

Input and Output: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 68/360 = 0.19$

$H^*_- = R50Y_-$

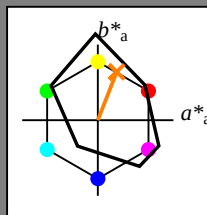
Data for any device (d) or elementary (e) colour:

HIC^*_-

hue text for the colours of this page:

$H^*_- = R50Y_-$

triangle lightness T^*



FRS06a; adapted (a) CIELAB data

name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R-,Ma	32.5	62.3	46.4	77.7	36
Y-,Ma	82.7	-3.1	113.9	114.0	91
G-,Ma	39.4	-61.8	45.8	76.9	143
C-,Ma	47.8	-26.8	-34.2	43.4	231
B-,Ma	10.1	55.1	-61.0	82.2	312
M-,Ma	34.5	80.6	-33.9	87.5	337
N-,Ma	6.2	0.0	0.0	0.0	0
W-,Ma	91.9	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):

$LabCh^*_{-,Ma}$: 68 25 63 68 68

$HIC^*_{-,Ma}$: R50Y_100_100_

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

1.0 0.5 0.0 1.0 1.0

triangle lightness T^*

% Gamut

$u^*_{rel} = 114$

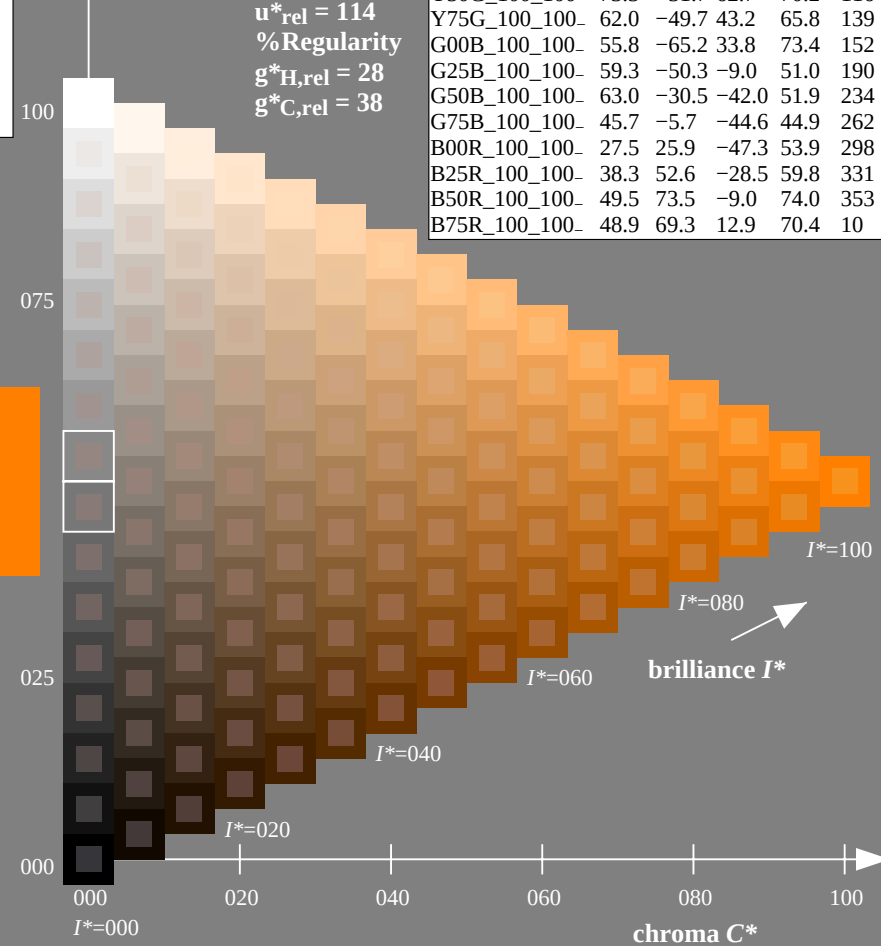
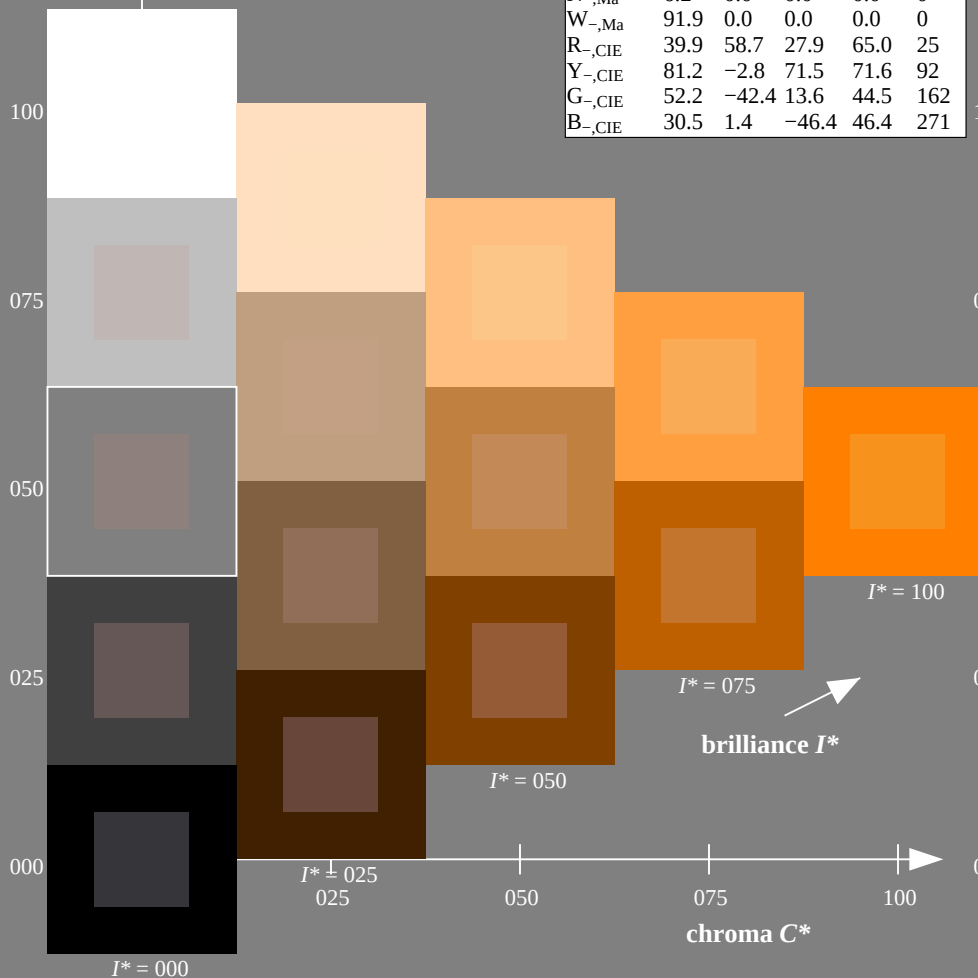
% Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

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



TUB-test chart QE19; hue code: $H^*_- = R50Y_-$
Test chart according to DIN 33872, 3D=0, de=0, cmyk

input: $rgb/cmyk \rightarrow rgb/cmyk$
output: no change

Input and Output: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 73/360 = 0.2$

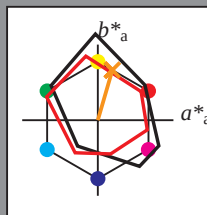
Data for any device (d) or elementary (e) colour:

HIC^*_d

hue text for the colours of this page:

$H^*_d = R50Y_d$

triangle lightness T^*



LRS18a; adapted (a) CIELAB data

name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R_{d,Ma}$	47.5	57.2	37.8	68.6	33
$Y_{d,Ma}$	91.5	-15.8	84.6	86.1	100
$G_{d,Ma}$	54.3	-67.6	30.8	74.3	155
$C_{d,Ma}$	53.1	-30.0	-43.1	52.5	235
$B_{d,Ma}$	32.5	16.9	-44.6	47.7	290
$M_{d,Ma}$	48.1	65.4	-12.7	66.6	348
$N_{d,Ma}$	23.8	0.0	0.0	0.0	0
$W_{d,Ma}$	95.8	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):

$LabCh^*_{d,Ma}$: 70 19 66 69 73

$HIC^*_{d,Ma}$: R50Y_100_100d

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

1.0 0.5 0.0 1.0 1.0

triangle lightness T^*

% Gamut

$u^*_{rel} = 114$

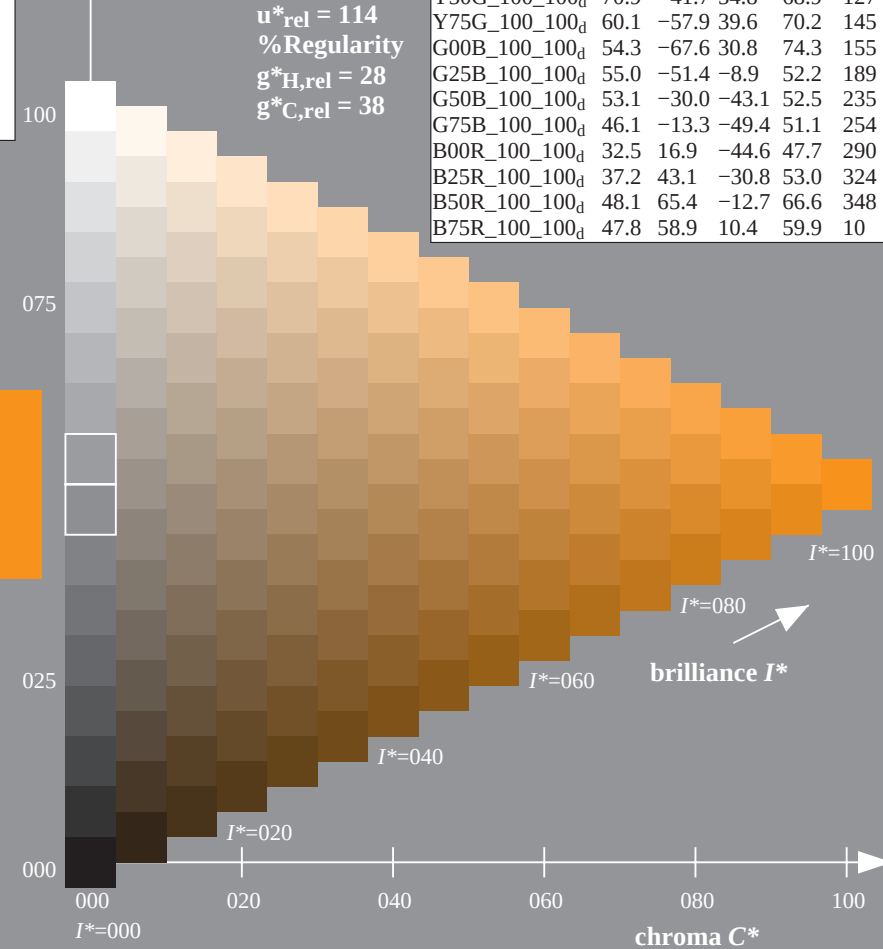
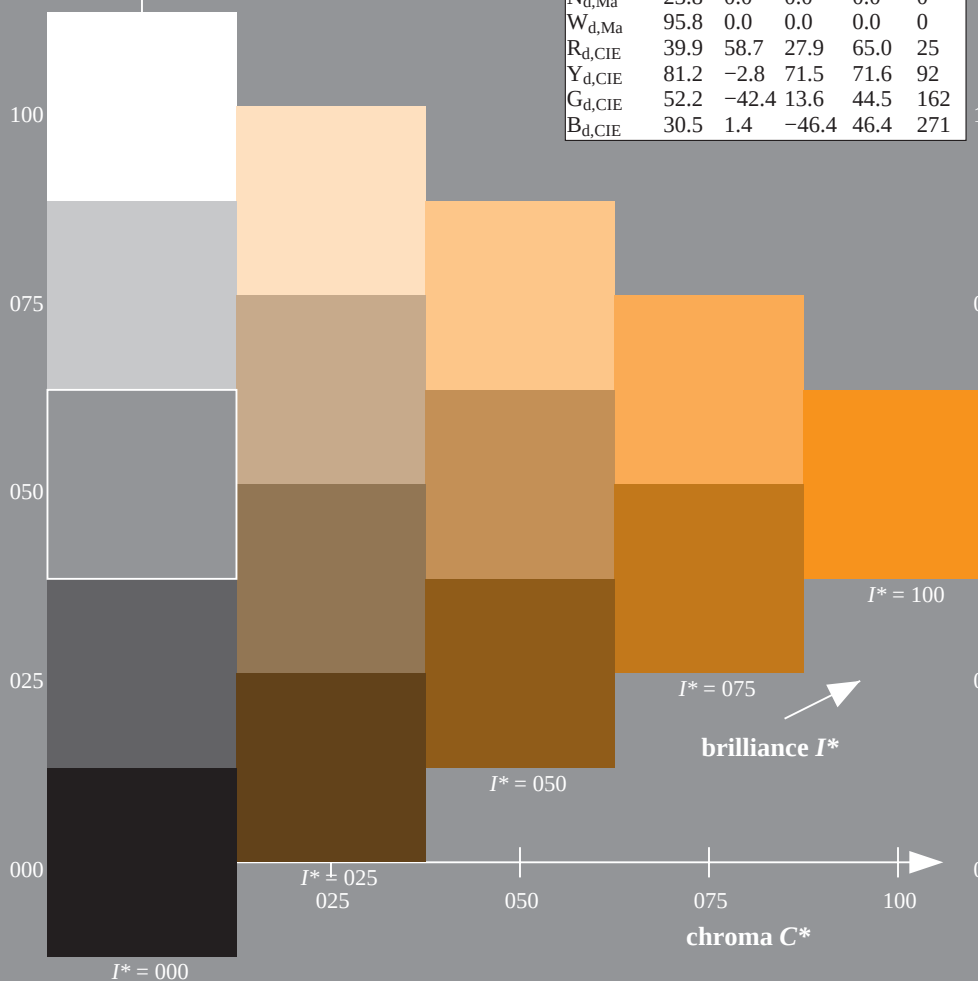
% Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

LRS18a; adapted (a) CIELAB data

H^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R00Y_{100_100d}$	47.5	57.2	37.8	68.6	33
$R25Y_{100_100d}$	57.4	43.5	54.5	69.7	51
$R50Y_{100_100d}$	70.5	19.2	66.2	69.0	73
$R75Y_{100_100d}$	83.5	-2.9	76.8	76.9	92
$Y00G_{100_100d}$	91.5	-15.8	84.6	86.1	100
$Y25G_{100_100d}$	90.4	-20.9	86.5	89.0	103
$Y50G_{100_100d}$	70.9	-41.7	54.8	68.9	127
$Y75G_{100_100d}$	60.1	-57.9	39.6	70.2	145
$G00B_{100_100d}$	54.3	-67.6	30.8	74.3	155
$G25B_{100_100d}$	55.0	-51.4	-8.9	52.2	189
$G50B_{100_100d}$	53.1	-30.0	-43.1	52.5	235
$G75B_{100_100d}$	46.1	-13.3	-49.4	51.1	254
$B00R_{100_100d}$	32.5	16.9	-44.6	47.7	290
$B25R_{100_100d}$	37.2	43.1	-30.8	53.0	324
$B50R_{100_100d}$	48.1	65.4	-12.7	66.6	348
$B75R_{100_100d}$	47.8	58.9	10.4	59.9	10



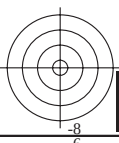
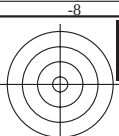
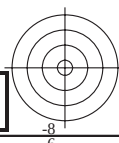
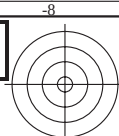
1-003130-L0 QE190-70

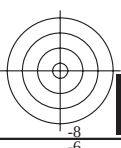
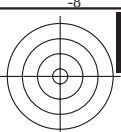
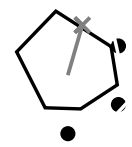
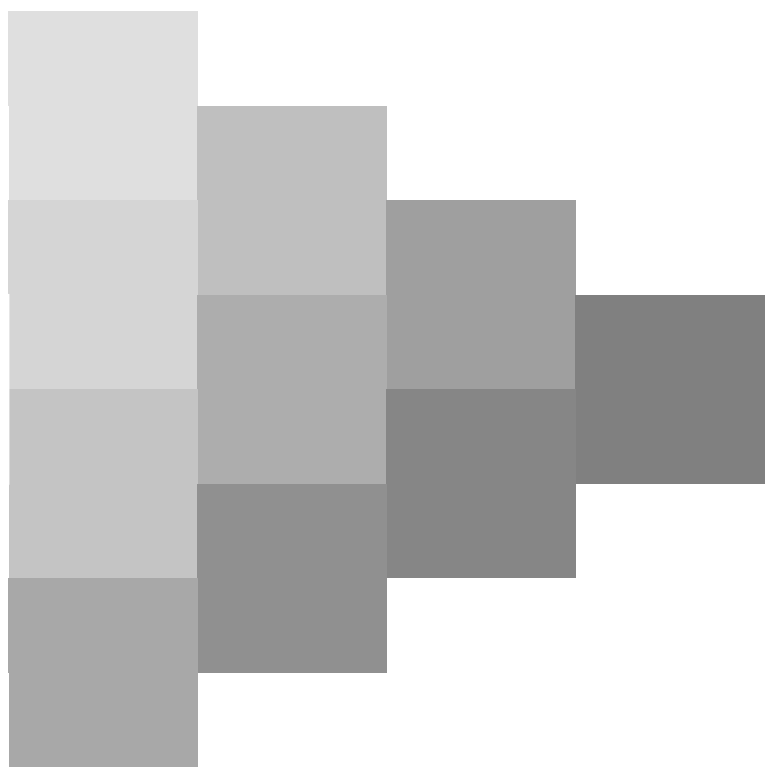
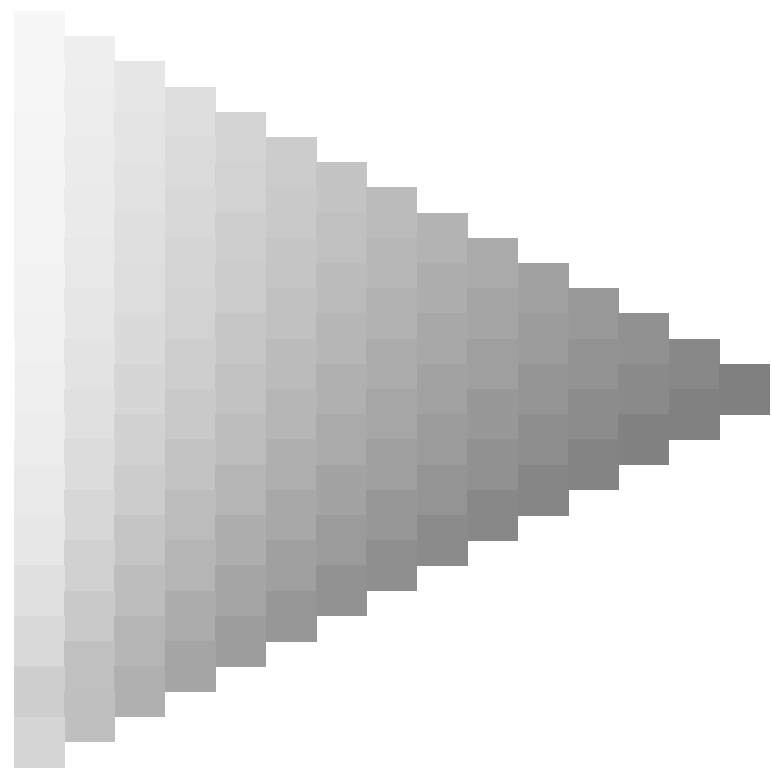
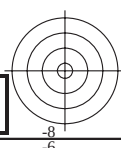
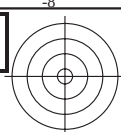
TUB-test chart QE19; hue code: $H^*_d=R50Y_d$

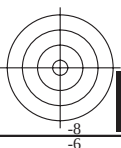
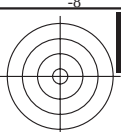
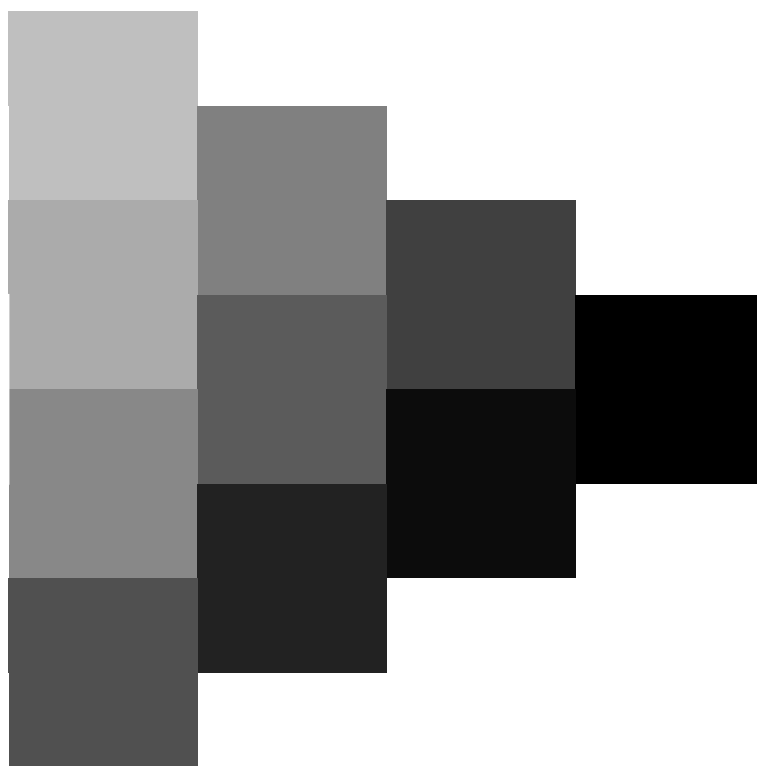
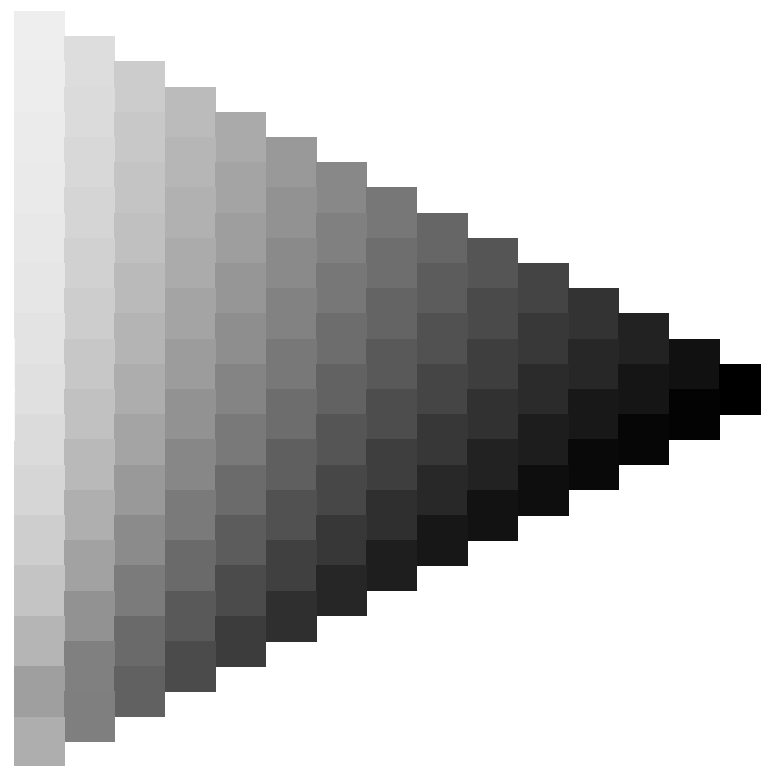
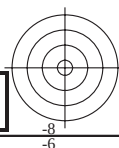
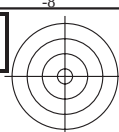
Test chart according to DIN 33872, 3D=0, de=0, cmyk

input: $rgb/cmyk \rightarrow rgb_d$

output: transfer to $cmyk_d$







Input and Output: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 73/360 = 0.2$

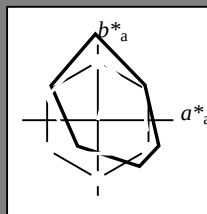
Data for any device (d) or elementary (e) colour:

HIC^*_d

hue text for the colours of this page:

$H^*_d = R50Y_d$

triangle lightness T^*



LRS18a; adapted (a) CIELAB data					
name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R_{d,Ma}$	47.5	57.2	37.8	68.6	33
$Y_{d,Ma}$	91.5	-15.8	84.6	86.1	100
$G_{d,Ma}$	54.3	-67.6	30.8	74.3	155
$C_{d,Ma}$	53.1	-30.0	-43.1	52.5	235
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$M_{d,Ma}$	48.1	65.4	-12.7	66.6	348
$N_{d,Ma}$	23.8	0.0	0.0	0.0	0
$W_{d,Ma}$	95.8	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):

$LabCh^*_{d,Ma}$: 70 19 66 69 73

$HIC^*_{d,Ma}$: R50Y_100_100d

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

1.0 0.5 0.0 1.0 1.0

triangle lightness T^*

% Gamut

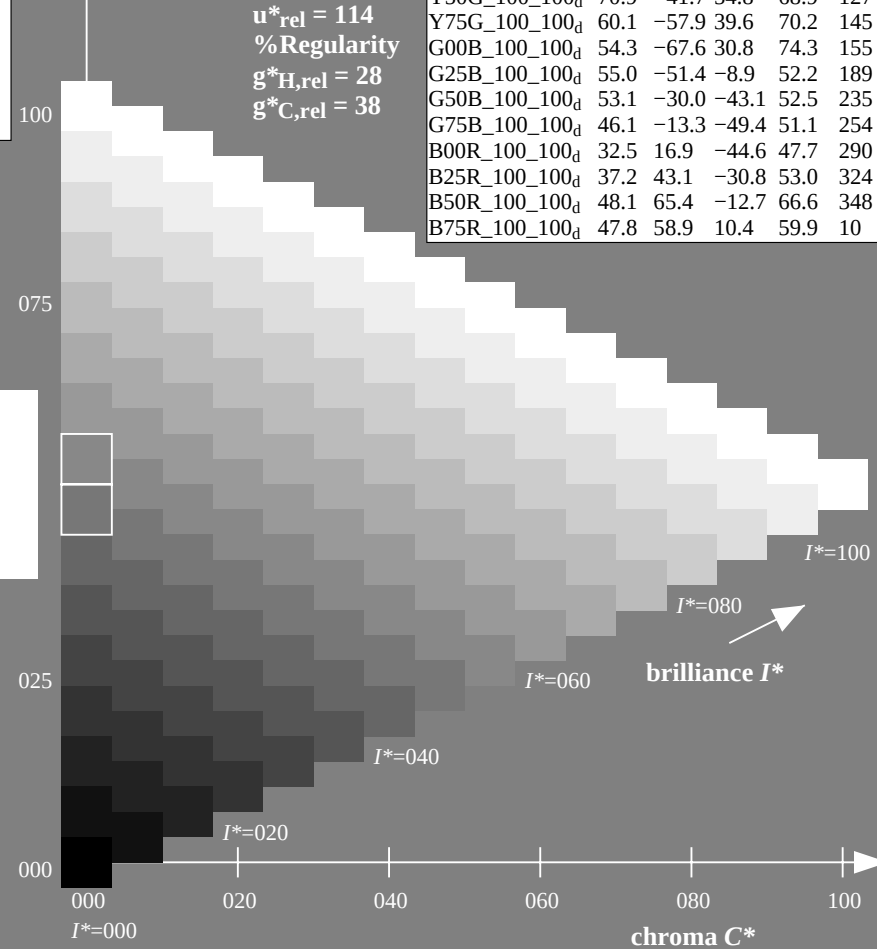
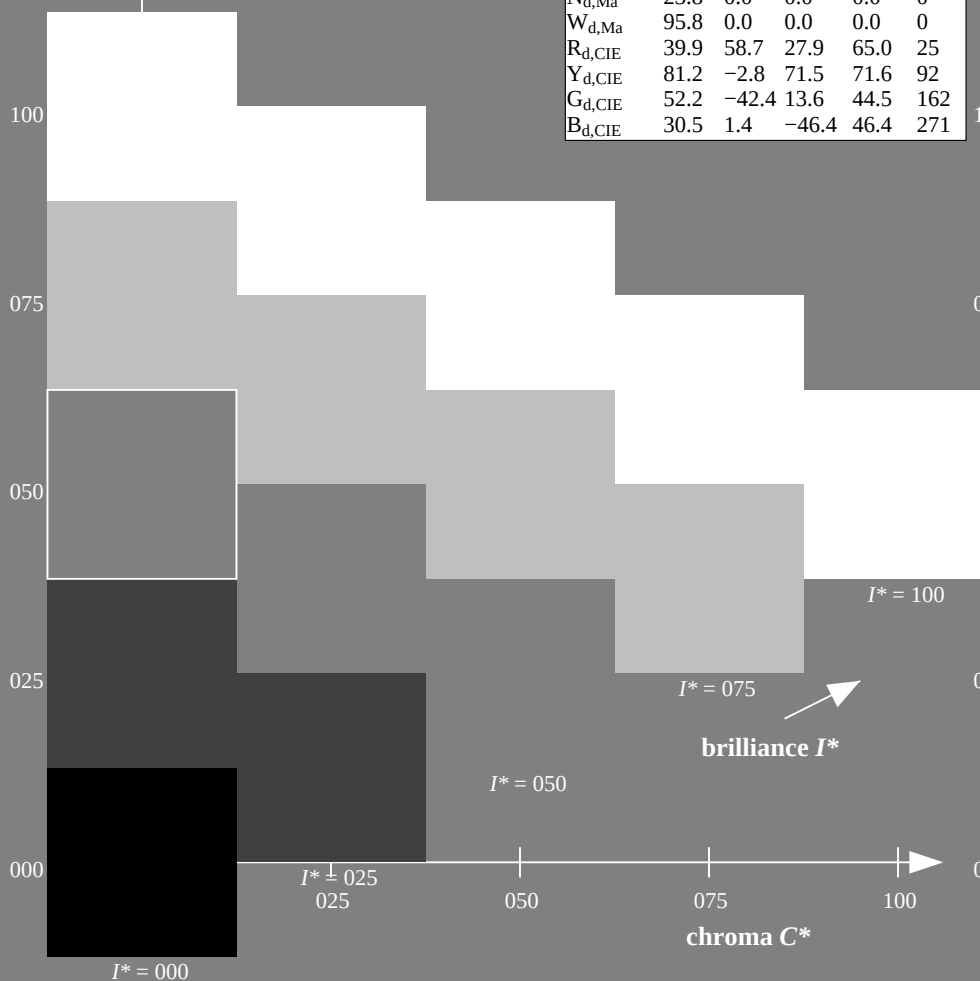
$u^*_{rel} = 114$

% Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

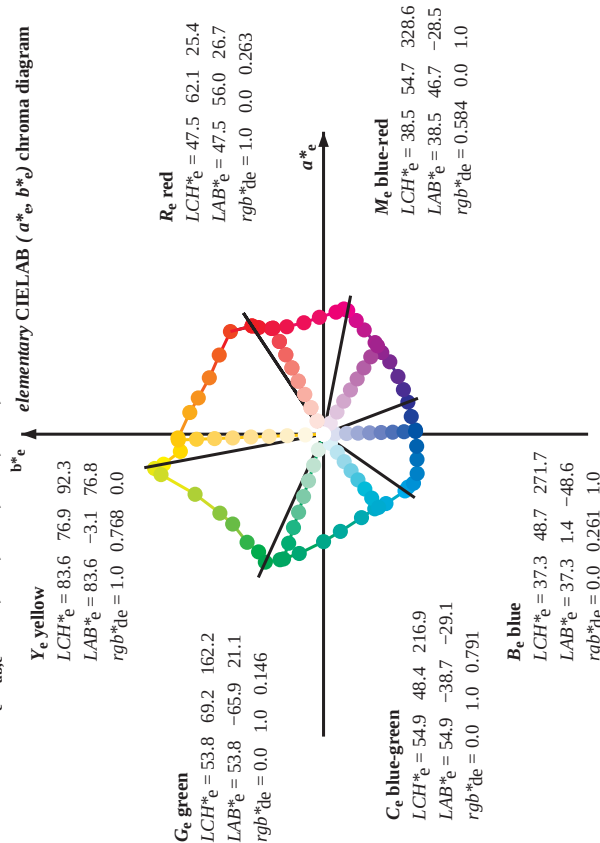
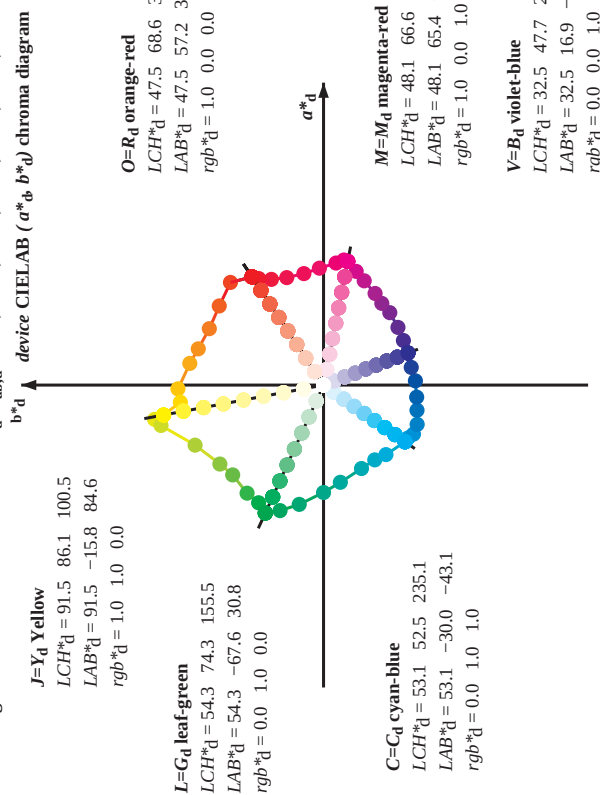
LRS18a; adapted (a) CIELAB data					
H^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R00Y_{100_100d}$	47.5	57.2	37.8	68.6	33
$R25Y_{100_100d}$	57.4	43.5	54.5	69.7	51
$R50Y_{100_100d}$	70.5	19.2	66.2	69.0	73
$R75Y_{100_100d}$	83.5	-2.9	76.8	76.9	92
$Y00G_{100_100d}$	91.5	-15.8	84.6	86.1	100
$Y25G_{100_100d}$	90.4	-20.9	86.5	89.0	103
$Y50G_{100_100d}$	70.9	-41.7	54.8	68.9	127
$Y75G_{100_100d}$	60.1	-57.9	39.6	70.2	145
$G00B_{100_100d}$	54.3	-67.6	30.8	74.3	155
$G25B_{100_100d}$	55.0	-51.4	-8.9	52.2	189
$G50B_{100_100d}$	53.1	-30.0	-43.1	52.5	235
$G75B_{100_100d}$	46.1	-13.3	-49.4	51.1	254
$B00R_{100_100d}$	32.5	16.9	-44.6	47.7	290
$B25R_{100_100d}$	37.2	43.1	-30.8	53.0	324
$B50R_{100_100d}$	48.1	65.4	-12.7	66.6	348
$B75R_{100_100d}$	47.8	58.9	10.4	59.9	10



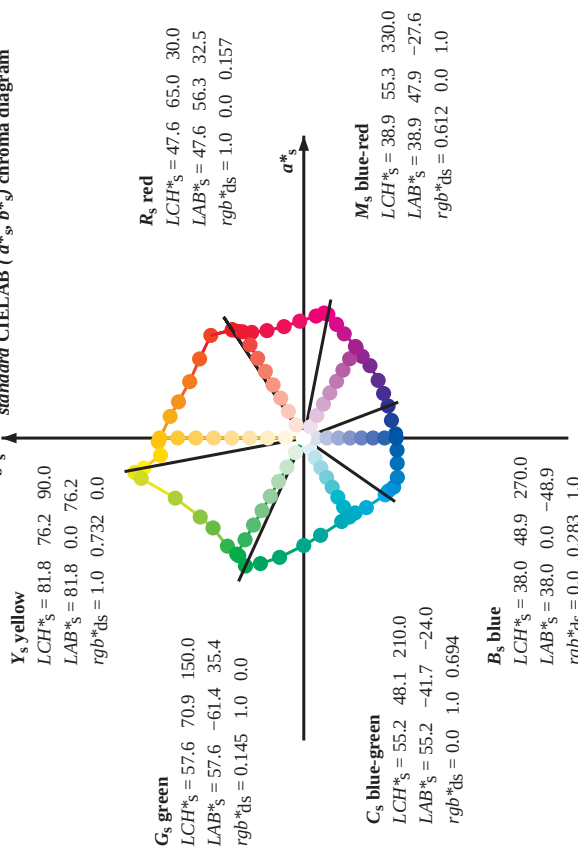
TUB-test chart QE19; hue code: $H^*_d=R50Y_d$
Test chart according to DIN 33872, 3D=0, de=0, cmyk

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

Data of Maximum color M in colorimetric system Laser printer output; 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; $h_{ab,d} = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9$; Six hue angles of the elementary colours RYGBM; $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$



standard CIELAB (a^*_s, b^*_s) chroma diagram



Notes to the CIELAB chroma diagrams (a^*_d, b^*_d), (a^*_s, b^*_s), (a^*_e, b^*_e)

1. For the rgb^*_e -input values the CIELAB data LCH^*_e and LAB^*_e have been calculated.
2. For the calculation of the standard hue angle $h_{ab,s}$ use for any device values rgb^*_e the equation:

$$h_{ab,s} = \arctan \left[\frac{r^*_d \cos(30) + g^*_d \cos(150)}{1 / r^*_d \sin(30) + g^*_d \sin(150)} \right] + b^*_d \sin(270) \quad (1)$$
3. For the 48 or 360 equally spaced standard hue angles $h_{ab,s}$ of the colours of maximum chroma use the seven hue angles of the 60 degree colours s : $h_{ab,s} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0, 390.0$ ($i=0,6$) and the equations for a 48 and 360 step hue circle:

$$h_{48ab,sij} = h_{ab,si} + j [h_{ab,si+1} - h_{ab,si}] / 8 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (2)$$

$$h_{360ab,sij} = h_{ab,si} + j [h_{ab,si+1} - h_{ab,si}] / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (3)$$
4. For the 48 or 360 elementary hue angles $h_{ab,e}$ of the colours of maximum chroma use the seven hue angles of the elementary colours e : $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6, 385.5$ ($i=0,6$) and the equations for a 48 and 360 step elementary hue circle:

$$h_{48ab,eij} = h_{ab,ei} + j [h_{ab,ei+1} - h_{ab,ei}] / 8 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (4)$$

$$h_{360ab,eij} = h_{ab,ei} + j [h_{ab,ei+1} - h_{ab,ei}] / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (5)$$
5. For any elementary hue angle h_{ab} there is a well defined device hue angle $h_{ab,d}$ see the following tables, columns 1 to 5 or 1 to 4.
6. The values rgb^*_e produce the output of the device-independent elementary hues

LAB*_{ab,0}, YN=0%, XYZnw=3.9, 4.1, 84.7, 89.6, 93.9, LAB*nw=23.9, 0.0, 0.0, 95.8, 0.0, 0.0

TUB-test chart QE19; hue code: H*_d=R50Y_d
48 step hue circles; $rgb-LabCh^*$ tables

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

Output: Laser printer output; separation cmyk6*, D65, page 7/38

<http://130.149.60.45/~farbmeterik/QE19/QE19L0NP.PDF> /PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 9/33

Output: Laser printer output; separation cmyn6*, D65, page 9/38

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

TUB-test chart QE19; hue code: $H^*_d=R50Y_d$
48 step hue circles; $rgb-LabCh^*$ tables

Data of Maximum color M in colorimetric system Laser printer output; D65 for input or output; Six hue angles of the 60 degree standard colours RYGCBM; $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;

LAB* _{rgb} → dx64M (x=LabCh)										LAB* _{rgb} → dx361M										
h _{a,b}	h _a	h _b	h _s	h _e	rgb* _{dx64M}	LAB* _{rgb} → dx64M					rgb* _{dx361M}	LAB* _{rgb} → dx361M								
33.4	33.4	30.0	25.4	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	1.0	0.0	0.263	47.6	56.1	26.7	62.1	25	
42.1	42.1	37.5	33.8	1.0	0.125	0.0	51.9	54.3	49.2	73.2	42.1	1.0	0.0	0.012	47.6	57.2	37.5	68.4	33	
52.8	52.8	45.0	42.1	1.0	0.25	0.0	58.2	41.8	55.1	69.2	52.8	1.0	0.125	0.0	52.0	54.3	49.2	73.3	42	
63.7	63.7	52.5	50.5	1.0	0.375	0.0	64.6	29.8	60.4	67.3	63.7	1.0	0.216	0.0	56.6	45.2	53.9	70.3	49	
73.8	73.8	60.0	58.8	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8	1.0	0.32	0.0	61.8	35.2	58.4	68.2	58	
80.7	80.7	67.5	67.2	1.0	0.625	0.0	74.9	11.4	70.7	71.6	80.7	1.0	0.412	0.0	66.4	26.9	62.3	67.9	66	
91.5	91.5	75.0	75.6	1.0	0.75	0.0	82.9	2.0	76.9	77.0	91.5	1.0	0.532	0.0	71.6	17.3	67.5	69.7	75	
96.8	96.8	82.5	83.9	1.0	0.875	0.0	87.6	-9.0	75.7	76.3	96.8	1.0	0.655	0.0	76.9	8.4	72.5	73.0	83	
100.5	100.5	90.0	92.3	1.0	1.0	0.0	91.5	-15.8	84.6	86.1	100.5	1.0	0.769	0.0	83.7	-3.0	76.8	76.9	92	
101.4	101.4	97.5	101.0	0.875	1.0	0.0	92.8	-18.1	89.4	91.2	101.4	0.875	1.0	0.896	0.0	91.5	-15.5	84.4	85.8	100
103.9	103.9	105.0	109.7	0.75	1.0	0.0	90.1	-21.3	86.0	88.6	103.9	0.75	1.0	0.996	0.0	84.7	-27.5	76.7	81.5	109
115.0	115.0	112.5	118.5	0.625	1.0	0.0	79.9	-31.7	67.9	75.0	115.0	0.625	1.0	0.847	0.0	77.8	-34.4	65.0	73.6	117
127.3	127.3	120.0	127.2	0.5	1.0	0.0	70.9	-41.7	54.8	68.9	127.3	0.5	1.0	0.501	0.0	71.0	-41.6	54.9	68.9	127
134.7	134.7	127.5	136.0	0.375	1.0	0.0	66.5	-47.5	48.0	67.6	134.7	0.375	1.0	0.366	0.0	66.2	-48.2	47.6	67.8	135
144.7	144.7	135.0	144.7	0.25	1.0	0.0	60.6	-57.2	40.4	70.1	144.7	0.25	1.0	0.205	0.0	60.6	-57.1	40.5	70.1	144
151.0	151.0	142.5	153.4	0.125	1.0	0.0	57.0	-62.2	34.4	71.1	151.0	0.125	1.0	0.073	0.0	55.9	-64.4	33.0	72.5	152
155.5	155.5	150.0	162.2	0.0	1.0	0.0	54.3	-67.6	30.8	74.3	155.5	0.0	1.0	0.147	0.0	53.8	-65.9	21.1	69.3	162
160.8	160.8	157.5	169.0	0.0	1.0	0.125	53.8	-66.4	23.0	70.2	160.8	0.125	1.0	0.251	0.0	53.8	-63.0	12.7	64.4	168
168.5	168.5	165.0	175.9	0.0	1.0	0.25	53.7	-63.1	12.8	64.4	168.5	0.25	1.0	0.331	0.0	54.4	-59.3	4.2	59.5	175
179.9	179.9	172.5	182.7	0.0	1.0	0.375	54.7	-56.8	8.0	56.8	179.9	0.375	1.0	0.405	0.0	54.8	-55.6	-2.1	55.7	182
189.8	189.8	180.0	189.6	0.0	1.0	0.5	55.0	-51.4	-8.9	52.2	189.8	0.5	1.0	0.497	0.0	55.0</				

Six hue angles of the device colours RYGCBM; $h_{ab,d} = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9$; Six hue angles of the elementary colours RYGCBM; $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$																				rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M}		rgb^*_{d361M} </	
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input: $rgb/cmyk \rightarrow rgb$
output: transfer to $cmyk_d$

TUB-test chart QE19; hue code: $H^*_d=R50Y_d$
48 step hue circles; $rgb-LabCh$ *tables

1-003930-L0 QE19-70 LAB^*_{d361M} $Y_N=0\%$ $XY_{Znw}=3.9, 4.1, 84.7, 89.6, 93.9$ $LAB^*_{nmw}=23.9, 0.0, 0.0, 95.8, 0.0, 0.0$

Data of Maximum color M in colorimetric system Laser printer output; separation cmyk6*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM; $h_{ab,d}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;										Six hue angles of the device colours RYGBM; $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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^*_{ds361M}	rgb^*_{ds361M}	rgb^*_{ds361M}	rgb^*_{ds361M}	rgb^*_{ds361M}	rgb^*_{ds361M}	rgb^*_{ds361M}	LAB^*_{ds361M}	LAB^*_{ds361M}	LAB^*_{ds361M}	LAB^*_{ds361M}	LAB^*_{ds361M}	LAB^*_{ds361M}	LAB^*_{ds361M}	LAB^*_{ds361M}	LAB^*_{ds361M}																		
272	255	258	0.0	0.25	1.0	36.8	2.2	-48.5	48.6	272	0.0	0.499	1.0	46.1	-13.1	-49.3	51.2	255	0.0	0.25	1.0	0.0	0.449	1.0	44.2	-10.4	-49.4	50.6	258	0.0	0.25	1.0				
273	256	258	0.0	0.233	1.0	36.6	3.2	-48.3	48.4	273	0.0	0.482	1.0	45.5	-12.2	-49.4	51.0	256	0.0	0.233	1.0	0.0	0.435	1.0	43.7	-9.5	-49.4	50.4	258	0.0	0.233	1.0				
274	257	259	0.0	0.216	1.0	36.4	4.1	-48.0	48.2	274	0.0	0.466	1.0	44.9	-11.3	-49.4	50.8	257	0.0	0.217	1.0	0.0	0.42	1.0	43.1	-8.7	-49.3	50.2	259	0.0	0.217	1.0				
276	258	260	0.0	0.2	1.0	36.1	5.1	-47.8	48.1	276	0.0	0.45	1.0	44.3	-10.4	-49.4	50.6	258	0.0	0.2	1.0	0.0	0.405	1.0	42.6	-7.9	-49.3	50.0	260	0.0	0.2	1.0				
277	259	261	0.0	0.183	1.0	35.9	6.1	-47.5	47.9	277	0.0	0.434	1.0	43.7	-9.5	-49.4	50.4	259	0.0	0.183	1.0	0.0	0.39	1.0	42.0	-7.1	-49.3	49.9	261	0.0	0.183	1.0				
278	260	262	0.0	0.166	1.0	35.6	7.0	-47.2	47.7	278	0.0	0.418	1.0	43.0	-8.6	-49.3	50.2	260	0.0	0.167	1.0	0.0	0.376	1.0	41.4	-6.3	-49.2	49.7	262	0.0	0.167	1.0				
279	261	263	0.0	0.15	1.0	35.4	8.0	-46.9	47.5	279	0.0	0.402	1.0	42.4	-7.7	-49.3	50.0	261	0.0	0.15	1.0	0.0	0.364	1.0	41.0	-5.5	-49.2	49.6	263	0.0	0.15	1.0				
280	262	264	0.0	0.133	1.0	35.2	8.9	-46.5	47.4	280	0.0	0.386	1.0	41.8	-6.8	-49.2	49.8	262	0.0	0.133	1.0	0.0	0.353	1.0	40.6	-4.7	-49.2	49.5	264	0.0	0.133	1.0				
282	263	265	0.0	0.116	1.0	34.9	9.9	-46.3	47.3	282	0.0	0.371	1.0	41.3	-6.0	-49.2	49.7	263	0.0	0.117	1.0	0.0	0.341	1.0	40.2	-3.9	-49.1	49.4	265	0.0	0.117	1.0				
283	264	266	0.0	0.1	1.0	34.5	10.9	-46.1	47.4	283	0.0	0.358	1.0	40.8	-5.1	-49.2	49.5	264	0.0	0.1	1.0	0.0	0.33	1.0	39.8	-3.1	-49.1	49.3	266	0.0	0.1	1.0				
284	265	267	0.0	0.083	1.0	34.2	11.9	-45.9	47.4	284	0.0	0.346	1.0	40.4	-4.2	-49.2	49.4	265	0.0	0.083	1.0	0.0	0.318	1.0	39.4	-2.3	-49.0	49.2	267	0.0	0.083	1.0				
285	266	268	0.0	0.066	1.0	33.9	12.9	-45.7	47.5	285	0.0	0.333	1.0	39.9	-3.3	-49.1	49.3	266	0.0	0.067	1.0	0.0	0.307	1.0	39.0	-1.5	-49.0	49.1	268	0.0	0.067	1.0				
287	267	269	0.0	0.049	1.0	33.5	13.9	-45.4	47.5	287	0.0	0.321	1.0	39.5	-2.5	-49.1	49.2	267	0.0	0.05	1.0	0.0	0.296	1.0	38.5	-0.8	-48.9	49.0	269	0.0	0.05	1.0				
288	268	269	0.0	0.033	1.0	33.2	14.9	-45.2	47.6	288	0.0	0.308	1.0	39.0	-1.6	-49.0	49.1	268	0.0	0.033	1.0	0.0	0.284	1.0	38.1	0.0	-48.8	48.9	269	0.0	0.033	1.0				
289	269	270	0.0	0.016	1.0	32.9	15.9	-44.9	47.6	289	0.0	0.296	1.0	38.5	-0.8	-48.9	48.9	269	0.0	0.017	1.0	0.0	0.273	1.0	37.7	0.7	-48.7	48.8	270	0.0	0.017	1.0				
290	270	271	0.0	0.0	1.0	32.5	16.9	-44.6	47.7	290	0.0	0.283	1.0	38.1	0.0	-48.8	48.9	270	0.0	0.0	1.0	0.0	0.261	1.0	37.3	1.5	-48.6	48.7	271	0.0	0.0	1.0				
291	271	272	0.016	0.0	1.0	32.4	17.8	-44.3	47.8	291	0.0	0.27	1.0	37.6	0.9	-48.7	48.8	271	0.0	0.017	1.0	0.0	0.249	1.0	36.9	2.3	-48.5	48.6	272	0.0	0.017	1.0				
293	272	273	0.033	0.0	1.0	32.3	18.7	-44.0	47.9	293	0.0	0.258	1.0	37.2	1.7	-48.6	48.7	272	0.0	0.033	0.0	1.0	0.0	0.236	1.0	36.7	3.1	-48.3	48.5	273	0.0	0.033	0.0	1.0		
294	273	274	0.05	0.0	1.0	32.1	19.6	-43.7	47.9	294	0.0	0.245	1.0	36.8	2.5	-48.4	48.6	273	0.0	0.05	0.0	1.0	0.0	0.222	1.0	36.5	3.9	-48.1	48.3	274	0.0	0.05	0.0	1.0		
295	274	275	0.066	0.0	1.0	32.0	20.5	-43.4	48.0	295	0.0	0.231	1.0	36.6	3.4	-48.2	48.4	274	0.0	0.067	0.0	1.0	0.0	0.209	1.0	36.3	4.6	-47.9	48.2	275	0.0	0.067	0.0	1.0		
296	275	276	0.083	0.0	1.0	31.9	21.4	-43.1	48.1	296	0.0	0.217	1.0	36.4	4.2	-48.0	48.3	275	0.0	0.083	0.0	1.0	0.0	0.196	1.0	36.1	5.4	-47.7	48.1	276	0.0	0.083	0.0	1.0		
297	276	277	0.1	0.0	1.0	31.8	22.3	-42.7	48.2	297	0.0	0.202	1.0	36.2	5.0	-47.8	48.1	276	0.0	0.1	0.0	1.0	0.0	0.182	1.0	35.9	6.2	-47.4	47.9	277	0.0	0.1	0.0	1.0		
298	277	278	0.116	0.0	1.0	31.6	23.1	-42.4	48.3	298	0.0	0.188	1.0	36.0	5.8	-47.5	48.0	277	0.0	0.117	0.0	1.0	0.0	0.169	1.0	35.7	7.0	-47.2	47.8	278	0.0	0.117	0.0	1.0		
299	278	279	0.133	0.0	1.0	31.5	24.1	-42.0	48.4	299	0.0	0.174	1.0	35.8	6.7	-47.3	47.8	278	0.0	0.133	0.0	1.0	0.0	0.155	1.0	35.5	7.7	-46.9	47.6	279	0.0	0.133	0.0	1.0		
300	279	280	0.15	0.0	1.0	31.4	25.0	-41.7	48.6	300	0.0	0.16	1.0	35.6	7.5	-47.0	47.7	279	0.0	0.15	0.0	1.0	0.0	0.142	1.0	35.3	8.5	-46.6	47.5	280	0.0	0.15	0.0	1.0		
302	280	281	0.166	0.0	1.0	31.3	25.9	-41.4	48.8	302	0.0	0.146	1.0	35.4	8.3	-46.7	47.5	280	0.0	0.167	0.0	1.0	0.0	0.129	1.0	35.1	9.2	-46.4	47.4	281	0.0	0.167	0.0	1.0		
303	281	282	0.183	0.0	1.0	31.2	26.8	-41.0	49.0	303	0.0	0.132	1.0	35.2	9.0	-46.4	47.4	281	0.0	0.183	0.0	1.0	0.0	0.116	1.0	34.9	10.0	-46.2	47.4	282	0.0	0.183	0.0	1.0		
304	282	283	0.2	0.0	1.0	31.2	27.8	-40.6	49.2	304	0.0	0.118	1.0	34.9	9.8	-46.2	47.4	282	0.0	0.2	0.0	1.0	0.0	0.103	1.0	34.6	10.8	-46.1	47.4	283	0.0	0.2	0.0	1.0		
305	283	284	0.216	0.0	1.0	31.1	28.7	-40.2	49.4	305	0.0	0.104	1.0	34.7	10.7	-46.1	47.4	283	0.0	0.217	0.0	1.0	0.0	0.09	1.0	34.4	11.5	-45.9	47.4	284	0.0	0.217	0.0	1.0		
306	284	285	0.233	0.0	1.0	31.1	29.6	-39.8	49.6	306	0.0	0.091	1.0	34.4	11.5	-45.9	47.4	284	0.0	0.233	0.0	1.0	0.0	0.078	1.0	34.1	12.3	-45.8	47.5	285	0.0	0.233	0.0	1.0		
307	285	286	0.25	0.0	1.0	31.0	30.5	-39.3	49.8	307	0.0	0.078	1.0	34.1	12.3	-45.8	47.5	285	0.0	0.25	0.0	1.0	0.0	0.065	1.0	33.9	13.1	-45.6	47.5	286	0.0	0.25	0.0	1.0		
309	286	287	0.266	0.0	1.0	31.4	31.6	-38.8	50.1	309	0.0	0.064	1.0	33.9	13.1	-45.6	47.5	286	0.0	0.267	0.0	1.0	0.0	0.052	1.0	33.6	13.8	-45.4	47.6	287	0.0	0.267	0.0	1.0		
310	287	288	0.283	0.0	1.0	31.8	32.6	-38.3	50.3	310	0.0	0.051	1.0	33.6	13.9	-45.4	47.6	287	0.0	0.283	0.0	1.0	0.0	0.04	1.0	33.4	14.6	-45.2	47.6	288	0.0	0.283	0.0	1.0		
311	288	289	0.3	0.0	1.0	32.3	33.6	-37.8	50.6	311	0.0	0.038	1.0	33.3	14.7	-45.2	47.6	288	0.0	0.3	0.0	1.0	0.0	0.027	1.0	33.1	15.4	-45.0	47.6	289	0.0	0.3	0.0	1.0		
312	289	289	0.316	0.0	1.0	32.7	34.7	-37.2	50.9	312	0.0	0.024	1.0	33.1	15.5	-44.9	47.6	289	0.0	0.317	0.0	1.0	0.0	0.014	1.0	32.9	16.1	-44.8	47.7	289	0.0	0.317	0.0	1.0		
314	290	290	0.333	0.0	1.0	33.1	35.7	-36.6	51.2	314	0.0	0.011	1.0	32.8	16.3	-44.7	47.7	290	0.0	0.333	0.0	1.0	0.0	0.001	1.0	32.6	16.9	-44.5	47.7	290	0.0	0.333	0.0	1.0		
315	291	291	0.35	0.0	1.0	33.6	36.7	-36.0	51.4	315	0.0	0.003	0.0	1.0	32.5	17.1	-44.5	47.7	291	0.0	0.35	0.0	1.0	0.0	0.002	0.0	1.0	32.5	17.6	-44.3	47.8	291	0.0	0.35	0.0	1.0
316	292	292	0.366	0.0	1.0	34.0	37.7	-35.3	51.7	316	0.0	0.018	0.0	1.0	32.4	17.9	-44.2	47.8	292	0.0	0.367	0.0	1.0	0.0	0.026	0.0	1.0	32.4	18.4	-44.1	47.9	292	0.0	0.367	0.0	1.0
317	293	293	0.383	0.0	1.0																															

technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

<http://130.149.60.45/~farbmatrik/QE19/QE19L0NP.PDF> /PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 16/33

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGCBM; $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;

LAB*a0, YN=0%	LAB*b0, YN=0%	LAB*c0, YN=0%	LAB*d0, YN=0%	LAB*e0, YN=0%	LAB*f0, YN=0%	LAB*g0, YN=0%	LAB*h0, YN=0%	LAB*i0, YN=0%	LAB*j0, YN=0%	LAB*k0, YN=0%	LAB*l0, YN=0%	LAB*m0, YN=0%	LAB*n0, YN=0%	LAB*o0, YN=0%	LAB*p0, YN=0%	LAB*q0, YN=0%	LAB*r0, YN=0%	LAB*s0, YN=0%	LAB*t0, YN=0%	LAB*u0, YN=0%	LAB*v0, YN=0%	LAB*w0, YN=0%	LAB*x0, YN=0%	LAB*y0, YN=0%	LAB*z0, YN=0%																																																																																																																																																																																																																					
LAB*190-70	LAB*290-70	LAB*390-70	LAB*490-70	LAB*590-70	LAB*690-70	LAB*790-70	LAB*890-70	LAB*990-70	LAB*1090-70	LAB*1190-70	LAB*1290-70	LAB*1390-70	LAB*1490-70	LAB*1590-70	LAB*1690-70	LAB*1790-70	LAB*1890-70	LAB*1990-70	LAB*2090-70	LAB*2190-70	LAB*2290-70	LAB*2390-70	LAB*2490-70	LAB*2590-70	LAB*2690-70	LAB*2790-70	LAB*2890-70	LAB*2990-70	LAB*3090-70	LAB*3190-70	LAB*3290-70	LAB*3390-70	LAB*3490-70	LAB*3590-70	LAB*3690-70	LAB*3790-70	LAB*3890-70	LAB*3990-70	LAB*4090-70	LAB*4190-70	LAB*4290-70	LAB*4390-70	LAB*4490-70	LAB*4590-70	LAB*4690-70	LAB*4790-70	LAB*4890-70	LAB*4990-70	LAB*5090-70	LAB*5190-70	LAB*5290-70	LAB*5390-70	LAB*5490-70	LAB*5590-70	LAB*5690-70	LAB*5790-70	LAB*5890-70	LAB*5990-70	LAB*6090-70	LAB*6190-70	LAB*6290-70	LAB*6390-70	LAB*6490-70	LAB*6590-70	LAB*6690-70	LAB*6790-70	LAB*6890-70	LAB*6990-70	LAB*7090-70	LAB*7190-70	LAB*7290-70	LAB*7390-70	LAB*7490-70	LAB*7590-70	LAB*7690-70	LAB*7790-70	LAB*7890-70	LAB*7990-70	LAB*8090-70	LAB*8190-70	LAB*8290-70	LAB*8390-70	LAB*8490-70	LAB*8590-70	LAB*8690-70	LAB*8790-70	LAB*8890-70	LAB*8990-70	LAB*9090-70	LAB*9190-70	LAB*9290-70	LAB*9390-70	LAB*9490-70	LAB*9590-70	LAB*9690-70	LAB*9790-70	LAB*9890-70	LAB*9990-70	LAB*10090-70	LAB*10190-70	LAB*10290-70	LAB*10390-70	LAB*10490-70	LAB*10590-70	LAB*10690-70	LAB*10790-70	LAB*10890-70	LAB*10990-70	LAB*11090-70	LAB*11190-70	LAB*11290-70	LAB*11390-70	LAB*11490-70	LAB*11590-70	LAB*11690-70	LAB*11790-70	LAB*11890-70	LAB*11990-70	LAB*12090-70	LAB*12190-70	LAB*12290-70	LAB*12390-70	LAB*12490-70	LAB*12590-70	LAB*12690-70	LAB*12790-70	LAB*12890-70	LAB*12990-70	LAB*13090-70	LAB*13190-70	LAB*13290-70	LAB*13390-70	LAB*13490-70	LAB*13590-70	LAB*13690-70	LAB*13790-70	LAB*13890-70	LAB*13990-70	LAB*14090-70	LAB*14190-70	LAB*14290-70	LAB*14390-70	LAB*14490-70	LAB*14590-70	LAB*14690-70	LAB*14790-70	LAB*14890-70	LAB*14990-70	LAB*15090-70	LAB*15190-70	LAB*15290-70	LAB*15390-70	LAB*15490-70	LAB*15590-70	LAB*15690-70	LAB*15790-70	LAB*15890-70	LAB*15990-70	LAB*16090-70	LAB*16190-70	LAB*16290-70	LAB*16390-70	LAB*16490-70	LAB*16590-70	LAB*16690-70	LAB*16790-70	LAB*16890-70	LAB*16990-70	LAB*17090-70	LAB*17190-70	LAB*17290-70	LAB*17390-70	LAB*17490-70	LAB*17590-70	LAB*17690-70	LAB*17790-70	LAB*17890-70	LAB*17990-70	LAB*18090-70	LAB*18190-70	LAB*18290-70	LAB*18390-70	LAB*18490-70	LAB*18590-70	LAB*18690-70	LAB*18790-70	LAB*18890-70	LAB*18990-70	LAB*19090-70	LAB*19190-70	LAB*19290-70	LAB*19390-70	LAB*19490-70	LAB*19590-70	LAB*19690-70	LAB*19790-70	LAB*19890-70	LAB*19990-70	LAB*20090-70	LAB*20190-70	LAB*20290-70	LAB*20390-70	LAB*20490-70	LAB*20590-70	LAB*20690-70	LAB*20790-70	LAB*20890-70	LAB*20990-70	LAB*21090-70	LAB*21190-70	LAB*21290-70	LAB*21390-70	LAB*21490-70	LAB*21590-70	LAB*21690-70	LAB*21790-70	LAB*21890-70	LAB*21990-70	LAB*22090-70	LAB*22190-70	LAB*22290-70	LAB*22390-70	LAB*22490-70	LAB*22590-70	LAB*22690-70	LAB*22790-70	LAB*22890-70	LAB*22990-70	LAB*23090-70	LAB*23190-70	LAB*23290-70	LAB*23390-70	LAB*23490-70	LAB*23590-70	LAB*23690-70	LAB*23790-70	LAB*23890-70	LAB*2

[illegible]

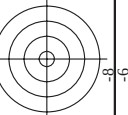
68.00.00

LAB* a0. YN=0%. XYZnw=3.9, 4.1, 4.1, 84.7, 89.6, 93.9, 100.0

nf	HfC*Fd	rgb_Fd	icr_Fd	hsa_Fd	LabCh*Fd	rgb*Fd	LabCh*Fd	DF*Fd	hsa_d	rgb*d	LabCh*d	DF*Fd	hsa_d	rgb*d	LabCh*d					
0/648	R00Y_100_100d	1.0	0.0	0.0	1.0	0.0	0.0	57.2	37.8	68.6	33.4	0.0	389	1.0	0.0	47.5	57.2	37.8	68.6	33.4
1/657	R13Y_100_100d	1.0	0.125	0.0	1.0	0.116	0.0	51.6	54.5	48.4	72.9	41.6	51.6	1.0	0.116	0.0	51.6	54.5	48.4	72.9
2/666	R28Y_100_100d	1.0	0.25	0.0	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4	57.4	1.0	0.233	0.0	57.4	43.5	54.5	69.7
3/675	R38Y_100_100d	1.0	0.375	0.0	1.0	0.366	0.0	64.2	30.6	60.1	67.5	60.1	64.2	1.0	0.366	0.0	64.2	30.6	60.1	67.5
4/684	R50Y_100_100d	1.0	0.5	0.0	1.0	0.5	0.0	70.5	19.2	66.2	73.8	81.5	70.5	1.0	0.5	0.0	70.5	19.2	66.2	73.8
5/693	R63Y_100_100d	1.0	0.625	0.0	1.0	0.633	0.0	75.4	10.6	71.2	72.0	81.5	75.4	1.0	0.633	0.0	75.4	10.6	71.2	72.0
6/702	R75Y_100_100d	1.0	0.75	0.0	1.0	0.766	0.0	83.5	-2.9	76.8	76.9	92.0	83.5	1.0	0.766	0.0	83.5	-2.9	76.8	76.9
7/711	R88Y_100_100d	1.0	0.875	0.0	1.0	0.883	0.0	87.6	-9.0	77.3	77.3	92.0	87.6	1.0	0.883	0.0	87.6	-9.0	77.3	77.3
8/720	Y00C_100_100d	1.0	0.0	1.0	0.0	0.0	1.0	91.5	-15.8	84.6	86.1	100.5	91.5	1.0	0.0	1.0	91.5	-15.8	84.6	86.1
9/639	Y13C_100_100d	0.875	1.0	0.0	0.883	1.0	0.0	92.7	-18.0	89.1	90.9	101.4	92.7	0.883	1.0	0.0	92.7	-18.0	89.1	90.9
10/558	Y25C_100_100d	0.75	1.0	0.0	0.766	1.0	0.0	90.4	-20.9	86.5	89.0	103.6	90.4	0.766	1.0	0.0	90.4	-20.9	86.5	89.0
11/477	Y38C_100_100d	0.625	1.0	0.0	0.633	1.0	0.0	80.5	-31.2	69.2	75.9	114.2	80.5	0.633	1.0	0.0	80.5	-31.2	69.2	75.9
12/396	Y50C_100_100d	0.5	1.0	0.0	0.5	1.0	0.0	70.9	-41.7	54.8	68.9	127.3	70.9	0.5	1.0	0.0	70.9	-41.7	54.8	68.9
13/315	Y63C_100_100d	0.375	1.0	0.0	0.366	1.0	0.0	66.1	-48.2	47.5	67.7	135.3	66.1	0.366	1.0	0.0	66.1	-48.2	47.5	67.7
14/234	Y75C_100_100d	0.25	1.0	0.0	0.233	1.0	0.0	60.1	-57.9	39.6	70.1	145.5	60.1	0.233	1.0	0.0	60.1	-57.9	39.6	70.1
15/153	Y88C_100_100d	0.125	1.0	0.0	0.116	1.0	0.0	56.8	-62.5	34.1	71.1	151.3	56.8	0.116	1.0	0.0	56.8	-62.5	34.1	71.1
16/72	G00C_100_100d	0.0	1.0	0.0	0.0	0.0	1.0	54.3	-67.6	30.8	74.3	155.5	54.3	0.0	1.0	0.0	54.3	-67.6	30.8	74.3
17/73	G13C_100_100d	0.0	1.0	0.125	0.0	0.116	0.0	53.8	-66.5	23.5	70.5	160.5	53.8	0.0	1.0	0.116	53.8	-66.5	23.5	70.5
18/74	G25C_100_100d	0.0	1.0	0.25	0.0	0.233	0.0	53.7	-63.6	14.1	65.2	167.4	53.7	0.0	1.0	0.233	53.7	-63.6	14.1	65.2
19/75	G38C_100_100d	0.0	1.0	0.375	0.0	0.366	0.0	54.7	-57.3	0.8	57.3	179.1	54.7	0.0	1.0	0.366	54.7	-57.3	0.8	57.3
20/76	G50C_100_100d	0.0	1.0	0.5	0.0	0.5	0.0	55.0	-51.4	-6.9	52.2	189.8	55.0	0.0	1.0	0.5	55.0	-51.4	-6.9	52.2
21/77	G63C_100_100d	0.0	1.0	0.625	0.0	0.633	0.0	55.3	-48.0	-20.5	48.4	205.1	55.3	0.0	1.0	0.633	55.3	-48.0	-20.5	48.4
22/78	G75C_100_100d	0.0	1.0	0.75	0.0	0.766	0.0	55.1	-39.2	-27.9	47.9	214.4	55.1	0.0	1.0	0.766	55.1	-39.2	-27.9	47.9
23/79	G88C_100_100d	0.0	1.0	0.875	0.0	0.883	0.0	54.3	-36.4	-33.7	49.6	222.8	54.3	0.0	1.0	0.883	54.3	-36.4	-33.7	49.6
24/80	C00B_100_100d	0.0	1.0	0.0	0.0	1.0	0.0	53.1	-30.0	-43.1	52.5	235.1	53.1	0.0	1.0	0.0	53.1	-30.0	-43.1	52.5
25/81	C13B_100_100d	0.0	1.0	0.125	0.0	0.883	1.0	53.1	-28.1	-44.6	52.7	237.7	53.1	0.0	0.883	1.0	53.1	-28.1	-44.6	52.7
26/82	C25B_100_100d	0.0	1.0	0.25	0.0	0.766	1.0	52.9	-26.2	-47.2	53.9	240.9	52.9	0.0	0.766	1.0	52.9	-26.2	-47.2	53.9
27/83	C38B_100_100d	0.0	1.0	0.375	0.0	0.633	1.0	50.7	-21.1	-49.4	53.7	246.8	50.7	0.0	0.633	1.0	50.7	-21.1	-49.4	53.7
28/84	C50B_100_100d	0.0	1.0	0.5	0.0	0.5	0.0	46.1	-13.3	-49.4	51.1	254.9	46.1	0.0	0.5	0.0	46.1	-13.3	-49.4	51.1
29/85	C63B_100_100d	0.0	1.0	0.625	0.0	0.366	1.0	41.4	-5.7	-49.2	49.6	263.3	41.4	0.0	0.366	1.0	41.4	-5.7	-49.2	49.6
30/86	C75B_100_100d	0.0	1.0	0.75	0.0	0.233	1.0	36.6	3.2	-48.3	48.4	273.8	36.6	0.0	0.233	1.0	36.6	3.2	-48.3	48.4
31/87	C88B_100_100d	0.0	1.0	0.875	0.0	0.116	1.0	34.9	9.9	-46.3	47.3	282.0	34.9	0.0	0.116	1.0	34.9	9.9	-46.3	47.3
32/8	B00M_100_100d	0.0	1.0	0.0	0.0	0.0	1.0	32.5	16.9	-44.6	47.7	290.8	32.5	0.0	1.0	0.0	32.5	16.9	-44.6	47.7
33/89	B13M_100_100d	0.125	0.0	1.0	0.116	0.0	0.0	31.6	23.1	-42.4	48.3	298.6	31.6	0.0	0.116	0.0	31.6	23.1	-42.4	48.3
34/170	B25M_100_100d	0.25	0.0	1.0	0.233	0.0	0.0	31.1	29.6	-39.8	49.6	306.6	31.1	0.0	0.233	0.0	31.1	29.6	-39.8	49.6
35/251	B38M_100_100d	0.375	0.0	1.0	0.366	0.0	0.0	34.0	37.7	-35.3	51.7	316.8	34.0	0.0	0.366	0.0	34.0	37.7	-35.3	51.7
36/332	B50M_100_100d	0.5	0.0	1.0	0.5	0.0	0.0	37.2	43.1	-30.8	53.0	324.4	37.2	0.0	0.5	0.0	37.2	43.1	-30.8	53.0
37/413	B63M_100_100d	0.625	0.0	1.0	0.633	0.0	0.0	39.2	48.9	-26.9	55.8	331.1	39.2	0.0	0.633	0.0	39.2	48.9	-26.9	55.8
38/494	B75M_100_100d	0.75	0.0	1.0	0.766	0.0	0.0	42.4	55.8	-20.9	59.6	339.4	42.4	0.0	0.766	0.0	42.4	55.8	-20.9	59.6
39/575	B88M_100_100d	0.875	0.0	1.0	0.883	0.0	0.0	45.8	60.5	-17.0	62.8	344.2	45.8	0.0	0.883	0.0	45.8	60.5	-17.0	62.8
40/656	M00R_100_100d	1.0	0.0	1.0	1.0	0.0	1.0	48.1	65.4	-12.7	66.6	348.9	48.1	1.0	1.0	0.0	48.1	65.4	-12.7	66.6
41/655	M13R_100_100d	1.0	0.0	0.875	1.0	0.0	0.883	49.4	66.1	-10.9	67.0	350.6	49.4	1.0	0.0	0.883	49.4	66.1	-10.9	67.0
42/654	M25R_100_100d	1.0	0.0	0.75	1.0	0.0	0.766	49.3	64.7	-7.1	65.1	353.7	49.3	1.0	0.0	0.766	49.3	64.7	-7.1	65.1
43/653	M38R_100_100d	1.0	0.0	0.625	1.0	0.0	0.633	48.0	62.0	1.5	62.0	1.4	48.0	1.0	0.0	0.633	48.0	62.0	1.5	62.0
44/652	M50R_100_100d	1.0	0.0	0.5	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.4	47.8	1.0	0.0	0.5	47.8	58.9	10.4	59.9
45/651	M63R_100_100d	1.0	0.0	0.375	1.0	0.0	0.366	47.4	56.8	20.0	60.2	19.4	47.4	1.0	0.0	0.366	47.4	56.8	20.0	19.4
46/650	M75R_100_100d	1.0	0.0	0.25	1.0	0.0	0.233	47.5	56.8	28.4	62.8	26.9	47.5	1.0	0.0	0.233	47.5	56.8	28.4	62.8
47/649	M88R_100_100d	1.0	0.0	0.125	1.0	0.0	0.116	47.6	56.4	36.1	66.1	31.4	47.6	1.0	0.0	0.116	47.6	56.4	36.1	31.4
48/648	R00Y_100_100d	1.0	0.0	0.0	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	47.5	1.0	0.0	0.0	47.5	57.2	37.8	68.6
49/0	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	23.8	1.0	1.0	0.0	23.8	0.0	0.0	0.0
50/91	NW_013d	0.125	0.0	0.125	0.0	0.125	0.0	23.8	0.0	0.0	0.0	0.0	23.8	1.0	1.0	0.0	23.8	0.0	0.0	0.0
51/182	NW_025d	0.25	0.0	0.25	0.0	0.25	0.0	23.8	0.0	0.0	0.0	0.0	23.8	1.0	1.0	0.0	23.8	0.0	0.0	0.0
52/273	NW_038d	0.375	0.0	0.375	0.0	0.375	0.0	23.8	0.0	0.0	0.0	0.0	23.8	1.0	1.0	0.0	23.8	0.0	0.0	0.0
53/364	NW_050d	0.5	0.0	0.5	0.0	0.5	0.0	23.8	0.0	0.0	0.0	0.0	23.8	1.0	1.0	0.0	23.8	0.0	0.0	0.0
54/455	NW_063d	0.625	0.0	0.625	0.0	0.625	0.0	23.8	0.0	0.0	0.0	0.0	23.8	1.0	1.0	0.0	23.8	0.0	0.0	0.0
55/546	NW_075d	0.75	0.0	0.75	0.0	0.75	0.0	23.8	0.0	0.0	0.0	0.0	23.8	1.0	1.0	0.0	23.8	0.0	0.0	0.0
56/637	NW_088d	0.875	0.0	0.875	0.0	0.875	0.0	23.8	0.0	0.0	0.0	0.0	23.8	1.0	1.0	0.0	23.8	0.0	0.0	0.0
57/728	NW_100d	1.0	1.0	1.0	1.0	1.0	1.0	23.8	0.0	0.0	0.0	0.0	23.8	1.0	1.0	1.0	23.8	0.0	0.0	0.0

Mean color difference of this page:

delta E* = 2.9



TUB material: code=rha4ta
cmy6 (CMYK)

input: *rgb/cmyk* → *rgbd*
output: transfer to *cmykd*

[illegible]

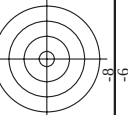
see similar files: <http://130.149.60.45/~farbmetrik/QE19/QE19.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>



TUB material: code=rha4ta
myn6 (CMYK)

input: *rgb/cmyk* → *rgb*_d
output: transfer to *cmyk*_d

[illegible]

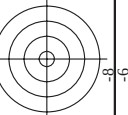


TUB material: code=rha4ta
myn6 (CMYK)

input: *rgb/cmyk* $\rightarrow$ *rgb*_d
output: transfer to *cmyk*_d

0E190-7N Page 33/33-E

[illegible]

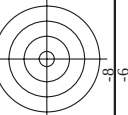


TUB material: code=rha4ta
cmyn6 (CMYK)

input: *rgb/cmyk* $\rightarrow$ *rgb*
output: transfer to *cmyk*

4	G50D_14	
	(-0032330-F0	

[illegible]

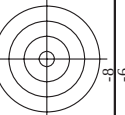


TUB material: code=rha4ta
myn6 (CMYK)

input: *rgb/cmyk* → *rgb_d*
output: transfer to *cmyk_d*

[illegible]

	Mean color difference of this page:
1	0.00
2	0.00
3	0.00
4	0.00
5	0.00
6	0.00
7	0.00
8	0.00
9	0.00
10	0.00
11	0.00
12	0.00
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94	0.00
95	0.00
96	0.00
97	0.00
98	0.00
99	0.00
100	0.00



TUB material: code=rha4ta
myn6 (CMYK)

input: *rgb/cmyk* -> *rgb*_d
output: transfer to *cmyk*_d

QE190-7N, Page 28/33-F

[illegible]

n	HCh*Fd	rgb_Fd	icr_Fd	hsa_Fd	rgb*Fd	LabCh*Fd	LabCh*Fd	DE**Fd	rgb**Md	LabCh**Md	delta E** = 3.0
1053	NW_086q	0.866	0.866	0.866	0.866	0.866	0.866	266.5	1.0	95.8	0.0
1054	NW_093d	0.933	0.933	0.933	0.933	0.933	0.933	278.1	1.0	95.8	0.0
1055	NW_100d	1.0	1.0	1.0	1.0	1.0	1.0	152.8	1.0	95.8	0.0
1056	NW_006q	0.0	0.0	0.0	0.0	0.0	0.0	83.2	1.0	95.8	0.0
1057	NW_006d	0.066	0.066	0.066	0.066	0.066	0.066	48.9	1.0	95.8	0.0
1058	NW_013q	0.133	0.133	0.133	0.133	0.133	0.133	268.2	1.0	95.8	0.0
1059	NW_026q	0.2	0.2	0.2	0.2	0.2	0.2	267.2	1.0	95.8	0.0
1060	NW_026d	0.266	0.266	0.266	0.266	0.266	0.266	269.1	1.0	95.8	0.0
1061	NW_033q	0.333	0.333	0.333	0.333	0.333	0.333	273.2	1.0	95.8	0.0
1062	NW_040q	0.4	0.4	0.4	0.4	0.4	0.4	273.2	1.0	95.8	0.0
1063	NW_046q	0.466	0.466	0.466	0.466	0.466	0.466	273.2	1.0	95.8	0.0
1064	NW_053q	0.533	0.533	0.533	0.533	0.533	0.533	268.8	1.0	95.8	0.0
1065	NW_060q	0.6	0.6	0.6	0.6	0.6	0.6	271.9	1.0	95.8	0.0
1066	NW_066q	0.666	0.666	0.666	0.666	0.666	0.666	265.0	1.0	95.8	0.0
1067	NW_073q	0.734	0.734	0.734	0.734	0.734	0.734	279.5	1.0	95.8	0.0
1068	NW_086q	0.8	0.8	0.8	0.8	0.8	0.8	252.2	1.0	95.8	0.0
1069	NW_086d	0.866	0.866	0.866	0.866	0.866	0.866	331.9	1.0	95.8	0.0
1070	NW_093d	0.933	0.933	0.933	0.933	0.933	0.933	58.1	1.0	95.8	0.0
1071	NW_100d	1.0	1.0	1.0	1.0	1.0	1.0	284.6	1.0	95.8	0.0
1072	NW_000q	0.0	0.0	0.0	0.0	0.0	0.0	35.5	1.0	95.8	0.0
1073	NW_100q	1.0	1.0	1.0	1.0	1.0	1.0	69.2	1.0	95.8	0.0
1074	R00Y_100_100d	1.0	0.0	0.0	0.0	0.0	0.0	234.0	1.0	53.1	-30.0
1075	G50B_100_100d	0.0	1.0	1.0	1.0	1.0	1.0	100.5	1.0	91.5	-15.8
1076	Y06C_100_100d	1.0	1.0	1.0	1.0	1.0	1.0	295.7	1.0	32.5	16.9
1077	B00R_100_100d	0.0	0.0	0.0	0.0	0.0	0.0	34.1	1.0	48.1	-12.7
1078	G00B_100_100d	0.0	1.0	1.0	1.0	1.0	1.0	154.3	1.0	54.3	65.4
1079	B50R_100_100d	1.0	0.0	0.0	0.0	0.0	0.0	348.9	1.0	48.1	66.6

Mean color difference of this page: $\Delta E^* = 3.0$

input: $rgb/cmyk \rightarrow rgbd$
output: transfer to $cmykd$

TUB-test chart QE19; hue code: $H^*_d=R50Y_d$
colors and differences, ΔE^*

1-0033230-F0

QE190-7N; Page 33/33-F

Input and Output: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 68/360 = 0.19$

$H^*_- = R50Y_-$

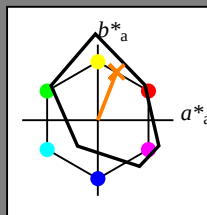
Data for any device (d) or elementary (e) colour:

HIC^*_-

hue text for the colours of this page:

$H^*_- = R50Y_-$

triangle lightness T^*



FRS06a; adapted (a) CIELAB data

name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R-,Ma	32.5	62.3	46.4	77.7	36
Y-,Ma	82.7	-3.1	113.9	114.0	91
G-,Ma	39.4	-61.8	45.8	76.9	143
C-,Ma	47.8	-26.8	-34.2	43.4	231
B-,Ma	10.1	55.1	-61.0	82.2	312
M-,Ma	34.5	80.6	-33.9	87.5	337
N-,Ma	6.2	0.0	0.0	0.0	0
W-,Ma	91.9	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):

$LabCh^*_{-,Ma}$: 68 25 63 68 68

$HIC^*_{-,Ma}$: R50Y_100_100_

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

1.0 0.5 0.0 1.0 1.0

triangle lightness T^*

% Gamut

$u^*_{rel} = 114$

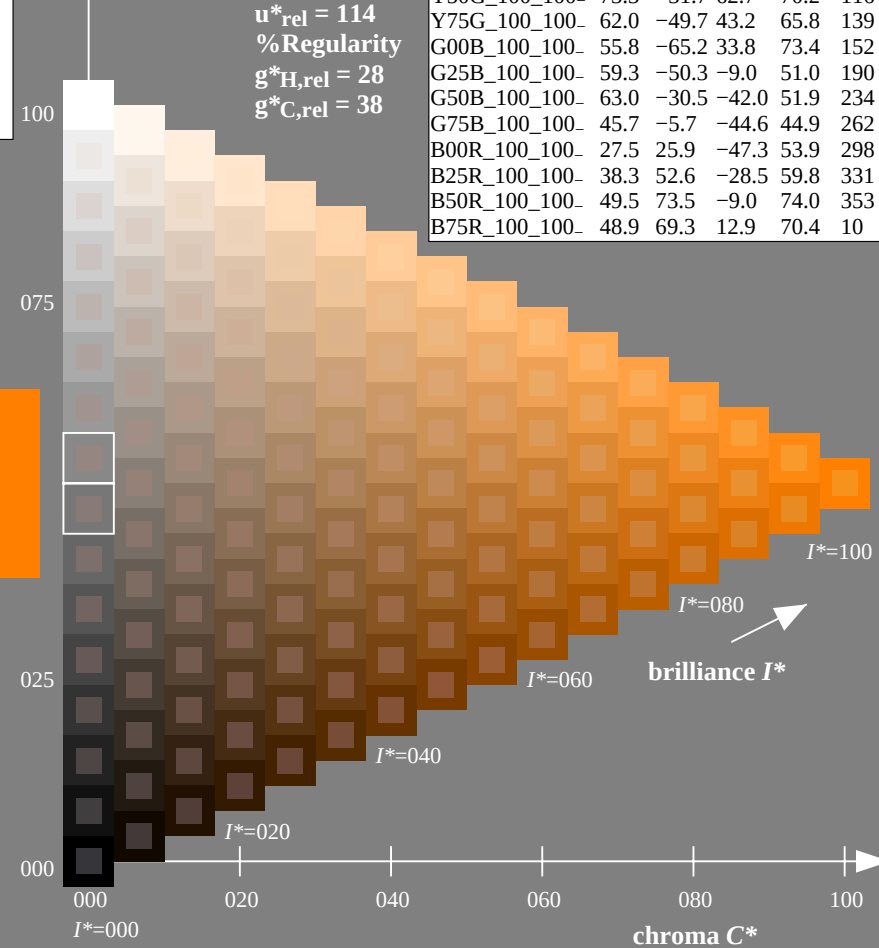
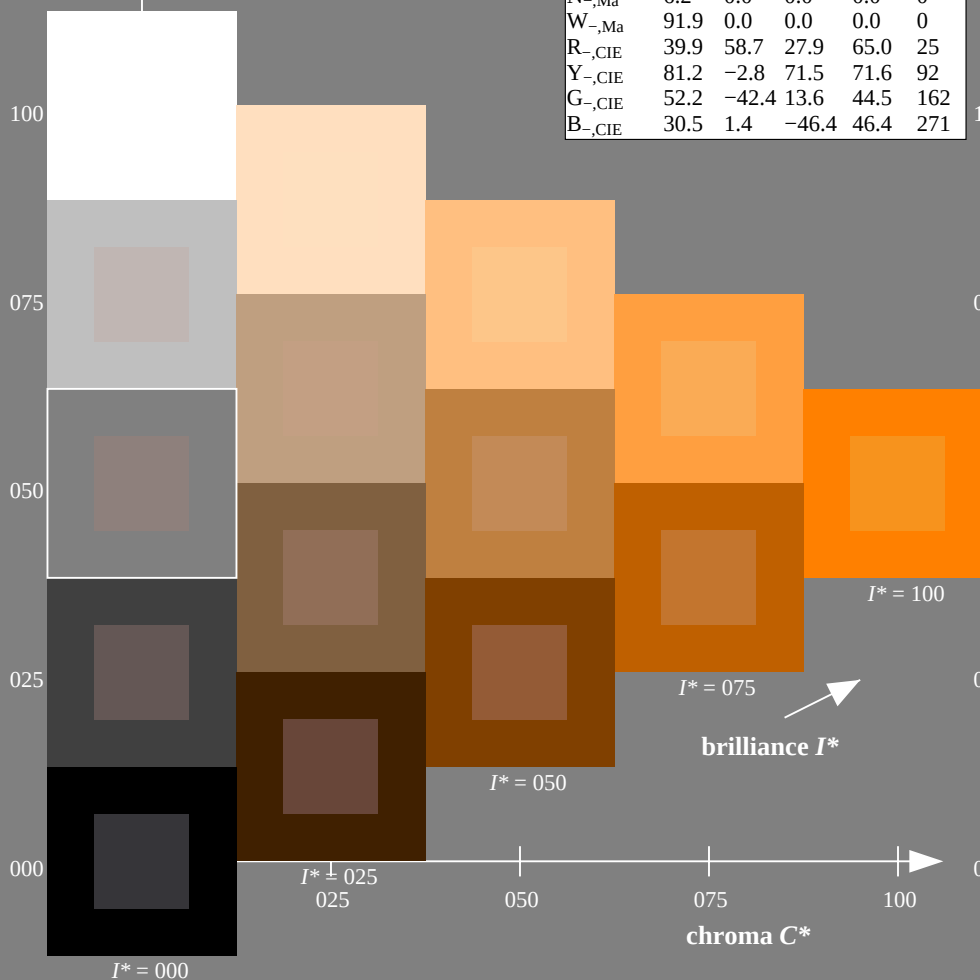
% Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

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



TUB-test chart QE19; hue code: $H^*_- = R50Y_-$
Test chart according to DIN 33872, 3D=0, de=1, cmyk

input: $rgb/cmyk \rightarrow rgb/cmyk$
output: no change

Input and Output: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 58/360 = 0.16$

$H^*_e = R50Y_e$

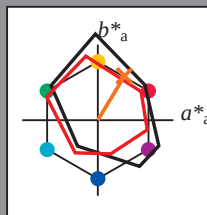
Data for any device (d) or elementary (e) colour:

HIC^*_e

hue text for the colours of this page:

$H^*_e = R50Y_e$

triangle lightness T^*



LRS18a; adapted (a) CIELAB data

name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_e, Ma	47.5	56.0	26.7	62.1	25
Y_e, Ma	83.6	-3.1	76.8	76.9	92
G_e, Ma	53.8	-65.9	21.1	69.2	162
C_e, Ma	54.9	-38.7	-29.1	48.4	216
B_e, Ma	37.3	1.4	-48.6	48.7	271
M_e, Ma	38.5	46.7	-28.5	54.7	328
N_e, Ma	23.8	0.0	0.0	0.0	0
W_e, Ma	95.8	0.0	0.0	0.0	0
R_e, CIE	39.9	58.7	27.9	65.0	25
Y_e, CIE	81.2	-2.8	71.5	71.6	92
G_e, CIE	52.2	-42.4	13.6	44.5	162
B_e, CIE	30.5	1.4	-46.4	46.4	271

Data for maximum colour (Ma):

$LabCh^*_e, Ma$: 61 35 58 68 58

HIC^*_e, Ma : R50Y_100_100_e

$rgbic^*_e, Ma$:

1.0 0.31 0.0 1.0 1.0

triangle lightness T^*

% Gamut

$u^*_{rel} = 114$

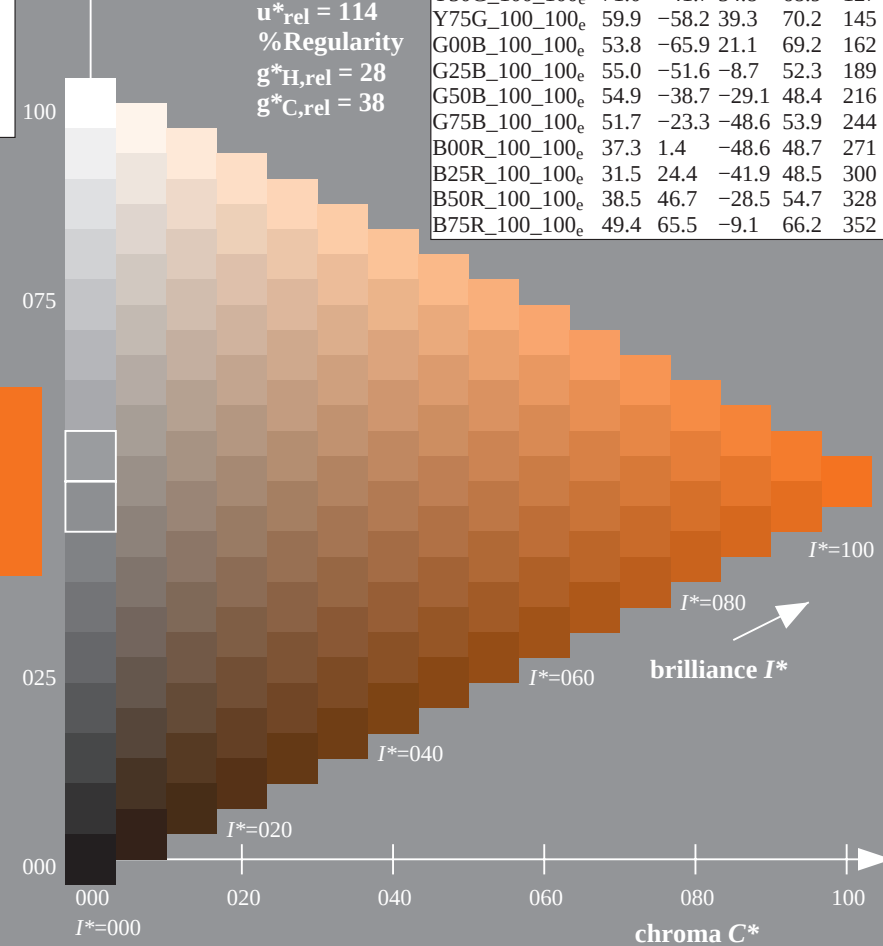
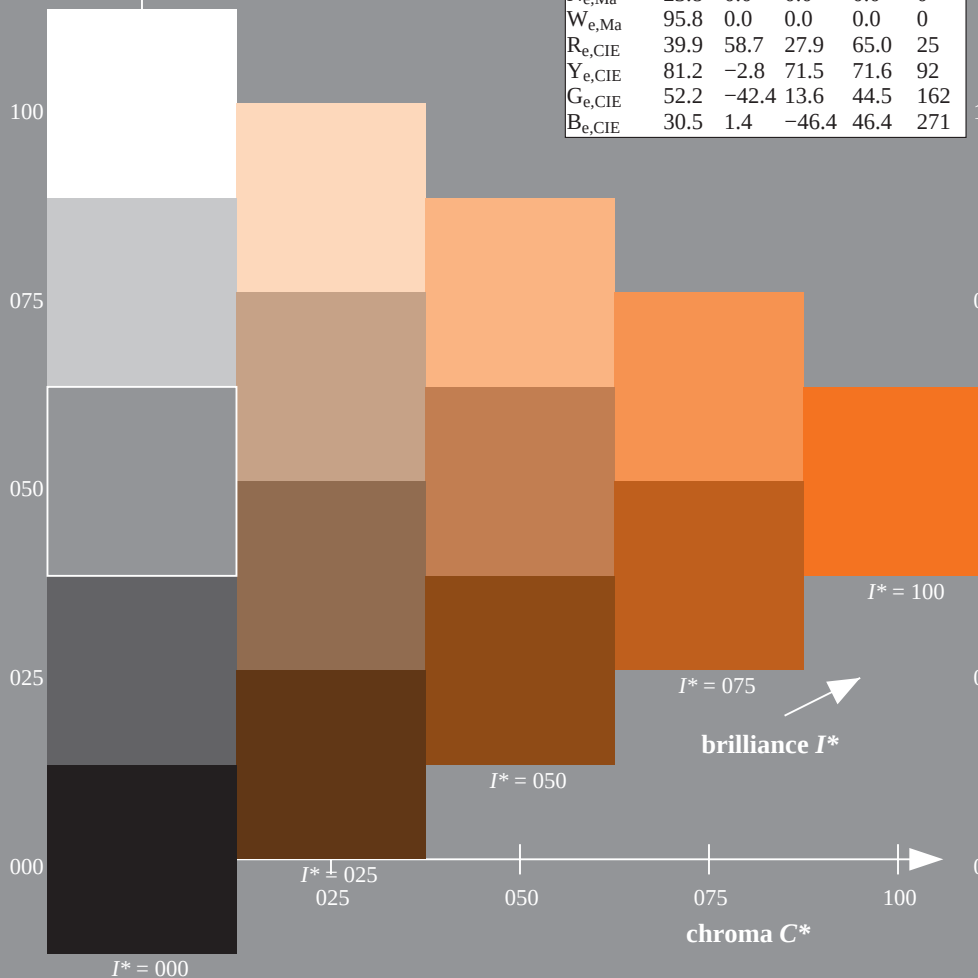
% Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

LRS18a; adapted (a) CIELAB data

H^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R00Y_100_100_e$	47.5	56.0	26.7	62.1	25
$R25Y_100_100_e$	51.4	54.8	47.7	72.6	41
$R50Y_100_100_e$	61.8	35.2	58.4	68.2	58
$R75Y_100_100_e$	72.3	16.1	68.2	70.1	76
$Y00G_100_100_e$	83.6	-3.1	76.8	76.9	92
$Y25G_100_100_e$	85.8	-26.4	78.5	82.9	108
$Y50G_100_100_e$	71.0	-41.7	54.8	68.9	127
$Y75G_100_100_e$	59.9	-58.2	39.3	70.2	145
$G00B_100_100_e$	53.8	-65.9	21.1	69.2	162
$G25B_100_100_e$	55.0	-51.6	-8.7	52.3	189
$G50B_100_100_e$	54.9	-38.7	-29.1	48.4	216
$G75B_100_100_e$	51.7	-23.3	-48.6	53.9	244
$B00R_100_100_e$	37.3	1.4	-48.6	48.7	271
$B25R_100_100_e$	31.5	24.4	-41.9	48.5	300
$B50R_100_100_e$	38.5	46.7	-28.5	54.7	328
$B75R_100_100_e$	49.4	65.5	-9.1	66.2	352



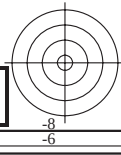
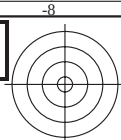
TUB-test chart QE19; hue code: $H^*_e=R50Y_e$
Test chart according to DIN 33872, 3D=0, de=1, cmyk

input: $rgb/cmyk \rightarrow rgb_e$
output: transfer to $cmyk_e$

TUB registration: 20130201-QE19/QE19L0NP.PDF /.PS
application for measurement of laser printer output, separation cmyk6 (CMYK)

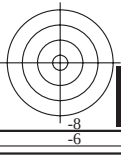
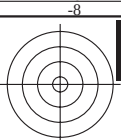
TUB material: code=rha4ta

TUB registration: 20130201-QE19/QE19L0NP.PDF /.PS TUB material: code=rha4ta
application for measurement of laser printer output, separation cmyk6 (CMYK)



http://130.149.60.45/~farbmetrik/QE19/QE19L0NP.PDF /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 3/33

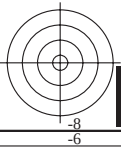
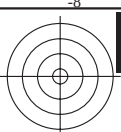
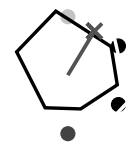
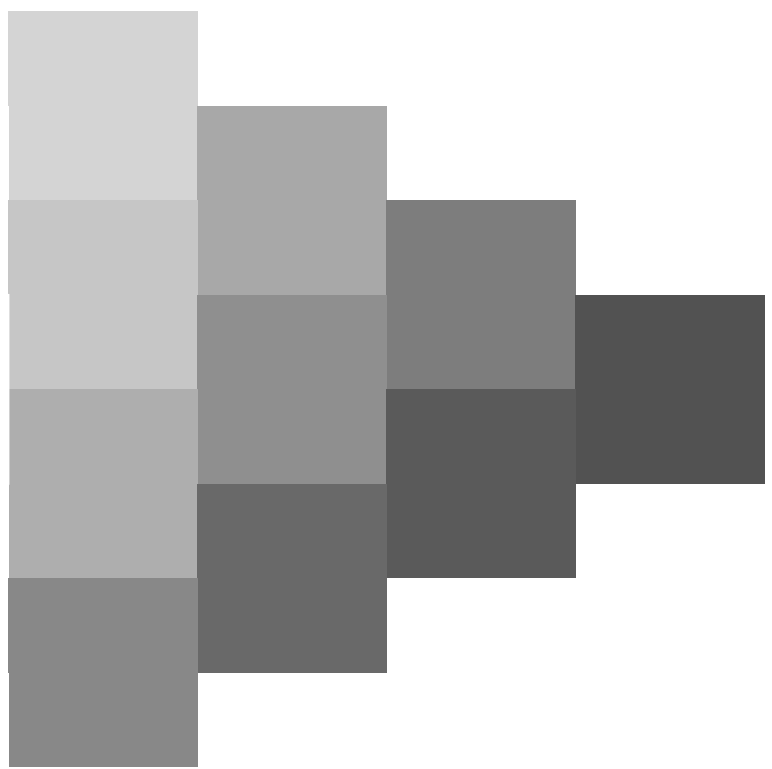
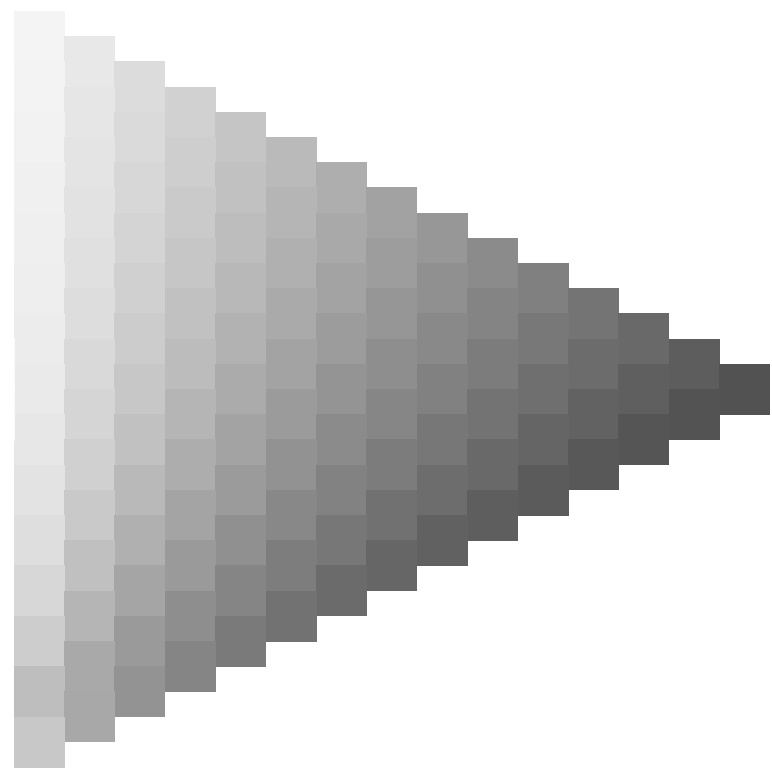
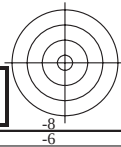
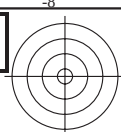
see similar files: <http://130.149.60.45/~farbmetrik/QE19/QE19.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

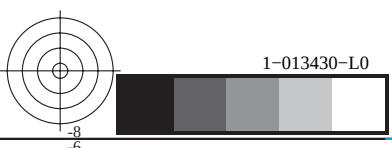
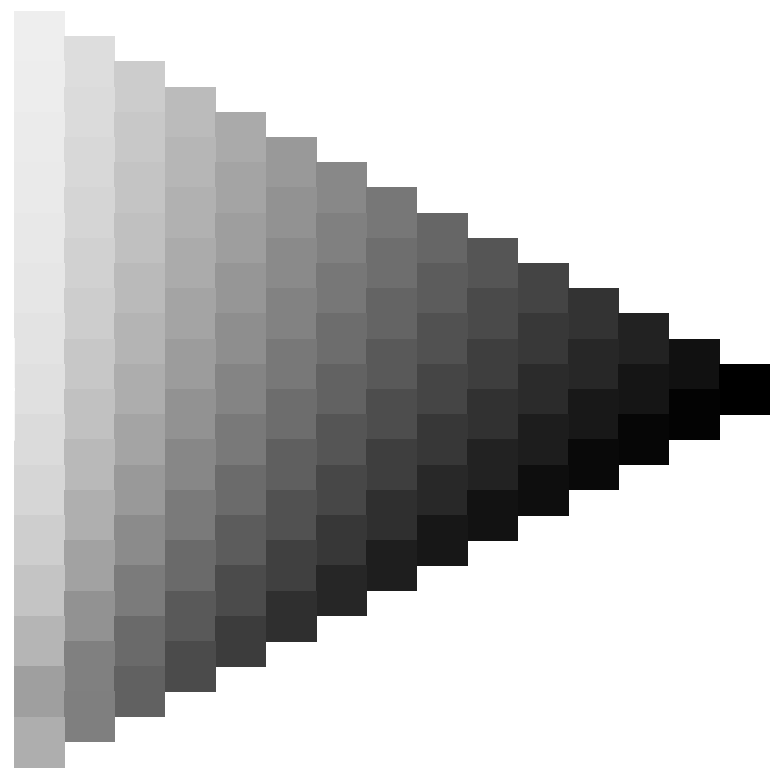
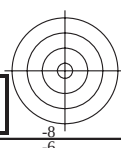
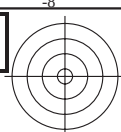


1-013230-L0 QE190-71
TUB-test chart QE19; hue code: $H^*_e=R50Y_e$
Test chart according to DIN 33872, 3D=0, de=1, cmyk

input: $rgb/cmyk \rightarrow rgb_e$
output: transfer to $cmyk_e$

1-013230-E0





C

M

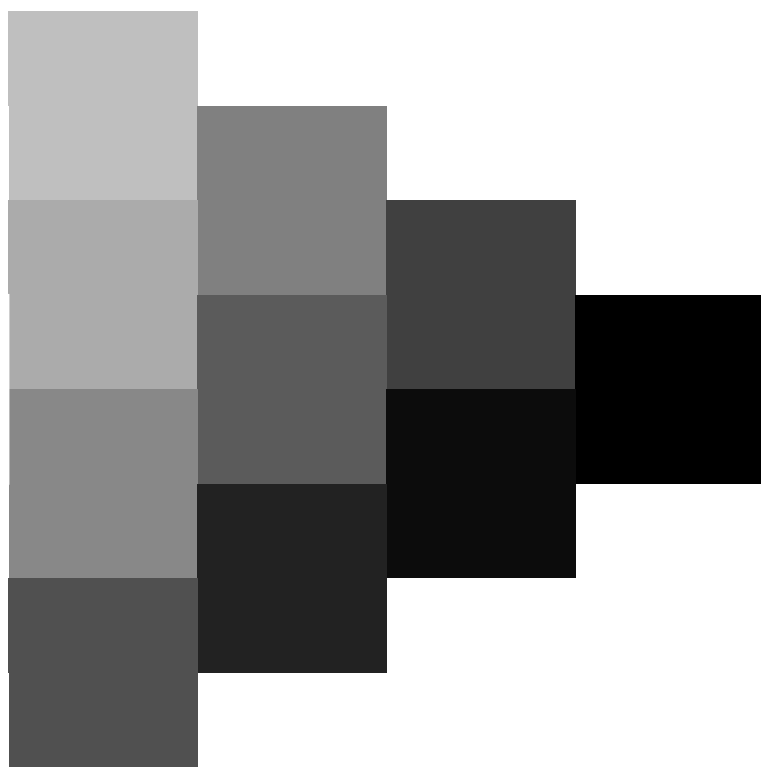
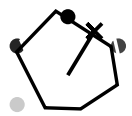
Y

O

L

V

see similar files: <http://130.149.60.45/~farbmetrik/QE19/QE19.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>



1-013430-L0 QE190-71

TUB-test chart QE19; hue code: $H^*_e=R50Y_e$
Test chart according to DIN 33872, 3D=0, de=1, cmyk

input: $rgb/cmyk \rightarrow rgb_e$
output: transfer to $cmyk_e$

1-013430-E0

V

L

O

Y

M

C

Input and Output: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 58/360 = 0.16$

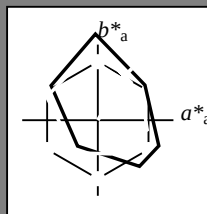
Data for any device (d) or elementary (e) colour:

HIC_e^*

hue text for the colours of this page:

$H_e^* = R50Y_e$

triangle lightness T^*



LRS18a; adapted (a) CIELAB data					
name	$L^*=L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
$R_{e,Ma}$	47.5	56.0	26.7	62.1	25
$Y_{e,Ma}$	83.6	-3.1	76.8	76.9	92
$G_{e,Ma}$	53.8	-65.9	21.1	69.2	162
$C_{e,Ma}$	54.9	-38.7	-29.1	48.4	216
$B_{e,Ma}$	37.3	1.4	-48.6	48.7	271
$M_{e,Ma}$	38.5	46.7	-28.5	54.7	328
$N_{e,Ma}$	23.8	0.0	0.0	0.0	0
$W_{e,Ma}$	95.8	0.0	0.0	0.0	0
$R_{e,CIE}$	39.9	58.7	27.9	65.0	25
$Y_{e,CIE}$	81.2	-2.8	71.5	71.6	92
$G_{e,CIE}$	52.2	-42.4	13.6	44.5	162
$B_{e,CIE}$	30.5	1.4	-46.4	46.4	271

Data for maximum colour (Ma):

$LabCh_{e,Ma}^*$: 61 35 58 68 58

$HIC_{e,Ma}^*$: R50Y_100_100_e

$rgbic_{e,Ma}^*$:

1.0 0.31 0.0 1.0 1.0

triangle lightness T^*

% Gamut

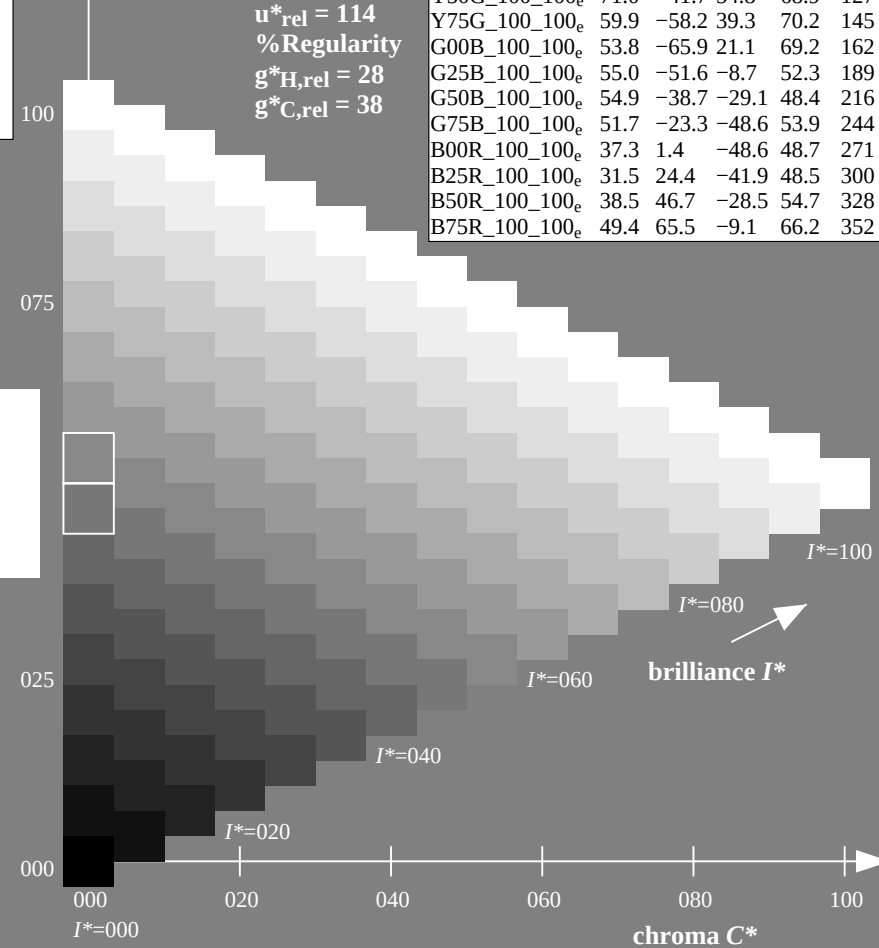
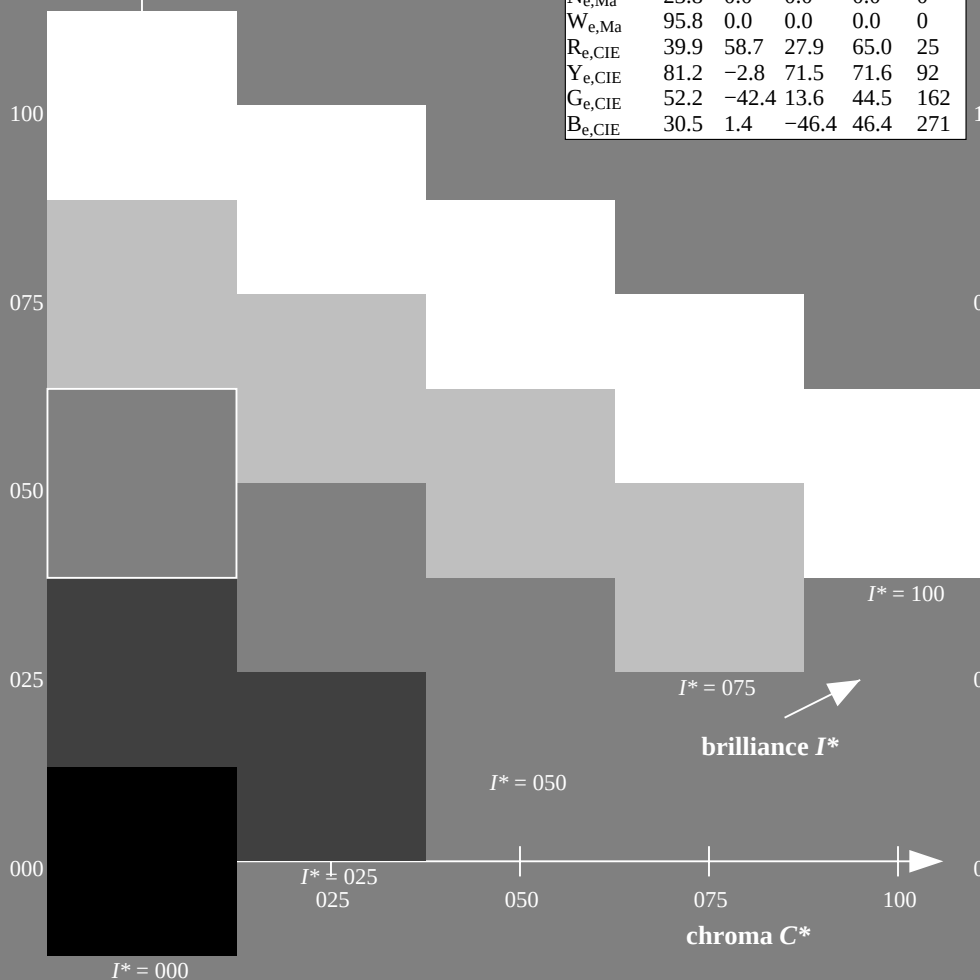
$u_{rel}^* = 114$

% Regularity

$g_{H,rel}^* = 28$

$g_{C,rel}^* = 38$

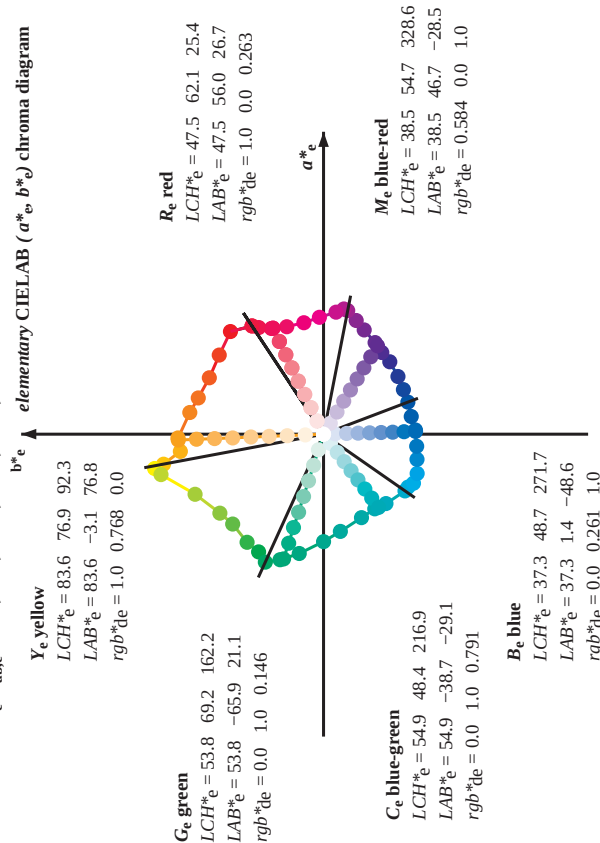
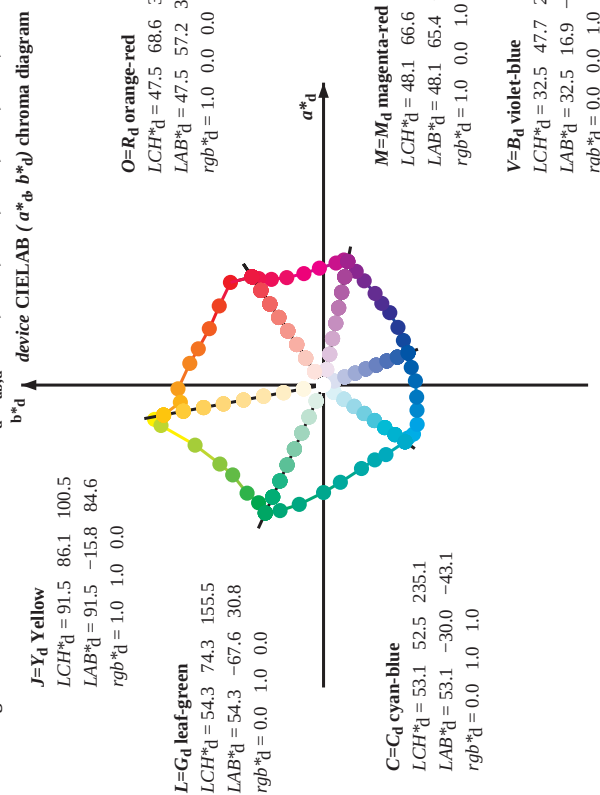
LRS18a; adapted (a) CIELAB data					
H_e^*	$L^*=L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
$R00Y_{100_100_e}$	47.5	56.0	26.7	62.1	25
$R25Y_{100_100_e}$	51.4	54.8	47.7	72.6	41
$R50Y_{100_100_e}$	61.8	35.2	58.4	68.2	58
$R75Y_{100_100_e}$	72.3	16.1	68.2	70.1	76
$Y00G_{100_100_e}$	83.6	-3.1	76.8	76.9	92
$Y25G_{100_100_e}$	85.8	-26.4	78.5	82.9	108
$Y50G_{100_100_e}$	71.0	-41.7	54.8	68.9	127
$Y75G_{100_100_e}$	59.9	-58.2	39.3	70.2	145
$G00B_{100_100_e}$	53.8	-65.9	21.1	69.2	162
$G25B_{100_100_e}$	55.0	-51.6	-8.7	52.3	189
$G50B_{100_100_e}$	54.9	-38.7	-29.1	48.4	216
$G75B_{100_100_e}$	51.7	-23.3	-48.6	53.9	244
$B00R_{100_100_e}$	37.3	1.4	-48.6	48.7	271
$B25R_{100_100_e}$	31.5	24.4	-41.9	48.5	300
$B50R_{100_100_e}$	38.5	46.7	-28.5	54.7	328
$B75R_{100_100_e}$	49.4	65.5	-9.1	66.2	352



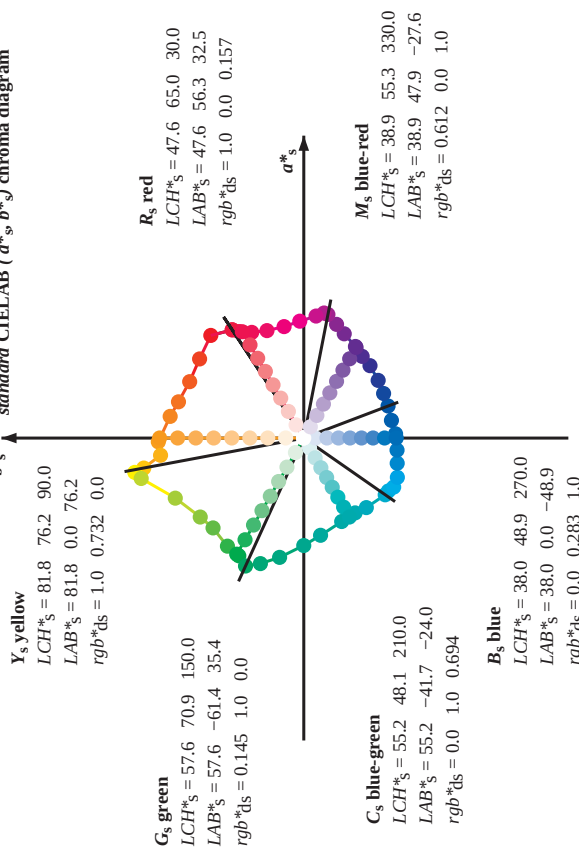
TUB-test chart QE19; hue code: $H_e^* = R50Y_e$
Test chart according to DIN 33872, 3D=0, de=1, cmyk

input: $rgb/cmyk \rightarrow rgb_e$
output: transfer to $cmyk_e$

Data of Maximum color M in colorimetric system Laser printer output; separation cmykn6*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBCM; $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;
Six hue angles of the device colours RYGBCM; $h_{ab,d} = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9$; Six hue angles of the elementary colours RYGBCM; $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$



standard CIELAB (a^*_s, b^*_s) chroma diagram



Notes to the CIELAB chroma diagrams (a^*_d, b^*_d), (a^*_s, b^*_s), (a^*_e, b^*_e)

- For the rgb^*_e -input values the CIELAB data LCH^*_e and LAB^*_e have been calculated.
- For the calculation of the standard hue angle h_{ab} use for any device values rgb^*_e the equation:

$$h_{ab,s} = \arctan \left[\frac{r^*_d \cos(30) + g^*_d \sin(150)}{1 / r^*_d \sin(30) + b^*_d \sin(270)} \right] \quad (1)$$
- For the 48 or 360 equally spaced standard hue angles h_{ab} of the colours of maximum chroma use the seven hue angles of the 60 degree colours s : $h_{ab,s} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0, 390.0$ ($i=0,6$) and the equations for a 48 and 360 step hue circle:

$$h_{48ab,sij} = h_{ab,si} + j [h_{ab,si+1} - h_{ab,si}] / 8 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (2)$$

$$h_{360ab,sij} = h_{ab,si} + j [h_{ab,si+1} - h_{ab,si}] / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (3)$$
- For the 48 or 360 elementary hue angles h_{ab} of the colours of maximum chroma use the seven hue angles of the elementary colours e : $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6, 385.5$ ($i=0,6$) and the equations for a 48 and 360 step elementary hue circle:

$$h_{48ab,eij} = h_{ab,ei} + j [h_{ab,ei+1} - h_{ab,ei}] / 8 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (4)$$

$$h_{360ab,eij} = h_{ab,ei} + j [h_{ab,ei+1} - h_{ab,ei}] / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (5)$$
- For any elementary hue angle h_{ab} there is a well defined device hue angle $h_{ab,d}$ see the following tables, columns 1 to 5 or 1 to 4.
- The values rgb^*_e produce the output of the device-independent elementary hues

LAB*_{ab0}, YN=0%, XY Znw=3.9, 4.1, 84.7, 89.6, 93.9, LAB*nw=23.9, 0.0, 0.0, 95.8, 0.0, 0.0

TUB-test chart QE19; hue code: H*_e=R50Y_e
48 step hue circles; $rgb-LabCh^*$ tables

input: $rgb/cmyk \rightarrow rgb_e$
output: transfer to $cmyk_e$

Output: Laser printer output; separation cmykn6*, D65, page 7/38

see similar files: <http://130.149.60.45/~farbmatrik/QE19/QE19.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>

http://130.149.60.45/~farbmatrik/QE19/QE19LONP.PDF /PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 14/33

Data of Maximum color M in colorimetric system Laser printer output; D65 for input or output; Six hue angles of the 60 degree standard colours RYGCBM; $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;

Six hue angles of the device colours $RYGCBM_d$: $h_{ab,d} = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9$; Six hue angles of the elementary colours $RYGCBM_e$: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

[illegible]

LAB*a0, YN=0%	LAB*znw=3.9, 4.1, 4.1, 84.7, 89.6, 93.9, LAB*znw=23.9, 0.0, 0.0, 95.8, 0.0, 0.0
---------------	---

input: *rgb/cmyk* → *rgb*
output: transfer to *cmyk*

48 step hue circles: *rgb-LabCh** tables

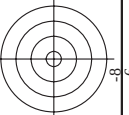
TUTUB-test chart QE19; hue code: H*e=R50Y_e

Output: Laser printer output: separation cmv6*. D65 page 14/33

Data of Maximum color M in colorimetric system Laser printer output; separation cmyk6*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBCM; $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;																			
Six hue angles of the device colours RYGBCM; $h_{ab,d} = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9$; Six hue angles of the elementary colours RYGBCM; $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$																			
$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	rgb^*_{ds}	rgb^*_{ds}	rgb^*_{ds}	rgb^*_{ds}	rgb^*_{ds}	rgb^*_{ds}	rgb^*_{ds}	LAB^*_{ds}	LAB^*_{ds}	LAB^*_{ds}	LAB^*_{ds}	LAB^*_{ds}	LAB^*_{ds}	LAB^*_{ds}	LAB^*_{ds}	LAB^*_{ds}	LAB^*_{ds}
324	300	300	0.5	0.0	1.0	37.2	43.1	-30.8	53.0	324	324	300	0.5	0.0	1.0	0.139	0.0	1.0	31.5
325	301	301	0.516	0.0	1.0	37.4	43.8	-30.4	53.4	325	325	301	0.516	0.0	1.0	0.153	0.0	1.0	31.5
326	302	302	0.533	0.0	1.0	37.7	44.5	-29.9	53.7	326	326	302	0.533	0.0	1.0	0.166	0.0	1.0	31.4
327	303	303	0.550	0.0	1.0	37.9	45.3	-29.5	54.0	327	327	303	0.550	0.0	1.0	0.180	0.0	1.0	31.4
328	304	304	0.566	0.0	1.0	38.2	46.0	-29.0	54.4	328	328	304	0.566	0.0	1.0	0.194	0.0	1.0	31.3
329	305	305	0.583	0.0	1.0	38.4	46.7	-28.5	54.7	329	329	305	0.583	0.0	1.0	0.208	0.0	1.0	31.2
330	306	306	0.600	0.0	1.0	38.7	47.4	-28.0	55.1	330	330	306	0.600	0.0	1.0	0.222	0.0	1.0	31.2
331	307	307	0.616	0.0	1.0	38.9	48.1	-27.5	55.4	331	331	307	0.616	0.0	1.0	0.235	0.0	1.0	31.1
332	308	308	0.633	0.0	1.0	39.2	48.9	-26.9	55.8	332	332	308	0.633	0.0	1.0	0.249	0.0	1.0	31.0
333	309	309	0.650	0.0	1.0	39.6	49.8	-26.2	56.3	333	333	309	0.650	0.0	1.0	0.261	0.0	1.0	31.0
334	310	310	0.666	0.0	1.0	40.0	50.7	-25.4	56.8	334	334	310	0.666	0.0	1.0	0.274	0.0	1.0	31.0
335	311	311	0.683	0.0	1.0	40.4	51.6	-24.7	57.2	335	335	311	0.683	0.0	1.0	0.286	0.0	1.0	31.0
336	312	312	0.700	0.0	1.0	40.7	52.5	-23.9	57.7	336	336	312	0.700	0.0	1.0	0.298	0.0	1.0	31.0
337	313	313	0.716	0.0	1.0	41.1	53.4	-23.1	58.2	337	337	313	0.716	0.0	1.0	0.310	0.0	1.0	31.0
338	314	314	0.733	0.0	1.0	41.5	54.3	-22.3	58.7	338	338	314	0.733	0.0	1.0	0.323	0.0	1.0	31.0
339	315	315	0.750	0.0	1.0	41.8	55.1	-21.4	59.1	339	339	315	0.750	0.0	1.0	0.335	0.0	1.0	31.0
340	316	316	0.766	0.0	1.0	42.4	55.8	-20.9	59.6	340	340	316	0.766	0.0	1.0	0.347	0.0	1.0	31.0
341	317	317	0.783	0.0	1.0	42.9	56.5	-20.4	60.1	341	341	317	0.783	0.0	1.0	0.359	0.0	1.0	31.0
342	318	318	0.800	0.0	1.0	43.4	57.2	-19.8	60.5	342	342	318	0.800	0.0	1.0	0.371	0.0	1.0	31.0
343	319	319	0.816	0.0	1.0	43.9	57.8	-19.3	61.0	343	343	319	0.816	0.0	1.0	0.383	0.0	1.0	31.0
344	320	320	0.833	0.0	1.0	44.4	58.5	-18.7	61.4	344	344	320	0.833	0.0	1.0	0.404	0.0	1.0	31.0
345	321	321	0.850	0.0	1.0	44.9	59.1	-18.2	61.9	345	345	321	0.850	0.0	1.0	0.421	0.0	1.0	31.0
346	322	322	0.866	0.0	1.0	45.4	59.8	-17.6	62.3	346	346	322	0.866	0.0	1.0	0.439	0.0	1.0	31.0
347	323	323	0.883	0.0	1.0	45.8	60.5	-17.0	62.8	347	347	323	0.883	0.0	1.0	0.456	0.0	1.0	31.0
348	324	324	0.900	0.0	1.0	46.1	61.2	-16.4	63.4	348	348	324	0.900	0.0	1.0	0.473	0.0	1.0	31.0
349	325	325	0.916	0.0	1.0	46.5	61.9	-15.9	63.9	349	349	325	0.916	0.0	1.0	0.490	0.0	1.0	31.0
350	326	326	0.933	0.0	1.0	46.8	62.6	-15.3	64.5	350	350	326	0.933	0.0	1.0	0.508	0.0	1.0	31.0
351	327	327	0.950	0.0	1.0	47.1	63.3	-14.6	65.0	351	351	327	0.950	0.0	1.0	0.527	0.0	1.0	31.0
352	328	328	0.966	0.0	1.0	47.5	64.0	-14.0	65.5	352	352	328	0.966	0.0	1.0	0.546	0.0	1.0	31.0
353	329	329	0.983	0.0	1.0	47.8	64.7	-13.4	66.1	353	353	329	0.983	0.0	1.0	0.565	0.0	1.0	31.0
354	330	330	1.0	0.0	1.0	48.1	65.4	-12.7	66.6	354	354	330	1.0	0.0	1.0	0.584	0.0	1.0	31.0
355	331	331	1.0	0.0	0.983	48.3	65.5	-12.5	66.7	355	355	331	1.0	0.0	0.983	0.603	0.0	1.0	38.5
356	332	332	1.0	0.0	0.966	48.5	65.6	-12.2	66.7	356	356	332	1.0	0.0	0.966	0.623	0.0	1.0	38.5
357	333	333	1.0	0.0	0.950	48.7	65.7	-11.9	66.8	357	357	333	1.0	0.0	0.950	0.638	0.0	1.0	39.1
358	334	334	1.0	0.0	0.933	48.9	65.8	-11.7	66.8	358	358	334	1.0	0.0	0.933	0.652	0.0	1.0	39.4
359	335	335	1.0	0.0	0.916	49.0	65.9	-11.4	66.9	359	359	335	1.0	0.0	0.916	0.667	0.0	1.0	39.7
360	336	336	1.0	0.0	0.899	49.2	66.0	-11.1	66.9	360	360	336	1.0	0.0	0.899	0.681	0.0	1.0	40.0
361	337	337	1.0	0.0	0.883	49.4	66.1	-10.9	67.0	361	361	337	1.0	0.0	0.883	0.696	0.0	1.0	40.4
362	338	338	1.0	0.0	0.866	49.5	66.0	-10.4	66.9	362	362	338	1.0	0.0	0.866	0.711	0.0	1.0	40.7
363	339	339	1.0	0.0	0.850	49.6	65.8	-9.9	66.6	363	363	339	1.0	0.0	0.850	0.725	0.0	1.0	41.0
364	340	340	1.0	0.0	0.833	49.7	65.6	-9.3	66.3	364	364	340	1.0	0.0	0.833	0.740	0.0	1.0	41.3
365	341	341	1.0	0.0	0.816	49.8	65.4	-8.7	66.0	365	365	341	1.0	0.0	0.816	0.755	0.0	1.0	41.7
366	342	342	1.0	0.0	0.800	49.9	65.2	-8.2	65.7	366	366	342	1.0	0.0	0.800	0.770	0.0	1.0	42.1
367	343	343	1.0	0.0	0.783	49.9	65.0	-7.6	65.4	367	367	343	1.0	0.0	0.783	0.802	0.0	1.0	42.1
368	344	344	1.0	0.0	0.766	49.9	64.7	-7.1	65.1	368	368	344	1.0	0.0	0.766	0.825	0.0	1.0	42.1
369	345	345	1.0	0.0	0.750	49.9	64.5	-6.5	64.8	369	369	345	1.0	0.0	0.750	0.848	0.0	1.0	42.1

Output: Laser printer output; separation cmyk6*, D65, page 16/83

input: $rgb/cmyk -> rgb$
output: transfer to $cmyk_e$



TUB material: code=rha4ta
cmyn6 (CMYK)

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

10





TUB material: code=rha4ta
cmyn6 (CMYK)

input: *rgb/cmyk* → *rgb*_e
output: transfer to *cmyk*_e

mean color difference of this page:

QE190-7N, Page 22/33-F

1-0132130-F0

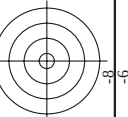
n	HIC*Fe	rgb_Fe	icr_Fe	hsl_Fa	rgb_Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe	LabCh*Fe
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see similar files: <http://130.149.60.45/~farbmatrik/QE19/QE19.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>

TUB-test chart QE19; hue code: $H^*_e=R50Y_e$

input: *rgb/cmyk* –> *rgb*_e
output: transfer to *cmyk*_e

n	HIC-Fe	rgb^*Fe	lcr^*Fe	h_{α}^*Fe	$LabCh^*Fe$	rgb^*Fe	$LabCh^*Fe$	rgb^*Fe	$LabCh^*Fe$	DE^*Fe	h_{α}^*Fe	rgb^*Fe	$LabCh^*Fe$
405	R00Y_062_062a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
406	R00Y_062_062a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
407	R11Y_062_062a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
408	R69R_062_062a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
409	B59R_062_062a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
410	B59R_062_062a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
411	B42R_075_075a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
412	B36R_087_087a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
413	R10Y_100_100a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
414	R18Y_062_062a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
415	R00Y_062_050a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
416	R26Y_062_050a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
417	R00Y_062_050a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
418	B61R_062_050a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
419	B40R_075_062a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
420	B40R_075_062a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
421	B34R_087_087a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
422	B29R_100_087a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
423	R33Y_062_062a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
424	R23Y_062_037a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
425	R00Y_062_037a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
426	R18Y_062_037a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
427	B65R_062_037a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
428	B59R_062_037a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
429	B38R_075_050a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
430	B38R_075_050a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
431	B25R_100_075a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
432	R61Y_062_062a	0.625	0.0	0.625	0.025	0.0	0.625	0.0	0.625	33.1	48.0	26.2	48.0
433	R												



TUB material: code=rha4ta
cmyn6 (CMYK)

input: *rgb/cmyk* → *rgbe*
output: transfer to *cmyke*

1043

[illegible]

n	HC*Fe	rgb_Fe	icL_Fe	hsa_Fa	rgb_Fe	LabCH*Fe	LabCH*Fe	rgb**Fe	DF**Fe	hsa**Fe	rgb**Fe	LabCH**Fe	LabCH**Fe
972	NW_000e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
973	NW_012e	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
974	NW_025e	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
975	NW_037e	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375
976	NW_050e	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
977	NW_062e	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
978	NW_075e	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
979	NW_087e	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875
980	NW_100e	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
981	NW_000e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
982	NW_012e	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
983	NW_025e	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
984	NW_037e	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375
985	NW_050e	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
986	NW_062e	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
987	NW_075e	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
988	NW_087e	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875
989	NW_100e	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
990	NW_000e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
991	NW_012e	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
992	NW_025e	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
993	NW_037e	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375
994	NW_050e	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
995	NW_062e	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
996	NW_075e	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
997	NW_087e	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875
998	NW_100e	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
999	NW_000e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1000	NW_012e	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
1001	NW_025e	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
1002	NW_037e	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375
1003	NW_050e	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1004	NW_062e	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
1005	NW_075e	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
1006	NW_087e	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875
1007	NW_100e	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1008	NW_000e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1009	NW_012e	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
1010	NW_025e	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
1011	NW_037e	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375
1012	NW_050e	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1013	NW_062e	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
1014	NW_075e	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
1015	NW_087e	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875
1016	NW_100e	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1017	NW_000e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1018	NW_012e	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
1019	NW_025e	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
1020	NW_037e	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375
1021	NW_050e	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1022	NW_062e	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
1023	NW_075e	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
1024	NW_087e	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875
1025	NW_100e	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1026	NW_000e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1027	NW_012e	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
1028	NW_025e	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
1029	NW_037e	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375
1030	NW_050e	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1031	NW_062e	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
1032	NW_075e	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
1033	NW_087e	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875
1034	NW_100e	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1035	NW_000e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1036	NW_012e	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
1037	NW_025e	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
1038	NW_037e	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375
1039	NW_050e	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1040	NW_062e	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
1041	NW_075e	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
1042	NW_087e	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875
1043	NW_100e	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1044	NW_000e	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1045	NW_012e	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
1046	NW_025e	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
1047	NW_037e	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375
1048	NW_050e	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1049	NW_062e	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
1050	NW_075e	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
1051	NW_087e	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875
1052	NW_100e	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Mean color difference of this page:

delta E** = 3.2

TUB-test chart QE19; hue code: H*e=R50Ye
colors and differences, ΔE*

input: rgb/cmyk -> rgbe
output: transfer to cmyke

TUB registration: 20130201-QE19/QE19L0NP.PDF /.PS
application for measurement of laser printer output, separation cmykn6 (CMYK)

TUB material: code=rha4ta

see similar files: <http://130.149.60.45/~farbmetrik/QE19/QE19.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

input: *rgb/cmyk* - > *rgbe*
output: transfer to *cmyke*

TUB-test chart QE19; hue code: H*e=R50Ye
colors and differences, ΔE^*

n	HC*Fe	rgb_Fe	ic*_Fe	hsa_Fa	rgb*Fe	LabCh*Fe	LabCh*Fe	rgb*Fe	DE*Fe	hsa_Fe	rgb*Me	LabCh*Me	DE*Me
1053	NW_086e	0.866	0.866	0.866	0.866	86.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1054	NW_093e	0.933	0.933	0.933	0.933	91.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1055	NW_100e	1.0	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1056	NW_000e	0.0	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1057	NW_006e	0.066	0.066	0.066	0.066	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1058	NW_013e	0.133	0.133	0.133	0.133	33.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1059	NW_020e	0.2	0.2	0.2	0.2	38.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1060	NW_026e	0.266	0.266	0.266	0.266	42.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1061	NW_033e	0.333	0.333	0.333	0.333	47.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1062	NW_040e	0.4	0.4	0.4	0.4	52.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1063	NW_046e	0.466	0.466	0.466	0.466	57.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1064	NW_053e	0.533	0.533	0.533	0.533	62.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1065	NW_060e	0.6	0.6	0.6	0.6	67.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1066	NW_066e	0.666	0.666	0.666	0.666	71.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1067	NW_073e	0.734	0.734	0.734	0.734	76.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1068	NW_080e	0.8	0.8	0.8	0.8	81.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1069	NW_086e	0.866	0.866	0.866	0.866	86.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1070	NW_093e	0.933	0.933	0.933	0.933	91.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1071	NW_100e	1.0	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1072	NW_000e	0.0	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1073	RO0Y_100_100e	1.0	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1074	G50B_100_100e	0.0	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1075	Y06C_100_100e	0.0	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1076	B06C_100_100e	0.0	0.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1077	B00C_100_100e	0.0	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1078	B50B_100_100e	0.0	0.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1079	B50R_100_100e	1.0	0.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Mean color difference of this page:

delta E* = 6.3