

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 102/360 = 0.28$

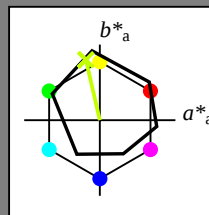
Data for any device (d) or elementary (e) colour:

HIC^*

hue text for the colours
of this page:

$H^*_{-} = Y25G_{-}$

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):

$LabCh^*_{-,Ma}$: 83 -18 79 81 102

$HIC^*_{-,Ma}$: Y25G_100_100

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

0.76 1.0 0.0 1.0 1.0

triangle lightness T^*

% Gamut

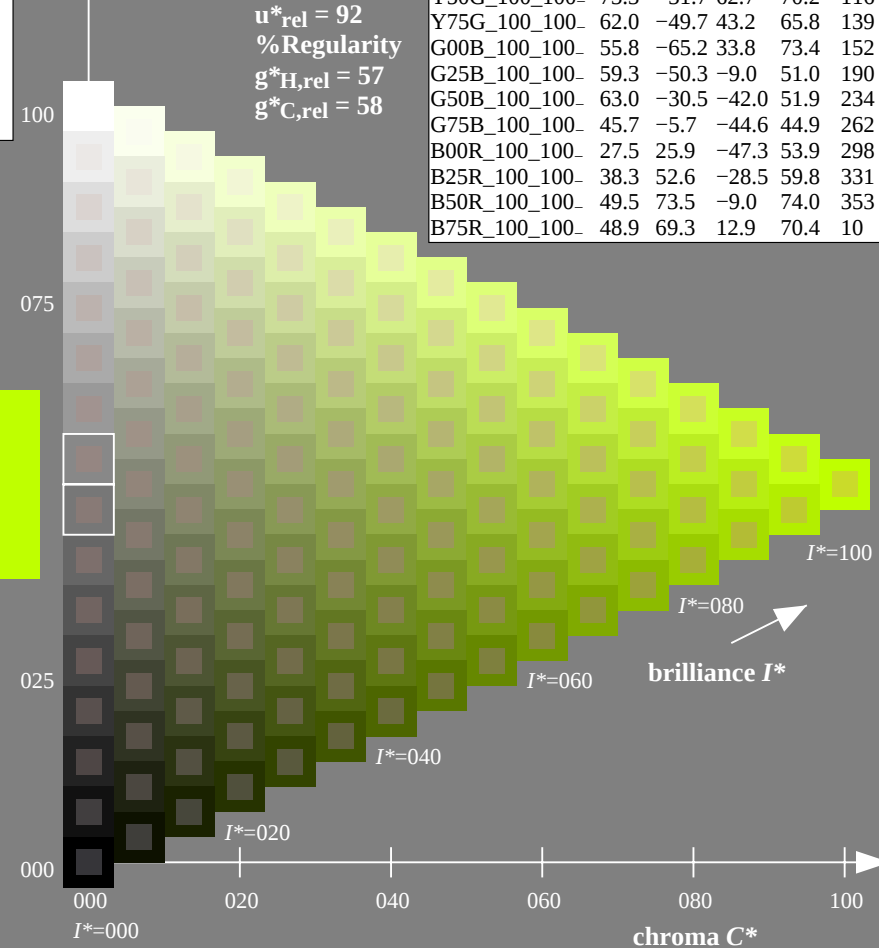
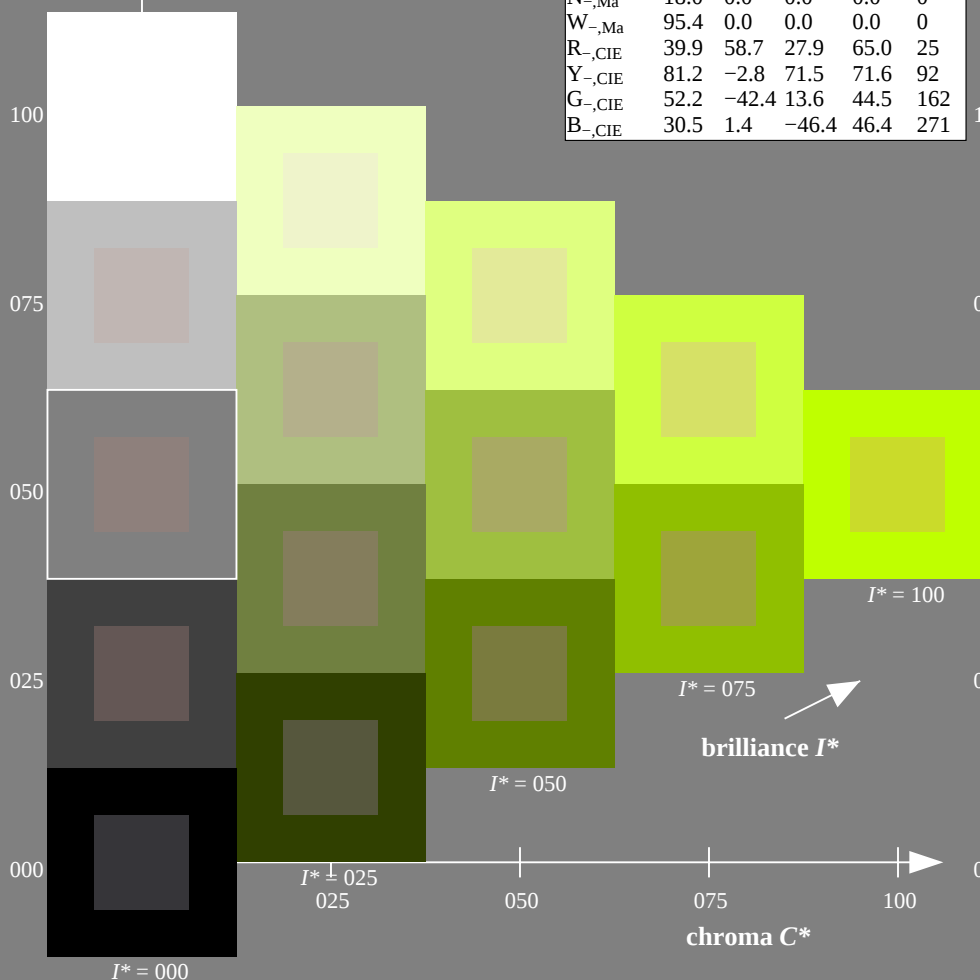
$u^*_{rel} = 92$

% 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



TUB-test chart QE45; hue code: $H^*_{-} = Y25G_{-}$
Test chart according to DIN 33872, 3D=1, de=1, $cm yk^*$

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

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 108/360 = 0.3$

$H^*_e = Y25G_e$

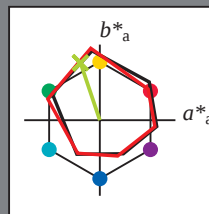
Data for any device (d) or elementary (e) colour:

HIC^*_e

hue text for the colours of this page:

$H^*_e = Y25G_e$

triangle lightness T^*



ORS20a; adapted (a) CIELAB data					
name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R_{e,Ma}$	47.6	64.9	30.9	71.9	25
$Y_{e,Ma}$	82.9	-3.5	87.8	87.9	92
$G_{e,Ma}$	52.4	-67.1	21.5	70.5	162
$C_{e,Ma}$	56.6	-39.7	-29.9	49.8	216
$B_{e,Ma}$	37.9	1.3	-45.4	45.4	271
$M_{e,Ma}$	34.8	49.2	-30.0	57.7	328
$N_{e,Ma}$	17.7	0.0	0.0	0.0	0
$W_{e,Ma}$	95.4	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):

$LabCh^*_{e,Ma}$: 76 -25 75 80 108

$HIC^*_{e,Ma}$: Y25G_100_100_e

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

0.61 1.0 0.0 1.0 1.0

triangle lightness T^*

% Gamut

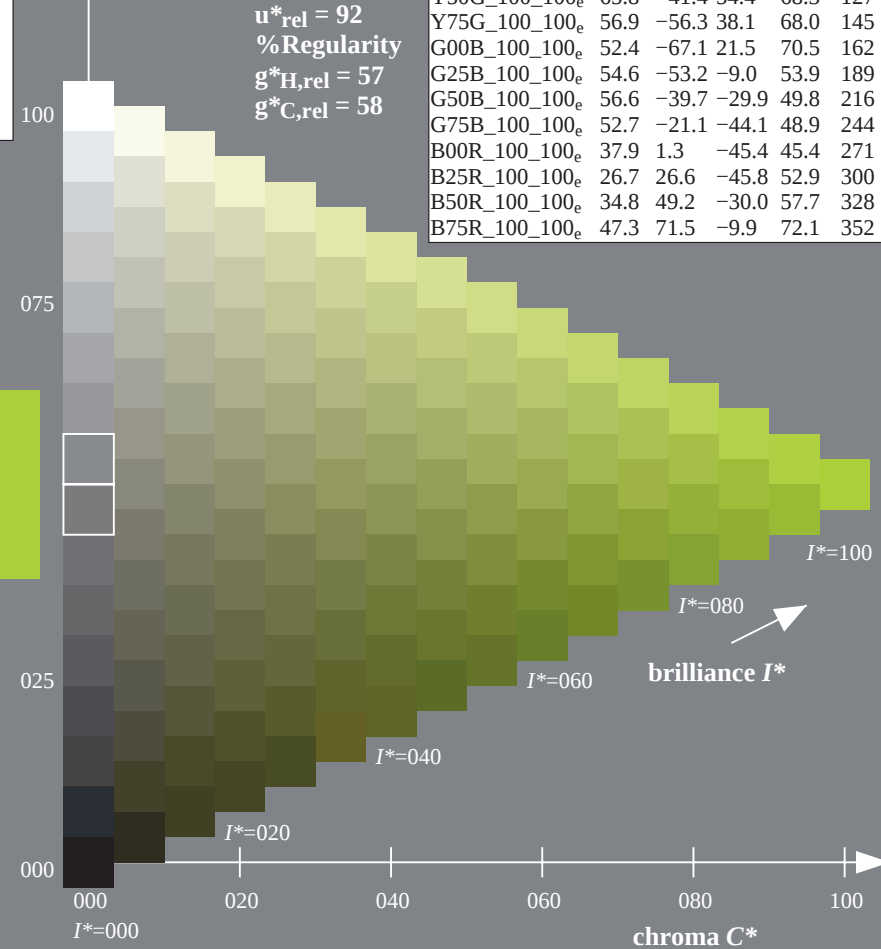
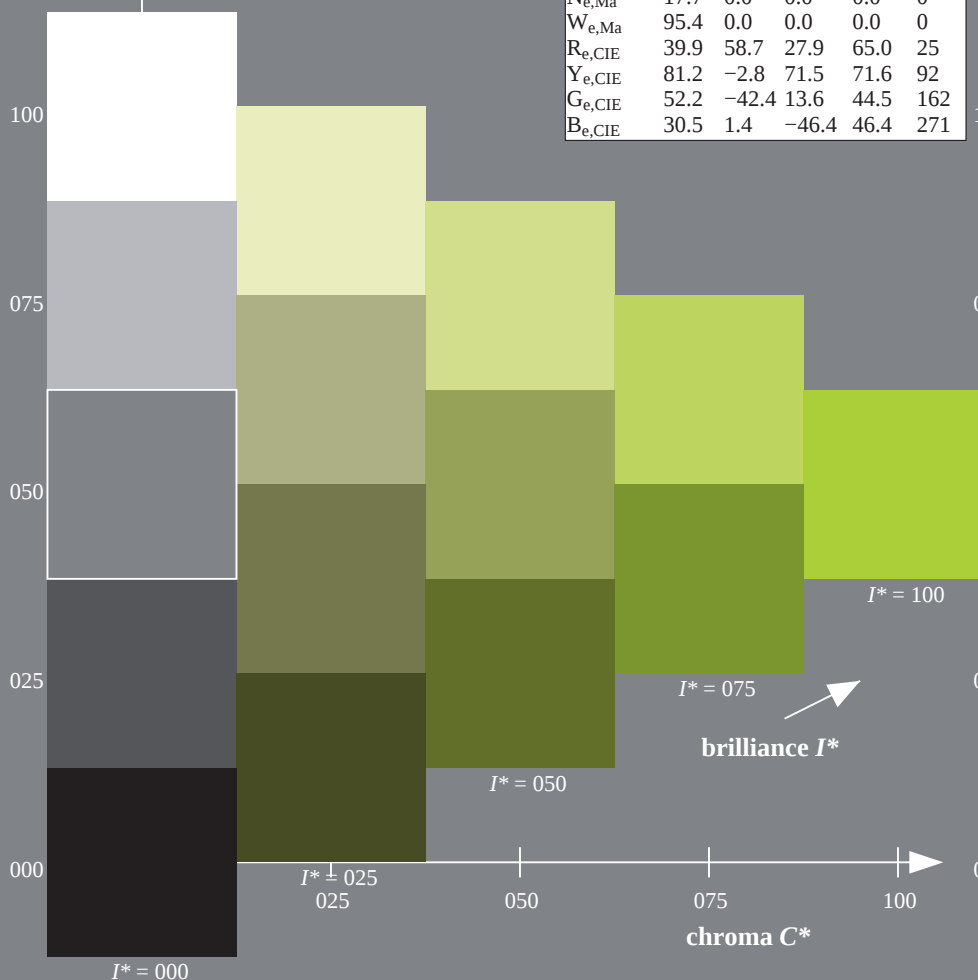
$u^*_{rel} = 92$

% Regularity

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

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

ORS20a; adapted (a) CIELAB data					
H^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100_e	47.6	64.9	30.9	71.9	25
R25Y_100_100_e	51.5	54.2	47.2	71.9	41
R50Y_100_100_e	60.3	35.6	59.0	68.9	58
R75Y_100_100_e	70.4	17.0	72.2	74.1	76
Y00G_100_100_e	82.9	-3.5	87.8	87.9	92
Y25G_100_100_e	76.9	-25.5	75.9	80.1	108
Y50G_100_100_e	65.8	-41.4	54.4	68.3	127
Y75G_100_100_e	56.9	-56.3	38.1	68.0	145
G00B_100_100_e	52.4	-67.1	21.5	70.5	162
G25B_100_100_e	54.6	-53.2	-9.0	53.9	189
G50B_100_100_e	56.6	-39.7	-29.9	49.8	216
G75B_100_100_e	52.7	-21.1	-44.1	48.9	244
B00R_100_100_e	37.9	1.3	-45.4	45.4	271
B25R_100_100_e	26.7	26.6	-45.8	52.9	300
B50R_100_100_e	34.8	49.2	-30.0	57.7	328
B75R_100_100_e	47.3	71.5	-9.9	72.1	352



TUB-test chart QE45; hue code: $H^*_e = Y25G_e$
Test chart according to DIN 33872, 3D=1, de=1, $cm\dot{y}k^*$

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cm\dot{y}k^*_{de}$

TUB registration: 20130201-QE45/QE45L0FA.TXT /PS
application for measurement of offset print output, separation $cm\dot{y}n6^*$ (CMYK)

TUB material: code=rha4ta

Input and Output: Offset Reflective System ORS18a for relative CIE LAB hue $h_{ab,rel} = h_{ab}/360 = 100/360 = 0.3$

$H^*_e = Y25G_e$

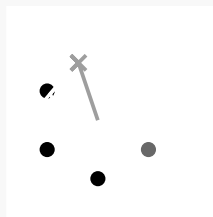
Data for any device (d) or elementary (e) colour:

HIC^*_e

hue text for the colours of this page:

$H^*_e = Y25G_e$

triangle lightness T^*



Data for maximum colour (Ma):

$LabCh^*_eMa$: 76 -25 75 80 100

HIC^*_eMa : Y25G_100_100_e

$rgbic^*_eMa$:

0.61 1.0 0.0 1.0 1.0

triangle lightness T^*

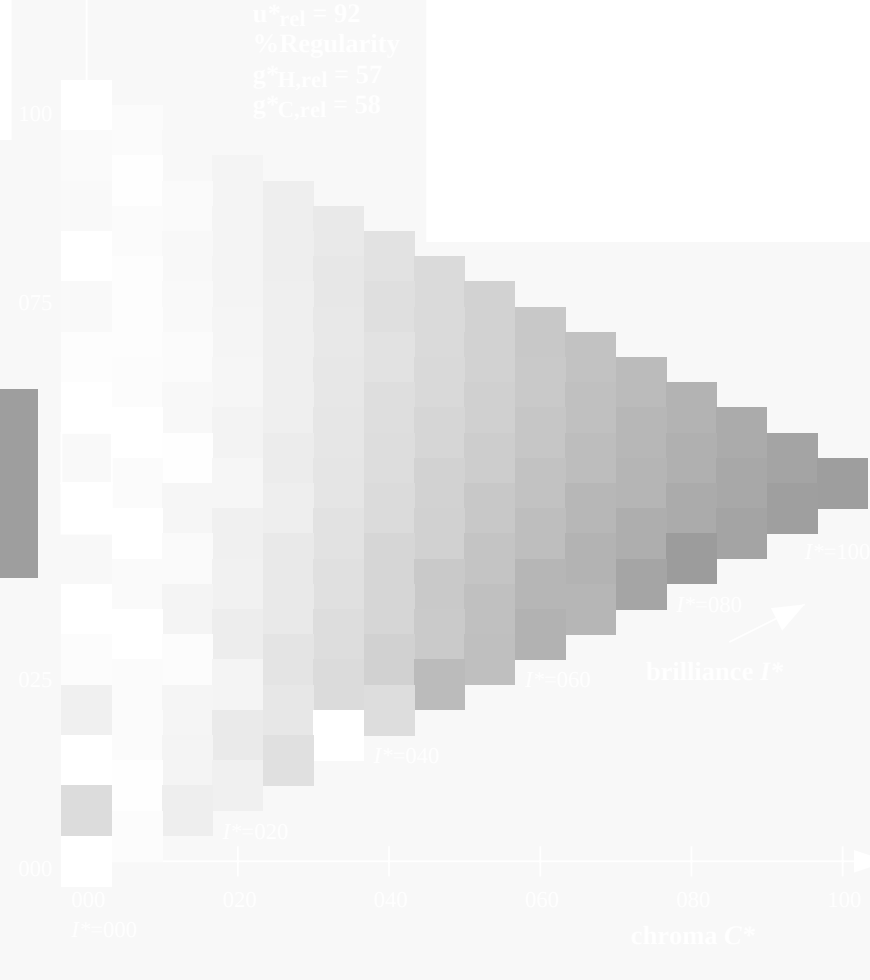
%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*H_{rel} = 57$

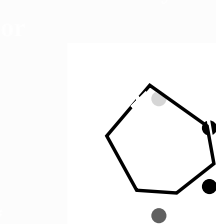
$g^*C_{rel} = 58$



1-113230-L0 QE450-73

TUB-test chart QE45; hue code: $H^*_e = Y25G_e$
Test chart according to DIN 33872, 3D=1, de=1, $cmYK^*$

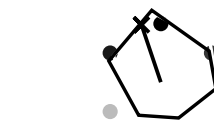
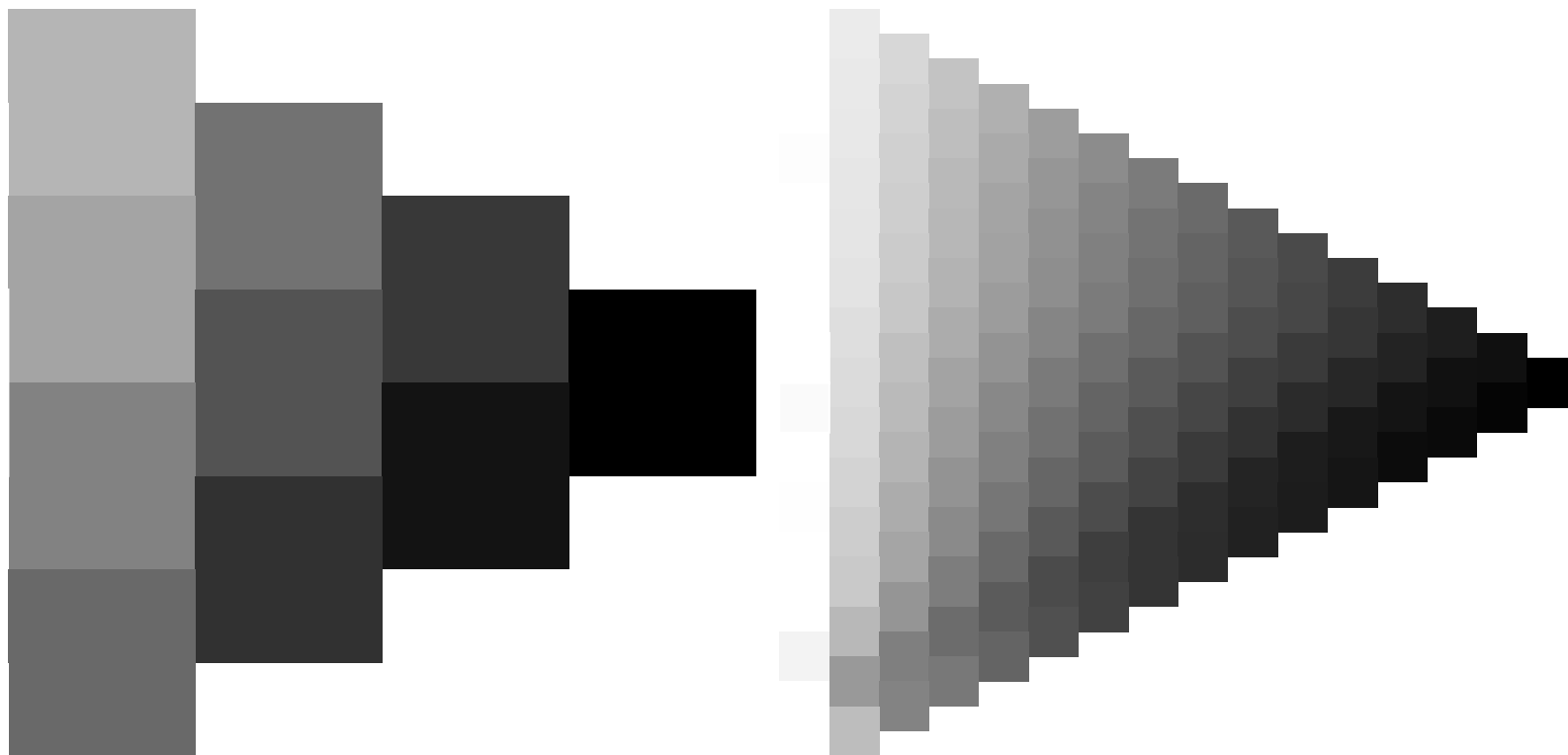
input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmYK^*_{de}$



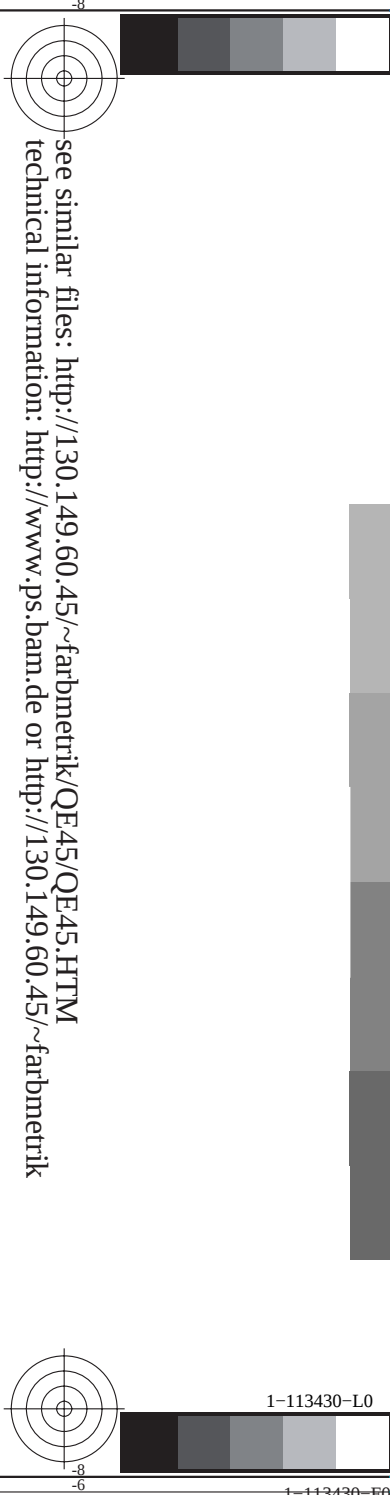
TUB material: code=rh4ta
nyn6* (CMYK)

TUB-test chart QE45; hue code: $H^*_e=Y25G_e$
Test chart according to DIN 33872, 3D=1, de=1, *cm* *y* *k**

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$



see similar files: <http://130.149.60.45/~farbmeterik/QE45/QE45.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmeterik>



Input and Output: Offset Reflective System ORS18a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 108/360 = 0.3$

$H^*_e = Y25G_e$

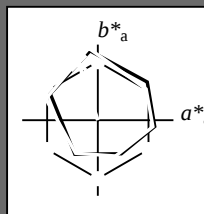
Data for any device (d) or elementary (e) colour:

HIC^*_e

hue text for the colours
of this page:

$H^*_e = Y25G_e$

triangle lightness T^*



ORS20a; adapted (a) CIELAB data					
name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R_{e, Ma}$	47.6	64.9	30.9	71.9	25
$Y_{e, Ma}$	82.9	-3.5	87.8	87.9	92
$G_{e, Ma}$	52.4	-67.1	21.5	70.5	162
$C_{e, Ma}$	56.6	-39.7	-29.9	49.8	216
$B_{e, Ma}$	37.9	1.3	-45.4	45.4	271
$M_{e, Ma}$	34.8	49.2	-30.0	57.7	328
$N_{e, Ma}$	17.7	0.0	0.0	0.0	0
$W_{e, Ma}$	95.4	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):

$LabCh^*_{e, Ma}$: 76 -25 75 80 108

$HIC^*_{e, Ma}$: Y25G_100_100_e

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

0.61 1.0 0.0 1.0 1.0

triangle lightness T^*

% Gamut

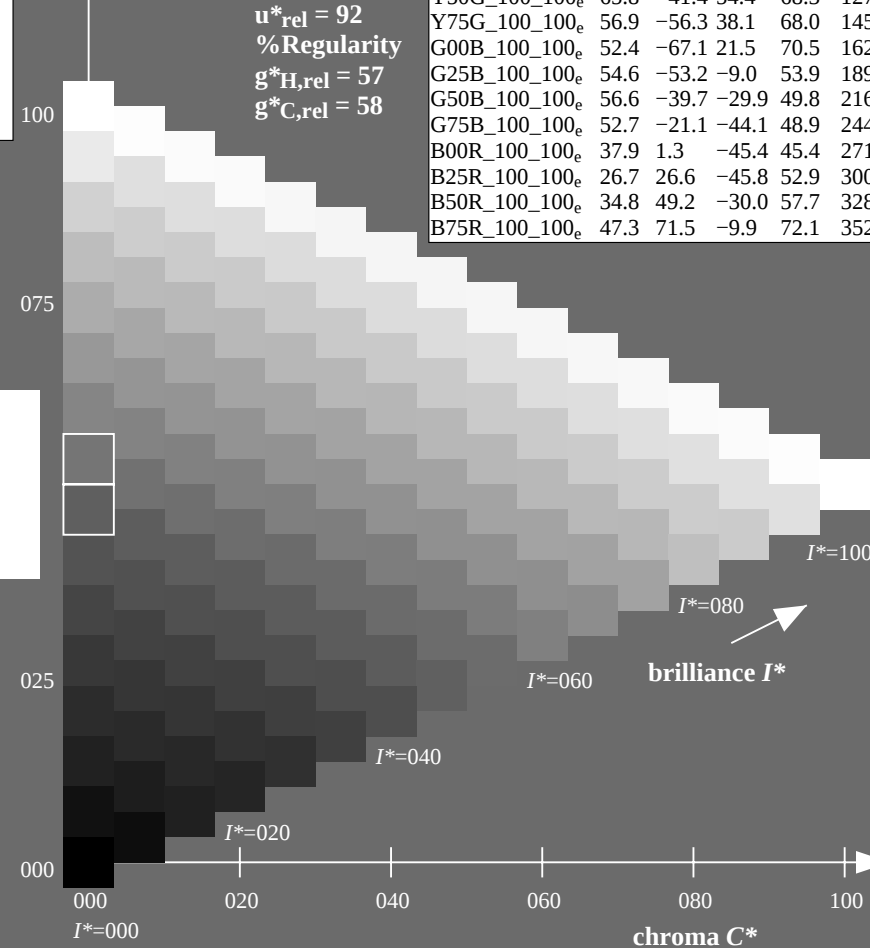
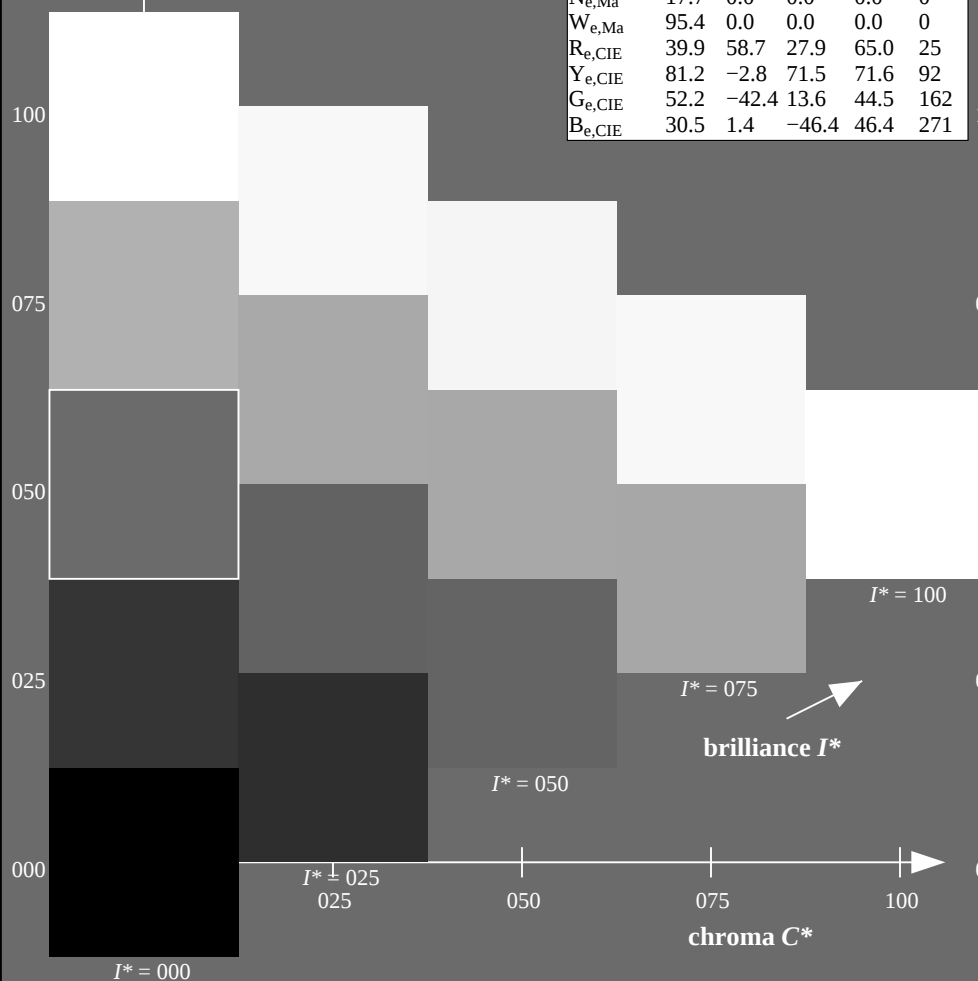
$u^*_{rel} = 92$

% Regularity

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

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

ORS20a; adapted (a) CIELAB data					
H^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R00Y_100_100_e$	47.6	64.9	30.9	71.9	25
$R25Y_100_100_e$	51.5	54.2	47.2	71.9	41
$R50Y_100_100_e$	60.3	35.6	59.0	68.9	58
$R75Y_100_100_e$	70.4	17.0	72.2	74.1	76
$Y00G_100_100_e$	82.9	-3.5	87.8	87.9	92
$Y25G_100_100_e$	76.9	-25.5	75.9	80.1	108
$Y50G_100_100_e$	65.8	-41.4	54.4	68.3	127
$Y75G_100_100_e$	56.9	-56.3	38.1	68.0	145
$G00B_100_100_e$	52.4	-67.1	21.5	70.5	162
$G25B_100_100_e$	54.6	-53.2	-9.0	53.9	189
$G50B_100_100_e$	56.6	-39.7	-29.9	49.8	216
$G75B_100_100_e$	52.7	-21.1	-44.1	48.9	244
$B00R_100_100_e$	37.9	1.3	-45.4	45.4	271
$B25R_100_100_e$	26.7	26.6	-45.8	52.9	300
$B50R_100_100_e$	34.8	49.2	-30.0	57.7	328
$B75R_100_100_e$	47.3	71.5	-9.9	72.1	352



1-113530-L0 QE450-73

TUB-test chart QE45; hue code: $H^*_e = Y25G_e$
Test chart according to DIN 33872, 3D=1, de=1, cmk^*

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to cmk^*_{de}

Data of Maximum color M in colorimetric system Offset standard print; separation cmy6*, D65 for input or output; Six hue angles of the 60 degree standard colours $RYGCBM_s$: $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$; Six hue angles of the device colours $RYGCBM_d$: $h_{ab,d} = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3$; Six hue angles of the elementary colours $RYGCBM_e$: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

$J=Y_d$ Yellow

$LCH^*_d = 88.3 \ 95.8 \ 97.1$
 $LAB^*_d = 88.3 \ -11.9 \ 95.1$
 $rgb^*_d = 1.0 \ 1.0 \ 0.0$

$L=G_d$ leaf-green

$LCH^*_d = 51.9 \ 74.3 \ 157.7$
 $LAB^*_d = 51.9 \ -68.8 \ 28.1$
 $rgb^*_d = 0.0 \ 1.0 \ 0.0$

$C=C_d$ cyan-blue

$LCH^*_d = 58.3 \ 52.6 \ 236.1$
 $LAB^*_d = 58.3 \ -29.2 \ -43.7$
 $rgb^*_d = 0.0 \ 1.0 \ 1.0$

$O=R_d$ orange-red

$LCH^*_d = 47.3 \ 76.0 \ 32.8$
 $LAB^*_d = 47.3 \ 63.8 \ 41.2$
 $rgb^*_d = 1.0 \ 0.0 \ 0.0$

$M=M_d$ magenta-red

$LCH^*_d = 48.2 \ 73.3 \ 353.3$
 $LAB^*_d = 48.2 \ 72.8 \ -8.5$
 $rgb^*_d = 1.0 \ 0.0 \ 1.0$

$V=B_d$ violet-blue

$LCH^*_d = 25.3 \ 52.8 \ 296.4$
 $LAB^*_d = 25.3 \ 23.5 \ -47.3$
 $rgb^*_d = 0.0 \ 0.0 \ 1.0$

Y_e yellow

$LCH^*_e = 82.9 \ 87.9 \ 92.3$
 $LAB^*_e = 82.9 \ -3.5 \ 87.8$
 $rgb^*_{de} = 1.0 \ 0.841 \ 0.0$

G_e green

$LCH^*_e = 52.4 \ 70.5 \ 162.2$
 $LAB^*_e = 52.4 \ -67.1 \ 21.5$
 $rgb^*_{de} = 0.0 \ 1.0 \ 0.093$

C_e blue-green

$LCH^*_e = 56.6 \ 49.8 \ 216.9$
 $LAB^*_e = 56.6 \ -39.7 \ -29.9$
 $rgb^*_{de} = 0.0 \ 1.0 \ 0.735$

B_e blue

$LCH^*_e = 37.9 \ 45.4 \ 271.7$
 $LAB^*_e = 37.9 \ 1.3 \ -45.4$
 $rgb^*_{de} = 0.0 \ 0.374 \ 1.0$

R_e red

$LCH^*_e = 47.6 \ 71.9 \ 25.4$
 $LAB^*_e = 47.6 \ 64.9 \ 30.9$
 $rgb^*_{de} = 1.0 \ 0.0 \ 0.209$

M_e blue-red

$LCH^*_e = 34.8 \ 57.7 \ 328.6$
 $LAB^*_e = 34.8 \ 49.2 \ -30.0$
 $rgb^*_{de} = 0.407 \ 0.0 \ 1.0$

Y_s yellow

$LCH^*_s = 80.6 \ 84.9 \ 90.0$
 $LAB^*_s = 80.6 \ 0.0 \ 84.9$
 $rgb^*_{ds} = 1.0 \ 0.784 \ 0.0$

G_s green

$LCH^*_s = 55.1 \ 70.1 \ 150.0$
 $LAB^*_s = 55.1 \ -60.7 \ 35.0$
 $rgb^*_{ds} = 0.074 \ 1.0 \ 0.0$

R_s red

$LCH^*_s = 47.4 \ 74.2 \ 30.0$
 $LAB^*_s = 47.4 \ 64.3 \ 37.1$
 $rgb^*_{ds} = 1.0 \ 0.0 \ 0.084$

C_s blue-green

$LCH^*_s = 56.1 \ 50.0 \ 210.0$
 $LAB^*_s = 56.1 \ -43.3 \ -25.0$
 $rgb^*_{ds} = 0.0 \ 1.0 \ 0.665$

M_s blue-red

$LCH^*_s = 35.6 \ 58.3 \ 330.0$
 $LAB^*_s = 35.6 \ 50.5 \ -29.1$
 $rgb^*_{ds} = 0.431 \ 0.0 \ 1.0$

B_s blue

$LCH^*_s = 38.8 \ 45.4 \ 270.0$
 $LAB^*_s = 38.8 \ 0.0 \ -45.4$
 $rgb^*_{ds} = 0.0 \ 0.397 \ 1.0$

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:

$$h_{ab,s} = \text{atan} [r^*_d \cos(30) + g^*_d \cos(150)] / [r^*_d \sin(30) + g^*_d \sin(150) + b^*_d \sin(270)] \quad (1)$$

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 $h_{ab,e}$ 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

Data of Maximum color M in colorimetric system Offset standard print; separation cmycn6*; D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM_s: $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;
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: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

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 : $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$																							
$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	rgb^*	$dd64M$	LAB^*	$ddx64M$ (x=LabCh)	rgb^*	$ddx361M$	LAB^*	$ddx361M$ (x=LabCh)	rgb^*	$dsx361M$	LAB^*	$ddx361M$ (x=LabCh)	rgb^*	$dex361M$	LAB^*	$ddx361M$					
32.8	30.0	25.4	1.0	0.0	47.3	63.8 41.2 76.0	32.8	1.0	0.0	0.0	47.4	63.9 41.2 76.0	32	1.0	0.0	0.084	47.4	64.3 37.1 74.3	30				
40.4	37.5	33.8	1.0	0.125	0.0	51.2 54.9 46.7 72.1	40.4	1.0	0.117	0.0	51.0 55.5 46.5 72.4	39	1.0	0.069	0.0	49.5 59.0 44.5 73.9	37	1.0	0.007	0.0	47.6 63.4 41.6 75.8	33	
50.0	45.0	42.1	1.0	0.25	0.0	56.0 44.4 53.0 69.1	50.0	1.0	0.25	0.0	56.0 44.4 53.0 69.2	50	1.0	0.185	0.0	53.5 50.0 50.0 70.7	45	1.0	0.148	0.0	52.1 53.0 48.1 71.6	42	
61.1	52.5	50.5	1.0	0.375	0.0	61.4 33.2 60.3 68.8	61.1	1.0	0.367	0.0	61.1 34.0 59.9 68.9	60	1.0	0.272	0.0	57.0 42.6 54.5 69.1	52	1.0	0.25	0.0	56.0 44.5 53.0 69.2	49	
71.4	60.0	58.8	1.0	0.5	0.0	67.2 22.6 67.6 71.2	71.4	1.0	0.5	0.0	67.2 22.6 67.6 71.3	71	1.0	0.362	0.0	60.9 34.5 59.7 68.9	60	1.0	0.35	0.0	60.3 35.6 59.0 69.0	58	
81.7	67.5	67.2	1.0	0.625	0.0	73.6 11.0 76.1 76.9	81.7	1.0	0.617	0.0	73.2 11.9 75.7 76.6	81	1.0	0.446	0.0	64.7 27.4 64.7 70.3	67	1.0	0.442	0.0	64.5 27.8 64.5 70.2	66	
88.5	75.0	75.6	1.0	0.75	0.0	79.2 2.0 83.0 83.1	88.5	1.0	0.75	0.0	79.3 2.0 83.1 83.1	88	1.0	0.543	0.0	69.4 19.0 70.7 73.2	75	1.0	0.55	0.0	69.8 18.3 71.3 73.6	75	
93.6	82.5	83.9	1.0	0.875	0.0	84.2 -5.7 89.4 89.6	93.6	1.0	0.867	0.0	84.0 -5.1 89.1 89.2	93	1.0	0.629	0.0	73.8 10.7 76.5 77.2	82	1.0	0.655	0.0	75.0 9.0 77.9 78.5	83	
97.1	90.0	92.3	1.0	1.0	0.0	88.3 -11.9 95.1 95.8	97.1	1.0	1.0	0.0	88.4 -11.9 95.1 95.9	97	1.0	0.785	0.0	80.7 0.0 84.9 84.9	90	1.0	0.842	0.0	83.0 -3.4 87.8 87.9	92	
100.3	97.5	101.0	0.875	1.0	0.0	85.8 -16.2 88.6 90.0	100.3	0.883	1.0	0.0	86.0 -15.9 89.0 90.5	100	1.0	0.994	0.0	88.2 -11.5 94.8 95.6	97	0.871	1.0	0.0	85.8 -16.2 88.4 89.9	100	
103.3	105.0	109.7	0.75	1.0	0.0	82.9 -19.7 83.0 85.3	103.3	0.75	1.0	0.0	83.0 -19.6 83.0 85.3	103	0.709	1.0	0.0	81.0 -21.6 80.9 83.7	105	0.599	1.0	0.0	76.2 -26.6 74.3 78.9	109	
108.3	112.5	118.5	0.625	1.0	0.0	77.0 -25.2 76.3 80.4	108.3	0.633	1.0	0.0	77.5 -24.8 76.8 80.8	107	0.56	1.0	0.0	74.9 -28.6 71.1 76.6	112	0.455	1.0	0.0	71.4 -33.4 63.2 71.6	117	
115.3	120.0	127.2	0.5	1.0	0.0	72.7 -31.3 66.0 73.1	115.3	0.5	1.0	0.0	72.8 -31.3 66.1 73.1	115	0.418	1.0	0.0	70.3 -35.1 60.9 70.3	120	0.327	1.0	0.0	65.8 -41.3 54.4 68.4	127	
122.4	127.5	136.0	0.375	1.0	0.0	68.9 -36.9 58.1 68.8	122.4	0.383	1.0	0.0	69.2 -36.5 58.6 69.1	121	0.329	1.0	0.0	66.0 -41.1 54.6 68.4	127	0.244	1.0	0.0	60.7 -48.1 47.5 67.6	135	
134.9	135.0	144.7	0.25	1.0	0.0	60.8 -47.8 47.8 67.6	134.9	0.25	1.0	0.0	60.9 -47.7 47.9 67.7	134	0.249	1.0	0.0	60.9 -47.7 47.8 67.7	135	0.124	1.0	0.0	57.4 -54.9 38.9 67.4	144	
144.6	142.5	153.4	0.125	1.0	0.0	57.4 -54.9 38.9 67.3	144.6	0.133	1.0	0.0	57.6 -54.4 39.6 67.4	144	0.159	1.0	0.0	58.4 -53.0 41.5 67.4	142	0.047	1.0	0.0	54.0 -63.8 32.7 71.7	152	
157.7	150.0	162.2	0.0	1.0	0.0	51.9 -68.8 28.1 74.3	157.7	0.0	1.0	0.0	52.0 -68.8 28.1 74.4	157	0.074	1.0	0.0	55.2 -60.7 35.1 70.2	150	0.0	1.0	0.0	0.093	52.4 -67.0 21.5 70.5	162
163.7	157.5	169.0	0.0	1.0	0.125	52.5 -66.4 19.3 69.1	163.7	0.0	1.0	0.117	52.5 -66.5 19.9 69.5	163	0.008	1.0	0.0	52.3 -68.0 28.9 73.9	157	0.0	1.0	0.0	0.209	53.1 -63.5 12.8 64.9	168
170.9	165.0	175.9	0.0	1.0	0.25	53.2 -61.9 9.8 62.7	170.9	0.0	1.0	0.25	53.3 -61.9 9.8 62.8	170	0.0	1.0	0.147	52.7 -65.7 17.6 68.1	165	0.0	1.0	0.0	0.311	53.7 -59.7 4.3 59.9	175
181.0	172.5	182.7	0.0	1.0	0.375	54.1 -56.9 -1.0 56.9	181.0	0.0	1.0	0.367	54.0 -57.3 -0.3 57.4	180	0.0	1.0	0.263	53.4 -61.5 8.7 62.2	172	0.0	1.0	0.0	0.387	54.2 -56.4 -2.2 56.5	182
193.5	180.0	189.6	0.0	1.0	0.5	54.8 -51.0 -12.3 52.5	193.5	0.0	1.0	0.5	54.8 -51.0 -12.2 52.6	193	0.0	1.0	0.362	54.0 -57.5 0.0 57.6	180	0.0	1.0	0.0	0.46	54.6 -53.1 -8.9 54.0	189
205.9	187.5	196.4	0.0	1.0	0.625	55.8 -45.1 -21.9 50.1	205.9	0.0	1.0	0.617	55.8 -45.5 -21.3 50.3	205	0.0	1.0	0.434	54.5 -54.4 -6.6 54.9	187	0.0	1.0	0.0	0.524	55.0 -50.0 -14.3 52.1	195
218.4	195.0	203.2	0.0	1.0	0.75	56.7 -38.9 -30.9 49.7	218.4	0.0	1.0	0.75	56.8 -38.9 -30.8 49.8	218	0.0	1.0	0.514	55.0 -50.4 -13.4 52.3	195	0.0	1.0	0.0	0.598	55.6 -46.5 -19.9 50.7	203
227.3	202.5	210.1	0.0	1.0	0.875	57.5 -34.3 -37.2 50.6	227.3	0.0	1.0	0.867	57.5 -34.6 -36.8 50.6	226	0.0	1.0	0.585	55.5 -47.1 -19.0 50.9	202	0.0	1.0	0.0	0.662	56.1 -43.4 -24.7 50.1	209
236.1	210.0	216.9	0.0	1.0	1.0	58.3 -29.2 -43.7 52.6	236.1	0.0	1.0	1.0	58.3 -29.2 -43.6 52.6	236	0.0	1.0	0.666	56.1 -43.2 -24.9 50.0	210	0.0	1.0	0.0	0.736	56.7 -39.7 -29.9 49.8	216
240.3	217.5	223.8	0.0	0.875	1.0	55.2 -25.0 -43.9 50.5	240.3	0.0	0.883	1.0	55.5 -25.2 -43.8 50.7	240	0.0	1.0	0.736	56.7 -39.7 -29.9 49.8	217	0.0	1.0	0.0	0.819	57.2 -36.4 -34.4 50.3	223
245.8	225.0	230.6	0.0	0.75	1.0	51.7 -19.7 -44.1 48.3	245.8	0.0	0.75	1.0	51.8 -19.7 -44.1 48.4	245	0.0	1.0	0.842	57.4 -35.6 -35.6 50.4	225	0.0	1.0	0.0	0.922	57.9 -32.5 -39.7 51.4	230
252.5	232.5	237.5	0.0	0.625	1.0	47.7 -13.9 -44.4 46.5	252.5	0.0	0.633	1.0	48.0 -14.2 -44.3 46.7	252	0.0	1.0	0.941	58.0 -31.7 -40.7 51.7	232	0.0	0.974	1.0	57.7 -28.3 -43.7 52.2	237	
262.3	240.0	244.3	0.0	0.5	1.0	42.7 -6.0 -45.0 45.4	262.3	0.0	0.5	1.0	42.8 -5.9 -44.9 45.4	262	0.0	0.886	1.0	55.5 -25.3 -43.8 50.7	240	0.0	0.785	1.0	52.7 -21.1 -44.1 49.0	244	
271.7	247.5	251.2	0.0	0.375	1.0	37.9 1.3 -45.4 45.4	271.7	0.0	0.383	1.0	38.3 0.9 -45.3 45.4	271	0.0	0.729	1.0	51.1 -18.7 -44.2 48.1	247	0.0	0.659	1.0	48.9 -15.4 -44.3 47.1	250	
281.6	255.0	258.0	0.0	0.25	1.0	33.3 9.4 -46.0 47.0	281.6	0.0	0.25	1.0	33.3 9.5 -45.9 47.0	281	0.0	0.594	1.0	46.5 -11.9 -44.6 46.3	255	0.0	0.555	1.0	45.0 -9.4 -44.8 45.9	258	
290.3	262.5	264.8	0.0	0.125	1.0	28.6 17.4 -46.9 50.1	290.3	0.0	0.133	1.0	28.9 16.9 -46.9 49.9	289	0.0	0.505	1.0	43.0 -6.2 -44.9 45.5	262	0.0	0.472	1.0	41.7 -4.3 -45.1 45.4	264	
296.4	270.0	271.7	0.0	0.0	1.0	25.3 23.5 -47.3 52.8	296.4	0.0	0.0	1.0	25.3 23.5 -47.3 52.9	296	0.0	0.398	1.0	38.8 0.0 -45.3 45.4	270	0.0	0.375	1.0	37.9 1.4 -45.3 45.5	271	
306.7	277.5	278.8	0.125	0.0	1.0	29.3 31.8 -42.6 53.1	306.7	0.117	0.0	1.0	29.1 31.3 -42.9 53.1	306	0.0	0.309	1.0	35.5 5.6 -45.8 46.3	277	0.0	0.291	1.0	34.9 6.8 -45.9 46.5	278	
312.7	285.0	285.9	0.25	0.0	1.0	31.5 36.2 -39.2 53.4	312.7	0.25	0.0	1.0	31.6 36.3 -39.1 53.4	312	0.0	0.202	1.0	31.5 12.5 -46.5 48.2	285	0.0	0.188	1.0	31.0 13.3 -46.6 48.5	285	
326.7	292.5	293.0	0.375	0.0	1.0	33.8 47.6 -31.2 56.9	326.7	0.367	0.0	1.0	33.7 46.9 -31.8 56.7	325	0.0	0.091	1.0	27.7 19.1 -47.1 50.9	292	0.0	0.079	1.0	27.4 19.6 -47.1 51.1	292	
333.9	300.0	300.1	0.5	0.0	1.0	37.8 53.8 -26.3 59.9	333.9	0.5	0.0	1.0	37.9 53.8 -26.3 59.9	333	0.043	0.0	1.0	26.7 26.5 -45.8 53.0	300	0.046	0.0	1.0	26.8 26.6 -45.7 53.0	300	
339.6	307.5	307.2	0.625	0.0	1.0	40.9 58.8 -21.8 62.7	339.6	0.617	0.0	1.0	40.8 58.5 -22.1 62.6	339	0.13	0.0	1.0	29.4 32.0 -42.4 53.2	307	0.126					

Data of Maximum color M in colorimetric system Offset standard print; separation cmyrn6*, D65 for input or output; Six hue angles of the 60 degree standard colours $RYGCBM_s$: $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;
Six hue angles of the device colours $RYGCBM_d$: $h_{ab,d} = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3$; Six hue angles of the elementary colours $RYGCBM_e$: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	rgb^*_{dd64M}	LAB^*_{dd64M}	LAB^*_{dd64M}	$rgb^*_{dex361M}$	$LAB^*_{dex361M}$	rgb^*_{dd}	rgb^*_{ds}	rgb^*_{de}
32.8	30.0	25.4	1.0	0.0	0.0	47.3	63.8	41.2	76.0	32.8
40.4	37.5	33.8	1.0	0.125	0.0	51.2	54.9	46.7	72.1	40.4
50.0	45.0	42.1	1.0	0.25	0.0	56.0	44.4	53.0	69.1	50.0
61.1	52.5	50.5	1.0	0.375	0.0	61.4	33.2	60.3	68.8	61.1
71.4	60.0	58.8	1.0	0.5	0.0	67.2	22.6	67.6	71.2	71.4
81.7	67.5	67.2	1.0	0.625	0.0	73.6	11.0	76.1	76.9	81.7
88.5	75.0	75.6	1.0	0.75	0.0	79.2	2.0	83.0	83.1	88.5
93.6	82.5	83.9	1.0	0.875	0.0	84.2	-5.7	89.4	89.6	93.6
97.1	90.0	92.3	1.0	1.0	0.0	88.3	-11.9	95.1	95.8	97.1
100.3	97.5	101.0	0.875	1.0	0.0	85.8	-16.2	88.6	90.0	100.3
103.3	105.0	109.7	0.75	1.0	0.0	82.9	-19.7	83.0	85.3	103.3
108.3	112.5	118.5	0.625	1.0	0.0	77.0	-25.2	76.3	80.4	108.3
115.3	120.0	127.2	0.5	1.0	0.0	72.7	-31.3	66.0	73.1	115.3
122.4	127.5	136.0	0.375	1.0	0.0	68.9	-36.9	58.1	68.8	122.4
134.9	135.0	144.7	0.25	1.0	0.0	60.8	-47.8	47.8	67.6	134.9
144.6	142.5	153.4	0.125	1.0	0.0	57.4	-54.9	38.9	67.3	144.6
157.7	150.0	162.2	0.0	1.0	0.0	51.9	-68.8	28.1	74.3	157.7
163.7	157.5	169.0	0.0	1.0	0.125	52.5	-66.4	19.3	69.1	163.7
170.9	165.0	175.9	0.0	1.0	0.25	53.2	-61.9	9.8	62.7	170.9
181.0	172.5	182.7	0.0	1.0	0.375	54.1	-56.9	-1.0	56.9	181.0
193.5	180.0	189.6	0.0	1.0	0.5	54.8	-51.0	-12.3	52.5	193.5
205.9	187.5	196.4	0.0	1.0	0.625	55.8	-45.1	-21.9	50.1	205.9
218.4	195.0	203.2	0.0	1.0	0.75	56.7	-38.9	-30.9	49.7	218.4
227.3	202.5	210.1	0.0	1.0	0.875	57.5	-34.3	-37.2	50.6	227.3
236.1	210.0	216.9	0.0	1.0	1.0	58.3	-29.2	-43.7	52.6	236.1
240.3	217.5	223.8	0.0	0.875	1.0	55.2	-25.0	-43.9	50.5	240.3
245.8	225.0	230.6	0.0	0.75	1.0	51.7	-19.7	-44.1	48.3	245.8
252.5	232.5	237.5	0.0	0.625	1.0	47.7	-13.9	-44.4	46.5	252.5
262.3	240.0	244.3	0.0	0.5	1.0	42.7	-6.0	-45.0	45.4	262.3
271.7	247.5	251.2	0.0	0.375	1.0	37.9	1.3	-45.4	45.4	271.7
281.6	255.0	258.0	0.0	0.25	1.0	33.3	9.4	-46.0	47.0	281.6
290.3	262.5	264.8	0.0	0.125	1.0	28.6	17.4	-46.9	50.1	290.3
296.4	270.0	271.7	0.0	0.0	1.0	25.3	23.5	-47.3	52.8	296.4
306.7	277.5	278.8	0.125	0.0	1.0	29.3	31.8	-42.6	53.1	306.7
312.7	285.0	285.9	0.25	0.0	1.0	31.5	36.2	-39.2	53.4	312.7
326.7	292.5	293.0	0.375	0.0	1.0	33.8	47.6	-31.2	56.9	326.7
333.9	300.0	300.1	0.5	0.0	1.0	37.8	53.8	-26.3	59.9	333.9
339.6	307.5	307.2	0.625	0.0	1.0	40.9	58.8	-21.8	62.7	339.6
347.2	315.0	314.3	0.75	0.0	1.0	43.1	65.9	-14.9	67.6	347.2
350.2	322.5	321.4	0.875	0.0	1.0	45.9	69.4	-11.9	70.5	350.2
353.3	330.0	328.6	1.0	0.0	1.0	48.2	72.8	-8.5	73.3	353.3
356.5	337.5	335.7	1.0	0.0	0.875	48.2	71.6	-4.3	71.7	356.5
360.3	345.0	342.8	1.0	0.0	0.75	48.1	70.4	0.3	70.4	360.3
365.8	352.5	349.9	1.0	0.0	0.625	48.0	68.9	7.1	69.3	365.8
371.6	360.0	357.0	1.0	0.0	0.5	47.7	67.7	14.0	69.1	371.6
378.2	367.5	364.1	1.0	0.0	0.375	47.7	66.1	21.8	69.6	378.2
383.9	375.0	371.2	1.0	0.0	0.25	47.7	65.0	28.9	71.2	383.9
388.6	382.5	378.3	1.0	0.0	0.125	47.4	64.4	35.1	73.4	388.6
392.8	390.0	385.4	1.0	0.0	0.0	47.3	63.8	41.2	76.0	392.8

1-113830-L0

QE450-73

LAB*la0, 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

Output: Offset standard print; separation cmyrn6*, D65, page 9/33

TUB-test chart QE45; hue code: $H^*_e=Y25G_e$
48 step hue circles; $rgb-LabCh^*$ tables

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$

TUB registration: 20130201-QE45/QE45L0FA.TXT /PS
application for measurement of offset print output, separation cmyrn6* (CMYK)
TUB material: code=rha4ta

Data of Maximum color M in colorimetric system Offset standard print; separation cmyln6*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM_c: $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;
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: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	rgb^*_{dd361M}	$LAB^*_{dd361M}(x=LabCh)$	R_d	$rgb^*_{ds361Mi}$	$LAB^*_{dsx361Mi}(x=LabCh)$	R_s	$rgb^*_{dd361Mi}$	$LAB^*_{de361Mi}(x=LabCh)$	R_e	$rgb^*_{dd361Mi}$	rgb^*_{dd}	rgb^*_{ds}	rgb^*_{de}
32	30	25	1.0	0.0	0.0	47.3	63.8	41.2	76.0	32	1.0	0.0	0.0	0.0	0.0
33	31	26	1.0	0.016	0.0	47.8	62.7	42.0	75.4	33	1.0	0.0	0.017	0.0	0.0
34	32	27	1.0	0.033	0.0	48.3	61.5	42.8	74.9	34	1.0	0.0	0.033	0.0	0.0
35	33	28	1.0	0.05	0.0	48.9	60.3	43.6	74.4	35	1.0	0.0	0.05	0.0	0.0
36	34	29	1.0	0.066	0.0	49.4	59.1	44.3	73.9	36	1.0	0.0	0.067	0.0	0.0
37	35	31	1.0	0.083	0.0	49.9	57.9	45.1	73.4	37	1.0	0.0	0.083	0.0	0.0
38	36	32	1.0	0.1	0.0	50.4	56.7	45.7	72.9	38	1.0	0.0	0.1	0.0	0.0
39	37	33	1.0	0.116	0.0	50.9	55.5	46.4	72.3	39	1.0	0.0	0.117	0.0	0.0
41	38	34	1.0	0.133	0.0	51.5	54.2	47.2	71.9	41	1.0	0.0	0.133	0.0	0.0
42	39	35	1.0	0.15	0.0	52.1	52.8	48.1	71.5	42	1.0	0.0	0.15	0.0	0.0
43	40	36	1.0	0.166	0.0	52.8	51.4	49.0	71.1	43	1.0	0.0	0.167	0.0	0.0
44	41	37	1.0	0.183	0.0	53.4	50.1	49.9	70.7	44	1.0	0.0	0.183	0.0	0.0
46	42	38	1.0	0.2	0.0	54.1	48.7	50.7	70.3	46	1.0	0.0	0.2	0.0	0.0
47	43	39	1.0	0.216	0.0	54.7	47.3	51.5	69.9	47	1.0	0.0	0.217	0.0	0.0
48	44	41	1.0	0.233	0.0	55.3	45.8	52.2	69.5	48	1.0	0.0	0.233	0.0	0.0
50	45	42	1.0	0.25	0.0	56.0	44.4	53.0	69.1	50	1.0	0.0	0.25	0.0	0.0
51	46	43	1.0	0.266	0.0	56.7	43.0	54.1	69.1	51	1.0	0.0	0.267	0.0	0.0
52	47	44	1.0	0.283	0.0	57.4	41.5	55.1	69.1	52	1.0	0.0	0.283	0.0	0.0
54	48	45	1.0	0.3	0.0	58.2	40.1	56.2	69.0	54	1.0	0.0	0.3	0.0	0.0
55	49	46	1.0	0.316	0.0	58.9	38.6	57.1	69.0	55	1.0	0.0	0.317	0.0	0.0
57	50	47	1.0	0.333	0.0	59.6	37.1	58.1	69.0	57	1.0	0.0	0.333	0.0	0.0
58	51	48	1.0	0.35	0.0	60.3	35.5	59.0	68.9	58	1.0	0.0	0.35	0.0	0.0
60	52	49	1.0	0.366	0.0	61.0	34.0	59.9	68.9	60	1.0	0.0	0.367	0.0	0.0
61	53	51	1.0	0.383	0.0	61.8	32.5	60.8	69.0	61	1.0	0.0	0.383	0.0	0.0
63	54	52	1.0	0.4	0.0	62.5	31.2	61.9	69.3	63	1.0	0.0	0.4	0.0	0.0
64	55	53	1.0	0.416	0.0	63.3	29.8	62.9	69.6	64	1.0	0.0	0.417	0.0	0.0
65	56	54	1.0	0.433	0.0	64.1	28.4	63.9	70.0	65	1.0	0.0	0.433	0.0	0.0
67	57	55	1.0	0.45	0.0	64.9	27.0	64.9	70.3	67	1.0	0.0	0.45	0.0	0.0
68	58	56	1.0	0.466	0.0	65.6	25.6	65.8	70.6	68	1.0	0.0	0.467	0.0	0.0
70	59	57	1.0	0.483	0.0	66.4	24.1	66.7	70.9	70	1.0	0.0	0.483	0.0	0.0
71	60	58	1.0	0.5	0.0	67.2	22.6	67.6	71.2	71	1.0	0.0	0.5	0.0	0.0
72	61	60	1.0	0.516	0.0	68.0	21.2	68.8	72.0	72	1.0	0.0	0.517	0.0	0.0
74	62	61	1.0	0.533	0.0	68.9	19.7	70.0	72.8	74	1.0	0.0	0.533	0.0	0.0
75	63	62	1.0	0.55	0.0	69.7	18.2	71.2	73.5	75	1.0	0.0	0.55	0.0	0.0
76	64	63	1.0	0.566	0.0	70.6	16.7	72.4	74.3	76	1.0	0.0	0.567	0.0	0.0
78	65	64	1.0	0.583	0.0	71.5	15.1	73.5	75.0	78	1.0	0.0	0.583	0.0	0.0
79	66	65	1.0	0.6	0.0	72.3	13.5	74.6	75.8	79	1.0	0.0	0.6	0.0	0.0
81	67	66	1.0	0.616	0.0	73.2	11.8	75.6	76.6	81	1.0	0.0	0.617	0.0	0.0
82	68	67	1.0	0.633	0.0	74.0	10.4	76.6	77.3	82	1.0	0.0	0.633	0.0	0.0
83	69	68	1.0	0.65	0.0	74.7	9.3	77.6	78.2	83	1.0	0.0	0.65	0.0	0.0
84	70	70	1.0	0.666	0.0	75.5	8.2	78.6	79.0	84	1.0	0.0	0.667	0.0	0.0
84	71	71	1.0	0.683	0.0	76.2	7.0	79.5	79.8	84	1.0	0.0	0.683	0.0	0.0
85	72	72	1.0	0.7	0.0	77.0	5.8	80.4	80.6	85	1.0	0.0	0.7	0.0	0.0
86	73	73	1.0	0.716	0.0	77.7	4.5	81.3	81.4	86	1.0	0.0	0.717	0.0	0.0
87	74	74	1.0	0.733	0.0	78.5	3.3	82.2	82.3	87	1.0	0.0	0.733	0.0	0.0
88	75	75	1.0	0.75	0.0	79.2	2.0	83.0	83.1	88	1.0	0.0	0.75	0.0	0.0

1-113930-L0

QE450-73

LAB*la0, 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

Output: Offset standard print; separation cmyln6*, D65, page 10/33

TUB-test chart QE45; hue code: $H^*_e=Y25G_e$
48 step hue circles; $rgb-LabCh$ *tables

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$

1-113930-F0

see similar files: <http://130.149.60.45/~farbmetrik/QE45/QE45L0FA.TXT> /PS
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE45/QE45L0FA.TXT /PS
application for measurement of offset print output, separation cmyln6* (CMYK)
TUB material: code=rha4ta

Data of Maximum color M in colorimetric system Offset standard print; separation cmy6*, D65 for input or output; Six hue angles of the 60 degree standard colours $RYGCBM_c$: $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;

Six hue angles of the device colours $RYGCBM_d$: $h_{ab,d} = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3$; Six hue angles of the elementary colours $RYGCBM_c$: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	rgb^*_{dd361M}	LAB^*_{d361M}	$LAB^*_{ds361Mi} (x=LabCh)$	$rgb^*_{ds361Mi}$	$LAB^*_{ds361Mi} (x=LabCh)$	$rgb^*_{dd361Mi}$	$LAB^*_{de361Mi}$	$dex361Mi (x=LabCh)$	$rgb^*_{dd361Mi}$	rgb^*_{dd}	rgb^*_{ds}	rgb^*_{de}
88	75	75	1.0	0.75	0.0	79.2	2.0	83.0	83.1	88	1.0	0.75	0.0	
89	76	76	1.0	0.766	0.0	79.9	1.0	83.9	83.9	89	1.0	0.767	0.0	
89	77	77	1.0	0.783	0.0	80.6	0.0	84.8	84.8	89	1.0	0.783	0.0	
90	78	78	1.0	0.8	0.0	81.2	-0.9	85.7	85.7	90	1.0	0.8	0.0	
91	79	80	1.0	0.816	0.0	81.9	-1.9	86.5	86.5	91	1.0	0.817	0.0	
91	80	81	1.0	0.833	0.0	82.6	-3.0	87.4	87.4	91	1.0	0.833	0.0	
92	81	82	1.0	0.85	0.0	83.2	-4.0	88.2	88.3	92	1.0	0.85	0.0	
93	82	83	1.0	0.866	0.0	83.9	-5.1	89.0	89.2	93	1.0	0.867	0.0	
93	83	84	1.0	0.883	0.0	84.5	-6.1	89.8	90.0	93	1.0	0.883	0.0	
94	84	85	1.0	0.9	0.0	85.1	-6.9	90.6	90.8	94	1.0	0.9	0.0	
94	85	86	1.0	0.916	0.0	85.6	-7.7	91.3	91.7	94	1.0	0.917	0.0	
95	86	87	1.0	0.933	0.0	86.1	-8.5	92.1	92.5	95	1.0	0.933	0.0	
95	87	88	1.0	0.95	0.0	86.7	-9.3	92.9	93.3	95	1.0	0.95	0.0	
96	88	90	1.0	0.966	0.0	87.2	-10.2	93.6	94.2	96	1.0	0.967	0.0	
96	89	91	1.0	0.983	0.0	87.8	-11.1	94.3	95.0	96	1.0	0.983	0.0	
97	90	92	1.0	1.0	0.0	88.3	-11.9	95.1	95.8	97	1.0	1.0	0.0	
97	91	93	0.983	1.0	0.0	88.0	-12.5	94.2	95.1	97	1.0	0.983	1.0	0.0
98	92	94	0.966	1.0	0.0	87.7	-13.1	93.4	94.3	98	1.0	0.967	1.0	0.0
98	93	95	0.95	1.0	0.0	87.3	-13.7	92.5	93.5	98	1.0	0.95	1.0	0.0
98	94	96	0.933	1.0	0.0	87.0	-14.3	91.6	92.7	98	1.0	0.933	1.0	0.0
99	95	98	0.916	1.0	0.0	86.6	-14.8	90.8	92.0	99	1.0	0.917	1.0	0.0
99	96	99	0.9	1.0	0.0	86.3	-15.4	89.9	91.2	99	1.0	0.9	1.0	0.0
100	97	100	0.883	1.0	0.0	86.0	-15.9	89.0	90.4	100	1.0	0.883	1.0	0.0
100	98	101	0.866	1.0	0.0	85.6	-16.4	88.2	89.7	100	1.0	0.867	1.0	0.0
100	99	102	0.85	1.0	0.0	85.2	-16.9	87.4	89.1	100	1.0	0.85	1.0	0.0
101	100	103	0.833	1.0	0.0	84.8	-17.4	86.7	88.4	101	1.0	0.833	1.0	0.0
101	101	105	0.816	1.0	0.0	84.5	-17.9	86.0	87.8	101	1.0	0.817	1.0	0.0
102	102	106	0.8	1.0	0.0	84.1	-18.3	85.2	87.2	102	1.0	0.8	1.0	0.0
102	103	107	0.783	1.0	0.0	83.7	-18.8	84.5	86.5	102	1.0	0.783	1.0	0.0
102	104	108	0.766	1.0	0.0	83.3	-19.2	83.7	85.9	102	1.0	0.767	1.0	0.0
103	105	109	0.75	1.0	0.0	82.9	-19.7	83.0	85.3	103	1.0	0.75	1.0	0.0
104	106	110	0.733	1.0	0.0	82.2	-20.5	82.1	84.6	104	1.0	0.733	1.0	0.0
104	107	112	0.716	1.0	0.0	81.4	-21.3	81.2	84.0	104	1.0	0.717	1.0	0.0
105	108	113	0.7	1.0	0.0	80.6	-22.0	80.3	83.3	105	1.0	0.7	1.0	0.0
106	109	114	0.683	1.0	0.0	79.8	-22.8	79.5	82.7	106	1.0	0.683	1.0	0.0
106	110	115	0.666	1.0	0.0	79.0	-23.5	78.6	82.0	106	1.0	0.667	1.0	0.0
107	111	116	0.65	1.0	0.0	78.2	-24.2	77.7	81.4	107	1.0	0.65	1.0	0.0
107	112	117	0.633	1.0	0.0	77.4	-24.9	76.8	80.7	107	1.0	0.633	1.0	0.0
108	113	119	0.616	1.0	0.0	76.8	-25.7	75.6	79.9	108	1.0	0.617	1.0	0.0
109	114	120	0.6	1.0	0.0	76.2	-26.6	74.3	78.9	109	1.0	0.6	1.0	0.0
110	115	121	0.583	1.0	0.0	75.6	-27.5	72.9	78.0	110	1.0	0.583	1.0	0.0
111	116	122	0.566	1.0	0.0	75.0	-28.3	71.6	77.0	111	1.0	0.567	1.0	0.0
112	117	123	0.55	1.0	0.0	74.5	-29.1	70.2	76.0	112	1.0	0.55	1.0	0.0
113	118	124	0.533	1.0	0.0	73.9	-29.9	68.8	75.0	113	1.0	0.533	1.0	0.0
114	119	126	0.516	1.0	0.0	73.3	-30.6	67.4	74.1	114	1.0	0.517	1.0	0.0
115	120	127	0.5	1.0	0.0	72.7	-31.3	66.0	73.1	115	1.0	0.5	1.0	0.0

1-1131030-L0 QE450-73 LAB*la0, 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

Output: Offset standard print; separation cmy6*, D65, page 11/33

TUB-test chart QE45; hue code: $H^*_e=Y25G_e$
48 step hue circles; $rgb-LabCh^*$ tables

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$

TUB registration: 20130201-QE45/QE45L0FA.TXT /PS
application for measurement of offset print output, separation cmy6* (CMYK)

TUB material: code=rha4ta

Output: Offset standard print; separation cmyn6*, D65, page 12/36

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$

Data of Maximum color M in colorimetric system Offset standard print; separation cmyrn6*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM_c: $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;
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: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	rgb^*_{dd361M}	LAB^*_{d361Mi}	LAB^*_{d361Mi}	$rgb^*_{ds361Mi}$	$LAB^*_{ds361Mi}$	$rgb^*_{dd361Mi}$	$LAB^*_{dd361Mi}$	$rgb^*_{de361Mi}$	$LAB^*_{de361Mi}$	$rgb^*_{dd361Mi}$	rgb^*_{dd}	rgb^*_{ds}	rgb^*_{de}
170	165	175	0.0	1.0	0.25	53.2	-61.9 9.8	62.7	170	0.0	1.0	0.25	0.0	1.0	0.25
172	166	176	0.0	1.0	0.266	53.4	-61.4 8.2	61.9	172	0.0	1.0	0.267	0.0	1.0	0.267
173	167	177	0.0	1.0	0.283	53.5	-60.8 6.7	61.2	173	0.0	1.0	0.283	0.0	1.0	0.283
175	168	178	0.0	1.0	0.3	53.6	-60.2 5.2	60.4	175	0.0	1.0	0.3	0.0	1.0	0.3
176	169	179	0.0	1.0	0.316	53.7	-59.5 3.7	59.6	176	0.0	1.0	0.317	0.0	1.0	0.317
177	170	180	0.0	1.0	0.333	53.8	-58.8 2.3	58.9	177	0.0	1.0	0.333	0.0	1.0	0.333
179	171	181	0.0	1.0	0.35	53.9	-58.1 0.9	58.1	179	0.0	1.0	0.35	0.0	1.0	0.35
180	172	182	0.0	1.0	0.366	54.0	-57.3 -0.4	57.3	180	0.0	1.0	0.367	0.0	1.0	0.367
181	173	183	0.0	1.0	0.383	54.1	-56.6 -1.8	56.6	181	0.0	1.0	0.383	0.0	1.0	0.383
183	174	184	0.0	1.0	0.4	54.2	-55.9 -3.5	56.0	183	0.0	1.0	0.4	0.0	1.0	0.4
185	175	185	0.0	1.0	0.416	54.3	-55.2 -5.0	55.5	185	0.0	1.0	0.417	0.0	1.0	0.417
186	176	186	0.0	1.0	0.433	54.4	-54.5 -6.6	54.9	186	0.0	1.0	0.433	0.0	1.0	0.433
188	177	186	0.0	1.0	0.45	54.5	-53.7 -8.0	54.3	188	0.0	1.0	0.45	0.0	1.0	0.45
190	178	187	0.0	1.0	0.466	54.6	-52.8 -9.5	53.7	190	0.0	1.0	0.467	0.0	1.0	0.467
191	179	188	0.0	1.0	0.483	54.7	-52.0 -10.9	53.1	191	0.0	1.0	0.483	0.0	1.0	0.483
193	180	189	0.0	1.0	0.5	54.8	-51.0 -12.3	52.5	193	0.0	1.0	0.5	0.0	1.0	0.5
195	181	190	0.0	1.0	0.516	54.9	-50.4 -13.7	52.2	195	0.0	1.0	0.517	0.0	1.0	0.517
196	182	191	0.0	1.0	0.533	55.1	-49.6 -15.0	51.9	196	0.0	1.0	0.533	0.0	1.0	0.533
198	183	192	0.0	1.0	0.55	55.2	-48.9 -16.3	51.6	198	0.0	1.0	0.55	0.0	1.0	0.55
200	184	193	0.0	1.0	0.566	55.3	-48.1 -17.6	51.2	200	0.0	1.0	0.567	0.0	1.0	0.567
201	185	194	0.0	1.0	0.583	55.5	-47.3 -18.9	50.9	201	0.0	1.0	0.583	0.0	1.0	0.583
203	186	195	0.0	1.0	0.6	55.6	-46.4 -20.1	50.6	203	0.0	1.0	0.6	0.0	1.0	0.6
205	187	195	0.0	1.0	0.616	55.7	-45.5 -21.3	50.3	205	0.0	1.0	0.617	0.0	1.0	0.617
206	188	196	0.0	1.0	0.633	55.8	-44.7 -22.5	50.1	206	0.0	1.0	0.633	0.0	1.0	0.633
208	189	197	0.0	1.0	0.65	56.0	-44.0 -23.8	50.1	208	0.0	1.0	0.65	0.0	1.0	0.65
210	190	198	0.0	1.0	0.666	56.1	-43.2 -25.0	50.0	210	0.0	1.0	0.667	0.0	1.0	0.667
211	191	199	0.0	1.0	0.683	56.2	-42.4 -26.3	49.9	211	0.0	1.0	0.683	0.0	1.0	0.683
213	192	200	0.0	1.0	0.7	56.3	-41.6 -27.5	49.9	213	0.0	1.0	0.7	0.0	1.0	0.7
215	193	201	0.0	1.0	0.716	56.5	-40.8 -28.6	49.8	215	0.0	1.0	0.717	0.0	1.0	0.717
216	194	202	0.0	1.0	0.733	56.6	-39.9 -29.8	49.8	216	0.0	1.0	0.733	0.0	1.0	0.733
218	195	203	0.0	1.0	0.75	56.7	-38.9 -30.9	49.7	218	0.0	1.0	0.75	0.0	1.0	0.75
219	196	204	0.0	1.0	0.766	56.8	-38.4 -31.7	49.8	219	0.0	1.0	0.767	0.0	1.0	0.767
220	197	205	0.0	1.0	0.783	56.9	-37.8 -32.6	49.9	220	0.0	1.0	0.783	0.0	1.0	0.783
221	198	206	0.0	1.0	0.8	57.0	-37.2 -33.5	50.1	221	0.0	1.0	0.8	0.0	1.0	0.8
223	199	206	0.0	1.0	0.816	57.1	-36.6 -34.3	50.2	223	0.0	1.0	0.817	0.0	1.0	0.817
224	200	207	0.0	1.0	0.833	57.3	-36.0 -35.2	50.3	224	0.0	1.0	0.833	0.0	1.0	0.833
225	201	208	0.0	1.0	0.85	57.4	-35.3 -36.0	50.4	225	0.0	1.0	0.85	0.0	1.0	0.85
226	202	209	0.0	1.0	0.866	57.5	-34.6 -36.8	50.6	226	0.0	1.0	0.867	0.0	1.0	0.867
227	203	210	0.0	1.0	0.883	57.6	-34.0 -37.7	50.8	227	0.0	1.0	0.883	0.0	1.0	0.883
229	204	211	0.0	1.0	0.9	57.7	-33.4 -38.6	51.0	229	0.0	1.0	0.9	0.0	1.0	0.9
230	205	212	0.0	1.0	0.916	57.8	-32.8 -39.4	51.3	230	0.0	1.0	0.917	0.0	1.0	0.917
231	206	213	0.0	1.0	0.933	57.9	-32.1 -40.3	51.6	231	0.0	1.0	0.933	0.0	1.0	0.933
232	207	214	0.0	1.0	0.95	58.0	-31.4 -41.2	51.8	232	0.0	1.0	0.95	0.0	1.0	0.95
233	208	215	0.0	1.0	0.966	58.1	-30.7 -42.0	52.1	233	0.0	1.0	0.967	0.0	1.0	0.967
235	209	216	0.0	1.0	0.983	58.2	-30.0 -42.9	52.3	235	0.0	1.0	0.983	0.0	1.0	0.983
236	210	216	0.0	1.0	1.0	58.3	-29.2 -43.7	52.6	236	0.0	1.0	1.0	0.0	1.0	1.0

1-1131230-L0 QE450-73 LAB*la0, 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

Output: Offset standard print; separation cmyrn6*, D65, page 13/33

TUB-test chart QE45; hue code: $H^*_e=Y25G_e$
48 step hue circles; $rgb-LabCh^*$ tables

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$

TUB registration: 20130201-QE45/QE45L0FA.TXT /PS
application for measurement of offset print output, separation cmyrn6* (CMYK)
TUB material: code=rha4ta

Data of Maximum color M in colorimetric system Offset standard print; separation cmyrn6*, D65 for input or output; Six hue angles of the 60 degree standard colours $RYGCBM_s$: $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;
Six hue angles of the device colours $RYGCBM_d$: $h_{ab,d} = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3$; Six hue angles of the elementary colours $RYGCBM_e$: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	rgb^*_{dd361M}	$LAB^*_{dd361Mi}(x=LabCh)$	C_d	$rgb^*_{ds361Mi}$	$LAB^*_{ds361Mi}(x=LabCh)$	C_s	$rgb^*_{dd361Mi}$	$LAB^*_{de361Mi}$	$rgb^*_{dex361Mi}(x=LabCh)$	C_e	$rgb^*_{dd361Mi}$	rgb^*_{dd}	rgb^*_{ds}	rgb^*_{de}		
236	210	216	0.0	1.0	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	210	0.0	1.0	1.0	1.0	
236	211	217	0.0	0.983	1.0	57.9	-28.7 -43.7 52.3	236	0.0	1.0	0.676 56.2	-42.8 -25.7 50.0	211	0.0	0.983	1.0	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	1.0	
237	213	219	0.0	0.95	1.0	57.1	-27.5 -43.8 51.8	237	0.0	1.0	0.696 56.4	-41.8 -27.1 49.9	213	0.0	0.95	1.0	1.0	
238	214	220	0.0	0.933	1.0	56.7	-26.9 -43.9 51.5	238	0.0	1.0	0.706 56.4	-41.3 -27.8 49.9	214	0.0	0.933	1.0	1.0	
238	215	221	0.0	0.916	1.0	56.2	-26.4 -43.9 51.2	238	0.0	1.0	0.716 56.5	-40.8 -28.5 49.9	215	0.0	0.917	1.0	1.0	
239	216	222	0.0	0.9	1.0	55.8	-25.8 -43.9 50.9	239	0.0	1.0	0.726 56.6	-40.2 -29.2 49.8	216	0.0	0.9	1.0	1.0	
240	217	223	0.0	0.883	1.0	55.4	-25.2 -43.9 50.7	240	0.0	1.0	0.736 56.7	-39.7 -29.9 49.8	217	0.0	0.883	1.0	1.0	
240	218	224	0.0	0.866	1.0	55.0	-24.6 -43.9 50.4	240	0.0	1.0	0.746 56.7	-39.1 -30.5 49.8	218	0.0	0.867	1.0	1.0	
241	219	225	0.0	0.85	1.0	54.5	-23.9 -44.0 50.1	241	0.0	1.0	0.758 56.8	-38.6 -31.2 49.8	219	0.0	0.85	1.0	1.0	
242	220	226	0.0	0.833	1.0	54.1	-23.2 -44.0 49.8	242	0.0	1.0	0.772 56.9	-38.1 -32.0 49.9	220	0.0	0.833	1.0	1.0	
242	221	227	0.0	0.816	1.0	53.6	-22.5 -44.1 49.5	242	0.0	1.0	0.786 57.0	-37.7 -32.7 50.0	221	0.0	0.817	1.0	1.0	
243	222	227	0.0	0.8	1.0	53.1	-21.8 -44.1 49.2	243	0.0	1.0	0.8	57.1	-37.2 -33.4 50.1	222	0.0	0.8	1.0	1.0
244	223	228	0.0	0.783	1.0	52.7	-21.1 -44.1 48.9	244	0.0	1.0	0.814 57.2	-36.6 -34.2 50.2	223	0.0	0.783	1.0	1.0	
245	224	229	0.0	0.766	1.0	52.2	-20.4 -44.1 48.6	245	0.0	1.0	0.828 57.3	-36.1 -34.9 50.3	224	0.0	0.767	1.0	1.0	
245	225	230	0.0	0.75	1.0	51.7	-19.7 -44.1 48.3	245	0.0	1.0	0.842 57.4	-35.6 -35.6 50.4	225	0.0	0.75	1.0	1.0	
246	226	231	0.0	0.733	1.0	51.2	-18.9 -44.2 48.1	246	0.0	1.0	0.856 57.5	-35.0 -36.3 50.5	226	0.0	0.733	1.0	1.0	
247	227	232	0.0	0.716	1.0	50.7	-18.1 -44.3 47.8	247	0.0	1.0	0.87	57.5	-34.4 -36.9 50.7	227	0.0	0.717	1.0	1.0
248	228	233	0.0	0.7	1.0	50.1	-17.4 -44.3 47.6	248	0.0	1.0	0.884 57.6	-33.9 -37.7 50.8	228	0.0	0.7	1.0	1.0	
249	229	234	0.0	0.683	1.0	49.6	-16.6 -44.3 47.4	249	0.0	1.0	0.899 57.7	-33.4 -38.4 51.1	229	0.0	0.683	1.0	1.0	
250	230	235	0.0	0.666	1.0	49.1	-15.8 -44.4 47.1	250	0.0	1.0	0.913 57.8	-32.9 -39.2 51.3	230	0.0	0.667	1.0	1.0	
251	231	236	0.0	0.65	1.0	48.5	-15.0 -44.4 46.9	251	0.0	1.0	0.927 57.9	-32.3 -39.9 51.5	231	0.0	0.65	1.0	1.0	
252	232	237	0.0	0.633	1.0	48.0	-14.3 -44.4 46.6	252	0.0	1.0	0.941 58.0	-31.7 -40.7 51.7	232	0.0	0.633	1.0	1.0	
253	233	237	0.0	0.616	1.0	47.4	-13.4 -44.5 46.4	253	0.0	1.0	0.955 58.1	-31.2 -41.4 51.9	233	0.0	0.617	1.0	1.0	
254	234	238	0.0	0.6	1.0	46.7	-12.3 -44.6 46.3	254	0.0	1.0	0.969 58.2	-30.6 -42.1 52.2	234	0.0	0.6	1.0	1.0	
255	235	239	0.0	0.583	1.0	46.1	-11.3 -44.7 46.1	255	0.0	1.0	0.983 58.2	-29.9 -42.8 52.4	235	0.0	0.583	1.0	1.0	
257	236	240	0.0	0.566	1.0	45.4	-10.2 -44.8 46.0	257	0.0	1.0	0.997 58.3	-29.3 -43.5 52.6	236	0.0	0.567	1.0	1.0	
258	237	241	0.0	0.55	1.0	44.7	-9.1 -44.9 45.8	258	0.0	0.976	1.0	57.7	-28.4 -43.7 52.2	237	0.0	0.55	1.0	1.0
259	238	242	0.0	0.533	1.0	44.1	-8.1 -45.0 45.7	259	0.0	0.946	1.0	57.0	-27.3 -43.8 51.7	238	0.0	0.533	1.0	1.0
261	239	243	0.0	0.516	1.0	43.4	-7.0 -45.0 45.5	261	0.0	0.916	1.0	56.3	-26.3 -43.8 51.2	239	0.0	0.517	1.0	1.0
262	240	244	0.0	0.5	1.0	42.7	-6.0 -45.0 45.4	262	0.0	0.886	1.0	55.5	-25.3 -43.8 50.7	240	0.0	0.5	1.0	1.0
263	241	245	0.0	0.483	1.0	42.1	-5.0 -45.1 45.4	263	0.0	0.861	1.0	54.9	-24.3 -43.9 50.3	241	0.0	0.483	1.0	1.0
264	242	246	0.0	0.466	1.0	41.4	-4.0 -45.2 45.4	264	0.0	0.838	1.0	54.2	-23.3 -44.0 49.9	242	0.0	0.467	1.0	1.0
266	243	247	0.0	0.45	1.0	40.8	-3.0 -45.3 45.4	266	0.0	0.815	1.0	53.6	-22.4 -44.0 49.5	243	0.0	0.45	1.0	1.0
267	244	248	0.0	0.433	1.0	40.2	-2.1 -45.3 45.4	267	0.0	0.793	1.0	53.0	-21.4 -44.1 49.1	244	0.0	0.433	1.0	1.0
268	245	248	0.0	0.416	1.0	39.5	-1.1 -45.4 45.4	268	0.0	0.77	1.0	52.3	-20.5 -44.1 48.7	245	0.0	0.417	1.0	1.0
269	246	249	0.0	0.4	1.0	38.9	-0.1 -45.4 45.4	269	0.0	0.748	1.0	51.7	-19.6 -44.1 48.4	246	0.0	0.4	1.0	1.0
271	247	250	0.0	0.383	1.0	38.2	0.8 -45.4 45.4	271	0.0	0.729	1.0	51.1	-18.7 -44.2 48.1	247	0.0	0.383	1.0	1.0
272	248	251	0.0	0.366	1.0	37.6	1.8 -45.5 45.5	272	0.0	0.711	1.0	50.5	-17.8 -44.2 47.8	248	0.0	0.367	1.0	1.0
273	249	252	0.0	0.35	1.0	37.0	2.9 -45.6 45.7	273	0.0	0.692	1.0	49.9	-16.9 -44.3 47.5	249	0.0	0.35	1.0	1.0
275	250	253	0.0	0.333	1.0	36.4	4.0 -45.7 45.9	275	0.0	0.673	1.0	49.3	-16.1 -44.3 47.3	250	0.0	0.333	1.0	1.0
276	251	254	0.0	0.316	1.0	35.7	5.1 -45.8 46.1	276	0.0	0.654	1.0	48.7	-15.2 -44.3 47.0	251	0.0	0.317	1.0	1.0
277	252	255	0.0	0.3	1.0	35.1	6.1 -45.9 46.3	277	0.0	0.636	1.0	48.1	-14.3 -44.3 46.7	252	0.0	0.3	1.0	1.0
279	253	256	0.0	0.283	1.0	34.5	7.2 -46.0 46.5	279	0.0	0.62	1.0	47.6	-13.5 -44.4 46.5	253	0.0	0.283	1.0	1.0
280	254	257	0.0	0.266	1.0	33.9	8.3 -46.0 46.7	280	0.0	0.607	1.0	47.1	-12.7 -44.5 46.4	254	0.0	0.267	1.0	1.0
281	255	258	0.0	0.25	1.0	33.3	9.4 -46.0 47.0	281	0.0	0.594	1.0	46.5	-11.9 -44.6 46.3	255	0.0	0.25	1.0	1.0

1-1131330-L0 QE450-73 LAB*la0, 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

Output: Offset standard print; separation cmyrn6*, D65, page 14/33

TUB-test chart QE45; hue code: $H^*_e=Y25G_e$
48 step hue circles; $rgb-LabCh$ *tables

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$

TUB registration: 20130201-QE45/QE45L0FA.TXT /PS
application for measurement of offset print output, separation cmyrn6* (CMYK)
TUB material: code=rha4ta

Data of Maximum color M in colorimetric system Offset standard print; separation cmy6*, D65 for input or output; Six hue angles of the 60 degree standard colours $RYGCBM_c$: $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;
Six hue angles of the device colours $RYGCBM_d$: $h_{ab,d} = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3$; Six hue angles of the elementary colours $RYGCBM_e$: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

Six hue angles of the device colours <i>RYGBM_d</i> : <i>h_{ab,d}</i> = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3; Six hue angles of the elementary colours <i>RYGBM_e</i> : <i>h_{ab,e}</i> = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6											
<i>h_{ab,d}</i>	<i>h_{ab,s}</i>	<i>h_{ab,e}</i>	<i>rgb*_{dd361M}</i>	<i>LAB*_{ddx361Mi} (x=LabCh)</i>	<i>rgb*_{ds361Mi}</i>	<i>LAB*_{dsx361Mi} (x=LabCh)</i>	<i>rgb*_{dd361Mi}</i>	<i>LAB*_{de361Mi}</i>	<i>rgb*_{dex361Mi} (x=LabCh)</i>	<i>rgb*_{dd361Mi}</i>	<i>LAB*_{dex361Mi} (x=LabCh)</i>
281	255	258	0.0 0.25 1.0	33.3 9.4 -46.0 47.0	0.0 0.594 1.0	46.5 -11.9 -44.6 46.3	0.0 0.25 1.0	0.0 0.555 1.0	45.0 -9.4 -44.8 45.9	0.0 0.25 1.0	0.0 0.555 1.0
282	256	258	0.0 0.233 1.0	32.7 10.5 -46.2 47.4	0.0 0.581 1.0	46.0 -11.1 -44.7 46.2	0.0 0.233 1.0	0.0 0.543 1.0	44.5 -8.7 -44.9 45.8	0.0 0.233 1.0	0.0 0.543 1.0
283	257	259	0.0 0.216 1.0	32.0 11.5 -46.4 47.8	0.0 0.568 1.0	45.5 -10.3 -44.8 46.1	0.0 0.217 1.0	0.0 0.532 1.0	44.1 -7.9 -44.9 45.7	0.0 0.217 1.0	0.0 0.532 1.0
285	258	260	0.0 0.2 1.0	31.4 12.5 -46.5 48.2	0.0 0.556 1.0	45.0 -9.5 -44.8 45.9	0.0 0.2 1.0	0.0 0.52 1.0	43.6 -7.2 -44.9 45.6	0.0 0.2 1.0	0.0 0.52 1.0
286	259	261	0.0 0.183 1.0	30.8 13.6 -46.7 48.6	0.0 0.543 1.0	44.5 -8.6 -44.9 45.8	0.0 0.183 1.0	0.0 0.508 1.0	43.1 -6.5 -44.9 45.5	0.0 0.183 1.0	0.0 0.508 1.0
287	260	262	0.0 0.166 1.0	30.1 14.7 -46.8 49.0	0.0 0.53 1.0	44.0 -7.8 -44.9 45.7	0.0 0.167 1.0	0.0 0.497 1.0	42.7 -5.7 -45.0 45.4	0.0 0.167 1.0	0.0 0.497 1.0
288	261	263	0.0 0.15 1.0	29.5 15.8 -46.9 49.4	0.0 0.517 1.0	43.5 -7.0 -44.9 45.6	0.0 0.15 1.0	0.0 0.484 1.0	42.2 -5.0 -45.0 45.4	0.0 0.15 1.0	0.0 0.484 1.0
289	262	264	0.0 0.133 1.0	28.9 16.8 -46.9 49.9	0.0 0.505 1.0	43.0 -6.2 -44.9 45.5	0.0 0.133 1.0	0.0 0.472 1.0	41.7 -4.3 -45.1 45.4	0.0 0.133 1.0	0.0 0.472 1.0
290	263	265	0.0 0.116 1.0	28.3 17.8 -47.0 50.3	0.0 0.491 1.0	42.5 -5.4 -45.0 45.4	0.0 0.117 1.0	0.0 0.46 1.0	41.2 -3.6 -45.2 45.4	0.0 0.117 1.0	0.0 0.46 1.0
291	264	266	0.0 0.1 1.0	27.9 18.6 -47.1 50.6	0.0 0.478 1.0	41.9 -4.6 -45.1 45.4	0.0 0.1 1.0	0.0 0.448 1.0	40.8 -2.9 -45.2 45.4	0.0 0.1 1.0	0.0 0.448 1.0
292	265	267	0.0 0.083 1.0	27.5 19.4 -47.1 51.0	0.0 0.465 1.0	41.4 -3.9 -45.2 45.4	0.0 0.083 1.0	0.0 0.436 1.0	40.3 -2.1 -45.3 45.4	0.0 0.083 1.0	0.0 0.436 1.0
293	266	268	0.0 0.066 1.0	27.0 20.2 -47.2 51.4	0.0 0.451 1.0	40.9 -3.1 -45.2 45.4	0.0 0.067 1.0	0.0 0.423 1.0	39.8 -1.4 -45.3 45.4	0.0 0.067 1.0	0.0 0.423 1.0
293	267	269	0.0 0.049 1.0	26.6 21.0 -47.3 51.7	0.0 0.438 1.0	40.4 -2.3 -45.3 45.4	0.0 0.05 1.0	0.0 0.411 1.0	39.4 -0.7 -45.3 45.4	0.0 0.05 1.0	0.0 0.411 1.0
294	268	269	0.0 0.033 1.0	26.2 21.8 -47.3 52.1	0.0 0.425 1.0	39.9 -1.5 -45.3 45.4	0.0 0.033 1.0	0.0 0.399 1.0	38.9 0.0 -45.3 45.4	0.0 0.033 1.0	0.0 0.399 1.0
295	269	270	0.0 0.016 1.0	25.7 22.6 -47.3 52.5	0.0 0.411 1.0	39.4 -0.7 -45.3 45.4	0.0 0.017 1.0	0.0 0.387 1.0	38.4 0.7 -45.3 45.4	0.0 0.017 1.0	0.0 0.387 1.0
296	270	271	0.0 0.0 1.0	25.3 23.5 -47.3 52.8	0.0 0.398 1.0	38.8 0.0 -45.3 45.4	0.0 0.0 1.0	0.0 0.375 1.0	37.9 1.4 -45.3 45.5	0.0 0.0 1.0	0.0 0.375 1.0
297	271	272	0.016 0.0 1.0	25.8 24.6 -46.8 52.9	0.0 0.385 1.0	38.3 0.8 -45.3 45.4	0.017 0.0 1.0	0.0 0.363 1.0	37.5 2.1 -45.5 45.6	0.017 0.0 1.0	0.0 0.363 1.0
299	272	273	0.033 0.0 1.0	26.3 25.8 -46.2 52.9	0.0 0.371 1.0	37.8 1.6 -45.4 45.5	0.033 0.0 1.0	0.0 0.351 1.0	37.1 2.9 -45.6 45.8	0.033 0.0 1.0	0.0 0.351 1.0
300	273	274	0.05 0.0 1.0	26.9 26.9 -45.6 52.9	0.0 0.359 1.0	37.3 2.4 -45.5 45.7	0.05 0.0 1.0	0.0 0.339 1.0	36.6 3.7 -45.7 45.9	0.05 0.0 1.0	0.0 0.339 1.0
301	274	275	0.066 0.0 1.0	27.4 28.0 -45.0 53.0	0.0 0.346 1.0	36.9 3.2 -45.6 45.8	0.067 0.0 1.0	0.0 0.327 1.0	36.2 4.4 -45.7 46.0	0.067 0.0 1.0	0.0 0.327 1.0
303	275	276	0.083 0.0 1.0	27.9 29.1 -44.3 53.0	0.0 0.334 1.0	36.4 4.0 -45.7 46.0	0.083 0.0 1.0	0.0 0.315 1.0	35.7 5.2 -45.8 46.2	0.083 0.0 1.0	0.0 0.315 1.0
304	276	277	0.1 0.0 1.0	28.5 30.2 -43.6 53.1	0.0 0.321 1.0	36.0 4.8 -45.8 46.1	0.1 0.0 1.0	0.0 0.303 1.0	35.3 6.0 -45.9 46.3	0.1 0.0 1.0	0.0 0.303 1.0
306	277	278	0.116 0.0 1.0	29.0 31.2 -42.9 53.1	0.0 0.309 1.0	35.5 5.6 -45.8 46.3	0.117 0.0 1.0	0.0 0.291 1.0	34.9 6.8 -45.9 46.5	0.117 0.0 1.0	0.0 0.291 1.0
307	278	279	0.133 0.0 1.0	29.4 32.1 -42.3 53.1	0.0 0.296 1.0	35.0 6.5 -45.9 46.4	0.133 0.0 1.0	0.0 0.279 1.0	34.4 7.6 -45.9 46.6	0.133 0.0 1.0	0.0 0.279 1.0
307	279	280	0.15 0.0 1.0	29.7 32.7 -41.9 53.2	0.0 0.283 1.0	34.6 7.3 -45.9 46.6	0.15 0.0 1.0	0.0 0.267 1.0	34.0 8.3 -45.9 46.8	0.15 0.0 1.0	0.0 0.267 1.0
308	280	281	0.166 0.0 1.0	30.0 33.3 -41.5 53.2	0.0 0.271 1.0	34.1 8.1 -45.9 46.7	0.167 0.0 1.0	0.0 0.256 1.0	33.5 9.1 -45.9 46.9	0.167 0.0 1.0	0.0 0.256 1.0
309	281	282	0.183 0.0 1.0	30.3 33.9 -41.0 53.2	0.0 0.258 1.0	33.6 8.9 -45.9 46.9	0.183 0.0 1.0	0.0 0.243 1.0	33.1 9.9 -46.0 47.2	0.183 0.0 1.0	0.0 0.243 1.0
310	282	283	0.2 0.0 1.0	30.6 34.5 -40.6 53.3	0.0 0.245 1.0	33.1 9.8 -46.0 47.1	0.2 0.0 1.0	0.0 0.229 1.0	32.5 10.8 -46.2 47.5	0.2 0.0 1.0	0.0 0.229 1.0
311	283	284	0.216 0.0 1.0	30.9 35.0 -40.1 53.3	0.0 0.231 1.0	32.6 10.7 -46.2 47.5	0.217 0.0 1.0	0.0 0.215 1.0	32.0 11.6 -46.3 47.9	0.217 0.0 1.0	0.0 0.215 1.0
311	284	285	0.233 0.0 1.0	31.2 35.6 -39.6 53.3	0.0 0.216 1.0	32.1 11.6 -46.3 47.8	0.233 0.0 1.0	0.0 0.202 1.0	31.5 12.5 -46.5 48.2	0.233 0.0 1.0	0.0 0.202 1.0
312	285	285	0.25 0.0 1.0	31.5 36.2 -39.2 53.4	0.0 0.202 1.0	31.5 12.5 -46.5 48.2	0.25 0.0 1.0	0.0 0.188 1.0	31.0 13.3 -46.6 48.5	0.25 0.0 1.0	0.0 0.188 1.0
314	286	286	0.266 0.0 1.0	31.8 37.8 -38.3 53.8	0.0 0.188 1.0	31.0 13.4 -46.6 48.6	0.267 0.0 1.0	0.0 0.175 1.0	30.5 14.2 -46.7 48.9	0.267 0.0 1.0	0.0 0.175 1.0
316	287	287	0.283 0.0 1.0	32.1 39.4 -37.4 54.3	0.0 0.173 1.0	30.4 14.3 -46.7 48.9	0.283 0.0 1.0	0.0 0.161 1.0	30.0 15.1 -46.8 49.2	0.283 0.0 1.0	0.0 0.161 1.0
318	288	288	0.3 0.0 1.0	32.4 40.9 -36.4 54.8	0.0 0.159 1.0	29.9 15.2 -46.8 49.3	0.3 0.0 1.0	0.0 0.147 1.0	29.5 16.0 -46.8 49.6	0.3 0.0 1.0	0.0 0.147 1.0
320	289	289	0.316 0.0 1.0	32.7 42.4 -35.3 55.3	0.0 0.145 1.0	29.4 16.2 -46.8 49.6	0.317 0.0 1.0	0.0 0.134 1.0	28.9 16.9 -46.9 49.9	0.317 0.0 1.0	0.0 0.134 1.0
322	290	290	0.333 0.0 1.0	33.0 43.9 -34.2 55.7	0.0 0.13 1.0	28.8 17.1 -46.9 50.0	0.333 0.0 1.0	0.0 0.118 1.0	28.4 17.8 -46.9 50.3	0.333 0.0 1.0	0.0 0.118 1.0
323	291	291	0.35 0.0 1.0	33.3 45.4 -33.1 56.2	0.0 0.112 1.0	28.3 18.1 -47.0 50.4	0.35 0.0 1.0	0.0 0.098 1.0	27.9 18.7 -47.0 50.7	0.35 0.0 1.0	0.0 0.098 1.0
325	292	292	0.366 0.0 1.0	33.6 46.9 -31.8 56.7	0.0 0.091 1.0	27.7 19.1 -47.1 50.9	0.367 0.0 1.0	0.0 0.079 1.0	27.4 19.6 -47.1 51.1	0.367 0.0 1.0	0.0 0.079 1.0
327	293	293	0.383 0.0 1.0	34.0 48.0 -30.9 57.1	0.0 0.07 1.0	27.2 20.1 -47.1 51.3	0.383 0.0 1.0	0.0 0.059 1.0	26.9 20.6 -47.2 51.6	0.383 0.0 1.0	0.0 0.059 1.0
328	294	294	0.4 0.0 1.0	34.6 48.9 -30.3 57.5	0.0 0.05 1.0	26.6 21.1 -47.2 51.8	0.4 0.0 1.0	0.0 0.04 1.0	26.4 21.6 -47.2 52.0	0.4 0.0 1.0	0.0 0.04 1.0
329	295	295	0.416 0.0 1.0	35.1 49.7 -29.7 57.9	0.0 0.029 1.0	26.1 22.1 -47.2 52.2	0.417 0.0 1.0	0.0 0.02 1.0	25.9 22.5 -47.3 52.4	0.417 0.0 1.0	0.0 0.02 1.0
330	296	296	0.433 0.0 1.0	35.7 50.5 -29.0 58.3	0.0 0.008 1.0	25.6 23.1 -47.3 52.7	0.433 0.0 1.0	0.0 0.001 1.0	25.3 23.5 -47.3 52.9	0.433 0.0 1.0	0.0 0.001 1.0
331	297	297	0.45 0.0 1.0	36.2 51.4 -28.4 58.7	0.007 0.0 1.0	25.6 24.0 -47.0 52.9	0.45 0.0 1.0	0.011 0.0 1.0	25.7 24.3 -46.9 52.9	0.45 0.0 1.0	0.011 0.0 1.0
332	298	298	0.466 0.0 1.0	36.7 52.2 -27.7 59.1	0.019 0.0 1.0	25.9 24.8 -46.6 52.9	0.467 0.0 1.0	0.023 0.0 1.0	26.1 25.1 -46.5 52.9	0.467 0.0 1.0	0.023 0.0 1.0
332	299	299	0.483 0.0 1.0	37.3 53.0 -27.0 59.5	0.031 0.0 1.0	26.3 25.7 -46.2 52.9	0.483 0.0 1.0	0.034 0.0 1.0	26.4 25.9 -46.1 53.0	0.483 0.0 1.0	0.034 0.0 1.0
333	300	300	0.5 0.0 1.0	37.8 53.8 -26.3 59.9	0.043 0.0 1.0	26.7 26.5 -45.8 53.0	0.5 0.0 1.0	0.046 0.0 1.0	26.8 26.6 -45.7 53.0	0.5 0.0 1.0	0.046 0.0 1.0

1-1131430-L0 QE450-73 LAB*la0, 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 QE45; hue code: $H^*_e=Y25G_e$
48 step hue circles; $rgb-LabCh^*$ tables

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$

Output: Offset standard print; separation cmy6*, D65, page 15/33

TUB registration: 20130201-QE45/QE45L0FA.TXT /PS
application for measurement of offset print output, separation cmy6* (CMYK)
TUB material: code=rha4ta

Output: Offset standard print; separation cmyn6*, D65, page 16/33

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$



Output: Offset standard print; separation cmyn6*, D65, page 17/33

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$

TUB material: code=rha4ta
nyn6* (CMYK)

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$

1-113230-F0

QE450-7N, Page 23/33-F

TUB-test chart QE45; hue code: $H^*_e = Y25G_e$

colors and differences, ΔE^*

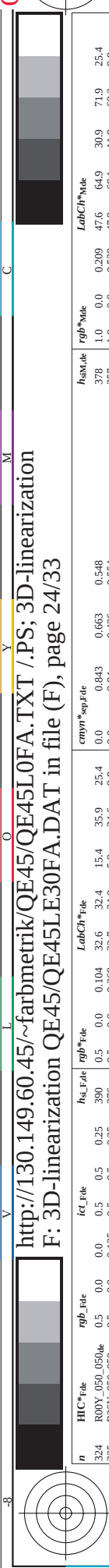
input: $rgb/cmyk \rightarrow rgb_{de}$

output: 3D-linearization to $cmyk^*_{de}$

The figure displays a color calibration chart with two rows of color patches. The top row shows the input colors in RGB and CMYK, and the bottom row shows the output colors after 3D-linearization. The color differences are labeled as ΔE^* . The chart is titled 'TUB-test chart QE45; hue code: $H^*_e = Y25G_e$ ' and 'colors and differences, ΔE^* '. The input is labeled 'input: $rgb/cmyk \rightarrow rgb_{de}$ ' and the output is labeled 'output: 3D-linearization to $cmyk^*_{de}$ '. The chart is identified by '1-113230-F0' and 'QE450-7N, Page 23/33-F'.

TUE
color

TUB-test chart QE45; hue code: $H_e^* = Y25G_e$



TUB registration: 20130201-QE45/QE45L0FA.TXT /.PS TUB material: code=rha4ta
application for measurement of offset print output, separation cmyn6* (CMYK)

see similar files: <http://130.149.60.45/~farbmatrik/QE45/QE45.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>

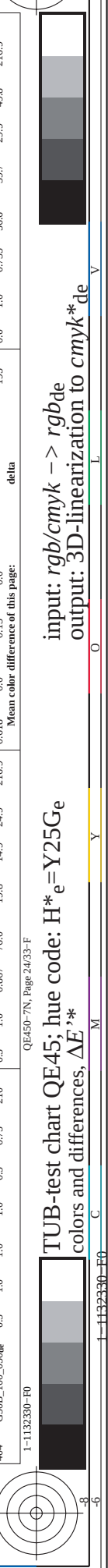
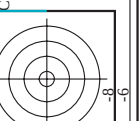
<http://130.149.60.45/~farbmatrik/QE45/QE45L0FA.TXT> /PS; 3D-linearization
F: 3D-linearization QE45/QE45L0FA.DAT in file (F), page 24/33

input: *rgb/cmyk* -> *rgbde*
output: 3D-linearization to *cmyk**de

QE4511L

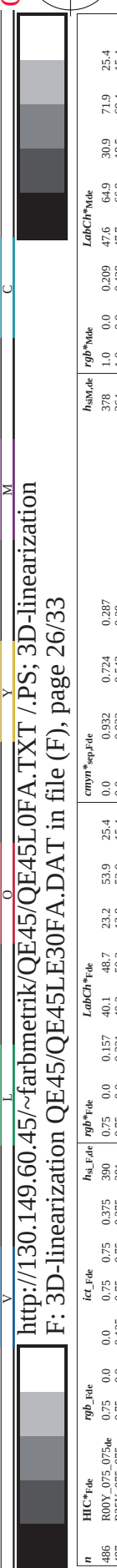
QE4511L

n		HiC*File	rgb*File	icL*File	hsa*File	rgb*File	LabCh*File	cmyk*sep*File		hsa*de	rgb*File	LabCh*File	delta	
324	325	R050_050_050de	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
326	327	R050_050_050de	0.5	0.0	0.125	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
328	329	B050_050_050de	0.5	0.0	0.375	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
330	331	B050_050_050de	0.5	0.0	0.625	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
332	333	B050_050_050de	0.5	0.0	0.875	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
334	335	R050_050_050de	0.5	0.125	0.125	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
336	337	R050_050_050de	0.5	0.125	0.375	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
338	339	R050_050_050de	0.5	0.125	0.625	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
340	341	R050_050_050de	0.5	0.125	0.875	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
342	343	R050_050_050de	0.5	0.25	0.125	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
344	345	R050_050_050de	0.5	0.25	0.375	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
346	347	R050_050_050de	0.5	0.25	0.625	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
348	349	R050_050_050de	0.5	0.25	0.875	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350	351	R050_050_050de	0.5	0.375	0.125	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
352	353	R050_050_050de	0.5	0.375	0.375	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
354	355	R050_050_050de	0.5	0.375	0.625	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
356	357	R050_050_050de	0.5	0.375	0.875	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
358	359	B050_050_050de	0.5	0.625	0.125	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
360	361	B050_050_050de	0.5	0.625	0.375	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
362	363	B050_050_050de	0.5	0.625	0.625	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
364	365	B050_050_050de	0.5	0.625	0.875	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
366	367	R050_050_050de	0.5	0.875	0.125	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
368	369	R050_050_050de	0.5	0.875	0.375	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
370	371	R050_050_050de	0.5	0.875	0.625	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
372	373	R050_050_050de	0.5	0.875	0.875	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
374	375	G050_050_050de	0.5	0.625	0.125	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
376	377	G050_050_050de	0.5	0.625	0.375	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
378	379	G050_050_050de	0.5	0.625	0.625	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
380	381	G050_050_050de	0.5	0.625	0.875	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
382	383	B050_050_050de	0.5	0.875	0.125	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
384	385	B050_050_050de	0.5	0.875	0.375	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
386	387	B050_050_050de	0.5	0.875	0.625	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
388	389	B050_050_050de	0.5	0.875	0.875	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
390	391	G050_050_050de	0.5	0.875	0.125	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
392	393	G050_050_050de	0.5	0.875	0.375	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
394	395	G050_050_050de	0.5	0.875	0.625	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
396	397	G050_050_050de	0.5	0.875	0.875	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
398	399	B050_050_050de	0.5	1.0	0.125	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
400	401	B050_050_050de	0.5	1.0	0.375	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
402	403	B050_050_050de	0.5	1.0	0.625	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
404	405	B050_050_050de	0.5	1.0	0.875	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

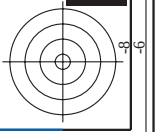
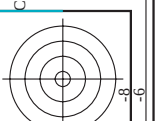


QE4511L

QE4511L



TUB registration: 20130201-QE45/QE45L0FA.TXT /.PS TUB material: code=rha4ta
application for measurement of offset print output, separation cmyn6* (CMYK)



http://130.149.60.45/~farbmatrik/QE45/QE45L0FA.TXT /.PS; 3D-linearization
F: 3D-linearization QE45/QE45L0FA.DAT in file (F), page 26/33

n	HC*File	rgb*File	Lab*File	rgb*File	Lab*File	cmyn*sep*File	rgb*File	Lab*File	delta
486	R00Y.075.075de	0.75	0.0	0.75	40.1	0.0	0.932	378	25.4
487	R35Y.075.075de	0.75	0.125	0.75	40.2	0.0	0.932	364	71.9
488	R10Y.075.075de	0.75	0.25	0.75	40.3	0.0	0.932	349	15.4
489	R10Y.075.075de	0.75	0.375	0.75	40.4	0.0	0.932	329	69.4
490	R65R.075.075de	0.75	0.5	0.75	39.9	0.0	0.928	347	5.2
491	B57R.075.075de	0.75	0.625	0.75	36.6	0.0	0.918	315	72.1
492	B57R.075.075de	0.75	0.75	0.75	34.1	0.0	0.921	304	352.0
493	B43R.087.087de	0.75	0.0	0.75	30.5	0.0	0.925	293	-15.5
494	B38R.100.100de	0.75	0.0	0.75	30.5	0.0	0.925	288	-23.9
495	R38Y.100.100de	0.75	0.0	0.75	30.5	0.0	0.925	288	-30.0
496	R38Y.100.100de	0.75	0.125	0.75	30.5	0.0	0.925	288	-34.9
497	R38Y.100.100de	0.75	0.25	0.75	30.5	0.0	0.925	288	-38.0
498	R38Y.100.100de	0.75	0.375	0.75	30.5	0.0	0.925	288	-40.0
499	R38Y.100.100de	0.75	0.5	0.75	30.5	0.0	0.925	288	-43.0
500	R38Y.100.100de	0.75	0.625	0.75	30.5	0.0	0.925	288	-44.0
501	B50R.075.062de	0.75	0.125	0.75	38.1	0.0	0.931	293	-35.4
502	B42R.087.075de	0.75	0.125	0.75	38.1	0.0	0.931	293	-35.4
503	B38R.100.087de	0.75	0.125	0.75	38.1	0.0	0.931	293	-35.4
504	R38Y.075.062de	0.75	0.125	0.75	38.1	0.0	0.931	293	-35.4
505	R38Y.075.062de	0.75	0.25	0.75	38.1	0.0	0.931	293	-35.4
506	R38Y.075.062de	0.75	0.375	0.75	38.1	0.0	0.931	293	-35.4
507	R38Y.075.062de	0.75	0.5	0.75	38.1	0.0	0.931	293	-35.4
508	R38Y.075.062de	0.75	0.625	0.75	38.1	0.0	0.931	293	-35.4
509	R38Y.075.062de	0.75	0.75	0.75	38.1	0.0	0.931	293	-35.4
510	B38R.100.075de	0.75	0.0	0.75	45.1	0.0	0.962	329	-30.0
511	B38R.100.075de	0.75	0.125	0.75	45.1	0.0	0.962	329	-30.0
512	B38R.100.075de	0.75	0.25	0.75	45.1	0.0	0.962	329	-30.0
513	B38R.100.075de	0.75	0.375	0.75	45.1	0.0	0.962	329	-30.0
514	B38R.100.075de	0.75	0.5	0.75	45.1	0.0	0.962	329	-30.0
515	B38R.100.075de	0.75	0.625	0.75	45.1	0.0	0.962	329	-30.0
516	B38R.100.075de	0.75	0.75	0.75	45.1	0.0	0.962	329	-30.0
517	R38Y.075.037de	0.75	0.375	0.75	58.0	0.0	0.944	349	-11.8
518	R38Y.075.037de	0.75	0.5	0.75	58.0	0.0	0.944	349	-11.8
519	B65R.075.037de	0.75	0.375	0.75	58.0	0.0	0.944	349	-11.8
520	B38R.087.050de	0.75	0.375	0.75	58.0	0.0	0.944	349	-11.8
521	B38R.087.050de	0.75	0.5	0.75	58.0	0.0	0.944	349	-11.8
522	R65Y.075.075de	0.75	0.0	0.75	58.0	0.0	0.944	349	-11.8
523	R65Y.075.075de	0.75	0.125	0.75	58.0	0.0	0.944	349	-11.8
524	R50Y.075.050de	0.75	0.5	0.75	58.0	0.0	0.944	349	-11.8
525	R31Y.075.037de	0.75	0.375	0.75	58.0	0.0	0.944	349	-11.8
526	R31Y.075.037de	0.75	0.5	0.75	58.0	0.0	0.944	349	-11.8
527	R31Y.075.037de	0.75	0.625	0.75	58.0	0.0	0.944	349	-11.8
528	B50R.075.025de	0.75	0.5	0.75	63.9	0.0	0.937	329	-30.0
529	B34R.087.037de	0.75	0.5	0.75	63.9	0.0	0.937	329	-30.0
530	B23R.100.050de	0.75	0.5	0.75	63.9	0.0	0.937	329	-30.0
531	R85Y.075.075de	0.75	0.0	0.75	63.9	0.0	0.937	329	-30.0
532	R85Y.075.075de	0.75	0.125	0.75	63.9	0.0	0.937	329	-30.0
533	R75Y.075.050de	0.75	0.5	0.75	63.9	0.0	0.937	329	-30.0
534	R65Y.075.037de	0.75	0.375	0.75	63.9	0.0	0.937	329	-30.0
535	R50Y.075.025de	0.75	0.5	0.75	63.9	0.0	0.937	329	-30.0
536	R38Y.075.012de	0.75	0.625	0.75	63.9	0.0	0.937	329	-30.0
537	B50R.075.012de	0.75	0.625	0.75	63.9	0.0	0.937	329	-30.0
538	B38R.087.012de	0.75	0.625	0.75	63.9	0.0	0.937	329	-30.0
539	B13R.100.037de	0.75	0.625	0.75	63.9	0.0	0.937	329	-30.0
540	Y00G.075.062de	0.75	0.125	0.75	63.9	0.0	0.937	329	-30.0
541	Y00G.075.062de	0.75	0.25	0.75	63.9	0.0	0.937	329	-30.0
542	Y00G.075.062de	0.75	0.375	0.75	63.9	0.0	0.937	329	-30.0
543	Y00G.075.062de	0.75	0.5	0.75	63.9	0.0	0.937	329	-30.0
544	Y00G.075.062de	0.75	0.625	0.75	63.9	0.0	0.937	329	-30.0
545	Y00G.075.062de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
546	Y00G.075.062de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
547	B00R.087.012de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
548	B00R.087.012de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
549	Y13C.087.087de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
550	Y13C.087.087de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
551	Y18C.087.062de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
552	Y23C.087.050de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
553	Y31G.087.037de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
554	Y50C.087.025de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
555	G50B.087.012de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
556	G50B.087.012de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
557	G73B.100.025de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
558	Y23C.100.100de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
559	Y26C.100.087de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
560	Y31G.100.075de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
561	Y38C.100.062de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
562	Y68C.100.037de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
563	Y68C.100.037de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
564	G05B.100.025de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
565	G25B.100.025de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0
566	G50B.100.025de	0.75	0.75	0.75	63.9	0.0	0.937	329	-30.0

QE450-7N; Page 26/33-F

TUB-test chart QE45; hue code: H*=Y25Ge
colors and differences, ΔE*

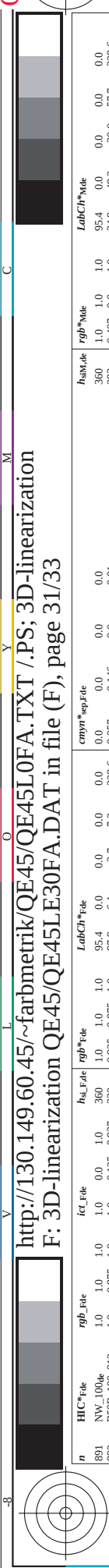
input: rgb/cmyk -> rgbde
output: 3D-linearization to cmyk*de

see similar files: <http://130.149.60.45/~farbmatrik/QE45/QE45.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>

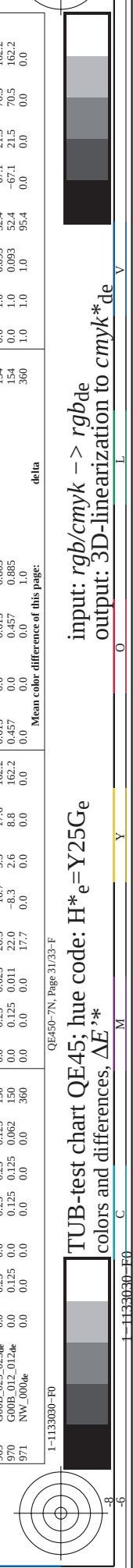
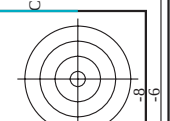
see similar files: <http://130.149.60.45/~farbmatrik/QE45/QE45.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>

input: $rgb/cmyk \rightarrow rgb_{de}$
output: 3D-linearization to $cmyk^*_{de}$

TUB-test chart QE45; hue code: $H_e^* = Y25G_e$



TUB registration: 20130201-QE45/QE45L0FA.TXT /.PS TUB material: code=rha4ta
application for measurement of offset print output, separation cmyk* (CMYK)



http://130.149.60.45/~farbmatrik/QE45/QE45L0FA.TXT /.PS; 3D-linearization
F: 3D-linearization QE45/QE45L0FA.DAT in file (F), page 31/33

n	HC*File	rgb*File	Lab*File	rgb*File	Lab*File	cmyn*sepFile	rgb*File	Lab*File	delta
891	NW_100de	1.0	1.0	1.0	95.4	0.0	1.0	95.4	0.0
892	NW_100de	0.875	1.0	0.875	87.5	0.0	0.875	87.5	0.0
893	B50R_100.012de	1.0	0.125	0.937	93.7	0.057	0.125	93.7	0.057
894	B50R_100.025de	1.0	0.25	0.875	87.5	0.146	0.25	87.5	0.146
895	B50R_100.037de	1.0	0.375	0.812	81.2	0.283	0.375	81.2	0.283
896	B50R_100.050de	1.0	0.5	0.75	75.0	0.411	0.5	75.0	0.411
897	B50R_100.062de	1.0	0.625	0.687	68.7	0.514	0.625	68.7	0.514
898	B50R_100.075de	1.0	0.75	0.625	62.5	0.589	0.75	62.5	0.589
899	B50R_100.087de	1.0	0.875	0.562	56.2	0.642	0.875	56.2	0.642
900	B50R_100.100de	1.0	1.0	0.5	50.0	0.766	1.0	50.0	0.766
901	NW_087de	0.875	1.0	0.875	87.5	0.0	0.875	87.5	0.0
902	B50R_087.012de	0.875	0.125	0.812	81.2	0.001	0.125	81.2	0.001
903	B50R_087.025de	0.875	0.25	0.75	75.0	0.014	0.25	75.0	0.014
904	B50R_087.037de	0.875	0.375	0.687	68.7	0.057	0.375	68.7	0.057
905	B50R_087.050de	0.875	0.5	0.625	62.5	0.127	0.5	62.5	0.127
906	B50R_087.062de	0.875	0.625	0.562	56.2	0.17	0.625	56.2	0.17
907	B50R_087.075de	0.875	0.75	0.5	50.0	0.223	0.75	50.0	0.223
908	B50R_087.087de	0.875	0.875	0.437	43.7	0.306	0.875	43.7	0.306
909	B50R_087.100de	0.875	1.0	0.375	37.5	0.411	1.0	37.5	0.411
910	NW_075de	0.75	1.0	0.75	75.0	0.0	0.75	75.0	0.0
911	B50R_075.012de	0.75	0.125	0.812	81.2	0.001	0.125	81.2	0.001
912	B50R_075.025de	0.75	0.25	0.75	75.0	0.018	0.25	75.0	0.018
913	B50R_075.037de	0.75	0.375	0.687	68.7	0.057	0.375	68.7	0.057
914	B50R_075.050de	0.75	0.5	0.625	62.5	0.127	0.5	62.5	0.127
915	B50R_075.062de	0.75	0.625	0.562	56.2	0.17	0.625	56.2	0.17
916	B50R_075.075de	0.75	0.75	0.5	50.0	0.223	0.75	50.0	0.223
917	B50R_075.087de	0.75	0.875	0.437	43.7	0.306	0.875	43.7	0.306
918	B50R_075.100de	0.75	1.0	0.375	37.5	0.411	1.0	37.5	0.411
919	NW_062de	0.625	1.0	0.625	62.5	0.0	0.625	62.5	0.0
920	B50R_062.012de	0.625	0.125	0.812	81.2	0.001	0.125	81.2	0.001
921	B50R_062.025de	0.625	0.25	0.75	75.0	0.018	0.25	75.0	0.018
922	B50R_062.037de	0.625	0.375	0.687	68.7	0.057	0.375	68.7	0.057
923	B50R_062.050de	0.625	0.5	0.625	62.5	0.127	0.5	62.5	0.127
924	B50R_062.062de	0.625	0.625	0.562	56.2	0.17	0.625	56.2	0.17
925	B50R_062.075de	0.625	0.75	0.5	50.0	0.223	0.75	50.0	0.223
926	B50R_062.087de	0.625	0.875	0.437	43.7	0.306	0.875	43.7	0.306
927	B50R_062.100de	0.625	1.0	0.375	37.5	0.411	1.0	37.5	0.411
928	NW_050de	0.5	1.0	0.5	50.0	0.0	0.5	50.0	0.0
929	B50R_050.012de	0.5	0.125	0.812	81.2	0.001	0.125	81.2	0.001
930	B50R_050.025de	0.5	0.25	0.75	75.0	0.018	0.25	75.0	0.018
931	B50R_050.037de	0.5	0.375	0.687	68.7	0.057	0.375	68.7	0.057
932	B50R_050.050de	0.5	0.5	0.625	62.5	0.127	0.5	62.5	0.127
933	B50R_050.062de	0.5	0.625	0.562	56.2	0.17	0.625	56.2	0.17
934	B50R_050.075de	0.5	0.75	0.5	50.0	0.223	0.75	50.0	0.223
935	B50R_050.087de	0.5	0.875	0.437	43.7	0.306	0.875	43.7	0.306
936	B50R_050.100de	0.5	1.0	0.375	37.5	0.411	1.0	37.5	0.411
937	NW_037de	0.375	1.0	0.375	37.5	0.0	0.375	37.5	0.0
938	B50R_037.012de	0.375	0.125	0.812	81.2	0.001	0.125	81.2	0.001
939	B50R_037.025de	0.375	0.25	0.75	75.0	0.018	0.25	75.0	0.018
940	B50R_037.037de	0.375	0.375	0.687	68.7	0.057	0.375	68.7	0.057
941	B50R_037.050de	0.375	0.5	0.625	62.5	0.127	0.5	62.5	0.127
942	B50R_037.062de	0.375	0.625	0.562	56.2	0.17	0.625	56.2	0.17
943	B50R_037.075de	0.375	0.75	0.5	50.0	0.223	0.75	50.0	0.223
944	B50R_037.087de	0.375	0.875	0.437	43.7	0.306	0.875	43.7	0.306
945	B50R_037.100de	0.375	1.0	0.375	37.5	0.411	1.0	37.5	0.411
946	NW_025de	0.25	1.0	0.25	25.0	0.0	0.25	25.0	0.0
947	B50R_025.012de	0.25	0.125	0.812	81.2	0.001	0.125	81.2	0.001
948	B50R_025.025de	0.25	0.25	0.75	75.0	0.018	0.25	75.0	0.018
949	B50R_025.037de	0.25	0.375	0.687	68.7	0.057	0.375	68.7	0.057
950	B50R_025.050de	0.25	0.5	0.625	62.5	0.127	0.5	62.5	0.127
951	B50R_025.062de	0.25	0.625	0.562	56.2	0.17	0.625	56.2	0.17
952	B50R_025.075de	0.25	0.75	0.5	50.0	0.223	0.75	50.0	0.223
953	B50R_025.087de	0.25	0.875	0.437	43.7	0.306	0.875	43.7	0.306
954	B50R_025.100de	0.25	1.0	0.375	37.5	0.411	1.0	37.5	0.411
955	NW_012de	0.125	1.0	0.125	12.5	0.0	0.125	12.5	0.0
956	B50R_012.012de	0.125	0.125	0.812	81.2	0.001	0.125	81.2	0.001
957	B50R_012.025de	0.125	0.25	0.75	75.0	0.018	0.25	75.0	0.018
958	B50R_012.037de	0.125	0.375	0.687	68.7	0.057	0.375	68.7	0.057
959	B50R_012.050de	0.125	0.5	0.625	62.5	0.127	0.5	62.5	0.127
960	B50R_012.062de	0.125	0.625	0.562	56.2	0.17	0.625	56.2	0.17
961	B50R_012.075de	0.125	0.75	0.5	50.0	0.223	0.75	50.0	0.223
962	B50R_012.087de	0.125	0.875	0.437	43.7	0.306	0.875	43.7	0.306
963	B50R_012.100de	0.125	1.0	0.375	37.5	0.411	1.0	37.5	0.411
964	NW_000de	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
965	B50R_000.012de	0.0	0.125	0.812	81.2	0.001	0.125	81.2	0.001
966	B50R_000.025de	0.0	0.25	0.75	75.0	0.018	0.25	75.0	0.018
967	B50R_000.037de	0.0	0.375	0.687	68.7	0.057	0.375	68.7	0.057
968	B50R_000.050de	0.0	0.5	0.625	62.5	0.127	0.5	62.5	0.127
969	B50R_000.062de	0.0	0.625	0.562	56.2	0.17	0.625	56.2	0.17
970	B50R_000.075de	0.0	0.75	0.5	50.0	0.223	0.75	50.0	0.223
971	B50R_000.087de	0.0	0.875	0.437	43.7	0.306	0.875	43.7	0.306
972	B50R_000.100de	0.0	1.0	0.375	37.5	0.411	1.0	37.5	0.411

see similar files: <http://130.149.60.45/~farbmatrik/QE45/QE45L0FA.TXT> /.PS
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>

input: *rgb/cmyk* -> *rgbde*
output: 3D-linearization to *cmyk*de*

TUB-test chart QE45: hue code: H*=Y25Ge
colors and differences, ΔE*

I-1133030-F0

QE450-7N; Page 31/33-F

TUB registration: 20130201-QE45/QE45L0FA.TXT /.PS TUB material: code=rha4ta
application for measurement of offset print output, separation cmyn6* (CMYK)

n	HC*File	rgb*File	icT*File	hsa*File	rgb*File	LabCH*File	cmyn*sep*File	rgb*File	hsa*File	rgb*File	LabCH*File
1053	NW_086de	0.866 0.866	0.866 0.866	0.866 0.866	0.866 0.866	85.0 0.0	0.024 0.007	0.0 0.179	360 0.0	1.0 1.0	95.4 0.0
1054	NW_093de	0.933 0.933	0.933 0.933	0.933 0.933	0.933 0.933	90.2 0.0	0.02 0.005	0.0 0.084	360 0.0	1.0 1.0	95.4 0.0
1055	NW_100de	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	95.4 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0
1056	NW_100de	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0
1057	NW_006de	0.066 0.066	0.066 0.066	0.066 0.066	0.066 0.066	22.8 0.0	0.139 0.022	0.0 0.933	360 0.0	1.0 1.0	95.4 0.0
1058	NW_013de	0.133 0.133	0.133 0.133	0.133 0.133	0.133 0.133	28.0 0.0	0.0 0.043	0.048 0.871	360 0.0	1.0 1.0	95.4 0.0
1059	NW_020de	0.2 0.2 0.2	0.2 0.2 0.2	0.2 0.2 0.2	0.2 0.2 0.2	33.2 0.0	0.057 0.036	0.0 0.825	360 0.0	1.0 1.0	95.4 0.0
1060	NW_026de	0.266 0.266	0.266 0.266	0.266 0.266	0.266 0.266	38.3 0.0	0.013 0.015	0.0 0.781	360 0.0	1.0 1.0	95.4 0.0
1061	NW_033de	0.333 0.333	0.333 0.333	0.333 0.333	0.333 0.333	43.6 0.0	0.0 0.016	0.005 0.672	360 0.0	1.0 1.0	95.4 0.0
1062	NW_040de	0.4 0.4 0.4	0.4 0.4 0.4	0.4 0.4 0.4	0.4 0.4 0.4	48.8 0.0	0.027 0.018	0.0 0.628	360 0.0	1.0 1.0	95.4 0.0
1063	NW_046de	0.466 0.466	0.466 0.466	0.466 0.466	0.466 0.466	53.9 0.0	0.021 0.007	0.0 0.541	360 0.0	1.0 1.0	95.4 0.0
1064	NW_053de	0.533 0.533	0.533 0.533	0.533 0.533	0.533 0.533	59.1 0.0	0.0 0.006	0.0 0.478	360 0.0	1.0 1.0	95.4 0.0
1065	NW_060de	0.6 0.6 0.6	0.6 0.6 0.6	0.6 0.6 0.6	0.6 0.6 0.6	64.3 0.0	0.006 0.005	0.0 0.405	360 0.0	1.0 1.0	95.4 0.0
1066	NW_066de	0.666 0.666	0.666 0.666	0.666 0.666	0.666 0.666	69.5 0.0	0.021 0.011	0.0 0.322	360 0.0	1.0 1.0	95.4 0.0
1067	NW_073de	0.734 0.734	0.734 0.734	0.734 0.734	0.734 0.734	74.7 0.0	0.0 0.007	0.005 0.26	360 0.0	1.0 1.0	95.4 0.0
1068	NW_080de	0.8 0.8 0.8	0.8 0.8 0.8	0.8 0.8 0.8	0.8 0.8 0.8	79.9 0.0	0.024 0.007	0.0 0.179	360 0.0	1.0 1.0	95.4 0.0
1069	NW_086de	0.866 0.866	0.866 0.866	0.866 0.866	0.866 0.866	85.0 0.0	0.02 0.005	0.0 0.084	360 0.0	1.0 1.0	95.4 0.0
1070	NW_093de	0.933 0.933	0.933 0.933	0.933 0.933	0.933 0.933	90.2 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0
1071	NW_100de	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	95.4 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0
1072	NW_100de	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0
1073	ROY_100_100de	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	95.4 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0
1074	G50E_100_100de	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0
1075	Y06E_100_100de	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	95.4 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0
1076	B06E_100_100de	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0
1077	B06E_100_100de	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	95.4 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0
1078	B06E_100_100de	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0
1079	B50E_100_100de	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	95.4 0.0	0.0 0.0	0.0 0.0	360 0.0	1.0 1.0	95.4 0.0

delta

Mean color difference of this page: