

ISO/IEC 24734 Printing Productivity Report: Office Category

Full Detailed Test Report - LETTER

HP Color LaserJet M280nw

Printing device and settings		
Test Start Date and Time	8/8/2017 1:11	
Tester	Susan	
Machine name/model	HP Color LaserJet M280nw	
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	9/19/2017 6:08	

	Item	Value
Mode and Setting	Driver Version	44.1.2549
	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)	No
	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	20.5	22.4
	Duplex	N/A	N/A
B&W	Simplex	18.8	22.3
	Duplex	N/A	N/A

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	20.50	11.71 (1 set)	18.15 (4 sets)	21.46 (24 sets)	22.39
	Simplex - Word	20.76	11.56 (1 set)	18.12 (4 sets)		22.48
	Simplex - Excel	19.98	12.02 (1 set)	18.36 (4 sets)		22.40
	Simplex - Average	20.5	11.7	18.2	21.4	22.4
	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	18.77	12.78 (1 set)	18.79 (4 sets)	21.39 (24 sets)	22.41
	Simplex - Word	19.19	12.50 (1 set)	18.73 (4 sets)		22.37
	Simplex - Excel	18.28	13.13 (1 set)	18.96 (4 sets)		22.41
	Simplex - Average	18.8	12.8	18.8	21.3	22.3
	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

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	Builitin
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 M280nw

Printing device and settings		
Test Start Date and Time	8/8/2017 1:11	
Tester	Susan	
Machine name/model	HP Color LaserJet M280nw	
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	9/19/2017 6:08	

	Item	Value
Mode and Setting	Driver Version	44.1.2549
	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)	No
	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	21.0	21.1
	Duplex	N/A	N/A
B&W	Simplex	19.4	21.2
	Duplex	N/A	N/A

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	20.98	11.44 (1 set)	17.39 (4 sets)	20.17 (23 sets)	21.17
	Simplex - Word	21.12	11.37 (1 set)	17.44 (4 sets)		21.21
	Simplex - Excel	20.62	11.64 (1 set)	17.58 (4 sets)		21.21
	Simplex - Average	21.0	11.4	17.4	20.1	21.1
	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	19.19	12.50 (1 set)	17.86 (4 sets)	19.93 (23 sets)	21.20
	Simplex - Word	19.62	12.23 (1 set)	17.84 (4 sets)		21.20
	Simplex - Excel	19.20	12.49 (1 set)	17.96 (4 sets)		21.20
	Simplex - Average	19.4	12.4	17.8	19.9	21.2
	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

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 M280nw

Printing device and settings		
Test Start Date and Time	8/8/2017 1:11	
Tester	Susan	
Machine name/model	HP Color LaserJet M280nw	
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	9/19/2017 6:08	

	Item	Value
Mode and Setting	Driver Version	44.1.2549
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	
	Duplex B&W Settings	
	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)	No
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	99%	99%
A5 Portrait Feed - Colour	Simplex	59%	26%
Legal - Colour	Simplex		
Legal - Colour	Duplex		
A5 Landscape Feed - B/W	Simplex	139%	181%
A5 Portrait Feed - B/W	Simplex	58%	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	32.88	21.2	33.25	21.1	99%	99%
Simplex A5 Portrait Feed - Colour	32.88	21.2	56.31	5.7	59%	26%
Legal Simplex - Colour	32.88	21.2				
Legal Duplex - Colour	32.88	21.2				
Simplex A5 Landscape Feed - B/W	31.39	21.19	22.59	38.5	139%	181%
Simplex A5 Portrait Feed - B/W	31.39	21.19	54.58	5.7	58%	26%
Legal Simplex - B/W	31.39	21.19				
Legal Duplex - B/W	31.39	21.19				

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 M280nw

Printing device and settings	
Test Start Date and Time	8/8/2017 1:11
Tester	Susan
Machine name/model	HP Color LaserJet M280nw
Colour or B&W	Colour
FW Version	20170627
Configuration (options)	Default
Controller	11530
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	9/19/2017 6:08

Item	Value	
Mode and Setting	PDL and driver version	44.1.2549
	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	11.86
	Duplex	
B&W	Simplex	10.14
	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	11.88	11.66	12.02	11.86	49 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			12.49		61 Minutes
	Recovery Time			0.5		
	FPOT from Off - Simplex			63.22		
	Warm-up Time			51.20		
B&W Mode	FPOT from Ready - Simplex	10.02	10.32	10.06	10.14	49 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			12.23		61 Minutes
	Recovery Time			2.2		
	FPOT from Off - Simplex			66.08		
	Warm-up Time			56.02		

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	12.49	12.61	12.37	N/A	Adobe Reader	61 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	12.38	12.39	12.36	N/A	Adobe Reader	16 Minutes
B&W Mode	FPOT from Sleep	12.23	12.21	12.24	N/A	Adobe Reader	61 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	12.16	12.14	12.18	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	
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
Printing Device Connection	TCP/IP	10/1000
	Operating System	Windows 7 Business/Ultimate, 64 bit, Build 7601, SP 1
Software	Printing Applications	Microsoft Office 2010 SP2
		Adobe Reader 10.1.4
	Print Driver	44.1.2549

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

Full Detailed Test Report - A4

HP Color LaserJet M280nw

Printing device and settings	
Test Start Date and Time	8/8/2017 1:11
Tester	Susan
Machine name/model	HP Color LaserJet M280nw
Colour or B&W	Colour
FW Version	20170627
Configuration (options)	Default
Controller	111530
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	9/19/2017 6:08

Item	Value	
Mode and Setting	PDL and driver version	44.1.2549
	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: A4		
FPOT from Ready (seconds)		
Colour	Simplex	11.95
	Duplex	
B&W	Simplex	10.48
	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	11.93	11.70	12.21	11.95	49 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			12.66		61 Minutes
	Recovery Time			0.4		
	FPOT from Off - Simplex			66.27		
	Warm-up Time			54.06		
B&W Mode	FPOT from Ready - Simplex	10.68	9.98	10.77	10.48	49 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			12.37		61 Minutes
	Recovery Time			1.6		
	FPOT from Off - Simplex			68.06		
	Warm-up Time			57.29		

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: A4							
		FPOT Avg (secs)	FPOT (secs) Iteration 1	FPOT (secs) Iteration 2	FPOT (secs) Iteration 3	Application	Delay Time
Color Mode	FPOT from Sleep	12.66	12.61	12.70	N/A	Adobe Reader	61 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	12.54	12.56	12.52	N/A	Adobe Reader	16 Minutes
B&W Mode	FPOT from Sleep	12.37	12.33	12.40	N/A	Adobe Reader	61 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	12.35	12.34	12.36	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	
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
Printing Device Connection	TCP/IP	10/1000
	Software	
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 44.1.2549

ISO/IEC 29183 Copy Productivity Report

Full Detailed Test Report - LETTER

HP Color LaserJet M280nw

Machine Setup Information		
Test Start Date and Time	8/25/2017 1:48	
Tester	Gaoqi	
Machine name/model	HP Color LaserJet M280nw	
Colour or B&W	Colour	
FW Version	20170627	
Configuration (options)	Not Specified	
Temperature and Humidity	75 degF / 24 degC 25.0 %rH	
Test End Date and Time:	9/21/2017 21:41	

	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	13.8	22.3
B&W	10.9	22.4

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	13.78	4.35	17.04 13 sets	20.33 90 sets	22.34
	B					
	C					
	D					
	Average	13.8	4.4	17.0	20.3	22.3
B&W	A	10.92	5.49	18.08 13 sets	20.56 92 sets	22.36
	B					
	C					
	D					
	Average	10.9	5.5	18.1	20.6	22.4

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 M280nw

Machine Setup Information	
Test Start Date and Time	8/25/2017 1:48
Tester	Gaoqi
Machine name/model	HP Color LaserJet M280nw
Colour or B&W	Colour
FW Version	20170627
Configuration (options)	Not Specified
Temperature and Humidity	75 degF / 24 degC 25.0 %rH
Test End Date and Time:	9/21/2017 21:41

	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	14.2	21.2
B&W	11.2	21.2

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	14.16	4.23	15.98 12 sets	20.28 86 sets	21.20
	B					
	C					
	D					
	Average	14.2	4.2	16.0	20.3	21.2
B&W	A	11.23	5.34	17.03 12 sets	20.50 86 sets	21.18
	B					
	C					
	D					
	Average	11.2	5.3	17.0	20.5	21.2

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	8/24/2017 22:51
Tester	Gaoqi
Machine name/model	HP Color LaserJet M280nw
Colour or B&W	Colour
FW Version	20170627
Configuration (options)	Not Specified
Temperature and Humidity	75 degF / 24 degC 25.0 %rH
Test End Date and Time:	9/20/2017 23:21
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	22.53	10.65 (1 set)	17.65 4 sets	19.57 24 sets	22.40
	1:2		(1 set)			
	2:2		(1 set)			
B&W mode	1:1	20.23	11.86	18.31 4 sets	20.36 24 sets	22.38
	1:2					
	2:2					
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	8/24/2017 22:51
Tester	Gaoqi
Machine name/model	HP Color LaserJet M280nw
Colour or B&W	Colour
FW Version	20170627
Configuration (options)	Not Specified
Temperature and Humidity	75 degF / 24 degC 25.0 %rH
Test End Date and Time:	9/20/2017 23:21
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	22.79	10.52 (1 set)	16.92 4 sets	19.73 23 sets	21.20
	1:2		(1 set)			
	2:2		(1 set)			
B&W mode	1:1	20.96	11.45	17.48 4 sets	20.31 23 sets	21.22
	1:2					
	2:2					
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	9/21/2017 2:22
Tester	Gaoqi
Machine name/model	HP Color LaserJet M280nw
Colour or B&W	Colour
Configuration (options)	Default
Temperature and Humidity	75 degF / 24 degC 25.0 %rH
Voltage	220V
Test End Date and Time	9/21/2017 3:39

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	150	single sided	23.33
			double sided	0.00
B&W	PDF	150	single sided	27.73
			double sided	0.00

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 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	150	single sided	22.06	2.41	4.00
			double sided	0.00		
B&W	PDF	150	single sided	26.08	3.31	5.00
			double sided	0.00		

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	150	single sided	18.36	22.09	23.33
			double sided	0.00	0	0
B&W	PDF	150	single sided	21.18	26.13	27.73
			double sided	0.00	0	0

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	150	single sided	19.23	22.06	2.41	4
			double sided	0.00	0.00		
B&W	PDF	150	single sided	21.81	26.08	3.31	5
			double sided	0.00	0.00		

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".

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
	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	9/21/2017 2:22	
Tester	Gaoqi	
Machine name/model	HP Color LaserJet M280nw	
Colour or B&W	Colour	
Configuration (options)	Default	
Temperature and Humidity	75 degF / 24 degC 25.0 %rH	
Voltage	220V	
Test End Date and Time	9/21/2017 3:39	

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	150	single sided	23.34
			double sided	0.00
B&W	PDF	150	single sided	27.92
			double sided	0.00

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 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	150	single sided	21.81	2.77	4.00
			double sided	0.00		
B&W	PDF	150	single sided	26.08	3.33	5.00
			double sided	0.00		

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	150	single sided	18.39	21.9	23.34
			double sided	0.00	0	0
B&W	PDF	150	single sided	20.98	26.29	27.92
			double sided	0.00	0	0

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	150	single sided	18.46	21.81	2.77	4
			double sided	0.00	0.00		
B&W	PDF	150	single sided	21.81	26.08	3.33	5
			double sided	0.00	0.00		

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".

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
	Connction Cable	Cat6 Straight cable
	Wireless router	No use
Others	No use	