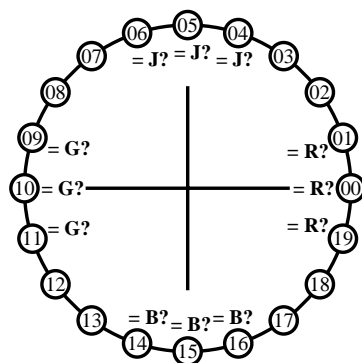


### Agreement with elementary hues (Yes/No decision) Example PostScript Printer

Layout Example: agreement with elementary hues **Test chart 1 (rgb) according to DIN 33872-5**



There are four elementary hues on each page: Red R, Yellow J (=french Jaune), Green G, and Blue B.

Input data 1 0 0 should produce Red  $R=R_e$ .

Input data 0 1 0 should produce Green  $G=G_e$ .

Input data 0 0 1 should produce Blue  $B=B_e$ .

Input data 1 1 0 should produce Yellow  $J=Y_e$ .

The elementary hues Red R and Green G should locate on the horizontal axis.

The elementary hues Yellow J and Blue B should locate on the vertical axis.

This test uses a hue circle with 20 hues.

No. 00 and 10 should be Red R and Green G.

No. 05 and 15 should be Yellow J and Blue B.

Are no. 00, 05, 10, and 15 the four elementary hues R, J, G and B? underline: Yes/No

Only in case of "No": **inapplicable**

Elementary Red R is hue step no. (e. g. 00, 01, 19) ..... (neither yellowish nor blueish)

Elementary Yellow J is hue step no. (e. g. 05, 04, 06) ..... (neither reddish nor greenish)

Elementary Green G is hue step no. (e. g. 10, 09, 11) ..... (neither yellowish nor blueish)

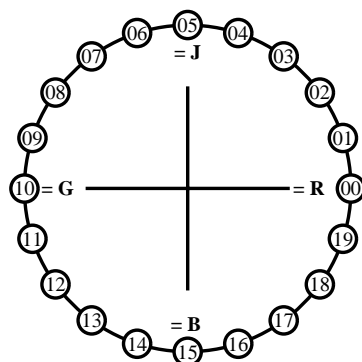
Elementary Blue B is hue step no. (e. g. 15, 14, 16) ..... (neither reddish nor greenish)

Result: Of the 4 elementary hues (e.g. three) ..... are at the intended location

VE650-3, De150-3

### Discriminability of colours with 20 hues (Yes/No decision) Example PostScript Printer

Layout example: discriminability of 20 hues **Test chart 1 (rgb) according to DIN 33872-5**



There are four elementary hues on each page: Red R, Yellow J (=french Jaune), Green G, and Blue B.

Input data 1 0 0 should produce Red  $R=R_e$ .

Input data 0 1 0 should produce Green  $G=G_e$ .

Input data 0 0 1 should produce Blue  $B=B_e$ .

Input data 1 1 0 should produce Yellow  $J=Y_e$ .

Four hue steps are between: Red R and Yellow J, Yellow J and Green G, Green G and Blue B, and Blue B and Red R.

This test uses a hue circle with 20 hues.

All 20 hues should be distinguishable.

For this test it is **not** necessary:

1. All 20 differences are visually equal.

2. Elementary hues locate at 00, 05, 10, and 15.

Are all 20 colours of the 20 hues distinguishable? underline: Yes/No

Only in case of "No":

The colours of the two hue steps no. (e. g. 00 and 01) ..... **00, 01** are not distinguishable

The colours of the two hue steps no. (e. g. 14 and 15) ..... **10, 11** are not distinguishable

The colours of the two hue steps no. (e. g. 15 and 16) ..... **15, 16** are not distinguishable

List other pairs: .....

Result: Of the 20 hue differences (e.g. 18) ..... **17** differences are visible.

VE650-7, De151-3

### Discriminability of 16 step colour series (Yes/No decision)

Layout example: three 16 step colour series **Example PostScript printer**

White W 16 steps, 15 differences

16 steps

Black N 16 steps, 15 differences

Chromatic X

There are three basic colours on each page: Black N, White W and Chromatic X.

Ten pages include 10 hue planes

$X=OYLCVM=(RYGCBM)_d$  and  $RJGB=(RYGB)_e$

There are at maximum 45 distinguishable steps.

**PDF test chart 1 (rgb ->rgb\*a or ->rgb\*e) according to DIN 33872-2, file -> PS printer**

All steps of the three series N-W, W-X and X-N should be distinguishable on all pages.

Are the three 16step series distinguishable on all pages?

underline: Yes/No

in case of No: Are the three 16 step series on Page x of 10 pages distinguishable?

Underline Yes/No and give in case of No the number of distinguishable steps?

Page 1: Yes/No, if No **40**/45 step differences are distinguishable of O = Orange Red

Page 2: Yes/No, if No **40**/45 step differences are distinguishable of Y = Yellow

Page 3: Yes/No, if No **38**/45 step differences are distinguishable of L = Leaf green

Page 4: Yes/No, if No **40**/45 step differences are distinguishable of C = Cyan blue

Page 5: Yes/No, if No **36**/45 step differences are distinguishable of V = Violett blue

Page 6: Yes/No, if No **40**/45 step differences are distinguishable of M = Magenta Red

Page 7: Yes/No, if No **40**/45 step differences are distinguishable of R = Elementary Red

Page 8: Yes/No, if No **40**/45 step differences are distinguishable of J = Elementary yellow

Page 9: Yes/No, if No **39**/45 step differences are distinguishable of G = Elementary Green

Page 10: Yes/No, if No **39**/45 step differences are distinguishable of B = Elementary blue

Sum: **0**/10 Yes-Pages and **392**/450 step differences are distinguishable.

VE651-3, De121-3

### Discriminability of 16 step colour series (Yes/No decision)

Layout example: three 16 step colour series **RECS colour atlas, R8-09 linearized offset print**

White W 16 steps, 15 differences

16 steps

Black N 16 steps, 15 differences

Chromatic X

There are three basic colours on each page: Black N, White W and Chromatic X.

Ten pages include 10 hue planes

$X=OYLCVM=(RYGCBM)_d$  and  $RJGB=(RYGB)_e$

There are at maximum 45 distinguishable steps.

**PDF test chart 1 (rgb ->rgb\*a or ->rgb\*e) according to DIN 33872-2, file -> offset print**

All steps of the three series N-W, W-X and X-N should be distinguishable on all pages.

Are the three 16step series distinguishable on all pages?

underline: Yes/No

in case of No: Are the three 16 step series on Page x of 10 pages distinguishable? **inapplicable**

Underline Yes/No and give in case of No the number of distinguishable steps?

Page 1: Yes/No, if No ../45 step differences are distinguishable of O = Orange Red

Page 2: Yes/No, if No ../45 step differences are distinguishable of Y = Yellow

Page 3: Yes/No, if No ../45 step differences are distinguishable of L = Leaf green

Page 4: Yes/No, if No ../45 step differences are distinguishable of C = Cyan blue

Page 5: Yes/No, if No ../45 step differences are distinguishable of V = Violett blue

Page 6: Yes/No, if No ../45 step differences are distinguishable of M = Magenta Red

Page 7: Yes/No, if No ../45 step differences are distinguishable of R = Elementary Red

Page 8: Yes/No, if No ../45 step differences are distinguishable of J = Elementary yellow

Page 9: Yes/No, if No ../45 step differences are distinguishable of G = Elementary Green

Page 10: Yes/No, if No ../45 step differences are distinguishable of B = Elementary blue

Sum: ../10 Yes-Pages and ../450 step differences are distinguishable

VE651-7, De121-3