

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 116/360 = 0.32$

$H^*_ = Y50G_ -$

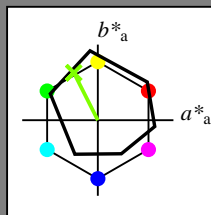
Data for any device (d) or elementary (e) colour:

$HIC^*_ -$

hue text for the colours of this page:

$H^*_ = Y50G_ -$

triangle lightness T^*



ORS18a; adapted (a) CIELAB data

name	$L^*=L^*_a a^*_a$	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_.,Ma	47.9	65.3	50.5	82.6
Y_.,Ma	90.3	-10.2	91.7	92.3
G_.,Ma	50.9	-62.8	34.9	71.9
C_.,Ma	58.6	-30.3	-45.0	54.2
B_.,Ma	25.7	31.0	-44.4	54.2
M_.,Ma	48.1	75.2	-8.3	75.7
N_.,Ma	18.0	0.0	0.0	0.0
W_.,Ma	95.4	0.0	0.0	0.0
R_.,CIE	39.9	58.7	27.9	65.0
Y_.,CIE	81.2	-2.8	71.5	71.6
G_.,CIE	52.2	-42.4	13.6	44.5
B_.,CIE	30.5	1.4	-46.4	46.4

Data for maximum colour (Ma):

$LabCh^*_{-,Ma}$: 73 -31 62 70 116

$HIC^*_{-,Ma}$: Y50G_100_100_

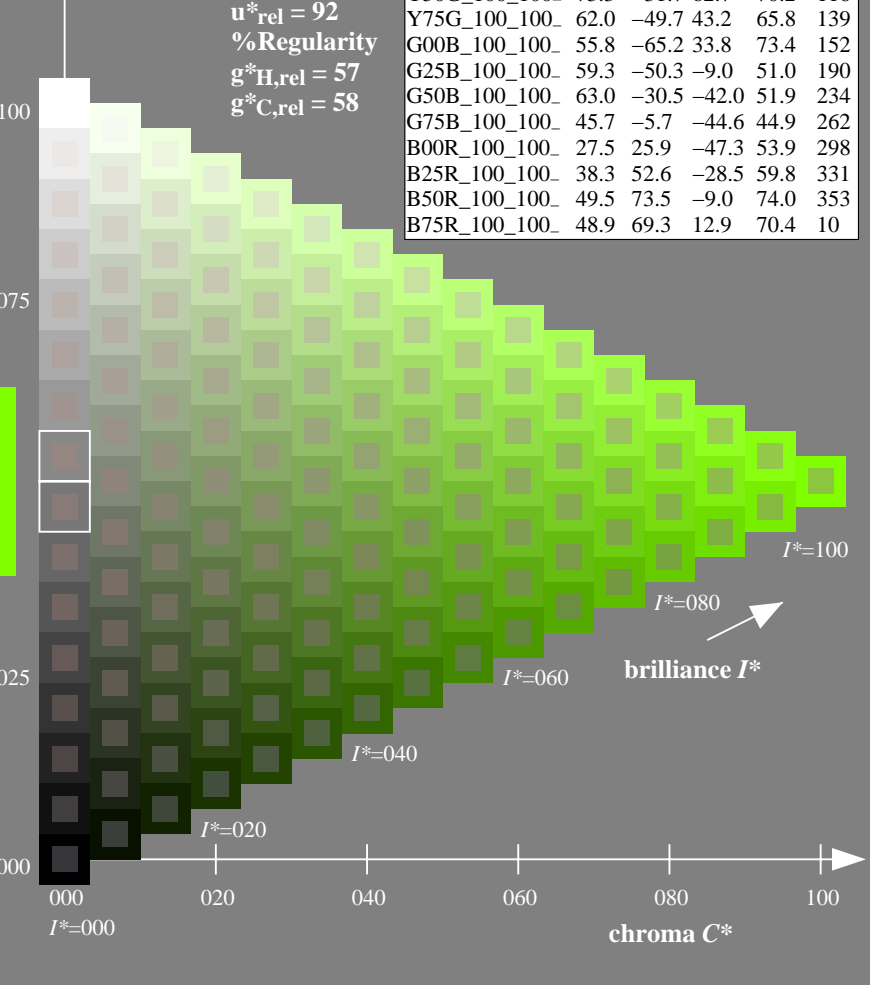
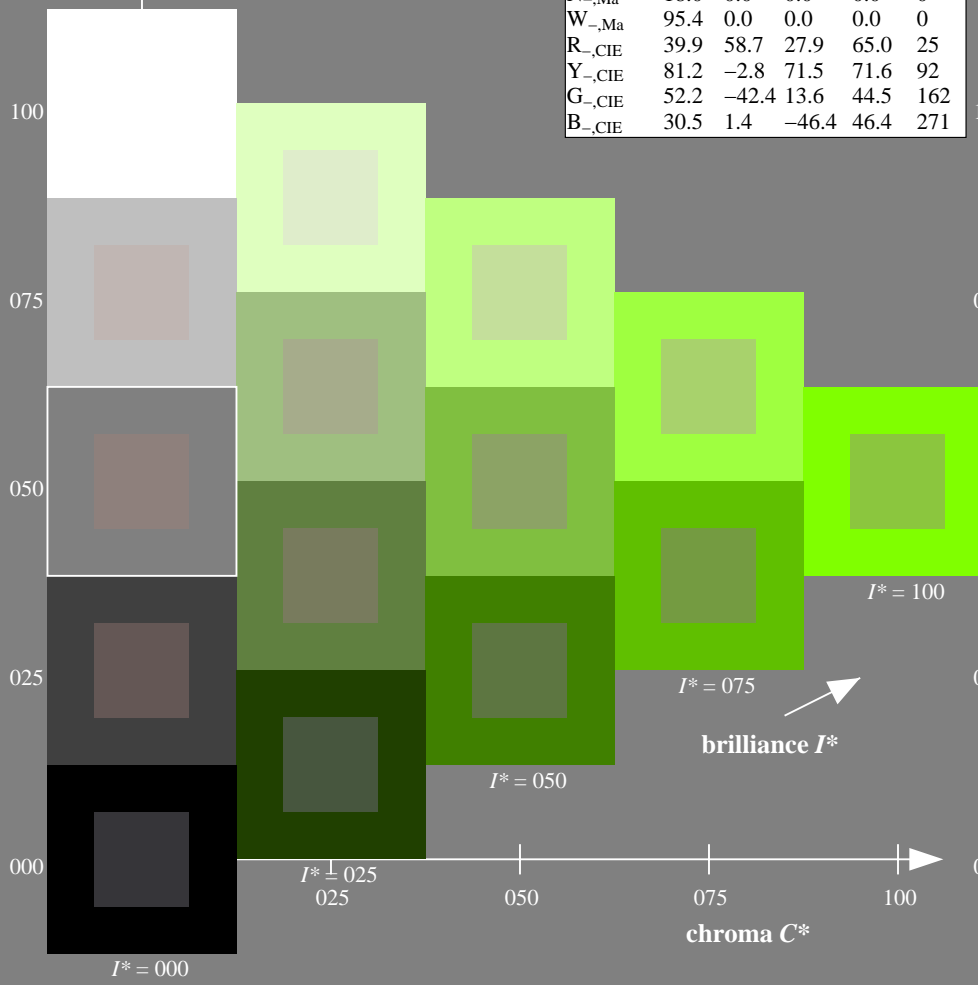
$rgbic^*_{-,Ma}$:

0.5 1.0 0.0 1.0 1.0

triangle lightness T^*

ORS20a; adapted (a) CIELAB data

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



see similar files: <http://130.149.60.45/~farbmetrik/QE51/QE51.HTM>
 technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE51/QE51L0NP.PDF /.PS
 application for measurement of display output

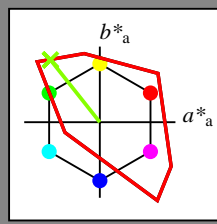
TUB material: code=rh4ta

Input and Output: Television Luminous System TLS00a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 128/360 = 0.35$

$H^*_d = Y50G_d$

Data for any device (d) or elementary (e) colour:
 HIC^*_d

hue text for the colours of this page:
 $H^*_d = Y50G_d$
triangle lightness T^*



TLS00a; adapted (a) CIELAB data

name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{d, Ma}	50.4	76.9	64.5	100.4	40
Y _{d, Ma}	92.6	-20.7	90.7	93.0	102
G _{d, Ma}	83.6	-82.7	79.8	115.0	136
C _{d, Ma}	86.8	-46.1	-13.5	48.1	196
B _{d, Ma}	30.3	76.0	-103.5	128.5	306
M _{d, Ma}	57.2	94.3	-58.4	110.9	328
N _{d, Ma}	0.0	0.0	0.0	0.0	0
W _{d, Ma}	95.4	0.0	0.0	0.0	0
R _{d, CIE}	39.9	58.7	27.9	65.0	25
Y _{d, CIE}	81.2	-2.8	71.5	71.6	92
G _{d, CIE}	52.2	-42.4	13.6	44.5	162
B _{d, CIE}	30.5	1.4	-46.4	46.4	271

Data for maximum colour (Ma):

$LabCh^*_d, Ma$: 85 -65 82 105 128

HIC^*_d, Ma : Y50G_100_100d

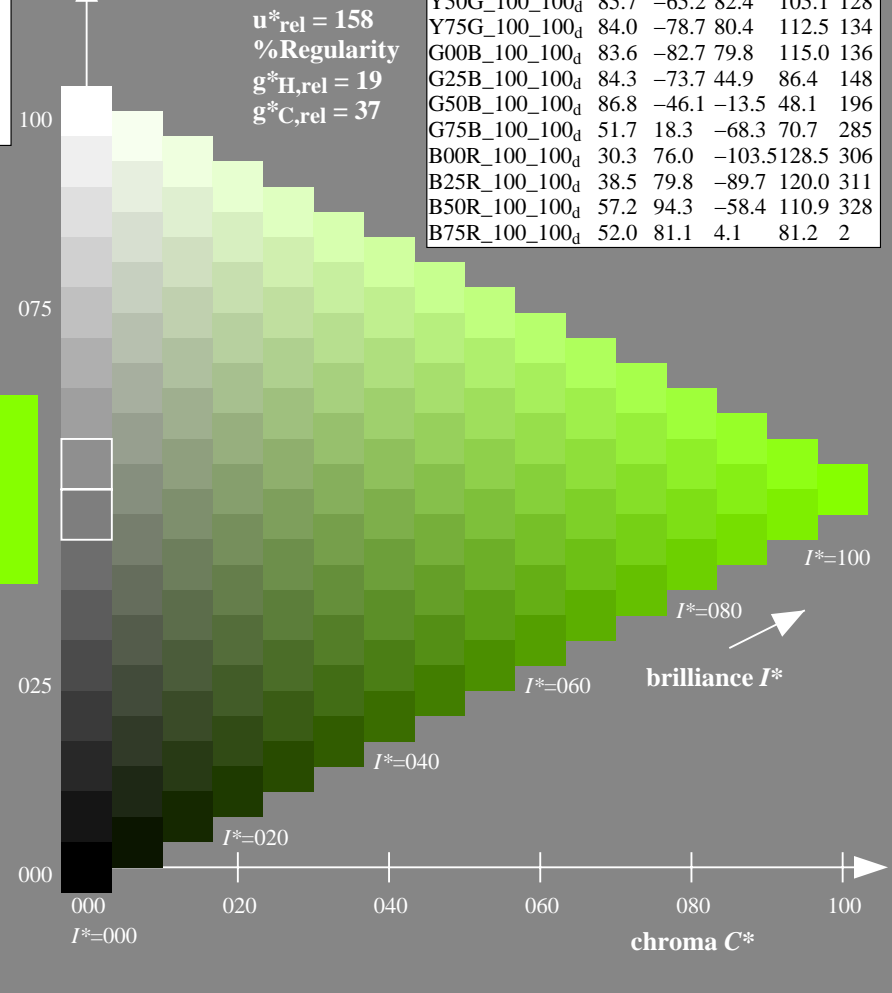
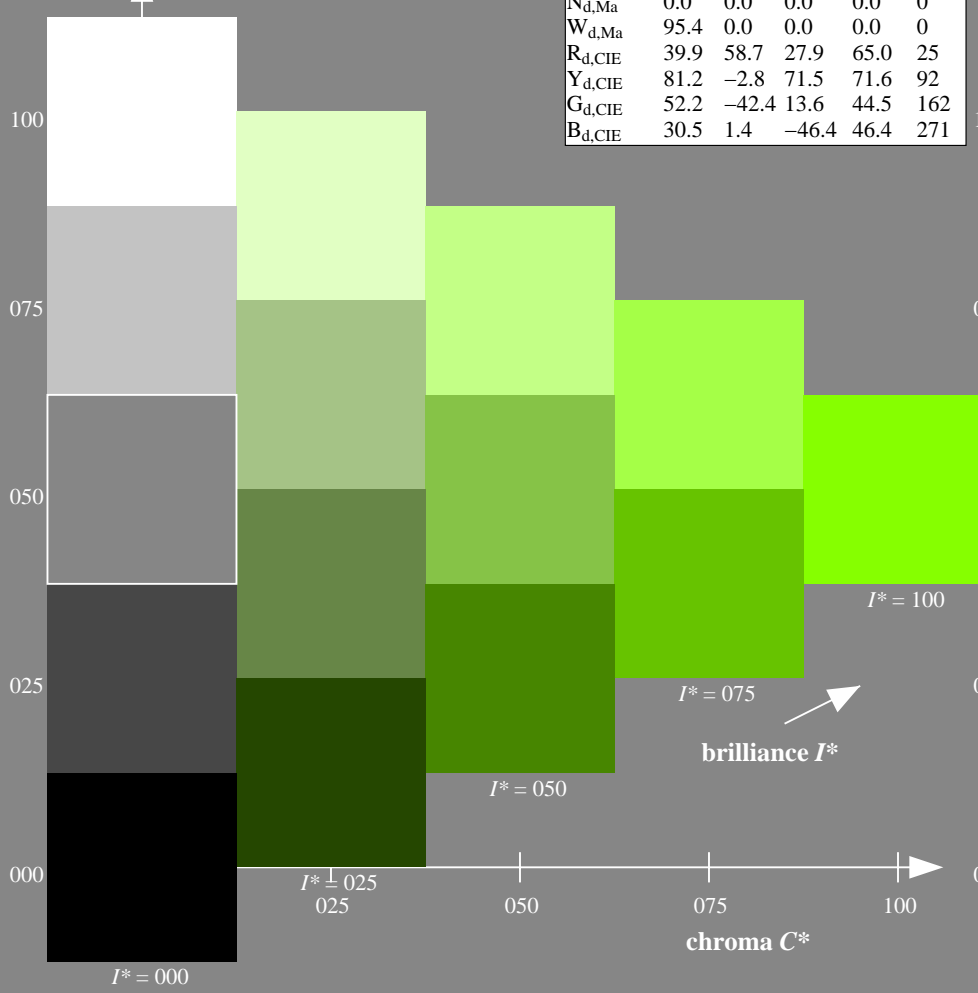
$rgbic^*_d, Ma$: 0.5 1.0 0.0 1.0 1.0

triangle lightness T^*

TLS00a; adapted (a) CIELAB data

H^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100 _d	50.4	76.9	64.5	100.4	40
R25Y_100_100 _d	53.7	67.6	65.8	94.4	44
R50Y_100_100 _d	63.6	41.3	71.0	82.2	59
R75Y_100_100 _d	78.2	7.8	80.6	81.0	84
Y00G_100_100 _d	92.6	-20.7	90.7	93.0	102
Y25G_100_100 _d	88.7	-43.3	86.2	96.5	116
Y50G_100_100 _d	85.7	-65.2	82.4	105.1	128
Y75G_100_100 _d	84.0	-78.7	80.4	112.5	134
G00B_100_100 _d	83.6	-82.7	79.8	115.0	136
G25B_100_100 _d	84.3	-73.7	44.9	86.4	148
G50B_100_100 _d	86.8	-46.1	-13.5	48.1	196
G75B_100_100 _d	51.7	18.3	-68.3	70.7	285
B00R_100_100 _d	30.3	76.0	-103.5	128.5	306
B25R_100_100 _d	38.5	79.8	-89.7	120.0	311
B50R_100_100 _d	57.2	94.3	-58.4	110.9	328
B75R_100_100 _d	52.0	81.1	4.1	81.2	2

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



see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE51/QE51L0NP.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 $RYGCBM_s$: $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$; 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 $RYGCBM_e$: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

J=Y_d Yellow
 $LCH^*_d = 92.6 \ 93.0 \ 102.8$
 $LAB^*_d = 92.6 \ -20.7 \ 90.7$
 $rgb^*_d = 1.0 \ 1.0 \ 0.0$

L=G_d leaf-green
 $LCH^*_d = 83.6 \ 115.0 \ 136.0$
 $LAB^*_d = 83.6 \ -82.7 \ 79.8$
 $rgb^*_d = 0.0 \ 1.0 \ 0.0$

C=C_d cyan-blue
 $LCH^*_d = 86.8 \ 48.1 \ 196.3$
 $LAB^*_d = 86.8 \ -46.1 \ -13.5$
 $rgb^*_d = 0.0 \ 1.0 \ 1.0$

O=R_d orange-red
 $LCH^*_d = 50.4 \ 100.4 \ 40.0$
 $LAB^*_d = 50.4 \ 76.9 \ 64.5$
 $rgb^*_d = 1.0 \ 0.0 \ 0.0$

M=M_d magenta-red
 $LCH^*_d = 57.2 \ 110.9 \ 328.2$
 $LAB^*_d = 57.2 \ 94.3 \ -58.4$
 $rgb^*_d = 1.0 \ 0.0 \ 1.0$

V=B_d violet-blue
 $LCH^*_d = 30.3 \ 128.5 \ 306.2$
 $LAB^*_d = 30.3 \ 76.0 \ -103.5$
 $rgb^*_d = 0.0 \ 0.0 \ 1.0$

Y_e yellow
 $LCH^*_e = 83.7 \ 84.5 \ 92.3$
 $LAB^*_e = 83.7 \ -3.4 \ 84.5$
 $rgb^*_{de} = 1.0 \ 0.856 \ 0.0$

G_e green
 $LCH^*_e = 85.1 \ 67.9 \ 162.2$
 $LAB^*_e = 85.1 \ -64.6 \ 20.7$
 $rgb^*_{de} = 0.0 \ 1.0 \ 0.706$

C_e blue-green
 $LCH^*_e = 79.0 \ 42.8 \ 216.9$
 $LAB^*_e = 79.0 \ -34.2 \ -25.7$
 $rgb^*_{de} = 0.0 \ 0.89 \ 1.0$

B_e blue
 $LCH^*_e = 59.2 \ 56.6 \ 271.7$
 $LAB^*_e = 59.2 \ 1.7 \ -56.6$
 $rgb^*_{de} = 0.0 \ 0.609 \ 1.0$

R_e red
 $LCH^*_e = 50.9 \ 86.7 \ 25.4$
 $LAB^*_e = 50.9 \ 78.3 \ 37.3$
 $rgb^*_{de} = 1.0 \ 0.0 \ 0.263$

M_e blue-red
 $LCH^*_e = 57.1 \ 110.3 \ 328.6$
 $LAB^*_e = 57.1 \ 94.1 \ -57.4$
 $rgb^*_{de} = 1.0 \ 0.0 \ 0.991$

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

Y_s yellow
 $LCH^*_s = 82.1 \ 83.5 \ 90.0$
 $LAB^*_s = 82.1 \ 0.0 \ 83.5$
 $rgb^*_{ds} = 1.0 \ 0.83 \ 0.0$

G_s green
 $LCH^*_s = 84.4 \ 84.2 \ 150.0$
 $LAB^*_s = 84.4 \ -72.9 \ 42.1$
 $rgb^*_{ds} = 0.0 \ 1.0 \ 0.523$

C_s blue-green
 $LCH^*_s = 81.7 \ 44.6 \ 210.0$
 $LAB^*_s = 81.7 \ -38.6 \ -22.3$
 $rgb^*_{ds} = 0.0 \ 0.927 \ 1.0$

R_s red
 $LCH^*_s = 50.7 \ 90.1 \ 30.0$
 $LAB^*_s = 50.7 \ 78.0 \ 45.0$
 $rgb^*_{ds} = 1.0 \ 0.0 \ 0.202$

M_s blue-red
 $LCH^*_s = 56.7 \ 107.7 \ 330.0$
 $LAB^*_s = 56.7 \ 93.3 \ -53.8$
 $rgb^*_{ds} = 1.0 \ 0.0 \ 0.962$

B_s blue
 $LCH^*_s = 60.2 \ 54.7 \ 270.0$
 $LAB^*_s = 60.2 \ 0.0 \ -54.7$
 $rgb^*_{ds} = 0.0 \ 0.623 \ 1.0$

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^*_e 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^*_{de} produce the output of the device-independent elementary hues

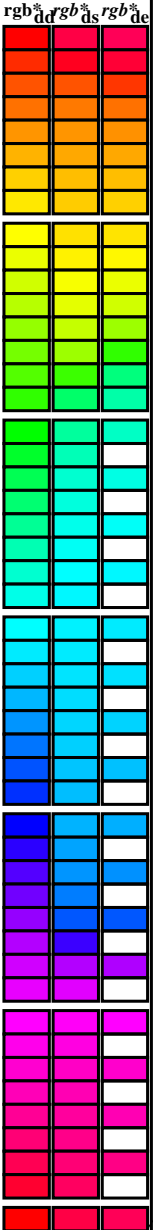
see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51L0NP.PDF /.PS; transfer output
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE51/QE51L0NP.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_s: h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours RYGBM_d: h_{ab,d} = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; Six hue angles of the elementary colours RYGBM_e: h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

Table with columns for device colors (h_{ab,d}, h_{ab,s}, h_{ab,e}, r_{gb}^a, d_{64M}, LAB^a, d_{dx64M} (x=LabCh), r_{gb}^a, d_{dx361M}, LAB^a, d_{dx361M} (x=LabCh), r_{gb}^a, d_{dsx361M}, LAB^a, d_{dsx361M} (x=LabCh), r_{gb}^a, d_{dex361M}, LAB^a, d_{dex361M}) and rows of color data.



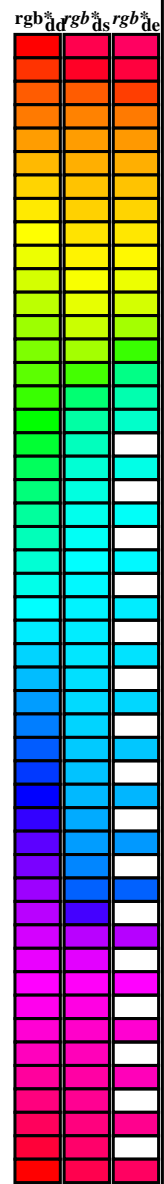
see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE51/QE51L0NP.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_s: h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;
Six hue angles of the device colours RYGBM_d: h_{ab,d} = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; Six hue angles of the elementary colours RYGBM_e: h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

h _{ab,d}	h _{ab,s}	h _{ab,e}	rgb* dd64M	LAB* ddx64M (x=LabCh)	rgb* 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	1.0 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 63.3 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	1.0 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	1.0 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	1.0 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	1.0 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	1.0 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	1.0 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	1.0 0.0	0.263 50.9 78.3 37.3 86.7 385



see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE51/QE51L0NP.PDF /.PS
application for measurement of display output, no separation

TUB material: code=rh4ta

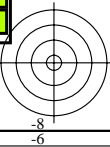
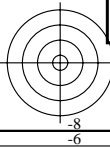
Data of Maximum color M in colorimetric system sRGB standard device; no separation, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM_s; h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours RYGBCM_d; h_{ab,d} = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; Six hue angles of the elementary colours RYGBM_e; h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

Table with columns for device colors (h_ab,d, h_ab,s, h_ab,e, rgb*, LAB*, dsx361Mi) and elementary colors (h_ab,e, rgb*, LAB*, dex361Mi). Rows 82-128 contain data for various hue angles.

see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE51/QE51L0NP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rh4t4

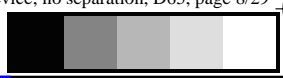
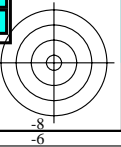
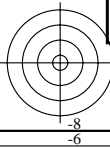


Data of Maximum color M in colorimetric system sRGB standard device; no separation, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM_s; h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours RYGBM_d; h_{ab,d} = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; Six hue angles of the elementary colours RYGBM_e; h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

Table with columns: h_{ab,d}, h_{ab,s}, h_{ab,e}, r_{gb}^{*}dd361M, LAB^{*}ddx361Mi (x=LabCh), r_{gb}^{*}ds361Mi, LAB^{*}dsx361Mi (x=LabCh), r_{gb}^{*}dd361Mi, LAB^{*}dex361Mi (x=LabCh), r_{gb}^{*}dd361Mi, LAB^{*}dex361Mi (x=LabCh), r_{gb}^{*}dd361Mi, LAB^{*}dex361Mi (x=LabCh). Rows 128-139.

see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

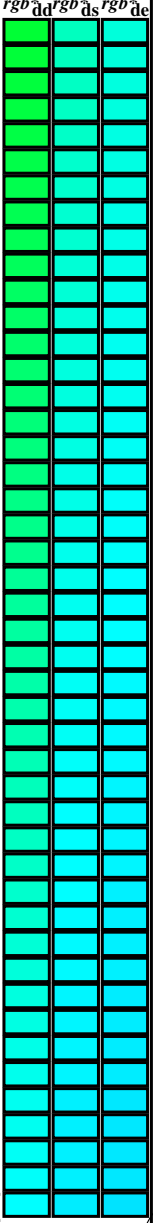
TUB registration: 20130201-QE51/QE51L0NP.PDF /.PS
application for measurement of display output, no separation
TUB material: code=rha4ta



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

Six hue angles of the device colours RYGBM_d: h_{ab,d} = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; Six hue angles of the elementary colours RYGBM_e: h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

Table with columns for device and elementary color data. Headers include h_{ab,d}, h_{ab,s}, h_{ab,e}, r_{gb}*_{dd361M}, LAB*_{dsx361Mi} (x=LabCh), r_{gb}*_{ds361Mi}, LAB*_{dsx361Mi} (x=LabCh), r_{gb}*_{dd361Mi}, LAB*_{de361Mi}, LAB*_{dex361Mi} (x=LabCh), r_{gb}*_{dd361Mi}, LAB*_{de361Mi}, LAB*_{dex361Mi} (x=LabCh). Rows 139-196.



see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE51/QE51L0NP.PDF /.PS
application for measurement of display output, no separation

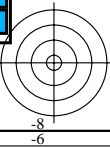
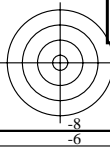
TUB material: code=rh4t4

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_s: h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours RYGBCM_d: h_{ab,d} = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; Six hue angles of the elementary colours RYGBM_e: h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

Table with columns: h_{ab,d}, h_{ab,s}, h_{ab,e}, r_{gb}*_{dd361M}, LAB*_{dsx361Mi (x=LabCh)}, C_d, r_{gb}*_{ds361Mi}, LAB*_{dsx361Mi (x=LabCh)}, 210C_s, r_{gb}*_{dd361Mi}, LAB*_{de361Mi}, LAB*_{dex361Mi (x=LabCh)}, 216C_c, r_{gb}*_{dd361Mi}, r_{gb}*_{dd}, r_{gb}*_{ds}, r_{gb}*_{de}. Rows 196-301.

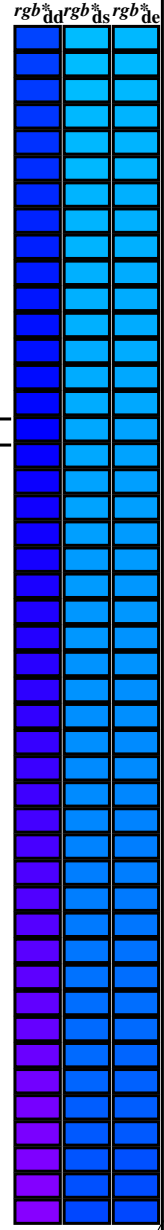
see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE51/QE51L0NP.PDF /.PS
application for measurement of display output, no separation
TUB material: code=rha4ta



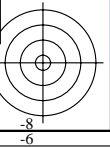
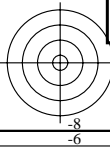
Data of Maximum color M in colorimetric system sRGB standard device; no separation, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM_s; h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours RYGBM_d; h_{ab,d} = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; Six hue angles of the elementary colours RYGBM_e; h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

Table with columns for colorimetric data: h_{ab,d}, h_{ab,s}, h_{ab,e}, r_{gb}^{*} (ds, dsx, de), LAB^{*} (dsx, dex), and r_{gb}^{*} (dd, ds, de). Rows 301-311 show data for various hue angles.



see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51L0NP.PDF /.PS application for measurement of display output, no separation

TUB registration: 20130201-QE51/QE51L0NP.PDF /.PS application for measurement of display output, no separation TUB material: code=rha4ta



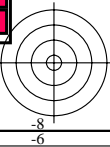
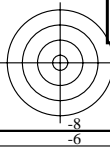
Data of Maximum color M in colorimetric system sRGB standard device; no separation, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM_s; h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours RYGBM_d; h_{ab,d} = 40.0, 102.9, 136.0, 196.4, 306.3, 328.2; Six hue angles of the elementary colours RYGBM_e; h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

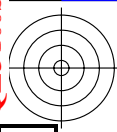
Table with 40 columns: h_{ab,d}, h_{ab,s}, h_{ab,e}, r_{gb}^{*}dd361M, LAB^{*}ddx361Mi (x=LabCh), r_{gb}^{*}ds361Mi, LAB^{*}dsx361Mi (x=LabCh), r_{gb}^{*}dd361Mi, LAB^{*}dex361Mi (x=LabCh), r_{gb}^{*}dd361Mi, r_{gb}^add, r_{gb}^bds, r_{gb}^cde. Rows 341-400.

see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE51/QE51L0NP.PDF /.PS
application for measurement of display output, no separation

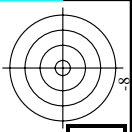
TUB material: code=rha4ta



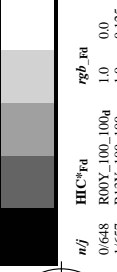


TUB registration: 20130201-QE51/QE51L0NP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta



http://130.149.60.45/~farbmetrik/QE51/QE51L0NP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 14/29



see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

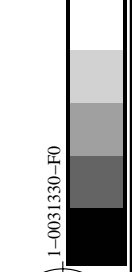


Table with 17 columns: nrf, HhC*Fd, rgp, Fd, icr, Fd, hsa, Fd, LabCh*Fd, rgp, Fd, LabCh*Fd, rgp, Fd, hsa, Fd, DF*Fd, hsa, Fd, LabCh*Fd, rgp, Fd. Contains 50 rows of numerical data representing color calibration measurements.

Mean color difference of this page: delta E*ab = 0.9

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

TUB-test chart QE51; hue code: H*_d=Y50G_d colors and differences, ΔE*_*

QE510-7N; Page 14/29-F

I-0031330-F0

I-0031330-F0

TUB registration: 20130201-QE51/QE51LONP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta

Table with 80 columns (H#F to H#B) and 80 rows (0 to 80). Each cell contains a 4x4 grid of numerical values representing color differences and differences between color channels.

see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

http://130.149.60.45/~farbmetrik/QE51/QE51LONP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 16/29

input: rgb/cmlyk -> rgbd output: transfer to rgbd

TUB-test chart QE51; hue code: H*d=Y50Gd colors and differences, ΔE*'

Mean color difference of this page: ΔE* = 4.6

QE510-7N; Page 16/29-F

TUB registration: 20130201-QE51/QE51LONP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta

Table with columns: n, HHC*Fd, rpb*Fd, icr*Fd, hsa*Fd, rpb*Fd, LabCh*Fd, LabCh*Fd, rpb*Fd, DF*Fd, hsa*Fd, rpb*Fd, LabCh*Fd, LabCh*Fd, rpb*Fd. Rows 81-161.

see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

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

delta E* = 8.3

Mean color difference of this page:

QE510-7N; Page 17/29-F

TUB-test chart QE51; hue code: H*d=Y50Gd colors and differences, AE*'

L-0031630-F0

L-0031630-F0

L-0031630-F0

L-0031630-F0

L-0031630-F0

L-0031630-F0

Table with columns: n, HHC*Fd, rpb*Fd, icr*Fd, hsa*Fd, rpb*Fd, LabCh*Fd, LabCh*Fd, rpb*Fd, DF*Fd, hsa*Fd, rpb*Fd, LabCh*Fd, LabCh*Fd, rpb*Fd, delta E* = 10.2

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

TUB-test chart QE51; hue code: H*d=Y50Gd colors and differences, AE*'

Main table with columns for color channels (HHC, Hs, iet, rpb, Lab, DF, Hs, Hs, Lab, rpb, Lab, DF, Hs, Hs, Lab, rpb, Lab, DF) and rows for various color patches (243-323).

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

delta E* = 10.5

Mean color difference of this page:

QE510-TN; Page 19/29-F

TUB-test chart QE51; hue code: H*d=Y50Gd colors and differences, AE*

L-0031830-F0

TUB registration: 20130201-QE51/QE51LONP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta

Table with columns: n, HHC*Fd, rpb*Fd, icr*Fd, hsa*Fd, rpb*Fd, LabCh*Fd, LabCh*Pd, rpb*Pd, LabCh*Pd, DF*Pd, hsa*Pd, rpb*Pd, LabCh*Pd. Rows list various color and grayscale patches with their corresponding numerical values.

see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

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

Mean color difference of this page:

QE510-7N; Page 20/29-F

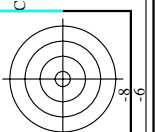
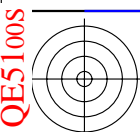
TUB-test chart QE51; hue code: H*d=Y50Gd colors and differences, AE*'

L-0031930-F0

L-0031930-F0

TUB registration: 20130201-QE51/QE51LONP.PDF /.PS application for measurement of display output, no separation

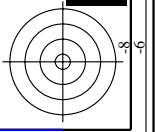
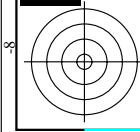
TUB material: code=rha4ta



http://130.149.60.45/~farbmetrik/QE51/QE51LONP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 21/29

Table with 10 columns: n, HHC*Fd, rpb*Fd, icr*Fd, hsa*Fd, rpb*Fd, LabCh*Fd, DF*Fd, hsa*Fd, rpb*Fd, LabCh*Fd. Rows 405-485.

input: rgb/cmyk -> rgbd output: transfer to rgbd delta E* = 9.7



see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

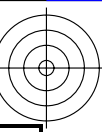
Table with 56 columns (n, HHC*Fd, Rgb*Fd, etc.) and 56 rows of data. Includes a 'delta E* = 9.4' label at the bottom right of the table area.

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

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

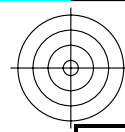
input: rgb/cmyk -> rgbd output: transfer to rgbd

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



TUB registration: 20130201-QE51/QE51LONP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta



http://130.149.60.45/~farbmatrik/QE51/QE51LONP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 23/29

Table with columns: n, HHC*Fd, rpb*Fd, icr*Fd, hsa*Fd, rpb*Fd, LabCh*Fd, LabCh*Fd, rpb*Fd, DF*Fd, hsa*Fd, rpb*Fd, LabCh*Fd, LabCh*Fd, rpb*Fd. Rows 567-647.

delta E* = 9.2

Mean color difference of this page:

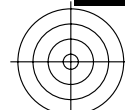
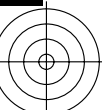
input: rgb/cmyk -> rgbd output: transfer to rgbd

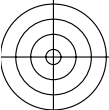
TUB-test chart QE51; hue code: H*d=Y50Gd colors and differences, AE*'

QE510-7N; Page 23/29-F

L-0032230-F0

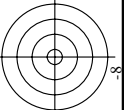
see similar files: http://130.149.60.45/~farbmatrik/QE51/QE51.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmatrik





TUB registration: 20130201-QE51/QE51LONP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta



http://130.149.60.45/~farbmetrik/QE51/QE51LONP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 24/29

Table with columns: n, HFC*Ed, Rgb*Ed, Icr*Ed, Hs*Ed, LabCh*Fd, LabCh*Fcd, Rgb*Fd, Rgb*Fcd, LabCh*Fd, LabCh*Fcd, Rgb*Fd, Rgb*Fcd, DF*Fd, Hs*Fd, Rgb*Fd, LabCh*Fd, LabCh*Fcd, Rgb*Fd, Rgb*Fcd, delta E** = 9,3

1-0032330-F0

input: rgb/cmlyk -> rgbd output: transfer to rgbd

QE510-7N; Page 24/29-F

TUB-test chart QE51; hue code: H*d=Y50Gd colors and differences, AE*"

Mean color difference of this page:

Mean color difference of this page:

see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM technical information: http://www.ps.bam.de http://130.149.60.45/~farbmetrik

Table with columns: n, HHC*Fd, rpb*Fd, icr*Fd, hsa*Fd, rpb*Fd, LabCH*Fd, rpb*Fd, LabCH*Fd, DF*Fd, hsa*Fd, rpb*Fd, LabCH*Fd, rpb*Fd, LabCH*Fd, LabCH*Ma, DF*Ma, hsa*Ma, rpb*Ma, LabCH*Ma, LabCH*Ma. Rows include various color patches like NV_100a, G50B_100.0124, etc.

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

TUB-test chart QE51; hue code: H*d=Y50Gd colors and differences, AE*'

QE510-7N; Page 25/29-F

L-0032430-F0

L-0032430-F0

TUB registration: 20130201-QE51/QE51LONP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta

Table with columns: n, HHC*Fd, rpb*Fd, icr*Fd, hsa*Fd, rpb*Fd, LabCh*Fd, rpb*Fd, LabCh*Fd, DF*Fd, hsa*Fd, rpb*Fd, LabCh*Fd, rpb*Fd, LabCh*Fd. Rows include various BOOR and YOGC codes.

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

Mean color difference of this page: delta E* = 8.7

Mean color difference of this page: delta E* = 8.7

Mean color difference of this page: delta E* = 8.7

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Mean color difference of this page: delta E* = 8.7

Mean color difference of this page: delta E* = 8.7

http://130.149.60.45/~farbmetrik/QE51/QE51LONP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 27/29

Table with columns: n, H#C*Fd, rgb*Fd, icr*Fd, Hs*Fd, rgb*Fhd, LabC*Fhd, LabCH*Fhd, DF*Fhd, Hs*Fhd, rgb*Fhd, LabCH*Fhd. Rows include various color patches like B50R_100_0124, B50R_100_0254, etc.

Mean color difference of this page: delta E* = 11.4

see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB-test chart QE51; hue code: H*d=Y50Gd colors and differences, AE* input: rgb/cmlyk -> rrgb output: transfer to rrgb

TUB registration: 20130201-QE51/QE51LONP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta

Table with 15 columns: n, HC*Fd, rpb_Fd, iet_Fd, ihs_Fd, rpb_Fd, LabC*F_d, LabC*F_d, LabC*F_d, LabC*F_d, LabC*F_d, LabC*F_d, LabC*F_d, LabC*F_d, LabC*F_d. Rows include color names like NW_000a, NW_012a, NW_025a, NW_037a, NW_050a, NW_062a, NW_075a, NW_087a, NW_100a, NW_112a, NW_125a, NW_137a, NW_150a, NW_162a, NW_175a, NW_187a, NW_200a, NW_212a, NW_225a, NW_237a, NW_250a, NW_262a, NW_275a, NW_287a, NW_300a, NW_312a, NW_325a, NW_337a, NW_350a, NW_362a, NW_375a, NW_387a, NW_400a, NW_412a, NW_425a, NW_437a, NW_450a, NW_462a, NW_475a, NW_487a, NW_500a, NW_512a, NW_525a, NW_537a, NW_550a, NW_562a, NW_575a, NW_587a, NW_600a, NW_612a, NW_625a, NW_637a, NW_650a, NW_662a, NW_675a, NW_687a, NW_700a, NW_712a, NW_725a, NW_737a, NW_750a, NW_762a, NW_775a, NW_787a, NW_800a, NW_812a, NW_825a, NW_837a, NW_850a, NW_862a, NW_875a, NW_887a, NW_900a, NW_912a, NW_925a, NW_937a, NW_950a, NW_962a, NW_975a, NW_987a, NW_1000a.

http://130.149.60.45/~farbmetrik/QE51/QE51LONP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 28/29

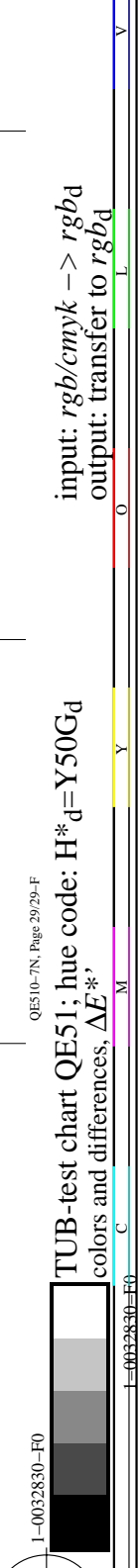
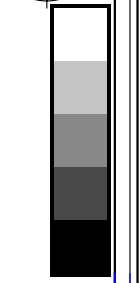
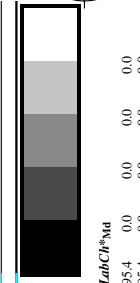
input: rgb/cmyk -> rgbd output: transfer to rgbd

Mean color difference of this page: delta E* = 1.6

see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-QE51/QE51L0NP.PDF /.PS application for measurement of display output, no separation

TUB material: code=rha4ta



http://130.149.60.45/~farbmetrik/QE51/QE51L0NP.PDF /.PS; transfer output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 29/29

Table with columns: n, HHC*Fd, rgb*Fd, iEt_Fd, h_s_Fd, rgb*Fd, LabCH*Fd, LabCH*Fd, rgb*Fd, DF*Fd, h_s_Md, rgb*Md, LabCH*Md, LabCH*Md, and numerical values.

Mean color difference of this page: delta E** = 1.0

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

TUB-test chart QE51; hue code: H*_d=Y50G_d colors and differences, Delta E**

see similar files: http://130.149.60.45/~farbmetrik/QE51/QE51.HTM technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik