

Manufacturer (trade mark):	Clover Germany	Type/Model OEM:	CLT-K809S/ELS
Lot/Part number:	DPCCLX9201BE	Toner color(s):	BLACK
Main application:	To be used on the relevant printers according to remanufacturer instructions		
Intended yield:	20000		
	Z8D3B1AF600008Z / Z8D3B1AF602967Z / Z8D3B1AF606114Z	Take over value of existing test protocol :	(box) Yes, from ISO19798
Test device:			
Test climate:			
Temperature:	23	Relative humidity:	41
Deviations of the determined test conditions			
Tester 1):	Aleksandar Kojic	Test location 2):	CLOVER SERBIA
Test date:	5.1.2018		

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	27005	Yes	Sample 1
2	26590	Yes	Sample 2
3	27111	Yes We use for A1 the	Sample 3
4	25633	Yes MAX, for A2 the	Sample 4
5	25900	Yes MEDIAN and for A3 the	Sample 5
6	26123	Yes MIN value of the list at	Sample 6
7	24720	Yes left	Sample 7
8	25080	Yes	Sample 8
9	25780	Yes	Sample 9

Comparing Sample (B)	Type	Used for valuation	Charge/Serial number
1	20000	Yes/no Yes	OEM Sample/Spec
2	20000	Yes/no Yes	OEM Sample/Spec
3	20000	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 ($\bar{A}$ or $\bar{V}$)
Yield A: $(A1+A2+A3)/3=\bar{A}$	27111	25900	24720	25910
Yield V: $(V1+V2+V3)/3=\bar{V}$	20000	20000	20000	20000

Alternative:

Yield A: Result of test after ISO/IEC 19752 $\bar{A}$	
Reference to the test protocol:	
Test date:	
Yield V: Result of test after ISO/IEC 19752 $\bar{V}$	
Reference to the test protocol:	
Test date:	
Result: $EZ=\bar{A}/\bar{V}$	1,30

Is the expected yield (EZ) reached?
Is the expected page yield reached?

Yes	No	Not Aplicable
YES		
YES		

Checking the black print/Color reproduction (5.6.2)

Average value of the 2 areas F test print A1:	23,3		
Average value of the 2 areas F comparing print V1:	30,9		
Difference is not higher than $\Delta \leq 5$ for Monochrome	Not Aplicable	Yes/No/Not Aplicable	Not Aplicable
Color difference $\Delta E \leq 18$ for Color	7,6	Yes/No/Not Aplicable	Yes
Average value of the 2 areas F test print A2:	23,4		
Average value of the 2 areas F comparing print V2:	26,3		
Difference is not higher than $\Delta \leq 5$ for Monochrome	Not Aplicable	Yes/No/Not Aplicable	Not Aplicable
Color difference $\Delta E \leq 18$ for Color	2,9	Yes/No/Not Aplicable	Yes
Average value of the 2 areas F test print A3:	26		
Average value of the 2 areas F comparing print V3:	26,3		

Difference is not higher than $\Delta \leq 5$ for Monochrome
Color difference $\Delta E \leq 18$ for Color

Not Aplicable
0,3

Yes/No/Not Aplicable
Yes/No/Not Aplicable

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	83,1	62,5	40,2	20
Color values 1 6 A F	1	6	A	F
The biggest deviation	3	4,7	6,5	5,1

Comparing print V1

Color values 1 6 A F	1	6	A	F
after 50 pages	86,5	69,8	50,2	29,8
Color values 1 6 A F	1	6	A	F
The biggest deviation	3,7	4,5	5,4	2,4

Result determination

Difference $\Delta L \leq 8$	1	6	A	F
	0,7	0,2	1,1	2,7

Difference within allowed parameters	YES	YES	YES	YES
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Test print A2 BLACK

Color values 1 6 A F	1	6	A	F
after 50 pages	84,7	62,6	41	21,9
Color values 1 6 A F	1	6	A	F
The biggest deviation	0,2	2,8	3,9	2,7

Comparing print V2

Color values 1 6 A F	1	6	A	F
after 50 pages	85,5	67,4	43,9	22
Color values 1 6 A F	1	6	A	F
The biggest deviation	2,7	5,6	9,7	6,2

Result determination

Difference $\Delta L \leq 8$	1	6	A	F
	3	2,8	5,8	3,5

Difference within allowed parameters	YES	YES	YES	YES
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Test print A3 BLACK

Color values 1 6 A F	1	6	A	F
after 50 pages	83	62,2	45,1	24,5
Color values 1 6 A F	1	6	A	F
The biggest deviation	3,5	5,9	6,6	5,2

Comparing print V2

Color values 1 6 A F	1	6	A	F
after 50 pages	84,6	67,7	44,3	21,2
Color values 1 6 A F	1	6	A	F
The biggest deviation	4,8	5,1	0,5	7,4

Result determination

Difference $\Delta L \leq 8$	1	6	A	F
	1,3	0,8	6,1	2,2

Difference within allowed parameters	YES	YES	YES	YES
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Checking toner adhesion

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 differences in between the acceptable parameters (pattern B2-B5) $\Delta E \leq 8$?

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?

Yes

If not: Describe deviation

OVERALL RESULT: **Passed**