

TYPE OF TEST: ISO 19798

When cartridges HP Q6000A, HP Q6001A, HP Q6002A, HP Q6003A are used in printer HP color LJ 1600.

Toner Cartridge yield

Average Continuous Black Cartridge Yield 2500 standard pages
Average Continuous CMY Cartridge Yield 3550 standard pages

Declared Yield value in accordance with ISO/IEC 19798

90% Lower Confidence	Black Cartridge	2511 standard pages
90% Lower Confidence	Cyan Cartridge	3551 standard pages
90% Lower Confidence	Yellow Cartridge	4131 standard pages
90% Lower Confidence	Magenta Cartridge	3200 standard pages

Note:

During tests was temperatures and humidity in accordance with the international standard ISO/IEC 19798.

Condition 24 hours before the start of the tests.

Date Tested:

15.2.2016 - 15.3.2016

For questions concerning testing contact

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Number of Cartridges used in testing:	K = 9, C = 9, M = 9, Y = 9
Number of Cartridges used in calculations	K = 9, C = 9, M = 9, Y = 9
Type of Cartridge	HP Q6000A, HP Q6001A, HP Q6003A, HP Q6002A
Shake Procedure Used	No
Print mode:	Continuous
Number of engines used in testing:	3
Media Used:	Navigator Universal 80g/m²
Paper Size:	A4
Paper feed orientation:	Short edge feed
Application Software:	Adobe Reader 11.0
Test Page Version	ISO-IEC 24712 2007 Test Pages
Power (off/on) everyday?	Yes

Computer stations and printers:

	Station 1.	Station 2.	Station 3.
Computer Model:	Intel(R) Pentium(R) 4 - 2.8 GHz	Sempron Procesor 3000+1.79 GHz	Intel(R) Pentium(R) 4 3.0 GHz
Operating System:	Windows XP Professional	Windows XP Professional	Windows XP Professional
Printer Number	63133	63179	62803
Printer Type	HP color LJ 1600	HP color LJ 1600	HP color LJ 1600
Printer Serial Number	CNCW6CF7M3	CNCW66VKOP	CNCW68JKR3
Printer Firmware Version	20120928	20070716	20120928
Driver Version:	PCL6 - 5.0 - 20 II 2013	PCL6 - 5.0 - 20 II 2013	PCL6 - 5.0 - 20 II 2013

Note:

Page yield of black cartridge rounded to 2500.	It is the same like OEM.
Page yield of color cartridge rounded to 3550.	It's 1550 pages more than OEM.

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Cartridges testing data:

Station 1	Color	Cartidge No.	Internal summary	Cartridge yield	Cartridge used in calculation
1st set	K	15079148728582 - K001	PHI_16_I0019	2 305	Y
1st set	C	16102189228583 - C001	PHI_16_I0019	3 710	Y
1st set	Y	15085657828585 - Y001	PHI_16_I0019	3 710	Y
1st set	M	16096934828584 - M001	PHI_16_I0019	3 605	Y
2nd set	K	15079149028582 - K002	PHI_16_I0020	2 465	Y
2nd set	C	15084612928583 - C002	PHI_16_I0020	3 590	Y
2nd set	Y	15085657628582 - Y002	PHI_16_I0020	3 995	Y
2nd set	M	16096932928584 - M002	PHI_16_I0020	3 390	Y
3rd set	K	16102179228582 - K003	PHI_16_I0021	2 625	Y
3rd set	C	16102190328583 - C003	PHI_16_I0021	3 990	Y
3rd set	Y	15085657028585 - Y003	PHI_16_I0021	4 083	Y
3rd set	M	16096933228584 - M003	PHI_16_I0021	3 285	Y
4th set	K				
4th set	C				
4th set	Y				
4th set	M				
5th set	K				
5th set	C				
5th set	Y				
5th set	M				

Color	Total yield	Avg yield	St Dev	90%LCB	Number cartridges used in calculation
K	7 395	2 465	160	2 195	3
C	11 290	3 763	205	3 417	3
Y	11 788	3 929	195	3 601	3
M	10 280	3 427	163	3 152	3

Station 2	Color	Cartidge No.	Internal summary	Cartridge yield	Cartridge used in calculation
1st set	K	15085543628582 - K004	PHI_16_I0022	2 645	Y
1st set	C	16102186628583 - C004	PHI_16_I0022	4 265	Y
1st set	Y	15085667228585 - Y004	PHI_16_I0022	4 675	Y
1st set	M	16096932428584 - M004	PHI_16_I0022	3 150	Y
2nd set	K	16102183428582 - K005	PHI_16_I0023	2 530	Y
2nd set	C	15084612228583 - C005	PHI_16_I0023	2 748	Y
2nd set	Y	15085657928585 - Y005	PHI_16_I0023	4 785	Y
2nd set	M	16096934528584 - M005	PHI_16_I0023	3 335	Y
3rd set	K	16102180128582 - K006	PHI_16_I0024	2 545	Y
3rd set	C	16102202228583 - C006	PHI_16_I0024	3 855	Y
3rd set	Y	15085658528585 - Y006	PHI_16_I0024	4 515	Y
3rd set	M	16096933428584 - M006	PHI_16_I0024	3 175	Y
4th set	K				
4th set	C				
4th set	Y				
4th set	M				
5th set	K				
5th set	C				
5th set	Y				
5th set	M				

Color	Total yield	Avg yield	St Dev	90%LCB	Number cartridges used in calculation
K	7 720	2 573	63	2 468	3
C	10 868	3 623	785	2 300	3
Y	13 975	4 658	136	4 429	3
M	9 660	3 220	100	3 051	3

Station 3	Color	Cartidge No.	Internal summary	Cartridge yield	Cartridge used in calculation
1st set	K	16092087228582 - K007	PHI_16_I0025	2 920	Y
1st set	C	16102189928583 - C007	PHI_16_I0025	4 030	Y
1st set	Y	15085656328585 - Y007	PHI_16_I0025	4 130	Y
1st set	M	16096932828584 - M007	PHI_16_I0025	3 225	Y
2nd set	K	16102819228582 - K008	PHI_16_I0026	3 365	Y
2nd set	C	15085527628583 - C008	PHI_16_I0026	4 930	Y
2nd set	Y	15085657128585 - Y008	PHI_16_I0026	4 930	Y
2nd set	M	16096933028584 - M008	PHI_16_I0026	3 165	Y
3rd set	K	16102179928582 - K009	PHI_16_I0027	3 475	Y
3rd set	C	16102189428583 - C009	PHI_16_I0027	4 090	Y
3rd set	Y	15085657428585 - Y009	PHI_16_I0027	5 615	Y
3rd set	M	16096932728584 - M009	PHI_16_I0027	3 975	Y
4th set	K				
4th set	C				
4th set	Y				
4th set	M				
5th set	K				
5th set	C				
5th set	Y				
5th set	M				

Color	Total yield	Avg yield	St Dev	90%LCB	Number cartridges used in calculation
K	9 760	3 253	294	2 758	3
C	13 050	4 350	503	3 502	3
Y	14 675	4 892	743	3 639	3
M	10 365	3 455	451	2 694	3

Summary	Color	Cartidges No.	Total	Avg	St Dev	90%LCB	Number cartridges
	K	K001 - K010	24 875	2 764	407	2 511	9
	C	C001 - C009	35 208	3 912	583	3 551	9
	Y	Y001 - Y009	40 438	4 493	584	4 131	9
	M	M001 - M009	30 305	3 367	269	3 200	9

Note:

Statement Black OEM 2500 pages.
Statement Cyan OEM 2000 pages.
Statement Yellow OEM 2000 pages.
Statement Magenta OEM 2000 pages.

TYPE OF TEST: ISO 19798

Temperature / Humidity

Thermometer hygrometer data logger
Measuring device Nr.

Comet S3120
12932752 - 12

Date of testing: 17.3.2016 10:30 - 2.4.2016 13:30

Testing Room average temp. [°C]	23,0	Allowed 23
Testing Room - max. running average temp. [°C]	24,2	26
Testing Room - min. running average temp. [°C]	20,0	20

Testing Room average RH. [%]	54,8	Allowed 50
Testing Room - max. running average RH [%]	57,4	65
Testing Room - min. running average RH [%]	38,4	35

Cartridges testing data:

Station 1	Color	Cartidge No.	Internal summary	Temperature			Humidity			Cartridge yield	Cartridge used in calculation
				Avg	Max	Min	Avg	Max	Min		
1st set	K	15079148728582 - K001	PHI_16_I0019	23,1	24,1	21,6	54,3	58,0	43,7	2 305	Y
1st set	C	16102189228583 - C001	PHI_16_I0019	23,2	24,1	21,6	54,3	58,2	43,7	3 710	Y
1st set	Y	15085657828585 - Y001	PHI_16_I0019	23,2	24,1	21,6	54,3	58,2	43,7	3 710	Y
1st set	M	16096934828584 - M001	PHI_16_I0019	23,2	24,1	21,6	54,4	58,2	43,7	3 605	Y
2nd set	K	15079149028582 - K002	PHI_16_I0020	22,6	24,0	20,5	54,7	58,2	44,5	2 465	Y
2nd set	C	15084612928583 - C002	PHI_16_I0020	22,8	24,1	20,5	54,8	57,9	44,5	3 590	Y
2nd set	Y	15085657628582 - Y002	PHI_16_I0020	22,8	24,1	20,5	54,8	57,9	44,5	3 995	Y
2nd set	M	16096932928584 - M002	PHI_16_I0020	22,8	24,1	20,5	54,8	57,9	44,5	3 390	Y
3rd set	K	16102179228582 - K003	PHI_16_I0021	23,4	24,1	22,2	54,7	57,9	46,9	2 625	Y
3rd set	C	16102190328583 - C003	PHI_16_I0021	23,2	24,2	21,8	51,5	58,2	38,3	3 990	Y
3rd set	Y	15085657028585 - Y003	PHI_16_I0021	23,2	24,2	21,7	51,0	58,2	38,3	4 083	Y
3rd set	M	16096933228584 - M003	PHI_16_I0021	23,1	24,2	21,8	50,9	58,2	38,3	3 285	Y
4th set	K										
	C										
	Y										
	M										

Station 2	Color	Cartidge No.	Internal summary	Temperature			Humidity			Cartridge yield	Cartridge used in calculation
				Avg	Max	Min	Avg	Max	Min		
1st set	K	15085543628582 - K004	PHI_16_I0022	23,1	24,1	21,6	54,3	58,0	43,7	2 645	Y
1st set	C	16102188628583 - C004	PHI_16_I0022	23,2	24,1	21,6	54,3	58,2	43,7	4 265	Y
1st set	Y	15085662728585 - Y004	PHI_16_I0022	22,8	24,1	20,5	54,6	58,2	43,7	4 675	Y
1st set	M	16096932428584 - M004	PHI_16_I0022	23,1	24,1	21,6	54,2	58,0	43,7	3 150	Y
2nd set	K	16102183428582 - K005	PHI_16_I0023	22,6	24,0	20,5	54,7	58,2	44,5	2 530	Y
2nd set	C	15084612228583 - C005	PHI_16_I0023	22,8	24,1	20,5	54,8	57,9	44,5	2 748	Y
2nd set	Y	15085657928585 - Y005	PHI_16_I0023	23,3	24,2	21,8	52,0	57,9	38,3	4 785	Y
2nd set	M	16096934528584 - M005	PHI_16_I0023	22,8	24,0	20,5	54,8	58,2	44,5	3 335	Y
3rd set	K	16102180128582 - K006	PHI_16_I0024	23,3	24,1	21,8	54,8	57,9	46,9	2 545	Y
3rd set	C	16102202228583 - C006	PHI_16_I0024	23,1	24,2	21,8	50,9	58,2	38,3	3 855	Y
3rd set	Y	15085658528585 - Y006	PHI_16_I0024	23,2	24,0	21,7	54,3	58,2	42,7	4 515	Y
3rd set	M	16096933428584 - M006	PHI_16_I0024	23,2	24,2	21,8	50,8	57,9	38,3	3 175	Y
4th set	K										
	C										
	Y										
	M										

Station 3	Color	Cartidge No.	Internal summary	Temperature			Humidity			Cartridge yield	Cartridge used in calculation
				Avg	Max	Min	Avg	Max	Min		
1st set	K	16092087228582 - K007	PHI_16_I0025	23,1	24,1	21,6	54,2	58,0	43,7	2 920	Y
1st set	C	16102188928583 - C007	PHI_16_I0025	22,8	24,1	20,5	54,5	58,2	43,7	4 030	Y
1st set	Y	15085656328585 - Y007	PHI_16_I0025	22,8	24,1	20,5	54,5	58,2	43,7	4 130	Y
1st set	M	16096932828584 - M007	PHI_16_I0025	23,1	24,1	21,6	54,1	58,0	43,7	3 225	Y
2nd set	K	16102819228582 - K008	PHI_16_I0026	23,0	24,2	20,5	52,8	58,2	38,3	3 365	Y
2nd set	C	15085527628583 - C008	PHI_16_I0026	23,3	24,2	21,7	52,5	58,2	38,3	4 930	Y
2nd set	Y	15085657128585 - Y008	PHI_16_I0026	23,3	24,2	21,7	52,5	58,2	38,3	4 930	Y
2nd set	M	16096933028584 - M008	PHI_16_I0026	23,0	24,2	20,5	52,6	58,2	38,3	3 165	Y
3rd set	K	16102179928582 - K009	PHI_16_I0027	23,2	24,0	21,7	54,3	58,2	42,7	3 475	Y
3rd set	C	16102189428583 - C009	PHI_16_I0027	23,4	24,2	21,9	54,2	57,6	45,2	4 090	Y
3rd set	Y	15085657428585 - Y009	PHI_16_I0027	23,2	24,2	21,0	54,3	57,6	43,7	5 615	Y
3rd set	M	16096932728584 - M009	PHI_16_I0027	23,2	24,0	21,7	54,3	58,2	48,8	3 975	Y
4th set	K										
	C										
	Y										
	M										