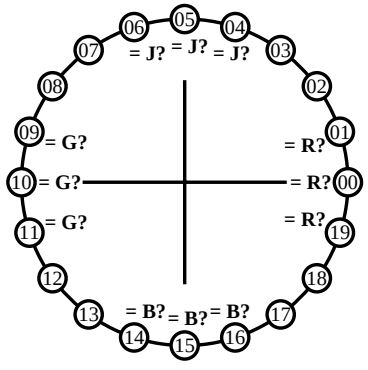
Agreement with elementary hues (Yes/No decision) Example *PostScript* Printer

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

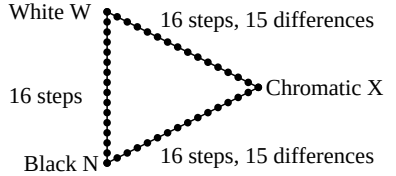
Elementary Red R is hue step no. (e. g. 00, 01, 19)	(neither yellowish nor blueish)
Elementary Yellow J is hue step no. (e. g. 05, 04, 06)	(neither reddish nor greenish)
Elementary Green G is hue step no. (e. g. 10, 09, 11)	(neither yellowish nor blueish)
Elementary Blue B is hue step no. (e. g. 15, 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 16 step colour series (Yes/No decision)

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



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 distinguashable steps.

PDF test chart 1 *(rgb −>rgb*$_d$* 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?

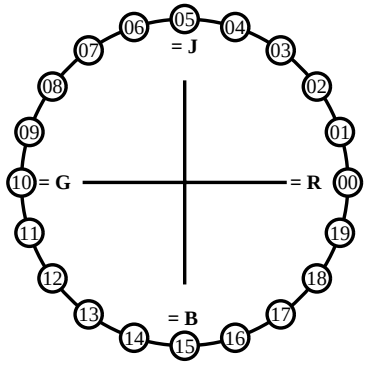
Page 1:	Yes/No, if No	**40**/45	step differences are distinguashable of O = Orange Red
Page 2:	Yes/No, if No	**40**/45	step differences are distinguashable of Y = Yellow
Page 3:	Yes/No, if No	**38**/45	step differences are distinguashable of L = Leaf green
Page 4:	Yes/No, if No	**40**/45	step differences are distinguashable of C = Cyan blue
Page 5:	Yes/No, if No	**36**/45	step differences are distinguashable of V = Violett blue
Page 6:	Yes/No, if No	**40**/45	step differences are distinguashable of M = Magenta Red
Page 7:	Yes/No, if No	**40**/45	step differences are distinguashable of R = Elementary Red
Page 8:	Yes/No, if No	**40**/45	step differences are distinguashable of J = Elementary yellow
Page 9:	Yes/No, if No	**39**/45	step differences are distinguashable of G = Elemantary Green
Page 10:	Yes/No, if No	**39**/45	step differences are distinguashable of B = Elementary blue

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

VE651−3, De121−3

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":

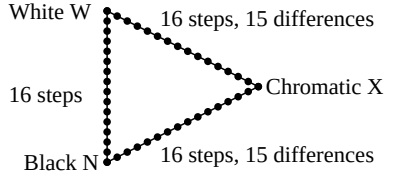
The colours of the two hue steps no. (e. g. 00 and 01)	**00, 01**	are not distinguishable
The colours of the two hue steps no. (e. g. 14 and 15)	**10, 11**	are not distinguishable
The colours of the two hue steps no. (e. g. 15 and 16)	**15, 16**	are not distinguishable

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 **RECS colour atlas, R8−09 linearized offset print**



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 distinguashable steps.

PDF test chart 1 *(rgb −>rgb*$_d$* 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 distinguashable of O = Orange Red
Page 2:	Yes/No, if No	../45	step differences are distinguashable of Y = Yellow
Page 3:	Yes/No, if No	../45	step differences are distinguashable of L = Leaf green
Page 4:	Yes/No, if No	../45	step differences are distinguashable of C = Cyan blue
Page 5:	Yes/No, if No	../45	step differences are distinguashable of V = Violett blue
Page 6:	Yes/No, if No	../45	step differences are distinguashable of M = Magenta Red
Page 7:	Yes/No, if No	../45	step differences are distinguashable of R = Elementary Red
Page 8:	Yes/No, if No	../45	step differences are distinguashable of J = Elementary yellow
Page 9:	Yes/No, if No	../45	step differences are distinguashable of G = Elemantary Green
Page 10:	Yes/No, if No	../45	step differences are distinguashable of B = Elementary blue

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

VE651−7, De121−3

Test charts 1 *(rgb)*, Agreement elementary colours and discriminability of 20 hues (DIN 33872-5); discriminability of 16 step colour scales (DIN 33872-2) input: *rgb−>rgb$_d$/rgb$_e$ setrgbcolor*