

Manufacturer (trade mark): **Clover Germany** Type/Model OEM: **CF280A**
 Lot/Part number: **80A** Toner color(s): **Monochrome**
 Main application: To be used on the relevant printers according to remanufacturer instructions
 Intended yield: 2700
 Test device: VNC6H03904 / VNC3J06896 Take over value of existing test protocol : (box) Yes, from ISO19752
 Test climate: Temperature: 24 Relative humidity: 55
 Deviations of the determined test conditions Tester 1): Aleksandar Kojic Test location 2): TRS EUROPE
 Test date: 11.6.2015

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	3681	Yes	Sample 1
2	3405	Yes	Sample 2
3	3525	Yes We use for A1 the	Sample 3
4	3215	Yes MAX, for A2 the	Sample 4
5	3271	Yes MEDIAN and for A3 the	Sample 5
6	3268	Yes MIN value of the list at	Sample 6
7	3663	Yes left	Sample 7
8	3501	Yes	Sample 8
9	3390	Yes	Sample 9
Comparing Sample (B)	Type	Used for valuation	Charge/Serial number
1	2700	Yes/no Yes	OEM Sample/Spec
2	2700	Yes/no Yes	OEM Sample/Spec
3	2700	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 Applicable**
 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)

Monochrome

	1	2	3	Average (Å or V)
Yield A: (A1+A2+A3)/3= Å	3681	3405	3215	3434
Yield V: (V1+V2+V3)/3=V	2700	2700	2700	2700

Alternative:

Yield A: Result of test after ISO/IEC 19752 Å	
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=Å/V	1,27

	Yes	No	Not Applicable
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	
Average value of the 2 areas F comparing print V1:	25	
Difference is not higher than Δ≤5 for Monochrome	1	Yes/No/Not Applicable Yes
Color difference ΔE≤18 for Color	Not applicable	Yes/No/Not Applicable Not Applicable
Average value of the 2 areas F test print A2:	24,7	
Average value of the 2 areas F comparing print V2:	24,8	
Difference is not higher than Δ≤5 for Monochrome	0,1	Yes/No/Not Applicable Yes
Color difference ΔE≤18 for Color	Not applicable	Yes/No/Not Applicable Not Applicable
Average value of the 2 areas F test print A3:	24,8	
Average value of the 2 areas F comparing print V3:	23,8	
Difference is not higher than Δ≤5 for Monochrome	1	Yes/No/Not Applicable Yes

Color difference $\Delta E \leq 18$ for Color

Yes/No/Not Aplicable

Checking the fade (5.6.3)

Monochrome

Test print A1					
Color values 1 6 A F	1	6	A	F	
after 50 pages	90,9	75	46,6	29,2	
Color values 1 6 A F	1	6	A	F	
The biggest deviation	1,2	4,1	6,8	7	
Comparing print V1					
Color values 1 6 A F	1	6	A	F	
after 50 pages	90,9	75,8	53,2	27,3	
Color values 1 6 A F	1	6	A	F	
The biggest deviation	0,3	1,7	1,4	3,8	
Result determination					
Difference $\Delta L \leq 8$	1	6	A	F	
Difference within allowed parameters	0,9	2,4	5,4	3,2	
Difference within allowed parameters	YES	YES	YES	YES	

Test print A2 Monochrome					
Color values 1 6 A F	1	6	A	F	
after 50 pages	91,2	71,2	46,9	30,4	
Color values 1 6 A F	1	6	A	F	
The biggest deviation	0,3	8,5	10,7	7,5	
Comparing print V2					
Color values 1 6 A F	1	6	A	F	
after 50 pages	90,5	73	51,6	27,8	
Color values 1 6 A F	1	6	A	F	
The biggest deviation	1,7	1,8	2,9	5,4	
Result determination					
Difference $\Delta L \leq 8$	1	6	A	F	
Difference within allowed parameters	1	6,7	7,8	2,1	
Difference within allowed parameters	YES	YES	YES	YES	

Test print A3 Monochrome					
Color values 1 6 A F	1	6	A	F	
after 50 pages	91	75,8	50	31,3	
Color values 1 6 A F	1	6	A	F	
The biggest deviation	0,4	4	7,3	9,3	
Comparing print V2					
Color values 1 6 A F	1	6	A	F	
after 50 pages	90,1	76,6	53,4	25,7	
Color values 1 6 A F	1	6	A	F	
The biggest deviation	1,9	0,3	1,1	2,9	
Result determination					
Difference $\Delta L \leq 8$	1	6	A	F	
Difference within allowed parameters	1,5	3,7	6,2	6,4	
Difference within allowed parameters	YES	YES	YES	YES	

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 differences in brightness between the acceptable parameters (pattern B2) $\Delta L \leq 5$? Yes
 If not: Describe deviation

Checking the background (5.6.6)

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