

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 86/360 = 0.24$

$H^*_- = R75Y_-$

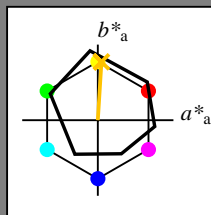
Data for any device (d) or elementary (e) colour:

$HIC^*_-$

hue text for the colours of this page:

$H^*_- = R75Y_-$

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):

$LabCh^*_{-,Ma}$ : 80 4 77 77 86

$HIC^*_{-,Ma}$ : R75Y\_100\_100\_

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

1.0 0.76 0.0 1.0 1.0

triangle lightness  $T^*$

%Gamut

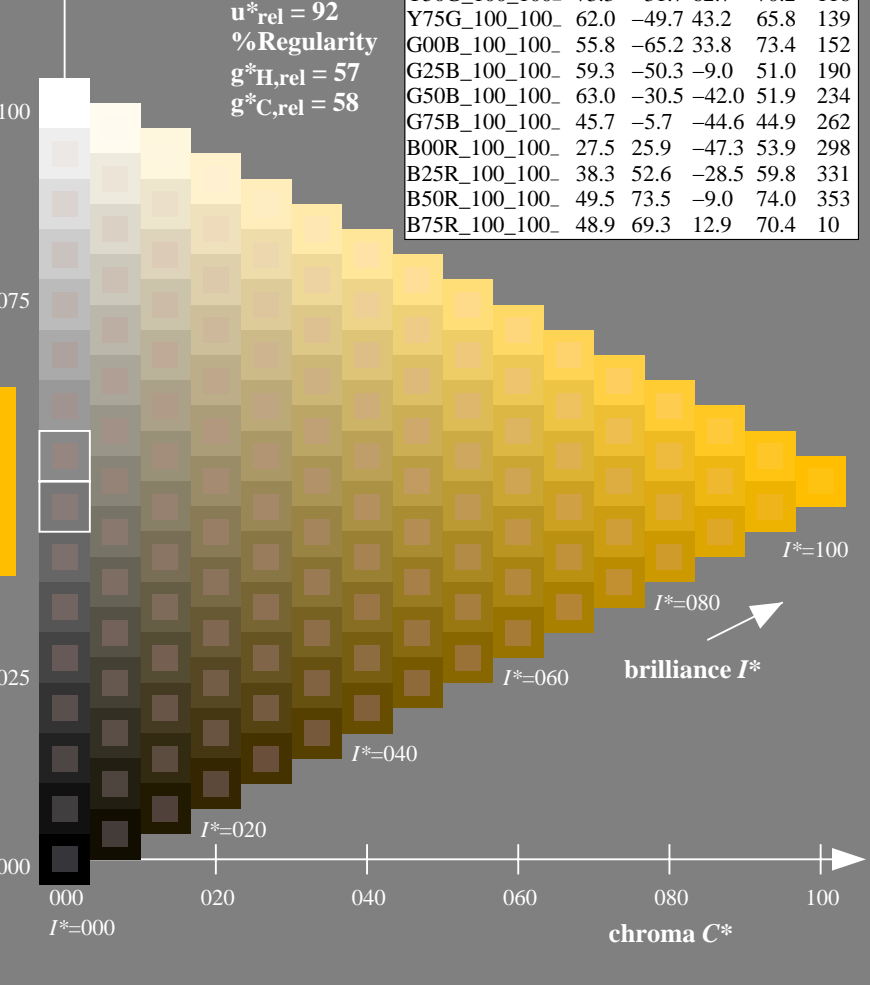
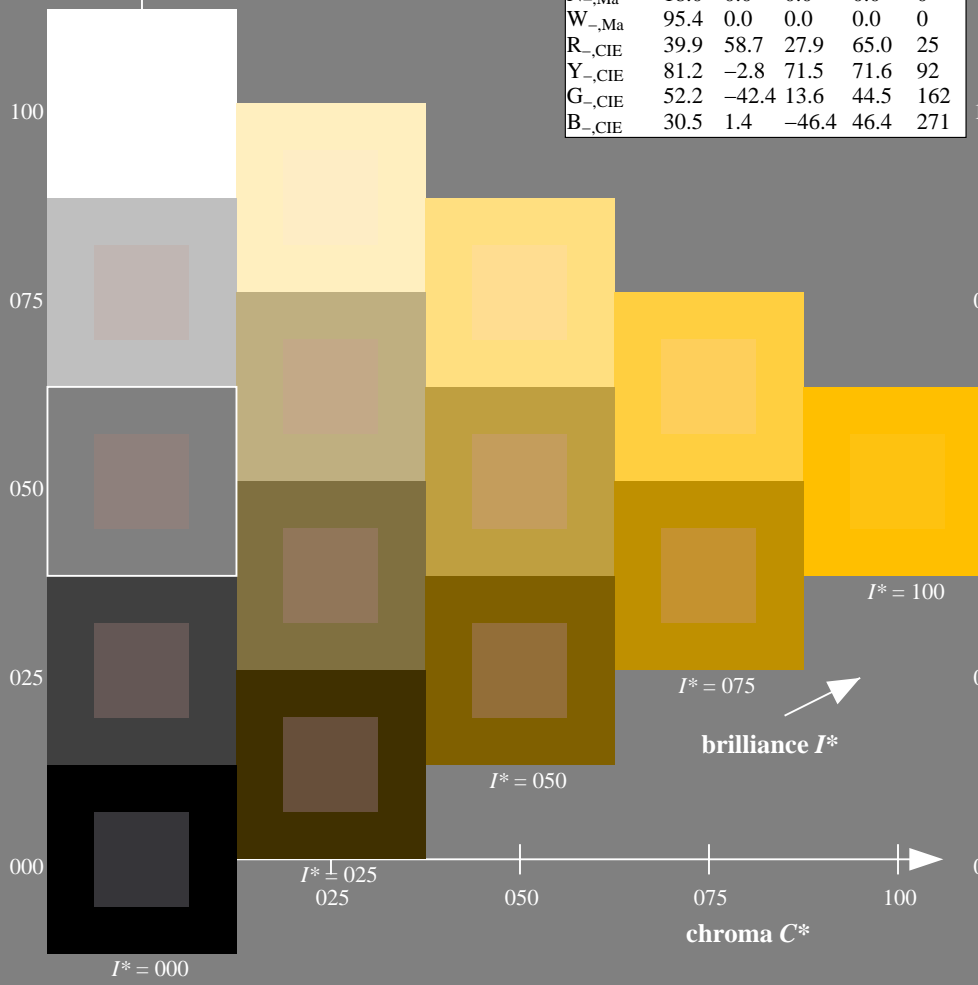
$u^*_{rel} = 92$

%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/QE22/QE22.HTM>  
 technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE22/QE22L0FP.PDF /.PS  
 application for measurement of display output

TUB material: code=rh4ta

1-113030-L0 QE220-7N

TUB-test chart QE22; hue code:  $H^*_- = R75Y_-$   
 Test chart according to DIN 33872, 3D=1, de=1, sRGB\*

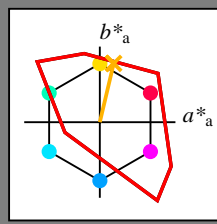
input:  $rgb/cmyk \rightarrow rgb/cmyk$   
 output: no change

Input and Output: Television Luminous System TLS00a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 76/360 = 0.21$

$H^*_e = R75Y_e$

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

$HIC^*_e$   
hue text for the colours of this page:  
 $H^*_e = R75Y_e$   
triangle lightness  $T^*$



**TLS00a; adapted (a) CIELAB data**

name	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
Re,Ma	50.9	78.3	37.3	86.7	25
Ye,Ma	83.7	-3.4	84.5	84.5	92
Ge,Ma	85.1	-64.6	20.7	67.9	162
Ce,Ma	79.0	-34.2	-25.7	42.8	216
Be,Ma	59.2	1.7	-56.6	56.6	271
Me,Ma	57.1	94.1	-57.4	110.3	328
Ne,Ma	0.0	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):

$LabCh^*_{e, Ma}: 73 \ 18 \ 77 \ 79 \ 76$

$HIC^*_{e, Ma}: R75Y\_100\_100_e$

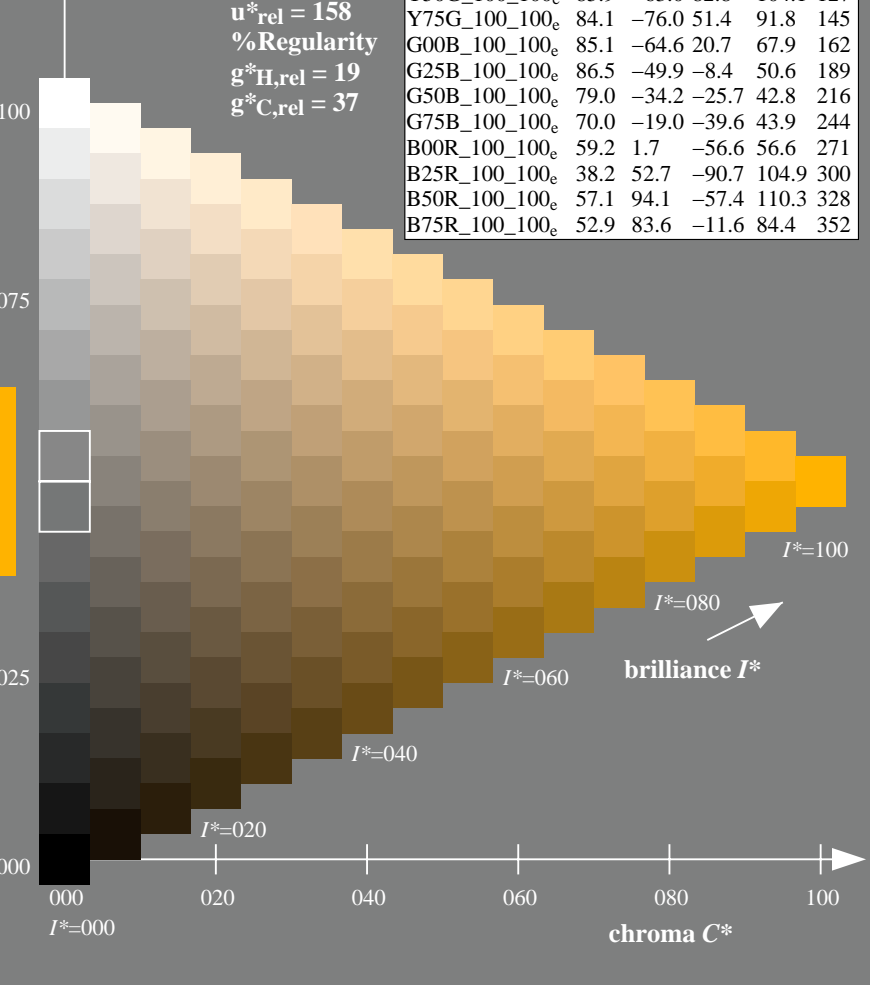
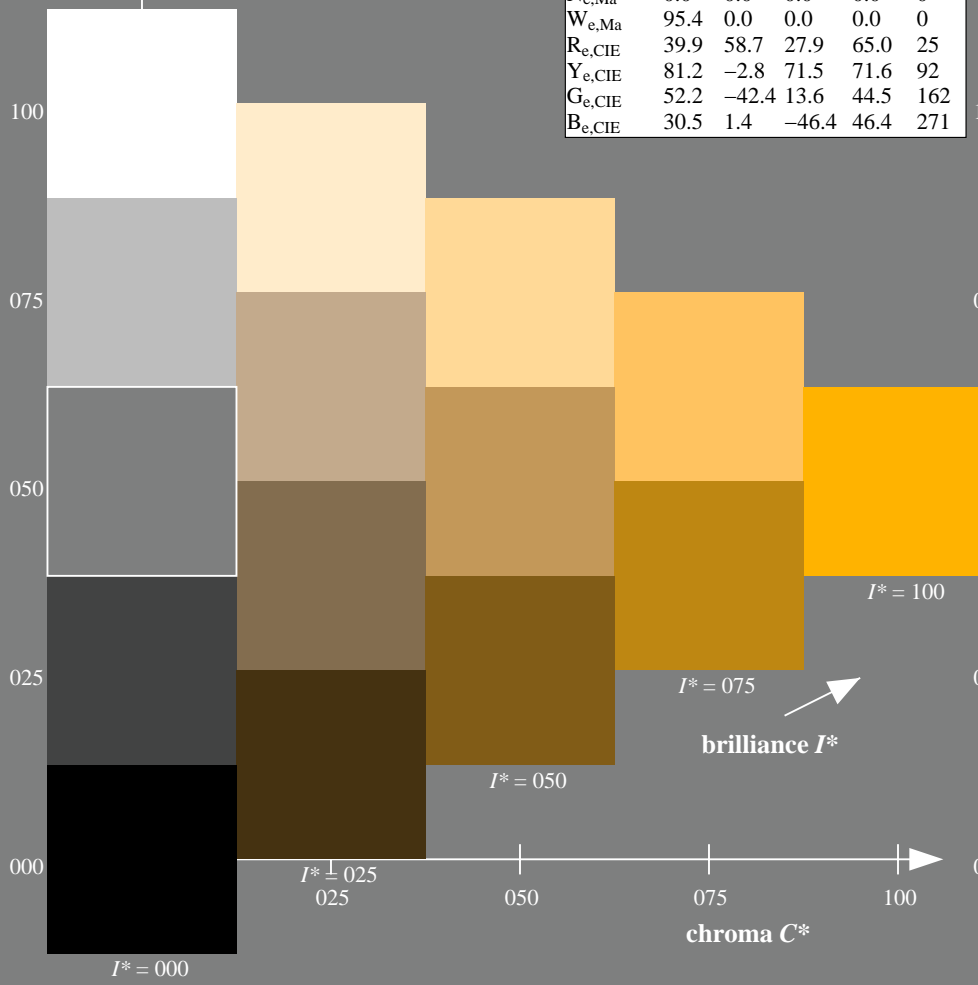
$rgbic^*_{e, Ma}: 1.0 \ 0.68 \ 0.0 \ 1.0 \ 1.0$

triangle lightness  $T^*$

**TLS00a; adapted (a) CIELAB data**

$H^*_e$	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100_e	50.9	78.3	37.3	86.7	25
R25Y_100_100_e	51.3	74.4	64.8	98.7	41
R50Y_100_100_e	63.1	42.7	70.8	82.7	58
R75Y_100_100_e	73.5	18.3	77.7	79.8	76
Y00G_100_100_e	83.7	-3.4	84.5	84.5	92
Y25G_100_100_e	91.0	-29.9	88.9	93.8	108
Y50G_100_100_e	85.9	-63.0	82.8	104.1	127
Y75G_100_100_e	84.1	-76.0	51.4	91.8	145
G00B_100_100_e	85.1	-64.6	20.7	67.9	162
G25B_100_100_e	86.5	-49.9	-8.4	50.6	189
G50B_100_100_e	79.0	-34.2	-25.7	42.8	216
G75B_100_100_e	70.0	-19.0	-39.6	43.9	244
B00R_100_100_e	59.2	1.7	-56.6	56.6	271
B25R_100_100_e	38.2	52.7	-90.7	104.9	300
B50R_100_100_e	57.1	94.1	-57.4	110.3	328
B75R_100_100_e	52.9	83.6	-11.6	84.4	352

%Gamut  
 $u^*_{rel} = 158$   
%Regularity  
 $g^*_{H,rel} = 19$   
 $g^*_{C,rel} = 37$



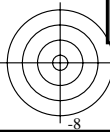
see similar files: <http://130.149.60.45/~farbmetrik/QE22/QE22L0FP.PDF> / .PS; 3D-linearization  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE22/QE22L0FP.PDF / .PS  
application for measurement of display output, no separation

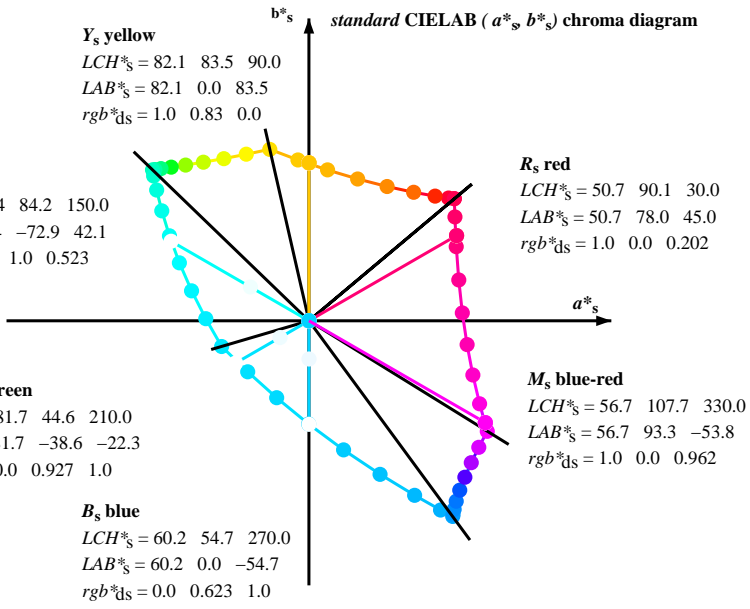
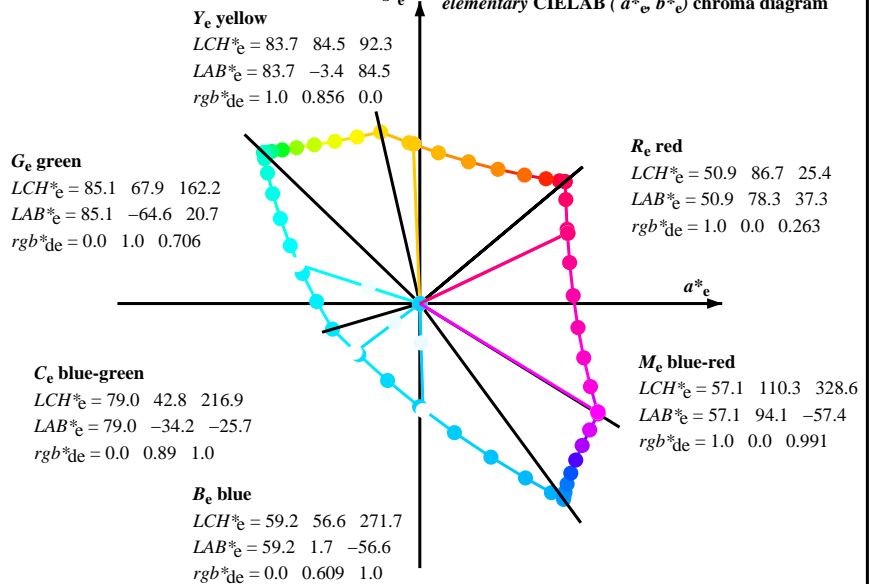
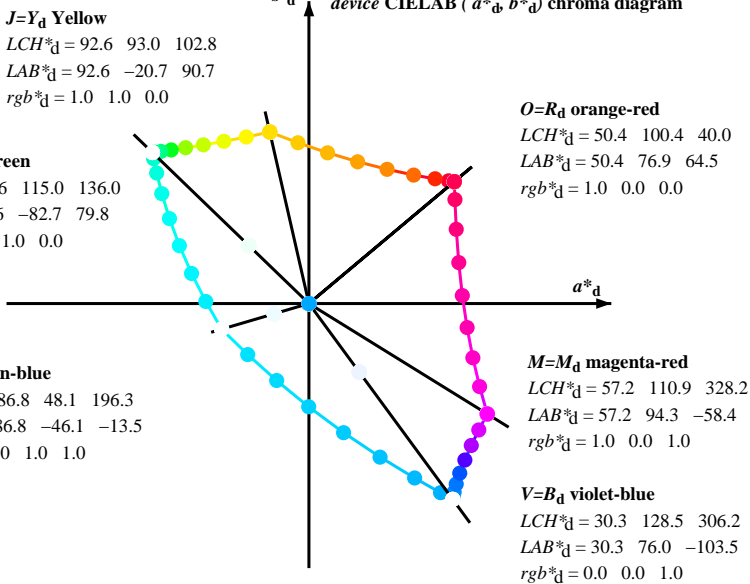
TUB material: code=rh4ta

TUB-test chart QE22; hue code:  $H^*_e=R75Y_e$   
Test chart according to DIN 33872, 3D=1, de=1, sRGB\*

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



Data of Maximum color M in colorimetric system sRGB standard device; no separation, 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  $RYGCBM_d$ :  $h_{ab,d} = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$



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

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

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

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

$$h_{360ab,sij} = h_{ab,si} + j [ h_{ab,si+1} - h_{ab,si} ] / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (3)$$
- 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:  

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

$$h_{360ab,eij} = h_{ab,ei} + j [ h_{ab,ei+1} - h_{ab,ei} ] / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (5)$$
- 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.
- The values  $rgb^*_e$  produce the output of the device-independent elementary hues

see similar files: http://130.149.60.45/~farbmetrik/QE22/QE22L0FP.PDF /.PS; 3D-linearization  
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE22/QE22L0FP.PDF /.PS  
application for measurement of display output, no separation

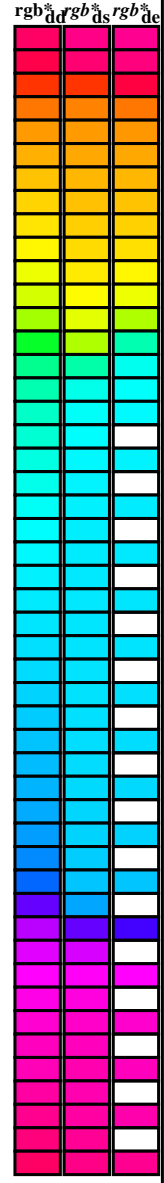
TUB material: code=rh4ta

Data of maximum color M in colorimetric system sRGB standard device; no separation, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<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 RYGBM<sub>d</sub>: h<sub>ab,d</sub> = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; 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* <sub>dd</sub>	rgb* <sub>ds</sub>	rgb* <sub>de</sub>	LAB* <sub>ddx64M</sub>	LAB* <sub>dsx361M</sub>	LAB* <sub>dex361M</sub>	rgb* <sub>ddx361M</sub>	rgb* <sub>dsx361M</sub>	rgb* <sub>dex361M</sub>	LAB* <sub>ddx64M</sub>	LAB* <sub>dsx361M</sub>	LAB* <sub>dex361M</sub>	rgb* <sub>ddx361M</sub>	rgb* <sub>dsx361M</sub>	rgb* <sub>dex361M</sub>																	
40.0	30.0	25.4	1.0	0.0	0.0	50.4	76.9	64.5	100.4	40.0	1.0	0.0	0.0	50.5	76.9	64.6	100.4	40	1.0	0.0	0.203	50.8	78.0	45.1	90.1	30	1.0	0.0	0.263	50.9	78.3	37.3	86.7	25
41.3	37.5	33.8	1.0	0.125	0.0	51.5	73.9	64.9	98.3	41.3	1.0	0.117	0.0	51.5	74.1	64.9	98.5	41	1.0	0.0	0.082	50.6	77.2	58.2	96.7	37	1.0	0.0	0.156	50.7	77.7	51.0	92.9	33
44.6	45.0	42.1	1.0	0.25	0.0	54.0	66.7	65.9	93.8	44.6	1.0	0.25	0.0	54.1	66.7	66.0	93.8	44	1.0	0.256	0.0	54.3	66.1	66.1	93.5	45	1.0	0.157	0.0	52.2	72.0	65.3	97.2	42
50.7	52.5	50.5	1.0	0.375	0.0	58.2	55.4	67.9	87.7	50.7	1.0	0.367	0.0	57.9	56.2	67.9	88.2	50	1.0	0.392	0.0	58.9	53.6	68.6	87.0	52	1.0	0.358	0.0	57.7	56.9	67.8	88.6	49
59.7	60.0	58.8	1.0	0.5	0.0	63.6	41.3	71.0	82.2	59.7	1.0	0.5	0.0	63.7	41.4	71.0	82.2	59	1.0	0.502	0.0	63.8	41.1	71.2	82.2	60	1.0	0.488	0.0	63.1	42.8	70.9	82.8	58
71.0	67.5	67.2	1.0	0.625	0.0	70.1	25.7	75.0	79.3	71.0	1.0	0.617	0.0	69.7	26.8	74.9	79.6	70	1.0	0.58	0.0	67.8	31.4	74.0	80.4	67	1.0	0.577	0.0	67.6	31.8	73.9	80.5	66
82.9	75.0	75.6	1.0	0.75	0.0	77.2	9.8	79.7	80.4	82.9	1.0	0.75	0.0	77.2	9.8	79.8	80.4	82	1.0	0.667	0.0	72.5	20.6	77.0	79.7	75	1.0	0.673	0.0	72.8	19.8	77.3	79.8	75
93.8	82.5	83.9	1.0	0.875	0.0	84.8	-5.7	85.0	85.2	93.8	1.0	0.867	0.0	84.3	-4.6	84.8	85.0	93	1.0	0.74	0.0	76.7	11.2	79.5	80.3	82	1.0	0.755	0.0	77.5	9.3	80.1	80.6	83
102.8	90.0	92.3	1.0	1.0	0.0	92.6	-20.7	90.7	93.0	102.8	1.0	1.0	0.0	92.7	-20.6	90.8	93.1	102	1.0	0.831	0.0	82.1	0.0	83.5	83.5	90	1.0	0.857	0.0	83.7	-3.3	84.5	84.6	92
110.5	97.5	101.0	0.875	1.0	0.0	90.4	-33.1	88.1	94.1	110.5	0.883	1.0	0.0	90.6	-32.2	88.4	94.1	110	1.0	0.918	0.0	87.5	-10.6	87.3	88.0	97	1.0	0.967	0.0	90.6	-16.4	89.5	91.0	100
117.6	105.0	109.7	0.75	1.0	0.0	88.5	-44.9	85.8	96.8	117.6	0.75	1.0	0.0	88.5	-44.8	85.8	96.9	117	0.965	1.0	0.0	92.0	-24.1	90.2	93.4	105	0.888	1.0	0.0	90.7	-31.7	88.5	94.0	109
123.6	112.5	118.5	0.625	1.0	0.0	86.9	-55.8	83.9	100.7	123.6	0.633	1.0	0.0	87.1	-55.0	84.1	100.5	123	0.85	1.0	0.0	90.1	-35.4	87.8	94.7	112	0.743	1.0	0.0	88.5	-45.4	85.8	97.1	117
128.3	120.0	127.2	0.5	1.0	0.0	85.7	-65.2	82.4	105.1	128.3	0.5	1.0	0.0	85.7	-65.1	82.4	105.1	128	0.7	1.0	0.0	87.9	-49.1	85.3	98.4	120	0.529	1.0	0.0	86.0	-62.9	82.9	104.1	127
131.8	127.5	136.0	0.375	1.0	0.0	84.7	-72.8	81.2	109.1	131.8	0.383	1.0	0.0	84.8	-72.2	81.4	108.9	131	0.536	1.0	0.0	86.1	-62.4	83.0	103.9	127	0.132	1.0	0.0	83.8	-81.2	80.1	114.1	135
134.1	135.0	144.7	0.25	1.0	0.0	84.1	-78.2	80.5	112.2	134.1	0.25	1.0	0.0	84.1	-78.2	80.5	112.3	134	0.173	1.0	0.0	83.9	-80.2	80.3	113.5	135	0.0	1.0	0.41	84.1	-76.8	54.3	94.1	144
135.5	142.5	153.4	0.125	1.0	0.0	83.7	-81.4	80.0	114.2	135.5	0.133	1.0	0.0	83.8	-81.2	80.1	114.1	135	0.0	1.0	0.335	83.9	-78.7	61.6	100.0	142	0.0	1.0	0.573	84.6	-70.9	36.3	79.8	152
136.0	150.0	162.2	0.0	1.0	0.0	83.6	-82.7	79.8	115.0	136.0	0.0	1.0	0.0	83.6	-82.7	79.9	115.0	136	0.0	1.0	0.523	84.4	-72.9	42.1	84.3	150	0.0	1.0	0.706	85.2	-64.6	20.7	67.9	162
137.0	157.5	169.0	0.0	1.0	0.125	83.6	-82.1	76.6	112.3	137.0	0.0	1.0	0.117	83.7	-82.1	76.8	112.5	136	0.0	1.0	0.639	84.9	-67.8	28.8	73.8	157	0.0	1.0	0.778	85.5	-60.6	12.2	61.9	168
139.3	165.0	175.9	0.0	1.0	0.25	83.8	-80.5	69.1	106.1	139.3	0.0	1.0	0.25	83.8	-80.5	69.1	106.2	139	0.0	1.0	0.742	85.3	-62.5	16.8	64.8	165	0.0	1.0	0.847	85.9	-56.4	4.0	56.7	175
143.2	172.5	182.7	0.0	1.0	0.375	84.0	-77.8	58.1	97.1	143.2	0.0	1.0	0.367	84.0	-77.9	58.9	97.7	142	0.0	1.0	0.81	85.7	-58.8	8.3	59.5	172	0.0	1.0	0.9	86.2	-53.2	-2.0	53.3	182
148.6	180.0	189.6	0.0	1.0	0.5	84.3	-73.7	44.9	86.4	148.6	0.0	1.0	0.5	84.3	-73.7	45.0	86.4	148	0.0	1.0	0.883	86.1	-54.1	0.0	54.2	180	0.0	1.0	0.952	86.6	-49.8	-8.3	50.6	189
155.8	187.5	196.4	0.0	1.0	0.625	84.7	-68.5	30.6	75.0	155.8	0.0	1.0	0.617	84.8	-68.8	31.5	75.8	155	0.0	1.0	0.933	86.4	-51.1	-6.2	51.6	187	0.0	1.0	0.997	86.9	-46.3	-13.2	48.3	195
165.6	195.0	203.2	0.0	1.0	0.75	85.3	-62.0	15.9	64.0	165.6	0.0	1.0	0.75	85.4	-62.0	15.9	64.1	165	0.0	1.0	0.99	86.8	-46.9	-12.5	48.6	195	0.0	0.963	1.0	84.3	-42.5	-18.2	46.4	203
178.8	202.5	210.1	0.0	1.0	0.875	86.0	-54.5	1.0	54.5	178.8	0.0	1.0	0.867	86.0	-55.1	2.0	55.2	177	0.0	0.97	1.0	84.7	-43.2	-17.4	46.7	202	0.0	0.929	1.0	81.8	-38.8	-22.1	44.7	209
196.3	210.0	216.9	0.0	1.0	1.0	86.8	-46.1	-13.5	48.1	196.3	0.0	1.0	1.0	86.9	-46.1	-13.5	48.1	196	0.0	0.927	1.0	81.7	-38.6	-22.2	44.7	210	0.0	0.89	1.0	79.1	-34.2	-25.7	42.9	216
219.8	217.5	223.8	0.0	0.875	1.0	77.9	-32.3	-27.0	42.1	219.8	0.0	0.883	1.0	78.6	-33.3	-26.3	42.6	218	0.0	0.89	1.0	79.1	-34.1	-25.7	42.9	217	0.0	0.859	1.0	76.9	-30.7	-30.0	42.4	223
247.2	225.0	230.6	0.0	0.75	1.0	69.1	-17.0	-40.7	44.1	247.2	0.0	0.75	1.0	69.1	-17.0	-40.6	44.2	247	0.0	0.851	1.0	76.3	-30.0	-30.0	42.5	225	0.0	0.826	1.0	74.5	-27.1	-33.1	43.0	230
269.8	232.5	237.5	0.0	0.625	1.0	60.3	-0.1	-54.6	54.6	269.8	0.0	0.633	1.0	60.9	-1.5	-53.8	53.9	268	0.0	0.82	1.0	74.1	-26.4	-33.8	43.1	232	0.0	0.797	1.0	72.4	-23.5	-36.3	43.4	237
285.0	240.0	244.3	0.0	0.5	1.0	51.7	18.3	-68.3	70.7	285.0	0.0	0.5	1.0	51.8	18.3	-68.2	70.7	285	0.0	0.783	1.0	71.5	-21.7	-37.7	43.6	240	0.0	0.763	1.0	70.1	-18.9	-39.5	44.0	244
294.8	247.5	251.2	0.0	0.375	1.0	43.8	37.6	-81.2	89.5	294.8	0.0	0.383	1.0	44.4	36.2	-80.4	88.3	294	0.0	0.751	1.0	69.2	-17.2	-40.6	44.2	247	0.0	0.731	1.0	67.8	-15.0	-43.1	45.8	250
301.1	255.0	258.0	0.0	0.25	1.0	37.1	55.9	-92.3	107.9	301.1	0.0	0.25	1.0	37.2	55.9	-92.2	107.9	301	0.0	0.707	1.0	66.1	-12.3	-46.0	47.8	255	0.0	0.69	1.0	64.9	-10.1	-48.0	49.2	258
304.8	262.5	264.8	0.0	0.125	1.0	32.4	69.5	-100.0	121.8	304.8	0.0	0.133	1.0	32.8	68.6	-99.5	121.0	304	0.0	0.668	1.0	63.4	-7.0	-50.4	51.0	262	0.0	0.655	1.0	62.4	-5.0	-51.8	52.1	264
306.2	270.0	271.7	0.0	0.0	1.0	30.3	76.0	-103.5	128.5	306.2	0.0	0.0	1.0	30.4	76.1	-103.5	128.5	306	0.0	0.624	1.0	60.2	0.0	-54.7	54.8	270	0.0	0.609	1.0	59.3	1.7	-56.5	56.6	271
306.6	277.5	278.8	0.125	0.0	1.0	31.0	76.2	-102.4	127.7	306.6	0.117	0.0	1.0	31.0	76.3	-102.5	127.8	306	0.0	0.566	1.0	56.3	7.6	-61.7	62.2	277	0.0	0.555	1.0	55.5	9.3	-62.9	63.7	278
307.5	285.0	285.9	0.25	0.0	1.0	32.6	76.8	-99.8	125.9	307.5	0.25	0.0	1.0	32.6	76.8	-99.7	126.0	307	0.0	0.5	1.0	51.8	18.3	-68.2	70.7	285	0.0	0.488	1.0	51.0	19.9	-69.6	72.5	285
309.2	292.5	293.0	0.375	0.0	1.0	35.1	77.9	-95.5	123.3	309.2	0.367	0.0	1.0	35.0	77.9	-95.7	123.5	309	0.0	0.412	1.0	46.2	31.5	-77.8	84.1	292	0.0	0.404	1.0	45.7	32.7	-78.5	85.2	292
311.6	300.0	300.1	0.5	0.0	1.0	38.5	79.8	-89.7	120.0	311.6	0.5	0.0	1.0	38.6	79.9	-89.6	120.1	311	0.0	0.274	1.0	38.4	52.2	-90.4	104.5	300	0.0	0.27	1.0	38.2	52.8	-90.6	105.0	300
314.8	307.5	307.2	0.625	0.0	1.0	42.7</																												

Data of Maximum color M in colorimetric system sRGB standard device; no separation, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<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 RYGBM<sub>d</sub>: h<sub>ab,d</sub> = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; 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
40.0	30.0	25.4	1.0 0.0 0.0	50.4 76.9 64.5 100.4 40.0	1.0 0.0 0.263 50.9	78.3 37.3 86.7 25
41.3	37.5	33.8	1.0 0.125 0.0	51.5 73.9 64.9 98.3 41.3	1.0 0.0 0.156 50.7	77.7 51.0 92.9 33
44.6	45.0	42.1	1.0 0.25 0.0	54.0 66.7 65.9 93.8 44.6	1.0 0.157 0.0	52.2 72.0 65.3 97.2 42
50.7	52.5	50.5	1.0 0.375 0.0	58.2 55.4 67.9 87.7 50.7	1.0 0.358 0.0	57.7 56.9 67.8 88.6 49
59.7	60.0	58.8	1.0 0.5 0.0	63.6 41.3 71.0 82.2 59.7	1.0 0.488 0.0	63.1 42.8 70.9 82.8 58
71.0	67.5	67.2	1.0 0.625 0.0	70.1 25.7 75.0 79.3 71.0	1.0 0.577 0.0	67.6 31.8 73.9 80.5 66
82.9	75.0	75.6	1.0 0.75 0.0	77.2 9.8 79.7 80.4 82.9	1.0 0.673 0.0	72.8 19.8 77.3 79.8 75
93.8	82.5	83.9	1.0 0.875 0.0	84.8 -5.7 85.0 85.2 93.8	1.0 0.755 0.0	77.5 9.3 80.1 80.6 83
102.8	90.0	92.3	1.0 1.0 0.0	92.6 -20.7 90.7 93.0 102.8	1.0 0.857 0.0	83.7 -3.3 84.5 84.6 92
110.5	97.5	101.0	0.875 1.0 0.0	90.4 -33.1 88.1 94.1 110.5	1.0 0.967 0.0	90.6 -16.4 89.5 91.0 100
117.6	105.0	109.7	0.75 1.0 0.0	88.5 -44.9 85.8 96.8 117.6	0.888 1.0 0.0	90.7 -31.7 88.5 94.0 109
123.6	112.5	118.5	0.625 1.0 0.0	86.9 -55.8 83.9 100.7 123.6	0.743 1.0 0.0	88.5 -45.4 85.8 97.1 117
128.3	120.0	127.2	0.5 1.0 0.0	85.7 -65.2 82.4 105.1 128.3	0.529 1.0 0.0	86.0 -62.9 82.9 104.1 127
131.8	127.5	136.0	0.375 1.0 0.0	84.7 -72.8 81.2 109.1 131.8	0.132 1.0 0.0	83.8 -81.2 80.1 114.1 135
134.1	135.0	144.7	0.25 1.0 0.0	84.1 -78.2 80.5 112.2 134.1	0.0 1.0 0.41	84.1 -76.8 54.3 94.1 144
135.5	142.5	153.4	0.125 1.0 0.0	83.7 -81.4 80.0 114.2 135.5	0.0 1.0 0.573	84.6 -70.9 36.3 79.8 152
136.0	150.0	162.2	0.0 1.0 0.0	83.6 -82.7 79.8 115.0 136.0	0.0 1.0 0.706	85.2 -64.6 20.7 67.9 162
137.0	157.5	169.0	0.0 1.0 0.125	83.6 -82.1 76.6 112.3 137.0	0.0 1.0 0.778	85.5 -60.6 12.2 61.9 168
139.3	165.0	175.9	0.0 1.0 0.25	83.8 -80.5 69.1 106.1 139.3	0.0 1.0 0.847	85.9 -56.4 4.0 56.7 175
143.2	172.5	182.7	0.0 1.0 0.375	84.0 -77.8 58.1 97.1 143.2	0.0 1.0 0.9	86.2 -53.2 -2.0 53.3 182
148.6	180.0	189.6	0.0 1.0 0.5	84.3 -73.7 44.9 86.4 148.6	0.0 1.0 0.952	86.6 -49.8 -8.3 50.6 189
155.8	187.5	196.4	0.0 1.0 0.625	84.7 -68.5 30.6 75.0 155.8	0.0 1.0 0.997	86.9 -46.3 -13.2 48.3 195
165.6	195.0	203.2	0.0 1.0 0.75	85.3 -62.0 15.9 64.0 165.6	0.0 0.963	1.0 84.3 -42.5 -18.2 46.4 203
178.8	202.5	210.1	0.0 1.0 0.875	86.0 -54.5 1.0 54.5 178.8	0.0 0.929	1.0 81.8 -38.8 -22.1 44.7 209
196.3	210.0	216.9	0.0 1.0 1.0	86.8 -46.1 -13.5 48.1 196.3	0.0 0.89	1.0 79.1 -34.2 -25.7 42.9 216
219.8	217.5	223.8	0.0 0.875 1.0	77.9 -32.3 -27.0 42.1 219.8	0.0 0.859	1.0 76.9 -30.7 -29.0 42.4 223
247.2	225.0	230.6	0.0 0.75 1.0	69.1 -17.0 -40.7 44.1 247.2	0.0 0.826	1.0 74.5 -27.1 -33.1 43.0 230
269.8	232.5	237.5	0.0 0.625 1.0	60.3 -0.1 -54.6 54.6 269.8	0.0 0.797	1.0 72.4 -23.5 -36.3 43.4 237
285.0	240.0	244.3	0.0 0.5 1.0	51.7 18.3 -68.3 70.7 285.0	0.0 0.763	1.0 70.1 -18.9 -39.5 44.0 244
294.8	247.5	251.2	0.0 0.375 1.0	43.8 37.6 -81.2 89.5 294.8	0.0 0.731	1.0 67.8 -15.0 -43.1 45.8 250
301.1	255.0	258.0	0.0 0.25 1.0	37.1 55.9 -92.3 107.9 301.1	0.0 0.69	1.0 64.9 -10.1 -48.0 49.2 258
304.8	262.5	264.8	0.0 0.125 1.0	32.4 69.5 -100.0 121.8 304.8	0.0 0.655	1.0 62.4 -5.0 -51.8 52.1 264
306.2	270.0	271.7	0.0 0.0 1.0	30.3 76.0 -103.5 128.5 306.2	0.0 0.609	1.0 59.3 1.7 -56.5 56.6 271
306.6	277.5	278.8	0.125 0.0 1.0	31.0 76.2 -102.4 127.7 306.6	0.0 0.555	1.0 55.5 9.3 -62.9 63.7 278
307.5	285.0	285.9	0.25 0.0 1.0	32.6 76.8 -99.8 125.9 307.5	0.0 0.488	1.0 51.0 19.9 -69.6 72.5 285
309.2	292.5	293.0	0.375 0.0 1.0	35.1 77.9 -95.5 123.3 309.2	0.0 0.404	1.0 45.7 32.7 -78.5 85.2 292
311.6	300.0	300.1	0.5 0.0 1.0	38.5 79.8 -89.7 120.0 311.6	0.0 0.27	1.0 38.2 52.8 -90.6 105.0 300
314.8	307.5	307.2	0.625 0.0 1.0	42.7 82.5 -82.7 116.8 314.8	0.0 0.146	0.0 31.3 76.4 -102.0 127.5 306
318.8	315.0	314.3	0.75 0.0 1.0	47.2 85.8 -75.1 114.0 318.8	0.605 0.0 1.0	42.1 82.1 -83.8 117.4 314
323.3	322.5	321.4	0.875 0.0 1.0	52.1 89.8 -66.9 112.0 323.3	0.811 0.0 1.0	49.7 87.9 -71.0 113.1 321
328.2	330.0	328.6	1.0 0.0 1.0	57.2 94.3 -58.4 110.9 328.2	0.0 0.992	57.2 94.2 -57.4 110.3 328
334.0	337.5	335.7	1.0 0.0 0.875	55.6 90.3 -43.9 100.4 334.0	0.0 0.856	55.4 89.9 -41.4 99.0 335
341.6	345.0	342.8	1.0 0.0 0.75	54.2 86.7 -28.6 91.3 341.6	0.0 0.735	54.1 86.5 -26.6 90.6 342
351.4	352.5	349.9	1.0 0.0 0.625	53.0 83.6 -12.6 84.6 351.4	0.0 0.65	53.3 84.5 -15.6 86.0 349
362.9	360.0	357.0	1.0 0.0 0.5	52.0 81.1 4.1 81.2 362.9	0.0 0.618	53.0 83.6 -11.6 84.4 352
375.2	367.5	364.1	1.0 0.0 0.375	51.3 79.2 21.6 82.1 375.2	0.0 0.533	52.3 82.2 -0.1 82.2 359
386.7	375.0	371.2	1.0 0.0 0.25	50.8 77.9 39.2 87.2 386.7	0.0 0.441	51.7 80.7 12.5 81.7 368
395.4	382.5	378.3	1.0 0.0 0.125	50.6 77.2 54.9 94.8 395.4	0.0 0.361	51.3 79.3 23.6 82.8 376
400.0	390.0	385.4	1.0 0.0 0.0	50.4 76.9 64.5 100.4 400.0	0.0 0.263	50.9 78.3 37.3 86.7 385



see similar files: http://130.149.60.45/~farbmetrik/QE22/QE22L0FP.PDF /.PS  
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE22/QE22L0FP.PDF /.PS  
application for measurement of display output, no separation  
TUB material: code=rh4ta

Data of Maximum color M in colorimetric system sRGB standard device; no separation, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<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 RYGBM<sub>d</sub>: h<sub>ab,d</sub> = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; 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 <sup>*</sup> <sub>dd361M</sub>	LAB <sup>*</sup> <sub>ddx361Mi (x=LabCh)</sub>	R <sub>d</sub>	rgb <sup>*</sup> <sub>ds361Mi</sub>	LAB <sup>*</sup> <sub>dsx361Mi (x=LabCh)</sub>	R <sub>s</sub>	rgb <sup>*</sup> <sub>dd361Mi</sub>	LAB <sup>*</sup> <sub>de361Mi</sub>	R <sub>e</sub>	rgb <sup>*</sup> <sub>dd361Mi</sub>	rgb <sup>*</sup> <sub>dd</sub>	rgb <sup>*</sup> <sub>ds</sub>	rgb <sup>*</sup> <sub>de</sub>
40	30	25	1.0 0.0 0.0	50.4 76.9 64.5 100.4 40	1.0	1.0 0.0 0.203 50.8 78.0 45.1 90.1 30	1.0	1.0 0.0 0.0	1.0 0.0 0.263 50.9 78.3 37.3 86.7 25	1.0	1.0 0.0 0.0	1.0			
40	31	26	1.0 0.016 0.0	50.6 76.5 64.6 100.1 40	1.0	1.0 0.0 0.189 50.7 78.0 46.9 91.0 31	1.0	1.0 0.017 0.0	1.0 0.0 0.251 50.9 78.0 39.0 87.2 26	1.0	1.0 0.017 0.0				
40	32	27	1.0 0.033 0.0	50.7 76.1 64.6 99.8 40	1.0	1.0 0.0 0.174 50.7 77.9 48.7 91.8 32	1.0	1.0 0.033 0.0	1.0 0.0 0.236 50.8 78.0 41.0 88.1 27	1.0	1.0 0.033 0.0				
40	33	28	1.0 0.05 0.0	50.9 75.7 64.7 99.6 40	1.0	1.0 0.0 0.16 50.7 77.7 50.5 92.7 33	1.0	1.0 0.05 0.0	1.0 0.0 0.22 50.8 78.1 43.0 89.1 28	1.0	1.0 0.05 0.0				
40	34	29	1.0 0.066 0.0	51.0 75.3 64.7 99.3 40	1.0	1.0 0.0 0.146 50.6 77.6 52.3 93.6 34	1.0	1.0 0.067 0.0	1.0 0.0 0.204 50.8 78.0 44.9 90.1 29	1.0	1.0 0.067 0.0				
40	35	31	1.0 0.083 0.0	51.1 74.9 64.8 99.0 40	1.0	1.0 0.0 0.131 50.6 77.3 54.2 94.4 35	1.0	1.0 0.083 0.0	1.0 0.0 0.188 50.7 78.0 46.9 91.0 31	1.0	1.0 0.083 0.0				
41	36	32	1.0 0.1 0.0	51.3 74.5 64.8 98.7 41	1.0	1.0 0.0 0.11 50.6 77.3 56.1 95.5 36	1.0	1.0 0.1 0.0	1.0 0.0 0.172 50.7 77.9 49.0 92.0 32	1.0	1.0 0.1 0.0				
41	37	33	1.0 0.116 0.0	51.4 74.1 64.9 98.5 41	1.0	1.0 0.0 0.082 50.6 77.2 58.2 96.7 37	1.0	1.0 0.117 0.0	1.0 0.0 0.156 50.7 77.7 51.0 92.9 33	1.0	1.0 0.117 0.0				
41	38	34	1.0 0.133 0.0	51.7 73.4 65.0 98.0 41	1.0	1.0 0.0 0.055 50.5 77.2 60.3 98.0 38	1.0	1.0 0.133 0.0	1.0 0.0 0.14 50.6 77.5 53.0 93.9 34	1.0	1.0 0.133 0.0				
41	39	35	1.0 0.15 0.0	52.0 72.4 65.2 97.4 41	1.0	1.0 0.0 0.028 50.5 77.1 62.4 99.2 39	1.0	1.0 0.15 0.0	1.0 0.0 0.123 50.6 77.2 55.1 94.9 35	1.0	1.0 0.15 0.0				
42	40	36	1.0 0.166 0.0	52.3 71.4 65.3 96.8 42	1.0	1.0 0.0 0.0 50.5 76.9 64.6 100.4 40	1.0	1.0 0.167 0.0	1.0 0.0 0.093 50.6 77.3 57.4 96.3 36	1.0	1.0 0.167 0.0				
42	41	37	1.0 0.183 0.0	52.7 70.5 65.5 96.2 42	1.0	1.0 0.095 0.0 51.3 74.6 64.9 98.9 41	1.0	1.0 0.183 0.0	1.0 0.0 0.062 50.5 77.2 59.7 97.6 37	1.0	1.0 0.183 0.0				
43	42	38	1.0 0.2 0.0	53.0 69.5 65.6 95.6 43	1.0	1.0 0.151 0.0 52.1 72.4 65.2 97.5 42	1.0	1.0 0.2 0.0	1.0 0.0 0.032 50.5 77.1 62.1 99.0 38	1.0	1.0 0.2 0.0				
43	43	39	1.0 0.216 0.0	53.4 68.6 65.7 95.0 43	1.0	1.0 0.188 0.0 52.8 70.3 65.5 96.1 43	1.0	1.0 0.217 0.0	1.0 0.0 0.001 50.5 76.9 64.5 100.4 39	1.0	1.0 0.217 0.0				
44	44	41	1.0 0.233 0.0	53.7 67.6 65.8 94.4 44	1.0	1.0 0.225 0.0 53.6 68.2 65.8 94.8 44	1.0	1.0 0.233 0.0	1.0 0.102 0.0 51.4 74.4 64.9 98.8 41	1.0	1.0 0.233 0.0				
44	45	42	1.0 0.25 0.0	54.0 66.7 65.9 93.8 44	1.0	1.0 0.256 0.0 54.3 66.1 66.1 93.5 45	1.0	1.0 0.25 0.0	1.0 0.157 0.0 52.2 72.0 65.3 97.2 42	1.0	1.0 0.25 0.0				
45	46	43	1.0 0.266 0.0	54.6 65.1 66.3 93.0 45	1.0	1.0 0.277 0.0 55.0 64.3 66.6 92.5 46	1.0	1.0 0.267 0.0	1.0 0.199 0.0 53.0 69.6 65.6 95.7 43	1.0	1.0 0.267 0.0				
46	47	44	1.0 0.283 0.0	55.1 63.6 66.6 92.2 46	1.0	1.0 0.297 0.0 55.6 62.4 66.9 91.5 47	1.0	1.0 0.283 0.0	1.0 0.24 0.0 53.9 67.3 65.9 94.2 44	1.0	1.0 0.283 0.0				
47	48	45	1.0 0.3 0.0	55.7 62.1 66.9 91.3 47	1.0	1.0 0.318 0.0 56.3 60.6 67.3 90.5 48	1.0	1.0 0.3 0.0	1.0 0.267 0.0 54.7 65.1 66.4 93.0 45	1.0	1.0 0.3 0.0				
47	49	46	1.0 0.316 0.0	56.2 60.6 67.2 90.5 47	1.0	1.0 0.338 0.0 57.0 58.7 67.6 89.5 49	1.0	1.0 0.317 0.0	1.0 0.29 0.0 55.4 63.1 66.8 91.9 46	1.0	1.0 0.317 0.0				
48	50	47	1.0 0.333 0.0	56.8 59.1 67.5 89.7 48	1.0	1.0 0.359 0.0 57.7 56.9 67.8 88.5 50	1.0	1.0 0.333 0.0	1.0 0.313 0.0 56.2 61.0 67.2 90.8 47	1.0	1.0 0.333 0.0				
49	51	48	1.0 0.35 0.0	57.3 57.6 67.7 88.9 49	1.0	1.0 0.378 0.0 58.3 55.1 68.1 87.6 51	1.0	1.0 0.35 0.0	1.0 0.336 0.0 56.9 59.0 67.5 89.7 48	1.0	1.0 0.35 0.0				
50	52	49	1.0 0.366 0.0	57.9 56.2 67.9 88.1 50	1.0	1.0 0.392 0.0 58.9 53.6 68.6 87.0 52	1.0	1.0 0.367 0.0	1.0 0.358 0.0 57.7 56.9 67.8 88.6 49	1.0	1.0 0.367 0.0				
51	53	51	1.0 0.383 0.0	58.5 54.5 68.2 87.3 51	1.0	1.0 0.406 0.0 59.6 52.0 69.0 86.4 53	1.0	1.0 0.383 0.0	1.0 0.379 0.0 58.4 55.0 68.1 87.6 51	1.0	1.0 0.383 0.0				
52	54	52	1.0 0.4 0.0	59.3 52.6 68.8 86.6 52	1.0	1.0 0.42 0.0 60.2 50.4 69.4 85.8 54	1.0	1.0 0.4 0.0	1.0 0.395 0.0 59.1 53.2 68.7 86.9 52	1.0	1.0 0.4 0.0				
53	55	53	1.0 0.416 0.0	60.0 50.7 69.3 85.9 53	1.0	1.0 0.433 0.0 60.8 48.8 69.8 85.2 55	1.0	1.0 0.417 0.0	1.0 0.41 0.0 59.7 51.5 69.1 86.2 53	1.0	1.0 0.417 0.0				
54	56	54	1.0 0.433 0.0	60.7 48.8 69.7 85.1 54	1.0	1.0 0.447 0.0 61.4 47.3 70.1 84.5 56	1.0	1.0 0.433 0.0	1.0 0.426 0.0 60.4 49.7 69.6 85.5 54	1.0	1.0 0.433 0.0				
56	57	55	1.0 0.45 0.0	61.4 46.9 70.1 84.4 56	1.0	1.0 0.461 0.0 62.0 45.7 70.4 83.9 57	1.0	1.0 0.45 0.0	1.0 0.441 0.0 61.1 48.0 69.9 84.8 55	1.0	1.0 0.45 0.0				
57	58	56	1.0 0.466 0.0	62.2 45.1 70.4 83.6 57	1.0	1.0 0.475 0.0 62.6 44.1 70.7 83.3 58	1.0	1.0 0.467 0.0	1.0 0.457 0.0 61.8 46.2 70.3 84.1 56	1.0	1.0 0.467 0.0				
58	59	57	1.0 0.483 0.0	62.9 43.2 70.7 82.9 58	1.0	1.0 0.489 0.0 63.2 42.6 70.9 82.7 59	1.0	1.0 0.483 0.0	1.0 0.472 0.0 62.5 44.5 70.6 83.4 57	1.0	1.0 0.483 0.0				
59	60	58	1.0 0.5 0.0	63.6 41.3 71.0 82.2 59	1.0	1.0 0.502 0.0 63.8 41.1 71.2 82.2 60	1.0	1.0 0.5 0.0	1.0 0.488 0.0 63.1 42.8 70.9 82.8 58	1.0	1.0 0.5 0.0				
61	61	60	1.0 0.516 0.0	64.5 39.3 71.7 81.8 61	1.0	1.0 0.513 0.0 64.4 39.7 71.6 81.9 61	1.0	1.0 0.517 0.0	1.0 0.502 0.0 63.8 41.1 71.2 82.2 60	1.0	1.0 0.517 0.0				
62	62	61	1.0 0.533 0.0	65.3 37.2 72.4 81.4 62	1.0	1.0 0.525 0.0 64.9 38.3 72.1 81.7 62	1.0	1.0 0.533 0.0	1.0 0.515 0.0 64.4 39.5 71.7 81.9 61	1.0	1.0 0.533 0.0				
64	63	62	1.0 0.55 0.0	66.2 35.1 73.0 81.0 64	1.0	1.0 0.536 0.0 65.5 37.0 72.5 81.4 63	1.0	1.0 0.55 0.0	1.0 0.527 0.0 65.1 38.0 72.2 81.6 62	1.0	1.0 0.55 0.0				
65	64	63	1.0 0.566 0.0	67.1 33.0 73.5 80.6 65	1.0	1.0 0.547 0.0 66.1 35.6 72.9 81.1 64	1.0	1.0 0.567 0.0	1.0 0.54 0.0 65.7 36.5 72.7 81.3 63	1.0	1.0 0.567 0.0				
67	65	64	1.0 0.583 0.0	67.9 31.0 74.0 80.3 67	1.0	1.0 0.558 0.0 66.7 34.2 73.3 80.9 65	1.0	1.0 0.583 0.0	1.0 0.552 0.0 66.4 34.9 73.1 81.0 64	1.0	1.0 0.583 0.0				
68	66	65	1.0 0.6 0.0	68.6 28.9 74.5 79.9 68	1.0	1.0 0.569 0.0 67.2 32.8 73.7 80.6 66	1.0	1.0 0.6 0.0	1.0 0.564 0.0 67.0 33.4 73.5 80.7 65	1.0	1.0 0.6 0.0				
70	67	66	1.0 0.616 0.0	69.8 26.8 74.8 79.5 70	1.0	1.0 0.58 0.0 67.8 31.4 74.0 80.4 67	1.0	1.0 0.617 0.0	1.0 0.577 0.0 67.6 31.8 73.9 80.5 66	1.0	1.0 0.617 0.0				
71	68	67	1.0 0.633 0.0	70.5 24.7 75.4 79.4 71	1.0	1.0 0.591 0.0 68.4 30.0 74.3 80.1 68	1.0	1.0 0.633 0.0	1.0 0.589 0.0 68.3 30.3 74.2 80.2 67	1.0	1.0 0.633 0.0				
73	69	68	1.0 0.65 0.0	71.5 22.7 76.2 79.5 73	1.0	1.0 0.602 0.0 69.0 28.6 74.6 79.9 69	1.0	1.0 0.65 0.0	1.0 0.602 0.0 68.9 28.7 74.5 79.9 68	1.0	1.0 0.65 0.0				
75	70	70	1.0 0.666 0.0	72.4 20.6 76.9 79.7 75	1.0	1.0 0.614 0.0 69.5 27.2 74.8 79.6 70	1.0	1.0 0.667 0.0	1.0 0.614 0.0 69.5 27.2 74.8 79.6 70	1.0	1.0 0.667 0.0				
76	71	71	1.0 0.683 0.0	73.4 18.5 77.6 79.8 76	1.0	1.0 0.625 0.0 70.1 25.8 75.0 79.4 71	1.0	1.0 0.683 0.0	1.0 0.626 0.0 70.2 25.6 75.1 79.4 71	1.0	1.0 0.683 0.0				
78	72	72	1.0 0.7 0.0	74.3 16.3 78.2 79.9 78	1.0	1.0 0.635 0.0 70.7 24.5 75.6 79.4 72	1.0	1.0 0.7 0.0	1.0 0.638 0.0 70.9 24.2 75.7 79.5 72	1.0	1.0 0.7 0.0				
79	73	73	1.0 0.716 0.0	75.3 14.2 78.8 80.1 79	1.0	1.0 0.646 0.0 71.3 23.3 76.1 79.5 73	1.0	1.0 0.717 0.0	1.0 0.65 0.0 71.5 22.8 76.2 79.6 73	1.0	1.0 0.717 0.0				
81	74	74	1.0 0.733 0.0	76.2 12.0 79.3 80.2 81	1.0	1.0 0.656 0.0 71.9 21.9 76.5 79.6 74	1.0	1.0 0.733 0.0	1.0 0.661 0.0 72.2 21.3 76.8 79.7 74	1.0	1.0 0.733 0.0				
82	75	75	1.0 0.75 0.0	77.2 9.8 79.7 80.4 82	1.0	1.0 0.667 0.0 72.5 20.6 77.0 79.7 75	1.0	1.0 0.75 0.0	1.0 0.673 0.0 72.8 19.8 77.3 79.8 75	1.0	1.0 0.75 0.0				

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TUB registration: 20130201-QE22/QE22L0FP.PDF /.PS  
application for measurement of display output, no separation  
TUB material: code=rh4ta

Data of Maximum color M in colorimetric system sRGB standard device; no separation, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<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> = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; 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 <sup>*</sup> <sub>dd361M</sub>	LAB <sup>*</sup> <sub>ddx361Mi (x=LabCh)</sub>	rgb <sup>*</sup> <sub>ds361Mi</sub>	LAB <sup>*</sup> <sub>dsx361Mi (x=LabCh)</sub>	rgb <sup>*</sup> <sub>de361Mi</sub>	LAB <sup>*</sup> <sub>dex361Mi (x=LabCh)</sub>	rgb <sup>*</sup> <sub>dd361Mi</sub>	Y <sub>d</sub>	Y <sub>s</sub>	Y <sub>e</sub>	Y <sub>e</sub>
82	75	75	1.0 0.75 0.0	77.2 9.8 79.7 80.4 82	1.0 0.667 0.0	72.5 20.6 77.0 79.7 75	1.0 0.75 0.0	1.0 0.673 0.0	72.8 19.8 77.3 79.8 75	1.0 0.75 0.0	1.0 0.673 0.0	72.8 19.8 77.3 79.8 75	1.0 0.75 0.0
84	76	76	1.0 0.766 0.0	78.2 7.8 80.6 81.0 84	1.0 0.677 0.0	73.1 19.3 77.4 79.8 76	1.0 0.767 0.0	1.0 0.685 0.0	73.5 18.3 77.7 79.9 76	1.0 0.767 0.0	1.0 0.685 0.0	73.5 18.3 77.7 79.9 76	1.0 0.767 0.0
85	77	77	1.0 0.783 0.0	79.2 5.8 81.4 81.7 85	1.0 0.688 0.0	73.7 18.0 77.8 79.9 77	1.0 0.783 0.0	1.0 0.696 0.0	74.2 16.9 78.2 80.0 77	1.0 0.783 0.0	1.0 0.696 0.0	74.2 16.9 78.2 80.0 77	1.0 0.783 0.0
87	78	78	1.0 0.8 0.0	80.2 3.8 82.2 82.3 87	1.0 0.698 0.0	74.3 16.6 78.2 80.0 78	1.0 0.8 0.0	1.0 0.708 0.0	74.8 15.3 78.6 80.1 78	1.0 0.8 0.0	1.0 0.708 0.0	74.8 15.3 78.6 80.1 78	1.0 0.8 0.0
88	79	80	1.0 0.816 0.0	81.2 1.7 82.9 83.0 88	1.0 0.708 0.0	74.9 15.3 78.6 80.1 79	1.0 0.817 0.0	1.0 0.72 0.0	75.5 13.8 78.9 80.1 80	1.0 0.817 0.0	1.0 0.72 0.0	75.5 13.8 78.9 80.1 80	1.0 0.817 0.0
90	80	81	1.0 0.833 0.0	82.2 -0.3 83.6 83.6 90	1.0 0.719 0.0	75.5 13.9 78.9 80.1 80	1.0 0.833 0.0	1.0 0.731 0.0	76.2 12.3 79.3 80.2 81	1.0 0.833 0.0	1.0 0.731 0.0	76.2 12.3 79.3 80.2 81	1.0 0.833 0.0
91	81	82	1.0 0.85 0.0	83.3 -2.5 84.2 84.3 91	1.0 0.729 0.0	76.1 12.6 79.2 80.2 81	1.0 0.85 0.0	1.0 0.743 0.0	76.8 10.8 79.6 80.3 82	1.0 0.85 0.0	1.0 0.743 0.0	76.8 10.8 79.6 80.3 82	1.0 0.85 0.0
93	82	83	1.0 0.866 0.0	84.3 -4.6 84.8 84.9 93	1.0 0.74 0.0	76.7 11.2 79.5 80.3 82	1.0 0.867 0.0	1.0 0.755 0.0	77.5 9.3 80.1 80.6 83	1.0 0.867 0.0	1.0 0.755 0.0	77.5 9.3 80.1 80.6 83	1.0 0.867 0.0
94	83	84	1.0 0.883 0.0	85.3 -6.7 85.5 85.8 94	1.0 0.75 0.0	77.3 9.8 79.8 80.4 83	1.0 0.883 0.0	1.0 0.768 0.0	78.3 7.8 80.7 81.1 84	1.0 0.883 0.0	1.0 0.768 0.0	78.3 7.8 80.7 81.1 84	1.0 0.883 0.0
95	84	85	1.0 0.9 0.0	86.3 -8.5 86.4 86.8 95	1.0 0.762 0.0	78.0 8.5 80.4 80.9 84	1.0 0.9 0.0	1.0 0.78 0.0	79.1 6.2 81.4 81.6 85	1.0 0.9 0.0	1.0 0.78 0.0	79.1 6.2 81.4 81.6 85	1.0 0.9 0.0
96	85	86	1.0 0.916 0.0	87.4 -10.5 87.2 87.8 96	1.0 0.773 0.0	78.7 7.1 81.0 81.3 85	1.0 0.917 0.0	1.0 0.793 0.0	79.9 4.7 82.0 82.1 86	1.0 0.917 0.0	1.0 0.793 0.0	79.9 4.7 82.0 82.1 86	1.0 0.917 0.0
98	86	87	1.0 0.933 0.0	88.4 -12.4 88.0 88.9 98	1.0 0.785 0.0	79.3 5.7 81.6 81.8 86	1.0 0.933 0.0	1.0 0.806 0.0	80.6 3.1 82.5 82.6 87	1.0 0.933 0.0	1.0 0.806 0.0	80.6 3.1 82.5 82.6 87	1.0 0.933 0.0
99	87	88	1.0 0.95 0.0	89.5 -14.4 88.7 89.9 99	1.0 0.796 0.0	80.0 4.3 82.1 82.2 87	1.0 0.95 0.0	1.0 0.819 0.0	81.4 1.5 83.1 83.1 88	1.0 0.95 0.0	1.0 0.819 0.0	81.4 1.5 83.1 83.1 88	1.0 0.95 0.0
100	88	90	1.0 0.966 0.0	90.5 -16.5 89.4 91.0 100	1.0 0.808 0.0	80.7 2.9 82.6 82.7 88	1.0 0.967 0.0	1.0 0.831 0.0	82.2 0.0 83.6 83.6 90	1.0 0.967 0.0	1.0 0.831 0.0	82.2 0.0 83.6 83.6 90	1.0 0.967 0.0
101	89	91	1.0 0.983 0.0	91.6 -18.5 90.1 92.0 101	1.0 0.819 0.0	81.4 1.5 83.1 83.1 89	1.0 0.983 0.0	1.0 0.844 0.0	83.0 -1.7 84.1 84.1 91	1.0 0.983 0.0	1.0 0.844 0.0	83.0 -1.7 84.1 84.1 91	1.0 0.983 0.0
102	90	92	1.0 1.0 0.0	92.6 -20.7 90.7 93.0 102	1.0 0.831 0.0	82.1 0.0 83.5 83.5 90	1.0 1.0 0.0	1.0 0.857 0.0	83.7 -3.3 84.5 84.6 92	1.0 1.0 0.0	1.0 0.857 0.0	83.7 -3.3 84.5 84.6 92	1.0 1.0 0.0
103	91	93	0.983 1.0 0.0	92.3 -22.3 90.5 93.2 103	1.0 0.842 0.0	82.8 -1.4 84.0 84.0 91	0.983 1.0 0.0	1.0 0.87 0.0	84.5 -5.1 84.9 85.1 93	0.983 1.0 0.0	1.0 0.87 0.0	84.5 -5.1 84.9 85.1 93	0.983 1.0 0.0
104	92	94	0.966 1.0 0.0	92.0 -24.0 90.2 93.3 104	1.0 0.853 0.0	83.5 -2.8 84.4 84.4 92	0.967 1.0 0.0	1.0 0.886 0.0	85.5 -6.9 85.7 85.9 94	0.967 1.0 0.0	1.0 0.886 0.0	85.5 -6.9 85.7 85.9 94	0.967 1.0 0.0
105	93	95	0.95 1.0 0.0	91.7 -25.6 89.9 93.5 105	1.0 0.865 0.0	84.2 -4.3 84.8 84.9 93	0.95 1.0 0.0	1.0 0.902 0.0	86.5 -8.7 86.5 87.0 95	0.95 1.0 0.0	1.0 0.902 0.0	86.5 -8.7 86.5 87.0 95	0.95 1.0 0.0
106	94	96	0.933 1.0 0.0	91.4 -27.3 89.5 93.6 106	1.0 0.877 0.0	84.9 -5.9 85.2 85.4 94	0.933 1.0 0.0	1.0 0.918 0.0	87.5 -10.6 87.3 88.0 96	0.933 1.0 0.0	1.0 0.918 0.0	87.5 -10.6 87.3 88.0 96	0.933 1.0 0.0
108	95	98	0.916 1.0 0.0	91.1 -28.9 89.1 93.7 108	1.0 0.891 0.0	85.8 -7.4 85.9 86.3 95	0.917 1.0 0.0	1.0 0.934 0.0	88.5 -12.5 88.1 89.0 98	0.917 1.0 0.0	1.0 0.934 0.0	88.5 -12.5 88.1 89.0 98	0.917 1.0 0.0
109	96	99	0.9 1.0 0.0	90.8 -30.6 88.7 93.9 109	1.0 0.904 0.0	86.7 -9.0 86.6 87.1 96	0.9 1.0 0.0	1.0 0.951 0.0	89.6 -14.4 88.8 90.0 99	0.9 1.0 0.0	1.0 0.951 0.0	89.6 -14.4 88.8 90.0 99	0.9 1.0 0.0
110	97	100	0.883 1.0 0.0	90.5 -32.2 88.3 94.0 110	1.0 0.918 0.0	87.5 -10.6 87.3 88.0 97	0.883 1.0 0.0	1.0 0.967 0.0	90.6 -16.4 89.5 91.0 100	0.883 1.0 0.0	1.0 0.967 0.0	90.6 -16.4 89.5 91.0 100	0.883 1.0 0.0
111	98	101	0.866 1.0 0.0	90.3 -33.8 88.0 94.3 111	1.0 0.932 0.0	88.4 -12.3 88.0 88.9 98	0.867 1.0 0.0	1.0 0.983 0.0	91.6 -18.5 90.1 92.0 101	0.867 1.0 0.0	1.0 0.983 0.0	91.6 -18.5 90.1 92.0 101	0.867 1.0 0.0
111	99	102	0.85 1.0 0.0	90.0 -35.4 87.7 94.6 111	1.0 0.946 0.0	89.3 -13.9 88.6 89.7 99	0.85 1.0 0.0	1.0 0.999 0.0	92.6 -20.5 90.7 93.0 102	0.85 1.0 0.0	1.0 0.999 0.0	92.6 -20.5 90.7 93.0 102	0.85 1.0 0.0
112	100	103	0.833 1.0 0.0	89.8 -37.0 87.5 95.0 112	1.0 0.96 0.0	90.2 -15.6 89.2 90.6 100	0.833 1.0 0.0	0.982 1.0 0.0	92.3 -22.4 90.5 93.2 103	0.833 1.0 0.0	0.982 1.0 0.0	92.3 -22.4 90.5 93.2 103	0.833 1.0 0.0
113	101	105	0.816 1.0 0.0	89.5 -38.6 87.2 95.4 113	1.0 0.974 0.0	91.0 -17.4 89.8 91.5 101	0.817 1.0 0.0	0.963 1.0 0.0	92.0 -24.3 90.2 93.4 105	0.817 1.0 0.0	0.963 1.0 0.0	92.0 -24.3 90.2 93.4 105	0.817 1.0 0.0
114	102	106	0.8 1.0 0.0	89.3 -40.1 86.9 95.7 114	1.0 0.988 0.0	91.9 -19.1 90.3 92.3 102	0.8 1.0 0.0	0.944 1.0 0.0	91.7 -26.1 89.8 93.6 106	0.8 1.0 0.0	0.944 1.0 0.0	91.7 -26.1 89.8 93.6 106	0.8 1.0 0.0
115	103	107	0.783 1.0 0.0	89.0 -41.7 86.6 96.1 115	0.998 1.0 0.0	92.6 -20.8 90.7 93.1 103	0.783 1.0 0.0	0.926 1.0 0.0	91.3 -28.0 89.4 93.7 107	0.783 1.0 0.0	0.926 1.0 0.0	91.3 -28.0 89.4 93.7 107	0.783 1.0 0.0
116	104	108	0.766 1.0 0.0	88.7 -43.3 86.2 96.5 116	0.981 1.0 0.0	92.3 -22.5 90.5 93.2 104	0.767 1.0 0.0	0.907 1.0 0.0	91.0 -29.9 89.0 93.9 108	0.767 1.0 0.0	0.907 1.0 0.0	91.0 -29.9 89.0 93.9 108	0.767 1.0 0.0
117	105	109	0.75 1.0 0.0	88.5 -44.9 85.8 96.8 117	0.965 1.0 0.0	92.0 -24.1 90.2 93.4 105	0.75 1.0 0.0	0.888 1.0 0.0	90.7 -31.7 88.5 94.0 109	0.75 1.0 0.0	0.888 1.0 0.0	90.7 -31.7 88.5 94.0 109	0.75 1.0 0.0
118	106	110	0.733 1.0 0.0	88.3 -46.3 85.6 97.4 118	0.949 1.0 0.0	91.8 -25.7 89.9 93.5 106	0.733 1.0 0.0	0.868 1.0 0.0	90.3 -33.6 88.0 94.3 110	0.733 1.0 0.0	0.868 1.0 0.0	90.3 -33.6 88.0 94.3 110	0.733 1.0 0.0
119	107	112	0.716 1.0 0.0	88.1 -47.8 85.4 97.9 119	0.933 1.0 0.0	91.5 -27.3 89.6 93.6 107	0.717 1.0 0.0	0.848 1.0 0.0	90.0 -35.6 87.8 94.7 112	0.717 1.0 0.0	0.848 1.0 0.0	90.0 -35.6 87.8 94.7 112	0.717 1.0 0.0
120	108	113	0.7 1.0 0.0	87.9 -49.2 85.2 98.4 120	0.917 1.0 0.0	91.2 -28.9 89.2 93.8 108	0.7 1.0 0.0	0.827 1.0 0.0	89.7 -37.5 87.4 95.2 113	0.7 1.0 0.0	0.827 1.0 0.0	89.7 -37.5 87.4 95.2 113	0.7 1.0 0.0
120	109	114	0.683 1.0 0.0	87.6 -50.7 84.9 98.9 120	0.901 1.0 0.0	90.9 -30.5 88.8 93.9 109	0.683 1.0 0.0	0.806 1.0 0.0	89.4 -39.5 87.1 95.7 114	0.683 1.0 0.0	0.806 1.0 0.0	89.4 -39.5 87.1 95.7 114	0.683 1.0 0.0
121	110	115	0.666 1.0 0.0	87.4 -52.1 84.7 99.4 121	0.884 1.0 0.0	90.6 -32.1 88.4 94.1 110	0.667 1.0 0.0	0.786 1.0 0.0	89.1 -41.5 86.7 96.1 115	0.667 1.0 0.0	0.786 1.0 0.0	89.1 -41.5 86.7 96.1 115	0.667 1.0 0.0
122	111	116	0.65 1.0 0.0	87.2 -53.6 84.4 100.0 122	0.868 1.0 0.0	90.3 -33.7 88.0 94.3 111	0.65 1.0 0.0	0.765 1.0 0.0	88.8 -43.4 86.2 96.6 116	0.65 1.0 0.0	0.765 1.0 0.0	88.8 -43.4 86.2 96.6 116	0.65 1.0 0.0
123	112	117	0.633 1.0 0.0	87.0 -55.0 84.1 100.5 123	0.85 1.0 0.0	90.1 -35.4 87.8 94.7 112	0.633 1.0 0.0	0.743 1.0 0.0	88.5 -45.4 85.8 97.1 117	0.633 1.0 0.0	0.743 1.0 0.0	88.5 -45.4 85.8 97.1 117	0.633 1.0 0.0
123	113	119	0.616 1.0 0.0	86.8 -56.4 83.8 101.0 123	0.832 1.0 0.0	89.8 -37.1 87.5 95.1 113	0.617 1.0 0.0	0.719 1.0 0.0	88.2 -47.5 85.5 97.9 119	0.617 1.0 0.0	0.719 1.0 0.0	88.2 -47.5 85.5 97.9 119	0.617 1.0 0.0
124	114	120	0.6 1.0 0.0	86.7 -57.6 83.7 101.6 124	0.814 1.0 0.0	89.5 -38.7 87.2 95.5 114	0.6 1.0 0.0	0.695 1.0 0.0	87.8 -49.6 85.2 98.6 120	0.6 1.0 0.0	0.695 1.0 0.0	87.8 -49.6 85.2 98.6 120	0.6 1.0 0.0
125	115	121	0.583 1.0 0.0	86.5 -58.9 83.5 102.2 125	0.797 1.0 0.0	89.3 -40.4 86.9 95.9 115	0.583 1.0 0.0	0.67 1.0 0.0	87.5 -51.7 84.8 99.4 121	0.583 1.0 0.0	0.67 1.0 0.0	87.5 -51.7 84.8 99.4 121	0.583 1.0 0.0
125	116	122	0.566 1.0 0.0	86.3 -60.1 83.3 102.8 125	0.779 1.0 0.0	89.0 -42.1 86.5 96.3 116	0.567 1.0 0.0	0.646 1.0 0.0	87.2 -53.9 84.4 100.1 122	0.567 1.0 0.0	0.646 1.0 0.0	87.2 -53.9 84.4 100.1 122	0.567 1.0 0.0
126	117	123	0.55 1.0 0.0	86.2 -61.4 83.1 103.3 126	0.761 1.0 0.0	88.7 -43.8 86.1 96.6 117	0.55 1.0 0.0	0.621 1.0 0.0	86.9 -56.0 83.9 100.9 123	0.55 1.0 0.0	0.621 1.0 0.0	86.9 -56.0 83.9 100.9 123	0.55 1.0 0.0
127	118	124	0.533 1.0 0.0	86.0 -62.7 82.9 103.9 127	0.742 1.0 0.0	88.4 -45.5 85.8 97.1 118	0.533 1.0 0.0	0.59 1.0 0.0	86.6 -58.3 83.6 102.0 124	0.533 1.0 0.0	0.59 1.0 0.0	86.6 -58.3 83.6 102.0 124	0.533 1.0 0.0
127	119	126	0.516 1.0 0.0	85.8 -63.9 82.6 104.5 127	0.721 1.0 0.0	88.2 -47.3 85.5 97.8 119	0.517 1.0 0.0	0.56 1.0 0.0	86.3 -60.6 83.3 103.1 126	0.517 1.0			

Data of Maximum color M in colorimetric system sRGB standard device; no separation, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<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> = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; 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* <sub>ds361M</sub>	LAB* <sub>dsx361Mi (x=LabCh)</sub>	rgb* <sub>ds361Mi</sub>	LAB* <sub>dsx361Mi (x=LabCh)</sub>	rgb* <sub>de361Mi</sub>	LAB* <sub>dex361Mi (x=LabCh)</sub>	rgb* <sub>de361Mi</sub>	LAB* <sub>dex361Mi (x=LabCh)</sub>	rgb* <sub>de361Mi</sub>	LAB* <sub>dex361Mi (x=LabCh)</sub>	rgb* <sub>de361Mi</sub>	LAB* <sub>dex361Mi (x=LabCh)</sub>	rgb* <sub>de361Mi</sub>	LAB* <sub>dex361Mi (x=LabCh)</sub>																			
128	120	127	0.5	1.0	0.0	85.7	-65.2	82.4	105.1	128	0.7	1.0	0.0	87.9	-49.1	85.3	98.4	120	0.5	1.0	0.0	0.529	1.0	0.0	86.0	-62.9	82.9	104.1	127	0.5	1.0	0.0			
128	121	128	0.483	1.0	0.0	85.5	-66.2	82.3	105.6	128	0.68	1.0	0.0	87.7	-50.9	84.9	99.1	121	0.483	1.0	0.0	0.498	1.0	0.0	85.7	-65.3	82.4	105.2	128	0.483	1.0	0.0			
129	122	129	0.466	1.0	0.0	85.4	-67.2	82.1	106.1	129	0.659	1.0	0.0	87.4	-52.8	84.6	99.7	122	0.466	1.0	0.0	0.456	1.0	0.0	85.4	-67.8	82.1	106.5	129	0.466	1.0	0.0			
129	123	130	0.45	1.0	0.0	85.3	-68.2	82.0	106.7	129	0.638	1.0	0.0	87.1	-54.6	84.2	100.4	123	0.45	1.0	0.0	0.414	1.0	0.0	85.1	-70.3	81.7	107.9	130	0.45	1.0	0.0			
130	124	131	0.433	1.0	0.0	85.2	-69.2	81.8	107.2	130	0.615	1.0	0.0	86.9	-56.5	83.9	101.1	124	0.433	1.0	0.0	0.372	1.0	0.0	84.7	-72.9	81.3	109.2	131	0.433	1.0	0.0			
130	125	133	0.416	1.0	0.0	85.0	-70.2	81.7	107.8	130	0.589	1.0	0.0	86.6	-58.4	83.6	102.1	125	0.417	1.0	0.0	0.309	1.0	0.0	84.0	-75.6	80.9	110.8	133	0.417	1.0	0.0			
131	126	134	0.4	1.0	0.0	84.9	-71.3	81.5	108.3	131	0.562	1.0	0.0	86.3	-60.4	83.3	103.0	126	0.4	1.0	0.0	0.244	1.0	0.0	84.1	-78.3	80.5	112.4	134	0.4	1.0	0.0			
131	127	135	0.383	1.0	0.0	84.8	-72.3	81.3	108.8	131	0.536	1.0	0.0	86.1	-62.4	83.0	103.9	127	0.383	1.0	0.0	0.132	1.0	0.0	83.8	-81.2	80.1	114.1	135	0.383	1.0	0.0			
132	128	136	0.366	1.0	0.0	84.7	-73.2	81.2	109.3	132	0.51	1.0	0.0	85.8	-64.4	82.6	104.8	128	0.367	1.0	0.0	0.0	1.0	0.073	83.7	-82.3	78.0	113.5	136	0.367	1.0	0.0			
132	129	137	0.35	1.0	0.0	84.6	-73.9	81.1	109.7	132	0.477	1.0	0.0	85.5	-66.5	82.3	105.8	129	0.35	1.0	0.0	0.0	1.0	0.165	83.7	-81.6	74.2	110.4	137	0.35	1.0	0.0			
132	130	138	0.333	1.0	0.0	84.5	-74.6	81.0	110.1	132	0.442	1.0	0.0	85.3	-68.7	82.0	107.0	130	0.333	1.0	0.0	0.0	1.0	0.227	83.8	-80.8	70.5	107.3	138	0.333	1.0	0.0			
132	131	140	0.316	1.0	0.0	84.4	-75.3	80.9	110.6	132	0.406	1.0	0.0	85.0	-70.9	81.6	108.1	131	0.317	1.0	0.0	0.0	1.0	0.273	83.8	-80.0	67.0	104.5	140	0.317	1.0	0.0			
133	132	141	0.3	1.0	0.0	84.3	-76.0	80.8	111.0	133	0.368	1.0	0.0	84.7	-73.1	81.2	109.3	132	0.3	1.0	0.0	0.0	1.0	0.311	83.9	-79.3	63.7	101.8	141	0.3	1.0	0.0			
133	133	142	0.283	1.0	0.0	84.2	-76.8	80.7	111.4	133	0.314	1.0	0.0	84.5	-75.4	80.9	110.7	133	0.283	1.0	0.0	0.0	1.0	0.349	84.0	-78.4	60.4	99.0	142	0.283	1.0	0.0			
133	134	143	0.266	1.0	0.0	84.2	-77.5	80.6	111.8	133	0.261	1.0	0.0	84.2	-77.7	80.6	112.0	134	0.267	1.0	0.0	0.0	1.0	0.383	84.0	-77.5	57.3	96.4	143	0.267	1.0	0.0			
134	135	144	0.25	1.0	0.0	84.1	-78.2	80.5	112.2	134	0.173	1.0	0.0	83.9	-80.2	80.3	113.5	135	0.25	1.0	0.0	0.0	1.0	0.41	84.1	-76.8	54.3	94.1	144	0.25	1.0	0.0			
134	136	145	0.233	1.0	0.0	84.0	-78.7	80.4	112.5	134	0.004	1.0	0.0	83.6	-82.6	79.9	115.0	136	0.233	1.0	0.0	0.0	1.0	0.437	84.2	-75.9	51.5	91.8	145	0.233	1.0	0.0			
134	137	147	0.216	1.0	0.0	84.0	-79.1	80.4	112.8	134	0.0	1.0	0.125	83.7	-82.1	76.6	112.3	137	0.217	1.0	0.0	0.0	1.0	0.464	84.2	-75.0	48.7	89.5	147	0.217	1.0	0.0			
134	138	148	0.2	1.0	0.0	83.9	-79.5	80.3	113.0	134	0.0	1.0	0.178	83.7	-81.4	73.4	109.7	138	0.2	1.0	0.0	0.0	1.0	0.491	84.3	-74.1	45.9	87.2	148	0.2	1.0	0.0			
134	139	149	0.183	1.0	0.0	83.9	-79.9	80.2	113.3	134	0.0	1.0	0.231	83.8	-80.7	70.3	107.1	139	0.183	1.0	0.0	0.0	1.0	0.513	84.4	-73.3	43.4	85.2	149	0.183	1.0	0.0			
135	140	150	0.166	1.0	0.0	83.8	-80.4	80.2	113.5	135	0.0	1.0	0.271	83.8	-80.1	67.3	104.7	140	0.167	1.0	0.0	0.0	1.0	0.533	84.5	-72.5	41.0	83.4	150	0.167	1.0	0.0			
135	141	151	0.15	1.0	0.0	83.8	-80.8	80.1	113.8	135	0.0	1.0	0.303	83.9	-79.4	64.4	102.3	141	0.15	1.0	0.0	0.0	1.0	0.553	84.5	-71.7	38.6	81.6	151	0.15	1.0	0.0			
135	142	152	0.133	1.0	0.0	83.7	-81.2	80.1	114.1	135	0.0	1.0	0.335	83.9	-78.7	61.6	100.0	142	0.133	1.0	0.0	0.0	1.0	0.573	84.6	-70.9	36.3	79.8	152	0.133	1.0	0.0			
135	143	154	0.116	1.0	0.0	83.7	-81.5	80.0	114.2	135	0.0	1.0	0.368	84.0	-77.9	58.8	97.7	143	0.117	1.0	0.0	0.0	1.0	0.593	84.7	-70.0	34.1	77.9	154	0.117	1.0	0.0			
135	144	155	0.1	1.0	0.0	83.7	-81.7	80.0	114.4	135	0.0	1.0	0.393	84.1	-77.3	56.2	95.6	144	0.1	1.0	0.0	0.0	1.0	0.614	84.7	-69.0	31.9	76.1	155	0.1	1.0	0.0			
135	145	156	0.083	1.0	0.0	83.7	-81.9	80.0	114.5	135	0.0	1.0	0.416	84.1	-76.6	53.7	93.6	145	0.083	1.0	0.0	0.0	1.0	0.631	84.8	-68.2	29.8	74.5	156	0.083	1.0	0.0			
135	146	157	0.066	1.0	0.0	83.7	-82.0	79.9	114.6	135	0.0	1.0	0.439	84.2	-75.9	51.3	91.7	146	0.067	1.0	0.0	0.0	1.0	0.646	84.9	-67.5	27.9	73.2	157	0.067	1.0	0.0			
135	147	158	0.049	1.0	0.0	83.6	-82.2	79.9	114.7	135	0.0	1.0	0.462	84.2	-75.1	48.8	89.7	147	0.05	1.0	0.0	0.0	1.0	0.661	85.0	-66.9	26.1	71.9	158	0.05	1.0	0.0			
135	148	159	0.033	1.0	0.0	83.6	-82.4	79.9	114.8	135	0.0	1.0	0.485	84.3	-74.3	46.5	87.7	148	0.033	1.0	0.0	0.0	1.0	0.676	85.0	-66.2	24.3	70.6	159	0.033	1.0	0.0			
135	149	161	0.016	1.0	0.0	83.6	-82.6	79.9	114.9	135	0.0	1.0	0.506	84.4	-73.5	44.2	85.9	149	0.017	1.0	0.0	0.0	1.0	0.691	85.1	-65.4	22.5	69.2	161	0.017	1.0	0.0			
136	150	162	0.0	1.0	0.0	83.6	-82.7	79.8	115.0	136	G <sub>d</sub>	0.0	1.0	0.523	84.4	-72.9	42.1	84.3	150	G <sub>s</sub>	0.0	1.0	0.0	0.0	1.0	0.706	85.2	-64.6	20.7	67.9	162	G <sub>e</sub>	0.0	1.0	0.0
136	151	163	0.0	1.0	0.016	83.6	-82.7	79.4	114.6	136	0.0	1.0	0.541	84.5	-72.3	40.1	82.7	151	0.0	1.0	0.017	0.0	1.0	0.718	85.2	-63.9	19.4	66.9	163	0.0	1.0	0.017			
136	152	164	0.0	1.0	0.033	83.6	-82.6	79.0	114.3	136	0.0	1.0	0.558	84.5	-71.6	38.1	81.2	152	0.0	1.0	0.033	0.0	1.0	0.73	85.3	-63.2	18.1	65.9	164	0.0	1.0	0.033			
136	153	164	0.0	1.0	0.05	83.6	-82.5	78.5	113.9	136	0.0	1.0	0.575	84.6	-70.8	36.1	79.6	153	0.0	1.0	0.05	0.0	1.0	0.741	85.3	-62.5	16.8	64.8	164	0.0	1.0	0.05			
136	154	165	0.0	1.0	0.066	83.6	-82.4	78.1	113.5	136	0.0	1.0	0.592	84.7	-70.0	34.2	78.0	154	0.0	1.0	0.067	0.0	1.0	0.752	85.4	-61.9	15.6	63.9	165	0.0	1.0	0.067			
136	155	166	0.0	1.0	0.083	83.6	-82.3	77.6	113.2	136	0.0	1.0	0.61	84.7	-69.2	32.3	76.5	155	0.0	1.0	0.083	0.0	1.0	0.761	85.4	-61.5	14.5	63.2	166	0.0	1.0	0.083			
136	156	167	0.0	1.0	0.1	83.6	-82.2	77.2	112.8	136	0.0	1.0	0.629	84.8	-68.4	30.5	74.9	156	0.0	1.0	0.1	0.0	1.0	0.77	85.5	-61.1	13.3	62.6	167	0.0	1.0	0.1			
136	157	168	0.0	1.0	0.116	83.6	-82.1	76.8	112.5	136	0.0	1.0	0.639	84.9	-67.8	28.8	73.8	157	0.0	1.0	0.117	0.0	1.0	0.778	85.5	-60.6	12.2	61.9	168	0.0	1.0	0.117			
137	158	169	0.0	1.0	0.133	83.6	-82.0	76.0	111.9	137	0.0	1.0	0.652	84.9	-67.3	27.2	72.7	158	0.0	1.0	0.133	0.0	1.0	0.787	85.6	-60.2	11.1	61.3	169	0.0	1.0	0.133			
137	159	170	0.0	1.0	0.15	83.7	-81.8	75.0	111.0	137	0.0	1.0	0.665	85.0	-66.7	25.6	71.6	159	0.0	1.0	0.15	0.0	1.0												



Data of Maximum color M in colorimetric system sRGB standard device; no separation, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<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 RYGBM<sub>d</sub>: h<sub>ab,d</sub> = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; 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

Table with columns for device colours (h<sub>ab,d</sub>, h<sub>ab,s</sub>, h<sub>ab,e</sub>, r<sub>gb</sub>\*\_dd361M, LAB\*<sub>d</sub>, ddx361Mi (x=LabCh), r<sub>gb</sub>\*\_ds361Mi, LAB\*<sub>s</sub>, dsx361Mi (x=LabCh), r<sub>gb</sub>\*\_dd361Mi, r<sub>gb</sub>\*\_de361Mi, LAB\*<sub>e</sub>, dex361Mi (x=LabCh), r<sub>gb</sub>\*\_dd361Mi) and rows for 48 color patches (139-196).

see similar files: http://130.149.60.45/~farbmetrik/QE22/QE22.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE22/QE22L0FP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta







Data of Maximum color M in colorimetric system sRGB standard device; no separation, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<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 RYGBM<sub>d</sub>: h<sub>ab,d</sub> = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; 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

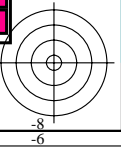
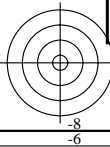
h <sub>ab,d</sub>	h <sub>ab,s</sub>	h <sub>ab,e</sub>	rgb* <sub>dd361M</sub>	LAB* <sub>dsx361Mi</sub> (x=LabCh)	rgb* <sub>ds361Mi</sub>	LAB* <sub>dsx361Mi</sub> (x=LabCh)	rgb* <sub>dd361Mi</sub>	LAB* <sub>de361Mi</sub> (x=LabCh)	rgb* <sub>dd361Mi</sub>	LAB* <sub>de361Mi</sub> (x=LabCh)	rgb* <sub>dd361Mi</sub>	rgb* <sub>dd</sub>	rgb* <sub>ds</sub>	rgb* <sub>de</sub>
341	345	342	1.0	0.0	0.75	54.2	86.7	-28.6	91.3	341	1.0	0.0	0.75	
342	346	343	1.0	0.0	0.733	54.0	86.5	-26.4	90.4	342	1.0	0.0	0.733	
344	347	344	1.0	0.0	0.716	53.8	86.2	-24.2	89.5	344	1.0	0.0	0.716	
345	348	345	1.0	0.0	0.7	53.7	85.8	-22.0	88.6	345	1.0	0.0	0.7	
346	349	346	1.0	0.0	0.683	53.5	85.4	-19.9	87.7	346	1.0	0.0	0.683	
348	350	347	1.0	0.0	0.666	53.4	85.0	-17.8	86.8	348	1.0	0.0	0.667	
349	351	348	1.0	0.0	0.65	53.2	84.5	-15.7	85.9	349	1.0	0.0	0.65	
350	352	349	1.0	0.0	0.633	53.0	83.9	-13.6	85.0	350	1.0	0.0	0.633	
352	353	350	1.0	0.0	0.616	52.9	83.6	-11.4	84.3	352	1.0	0.0	0.617	
353	354	351	1.0	0.0	0.6	52.8	83.4	-9.1	83.9	353	1.0	0.0	0.6	
355	355	352	1.0	0.0	0.583	52.7	83.2	-6.9	83.5	355	1.0	0.0	0.583	
356	356	353	1.0	0.0	0.566	52.5	82.9	-4.6	83.0	356	1.0	0.0	0.567	
358	357	354	1.0	0.0	0.55	52.4	82.5	-2.4	82.6	358	1.0	0.0	0.55	
359	358	355	1.0	0.0	0.533	52.3	82.1	-0.1	82.1	359	1.0	0.0	0.533	
361	359	356	1.0	0.0	0.516	52.1	81.6	2.0	81.7	361	1.0	0.0	0.517	
362	360	352	1.0	0.0	0.5	52.0	81.1	4.1	81.2	362	1.0	0.0	0.5	
364	361	353	1.0	0.0	0.483	51.9	81.1	6.5	81.3	364	1.0	0.0	0.483	
366	362	354	1.0	0.0	0.466	51.8	81.0	8.8	81.5	366	1.0	0.0	0.467	
367	363	355	1.0	0.0	0.45	51.7	80.8	11.1	81.6	367	1.0	0.0	0.45	
369	364	356	1.0	0.0	0.433	51.6	80.6	13.5	81.7	369	1.0	0.0	0.433	
371	365	357	1.0	0.0	0.416	51.5	80.3	15.8	81.8	371	1.0	0.0	0.417	
372	366	358	1.0	0.0	0.4	51.4	79.9	18.1	81.9	372	1.0	0.0	0.4	
374	367	359	1.0	0.0	0.383	51.4	79.5	20.4	82.1	374	1.0	0.0	0.383	
376	368	360	1.0	0.0	0.366	51.3	79.3	22.7	82.5	376	1.0	0.0	0.367	
377	369	362	1.0	0.0	0.35	51.2	79.3	25.1	83.2	377	1.0	0.0	0.35	
379	370	363	1.0	0.0	0.333	51.1	79.2	27.4	83.8	379	1.0	0.0	0.333	
380	371	364	1.0	0.0	0.316	51.1	79.1	29.7	84.5	380	1.0	0.0	0.317	
382	372	365	1.0	0.0	0.3	51.0	78.9	32.1	85.2	382	1.0	0.0	0.3	
383	373	366	1.0	0.0	0.283	51.0	78.7	34.4	85.9	383	1.0	0.0	0.283	
385	374	367	1.0	0.0	0.266	50.9	78.3	36.8	86.6	385	1.0	0.0	0.267	
386	375	368	1.0	0.0	0.25	50.8	77.9	39.2	87.2	386	1.0	0.0	0.25	
387	376	369	1.0	0.0	0.233	50.8	78.0	41.2	88.2	387	1.0	0.0	0.233	
389	377	370	1.0	0.0	0.216	50.8	78.0	43.3	89.2	389	1.0	0.0	0.217	
390	378	372	1.0	0.0	0.2	50.7	78.0	45.4	90.2	390	1.0	0.0	0.2	
391	379	373	1.0	0.0	0.183	50.7	77.9	47.5	91.2	391	1.0	0.0	0.183	
392	380	374	1.0	0.0	0.166	50.6	77.8	49.6	92.2	392	1.0	0.0	0.167	
393	381	375	1.0	0.0	0.15	50.6	77.6	51.9	93.3	393	1.0	0.0	0.15	
394	382	376	1.0	0.0	0.133	50.6	77.3	53.9	94.3	394	1.0	0.0	0.133	
395	383	377	1.0	0.0	0.116	50.5	77.2	55.6	95.1	395	1.0	0.0	0.117	
396	384	378	1.0	0.0	0.1	50.5	77.2	56.8	95.9	396	1.0	0.0	0.1	
396	385	379	1.0	0.0	0.083	50.5	77.2	58.1	96.6	396	1.0	0.0	0.083	
397	386	381	1.0	0.0	0.066	50.5	77.2	59.4	97.4	397	1.0	0.0	0.067	
398	387	382	1.0	0.0	0.049	50.5	77.1	60.6	98.1	398	1.0	0.0	0.05	
398	388	383	1.0	0.0	0.033	50.5	77.1	61.9	98.9	398	1.0	0.0	0.033	
399	389	384	1.0	0.0	0.016	50.5	77.0	63.2	99.6	399	1.0	0.0	0.017	
400	390	385	1.0	0.0	0.0	50.4	76.9	64.5	100.4	400	1.0	0.0	0.0	

see similar files: http://130.149.60.45/~farbmetrik/QE22/QE22L0FP.PDF /.PS  
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE22/QE22L0FP.PDF /.PS  
application for measurement of display output, no separation  
TUB material: code=rha4ta

TUB-test chart QE22; hue code: H\*\_e=R75Y\_e  
48 step hue circles; rgb-LabCh\*tables

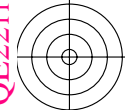
input: rgb/cmyk -> rgb<sub>de</sub>  
output: 3D-linearization to rgb\*\_de





nif	HC*Fate	rgb*Rate	icr*Fate	hsa*Fate	rgb*Fate	LabCH*Fate	LabCH*Fate	rgb*Fate	DF*Fate	rgb*Fate	LabCH*Fate	
0/648	ROXY_100_100de	1.0	0.0	0.0	0.0	0.0	0.263	50.9	78.3	37.3	86.7	25.4
1/668	R25Y_100_100de	1.0	0.25	0.0	1.0	0.0	0.102	0.0	0.102	0.0	51.3	74.4
2/684	R50Y_100_100de	1.0	0.5	0.0	1.0	0.0	0.487	0.0	0.487	0.0	63.1	42.7
3/702	R75Y_100_100de	1.0	0.75	0.0	1.0	0.0	0.684	0.0	0.684	0.0	73.3	18.3
4/720	Y00G_100_100de	1.0	1.0	0.0	1.0	0.0	0.856	0.0	0.856	0.0	83.7	-3.4
5/558	Y25G_100_100de	0.75	1.0	0.0	1.0	0.0	0.906	1.0	0.906	1.0	91.0	-29.9
6/396	Y50G_100_100de	0.5	1.0	0.0	1.0	0.0	0.528	1.0	0.528	1.0	85.9	-63.0
7/234	Y75G_100_100de	0.25	1.0	0.0	1.0	0.0	0.436	1.0	0.436	1.0	84.1	-76.0
8/72	CO0B_100_100de	0.0	1.0	0.0	1.0	0.0	0.706	85.1	0.0	0.706	85.1	-64.6
9/72	CO1B_100_100de	0.0	1.0	0.0	1.0	0.0	0.706	85.1	0.0	0.706	85.1	-64.6
10/76	CO2B_100_100de	0.0	1.0	0.0	1.0	0.0	0.951	86.5	0.0	0.951	86.5	-49.9
11/80	CO3B_100_100de	0.0	1.0	0.0	1.0	0.0	0.89	1.0	0.89	1.0	79.0	-34.2
12/44	CO4B_100_100de	0.0	1.0	0.0	1.0	0.0	0.763	1.0	0.763	1.0	70.0	-19.0
13/8	BO0M_100_100de	0.0	1.0	0.0	1.0	0.0	0.609	1.0	0.609	1.0	59.2	0.0
14/332	B25R_100_100de	0.5	1.0	0.0	1.0	0.0	0.27	1.0	0.27	1.0	38.2	5.7
15/656	B50R_100_100de	0.5	1.0	0.0	1.0	0.0	0.091	57.1	0.0	0.091	57.1	94.1
16/652	B75R_100_100de	1.0	0.0	0.5	3.0	1.0	0.0	0.617	52.9	83.6	-11.6	84.4
17/648	ROXY_100_100de	1.0	0.0	0.0	1.0	0.0	0.263	50.9	78.3	37.3	86.7	25.4
18/688	ROXY_100_050de	1.0	0.5	0.5	1.0	0.5	0.631	73.1	39.1	18.6	43.3	25.4
19/706	ROXY_100_025de	1.0	0.75	0.5	1.0	0.75	0.743	0.5	77.9	16.5	33.4	63.6
20/724	Y00G_100_050de	0.75	1.0	0.0	1.0	0.75	0.928	0.5	89.5	-1.7	42.2	92.3
21/462	Y00G_100_025de	0.5	1.0	0.0	1.0	0.5	0.764	1.0	0.607	80.2	-31.1	41.0
22/400	CO0B_100_050de	0.5	1.0	0.0	1.0	0.5	0.853	90.2	-32.3	103.8	-16.2	51.9
23/400	CO0B_100_025de	0.5	1.0	0.0	1.0	0.5	0.853	90.2	-32.3	103.8	-16.2	51.9
24/560	BO0R_100_050de	0.5	1.0	0.0	1.0	0.5	0.804	1.0	0.711	0.3	-27.0	27.9
25/692	B50R_100_050de	1.0	0.5	0.5	1.0	0.5	0.995	76.3	47.0	-28.7	55.1	328.6
26/688	ROXY_100_050de	1.0	0.5	0.5	1.0	0.5	0.631	73.1	39.1	18.6	43.3	25.4
27/506	ROXY_075_050de	0.75	0.25	0.5	0.5	0.75	0.25	0.381	49.3	39.1	18.6	43.3
28/524	ROXY_075_025de	0.75	0.25	0.5	0.5	0.75	0.493	0.25	55.4	21.3	35.4	58.8
29/542	Y00G_075_050de	0.75	0.75	0.5	0.5	0.75	0.678	0.25	65.7	-1.7	42.2	92.3
30/380	Y50G_075_050de	0.5	0.75	0.5	0.5	0.5	0.514	0.75	0.25	66.8	-31.5	41.4
31/218	CO0B_075_050de	0.25	0.75	0.5	0.5	0.25	0.75	0.603	66.4	-32.3	103.3	33.9
32/222	CO0B_075_025de	0.25	0.75	0.5	0.5	0.25	0.695	0.75	53.4	-17.1	-12.8	21.4
33/186	BO0R_075_050de	0.25	0.75	0.5	0.5	0.25	0.554	0.75	53.4	0.8	-28.3	28.3
34/510	B50R_075_050de	0.75	0.25	0.5	0.5	0.75	0.25	0.745	0.724	52.4	46.7	-28.6
35/506	ROXY_075_050de	0.75	0.25	0.5	0.5	0.75	0.25	0.381	49.3	39.1	18.6	43.3
36/324	ROXY_050_050de	0.5	0.0	0.5	0.5	0.5	0.131	25.4	39.1	18.6	43.3	25.4
37/342	ROXY_050_025de	0.5	0.25	0.5	0.5	0.5	0.243	0.0	31.5	21.4	36.4	42.2
38/360	Y00G_050_050de	0.5	0.5	0.5	0.5	0.5	0.428	0.0	41.8	-1.7	42.2	92.3
39/198	Y50G_050_050de	0.25	0.5	0.5	0.5	0.25	0.264	0.5	0.429	-31.5	41.4	52.0
40/36	CO0B_050_050de	0.0	0.5	0.5	0.5	0.0	0.5	0.353	42.5	-32.3	103.3	33.9
41/40	CO0B_050_025de	0.0	0.5	0.5	0.5	0.0	0.445	0.5	39.5	-17.1	-12.8	21.4
42/4	BO0R_050_050de	0.0	0.5	0.5	0.5	0.0	0.304	0.5	29.6	0.8	-28.3	28.3
43/328	B50R_050_050de	0.5	0.0	0.5	0.5	0.5	0.0	0.495	28.5	47.0	-28.7	55.1
44/324	ROXY_050_050de	0.5	0.0	0.5	0.5	0.5	0.0	0.131	25.4	39.1	18.6	43.3
45/0	NW_000de	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46/91	NW_015de	0.125	0.125	0.125	0.125	0.125	0.125	0.125	11.9	0.0	0.0	0.0
47/182	NW_025de	0.25	0.25	0.25	0.25	0.25	0.25	0.25	23.8	0.0	0.0	0.0
48/273	NW_038de	0.375	0.375	0.375	0.375	0.375	0.375	0.375	35.7	0.0	0.0	0.0
49/364	NW_050de	0.5	0.5	0.5	0.5	0.5	0.5	0.5	47.7	0.0	0.0	0.0
50/455	NW_062de	0.625	0.625	0.625	0.625	0.625	0.625	0.625	59.6	0.0	0.0	0.0
51/546	NW_075de	0.75	0.75	0.75	0.75	0.75	0.75	0.75	71.5	0.0	0.0	0.0
52/637	NW_088de	0.875	0.875	0.875	0.875	0.875	0.875	0.875	83.3	0.0	0.0	0.0
53/728	NW_100de	1.0	1.0	1.0	1.0	1.0	1.0	1.0	95.4	0.0	0.0	0.0

Mean color difference of this page: delta E\* = 0.8



TUB registration: 20130201-QE22/QE22L0FP.PDF /.PS application for measurement of display output, no separation

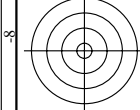
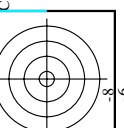
TUB material: code=rha4ta



http://130.149.60.45/~farbmetrik/QE22/QE22L0FP.PDF /.PS; 3D-linearization F: 3D-linearization QE22/QE22LE30FP.DAT in file (F), page 16/29

Table with 80 rows and multiple columns (n#, H/C\*F, Rgb\*F, LabCH\*F, LabCH\*Fb, Rgb\*Fb, LabCH\*Fb, DPe\*F, Rgb\*Fb, LabCH\*Fb, Rgb\*F, LabCH\*F, LabCH\*Fb, Rgb\*Fb, DPe\*F, Rgb\*F, LabCH\*F, LabCH\*Fb, Rgb\*Fb). Includes a mean color difference column (delta E\*) and a footer note 'Mean color difference of this page: 34.1'.

input: rgb\*cm/yk -> rgb\*de output: 3D-linearization to rgb\*de



see similar files: http://130.149.60.45/~farbmetrik/QE22/QE22.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik



TUB registration: 20130201-QE22/QE22LOFP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta

Table with 16 columns: n, HHC\*File, rpb\*File, iet\*File, hsa\*File, rpb\*File, LabCh\*File, iet\*File, hsa\*File, rpb\*File, LabCh\*File, rpb\*File, LabCh\*File, DP\*File, hsa\*File, rpb\*File, LabCh\*File. Rows 81-161.

see similar files: http://130.149.60.45/~farbmetrik/QE22/QE22LOFP.PDF /.PS; 3D-linearization technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

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

TUB-test chart QE22; hue code: H\*e=eR75Ye colors and differences, AE\*<sup>\*</sup>

Mean color difference of this page: delta E\*\* = 0.6

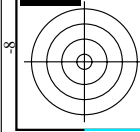
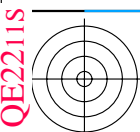
TUB registration: 20130201-QE22/QE22LOFP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta

Table with columns: n, HHC\*Fate, rpb\*Fate, iet\*Fate, Hsa\*Fate, rpb\*Fate, LabCH\*Fate, rpb\*Fate, LabCH\*Fate, DF\*Fate, rpb\*Fate, LabCH\*Fate, rpb\*Fate, LabCH\*Fate, DF\*Fate, rpb\*Fate, LabCH\*Fate. Rows 162-242.

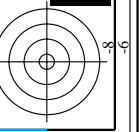
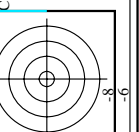
input: rgb/cmlyk -> rgbde output: 3D-linearization to rpb\*de Mean color difference of this page: delta E\*\* = 0.5





TUB registration: 20130201-QE22/QE22LOFP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta



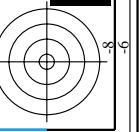
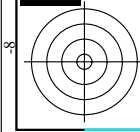
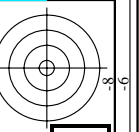
http://130.149.60.45/~farbmatrik/QE22/QE22LOFP.PDF /.PS; 3D-linearization F: 3D-linearization QE22/QE22LE30FP.DAT in file (F), page 20/29

Main data table with columns: n, HHC\*F, rgb\*Rate, iZt\*Rate, iRs\*Rate, rrgb\*Rate, LabCH\*F, LabCH\*Rate, rrgb\*Rate, DF\*F, rrgb\*Rate, LabCH\*Rate, LabCH\*Rate, rrgb\*Rate, rrgb\*Rate, LabCH\*Rate, LabCH\*Rate, rrgb\*Rate, LabCH\*Rate, rrgb\*Rate, LabCH\*Rate, rrgb\*Rate, LabCH\*Rate. Includes a footer: Mean color difference of this page: delta E\*\* = 0.4

TUB-test chart QE22; hue code: H\*e=eR75Ye colors and differences, ΔE\*\*

input: rgb/cmkyk -> rgbd output: 3D-linearization to rrgb\*de

see similar files: http://130.149.60.45/~farbmatrik/QE22/QE22.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmatrik



see similar files: <http://130.149.60.45/~farbmetrik/QE22/QE22.HTM>  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

http://130.149.60.45/~farbmetrik/QE22/QE22LOFP.PDF /.PS; 3D-linearization  
F: 3D-linearization QE22/QE22LE30FP.DAT in file (F), page 21/29

Table with columns: n, HHC\*F0, rpb\*F0, iet\*F0, Hsa\*F0, rpb\*F0, LabCh\*F0, rpb\*F0, LabCh\*F0, DP\*F0, rpb\*F0, LabCh\*F0, rpb\*F0, LabCh\*F0. Rows 405-485.

Mean color difference of this page:  $\Delta E^*_{ab} = 0.4$   
input: *rgb/cmlyk* -> *rgbde*  
output: 3D-linearization to *rgb\*de*  
QE220-TN; Page 21/29-F



TUB registration: 20130201-QE22/QE22LOFP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta

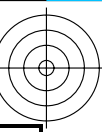
Table with columns: n, HHC\*F0, rgb\*F0, iet\*F0, Hsa\*F0, rgb\*F0, LabCH\*F0, LabCH\*F0, rgb\*F0, DP\*F0, Hsa\*F0, LabCH\*F0, LabCH\*F0, rgb\*F0, LabCH\*F0. Rows 567-647.

input: rgb/cmlyk -> rgbde output: 3D-linearization to rgb\*de Mean color difference of this page: delta E\*\* = 0.3

TUB-test chart QE22; hue code: H\*e=R75Ye colors and differences, AE\*\*

QE220-TN; Page 23/29-F

L-1132230-F0



TUB registration: 20130201-QE22/QE22L0FP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta

http://130.149.60.45/~farbmetrik/QE22/QE22L0FP.PDF /.PS; 3D-linearization output: 3D-linearization to rgb\*de

http://130.149.60.45/~farbmetrik/QE22/QE22L0FP.PDF /.PS; 3D-linearization output: 3D-linearization to rgb\*de

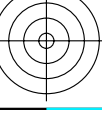
Table with columns: n, HHC\*Fde, rgb\*Fde, iZr\*Fde, Hrs\*Fde, Hrs\*Fde, LabCH\*Fde, LabCH\*Fde, rgb\*Fde, DE\*Fde, DE\*Fde, LabCH\*Fde, LabCH\*Fde, rgb\*Fde, rgb\*Fde. Rows 648-728.

Mean color difference of this page: delta E\*ab = 2.5

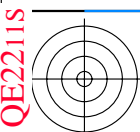
see similar files: http://130.149.60.45/~farbmetrik/QE22/QE22L0FP.PDF /.PS; 3D-linearization output: 3D-linearization to rgb\*de

TUB-test chart QE22; hue code: H\*e=R75Ye colors and differences, AE\*ab

QE220-7N; Page 24/29-F



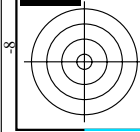
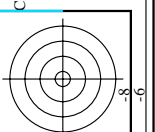




QE2211S

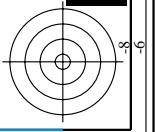
TUB registration: 20130201-QE22/QE22L0FP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta



QE2211S

see similar files: http://130.149.60.45/~farbmetrik/QE22/QE22.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik



QE2211S

Table with 30 columns (n, H/C, Rgb, etc.) and 800 rows of color calibration data.

QE220-7N; Page 25/29-F

TUB-test chart QE22; hue code: H\*e=R75Ye colors and differences, ΔE\*

input: rgb/cmlyk -> rgbd output: 3D-linearization to rgb\*de

Mean color difference of this page:

delta E\*\* = 0.7



TUB registration: 20130201-QE22/QE22L0FP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta

Table with 10 columns: n, H/C\*F0e, r/gb\*F0e, i/cr\*F0e, i/rs\*F0e, r/gb\*F0e, Lab/C\*F0e, Lab/C\*F0e, r/gb\*F0e, Lab/C\*F0e. Rows 891-971.

Table with 10 columns: n, H/C\*F0e, r/gb\*F0e, i/cr\*F0e, i/rs\*F0e, r/gb\*F0e, Lab/C\*F0e, Lab/C\*F0e, r/gb\*F0e, Lab/C\*F0e. Rows 972-991.

see similar files: http://130.149.60.45/~farbmetrik/QE22/QE22L0FP.PDF /.PS; 3D-linearization technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

Main data table with 10 columns: H/C\*F0e, r/gb\*F0e, i/cr\*F0e, i/rs\*F0e, r/gb\*F0e, Lab/C\*F0e, Lab/C\*F0e, r/gb\*F0e, Lab/C\*F0e, Lab/C\*F0e. Rows 891-971.

Main data table with 10 columns: H/C\*F0e, r/gb\*F0e, i/cr\*F0e, i/rs\*F0e, r/gb\*F0e, Lab/C\*F0e, Lab/C\*F0e, r/gb\*F0e, Lab/C\*F0e, Lab/C\*F0e. Rows 972-991.

Table with 10 columns: Lab/C\*F0e, r/gb\*F0e, i/cr\*F0e, i/rs\*F0e, r/gb\*F0e, Lab/C\*F0e, Lab/C\*F0e, r/gb\*F0e, Lab/C\*F0e, Lab/C\*F0e. Rows 891-971.

Table with 10 columns: Lab/C\*F0e, r/gb\*F0e, i/cr\*F0e, i/rs\*F0e, r/gb\*F0e, Lab/C\*F0e, Lab/C\*F0e, r/gb\*F0e, Lab/C\*F0e, Lab/C\*F0e. Rows 972-991.

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

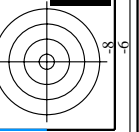
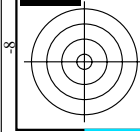
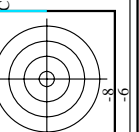
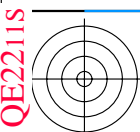
TUB-test chart QE22; hue code: H\*=R75Ye colors and differences, ΔE\*<sup>\*</sup>

QE220-TN; Page 27/29-F

L-1132630-F0

delta E\* = 0.6

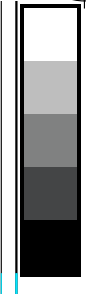
Mean color difference of this page:



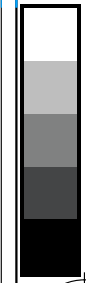


TUB registration: 20130201-QE22/QE22L0FP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta



http://130.149.60.45/~farbmetrik/QE22/QE22L0FP.PDF /.PS; 3D-linearization F: 3D-linearization QE22/QE22LE30FP.DAT in file (F), page 29/29



n	HC*Fde	rgb*Fde	ict*Fde	hsa*Fde	rgb*Fde	LabCH*Fde	hsa*Fde	LabCH*Fde	rgb*Fde	DF*Fde	hsa*Fde	rgb*Fde	LabCH*Fde	hsa*Fde	LabCH*Fde	hsa*Fde	rgb*Fde	LabCH*Fde
1053	NW_086de	0.866	0.866	0.866	0.866	0.866	0.866	0.866	0.866	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
1054	NW_093de	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
1055	NW_100de	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1056	NW_006de	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1057	NW_013de	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1058	NW_020de	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1059	NW_026de	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1060	NW_033de	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1061	NW_040de	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1062	NW_046de	0.466	0.466	0.466	0.466	0.466	0.466	0.466	0.466	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1063	NW_053de	0.533	0.533	0.533	0.533	0.533	0.533	0.533	0.533	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1064	NW_059de	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1065	NW_066de	0.666	0.666	0.666	0.666	0.666	0.666	0.666	0.666	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1066	NW_073de	0.734	0.734	0.734	0.734	0.734	0.734	0.734	0.734	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1067	NW_080de	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1068	NW_086de	0.866	0.866	0.866	0.866	0.866	0.866	0.866	0.866	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1069	NW_093de	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1070	NW_100de	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1071	NW_006de	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
1072	NW_013de	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
1073	NW_020de	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
1074	ROY_100_100de	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1075	GS0B_100_100de	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
1076	Y06C_100_100de	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1077	B08C_100_100de	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1078	B08C_100_100de	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1079	B50R_100_100de	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Mean color difference of this page: delta E\*\* = 0.3

see similar files: http://130.149.60.45/~farbmetrik/QE22/QE22.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

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

QE220-7N; Page 29/29-F TUB-test chart QE22; hue code: H\*\_e=R75Y\_e colors and differences, ΔE\*\*