

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 PageWide Enterprise Color Flow MFP 586z

| Printing device and test settings |  |
|-----------------------------------|--|
| Test Start Date and Time          | 02/04/16 10:16:39 AM                       |
| Test Location                     | Alaska, Valhalla                           |
| Machine product number            | GVW41A                                     |
| Machine name/model                | HP PageWide Enterprise Color Flow MFP 586z |
| FW Version                        | 81M1CN1550DR                               |
| Colour or B&W                     | Color                                      |
| Temperature and humidity          | 73.2 ZRH                                   |
| Volume                            | 10   |
| Test End Date and Time            | 02/04/16 10:30:51 AM                       |

| Item                    | Value              |
|-------------------------|--------------------|
| Driver version          | Fusion 18          |
| Media Quality Setting   | Plain/Normal       |
| Simplex (B&W settings)  | Black Ink Only     |
| Duplex (B&W settings)   | Black Ink Only     |
| Setting to test count   | Application        |
| Collating function      | Enabled            |
| Paper sending direction | Default            |
| Paper size setting      | Default            |
| Paper feeding           | Standard cassette  |
| Paper path              | Standard exit tray |
| Output orientation      | Face Down          |
| Duplicating ADF Unit    | Yes                |
| Duplicating Print Unit  | Yes                |
| Paper Manufacturer      | Hewlett Packard    |
| Weight (gsm)            | 80                 |
| Size                    | A4                 |
| Paper type/name         | LHP Office         |

| Summary Reports |                |            |    |
|-----------------|----------------|------------|----|
| ISO/IEC 24734   | FCOT (seconds) | ESAT (ipm) |    |
| Color           | Single Sided   | 13         | 50 |
|                 | Two Sided      | 21         | 25 |
| B&W             | Single Sided   | 13         | 50 |
|                 | Two Sided      | 21         | 25 |

Notes: 1) ipm = Images Per Minute and is equivalent to ppm of Pages Per Minute  
 2) For Simplex B&W results, Black Ink Only  
 3) For Duplex B&W results, Black Ink Only  
 4) Scale constant for A4 for 8.5x11 paper sizes set to off for Word and Excel

| FDIS ISO/IEC 29183 |                |             |  |
|--------------------|----------------|-------------|--|
| Color              | FCOT (seconds) | sESAT (ipm) |  |
| Color              | 9              | 50          |  |
| B&W                | 7              | 50          |  |

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

| ISO/IEC 17629 |         |                       |
|---------------|---------|-----------------------|
| Color         | Simplex | FPOT From Ready (sec) |
| Color         | Simplex | 7.1                   |
| B&W           | Simplex | 7.1                   |

Notes: 1) For B&W results, Black Ink Only

Full Reports

| ISO/IEC 24734 | Office Category | FCOT (sec)    | EFTP (ipm)   |                   |                  |       | sESAT (ipm) |       |
|---------------|-----------------|---------------|--------------|-------------------|------------------|-------|-------------|-------|
|               |                 |               | 1 Set        | 1 Set+ 30 seconds | 1 Set+ 4 Minutes |       |             |       |
|               |                 |               | 1 Set        | 1 Set+ 30 seconds | 1 Set+ 4 Minutes |       |             |       |
| Color         | Single Sided    | PDF (1 set)   | 12.00        | 21.00             | 42.00            | 48.00 | 50.10       |       |
|               |                 | Word (1 set)  | 11.00        | 1                 | 8                | 52    | 50.10       |       |
|               |                 | Excel (1 set) | 14.00        |                   |                  |       | 50.20       |       |
|               |                 | Average       | 13           |                   |                  |       | 50          |       |
|               | Two Sided       | PDF (1 set)   | 20.00        | 12.00             | 20.00            |       | 25.50       |       |
|               |                 | Word (1 set)  | 19.00        | 1                 | 1                |       | 25.60       |       |
| Excel (1 set) |                 | 22.00         |              |                   |                  | 25.60 |             |       |
|               |                 | Average       | 21           |                   |                  |       | 25          |       |
| B&W           |                 | Single Sided  | PDF (1 set)  | 12.00             | 22.00            | 42.00 | 48.00       | 50.10 |
|               |                 |               | Word (1 set) | 11.00             | 1                | 6     | 52          | 50.10 |
|               | Excel (1 set)   |               | 14.00        |                   |                  |       | 50.10       |       |
|               |                 | Average       | 13           |                   |                  |       | 50          |       |
|               | Two Sided       | PDF (1 set)   | 19.00        | 12.00             | 21.00            | 5     | 25.50       |       |
|               |                 | Word (1 set)  | 19.00        | 1                 | 5                |       | 25.50       |       |
| Excel (1 set) |                 | 22.00         |              |                   |                  | 25.70 |             |       |
|               | Average         | 21            |              |                   |                  | 25    |             |       |

Notes: 1) ipm = Images Per Minute and is equivalent to ppm of Pages Per Minute  
 2) For Simplex B&W results, Black Ink Only  
 3) For Duplex B&W results, Black Ink Only  
 4) Scale constant for A4 for 8.5x11 paper sizes set to off for Word and Excel

| FDIS ISO/IEC 29183 |                   |            |             |                     |                    |             |
|--------------------|-------------------|------------|-------------|---------------------|--------------------|-------------|
| Color              | Page              | FCOT (sec) | sEFTP (ipm) |                     |                    | sESAT (ipm) |
|                    |                   |            | 1 Copy      | 1 Copy + 30 seconds | 1 Copy + 4 Minutes |             |
| Color              | Page 1 (1 copies) | 8.70       | 7.00        | 39.00               | 48.00              | 50.10       |
|                    | Page 2 (1 copies) | 8.80       | 7.00        | 39.00               | 205                | 50.10       |
|                    | Page 3 (1 copies) | 8.70       | 7.00        | 39.00               | 27                 | 50.10       |
|                    | Page 4 (1 copies) | 8.80       | 7.00        | 39.00               | 27                 | 50.10       |
|                    |                   | Average    | 8           | 7                   | 39                 |             |
| Black              | Page 1 (1 copies) | 6.70       | 9.00        | 42.00               | 48.00              | 50.10       |
|                    | Page 2 (1 copies) | 6.70       | 9.00        | 42.00               | 205                | 50.10       |
|                    | Page 3 (1 copies) | 6.70       | 9.00        | 42.00               | 27                 | 50.20       |
|                    | Page 4 (1 copies) | 6.70       | 9.00        | 42.00               | 27                 | 50.10       |
|                    |                   | Average    | 7           | 9                   | 42                 |             |

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

| ISO/IEC 17629 |         |                       |                     |         |
|---------------|---------|-----------------------|---------------------|---------|
| Color         | Simplex | FPOT from Ready (sec) | Recovery Time (sec) |         |
| Color Simplex | PDF     | 7.20                  | 15.00               | 7.50    |
|               | Word    | 6.30                  |                     |         |
|               | Excel   | 7.10                  |                     |         |
|               | Average | 7.20                  |                     |         |
|               |         | Delay Time            | 30 sec              | 180 min |
| B&W Simplex   | PDF     | 6.50                  | 14.00               | 7.50    |
|               | Word    | 6.10                  |                     |         |
|               | Excel   | 6.80                  |                     |         |
|               | Average | 7.10                  |                     |         |
|               |         | Delay Time            | 30 sec              | 180 min |

Notes: 1) For B&W results, Black Ink Only  
 2) Scale constant for A4 for 8.5x11 paper sizes set to off for Word and Excel

Test system parameters

| Item                    | Value  |
|-------------------------|--|
| Computer                | HP Compaq Elite 8300 Small Form Factor PC  |
| Processor               | Intel Core i7-3770 Quad Core (3.40 GHz, 8 MB cache)  |
| System Chip Set         | Intel(R) Q77 Express Chipset   |
| System Board            | Standard system device, default system BIOS  |
| System Memory           | 4 GB (4 x 1 GB DDR3 1600 MHz)  |
| Hard Drive subsystem    | 1 TB Toshiba + 500 GB Seagate  |
| Video subsystem         | NVIDIA GeForce HD 6300   |
| Optical Drive           | HP DVD A, DH16AC-SHR, ATA  |
| I/O subsystem           | Built-in   |
| USB subsystem           | USB 2.0/3.0  |
| Printer Connection      | 0  |
| Operating System        | Microsoft Windows 7 Professional 64-bit SP1  |
| Printing Applications   | Microsoft Office Pro Plus Word 2010 32-bit SP1<br>Microsoft Office Pro Plus Excel 2010 32-bit SP1<br>Adobe Reader X 10.1.2 |
| 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 PageWide Enterprise Color Flow MFP 586z & Page Wide Managed MFP E58650z

| Printing device and settings |  |
|------------------------------|--|
| Test Start Date and Time     | 3/10/2021 18:31  |
| Tester                       | RM   |
| Machine name/model           | HP PageWide Enterprise Color Flow MFP 586z & Page Wide Managed MFP E58650z |
| Colour or B&W                | Colour   |
| FW Version                   | 2501124_004339   |
| Configuration (options)      | Default  |
| Controller                   | Not Specified  |
| Printing device page count   | Not Specified  |
| Printing supplies page count | Not Specified  |
| Temperature and Humidity     | 73 degF / 23 degC 32.3 %rH   |
| Voltage                      | 110V   |
| Test End Date and Time       | 3/12/2021 14:53  |

| Item                    | Value                          |
|-------------------------|--------------------------------|
| <b>Mode and Setting</b> |                                |
| PDL and driver version  | 8.00.1324.6775                 |
| Print Quality mode      | default                        |
| B&W settings            | default                        |
| Paper feed orientation  | Short Edge                     |
| Paper type setting      | default                        |
| Paper feeding           | Standard cassette              |
| Paper exit              | Standard exit tray             |
| <b>Paper Path</b>       |                                |
| 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 | 5.92                      |
|                        | Duplex  |                           |
| B&W                    | Simplex | 5.94                      |
|                        | 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 | 5.83           | 5.61            | 6.31                   | 5.92              | 20 Seconds |
|                         | FPOT from Ready - Duplex  |                |                 |                        |                   |            |
|                         | FPOT from Sleep - Simplex |                |                 | 14.26                  |                   | 67 Minutes |
|                         | Recovery Time             |                |                 | 8.0                    |                   |            |
|                         | FPOT from Off - Simplex   |                |                 | 184.61                 |                   |            |
|                         | Warm-up Time              |                |                 | 178.30                 |                   |            |
| B&W Mode                | FPOT from Ready - Simplex | 5.91           | 5.65            | 6.26                   | 5.94              | 20 Seconds |
|                         | FPOT from Ready - Duplex  |                |                 |                        |                   |            |
|                         | FPOT from Sleep - Simplex |                |                 | 12.59                  |                   | 67 Minutes |
|                         | Recovery Time             |                |                 | 6.3                    |                   |            |
|                         | FPOT from Off - Simplex   |                |                 | 179.84                 |                   |            |
|                         | Warm-up Time              |                |                 | 173.58                 |                   |            |

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                                | 14.26           | 14.54                   | 13.98                   | N/A                     | Adobe Reader | 67 Minutes |
|                         | FPOT from Sleep (15 minutes) HP/Non ISO Test   | 12.46           | 12.38                   | 12.53                   | 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                                | 12.59           | 12.18                   | 12.99                   | N/A                     | Adobe Reader | 67 Minutes |
|                         | FPOT from Sleep (15 minutes) HP/Non ISO Test   | 11.91           | 11.98                   | 11.84                   | 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                                |
|                            | 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         | Bullitt                             |
|                            | USB Subsystem         | USB 2.0/3.0                         |
| Printing Device Connection | TCP/IP                |                                     |
| Software                   | Operating System      | Win 10 Enterprise 64 Bit (1909)     |
|                            | Printing Applications | Microsoft Office 2019               |
|                            | Print Driver          | Adobe Reader DC 8.00.1324.6775      |

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

Full Detailed Test Report - A4

HP PageWide Enterprise Color Flow MFP 586z & Page Wide Managed MFP E58650z

| Printing device and settings |  |
|------------------------------|--|
| Test Start Date and Time     | 3/10/2021 18:31  |
| Tester                       | RM   |
| Machine name/model           | HP PageWide Enterprise Color Flow MFP 586z & Page Wide Managed MFP E58650z |
| Colour or B&W                | Colour   |
| FW Version                   | 2501124_004339   |
| Configuration (options)      | Default  |
| Controller                   | Not Specified  |
| Printing device page count   | Not Specified  |
| Printing supplies page count | Not Specified  |
| Temperature and Humidity     | 73 degF / 23 degC 32.3 %rH   |
| Voltage                      | 110V   |
| Test End Date and Time       | 3/12/2021 14:53  |

| Item                    | Value                          |
|-------------------------|--------------------------------|
| <b>Mode and Setting</b> |                                |
| PDL and driver version  | 8.00.1324.6775                 |
| 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 exit 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) |
|--------------------|---------|---------------------------|
| Colour             | Simplex | 6.27                      |
|                    | Duplex  |                           |
| B&W                | Simplex | 5.94                      |
|                    | 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 | 6.48           | 5.90            | 6.40                   | 6.27              | 20 Seconds |
|   | FPOt from Ready - Duplex  |                |                 |                        |                   |            |
|   | FPOt from Sleep - Simplex |                |                 | 14.35                  |                   | 67 Minutes |
|   | Recovery Time             |                |                 | 7.9                    |                   |            |
|   | FPOt from Off - Simplex   |                |                 | 184.01                 |                   |            |
|   | Warm-up Time              |                |                 | 177.61                 |                   |            |
| B&W Mode  | FPOt from Ready - Simplex | 5.65           | 6.00            | 6.15                   | 5.94              | 20 Seconds |
|   | FPOt from Ready - Duplex  |                |                 |                        |                   |            |
|   | FPOt from Sleep - Simplex |                |                 | 12.75                  |                   | 67 Minutes |
|   | Recovery Time             |                |                 | 6.6                    |                   |            |
|   | FPOt from Off - Simplex   |                |                 | 179.01                 |                   |            |
|   | Warm-up Time              |                |                 | 172.86                 |                   |            |

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 <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                                | 14.35           | 14.17                   | 14.52                   | N/A                     | Adobe Reader | 67 Minutes |
|                     | FPOt from Sleep (15 minutes) HP/Non ISO Test   | 12.84           | 13.03                   | 12.65                   | 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                                | 12.75           | 12.20                   | 13.30                   | N/A                     | Adobe Reader | 67 Minutes |
|                     | FPOt from Sleep (15 minutes) HP/Non ISO Test   | 12.14           | 12.08                   | 12.19                   | 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                                |
|                            | 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 (1909)     |
|                            | Printing Applications | Microsoft Office 2019               |
|                            | Print Driver          | Adobe Reader DC 8.00.1324.6775      |