

**ISO/IEC 24734 Printing Productivity Report: Office Category**

Full Detailed Test Report - LETTER

HP LaserJet M609DN

Printing device and settings	
Test Start Date and Time	4/11/2017 8:32
Tester	AO
Machine name/model	HP LaserJet M609DN
Colour or B&W	B&W
FW Version	2403298_006034
Temperature and Humidity	73 degF / 23 degC 20.0 %rH
Voltage	110V
Test End Date and Time	4/11/2017 13:02

Item	Value	
Mode and Setting	Driver Version	UPD 6.4.0
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	default
	Duplex B&W Settings	default
	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: Letter			
Office Category Test for B&W Device		FSOT (seconds)	ESAT (ipm)
B&W	Simplex	6.9	75.7
	Duplex	8.6	66.7

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		( 1 set )			
	Simplex - Word		( 1 set )			
	Simplex - Excel		( 1 set )			
	Simplex - Average					
	Duplex - Adobe Reader	N/A	N/A	N/A		N/A
	Duplex - Word	N/A	N/A	N/A		N/A
	Duplex - Excel	N/A	N/A	N/A		N/A
	Duplex - Average	N/A	N/A	N/A		N/A
B&W mode (optional for color device)	Simplex - Adobe Reader	7.22	33.26 ( 1 set )	67.43 ( 11 sets )	72.82 ( 78 sets )	75.70
	Simplex - Word	6.92	34.68 ( 1 set )	68.75 ( 11 sets )		75.75
	Simplex - Excel	6.47	37.09 ( 1 set )	68.78 ( 11 sets )		75.76
	Simplex - Average	6.9	35.0 ( 1 set )	68.3 ( 11 sets )	72.8	75.7
	Duplex - Adobe Reader	9.25	25.94 ( 1 set )	55.20 ( 10 sets )		66.70
	Duplex - Word	8.38	28.68 ( 1 set )	57.64 ( 10 sets )		66.72
	Duplex - Excel	8.14	29.48 ( 1 set )	57.86 ( 10 sets )		66.72
	Duplex - Average	8.6	28.0 ( 1 set )	56.9 ( 10 sets )		66.7

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 LaserJet M609DN

**Printing device and settings**

Test Start Date and Time	4/11/2017 8:32
Tester	AO
Machine name/model	HP LaserJet M609DN
Colour or B&W	B&W
FW Version	2403298_006034
Temperature and Humidity	73 degF / 23 degC 20.0 %RH
Voltage	110V
Test End Date and Time	4/11/2017 13:02

Item	Value	
<b>Mode and Setting</b>	Driver Version	UPD 6.4.0
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	default
	Duplex B&W Settings	default
	Setting N set count	Application
Collating function	Activated (application)	
<b>Paper Path</b>	Paper Sending Direction	Default
	Paper Size Setting	Default
	Paper Feeding	Tray 2
	Paper Exit	Standard Exit Tray
	Output Orientation	Default (face down)
<b>Paper</b>	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 B&W Device		FSOT (seconds)	ESAT (ipm)
<b>B&amp;W</b>	Simplex	7.4	71.6
	Duplex	9.1	63.6

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: 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
<b>Colour Mode</b>	Simplex - Adobe Reader		( 1 set )			
	Simplex - Word		( 1 set )			
	Simplex - Excel		( 1 set )			
	Simplex - Average					
	Duplex - Adobe Reader	N/A	N/A	N/A		N/A
	Duplex - Word	N/A	N/A	N/A		N/A
	Duplex - Excel	N/A	N/A	N/A		N/A
	Duplex - Average	N/A	N/A	N/A		N/A
<b>B&amp;W mode</b> (optional for color device)	Simplex - Adobe Reader	7.62	31.51 ( 1 set )	62.96 ( 10 sets )	69.18 ( 73 sets )	71.58
	Simplex - Word	7.11	33.75 ( 1 set )	64.38 ( 10 sets )		71.63
	Simplex - Excel	7.35	32.67 ( 1 set )	64.17 ( 10 sets )		71.60
	Simplex - Average	7.4	32.6	63.8	69.1	71.6
	Duplex - Adobe Reader	9.79	24.52 ( 1 set )	52.84 ( 9 sets )		63.70
	Duplex - Word	8.73	27.48 ( 1 set )	54.34 ( 9 sets )		63.60
	Duplex - Excel	8.76	27.40 ( 1 set )	54.18 ( 9 sets )		63.64
	Duplex - Average	9.1	26.4	53.7		63.6

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**

**Feature Performance Full Report - Office Feature Performance Test**

HP LaserJet M609DN

Printing device and settings		
Test Start Date and Time	4/11/2017 8:32	
Tester	AO	
Machine name/model	HP LaserJet M609DN	
Colour or B&W	B&W	
FW Version	2403298_006034	
Temperature and Humidity	73 degF / 23 degC 20.0 %rH	
Voltage	110V	
Test End Date and Time	4/11/2017 13:02	
<b>Item</b>		
<b>Value</b>		
<b>Mode and Setting</b>	Driver Version	UPD 6.4.0
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	default
	Duplex B&W Settings	default
	Setting N set count	Application
Collating function		Activated (application)
<b>Paper Path</b>	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
<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

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		
A5 Portrait Feed - Colour	Simplex		
Legal - Colour	Simplex		
Legal - Colour	Duplex		
A5 Landscape Feed - B/W	Simplex	130%	162%
A5 Portrait Feed - B/W	Simplex	65%	42%
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						
Simplex A5 Portrait Feed - Colour						
Legal Simplex - Colour						
Legal Duplex - Colour						
Simplex A5 Landscape Feed - B/W	11.24	71.6	8.68	116.3	130%	162%
Simplex A5 Portrait Feed - B/W	11.24	71.6	17.35	30.3	65%	42%
Legal Simplex - B/W	11.24	71.6				
Legal Duplex - B/W	11.24	71.6				

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	
<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 DH16aCXHR ATA
	I/O Subsystem	Builtin
	USB Subsystem	USB 2.0/3.0
<b>I/O</b>	TCP/IP	TCP/IP 10/1000
	Operating System	Windows 7 64 Bit
<b>Software</b>	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 LaserJet M609DN

Printing device and settings	
Test Start Date and Time	4/11/2017 18:21
Tester	AC
Machine name/model	HP LaserJet M609DN
Colour or B&W	B&W
FW Version	2403298_006034
Configuration (options)	Default
Controller	4.119
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	4/13/2017 3:02

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

**ISO First Page Out Time Summary Report: Office Category**

Summary Report: Letter		
		FPOT from Ready (seconds)
<b>B&amp;W</b>	Simplex	4.72
	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 <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.		
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
<b>Color Mode</b>	FPOT from Ready - Simplex					
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			N/A		
	Recovery Time					
	FPOT from Off - Simplex					
	Warm-up Time					
<b>B&amp;W Mode</b>	FPOT from Ready - Simplex	4.48	4.67	4.99	4.72	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			11.72		105 Minutes
	Recovery Time			6.7		
	FPOT from Off - Simplex			159.65		
	Warm-up Time			154.66		

- 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
<b>Color Mode</b>	FPOT from Sleep	N/A	N/A	N/A	N/A	Adobe Reader	
	FPOT from Sleep (15 minutes) HP/Non ISO Test	N/A	N/A	N/A	N/A	Adobe Reader	
<b>B&amp;W Mode</b>	FPOT from Sleep	11.72	11.58	11.86	N/A	Adobe Reader	105 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	7.08	7.08	7.08	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	
<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 DH16aC5HR ATA
	I/O Subsystem	Builtin
	USB Subsystem	USB 2.0/3.0
<b>Printing Device Connection</b>	TCP/IP	10/1000
<b>Software</b>	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 LaserJet M609DN

Printing device and settings	
Test Start Date and Time	4/11/2017 18:21
Tester	AO
Machine name/model	HP LaserJet M609DN
Colour or B&W	B&W
FW Version	2403298_006034
Configuration (options)	Default
Controller	4.119
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	4/13/2017 3:02

Item	Value
<b>Mode and Setting</b>	
PDL and driver version	UPD 6.4.0
Print Quality mode	default
B&W settings	default
Paper feed orientation	Short Edge
<b>Paper</b>	
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>B&amp;W</b>	Simplex	4.82
	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					
	FPOt from Ready - Duplex					
	FPOt from Sleep - Simplex			N/A		
	Recovery Time					
	FPOt from Off - Simplex					
	Warm-up Time					
<b>B&amp;W Mode</b>	FPOt from Ready - Simplex	4.59	4.72	5.13	4.82	20 Seconds
	FPOt from Ready - Duplex					
	FPOt from Sleep - Simplex			11.72		105 Minutes
	Recovery Time			6.6		
	FPOt from Off - Simplex			158.36		
	Warm-up Time			153.23		

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	N/A	N/A	N/A	N/A	Adobe Reader	
	FPOt from Sleep (15 minutes)	N/A	N/A	N/A	N/A	Adobe Reader	
	HP/Non ISO Test						
<b>B&amp;W Mode</b>	FPOt from Sleep	11.72	11.66	11.77	N/A	Adobe Reader	105 Minutes
	FPOt from Sleep (15 minutes)	7.11	7.08	7.13	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	
<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
<b>Software</b>	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