

**Yield Reporting Form for HP Inc. Toner Supplies Solutions Group:
HP Color LaserJet Pro M454 and HP Color LaserJet Pro MFP M479 with Introductory
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 1,200 standard pages²

Average K cartridge yield 1,200 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 limit ²	
HP Cyan LaserJet Toner Cartridge	1650 pages
HP Magenta LaserJet Toner Cartridge	1836 pages
HP Yellow LaserJet Toner Cartridge	1351 pages
Composite CMY	1586 pages
HP Black LaserJet Toner Cartridge	1424 pages
Test date: beginning	3/26/2020
Test dates: ending	4/1/2020
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 250G5 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	53
Min running average	23.3	48
Average	23.3	50

Cyan (W2021A_Starter) in CLJ Pro M454 and CLJ Pro MFP M479				Magenta (W2023A_Starter) in CLJ Pro M454 and CLJ Pro MFP M479			
Average:		1,697		Average:		1,874	
Standard Deviation:		89		Standard Deviation:		74	
90% LCB:		1,650		90% LCB:		1,836	
Cartridge#	Lot Code	Engine SerNo	Cartridge Yield	Cartridge#	Lot Code	Engine SerNo	Cartridge Yield
W2021AS-74	9K08M1Ea	VNB3K03668	1,670	W2023AS-74	9K09M1Ea	VNB3K03668	1,955
W2021AS-75	9K08M1Ea	VNB3S03632	1,715	W2023AS-75	9K09M1Ea	VNB3S03632	1,970
W2021AS-76	9K08M1Ea	MXBCM9Y3HT	1,495	W2023AS-76	9K09M1Ea	MXBCM9Y3HT	1,770
W2021AS-77	9K08M1Ea	MXBCMB81F4	1,635	W2023AS-77	9K09M1Ea	MXBCMB81F4	1,875
W2021AS-78	9J29M3Ea	VNB3K03668	1,825	W2023AS-78	9J29M3Ea	VNB3K03668	1,850
W2021AS-79	9J29M3Ea	VNB3S03632	1,820	W2023AS-79	9J29M3Ea	VNB3S03632	1,820
W2021AS-80	9J29M3Ea	MXBCM9Y3HT	1,715	W2023AS-80	9J29M3Ea	MXBCM9Y3HT	1,800
W2021AS-81	9J29M3Ea	MXBCMB81F4	1,775	W2023AS-81	9J29M3Ea	MXBCMB81F4	1,775
W2021AS-82	9J23M1Ea	VNB3K03668	1,645	W2023AS-82	9J23M3Ea	VNB3K03668	1,960
W2021AS-83	9J23M1Ea	VNB3S03632	1,670	W2023AS-83	9J23M3Ea	VNB3S03632	1,945
W2021AS-84	9J23M1Ea	MXBCM9Y3HT	1,675	W2023AS-84	9J23M3Ea	MXBCM9Y3HT	1,920
W2021AS-85	9J23M1Ea	MXBCMB81F4	1,720	W2023AS-85	9J23M3Ea	MXBCMB81F4	1,850

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Yellow (W2022A_Starter) in CLJ Pro M454 and CLJ Pro MFP M479				Black (W2020A_Starter) in CLJ Pro M454 and CLJ Pro MFP M479			
Average:		1,380		Average:		1,488	
Standard Deviation:		55		Standard Deviation:		123	
90% LCB:		1,351		90% LCB:		1,424	
Cartridge#	Lot Code	Engine SerNo	Cartridge Yield	Cartridge#	Lot Code	Engine SerNo	Cartridge Yield
W2022AS-74	9K15M3Ea	VNB3K03668	1,455	W2020AS-74	9K22M3Fa	VNB3K03668	1,520
W2022AS-75	9K15M3Ea	VNB3S03632	1,340	W2020AS-75	9K22M3Fa	VNB3S03632	1,490
W2022AS-76	9K15M3Ea	MXBCM9Y3HT	1,350	W2020AS-76	9K22M3Fa	MXBCM9Y3HT	1,275
W2022AS-77	9K15M3Ea	MXBCMB81F4	1,345	W2020AS-77	9K22M3Fa	MXBCMB81F4	1,440
W2022AS-78	9K07M2Ea	VNB3K03668	1,330	W2020AS-78	9K18M1Fa	VNB3K03668	1,625
W2022AS-79	9K07M2Ea	VNB3S03632	1,305	W2020AS-79	9K18M1Fa	VNB3S03632	1,640
W2022AS-80	9K07M2Ea	MXBCM9Y3HT	1,330	W2020AS-80	9K18M1Fa	MXBCM9Y3HT	1,615
W2022AS-81	9K07M2Ea	MXBCMB81F4	1,360	W2020AS-81	9K18M1Fa	MXBCMB81F4	1,630
W2022AS-82	9J24M1Ea	VNB3K03668	1,465	W2020AS-82	9K15M1Fa	VNB3K03668	1,475
W2022AS-83	9J24M1Ea	VNB3S03632	1,430	W2020AS-83	9K15M1Fa	VNB3S03632	1,365
W2022AS-84	9J24M1Ea	MXBCM9Y3HT	1,430	W2020AS-84	9K15M1Fa	MXBCM9Y3HT	1,340
W2022AS-85	9J24M1Ea	MXBCMB81F4	1,415	W2020AS-85	9K15M1Fa	MXBCMB81F4	1,440

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.

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