

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

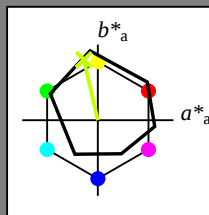
Data for any device (d) or elementary (e) colour:

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
Y _{-,Ma}	90.3	-10.2	91.7	92.3
G _{-,Ma}	50.9	-62.8	34.9	71.9
C _{-,Ma}	58.6	-30.3	-45.0	54.2
B _{-,Ma}	25.7	31.0	-44.4	54.2
M _{-,Ma}	48.1	75.2	-8.3	75.7
N _{-,Ma}	18.0	0.0	0.0	0
W _{-,Ma}	95.4	0.0	0.0	0
R _{-,CIE}	39.9	58.7	27.9	65.0
Y _{-,CIE}	81.2	-2.8	71.5	71.6
G _{-,CIE}	52.2	-42.4	13.6	44.5
B _{-,CIE}	30.5	1.4	-46.4	46.4

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

$u^*_{rel} = 92$

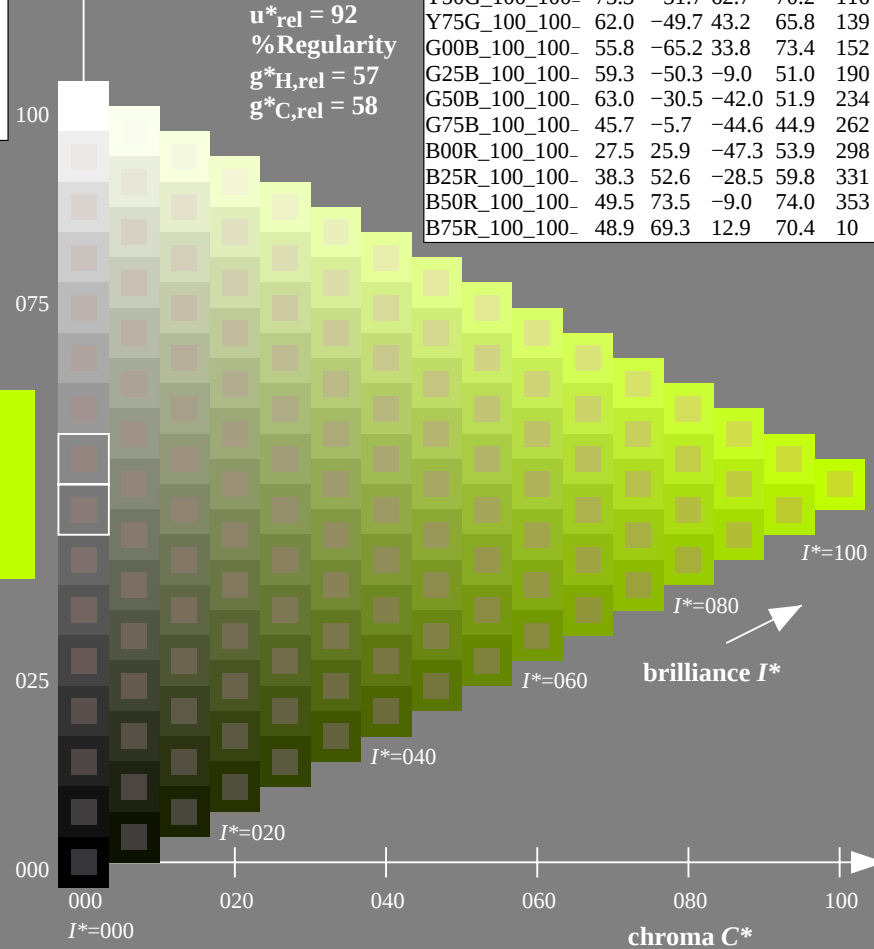
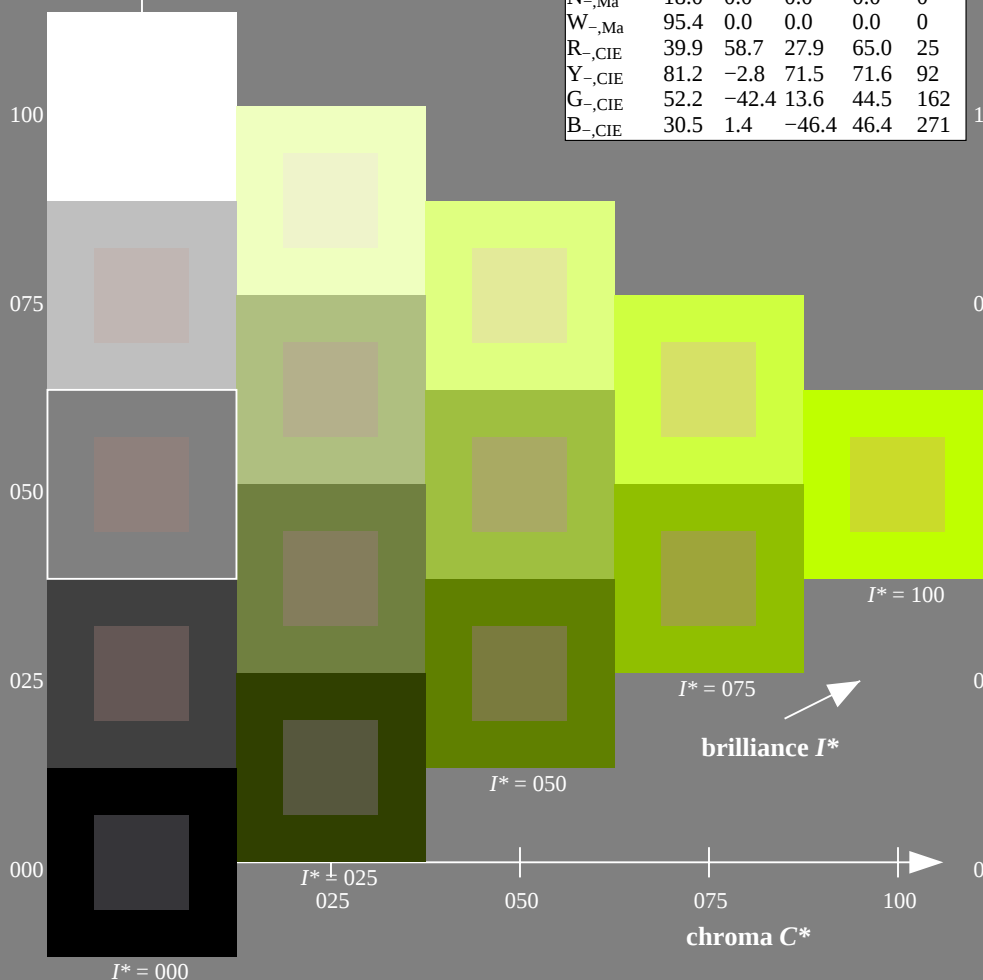
% Regularity

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

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

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
R25Y_100_100-	56.8	48.0	50.5	69.6
R50Y_100_100-	68.6	25.0	63.9	68.6
R75Y_100_100-	80.6	4.8	77.2	77.3
Y00G_100_100-	90.2	-9.6	88.2	88.7
Y25G_100_100-	83.2	-18.4	79.9	81.9
Y50G_100_100-	73.3	-31.7	62.7	70.2
Y75G_100_100-	62.0	-49.7	43.2	65.8
G00B_100_100-	55.8	-65.2	33.8	73.4
G25B_100_100-	59.3	-50.3	-9.0	51.0
G50B_100_100-	63.0	-30.5	-42.0	51.9
G75B_100_100-	45.7	-5.7	-44.6	44.9
B00R_100_100-	27.5	25.9	-47.3	53.9
B25R_100_100-	38.3	52.6	-28.5	59.8
B50R_100_100-	49.5	73.5	-9.0	74.0
B75R_100_100-	48.9	69.3	12.9	70.4



TUB-test chart QE44; hue code: $H^*_- = Y25G_-$
Test chart according to DIN 33872, 3D=1, de=0, cmk^*

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

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

$H^*_d = Y25G_d$

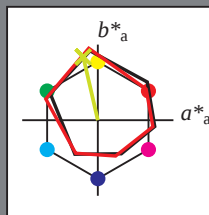
Data for any device (d) or elementary (e) colour:

HIC^*_d

hue text for the colours of this page:

$H^*_d = Y25G_d$

triangle lightness T^*



ORS20a; adapted (a) CIELAB data

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

Data for maximum colour (Ma):

$LabCh^*_{d,Ma}$: 83 -19 83 85 102

$HIC^*_{d,Ma}$: Y25G_100_100d

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

0.76 1.0 0.0 1.0 1.0

triangle lightness T^*

% Gamut

$u^*_{rel} = 92$

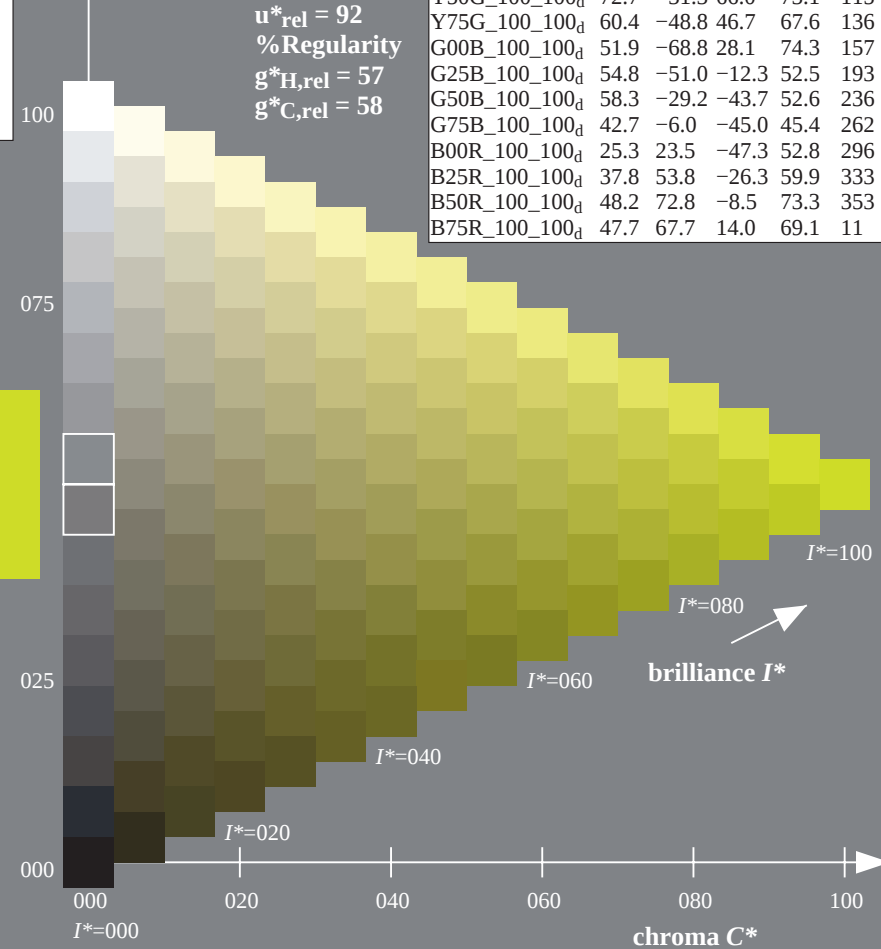
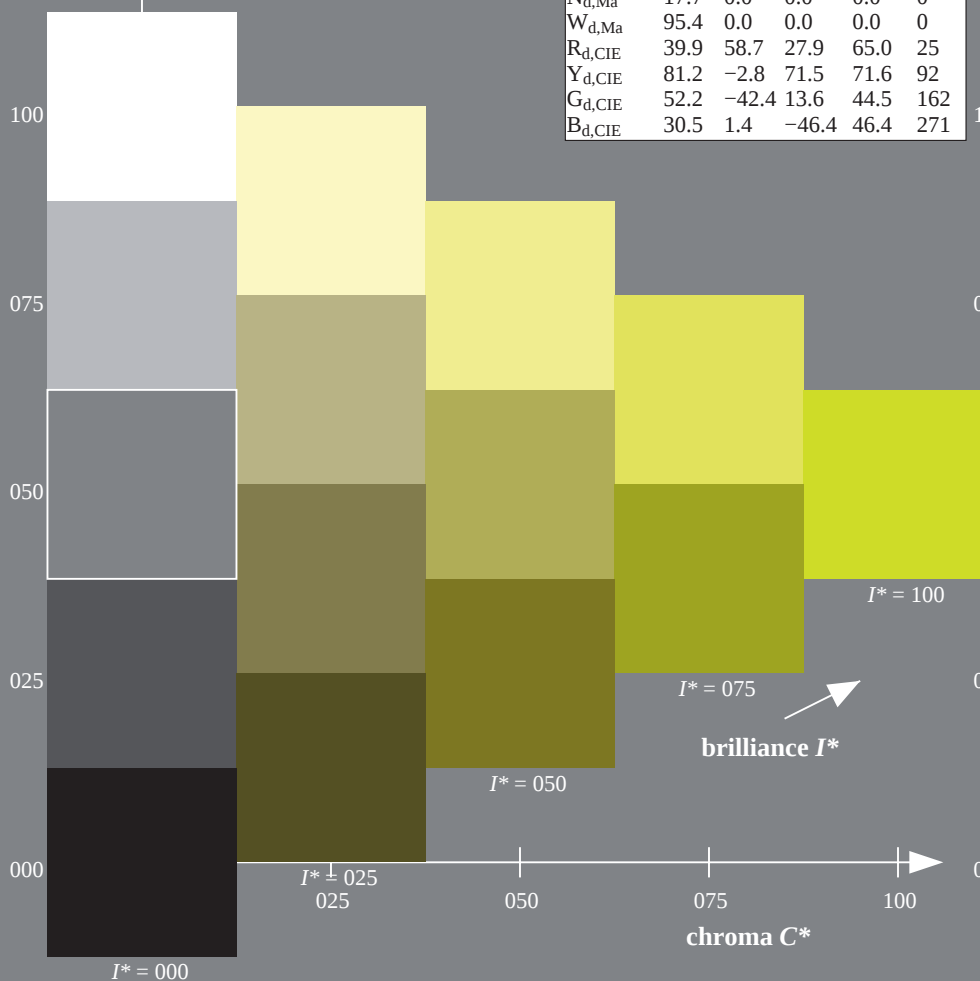
% Regularity

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

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

ORS20a; adapted (a) CIELAB data

H^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R00Y_{100_100d}$	47.3	63.8	41.2	76.0	32
$R25Y_{100_100d}$	55.3	45.8	52.2	69.5	48
$R50Y_{100_100d}$	67.2	22.6	67.6	71.2	71
$R75Y_{100_100d}$	79.9	1.0	83.9	83.9	89
$Y00G_{100_100d}$	88.3	-11.9	95.1	95.8	97
$Y25G_{100_100d}$	83.3	-19.2	83.7	85.9	102
$Y50G_{100_100d}$	72.7	-31.3	66.0	73.1	115
$Y75G_{100_100d}$	60.4	-48.8	46.7	67.6	136
$G00B_{100_100d}$	51.9	-68.8	28.1	74.3	157
$G25B_{100_100d}$	54.8	-51.0	-12.3	52.5	193
$G50B_{100_100d}$	58.3	-29.2	-43.7	52.6	236
$G75B_{100_100d}$	42.7	-6.0	-45.0	45.4	262
$B00R_{100_100d}$	25.3	23.5	-47.3	52.8	296
$B25R_{100_100d}$	37.8	53.8	-26.3	59.9	333
$B50R_{100_100d}$	48.2	72.8	-8.5	73.3	353
$B75R_{100_100d}$	47.7	67.7	14.0	69.1	11



TUB-test chart QE44; hue code: $H^*_d=Y25G_d$
Test chart according to DIN 33872, 3D=1, de=0, $cmYK^*$

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

TUB registration: 20130201-QE44/QE44L0FP.PDF /.PS
application for measurement of offset print output, separation $cmYK^*$ (CMYK)

TUB material: code=rha4ta

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

$H^*_d = Y25G_d$

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

HIC^*_d

hue text for the colours of this page:

$H^*_d = Y25G_d$

triangle lightness T^*

Data for maximum colour (Ma):

$LabCh^*_{d, Ma}$: 83 -19 83 85 102

$HIC^*_{d, Ma}$: Y25G_100_100_d

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

0.76 1.0 0.0 1.0 1.0

triangle lightness T^*

%Gamut

$u^*_{rel} = 92$

%Regularity

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

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

see similar files: <http://130.149.60.45/~farbmetrik/QE44/QE44L0FP.PDF> / .PS
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE44/QE44L0FP.PDF /.PS TUB material: code=rha4ta
application for measurement of offset print output, separation cmyk* (CMYK)



1-103230-L0 QE440-72

TUB-test chart QE44; hue code: $H^*_d = Y25G_d$
Test chart according to DIN 33872, 3D=1, de=0, cmyk*

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

1-103230-F0

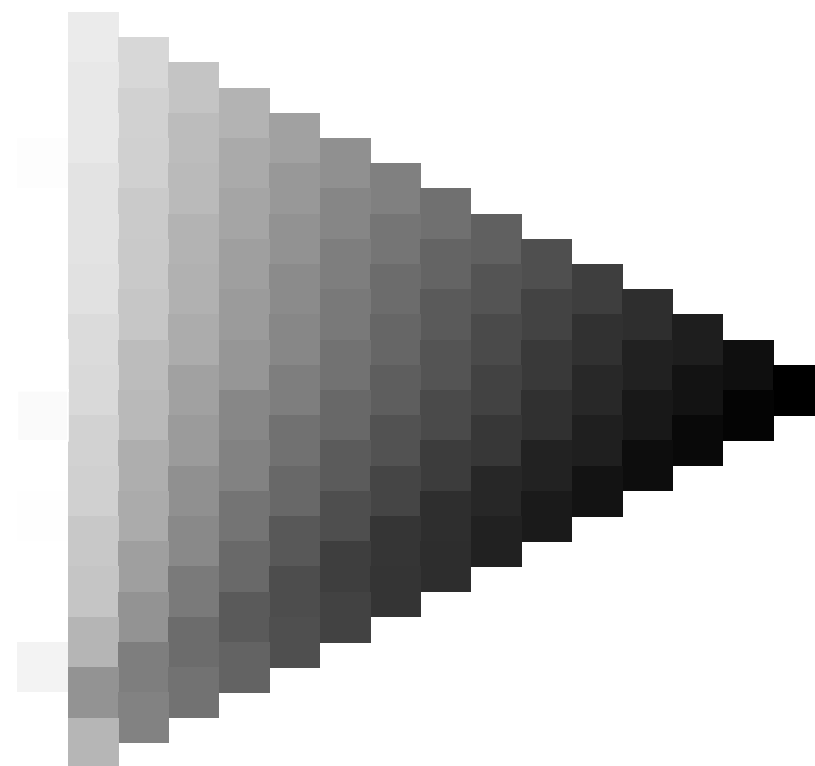
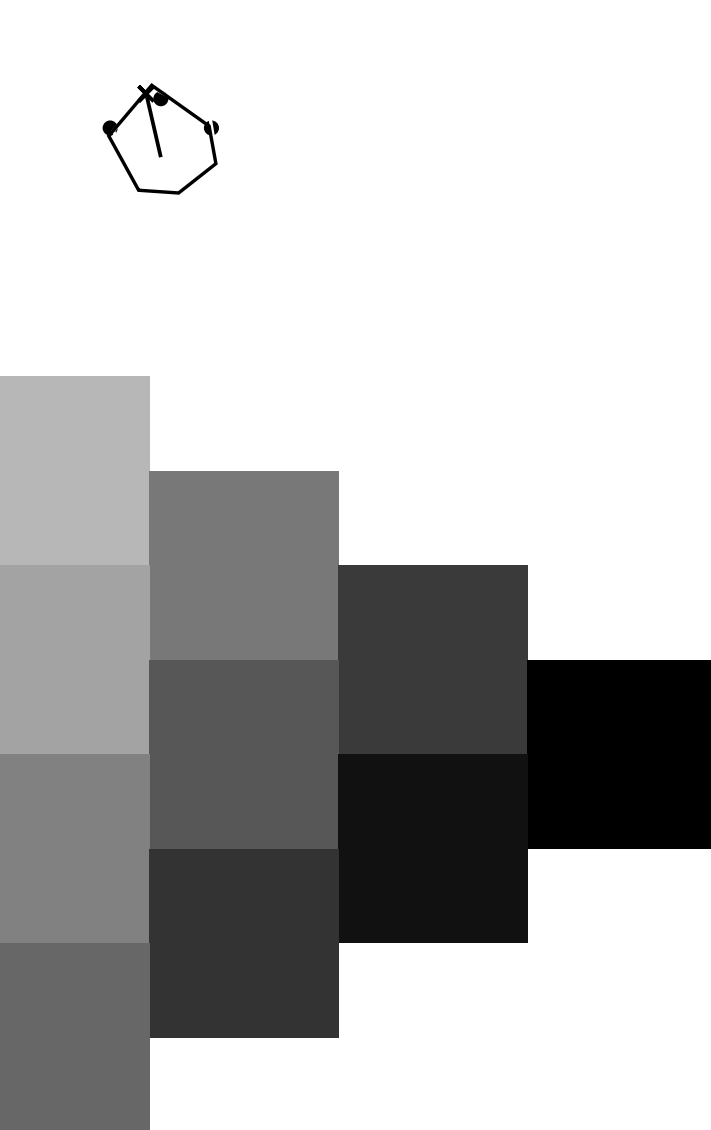
TUB registration: 20130201-QE44/QE44L0FP.PDF /.PS
application for measurement of offset print output, separation cmyk6* (CMYK)

TUB material: code=rha4ta

1-103330-L0 QE440-72
TUB-test chart QE44; hue code: $H^*_d=Y25G_d$
Test chart according to DIN 33872, 3D=1, de=0, cmyk*

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

see similar files: <http://130.149.60.45/~farbmetrik/QE44/QE44.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>



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

$H^*_d = Y25G_d$

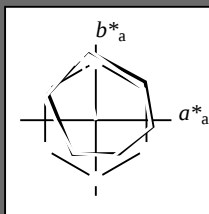
Data for any device (d) or elementary (e) colour:

HIC^*_d

hue text for the colours of this page:

$H^*_d = Y25G_d$

triangle lightness T^*



ORS20a; adapted (a) CIELAB data

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

Data for maximum colour (Ma):

$LabCh^*_{d,Ma}$: 83 -19 83 85 102

$HIC^*_{d,Ma}$: Y25G_100_100d

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

0.76 1.0 0.0 1.0 1.0

triangle lightness T^*

% Gamut

$u^*_{rel} = 92$

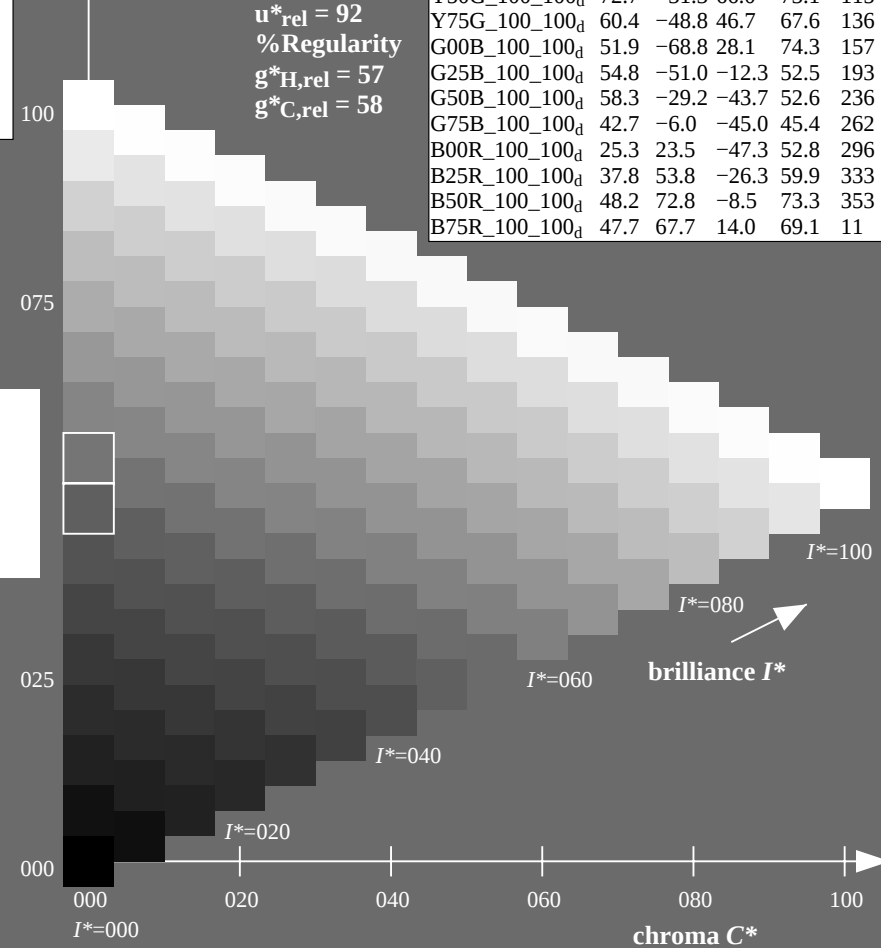
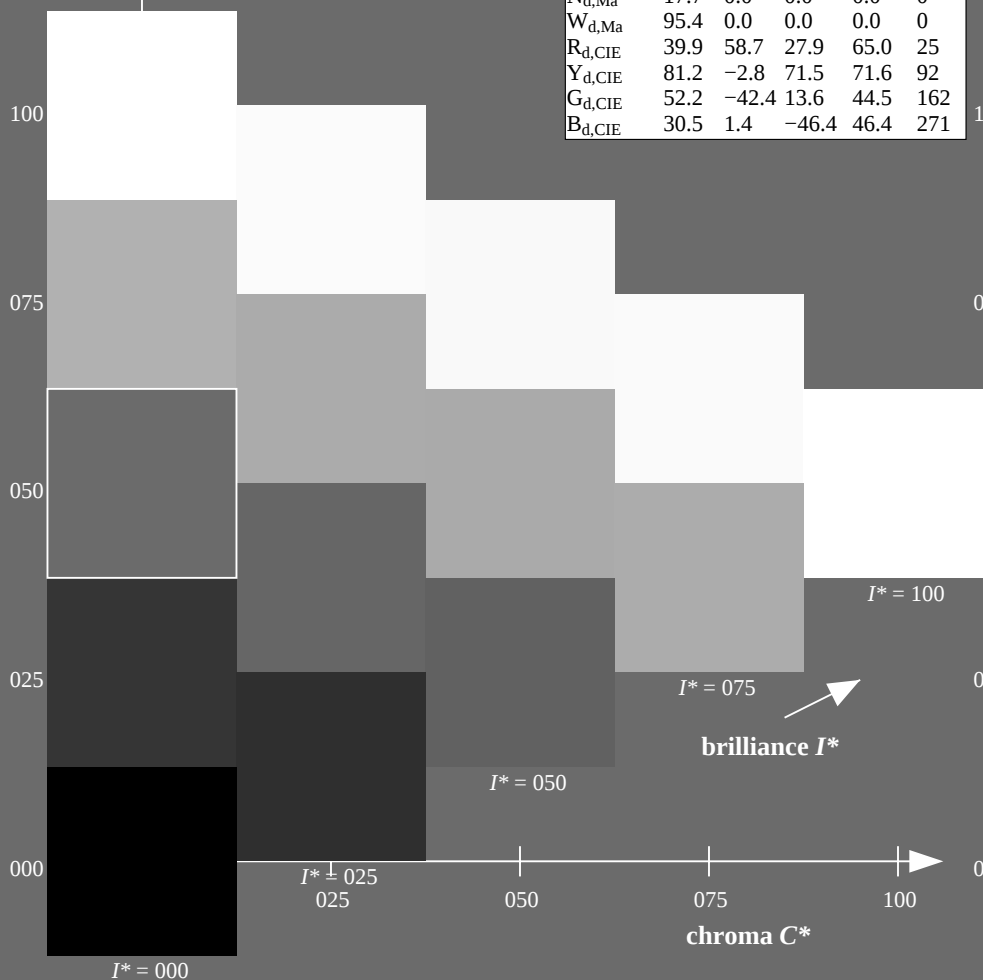
% Regularity

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

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

ORS20a; adapted (a) CIELAB data

H^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R00Y_100_100_d$	47.3	63.8	41.2	76.0	32
$R25Y_100_100_d$	55.3	45.8	52.2	69.5	48
$R50Y_100_100_d$	67.2	22.6	67.6	71.2	71
$R75Y_100_100_d$	79.9	1.0	83.9	83.9	89
$Y00G_100_100_d$	88.3	-11.9	95.1	95.8	97
$Y25G_100_100_d$	83.3	-19.2	83.7	85.9	102
$Y50G_100_100_d$	72.7	-31.3	66.0	73.1	115
$Y75G_100_100_d$	60.4	-48.8	46.7	67.6	136
$G00B_100_100_d$	51.9	-68.8	28.1	74.3	157
$G25B_100_100_d$	54.8	-51.0	-12.3	52.5	193
$G50B_100_100_d$	58.3	-29.2	-43.7	52.6	236
$G75B_100_100_d$	42.7	-6.0	-45.0	45.4	262
$B00R_100_100_d$	25.3	23.5	-47.3	52.8	296
$B25R_100_100_d$	37.8	53.8	-26.3	59.9	333
$B50R_100_100_d$	48.2	72.8	-8.5	73.3	353
$B75R_100_100_d$	47.7	67.7	14.0	69.1	11



TUB-test chart QE44; hue code: $H^*_d=Y25G_d$
Test chart according to DIN 33872, 3D=1, de=0, $cm\dot{y}k^*$

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

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 elementary CIELAB (a^*_e, b^*_e) chroma diagram

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

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

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

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

1-103630-L0 QE440-72 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 QE44; hue code: $H^*_d=Y25G_d$
48 step hue circles; $rgb-LabCh^*$ -tables

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

Output: Offset standard print; separation cmy6*, D65, page 7/33

see similar files: <http://130.149.60.45/~farbmetrik/QE44/QE44L0FP.PDF> / .PS
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE44/QE44L0FP.PDF / .PS
application for measurement of offset print output, separation cmy6* (CMYK)
TUB material: code=rha4ta

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 <i>RYGCBM</i> _d : $h_{ab,d} = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3$; Six hue angles of the elementary colours <i>RYGCBM</i> _e : $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$																																		
<i>h</i> _{ab,d}	<i>h</i> _{ab,s}	<i>h</i> _{ab,e}	<i>rgb</i> [*] _{dd64M}	<i>LAB</i> [*] _{dd64M} (x=LabCh)	<i>rgb</i> [*] _{ddx361M}	<i>LAB</i> [*] _{ddx361M} (x=LabCh)	<i>rgb</i> [*] _{dsx361M}	<i>LAB</i> [*] _{dsx361M} (x=LabCh)	<i>rgb</i> [*] _{dex361M}	<i>LAB</i> [*] _{dex361M}																								
32.8	30.0	25.4	1.0	0.0	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	1.0	0.0	0.209	47.6	64.9	30.9	71.9	25
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	0.093	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	0.209	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	0.311	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	0.387	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	0.46	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	0.524	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	0.598	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	0.662	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	0.736	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	0.819	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	0.922	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																																

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}			$LAB^*_{ddx64M}(x=LabCh)$						$rgb^*_{dex361M}$					$LAB^*_{dex361M}$						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					1.0	0.0	0.209	47.6	64.9	30.9	71.9	25				
40.4	37.5	33.8	1.0	0.125	0.0	51.2	54.9	46.7	72.1	40.4					1.0	0.007	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	0.148	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	0.25	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	0.35	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	0.442	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	0.55	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	0.655	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	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					0.871	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					0.599	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					0.455	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					0.327	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					0.244	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					0.124	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					0.047	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	0.093	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	0.209	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	0.311	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	0.387	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	0.46	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	0.524	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	0.598	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	0.662	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	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	1.0	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	1.0	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	0.974	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	0.785	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	0.659	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	0.555	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	0.472	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	0.375	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					0.0	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					0.0	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					0.0	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					0.046	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					0.067	0.126	0.0	1.0	29.4	31.9	-42.5	53.2	306			
347.2	315.0	314.3	0.75	0.0	1.0	43.1	65.9	-14.9	67.6	347.2					0.265	0.0	1.0	31.8	37.7	-38.4	53.8	314				
350.2	322.5	321.4	0.875	0.0	1.0	45.9	69.4	-11.9	70.5	350.2					0.324	0.0	1.0	32.9	43.2	-34.8	55.5	321				
353.3	330.0	328.6	1.0	0.0	1.0	48.2	72.8	-8.5	73.3	353.3					0.407	0.0	1.0	34.9	49.3	-30.0	57.7	328				
356.5	337.5	335.7	1.0	0.0	0.875	48.2	71.6	-4.3	71.7	356.5					0.529	0.0	1.0	38.6	55.0	-25.3	60.6	335				
360.3	345.0	342.8	1.0	0.0	0.75	48.1	70.4	0.3	70.4	360.3					0.678	0.0	1.0	41.9	61.9	-19.0	64.8	342				
365.8	352.5	349.9	1.0	0.0	0.625	48.0	68.9	7.1	69.3	365.8					0.842	0.0	1.0	45.2	68.6	-12.7	69.8	349				
371.6	360.0	357.0	1.0	0.0	0.5	47.7	67.7	14.0	69.1	371.6					0.949	0.0	1.0	47.3	71.5	-9.9	72.2	352				
378.2	367.5	364.1	1.0	0.0	0.375	47.7	66.1	21.8	69.6	378.2					1.0	0.0	0.765	48.2	70.6	-0.1	70.6	359				
383.9	375.0	371.2	1.0	0.0	0.25	47.7	65.0	28.9	71.2	383.9					1.0	0.0	0.563	47.9	68.4	10.6	69.2	368				
388.6	382.5	378.3	1.0	0.0	0.125	47.4	64.4	35.1	73.4	388.6					1.0	0.0	0.408	47.8	66.7	19.8	69.6	376				
392.8	390.0	385.4	1.0	0.0	0.0	47.3	63.8	41.2	76.0	392.8					1.0	0.0	0.209	47.6	64.9	30.9	71.9	385				

1-103830-L0 QE440-72 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 QE44; hue code: $H^*_d=Y25G_d$
48 step hue circles; $rgb-LabCh^*$ tables

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

TUB registration: 20130201-QE44/QE44L0FP.PDF /.PS
application for measurement of offset print output, separation cmyrn6* (CMYK)
TUB material: code=rh4ta

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 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: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	rgb^*_{dd361M}	$LAB^*_{dd361M}(x=LabCh)$	R_d	$rgb^*_{ds361Mi}$	$LAB^*_{ds361Mi}(x=LabCh)$	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

1-103930-L0

QE440-72

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 10/33

TUB-test chart QE44; hue code: $H^*_d=Y25G_d$
48 step hue circles; $rgb-LabCh^*$ tables

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

1-103930-F0

see similar files: <http://130.149.60.45/~farbmetrik/QE44/QE44L0FP.PDF> / .PS
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE44/QE44L0FP.PDF / .PS
application for measurement of offset print output, separation cmy6* (CMYK)
TUB material: code=rha4ta

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 $RYGCBM_c$: $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;

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}	$LAB^*_{d361Mi}(x=LabCh)$	$rgb^*_{ds361Mi}$	$LAB^*_{ds361Mi}(x=LabCh)$	$rgb^*_{dd361Mi}$	$LAB^*_{de361Mi}$	$dex361Mi(x=LabCh)$	$rgb^*_{dd361Mi}$	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	88
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
89	77	77	1.0	0.783	0.0	80.6	0.0	84.8	84.8	89	1.0	0.783	0.0	89
90	78	78	1.0	0.8	0.0	81.2	-0.9	85.7	85.7	90	1.0	0.8	0.0	90
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
91	80	81	1.0	0.833	0.0	82.6	-3.0	87.4	87.4	91	1.0	0.833	0.0	91
92	81	82	1.0	0.85	0.0	83.2	-4.0	88.2	88.3	92	1.0	0.85	0.0	92
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
93	83	84	1.0	0.883	0.0	84.5	-6.1	89.8	90.0	93	1.0	0.883	0.0	93
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
94	85	86	1.0	0.916	0.0	85.6	-7.7	91.3	91.7	94	1.0	0.917	0.0	94
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
95	87	88	1.0	0.95	0.0	86.7	-9.3	92.9	93.3	95	1.0	0.95	0.0	95
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
96	89	91	1.0	0.983	0.0	87.8	-11.1	94.3	95.0	96	1.0	0.983	0.0	96
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
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

1-1031030-L0 QE440-72 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 cmycn6*, D65, page 11/33

TUB-test chart QE44; hue code: $H^*_d=Y25G_d$
48 step hue circles; $rgb-LabCh^*$ tables

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

TUB registration: 20130201-QE44/QE44L0FP.PDF /.PS
application for measurement of offset print output, separation cmycn6* (CMYK)

TUB material: code=rha4ta

11

1-1031230-L0	QE440-72	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
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Output: Offset standard print; separation cmyn6*, D65, page 13/36

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_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: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	rgb^*_{dd361M}	$LAB^*_{ddx361Mi}(x=LabCh)$	C_d	$rgb^*_{ds361Mi}$	$LAB^*_{dsx361Mi}(x=LabCh)$	$210C_s$	$rgb^*_{dd361Mi}$	$LAB^*_{de361Mi}$	$216C_e$	$rgb^*_{dd361Mi}$	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	0.983	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	0.983	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	0.967	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	0.95	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	0.933	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	0.917	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	0.9	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	0.883	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	0.867	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	0.85	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	0.833	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	0.817	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	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	0.783	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	0.767	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	0.75	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	0.733	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	0.717	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	0.7	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	0.683	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	0.667	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	0.65	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	0.633	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	0.617	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	0.6	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	0.583	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	0.567	1.0	1.0
258	237	241	0.0	0.55	1.0	44.7	-9.1	-44.9	45.8	258	0.0	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	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	1.0	0.25	1.0	1.0

1-1031330-L0

QE440-72

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 QE44; hue code: $H^*_d=Y25G_d$
48 step hue circles; $rgb-LabCh^*$ tables

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

TUB registration: 20130201-QE44/QE44L0FP.PDF /.PS
application for measurement of offset print output, separation cmyrn6* (CMYK)

TUB material: code=rha4ta

TUB registration: 20130201-QE44/QE44LOFP.PDF /.PS
application for measurement of offset print output, separa

[illegible]

Output: Offset standard print; separation cmyn6*, D65, page 15/33

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

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 $RYGCBM_e$: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

	$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	rgb^*_{dd361M}			LAB^*_{d361Mi} (x=LabCh)			$rgb^*_{ds361Mi}$	$LAB^*_{ds361Mi}$ (x=LabCh)			$rgb^*_{dd361Mi}$	$rgb^*_{de361Mi}$			$LAB^*_{dex361Mi}$ (x=LabCh)			$rgb^*_{dd361Mi}$			rgb^*_{dd}	rgb^*_{ds}	rgb^*_{de}										
333	300	300		0.5	0.0	1.0	37.8	53.8	-26.3	59.9	333		0.043	0.0	1.0	26.7	26.5	-45.8	53.0	300		0.5	0.0	1.0												
334	301	301		0.516	0.0	1.0	38.3	54.5	-25.7	60.3	334		0.056	0.0	1.0	27.1	27.3	-45.3	53.0	301		0.517	0.0	1.0												
335	302	302		0.533	0.0	1.0	38.7	55.2	-25.2	60.6	335		0.068	0.0	1.0	27.5	28.1	-44.9	53.0	302		0.533	0.0	1.0												
336	303	303		0.55	0.0	1.0	39.1	55.8	-24.6	61.0	336		0.08	0.0	1.0	27.9	28.9	-44.4	53.1	303		0.55	0.0	1.0												
336	304	303		0.566	0.0	1.0	39.5	56.5	-24.0	61.4	336		0.092	0.0	1.0	28.3	29.7	-43.9	53.1	304		0.567	0.0	1.0												
337	305	304		0.583	0.0	1.0	39.9	57.2	-23.4	61.8	337		0.104	0.0	1.0	28.7	30.5	-43.4	53.1	305		0.583	0.0	1.0												
338	306	305		0.6	0.0	1.0	40.3	57.8	-22.8	62.2	338		0.116	0.0	1.0	29.0	31.2	-42.9	53.1	306		0.6	0.0	1.0												
339	307	306		0.616	0.0	1.0	40.7	58.5	-22.1	62.5	339		0.13	0.0	1.0	29.4	32.0	-42.4	53.2	307		0.617	0.0	1.0												
340	308	307		0.633	0.0	1.0	41.1	59.3	-21.4	63.0	340		0.151	0.0	1.0	29.8	32.8	-41.8	53.2	308		0.633	0.0	1.0												
341	309	308		0.65	0.0	1.0	41.4	60.3	-20.5	63.7	341		0.172	0.0	1.0	30.2	33.5	-41.3	53.3	309		0.65	0.0	1.0												
342	310	309		0.666	0.0	1.0	41.7	61.3	-19.7	64.3	342		0.193	0.0	1.0	30.6	34.3	-40.7	53.3	310		0.667	0.0	1.0												
343	311	310		0.683	0.0	1.0	41.9	62.2	-18.8	65.0	343		0.214	0.0	1.0	30.9	35.0	-40.2	53.3	311		0.683	0.0	1.0												
344	312	311		0.7	0.0	1.0	42.2	63.2	-17.8	65.6	344		0.234	0.0	1.0	31.3	35.7	-39.6	53.4	312		0.7	0.0	1.0												
345	313	312		0.716	0.0	1.0	42.5	64.1	-16.9	66.3	345		0.252	0.0	1.0	31.6	36.5	-39.0	53.5	313		0.717	0.0	1.0												
346	314	313		0.733	0.0	1.0	42.8	65.0	-15.9	66.9	346		0.261	0.0	1.0	31.8	37.3	-38.5	53.7	314		0.733	0.0	1.0												
347	315	314		0.75	0.0	1.0	43.1	65.9	-14.9	67.6	347		0.27	0.0	1.0	31.9	38.2	-38.1	54.0	315		0.75	0.0	1.0												
347	316	315		0.766	0.0	1.0	43.5	66.4	-14.5	68.0	347		0.279	0.0	1.0	32.1	39.0	-37.6	54.2	316		0.767	0.0	1.0												
348	317	316		0.783	0.0	1.0	43.8	66.9	-14.1	68.4	348		0.288	0.0	1.0	32.3	39.8	-37.1	54.5	317		0.783	0.0	1.0												
348	318	317		0.8	0.0	1.0	44.2	67.3	-13.7	68.7	348		0.297	0.0	1.0	32.4	40.7	-36.5	54.7	318		0.8	0.0	1.0												
348	319	318		0.816	0.0	1.0	44.6	67.8	-13.3	69.1	348		0.306	0.0	1.0	32.6	41.5	-36.0	55.0	319		0.817	0.0	1.0												
349	320	319		0.833	0.0	1.0	45.0	68.3	-12.9	69.5	349		0.315	0.0	1.0	32.7	42.3	-35.4	55.2	320		0.833	0.0	1.0												
349	321	320		0.85	0.0	1.0	45.3	68.8	-12.5	69.9	349		0.324	0.0	1.0	32.9	43.1	-34.8	55.5	321		0.85	0.0	1.0												
350	322	321		0.866	0.0	1.0	45.7	69.2	-12.1	70.3	350		0.333	0.0	1.0	33.1	43.9	-34.2	55.8	322		0.867	0.0	1.0												
350	323	321		0.883	0.0	1.0	46.1	69.7	-11.7	70.7	350		0.342	0.0	1.0	33.2	44.7	-33.6	56.0	323		0.883	0.0	1.0												
350	324	322		0.9	0.0	1.0	46.4	70.1	-11.2	71.0	350		0.351	0.0	1.0	33.4	45.5	-33.0	56.3	324		0.9	0.0	1.0												
351	325	323		0.916	0.0	1.0	46.7	70.6	-10.8	71.4	351		0.359	0.0	1.0	33.5	46.3	-32.3	56.5	325		0.917	0.0	1.0												
351	326	324		0.933	0.0	1.0	47.0	71.0	-10.3	71.8	351		0.368	0.0	1.0	33.7	47.1	-31.6	56.8	326		0.933	0.0	1.0												
352	327	325		0.95	0.0	1.0	47.3	71.5	-9.9	72.2	352		0.379	0.0	1.0	34.0	47.9	-31.0	57.1	327		0.95	0.0	1.0												
352	328	326		0.966	0.0	1.0	47.6	71.9	-9.4	72.5	352		0.397	0.0	1.0	34.5	48.7	-30.4	57.5	328		0.967	0.0	1.0												
352	329	327		0.983	0.0	1.0	47.9	72.4	-9.0	72.9	352		0.414	0.0	1.0	35.1	49.6	-29.7	57.9	329		0.983	0.0	1.0												
353	330	328		1.0	0.0	1.0	48.2	72.8	-8.5	73.3	353	M_d	0.432	0.0	1.0	35.7	50.5	-29.1	58.3	330	M_s	1.0	0.0	1.0	0.407	0.0	1.0	34.9	49.3	-30.0	57.7	328	M_e	1.0	0.0	1.0
353	331	329		1.0	0.0	0.983	48.2	72.7	-7.9	73.1	353		0.449	0.0	1.0	36.2	51.4	-28.4	58.7	331		1.0	0.0	0.983	0.424	0.0	1.0	35.4	50.1	-29.4	58.1	329		1.0	0.0	0.983
354	332	330		1.0	0.0	0.966	48.2	72.5	-7.4	72.9	354		0.467	0.0	1.0	36.8	52.2	-27.7	59.1	332		1.0	0.0	0.967	0.441	0.0	1.0	35.9	50.9	-28.7	58.5	330		1.0	0.0	0.967
354	333	331		1.0	0.0	0.95	48.2	72.4	-6.8	72.7	354		0.484	0.0	1.0	37.4	53.1	-26.9	59.6	333		1.0	0.0	0.95	0.457	0.0	1.0	36.5	51.8	-28.1	58.9	331		1.0	0.0	0.95
355	334	332		1.0	0.0	0.933	48.2	72.2	-6.2	72.5	355		0.502	0.0	1.0	37.9	53.9	-26.2	60.0	334		1.0	0.0	0.933	0.474	0.0	1.0	37.0	52.6	-27.4	59.3	332		1.0	0.0	0.933
355	335	333		1.0	0.0	0.916	48.2	72.0	-5.7	72.3	355		0.524	0.0	1.0	38.5	54.8	-25.5	60.5	335		1.0	0.0	0.917	0.49	0.0	1.0	37.6	53.4	-26.7	59.7	333		1.0	0.0	0.917
355	336	334		1.0	0.0	0.9	48.2	71.9	-5.1	72.1	355		0.546	0.0	1.0	39.0	55.7	-24.7	61.0	336		1.0	0.0	0.9	0.508	0.0	1.0	38.1	54.2	-26.0	60.1	334		1.0	0.0	0.9
356	337	335		1.0	0.0	0.883	48.2	71.7	-4.6	71.8	356		0.567	0.0	1.0	39.6	56.6	-23.9	61.5	337		1.0	0.0	0.883	0.529	0.0	1.0	38.6	55.0	-25.3	60.6	335		1.0	0.0	0.883
356	338	336		1.0	0.0	0.866	48.2	71.5	-4.0	71.7	356		0.589	0.0	1.0	40.1	57.5	-23.1	62.0	338		1.0	0.0	0.867	0.55	0.0	1.0	39.1	55.9	-24.6	61.1	336		1.0	0.0	0.867
357	339	337		1.0	0.0	0.85	48.2	71.4	-3.3	71.5	357		0.611	0.0	1.0	40.7	58.3	-22.3	62.5	339		1.0	0.0	0.85	0.57	0.0	1.0	39.6	56.7	-23.8	61.5	337		1.0	0.0	0.85
357	340	338		1.0	0.0	0.833	48.2	71.3	-2.7	71.3	357		0.631	0.0	1.0	41.1	59.2	-21.5	63.0	340		1.0	0.0	0.833	0.591	0.0	1.0	40.2	57.5	-23.0	62.0	338		1.0	0.0	0.833
358	341	339		1.0	0.0	0.816	48.2	71.1	-2.1	71.1	358		0.648	0.0	1.0	41.4	60.2	-20.6																		

Output: Offset standard print; separation cmyk6*, D65, page 17/38

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

Mean color difference of this page: 0.0 0.0 0.0 delta

TUB registration: 20130201-QE44/QE44L0FP.PDF /.PS
- application for measurement of offset print output, separations

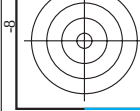
TUB material: code=rha4ta
nyn6* (CMYK)

see similar files: <http://130.149.60.45/~farbmetrik/QE44/QE44.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

see similar files: <http://130.149.60.45/~farbmetrik/QE44/QE44.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

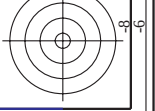
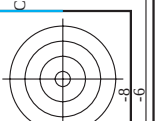
input: $rgb/cmyk \rightarrow rgb_{dd}$
output: 3D-linearization to $cmyk^*_{dd}$

TUB-test chart QE44; hue code: H_d^{*}=Y25G_d
 colors and differences, ΔE^*



TUB registration: 20130201-QE44/QE44L0FP.PDF /.PS
application for measurement of offset print output, separation cmyn6* (CMYK)

TUB material: code=rha4ta



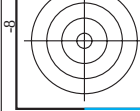
http://130.149.60.45/~farbmatrik/QE44/QE44L0FP.PDF /.PS; 3D-linearization
F: 3D-linearization QE44/QE44L0FP.DAT in file (F), page 28/33

input: rgb/cmyk -> rgbd
output: 3D-linearization to cmyk*dd

n	HC*Field	rgb_Field	ic*_Field	hs*_Field	rgb*_Field	LabCh*_Field	cmyk*_sep_Field	hs*_id	rgb*_id	LabCh*_id	delta
648	R00Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	390	1.0	0.0	0.0
649	R38Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	383	1.0	0.0	0.0
650	R13Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	377	1.0	0.0	0.0
651	R23Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	368	1.0	0.0	0.0
652	R00Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	360	1.0	0.0	0.0
653	R68R_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	351	1.0	0.0	0.0
654	B61R_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	342	1.0	0.0	0.0
655	B55R_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	336	1.0	0.0	0.0
656	B50R_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	330	1.0	0.0	0.0
657	R11Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	36	1.0	0.0	0.0
658	R00Y_100_097ad	1.0	0.0	0.0	0.0	47.3	63.8	389	1.0	0.0	0.0
659	R36Y_100_097ad	1.0	0.0	0.0	0.0	47.3	63.8	382	1.0	0.0	0.0
660	R23Y_100_097ad	1.0	0.0	0.0	0.0	47.3	63.8	375	1.0	0.0	0.0
661	R00Y_100_097ad	1.0	0.0	0.0	0.0	47.3	63.8	365	1.0	0.0	0.0
662	B70R_100_097ad	1.0	0.0	0.0	0.0	47.3	63.8	354	1.0	0.0	0.0
663	B63R_100_097ad	1.0	0.0	0.0	0.0	47.3	63.8	344	1.0	0.0	0.0
664	B56R_100_097ad	1.0	0.0	0.0	0.0	47.3	63.8	337	1.0	0.0	0.0
665	B50R_100_097ad	1.0	0.0	0.0	0.0	47.3	63.8	330	1.0	0.0	0.0
666	R23Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	42	1.0	0.0	0.0
667	R13Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	37	1.0	0.0	0.0
668	R00Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	389	1.0	0.0	0.0
669	R38Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	382	1.0	0.0	0.0
670	R13Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	371	1.0	0.0	0.0
671	R00Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	360	1.0	0.0	0.0
672	B63R_100_075ad	1.0	0.0	0.0	0.0	47.3	63.8	346	1.0	0.0	0.0
673	B56R_100_075ad	1.0	0.0	0.0	0.0	47.3	63.8	337	1.0	0.0	0.0
674	B50R_100_075ad	1.0	0.0	0.0	0.0	47.3	63.8	330	1.0	0.0	0.0
675	R26Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	44	1.0	0.0	0.0
676	R16Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	39	1.0	0.0	0.0
677	R00Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	389	1.0	0.0	0.0
678	R38Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	380	1.0	0.0	0.0
679	R13Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	367	1.0	0.0	0.0
680	R00Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	352	1.0	0.0	0.0
681	B69R_100_062ad	1.0	0.0	0.0	0.0	47.3	63.8	339	1.0	0.0	0.0
682	B59R_100_062ad	1.0	0.0	0.0	0.0	47.3	63.8	330	1.0	0.0	0.0
683	B50Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	59	1.0	0.0	0.0
684	R41Y_100_087ad	1.0	0.0	0.0	0.0	47.3	63.8	54	1.0	0.0	0.0
685	R31Y_100_075ad	1.0	0.0	0.0	0.0	47.3	63.8	48	1.0	0.0	0.0
686	R18Y_100_062ad	1.0	0.0	0.0	0.0	47.3	63.8	39	1.0	0.0	0.0
687	R00Y_100_050ad	1.0	0.0	0.0	0.0	47.3	63.8	389	1.0	0.0	0.0
688	R26Y_100_050ad	1.0	0.0	0.0	0.0	47.3	63.8	377	1.0	0.0	0.0
689	R00Y_100_050ad	1.0	0.0	0.0	0.0	47.3	63.8	360	1.0	0.0	0.0
690	B61R_100_050ad	1.0	0.0	0.0	0.0	47.3	63.8	342	1.0	0.0	0.0
691	B50R_100_050ad	1.0	0.0	0.0	0.0	47.3	63.8	330	1.0	0.0	0.0
692	R63Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	68	1.0	0.0	0.0
693	R38Y_100_097ad	1.0	0.0	0.0	0.0	47.3	63.8	65	1.0	0.0	0.0
694	R26Y_100_075ad	1.0	0.0	0.0	0.0	47.3	63.8	52	1.0	0.0	0.0
695	R38Y_100_075ad	1.0	0.0	0.0	0.0	47.3	63.8	42	1.0	0.0	0.0
696	R23Y_100_050ad	1.0	0.0	0.0	0.0	47.3	63.8	389	1.0	0.0	0.0
697	R00Y_100_037ad	1.0	0.0	0.0	0.0	47.3	63.8	371	1.0	0.0	0.0
698	R18Y_100_037ad	1.0	0.0	0.0	0.0	47.3	63.8	348	1.0	0.0	0.0
699	B63R_100_037ad	1.0	0.0	0.0	0.0	47.3	63.8	340	1.0	0.0	0.0
700	B50R_100_037ad	1.0	0.0	0.0	0.0	47.3	63.8	330	1.0	0.0	0.0
701	R76Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	77	1.0	0.0	0.0
702	R31Y_100_075ad	1.0	0.0	0.0	0.0	47.3	63.8	71	1.0	0.0	0.0
703	R18Y_100_062ad	1.0	0.0	0.0	0.0	47.3	63.8	67	1.0	0.0	0.0
704	B63R_100_050ad	1.0	0.0	0.0	0.0	47.3	63.8	59	1.0	0.0	0.0
705	B56R_100_050ad	1.0	0.0	0.0	0.0	47.3	63.8	48	1.0	0.0	0.0
706	B50Y_100_050ad	1.0	0.0	0.0	0.0	47.3	63.8	48	1.0	0.0	0.0
707	R31Y_100_037ad	1.0	0.0	0.0	0.0	47.3	63.8	389	1.0	0.0	0.0
708	R00Y_100_025ad	1.0	0.0	0.0	0.0	47.3	63.8	360	1.0	0.0	0.0
709	B50R_100_025ad	1.0	0.0	0.0	0.0	47.3	63.8	330	1.0	0.0	0.0
710	R88Y_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	83	1.0	0.0	0.0
711	R85Y_100_097ad	1.0	0.0	0.0	0.0	47.3	63.8	82	1.0	0.0	0.0
712	R85Y_100_062ad	1.0	0.0	0.0	0.0	47.3	63.8	80	1.0	0.0	0.0
713	R85Y_100_062ad	1.0	0.0	0.0	0.0	47.3	63.8	80	1.0	0.0	0.0
714	R81Y_100_062ad	1.0	0.0	0.0	0.0	47.3	63.8	77	1.0	0.0	0.0
715	R76Y_100_050ad	1.0	0.0	0.0	0.0	47.3	63.8	71	1.0	0.0	0.0
716	R85Y_100_037ad	1.0	0.0	0.0	0.0	47.3	63.8	59	1.0	0.0	0.0
717	R85Y_100_025ad	1.0	0.0	0.0	0.0	47.3	63.8	51	1.0	0.0	0.0
718	R00Y_100_012ad	1.0	0.0	0.0	0.0	47.3	63.8	389	1.0	0.0	0.0
719	B50R_100_012ad	1.0	0.0	0.0	0.0	47.3	63.8	330	1.0	0.0	0.0
720	Y00C_100_100ad	1.0	0.0	0.0	0.0	47.3	63.8	89	1.0	0.0	0.0
721	Y00C_100_087ad	1.0	0.0	0.0	0.0	47.3	63.8	89	1.0	0.0	0.0
722	Y00C_100_075ad	1.0	0.0	0.0	0.0	47.3	63.8	89	1.0	0.0	0.0
723	Y00C_100_062ad	1.0	0.0	0.0	0.0	47.3	63.8	89	1.0	0.0	0.0
724	Y00C_100_050ad	1.0	0.0	0.0	0.0	47.3	63.8	89	1.0	0.0	0.0
725	Y00C_100_037ad	1.0	0.0	0.0	0.0	47.3	63.8	89	1.0	0.0	0.0
726	Y00C_100_025ad	1.0	0.0	0.0	0.0	47.3	63.8	89	1.0	0.0	0.0
727	Y00C_100_012ad	1.0	0.0	0.0	0.0	47.3	63.8	89	1.0	0.0	0.0
728	NW_100ad	1.0	1.0	1.0	1.0	95.4	0.0	360	1.0	1.0	0.0

see similar files: <http://130.149.60.45/~farbmatrik/QE44/QE44L0FP.PDF> /.PS
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>

TUB-test chart QE44; hue code: H*d=Y25Gd
colors and differences, ΔE*



http://130.149.60.45/~farbmatrik/QE44/QE44L0FP.PDF /.PS; 3D-linearization
F: 3D-linearization QE44/QE44L0FP.DAT in file (F), page 29/33

n	HC*Field	rgb_Field	lch_Field	hsa_Field	rgb_Mid	LabCH*Mid	cmyn*_sep_Feld	cmyn*_sep_Mid	hsa_Mid	rgb_Mid	LabCH*Mid	delta
729	NW_100ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
730	G50B_100.012ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
731	G50B_100.037ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
732	G50B_100.052ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
733	G50B_100.067ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
734	G50B_100.082ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
735	G50B_100.097ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
736	G50B_100.112ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
737	G50B_100.127ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
738	ROY_100.012ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
739	ROY_100.037ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
740	ROY_100.052ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
741	ROY_100.067ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
742	ROY_100.082ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
743	ROY_100.097ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
744	ROY_100.112ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
745	ROY_100.127ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
746	ROY_100.012ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
747	ROY_100.037ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
748	ROY_100.052ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
749	ROY_100.067ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
750	ROY_100.082ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
751	ROY_100.097ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
752	ROY_100.112ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
753	ROY_100.127ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
754	ROY_100.012ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
755	ROY_100.037ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
756	ROY_100.052ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
757	ROY_100.067ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
758	ROY_100.082ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
759	ROY_100.097ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
760	ROY_100.112ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
761	ROY_100.127ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
762	ROY_100.012ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
763	ROY_100.037ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
764	ROY_100.052ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
765	ROY_100.067ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
766	ROY_100.082ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
767	ROY_100.097ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
768	ROY_100.112ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
769	ROY_100.127ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
770	ROY_100.012ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
771	ROY_100.037ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
772	ROY_100.052ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
773	ROY_100.067ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
774	ROY_100.082ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
775	ROY_100.097ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
776	ROY_100.112ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
777	ROY_100.127ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
778	ROY_100.012ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
779	ROY_100.037ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
780	ROY_100.052ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
781	ROY_100.067ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
782	ROY_100.082ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
783	ROY_100.097ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
784	ROY_100.112ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
785	ROY_100.127ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
786	ROY_100.012ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
787	ROY_100.037ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
788	ROY_100.052ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
789	ROY_100.067ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
790	ROY_100.082ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
791	ROY_100.097ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
792	ROY_100.112ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
793	ROY_100.127ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
794	ROY_100.012ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
795	ROY_100.037ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
796	ROY_100.052ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
797	ROY_100.067ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
798	ROY_100.082ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
799	ROY_100.097ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
800	ROY_100.112ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
801	ROY_100.127ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
802	ROY_100.012ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
803	ROY_100.037ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
804	ROY_100.052ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
805	ROY_100.067ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
806	ROY_100.082ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
807	ROY_100.097ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
808	ROY_100.112ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0
809	ROY_100.127ad	0.875	1.0	1.0	0.875	1.0	0.0	0.0	360	1.0	1.0	0.0

Mean color difference of this page:

input: rgb/cmyk -> rgbd
output: 3D-linearization to cmyk*ad

TUB-test chart QE44; hue code: H*d=Y25Gd
colors and differences, ΔE*

QE440-7N; Page 29/33-F

I-1032830-F0

TUB registration: 20130201-QE44/QE44L0FP.PDF /.PS
TUB material: code=rha4ta
application for measurement of offset print output, separation cmyn6* (CMYK)

see similar files: <http://130.149.60.45/~farbmatrik/QE44/QE44L0FP.PDF>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>

n	HVC-Fid	rgb_Fid	icr_Fid	hsa_Fid	rgb_Mid	LabCh*_Mid	cmyn*_sep_Fid	hsv_Mid	hsv_Mid	LabCh*_Mid	delta
891	NW_100Mid	1.0	1.0	1.0	1.0	95.4	0.0	0.0	0.0	95.4	0.0
892	B50R_100.012Mid	0.875	1.0	0.875	1.0	89.5	9.1	1.0	0.0	48.2	72.8
893	B50R_100.025Mid	0.75	1.0	0.75	1.0	83.6	18.2	1.0	0.0	48.2	72.8
894	B50R_100.037Mid	0.625	1.0	0.625	1.0	77.7	27.3	1.0	0.0	48.2	72.8
895	B50R_100.050Mid	0.5	1.0	0.5	1.0	71.8	36.4	1.0	0.0	48.2	72.8
896	B50R_100.062Mid	0.375	1.0	0.375	1.0	65.9	45.5	1.0	0.0	48.2	72.8
897	B50R_100.075Mid	0.25	1.0	0.25	1.0	60.0	54.6	1.0	0.0	48.2	72.8
898	B50R_100.087Mid	0.125	1.0	0.125	1.0	54.1	63.7	1.0	0.0	48.2	72.8
899	B50R_100.100Mid	0.0	1.0	0.0	1.0	48.2	72.8	1.0	0.0	48.2	72.8
900	GOB_100.012Mid	0.875	1.0	0.875	1.0	90.0	8.6	1.0	0.0	51.9	68.8
901	NW_087Mid	0.875	0.875	0.875	0.875	85.7	0.0	1.0	0.0	51.9	68.8
902	B50R_087.012Mid	0.875	0.875	0.875	0.875	79.8	9.1	1.0	0.0	51.9	68.8
903	B50R_087.025Mid	0.875	0.875	0.875	0.875	73.9	18.2	1.0	0.0	51.9	68.8
904	B50R_087.037Mid	0.875	0.875	0.875	0.875	68.0	27.3	1.0	0.0	51.9	68.8
905	B50R_087.050Mid	0.875	0.875	0.875	0.875	62.1	36.4	1.0	0.0	51.9	68.8
906	B50R_087.062Mid	0.875	0.875	0.875	0.875	56.2	45.5	1.0	0.0	51.9	68.8
907	B50R_087.075Mid	0.875	0.875	0.875	0.875	50.3	54.6	1.0	0.0	51.9	68.8
908	B50R_087.087Mid	0.875	0.875	0.875	0.875	44.4	63.7	1.0	0.0	51.9	68.8
909	GOB_100.025Mid	0.75	1.0	0.75	1.0	84.5	-17.2	1.0	0.0	51.9	68.8
910	GOB_100.037Mid	0.625	1.0	0.625	1.0	78.6	-26.3	1.0	0.0	51.9	68.8
911	NW_075Mid	0.75	0.75	0.75	0.75	76.0	0.0	1.0	0.0	51.9	68.8
912	B50R_075.012Mid	0.75	0.75	0.75	0.75	70.1	9.1	1.0	0.0	51.9	68.8
913	B50R_075.025Mid	0.75	0.75	0.75	0.75	64.2	18.2	1.0	0.0	51.9	68.8
914	B50R_075.037Mid	0.75	0.75	0.75	0.75	58.3	27.3	1.0	0.0	51.9	68.8
915	B50R_075.050Mid	0.75	0.75	0.75	0.75	52.4	36.4	1.0	0.0	51.9	68.8
916	B50R_075.062Mid	0.75	0.75	0.75	0.75	46.5	45.5	1.0	0.0	51.9	68.8
917	B50R_075.075Mid	0.75	0.75	0.75	0.75	40.6	54.6	1.0	0.0	51.9	68.8
918	GOB_100.037Mid	0.625	1.0	0.625	1.0	79.1	-25.8	1.0	0.0	51.9	68.8
919	GOB_100.050Mid	0.5	1.0	0.5	1.0	73.2	-34.9	1.0	0.0	51.9	68.8
920	GOB_075.012Mid	0.625	0.75	0.625	0.75	68.5	-34.9	1.0	0.0	51.9	68.8
921	GOB_075.025Mid	0.625	0.75	0.625	0.75	62.6	-43.9	1.0	0.0	51.9	68.8
922	B50R_062.012Mid	0.625	0.625	0.625	0.625	60.4	9.1	1.0	0.0	51.9	68.8
923	B50R_062.025Mid	0.625	0.625	0.625	0.625	54.5	18.2	1.0	0.0	51.9	68.8
924	B50R_062.037Mid	0.625	0.625	0.625	0.625	48.6	27.3	1.0	0.0	51.9	68.8
925	B50R_062.050Mid	0.625	0.625	0.625	0.625	42.7	36.4	1.0	0.0	51.9	68.8
926	B50R_062.062Mid	0.625	0.625	0.625	0.625	36.8	45.5	1.0	0.0	51.9	68.8
927	GOB_100.050Mid	0.5	1.0	0.5	1.0	73.7	-34.9	1.0	0.0	51.9	68.8
928	GOB_087.037Mid	0.5	0.875	0.5	0.875	69.4	-25.8	1.0	0.0	51.9	68.8
929	GOB_075.025Mid	0.5	0.75	0.5	0.75	63.5	-34.9	1.0	0.0	51.9	68.8
930	GOB_062.012Mid	0.5	0.625	0.5	0.625	57.6	-43.9	1.0	0.0	51.9	68.8
931	NW_050Mid	0.5	0.5	0.5	0.5	56.5	0.0	1.0	0.0	51.9	68.8
932	B50R_050.012Mid	0.5	0.375	0.5	0.375	50.6	9.1	1.0	0.0	51.9	68.8
933	B50R_050.025Mid	0.5	0.25	0.5	0.25	44.7	18.2	1.0	0.0	51.9	68.8
934	B50R_050.037Mid	0.5	0.125	0.5	0.125	38.8	27.3	1.0	0.0	51.9	68.8
935	B50R_050.050Mid	0.5	0.0	0.5	0.0	32.9	36.4	1.0	0.0	51.9	68.8
936	GOB_100.062Mid	0.375	1.0	0.375	1.0	68.2	-43.9	1.0	0.0	51.9	68.8
937	GOB_087.050Mid	0.375	0.875	0.375	0.875	63.9	-34.9	1.0	0.0	51.9	68.8
938	GOB_075.037Mid	0.375	0.75	0.375	0.75	58.0	-43.9	1.0	0.0	51.9	68.8
939	GOB_062.025Mid	0.375	0.625	0.375	0.625	52.1	-52.8	1.0	0.0	51.9	68.8
940	NW_037Mid	0.375	0.375	0.375	0.375	51.1	-61.8	1.0	0.0	51.9	68.8
941	B50R_037.012Mid	0.375	0.375	0.375	0.375	45.2	-70.9	1.0	0.0	51.9	68.8
942	B50R_037.025Mid	0.375	0.375	0.375	0.375	39.3	-79.9	1.0	0.0	51.9	68.8
943	B50R_037.037Mid	0.375	0.375	0.375	0.375	33.4	-89.0	1.0	0.0	51.9	68.8
944	B50R_037.050Mid	0.375	0.375	0.375	0.375	27.5	-98.0	1.0	0.0	51.9	68.8
945	GOB_100.075Mid	0.25	1.0	0.25	1.0	62.8	-51.6	1.0	0.0	51.9	68.8
946	GOB_087.062Mid	0.25	0.875	0.25	0.875	56.9	-60.7	1.0	0.0	51.9	68.8
947	GOB_075.050Mid	0.25	0.75	0.25	0.75	51.0	-69.7	1.0	0.0	51.9	68.8
948	GOB_062.037Mid	0.25	0.625	0.25	0.625	45.1	-78.8	1.0	0.0	51.9	68.8
949	GOB_050.025Mid	0.25	0.5	0.25	0.5	39.2	-87.8	1.0	0.0	51.9	68.8
950	GOB_037.012Mid	0.25	0.375	0.25	0.375	33.3	-96.9	1.0	0.0	51.9	68.8
951	NW_025Mid	0.25	0.25	0.25	0.25	31.2	-105.9	1.0	0.0	51.9	68.8
952	B50R_025.012Mid	0.25	0.25	0.25	0.25	25.3	-115.0	1.0	0.0	51.9	68.8
953	B50R_025.025Mid	0.25	0.25	0.25	0.25	19.4	-124.0	1.0	0.0	51.9	68.8
954	GOB_100.087Mid	0.125	1.0	0.125	1.0	57.9	-60.2	1.0	0.0	51.9	68.8
955	GOB_087.075Mid	0.125	0.875	0.125	0.875	52.0	-69.3	1.0	0.0	51.9	68.8
956	GOB_075.062Mid	0.125	0.75	0.125	0.75	46.1	-78.4	1.0	0.0	51.9	68.8
957	GOB_062.050Mid	0.125	0.625	0.125	0.625	40.2	-87.5	1.0	0.0	51.9	68.8
958	GOB_050.037Mid	0.125	0.5	0.125	0.5	34.3	-96.6	1.0	0.0	51.9	68.8
959	GOB_037.025Mid	0.125	0.375	0.125	0.375	28.4	-105.7	1.0	0.0	51.9	68.8
960	NW_012Mid	0.125	0.125	0.125	0.125	22.5	-114.8	1.0	0.0	51.9	68.8
961	B50R_012.012Mid	0.125	0.125	0.125	0.125	16.6	-123.9	1.0	0.0	51.9	68.8
962	B50R_012.025Mid	0.125	0.125	0.125	0.125	10.7	-133.0	1.0	0.0	51.9	68.8
963	GOB_100.100Mid	0.0	1.0	0.0	1.0	51.9	-68.8	1.0	0.0	51.9	68.8
964	GOB_087.087Mid	0.0	0.875	0.0	0.875	46.0	-77.9	1.0	0.0	51.9	68.8
965	GOB_075.075Mid	0.0	0.75	0.0	0.75	40.1	-87.0	1.0	0.0	51.9	68.8
966	GOB_062.062Mid	0.0	0.625	0.0	0.625	34.2	-96.1	1.0	0.0	51.9	68.8
967	GOB_050.050Mid	0.0	0.5	0.0	0.5	28.3	-105.2	1.0	0.0	51.9	68.8
968	GOB_037.037Mid	0.0	0.375	0.0	0.375	22.4	-114.3	1.0	0.0	51.9	68.8
969	GOB_025.025Mid	0.0	0.25	0.0	0.25	16.5	-123.4	1.0	0.0	51.9	68.8
970	GOB_012.012Mid	0.0	0.125	0.0	0.125	10.6	-132.5	1.0	0.0	51.9	68.8
971	NW_000Mid	0.0	0.0	0.0	0.0	17.7	-141.6	1.0	0.0	51.9	68.8

Mean color difference of this page:

input: rgb/cmyk -> rgbd
output: 3D-linearization to cmyk*dd

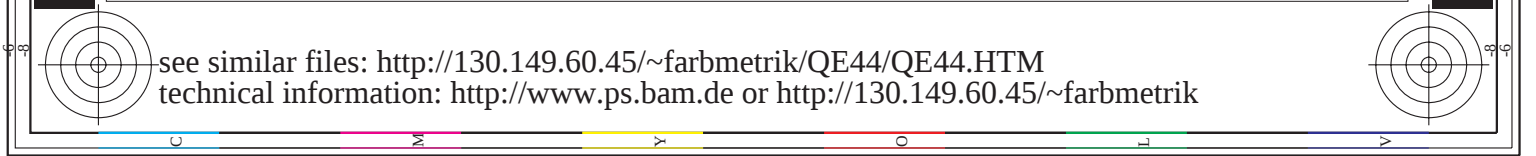
QE440-7N; Page 31/33-F

TUB-test chart QE44; hue code: H*d=Y25Gd
colors and differences, ΔE*



TUB registration: 20130201-QE44/QE44L0FP.PDF /.PS
application for measurement of offset print output, separ

TUB material: code=rha4ta
nyn6* (CMYK)

[illegible]

TUB registration: 20130201-QE44/QE44L0FP.PDF /.PS
application for measurement of offset print output, separation cmyk6* (CMYK)

TUB material: code=rha4ta

see similar files: <http://130.149.60.45/~farbmetrik/QE44/QE44.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB-test chart QE44; hue code: H*d=Y25Gd
colors and differences, ΔE^*

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

n	HVC*Fid	rgb_Fid	lcr_Fid	hsa_Fid	rgb*Fid	LabCH*Fid	cmyk*_sep_Fid	rgb*_dd	hsa*_dd	LabCH*_dd	delta
1053	NW_086dd	0.866 0.866 0.866	0.866 0.866 0.866	0.866 0.866 0.866	0.866 0.866 0.866	85.0 0.0 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1054	NW_093dd	0.933 0.933 0.933	0.933 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	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1055	NW_100dd	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	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1056	NW_006dd	0.066 0.066 0.066	0.066 0.066 0.066	0.066 0.066 0.066	0.066 0.066 0.066	22.8 0.0 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1057	NW_013dd	0.133 0.133 0.133	0.133 0.133 0.133	0.133 0.133 0.133	0.133 0.133 0.133	28.0 0.0 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1058	NW_020dd	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 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1059	NW_026dd	0.266 0.266 0.266	0.266 0.266 0.266	0.266 0.266 0.266	0.266 0.266 0.266	38.3 0.0 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1060	NW_033dd	0.333 0.333 0.333	0.333 0.333 0.333	0.333 0.333 0.333	0.333 0.333 0.333	43.6 0.0 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1061	NW_040dd	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 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1062	NW_046dd	0.466 0.466 0.466	0.466 0.466 0.466	0.466 0.466 0.466	0.466 0.466 0.466	53.9 0.0 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1063	NW_053dd	0.533 0.533 0.533	0.533 0.533 0.533	0.533 0.533 0.533	0.533 0.533 0.533	59.1 0.0 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1064	NW_060dd	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 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1065	NW_066dd	0.666 0.666 0.666	0.666 0.666 0.666	0.666 0.666 0.666	0.666 0.666 0.666	69.5 0.0 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1066	NW_073dd	0.734 0.734 0.734	0.734 0.734 0.734	0.734 0.734 0.734	0.734 0.734 0.734	74.7 0.0 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1067	NW_080dd	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 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1068	NW_086dd	0.866 0.866 0.866	0.866 0.866 0.866	0.866 0.866 0.866	0.866 0.866 0.866	85.0 0.0 0.0	0.0 0.0 0.0	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1069	NW_093dd	0.933 0.933 0.933	0.933 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	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1070	NW_100dd	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	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1071	NW_006dd	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	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1072	NW_013dd	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	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1073	NW_020dd	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	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1074	ROXY_100_100dd	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	1.0 1.0 1.0	360 1.0 1.0	95.4 0.0 0.0	0.0
1075	G50B_100_100dd	0.0 1.0 1.0	0.0 1.0 1.0	0.0 1.0 1.0	0.0 1.0 1.0	47.3 63.8 41.2	0.0 0.0 0.0	1.0 0.0 0.0	389 1.0 0.0	58.3 63.8 41.2	32.8
1076	Y06C_100_100dd	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	58.3 -29.2 -43.7	0.0 0.0 0.0	0.0 1.0 0.0	210 0.0 1.0	58.3 -29.2 -43.7	76.0
1077	B00R_100_100dd	0.0 0.0 1.0	0.0 0.0 1.0	0.0 0.0 1.0	0.0 0.0 1.0	25.3 23.5 28.1	0.0 0.0 0.0	0.0 0.0 1.0	89 0.0 0.0	25.3 23.5 28.1	32.8
1078	B00R_100_100dd	0.0 0.0 1.0	0.0 0.0 1.0	0.0 0.0 1.0	0.0 0.0 1.0	51.9 48.8 28.1	0.0 0.0 0.0	0.0 0.0 1.0	270 0.0 0.0	51.9 48.8 28.1	97.1
1079	B50R_100_100dd	0.0 0.0 1.0	0.0 0.0 1.0	0.0 0.0 1.0	0.0 0.0 1.0	73.3 73.3 35.3	0.0 0.0 0.0	0.0 0.0 1.0	330 0.0 0.0	73.3 73.3 35.3	266.4