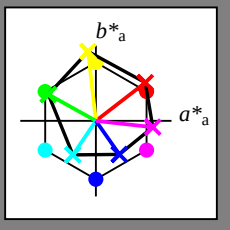
Input and Output: Offset Reflective System ORS18a

Data for any device (d) or elementary (e) colour:
HIC*_
hue text for the colours of this page:
***H*_* = R00Y–, R25Y–, ..., B75R–**

ORS20a; adapted (a) CIELAB data

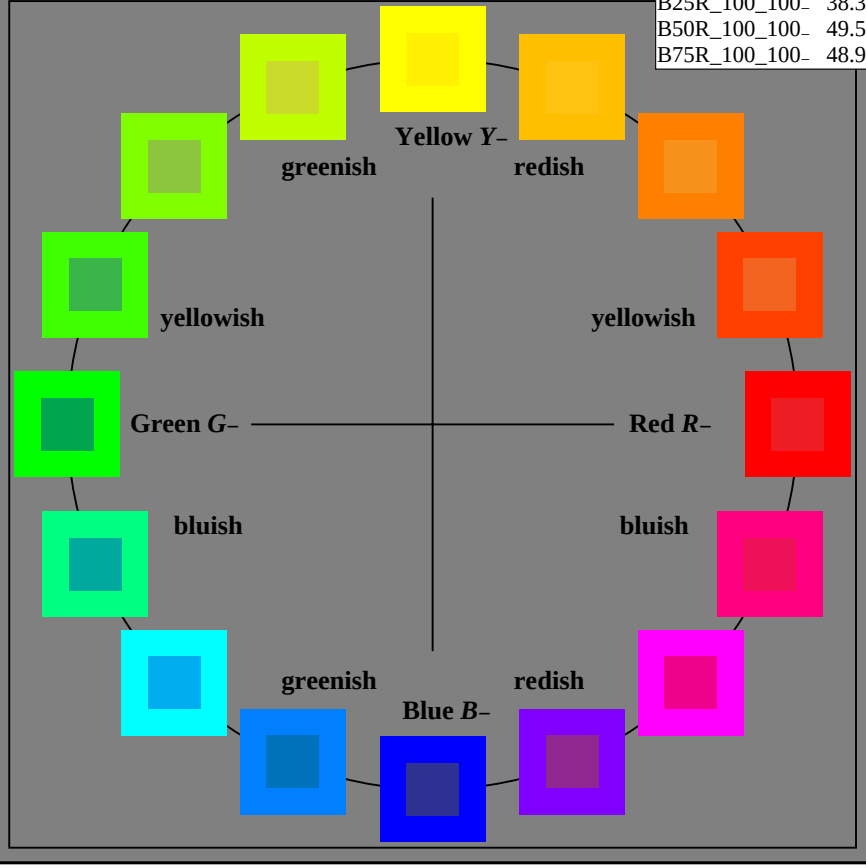
*H*_	*L*=*L**a	*a**a	*b**a	*C**ab,a	*h**ab,a
R00Y_100_100_	48.4	66.1	40.2	77.3	31
R25Y_100_100_	56.8	48.0	50.5	69.6	46
R50Y_100_100_	68.6	25.0	63.9	68.6	68
R75Y_100_100_	80.6	4.8	77.2	77.3	86
Y00G_100_100_	90.2	−9.6	88.2	88.7	96
Y25G_100_100_	83.2	−18.4	79.9	81.9	102
Y50G_100_100_	73.3	−31.7	62.7	70.2	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

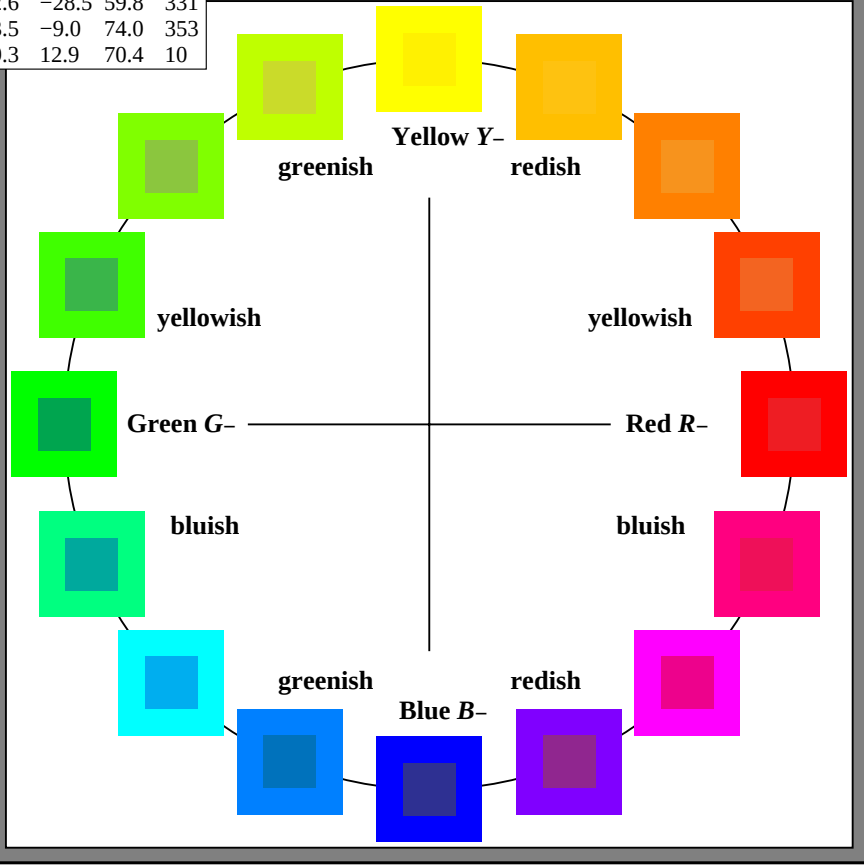


%Gamut
u^*_{rel} = 92
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 58

ORS18a; adapted (a) CIELAB data

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





TUB-test chart PE87; 16 step hue circle
Test chart according to DIN 33872, 3D=0, de=0, *cmy0*

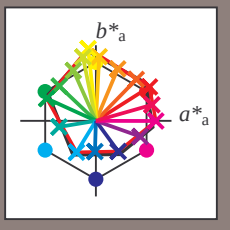
input: *rgb/cmyk −> rgb/cmyk*
output: no change

Input and Output: Offset Reflective System ORS18a

Data for any device (d) or elementary (e) colour:
*HIC**$_d$
hue text for the colours of this page:
*H**$_d$ = R00Y$_d$, R25Y$_d$, ..., B75R$_d$

ORS20a; adapted (a) CIELAB data

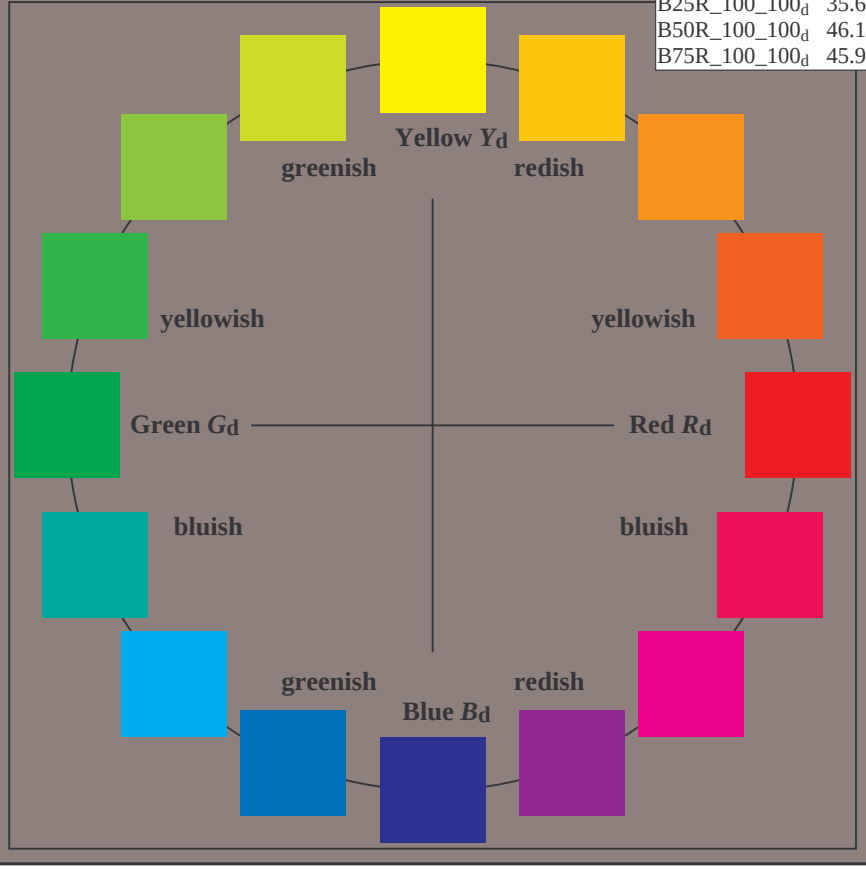
*H**$_d$	*L**=*L**$_a$	*a**$_a$	*b**$_a$	*C**$_{ab,a}$	*h**$_{ab,a}$
R00Y_100_100$_d$	45.4	70.9	44.8	83.9	32
R25Y_100_100$_d$	53.0	53.4	54.8	76.5	45
R50Y_100_100$_d$	64.9	28.9	68.6	74.5	67
R75Y_100_100$_d$	78.6	4.3	84.7	84.8	87
Y00G_100_100$_d$	87.8	−10.2	95.4	96.0	96
Y25G_100_100$_d$	81.2	−17.0	84.3	86.0	101
Y50G_100_100$_d$	70.6	−29.7	66.5	72.8	114
Y75G_100_100$_d$	57.9	−48.3	45.8	66.5	136
G00B_100_100$_d$	50.0	−65.0	29.6	71.4	155
G25B_100_100$_d$	52.9	−48.6	−8.0	49.3	189
G50B_100_100$_d$	56.8	−25.5	−41.5	48.7	238
G75B_100_100$_d$	41.7	−1.2	−40.6	40.6	268
B00R_100_100$_d$	25.0	29.5	−40.4	50.0	306
B25R_100_100$_d$	35.6	58.6	−20.7	62.1	340
B50R_100_100$_d$	46.1	79.3	−0.2	79.3	359
B75R_100_100$_d$	45.9	74.2	21.1	77.1	15

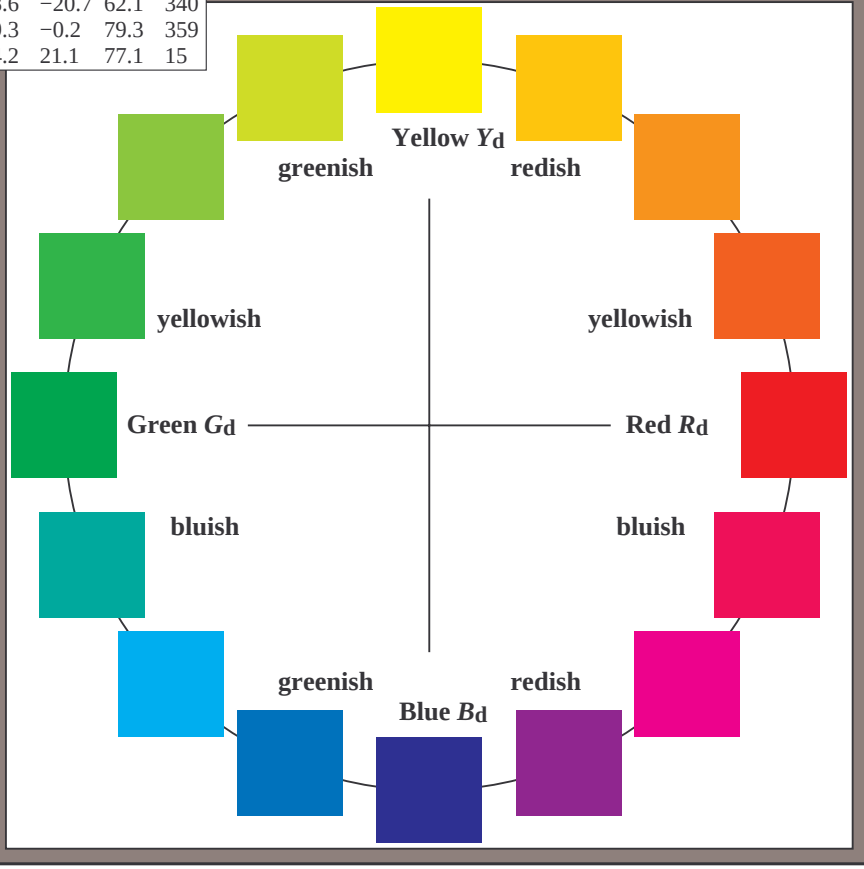


%Gamut
u*$_{rel}$ = 92
%Regularity
g*$_{H,rel}$ = 57
g*$_{C,rel}$ = 58

ORS20a; adapted (a) CIELAB data

name	*L**=*L**$_a$	*a**$_a$	*b**$_a$	*C**$_{ab,a}$	*h**$_{ab,a}$
R$_{d,Ma}$	45.4	70.9	44.8	83.9	32
Y$_{d,Ma}$	87.8	−10.2	95.4	96.0	96
G$_{d,Ma}$	50.0	−65.0	29.6	71.4	155
C$_{d,Ma}$	56.8	−25.5	−41.5	48.7	238
B$_{d,Ma}$	25.0	29.5	−40.4	50.0	306
M$_{d,Ma}$	46.1	79.3	−0.2	79.3	359
N$_{d,Ma}$	24.3	0.0	0.0	0.0	0
W$_{d,Ma}$	95.6	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





1−003131−L0 PE870−70

TUB-test chart PE87; 16 step hue circle
Test chart according to DIN 33872, 3D=0, de=0, *cmy0*

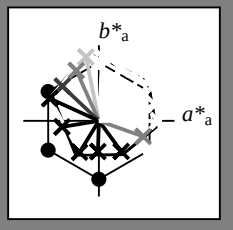
input: *rgb/cmyk* −> *rgb*$_d$
output: transfer to *cmy0*$_d$

Input and Output: Offset Reflective System ORS18a

Data for any device (d) or elementary (e) colour:
HIC**d
hue text for the colours of this page:
***H**d = R00Yd, R25Yd, ..., B75Rd**

ORS20a; adapted (a) CIELAB data

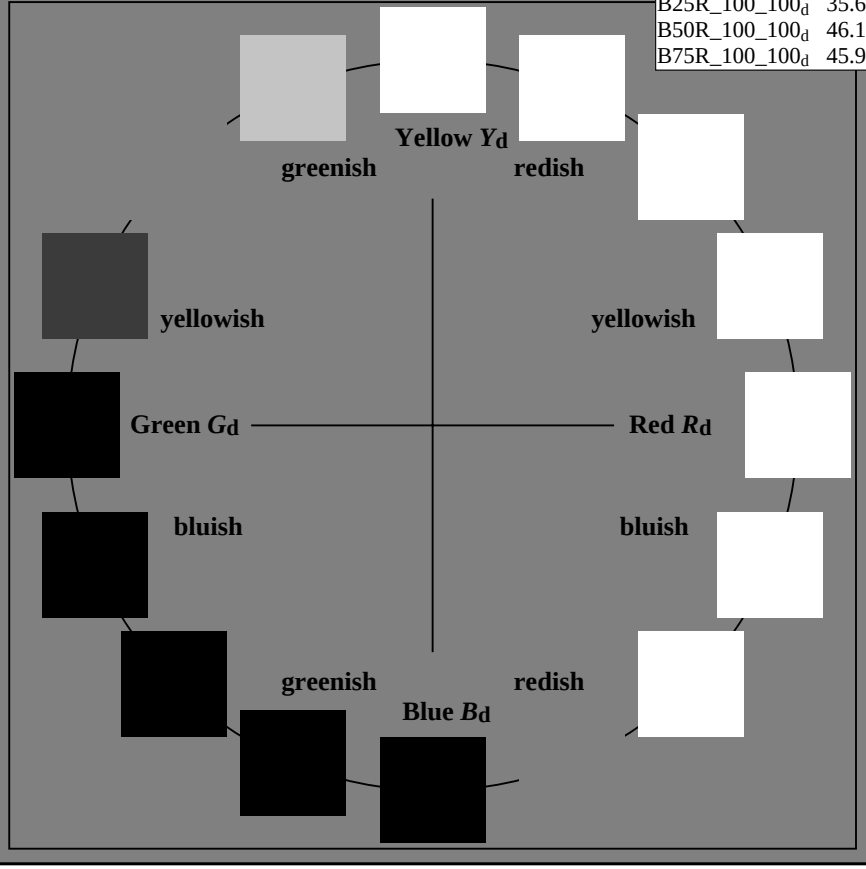
*H**d	*L**=*L**a	*a**a	*b**a	*C**ab,a	*h**ab,a
R00Y_100_100d	45.4	70.9	44.8	83.9	32
R25Y_100_100d	53.0	53.4	54.8	76.5	45
R50Y_100_100d	64.9	28.9	68.6	74.5	67
R75Y_100_100d	78.6	4.3	84.7	84.8	87
Y00G_100_100d	87.8	−10.2	95.4	96.0	96
Y25G_100_100d	81.2	−17.0	84.3	86.0	101
Y50G_100_100d	70.6	−29.7	66.5	72.8	114
Y75G_100_100d	57.9	−48.3	45.8	66.5	136
G00B_100_100d	50.0	−65.0	29.6	71.4	155
G25B_100_100d	52.9	−48.6	−8.0	49.3	189
G50B_100_100d	56.8	−25.5	−41.5	48.7	238
G75B_100_100d	41.7	−1.2	−40.6	40.6	268
B00R_100_100d	25.0	29.5	−40.4	50.0	306
B25R_100_100d	35.6	58.6	−20.7	62.1	340
B50R_100_100d	46.1	79.3	−0.2	79.3	359
B75R_100_100d	45.9	74.2	21.1	77.1	15

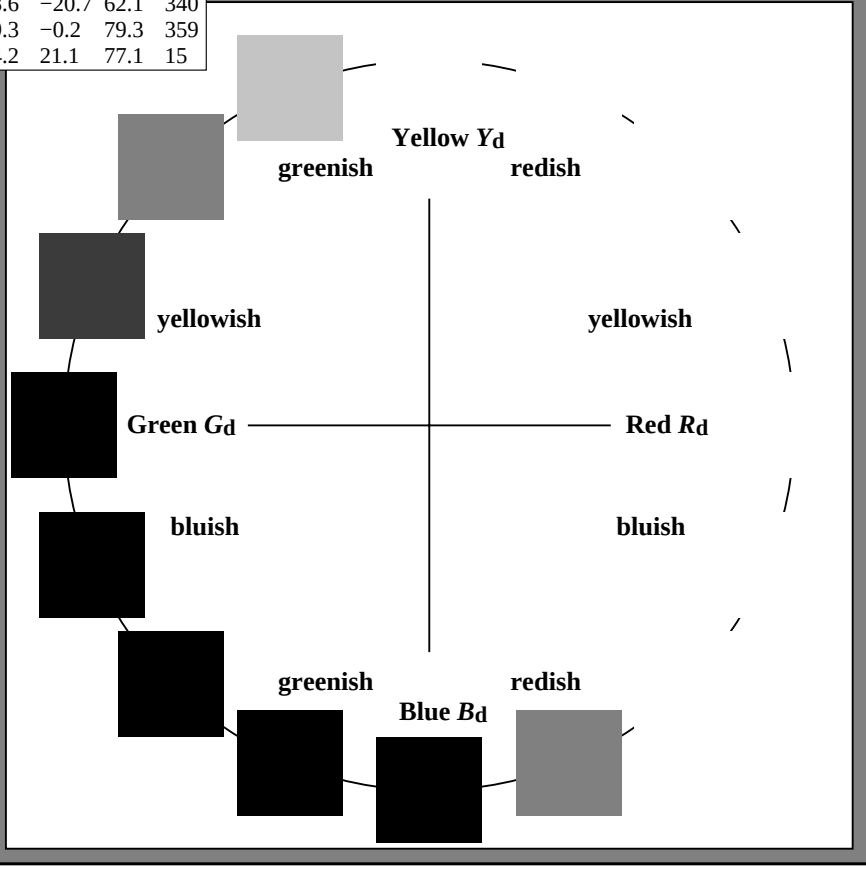


%Gamut
u*rel = 92
%Regularity
g*H,rel = 57
g*C,rel = 58

ORS20a; adapted (a) CIELAB data

name	*L**=*L**a	*a**a	*b**a	*C**ab,a	*h**ab,a
Rd,Ma	45.4	70.9	44.8	83.9	32
Yd,Ma	87.8	−10.2	95.4	96.0	96
Gd,Ma	50.0	−65.0	29.6	71.4	155
Cd,Ma	56.8	−25.5	−41.5	48.7	238
Bd,Ma	25.0	29.5	−40.4	50.0	306
Md,Ma	46.1	79.3	−0.2	79.3	359
Nd,Ma	24.3	0.0	0.0	0.0	0
Wd,Ma	95.6	0.0	0.0	0.0	0
Rd,CIE	39.9	58.7	27.9	65.0	25
Yd,CIE	81.2	−2.8	71.5	71.6	92
Gd,CIE	52.2	−42.4	13.6	44.5	162
Bd,CIE	30.5	1.4	−46.4	46.4	271





1−003231−L0 PE870−70

TUB-test chart PE87; 16 step hue circle
Test chart according to DIN 33872, 3D=0, de=0, *cmy0*

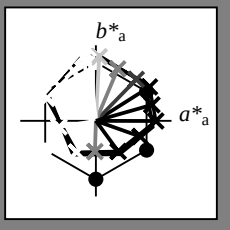
input: *rgb/cmyk −> rgb*d
output: transfer to *cmy0*d

Input and Output: Offset Reflective System ORS18a

Data for any device (d) or elementary (e) colour:
*HIC**$_d$
hue text for the colours of this page:
*H**$_d$ = R00Y$_d$, R25Y$_d$, ..., B75R$_d$

ORS20a; adapted (a) CIELAB data

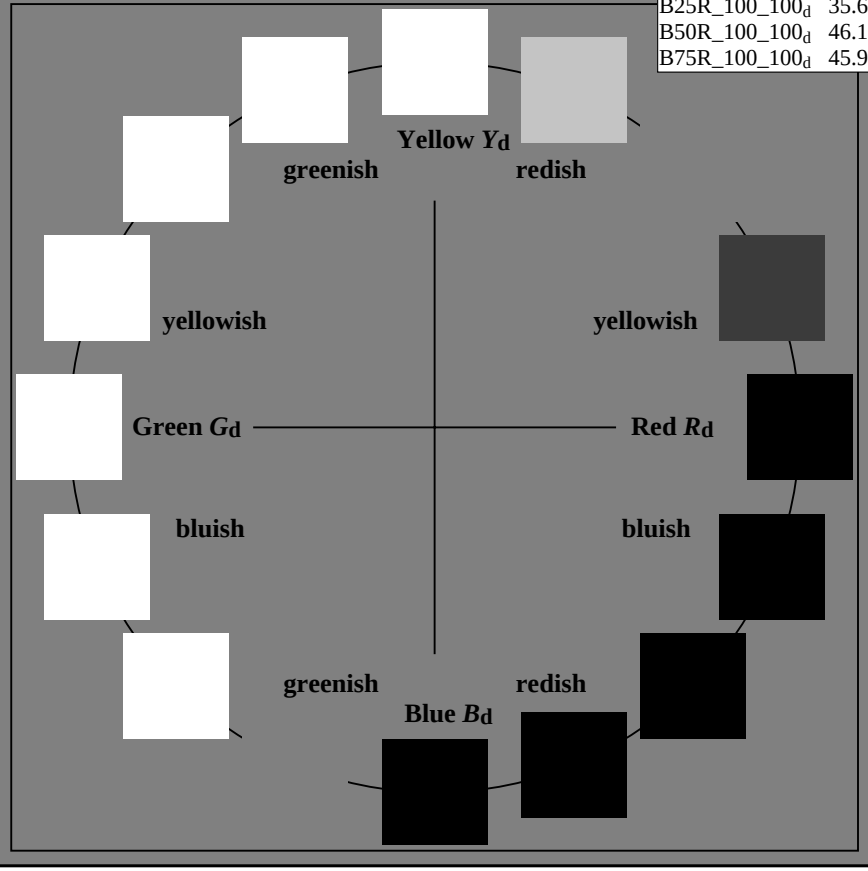
*H**$_d$	*L**=*L**$_a$	*a**$_a$	*b**$_a$	*C**$_{ab,a}$	*h**$_{ab,a}$
R00Y_100_100$_d$	45.4	70.9	44.8	83.9	32
R25Y_100_100$_d$	53.0	53.4	54.8	76.5	45
R50Y_100_100$_d$	64.9	28.9	68.6	74.5	67
R75Y_100_100$_d$	78.6	4.3	84.7	84.8	87
Y00G_100_100$_d$	87.8	−10.2	95.4	96.0	96
Y25G_100_100$_d$	81.2	−17.0	84.3	86.0	101
Y50G_100_100$_d$	70.6	−29.7	66.5	72.8	114
Y75G_100_100$_d$	57.9	−48.3	45.8	66.5	136
G00B_100_100$_d$	50.0	−65.0	29.6	71.4	155
G25B_100_100$_d$	52.9	−48.6	−8.0	49.3	189
G50B_100_100$_d$	56.8	−25.5	−41.5	48.7	238
G75B_100_100$_d$	41.7	−1.2	−40.6	40.6	268
B00R_100_100$_d$	25.0	29.5	−40.4	50.0	306
B25R_100_100$_d$	35.6	58.6	−20.7	62.1	340
B50R_100_100$_d$	46.1	79.3	−0.2	79.3	359
B75R_100_100$_d$	45.9	74.2	21.1	77.1	15

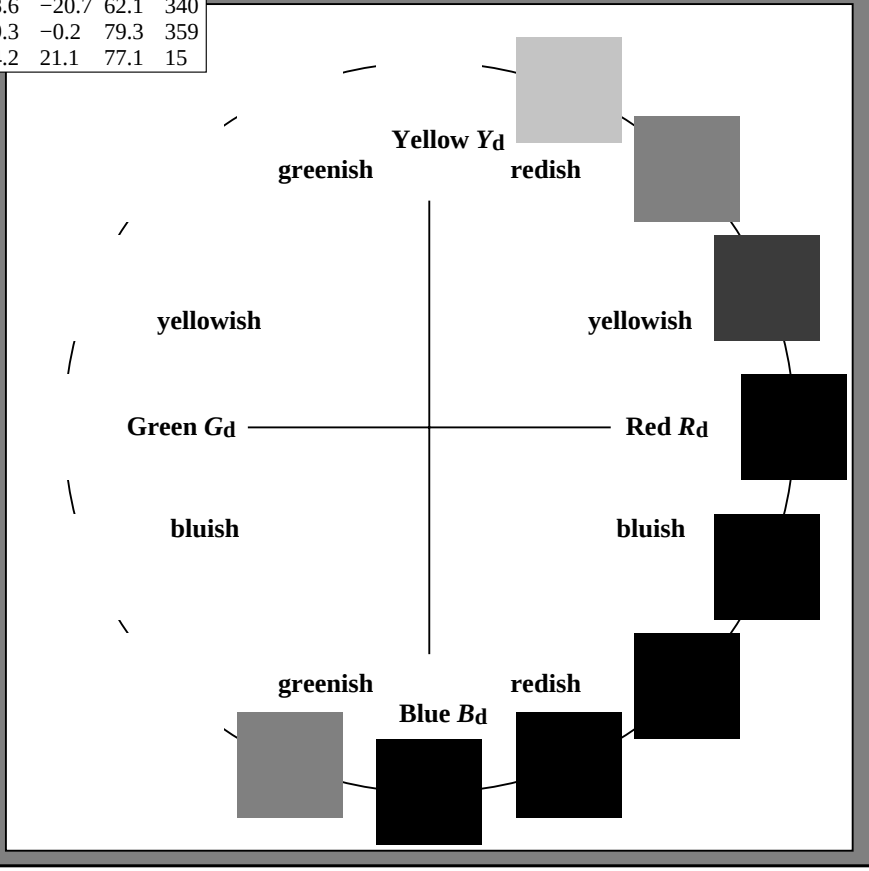


%Gamut
u*$_{rel}$ = 92
%Regularity
g*$_{H,rel}$ = 57
g*$_{C,rel}$ = 58

ORS20a; adapted (a) CIELAB data

name	*L**=*L**$_a$	*a**$_a$	*b**$_a$	*C**$_{ab,a}$	*h**$_{ab,a}$
R$_{d,Ma}$	45.4	70.9	44.8	83.9	32
Y$_{d,Ma}$	87.8	−10.2	95.4	96.0	96
G$_{d,Ma}$	50.0	−65.0	29.6	71.4	155
C$_{d,Ma}$	56.8	−25.5	−41.5	48.7	238
B$_{d,Ma}$	25.0	29.5	−40.4	50.0	306
M$_{d,Ma}$	46.1	79.3	−0.2	79.3	359
N$_{d,Ma}$	24.3	0.0	0.0	0.0	0
W$_{d,Ma}$	95.6	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





1−003331−L0 PE870−70

TUB-test chart PE87; 16 step hue circle
Test chart according to DIN 33872, 3D=0, de=0, *cmy0*

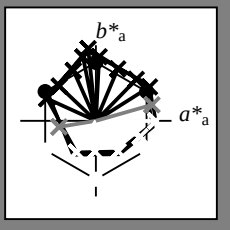
input: *rgb/cmyk* −> *rgb*$_d$
output: transfer to *cmy0*$_d$

Input and Output: Offset Reflective System ORS18a

Data for any device (d) or elementary (e) colour:
*HIC**$_d$
hue text for the colours of this page:
*H**$_d$ = R00Y$_d$, R25Y$_d$, ..., B75R$_d$

ORS20a; adapted (a) CIELAB data

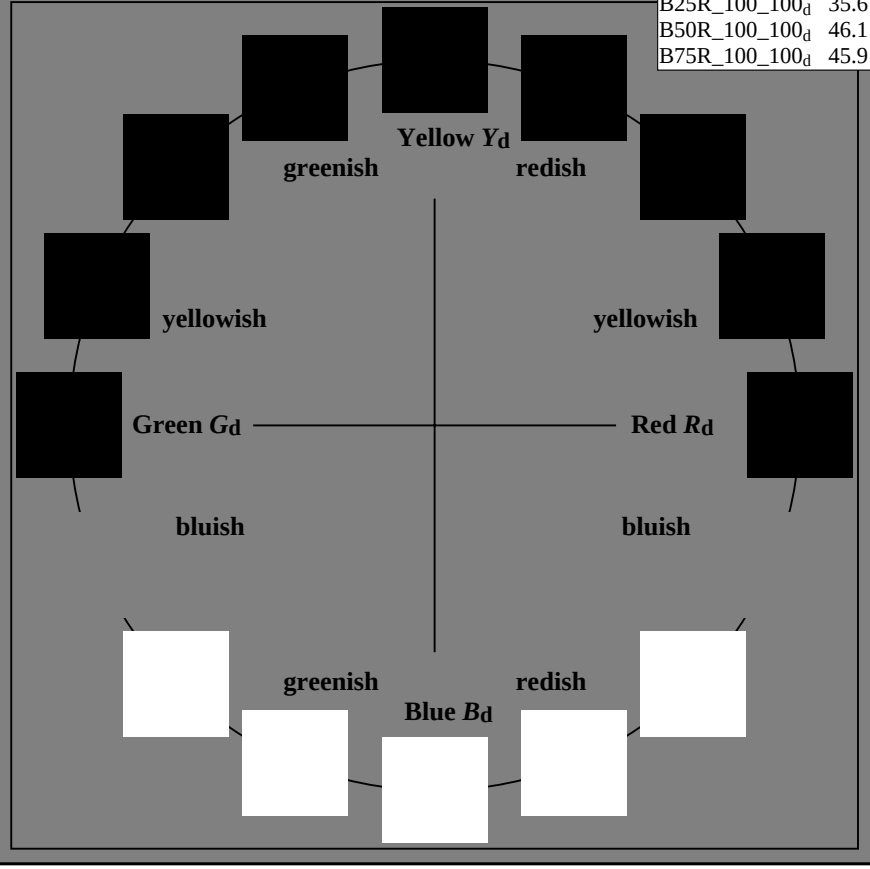
*H**$_d$	*L**=*L**$_a$	*a**$_a$	*b**$_a$	*C**$_{ab,a}$	*h**$_{ab,a}$
R00Y_100_100$_d$	45.4	70.9	44.8	83.9	32
R25Y_100_100$_d$	53.0	53.4	54.8	76.5	45
R50Y_100_100$_d$	64.9	28.9	68.6	74.5	67
R75Y_100_100$_d$	78.6	4.3	84.7	84.8	87
Y00G_100_100$_d$	87.8	−10.2	95.4	96.0	96
Y25G_100_100$_d$	81.2	−17.0	84.3	86.0	101
Y50G_100_100$_d$	70.6	−29.7	66.5	72.8	114
Y75G_100_100$_d$	57.9	−48.3	45.8	66.5	136
G00B_100_100$_d$	50.0	−65.0	29.6	71.4	155
G25B_100_100$_d$	52.9	−48.6	−8.0	49.3	189
G50B_100_100$_d$	56.8	−25.5	−41.5	48.7	238
G75B_100_100$_d$	41.7	−1.2	−40.6	40.6	268
B00R_100_100$_d$	25.0	29.5	−40.4	50.0	306
B25R_100_100$_d$	35.6	58.6	−20.7	62.1	340
B50R_100_100$_d$	46.1	79.3	−0.2	79.3	359
B75R_100_100$_d$	45.9	74.2	21.1	77.1	15

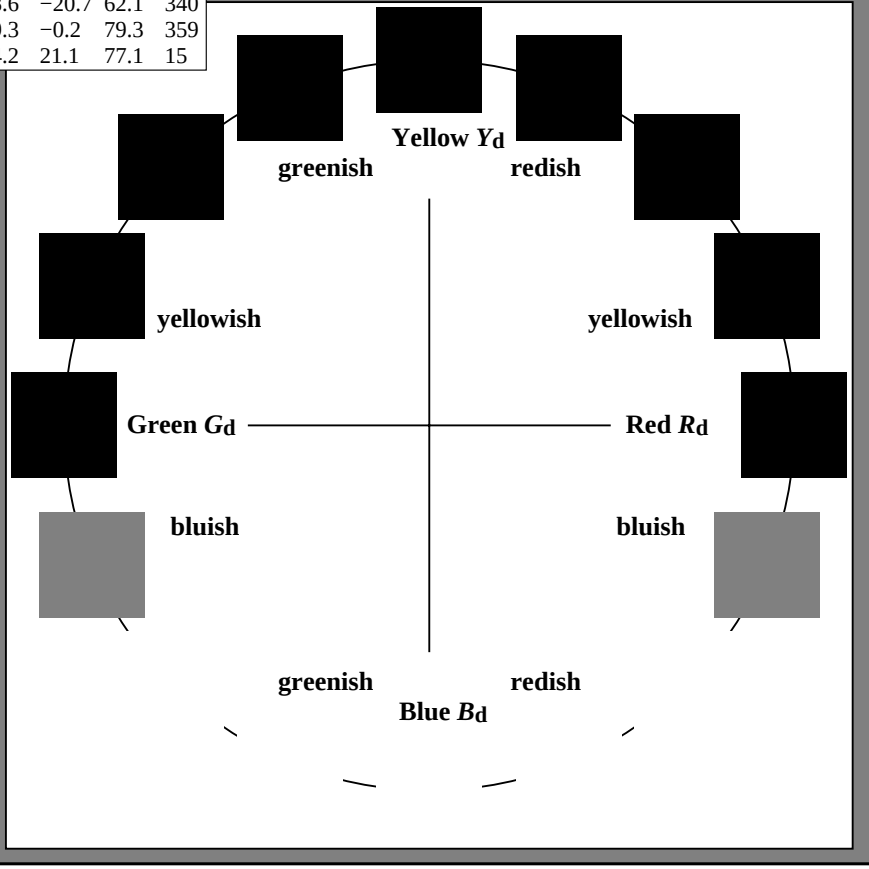


%Gamut
u*$_{rel}$ = 92
%Regularity
g*$_{H,rel}$ = 57
g*$_{C,rel}$ = 58

ORS20a; adapted (a) CIELAB data

name	*L**=*L**$_a$	*a**$_a$	*b**$_a$	*C**$_{ab,a}$	*h**$_{ab,a}$
R$_{d,Ma}$	45.4	70.9	44.8	83.9	32
Y$_{d,Ma}$	87.8	−10.2	95.4	96.0	96
G$_{d,Ma}$	50.0	−65.0	29.6	71.4	155
C$_{d,Ma}$	56.8	−25.5	−41.5	48.7	238
B$_{d,Ma}$	25.0	29.5	−40.4	50.0	306
M$_{d,Ma}$	46.1	79.3	−0.2	79.3	359
N$_{d,Ma}$	24.3	0.0	0.0	0.0	0
W$_{d,Ma}$	95.6	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



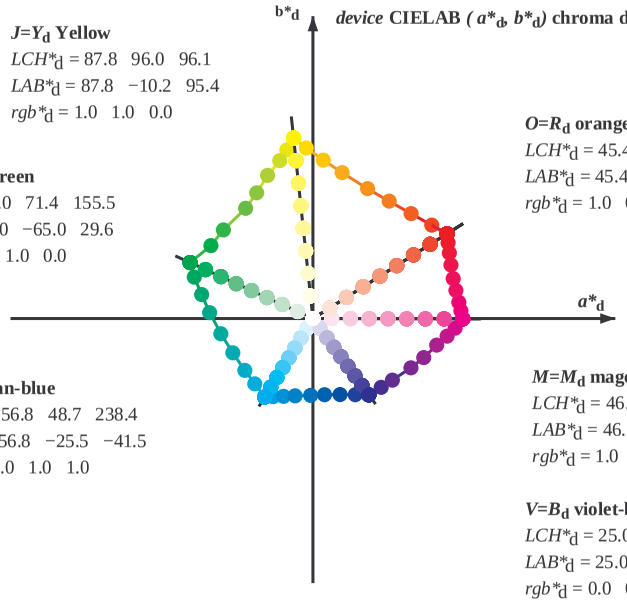


1−003431−L0 PE870−70

TUB-test chart PE87; 16 step hue circle
Test chart according to DIN 33872, 3D=0, de=0, *cmy0*

input: *rgb/cmyk* −> *rgb*$_d$
output: transfer to *cmy0*$_d$

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6



device CIELAB (a^*_d, b^*_d) chroma diagram

J=Y_d Yellow
LCH^*_d = 87.8 96.0 96.1
LAB^*_d = 87.8 −10.2 95.4
rgb^*_d = 1.0 1.0 0.0

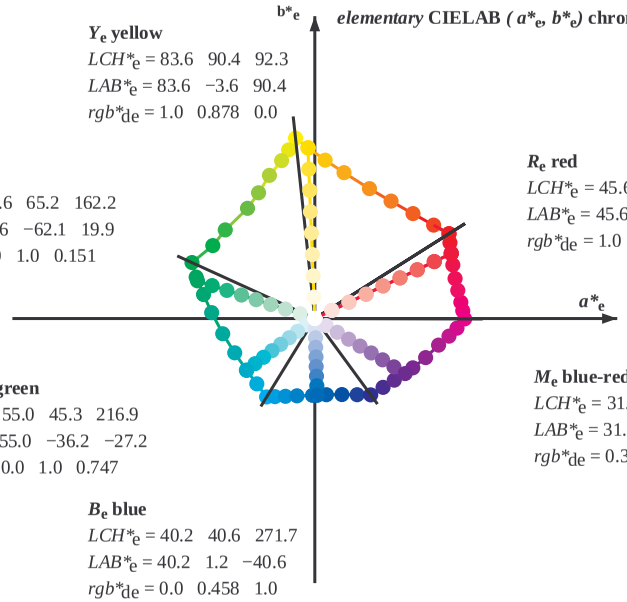
O=R_d orange-red
LCH^*_d = 45.4 83.9 32.3
LAB^*_d = 45.4 70.9 44.8
rgb^*_d = 1.0 0.0 0.0

L=G_d leaf-green
LCH^*_d = 50.0 71.4 155.5
LAB^*_d = 50.0 −65.0 29.6
rgb^*_d = 0.0 1.0 0.0

C=C_d cyan-blue
LCH^*_d = 56.8 48.7 238.4
LAB^*_d = 56.8 −25.5 −41.5
rgb^*_d = 0.0 1.0 1.0

M=M_d magenta-red
LCH^*_d = 46.1 79.3 359.8
LAB^*_d = 46.1 79.3 −0.2
rgb^*_d = 1.0 0.0 1.0

V=B_d violet-blue
LCH^*_d = 25.0 50.0 306.2
LAB^*_d = 25.0 29.5 −40.4
rgb^*_d = 0.0 0.0 1.0



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

Y_e yellow
LCH^*_e = 83.6 90.4 92.3
LAB^*_e = 83.6 −3.6 90.4
rgb^*_{de} = 1.0 0.878 0.0

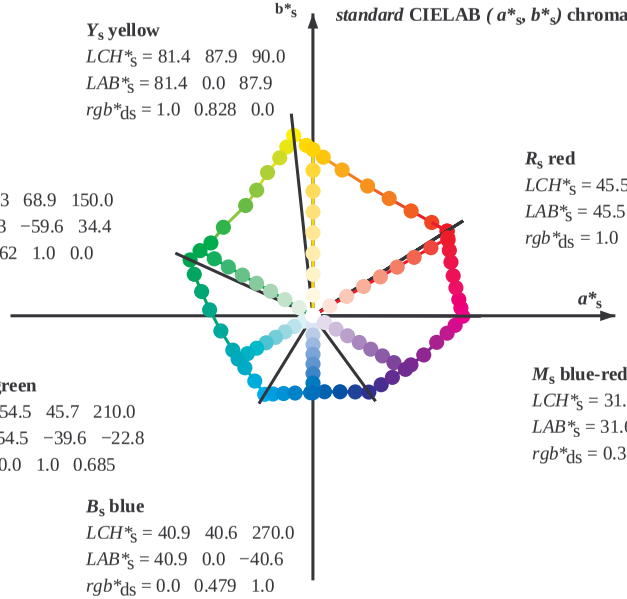
R_e red
LCH^*_e = 45.6 80.0 25.4
LAB^*_e = 45.6 72.2 34.4
rgb^*_{de} = 1.0 0.0 0.254

G_e green
LCH^*_e = 50.6 65.2 162.2
LAB^*_e = 50.6 −62.1 19.9
rgb^*_{de} = 0.0 1.0 0.151

C_e blue-green
LCH^*_e = 55.0 45.3 216.9
LAB^*_e = 55.0 −36.2 −27.2
rgb^*_{de} = 0.0 1.0 0.747

M_e blue-red
LCH^*_e = 31.1 55.9 328.6
LAB^*_e = 31.1 47.7 −29.1
rgb^*_{de} = 0.321 0.0 1.0

B_e blue
LCH^*_e = 40.2 40.6 271.7
LAB^*_e = 40.2 1.2 −40.6
rgb^*_{de} = 0.0 0.458 1.0



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

Y_s yellow
LCH^*_s = 81.4 87.9 90.0
LAB^*_s = 81.4 0.0 87.9
rgb^*_{ds} = 1.0 0.828 0.0

R_s red
LCH^*_s = 45.5 82.4 30.0
LAB^*_s = 45.5 71.3 41.2
rgb^*_{ds} = 1.0 0.0 0.096

G_s green
LCH^*_s = 52.3 68.9 150.0
LAB^*_s = 52.3 −59.6 34.4
rgb^*_{ds} = 0.062 1.0 0.0

C_s blue-green
LCH^*_s = 54.5 45.7 210.0
LAB^*_s = 54.5 −39.6 −22.8
rgb^*_{ds} = 0.0 1.0 0.685

M_s blue-red
LCH^*_s = 31.6 56.5 330.0
LAB^*_s = 31.6 49.0 −28.2
rgb^*_{ds} = 0.337 0.0 1.0

B_s blue
LCH^*_s = 40.9 40.6 270.0
LAB^*_s = 40.9 0.0 −40.6
rgb^*_{ds} = 0.0 0.479 1.0

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

1. For the rgb^*_d-input values the CIELAB data LCH^*_d and LAB^*_d have been calculated.
2. For the calculation of the standard hue angle $h_{ab,s}$ use for any device values rgb^*_d the equation:
$$h_{ab,s} = atan\ [\ r^*_d\ cos(30) + g^*_d\ cos(150)\ ]\ /\ [\ r^*_d\ sin(30) + g^*_d\ sin(150) + b^*_d\ sin(270)\ ] \quad (1)$$
3. For the 48 or 360 equally spaced standard hue angles $h_{ab,s}$ of the colours of maximum chroma use the seven hue angles of the 60 degree colours *s*: $h_{ab,si}$ = 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:
$$h_{48ab,sij} = h_{ab,si} + j\ [h_{ab,si+1} - h_{ab,si}\ ]\ /8\ (\ i = 0, 1, ..., 5;\ j = 0, 1, ..., 7) \quad (2)$$
$$h_{360ab,sij} = h_{ab,si} + j\ [h_{ab,si+1} - h_{ab,si}\ ]\ /60\ (\ i = 0, 1, ..., 5;\ j = 0, 1, ..., 59) \quad (3)$$
4. For the 48 or 360 elementary hue angles $h_{ab,e}$ of the colours of maximum chroma use the seven hue angles of the elementary colours *e*: $h_{ab,ei}$ = 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:
$$h_{48ab,eij} = h_{ab,ei} + j\ [h_{ab,ei+1} - h_{ab,ei}\ ]\ /8\ (\ i = 0, 1, ..., 5;\ j = 0, 1, ..., 7) \quad (4)$$
$$h_{360ab,eij} = h_{ab,ei} + j\ [h_{ab,ei+1} - h_{ab,ei}\ ]\ /60\ (\ i = 0, 1, ..., 5;\ j = 0, 1, ..., 59) \quad (5)$$
5. For any elementary hue angle $h_{ab,e}$ there is a well defined device hue angle $h_{ab,d}$ see the following tables, columns 1 to 5 or 1 to 4.
6. The values rgb^*_{de} produce the output of the device-independent elementary hues

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;
Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb**dd64M			*LAB**ddx64M (x=LabCh)					*rgb**ddx361M			*LAB**ddx361M (x=LabCh)					*rgb**dsx361M			*LAB**dsx361M (x=LabCh)					*rgb**dex361M			*LAB**dex361M					rgb*$_{dd}$	*rgb**$_{ds}$	*rgb**$_{de}$
32.3	30.0	25.4	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	1.0	0.0	0.0	45.5	70.9	44.9	83.9	32	1.0	0.0	0.096	45.5	71.4	41.2	82.4	30	1.0	0.0	0.255	45.7	72.2	34.4	80.0	25			
38.1	37.5	33.8	1.0	0.125	0.0	48.9	62.8	49.4	79.9	38.1	1.0	0.117	0.0	48.7	63.4	49.1	80.2	37	1.0	0.1	0.0	48.2	64.5	48.6	80.7	37	1.0	0.021	0.0	46.0	69.6	45.7	83.3	33			
46.8	45.0	42.1	1.0	0.25	0.0	53.6	51.9	55.5	76.0	46.8	1.0	0.25	0.0	53.7	52.0	55.5	76.0	46	1.0	0.223	0.0	52.7	54.4	54.4	76.9	45	1.0	0.183	0.0	51.1	57.9	52.5	78.1	42			
56.9	52.5	50.5	1.0	0.375	0.0	59.1	40.3	62.0	74.0	56.9	1.0	0.367	0.0	58.8	41.1	61.7	74.2	56	1.0	0.313	0.0	56.5	46.2	59.1	75.0	52	1.0	0.288	0.0	55.4	48.5	57.8	75.4	49			
67.1	60.0	58.8	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1	1.0	0.5	0.0	64.9	28.9	68.7	74.5	67	1.0	0.412	0.0	60.9	37.1	64.2	74.2	60	1.0	0.398	0.0	60.3	38.3	63.5	74.1	58			
78.6	67.5	67.2	1.0	0.625	0.0	72.1	15.4	77.1	78.6	78.6	1.0	0.617	0.0	71.6	16.5	76.7	78.4	77	1.0	0.498	0.0	64.8	29.1	68.6	74.5	67	1.0	0.494	0.0	64.6	29.5	68.4	74.5	66			
86.2	75.0	75.6	1.0	0.75	0.0	77.9	5.4	83.8	84.0	86.2	1.0	0.75	0.0	77.9	5.5	83.9	84.1	86	1.0	0.585	0.0	69.8	20.0	74.7	77.4	75	1.0	0.592	0.0	70.2	19.3	75.2	77.6	75			
92.1	82.5	83.9	1.0	0.875	0.0	83.4	−3.4	90.2	90.2	92.1	1.0	0.867	0.0	83.1	−2.7	89.8	89.9	91	1.0	0.68	0.0	74.7	11.3	80.3	81.1	82	1.0	0.703	0.0	75.8	9.4	81.5	82.0	83			
96.1	90.0	92.3	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	1.0	1.0	0.0	87.8	−10.1	95.5	96.0	96	1.0	0.829	0.0	81.4	0.0	88.0	88.0	90	1.0	0.879	0.0	83.6	−3.6	90.4	90.5	92			
98.8	97.5	101.0	0.875	1.0	0.0	84.3	−13.9	89.2	90.3	98.8	0.883	1.0	0.0	84.6	−13.6	89.7	90.7	98	0.959	1.0	0.0	86.7	−11.4	93.5	94.2	97	0.807	1.0	0.0	82.4	−15.8	86.2	87.7	100			
101.8	105.0	109.7	0.75	1.0	0.0	80.7	−17.5	83.5	85.3	101.8	0.75	1.0	0.0	80.8	−17.4	83.6	85.4	101	0.682	1.0	0.0	77.8	−21.2	79.4	82.2	105	0.583	1.0	0.0	73.7	−26.1	72.7	77.3	109			
107.6	112.5	118.5	0.625	1.0	0.0	75.3	−24.0	75.7	79.4	107.6	0.633	1.0	0.0	75.7	−23.6	76.3	79.9	107	0.54	1.0	0.0	72.1	−28.0	69.5	75.0	112	0.434	1.0	0.0	68.0	−32.9	62.2	70.5	117			
114.0	120.0	127.2	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	0.5	1.0	0.0	70.6	−29.6	66.5	72.8	114	0.399	1.0	0.0	66.7	−34.5	59.9	69.2	120	0.322	1.0	0.0	62.6	−40.8	53.8	67.6	127			
121.4	127.5	136.0	0.375	1.0	0.0	65.7	−35.6	58.3	68.3	121.4	0.383	1.0	0.0	66.1	−35.2	58.9	68.6	120	0.325	1.0	0.0	62.8	−40.6	54.0	67.6	127	0.249	1.0	0.0	58.4	−47.4	46.8	66.6	135			
135.3	135.0	144.7	0.25	1.0	0.0	58.4	−47.3	46.8	66.6	135.3	0.25	1.0	0.0	58.4	−47.3	46.9	66.6	135	0.253	1.0	0.0	58.6	−47.0	47.1	66.7	135	0.122	1.0	0.0	54.6	−54.2	38.4	66.5	144			
144.4	142.5	153.4	0.125	1.0	0.0	54.7	−53.9	38.5	66.3	144.4	0.133	1.0	0.0	55.0	−53.5	39.2	66.4	143	0.159	1.0	0.0	55.7	−52.3	40.9	66.4	142	0.03	1.0	0.0	51.2	−62.4	32.0	70.2	152			
155.5	150.0	162.2	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	0.0	1.0	0.0	50.1	−64.9	29.6	71.4	155	0.062	1.0	0.0	52.4	−59.6	34.5	68.9	150	0.0	1.0	0.151	50.7	−62.0	19.9	65.2	162			
160.7	157.5	169.0	0.0	1.0	0.125	50.5	−62.8	21.9	66.5	160.7	0.0	1.0	0.117	50.5	−62.9	22.4	66.9	160	0.0	1.0	0.035	50.2	−64.4	27.4	70.0	157	0.0	1.0	0.261	51.3	−58.5	11.8	59.8	168			
167.7	165.0	175.9	0.0	1.0	0.25	51.2	−58.9	12.7	60.3	167.7	0.0	1.0	0.25	51.2	−58.8	12.7	60.3	167	0.0	1.0	0.2	51.0	−60.5	16.2	62.8	165	0.0	1.0	0.364	52.0	−55.0	3.9	55.2	175			
176.7	172.5	182.7	0.0	1.0	0.375	52.0	−54.5	3.1	54.6	176.7	0.0	1.0	0.367	52.0	−54.8	3.7	55.1	176	0.0	1.0	0.309	51.6	−57.0	8.0	57.7	172	0.0	1.0	0.43	52.5	−52.2	−2.0	52.3	182			
189.3	180.0	189.6	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3	0.0	1.0	0.5	53.0	−48.6	−7.9	49.3	189	0.0	1.0	0.407	52.3	−53.2	0.0	53.3	180	0.0	1.0	0.502	53.0	−48.5	−8.1	49.3	189			
203.2	187.5	196.4	0.0	1.0	0.625	54.0	−42.3	−18.1	46.1	203.2	0.0	1.0	0.617	54.0	−42.8	−17.5	46.3	202	0.0	1.0	0.477	52.8	−49.9	−6.0	50.3	187	0.0	1.0	0.56	53.5	−45.9	−13.1	47.8	195			
217.2	195.0	203.2	0.0	1.0	0.75	55.0	−36.0	−27.4	45.3	217.2	0.0	1.0	0.75	55.0	−35.9	−27.3	45.3	217	0.0	1.0	0.551	53.4	−46.3	−12.3	48.0	195	0.0	1.0	0.626	54.1	−42.3	−18.1	46.1	203			
228.3	202.5	210.1	0.0	1.0	0.875	55.8	−30.7	−34.5	46.2	228.3	0.0	1.0	0.867	55.8	−31.0	−34.0	46.1	227	0.0	1.0	0.614	54.0	−42.9	−17.3	46.4	202	0.0	1.0	0.682	54.5	−39.6	−22.6	45.7	209			
238.4	210.0	216.9	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	0.0	1.0	1.0	56.8	−25.4	−41.4	48.7	238	0.0	1.0	0.685	54.5	−39.5	−22.8	45.7	210	0.0	1.0	0.747	55.0	−36.1	−27.2	45.3	216			
242.9	217.5	223.8	0.0	0.875	1.0	54.1	−21.1	−41.3	46.4	242.9	0.0	0.883	1.0	54.3	−21.4	−41.3	46.6	242	0.0	1.0	0.747	55.0	−36.1	−27.2	45.3	217	0.0	1.0	0.819	55.5	−33.2	−31.3	45.8	223			
249.3	225.0	230.6	0.0	0.75	1.0	50.4	−15.5	−41.1	43.9	249.3	0.0	0.75	1.0	50.4	−15.4	−41.0	44.0	249	0.0	1.0	0.837	55.6	−32.4	−32.4	45.9	225	0.0	1.0	0.904	56.1	−29.6	−36.1	46.8	230			
256.9	232.5	237.5	0.0	0.625	1.0	46.5	−9.4	−40.8	41.9	256.9	0.0	0.633	1.0	46.8	−9.8	−40.8	42.1	256	0.0	1.0	0.92	56.2	−28.9	−37.0	47.1	232	0.0	1.0	0.983	56.7	−26.2	−40.5	48.4	237			
268.2	240.0	244.3	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2	0.0	0.5	1.0	41.7	−1.1	−40.6	40.7	268	0.0	0.956	1.0	55.9	−23.9	−41.4	48.0	240	0.0	0.847	1.0	53.3	−19.8	−41.3	45.9	244			
278.6	247.5	251.2	0.0	0.375	1.0	37.3	6.1	−40.2	40.7	278.6	0.0	0.383	1.0	37.6	5.6	−40.2	40.7	277	0.0	0.795	1.0	51.8	−17.4	−41.2	44.9	247	0.0	0.726	1.0	49.7	−14.3	−41.1	43.6	250			
289.6	255.0	258.0	0.0	0.25	1.0	32.8	14.3	−40.2	42.7	289.6	0.0	0.25	1.0	32.9	14.4	−40.1	42.7	289	0.0	0.657	1.0	47.5	−10.9	−40.9	42.5	255	0.0	0.613	1.0	46.1	−8.6	−40.8	41.9	258			
299.0	262.5	264.8	0.0	0.125	1.0	28.6	22.4	−40.2	46.1	299.0	0.0	0.133	1.0	28.9	21.9	−40.2	45.9	298	0.0	0.569	1.0	44.4	−5.7	−40.9	41.4	262	0.0	0.542	1.0	43.4	−3.9	−40.8	41.1	264			
306.2	270.0	271.7	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	0.0	0.0	1.0	25.1	29.6	−40.3	50.1	306	0.0	0.479	1.0	41.0	0.0	−40.6	40.7	270	0.0	0.458	1.0	40.3	1.2	−40.6	40.7	271			
314.7	277.5	278.8	0.125	0.0	1.0	27.9	36.0	−36.4	51.2	314.7	0.117	0.0	1.0	27.7	35.7	−36.6	51.2	314	0.0	0.395	1.0	38.1	5.0	−40.3	40.7	277	0.0	0.378	1.0	37.5	5.9	−40.2	40.7	278			
322.1	285.0	285.9	0.25	0.0	1.0	28.8	41.9	−32.5	53.1	322.1	0.25	0.0	1.0	28.9	42.0	−32.5	53.2	322	0.0	0.303	1.0	34.8	10.8	−40.3	41.9	285	0.0	0.292	1.0	34.4	11.6	−40.3	42.0	285			
333.3	292.5	293.0	0.375	0.0	1.0	32.7	51.8	−26.0	58.0	333.3	0.367	0.0	1.0	32.5	51.3	−26.5	57.7	332	0.0	0.219	1.0	31.8	16.3	−40.3	43.6	292	0.0	0.211	1.0	31.5	16.8	−40.3	43.8	292			
340.5	300.0	300.1	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	0.5	0.0	1.0	35.6	58.6	−20.6	62.2	340	0.0	0.109	1.0	28.2	23.3	−40.3	46.6	300	0.0	0.106	1.0	28.1	23.5	−40.3	46.7	300			
347.9	307.5	307.2	0.625	0.0	1.0	38.1	65.4	−14.0	66.9	347.9	0.617	0.0	1.0	37.9	65.1	−14.4	66.7	347	0.011	0.0	1.0	25.3	30.2	−40.0	50.2	307	0.009	0.0	1.0	25.3	30.1	−40.1	50.2	306			
352.5	315.0	314.3	0.75	0.0	1.0	41.8	71.0	−9.2	71.6	352.5	0.75	0.0	1.0	41.8	71.0	−9.2	71.6	352	0.13	0.0	1.0	27.9	36.3	−36.2	51.3	315	0.12	0.0	1.0	27.8	35.8	−36.5	51.2	314			
356.1	322.5	321.4	0.875	0.0	1.0	44.2	75.2	−5.0	75.3	356.1	0.867	0.0	1.0	44.1	74.9	−5.3	75.1	355	0.247	0.0	1.0	28.9	41.9	−32.6	53.1	322	0.231	0.0	1.0	28.7	41.1	−33.2	52.9	321			
359.8	330.0	328.6	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	1.0	0.0	1.0	46.1	79.3	−0.1	79.3	359	0.337	0.0	1.0	31.6	49.0	−28.2	56.6	330	0.322	0.0	1.0	31.1	47.8	−29.1	56.0	328			
363.0	337.5	335.7	1.0	0.0	0.875	45.9	78.2	4.1	78.3	363.0	1.0	0.0	0.883	46.0	78.3	3.9	78.4	362	0.438	0.0	1.0	34.2	55.4	−23.4	60.1	337	0.408	0.0	1.0	33.5	53.7	−24.7	59.1	335			
366.4	345.0	342.8	1.0	0.0	0.75	45.9	77.1	8.6	77.6	366.4	1.0	0.0	0.75	46.0	77.2	8.7	77.7	366	0.576	0.0	1.0	37.1	62.9	−16.7	65.1	345	0.539	0.0	1.0	36.4	60.8	−18.7	63.7	342			
371.1	352.5	349.9	1.0	0.0	0.625	46.0	75.6	14.8	77.0	371.1	1.0	0.0	0.633	46.0	75.8	14.5	77.1	370	0.735	0.0	1.0	41.4	70.4	−9.8	71.1	352	0.667	0.0	1.0	39.3	67.4	−12.4	68.5	349			
375.9	360.0	357.0	1.0	0.0	0.5	45.9	74.2	21.1	77.1	375.9	1.0	0.0	0.5	45.9	74.2	21.2	77.2	375	1.0	0.0	0.994	46.1	79.3	0.0	79.3	360	0.736	0.0	1.0	41.4	70.5	−9.7	71.1	352			
381.2	367.5	364.1	1.0	0.0	0.375	45.8	72.9	28.3	78.3	381.2	1.0	0.0	0.383	45.8	73.1	27.9	78.2	380	1.0	0.0	0.734	46.0	77.0	9.5	77.6	367	1.0	0.0	1.0	46.1	79.3	−0.1	79.3	359			
385.6	375.0	371.2	1.0	0.0	0.25	45.6	72.1	34.6	80.0	385.6	1.0	0.0	0.25	45.6	72.2	34.7	80.1	385	1.0	0.0	0.524	45.9	74.5	20.0	77.2	375	1.0	0.0	0.687	46.0	76.5	11.8	77.4	368			
389.3	382.5	378.3	1.0	0.0	0.125	45.5	71.4	40.1	81.9	389.3	1.0	0.0	0.133	45.6	71.5	39.8	81.8	389	1.0	0.0	0.353	45.8	72.9	29.4	78.6	382	1.0	0.0	0.485	45.9	74.1	22.0	77.3	376			
392.3	390.0	385.4	1.0	0.0	0.0	45.4	70.9	44.8	83.9	392.3	1.0	0.0	0.0	45.5	70.9	44.9	83.9	392	1.0	0.0	0.096	45.5	71.4	41.2	82.4	390	1.0	0.0	0.255	45.7	72.2	34.4	80.0	385			

TUB-test chart PE87; 16 step hue circle
48 step hue circles; *rgb−LabCh**tables

input: *rgb/cmyk −> rgb*$_d$
output: transfer to *cmy0*$_d$

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb**			dd64M			*LAB**			ddx64M (x=LabCh)	
32.3	30.0	25.4	1.0	0.0	0.0		45.4	70.9	44.8	83.9	32.3
38.1	37.5	33.8	1.0	0.125	0.0		48.9	62.8	49.4	79.9	38.1
46.8	45.0	42.1	1.0	0.25	0.0		53.6	51.9	55.5	76.0	46.8
56.9	52.5	50.5	1.0	0.375	0.0		59.1	40.3	62.0	74.0	56.9
67.1	60.0	58.8	1.0	0.5	0.0		64.9	28.9	68.6	74.5	67.1
78.6	67.5	67.2	1.0	0.625	0.0		72.1	15.4	77.1	78.6	78.6
86.2	75.0	75.6	1.0	0.75	0.0		77.9	5.4	83.8	84.0	86.2
92.1	82.5	83.9	1.0	0.875	0.0		83.4	−3.4	90.2	90.2	92.1
96.1	90.0	92.3	1.0	1.0	0.0		87.8	−10.2	95.4	96.0	96.1
98.8	97.5	101.0	0.875	1.0	0.0		84.3	−13.9	89.2	90.3	98.8
101.8	105.0	109.7	0.75	1.0	0.0		80.7	−17.5	83.5	85.3	101.8
107.6	112.5	118.5	0.625	1.0	0.0		75.3	−24.0	75.7	79.4	107.6
114.0	120.0	127.2	0.5	1.0	0.0		70.6	−29.7	66.5	72.8	114.0
121.4	127.5	136.0	0.375	1.0	0.0		65.7	−35.6	58.3	68.3	121.4
135.3	135.0	144.7	0.25	1.0	0.0		58.4	−47.3	46.8	66.6	135.3
144.4	142.5	153.4	0.125	1.0	0.0		54.7	−53.9	38.5	66.3	144.4
155.5	150.0	162.2	0.0	1.0	0.0		50.0	−65.0	29.6	71.4	155.5
160.7	157.5	169.0	0.0	1.0	0.125		50.5	−62.8	21.9	66.5	160.7
167.7	165.0	175.9	0.0	1.0	0.25		51.2	−58.9	12.7	60.3	167.7
176.7	172.5	182.7	0.0	1.0	0.375		52.0	−54.5	3.1	54.6	176.7
189.3	180.0	189.6	0.0	1.0	0.5		52.9	−48.6	−8.0	49.3	189.3
203.2	187.5	196.4	0.0	1.0	0.625		54.0	−42.3	−18.1	46.1	203.2
217.2	195.0	203.2	0.0	1.0	0.75		55.0	−36.0	−27.4	45.3	217.2
228.3	202.5	210.1	0.0	1.0	0.875		55.8	−30.7	−34.5	46.2	228.3
238.4	210.0	216.9	0.0	1.0	1.0		56.8	−25.5	−41.5	48.7	238.4
242.9	217.5	223.8	0.0	0.875	1.0		54.1	−21.1	−41.3	46.4	242.9
249.3	225.0	230.6	0.0	0.75	1.0		50.4	−15.5	−41.1	43.9	249.3
256.9	232.5	237.5	0.0	0.625	1.0		46.5	−9.4	−40.8	41.9	256.9
268.2	240.0	244.3	0.0	0.5	1.0		41.7	−1.2	−40.6	40.6	268.2
278.6	247.5	251.2	0.0	0.375	1.0		37.3	6.1	−40.2	40.7	278.6
289.6	255.0	258.0	0.0	0.25	1.0		32.8	14.3	−40.2	42.7	289.6
299.0	262.5	264.8	0.0	0.125	1.0		28.6	22.4	−40.2	46.1	299.0
306.2	270.0	271.7	0.0	0.0	1.0		25.0	29.5	−40.4	50.0	306.2
314.7	277.5	278.8	0.125	0.0	1.0		27.9	36.0	−36.4	51.2	314.7
322.1	285.0	285.9	0.25	0.0	1.0		28.8	41.9	−32.5	53.1	322.1
333.3	292.5	293.0	0.375	0.0	1.0		32.7	51.8	−26.0	58.0	333.3
340.5	300.0	300.1	0.5	0.0	1.0		35.6	58.6	−20.7	62.1	340.5
347.9	307.5	307.2	0.625	0.0	1.0		38.1	65.4	−14.0	66.9	347.9
352.5	315.0	314.3	0.75	0.0	1.0		41.8	71.0	−9.2	71.6	352.5
356.1	322.5	321.4	0.875	0.0	1.0		44.2	75.2	−5.0	75.3	356.1
359.8	330.0	328.6	1.0	0.0	1.0		46.1	79.3	−0.2	79.3	359.8
363.0	337.5	335.7	1.0	0.0	0.875		45.9	78.2	4.1	78.3	363.0
366.4	345.0	342.8	1.0	0.0	0.75		45.9	77.1	8.6	77.6	366.4
371.1	352.5	349.9	1.0	0.0	0.625		46.0	75.6	14.8	77.0	371.1
375.9	360.0	357.0	1.0	0.0	0.5		45.9	74.2	21.1	77.1	375.9
381.2	367.5	364.1	1.0	0.0	0.375		45.8	72.9	28.3	78.3	381.2
385.6	375.0	371.2	1.0	0.0	0.25		45.6	72.1	34.6	80.0	385.6
389.3	382.5	378.3	1.0	0.0	0.125		45.5	71.4	40.1	81.9	389.3
392.3	390.0	385.4	1.0	0.0	0.0		45.4	70.9	44.8	83.9	392.3

*rgb**			dex361M		*LAB**	dex361M			
1.0	0.0	0.255	45.7	72.2	34.4	80.0	25
1.0	0.021	0.0	46.0	69.6	45.7	83.3	33
1.0	0.183	0.0	51.1	57.9	52.5	78.1	42
1.0	0.288	0.0	55.4	48.5	57.8	75.4	49
1.0	0.398	0.0	60.3	38.3	63.5	74.1	58
1.0	0.494	0.0	64.6	29.5	68.4	74.5	66
1.0	0.592	0.0	70.2	19.3	75.2	77.6	75
1.0	0.703	0.0	75.8	9.4	81.5	82.0	83
1.0	0.879	0.0	83.6	−3.6	90.4	90.5	92
0.807	1.0	0.0	82.4	−15.8	86.2	87.7	100
0.583	1.0	0.0	73.7	−26.1	72.7	77.3	109
0.434	1.0	0.0	68.0	−32.9	62.2	70.5	117
0.322	1.0	0.0	62.6	−40.8	53.8	67.6	127
0.249	1.0	0.0	58.4	−47.4	46.8	66.6	135
0.122	1.0	0.0	54.6	−54.2	38.4	66.5	144
0.03	1.0	0.0	51.2	−62.4	32.0	70.2	152
0.0	1.0	0.151	50.7	−62.0	19.9	65.2	162
0.0	1.0	0.261	51.3	−58.5	11.8	59.8	168
0.0	1.0	0.364	52.0	−55.0	3.9	55.2	175
0.0	1.0	0.43	52.5	−52.2	−2.0	52.3	182
0.0	1.0	0.502	53.0	−48.5	−8.1	49.3	189
0.0	1.0	0.56	53.5	−45.9	−13.1	47.8	195
0.0	1.0	0.626	54.1	−42.3	−18.1	46.1	203
0.0	1.0	0.682	54.5	−39.6	−22.6	45.7	209
0.0	1.0	0.747	55.0	−36.1	−27.2	45.3	216
0.0	1.0	0.819	55.5	−33.2	−31.3	45.8	223
0.0	1.0	0.904	56.1	−29.6	−36.1	46.8	230
0.0	1.0	0.983	56.7	−26.2	−40.5	48.4	237
0.0	0.847	1.0	53.3	−19.8	−41.3	45.9	244
0.0	0.726	1.0	49.7	−14.3	−41.1	43.6	250
0.0	0.613	1.0	46.1	−8.6	−40.8	41.9	258
0.0	0.542	1.0	43.4	−3.9	−40.8	41.1	264
0.0	0.458	1.0	40.3	1.2	−40.6	40.7	271
0.0	0.378	1.0	37.5	5.9	−40.2	40.7	278
0.0	0.292	1.0	34.4	11.6	−40.3	42.0	285
0.0	0.211	1.0	31.5	16.8	−40.3	43.8	292
0.0	0.106	1.0	28.1	23.5	−40.3	46.7	300
0.009	0.0	1.0	25.3	30.1	−40.1	50.2	306
0.12	0.0	1.0	27.8	35.8	−36.5	51.2	314
0.231	0.0	1.0	28.7	41.1	−33.2	52.9	321
0.322	0.0	1.0	31.1	47.8	−29.1	56.0	328
0.408	0.0	1.0	33.5	53.7	−24.7	59.1	335
0.539	0.0	1.0	36.4	60.8	−18.7	63.7	342
0.667	0.0	1.0	39.3	67.4	−12.4	68.5	349
0.736	0.0	1.0	41.4	70.5	−9.7	71.1	352
1.0	0.0	1.0	46.1	79.3	−0.1	79.3	359
1.0	0.0	0.687	46.0	76.5	11.8	77.4	368
1.0	0.0	0.485	45.9	74.1	22.0	77.3	376
1.0	0.0	0.255	45.7	72.2	34.4	80.0	385

rgb*$_{dd}$ rgb*$_{ds}$ rgb*$_{de}$

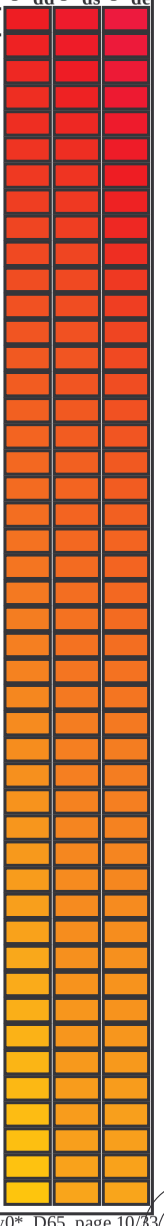
1−003831−L0 PE870−70 LAB*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0 Output: Offset standard print; separation cmy0*, D65, page 9/33

TUB-test chart PE87; 16 step hue circle
48 step hue circles; *rgb−LabCh**tables

input: *rgb/cmyk −> rgb*$_d$
output: transfer to *cmy0*$_d$

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours $RYGCBM_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;
Six hue angles of the device colours $RYGCBM_d$: $h_{ab,d}$ = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours $RYGCBM_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

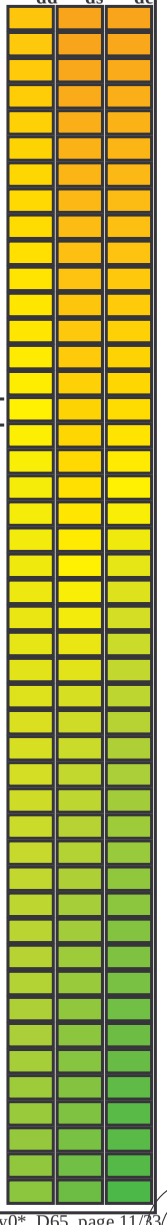
$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb** dd361M			*LAB** ddx361Mi (x=LabCh)					R_d	*rgb** ds361Mi			*LAB** dsx361Mi (x=LabCh)					R_s	*rgb** dd361Mi			*rgb** de361Mi			*LAB** dex361Mi (x=LabCh)					R_e	*rgb** dd361Mi		
32	30	25	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32		1.0	0.0	0.096	45.5	71.4	41.2	82.4	30		1.0	0.0	0.0	1.0	0.0	0.255	45.7	72.2	34.4	80.4	25		1.0	0.0	0.0
33	31	26	1.0	0.016	0.0	45.9	69.8	45.5	83.4	33		1.0	0.0	0.055	45.5	71.2	42.8	83.1	31		1.0	0.017	0.0	1.0	0.0	0.218	45.6	72.0	36.1	80.6	26		1.0	0.017	0.0
33	32	27	1.0	0.033	0.0	46.3	68.8	46.1	82.8	33		1.0	0.0	0.013	45.5	71.0	44.4	83.7	32		1.0	0.033	0.0	1.0	0.0	0.18	45.6	71.8	37.7	81.1	27		1.0	0.033	0.0
34	33	28	1.0	0.05	0.0	46.8	67.7	46.8	82.3	34		1.0	0.015	0.0	45.9	70.0	45.5	83.5	33		1.0	0.05	0.0	1.0	0.0	0.142	45.6	71.6	39.4	81.7	28		1.0	0.05	0.0
35	34	29	1.0	0.066	0.0	47.3	66.6	47.4	81.8	35		1.0	0.036	0.0	46.5	68.6	46.3	82.8	34		1.0	0.067	0.0	1.0	0.0	0.099	45.5	71.4	41.1	82.4	29		1.0	0.067	0.0
36	35	31	1.0	0.083	0.0	47.7	65.5	48.0	81.2	36		1.0	0.057	0.0	47.1	67.3	47.1	82.1	35		1.0	0.083	0.0	1.0	0.0	0.053	45.5	71.2	42.9	83.1	31		1.0	0.083	0.0
36	36	32	1.0	0.1	0.0	48.2	64.4	48.5	80.7	36		1.0	0.079	0.0	47.6	65.9	47.9	81.4	36		1.0	0.1	0.0	1.0	0.0	0.006	45.5	71.0	44.6	83.8	32		1.0	0.1	0.0
37	37	33	1.0	0.116	0.0	48.6	63.3	49.1	80.2	37		1.0	0.1	0.0	48.2	64.5	48.6	80.7	37		1.0	0.117	0.0	1.0	0.021	0.0	46.0	69.6	45.7	83.3	33		1.0	0.117	0.0
38	38	34	1.0	0.133	0.0	49.2	62.1	49.8	79.6	38		1.0	0.121	0.0	48.8	63.1	49.3	80.1	38		1.0	0.133	0.0	1.0	0.044	0.0	46.7	68.1	46.6	82.5	34		1.0	0.133	0.0
39	39	35	1.0	0.15	0.0	49.8	60.7	50.7	79.1	39		1.0	0.137	0.0	49.4	61.8	50.1	79.6	39		1.0	0.15	0.0	1.0	0.068	0.0	47.4	66.6	47.5	81.8	35		1.0	0.15	0.0
41	40	36	1.0	0.166	0.0	50.5	59.2	51.6	78.6	41		1.0	0.151	0.0	49.9	60.6	50.9	79.1	40		1.0	0.167	0.0	1.0	0.092	0.0	48.0	65.0	48.3	81.0	36		1.0	0.167	0.0
42	41	37	1.0	0.183	0.0	51.1	57.8	52.5	78.1	42		1.0	0.166	0.0	50.5	59.4	51.6	78.7	41		1.0	0.183	0.0	1.0	0.116	0.0	48.7	63.5	49.1	80.2	37		1.0	0.183	0.0
43	42	38	1.0	0.2	0.0	51.7	56.3	53.3	77.5	43		1.0	0.18	0.0	51.0	58.1	52.3	78.2	42		1.0	0.2	0.0	1.0	0.135	0.0	49.3	62.0	49.9	79.6	38		1.0	0.2	0.0
44	43	39	1.0	0.216	0.0	52.4	54.9	54.0	77.0	44		1.0	0.194	0.0	51.6	56.9	53.0	77.8	43		1.0	0.217	0.0	1.0	0.151	0.0	49.9	60.7	50.8	79.1	39		1.0	0.217	0.0
45	44	41	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45		1.0	0.209	0.0	52.1	55.6	53.7	77.3	44		1.0	0.233	0.0	1.0	0.167	0.0	50.5	59.3	51.7	78.6	41		1.0	0.233	0.0
46	45	42	1.0	0.25	0.0	53.6	51.9	55.5	76.0	46		1.0	0.223	0.0	52.7	54.4	54.4	76.9	45		1.0	0.25	0.0	1.0	0.183	0.0	51.1	57.9	52.5	78.1	42		1.0	0.25	0.0
48	46	43	1.0	0.266	0.0	54.4	50.4	56.5	75.7	48		1.0	0.237	0.0	53.2	53.1	55.0	76.4	46		1.0	0.267	0.0	1.0	0.198	0.0	51.7	56.5	53.2	77.6	43		1.0	0.267	0.0
49	47	44	1.0	0.283	0.0	55.1	48.9	57.4	75.4	49		1.0	0.251	0.0	53.7	51.8	55.6	76.0	47		1.0	0.283	0.0	1.0	0.214	0.0	52.3	55.1	54.0	77.1	44		1.0	0.283	0.0
50	48	45	1.0	0.3	0.0	55.8	47.4	58.4	75.2	50		1.0	0.264	0.0	54.3	50.7	56.3	75.8	48		1.0	0.3	0.0	1.0	0.23	0.0	52.9	53.7	54.7	76.6	45		1.0	0.3	0.0
52	49	46	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52		1.0	0.276	0.0	54.8	49.6	57.1	75.6	49		1.0	0.317	0.0	1.0	0.246	0.0	53.5	52.3	55.4	76.1	46		1.0	0.317	0.0
53	50	47	1.0	0.333	0.0	57.3	44.2	60.1	74.6	53		1.0	0.288	0.0	55.4	48.5	57.8	75.4	50		1.0	0.333	0.0	1.0	0.261	0.0	54.2	51.0	56.2	75.9	47		1.0	0.333	0.0
54	51	48	1.0	0.35	0.0	58.0	42.7	60.9	74.4	54		1.0	0.301	0.0	55.9	47.3	58.5	75.2	51		1.0	0.35	0.0	1.0	0.274	0.0	54.8	49.8	57.0	75.6	48		1.0	0.35	0.0
56	52	49	1.0	0.366	0.0	58.8	41.1	61.7	74.1	56		1.0	0.313	0.0	56.5	46.2	59.1	75.0	52		1.0	0.367	0.0	1.0	0.288	0.0	55.4	48.5	57.8	75.4	49		1.0	0.367	0.0
57	53	51	1.0	0.383	0.0	59.5	39.5	62.5	74.0	57		1.0	0.326	0.0	57.0	45.0	59.8	74.8	53		1.0	0.383	0.0	1.0	0.302	0.0	56.0	47.2	58.5	75.2	51		1.0	0.383	0.0
59	54	52	1.0	0.4	0.0	60.3	38.1	63.5	74.1	59		1.0	0.338	0.0	57.6	43.9	60.4	74.6	54		1.0	0.4	0.0	1.0	0.316	0.0	56.6	45.9	59.3	75.0	52		1.0	0.4	0.0
60	55	53	1.0	0.416	0.0	61.0	36.6	64.5	74.1	60		1.0	0.35	0.0	58.1	42.7	61.0	74.4	55		1.0	0.417	0.0	1.0	0.33	0.0	57.2	44.6	60.0	74.8	53		1.0	0.417	0.0
61	56	54	1.0	0.433	0.0	61.8	35.1	65.4	74.2	61		1.0	0.363	0.0	58.6	41.5	61.5	74.2	56		1.0	0.433	0.0	1.0	0.343	0.0	57.8	43.3	60.6	74.5	54		1.0	0.433	0.0
63	57	55	1.0	0.45	0.0	62.6	33.6	66.2	74.3	63		1.0	0.375	0.0	59.2	40.3	62.1	74.0	57		1.0	0.45	0.0	1.0	0.357	0.0	58.4	42.0	61.3	74.3	55		1.0	0.45	0.0
64	58	56	1.0	0.466	0.0	63.3	32.0	67.1	74.4	64		1.0	0.387	0.0	59.8	39.3	62.8	74.1	58		1.0	0.467	0.0	1.0	0.371	0.0	59.0	40.7	61.9	74.1	56		1.0	0.467	0.0
65	59	57	1.0	0.483	0.0	64.1	30.5	67.9	74.4	65		1.0	0.4	0.0	60.3	38.2	63.5	74.1	59		1.0	0.483	0.0	1.0	0.385	0.0	59.6	39.5	62.7	74.1	57		1.0	0.483	0.0
67	60	58	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67		1.0	0.412	0.0	60.9	37.1	64.2	74.2	60		1.0	0.5	0.0	1.0	0.398	0.0	60.3	38.3	63.5	74.1	58		1.0	0.5	0.0
68	61	60	1.0	0.516	0.0	65.8	27.2	69.9	75.0	68		1.0	0.424	0.0	61.4	36.0	64.9	74.2	61		1.0	0.517	0.0	1.0	0.412	0.0	60.9	37.1	64.2	74.2	60		1.0	0.517	0.0
70	62	61	1.0	0.533	0.0	66.8	25.5	71.1	75.6	70		1.0	0.436	0.0	62.0	34.9	65.6	74.3	62		1.0	0.533	0.0	1.0	0.426	0.0	61.5	35.8	65.0	74.2	61		1.0	0.533	0.0
71	63	62	1.0	0.55	0.0	67.7	23.8	72.3	76.1	71		1.0	0.449	0.0	62.6	33.7	66.2	74.3	63		1.0	0.55	0.0	1.0	0.439	0.0	62.1	34.6	65.7	74.3	62		1.0	0.55	0.0
73	64	63	1.0	0.566	0.0	68.7	22.0	73.5	76.7	73		1.0	0.461	0.0	63.1	32.6	66.9	74.4	64		1.0	0.567	0.0	1.0	0.453	0.0	62.8	33.3	66.4	74.3	63		1.0	0.567	0.0
74	65	64	1.0	0.583	0.0	69.7	20.2	74.6	77.3	74		1.0	0.473	0.0	63.7	31.5	67.5	74.4	65		1.0	0.583	0.0	1.0	0.467	0.0	63.4	32.1	67.1	74.4	64		1.0	0.583	0.0
76	66	65	1.0	0.6	0.0	70.6	18.3	75.6	77.8	76		1.0	0.486	0.0	64.2	30.3	68.0	74.5	66		1.0	0.6	0.0	1.0	0.48	0.0	64.0	30.8	67.8	74.5	65		1.0	0.6	0.0
77	67	66	1.0	0.616	0.0	71.6	16.4	76.6	78.4	77		1.0	0.498	0.0	64.8	29.1	68.6	74.5	67		1.0	0.617	0.0	1.0	0.494	0.0	64.6	29.5	68.4	74.5	66		1.0	0.617	0.0
79	68	67	1.0	0.633	0.0	72.5	14.8	77.6	79.0	79		1.0	0.509	0.0	65.4	28.0	69.4	74.8	68		1.0	0.633	0.0	1.0	0.507	0.0	65.3	28.2	69.2	74.8	67		1.0	0.633	0.0
80	69	68	1.0	0.65	0.0	73.2	13.6	78.5	79.7	80		1.0	0.52	0.0	66.1	26.9	70.2	75.2	69		1.0	0.65	0.0	1.0	0.519	0.0	66.0	27.0	70.1	75.2	68		1.0	0.65	0.0
81	70	70	1.0	0.666	0.0	74.0	12.3	79.5	80.4	81		1.0	0.531	0.0	66.7	25.8	71.0	75.6	70		1.0	0.667	0.0	1.0	0.531	0.0	66.7	25.8	71.0	75.6	70		1.0	0.667	0.0
82	71	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82		1.0	0.542	0.0	67.3	24.7	71.8	75.9	71		1.0	0.683	0.0	1.0	0.543	0.0	67.4	24.6	71.9	76.0	71		1.0	0.683	0.0
83	72	72	1.0	0.7	0.0	75.6	9.6	81.3	81.9	83		1.0	0.553	0.0	67.9	23.6	72.6	76.3	72		1.0	0.7	0.0	1.0	0.555	0.0	68.1	23.3	72.8	76.4	72		1.0	0.7	0.0
84	73	73	1.0	0.716	0.0	76.3	8.3	82.2	82.6	84		1.0	0.564	0.0	68.6	22.4	73.3	76.6	73		1.0	0.717	0.0	1.0	0.568	0.0	68.8	22.0	73.6	76.8	73		1.0	0.717	0.0
85	74	74	1.0	0.733	0.0	77.1	6.9	83.0	83.3	85		1.0	0.574	0.0	69.2	21.2	74.0	77.0	74		1.0	0.733	0.0	1.0	0.58	0.0	69.5	20.6	74.4	77.2	74		1.0	0.733	0.0
86	75	75	1.0	0.75	0.0	77.9	5.4	83.8	84.0	86		1.0	0.585	0.0	69.8	20.0	74.7	77.4	75		1.0	0.75	0.0	1.0	0.592	0.0	70.2	19.3	75.2	77.6	75		1.0	0.75	0.0



1−003931−L0 PE870−70 LAB*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0 Output: Offset standard print; separation cmy0*, D65, page 10/33

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;
Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb**dd361M			*LAB**ddx361Mi (x=LabCh)					*rgb**ds361Mi			*LAB**dsx361Mi (x=LabCh)					*rgb**dd361Mi			*rgb**de361Mi			*LAB**dex361Mi (x=LabCh)					*rgb**dd361Mi			*rgb**dd	*rgb**ds	*rgb**de
86	75	75	1.0	0.75	0.0	77.9	5.4	83.8	84.0	86	1.0	0.585	0.0	69.8	20.0	74.7	77.4	75	1.0	0.75	0.0	1.0	0.592	0.0	70.2	19.3	75.2	77.6	75	1.0	0.75	0.0			
87	76	76	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87	1.0	0.596	0.0	70.5	18.8	75.4	77.7	76	1.0	0.767	0.0	1.0	0.604	0.0	70.9	17.9	75.9	78.0	76	1.0	0.767	0.0			
87	77	77	1.0	0.783	0.0	79.4	3.2	85.6	85.7	87	1.0	0.607	0.0	71.1	17.6	76.1	78.1	77	1.0	0.783	0.0	1.0	0.616	0.0	71.6	16.5	76.6	78.4	77	1.0	0.783	0.0			
88	78	78	1.0	0.8	0.0	80.1	2.0	86.5	86.5	88	1.0	0.618	0.0	71.7	16.3	76.7	78.5	78	1.0	0.8	0.0	1.0	0.63	0.0	72.4	15.1	77.4	78.9	78	1.0	0.8	0.0			
89	79	80	1.0	0.816	0.0	80.8	0.8	87.3	87.3	89	1.0	0.631	0.0	72.4	15.1	77.5	78.9	79	1.0	0.817	0.0	1.0	0.648	0.0	73.2	13.8	78.5	79.7	80	1.0	0.817	0.0			
90	80	81	1.0	0.833	0.0	81.6	−0.3	88.2	88.2	90	1.0	0.647	0.0	73.2	13.8	78.4	79.6	80	1.0	0.833	0.0	1.0	0.667	0.0	74.1	12.3	79.5	80.5	81	1.0	0.833	0.0			
91	81	82	1.0	0.85	0.0	82.3	−1.5	89.0	89.0	91	1.0	0.664	0.0	73.9	12.6	79.4	80.4	81	1.0	0.85	0.0	1.0	0.685	0.0	74.9	10.9	80.5	81.3	82	1.0	0.85	0.0			
91	82	83	1.0	0.866	0.0	83.1	−2.8	89.8	89.8	91	1.0	0.68	0.0	74.7	11.3	80.3	81.1	82	1.0	0.867	0.0	1.0	0.703	0.0	75.8	9.4	81.5	82.0	83	1.0	0.867	0.0			
92	83	84	1.0	0.883	0.0	83.7	−3.8	90.5	90.6	92	1.0	0.697	0.0	75.5	10.0	81.2	81.8	83	1.0	0.883	0.0	1.0	0.721	0.0	76.6	7.9	82.4	82.8	84	1.0	0.883	0.0			
92	84	85	1.0	0.9	0.0	84.3	−4.7	91.3	91.4	92	1.0	0.713	0.0	76.2	8.6	82.0	82.5	84	1.0	0.9	0.0	1.0	0.74	0.0	77.5	6.4	83.4	83.6	85	1.0	0.9	0.0			
93	85	86	1.0	0.916	0.0	84.9	−5.6	92.0	92.2	93	1.0	0.729	0.0	77.0	7.2	82.9	83.2	85	1.0	0.917	0.0	1.0	0.76	0.0	78.4	4.8	84.4	84.6	86	1.0	0.917	0.0			
94	86	87	1.0	0.933	0.0	85.5	−6.5	92.7	92.9	94	1.0	0.746	0.0	77.7	5.9	83.7	83.9	86	1.0	0.933	0.0	1.0	0.784	0.0	79.4	3.2	85.7	85.7	87	1.0	0.933	0.0			
94	87	88	1.0	0.95	0.0	86.0	−7.4	93.4	93.7	94	1.0	0.766	0.0	78.6	4.4	84.7	84.8	87	1.0	0.95	0.0	1.0	0.807	0.0	80.5	1.6	86.9	86.9	88	1.0	0.95	0.0			
95	88	90	1.0	0.966	0.0	86.6	−8.3	94.1	94.5	95	1.0	0.787	0.0	79.6	3.0	85.8	85.9	88	1.0	0.967	0.0	1.0	0.831	0.0	81.5	0.0	88.1	88.1	90	1.0	0.967	0.0			
95	89	91	1.0	0.983	0.0	87.2	−9.2	94.8	95.2	95	1.0	0.808	0.0	80.5	1.5	86.9	86.9	89	1.0	0.983	0.0	1.0	0.854	0.0	82.6	−1.8	89.2	89.3	91	1.0	0.983	0.0			
96	90	92	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96	Y_d	1.0	0.829	0.0	81.4	0.0	88.0	88.0	90	Y_s	1.0	1.0	0.0	1.0	0.879	0.0	83.6	−3.6	90.4	90.5	92	Y_e	1.0	1.0	0.0			
96	91	93	0.983	1.0	0.0	87.3	−10.7	94.6	95.2	96		1.0	0.85	0.0	82.4	−1.5	89.0	89.0	91		0.983	1.0	0.0	1.0	0.916	0.0	84.9	−5.5	92.0	92.2	93		0.983	1.0	0.0			
96	92	94	0.966	1.0	0.0	86.8	−11.2	93.8	94.5	96		1.0	0.871	0.0	83.3	−3.0	90.0	90.1	92		0.967	1.0	0.0	1.0	0.953	0.0	86.2	−7.5	93.6	93.9	94		0.967	1.0	0.0			
97	93	95	0.95	1.0	0.0	86.4	−11.7	93.0	93.7	97		1.0	0.901	0.0	84.4	−4.7	91.4	91.5	93		0.95	1.0	0.0	1.0	0.99	0.0	87.5	−9.6	95.1	95.6	95		0.95	1.0	0.0			
97	94	96	0.933	1.0	0.0	85.9	−12.2	92.2	93.0	97		1.0	0.933	0.0	85.5	−6.4	92.7	93.0	94		0.933	1.0	0.0	0.961	1.0	0.0	86.7	−11.3	93.6	94.3	96		0.933	1.0	0.0			
97	95	98	0.916	1.0	0.0	85.5	−12.7	91.3	92.2	97		1.0	0.965	0.0	86.6	−8.1	94.1	94.4	95		0.917	1.0	0.0	0.907	1.0	0.0	85.3	−12.9	90.9	91.8	98		0.917	1.0	0.0			
98	96	99	0.9	1.0	0.0	85.0	−13.2	90.5	91.5	98		1.0	0.997	0.0	87.7	−9.9	95.4	95.9	96		0.9	1.0	0.0	0.856	1.0	0.0	83.8	−14.4	88.4	89.6	99		0.9	1.0	0.0			
98	97	100	0.883	1.0	0.0	84.5	−13.6	89.7	90.7	98		0.959	1.0	0.0	86.7	−11.4	93.5	94.2	97		0.883	1.0	0.0	0.807	1.0	0.0	82.4	−15.8	86.2	87.7	100		0.883	1.0	0.0			
99	98	101	0.866	1.0	0.0	84.1	−14.1	88.9	90.0	99		0.914	1.0	0.0	85.4	−12.7	91.2	92.1	98		0.867	1.0	0.0	0.759	1.0	0.0	81.0	−17.2	84.0	85.7	101		0.867	1.0	0.0			
99	99	102	0.85	1.0	0.0	83.6	−14.6	88.1	89.3	99		0.869	1.0	0.0	84.2	−14.0	89.0	90.1	99		0.85	1.0	0.0	0.729	1.0	0.0	79.9	−18.6	82.3	84.4	102		0.85	1.0	0.0			
99	100	103	0.833	1.0	0.0	83.1	−15.1	87.4	88.7	99		0.827	1.0	0.0	83.0	−15.3	87.1	88.5	100		0.833	1.0	0.0	0.704	1.0	0.0	78.8	−20.0	80.8	83.2	103		0.833	1.0	0.0			
100	101	105	0.816	1.0	0.0	82.6	−15.6	86.6	88.0	100		0.785	1.0	0.0	81.8	−16.5	85.2	86.8	101		0.817	1.0	0.0	0.679	1.0	0.0	77.7	−21.3	79.2	82.0	105		0.817	1.0	0.0			
100	102	106	0.8	1.0	0.0	82.2	−16.1	85.8	87.3	100		0.747	1.0	0.0	80.6	−17.6	83.4	85.2	102		0.8	1.0	0.0	0.654	1.0	0.0	76.6	−22.6	77.6	80.8	106		0.8	1.0	0.0			
101	103	107	0.783	1.0	0.0	81.7	−16.6	85.1	86.7	101		0.725	1.0	0.0	79.7	−18.8	82.0	84.2	103		0.783	1.0	0.0	0.628	1.0	0.0	75.5	−23.8	76.0	79.6	107		0.783	1.0	0.0			
101	104	108	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101		0.703	1.0	0.0	78.7	−20.0	80.7	83.2	104		0.767	1.0	0.0	0.605	1.0	0.0	74.6	−25.0	74.3	78.4	108		0.767	1.0	0.0			
101	105	109	0.75	1.0	0.0	80.7	−17.5	83.5	85.3	101		0.682	1.0	0.0	77.8	−21.2	79.4	82.2	105		0.75	1.0	0.0	0.583	1.0	0.0	73.7	−26.1	72.7	77.3	109		0.75	1.0	0.0			
102	106	110	0.733	1.0	0.0	80.0	−18.4	82.5	84.6	102		0.66	1.0	0.0	76.8	−22.3	78.0	81.1	106		0.733	1.0	0.0	0.56	1.0	0.0	72.9	−27.1	71.0	76.1	110		0.733	1.0	0.0			
103	107	112	0.716	1.0	0.0	79.3	−19.3	81.5	83.8	103		0.638	1.0	0.0	75.9	−23.3	76.6	80.1	107		0.717	1.0	0.0	0.538	1.0	0.0	72.0	−28.1	69.3	74.9	112		0.717	1.0	0.0			
104	108	113	0.7	1.0	0.0	78.5	−20.2	80.5	83.0	104		0.617	1.0	0.0	75.0	−24.3	75.2	79.1	108		0.7	1.0	0.0	0.515	1.0	0.0	71.2	−29.0	67.7	73.7	113		0.7	1.0	0.0			
104	109	114	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104		0.598	1.0	0.0	74.3	−25.3	73.8	78.1	109		0.683	1.0	0.0	0.494	1.0	0.0	70.4	−30.0	66.1	72.6	114		0.683	1.0	0.0			
105	110	115	0.666	1.0	0.0	77.1	−22.0	78.4	81.4	105		0.579	1.0	0.0	73.6	−26.2	72.4	77.0	110		0.667	1.0	0.0	0.474	1.0	0.0	69.6	−31.0	64.8	71.9	115		0.667	1.0	0.0			
106	111	116	0.65	1.0	0.0	76.4	−22.8	77.3	80.6	106		0.559	1.0	0.0	72.9	−27.1	71.0	76.0	111		0.65	1.0	0.0	0.454	1.0	0.0	68.8	−32.0	63.5	71.2	116		0.65	1.0	0.0			
107	112	117	0.633	1.0	0.0	75.6	−23.6	76.2	79.8	107		0.54	1.0	0.0	72.1	−28.0	69.5	75.0	112		0.633	1.0	0.0	0.434	1.0	0.0	68.0	−32.9	62.2	70.5	117		0.633	1.0	0.0			
108	113	119	0.616	1.0	0.0	75.0	−24.4	75.1	79.0	108		0.521	1.0	0.0	71.4	−28.8	68.1	74.0	113		0.617	1.0	0.0	0.414	1.0	0.0	67.3	−33.8	60.9	69.7	119		0.617	1.0	0.0			
108	114	120	0.6	1.0	0.0	74.3	−25.3	73.9	78.1	108		0.501	1.0	0.0	70.7	−29.6	66.6	72.9	114		0.6	1.0	0.0	0.394	1.0	0.0	66.5	−34.7	59.6	69.0	120		0.6	1.0	0.0			
109	115	121	0.583	1.0	0.0	73.7	−26.1	72.7	77.2	109		0.484	1.0	0.0	70.0	−30.4	65.5	72.3	115		0.583	1.0	0.0	0.375	1.0	0.0	65.7	−35.5	58.3	68.3	121		0.583	1.0	0.0			
110	116	122	0.566	1.0	0.0	73.1	−26.9	71.4	76.3	110		0.467	1.0	0.0	69.3	−31.3	64.4	71.7	116		0.567	1.0	0.0	0.364	1.0	0.0	65.1	−36.6	57.4	68.2	122		0.567	1.0	0.0			
111	117	123	0.55	1.0	0.0	72.4	−27.6	70.2	75.5	111		0.45	1.0	0.0	68.7	−32.2	63.3	71.0	117		0.55	1.0	0.0	0.354	1.0	0.0	64.5	−37.7	56.6	68.0	123		0.55	1.0	0.0			
112	118	124	0.533	1.0	0.0	71.8	−28.3	69.0	74.6	112		0.433	1.0	0.0	68.0	−33.0	62.2	70.4	118		0.533	1.0	0.0	0.343	1.0	0.0	63.9	−38.8	55.7	67.9	124		0.533	1.0	0.0			
113	119	126	0.516	1.0	0.0	71.2	−29.0	67.7	73.7	113		0.416	1.0	0.0	67.3	−33.7	61.1	69.8	119		0.517	1.0	0.0	0.333	1.0	0.0	63.3	−39.8	54.7	67.8	126		0.517	1.0	0.0			
114	120	127	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114		0.399	1.0	0.0	66.7	−34.5	59.9	69.2	120		0.5	1.0	0.0	0.322	1.0	0.0	62.6	−40.8	53.8	67.6	127		0.5	1.0	0.0			



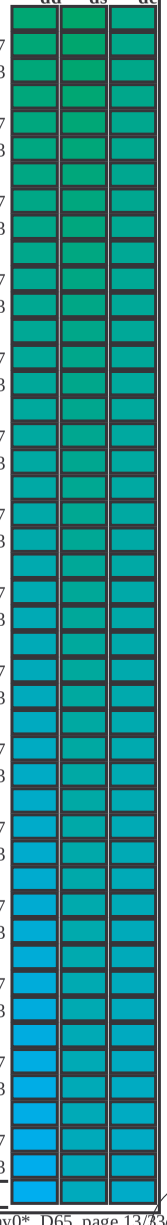
Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;
Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb**dd361M	*LAB**ddx361Mi (x=LabCh)	*rgb**ds361Mi	*LAB**dsx361Mi (x=LabCh)	*rgb**dd361Mi	*rgb**de361Mi	*LAB**dex361Mi (x=LabCh)	*rgb**dd361Mi
114	120	127	0.5 1.0 0.0	70.6 −29.7 66.5 72.8 114	0.399 1.0 0.0	66.7 −34.5 59.9 69.2 120	0.5 1.0 0.0	0.322 1.0 0.0	62.6 −40.8 53.8 67.6 127	0.5 1.0 0.0
115	121	128	0.483 1.0 0.0	69.9 −30.5 65.4 72.2 115	0.382 1.0 0.0	66.0 −35.2 58.8 68.6 121	0.483 1.0 0.0	0.312 1.0 0.0	62.0 −41.8 52.9 67.5 128	0.483 1.0 0.0
116	122	129	0.466 1.0 0.0	69.3 −31.4 64.3 71.6 116	0.37 1.0 0.0	65.4 −36.1 57.9 68.3 122	0.467 1.0 0.0	0.301 1.0 0.0	61.4 −42.8 51.9 67.3 129	0.467 1.0 0.0
117	123	130	0.45 1.0 0.0	68.6 −32.2 63.2 71.0 117	0.361 1.0 0.0	64.9 −37.0 57.1 68.1 123	0.45 1.0 0.0	0.291 1.0 0.0	60.8 −43.8 50.9 67.2 130	0.45 1.0 0.0
117	124	131	0.433 1.0 0.0	68.0 −33.0 62.1 70.4 117	0.352 1.0 0.0	64.4 −37.9 56.4 68.0 124	0.433 1.0 0.0	0.28 1.0 0.0	60.2 −44.7 49.9 67.0 131	0.433 1.0 0.0
118	125	133	0.416 1.0 0.0	67.3 −33.8 61.0 69.8 118	0.343 1.0 0.0	63.8 −38.8 55.6 67.9 125	0.417 1.0 0.0	0.27 1.0 0.0	59.6 −45.6 48.9 66.9 133	0.417 1.0 0.0
119	126	134	0.4 1.0 0.0	66.7 −34.5 59.9 69.2 119	0.334 1.0 0.0	63.3 −39.7 54.8 67.8 126	0.4 1.0 0.0	0.259 1.0 0.0	59.0 −46.5 47.8 66.8 134	0.4 1.0 0.0
120	127	135	0.383 1.0 0.0	66.0 −35.2 58.8 68.6 120	0.325 1.0 0.0	62.8 −40.6 54.0 67.6 127	0.383 1.0 0.0	0.249 1.0 0.0	58.4 −47.4 46.8 66.6 135	0.383 1.0 0.0
122	128	136	0.366 1.0 0.0	65.2 −36.4 57.6 68.2 122	0.316 1.0 0.0	62.3 −41.5 53.2 67.5 128	0.367 1.0 0.0	0.233 1.0 0.0	57.9 −48.3 45.8 66.6 136	0.367 1.0 0.0
124	129	137	0.35 1.0 0.0	64.2 −38.2 56.2 67.9 124	0.307 1.0 0.0	61.7 −42.3 52.4 67.4 129	0.35 1.0 0.0	0.217 1.0 0.0	57.4 −49.2 44.7 66.6 137	0.35 1.0 0.0
126	130	138	0.333 1.0 0.0	63.2 −39.8 54.7 67.7 126	0.298 1.0 0.0	61.2 −43.1 51.5 67.3 130	0.333 1.0 0.0	0.201 1.0 0.0	57.0 −50.0 43.7 66.5 138	0.333 1.0 0.0
127	131	140	0.316 1.0 0.0	62.3 −41.4 53.2 67.5 127	0.289 1.0 0.0	60.7 −44.0 50.7 67.2 131	0.317 1.0 0.0	0.185 1.0 0.0	56.5 −50.9 42.7 66.5 140	0.317 1.0 0.0
129	132	141	0.3 1.0 0.0	61.3 −43.0 51.7 67.3 129	0.28 1.0 0.0	60.2 −44.8 49.8 67.0 132	0.3 1.0 0.0	0.169 1.0 0.0	56.0 −51.7 41.6 66.5 141	0.3 1.0 0.0
131	133	142	0.283 1.0 0.0	60.3 −44.5 50.1 67.0 131	0.271 1.0 0.0	59.6 −45.5 48.9 66.9 133	0.283 1.0 0.0	0.153 1.0 0.0	55.5 −52.5 40.5 66.4 142	0.283 1.0 0.0
133	134	143	0.266 1.0 0.0	59.3 −45.9 48.5 66.8 133	0.262 1.0 0.0	59.1 −46.3 48.0 66.8 134	0.267 1.0 0.0	0.137 1.0 0.0	55.1 −53.3 39.4 66.4 143	0.267 1.0 0.0
135	135	144	0.25 1.0 0.0	58.4 −47.3 46.8 66.6 135	0.253 1.0 0.0	58.6 −47.0 47.1 66.7 135	0.25 1.0 0.0	0.122 1.0 0.0	54.6 −54.2 38.4 66.5 144	0.25 1.0 0.0
136	136	145	0.233 1.0 0.0	57.9 −48.3 45.8 66.5 136	0.241 1.0 0.0	58.1 −47.8 46.3 66.6 136	0.233 1.0 0.0	0.108 1.0 0.0	54.1 −55.4 37.6 67.0 145	0.233 1.0 0.0
137	137	147	0.216 1.0 0.0	57.4 −49.2 44.7 66.5 137	0.227 1.0 0.0	57.7 −48.6 45.4 66.6 137	0.217 1.0 0.0	0.095 1.0 0.0	53.6 −56.6 36.7 67.6 147	0.217 1.0 0.0
138	138	148	0.2 1.0 0.0	56.9 −50.1 43.6 66.5 138	0.213 1.0 0.0	57.3 −49.4 44.5 66.6 138	0.2 1.0 0.0	0.082 1.0 0.0	53.1 −57.8 35.8 68.1 148	0.2 1.0 0.0
140	139	149	0.183 1.0 0.0	56.4 −51.0 42.5 66.4 140	0.2 1.0 0.0	56.9 −50.1 43.6 66.5 139	0.183 1.0 0.0	0.069 1.0 0.0	52.6 −59.0 34.9 68.6 149	0.183 1.0 0.0
141	140	150	0.166 1.0 0.0	55.9 −51.9 41.4 66.4 141	0.186 1.0 0.0	56.5 −50.8 42.7 66.5 140	0.167 1.0 0.0	0.056 1.0 0.0	52.1 −60.1 34.0 69.2 150	0.167 1.0 0.0
142	141	151	0.15 1.0 0.0	55.4 −52.7 40.3 66.4 142	0.172 1.0 0.0	56.1 −51.6 41.8 66.5 141	0.15 1.0 0.0	0.043 1.0 0.0	51.7 −61.3 33.0 69.7 151	0.15 1.0 0.0
143	142	152	0.133 1.0 0.0	54.9 −53.5 39.1 66.3 143	0.159 1.0 0.0	55.7 −52.3 40.9 66.4 142	0.133 1.0 0.0	0.03 1.0 0.0	51.2 −62.4 32.0 70.2 152	0.133 1.0 0.0
145	143	154	0.116 1.0 0.0	54.4 −54.7 38.0 66.6 145	0.145 1.0 0.0	55.3 −52.9 40.0 66.4 143	0.117 1.0 0.0	0.016 1.0 0.0	50.7 −63.5 30.9 70.8 154	0.117 1.0 0.0
146	144	155	0.1 1.0 0.0	53.7 −56.2 37.0 67.3 146	0.131 1.0 0.0	54.9 −53.6 39.0 66.4 144	0.1 1.0 0.0	0.003 1.0 0.0	50.2 −64.6 29.9 71.3 155	0.1 1.0 0.0
148	145	156	0.083 1.0 0.0	53.1 −57.7 35.9 68.0 148	0.119 1.0 0.0	54.5 −54.5 38.2 66.6 145	0.083 1.0 0.0	0.0 1.0 0.021	50.1 −64.6 28.3 70.6 156	0.083 1.0 0.0
149	146	157	0.066 1.0 0.0	52.5 −59.2 34.7 68.7 149	0.107 1.0 0.0	54.1 −55.5 37.5 67.1 146	0.067 1.0 0.0	0.0 1.0 0.049	50.3 −64.2 26.5 69.5 157	0.067 1.0 0.0
151	147	158	0.049 1.0 0.0	51.9 −60.7 33.5 69.4 151	0.096 1.0 0.0	53.7 −56.5 36.8 67.5 147	0.05 1.0 0.0	0.0 1.0 0.077	50.4 −63.7 24.8 68.4 158	0.05 1.0 0.0
152	148	159	0.033 1.0 0.0	51.3 −62.2 32.2 70.0 152	0.085 1.0 0.0	53.2 −57.6 36.0 68.0 148	0.033 1.0 0.0	0.0 1.0 0.104	50.5 −63.1 23.1 67.3 159	0.033 1.0 0.0
154	149	161	0.016 1.0 0.0	50.6 −63.6 30.9 70.7 154	0.074 1.0 0.0	52.8 −58.6 35.3 68.4 149	0.017 1.0 0.0	0.0 1.0 0.13	50.6 −62.6 21.5 66.3 161	0.017 1.0 0.0
155	150	162	0.0 1.0 0.0	50.0 −65.0 29.6 71.4 155	G_d 0.062 1.0 0.0	52.4 −59.6 34.5 68.9 150	G_s 0.0 1.0 0.0	0.0 1.0 0.151	50.7 −62.0 19.9 65.2 162	G_e 0.0 1.0 0.0
156	151	163	0.0 1.0 0.016	50.1 −64.7 28.5 70.7 156	0.051 1.0 0.0	52.0 −60.6 33.6 69.4 151	0.0 1.0 0.017	0.0 1.0 0.167	50.8 −61.6 18.7 64.4 163	0.0 1.0 0.017
156	152	164	0.0 1.0 0.033	50.1 −64.5 27.4 70.1 156	0.04 1.0 0.0	51.5 −61.6 32.8 69.8 152	0.0 1.0 0.033	0.0 1.0 0.183	50.9 −61.1 17.5 63.6 164	0.0 1.0 0.033
157	153	164	0.0 1.0 0.05	50.2 −64.2 26.4 69.4 157	0.028 1.0 0.0	51.1 −62.5 31.9 70.3 153	0.0 1.0 0.05	0.0 1.0 0.2	51.0 −60.6 16.3 62.8 164	0.0 1.0 0.05
158	154	165	0.0 1.0 0.066	50.3 −63.9 25.4 68.8 158	0.017 1.0 0.0	50.7 −63.5 31.0 70.7 154	0.0 1.0 0.067	0.0 1.0 0.216	51.0 −60.0 15.1 62.0 165	0.0 1.0 0.067
159	155	166	0.0 1.0 0.083	50.3 −63.6 24.4 68.1 159	0.006 1.0 0.0	50.3 −64.4 30.1 71.2 155	0.0 1.0 0.083	0.0 1.0 0.232	51.1 −59.5 14.0 61.2 166	0.0 1.0 0.083
159	156	167	0.0 1.0 0.1	50.4 −63.3 23.4 67.5 159	0.0 1.0 0.012	50.1 −64.7 28.9 71.0 156	0.0 1.0 0.1	0.0 1.0 0.248	51.2 −58.9 12.9 60.4 167	0.0 1.0 0.1
160	157	168	0.0 1.0 0.116	50.5 −62.9 22.4 66.8 160	0.0 1.0 0.035	50.2 −64.4 27.4 70.0 157	0.0 1.0 0.117	0.0 1.0 0.261	51.3 −58.5 11.8 59.8 168	0.0 1.0 0.117
161	158	169	0.0 1.0 0.133	50.5 −62.5 21.2 66.1 161	0.0 1.0 0.059	50.3 −64.0 25.9 69.1 158	0.0 1.0 0.133	0.0 1.0 0.274	51.4 −58.1 10.8 59.2 169	0.0 1.0 0.133
162	159	170	0.0 1.0 0.15	50.6 −62.1 19.9 65.2 162	0.0 1.0 0.083	50.4 −63.5 24.4 68.2 159	0.0 1.0 0.15	0.0 1.0 0.287	51.5 −57.7 9.7 58.6 170	0.0 1.0 0.15
163	160	171	0.0 1.0 0.166	50.7 −61.6 18.7 64.4 163	0.0 1.0 0.107	50.5 −63.1 23.0 67.2 160	0.0 1.0 0.167	0.0 1.0 0.3	51.5 −57.3 8.7 58.1 171	0.0 1.0 0.167
164	161	172	0.0 1.0 0.183	50.8 −61.1 17.4 63.6 164	0.0 1.0 0.129	50.6 −62.6 21.6 66.3 161	0.0 1.0 0.183	0.0 1.0 0.313	51.6 −56.9 7.7 57.5 172	0.0 1.0 0.183
164	162	173	0.0 1.0 0.2	50.9 −60.6 16.2 62.7 164	0.0 1.0 0.147	50.7 −62.1 20.2 65.4 162	0.0 1.0 0.2	0.0 1.0 0.325	51.7 −56.4 6.8 56.9 173	0.0 1.0 0.2
165	163	174	0.0 1.0 0.216	51.0 −60.1 15.0 61.9 165	0.0 1.0 0.165	50.8 −61.6 18.9 64.5 163	0.0 1.0 0.217	0.0 1.0 0.338	51.8 −55.9 5.8 56.3 174	0.0 1.0 0.217
166	164	175	0.0 1.0 0.233	51.1 −59.5 13.9 61.1 166	0.0 1.0 0.183	50.9 −61.1 17.5 63.7 164	0.0 1.0 0.233	0.0 1.0 0.351	51.9 −55.5 4.9 55.8 175	0.0 1.0 0.233
167	165	175	0.0 1.0 0.25	51.2 −58.9 12.7 60.3 167	0.0 1.0 0.2	51.0 −60.5 16.2 62.8 165	0.0 1.0 0.25	0.0 1.0 0.364	52.0 −55.0 3.9 55.2 175	0.0 1.0 0.25

*rgb**dd *rgb**ds *rgb**de

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;
Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb**dd361M			*LAB**ddx361Mi (x=LabCh)				*rgb**ds361Mi			*LAB**dsx361Mi (x=LabCh)				*rgb**dd361Mi			*rgb**de361Mi			*LAB**dex361Mi (x=LabCh)				*rgb**dd361Mi			*rgb**$_{dd}$	*rgb**$_{ds}$	*rgb**$_{de}$
167	165	175	0.0	1.0	0.25	51.2	−58.9	12.7	60.3	167	0.0	1.0	0.2	51.0	−60.5	16.2	62.8	165	0.0	1.0	0.25	0.0	1.0	0.364	52.0	−55.0	3.9	55.2	175	0.0	1.0	0.25			
168	166	176	0.0	1.0	0.266	51.3	−58.4	11.3	59.5	168	0.0	1.0	0.218	51.1	−60.0	15.0	61.9	166	0.0	1.0	0.267	0.0	1.0	0.376	52.0	−54.5	3.0	54.6	176	0.0	1.0	0.267			
170	167	177	0.0	1.0	0.283	51.4	−57.9	10.0	58.8	170	0.0	1.0	0.236	51.2	−59.3	13.7	61.0	167	0.0	1.0	0.283	0.0	1.0	0.385	52.1	−54.1	2.1	54.3	177	0.0	1.0	0.283			
171	168	178	0.0	1.0	0.3	51.5	−57.3	8.7	58.0	171	0.0	1.0	0.253	51.2	−58.8	12.5	60.2	168	0.0	1.0	0.3	0.0	1.0	0.394	52.2	−53.8	1.3	53.9	178	0.0	1.0	0.3			
172	169	179	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172	0.0	1.0	0.267	51.3	−58.4	11.4	59.5	169	0.0	1.0	0.317	0.0	1.0	0.403	52.2	−53.4	0.4	53.5	179	0.0	1.0	0.317			
173	170	180	0.0	1.0	0.333	51.7	−56.2	6.1	56.5	173	0.0	1.0	0.281	51.4	−57.9	10.2	58.9	170	0.0	1.0	0.333	0.0	1.0	0.412	52.3	−53.0	−0.3	53.1	180	0.0	1.0	0.333			
174	171	181	0.0	1.0	0.35	51.8	−55.5	4.9	55.8	174	0.0	1.0	0.295	51.5	−57.5	9.1	58.3	171	0.0	1.0	0.35	0.0	1.0	0.421	52.4	−52.6	−1.2	52.7	181	0.0	1.0	0.35			
176	172	182	0.0	1.0	0.366	51.9	−54.9	3.7	55.0	176	0.0	1.0	0.309	51.6	−57.0	8.0	57.7	172	0.0	1.0	0.367	0.0	1.0	0.43	52.5	−52.2	−2.0	52.3	182	0.0	1.0	0.367			
177	173	183	0.0	1.0	0.383	52.0	−54.2	2.3	54.3	177	0.0	1.0	0.323	51.7	−56.5	6.9	57.0	173	0.0	1.0	0.383	0.0	1.0	0.439	52.5	−51.8	−2.8	51.9	183	0.0	1.0	0.383			
179	174	184	0.0	1.0	0.4	52.2	−53.6	0.7	53.6	179	0.0	1.0	0.337	51.8	−56.0	5.9	56.4	174	0.0	1.0	0.4	0.0	1.0	0.448	52.6	−51.3	−3.6	51.6	184	0.0	1.0	0.4			
180	175	185	0.0	1.0	0.416	52.3	−52.8	−0.8	52.9	180	0.0	1.0	0.351	51.9	−55.5	4.9	55.8	175	0.0	1.0	0.417	0.0	1.0	0.457	52.7	−50.9	−4.4	51.2	185	0.0	1.0	0.417			
182	176	185	0.0	1.0	0.433	52.4	−52.1	−2.3	52.1	182	0.0	1.0	0.365	52.0	−54.9	3.8	55.1	176	0.0	1.0	0.433	0.0	1.0	0.466	52.7	−50.4	−5.2	50.8	185	0.0	1.0	0.433			
184	177	186	0.0	1.0	0.45	52.6	−51.3	−3.8	51.4	184	0.0	1.0	0.378	52.0	−54.4	2.9	54.6	177	0.0	1.0	0.45	0.0	1.0	0.475	52.8	−49.9	−5.9	50.4	186	0.0	1.0	0.45			
185	178	187	0.0	1.0	0.466	52.7	−50.4	−5.3	50.7	185	0.0	1.0	0.388	52.1	−54.0	1.9	54.1	178	0.0	1.0	0.467	0.0	1.0	0.484	52.9	−49.5	−6.7	50.0	187	0.0	1.0	0.467			
187	179	188	0.0	1.0	0.483	52.8	−49.6	−6.6	50.0	187	0.0	1.0	0.398	52.2	−53.6	0.9	53.7	179	0.0	1.0	0.483	0.0	1.0	0.493	52.9	−49.0	−7.4	49.6	188	0.0	1.0	0.483			
189	180	189	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189	0.0	1.0	0.407	52.3	−53.2	0.0	53.3	180	0.0	1.0	0.5	0.0	1.0	0.502	53.0	−48.5	−8.1	49.3	189	0.0	1.0	0.5			
191	181	190	0.0	1.0	0.516	53.1	−47.9	−9.5	48.9	191	0.0	1.0	0.417	52.4	−52.8	−0.8	52.9	181	0.0	1.0	0.517	0.0	1.0	0.51	53.1	−48.2	−8.9	49.1	190	0.0	1.0	0.517			
193	182	191	0.0	1.0	0.533	53.2	−47.2	−10.9	48.4	193	0.0	1.0	0.427	52.4	−52.3	−1.7	52.5	182	0.0	1.0	0.533	0.0	1.0	0.519	53.1	−47.8	−9.6	48.9	191	0.0	1.0	0.533			
194	183	192	0.0	1.0	0.55	53.4	−46.4	−12.3	48.0	194	0.0	1.0	0.437	52.5	−51.9	−2.6	52.0	183	0.0	1.0	0.55	0.0	1.0	0.527	53.2	−47.4	−10.3	48.7	192	0.0	1.0	0.55			
196	184	193	0.0	1.0	0.566	53.5	−45.6	−13.7	47.6	196	0.0	1.0	0.447	52.6	−51.4	−3.5	51.6	184	0.0	1.0	0.567	0.0	1.0	0.535	53.3	−47.1	−11.0	48.4	193	0.0	1.0	0.567			
198	185	194	0.0	1.0	0.583	53.6	−44.7	−15.0	47.1	198	0.0	1.0	0.457	52.7	−50.9	−4.4	51.2	185	0.0	1.0	0.583	0.0	1.0	0.543	53.4	−46.7	−11.7	48.2	194	0.0	1.0	0.583			
200	186	195	0.0	1.0	0.6	53.8	−43.8	−16.3	46.7	200	0.0	1.0	0.467	52.7	−50.4	−5.2	50.8	186	0.0	1.0	0.6	0.0	1.0	0.552	53.4	−46.3	−12.4	48.0	195	0.0	1.0	0.6			
202	187	195	0.0	1.0	0.616	53.9	−42.8	−17.5	46.3	202	0.0	1.0	0.477	52.8	−49.9	−6.0	50.3	187	0.0	1.0	0.617	0.0	1.0	0.56	53.5	−45.9	−13.1	47.8	195	0.0	1.0	0.617			
204	188	196	0.0	1.0	0.633	54.1	−42.0	−18.8	46.0	204	0.0	1.0	0.486	52.9	−49.3	−6.8	49.9	188	0.0	1.0	0.633	0.0	1.0	0.568	53.6	−45.4	−13.7	47.6	196	0.0	1.0	0.633			
206	189	197	0.0	1.0	0.65	54.2	−41.2	−20.1	45.9	206	0.0	1.0	0.496	53.0	−48.8	−7.6	49.5	189	0.0	1.0	0.65	0.0	1.0	0.576	53.6	−45.0	−14.4	47.4	197	0.0	1.0	0.65			
207	190	198	0.0	1.0	0.666	54.3	−40.5	−21.4	45.8	207	0.0	1.0	0.506	53.0	−48.4	−8.4	49.2	190	0.0	1.0	0.667	0.0	1.0	0.585	53.7	−44.6	−15.0	47.2	198	0.0	1.0	0.667			
209	191	199	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209	0.0	1.0	0.515	53.1	−48.0	−9.2	49.0	191	0.0	1.0	0.683	0.0	1.0	0.593	53.8	−44.1	−15.7	47.0	199	0.0	1.0	0.683			
211	192	200	0.0	1.0	0.7	54.6	−38.8	−23.9	45.6	211	0.0	1.0	0.524	53.2	−47.6	−10.0	48.7	192	0.0	1.0	0.7	0.0	1.0	0.601	53.8	−43.7	−16.3	46.7	200	0.0	1.0	0.7			
213	193	201	0.0	1.0	0.716	54.7	−37.9	−25.1	45.5	213	0.0	1.0	0.533	53.3	−47.2	−10.8	48.5	193	0.0	1.0	0.717	0.0	1.0	0.609	53.9	−43.2	−16.9	46.5	201	0.0	1.0	0.717			
215	194	202	0.0	1.0	0.733	54.9	−37.0	−26.3	45.4	215	0.0	1.0	0.542	53.3	−46.7	−11.6	48.3	194	0.0	1.0	0.733	0.0	1.0	0.618	54.0	−42.7	−17.5	46.3	202	0.0	1.0	0.733			
217	195	203	0.0	1.0	0.75	55.0	−36.0	−27.4	45.3	217	0.0	1.0	0.551	53.4	−46.3	−12.3	48.0	195	0.0	1.0	0.75	0.0	1.0	0.626	54.1	−42.3	−18.1	46.1	203	0.0	1.0	0.75			
218	196	204	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218	0.0	1.0	0.56	53.5	−45.9	−13.1	47.8	196	0.0	1.0	0.767	0.0	1.0	0.634	54.1	−41.9	−18.8	46.1	204	0.0	1.0	0.767			
220	197	205	0.0	1.0	0.783	55.2	−34.7	−29.4	45.5	220	0.0	1.0	0.569	53.6	−45.4	−13.8	47.6	197	0.0	1.0	0.783	0.0	1.0	0.642	54.2	−41.6	−19.4	46.0	205	0.0	1.0	0.783			
221	198	206	0.0	1.0	0.8	55.3	−34.0	−30.3	45.6	221	0.0	1.0	0.578	53.6	−44.9	−14.5	47.3	198	0.0	1.0	0.8	0.0	1.0	0.65	54.2	−41.2	−20.1	46.0	206	0.0	1.0	0.8			
223	199	206	0.0	1.0	0.816	55.4	−33.3	−31.3	45.7	223	0.0	1.0	0.587	53.7	−44.4	−15.2	47.1	199	0.0	1.0	0.817	0.0	1.0	0.658	54.3	−40.8	−20.7	45.9	206	0.0	1.0	0.817			
224	200	207	0.0	1.0	0.833	55.6	−32.6	−32.2	45.9	224	0.0	1.0	0.596	53.8	−43.9	−15.9	46.9	200	0.0	1.0	0.833	0.0	1.0	0.666	54.4	−40.4	−21.3	45.9	207	0.0	1.0	0.833			
226	201	208	0.0	1.0	0.85	55.7	−31.8	−33.1	46.0	226	0.0	1.0	0.605	53.9	−43.4	−16.6	46.6	201	0.0	1.0	0.85	0.0	1.0	0.674	54.4	−40.0	−21.9	45.8	208	0.0	1.0	0.85			
227	202	209	0.0	1.0	0.866	55.8	−31.1	−34.0	46.1	227	0.0	1.0	0.614	54.0	−42.9	−17.3	46.4	202	0.0	1.0	0.867	0.0	1.0	0.682	54.5	−39.6	−22.6	45.7	209	0.0	1.0	0.867			
229	203	210	0.0	1.0	0.883	55.9	−30.4	−35.0	46.3	229	0.0	1.0	0.623	54.0	−42.4	−17.9	46.2	203	0.0	1.0	0.883	0.0	1.0	0.691	54.6	−39.2	−23.2	45.7	210	0.0	1.0	0.883			
230	204	211	0.0	1.0	0.9	56.0	−29.7	−35.9	46.7	230	0.0	1.0	0.632	54.1	−42.0	−18.6	46.1	204	0.0	1.0	0.9	0.0	1.0	0.699	54.6	−38.8	−23.8	45.6	211	0.0	1.0	0.9			
231	205	212	0.0	1.0	0.916	56.1	−29.1	−36.9	47.0	231	0.0	1.0	0.641	54.2	−41.6	−19.3	46.0	205	0.0	1.0	0.917	0.0	1.0	0.707	54.7	−38.4	−24.3	45.6	212	0.0	1.0	0.917			
233	206	213	0.0	1.0	0.933	56.3	−28.4	−37.8	47.3	233	0.0	1.0	0.65	54.2	−41.2	−20.0	46.0	206	0.0	1.0	0.933	0.0	1.0	0.715	54.8	−37.9	−24.9	45.5	213	0.0	1.0	0.933			
234	207	214	0.0	1.0	0.95	56.4	−27.7	−38.8	47.7	234	0.0	1.0	0.659	54.3	−40.8	−20.7	45.9	207	0.0	1.0	0.95	0.0	1.0	0.723	54.8	−37.5	−25.5	45.5	214	0.0	1.0	0.95			
235	208	215	0.0	1.0	0.966	56.5	−27.0	−39.7	48.0	235	0.0	1.0	0.668	54.4	−40.4	−21.4	45.8	208	0.0	1.0	0.967	0.0	1.0	0.731	54.9	−37.0	−26.1	45.4	215	0.0	1.0	0.967			
237	209	216	0.0	1.0	0.983	56.6	−26.2	−40.6	48.3	237	0.0	1.0	0.676	54.5	−39.9	−22.1	45.8	209	0.0	1.0	0.983	0.0	1.0	0.739	55.0	−36.6	−26.6	45.4	216	0.0	1.0	0.983			
238	210	216	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238	C_d	0.0	1.0	0.685	54.5	−39.5	−22.8	45.7	210	C_s	0.0	1.0	1.0	0.0	1.0	0.747	55.0	−36.1	−27.2	45.3	216	C_e	0.0	1.0	1.0			



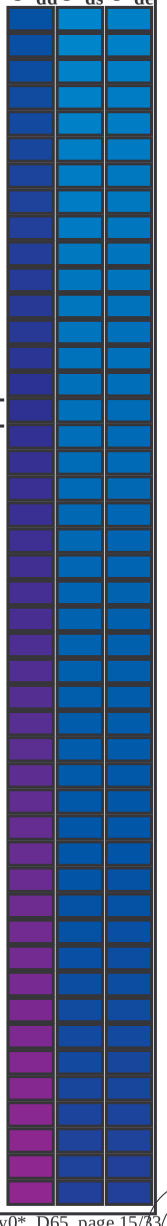
Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;
Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb*dd361M*			*LAB*ddx361Mi (x=LabCh)*					*rgb*ds361Mi*			*LAB*dsx361Mi (x=LabCh)*					*rgb*dd361Mi*			*rgb*de361Mi*			*LAB*dex361Mi (x=LabCh)*					*rgb*dd361Mi*			*rgb*dd*	*rgb*ds*	*rgb*de*
238	210	216	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238	C_d	0.0	1.0	0.685	54.5	−39.5	−22.8	45.7	210	C_s	0.0	1.0	1.0	0.0	1.0	0.747	55.0	−36.1	−27.2	45.3	216	C_e	0.0	1.0	1.0			
239	211	217	0.0	0.983	1.0	56.4	−24.9	−41.5	48.4	239		0.0	1.0	0.694	54.6	−39.0	−23.4	45.7	211		0.0	0.983	1.0	0.0	1.0	0.757	55.1	−35.7	−27.8	45.4	217		0.0	0.983	1.0			
239	212	218	0.0	0.966	1.0	56.1	−24.3	−41.5	48.1	239		0.0	1.0	0.703	54.7	−38.6	−24.1	45.6	212		0.0	0.967	1.0	0.0	1.0	0.767	55.2	−35.3	−28.4	45.4	218		0.0	0.967	1.0			
240	213	219	0.0	0.95	1.0	55.7	−23.7	−41.5	47.8	240		0.0	1.0	0.712	54.7	−38.1	−24.7	45.6	213		0.0	0.95	1.0	0.0	1.0	0.778	55.2	−34.9	−29.0	45.5	219		0.0	0.95	1.0			
240	214	220	0.0	0.933	1.0	55.4	−23.1	−41.5	47.5	240		0.0	1.0	0.721	54.8	−37.6	−25.3	45.5	214		0.0	0.933	1.0	0.0	1.0	0.788	55.3	−34.5	−29.6	45.6	220		0.0	0.933	1.0			
241	215	221	0.0	0.916	1.0	55.0	−22.5	−41.4	47.2	241		0.0	1.0	0.73	54.9	−37.1	−26.0	45.4	215		0.0	0.917	1.0	0.0	1.0	0.798	55.4	−34.1	−30.2	45.7	221		0.0	0.917	1.0			
242	216	222	0.0	0.9	1.0	54.6	−22.0	−41.4	46.9	242		0.0	1.0	0.739	55.0	−36.6	−26.6	45.4	216		0.0	0.9	1.0	0.0	1.0	0.808	55.4	−33.6	−30.8	45.7	222		0.0	0.9	1.0			
242	217	223	0.0	0.883	1.0	54.3	−21.4	−41.4	46.6	242		0.0	1.0	0.747	55.0	−36.1	−27.2	45.3	217		0.0	0.883	1.0	0.0	1.0	0.819	55.5	−33.2	−31.3	45.8	223		0.0	0.883	1.0			
243	218	224	0.0	0.866	1.0	53.9	−20.7	−41.3	46.3	243		0.0	1.0	0.758	55.1	−35.6	−27.8	45.4	218		0.0	0.867	1.0	0.0	1.0	0.829	55.6	−32.7	−31.9	45.9	224		0.0	0.867	1.0			
244	219	225	0.0	0.85	1.0	53.4	−20.0	−41.3	45.9	244		0.0	1.0	0.769	55.2	−35.2	−28.5	45.4	219		0.0	0.85	1.0	0.0	1.0	0.839	55.6	−32.3	−32.5	45.9	225		0.0	0.85	1.0			
245	220	226	0.0	0.833	1.0	52.9	−19.2	−41.3	45.6	245		0.0	1.0	0.781	55.3	−34.8	−29.2	45.5	220		0.0	0.833	1.0	0.0	1.0	0.85	55.7	−31.8	−33.1	46.0	226		0.0	0.833	1.0			
245	221	227	0.0	0.816	1.0	52.4	−18.5	−41.3	45.3	245		0.0	1.0	0.792	55.3	−34.3	−29.8	45.6	221		0.0	0.817	1.0	0.0	1.0	0.86	55.8	−31.3	−33.6	46.1	227		0.0	0.817	1.0			
246	222	227	0.0	0.8	1.0	51.9	−17.7	−41.3	44.9	246		0.0	1.0	0.803	55.4	−33.9	−30.5	45.7	222		0.0	0.8	1.0	0.0	1.0	0.87	55.8	−30.8	−34.2	46.2	227		0.0	0.8	1.0			
247	223	228	0.0	0.783	1.0	51.4	−17.0	−41.2	44.6	247		0.0	1.0	0.815	55.5	−33.4	−31.1	45.8	223		0.0	0.783	1.0	0.0	1.0	0.881	55.9	−30.4	−34.8	46.3	228		0.0	0.783	1.0			
248	224	229	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248		0.0	1.0	0.826	55.6	−32.9	−31.7	45.8	224		0.0	0.767	1.0	0.0	1.0	0.893	56.0	−30.0	−35.4	46.6	229		0.0	0.767	1.0			
249	225	230	0.0	0.75	1.0	50.4	−15.5	−41.1	43.9	249		0.0	1.0	0.837	55.6	−32.4	−32.4	45.9	225		0.0	0.75	1.0	0.0	1.0	0.904	56.1	−29.6	−36.1	46.8	230		0.0	0.75	1.0			
250	226	231	0.0	0.733	1.0	49.9	−14.7	−41.1	43.6	250		0.0	1.0	0.849	55.7	−31.9	−33.0	46.0	226		0.0	0.733	1.0	0.0	1.0	0.915	56.2	−29.1	−36.7	47.0	231		0.0	0.733	1.0			
251	227	232	0.0	0.716	1.0	49.4	−13.8	−41.1	43.4	251		0.0	1.0	0.86	55.8	−31.3	−33.6	46.1	227		0.0	0.717	1.0	0.0	1.0	0.926	56.3	−28.7	−37.4	47.2	232		0.0	0.717	1.0			
252	228	233	0.0	0.7	1.0	48.8	−13.0	−41.1	43.1	252		0.0	1.0	0.871	55.9	−30.8	−34.2	46.2	228		0.0	0.7	1.0	0.0	1.0	0.938	56.3	−28.2	−38.0	47.5	233		0.0	0.7	1.0			
253	229	234	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253		0.0	1.0	0.883	55.9	−30.3	−34.9	46.4	229		0.0	0.683	1.0	0.0	1.0	0.949	56.4	−27.7	−38.6	47.7	234		0.0	0.683	1.0			
254	230	235	0.0	0.666	1.0	47.8	−11.4	−41.0	42.6	254		0.0	1.0	0.896	56.0	−29.9	−35.6	46.6	230		0.0	0.667	1.0	0.0	1.0	0.96	56.5	−27.2	−39.3	47.9	235		0.0	0.667	1.0			
255	231	236	0.0	0.65	1.0	47.3	−10.6	−41.0	42.3	255		0.0	1.0	0.908	56.1	−29.4	−36.3	46.9	231		0.0	0.65	1.0	0.0	1.0	0.972	56.6	−26.7	−39.9	48.2	236		0.0	0.65	1.0			
256	232	237	0.0	0.633	1.0	46.8	−9.8	−40.9	42.1	256		0.0	1.0	0.92	56.2	−28.9	−37.0	47.1	232		0.0	0.633	1.0	0.0	1.0	0.983	56.7	−26.2	−40.5	48.4	237		0.0	0.633	1.0			
257	233	237	0.0	0.616	1.0	46.2	−8.9	−40.9	41.8	257		0.0	1.0	0.933	56.3	−28.4	−37.7	47.4	233		0.0	0.617	1.0	0.0	1.0	0.994	56.8	−25.7	−41.1	48.6	237		0.0	0.617	1.0			
259	234	238	0.0	0.6	1.0	45.5	−7.8	−40.9	41.7	259		0.0	1.0	0.945	56.4	−27.9	−38.4	47.6	234		0.0	0.6	1.0	0.0	0.988	1.0	56.6	−25.0	−41.4	48.5	238		0.0	0.6	1.0			
260	235	239	0.0	0.583	1.0	44.9	−6.6	−41.0	41.5	260		0.0	1.0	0.957	56.5	−27.4	−39.1	47.9	235		0.0	0.583	1.0	0.0	0.962	1.0	56.0	−24.1	−41.4	48.1	239		0.0	0.583	1.0			
262	236	240	0.0	0.566	1.0	44.2	−5.5	−40.9	41.3	262		0.0	1.0	0.97	56.6	−26.8	−39.8	48.1	236		0.0	0.567	1.0	0.0	0.937	1.0	55.5	−23.2	−41.4	47.6	240		0.0	0.567	1.0			
263	237	241	0.0	0.55	1.0	43.6	−4.4	−40.9	41.1	263		0.0	1.0	0.982	56.7	−26.2	−40.5	48.4	237		0.0	0.55	1.0	0.0	0.911	1.0	54.9	−22.3	−41.4	47.1	241		0.0	0.55	1.0			
265	238	242	0.0	0.533	1.0	43.0	−3.3	−40.8	41.0	265		0.0	1.0	0.994	56.8	−25.7	−41.1	48.6	238		0.0	0.533	1.0	0.0	0.885	1.0	54.4	−21.4	−41.3	46.7	242		0.0	0.533	1.0			
266	239	243	0.0	0.516	1.0	42.3	−2.3	−40.7	40.8	266		0.0	0.985	1.0	56.5	−24.9	−41.4	48.5	239		0.0	0.517	1.0	0.0	0.864	1.0	53.9	−20.6	−41.3	46.3	243		0.0	0.517	1.0			
268	240	244	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268		0.0	0.956	1.0	55.9	−23.9	−41.4	48.0	240		0.0	0.5	1.0	0.0	0.847	1.0	53.3	−19.8	−41.3	45.9	244		0.0	0.5	1.0			
269	241	245	0.0	0.483	1.0	41.1	−0.2	−40.6	40.6	269		0.0	0.928	1.0	55.3	−22.9	−41.4	47.4	241		0.0	0.483	1.0	0.0	0.829	1.0	52.8	−19.0	−41.3	45.6	245		0.0	0.483	1.0			
271	242	246	0.0	0.466	1.0	40.5	0.7	−40.6	40.6	271		0.0	0.9	1.0	54.7	−21.9	−41.3	46.9	242		0.0	0.467	1.0	0.0	0.811	1.0	52.3	−18.1	−41.2	45.2	246		0.0	0.467	1.0			
272	243	247	0.0	0.45	1.0	39.9	1.7	−40.6	40.6	272		0.0	0.873	1.0	54.1	−21.0	−41.3	46.4	243		0.0	0.45	1.0	0.0	0.793	1.0	51.7	−17.3	−41.2	44.8	247		0.0	0.45	1.0			
273	244	248	0.0	0.433	1.0	39.3	2.7	−40.6	40.6	273		0.0	0.854	1.0	53.5	−20.1	−41.3	46.1	244		0.0	0.433	1.0	0.0	0.775	1.0	51.2	−16.6	−41.1	44.5	248		0.0	0.433	1.0			
275	245	248	0.0	0.416	1.0	38.8	3.6	−40.5	40.6	275		0.0	0.834	1.0	53.0	−19.2	−41.3	45.7	245		0.0	0.417	1.0	0.0	0.757	1.0	50.7	−15.8	−41.1	44.1	248		0.0	0.417	1.0			
276	246	249	0.0	0.4	1.0	38.2	4.6	−40.4	40.7	276		0.0	0.815	1.0	52.4	−18.3	−41.3	45.3	246		0.0	0.4	1.0	0.0	0.741	1.0	50.2	−15.0	−41.0	43.8	249		0.0	0.4	1.0			
277	247	250	0.0	0.383	1.0	37.6	5.6	−40.3	40.7	277		0.0	0.795	1.0	51.8	−17.4	−41.2	44.9	247		0.0	0.383	1.0	0.0	0.726	1.0	49.7	−14.3	−41.1	43.6	250		0.0	0.383	1.0			
279	248	251	0.0	0.366	1.0	37.0	6.6	−40.2	40.8	279		0.0	0.775	1.0	51.2	−16.6	−41.1	44.5	248		0.0	0.367	1.0	0.0	0.711	1.0	49.2	−13.5	−41.0	43.4	251		0.0	0.367	1.0			
280	249	252	0.0	0.35	1.0	36.4	7.7	−40.3	41.1	280		0.0	0.756	1.0	50.6	−15.7	−41.1	44.1	249		0.0	0.35	1.0	0.0	0.697	1.0	48.8	−12.8	−41.0	43.1	252		0.0	0.35	1.0			
282	250	253	0.0	0.333	1.0	35.8	8.8	−40.4	41.3	282		0.0	0.739	1.0	50.1	−14.9	−41.0	43.8	250		0.0	0.333	1.0	0.0	0.682	1.0	48.3	−12.1	−41.0	42.9	253		0.0	0.333	1.0			
283	251	254	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283		0.0	0.722	1.0	49.6	−14.1	−41.1	43.5	251		0.0	0.317	1.0	0.0	0.667	1.0	47.9	−11.4	−41.0	42.6	254		0.0	0.317	1.0			
285	252	255	0.0	0.3	1.0	34.6	11.0	−40.4	41.9	285		0.0	0.706	1.0	49.1	−13.3	−41.0	43.3	252		0.0	0.3	1.0	0.0	0.652	1.0	47.4	−10.7	−40.9	42.4	255		0.0	0.3	1.0			
286	253	256	0.0	0.283	1.0	34.0	12.1	−40.3	42.1	286		0.0	0.69	1.0	48.6	−12.5	−41.0	43.0	253		0.0	0.283	1.0	0.0	0.637	1.0	46.9	−9.9	−40.9	42.2	256		0.0	0.283	1.0			
288	254	257	0.0	0.266	1.0	33.4	13.2	−40.3	42.4	288		0.0	0.673	1.0	48.1	−11.7	−41.0	42.7	254		0.0	0.267	1.0	0.0	0.623	1.0	46.5	−9.2	−40.8	42.0	257		0.0	0.267	1.0			
289	255	258	0.0	0.25	1.0	32.8	14.3	−40.2	42.7	289		0.0	0.657	1.0	47.5	−10.9	−40.9	42.5	255		0.0	0.25	1.0	0.0	0.613	1.0	46.1	−8.6	−40.8	41.9	258		0.0	0.25	1.0			

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;
Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

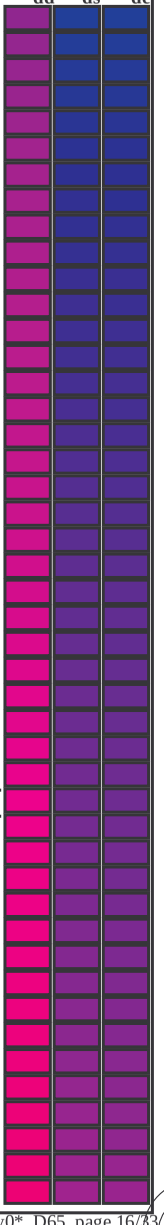
$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb*dd361M*			*LAB*ddx361Mi (x=LabCh)*					*rgb*ds361Mi*			*LAB*dsx361Mi (x=LabCh)*					*rgb*dd361Mi*			*rgb*de361Mi*			*LAB*dex361Mi (x=LabCh)*					*rgb*dd361Mi*		
289	255	258	0.0	0.25	1.0	32.8	14.3	−40.2	42.7	289	0.0	0.657	1.0	47.5	−10.9	−40.9	42.5	255	0.0	0.25	1.0	0.0	0.613	1.0	46.1	−8.6	−40.8	41.9	258	0.0	0.25	1.0
290	256	258	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290	0.0	0.641	1.0	47.0	−10.1	−40.9	42.2	256	0.0	0.233	1.0	0.0	0.603	1.0	45.7	−7.9	−40.9	41.7	258	0.0	0.233	1.0
292	257	259	0.0	0.216	1.0	31.7	16.4	−40.3	43.6	292	0.0	0.624	1.0	46.5	−9.3	−40.8	42.0	257	0.0	0.217	1.0	0.0	0.593	1.0	45.3	−7.2	−40.9	41.6	259	0.0	0.217	1.0
293	258	260	0.0	0.2	1.0	31.1	17.5	−40.4	44.0	293	0.0	0.613	1.0	46.1	−8.6	−40.8	41.9	258	0.0	0.2	1.0	0.0	0.583	1.0	44.9	−6.6	−40.9	41.5	260	0.0	0.2	1.0
294	259	261	0.0	0.183	1.0	30.6	18.5	−40.4	44.5	294	0.0	0.602	1.0	45.7	−7.9	−40.9	41.7	259	0.0	0.183	1.0	0.0	0.573	1.0	44.5	−5.9	−40.9	41.4	261	0.0	0.183	1.0
295	260	262	0.0	0.166	1.0	30.0	19.6	−40.4	44.9	295	0.0	0.591	1.0	45.3	−7.1	−40.9	41.6	260	0.0	0.167	1.0	0.0	0.562	1.0	44.1	−5.2	−40.9	41.3	262	0.0	0.167	1.0
297	261	263	0.0	0.15	1.0	29.5	20.7	−40.4	45.4	297	0.0	0.58	1.0	44.8	−6.4	−40.9	41.5	261	0.0	0.15	1.0	0.0	0.552	1.0	43.7	−4.5	−40.9	41.2	263	0.0	0.15	1.0
298	262	264	0.0	0.133	1.0	28.9	21.8	−40.3	45.8	298	0.0	0.569	1.0	44.4	−5.7	−40.9	41.4	262	0.0	0.133	1.0	0.0	0.542	1.0	43.4	−3.9	−40.8	41.1	264	0.0	0.133	1.0
299	263	265	0.0	0.116	1.0	28.4	22.8	−40.3	46.3	299	0.0	0.558	1.0	44.0	−4.9	−40.9	41.3	263	0.0	0.117	1.0	0.0	0.532	1.0	43.0	−3.2	−40.8	41.0	265	0.0	0.117	1.0
300	264	266	0.0	0.1	1.0	27.9	23.8	−40.4	46.9	300	0.0	0.547	1.0	43.5	−4.2	−40.8	41.2	264	0.0	0.1	1.0	0.0	0.522	1.0	42.6	−2.6	−40.7	40.9	266	0.0	0.1	1.0
301	265	267	0.0	0.083	1.0	27.4	24.7	−40.4	47.4	301	0.0	0.536	1.0	43.1	−3.5	−40.8	41.1	265	0.0	0.083	1.0	0.0	0.512	1.0	42.2	−1.9	−40.7	40.8	267	0.0	0.083	1.0
302	266	268	0.0	0.066	1.0	26.9	25.7	−40.4	47.9	302	0.0	0.525	1.0	42.7	−2.8	−40.7	40.9	266	0.0	0.067	1.0	0.0	0.502	1.0	41.8	−1.3	−40.6	40.7	268	0.0	0.067	1.0
303	267	269	0.0	0.049	1.0	26.5	26.6	−40.5	48.4	303	0.0	0.514	1.0	42.3	−2.0	−40.7	40.8	267	0.0	0.05	1.0	0.0	0.491	1.0	41.4	−0.6	−40.6	40.7	269	0.0	0.05	1.0
304	268	269	0.0	0.033	1.0	26.0	27.6	−40.4	49.0	304	0.0	0.503	1.0	41.8	−1.3	−40.6	40.7	268	0.0	0.033	1.0	0.0	0.48	1.0	41.0	0.0	−40.6	40.7	269	0.0	0.033	1.0
305	269	270	0.0	0.016	1.0	25.5	28.6	−40.4	49.5	305	0.0	0.491	1.0	41.4	−0.6	−40.6	40.7	269	0.0	0.017	1.0	0.0	0.469	1.0	40.6	0.6	−40.6	40.7	270	0.0	0.017	1.0
306	270	271	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306	B_d	0.0	0.479	1.0	41.0	0.0	−40.6	40.7	270	B_s	0.0	0.0	1.0	0.0	0.458	1.0	40.3	1.2	−40.6	40.7	271	B_e	0.0	0.0	1.0
307	271	272	0.016	0.0	1.0	25.4	30.4	−39.9	50.2	307	0.0	0.467	1.0	40.6	0.7	−40.6	40.7	271	0.017	0.0	1.0	0.0	0.447	1.0	39.9	1.9	−40.5	40.7	272	0.017	0.0	1.0
308	272	273	0.033	0.0	1.0	25.8	31.3	−39.4	50.4	308	0.0	0.455	1.0	40.2	1.4	−40.6	40.7	272	0.033	0.0	1.0	0.0	0.435	1.0	39.5	2.6	−40.5	40.7	273	0.033	0.0	1.0
309	273	274	0.05	0.0	1.0	26.2	32.2	−38.9	50.5	309	0.0	0.443	1.0	39.7	2.1	−40.5	40.7	273	0.05	0.0	1.0	0.0	0.424	1.0	39.1	3.3	−40.5	40.7	274	0.05	0.0	1.0
310	274	275	0.066	0.0	1.0	26.5	33.1	−38.4	50.7	310	0.0	0.431	1.0	39.3	2.8	−40.5	40.7	274	0.067	0.0	1.0	0.0	0.413	1.0	38.7	3.9	−40.4	40.7	275	0.067	0.0	1.0
311	275	276	0.083	0.0	1.0	26.9	33.9	−37.8	50.8	311	0.0	0.419	1.0	38.9	3.5	−40.4	40.7	275	0.083	0.0	1.0	0.0	0.401	1.0	38.3	4.6	−40.3	40.7	276	0.083	0.0	1.0
313	276	277	0.1	0.0	1.0	27.3	34.8	−37.3	51.0	313	0.0	0.407	1.0	38.5	4.3	−40.4	40.7	276	0.1	0.0	1.0	0.0	0.39	1.0	37.9	5.3	−40.3	40.7	277	0.1	0.0	1.0
314	277	278	0.116	0.0	1.0	27.7	35.6	−36.7	51.1	314	0.0	0.395	1.0	38.1	5.0	−40.3	40.7	277	0.117	0.0	1.0	0.0	0.378	1.0	37.5	5.9	−40.2	40.7	278	0.117	0.0	1.0
315	278	279	0.133	0.0	1.0	27.9	36.4	−36.2	51.3	315	0.0	0.383	1.0	37.6	5.7	−40.2	40.7	278	0.133	0.0	1.0	0.0	0.367	1.0	37.1	6.6	−40.2	40.8	279	0.133	0.0	1.0
316	279	280	0.15	0.0	1.0	28.1	37.2	−35.7	51.6	316	0.0	0.371	1.0	37.2	6.4	−40.2	40.8	279	0.15	0.0	1.0	0.0	0.357	1.0	36.7	7.3	−40.2	41.0	280	0.15	0.0	1.0
317	280	281	0.166	0.0	1.0	28.2	38.0	−35.2	51.9	317	0.0	0.36	1.0	36.8	7.1	−40.2	41.0	280	0.167	0.0	1.0	0.0	0.346	1.0	36.3	8.0	−40.3	41.2	281	0.167	0.0	1.0
318	281	282	0.183	0.0	1.0	28.3	38.8	−34.7	52.1	318	0.0	0.348	1.0	36.4	7.8	−40.3	41.1	281	0.183	0.0	1.0	0.0	0.335	1.0	35.9	8.7	−40.3	41.3	282	0.183	0.0	1.0
319	282	283	0.2	0.0	1.0	28.5	39.6	−34.2	52.4	319	0.0	0.337	1.0	36.0	8.6	−40.3	41.3	282	0.2	0.0	1.0	0.0	0.324	1.0	35.5	9.4	−40.3	41.5	283	0.2	0.0	1.0
320	283	284	0.216	0.0	1.0	28.6	40.4	−33.7	52.6	320	0.0	0.326	1.0	35.6	9.3	−40.3	41.5	283	0.217	0.0	1.0	0.0	0.313	1.0	35.1	10.1	−40.3	41.7	284	0.217	0.0	1.0
321	284	285	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321	0.0	0.314	1.0	35.2	10.1	−40.3	41.7	284	0.233	0.0	1.0	0.0	0.303	1.0	34.8	10.8	−40.3	41.9	285	0.233	0.0	1.0
322	285	285	0.25	0.0	1.0	28.8	41.9	−32.5	53.1	322	0.0	0.303	1.0	34.8	10.8	−40.3	41.9	285	0.25	0.0	1.0	0.0	0.292	1.0	34.4	11.6	−40.3	42.0	285	0.25	0.0	1.0
323	286	286	0.266	0.0	1.0	29.4	43.3	−31.8	53.8	323	0.0	0.291	1.0	34.3	11.6	−40.3	42.0	286	0.267	0.0	1.0	0.0	0.281	1.0	34.0	12.3	−40.3	42.2	286	0.267	0.0	1.0
325	287	287	0.283	0.0	1.0	29.9	44.7	−31.1	54.4	325	0.0	0.28	1.0	33.9	12.3	−40.3	42.2	287	0.283	0.0	1.0	0.0	0.27	1.0	33.6	13.0	−40.2	42.4	287	0.283	0.0	1.0
326	288	288	0.3	0.0	1.0	30.4	46.0	−30.3	55.1	326	0.0	0.269	1.0	33.5	13.1	−40.2	42.4	288	0.3	0.0	1.0	0.0	0.26	1.0	33.2	13.7	−40.2	42.5	288	0.3	0.0	1.0
328	289	289	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328	0.0	0.257	1.0	33.1	13.9	−40.2	42.6	289	0.317	0.0	1.0	0.0	0.249	1.0	32.8	14.4	−40.1	42.7	289	0.317	0.0	1.0
329	290	290	0.333	0.0	1.0	31.4	48.6	−28.5	56.4	329	0.0	0.245	1.0	32.7	14.6	−40.1	42.8	290	0.333	0.0	1.0	0.0	0.236	1.0	32.4	15.2	−40.2	43.1	290	0.333	0.0	1.0
331	291	291	0.35	0.0	1.0	32.0	49.9	−27.5	57.0	331	0.0	0.232	1.0	32.2	15.5	−40.2	43.2	291	0.35	0.0	1.0	0.0	0.223	1.0	32.0	16.0	−40.3	43.4	291	0.35	0.0	1.0
332	292	292	0.366	0.0	1.0	32.5	51.2	−26.5	57.7	332	0.0	0.219	1.0	31.8	16.3	−40.3	43.6	292	0.367	0.0	1.0	0.0	0.211	1.0	31.5	16.8	−40.3	43.8	292	0.367	0.0	1.0
333	293	293	0.383	0.0	1.0	32.9	52.3	−25.7	58.3	333	0.0	0.205	1.0	31.4	17.2	−40.3	43.9	293	0.383	0.0	1.0	0.0	0.198	1.0	31.1	17.6	−40.3	44.1	293	0.383	0.0	1.0
334	294	294	0.4	0.0	1.0	33.3	53.2	−25.0	58.8	334	0.0	0.192	1.0	30.9	18.0	−40.3	44.3	294	0.4	0.0	1.0	0.0	0.186	1.0	30.7	18.4	−40.4	44.5	294	0.4	0.0	1.0
335	295	295	0.416	0.0	1.0	33.7	54.1	−24.4	59.4	335	0.0	0.179	1.0	30.5	18.9	−40.4	44.6	295	0.417	0.0	1.0	0.0	0.173	1.0	30.3	19.2	−40.4	44.8	295	0.417	0.0	1.0
336	296	296	0.433	0.0	1.0	34.0	55.0	−23.7	59.9	336	0.0	0.166	1.0	30.0	19.7	−40.3	45.0	296	0.433	0.0	1.0	0.0	0.161	1.0	29.9	20.1	−40.3	45.1	296	0.433	0.0	1.0
337	297	297	0.45	0.0	1.0	34.4	55.9	−23.0	60.5	337	0.0	0.152	1.0	29.6	20.6	−40.3	45.4	297	0.45	0.0	1.0	0.0	0.148	1.0	29.4	20.9	−40.3	45.5	297	0.45	0.0	1.0
338	298	298	0.466	0.0	1.0	34.8	56.8	−22.2	61.0	338	0.0	0.139	1.0	29.1	21.5	−40.3	45.7	298	0.467	0.0	1.0	0.0	0.136	1.0	29.0	21.7	−40.3	45.8	298	0.467	0.0	1.0
339	299	299	0.483	0.0	1.0	35.2	57.7	−21.5	61.6	339	0.0	0.126	1.0	28.7	22.3	−40.2	46.1	299	0.483	0.0	1.0	0.0	0.122	1.0	28.6	22.6	−40.2	46.2	299	0.483	0.0	1.0
340	300	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340	0.0	0.109	1.0	28.2	23.3	−40.3	46.6	300	0.5	0.0	1.0	0.0	0.106	1.0	28.1	23.5	−40.3	46.7	300	0.5	0.0	1.0

*rgb*dd* *rgb*ds* *rgb*de*



Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;
Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb**dd361M			*LAB**ddx361Mi (x=LabCh)					*rgb**ds361Mi			*LAB**dsx361Mi (x=LabCh)					*rgb**dd361Mi			*rgb**de361Mi			*LAB**dex361Mi (x=LabCh)					*rgb**dd361Mi		
340	300	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340	0.0	0.109	1.0	28.2	23.3	−40.3	46.6	300	0.5	0.0	1.0	0.0	0.106	1.0	28.1	23.5	−40.3	46.7	300	0.5	0.0	1.0
341	301	301	0.516	0.0	1.0	35.9	59.5	−19.9	62.8	341	0.0	0.091	1.0	27.7	24.3	−40.3	47.2	301	0.517	0.0	1.0	0.0	0.089	1.0	27.6	24.4	−40.3	47.2	301	0.517	0.0	1.0
342	302	302	0.533	0.0	1.0	36.2	60.5	−19.0	63.4	342	0.0	0.074	1.0	27.2	25.3	−40.4	47.7	302	0.533	0.0	1.0	0.0	0.073	1.0	27.2	25.4	−40.4	47.8	302	0.533	0.0	1.0
343	303	303	0.55	0.0	1.0	36.6	61.4	−18.2	64.0	343	0.0	0.056	1.0	26.7	26.3	−40.4	48.3	303	0.55	0.0	1.0	0.0	0.056	1.0	26.7	26.3	−40.4	48.3	303	0.55	0.0	1.0
344	304	303	0.566	0.0	1.0	36.9	62.3	−17.3	64.7	344	0.0	0.039	1.0	26.2	27.3	−40.4	48.9	304	0.567	0.0	1.0	0.0	0.039	1.0	26.2	27.3	−40.4	48.8	303	0.567	0.0	1.0
345	305	304	0.583	0.0	1.0	37.2	63.2	−16.4	65.3	345	0.0	0.021	1.0	25.7	28.3	−40.4	49.4	305	0.583	0.0	1.0	0.0	0.023	1.0	25.7	28.2	−40.4	49.4	304	0.583	0.0	1.0
346	306	305	0.6	0.0	1.0	37.6	64.1	−15.4	66.0	346	0.0	0.004	1.0	25.2	29.4	−40.3	50.0	306	0.6	0.0	1.0	0.0	0.006	1.0	25.3	29.2	−40.3	49.9	305	0.6	0.0	1.0
347	307	306	0.616	0.0	1.0	37.9	65.0	−14.5	66.6	347	0.011	0.0	1.0	25.3	30.2	−40.0	50.2	307	0.617	0.0	1.0	0.009	0.0	1.0	25.3	30.1	−40.1	50.2	306	0.617	0.0	1.0
348	308	307	0.633	0.0	1.0	38.3	65.8	−13.7	67.2	348	0.026	0.0	1.0	25.7	31.0	−39.6	50.3	308	0.633	0.0	1.0	0.023	0.0	1.0	25.6	30.8	−39.7	50.3	307	0.633	0.0	1.0
348	309	308	0.65	0.0	1.0	38.8	66.6	−13.1	67.9	348	0.041	0.0	1.0	26.0	31.8	−39.1	50.5	309	0.65	0.0	1.0	0.036	0.0	1.0	25.9	31.5	−39.3	50.4	308	0.65	0.0	1.0
349	310	309	0.666	0.0	1.0	39.3	67.3	−12.5	68.5	349	0.056	0.0	1.0	26.3	32.5	−38.7	50.6	310	0.667	0.0	1.0	0.05	0.0	1.0	26.2	32.3	−38.8	50.6	309	0.667	0.0	1.0
350	311	310	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350	0.07	0.0	1.0	26.7	33.3	−38.2	50.8	311	0.683	0.0	1.0	0.064	0.0	1.0	26.5	33.0	−38.4	50.7	310	0.683	0.0	1.0
350	312	311	0.7	0.0	1.0	40.3	68.8	−11.2	69.7	350	0.085	0.0	1.0	27.0	34.1	−37.7	50.9	312	0.7	0.0	1.0	0.078	0.0	1.0	26.9	33.7	−37.9	50.8	311	0.7	0.0	1.0
351	313	312	0.716	0.0	1.0	40.8	69.5	−10.6	70.4	351	0.1	0.0	1.0	27.3	34.8	−37.2	51.0	313	0.717	0.0	1.0	0.092	0.0	1.0	27.2	34.4	−37.5	51.0	312	0.717	0.0	1.0
351	314	313	0.733	0.0	1.0	41.3	70.3	−9.9	71.0	351	0.114	0.0	1.0	27.7	35.5	−36.7	51.2	314	0.733	0.0	1.0	0.106	0.0	1.0	27.5	35.1	−37.0	51.1	313	0.733	0.0	1.0
352	315	314	0.75	0.0	1.0	41.8	71.0	−9.2	71.6	352	0.13	0.0	1.0	27.9	36.3	−36.2	51.3	315	0.75	0.0	1.0	0.12	0.0	1.0	27.8	35.8	−36.5	51.2	314	0.75	0.0	1.0
353	316	315	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353	0.146	0.0	1.0	28.1	37.1	−35.7	51.6	316	0.767	0.0	1.0	0.135	0.0	1.0	28.0	36.6	−36.0	51.4	315	0.767	0.0	1.0
353	317	316	0.783	0.0	1.0	42.4	72.1	−8.1	72.6	353	0.163	0.0	1.0	28.2	37.9	−35.3	51.8	317	0.783	0.0	1.0	0.151	0.0	1.0	28.1	37.3	−35.6	51.7	316	0.783	0.0	1.0
353	318	317	0.8	0.0	1.0	42.7	72.7	−7.6	73.1	353	0.18	0.0	1.0	28.3	38.7	−34.8	52.1	318	0.8	0.0	1.0	0.167	0.0	1.0	28.2	38.1	−35.1	51.9	317	0.8	0.0	1.0
354	319	318	0.816	0.0	1.0	43.1	73.2	−7.0	73.6	354	0.197	0.0	1.0	28.5	39.5	−34.2	52.4	319	0.817	0.0	1.0	0.183	0.0	1.0	28.4	38.9	−34.7	52.1	318	0.817	0.0	1.0
354	320	319	0.833	0.0	1.0	43.4	73.8	−6.5	74.1	354	0.213	0.0	1.0	28.6	40.3	−33.7	52.6	320	0.833	0.0	1.0	0.199	0.0	1.0	28.5	39.6	−34.2	52.4	319	0.833	0.0	1.0
355	321	320	0.85	0.0	1.0	43.7	74.3	−5.9	74.6	355	0.23	0.0	1.0	28.7	41.1	−33.2	52.9	321	0.85	0.0	1.0	0.215	0.0	1.0	28.6	40.4	−33.7	52.6	320	0.85	0.0	1.0
355	322	321	0.866	0.0	1.0	44.0	74.9	−5.3	75.1	355	0.247	0.0	1.0	28.9	41.9	−32.6	53.1	322	0.867	0.0	1.0	0.231	0.0	1.0	28.7	41.1	−33.2	52.9	321	0.867	0.0	1.0
356	323	321	0.883	0.0	1.0	44.3	75.4	−4.7	75.6	356	0.259	0.0	1.0	29.2	42.7	−32.1	53.5	323	0.883	0.0	1.0	0.247	0.0	1.0	28.9	41.8	−32.6	53.1	321	0.883	0.0	1.0
356	324	322	0.9	0.0	1.0	44.6	76.0	−4.1	76.1	356	0.27	0.0	1.0	29.5	43.7	−31.6	54.0	324	0.9	0.0	1.0	0.258	0.0	1.0	29.2	42.7	−32.1	53.5	322	0.9	0.0	1.0
357	325	323	0.916	0.0	1.0	44.8	76.6	−3.5	76.6	357	0.282	0.0	1.0	29.9	44.6	−31.1	54.4	325	0.917	0.0	1.0	0.269	0.0	1.0	29.5	43.5	−31.7	53.9	323	0.917	0.0	1.0
357	326	324	0.933	0.0	1.0	45.1	77.1	−2.8	77.2	357	0.293	0.0	1.0	30.2	45.5	−30.6	54.8	326	0.933	0.0	1.0	0.28	0.0	1.0	29.8	44.4	−31.2	54.3	324	0.933	0.0	1.0
358	327	325	0.95	0.0	1.0	45.3	77.7	−2.2	77.7	358	0.304	0.0	1.0	30.6	46.4	−30.0	55.3	327	0.95	0.0	1.0	0.29	0.0	1.0	30.1	45.2	−30.7	54.7	325	0.95	0.0	1.0
358	328	326	0.966	0.0	1.0	45.6	78.2	−1.5	78.2	358	0.315	0.0	1.0	30.9	47.2	−29.4	55.7	328	0.967	0.0	1.0	0.301	0.0	1.0	30.5	46.1	−30.2	55.1	326	0.967	0.0	1.0
359	329	327	0.983	0.0	1.0	45.8	78.7	−0.8	78.7	359	0.326	0.0	1.0	31.3	48.1	−28.8	56.1	329	0.983	0.0	1.0	0.311	0.0	1.0	30.8	46.9	−29.6	55.6	327	0.983	0.0	1.0
359	330	328	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359	M_d	0.337	0.0	1.0	31.6	49.0	−28.2	56.6	330	M_s	1.0	0.0	1.0	0.322	0.0	1.0	31.1	47.8	−29.1	56.0	328	M_e	1.0	0.0	1.0
360	331	329	1.0	0.0	0.983	46.1	79.1	0.3	79.1	360	0.349	0.0	1.0	32.0	49.9	−27.5	57.0	331	1.0	0.0	0.983	0.332	0.0	1.0	31.5	48.6	−28.5	56.4	329	1.0	0.0	0.983
360	332	330	1.0	0.0	0.966	46.0	79.0	0.9	79.0	360	0.36	0.0	1.0	32.3	50.7	−26.9	57.5	332	1.0	0.0	0.967	0.343	0.0	1.0	31.8	49.4	−27.9	56.8	330	1.0	0.0	0.967
361	333	331	1.0	0.0	0.95	46.0	78.9	1.5	78.9	361	0.371	0.0	1.0	32.7	51.6	−26.2	57.9	333	1.0	0.0	0.95	0.354	0.0	1.0	32.1	50.3	−27.2	57.2	331	1.0	0.0	0.95
361	334	332	1.0	0.0	0.933	46.0	78.7	2.1	78.8	361	0.386	0.0	1.0	33.0	52.5	−25.5	58.4	334	1.0	0.0	0.933	0.364	0.0	1.0	32.4	51.1	−26.6	57.6	332	1.0	0.0	0.933
361	335	333	1.0	0.0	0.916	46.0	78.6	2.7	78.6	361	0.404	0.0	1.0	33.4	53.5	−24.8	59.0	335	1.0	0.0	0.917	0.375	0.0	1.0	32.8	51.9	−25.9	58.0	333	1.0	0.0	0.917
362	336	334	1.0	0.0	0.9	46.0	78.4	3.2	78.5	362	0.421	0.0	1.0	33.8	54.4	−24.1	59.6	336	1.0	0.0	0.9	0.391	0.0	1.0	33.1	52.8	−25.3	58.6	334	1.0	0.0	0.9
362	337	335	1.0	0.0	0.883	45.9	78.3	3.8	78.4	362	0.438	0.0	1.0	34.2	55.4	−23.4	60.1	337	1.0	0.0	0.883	0.408	0.0	1.0	33.5	53.7	−24.7	59.1	335	1.0	0.0	0.883
363	338	336	1.0	0.0	0.866	45.9	78.1	4.4	78.3	363	0.456	0.0	1.0	34.6	56.3	−22.6	60.7	338	1.0	0.0	0.867	0.424	0.0	1.0	33.9	54.6	−24.0	59.7	336	1.0	0.0	0.867
363	339	337	1.0	0.0	0.85	45.9	78.0	5.0	78.2	363	0.473	0.0	1.0	35.0	57.2	−21.9	61.3	339	1.0	0.0	0.85	0.441	0.0	1.0	34.3	55.5	−23.3	60.2	337	1.0	0.0	0.85
364	340	338	1.0	0.0	0.833	45.9	77.9	5.6	78.1	364	0.491	0.0	1.0	35.4	58.1	−21.1	61.9	340	1.0	0.0	0.833	0.457	0.0	1.0	34.6	56.4	−22.6	60.8	338	1.0	0.0	0.833
364	341	339	1.0	0.0	0.816	45.9	77.7	6.2	78.0	364	0.508	0.0	1.0	35.8	59.1	−20.2	62.5	341	1.0	0.0	0.817	0.474	0.0	1.0	35.0	57.2	−21.8	61.3	339	1.0	0.0	0.817
365	342	339	1.0	0.0	0.8	45.9	77.6	6.8	77.9	365	0.525	0.0	1.0	36.1	60.0	−19.4	63.1	342	1.0	0.0	0.8	0.491	0.0	1.0	35.4	58.1	−21.1	61.8	339	1.0	0.0	0.8
365	343	340	1.0	0.0	0.783	45.9	77.4	7.4	77.8	365	0.542	0.0	1.0	36.4	61.0	−18.5	63.8	343	1.0	0.0	0.783	0.507	0.0	1.0	35.7	59.0	−20.3	62.4	340	1.0	0.0	0.783
365	344	341	1.0	0.0	0.766	45.9	77.3	8.0	77.7	365	0.559	0.0	1.0	36.8	61.9	−17.7	64.4	344	1.0	0.0	0.767	0.523	0.0	1.0	36.1	59.9	−19.5	63.0	341	1.0	0.0	0.767
366	345	342	1.0	0.0	0.75	45.9	77.1	8.6	77.6	366	0.576	0.0	1.0	37.1	62.9	−16.7	65.1	345	1.0	0.0	0.75	0.539	0.0	1.0	36.4	60.8	−18.7	63.7	342	1.0	0.0	0.75



TUB-test chart PE87; 16 step hue circle
48 step hue circles; *rgb−LabCh**tables

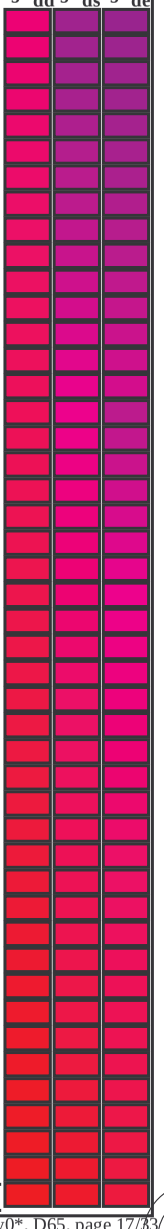
input: *rgb/cmyk −> rgb*$_d$
output: transfer to *cmy0*$_d$

TUB registration: 20150701-PE87/PE87L0NP.PDF /.PS
application for measurement of offset print output, separation cmy0 (CMY0)

TUB material: code=rha4ta

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0;
Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb**dd361M			*LAB**ddx361Mi (x=LabCh)						*rgb**ds361Mi			*LAB**dsx361Mi (x=LabCh)						*rgb**dd361Mi			*rgb**de361Mi			*LAB**dex361Mi (x=LabCh)						*rgb**dd361Mi			*rgb**$_{dd}$	*rgb**$_{ds}$	*rgb**$_{de}$
366	345	342	1.0	0.0	0.75	45.9	77.1	8.6	77.6	366	0.576	0.0	1.0	37.1	62.9	−16.7	65.1	345	1.0	0.0	0.75	0.539	0.0	1.0	36.4	60.8	−18.7	63.7	342	1.0	0.0	0.75			
367	346	343	1.0	0.0	0.733	45.9	77.0	9.4	77.5	367	0.593	0.0	1.0	37.5	63.8	−15.8	65.7	346	1.0	0.0	0.733	0.555	0.0	1.0	36.7	61.7	−17.9	64.3	343	1.0	0.0	0.733			
367	347	344	1.0	0.0	0.716	45.9	76.8	10.3	77.5	367	0.61	0.0	1.0	37.8	64.7	−14.8	66.4	347	1.0	0.0	0.717	0.571	0.0	1.0	37.0	62.6	−17.0	64.9	344	1.0	0.0	0.717			
368	348	345	1.0	0.0	0.7	45.9	76.6	11.1	77.4	368	0.627	0.0	1.0	38.2	65.6	−13.8	67.1	348	1.0	0.0	0.7	0.587	0.0	1.0	37.3	63.5	−16.1	65.5	345	1.0	0.0	0.7			
368	349	346	1.0	0.0	0.683	45.9	76.4	11.9	77.3	368	0.654	0.0	1.0	39.0	66.8	−12.9	68.1	349	1.0	0.0	0.683	0.603	0.0	1.0	37.7	64.3	−15.2	66.1	346	1.0	0.0	0.683			
369	350	347	1.0	0.0	0.666	45.9	76.2	12.8	77.2	369	0.681	0.0	1.0	39.8	68.0	−11.9	69.1	350	1.0	0.0	0.667	0.619	0.0	1.0	38.0	65.2	−14.3	66.7	347	1.0	0.0	0.667			
370	351	348	1.0	0.0	0.65	46.0	75.9	13.6	77.2	370	0.708	0.0	1.0	40.6	69.2	−10.9	70.1	351	1.0	0.0	0.65	0.641	0.0	1.0	38.6	66.2	−13.4	67.6	348	1.0	0.0	0.65			
370	352	349	1.0	0.0	0.633	46.0	75.7	14.4	77.1	370	0.735	0.0	1.0	41.4	70.4	−9.8	71.1	352	1.0	0.0	0.633	0.667	0.0	1.0	39.3	67.4	−12.4	68.5	349	1.0	0.0	0.633			
371	353	350	1.0	0.0	0.616	46.0	75.5	15.2	77.1	371	0.765	0.0	1.0	42.1	71.6	−8.7	72.1	353	1.0	0.0	0.617	0.692	0.0	1.0	40.1	68.5	−11.5	69.5	350	1.0	0.0	0.617			
372	354	351	1.0	0.0	0.6	45.9	75.4	16.1	77.1	372	0.8	0.0	1.0	42.8	72.7	−7.5	73.1	354	1.0	0.0	0.6	0.717	0.0	1.0	40.9	69.6	−10.5	70.4	351	1.0	0.0	0.6			
372	355	352	1.0	0.0	0.583	45.9	75.2	16.9	77.1	372	0.835	0.0	1.0	43.5	73.9	−6.4	74.2	355	1.0	0.0	0.583	0.743	0.0	1.0	41.6	70.7	−9.5	71.4	352	1.0	0.0	0.583			
373	356	353	1.0	0.0	0.566	45.9	75.0	17.8	77.1	373	0.87	0.0	1.0	44.2	75.0	−5.1	75.2	356	1.0	0.0	0.567	0.774	0.0	1.0	42.3	71.9	−8.4	72.4	353	1.0	0.0	0.567			
374	357	354	1.0	0.0	0.55	45.9	74.8	18.6	77.1	374	0.904	0.0	1.0	44.7	76.2	−3.9	76.3	357	1.0	0.0	0.55	0.807	0.0	1.0	42.9	73.0	−7.3	73.3	354	1.0	0.0	0.55			
374	358	355	1.0	0.0	0.533	45.9	74.6	19.5	77.1	374	0.938	0.0	1.0	45.2	77.3	−2.6	77.3	358	1.0	0.0	0.533	0.84	0.0	1.0	43.6	74.1	−6.2	74.3	355	1.0	0.0	0.533			
375	359	356	1.0	0.0	0.516	45.9	74.4	20.3	77.1	375	0.971	0.0	1.0	45.7	78.4	−1.3	78.4	359	1.0	0.0	0.517	0.873	0.0	1.0	44.2	75.1	−5.0	75.3	356	1.0	0.0	0.517			
375	360	352	1.0	0.0	0.5	45.9	74.2	21.1	77.1	375	1.0	0.0	0.994	46.1	79.3	0.0	79.3	360	1.0	0.0	0.5	0.736	0.0	1.0	41.4	70.5	−9.7	71.1	352	1.0	0.0	0.5			
376	361	353	1.0	0.0	0.483	45.8	74.1	22.1	77.3	376	1.0	0.0	0.955	46.1	79.0	1.4	79.0	361	1.0	0.0	0.483	0.771	0.0	1.0	42.2	71.8	−8.5	72.3	353	1.0	0.0	0.483			
377	362	354	1.0	0.0	0.466	45.8	73.9	23.1	77.4	377	1.0	0.0	0.916	46.0	78.6	2.7	78.7	362	1.0	0.0	0.467	0.81	0.0	1.0	43.0	73.1	−7.2	73.4	354	1.0	0.0	0.467			
378	363	355	1.0	0.0	0.45	45.8	73.8	24.0	77.6	378	1.0	0.0	0.876	46.0	78.3	4.1	78.4	363	1.0	0.0	0.45	0.849	0.0	1.0	43.8	74.4	−5.9	74.6	355	1.0	0.0	0.45			
378	364	356	1.0	0.0	0.433	45.8	73.6	25.0	77.7	378	1.0	0.0	0.839	46.0	78.0	5.5	78.2	364	1.0	0.0	0.433	0.887	0.0	1.0	44.4	75.6	−4.5	75.8	356	1.0	0.0	0.433			
379	365	357	1.0	0.0	0.416	45.8	73.4	25.9	77.9	379	1.0	0.0	0.802	46.0	77.7	6.8	78.0	365	1.0	0.0	0.417	0.925	0.0	1.0	45.0	76.9	−3.1	77.0	357	1.0	0.0	0.417			
380	366	358	1.0	0.0	0.4	45.8	73.2	26.9	78.0	380	1.0	0.0	0.765	46.0	77.3	8.1	77.8	366	1.0	0.0	0.4	0.963	0.0	1.0	45.6	78.1	−1.6	78.1	358	1.0	0.0	0.4			
380	367	359	1.0	0.0	0.383	45.8	73.0	27.8	78.2	380	1.0	0.0	0.734	46.0	77.0	9.5	77.6	367	1.0	0.0	0.383	1.0	0.0	1.0	46.1	79.3	−0.1	79.3	359	1.0	0.0	0.383			
381	368	360	1.0	0.0	0.366	45.8	72.9	28.7	78.4	381	1.0	0.0	0.708	46.0	76.7	10.8	77.5	368	1.0	0.0	0.367	1.0	0.0	0.956	46.1	79.0	1.3	79.0	360	1.0	0.0	0.367			
382	369	362	1.0	0.0	0.35	45.8	72.8	29.6	78.6	382	1.0	0.0	0.681	46.0	76.4	12.1	77.4	369	1.0	0.0	0.35	1.0	0.0	0.912	46.0	78.6	2.9	78.7	362	1.0	0.0	0.35			
382	370	363	1.0	0.0	0.333	45.7	72.7	30.4	78.8	382	1.0	0.0	0.655	46.0	76.1	13.4	77.2	370	1.0	0.0	0.333	1.0	0.0	0.869	46.0	78.2	4.4	78.3	363	1.0	0.0	0.333			
383	371	364	1.0	0.0	0.316	45.7	72.6	31.2	79.1	383	1.0	0.0	0.628	46.0	75.7	14.7	77.1	371	1.0	0.0	0.317	1.0	0.0	0.828	46.0	77.9	5.9	78.1	364	1.0	0.0	0.317			
383	372	365	1.0	0.0	0.3	45.7	72.5	32.1	79.3	383	1.0	0.0	0.602	46.0	75.4	16.0	77.1	372	1.0	0.0	0.3	1.0	0.0	0.786	46.0	77.5	7.4	77.9	365	1.0	0.0	0.3			
384	373	366	1.0	0.0	0.283	45.6	72.4	32.9	79.6	384	1.0	0.0	0.576	46.0	75.2	17.4	77.1	373	1.0	0.0	0.283	1.0	0.0	0.746	46.0	77.1	8.8	77.7	366	1.0	0.0	0.283			
385	374	367	1.0	0.0	0.266	45.6	72.3	33.8	79.8	385	1.0	0.0	0.55	45.9	74.9	18.7	77.2	374	1.0	0.0	0.267	1.0	0.0	0.717	46.0	76.8	10.3	77.5	367	1.0	0.0	0.267			
385	375	368	1.0	0.0	0.25	45.6	72.1	34.6	80.0	385	1.0	0.0	0.524	45.9	74.5	20.0	77.2	375	1.0	0.0	0.25	1.0	0.0	0.687	46.0	76.5	11.8	77.4	368	1.0	0.0	0.25			
386	376	369	1.0	0.0	0.233	45.6	72.1	35.3	80.3	386	1.0	0.0	0.498	45.9	74.2	21.3	77.2	376	1.0	0.0	0.233	1.0	0.0	0.658	46.0	76.1	13.3	77.2	369	1.0	0.0	0.233			
386	377	370	1.0	0.0	0.216	45.6	72.0	36.1	80.5	386	1.0	0.0	0.475	45.9	74.0	22.6	77.4	377	1.0	0.0	0.217	1.0	0.0	0.628	46.0	75.7	14.7	77.1	370	1.0	0.0	0.217			
387	378	372	1.0	0.0	0.2	45.6	71.9	36.8	80.8	387	1.0	0.0	0.451	45.9	73.8	24.0	77.6	378	1.0	0.0	0.2	1.0	0.0	0.599	46.0	75.4	16.2	77.1	372	1.0	0.0	0.2			
387	379	373	1.0	0.0	0.183	45.5	71.8	37.5	81.0	387	1.0	0.0	0.428	45.9	73.6	25.3	77.8	379	1.0	0.0	0.183	1.0	0.0	0.57	46.0	75.1	17.6	77.1	373	1.0	0.0	0.183			
388	380	374	1.0	0.0	0.166	45.5	71.7	38.2	81.3	388	1.0	0.0	0.404	45.9	73.3	26.7	78.0	380	1.0	0.0	0.167	1.0	0.0	0.541	45.9	74.8	19.1	77.2	374	1.0	0.0	0.167			
388	381	375	1.0	0.0	0.15	45.5	71.6	39.0	81.5	388	1.0	0.0	0.38	45.8	73.1	28.0	78.3	381	1.0	0.0	0.15	1.0	0.0	0.512	45.9	74.4	20.6	77.2	375	1.0	0.0	0.15			
389	382	376	1.0	0.0	0.133	45.5	71.5	39.7	81.8	389	1.0	0.0	0.353	45.8	72.9	29.4	78.6	382	1.0	0.0	0.133	1.0	0.0	0.485	45.9	74.1	22.0	77.3	376	1.0	0.0	0.133			
389	383	377	1.0	0.0	0.116	45.5	71.4	40.4	82.1	389	1.0	0.0	0.325	45.8	72.7	30.9	79.0	383	1.0	0.0	0.117	1.0	0.0	0.459	45.9	73.9	23.6	77.6	377	1.0	0.0	0.117			
389	384	378	1.0	0.0	0.1	45.5	71.3	41.0	82.3	389	1.0	0.0	0.297	45.7	72.5	32.3	79.4	384	1.0	0.0	0.1	1.0	0.0	0.433	45.9	73.6	25.1	77.8	378	1.0	0.0	0.1			
390	385	379	1.0	0.0	0.083	45.5	71.3	41.6	82.6	390	1.0	0.0	0.268	45.7	72.3	33.7	79.8	385	1.0	0.0	0.083	1.0	0.0	0.406	45.9	73.4	26.6	78.0	379	1.0	0.0	0.083			
390	386	381	1.0	0.0	0.066	45.5	71.2	42.3	82.8	390	1.0	0.0	0.238	45.6	72.1	35.2	80.3	386	1.0	0.0	0.067	1.0	0.0	0.38	45.8	73.1	28.1	78.3	381	1.0	0.0	0.067			
391	387	382	1.0	0.0	0.049	45.5	71.1	42.9	83.1	391	1.0	0.0	0.204	45.6	72.0	36.7	80.8	387	1.0	0.0	0.05	1.0	0.0	0.349	45.8	72.9	29.6	78.7	382	1.0	0.0	0.05			
391	388	383	1.0	0.0	0.033	45.4	71.1	43.5	83.4	391	1.0	0.0	0.17	45.6	71.8	38.2	81.3	388	1.0	0.0	0.033	1.0	0.0	0.318	45.8	72.7	31.2	79.1	383	1.0	0.0	0.033			
391	389	384	1.0	0.0	0.016	45.4	71.0	44.2	83.6	391	1.0	0.0	0.135	45.6	71.6	39.7	81.8	389	1.0	0.0	0.017	1.0	0.0	0.286	45.7	72.5	32.8	79.6	384	1.0	0.0	0.017			
392	390	385	1.0	0.0	0.0	45.4	70.9	44.8	83.9	392	***R*$_d$**	1.0	0.0	0.096	45.5	71.4	41.2	82.4	390	***R*$_s$**	1.0	0.0	0.0	1.0	0.0	0.255	45.7	72.2	34.4	80.0	385	***R*$_e$**	1.0	0.0	0.0			



TUB-test chart PE87; 16 step hue circle
48 step hue circles; *rgb−LabCh**tables

input: *rgb/cmyk −> rgb*$_d$
output: transfer to *cmy0*$_d$

n/j	HIC*Fd	*rgb*_Fd			*ict*_Fd			$h_{si\_F,d}$	*rgb**Fd			*LabCh**Fd				*rgb**'Fd			*LabCh**'Fd				*DE**'Fd	$h_{siM,d}$	*rgb**Md			*LabCh**Md			
0/648	R00Y_100_100d	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
1/657	R13Y_100_100d	1.0	0.125	0.0	1.0	1.0	0.5	37	1.0	0.116	0.0	48.6	63.3	49.1	80.2	37.7	1.0	0.125	0.0	48.9	62.8	49.4	79.9	38.1	0.6	36	1.0	0.116	0.0	48.6	63.3	49.1	80.2	37.7
2/666	R25Y_100_100d	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7	1.0	0.25	0.0	53.6	51.9	55.5	76.0	46.8	1.7	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
3/675	R38Y_100_100d	1.0	0.375	0.0	1.0	1.0	0.5	52	1.0	0.366	0.0	58.8	41.1	61.7	74.1	56.3	1.0	0.375	0.0	59.1	40.3	62.0	74.0	56.9	0.9	51	1.0	0.366	0.0	58.8	41.1	61.7	74.1	56.3
4/684	R50Y_100_100d	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
5/693	R63Y_100_100d	1.0	0.625	0.0	1.0	1.0	0.5	68	1.0	0.633	0.0	72.5	14.8	77.6	79.0	79.1	1.0	0.625	0.0	72.1	15.4	77.1	78.6	78.6	0.8	68	1.0	0.633	0.0	72.5	14.8	77.6	79.0	79.1
6/702	R75Y_100_100d	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0	1.0	0.75	0.0	77.9	5.4	83.8	84.0	86.2	1.6	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
7/711	R88Y_100_100d	1.0	0.875	0.0	1.0	1.0	0.5	83	1.0	0.883	0.0	83.7	−3.8	90.5	90.6	92.4	1.0	0.875	0.0	83.4	−3.4	90.2	90.2	92.1	0.6	83	1.0	0.883	0.0	83.7	−3.8	90.5	90.6	92.4
8/720	Y00G_100_100d	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
9/639	Y13G_100_100d	0.875	1.0	0.0	1.0	1.0	0.5	97	0.883	1.0	0.0	84.5	−13.6	89.7	90.7	98.6	0.875	1.0	0.0	84.3	−13.9	89.2	90.3	98.8	0.5	96	0.883	1.0	0.0	84.5	−13.6	89.7	90.7	98.6
10/558	Y25G_100_100d	0.75	1.0	0.0	1.0	1.0	0.5	104	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4	0.75	1.0	0.0	80.7	−17.5	83.5	85.3	101.8	1.0	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
11/477	Y38G_100_100d	0.625	1.0	0.0	1.0	1.0	0.5	112	0.633	1.0	0.0	75.6	−23.6	76.2	79.8	107.2	0.625	1.0	0.0	75.3	−24.0	75.7	79.4	107.6	0.7	111	0.633	1.0	0.0	75.6	−23.6	76.2	79.8	107.2
12/396	Y50G_100_100d	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
13/315	Y63G_100_100d	0.375	1.0	0.0	1.0	1.0	0.5	128	0.366	1.0	0.0	65.2	−36.4	57.6	68.2	122.3	0.375	1.0	0.0	65.7	−35.6	58.3	68.3	121.4	1.2	128	0.366	1.0	0.0	65.2	−36.4	57.6	68.2	122.3
14/234	Y75G_100_100d	0.25	1.0	0.0	1.0	1.0	0.5	136	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5	0.25	1.0	0.0	58.4	−47.3	46.8	66.6	135.3	1.4	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
15/153	Y88G_100_100d	0.125	1.0	0.0	1.0	1.0	0.5	143	0.116	1.0	0.0	54.4	−54.7	38.0	66.6	145.1	0.125	1.0	0.0	54.7	−53.9	38.5	66.3	144.4	0.9	143	0.116	1.0	0.0	54.4	−54.7	38.0	66.6	145.1
16/72	G00C_100_100d	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
17/73	G13C_100_100d	0.0	1.0	0.125	1.0	1.0	0.5	157	0.0	1.0	0.116	50.5	−62.9	22.4	66.8	160.4	0.0	1.0	0.125	50.5	−62.8	21.9	66.5	160.7	0.5	156	0.0	1.0	0.116	50.5	−62.9	22.4	66.8	160.4
18/74	G25C_100_100d	0.0	1.0	0.25	1.0	1.0	0.5	164	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8	0.0	1.0	0.25	51.2	−58.9	12.7	60.3	167.7	1.2	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
19/75	G38C_100_100d	0.0	1.0	0.375	1.0	1.0	0.5	172	0.0	1.0	0.366	51.9	−54.9	3.7	55.0	176.1	0.0	1.0	0.375	52.0	−54.5	3.1	54.6	176.7	0.6	171	0.0	1.0	0.366	51.9	−54.9	3.7	55.0	176.1
20/76	G50C_100_100d	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
21/77	G63C_100_100d	0.0	1.0	0.625	1.0	1.0	0.5	188	0.0	1.0	0.633	54.1	−42.0	−18.8	46.0	204.1	0.0	1.0	0.625	54.0	−42.3	−18.1	46.1	203.2	0.7	188	0.0	1.0	0.633	54.1	−42.0	−18.8	46.0	204.1
22/78	G75C_100_100d	0.0	1.0	0.75	1.0	1.0	0.5	196	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7	0.0	1.0	0.75	55.0	−36.0	−27.4	45.3	217.2	1.1	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
23/79	G88C_100_100d	0.0	1.0	0.875	1.0	1.0	0.5	203	0.0	1.0	0.883	55.9	−30.4	−35.0	46.3	229.0	0.0	1.0	0.875	55.8	−30.7	−34.5	46.2	228.3	0.5	203	0.0	1.0	0.883	55.9	−30.4	−35.0	46.3	229.0
24/80	C00B_100_100d	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
25/71	C13B_100_100d	0.0	0.875	1.0	1.0	1.0	0.5	217	0.0	0.883	1.0	54.3	−21.4	−41.4	46.6	242.6	0.0	0.875	1.0	54.1	−21.1	−41.3	46.4	242.9	0.3	216	0.0	0.883	1.0	54.3	−21.4	−41.4	46.6	242.6
26/62	C25B_100_100d	0.0	0.75	1.0	1.0	1.0	0.5	224	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4	0.0	0.75	1.0	50.4	−15.5	−41.1	43.9	249.3	0.8	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
27/53	C38B_100_100d	0.0	0.625	1.0	1.0	1.0	0.5	232	0.0	0.633	1.0	46.8	−9.8	−40.9	42.1	256.4	0.0	0.625	1.0	46.5	−9.4	−40.8	41.9	256.9	0.4	231	0.0	0.633	1.0	46.8	−9.8	−40.9	42.1	256.4
28/44	C50B_100_100d	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
29/35	C63B_100_100d	0.0	0.375	1.0	1.0	1.0	0.5	248	0.0	0.366	1.0	37.0	6.6	−40.2	40.8	279.3	0.0	0.375	1.0	37.3	6.1	−40.2	40.7	278.6	0.6	248	0.0	0.366	1.0	37.0	6.6	−40.2	40.8	279.3
30/26	C75B_100_100d	0.0	0.25	1.0	1.0	1.0	0.5	256	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8	0.0	0.25	1.0	32.8	14.3	−40.2	42.7	289.6	1.1	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
31/17	C88B_100_100d	0.0	0.125	1.0	1.0	1.0	0.5	263	0.0	0.116	1.0	28.4	22.8	−40.3	46.3	299.5	0.0	0.125	1.0	28.6	22.4	−40.2	46.1	299.0	0.5	263	0.0	0.116	1.0	28.4	22.8	−40.3	46.3	299.5
32/8	B00M_100_100d	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
33/89	B13M_100_100d	0.125	0.0	1.0	1.0	1.0	0.5	277	0.116	0.0	1.0	27.7	35.6	−36.7	51.1	314.1	0.125	0.0	1.0	27.9	36.0	−36.4	51.2	314.7	0.5	276	0.116	0.0	1.0	27.7	35.6	−36.7	51.1	314.1
34/170	B25M_100_100d	0.25	0.0	1.0	1.0	1.0	0.5	284	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1	0.25	0.0	1.0	28.8	41.9	−32.5	53.1	322.1	0.9	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
35/251	B38M_100_100d	0.375	0.0	1.0	1.0	1.0	0.5	292	0.366	0.0	1.0	32.5	51.2	−26.5	57.7	332.6	0.375	0.0	1.0	32.7	51.8	−26.0	58.0	333.3	0.8	291	0.366	0.0	1.0	32.5	51.2	−26.5	57.7	332.6
36/332	B50M_100_100d	0.5	0.0	1.0	1.0	1.0	0.5	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
37/413	B63M_100_100d	0.625	0.0	1.0	1.0	1.0	0.5	308	0.633	0.0	1.0	38.3	65.8	−13.7	67.2	348.2	0.625	0.0	1.0	38.1	65.4	−14.0	66.9	347.9	0.5	308	0.633	0.0	1.0	38.3	65.8	−13.7	67.2	348.2
38/494	B75M_100_100d	0.75	0.0	1.0	1.0	1.0	0.5	316	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0	0.75	0.0	1.0	41.8	71.0	−9.2	71.6	352.5	0.8	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
39/575	B88M_100_100d	0.875	0.0	1.0	1.0	1.0	0.5	323	0.883	0.0	1.0	44.3	75.4	−4.7	75.6	356.3	0.875	0.0	1.0	44.2	75.2	−5.0	75.3	356.1	0.4	323	0.883	0.0	1.0	44.3	75.4	−4.7	75.6	356.3
40/656	M00R_100_100d	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
41/655	M13R_100_100d	1.0	0.0	0.875	1.0	1.0	0.5	337	1.0	0.0	0.883	45.9	78.3	3.8	78.4	2.8	1.0	0.0	0.875	45.9	78.2	4.1	78.3	363.0	0.2	336	1.0	0.0	0.883	45.9	78.3	3.8	78.4	2.8
42/654	M25R_100_100d	1.0	0.0	0.75	1.0	1.0	0.5	344	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9	1.0	0.0	0.75	45.9	77.1	8.6	77.6	366.4	0.6	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
43/653	M38R_100_100d	1.0	0.0	0.625	1.0	1.0	0.5	352	1.0	0.0	0.633	46.0	75.7	14.4	77.1	10.8	1.0	0.0	0.625	46.0	75.6	14.8	77.0	371.1	0.4	351	1.0	0.0	0.633	46.0	75.7	14.4	77.1	10.8
44/652	M50R_100_100d	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9	1.0	0.0	0.5	45.9	74.2	21.1	77.1	375.9	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
45/651	M63R_100_100d	1.0	0.0	0.375	1.0	1.0	0.5	368	1.0	0.0	0.366	45.8	72.9	28.7	78.4	21.5	1.0	0.0	0.375	45.8	72.9	28.3	78.3	381.2	0.4	368	1.0	0.0	0.366	45.8	72.9	28.7	78.4	21.5
46/650	M75R_100_100d	1.0	0.0	0.25	1.0	1.0	0.5	376	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1	1.0	0.0	0.25	45.6	72.1	34.6	80.0	385.6	0.7	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
47/649	M88R_100_100d	1.0	0.0	0.125	1.0	1.0	0.5	383	1.0	0.0	0.116	45.5	71.4	40.4	82.1	29.5	1.0	0.0	0.125	45.5	71.4	40.1	81.9	389.3	0.3	383	1.0	0.0	0.116	45.5	71.4	40.4	82.1	29.5
48/648	R00Y_100_100d	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	1.0	0.0	0.0	45.4	70.9	44.8	83.9	392.3	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
49/0	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.9	62.8	49.4	79.9	398.1	83.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
50/91	NW_013d	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0	0.125	0.125	0.125	24.3	0.0	0.0	0.0	0.0	8.9	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
51/182	NW_025d	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0	0.25	0.25	0.25	29.8	7.2	3.6	8.1	26.3	14.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
52/273	NW_038d	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0	0.375	0.375	0.375	35.7	7.5	7.1	10.4	43.4	18.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
53/364	NW_050d	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	45.3	10.0	11.0	14.9	47.8	20.9	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
54/455	NW_063d	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0	0.625	0.625	0.625	55.1	8.8	9.3	12.8	46.5	18.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
55/546	NW_075d	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0	0.75	0.75	0.75	64.6	6.7	9.1	11.3	53.7	17.4	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
56/637	NW_088d	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0	0.875	0.875	0.875	76.3	4.7	5.9	7.6	51.3	12.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
57/728	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	1.0	1.0	1.0	86.7	1.6	2.9	3.3	60.9	9.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

Mean color difference of this page: **delta *E**' = *4.0***

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

input: *rgb/cmyk* −> rgb_d
output: transfer to $cmy0_d$

1−0031731−F0

n/j	HIC*Fd	*rgb*_Fd			*ict*_Fd			$h_{si\_F,d}$	*rgb**Fd			*LabCh**Fd					*rgb**'Fd			*LabCh**'Fd					*DE**'Fd	$h_{siM,d}$	*rgb**Md			*LabCh**Md				
0/648	R00Y_100_100d	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
1/666	R25Y_100_100d	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7	1.0	0.25	0.0	53.6	51.9	55.5	76.0	46.8	1.7	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
2/684	R50Y_100_100d	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
3/702	R75Y_100_100d	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0	1.0	0.75	0.0	77.9	5.4	83.8	84.0	86.2	1.6	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
4/720	Y00G_100_100d	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
5/558	Y25G_100_100d	0.75	1.0	0.0	1.0	1.0	0.5	104	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4	0.75	1.0	0.0	80.7	−17.5	83.5	85.3	101.8	1.0	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
6/396	Y50G_100_100d	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
7/234	Y75G_100_100d	0.25	1.0	0.0	1.0	1.0	0.5	136	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5	0.25	1.0	0.0	58.4	−47.3	46.8	66.6	135.3	1.4	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
8/72	G00B_100_100d	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
9/72	G00B_100_100d	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
10/76	G25B_100_100d	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
11/80	G50B_100_100d	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
12/44	G75B_100_100d	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
13/8	B00M_100_100d	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
14/332	B25R_100_100d	0.5	0.0	1.0	1.0	1.0	0.5	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
15/656	B50R_100_100d	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
16/652	B75R_100_100d	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
17/648	R00Y_100_100d	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
18/688	R00Y_100_050d	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	70.5	35.4	22.4	41.9	32.3	1.0	0.5	0.5	68.0	29.9	28.7	41.5	43.8	8.7	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
19/706	R50Y_100_050d	1.0	0.75	0.5	1.0	0.5	0.75	60	1.0	0.75	0.5	80.2	14.4	34.3	37.2	67.1	1.0	0.75	0.5	80.4	9.0	35.3	36.5	75.5	5.4	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
20/724	Y00G_100_050d	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	1.0	0.5	91.7	−5.1	47.7	48.0	96.1	1.0	1.0	0.5	91.4	−7.7	42.5	43.2	100.3	5.8	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
21/562	Y50G_100_050d	0.75	1.0	0.5	1.0	0.5	0.75	120	0.75	1.0	0.5	83.1	−14.8	33.2	36.4	114.0	0.75	1.0	0.5	84.2	−14.1	31.5	34.5	114.0	2.1	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
22/400	G00B_100_050d	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.5	72.8	−32.5	14.8	35.7	155.5	0.5	1.0	0.5	73.9	−23.7	19.9	31.0	140.0	10.1	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
23/404	G50B_100_050d	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	1.0	76.2	−12.7	−20.7	24.3	238.4	0.5	1.0	1.0	78.7	−11.6	−18.3	21.7	237.6	3.6	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
24/368	B00R_100_050d	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.5	1.0	60.3	14.7	−20.2	25.0	306.2	0.5	0.5	1.0	57.9	18.3	−20.7	27.7	311.4	4.3	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
25/692	B50R_100_050d	1.0	0.5	1.0	1.0	0.5	0.75	330	1.0	0.5	1.0	70.8	39.6	−0.1	39.6	359.8	1.0	0.5	1.0	70.7	35.2	−3.7	35.4	353.9	5.7	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
26/688	R00Y_100_050d	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	70.5	35.4	22.4	41.9	32.3	1.0	0.5	0.5	68.0	29.9	28.7	41.5	43.8	8.7	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
27/506	R00Y_075_050d	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	52.7	35.4	22.4	41.9	32.3	0.75	0.25	0.25	50.4	39.4	31.9	50.7	38.9	10.5	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
28/524	R50Y_075_050d	0.75	0.5	0.25	0.75	0.5	0.5	60	0.75	0.5	0.25	62.4	14.4	34.3	37.2	67.1	0.75	0.5	0.25	61.2	18.1	39.5	43.4	65.3	6.4	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
29/542	Y00G_075_050d	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.75	0.25	73.9	−5.1	47.7	48.0	96.1	0.75	0.75	0.25	72.4	−1.4	48.0	48.0	91.7	3.9	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
30/380	Y50G_075_050d	0.5	0.75	0.25	0.75	0.5	0.5	120	0.5	0.75	0.25	65.3	−14.8	33.2	36.4	114.0	0.5	0.75	0.25	63.2	−12.6	35.5	37.7	109.6	3.7	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
31/218	G00B_075_050d	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.25	55.0	−32.5	14.8	35.7	155.5	0.25	0.75	0.25	53.0	−27.9	21.7	35.3	142.0	8.5	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
32/222	G50B_075_050d	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.75	58.4	−12.7	−20.7	24.3	238.4	0.25	0.75	0.75	55.9	−14.3	−16.3	21.7	228.6	5.3	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
33/186	B00R_075_050d	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.25	0.75	42.5	14.7	−20.2	25.0	306.2	0.25	0.25	0.75	37.5	18.9	−20.4	27.9	312.8	6.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
34/510	B50R_075_050d	0.75	0.25	0.75	0.75	0.5	0.5	330	0.75	0.25	0.75	53.0	39.6	−0.1	39.6	359.8	0.75	0.25	0.75	52.4	44.4	0.5	44.4	0.6	4.8	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
35/506	R00Y_075_050d	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	52.7	35.4	22.4	41.9	32.3	0.75	0.25	0.25	50.4	39.4	31.9	50.7	38.9	10.5	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
36/324	R00Y_050_050d	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	34.9	35.4	22.4	41.9	32.3	0.5	0.0	0.0	34.8	44.7	22.4	50.0	26.6	9.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
37/342	R50Y_050_050d	0.5	0.25	0.0	0.5	0.5	0.25	60	0.5	0.25	0.0	44.6	14.4	34.3	37.2	67.1	0.5	0.25	0.0	43.4	24.2	33.3	41.2	53.9	9.9	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
38/360	Y00G_050_050d	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.5	0.0	56.1	−5.1	47.7	48.0	96.1	0.5	0.5	0.0	52.6	3.9	44.2	44.3	84.8	10.3	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
39/198	Y50G_050_050d	0.25	0.5	0.0	0.5	0.5	0.25	120	0.25	0.5	0.0	47.4	−14.8	33.2	36.4	114.0	0.25	0.5	0.0	43.1	−14.1	28.4	31.7	116.4	6.5	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
40/36	G00B_050_050d	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.0	37.2	−32.5	14.8	35.7	155.5	0.0	0.5	0.0	37.3	−36.4	15.2	39.5	157.2	3.9	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
41/40	G50B_050_050d	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.5	40.5	−12.7	−20.7	24.3	238.4	0.0	0.5	0.5	39.1	−21.5	−13.3	25.3	211.8	11.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
42/4	B00R_050_050d	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.0	0.5	24.7	14.7	−20.2	25.0	306.2	0.0	0.0	0.5	24.3	11.6	−18.9	22.1	301.5	3.4	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
43/328	B50R_050_050d	0.5	0.0	0.5	0.5	0.5	0.25	330	0.5	0.0	0.5	35.2	39.6	−0.1	39.6	359.8	0.5	0.0	0.5	35.0	49.8	0.6	49.8	0.7	10.2	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
44/324	R00Y_050_050d	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	34.9	35.4	22.4	41.9	32.3	0.5	0.0	0.0	34.8	44.7	22.4	50.0	26.6	9.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
45/0	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
46/91	NW_013d	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0	0.125	0.125	0.125	29.8	7.2	3.6	8.1	26.3	8.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
47/182	NW_025d	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0	0.25	0.25	0.25	35.7	7.5	7.1	10.4	43.4	12.2	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
48/273	NW_038d	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0	0.375	0.375	0.375	45.3	10.0	11.0	14.9	47.8	16.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
49/364	NW_050d	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	55.1	8.8	9.3	12.8	46.5	13.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
50/455	NW_063d	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0	0.625	0.625	0.625	64.6	6.7	9.1	11.3	53.7	12.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
51/546	NW_075d	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0	0.75	0.75	0.75	76.3	4.7	5.9	7.6	51.3	7.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
52/637	NW_088d	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0	0.875	0.875	0.875	86.7	1.6	2.9	3.3	60.9	3.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
53/728	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

Mean color difference of this page: **delta *E**' = *5.0***

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

input: *rgb/cmyk* −> rgb_d
output: transfer to $cmy0_d$

1−0031831−F0

http://130.149.60.45/~farbmetrik/PE87/PE87L0NP.PDF /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 20/33

n=j	HIC*Fd	rgb_Fd			ict_Fd			$h_{si\_F,d}$	rgb*Fd			LabCh*Fd				
0	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
1	B00R_012_012d	0.0	0.0	0.125	0.125	0.125	0.062	270	0.0	0.0	0.125	24.4	3.6	−5.0	6.2	306.2
2	B00R_025_025d	0.0	0.0	0.25	0.25	0.25	0.125	270	0.0	0.0	0.25	24.5	7.3	−10.1	12.5	306.2
3	B00R_037_037d	0.0	0.0	0.375	0.375	0.375	0.187	270	0.0	0.0	0.375	24.6	11.0	−15.1	18.7	306.2
4	B00R_050_050d	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.0	0.5	24.7	14.7	−20.2	25.0	306.2
5	B00R_062_062d	0.0	0.0	0.625	0.625	0.625	0.312	270	0.0	0.0	0.625	24.8	18.4	−25.2	31.3	306.2
6	B00R_075_075d	0.0	0.0	0.75	0.75	0.75	0.375	270	0.0	0.0	0.75	24.9	22.1	−30.3	37.5	306.2
7	B00R_087_087d	0.0	0.0	0.875	0.875	0.875	0.437	270	0.0	0.0	0.875	24.9	25.8	−35.3	43.8	306.2
8	B00R_100_100d	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
9	G00B_012_012d	0.0	0.125	0.0	0.125	0.125	0.062	150	0.0	0.125	0.0	27.5	−8.1	3.7	8.9	155.5
10	G50B_012_012d	0.0	0.125	0.125	0.125	0.125	0.062	210	0.0	0.125	0.125	28.4	−3.1	−5.1	6.0	238.4
11	G75B_025_025d	0.0	0.125	0.25	0.25	0.25	0.125	240	0.0	0.125	0.25	28.7	−0.3	−10.1	10.1	268.2
12	G84B_037_037d	0.0	0.125	0.375	0.375	0.375	0.187	251	0.0	0.118	0.375	28.4	3.7	−15.1	15.6	283.7
13	G88B_050_050d	0.0	0.125	0.5	0.5	0.5	0.25	256	0.0	0.116	0.5	28.3	7.6	−20.1	21.5	290.8
14	G90B_062_062d	0.0	0.125	0.625	0.625	0.625	0.312	259	0.0	0.114	0.625	28.2	11.6	−25.2	27.8	294.6
15	G92B_075_075d	0.0	0.125	0.75	0.75	0.75	0.375	261	0.0	0.112	0.75	28.2	15.5	−30.3	34.0	297.1
16	G93B_087_087d	0.0	0.125	0.875	0.875	0.875	0.437	262	0.0	0.116	0.875	28.3	19.1	−35.2	40.1	298.4
17	G94B_100_100d	0.0	0.125	1.0	1.0	1.0	0.5	263	0.0	0.116	1.0	28.4	22.8	−40.3	46.3	299.5
18	G00B_025_025d	0.0	0.25	0.0	0.25	0.25	0.125	150	0.0	0.25	0.0	30.7	−16.2	7.4	17.8	155.5
19	G25B_025_025d	0.0	0.25	0.125	0.25	0.25	0.125	180	0.0	0.25	0.125	31.5	−12.1	−2.0	12.3	189.3
20	G50B_025_025d	0.0	0.25	0.25	0.25	0.25	0.125	210	0.0	0.25	0.25	32.4	−6.3	−10.3	12.1	238.4
21	G65B_037_037d	0.0	0.25	0.375	0.375	0.375	0.187	229	0.0	0.256	0.375	33.3	−4.6	−15.4	16.0	253.3
22	G75B_050_050d	0.0	0.25	0.5	0.5	0.5	0.25	240	0.0	0.25	0.5	33.0	−0.6	−20.3	20.3	268.2
23	G80B_062_062d	0.0	0.25	0.625	0.625	0.625	0.312	247	0.0	0.239	0.625	32.6	3.5	−25.1	25.4	277.9
24	G84B_075_075d	0.0	0.25	0.75	0.75	0.75	0.375	251	0.0	0.237	0.75	32.5	7.4	−30.3	31.2	283.7
25	G86B_087_087d	0.0	0.25	0.875	0.875	0.875	0.437	254	0.0	0.233	0.875	32.3	11.5	−35.2	37.1	288.1
26	G88B_100_100d	0.0	0.25	1.0	1.0	1.0	0.5	256	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
27	G00B_037_037d	0.0	0.375	0.0	0.375	0.375	0.187	150	0.0	0.375	0.0	34.0	−24.3	11.1	26.7	155.5
28	G15B_037_037d	0.0	0.375	0.125	0.375	0.375	0.187	169	0.0	0.375	0.118	34.6	−21.3	2.7	21.4	172.5
29	G34B_037_037d	0.0	0.375	0.25	0.375	0.375	0.187	191	0.0	0.375	0.256	35.6	−14.8	−8.5	17.1	209.7
30	G50B_037_037d	0.0	0.375	0.375	0.375	0.375	0.187	210	0.0	0.375	0.375	36.5	−9.5	−15.5	18.2	238.4
31	G61B_050_050d	0.0	0.375	0.5	0.5	0.5	0.25	224	0.0	0.383	0.5	37.6	−8.1	−20.6	22.1	248.4
32	G69B_062_062d	0.0	0.375	0.625	0.625	0.625	0.312	233	0.0	0.385	0.625	38.0	−5.5	−25.5	26.1	257.7
33	G75B_075_075d	0.0	0.375	0.75	0.75	0.75	0.375	240	0.0	0.375	0.75	37.3	−0.9	−30.4	30.5	268.2
34	G79B_087_087d	0.0	0.375	0.875	0.875	0.875	0.437	245	0.0	0.364	0.875	37.0	3.2	−35.4	35.6	275.1
35	G81B_100_100d	0.0	0.375	1.0	1.0	1.0	0.5	248	0.0	0.366	1.0	37.0	6.6	−40.2	40.8	279.3
36	G00B_050_050d	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.0	37.2	−32.5	14.8	35.7	155.5
37	G11B_050_050d	0.0	0.5	0.125	0.5	0.5	0.25	164	0.0	0.5	0.116	37.7	−29.7	6.9	30.5	166.8
38	G25B_050_050d	0.0	0.5	0.25	0.5	0.5	0.25	180	0.0	0.5	0.25	38.6	−24.3	−4.0	24.6	189.3
39	G38B_050_050d	0.0	0.5	0.375	0.5	0.5	0.25	196	0.0	0.5	0.383	39.7	−17.7	−14.2	22.7	218.7
40	G50B_050_050d	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.5	40.5	−12.7	−20.7	24.3	238.4
41	G59B_062_062d	0.0	0.5	0.625	0.625	0.625	0.312	221	0.0	0.51	0.625	41.9	−11.5	−25.8	28.3	245.8
42	G65B_075_075d	0.0	0.5	0.75	0.75	0.75	0.375	229	0.0	0.512	0.75	42.3	−9.2	−30.8	32.1	253.3
43	G70B_087_087d	0.0	0.5	0.875	0.875	0.875	0.437	235	0.0	0.51	0.875	42.3	−5.8	−35.8	36.3	260.7
44	G75B_100_100d	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
45	G00B_062_062d	0.0	0.625	0.0	0.625	0.625	0.312	150	0.0	0.625	0.0	40.4	−40.6	18.5	44.6	155.5
46	G09B_062_062d	0.0	0.625	0.125	0.625	0.625	0.312	161	0.0	0.625	0.114	40.9	−38.2	10.9	39.7	164.0
47	G19B_062_062d	0.0	0.625	0.25	0.625	0.625	0.312	173	0.0	0.625	0.239	41.6	−33.9	1.4	33.9	177.5
48	G30B_062_062d	0.0	0.625	0.375	0.625	0.625	0.312	187	0.0	0.625	0.385	42.8	−26.7	−10.9	28.9	202.2
49	G40B_062_062d	0.0	0.625	0.5	0.625	0.625	0.312	199	0.0	0.625	0.51	43.8	−20.8	−19.5	28.6	223.1
50	G50B_062_062d	0.0	0.625	0.625	0.625	0.625	0.312	210	0.0	0.625	0.625	44.6	−15.9	−25.9	30.4	238.4
51	G57B_075_075d	0.0	0.625	0.75	0.75	0.75	0.375	219	0.0	0.637	0.75	46.1	−15.0	−31.0	34.4	244.1
52	G63B_087_087d	0.0	0.625	0.875	0.875	0.875	0.437	226	0.0	0.641	0.875	46.7	−12.8	−36.0	38.2	250.3
53	G68B_100_100d	0.0	0.625	1.0	1.0	1.0	0.5	232	0.0	0.633	1.0	46.8	−9.8	−40.9	42.1	256.4
54	G00B_075_075d	0.0	0.75	0.0	0.75	0.75	0.375	150	0.0	0.75	0.0	43.6	−48.7	22.2	53.5	155.5
55	G07B_075_075d	0.0	0.75	0.125	0.75	0.75	0.375	159	0.0	0.75	0.112	44.1	−46.6	14.9	48.9	162.1
56	G15B_075_075d	0.0	0.75	0.25	0.75	0.75	0.375	169	0.0	0.75	0.237	44.8	−42.6	5.5	42.9	172.5
57	G25B_075_075d	0.0	0.75	0.375	0.75	0.75	0.375	180	0.0	0.75	0.375	45.8	−36.5	−6.0	37.0	189.3
58	G34B_075_075d	0.0	0.75	0.5	0.75	0.75	0.375	191	0.0	0.75	0.512	46.9	−29.7	−17.0	34.3	209.7
59	G42B_075_075d	0.0	0.75	0.625	0.75	0.75	0.375	201	0.0	0.75	0.637	47.8	−23.9	−24.8	34.5	226.1
60	G50B_075_075d	0.0	0.75	0.75	0.75	0.75	0.375	210	0.0	0.75	0.75	48.7	−19.1	−31.1	36.5	238.4
61	G56B_087_087d	0.0	0.75	0.875	0.875	0.875	0.437	218	0.0	0.758	0.875	50.2	−18.1	−36.2	40.5	243.3
62	G61B_100_100d	0.0	0.75	1.0	1.0	1.0	0.5	224	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
63	G00B_087_087d	0.0	0.875	0.0	0.875	0.875	0.437	150	0.0	0.875	0.0	46.8	−56.8	25.9	62.5	155.5
64	G06B_087_087d	0.0	0.875	0.125	0.875	0.875	0.437	158	0.0	0.875	0.116	47.3	−54.7	18.6	57.8	161.2
65	G13B_087_087d	0.0	0.875	0.25	0.875	0.875	0.437	166	0.0	0.875	0.233	47.9	−51.1	9.9	52.1	168.9
66	G20B_087_087d	0.0	0.875	0.375	0.875	0.875	0.437	175	0.0	0.875	0.364	48.8	−46.2	−0.7	46.2	180.9
67	G29B_087_087d	0.0	0.875	0.5	0.875	0.875	0.437	185	0.0	0.875	0.51	50.0	−39.1	−13.1	41.2	198.5
68	G36B_087_087d	0.0	0.875	0.625	0.875	0.875	0.437	194	0.0	0.875	0.641	51.0	−32.3	−23.0	39.7	215.4
69	G43B_087_087d	0.0	0.875	0.75	0.875	0.875	0.437	202	0.0	0.875	0.758	51.8	−27.2	−29.8	40.3	227.5
70	G50B_087_087d	0.0	0.875	0.875	0.875	0.875	0.437	210	0.0	0.875	0.875	52.7	−22.3	−36.3	42.6	238.4
71	G55B_100_100d	0.0	0.875	1.0	1.0	1.0	0.5	217	0.0	0.883	1.0	54.3	−21.4	−41.4	46.6	242.6
72	G00B_100_100d	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
73	G05B_100_100d	0.0	1.0	0.125	1.0	1.0	0.5	157	0.0	1.0	0.116	50.5	−62.9	22.4	66.8	160.4
74	G11B_100_100d	0.0	1.0	0.25	1.0	1.0	0.5	164	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
75	G18B_100_100d	0.0	1.0	0.375	1.0	1.0	0.5	172	0.0	1.0	0.366	51.9	−54.9	3.7	55.0	176.1
76	G25B_100_100d	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
77	G31B_100_100d	0.0	1.0	0.625	1.0	1.0	0.5	188	0.0	1.0	0.633	54.1	−42.0	−18.8	46.0	204.1
78	G38B_100_100d	0.0	1.0	0.75	1.0	1.0	0.5	196	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
79	G44B_100_100d	0.0	1.0	0.875	1.0	1.0	0.5	203	0.0	1.0	0.883	55.9	−30.4	−35.0	46.3	229.0
80	G50B_100_100d	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

n=j	rgb*'Fd			LabCh*'Fd					DE*'Fd	$h_{siM,d}$
0	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	0.0	360
1	0.0	0.0	0.125	23.8	2.3	−3.5	4.2	303.1	2.1	270
2	0.0	0.0	0.25	23.9	4.8	−8.0	9.4	300.8	3.3	270
3	0.0	0.0	0.375	24.1	6.9	−12.1	13.9	299.8	5.1	270
4	0.0	0.0	0.5	24.3	11.6	−18.9	22.1	301.5	3.4	270
5	0.0	0.0	0.625	24.6	15.8	−24.6	29.2	302.7	2.7	270
6	0.0	0.0	0.75	24.7	20.7	−30.7	37.0	303.9	1.5	270
7	0.0	0.0	0.875	24.8	25.5	−35.9	44.0	305.3	0.7	270
8	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	0.0	270
9	0.0	0.125	0.0	27.1	−8.2	2.9	8.7	160.0	0.8	149
10	0.0	0.125	0.125	26.7	−5.9	−1.1	6.0	190.5	5.2	210
11	0.0	0.125	0.25	27.1	−3.6	−5.7	6.8	237.4	5.7	240
12	0.0	0.125	0.375	27.1	−0.2	−10.8	10.8	268.5	5.9	251
13	0.0	0.125	0.5	27.3	4.4	−17.8	18.3	284.1	4.1	257
14	0.0	0.125	0.625	27.8	8.7	−24.2	25.7	289.8	3.0	260
15	0.0	0.125	0.75	28.1	13.4	−30.2	33.0	293.9	2.1	262
16	0.0	0.125	0.875	28.3	18.0	−35.6	39.9	296.8	1.1	262
17	0.0	0.125	1.0	28.6	22.4	−40.2	46.1	299.0	0.5	263
18	0.0	0.25	0.0	30.5	−18.5	7.5	20.0	157.7	2.2	149
19	0.0	0.25	0.125	30.7	−16.4	2.9	16.6	169.8	6.5	180
20	0.0	0.25	0.25	31.1	−13.5	−2.5	13.7	190.8	10.6	210
21	0.0	0.25	0.375	31.7	−11.0	−8.3	13.7	217.0	9.7	228
22	0.0	0.25	0.5	31.8	−5.6	−15.7	16.7	250.1	6.9	240
23	0.0	0.25	0.625	32.1	−0.6	−22.5	22.5	268.3	4.9	247
24	0.0	0.25	0.75	32.2	4.8	−29.1	29.5	279.4	2.8	251
25	0.0	0.25	0.875	32.3	9.9	−34.9	36.3	285.8	1.6	255
26	0.0	0.25	1.0	32.8	14.3	−40.2	42.7	289.6	1.1	257
27	0.0	0.375	0.0	33.9	−27.6	11.4	29.8	157.4	3.2	149
28	0.0	0.375	0.125	34.2	−25.5	6.6	26.4	165.4	5.7	168
29	0.0	0.375	0.25	34.7	−22.1	−0.5	22.1	181.3	10.8	191
30	0.0	0.375	0.375	34.9	−18.4	−6.6	19.6	199.8	12.6	210
31	0.0	0.375	0.5	35.7	−14.1	−14.6	20.3	226.1	8.6	222
32	0.0	0.375	0.625	36.6	−10.0	−21.5	23.7	245.0	6.1	232
33	0.0	0.375	0.75	36.5	−4.0	−28.4	28.6	261.8	3.8	240
34	0.0	0.375	0.875	36.5	2.0	−34.7	34.8	273.3	1.4	245
35	0.0	0.375	1.0	37.3	6.1	−40.2	40.7	278.6	0.6	248
36	0.0	0.5	0.0	37.3	−36.4	15.2	39.5	157.2	3.9	149
37	0.0	0.5	0.125	37.6	−34.1	9.9	35.5	163.8	5.2	162
38	0.0	0.5	0.25	38.1	−30.3	2.2	30.4	175.7	8.7	180
39	0.0	0.5	0.375	38.7	−26.0	−5.6	26.6	192.2	12.0	197
40	0.0	0.5	0.5	39.1	−21.5	−13.3	25.3	211.8	11.5	210
41	0.0	0.5	0.625	40.3	−17.0	−21.0	27.1	231.0	7.4	219
42	0.0	0.5	0.75	41.1	−12.1	−28.0	30.5	246.4	4.2	228
43	0.0	0.5	0.875	41.6	−6.8	−34.8	35.4	258.8	1.6	234
44	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2	0.0	240
45	0.0	0.625	0.0	41.4	−45.8	19.8	49.9	156.6	5.5	149
46	0.0	0.625	0.125	41.6	−43.4	13.8	45.5	162.2	5.9	159
47	0.0	0.625	0.25	42.1	−39.7	5.6	40.1	171.9	7.1	172
48	0.0	0.625	0.375	42.9	−34.7	−3.7	34.9	186.1	10.7	187
49	0.0	0.625	0.5	43.4	−29.7	−12.3	32.1	202.4	11.4	200
50	0.0	0.625	0.625	44.2	−25.0	−19.8	31.9	218.3	10.9	210
51	0.0	0.625	0.75	45.4	−19.9	−27.5	34.0	234.0	6.1	217
52	0.0	0.625	0.875	46.0	−14.7	−34.6	37.6	246.9	2.3	224
53	0.0	0.625	1.0	46.5	−9.4	−40.8	41.9	256.9	0.4	231
54	0.0	0.75	0.0	44.1	−52.2	22.9	57.0	156.2	3.5	149
55	0.0	0.75	0.125	44.4	−49.8	16.5	52.5	161.6	3.6	157
56	0.0	0.75	0.25	45.1	−46.0	7.6	46.6	170.5	3.9	168
57	0.0	0.75	0.375	45.8	−41.8	−1.2	41.8	181.6	7.1	180
58	0.0	0.75	0.5	46.7	−35.7	−11.7	37.5	198.2	7.9	191
59	0.0	0.75	0.625	47.6	−30.2	−20.1	36.3	213.7	7.8	202
60	0.0	0.75	0.75	48.3	−25.2	−27.2	37.1	227.1	7.3	210
61	0.0	0.75	0.875	49.3	−20.3	−34.4	40.0	239.4	2.9	217
62	0.0	0.75	1.0	50.4	−15.5	−41.1	43.9	249.3	0.8	222
63	0.0	0.875	0.0	47.4	−59.9	26.3	65.4	156.2	3.1	149
64	0.0	0.875	0.125	47.9	−57.3	19.2	60.4	161.4	2.7	157
65	0.0	0.875	0.25	48.6	−53.4	10.5	54.5	168.7	2.4	164
66	0.0	0.875	0.375	49.4	−49.1	1.2	49.2	178.5	3.5	174
67	0.0	0.875	0.5	50.3	−42.8	−10.1	44.0	193.2	4.8	185
68	0.0	0.875	0.625	51.3	−36.6	−19.6	41.6	208.2	5.4	195
69	0.0	0.875	0.75	52.2	−31.2	−27.5	41.6	221.3	4.6	202
70	0.0	0.875	0.875	53.0	−26.2	−34.4	43.3	232.6	4.4	210
71	0.0	0.875	1.0	54.1	−21.1	−41.3	46.4	242.9	0.3	216
72	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	0.0	149
73	0.0	1.0	0.125	50.5	−62.8	21.9	66.5	160.7	0.5	156
74	0.0	1.0	0.25	51.2	−58.9	12.7	60.3	167.7	1.2	162
75	0.0	1.0	0.375	52.0	−54.5	3.1	54.6	176.7	0.6	171
76	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3	0.0	180
77	0.0	1.0	0.625	54.0	−42.3	−18.1	46.1	203.2	0.7	188
78	0.0	1.0	0.75	55.0	−36.0	−27.4	45.3	217.2	1.1	197
79	0.0	1.0	0.875	55.8	−30.7	−34.5	46.2	228.3	0.5	203
80	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	0.0	210

Mean color difference of this page: **delta** $E^{*\prime}$ = **4.2**

n=j	rgb*Md			LabCh*Md				
0	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
2	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
3	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
4	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
5	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
6	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
7	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
8	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
9	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
10	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
11	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
12	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
13	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
14	0.0	0.183	1.0	30.6	18.5	−40.4	44.5	294.6
15	0.0	0.15	1.0	29.5	20.7	−40.4	45.4	297.1
16	0.0	0.133	1.0	28.9	21.8	−40.3	45.8	298.4
17	0.0	0.116	1.0	28.4	22.8	−40.3	46.3	299.5
18	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
19	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
20	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
21	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
22	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
23	0.0	0.383	1.0	37.6	5.6	−40.3	40.7	277.9
24	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
25	0.0	0.266	1.0	33.4	13.2	−40.3	42.4	288.1
26	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
27	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
28	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
29	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
30	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
31	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
32	0.0	0.616	1.0	46.2	−8.9	−40.9	41.8	257.7
33	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
34	0.0	0.416	1.0	38.8	3.6	−40.5	40.6	275.1
35	0.0	0.366	1.0	37.0	6.6	−40.2	40.8	279.3
36	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
37	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
38	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
39	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
40	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
41	0.0	0.816	1.0	52.4	−18.5	−41.3	45.3	245.8
42	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
43	0.0	0.583	1.0	44.9	−6.6	−41.0	41.5	260.7
44	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
45	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
46	0.0	1.0	0.183	50.8	−61.1	17.4	63.6	164.0
47	0.0	1.0	0.383	52.0	−54.2	2.3	54.3	177.5
48	0.0	1.0	0.616	53.9	−42.8	−17.5	46.3	202.2
49	0.0	1.0	0.816	55.4	−33.3	−31.3	45.7	223.1
50	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
51	0.0	0.85	1.0	53.4	−20.0	−41.3	45.9	244.1
52	0.0	0.733	1.0	49.9	−14.7	−41.1	43.6	250.3
53	0.0	0.633	1.0	46.8	−9.8	−40.9	42.1	256.4
54	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
55	0.0	1.0	0.15	50.6	−62.1	19.9	65.2	162.1
56	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
57	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
58	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
59	0.0	1.0	0.85	55.7	−31.8	−33.1	46.0	226.1
60	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
61	0.0	0.866	1.0	53.9	−20.7	−41.3	46.3	243.3
62	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
63	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
64	0.0	1.0	0.133	50.5	−62.5	21.2	66.1	161.2
65	0.0	1.0	0.266	51.3	−58.4	11.3	59.5	168.9
66	0.0	1.0	0.416	52.3	−52.8	−0.8	52.9	180.9
67	0.0	1.0	0.583	53.6	−44.7	−15.0	47.1	198.5
68	0.0	1.0	0.733	54.9	−37.0	−26.3	45.4	215.4
69	0.0	1.0	0.866	55.8	−31.1	−34.0	46.1	227.5
70	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
71	0.0	0.883	1.0	54.3	−21.4	−41.4	46.6	242.6
72	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
73	0.0	1.0	0.116	50.5	−62.9	22.4	66.8	160.4
74	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
75	0.0	1.0	0.366	51.9	−54.9	3.7	55.0	176.1
76	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
77	0.0	1.0	0.633	54.1	−42.0	−18.8	46.0	204.1
78	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
79	0.0	1.0	0.883	55.9	−30.4	−35.0	46.3	229.0
80	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

1−0031931−F0 PE870−7N, Page 20/33−F

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

input: *rgb/cmyk* −> rgb_d
output: transfer to $cmy0_d$

1−0031931−F0

http://130.149.60.45/~farbmetrik/PE87/PE87L0NP.PDF /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 21/33

n	HIC*Fd	rgb_Fd			ict_Fd			$h_{si\_F,d}$	rgb*Fd			LabCh*Fd				
81	R00Y_012_012d	0.125	0.0	0.0	0.125	0.125	0.062	390	0.125	0.0	0.0	27.0	8.8	5.6	10.4	32.3
82	B50R_012_012d	0.125	0.0	0.125	0.125	0.125	0.062	330	0.125	0.0	0.125	27.0	9.9	0.0	9.9	359.8
83	B25R_025_025d	0.125	0.0	0.25	0.25	0.25	0.125	300	0.125	0.0	0.25	27.1	14.6	−5.1	15.5	340.5
84	B15R_037_037d	0.125	0.0	0.375	0.375	0.375	0.187	289	0.118	0.0	0.375	26.8	17.7	−11.0	20.9	328.1
85	B11R_050_050d	0.125	0.0	0.5	0.5	0.5	0.25	284	0.116	0.0	0.5	26.5	20.6	−16.5	26.4	321.1
86	B09R_062_062d	0.125	0.0	0.625	0.625	0.625	0.312	281	0.114	0.0	0.625	26.8	24.2	−21.7	32.5	318.2
87	B07R_075_075d	0.125	0.0	0.75	0.75	0.75	0.375	279	0.112	0.0	0.75	27.1	27.9	−26.8	38.7	316.2
88	B06R_087_087d	0.125	0.0	0.875	0.875	0.875	0.437	278	0.116	0.0	0.875	27.5	31.9	−31.6	44.9	315.2
89	B05R_100_100d	0.125	0.0	1.0	1.0	1.0	0.5	277	0.116	0.0	1.0	27.7	35.6	−36.7	51.1	314.1
90	Y00G_012_012d	0.125	0.125	0.0	0.125	0.125	0.062	90	0.125	0.125	0.0	32.3	−1.2	11.9	12.0	96.1
91	NW_012d	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0
92	B00R_025_012d	0.125	0.125	0.25	0.25	0.125	0.187	270	0.124	0.124	0.25	33.3	3.6	−5.0	6.2	306.2
93	B00R_037_025d	0.125	0.125	0.375	0.375	0.25	0.25	270	0.124	0.124	0.375	33.4	7.3	−10.1	12.5	306.2
94	B00R_050_037d	0.125	0.125	0.5	0.5	0.375	0.312	270	0.124	0.124	0.5	33.5	11.0	−15.1	18.7	306.2
95	B00R_062_050d	0.125	0.125	0.625	0.625	0.5	0.375	270	0.125	0.125	0.625	33.6	14.7	−20.2	25.0	306.2
96	B00R_075_062d	0.125	0.125	0.75	0.75	0.625	0.437	270	0.125	0.125	0.75	33.7	18.4	−25.2	31.3	306.2
97	B00R_087_075d	0.125	0.125	0.875	0.875	0.75	0.5	270	0.125	0.125	0.875	33.8	22.1	−30.3	37.5	306.2
98	B00R_100_087d	0.125	0.125	1.0	1.0	0.875	0.562	270	0.125	0.125	1.0	33.9	25.8	−35.3	43.8	306.2
99	Y50G_025_025d	0.125	0.25	0.0	0.25	0.25	0.125	120	0.125	0.25	0.0	35.9	−7.4	16.6	18.2	114.0
100	G00B_025_012d	0.125	0.25	0.125	0.25	0.125	0.187	150	0.124	0.25	0.124	36.4	−8.1	3.7	8.9	155.5
101	G50B_025_012d	0.125	0.25	0.25	0.25	0.125	0.187	210	0.124	0.25	0.25	37.3	−3.1	−5.1	6.0	238.4
102	G75B_037_025d	0.125	0.25	0.375	0.375	0.25	0.25	240	0.124	0.25	0.375	37.6	−0.3	−10.1	10.1	268.2
103	G84B_050_037d	0.125	0.25	0.5	0.5	0.375	0.312	251	0.124	0.243	0.5	37.3	3.7	−15.1	15.6	283.7
104	G88B_062_050d	0.125	0.25	0.625	0.625	0.5	0.375	256	0.125	0.241	0.625	37.2	7.6	−20.1	21.5	290.8
105	G90B_075_062d	0.125	0.25	0.75	0.75	0.625	0.437	259	0.125	0.239	0.75	37.1	11.6	−25.2	27.8	294.6
106	G92B_087_075d	0.125	0.25	0.875	0.875	0.75	0.5	261	0.125	0.237	0.875	37.1	15.5	−30.3	34.0	297.1
107	G93B_100_087d	0.125	0.25	1.0	1.0	0.875	0.562	262	0.125	0.241	1.0	37.2	19.1	−35.2	40.1	298.4
108	Y68G_037_037d	0.125	0.375	0.0	0.375	0.375	0.187	131	0.118	0.375	0.0	38.6	−15.5	19.9	25.3	127.8
109	G00B_037_025d	0.125	0.375	0.125	0.375	0.25	0.25	150	0.124	0.375	0.124	39.7	−16.2	7.4	17.8	155.5
110	G25B_037_025d	0.125	0.375	0.25	0.375	0.25	0.25	180	0.124	0.375	0.25	40.4	−12.1	−2.0	12.3	189.3
111	G50B_037_025d	0.125	0.375	0.375	0.375	0.25	0.25	210	0.124	0.375	0.375	41.3	−6.3	−10.3	12.1	238.4
112	G65B_050_037d	0.125	0.375	0.5	0.5	0.375	0.312	229	0.124	0.381	0.5	42.2	−4.6	−15.4	16.0	253.3
113	G75B_062_050d	0.125	0.375	0.625	0.625	0.5	0.375	240	0.125	0.375	0.625	41.9	−0.6	−20.3	20.3	268.2
114	G80B_075_062d	0.125	0.375	0.75	0.75	0.625	0.437	247	0.125	0.364	0.75	41.5	3.5	−25.1	25.4	277.9
115	G84B_087_075d	0.125	0.375	0.875	0.875	0.75	0.5	251	0.125	0.362	0.875	41.4	7.4	−30.3	31.2	283.7
116	G86B_100_087d	0.125	0.375	1.0	1.0	0.875	0.562	254	0.125	0.358	1.0	41.2	11.5	−35.2	37.1	288.1
117	Y76G_050_050d	0.125	0.5	0.0	0.5	0.5	0.25	136	0.116	0.5	0.0	41.1	−24.1	22.9	33.2	136.5
118	G00B_050_037d	0.125	0.5	0.125	0.5	0.375	0.312	150	0.124	0.5	0.124	42.9	−24.3	11.1	26.7	155.5
119	G15B_050_037d	0.125	0.5	0.25	0.5	0.375	0.312	169	0.124	0.5	0.243	43.5	−21.3	2.7	21.4	172.5
120	G34B_050_037d	0.125	0.5	0.375	0.5	0.375	0.312	191	0.124	0.5	0.381	44.5	−14.8	−8.5	17.1	209.7
121	G50B_050_037d	0.125	0.5	0.5	0.5	0.375	0.312	210	0.124	0.5	0.5	45.4	−9.5	−15.5	18.2	238.4
122	G61B_062_050d	0.125	0.5	0.625	0.625	0.5	0.375	224	0.125	0.508	0.625	46.5	−8.1	−20.6	22.1	248.4
123	G69B_075_062d	0.125	0.5	0.75	0.75	0.625	0.437	233	0.125	0.51	0.75	46.9	−5.5	−25.5	26.1	257.7
124	G75B_087_075d	0.125	0.5	0.875	0.875	0.75	0.5	240	0.125	0.5	0.875	46.2	−0.9	−30.4	30.5	268.2
125	G79B_100_087d	0.125	0.5	1.0	1.0	0.875	0.562	245	0.125	0.489	1.0	45.9	3.2	−35.4	35.6	275.1
126	Y81G_062_062d	0.125	0.625	0.0	0.625	0.625	0.312	139	0.114	0.625	0.0	44.4	−31.9	26.6	41.5	140.1
127	G00B_062_050d	0.125	0.625	0.125	0.625	0.5	0.375	150	0.125	0.625	0.125	46.1	−32.5	14.8	35.7	155.5
128	G11B_062_050d	0.125	0.625	0.25	0.625	0.5	0.375	164	0.125	0.625	0.241	46.6	−29.7	6.9	30.5	166.8
129	G25B_062_050d	0.125	0.625	0.375	0.625	0.5	0.375	180	0.125	0.625	0.375	47.5	−24.3	−4.0	24.6	189.3
130	G38B_062_050d	0.125	0.625	0.5	0.625	0.5	0.375	196	0.125	0.625	0.508	48.6	−17.7	−14.2	22.7	218.7
131	G50B_062_050d	0.125	0.625	0.625	0.625	0.5	0.375	210	0.125	0.625	0.625	49.4	−12.7	−20.7	24.3	238.4
132	G59B_075_062d	0.125	0.625	0.75	0.75	0.625	0.437	221	0.125	0.635	0.75	50.8	−11.5	−25.8	28.3	245.8
133	G65B_087_075d	0.125	0.625	0.875	0.875	0.75	0.5	229	0.125	0.637	0.875	51.2	−9.2	−30.8	32.1	253.3
134	G70B_100_087d	0.125	0.625	1.0	1.0	0.875	0.562	235	0.125	0.635	1.0	51.2	−5.8	−35.8	36.3	260.7
135	Y85G_075_075d	0.125	0.75	0.0	0.75	0.75	0.375	141	0.112	0.75	0.0	47.6	−39.5	30.2	49.8	142.6
136	G00B_075_062d	0.125	0.75	0.125	0.75	0.625	0.437	150	0.125	0.75	0.125	49.3	−40.6	18.5	44.6	155.5
137	G09B_075_062d	0.125	0.75	0.25	0.75	0.625	0.437	161	0.125	0.75	0.239	49.8	−38.2	10.9	39.7	164.0
138	G19B_075_062d	0.125	0.75	0.375	0.75	0.625	0.437	173	0.125	0.75	0.364	50.6	−33.9	1.4	33.9	177.5
139	G30B_075_062d	0.125	0.75	0.5	0.75	0.625	0.437	187	0.125	0.75	0.51	51.7	−26.7	−10.9	28.9	202.2
140	G40B_075_062d	0.125	0.75	0.625	0.75	0.625	0.437	199	0.125	0.75	0.635	52.7	−20.8	−19.5	28.6	223.1
141	G50B_075_062d	0.125	0.75	0.75	0.75	0.625	0.437	210	0.125	0.75	0.75	53.5	−15.9	−25.9	30.4	238.4
142	G57B_087_075d	0.125	0.75	0.875	0.875	0.75	0.5	219	0.125	0.762	0.875	55.0	−15.0	−31.0	34.4	244.1
143	G63B_100_087d	0.125	0.75	1.0	1.0	0.875	0.562	226	0.125	0.766	1.0	55.6	−12.8	−36.0	38.2	250.3
144	Y86G_087_087d	0.125	0.875	0.0	0.875	0.875	0.437	142	0.116	0.875	0.0	51.1	−46.8	34.2	58.0	143.8
145	G00B_087_075d	0.125	0.875	0.125	0.875	0.75	0.5	150	0.125	0.875	0.125	52.5	−48.7	22.2	53.5	155.5
146	G07B_087_075d	0.125	0.875	0.25	0.875	0.75	0.5	159	0.125	0.875	0.237	53.0	−46.6	14.9	48.9	162.1
147	G15B_087_075d	0.125	0.875	0.375	0.875	0.75	0.5	169	0.125	0.875	0.362	53.7	−42.6	5.5	42.9	172.5
148	G25B_087_075d	0.125	0.875	0.5	0.875	0.75	0.5	180	0.125	0.875	0.5	54.7	−36.5	−6.0	37.0	189.3
149	G34B_087_075d	0.125	0.875	0.625	0.875	0.75	0.5	191	0.125	0.875	0.637	55.8	−29.7	−17.0	34.3	209.7
150	G42B_087_075d	0.125	0.875	0.75	0.875	0.75	0.5	201	0.125	0.875	0.762	56.7	−23.9	−24.8	34.5	226.1
151	G50B_087_075d	0.125	0.875	0.875	0.875	0.75	0.5	210	0.125	0.875	0.875	57.6	−19.1	−31.1	36.5	238.4
152	G56B_100_087d	0.125	0.875	1.0	1.0	0.875	0.562	218	0.125	0.883	1.0	59.1	−18.1	−36.2	40.5	243.3
153	Y88G_100_100d	0.125	1.0	0.0	1.0	1.0	0.5	143	0.116	1.0	0.0	54.4	−54.7	38.0	66.6	145.1
154	G00B_100_087d	0.125	1.0	0.125	1.0	0.875	0.562	150	0.125	1.0	0.125	55.7	−56.8	25.9	62.5	155.5
155	G06B_100_087d	0.125	1.0	0.25	1.0	0.875	0.562	158	0.125	1.0	0.241	56.2	−54.7	18.6	57.8	161.2
156	G13B_100_087d	0.125	1.0	0.375	1.0	0.875	0.562	166	0.125	1.0	0.358	56.8	−51.1	9.9	52.1	168.9
157	G20B_100_087d	0.125	1.0	0.5	1.0	0.875	0.562	175	0.125	1.0	0.489	57.7	−46.2	−0.7	46.2	180.9
158	G29B_100_087d	0.125	1.0	0.625	1.0	0.875	0.562	185	0.125	1.0	0.635	58.9	−39.1	−13.1	41.2	198.5
159	G36B_100_087d	0.125	1.0	0.75	1.0	0.875	0.562	194	0.125	1.0	0.766	60.0	−32.3	−23.0	39.7	215.4
160	G43B_100_087d	0.125	1.0	0.875	1.0	0.875	0.562	202	0.125	1.0	0.883	60.7	−27.2	−29.8	40.3	227.5
161	G50B_100_087d	0.125	1.0	1.0	1.0	0.875	0.562	210	0.125	1.0	1.0	61.6	−22.3	−36.3	42.6	238.4

n	rgb*'Fd			LabCh*'Fd					DE*'Fd	$h_{siM,d}$	rgb*Md			LabCh*Md				
81	0.125	0.0	0.0	26.6	14.6	4.2	15.2	16.1	5.9	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
82	0.125	0.0	0.125	26.7	15.8	0.3	15.8	1.1	5.9	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
83	0.125	0.0	0.25	26.9	17.8	−4.5	18.4	345.8	3.2	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
84	0.125	0.0	0.375	26.6	19.3	−9.3	21.5	334.2	2.3	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
85	0.125	0.0	0.5	27.0	21.7	−15.4	26.6	324.6	1.7	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
86	0.125	0.0	0.625	27.1	25.2	−21.3	33.1	319.7	1.0	279	0.183	0.0	1.0	28.3	38.8	−34.7	52.1	318.2
87	0.125	0.0	0.75	27.4	29.1	−26.9	39.7	317.2	1.2	278	0.15	0.0	1.0	28.1	37.2	−35.7	51.6	316.2
88	0.125	0.0	0.875	27.4	33.0	−32.0	46.0	315.8	1.1	277	0.133	0.0	1.0	27.9	36.4	−36.2	51.3	315.2
89	0.125	0.0	1.0	27.9	36.0	−36.4	51.2	314.7	0.5	276	0.116	0.0	1.0	27.7	35.6	−36.7	51.1	314.1
90	0.125	0.125	0.0	29.6	5.9	7.7	9.7	52.8	8.6	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
91	0.125	0.125	0.125	29.8	7.2	3.6	8.1	26.3	8.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
92	0.125	0.125	0.25	30.0	8.9	−1.7	9.1	349.1	7.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
93	0.125	0.125	0.375	30.4	11.8	−7.5	14.0	327.5	5.9	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
94	0.125	0.125	0.5	30.5	14.5	−14.1	20.3	315.8	4.7	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
95	0.125	0.125	0.625	30.9	17.9	−20.2	27.0	311.4	4.1	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
96	0.125	0.125	0.75	31.5	21.1	−26.2	33.7	308.7	3.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
97	0.125	0.125	0.875	31.5	25.0	−31.5	40.2	308.4	3.8	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
98	0.125	0.125	1.0	32.0	28.2	−36.3	46.0	307.8	3.1	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
99	0.125	0.25	0.0	33.7	−4.5	12.9	13.6	109.2	5.2	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
100	0.125	0.25	0.125	33.9	−3.6	8.3	9.1	113.6	6.9	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
101	0.125	0.25	0.25	34.4	−1.1	1.6	2.0	124.6	7.7	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
102	0.125	0.25	0.375	34.7	1.3	−4.5	4.7	286.1	6.5	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
103	0.125	0.25	0.5	35.0	4.5	−11.8	12.7	291.0	4.1	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
104	0.125	0.25	0.625	35.2	8.5	−18.0	20.0	295.3	2.9	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
105	0.125	0.25	0.75	35.7	12.5	−24.8	27.8	296.7	1.7	260	0.0	0.183	1.0	30.6	18.5	−40.4	44.5	294.6
106	0.125	0.25	0.875	36.1	16.4	−30.6	34.8	298.2	1.3	262	0.0	0.15	1.0	29.5	20.7	−40.4	45.4	297.1
107	0.125	0.25	1.0	36.4	19.7	−35.8	40.8	298.8	1.1	262	0.0	0.133	1.0	28.9	21.8	−40.3	45.8	298.4
108	0.125	0.375	0.0	37.4	−15.0	17.0	22.7	131.3	3.1	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
109	0.125	0.375	0.125	37.6	−12.8	11.7	17.3	137.3	5.9	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
110	0.125	0.375	0.25	38.4	−10.8	5.2	12.0	154.3	7.6	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
111	0.125	0.375	0.375	38.8	−7.8	−2.3	8.2	196.2	8.6	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
112	0.125	0.375	0.5	39.7	−5.2	−9.5	10.8	241.1	6.4	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
113	0.125	0.375	0.625	39.7	−0.9	−16.6	16.6	266.8	4.2	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
114	0.125	0.375	0.75	39.8	4.0	−24.0	24.4	279.5	2.0	247	0.0	0.383	1.0	37.6	5.6	−40.3	40.7	277.9
115	0.125	0.375	0.875	40.3	8.1	−30.2	31.3	285.1	1.3	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
116	0.125	0.375	1.0	40.4	12.6	−35.8	37.9	289.4	1.4	255	0.0	0.266	1.0	33.4	13.2	−40.3	42.4	288.1
117	0.125	0.5	0.0	41.0	−23.7	21.5	32.0	137.7	1.4	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
118	0.125	0.5	0.125	41.5	−21.6	15.4	26.6	144.4	5.3	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
119	0.125	0.5	0.25	42.1	−19.2	8.0	20.8	157.3	5.8	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
120	0.125	0.5	0.375	42.7	−15.8	−0.3	15.8	181.2	8.4	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
121	0.125	0.5	0.5	43.0	−12.4	−8.0	14.7	212.9	8.3	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
122	0.125	0.5	0.625	44.2	−9.4	−15.4	18.1	238.4	5.7	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
123	0.125	0.5	0.75	45.0	−5.2	−22.9	23.4	257.0	3.3	232	0.0	0.616	1.0	46.2	−8.9	−40.9	41.8	257.7
124	0.125	0.5	0.875	45.2	−0.4	−29.7	29.7	269.1	1.4	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
125	0.125	0.5	1.0	45.4	4.0	−35.8	36.1	276.5	1.0	245	0.0	0.416	1.0	38.8	3.6	−40.5	40.6	275.1
126	0.125	0.625	0.0	45.0	−33.3	26.4	42.5	141.5	1.5	140	0.183	1.0	0.0	56.4	−51.0	42.5	66.4	140.1
127	0.125	0.625	0.125	45.9	−30.8	20.2	36.9	146.8	5.6	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
128	0.125	0.625	0.25	46.5	−28.6	12.2	31.1	156.7	5.4	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
129	0.125	0.625	0.375	47.3	−25.2	3.3	25.4	172.4	7.4	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
130	0.125	0.625	0.5	47.9	−21.0	−6.0	21.8	196.1	8.8	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
131	0.125	0.625	0.625	48.5	−17.3	−14.0	22.3	219.1	8.1	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
132	0.125	0.625	0.75	49.8	−13.8	−21.9	25.8	237.7	4.6	219	0.0	0.816	1.0	52.4	−18.5	−41.3	45.3	245.8
133	0.125	0.625	0.875	50.7	−9.3	−29.0	30.4	252.0	1.9	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
134	0.125	0.625	1.0	50.9	−5.1	−35.8	36.2	261.8	0.8	234	0.0	0.583	1.0	44.9	−6.6	−41.0	41.5	260.7
135	0.125	0.75	0.0	48.5	−40.4	30.4	50.6	143.0	1.1	142	0.15	1.0	0.0	55.4	−52.7	40.3	66.4	142.6
136	0.125	0.75	0.125	49.1	−37.9	23.5	44.7	148.1	5.7	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
137	0.125	0.75	0.25	49.9	−35.0	15.2	38.2	156.5	5.3	159	0.0	1.0	0.183	50.8	−61.1	17.4	63.6	164.0
138	0.125	0.75	0.375	50.5	−32.1	6.3	32.7	168.7	5.2	172	0.0	1.0	0.383	52.0	−54.2	2.3	54.3	177.5
139	0.125	0.75	0.5	50.9	−27.7	−4.9	28.1	190.1	6.1	187	0.0	1.0	0.616	53.9	−42.8	−17.5	46.3	202.2
140	0.125	0.75	0.625	52.0	−23.5	−13.7	27.2	210.2	6.4	200	0.0	1.0	0.816	55.4	−33.3	−31.3	45.7	223.1
141	0.125	0.75	0.75	53.0	−19.3	−21.3	28.8	227.8	5.7	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
142	0.125	0.75	0.875	54.4	−15.2	−28.9	32.6	242.2	2.2	217	0.0	0.85	1.0	53.4	−20.0	−41.3	45.9	244.1
143	0.125	0.75	1.0	55.0	−11.1	−35.8	37.5	252.7	1.8	224	0.0	0.733	1.0	49.9	−14.7	−41.1	43.6	250.3
144	0.125	0.875	0.0	51.9	−48.3	35.1	59.8	143.9	1.9	142	0.133	1.0	0.0	54.9	−53.5	39.1	66.3	143.8
145	0.125	0.875	0.125	52.7	−45.7	27.1	53.2	149.2	5.8	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
146	0.125	0.875	0.25	53.6	−42.7	18.2	46.5	156.8	5.0	157	0.0	1.0	0.15	50.6	−62.1	19.9	65.2	162.1
147	0.125	0.875	0.375	54.3	−39.7	8.6	40.6	167.7	4.2	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
148	0.125	0.875	0.5	55.1	−35.7	−2.4	35.8	183.9	3.6	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
149	0.125	0.875	0.625	56.2	−30.3	−13.0	33.0	203.2	4.0	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
150	0.125	0.875	0.75	57.2	−25.6	−21.8	33.6	220.3	3.5	202	0.0	1.0	0.85	55.7	−31.8	−33.1	46.0	226.1
151	0.125	0.875	0.875	58.2	−21.4	−28.4	35.6	232.9	3.6	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
152	0.125	0.875	1.0	59.1	−17.1	−36.0	39.9	244.5	1.0	217	0.0	0.866	1.0	53.9	−20.7	−41.3	46.3	243.3
153	0.125	1.0	0.0	54.7	−53.9	38.5	66.3	144.4	0.9	143	0.116	1.0	0.0	54.4	−54.7	38.0	66.6	145.1
154	0.125	1.0	0.125	55.6	−51.3	30.2	59.5	149.5	7.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
155	0.125	1.0	0.25	56.4	−48.3	20.7	52.5	156.7	6.8	157	0.0	1.0	0.133	50.5	−62.5	21.2	66.1	161.2
156	0.125	1.0	0.375	57.0	−45.6	11.7	47.1	165.6	5.7	164	0.0	1.0	0.266	51.3	−58.4	11.3	59.5	168.9
157	0.125	1.0	0.5	57.5	−42.0	0.4	42.0	179.3	4.4	174	0.0	1.0	0.416	52.3	−52.8	−0.8	52.9	180.9
158	0.125	1.0	0.625	59.1	−35.9	−11.3	37.6	197.4	3.7	185	0.0	1.0	0.583	53.6	−44.7	−15.0	47.1	198.5
159	0.125	1.0	0.75	60.1	−30.8	−21.2	37.4	214.5	2.3	195	0.0	1.0	0.733	54.9	−37.0	−26.3	45.4	215.4
160	0.125	1.0	0.875	61.2	−26.4	−28.4	38.8	227.0	1.6	202	0.0	1.0	0.866	55.8	−31.1	−34.0	46.1	227.5
161	0.125	1.0	1.0	62.0	−21.8	−35.7	41.8	238.5	0.8	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

Mean color difference of this page: delta E*' = 4.2

1-0032031-F0

PE870-7N, Page 21/33-F

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

input: *rgb/cmyk* −> rgb_d
output: transfer to $cmy0_d$

1-0032031-F0

TUB registration: 20150701-PE87/PE87L0NP.PDF /.PS TUB material: code=rha4ta
application for measurement of offset print output, separation cmy0 (CMY0)

http://130.149.60.45/~farbmetrik/PE87/PE87L0NP.PDF /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 22/33

n	HIC*Fd	rgb_Fd			ict_Fd			hsi_F,d	rgb*Fd			LabCh*Fd					rgb*'Fd			LabCh*'Fd					DE*'Fd	hsiM,d	rgb*Md			LabCh*Md				
162	R00Y_025_025d	0.25	0.0	0.0	0.25	0.25	0.125	390	0.25	0.0	0.0	29.6	17.7	11.2	20.9	32.3	0.25	0.0	0.0	28.1	24.0	7.8	25.2	18.0	7.3	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
163	R00Y_025_025d	0.25	0.0	0.125	0.25	0.25	0.125	360	0.25	0.0	0.125	29.7	18.5	5.2	19.2	15.9	0.25	0.0	0.125	28.1	25.5	4.4	25.9	9.7	7.2	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
164	B50R_025_025d	0.25	0.0	0.25	0.25	0.25	0.125	330	0.25	0.0	0.25	29.8	19.8	0.0	19.8	359.8	0.25	0.0	0.25	28.3	27.3	−0.1	27.3	359.7	7.6	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
165	B34R_037_037d	0.25	0.0	0.375	0.375	0.375	0.187	311	0.256	0.0	0.375	30.1	25.5	−4.4	25.9	350.0	0.25	0.0	0.375	28.5	29.3	−4.3	29.6	351.6	4.1	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
166	B25R_050_050d	0.25	0.0	0.5	0.5	0.5	0.25	300	0.25	0.0	0.5	29.9	29.3	−10.3	31.0	340.5	0.25	0.0	0.5	28.5	30.6	−10.4	32.3	341.1	1.9	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
167	B19R_062_062d	0.25	0.0	0.625	0.625	0.625	0.312	293	0.239	0.0	0.625	29.7	32.7	−16.0	36.4	333.8	0.25	0.0	0.625	28.5	32.6	−17.0	36.8	332.3	1.5	292	0.383	0.0	1.0	32.9	52.3	−25.7	58.3	333.8
168	B15R_075_075d	0.25	0.0	0.75	0.75	0.75	0.375	289	0.237	0.0	0.75	29.3	35.5	−22.0	41.8	328.1	0.25	0.0	0.75	28.7	36.0	−23.1	42.8	327.3	1.3	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
169	B13R_087_087d	0.25	0.0	0.875	0.875	0.875	0.437	286	0.233	0.0	0.875	28.7	37.9	−27.8	47.0	323.6	0.25	0.0	0.875	28.6	39.2	−28.1	48.2	324.3	1.3	284	0.266	0.0	1.0	29.4	43.3	−31.8	53.8	323.6
170	B11R_100_100d	0.25	0.0	1.0	1.0	1.0	0.5	284	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1	0.25	0.0	1.0	28.8	41.9	−32.5	53.1	322.1	0.9	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
171	R50Y_025_025d	0.25	0.125	0.0	0.25	0.25	0.125	60	0.25	0.125	0.0	34.5	7.2	17.1	18.6	67.1	0.25	0.125	0.0	31.0	16.0	11.8	19.9	36.4	10.8	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
172	R00Y_025_012d	0.25	0.125	0.125	0.25	0.125	0.187	390	0.25	0.124	0.124	35.9	8.8	5.6	10.4	32.3	0.25	0.125	0.125	31.0	16.8	8.0	18.6	25.3	9.7	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
173	B50R_025_012d	0.25	0.125	0.25	0.25	0.125	0.187	330	0.25	0.124	0.25	36.0	9.9	0.0	9.9	359.8	0.25	0.125	0.25	31.5	18.6	3.2	18.9	9.7	10.3	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
174	B25R_037_025d	0.25	0.125	0.375	0.375	0.25	0.25	300	0.25	0.124	0.375	36.0	14.6	−5.1	15.5	340.5	0.25	0.125	0.375	31.7	20.5	−2.2	20.6	353.7	7.9	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
175	B15R_050_037d	0.25	0.125	0.5	0.5	0.375	0.312	289	0.243	0.124	0.5	35.7	17.7	−11.0	20.9	328.1	0.25	0.125	0.5	31.9	22.3	−9.9	24.4	335.9	6.0	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
176	B11R_062_050d	0.25	0.125	0.625	0.625	0.5	0.375	284	0.241	0.125	0.625	35.4	20.6	−16.5	26.4	321.1	0.25	0.125	0.625	32.1	24.7	−16.1	29.5	326.9	5.3	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
177	B09R_075_062d	0.25	0.125	0.75	0.75	0.625	0.437	281	0.239	0.125	0.75	35.7	24.2	−21.7	32.5	318.2	0.25	0.125	0.75	32.4	28.2	−22.2	35.9	321.8	5.1	279	0.183	0.0	1.0	28.3	38.8	−34.7	52.1	318.2
178	B07R_087_075d	0.25	0.125	0.875	0.875	0.75	0.5	279	0.237	0.125	0.875	36.0	27.9	−26.8	38.7	316.2	0.25	0.125	0.875	32.8	30.9	−27.8	41.6	318.0	4.5	278	0.15	0.0	1.0	28.1	37.2	−35.7	51.6	316.2
179	B06R_100_087d	0.25	0.125	1.0	1.0	0.875	0.562	278	0.241	0.125	1.0	36.4	31.9	−31.6	44.9	315.2	0.25	0.125	1.0	33.1	33.9	−32.5	47.0	316.2	3.9	277	0.133	0.0	1.0	27.9	36.4	−36.2	51.3	315.2
180	Y00G_025_025d	0.25	0.25	0.0	0.25	0.25	0.125	90	0.25	0.25	0.0	40.2	−2.5	23.8	24.0	96.1	0.25	0.25	0.0	35.1	5.0	17.5	18.2	74.0	11.1	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
181	Y00G_025_012d	0.25	0.25	0.125	0.25	0.125	0.187	90	0.25	0.25	0.124	41.2	−1.2	11.9	12.0	96.1	0.25	0.25	0.125	35.4	5.7	13.1	14.3	66.3	9.1	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
182	NW_025d	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0	0.25	0.25	0.25	35.7	7.5	7.1	10.4	43.4	12.2	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
183	B00R_037_012d	0.25	0.25	0.375	0.375	0.125	0.312	270	0.249	0.249	0.375	42.2	3.6	−5.0	6.2	306.2	0.25	0.25	0.375	36.3	9.3	0.7	9.4	4.5	10.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
184	B00R_050_025d	0.25	0.25	0.5	0.5	0.25	0.375	270	0.249	0.249	0.5	42.3	7.3	−10.1	12.5	306.2	0.25	0.25	0.5	36.4	12.3	−6.8	14.1	330.9	8.3	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
185	B00R_062_037d	0.25	0.25	0.625	0.625	0.375	0.437	270	0.25	0.25	0.625	42.4	11.0	−15.1	18.7	306.2	0.25	0.25	0.625	37.0	15.5	−14.0	20.9	318.0	7.1	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
186	B00R_075_050d	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.25	0.75	42.5	14.7	−20.2	25.0	306.2	0.25	0.25	0.75	37.5	18.9	−20.4	27.9	312.8	6.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
187	B00R_087_062d	0.25	0.25	0.875	0.875	0.625	0.562	270	0.25	0.25	0.875	42.6	18.4	−25.2	31.3	306.2	0.25	0.25	0.875	38.0	22.0	−26.5	34.4	309.7	5.9	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
188	B00R_100_075d	0.25	0.25	1.0	1.0	0.75	0.625	270	0.25	0.25	1.0	42.7	22.1	−30.3	37.5	306.2	0.25	0.25	1.0	38.2	25.3	−31.6	40.5	308.7	5.6	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
189	Y31G_037_037d	0.25	0.375	0.0	0.375	0.375	0.187	109	0.256	0.375	0.0	44.4	−7.9	29.8	30.8	104.9	0.25	0.375	0.0	39.4	−4.2	23.2	23.6	100.4	9.0	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
190	Y50G_037_025d	0.25	0.375	0.125	0.375	0.25	0.25	120	0.25	0.375	0.124	44.8	−7.4	16.6	18.2	114.0	0.25	0.375	0.125	39.4	−3.5	17.7	18.1	101.1	6.7	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
191	G00B_037_012d	0.25	0.375	0.25	0.375	0.125	0.312	150	0.249	0.375	0.249	45.4	−8.1	3.7	8.9	155.5	0.25	0.375	0.25	40.0	−1.6	10.9	11.0	98.5	11.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
192	G50B_037_012d	0.25	0.375	0.375	0.375	0.125	0.312	210	0.249	0.375	0.375	46.2	−3.1	−5.1	6.0	238.4	0.25	0.375	0.375	40.5	0.2	4.0	4.0	87.0	11.3	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
193	G75B_050_025d	0.25	0.375	0.5	0.5	0.25	0.375	240	0.249	0.375	0.5	46.5	−0.3	−10.1	10.1	268.2	0.25	0.375	0.5	40.8	3.5	−4.5	5.8	307.8	8.8	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
194	G84B_062_037d	0.25	0.375	0.625	0.625	0.375	0.437	251	0.25	0.368	0.625	46.2	3.7	−15.1	15.6	283.7	0.25	0.375	0.625	40.7	7.2	−11.9	13.9	301.0	7.2	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
195	G88B_075_050d	0.25	0.375	0.75	0.75	0.5	0.5	256	0.25	0.366	0.75	46.1	7.6	−20.1	21.5	290.8	0.25	0.375	0.75	41.7	10.7	−19.4	22.2	299.0	5.4	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
196	G90B_087_062d	0.25	0.375	0.875	0.875	0.625	0.562	259	0.25	0.364	0.875	46.0	11.6	−25.2	27.8	294.6	0.25	0.375	0.875	41.7	14.8	−26.1	30.1	299.6	5.5	260	0.0	0.183	1.0	30.6	18.5	−40.4	44.5	294.6
197	G92B_100_075d	0.25	0.375	1.0	1.0	0.75	0.625	261	0.25	0.362	1.0	46.0	15.5	−30.3	34.0	297.1	0.25	0.375	1.0	42.1	18.3	−31.8	36.7	299.9	5.0	262	0.0	0.15	1.0	29.5	20.7	−40.4	45.4	297.1
198	Y50G_050_050d	0.25	0.5	0.0	0.5	0.5	0.25	120	0.25	0.5	0.0	47.4	−14.8	33.2	36.4	114.0	0.25	0.5	0.0	43.1	−14.1	28.4	31.7	116.4	6.5	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
199	Y68G_050_037d	0.25	0.5	0.125	0.5	0.375	0.312	131	0.243	0.5	0.124	47.5	−15.5	19.9	25.3	127.8	0.25	0.5	0.125	43.2	−13.5	21.7	25.6	121.9	4.9	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
200	G00B_050_025d	0.25	0.5	0.25	0.5	0.25	0.375	150	0.249	0.5	0.249	48.6	−16.2	7.4	17.8	155.5	0.25	0.5	0.25	44.2	−10.9	14.5	18.2	126.7	9.9	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
201	G25B_050_025d	0.25	0.5	0.375	0.5	0.25	0.375	180	0.249	0.5	0.375	49.3	−12.1	−2.0	12.3	189.3	0.25	0.5	0.375	44.9	−8.5	6.8	10.9	141.0	10.5	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
202	G50B_050_025d	0.25	0.5	0.5	0.5	0.25	0.375	210	0.249	0.5	0.5	50.2	−6.3	−10.3	12.1	238.4	0.25	0.5	0.5	45.1	−5.3	−2.5	5.9	205.3	9.3	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
203	G65B_062_037d	0.25	0.5	0.625	0.625	0.375	0.437	229	0.25	0.506	0.625	51.1	−4.6	−15.4	16.0	253.3	0.25	0.5	0.625	46.3	−2.7	−10.5	10.8	255.5	7.1	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
204	G75B_075_050d	0.25	0.5	0.75	0.75	0.5	0.5	240	0.25	0.5	0.75	50.8	−0.6	−20.3	20.3	268.2	0.25	0.5	0.75	46.6	1.2	−18.6	18.6	273.6	4.8	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
205	G80B_087_062d	0.25	0.5	0.875	0.875	0.625	0.562	247	0.25	0.489	0.875	50.4	3.5	−25.1	25.4	277.9	0.25	0.5	0.875	46.6	6.3	−25.4	26.2	283.9	4.7	247	0.0	0.383	1.0	37.6	5.6	−40.3	40.7	277.9
206	G84B_100_075d	0.25	0.5	1.0	1.0	0.75	0.625	251	0.25	0.487	1.0	50.3	7.4	−30.3	31.2	283.7	0.25	0.5	1.0	47.4	9.7	−31.7	33.1	287.1	3.9	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
207	Y61G_062_062d	0.25	0.625	0.0	0.625	0.625	0.312	127	0.239	0.625	0.0	50.4	−22.0	36.7	42.8	120.9	0.25	0.625	0.0	47.5	−24.9	33.3	41.6	126.7	5.2	127	0.383	1.0	0.0	66.0	−35.2	58.8	68.6	120.9
208	Y76G_062_050d	0.25	0.625	0.125	0.625	0.5	0.375	136	0.241	0.625	0.125	50.0	−24.1	22.9	33.2	136.5	0.25	0.625	0.125	47.9	−23.7	26.3	35.4	132.0	4.0	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
209	G00B_062_037d	0.25	0.625	0.25	0.625	0.375	0.437	150	0.25	0.625	0.25	51.8	−24.3	11.1	26.7	155.5	0.25	0.625	0.25	48.7	−21.1	18.4	28.0	138.9	8.5	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
210	G15B_062_037d	0.25	0.625	0.375	0.625	0.375	0.437	169	0.25	0.625	0.368	52.4	−21.3	2.7	21.4	172.5	0.25	0.625	0.375	49.6	−18.5	9.9	21.0	151.7	8.1	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
211	G34B_062_037d	0.25	0.625	0.5	0.625	0.375	0.437	191	0.25	0.625	0.506	53.4	−14.8	−8.5	17.1	209.7	0.25	0.625	0.5	50.2	−15.3	−0.6	15.3	182.4	8.5	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
212	G50B_062_037d	0.25	0.625	0.625	0.625	0.375	0.437	210	0.25	0.625	0.625	54.3	−9.5	−15.5	18.2	238.4	0.25	0.625	0.625	51.0	−11.4	−8.9	14.5	218.0	7.6	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
213	G61B_075_050d	0.25	0.625	0.75	0.75	0.5	0.5	224	0.25	0.633	0.75	55.4	−8.1	−20.6	22.1	248.4	0.25	0.625	0.75	52.3	−8.5	−17.4	19.4	243.9	4.4	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
214	G69B_087_062d	0.25	0.625	0.875	0.875	0.625	0.562	233	0.25	0.635	0.875	55.8	−5.5	−25.5	26.1	257.7	0.25	0.625	0.875	52.8	−4.3	−24.8	25.2	260.0	3.2	232	0.0	0.616	1.0	46.2	−8.9	−40.9	41.8	257.7
215	G75B_100_075d	0.25	0.625	1.0	1.0	0.75	0.625	240	0.25	0.625	1.0	55.1	−0.9	−30.4	30.5	268.2	0.25	0.625	1.0	53.2	0.1	−31.7	31.7	270.2	2.5	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
216	Y68G_075_075d	0.25	0.75	0.0	0.75	0.75	0.375	131	0.237	0.75	0.0	52.8	−31.1	39.9	50.6	127.8	0.25	0.75	0.0	51.1	−32.9	37.5	49.9	131.2	3.4	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
217	Y81G_075_062d	0.25	0.75	0.125	0.75	0.625	0.437	139	0.239	0.75	0.125	53.3	−31.9	26.6	41.5	140.1	0.25	0.75	0.125	51.9	−31.2	30.6	43.7	135.5	4.3	140	0.183	1.0	0.0	56.4	−51.0	42.5	66.4	140.1
218	G00B_075_050d	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.25	55.0	−32.5	14.8	35.7	155.5	0.25	0.75	0.25	53.0	−27.9	21.7	35.3	142.0	8.5	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
219	G11B_075_050d	0.25	0.75	0.375	0.75	0.5	0.5	164	0.25	0.75	0.366	55.5	−29.7	6.9	30.5	166.8	0.25	0.75	0.375	53.6	−25.5	12.8	28.5	153.1	7.5	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
220	G25B_075_050d	0.25	0.75	0.5	0.75	0.5	0.5	180	0.25	0.75	0.5	56.4	−24.3	−4.0	24.6	189.3	0.25	0.75	0.5	54.3	−22.4	1.6	22.5	175.7	6.3	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
221	G38B_075_050d	0.25	0.75	0.625	0.75	0.5	0.5	196	0.25	0.75	0.633	57.5	−17.7	−14.2	22.7	218.7	0.25	0.75	0.625	55.4	−18.1	−8.0	19.8	203.9	6.5	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
222	G50B_075_050d	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.75	58.4	−12.7	−20.7	24.3	238.4	0.25	0.75	0.75	55.9	−14.3	−16.3	21.7	228.6	5.3	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
223	G59B_087_062d	0.25	0.75	0.875	0.875	0.625	0.562	221	0.25	0.76	0.875	59.7	−11.5	−25.8	28.3	245.8	0.25	0.75	0.875	57.2	−10.9	−24.3	26.6	245.8	2.9	219	0.0	0.816	1.0	52.4	−18.5	−41.3	45.3	245.8
224	G65B_100_075d	0.25	0.75	1.0	1.0	0.75	0.625	229	0.25	0.762	1.0	60.1	−9.2	−30.8	32.1	253.3	0.25	0.75	1.0	58.2	−6.9	−31.5	32.2	257.5	3.0	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
225	Y73G_087_087d	0.25	0.875	0.0	0.875	0.875	0.437	134	0.233	0.875	0.0	55.0	−40.2	42.4	58.5	133.4	0.25	0.875	0.0	55.3	−41.3	43.0	59.7	133.8	1.3	135	0.266	1.0	0.0	59.3	−45.9	48.5	66.8	133.4
226	Y85G_087_075d	0.25	0.875	0.125	0.875	0.75	0.5	141	0.237	0.875	0.125	56.5	−39.5	30.2	49.8	142.6	0.25	0.875	0.125	56.0	−39.6	34.6	52.6	138.8	4.4	142	0.15	1.0	0.0	55.4	−52.7	40.3	66.4	142.6
227	G00B_087_062d	0.25	0.875	0.25	0.875	0.625	0.562	150	0.25	0.875	0.25	58.2	−40.6	18.5	44.6	155.5	0.25	0.875	0.25	57.6	−36.1	25.5	44.2	144.7	8.3	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
228	G09B_087_062d	0.25	0.875	0.375	0.875	0.625	0.562	161	0.25	0.875	0.364	58.7	−38.2	10.9	39.7	164.0	0.25	0.875	0.375	58.0	−34.0	15.9	37.5	154.8	6.5	159	0.0	1.0	0.183	50.8	−61.1	17.4	63.6	164.0
229	G19B_087_062d	0.25	0.875	0.5	0.875	0.625	0.562	173	0.25	0.875	0.489	59.5	−33.9	1.4	33.9	177.5	0.25	0.875	0.5	58.8	−30.7	5.0	31.1	170.6	4.8	172	0.0	1.0	0.383	52.0	−54.2	2.3	54.3	177.5
230	G30B_087_062d	0.25	0.875	0.625	0.875	0.625	0.562	187	0.25	0.875	0.635	60.6	−26.7	−10.9	28.9	202.2	0.25	0.875	0.625	59.8	−26.2	−6.7	27.1	194.3	4.3	187	0.0	1.0	0.616	53.9	−42.8	−17.5	46.3	202.2
231	G40B_087_062d	0.25	0.875	0.75	0.875	0.625	0.562	199	0.25	0.875	0.76	61.6	−20.8	−19.5	28.6	223.1	0.25	0.875	0.75	61.0	−21.7	−16.2	27.1	216.7	3.4	200	0.0	1.0	0.816	55.4	−33.3	−31.3	45.7	223.1
232	G50B_087_062d	0.25	0.875	0.875	0.875	0.625	0.562	210	0.25	0.875	0.875	62.4	−15.9	−25.9	30.4	238.4	0.25	0.875	0.875	61.9	−17.8	−23.7	29.6	233.0	2.9	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
233	G57B_100_075d	0.25	0.875	1.0	1.0	0.75	0.625	219	0.25	0.887	1.0	63.9	−15.0	−31.0	34.4	244.1	0.25	0.875	1.0	63.0	−14.2	−31.6	34.7	245.7	1.3	217	0.0	0.85	1.0	53.4	−20.0	−41.3	45.9	244.1
234	Y76G_100_100d	0.25	1.0	0.0	1.0	1.0	0.5	136	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5	0.25	1.0	0.0	58.4	−47.3	46.8	66.6	135.3	1.4	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
235	Y86G_100_087d	0.25	1.0	0.125	1.0	0.875	0.562	142	0.241	1.0	0.125	60.0	−46.8	34.2	58.0	143.8	0.25	1.0	0.125	59.2	−45.5	38.1	59.3	140.0	4.1	142	0.133	1.0	0.0	54.9	−53.5	39.1	66.3	143.8
236	G00B_100_075d	0.25	1.0	0.25	1.0	0.75	0.625	150	0.25	1.0	0.25	61.4	−48.7	22.2	53.5	155.5	0.25	1.0	0.25	60.7	−42.2	28.2	50.8	146.2	8.8	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
237	G07B_100_075d	0.25	1.0	0.375	1.0	0.75	0.625	159	0.25	1.0	0.362	61.9	−46.6	14.9	48.9	162.1	0.25	1.0	0.375	61.4	−39.9	18.6	44.0	154.9	7.6	157	0.0	1.0	0.15	50.6	−62.1	19.9	65.2	162.1
238	G15B_100_075d	0.25	1.0	0.5	1.0	0.75	0.625	169	0.25	1.0	0.487	62.6	−42.6	5.5	42.9	172.5	0.25	1.0	0.5	62.1	−36.8	7.1	37.5	169.0	6.0	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
239	G25B_100_075d	0.25	1.0	0.625	1.0	0.75	0.625	180	0.25	1.0	0.625	63.6	−36.5	−6.0	37.0	189.3	0.25	1.0	0.625	63.2	−32.3	−4.5	32.6	187.9	4.4	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
240	G34B_100_075d	0.25	1.0	0.75	1.0	0.75	0.625	191	0.25	1.0	0.762	64.7	−29.7	−17.0	34.3	209.7	0.25	1.0	0.75	64.5	−27.4	−15.5	31.5	209.5	2.8	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
241	G42B_100_075d	0.25	1.0	0.875	1.0	0.75	0.625	201	0.25	1.0	0.887	65.6	−23.9	−24.8	34.5	226.1	0.25	1.0	0.875	65.3	−23.3	−24.0	33.5	225.7	1.0	202	0.0	1.0	0.85	55.7	−31.8	−33.1	46.0	226.1
242	G50B_100_075d	0.25	1.0	1.0	1.0	0.75	0.625	210	0.25	1.0	1.0	66.5	−19.1	−31.1	36.5	238.4	0.25	1.0	1.0	66.5	−19.0	−31.0	36.4	238.5	0.1	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

Mean color difference of this page: delta $E^{*\prime}$ = 5.9

1−0032131−F0

PE870−7N, Page 22/33−F

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

input: *rgb/cmyk* −> *rgb*$_d$
output: transfer to *cmy0*$_d$

see similar files: http://130.149.60.45/~farbmetrik/PE87/PE87.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

1−0032131−F0

http://130.149.60.45/~farbmetrik/PE87/PE87L0NP.PDF /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 23/33

n	HIC*Fd	rgb_Fd			ict_Fd			$h_{si\_F,d}$	rgb*Fd			LabCh*Fd				
243	R00Y_037_037d	0.375	0.0	0.0	0.375	0.375	0.187	390	0.375	0.0	0.0	32.2	26.6	16.8	31.4	32.3
244	R18Y_037_037d	0.375	0.0	0.125	0.375	0.375	0.187	371	0.375	0.0	0.118	32.3	27.2	11.7	29.6	23.2
245	B65R_037_037d	0.375	0.0	0.25	0.375	0.375	0.187	349	0.375	0.0	0.256	32.4	28.6	4.4	29.0	8.9
246	B50R_037_037d	0.375	0.0	0.375	0.375	0.375	0.187	330	0.375	0.0	0.375	32.5	29.7	0.0	29.7	359.8
247	B38R_050_050d	0.375	0.0	0.5	0.5	0.5	0.25	316	0.383	0.0	0.5	33.2	35.8	−4.3	36.0	353.0
248	B30R_062_062d	0.375	0.0	0.625	0.625	0.625	0.312	307	0.385	0.0	0.625	32.8	40.6	−9.0	41.6	347.4
249	B25R_075_075d	0.375	0.0	0.75	0.75	0.75	0.375	300	0.375	0.0	0.75	32.7	43.9	−15.5	46.6	340.5
250	B20R_087_087d	0.375	0.0	0.875	0.875	0.875	0.437	295	0.364	0.0	0.875	32.5	47.4	−21.3	51.9	335.7
251	B18R_100_100d	0.375	0.0	1.0	1.0	1.0	0.5	292	0.366	0.0	1.0	32.5	51.2	−26.5	57.7	332.6
252	R31Y_037_037d	0.375	0.125	0.0	0.375	0.375	0.187	49	0.375	0.118	0.0	36.4	17.1	22.2	28.1	52.2
253	R00Y_037_025d	0.375	0.125	0.125	0.375	0.25	0.25	390	0.375	0.124	0.124	38.5	17.7	11.2	20.9	32.3
254	R00Y_037_025d	0.375	0.125	0.25	0.375	0.25	0.25	360	0.375	0.124	0.25	38.6	18.5	5.2	19.2	15.9
255	B50R_037_025d	0.375	0.125	0.375	0.375	0.25	0.25	330	0.375	0.124	0.375	38.7	19.8	0.0	19.8	359.8
256	B34R_050_037d	0.375	0.125	0.5	0.5	0.375	0.312	311	0.381	0.124	0.5	39.0	25.5	−4.4	25.9	350.0
257	B25R_062_050d	0.375	0.125	0.625	0.625	0.5	0.375	300	0.375	0.125	0.625	38.8	29.3	−10.3	31.0	340.5
258	B19R_075_062d	0.375	0.125	0.75	0.75	0.625	0.437	293	0.364	0.125	0.75	38.6	32.7	−16.0	36.4	333.8
259	B15R_087_075d	0.375	0.125	0.875	0.875	0.75	0.5	289	0.362	0.125	0.875	38.2	35.5	−22.0	41.8	328.1
260	B13R_100_087d	0.375	0.125	1.0	1.0	0.875	0.562	286	0.358	0.125	1.0	37.6	37.9	−27.8	47.0	323.6
261	R68Y_037_037d	0.375	0.25	0.0	0.375	0.375	0.187	71	0.375	0.256	0.0	43.2	4.1	30.1	30.4	82.1
262	R50Y_037_025d	0.375	0.25	0.125	0.375	0.25	0.25	60	0.375	0.25	0.124	43.4	7.2	17.1	18.6	67.1
263	R00Y_037_012d	0.375	0.25	0.25	0.375	0.125	0.312	390	0.375	0.249	0.249	44.8	8.8	5.6	10.4	32.3
264	B50R_037_012d	0.375	0.25	0.375	0.375	0.125	0.312	330	0.375	0.249	0.375	44.9	9.9	0.0	9.9	359.8
265	B25R_050_025d	0.375	0.25	0.5	0.5	0.25	0.375	300	0.375	0.249	0.5	44.9	14.6	−5.1	15.5	340.5
266	B15R_062_037d	0.375	0.25	0.625	0.625	0.375	0.437	289	0.368	0.25	0.625	44.6	17.7	−11.0	20.9	328.1
267	B11R_075_050d	0.375	0.25	0.75	0.75	0.5	0.5	284	0.366	0.25	0.75	44.3	20.6	−16.5	26.4	321.1
268	B09R_087_062d	0.375	0.25	0.875	0.875	0.625	0.562	281	0.364	0.25	0.875	44.6	24.2	−21.7	32.5	318.2
269	B07R_100_075d	0.375	0.25	1.0	1.0	0.75	0.625	279	0.362	0.25	1.0	44.9	27.9	−26.8	38.7	316.2
270	Y00G_037_037d	0.375	0.375	0.0	0.375	0.375	0.187	90	0.375	0.375	0.0	48.1	−3.8	35.8	36.0	96.1
271	Y00G_037_025d	0.375	0.375	0.125	0.375	0.25	0.25	90	0.375	0.375	0.124	49.1	−2.5	23.8	24.0	96.1
272	Y00G_037_012d	0.375	0.375	0.25	0.375	0.125	0.312	90	0.375	0.375	0.249	50.1	−1.2	11.9	12.0	96.1
273	NW_037d	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0
274	B00R_050_012d	0.375	0.375	0.5	0.5	0.125	0.437	270	0.375	0.375	0.5	51.1	3.6	−5.0	6.2	306.2
275	B00R_062_025d	0.375	0.375	0.625	0.625	0.25	0.5	270	0.375	0.375	0.625	51.2	7.3	−10.1	12.5	306.2
276	B00R_075_037d	0.375	0.375	0.75	0.75	0.375	0.562	270	0.375	0.375	0.75	51.3	11.0	−15.1	18.7	306.2
277	B00R_087_050d	0.375	0.375	0.875	0.875	0.5	0.625	270	0.375	0.375	0.875	51.4	14.7	−20.2	25.0	306.2
278	B00R_100_062d	0.375	0.375	1.0	1.0	0.625	0.687	270	0.375	0.375	1.0	51.5	18.4	−25.2	31.3	306.2
279	Y23G_050_050d	0.375	0.5	0.0	0.5	0.5	0.25	104	0.383	0.5	0.0	52.8	−8.5	42.1	43.0	101.4
280	Y31G_050_037d	0.375	0.5	0.125	0.5	0.375	0.312	109	0.381	0.5	0.124	53.3	−7.9	29.8	30.8	104.9
281	Y50G_050_025d	0.375	0.5	0.25	0.5	0.25	0.375	120	0.375	0.5	0.249	53.7	−7.4	16.6	18.2	114.0
282	G00B_050_012d	0.375	0.5	0.375	0.5	0.125	0.437	150	0.375	0.5	0.375	54.3	−8.1	3.7	8.9	155.5
283	G50B_050_012d	0.375	0.5	0.5	0.5	0.125	0.437	210	0.375	0.5	0.5	55.1	−3.1	−5.1	6.0	238.4
284	G75B_062_025d	0.375	0.5	0.625	0.625	0.25	0.5	240	0.375	0.5	0.625	55.4	−0.3	−10.1	10.1	268.2
285	G84B_075_037d	0.375	0.5	0.75	0.75	0.375	0.562	251	0.375	0.493	0.75	55.1	3.7	−15.1	15.6	283.7
286	G88B_087_050d	0.375	0.5	0.875	0.875	0.5	0.625	256	0.375	0.491	0.875	55.0	7.6	−20.1	21.5	290.8
287	G90B_100_062d	0.375	0.5	1.0	1.0	0.625	0.687	259	0.375	0.489	1.0	54.9	11.6	−25.2	27.8	294.6
288	Y38G_062_062d	0.375	0.625	0.0	0.625	0.625	0.312	113	0.385	0.625	0.0	56.0	−15.3	46.9	49.4	108.0
289	Y50G_062_050d	0.375	0.625	0.125	0.625	0.5	0.375	120	0.375	0.625	0.125	56.4	−14.8	33.2	36.4	114.0
290	Y68G_062_037d	0.375	0.625	0.25	0.625	0.375	0.437	131	0.368	0.625	0.25	56.4	−15.5	19.9	25.3	127.8
291	G00B_062_025d	0.375	0.625	0.375	0.625	0.25	0.5	150	0.375	0.625	0.375	57.5	−16.2	7.4	17.8	155.5
292	G25B_062_025d	0.375	0.625	0.5	0.625	0.25	0.5	180	0.375	0.625	0.5	58.2	−12.1	−2.0	12.3	189.3
293	G50B_062_025d	0.375	0.625	0.625	0.625	0.25	0.5	210	0.375	0.625	0.625	59.2	−6.3	−10.3	12.1	238.4
294	G65B_075_037d	0.375	0.625	0.75	0.75	0.375	0.562	229	0.375	0.631	0.75	60.0	−4.6	−15.4	16.0	253.3
295	G75B_087_050d	0.375	0.625	0.875	0.875	0.5	0.625	240	0.375	0.625	0.875	59.7	−0.6	−20.3	20.3	268.2
296	G80B_100_062d	0.375	0.625	1.0	1.0	0.625	0.687	247	0.375	0.614	1.0	59.3	3.5	−25.1	25.4	277.9
297	Y50G_075_075d	0.375	0.75	0.0	0.75	0.75	0.375	120	0.375	0.75	0.0	59.0	−22.2	49.8	54.6	114.0
298	Y61G_075_062d	0.375	0.75	0.125	0.75	0.625	0.437	127	0.364	0.75	0.125	59.3	−22.0	36.7	42.8	120.9
299	Y76G_075_050d	0.375	0.75	0.25	0.75	0.5	0.5	136	0.366	0.75	0.25	58.9	−24.1	22.9	33.2	136.5
300	G00B_075_037d	0.375	0.75	0.375	0.75	0.375	0.562	150	0.375	0.75	0.375	60.7	−24.3	11.1	26.7	155.5
301	G15B_075_037d	0.375	0.75	0.5	0.75	0.375	0.562	169	0.375	0.75	0.493	61.3	−21.3	2.7	21.4	172.5
302	G34B_075_037d	0.375	0.75	0.625	0.75	0.375	0.562	191	0.375	0.75	0.631	62.3	−14.8	−8.5	17.1	209.7
303	G50B_075_037d	0.375	0.75	0.75	0.75	0.375	0.562	210	0.375	0.75	0.75	63.2	−9.5	−15.5	18.2	238.4
304	G61B_087_050d	0.375	0.75	0.875	0.875	0.5	0.625	224	0.375	0.758	0.875	64.3	−8.1	−20.6	22.1	248.4
305	G69B_100_062d	0.375	0.75	1.0	1.0	0.625	0.687	233	0.375	0.76	1.0	64.7	−5.5	−25.5	26.1	257.7
306	Y58G_087_087d	0.375	0.875	0.0	0.875	0.875	0.437	125	0.364	0.875	0.0	61.9	−29.5	53.4	61.1	118.9
307	Y68G_087_075d	0.375	0.875	0.125	0.875	0.75	0.5	131	0.362	0.875	0.125	61.7	−31.1	39.9	50.6	127.8
308	Y81G_087_062d	0.375	0.875	0.25	0.875	0.625	0.562	139	0.364	0.875	0.25	62.2	−31.9	26.6	41.5	140.1
309	G00B_087_050d	0.375	0.875	0.375	0.875	0.5	0.625	150	0.375	0.875	0.375	63.9	−32.5	14.8	35.7	155.5
310	G11B_087_050d	0.375	0.875	0.5	0.875	0.5	0.625	164	0.375	0.875	0.491	64.4	−29.7	6.9	30.5	166.8
311	G25B_087_050d	0.375	0.875	0.625	0.875	0.5	0.625	180	0.375	0.875	0.625	65.4	−24.3	−4.0	24.6	189.3
312	G38B_087_050d	0.375	0.875	0.75	0.875	0.5	0.625	196	0.375	0.875	0.758	66.4	−17.7	−14.2	22.7	218.7
313	G50B_087_050d	0.375	0.875	0.875	0.875	0.5	0.625	210	0.375	0.875	0.875	67.3	−12.7	−20.7	24.3	238.4
314	G59B_100_062d	0.375	0.875	1.0	1.0	0.625	0.687	221	0.375	0.885	1.0	68.6	−11.5	−25.8	28.3	245.8
315	Y63G_100_100d	0.375	1.0	0.0	1.0	1.0	0.5	128	0.366	1.0	0.0	65.2	−36.4	57.6	68.2	122.3
316	Y73G_100_087d	0.375	1.0	0.125	1.0	0.875	0.562	134	0.358	1.0	0.125	63.9	−40.2	42.4	58.5	133.4
317	Y85G_100_075d	0.375	1.0	0.25	1.0	0.75	0.625	141	0.362	1.0	0.25	65.5	−39.5	30.2	49.8	142.6
318	G00B_100_062d	0.375	1.0	0.375	1.0	0.625	0.687	150	0.375	1.0	0.375	67.1	−40.6	18.5	44.6	155.5
319	G09B_100_062d	0.375	1.0	0.5	1.0	0.625	0.687	161	0.375	1.0	0.489	67.6	−38.2	10.9	39.7	164.0
320	G19B_100_062d	0.375	1.0	0.625	1.0	0.625	0.687	173	0.375	1.0	0.614	68.4	−33.9	1.4	33.9	177.5
321	G30B_100_062d	0.375	1.0	0.75	1.0	0.625	0.687	187	0.375	1.0	0.76	69.5	−26.7	−10.9	28.9	202.2
322	G40B_100_062d	0.375	1.0	0.875	1.0	0.625	0.687	199	0.375	1.0	0.885	70.5	−20.8	−19.5	28.6	223.1
323	G50B_100_062d	0.375	1.0	1.0	1.0	0.625	0.687	210	0.375	1.0	1.0	71.3	−15.9	−25.9	30.4	238.4

n	rgb*'Fd			LabCh*'Fd					DE*'Fd	$h_{siM,d}$	rgb*Md			LabCh*Md				
243	0.375	0.0	0.0	31.7	36.2	17.7	40.3	26.1	9.6	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
244	0.375	0.0	0.125	31.6	36.7	13.2	39.0	19.8	9.6	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
245	0.375	0.0	0.25	31.7	38.5	8.1	39.3	11.9	10.5	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
246	0.375	0.0	0.375	31.7	39.8	3.0	39.9	4.3	10.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
247	0.375	0.0	0.5	32.2	42.9	−3.3	43.0	355.5	7.3	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
248	0.375	0.0	0.625	32.4	45.1	−9.5	46.1	348.0	4.5	307	0.616	0.0	1.0	37.9	65.0	−14.5	66.6	347.4
249	0.375	0.0	0.75	32.5	47.1	−15.8	49.6	341.4	3.1	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
250	0.375	0.0	0.875	32.6	49.3	−21.4	53.8	336.5	1.9	294	0.416	0.0	1.0	33.7	54.1	−24.4	59.4	335.7
251	0.375	0.0	1.0	32.7	51.8	−26.0	58.0	333.3	0.8	291	0.366	0.0	1.0	32.5	51.2	−26.5	57.7	332.6
252	0.375	0.125	0.0	34.8	28.0	21.3	35.2	37.3	10.9	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
253	0.375	0.125	0.125	35.1	28.3	16.7	32.9	30.6	12.4	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
254	0.375	0.125	0.25	35.3	29.6	10.7	31.5	19.8	12.7	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
255	0.375	0.125	0.375	35.5	31.2	5.0	31.6	9.2	12.9	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
256	0.375	0.125	0.5	36.2	33.7	−2.3	33.7	355.9	8.9	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
257	0.375	0.125	0.625	36.2	35.2	−9.0	36.3	345.6	6.6	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
258	0.375	0.125	0.75	36.6	37.1	−15.7	40.3	337.0	4.8	292	0.383	0.0	1.0	32.9	52.3	−25.7	58.3	333.8
259	0.375	0.125	0.875	36.9	39.8	−21.4	45.2	331.6	4.5	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
260	0.375	0.125	1.0	36.8	42.2	−26.6	49.9	327.7	4.5	284	0.266	0.0	1.0	29.4	43.3	−31.8	53.8	323.6
261	0.375	0.25	0.0	39.9	16.0	27.6	31.9	59.7	12.6	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
262	0.375	0.25	0.125	39.9	17.1	21.7	27.7	51.6	11.5	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
263	0.375	0.25	0.25	40.0	18.4	15.1	23.9	39.3	14.3	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
264	0.375	0.25	0.375	40.7	19.7	8.1	21.3	22.2	13.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
265	0.375	0.25	0.5	41.2	22.1	−0.1	22.1	359.5	9.7	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
266	0.375	0.25	0.625	41.6	23.9	−7.1	25.0	343.2	7.9	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
267	0.375	0.25	0.75	42.1	26.2	−14.0	29.7	331.7	6.5	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
268	0.375	0.25	0.875	42.9	28.9	−20.3	35.3	324.8	5.1	279	0.183	0.0	1.0	28.3	38.8	−34.7	52.1	318.2
269	0.375	0.25	1.0	43.1	31.3	−26.0	40.7	320.3	3.9	278	0.15	0.0	1.0	28.1	37.2	−35.7	51.6	316.2
270	0.375	0.375	0.0	44.1	6.7	33.2	33.8	78.5	11.5	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
271	0.375	0.375	0.125	44.5	7.0	26.3	27.2	75.0	10.9	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
272	0.375	0.375	0.25	44.7	8.5	18.5	20.4	65.3	12.9	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
273	0.375	0.375	0.375	45.3	10.0	11.0	14.9	47.8	16.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
274	0.375	0.375	0.5	46.1	12.2	2.1	12.3	10.0	12.2	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
275	0.375	0.375	0.625	46.7	14.8	−5.3	15.7	340.2	9.9	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
276	0.375	0.375	0.75	47.4	17.2	−12.5	21.3	323.8	7.7	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
277	0.375	0.375	0.875	48.1	19.9	−19.3	27.7	315.9	6.1	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
278	0.375	0.375	1.0	48.4	23.0	−25.3	34.2	312.3	5.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
279	0.375	0.5	0.0	49.1	−2.0	38.9	38.9	92.9	8.1	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
280	0.375	0.5	0.125	49.5	−1.7	31.0	31.0	93.2	7.3	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
281	0.375	0.5	0.25	49.7	−0.9	22.3	22.3	92.5	9.4	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
282	0.375	0.5	0.375	50.4	0.8	13.6	13.6	86.3	13.9	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
283	0.375	0.5	0.5	51.1	2.9	4.1	5.0	54.4	11.8	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
284	0.375	0.5	0.625	51.7	5.8	−4.1	7.1	324.8	9.3	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
285	0.375	0.5	0.75	52.4	8.7	−11.9	14.7	306.3	6.5	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
286	0.375	0.5	0.875	52.9	12.1	−18.6	22.2	303.1	5.1	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
287	0.375	0.5	1.0	53.6	15.1	−25.2	29.4	301.0	3.8	260	0.0	0.183	1.0	30.6	18.5	−40.4	44.5	294.6
288	0.375	0.625	0.0	54.2	−12.9	44.7	46.5	106.1	3.7	112	0.616	1.0	0.0	75.0	−24.4	75.1	79.0	108.0
289	0.375	0.625	0.125	54.5	−12.7	36.0	38.2	109.5	3.9	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
290	0.375	0.625	0.25	54.9	−11.6	26.1	28.6	114.0	7.3	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
291	0.375	0.625	0.375	55.9	−9.5	17.1	19.6	119.2	11.9	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
292	0.375	0.625	0.5	56.6	−7.0	7.0	9.9	134.9	10.5	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
293	0.375	0.625	0.625	57.2	−4.2	−1.9	4.6	204.4	8.9	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
294	0.375	0.625	0.75	58.8	−1.4	−10.4	10.5	261.9	6.0	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
295	0.375	0.625	0.875	59.6	1.8	−17.6	17.7	275.8	3.6	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
296	0.375	0.625	1.0	59.6	5.5	−24.8	25.4	282.6	2.1	247	0.0	0.383	1.0	37.6	5.6	−40.3	40.7	277.9
297	0.375	0.75	0.0	57.8	−21.0	48.5	52.9	113.4	2.1	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
298	0.375	0.75	0.125	58.1	−20.5	39.0	44.1	117.7	2.9	127	0.383	1.0	0.0	66.0	−35.2	58.8	68.6	120.9
299	0.375	0.75	0.25	58.8	−19.1	28.6	34.4	123.7	7.6	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
300	0.375	0.75	0.375	59.8	−16.7	19.6	25.7	130.3	11.5	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
301	0.375	0.75	0.5	60.7	−14.2	9.9	17.3	145.1	10.0	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
302	0.375	0.75	0.625	61.7	−11.2	−1.3	11.3	186.7	8.0	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
303	0.375	0.75	0.75	62.6	−8.1	−9.5	12.5	229.4	6.2	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
304	0.375	0.75	0.875	64.3	−5.6	−17.1	18.0	251.7	4.2	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
305	0.375	0.75	1.0	65.2	−2.3	−24.3	24.4	264.5	3.5	232	0.0	0.616	1.0	46.2	−8.9	−40.9	41.8	257.7
306	0.375	0.875	0.0	62.1	−29.7	53.7	61.4	118.9	0.4	125	0.416	1.0	0.0	67.3	−33.8	61.0	69.8	118.9
307	0.375	0.875	0.125	62.6	−28.9	43.3	52.1	123.7	4.1	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
308	0.375	0.875	0.25	63.2	−27.1	32.3	42.2	130.0	7.5	140	0.183	1.0	0.0	56.4	−51.0	42.5	66.4	140.1
309	0.375	0.875	0.375	64.5	−24.4	21.9	32.8	138.1	10.7	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
310	0.375	0.875	0.5	65.5	−22.3	11.8	25.2	152.1	8.9	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
311	0.375	0.875	0.625	66.7	−18.9	1.0	19.0	176.7	7.5	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
312	0.375	0.875	0.75	67.7	−15.6	−8.7	17.8	209.3	5.9	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
313	0.375	0.875	0.875	68.8	−12.4	−16.2	20.5	232.5	4.7	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
314	0.375	0.875	1.0	69.9	−9.2	−24.1	25.8	249.1	3.2	219	0.0	0.816	1.0	52.4	−18.5	−41.3	45.3	245.8
315	0.375	1.0	0.0	65.7	−35.6	58.3	68.3	121.4	1.2	128	0.366	1.0	0.0	65.2	−36.4	57.6	68.2	122.3
316	0.375	1.0	0.125	65.8	−35.4	46.5	58.5	127.2	6.5	135	0.266	1.0	0.0	59.3	−45.9	48.5	66.8	133.4
317	0.375	1.0	0.25	66.8	−33.2	35.4	48.6	133.1	8.3	142	0.15	1.0	0.0	55.4	−52.7	40.3	66.4	142.6
318	0.375	1.0	0.375	68.2	−30.7	24.8	39.5	140.9	11.8	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
319	0.375	1.0	0.5	69.1	−28.5	14.1	31.8	153.5	10.3	159	0.0	1.0	0.183	50.8	−61.1	17.4	63.6	164.0
320	0.375	1.0	0.625	70.3	−25.3	3.8	25.6	171.3	9.0	172	0.0	1.0	0.383	52.0	−54.2	2.3	54.3	177.5
321	0.375	1.0	0.75	71.7	−21.5	−7.4	22.7	198.9	6.7	187	0.0	1.0	0.616	53.9	−42.8	−17.5	46.3	202.2
322	0.375	1.0	0.875	72.9	−18.0	−16.1	24.1	221.8	5.0	200	0.0	1.0	0.816	55.4	−33.3	−31.3	45.7	223.1
323	0.375	1.0	1.0	73.8	−14.5	−23.5	27.6	238.1	3.7	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

Mean color difference of this page: delta $E^{*\prime}$ = 7.6

1-0032231-F0 PE870-7N, Page 23/33-F

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

input: *rgb/cmyk* −> *rgb*d
output: transfer to *cmy0*d

http://130.149.60.45/~farbmetrik/PE87/PE87L0NP.PDF /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 24/33

n	HIC*Fd	rgb_Fd			ict_Fd			hsi_F,d	rgb*Fd			LabCh*Fd					rgb*'Fd			LabCh*'Fd					DE*'Fd	hsiM,d	rgb*Md			LabCh*Md				
324	R00Y_050_050d	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	34.9	35.4	22.4	41.9	32.3	0.5	0.0	0.0	34.8	44.7	22.4	50.0	26.6	9.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
325	R26Y_050_050d	0.5	0.0	0.125	0.5	0.5	0.25	376	0.5	0.0	0.116	35.0	36.0	17.6	40.1	26.1	0.5	0.0	0.125	34.7	45.7	18.0	49.1	21.5	9.6	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
326	R00Y_050_050d	0.5	0.0	0.25	0.5	0.5	0.25	360	0.5	0.0	0.25	35.1	37.1	10.5	38.5	15.9	0.5	0.0	0.25	34.8	46.7	12.4	48.3	14.9	9.7	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
327	B61R_050_050d	0.5	0.0	0.375	0.5	0.5	0.25	344	0.5	0.0	0.383	35.1	38.6	4.0	38.8	5.9	0.5	0.0	0.375	34.8	48.4	6.7	48.9	7.8	10.1	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
328	B50R_050_050d	0.5	0.0	0.5	0.5	0.5	0.25	330	0.5	0.0	0.5	35.2	39.6	−0.1	39.6	359.8	0.5	0.0	0.5	35.0	49.8	0.6	49.8	0.7	10.2	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
329	B40R_062_062d	0.5	0.0	0.625	0.625	0.625	0.312	319	0.51	0.0	0.625	36.0	45.8	−4.4	46.0	354.4	0.5	0.0	0.625	35.3	52.5	−4.7	52.7	354.8	6.7	320	0.816	0.0	1.0	43.1	73.2	−7.0	73.6	354.4
330	B34R_075_075d	0.5	0.0	0.75	0.75	0.75	0.375	311	0.512	0.0	0.75	35.9	51.0	−8.9	51.8	350.0	0.5	0.0	0.75	35.7	54.4	−10.3	55.4	349.2	3.6	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
331	B29R_087_087d	0.5	0.0	0.875	0.875	0.875	0.437	305	0.51	0.0	0.875	35.6	55.3	−14.3	57.1	345.4	0.5	0.0	0.875	35.8	56.7	−15.7	58.8	344.4	1.9	305	0.583	0.0	1.0	37.2	63.2	−16.4	65.3	345.4
332	B25R_100_100d	0.5	0.0	1.0	1.0	1.0	0.5	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
333	R23Y_050_050d	0.5	0.125	0.0	0.5	0.5	0.25	44	0.5	0.116	0.0	38.7	26.7	27.4	38.2	45.7	0.5	0.125	0.0	38.2	36.5	26.8	45.3	36.2	9.9	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
334	R00Y_050_037d	0.5	0.125	0.125	0.5	0.375	0.312	390	0.5	0.124	0.124	41.1	26.6	16.8	31.4	32.3	0.5	0.125	0.125	38.6	36.6	21.7	42.6	30.7	11.4	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
335	R18Y_050_037d	0.5	0.125	0.25	0.5	0.375	0.312	371	0.5	0.124	0.243	41.2	27.2	11.7	29.6	23.2	0.5	0.125	0.25	38.5	37.3	15.9	40.6	23.1	11.3	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
336	B65R_050_037d	0.5	0.125	0.375	0.5	0.375	0.312	349	0.5	0.124	0.381	41.3	28.6	4.4	29.0	8.9	0.5	0.125	0.375	38.8	39.2	8.8	40.2	12.6	11.7	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
337	B50R_050_037d	0.5	0.125	0.5	0.5	0.375	0.312	330	0.5	0.124	0.5	41.4	29.7	0.0	29.7	359.8	0.5	0.125	0.5	39.3	40.7	1.9	40.8	2.7	11.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
338	B38R_062_050d	0.5	0.125	0.625	0.625	0.5	0.375	316	0.508	0.125	0.625	42.1	35.8	−4.3	36.0	353.0	0.5	0.125	0.625	39.5	42.6	−4.1	42.8	354.3	7.3	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
339	B30R_075_062d	0.5	0.125	0.75	0.75	0.625	0.437	307	0.51	0.125	0.75	41.7	40.6	−9.0	41.6	347.4	0.5	0.125	0.75	40.4	44.7	−10.1	45.8	347.1	4.4	307	0.616	0.0	1.0	37.9	65.0	−14.5	66.6	347.4
340	B25R_087_075d	0.5	0.125	0.875	0.875	0.75	0.5	300	0.5	0.125	0.875	41.7	43.9	−15.5	46.6	340.5	0.5	0.125	0.875	40.2	46.8	−16.1	49.5	340.9	3.3	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
341	B20R_100_087d	0.5	0.125	1.0	1.0	0.875	0.562	295	0.489	0.125	1.0	41.4	47.4	−21.3	51.9	335.7	0.5	0.125	1.0	40.3	48.4	−21.7	53.0	335.8	1.5	294	0.416	0.0	1.0	33.7	54.1	−24.4	59.4	335.7
342	R50Y_050_050d	0.5	0.25	0.0	0.5	0.5	0.25	60	0.5	0.25	0.0	44.6	14.4	34.3	37.2	67.1	0.5	0.25	0.0	43.4	24.2	33.3	41.2	53.9	9.9	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
343	R31Y_050_037d	0.5	0.25	0.125	0.5	0.375	0.312	49	0.5	0.243	0.124	45.3	17.1	22.2	28.1	52.2	0.5	0.25	0.125	43.4	25.3	26.7	36.8	46.5	9.5	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
344	R00Y_050_025d	0.5	0.25	0.25	0.5	0.25	0.375	390	0.5	0.249	0.249	47.4	17.7	11.2	20.9	32.3	0.5	0.25	0.25	44.0	25.7	19.7	32.4	37.4	12.1	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
345	R00Y_050_025d	0.5	0.25	0.375	0.5	0.25	0.375	360	0.5	0.249	0.375	47.5	18.5	5.2	19.2	15.9	0.5	0.25	0.375	44.3	27.0	12.6	29.8	25.1	11.6	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
346	B50R_050_025d	0.5	0.25	0.5	0.5	0.25	0.375	330	0.5	0.249	0.5	47.6	19.8	0.0	19.8	359.8	0.5	0.25	0.5	44.8	28.7	4.6	29.0	9.2	10.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
347	B34R_062_037d	0.5	0.25	0.625	0.625	0.375	0.437	311	0.506	0.25	0.625	47.9	25.5	−4.4	25.9	350.0	0.5	0.25	0.625	45.5	30.6	−2.0	30.7	356.0	6.1	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
348	B25R_075_050d	0.5	0.25	0.75	0.75	0.5	0.5	300	0.5	0.25	0.75	47.8	29.3	−10.3	31.0	340.5	0.5	0.25	0.75	45.9	32.2	−9.6	33.6	343.4	3.5	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
349	B19R_087_062d	0.5	0.25	0.875	0.875	0.625	0.562	293	0.489	0.25	0.875	47.5	32.7	−16.0	36.4	333.8	0.5	0.25	0.875	46.1	34.4	−15.8	37.9	335.2	2.2	292	0.383	0.0	1.0	32.9	52.3	−25.7	58.3	333.8
350	B15R_100_075d	0.5	0.25	1.0	1.0	0.75	0.625	289	0.487	0.25	1.0	47.1	35.5	−22.0	41.8	328.1	0.5	0.25	1.0	46.6	36.7	−21.3	42.4	329.8	1.5	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
351	R76Y_050_050d	0.5	0.375	0.0	0.5	0.5	0.25	76	0.5	0.383	0.0	51.5	2.1	42.3	42.4	87.0	0.5	0.375	0.0	48.2	12.8	39.3	41.4	71.8	11.5	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
352	R68Y_050_037d	0.5	0.375	0.125	0.5	0.375	0.312	71	0.5	0.381	0.124	52.2	4.1	30.1	30.4	82.1	0.5	0.375	0.125	48.7	13.5	32.0	34.7	67.1	10.1	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
353	R50Y_050_025d	0.5	0.375	0.25	0.5	0.25	0.375	60	0.5	0.375	0.249	52.3	7.2	17.1	18.6	67.1	0.5	0.375	0.25	48.7	15.3	23.6	28.1	56.9	10.9	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
354	R00Y_050_012d	0.5	0.375	0.375	0.5	0.125	0.437	390	0.5	0.375	0.375	53.7	8.8	5.6	10.4	32.3	0.5	0.375	0.375	49.3	16.6	15.4	22.7	42.7	13.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
355	B50R_050_012d	0.5	0.375	0.5	0.5	0.125	0.437	330	0.5	0.375	0.5	53.8	9.9	0.0	9.9	359.8	0.5	0.375	0.5	50.0	18.1	6.9	19.4	21.0	11.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
356	B25R_062_025d	0.5	0.375	0.625	0.625	0.25	0.5	300	0.5	0.375	0.625	53.9	14.6	−5.1	15.5	340.5	0.5	0.375	0.625	50.6	20.3	−0.7	20.3	357.8	7.9	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
357	B15R_075_037d	0.5	0.375	0.75	0.75	0.375	0.562	289	0.493	0.375	0.75	53.5	17.7	−11.0	20.9	328.1	0.5	0.375	0.75	51.3	22.1	−8.5	23.7	338.9	5.5	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
358	B11R_087_050d	0.5	0.375	0.875	0.875	0.5	0.625	284	0.491	0.375	0.875	53.2	20.6	−16.5	26.4	321.1	0.5	0.375	0.875	51.7	24.3	−15.1	28.6	328.0	4.2	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
359	B09R_100_062d	0.5	0.375	1.0	1.0	0.625	0.687	281	0.489	0.375	1.0	53.5	24.2	−21.7	32.5	318.2	0.5	0.375	1.0	52.1	26.7	−21.3	34.2	321.4	2.8	279	0.183	0.0	1.0	28.3	38.8	−34.7	52.1	318.2
360	Y00G_050_050d	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.5	0.0	56.1	−5.1	47.7	48.0	96.1	0.5	0.5	0.0	52.6	3.9	44.2	44.3	84.8	10.3	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
361	Y00G_050_037d	0.5	0.5	0.125	0.5	0.375	0.312	90	0.5	0.5	0.124	57.0	−3.8	35.8	36.0	96.1	0.5	0.5	0.125	53.0	4.5	36.2	36.5	82.8	9.3	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
362	Y00G_050_025d	0.5	0.5	0.25	0.5	0.25	0.375	90	0.5	0.5	0.249	58.0	−2.5	23.8	24.0	96.1	0.5	0.5	0.25	53.6	5.7	27.6	28.2	78.1	10.1	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
363	Y00G_050_012d	0.5	0.5	0.375	0.5	0.125	0.437	90	0.5	0.5	0.375	59.0	−1.2	11.9	12.0	96.1	0.5	0.5	0.375	54.5	6.9	19.0	20.2	69.9	11.7	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
364	NW_050d	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	55.1	8.8	9.3	12.8	46.5	13.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
365	B00R_062_012d	0.5	0.5	0.625	0.625	0.125	0.562	270	0.5	0.5	0.625	60.0	3.6	−5.0	6.2	306.2	0.5	0.5	0.625	55.7	11.2	0.8	11.2	4.5	10.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
366	B00R_075_025d	0.5	0.5	0.75	0.75	0.25	0.625	270	0.5	0.5	0.75	60.1	7.3	−10.1	12.5	306.2	0.5	0.5	0.75	56.5	13.3	−7.1	15.1	331.7	7.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
367	B00R_087_037d	0.5	0.5	0.875	0.875	0.375	0.687	270	0.5	0.5	0.875	60.2	11.0	−15.1	18.7	306.2	0.5	0.5	0.875	57.2	15.8	−14.2	21.3	318.1	5.7	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
368	B00R_100_050d	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.5	1.0	60.3	14.7	−20.2	25.0	306.2	0.5	0.5	1.0	57.9	18.3	−20.7	27.7	311.4	4.3	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
369	Y18G_062_062d	0.5	0.625	0.0	0.625	0.625	0.312	101	0.51	0.625	0.0	60.8	−9.7	54.1	55.0	100.2	0.5	0.625	0.0	58.2	−6.1	51.8	52.1	96.8	5.0	99	0.816	1.0	0.0	82.6	−15.6	86.6	88.0	100.2
370	Y23G_062_050d	0.5	0.625	0.125	0.625	0.5	0.375	104	0.508	0.625	0.125	61.7	−8.5	42.1	43.0	101.4	0.5	0.625	0.125	58.8	−5.8	42.5	42.9	97.8	3.9	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
371	Y31G_062_037d	0.5	0.625	0.25	0.625	0.375	0.437	109	0.506	0.625	0.25	62.2	−7.9	29.8	30.8	104.9	0.5	0.625	0.25	59.3	−4.8	32.3	32.7	98.5	4.9	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
372	Y50G_062_025d	0.5	0.625	0.375	0.625	0.25	0.5	120	0.5	0.625	0.375	62.6	−7.4	16.6	18.2	114.0	0.5	0.625	0.375	59.7	−3.4	22.2	22.4	98.7	7.4	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
373	G00B_062_012d	0.5	0.625	0.5	0.625	0.125	0.562	150	0.5	0.625	0.5	63.2	−8.1	3.7	8.9	155.5	0.5	0.625	0.5	60.6	−1.5	12.5	12.6	96.8	11.3	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
374	G50B_062_012d	0.5	0.625	0.625	0.625	0.125	0.562	210	0.5	0.625	0.625	64.0	−3.1	−5.1	6.0	238.4	0.5	0.625	0.625	61.5	0.8	3.2	3.3	75.1	9.7	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
375	G75B_075_025d	0.5	0.625	0.75	0.75	0.25	0.625	240	0.5	0.625	0.75	64.3	−0.3	−10.1	10.1	268.2	0.5	0.625	0.75	62.5	3.3	−5.3	6.2	301.9	6.3	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
376	G84B_087_037d	0.5	0.625	0.875	0.875	0.375	0.687	251	0.5	0.618	0.875	64.0	3.7	−15.1	15.6	283.7	0.5	0.625	0.875	63.0	6.3	−13.2	14.7	295.4	3.3	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
377	G88B_100_050d	0.5	0.625	1.0	1.0	0.5	0.75	256	0.5	0.616	1.0	63.9	7.6	−20.1	21.5	290.8	0.5	0.625	1.0	63.6	9.5	−20.1	22.3	295.2	1.8	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
378	Y31G_075_075d	0.5	0.75	0.0	0.75	0.75	0.375	109	0.512	0.75	0.0	64.4	−15.8	59.6	61.6	104.9	0.5	0.75	0.0	62.5	−13.9	56.8	58.5	103.8	3.8	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
379	Y38G_075_062d	0.5	0.75	0.125	0.75	0.625	0.437	113	0.51	0.75	0.125	64.9	−15.3	46.9	49.4	108.0	0.5	0.75	0.125	63.2	−13.1	47.0	48.8	105.6	2.6	112	0.616	1.0	0.0	75.0	−24.4	75.1	79.0	108.0
380	Y50G_075_050d	0.5	0.75	0.25	0.75	0.5	0.5	120	0.5	0.75	0.25	65.3	−14.8	33.2	36.4	114.0	0.5	0.75	0.25	63.2	−12.6	35.5	37.7	109.6	3.7	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
381	Y68G_075_037d	0.5	0.75	0.375	0.75	0.375	0.562	131	0.493	0.75	0.375	65.3	−15.5	19.9	25.3	127.8	0.5	0.75	0.375	63.8	−11.2	24.9	27.3	114.2	6.7	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
382	G00B_075_025d	0.5	0.75	0.5	0.75	0.25	0.625	150	0.5	0.75	0.5	66.4	−16.2	7.4	17.8	155.5	0.5	0.75	0.5	65.3	−8.8	14.7	17.1	120.9	10.4	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
383	G25B_075_025d	0.5	0.75	0.625	0.75	0.25	0.625	180	0.5	0.75	0.625	67.1	−12.1	−2.0	12.3	189.3	0.5	0.75	0.625	66.0	−6.3	5.0	8.1	141.1	9.2	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
384	G50B_075_025d	0.5	0.75	0.75	0.75	0.25	0.625	210	0.5	0.75	0.75	68.1	−6.3	−10.3	12.1	238.4	0.5	0.75	0.75	66.9	−3.4	−4.3	5.5	231.2	6.8	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
385	G65B_087_037d	0.5	0.75	0.875	0.875	0.375	0.687	229	0.5	0.756	0.875	68.9	−4.6	−15.4	16.0	253.3	0.5	0.75	0.875	68.2	−1.2	−12.1	12.2	263.9	4.6	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
386	G75B_100_050d	0.5	0.75	1.0	1.0	0.5	0.75	240	0.5	0.75	1.0	68.6	−0.6	−20.3	20.3	268.2	0.5	0.75	1.0	69.0	1.8	−19.7	19.8	275.2	2.5	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
387	Y41G_087_087d	0.5	0.875	0.0	0.875	0.875	0.437	115	0.51	0.875	0.0	67.5	−22.8	63.6	67.6	109.7	0.5	0.875	0.0	67.4	−22.7	62.6	66.6	109.9	1.0	114	0.583	1.0	0.0	73.7	−26.1	72.7	77.2	109.7
388	Y50G_087_075d	0.5	0.875	0.125	0.875	0.75	0.5	120	0.5	0.875	0.125	67.9	−22.2	49.8	54.6	114.0	0.5	0.875	0.125	67.5	−22.5	51.0	55.8	113.8	1.3	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
389	Y61G_087_062d	0.5	0.875	0.25	0.875	0.625	0.562	127	0.489	0.875	0.25	68.2	−22.0	36.7	42.8	120.9	0.5	0.875	0.25	67.7	−21.8	39.0	44.7	119.1	2.3	127	0.383	1.0	0.0	66.0	−35.2	58.8	68.6	120.9
390	Y76G_087_050d	0.5	0.875	0.375	0.875	0.5	0.625	136	0.491	0.875	0.375	67.8	−24.1	22.9	33.2	136.5	0.5	0.875	0.375	68.8	−20.0	27.8	34.3	125.6	6.5	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
391	G00B_087_037d	0.5	0.875	0.5	0.875	0.375	0.687	150	0.5	0.875	0.5	69.6	−24.3	11.1	26.7	155.5	0.5	0.875	0.5	70.0	−17.4	16.9	24.3	135.7	9.1	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
392	G15B_087_037d	0.5	0.875	0.625	0.875	0.375	0.687	169	0.5	0.875	0.618	70.2	−21.3	2.7	21.4	172.5	0.5	0.875	0.625	71.1	−14.7	6.9	16.3	154.7	7.8	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
393	G34B_087_037d	0.5	0.875	0.75	0.875	0.375	0.687	191	0.5	0.875	0.756	71.3	−14.8	−8.5	17.1	209.7	0.5	0.875	0.75	72.4	−11.6	−3.5	12.2	196.9	6.0	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
394	G50B_087_037d	0.5	0.875	0.875	0.875	0.375	0.687	210	0.5	0.875	0.875	72.1	−9.5	−15.5	18.2	238.4	0.5	0.875	0.875	73.5	−8.9	−11.4	14.5	231.9	4.3	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
395	G61B_100_050d	0.5	0.875	1.0	1.0	0.5	0.75	224	0.5	0.883	1.0	73.2	−8.1	−20.6	22.1	248.4	0.5	0.875	1.0	74.6	−6.0	−19.4	20.3	252.6	2.7	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
396	Y50G_100_100d	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
397	Y58G_100_087d	0.5	1.0	0.125	1.0	0.875	0.562	125	0.489	1.0	0.125	70.8	−29.5	53.4	61.1	118.9	0.5	1.0	0.125	70.8	−29.2	54.6	61.9	118.1	1.1	125	0.416	1.0	0.0	67.3	−33.8	61.0	69.8	118.9
398	Y68G_100_075d	0.5	1.0	0.25	1.0	0.75	0.625	131	0.487	1.0	0.25	70.6	−31.1	39.9	50.6	127.8	0.5	1.0	0.25	71.4	−28.0	42.3	50.8	123.5	3.9	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
399	Y81G_100_062d	0.5	1.0	0.375	1.0	0.625	0.687	139	0.489	1.0	0.375	71.1	−31.9	26.6	41.5	140.1	0.5	1.0	0.375	72.3	−26.4	31.2	40.9	130.3	7.2	140	0.183	1.0	0.0	56.4	−51.0	42.5	66.4	140.1
400	G00B_100_050d	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.5	72.8	−32.5	14.8	35.7	155.5	0.5	1.0	0.5	73.9	−23.7	19.9	31.0	140.0	10.1	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
401	G11B_100_050d	0.5	1.0	0.625	1.0	0.5	0.75	164	0.5	1.0	0.616	73.3	−29.7	6.9	30.5	166.8	0.5	1.0	0.625	75.1	−21.0	9.4	23.1	155.8	9.2	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
402	G25B_100_050d	0.5	1.0	0.75	1.0	0.5	0.75	180	0.5	1.0	0.75	74.3	−24.3	−4.0	24.6	189.3	0.5	1.0	0.75	76.3	−18.0	−1.1	18.1	183.7	7.1	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
403	G38B_100_050d	0.5	1.0	0.875	1.0	0.5	0.75	196	0.5	1.0	0.883	75.3	−17.7	−14.2	22.7	218.7	0.5	1.0	0.875	77.5	−14.9	−10.4	18.2	215.0	5.1	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
404	G50B_100_050d	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	1.0	76.2	−12.7	−20.7	24.3	238.4	0.5	1.0	1.0	78.7	−11.6	−18.3	21.7	237.6	3.6	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

Mean color difference of this page: delta $E^{*\prime}$ = 6.8

1−0032331−F0 PE870−7N, Page 24/33−F

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

input: $rgb/cmyk \rightarrow rgb_d$
output: transfer to $cmy0_d$

1−0032331−F0

TUB registration: 20150701-PE87/PE87L0NP.PDF /.PS
application for measurement of offset print output, separation cmy0 (CMY0)
TUB material: code=rha4ta

n	HIC*Fd	rgb_Fd			ict_Fd			hsi_F,d	rgb*Fd			LabCh*Fd					rgb*'Fd			LabCh*'Fd					DE*'Fd	hsiM,d	rgb*Md			LabCh*Md				
405	R00Y_062_062d	0.625	0.0	0.0	0.625	0.625	0.312	390	0.625	0.0	0.0	37.5	44.3	28.0	52.4	32.3	0.625	0.0	0.0	37.2	53.3	28.6	60.5	28.2	9.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
406	R31Y_062_062d	0.625	0.0	0.125	0.625	0.625	0.312	379	0.625	0.0	0.114	37.6	44.9	23.4	50.6	27.5	0.625	0.0	0.125	37.4	54.0	24.4	59.3	24.3	9.2	380	1.0	0.0	0.183	45.5	71.8	37.5	81.0	27.5
407	R11Y_062_062d	0.625	0.0	0.25	0.625	0.625	0.312	367	0.625	0.0	0.239	37.7	45.6	17.4	48.8	20.8	0.625	0.0	0.25	37.3	54.8	19.5	58.2	19.6	9.4	367	1.0	0.0	0.383	45.8	73.0	27.8	78.2	20.8
408	B69R_062_062d	0.625	0.0	0.375	0.625	0.625	0.312	353	0.625	0.0	0.385	37.8	47.2	9.5	48.1	11.4	0.625	0.0	0.375	37.4	56.1	13.0	57.6	13.0	9.5	352	1.0	0.0	0.616	46.0	75.5	15.2	77.1	11.4
409	B59R_062_062d	0.625	0.0	0.5	0.625	0.625	0.312	341	0.625	0.0	0.51	37.8	48.6	3.9	48.7	4.6	0.625	0.0	0.5	37.4	57.9	6.5	58.2	6.4	9.6	339	1.0	0.0	0.816	45.9	77.7	6.2	78.0	4.6
410	B50R_062_062d	0.625	0.0	0.625	0.625	0.625	0.312	330	0.625	0.0	0.625	37.9	49.5	−0.1	49.5	359.8	0.625	0.0	0.625	37.4	59.3	1.1	59.3	1.0	9.8	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
411	B42R_075_075d	0.625	0.0	0.75	0.75	0.75	0.375	321	0.637	0.0	0.75	38.9	55.7	−4.4	55.9	355.4	0.625	0.0	0.75	37.9	61.6	−4.2	61.8	356.0	5.9	322	0.85	0.0	1.0	43.7	74.3	−5.9	74.6	355.4
412	B36R_087_087d	0.625	0.0	0.875	0.875	0.875	0.437	314	0.641	0.0	0.875	39.2	61.5	−8.7	62.1	351.9	0.625	0.0	0.875	38.3	64.0	−9.1	64.6	351.8	2.6	315	0.733	0.0	1.0	41.3	70.3	−9.9	71.0	351.9
413	B31R_100_100d	0.625	0.0	1.0	1.0	1.0	0.5	308	0.633	0.0	1.0	38.3	65.8	−13.7	67.2	348.2	0.625	0.0	1.0	38.1	65.4	−14.0	66.9	347.9	0.5	308	0.633	0.0	1.0	38.3	65.8	−13.7	67.2	348.2
414	R18Y_062_062d	0.625	0.125	0.0	0.625	0.625	0.312	41	0.625	0.114	0.0	41.1	36.1	32.8	48.8	42.2	0.625	0.125	0.0	40.5	45.1	32.7	55.7	35.9	9.0	39	1.0	0.183	0.0	51.1	57.8	52.5	78.1	42.2
415	R00Y_062_050d	0.625	0.125	0.125	0.625	0.5	0.375	390	0.625	0.125	0.125	43.8	35.4	22.4	41.9	32.3	0.625	0.125	0.125	41.0	44.9	28.0	53.0	31.9	11.3	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
416	R26Y_062_050d	0.625	0.125	0.25	0.625	0.5	0.375	376	0.625	0.125	0.241	43.9	36.0	17.6	40.1	26.1	0.625	0.125	0.25	41.0	45.8	22.3	51.0	25.9	11.2	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
417	R00Y_062_050d	0.625	0.125	0.375	0.625	0.5	0.375	360	0.625	0.125	0.375	44.0	37.1	10.5	38.5	15.9	0.625	0.125	0.375	41.1	47.2	15.5	49.7	18.2	11.6	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
418	B61R_062_050d	0.625	0.125	0.5	0.625	0.5	0.375	344	0.625	0.125	0.508	44.0	38.6	4.0	38.8	5.9	0.625	0.125	0.5	41.4	48.6	7.7	49.3	9.0	11.0	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
419	B50R_062_050d	0.625	0.125	0.625	0.625	0.5	0.375	330	0.625	0.125	0.625	44.1	39.6	−0.1	39.6	359.8	0.625	0.125	0.625	41.7	50.4	1.6	50.4	1.8	11.1	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
420	B40R_075_062d	0.625	0.125	0.75	0.75	0.625	0.437	319	0.635	0.125	0.75	44.9	45.8	−4.4	46.0	354.4	0.625	0.125	0.75	42.7	52.1	−4.3	52.3	355.2	6.7	320	0.816	0.0	1.0	43.1	73.2	−7.0	73.6	354.4
421	B34R_087_075d	0.625	0.125	0.875	0.875	0.75	0.5	311	0.637	0.125	0.875	44.8	51.0	−8.9	51.8	350.0	0.625	0.125	0.875	42.7	54.6	−10.3	55.5	349.2	4.3	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
422	B29R_100_087d	0.625	0.125	1.0	1.0	0.875	0.562	305	0.635	0.125	1.0	44.5	55.3	−14.3	57.1	345.4	0.625	0.125	1.0	43.0	56.2	−15.1	58.2	344.9	1.9	305	0.583	0.0	1.0	37.2	63.2	−16.4	65.3	345.4
423	R38Y_062_062d	0.625	0.25	0.0	0.625	0.625	0.312	53	0.625	0.239	0.0	46.3	24.7	39.1	46.2	57.6	0.625	0.25	0.0	45.1	34.1	38.7	51.6	48.5	9.5	52	1.0	0.383	0.0	59.5	39.5	62.5	74.0	57.6
424	R23Y_062_050d	0.625	0.25	0.125	0.625	0.5	0.375	44	0.625	0.241	0.125	47.6	26.7	27.4	38.2	45.7	0.625	0.25	0.125	45.7	34.0	33.2	47.6	44.3	9.6	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
425	R00Y_062_037d	0.625	0.25	0.25	0.625	0.375	0.437	390	0.625	0.25	0.25	50.1	26.6	16.8	31.4	32.3	0.625	0.25	0.25	46.1	34.0	26.2	43.0	37.6	12.6	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
426	R18Y_062_037d	0.625	0.25	0.375	0.625	0.375	0.437	371	0.625	0.25	0.368	50.2	27.2	11.7	29.6	23.2	0.625	0.25	0.375	46.5	35.2	19.1	40.1	28.4	11.4	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
427	B65R_062_037d	0.625	0.25	0.5	0.625	0.375	0.437	349	0.625	0.25	0.506	50.2	28.6	4.4	29.0	8.9	0.625	0.25	0.5	46.9	37.0	10.1	38.4	15.3	10.6	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
428	B50R_062_037d	0.625	0.25	0.625	0.625	0.375	0.437	330	0.625	0.25	0.625	50.3	29.7	0.0	29.7	359.8	0.625	0.25	0.625	47.5	38.1	3.1	38.3	4.7	9.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
429	B38R_075_050d	0.625	0.25	0.75	0.75	0.5	0.5	316	0.633	0.25	0.75	51.0	35.8	−4.3	36.0	353.0	0.625	0.25	0.75	48.6	39.4	−3.6	39.6	354.7	4.4	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
430	B30R_087_062d	0.625	0.25	0.875	0.875	0.625	0.562	307	0.635	0.25	0.875	50.6	40.6	−9.0	41.6	347.4	0.625	0.25	0.875	49.0	42.1	−9.7	43.2	346.9	2.2	307	0.616	0.0	1.0	37.9	65.0	−14.5	66.6	347.4
431	B25R_100_075d	0.625	0.25	1.0	1.0	0.75	0.625	300	0.625	0.25	1.0	50.6	43.9	−15.5	46.6	340.5	0.625	0.25	1.0	49.1	43.7	−15.5	46.4	340.3	1.5	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
432	R61Y_062_062d	0.625	0.375	0.0	0.625	0.625	0.312	67	0.625	0.385	0.0	53.9	10.2	47.9	49.0	77.8	0.625	0.375	0.0	50.8	21.2	46.0	50.6	65.2	11.5	67	1.0	0.616	0.0	71.6	16.4	76.6	78.4	77.8
433	R50Y_062_050d	0.625	0.375	0.125	0.625	0.5	0.375	60	0.625	0.375	0.125	53.5	14.4	34.3	37.2	67.1	0.625	0.375	0.125	50.7	22.7	38.2	44.5	59.2	9.5	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
434	R31Y_062_037d	0.625	0.375	0.25	0.625	0.375	0.437	49	0.625	0.368	0.25	54.2	17.1	22.2	28.1	52.2	0.625	0.375	0.25	50.9	23.8	30.0	38.3	51.5	10.8	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
435	R00Y_062_025d	0.625	0.375	0.375	0.625	0.25	0.5	390	0.625	0.375	0.375	56.3	17.7	11.2	20.9	32.3	0.625	0.375	0.375	51.6	24.4	22.1	33.0	42.1	13.7	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
436	R00Y_062_025d	0.625	0.375	0.5	0.625	0.25	0.5	360	0.625	0.375	0.5	56.4	18.5	5.2	19.2	15.9	0.625	0.375	0.5	52.0	26.1	13.2	29.2	26.9	11.8	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
437	B50R_062_025d	0.625	0.375	0.625	0.625	0.25	0.5	330	0.625	0.375	0.625	56.5	19.8	0.0	19.8	359.8	0.625	0.375	0.625	52.6	27.8	4.7	28.2	9.6	10.1	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
438	B34R_075_037d	0.625	0.375	0.75	0.75	0.375	0.562	311	0.631	0.375	0.75	56.8	25.5	−4.4	25.9	350.0	0.625	0.375	0.75	53.8	29.6	−2.9	29.8	354.2	5.3	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
439	B25R_087_050d	0.625	0.375	0.875	0.875	0.5	0.625	300	0.625	0.375	0.875	56.7	29.3	−10.3	31.0	340.5	0.625	0.375	0.875	54.2	31.4	−9.8	32.9	342.6	3.3	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
440	B19R_100_062d	0.625	0.375	1.0	1.0	0.625	0.687	293	0.614	0.375	1.0	56.4	32.7	−16.0	36.4	333.8	0.625	0.375	1.0	54.3	32.9	−16.3	36.8	333.5	2.1	292	0.383	0.0	1.0	32.9	52.3	−25.7	58.3	333.8
441	R81Y_062_062d	0.625	0.5	0.0	0.625	0.625	0.312	79	0.625	0.51	0.0	59.7	0.5	54.6	54.6	89.4	0.625	0.5	0.0	55.7	11.1	52.4	53.6	77.9	11.5	80	1.0	0.816	0.0	80.8	0.8	87.3	87.3	89.4
442	R76Y_062_050d	0.625	0.5	0.125	0.625	0.5	0.375	76	0.625	0.508	0.125	60.4	2.1	42.3	42.4	87.0	0.625	0.5	0.125	56.2	11.5	43.8	45.3	75.3	10.3	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
443	R68Y_062_037d	0.625	0.5	0.25	0.625	0.375	0.437	71	0.625	0.506	0.25	61.1	4.1	30.1	30.4	82.1	0.625	0.5	0.25	56.7	12.5	34.7	36.9	70.0	10.5	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
444	R50Y_062_025d	0.625	0.5	0.375	0.625	0.25	0.5	60	0.625	0.5	0.375	61.2	7.2	17.1	18.6	67.1	0.625	0.5	0.375	57.0	14.3	25.0	28.8	60.2	11.4	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
445	R00Y_062_012d	0.625	0.5	0.5	0.625	0.125	0.562	390	0.625	0.5	0.5	62.6	8.8	5.6	10.4	32.3	0.625	0.5	0.5	57.5	16.1	15.5	22.3	44.0	13.3	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
446	B50R_062_012d	0.625	0.5	0.625	0.625	0.125	0.562	330	0.625	0.5	0.625	62.7	9.9	0.0	9.9	359.8	0.625	0.5	0.625	58.3	18.1	6.5	19.3	19.8	11.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
447	B25R_075_025d	0.625	0.5	0.75	0.75	0.25	0.625	300	0.625	0.5	0.75	62.8	14.6	−5.1	15.5	340.5	0.625	0.5	0.75	58.9	19.9	−1.9	19.9	354.3	7.2	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
448	B15R_087_037d	0.625	0.5	0.875	0.875	0.375	0.687	289	0.618	0.5	0.875	62.4	17.7	−11.0	20.9	328.1	0.625	0.5	0.875	59.3	21.8	−9.6	23.8	336.0	5.3	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
449	B11R_100_050d	0.625	0.5	1.0	1.0	0.5	0.75	284	0.616	0.5	1.0	62.1	20.6	−16.5	26.4	321.1	0.625	0.5	1.0	59.7	24.4	−16.2	29.3	326.2	4.5	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
450	Y00G_062_062d	0.625	0.625	0.0	0.625	0.625	0.312	90	0.625	0.625	0.0	64.0	−6.3	59.6	60.0	96.1	0.625	0.625	0.0	61.0	0.3	58.3	58.3	89.6	7.4	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
451	Y00G_062_050d	0.625	0.625	0.125	0.625	0.5	0.375	90	0.625	0.625	0.125	65.0	−5.1	47.7	48.0	96.1	0.625	0.625	0.125	61.5	0.9	49.3	49.3	88.9	7.1	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
452	Y00G_062_037d	0.625	0.625	0.25	0.625	0.375	0.437	90	0.625	0.625	0.25	65.9	−3.8	35.8	36.0	96.1	0.625	0.625	0.25	62.1	1.8	39.4	39.4	87.3	7.7	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
453	Y00G_062_025d	0.625	0.625	0.375	0.625	0.25	0.5	90	0.625	0.625	0.375	66.9	−2.5	23.8	24.0	96.1	0.625	0.625	0.375	62.8	3.0	29.4	29.5	84.0	8.9	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
454	Y00G_062_012d	0.625	0.625	0.5	0.625	0.125	0.562	90	0.625	0.625	0.5	67.9	−1.2	11.9	12.0	96.1	0.625	0.625	0.5	63.6	4.5	18.8	19.3	76.3	10.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
455	NW_062d	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0	0.625	0.625	0.625	64.6	6.7	9.1	11.3	53.7	12.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
456	B00R_075_012d	0.625	0.625	0.75	0.75	0.125	0.687	270	0.625	0.625	0.75	68.9	3.6	−5.0	6.2	306.2	0.625	0.625	0.75	65.5	8.9	0.0	8.9	359.4	7.9	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
457	B00R_087_025d	0.625	0.625	0.875	0.875	0.25	0.75	270	0.625	0.625	0.875	69.0	7.3	−10.1	12.5	306.2	0.625	0.625	0.875	66.1	11.3	−8.3	14.0	323.7	5.2	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
458	B00R_100_037d	0.625	0.625	1.0	1.0	0.375	0.812	270	0.625	0.625	1.0	69.1	11.0	−15.1	18.7	306.2	0.625	0.625	1.0	67.2	13.7	−15.4	20.6	311.6	3.2	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
459	Y15G_075_075d	0.625	0.75	0.0	0.75	0.75	0.375	99	0.637	0.75	0.0	68.8	−11.0	66.1	67.0	99.4	0.625	0.75	0.0	65.8	−7.1	64.5	64.9	96.3	5.0	97	0.85	1.0	0.0	83.6	−14.6	88.1	89.3	99.4
460	Y18G_075_062d	0.625	0.75	0.125	0.75	0.625	0.437	101	0.635	0.75	0.125	69.7	−9.7	54.1	55.0	100.2	0.625	0.75	0.125	66.7	−6.8	54.8	55.2	97.1	4.2	99	0.816	1.0	0.0	82.6	−15.6	86.6	88.0	100.2
461	Y23G_075_050d	0.625	0.75	0.25	0.75	0.5	0.5	104	0.633	0.75	0.25	70.6	−8.5	42.1	43.0	101.4	0.625	0.75	0.25	66.9	−6.0	43.6	44.0	97.9	4.6	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
462	Y31G_075_037d	0.625	0.75	0.375	0.75	0.375	0.562	109	0.631	0.75	0.375	71.1	−7.9	29.8	30.8	104.9	0.625	0.75	0.375	67.8	−4.8	32.8	33.2	98.3	5.4	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
463	Y50G_075_025d	0.625	0.75	0.5	0.75	0.25	0.625	120	0.625	0.75	0.5	71.5	−7.4	16.6	18.2	114.0	0.625	0.75	0.5	68.7	−3.5	21.4	21.7	99.4	6.7	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
464	G00B_075_012d	0.625	0.75	0.625	0.75	0.125	0.687	150	0.625	0.75	0.625	72.1	−8.1	3.7	8.9	155.5	0.625	0.75	0.625	69.6	−1.3	11.0	11.1	97.0	10.2	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
465	G50B_075_012d	0.625	0.75	0.75	0.75	0.125	0.687	210	0.625	0.75	0.75	72.9	−3.1	−5.1	6.0	238.4	0.625	0.75	0.75	70.5	1.1	1.2	1.7	46.7	8.1	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
466	G75B_087_025d	0.625	0.75	0.875	0.875	0.25	0.75	240	0.625	0.75	0.875	73.2	−0.3	−10.1	10.1	268.2	0.625	0.75	0.875	71.7	3.5	−7.2	8.0	296.3	5.1	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
467	G84B_100_037d	0.625	0.75	1.0	1.0	0.375	0.812	251	0.625	0.743	1.0	72.9	3.7	−15.1	15.6	283.7	0.625	0.75	1.0	72.4	6.6	−14.8	16.2	294.1	2.9	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
468	Y26G_087_087d	0.625	0.875	0.0	0.875	0.875	0.437	106	0.641	0.875	0.0	73.0	−16.1	72.2	74.0	102.6	0.625	0.875	0.0	71.6	−16.6	71.3	73.2	103.1	1.7	104	0.733	1.0	0.0	80.0	−18.4	82.5	84.6	102.6
469	Y31G_087_075d	0.625	0.875	0.125	0.875	0.75	0.5	109	0.637	0.875	0.125	73.4	−15.8	59.6	61.6	104.9	0.625	0.875	0.125	72.2	−16.3	60.1	62.3	105.2	1.3	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
470	Y38G_087_062d	0.625	0.875	0.25	0.875	0.625	0.562	113	0.635	0.875	0.25	73.8	−15.3	46.9	49.4	108.0	0.625	0.875	0.25	72.8	−15.2	48.4	50.7	107.4	1.7	112	0.616	1.0	0.0	75.0	−24.4	75.1	79.0	108.0
471	Y50G_087_050d	0.625	0.875	0.375	0.875	0.5	0.625	120	0.625	0.875	0.375	74.2	−14.8	33.2	36.4	114.0	0.625	0.875	0.375	73.4	−14.4	36.3	39.1	111.6	3.2	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
472	Y68G_087_037d	0.625	0.875	0.5	0.875	0.375	0.687	131	0.618	0.875	0.5	74.2	−15.5	19.9	25.3	127.8	0.625	0.875	0.5	74.0	−12.9	23.6	26.9	118.6	4.5	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
473	G00B_087_025d	0.625	0.875	0.625	0.875	0.25	0.75	150	0.625	0.875	0.625	75.3	−16.2	7.4	17.8	155.5	0.625	0.875	0.625	75.4	−10.2	13.2	16.7	127.7	8.3	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
474	G25B_087_025d	0.625	0.875	0.75	0.875	0.25	0.75	180	0.625	0.875	0.75	76.0	−12.1	−2.0	12.3	189.3	0.625	0.875	0.75	76.6	−7.7	3.0	8.3	158.4	6.7	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
475	G50B_087_025d	0.625	0.875	0.875	0.875	0.25	0.75	210	0.625	0.875	0.875	77.0	−6.3	−10.3	12.1	238.4	0.625	0.875	0.875	77.4	−5.1	−6.1	8.0	229.9	4.4	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
476	G65B_100_037d	0.625	0.875	1.0	1.0	0.375	0.812	229	0.625	0.881	1.0	77.9	−4.6	−15.4	16.0	253.3	0.625	0.875	1.0	78.8	−2.5	−14.4	14.6	260.1	2.4	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
477	Y36G_100_100d	0.625	1.0	0.0	1.0	1.0	0.5	112	0.633	1.0	0.0	75.6	−23.6	76.2	79.8	107.2	0.625	1.0	0.0	75.3	−24.0	75.7	79.4	107.6	0.7	111	0.633	1.0	0.0	75.6	−23.6	76.2	79.8	107.2
478	Y41G_100_087d	0.625	1.0	0.125	1.0	0.875	0.562	115	0.635	1.0	0.125	76.4	−22.8	63.6	67.6	109.7	0.625	1.0	0.125	76.3	−23.2	64.8	68.8	109.7	1.2	114	0.583	1.0	0.0	73.7	−26.1	72.7	77.2	109.7
479	Y50G_100_075d	0.625	1.0	0.25	1.0	0.75	0.625	120	0.625	1.0	0.25	76.8	−22.2	49.8	54.6	114.0	0.625	1.0	0.25	76.4	−22.8	51.6	56.4	113.8	1.8	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
480	Y61G_100_062d	0.625	1.0	0.375	1.0	0.625	0.687	127	0.614	1.0	0.375	77.1	−22.0	36.7	42.8	120.9	0.625	1.0	0.375	76.9	−22.0	39.0	44.8	119.4	2.2	127	0.383	1.0	0.0	66.0	−35.2	58.8	68.6	120.9
481	Y76G_100_050d	0.625	1.0	0.5	1.0	0.5	0.75	136	0.616	1.0	0.5	76.7	−24.1	22.9	33.2	136.5	0.625	1.0	0.5	78.3	−19.8	26.6	33.2	126.6	5.9	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
482	G00B_100_037d	0.625	1.0	0.625	1.0	0.375	0.812	150	0.625	1.0	0.625	78.5	−24.3	11.1	26.7	155.5	0.625	1.0	0.625	79.8	−17.2	15.4	23.1	138.0	8.4	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
483	G15B_100_037d	0.625	1.0	0.75	1.0	0.375	0.812	169	0.625	1.0	0.743	79.1	−21.3	2.7	21.4	172.5	0.625	1.0	0.75	80.8	−14.8	5.1	15.6	160.6	7.1	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
484	G34B_100_037d	0.625	1.0	0.875	1.0	0.375	0.812	191	0.625	1.0	0.881	80.2	−14.8	−8.5	17.1	209.7	0.625	1.0	0.875	82.0	−11.7	−5.1	12.8	203.5	4.9	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
485	G50B_100_037d	0.625	1.0	1.0	1.0	0.375	0.812	210	0.625	1.0	1.0	81.0	−9.5	−15.5	18.2	238.4	0.625	1.0	1.0	83.0	−8.7	−13.5	16.1	237.2	2.9	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

Mean color difference of this page: delta $E^{*\prime}$ = 7.0

1-0032431-F0

PE870−7N, Page 25/33−F

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

input: *rgb/cmyk* −> rgb_d
output: transfer to $cmy0_d$

1-0032431-F0

TUB registration: 20150701-PE87/PE87L0NP.PDF /.PS TUB material: code=rha4ta
application for measurement of offset print output, separation cmy0 (CMY0)

http://130.149.60.45/~farbmetrik/PE87/PE87L0NP.PDF /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 26/33

n	HIC*Fd	rgb_Fd			ict_Fd			hsi_F,d	rgb*Fd			LabCh*Fd				
486	R00Y_075_075d	0.75	0.0	0.0	0.75	0.75	0.375	390	0.75	0.0	0.0	40.2	53.2	33.6	62.9	32.3
487	R35Y_075_075d	0.75	0.0	0.125	0.75	0.75	0.375	381	0.75	0.0	0.112	40.2	53.7	29.2	61.1	28.5
488	R18Y_075_075d	0.75	0.0	0.25	0.75	0.75	0.375	371	0.75	0.0	0.237	40.4	54.5	23.4	59.3	23.2
489	R00Y_075_075d	0.75	0.0	0.375	0.75	0.75	0.375	360	0.75	0.0	0.375	40.5	55.6	15.8	57.8	15.9
490	B65R_075_075d	0.75	0.0	0.5	0.75	0.75	0.375	349	0.75	0.0	0.512	40.5	57.3	8.9	58.0	8.9
491	B57R_075_075d	0.75	0.0	0.625	0.75	0.75	0.375	339	0.75	0.0	0.637	40.5	58.5	3.7	58.6	3.7
492	B50R_075_075d	0.75	0.0	0.75	0.75	0.75	0.375	330	0.75	0.0	0.75	40.6	59.4	−0.1	59.4	359.8
493	B43R_087_087d	0.75	0.0	0.875	0.875	0.875	0.437	322	0.758	0.0	0.875	41.6	65.5	−4.6	65.7	355.9
494	B38R_100_100d	0.75	0.0	1.0	1.0	1.0	0.5	316	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
495	R15Y_075_075d	0.75	0.125	0.0	0.75	0.75	0.375	39	0.75	0.112	0.0	43.4	45.5	38.0	59.3	39.9
496	R00Y_075_062d	0.75	0.125	0.125	0.75	0.625	0.437	390	0.75	0.125	0.125	46.4	44.3	28.0	52.4	32.3
497	R31Y_075_062d	0.75	0.125	0.25	0.75	0.625	0.437	379	0.75	0.125	0.239	46.5	44.9	23.4	50.6	27.5
498	R11Y_075_062d	0.75	0.125	0.375	0.75	0.625	0.437	367	0.75	0.125	0.364	46.6	45.6	17.4	48.8	20.8
499	B69R_075_062d	0.75	0.125	0.5	0.75	0.625	0.437	353	0.75	0.125	0.51	46.8	47.2	9.5	48.1	11.4
500	B59R_075_062d	0.75	0.125	0.625	0.75	0.625	0.437	341	0.75	0.125	0.635	46.7	48.6	3.9	48.7	4.6
501	B50R_075_062d	0.75	0.125	0.75	0.75	0.625	0.437	330	0.75	0.125	0.75	46.8	49.5	−0.1	49.5	359.8
502	B42R_087_075d	0.75	0.125	0.875	0.875	0.75	0.5	321	0.762	0.125	0.875	47.8	55.7	−4.4	55.9	355.4
503	B36R_100_087d	0.75	0.125	1.0	1.0	0.875	0.562	314	0.766	0.125	1.0	48.1	61.5	−8.7	62.1	351.9
504	R31Y_075_075d	0.75	0.25	0.0	0.75	0.75	0.375	49	0.75	0.237	0.0	48.5	34.3	44.4	56.2	52.2
505	R18Y_075_062d	0.75	0.25	0.125	0.75	0.625	0.437	41	0.75	0.239	0.125	50.0	36.1	32.8	48.8	42.2
506	R00Y_075_050d	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	52.7	35.4	22.4	41.9	32.3
507	R26Y_075_050d	0.75	0.25	0.375	0.75	0.5	0.5	376	0.75	0.25	0.366	52.8	36.0	17.6	40.1	26.1
508	R00Y_075_050d	0.75	0.25	0.5	0.75	0.5	0.5	360	0.75	0.25	0.5	52.9	37.1	10.5	38.5	15.9
509	B61R_075_050d	0.75	0.25	0.625	0.75	0.5	0.5	344	0.75	0.25	0.633	52.9	38.6	4.0	38.8	5.9
510	B50R_075_050d	0.75	0.25	0.75	0.75	0.5	0.5	330	0.75	0.25	0.75	53.0	39.6	−0.1	39.6	359.8
511	B40R_087_062d	0.75	0.25	0.875	0.875	0.625	0.562	319	0.76	0.25	0.875	53.9	45.8	−4.4	46.0	354.4
512	B34R_100_075d	0.75	0.25	1.0	1.0	0.75	0.625	311	0.762	0.25	1.0	53.7	51.0	−8.9	51.8	350.0
513	R50Y_075_075d	0.75	0.375	0.0	0.75	0.75	0.375	60	0.75	0.375	0.0	54.7	21.6	51.5	55.9	67.1
514	R38Y_075_062d	0.75	0.375	0.125	0.75	0.625	0.437	53	0.75	0.364	0.125	55.2	24.7	39.1	46.2	57.6
515	R23Y_075_050d	0.75	0.375	0.25	0.75	0.5	0.5	44	0.75	0.366	0.25	56.5	26.7	27.4	38.2	45.7
516	R00Y_075_037d	0.75	0.375	0.375	0.75	0.375	0.562	390	0.75	0.375	0.375	59.0	26.6	16.8	31.4	32.3
517	R18Y_075_037d	0.75	0.375	0.5	0.75	0.375	0.562	371	0.75	0.375	0.493	59.1	27.2	11.7	29.6	23.2
518	B65R_075_037d	0.75	0.375	0.625	0.75	0.375	0.562	349	0.75	0.375	0.631	59.1	28.6	4.4	29.0	8.9
519	B50R_075_037d	0.75	0.375	0.75	0.75	0.375	0.562	330	0.75	0.375	0.75	59.2	29.7	0.0	29.7	359.8
520	B38R_087_050d	0.75	0.375	0.875	0.875	0.5	0.625	316	0.758	0.375	0.875	59.9	35.8	−4.3	36.0	353.0
521	B30R_100_062d	0.75	0.375	1.0	1.0	0.625	0.687	307	0.76	0.375	1.0	59.5	40.6	−9.0	41.6	347.4
522	R68Y_075_075d	0.75	0.5	0.0	0.75	0.75	0.375	71	0.75	0.512	0.0	62.2	8.2	60.3	60.8	82.1
523	R61Y_075_062d	0.75	0.5	0.125	0.75	0.625	0.437	67	0.75	0.51	0.125	62.8	10.2	47.9	49.0	77.8
524	R50Y_075_050d	0.75	0.5	0.25	0.75	0.5	0.5	60	0.75	0.5	0.25	62.4	14.4	34.3	37.2	67.1
525	R31Y_075_037d	0.75	0.5	0.375	0.75	0.375	0.562	49	0.75	0.493	0.375	63.1	17.1	22.2	28.1	52.2
526	R00Y_075_025d	0.75	0.5	0.5	0.75	0.25	0.625	390	0.75	0.5	0.5	65.2	17.7	11.2	20.9	32.3
527	R00Y_075_025d	0.75	0.5	0.625	0.75	0.25	0.625	360	0.75	0.5	0.625	65.3	18.5	5.2	19.2	15.9
528	B50R_075_025d	0.75	0.5	0.75	0.75	0.25	0.625	330	0.75	0.5	0.75	65.4	19.8	0.0	19.8	359.8
529	B34R_087_037d	0.75	0.5	0.875	0.875	0.375	0.687	311	0.756	0.5	0.875	65.7	25.5	−4.4	25.9	350.0
530	B25R_100_050d	0.75	0.5	1.0	1.0	0.5	0.75	300	0.75	0.5	1.0	65.6	29.3	−10.3	31.0	340.5
531	R85Y_075_075d	0.75	0.625	0.0	0.75	0.75	0.375	81	0.75	0.637	0.0	67.8	−1.1	66.7	66.7	91.0
532	R81Y_075_062d	0.75	0.625	0.125	0.75	0.625	0.437	79	0.75	0.635	0.125	68.6	0.5	54.6	54.6	89.4
533	R76Y_075_050d	0.75	0.625	0.25	0.75	0.5	0.5	76	0.75	0.633	0.25	69.3	2.1	42.3	42.4	87.0
534	R68Y_075_037d	0.75	0.625	0.375	0.75	0.375	0.562	71	0.75	0.631	0.375	70.0	4.1	30.1	30.4	82.1
535	R50Y_075_025d	0.75	0.625	0.5	0.75	0.25	0.625	60	0.75	0.625	0.5	70.1	7.2	17.1	18.6	67.1
536	R00Y_075_012d	0.75	0.625	0.625	0.75	0.125	0.687	390	0.75	0.625	0.625	71.5	8.8	5.6	10.4	32.3
537	B50R_075_012d	0.75	0.625	0.75	0.75	0.125	0.687	330	0.75	0.625	0.75	71.6	9.9	0.0	9.9	359.8
538	B25R_087_025d	0.75	0.625	0.875	0.875	0.25	0.75	300	0.75	0.625	0.875	71.7	14.6	−5.1	15.5	340.5
539	B15R_100_037d	0.75	0.625	1.0	1.0	0.375	0.812	289	0.743	0.625	1.0	71.3	17.7	−11.0	20.9	328.1
540	Y00G_075_075d	0.75	0.75	0.0	0.75	0.75	0.375	90	0.75	0.75	0.0	71.9	−7.6	71.6	72.0	96.1
541	Y00G_075_062d	0.75	0.75	0.125	0.75	0.625	0.437	90	0.75	0.75	0.125	72.9	−6.3	59.6	60.0	96.1
542	Y00G_075_050d	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.75	0.25	73.9	−5.1	47.7	48.0	96.1
543	Y00G_075_037d	0.75	0.75	0.375	0.75	0.375	0.562	90	0.75	0.75	0.375	74.8	−3.8	35.8	36.0	96.1
544	Y00G_075_025d	0.75	0.75	0.5	0.75	0.25	0.625	90	0.75	0.75	0.5	75.8	−2.5	23.8	24.0	96.1
545	Y00G_075_012d	0.75	0.75	0.625	0.75	0.125	0.687	90	0.75	0.75	0.625	76.8	−1.2	11.9	12.0	96.1
546	NW_075d	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0
547	B00R_087_012d	0.75	0.75	0.875	0.875	0.125	0.812	270	0.75	0.75	0.875	77.9	3.6	−5.0	6.2	306.2
548	B00R_100_025d	0.75	0.75	1.0	1.0	0.25	0.875	270	0.75	0.75	1.0	77.9	7.3	−10.1	12.5	306.2
549	Y13G_087_087d	0.75	0.875	0.0	0.875	0.875	0.437	98	0.758	0.875	0.0	76.6	−12.3	77.8	78.7	99.0
550	Y15G_087_075d	0.75	0.875	0.125	0.875	0.75	0.5	99	0.762	0.875	0.125	77.7	−11.0	66.1	67.0	99.4
551	Y18G_087_062d	0.75	0.875	0.25	0.875	0.625	0.562	101	0.76	0.875	0.25	78.6	−9.7	54.1	55.0	100.2
552	Y23G_087_050d	0.75	0.875	0.375	0.875	0.5	0.625	104	0.758	0.875	0.375	79.5	−8.5	42.1	43.0	101.4
553	Y31G_087_037d	0.75	0.875	0.5	0.875	0.375	0.687	109	0.756	0.875	0.5	80.0	−7.9	29.8	30.8	104.9
554	Y50G_087_025d	0.75	0.875	0.625	0.875	0.25	0.75	120	0.75	0.875	0.625	80.4	−7.4	16.6	18.2	114.0
555	G00B_087_012d	0.75	0.875	0.75	0.875	0.125	0.812	150	0.75	0.875	0.75	81.0	−8.1	3.7	8.9	155.5
556	G50B_087_012d	0.75	0.875	0.875	0.875	0.125	0.812	210	0.75	0.875	0.875	81.8	−3.1	−5.1	6.0	238.4
557	G75B_100_025d	0.75	0.875	1.0	1.0	0.25	0.875	240	0.75	0.875	1.0	82.1	−0.3	−10.1	10.1	268.2
558	Y23G_100_100d	0.75	1.0	0.0	1.0	1.0	0.5	104	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
559	Y26G_100_087d	0.75	1.0	0.125	1.0	0.875	0.562	106	0.766	1.0	0.125	81.9	−16.1	72.2	74.0	102.6
560	Y31G_100_075d	0.75	1.0	0.25	1.0	0.75	0.625	109	0.762	1.0	0.25	82.3	−15.8	59.6	61.6	104.9
561	Y38G_100_062d	0.75	1.0	0.375	1.0	0.625	0.687	113	0.76	1.0	0.375	82.7	−15.3	46.9	49.4	108.0
562	Y50G_100_050d	0.75	1.0	0.5	1.0	0.5	0.75	120	0.75	1.0	0.5	83.1	−14.8	33.2	36.4	114.0
563	Y68G_100_037d	0.75	1.0	0.625	1.0	0.375	0.812	131	0.743	1.0	0.625	83.1	−15.5	19.9	25.3	127.8
564	G00B_100_025d	0.75	1.0	0.75	1.0	0.25	0.875	150	0.75	1.0	0.75	84.2	−16.2	7.4	17.8	155.5
565	G25B_100_025d	0.75	1.0	0.875	1.0	0.25	0.875	180	0.75	1.0	0.875	84.9	−12.1	−2.0	12.3	189.3
566	G50B_100_025d	0.75	1.0	1.0	1.0	0.25	0.875	210	0.75	1.0	1.0	85.9	−6.3	−10.3	12.1	238.4

n	rgb*'Fd			LabCh*'Fd					DE*'Fd	hsiM,d	rgb*Md			LabCh*Md				
486	0.75	0.0	0.0	40.7	59.2	36.3	69.4	31.5	6.6	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
487	0.75	0.0	0.125	40.6	60.2	31.6	68.0	27.7	6.9	382	1.0	0.0	0.15	45.5	71.6	39.0	81.5	28.5
488	0.75	0.0	0.25	40.9	61.1	25.5	66.2	22.6	6.9	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
489	0.75	0.0	0.375	41.0	62.2	19.2	65.1	17.1	7.4	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
490	0.75	0.0	0.5	40.9	64.0	11.4	65.1	10.1	7.2	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
491	0.75	0.0	0.625	41.1	65.4	5.1	65.6	4.4	7.0	337	1.0	0.0	0.85	45.9	78.0	5.0	78.2	3.7
492	0.75	0.0	0.75	41.1	66.9	0.0	66.9	0.0	7.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
493	0.75	0.0	0.875	41.4	69.0	−4.7	69.2	356.0	3.4	322	0.866	0.0	1.0	44.0	74.9	−5.3	75.1	355.9
494	0.75	0.0	1.0	41.8	71.0	−9.2	71.6	352.5	0.8	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
495	0.75	0.125	0.0	43.9	51.3	40.0	65.1	37.8	6.1	37	1.0	0.15	0.0	49.8	60.7	50.7	79.1	39.9
496	0.75	0.125	0.125	44.5	50.6	34.5	61.3	34.3	9.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
497	0.75	0.125	0.25	44.8	51.4	28.4	58.8	28.9	8.3	380	1.0	0.0	0.183	45.5	71.8	37.5	81.0	27.5
498	0.75	0.125	0.375	45.0	52.4	21.2	56.5	22.0	7.9	367	1.0	0.0	0.383	45.8	73.0	27.8	78.2	20.8
499	0.75	0.125	0.5	45.4	54.0	12.4	55.4	12.9	7.5	352	1.0	0.0	0.616	46.0	75.5	15.2	77.1	11.4
500	0.75	0.125	0.625	45.8	55.0	5.5	55.3	5.7	6.6	339	1.0	0.0	0.816	45.9	77.7	6.2	78.0	4.6
501	0.75	0.125	0.75	45.9	56.5	−0.2	56.5	359.7	7.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
502	0.75	0.125	0.875	46.6	58.6	−5.6	58.9	354.5	3.3	322	0.85	0.0	1.0	43.7	74.3	−5.9	74.6	355.4
503	0.75	0.125	1.0	47.0	60.4	−10.4	61.3	350.2	2.2	315	0.733	0.0	1.0	41.3	70.3	−9.9	71.0	351.9
504	0.75	0.25	0.0	48.9	39.7	46.7	61.3	49.6	5.8	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
505	0.75	0.25	0.125	49.3	39.8	39.4	56.1	44.7	7.6	39	1.0	0.183	0.0	51.1	57.8	52.5	78.1	42.2
506	0.75	0.25	0.25	50.4	39.4	31.9	50.7	38.9	10.5	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
507	0.75	0.25	0.375	51.0	39.9	24.4	46.8	31.4	8.0	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
508	0.75	0.25	0.5	51.3	41.4	15.2	44.1	20.2	6.5	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
509	0.75	0.25	0.625	52.0	42.7	7.1	43.3	9.4	5.1	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
510	0.75	0.25	0.75	52.4	44.4	0.5	44.4	0.6	4.8	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
511	0.75	0.25	0.875	53.4	46.0	−5.4	46.3	353.2	1.1	320	0.816	0.0	1.0	43.1	73.2	−7.0	73.6	354.4
512	0.75	0.25	1.0	53.7	47.7	−10.9	48.9	347.1	3.9	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
513	0.75	0.375	0.0	54.3	28.1	53.1	60.1	62.1	6.6	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
514	0.75	0.375	0.125	54.7	28.8	44.2	52.8	56.8	6.6	52	1.0	0.383	0.0	59.5	39.5	62.5	74.0	57.6
515	0.75	0.375	0.25	55.2	29.4	35.2	45.9	50.0	8.3	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
516	0.75	0.375	0.375	56.5	29.0	26.5	39.3	42.3	10.3	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
517	0.75	0.375	0.5	56.9	30.5	18.0	35.4	30.6	7.4	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
518	0.75	0.375	0.625	57.9	31.7	8.4	32.8	14.8	5.1	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
519	0.75	0.375	0.75	58.3	33.3	1.5	33.4	2.6	4.1	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
520	0.75	0.375	0.875	59.1	35.6	−4.8	35.9	352.3	0.9	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
521	0.75	0.375	1.0	59.9	36.8	−10.8	38.4	343.5	4.2	307	0.616	0.0	1.0	37.9	65.0	−14.5	66.6	347.4
522	0.75	0.5	0.0	60.6	15.9	60.3	62.4	75.2	7.8	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
523	0.75	0.5	0.125	61.1	16.4	50.3	52.9	71.9	6.7	67	1.0	0.616	0.0	71.6	16.4	76.6	78.4	77.8
524	0.75	0.5	0.25	61.2	18.1	39.5	43.4	65.3	6.4	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
525	0.75	0.5	0.375	61.9	19.2	29.9	35.5	57.3	8.0	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
526	0.75	0.5	0.5	62.8	20.1	19.9	28.3	44.7	9.3	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
527	0.75	0.5	0.625	63.6	21.9	10.7	24.4	26.2	6.6	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
528	0.75	0.5	0.75	64.0	23.8	2.5	24.0	6.1	5.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
529	0.75	0.5	0.875	65.2	25.4	−4.4	25.8	350.1	0.5	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
530	0.75	0.5	1.0	65.7	26.9	−11.2	29.2	337.4	2.4	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
531	0.75	0.625	0.0	66.7	4.4	67.2	67.4	86.2	5.7	81	1.0	0.85	0.0	82.3	−1.5	89.0	89.0	91.0
532	0.75	0.625	0.125	67.6	4.8	56.3	56.5	85.0	4.7	80	1.0	0.816	0.0	80.8	0.8	87.3	87.3	89.4
533	0.75	0.625	0.25	68.3	5.5	44.9	45.3	82.9	4.3	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
534	0.75	0.625	0.375	68.8	7.0	34.2	34.9	78.3	5.1	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
535	0.75	0.625	0.5	69.5	8.8	22.7	24.4	68.7	5.8	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
536	0.75	0.625	0.625	70.5	10.3	13.3	16.9	52.1	7.9	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
537	0.75	0.625	0.75	71.3	12.4	4.6	13.2	20.3	5.2	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
538	0.75	0.625	0.875	72.0	14.2	−3.3	14.6	346.9	1.9	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
539	0.75	0.625	1.0	72.8	16.2	−10.5	19.3	326.9	2.1	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
540	0.75	0.75	0.0	70.6	−2.5	71.5	71.6	92.0	5.2	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
541	0.75	0.75	0.125	71.4	−2.1	59.8	59.8	92.0	4.4	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
542	0.75	0.75	0.25	72.4	−1.4	48.0	48.0	91.7	3.9	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
543	0.75	0.75	0.375	73.3	−0.4	37.0	37.0	90.6	3.9	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
544	0.75	0.75	0.5	74.3	0.9	25.5	25.5	87.8	4.1	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
545	0.75	0.75	0.625	75.3	2.7	15.0	15.3	79.7	5.3	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
546	0.75	0.75	0.75	76.3	4.7	5.9	7.6	51.3	7.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
547	0.75	0.75	0.875	77.0	6.7	−2.3	7.1	340.8	4.1	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
548	0.75	0.75	1.0	77.9	9.1	−9.9	13.4	312.5	1.7	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
549	0.75	0.875	0.0	76.4	−11.0	78.3	79.1	98.0	1.4	97	0.866	1.0	0.0	84.1	−14.1	88.9	90.0	99.0
550	0.75	0.875	0.125	77.1	−10.6	65.6	66.5	99.2	0.8	97	0.85	1.0	0.0	83.6	−14.6	88.1	89.3	99.4
551	0.75	0.875	0.25	78.0	−9.8	52.9	53.8	100.4	1.3	99	0.816	1.0	0.0	82.6	−15.6	86.6	88.0	100.2
552	0.75	0.875	0.375	79.1	−8.7	41.4	42.3	101.9	0.9	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
553	0.75	0.875	0.5	80.1	−7.2	28.5	29.5	104.2	1.3	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
554	0.75	0.875	0.625	81.1	−5.5	16.9	17.8	108.0	2.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
555	0.75	0.875	0.75	81.8	−3.4	7.6	8.3	114.5	6.1	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
556	0.75	0.875	0.875	82.8	−1.4	−1.0	1.7	217.4	4.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
557	0.75	0.875	1.0	83.7	1.0	−9.1	9.2	276.6	2.3	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
558	0.75	1.0	0.0	80.7	−17.5	83.5	85.3	101.8	1.0	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
559	0.75	1.0	0.125	81.7	−17.1	70.4	72.4	103.6	2.0	104	0.733	1.0	0.0	80.0	−18.4	82.5	84.6	102.6
560	0.75	1.0	0.25	82.3	−16.6	57.1	59.5	106.2	2.5	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
561	0.75	1.0	0.375	83.3	−15.3	44.6	47.2	108.9	2.3	112	0.616	1.0	0.0	75.0	−24.4	75.1	79.0	108.0
562	0.75	1.0	0.5	84.2	−14.1	31.5	34.5	114.0	2.1	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
563	0.75	1.0	0.625	85.1	−12.2	19.6	23.1	122.0	3.8	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
564	0.75	1.0	0.75	86.5	−9.9	9.5	13.7	136.2	7.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
565	0.75	1.0	0.875	87.5	−7.8	0.5	7.8	176.3	5.6	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
566	0.75	1.0	1.0	88.4	−5.2	−8.0	9.6	236.8	3.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

Mean color difference of this page: delta $E^{*\prime}$ = 5.0

1-0032531-F0 PE870−7N, Page 26/33−F

TUB-test chart PE87; 16 step hue circle
colors and differences, ΔE^*'

input: $rgb/cmyk \rightarrow rgb_d$
output: transfer to $cmy0_d$

see similar files: http://130.149.60.45/~farbmetrik/PE87/PE87.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

1-0032531-F0

TUB registration: 20150701-PE87/PE87L0NP.PDF /.PS
application for measurement of offset print output, separation cmy0 (CMY0)

TUB material: code=rha4ta

n	HIC*Fd	rgb_Fd			ict_Fd			hsi_F,d	rgb*Fd			LabCh*Fd					rgb*'Fd			LabCh*'Fd					DE*'Fd	hsiM,d	rgb*Md			LabCh*Md				
567	R00Y_087_087d	0.875	0.0	0.0	0.875	0.875	0.437	390	0.875	0.0	0.0	42.8	62.0	39.2	73.4	32.3	0.875	0.0	0.0	43.2	65.4	40.5	76.9	31.8	3.6	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
568	R36Y_087_087d	0.875	0.0	0.125	0.875	0.875	0.437	382	0.875	0.0	0.116	42.9	62.5	34.7	71.6	29.0	0.875	0.0	0.125	43.3	66.0	35.3	74.9	28.1	3.5	382	1.0	0.0	0.133	45.5	71.5	39.7	81.8	29.0
569	R23Y_087_087d	0.875	0.0	0.25	0.875	0.875	0.437	374	0.875	0.0	0.233	43.0	63.2	29.5	69.8	25.0	0.875	0.0	0.25	43.6	66.5	29.6	72.8	23.9	3.3	375	1.0	0.0	0.266	45.6	72.3	33.8	79.8	25.0
570	R08Y_087_087d	0.875	0.0	0.375	0.875	0.875	0.437	365	0.875	0.0	0.364	43.1	64.2	22.7	68.1	19.4	0.875	0.0	0.375	43.6	67.7	23.3	71.6	19.0	3.5	365	1.0	0.0	0.416	45.8	73.4	25.9	77.9	19.4
571	B70R_087_087d	0.875	0.0	0.5	0.875	0.875	0.437	355	0.875	0.0	0.51	43.2	65.8	14.8	67.4	12.7	0.875	0.0	0.5	43.7	69.3	16.0	71.2	13.0	3.7	354	1.0	0.0	0.583	45.9	75.2	16.9	77.1	12.7
572	B63R_087_087d	0.875	0.0	0.625	0.875	0.875	0.437	346	0.875	0.0	0.641	43.2	67.3	8.3	67.8	7.0	0.875	0.0	0.625	43.8	70.8	9.3	71.4	7.5	3.6	344	1.0	0.0	0.733	45.9	77.0	9.4	77.5	7.0
573	B56R_087_087d	0.875	0.0	0.75	0.875	0.875	0.437	338	0.875	0.0	0.758	43.2	68.4	3.8	68.5	3.2	0.875	0.0	0.75	43.8	72.3	4.2	72.5	3.3	4.0	337	1.0	0.0	0.866	45.9	78.1	4.4	78.3	3.2
574	B50R_087_087d	0.875	0.0	0.875	0.875	0.875	0.437	330	0.875	0.0	0.875	43.4	69.4	−0.1	69.4	359.8	0.875	0.0	0.875	44.0	73.5	−0.8	73.5	359.3	4.2	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
575	B44R_100_100d	0.875	0.0	1.0	1.0	1.0	0.5	323	0.883	0.0	1.0	44.3	75.4	−4.7	75.6	356.3	0.875	0.0	1.0	44.2	75.2	−5.0	75.3	356.1	0.4	323	0.883	0.0	1.0	44.3	75.4	−4.7	75.6	356.3
576	R13Y_087_087d	0.875	0.125	0.0	0.875	0.875	0.437	38	0.875	0.116	0.0	46.1	54.3	43.6	69.7	38.7	0.875	0.125	0.0	47.3	56.4	44.0	71.5	38.0	2.4	37	1.0	0.133	0.0	49.2	62.1	49.8	79.6	38.7
577	R00Y_087_075d	0.875	0.125	0.125	0.875	0.75	0.5	390	0.875	0.125	0.125	49.1	53.2	33.6	62.9	32.3	0.875	0.125	0.125	47.6	56.0	38.5	67.9	34.5	5.8	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
578	R35Y_087_075d	0.875	0.125	0.25	0.875	0.75	0.5	381	0.875	0.125	0.237	49.1	53.7	29.2	61.1	28.5	0.875	0.125	0.25	47.9	56.7	32.6	65.4	29.8	4.6	382	1.0	0.0	0.15	45.5	71.6	39.0	81.5	28.5
579	R18Y_087_075d	0.875	0.125	0.375	0.875	0.75	0.5	371	0.875	0.125	0.362	49.3	54.5	23.4	59.3	23.2	0.875	0.125	0.375	48.2	57.5	25.3	62.8	23.7	3.7	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
580	R00Y_087_075d	0.875	0.125	0.5	0.875	0.75	0.5	360	0.875	0.125	0.5	49.4	55.6	15.8	57.8	15.9	0.875	0.125	0.5	48.4	59.1	16.9	61.5	15.9	3.7	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
581	B65R_087_075d	0.875	0.125	0.625	0.875	0.75	0.5	349	0.875	0.125	0.637	49.4	57.3	8.9	58.0	8.9	0.875	0.125	0.625	48.8	60.3	9.3	61.0	8.8	3.1	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
582	B57R_087_075d	0.875	0.125	0.75	0.875	0.75	0.5	339	0.875	0.125	0.762	49.4	58.5	3.7	58.6	3.7	0.875	0.125	0.75	48.9	62.0	2.9	62.0	2.7	3.6	337	1.0	0.0	0.85	45.9	78.0	5.0	78.2	3.7
583	B50R_087_075d	0.875	0.125	0.875	0.875	0.75	0.5	330	0.875	0.125	0.875	49.5	59.4	−0.1	59.4	359.8	0.875	0.125	0.875	49.3	62.9	−2.0	62.9	358.1	3.9	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
584	B43R_100_087d	0.875	0.125	1.0	1.0	0.875	0.562	322	0.883	0.125	1.0	50.5	65.5	−4.6	65.7	355.9	0.875	0.125	1.0	49.6	64.5	−6.6	64.9	354.1	2.3	322	0.866	0.0	1.0	44.0	74.9	−5.3	75.1	355.9
585	R26Y_087_087d	0.875	0.25	0.0	0.875	0.875	0.437	46	0.875	0.233	0.0	50.6	44.1	49.4	66.2	48.2	0.875	0.25	0.0	51.7	45.6	50.7	68.2	48.0	2.3	44	1.0	0.266	0.0	54.4	50.4	56.5	75.7	48.2
586	R15Y_087_075d	0.875	0.25	0.125	0.875	0.75	0.5	39	0.875	0.237	0.125	52.4	45.5	38.0	59.3	39.9	0.875	0.25	0.125	52.6	45.0	43.6	62.7	44.1	5.6	37	1.0	0.15	0.0	49.8	60.7	50.7	79.1	39.9
587	R00Y_087_062d	0.875	0.25	0.25	0.875	0.625	0.562	390	0.875	0.25	0.25	55.3	44.3	28.0	52.4	32.3	0.875	0.25	0.25	53.7	44.1	35.9	56.8	39.1	8.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
588	R31Y_087_062d	0.875	0.25	0.375	0.875	0.625	0.562	379	0.875	0.25	0.364	55.4	44.9	23.4	50.6	27.5	0.875	0.25	0.375	54.3	44.5	28.2	52.7	32.3	4.8	380	1.0	0.0	0.183	45.5	71.8	37.5	81.0	27.5
589	R11Y_087_062d	0.875	0.25	0.5	0.875	0.625	0.562	367	0.875	0.25	0.489	55.6	45.6	17.4	48.8	20.8	0.875	0.25	0.5	54.5	45.9	19.9	50.0	23.4	2.7	367	1.0	0.0	0.383	45.8	73.0	27.8	78.2	20.8
590	B69R_087_062d	0.875	0.25	0.625	0.875	0.625	0.562	353	0.875	0.25	0.635	55.7	47.2	9.5	48.1	11.4	0.875	0.25	0.625	55.1	47.5	10.8	48.7	12.8	1.4	352	1.0	0.0	0.616	46.0	75.5	15.2	77.1	11.4
591	B59R_087_062d	0.875	0.25	0.75	0.875	0.625	0.562	341	0.875	0.25	0.76	55.6	48.6	3.9	48.7	4.6	0.875	0.25	0.75	55.4	48.8	4.0	49.0	4.6	0.3	339	1.0	0.0	0.816	45.9	77.7	6.2	78.0	4.6
592	B50R_087_062d	0.875	0.25	0.875	0.875	0.625	0.562	330	0.875	0.25	0.875	55.7	49.5	−0.1	49.5	359.8	0.875	0.25	0.875	56.0	49.9	−1.8	49.9	357.9	1.7	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
593	B42R_100_075d	0.875	0.25	1.0	1.0	0.75	0.625	321	0.887	0.25	1.0	56.7	55.7	−4.4	55.9	355.4	0.875	0.25	1.0	56.7	51.9	−6.8	52.3	352.4	4.5	322	0.85	0.0	1.0	43.7	74.3	−5.9	74.6	355.4
594	R41Y_087_087d	0.875	0.375	0.0	0.875	0.875	0.437	55	0.875	0.364	0.0	56.5	32.0	56.4	64.9	60.3	0.875	0.375	0.0	57.5	33.5	57.7	66.8	59.8	2.2	54	1.0	0.416	0.0	61.0	36.6	64.5	74.1	60.3
595	R31Y_087_075d	0.875	0.375	0.125	0.875	0.75	0.5	49	0.875	0.362	0.125	57.4	34.3	44.4	56.2	52.2	0.875	0.375	0.125	57.9	33.6	48.9	59.4	55.5	4.6	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
596	R18Y_087_062d	0.875	0.375	0.25	0.875	0.625	0.562	41	0.875	0.364	0.25	58.9	36.1	32.8	48.8	42.2	0.875	0.375	0.25	58.6	34.1	39.3	52.1	49.0	6.8	39	1.0	0.183	0.0	51.1	57.8	52.5	78.1	42.2
597	R00Y_087_050d	0.875	0.375	0.375	0.875	0.5	0.625	390	0.875	0.375	0.375	61.6	35.4	22.4	41.9	32.3	0.875	0.375	0.375	59.7	33.8	30.7	45.6	42.2	8.6	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
598	R26Y_087_050d	0.875	0.375	0.5	0.875	0.5	0.625	376	0.875	0.375	0.491	61.7	36.0	17.6	40.1	26.1	0.875	0.375	0.5	60.3	34.8	21.9	41.1	32.1	4.6	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
599	R00Y_087_050d	0.875	0.375	0.625	0.875	0.5	0.625	360	0.875	0.375	0.625	61.8	37.1	10.5	38.5	15.9	0.875	0.375	0.625	61.1	36.1	12.9	38.3	19.7	2.6	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
600	B61R_087_050d	0.875	0.375	0.75	0.875	0.5	0.625	344	0.875	0.375	0.758	61.8	38.6	4.0	38.8	5.9	0.875	0.375	0.75	61.4	37.8	4.6	38.1	7.0	1.0	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
601	B50R_087_050d	0.875	0.375	0.875	0.875	0.5	0.625	330	0.875	0.375	0.875	61.9	39.6	−0.1	39.6	359.8	0.875	0.375	0.875	62.3	38.7	−1.4	38.7	357.8	1.6	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
602	B40R_100_062d	0.875	0.375	1.0	1.0	0.625	0.687	319	0.885	0.375	1.0	62.8	45.8	−4.4	46.0	354.4	0.875	0.375	1.0	63.0	40.3	−7.2	40.9	349.7	6.1	320	0.816	0.0	1.0	43.1	73.2	−7.0	73.6	354.4
603	R58Y_087_087d	0.875	0.5	0.0	0.875	0.875	0.437	65	0.875	0.51	0.0	64.0	17.7	65.2	67.6	74.8	0.875	0.5	0.0	63.7	21.0	64.7	68.1	72.0	3.3	65	1.0	0.583	0.0	69.7	20.2	74.6	77.3	74.8
604	R50Y_087_075d	0.875	0.5	0.125	0.875	0.75	0.5	60	0.875	0.5	0.125	63.6	21.6	51.5	55.9	67.1	0.875	0.5	0.125	63.9	22.1	53.8	58.2	67.6	2.4	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
605	R38Y_087_062d	0.875	0.5	0.25	0.875	0.625	0.562	53	0.875	0.489	0.25	64.1	24.7	39.1	46.2	57.6	0.875	0.5	0.25	64.0	23.7	43.4	49.4	61.3	4.4	52	1.0	0.383	0.0	59.5	39.5	62.5	74.0	57.6
606	R23Y_087_050d	0.875	0.5	0.375	0.875	0.5	0.625	44	0.875	0.491	0.375	65.4	26.7	27.4	38.2	45.7	0.875	0.5	0.375	64.9	24.1	33.4	41.2	54.1	6.5	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
607	R00Y_087_037d	0.875	0.5	0.5	0.875	0.375	0.687	390	0.875	0.5	0.5	67.9	26.6	16.8	31.4	32.3	0.875	0.5	0.5	65.9	24.7	24.0	34.4	44.2	7.7	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
608	R18Y_087_037d	0.875	0.5	0.625	0.875	0.375	0.687	371	0.875	0.5	0.618	68.0	27.2	11.7	29.6	23.2	0.875	0.5	0.625	66.7	26.0	14.9	29.9	29.8	3.6	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
609	B65R_087_037d	0.875	0.5	0.75	0.875	0.375	0.687	349	0.875	0.5	0.756	68.1	28.6	4.4	29.0	8.9	0.875	0.5	0.75	67.4	27.8	5.7	28.4	11.6	1.6	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
610	B50R_087_037d	0.875	0.5	0.875	0.875	0.375	0.687	330	0.875	0.5	0.875	68.1	29.7	0.0	29.7	359.8	0.875	0.5	0.875	68.2	29.1	−0.9	29.1	358.1	1.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
611	B38R_100_050d	0.875	0.5	1.0	1.0	0.5	0.75	316	0.883	0.5	1.0	68.8	35.8	−4.3	36.0	353.0	0.875	0.5	1.0	69.1	30.9	−7.1	31.7	346.9	5.6	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
612	R73Y_087_087d	0.875	0.625	0.0	0.875	0.875	0.437	74	0.875	0.641	0.0	70.5	6.0	72.6	72.9	85.2	0.875	0.625	0.0	70.1	9.2	72.5	73.1	82.7	3.2	75	1.0	0.733	0.0	77.1	6.9	83.0	83.3	85.2
613	R68Y_087_075d	0.875	0.625	0.125	0.875	0.75	0.5	71	0.875	0.637	0.125	71.1	8.2	60.3	60.8	82.1	0.875	0.625	0.125	70.5	9.9	60.9	61.7	80.7	1.8	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
614	R61Y_087_062d	0.875	0.625	0.25	0.875	0.625	0.562	67	0.875	0.635	0.25	71.7	10.2	47.9	49.0	77.8	0.875	0.625	0.25	71.4	10.4	49.1	50.2	78.0	1.2	67	1.0	0.616	0.0	71.6	16.4	76.6	78.4	77.8
615	R50Y_087_050d	0.875	0.625	0.375	0.875	0.5	0.625	60	0.875	0.625	0.375	71.3	14.4	34.3	37.2	67.1	0.875	0.625	0.375	71.7	11.9	38.5	40.3	72.8	4.9	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
616	R31Y_087_037d	0.875	0.625	0.5	0.875	0.375	0.687	49	0.875	0.618	0.5	72.0	17.1	22.2	28.1	52.2	0.875	0.625	0.5	72.5	13.3	27.6	30.7	64.1	6.6	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
617	R00Y_087_025d	0.875	0.625	0.625	0.875	0.25	0.75	390	0.875	0.625	0.625	74.1	17.7	11.2	20.9	32.3	0.875	0.625	0.625	73.5	14.5	17.6	22.8	50.5	7.1	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
618	R00Y_087_025d	0.875	0.625	0.75	0.875	0.25	0.75	360	0.875	0.625	0.75	74.2	18.5	5.2	19.2	15.9	0.875	0.625	0.75	74.4	16.2	8.4	18.3	27.4	3.8	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
619	B50R_087_025d	0.875	0.625	0.875	0.875	0.25	0.75	330	0.875	0.625	0.875	74.3	19.8	0.0	19.8	359.8	0.875	0.625	0.875	75.3	17.9	0.6	17.9	1.9	2.2	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
620	B34R_100_037d	0.875	0.625	1.0	1.0	0.375	0.812	311	0.881	0.625	1.0	74.7	25.5	−4.4	25.9	350.0	0.875	0.625	1.0	76.3	19.9	−6.4	20.9	342.1	6.1	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
621	R86Y_087_087d	0.875	0.75	0.0	0.875	0.875	0.437	82	0.875	0.758	0.0	75.7	−2.4	78.6	78.6	91.7	0.875	0.75	0.0	74.7	1.3	77.7	77.7	89.0	4.0	82	1.0	0.866	0.0	83.1	−2.8	89.8	89.8	91.7
622	R85Y_087_075d	0.875	0.75	0.125	0.875	0.75	0.5	81	0.875	0.762	0.125	76.7	−1.1	66.7	66.7	91.0	0.875	0.75	0.125	75.7	1.0	65.9	65.9	89.1	2.5	81	1.0	0.85	0.0	82.3	−1.5	89.0	89.0	91.0
623	R81Y_087_062d	0.875	0.75	0.25	0.875	0.625	0.562	79	0.875	0.76	0.25	77.5	0.5	54.6	54.6	89.4	0.875	0.75	0.25	76.3	1.9	53.4	53.4	87.9	2.1	80	1.0	0.816	0.0	80.8	0.8	87.3	87.3	89.4
624	R76Y_087_050d	0.875	0.75	0.375	0.875	0.5	0.625	76	0.875	0.758	0.375	78.2	2.1	42.3	42.4	87.0	0.875	0.75	0.375	77.2	2.8	42.2	42.3	86.1	1.1	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
625	R68Y_087_037d	0.875	0.75	0.5	0.875	0.375	0.687	71	0.875	0.756	0.5	78.9	4.1	30.1	30.4	82.1	0.875	0.75	0.5	77.9	4.5	30.7	31.0	81.5	1.2	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
626	R50Y_087_025d	0.875	0.75	0.625	0.875	0.25	0.75	60	0.875	0.75	0.625	79.0	7.2	17.1	18.6	67.1	0.875	0.75	0.625	78.7	6.4	19.6	20.7	71.8	2.6	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
627	R00Y_087_012d	0.875	0.75	0.75	0.875	0.125	0.812	390	0.875	0.75	0.75	80.4	8.8	5.6	10.4	32.3	0.875	0.75	0.75	79.7	8.2	9.9	12.9	50.2	4.4	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
628	B50R_087_012d	0.875	0.75	0.875	0.875	0.125	0.812	330	0.875	0.75	0.875	80.5	9.9	0.0	9.9	359.8	0.875	0.75	0.875	80.8	9.9	1.7	10.1	9.6	1.7	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
629	B25R_100_025d	0.875	0.75	1.0	1.0	0.25	0.875	300	0.875	0.75	1.0	80.6	14.6	−5.1	15.5	340.5	0.875	0.75	1.0	81.1	12.3	−6.1	13.7	333.7	2.5	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
630	Y00G_087_087d	0.875	0.875	0.0	0.875	0.875	0.437	90	0.875	0.875	0.0	79.8	−8.9	83.5	84.0	96.1	0.875	0.875	0.0	79.8	−7.2	83.8	84.1	94.9	1.7	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
631	Y00G_087_075d	0.875	0.875	0.125	0.875	0.75	0.5	90	0.875	0.875	0.125	80.8	−7.6	71.6	72.0	96.1	0.875	0.875	0.125	80.6	−6.9	70.6	71.0	95.6	1.1	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
632	Y00G_087_062d	0.875	0.875	0.25	0.875	0.625	0.562	90	0.875	0.875	0.25	81.8	−6.3	59.6	60.0	96.1	0.875	0.875	0.25	81.4	−6.1	57.8	58.2	96.1	1.8	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
633	Y00G_087_050d	0.875	0.875	0.375	0.875	0.5	0.625	90	0.875	0.875	0.375	82.8	−5.1	47.7	48.0	96.1	0.875	0.875	0.375	82.3	−5.3	45.8	46.1	96.6	1.9	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
634	Y00G_087_037d	0.875	0.875	0.5	0.875	0.375	0.687	90	0.875	0.875	0.5	83.7	−3.8	35.8	36.0	96.1	0.875	0.875	0.5	83.7	−3.9	33.3	33.6	96.8	2.4	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
635	Y00G_087_025d	0.875	0.875	0.625	0.875	0.25	0.75	90	0.875	0.875	0.625	84.7	−2.5	23.8	24.0	96.1	0.875	0.875	0.625	84.6	−2.2	22.0	22.1	95.8	1.8	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
636	Y00G_087_012d	0.875	0.875	0.75	0.875	0.125	0.812	90	0.875	0.875	0.75	85.7	−1.2	11.9	12.0	96.1	0.875	0.875	0.75	85.6	−0.3	11.7	11.7	91.7	0.9	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
637	NW_087d	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0	0.875	0.875	0.875	86.7	1.6	2.9	3.3	60.9	3.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
638	B00R_100_012d	0.875	0.875	1.0	1.0	0.125	0.937	270	0.875	0.875	1.0	86.8	3.6	−5.0	6.2	306.2	0.875	0.875	1.0	87.6	3.8	−5.2	6.4	306.2	0.8	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
639	Y11G_100_100d	0.875	1.0	0.0	1.0	1.0	0.5	97	0.883	1.0	0.0	84.5	−13.6	89.7	90.7	98.6	0.875	1.0	0.0	84.3	−13.9	89.2	90.3	98.8	0.5	96	0.883	1.0	0.0	84.5	−13.6	89.7	90.7	98.6
640	Y13G_100_087d	0.875	1.0	0.125	1.0	0.875	0.562	98	0.883	1.0	0.125	85.5	−12.3	77.8	78.7	99.0	0.875	1.0	0.125	85.1	−13.6	75.8	77.0	100.2	2.3	97	0.866	1.0	0.0	84.1	−14.1	88.9	90.0	99.0
641	Y15G_100_075d	0.875	1.0	0.25	1.0	0.75	0.625	99	0.887	1.0	0.25	86.6	−11.0	66.1	67.0	99.4	0.875	1.0	0.25	86.2	−12.7	63.0	64.3	101.4	3.5	97	0.85	1.0	0.0	83.6	−14.6	88.1	89.3	99.4
642	Y18G_100_062d	0.875	1.0	0.375	1.0	0.625	0.687	101	0.885	1.0	0.375	87.5	−9.7	54.1	55.0	100.2	0.875	1.0	0.375	87.0	−12.0	50.1	51.6	103.5	4.6	99	0.816	1.0	0.0	82.6	−15.6	86.6	88.0	100.2
643	Y23G_100_050d	0.875	1.0	0.5	1.0	0.5	0.75	104	0.883	1.0	0.5	88.4	−8.5	42.1	43.0	101.4	0.875	1.0	0.5	88.0	−10.8	37.3	38.8	106.1	5.3	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
644	Y31G_100_037d	0.875	1.0	0.625	1.0	0.375	0.812	109	0.881	1.0	0.625	88.9	−7.9	29.8	30.8	104.9	0.875	1.0	0.625	89.3	−8.9	24.9	26.5	109.6	4.9	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
645	Y50G_100_025d	0.875	1.0	0.75	1.0	0.25	0.875	120	0.875	1.0	0.75	89.3	−7.4	16.6	18.2	114.0	0.875	1.0	0.75	90.5	−6.9	13.6	15.3	117.0	3.1	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
646	G00B_100_012d	0.875	1.0	0.875	1.0	0.125	0.937	150	0.875	1.0	0.875	89.9	−8.1	3.7	8.9	155.5	0.875	1.0	0.875	91.4	−5.0	4.6	6.8	137.4	3.5	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
647	G50B_100_012d	0.875	1.0	1.0	1.0	0.125	0.937	210	0.875	1.0	1.0	90.7	−3.1	−5.1	6.0	238.4	0.875	1.0	1.0	92.3	−2.7	−3.8	4.7	234.9	2.1	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

Mean color difference of this page: delta E*' = 3.4

1-0032631-F0

PE870-7N, Page 27/33-F

TUB-test chart PE87; 16 step hue circle
colors and differences, ΔE*'

input: *rgb/cmyk* −> *rgb*d
output: transfer to *cmy0*d

see similar files: http://130.149.60.45/~farbmetrik/PE87/PE87.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

1-0032631-F0

TUB registration: 20150701-PE87/PE87L0NP.PDF /.PS TUB material: code=rha4ta
application for measurement of offset print output, separation cmy0 (CMY0)

http://130.149.60.45/~farbmetrik/PE87/PE87L0NP.PDF /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 28/33

n	HIC*Fd	rgb_Fd			ict_Fd			$h_{si\_F,d}$	rgb*Fd			LabCh*Fd				
648	R00Y_100_100d	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
649	R38Y_100_100d	1.0	0.0	0.125	1.0	1.0	0.5	383	1.0	0.0	0.116	45.5	71.4	40.4	82.1	29.5
650	R26Y_100_100d	1.0	0.0	0.25	1.0	1.0	0.5	376	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
651	R13Y_100_100d	1.0	0.0	0.375	1.0	1.0	0.5	368	1.0	0.0	0.366	45.8	72.9	28.7	78.4	21.5
652	R00Y_100_100d	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
653	B68R_100_100d	1.0	0.0	0.625	1.0	1.0	0.5	352	1.0	0.0	0.633	46.0	75.7	14.4	77.1	10.8
654	B61R_100_100d	1.0	0.0	0.75	1.0	1.0	0.5	344	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
655	B55R_100_100d	1.0	0.0	0.875	1.0	1.0	0.5	337	1.0	0.0	0.883	45.9	78.3	3.8	78.4	2.8
656	B50R_100_100d	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
657	R11Y_100_100d	1.0	0.125	0.0	1.0	1.0	0.5	37	1.0	0.116	0.0	48.6	63.3	49.1	80.2	37.7
658	R00Y_100_087d	1.0	0.125	0.125	1.0	0.875	0.562	390	1.0	0.125	0.125	51.7	62.0	39.2	73.4	32.3
659	R36Y_100_087d	1.0	0.125	0.25	1.0	0.875	0.562	382	1.0	0.125	0.241	51.8	62.5	34.7	71.6	29.0
660	R23Y_100_087d	1.0	0.125	0.375	1.0	0.875	0.562	374	1.0	0.125	0.358	51.9	63.2	29.5	69.8	25.0
661	R08Y_100_087d	1.0	0.125	0.5	1.0	0.875	0.562	365	1.0	0.125	0.489	52.0	64.2	22.7	68.1	19.4
662	B70R_100_087d	1.0	0.125	0.625	1.0	0.875	0.562	355	1.0	0.125	0.635	52.1	65.8	14.8	67.4	12.7
663	B63R_100_087d	1.0	0.125	0.75	1.0	0.875	0.562	346	1.0	0.125	0.766	52.1	67.3	8.3	67.8	7.0
664	B56R_100_087d	1.0	0.125	0.875	1.0	0.875	0.562	338	1.0	0.125	0.883	52.1	68.4	3.8	68.5	3.2
665	B50R_100_087d	1.0	0.125	1.0	1.0	0.875	0.562	330	1.0	0.125	1.0	52.3	69.4	−0.1	69.4	359.8
666	R23Y_100_100d	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
667	R13Y_100_087d	1.0	0.25	0.125	1.0	0.875	0.562	38	1.0	0.241	0.125	55.0	54.3	43.6	69.7	38.7
668	R00Y_100_075d	1.0	0.25	0.25	1.0	0.75	0.625	390	1.0	0.25	0.25	58.0	53.2	33.6	62.9	32.3
669	R35Y_100_075d	1.0	0.25	0.375	1.0	0.75	0.625	381	1.0	0.25	0.362	58.0	53.7	29.2	61.1	28.5
670	R18Y_100_075d	1.0	0.25	0.5	1.0	0.75	0.625	371	1.0	0.25	0.487	58.2	54.5	23.4	59.3	23.2
671	R00Y_100_075d	1.0	0.25	0.625	1.0	0.75	0.625	360	1.0	0.25	0.625	58.3	55.6	15.8	57.8	15.9
672	B65R_100_075d	1.0	0.25	0.75	1.0	0.75	0.625	349	1.0	0.25	0.762	58.3	57.3	8.9	58.0	8.9
673	B57R_100_075d	1.0	0.25	0.875	1.0	0.75	0.625	339	1.0	0.25	0.887	58.3	58.5	3.7	58.6	3.7
674	B50R_100_075d	1.0	0.25	1.0	1.0	0.75	0.625	330	1.0	0.25	1.0	58.4	59.4	−0.1	59.4	359.8
675	R36Y_100_100d	1.0	0.375	0.0	1.0	1.0	0.5	52	1.0	0.366	0.0	58.8	41.1	61.7	74.1	56.3
676	R26Y_100_087d	1.0	0.375	0.125	1.0	0.875	0.562	46	1.0	0.358	0.125	59.5	44.1	49.4	66.2	48.2
677	R15Y_100_075d	1.0	0.375	0.25	1.0	0.75	0.625	39	1.0	0.362	0.25	61.3	45.5	38.0	59.3	39.9
678	R00Y_100_062d	1.0	0.375	0.375	1.0	0.625	0.687	390	1.0	0.375	0.375	64.2	44.3	28.0	52.4	32.3
679	R31Y_100_062d	1.0	0.375	0.5	1.0	0.625	0.687	379	1.0	0.375	0.489	64.3	44.9	23.4	50.6	27.5
680	R11Y_100_062d	1.0	0.375	0.625	1.0	0.625	0.687	367	1.0	0.375	0.614	64.5	45.6	17.4	48.8	20.8
681	B69R_100_062d	1.0	0.375	0.75	1.0	0.625	0.687	353	1.0	0.375	0.76	64.6	47.2	9.5	48.1	11.4
682	B59R_100_062d	1.0	0.375	0.875	1.0	0.625	0.687	341	1.0	0.375	0.885	64.5	48.6	3.9	48.7	4.6
683	B50R_100_062d	1.0	0.375	1.0	1.0	0.625	0.687	330	1.0	0.375	1.0	64.6	49.5	−0.1	49.5	359.8
684	R50Y_100_100d	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
685	R41Y_100_087d	1.0	0.5	0.125	1.0	0.875	0.562	55	1.0	0.489	0.125	65.4	32.0	56.4	64.9	60.3
686	R31Y_100_075d	1.0	0.5	0.25	1.0	0.75	0.625	49	1.0	0.487	0.25	66.3	34.3	44.4	56.2	52.2
687	R18Y_100_062d	1.0	0.5	0.375	1.0	0.625	0.687	41	1.0	0.489	0.375	67.8	36.1	32.8	48.8	42.2
688	R00Y_100_050d	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	70.5	35.4	22.4	41.9	32.3
689	R26Y_100_050d	1.0	0.5	0.625	1.0	0.5	0.75	376	1.0	0.5	0.616	70.6	36.0	17.6	40.1	26.1
690	R00Y_100_050d	1.0	0.5	0.75	1.0	0.5	0.75	360	1.0	0.5	0.75	70.7	37.1	10.5	38.5	15.9
691	B61R_100_050d	1.0	0.5	0.875	1.0	0.5	0.75	344	1.0	0.5	0.883	70.7	38.6	4.0	38.8	5.9
692	B50R_100_050d	1.0	0.5	1.0	1.0	0.5	0.75	330	1.0	0.5	1.0	70.8	39.6	−0.1	39.6	359.8
693	R63Y_100_100d	1.0	0.625	0.0	1.0	1.0	0.5	68	1.0	0.633	0.0	72.5	14.8	77.6	79.0	79.1
694	R58Y_100_087d	1.0	0.625	0.125	1.0	0.875	0.562	65	1.0	0.635	0.125	72.9	17.7	65.2	67.6	74.8
695	R50Y_100_075d	1.0	0.625	0.25	1.0	0.75	0.625	60	1.0	0.625	0.25	72.5	21.6	51.5	55.9	67.1
696	R38Y_100_062d	1.0	0.625	0.375	1.0	0.625	0.687	53	1.0	0.614	0.375	73.0	24.7	39.1	46.2	57.6
697	R23Y_100_050d	1.0	0.625	0.5	1.0	0.5	0.75	44	1.0	0.616	0.5	74.3	26.7	27.4	38.2	45.7
698	R00Y_100_037d	1.0	0.625	0.625	1.0	0.375	0.812	390	1.0	0.625	0.625	76.8	26.6	16.8	31.4	32.3
699	R18Y_100_037d	1.0	0.625	0.75	1.0	0.375	0.812	371	1.0	0.625	0.743	76.9	27.2	11.7	29.6	23.2
700	B65R_100_037d	1.0	0.625	0.875	1.0	0.375	0.812	349	1.0	0.625	0.881	77.0	28.6	4.4	29.0	8.9
701	B50R_100_037d	1.0	0.625	1.0	1.0	0.375	0.812	330	1.0	0.625	1.0	77.0	29.7	0.0	29.7	359.8
702	R76Y_100_100d	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
703	R73Y_100_087d	1.0	0.75	0.125	1.0	0.875	0.562	74	1.0	0.766	0.125	79.4	6.0	72.6	72.9	85.2
704	R68Y_100_075d	1.0	0.75	0.25	1.0	0.75	0.625	71	1.0	0.762	0.25	80.0	8.2	60.3	60.8	82.1
705	R61Y_100_062d	1.0	0.75	0.375	1.0	0.625	0.687	67	1.0	0.76	0.375	80.6	10.2	47.9	49.0	77.8
706	R50Y_100_050d	1.0	0.75	0.5	1.0	0.5	0.75	60	1.0	0.75	0.5	80.2	14.4	34.3	37.2	67.1
707	R31Y_100_037d	1.0	0.75	0.625	1.0	0.375	0.812	49	1.0	0.743	0.625	80.9	17.1	22.2	28.1	52.2
708	R00Y_100_025d	1.0	0.75	0.75	1.0	0.25	0.875	390	1.0	0.75	0.75	83.0	17.7	11.2	20.9	32.3
709	R00Y_100_025d	1.0	0.75	0.875	1.0	0.25	0.875	360	1.0	0.75	0.875	83.1	18.5	5.2	19.2	15.9
710	B50R_100_025d	1.0	0.75	1.0	1.0	0.25	0.875	330	1.0	0.75	1.0	83.2	19.8	0.0	19.8	359.8
711	R88Y_100_100d	1.0	0.875	0.0	1.0	1.0	0.5	83	1.0	0.883	0.0	83.7	−3.8	90.5	90.6	92.4
712	R86Y_100_087d	1.0	0.875	0.125	1.0	0.875	0.562	82	1.0	0.883	0.125	84.6	−2.4	78.6	78.6	91.7
713	R85Y_100_075d	1.0	0.875	0.25	1.0	0.75	0.625	81	1.0	0.887	0.25	85.6	−1.1	66.7	66.7	91.0
714	R81Y_100_062d	1.0	0.875	0.375	1.0	0.625	0.687	79	1.0	0.885	0.375	86.4	0.5	54.6	54.6	89.4
715	R76Y_100_050d	1.0	0.875	0.5	1.0	0.5	0.75	76	1.0	0.883	0.5	87.1	2.1	42.3	42.4	87.0
716	R68Y_100_037d	1.0	0.875	0.625	1.0	0.375	0.812	71	1.0	0.881	0.625	87.8	4.1	30.1	30.4	82.1
717	R50Y_100_025d	1.0	0.875	0.75	1.0	0.25	0.875	60	1.0	0.875	0.75	87.9	7.2	17.1	18.6	67.1
718	R00Y_100_012d	1.0	0.875	0.875	1.0	0.125	0.937	390	1.0	0.875	0.875	89.3	8.8	5.6	10.4	32.3
719	B50R_100_012d	1.0	0.875	1.0	1.0	0.125	0.937	330	1.0	0.875	1.0	89.4	9.9	0.0	9.9	359.8
720	Y00G_100_100d	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
721	Y00G_100_087d	1.0	1.0	0.125	1.0	0.875	0.562	90	1.0	1.0	0.125	88.8	−8.9	83.5	84.0	96.1
722	Y00G_100_075d	1.0	1.0	0.25	1.0	0.75	0.625	90	1.0	1.0	0.25	89.7	−7.6	71.6	72.0	96.1
723	Y00G_100_062d	1.0	1.0	0.375	1.0	0.625	0.687	90	1.0	1.0	0.375	90.7	−6.3	59.6	60.0	96.1
724	Y00G_100_050d	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	1.0	0.5	91.7	−5.1	47.7	48.0	96.1
725	Y00G_100_037d	1.0	1.0	0.625	1.0	0.375	0.812	90	1.0	1.0	0.625	92.6	−3.8	35.8	36.0	96.1
726	Y00G_100_025d	1.0	1.0	0.75	1.0	0.25	0.875	90	1.0	1.0	0.75	93.6	−2.5	23.8	24.0	96.1
727	Y00G_100_012d	1.0	1.0	0.875	1.0	0.125	0.937	90	1.0	1.0	0.875	94.6	−1.2	11.9	12.0	96.1
728	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

n	rgb*'Fd			LabCh*'Fd					DE*'Fd	$h_{siM,d}$	rgb*Md			LabCh*Md				
648	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
649	1.0	0.0	0.125	45.5	71.4	40.1	81.9	29.3	0.3	383	1.0	0.0	0.116	45.5	71.4	40.4	82.1	29.5
650	1.0	0.0	0.25	45.6	72.1	34.6	80.0	25.6	0.7	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
651	1.0	0.0	0.375	45.8	72.9	28.3	78.3	21.2	0.4	368	1.0	0.0	0.366	45.8	72.9	28.7	78.4	21.5
652	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
653	1.0	0.0	0.625	46.0	75.6	14.8	77.0	11.1	0.4	351	1.0	0.0	0.633	46.0	75.7	14.4	77.1	10.8
654	1.0	0.0	0.75	45.9	77.1	8.6	77.6	6.4	0.6	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
655	1.0	0.0	0.875	45.9	78.2	4.1	78.3	3.0	0.2	336	1.0	0.0	0.883	45.9	78.3	3.8	78.4	2.8
656	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
657	1.0	0.125	0.0	48.9	62.8	49.4	79.9	38.1	0.6	36	1.0	0.116	0.0	48.6	63.3	49.1	80.2	37.7
658	1.0	0.125	0.125	49.6	62.3	43.6	76.1	34.9	4.8	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
659	1.0	0.125	0.25	49.6	63.1	36.9	73.1	30.3	3.0	382	1.0	0.0	0.133	45.5	71.5	39.7	81.8	29.0
660	1.0	0.125	0.375	50.0	63.5	30.1	70.3	25.3	2.0	375	1.0	0.0	0.266	45.6	72.3	33.8	79.8	25.0
661	1.0	0.125	0.5	50.2	64.7	22.4	68.5	19.1	1.9	365	1.0	0.0	0.416	45.8	73.4	25.9	77.9	19.4
662	1.0	0.125	0.625	50.6	65.8	14.3	67.3	12.2	1.6	354	1.0	0.0	0.583	45.9	75.2	16.9	77.1	12.7
663	1.0	0.125	0.75	50.9	66.9	7.4	67.3	6.3	1.5	344	1.0	0.0	0.733	45.9	77.0	9.4	77.5	7.0
664	1.0	0.125	0.875	51.0	68.3	2.4	68.3	2.0	1.9	337	1.0	0.0	0.866	45.9	78.1	4.4	78.3	3.2
665	1.0	0.125	1.0	51.3	69.1	−2.3	69.2	358.0	2.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
666	1.0	0.25	0.0	53.6	51.9	55.5	76.0	46.8	1.7	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
667	1.0	0.25	0.125	54.4	51.3	48.5	70.6	43.3	5.7	37	1.0	0.133	0.0	49.2	62.1	49.8	79.6	38.7
668	1.0	0.25	0.25	55.3	50.6	40.6	64.9	38.7	7.8	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
669	1.0	0.25	0.375	55.8	50.9	33.0	60.7	32.9	5.2	382	1.0	0.0	0.15	45.5	71.6	39.0	81.5	28.5
670	1.0	0.25	0.5	56.4	51.4	24.6	57.0	25.5	3.6	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
671	1.0	0.25	0.625	56.8	52.8	15.9	55.2	16.7	3.1	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
672	1.0	0.25	0.75	57.1	54.5	7.8	55.1	8.1	3.2	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
673	1.0	0.25	0.875	57.6	55.4	1.7	55.5	1.7	3.7	337	1.0	0.0	0.85	45.9	78.0	5.0	78.2	3.7
674	1.0	0.25	1.0	58.0	56.2	−3.2	56.3	356.6	4.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
675	1.0	0.375	0.0	59.1	40.3	62.0	74.0	56.9	0.9	51	1.0	0.366	0.0	58.8	41.1	61.7	74.1	56.3
676	1.0	0.375	0.125	59.2	41.2	53.0	67.1	52.1	4.6	44	1.0	0.266	0.0	54.4	50.4	56.5	75.7	48.2
677	1.0	0.375	0.25	59.8	41.2	44.0	60.3	46.8	7.4	37	1.0	0.15	0.0	49.8	60.7	50.7	79.1	39.9
678	1.0	0.375	0.375	61.2	40.1	35.6	53.7	41.6	9.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
679	1.0	0.375	0.5	61.7	40.7	27.1	48.9	33.6	6.1	380	1.0	0.0	0.183	45.5	71.8	37.5	81.0	27.5
680	1.0	0.375	0.625	62.6	41.7	17.7	45.3	23.0	4.4	367	1.0	0.0	0.383	45.8	73.0	27.8	78.2	20.8
681	1.0	0.375	0.75	63.0	43.5	8.8	44.4	11.4	4.1	352	1.0	0.0	0.616	46.0	75.5	15.2	77.1	11.4
682	1.0	0.375	0.875	63.9	44.3	1.6	44.3	2.1	4.8	339	1.0	0.0	0.816	45.9	77.7	6.2	78.0	4.6
683	1.0	0.375	1.0	64.6	45.0	−3.7	45.2	355.2	5.7	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
684	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
685	1.0	0.5	0.125	64.9	29.9	58.6	65.9	62.9	3.1	54	1.0	0.416	0.0	61.0	36.6	64.5	74.1	60.3
686	1.0	0.5	0.25	65.7	30.0	48.4	57.0	58.2	5.9	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
687	1.0	0.5	0.375	66.5	30.2	39.0	49.3	52.2	8.6	39	1.0	0.183	0.0	51.1	57.8	52.5	78.1	42.2
688	1.0	0.5	0.5	68.0	29.9	28.7	41.5	43.8	8.7	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
689	1.0	0.5	0.625	68.6	31.2	19.2	36.6	31.5	5.4	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
690	1.0	0.5	0.75	69.1	32.9	10.3	34.5	17.4	4.4	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
691	1.0	0.5	0.875	70.2	34.0	2.5	34.1	4.2	4.9	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
692	1.0	0.5	1.0	70.7	35.2	−3.7	35.4	353.9	5.7	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
693	1.0	0.625	0.0	72.1	15.4	77.1	78.6	78.6	0.8	68	1.0	0.633	0.0	72.5	14.8	77.6	79.0	79.1
694	1.0	0.625	0.125	73.0	15.1	66.5	68.2	77.1	2.8	65	1.0	0.583	0.0	69.7	20.2	74.6	77.3	74.8
695	1.0	0.625	0.25	73.3	16.2	54.7	57.1	73.4	6.3	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
696	1.0	0.625	0.375	73.7	17.5	43.5	46.9	68.0	8.4	52	1.0	0.383	0.0	59.5	39.5	62.5	74.0	57.6
697	1.0	0.625	0.5	74.7	18.3	32.2	37.0	60.3	9.6	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
698	1.0	0.625	0.625	76.0	19.0	21.7	28.9	48.7	9.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
699	1.0	0.625	0.75	76.6	20.7	12.6	24.2	31.4	6.5	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
700	1.0	0.625	0.875	77.7	22.1	3.8	22.4	9.8	6.5	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
701	1.0	0.625	1.0	78.3	23.8	−3.0	24.0	352.6	6.7	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
702	1.0	0.75	0.0	77.9	5.4	83.8	84.0	86.2	1.6	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
703	1.0	0.75	0.125	78.7	5.4	72.0	72.2	85.6	1.1	75	1.0	0.733	0.0	77.1	6.9	83.0	83.3	85.2
704	1.0	0.75	0.25	79.3	6.1	59.9	60.2	84.1	2.2	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
705	1.0	0.75	0.375	79.9	7.2	47.7	48.3	81.3	3.1	67	1.0	0.616	0.0	71.6	16.4	76.6	78.4	77.8
706	1.0	0.75	0.5	80.4	9.0	35.3	36.5	75.5	5.4	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
707	1.0	0.75	0.625	81.3	10.8	23.7	26.1	65.5	6.5	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
708	1.0	0.75	0.75	82.4	12.2	13.9	18.5	48.7	6.1	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
709	1.0	0.75	0.875	83.2	13.9	5.3	14.9	21.0	4.6	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
710	1.0	0.75	1.0	84.0	15.8	−2.4	16.0	351.0	4.7	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
711	1.0	0.875	0.0	83.4	−3.4	90.2	90.2	92.1	0.6	83	1.0	0.883	0.0	83.7	−3.8	90.5	90.6	92.4
712	1.0	0.875	0.125	84.2	−3.3	77.6	77.6	92.4	1.3	82	1.0	0.866	0.0	83.1	−2.8	89.8	89.8	91.7
713	1.0	0.875	0.25	85.3	−3.2	65.1	65.2	92.8	2.6	81	1.0	0.85	0.0	82.3	−1.5	89.0	89.0	91.0
714	1.0	0.875	0.375	85.9	−2.1	52.6	52.6	92.3	3.3	80	1.0	0.816	0.0	80.8	0.8	87.3	87.3	89.4
715	1.0	0.875	0.5	86.9	−0.8	39.3	39.3	91.2	4.3	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
716	1.0	0.875	0.625	87.9	0.7	27.3	27.3	88.5	4.4	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
717	1.0	0.875	0.75	88.8	2.8	16.3	16.5	80.0	4.5	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
718	1.0	0.875	0.875	89.8	4.6	7.1	8.5	56.8	4.4	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
719	1.0	0.875	1.0	90.5	6.9	−1.4	7.1	347.9	3.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
720	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
721	1.0	1.0	0.125	88.5	−10.1	82.6	83.3	96.9	1.4	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
722	1.0	1.0	0.25	89.3	−9.7	69.6	70.3	97.9	2.8	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
723	1.0	1.0	0.375	90.3	−8.8	56.2	56.8	98.9	4.3	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
724	1.0	1.0	0.5	91.4	−7.7	42.5	43.2	100.3	5.8	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
725	1.0	1.0	0.625	92.5	−6.1	30.1	30.7	101.5	6.1	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
726	1.0	1.0	0.75	93.7	−4.3	19.0	19.5	102.8	5.1	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
727	1.0	1.0	0.875	94.8	−2.3	9.0	9.3	104.4	3.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
728	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

Mean color difference of this page: delta $E^{*\prime}$ = 3.7

1-0032731-F0

PE870-7N, Page 28/33-F

TUB-test chart PE87; 16 step hue circle colors and differences, $\Delta E^{*\prime}$

input: $rgb/cmyk \rightarrow rgb_d$
output: transfer to $cmy0_d$

see similar files: http://130.149.60.45/~farbmetrik/PE87/PE87.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

http://130.149.60.45/~farbmetrik/PE87/PE87L0NP.PDF /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 29/33

n	HIC*Fd	rgb_Fd			ict_Fd			hsi_F,d	rgb*Fd			LabCh*Fd					rgb*'Fd			LabCh*'Fd					DE*'Fd	hsiM,d	rgb*Md			LabCh*Md				
729	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	1.0	1.0	1.0	95.5	0.0	0.0	0.1	112.0	0.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
730	G50B_100_012d	0.875	1.0	1.0	1.0	0.125	0.937	210	0.875	1.0	1.0	90.7	−3.1	−5.1	6.0	238.4	0.875	1.0	1.0	91.9	−2.9	−4.1	5.0	234.3	1.6	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
731	G50B_100_025d	0.75	1.0	1.0	1.0	0.25	0.875	210	0.75	1.0	1.0	85.9	−6.3	−10.3	12.1	238.4	0.75	1.0	1.0	87.8	−5.7	−8.6	10.3	236.4	2.7	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
732	G50B_100_037d	0.625	1.0	1.0	1.0	0.375	0.812	210	0.625	1.0	1.0	81.0	−9.5	−15.5	18.2	238.4	0.625	1.0	1.0	83.2	−8.6	−13.4	15.9	237.2	3.2	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
733	G50B_100_050d	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	1.0	76.2	−12.7	−20.7	24.3	238.4	0.5	1.0	1.0	77.6	−12.2	−19.4	22.9	237.6	2.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
734	G50B_100_062d	0.375	1.0	1.0	1.0	0.625	0.687	210	0.375	1.0	1.0	71.3	−15.9	−25.9	30.4	238.4	0.375	1.0	1.0	72.3	−15.5	−24.9	29.4	238.1	1.4	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
735	G50B_100_075d	0.25	1.0	1.0	1.0	0.75	0.625	210	0.25	1.0	1.0	66.5	−19.1	−31.1	36.5	238.4	0.25	1.0	1.0	66.5	−19.1	−31.2	36.6	238.4	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
736	G50B_100_087d	0.125	1.0	1.0	1.0	0.875	0.562	210	0.125	1.0	1.0	61.6	−22.3	−36.3	42.6	238.4	0.125	1.0	1.0	61.2	−21.8	−36.5	42.5	239.0	0.6	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
737	G50B_100_100d	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	0.0	1.0	1.0	55.3	−24.7	−42.3	49.0	239.6	1.7	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
738	R00Y_100_012d	1.0	0.875	0.875	1.0	0.125	0.937	390	1.0	0.875	0.875	89.3	8.8	5.6	10.4	32.3	1.0	0.875	0.875	89.7	4.4	7.8	9.0	60.1	4.9	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
739	NW_087d	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0	0.875	0.875	0.875	86.1	1.2	3.6	3.8	70.9	3.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
740	G50B_087_012d	0.75	0.875	0.875	0.875	0.125	0.812	210	0.75	0.875	0.875	81.8	−3.1	−5.1	6.0	238.4	0.75	0.875	0.875	82.2	−1.9	−0.8	2.1	204.3	4.4	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
741	G50B_087_025d	0.625	0.875	0.875	0.875	0.25	0.75	210	0.625	0.875	0.875	77.0	−6.3	−10.3	12.1	238.4	0.625	0.875	0.875	77.9	−5.4	−5.5	7.8	225.6	4.9	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
742	G50B_087_037d	0.5	0.875	0.875	0.875	0.375	0.687	210	0.5	0.875	0.875	72.1	−9.5	−15.5	18.2	238.4	0.5	0.875	0.875	72.8	−9.5	−11.3	14.8	229.9	4.2	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
743	G50B_087_050d	0.375	0.875	0.875	0.875	0.5	0.625	210	0.375	0.875	0.875	67.3	−12.7	−20.7	24.3	238.4	0.375	0.875	0.875	67.6	−13.7	−16.9	21.8	230.9	3.9	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
744	G50B_087_062d	0.25	0.875	0.875	0.875	0.625	0.562	210	0.25	0.875	0.875	62.4	−15.9	−25.9	30.4	238.4	0.25	0.875	0.875	62.2	−18.3	−23.4	29.8	231.9	3.4	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
745	G50B_087_075d	0.125	0.875	0.875	0.875	0.75	0.5	210	0.125	0.875	0.875	57.6	−19.1	−31.1	36.5	238.4	0.125	0.875	0.875	57.2	−22.1	−28.6	36.1	232.2	3.9	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
746	G50B_087_087d	0.0	0.875	0.875	0.875	0.875	0.437	210	0.0	0.875	0.875	52.7	−22.3	−36.3	42.6	238.4	0.0	0.875	0.875	51.9	−26.3	−34.9	43.7	232.9	4.3	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
747	R00Y_100_025d	1.0	0.75	0.75	1.0	0.25	0.875	390	1.0	0.75	0.75	83.0	17.7	11.2	20.9	32.3	1.0	0.75	0.75	82.3	11.7	15.1	19.1	52.1	7.1	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
748	R00Y_087_012d	0.875	0.75	0.75	0.875	0.125	0.812	390	0.875	0.75	0.75	80.4	8.8	5.6	10.4	32.3	0.875	0.75	0.75	79.1	8.0	10.9	13.6	53.6	5.5	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
749	NW_075d	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0	0.75	0.75	0.75	75.6	4.4	6.7	8.0	56.1	8.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
750	G50B_075_012d	0.625	0.75	0.75	0.75	0.125	0.687	210	0.625	0.75	0.75	72.9	−3.1	−5.1	6.0	238.4	0.625	0.75	0.75	71.2	0.3	1.9	2.0	79.0	8.2	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
751	G50B_075_025d	0.5	0.75	0.75	0.75	0.25	0.625	210	0.5	0.75	0.75	68.1	−6.3	−10.3	12.1	238.4	0.5	0.75	0.75	66.4	−4.7	−3.8	6.1	219.4	6.9	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
752	G50B_075_037d	0.375	0.75	0.75	0.75	0.375	0.562	210	0.375	0.75	0.75	63.2	−9.5	−15.5	18.2	238.4	0.375	0.75	0.75	61.8	−9.3	−9.6	13.4	225.8	6.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
753	G50B_075_050d	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.75	58.4	−12.7	−20.7	24.3	238.4	0.25	0.75	0.75	56.5	−15.2	−16.0	22.1	226.3	5.6	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
754	G50B_075_062d	0.125	0.75	0.75	0.75	0.625	0.437	210	0.125	0.75	0.75	53.5	−15.9	−25.9	30.4	238.4	0.125	0.75	0.75	52.2	−19.8	−21.1	28.9	226.8	6.3	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
755	G50B_075_075d	0.0	0.75	0.75	0.75	0.75	0.375	210	0.0	0.75	0.75	48.7	−19.1	−31.1	36.5	238.4	0.0	0.75	0.75	47.3	−25.7	−27.2	37.5	226.6	7.8	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
756	R00Y_100_037d	1.0	0.625	0.625	1.0	0.375	0.812	390	1.0	0.625	0.625	76.8	26.6	16.8	31.4	32.3	1.0	0.625	0.625	76.1	18.3	22.9	29.3	51.3	10.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
757	R00Y_087_025d	0.875	0.625	0.625	0.875	0.25	0.75	390	0.875	0.625	0.625	74.1	17.7	11.2	20.9	32.3	0.875	0.625	0.625	73.0	14.4	18.5	23.5	52.0	8.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
758	R00Y_075_012d	0.75	0.625	0.625	0.75	0.125	0.687	390	0.75	0.625	0.625	71.5	8.8	5.6	10.4	32.3	0.75	0.625	0.625	69.8	10.1	14.0	17.3	54.0	8.6	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
759	NW_062d	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0	0.625	0.625	0.625	65.4	5.8	9.1	10.9	57.3	11.4	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
760	G50B_062_012d	0.5	0.625	0.625	0.625	0.125	0.562	210	0.5	0.625	0.625	64.0	−3.1	−5.1	6.0	238.4	0.5	0.625	0.625	61.0	0.4	3.7	3.7	83.2	10.1	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
761	G50B_062_025d	0.375	0.625	0.625	0.625	0.25	0.5	210	0.375	0.625	0.625	59.2	−6.3	−10.3	12.1	238.4	0.375	0.625	0.625	56.7	−5.3	−2.1	5.7	201.6	8.6	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
762	G50B_062_037d	0.25	0.625	0.625	0.625	0.375	0.437	210	0.25	0.625	0.625	54.3	−9.5	−15.5	18.2	238.4	0.25	0.625	0.625	51.9	−12.3	−8.5	14.9	214.7	7.9	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
763	G50B_062_050d	0.125	0.625	0.625	0.625	0.5	0.375	210	0.125	0.625	0.625	49.4	−12.7	−20.7	24.3	238.4	0.125	0.625	0.625	48.0	−18.0	−13.9	22.8	217.6	8.7	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
764	G50B_062_062d	0.0	0.625	0.625	0.625	0.625	0.312	210	0.0	0.625	0.625	44.6	−15.9	−25.9	30.4	238.4	0.0	0.625	0.625	43.3	−25.1	−20.1	32.1	218.6	10.9	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
765	R00Y_100_050d	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	70.5	35.4	22.4	41.9	32.3	1.0	0.5	0.5	68.2	29.0	29.0	41.1	45.0	9.5	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
766	R00Y_087_037d	0.875	0.5	0.5	0.875	0.375	0.687	390	0.875	0.5	0.5	67.9	26.6	16.8	31.4	32.3	0.875	0.5	0.5	65.3	24.5	25.2	35.1	45.7	9.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
767	R00Y_075_025d	0.75	0.5	0.5	0.75	0.25	0.625	390	0.75	0.5	0.5	65.2	17.7	11.2	20.9	32.3	0.75	0.5	0.5	62.2	20.1	20.1	28.5	45.0	9.7	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
768	R00Y_062_012d	0.625	0.5	0.5	0.625	0.125	0.562	390	0.625	0.5	0.5	62.6	8.8	5.6	10.4	32.3	0.625	0.5	0.5	58.7	14.9	15.6	21.6	46.3	12.3	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
769	NW_050d	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	54.3	8.9	10.1	13.5	48.5	14.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
770	G50B_050_012d	0.375	0.5	0.5	0.5	0.125	0.437	210	0.375	0.5	0.5	55.1	−3.1	−5.1	6.0	238.4	0.375	0.5	0.5	50.6	1.9	4.3	4.7	65.2	11.7	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
771	G50B_050_025d	0.25	0.5	0.5	0.5	0.25	0.375	210	0.249	0.5	0.5	50.2	−6.3	−10.3	12.1	238.4	0.25	0.5	0.5	46.0	−5.6	−2.0	6.0	199.5	9.3	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
772	G50B_050_037d	0.125	0.5	0.5	0.5	0.375	0.312	210	0.124	0.5	0.5	45.4	−9.5	−15.5	18.2	238.4	0.125	0.5	0.5	42.3	−12.7	−7.7	14.9	211.3	8.9	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
773	G50B_050_050d	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.5	40.5	−12.7	−20.7	24.3	238.4	0.0	0.5	0.5	38.5	−21.4	−13.9	25.5	213.0	11.2	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
774	R00Y_100_062d	1.0	0.375	0.375	1.0	0.625	0.687	390	1.0	0.375	0.375	64.2	44.3	28.0	52.4	32.3	1.0	0.375	0.375	61.4	39.0	35.7	52.9	42.4	9.7	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
775	R00Y_087_050d	0.875	0.375	0.375	0.875	0.5	0.625	390	0.875	0.375	0.375	61.6	35.4	22.4	41.9	32.3	0.875	0.375	0.375	58.9	33.9	31.5	46.3	42.8	9.6	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
776	R00Y_075_037d	0.75	0.375	0.375	0.75	0.375	0.562	390	0.75	0.375	0.375	59.0	26.6	16.8	31.4	32.3	0.75	0.375	0.375	55.9	29.2	26.8	39.7	42.5	10.8	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
777	R00Y_062_025d	0.625	0.375	0.375	0.625	0.25	0.5	390	0.625	0.375	0.375	56.3	17.7	11.2	20.9	32.3	0.625	0.375	0.375	52.5	23.8	21.9	32.3	42.6	12.9	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
778	R00Y_050_012d	0.5	0.375	0.375	0.5	0.125	0.437	390	0.5	0.375	0.375	53.7	8.8	5.6	10.4	32.3	0.5	0.375	0.375	48.7	16.8	16.1	23.3	43.7	14.1	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
779	NW_037d	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0	0.375	0.375	0.375	45.0	9.7	10.1	14.0	46.0	15.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
780	G50B_037_012d	0.25	0.375	0.375	0.375	0.125	0.312	210	0.249	0.375	0.375	46.2	−3.1	−5.1	6.0	238.4	0.25	0.375	0.375	40.9	0.8	3.7	3.8	77.4	11.1	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
781	G50B_037_025d	0.125	0.375	0.375	0.375	0.25	0.25	210	0.124	0.375	0.375	41.3	−6.3	−10.3	12.1	238.4	0.125	0.375	0.375	37.7	−7.6	−1.5	7.8	191.5	9.6	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
782	G50B_037_037d	0.0	0.375	0.375	0.375	0.375	0.187	210	0.0	0.375	0.375	36.5	−9.5	−15.5	18.2	238.4	0.0	0.375	0.375	34.4	−17.9	−8.0	19.6	204.0	11.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
783	R00Y_100_075d	1.0	0.25	0.25	1.0	0.75	0.625	390	1.0	0.25	0.25	58.0	53.2	33.6	62.9	32.3	1.0	0.25	0.25	55.3	49.7	40.6	64.1	39.2	8.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
784	R00Y_087_062d	0.875	0.25	0.25	0.875	0.625	0.562	390	0.875	0.25	0.25	55.3	44.3	28.0	52.4	32.3	0.875	0.25	0.25	52.8	44.8	36.2	57.7	38.9	8.6	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
785	R00Y_075_050d	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	52.7	35.4	22.4	41.9	32.3	0.75	0.25	0.25	50.1	39.4	31.1	50.3	38.3	9.9	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
786	R00Y_062_037d	0.625	0.25	0.25	0.625	0.375	0.437	390	0.625	0.25	0.25	50.1	26.6	16.8	31.4	32.3	0.625	0.25	0.25	46.7	33.8	26.1	42.7	37.7	12.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
787	R00Y_050_025d	0.5	0.25	0.25	0.5	0.25	0.375	390	0.5	0.249	0.249	47.4	17.7	11.2	20.9	32.3	0.5	0.25	0.25	43.2	26.1	19.9	32.8	37.3	12.8	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
788	R00Y_037_012d	0.375	0.25	0.25	0.375	0.125	0.312	390	0.375	0.249	0.249	44.8	8.8	5.6	10.4	32.3	0.375	0.25	0.25	40.0	18.4	13.9	23.1	37.2	13.5	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
789	NW_025d	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0	0.25	0.25	0.25	36.4	8.8	7.3	11.4	39.4	12.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
790	G50B_025_012d	0.125	0.25	0.25	0.25	0.125	0.187	210	0.124	0.25	0.25	37.3	−3.1	−5.1	6.0	238.4	0.125	0.25	0.25	33.2	−0.1	1.3	1.3	95.3	8.2	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
791	G50B_025_025d	0.0	0.25	0.25	0.25	0.25	0.125	210	0.0	0.25	0.25	32.4	−6.3	−10.3	12.1	238.4	0.0	0.25	0.25	30.1	−12.1	−4.7	13.0	201.5	8.3	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
792	R00Y_100_087d	1.0	0.125	0.125	1.0	0.875	0.562	390	1.0	0.125	0.125	51.7	62.0	39.2	73.4	32.3	1.0	0.125	0.125	49.4	61.7	43.9	75.7	35.4	5.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
793	R00Y_087_075d	0.875	0.125	0.125	0.875	0.75	0.5	390	0.875	0.125	0.125	49.1	53.2	33.6	62.9	32.3	0.875	0.125	0.125	46.9	56.6	39.6	69.1	34.9	7.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
794	R00Y_075_062d	0.75	0.125	0.125	0.75	0.625	0.437	390	0.75	0.125	0.125	46.4	44.3	28.0	52.4	32.3	0.75	0.125	0.125	44.4	50.9	33.9	61.2	33.7	9.1	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
795	R00Y_062_050d	0.625	0.125	0.125	0.625	0.5	0.375	390	0.625	0.125	0.125	43.8	35.4	22.4	41.9	32.3	0.625	0.125	0.125	41.3	44.8	28.5	53.1	32.5	11.4	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
796	R00Y_050_037d	0.5	0.125	0.125	0.5	0.375	0.312	390	0.5	0.124	0.124	41.1	26.6	16.8	31.4	32.3	0.5	0.125	0.125	38.1	36.7	21.7	42.7	30.6	11.7	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
797	R00Y_037_025d	0.375	0.125	0.125	0.375	0.25	0.25	390	0.375	0.124	0.124	38.5	17.7	11.2	20.9	32.3	0.375	0.125	0.125	34.9	28.6	15.4	32.5	28.2	12.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
798	R00Y_025_012d	0.25	0.125	0.125	0.25	0.125	0.187	390	0.25	0.124	0.124	35.9	8.8	5.6	10.4	32.3	0.25	0.125	0.125	31.8	18.4	8.4	20.3	24.4	10.8	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
799	NW_012d	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0	0.125	0.125	0.125	28.8	8.2	2.6	8.6	18.0	9.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
800	G50B_012_012d	0.0	0.125	0.125	0.125	0.125	0.062	210	0.0	0.125	0.125	28.4	−3.1	−5.1	6.0	238.4	0.0	0.125	0.125	26.1	−4.3	−3.2	5.4	216.7	3.2	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
801	R00Y_100_100d	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	1.0	0.0	0.0	45.5	70.1	45.1	83.4	32.7	0.8	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
802	R00Y_087_087d	0.875	0.0	0.0	0.875	0.875	0.437	390	0.875	0.0	0.0	42.8	62.0	39.2	73.4	32.3	0.875	0.0	0.0	43.0	64.9	40.8	76.6	32.1	3.2	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
803	R00Y_075_075d	0.75	0.0	0.0	0.75	0.75	0.375	390	0.75	0.0	0.0	40.2	53.2	33.6	62.9	32.3	0.75	0.0	0.0	40.5	59.5	34.9	69.0	30.4	6.4	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
804	R00Y_062_062d	0.625	0.0	0.0	0.625	0.625	0.312	390	0.625	0.0	0.0	37.5	44.3	28.0	52.4	32.3	0.625	0.0	0.0	37.8	52.8	29.2	60.4	28.9	8.6	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
805	R00Y_050_050d	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	34.9	35.4	22.4	41.9	32.3	0.5	0.0	0.0	34.3	44.8	22.2	50.0	26.3	9.4	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
806	R00Y_037_037d	0.375	0.0	0.0	0.375	0.375	0.187	390	0.375	0.0	0.0	32.2	26.6	16.8	31.4	32.3	0.375	0.0	0.0	31.4	36.5	15.7	39.7	23.2	10.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
807	R00Y_025_025d	0.25	0.0	0.0	0.25	0.25	0.125	390	0.25	0.0	0.0	29.6	17.7	11.2	20.9	32.3	0.25	0.0	0.0	28.3	26.4	9.1	27.9	19.1	9.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
808	R00Y_012_012d	0.125	0.0	0.0	0.125	0.125	0.062	390	0.125	0.0	0.0	27.0	8.8	5.6	10.4	32.3	0.125	0.0	0.0	25.8	15.3	2.7	15.5	10.1	7.1	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
809	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.9	2.2	−3.1	3.8	305.4	4.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

Mean color difference of this page: delta $E^{*\prime}$ = 7.8

1−0032831−F0 PE870−7N, Page 29/33−F

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

input: $rgb/cmyk \rightarrow rgb_d$
output: transfer to $cmy0_d$

1−0032831−F0

TUB registration: 20150701-PE87/PE87L0NP.PDF /.PS TUB material: code=rha4ta
application for measurement of offset print output, separation cmy0 (CMY0)

n	HIC*Fd	rgb_Fd			ict_Fd			$h_{si\_F,d}$	rgb*Fd			LabCh*Fd					rgb*'Fd			LabCh*'Fd					DE*'Fd	$h_{siM,d}$	rgb*Md			LabCh*Md				
810	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	1.0	1.0	1.0	95.6	0.0	0.1	0.1	116.7	0.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
811	B00R_100_012d	0.875	0.875	1.0	1.0	0.125	0.937	270	0.875	0.875	1.0	86.8	3.6	-5.0	6.2	306.2	0.875	0.875	1.0	87.2	3.8	-5.3	6.6	305.3	0.5	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
812	B00R_100_025d	0.75	0.75	1.0	1.0	0.25	0.875	270	0.75	0.75	1.0	77.9	7.3	-10.1	12.5	306.2	0.75	0.75	1.0	76.6	9.6	-10.6	14.3	312.1	2.6	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
813	B00R_100_037d	0.625	0.625	1.0	1.0	0.375	0.812	270	0.625	0.625	1.0	69.1	11.0	-15.1	18.7	306.2	0.625	0.625	1.0	67.2	13.6	-15.6	20.8	311.0	3.2	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
814	B00R_100_050d	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.5	1.0	60.3	14.7	-20.2	25.0	306.2	0.5	0.5	1.0	55.8	19.6	-21.4	29.1	312.4	6.7	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
815	B00R_100_062d	0.375	0.375	1.0	1.0	0.625	0.687	270	0.375	0.375	1.0	51.5	18.4	-25.2	31.3	306.2	0.375	0.375	1.0	45.8	24.1	-26.3	35.7	312.5	8.1	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
816	B00R_100_075d	0.25	0.25	1.0	1.0	0.75	0.625	270	0.25	0.25	1.0	42.7	22.1	-30.3	37.5	306.2	0.25	0.25	1.0	37.4	26.6	-31.6	41.3	310.1	6.9	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
817	B00R_100_087d	0.125	0.125	1.0	1.0	0.875	0.562	270	0.125	0.125	1.0	33.9	25.8	-35.3	43.8	306.2	0.125	0.125	1.0	28.7	31.4	-36.1	47.8	311.0	7.6	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
818	B00R_100_100d	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2	0.0	0.0	1.0	23.4	30.6	-39.6	50.1	307.6	2.0	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
819	Y00G_100_012d	1.0	1.0	0.875	1.0	0.125	0.937	90	1.0	1.0	0.875	94.6	-1.2	11.9	12.0	96.1	1.0	1.0	0.875	94.6	-2.5	9.9	10.2	104.1	2.3	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
820	NW_087d	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0	0.875	0.875	0.875	86.3	1.2	3.7	3.9	71.1	3.9	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
821	B00R_087_012d	0.75	0.75	0.875	0.875	0.125	0.812	270	0.75	0.75	0.875	77.9	3.6	-5.0	6.2	306.2	0.75	0.75	0.875	76.0	6.9	-2.3	7.3	341.0	4.5	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
822	B00R_087_025d	0.625	0.625	0.875	0.875	0.25	0.75	270	0.625	0.625	0.875	69.0	7.3	-10.1	12.5	306.2	0.625	0.625	0.875	66.7	11.0	-8.0	13.6	323.8	4.7	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
823	B00R_087_037d	0.5	0.5	0.875	0.875	0.375	0.687	270	0.5	0.5	0.875	60.2	11.0	-15.1	18.7	306.2	0.5	0.5	0.875	55.5	16.6	-14.6	22.1	318.6	7.2	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
824	B00R_087_050d	0.375	0.375	0.875	0.875	0.5	0.625	270	0.375	0.375	0.875	51.4	14.7	-20.2	25.0	306.2	0.375	0.375	0.875	45.6	21.0	-20.4	29.2	315.8	8.5	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
825	B00R_087_062d	0.25	0.25	0.875	0.875	0.625	0.562	270	0.25	0.25	0.875	42.6	18.4	-25.2	31.3	306.2	0.25	0.25	0.875	37.1	23.2	-26.2	35.0	311.5	7.3	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
826	B00R_087_075d	0.125	0.125	0.875	0.875	0.75	0.5	270	0.125	0.125	0.875	33.8	22.1	-30.3	37.5	306.2	0.125	0.125	0.875	29.0	26.9	-31.2	41.2	310.8	6.8	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
827	B00R_087_087d	0.0	0.0	0.875	0.875	0.875	0.437	270	0.0	0.0	0.875	24.9	25.8	-35.3	43.8	306.2	0.0	0.0	0.875	23.4	26.1	-35.1	43.8	306.6	1.6	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
828	Y00G_100_025d	1.0	1.0	0.75	1.0	0.25	0.875	90	1.0	1.0	0.75	93.6	-2.5	23.8	24.0	96.1	1.0	1.0	0.75	93.5	-4.4	20.0	20.4	102.4	4.2	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
829	Y00G_087_012d	0.875	0.875	0.75	0.875	0.125	0.812	90	0.875	0.875	0.75	85.7	-1.2	11.9	12.0	96.1	0.875	0.875	0.75	85.2	-0.7	13.0	13.1	93.4	1.3	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
830	NW_075d	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0	0.75	0.75	0.75	75.1	4.6	6.6	8.1	54.7	8.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
831	B00R_075_012d	0.625	0.625	0.75	0.75	0.125	0.687	270	0.625	0.625	0.75	68.9	3.6	-5.0	6.2	306.2	0.625	0.625	0.75	66.1	8.4	0.2	8.4	1.7	7.7	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
832	B00R_075_025d	0.5	0.5	0.75	0.75	0.25	0.625	270	0.5	0.5	0.75	60.1	7.3	-10.1	12.5	306.2	0.5	0.5	0.75	54.8	13.8	-6.8	15.4	333.6	8.9	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
833	B00R_075_037d	0.375	0.375	0.75	0.75	0.375	0.562	270	0.375	0.375	0.75	51.3	11.0	-15.1	18.7	306.2	0.375	0.375	0.75	45.6	17.2	-13.3	21.7	322.1	8.5	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
834	B00R_075_050d	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.25	0.75	42.5	14.7	-20.2	25.0	306.2	0.25	0.25	0.75	37.2	19.3	-19.7	27.6	314.5	7.0	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
835	B00R_075_062d	0.125	0.125	0.75	0.75	0.625	0.437	270	0.125	0.125	0.75	33.7	18.4	-25.2	31.3	306.2	0.125	0.125	0.75	29.3	22.6	-25.7	34.2	311.4	6.1	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
836	B00R_075_075d	0.0	0.0	0.75	0.75	0.75	0.375	270	0.0	0.0	0.75	24.9	22.1	-30.3	37.5	306.2	0.0	0.0	0.75	23.6	21.0	-30.2	36.9	304.8	1.6	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
837	Y00G_100_037d	1.0	1.0	0.625	1.0	0.375	0.812	90	1.0	1.0	0.625	92.6	-3.8	35.8	36.0	96.1	1.0	1.0	0.625	92.4	-6.1	30.9	31.6	101.2	5.3	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
838	Y00G_087_025d	0.875	0.875	0.625	0.875	0.25	0.75	90	0.875	0.875	0.625	84.7	-2.5	23.8	24.0	96.1	0.875	0.875	0.625	84.2	-2.8	23.6	23.8	96.7	0.5	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
839	Y00G_075_012d	0.75	0.75	0.625	0.75	0.125	0.687	90	0.75	0.75	0.625	76.8	-1.2	11.9	12.0	96.1	0.75	0.75	0.625	74.4	2.4	16.3	16.5	81.4	6.2	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
840	NW_062d	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0	0.625	0.625	0.625	65.5	5.9	9.4	11.1	57.6	11.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
841	B00R_062_012d	0.5	0.5	0.625	0.625	0.125	0.562	270	0.5	0.5	0.625	60.0	3.6	-5.0	6.2	306.2	0.5	0.5	0.625	54.5	11.4	1.1	11.4	5.8	11.3	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
842	B00R_062_025d	0.375	0.375	0.625	0.625	0.25	0.5	270	0.375	0.375	0.625	51.2	7.3	-10.1	12.5	306.2	0.375	0.375	0.625	45.2	14.8	-6.0	16.0	337.7	10.3	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
843	B00R_062_037d	0.25	0.25	0.625	0.625	0.375	0.437	270	0.25	0.25	0.625	42.4	11.0	-15.1	18.7	306.2	0.25	0.25	0.625	36.9	16.3	-13.2	21.0	320.9	7.8	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
844	B00R_062_050d	0.125	0.125	0.625	0.625	0.5	0.375	270	0.125	0.125	0.625	33.6	14.7	-20.2	25.0	306.2	0.125	0.125	0.625	29.1	19.3	-19.9	27.7	314.1	6.3	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
845	B00R_062_062d	0.0	0.0	0.625	0.625	0.625	0.312	270	0.0	0.0	0.625	24.8	18.4	-25.2	31.3	306.2	0.0	0.0	0.625	23.5	16.8	-24.9	30.0	304.0	2.1	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
846	Y00G_100_050d	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	1.0	0.5	91.7	-5.1	47.7	48.0	96.1	1.0	1.0	0.5	91.2	-7.6	43.4	44.1	100.0	5.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
847	Y00G_087_037d	0.875	0.875	0.5	0.875	0.375	0.687	90	0.875	0.875	0.5	83.7	-3.8	35.8	36.0	96.1	0.875	0.875	0.5	83.1	-4.5	35.6	35.8	97.2	0.9	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
848	Y00G_075_025d	0.75	0.75	0.5	0.75	0.25	0.625	90	0.75	0.75	0.5	75.8	-2.5	23.8	24.0	96.1	0.75	0.75	0.5	73.6	0.4	27.0	27.0	88.9	4.9	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
849	Y00G_062_012d	0.625	0.625	0.5	0.625	0.125	0.562	90	0.625	0.625	0.5	67.9	-1.2	11.9	12.0	96.1	0.625	0.625	0.5	64.7	3.9	19.0	19.4	78.1	9.3	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
850	NW_050d	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	54.3	9.1	9.8	13.4	47.1	14.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
851	B00R_050_012d	0.375	0.375	0.5	0.5	0.125	0.437	270	0.375	0.375	0.5	51.1	3.6	-5.0	6.2	306.2	0.375	0.375	0.5	45.1	12.0	1.6	12.1	7.7	12.2	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
852	B00R_050_025d	0.25	0.25	0.5	0.5	0.25	0.375	270	0.249	0.249	0.5	42.3	7.3	-10.1	12.5	306.2	0.25	0.25	0.5	36.8	13.1	-6.7	14.7	332.9	8.6	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
853	B00R_050_037d	0.125	0.125	0.5	0.5	0.375	0.312	270	0.124	0.124	0.5	33.5	11.0	-15.1	18.7	306.2	0.125	0.125	0.5	29.0	15.8	-14.1	21.2	318.3	6.6	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
854	B00R_050_050d	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.0	0.5	24.7	14.7	-20.2	25.0	306.2	0.0	0.0	0.5	23.6	12.6	-19.4	23.2	302.9	2.5	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
855	Y00G_100_062d	1.0	1.0	0.375	1.0	0.625	0.687	90	1.0	1.0	0.375	90.7	-6.3	59.6	60.0	96.1	1.0	1.0	0.375	89.9	-8.6	55.9	56.5	98.8	4.4	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
856	Y00G_087_050d	0.875	0.875	0.375	0.875	0.5	0.625	90	0.875	0.875	0.375	82.8	-5.1	47.7	48.0	96.1	0.875	0.875	0.375	81.9	-5.6	47.6	47.9	96.7	1.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
857	Y00G_075_037d	0.75	0.75	0.375	0.75	0.375	0.562	90	0.75	0.75	0.375	74.8	-3.8	35.8	36.0	96.1	0.75	0.75	0.375	72.6	-0.8	38.3	38.3	91.1	4.5	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
858	Y00G_062_025d	0.625	0.625	0.375	0.625	0.25	0.5	90	0.625	0.625	0.375	66.9	-2.5	23.8	24.0	96.1	0.625	0.625	0.375	64.1	2.1	29.3	29.4	85.7	7.7	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
859	Y00G_050_012d	0.5	0.5	0.375	0.5	0.125	0.437	90	0.5	0.5	0.375	59.0	-1.2	11.9	12.0	96.1	0.5	0.5	0.375	53.6	6.9	18.8	20.1	69.7	12.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
860	NW_037d	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0	0.375	0.375	0.375	44.7	10.1	9.6	14.0	43.4	15.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
861	B00R_037_012d	0.25	0.25	0.375	0.375	0.125	0.312	270	0.249	0.249	0.375	42.2	3.6	-5.0	6.2	306.2	0.25	0.25	0.375	36.9	10.5	0.5	10.5	3.1	10.3	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
862	B00R_037_025d	0.125	0.125	0.375	0.375	0.25	0.25	270	0.124	0.124	0.375	33.4	7.3	-10.1	12.5	306.2	0.125	0.125	0.375	28.8	12.5	-7.8	14.8	328.0	7.2	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
863	B00R_037_037d	0.0	0.0	0.375	0.375	0.375	0.187	270	0.0	0.0	0.375	24.6	11.0	-15.1	18.7	306.2	0.0	0.0	0.375	23.3	8.6	-14.0	16.5	301.4	2.9	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
864	Y00G_100_075d	1.0	1.0	0.25	1.0	0.75	0.625	90	1.0	1.0	0.25	89.7	-7.6	71.6	72.0	96.1	1.0	1.0	0.25	88.9	-9.2	67.9	68.5	97.7	4.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
865	Y00G_087_062d	0.875	0.875	0.25	0.875	0.625	0.562	90	0.875	0.875	0.25	81.8	-6.3	59.6	60.0	96.1	0.875	0.875	0.25	81.2	-6.4	58.4	58.8	96.2	1.3	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
866	Y00G_075_050d	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.75	0.25	73.9	-5.1	47.7	48.0	96.1	0.75	0.75	0.25	72.1	-2.0	48.5	48.5	92.4	3.5	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
867	Y00G_062_037d	0.625	0.625	0.25	0.625	0.375	0.437	90	0.625	0.625	0.25	65.9	-3.8	35.8	36.0	96.1	0.625	0.625	0.25	63.5	0.8	38.9	38.9	88.6	6.1	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
868	Y00G_050_025d	0.5	0.5	0.25	0.5	0.25	0.375	90	0.5	0.5	0.249	58.0	-2.5	23.8	24.0	96.1	0.5	0.5	0.25	53.4	5.2	27.2	27.7	79.0	9.7	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
869	Y00G_037_012d	0.375	0.375	0.25	0.375	0.125	0.312	90	0.375	0.375	0.249	50.1	-1.2	11.9	12.0	96.1	0.375	0.375	0.25	44.7	7.7	17.3	19.0	65.8	11.8	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
870	NW_025d	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0	0.25	0.25	0.25	36.9	9.2	6.8	11.4	36.3	12.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
871	B00R_025_012d	0.125	0.125	0.25	0.25	0.125	0.187	270	0.124	0.124	0.25	33.3	3.6	-5.0	6.2	306.2	0.125	0.125	0.25	28.8	10.2	-2.4	10.5	346.3	8.3	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
872	B00R_025_025d	0.0	0.0	0.25	0.25	0.25	0.125	270	0.0	0.0	0.25	24.5	7.3	-10.1	12.5	306.2	0.0	0.0	0.25	23.9	5.9	-10.1	11.7	300.3	1.5	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
873	Y00G_100_087d	1.0	1.0	0.125	1.0	0.875	0.562	90	1.0	1.0	0.125	88.8	-8.9	83.5	84.0	96.1	1.0	1.0	0.125	88.1	-9.7	80.8	81.4	96.9	2.9	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
874	Y00G_087_075d	0.875	0.875	0.125	0.875	0.75	0.5	90	0.875	0.875	0.125	80.8	-7.6	71.6	72.0	96.1	0.875	0.875	0.125	80.6	-7.1	70.7	71.1	95.8	1.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
875	Y00G_075_062d	0.75	0.75	0.125	0.75	0.625	0.437	90	0.75	0.75	0.125	72.9	-6.3	59.6	60.0	96.1	0.75	0.75	0.125	71.4	-2.8	59.7	59.8	92.7	3.8	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
876	Y00G_062_050d	0.625	0.625	0.125	0.625	0.5	0.375	90	0.625	0.625	0.125	65.0	-5.1	47.7	48.0	96.1	0.625	0.625	0.125	62.9	0.2	49.0	49.0	89.7	5.8	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
877	Y00G_050_037d	0.5	0.5	0.125	0.5	0.375	0.312	90	0.5	0.5	0.124	57.0	-3.8	35.8	36.0	96.1	0.5	0.5	0.125	53.1	4.2	36.2	36.5	83.2	9.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
878	Y00G_037_025d	0.375	0.375	0.125	0.375	0.25	0.25	90	0.375	0.375	0.124	49.1	-2.5	23.8	24.0	96.1	0.375	0.375	0.125	44.1	6.5	24.6	25.5	75.2	10.3	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
879	Y00G_025_012d	0.25	0.25	0.125	0.25	0.125	0.187	90	0.25	0.25	0.124	41.2	-1.2	11.9	12.0	96.1	0.25	0.25	0.125	36.7	7.6	12.8	14.9	59.0	10.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
880	NW_012d	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0	0.125	0.125	0.125	28.8	8.9	1.9	9.1	12.5	10.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
881	B00R_012_012d	0.0	0.0	0.125	0.125	0.125	0.062	270	0.0	0.0	0.125	24.4	3.6	-5.0	6.2	306.2	0.0	0.0	0.125	23.5	3.9	-6.7	7.8	300.0	1.9	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
882	Y00G_100_100d	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1	1.0	1.0	0.0	87.6	-10.0	93.9	94.5	96.0	1.5	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
883	Y00G_087_087d	0.875	0.875	0.0	0.875	0.875	0.437	90	0.875	0.875	0.0	79.8	-8.9	83.5	84.0	96.1	0.875	0.875	0.0	80.0	-7.8	83.1	83.5	95.3	1.2	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
884	Y00G_075_075d	0.75	0.75	0.0	0.75	0.75	0.375	90	0.75	0.75	0.0	71.9	-7.6	71.6	72.0	96.1	0.75	0.75	0.0	71.1	-3.3	71.0	71.1	92.7	4.4	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
885	Y00G_062_062d	0.625	0.625	0.0	0.625	0.625	0.312	90	0.625	0.625	0.0	64.0	-6.3	59.6	60.0	96.1	0.625	0.625	0.0	62.7	-0.6	59.0	59.0	90.6	5.9	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
886	Y00G_050_050d	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.5	0.0	56.1	-5.1	47.7	48.0	96.1	0.5	0.5	0.0	52.7	3.7	44.2	44.4	85.2	10.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
887	Y00G_037_037d	0.375	0.375	0.0	0.375	0.375	0.187	90	0.375	0.375	0.0	48.1	-3.8	35.8	36.0	96.1	0.375	0.375	0.0	44.0	5.9	31.4	32.0	79.2	11.4	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
888	Y00G_025_025d	0.25	0.25	0.0	0.25	0.25	0.125	90	0.25	0.25	0.0	40.2	-2.5	23.8	24.0	96.1	0.25	0.25	0.0	36.5	6.8	18.0	19.3	69.2	11.6	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
889	Y00G_012_012d	0.125	0.125	0.0	0.125	0.125	0.062	90	0.125	0.125	0.0	32.3	-1.2	11.9	12.0	96.1	0.125	0.125	0.0	28.6	7.4	6.1	9.6	39.9	11.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
890	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.4	2.2	-3.7	4.3	300.5	4.4	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

Mean color difference of this page: delta $E^{*\prime}$ = 6.2

1-0032931-F0 PE870-7N, Page 30/33-F

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

input: $rgb/cmyk \rightarrow rgb_d$
output: transfer to $cmy0_d$

1-0032931-F0

TUB registration: 20150701-PE87/PE87L0NP.PDF /.PS TUB material: code=rha4ta
application for measurement of offset print output, separation cmy0 (CMY0)

http://130.149.60.45/~farbmetrik/PE87/PE87L0NP.PDF /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 31/33

n	HIC*Fd	rgb_Fd			ict_Fd			hsi_F,d	rgb*Fd			LabCh*Fd				
891	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
892	B50R_100_012d	1.0	0.875	1.0	1.0	0.125	0.937	330	1.0	0.875	1.0	89.4	9.9	0.0	9.9	359.8
893	B50R_100_025d	1.0	0.75	1.0	1.0	0.25	0.875	330	1.0	0.75	1.0	83.2	19.8	0.0	19.8	359.8
894	B50R_100_037d	1.0	0.625	1.0	1.0	0.375	0.812	330	1.0	0.625	1.0	77.0	29.7	0.0	29.7	359.8
895	B50R_100_050d	1.0	0.5	1.0	1.0	0.5	0.75	330	1.0	0.5	1.0	70.8	39.6	−0.1	39.6	359.8
896	B50R_100_062d	1.0	0.375	1.0	1.0	0.625	0.687	330	1.0	0.375	1.0	64.6	49.5	−0.1	49.5	359.8
897	B50R_100_075d	1.0	0.25	1.0	1.0	0.75	0.625	330	1.0	0.25	1.0	58.4	59.4	−0.1	59.4	359.8
898	B50R_100_087d	1.0	0.125	1.0	1.0	0.875	0.562	330	1.0	0.125	1.0	52.3	69.4	−0.1	69.4	359.8
899	B50R_100_100d	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
900	G00B_100_012d	0.875	1.0	0.875	1.0	0.125	0.937	150	0.875	1.0	0.875	89.9	−8.1	3.7	8.9	155.5
901	NW_087d	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0
902	B50R_087_012d	0.875	0.75	0.875	0.875	0.125	0.812	330	0.875	0.75	0.875	80.5	9.9	0.0	9.9	359.8
903	B50R_087_025d	0.875	0.625	0.875	0.875	0.25	0.75	330	0.875	0.625	0.875	74.3	19.8	0.0	19.8	359.8
904	B50R_087_037d	0.875	0.5	0.875	0.875	0.375	0.687	330	0.875	0.5	0.875	68.1	29.7	0.0	29.7	359.8
905	B50R_087_050d	0.875	0.375	0.875	0.875	0.5	0.625	330	0.875	0.375	0.875	61.9	39.6	−0.1	39.6	359.8
906	B50R_087_062d	0.875	0.25	0.875	0.875	0.625	0.562	330	0.875	0.25	0.875	55.7	49.5	−0.1	49.5	359.8
907	B50R_087_075d	0.875	0.125	0.875	0.875	0.75	0.5	330	0.875	0.125	0.875	49.5	59.4	−0.1	59.4	359.8
908	B50R_087_087d	0.875	0.0	0.875	0.875	0.875	0.437	330	0.875	0.0	0.875	43.4	69.4	−0.1	69.4	359.8
909	G00B_100_025d	0.75	1.0	0.75	1.0	0.25	0.875	150	0.75	1.0	0.75	84.2	−16.2	7.4	17.8	155.5
910	G00B_087_012d	0.75	0.875	0.75	0.875	0.125	0.812	150	0.75	0.875	0.75	81.0	−8.1	3.7	8.9	155.5
911	NW_075d	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0
912	B50R_075_012d	0.75	0.625	0.75	0.75	0.125	0.687	330	0.75	0.625	0.75	71.6	9.9	0.0	9.9	359.8
913	B50R_075_025d	0.75	0.5	0.75	0.75	0.25	0.625	330	0.75	0.5	0.75	65.4	19.8	0.0	19.8	359.8
914	B50R_075_037d	0.75	0.375	0.75	0.75	0.375	0.562	330	0.75	0.375	0.75	59.2	29.7	0.0	29.7	359.8
915	B50R_075_050d	0.75	0.25	0.75	0.75	0.5	0.5	330	0.75	0.25	0.75	53.0	39.6	−0.1	39.6	359.8
916	B50R_075_062d	0.75	0.125	0.75	0.75	0.625	0.437	330	0.75	0.125	0.75	46.8	49.5	−0.1	49.5	359.8
917	B50R_075_075d	0.75	0.0	0.75	0.75	0.75	0.375	330	0.75	0.0	0.75	40.6	59.4	−0.1	59.4	359.8
918	G00B_100_037d	0.625	1.0	0.625	1.0	0.375	0.812	150	0.625	1.0	0.625	78.5	−24.3	11.1	26.7	155.5
919	G00B_087_025d	0.625	0.875	0.625	0.875	0.25	0.75	150	0.625	0.875	0.625	75.3	−16.2	7.4	17.8	155.5
920	G00B_075_012d	0.625	0.75	0.625	0.75	0.125	0.687	150	0.625	0.75	0.625	72.1	−8.1	3.7	8.9	155.5
921	NW_062d	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0
922	B50R_062_012d	0.625	0.5	0.625	0.625	0.125	0.562	330	0.625	0.5	0.625	62.7	9.9	0.0	9.9	359.8
923	B50R_062_025d	0.625	0.375	0.625	0.625	0.25	0.5	330	0.625	0.375	0.625	56.5	19.8	0.0	19.8	359.8
924	B50R_062_037d	0.625	0.25	0.625	0.625	0.375	0.437	330	0.625	0.25	0.625	50.3	29.7	0.0	29.7	359.8
925	B50R_062_050d	0.625	0.125	0.625	0.625	0.5	0.375	330	0.625	0.125	0.625	44.1	39.6	−0.1	39.6	359.8
926	B50R_062_062d	0.625	0.0	0.625	0.625	0.625	0.312	330	0.625	0.0	0.625	37.9	49.5	−0.1	49.5	359.8
927	G00B_100_050d	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.5	72.8	−32.5	14.8	35.7	155.5
928	G00B_087_037d	0.5	0.875	0.5	0.875	0.375	0.687	150	0.5	0.875	0.5	69.6	−24.3	11.1	26.7	155.5
929	G00B_075_025d	0.5	0.75	0.5	0.75	0.25	0.625	150	0.5	0.75	0.5	66.4	−16.2	7.4	17.8	155.5
930	G00B_062_012d	0.5	0.625	0.5	0.625	0.125	0.562	150	0.5	0.625	0.5	63.2	−8.1	3.7	8.9	155.5
931	NW_050d	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0
932	B50R_050_012d	0.5	0.375	0.5	0.5	0.125	0.437	330	0.5	0.375	0.5	53.8	9.9	0.0	9.9	359.8
933	B50R_050_025d	0.5	0.25	0.5	0.5	0.25	0.375	330	0.5	0.249	0.5	47.6	19.8	0.0	19.8	359.8
934	B50R_050_037d	0.5	0.125	0.5	0.5	0.375	0.312	330	0.5	0.124	0.5	41.4	29.7	0.0	29.7	359.8
935	B50R_050_050d	0.5	0.0	0.5	0.5	0.5	0.25	330	0.5	0.0	0.5	35.2	39.6	−0.1	39.6	359.8
936	G00B_100_062d	0.375	1.0	0.375	1.0	0.625	0.687	150	0.375	1.0	0.375	67.1	−40.6	18.5	44.6	155.5
937	G00B_087_050d	0.375	0.875	0.375	0.875	0.5	0.625	150	0.375	0.875	0.375	63.9	−32.5	14.8	35.7	155.5
938	G00B_075_037d	0.375	0.75	0.375	0.75	0.375	0.562	150	0.375	0.75	0.375	60.7	−24.3	11.1	26.7	155.5
939	G00B_062_025d	0.375	0.625	0.375	0.625	0.25	0.5	150	0.375	0.625	0.375	57.5	−16.2	7.4	17.8	155.5
940	G00B_050_012d	0.375	0.5	0.375	0.5	0.125	0.437	150	0.375	0.5	0.375	54.3	−8.1	3.7	8.9	155.5
941	NW_037d	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0
942	B50R_037_012d	0.375	0.25	0.375	0.375	0.125	0.312	330	0.375	0.249	0.375	44.9	9.9	0.0	9.9	359.8
943	B50R_037_025d	0.375	0.125	0.375	0.375	0.25	0.25	330	0.375	0.124	0.375	38.7	19.8	0.0	19.8	359.8
944	B50R_037_037d	0.375	0.0	0.375	0.375	0.375	0.187	330	0.375	0.0	0.375	32.5	29.7	0.0	29.7	359.8
945	G00B_100_075d	0.25	1.0	0.25	1.0	0.75	0.625	150	0.25	1.0	0.25	61.4	−48.7	22.2	53.5	155.5
946	G00B_087_062d	0.25	0.875	0.25	0.875	0.625	0.562	150	0.25	0.875	0.25	58.2	−40.6	18.5	44.6	155.5
947	G00B_075_050d	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.25	55.0	−32.5	14.8	35.7	155.5
948	G00B_062_037d	0.25	0.625	0.25	0.625	0.375	0.437	150	0.25	0.625	0.25	51.8	−24.3	11.1	26.7	155.5
949	G00B_050_025d	0.25	0.5	0.25	0.5	0.25	0.375	150	0.249	0.5	0.249	48.6	−16.2	7.4	17.8	155.5
950	G00B_037_012d	0.25	0.375	0.25	0.375	0.125	0.312	150	0.249	0.375	0.249	45.4	−8.1	3.7	8.9	155.5
951	NW_025d	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0
952	B50R_025_012d	0.25	0.125	0.25	0.25	0.125	0.187	330	0.25	0.124	0.25	36.0	9.9	0.0	9.9	359.8
953	B50R_025_025d	0.25	0.0	0.25	0.25	0.25	0.125	330	0.25	0.0	0.25	29.8	19.8	0.0	19.8	359.8
954	G00B_100_087d	0.125	1.0	0.125	1.0	0.875	0.562	150	0.125	1.0	0.125	55.7	−56.8	25.9	62.5	155.5
955	G00B_087_075d	0.125	0.875	0.125	0.875	0.75	0.5	150	0.125	0.875	0.125	52.5	−48.7	22.2	53.5	155.5
956	G00B_075_062d	0.125	0.75	0.125	0.75	0.625	0.437	150	0.125	0.75	0.125	49.3	−40.6	18.5	44.6	155.5
957	G00B_062_050d	0.125	0.625	0.125	0.625	0.5	0.375	150	0.125	0.625	0.125	46.1	−32.5	14.8	35.7	155.5
958	G00B_050_037d	0.125	0.5	0.125	0.5	0.375	0.312	150	0.124	0.5	0.124	42.9	−24.3	11.1	26.7	155.5
959	G00B_037_025d	0.125	0.375	0.125	0.375	0.25	0.25	150	0.124	0.375	0.124	39.7	−16.2	7.4	17.8	155.5
960	G00B_025_012d	0.125	0.25	0.125	0.25	0.125	0.187	150	0.124	0.25	0.124	36.4	−8.1	3.7	8.9	155.5
961	NW_012d	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0
962	B50R_012_012d	0.125	0.0	0.125	0.125	0.125	0.062	330	0.125	0.0	0.125	27.0	9.9	0.0	9.9	359.8
963	G00B_100_100d	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
964	G00B_087_087d	0.0	0.875	0.0	0.875	0.875	0.437	150	0.0	0.875	0.0	46.8	−56.8	25.9	62.5	155.5
965	G00B_075_075d	0.0	0.75	0.0	0.75	0.75	0.375	150	0.0	0.75	0.0	43.6	−48.7	22.2	53.5	155.5
966	G00B_062_062d	0.0	0.625	0.0	0.625	0.625	0.312	150	0.0	0.625	0.0	40.4	−40.6	18.5	44.6	155.5
967	G00B_050_050d	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.0	37.2	−32.5	14.8	35.7	155.5
968	G00B_037_037d	0.0	0.375	0.0	0.375	0.375	0.187	150	0.0	0.375	0.0	34.0	−24.3	11.1	26.7	155.5
969	G00B_025_025d	0.0	0.25	0.0	0.25	0.25	0.125	150	0.0	0.25	0.0	30.7	−16.2	7.4	17.8	155.5
970	G00B_012_012d	0.0	0.125	0.0	0.125	0.125	0.062	150	0.0	0.125	0.0	27.5	−8.1	3.7	8.9	155.5
971	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0

n	rgb*'Fd			LabCh*'Fd					DE*'Fd	hsiM,d	rgb*Md			LabCh*Md				
891	1.0	1.0	1.0	95.6	0.0	0.1	0.1	111.4	0.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
892	1.0	0.875	1.0	90.7	6.8	−1.4	6.9	348.2	3.6	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
893	1.0	0.75	1.0	84.2	15.6	−2.4	15.8	351.1	4.9	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
894	1.0	0.625	1.0	78.5	23.6	−3.2	23.8	352.2	7.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
895	1.0	0.5	1.0	70.6	35.6	−3.8	35.8	353.8	5.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
896	1.0	0.375	1.0	63.5	46.7	−3.8	46.9	355.3	4.7	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
897	1.0	0.25	1.0	57.0	58.1	−2.9	58.1	357.1	3.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
898	1.0	0.125	1.0	50.3	70.4	−1.6	70.4	358.6	2.6	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
899	1.0	0.0	1.0	45.4	79.5	1.0	79.5	0.7	1.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
900	0.875	1.0	0.875	90.9	−5.6	5.6	7.9	135.3	3.2	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
901	0.875	0.875	0.875	86.2	1.2	3.6	3.8	71.0	3.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
902	0.875	0.75	0.875	80.1	10.0	2.1	10.2	11.8	2.1	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
903	0.875	0.625	0.875	74.6	18.0	0.9	18.1	2.9	2.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
904	0.875	0.5	0.875	66.7	30.6	−0.6	30.6	358.7	1.7	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
905	0.875	0.375	0.875	60.5	40.8	−1.0	40.8	358.5	2.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
906	0.875	0.25	0.875	54.0	52.3	−1.0	52.3	358.7	3.3	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
907	0.875	0.125	0.875	47.7	64.4	−0.5	64.4	359.4	5.3	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
908	0.875	0.0	0.875	42.9	73.7	1.1	73.7	0.8	4.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
909	0.75	1.0	0.75	85.6	−11.0	10.4	15.2	136.5	6.2	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
910	0.75	0.875	0.75	81.1	−4.3	8.3	9.4	117.5	5.9	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
911	0.75	0.75	0.75	75.6	4.3	6.4	7.8	56.1	8.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
912	0.75	0.625	0.75	70.5	12.2	4.7	13.1	21.4	5.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
913	0.75	0.5	0.75	63.2	23.9	2.7	24.1	6.6	5.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
914	0.75	0.375	0.75	57.3	34.4	1.7	34.4	2.9	5.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
915	0.75	0.25	0.75	50.7	45.7	0.7	45.8	0.9	6.6	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
916	0.75	0.125	0.75	44.9	57.7	0.1	57.7	0.1	8.4	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
917	0.75	0.0	0.75	40.3	67.0	1.0	67.0	0.8	7.6	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
918	0.625	1.0	0.625	79.8	−17.2	15.5	23.2	137.8	8.5	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
919	0.625	0.875	0.625	76.0	−10.5	12.9	16.7	129.1	8.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
920	0.625	0.75	0.625	70.7	−2.0	10.9	11.1	100.3	9.5	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
921	0.625	0.625	0.625	66.0	5.6	8.9	10.5	57.5	10.9	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
922	0.625	0.5	0.625	59.5	17.0	6.1	18.1	19.9	9.9	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
923	0.625	0.375	0.625	53.7	26.9	4.3	27.3	9.1	8.8	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
924	0.625	0.25	0.625	47.9	38.2	2.9	38.3	4.3	9.3	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
925	0.625	0.125	0.625	42.0	50.1	1.3	50.1	1.5	10.7	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
926	0.625	0.0	0.625	37.5	59.5	0.8	59.5	0.7	10.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
927	0.5	1.0	0.5	73.8	−24.0	19.6	31.0	140.7	9.7	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
928	0.5	0.875	0.5	70.0	−18.0	17.2	24.9	136.3	8.8	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
929	0.5	0.75	0.5	65.3	−9.6	14.9	17.7	122.9	10.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
930	0.5	0.625	0.5	61.0	−2.3	12.4	12.6	100.7	10.6	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
931	0.5	0.5	0.5	54.8	8.7	9.3	12.7	47.0	13.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
932	0.5	0.375	0.5	49.6	18.6	6.7	19.8	19.7	11.8	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
933	0.5	0.25	0.5	44.1	29.4	4.1	29.7	7.9	11.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
934	0.5	0.125	0.5	38.7	41.2	1.8	41.3	2.5	12.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
935	0.5	0.0	0.5	34.5	50.1	0.7	50.1	0.8	10.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
936	0.375	1.0	0.375	67.5	−31.6	23.8	39.6	143.0	10.4	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
937	0.375	0.875	0.375	64.2	−26.0	21.1	33.5	140.9	9.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
938	0.375	0.75	0.375	60.0	−17.7	18.6	25.7	133.4	10.1	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
939	0.375	0.625	0.375	56.3	−10.4	16.0	19.1	123.1	10.4	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
940	0.375	0.5	0.375	50.7	0.3	12.7	12.7	88.6	12.8	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
941	0.375	0.375	0.375	45.5	9.7	9.2	13.4	43.5	14.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
942	0.375	0.25	0.375	40.5	20.4	6.1	21.3	16.7	12.9	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
943	0.375	0.125	0.375	35.5	31.3	3.0	31.5	5.4	12.3	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
944	0.375	0.0	0.375	31.5	40.4	1.1	40.4	1.6	10.8	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
945	0.25	1.0	0.25	61.3	−40.7	26.6	48.7	146.8	9.1	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
946	0.25	0.875	0.25	58.3	−35.4	24.2	42.9	145.6	7.7	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
947	0.25	0.75	0.25	54.6	−27.2	21.0	34.4	142.3	8.1	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
948	0.25	0.625	0.25	51.3	−20.3	17.9	27.1	138.5	7.9	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
949	0.25	0.5	0.25	46.2	−10.0	14.0	17.3	125.5	9.4	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
950	0.25	0.375	0.25	41.7	−1.0	10.6	10.7	95.4	10.6	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
951	0.25	0.25	0.25	37.0	9.2	6.4	11.3	34.8	12.4	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
952	0.25	0.125	0.25	32.4	20.2	2.7	20.4	7.6	11.2	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
953	0.25	0.0	0.25	28.7	29.1	0.4	29.1	0.9	9.3	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
954	0.125	1.0	0.125	55.9	−50.9	28.6	58.4	150.6	6.5	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
955	0.125	0.875	0.125	53.1	−45.6	25.8	52.4	150.5	4.8	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
956	0.125	0.75	0.125	49.8	−38.3	22.5	44.4	149.4	4.7	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
957	0.125	0.625	0.125	46.5	−31.3	19.3	36.8	148.2	4.7	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
958	0.125	0.5	0.125	42.0	−20.9	15.3	25.9	143.6	5.5	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
959	0.125	0.375	0.125	37.7	−12.2	11.1	16.5	137.6	5.8	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
960	0.125	0.25	0.125	33.4	−2.0	6.4	6.7	107.5	7.3	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
961	0.125	0.125	0.125	29.4	8.6	2.6	9.0	16.9	9.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
962	0.125	0.0	0.125	26.3	17.3	−0.9	17.3	356.8	7.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
963	0.0	1.0	0.0	49.6	−65.2	27.5	70.8	157.1	2.1	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
964	0.0	0.875	0.0	47.4	−60.3	24.8	65.2	157.6	3.6	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
965	0.0	0.75	0.0	44.3	−53.0	21.3	57.1	158.1	4.4	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
966	0.0	0.625	0.0	41.4	−45.9	17.9	49.2	158.6	5.4	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
967	0.0	0.5	0.0	37.6	−36.3	13.4	38.7	159.6	4.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
968	0.0	0.375	0.0	33.6	−26.5	9.1	28.0	160.9	2.9	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
969	0.0	0.25	0.0	30.4	−16.6	4.3	17.2	165.4	3.1	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
970	0.0	0.125	0.0	26.6	−6.2	0.0	6.2	179.1	4.1	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
971	0.0	0.0	0.0	23.5	2.2	−2.7	3.5	308.8	3.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

Mean color difference of this page: **delta E*' = 7.2**

1−0033031−F0 PE870−7N, Page 31/33−F

TUB-test chart PE87; 16 step hue circle
colors and differences, ΔE*'

input: *rgb/cmyk −> rgb*d
output: transfer to *cmy0*d

see similar files: http://130.149.60.45/~farbmetrik/PE87/PE87.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

http://130.149.60.45/~farbmetrik/PE87/PE87L0NP.PDF /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 32/33

n	HIC*Fd	rgb_Fd			ict_Fd			hsi_F,d	rgb*Fd			LabCh*Fd				
972	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
973	NW_012d	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0
974	NW_025d	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0
975	NW_037d	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0
976	NW_050d	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0
977	NW_062d	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0
978	NW_075d	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0
979	NW_087d	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0
980	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
981	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
982	NW_012d	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0
983	NW_025d	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0
984	NW_037d	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0
985	NW_050d	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0
986	NW_062d	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0
987	NW_075d	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0
988	NW_087d	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0
989	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
990	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
991	NW_012d	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0
992	NW_025d	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0
993	NW_037d	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0
994	NW_050d	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0
995	NW_062d	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0
996	NW_075d	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0
997	NW_087d	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0
998	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
999	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
1000	NW_012d	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0
1001	NW_025d	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0
1002	NW_037d	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0
1003	NW_050d	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0
1004	NW_062d	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0
1005	NW_075d	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0
1006	NW_087d	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0
1007	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1008	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
1009	NW_006d	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	29.0	0.0	0.0	0.0	0.0
1010	NW_013d	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.8	0.0	0.0	0.0	0.0
1011	NW_020d	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.6	0.0	0.0	0.0	0.0
1012	NW_026d	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	43.3	0.0	0.0	0.0	0.0
1013	NW_033d	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	48.1	0.0	0.0	0.0	0.0
1014	NW_040d	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.8	0.0	0.0	0.0	0.0
1015	NW_046d	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.5	0.0	0.0	0.0	0.0
1016	NW_053d	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.3	0.0	0.0	0.0	0.0
1017	NW_060d	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.1	0.0	0.0	0.0	0.0
1018	NW_066d	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.8	0.0	0.0	0.0	0.0
1019	NW_073d	0.734	0.734	0.734	0.734	0.0	0.734	360	0.734	0.734	0.734	76.6	0.0	0.0	0.0	0.0
1020	NW_080d	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.3	0.0	0.0	0.0	0.0
1021	NW_086d	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.0	0.0	0.0	0.0	0.0
1022	NW_093d	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	90.8	0.0	0.0	0.0	0.0
1023	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1024	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
1025	NW_006d	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	29.0	0.0	0.0	0.0	0.0
1026	NW_013d	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.8	0.0	0.0	0.0	0.0
1027	NW_020d	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.6	0.0	0.0	0.0	0.0
1028	NW_026d	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	43.3	0.0	0.0	0.0	0.0
1029	NW_033d	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	48.1	0.0	0.0	0.0	0.0
1030	NW_040d	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.8	0.0	0.0	0.0	0.0
1031	NW_046d	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.5	0.0	0.0	0.0	0.0
1032	NW_053d	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.3	0.0	0.0	0.0	0.0
1033	NW_060d	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.1	0.0	0.0	0.0	0.0
1034	NW_066d	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.8	0.0	0.0	0.0	0.0
1035	NW_073d	0.734	0.734	0.734	0.734	0.0	0.734	360	0.734	0.734	0.734	76.6	0.0	0.0	0.0	0.0
1036	NW_080d	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.3	0.0	0.0	0.0	0.0
1037	NW_086d	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.0	0.0	0.0	0.0	0.0
1038	NW_093d	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	90.8	0.0	0.0	0.0	0.0
1039	NW_100d	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1040	NW_000d	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
1041	NW_006d	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	29.0	0.0	0.0	0.0	0.0
1042	NW_013d	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.8	0.0	0.0	0.0	0.0
1043	NW_020d	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.6	0.0	0.0	0.0	0.0
1044	NW_026d	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	43.3	0.0	0.0	0.0	0.0
1045	NW_033d	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	48.1	0.0	0.0	0.0	0.0
1046	NW_040d	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.8	0.0	0.0	0.0	0.0
1047	NW_046d	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.5	0.0	0.0	0.0	0.0
1048	NW_053d	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.3	0.0	0.0	0.0	0.0
1049	NW_060d	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.1	0.0	0.0	0.0	0.0
1050	NW_066d	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.8	0.0	0.0	0.0	0.0
1051	NW_073d	0.734	0.734	0.734	0.734	0.0	0.734	360	0.734	0.734	0.734	76.6	0.0	0.0	0.0	0.0
1052	NW_080d	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.3	0.0	0.0	0.0	0.0

n	rgb*'Fd			LabCh*'Fd					DE*'Fd	hsiM,d	rgb*Md			LabCh*Md				
972	0.0	0.0	0.0	23.1	1.0	−1.6	1.9	302.0	2.2	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
973	0.125	0.125	0.125	28.5	8.0	4.0	8.9	26.4	10.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
974	0.25	0.25	0.25	36.5	9.3	8.5	12.6	42.5	13.9	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
975	0.375	0.375	0.375	45.3	10.1	10.9	14.8	47.1	15.9	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
976	0.5	0.5	0.5	55.2	8.8	10.0	13.3	48.4	14.2	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
977	0.625	0.625	0.625	66.4	5.6	9.0	10.6	58.3	10.9	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
978	0.75	0.75	0.75	76.2	3.9	6.3	7.5	57.9	7.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
979	0.875	0.875	0.875	86.5	1.1	3.3	3.6	70.5	3.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
980	1.0	1.0	1.0	95.6	0.0	0.0	0.1	126.7	0.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
981	0.0	0.0	0.0	22.9	1.2	−0.6	1.4	332.7	2.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
982	0.125	0.125	0.125	28.4	8.3	4.3	9.4	27.2	10.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
983	0.25	0.25	0.25	35.9	9.7	9.1	13.3	43.2	14.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
984	0.375	0.375	0.375	45.6	9.9	11.0	14.9	47.9	15.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
985	0.5	0.5	0.5	55.1	8.6	9.9	13.1	49.1	14.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
986	0.625	0.625	0.625	66.2	5.6	9.1	10.7	58.2	11.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
987	0.75	0.75	0.75	76.0	4.1	6.1	7.4	56.0	7.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
988	0.875	0.875	0.875	86.6	1.2	3.4	3.6	70.8	3.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
989	1.0	1.0	1.0	95.6	0.0	0.0	0.0	133.9	0.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
990	0.0	0.0	0.0	23.0	0.5	−0.7	0.9	307.9	1.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
991	0.125	0.125	0.125	28.1	7.9	4.7	9.2	30.9	10.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
992	0.25	0.25	0.25	36.3	9.2	9.2	13.0	45.2	14.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
993	0.375	0.375	0.375	44.9	10.0	11.2	15.1	48.2	16.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
994	0.5	0.5	0.5	54.7	8.9	9.9	13.3	48.3	14.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
995	0.625	0.625	0.625	66.3	5.6	9.3	10.9	59.0	11.2	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
996	0.75	0.75	0.75	75.8	4.1	6.3	7.5	56.9	7.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
997	0.875	0.875	0.875	86.3	1.1	3.4	3.6	71.6	3.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
998	1.0	1.0	1.0	95.7	0.0	0.1	0.1	120.9	0.2	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
999	0.0	0.0	0.0	22.8	0.5	−0.5	0.8	317.5	1.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1000	0.125	0.125	0.125	27.9	8.0	4.4	9.1	28.8	10.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1001	0.25	0.25	0.25	35.8	9.1	9.3	13.0	45.5	14.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1002	0.375	0.375	0.375	44.9	10.0	11.4	15.2	48.7	16.4	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1003	0.5	0.5	0.5	54.7	9.1	10.4	13.8	48.7	14.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1004	0.625	0.625	0.625	66.0	5.6	9.5	11.1	59.3	11.4	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1005	0.75	0.75	0.75	75.7	4.1	6.4	7.6	57.3	7.9	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1006	0.875	0.875	0.875	86.3	1.1	3.5	3.7	71.9	3.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1007	1.0	1.0	1.0	95.4	0.0	0.0	0.0	113.6	0.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1008	0.0	0.0	0.0	23.1	1.4	−1.9	2.4	306.9	2.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1009	0.066	0.066	0.066	26.0	5.8	0.2	5.8	2.4	6.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1010	0.133	0.133	0.133	28.8	8.4	3.0	9.0	19.7	10.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1011	0.2	0.2	0.2	32.3	9.7	5.8	11.4	30.8	13.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1012	0.266	0.266	0.266	37.0	9.1	8.3	12.3	42.4	13.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1013	0.333	0.333	0.333	41.4	10.4	9.4	14.0	42.0	15.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1014	0.4	0.4	0.4	47.5	8.9	9.8	13.3	47.7	14.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1015	0.466	0.466	0.466	52.0	8.9	10.0	13.4	48.0	14.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1016	0.533	0.533	0.533	57.0	7.2	10.0	12.3	53.9	13.4	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1017	0.6	0.6	0.6	64.2	5.6	8.6	10.3	57.1	10.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1018	0.666	0.666	0.666	69.7	5.2	8.2	9.7	57.4	10.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1019	0.734	0.734	0.734	75.0	4.8	6.6	8.2	53.8	8.4	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1020	0.8	0.8	0.8	80.6	2.8	4.9	5.6	60.2	5.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1021	0.866	0.866	0.866	86.0	1.3	3.3	3.6	67.9	3.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1022	0.933	0.933	0.933	90.8	0.5	1.4	1.5	70.7	1.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1023	1.0	1.0	1.0	95.6	0.0	0.1	0.1	99.5	0.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1024	0.0	0.0	0.0	22.8	1.6	−1.4	2.1	318.9	2.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1025	0.066	0.066	0.066	25.8	6.1	0.6	6.1	6.1	6.9	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1026	0.133	0.133	0.133	28.5	8.6	3.3	9.2	21.0	10.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1027	0.2	0.2	0.2	32.1	9.8	5.8	11.4	30.5	13.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1028	0.266	0.266	0.266	36.9	9.9	8.4	13.0	40.4	14.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1029	0.333	0.333	0.333	41.1	10.3	9.6	14.1	42.7	15.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1030	0.4	0.4	0.4	47.5	8.4	10.0	13.1	49.7	14.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1031	0.466	0.466	0.466	52.2	8.6	9.4	12.8	47.5	13.9	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1032	0.533	0.533	0.533	57.5	7.3	9.1	11.7	50.9	12.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1033	0.6	0.6	0.6	63.9	6.1	8.7	10.6	54.8	11.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1034	0.666	0.666	0.666	69.4	5.6	8.0	9.8	55.1	10.1	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1035	0.734	0.734	0.734	74.9	4.7	6.4	8.0	53.5	8.2	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1036	0.8	0.8	0.8	80.7	2.8	5.0	5.7	60.7	5.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1037	0.866	0.866	0.866	86.0	1.2	3.4	3.6	70.1	3.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1038	0.933	0.933	0.933	90.9	0.4	1.4	1.5	72.5	1.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1039	1.0	1.0	1.0	95.7	0.0	0.0	0.0	224.9	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1040	0.0	0.0	0.0	22.9	0.8	−1.2	1.5	306.3	2.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1041	0.066	0.066	0.066	25.7	5.7	0.8	5.7	8.2	6.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1042	0.133	0.133	0.133	28.6	8.6	3.6	9.3	23.1	10.7	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1043	0.2	0.2	0.2	32.1	9.5	6.1	11.3	32.8	13.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1044	0.266	0.266	0.266	36.5	9.2	9.1	13.0	44.8	14.6	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1045	0.333	0.333	0.333	40.7	10.7	9.4	14.3	41.1	16.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1046	0.4	0.4	0.4	47.2	8.4	10.1	13.2	50.2	14.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1047	0.466	0.466	0.466	51.7	8.7	9.7	13.0	47.9	14.3	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1048	0.533	0.533	0.533	57.5	7.2	9.1	11.6	51.4	12.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1049	0.6	0.6	0.6	64.0	5.8	9.1	10.8	57.3	11.2	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1050	0.666	0.666	0.666	69.5	5.4	8.3	9.9	56.7	10.2	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1051	0.734	0.734	0.734	74.6	4.9	6.6	8.3	53.6	8.5	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1052	0.8	0.8	0.8	80.6	2.7	5.1	5.8	61.5	5.8	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

Mean color difference of this page: delta E*' = 9.2

1–0033131–F0

PE870–7N, Page 32/33–F

input: *rgb/cmyk* −> rgb_d
output: transfer to $cmy0_d$

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

1–0033131–F0

n	HIC*$_{Fd}$	*rgb*$_{Fd}$			*ict*$_{Fd}$			$h_{si\_F,d}$
1053	NW_086$_d$	0.866	0.866	0.866	0.866	0.0	0.866	360
1054	NW_093$_d$	0.933	0.933	0.933	0.933	0.0	0.933	360
1055	NW_100$_d$	1.0	1.0	1.0	1.0	0.0	1.0	360
1056	NW_000$_d$	0.0	0.0	0.0	0.0	0.0	0.0	360
1057	NW_006$_d$	0.066	0.066	0.066	0.066	0.0	0.066	360
1058	NW_013$_d$	0.133	0.133	0.133	0.133	0.0	0.133	360
1059	NW_020$_d$	0.2	0.2	0.2	0.2	0.0	0.2	360
1060	NW_026$_d$	0.266	0.266	0.266	0.266	0.0	0.266	360
1061	NW_033$_d$	0.333	0.333	0.333	0.333	0.0	0.333	360
1062	NW_040$_d$	0.4	0.4	0.4	0.4	0.0	0.4	360
1063	NW_046$_d$	0.466	0.466	0.466	0.466	0.0	0.466	360
1064	NW_053$_d$	0.533	0.533	0.533	0.533	0.0	0.533	360
1065	NW_060$_d$	0.6	0.6	0.6	0.6	0.0	0.6	360
1066	NW_066$_d$	0.666	0.666	0.666	0.666	0.0	0.666	360
1067	NW_073$_d$	0.734	0.734	0.734	0.734	0.0	0.734	360
1068	NW_080$_d$	0.8	0.8	0.8	0.8	0.0	0.8	360
1069	NW_086$_d$	0.866	0.866	0.866	0.866	0.0	0.866	360
1070	NW_093$_d$	0.933	0.933	0.933	0.933	0.0	0.933	360
1071	NW_100$_d$	1.0	1.0	1.0	1.0	0.0	1.0	360
1072	NW_000$_d$	0.0	0.0	0.0	0.0	0.0	0.0	360
1073	NW_100$_d$	1.0	1.0	1.0	1.0	0.0	1.0	360
1074	R00Y_100_100$_d$	1.0	0.0	0.0	1.0	1.0	0.5	390
1075	G50B_100_100$_d$	0.0	1.0	1.0	1.0	1.0	0.5	210
1076	Y00G_100_100$_d$	1.0	1.0	0.0	1.0	1.0	0.5	90
1077	B00R_100_100$_d$	0.0	0.0	1.0	1.0	1.0	0.5	270
1078	G00B_100_100$_d$	0.0	1.0	0.0	1.0	1.0	0.5	150
1079	B50R_100_100$_d$	1.0	0.0	1.0	1.0	1.0	0.5	330

*rgb**$_{Fd}$			*LabCh**$_{Fd}$				
0.866	0.866	0.866	86.0	0.0	0.0	0.0	0.0
0.933	0.933	0.933	90.8	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
0.066	0.066	0.066	29.0	0.0	0.0	0.0	0.0
0.133	0.133	0.133	33.8	0.0	0.0	0.0	0.0
0.2	0.2	0.2	38.6	0.0	0.0	0.0	0.0
0.266	0.266	0.266	43.3	0.0	0.0	0.0	0.0
0.333	0.333	0.333	48.1	0.0	0.0	0.0	0.0
0.4	0.4	0.4	52.8	0.0	0.0	0.0	0.0
0.466	0.466	0.466	57.5	0.0	0.0	0.0	0.0
0.533	0.533	0.533	62.3	0.0	0.0	0.0	0.0
0.6	0.6	0.6	67.1	0.0	0.0	0.0	0.0
0.666	0.666	0.666	71.8	0.0	0.0	0.0	0.0
0.734	0.734	0.734	76.6	0.0	0.0	0.0	0.0
0.8	0.8	0.8	81.3	0.0	0.0	0.0	0.0
0.866	0.866	0.866	86.0	0.0	0.0	0.0	0.0
0.933	0.933	0.933	90.8	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8

*rgb**'$_{Fd}$			*LabCh**'$_{Fd}$					*DE**'$_{Fd}$	$h_{siM,d}$
0.866	0.866	0.866	86.1	1.2	3.4	3.7	69.9	3.7	360
0.933	0.933	0.933	90.8	0.4	1.4	1.5	71.6	1.5	360
1.0	1.0	1.0	95.6	0.0	0.1	0.1	114.3	0.1	360
0.0	0.0	0.0	23.0	0.7	−0.9	1.1	308.5	1.7	360
0.066	0.066	0.066	25.6	5.5	0.6	5.5	6.7	6.5	360
0.133	0.133	0.133	28.2	8.3	3.4	9.0	22.4	10.6	360
0.2	0.2	0.2	32.0	10.0	5.8	11.6	30.4	13.3	360
0.266	0.266	0.266	36.7	8.8	8.7	12.4	44.7	14.0	360
0.333	0.333	0.333	40.7	10.4	8.9	13.7	40.4	15.5	360
0.4	0.4	0.4	46.8	8.7	10.2	13.4	49.7	14.7	360
0.466	0.466	0.466	51.8	8.8	9.9	13.3	48.4	14.5	360
0.533	0.533	0.533	57.5	7.3	9.2	11.8	51.6	12.7	360
0.6	0.6	0.6	63.6	6.0	9.2	11.0	56.7	11.5	360
0.666	0.666	0.666	69.3	5.2	8.3	9.8	57.5	10.1	360
0.734	0.734	0.734	74.5	4.8	6.5	8.1	53.5	8.3	360
0.8	0.8	0.8	80.5	2.7	5.2	5.9	62.0	5.9	360
0.866	0.866	0.866	86.1	1.2	3.4	3.6	69.4	3.6	360
0.933	0.933	0.933	90.7	0.4	1.4	1.5	71.7	1.5	360
1.0	1.0	1.0	95.7	0.0	0.0	0.1	118.4	0.1	360
0.0	0.0	0.0	23.3	1.3	−2.4	2.8	299.2	2.9	360
1.0	1.0	1.0	95.7	0.0	0.0	0.0	138.7	0.0	360
1.0	0.0	0.0	45.4	70.5	45.5	83.9	32.8	0.7	389
0.0	1.0	1.0	56.4	−25.2	−41.8	48.8	238.9	0.5	210
1.0	1.0	0.0	87.5	−10.0	95.1	95.7	96.0	0.4	89
0.0	0.0	1.0	24.7	29.8	−40.1	49.9	306.6	0.5	270
0.0	1.0	0.0	49.2	−65.4	28.0	71.2	156.7	1.8	149
1.0	0.0	1.0	45.8	79.2	−0.2	79.2	359.8	0.2	330

Mean color difference of this page: **delta *E**' = *5.8***

*rgb**$_{Md}$			*LabCh**$_{Md}$				
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8

TUB-test chart PE87; 16 step hue circle
colors and differences, $\Delta E^{*\prime}$

input: *rgb/cmyk* −> rgb_d
output: transfer to $cmy0_d$

1−0033231−F0