

ISO/IEC 24734 Printing Productivity Report: Office Category  
 ISO/IEC 29183 Copying Productivity Report  
 ISO/IEC 17629 First Page Out Time Report

Full Detailed Test Reports  
 HP OfficeJet Pro 9020 All-in-One Printer series

Printing device and test settings	
Test Start Date and Time	10/04/18 12:00:00 AM
Tester	Ulisses
Machine product number	1MR78A
Machine name/model	HP OfficeJet Pro 9020 All-in-One Printer
FW Version	1840A
Colour or B&W	Color
Temperature and humidity	22 °C and 62%
Voltage	240 volts AC
Test End Date and Time	10/18/18

Modes and Settings	Item	Value
Modes and Settings	Driver version	42.0.3.543
	Media / Quality Setting	Default / Default
	Simplex B&W settings	Print in grayscale, black ink only
	Duplex B&W settings	Print in grayscale, black ink only
Settings	Setting N set count	Application
	Collate function	Enabled in Application
Paper Path	Paper sending direction	Default
	Paper size setting	Default
	Paper feeding	Standard cassette
	Paper exit	Standard exit tray
	Output orientation	Default (face up), portrait
	Duplexing ADF Unit	Yes
Paper	Duplexing Print Line	Yes
	Paper Manufacturer	Print: HP Copy: HP
	Weight	Print: 80gsm Copy: 80gsm
	Size	Print: A4 Copy: A4
	Paper type/name	Print: HP Everyday Paper Colorlok Copy: HP Everyday Paper Colorlok

Summary Reports		
ISO/IEC 24734	FSOT (seconds)	sESAT (ppm)
Color	Single Sided	22
	Two Sided	29
B&W	Single Sided	19
	Two Sided	26

Notes: 1) ppm = Images Per Minute and is equivalent to ppm in Pages Per Minute  
 2) For Simplex B&W results, Print in grayscale, black ink only  
 3) For Duplex B&W results, Print in grayscale, black ink only  
 4) Scale content for A4 for 8.5x11 paper sizes set to off for Word and Excel

FDIS ISO/IEC 29183		
Color	FCOT (seconds)	sESAT (ppm)
B&W	7	23

Notes: 1) ppm = Images Per Minute and is equivalent to ppm in Pages Per Minute

ISO/IEC 17629		
Color	Simplex	FPOT From Ready (sec)
B&W	Simplex	9

Notes: 1) For B&W results, Print in grayscale, black ink only

Full Reports

ISO/IEC 24734		Office Category	FSOT (sec)	EFTP (ppm)				sESAT (ppm)
Color	Single Sided	PDF (# sets)	26.00	9.00	14.00	15.00	16.40	
		Word (# sets)	16.00	1	1	1	1	28.40
Excel (# sets)	21.00	1	1	1	1	17.60		
Average	22	7.00	9.00			20		
Two Sided	PDF (# sets)	33.00	7.00	9.00		11.30		
Word (# sets)	23.00	1	1	1	1	16.60		
Excel (# sets)	28.00	1	1	1	1	11.90		
Average	29	12.00	18.00	21.00	23.20	13		
B&W	Single Sided	PDF (# sets)	21.00	12.00	18.00	21.00	23.20	
Word (# sets)	16.00	1	1	1	1	29.40		
Excel (# sets)	18.00	1	1	1	1	23.00		
Average	19	9.00	12.00			24		
Two Sided	PDF (# sets)	23.00	9.00	12.00		14.80		
Word (# sets)	23.00	1	1	1	1	17.30		
Excel (# sets)	25.00	1	1	1	1	14.80		
Average	26	12.00	18.00	21.00	23.20	15		

Notes: 1) ppm = Images Per Minute and is equivalent to ppm in Pages Per Minute  
 2) For Simplex B&W results, Print in grayscale, black ink only  
 3) For Duplex B&W results, Print in grayscale, black ink only  
 4) Scale content for A4 for 8.5x11 paper sizes set to off for Word and Excel

FDIS ISO/IEC 29183		FCOT (sec)	1 Copy	1 Copy + 30 seconds	1 Copy + 4 Minutes	sESAT (ppm)
Color	Page 1 (# copies)	7.70	8.00	13.00	12.00	14.90
	Page 2 (# copies)	6.70	9.00	23.00	60	26.10
	Page 3 (# copies)	7.20	8.00	15.00	10	16.30
	Page 4 (# copies)	8.30	7.00	11.00	10	12.20
Average	9	8	8	10	11	
Black	Page 1 (# copies)	5.90	10.00	20.00	21.00	22.60
	Page 2 (# copies)	5.80	10.00	24.00	15	20.90
	Page 3 (# copies)	6.20	10.00	21.00	15	23.10
	Page 4 (# copies)	5.90	10.00	20.00	10	22.40
Average	7	10	21	15	21	

Notes: 1) ppm = Images Per Minute and is equivalent to ppm in Pages Per Minute

ISO/IEC 17629		FPOT from Ready (sec)	FPOT from Sleep (sec)	Recovery Time (sec)
Color Simplex	PDF	10.80	10.80	9.00
	Word	8.60		
	Excel	9.30		
	Average	10.00		
B&W Simplex	Delay Time	30 sec	120 min	
	PDF	9.00	17.60	8.00
	Word	8.40		
	Excel	8.20		
Average	9.00	120 min		
Delay Time	30 sec	120 min		

Notes: 1) For B&W results, Print in grayscale, black ink only  
 2) FPOT from Sleep Average = FPOT from Ready Average + Recovery Time  
 3) Scale content for A4 for 8.5x11 paper sizes set to off for Word and Excel

Test system parameters		Item	Value
Test System	Computer	HP Envoy 15 Notebook	
	Processor	Intel Core i5-4210U 1.70GHz	
	System Disk Set	Intel Celeron	
	System Board	229A	
	System Memory	8GB 1600MHz DDR3L	
	Hard Drive subsystem	4GB 220GB of storage	
	Video subsystem	Intel HD graphics	
	Optical Drive	HP DVDRW G8-B0UN	
	IO subsystem	Built in	
	USB subsystem	USB 2.0/3.0	
I/O	Printer Connection	USB 2.0	
	Operating System	Microsoft Windows 10 Enterprise	
Software	Printing Applications	Microsoft Office Word 2016 MSO 64-bit	
		Microsoft Office Excel 2016 64-bit	
	Test Files and location	Apple iWork Reader Doc, Version: 2018.099.20044 Office Category files, hard drive	