

**Yield Reporting Form for HP Inc. Toner Supplies Solutions Group:****HP Color LaserJet Pro M452 and HP Color LaserJet Pro MFP M477 cartridge models CF410A, CF411A, CF412A, CF413A****Declared ISO Yield****Toner cartridge yield:****Average composite CMY cartridge yield 2,300 standard pages<sup>1</sup>****Average K cartridge yield 2,300 standard pages<sup>1</sup>***Declared yield value in accordance with ISO/IEC 19798 based on continuous printing.**The results within this report relate only to the items tested as identified in this report.***Calculated test values**

<b>90% lower confidence limit<sup>1</sup></b>	
HP Cyan LaserJet Toner Cartridge (CF411A)	2731 pages
HP Magenta LaserJet Toner Cartridge (CF413A)	2703 pages
HP Yellow LaserJet Toner Cartridge (CF412A)	2747 pages
Composite CMY	2727 pages
HP Black LaserJet Toner Cartridge (CF410A)	2604 pages

Test date: beginning	8/17/2022
Test dates: ending	8/29/2022
Number of cartridges used in testing	36
Number of cartridges used in calculations	C=9, M=9, Y=9, K=9 (Total=36)
Type of cartridge	All-in-one
Shake procedure used?	Yes
Print mode	Continuous
MPACCO Mode	Off
Number of engines used in testing	3
Media	HP Multipurpose
Paper size	Letter
Paper feed orientation	Short edge
Computer model	HP Elite Book 845G8 Notebook PC
Operating system	Microsoft Windows 10
Application software or HP Direct Print	Batch file running hpnpf.exe
Print driver version or HP Direct Print	None: Internal PDF interpreter
Connection type	network
Test page version	ISO-IEC 24712
Power on/off every day	No

Printer Product Numbers	Engine serial numbers:	Engine Firmware Version:
HP Color LaserJet Pro M452	VNC3H00337	20220530
HP Color LaserJet Pro M452	VNB3D24438	20220414
HP Color LaserJet Pro MFP M477	VN38H78BFP	20220414

Do not reproduce this report without approval of the Laserjet Test Lab/Hardware Test Center at HP Inc.

## Cartridge testing data

Test environmental limits:

	Temperature	Humidity
	°C	%RH
Max running average	23.2	50
Min running average	22.9	50
Average	23.0	50

Cyan (CF411A) in HP Color LaserJet Pro M452 and HP Color LaserJet Pro MFP M477				Magenta (CF413A) in HP Color LaserJet Pro M452 and HP Color LaserJet Pro MFP M477			
Average:		2,793		Average:		2,804	
Standard Deviation:		100		Standard Deviation:		164	
90% LCB:		2,731		90% LCB:		2,703	
Cartridge#	Lot Code	Engine SerNo	Cartridge Yield	Cartridge#	Lot Code	Engine SerNo	Cartridge Yield
CF411A-221	2D07M2Bb	VNC3H00337	2,550	CF413A-221	2D02M3Bb	VNC3H00337	2,915
CF411A-222	2D20M2Ab	VNB3D24438	2,810	CF413A-222	2E19M1Ab	VNB3D24438	2,825
CF411A-223	2C22M1Bb	VN38H78BFP	2,795	CF413A-223	2D20M2Ab	VN38H78BFP	2,955
CF411A-224	2C22M1Bb	VNC3H00337	2,785	CF413A-224	2D20M2Ab	VNC3H00337	2,780
CF411A-225	2D07M2Bb	VNB3D24438	2,785	CF413A-225	2D02M3Bb	VNB3D24438	2,745
CF411A-226	2D20M2Ab	VN38H78BFP	2,815	CF413A-226	2E19M1Ab	VN38H78BFP	2,455
CF411A-227	2D20M2Ab	VNC3H00337	2,815	CF413A-227	2E19M1Ab	VNC3H00337	2,680
CF411A-228	2C22M1Bb	VNB3D24438	2,875	CF413A-228	2D20M2Ab	VNB3D24438	2,965
CF411A-229	2D07M2Bb	VN38H78BFP	2,905	CF413A-229	2D02M3Bb	VN38H78BFP	2,920

Do not reproduce this report without approval of the Laserjet Test Lab/Hardware Test Center at HP Inc.

<b>Yellow (CF412A) in HP Color LaserJet Pro M452 and HP Color LaserJet Pro MFP M477</b>				<b>Black (CF410A) in HP Color LaserJet Pro M452 and HP Color LaserJet Pro MFP M477</b>			
Average:		2,801		Average:		2,663	
Standard Deviation:		87		Standard Deviation:		95	
90% LCB:		2,747		90% LCB:		2,604	
<b>Cartridge#</b>	<b>Lot Code</b>	<b>Engine SerNo</b>	<b>Cartridge Yield</b>	<b>Cartridge#</b>	<b>Lot Code</b>	<b>Engine SerNo</b>	<b>Cartridge Yield</b>
CF412A-221	2C25M3Ab	VNC3H00337	2,775	CF410A-221	2C17M3Bb	VNC3H00337	2,760
CF412A-222	2D28M2Ab	VNB3D24438	2,810	CF410A-222	2D06M2Bb	VNB3D24438	2,750
CF412A-223	2E20M2Ab	VN38H78BFP	2,935	CF410A-223	2D27M3Ab	VN38H78BFP	2,610
CF412A-224	2E20M2Ab	VNC3H00337	2,655	CF410A-224	2D27M3Ab	VNC3H00337	2,625
CF412A-225	2C25M3Ab	VNB3D24438	2,720	CF410A-225	2C17M3Bb	VNB3D24438	2,710
CF412A-226	2D28M2Ab	VN38H78BFP	2,790	CF410A-226	2D06M2Bb	VN38H78BFP	2,650
CF412A-227	2D28M2Ab	VNC3H00337	2,790	CF410A-227	2D06M2Bb	VNC3H00337	2,675
CF412A-228	2E20M2Ab	VNB3D24438	2,915	CF410A-228	2D27M3Ab	VNB3D24438	2,455
CF412A-229	2C25M3Ab	VN38H78BFP	2,820	CF410A-229	2C17M3Bb	VN38H78BFP	2,730

<sup>1</sup> In an ISO report commonly two values are listed: declared ISO yield and calculated test values. Generally, the calculated test values are higher than the declared ISO yield. Actual cartridge yields vary considerably based on content of images printed and other factors. For more information, visit [www.hp.com/go/learnaboutequipment](http://www.hp.com/go/learnaboutequipment).