



| | | | |
|--|--|--|-----------------|
| Manufacturer (trade mark): | PRPS | Type/Model OEM: | C540H2KG |
| Lot/Part number: | 4208286 | Toner color(s): | BLACK |
| Main application: | To be used on the relevant printers according to remanufacturer instructions | | |
| Intended yield: | 2500 | | |
| Test device: | 9812HDK / 982196N / 9462PKW | Take over value of existing test protocol : (box) Yes, from ISO19798 | |
| Test climate: | | | |
| Temperature: | 24 | Relative humidity: 40 | |
| Deviations of the determined test conditions | | | |
| Tester 1): | Aleksandar Kojic | Test location 2): SERBIA | |
| Test date: | 04/11/2015 | | |

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 2841 | | Yes | Sample 1 |
| 2 3300 | | Yes | Sample 2 |
| 3 3275 | | Yes We use for A1 the | Sample 3 |
| 4 3090 | | Yes MAX, for A2 the | Sample 4 |
| 5 3100 | | Yes MEDIAN and for A3 the | Sample 5 |
| 6 3000 | | Yes MIN value of the list at | Sample 6 |
| 7 3511 | | Yes left | Sample 7 |
| 8 3150 | | Yes | Sample 8 |
| 9 2950 | | Yes | Sample 9 |
| Comparing Sample (B) | Type | Used for valuation | Charge/Serial number |
| OEM data taken from OEMs own ISO19752 or ISO19798 declarations of yield | 1 2500 | Yes/no Yes | OEM Sample/Spec |
| | 2 2500 | Yes/no Yes | OEM Sample/Spec |
| | 3 2500 | Yes/no Yes | OEM Sample/Spec |
| | 4 | Yes/no | |
| | 5 | Yes/no | |

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

Yes/no Not Applicable

Is there a test report about the AMES test of the used toner?

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 V) |
|----------------------------------|------|------|---------------------------|
| Yield A: (A1+A2+A3)/3= \bar{A} | 3511 | 3100 | 2841 |
| Yield V: (V1+V2+V3)/3=V | 2500 | 2500 | 2500 |

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 V

Reference to the test protocol:

Test date:

Result: EZ= \bar{A} /V

| | | |
|--|--|------|
| | | |
| | | |
| | | |
| | | 1,26 |

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: 19,4

Yes/No/Not Applicable Not Applicable

Average value of the 2 areas F comparing print V1: 19,7

Yes/No/Not Applicable Yes

Difference is not higher than $\Delta \leq 5$ for Monochrom

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

0,3

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 V

Reference to the test protocol:

Test date:

Result: EZ= \bar{A} /V

Average value of the 2 areas F test print A2: 22,2

Yes/No/Not Applicable Not Applicable

Average value of the 2 areas F comparing print V2: 19,9

Yes/No/Not Applicable Yes

Difference is not higher than $\Delta \leq 5$ for Monochrom

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

2,3

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 V

Reference to the test protocol:

Test date:

Result: EZ= \bar{A} /V

Average value of the 2 areas F test print A3: 22,2

Yes/No/Not Applicable Not Applicable

Average value of the 2 areas F comparing print V3: 21,6

Yes/No/Not Applicable Yes

Difference is not higher than $\Delta \leq 5$ for Monochrom

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

0,6

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 V

Reference to the test protocol:

Test date:

Result: EZ= \bar{A} /V

Checking the fade (5.6.3)

BLACK

Test print A1

| Color values 1 6 A F | 1 | 6 | A | F |
|---------------------------|------|------|------|------|
| after 50 pages | 84,7 | 56,5 | 34,4 | 18,9 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 2,2 | 3,5 | 4,9 | 0,9 |
| Comparing print V1 | | | | |
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 87,2 | 54 | 35,8 | 19,5 |

| | | | | |
|--------------------------------------|-----|-----|-----|-----|
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 3,3 | 4 | 4,8 | 0,7 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 1,1 | 0,5 | 0,1 | 0,2 |
| 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 | 87,4 | 65,9 | 46 | 24 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 1,6 | 12,7 | 13,4 | 2,9 |
| Comparing print V2 | | | | |
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 83,7 | 47,4 | 33,8 | 20,9 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 4,4 | 10,8 | 5,5 | 1,8 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 3 | 1,9 | 7,9 | 1,1 |
| 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 | 87,5 | 51,8 | 32,3 | 23,9 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 0,7 | 6 | 4,9 | 3,6 |
| Comparing print V2 | | | | |
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 86,8 | 61 | 40,3 | 23,8 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 6,5 | 13,7 | 12,5 | 3,2 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 5,8 | 7,7 | 7,6 | 0,4 |
| 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 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



| | | | |
|--|--|--|-----------------|
| Manufacturer (trade mark): | PRPS | Type/Model OEM: | C540H2CG |
| Lot/Part number: | 4208293 | Toner color(s): | CYAN |
| Main application: | To be used on the relevant printers according to remanufacturer instructions | | |
| Intended yield: | 2000 | | |
| Test device: | 946DH0M / 982196N / 9462PKW | Take over value of existing test protocol : (box) Yes, from ISO19798 | |
| Test climate: | | | |
| Temperature: | 24 | Relative humidity: 40 | |
| Deviations of the determined test conditions | | | |
| Tester 1): | Aleksandar Kojic | Test location 2): SERBIA | |
| Test date: | 04/11/2015 | | |

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 3843 | | Yes | Sample 1 |
| 2 3020 | | Yes | Sample 2 |
| 3 2120 | | Yes We use for A1 the | Sample 3 |
| 4 3843 | | Yes MAX, for A2 the | Sample 4 |
| 5 2950 | | Yes MEDIAN and for A3 the | Sample 5 |
| 6 2500 | | Yes MIN value of the list at | Sample 6 |
| 7 4739 | | Yes left | Sample 7 |
| 8 2373 | | Yes | Sample 8 |
| 9 2651 | | Yes | Sample 9 |
| Comparing Sample (B) | Type | Used for valuation | Charge/Serial number |
| OEM data taken from OEMs own ISO19752 or ISO19798 declarations of yield | | Yes/no Yes | OEM Sample/Spec |
| 1 2000 | | Yes/no Yes | OEM Sample/Spec |
| 2 2000 | | Yes/no Yes | OEM Sample/Spec |
| 3 2000 | | Yes/no | |
| 4 | | Yes/no | |
| 5 | | Yes/no | |

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

Yes/no Not Applicable

Is there a test report about the AMES test of the used toner?

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)

CYAN

| 1 | 2 | 3 | Average (\bar{A} or V) |
|----------------------------------|------|------|---------------------------|
| Yield A: (A1+A2+A3)/3= \bar{A} | 4739 | 2950 | 2120 |
| Yield V: (V1+V2+V3)/3=V | 2000 | 2000 | 2000 |

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 V

Reference to the test protocol:

Test date:

Result: EZ= \bar{A} /V

| | | | | |
|---|---|---|---|------|
| 1 | 2 | 3 | 4 | 5 |
| | | | | |
| | | | | |
| | | | | |
| | | | | 1,63 |

Yes

No

Not Applicable

| | | |
|-----|--|--|
| YES | | |
| YES | | |

Checking the black print/Color reproduction (5.6.2)

Average value of the 2 areas F test print A1: 53,5
Average value of the 2 areas F comparing print V1: 55,2

Yes/No/Not Applicable Not Applicable
Yes/No/Not Applicable Yes

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

1,7

Not Applicable

Average value of the 2 areas F test print A2: 55
Average value of the 2 areas F comparing print V2: 54,9

Yes/No/Not Applicable Not Applicable
Yes/No/Not Applicable Yes

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

0,1

Average value of the 2 areas F test print A3: 55
Average value of the 2 areas F comparing print V3: 50,1

Yes/No/Not Applicable Not Applicable
Yes/No/Not Applicable Yes

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

4,9

Checking the fade (5.6.3)

CYAN

Test print A1

| Color values 1 6 A F | 1 | 6 | A | F |
|----------------------|------|------|------|------|
| after 50 pages | 89,5 | 75,7 | 62,7 | 53,1 |

| Color values 1 6 A F | 1 | 6 | A | F |
|-----------------------|-----|-----|-----|-----|
| The biggest deviation | 1,4 | 1,8 | 2,9 | 1,2 |

| Comparing print V1 | 1 | 6 | A | F |
|-------------------------------------|------|------|------|------|
| Color values 1 6 A F after 50 pages | 90,2 | 77,5 | 65,9 | 55,5 |

| | | | | |
|--------------------------------------|-----|-----|-----|-----|
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 2,1 | 1,1 | 1 | 1,5 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 0,7 | 0,7 | 1,9 | 0,3 |
| Difference within allowed parameters | YES | YES | YES | YES |

Test print A2 CYAN

| | | | | |
|--------------------------------------|------|------|------|------|
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 88 | 74,2 | 63,5 | 55,8 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 1,2 | 2,5 | 1,3 | 1,6 |
| Comparing print V2 | | | | |
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 87,4 | 71,3 | 59,8 | 53,7 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 2 | 6,7 | 5,8 | 2,2 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 1 | 4,2 | 4,5 | 0,6 |
| Difference within allowed parameters | YES | YES | YES | YES |

Test print A3 CYAN

| | | | | |
|--------------------------------------|------|------|------|------|
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 91,1 | 76,7 | 64,9 | 56,5 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 1,6 | 2,2 | 3,2 | 2,9 |
| Comparing print V2 | | | | |
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 88,8 | 71,2 | 58,1 | 50,2 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 0,9 | 4,6 | 3 | 3,2 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 0,7 | 2,4 | 0,2 | 0,3 |
| 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 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



| | | | |
|--|--|--|-----------------|
| Manufacturer (trade mark): | PRPS | Type/Model OEM: | C540H2MG |
| Lot/Part number: | 4208309 | Toner color(s): | MAGENTA |
| Main application: | To be used on the relevant printers according to remanufacturer instructions | | |
| Intended yield: | 2000 | | |
| Test device: | 9812HDK / 982196N / 9462PKW | Take over value of existing test protocol : (box) Yes, from ISO19798 | |
| Test climate: | | | |
| Temperature: | 24 | Relative humidity: 40 | |
| Deviations of the determined test conditions | | | |
| Tester 1): | Aleksandar Kojic | Test location 2): SERBIA | |
| Test date: | 04/11/2015 | | |

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 2583 | | Yes | Sample 1 |
| 2 2700 | | Yes | Sample 2 |
| 3 2080 | | Yes We use for A1 the | Sample 3 |
| 4 2909 | | Yes MAX, for A2 the | Sample 4 |
| 5 2350 | | Yes MEDIAN and for A3 the | Sample 5 |
| 6 2250 | | Yes MIN value of the list at | Sample 6 |
| 7 2708 | | Yes left | Sample 7 |
| 8 2245 | | Yes | Sample 8 |
| 9 2344 | | Yes | Sample 9 |
| Comparing Sample (B) | Type | Used for valuation | Charge/Serial number |
| OEM data taken from OEMs own ISO19752 or ISO19798 declarations of yield | | Yes/no Yes | OEM Sample/Spec |
| 1 2000 | | Yes/no Yes | OEM Sample/Spec |
| 2 2000 | | Yes/no Yes | OEM Sample/Spec |
| 3 2000 | | Yes/no | |
| 4 | | Yes/no | |
| 5 | | Yes/no | |

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

Yes/no Not Applicable

Is there a test report about the AMES test of the used toner?

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)

MAGENTA

| 1 | 2 | 3 | Average (\bar{A} or V) |
|----------------------------------|------|------|---------------------------|
| Yield A: (A1+A2+A3)/3= \bar{A} | 2909 | 2350 | 2080 |
| Yield V: (V1+V2+V3)/3=V | 2000 | 2000 | 2000 |

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 V

Reference to the test protocol:

Test date:

Result: EZ= \bar{A} /V

| | | |
|--|--|------|
| | | |
| | | |
| | | |
| | | |
| | | 1,22 |

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: | 46,5 |
| Average value of the 2 areas F comparing print V1: | 50 |
| Difference is not higher than $\Delta \leq 5$ for Monochrom | Not Applicable |
| Color difference $\Delta E \leq 18$ for Color | 3,5 |
| Average value of the 2 areas F test print A2: | 47,6 |
| Average value of the 2 areas F comparing print V2: | 48,5 |
| Difference is not higher than $\Delta \leq 5$ for Monochrom | Not Applicable |
| Color difference $\Delta E \leq 18$ for Color | 0,9 |
| Average value of the 2 areas F test print A3: | 48,1 |
| Average value of the 2 areas F comparing print V3: | 43,7 |
| Difference is not higher than $\Delta \leq 5$ for Monochrom | Not Applicable |
| Color difference $\Delta E \leq 18$ for Color | 4,4 |

| | |
|-----------------------|----------------|
| Yes/No/Not Applicable | Not Applicable |
| Yes/No/Not Applicable | Yes |
| Yes/No/Not Applicable | Not Applicable |
| Yes/No/Not Applicable | Yes |
| Yes/No/Not Applicable | Not Applicable |
| Yes/No/Not Applicable | Yes |

Checking the fade (5.6.3)

MAGENTA

| Test print A1 | | Comparing print V1 | |
|-----------------------|------|--------------------|-----------|
| Color values 1 6 A F | 1 | 6 | A F |
| after 50 pages | 85,9 | 67,7 | 55,5 46,5 |
| Color values 1 6 A F | 1 | 6 | A F |
| The biggest deviation | 3,1 | 3,4 | 4,1 0,8 |
| Color values 1 6 A F | 1 | 6 | A F |
| after 50 pages | 88 | 72,3 | 59,4 49,4 |

| | | | | |
|--------------------------------------|-----|-----|-----|-----|
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 2,1 | 2,1 | 0,7 | 1,7 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 1 | 1,3 | 3,4 | 0,9 |
| Difference within allowed parameters | YES | YES | YES | YES |

Test print A2 MAGENTA

| | | | | |
|--------------------------------------|------|------|------|------|
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 87,3 | 67,5 | 56,1 | 47,1 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 0,8 | 3,1 | 1,2 | 0,9 |
| Comparing print V2 | | | | |
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 86 | 65,6 | 52,1 | 45 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 2,5 | 7,3 | 8,4 | 5,4 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 2 | 4,2 | 7,2 | 4,5 |
| Difference within allowed parameters | YES | YES | YES | YES |

Test print A3 MAGENTA

| | | | | |
|--------------------------------------|------|------|------|------|
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 88,3 | 72,1 | 59 | 48,1 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 0,5 | 3,6 | 4,8 | 0,8 |
| Comparing print V2 | | | | |
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 87,7 | 67,4 | 52,3 | 44 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 2 | 1,4 | 2,1 | 3,6 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 1,5 | 2,2 | 2,7 | 2,8 |
| 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 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



| | | | |
|--|--|--|-----------------|
| Manufacturer (trade mark): | PRPS | Type/Model OEM: | C540H2YG |
| Lot/Part number: | N/A | Toner color(s): | YELLOW |
| Main application: | To be used on the relevant printers according to remanufacturer instructions | | |
| Intended yield: | 2000 | | |
| Test device: | 9812HDK / 982196N / 9462PKW | Take over value of existing test protocol : (box) Yes, from ISO19798 | |
| Test climate: | | | |
| Temperature: | 24 | Relative humidity: 40 | |
| Deviations of the determined test conditions | | | |
| Tester 1): | Aleksandar Kojic | Test location 2): SERBIA | |
| Test date: | 04/11/2015 | | |

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 2811 | | Yes | Sample 1 |
| 2 2450 | | Yes | Sample 2 |
| 3 2320 | | Yes We use for A1 the | Sample 3 |
| 4 3510 | | Yes MAX, for A2 the | Sample 4 |
| 5 2950 | | Yes MEDIAN and for A3 the | Sample 5 |
| 6 2420 | | Yes MIN value of the list at | Sample 6 |
| 7 2708 | | Yes left | Sample 7 |
| 8 2542 | | Yes | Sample 8 |
| 9 2470 | | Yes | Sample 9 |
| Comparing Sample (B) | Type | Used for valuation | Charge/Serial number |
| OEM data taken from OEMs own ISO19752 or ISO19798 declarations of yield | 1 2000 2 2000 3 2000 4 5 | Yes/no Yes Yes/no Yes Yes/no | OEM Sample/Spec OEM Sample/Spec OEM Sample/Spec |

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

Yes/no **Not Applicable**

Is there a test report about the AMES test of the used toner?

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)

YELLOW

| 1 | 2 | 3 | Average (\bar{A} or V) |
|---|--------------|--------------|---------------------------|
| Yield A: (A1+A2+A3)/3= \bar{A} Yield V: (V1+V2+V3)/3=V | 3510 2000 | 2542 2000 | 2320 2000 |
| Alternative: | | | 2791 2000 |

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 V

Reference to the test protocol:

Test date:

Result: EZ= \bar{A} /V

Is the expected yield (EZ) reached?

Yes

No

Not Applicable

Is the expected page yield reached?

| | | |
|-----|--|--|
| YES | | |
| YES | | |

1,40

Checking the black print/Color reproduction (5.6.2)

Average value of the 2 areas F test print A1: 89,3

Yes/No/Not Applicable

Not Applicable

Average value of the 2 areas F comparing print V1: 89,7

Yes/No/Not Applicable

Yes

Difference is not higher than $\Delta \leq 5$ for Monochrom

Not Applicable

Color difference $\Delta E \leq 18$ for Color 0,4

Average value of the 2 areas F test print A2: 89,1

Yes/No/Not Applicable

Not Applicable

Average value of the 2 areas F comparing print V2: 89,5

Yes/No/Not Applicable

Yes

Difference is not higher than $\Delta \leq 5$ for Monochrom

Not Applicable

Color difference $\Delta E \leq 18$ for Color 0,4

Average value of the 2 areas F test print A3: 89

Yes/No/Not Applicable

Not Applicable

Average value of the 2 areas F comparing print V3: 89,4

Yes/No/Not Applicable

Yes

Difference is not higher than $\Delta \leq 5$ for Monochrom

Not Applicable

Color difference $\Delta E \leq 18$ for Color 0,4

Checking the fade (5.6.3)

YELLOW

Test print A1

| | | | | | |
|-------------------------------------|---|---|---|---|------|
| Color values 1 6 A F after 50 pages | 1 | 6 | A | F | 89,3 |
| Color values 1 6 A F | 1 | 6 | A | F | |

The biggest deviation

1,6

0,1

0,2

0,1

Comparing print V1

1

6

A

F

| | | | | | |
|-------------------------------------|------|------|------|---|------|
| Color values 1 6 A F after 50 pages | 1 | 6 | A | F | 89,7 |
| Color values 1 6 A F | 90,8 | 91,5 | 90,4 | | |

| | | | | |
|--------------------------------------|-----|-----|-----|-----|
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 1,9 | 0,4 | 0,6 | 0,3 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 0,3 | 0,3 | 0,4 | 0,2 |
| Difference within allowed parameters | YES | YES | YES | YES |

Test print A2 YELLOW

| | | | | |
|--------------------------------------|------|------|------|------|
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 92 | 91,2 | 90,3 | 89,1 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 1,4 | 0,2 | 0,8 | 0,2 |
| Comparing print V2 | | | | |
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 90,6 | 91,2 | 90 | 89,1 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 1,3 | 0,3 | 0,5 | 0,7 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 0 | 0,1 | 0,3 | 0,5 |
| Difference within allowed parameters | YES | YES | YES | YES |

Test print A3 YELLOW

| | | | | |
|--------------------------------------|------|------|------|------|
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 92,7 | 91,3 | 89,7 | 88,8 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 0,7 | 0,3 | 0,3 | 0,3 |
| Comparing print V2 | | | | |
| Color values 1 6 A F | 1 | 6 | A | F |
| after 50 pages | 91,7 | 91,3 | 90,1 | 89,3 |
| Color values 1 6 A F | 1 | 6 | A | F |
| The biggest deviation | 1,1 | 0,1 | 0,4 | 0,2 |
| Result determination | 1 | 6 | A | F |
| Difference $\Delta L \leq 8$ | 0,4 | 0,2 | 0,1 | 0,1 |
| 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 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