

Anex C - DIN33870-Mono/Color

Manufacturer (trade mark):	<b>Clover Germany</b>	Type/Model OEM:	CF360X
Lot/Part number:	<b>DPCM553BE</b>	Toner color(s):	<b>BLACK</b>
Main application:	To be used on the relevant printers according to remanufacturer instructions		
Intended yield:	12500	Take over value of existing test protocol :	(box) <b>Yes, from ISO19798</b>
Test device:	JPBVJ9M1PF / CNBVH5N0LZ / JPBVJ370X5		
Test climate:			
Temperature:	24	Relative humidity:	45
Deviations of the determined test conditions			
Tester 1):	<b>Aleksandar Kojic</b>	Test location 2):	<b>CLOVER SERBIA</b>
Test date:	<b>12.04.2018</b>		

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	14242	Yes	Sample 1
2	12577	Yes	Sample 2
3	12537	Yes	Sample 3
4	12518	Yes	Sample 4
5	12538	Yes	Sample 5
6	12743	Yes	Sample 6
7	12537	Yes	Sample 7
8	12752	Yes	Sample 8
9	14126	Yes	Sample 9

We use for A1 the MAX,  
for A2 the MEDIAN and  
for A3 the MIN value of  
the list at left

Comparing Sample (B)	Type	Used for valuation	Charge/Serial number
1	12500	Yes/no Yes	OEM Sample/Spec
2	12500	Yes/no Yes	OEM Sample/Spec
3	12500	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)**

	<b>BLACK</b>			<b>Average (Ā or V)</b>
	<b>1</b>	<b>2</b>	<b>3</b>	
Yield A: (A1+A2+A3)/3= Ā	14242	12577	12518	13112
Yield V: (V1+V2+V3)/3= V	12500	12500	12500	12500

**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	1,05

	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:	27,8		
Average value of the 2 areas F comparing print V1:	27,5		
Difference is not higher than Δ≤5 for Monochrom	<b>Not Aplicable</b>	Yes/No/Not Aplicable	<b>Not Aplicable</b>
Color difference ΔE≤18 for Color	0,3	Yes/No/Not Aplicable	<b>Yes</b>
Average value of the 2 areas F test print A2:	22,3		
Average value of the 2 areas F comparing print V2:	27,9		
Difference is not higher than Δ≤5 for Monochrom	<b>Not Aplicable</b>	Yes/No/Not Aplicable	<b>Not Aplicable</b>
Color difference ΔE≤18 for Color	5,6	Yes/No/Not Aplicable	<b>Yes</b>
Average value of the 2 areas F test print A3:	23,7		
Average value of the 2 areas F comparing print V3:	28,1		
Difference is not higher than Δ≤5 for Monochrom	<b>Not Aplicable</b>	Yes/No/Not Aplicable	<b>Not Aplicable</b>

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

Yes/No/Not Applicable

**Checking the fade (5.6.3)**

**BLACK**

**Test print A1**

Color values 1 6 A F	1	6	A	F
after 50 pages	89,3	73,2	49,4	30,4
Color values 1 6 A F	1	6	A	F
The biggest deviation	2	7,1	8,6	4

**Comparing print V1**

Color values 1 6 A F	1	6	A	F
after 50 pages	89,2	70,7	53,7	30,1
Color values 1 6 A F	1	6	A	F
The biggest deviation	1,3	2,3	4,9	4,1

**Result determination**

Difference $\Delta L \leq 8$	1	6	A	F
Difference within allowed parameters	0,7	4,8	3,7	0,1
	YES	YES	YES	YES

**Test print A2 BLACK**

Color values 1 6 A F	1	6	A	F
after 50 pages	87,3	66,8	40,8	24,4
Color values 1 6 A F	1	6	A	F
The biggest deviation	2,4	6,1	8,5	4,5

**Comparing print V2**

Color values 1 6 A F	1	6	A	F
after 50 pages	87,9	70,3	52,6	29,7
Color values 1 6 A F	1	6	A	F
The biggest deviation	3	0,9	4,2	3,4

**Result determination**

Difference $\Delta L \leq 8$	1	6	A	F
Difference within allowed parameters	1	5,2	4,3	1,1
	YES	YES	YES	YES

**Test print A3 BLACK**

Color values 1 6 A F	1	6	A	F
after 50 pages	90,3	69,5	45,3	25,8
Color values 1 6 A F	1	6	A	F
The biggest deviation	1,5	8,2	8	3,5

**Comparing print V2**

Color values 1 6 A F	1	6	A	F
after 50 pages	90	70,4	52,3	29
Color values 1 6 A F	1	6	A	F
The biggest deviation	1,7	2,8	2,9	1,5

**Result determination**

Difference $\Delta L \leq 8$	1	6	A	F
Difference within allowed parameters	0,2	5,4	5,1	2
	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 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? N/A  
 If not: Describe deviation

**OVERALL RESULT: Passed**