

ISO/IEC 24734 Printing Productivity Report: Office Category

Full Detailed Test Report - LETTER

Printing device and settings	
Test Start Date and Time	4/3/2023 12:12
Tester	JB
Machine name/model	HP Color LaserJet Pro 4200 Series
Colour or B&W	Colour
FW Version	8.12.0.1994
Temperature and Humidity	72 degF / 22 degC 19 %rH
Voltage	110V
Test End Date and Time	4/5/2023 16:21
Mode and Setting	
Item	Value
Driver Version	56.1.1311
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 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	15.53	35.15
	Duplex	20.23	31.85
B&W	Simplex	14.58	35.15
	Duplex	19.05	31.86

- 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 <https://w.w.w.hp.com/us-en/printers/printing-speed-test-reports.html>.
 - 4) Port monitor not configured to follow device if the IP address changes.
 - 5) Productivity has been determined in accordance to ISO/IEC 24734:2010

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	15.52	15.46 (1 set)	28.95 (6 sets)	32.30 (37 sets)	35.15
	Simplex - Word	16.52	14.52 (1 set)	28.24 (6 sets)		35.15
	Simplex - Excel	14.55	16.49 (1 set)	29.21 (6 sets)		35.15
	Simplex - Average	15.53	15.49	28.80	32.30	35.15
	Duplex - Adobe Reader	20.44	11.72 (1 set)	23.36 (5 sets)		31.86
	Duplex - Word	21.07	11.38 (1 set)	22.98 (5 sets)		31.86
	Duplex - Excel	19.18	12.50 (1 set)	23.70 (5 sets)		31.84
	Duplex - Average	20.23	11.86	23.34		31.85
B&W mode (optional for color device)	Simplex - Adobe Reader	14.46	16.59 (1 set)	29.53 (6 sets)	30.94 (37 sets)	35.16
	Simplex - Word	15.59	15.39 (1 set)	28.75 (6 sets)		35.16
	Simplex - Excel	13.69	17.53 (1 set)	29.76 (6 sets)		35.15
	Simplex - Average	14.58	16.50	29.34	30.9	35.15
	Duplex - Adobe Reader	19.21	12.48 (1 set)	23.92 (5 sets)		31.86
	Duplex - Word	19.73	12.16 (1 set)	23.54 (5 sets)		31.86
	Duplex - Excel	18.21	13.16 (1 set)	24.18 (5 sets)		31.86
	Duplex - Average	19.05	12.60	23.88		31.86

- 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 <https://w.w.w.hp.com/us-en/printers/printing-speed-test-reports.html>.
 - 4) Port monitor not configured to follow device if the IP address changes.
 - 5) Productivity has been determined in accordance to ISO/IEC 24734:2010

Test System Parameters

Item	Value
Computer	HP Z240 SFF Workstation
Processor	Intel Core i7 -6770, 3.4 GHz
System Chip Set	Intel SKL/KBL Mobile/Desktop
System Board	system devices, default system BIOS
System Memory	8 GB
Hard Drive Subsystem	Turbo Drive G2 256GB PCIe SSD
Video Subsystem	Microsoft Basic Display Adaptor
Optical Drive	HP HLDS DVD/DRW GUD1N
I/O Subsystem	Builtin
USB Subsystem	USB 2.0/3.0
TCP/IP	TCP/IP 10/1000
Operating System	Win 10 Enterprise 64 Bit (2004)
Printing Applications	Microsoft Office Word 2019 Acrobat Reader DC Microsoft Office Excel 2019
Print Driver	Not Specified
Test files and location	Office category files, hard drive

ISO/IEC 24734 Printing Productivity Report: Office Category

Full Detailed Test Report - A4

Printing device and settings	
Test Start Date and Time	4/3/2023 12:12
Tester	JB
Machine name/model	HP Color LaserJet Pro 4200 Series
Colour or B&W	Colour
FW Version	8.12.0.1994
Temperature and Humidity	72 degF / 22 degC 19 %rH
Voltage	110V
Test End Date and Time	4/5/2023 16:21
Mode and Setting	
Item	Value
Driver Version	56.1.1311
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 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 Path	
Item	Value
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	16.39	33.28
	Duplex	21.05	30.50
B&W	Simplex	15.37	33.28
	Duplex	19.61	30.50

- 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 <https://www.hp.com/us-en/printers/printing-speed-test-reports.html>.
 - 4) Port monitor not configured to follow device if the IP address changes.
 - 5) Productivity has been determined in accordance to ISO/IEC 24734:2010

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)	
Colour Mode	Simplex - Adobe Reader	15.89	15.10	27.69	31.37	33.29
			(1 set)	(6 sets)	(35 sets)	
	Simplex - Word	18.30	13.11	25.93		33.28
			(1 set)	(6 sets)		
	Simplex - Excel	14.96	16.04	27.89		33.28
			(1 set)	(6 sets)		
	Simplex - Average	16.39	14.75	27.17	31.37	33.28
		Duplex - Adobe Reader	20.65	11.60	22.60	
	(1 set)		(5 sets)			
Duplex - Word	22.91	10.46	20.64		30.50	
		(1 set)	(5 sets)			
Duplex - Excel	19.59	12.24	22.84		30.50	
		(1 set)	(5 sets)			
Duplex - Average	21.1	11.43	22.02		30.50	
	Simplex - Adobe Reader	14.86	16.15	28.24	31.38	33.28
		(1 set)	(6 sets)	(35 sets)		
Simplex - Word	17.11	14.02	26.83		33.28	
		(1 set)	(6 sets)			
Simplex - Excel	14.14	16.96	28.39		33.29	
		(1 set)	(6 sets)			
Simplex - Average	15.4	15.71	27.82	31.4	33.28	
	Duplex - Adobe Reader	19.37	12.38	23.18		30.50
		(1 set)	(5 sets)			
Duplex - Word	20.94	11.44	22.18		30.50	
		(1 set)	(5 sets)			
Duplex - Excel	18.50	12.96	23.34		30.52	
		(1 set)	(5 sets)			
Duplex - Average	19.6	12.26	22.90		30.50	

- 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 <https://www.hp.com/us-en/printers/printing-speed-test-reports.html>.
 - 4) Port monitor not configured to follow device if the IP address changes.
 - 5) Productivity has been determined in accordance to ISO/IEC 24734:2010

Test System Parameters

Item	Value
Computer	HP Z240 SFF Workstation
Processor	Intel Core i7 -6770, 3.4 GHz
System Chip Set	Intel SKL/KBL Mobile/Desktop
System Board	system devices, default system BIOS
System Memory	8 GB
Hard Drive Subsystem	Turbo Drive G2 256GB PCIe SSD
Video Subsystem	Microsoft Basic Display Adaptor
Optical Drive	HP HLDS DVD/DRW GUD1N
I/O Subsystem	Builtin
USB Subsystem	USB 2.0/3.0
TCP/IP	TCP/IP 10/1000
Operating System	
Operating System	Win 10 Enterprise 64 Bit (2004)
Printing Applications	
Printing Applications	Microsoft Office Word 2019
	Acrobat Reader DC
	Microsoft Office Excel 2019
Print Driver	Not Specified
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 Pro 4200 Series

Printing device and settings	
Test Start Date and Time	4/3/2023 12:12
Tester	JB
Machine name/model	HP Color LaserJet Pro 4200 Series
Colour or B&W	Colour
FW Version	8.12.0.1994
Temperature and Humidity	72 degF / 22 degC 19 %rH
Voltage	110V
Test End Date and Time	4/5/2023 16:21
Item	Value
Driver Version	56.1.1311
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 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 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	
		FSOT (base) FSOT (feature)	ESAT (feature) ESAT (base)
A5, Landscape Feed, Simplex, Colour	Simplex		
A5, Portrait Feed, Simplex, Colour	Simplex	123%	135%
Legal, Simplex, Colour	Simplex		
Legal, Duplex, Colour	Duplex		
A4, 1200 dpi, Simplex, Colour	Simplex		
Letter, 1200 dpi, Simplex, Colour	Simplex		
A4, General Office, Simplex, Colour	Simplex		
Letter, General Office, Simplex, Colour	Simplex		
A5, Landscape Feed, Simplex, B/W	Simplex		
A5, Portrait Feed, Simplex, B/W	Simplex	118%	135%
Legal, Simplex, B/W	Simplex		
Legal, Duplex, B/W	Duplex		
A4, 1200 dpi, Simplex, B/W	Simplex		
Letter, 1200 dpi, Simplex, B/W	Simplex		
A4, General Office, Simplex, B/W	Simplex		
Letter, General Office, Simplex, B/W	Simplex		

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 <https://www.hp.com/us-en/printers/printing-speed-test-reports.html>.
 4) Port monitor not configured to follow device if the IP address changes.
 5) Productivity has been determined in accordance to ISO/IEC 24734:2010

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	1 set FSOT (secs)	1 set + 30 sec ESAT (ipm)	FSOT (base) FSOT (feature)	ESAT (feature) ESAT (base)
A5, Landscape Feed, Simplex, Colour	23.33	33.28				
A5, Portrait Feed, Simplex, Colour	23.33	33.28	18.98	45.1	123%	135%
Legal, Simplex, Colour						
Legal, Duplex, Colour						
A4, 1200 dpi, Simplex, Colour	23.33	33.28				
Letter, 1200 dpi, Simplex, Colour						
A4, General Office, Simplex, Colour	23.33	33.28				
Letter, General Office, Simplex, Colour						
A5, Landscape Feed, Simplex, B/W	22.41	33.29				
A5, Portrait Feed, Simplex, B/W	22.41	33.29	19.09	45.1	118%	135%
Legal, Simplex, B/W						
Legal, Duplex, B/W						
A4, 1200 dpi, Simplex, B/W	22.41	33.29				
Letter, 1200 dpi, Simplex, B/W						
A4, General Office, Simplex, B/W	22.41	33.29				
Letter, General Office, Simplex, B/W						

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 <https://www.hp.com/us-en/printers/printing-speed-test-reports.html>.
 4) Port monitor not configured to follow device if the IP address changes.
 5) Productivity has been determined in accordance to ISO/IEC 24734:2010

Test System Parameters

Item	Value	
Test System	Computer	HP Z240 SFF Workstation
	Processor	Intel Core i7 -6770, 3.4 GHz
	System Chip Set	Intel SKL/KBL Mobile/Desktop
	System Board	system devices, default system BIOS
	System Memory	8 GB
	Hard Drive Subsystem	Turbo Drive G2 256GB PCIe SSD
	Video Subsystem	Microsoft Basic Display Adaptor
	Optical Drive	HP HLDS DVDRW GUD1N
	I/O Subsystem	Builtin
	USB Subsystem	USB 2.0/3.0
I/O	TCP/IP	TCP/IP 10/1000
Software	Operating System	Win 10 Enterprise 64 Bit (2004)
	Printing Applications	Microsoft Office Word 2019
		Acrobat Reader DC
		Microsoft Office Excel 2019
Print Driver	Not Specified	
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 Pro 4200 Series

Printing device and settings		
Test Start Date and Time	3/29/2023 11:58	
Tester	JB	
Machine name/model	HP Color LaserJet Pro 4200 Series	
Colour or B&W	Colour	
FW Version	6.12.0.1994	
Configuration (options)	Default	
Controller	13901	
Printing device page count	Not Specified	
Printing supplies page count	Not Specified	
Temperature and Humidity	72 degF / 22 degC 19 %rH	
Voltage	110V	
Test End Date and Time	4/4/2023 13:10	

Item	Value	
Mode and Setting	PDL and driver version	56.1.1311
	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	9.67
	Duplex	
B&W	Simplex	8.74
	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 https://www.hp.com/us-en/printers/printing-speed-test-reports.html .		
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.		
7) Productivity has been determined in accordance to ISO/IEC 17629:2010		

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	10.97	8.93	9.10	9.67	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			9.57		61 Minutes
	Recovery Time			0.5		
	FPOT from Off - Simplex			55.85		
	Warm-up Time			46.75		
B&W Mode	FPOT from Ready - Simplex	9.93	8.19	8.10	8.74	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			9.48		61 Minutes
	Recovery Time			1.4		
	FPOT from Off - Simplex			55.70		
	Warm-up Time			47.60		
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 https://www.hp.com/us-en/printers/printing-speed-test-reports.html .						
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.						
7) Productivity has been determined in accordance to ISO/IEC 17629:2010						

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	9.57	9.56	9.57	N/A	Adobe Reader	61 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	9.63	9.59	9.67	N/A	Adobe Reader	16 Minutes
	FPOT from Ready, HP High Speed HP/Non ISO Test	N/A	N/A	N/A	N/A	Adobe Reader	N/A
B&W Mode	FPOT from Sleep	9.48	9.47	9.49	N/A	Adobe Reader	61 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	9.44	9.40	9.47	N/A	Adobe Reader	16 Minutes

Test System Parameters		
Item	Value	
Test System	Computer	HP Z240 SFF Workstation
	Processor	Intel Core i7 -6770, 3.4 GHz
	System Chip Set	Intel SKL/KBL Mobile/Desktop
	System Board	system devices, default system BIOS
	System Memory	8 GB
	Hard Drive Subsystem	Turbo Drive G2 256GB PCIe SSD
	Video Subsystem	Microsoft Basic Display Adaptor
	Optical Drive	HP HLDS DVDRW GUD1N
	I/O Subsystem	Builitin
	USB Subsystem	USB 2.0/3.0
Printing Device Connection	TCP/IP	10/1000
Software	Operating System	Win 10 Enterprise 64 Bit (2004)
	Printing Applications	Microsoft Office 2019 Adobe Reader DC
	Print Driver	56.1.1311

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

Full Detailed Test Report - A4

HP Color LaserJet Pro 4200 Series

Printing device and settings		
Test Start Date and Time	3/29/2023 11:58	
Tester	JB	
Machine name/model	HP Color LaserJet Pro 4200 Series	
Colour or B&W	Colour	
FW Version	6.12.0.1994	
Configuration (options)	Default	
Controller	13901	
Printing device page count	Not Specified	
Printing supplies page count	Not Specified	
Temperature and Humidity	72 degF / 22 degC 19 %rH	
Voltage	110V	
Test End Date and Time	4/4/2023 13:10	

Item	Value
Mode and Setting	
PDL and driver version	56.1.1311
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	10.35
	Duplex	
B&W	Simplex	9.22
	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 <https://www.hp.com/us-en/printers/printing-speed-test-reports.html>.
 - 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.
 - 7) Productivity has been determined in accordance to ISO/IEC 17629:2010

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	12.63	9.17	9.25	10.35	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			9.78		61 Minutes
	Recovery Time			0.5		
	FPOT from Off - Simplex			55.66		
	Warm-up Time			46.41		
B&W Mode	FPOT from Ready - Simplex	11.04	8.38	8.24	9.22	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			9.89		61 Minutes
	Recovery Time			1.6		
	FPOT from Off - Simplex			55.55		
	Warm-up Time			47.31		

- 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 <https://www.hp.com/us-en/printers/printing-speed-test-reports.html>.
 - 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.
 - 7) Productivity has been determined in accordance to ISO/IEC 17629:2010

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	9.78	9.75	9.80	N/A	Adobe Reader	61 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	9.70	9.92	9.47	N/A	Adobe Reader	16 Minutes
	FPOT from Ready, HP High Speed HP/Non ISO Test	N/A	N/A	N/A	N/A	Adobe Reader	N/A
	FPOT from Sleep	9.89	9.92	9.85	N/A	Adobe Reader	61 Minutes
B&W Mode	FPOT from Sleep (15 minutes) HP/Non ISO Test	9.94	9.52	10.36	N/A	Adobe Reader	16 Minutes

Test System Parameters

Item	Value
Test System	
Computer	HP Z240 SFF Workstation
Processor	Intel Core i7 -6770, 3.4 Ghz
System Chip Set	Intel SKL/KBL Mobile/Desktop
System Board	system devices, default system BIOS
System Memory	8 GB
Hard Drive Subsystem	Turbo Drive G2 256GB PCIe SSD
Video Subsystem	Microsoft Basic Display Adaptor
Optical Drive	HP HLDS DVDRW GUD1N
I/O Subsystem	Builtin
USB Subsystem	USB 2.0/3.0
Printing Device Connection	
TCP/IP	10/1000
Software	
Operating System	Win 10 Enterprise 64 Bit (2004)
Printing Applications	Microsoft Office 2019
Print Driver	Adobe Reader DC
	56.1.1311