254dn	
Colour or B&W	Colour	
FW Version	20170627	
Temperature and Humidity	75 degF / 24 degC 25.0 %rH	
Voltage	220V	
Test End Date and Time	9/26/2017 10:09	

	Item	Value
Mode and Setting	Driver Version	44.1.2526
	Media/Quality Settings	Default / Default
	Simplex B&W Settings	
	Duplex B&W Settings	
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		20.6	22.3
	Duplex		30.5	13.2
B&W	Simplex		19.1	22.3
	Duplex		30.5	13.2

- 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 + 30sec (# of sets)	1 set + 4min (# of sets)	
Color Mode	Simplex - Adobe Reader	20.80	11.53 ( 1 set )	17.82 ( 4 sets )	20.96 ( 24 sets )	22.38
	Simplex - Word	20.71	11.58 ( 1 set )	17.91 ( 4 sets )		22.39
	Simplex - Excel	20.25	11.85 ( 1 set )	18.19 ( 4 sets )		22.40
	Simplex - Average	20.6	11.6	17.9	20.9	22.3
	Duplex - Adobe Reader	30.28	7.90 ( 1 set )	10.82 ( 3 sets )		13.26
	Duplex - Word	30.41	7.88 ( 1 set )	10.82 ( 3 sets )		13.26
	Duplex - Excel	30.80	7.78 ( 1 set )	10.84 ( 3 sets )		13.26
	Duplex - Average	30.5	7.8	10.8		13.2
B&W mode (optional for color device)	Simplex - Adobe Reader	18.77	12.78 ( 1 set )	18.64 ( 4 sets )	21.25 ( 24 sets )	22.41
	Simplex - Word	19.28	12.44 ( 1 set )	18.46 ( 4 sets )		22.37
	Simplex - Excel	18.96	12.65 ( 1 set )	18.78 ( 4 sets )		22.40
	Simplex - Average	19.1	12.6	18.6	21.2	22.3
	Duplex - Adobe Reader	31.17	7.70 ( 1 set )	10.52 ( 3 sets )		13.28
	Duplex - Word	30.92	7.76 ( 1 set )	10.68 ( 3 sets )		13.26
	Duplex - Excel	29.40	8.14 ( 1 set )	10.96 ( 3 sets )		13.26
	Duplex - Average	30.5	7.8	10.7		13.2

- 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
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 M254dn

Printing device and settings		
Test Start Date and Time	7/10/2017 19:32	
Tester	Susan	
Machine name/model	HP Color LaserJet M254dn	
Colour or B&W	Colour	
FW Version	20170627	
Temperature and Humidity	75 degF / 24 degC 25.0 %rH	
Voltage	220V	
Test End Date and Time	9/26/2017 10:09	

	Item	Value
Mode and Setting	Driver Version	44.1.2526
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	
	Duplex B&W Settings	
	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	21.4	21.1
	Duplex	30.7	12.8
B&W	Simplex	20.1	21.1
	Duplex	30.1	12.8

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 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	21.42	11.20 ( 1 set )	17.23 ( 4 sets )	20.36 ( 23 sets )	21.19
	Simplex - Word	21.39	11.22 ( 1 set )	17.29 ( 4 sets )		21.18
	Simplex - Excel	21.35	11.23 ( 1 set )	17.47 ( 4 sets )		21.21
	Simplex - Average	21.4	11.2	17.3	20.3	21.1
	Duplex - Adobe Reader	30.76	7.78 ( 1 set )	10.54 ( 3 sets )		12.84
	Duplex - Word	30.60	7.82 ( 1 set )	10.18 ( 3 sets )		12.84
	Duplex - Excel	30.46	7.88 ( 1 set )	10.52 ( 3 sets )		12.82
	Duplex - Average	30.7	7.8	10.4		12.8
B&W mode (optional for color device)	Simplex - Adobe Reader	19.73	12.16 ( 1 set )	17.83 ( 4 sets )	19.94 ( 23 sets )	21.18
	Simplex - Word	20.35	11.79 ( 1 set )	17.71 ( 4 sets )		21.21
	Simplex - Excel	20.07	11.96 ( 1 set )	17.82 ( 4 sets )		21.19
	Simplex - Average	20.1	11.9	17.7	19.9	21.1
	Duplex - Adobe Reader	30.13	7.96 ( 1 set )	10.60 ( 3 sets )		12.86
	Duplex - Word	30.05	7.98 ( 1 set )	10.24 ( 3 sets )		12.86
	Duplex - Excel	30.00	7.98 ( 1 set )	10.44 ( 3 sets )		12.84
	Duplex - Average	30.1	7.9	10.4		12.8

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	
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 M254dn

Printing device and settings		
Test Start Date and Time	7/10/2017 19:32	
Tester	Susan	
Machine name/model	HP Color LaserJet M254dn	
Colour or B&W	Colour	
FW Version	20170627	
Temperature and Humidity	75 degF / 24 degC 25.0 %rH	
Voltage	220V	
Test End Date and Time	9/26/2017 10:09	

	Item	Value
Mode and Setting	Driver Version	44.1.2526
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	
	Duplex B&W Settings	
	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	89%	86%
A5 Portrait Feed - Colour	Simplex	58%	26%
Legal - Colour	Simplex		
Legal - Colour	Duplex		
A5 Landscape Feed - B/W	Simplex	145%	181%
A5 Portrait Feed - B/W	Simplex	59%	26%
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			
	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	33.15	21.2	37.36	18.3	89%	86%
Simplex A5 Portrait Feed - Colour	33.15	21.2	57.79	5.7	58%	26%
Legal Simplex - Colour	33.15	21.2				
Legal Duplex - Colour	33.15	21.2				
Simplex A5 Landscape Feed - B/W	33	21.21	22.82	38.5	145%	181%
Simplex A5 Portrait Feed - B/W	33	21.21	56.44	5.7	59%	26%
Legal Simplex - B/W	33	21.21				
Legal Duplex - B/W	33	21.21				

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	Built-in
	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 M254dn

Printing device and settings	
Test Start Date and Time	7/10/2017 19:32
Tester	Susan
Machine name/model	HP Color LaserJet M254dn
Colour or B&W	Colour
FW Version	20170627
Configuration (options)	Default
Controller	11500
Printing device page count	Not Specified
Printing supplies page count	Not Specified
Temperature and Humidity	75 degF / 24 degC 25.0 %rH
Voltage	220V
Test End Date and Time	9/26/2017 10:09

Item	Value	
Mode and Setting	PDL and driver version	44.1.2526
	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: Letter		FPOT from Ready (seconds)
Color	Simplex	11.95
	Duplex	
B&W	Simplex	10.49
	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	11.91	11.71	12.21	11.95	100 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			12.63		61 Minutes
	Recovery Time			0.4		
	FPOT from Off - Simplex			67.66		
	Warm-up Time			55.45		
B&W Mode	FPOT from Ready - Simplex	10.79	10.09	10.57	10.49	49 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			12.64		61 Minutes
	Recovery Time			2.1		
	FPOT from Off - Simplex			66.38		
	Warm-up Time			55.81		

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	12.63	12.69	12.57	N/A	Adobe Reader	61 Minutes
	FPOT from Sleep (15 minutes)	12.68	12.68	12.68	N/A	Adobe Reader	16 Minutes
	HP/Non ISO Test						
B&W Mode	FPOT from Sleep	12.64	12.63	12.64	N/A	Adobe Reader	61 Minutes
	FPOT from Sleep (15 minutes)	12.33	12.48	12.17	N/A	Adobe Reader	16 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
		Adobe Reader 10.1.4
	Print Driver	44.1.2526

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

Full Detailed Test Report - A4  
HP Color LaserJet M254dn

Printing device and settings	
Test Start Date and Time	7/10/2017 19:32
Tester	Susan
Machine name/model	HP Color LaserJet M254dn
Colour or B&W	Colour
FW Version	20170627
Configuration (options)	Default
Controller	11500
Printing device page count	Not Specified
Printing supplies page count	Not Specified
Temperature and Humidity	75 degF / 24 degC 25.0 %rH
Voltage	220V
Test End Date and Time	9/26/2017 10:09

Item	Value	
<b>Mode and Setting</b>	PDL and driver version	44.1.2526
	Print Quality mode	default
	B&W settings	default
<b>Paper</b>	Paper feed orientation	Short Edge
	Paper type setting	default
	Paper feeding	Standard cassette
<b>Paper Path</b>	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)
<b>Colour</b>	Simplex	12.17
	Duplex	
<b>B&amp;W</b>	Simplex	10.76
	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
<b>Color Mode</b>	FPOT from Ready - Simplex	12.22	11.99	12.29	12.17	100 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			12.78		61 Minutes
	Recovery Time			0.5		
	FPOT from Off - Simplex			66.45		
	Warm-up Time			54.17		
<b>B&amp;W Mode</b>	FPOT from Ready - Simplex	10.88	10.68	10.72	10.76	49 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			12.56		61 Minutes
	Recovery Time			1.8		
	FPOT from Off - Simplex			66.01		
	Warm-up Time			55.30		

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
<b>Color Mode</b>	FPOT from Sleep	12.78	12.75	12.81	N/A	Adobe Reader	61 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	12.83	12.69	12.96	N/A	Adobe Reader	16 Minutes
	FPOT from Sleep	12.56	12.61	12.51	N/A	Adobe Reader	61 Minutes
<b>B&amp;W Mode</b>	FPOT from Sleep (15 minutes) HP/Non ISO Test	12.53	12.52	12.54	N/A	Adobe Reader	16 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	
<b>Test System</b>	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
<b>Printing Device Connection</b>	TCP/IP	10/1000
	Operating System	Windows 7 Business/Ultimate, 64 bit, Build 7601, SP 1
<b>Software</b>	Printing Applications	Microsoft Office 2010 SP2
		Adobe Reader 10.1.4
	Print Driver	44.1.2526