

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

**Full Detailed Test Report - LETTER**

Lexmark CS310dn

Printing device and settings		
Test Start Date and Time	6/15/2015 5:05	
Tester	BG	
Machine name/model	Lexmark CS310dn	
Colour or B&W	Colour	
FW Version	NA	
Temperature and Humidity	78 degF / 26 degC, 26 %rH	
Voltage	110V	
Test End Date and Time	6/17/2015 22:51	

Item	Value	
Mode and Setting	Driver Version	NA
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	Print in Black and White
	Duplex B&W Settings	Print in Black and White
	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: Letter			
Office Category Test for Color Device		FSOT (seconds)	ESAT (ipm)
Color	Simplex	19.9	25.0
	Duplex	29.3	12.6
B&W	Simplex	18.9	24.9
	Duplex	29.0	12.2

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	20.64	11.62 ( 1 set )	20.99 ( 6 sets )	23.65 ( 26 sets )	25.07
	Simplex - Word	19.28	12.44 ( 1 set )	20.84 ( 5 sets )		25.09
	Simplex - Excel	19.57	12.26 ( 1 set )	20.74 ( 5 sets )		25.09
	Simplex - Average	19.9	12.1	20.8	23.6	25.0
	Duplex - Adobe Reader	30.11	7.96 ( 1 set )	10.58 ( 3 sets )		12.68
	Duplex - Word	28.78	8.32 ( 1 set )	10.78 ( 3 sets )		12.70
	Duplex - Excel	28.80	8.32 ( 1 set )	10.78 ( 3 sets )		12.70
	Duplex - Average	29.3	8.2	10.7		12.6
B&W mode (optional for color device)	Simplex - Adobe Reader	20.18	11.91 ( 1 set )	21.26 ( 6 sets )	23.49 ( 26 sets )	25.12
	Simplex - Word	18.11	13.25 ( 1 set )	21.02 ( 5 sets )		25.12
	Simplex - Excel	18.34	13.08 ( 1 set )	20.91 ( 5 sets )		24.67
	Simplex - Average	18.9	12.7	21.0	23.4	24.9
	Duplex - Adobe Reader	29.25	8.20 ( 1 set )	10.46 ( 3 sets )		12.12
	Duplex - Word	28.62	8.38 ( 1 set )	10.72 ( 3 sets )		12.32
	Duplex - Excel	28.98	8.28 ( 1 set )	10.72 ( 3 sets )		12.32
	Duplex - Average	29.0	8.2	10.6		12.2

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	Builton
USB Subsystem	USB 2.0/3.0
TCP/IP	TCP/IP 10/1000
Operating System	Windows 7 64 Bit
Printing Applications	Microsoft Office 2010
Microsoft Office	Office 2010
Adobe Reader	10
Test files and location	Office category files, hard drive

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

Full Detailed Test Report - A4

Lexmark CS310dn

Printing device and settings	
Test Start Date and Time	6/15/2015 5:05
Tester	BG
Machine name/model	Lexmark CS310dn
Colour or B&W	Colour
FW Version	NA
Temperature and Humidity	78 degF / 26 degC, 26 %rH
Voltage	110V
Test End Date and Time	6/17/2015 22:51

Item	Value	
Mode and Setting	Driver Version	NA
	Media/Quality Setting	Default / Default
	Simplex B&W Settings	Print in Black and White
	Duplex B&W Settings	Print in Black and White
	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)
Paper	Duplexing Unit (Yes/No)	Yes
	Paper Manufacturer	HP / Xerox
	Paper Weight	20lb / 75 g/m2
	Paper Size	Letter / A4
Paper type/name		HP Multipurpose Ultra White / HP Office

Summary Report: A4			
Office Category	Test for Color Device	FSOT (seconds)	ESAT (ipm)
Colour	Simplex	20.4	23.8
	Duplex	29.9	12.3
B&W	Simplex	19.1	23.4
	Duplex	28.7	12.2

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	21.29	11.26 ( 1 set )	18.68 ( 4 sets )	22.60 ( 26 sets )	23.84
	Simplex - Word	19.76	12.13 ( 1 set )	19.90 ( 5 sets )		23.83
	Simplex - Excel	20.05	11.96 ( 1 set )	19.84 ( 5 sets )		23.83
	Simplex - Average	20.4	11.7	19.4	22.6	23.8
	Duplex - Adobe Reader	30.75	7.78 ( 1 set )	10.32 ( 3 sets )		12.36
	Duplex - Word	29.33	8.16 ( 1 set )	10.54 ( 3 sets )		12.36
	Duplex - Excel	29.41	8.14 ( 1 set )	10.52 ( 3 sets )		12.36
	Duplex - Average	29.9	8.0	10.4		12.3
B&W mode (optional for color device)	Simplex - Adobe Reader	19.55	12.27 ( 1 set )	18.95 ( 4 sets )	22.21 ( 26 sets )	23.33
	Simplex - Word	18.64	12.87 ( 1 set )	20.09 ( 5 sets )		23.43
	Simplex - Excel	18.90	12.69 ( 1 set )	20.03 ( 5 sets )		23.45
	Simplex - Average	19.1	12.6	19.6	22.2	23.4
	Duplex - Adobe Reader	29.42	8.14 ( 1 set )	10.54 ( 3 sets )		12.34
	Duplex - Word	28.28	8.48 ( 1 set )	10.62 ( 3 sets )		12.12
	Duplex - Excel	28.25	8.48 ( 1 set )	10.58 ( 3 sets )		12.34
	Duplex - Average	28.7	8.3	10.5		12.2

Notes  
 1) All printing device and driver settings were default mode.  
 2) For the B/W results, the print driver was set to "print in B/W".  
 3) For more information see <http://www.hp.com/go/printerclaims>.  
 4) Port monitor not configured to follow device if the IP address changes.

Test System Parameters	
Item	Value
Computer	HP Compaq Elite 8300 Small Form Factor
Processor	Intel Core i7 -3770, 3.4 GHz
System Chip Set	Intel C216 Chipset Family SMBus Host Controller
System Board	system devices, default system BIOS
System Memory	4 GB
Hard Drive Subsystem	Standard disk drive (Seagate)
Video Subsystem	AMD Radeon HD 6350
Optical Drive	HP DVD A DH16aCSHR ATA
I/O Subsystem	Builtin
USB Subsystem	USB 2.0/3.0
TCP/IP	TCP/IP 10/1000
Operating System	Windows 7 64 Bit
Printing Applications	Microsoft Office 2010
Microsoft Office	Office 2010
Adobe Reader	10
Test files and location	Office category files, hard drive

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

Full Detailed Test Report - LETTER

Lexmark CS310dn		
<b>Printing device and settings</b>		
Test Start Date and Time	6/12/2015 1:17	
Tester	BG	
Machine name/model	Lexmark CS310dn	
Colour or B&W	Colour	
FW Version	NA	
Configuration (options)	Default	
Controller	NA	
Printing device page count	Not Specified	
Printing supplies page count	Not Specified	
Temperature and Humidity	78 degF / 26 degC, 30 %rH	
Voltage	110V	
Test End Date and Time	8/5/2015 10:31	
<b>Item</b>		
<b>Value</b>		
<b>Mode and Setting</b>	PDL and driver version	NA
	Print Quality mode	default
	B&W settings	default
	Paper feed orientation	Short Edge
<b>Paper</b>	Paper type setting	default
	Paper feeding	Standard cassette
<b>Paper Path</b>	Paper ext	Standard ext tray
	Output orientation	default (face up or face down)

<b>ISO First Page Out Time Summary Report: Office Category</b>		
Summary Report: Letter		
		<b>FPOT from Ready (seconds)</b>
<b>Color</b>	Simplex	12.64
	Duplex	19.73
<b>B&amp;W</b>	Simplex	11.32
	Duplex	18.83
Notes		
1) All printing device and driver settings were default mode.		
2) For the B/W results, the print driver was set to "print in B/W".		
3) For more information see <a href="http://www.hp.com/go/printerclaims">http://www.hp.com/go/printerclaims</a> .		
4) Port monitor not configured to follow device if the IP address changes.		
5) Page counts were collected after completion of the tests.		

<b>ISO First Page Out Time Report: Office Category</b>						
Detailed Report: LETTER						
		<b>Word (seconds)</b>	<b>Excel (seconds)</b>	<b>Adobe Reader (seconds)</b>	<b>Average (seconds)</b>	<b>Delay Time</b>
<b>Color Mode</b>	FPOT from Ready - Simplex	12.11	12.26	13.55	12.64	49 Seconds
	FPOT from Ready - Duplex	19.23	19.36	20.59	19.73	49 Seconds
	FPOT from Sleep - Simplex			20.32		80 Minutes
	Recovery Time			6.8		
	FPOT from Off - Simplex			113.93		
	Warm-up Time			100.38		
<b>B&amp;W Mode</b>	FPOT from Ready - Simplex	10.83	11.15	11.96	11.32	49 Seconds
	FPOT from Ready - Duplex	17.96	18.53	19.98	18.83	49 Seconds
	FPOT from Sleep - Simplex			19.08		80 Minutes
	Recovery Time			7.1		
	FPOT from Off - Simplex			108.12		
	Warm-up Time			96.16		
Notes						
1) All printing device and driver settings were default mode.						
2) For the B/W results, the print driver was set to "print in B/W".						
3) For more information see <a href="http://www.hp.com/go/printerclaims">http://www.hp.com/go/printerclaims</a> .						
4) Port monitor not configured to follow device if the IP address changes.						
5) Page counts were collected after completion of the tests.						

<b>Test System Parameters</b>		
<b>Item</b>		
<b>Value</b>		
<b>Test System</b>	Computer	HP Compaq Elite 8300 Small Form Factor
	Processor	Intel Core i7 -3770, 3.4 GHz
	System Chip Set	Intel C216 Chipset Family SMBus Host Controller
	System Board	system devices, default system BIOS
	System Memory	4 GB
	Hard Drive Subsystem	Standard disk drive (Seagate)
	Video Subsystem	AMD Radeon HD 6350
	Optical Drive	HP DVD A DH16aC5HR ATA
	I/O Subsystem	Builtin
	USB Subsystem	USB 2.0/3.0
<b>Printing Device Connection</b>	TCP/IP	10/1000
<b>Software</b>	Operating System	Windows 7 Business/Ultimate, 64 bit, Build 7601, SP 1
	Printing Applications	Microsoft Office 2010 SP2
	Print Driver	Adobe Reader 10.1.4

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

Full Detailed Test Report - A4

Lexmark CS310dn

Printing device and settings	
Test Start Date and Time	6/12/2015 1:17
Tester	BG
Machine name/model	Lexmark CS310dn
Colour or B&W	Colour
FW Version	NA
Configuration (options)	Default
Controller	NA
Printing device page count	Not Specified
Printing supplies page count	Not Specified
Temperature and Humidity	78 degF / 26 degC, 30 %RH
Voltage	110V
Test End Date and Time	8/5/2015 10:31

Item	Value
<b>Mode and Setting</b>	
PDL and driver version	NA
Print Quality mode	default
B&W settings	default
Paper feed orientation	Short Edge
<b>Paper</b>	
Paper type setting	default
Paper feeding	Standard cassette
Paper exit	Standard ext tray
<b>Paper Path</b>	
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>Colour</b>	Simplex	12.58
	Duplex	20.04
<b>B&amp;W</b>	Simplex	11.39
	Duplex	18.77

Notes  
 1) All printing device and driver settings were default mode.  
 2) For the B/W results, the print driver was set to "print in B/W".  
 3) For more information see <http://www.hp.com/go/printerclaims>.  
 4) Port monitor not configured to follow device if the IP address changes.  
 5) Page counts were collected after completion of the tests.

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

Detailed Report: A4						
		Word (seconds)	Excel (seconds)	Adobe Reader (seconds)	Average (seconds)	Delay Time
<b>Colour Mode</b>	FPOt from Ready - Simplex	12.04	12.34	13.34	12.58	49 Seconds
	FPOt from Ready - Duplex	19.48	19.68	20.94	20.04	49 Seconds
	FPOt from Sleep - Simplex			20.38		80 Minutes
	Recovery Time			7.0		
	FPOt from Off - Simplex			109.79		
	Warm-up Time			96.45		
<b>B&amp;W Mode</b>	FPOt from Ready - Simplex	10.95	11.14	12.06	11.39	49 Seconds
	FPOt from Ready - Duplex	18.40	18.42	19.48	18.77	49 Seconds
	FPOt from Sleep - Simplex			19.61		80 Minutes
	Recovery Time			7.6		
	FPOt from Off - Simplex			106.39		
	Warm-up Time			94.33		

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.

Test System Parameters		
Item	Value	
<b>Test System</b>	Computer	HP Compaq Elite 8300 Small Form Factor
	Processor	Intel Core i7 -3770, 3.4 GHz
	System Chip Set	Intel C216 Chipset Family SMBus Host Controller
	System Board	system devices, default system BIOS
	System Memory	4 GB
	Hard Drive Subsystem	Standard disk drive (Seagate)
	Video Subsystem	AMD Radeon HD 6350
	Optical Drive	HP DVD A DH16aCSHR ATA
	I/O Subsystem	Built-in
	USB Subsystem	USB 2.0/3.0
<b>Printing Device Connection</b>	TCP/IP	10/1000
<b>Software</b>	Operating System	Windows 7 Business/Ultimate, 64 bit, Build 7601, SP 1
	Printing Applications	Microsoft Office 2010 SP2
	Print Driver	Adobe Reader 10.1.4