

## Yield Reporting Form:

HP Color LaserJet Enterprise MFP M680 cartridge models CF320X, CF321A, CF322A, CF323A

## Declared ISO Yield

**Toner cartridge yield:**

Average composite CMY cartridge yield 16,500 standard pages<sup>1</sup>

Average K cartridge yield 21,000 standard pages<sup>1</sup>

*Declared yield value in accordance with ISO/IEC 19798 based on continuous printing.*

Calculated test values

90% lower confidence limit <sup>1</sup>	
Cyan (CF321A) Cartridge	14470 pages
Magenta (CF323A) Cartridge	16080 pages
Yellow (CF322A) Cartridge	19884 pages
Composite CMY	16521 pages
Black (CF320X) Cartridge	21043 pages

Test date: beginning	3/28/2014
Test dates: ending	4/2/2014
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?	No
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	vSphere Client virtual machine
Operating system	Microsoft Windows 7 Enterprise with SP1
Application software	Batch File running hpnpf.exe
Print driver version	None: Internal PDF interpreter
Connection type	Network
Test page version	ISO-IEC 24712
Power on/off every day	No

## Engine serial numbers:

## Engine Firmware Version:

MX2CG1FOVQ	2302829_434659
MX2CGFOW5	2302829_434659
MX2CG1FOQB	2302829_434659

Cartridge testing data

Test environmental limits:	<b>Temperature</b>	<b>Humidity</b>
	<b>°C</b>	<b>%RH</b>
Max running average	22.9	53
Min running average	22.6	51
Average	22.7	52

<b>Cyan (CF321A) in LaserJet HP CLJ MFP M680</b>				<b>Magenta (CF323A) in LaserJet HP CLJ MFP M680</b>			
Average:		14,474		Average:		16,084	
Standard Deviation:		7		Standard Deviation:		6	
90% LCB:		14,470		90% LCB:		16,080	
<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>
CF321A-30	3L17H1Ba	MX2CG1FOVQ	14,485	CF323A-30	3J03H1Ba	MX2CG1FOVQ	16,085
CF321A-31	3L17H1Ba	MX2CGFOW5	14,465	CF323A-31	3L13H1Ba	MX2CGFOW5	16,080
CF321A-32	3L17H1Ba	MX2CG1FOQB	14,465	CF323A-32	3L13H1Ba	MX2CG1FOQB	16,085
CF321A-33	3I26H1Ba	MX2CG1FOVQ	14,475	CF323A-33	3L13H1Ba	MX2CG1FOVQ	16,085
CF321A-34	3I26H1Ba	MX2CGFOW5	14,475	CF323A-34	3J03H1Ba	MX2CGFOW5	16,090
CF321A-35	3L17H1Ba	MX2CG1FOQB	14,475	CF323A-35	3L13H1Ba	MX2CG1FOQB	16,085
CF321A-36	3L17H1Ba	MX2CG1FOVQ	14,480	CF323A-36	3L13H1Ba	MX2CG1FOVQ	16,085
CF321A-37	3L17H1Ba	MX2CGFOW5	14,470	CF323A-37	3L13H1Ba	MX2CGFOW5	16,090
CF321A-38	3L17H1Ba	MX2CG1FOQB	14,480	CF323A-38	3L13H1Ba	MX2CG1FOQB	16,070

Yellow (CF322A) in LaserJet HP CLJ MFP M680				Black (CF320X) in LaserJet HP CLJ MFP M680			
Average:		19,891		Average:		21,049	
Standard Deviation:		11		Standard Deviation:		9	
90% LCB:		19,884		90% LCB:		21,043	
Cartridge#	Lot Code	Engine SerNo	Cartridge Yield	Cartridge#	Lot Code	Engine SerNo	Cartridge Yield
CF322A-30	3L16H1Ba	MX2CG1FOVQ	19,905	CF320X-30	3L11H2Ba	MX2CG1FOVQ	21,040
CF322A-31	3L16H1Ba	MX2CGFOW5	19,900	CF320X-31	3L11H2Ba	MX2CGFOW5	21,045
CF322A-32	3L16H1Ba	MX2CG1FOQB	19,880	CF320X-32	3L11H2Ba	MX2CG1FOQB	21,040
CF322A-33	3L16H1Ba	MX2CG1FOVQ	19,900	CF320X-33	3L11H2Ba	MX2CG1FOVQ	21,055
CF322A-34	3J03H1Ba	MX2CGFOW5	19,895	CF320X-34	3L11H2Ba	MX2CGFOW5	21,055
CF322A-35	3J03H1Ba	MX2CG1FOQB	19,880	CF320X-35	3L11H2Ba	MX2CG1FOQB	21,060
CF322A-36	3L16H1Ba	MX2CG1FOVQ	19,900	CF320X-36	3L11H2Ba	MX2CG1FOVQ	21,055
CF322A-37	3L16H1Ba	MX2CGFOW5	19,885	CF320X-37	3L11H2Ba	MX2CGFOW5	21,055
CF322A-38	3L16H1Ba	MX2CG1FOQB	19,875	CF320X-38	3L11H2Ba	MX2CG1FOQB	21,035

<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/learnaboutsupplies](http://www.hp.com/go/learnaboutsupplies).