

Yield Reporting Form for HP Inc. Toner Supplies Solutions Group:

HP Color LaserJet Pro M454 and HP Color LaserJet Pro MFP M479 cartridge models W2020A, W2021A, W2022A, W2023A/W2030A, W2031A, W2032A, W2033A/W2040A, W2041A, W2042A, W2043A¹

Declared ISO Yield**Toner cartridge yield:**

Average composite CMY cartridge yield 2,100 standard pages²

Average K cartridge yield 2,400 standard pages²

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

Values reported do not include measurement uncertainty.

The results within this report relate only to the items tested as identified in this report.

Calculated test values

90% lower confidence limit²	
HP Cyan LaserJet Toner Cartridge	2,431 pages
HP Magenta LaserJet Toner Cartridge	2,423 pages
HP Yellow LaserJet Toner Cartridge	1,854 pages
Composite CMY	2,200 pages
HP Black LaserJet Toner Cartridge	2,412 pages

Test date: beginning	3/5/2020
Test dates: ending	3/11/2020
Number of cartridges used in testing	48
Number of cartridges used in calculations	C=12, M=12, Y=12, K=12 (Total=48)
Type of cartridge	All-in-one
Shake procedure used?	Yes
Print mode	Continuous
MPACCO Mode	Off
Number of engines used in testing	4
Media	HP Multipurpose
Paper size	Letter
Paper feed orientation	Short edge
Computer model	HP 250 G5 Notebook
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

Engine serial numbers:**Engine Firmware Version:**

VNB3K03668	SHMNT2XXXN002.2002B.00
VNB3S03632	SHMNT2XXXN002.2002B.00
MXBCM9Y3HT	CLRWTRXXXN002.2002B.00
MXBCMB81F4	CLRWTRXXXN002.2002B.00

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Cartridge testing data

Test environmental limits:

	Temperature	Humidity
	°C	%RH
Max running average	23.3	54
Min running average	23.3	48
Average	23.3	50

Cyan (W2021A) in CLJ Pro M454 and CLJ Pro MFP M479				Magenta (W2023A) in CLJ Pro M454 and CLJ Pro MFP M479			
Average:		2,500		Average:		2,479	
Standard Deviation:		134		Standard Deviation:		108	
90% LCB:		2,431		90% LCB:		2,423	
Cartridge#	Lot Code	Engine SerNo	Cartridge Yield	Cartridge#	Lot Code	Engine SerNo	Cartridge Yield
W2021A-62	9K15M1Ea	VNB3K03668	2,405	W2023A-62	9J21M3Ea	VNB3K03668	2,445
W2021A-63	9K15M1Ea	VNB3S03632	2,515	W2023A-63	9J21M3Ea	VNB3S03632	2,550
W2021A-64	9K15M1Ea	MXBCM9Y3HT	2,255	W2023A-64	9J21M3Ea	MXBCM9Y3HT	2,365
W2021A-65	9K15M1Ea	MXBCMB81F4	2,410	W2023A-65	9J21M3Ea	MXBCMB81F4	2,600
W2021A-66	9K09M2Ea	VNB3K03668	2,460	W2023A-66	9K01M2Ea	VNB3K03668	2,580
W2021A-67	9K09M2Ea	VNB3S03632	2,450	W2023A-67	9K01M2Ea	VNB3S03632	2,550
W2021A-68	9K09M2Ea	MXBCM9Y3HT	2,365	W2023A-68	9K01M2Ea	MXBCM9Y3HT	2,390
W2021A-69	9K09M2Ea	MXBCMB81F4	2,630	W2023A-69	9K01M2Ea	MXBCMB81F4	2,585
W2021A-70	9J17M3Ea	VNB3K03668	2,730	W2023A-70	9J27M1Ea	VNB3K03668	2,600
W2021A-71	9J17M3Ea	VNB3S03632	2,575	W2023A-71	9J27M1Ea	VNB3S03632	2,390
W2021A-72	9J17M3Ea	MXBCM9Y3HT	2,575	W2023A-72	9J27M1Ea	MXBCM9Y3HT	2,375
W2021A-73	9J17M3Ea	MXBCMB81F4	2,635	W2023A-73	9J27M1Ea	MXBCMB81F4	2,315

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Yellow (W2022A) in CLJ Pro M454 and CLJ Pro MFP M479				Black (W2020A) in CLJ Pro M454 and CLJ Pro MFP M479			
Average:		1,895		Average:		2,447	
Standard Deviation:		80		Standard Deviation:		67	
90% LCB:		1,854		90% LCB:		2,412	
Cartridge#	Lot Code	Engine SerNo	Cartridge Yield	Cartridge#	Lot Code	Engine SerNo	Cartridge Yield
W2022A-62	9J28M1Ea	VNB3K03668	2,000	W2020A-62	9J29M3Ea	VNB3K03668	2,545
W2022A-63	9J28M1Ea	VNB3S03632	1,910	W2020A-63	9J29M3Ea	VNB3S03632	2,445
W2022A-64	9J28M1Ea	MXBCM9Y3HT	1,840	W2020A-64	9J29M3Ea	MXBCM9Y3HT	2,415
W2022A-65	9J28M1Ea	MXBCMB81F4	1,955	W2020A-65	9J29M3Ea	MXBCMB81F4	2,425
W2022A-66	9K02M3Ea	VNB3K03668	1,805	W2020A-66	9K01M3Ea	VNB3K03668	2,575
W2022A-67	9K02M3Ea	VNB3S03632	1,790	W2020A-67	9K01M3Ea	VNB3S03632	2,480
W2022A-68	9K02M3Ea	MXBCM9Y3HT	1,900	W2020A-68	9K01M3Ea	MXBCM9Y3HT	2,400
W2022A-69	9K02M3Ea	MXBCMB81F4	1,755	W2020A-69	9K01M3Ea	MXBCMB81F4	2,405
W2022A-70	9K09M2Ea	VNB3K03668	1,955	W2020A-70	9J21M2Ea	VNB3K03668	2,505
W2022A-71	9K09M2Ea	VNB3S03632	1,905	W2020A-71	9J21M2Ea	VNB3S03632	2,350
W2022A-72	9K09M2Ea	MXBCM9Y3HT	1,960	W2020A-72	9J21M2Ea	MXBCM9Y3HT	2,420
W2022A-73	9K09M2Ea	MXBCMB81F4	1,970	W2020A-73	9J21M2Ea	MXBCMB81F4	2,395

¹ The physical cartridges for the SKU series W2020A, W2021A, W2022A, W2023A are identical to the SKU series W2030A, W2031A, W2032A, W2033A and W2040A, W2041A, W2042A, W2043A.

² 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.