

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 353/360 = 0.98$

$H^*_ = B50R_$

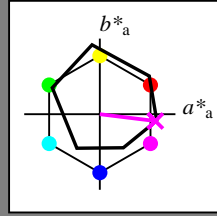
Data for any device (d) or elementary (e) colour:

$HIC^*_$

hue text for the colours of this page:

$H^*_ = B50R_$

triangle lightness T^*



ORS18a; adapted (a) CIELAB data

name	$L^*=L^*_a a^*_a$	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
R _{-,Ma}	47.9	65.3	50.5	82.6	37
Y _{-,Ma}	90.3	-10.2	91.7	92.3	96
G _{-,Ma}	50.9	-62.8	34.9	71.9	150
C _{-,Ma}	58.6	-30.3	-45.0	54.2	236
B _{-,Ma}	25.7	31.0	-44.4	54.2	305
M _{-,Ma}	48.1	75.2	-8.3	75.7	353
N _{-,Ma}	18.0	0.0	0.0	0.0	0
W _{-,Ma}	95.4	0.0	0.0	0.0	0
R _{-,CIE}	39.9	58.7	27.9	65.0	25
Y _{-,CIE}	81.2	-2.8	71.5	71.6	92
G _{-,CIE}	52.2	-42.4	13.6	44.5	162
B _{-,CIE}	30.5	1.4	-46.4	46.4	271

Data for maximum colour (Ma):

$LabCh^*_{-,Ma}$: 49 73 -9 74 353

$HIC^*_{-,Ma}$: B50R_100_100_

$rgbic^*_{-,Ma}$:

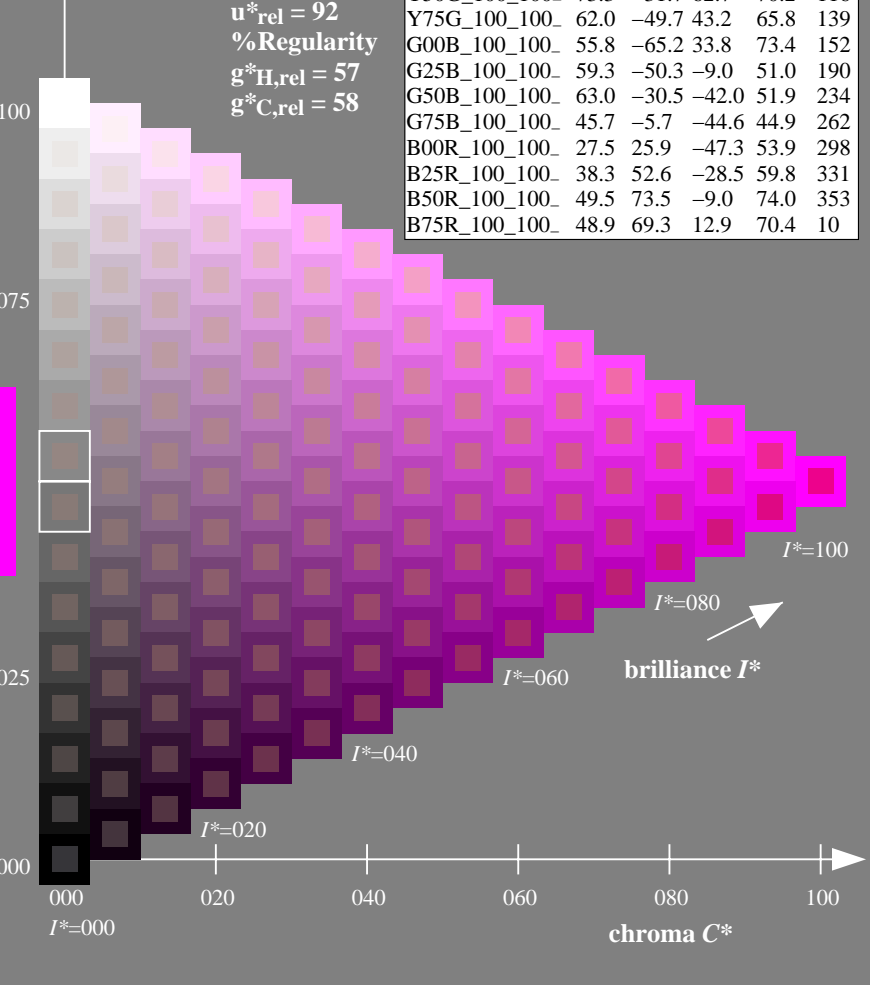
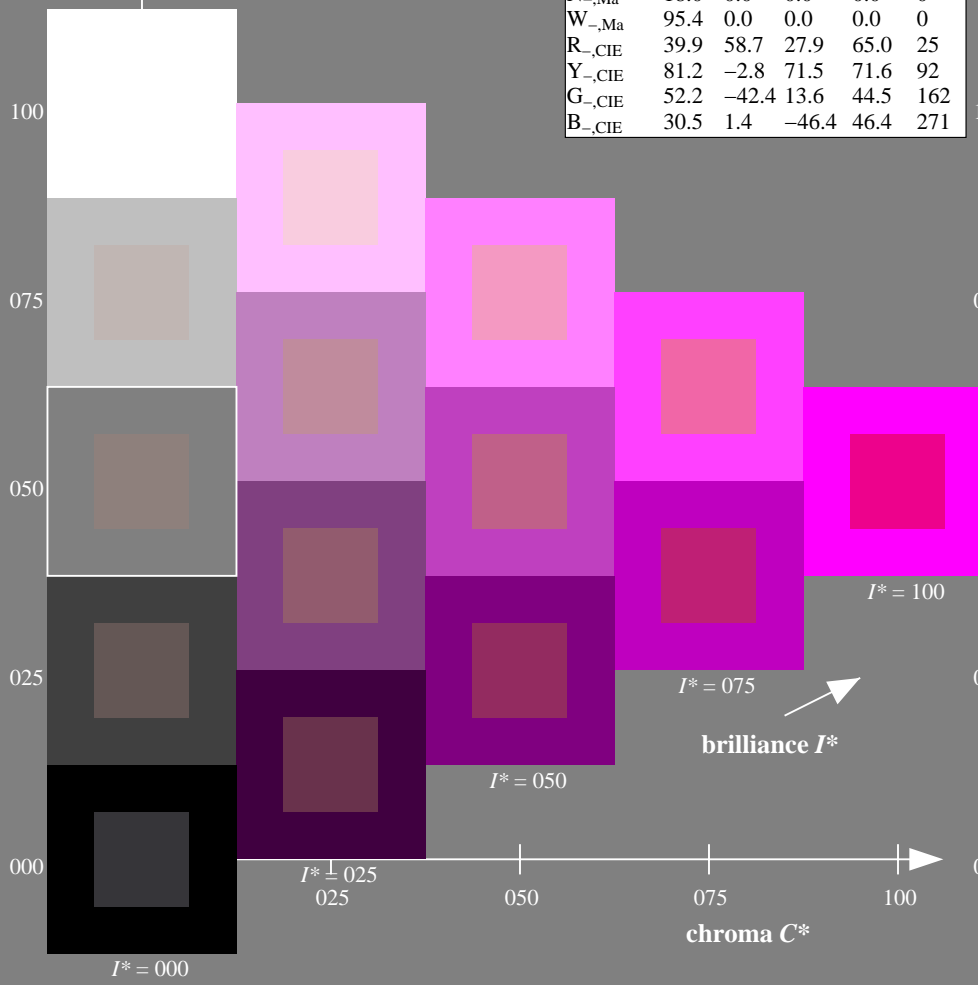
1.0 0.0 1.0 1.0 1.0

triangle lightness T^*

%Gamut
 $u^*_{rel} = 92$
%Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 58$

ORS20a; adapted (a) CIELAB data

$H^*_$	$L^*=L^*_a a^*_a$	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
R00Y_100_100_	48.4	66.1	40.2	77.3	31
R25Y_100_100_	56.8	48.0	50.5	69.6	46
R50Y_100_100_	68.6	25.0	63.9	68.6	68
R75Y_100_100_	80.6	4.8	77.2	77.3	86
Y00G_100_100_	90.2	-9.6	88.2	88.7	96
Y25G_100_100_	83.2	-18.4	79.9	81.9	102
Y50G_100_100_	73.3	-31.7	62.7	70.2	116
Y75G_100_100_	62.0	-49.7	43.2	65.8	139
G00B_100_100_	55.8	-65.2	33.8	73.4	152
G25B_100_100_	59.3	-50.3	-9.0	51.0	190
G50B_100_100_	63.0	-30.5	-42.0	51.9	234
G75B_100_100_	45.7	-5.7	-44.6	44.9	262
B00R_100_100_	27.5	25.9	-47.3	53.9	298
B25R_100_100_	38.3	52.6	-28.5	59.8	331
B50R_100_100_	49.5	73.5	-9.0	74.0	353
B75R_100_100_	48.9	69.3	12.9	70.4	10



see similar files: http://130.149.60.45/~farbmetrik/RE34/RE34.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20150701-RE34/RE34LONP.PDF /.PS
application for measurement of offset print output

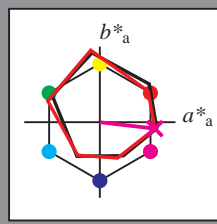
TUB material: code=rh4ta

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 353/360 = 0.98$

$H^*_d = B50R_d$

Data for any device (d) or elementary (e) colour:

HIC^*_d
hue text for the colours of this page:
 $H^*_d = B50R_d$
triangle lightness T^*



ORS20a; adapted (a) CIELAB data

name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{d,Ma}	47.3	63.8	41.2	76.0	32
Y _{d,Ma}	88.3	-11.9	95.1	95.8	97
G _{d,Ma}	51.9	-68.8	28.1	74.3	157
C _{d,Ma}	58.3	-29.2	-43.7	52.6	236
B _{d,Ma}	25.3	23.5	-47.3	52.8	296
M _{d,Ma}	48.2	72.8	-8.5	73.3	353
N _{d,Ma}	17.7	0.0	0.0	0.0	0
W _{d,Ma}	95.4	0.0	0.0	0.0	0
R _{d,CIE}	39.9	58.7	27.9	65.0	25
Y _{d,CIE}	81.2	-2.8	71.5	71.6	92
G _{d,CIE}	52.2	-42.4	13.6	44.5	162
B _{d,CIE}	30.5	1.4	-46.4	46.4	271

Data for maximum colour (Ma):

$LabCh^*_{d,Ma}$: 48 72 -8 73 353

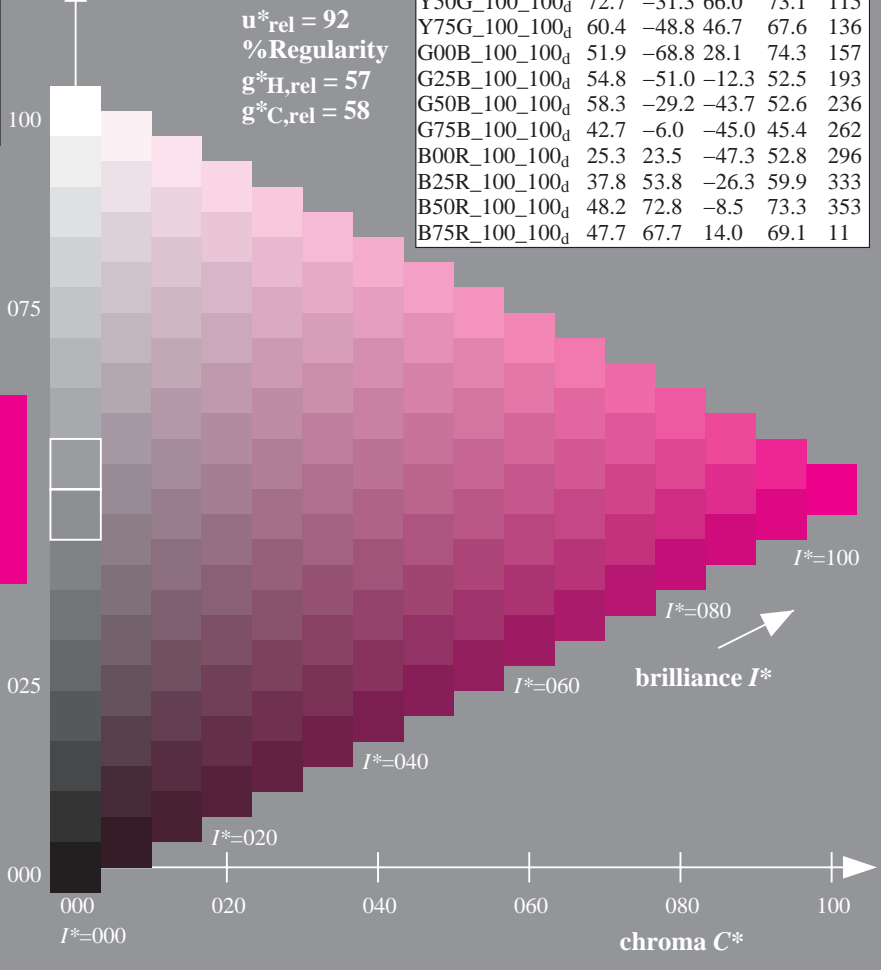
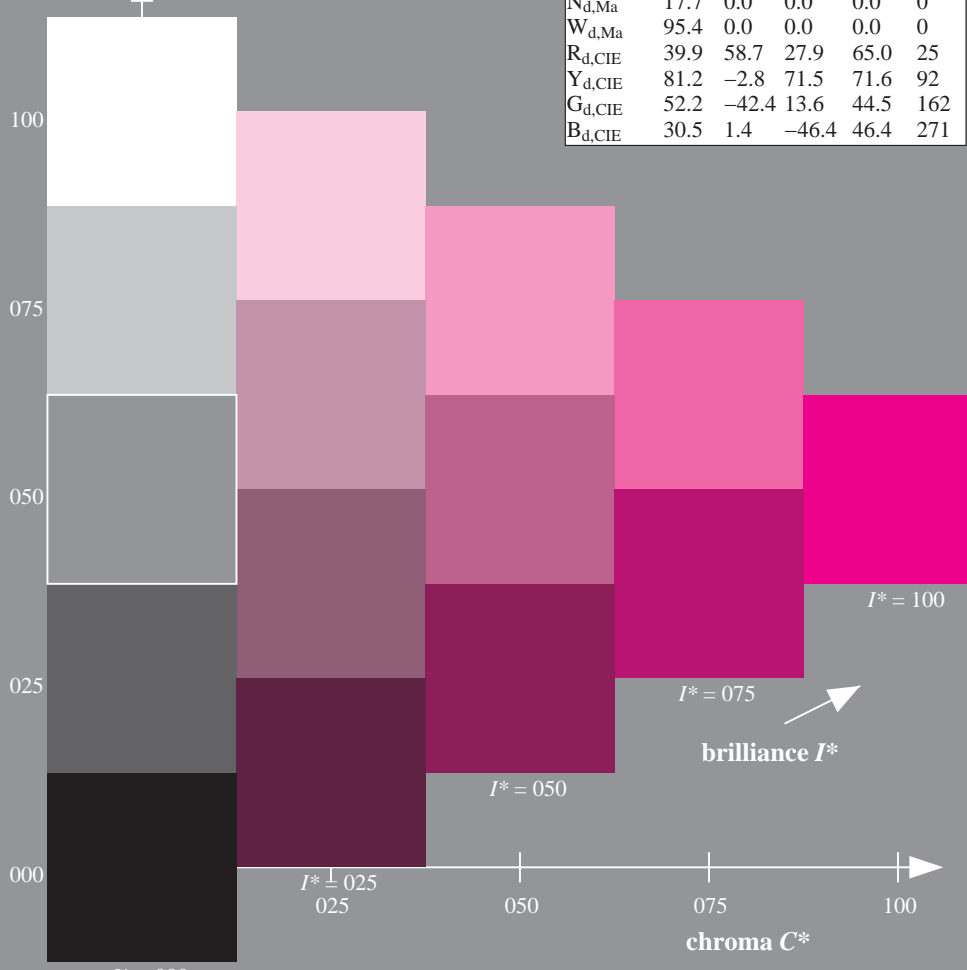
$HIC^*_{d,Ma}$: B50R_100_100d

$rgbic^*_{d,Ma}$:
1.0 0.0 1.0 1.0 1.0

triangle lightness T^*

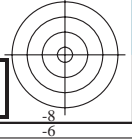
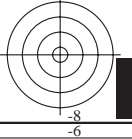
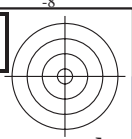
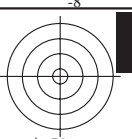
ORS20a; adapted (a) CIELAB data

H^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100d	47.3	63.8	41.2	76.0	32
R25Y_100_100d	55.3	45.8	52.2	69.5	48
R50Y_100_100d	67.2	22.6	67.6	71.2	71
R75Y_100_100d	79.9	1.0	83.9	83.9	89
Y00G_100_100d	88.3	-11.9	95.1	95.8	97
Y25G_100_100d	83.3	-19.2	83.7	85.9	102
Y50G_100_100d	72.7	-31.3	66.0	73.1	115
Y75G_100_100d	60.4	-48.8	46.7	67.6	136
G00B_100_100d	51.9	-68.8	28.1	74.3	157
G25B_100_100d	54.8	-51.0	-12.3	52.5	193
G50B_100_100d	58.3	-29.2	-43.7	52.6	236
G75B_100_100d	42.7	-6.0	-45.0	45.4	262
B00R_100_100d	25.3	23.5	-47.3	52.8	296
B25R_100_100d	37.8	53.8	-26.3	59.9	333
B50R_100_100d	48.2	72.8	-8.5	73.3	353
B75R_100_100d	47.7	67.7	14.0	69.1	11



see similar files: http://130.149.60.45/~farbmetrik/RE34/RE34.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20150701-RE34/RE34LONP.PDF /.PS
application for measurement of offset print output, separation cmykn6 (CMYK)
TUB material: code=rh4ta

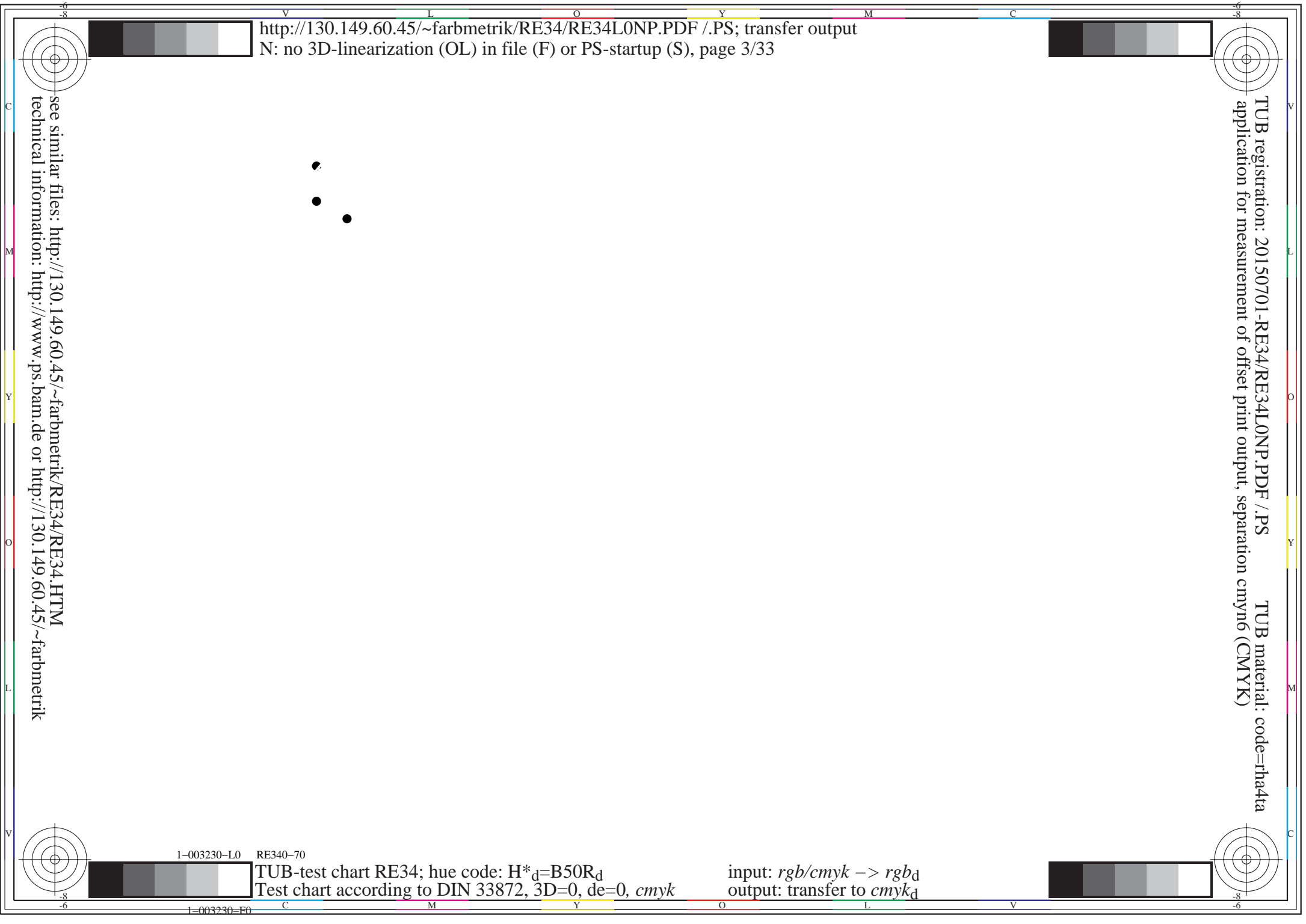


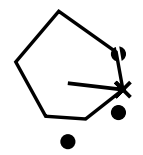
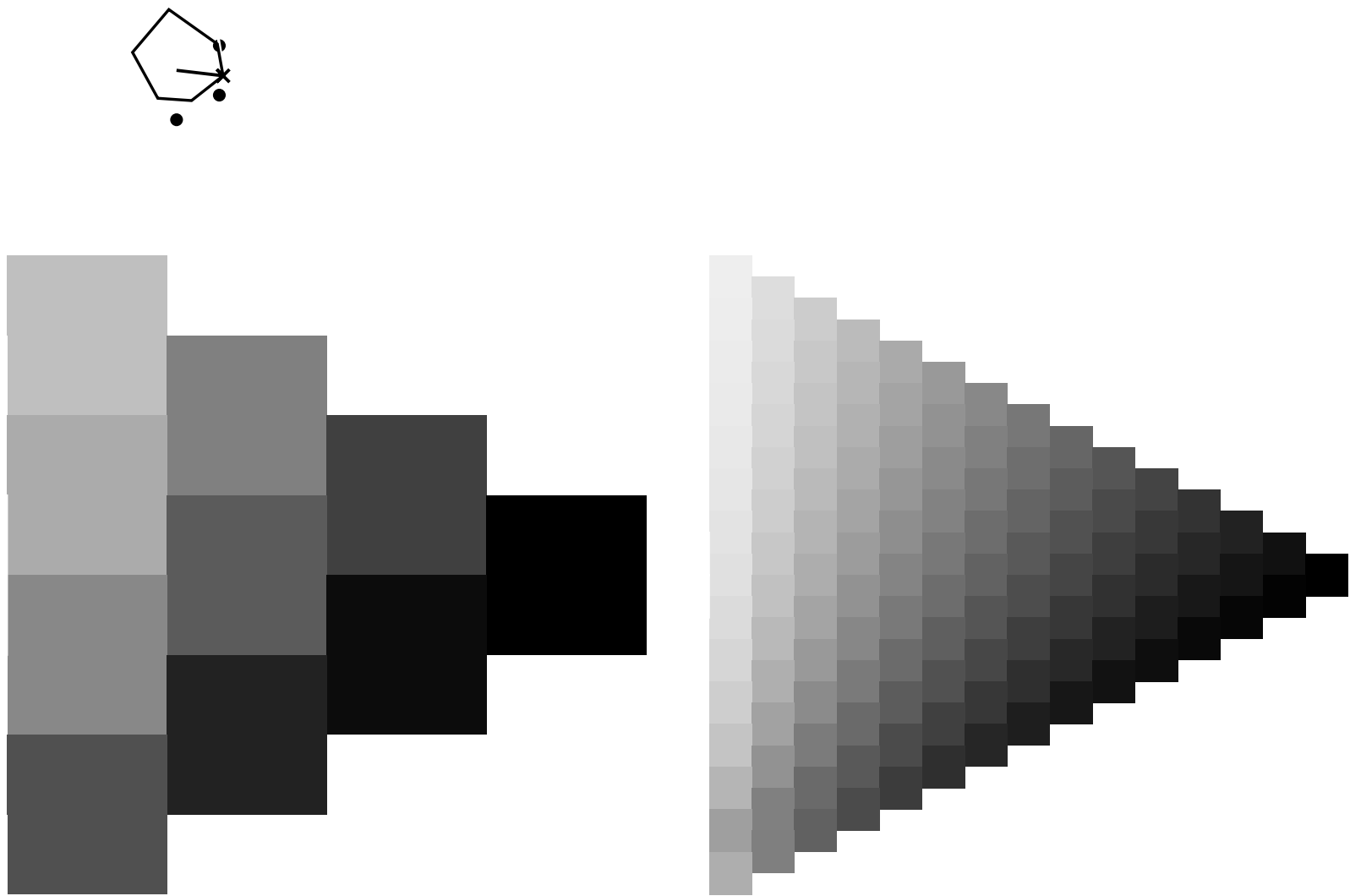
1-003230-L0 RE340-70

TUB-test chart RE34; hue code: $H^*_d=B50R_d$
Test chart according to DIN 33872, 3D=0, de=0, cmyk

input: $rgb/cmyk \rightarrow rgb_d$
output: transfer to $cmyk_d$

1-003230-F0



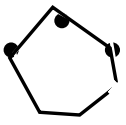


1-003330-L0 RE340-70

TUB-test chart RE34; hue code: $H^*_d=B50R_d$
Test chart according to DIN 33872, 3D=0, de=0, cmyk

input: *rgb/cmyk* -> *rgb_d*
output: transfer to *cmyk_d*

1-003330-E0



Input and Output: Offset Reflective System ORS18a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 353/360 = 0.98$

$H^*_d = B50R_d$

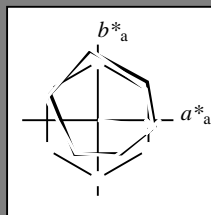
Data for any device (d) or elementary (e) colour:

HIC^*_d

hue text for the colours of this page:

$H^*_d = B50R_d$

triangle lightness T^*



ORS20a; adapted (a) CIELAB data

name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{d, Ma}	47.3	63.8	41.2	76.0	32
Y _{d, Ma}	88.3	-11.9	95.1	95.8	97
G _{d, Ma}	51.9	-68.8	28.1	74.3	157
C _{d, Ma}	58.3	-29.2	-43.7	52.6	236
B _{d, Ma}	25.3	23.5	-47.3	52.8	296
M _{d, Ma}	48.2	72.8	-8.5	73.3	353
N _{d, Ma}	17.7	0.0	0.0	0.0	0
W _{d, Ma}	95.4	0.0	0.0	0.0	0
R _{d, CIE}	39.9	58.7	27.9	65.0	25
Y _{d, CIE}	81.2	-2.8	71.5	71.6	92
G _{d, CIE}	52.2	-42.4	13.6	44.5	162
B _{d, CIE}	30.5	1.4	-46.4	46.4	271

Data for maximum colour (Ma):

$LabCh^*_d, Ma$: 48 72 -8 73 353

HIC^*_d, Ma : B50R_100_100_d

$rgbic^*_d, Ma$:

1.0 0.0 1.0 1.0 1.0

triangle lightness T^*

%Gamut

$u^*_{rel} = 92$

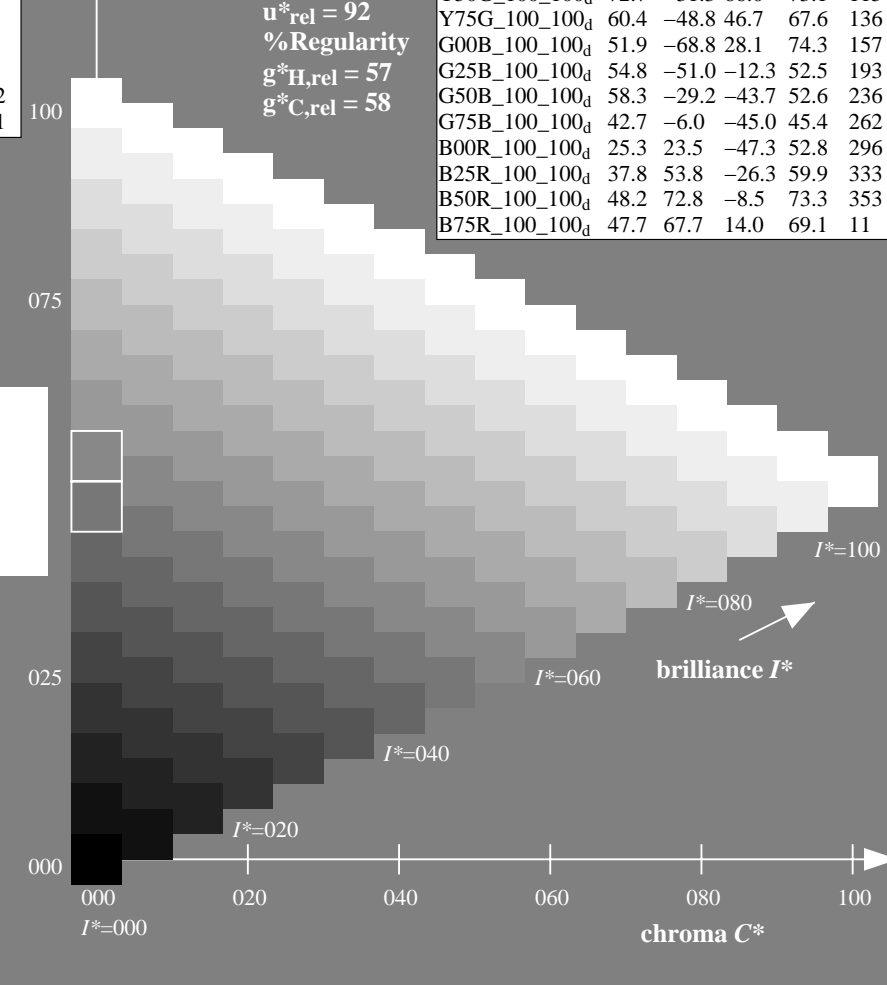
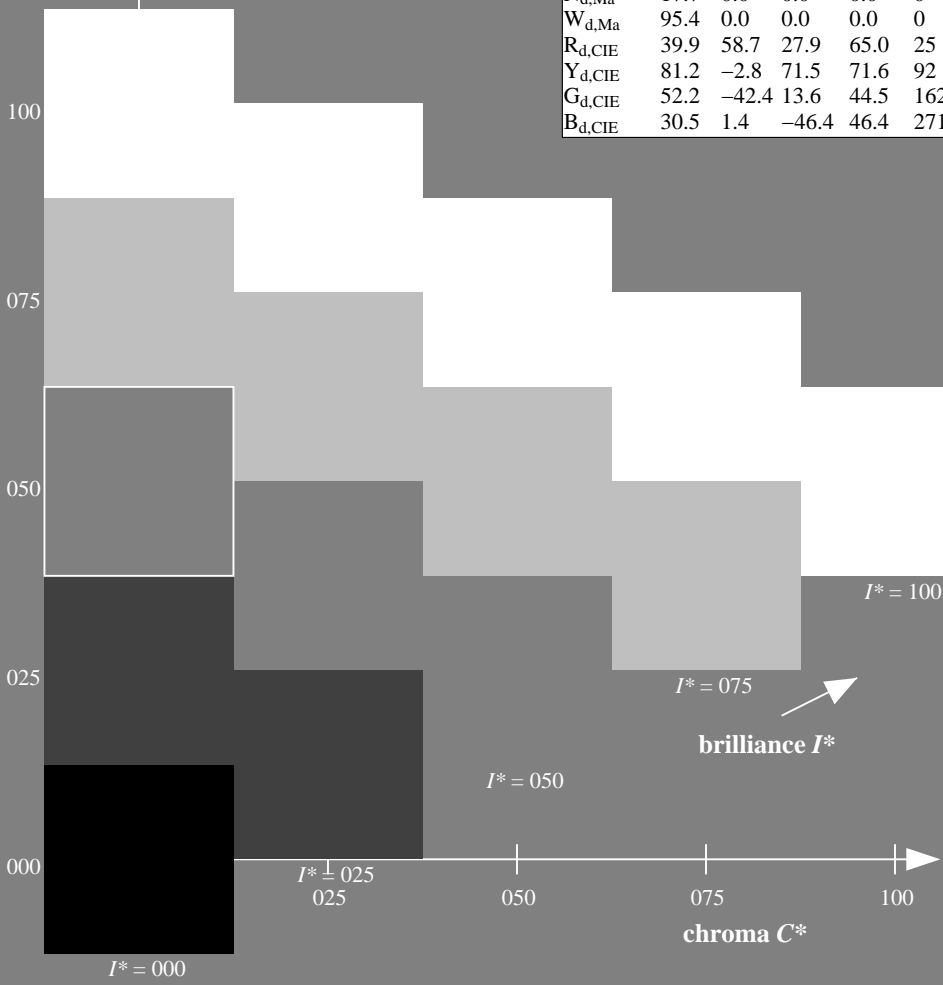
%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 58$

ORS20a; adapted (a) CIELAB data

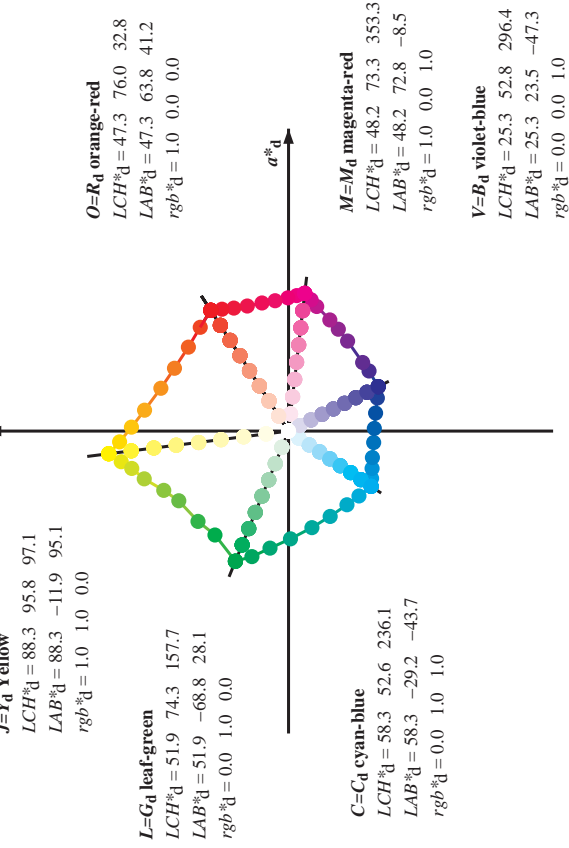
H^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100 _d	47.3	63.8	41.2	76.0	32
R25Y_100_100 _d	55.3	45.8	52.2	69.5	48
R50Y_100_100 _d	67.2	22.6	67.6	71.2	71
R75Y_100_100 _d	79.9	1.0	83.9	83.9	89
Y00G_100_100 _d	88.3	-11.9	95.1	95.8	97
Y25G_100_100 _d	83.3	-19.2	83.7	85.9	102
Y50G_100_100 _d	72.7	-31.3	66.0	73.1	115
Y75G_100_100 _d	60.4	-48.8	46.7	67.6	136
G00B_100_100 _d	51.9	-68.8	28.1	74.3	157
G25B_100_100 _d	54.8	-51.0	-12.3	52.5	193
G50B_100_100 _d	58.3	-29.2	-43.7	52.6	236
G75B_100_100 _d	42.7	-6.0	-45.0	45.4	262
B00R_100_100 _d	25.3	23.5	-47.3	52.8	296
B25R_100_100 _d	37.8	53.8	-26.3	59.9	333
B50R_100_100 _d	48.2	72.8	-8.5	73.3	353
B75R_100_100 _d	47.7	67.7	14.0	69.1	11



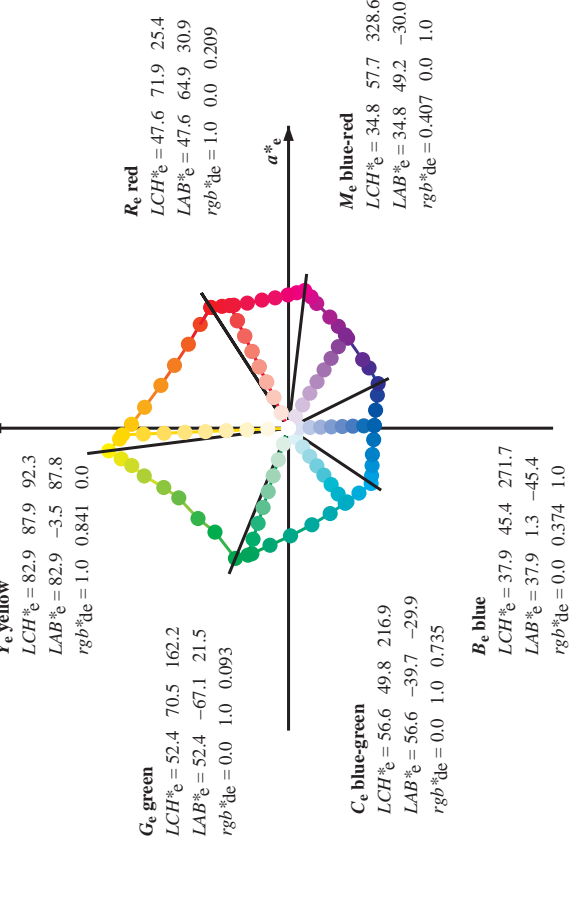
http://130.149.60.45/~farbmetrik/RE34/RE34L0NP.PDF /PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 7/33

Data of Maximum color, M in colorimetric system Offset standard print; separation cmyk6* D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM_d; $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$; Six hue angles of the device colours RYGBM_d; $h_{ab,d} = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3$; Six hue angles of the elementary colours RYGBM_e; $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

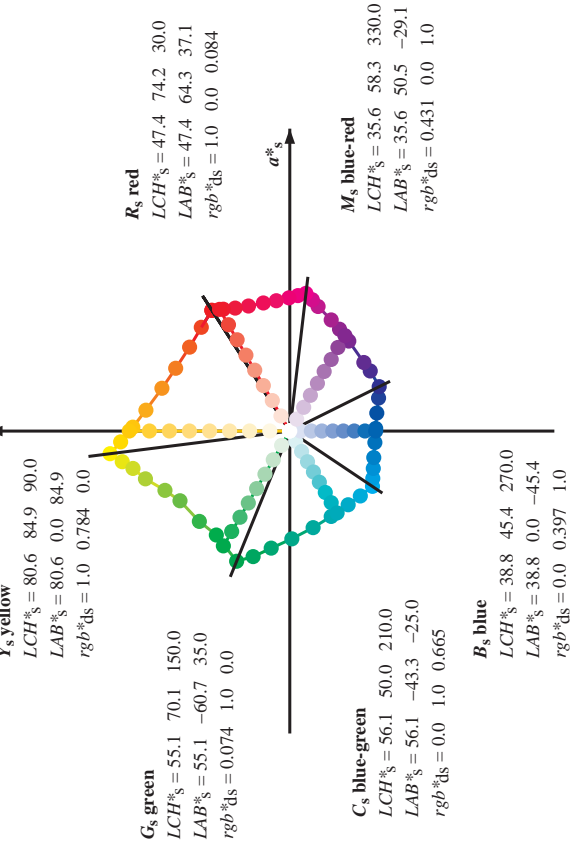
J=Y_d Yellow
O=R_d orange-red
L=G_d leaf-green
C=C_d cyan-blue
M=M_d magenta-red
V=B_d violet-blue



Y_e yellow
G_e green
C_e blue-green
B_e blue
M_e blue-red
R_e red



Y_s yellow
G_s green
C_s blue-green
B_s blue
M_s blue-red
R_s red



Notes to the CIELAB chroma diagrams (a*s, b*s), (a*d, b*d), (a*e, b*e)

- For the rgb^*_s -input values the CIELAB data LCH^*_s and LAB^*_s have been calculated.
- For the calculation of the standard hue angle h_{max} use for any device values rgb^*_s the equation:
 $h_{hs} = \arctan \left[\frac{r^*_s \cos(30) + g^*_s \sin(150)}{r^*_s \sin(30) + g^*_s \sin(150)} \right] + b^*_s \sin(270)$ (1)
- For the 48 or 360 equally spaced standard hue angles h_{es} of the colours of maximum chroma use the seven hue angles of the 60 degree colours s : $h_{es} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0, 390.0$ ($i=0,6$) and the equations for a 48 and 360 step hue circle:
 $h_{48ab,si} = h_{abs,i} + j [h_{abs,i+1} - h_{abs,i}] / 8$ ($i = 0, 1, \dots, 5; j = 0, 1, \dots, 7$) (2)
 $h_{360ab,sij} = h_{abs,i} + j [h_{abs,i+1} - h_{abs,i}] / 60$ ($i = 0, 1, \dots, 5; j = 0, 1, \dots, 59$) (3)
- For the 48 or 360 elementary hue angles h_{es} of the colours of maximum chroma use the seven hue angles of the elementary colours e : $h_{es} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6, 385.5$ ($i=0,6$) and the equations for a 48 and 360 step elementary hue circle:
 $h_{48ab,ei} = h_{abs,i} + j [h_{abs,i+1} - h_{abs,i}] / 8$ ($i = 0, 1, \dots, 5; j = 0, 1, \dots, 7$) (4)
 $h_{360ab,eij} = h_{abs,i} + j [h_{abs,i+1} - h_{abs,i}] / 60$ ($i = 0, 1, \dots, 5; j = 0, 1, \dots, 59$) (5)
- For any elementary hue angle h_{es} there is a well defined device hue angle h_{ds} see the following tables, columns 1 to 4.
- The values rgb^*_s produce the output of the device-independent elementary hues

I-003630-L0 RE340-70 LAB*_{at0}, YN=0%, XY_{Znw}=2.4, 2.5, 2.6, 85.1, 88.8, 104.3, LAB*_{nw}=17.7, 0.0, 0.0, 95.5, 0.0, 0.0
 TUB-test chart RE34; hue code: H*_d=B50Rd
 48 step hue circles; $rgb-LabCh$ *tables

input: $rgb/cmyk \rightarrow rgb_d$
 output: transfer to $cmyk_d$

http://130.149.60.45/~farbmetrik/RE34/RE34L0NP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 9/33

Data of Maximum color, M in colorimetric system Offset standard print; separation cmyk6* D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM; h_ab,ab = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours RYGBM; h_ab,d = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3; Six hue angles of the elementary colours RYGBM; h_ab,e = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

Table with columns: h_ab,d, h_ab,s, h_ab,e, rgb*, dex36IM, LAB* dex36IM, LAB* dex36IM, and a color bar. The table lists 360 rows of color data, including hue angles and corresponding colorimetric values.

Output: Offset standard print; separation cmyk6* D65, page 9/33

input: rgb/cmyk -> rgbd output: transfer to cmykd

LAB*lab0, RE340-70 LAB*lab0, YN=0%, XYZnw=2.4, 2.5, 2.6, 85.1, 88.8, 104.3, LAB*nw=17.7, 0.0, 0.0, 95.5, 0.0, 0.0

TUB-test chart RE34; hue code: H*_d=B50Rd 48 step hue circles; rgb-LabCh*tables

http://130.149.60.45/~farbmetrik/RE34/RE34L0NP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 10/33

Data of Maximum color, M in colorimetric system Offset standard print; separation cmyk6*: D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM; h_ab,ds = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;

Six hue angles of the device colours RYGBM; h_ab,d = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3; Six hue angles of the elementary colours RYGBM; h_ab,e = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

Table with 10 columns: h_ab,d, h_ab,s, h_ab,e, Rgb*, Lab*, Lab*, Lab*, Lab*, Lab*, Lab*, Lab*. Rows 32-88.

LAB*da0, YN=0%, XYZnw=2.4, 2.5, 2.6, 85.1, 88.8, 104.3, LAB*rw=17.7, 0.0, 0.0, 95.5, 0.0, 0.0

TUB-test chart RE34; hue code: H*_d=B50Rd 48 step hue circles; rgb-LabCh*tables input: rgb/cmyk -> rgbd output: transfer to cmykd

Output: Offset standard print; separation cmyk6*: D65, page 10/33

http://130.149.60.45/~farbmetrik/RE34/RE34L0NP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 12/33

Data of Maximum color, M in colorimetric system Offset standard print; separation cmyk6*: D65 for input or output; Six hue angles of the 60 degree standard colours RYGBCM; h_ab,ab = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;

Table with 17 columns: h_ab,d, h_ab,s, h_ab,e, rgb*_dd361M, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI, LAB*_dcs361MI. Rows 115-170.

Six hue angles of the device colours RYGBCM; h_ab,d = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3; Six hue angles of the elementary colours RYGBCM; h_ab,e = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

TUB-test chart RE34; hue code: H*_d=B50Rd 48 step hue circles; rgb-LabCh*tables

input: rgb/cmyk -> rgbd

output: transfer to cmykd

Output: Offset standard print; separation cmyk6*: D65, page 12/33

Data of Maximum color, M in colorimetric system Offset standard print; separation cmyk6*; D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM; h _{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;																																									
Six hue angles of the device colours RYGBM; h _{ab,d} = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3; Six hue angles of the elementary colours RYGBM; h _{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6																																									
h _{ab,d}	h _{ab,s}	h _{ab,e}	rgb* _{ds}	rgb* _{ds361MI}	LAB* _{ds361MI} (x=LabCh)	rgb* _{ds}	rgb* _{ds361MI}	LAB* _{ds361MI} (x=LabCh)	rgb* _{ds}	rgb* _{ds361MI}	LAB* _{ds361MI} (x=LabCh)	rgb* _{ds}	rgb* _{ds361MI}	LAB* _{ds361MI} (x=LabCh)																											
236	210	216	0.0	1.0	58.3	-29.2	-43.7	52.6	236	0.0	1.0	0.666	56.1	-43.2	-24.9	50.0	210C _s	0.0	1.0	1.0	0.983	1.0	0.0	1.0	0.736	56.7	-39.7	-29.9	49.8	216C _s	0.0	1.0	0.745	56.7	-39.2	-30.5	49.8	217	0.0	0.983	1.0
237	212	218	0.0	0.966	1.0	57.5	-28.1	-43.8	52.0	237	0.0	1.0	0.686	56.3	-42.3	-26.4	50.0	212	0.0	0.967	1.0	0.0	1.0	0.755	56.8	-38.7	-31.1	49.8	218	0.0	0.967	1.0									
238	214	220	0.0	0.933	1.0	56.7	-26.9	-43.9	51.8	238	0.0	1.0	0.706	56.4	-41.8	-27.1	49.9	213	0.0	0.95	1.0	0.0	1.0	0.768	56.9	-38.3	-31.8	49.9	219	0.0	0.95	1.0									
239	216	222	0.0	0.916	1.0	56.2	-26.4	-43.9	51.2	239	0.0	1.0	0.716	56.5	-41.3	-27.8	49.9	214	0.0	0.933	1.0	0.0	1.0	0.781	57.0	-37.8	-32.4	50.0	220	0.0	0.933	1.0									
240	217	223	0.0	0.883	1.0	55.4	-25.2	-43.9	50.7	240	0.0	1.0	0.726	56.6	-40.2	-29.2	49.8	216	0.0	0.917	1.0	0.0	1.0	0.807	57.1	-36.9	-33.8	50.2	222	0.0	0.917	1.0									
241	219	225	0.0	0.866	1.0	55.0	-24.6	-43.9	50.4	241	0.0	1.0	0.746	56.7	-39.1	-30.5	49.8	218	0.0	0.867	1.0	0.0	1.0	0.832	57.3	-36.0	-35.1	50.4	224	0.0	0.867	1.0									
242	221	227	0.0	0.833	1.0	54.1	-23.2	-44.0	49.8	242	0.0	1.0	0.756	56.7	-39.7	-29.9	49.8	217	0.0	0.883	1.0	0.0	1.0	0.845	57.4	-35.5	-35.7	50.5	225	0.0	0.883	1.0									
243	222	227	0.0	0.8	1.0	53.1	-21.8	-44.1	49.2	243	0.0	1.0	0.758	56.8	-38.6	-31.2	49.8	219	0.0	0.85	1.0	0.0	1.0	0.858	57.5	-35.0	-36.3	50.6	226	0.0	0.858	1.0									
244	223	228	0.0	0.783	1.0	52.7	-21.1	-44.1	48.9	244	0.0	1.0	0.786	57.0	-37.7	-32.7	50.0	220	0.0	0.833	1.0	0.0	1.0	0.871	57.5	-34.4	-37.0	50.7	227	0.0	0.871	1.0									
245	224	229	0.0	0.766	1.0	52.2	-20.4	-44.1	48.6	245	0.0	1.0	0.814	57.2	-36.6	-34.2	50.2	223	0.0	0.8	1.0	0.0	1.0	0.884	57.6	-33.9	-37.6	50.8	227	0.0	0.8	1.0									
246	226	231	0.0	0.733	1.0	51.2	-19.7	-44.1	48.3	246	0.0	1.0	0.828	57.3	-36.1	-34.9	50.3	224	0.0	0.767	1.0	0.0	1.0	0.896	57.7	-33.5	-38.3	51.0	228	0.0	0.767	1.0									
247	227	232	0.0	0.716	1.0	50.7	-18.9	-44.2	48.1	247	0.0	1.0	0.842	57.4	-35.6	-35.6	50.4	225	0.0	0.75	1.0	0.0	1.0	0.922	57.8	-33.0	-39.7	51.4	230	0.0	0.75	1.0									
248	228	233	0.0	0.7	1.0	50.1	-17.4	-44.3	47.6	248	0.0	1.0	0.856	57.5	-35.0	-36.3	50.5	226	0.0	0.733	1.0	0.0	1.0	0.935	57.9	-32.0	-40.4	51.6	231	0.0	0.733	1.0									
249	229	234	0.0	0.683	1.0	49.6	-16.6	-44.3	47.4	249	0.0	1.0	0.87	57.5	-34.4	-36.9	50.7	227	0.0	0.717	1.0	0.0	1.0	0.948	58.0	-31.5	-41.0	51.8	232	0.0	0.717	1.0									
250	230	235	0.0	0.666	1.0	49.1	-15.8	-44.4	47.1	250	0.0	1.0	0.899	57.7	-33.4	-38.4	51.1	229	0.0	0.683	1.0	0.0	1.0	0.961	58.1	-30.9	-41.7	52.0	233	0.0	0.7	1.0									
251	231	236	0.0	0.65	1.0	48.5	-15.0	-44.4	46.9	251	0.0	1.0	0.913	57.8	-32.9	-39.2	51.3	230	0.0	0.667	1.0	0.0	1.0	0.974	58.2	-30.4	-42.3	52.2	234	0.0	0.667	1.0									
252	232	237	0.0	0.633	1.0	48.0	-14.3	-44.4	46.6	252	0.0	1.0	0.927	57.9	-32.3	-39.9	51.5	231	0.0	0.65	1.0	0.0	1.0	0.987	58.3	-29.8	-43.0	52.4	235	0.0	0.65	1.0									
253	233	237	0.0	0.616	1.0	47.4	-13.4	-44.5	46.4	253	0.0	1.0	0.941	58.0	-31.7	-40.7	51.7	232	0.0	0.633	1.0	0.0	1.0	0.994	58.3	-29.2	-43.6	52.6	236	0.0	0.633	1.0									
254	234	238	0.0	0.6	1.0	46.7	-12.3	-44.6	46.3	254	0.0	1.0	0.955	58.1	-31.2	-41.4	51.9	233	0.0	0.617	1.0	0.0	1.0	1.0	58.2	-27.4	-43.8	51.8	237	0.0	0.617	1.0									
255	235	239	0.0	0.583	1.0	46.1	-11.3	-44.7	46.1	255	0.0	1.0	0.969	58.2	-30.6	-42.1	52.2	234	0.0	0.6	1.0	0.0	1.0	1.0	58.3	-26.4	-43.8	51.3	238	0.0	0.6	1.0									
256	236	240	0.0	0.566	1.0	45.4	-10.2	-44.8	46.0	256	0.0	1.0	0.983	58.2	-29.9	-42.8	52.4	235	0.0	0.583	1.0	0.0	1.0	1.0	58.4	-25.5	-43.8	50.8	239	0.0	0.583	1.0									
257	237	241	0.0	0.55	1.0	44.7	-9.1	-44.9	45.8	257	0.0	1.0	0.997	58.3	-29.3	-43.5	52.6	236	0.0	0.567	1.0	0.0	1.0	1.0	58.5	-24.6	-43.9	50.4	240	0.0	0.567	1.0									
258	238	242	0.0	0.533	1.0	44.1	-8.1	-45.0	45.7	258	0.0	1.0	1.0	58.3	-28.4	-43.7	52.2	237	0.0	0.55	1.0	0.0	1.0	1.0	58.6	-23.7	-44.0	50.1	241	0.0	0.55	1.0									
259	239	243	0.0	0.516	1.0	43.4	-7.0	-45.0	45.5	259	0.0	1.0	0.946	1.0	57.0	-27.3	-43.8	51.7	238	0.0	0.533	1.0	0.0	1.0	1.0	58.7	-22.8	-44.0	49.7	242	0.0	0.533	1.0								
260	240	244	0.0	0.5	1.0	42.7	-6.0	-45.0	45.4	260	0.0	1.0	0.916	1.0	56.3	-26.3	-43.8	51.2	239	0.0	0.517	1.0	0.0	1.0	1.0	58.8	-22.0	-44.0	49.3	243	0.0	0.517	1.0								
261	241	245	0.0	0.483	1.0	42.1	-5.0	-45.1	45.4	261	0.0	1.0	0.886	1.0	55.5	-25.3	-43.8	50.7	240	0.0	0.5	1.0	0.0	1.0	1.0	58.9	-21.1	-44.1	49.0	244	0.0	0.5	1.0								
262	242	246	0.0	0.466	1.0	41.4	-4.0	-45.2	45.4	262	0.0	1.0	0.861	1.0	54.9	-24.3	-43.9	50.3	241	0.0	0.483	1.0	0.0	1.0	1.0	59.0	-20.2	-44.1	48.6	245	0.0	0.483	1.0								
263	243	247	0.0	0.45	1.0	40.8	-3.0	-45.3	45.4	263	0.0	1.0	0.838	1.0	54.2	-23.3	-44.0	49.9	242	0.0	0.467	1.0	0.0	1.0	1.0	59.1	-19.4	-44.1	48.3	246	0.0	0.467	1.0								
264	244	248	0.0	0.433	1.0	40.2	-2.1	-45.3	45.4	264	0.0	1.0	0.815	1.0	53.6	-22.4	-44.0	49.5	243	0.0	0.45	1.0	0.0	1.0	1.0	59.2	-18.6	-44.2	48.1	247	0.0	0.45	1.0								
265	245	249	0.0	0.416	1.0	39.5	-1.1	-45.4	45.4	265	0.0	1.0	0.793	1.0	53.0	-21.4	-44.1	49.1	244	0.0	0.433	1.0	0.0	1.0	1.0	59.3	-17.8	-44.2	47.8	248	0.0	0.433	1.0								
266	246	250	0.0	0.4	1.0	38.9	-0.1	-45.4	45.4	266	0.0	1.0	0.77	1.0	52.3	-20.5	-44.1	48.7	245	0.0	0.417	1.0	0.0	1.0	1.0	59.4	-17.0	-44.3	47.6	248	0.0	0.417	1.0								
267	247	251	0.0	0.383	1.0	38.2	0.8	-45.4	45.4	267	0.0	1.0	0.748	1.0	51.7	-19.6	-44.1	48.4	246	0.0	0.4	1.0	0.0	1.0	1.0	59.5	-16.2	-44.3	47.3	249	0.0	0.4	1.0								
268	248	252	0.0	0.366	1.0	37.6	1.8	-45.5	45.5	268	0.0	1.0	0.729	1.0	51.1	-18.7	-44.2	48.1	247	0.0	0.383	1.0	0.0	1.0	1.0	59.6	-15.4	-44.3	47.1	250	0.0	0.383	1.0								
269	249	253	0.0	0.35	1.0	37.0	2.9	-45.6	45.7	269	0.0	1.0	0.711	1.0	50.5	-17.8	-44.2	47.8	248	0.0	0.367	1.0	0.0	1.0	1.0	59.7	-14.6	-44.3	46.8	251	0.0	0.367	1.0								
270	250	254	0.0	0.333	1.0	36.4	4.0	-45.7	45.9	270	0.0	1.0	0.692	1.0	49.9	-16.9	-44.3	47.5	249	0.0	0.35	1.0	0.0	1.0	1.0	59.8	-13.8	-44.3	46.6	252	0.0	0.35	1.0								
271	251	255	0.0	0.316	1.0	35.7	5.1	-45.8	46.1	271	0.0	1.0	0.673	1.0	49.3	-16.1	-44.3	47.3	250	0.0	0.333	1.0	0.0	1.0	1.0	59.9	-13.1	-44.4	46.5	253	0.0	0.333	1.0								
272	252	256	0.0	0.3	1.0	35.1	6.1	-45.9	46.3	272	0.0	1.0	0.654	1.0	48.7	-15.2	-44.3	47.0	251	0.0	0.317	1.0	0.0	1.0	1.0	60.0	-12.4	-44.4	46.4	254	0.0	0.317	1.0								
273	253	257	0.0	0.283	1.0	34.5	7.2	-46.0	46.5	273	0.0	1.0	0.636	1.0	48.1	-14.3	-44.4	46.7	252	0.0	0.3	1.0	0.0	1.0	1.0	60.1	-11.6	-44.6	46.3	255	0.0	0.3	1.0								
274	254	258	0.0	0.266	1.0	33.9	8.3	-46.0	46.7	274	0.0	1.0	0.62	1.0	47.6	-13.5	-44.4	46.6	253	0.0	0.283	1.0	0.0	1.0	1.0	60.2	-10.9	-44.7	46.1	256	0.0	0.283	1.0								
275	255	259	0.0	0.25	1.0	33.3	9.4	-46.0	47.0	275	0.0	1.0	0.607	1.0	47.1	-12.7	-44.5	46.4	254	0.0	0.267	1.0	0.0	1.0	1.0	60.3	-10.2	-44.8	46.0	257	0.0	0.267	1.0								
276	256	2																																							

http://130.149.60.45/~farbmetrik/RE34/RE34LONP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 21/33

Table with 16 columns: n, HHC*Fd, rgb*Fd, icr*Fd, hsa*Fd, rgb*Fd, LabCH*Fd, LabCH*Fd, LabCH*Fd, LabCH*Fd, LabCH*Fd, LabCH*Fd, LabCH*Fd, LabCH*Fd, LabCH*Fd, LabCH*Fd. Rows 81-161.

input: rgb/cmyk -> rgbd output: transfer to cmykd

TUB-test chart RE34; hue code: H*d=B50Rd colors and differences, AE*

Mean color difference of this page: delta E* = 4.9

http://130.149.60.45/~farbmetrik/RE34/RE34LONP.PDF /PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 24/33

Table with 15 columns: n, HHC*Fd, rpb*Fd, icr*Fd, hsa*Fd, rpb*Fd, LabC*Fd, LabCH*Fd, DF*Fd, hsa*Fd, rpb*Fd, LabCH*Fd, DF*Fd, hsa*Fd, rpb*Fd. It contains color calibration data for various color patches.

Mean color difference of this page: delta E* = 5.3 input: rgb/cmyk -> rgbd output: transfer to cmykd

http://130.149.60.45/~farbmetrik/RE34/RE34LONP.PDF /PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 26/33

Table with 15 columns: n, HHC*Fd, rpb*Fd, icr*Fd, hsa*Fd, rpb*Fd, LabCH*Fd, LabCH*Fd, rpb*Fd, rpb*Fd, LabCH*Fd, DF*Fd, hsa*Fd, rpb*Fd, LabCH*Fd. Rows contain numerical data for various color patches.

Mean color difference of this page: delta E* = 4.6

TUB-test chart RE34; hue code: H*d=B50Rd colors and differences, AE* input: rgb/cmyk -> rgbd output: transfer to cmykd

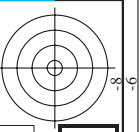
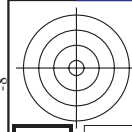
RE340-TN, Page 26/33-F

I-0032530-F0

http://130.149.60.45/~farbmetrik/RE34/RE34LONP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 27/33

Table with 15 columns: n, HHC*Fd, rpb*Fd, icr*Fd, hsa*Fd, rpb*Fd, LabCH*Fd, LabCH*Fd, LabCH*Fd, rpb*Fd, rpb*Fd, LabCH*Fd, LabCH*Fd, LabCH*Fd, rpb*Fd. Rows contain numerical data for various color patches.

Mean color difference of this page: delta E* = 4.8
input: rgb/cmyk -> rgbd
output: transfer to cmykd

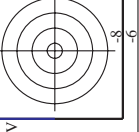
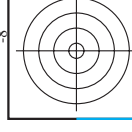


http://130.149.60.45/~farbmetrik/RE34/RE34L0NP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 32/33

Table with 15 columns: n, H#C*Fd, rpb*Fd, iet*Fd, hsa*Fd, rpb*Fd, LabC*Fd, LabC*Fd, rpb*Fd, LabC*Fd, rpb*Fd, LabC*Fd, rpb*Fd, LabC*Fd, LabC*Fd. Rows 972-1052.

Mean color difference of this page: delta E** = 5.5

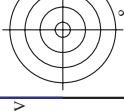
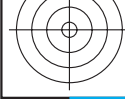
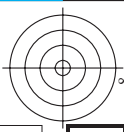
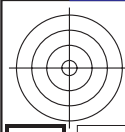
input: rgb/cmyk -> rgbd output: transfer to cmykd



RE340-TN, Page 32/33-F

TUB-test chart RE34; hue code: H*_d=B50Rd colors and differences, AE**

I-0033130-F0



http://130.149.60.45/~farbmetrik/RE34/RE34L0NP.PDF /.PS; transfer output
 N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 33/33

n	HC*Fd	rgb*Fd	icr*Fd	isr*Fd	rgb*Fd	LabCH*Fd	isr*Fd	LabCH*Fd	rgb*Fd	LabCH*Fd	DF*Fd	Hs*Fd	rgb*Fd	LabCH*Fd	Hs*Fd	DF*Fd	rgb*Fd	LabCH*Fd	Hs*Fd
1053	NW_086d	0.866	0.866	0.866	0.866	0.866	0.866	85.0	0.0	0.0	0.0	360	0.866	0.866	0.866	0.0	0.0	0.0	360
1054	NW_093d	0.933	0.933	0.933	0.933	0.933	0.933	90.2	0.0	0.0	0.0	360	0.933	0.933	0.933	0.0	0.0	0.0	360
1055	NW_100d	1.0	1.0	1.0	1.0	1.0	1.0	95.4	0.0	0.0	0.0	360	1.0	1.0	1.0	0.0	0.0	0.0	360
1056	NW_100d	0.0	0.0	0.0	0.0	0.0	0.0	17.7	0.0	0.0	0.0	360	0.0	0.0	0.0	0.0	0.0	0.0	360
1057	NW_100d	0.066	0.066	0.066	0.066	0.066	0.066	22.8	0.0	0.0	0.0	360	0.066	0.066	0.066	0.0	0.0	0.0	360
1058	NW_013d	0.133	0.133	0.133	0.133	0.133	0.133	33.2	0.0	0.0	0.0	360	0.133	0.133	0.133	0.0	0.0	0.0	360
1059	NW_020d	0.2	0.2	0.2	0.2	0.2	0.2	33.2	0.0	0.0	0.0	360	0.2	0.2	0.2	0.0	0.0	0.0	360
1060	NW_026d	0.266	0.266	0.266	0.266	0.266	0.266	38.3	0.0	0.0	0.0	360	0.266	0.266	0.266	0.0	0.0	0.0	360
1061	NW_033d	0.333	0.333	0.333	0.333	0.333	0.333	43.6	0.0	0.0	0.0	360	0.333	0.333	0.333	0.0	0.0	0.0	360
1062	NW_040d	0.4	0.4	0.4	0.4	0.4	0.4	48.8	0.0	0.0	0.0	360	0.4	0.4	0.4	0.0	0.0	0.0	360
1063	NW_046d	0.466	0.466	0.466	0.466	0.466	0.466	53.9	0.0	0.0	0.0	360	0.466	0.466	0.466	0.0	0.0	0.0	360
1064	NW_053d	0.533	0.533	0.533	0.533	0.533	0.533	59.1	0.0	0.0	0.0	360	0.533	0.533	0.533	0.0	0.0	0.0	360
1065	NW_060d	0.6	0.6	0.6	0.6	0.6	0.6	64.3	0.0	0.0	0.0	360	0.6	0.6	0.6	0.0	0.0	0.0	360
1066	NW_066d	0.666	0.666	0.666	0.666	0.666	0.666	69.5	0.0	0.0	0.0	360	0.666	0.666	0.666	0.0	0.0	0.0	360
1067	NW_073d	0.734	0.734	0.734	0.734	0.734	0.734	74.7	0.0	0.0	0.0	360	0.734	0.734	0.734	0.0	0.0	0.0	360
1068	NW_080d	0.8	0.8	0.8	0.8	0.8	0.8	79.9	0.0	0.0	0.0	360	0.8	0.8	0.8	0.0	0.0	0.0	360
1069	NW_086d	0.866	0.866	0.866	0.866	0.866	0.866	85.0	0.0	0.0	0.0	360	0.866	0.866	0.866	0.0	0.0	0.0	360
1070	NW_093d	0.933	0.933	0.933	0.933	0.933	0.933	90.2	0.0	0.0	0.0	360	0.933	0.933	0.933	0.0	0.0	0.0	360
1071	NW_100d	1.0	1.0	1.0	1.0	1.0	1.0	95.4	0.0	0.0	0.0	360	1.0	1.0	1.0	0.0	0.0	0.0	360
1072	NW_100d	0.0	0.0	0.0	0.0	0.0	0.0	17.7	0.0	0.0	0.0	360	0.0	0.0	0.0	0.0	0.0	0.0	360
1073	NW_100d	1.0	1.0	1.0	1.0	1.0	1.0	95.4	0.0	0.0	0.0	360	1.0	1.0	1.0	0.0	0.0	0.0	360
1074	ROY_100_100d	1.0	0.0	0.0	0.0	0.0	0.0	47.3	63.8	41.2	76.0	32.8	1.0	0.0	0.0	0.0	0.0	0.0	360
1075	GY0B_100_100d	0.0	1.0	0.0	0.0	0.0	0.0	58.3	-29.2	-43.7	52.6	236.1	0.0	1.0	0.0	0.0	0.0	0.0	360
1076	Y00C_100_100d	0.0	0.0	1.0	0.0	0.0	0.0	88.3	-11.9	95.1	95.8	97.1	0.0	0.0	1.0	0.0	0.0	0.0	360
1077	BY0R_100_100d	0.0	0.0	0.0	1.0	0.0	0.0	25.3	23.8	47.3	52.8	266.4	0.0	0.0	0.0	1.0	0.0	0.0	360
1078	BY0R_100_100d	0.0	0.0	0.0	0.0	1.0	0.0	5.1	88.8	28.1	74.3	457.7	0.0	0.0	0.0	0.0	1.0	0.0	360
1079	BY0R_100_100d	1.0	0.0	0.0	0.0	0.0	0.0	48.2	72.8	-8.3	75.3	353.3	1.0	0.0	0.0	0.0	0.0	0.0	360

Mean color difference of this page: $\Delta E^* = 4.2$

input: rgb/cmyk -> rgbd
 output: transfer to cmykd

TUB-test chart RE34; hue code: H*_d=B50R_d
 colors and differences, ΔE^*