Manufacturer (trade mark):	**Clover Germany**	Type/Model OEM:	CLT-K404S/ELS
Lot/Part number:	**DPCC480BE**	Toner color(s):	**BLACK**
Main application:	To be used on the relevant printers according to remanufacturer instructions		
Intended yield:	1500		
Test device:	09VGB8GH1A00BYZ / 09VHB8GG8E008XV / 09VGB8GH1A006M	Take over value of existing test protocol :	(box) Yes, from ISO19798
Test climate:			
Temperature:	25	Relative humidity:	42
Deviations of the determined test conditions			
Tester 1):	Aleksandar Kojic	Test location 2):	**CLOVER SERBIA**
Test date:	**13.7.2017**		

1) If values are taken over from test protocol, the signing person is responsible, that the protocols, from which the values have been taken off, are plausible and correct.

2) Either testing place or place where the protocol is made

Test sample (A)	Type	Used for valuation		Charge/Serial number
1	1580	Yes		Sample 1
2	1648	Yes		Sample 2
3	1590	Yes	We use for A1 the	Sample 3
4	1550	Yes	MAX, for A2 the	Sample 4
5	1528	Yes	MEDIAN and for A3 the	Sample 5
6	1600	Yes	MIN value of the list at	Sample 6
7	1536	Yes	left	Sample 7
8	1578	Yes		Sample 8
9	1539	Yes		Sample 9

Comparing Sample (B)	Type	Used for valuation		Charge/Serial number
1	1500	Yes/no	Yes	OEM Sample/Spec
2	1500	Yes/no	Yes	OEM Sample/Spec
3	1500	Yes/no	Yes	OEM Sample/Spec
4		Yes/no		
5		Yes/no		

OEM data taken from OEMs own ISO19752 or ISO19798 declarations of yield

Administrative checking of health related attributes (5.2)

Is there an EG- Safety Data Sheet of the used toner?	Yes/no	Yes
If there are no information of the AMES test in the EG Safety Data Sheet		
Is there a test report about the AMES test of the used toner?	Yes/no	Not Aplicable
If not: Description	All MSDSs mention Ames test	

Checking the influence of the toner module on the printer (5.3)

Is the toner leaking less than the original?	Yes/no	Yes
Is the interaction between printer and toner module acceptable?	Yes/no	Yes
If not: Description		

Checking the initialization (5.4)

Is the print out acceptable right after the toner module has been inserted?	Yes/no	Yes
If not: Describe fault		

Checking the yield number (5.5) **BLACK**

	1	2	3	Average (Ā or V)
Yield A: (A1+A2+A3)/3= Ā	1648	1578	1528	1585
Yield V: (V1+V2+V3)/3=V	1500	1500	1500	1500

Alternative:

Yield A: Result of test after ISO/IEC 19752 Ā	
Reference to the test protocol:	
Test date:	
Yield V: Result of test after ISO/IEC 19752 V	
Reference to the test protocol:	
Test date:	
Result: EZ=Ā/V	1,06

	Yes	No	Not Aplicable
Is the expected yield (EZ) reached?	YES		
Is the expected page yield reached?	YES		

Checking the black print/Color reproduction (5.6.2)

Average value of the 2 areas F test print A1:	24,2		
Average value of the 2 areas F comparing print V1:	27,2		
Difference is not higher than Δ≤5 for Monochrom	Not Aplicable	Yes/No/Not Aplicable	Not Aplicable
Color difference ΔE≤18 for Color	3	Yes/No/Not Aplicable	Yes
Average value of the 2 areas F test print A2:	23,3		
Average value of the 2 areas F comparing print V2:	30,2		
Difference is not higher than Δ≤5 for Monochrom	Not Aplicable	Yes/No/Not Aplicable	Not Aplicable
Color difference ΔE≤18 for Color	6,9	Yes/No/Not Aplicable	Yes
Average value of the 2 areas F test print A3:	24,6		
Average value of the 2 areas F comparing print V3:	31,1		

Difference is not higher than Δ≤5 for Monochrom	Not Aplicable	Yes/No/Not Aplicable	Not Aplicable
Color difference ΔE≤18 for Color	6,5	Yes/No/Not Aplicable	Yes

Checking the fade (5.6.3) **BLACK**

Test print A1

Color values 1 6 A F	1	6	A	F
after 50 pages	88,1	67,2	47,4	22,4
Color values 1 6 A F	1	6	A	F
The biggest deviation	2,1	1,4	3	2,6

Comparing print V1

Color values 1 6 A F	1	6	A	F
after 50 pages	88,3	68,3	52,8	23,2
Color values 1 6 A F	1	6	A	F
The biggest deviation	3,2	6,4	9	8,3

Result determination	1	6	A	F
Difference ΔL≤8	1,1	5	6	5,7
Difference within allowed parameters	YES	YES	YES	YES

Test print A2 **BLACK**

Color values 1 6 A F	1	6	A	F
after 50 pages	88,3	67	48	22,3
Color values 1 6 A F	1	6	A	F
The biggest deviation	0,7	1,9	2,9	2,1

Comparing print V2

Color values 1 6 A F	1	6	A	F
after 50 pages	87,3	68,5	55	28,1
Color values 1 6 A F	1	6	A	F
The biggest deviation	3,8	6	9,6	10,1

Result determination	1	6	A	F
Difference ΔL≤8	3	4,1	6,7	8
Difference within allowed parameters	YES	YES	YES	YES

Test print A3 **BLACK**

Color values 1 6 A F	1	6	A	F
after 50 pages	88,3	66,5	48,9	21,7
Color values 1 6 A F	1	6	A	F
The biggest deviation	2	4	4,7	8,7

Comparing print V2

Color values 1 6 A F	1	6	A	F
after 50 pages	87,4	67,5	53	24,3
Color values 1 6 A F	1	6	A	F
The biggest deviation	5,5	10,3	12,4	12,7

Result determination	1	6	A	F
Difference ΔL≤8	3,5	6,3	7,7	4
Difference within allowed parameters	YES	YES	YES	YES

Checking toner adhesition

Test process: visual (tape method):

Is the resistance in between the acceptable parameters? Yes

If not: Describe deviation

Checking the grey page/color uniformity (5.6.5)

Are the color diferences in between the acceptable parameters (pattern B2-B5) ΔE≤8 ? Yes

If not: Describe deviation

Checking the background (5.6.6)

Is the background smudge between the acceptable parameters (pattern B1-B5)? Yes

If not: Describe deviation

Checking the ghosting (5.6.7)

Is the repeating of the back rectangles in between the acceptable parameters (pattern B2-B5)? Yes

If not: Describe deviation

Checking toner miscibility (5.6.8)

Is the toner miscibility given? N/A

If not: Describe deviation

OVERALL RESULT: Passed