

ISO/IEC 24734 Printing Productivity Report: Office Category

Full Detailed Test Report - LETTER

HP Color LaserJet Enterprise MFP M480f

Printing device and settings

Test Start Date and Time	11/24/2020 18:01
Tester	AW
Machine name/model	HP Color LaserJet Enterprise MFP M480f
Colour or B&W	Colour
FW Version	2500213 000021
Temperature and Humidity	71 degF / 22 degC 18 %rH
Voltage	110V
Test End Date and Time	3/2/2021 12:30

Item	Value
Mode and Setting	Driver Version 7.0.0.24832
	Media/Quality Setting Default / Default
	Simplex B&W Settings grayscale
	Duplex B&W Settings grayscale
	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)
	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	17.22	29.06
	Duplex	23.16	26.08
B&W	Simplex	15.87	29.06
	Duplex	21.35	26.09

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	18.30	13.11 (1 set)	23.21 (5 sets)	27.25 (31 sets)	29.06
	Simplex - Word	16.78	14.30 (1 set)	20.58 (5 sets)		29.07
	Simplex - Excel	16.57	14.48 (1 set)	24.05 (5 sets)		29.07
	Simplex - Average	17.22	13.96	22.61	27.25	29.06
	Duplex - Adobe Reader	24.32	9.86 (1 set)	19.50 (5 sets)		26.08
	Duplex - Word	22.62	10.60 (1 set)	14.82 (5 sets)		26.08
	Duplex - Excel	22.53	10.64 (1 set)	20.02 (5 sets)		26.10
	Duplex - Average	23.16	10.36	18.11		26.08
B&W mode (optional for color device)	Simplex - Adobe Reader	16.87	14.22 (1 set)	23.97 (5 sets)	27.57 (31 sets)	29.05
	Simplex - Word	15.29	15.69 (1 set)	24.86 (5 sets)		29.06
	Simplex - Excel	15.45	15.54 (1 set)	24.92 (5 sets)		29.07
	Simplex - Average	15.87	15.15	24.58	27.6	29.06
	Duplex - Adobe Reader	22.39	10.70 (1 set)	20.16 (5 sets)		26.08
	Duplex - Word	20.84	11.50 (1 set)	20.72 (5 sets)		26.10
	Duplex - Excel	20.82	11.52 (1 set)	20.76 (5 sets)		26.10
	Duplex - Average	21.35	11.24	20.54		26.09

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 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	Built-in
USB Subsystem	USB 2.0/3.0
TCP/IP	TCP/IP 10/1000
Operating System	Win 10 Enterprise 64 Bit (1909)
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

HP Color LaserJet Enterprise MFP M480f

Printing device and settings

Test Start Date and Time	11/24/2020 18:01
Tester	AW
Machine name/model	HP Color LaserJet Enterprise MFP M480f
Colour or B&W	Colour
FW Version	2500213 000021
Temperature and Humidity	71 degF / 22 degC 18 %rH
Voltage	110V
Test End Date and Time	3/2/2021 12:30

Item	Value
Mode and Setting	Driver Version 7.0.0.24832
	Media/Quality Setting Default / Default
	Simplex B&W Settings grayscale
	Duplex B&W Settings grayscale
	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) 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: A4

Office Category Test for Color Device		FSOT (seconds)	ESAT (ipm)
Colour	Simplex	17.79	27.18
	Duplex	23.94	24.79
B&W	Simplex	16.28	27.20
	Duplex	24.00	24.80

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)
Colour Mode	Simplex - Adobe Reader	18.91	12.69 (1 set)	22.09 (5 sets)	25.64 (29 sets)
	Simplex - Word	17.32	13.86 (1 set)	22.75 (5 sets)	27.18
	Simplex - Excel	17.12	14.01 (1 set)	22.83 (5 sets)	27.20
	Simplex - Average	17.79	13.52	22.55	25.64
	Duplex - Adobe Reader	25.03	9.58 (1 set)	18.50 (5 sets)	24.80
	Duplex - Word	23.46	10.22 (1 set)	19.20 (5 sets)	24.78
	Duplex - Excel	23.32	10.28 (1 set)	19.26 (5 sets)	24.80
	Duplex - Average	23.9	10.02	18.98	24.79
B&W mode (optional for color device)	Simplex - Adobe Reader	17.37	13.81 (1 set)	22.80 (5 sets)	25.78 (29 sets)
	Simplex - Word	15.82	15.17 (1 set)	23.51 (5 sets)	27.20
	Simplex - Excel	15.64	15.34 (1 set)	23.54 (5 sets)	27.21
	Simplex - Average	16.3	14.77	23.28	25.8
	Duplex - Adobe Reader	25.07	9.56 (1 set)	19.04 (5 sets)	24.78
	Duplex - Word	23.50	10.20 (1 set)	19.52 (5 sets)	24.80
	Duplex - Excel	23.41	10.24 (1 set)	19.26 (5 sets)	24.82
	Duplex - Average	24.0	10.00	19.27	24.80

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 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 RW GUD1N
I/O Subsystem	Built-in
USB Subsystem	USB 2.0/3.0
TCP/IP	TCP/IP 10/100
Operating System	Win 10 Enterprise 64 Bit (1909)
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 Enterprise MFP M480f

Printing device and settings

Test Start Date and Time	11/24/2020 18:01
Tester	AW
Machine name/model	HP Color LaserJet Enterprise MFP M480f
Colour or B&W	Colour
FW Version	2500213 000021
Temperature and Humidity	71 degF / 22 degC 18 %rH
Voltage	110V
Test End Date and Time	3/2/2021 12:30

	Item	Value
Mode and Setting	Driver Version	7.0.0.24832
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	grayscale
	Duplex B&W Settings	grayscale
	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	
		FSOT (base) FSOT (feature)	ESAT (feature) ESAT (base)
A5, Landscape Feed, Simplex, Colour	Simplex	245%	183%
A5, Portrait Feed, Simplex, Colour	Simplex	187%	42%
A4, HP High Speed, Simplex, Colour	Simplex	175%	100%
Letter, HP High Speed, Simplex, Colour	Simplex	102%	100%
A5, Landscape Feed, Simplex, B/W	Simplex	143%	187%
A5, Portrait Feed, Simplex, B/W	Simplex	108%	45%
A4, HP High Speed, Simplex, B/W	Simplex	102%	102%
Letter, HP High Speed, Simplex, B/W	Simplex	102%	102%

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	1 set FSOT (secs)	1 set + 30 sec ESAT (ipm)	FSOT (base)	ESAT (feature)
					FSOT (feature)	ESAT (base)
A5, Landscape Feed, Simplex, Colour	48.43	27.2	19.78	49.9	245%	183%
A5, Portrait Feed, Simplex, Colour	48.43	27.2	25.96	11.6	187%	42%
A4, HP High Speed, Simplex, Colour	48.43	27.2	27.72	27.2	175%	100%
Letter, HP High Speed, Simplex, Colour	26.86	29.03	26.57	29.1	102%	100%
A5, Landscape Feed, Simplex, B/W	26.48	26.63	18.52	49.8	143%	187%
A5, Portrait Feed, Simplex, B/W	26.48	26.63	24.59	12.1	108%	45%
A4, HP High Speed, Simplex, B/W	26.48	26.63	26.04	27.2	102%	102%
Letter, HP High Speed, Simplex, B/W	25.35	28.38	24.91	29.1	102%	102%

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 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 RW GUD1N
	I/O Subsystem	Built in
	USB Subsystem	USB 2.0/3.0
I/O	TCP/IP	TCP/IP 10/1000
Software	Operating System	Win 10 Enterprise 64 Bit (1909)
	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 Enterprise MFP M480f

Printing device and settings	
Test Start Date and Time	11/24/2020 13:57
Tester	AW
Machine name/model	HP Color LaserJet Enterprise MFP M480f
Colour or B&W	Colour
FW Version	2500213 000021
Configuration (options)	Default
Controller	7.108
Printing device page count	Not Specified
Printing supplies page count	Not Specified
Temperature and Humidity	71 degF / 22 degC 18 %rH
Voltage	110V
Test End Date and Time	2/19/2021 16:22

Item	Value
Mode and Setting	PDL and driver version
	7.0.0.24832
	Print Quality mode
	default
Paper	B&W settings
	default
	Paper feed orientation
	Short Edge
Paper Path	Paper type setting
	default
	Paper feeding
	Standard cassette
Paper Path	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	10.44
	Duplex	
B&W	Simplex	8.72
	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 <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	10.33	10.20	10.79	10.44	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			11.19		60 Minutes
	Recovery Time			0.4		
	FPOT from Off - Simplex			205.94		
	Warm-up Time			195.15		
B&W Mode	FPOT from Ready - Simplex	8.58	8.55	9.02	8.72	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			10.27		60 Minutes
	Recovery Time			1.3		
	FPOT from Off - Simplex			206.10		
	Warm-up Time			197.08		

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	11.19	11.22	11.15	N/A	Adobe Reader	60 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	11.12	11.13	11.10	N/A	Adobe Reader	15 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	10.27	10.27	10.27	N/A	Adobe Reader	60 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	9.50	9.49	9.50	N/A	Adobe Reader	15 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
Printing Device Connection	8 GB
	Hard Drive Subsystem
	Turbo Drive G2 256GB PCIe SSD
	Video Subsystem
	Microsoft Basic Display Adaptor
	Optical Drive
	HP HLDS DVD RW GUD1N
	I/O Subsystem
	Builtin
Software	USB Subsystem
	USB 2.0/3.0
	TCP/IP
Software	Operating System
	Win 10 Enterprise 64 Bit (1909)
	Printing Applications
	Microsoft Office 2019
Software	Adobe Reader DC
	Print Driver
	7.0.0.24832

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

Full Detailed Test Report - A4

HP Color LaserJet Enterprise MFP M480f

Printing device and settings	
Test Start Date and Time	11/24/2020 13:57
Tester	AW
Machine name/model	HP Color LaserJet Enterprise MFP M480f
Colour or B&W	Colour
FW Version	2500213_000021
Configuration (options)	Default
Controller	7.108
Printing device page count	Not Specified
Printing supplies page count	Not Specified
Temperature and Humidity	71 degF / 22 degC 18 %rH
Voltage	110V
Test End Date and Time	2/19/2021 16:22

Item	Value
Mode and Setting	PDL and driver version
	7.0.0.24832
	Print Quality mode
	default
Paper	B&W settings
	default
	Paper feed orientation
	Short Edge
Paper Path	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)
Colour	Simplex	10.60
	Duplex	
B&W	Simplex	8.83
	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	10.43	10.38	10.97	10.60	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			11.36		60 Minutes
	Recovery Time			0.4		
	FPOT from Off - Simplex			199.67		
	Warm-up Time			188.90		
B&W Mode	FPOT from Ready - Simplex	8.81	8.63	9.05	8.83	20 Seconds
	FPOT from Ready - Duplex					
	FPOT from Sleep - Simplex			11.35		60 Minutes
	Recovery Time			2.3		
	FPOT from Off - Simplex			216.99		
	Warm-up Time			207.94		

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	11.36	11.39	11.32	N/A	Adobe Reader	60 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	11.30	11.39	11.20	N/A	Adobe Reader	15 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	11.35	11.35	11.35	N/A	Adobe Reader	60 Minutes
	FPOT from Sleep (15 minutes) HP/Non ISO Test	11.35	11.35	11.34	N/A	Adobe Reader	15 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
Printing Device Connection	Hard Drive Subsystem
	Turbo Drive G2 256GB PCIe SSD
	Video Subsystem
	Microsoft Basic Display Adaptor
Software	Optical Drive
	HP HLDS DVD-RW GUD1N
	I/O Subsystem
	Built-in
Printing Device Connection	USB Subsystem
	USB 2.0/3.0
Printing Device Connection	TCP/IP
	10/1000
Software	Operating System
	Win 10 Enterprise 64 Bit (1909)
	Printing Applications
Software	Microsoft Office 2019
	Adobe Reader DC
Software	Print Driver
	7.0.0.24832

ISO/IEC 29183 Copy Productivity Report

Full Detailed Test Report - LETTER

HP Color LaserJet Enterprise MFP M480f

Machine Setup Information

	Test Start Date and Time	2/14/2021 15:43
	Tester	AW
	Machine name/model	HP Color LaserJet Enterprise MFP M480f
	Colour or B&W	Colour
	FW Version	2500213 000021
	Configuration (options)	Not Specified
	Temperature and Humidity	71 degF / 22 degC 18 %rH
	Test End Date and Time:	2/23/2021 11:12

	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	10.92	29.06
B&W	9.34	29.05

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	10.92	5.48	22.39 17 sets	27.24 122 sets	29.06
	B					
	C					
	D					
	Average	10.92	5.48	22.39	27.24	29.06
B&W	A	9.34	6.42	23.73 16 sets	27.17 116 sets	29.05
	B					
	C					
	D					
	Average	9.34	6.42	23.73	27.17	29.05

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 Enterprise MFP M480f

Machine Setup Information

	Test Start Date and Time	2/14/2021 15:43
	Tester	AW
	Machine name/model	HP Color LaserJet Enterprise MFP M480f
	Colour or B&W	Colour
	FW Version	2500213 000021
	Configuration (options)	Not Specified
	Temperature and Humidity	71 degF / 22 degC 18 %rH
	Test End Date and Time:	2/23/2021 11:12

	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	11.19	27.20
B&W	9.50	27.21

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	11.19	5.35	21.27 15 sets	25.73 111 sets	27.20
	B					
	C					
	D					
	Average	11.19	5.35	21.27	25.73	27.20
B&W	A	9.50	6.31	22.16 15 sets	25.20 111 sets	27.21
	B					
	C					
	D					
	Average	9.50	6.31	22.16	25.20	27.21

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

Full Detailed Test Report - LETTER

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	19.82	12.10	22.64	26.83	29.05
			(1 set)	5 sets	31 sets	
	1:2	30.21	7.94	17.78	23.06	26.08
			(1 set)	5 sets	27 sets	
	2:2	25.80	9.30	19.20	23.86	26.08
			(1 set)	5 sets	27 sets	
B&W mode	1:1	18.39	13.05	23.32	26.13	29.03
				5 sets	31 sets	
	1:2	27.75	8.64	18.48	23.06	26.10
				5 sets	27 sets	
	2:2	27.00	8.88	18.66	23.2	26.08
				5 sets	27 sets	

Notes
 Reports located: <http://www.hp.com/go/printerclaims>

Full Detailed Test Report - 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	20.39	11.77	21.44	25.16	27.19
			(1 set)	5 sets	29 sets	
	1:2	28.28	8.48	17.38	22.56	24.80
			(1 set)	5 sets	26 sets	
	2:2	26.87	8.92	18.24	22.66	24.80
			(1 set)	5 sets	26 sets	
B&W mode	1:1	18.98	12.65	22.10	25.04	27.20
				5 sets	29 sets	
	1:2	29.00	8.26	17.54	22.04	24.80
				5 sets	26 sets	
	2:2	24.48	9.80	18.88	22.26	24.78
				5 sets	26 sets	

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	3/2/2021 14:55
	Tester	AW
	Machine name/model	HP Color LaserJet Enterprise MFP M480f
	Colour or B&W	Colour
	Configuration (options)	Default
	Temperature and Humidity	71 degF / 22 degC 18 %rH
	Voltage	110V
	Test End Date and Time	3/3/2021 12:36

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)
	Paper feed direction	default (long edge)
ADF Paper-path	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 1.4	200	single sided	31.06
			double sided	62.06
B&W	PDF 1.4	200	single sided	31.14
			double sided	62.28

Notes

- 1) For more information see <http://www.hp.com/go/printerclaims>.
2) For the BW 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 1.4	200	single sided	27.24	2.35	5.00
			double sided	53.22	3.85	9.00
B&W	PDF 1.4	200	single sided	27.27	1.01	5.00
			double sided	53.16	1.75	9.00

Notes

- 1) For more information see <http://www.hp.com/go/printerclaims>.
2) For the BW 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 1.4	200	single sided	22.17	28.82	31.06
			double sided	33.17	56.8	62.06
B&W	PDF 1.4	200	single sided	21.50	28.87	31.14
			double sided	33.19	56.78	62.28

Notes

- 1) For more information see <http://www.hp.com/go/printerclaims>.
2) For the BW 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 1.4	200	single sided	18.14	27.24	2.35	5
			double sided	24.09	53.22	3.85	9
B&W	PDF 1.4	200	single sided	17.68	27.27	1.01	5
			double sided	23.95	53.16	1.75	9

Notes

- 1) For more information see <http://www.hp.com/go/printerclaims>.
2) For the BW results, the device scan setting is set to "Scan in B/W".

Test System Parameters		
	Item	Value
System	Computer name	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
	Operating System	Win 10 Enterprise 64 Bit (10240)
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

ISO/IEC 17991 Scanning Productivity Report

Full Detailed Test Report - A4

Machine Setup Information		
	Test Start Date and Time	3/2/2021 14:55
	Tester	AW
	Machine name/model	HP Color LaserJet Enterprise MFP M480f
	Colour or B&W	Colour
	Configuration (options)	Default
	Temperature and Humidity	71 degF / 22 degC 18 %rH
	Voltage	110V
	Test End Date and Time	3/3/2021 12:36

	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)
	Paper feed direction	default (long edge)
ADF Paper-path	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 1.4	200	single sided	29.62
			double sided	58.77
B&W	PDF 1.4	200	single sided	29.66
			double sided	57.98

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 1.4	200	single sided	26.18	2.05	5.00
			double sided	50.33	3.47	9.00
B&W	PDF 1.4	200	single sided	26.24	0.87	5.00
			double sided	50.05	1.50	9.00

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 1.4	200	single sided	21.31	27.65	29.62
			double sided	31.59	53.81	58.77
B&W	PDF 1.4	200	single sided	21.48	27.72	29.66
			double sided	32.16	53.26	57.98

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 1.4	200	single sided	17.56	26.18	2.05	5
			double sided	23.62	50.33	3.47	9
B&W	PDF 1.4	200	single sided	17.68	26.24	0.87	5
			double sided	23.86	50.05	1.50	9

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 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
	Operating System	Win 10 Enterprise 64 Bit (10240)
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