

ISO/IEC 24734 Printing Productivity Report: Office Category

Full Detailed Test Report - LETTER

HP Laser Jet

Item	Value
Test Start Date and Time	06/20/20 17:13
Letter	A4
Machine name/model	HP LaserJet 408dn
Color or B&W	B&W
SW Version	4.0.0.01.20
Temperature and Humidity	77 degF / 25 degC 51 %RH
Voltage	220V
Test End Date and Time	07/02/20 20:36

Item	Value
Mode and Setting	Driver Version: V1.04 Media/Quality Setting: Default / Default Simplex B&W Settings: Print in Grayscale Duplex B&W Settings: Print in Grayscale Selling N set count: Application Collate Function: Enabled (application)
Paper Path	Paper Sending Direction: Default Paper Size Setting: Default Paper Feeding: Tray 2 Paper Exit: Standard Exit Tray Output Orientation: Default (front down) Duplexing Unit (Yes/No): Yes
Paper	Paper Manufacturer: HP Paper Weight: 24lb / 75 gsm2 Paper Size: Letter / A4 / JIS Paper type/name: Multipurpose Ultra White / HP Office

Summary Report: Letter			
Office Category Test for B&W Device			
		FSOT (seconds)	ESAT (ipm)
B&W	Simplex	12.62	42.69
	Duplex	20.52	18.34

- Notes  
 1) All printing device and other 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/printclaims>  
 4) If the monitor not configured to follow device's 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)	
Color Mode	Simplex - Adobe Reader					
	Simplex - Word					
	Simplex - Excel					
	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
	Simplex - Adobe Reader	12.45	19.29	36.35	11.55	42.72
	Simplex - Word	12.66	18.95	36.04	11.44	42.69
B&W mode (optional for color device)	Simplex - Excel	12.73	18.83	36.01	11.62	42.67
	Simplex - Average	12.62	19.03	36.09	11.6	42.69
	Duplex - Adobe Reader	20.35	11.78	16.10		18.36
	Duplex - Word	20.65	11.90	16.00		18.34
	Duplex - Excel	20.55	11.68	16.02		18.34
	Duplex - Average	20.52	11.68	16.04		18.34

- Notes  
 1) All printing device and other 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/printclaims>  
 4) If the monitor not configured to follow device's IP address changes.

Item	Value
Computer	HP Z240 SFF Workstation
Processor	Intel Core i7-4770 3.4 GHz
System Chip Set	Intel SKL/UBL Media/Workshop
System Board	System devices, default system BIOS
System Memory	8 GB
Hard Drive Subsystem	Turbo Drive G2 256GB PCIe SSD
Video Subsystem	Microport Basic Display Adapter
Optical Drive	HP HLDS DVD/WRW GLE1N
BD Subsystem	Builtin
USB Subsystem	USB 2.0/3.0
ICP/IP	ICP/IP: 10/1000
Operating System	Win 10 Enterprise G4 64 (15240)
Printing Applications	Microsoft Office Word 2016 Acrobat Reader DC Microsoft Office Excel 2016
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

HP Laser Jet

Printing device and settings	
Test Start Date and Time	06/20/20 17:13
Printer	Jetson
Machine name/model	HP Laser 408dn
Colour or B&W	B&W
SW Version	4.0.0.1.20
Temperature and Humidity	77 degF / 25 degC 51 %RH
Voltage	220V
Test End Date and Time	07/02/20 20:36

Item	Value
Driver Version	V1.04
Media/Quality Setting	Default / Default
Simplex B&W Settings	Print in Grayscale
Duplex B&W Settings	Print in Grayscale
Setting N set count	Application
Collate Function	Enabled (application)
Paper Sending Direction	Default
Paper Size Setting	Default
Paper Feeding	Tray 2
Paper Exit	Standard Exit Tray
Output Orientation	Default (front down)
Duplexing Unit (Yes/No)	Yes
Paper Manufacturer	HP
Paper Weight	20lb / 75 gsm
Paper Size	Letter / A4 / JIS
Paper type/name	HP Multipurpose Ultra White / HP Office

Summary Report: A4			
Office Category Test for B&W Device		FSOT (seconds)	ESAT (ipm)
B&W	Simplex	12.94	40.30
	Duplex	20.98	17.88

Notes  
 1) All printing device and other 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/printsolutions>  
 4) This monitor not configured to follow device if the IP address changes.

Detailed Report: A4						
Office Category Test	FSDT (secs)	EFTP (ipm)			ESAT (ipm)	
		1 set only (1 set)	1 set + 30sec (1 set)	1 set + 4min (# of sets)		
Colour Mode	Simplex - Adobe Reader					
	Simplex - Word					
	Simplex - Excel					
	Simplex - Average					
	Duplex - Adobe Reader	N/A	N/A		N/A	
	Duplex - Word	N/A	N/A		N/A	
	Duplex - Excel	N/A	N/A		N/A	
	Duplex - Average	N/A	N/A		N/A	
	Simplex - Adobe Reader	12.73	18.65 (7 sets)	34.30 (42 sets)	40.40	
	Simplex - Word	13.03	18.42 (7 sets)	34.40 (42 sets)	40.25	
B&W mode (optional for color device)	Simplex - Excel	13.04	18.41 (7 sets)	34.30 (42 sets)	40.26	
	Simplex - Average	12.9	18.56 (7 sets)	34.40 (42 sets)	40.30	
	Duplex - Adobe Reader	20.64	11.62 (4 sets)	15.72 (4 sets)	17.88	
	Duplex - Word	21.37	11.21 (4 sets)	15.54 (4 sets)	17.88	
	Duplex - Excel	20.91	11.58 (4 sets)	15.69 (4 sets)	17.90	
	Duplex - Average	21.0	11.44 (4 sets)	15.07 (4 sets)	17.88	

Notes  
 1) All printing device and other 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/printsolutions>  
 4) This monitor not configured to follow device if the IP address changes.

Item	Value
Computer	HP Z240 SFF Workstation
Processor	Intel Core i7-4770 3.4 GHz
System Chip Set	Intel SKL/UBL Media/Workshop
System Board	System devices, default system BIOS
System Memory	8 GB
Hard Drive Subsystem	Turbo Drive G2 256GB PCIe SSD
Video Subsystem	Microsemi Radeon Display Adapter
Optical Drive	HP HLDS DVD/BDW DL GEN10
BD Subsystem	Built-in
USB Subsystem	USB 2.0/3.0
IC/Chip	IC/PI/P: TD1000
Operating System	Win 10 Enterprise (64 bit) (15240)
Printing Applications	Microsoft Office Word 2016 Acrobat Reader DC Microsoft Office Excel 2016
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

Printing device and settings	
Test Start Date and Time	8/6/2020 14:39
Tester	Jwon
Machine name/model	HP Laser 408dn
Colour or B&W	B&W
FW Version	v4.00.01.20
Configuration (options)	Default
Controller	Unknown
Printing device page count	Not Specified
Printing supplies page count	Not Specified
Temperature and Humidity	77 degF / 26 degC 45.4 %rH
Voltage	220V
Test End Date and Time	8/6/2020 15:40

Item	Value	
Mode and Setting	PDL and driver version	1.04
	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		FPUT from Ready (seconds)
B&W	Simplex	7.91
	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	FPUT from Ready - Simplex					
	FPUT from Ready - Duplex					
	FPUT from Sleep - Simplex			N/A		
	Recovery Time					
	FPUT from Off - Simplex					
	Warm-up Time					
B&W Mode	FPUT from Ready - Simplex	7.83	8.15	7.75	7.91	20 Seconds
	FPUT from Ready - Duplex					
	FPUT from Sleep - Simplex			17.75		61 Minutes
	Recovery Time			10.0		
	FPUT from Off - Simplex			51.95		
	Warm-up Time			44.20		

- 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 FPUT from Sleep are shown below.

**HP Data Table**

Detailed Report: LETTER		FPUT Avg (secs)	FPUT (secs) Iteration 1	FPUT (secs) Iteration 2	FPUT (secs) Iteration 3	Application	Delay Time
Color Mode	FPUT from Sleep	N/A	N/A	N/A	N/A	Adobe Reader	
	FPUT from Sleep (15 minutes) HP/Non ISO Test	N/A	N/A	N/A	N/A	Adobe Reader	
	FPUT from Ready, HP High Speed HP/Non ISO Test	N/A	N/A	N/A	N/A	Adobe Reader	
B&W Mode	FPUT from Sleep	17.75	17.77	17.72	N/A	Adobe Reader	61 Minutes
	FPUT from Sleep (15 minutes) HP/Non ISO Test	16.36	16.51	16.21	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 SKU/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
Printing Device Connection	TCP/IP	
Software	Operating System	Win 10 Enterprise 64 Bit (10240)
	Printing Applications	Microsoft Office 2016
	Print Driver	Adobe Reader DC 1.04

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

Full Detailed Test Report - A4

Printing device and settings	
Test Start Date and Time	8/6/2020 14:39
Tester	Jwon
Machine name/model	HP Laser 408dn
Colour or B&W	B&W
FW Version	v4.00.01.20
Configuration (options)	Default
Controller	Unknown
Printing device page count	Not Specified
Printing supplies page count	Not Specified
Temperature and Humidity	77 degF / 26 degC 45.4 %rH
Voltage	220V
Test End Date and Time	8/6/2020 15:40

Item	Value	
Mode and Setting	PDL and driver version	1.04
	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: A4		FPOt from Ready (seconds)
B&W	Simplex	8.03
	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					
	FPOt from Ready - Duplex					
	FPOt from Sleep - Simplex			N/A		
	Recovery Time					
	FPOt from Off - Simplex					
	Warm-up Time					
B&W Mode	FPOt from Ready - Simplex	7.91	8.32	7.85	8.03	20 Seconds
	FPOt from Ready - Duplex					
	FPOt from Sleep - Simplex			15.77		61 Minutes
	Recovery Time			7.9		
	FPOt from Off - Simplex			52.38		
	Warm-up Time			44.53		

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	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	
	FPOt from Ready, HP High Speed HP/Non ISO Test	N/A	N/A	N/A	N/A	Adobe Reader	
B&W Mode	FPOt from Sleep	15.77	16.05	15.49	N/A	Adobe Reader	61 Minutes
	FPOt from Sleep (15 minutes) HP/Non ISO Test	14.89	14.86	14.91	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 SKU/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
Printing Device Connection	TCP/IP	10/1000
Software	Operating System	Win 10 Enterprise 64 Bit (10240)
	Printing Applications	Microsoft Office 2016
	Print Driver	Adobe Reader DC 1.04