

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 68/360 = 0.19$

$H^*_- = R50Y_-$

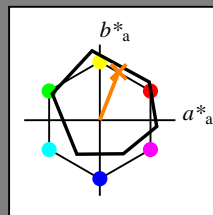
Data for any device (d) or elementary (e) colour:

$HIC^*_-$

hue text for the colours of this page:

$H^*_- = R50Y_-$

triangle lightness  $T^*$



**ORS18a; adapted (a) CIELAB data**

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

Data for maximum colour (Ma):

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

$HIC^*_{-,Ma}$ : R50Y\_100\_100\_

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

1.0 0.5 0.0 1.0 1.0

triangle lightness  $T^*$

%Gamut

$u^*_{rel} = 92$

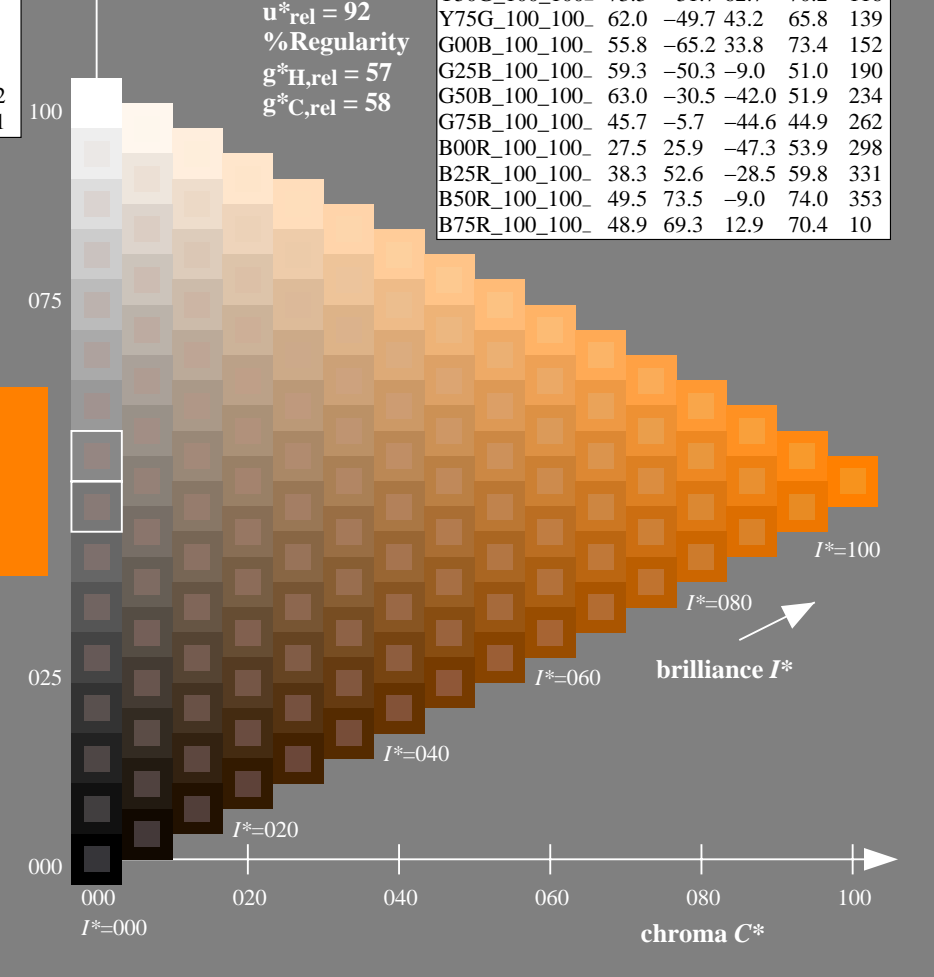
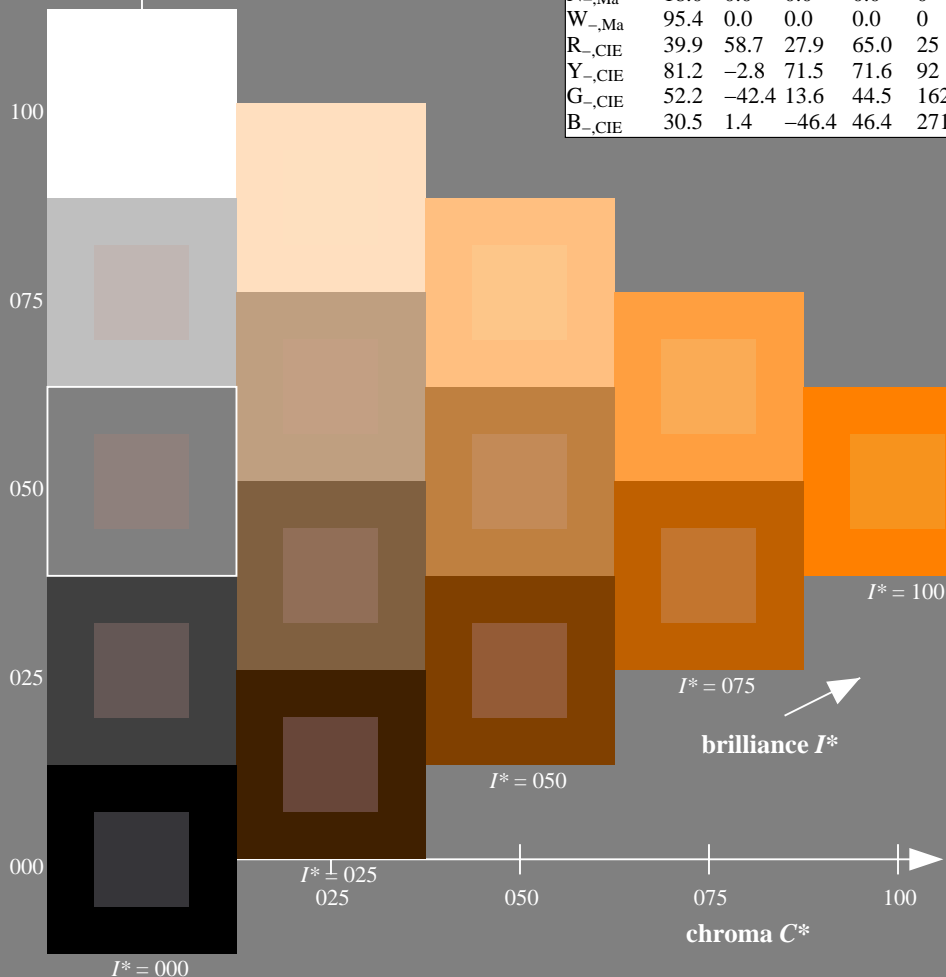
%Regularity

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

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

**ORS20a; adapted (a) CIELAB data**

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



see similar files: <http://130.149.60.45/~farbmetrik/QE15/QE15L0FP.PDF> / .PS; start output  
 technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS  
 application for measurement of offset print output

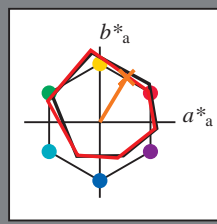
TUB material: code=rh4ta

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 58/360 = 0.16$

$H^*_e = R50Y_e$

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

$HIC^*_e$   
hue text for the colours of this page:  
 $H^*_e = R50Y_e$   
triangle lightness  $T^*$



ORS20a; adapted (a) CIELAB data

name	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
Re,Ma	47.6	64.9	30.9	71.9	25
Ye,Ma	82.9	-3.5	87.8	87.9	92
Ge,Ma	52.4	-67.1	21.5	70.5	162
Ce,Ma	56.6	-39.7	-29.9	49.8	216
Be,Ma	37.9	1.3	-45.4	45.4	271
Me,Ma	34.8	49.2	-30.0	57.7	328
Ne,Ma	17.7	0.0	0.0	0.0	0
We,Ma	95.4	0.0	0.0	0.0	0
Re,CIE	39.9	58.7	27.9	65.0	25
Ye,CIE	81.2	-2.8	71.5	71.6	92
Ge,CIE	52.2	-42.4	13.6	44.5	162
Be,CIE	30.5	1.4	-46.4	46.4	271

Data for maximum colour (Ma):

$LabCh^*_{e, Ma}$ : 60 35 59 68 58

$HIC^*_{e, Ma}$ : R50Y\_100\_100\_e

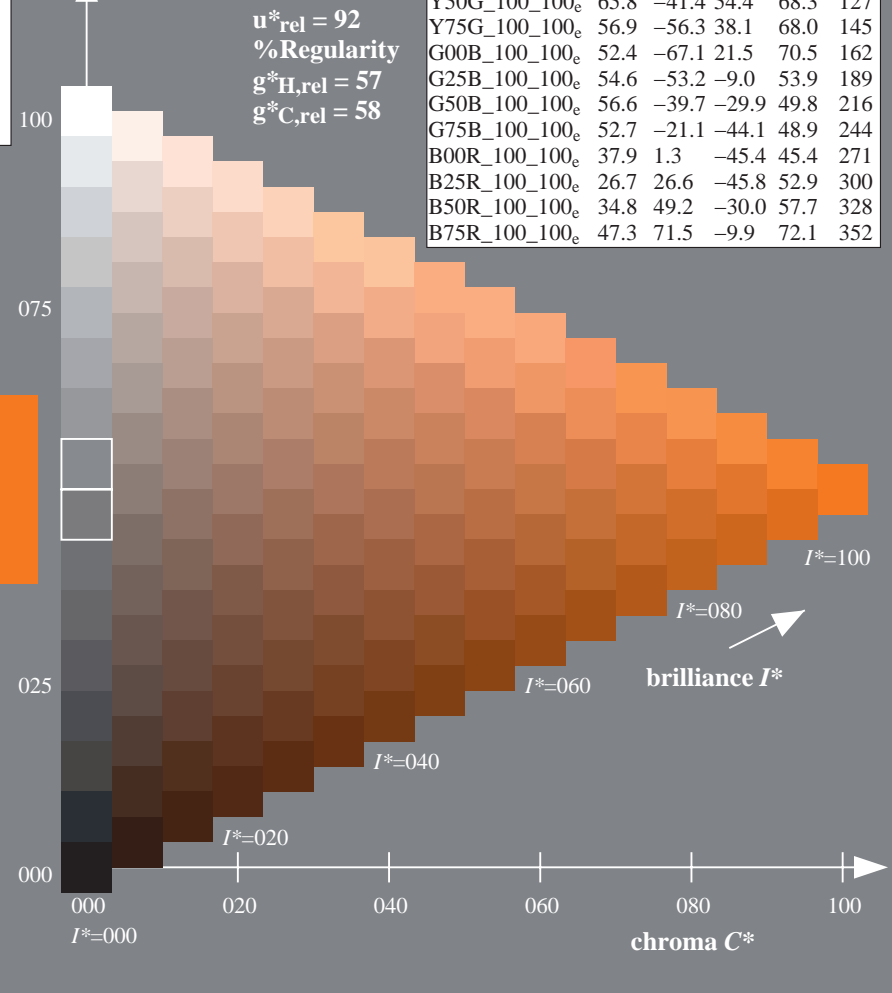
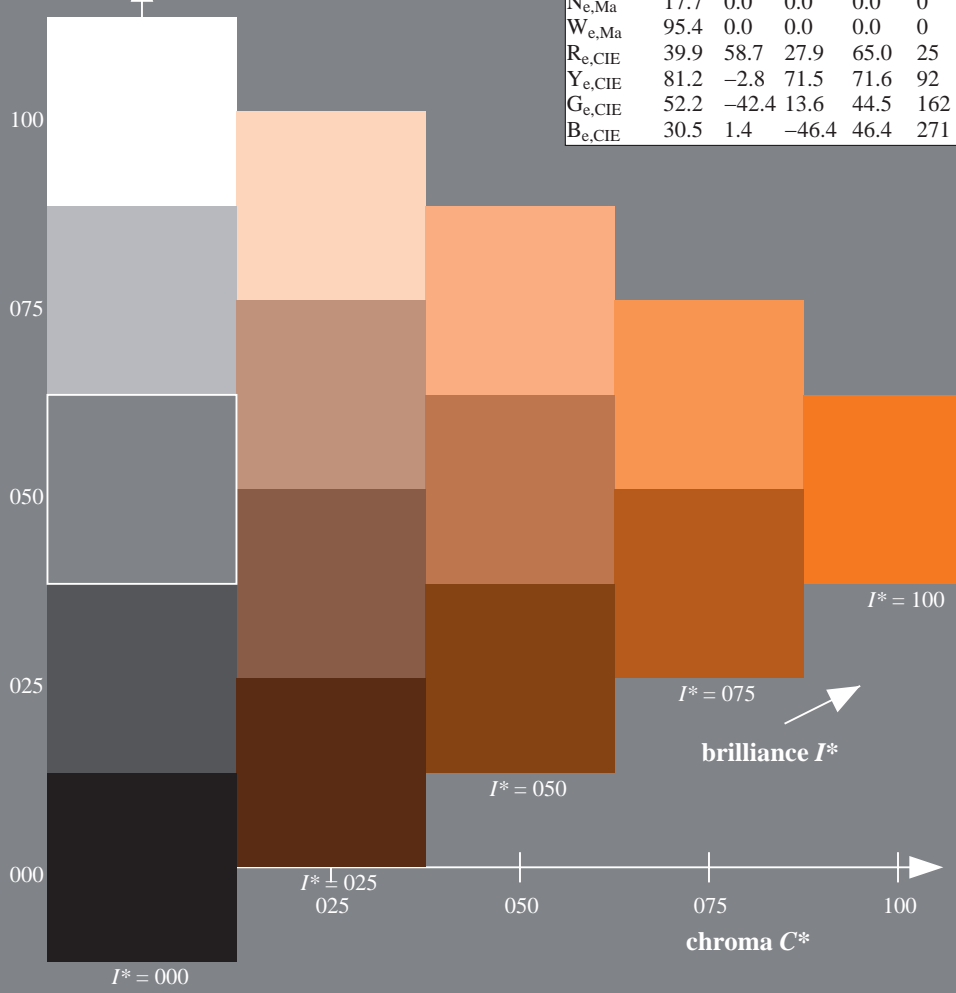
$rgbic^*_{e, Ma}$ : 1.0 0.34 0.0 1.0 1.0

triangle lightness  $T^*$

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

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



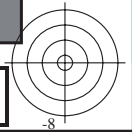
see similar files: <http://130.149.60.45/~farbmetrik/QE15/QE15.HTM>  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS  
application for measurement of offset print output, separation cmykn6\* (CMYK)  
TUB material: code=rh4ta

1-113130-L0 QE150-73

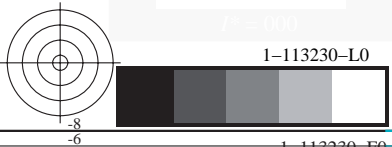
TUB-test chart QE15; hue code:  $H^*_e=R50Y_e$   
Test chart according to DIN 33872, 3D=1, de=1,  $cmyk^*$

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



see similar files: <http://130.149.60.45/~farbmetrik/QE15/QE15.HTM>  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

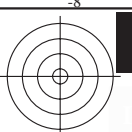
TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS TUB material: code=rh4ta  
application for measurement of offset print output, separation cmykn6\* (CMYK)



TUB-test chart QE15; hue code:  $H^*_e=R50Y_e$   
Test chart according to DIN 33872, 3D=1, de=1, cmyk\*

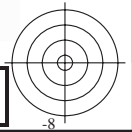
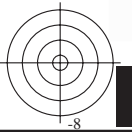
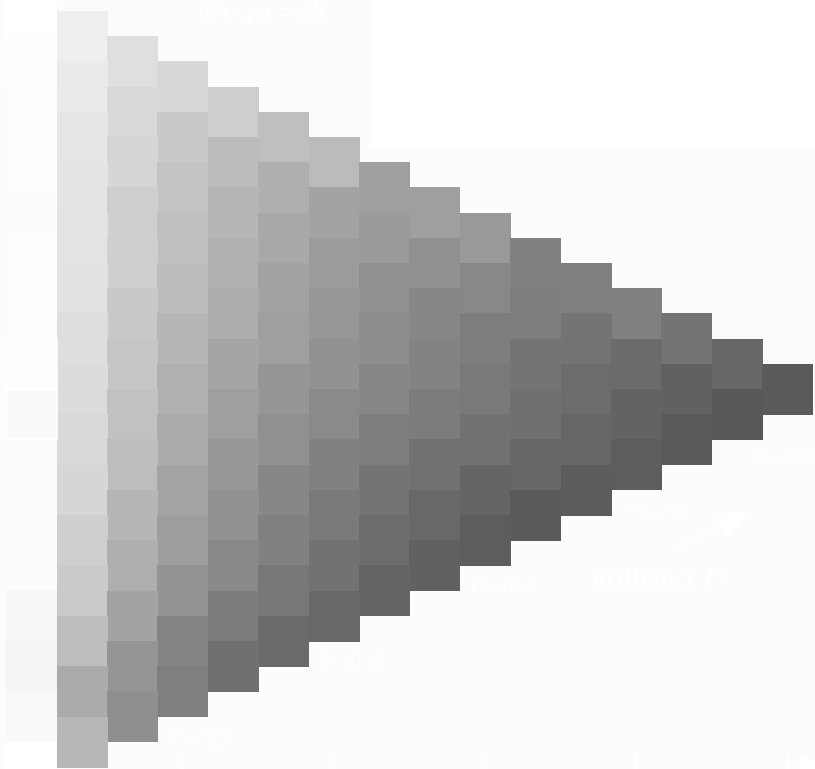
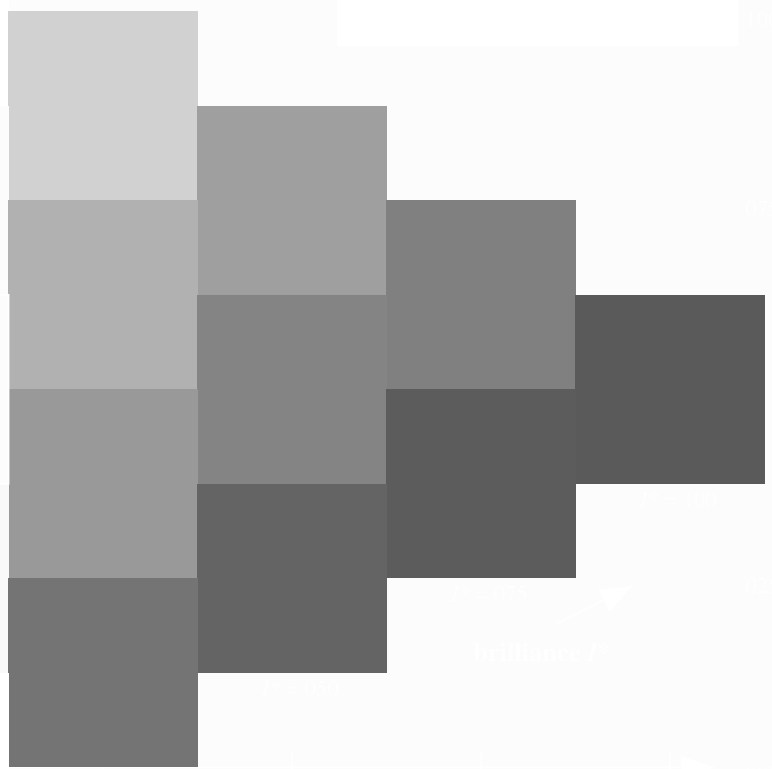
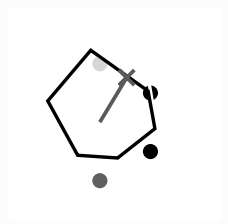
input:  $rgb/cmyk \rightarrow rgb_{de}$   
output: 3D-linearization to  $cmyk^*_{de}$





see similar files: <http://130.149.60.45/~farbmetrik/QE15/QE15.HTM>  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS TUB material: code=rh4ta  
application for measurement of offset print output, separation cmyk\* (CMYK)



1-113330-L0 QE150-73

TUB-test chart QE15; hue code:  $H^*_e=R50Y_e$   
Test chart according to DIN 33872, 3D=1,  $de=1$ , cmyk\*

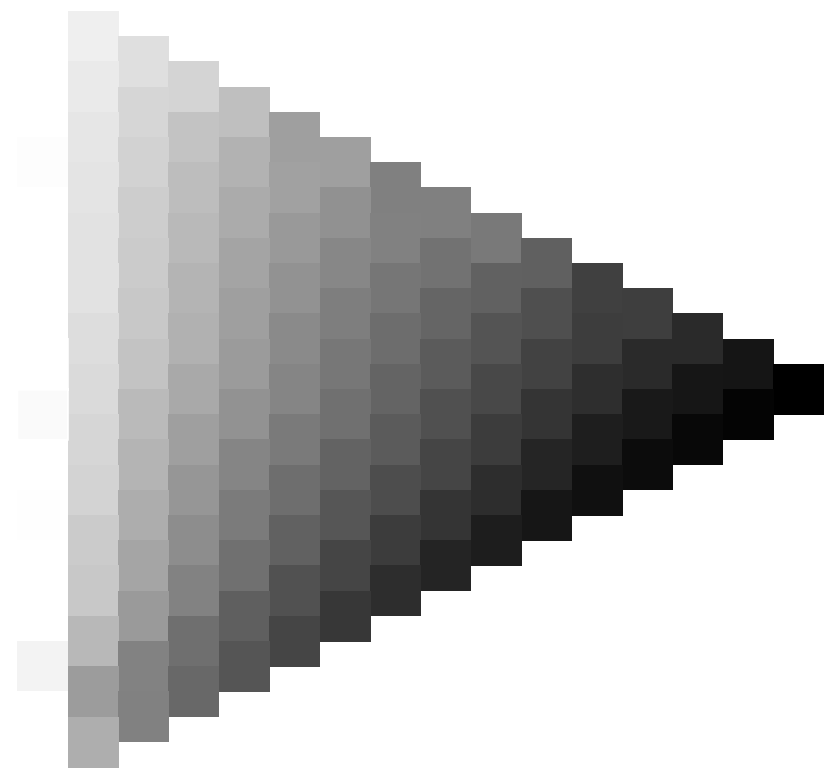
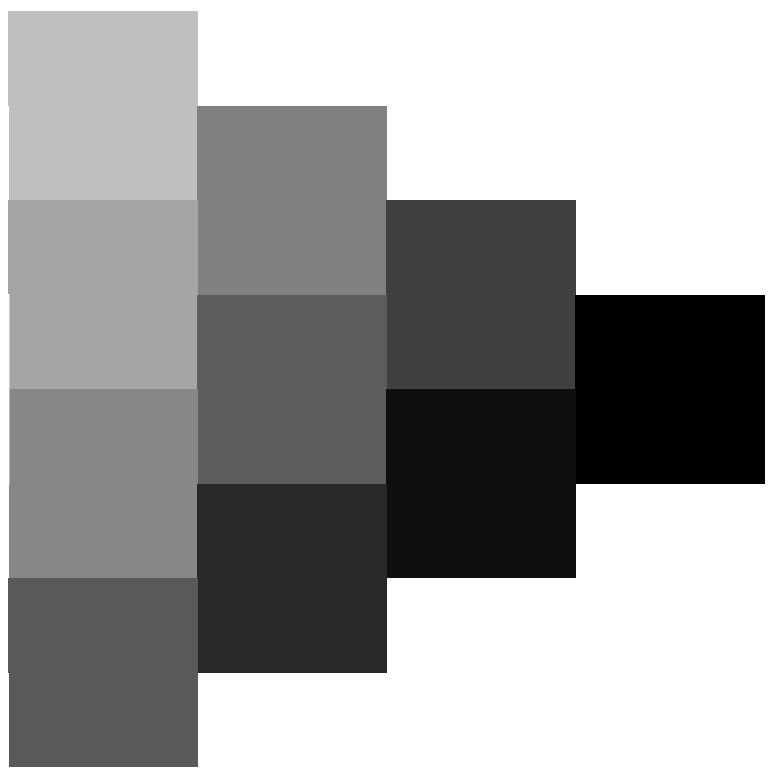
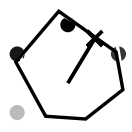
input:  $rgb/cmyk \rightarrow rgb_{de}$   
output: 3D-linearization to  $cmyk^*_{de}$

1-113330-F0



TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS TUB material: code=rh4ta  
application for measurement of offset print output, separation cmykn6\* (CMYK)

see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM  
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik



1-113430-L0 QE150-73

TUB-test chart QE15; hue code:  $H^*_e=R50Y_e$   
Test chart according to DIN 33872, 3D=1, de=1, cmyk\*

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

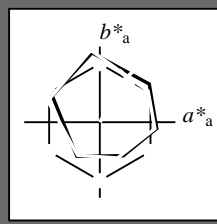


Input and Output: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 58/360 = 0.16$

$H^*_e = R50Y_e$

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

$HIC^*_e$   
hue text for the colours of this page:  
 $H^*_e = R50Y_e$   
triangle lightness  $T^*$



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 ( $Ma$ ):

$LabCh^*_{e, Ma}$ : 60 35 59 68 58

$HIC^*_{e, Ma}$ : R50Y\_100\_100\_e

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

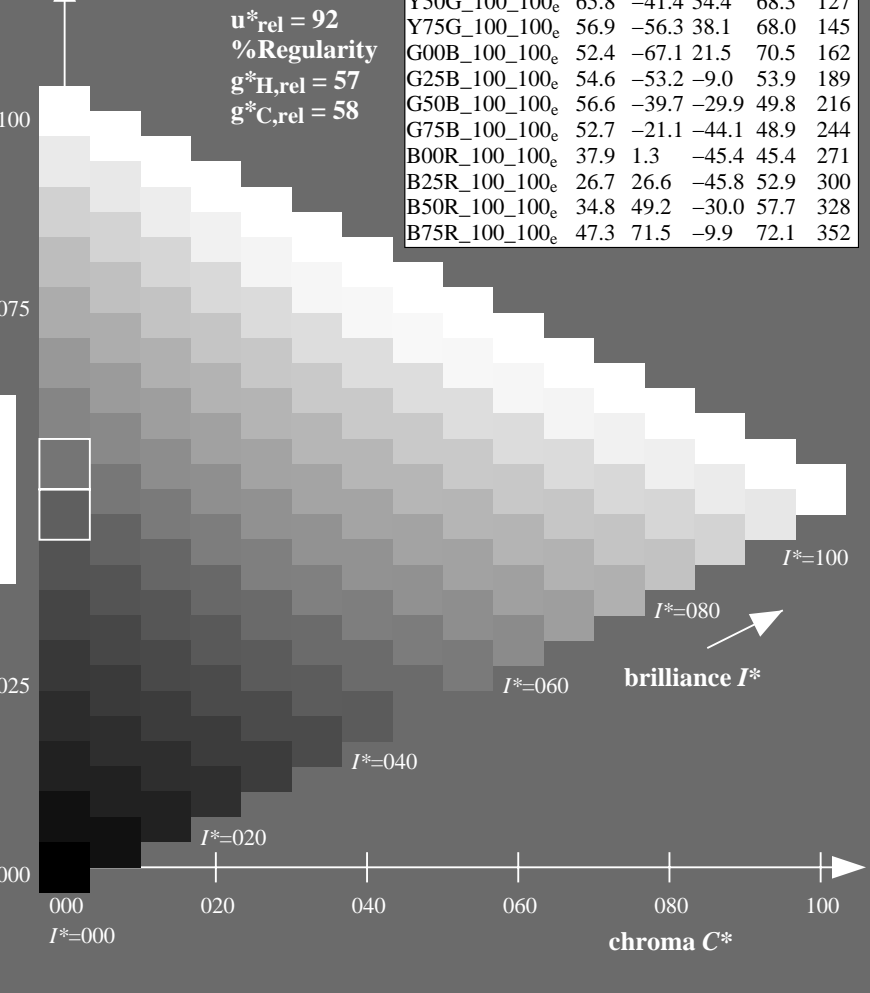
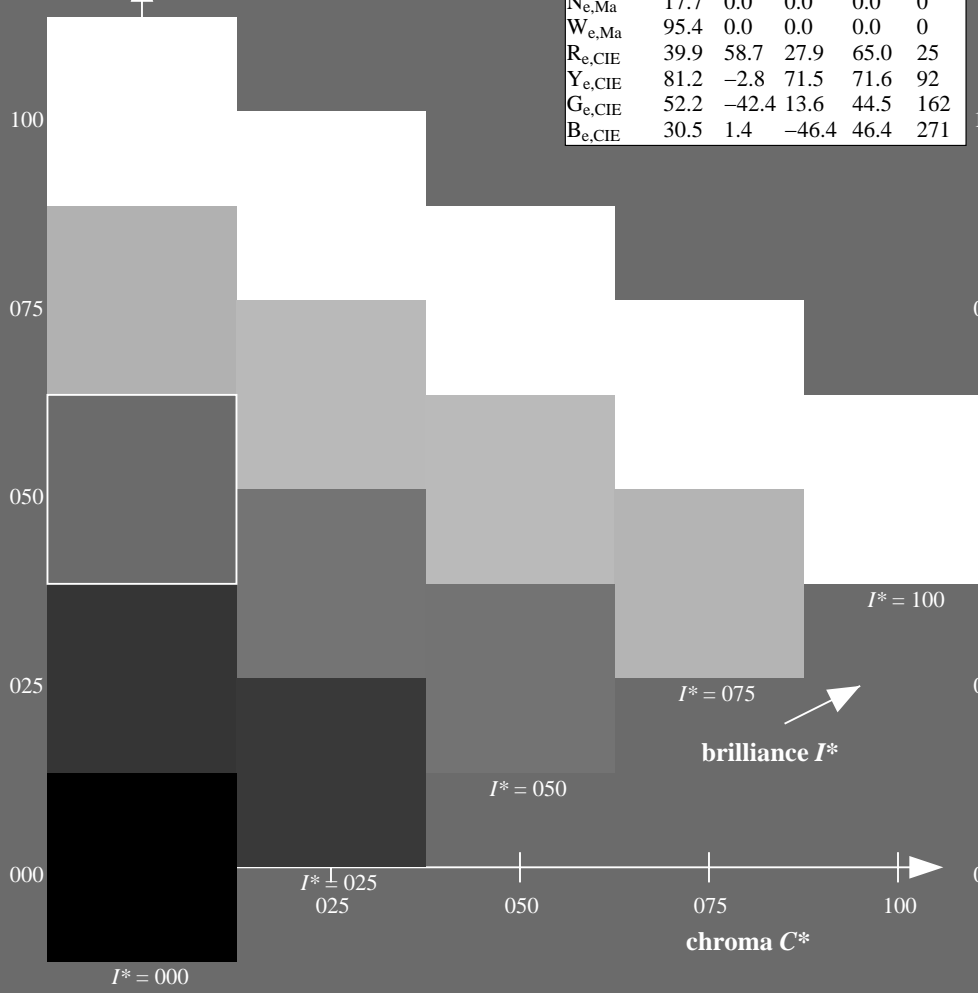
1.0 0.34 0.0 1.0 1.0

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



see similar files: <http://130.149.60.45/~farbmetrik/QE15/QE15.HTM>  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS  
application for measurement of offset print output, separation cmyk\* (CMYK)  
TUB material: code=rh4ta

1-113530-L0 QE150-73

TUB-test chart QE15; hue code:  $H^*_e=R50Y_e$   
Test chart according to DIN 33872, 3D=1, de=1,  $cmyk^*$

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

1-113530-F0

Data of Maximum color M in colorimetric system Offset standard print; separation cmy<sup>6</sup>, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM<sub>s</sub>*:  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
 Six hue angles of the device colours *RYGCBM<sub>d</sub>*:  $h_{ab,d} = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3$ ; Six hue angles of the elementary colours *RYGCBM<sub>e</sub>*:  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

**J=Y<sub>d</sub> 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<sub>d</sub> 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<sub>d</sub> 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<sub>d</sub> 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<sub>d</sub> 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<sub>d</sub> 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<sub>e</sub> 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<sub>e</sub> 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<sub>e</sub> 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<sub>e</sub> 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<sub>e</sub> 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<sub>e</sub> 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<sub>s</sub> 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<sub>s</sub> green**

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

**C<sub>s</sub> blue-green**

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

**R<sub>s</sub> red**

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

**M<sub>s</sub> 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<sub>s</sub> 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  $rgb^*_d$  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  $rgb^*_{de}$  produce the output of the device-independent elementary hues

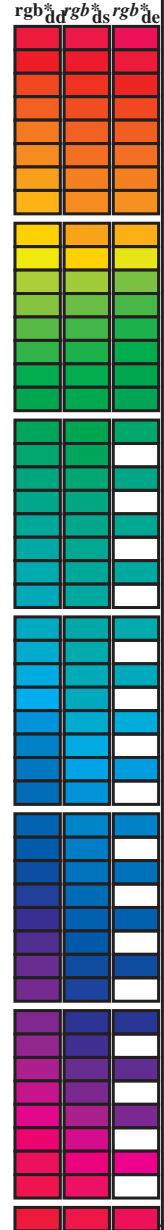
see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM  
 technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS  
 application for measurement of offset print output, separation cmy<sup>6</sup> (CMYK)  
 TUB material: code=rha4ta



Data of maximum color M in colorimetric system Offset standard print; separation cmykn6\*; D65 for input or output; Six hue angles of the 60 degree standard colours RYGBCM<sub>s</sub>; h<sub>ab,ds</sub> = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;  
Six hue angles of the device colours RYGBCM<sub>d</sub>; h<sub>ab,d</sub> = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3; Six hue angles of the elementary colours RYGBCM<sub>e</sub>; h<sub>ab,e</sub> = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

Table with 12 columns: h<sub>ab,d</sub>, h<sub>ab,s</sub>, h<sub>ab,e</sub>, r<sub>gb</sub><sup>a</sup>, d<sub>64M</sub>, LAB\*<sub>ddx64M</sub> (x=LabCh), r<sub>gb</sub><sup>a</sup>, d<sub>361M</sub>, LAB\*<sub>ddx361M</sub> (x=LabCh), r<sub>gb</sub><sup>a</sup>, d<sub>361M</sub>, LAB\*<sub>dsx361M</sub> (x=LabCh), r<sub>gb</sub><sup>a</sup>, d<sub>361M</sub>, LAB\*<sub>dex361M</sub> (x=LabCh). Rows contain numerical data for 60 color patches.



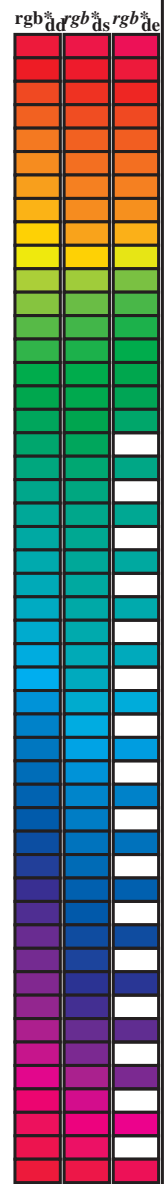
see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM  
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS  
application for measurement of offset print output, separation cmykn6\* (CMYK)  
TUB material: code=rh4ta



Data of Maximum color M in colorimetric system Offset standard print; separation cmykn6\*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<sub>c</sub>: h<sub>ab,ds</sub> = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;  
Six hue angles of the device colours RYGBM<sub>d</sub>: h<sub>ab,d</sub> = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3; Six hue angles of the elementary colours RYGBM<sub>e</sub>: h<sub>ab,e</sub> = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

h <sub>ab,d</sub>	h <sub>ab,s</sub>	h <sub>ab,e</sub>	rgb* dd64M	LAB* ddx64M (x=LabCh)	rgb* dex361M	LAB* 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 0.209	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	0.06 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



see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM  
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS  
application for measurement of offset print output, separation cmykn6\* (CMYK)  
TUB material: code=rh4ta

Data of Maximum color M in colorimetric system Offset standard print; separation cmy<sup>6</sup>\*, D65 for input or output; Six hue angles of the 60 degree standard colours RY<sup>6</sup>GCB<sup>6</sup><sub>M</sub>; h<sub>ab,ds</sub> = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;  
Six hue angles of the device colours RY<sup>6</sup>GCB<sup>6</sup><sub>d</sub>; h<sub>ab,d</sub> = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3; Six hue angles of the elementary colours RY<sup>6</sup>GCB<sup>6</sup><sub>e</sub>; h<sub>ab,e</sub> = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

h <sub>ab,d</sub>	h <sub>ab,s</sub>	h <sub>ab,e</sub>	rgb <sup>6</sup> *_dd361M	LAB <sup>6</sup> *_ddx361Mi (x=LabCh)	R <sub>d</sub>	rgb <sup>6</sup> *_ds361Mi	LAB <sup>6</sup> *_dsx361Mi (x=LabCh)	R <sub>s</sub>	rgb <sup>6</sup> *_dd361Mi	LAB <sup>6</sup> *_dex361Mi (x=LabCh)	R <sub>e</sub>	rgb <sup>6</sup> *_dd361Mi	rgb <sup>6</sup> *_dd361Mi	rgb <sup>6</sup> *_ds361Mi	rgb <sup>6</sup> *_ds361Mi
32	30	25	1.0 0.0 0.0	47.3 63.8 41.2 76.0 32		1.0 0.0 0.084 47.4 64.3 37.1 74.3 30		1.0 0.0 0.0	1.0 0.0 0.209 47.6 64.9 30.9 71.9 25		1.0 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 0.054 47.4 64.2 38.6 74.9 31		1.0 0.017 0.0	1.0 0.0 0.18 47.6 64.8 32.4 72.5 26		1.0 0.017 0.0				
34	32	27	1.0 0.033 0.0	48.3 61.5 42.8 74.9 34		1.0 0.0 0.025 47.4 64.0 40.0 75.5 32		1.0 0.033 0.0	1.0 0.0 0.15 47.5 64.6 33.9 73.0 27		1.0 0.033 0.0				
35	33	28	1.0 0.05 0.0	48.9 60.3 43.6 74.4 35		1.0 0.003 0.0 47.5 63.7 41.3 75.9 33		1.0 0.05 0.0	1.0 0.0 0.119 47.5 64.4 35.5 73.6 28		1.0 0.05 0.0				
36	34	29	1.0 0.066 0.0	49.4 59.1 44.3 73.9 36		1.0 0.019 0.0 48.0 62.5 42.2 75.4 34		1.0 0.067 0.0	1.0 0.0 0.086 47.4 64.3 37.0 74.2 29		1.0 0.067 0.0				
37	35	31	1.0 0.083 0.0	49.9 57.9 45.1 73.4 37		1.0 0.036 0.0 48.5 61.4 43.0 74.9 35		1.0 0.083 0.0	1.0 0.0 0.053 47.4 64.2 38.6 74.9 31		1.0 0.083 0.0				
38	36	32	1.0 0.1 0.0	50.4 56.7 45.7 72.9 38		1.0 0.052 0.0 49.0 60.2 43.7 74.4 36		1.0 0.1 0.0	1.0 0.0 0.02 47.4 64.0 40.2 75.6 32		1.0 0.1 0.0				
39	37	33	1.0 0.116 0.0	50.9 55.5 46.4 72.3 39		1.0 0.069 0.0 49.5 59.0 44.5 73.9 37		1.0 0.117 0.0	1.0 0.007 0.0 47.6 63.4 41.6 75.8 33		1.0 0.117 0.0				
41	38	34	1.0 0.133 0.0	51.5 54.2 47.2 71.9 41		1.0 0.085 0.0 50.0 57.8 45.2 73.4 38		1.0 0.133 0.0	1.0 0.026 0.0 48.2 62.1 42.5 75.2 34		1.0 0.133 0.0				
42	39	35	1.0 0.15 0.0	52.1 52.8 48.1 71.5 42		1.0 0.101 0.0 50.5 56.6 45.9 72.9 39		1.0 0.15 0.0	1.0 0.044 0.0 48.7 60.8 43.4 74.6 35		1.0 0.15 0.0				
43	40	36	1.0 0.166 0.0	52.8 51.4 49.0 71.1 43		1.0 0.118 0.0 51.0 55.4 46.5 72.4 40		1.0 0.167 0.0	1.0 0.062 0.0 49.3 59.5 44.2 74.1 36		1.0 0.167 0.0				
44	41	37	1.0 0.183 0.0	53.4 50.1 49.9 70.7 44		1.0 0.132 0.0 51.5 54.3 47.2 72.0 41		1.0 0.183 0.0	1.0 0.081 0.0 49.8 58.1 45.0 73.5 37		1.0 0.183 0.0				
46	42	38	1.0 0.2 0.0	54.1 48.7 50.7 70.3 46		1.0 0.145 0.0 52.0 53.2 47.9 71.7 42		1.0 0.2 0.0	1.0 0.099 0.0 50.4 56.8 45.8 72.9 38		1.0 0.2 0.0				
47	43	39	1.0 0.216 0.0	54.7 47.3 51.5 69.9 47		1.0 0.158 0.0 52.5 52.2 48.7 71.3 43		1.0 0.217 0.0	1.0 0.117 0.0 51.0 55.5 46.5 72.4 39		1.0 0.217 0.0				
48	44	41	1.0 0.233 0.0	55.3 45.8 52.2 69.5 48		1.0 0.172 0.0 53.0 51.1 49.3 71.0 44		1.0 0.233 0.0	1.0 0.133 0.0 51.5 54.2 47.3 71.9 41		1.0 0.233 0.0				
50	45	42	1.0 0.25 0.0	56.0 44.4 53.0 69.1 50		1.0 0.185 0.0 53.5 50.0 50.0 70.7 45		1.0 0.25 0.0	1.0 0.148 0.0 52.1 53.0 48.1 71.6 42		1.0 0.25 0.0				
51	46	43	1.0 0.266 0.0	56.7 43.0 54.1 69.1 51		1.0 0.198 0.0 54.0 48.9 50.7 70.4 46		1.0 0.267 0.0	1.0 0.162 0.0 52.7 51.9 48.9 71.2 43		1.0 0.267 0.0				
52	47	44	1.0 0.283 0.0	57.4 41.5 55.1 69.1 52		1.0 0.211 0.0 54.5 47.8 51.3 70.1 47		1.0 0.283 0.0	1.0 0.177 0.0 53.2 50.6 49.6 70.9 44		1.0 0.283 0.0				
54	48	45	1.0 0.3 0.0	58.2 40.1 56.2 69.0 54		1.0 0.224 0.0 55.0 46.7 51.9 69.8 48		1.0 0.3 0.0	1.0 0.191 0.0 53.8 49.4 50.4 70.6 45		1.0 0.3 0.0				
55	49	46	1.0 0.316 0.0	58.9 38.6 57.1 69.0 55		1.0 0.237 0.0 55.5 45.6 52.4 69.5 49		1.0 0.317 0.0	1.0 0.206 0.0 54.3 48.2 51.1 70.2 46		1.0 0.317 0.0				
57	50	47	1.0 0.333 0.0	59.6 37.1 58.1 68.9 57		1.0 0.25 0.0 56.0 44.5 53.0 69.2 50		1.0 0.333 0.0	1.0 0.22 0.0 54.9 47.0 51.7 69.9 47		1.0 0.333 0.0				
58	51	48	1.0 0.35 0.0	60.3 35.5 59.0 68.9 58		1.0 0.261 0.0 56.5 43.5 53.7 69.2 51		1.0 0.35 0.0	1.0 0.235 0.0 55.5 45.7 52.4 69.5 48		1.0 0.35 0.0				
60	52	49	1.0 0.366 0.0	61.0 34.0 59.9 68.9 60		1.0 0.272 0.0 57.0 42.6 54.5 69.1 52		1.0 0.367 0.0	1.0 0.25 0.0 56.0 44.5 53.0 69.2 49		1.0 0.367 0.0				
61	53	51	1.0 0.383 0.0	61.8 32.5 60.8 69.0 61		1.0 0.283 0.0 57.5 41.6 55.2 69.1 53		1.0 0.383 0.0	1.0 0.262 0.0 56.6 43.4 53.8 69.1 51		1.0 0.383 0.0				
63	54	52	1.0 0.4 0.0	62.5 31.2 61.9 69.3 63		1.0 0.295 0.0 58.0 40.6 55.9 69.1 54		1.0 0.4 0.0	1.0 0.275 0.0 57.1 42.4 54.6 69.1 52		1.0 0.4 0.0				
64	55	53	1.0 0.416 0.0	63.3 29.8 62.9 69.6 64		1.0 0.306 0.0 58.5 39.6 56.6 69.1 55		1.0 0.417 0.0	1.0 0.287 0.0 57.6 41.3 55.4 69.1 53		1.0 0.417 0.0				
65	56	54	1.0 0.433 0.0	64.1 28.4 63.9 70.0 65		1.0 0.317 0.0 58.9 38.6 57.2 69.0 56		1.0 0.433 0.0	1.0 0.3 0.0 58.2 40.2 56.2 69.1 54		1.0 0.433 0.0				
67	57	55	1.0 0.45 0.0	64.9 27.0 64.9 70.3 67		1.0 0.328 0.0 59.4 37.6 57.9 69.0 57		1.0 0.45 0.0	1.0 0.312 0.0 58.7 39.0 56.9 69.0 55		1.0 0.45 0.0				
68	58	56	1.0 0.466 0.0	65.6 25.6 65.8 70.6 68		1.0 0.34 0.0 59.9 36.6 58.5 69.0 58		1.0 0.467 0.0	1.0 0.325 0.0 59.3 37.9 57.7 69.0 56		1.0 0.467 0.0				
70	59	57	1.0 0.483 0.0	66.4 24.1 66.7 70.9 70		1.0 0.351 0.0 60.4 35.5 59.1 69.0 59		1.0 0.483 0.0	1.0 0.337 0.0 59.8 36.8 58.4 69.0 57		1.0 0.483 0.0				
71	60	58	1.0 0.5 0.0	67.2 22.6 67.6 71.2 71		1.0 0.362 0.0 60.9 34.5 59.7 68.9 60		1.0 0.5 0.0	1.0 0.35 0.0 60.3 35.6 59.0 69.0 58		1.0 0.5 0.0				
72	61	60	1.0 0.516 0.0	68.0 21.2 68.8 72.0 72		1.0 0.373 0.0 61.4 33.4 60.3 68.9 61		1.0 0.517 0.0	1.0 0.362 0.0 60.9 34.5 59.7 68.9 60		1.0 0.517 0.0				
74	62	61	1.0 0.533 0.0	68.9 19.7 70.0 72.8 74		1.0 0.385 0.0 61.9 32.4 61.0 69.1 62		1.0 0.533 0.0	1.0 0.375 0.0 61.4 33.3 60.3 68.9 61		1.0 0.533 0.0				
75	63	62	1.0 0.55 0.0	69.7 18.2 71.2 73.5 75		1.0 0.397 0.0 62.5 31.5 61.8 69.3 63		1.0 0.55 0.0	1.0 0.388 0.0 62.0 32.2 61.2 69.1 62		1.0 0.55 0.0				
76	64	63	1.0 0.566 0.0	70.6 16.7 72.4 74.3 76		1.0 0.409 0.0 63.0 30.5 62.5 69.6 64		1.0 0.567 0.0	1.0 0.402 0.0 62.7 31.1 62.0 69.4 63		1.0 0.567 0.0				
78	65	64	1.0 0.583 0.0	71.5 15.1 73.5 75.0 78		1.0 0.421 0.0 63.6 29.5 63.2 69.8 65		1.0 0.583 0.0	1.0 0.415 0.0 63.3 30.0 62.9 69.7 64		1.0 0.583 0.0				
79	66	65	1.0 0.6 0.0	72.3 13.5 74.6 75.8 79		1.0 0.434 0.0 64.2 28.5 64.0 70.0 66		1.0 0.6 0.0	1.0 0.428 0.0 63.9 28.9 63.7 69.9 65		1.0 0.6 0.0				
81	67	66	1.0 0.616 0.0	73.2 11.8 75.6 76.6 81		1.0 0.446 0.0 64.7 27.4 64.7 70.3 67		1.0 0.617 0.0	1.0 0.442 0.0 64.5 27.8 64.5 70.2 66		1.0 0.617 0.0				
82	68	67	1.0 0.633 0.0	74.0 10.4 76.6 77.3 82		1.0 0.458 0.0 65.3 26.4 65.4 70.5 68		1.0 0.633 0.0	1.0 0.455 0.0 65.2 26.6 65.2 70.4 67		1.0 0.633 0.0				
83	69	68	1.0 0.65 0.0	74.7 9.3 77.6 78.2 83		1.0 0.47 0.0 65.8 25.3 66.0 70.7 69		1.0 0.65 0.0	1.0 0.469 0.0 65.8 25.4 66.0 70.7 68		1.0 0.65 0.0				
84	70	70	1.0 0.666 0.0	75.5 8.2 78.6 79.0 84		1.0 0.482 0.0 66.4 24.3 66.7 70.9 70		1.0 0.667 0.0	1.0 0.482 0.0 66.4 24.2 66.7 71.0 70		1.0 0.667 0.0				
84	71	71	1.0 0.683 0.0	76.2 7.0 79.5 79.8 84		1.0 0.494 0.0 66.9 23.2 67.3 71.2 71		1.0 0.683 0.0	1.0 0.496 0.0 67.0 23.0 67.4 71.2 71		1.0 0.683 0.0				
85	72	72	1.0 0.7 0.0	77.0 5.8 80.4 80.6 85		1.0 0.506 0.0 67.5 22.1 68.1 71.6 72		1.0 0.7 0.0	1.0 0.509 0.0 67.7 21.9 68.3 71.7 72		1.0 0.7 0.0				
86	73	73	1.0 0.716 0.0	77.7 4.5 81.3 81.4 86		1.0 0.518 0.0 68.2 21.1 69.0 72.1 73		1.0 0.717 0.0	1.0 0.523 0.0 68.4 20.7 69.3 72.3 73		1.0 0.717 0.0				
87	74	74	1.0 0.733 0.0	78.5 3.3 82.2 82.3 87		1.0 0.531 0.0 68.8 20.0 69.9 72.7 74		1.0 0.733 0.0	1.0 0.537 0.0 69.1 19.5 70.3 73.0 74		1.0 0.733 0.0				
88	75	75	1.0 0.75 0.0	79.2 2.0 83.0 83.1 88		1.0 0.543 0.0 69.4 19.0 70.7 73.2 75		1.0 0.75 0.0	1.0 0.55 0.0 69.8 18.3 71.3 73.6 75		1.0 0.75 0.0				

see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM  
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS  
application for measurement of offset print output, separation cmy<sup>6</sup>\* (CMYK)  
TUB material: code=rh4ta

see similar files: <http://130.149.60.45/~farbmetrik/QE15/QE15.HTM>  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS  
application for measurement of offset print output, separation cmyk6\* (CMYK)  
TUB material: code=rh4ta

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

h <sub>ab,d</sub>	h <sub>ab,s</sub>	h <sub>ab,e</sub>	rgb* <sub>dd361M</sub>	LAB* <sub>ddx361Mi</sub> (x=LabCh)	rgb* <sub>ds361Mi</sub>	LAB* <sub>dsx361Mi</sub> (x=LabCh)	rgb* <sub>dd361Mi</sub>	LAB* <sub>dex361Mi</sub> (x=LabCh)	rgb* <sub>dd361Mi</sub>	LAB* <sub>dex361Mi</sub> (x=LabCh)	rgb* <sub>dd361Mi</sub>	rgb* <sub>dd</sub>	rgb* <sub>ds</sub>	rgb* <sub>de</sub>
88	75	75	1.0 0.75 0.0	79.2 2.0 83.0 83.1 88	1.0 0.543 0.0	69.4 19.0 70.7 73.2 75	1.0 0.75 0.0	1.0 0.55 0.0	69.8 18.3 71.3 73.6 75	1.0 0.75 0.0	1.0			
89	76	76	1.0 0.766 0.0	79.9 1.0 83.9 83.9 89	1.0 0.555 0.0	70.0 17.9 71.6 73.8 76	1.0 0.767 0.0	1.0 0.564 0.0	70.5 17.0 72.2 74.2 76	1.0 0.767 0.0	1.0			
89	77	77	1.0 0.783 0.0	80.6 0.0 84.8 84.8 89	1.0 0.567 0.0	70.7 16.7 72.4 74.3 77	1.0 0.783 0.0	1.0 0.577 0.0	71.2 15.8 73.1 74.8 77	1.0 0.783 0.0	1.0			
90	78	78	1.0 0.8 0.0	81.2 -0.9 85.7 85.7 90	1.0 0.579 0.0	71.3 15.6 73.3 74.9 78	1.0 0.8 0.0	1.0 0.591 0.0	71.9 14.5 74.0 75.4 78	1.0 0.8 0.0	1.0			
91	79	80	1.0 0.816 0.0	81.9 -1.9 86.5 86.5 91	1.0 0.591 0.0	71.9 14.4 74.1 75.5 79	1.0 0.817 0.0	1.0 0.604 0.0	72.6 13.1 74.9 76.0 80	1.0 0.817 0.0	1.0			
91	80	81	1.0 0.833 0.0	82.6 -3.0 87.4 87.4 91	1.0 0.604 0.0	72.5 13.2 74.9 76.0 80	1.0 0.833 0.0	1.0 0.618 0.0	73.3 11.8 75.8 76.7 81	1.0 0.833 0.0	1.0			
92	81	82	1.0 0.85 0.0	83.2 -4.0 88.2 88.3 92	1.0 0.616 0.0	73.2 12.0 75.6 76.6 81	1.0 0.85 0.0	1.0 0.635 0.0	74.1 10.4 76.8 77.5 82	1.0 0.85 0.0	1.0			
93	82	83	1.0 0.866 0.0	83.9 -5.1 89.0 89.2 93	1.0 0.629 0.0	73.8 10.7 76.5 77.2 82	1.0 0.867 0.0	1.0 0.655 0.0	75.0 9.0 77.9 78.5 83	1.0 0.867 0.0	1.0			
93	83	84	1.0 0.883 0.0	84.5 -6.1 89.8 90.0 93	1.0 0.648 0.0	74.7 9.5 77.5 78.1 83	1.0 0.883 0.0	1.0 0.675 0.0	75.9 7.6 79.1 79.5 84	1.0 0.883 0.0	1.0			
94	84	85	1.0 0.9 0.0	85.1 -6.9 90.6 90.8 94	1.0 0.666 0.0	75.5 8.3 78.6 79.0 84	1.0 0.9 0.0	1.0 0.696 0.0	76.8 6.1 80.2 80.5 85	1.0 0.9 0.0	1.0			
94	85	86	1.0 0.916 0.0	85.6 -7.7 91.3 91.7 94	1.0 0.684 0.0	76.3 7.0 79.6 79.9 85	1.0 0.917 0.0	1.0 0.716 0.0	77.8 4.6 81.3 81.5 86	1.0 0.917 0.0	1.0			
95	86	87	1.0 0.933 0.0	86.1 -8.5 92.1 92.5 95	1.0 0.703 0.0	77.1 5.6 80.6 80.8 86	1.0 0.933 0.0	1.0 0.736 0.0	78.7 3.1 82.4 82.5 87	1.0 0.933 0.0	1.0			
95	87	88	1.0 0.95 0.0	86.7 -9.3 92.9 93.3 95	1.0 0.721 0.0	78.0 4.3 81.6 81.7 87	1.0 0.95 0.0	1.0 0.759 0.0	79.7 1.5 83.6 83.6 88	1.0 0.95 0.0	1.0			
96	88	90	1.0 0.966 0.0	87.2 -10.2 93.6 94.2 96	1.0 0.739 0.0	78.8 2.9 82.5 82.6 88	1.0 0.967 0.0	1.0 0.787 0.0	80.8 0.0 85.0 85.0 90	1.0 0.967 0.0	1.0			
96	89	91	1.0 0.983 0.0	87.8 -11.1 94.3 95.0 96	1.0 0.76 0.0	79.7 1.5 83.6 83.6 89	1.0 0.983 0.0	1.0 0.814 0.0	81.9 -1.7 86.5 86.5 91	1.0 0.983 0.0	1.0			
97	90	92	1.0 1.0 0.0	88.3 -11.9 95.1 95.8 97	Y <sub>d</sub> 1.0 0.785 0.0	80.7 0.0 84.9 84.9 90	Y <sub>s</sub> 1.0 1.0 0.0	1.0 0.842 0.0	83.0 -3.4 87.8 87.9 92	Y <sub>e</sub> 1.0 1.0 0.0	1.0			
97	91	93	0.983 1.0 0.0	88.0 -12.5 94.2 95.1 97	1.0 0.809 0.0	81.7 -1.4 86.2 86.2 91	0.983 1.0 0.0	1.0 0.871 0.0	84.1 -5.3 89.2 89.4 93	0.983 1.0 0.0	1.0			
98	92	94	0.966 1.0 0.0	87.7 -13.1 93.4 94.3 98	1.0 0.834 0.0	82.7 -3.0 87.5 87.5 92	0.967 1.0 0.0	1.0 0.91 0.0	85.4 -7.3 91.1 91.4 94	0.967 1.0 0.0	1.0			
98	93	95	0.95 1.0 0.0	87.3 -13.7 92.5 93.5 98	1.0 0.859 0.0	83.6 -4.5 88.7 88.8 93	0.95 1.0 0.0	1.0 0.951 0.0	86.8 -9.4 93.0 93.4 95	0.95 1.0 0.0	1.0			
98	94	96	0.933 1.0 0.0	87.0 -14.3 91.6 92.7 98	1.0 0.887 0.0	84.7 -6.2 90.0 90.3 94	0.933 1.0 0.0	1.0 0.993 0.0	88.1 -11.5 94.8 95.5 96	0.933 1.0 0.0	1.0			
99	95	98	0.916 1.0 0.0	86.6 -14.8 90.8 92.0 99	1.0 0.923 0.0	85.8 -7.9 91.7 92.0 95	0.917 1.0 0.0	0.963 1.0 0.0	87.6 -13.2 93.2 94.1 98	0.917 1.0 0.0	1.0			
99	96	99	0.9 1.0 0.0	86.3 -15.4 89.9 91.2 99	1.0 0.958 0.0	87.0 -9.7 93.3 93.8 96	0.9 1.0 0.0	0.917 1.0 0.0	86.7 -14.8 90.8 92.0 99	0.9 1.0 0.0	1.0			
100	97	100	0.883 1.0 0.0	86.0 -15.9 89.0 90.4 100	1.0 0.994 0.0	88.2 -11.5 94.8 95.6 97	0.883 1.0 0.0	0.871 1.0 0.0	85.8 -16.2 88.4 89.9 100	0.883 1.0 0.0	1.0			
100	98	101	0.866 1.0 0.0	85.6 -16.4 88.2 89.7 100	0.968 1.0 0.0	87.7 -13.0 93.5 94.4 98	0.867 1.0 0.0	0.823 1.0 0.0	84.7 -17.7 86.3 88.1 101	0.867 1.0 0.0	1.0			
100	99	102	0.85 1.0 0.0	85.2 -16.9 87.4 89.1 100	0.929 1.0 0.0	86.9 -14.4 91.4 92.6 99	0.85 1.0 0.0	0.774 1.0 0.0	83.5 -19.0 84.1 86.2 102	0.85 1.0 0.0	1.0			
101	100	103	0.833 1.0 0.0	84.8 -17.4 86.7 88.4 101	0.89 1.0 0.0	86.2 -15.7 89.4 90.8 100	0.833 1.0 0.0	0.735 1.0 0.0	82.3 -20.3 82.2 84.7 103	0.833 1.0 0.0	1.0			
101	101	105	0.816 1.0 0.0	84.5 -17.9 86.0 87.8 101	0.849 1.0 0.0	85.3 -16.9 87.5 89.1 101	0.817 1.0 0.0	0.706 1.0 0.0	80.9 -21.7 80.7 83.6 105	0.817 1.0 0.0	1.0			
102	102	106	0.8 1.0 0.0	84.1 -18.3 85.2 87.2 102	0.807 1.0 0.0	84.3 -18.1 85.6 87.5 102	0.8 1.0 0.0	0.676 1.0 0.0	79.5 -23.0 79.1 82.4 106	0.8 1.0 0.0	1.0			
102	103	107	0.783 1.0 0.0	83.7 -18.8 84.5 86.5 102	0.765 1.0 0.0	83.3 -19.2 83.7 85.9 103	0.783 1.0 0.0	0.647 1.0 0.0	78.1 -24.3 77.5 81.3 107	0.783 1.0 0.0	1.0			
102	104	108	0.766 1.0 0.0	83.3 -19.2 83.7 85.9 102	0.734 1.0 0.0	82.2 -20.4 82.2 84.7 104	0.767 1.0 0.0	0.62 1.0 0.0	76.9 -25.5 75.9 80.1 108	0.767 1.0 0.0	1.0			
103	105	109	0.75 1.0 0.0	82.9 -19.7 83.0 85.3 103	0.709 1.0 0.0	81.0 -21.6 80.9 83.7 105	0.75 1.0 0.0	0.599 1.0 0.0	76.2 -26.6 74.3 78.9 109	0.75 1.0 0.0	1.0			
104	106	110	0.733 1.0 0.0	82.2 -20.5 82.1 84.6 104	0.684 1.0 0.0	79.9 -22.7 79.5 82.7 106	0.733 1.0 0.0	0.578 1.0 0.0	75.5 -27.7 72.6 77.7 110	0.733 1.0 0.0	1.0			
104	107	112	0.716 1.0 0.0	81.4 -21.3 81.2 84.0 104	0.658 1.0 0.0	78.7 -23.8 78.2 81.7 107	0.717 1.0 0.0	0.558 1.0 0.0	74.8 -28.7 70.9 76.5 112	0.717 1.0 0.0	1.0			
105	108	113	0.7 1.0 0.0	80.6 -22.0 80.3 83.3 105	0.633 1.0 0.0	77.5 -24.9 76.8 80.8 108	0.7 1.0 0.0	0.537 1.0 0.0	74.1 -29.7 69.2 75.3 113	0.7 1.0 0.0	1.0			
106	109	114	0.683 1.0 0.0	79.8 -22.8 79.5 82.7 106	0.613 1.0 0.0	76.7 -25.9 75.4 79.7 109	0.683 1.0 0.0	0.517 1.0 0.0	73.4 -30.6 67.5 74.1 114	0.683 1.0 0.0	1.0			
106	110	115	0.666 1.0 0.0	79.0 -23.5 78.6 82.0 106	0.595 1.0 0.0	76.1 -26.8 74.0 78.7 110	0.667 1.0 0.0	0.496 1.0 0.0	72.7 -31.5 65.8 73.0 115	0.667 1.0 0.0	1.0			
107	111	116	0.65 1.0 0.0	78.2 -24.2 77.7 81.4 107	0.578 1.0 0.0	75.5 -27.7 72.5 77.7 111	0.65 1.0 0.0	0.475 1.0 0.0	72.0 -32.5 64.5 72.3 116	0.65 1.0 0.0	1.0			
107	112	117	0.633 1.0 0.0	77.4 -24.9 76.8 80.7 107	0.56 1.0 0.0	74.9 -28.6 71.1 76.6 112	0.633 1.0 0.0	0.455 1.0 0.0	71.4 -33.4 63.2 71.6 117	0.633 1.0 0.0	1.0			
108	113	119	0.616 1.0 0.0	76.8 -25.7 75.6 79.9 108	0.542 1.0 0.0	74.2 -29.4 69.6 75.6 113	0.617 1.0 0.0	0.434 1.0 0.0	70.7 -34.4 61.9 70.9 119	0.617 1.0 0.0	1.0			
109	114	120	0.6 1.0 0.0	76.2 -26.6 74.3 78.9 109	0.525 1.0 0.0	73.6 -30.2 68.1 74.6 114	0.6 1.0 0.0	0.413 1.0 0.0	70.1 -35.3 60.6 70.2 120	0.6 1.0 0.0	1.0			
110	115	121	0.583 1.0 0.0	75.6 -27.5 72.9 78.0 110	0.507 1.0 0.0	73.0 -31.0 66.7 73.5 115	0.583 1.0 0.0	0.393 1.0 0.0	69.5 -36.1 59.2 69.4 121	0.583 1.0 0.0	1.0			
111	116	122	0.566 1.0 0.0	75.0 -28.3 71.6 77.0 111	0.489 1.0 0.0	72.5 -31.8 65.4 72.8 116	0.567 1.0 0.0	0.373 1.0 0.0	68.8 -37.0 58.0 68.8 122	0.567 1.0 0.0	1.0			
112	117	123	0.55 1.0 0.0	74.5 -29.1 70.2 76.0 112	0.471 1.0 0.0	71.9 -32.7 64.3 72.2 117	0.55 1.0 0.0	0.362 1.0 0.0	68.1 -38.1 57.1 68.7 123	0.55 1.0 0.0	1.0			
113	118	124	0.533 1.0 0.0	73.9 -29.9 68.8 75.0 113	0.454 1.0 0.0	71.4 -33.5 63.2 71.5 118	0.533 1.0 0.0	0.35 1.0 0.0	67.3 -39.2 56.2 68.6 124	0.533 1.0 0.0	1.0			
114	119	126	0.516 1.0 0.0	73.3 -30.6 67.4 74.1 114	0.436 1.0 0.0	70.8 -34.3 62.0 70.9 119	0.517 1.0 0.0	0.338 1.0 0.0	66.6 -40.3 55.3 68.5 126	0.517 1.0 0.0	1.0			
115	120	127	0.5 1.0 0.0	72.7 -31.3 66.0 73.1 115	0.418 1.0 0.0	70.3 -35.1 60.9 70.3 120	0.5 1.0 0.0	0.327 1.0 0.0	65.8 -41.3 54.4 68.4 127	0.5 1.0 0.0	1.0			

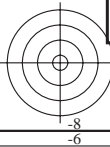


1-1131030-L0 QE150-73 LAB\*la0, YN=0%, XYZnw=2.4, 2.5, 2.6, 85.1, 88.8, 104.3, LAB\*nw=17.7, 0.0, 0.0 95.5, 0.0, 0.0

Output: Offset standard print; separation cmyk6\*, D65, page 11/33

TUB-test chart QE15; hue code: H\*e=R50Ye  
48 step hue circles; rgb-LabCh\*tables

input: rgb/cmyk -> rgb<sub>de</sub>  
output: 3D-linearization to cmyk\*<sub>de</sub>



Data of Maximum color M in colorimetric system Offset standard print; separation cmykn6\*; D65 for input or output; Six hue angles of the 60 degree standard colours RYGCMB;  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours RYGCMB:  $d_{ab,d} = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3$ ; Six hue angles of the elementary colours RYGCMB:  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	$rgb^*_{dd361M}$	$LAB^*_{d361M}$	$LAB^*_{d361Mi}(x=LabCh)$	$rgb^*_{ds361Mi}$	$LAB^*_{ds361Mi}(x=LabCh)$	$rgb^*_{dd361Mi}$	$rgb^*_{de361Mi}$	$LAB^*_{dex361Mi}(x=LabCh)$	$rgb^*_{dd361Mi}$	$rgb^*_{ds361Mi}$	$rgb^*_{de361Mi}$
115	120	127	0.5	1.0	0.0	72.7	-31.3	66.0	73.1	115	0.418	1.0	0.0
116	121	128	0.483	1.0	0.0	72.2	-32.1	65.0	72.5	116	0.4	1.0	0.0
117	122	129	0.466	1.0	0.0	71.7	-32.9	63.9	71.9	117	0.383	1.0	0.0
118	123	130	0.45	1.0	0.0	71.2	-33.7	62.9	71.4	118	0.369	1.0	0.0
119	124	131	0.433	1.0	0.0	70.7	-34.5	61.8	70.8	119	0.359	1.0	0.0
120	125	133	0.416	1.0	0.0	70.2	-35.2	60.8	70.2	120	0.349	1.0	0.0
121	126	134	0.4	1.0	0.0	69.6	-35.9	59.7	69.6	121	0.339	1.0	0.0
121	127	135	0.383	1.0	0.0	69.1	-36.5	58.6	69.1	121	0.329	1.0	0.0
123	128	136	0.366	1.0	0.0	68.3	-37.7	57.4	68.7	123	0.319	1.0	0.0
124	129	137	0.35	1.0	0.0	67.3	-39.2	56.2	68.6	124	0.309	1.0	0.0
126	130	138	0.333	1.0	0.0	66.2	-40.8	54.9	68.4	126	0.299	1.0	0.0
128	131	140	0.316	1.0	0.0	65.1	-42.3	53.6	68.2	128	0.289	1.0	0.0
129	132	141	0.3	1.0	0.0	64.0	-43.7	52.2	68.1	129	0.28	1.0	0.0
131	133	142	0.283	1.0	0.0	63.0	-45.1	50.8	67.9	131	0.27	1.0	0.0
133	134	143	0.266	1.0	0.0	61.9	-46.5	49.3	67.8	133	0.26	1.0	0.0
134	135	144	0.25	1.0	0.0	60.8	-47.8	47.8	67.6	134	0.249	1.0	0.0
136	136	145	0.233	1.0	0.0	60.4	-48.8	46.7	67.6	136	0.237	1.0	0.0
137	137	147	0.216	1.0	0.0	59.9	-49.8	45.6	67.5	137	0.224	1.0	0.0
138	138	148	0.2	1.0	0.0	59.4	-50.8	44.4	67.5	138	0.211	1.0	0.0
140	139	149	0.183	1.0	0.0	59.0	-51.8	43.2	67.4	140	0.198	1.0	0.0
141	140	150	0.166	1.0	0.0	58.5	-52.7	42.0	67.4	141	0.185	1.0	0.0
142	141	151	0.15	1.0	0.0	58.1	-53.6	40.8	67.4	142	0.172	1.0	0.0
144	142	152	0.133	1.0	0.0	57.6	-54.5	39.5	67.3	144	0.159	1.0	0.0
145	143	154	0.116	1.0	0.0	57.0	-55.9	38.3	67.8	145	0.147	1.0	0.0
147	144	155	0.1	1.0	0.0	56.3	-57.8	37.1	68.7	147	0.134	1.0	0.0
149	145	156	0.083	1.0	0.0	55.5	-59.7	35.8	69.6	149	0.122	1.0	0.0
150	146	157	0.066	1.0	0.0	54.8	-61.6	34.4	70.6	150	0.112	1.0	0.0
152	147	158	0.049	1.0	0.0	54.1	-63.4	32.9	71.5	152	0.103	1.0	0.0
154	148	159	0.033	1.0	0.0	53.4	-65.3	31.4	72.4	154	0.093	1.0	0.0
156	149	161	0.016	1.0	0.0	52.6	-67.1	29.8	73.4	156	0.084	1.0	0.0
157	150	162	0.0	1.0	0.0	51.9	-68.8	28.1	74.3	157	0.074	1.0	0.0
158	151	163	0.0	1.0	0.016	52.0	-68.5	26.9	73.6	158	0.065	1.0	0.017
159	152	164	0.0	1.0	0.033	52.1	-68.3	25.7	72.9	159	0.055	1.0	0.033
160	153	164	0.0	1.0	0.05	52.2	-68.0	24.5	72.2	160	0.046	1.0	0.05
160	154	165	0.0	1.0	0.066	52.2	-67.6	23.3	71.6	160	0.036	1.0	0.067
161	155	166	0.0	1.0	0.083	52.3	-67.3	22.1	70.9	161	0.027	1.0	0.083
162	156	167	0.0	1.0	0.1	52.4	-66.9	21.0	70.2	162	0.017	1.0	0.1
163	157	168	0.0	1.0	0.116	52.5	-66.6	19.9	69.5	163	0.008	1.0	0.117
164	158	169	0.0	1.0	0.133	52.6	-66.1	18.6	68.7	164	0.0	1.0	0.133
165	159	170	0.0	1.0	0.15	52.7	-65.6	17.3	67.9	165	0.0	1.0	0.15
166	160	171	0.0	1.0	0.166	52.8	-65.0	16.0	67.0	166	0.0	1.0	0.167
167	161	172	0.0	1.0	0.183	52.9	-64.5	14.7	66.1	167	0.0	1.0	0.183
168	162	173	0.0	1.0	0.2	53.0	-63.9	13.4	65.3	168	0.0	1.0	0.2
169	163	174	0.0	1.0	0.216	53.1	-63.3	12.2	64.4	169	0.0	1.0	0.217
170	164	175	0.0	1.0	0.233	53.2	-62.6	11.0	63.6	170	0.0	1.0	0.233
170	165	175	0.0	1.0	0.25	53.2	-61.9	9.8	62.7	170	0.0	1.0	0.25

see similar files: <http://130.149.60.45/~farbmetrik/QE15/QE15L0FP.PDF> / .PS  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

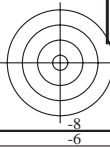
TUB registration: 20130201-QE15/QE15L0FP.PDF / .PS  
application for measurement of offset print output, separation cmykn6\* (CMYK)  
TUB material: code=rh4ta

1-1131130-L0 QE150-73 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 cmykn6\*, D65, page 12/33

TUB-test chart QE15; hue code:  $H^*_e=R50Y_e$   
48 step hue circles;  $rgb-LabCh$ \*tables

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





Data of Maximum color M in colorimetric system Offset standard print; separation cmy<sup>6</sup>\*; D65 for input or output; Six hue angles of the 60 degree standard colours RYGBCM<sub>d</sub>: h<sub>ab,ds</sub> = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;  
Six hue angles of the device colours RYGBCM<sub>d</sub>: h<sub>ab,d</sub> = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3; Six hue angles of the elementary colours RYGBCM<sub>e</sub>: h<sub>ab,e</sub> = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

h <sub>ab,d</sub>	h <sub>ab,s</sub>	h <sub>ab,e</sub>	rgb* <sub>dd361M</sub>	LAB* <sub>dsx361Mi</sub> (x=LabCh)	rgb* <sub>ds361Mi</sub>	LAB* <sub>dsx361Mi</sub> (x=LabCh)	rgb* <sub>de361Mi</sub>	LAB* <sub>dex361Mi</sub> (x=LabCh)	rgb* <sub>dd361Mi</sub>	rgb* <sub>de361Mi</sub>	rgb* <sub>ds361Mi</sub>	rgb* <sub>de361Mi</sub>	
170	165	175	0.0	1.0	0.25	53.2	-61.9	9.8	62.7	170	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
173	167	177	0.0	1.0	0.283	53.5	-60.8	6.7	61.2	173	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
176	169	179	0.0	1.0	0.316	53.7	-59.5	3.7	59.6	176	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
179	171	181	0.0	1.0	0.35	53.9	-58.1	0.9	58.1	179	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
181	173	183	0.0	1.0	0.383	54.1	-56.6	-1.8	56.6	181	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
185	175	185	0.0	1.0	0.416	54.3	-55.2	-5.0	55.5	185	0.0	1.0	0.417
186	176	185	0.0	1.0	0.433	54.4	-54.5	-6.6	54.9	186	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
190	178	187	0.0	1.0	0.466	54.6	-52.8	-9.5	53.7	190	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
193	180	189	0.0	1.0	0.5	54.8	-51.0	-12.3	52.5	193	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
196	182	191	0.0	1.0	0.533	55.1	-49.6	-15.0	51.9	196	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
200	184	193	0.0	1.0	0.566	55.3	-48.1	-17.6	51.2	200	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
203	186	195	0.0	1.0	0.6	55.6	-46.4	-20.1	50.6	203	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
206	188	196	0.0	1.0	0.633	55.8	-44.7	-22.5	50.1	206	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
210	190	198	0.0	1.0	0.666	56.1	-43.2	-25.0	50.0	210	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
213	192	200	0.0	1.0	0.7	56.3	-41.6	-27.5	49.9	213	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
216	194	202	0.0	1.0	0.733	56.6	-39.9	-29.8	49.8	216	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
219	196	204	0.0	1.0	0.766	56.8	-38.4	-31.7	49.8	219	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
221	198	206	0.0	1.0	0.8	57.0	-37.2	-33.5	50.1	221	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
224	200	207	0.0	1.0	0.833	57.3	-36.0	-35.2	50.3	224	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
226	202	209	0.0	1.0	0.866	57.5	-34.6	-36.8	50.6	226	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
229	204	211	0.0	1.0	0.9	57.7	-33.4	-38.6	51.0	229	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
231	206	213	0.0	1.0	0.933	57.9	-32.1	-40.3	51.6	231	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
233	208	215	0.0	1.0	0.966	58.1	-30.7	-42.0	52.1	233	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
236	210	216	0.0	1.0	1.0	58.3	-29.2	-43.7	52.6	236	0.0	1.0	1.0

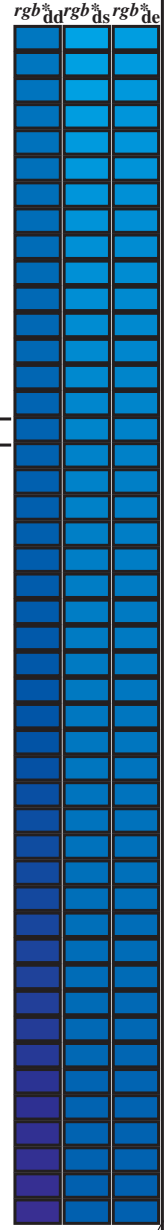
see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM  
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS  
application for measurement of offset print output, separation cmy<sup>6</sup>\* (CMYK)  
TUB material: code=rha4ta



Data of Maximum color M in colorimetric system Offset standard print; separation cmykn6\*; D65 for input or output; Six hue angles of the 60 degree standard colours RYGBCM;  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours RYGBCM<sub>d</sub>;  $h_{ab,d} = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3$ ; Six hue angles of the elementary colours RYGBCM<sub>e</sub>;  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

h <sub>ab,d</sub>	h <sub>ab,s</sub>	h <sub>ab,e</sub>	rgb <sup>*</sup> <sub>ds361M</sub>	LAB <sup>*</sup> <sub>ds361M</sub>	LAB <sup>*</sup> <sub>ds361Mi (x=LabCh)</sub>	rgb <sup>*</sup> <sub>ds361Mi</sub>	LAB <sup>*</sup> <sub>ds361Mi</sub>	LAB <sup>*</sup> <sub>ds361Mi (x=LabCh)</sub>	rgb <sup>*</sup> <sub>de361Mi</sub>	LAB <sup>*</sup> <sub>de361Mi</sub>	LAB <sup>*</sup> <sub>de361Mi (x=LabCh)</sub>	rgb <sup>*</sup> <sub>de361Mi</sub>	LAB <sup>*</sup> <sub>de361Mi</sub>	LAB <sup>*</sup> <sub>de361Mi (x=LabCh)</sub>	rgb <sup>*</sup> <sub>dd361Mi</sub>	LAB <sup>*</sup> <sub>dd361Mi</sub>	LAB <sup>*</sup> <sub>dd361Mi (x=LabCh)</sub>		
281	255	258	0.0	0.25	1.0	33.3	9.4	-46.0 47.0	281	0.0	0.25	1.0	33.3	9.4	-46.0 47.0	281	0.0	0.25	1.0
282	256	258	0.0	0.233	1.0	32.7	10.5	-46.2 47.4	282	0.0	0.233	1.0	32.7	10.5	-46.2 47.4	282	0.0	0.233	1.0
283	257	259	0.0	0.216	1.0	32.0	11.5	-46.4 47.8	283	0.0	0.216	1.0	32.0	11.5	-46.4 47.8	283	0.0	0.216	1.0
285	258	260	0.0	0.2	1.0	31.4	12.5	-46.5 48.2	285	0.0	0.2	1.0	31.4	12.5	-46.5 48.2	285	0.0	0.2	1.0
286	259	261	0.0	0.183	1.0	30.8	13.6	-46.7 48.6	286	0.0	0.183	1.0	30.8	13.6	-46.7 48.6	286	0.0	0.183	1.0
287	260	262	0.0	0.166	1.0	30.1	14.7	-46.8 49.0	287	0.0	0.166	1.0	30.1	14.7	-46.8 49.0	287	0.0	0.166	1.0
288	261	263	0.0	0.15	1.0	29.5	15.8	-46.9 49.4	288	0.0	0.15	1.0	29.5	15.8	-46.9 49.4	288	0.0	0.15	1.0
289	262	264	0.0	0.133	1.0	28.9	16.8	-46.9 49.9	289	0.0	0.133	1.0	28.9	16.8	-46.9 49.9	289	0.0	0.133	1.0
290	263	265	0.0	0.116	1.0	28.3	17.8	-47.0 50.3	290	0.0	0.116	1.0	28.3	17.8	-47.0 50.3	290	0.0	0.116	1.0
291	264	266	0.0	0.1	1.0	27.9	18.6	-47.1 50.6	291	0.0	0.1	1.0	27.9	18.6	-47.1 50.6	291	0.0	0.1	1.0
292	265	267	0.0	0.083	1.0	27.5	19.4	-47.1 51.0	292	0.0	0.083	1.0	27.5	19.4	-47.1 51.0	292	0.0	0.083	1.0
293	266	268	0.0	0.066	1.0	27.0	20.2	-47.2 51.4	293	0.0	0.066	1.0	27.0	20.2	-47.2 51.4	293	0.0	0.066	1.0
293	267	269	0.0	0.049	1.0	26.6	21.0	-47.3 51.7	293	0.0	0.049	1.0	26.6	21.0	-47.3 51.7	293	0.0	0.049	1.0
294	268	269	0.0	0.033	1.0	26.2	21.8	-47.3 52.1	294	0.0	0.033	1.0	26.2	21.8	-47.3 52.1	294	0.0	0.033	1.0
295	269	270	0.0	0.016	1.0	25.7	22.6	-47.3 52.5	295	0.0	0.016	1.0	25.7	22.6	-47.3 52.5	295	0.0	0.016	1.0
296	270	271	0.0	0.0	1.0	25.3	23.5	-47.3 52.8	296	0.0	0.0	1.0	25.3	23.5	-47.3 52.8	296	0.0	0.0	1.0
297	271	272	0.016	0.0	1.0	25.8	24.6	-46.8 52.9	297	0.0	0.385	1.0	38.3	0.8	-45.3 45.4	271	0.017	0.0	1.0
299	272	273	0.033	0.0	1.0	26.3	25.8	-46.2 52.9	299	0.0	0.371	1.0	37.8	1.6	-45.4 45.5	272	0.033	0.0	1.0
300	273	274	0.05	0.0	1.0	26.9	26.9	-45.6 52.9	300	0.0	0.359	1.0	37.3	2.4	-45.5 45.7	273	0.05	0.0	1.0
301	274	275	0.066	0.0	1.0	27.4	28.0	-45.0 53.0	301	0.0	0.346	1.0	36.9	3.2	-45.6 45.8	274	0.067	0.0	1.0
303	275	276	0.083	0.0	1.0	27.9	29.1	-44.3 53.0	303	0.0	0.334	1.0	36.4	4.0	-45.7 46.0	275	0.083	0.0	1.0
304	276	277	0.1	0.0	1.0	28.5	30.2	-43.6 53.1	304	0.0	0.321	1.0	36.0	4.8	-45.8 46.1	276	0.1	0.0	1.0
306	277	278	0.116	0.0	1.0	29.0	31.2	-42.9 53.1	306	0.0	0.309	1.0	35.5	5.6	-45.8 46.3	277	0.117	0.0	1.0
307	278	279	0.133	0.0	1.0	29.4	32.1	-42.3 53.1	307	0.0	0.296	1.0	35.0	6.5	-45.9 46.4	278	0.133	0.0	1.0
307	279	280	0.15	0.0	1.0	29.7	32.7	-41.9 53.2	307	0.0	0.283	1.0	34.6	7.3	-45.9 46.6	279	0.15	0.0	1.0
308	280	281	0.166	0.0	1.0	30.0	33.3	-41.5 53.2	308	0.0	0.271	1.0	34.1	8.1	-45.9 46.7	280	0.167	0.0	1.0
309	281	282	0.183	0.0	1.0	30.3	33.9	-41.0 53.2	309	0.0	0.258	1.0	33.6	8.9	-45.9 46.9	281	0.183	0.0	1.0
310	282	283	0.2	0.0	1.0	30.6	34.5	-40.6 53.3	310	0.0	0.245	1.0	33.1	9.8	-46.0 47.1	282	0.2	0.0	1.0
311	283	284	0.216	0.0	1.0	30.9	35.0	-40.1 53.3	311	0.0	0.231	1.0	32.6	10.7	-46.2 47.5	283	0.217	0.0	1.0
311	284	285	0.233	0.0	1.0	31.2	35.6	-39.6 53.3	311	0.0	0.216	1.0	32.1	11.6	-46.3 47.8	284	0.233	0.0	1.0
312	285	285	0.25	0.0	1.0	31.5	36.2	-39.2 53.4	312	0.0	0.202	1.0	31.5	12.5	-46.5 48.2	285	0.25	0.0	1.0
314	286	286	0.266	0.0	1.0	31.8	37.8	-38.3 53.8	314	0.0	0.188	1.0	31.0	13.4	-46.6 48.6	286	0.267	0.0	1.0
316	287	287	0.283	0.0	1.0	32.1	39.4	-37.4 54.3	316	0.0	0.173	1.0	30.4	14.3	-46.7 48.9	287	0.283	0.0	1.0
318	288	288	0.3	0.0	1.0	32.4	40.9	-36.4 54.8	318	0.0	0.159	1.0	29.9	15.2	-46.8 49.3	288	0.3	0.0	1.0
320	289	289	0.316	0.0	1.0	32.7	42.4	-35.3 55.3	320	0.0	0.145	1.0	29.4	16.2	-46.8 49.6	289	0.317	0.0	1.0
322	290	290	0.333	0.0	1.0	33.0	43.9	-34.2 55.7	322	0.0	0.13	1.0	28.8	17.1	-46.9 50.0	290	0.333	0.0	1.0
323	291	291	0.35	0.0	1.0	33.3	45.4	-33.1 56.2	323	0.0	0.112	1.0	28.3	18.1	-47.0 50.4	291	0.35	0.0	1.0
325	292	292	0.366	0.0	1.0	33.6	46.9	-31.8 56.7	325	0.0	0.091	1.0	27.7	19.1	-47.1 50.9	292	0.367	0.0	1.0
327	293	293	0.383	0.0	1.0	34.0	48.0	-30.9 57.1	327	0.0	0.07	1.0	27.2	20.1	-47.1 51.3	293	0.383	0.0	1.0
328	294	294	0.4	0.0	1.0	34.6	48.9	-30.3 57.5	328	0.0	0.05	1.0	26.6	21.1	-47.2 51.8	294	0.4	0.0	1.0
329	295	295	0.416	0.0	1.0	35.1	49.7	-29.7 57.9	329	0.0	0.029	1.0	26.1	22.1	-47.2 52.2	295	0.417	0.0	1.0
330	296	296	0.433	0.0	1.0	35.7	50.5	-29.0 58.3	330	0.0	0.008	1.0	25.6	23.1	-47.3 52.7	296	0.433	0.0	1.0
331	297	297	0.45	0.0	1.0	36.2	51.4	-28.4 58.7	331	0.007	0.0	1.0	25.6	24.0	-47.0 52.9	297	0.45	0.0	1.0
332	298	298	0.466	0.0	1.0	36.7	52.2	-27.7 59.1	332	0.019	0.0	1.0	25.9	24.8	-46.6 52.9	298	0.467	0.0	1.0
332	299	299	0.483	0.0	1.0	37.3	53.0	-27.0 59.5	332	0.031	0.0	1.0	26.3	25.7	-46.2 52.9	299	0.483	0.0	1.0
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



see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM  
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS  
application for measurement of offset print output, separation cmykn6\* (CMYK)  
TUB material: code=rha4ta





Data of Maximum color M in colorimetric system Offset standard print; separation cmy<sup>6</sup>\*\_D65 for input or output; Six hue angles of the 60 degree standard colours RYGBCM<sub>d</sub>: *h*<sub>ab,ds</sub> = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours RYGBCM<sub>d</sub>: *h*<sub>ab,d</sub> = 32.8, 97.2, 157.8, 236.2, 296.4, 353.3; Six hue angles of the elementary colours RYGBCM<sub>e</sub>: *h*<sub>ab,e</sub> = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

Table with columns: *h*<sub>ab,d</sub>, *h*<sub>ab,s</sub>, *h*<sub>ab,e</sub>, *rgb*<sup>6</sup>\*\_dd361M, *LAB*<sup>6</sup>\*\_ddx361Mi (x=LabCh), *rgb*<sup>6</sup>\*\_ds361Mi, *LAB*<sup>6</sup>\*\_dsx361Mi (x=LabCh), *rgb*<sup>6</sup>\*\_dd361Mi, *rgb*<sup>6</sup>\*\_de361Mi, *LAB*<sup>6</sup>\*\_dex361Mi (x=LabCh), *rgb*<sup>6</sup>\*\_dd361Mi, *rgb*<sup>6</sup>\*\_dd361Mi, *rgb*<sup>6</sup>\*\_ds361Mi, *rgb*<sup>6</sup>\*\_de361Mi. Rows 360-392.

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS  
application for measurement of offset print output, separation cmy<sup>6</sup>\* (CMYK)  
TUB material: code=rha4ta

see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM  
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

ref	HC*File	rgb*File	icr*File	hsa*File	rgb*File	LabCM*File	cmyk*_sep*File	cmyn6*_sep*File	hsa*File	rgb*File	LabCM*File	delta
0/648	R00Y_100_100de	1.0	1.0	0.5	390	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1/657	R13Y_100_100de	0.0	1.0	0.5	37	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/665	R25Y_100_100de	0.0	1.0	0.5	44	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/675	R35Y_100_100de	0.0	1.0	0.5	52	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/684	R50Y_100_100de	0.0	1.0	0.5	60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/693	R63Y_100_100de	0.0	1.0	0.5	68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/702	R75Y_100_100de	0.0	1.0	0.5	83	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7/711	R88Y_100_100de	0.0	1.0	0.5	90	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/720	Y00G_100_100de	0.0	1.0	0.5	90	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/639	Y13G_100_100de	0.0	1.0	0.5	97	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/558	Y25G_100_100de	0.0	1.0	0.5	104	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/477	Y38G_100_100de	0.0	1.0	0.5	112	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/396	Y50G_100_100de	0.0	1.0	0.5	120	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13/315	Y63G_100_100de	0.0	1.0	0.5	128	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14/234	Y75G_100_100de	0.0	1.0	0.5	136	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15/153	Y88G_100_100de	0.0	1.0	0.5	143	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16/72	G00C_100_100de	0.0	1.0	0.0	150	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17/73	G13C_100_100de	0.0	1.0	0.0	157	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18/74	G25C_100_100de	0.0	1.0	0.0	164	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19/75	G38C_100_100de	0.0	1.0	0.0	172	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20/76	G50C_100_100de	0.0	1.0	0.0	180	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21/77	G63C_100_100de	0.0	1.0	0.0	188	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22/78	G75C_100_100de	0.0	1.0	0.0	196	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23/79	G88C_100_100de	0.0	1.0	0.0	203	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24/80	C00B_100_100de	0.0	1.0	0.0	210	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25/71	C13B_100_100de	0.0	1.0	0.0	217	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26/62	C25B_100_100de	0.0	1.0	0.0	224	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27/53	C38B_100_100de	0.0	1.0	0.0	232	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28/44	C50B_100_100de	0.0	1.0	0.0	240	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29/35	C63B_100_100de	0.0	1.0	0.0	248	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30/26	C75B_100_100de	0.0	1.0	0.0	256	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31/17	C88B_100_100de	0.0	1.0	0.0	263	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32/8	B00M_100_100de	0.0	1.0	0.0	270	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33/89	B13M_100_100de	0.0	1.0	0.0	277	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34/170	B25M_100_100de	0.25	0.0	0.5	284	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35/251	B38M_100_100de	0.375	0.0	0.5	292	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36/332	B50M_100_100de	0.5	0.0	0.5	300	0.045	0.0	0.0	0.0	0.0	0.0	0.0
37/413	B63M_100_100de	0.625	0.0	0.5	308	0.146	0.0	0.0	0.0	0.0	0.0	0.0
38/494	B75M_100_100de	0.75	0.0	0.5	316	0.273	0.0	0.0	0.0	0.0	0.0	0.0
39/575	B88M_100_100de	0.875	0.0	0.5	323	0.332	0.0	0.0	0.0	0.0	0.0	0.0
40/656	M00R_100_100de	1.0	0.0	1.0	330	0.407	0.0	0.0	0.0	0.0	0.0	0.0
41/655	M13R_100_100de	1.0	0.0	0.875	337	0.528	0.0	0.0	0.0	0.0	0.0	0.0
42/654	M25R_100_100de	1.0	0.0	0.75	344	0.661	0.0	0.0	0.0	0.0	0.0	0.0
43/653	M38R_100_100de	1.0	0.0	0.625	352	0.841	0.0	0.0	0.0	0.0	0.0	0.0
44/652	M50R_100_100de	1.0	0.0	0.5	360	0.948	0.0	0.0	0.0	0.0	0.0	0.0
45/651	M63R_100_100de	1.0	0.0	0.375	368	1.05	0.0	0.0	0.0	0.0	0.0	0.0
46/650	M75R_100_100de	1.0	0.0	0.25	376	1.16	0.0	0.0	0.0	0.0	0.0	0.0
47/649	M88R_100_100de	1.0	0.0	0.125	383	1.27	0.0	0.0	0.0	0.0	0.0	0.0
48/648	R00Y_100_100de	1.0	0.0	0.0	390	1.0	0.0	0.0	0.0	0.0	0.0	0.0
49/0	NV_000de	0.0	0.0	0.0	360	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50/91	NV_0125de	0.125	0.125	0.125	360	0.125	0.125	0.125	0.125	0.125	0.125	0.125
51/182	NV_025de	0.25	0.25	0.25	360	0.25	0.25	0.25	0.25	0.25	0.25	0.25
52/273	NV_0375de	0.375	0.375	0.375	360	0.375	0.375	0.375	0.375	0.375	0.375	0.375
53/564	NV_050de	0.5	0.5	0.5	360	0.5	0.5	0.5	0.5	0.5	0.5	0.5
54/455	NV_0625de	0.625	0.625	0.625	360	0.625	0.625	0.625	0.625	0.625	0.625	0.625
55/546	NV_075de	0.75	0.75	0.75	360	0.75	0.75	0.75	0.75	0.75	0.75	0.75
56/637	NV_088de	0.875	0.875	0.875	360	0.875	0.875	0.875	0.875	0.875	0.875	0.875
57/728	NV_100de	1.0	1.0	1.0	360	1.0	1.0	1.0	1.0	1.0	1.0	1.0







http://130.149.60.45/~farbmetrik/QE15/QE15L0FP.PDF /.PS; 3D-linearization F: 3D-linearization QE15/QE15L30FP.DAT in file (F), page 21/33

Table with columns: n, HHC\*File, rgb\*File, iet\*File, hsa\*File, rgb\*File, LabC\*File, cmyk\*sep\*File, LabC\*File, hsa\*File, rgb\*File, LabC\*File, delta. Contains 161 rows of color calibration data.

Mean color difference of this page:

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

TUB-test chart QE15; hue code: H\*e=R50Ye colors and differences, ΔE\*

QE150-TN; Page 21/33-F

QE1511L

QE1511R

Table with 16 columns: n, HHC\*File, rgb\_Rate, icr\_File, Hsa\_Rate, rgb\*Rate, LabCM\*File, LabCM\*SepRate, cmyk\*SepRate, LabCM\*Rate, Hsa\*Rate, rgb\*Rate, LabCM\*Rate, LabCM\*SepRate, cmyk\*SepRate, LabCM\*Rate. The table lists 242 rows of color calibration data for various color patches.

Mean color difference of this page: delta

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

TUB-test chart QE15; hue code: H\*e=R50Ye  
colors and differences, AE\* \*

QE150-TN; Page 22/33-F



http://130.149.60.45/~farbmetrik/QE15/QE15LOFP.PDF /.PS; 3D-linearization F: 3D-linearization QE15/QE15LE30FP.DAT in file (F), page 23/33

Table with 32 columns: n, HHC\*File, rgb\*File, iet\*File, Hsa\*File, rgb\*File, LabCM\*File, LabCM\*File, cmyn\*sep, cmyn\*sep, LabCM\*File, Hsa\*File, rgb\*File, LabCM\*File, LabCM\*File, delta. Rows 243-323.

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

TUB-test chart QE15; hue code: H\*e=R50Ye colors and differences, AE\*<sup>\*</sup>

see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

http://130.149.60.45/~farbmetrik/QE15/QE15L0FP.PDF /.PS; 3D-linearization F: 3D-linearization QE15/QE15LE30FP.DAT in file (F), page 24/33

Table with 20 columns: n, HHC\*File, rgb\*File, icr\*File, Hrs\*File, rgb\*File, LabC\*File, cmyk\*sep\*File, LabC\*File, Hrs\*File, rgb\*File, LabC\*File, Hrs\*File, cmyk\*sep\*File, LabC\*File, Hrs\*File, rgb\*File, LabC\*File, Hrs\*File, cmyk\*sep\*File. The table contains numerical data for each row.

see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

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

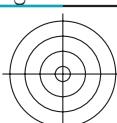
Mean color difference of this page:

TUB-test chart QE15; hue code: H\*\_e=R50Y\_e colors and differences, ΔE\*\_\*

QE150-7N; Page 24/33-F

I-1133230-F0





http://130.149.60.45/~farbmetrik/QE15/QE15LOFP.PDF /.PS; 3D-linearization F: 3D-linearization QE15/QE15LE30FP.DAT in file (F), page 26/33

n	HC*Fide	rgb_Fide	LabC*Fide	rgb*Fide	LabC*Fide	cmyn*sep_Fide	LabC*Fide	rgb*Fide	LabC*Fide	rgb*Fide	LabC*Fide
486	ROY0_075_0750e	0.75	0.0	0.75	0.0	0.0	0.932	0.287	0.724	0.0	0.0
487	R35Y_075_0750e	0.75	0.75	0.75	0.0	0.0	0.932	0.543	0.543	0.0	0.0
488	R18Y_075_0750e	0.75	0.75	0.75	0.75	0.0	0.929	0.291	0.347	0.0	0.0
489	ROY0_075_0750e	0.75	0.75	0.75	0.75	0.0	0.929	0.291	0.347	0.0	0.0
490	B6SK_075_0750e	0.75	0.5	0.75	0.75	0.0	0.928	0.039	0.039	0.0	0.0
491	B57K_075_0750e	0.75	0.5	0.75	0.75	0.0	0.918	0.0	0.0	0.0	0.0
492	B59K_075_0750e	0.75	0.5	0.75	0.75	0.0	0.918	0.0	0.0	0.0	0.0
493	B43R_087_0870e	0.75	0.75	0.75	0.75	0.0	0.925	0.0	0.0	0.0	0.0
494	B38R_100_1000e	0.75	0.75	0.75	0.75	0.0	0.925	0.0	0.0	0.0	0.0
495	R15Y_075_0750e	0.75	0.0	0.75	0.0	0.0	0.924	0.285	0.0	0.0	0.0
496	ROY0_075_0620e	0.75	0.75	0.625	0.437	0.0	0.793	0.0	0.0	0.209	0.0
497	R11Y_075_0620e	0.75	0.75	0.625	0.437	0.0	0.793	0.0	0.0	0.209	0.0
498	R11Y_075_0620e	0.75	0.75	0.625	0.437	0.0	0.793	0.0	0.0	0.209	0.0
499	B69K_075_0620e	0.75	0.75	0.625	0.437	0.0	0.798	0.0	0.0	0.209	0.0
500	B59K_075_0620e	0.75	0.75	0.625	0.437	0.0	0.798	0.0	0.0	0.209	0.0
501	B59K_075_0620e	0.75	0.75	0.625	0.437	0.0	0.798	0.0	0.0	0.209	0.0
502	B42K_087_0750e	0.75	0.75	0.625	0.437	0.0	0.821	0.0	0.0	0.166	0.0
503	B36R_100_0870e	0.75	0.75	0.625	0.437	0.0	0.821	0.0	0.0	0.166	0.0
504	R18Y_075_0620e	0.75	0.75	0.625	0.437	0.0	0.793	0.0	0.0	0.209	0.0
505	R18Y_075_0620e	0.75	0.75	0.625	0.437	0.0	0.793	0.0	0.0	0.209	0.0
506	R26Y_075_0500e	0.75	0.75	0.5	0.5	0.0	0.671	0.0	0.0	0.0	0.0
507	R26Y_075_0500e	0.75	0.75	0.5	0.5	0.0	0.671	0.0	0.0	0.0	0.0
508	B01R_075_0500e	0.75	0.75	0.5	0.5	0.0	0.671	0.0	0.0	0.0	0.0
509	B01R_075_0500e	0.75	0.75	0.5	0.5	0.0	0.671	0.0	0.0	0.0	0.0
510	B30R_075_0500e	0.75	0.75	0.5	0.5	0.0	0.662	0.0	0.0	0.0	0.0
511	B30R_075_0500e	0.75	0.75	0.5	0.5	0.0	0.662	0.0	0.0	0.0	0.0
512	B34R_100_0750e	0.75	0.75	0.625	0.437	0.0	0.662	0.0	0.0	0.0	0.0
513	B34R_100_0750e	0.75	0.75	0.625	0.437	0.0	0.662	0.0	0.0	0.0	0.0
514	R38Y_075_0620e	0.75	0.75	0.625	0.437	0.0	0.628	0.0	0.0	0.0	0.0
515	R23Y_075_0500e	0.75	0.75	0.5	0.5	0.0	0.644	0.0	0.0	0.0	0.0
516	R18Y_075_0570e	0.75	0.75	0.625	0.437	0.0	0.584	0.259	0.0	0.0	0.0
517	R18Y_075_0570e	0.75	0.75	0.625	0.437	0.0	0.584	0.259	0.0	0.0	0.0
518	B69K_075_0570e	0.75	0.75	0.625	0.437	0.0	0.545	0.193	0.0	0.0	0.0
519	B69K_075_0570e	0.75	0.75	0.625	0.437	0.0	0.545	0.193	0.0	0.0	0.0
520	B38R_087_0500e	0.75	0.75	0.625	0.437	0.0	0.526	0.0	0.0	0.0	0.0
521	B38R_087_0500e	0.75	0.75	0.625	0.437	0.0	0.526	0.0	0.0	0.0	0.0
522	R68Y_075_0500e	0.75	0.5	0.75	0.0	0.0	0.517	0.0	0.0	0.0	0.0
523	R68Y_075_0500e	0.75	0.5	0.75	0.0	0.0	0.517	0.0	0.0	0.0	0.0
524	R30Y_075_0500e	0.75	0.5	0.75	0.0	0.0	0.491	0.0	0.0	0.0	0.0
525	R30Y_075_0500e	0.75	0.5	0.75	0.0	0.0	0.491	0.0	0.0	0.0	0.0
526	R31Y_075_0570e	0.75	0.75	0.625	0.437	0.0	0.481	0.0	0.0	0.0	0.0
527	R31Y_075_0570e	0.75	0.75	0.625	0.437	0.0	0.481	0.0	0.0	0.0	0.0
528	B50K_075_0520e	0.75	0.75	0.625	0.437	0.0	0.407	0.0	0.0	0.0	0.0
529	B50K_075_0520e	0.75	0.75	0.625	0.437	0.0	0.407	0.0	0.0	0.0	0.0
530	B34R_087_0370e	0.75	0.75	0.625	0.437	0.0	0.397	0.0	0.0	0.0	0.0
531	B34R_087_0370e	0.75	0.75	0.625	0.437	0.0	0.397	0.0	0.0	0.0	0.0
532	R88Y_075_0500e	0.75	0.5	0.75	0.0	0.0	0.376	0.0	0.0	0.0	0.0
533	R88Y_075_0500e	0.75	0.5	0.75	0.0	0.0	0.376	0.0	0.0	0.0	0.0
534	R67Y_075_0500e	0.75	0.75	0.625	0.437	0.0	0.365	0.0	0.0	0.0	0.0
535	R67Y_075_0500e	0.75	0.75	0.625	0.437	0.0	0.365	0.0	0.0	0.0	0.0
536	R30Y_075_0520e	0.75	0.75	0.625	0.437	0.0	0.349	0.0	0.0	0.0	0.0
537	R30Y_075_0520e	0.75	0.75	0.625	0.437	0.0	0.349	0.0	0.0	0.0	0.0
538	B13R_100_0500e	0.75	0.75	0.625	0.437	0.0	0.352	0.0	0.0	0.0	0.0
539	B13R_100_0500e	0.75	0.75	0.625	0.437	0.0	0.352	0.0	0.0	0.0	0.0
540	Y06G_075_0750e	0.75	0.75	0.625	0.437	0.0	0.286	0.0	0.0	0.0	0.0
541	Y06G_075_0750e	0.75	0.75	0.625	0.437	0.0	0.286	0.0	0.0	0.0	0.0
542	Y06G_075_0500e	0.75	0.75	0.625	0.437	0.0	0.286	0.0	0.0	0.0	0.0
543	Y06G_075_0500e	0.75	0.75	0.625	0.437	0.0	0.286	0.0	0.0	0.0	0.0
544	Y06G_075_0500e	0.75	0.75	0.625	0.437	0.0	0.286	0.0	0.0	0.0	0.0
545	Y06G_075_0500e	0.75	0.75	0.625	0.437	0.0	0.286	0.0	0.0	0.0	0.0
546	Y06G_075_0500e	0.75	0.75	0.625	0.437	0.0	0.286	0.0	0.0	0.0	0.0
547	B09R_087_0120e	0.75	0.75	0.625	0.437	0.0	0.188	0.0	0.0	0.0	0.0
548	B09R_087_0120e	0.75	0.75	0.625	0.437	0.0	0.188	0.0	0.0	0.0	0.0
549	Y13G_087_0870e	0.75	0.75	0.625	0.437	0.0	0.144	0.0	0.0	0.0	0.0
550	Y13G_087_0870e	0.75	0.75	0.625	0.437	0.0	0.144	0.0	0.0	0.0	0.0
551	Y18G_087_0620e	0.75	0.75	0.625	0.437	0.0	0.147	0.0	0.0	0.0	0.0
552	Y23G_087_0500e	0.75	0.75	0.625	0.437	0.0	0.147	0.0	0.0	0.0	0.0
553	Y23G_087_0500e	0.75	0.75	0.625	0.437	0.0	0.147	0.0	0.0	0.0	0.0
554	Y50G_087_0250e	0.75	0.75	0.625	0.437	0.0	0.173	0.0	0.0	0.0	0.0
555	Y50G_087_0250e	0.75	0.75	0.625	0.437	0.0	0.173	0.0	0.0	0.0	0.0
556	G00B_087_0120e	0.75	0.75	0.625	0.437	0.0	0.162	0.0	0.0	0.0	0.0
557	G00B_087_0120e	0.75	0.75	0.625	0.437	0.0	0.162	0.0	0.0	0.0	0.0
558	G73B_100_0250e	0.75	0.75	0.625	0.437	0.0	0.077	0.0	0.0	0.0	0.0
559	G73B_100_0250e	0.75	0.75	0.625	0.437	0.0	0.077	0.0	0.0	0.0	0.0
560	Y26G_100_0870e	0.75	0.75	0.625	0.437	0.0	0.144	0.0	0.0	0.0	0.0
561	Y38G_100_0620e	0.75	0.75	0.625	0.437	0.0	0.144	0.0	0.0	0.0	0.0
562	Y68G_100_0500e	0.75	0.75	0.625	0.437	0.0	0.144	0.0	0.0	0.0	0.0
563	Y68G_100_0500e	0.75	0.75	0.625	0.437	0.0	0.144	0.0	0.0	0.0	0.0
564	G00B_100_0250e	0.75	0.75	0.625	0.437	0.0	0.144	0.0	0.0	0.0	0.0
565	G00B_100_0250e	0.75	0.75	0.625	0.437	0.0	0.144	0.0	0.0	0.0	0.0
566	G50B_100_0250e	0.75	0.75	0.625	0.437	0.0	0.144	0.0	0.0	0.0	0.0

delta

Mean color difference of this page:

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

TUB-test chart QE15; hue code: H\*\_e=R50Y\_e  
colors and differences, ΔE\*

QE150-7N; Page 26/33-F

I-113230-F0

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

http://130.149.60.45/~farbmetrik/QE15/QE15LOFP.PDF /.PS; 3D-linearization F: 3D-linearization QE15/QE15LE30FP.DAT in file (F), page 27/33

Table with 13 columns: n, HHC\*Fide, rgb\_Fide, icr\_Fide, hsa\_Fide, rgpb\_Fide, LabCH\*Fide, cmynd6\*sep\_Fide, cmyn\*sep\_Fide, LabCH\*Fide, Hsa\*Fide, rgpb\*Fide, LabCH\*Fide, delta. Rows list various color patches and their corresponding colorimetric values.

see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB-test chart QE15; hue code: H\*e=R50Ye colors and differences, ΔE\*<sup>a</sup>

Table with 30 columns: n, HHC\*File, rpb\_Erate, icr\_Erate, hsa\_Erate, rpb\*File, LabC\*File, cmyk\*sep\_Erate, rpb\*\*SepRate, LabC\*\*SepRate, hsa\*\*SepRate, rpb\*\*File, LabC\*\*File, cmyk\*\*SepRate, rpb\*\*File, LabC\*\*File, hsa\*\*SepRate, LabC\*\*SepRate, hsa\*\*File, LabC\*\*File, hsa\*\*SepRate, LabC\*\*SepRate, hsa\*\*File, LabC\*\*File, hsa\*\*SepRate, LabC\*\*SepRate, hsa\*\*File, LabC\*\*File, hsa\*\*SepRate, LabC\*\*SepRate. The table contains color calibration data for various printing conditions.

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

TUB-test chart QE15; hue code: H\*e=R50Ye colors and differences, ΔE\*\*

Mean color difference of this page: delta

QE150-7N; Page 2833-F



QE15.111L

TUB registration: 20130201-QE15/QE15L0FP.PDF /.PS application for measurement of offset print output, separation cmyk6\* (CMYK) TUB material: code=rha4ta

QE15.111R

http://130.149.60.45/~farbmetrik/QE15/QE15L0FP.PDF /.PS; 3D-linearization QE15/QE15LE30FP.DAT in file (F), page 29/33

n	HC*File	rgb*File	LabCH*File	Hsb*File	rgb*File	LabCH*File	cmyn*sep*File	rgb*File	Hsb*File	LabCH*File	delta
729	NW_100.00e	1.0	1.0	1.0	1.0	1.0	0.0	1.0	360	95.4	0.0
730	G50B_100.012de	0.875	1.0	1.0	1.0	1.0	0.0	1.0	360	95.4	0.0
731	G50B_100.025de	0.75	1.0	1.0	1.0	1.0	0.0	1.0	360	95.4	0.0
732	G50B_100.037de	0.625	1.0	1.0	1.0	1.0	0.0	1.0	360	95.4	0.0
733	G50B_100.050de	0.5	1.0	1.0	1.0	1.0	0.0	1.0	360	95.4	0.0
734	G50B_100.062de	0.375	1.0	1.0	1.0	1.0	0.0	1.0	360	95.4	0.0
735	G50B_100.075de	0.25	1.0	1.0	1.0	1.0	0.0	1.0	360	95.4	0.0
736	G50B_100.087de	0.125	1.0	1.0	1.0	1.0	0.0	1.0	360	95.4	0.0
737	G50B_100.100de	0.0	1.0	1.0	1.0	1.0	0.0	1.0	360	95.4	0.0
738	ROY_100.012de	1.0	0.875	0.875	1.0	1.0	0.0	1.0	360	95.4	0.0
739	NW_087de	0.875	0.875	0.875	1.0	1.0	0.0	1.0	360	95.4	0.0
740	G50B_087.012de	0.75	0.875	0.875	1.0	1.0	0.0	1.0	360	95.4	0.0
741	G50B_087.025de	0.625	0.875	0.875	1.0	1.0	0.0	1.0	360	95.4	0.0
742	G50B_087.037de	0.5	0.875	0.875	1.0	1.0	0.0	1.0	360	95.4	0.0
743	G50B_087.050de	0.375	0.875	0.875	1.0	1.0	0.0	1.0	360	95.4	0.0
744	G50B_087.062de	0.25	0.875	0.875	1.0	1.0	0.0	1.0	360	95.4	0.0
745	G50B_087.075de	0.125	0.875	0.875	1.0	1.0	0.0	1.0	360	95.4	0.0
746	G50B_087.087de	0.0	0.875	0.875	1.0	1.0	0.0	1.0	360	95.4	0.0
747	ROY_100.025de	0.875	0.75	0.75	1.0	1.0	0.0	1.0	360	95.4	0.0
748	ROY_100.037de	0.75	0.75	0.75	1.0	1.0	0.0	1.0	360	95.4	0.0
749	NW_075de	0.625	0.75	0.75	1.0	1.0	0.0	1.0	360	95.4	0.0
750	G50B_075.012de	0.5	0.75	0.75	1.0	1.0	0.0	1.0	360	95.4	0.0
751	G50B_075.025de	0.375	0.75	0.75	1.0	1.0	0.0	1.0	360	95.4	0.0
752	G50B_075.037de	0.25	0.75	0.75	1.0	1.0	0.0	1.0	360	95.4	0.0
753	G50B_075.050de	0.125	0.75	0.75	1.0	1.0	0.0	1.0	360	95.4	0.0
754	G50B_075.062de	0.0	0.75	0.75	1.0	1.0	0.0	1.0	360	95.4	0.0
755	ROY_100.037de	1.0	0.625	0.625	1.0	1.0	0.0	1.0	360	95.4	0.0
756	ROY_100.050de	0.875	0.625	0.625	1.0	1.0	0.0	1.0	360	95.4	0.0
757	ROY_100.062de	0.75	0.625	0.625	1.0	1.0	0.0	1.0	360	95.4	0.0
758	ROY_100.075de	0.625	0.625	0.625	1.0	1.0	0.0	1.0	360	95.4	0.0
759	NW_062de	0.5	0.625	0.625	1.0	1.0	0.0	1.0	360	95.4	0.0
760	G50B_062.012de	0.375	0.625	0.625	1.0	1.0	0.0	1.0	360	95.4	0.0
761	G50B_062.025de	0.25	0.625	0.625	1.0	1.0	0.0	1.0	360	95.4	0.0
762	G50B_062.037de	0.125	0.625	0.625	1.0	1.0	0.0	1.0	360	95.4	0.0
763	G50B_062.050de	0.0	0.625	0.625	1.0	1.0	0.0	1.0	360	95.4	0.0
764	ROY_100.062de	1.0	0.5	0.5	1.0	1.0	0.0	1.0	360	95.4	0.0
765	ROY_100.075de	0.875	0.5	0.5	1.0	1.0	0.0	1.0	360	95.4	0.0
766	ROY_100.087de	0.75	0.5	0.5	1.0	1.0	0.0	1.0	360	95.4	0.0
767	ROY_100.100de	0.625	0.5	0.5	1.0	1.0	0.0	1.0	360	95.4	0.0
768	NW_050de	0.5	0.5	0.5	1.0	1.0	0.0	1.0	360	95.4	0.0
770	G50B_050.012de	0.375	0.5	0.5	1.0	1.0	0.0	1.0	360	95.4	0.0
771	G50B_050.025de	0.25	0.5	0.5	1.0	1.0	0.0	1.0	360	95.4	0.0
772	G50B_050.037de	0.125	0.5	0.5	1.0	1.0	0.0	1.0	360	95.4	0.0
773	G50B_050.050de	0.0	0.5	0.5	1.0	1.0	0.0	1.0	360	95.4	0.0
774	ROY_100.062de	1.0	0.375	0.375	1.0	1.0	0.0	1.0	360	95.4	0.0
775	ROY_100.075de	0.875	0.375	0.375	1.0	1.0	0.0	1.0	360	95.4	0.0
776	ROY_100.087de	0.75	0.375	0.375	1.0	1.0	0.0	1.0	360	95.4	0.0
777	ROY_100.100de	0.625	0.375	0.375	1.0	1.0	0.0	1.0	360	95.4	0.0
778	NW_037de	0.5	0.375	0.375	1.0	1.0	0.0	1.0	360	95.4	0.0
779	ROY_050.012de	1.0	0.375	0.375	1.0	1.0	0.0	1.0	360	95.4	0.0
780	G50B_037.012de	0.875	0.375	0.375	1.0	1.0	0.0	1.0	360	95.4	0.0
781	G50B_037.025de	0.75	0.375	0.375	1.0	1.0	0.0	1.0	360	95.4	0.0
782	G50B_037.037de	0.625	0.375	0.375	1.0	1.0	0.0	1.0	360	95.4	0.0
783	ROY_100.075de	1.0	0.25	0.25	1.0	1.0	0.0	1.0	360	95.4	0.0
784	ROY_100.100de	0.875	0.25	0.25	1.0	1.0	0.0	1.0	360	95.4	0.0
785	G50B_02.050de	0.375	0.25	0.25	1.0	1.0	0.0	1.0	360	95.4	0.0
786	G50B_02.037de	0.25	0.25	0.25	1.0	1.0	0.0	1.0	360	95.4	0.0
787	ROY_050.025de	1.0	0.25	0.25	1.0	1.0	0.0	1.0	360	95.4	0.0
788	ROY_050.037de	0.875	0.25	0.25	1.0	1.0	0.0	1.0	360	95.4	0.0
789	NW_025de	0.75	0.25	0.25	1.0	1.0	0.0	1.0	360	95.4	0.0
790	G50B_025.012de	0.625	0.25	0.25	1.0	1.0	0.0	1.0	360	95.4	0.0
791	G50B_025.025de	0.5	0.25	0.25	1.0	1.0	0.0	1.0	360	95.4	0.0
792	G50B_025.037de	0.375	0.25	0.25	1.0	1.0	0.0	1.0	360	95.4	0.0
793	ROY_100.087de	1.0	0.125	0.125	1.0	1.0	0.0	1.0	360	95.4	0.0
794	ROY_075.062de	0.875	0.125	0.125	1.0	1.0	0.0	1.0	360	95.4	0.0
795	ROY_062.050de	0.75	0.125	0.125	1.0	1.0	0.0	1.0	360	95.4	0.0
796	ROY_050.050de	0.625	0.125	0.125	1.0	1.0	0.0	1.0	360	95.4	0.0
797	ROY_037.025de	0.5	0.125	0.125	1.0	1.0	0.0	1.0	360	95.4	0.0
798	ROY_025.025de	0.375	0.125	0.125	1.0	1.0	0.0	1.0	360	95.4	0.0
799	NW_012de	0.25	0.125	0.125	1.0	1.0	0.0	1.0	360	95.4	0.0
800	G50B_012.012de	0.125	0.125	0.125	1.0	1.0	0.0	1.0	360	95.4	0.0
801	ROY_100.100de	1.0	0.0	0.0	1.0	1.0	0.0	1.0	360	95.4	0.0
802	ROY_100.087de	0.875	0.0	0.0	1.0	1.0	0.0	1.0	360	95.4	0.0
803	ROY_075.075de	0.75	0.0	0.0	1.0	1.0	0.0	1.0	360	95.4	0.0
804	ROY_062.062de	0.625	0.0	0.0	1.0	1.0	0.0	1.0	360	95.4	0.0
805	ROY_050.050de	0.5	0.0	0.0	1.0	1.0	0.0	1.0	360	95.4	0.0
806	ROY_037.037de	0.375	0.0	0.0	1.0	1.0	0.0	1.0	360	95.4	0.0
807	ROY_025.025de	0.25	0.0	0.0	1.0	1.0	0.0	1.0	360	95.4	0.0
808	ROY_012.012de	0.125	0.0	0.0	1.0	1.0	0.0	1.0	360	95.4	0.0
809	NW_000de	0.0	0.0	0.0	1.0	1.0	0.0	1.0	360	95.4	0.0

Mean color difference of this page:

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

QE15.111L

see similar files: http://130.149.60.45/~farbmetrik/QE15/QE15.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

QE15.111R









n	HC*Fde	rgb*Fde	icT*Fde	hsa*Fde	rgb*Fde	LabCIP*Fde	cmyp*sep*Fde	cmyp*sep*Rate	delta	hsa*Fde	rgb*Fde	LabCIP*Fde	cmyp*sep*Fde	cmyp*sep*Rate	delta
1053	NW_086de	0.866	0.866	0.866	0.866	85.0	0.007	0.0	0.179	360	1.0	1.0	0.024	0.007	0.0
1054	NW_093de	0.933	0.933	0.933	0.933	90.2	0.005	0.0	0.084	360	1.0	1.0	0.02	0.005	0.0
1055	NW_100de	1.0	1.0	1.0	1.0	95.4	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1056	NW_006de	0.066	0.066	0.066	0.066	17.7	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1057	NW_013de	0.133	0.133	0.133	0.133	22.8	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1058	NW_020de	0.2	0.2	0.2	0.2	33.2	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1059	NW_026de	0.266	0.266	0.266	0.266	38.3	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1060	NW_033de	0.333	0.333	0.333	0.333	43.6	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1061	NW_040de	0.4	0.4	0.4	0.4	48.8	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1062	NW_046de	0.466	0.466	0.466	0.466	53.9	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1063	NW_053de	0.533	0.533	0.533	0.533	59.1	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1064	NW_060de	0.6	0.6	0.6	0.6	64.3	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1065	NW_066de	0.666	0.666	0.666	0.666	69.5	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1066	NW_073de	0.734	0.734	0.734	0.734	74.7	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1067	NW_080de	0.8	0.8	0.8	0.8	79.9	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1068	NW_086de	0.866	0.866	0.866	0.866	85.0	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1069	NW_093de	0.933	0.933	0.933	0.933	90.2	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1070	NW_100de	1.0	1.0	1.0	1.0	95.4	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1071	NW_006de	0.0	0.0	0.0	0.0	17.7	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1072	NW_013de	0.0	0.0	0.0	0.0	22.8	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1073	NW_020de	0.0	0.0	0.0	0.0	33.2	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1074	NW_026de	0.0	0.0	0.0	0.0	43.6	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1075	NW_033de	0.0	0.0	0.0	0.0	48.8	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1076	NW_040de	0.0	0.0	0.0	0.0	53.9	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1077	NW_046de	0.0	0.0	0.0	0.0	59.1	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1078	NW_053de	0.0	0.0	0.0	0.0	64.3	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1079	NW_060de	0.0	0.0	0.0	0.0	69.5	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1079	NW_066de	0.0	0.0	0.0	0.0	74.7	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1079	NW_073de	0.0	0.0	0.0	0.0	79.9	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1079	NW_080de	0.0	0.0	0.0	0.0	85.0	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1079	NW_086de	0.0	0.0	0.0	0.0	90.2	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1079	NW_093de	0.0	0.0	0.0	0.0	95.4	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1079	NW_100de	0.0	0.0	0.0	0.0	17.7	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1079	ROY_100_100de	1.0	1.0	1.0	1.0	95.4	0.0	0.0	0.0	360	1.0	1.0	0.0	0.0	0.0
1079	GY0B_100_100de	0.0	0.0	0.0	0.0	209	0.0	0.0	0.0	195	0.0	0.0	0.0	0.0	0.0
1079	Y00G_100_100de	0.0	0.0	0.0	0.0	47.6	0.0	0.0	0.0	195	0.0	0.0	0.0	0.0	0.0
1079	B00C_100_100de	0.0	0.0	0.0	0.0	56.6	0.0	0.0	0.0	81	0.0	0.0	0.0	0.0	0.0
1079	R00M_100_100de	0.0	0.0	0.0	0.0	82.9	0.0	0.0	0.0	248	0.0	0.0	0.0	0.0	0.0
1079	B50R_100_100de	0.0	0.0	0.0	0.0	37.4	0.0	0.0	0.0	248	0.0	0.0	0.0	0.0	0.0
1079	B50R_100_100de	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	293	0.0	0.0	0.0	0.0	0.0
1079	B50R_100_100de	0.0	0.0	0.0	0.0	0.093	0.0	0.0	0.0	293	0.0	0.0	0.0	0.0	0.0
1079	B50R_100_100de	0.0	0.0	0.0	0.0	34.8	0.0	0.0	0.0	293	0.0	0.0	0.0	0.0	0.0

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

TUB-test chart QE15; hue code: H\*\_e=R50Y\_e  
 colors and differences, ΔE\*\_\*