

## Yield Reporting Form:

# HP Color LaserJet Pro M452 and HP Color LaserJet Pro MFP M477 cartridge models CF410X-CF413X

## Declared ISO Yield

**Toner cartridge yield:**Average composite CMY cartridge yield **5000** standard pages<sup>1</sup>Average K cartridge yield **6500** 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>	
HP 410X Cyan LaserJet Toner Cartridge (CF411X)	4792 pages
HP 410X Magenta LaserJet Toner Cartridge (CF413X)	5705 pages
HP 410X Yellow LaserJet Toner Cartridge (CF412X)	4870 pages
Composite CMY	5091 pages
HP 410X Black LaserJet Toner Cartridge (CF410X)	6832 pages

Test date: beginning	11/3/2015
Test dates: ending	11/16/2015
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?	No
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	vSphere Client virtual machine
Operating system	Microsoft Windows 7 Enterprise with SP1
Application software	HP Direct Print
Print driver version	HP Direct Print
Connection type	network
Test page version	ISO-IEC 24712
Power on/off every day	No

Engine serial numbers:

Engine Firmware Version:

VNB3X00148	20150506
VNB3X00158	20150506
VN38H789MQ	20150625
VN38H789T5	20150625

## Cartridge testing data

Test environmental limits:

	Temperature	Humidity
	°C	%RH
Max running average	22.9	53
Min running average	22.6	51
Average	22.7	52

Cyan (CF411X) in HP Color LaserJet Pro M452/MFP M477				Magenta (CF413X) in HP Color LaserJet Pro M452/MFP M477			
Average:		4,865		Average:		5,748	
Standard Deviation:		141		Standard Deviation:		83	
90% LCB:		4,792		90% LCB:		5,705	
Cartridge#	Lot Code	Engine SerNo	Cartridge Yield	Cartridge#	Lot Code	Engine SerNo	Cartridge Yield
CF411X-27	5F25M3Ba	VNB3X00148	4,815	CF413X-27	5F27M2Ba	VNB3X00148	5,740
CF411X-28	5F25M3Ba	VNB3X00158	4,945	CF413X-28	5F27M2Ba	VNB3X00158	5,725
CF411X-25	5F25M3Ba	VN38H789MQ	5,050	CF413X-25	5F27M2Ba	VN38H789MQ	5,860
CF411X-26	5F25M3Ba	VN38H789T5	4,945	CF413X-26	5F27M2Ba	VN38H789T5	5,850
CF411X-31	5H01M1Ba	VNB3X00148	4,770	CF413X-31	5H01M1Ba	VNB3X00148	5,615
CF411X-32	5H01M1Ba	VNB3X00158	4,835	CF413X-32	5H01M1Ba	VNB3X00158	5,625
CF411X-29	5H01M1Ba	VN38H789MQ	5,005	CF413X-29	5H01M1Ba	VN38H789MQ	5,800
CF411X-30	5H01M1Ba	VN38H789T5	4,615	CF413X-30	5H01M1Ba	VN38H789T5	5,765
CF411X-35	5J15M2Ba	VNB3X00148	4,825	CF413X-35	5J15M3Ba	VNB3X00148	5,690
CF411X-36	5J15M2Ba	VNB3X00158	4,860	CF413X-36	5J15M3Ba	VNB3X00158	5,685
CF411X-33	5J15M2Ba	VN38H789MQ	5,055	CF413X-33	5J15M3Ba	VN38H789MQ	5,820
CF411X-34	5J15M2Ba	VN38H789T5	4,665	CF413X-34	5J15M3Ba	VN38H789T5	5,805

Yellow (CF412X) in HP Color LaserJet Pro M452/MFP M477				Black (CF410X) in HP Color LaserJet Pro M452/MFP M477			
Average:		4,898		Average:		7,017	
Standard Deviation:		53		Standard Deviation:		279	
90% LCB:		4,870		90% LCB:		6,872	
Cartridge#	Lot Code	Engine SerNo	Cartridge Yield	Cartridge#	Lot Code	Engine SerNo	Cartridge Yield
CF412X-27	5F29M1Ba	VNB3X00148	4,970	CF410X-27	5F25M2Ba	VNB3X00148	6,765
CF412X-28	5F29M1Ba	VNB3X00158	4,945	CF410X-28	5F25M2Ba	VNB3X00158	6,865
CF412X-25	5F29M1Ba	VN38H789MQ	4,945	CF410X-25	5F25M2Ba	VN38H789MQ	7,520
CF412X-26	5F29M1Ba	VN38H789T5	4,945	CF410X-26	5F25M2Ba	VN38H789T5	7,230
CF412X-31	5G31M2Ba	VNB3X00148	4,935	CF410X-31	5G31M2Ba	VNB3X00148	6,795
CF412X-32	5G31M2Ba	VNB3X00158	4,835	CF410X-32	5G31M2Ba	VNB3X00158	6,845
CF412X-29	5G31M2Ba	VN38H789MQ	4,830	CF410X-29	5G31M2Ba	VN38H789MQ	7,390
CF412X-30	5G31M2Ba	VN38H789T5	4,860	CF410X-30	5G31M2Ba	VN38H789T5	7,145
CF412X-35	5J15M3Aa	VNB3X00148	4,940	CF410X-35	5J08M1Ba	VNB3X00148	6,625
CF412X-36	5J15M3Aa	VNB3X00158	4,880	CF410X-36	5J08M1Ba	VNB3X00158	6,805
CF412X-33	5J15M3Aa	VN38H789MQ	4,840	CF410X-33	5J08M1Ba	VN38H789MQ	7,210
CF412X-34	5J15M3Aa	VN38H789T5	4,845	CF410X-34	5J08M1Ba	VN38H789T5	7,005

<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).