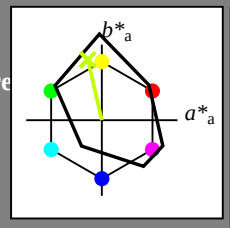
Entrada i salida: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel}$ = h_{ab}/360 = 102/360 = 0.28

***H**–* = Y25G–**

Datos del dispositivo (d) o elemental (e) color:
HIC**–
código de tono para les colore esta página:
***H**–* = Y25G–**

triàngulo claridad *T**



FRS06a; datos adaptados CIELAB (a)

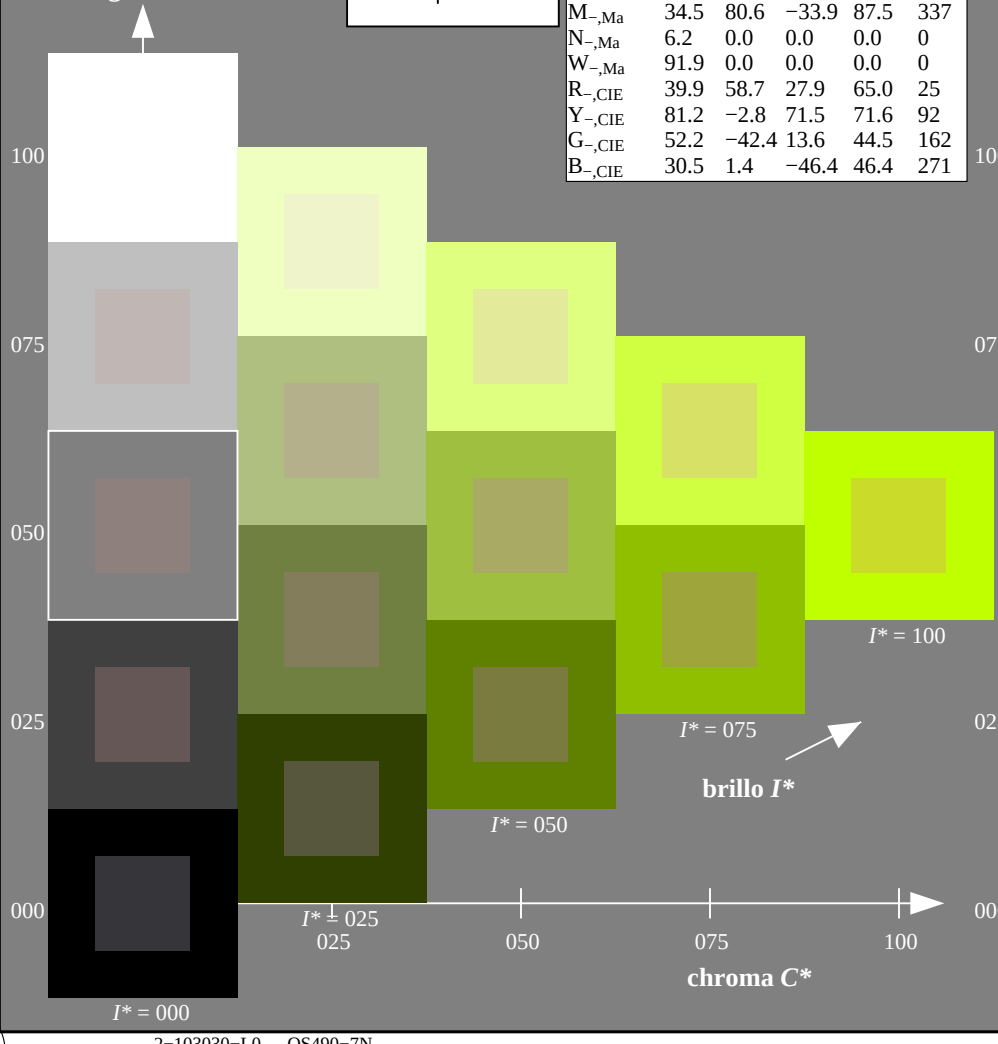
name	*L**=*L**a	*a**a	*b**a	*C**ab,a	*h**ab,a
R–,Ma	32.5	62.3	46.4	77.7	36
Y–,Ma	82.7	−3.1	113.9	114.0	91
G–,Ma	39.4	−61.8	45.8	76.9	143
C–,Ma	47.8	−26.8	−34.2	43.4	231
B–,Ma	10.1	55.1	−61.0	82.2	312
M–,Ma	34.5	80.6	−33.9	87.5	337
N–,Ma	6.2	0.0	0.0	0.0	0
W–,Ma	91.9	0.0	0.0	0.0	0
R–,CIE	39.9	58.7	27.9	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

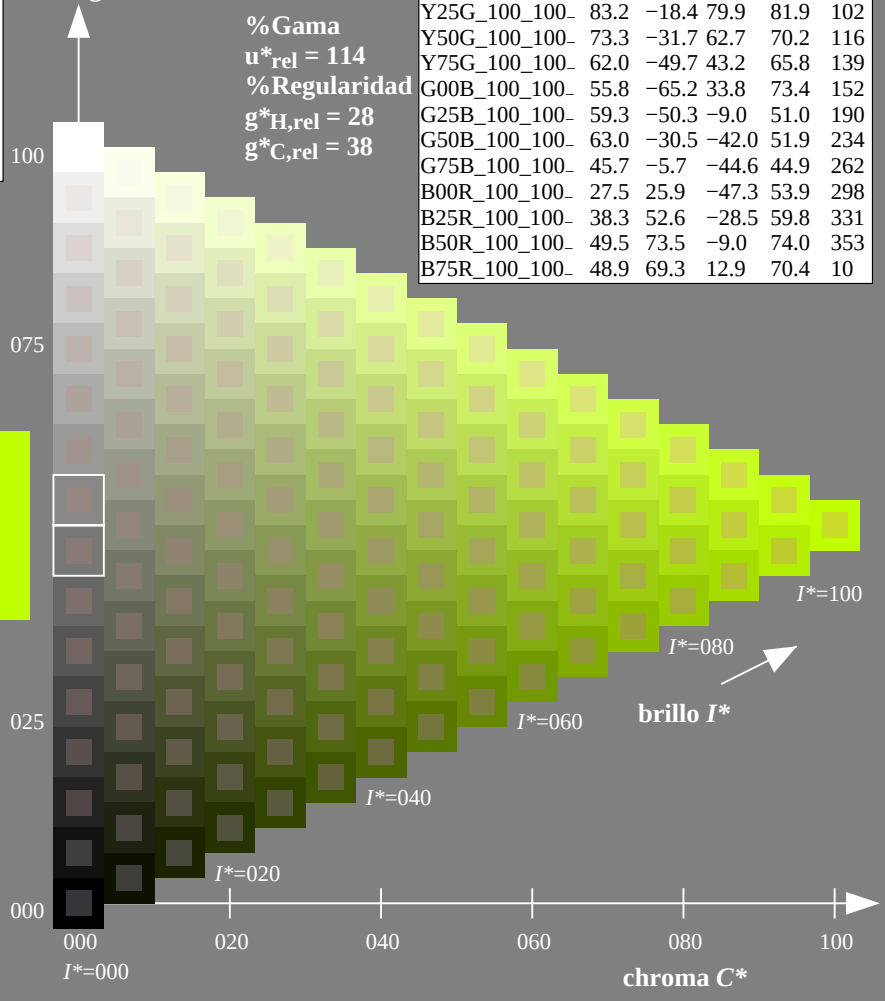
Los datos de color máximo (Ma):
***LabCh**–,Ma*: 83 −18 79 81 102**
***HIC**–,Ma*: Y25G_100_100–**
***rgbic**–,Ma*:**
0.76 1.0 0.0 1.0 1.0

ORS20a; datos adaptados CIELAB (a)

*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

%Gama
u^*_{rel} = 114
%Regularidad
$g^*_{H,rel}$ = 28
$g^*_{C,rel}$ = 38

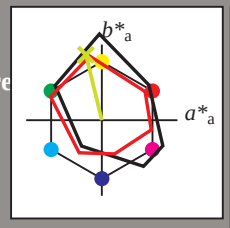




Entrada i salida: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel}$ = h_{ab}/360 = 103/360 = 0.28

H^*_d = Y25G$_d$

Datos del dispositivo (d) o elemental (e) color:
***HIC*$^*_d$**
código de tono para les colore esta página:
H^*_d = Y25G$_d$
triàngulo claridad *T



LRS18a; datos adaptados CIELAB (a)

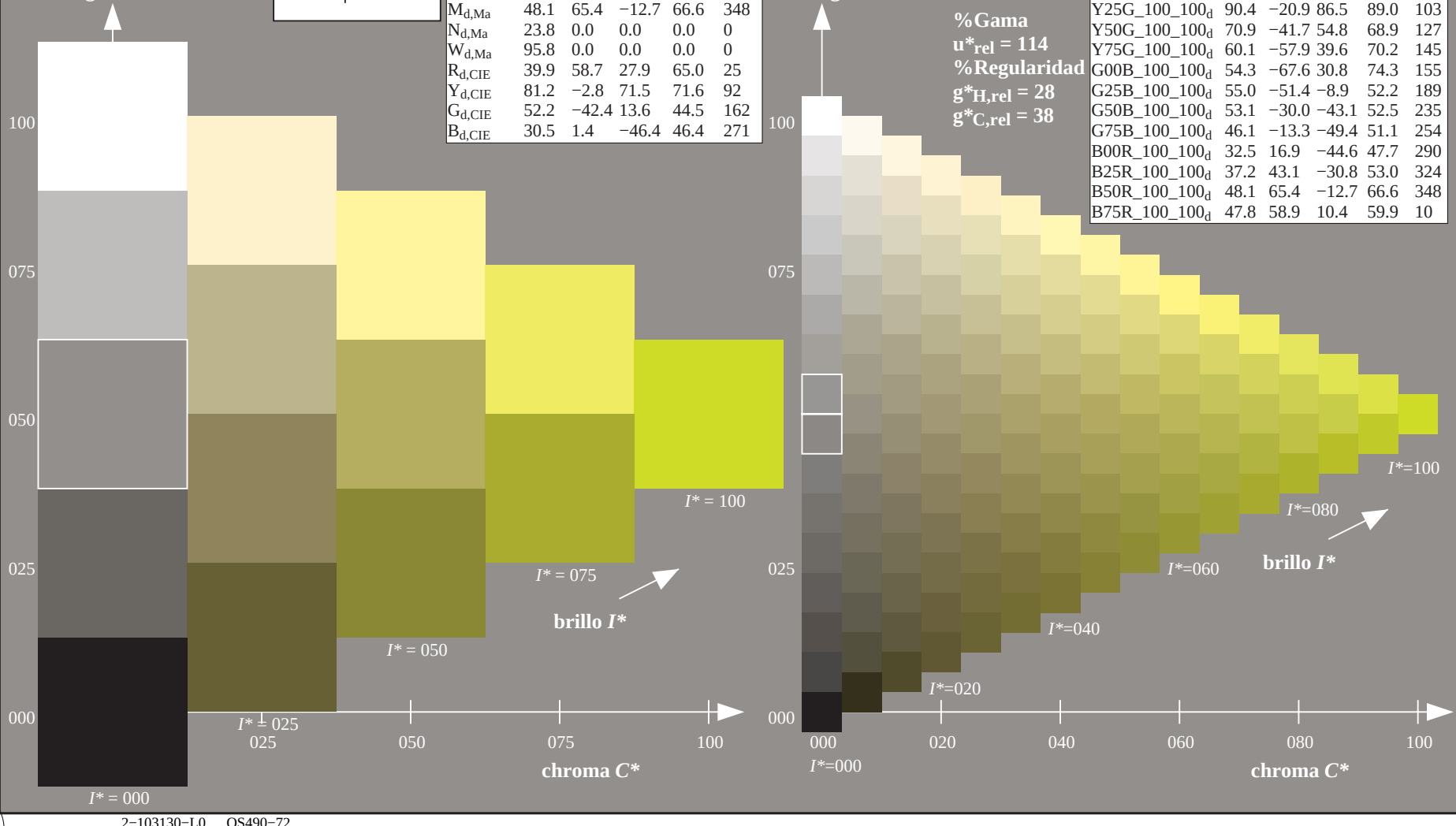
name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R_{d,Ma}$	47.5	57.2	37.8	68.6	33
$Y_{d,Ma}$	91.5	−15.8	84.6	86.1	100
$G_{d,Ma}$	54.3	−67.6	30.8	74.3	155
$C_{d,Ma}$	53.1	−30.0	−43.1	52.5	235
$B_{d,Ma}$	32.5	16.9	−44.6	47.7	290
$M_{d,Ma}$	48.1	65.4	−12.7	66.6	348
$N_{d,Ma}$	23.8	0.0	0.0	0.0	0
$W_{d,Ma}$	95.8	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

Los datos de color máximo (Ma):
***LabCh*$^*_{d,Ma}$: 90 −20 86 89 103**
***HIC*$^*_{d,Ma}$: Y25G_100_100$_d$**
***rgbic*$^*_{d,Ma}$:**
0.76 1.0 0.0 1.0 1.0
triàngulo claridad *T**

%Gama
u^*_{rel} = 114
%Regularidad
$g^*_{H,rel}$ = 28
$g^*_{C,rel}$ = 38

LRS18a; datos adaptados CIELAB (a)

H^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100$_d$	47.5	57.2	37.8	68.6	33
R25Y_100_100$_d$	57.4	43.5	54.5	69.7	51
R50Y_100_100$_d$	70.5	19.2	66.2	69.0	73
R75Y_100_100$_d$	83.5	−2.9	76.8	76.9	92
Y00G_100_100$_d$	91.5	−15.8	84.6	86.1	100
Y25G_100_100$_d$	90.4	−20.9	86.5	89.0	103
Y50G_100_100$_d$	70.9	−41.7	54.8	68.9	127
Y75G_100_100$_d$	60.1	−57.9	39.6	70.2	145
G00B_100_100$_d$	54.3	−67.6	30.8	74.3	155
G25B_100_100$_d$	55.0	−51.4	−8.9	52.2	189
G50B_100_100$_d$	53.1	−30.0	−43.1	52.5	235
G75B_100_100$_d$	46.1	−13.3	−49.4	51.1	254
B00R_100_100$_d$	32.5	16.9	−44.6	47.7	290
B25R_100_100$_d$	37.2	43.1	−30.8	53.0	324
B50R_100_100$_d$	48.1	65.4	−12.7	66.6	348
B75R_100_100$_d$	47.8	58.9	10.4	59.9	10



TUB matrícula: 20130201-QS49/QS49L0FP.PDF /.PS TUB material: code=rha4ta
aplicación para la medida salida de impresora láser, separación cmyn6* (CMYK)

vea archivos semejantes: http://130.149.60.45/~farbmetrik/QS49/QS49.HTM
información técnica: http://www.ps.bam.de o http://130.149.60.45/~farbmetrik

2−103230−L0 QS490−72
gráfico TUB-QS49; código de tono: H^*_d=$Y25G_d$
gráfico según a DIN 33872, 3D=1, de=0, *cmyk**

entrada: *rgb/cmyk −> rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

2−103230−F0

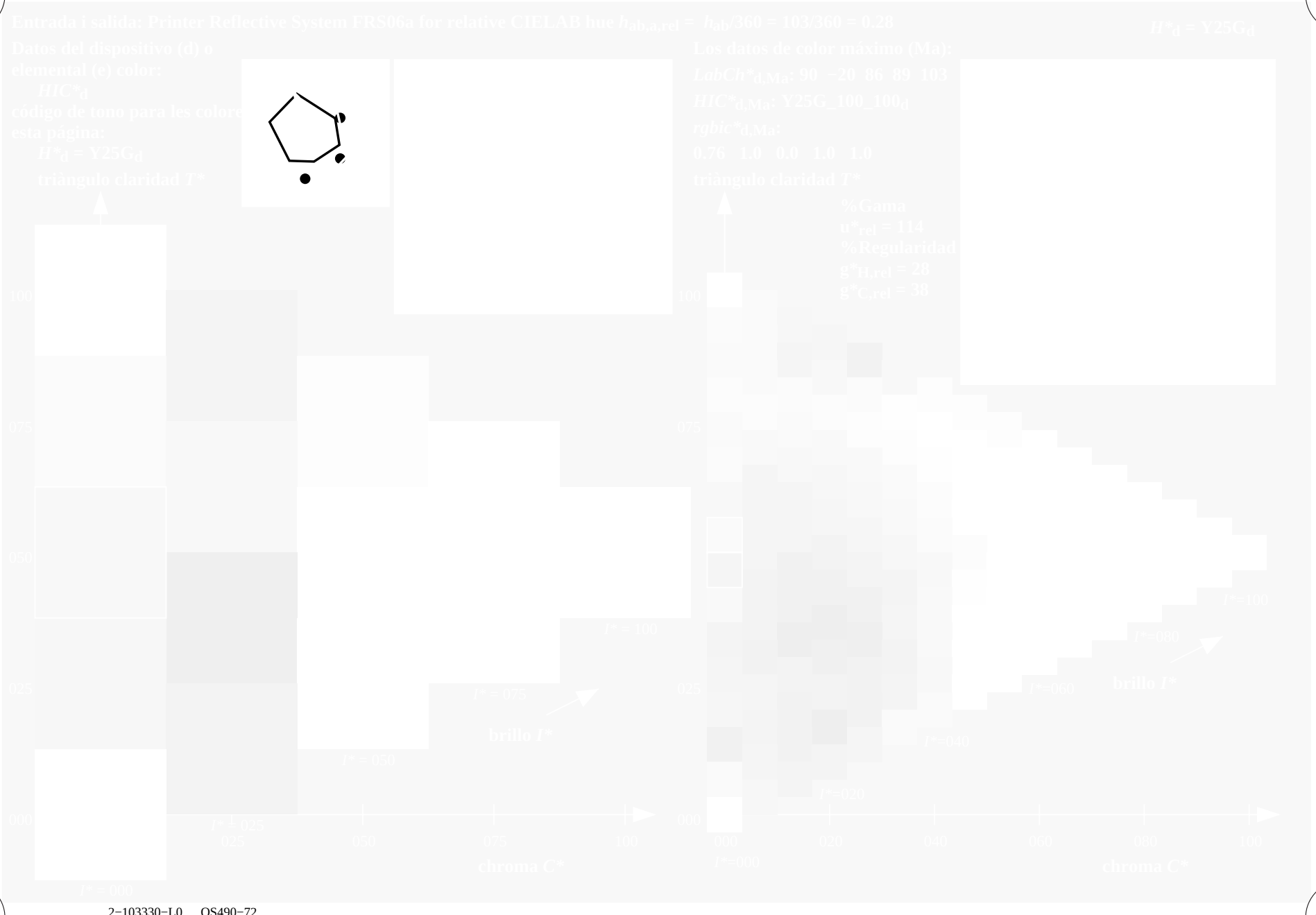


gráfico TUB-QS49; código de tono: $H^*_d=Y25G_d$
gráfico según a DIN 33872, 3D=1, de=0, *cmyk**

entrada: *rgb/cmyk* −> rgb_{dd}
salida: 3D-linealización a $cmyk^*_{dd}$

Entrada i salida: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel}$ = h_{ab}/360 = 103/360 = 0.28

H^*_d = Y25G$_d$

Datos del dispositivo (d) o elemental (e) color:

HIC^*_d

código de tono para les colore esta página:

H^*_d = Y25G$_d$

triàngulo claridad T^*

Los datos de color máximo (Ma):

$LabCh^*_{d,Ma}$: 90 −20 86 89 103

$HIC^*_{d,Ma}$: Y25G_100_100$_d$

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

0.76 1.0 0.0 1.0 1.0

triàngulo claridad T^*

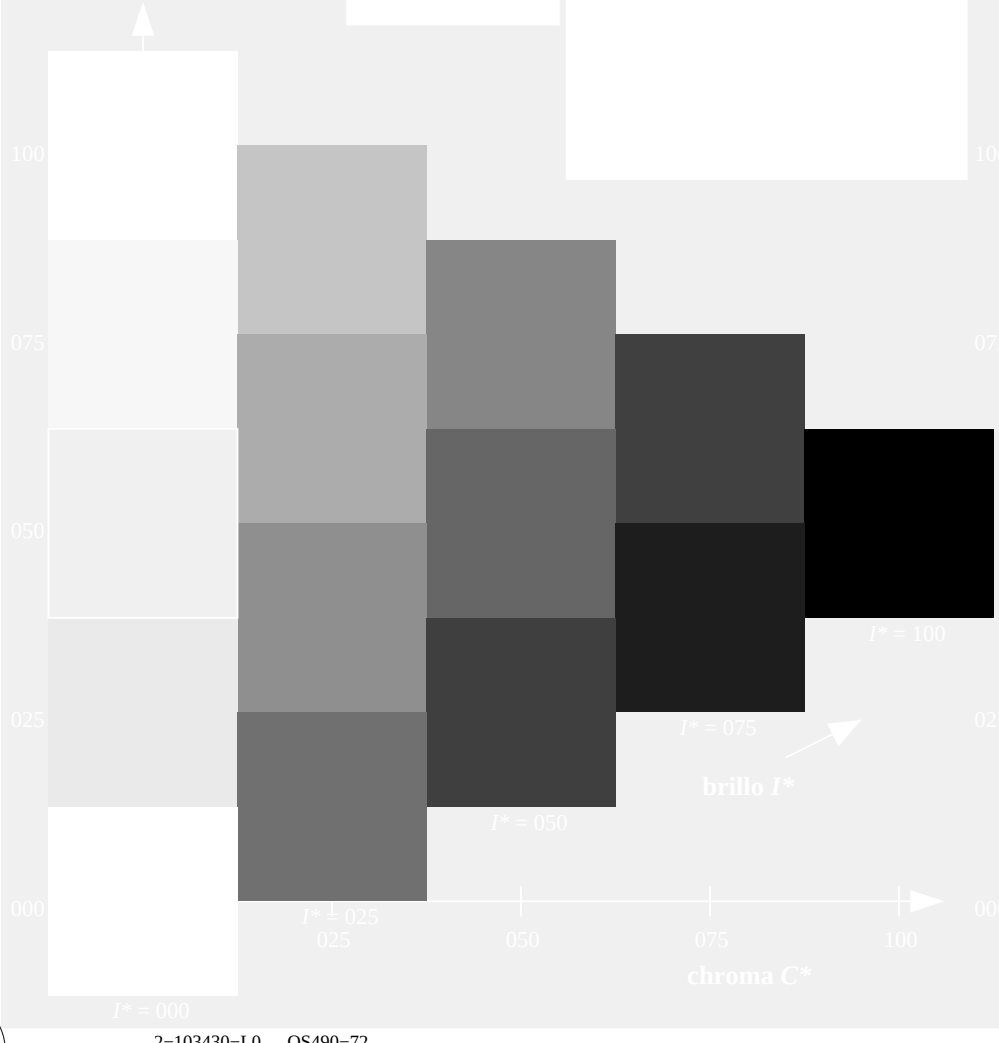
%Gama

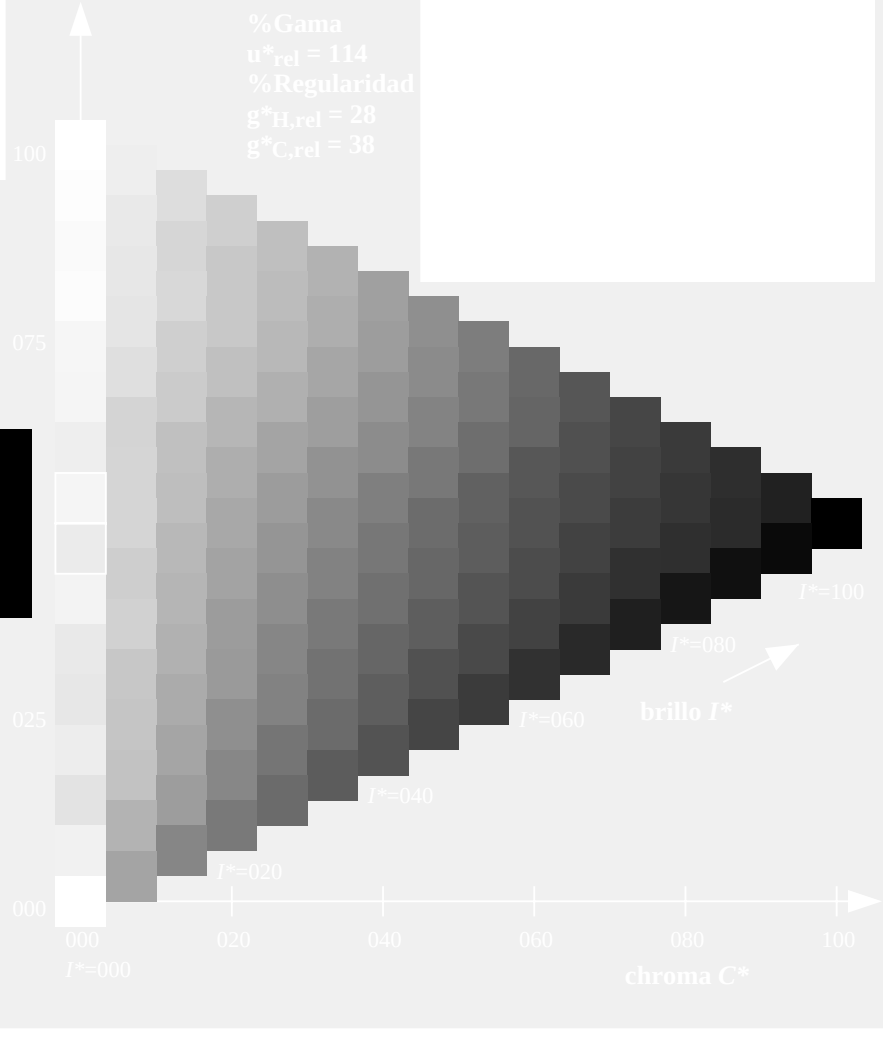
u^*_{rel} = 114

%Regularidad

$g^*_{H,rel}$ = 28

$g^*_{C,rel}$ = 38





2−103430−L0 QS490−72

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
gráfico según a DIN 33872, 3D=1, de=0, *cmyk**

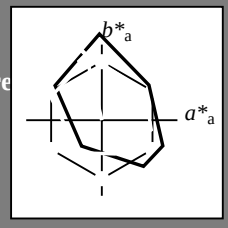
entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

2−103430−F0

Entrada i salida: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel}$ = h_{ab}/360 = 103/360 = 0.28

H^*_d = Y25G$_d$

Datos del dispositivo (d) o elemental (e) color:
***HIC*$^*_d$**
código de tono para les colore esta página:
H^*_d = Y25G$_d$
triàngulo claridad *T



LRS18a; datos adaptados CIELAB (a)

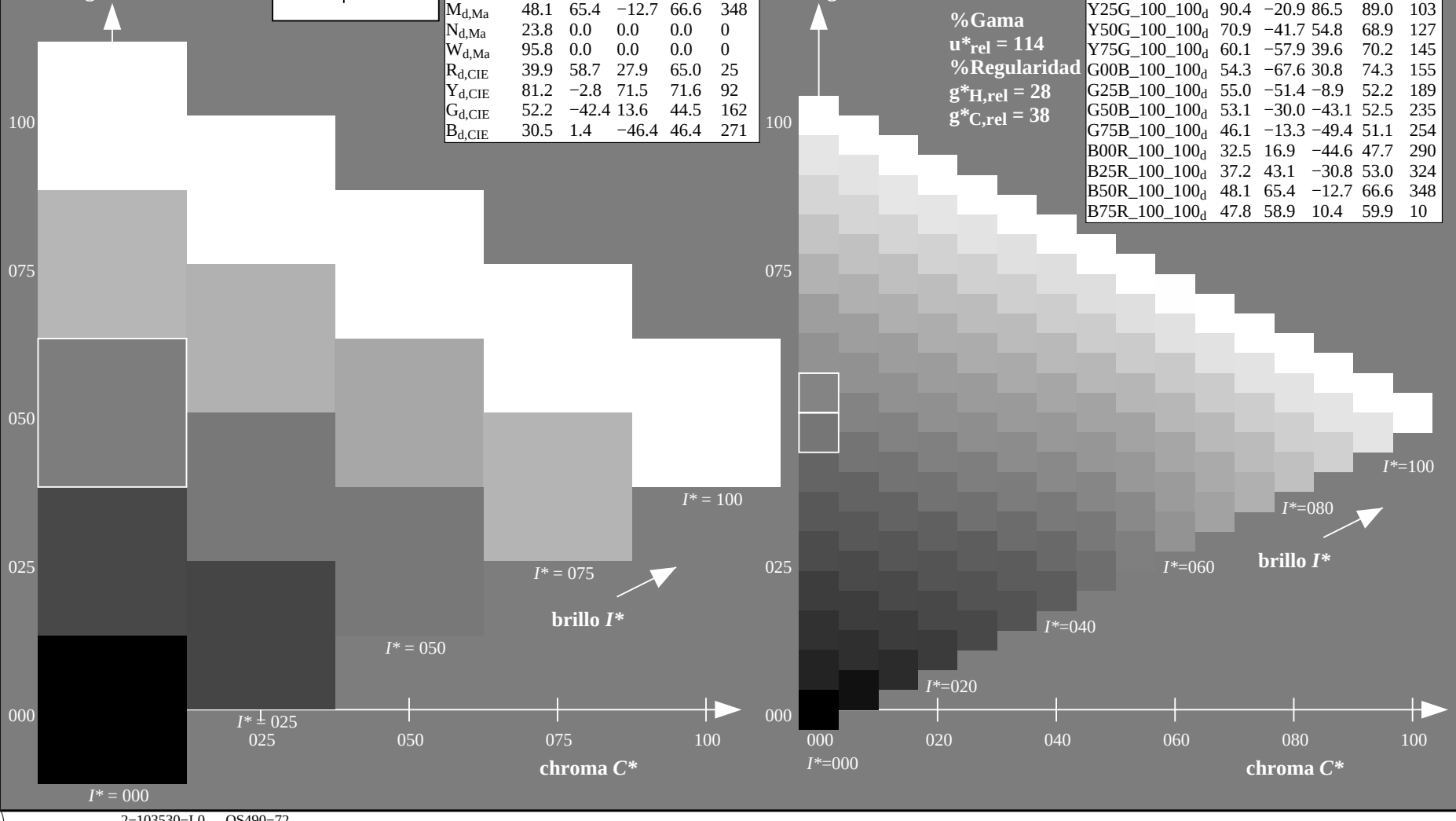
name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R_{d,Ma}$	47.5	57.2	37.8	68.6	33
$Y_{d,Ma}$	91.5	−15.8	84.6	86.1	100
$G_{d,Ma}$	54.3	−67.6	30.8	74.3	155
$C_{d,Ma}$	53.1	−30.0	−43.1	52.5	235
$B_{d,Ma}$	32.5	16.9	−44.6	47.7	290
$M_{d,Ma}$	48.1	65.4	−12.7	66.6	348
$N_{d,Ma}$	23.8	0.0	0.0	0.0	0
$W_{d,Ma}$	95.8	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

Los datos de color máximo (Ma):
***LabCh*$^*_{d,Ma}$: 90 −20 86 89 103**
***HIC*$^*_{d,Ma}$: Y25G_100_100$_d$**
***rgbic*$^*_{d,Ma}$:**
0.76 1.0 0.0 1.0 1.0
triàngulo claridad *T**

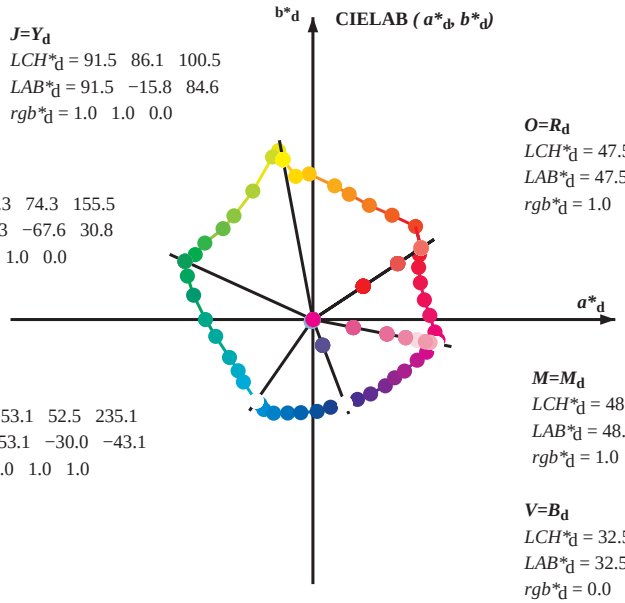
%Gama
u^*_{rel} = 114
%Regularidad
$g^*_{H,rel}$ = 28
$g^*_{C,rel}$ = 38

LRS18a; datos adaptados CIELAB (a)

H^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100$_d$	47.5	57.2	37.8	68.6	33
R25Y_100_100$_d$	57.4	43.5	54.5	69.7	51
R50Y_100_100$_d$	70.5	19.2	66.2	69.0	73
R75Y_100_100$_d$	83.5	−2.9	76.8	76.9	92
Y00G_100_100$_d$	91.5	−15.8	84.6	86.1	100
Y25G_100_100$_d$	90.4	−20.9	86.5	89.0	103
Y50G_100_100$_d$	70.9	−41.7	54.8	68.9	127
Y75G_100_100$_d$	60.1	−57.9	39.6	70.2	145
G00B_100_100$_d$	54.3	−67.6	30.8	74.3	155
G25B_100_100$_d$	55.0	−51.4	−8.9	52.2	189
G50B_100_100$_d$	53.1	−30.0	−43.1	52.5	235
G75B_100_100$_d$	46.1	−13.3	−49.4	51.1	254
B00R_100_100$_d$	32.5	16.9	−44.6	47.7	290
B25R_100_100$_d$	37.2	43.1	−30.8	53.0	324
B50R_100_100$_d$	48.1	65.4	−12.7	66.6	348
B75R_100_100$_d$	47.8	58.9	10.4	59.9	10



Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6



CIELAB (a^*_d, b^*_d)

$J=Y_d$
LCH^*_d = 91.5 86.1 100.5
LAB^*_d = 91.5 −15.8 84.6
rgb^*_d = 1.0 1.0 0.0

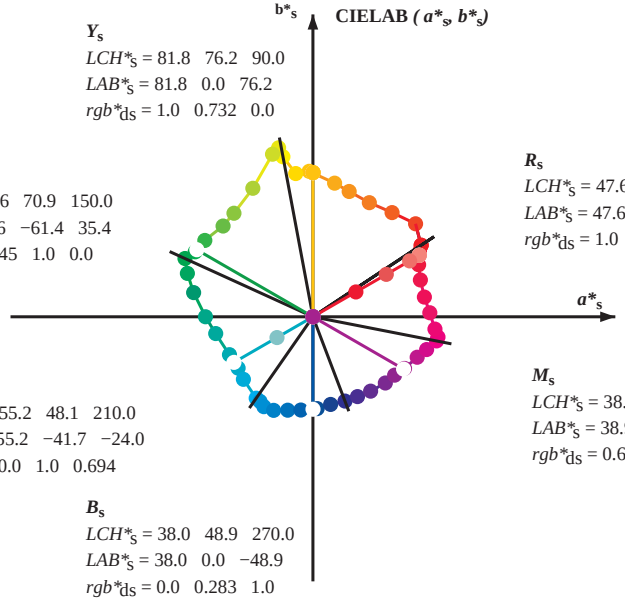
$L=G_d$
LCH^*_d = 54.3 74.3 155.5
LAB^*_d = 54.3 −67.6 30.8
rgb^*_d = 0.0 1.0 0.0

$O=R_d$
LCH^*_d = 47.5 68.6 33.4
LAB^*_d = 47.5 57.2 37.8
rgb^*_d = 1.0 0.0 0.0

$C=C_d$
LCH^*_d = 53.1 52.5 235.1
LAB^*_d = 53.1 −30.0 −43.1
rgb^*_d = 0.0 1.0 1.0

$M=M_d$
LCH^*_d = 48.1 66.6 348.9
LAB^*_d = 48.1 65.4 −12.7
rgb^*_d = 1.0 0.0 1.0

$V=B_d$
LCH^*_d = 32.5 47.7 290.8
LAB^*_d = 32.5 16.9 −44.6
rgb^*_d = 0.0 0.0 1.0



CIELAB (a^*_s, b^*_s)

Y_s
LCH^*_s = 81.8 76.2 90.0
LAB^*_s = 81.8 0.0 76.2
rgb^*_{ds} = 1.0 0.732 0.0

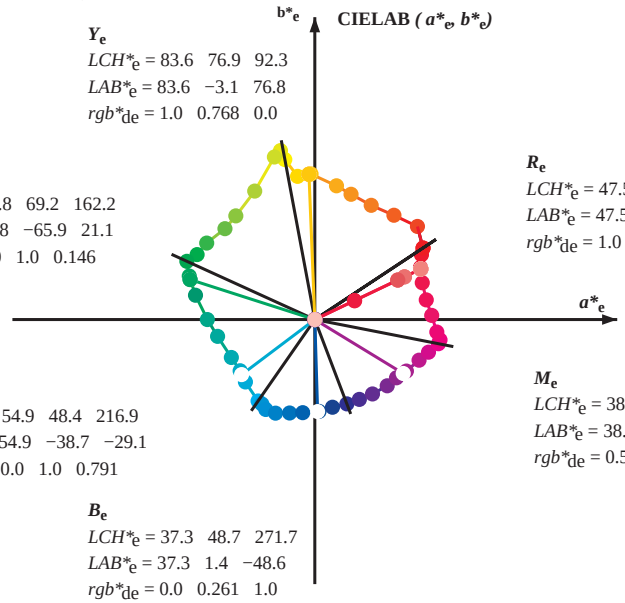
G_s
LCH^*_s = 57.6 70.9 150.0
LAB^*_s = 57.6 −61.4 35.4
rgb^*_{ds} = 0.145 1.0 0.0

R_s
LCH^*_s = 47.6 65.0 30.0
LAB^*_s = 47.6 56.3 32.5
rgb^*_{ds} = 1.0 0.0 0.157

C_s
LCH^*_s = 55.2 48.1 210.0
LAB^*_s = 55.2 −41.7 −24.0
rgb^*_{ds} = 0.0 1.0 0.694

M_s
LCH^*_s = 38.9 55.3 330.0
LAB^*_s = 38.9 47.9 −27.6
rgb^*_{ds} = 0.612 0.0 1.0

B_s
LCH^*_s = 38.0 48.9 270.0
LAB^*_s = 38.0 0.0 −48.9
rgb^*_{ds} = 0.0 0.283 1.0



CIELAB (a^*_e, b^*_e)

Y_e
LCH^*_e = 83.6 76.9 92.3
LAB^*_e = 83.6 −3.1 76.8
rgb^*_{de} = 1.0 0.768 0.0

G_e
LCH^*_e = 53.8 69.2 162.2
LAB^*_e = 53.8 −65.9 21.1
rgb^*_{de} = 0.0 1.0 0.146

R_e
LCH^*_e = 47.5 62.1 25.4
LAB^*_e = 47.5 56.0 26.7
rgb^*_{de} = 1.0 0.0 0.263

C_e
LCH^*_e = 54.9 48.4 216.9
LAB^*_e = 54.9 −38.7 −29.1
rgb^*_{de} = 0.0 1.0 0.791

M_e
LCH^*_e = 38.5 54.7 328.6
LAB^*_e = 38.5 46.7 −28.5
rgb^*_{de} = 0.584 0.0 1.0

B_e
LCH^*_e = 37.3 48.7 271.7
LAB^*_e = 37.3 1.4 −48.6
rgb^*_{de} = 0.0 0.261 1.0

(a^*_d, b^*_d), (a^*_s, b^*_s), (a^*_e, b^*_e)

rgb^*_d LCH^*_d LAB^*_d

$h_{ab,s}$ rgb^*_d

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

$h_{ab,s}$

s: $h_{ab,si}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0, 390.0 (i=0,6)

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

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

$h_{ab,e}$

e: $h_{ab,ei}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6, 385.5 (i=0,6)

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

$$h_{360ab,eij} = h_{ab,ei} + j\ [h_{ab,ei+1} - h_{ab,ei}\ ]\ /60\ (\ i = 0, 1, ..., 5;\ j = 0, 1, ..., 59) \quad (5)$$

h_{ab},$h_{ab,d}$

rgb^*_{de}

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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**$_{de}$
33.4	30.0	25.4	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	1.0	0.0	0.0	47.6	57.2	37.9	68.6	33	1.0	0.0	0.158	47.7	56.3	32.5	65.0	30	1.0	0.0	0.263	47.6	56.1	26.7	62.1	25	
42.1	37.5	33.8	1.0	0.125	0.0	51.9	54.3	49.2	73.2	42.1	1.0	0.117	0.0	51.7	54.6	48.5	73.0	41	1.0	0.05	0.0	49.4	56.3	42.4	70.5	37	1.0	0.0	0.012	47.6	57.2	37.5	68.4	33	
52.8	45.0	42.1	1.0	0.25	0.0	58.2	41.8	55.1	69.2	52.8	1.0	0.25	0.0	58.3	41.8	55.2	69.2	52	1.0	0.158	0.0	53.6	51.1	51.1	72.2	45	1.0	0.125	0.0	52.0	54.3	49.2	73.3	42	
63.7	52.5	50.5	1.0	0.375	0.0	64.6	29.8	60.4	67.3	63.7	1.0	0.367	0.0	64.2	30.6	60.1	67.5	63	1.0	0.24	0.0	57.8	42.8	54.8	69.6	52	1.0	0.216	0.0	56.6	45.2	53.9	70.3	49	
73.8	60.0	58.8	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8	1.0	0.5	0.0	70.5	19.2	66.3	69.0	73	1.0	0.332	0.0	62.5	34.0	58.9	68.0	60	1.0	0.32	0.0	61.8	35.2	58.4	68.2	58	
80.7	67.5	67.2	1.0	0.625	0.0	74.9	11.4	70.7	71.6	80.7	1.0	0.617	0.0	74.6	12.0	70.5	71.5	80	1.0	0.416	0.0	66.6	26.5	62.5	67.9	67	1.0	0.412	0.0	66.4	26.9	62.3	67.9	66	
91.5	75.0	75.6	1.0	0.75	0.0	82.9	−2.0	76.9	77.0	91.5	1.0	0.75	0.0	83.0	−1.9	77.0	77.0	−268	1.0	0.521	0.0	71.3	18.0	67.1	69.5	75	1.0	0.532	0.0	71.6	17.3	67.5	69.7	75	
96.8	82.5	83.9	1.0	0.875	0.0	87.6	−9.0	75.7	76.3	96.8	1.0	0.867	0.0	87.3	−8.5	75.9	76.4	96	1.0	0.639	0.0	75.8	10.1	71.6	72.3	82	1.0	0.655	0.0	76.9	8.4	72.5	73.0	83	
100.5	90.0	92.3	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5	1.0	1.0	0.0	91.6	−15.7	84.7	86.2	100	1.0	0.732	0.0	81.8	0.0	76.3	76.3	90	1.0	0.769	0.0	83.7	−3.0	76.8	76.9	92	
101.4	97.5	101.0	0.875	1.0	0.0	92.8	−18.1	89.4	91.2	101.4	0.883	1.0	0.0	92.7	−17.9	89.1	90.9	101	1.0	0.88	0.0	87.8	−9.3	76.2	76.7	97	1.0	0.996	0.0	91.5	−15.5	84.4	85.8	100	
103.9	105.0	109.7	0.75	1.0	0.0	90.1	−21.3	86.0	88.6	103.9	0.75	1.0	0.0	90.1	−21.3	86.0	88.7	103	0.738	1.0	0.0	89.2	−22.5	84.4	87.4	105	0.684	1.0	0.0	84.7	−27.5	76.7	81.5	109	
115.0	112.5	118.5	0.625	1.0	0.0	79.9	−31.7	67.9	75.0	115.0	0.633	1.0	0.0	80.6	−31.1	69.2	75.9	114	0.659	1.0	0.0	82.7	−29.4	73.0	78.8	112	0.595	1.0	0.0	77.8	−34.4	65.0	73.6	117	
127.3	120.0	127.2	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127	0.574	1.0	0.0	76.3	−36.2	62.8	72.6	120	0.501	1.0	0.0	71.0	−41.6	54.9	68.9	127	
134.7	127.5	136.0	0.375	1.0	0.0	66.5	−47.5	48.0	67.6	134.7	0.383	1.0	0.0	66.9	−47.1	48.5	67.7	134	0.503	1.0	0.0	71.2	−41.5	55.2	69.1	127	0.366	1.0	0.0	66.2	−48.2	47.6	67.8	135	
144.7	135.0	144.7	0.25	1.0	0.0	60.6	−57.2	40.4	70.1	144.7	0.25	1.0	0.0	60.6	−57.2	40.5	70.1	144	0.372	1.0	0.0	66.4	−47.8	47.9	67.7	135	0.25	1.0	0.0	60.6	−57.1	40.5	70.1	144	
151.0	142.5	153.4	0.125	1.0	0.0	57.0	−62.2	34.4	71.1	151.0	0.133	1.0	0.0	57.3	−61.8	34.8	71.0	150	0.284	1.0	0.0	62.3	−54.6	42.7	69.4	142	0.073	1.0	0.0	55.9	−64.4	33.0	72.5	152	
155.5	150.0	162.2	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5	0.0	1.0	0.0	54.3	−67.6	30.8	74.4	155	0.146	1.0	0.0	57.6	−61.3	35.5	70.9	150	0.0	1.0	0.147	53.8	−65.9	21.1	69.3	162	
160.8	157.5	169.0	0.0	1.0	0.125	53.8	−66.4	23.0	70.2	160.8	0.0	1.0	0.117	53.9	−66.4	23.5	70.6	160	0.0	1.0	0.035	54.2	−67.3	28.6	73.2	157	0.0	1.0	0.251	53.8	−63.0	12.7	64.4	168	
168.5	165.0	175.9	0.0	1.0	0.25	53.7	−63.1	12.8	64.4	168.5	0.0	1.0	0.25	53.8	−63.1	12.8	64.4	168	0.0	1.0	0.192	53.8	−64.7	17.4	67.1	165	0.0	1.0	0.331	54.4	−59.3	4.2	59.5	175	
179.9	172.5	182.7	0.0	1.0	0.375	54.7	−56.8	0.0	56.8	179.9	0.0	1.0	0.367	54.7	−57.2	0.8	57.3	179	0.0	1.0	0.288	54.1	−61.4	8.6	62.1	172	0.0	1.0	0.405	54.8	−55.6	−2.1	55.7	182	
189.8	180.0	189.6	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8	0.0	1.0	0.5	55.0	−51.4	−8.8	52.2	189	0.0	1.0	0.375	54.8	−56.7	0.0	56.8	180	0.0	1.0	0.497	55.0	−51.5	−8.6	52.3	189	
204.4	187.5	196.4	0.0	1.0	0.625	55.3	−44.1	−20.0	48.5	204.4	0.0	1.0	0.617	55.3	−44.6	−19.3	48.8	203	0.0	1.0	0.464	55.0	−53.0	−6.4	53.5	187	0.0	1.0	0.553	55.2	−48.6	−13.9	50.7	195	
214.4	195.0	203.2	0.0	1.0	0.75	55.2	−39.5	−27.1	47.9	214.4	0.0	1.0	0.75	55.2	−39.4	−27.0	47.9	214	0.0	1.0	0.544	55.2	−49.1	−13.1	50.9	195	0.0	1.0	0.615	55.3	−44.7	−19.2	48.8	203	
221.9	202.5	210.1	0.0	1.0	0.875	54.4	−36.7	−33.0	49.4	221.9	0.0	1.0	0.867	54.5	−36.9	−32.6	49.4	221	0.0	1.0	0.604	55.3	−45.5	−18.3	49.1	202	0.0	1.0	0.69	55.3	−41.8	−23.8	48.2	209	
235.1	210.0	216.9	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1	0.0	1.0	1.0	53.1	−29.9	−43.0	52.5	235	0.0	1.0	0.694	55.3	−41.6	−24.0	48.2	210	0.0	1.0	0.792	55.0	−38.6	−29.0	48.4	216	
237.9	217.5	223.8	0.0	0.875	1.0	53.1	−27.9	−44.7	52.7	237.9	0.0	0.883	1.0	53.1	−28.0	−44.5	52.8	237	0.0	1.0	0.792	55.0	−38.6	−29.1	48.5	217	0.0	1.0	0.888	54.3	−36.1	−34.1	49.8	223	
241.3	225.0	230.6	0.0	0.75	1.0	52.9	−25.9	−47.5	54.1	241.3	0.0	0.75	1.0	52.9	−25.8	−47.5	54.2	241	0.0	1.0	0.904	54.2	−35.4	−35.4	50.2	225	0.0	1.0	0.957	53.6	−32.5	−39.7	51.5	230	
247.2	232.5	237.5	0.0	0.625	1.0	50.5	−20.8	−49.5	53.7	247.2	0.0	0.633	1.0	50.7	−21.1	−49.3	53.8	246	0.0	1.0	0.97	53.5	−31.8	−40.7	51.8	232	0.0	0.916	1.0	53.1	−28.6	−44.1	52.7	237	
254.9	240.0	244.3	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9	0.0	0.5	1.0	46.2	−13.2	−49.3	51.2	254	0.0	0.801	1.0	53.0	−26.7	−46.3	53.6	240	0.0	0.686	1.0	51.7	−23.3	−48.5	54.0	244	
262.6	247.5	251.2	0.0	0.375	1.0	41.4	−6.3	−49.2	49.6	262.6	0.0	0.383	1.0	41.7	−6.7	−49.2	49.8	262	0.0	0.63	1.0	50.7	−20.9	−49.4	53.8	247	0.0	0.568	1.0	48.6	−17.2	−49.5	52.6	250	
272.6	255.0	258.0	0.0	0.25	1.0	36.8	2.2	−48.5	48.6	272.6	0.0	0.25	1.0	36.9	2.2	−48.5	48.6	272	0.0	0.499	1.0	46.1	−13.1	−49.3	51.2	255	0.0	0.449	1.0	44.2	−10.4	−49.4	50.6	258	
281.4	262.5	264.8	0.0	0.125	1.0	35.0	9.4	−46.3	47.3	281.4	0.0	0.133	1.0	35.2	8.9	−46.5	47.4	280	0.0	0.386	1.0	41.8	−6.8	−49.2	49.8	262	0.0	0.353	1.0	40.6	−4.7	−49.2	49.5	264	
290.8	270.0	271.7	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8	0.0	0.0	1.0	32.6	16.9	−44.5	47.7	290	0.0	0.283	1.0	38.1	0.0	−48.8	48.9	270	0.0	0.261	1.0	37.3	1.5	−48.6	48.7	271	
299.2	277.5	278.8	0.125	0.0	1.0	31.6	23.6	−42.2	48.4	299.2	0.117	0.0	1.0	31.7	23.2	−42.3	48.4	298	0.0	0.188	1.0	36.0	5.8	−47.5	48.0	277	0.0	0.169	1.0	35.7	7.0	−47.2	47.8	278	
307.8	285.0	285.9	0.25	0.0	1.0	31.0	30.5	−39.3	49.8	307.8	0.25	0.0	1.0	31.0	30.6	−39.3	49.9	307	0.0	0.078	1.0	34.1	12.3	−45.8	47.5	285	0.0	0.065	1.0	33.9	13.1	−45.6	47.5	285	
317.5	292.5	293.0	0.375	0.0	1.0	34.2	38.2	−35.0	51.8	317.5	0.367	0.0	1.0	34.0	37.8	−35.3	51.7	316	0.018	0.0	1.0	32.4	17.9	−44.2	47.8	292	0.026	0.0	1.0	32.4	18.4	−44.1	47.9	292	
324.4	300.0	300.1	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4	0.5	0.0	1.0	37.2	43.2	−30.8	53.1	324	0.136	0.0	1.0	31.6	24.3	−41.9	48.5	300	0.139	0.0	1.0	31.5	24.4	−41.9	48.6	300	
330.6	307.5	307.2	0.625	0.0	1.0	39.1	48.4	−27.2	55.6	330.6	0.617	0.0	1.0	39.0	48.1	−27.4	55.4	330	0.238	0.0	1.0	31.1	29.9	−39.6	49.7	307	0.235	0.0	1.0	31.1	29.8	−39.7	49.7	306	
338.7	315.0	314.3	0.75	0.0	1.0	41.8	55.1	−21.4	59.1	338.7	0.75	0.0	1.0	41.9	55.2	−21.4	59.2	338	0.343	0.0	1.0	33.4	36.3	−36.2	51.4	315	0.335	0.0	1.0	33.2	35.8	−36.5	51.2	314	
343.9	322.5	321.4	0.875	0.0	1.0	45.6	60.1	−17.3	62.6	343.9	0.867	0.0	1.0	45.4	59.8	−17.5	62.4	343	0.456	0.0	1.0	36.2	41.5	−32.3	52.7	322	0.439	0.0	1.0	35.8	40.8	−32.9	52.5	321	
348.9	330.0	328.6	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9	1.0	0.0	1.0	48.2	65.4	−12.7	66.7	348	0.612	0.0	1.0	38.9	47.9	−27.6	55.4	330	0.584	0.0	1.0	38.5	46.8	−28.4	54.8	328	
350.7	337.5	335.7	1.0	0.0	0.875	49.5	66.1	−10.7	67.0	350.7	1.0	0.0	0.883	49.5	66.1	−10.8	67.0	350	0.723	0.0	1.0	41.3	53.8	−22.7	58.4	337	0.696	0.0	1.0	40.7	52.3	−24.0	57.6	335	
354.2	345.0	342.8	1.0	0.0	0.75	49.3	64.5	−6.5	64.8	354.2	1.0	0.0	0.75	49.3	64.6	−6.5	64.9	354	0.902	0.0	1.0	46.2	61.3	−16.3	63.5	345	0.848	0.0	1.0	44.9	59.1	−18.2	61.9	342	
361.9	352.5	349.9	1.0	0.0	0.625	48.0	61.8	2.1	61.8	361.9	1.0	0.0	0.633	48.1	62.0	1.6	62.0	361	1.0	0.0	0.83	49.5	65.6	−9.1	66.3	352	1.0	0.0	0.964	48.6	65.6	−12.1	66.8	349	
370.0	360.0	357.0	1.0	0.0	0.5	47.8	58.9	10.4	59.9	370.0	1.0	0.0	0.5	47.8	59.0	10.4	59.9	370	1.0	0.0	0.657	48.3	62.6	0.0	62.6	360	1.0	0.0	0.828	49.5	65.6	−9.0	66.2	352	
378.9	367.5	364.1	1.0	0.0	0.375	47.4	56.8	19.5	60.0	378.9	1.0	0.0	0.383	47.4	57.0	18.9	60.1	378	1.0	0.0	0.547	47.9	60.2	7.4	60.6	367	1.0	0.0	0.659	48.4	62.7	−0.1	62.7	359	
386.2	375.0	371.2	1.0	0.0	0.25	47.5	55.9	27.5	62.3	386.2	1.0	0.0	0.25	47.6	55.9	27.6	62.4	386	1.0	0.0	0.43	47.6	58.0	15.5	60.0	375	1.0	0.0	0.519	47.8	59.5	9.2	60.2	368	
391.3	382.5	378.3	1.0	0.0	0.125	47.6	56.3	34.2	65.9	391.3	1.0	0.0	0.133	47.7	56.4	33.8	65.7	390	1.0	0.0	0.323	47.5	56.6	22.9	61.0	382	1.0	0.0	0.408	47.5	57.6	17.1	60.0	376	
393.4	390.0	385.4	1.0	0.0	0.0	47.5	57.2	37.8	68.6	393.4	1.0	0.0	0.0	47.6	57.2	37.9	68.6	393	1.0	0.0	0.158	47.7	56.3	32.5	65.0	390	1.0	0.0	0.263	47.6	56.1	26.7	62.1	385	

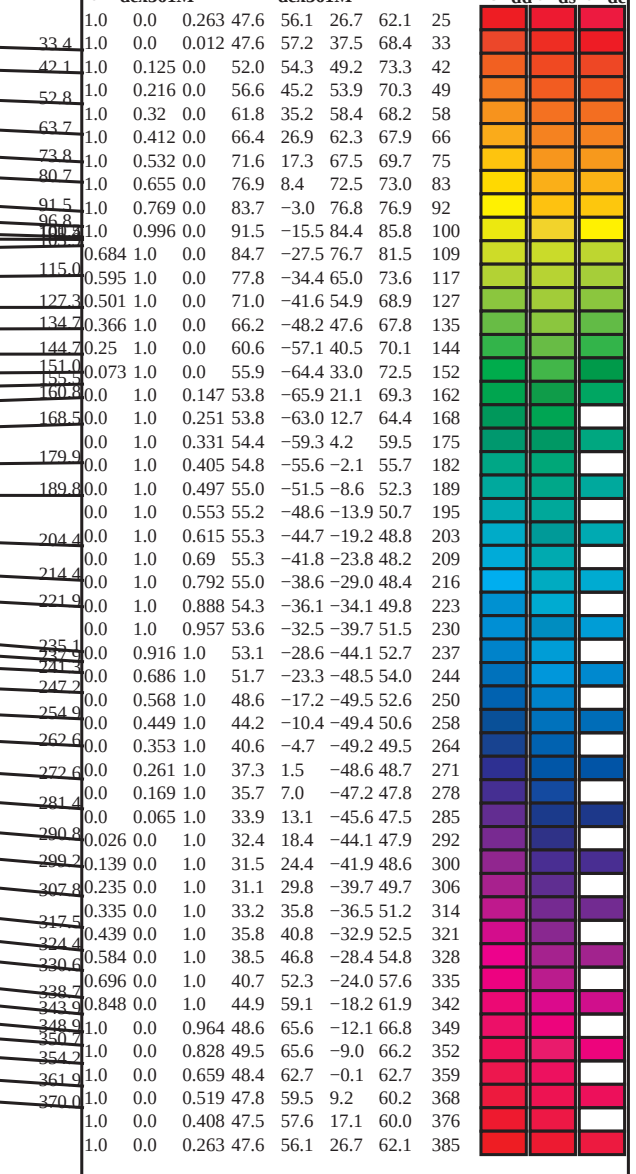
gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
círculo de tono, 48 pasos; *rgb*−*LabCh**mesas

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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)				
33.4	30.0	25.4	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
42.1	37.5	33.8	1.0	0.125	0.0	51.9	54.3	49.2	73.2	42.1
52.8	45.0	42.1	1.0	0.25	0.0	58.2	41.8	55.1	69.2	52.8
63.7	52.5	50.5	1.0	0.375	0.0	64.6	29.8	60.4	67.3	63.7
73.8	60.0	58.8	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
80.7	67.5	67.2	1.0	0.625	0.0	74.9	11.4	70.7	71.6	80.7
91.5	75.0	75.6	1.0	0.75	0.0	82.9	−2.0	76.9	77.0	91.5
96.8	82.5	83.9	1.0	0.875	0.0	87.6	−9.0	75.7	76.3	96.8
100.5	90.0	92.3	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
101.4	97.5	101.0	0.875	1.0	0.0	92.8	−18.1	89.4	91.2	101.4
103.9	105.0	109.7	0.75	1.0	0.0	90.1	−21.3	86.0	88.6	103.9
115.0	112.5	118.5	0.625	1.0	0.0	79.9	−31.7	67.9	75.0	115.0
127.3	120.0	127.2	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
134.7	127.5	136.0	0.375	1.0	0.0	66.5	−47.5	48.0	67.6	134.7
144.7	135.0	144.7	0.25	1.0	0.0	60.6	−57.2	40.4	70.1	144.7
151.0	142.5	153.4	0.125	1.0	0.0	57.0	−62.2	34.4	71.1	151.0
155.5	150.0	162.2	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
160.8	157.5	169.0	0.0	1.0	0.125	53.8	−66.4	23.0	70.2	160.8
168.5	165.0	175.9	0.0	1.0	0.25	53.7	−63.1	12.8	64.4	168.5
179.9	172.5	182.7	0.0	1.0	0.375	54.7	−56.8	0.0	56.8	179.9
189.8	180.0	189.6	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
204.4	187.5	196.4	0.0	1.0	0.625	55.3	−44.1	−20.0	48.5	204.4
214.4	195.0	203.2	0.0	1.0	0.75	55.2	−39.5	−27.1	47.9	214.4
221.9	202.5	210.1	0.0	1.0	0.875	54.4	−36.7	−33.0	49.4	221.9
235.1	210.0	216.9	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
237.9	217.5	223.8	0.0	0.875	1.0	53.1	−27.9	−44.7	52.7	237.9
241.3	225.0	230.6	0.0	0.75	1.0	52.9	−25.9	−47.5	54.1	241.3
247.2	232.5	237.5	0.0	0.625	1.0	50.5	−20.8	−49.5	53.7	247.2
254.9	240.0	244.3	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
262.6	247.5	251.2	0.0	0.375	1.0	41.4	−6.3	−49.2	49.6	262.6
272.6	255.0	258.0	0.0	0.25	1.0	36.8	2.2	−48.5	48.6	272.6
281.4	262.5	264.8	0.0	0.125	1.0	35.0	9.4	−46.3	47.3	281.4
290.8	270.0	271.7	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
299.2	277.5	278.8	0.125	0.0	1.0	31.6	23.6	−42.2	48.4	299.2
307.8	285.0	285.9	0.25	0.0	1.0	31.0	30.5	−39.3	49.8	307.8
317.5	292.5	293.0	0.375	0.0	1.0	34.2	38.2	−35.0	51.8	317.5
324.4	300.0	300.1	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
330.6	307.5	307.2	0.625	0.0	1.0	39.1	48.4	−27.2	55.6	330.6
338.7	315.0	314.3	0.75	0.0	1.0	41.8	55.1	−21.4	59.1	338.7
343.9	322.5	321.4	0.875	0.0	1.0	45.6	60.1	−17.3	62.6	343.9
348.9	330.0	328.6	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
350.7	337.5	335.7	1.0	0.0	0.875	49.5	66.1	−10.7	67.0	350.7
354.2	345.0	342.8	1.0	0.0	0.75	49.3	64.5	−6.5	64.8	354.2
361.9	352.5	349.9	1.0	0.0	0.625	48.0	61.8	2.1	61.8	361.9
370.0	360.0	357.0	1.0	0.0	0.5	47.8	58.9	10.4	59.9	370.0
378.9	367.5	364.1	1.0	0.0	0.375	47.4	56.8	19.5	60.0	378.9
386.2	375.0	371.2	1.0	0.0	0.25	47.5	55.9	27.5	62.3	386.2
391.3	382.5	378.3	1.0	0.0	0.125	47.6	56.3	34.2	65.9	391.3
393.4	390.0	385.4	1.0	0.0	0.0	47.5	57.2	37.8	68.6	393.4

*rgb** dex361M			*LAB** dex361M				
1.0	0.0	0.263	47.6	56.1	26.7	62.1	25
1.0	0.0	0.012	47.6	57.2	37.5	68.4	33
1.0	0.125	0.0	52.0	54.3	49.2	73.3	42
1.0	0.216	0.0	56.6	45.2	53.9	70.3	49
1.0	0.32	0.0	61.8	35.2	58.4	68.2	58
1.0	0.412	0.0	66.4	26.9	62.3	67.9	66
1.0	0.532	0.0	71.6	17.3	67.5	69.7	75
1.0	0.655	0.0	76.9	8.4	72.5	73.0	83
1.0	0.769	0.0	83.7	−3.0	76.8	76.9	92
1.0	0.996	0.0	91.5	−15.5	84.4	85.8	100
0.684	1.0	0.0	84.7	−27.5	76.7	81.5	109
0.595	1.0	0.0	77.8	−34.4	65.0	73.6	117
0.501	1.0	0.0	71.0	−41.6	54.9	68.9	127
0.366	1.0	0.0	66.2	−48.2	47.6	67.8	135
0.25	1.0	0.0	60.6	−57.1	40.5	70.1	144
0.073	1.0	0.0	55.9	−64.4	33.0	72.5	152
0.0	1.0	0.147	53.8	−65.9	21.1	69.3	162
0.0	1.0	0.251	53.8	−63.0	12.7	64.4	168
0.0	1.0	0.331	54.4	−59.3	4.2	59.5	175
0.0	1.0	0.405	54.8	−55.6	−2.1	55.7	182
0.0	1.0	0.497	55.0	−51.5	−8.6	52.3	189
0.0	1.0	0.553	55.2	−48.6	−13.9	50.7	195
0.0	1.0	0.615	55.3	−44.7	−19.2	48.8	203
0.0	1.0	0.69	55.3	−41.8	−23.8	48.2	209
0.0	1.0	0.792	55.0	−38.6	−29.0	48.4	216
0.0	1.0	0.888	54.3	−36.1	−34.1	49.8	223
0.0	1.0	0.957	53.6	−32.5	−39.7	51.5	230
0.0	0.916	1.0	53.1	−28.6	−44.1	52.7	237
0.0	0.686	1.0	51.7	−23.3	−48.5	54.0	244
0.0	0.568	1.0	48.6	−17.2	−49.5	52.6	250
0.0	0.449	1.0	44.2	−10.4	−49.4	50.6	258
0.0	0.353	1.0	40.6	−4.7	−49.2	49.5	264
0.0	0.261	1.0	37.3	1.5	−48.6	48.7	271
0.0	0.169	1.0	35.7	7.0	−47.2	47.8	278
0.0	0.065	1.0	33.9	13.1	−45.6	47.5	285
0.026	0.0	1.0	32.4	18.4	−44.1	47.9	292
0.139	0.0	1.0	31.5	24.4	−41.9	48.6	300
0.235	0.0	1.0	31.1	29.8	−39.7	49.7	306
0.335	0.0	1.0	33.2	35.8	−36.5	51.2	314
0.439	0.0	1.0	35.8	40.8	−32.9	52.5	321
0.584	0.0	1.0	38.5	46.8	−28.4	54.8	328
0.696	0.0	1.0	40.7	52.3	−24.0	57.6	335
0.848	0.0	1.0	44.9	59.1	−18.2	61.9	342
1.0	0.0	0.964	48.6	65.6	−12.1	66.8	349
1.0	0.0	0.828	49.5	65.6	−9.0	66.2	352
1.0	0.0	0.659	48.4	62.7	−0.1	62.7	359
1.0	0.0	0.519	47.8	59.5	9.2	60.2	368
1.0	0.0	0.408	47.5	57.6	17.1	60.0	376
1.0	0.0	0.263	47.6	56.1	26.7	62.1	385



Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

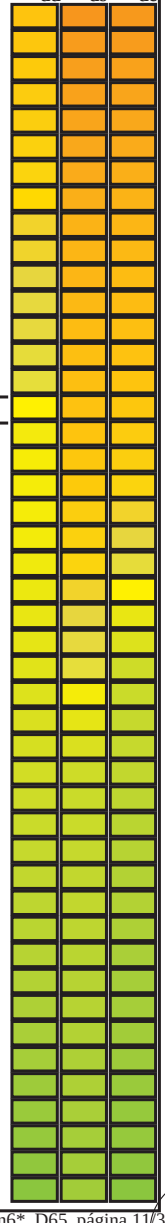
$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb*dd361M*			*LAB*ddx361Mi (x=LabCh)*						*rgb*ds361Mi*			*LAB*dsx361Mi (x=LabCh)*						*rgb*dd361Mi*			*rgb*de361Mi*			*LAB*dex361Mi (x=LabCh)*						*rgb*dd361Mi*			*rgb*dd*	*rgb*ds*	*rgb*de*
33	30	25	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33	R_d	1.0	0.0	0.158	47.7	56.3	32.5	65.0	30	R_s	1.0	0.0	0.0	1.0	0.0	0.263	47.6	56.1	26.7	62.1	25	R_e	1.0	0.0	0.0			
34	31	26	1.0	0.016	0.0	48.1	56.9	39.3	69.2	34		1.0	0.0	0.133	47.7	56.4	33.9	65.8	31		1.0	0.017	0.0	1.0	0.0	0.242	47.6	56.0	28.0	62.6	26		1.0	0.017	0.0			
35	32	27	1.0	0.033	0.0	48.7	56.6	40.8	69.8	35		1.0	0.0	0.085	47.7	56.7	35.4	66.8	32		1.0	0.033	0.0	1.0	0.0	0.214	47.6	56.1	29.5	63.4	27		1.0	0.033	0.0			
36	33	28	1.0	0.05	0.0	49.3	56.3	42.3	70.4	36		1.0	0.0	0.028	47.6	57.1	37.0	68.0	33		1.0	0.05	0.0	1.0	0.0	0.187	47.6	56.2	30.9	64.2	28		1.0	0.05	0.0			
38	34	29	1.0	0.066	0.0	49.9	55.9	43.9	71.1	38		1.0	0.007	0.0	47.8	57.1	38.5	68.9	34		1.0	0.067	0.0	1.0	0.0	0.159	47.7	56.3	32.4	65.0	29		1.0	0.067	0.0			
39	35	31	1.0	0.083	0.0	50.5	55.5	45.4	71.7	39		1.0	0.022	0.0	48.4	56.9	39.8	69.4	35		1.0	0.083	0.0	1.0	0.0	0.132	47.7	56.4	33.9	65.8	31		1.0	0.083	0.0			
40	36	32	1.0	0.1	0.0	51.0	55.0	46.9	72.3	40		1.0	0.036	0.0	48.9	56.6	41.1	70.0	36		1.0	0.1	0.0	1.0	0.0	0.076	47.6	56.7	35.7	67.0	32		1.0	0.1	0.0			
41	37	33	1.0	0.116	0.0	51.6	54.5	48.4	72.9	41		1.0	0.05	0.0	49.4	56.3	42.4	70.5	37		1.0	0.117	0.0	1.0	0.0	0.012	47.6	57.2	37.5	68.4	33		1.0	0.117	0.0			
42	38	34	1.0	0.133	0.0	52.3	53.4	49.7	73.0	42		1.0	0.065	0.0	49.9	56.0	43.7	71.0	38		1.0	0.133	0.0	1.0	0.013	0.0	48.0	57.0	39.0	69.1	34		1.0	0.133	0.0			
44	39	35	1.0	0.15	0.0	53.2	51.8	50.6	72.4	44		1.0	0.079	0.0	50.4	55.6	45.0	71.6	39		1.0	0.15	0.0	1.0	0.029	0.0	48.6	56.7	40.5	69.7	35		1.0	0.15	0.0			
45	40	36	1.0	0.166	0.0	54.0	50.2	51.5	71.9	45		1.0	0.094	0.0	50.9	55.2	46.4	72.1	40		1.0	0.167	0.0	1.0	0.045	0.0	49.2	56.4	41.9	70.3	36		1.0	0.167	0.0			
47	41	37	1.0	0.183	0.0	54.9	48.5	52.3	71.4	47		1.0	0.108	0.0	51.4	54.8	47.7	72.7	41		1.0	0.183	0.0	1.0	0.061	0.0	49.7	56.1	43.4	70.9	37		1.0	0.183	0.0			
48	42	38	1.0	0.2	0.0	55.7	46.8	53.1	70.8	48		1.0	0.122	0.0	51.9	54.4	49.0	73.2	42		1.0	0.2	0.0	1.0	0.077	0.0	50.3	55.7	44.8	71.5	38		1.0	0.2	0.0			
50	43	39	1.0	0.216	0.0	56.6	45.2	53.8	70.3	50		1.0	0.134	0.0	52.5	53.4	49.8	73.0	43		1.0	0.217	0.0	1.0	0.093	0.0	50.8	55.3	46.3	72.1	39		1.0	0.217	0.0			
51	44	41	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51		1.0	0.146	0.0	53.0	52.2	50.4	72.6	44		1.0	0.233	0.0	1.0	0.109	0.0	51.4	54.8	47.8	72.7	41		1.0	0.233	0.0			
52	45	42	1.0	0.25	0.0	58.2	41.8	55.1	69.2	52		1.0	0.158	0.0	53.6	51.1	51.1	72.2	45		1.0	0.25	0.0	1.0	0.125	0.0	52.0	54.3	49.2	73.3	42		1.0	0.25	0.0			
54	46	43	1.0	0.266	0.0	59.1	40.2	56.0	69.0	54		1.0	0.17	0.0	54.2	49.9	51.7	71.8	46		1.0	0.267	0.0	1.0	0.138	0.0	52.6	53.0	50.0	72.9	43		1.0	0.267	0.0			
55	47	44	1.0	0.283	0.0	59.9	38.6	56.8	68.7	55		1.0	0.181	0.0	54.8	48.7	52.3	71.5	47		1.0	0.283	0.0	1.0	0.151	0.0	53.3	51.8	50.7	72.4	44		1.0	0.283	0.0			
57	48	45	1.0	0.3	0.0	60.8	37.1	57.5	68.5	57		1.0	0.193	0.0	55.4	47.6	52.8	71.1	48		1.0	0.3	0.0	1.0	0.164	0.0	54.0	50.5	51.4	72.0	45		1.0	0.3	0.0			
58	49	46	1.0	0.316	0.0	61.6	35.5	58.2	68.2	58		1.0	0.205	0.0	56.0	46.4	53.4	70.7	49		1.0	0.317	0.0	1.0	0.177	0.0	54.6	49.2	52.1	71.6	46		1.0	0.317	0.0			
60	50	47	1.0	0.333	0.0	62.5	33.9	58.9	68.0	60		1.0	0.217	0.0	56.6	45.2	53.9	70.3	50		1.0	0.333	0.0	1.0	0.19	0.0	55.3	47.9	52.7	71.2	47		1.0	0.333	0.0			
61	51	48	1.0	0.35	0.0	63.3	32.2	59.5	67.7	61		1.0	0.228	0.0	57.2	44.0	54.4	69.9	51		1.0	0.35	0.0	1.0	0.203	0.0	55.9	46.5	53.3	70.8	48		1.0	0.35	0.0			
63	52	49	1.0	0.366	0.0	64.2	30.6	60.1	67.5	63		1.0	0.24	0.0	57.8	42.8	54.8	69.6	52		1.0	0.367	0.0	1.0	0.216	0.0	56.6	45.2	53.9	70.3	49		1.0	0.367	0.0			
64	53	51	1.0	0.383	0.0	65.0	29.1	60.8	67.4	64		1.0	0.252	0.0	58.4	41.7	55.3	69.2	53		1.0	0.383	0.0	1.0	0.23	0.0	57.3	43.9	54.4	69.9	51		1.0	0.383	0.0			
65	54	52	1.0	0.4	0.0	65.8	27.8	61.7	67.7	65		1.0	0.263	0.0	59.0	40.6	55.9	69.1	54		1.0	0.4	0.0	1.0	0.243	0.0	57.9	42.6	54.9	69.5	52		1.0	0.4	0.0			
67	55	53	1.0	0.416	0.0	66.6	26.4	62.5	67.9	67		1.0	0.275	0.0	59.6	39.5	56.4	68.9	55		1.0	0.417	0.0	1.0	0.256	0.0	58.6	41.3	55.5	69.2	53		1.0	0.417	0.0			
68	56	54	1.0	0.433	0.0	67.3	25.0	63.3	68.1	68		1.0	0.286	0.0	60.1	38.4	57.0	68.7	56		1.0	0.433	0.0	1.0	0.268	0.0	59.2	40.1	56.1	69.0	54		1.0	0.433	0.0			
69	57	55	1.0	0.45	0.0	68.1	23.6	64.1	68.3	69		1.0	0.298	0.0	60.7	37.3	57.5	68.5	57		1.0	0.45	0.0	1.0	0.281	0.0	59.9	38.9	56.7	68.8	55		1.0	0.45	0.0			
71	58	56	1.0	0.466	0.0	68.9	22.1	64.8	68.5	71		1.0	0.309	0.0	61.3	36.2	58.0	68.4	58		1.0	0.467	0.0	1.0	0.294	0.0	60.5	37.7	57.3	68.6	56		1.0	0.467	0.0			
72	59	57	1.0	0.483	0.0	69.7	20.7	65.6	68.8	72		1.0	0.321	0.0	61.9	35.1	58.5	68.2	59		1.0	0.483	0.0	1.0	0.307	0.0	61.2	36.5	57.9	68.4	57		1.0	0.483	0.0			
73	60	58	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73		1.0	0.332	0.0	62.5	34.0	58.9	68.0	60		1.0	0.5	0.0	1.0	0.32	0.0	61.8	35.2	58.4	68.2	58		1.0	0.5	0.0			
74	61	60	1.0	0.516	0.0	71.0	18.2	66.9	69.3	74		1.0	0.344	0.0	63.1	32.9	59.3	67.8	61		1.0	0.517	0.0	1.0	0.332	0.0	62.5	34.0	58.9	68.0	60		1.0	0.517	0.0			
75	62	61	1.0	0.533	0.0	71.6	17.2	67.5	69.7	75		1.0	0.355	0.0	63.6	31.8	59.8	67.7	62		1.0	0.533	0.0	1.0	0.345	0.0	63.1	32.8	59.4	67.8	61		1.0	0.533	0.0			
76	63	62	1.0	0.55	0.0	72.2	16.2	68.1	70.0	76		1.0	0.367	0.0	64.2	30.6	60.1	67.5	63		1.0	0.55	0.0	1.0	0.358	0.0	63.8	31.5	59.9	67.6	62		1.0	0.55	0.0			
77	64	63	1.0	0.566	0.0	72.8	15.1	68.7	70.4	77		1.0	0.378	0.0	64.8	29.6	60.6	67.4	64		1.0	0.567	0.0	1.0	0.371	0.0	64.4	30.3	60.3	67.4	63		1.0	0.567	0.0			
78	65	64	1.0	0.583	0.0	73.4	14.1	69.3	70.7	78		1.0	0.391	0.0	65.4	28.6	61.3	67.6	65		1.0	0.583	0.0	1.0	0.384	0.0	65.1	29.1	60.9	67.5	64		1.0	0.583	0.0			
79	66	65	1.0	0.6	0.0	74.0	13.0	69.9	71.1	79		1.0	0.403	0.0	66.0	27.6	61.9	67.8	66		1.0	0.6	0.0	1.0	0.398	0.0	65.7	28.0	61.6	67.7	65		1.0	0.6	0.0			
80	67	66	1.0	0.616	0.0	74.6	12.0	70.4	71.4	80		1.0	0.416	0.0	66.6	26.5	62.5	67.9	67		1.0	0.617	0.0	1.0	0.412	0.0	66.4	26.9	62.3	67.9	66		1.0	0.617	0.0			
81	68	67	1.0	0.633	0.0	75.4	10.6	71.2	72.0	81		1.0	0.428	0.0	67.1	25.5	63.1	68.1	68		1.0	0.633	0.0	1.0	0.425	0.0	67.0	25.7	63.0	68.0	67		1.0	0.633	0.0			
82	69	68	1.0	0.65	0.0	76.5	8.9	72.1	72.7	82		1.0	0.44	0.0	67.7	24.5	63.7	68.2	69		1.0	0.65	0.0	1.0	0.439	0.0	67.7	24.5	63.7	68.2	68		1.0	0.65	0.0			
84	70	70	1.0	0.666	0.0	77.5	7.2	73.0	73.4	84		1.0	0.453	0.0	68.3	23.4	64.3	68.4	70		1.0	0.667	0.0	1.0	0.453	0.0	68.3	23.4	64.3	68.4	70		1.0	0.667	0.0			
85	71	71	1.0	0.683	0.0	78.6	5.4	73.9	74.1	85		1.0	0.465	0.0	68.9	22.3	64.8	68.6	71		1.0	0.683	0.0	1.0	0.467	0.0	69.0	22.2	64.9	68.6	71		1.0	0.683	0.0			
87	72	72	1.0	0.7	0.0	79.7	3.6	74.7	74.8	87		1.0	0.477	0.0	69.5	21.2	65.4	68.7	72		1.0	0.7	0.0	1.0	0.481	0.0	69.6	20.9	65.5	68.8	72		1.0	0.7	0.0			
88	73	73	1.0	0.716	0.0	80.8	1.7	75.5	75.5	88		1.0	0.49	0.0	70.0	20.1	65.9	68.9	73		1.0	0.717	0.0	1.0	0.494	0.0	70.2	19.7	66.1	68.9	73		1.0	0.717	0.0			
−269	74	74	1.0	0.733	0.0	81.8	−0.1	76.3	76.3	−269		1.0	0.503	0.0	70.6	19.0	66.4	69.1	74		1.0	0.733	0.0	1.0	0.512	0.0	70.9	18.5	66.7	69.3	74		1.0	0.733	0.0			
−268	75	75	1.0	0.75	0.0	82.9	−2.0	76.9	77.0	−268	R_d	1.0	0.521	0.0	71.3	18.0	67.1	69.5	75		1.0	0.75	0.0	1.0	0.532	0.0	71.6	17.3	67.5	69.7	75		1.0	0.75	0.0			

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
círculo de tono, 48 pasos; *rgb−LabCh**mesas

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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*
−268	75	75	1.0	0.75	0.0	82.9	−2.0	76.9	77.0	−268	1.0	0.521	0.0	71.3	18.0	67.1	69.5	75	1.0	0.75	0.0	1.0	0.532	0.0	71.6	17.3	67.5	69.7	75	1.0	0.75	0.0	
92	76	76	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92	1.0	0.539	0.0	71.9	16.9	67.8	69.8	76	1.0	0.767	0.0	1.0	0.552	0.0	72.3	16.1	68.2	70.1	76	1.0	0.767	0.0	
92	77	77	1.0	0.783	0.0	84.2	−3.9	76.7	76.8	92	1.0	0.557	0.0	72.5	15.8	68.4	70.2	77	1.0	0.783	0.0	1.0	0.572	0.0	73.0	14.9	69.0	70.5	77	1.0	0.783	0.0	
93	78	78	1.0	0.8	0.0	84.8	−4.8	76.5	76.7	93	1.0	0.575	0.0	73.1	14.7	69.1	70.6	78	1.0	0.8	0.0	1.0	0.592	0.0	73.7	13.6	69.7	71.0	78	1.0	0.8	0.0	
94	79	80	1.0	0.816	0.0	85.4	−5.8	76.4	76.6	94	1.0	0.593	0.0	73.8	13.5	69.7	71.0	79	1.0	0.817	0.0	1.0	0.612	0.0	74.4	12.3	70.3	71.4	80	1.0	0.817	0.0	
95	80	81	1.0	0.833	0.0	86.0	−6.7	76.2	76.5	95	1.0	0.611	0.0	74.4	12.4	70.3	71.4	80	1.0	0.833	0.0	1.0	0.629	0.0	75.2	11.0	71.0	71.9	81	1.0	0.833	0.0	
95	81	82	1.0	0.85	0.0	86.6	−7.6	76.0	76.4	95	1.0	0.627	0.0	75.1	11.2	70.9	71.8	81	1.0	0.85	0.0	1.0	0.642	0.0	76.0	9.7	71.8	72.4	82	1.0	0.85	0.0	
96	82	83	1.0	0.866	0.0	87.3	−8.6	75.8	76.3	96	1.0	0.639	0.0	75.8	10.1	71.6	72.3	82	1.0	0.867	0.0	1.0	0.655	0.0	76.9	8.4	72.5	73.0	83	1.0	0.867	0.0	
97	83	84	1.0	0.883	0.0	87.8	−9.4	76.3	76.9	97	1.0	0.651	0.0	76.6	8.9	72.2	72.8	83	1.0	0.883	0.0	1.0	0.668	0.0	77.7	7.0	73.2	73.5	84	1.0	0.883	0.0	
97	84	85	1.0	0.9	0.0	88.4	−10.3	77.6	78.2	97	1.0	0.662	0.0	77.3	7.7	72.9	73.3	84	1.0	0.9	0.0	1.0	0.681	0.0	78.5	5.6	73.9	74.1	85	1.0	0.9	0.0	
98	85	86	1.0	0.916	0.0	88.9	−11.2	78.8	79.6	98	1.0	0.674	0.0	78.1	6.4	73.5	73.8	85	1.0	0.917	0.0	1.0	0.694	0.0	79.4	4.2	74.5	74.6	86	1.0	0.917	0.0	
98	86	87	1.0	0.933	0.0	89.4	−12.0	80.0	80.9	98	1.0	0.686	0.0	78.8	5.2	74.1	74.3	86	1.0	0.933	0.0	1.0	0.707	0.0	80.2	2.8	75.1	75.2	87	1.0	0.933	0.0	
99	87	88	1.0	0.95	0.0	89.9	−12.9	81.1	82.2	99	1.0	0.697	0.0	79.6	3.9	74.7	74.8	87	1.0	0.95	0.0	1.0	0.72	0.0	81.1	1.4	75.7	75.7	88	1.0	0.95	0.0	
99	88	90	1.0	0.966	0.0	90.5	−13.9	82.3	83.5	99	1.0	0.709	0.0	80.3	2.6	75.2	75.3	88	1.0	0.967	0.0	1.0	0.733	0.0	81.9	0.0	76.3	76.3	90	1.0	0.967	0.0	
100	89	91	1.0	0.983	0.0	91.0	−14.8	83.5	84.8	100	1.0	0.721	0.0	81.1	1.3	75.8	75.8	89	1.0	0.983	0.0	1.0	0.746	0.0	82.7	−1.5	76.8	76.9	91	1.0	0.983	0.0	
100	90	92	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100	1.0	0.732	0.0	81.8	0.0	76.3	76.3	90	1.0	1.0	0.0	1.0	0.769	0.0	83.7	−3.0	76.8	76.9	92	1.0	1.0	0.0	
100	91	93	0.983	1.0	0.0	91.7	−16.1	85.3	86.8	100	1.0	0.744	0.0	82.6	−1.2	76.7	76.8	91	0.983	1.0	0.0	1.0	0.796	0.0	84.7	−4.6	76.6	76.8	93	0.983	1.0	0.0	
100	92	94	0.966	1.0	0.0	91.9	−16.4	85.9	87.5	100	1.0	0.761	0.0	83.4	−2.6	76.9	77.0	92	0.967	1.0	0.0	1.0	0.823	0.0	85.7	−6.1	76.4	76.6	94	0.967	1.0	0.0	
100	93	95	0.95	1.0	0.0	92.0	−16.7	86.5	88.2	100	1.0	0.785	0.0	84.3	−3.9	76.7	76.8	93	0.95	1.0	0.0	1.0	0.851	0.0	86.7	−7.6	76.1	76.5	95	0.95	1.0	0.0	
101	94	96	0.933	1.0	0.0	92.2	−17.0	87.2	88.8	101	1.0	0.808	0.0	85.1	−5.2	76.5	76.7	94	0.933	1.0	0.0	1.0	0.879	0.0	87.8	−9.2	76.1	76.7	96	0.933	1.0	0.0	
101	95	98	0.916	1.0	0.0	92.4	−17.3	87.8	89.5	101	1.0	0.832	0.0	86.0	−6.6	76.3	76.6	95	0.917	1.0	0.0	1.0	0.918	0.0	89.0	−11.2	78.9	79.7	98	0.917	1.0	0.0	
101	96	99	0.9	1.0	0.0	92.5	−17.6	88.4	90.2	101	1.0	0.855	0.0	86.9	−7.9	76.0	76.4	96	0.9	1.0	0.0	1.0	0.957	0.0	90.2	−13.3	81.7	82.8	99	0.9	1.0	0.0	
101	97	100	0.883	1.0	0.0	92.7	−18.0	89.1	90.9	101	1.0	0.88	0.0	87.8	−9.3	76.2	76.7	97	0.883	1.0	0.0	1.0	0.996	0.0	91.5	−15.5	84.4	85.8	100	0.883	1.0	0.0	
101	98	101	0.866	1.0	0.0	92.6	−18.3	89.2	91.0	101	1.0	0.914	0.0	88.8	−10.9	78.6	79.4	98	0.867	1.0	0.0	0.867	1.0	0.0	92.6	−18.3	89.2	91.1	101	0.867	1.0	0.0	
101	99	102	0.85	1.0	0.0	92.2	−18.8	88.7	90.7	101	1.0	0.947	0.0	89.9	−12.7	81.0	82.0	99	0.85	1.0	0.0	0.808	1.0	0.0	91.4	−19.8	87.6	89.9	102	0.85	1.0	0.0	
102	100	103	0.833	1.0	0.0	91.9	−19.2	88.3	90.3	102	1.0	0.98	0.0	91.0	−14.6	83.3	84.6	100	0.833	1.0	0.0	0.75	1.0	0.0	90.1	−21.3	86.0	88.6	103	0.833	1.0	0.0	
102	101	105	0.816	1.0	0.0	91.5	−19.6	87.8	90.0	102	0.943	1.0	0.0	92.2	−16.8	86.9	88.5	101	0.817	1.0	0.0	0.737	1.0	0.0	89.0	−22.7	84.2	87.2	105	0.817	1.0	0.0	
102	102	106	0.8	1.0	0.0	91.1	−20.1	87.4	89.7	102	0.849	1.0	0.0	92.2	−18.8	88.7	90.7	102	0.8	1.0	0.0	0.724	1.0	0.0	88.0	−24.0	82.3	85.8	106	0.8	1.0	0.0	
103	103	107	0.783	1.0	0.0	90.8	−20.5	86.9	89.3	103	0.798	1.0	0.0	91.2	−20.1	87.4	89.7	103	0.783	1.0	0.0	0.71	1.0	0.0	86.9	−25.2	80.5	84.3	107	0.783	1.0	0.0	
103	104	108	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103	0.749	1.0	0.0	90.1	−21.3	86.0	88.6	104	0.767	1.0	0.0	0.697	1.0	0.0	85.8	−26.4	78.6	82.9	108	0.767	1.0	0.0	
103	105	109	0.75	1.0	0.0	90.1	−21.3	86.0	88.6	103	0.738	1.0	0.0	89.2	−22.5	84.4	87.4	105	0.75	1.0	0.0	0.684	1.0	0.0	84.7	−27.5	76.7	81.5	109	0.75	1.0	0.0	
105	106	110	0.733	1.0	0.0	88.7	−23.1	83.7	86.8	105	0.727	1.0	0.0	88.2	−23.6	82.8	86.1	106	0.733	1.0	0.0	0.671	1.0	0.0	83.7	−28.5	74.8	80.0	110	0.733	1.0	0.0	
106	107	112	0.716	1.0	0.0	87.3	−24.7	81.3	85.0	106	0.716	1.0	0.0	87.3	−24.7	81.2	84.9	107	0.717	1.0	0.0	0.658	1.0	0.0	82.6	−29.5	72.8	78.6	112	0.717	1.0	0.0	
108	108	113	0.7	1.0	0.0	86.0	−26.2	78.9	83.2	108	0.704	1.0	0.0	86.4	−25.8	79.6	83.7	108	0.7	1.0	0.0	0.645	1.0	0.0	81.5	−30.4	70.9	77.2	113	0.7	1.0	0.0	
109	109	114	0.683	1.0	0.0	84.6	−27.6	76.5	81.3	109	0.693	1.0	0.0	85.5	−26.7	78.0	82.5	109	0.683	1.0	0.0	0.632	1.0	0.0	80.4	−31.3	69.0	75.7	114	0.683	1.0	0.0	
111	110	115	0.666	1.0	0.0	83.3	−28.9	74.1	79.5	111	0.682	1.0	0.0	84.5	−27.7	76.3	81.2	110	0.667	1.0	0.0	0.619	1.0	0.0	79.5	−32.2	67.4	74.7	115	0.667	1.0	0.0	
112	111	116	0.65	1.0	0.0	81.9	−30.1	71.6	77.7	112	0.67	1.0	0.0	83.6	−28.6	74.7	80.0	111	0.65	1.0	0.0	0.607	1.0	0.0	78.6	−33.3	66.2	74.2	116	0.65	1.0	0.0	
114	112	117	0.633	1.0	0.0	80.5	−31.2	69.2	75.9	114	0.659	1.0	0.0	82.7	−29.4	73.0	78.8	112	0.633	1.0	0.0	0.595	1.0	0.0	77.8	−34.4	65.0	73.6	117	0.633	1.0	0.0	
115	113	119	0.616	1.0	0.0	79.3	−32.5	67.1	74.6	115	0.648	1.0	0.0	81.8	−30.2	71.4	77.5	113	0.617	1.0	0.0	0.584	1.0	0.0	77.0	−35.4	63.8	73.0	119	0.617	1.0	0.0	
117	114	120	0.6	1.0	0.0	78.1	−34.0	65.4	73.8	117	0.637	1.0	0.0	80.9	−30.9	69.7	76.3	114	0.6	1.0	0.0	0.572	1.0	0.0	76.1	−36.4	62.5	72.4	120	0.6	1.0	0.0	
119	115	121	0.583	1.0	0.0	76.9	−35.5	63.7	72.9	119	0.625	1.0	0.0	79.9	−31.6	68.0	75.1	115	0.583	1.0	0.0	0.56	1.0	0.0	75.3	−37.4	61.3	71.8	121	0.583	1.0	0.0	
120	116	122	0.566	1.0	0.0	75.7	−36.9	62.0	72.1	120	0.615	1.0	0.0	79.2	−32.6	67.0	74.5	116	0.567	1.0	0.0	0.548	1.0	0.0	74.4	−38.3	60.0	71.3	122	0.567	1.0	0.0	
122	117	123	0.55	1.0	0.0	74.5	−38.2	60.2	71.3	122	0.605	1.0	0.0	78.5	−33.5	66.0	74.1	117	0.55	1.0	0.0	0.536	1.0	0.0	73.6	−39.2	58.8	70.7	123	0.55	1.0	0.0	
124	118	124	0.533	1.0	0.0	73.3	−39.4	58.4	70.5	124	0.595	1.0	0.0	77.8	−34.4	64.9	73.6	118	0.533	1.0	0.0	0.524	1.0	0.0	72.7	−40.0	57.5	70.1	124	0.533	1.0	0.0	
125	119	126	0.516	1.0	0.0	72.1	−40.6	56.6	69.7	125	0.585	1.0	0.0	77.0	−35.3	63.9	73.1	119	0.517	1.0	0.0	0.512	1.0	0.0	71.9	−40.9	56.2	69.5	126	0.517	1.0	0.0	
127	120	127	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127	0.574	1.0	0.0	76.3	−36.2	62.8	72.6	120	0.5	1.0	0.0	0.501	1.0	0.0	71.0	−41.6	54.9	68.9	127	0.5	1.0	0.0	



2−1031030−L0 QS490−72 LAB*la0, YN=0%, XYZnw=3.9, 4.1, 4.1, 84.7, 89.6, 93.9, LAB*nw=23.9, 0.0, 0.0, 95.8, 0.0, 0.0 salida: Laser printer output; separation cmyn6*, D65, página 11/33

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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		
127	120	127	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127	0.574	1.0	0.0	76.3	−36.2	62.8	72.6	120	0.5	1.0	0.0	0.501	1.0	0.0	71.0	−41.6	54.9	68.9	127	0.5	1.0	0.0
128	121	128	0.483	1.0	0.0	70.4	−42.6	53.9	68.7	128	0.564	1.0	0.0	75.6	−37.0	61.8	72.1	121	0.483	1.0	0.0	0.481	1.0	0.0	70.3	−42.6	53.8	68.7	128	0.483	1.0	0.0
129	122	129	0.466	1.0	0.0	69.8	−43.4	53.0	68.5	129	0.554	1.0	0.0	74.9	−37.8	60.7	71.6	122	0.467	1.0	0.0	0.462	1.0	0.0	69.6	−43.6	52.8	68.5	129	0.467	1.0	0.0
130	123	130	0.45	1.0	0.0	69.2	−44.2	52.1	68.3	130	0.544	1.0	0.0	74.1	−38.6	59.6	71.1	123	0.45	1.0	0.0	0.442	1.0	0.0	68.9	−44.5	51.7	68.3	130	0.45	1.0	0.0
131	124	131	0.433	1.0	0.0	68.6	−45.0	51.2	68.2	131	0.534	1.0	0.0	73.4	−39.4	58.5	70.6	124	0.433	1.0	0.0	0.422	1.0	0.0	68.3	−45.4	50.7	68.1	131	0.433	1.0	0.0
132	125	133	0.416	1.0	0.0	68.0	−45.7	50.3	68.0	132	0.524	1.0	0.0	72.7	−40.1	57.4	70.1	125	0.417	1.0	0.0	0.403	1.0	0.0	67.6	−46.3	49.6	67.9	133	0.417	1.0	0.0
133	126	134	0.4	1.0	0.0	67.4	−46.5	49.4	67.8	133	0.513	1.0	0.0	72.0	−40.8	56.3	69.6	126	0.4	1.0	0.0	0.383	1.0	0.0	66.9	−47.1	48.5	67.7	134	0.4	1.0	0.0
134	127	135	0.383	1.0	0.0	66.8	−47.2	48.5	67.7	134	0.503	1.0	0.0	71.2	−41.5	55.2	69.1	127	0.383	1.0	0.0	0.366	1.0	0.0	66.2	−48.2	47.6	67.8	135	0.383	1.0	0.0
135	128	136	0.366	1.0	0.0	66.1	−48.2	47.5	67.7	135	0.489	1.0	0.0	70.6	−42.3	54.2	68.8	128	0.367	1.0	0.0	0.352	1.0	0.0	65.5	−49.4	46.8	68.1	136	0.367	1.0	0.0
136	129	137	0.35	1.0	0.0	65.4	−49.5	46.6	68.1	136	0.472	1.0	0.0	70.0	−43.1	53.3	68.6	129	0.35	1.0	0.0	0.337	1.0	0.0	64.8	−50.5	46.0	68.4	137	0.35	1.0	0.0
138	130	138	0.333	1.0	0.0	64.6	−50.9	45.7	68.4	138	0.455	1.0	0.0	69.4	−43.9	52.4	68.4	130	0.333	1.0	0.0	0.323	1.0	0.0	64.1	−51.7	45.1	68.7	138	0.333	1.0	0.0
139	131	140	0.316	1.0	0.0	63.8	−52.2	44.7	68.7	139	0.438	1.0	0.0	68.8	−44.7	51.5	68.3	131	0.317	1.0	0.0	0.308	1.0	0.0	63.4	−52.8	44.2	68.9	140	0.317	1.0	0.0
140	132	141	0.3	1.0	0.0	63.0	−53.5	43.7	69.1	140	0.421	1.0	0.0	68.2	−45.5	50.6	68.1	132	0.3	1.0	0.0	0.294	1.0	0.0	62.7	−53.9	43.3	69.2	141	0.3	1.0	0.0
142	133	142	0.283	1.0	0.0	62.2	−54.7	42.6	69.4	142	0.404	1.0	0.0	67.6	−46.2	49.7	67.9	133	0.283	1.0	0.0	0.279	1.0	0.0	62.0	−55.0	42.4	69.5	142	0.283	1.0	0.0
143	134	143	0.266	1.0	0.0	61.4	−56.0	41.5	69.7	143	0.387	1.0	0.0	67.0	−47.0	48.7	67.7	134	0.267	1.0	0.0	0.265	1.0	0.0	61.3	−56.1	41.4	69.8	143	0.267	1.0	0.0
144	135	144	0.25	1.0	0.0	60.6	−57.2	40.4	70.1	144	0.372	1.0	0.0	66.4	−47.8	47.9	67.7	135	0.25	1.0	0.0	0.25	1.0	0.0	60.6	−57.1	40.5	70.1	144	0.25	1.0	0.0
145	136	145	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145	0.359	1.0	0.0	65.8	−48.8	47.2	67.9	136	0.233	1.0	0.0	0.227	1.0	0.0	60.0	−58.1	39.4	70.3	145	0.233	1.0	0.0
146	137	147	0.216	1.0	0.0	59.6	−58.6	38.9	70.3	146	0.347	1.0	0.0	65.2	−49.8	46.5	68.2	137	0.217	1.0	0.0	0.204	1.0	0.0	59.3	−59.1	38.3	70.5	147	0.217	1.0	0.0
147	138	148	0.2	1.0	0.0	59.1	−59.3	38.1	70.5	147	0.334	1.0	0.0	64.7	−50.8	45.8	68.4	138	0.2	1.0	0.0	0.181	1.0	0.0	58.6	−60.0	37.2	70.7	148	0.2	1.0	0.0
148	139	149	0.183	1.0	0.0	58.7	−59.9	37.3	70.6	148	0.322	1.0	0.0	64.1	−51.7	45.1	68.7	139	0.183	1.0	0.0	0.158	1.0	0.0	58.0	−60.9	36.1	70.8	149	0.183	1.0	0.0
148	140	150	0.166	1.0	0.0	58.2	−60.6	36.4	70.7	148	0.309	1.0	0.0	63.5	−52.7	44.3	68.9	140	0.167	1.0	0.0	0.135	1.0	0.0	57.3	−61.8	34.9	71.0	150	0.167	1.0	0.0
149	141	151	0.15	1.0	0.0	57.7	−61.2	35.6	70.9	149	0.297	1.0	0.0	62.9	−53.7	43.5	69.2	141	0.15	1.0	0.0	0.106	1.0	0.0	56.6	−63.0	33.9	71.6	151	0.15	1.0	0.0
150	142	152	0.133	1.0	0.0	57.2	−61.9	34.8	71.0	150	0.284	1.0	0.0	62.3	−54.6	42.7	69.4	142	0.133	1.0	0.0	0.073	1.0	0.0	55.9	−64.4	33.0	72.5	152	0.133	1.0	0.0
151	143	154	0.116	1.0	0.0	56.8	−62.5	34.1	71.3	151	0.272	1.0	0.0	61.7	−55.5	41.9	69.7	143	0.117	1.0	0.0	0.041	1.0	0.0	55.2	−65.8	32.1	73.3	154	0.117	1.0	0.0
151	144	155	0.1	1.0	0.0	56.4	−63.3	33.7	71.7	151	0.259	1.0	0.0	61.1	−56.5	41.1	69.9	144	0.1	1.0	0.0	0.008	1.0	0.0	54.5	−67.2	31.1	74.2	155	0.1	1.0	0.0
152	145	156	0.083	1.0	0.0	56.1	−64.0	33.2	72.1	152	0.245	1.0	0.0	60.5	−57.4	40.2	70.1	145	0.083	1.0	0.0	0.0	1.0	0.021	54.3	−67.4	29.5	73.7	156	0.083	1.0	0.0
153	146	157	0.066	1.0	0.0	55.7	−64.7	32.8	72.6	153	0.225	1.0	0.0	59.9	−58.2	39.3	70.3	146	0.067	1.0	0.0	0.0	1.0	0.048	54.1	−67.2	27.8	72.8	157	0.067	1.0	0.0
153	147	158	0.049	1.0	0.0	55.4	−65.5	32.3	73.0	153	0.205	1.0	0.0	59.3	−59.0	38.4	70.5	147	0.05	1.0	0.0	0.0	1.0	0.075	54.0	−66.9	26.1	71.9	158	0.05	1.0	0.0
154	148	159	0.033	1.0	0.0	55.0	−66.2	31.8	73.5	154	0.186	1.0	0.0	58.8	−59.8	37.4	70.6	148	0.033	1.0	0.0	0.0	1.0	0.102	53.9	−66.6	24.4	71.0	159	0.033	1.0	0.0
154	149	161	0.016	1.0	0.0	54.7	−66.9	31.3	73.9	154	0.166	1.0	0.0	58.2	−60.6	36.5	70.8	149	0.017	1.0	0.0	0.0	1.0	0.128	53.8	−66.3	22.8	70.2	161	0.017	1.0	0.0
155	150	162	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155	G_d 0.146	1.0	0.0	57.6	−61.3	35.5	70.9	150	G_s 0.0	1.0	0.0	0.0	1.0	0.147	53.8	−65.9	21.1	69.3	162	G_e 0.0	1.0	0.0
156	151	163	0.0	1.0	0.016	54.2	−67.5	29.7	73.8	156	0.126	1.0	0.0	57.0	−62.1	34.5	71.1	151	0.0	1.0	0.017	0.0	1.0	0.162	53.8	−65.5	19.9	68.6	163	0.0	1.0	0.017
156	152	164	0.0	1.0	0.033	54.2	−67.4	28.6	73.2	156	0.099	1.0	0.0	56.4	−63.3	33.7	71.8	152	0.0	1.0	0.033	0.0	1.0	0.177	53.8	−65.2	18.7	67.9	164	0.0	1.0	0.033
157	153	164	0.0	1.0	0.05	54.1	−67.2	27.6	72.7	157	0.071	1.0	0.0	55.9	−64.5	32.9	72.5	153	0.0	1.0	0.05	0.0	1.0	0.192	53.8	−64.8	17.4	67.2	164	0.0	1.0	0.05
158	154	165	0.0	1.0	0.066	54.0	−67.1	26.6	72.1	158	0.042	1.0	0.0	55.3	−65.7	32.1	73.3	154	0.0	1.0	0.067	0.0	1.0	0.207	53.8	−64.4	16.2	66.5	165	0.0	1.0	0.067
159	155	166	0.0	1.0	0.083	53.9	−66.9	25.5	71.6	159	0.014	1.0	0.0	54.7	−67.0	31.3	74.0	155	0.0	1.0	0.083	0.0	1.0	0.222	53.8	−63.9	15.0	65.8	166	0.0	1.0	0.083
159	156	167	0.0	1.0	0.1	53.9	−66.7	24.5	71.1	159	0.0	1.0	0.011	54.3	−67.5	30.1	74.0	156	0.0	1.0	0.1	0.0	1.0	0.237	53.8	−63.5	13.9	65.1	167	0.0	1.0	0.1
160	157	168	0.0	1.0	0.116	53.8	−66.5	23.5	70.5	160	0.0	1.0	0.035	54.2	−67.3	28.6	73.2	157	0.0	1.0	0.117	0.0	1.0	0.251	53.8	−63.0	12.7	64.4	168	0.0	1.0	0.117
161	158	169	0.0	1.0	0.133	53.8	−66.2	22.3	69.9	161	0.0	1.0	0.058	54.1	−67.1	27.2	72.5	158	0.0	1.0	0.133	0.0	1.0	0.261	53.9	−62.6	11.6	63.8	169	0.0	1.0	0.133
162	159	170	0.0	1.0	0.15	53.8	−65.8	20.8	69.1	162	0.0	1.0	0.081	54.0	−66.9	25.7	71.7	159	0.0	1.0	0.15	0.0	1.0	0.271	54.0	−62.2	10.5	63.2	170	0.0	1.0	0.15
163	160	171	0.0	1.0	0.166	53.8	−65.5	19.4	68.3	163	0.0	1.0	0.104	53.9	−66.6	24.3	71.0	160	0.0	1.0	0.167	0.0	1.0	0.281	54.0	−61.7	9.4	62.6	171	0.0	1.0	0.167
164	161	172	0.0	1.0	0.183	53.8	−65.0	18.1	67.5	164	0.0	1.0	0.127	53.8	−66.3	22.9	70.2	161	0.0	1.0	0.183	0.0	1.0	0.291	54.1	−61.3	8.3	61.9	172	0.0	1.0	0.183
165	162	173	0.0	1.0	0.2	53.8	−64.6	16.7	66.7	165	0.0	1.0	0.143	53.8	−65.9	21.5	69.4	162	0.0	1.0	0.2	0.0	1.0	0.301	54.2	−60.8	7.3	61.3	173	0.0	1.0	0.2
166	163	174	0.0	1.0	0.216	53.7	−64.1	15.4	66.0	166	0.0	1.0	0.16	53.8	−65.6	20.1	68.7	163	0.0	1.0	0.217	0.0	1.0	0.311	54.3	−60.3	6.3	60.7	174	0.0	1.0	0.217
167	164	175	0.0	1.0	0.233	53.7	−63.6	14.1	65.2	167	0.0	1.0	0.176	53.8	−65.2	18.7	67.9	164	0.0	1.0	0.233	0.0	1.0	0.321	54.3	−59.8	5.2	60.1	175	0.0	1.0	0.233
168	165	175	0.0	1.0	0.25	53.7	−63.1	12.8	64.4	168	0.0	1.0	0.192	53.8	−64.7	17.4	67.1	165	0.0	1.0	0.25	0.0	1.0	0.331	54.4	−59.3	4.2	59.5	175	0.0	1.0	0.25

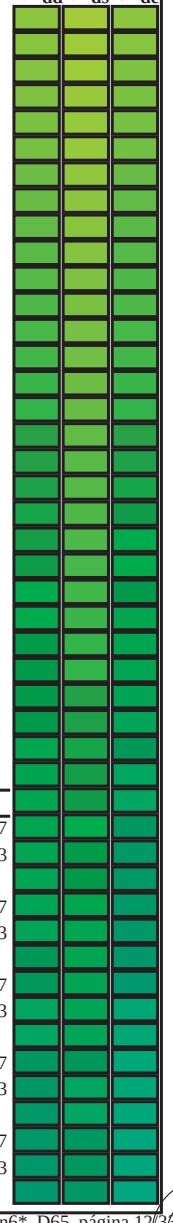


gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
círculo de tono, 48 pasos; *rgb−LabCh**mesas

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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
168	165	175	0.0	1.0	0.25	53.7	−63.1	12.8	64.4	168	0.0	1.0	0.192	53.8	−64.7	17.4	67.1	165	0.0	1.0	0.25	0.0	1.0	0.331	54.4	−59.3	4.2	59.5	175	0.0	1.0	0.25			
170	166	176	0.0	1.0	0.266	53.9	−62.4	10.9	63.4	170	0.0	1.0	0.209	53.8	−64.3	16.1	66.4	166	0.0	1.0	0.267	0.0	1.0	0.341	54.5	−58.7	3.3	58.9	176	0.0	1.0	0.267			
171	167	177	0.0	1.0	0.283	54.0	−61.7	9.1	62.4	171	0.0	1.0	0.225	53.8	−63.8	14.8	65.6	167	0.0	1.0	0.283	0.0	1.0	0.351	54.6	−58.2	2.3	58.3	177	0.0	1.0	0.283			
173	168	178	0.0	1.0	0.3	54.1	−60.9	7.3	61.3	173	0.0	1.0	0.242	53.8	−63.3	13.5	64.8	168	0.0	1.0	0.3	0.0	1.0	0.361	54.7	−57.6	1.4	57.7	178	0.0	1.0	0.3			
174	169	179	0.0	1.0	0.316	54.3	−60.1	5.6	60.3	174	0.0	1.0	0.255	53.8	−62.8	12.2	64.1	169	0.0	1.0	0.317	0.0	1.0	0.371	54.7	−57.0	0.4	57.1	179	0.0	1.0	0.317			
176	170	180	0.0	1.0	0.333	54.4	−59.2	3.9	59.3	176	0.0	1.0	0.266	53.9	−62.4	11.0	63.5	170	0.0	1.0	0.333	0.0	1.0	0.382	54.8	−56.5	−0.4	56.6	180	0.0	1.0	0.333			
177	171	181	0.0	1.0	0.35	54.5	−58.2	2.3	58.3	177	0.0	1.0	0.277	54.0	−61.9	9.8	62.8	171	0.0	1.0	0.35	0.0	1.0	0.393	54.8	−56.0	−1.3	56.2	181	0.0	1.0	0.35			
179	172	182	0.0	1.0	0.366	54.7	−57.3	0.8	57.3	179	0.0	1.0	0.288	54.1	−61.4	8.6	62.1	172	0.0	1.0	0.367	0.0	1.0	0.405	54.8	−55.6	−2.1	55.7	182	0.0	1.0	0.367			
180	173	183	0.0	1.0	0.383	54.7	−56.5	−0.6	56.5	180	0.0	1.0	0.299	54.2	−60.9	7.5	61.5	173	0.0	1.0	0.383	0.0	1.0	0.416	54.9	−55.1	−3.0	55.3	183	0.0	1.0	0.383			
181	174	184	0.0	1.0	0.4	54.8	−55.8	−1.8	55.9	181	0.0	1.0	0.31	54.3	−60.4	6.4	60.8	174	0.0	1.0	0.4	0.0	1.0	0.428	54.9	−54.6	−3.8	54.9	184	0.0	1.0	0.4			
183	175	185	0.0	1.0	0.416	54.8	−55.2	−3.1	55.2	183	0.0	1.0	0.321	54.3	−59.8	5.2	60.1	175	0.0	1.0	0.417	0.0	1.0	0.439	54.9	−54.1	−4.7	54.5	185	0.0	1.0	0.417			
184	176	185	0.0	1.0	0.433	54.8	−54.5	−4.3	54.6	184	0.0	1.0	0.332	54.4	−59.2	4.1	59.5	176	0.0	1.0	0.433	0.0	1.0	0.451	54.9	−53.6	−5.5	54.0	185	0.0	1.0	0.433			
185	177	186	0.0	1.0	0.45	54.9	−53.7	−5.5	54.0	185	0.0	1.0	0.343	54.5	−58.6	3.1	58.8	177	0.0	1.0	0.45	0.0	1.0	0.463	55.0	−53.1	−6.3	53.6	186	0.0	1.0	0.45			
187	178	187	0.0	1.0	0.466	54.9	−53.0	−6.6	53.4	187	0.0	1.0	0.354	54.6	−58.0	2.0	58.1	178	0.0	1.0	0.467	0.0	1.0	0.474	55.0	−52.6	−7.1	53.2	187	0.0	1.0	0.467			
188	179	188	0.0	1.0	0.483	55.0	−52.2	−7.8	52.8	188	0.0	1.0	0.365	54.7	−57.3	1.0	57.5	179	0.0	1.0	0.483	0.0	1.0	0.486	55.0	−52.1	−7.9	52.8	188	0.0	1.0	0.483			
189	180	189	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189	0.0	1.0	0.375	54.8	−56.7	0.0	56.8	180	0.0	1.0	0.5	0.0	1.0	0.497	55.0	−51.5	−8.6	52.3	189	0.0	1.0	0.5			
191	181	190	0.0	1.0	0.516	55.0	−50.6	−10.5	51.7	191	0.0	1.0	0.388	54.8	−56.2	−0.9	56.3	181	0.0	1.0	0.517	0.0	1.0	0.506	55.1	−51.1	−9.4	52.1	190	0.0	1.0	0.517			
193	182	191	0.0	1.0	0.533	55.1	−49.7	−12.1	51.2	193	0.0	1.0	0.401	54.8	−55.7	−1.8	55.9	182	0.0	1.0	0.533	0.0	1.0	0.514	55.1	−50.7	−10.2	51.8	191	0.0	1.0	0.533			
195	183	192	0.0	1.0	0.55	55.1	−48.8	−13.7	50.7	195	0.0	1.0	0.414	54.9	−55.2	−2.8	55.4	183	0.0	1.0	0.55	0.0	1.0	0.522	55.1	−50.3	−10.9	51.6	192	0.0	1.0	0.55			
197	184	193	0.0	1.0	0.566	55.2	−47.8	−15.2	50.2	197	0.0	1.0	0.426	54.9	−54.7	−3.7	54.9	184	0.0	1.0	0.567	0.0	1.0	0.529	55.1	−49.9	−11.7	51.4	193	0.0	1.0	0.567			
199	185	194	0.0	1.0	0.583	55.2	−46.8	−16.6	49.7	199	0.0	1.0	0.439	54.9	−54.2	−4.6	54.5	185	0.0	1.0	0.583	0.0	1.0	0.537	55.1	−49.5	−12.4	51.1	194	0.0	1.0	0.583			
201	186	195	0.0	1.0	0.6	55.2	−45.8	−18.0	49.2	201	0.0	1.0	0.452	54.9	−53.6	−5.5	54.0	186	0.0	1.0	0.6	0.0	1.0	0.545	55.2	−49.0	−13.1	50.9	195	0.0	1.0	0.6			
203	187	195	0.0	1.0	0.616	55.3	−44.7	−19.4	48.7	203	0.0	1.0	0.464	55.0	−53.0	−6.4	53.5	187	0.0	1.0	0.617	0.0	1.0	0.553	55.2	−48.6	−13.9	50.7	195	0.0	1.0	0.617			
205	188	196	0.0	1.0	0.633	55.3	−43.8	−20.5	48.4	205	0.0	1.0	0.477	55.0	−52.5	−7.3	53.1	188	0.0	1.0	0.633	0.0	1.0	0.561	55.2	−48.2	−14.6	50.4	196	0.0	1.0	0.633			
206	189	197	0.0	1.0	0.65	55.3	−43.3	−21.5	48.3	206	0.0	1.0	0.49	55.0	−51.9	−8.1	52.6	189	0.0	1.0	0.65	0.0	1.0	0.568	55.2	−47.7	−15.3	50.2	197	0.0	1.0	0.65			
207	190	198	0.0	1.0	0.666	55.3	−42.7	−22.5	48.3	207	0.0	1.0	0.502	55.1	−51.3	−9.0	52.2	190	0.0	1.0	0.667	0.0	1.0	0.576	55.2	−47.2	−15.9	50.0	198	0.0	1.0	0.667			
209	191	199	0.0	1.0	0.683	55.2	−42.1	−23.4	48.2	209	0.0	1.0	0.51	55.1	−50.9	−9.8	51.9	191	0.0	1.0	0.683	0.0	1.0	0.584	55.3	−46.7	−16.6	49.7	199	0.0	1.0	0.683			
210	192	200	0.0	1.0	0.7	55.2	−41.5	−24.4	48.1	210	0.0	1.0	0.519	55.1	−50.5	−10.6	51.7	192	0.0	1.0	0.7	0.0	1.0	0.592	55.3	−46.3	−17.3	49.5	200	0.0	1.0	0.7			
211	193	201	0.0	1.0	0.716	55.2	−40.8	−25.3	48.0	211	0.0	1.0	0.527	55.1	−50.0	−11.5	51.4	193	0.0	1.0	0.717	0.0	1.0	0.6	55.3	−45.8	−17.9	49.3	201	0.0	1.0	0.717			
213	194	202	0.0	1.0	0.733	55.2	−40.2	−26.2	48.0	213	0.0	1.0	0.536	55.1	−49.6	−12.3	51.2	194	0.0	1.0	0.733	0.0	1.0	0.607	55.3	−45.2	−18.6	49.0	202	0.0	1.0	0.733			
214	195	203	0.0	1.0	0.75	55.2	−39.5	−27.1	47.9	214	0.0	1.0	0.544	55.2	−49.1	−13.1	50.9	195	0.0	1.0	0.75	0.0	1.0	0.615	55.3	−44.7	−19.2	48.8	203	0.0	1.0	0.75			
215	196	204	0.0	1.0	0.766	55.1	−39.2	−27.9	48.1	215	0.0	1.0	0.553	55.2	−48.6	−13.9	50.7	196	0.0	1.0	0.767	0.0	1.0	0.623	55.4	−44.2	−19.8	48.6	204	0.0	1.0	0.767			
216	197	205	0.0	1.0	0.783	55.0	−38.8	−28.7	48.3	216	0.0	1.0	0.561	55.2	−48.1	−14.6	50.4	197	0.0	1.0	0.783	0.0	1.0	0.633	55.3	−43.8	−20.5	48.5	205	0.0	1.0	0.783			
217	198	206	0.0	1.0	0.8	54.9	−38.5	−29.5	48.5	217	0.0	1.0	0.57	55.2	−47.6	−15.4	50.2	198	0.0	1.0	0.8	0.0	1.0	0.645	55.3	−43.4	−21.1	48.4	206	0.0	1.0	0.8			
218	199	206	0.0	1.0	0.816	54.8	−38.1	−30.3	48.7	218	0.0	1.0	0.578	55.2	−47.1	−16.1	49.9	199	0.0	1.0	0.817	0.0	1.0	0.656	55.3	−43.0	−21.8	48.4	206	0.0	1.0	0.817			
219	200	207	0.0	1.0	0.833	54.7	−37.7	−31.1	48.9	219	0.0	1.0	0.587	55.3	−46.6	−16.9	49.6	200	0.0	1.0	0.833	0.0	1.0	0.667	55.3	−42.6	−22.5	48.3	207	0.0	1.0	0.833			
220	201	208	0.0	1.0	0.85	54.6	−37.3	−31.9	49.1	220	0.0	1.0	0.596	55.3	−46.0	−17.6	49.4	201	0.0	1.0	0.85	0.0	1.0	0.679	55.3	−42.2	−23.1	48.3	208	0.0	1.0	0.85			
221	202	209	0.0	1.0	0.866	54.5	−36.9	−32.6	49.3	221	0.0	1.0	0.604	55.3	−45.5	−18.3	49.1	202	0.0	1.0	0.867	0.0	1.0	0.69	55.3	−41.8	−23.8	48.2	209	0.0	1.0	0.867			
222	203	210	0.0	1.0	0.883	54.3	−36.4	−33.7	49.6	222	0.0	1.0	0.613	55.3	−44.9	−19.0	48.9	203	0.0	1.0	0.883	0.0	1.0	0.702	55.3	−41.4	−24.4	48.2	210	0.0	1.0	0.883			
224	204	211	0.0	1.0	0.9	54.2	−35.6	−35.1	50.0	224	0.0	1.0	0.621	55.3	−44.3	−19.7	48.6	204	0.0	1.0	0.9	0.0	1.0	0.713	55.3	−40.9	−25.0	48.1	211	0.0	1.0	0.9			
226	205	212	0.0	1.0	0.916	54.0	−34.8	−36.5	50.4	226	0.0	1.0	0.632	55.3	−43.8	−20.4	48.5	205	0.0	1.0	0.917	0.0	1.0	0.724	55.3	−40.5	−25.7	48.1	212	0.0	1.0	0.917			
228	206	213	0.0	1.0	0.933	53.8	−33.9	−37.8	50.8	228	0.0	1.0	0.644	55.3	−43.4	−21.1	48.4	206	0.0	1.0	0.933	0.0	1.0	0.736	55.2	−40.0	−26.3	48.0	213	0.0	1.0	0.933			
229	207	214	0.0	1.0	0.95	53.6	−33.0	−39.2	51.2	229	0.0	1.0	0.657	55.3	−43.0	−21.9	48.4	207	0.0	1.0	0.95	0.0	1.0	0.747	55.2	−39.5	−26.9	48.0	214	0.0	1.0	0.95			
231	208	215	0.0	1.0	0.966	53.4	−32.0	−40.5	51.7	231	0.0	1.0	0.669	55.3	−42.6	−22.6	48.3	208	0.0	1.0	0.967	0.0	1.0	0.761	55.2	−39.2	−27.6	48.1	215	0.0	1.0	0.967			
233	209	216	0.0	1.0	0.983	53.3	−31.0	−41.8	52.1	233	0.0	1.0	0.682	55.3	−42.1	−23.3	48.3	209	0.0	1.0	0.983	0.0	1.0	0.777	55.1	−38.9	−28.3	48.3	216	0.0	1.0	0.983			
235	210	216	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235	C_d	0.0	1.0	0.694	55.3	−41.6	−24.0	48.2	210	C_s	0.0	1.0	1.0	0.0	1.0	0.792	55.0	−38.6	−29.0	48.4	216	C_e	0.0	1.0	1.0			

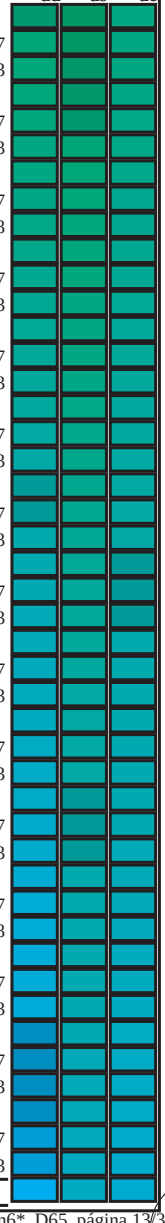


gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
círculo de tono, 48 pasos; *rgb−LabCh**mesas

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

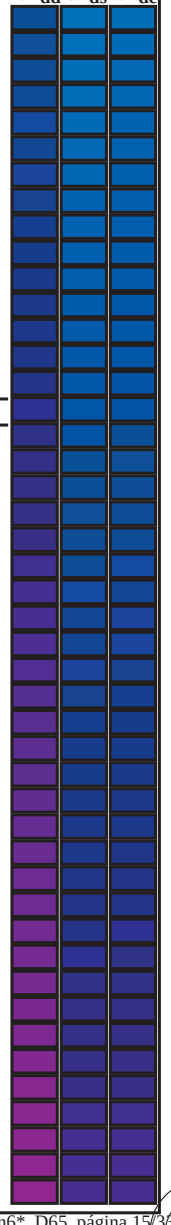
Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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		
235	210	216	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235	C_d	0.0	1.0	0.694	55.3	−41.6	−24.0	48.2	210	C_s	0.0	1.0	1.0	0.0	1.0	0.792	55.0	−38.6	−29.0	48.4	216	C_e	0.0	1.0	1.0
235	211	217	0.0	0.983	1.0	53.1	−29.7	−43.3	52.5	235		0.0	1.0	0.707	55.3	−41.2	−24.7	48.1	211		0.0	0.983	1.0	0.0	1.0	0.807	54.9	−38.3	−29.8	48.6	217		0.0	0.983	1.0
235	212	218	0.0	0.966	1.0	53.1	−29.4	−43.5	52.5	235		0.0	1.0	0.719	55.3	−40.7	−25.4	48.1	212		0.0	0.967	1.0	0.0	1.0	0.822	54.8	−37.9	−30.5	48.8	218		0.0	0.967	1.0
236	213	219	0.0	0.95	1.0	53.1	−29.2	−43.7	52.6	236		0.0	1.0	0.732	55.3	−40.2	−26.1	48.0	213		0.0	0.95	1.0	0.0	1.0	0.837	54.7	−37.6	−31.2	49.0	219		0.0	0.95	1.0
236	214	220	0.0	0.933	1.0	53.1	−28.9	−43.9	52.6	236		0.0	1.0	0.744	55.2	−39.7	−26.7	48.0	214		0.0	0.933	1.0	0.0	1.0	0.853	54.6	−37.2	−31.9	49.2	220		0.0	0.933	1.0
237	215	221	0.0	0.916	1.0	53.1	−28.6	−44.2	52.6	237		0.0	1.0	0.759	55.2	−39.3	−27.5	48.1	215		0.0	0.917	1.0	0.0	1.0	0.868	54.5	−36.9	−32.6	49.4	221		0.0	0.917	1.0
237	216	222	0.0	0.9	1.0	53.1	−28.3	−44.4	52.7	237		0.0	1.0	0.775	55.1	−38.9	−28.3	48.3	216		0.0	0.9	1.0	0.0	1.0	0.88	54.4	−36.5	−33.4	49.6	222		0.0	0.9	1.0
237	217	223	0.0	0.883	1.0	53.1	−28.1	−44.6	52.7	237		0.0	1.0	0.792	55.0	−38.6	−29.1	48.5	217		0.0	0.883	1.0	0.0	1.0	0.888	54.3	−36.1	−34.1	49.8	223		0.0	0.883	1.0
238	218	224	0.0	0.866	1.0	53.0	−27.8	−44.9	52.8	238		0.0	1.0	0.809	54.9	−38.2	−29.9	48.7	218		0.0	0.867	1.0	0.0	1.0	0.897	54.2	−35.7	−34.8	50.0	224		0.0	0.867	1.0
238	219	225	0.0	0.85	1.0	53.0	−27.5	−45.3	53.0	238		0.0	1.0	0.825	54.8	−37.9	−30.6	48.9	219		0.0	0.85	1.0	0.0	1.0	0.906	54.1	−35.3	−35.5	50.2	225		0.0	0.85	1.0
239	220	226	0.0	0.833	1.0	53.0	−27.3	−45.6	53.2	239		0.0	1.0	0.842	54.7	−37.5	−31.4	49.1	220		0.0	0.833	1.0	0.0	1.0	0.914	54.1	−34.9	−36.2	50.4	226		0.0	0.833	1.0
239	221	227	0.0	0.816	1.0	53.0	−27.0	−46.0	53.4	239		0.0	1.0	0.859	54.6	−37.1	−32.2	49.3	221		0.0	0.817	1.0	0.0	1.0	0.923	54.0	−34.4	−36.9	50.6	227		0.0	0.817	1.0
240	222	227	0.0	0.8	1.0	52.9	−26.7	−46.4	53.6	240		0.0	1.0	0.875	54.5	−36.7	−33.0	49.5	222		0.0	0.8	1.0	0.0	1.0	0.932	53.9	−34.0	−37.6	50.8	227		0.0	0.8	1.0
240	223	228	0.0	0.783	1.0	52.9	−26.5	−46.8	53.8	240		0.0	1.0	0.885	54.4	−36.2	−33.8	49.7	223		0.0	0.783	1.0	0.0	1.0	0.94	53.8	−33.5	−38.3	51.1	228		0.0	0.783	1.0
240	224	229	0.0	0.766	1.0	52.9	−26.2	−47.2	53.9	240		0.0	1.0	0.894	54.3	−35.8	−34.6	49.9	224		0.0	0.767	1.0	0.0	1.0	0.949	53.7	−33.0	−39.0	51.3	229		0.0	0.767	1.0
241	225	230	0.0	0.75	1.0	52.9	−25.9	−47.5	54.1	241		0.0	1.0	0.904	54.2	−35.4	−35.4	50.2	225		0.0	0.75	1.0	0.0	1.0	0.957	53.6	−32.5	−39.7	51.5	230		0.0	0.75	1.0
242	226	231	0.0	0.733	1.0	52.6	−25.2	−47.8	54.1	242		0.0	1.0	0.913	54.1	−34.9	−36.2	50.4	226		0.0	0.733	1.0	0.0	1.0	0.966	53.5	−32.0	−40.4	51.7	231		0.0	0.733	1.0
242	227	232	0.0	0.716	1.0	52.2	−24.5	−48.1	54.0	242		0.0	1.0	0.923	54.0	−34.4	−36.9	50.6	227		0.0	0.717	1.0	0.0	1.0	0.975	53.4	−31.5	−41.1	51.9	232		0.0	0.717	1.0
243	228	233	0.0	0.7	1.0	51.9	−23.9	−48.4	54.0	243		0.0	1.0	0.932	53.9	−33.9	−37.7	50.9	228		0.0	0.7	1.0	0.0	1.0	0.983	53.3	−31.0	−41.7	52.1	233		0.0	0.7	1.0
244	229	234	0.0	0.683	1.0	51.6	−23.2	−48.6	53.9	244		0.0	1.0	0.942	53.8	−33.4	−38.5	51.1	229		0.0	0.683	1.0	0.0	1.0	0.992	53.2	−30.4	−42.4	52.3	234		0.0	0.683	1.0
245	230	235	0.0	0.666	1.0	51.3	−22.5	−48.9	53.8	245		0.0	1.0	0.951	53.7	−32.9	−39.2	51.3	230		0.0	0.667	1.0	0.0	0.997	1.0	53.1	−29.9	−43.1	52.5	235		0.0	0.667	1.0
246	231	236	0.0	0.65	1.0	51.0	−21.8	−49.1	53.8	246		0.0	1.0	0.961	53.6	−32.3	−40.0	51.6	231		0.0	0.65	1.0	0.0	0.956	1.0	53.1	−29.2	−43.6	52.6	236		0.0	0.65	1.0
246	232	237	0.0	0.633	1.0	50.7	−21.1	−49.4	53.7	246		0.0	1.0	0.97	53.5	−31.8	−40.7	51.8	232		0.0	0.633	1.0	0.0	0.916	1.0	53.1	−28.6	−44.1	52.7	237		0.0	0.633	1.0
247	233	237	0.0	0.616	1.0	50.2	−20.2	−49.5	53.5	247		0.0	1.0	0.98	53.4	−31.2	−41.5	52.0	233		0.0	0.617	1.0	0.0	0.876	1.0	53.1	−27.9	−44.6	52.8	237		0.0	0.617	1.0
248	234	238	0.0	0.6	1.0	49.7	−19.2	−49.6	53.2	248		0.0	1.0	0.989	53.2	−30.6	−42.2	52.3	234		0.0	0.6	1.0	0.0	0.842	1.0	53.1	−27.4	−45.4	53.1	238		0.0	0.6	1.0
249	235	239	0.0	0.583	1.0	49.1	−18.2	−49.6	52.8	249		0.0	1.0	0.999	53.1	−30.0	−42.9	52.5	235		0.0	0.583	1.0	0.0	0.809	1.0	53.0	−26.8	−46.2	53.5	239		0.0	0.583	1.0
250	236	240	0.0	0.566	1.0	48.5	−17.2	−49.6	52.5	250		0.0	0.963	1.0	53.1	−29.3	−43.5	52.6	236		0.0	0.567	1.0	0.0	0.775	1.0	53.0	−26.3	−46.9	53.9	240		0.0	0.567	1.0
251	237	241	0.0	0.55	1.0	47.9	−16.2	−49.5	52.2	251		0.0	0.918	1.0	53.1	−28.6	−44.1	52.7	237		0.0	0.55	1.0	0.0	0.745	1.0	52.8	−25.6	−47.6	54.2	241		0.0	0.55	1.0
252	238	242	0.0	0.533	1.0	47.3	−15.2	−49.5	51.8	252		0.0	0.874	1.0	53.1	−27.9	−44.7	52.8	238		0.0	0.533	1.0	0.0	0.726	1.0	52.5	−24.9	−47.9	54.1	242		0.0	0.533	1.0
253	239	243	0.0	0.516	1.0	46.7	−14.3	−49.4	51.5	253		0.0	0.838	1.0	53.0	−27.3	−45.5	53.2	239		0.0	0.517	1.0	0.0	0.706	1.0	52.1	−24.1	−48.2	54.0	243		0.0	0.517	1.0
254	240	244	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254		0.0	0.801	1.0	53.0	−26.7	−46.3	53.6	240		0.0	0.5	1.0	0.0	0.686	1.0	51.7	−23.3	−48.5	54.0	244		0.0	0.5	1.0
255	241	245	0.0	0.483	1.0	45.5	−12.3	−49.4	50.9	255		0.0	0.764	1.0	52.9	−26.1	−47.2	54.0	241		0.0	0.483	1.0	0.0	0.667	1.0	51.4	−22.4	−48.8	53.9	245		0.0	0.483	1.0
256	242	246	0.0	0.466	1.0	44.8	−11.4	−49.4	50.7	256		0.0	0.737	1.0	52.7	−25.3	−47.7	54.1	242		0.0	0.467	1.0	0.0	0.647	1.0	51.0	−21.6	−49.1	53.8	246		0.0	0.467	1.0
258	243	247	0.0	0.45	1.0	44.2	−10.5	−49.4	50.5	258		0.0	0.716	1.0	52.3	−24.4	−48.1	54.1	243		0.0	0.45	1.0	0.0	0.628	1.0	50.6	−20.8	−49.4	53.8	247		0.0	0.45	1.0
259	244	248	0.0	0.433	1.0	43.6	−9.5	−49.4	50.3	259		0.0	0.694	1.0	51.9	−23.6	−48.4	54.0	244		0.0	0.433	1.0	0.0	0.612	1.0	50.1	−19.9	−49.5	53.5	248		0.0	0.433	1.0
260	245	248	0.0	0.416	1.0	42.9	−8.6	−49.4	50.1	260		0.0	0.673	1.0	51.5	−22.7	−48.8	53.9	245		0.0	0.417	1.0	0.0	0.597	1.0	49.6	−19.0	−49.5	53.2	248		0.0	0.417	1.0
261	246	249	0.0	0.4	1.0	42.3	−7.7	−49.3	49.9	261		0.0	0.651	1.0	51.1	−21.8	−49.1	53.8	246		0.0	0.4	1.0	0.0	0.582	1.0	49.1	−18.1	−49.5	52.9	249		0.0	0.4	1.0
262	247	250	0.0	0.383	1.0	41.7	−6.8	−49.3	49.7	262		0.0	0.63	1.0	50.7	−20.9	−49.4	53.8	247		0.0	0.383	1.0	0.0	0.568	1.0	48.6	−17.2	−49.5	52.6	250		0.0	0.383	1.0
263	248	251	0.0	0.366	1.0	41.1	−5.7	−49.2	49.6	263		0.0	0.612	1.0	50.1	−19.9	−49.5	53.5	248		0.0	0.367	1.0	0.0	0.553	1.0	48.0	−16.3	−49.5	52.3	251		0.0	0.367	1.0
264	249	252	0.0	0.35	1.0	40.5	−4.6	−49.2	49.4	264		0.0	0.596	1.0	49.6	−18.9	−49.5	53.1	249		0.0	0.35	1.0	0.0	0.538	1.0	47.5	−15.5	−49.5	52.0	252		0.0	0.35	1.0
265	250	253	0.0	0.333	1.0	39.9	−3.4	−49.2	49.3	265		0.0	0.58	1.0	49.0	−18.0	−49.5	52.8	250		0.0	0.333	1.0	0.0	0.523	1.0	47.0	−14.6	−49.4	51.6	253		0.0	0.333	1.0
267	251	254	0.0	0.316	1.0	39.3	−2.3	−49.1	49.1	267		0.0	0.564	1.0	48.4	−17.0	−49.5	52.5	251		0.0	0.317	1.0	0.0	0.508	1.0	46.5	−13.7	−49.4	51.3	254		0.0	0.317	1.0
268	252	255	0.0	0.3	1.0	38.7	−1.1	−49.0	49.0	268		0.0	0.547	1.0	47.8	−16.0	−49.5	52.1	252		0.0	0.3	1.0	0.0	0.494	1.0	45.9	−12.9	−49.3	51.1	255		0.0	0.3	1.0
269	253	256	0.0	0.283	1.0	38.1	0.0	−48.9	48.9	269		0.0	0.531	1.0	47.3	−15.0	−49.4	51.8	253		0.0	0.283	1.0	0.0	0.479	1.0	45.4	−12.0	−49.4	50.9	256		0.0	0.283	1.0
271	254	257	0.0	0.266	1.0	37.4	1.1	−48.7	48.7	271		0.0	0.515	1.0	46.7	−14.1	−49.4	51.5	254		0.0	0.267	1.0	0.0	0.464	1.0	44.8	−11.2	−49.4	50.7	257		0.0	0.267	1.0
272	255	258	0.0	0.25	1.0	36.8	2.2	−48.5	48.6	272		0.0	0.499	1.0	46.1	−13.1	−49.3	51.2	255		0.0	0.25	1.0	0.0	0.449	1.0	44.2	−10.4	−49.4	50.6	258		0.0	0.25	1.0

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

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

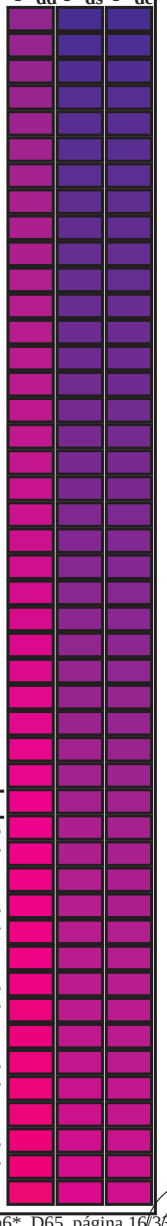
$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb**dd361M			*LAB**ddx361Mi (x=LabCh)					*rgb**ds361Mi			*LAB**dsx361Mi (x=LabCh)					*rgb**dd361Mi			*rgb**de361Mi			*LAB**dex361Mi (x=LabCh)					*rgb**dd361Mi			*rgb**dd *rgb**ds *rgb**de
272	255	258	0.0	0.25	1.0	36.8	2.2	−48.5	48.6	272	0.0	0.499	1.0	46.1	−13.1	−49.3	51.2	255	0.0	0.25	1.0	0.0	0.449	1.0	44.2	−10.4	−49.4	50.6	258	0.0	0.25	1.0	
273	256	258	0.0	0.233	1.0	36.6	3.2	−48.3	48.4	273	0.0	0.482	1.0	45.5	−12.2	−49.4	51.0	256	0.0	0.233	1.0	0.0	0.435	1.0	43.7	−9.5	−49.4	50.4	258	0.0	0.233	1.0	
274	257	259	0.0	0.216	1.0	36.4	4.1	−48.0	48.2	274	0.0	0.466	1.0	44.9	−11.3	−49.4	50.8	257	0.0	0.217	1.0	0.0	0.42	1.0	43.1	−8.7	−49.3	50.2	259	0.0	0.217	1.0	
276	258	260	0.0	0.2	1.0	36.1	5.1	−47.8	48.1	276	0.0	0.45	1.0	44.3	−10.4	−49.4	50.6	258	0.0	0.2	1.0	0.0	0.405	1.0	42.6	−7.9	−49.3	50.0	260	0.0	0.2	1.0	
277	259	261	0.0	0.183	1.0	35.9	6.1	−47.5	47.9	277	0.0	0.434	1.0	43.7	−9.5	−49.4	50.4	259	0.0	0.183	1.0	0.0	0.39	1.0	42.0	−7.1	−49.3	49.9	261	0.0	0.183	1.0	
278	260	262	0.0	0.166	1.0	35.6	7.0	−47.2	47.7	278	0.0	0.418	1.0	43.0	−8.6	−49.3	50.2	260	0.0	0.167	1.0	0.0	0.376	1.0	41.4	−6.3	−49.2	49.7	262	0.0	0.167	1.0	
279	261	263	0.0	0.15	1.0	35.4	8.0	−46.9	47.5	279	0.0	0.402	1.0	42.4	−7.7	−49.3	50.0	261	0.0	0.15	1.0	0.0	0.364	1.0	41.0	−5.5	−49.2	49.6	263	0.0	0.15	1.0	
280	262	264	0.0	0.133	1.0	35.2	8.9	−46.5	47.4	280	0.0	0.386	1.0	41.8	−6.8	−49.2	49.8	262	0.0	0.133	1.0	0.0	0.353	1.0	40.6	−4.7	−49.2	49.5	264	0.0	0.133	1.0	
282	263	265	0.0	0.116	1.0	34.9	9.9	−46.3	47.3	282	0.0	0.371	1.0	41.3	−6.0	−49.2	49.7	263	0.0	0.117	1.0	0.0	0.341	1.0	40.2	−3.9	−49.1	49.4	265	0.0	0.117	1.0	
283	264	266	0.0	0.1	1.0	34.5	10.9	−46.1	47.4	283	0.0	0.358	1.0	40.8	−5.1	−49.2	49.5	264	0.0	0.1	1.0	0.0	0.33	1.0	39.8	−3.1	−49.1	49.3	266	0.0	0.1	1.0	
284	265	267	0.0	0.083	1.0	34.2	11.9	−45.9	47.4	284	0.0	0.346	1.0	40.4	−4.2	−49.2	49.4	265	0.0	0.083	1.0	0.0	0.318	1.0	39.4	−2.3	−49.0	49.2	267	0.0	0.083	1.0	
285	266	268	0.0	0.066	1.0	33.9	12.9	−45.7	47.5	285	0.0	0.333	1.0	39.9	−3.3	−49.1	49.3	266	0.0	0.067	1.0	0.0	0.307	1.0	39.0	−1.5	−49.0	49.1	268	0.0	0.067	1.0	
287	267	269	0.0	0.049	1.0	33.5	13.9	−45.4	47.5	287	0.0	0.321	1.0	39.5	−2.5	−49.1	49.2	267	0.0	0.05	1.0	0.0	0.296	1.0	38.5	−0.8	−48.9	49.0	269	0.0	0.05	1.0	
288	268	269	0.0	0.033	1.0	33.2	14.9	−45.2	47.6	288	0.0	0.308	1.0	39.0	−1.6	−49.0	49.1	268	0.0	0.033	1.0	0.0	0.284	1.0	38.1	0.0	−48.8	48.9	269	0.0	0.033	1.0	
289	269	270	0.0	0.016	1.0	32.9	15.9	−44.9	47.6	289	0.0	0.296	1.0	38.5	−0.8	−48.9	49.0	269	0.0	0.017	1.0	0.0	0.273	1.0	37.7	0.7	−48.7	48.8	270	0.0	0.017	1.0	
290	270	271	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290	B_d	0.0	0.283	1.0	38.1	0.0	−48.8	48.9	270	B_s	0.0	0.0	1.0	0.0	0.261	1.0	37.3	1.5	−48.6	48.7	271	B_e	0.0	0.0	1.0	
291	271	272	0.016	0.0	1.0	32.4	17.8	−44.3	47.8	291	0.0	0.27	1.0	37.6	0.9	−48.7	48.8	271	0.017	0.0	1.0	0.0	0.249	1.0	36.9	2.3	−48.5	48.6	272	0.017	0.0	1.0	
293	272	273	0.033	0.0	1.0	32.3	18.7	−44.0	47.9	293	0.0	0.258	1.0	37.2	1.7	−48.6	48.7	272	0.033	0.0	1.0	0.0	0.236	1.0	36.7	3.1	−48.3	48.5	273	0.033	0.0	1.0	
294	273	274	0.05	0.0	1.0	32.1	19.6	−43.7	47.9	294	0.0	0.245	1.0	36.8	2.5	−48.4	48.6	273	0.05	0.0	1.0	0.0	0.222	1.0	36.5	3.9	−48.1	48.3	274	0.05	0.0	1.0	
295	274	275	0.066	0.0	1.0	32.0	20.5	−43.4	48.0	295	0.0	0.231	1.0	36.6	3.4	−48.2	48.4	274	0.067	0.0	1.0	0.0	0.209	1.0	36.3	4.6	−47.9	48.2	275	0.067	0.0	1.0	
296	275	276	0.083	0.0	1.0	31.9	21.4	−43.1	48.1	296	0.0	0.217	1.0	36.4	4.2	−48.0	48.3	275	0.083	0.0	1.0	0.0	0.196	1.0	36.1	5.4	−47.7	48.1	276	0.083	0.0	1.0	
297	276	277	0.1	0.0	1.0	31.8	22.3	−42.7	48.2	297	0.0	0.202	1.0	36.2	5.0	−47.8	48.1	276	0.1	0.0	1.0	0.0	0.182	1.0	35.9	6.2	−47.4	47.9	277	0.1	0.0	1.0	
298	277	278	0.116	0.0	1.0	31.6	23.1	−42.4	48.3	298	0.0	0.188	1.0	36.0	5.8	−47.5	48.0	277	0.117	0.0	1.0	0.0	0.169	1.0	35.7	7.0	−47.2	47.8	278	0.117	0.0	1.0	
299	278	279	0.133	0.0	1.0	31.5	24.1	−42.0	48.4	299	0.0	0.174	1.0	35.8	6.7	−47.3	47.8	278	0.133	0.0	1.0	0.0	0.155	1.0	35.5	7.7	−46.9	47.6	279	0.133	0.0	1.0	
300	279	280	0.15	0.0	1.0	31.4	25.0	−41.7	48.6	300	0.0	0.16	1.0	35.6	7.5	−47.0	47.7	279	0.15	0.0	1.0	0.0	0.142	1.0	35.3	8.5	−46.6	47.5	280	0.15	0.0	1.0	
302	280	281	0.166	0.0	1.0	31.4	25.9	−41.4	48.8	302	0.0	0.146	1.0	35.4	8.3	−46.7	47.5	280	0.167	0.0	1.0	0.0	0.129	1.0	35.1	9.2	−46.4	47.4	281	0.167	0.0	1.0	
303	281	282	0.183	0.0	1.0	31.3	26.8	−41.0	49.0	303	0.0	0.132	1.0	35.2	9.0	−46.4	47.4	281	0.183	0.0	1.0	0.0	0.116	1.0	34.9	10.0	−46.2	47.4	282	0.183	0.0	1.0	
304	282	283	0.2	0.0	1.0	31.2	27.8	−40.6	49.2	304	0.0	0.118	1.0	34.9	9.8	−46.2	47.4	282	0.2	0.0	1.0	0.0	0.103	1.0	34.6	10.8	−46.1	47.4	283	0.2	0.0	1.0	
305	283	284	0.216	0.0	1.0	31.1	28.7	−40.2	49.4	305	0.0	0.104	1.0	34.7	10.7	−46.1	47.4	283	0.217	0.0	1.0	0.0	0.09	1.0	34.4	11.5	−45.9	47.4	284	0.217	0.0	1.0	
306	284	285	0.233	0.0	1.0	31.1	29.6	−39.8	49.6	306	0.0	0.091	1.0	34.4	11.5	−45.9	47.4	284	0.233	0.0	1.0	0.0	0.078	1.0	34.1	12.3	−45.8	47.5	285	0.233	0.0	1.0	
307	285	285	0.25	0.0	1.0	31.0	30.5	−39.3	49.8	307	0.0	0.078	1.0	34.1	12.3	−45.8	47.5	285	0.25	0.0	1.0	0.0	0.065	1.0	33.9	13.1	−45.6	47.5	285	0.25	0.0	1.0	
309	286	286	0.266	0.0	1.0	31.4	31.6	−38.8	50.1	309	0.0	0.064	1.0	33.9	13.1	−45.6	47.5	286	0.267	0.0	1.0	0.0	0.052	1.0	33.6	13.8	−45.4	47.6	286	0.267	0.0	1.0	
310	287	287	0.283	0.0	1.0	31.8	32.6	−38.3	50.3	310	0.0	0.051	1.0	33.6	13.9	−45.4	47.6	287	0.283	0.0	1.0	0.0	0.04	1.0	33.4	14.6	−45.2	47.6	287	0.283	0.0	1.0	
311	288	288	0.3	0.0	1.0	32.3	33.6	−37.8	50.6	311	0.0	0.038	1.0	33.3	14.7	−45.2	47.6	288	0.3	0.0	1.0	0.0	0.027	1.0	33.1	15.4	−45.0	47.6	288	0.3	0.0	1.0	
312	289	289	0.316	0.0	1.0	32.7	34.7	−37.2	50.9	312	0.0	0.024	1.0	33.1	15.5	−44.9	47.6	289	0.317	0.0	1.0	0.0	0.014	1.0	32.9	16.1	−44.8	47.7	289	0.317	0.0	1.0	
314	290	290	0.333	0.0	1.0	33.1	35.7	−36.6	51.2	314	0.0	0.011	1.0	32.8	16.3	−44.7	47.7	290	0.333	0.0	1.0	0.0	0.001	1.0	32.6	16.9	−44.5	47.7	290	0.333	0.0	1.0	
315	291	291	0.35	0.0	1.0	33.6	36.7	−36.0	51.4	315	0.003	0.0	1.0	32.5	17.1	−44.5	47.7	291	0.35	0.0	1.0	0.012	0.0	1.0	32.5	17.6	−44.3	47.8	291	0.35	0.0	1.0	
316	292	292	0.366	0.0	1.0	34.0	37.7	−35.3	51.7	316	0.018	0.0	1.0	32.4	17.9	−44.2	47.8	292	0.367	0.0	1.0	0.026	0.0	1.0	32.4	18.4	−44.1	47.9	292	0.367	0.0	1.0	
317	293	293	0.383	0.0	1.0	34.4	38.5	−34.7	51.9	317	0.033	0.0	1.0	32.3	18.7	−44.0	47.9	293	0.383	0.0	1.0	0.041	0.0	1.0	32.3	19.1	−43.9	47.9	293	0.383	0.0	1.0	
318	294	294	0.4	0.0	1.0	34.8	39.2	−34.2	52.1	318	0.047	0.0	1.0	32.2	19.5	−43.7	48.0	294	0.4	0.0	1.0	0.055	0.0	1.0	32.1	19.9	−43.6	48.0	294	0.4	0.0	1.0	
319	295	295	0.416	0.0	1.0	35.2	39.9	−33.7	52.2	319	0.062	0.0	1.0	32.1	20.3	−43.5	48.1	295	0.417	0.0	1.0	0.069	0.0	1.0	32.0	20.7	−43.3	48.1	295	0.417	0.0	1.0	
320	296	296	0.433	0.0	1.0	35.6	40.5	−33.1	52.4	320	0.077	0.0	1.0	32.0	21.1	−43.2	48.1	296	0.433	0.0	1.0	0.083	0.0	1.0	31.9	21.4	−43.1	48.2	296	0.433	0.0	1.0	
321	297	297	0.45	0.0	1.0	36.0	41.2	−32.6	52.5	321	0.092	0.0	1.0	31.9	21.9	−42.9	48.2	297	0.45	0.0	1.0	0.097	0.0	1.0	31.8	22.2	−42.8	48.2	297	0.45	0.0	1.0	
322	298	298	0.466	0.0	1.0	36.4	41.8	−32.0	52.7	322	0.107	0.0	1.0	31.7	22.7	−42.5	48.3	298	0.467	0.0	1.0	0.111	0.0	1.0	31.7	22.9	−42.5	48.3	298	0.467	0.0	1.0	
323	299	299	0.483	0.0	1.0	36.8	42.5	−31.4	52.9	323	0.122	0.0	1.0	31.6	23.5	−42.2	48.4	299	0.483	0.0	1.0	0.125	0.0	1.0	31.6	23.6	−42.1	48.4	299	0.483	0.0	1.0	
324	300	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324	0.136	0.0	1.0	31.6	24.3	−41.9	48.5	300	0.5	0.0	1.0	0.139	0.0	1.0	31.5	24.4	−41.9	48.6	300	0.5	0.0	1.0	



Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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*
324	300	300	0.5 0.0 1.0	37.2 43.1 −30.8 53.0 324	0.136 0.0 1.0	31.6 24.3 −41.9 48.5 300	0.5 0.0 1.0	0.139 0.0 1.0	31.5 24.4 −41.9 48.6 300	0.5 0.0 1.0
325	301	301	0.516 0.0 1.0	37.4 43.8 −30.4 53.4 325	0.151 0.0 1.0	31.5 25.1 −41.6 48.7 301	0.517 0.0 1.0	0.153 0.0 1.0	31.5 25.2 −41.6 48.7 301	0.517 0.0 1.0
326	302	302	0.533 0.0 1.0	37.7 44.5 −29.9 53.7 326	0.165 0.0 1.0	31.4 25.9 −41.3 48.9 302	0.533 0.0 1.0	0.166 0.0 1.0	31.4 26.0 −41.3 48.9 302	0.533 0.0 1.0
326	303	303	0.55 0.0 1.0	37.9 45.3 −29.5 54.0 326	0.18 0.0 1.0	31.4 26.7 −41.0 49.0 303	0.55 0.0 1.0	0.18 0.0 1.0	31.4 26.7 −41.0 49.0 303	0.55 0.0 1.0
327	304	303	0.566 0.0 1.0	38.2 46.0 −29.0 54.4 327	0.194 0.0 1.0	31.3 27.5 −40.7 49.2 304	0.567 0.0 1.0	0.194 0.0 1.0	31.3 27.5 −40.7 49.2 303	0.567 0.0 1.0
328	305	304	0.583 0.0 1.0	38.4 46.7 −28.5 54.7 328	0.209 0.0 1.0	31.2 28.3 −40.3 49.4 305	0.583 0.0 1.0	0.208 0.0 1.0	31.2 28.3 −40.4 49.4 304	0.583 0.0 1.0
329	306	305	0.6 0.0 1.0	38.7 47.4 −28.0 55.1 329	0.224 0.0 1.0	31.1 29.1 −40.0 49.5 306	0.6 0.0 1.0	0.222 0.0 1.0	31.2 29.0 −40.0 49.5 305	0.6 0.0 1.0
330	307	306	0.616 0.0 1.0	38.9 48.1 −27.5 55.4 330	0.238 0.0 1.0	31.1 29.9 −39.6 49.7 307	0.617 0.0 1.0	0.235 0.0 1.0	31.1 29.8 −39.7 49.7 306	0.617 0.0 1.0
331	308	307	0.633 0.0 1.0	39.2 48.9 −26.9 55.8 331	0.252 0.0 1.0	31.1 30.7 −39.2 49.9 308	0.633 0.0 1.0	0.249 0.0 1.0	31.0 30.5 −39.3 49.8 307	0.633 0.0 1.0
332	309	308	0.65 0.0 1.0	39.6 49.8 −26.2 56.3 332	0.265 0.0 1.0	31.4 31.5 −38.8 50.1 309	0.65 0.0 1.0	0.261 0.0 1.0	31.3 31.3 −39.0 50.0 308	0.65 0.0 1.0
333	310	309	0.666 0.0 1.0	40.0 50.7 −25.4 56.8 333	0.278 0.0 1.0	31.8 32.3 −38.4 50.3 310	0.667 0.0 1.0	0.274 0.0 1.0	31.6 32.1 −38.6 50.2 309	0.667 0.0 1.0
334	311	310	0.683 0.0 1.0	40.4 51.6 −24.7 57.2 334	0.291 0.0 1.0	32.1 33.1 −38.0 50.5 311	0.683 0.0 1.0	0.286 0.0 1.0	32.0 32.8 −38.2 50.4 310	0.683 0.0 1.0
335	312	311	0.7 0.0 1.0	40.7 52.5 −23.9 57.7 335	0.304 0.0 1.0	32.4 33.9 −37.6 50.7 312	0.7 0.0 1.0	0.298 0.0 1.0	32.3 33.6 −37.8 50.6 311	0.7 0.0 1.0
336	313	312	0.716 0.0 1.0	41.1 53.4 −23.1 58.2 336	0.317 0.0 1.0	32.8 34.7 −37.2 50.9 313	0.717 0.0 1.0	0.31 0.0 1.0	32.6 34.3 −37.4 50.8 312	0.717 0.0 1.0
337	314	313	0.733 0.0 1.0	41.5 54.3 −22.3 58.7 337	0.33 0.0 1.0	33.1 35.5 −36.7 51.1 314	0.733 0.0 1.0	0.323 0.0 1.0	32.9 35.1 −37.0 51.0 313	0.733 0.0 1.0
338	315	314	0.75 0.0 1.0	41.8 55.1 −21.4 59.1 338	0.343 0.0 1.0	33.4 36.3 −36.2 51.4 315	0.75 0.0 1.0	0.335 0.0 1.0	33.2 35.8 −36.5 51.2 314	0.75 0.0 1.0
339	316	315	0.766 0.0 1.0	42.4 55.8 −20.9 59.6 339	0.356 0.0 1.0	33.8 37.1 −35.7 51.6 316	0.767 0.0 1.0	0.347 0.0 1.0	33.5 36.6 −36.0 51.4 315	0.767 0.0 1.0
340	317	316	0.783 0.0 1.0	42.9 56.5 −20.4 60.1 340	0.368 0.0 1.0	34.1 37.9 −35.2 51.8 317	0.783 0.0 1.0	0.359 0.0 1.0	33.9 37.3 −35.6 51.6 316	0.783 0.0 1.0
340	318	317	0.8 0.0 1.0	43.4 57.2 −19.8 60.5 340	0.384 0.0 1.0	34.5 38.6 −34.7 52.0 318	0.8 0.0 1.0	0.371 0.0 1.0	34.2 38.0 −35.1 51.8 317	0.8 0.0 1.0
341	319	318	0.816 0.0 1.0	43.9 57.8 −19.3 61.0 341	0.402 0.0 1.0	34.9 39.3 −34.1 52.1 319	0.817 0.0 1.0	0.387 0.0 1.0	34.6 38.8 −34.6 52.0 318	0.817 0.0 1.0
342	320	319	0.833 0.0 1.0	44.4 58.5 −18.7 61.4 342	0.42 0.0 1.0	35.3 40.1 −33.5 52.3 320	0.833 0.0 1.0	0.404 0.0 1.0	35.0 39.4 −34.0 52.2 319	0.833 0.0 1.0
342	321	320	0.85 0.0 1.0	44.9 59.1 −18.2 61.9 342	0.438 0.0 1.0	35.8 40.8 −32.9 52.5 321	0.85 0.0 1.0	0.421 0.0 1.0	35.4 40.1 −33.5 52.3 320	0.85 0.0 1.0
343	322	321	0.866 0.0 1.0	45.4 59.8 −17.6 62.3 343	0.456 0.0 1.0	36.2 41.5 −32.3 52.7 322	0.867 0.0 1.0	0.439 0.0 1.0	35.8 40.8 −32.9 52.5 321	0.867 0.0 1.0
344	323	321	0.883 0.0 1.0	45.8 60.5 −17.0 62.8 344	0.474 0.0 1.0	36.6 42.2 −31.7 52.8 323	0.883 0.0 1.0	0.456 0.0 1.0	36.2 41.5 −32.3 52.6 321	0.883 0.0 1.0
344	324	322	0.9 0.0 1.0	46.1 61.2 −16.4 63.4 344	0.492 0.0 1.0	37.1 42.9 −31.1 53.0 324	0.9 0.0 1.0	0.473 0.0 1.0	36.6 42.1 −31.7 52.8 322	0.9 0.0 1.0
345	325	323	0.916 0.0 1.0	46.5 61.9 −15.9 63.9 345	0.512 0.0 1.0	37.4 43.7 −30.5 53.3 325	0.917 0.0 1.0	0.49 0.0 1.0	37.0 42.8 −31.1 53.0 323	0.917 0.0 1.0
346	326	324	0.933 0.0 1.0	46.8 62.6 −15.3 64.5 346	0.532 0.0 1.0	37.7 44.5 −29.9 53.7 326	0.933 0.0 1.0	0.508 0.0 1.0	37.4 43.5 −30.6 53.2 324	0.933 0.0 1.0
346	327	325	0.95 0.0 1.0	47.1 63.3 −14.6 65.0 346	0.552 0.0 1.0	38.0 45.4 −29.4 54.1 327	0.95 0.0 1.0	0.527 0.0 1.0	37.6 44.3 −30.1 53.6 325	0.95 0.0 1.0
347	328	326	0.966 0.0 1.0	47.5 64.0 −14.0 65.5 347	0.572 0.0 1.0	38.3 46.2 −28.8 54.5 328	0.967 0.0 1.0	0.546 0.0 1.0	37.9 45.1 −29.5 54.0 326	0.967 0.0 1.0
348	329	327	0.983 0.0 1.0	47.8 64.7 −13.4 66.1 348	0.592 0.0 1.0	38.6 47.1 −28.2 54.9 329	0.983 0.0 1.0	0.565 0.0 1.0	38.2 46.0 −29.0 54.4 327	0.983 0.0 1.0
348	330	328	1.0 0.0 1.0	48.1 65.4 −12.7 66.6 348	M_d 0.612 0.0 1.0	38.9 47.9 −27.6 55.4 330	M_s 1.0 0.0 1.0	0.584 0.0 1.0	38.5 46.8 −28.4 54.8 328	M_e 1.0 0.0 1.0
349	331	329	1.0 0.0 0.983	48.3 65.5 −12.5 66.7 349	0.631 0.0 1.0	39.2 48.8 −26.9 55.8 331	1.0 0.0 0.983	0.603 0.0 1.0	38.8 47.6 −27.9 55.2 329	1.0 0.0 0.983
349	332	330	1.0 0.0 0.966	48.5 65.6 −12.2 66.7 349	0.646 0.0 1.0	39.6 49.6 −26.3 56.2 332	1.0 0.0 0.967	0.623 0.0 1.0	39.1 48.4 −27.3 55.6 330	1.0 0.0 0.967
349	333	331	1.0 0.0 0.95	48.7 65.7 −11.9 66.8 349	0.662 0.0 1.0	39.9 50.5 −25.6 56.7 333	1.0 0.0 0.95	0.638 0.0 1.0	39.4 49.2 −26.7 56.0 331	1.0 0.0 0.95
349	334	332	1.0 0.0 0.933	48.9 65.8 −11.7 66.8 349	0.677 0.0 1.0	40.3 51.3 −24.9 57.1 334	1.0 0.0 0.933	0.652 0.0 1.0	39.7 50.0 −26.0 56.4 332	1.0 0.0 0.933
350	335	333	1.0 0.0 0.916	49.0 65.9 −11.4 66.9 350	0.692 0.0 1.0	40.6 52.1 −24.2 57.5 335	1.0 0.0 0.917	0.667 0.0 1.0	40.0 50.8 −25.4 56.8 333	1.0 0.0 0.917
350	336	334	1.0 0.0 0.9	49.2 66.0 −11.1 66.9 350	0.708 0.0 1.0	41.0 53.0 −23.5 58.0 336	1.0 0.0 0.9	0.681 0.0 1.0	40.4 51.6 −24.7 57.2 334	1.0 0.0 0.9
350	337	335	1.0 0.0 0.883	49.4 66.1 −10.9 67.0 350	0.723 0.0 1.0	41.3 53.8 −22.7 58.4 337	1.0 0.0 0.883	0.696 0.0 1.0	40.7 52.3 −24.0 57.6 335	1.0 0.0 0.883
350	338	336	1.0 0.0 0.866	49.5 66.0 −10.4 66.9 350	0.738 0.0 1.0	41.6 54.6 −22.0 58.9 338	1.0 0.0 0.867	0.711 0.0 1.0	41.0 53.1 −23.3 58.1 336	1.0 0.0 0.867
351	339	337	1.0 0.0 0.85	49.4 65.8 −9.9 66.6 351	0.756 0.0 1.0	42.1 55.4 −21.2 59.4 339	1.0 0.0 0.85	0.725 0.0 1.0	41.3 53.9 −22.6 58.5 337	1.0 0.0 0.85
351	340	338	1.0 0.0 0.833	49.4 65.6 −9.3 66.3 351	0.78 0.0 1.0	42.8 56.4 −20.4 60.0 340	1.0 0.0 0.833	0.74 0.0 1.0	41.7 54.6 −21.9 58.9 338	1.0 0.0 0.833
352	341	339	1.0 0.0 0.816	49.4 65.4 −8.7 66.0 352	0.804 0.0 1.0	43.5 57.4 −19.7 60.7 341	1.0 0.0 0.817	0.757 0.0 1.0	42.1 55.5 −21.1 59.4 339	1.0 0.0 0.817
352	342	339	1.0 0.0 0.8	49.4 65.2 −8.2 65.7 352	0.828 0.0 1.0	44.3 58.3 −18.9 61.3 342	1.0 0.0 0.8	0.78 0.0 1.0	42.8 56.4 −20.4 60.0 339	1.0 0.0 0.8
353	343	340	1.0 0.0 0.783	49.3 65.0 −7.6 65.4 353	0.852 0.0 1.0	45.0 59.3 −18.0 62.0 343	1.0 0.0 0.783	0.802 0.0 1.0	43.5 57.3 −19.7 60.6 340	1.0 0.0 0.783
353	344	341	1.0 0.0 0.766	49.3 64.7 −7.1 65.1 353	0.877 0.0 1.0	45.7 60.2 −17.2 62.7 344	1.0 0.0 0.767	0.825 0.0 1.0	44.2 58.2 −19.0 61.3 341	1.0 0.0 0.767
354	345	342	1.0 0.0 0.75	49.3 64.5 −6.5 64.8 354	0.902 0.0 1.0	46.2 61.3 −16.3 63.5 345	1.0 0.0 0.75	0.848 0.0 1.0	44.9 59.1 −18.2 61.9 342	1.0 0.0 0.75

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



Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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
354	345	342	1.0	0.0	0.75	49.3	64.5	−6.5	64.8	354	0.902	0.0	1.0	46.2	61.3	−16.3	63.5	345	1.0	0.0	0.75	0.848	0.0	1.0	44.9	59.1	−18.2	61.9	342	1.0	0.0	0.75	
355	346	343	1.0	0.0	0.733	49.1	64.2	−5.3	64.4	355	0.926	0.0	1.0	46.7	62.4	−15.5	64.3	346	1.0	0.0	0.733	0.871	0.0	1.0	45.6	60.0	−17.4	62.5	343	1.0	0.0	0.733	
356	347	344	1.0	0.0	0.716	48.9	63.9	−4.1	64.0	356	0.951	0.0	1.0	47.2	63.4	−14.5	65.1	347	1.0	0.0	0.717	0.895	0.0	1.0	46.1	61.0	−16.6	63.2	344	1.0	0.0	0.717	
357	348	345	1.0	0.0	0.7	48.7	63.5	−2.9	63.6	357	0.976	0.0	1.0	47.7	64.5	−13.6	65.9	348	1.0	0.0	0.7	0.918	0.0	1.0	46.5	62.0	−15.7	64.0	345	1.0	0.0	0.7	
358	349	346	1.0	0.0	0.683	48.6	63.2	−1.8	63.2	358	1.0	0.0	0.996	48.2	65.4	−12.6	66.7	349	1.0	0.0	0.683	0.942	0.0	1.0	47.0	63.0	−14.9	64.8	346	1.0	0.0	0.683	
359	350	347	1.0	0.0	0.666	48.4	62.8	−0.6	62.8	359	1.0	0.0	0.927	49.0	65.9	−11.5	66.9	350	1.0	0.0	0.667	0.966	0.0	1.0	47.5	64.0	−14.0	65.5	347	1.0	0.0	0.667	
360	351	348	1.0	0.0	0.65	48.2	62.4	0.4	62.4	360	1.0	0.0	0.866	49.5	66.1	−10.4	66.9	351	1.0	0.0	0.65	0.989	0.0	1.0	48.0	65.0	−13.1	66.3	348	1.0	0.0	0.65	
361	352	349	1.0	0.0	0.633	48.0	62.0	1.5	62.0	361	1.0	0.0	0.83	49.5	65.6	−9.1	66.3	352	1.0	0.0	0.633	1.0	0.0	0.964	48.6	65.6	−12.1	66.8	349	1.0	0.0	0.633	
362	353	350	1.0	0.0	0.616	47.9	61.6	2.7	61.7	362	1.0	0.0	0.794	49.4	65.2	−7.9	65.6	353	1.0	0.0	0.617	1.0	0.0	0.899	49.3	66.0	−11.1	67.0	350	1.0	0.0	0.617	
363	354	351	1.0	0.0	0.6	47.9	61.3	3.8	61.4	363	1.0	0.0	0.757	49.3	64.7	−6.7	65.0	354	1.0	0.0	0.6	1.0	0.0	0.853	49.5	65.9	−9.9	66.7	351	1.0	0.0	0.6	
364	355	352	1.0	0.0	0.583	47.9	60.9	4.9	61.1	364	1.0	0.0	0.737	49.2	64.3	−5.5	64.6	355	1.0	0.0	0.583	1.0	0.0	0.819	49.4	65.5	−8.7	66.1	352	1.0	0.0	0.583	
365	356	353	1.0	0.0	0.566	47.9	60.6	6.0	60.9	365	1.0	0.0	0.721	49.0	64.0	−4.4	64.2	356	1.0	0.0	0.567	1.0	0.0	0.785	49.4	65.0	−7.6	65.5	353	1.0	0.0	0.567	
366	357	354	1.0	0.0	0.55	47.8	60.2	7.1	60.6	366	1.0	0.0	0.705	48.9	63.7	−3.2	63.8	357	1.0	0.0	0.55	1.0	0.0	0.75	49.3	64.6	−6.5	64.9	354	1.0	0.0	0.55	
367	358	355	1.0	0.0	0.533	47.8	59.8	8.2	60.4	367	1.0	0.0	0.689	48.7	63.4	−2.1	63.4	358	1.0	0.0	0.533	1.0	0.0	0.735	49.2	64.3	−5.4	64.5	355	1.0	0.0	0.533	
368	359	356	1.0	0.0	0.516	47.8	59.4	9.3	60.1	368	1.0	0.0	0.673	48.5	63.0	−1.0	63.0	359	1.0	0.0	0.517	1.0	0.0	0.72	49.0	64.0	−4.3	64.1	356	1.0	0.0	0.517	
370	360	352	1.0	0.0	0.5	47.8	58.9	10.4	59.9	370	1.0	0.0	0.657	48.3	62.6	0.0	62.6	360	1.0	0.0	0.5	1.0	0.0	0.828	49.5	65.6	−9.0	66.2	352	1.0	0.0	0.5	
371	361	353	1.0	0.0	0.483	47.7	58.7	11.6	59.9	371	1.0	0.0	0.641	48.2	62.2	1.1	62.2	361	1.0	0.0	0.483	1.0	0.0	0.787	49.4	65.1	−7.7	65.5	353	1.0	0.0	0.483	
372	362	354	1.0	0.0	0.466	47.7	58.5	12.8	59.9	372	1.0	0.0	0.625	48.0	61.8	2.2	61.8	362	1.0	0.0	0.467	1.0	0.0	0.749	49.3	64.5	−6.4	64.8	354	1.0	0.0	0.467	
373	363	355	1.0	0.0	0.45	47.6	58.3	14.0	59.9	373	1.0	0.0	0.609	48.0	61.5	3.2	61.6	363	1.0	0.0	0.45	1.0	0.0	0.731	49.1	64.2	−5.1	64.4	355	1.0	0.0	0.45	
374	364	356	1.0	0.0	0.433	47.5	58.0	15.2	60.0	374	1.0	0.0	0.594	48.0	61.2	4.3	61.4	364	1.0	0.0	0.433	1.0	0.0	0.713	48.9	63.9	−3.8	64.0	356	1.0	0.0	0.433	
375	365	357	1.0	0.0	0.416	47.5	57.7	16.5	60.0	375	1.0	0.0	0.578	47.9	60.9	5.3	61.1	365	1.0	0.0	0.417	1.0	0.0	0.695	48.7	63.5	−2.5	63.5	357	1.0	0.0	0.417	
377	366	358	1.0	0.0	0.4	47.4	57.3	17.7	60.0	377	1.0	0.0	0.562	47.9	60.5	6.4	60.9	366	1.0	0.0	0.4	1.0	0.0	0.677	48.6	63.1	−1.3	63.1	358	1.0	0.0	0.4	
378	367	359	1.0	0.0	0.383	47.4	57.0	18.9	60.0	378	1.0	0.0	0.547	47.9	60.2	7.4	60.6	367	1.0	0.0	0.383	1.0	0.0	0.659	48.4	62.7	−0.1	62.7	359	1.0	0.0	0.383	
379	368	360	1.0	0.0	0.366	47.4	56.8	20.0	60.2	379	1.0	0.0	0.531	47.9	59.8	8.4	60.4	368	1.0	0.0	0.367	1.0	0.0	0.641	48.2	62.2	1.1	62.2	360	1.0	0.0	0.367	
380	369	362	1.0	0.0	0.35	47.4	56.7	21.1	60.5	380	1.0	0.0	0.516	47.8	59.4	9.4	60.2	369	1.0	0.0	0.35	1.0	0.0	0.624	48.0	61.8	2.3	61.8	362	1.0	0.0	0.35	
381	370	363	1.0	0.0	0.333	47.4	56.6	22.1	60.8	381	1.0	0.0	0.5	47.8	59.0	10.4	59.9	370	1.0	0.0	0.333	1.0	0.0	0.606	48.0	61.5	3.4	61.5	363	1.0	0.0	0.333	
382	371	364	1.0	0.0	0.316	47.4	56.5	23.2	61.1	382	1.0	0.0	0.486	47.8	58.8	11.4	59.9	371	1.0	0.0	0.317	1.0	0.0	0.589	47.9	61.1	4.6	61.3	364	1.0	0.0	0.317	
383	372	365	1.0	0.0	0.3	47.5	56.4	24.3	61.4	383	1.0	0.0	0.472	47.7	58.6	12.5	60.0	372	1.0	0.0	0.3	1.0	0.0	0.571	47.9	60.7	5.8	61.0	365	1.0	0.0	0.3	
384	373	366	1.0	0.0	0.283	47.5	56.2	25.4	61.7	384	1.0	0.0	0.458	47.7	58.4	13.5	60.0	373	1.0	0.0	0.283	1.0	0.0	0.554	47.9	60.3	6.9	60.7	366	1.0	0.0	0.283	
385	374	367	1.0	0.0	0.266	47.5	56.1	26.5	62.0	385	1.0	0.0	0.444	47.6	58.2	14.5	60.0	374	1.0	0.0	0.267	1.0	0.0	0.537	47.9	59.9	8.1	60.5	367	1.0	0.0	0.267	
386	375	368	1.0	0.0	0.25	47.5	55.9	27.5	62.3	386	1.0	0.0	0.43	47.6	58.0	15.5	60.0	375	1.0	0.0	0.25	1.0	0.0	0.519	47.8	59.5	9.2	60.2	368	1.0	0.0	0.25	
386	376	369	1.0	0.0	0.233	47.5	56.0	28.4	62.8	386	1.0	0.0	0.416	47.5	57.7	16.5	60.0	376	1.0	0.0	0.233	1.0	0.0	0.502	47.8	59.1	10.3	59.9	369	1.0	0.0	0.233	
387	377	370	1.0	0.0	0.216	47.6	56.1	29.3	63.3	387	1.0	0.0	0.402	47.5	57.4	17.6	60.1	377	1.0	0.0	0.217	1.0	0.0	0.486	47.8	58.8	11.4	59.9	370	1.0	0.0	0.217	
388	378	372	1.0	0.0	0.2	47.6	56.1	30.2	63.8	388	1.0	0.0	0.388	47.5	57.1	18.6	60.1	378	1.0	0.0	0.2	1.0	0.0	0.471	47.7	58.6	12.6	60.0	372	1.0	0.0	0.2	
388	379	373	1.0	0.0	0.183	47.6	56.2	31.1	64.2	388	1.0	0.0	0.374	47.4	56.8	19.6	60.1	379	1.0	0.0	0.183	1.0	0.0	0.455	47.7	58.4	13.7	60.0	373	1.0	0.0	0.183	
389	380	374	1.0	0.0	0.166	47.6	56.3	32.0	64.7	389	1.0	0.0	0.357	47.4	56.8	20.7	60.4	380	1.0	0.0	0.167	1.0	0.0	0.439	47.6	58.1	14.9	60.0	374	1.0	0.0	0.167	
390	381	375	1.0	0.0	0.15	47.6	56.3	32.9	65.2	390	1.0	0.0	0.34	47.5	56.7	21.8	60.7	381	1.0	0.0	0.15	1.0	0.0	0.424	47.6	57.9	16.0	60.0	375	1.0	0.0	0.15	
390	382	376	1.0	0.0	0.133	47.6	56.3	33.8	65.7	390	1.0	0.0	0.323	47.5	56.6	22.9	61.0	382	1.0	0.0	0.133	1.0	0.0	0.408	47.5	57.6	17.1	60.0	376	1.0	0.0	0.133	
391	383	377	1.0	0.0	0.116	47.6	56.4	34.5	66.1	391	1.0	0.0	0.306	47.5	56.5	24.0	61.4	383	1.0	0.0	0.117	1.0	0.0	0.393	47.5	57.2	18.2	60.1	377	1.0	0.0	0.117	
391	384	378	1.0	0.0	0.1	47.6	56.5	34.9	66.5	391	1.0	0.0	0.289	47.5	56.3	25.1	61.7	384	1.0	0.0	0.1	1.0	0.0	0.377	47.4	56.9	19.4	60.1	378	1.0	0.0	0.1	
392	385	379	1.0	0.0	0.083	47.6	56.6	35.4	66.8	392	1.0	0.0	0.272	47.6	56.2	26.2	62.0	385	1.0	0.0	0.083	1.0	0.0	0.358	47.4	56.8	20.6	60.4	379	1.0	0.0	0.083	
392	386	381	1.0	0.0	0.066	47.6	56.7	35.9	67.2	392	1.0	0.0	0.255	47.6	56.0	27.3	62.3	386	1.0	0.0	0.067	1.0	0.0	0.339	47.5	56.7	21.8	60.7	381	1.0	0.0	0.067	
392	387	382	1.0	0.0	0.049	47.6	56.9	36.4	67.5	392	1.0	0.0	0.232	47.6	56.0	28.5	62.9	387	1.0	0.0	0.05	1.0	0.0	0.32	47.5	56.6	23.0	61.1	382	1.0	0.0	0.05	
392	388	383	1.0	0.0	0.033	47.6	57.0	36.8	67.9	392	1.0	0.0	0.207	47.6	56.2	29.9	63.6	388	1.0	0.0	0.033	1.0	0.0	0.301	47.5	56.4	24.2	61.4	383	1.0	0.0	0.033	
393	389	384	1.0	0.0	0.016	47.6	57.1	37.3	68.2	393	1.0	0.0	0.182	47.6	56.3	31.2	64.3	389	1.0	0.0	0.017	1.0	0.0	0.282	47.5	56.3	25.5	61.8	384	1.0	0.0	0.017	
393	390	385	1.0	0.0	0.0	47.5	57.2	37.8	68.6	393 R_d	1.0	0.0	0.158	47.7	56.3	32.5	65.0	390 R_s	1.0	0.0	0.0	1.0	0.0	0.263	47.6	56.1	26.7	62.1	385 R_e	1.0	0.0	0.0	

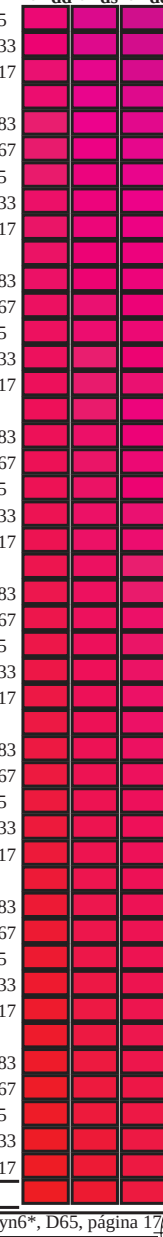


gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
círculo de tono, 48 pasos; *rgb−LabCh**mesas

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

n/j	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$					*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
0/648	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
1/657	R13Y_100_100$_{dd}$	1.0	0.125	0.0	1.0	1.0	0.5	37	1.0	0.116	0.0	51.6	54.5	48.4	72.9	41.6	0.0	0.873	0.974	0.005	36	1.0	0.116	0.0	51.6	54.5	48.4	72.9	41.6
2/666	R25Y_100_100$_{dd}$	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4	0.0	0.767	1.0	0.0	42	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4
3/675	R38Y_100_100$_{dd}$	1.0	0.375	0.0	1.0	1.0	0.5	52	1.0	0.366	0.0	64.2	30.6	60.1	67.5	63.0	0.0	0.632	0.999	0.0	51	1.0	0.366	0.0	64.2	30.6	60.1	67.5	63.0
4/684	R50Y_100_100$_{dd}$	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8	0.0	0.5	1.0	0.0	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
5/693	R63Y_100_100$_{dd}$	1.0	0.625	0.0	1.0	1.0	0.5	68	1.0	0.633	0.0	75.4	10.6	71.2	72.0	81.5	0.0	0.367	1.0	0.0	68	1.0	0.633	0.0	75.4	10.6	71.2	72.0	81.5
6/702	R75Y_100_100$_{dd}$	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92.2	0.0	0.233	0.999	0.001	77	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92.2
7/711	R88Y_100_100$_{dd}$	1.0	0.875	0.0	1.0	1.0	0.5	83	1.0	0.883	0.0	87.8	−9.4	76.3	76.9	97.0	0.0	0.117	0.999	0.0	83	1.0	0.883	0.0	87.8	−9.4	76.3	76.9	97.0
8/720	Y00G_100_100$_{dd}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5	0.0	0.0	1.0	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
9/639	Y13G_100_100$_{dd}$	0.875	1.0	0.0	1.0	1.0	0.5	97	0.883	1.0	0.0	92.7	−18.0	89.1	90.9	101.4	0.116	0.0	1.0	0.0	96	0.883	1.0	0.0	92.7	−18.0	89.1	90.9	101.4
10/558	Y25G_100_100$_{dd}$	0.75	1.0	0.0	1.0	1.0	0.5	104	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103.6	0.234	0.0	1.0	0.0	102	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103.6
11/477	Y38G_100_100$_{dd}$	0.625	1.0	0.0	1.0	1.0	0.5	112	0.633	1.0	0.0	80.5	−31.2	69.2	75.9	114.2	0.367	0.0	1.0	0.0	111	0.633	1.0	0.0	80.5	−31.2	69.2	75.9	114.2
12/396	Y50G_100_100$_{dd}$	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3	0.5	0.0	1.0	0.0	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
13/315	Y63G_100_100$_{dd}$	0.375	1.0	0.0	1.0	1.0	0.5	128	0.366	1.0	0.0	66.1	−48.2	47.5	67.7	135.3	0.632	0.0	1.0	0.0	128	0.366	1.0	0.0	66.1	−48.2	47.5	67.7	135.3
14/234	Y75G_100_100$_{dd}$	0.25	1.0	0.0	1.0	1.0	0.5	136	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145.5	0.763	0.0	1.0	0.0	137	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145.5
15/153	Y88G_100_100$_{dd}$	0.125	1.0	0.0	1.0	1.0	0.5	143	0.116	1.0	0.0	56.8	−62.5	34.1	71.3	151.3	0.881	0.0	0.999	0.0	143	0.116	1.0	0.0	56.8	−62.5	34.1	71.3	151.3
16/72	G00C_100_100$_{dd}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5	1.0	0.0	1.0	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
17/73	G13C_100_100$_{dd}$	0.0	1.0	0.125	1.0	1.0	0.5	157	0.0	1.0	0.116	53.8	−66.5	23.5	70.5	160.5	1.0	0.0	0.884	0.0	156	0.0	1.0	0.116	53.8	−66.5	23.5	70.5	160.5
18/74	G25C_100_100$_{dd}$	0.0	1.0	0.25	1.0	1.0	0.5	164	0.0	1.0	0.233	53.7	−63.6	14.1	65.2	167.4	0.947	0.0	0.713	0.125	162	0.0	1.0	0.233	53.7	−63.6	14.1	65.2	167.4
19/75	G38C_100_100$_{dd}$	0.0	1.0	0.375	1.0	1.0	0.5	172	0.0	1.0	0.366	54.7	−57.3	0.8	57.3	179.1	1.0	0.0	0.632	0.0	171	0.0	1.0	0.366	54.7	−57.3	0.8	57.3	179.1
20/76	G50C_100_100$_{dd}$	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8	1.0	0.0	0.5	0.0	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
21/77	G63C_100_100$_{dd}$	0.0	1.0	0.625	1.0	1.0	0.5	188	0.0	1.0	0.633	55.3	−43.8	−20.5	48.4	205.1	1.0	0.0	0.364	0.0	188	0.0	1.0	0.633	55.3	−43.8	−20.5	48.4	205.1
22/78	G75C_100_100$_{dd}$	0.0	1.0	0.75	1.0	1.0	0.5	196	0.0	1.0	0.766	55.1	−39.2	−27.9	48.1	215.4	1.0	0.0	0.229	0.0	197	0.0	1.0	0.766	55.1	−39.2	−27.9	48.1	215.4
23/79	G88C_100_100$_{dd}$	0.0	1.0	0.875	1.0	1.0	0.5	203	0.0	1.0	0.883	54.3	−36.4	−33.7	49.6	222.8	0.999	0.0	0.123	0.001	203	0.0	1.0	0.883	54.3	−36.4	−33.7	49.6	222.8
24/80	C00B_100_100$_{dd}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1	0.999	0.0	0.0	0.0	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
25/71	C13B_100_100$_{dd}$	0.0	0.875	1.0	1.0	1.0	0.5	217	0.0	0.883	1.0	53.1	−28.1	−44.6	52.7	237.7	0.986	0.155	0.0	0.052	216	0.0	0.883	1.0	53.1	−28.1	−44.6	52.7	237.7
26/62	C25B_100_100$_{dd}$	0.0	0.75	1.0	1.0	1.0	0.5	224	0.0	0.766	1.0	52.9	−26.2	−47.2	53.9	240.9	0.997	0.243	0.0	0.009	222	0.0	0.766	1.0	52.9	−26.2	−47.2	53.9	240.9
27/53	C38B_100_100$_{dd}$	0.0	0.625	1.0	1.0	1.0	0.5	232	0.0	0.633	1.0	50.7	−21.1	−49.4	53.7	246.8	1.0	0.367	0.0	0.0	231	0.0	0.633	1.0	50.7	−21.1	−49.4	53.7	246.8
28/44	C50B_100_100$_{dd}$	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9	1.0	0.5	0.0	0.0	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
29/35	C63B_100_100$_{dd}$	0.0	0.375	1.0	1.0	1.0	0.5	248	0.0	0.366	1.0	41.1	−5.7	−49.2	49.6	263.3	0.999	0.63	0.0	0.0	248	0.0	0.366	1.0	41.1	−5.7	−49.2	49.6	263.3
30/26	C75B_100_100$_{dd}$	0.0	0.25	1.0	1.0	1.0	0.5	256	0.0	0.233	1.0	36.6	3.2	−48.3	48.4	273.8	0.978	0.699	0.0	0.125	257	0.0	0.233	1.0	36.6	3.2	−48.3	48.4	273.8
31/17	C88B_100_100$_{dd}$	0.0	0.125	1.0	1.0	1.0	0.5	263	0.0	0.116	1.0	34.9	9.9	−46.3	47.3	282.0	0.964	0.805	0.0	0.125	263	0.0	0.116	1.0	34.9	9.9	−46.3	47.3	282.0
32/8	B00M_100_100$_{dd}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8	1.0	1.0	0.0	0.0	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
33/89	B13M_100_100$_{dd}$	0.125	0.0	1.0	1.0	1.0	0.5	277	0.116	0.0	1.0	31.6	23.1	−42.4	48.3	298.6	0.882	1.0	0.0	0.0	276	0.116	0.0	1.0	31.6	23.1	−42.4	48.3	298.6
34/170	B25M_100_100$_{dd}$	0.25	0.0	1.0	1.0	1.0	0.5	284	0.233	0.0	1.0	31.1	29.6	−39.8	49.6	306.6	0.763	0.998	0.0	0.0	282	0.233	0.0	1.0	31.1	29.6	−39.8	49.6	306.6
35/251	B38M_100_100$_{dd}$	0.375	0.0	1.0	1.0	1.0	0.5	292	0.366	0.0	1.0	34.0	37.7	−35.3	51.7	316.8	0.631	1.0	0.0	0.0	291	0.366	0.0	1.0	34.0	37.7	−35.3	51.7	316.8
36/332	B50M_100_100$_{dd}$	0.5	0.0	1.0	1.0	1.0	0.5	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4	0.498	0.999	0.0	0.0	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
37/413	B63M_100_100$_{dd}$	0.625	0.0	1.0	1.0	1.0	0.5	308	0.633	0.0	1.0	39.2	48.9	−26.9	55.8	331.1	0.367	1.0	0.0	0.0	308	0.633	0.0	1.0	39.2	48.9	−26.9	55.8	331.1
38/494	B75M_100_100$_{dd}$	0.75	0.0	1.0	1.0	1.0	0.5	316	0.766	0.0	1.0	42.4	55.8	−20.9	59.6	339.4	0.234	0.999	0.0	0.0	317	0.766	0.0	1.0	42.4	55.8	−20.9	59.6	339.4
39/575	B88M_100_100$_{dd}$	0.875	0.0	1.0	1.0	1.0	0.5	323	0.883	0.0	1.0	45.8	60.5	−17.0	62.8	344.2	0.116	0.999	0.0	0.0	323	0.883	0.0	1.0	45.8	60.5	−17.0	62.8	344.2
40/656	M00R_100_100$_{dd}$	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9	0.0	1.0	0.0	0.0	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
41/655	M13R_100_100$_{dd}$	1.0	0.0	0.875	1.0	1.0	0.5	337	1.0	0.0	0.883	49.4	66.1	−10.9	67.0	350.6	0.0	0.998	0.12	0.002	336	1.0	0.0	0.883	49.4	66.1	−10.9	67.0	350.6
42/654	M25R_100_100$_{dd}$	1.0	0.0	0.75	1.0	1.0	0.5	344	1.0	0.0	0.766	49.3	64.7	−7.1	65.1	353.7	0.0	0.99	0.235	0.004	342	1.0	0.0	0.766	49.3	64.7	−7.1	65.1	353.7
43/653	M38R_100_100$_{dd}$	1.0	0.0	0.625	1.0	1.0	0.5	352	1.0	0.0	0.633	48.0	62.0	1.5	62.0	1.4	0.0	0.987	0.367	0.007	351	1.0	0.0	0.633	48.0	62.0	1.5	62.0	1.4
44/652	M50R_100_100$_{dd}$	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0	0.0	1.0	0.5	0.0	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
45/651	M63R_100_100$_{dd}$	1.0	0.0	0.375	1.0	1.0	0.5	368	1.0	0.0	0.366	47.4	56.8	20.0	60.2	19.4	0.0	0.998	0.631	0.0	368	1.0	0.0	0.366	47.4	56.8	20.0	60.2	19.4
46/650	M75R_100_100$_{dd}$	1.0	0.0	0.25	1.0	1.0	0.5	376	1.0	0.0	0.233	47.5	56.0	28.4	62.8	26.9	0.0	1.0	0.766	0.0	377	1.0	0.0	0.233	47.5	56.0	28.4	62.8	26.9
47/649	M88R_100_100$_{dd}$	1.0	0.0	0.125	1.0	1.0	0.5	383	1.0	0.0	0.116	47.6	56.4	34.5	66.1	31.4	0.0	1.0	0.886	0.0	383	1.0	0.0	0.116	47.6	56.4	34.5	66.1	31.4
48/648	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
49/0	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
50/91	NW_013$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
51/182	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
52/273	NW_038$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
53/364	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
54/455	NW_063$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
55/546	NW_075$_{dd}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
56/637	NW_088$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
57/728	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

delta

n/j	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$					*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
0/648	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
1/666	R25Y_100_100$_{dd}$	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4	0.0	0.767	1.0	0.0	42	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4
2/684	R50Y_100_100$_{dd}$	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8	0.0	0.5	1.0	0.0	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
3/702	R75Y_100_100$_{dd}$	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92.2	0.0	0.233	0.999	0.001	77	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92.2
4/720	Y00G_100_100$_{dd}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5	0.0	0.0	1.0	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
5/558	Y25G_100_100$_{dd}$	0.75	1.0	0.0	1.0	1.0	0.5	104	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103.6	0.234	0.0	1.0	0.0	102	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103.6
6/396	Y50G_100_100$_{dd}$	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3	0.5	0.0	1.0	0.0	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
7/234	Y75G_100_100$_{dd}$	0.25	1.0	0.0	1.0	1.0	0.5	136	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145.5	0.763	0.0	1.0	0.0	137	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145.5
8/72	G00B_100_100$_{dd}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5	1.0	0.0	1.0	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
9/72	G00B_100_100$_{dd}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5	1.0	0.0	1.0	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
10/76	G25B_100_100$_{dd}$	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8	1.0	0.0	0.5	0.0	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
11/80	G50B_100_100$_{dd}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1	0.999	0.0	0.0	0.0	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
12/44	G75B_100_100$_{dd}$	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9	1.0	0.5	0.0	0.0	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
13/8	B00M_100_100$_{dd}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8	1.0	1.0	0.0	0.0	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
14/332	B25R_100_100$_{dd}$	0.5	0.0	1.0	1.0	1.0	0.5	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4	0.498	0.999	0.0	0.0	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
15/656	B50R_100_100$_{dd}$	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9	0.0	1.0	0.0	0.0	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
16/652	B75R_100_100$_{dd}$	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0	0.0	1.0	0.5	0.0	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
17/648	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
18/688	R00Y_100_050$_{dd}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	71.7	28.6	18.9	34.3	33.4	0.0	0.504	0.398	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
19/706	R50Y_100_050$_{dd}$	1.0	0.75	0.5	1.0	0.5	0.75	60	1.0	0.75	0.5	83.1	9.6	33.1	34.5	73.8	0.0	0.283	0.426	0.0	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
20/724	Y00G_100_050$_{dd}$	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	1.0	0.5	93.7	−7.9	42.3	43.0	100.5	0.0	0.012	0.457	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
21/562	Y50G_100_050$_{dd}$	0.75	1.0	0.5	1.0	0.5	0.75	120	0.75	1.0	0.5	83.4	−20.8	27.4	34.4	127.3	0.269	0.0	0.458	0.046	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
22/400	G00B_100_050$_{dd}$	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.5	75.0	−33.8	15.4	37.1	155.5	0.498	0.0	0.623	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
23/404	G50B_100_050$_{dd}$	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	1.0	74.4	−15.0	−21.5	26.2	235.1	0.374	0.013	0.0	0.158	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
24/368	B00R_100_050$_{dd}$	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.5	1.0	64.2	8.4	−22.3	23.8	290.8	0.316	0.347	0.0	0.157	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
25/692	B50R_100_050$_{dd}$	1.0	0.5	1.0	1.0	0.5	0.75	330	1.0	0.5	1.0	72.0	32.7	−6.3	33.3	348.9	0.0	0.478	0.108	0.022	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
26/688	R00Y_100_050$_{dd}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	71.7	28.6	18.9	34.3	33.4	0.0	0.504	0.398	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
27/506	R00Y_075_050$_{dd}$	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	53.7	28.6	18.9	34.3	33.4	0.0	0.632	0.514	0.234	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
28/524	R50Y_075_050$_{dd}$	0.75	0.5	0.25	0.75	0.5	0.5	60	0.75	0.5	0.25	65.1	9.6	33.1	34.5	73.8	0.0	0.359	0.616	0.236	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
29/542	Y00G_075_050$_{dd}$	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.75	0.25	75.7	−7.9	42.3	43.0	100.5	0.0	0.062	0.597	0.302	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
30/380	Y50G_075_050$_{dd}$	0.5	0.75	0.25	0.75	0.5	0.5	120	0.5	0.75	0.25	65.4	−20.8	27.4	34.4	127.3	0.301	0.0	0.609	0.334	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
31/218	G00B_075_050$_{dd}$	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.25	57.0	−33.8	15.4	37.1	155.5	0.586	0.0	0.642	0.285	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
32/222	G50B_075_050$_{dd}$	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.75	56.4	−15.0	−21.5	26.2	235.1	0.477	0.0	0.015	0.398	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
33/186	B00R_075_050$_{dd}$	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.25	0.75	46.2	8.4	−22.3	23.8	290.8	0.364	0.428	0.0	0.425	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
34/510	B50R_075_050$_{dd}$	0.75	0.25	0.75	0.75	0.5	0.5	330	0.75	0.25	0.75	54.0	32.7	−6.3	33.3	348.9	0.0	0.609	0.12	0.286	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
35/506	R00Y_075_050$_{dd}$	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	53.7	28.6	18.9	34.3	33.4	0.0	0.632	0.514	0.234	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
36/324	R00Y_050_050$_{dd}$	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	35.7	28.6	18.9	34.3	33.4	0.0	0.803	0.705	0.52	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
37/342	R50Y_050_050$_{dd}$	0.5	0.25	0.0	0.5	0.5	0.25	60	0.5	0.25	0.0	47.1	9.6	33.1	34.5	73.8	0.0	0.442	0.766	0.476	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
38/360	Y00G_050_050$_{dd}$	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.5	0.0	57.7	−7.9	42.3	43.0	100.5	0.0	0.051	0.73	0.52	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
39/198	Y50G_050_050$_{dd}$	0.25	0.5	0.0	0.5	0.5	0.25	120	0.25	0.5	0.0	47.4	−20.8	27.4	34.4	127.3	0.349	0.0	0.75	0.532	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
40/36	G00B_050_050$_{dd}$	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.0	39.0	−33.8	15.4	37.1	155.5	0.655	0.0	0.778	0.617	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
41/40	G50B_050_050$_{dd}$	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.5	38.4	−15.0	−21.5	26.2	235.1	0.614	0.003	0.0	0.662	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
42/4	B00R_050_050$_{dd}$	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.0	0.5	28.2	8.4	−22.3	23.8	290.8	0.501	0.649	0.0	0.669	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
43/328	B50R_050_050$_{dd}$	0.5	0.0	0.5	0.5	0.5	0.25	330	0.5	0.0	0.5	36.0	32.7	−6.3	33.3	348.9	0.0	0.757	0.143	0.571	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
44/324	R00Y_050_050$_{dd}$	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	35.7	28.6	18.9	34.3	33.4	0.0	0.803	0.705	0.52	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
45/0	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
46/91	NW_013$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
47/182	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
48/273	NW_038$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
49/364	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
50/455	NW_063$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
51/546	NW_075$_{dd}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
52/637	NW_088$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
53/728	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

delta

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
colores y differencia en color, $\Delta E'$*

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

2−1031830−F0

http://130.149.60.45/~farbmetrik/QS49/QS49L0FP.PDF /.PS; 3D-linealización
F: 3D-linealización QS49/QS49LS30FP.DAT en archivo (F), página 20/33

n=j	HIC*Fdd	rgb_Fdd			ict_Fdd			$h_{si\_F,dd}$	rgb*Fdd			LabCh*Fdd					cmyn*sep,Fdd				$h_{siM,dd}$	rgb*Mdd			LabCh*Mdd				
0	NW_000dd	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1	B00R_012_012dd	0.0	0.0	0.125	0.125	0.125	0.062	270	0.0	0.0	0.125	24.9	2.1	−5.5	5.9	290.8	0.296	0.35	0.0	0.938	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
2	B00R_025_025dd	0.0	0.0	0.25	0.25	0.25	0.125	270	0.0	0.0	0.25	26.0	4.2	−11.1	11.9	290.8	0.383	0.476	0.0	0.865	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
3	B00R_037_037dd	0.0	0.0	0.375	0.375	0.375	0.187	270	0.0	0.0	0.375	27.1	6.3	−16.7	17.8	290.8	0.377	0.528	0.0	0.756	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
4	B00R_050_050dd	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.0	0.5	28.2	8.4	−22.3	23.8	290.8	0.501	0.649	0.0	0.669	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
5	B00R_062_062dd	0.0	0.0	0.625	0.625	0.625	0.312	270	0.0	0.0	0.625	29.2	10.5	−27.8	29.8	290.8	0.642	0.747	0.0	0.586	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
6	B00R_075_075dd	0.0	0.0	0.75	0.75	0.75	0.375	270	0.0	0.0	0.75	30.3	12.7	−33.4	35.7	290.8	0.739	0.797	0.0	0.519	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
7	B00R_087_087dd	0.0	0.0	0.875	0.875	0.875	0.437	270	0.0	0.0	0.875	31.4	14.8	−39.0	41.7	290.8	0.824	0.833	0.0	0.422	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
8	B00R_100_100dd	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8	1.0	1.0	0.0	0.0	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
9	G00B_012_012dd	0.0	0.125	0.0	0.125	0.125	0.062	150	0.0	0.125	0.0	27.6	−8.4	3.8	9.2	155.5	0.279	0.0	0.279	0.944	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
10	G50B_012_012dd	0.0	0.125	0.125	0.125	0.125	0.062	210	0.0	0.125	0.125	27.5	−3.7	−5.3	6.5	235.1	0.349	0.0	0.024	0.936	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
11	G75B_025_025dd	0.0	0.125	0.25	0.25	0.25	0.125	240	0.0	0.125	0.25	29.4	−3.3	−12.3	12.7	254.9	0.419	0.195	0.0	0.8	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
12	G84B_037_037dd	0.0	0.125	0.375	0.375	0.375	0.187	251	0.0	0.118	0.375	29.6	−0.8	−18.4	18.4	267.3	0.448	0.342	0.0	0.736	251	0.0	0.316	1.0	39.3	−2.3	−49.1	49.1	267.3
13	G88B_050_050dd	0.0	0.125	0.5	0.5	0.5	0.25	256	0.0	0.116	0.5	30.2	1.6	−24.1	24.2	273.8	0.58	0.513	0.0	0.653	257	0.0	0.233	1.0	36.6	3.2	−48.3	48.4	273.8
14	G90B_062_062dd	0.0	0.125	0.625	0.625	0.625	0.312	259	0.0	0.114	0.625	31.4	3.8	−29.7	29.9	277.3	0.701	0.631	0.0	0.567	260	0.0	0.183	1.0	35.9	6.1	−47.5	47.9	277.3
15	G92B_075_075dd	0.0	0.125	0.75	0.75	0.75	0.375	261	0.0	0.112	0.75	32.5	6.0	−35.1	35.6	279.6	0.788	0.698	0.0	0.498	262	0.0	0.15	1.0	35.4	8.0	−46.9	47.5	279.6
16	G93B_087_087dd	0.0	0.125	0.875	0.875	0.875	0.437	262	0.0	0.116	0.875	33.7	7.8	−40.7	41.4	280.8	0.862	0.739	0.0	0.412	262	0.0	0.133	1.0	35.2	8.9	−46.5	47.4	280.8
17	G94B_100_100dd	0.0	0.125	1.0	1.0	1.0	0.5	263	0.0	0.116	1.0	34.9	9.9	−46.3	47.3	282.0	0.964	0.805	0.0	0.125	263	0.0	0.116	1.0	34.9	9.9	−46.3	47.3	282.0
18	G00B_025_025dd	0.0	0.25	0.0	0.25	0.25	0.125	150	0.0	0.25	0.0	31.4	−16.9	7.7	18.5	155.5	0.484	0.0	0.484	0.874	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
19	G25B_025_025dd	0.0	0.25	0.125	0.25	0.25	0.125	180	0.0	0.25	0.125	31.6	−12.8	−2.2	13.0	189.8	0.499	0.0	0.432	0.867	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
20	G50B_025_025dd	0.0	0.25	0.25	0.25	0.25	0.125	210	0.0	0.25	0.25	31.1	−7.5	−10.7	13.1	235.1	0.43	0.005	0.0	0.817	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
21	G65B_037_037dd	0.0	0.25	0.375	0.375	0.375	0.187	229	0.0	0.256	0.375	34.2	−8.7	−18.2	20.2	244.5	0.457	0.108	0.0	0.721	228	0.0	0.683	1.0	51.6	−23.2	−48.6	53.9	244.5
22	G75B_050_050dd	0.0	0.25	0.5	0.5	0.5	0.25	240	0.0	0.25	0.5	35.0	−6.6	−24.7	25.5	254.9	0.613	0.306	0.0	0.635	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
23	G80B_062_062dd	0.0	0.25	0.625	0.625	0.625	0.312	247	0.0	0.239	0.625	35.0	−4.2	−30.8	31.1	262.1	0.75	0.463	0.0	0.547	247	0.0	0.383	1.0	41.7	−6.8	−49.3	49.7	262.1
24	G84B_075_075dd	0.0	0.25	0.75	0.75	0.75	0.375	251	0.0	0.237	0.75	35.4	−1.7	−36.8	36.8	267.3	0.837	0.565	0.0	0.462	251	0.0	0.316	1.0	39.3	−2.3	−49.1	49.1	267.3
25	G86B_087_087dd	0.0	0.25	0.875	0.875	0.875	0.437	254	0.0	0.233	0.875	35.7	0.9	−42.6	42.6	271.3	0.902	0.638	0.0	0.385	255	0.0	0.266	1.0	37.4	1.1	−48.7	48.7	271.3
26	G88B_100_100dd	0.0	0.25	1.0	1.0	1.0	0.5	256	0.0	0.233	1.0	36.6	3.2	−48.3	48.4	273.8	0.978	0.699	0.0	0.125	257	0.0	0.233	1.0	36.6	3.2	−48.3	48.4	273.8
27	G00B_037_037dd	0.0	0.375	0.0	0.375	0.375	0.187	150	0.0	0.375	0.0	35.2	−25.3	11.5	27.8	155.5	0.657	0.0	0.687	0.749	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
28	G15B_037_037dd	0.0	0.375	0.125	0.375	0.375	0.187	169	0.0	0.375	0.118	35.2	−22.5	2.1	22.6	174.6	0.658	0.0	0.573	0.718	168	0.0	1.0	0.316	54.3	−60.1	5.6	60.3	174.6
29	G34B_037_037dd	0.0	0.375	0.25	0.375	0.375	0.187	191	0.0	0.375	0.256	35.6	−15.8	−8.8	18.0	209.1	0.555	0.0	0.258	0.719	191	0.0	1.0	0.683	55.2	−42.1	−23.4	48.2	209.1
30	G50B_037_037dd	0.0	0.375	0.375	0.375	0.375	0.187	210	0.0	0.375	0.375	34.8	−11.2	−16.1	19.6	235.1	0.444	0.0	0.028	0.732	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
31	G61B_050_050dd	0.0	0.375	0.5	0.5	0.5	0.25	224	0.0	0.383	0.5	38.3	−13.1	−23.6	26.9	240.9	0.628	0.093	0.0	0.64	222	0.0	0.766	1.0	52.9	−26.2	−47.2	53.9	240.9
32	G69B_062_062dd	0.0	0.375	0.625	0.625	0.625	0.312	233	0.0	0.385	0.625	40.3	−12.6	−30.9	33.4	247.7	0.756	0.245	0.0	0.514	232	0.0	0.616	1.0	50.2	−20.2	−49.5	53.5	247.7
33	G75B_075_075dd	0.0	0.375	0.75	0.75	0.75	0.375	240	0.0	0.375	0.75	40.5	−9.9	−37.0	38.3	254.9	0.847	0.396	0.0	0.401	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
34	G79B_087_087dd	0.0	0.375	0.875	0.875	0.875	0.437	245	0.0	0.364	0.875	40.6	−7.5	−43.2	43.9	260.0	0.914	0.489	0.0	0.307	245	0.0	0.416	1.0	42.9	−8.6	−49.4	50.1	260.0
35	G81B_100_100dd	0.0	0.375	1.0	1.0	1.0	0.5	248	0.0	0.366	1.0	41.1	−5.7	−49.2	49.6	263.3	0.999	0.63	0.0	0.0	248	0.0	0.366	1.0	41.1	−5.7	−49.2	49.6	263.3
36	G00B_050_050dd	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.0	39.0	−33.8	15.4	37.1	155.5	0.655	0.0	0.778	0.617	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
37	G11B_050_050dd	0.0	0.5	0.125	0.5	0.5	0.25	164	0.0	0.5	0.116	38.8	−31.8	7.0	32.6	167.4	0.696	0.0	0.647	0.609	162	0.0	1.0	0.233	53.7	−63.6	14.1	65.2	167.4
38	G25B_050_050dd	0.0	0.5	0.25	0.5	0.5	0.25	180	0.0	0.5	0.25	39.4	−25.7	−4.4	26.1	189.8	0.661	0.0	0.423	0.584	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
39	G38B_050_050dd	0.0	0.5	0.375	0.5	0.5	0.25	196	0.0	0.5	0.383	39.4	−19.6	−13.9	24.0	215.4	0.624	0.0	0.223	0.606	197	0.0	1.0	0.766	55.1	−39.2	−27.9	48.1	215.4
40	G50B_050_050dd	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.5	38.4	−15.0	−21.5	26.2	235.1	0.614	0.003	0.0	0.662	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
41	G59B_062_062dd	0.0	0.5	0.625	0.625	0.625	0.312	221	0.0	0.51	0.625	42.0	−16.9	−28.7	33.3	239.5	0.735	0.093	0.0	0.541	219	0.0	0.816	1.0	53.0	−27.0	−46.0	53.4	239.5
42	G65B_075_075dd	0.0	0.5	0.75	0.75	0.75	0.375	229	0.0	0.512	0.75	44.7	−17.4	−36.5	40.4	244.5	0.854	0.223	0.0	0.384	228	0.0	0.683	1.0	51.6	−23.2	−48.6	53.9	244.5
43	G70B_087_087dd	0.0	0.5	0.875	0.875	0.875	0.437	235	0.0	0.51	0.875	45.9	−15.9	−43.4	46.2	249.7	0.921	0.358	0.0	0.266	234	0.0	0.583	1.0	49.1	−18.2	−49.6	52.8	249.7
44	G75B_100_100dd	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9	1.0	0.5	0.0	0.0	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
45	G00B_062_062dd	0.0	0.625	0.0	0.625	0.625	0.312	150	0.0	0.625	0.0	42.9	−42.3	19.2	46.4	155.5	0.683	0.0	0.809	0.476	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
46	G09B_062_062dd	0.0	0.625	0.125	0.625	0.625	0.312	161	0.0	0.625	0.114	42.5	−40.6	11.3	42.2	164.4	0.735	0.0	0.695	0.504	159	0.0	1.0	0.183	53.8	−65.0	18.1	67.5	164.4
47	G19B_062_062dd	0.0	0.625	0.25	0.625	0.625	0.312	173	0.0	0.625	0.239	43.1	−35.3	−0.3	35.3	180.6	0.735	0.0	0.5	0.488	172	0.0	1.0	0.383	54.7	−56.5	−0.6	56.5	180.6
48	G30B_062_062dd	0.0	0.625	0.375	0.625	0.625	0.312	187	0.0	0.625	0.385	43.5	−27.9	−12.1	30.4	203.4	0.716	0.0	0.322	0.5	187	0.0	1.0	0.616	55.3	−44.7	−19.4	48.7	203.4
49	G40B_062_062dd	0.0	0.625	0.5	0.625	0.625	0.312	199	0.0	0.625	0.51	43.2	−23.8	−18.9	30.4	218.4	0.71	0.0	0.206	0.528	200	0.0	1.0	0.816	54.8	−38.1	−30.3	48.7	218.4
50	G50B_062_062dd	0.0	0.625	0.625	0.625	0.625	0.312	210	0.0	0.625	0.625	42.1	−18.7	−26.9	32.8	235.1	0.72	0.019	0.0	0.57	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
51	G57B_075_075dd	0.0	0.625	0.75	0.75	0.75	0.375	219	0.0	0.637	0.75	45.7	−20.6	−33.9	39.7	238.6	0.825	0.09	0.0	0.434	217	0.0	0.85	1.0	53.0	−27.5	−45.3	53.0	238.6
52	G63B_087_087dd	0.0	0.625	0.875	0.875	0.875	0.437	226	0.0	0.641	0.875	49.0	−22.1	−41.8	47.3	242.1	0.917	0.239	0.0	0.267	224	0.0	0.733	1.0	52.6	−25.2	−47.8	54.1	242.1
53	G68B_100_100dd	0.0	0.625	1.0	1.0	1.0	0.5	232	0.0	0.633	1.0	50.7	−21.1	−49.4	53.7	246.8	1.0	0.367	0.0	0.0	231	0.0	0.633	1.0	50.7	−21.1	−49.4	53.7	246.8
54	G00B_075_075dd	0.0	0.75	0.0	0.75	0.75	0.375	150	0.0	0.75	0.0	46.7	−50.7	23.1	55.7	155.5	0.744	0.0	0.852	0.388	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
55	G07B_075_075dd	0.0	0.75	0.125	0.75	0.75	0.375	159	0.0	0.75	0.112	46.3	−49.4	15.6	51.8	162.4	0.795	0.0	0.727	0.413	157	0.0	1.0	0.15	53.8	−65.8	20.8	69.1	162.4
56	G15B_075_075dd	0.0	0.75	0.25	0.75	0.75	0.375	169	0.0	0.75	0.237	46.6	−45.0	4.2	45.2	174.6	0.791	0.0	0.555	0.41	168	0.0	1.0	0.316	54.3	−60.1	5.6	60.3	174.6
57	G25B_075_075dd	0.0	0.75	0.375	0.75	0.75	0.375	180	0.0	0.75	0.375	47.2	−38.6	−6.6	39.1	189.8	0.785	0.0	0.422	0.415	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
58	G34B_075_075dd	0.0	0.75	0.5	0.75	0.75	0.375	191	0.0	0.75	0.512	47.4	−31.6	−17.6	36.1	209.1	0.779	0.0	0.278	0.429	191	0.0	1.0	0.683	55.2	−42.1	−23.4	48.2	209.1
59	G42B_075_075dd	0.0	0.75	0.625	0.75	0.75	0.375	201	0.0	0.75	0.637	46.9	−28.0	−23.9	36.8	220.4	0.788	0.0	0.168	0.448	202	0.0	1.0	0.85	54.6	−37.3	−31.9	49.1	220.4
60	G50B_075_075dd	0.0	0.75	0.75	0.75	0.75	0.375	210	0.0	0.75	0.75	45.8	−22.5	−32.3	39.3	235.1	0.81	0.015	0.0	0.472	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
61	G56B_087_087dd	0.0	0.75	0.875	0.875	0.875	0.437	218	0.0	0.758	0.875	49.4	−24.3	−39.3	46.2	238.2	0.898	0.139	0.0	0.318	217	0.0	0.866	1.0	53.0	−27.8	−44.9	52.8	238.2
62	G61B_100_100dd	0.0	0.75	1.0	1.0	1.0	0.5	224	0.0	0.766	1.0	52.9	−26.2	−47.2	53.9	240.9	0.997	0.243	0.0	0.009	222	0.0	0.766	1.0	52.9	−26.2	−47.2	53.9	240.9
63	G00B_087_087dd	0.0	0.875	0.0	0.875	0.875	0.437	150	0.0	0.875	0.0	50.5	−59.2	26.9	65.0	155.5	0.822	0.0	0.901	0.294	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
64	G06B_087_087dd	0.0	0.875	0.125	0.875	0.875	0.437	158	0.0	0.875	0.116	50.0	−57.9	19.5	61.1	161.3	0.876	0.0	0.795	0.25	157	0.0	1.0	0.133	53.8	−66.2	22.3	69.9	161.3
65	G13B_087_087dd	0.0	0.875	0.25	0.875	0.875	0.437	166	0.0	0.875	0.233	50.1	−54.6	9.6	55.4	170.0	0.875	0.0	0.635	0.25	164	0.0	1.0	0.266	53.9	−62.4	10.9	63.4	170.0
66	G20B_087_087dd	0.0	0.875	0.375	0.875	0.875	0.437	175	0.0	0.875	0.364	50.9	−48.3	−2.7	48.3	183.2	0.859	0.0	0.475	0.25	174	0.0	1.0	0.416	54.8	−55.2	−3.1	55.2	183.2
67	G29B_087_087dd	0.0	0.875	0.5	0.875	0.875	0.437	185	0.0	0.875	0.51	51.3	−41.0	−14.5	43.5	199.5	0.876	0.0	0.315	0.25	185	0.0	1.0	0.583	55.2	−46.8	−16.6	49.7	199.5
68	G36B_087_087dd	0.0	0.875	0.625	0.875	0.875	0.437	194	0.0	0.875	0.641	51.3	−35.1	−22.9	42.0	213.1	0.875	0.0	0.25	0.0	195	0.0	1.0	0.733	55.2	−40.2	−26.2	48.0	213.1
69	G43B_087_087dd	0.0	0.875	0.75	0.875	0.875	0.437	202	0.0	0.875	0.758	50.6	−32.3	−28.6	43.1	221.4	0.845	0.0	0.142	0.376	202	0.0	1.0	0.866	54.5	−36.9	−32.6	49.3	221.4
70	G50B_087_087dd	0.0	0.875	0.875	0.875	0.875	0.437	210	0.0	0.875	0.875	49.4	−26.2	−37.7	45.9	235.1	0.889	0.055	0.0	0.368	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
71	G55B_100_100dd	0.0	0.875	1.0	1.0	1.0	0.5	217	0.0	0.883	1.0	53.1	−28.1	−44.6	52.7	237.7	0.986	0.155	0.0	0.052	216	0.0	0.883	1.0	53.1	−28.1	−44.6	52.7	237.7
72	G00B_100_100dd	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5	1.0	0.0	1.0	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
73	G05B_100_100dd	0.0	1.0	0.125	1.0	1.0	0.5	157	0.0	1.0	0.116	53.8	−66.5	23.5	70.5	160.5	1.0	0.0	0.884	0.0	156	0.0	1.0	0.116	53.8	−66.5	23.5	70.5	160.5
74	G11B_100_100dd	0.0	1.0	0.25	1.0	1.0	0.5	164	0.0	1.0	0.233	53.7	−63.6	14.1	65.2	167.4	0.947	0.0	0.713	0.125	162	0.0	1.0	0.233	53.7	−63.6	14.1	65.2	167.4
75	G18B_100_100dd	0.0	1.0	0.375	1.0	1.0	0.5	172	0.0	1.0	0.366	54.7	−57.3	0.8	57.3	179.1	1.0	0.0	0.632	0.0	171	0.0	1.0	0.366	54.7	−57.3	0.8	57.3	179.1
76	G25B_100_100dd	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8	1.0	0.0	0.5	0.0	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
77	G31B_100_100dd	0.0	1.0	0.625	1.0	1.0	0.5	188	0.0	1.0	0.633	55.3	−43.8	−20.5	48.4	205.1	1.0	0.0	0.364	0.0	188	0.0	1.0	0.633	55.3	−43.8	−20.5	48.4	205.1
78	G38B_100_100dd	0.0	1.0	0.75	1.0	1.0	0.5	196	0.0	1.0	0.766	55.1	−39.2	−27.9	48.1	215.4	1.0	0.0	0.229	0.0	197	0.0	1.0	0.766	55.1	−39.2	−27.9	48.1	215.4
79	G44B_100_100dd	0.0	1.0	0.875	1.0	1.0	0.5	203	0.0	1.0	0.883	54.3	−36.4	−33.7	49.6	222.8	0.999	0.0	0.123	0.001	203	0.0	1.0	0.883	54.3	−36.4	−33.7	49.6	222.8
80	G50B_100_100dd	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1	0.999	0.0	0.0	0.0	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1

delta

2−1031930−F0 QS490−7N, 20/33−F

gráfico TUB-QS49; código de tono: H^*_d=Y25G_d entrada: *rgb/cmyk* −> *rgb*dd
colores y differencia en color, $\Delta E'^*$ salida: 3D-linealización a *cmyk**dd

2−1031930−F0

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$				*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
81	R00Y_012_012$_{dd}$	0.125	0.0	0.0	0.125	0.125	0.062	390	0.125	0.0	0.0	26.8	7.1	4.7	8.5	33.4	0.0	0.482	0.398	0.864	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
82	B50R_012_012$_{dd}$	0.125	0.0	0.125	0.125	0.125	0.062	330	0.125	0.0	0.125	26.8	8.1	−1.5	8.3	348.9	0.0	0.459	0.135	0.876	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
83	B25R_025_025$_{dd}$	0.125	0.0	0.25	0.25	0.25	0.125	300	0.125	0.0	0.25	27.1	10.7	−7.7	13.2	324.4	0.077	0.521	0.0	0.825	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
84	B15R_037_037$_{dd}$	0.125	0.0	0.375	0.375	0.375	0.187	289	0.118	0.0	0.375	27.1	13.0	−13.9	19.1	312.9	0.23	0.615	0.0	0.762	288	0.316	0.0	1.0	32.7	34.7	−37.2	50.9	312.9
85	B11R_050_050$_{dd}$	0.125	0.0	0.5	0.5	0.5	0.25	284	0.116	0.0	0.5	27.4	14.8	−19.9	24.8	306.6	0.406	0.732	0.0	0.678	282	0.233	0.0	1.0	31.1	29.6	−39.8	49.6	306.6
86	B09R_062_062$_{dd}$	0.125	0.0	0.625	0.625	0.625	0.312	281	0.114	0.0	0.625	28.5	16.8	−25.6	30.6	303.2	0.535	0.803	0.0	0.585	279	0.183	0.0	1.0	31.3	26.8	−41.0	49.0	303.2
87	B07R_075_075$_{dd}$	0.125	0.0	0.75	0.75	0.75	0.375	279	0.112	0.0	0.75	29.5	18.7	−31.3	36.5	300.9	0.638	0.832	0.0	0.512	278	0.15	0.0	1.0	31.4	25.0	−41.7	48.6	300.9
88	B06R_087_087$_{dd}$	0.125	0.0	0.875	0.875	0.875	0.437	278	0.116	0.0	0.875	30.6	21.0	−36.8	42.4	299.8	0.752	0.877	0.0	0.394	277	0.133	0.0	1.0	31.5	24.1	−42.0	48.4	299.8
89	B05R_100_100$_{dd}$	0.125	0.0	1.0	1.0	1.0	0.5	277	0.116	0.0	1.0	31.6	23.1	−42.4	48.3	298.6	0.882	1.0	0.0	0.0	276	0.116	0.0	1.0	31.6	23.1	−42.4	48.3	298.6
90	Y00G_012_012$_{dd}$	0.125	0.125	0.0	0.125	0.125	0.062	90	0.125	0.125	0.0	32.3	−1.9	10.5	10.7	100.5	0.0	0.072	0.456	0.829	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
91	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
92	B00R_025_012$_{dd}$	0.125	0.125	0.25	0.25	0.125	0.187	270	0.124	0.124	0.25	33.9	2.1	−5.5	5.9	290.8	0.069	0.156	0.0	0.781	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
93	B00R_037_025$_{dd}$	0.125	0.125	0.375	0.375	0.25	0.25	270	0.124	0.124	0.375	35.0	4.2	−11.1	11.9	290.8	0.207	0.302	0.0	0.715	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
94	B00R_050_037$_{dd}$	0.125	0.125	0.5	0.5	0.375	0.312	270	0.124	0.124	0.5	36.1	6.3	−16.7	17.8	290.8	0.276	0.393	0.0	0.636	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
95	B00R_062_050$_{dd}$	0.125	0.125	0.625	0.625	0.5	0.375	270	0.125	0.125	0.625	37.2	8.4	−22.3	23.8	290.8	0.398	0.503	0.0	0.545	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
96	B00R_075_062$_{dd}$	0.125	0.125	0.75	0.75	0.625	0.437	270	0.125	0.125	0.75	38.2	10.5	−27.8	29.8	290.8	0.526	0.606	0.0	0.44	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
97	B00R_087_075$_{dd}$	0.125	0.125	0.875	0.875	0.75	0.5	270	0.125	0.125	0.875	39.3	12.7	−33.4	35.7	290.8	0.641	0.694	0.0	0.326	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
98	B00R_100_087$_{dd}$	0.125	0.125	1.0	1.0	0.875	0.562	270	0.125	0.125	1.0	40.4	14.8	−39.0	41.7	290.8	0.688	0.705	0.0	0.173	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
99	Y50G_025_025$_{dd}$	0.125	0.25	0.0	0.25	0.25	0.125	120	0.125	0.25	0.0	35.6	−10.4	13.7	17.2	127.3	0.272	0.0	0.599	0.779	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
100	G00B_025_012$_{dd}$	0.125	0.25	0.125	0.25	0.125	0.187	150	0.124	0.25	0.124	36.6	−8.4	3.8	9.2	155.5	0.259	0.0	0.361	0.766	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
101	G50B_025_012$_{dd}$	0.125	0.25	0.25	0.25	0.125	0.187	210	0.124	0.25	0.25	36.5	−3.7	−5.3	6.5	235.1	0.159	0.0	0.032	0.767	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
102	G75B_037_025$_{dd}$	0.125	0.25	0.375	0.375	0.25	0.25	240	0.124	0.25	0.375	38.4	−3.3	−12.3	12.7	254.9	0.282	0.123	0.0	0.688	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
103	G84B_050_037$_{dd}$	0.125	0.25	0.5	0.5	0.375	0.312	251	0.124	0.243	0.5	38.6	−0.8	−18.4	18.4	267.3	0.328	0.242	0.0	0.626	251	0.0	0.316	1.0	39.3	−2.3	−49.1	49.1	267.3
104	G88B_062_050$_{dd}$	0.125	0.25	0.625	0.625	0.5	0.375	256	0.125	0.241	0.625	39.2	1.6	−24.1	24.2	273.8	0.48	0.407	0.0	0.532	257	0.0	0.233	1.0	36.6	3.2	−48.3	48.4	273.8
105	G90B_075_062$_{dd}$	0.125	0.25	0.75	0.75	0.625	0.437	259	0.125	0.239	0.75	40.3	3.8	−29.7	29.9	277.3	0.623	0.54	0.0	0.414	260	0.0	0.183	1.0	35.9	6.1	−47.5	47.9	277.3
106	G92B_087_075$_{dd}$	0.125	0.25	0.875	0.875	0.75	0.5	261	0.125	0.237	0.875	41.5	6.0	−35.1	35.6	279.6	0.716	0.631	0.0	0.291	262	0.0	0.15	1.0	35.4	8.0	−46.9	47.5	279.6
107	G93B_100_087$_{dd}$	0.125	0.25	1.0	1.0	0.875	0.562	262	0.125	0.241	1.0	42.7	7.8	−40.7	41.4	280.8	0.718	0.623	0.0	0.154	262	0.0	0.133	1.0	35.2	8.9	−46.5	47.4	280.8
108	Y68G_037_037$_{dd}$	0.125	0.375	0.0	0.375	0.375	0.187	131	0.118	0.375	0.0	38.8	−19.5	16.7	25.7	139.4	0.41	0.0	0.695	0.679	131	0.316	1.0	0.0	63.8	−52.2	44.7	68.7	139.4
109	G00B_037_025$_{dd}$	0.125	0.375	0.125	0.375	0.25	0.25	150	0.124	0.375	0.124	40.4	−16.9	7.7	18.5	155.5	0.415	0.0	0.527	0.659	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
110	G25B_037_025$_{dd}$	0.125	0.375	0.25	0.375	0.25	0.25	180	0.124	0.375	0.25	40.6	−12.8	−2.2	13.0	189.8	0.386	0.0	0.306	0.653	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
111	G50B_037_025$_{dd}$	0.125	0.375	0.375	0.375	0.25	0.25	210	0.124	0.375	0.375	40.1	−7.5	−10.7	13.1	235.1	0.295	0.0	0.03	0.687	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
112	G65B_050_037$_{dd}$	0.125	0.375	0.5	0.5	0.375	0.312	229	0.124	0.381	0.5	43.2	−8.7	−18.2	20.2	244.5	0.352	0.06	0.0	0.619	228	0.0	0.683	1.0	51.6	−23.2	−48.6	53.9	244.5
113	G75B_062_050$_{dd}$	0.125	0.375	0.625	0.625	0.5	0.375	240	0.125	0.375	0.625	44.0	−6.6	−24.7	25.5	254.9	0.533	0.246	0.0	0.511	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
114	G80B_075_062$_{dd}$	0.125	0.375	0.75	0.75	0.625	0.437	247	0.125	0.364	0.75	44.0	−4.2	−30.8	31.1	262.1	0.684	0.419	0.0	0.368	247	0.0	0.383	1.0	41.7	−6.8	−49.3	49.7	262.1
115	G84B_087_075$_{dd}$	0.125	0.375	0.875	0.875	0.75	0.5	251	0.125	0.362	0.875	44.4	−1.7	−36.8	36.8	267.3	0.761	0.525	0.0	0.237	251	0.0	0.316	1.0	39.3	−2.3	−49.1	49.1	267.3
116	G86B_100_087$_{dd}$	0.125	0.375	1.0	1.0	0.875	0.562	254	0.125	0.358	1.0	44.7	0.9	−42.6	42.6	271.3	0.755	0.56	0.0	0.138	255	0.0	0.266	1.0	37.4	1.1	−48.7	48.7	271.3
117	Y76G_050_050$_{dd}$	0.125	0.5	0.0	0.5	0.5	0.25	136	0.116	0.5	0.0	42.0	−28.9	19.8	35.1	145.5	0.518	0.0	0.761	0.559	137	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145.5
118	G00B_050_037$_{dd}$	0.125	0.5	0.125	0.5	0.375	0.312	150	0.124	0.5	0.124	44.2	−25.3	11.5	27.8	155.5	0.529	0.0	0.641	0.534	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
119	G15B_050_037$_{dd}$	0.125	0.5	0.25	0.5	0.375	0.312	169	0.124	0.5	0.243	44.2	−22.5	2.1	22.6	174.6	0.518	0.0	0.462	0.533	168	0.0	1.0	0.316	54.3	−60.1	5.6	60.3	174.6
120	G34B_050_037$_{dd}$	0.125	0.5	0.375	0.5	0.375	0.312	191	0.124	0.5	0.381	44.6	−15.8	−8.8	18.0	209.1	0.446	0.0	0.233	0.571	191	0.0	1.0	0.683	55.2	−42.1	−23.4	48.2	209.1
121	G50B_050_037$_{dd}$	0.125	0.5	0.5	0.5	0.375	0.312	210	0.124	0.5	0.5	43.8	−11.2	−16.1	19.6	235.1	0.366	0.0	0.035	0.626	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
122	G61B_062_050$_{dd}$	0.125	0.5	0.625	0.625	0.5	0.375	224	0.125	0.508	0.625	47.3	−13.1	−23.6	26.9	240.9	0.538	0.061	0.0	0.507	222	0.0	0.766	1.0	52.9	−26.2	−47.2	53.9	240.9
123	G69B_075_062$_{dd}$	0.125	0.5	0.75	0.75	0.625	0.437	233	0.125	0.51	0.75	49.3	−12.6	−30.9	33.4	247.7	0.683	0.207	0.0	0.347	232	0.0	0.616	1.0	50.2	−20.2	−49.5	53.5	247.7
124	G75B_087_075$_{dd}$	0.125	0.5	0.875	0.875	0.75	0.5	240	0.125	0.5	0.875	49.5	−9.9	−37.0	38.3	254.9	0.742	0.369	0.0	0.195	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
125	G79B_100_087$_{dd}$	0.125	0.5	1.0	1.0	0.875	0.562	245	0.125	0.489	1.0	49.6	−7.5	−43.2	43.9	260.0	0.749	0.418	0.0	0.024	245	0.0	0.416	1.0	42.9	−8.6	−49.4	50.1	260.0
126	Y81G_062_062$_{dd}$	0.125	0.625	0.0	0.625	0.625	0.312	139	0.114	0.625	0.0	45.6	−37.4	23.3	44.1	148.1	0.599	0.0	0.814	0.448	140	0.183	1.0	0.0	58.7	−59.9	37.3	70.6	148.1
127	G00B_062_050$_{dd}$	0.125	0.625	0.125	0.625	0.5	0.375	150	0.125	0.625	0.125	48.0	−33.8	15.4	37.1	155.5	0.628	0.0	0.704	0.415	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
128	G11B_062_050$_{dd}$	0.125	0.625	0.25	0.625	0.5	0.375	164	0.125	0.625	0.241	47.8	−31.8	7.0	32.6	167.4	0.635	0.0	0.571	0.419	162	0.0	1.0	0.233	53.7	−63.6	14.1	65.2	167.4
129	G25B_062_050$_{dd}$	0.125	0.625	0.375	0.625	0.5	0.375	180	0.125	0.625	0.375	48.4	−25.7	−4.4	26.1	189.8	0.606	0.0	0.389	0.438	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
130	G38B_062_050$_{dd}$	0.125	0.625	0.5	0.625	0.5	0.375	196	0.125	0.625	0.508	48.4	−19.6	−13.9	24.0	215.4	0.562	0.0	0.212	0.472	197	0.0	1.0	0.766	55.1	−39.2	−27.9	48.1	215.4
131	G50B_062_050$_{dd}$	0.125	0.625	0.625	0.625	0.5	0.375	210	0.125	0.625	0.625	47.4	−15.0	−21.5	26.2	235.1	0.529	0.0	0.018	0.522	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
132	G59B_075_062$_{dd}$	0.125	0.625	0.75	0.75	0.625	0.437	221	0.125	0.635	0.75	51.0	−16.9	−28.7	33.3	239.5	0.661	0.06	0.0	0.384	219	0.0	0.816	1.0	53.0	−27.0	−46.0	53.4	239.5
133	G65B_087_075$_{dd}$	0.125	0.625	0.875	0.875	0.75	0.5	229	0.125	0.637	0.875	53.7	−17.4	−36.5	40.4	244.5	0.769	0.197	0.0	0.186	228	0.0	0.683	1.0	51.6	−23.2	−48.6	53.9	244.5
134	G70B_100_087$_{dd}$	0.125	0.625	1.0	1.0	0.875	0.562	235	0.125	0.635	1.0	54.9	−15.9	−43.4	46.2	249.7	0.776	0.304	0.0	0.003	234	0.0	0.583	1.0	49.1	−18.2	−49.6	52.8	249.7
135	Y85G_075_075$_{dd}$	0.125	0.75	0.0	0.75	0.75	0.375	141	0.112	0.75	0.0	49.2	−45.9	26.7	53.1	149.7	0.675	0.0	0.863	0.355	142	0.15	1.0	0.0	57.7	−61.2	35.6	70.9	149.7
136	G00B_075_062$_{dd}$	0.125	0.75	0.125	0.75	0.625	0.437	150	0.125	0.75	0.125	51.9	−42.3	19.2	46.4	155.5	0.729	0.0	0.776	0.295	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
137	G09B_075_062$_{dd}$	0.125	0.75	0.25	0.75	0.625	0.437	161	0.125	0.75	0.239	51.5	−40.6	11.3	42.2	164.4	0.746	0.0	0.662	0.303	159	0.0	1.0	0.183	53.8	−65.0	18.1	67.5	164.4
138	G19B_075_062$_{dd}$	0.125	0.75	0.375	0.75	0.625	0.437	173	0.125	0.75	0.364	52.1	−35.3	−0.3	35.3	180.6	0.721	0.0	0.488	0.323	172	0.0	1.0	0.383	54.7	−56.5	−0.6	56.5	180.6
139	G30B_075_062$_{dd}$	0.125	0.75	0.5	0.75	0.625	0.437	187	0.125	0.75	0.51	52.5	−27.9	−12.1	30.4	203.4	0.69	0.0	0.312	0.352	187	0.0	1.0	0.616	55.3	−44.7	−19.4	48.7	203.4
140	G40B_075_062$_{dd}$	0.125	0.75	0.625	0.75	0.625	0.437	199	0.125	0.75	0.635	52.2	−23.8	−18.9	30.4	218.4	0.682	0.0	0.203	0.369	200	0.0	1.0	0.816	54.8	−38.1	−30.3	48.7	218.4
141	G50B_075_062$_{dd}$	0.125	0.75	0.75	0.75	0.625	0.437	210	0.125	0.75	0.75	51.1	−18.7	−26.9	32.8	235.1	0.655	0.0	0.005	0.41	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
142	G57B_087_075$_{dd}$	0.125	0.75	0.875	0.875	0.75	0.5	219	0.125	0.762	0.875	54.7	−20.6	−33.9	39.7	238.6	0.756	0.073	0.0	0.253	217	0.0	0.85	1.0	53.0	−27.5	−45.3	53.0	238.6
143	G63B_100_087$_{dd}$	0.125	0.75	1.0	1.0	0.875	0.562	226	0.125	0.766	1.0	58.0	−22.1	−41.8	47.3	242.1	0.813	0.17	0.0	0.01	224	0.0	0.733	1.0	52.6	−25.2	−47.8	54.1	242.1
144	Y86G_087_087$_{dd}$	0.125	0.875	0.0	0.875	0.875	0.437	142	0.116	0.875	0.0	53.0	−54.1	30.4	62.1	150.6	0.755	0.0	0.918	0.262	142	0.133	1.0	0.0	57.2	−61.9	34.8	71.0	150.6
145	G00B_087_075$_{dd}$	0.125	0.875	0.125	0.875	0.75	0.5	150	0.125	0.875	0.125	55.7	−50.7	23.1	55.7	155.5	0.791	0.0	0.805	0.196	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
146	G07B_087_075$_{dd}$	0.125	0.875	0.25	0.875	0.75	0.5	159	0.125	0.875	0.237	55.3	−49.4	15.6	51.8	162.4	0.807	0.0	0.706	0.199	157	0.0	1.0	0.15	53.8	−65.8	20.8	69.1	162.4
147	G15B_087_075$_{dd}$	0.125	0.875	0.375	0.875	0.75	0.5	169	0.125	0.875	0.362	55.6	−45.0	4.2	45.2	174.6	0.797	0.0	0.563	0.214	168	0.0	1.0	0.316	54.3	−60.1	5.6	60.3	174.6
148	G25B_087_075$_{dd}$	0.125	0.875	0.5	0.875	0.75	0.5	180	0.125	0.875	0.5	56.2	−38.6	−6.6	39.1	189.8	0.777	0.0	0.424	0.238	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
149	G34B_087_075$_{dd}$	0.125	0.875	0.625	0.875	0.75	0.5	191	0.125	0.875	0.637	56.4	−31.6	−17.6	36.1	209.1	0.768	0.0	0.286	0.262	191	0.0	1.0	0.683	55.2	−42.1	−23.4	48.2	209.1
150	G42B_087_075$_{dd}$	0.125	0.875	0.75	0.875	0.75	0.5	201	0.125	0.875	0.762	55.9	−28.0	−23.9	36.8	220.4	0.763	0.0	0.172	0.275	202	0.0	1.0	0.85	54.6	−37.3	−31.9	49.1	220.4
151	G50B_087_075$_{dd}$	0.125	0.875	0.875	0.875	0.75	0.5	210	0.125	0.875	0.875	54.8	−22.5	−32.3	39.3	235.1	0.753	0.02	0.0	0.286	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
152	G56B_100_087$_{dd}$	0.125	0.875	1.0	1.0	0.875	0.562	218	0.125	0.883	1.0	58.4	−24.3	−39.3	46.2	238.2	0.809	0.094	0.0	0.07	217	0.0	0.866	1.0	53.0	−27.8	−44.9	52.8	238.2
153	Y88G_100_100$_{dd}$	0.125	1.0	0.0	1.0	1.0	0.5	143	0.116	1.0	0.0	56.8	−62.5	34.1	71.3	151.3	0.881	0.0	0.999	0.0	143	0.116	1.0	0.0	56.8	−62.5	34.1	71.3	151.3
154	G00B_100_087$_{dd}$	0.125	1.0	0.125	1.0	0.875	0.562	150	0.125	1.0	0.125	59.5	−59.2	26.9	65.0	155.5	0.841	0.0	0.841	0.125	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
155	G06B_100_087$_{dd}$	0.125	1.0	0.25	1.0	0.875	0.562	158	0.125	1.0	0.241	59.0	−57.9	19.5	61.1	161.3	0.826	0.0	0.705	0.125	157	0.0	1.0	0.133	53.8	−66.2	22.3	69.9	161.3
156	G13B_100_087$_{dd}$	0.125	1.0	0.375	1.0	0.875	0.562	166	0.125	1.0	0.358	59.1	−54.6	9.6	55.4	170.0	0.834	0.0	0.611	0.125	164	0.0	1.0	0.266	53.9	−62.4	10.9	63.4	170.0
157	G20B_100_087$_{dd}$	0.125	1.0	0.5	1.0	0.875	0.562	175	0.125	1.0	0.489	59.9	−48.3	−2.7	48.3	183.2	0.824	0.0	0.468	0.125	174	0.0	1.0	0.416	54.8	−55.2	−3.1	55.2	183.2
158	G29B_100_087$_{dd}$	0.125	1.0	0.625	1.0	0.875	0.562	185	0.125	1.0	0.635	60.3	−41.0	−14.5	43.5	199.5	0.818	0.0	0.326	0.125	185	0.0	1.0	0.583	55.2	−46.8	−16.6	49.7	199.5
159	G36B_100_087$_{dd}$	0.125	1.0	0.75	1.0	0.875	0.562	194	0.125	1.0	0.766	60.3	−35.1	−22.9	42.0	213.1	0.805	0.0	0.211	0.125	195	0.0	1.0	0.733	55.2	−40.2	−26.2	48.0	213.1
160	G43B_100_087$_{dd}$	0.125	1.0	0.875	1.0	0.875	0.562	202	0.125	1.0	0.883	59.6	−32.3	−28.6	43.1	221.4	0.807	0.0	0.14	0.125	202	0.0	1.0	0.866	54.5	−36.9	−32.6	49.3	221.4
161	G50B_100_087$_{dd}$	0.125	1.0	1.0	1.0	0.875	0.562	210	0.125	1.0	1.0	58.4	−26.2	−37.7	45.9	235.1	0.81	0.035	0.0	0.116	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1

delta

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

2−1032030−F0

TUB matrícula: 20130201-QS49/QS49L0FP.PDF /.PS TUB material: code=rha4ta

aplicación para la medida salida de impresora láser, separación cmyn6* (CMYK)

http://130.149.60.45/~farbmetrik/QS49/QS49L0FP.PDF /.PS; 3D-linealización

F: 3D-linealización QS49/QS49LS30FP.DAT en archivo (F), página 22/33

n	HIC*$_{Fdd}$	rgb$_{Fdd}$			ict$_{Fdd}$			$h_{si\_F,dd}$	rgb*$_{Fdd}$			LabCh*$_{Fdd}$					cmyn*$_{sep,Fdd}$				$h_{siM,dd}$	rgb*$_{Mdd}$			LabCh*$_{Mdd}$				
162	R00Y_025_025dd	0.25	0.0	0.0	0.25	0.25	0.125	390	0.25	0.0	0.0	29.7	14.3	9.4	17.1	33.4	0.0	0.624	0.53	0.722	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
163	R00Y_025_025dd	0.25	0.0	0.125	0.25	0.25	0.125	360	0.25	0.0	0.125	29.8	14.7	2.6	14.9	10.0	0.0	0.581	0.323	0.735	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
164	B50R_025_025dd	0.25	0.0	0.25	0.25	0.25	0.125	330	0.25	0.0	0.25	29.9	16.3	−3.1	16.6	348.9	0.0	0.579	0.168	0.743	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
165	B34R_037_037dd	0.25	0.0	0.375	0.375	0.375	0.187	311	0.256	0.0	0.375	30.0	19.3	−9.2	21.4	334.4	0.0	0.607	0.007	0.744	311	0.683	0.0	1.0	40.4	51.6	−24.7	57.2	334.4
166	B25R_050_050dd	0.25	0.0	0.5	0.5	0.5	0.25	300	0.25	0.0	0.5	30.5	21.5	−15.4	26.5	324.4	0.206	0.709	0.0	0.65	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
167	B19R_062_062dd	0.25	0.0	0.625	0.625	0.625	0.312	293	0.239	0.0	0.625	30.4	24.1	−21.7	32.4	317.9	0.362	0.801	0.0	0.543	292	0.383	0.0	1.0	34.4	38.5	−34.7	51.9	317.9
168	B15R_075_075dd	0.25	0.0	0.75	0.75	0.75	0.375	289	0.237	0.0	0.75	30.5	26.0	−27.9	38.2	312.9	0.491	0.866	0.0	0.435	288	0.316	0.0	1.0	32.7	34.7	−37.2	50.9	312.9
169	B13R_087_087dd	0.25	0.0	0.875	0.875	0.875	0.437	286	0.233	0.0	0.875	30.5	27.6	−34.0	43.8	309.1	0.631	0.922	0.0	0.33	284	0.266	0.0	1.0	31.4	31.6	−38.8	50.1	309.1
170	B11R_100_100dd	0.25	0.0	1.0	1.0	1.0	0.5	284	0.233	0.0	1.0	31.1	29.6	−39.8	49.6	306.6	0.763	0.998	0.0	0.0	282	0.233	0.0	1.0	31.1	29.6	−39.8	49.6	306.6
171	R50Y_025_025dd	0.25	0.125	0.0	0.25	0.25	0.125	60	0.25	0.125	0.0	35.5	4.8	16.5	17.2	73.8	0.0	0.345	0.576	0.713	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
172	R00Y_025_012dd	0.25	0.125	0.125	0.25	0.125	0.187	390	0.25	0.124	0.124	35.8	7.1	4.7	8.5	33.4	0.0	0.34	0.304	0.724	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
173	B50R_025_012dd	0.25	0.125	0.25	0.25	0.125	0.187	330	0.25	0.124	0.25	35.8	8.1	−1.5	8.3	348.9	0.0	0.312	0.13	0.734	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
174	B25R_037_025dd	0.25	0.125	0.375	0.375	0.25	0.25	300	0.25	0.124	0.375	36.1	10.7	−7.7	13.2	324.4	0.033	0.369	0.0	0.711	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
175	B15R_050_037dd	0.25	0.125	0.5	0.5	0.375	0.312	289	0.243	0.124	0.5	36.1	13.0	−13.9	19.1	312.9	0.175	0.482	0.0	0.642	288	0.316	0.0	1.0	32.7	34.7	−37.2	50.9	312.9
176	B11R_062_050dd	0.25	0.125	0.625	0.625	0.5	0.375	284	0.241	0.125	0.625	36.4	14.8	−19.9	24.8	306.6	0.321	0.578	0.0	0.553	282	0.233	0.0	1.0	31.1	29.6	−39.8	49.6	306.6
177	B09R_075_062dd	0.25	0.125	0.75	0.75	0.625	0.437	281	0.239	0.125	0.75	37.5	16.8	−25.6	30.6	303.2	0.445	0.661	0.0	0.445	279	0.183	0.0	1.0	31.3	26.8	−41.0	49.0	303.2
178	B07R_087_075dd	0.25	0.125	0.875	0.875	0.75	0.5	279	0.237	0.125	0.875	38.5	18.7	−31.3	36.5	300.9	0.552	0.737	0.0	0.332	278	0.15	0.0	1.0	31.4	25.0	−41.7	48.6	300.9
179	B06R_100_087dd	0.25	0.125	1.0	1.0	0.875	0.562	278	0.241	0.125	1.0	39.6	21.0	−36.8	42.4	299.8	0.621	0.751	0.0	0.174	277	0.133	0.0	1.0	31.5	24.1	−42.0	48.4	299.8
180	Y00G_025_025dd	0.25	0.25	0.0	0.25	0.25	0.125	90	0.25	0.25	0.0	40.7	−3.9	21.1	21.5	100.5	0.0	0.095	0.556	0.718	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
181	Y00G_025_012dd	0.25	0.25	0.125	0.25	0.125	0.187	90	0.25	0.25	0.124	41.3	−1.9	10.5	10.7	100.5	0.0	0.074	0.336	0.72	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
182	NW_025dd	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
183	B00R_037_012dd	0.25	0.25	0.375	0.375	0.125	0.312	270	0.249	0.249	0.375	42.9	2.1	−5.5	5.9	290.8	0.03	0.103	0.0	0.682	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
184	B00R_050_025dd	0.25	0.25	0.5	0.5	0.25	0.375	270	0.249	0.249	0.5	44.0	4.2	−11.1	11.9	290.8	0.128	0.213	0.0	0.624	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
185	B00R_062_037dd	0.25	0.25	0.625	0.625	0.375	0.437	270	0.25	0.25	0.625	45.1	6.3	−16.7	17.8	290.8	0.26	0.334	0.0	0.532	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
186	B00R_075_050dd	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.25	0.75	46.2	8.4	−22.3	23.8	290.8	0.364	0.428	0.0	0.425	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
187	B00R_087_062dd	0.25	0.25	0.875	0.875	0.625	0.562	270	0.25	0.25	0.875	47.2	10.5	−27.8	29.8	290.8	0.474	0.525	0.0	0.292	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
188	B00R_100_075dd	0.25	0.25	1.0	1.0	0.75	0.625	270	0.25	0.25	1.0	48.3	12.7	−33.4	35.7	290.8	0.534	0.55	0.0	0.17	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
189	Y31G_037_037dd	0.25	0.375	0.0	0.375	0.375	0.187	109	0.256	0.375	0.0	46.6	−10.3	28.7	30.5	109.8	0.102	0.0	0.664	0.647	108	0.683	1.0	0.0	84.6	−27.6	76.5	81.3	109.8
190	Y50G_037_025dd	0.25	0.375	0.125	0.375	0.25	0.25	120	0.25	0.375	0.124	44.6	−10.4	13.7	17.2	127.3	0.198	0.0	0.485	0.653	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
191	G00B_037_012dd	0.25	0.375	0.25	0.375	0.125	0.312	150	0.249	0.375	0.249	45.6	−8.4	3.8	9.2	155.5	0.189	0.0	0.293	0.641	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
192	G50B_037_012dd	0.25	0.375	0.375	0.375	0.125	0.312	210	0.249	0.375	0.375	45.5	−3.7	−5.3	6.5	235.1	0.109	0.0	0.04	0.661	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
193	G75B_050_025dd	0.25	0.375	0.5	0.5	0.25	0.375	240	0.249	0.375	0.5	47.4	−3.3	−12.3	12.7	254.9	0.222	0.097	0.0	0.594	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
194	G84B_062_037dd	0.25	0.375	0.625	0.625	0.375	0.437	251	0.25	0.368	0.625	47.6	−0.8	−18.4	18.4	267.3	0.326	0.228	0.0	0.514	251	0.0	0.316	1.0	39.3	−2.3	−49.1	49.1	267.3
195	G88B_075_050dd	0.25	0.375	0.75	0.75	0.5	0.5	256	0.25	0.366	0.75	48.2	1.6	−24.1	24.2	273.8	0.436	0.354	0.0	0.399	257	0.0	0.233	1.0	36.6	3.2	−48.3	48.4	273.8
196	G90B_087_062dd	0.25	0.375	0.875	0.875	0.625	0.562	259	0.25	0.364	0.875	49.3	3.8	−29.7	29.9	277.3	0.544	0.458	0.0	0.256	260	0.0	0.183	1.0	35.9	6.1	−47.5	47.9	277.3
197	G92B_100_075dd	0.25	0.375	1.0	1.0	0.75	0.625	261	0.25	0.362	1.0	50.5	6.0	−35.1	35.6	279.6	0.582	0.491	0.0	0.151	262	0.0	0.15	1.0	35.4	8.0	−46.9	47.5	279.6
198	Y50G_050_050dd	0.25	0.5	0.0	0.5	0.5	0.25	120	0.25	0.5	0.0	47.4	−20.8	27.4	34.4	127.3	0.349	0.0	0.75	0.532	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
199	Y68G_050_037dd	0.25	0.5	0.125	0.5	0.375	0.312	131	0.243	0.5	0.124	47.8	−19.5	16.7	25.7	139.4	0.369	0.0	0.619	0.544	131	0.316	1.0	0.0	63.8	−52.2	44.7	68.7	139.4
200	G00B_050_025dd	0.25	0.5	0.25	0.5	0.25	0.375	150	0.249	0.5	0.249	49.4	−16.9	7.7	18.5	155.5	0.346	0.0	0.444	0.531	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
201	G25B_050_025dd	0.25	0.5	0.375	0.5	0.25	0.375	180	0.249	0.5	0.375	49.6	−12.8	−2.2	13.0	189.8	0.322	0.0	0.26	0.548	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
202	G50B_050_025dd	0.25	0.5	0.5	0.5	0.25	0.375	210	0.249	0.5	0.5	49.1	−7.5	−10.7	13.1	235.1	0.245	0.0	0.027	0.588	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
203	G65B_062_037dd	0.25	0.5	0.625	0.625	0.375	0.437	229	0.25	0.506	0.625	52.2	−8.7	−18.2	20.2	244.5	0.355	0.057	0.0	0.502	228	0.0	0.683	1.0	51.6	−23.2	−48.6	53.9	244.5
204	G75B_075_050dd	0.25	0.5	0.75	0.75	0.5	0.5	240	0.25	0.5	0.75	53.0	−6.6	−24.7	25.5	254.9	0.466	0.203	0.0	0.379	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
205	G80B_087_062dd	0.25	0.5	0.875	0.875	0.625	0.562	247	0.25	0.489	0.875	53.0	−4.2	−30.8	31.1	262.1	0.586	0.354	0.0	0.225	247	0.0	0.383	1.0	41.7	−6.8	−49.3	49.7	262.1
206	G84B_100_075dd	0.25	0.5	1.0	1.0	0.75	0.625	251	0.25	0.487	1.0	53.4	−1.7	−36.8	36.8	267.3	0.632	0.417	0.0	0.094	251	0.0	0.316	1.0	39.3	−2.3	−49.1	49.1	267.3
207	Y61G_062_062dd	0.25	0.625	0.0	0.625	0.625	0.312	127	0.239	0.625	0.0	50.7	−29.5	30.3	42.3	134.2	0.461	0.0	0.812	0.422	127	0.383	1.0	0.0	66.8	−47.2	48.5	67.7	134.2
208	Y76G_062_050dd	0.25	0.625	0.125	0.625	0.5	0.375	136	0.241	0.625	0.125	51.0	−28.9	19.8	35.1	145.5	0.502	0.0	0.695	0.421	137	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145.5
209	G00B_062_037dd	0.25	0.625	0.25	0.625	0.375	0.437	150	0.25	0.625	0.25	53.2	−25.3	11.5	27.8	155.5	0.471	0.0	0.548	0.41	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
210	G15B_062_037dd	0.25	0.625	0.375	0.625	0.375	0.437	169	0.25	0.625	0.368	53.2	−22.5	2.1	22.6	174.6	0.48	0.0	0.416	0.419	168	0.0	1.0	0.316	54.3	−60.1	5.6	60.3	174.6
211	G34B_062_037dd	0.25	0.625	0.5	0.625	0.375	0.437	191	0.25	0.625	0.506	53.6	−15.8	−8.8	18.0	209.1	0.416	0.0	0.204	0.463	191	0.0	1.0	0.683	55.2	−42.1	−23.4	48.2	209.1
212	G50B_062_037dd	0.25	0.625	0.625	0.625	0.375	0.437	210	0.25	0.625	0.625	52.8	−11.2	−16.1	19.6	235.1	0.359	0.0	0.025	0.509	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
213	G61B_075_050dd	0.25	0.625	0.75	0.75	0.5	0.5	224	0.25	0.633	0.75	56.3	−13.1	−23.6	26.9	240.9	0.478	0.052	0.0	0.38	222	0.0	0.766	1.0	52.9	−26.2	−47.2	53.9	240.9
214	G69B_087_062dd	0.25	0.625	0.875	0.875	0.625	0.562	233	0.25	0.635	0.875	58.3	−12.6	−30.9	33.4	247.7	0.608	0.196	0.0	0.202	232	0.0	0.616	1.0	50.2	−20.2	−49.5	53.5	247.7
215	G75B_100_075dd	0.25	0.625	1.0	1.0	0.75	0.625	240	0.25	0.625	1.0	58.5	−9.9	−37.0	38.3	254.9	0.643	0.309	0.0	0.029	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
216	Y68G_075_075dd	0.25	0.75	0.0	0.75	0.75	0.375	131	0.237	0.75	0.0	53.8	−39.1	33.5	51.5	139.4	0.569	0.0	0.88	0.317	131	0.316	1.0	0.0	63.8	−52.2	44.7	68.7	139.4
217	Y81G_075_062dd	0.25	0.75	0.125	0.75	0.625	0.437	139	0.239	0.75	0.125	54.6	−37.4	23.3	44.1	148.1	0.607	0.0	0.77	0.296	140	0.183	1.0	0.0	58.7	−59.9	37.3	70.6	148.1
218	G00B_075_050dd	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.25	57.0	−33.8	15.4	37.1	155.5	0.586	0.0	0.642	0.285	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
219	G11B_075_050dd	0.25	0.75	0.375	0.75	0.5	0.5	164	0.25	0.75	0.366	56.8	−31.8	7.0	32.6	167.4	0.608	0.0	0.528	0.291	162	0.0	1.0	0.233	53.7	−63.6	14.1	65.2	167.4
220	G25B_075_050dd	0.25	0.75	0.5	0.75	0.5	0.5	180	0.25	0.75	0.5	57.4	−25.7	−4.4	26.1	189.8	0.574	0.0	0.351	0.32	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
221	G38B_075_050dd	0.25	0.75	0.625	0.75	0.5	0.5	196	0.25	0.75	0.633	57.4	−19.6	−13.9	24.0	215.4	0.523	0.0	0.187	0.358	197	0.0	1.0	0.766	55.1	−39.2	−27.9	48.1	215.4
222	G50B_075_050dd	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.75	56.4	−15.0	−21.5	26.2	235.1	0.477	0.0	0.015	0.398	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
223	G59B_087_062dd	0.25	0.75	0.875	0.875	0.625	0.562	221	0.25	0.76	0.875	60.0	−16.9	−28.7	33.3	239.5	0.6	0.056	0.0	0.253	219	0.0	0.816	1.0	53.0	−27.0	−46.0	53.4	239.5
224	G65B_100_075dd	0.25	0.75	1.0	1.0	0.75	0.625	229	0.25	0.762	1.0	62.7	−17.4	−36.5	40.4	244.5	0.681	0.19	0.0	0.037	228	0.0	0.683	1.0	51.6	−23.2	−48.6	53.9	244.5
225	Y73G_087_087dd	0.25	0.875	0.0	0.875	0.875	0.437	134	0.233	0.875	0.0	56.7	−49.0	36.3	61.0	143.4	0.672	0.0	0.932	0.236	135	0.266	1.0	0.0	61.4	−56.0	41.5	69.7	143.4
226	Y85G_087_075dd	0.25	0.875	0.125	0.875	0.75	0.5	141	0.237	0.875	0.125	58.2	−45.9	26.7	53.1	149.7	0.678	0.0	0.806	0.201	142	0.15	1.0	0.0	57.7	−61.2	35.6	70.9	149.7
227	G00B_087_062dd	0.25	0.875	0.25	0.875	0.625	0.562	150	0.25	0.875	0.25	60.9	−42.3	19.2	46.4	155.5	0.657	0.0	0.689	0.187	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
228	G09B_087_062dd	0.25	0.875	0.375	0.875	0.625	0.562	161	0.25	0.875	0.364	60.5	−40.6	11.3	42.2	164.4	0.681	0.0	0.592	0.19	159	0.0	1.0	0.183	53.8	−65.0	18.1	67.5	164.4
229	G19B_087_062dd	0.25	0.875	0.5	0.875	0.625	0.562	173	0.25	0.875	0.489	61.1	−35.3	−0.3	35.3	180.6	0.676	0.0	0.439	0.199	172	0.0	1.0	0.383	54.7	−56.5	−0.6	56.5	180.6
230	G30B_087_062dd	0.25	0.875	0.625	0.875	0.625	0.562	187	0.25	0.875	0.635	61.5	−27.9	−12.1	30.4	203.4	0.652	0.0	0.278	0.221	187	0.0	1.0	0.616	55.3	−44.7	−19.4	48.7	203.4
231	G40B_087_062dd	0.25	0.875	0.75	0.875	0.625	0.562	199	0.25	0.875	0.76	61.2	−23.8	−18.9	30.4	218.4	0.64	0.0	0.184	0.238	200	0.0	1.0	0.816	54.8	−38.1	−30.3	48.7	218.4
232	G50B_087_062dd	0.25	0.875	0.875	0.875	0.625	0.562	210	0.25	0.875	0.875	60.1	−18.7	−26.9	32.8	235.1	0.599	0.0	0.008	0.279	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
233	G57B_100_075dd	0.25	0.875	1.0	1.0	0.75	0.625	219	0.25	0.887	1.0	63.7	−20.6	−33.9	39.7	238.6	0.68	0.065	0.0	0.105	217	0.0	0.85	1.0	53.0	−27.5	−45.3	53.0	238.6
234	Y76G_100_100dd	0.25	1.0	0.0	1.0	1.0	0.5	136	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145.5	0.763	0.0	1.0	0.0	137	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145.5
235	Y86G_100_087dd	0.25	1.0	0.125	1.0	0.875	0.562	142	0.241	1.0	0.125	62.0	−54.1	30.4	62.1	150.6	0.718	0.0	0.813	0.125	142	0.133	1.0	0.0	57.2	−61.9	34.8	71.0	150.6
236	G00B_100_075dd	0.25	1.0	0.25	1.0	0.75	0.625	150	0.25	1.0	0.25	64.7	−50.7	23.1	55.7	155.5	0.702	0.0	0.707	0.125	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
237	G07B_100_075dd	0.25	1.0	0.375	1.0	0.75	0.625	159	0.25	1.0	0.362	64.3	−49.4	15.6	51.8	162.4	0.718	0.0	0.628	0.125	157	0.0	1.0	0.15	53.8	−65.8	20.8	69.1	162.4
238	G15B_100_075dd	0.25	1.0	0.5	1.0	0.75	0.625	169	0.25	1.0	0.487	64.6	−45.0	4.2	45.2	174.6	0.722	0.0	0.5	0.125	168	0.0	1.0	0.316	54.3	−60.1	5.6	60.3	174.6
239	G25B_100_075dd	0.25	1.0	0.625	1.0	0.75	0.625	180	0.25	1.0	0.625	65.2	−38.6	−6.6	39.1	189.8	0.702	0.0	0.369	0.125	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
240	G34B_100_075dd	0.25	1.0	0.75	1.0	0.75	0.625	191	0.25	1.0	0.762	65.4	−31.6	−17.6	36.1	209.1	0.688	0.0	0.254	0.0	191	0.0	1.0	0.683	55.2	−42.1	−23.4	48.2	209.1
241	G42B_100_075dd	0.25	1.0	0.875	1.0	0.75	0.625	201	0.25	1.0	0.887	64.9	−28.0	−23.9	36.8	220.4	0.701	0.0	0.18	0.016	202	0.0	1.0	0.85	54.6	−37.3	−31.9	49.1	220.4
242	G50B_100_075dd	0.25	1.0	1.0	1.0	0.75	0.625	210	0.25	1.0	1.0	63.8	−22.5	−32.3	39.3	235.1	0.677	0.004	0.0	0.142	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1

delta

2−1032130−F0 QS490−7N, 22/33−F

gráfico TUB-QS49; código de tono: H^*_d=Y25G_d entrada: *rgb/cmyk* −> *rgb*$_{dd}$

colores y differencia en color, $\Delta E'^*$ salida: 3D-linealización a *cmyk**$_{dd}$

vea archivos semejantes: http://130.149.60.45/~farbmetrik/QS49/QS49.HTM

información técnica: http://www.ps.bam.de o http://130.149.60.45/~farbmetrik

2−1032130−F0

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$				*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
243	R00Y_037_037$_{dd}$	0.375	0.0	0.0	0.375	0.375	0.187	390	0.375	0.0	0.0	32.7	21.4	14.1	25.7	33.4	0.0	0.736	0.635	0.64	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
244	R18Y_037_037$_{dd}$	0.375	0.0	0.125	0.375	0.375	0.187	371	0.375	0.0	0.118	32.7	21.2	8.7	22.9	22.3	0.0	0.728	0.493	0.653	371	1.0	0.0	0.316	47.4	56.5	23.2	61.1	22.3
245	B65R_037_037$_{dd}$	0.375	0.0	0.25	0.375	0.375	0.187	349	0.375	0.0	0.256	33.1	23.7	−0.6	23.7	358.3	0.0	0.703	0.274	0.656	348	1.0	0.0	0.683	48.6	63.2	−1.8	63.2	358.3
246	B50R_037_037$_{dd}$	0.375	0.0	0.375	0.375	0.375	0.187	330	0.375	0.0	0.375	32.9	24.5	−4.7	24.9	348.9	0.0	0.693	0.169	0.665	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
247	B38R_050_050$_{dd}$	0.375	0.0	0.5	0.5	0.5	0.25	316	0.383	0.0	0.5	33.1	27.9	−10.4	29.8	339.4	0.008	0.714	0.0	0.661	317	0.766	0.0	1.0	42.4	55.8	−20.9	59.6	339.4
248	B30R_062_062$_{dd}$	0.375	0.0	0.625	0.625	0.625	0.312	307	0.385	0.0	0.625	33.3	30.0	−17.2	34.6	330.2	0.224	0.791	0.0	0.544	307	0.616	0.0	1.0	38.9	48.1	−27.5	55.4	330.2
249	B25R_075_075$_{dd}$	0.375	0.0	0.75	0.75	0.75	0.375	300	0.375	0.0	0.75	33.8	32.3	−23.1	39.8	324.4	0.354	0.846	0.0	0.414	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
250	B20R_087_087$_{dd}$	0.375	0.0	0.875	0.875	0.875	0.437	295	0.364	0.0	0.875	33.8	34.9	−29.5	45.7	319.8	0.481	0.92	0.0	0.28	294	0.416	0.0	1.0	35.2	39.9	−33.7	52.2	319.8
251	B18R_100_100$_{dd}$	0.375	0.0	1.0	1.0	1.0	0.5	292	0.366	0.0	1.0	34.0	37.7	−35.3	51.7	316.8	0.631	1.0	0.0	0.0	291	0.366	0.0	1.0	34.0	37.7	−35.3	51.7	316.8
252	R31Y_037_037$_{dd}$	0.375	0.125	0.0	0.375	0.375	0.187	49	0.375	0.118	0.0	38.0	13.3	21.8	25.5	58.6	0.0	0.557	0.701	0.609	48	1.0	0.316	0.0	61.6	35.5	58.2	68.2	58.6
253	R00Y_037_025$_{dd}$	0.375	0.125	0.125	0.375	0.25	0.25	390	0.375	0.124	0.124	38.7	14.3	9.4	17.1	33.4	0.0	0.53	0.432	0.631	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
254	R00Y_037_025$_{dd}$	0.375	0.125	0.25	0.375	0.25	0.25	360	0.375	0.124	0.25	38.8	14.7	2.6	14.9	10.0	0.0	0.482	0.281	0.642	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
255	B50R_037_025$_{dd}$	0.375	0.125	0.375	0.375	0.25	0.25	330	0.375	0.124	0.375	38.9	16.3	−3.1	16.6	348.9	0.0	0.477	0.145	0.646	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
256	B34R_050_037$_{dd}$	0.375	0.125	0.5	0.5	0.375	0.312	311	0.381	0.124	0.5	39.0	19.3	−9.2	21.4	334.4	0.0	0.5	0.005	0.644	311	0.683	0.0	1.0	40.4	51.6	−24.7	57.2	334.4
257	B25R_062_050$_{dd}$	0.375	0.125	0.625	0.625	0.5	0.375	300	0.375	0.125	0.625	39.5	21.5	−15.4	26.5	324.4	0.18	0.589	0.0	0.544	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
258	B19R_075_062$_{dd}$	0.375	0.125	0.75	0.75	0.625	0.437	293	0.364	0.125	0.75	39.4	24.1	−21.7	32.4	317.9	0.322	0.681	0.0	0.421	292	0.383	0.0	1.0	34.4	38.5	−34.7	51.9	317.9
259	B15R_087_075$_{dd}$	0.375	0.125	0.875	0.875	0.75	0.5	289	0.362	0.125	0.875	39.5	26.0	−27.9	38.2	312.9	0.452	0.776	0.0	0.292	288	0.316	0.0	1.0	32.7	34.7	−37.2	50.9	312.9
260	B13R_100_087$_{dd}$	0.375	0.125	1.0	1.0	0.875	0.562	286	0.358	0.125	1.0	39.5	27.6	−34.0	43.8	309.1	0.536	0.777	0.0	0.166	284	0.266	0.0	1.0	31.4	31.6	−38.8	50.1	309.1
261	R68Y_037_037$_{dd}$	0.375	0.25	0.0	0.375	0.375	0.187	71	0.375	0.256	0.0	44.4	2.0	27.7	27.8	85.7	0.0	0.296	0.671	0.616	71	1.0	0.683	0.0	78.6	5.4	73.9	74.1	85.7
262	R50Y_037_025$_{dd}$	0.375	0.25	0.125	0.375	0.25	0.25	60	0.375	0.25	0.124	44.5	4.8	16.5	17.2	73.8	0.0	0.317	0.494	0.628	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
263	R00Y_037_012$_{dd}$	0.375	0.25	0.25	0.375	0.125	0.312	390	0.375	0.249	0.249	44.8	7.1	4.7	8.5	33.4	0.0	0.274	0.266	0.628	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
264	B50R_037_012$_{dd}$	0.375	0.25	0.375	0.375	0.125	0.312	330	0.375	0.249	0.375	44.8	8.1	−1.5	8.3	348.9	0.0	0.257	0.126	0.633	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
265	B25R_050_025$_{dd}$	0.375	0.25	0.5	0.5	0.25	0.375	300	0.375	0.249	0.5	45.1	10.7	−7.7	13.2	324.4	0.0	0.274	0.004	0.627	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
266	B15R_062_037$_{dd}$	0.375	0.25	0.625	0.625	0.375	0.437	289	0.368	0.25	0.625	45.1	13.0	−13.9	19.1	312.9	0.154	0.393	0.0	0.539	288	0.316	0.0	1.0	32.7	34.7	−37.2	50.9	312.9
267	B11R_075_050$_{dd}$	0.375	0.25	0.75	0.75	0.5	0.5	284	0.366	0.25	0.75	45.4	14.8	−19.9	24.8	306.6	0.279	0.481	0.0	0.439	282	0.233	0.0	1.0	31.1	29.6	−39.8	49.6	306.6
268	B09R_087_062$_{dd}$	0.375	0.25	0.875	0.875	0.625	0.562	281	0.364	0.25	0.875	46.5	16.8	−25.6	30.6	303.2	0.402	0.576	0.0	0.302	279	0.183	0.0	1.0	31.3	26.8	−41.0	49.0	303.2
269	B07R_100_075$_{dd}$	0.375	0.25	1.0	1.0	0.75	0.625	279	0.362	0.25	1.0	47.5	18.7	−31.3	36.5	300.9	0.468	0.598	0.0	0.173	278	0.15	0.0	1.0	31.4	25.0	−41.7	48.6	300.9
270	Y00G_037_037$_{dd}$	0.375	0.375	0.0	0.375	0.375	0.187	90	0.375	0.375	0.0	49.2	−5.9	31.7	32.3	100.5	0.0	0.083	0.65	0.635	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
271	Y00G_037_025$_{dd}$	0.375	0.375	0.125	0.375	0.25	0.25	90	0.375	0.375	0.124	49.7	−3.9	21.1	21.5	100.5	0.0	0.087	0.479	0.636	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
272	Y00G_037_012$_{dd}$	0.375	0.375	0.25	0.375	0.125	0.312	90	0.375	0.375	0.249	50.3	−1.9	10.5	10.7	100.5	0.0	0.077	0.298	0.626	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
273	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
274	B00R_050_012$_{dd}$	0.375	0.375	0.5	0.5	0.125	0.437	270	0.375	0.375	0.5	51.9	2.1	−5.5	5.9	290.8	0.046	0.1	0.0	0.578	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
275	B00R_062_025$_{dd}$	0.375	0.375	0.625	0.625	0.25	0.5	270	0.375	0.375	0.625	53.0	4.2	−11.1	11.9	290.8	0.113	0.187	0.0	0.511	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
276	B00R_075_037$_{dd}$	0.375	0.375	0.75	0.75	0.375	0.562	270	0.375	0.375	0.75	54.1	6.3	−16.7	17.8	290.8	0.238	0.289	0.0	0.407	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
277	B00R_087_050$_{dd}$	0.375	0.375	0.875	0.875	0.5	0.625	270	0.375	0.375	0.875	55.2	8.4	−22.3	23.8	290.8	0.349	0.395	0.0	0.27	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
278	B00R_100_062$_{dd}$	0.375	0.375	1.0	1.0	0.625	0.687	270	0.375	0.375	1.0	56.2	10.5	−27.8	29.8	290.8	0.409	0.442	0.0	0.162	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
279	Y23G_050_050$_{dd}$	0.375	0.5	0.0	0.5	0.5	0.25	104	0.383	0.5	0.0	57.1	−10.4	43.2	44.5	103.6	0.039	0.0	0.753	0.529	102	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103.6
280	Y31G_050_037$_{dd}$	0.375	0.5	0.125	0.5	0.375	0.312	109	0.381	0.5	0.124	55.6	−10.3	28.7	30.5	109.8	0.075	0.0	0.565	0.581	108	0.683	1.0	0.0	84.6	−27.6	76.5	81.3	109.8
281	Y50G_050_025$_{dd}$	0.375	0.5	0.25	0.5	0.25	0.375	120	0.375	0.5	0.249	53.6	−10.4	13.7	17.2	127.3	0.155	0.0	0.407	0.568	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
282	G00B_050_012$_{dd}$	0.375	0.5	0.375	0.5	0.125	0.437	150	0.375	0.5	0.375	54.6	−8.4	3.8	9.2	155.5	0.184	0.0	0.248	0.547	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
283	G50B_050_012$_{dd}$	0.375	0.5	0.5	0.5	0.125	0.437	210	0.375	0.5	0.5	54.5	−3.7	−5.3	6.5	235.1	0.117	0.0	0.031	0.561	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
284	G75B_062_025$_{dd}$	0.375	0.5	0.625	0.625	0.25	0.5	240	0.375	0.5	0.625	56.4	−3.3	−12.3	12.7	254.9	0.184	0.064	0.0	0.499	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
285	G84B_075_037$_{dd}$	0.375	0.5	0.75	0.75	0.375	0.562	251	0.375	0.493	0.75	56.6	−0.8	−18.4	18.4	267.3	0.294	0.2	0.0	0.392	251	0.0	0.316	1.0	39.3	−2.3	−49.1	49.1	267.3
286	G88B_087_050$_{dd}$	0.375	0.5	0.875	0.875	0.5	0.625	256	0.375	0.491	0.875	57.2	1.6	−24.1	24.2	273.8	0.417	0.331	0.0	0.247	257	0.0	0.233	1.0	36.6	3.2	−48.3	48.4	273.8
287	G90B_100_062$_{dd}$	0.375	0.5	1.0	1.0	0.625	0.687	259	0.375	0.489	1.0	58.3	3.8	−29.7	29.9	277.3	0.469	0.386	0.0	0.145	260	0.0	0.183	1.0	35.9	6.1	−47.5	47.9	277.3
288	Y38G_062_062$_{dd}$	0.375	0.625	0.0	0.625	0.625	0.312	113	0.385	0.625	0.0	58.5	−20.3	41.9	46.6	115.8	0.291	0.0	0.82	0.406	112	0.616	1.0	0.0	79.3	−32.5	67.1	74.6	115.8
289	Y50G_062_050$_{dd}$	0.375	0.625	0.125	0.625	0.5	0.375	120	0.375	0.625	0.125	56.4	−20.8	27.4	34.4	127.3	0.339	0.0	0.682	0.454	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
290	Y68G_062_037$_{dd}$	0.375	0.625	0.25	0.625	0.375	0.437	131	0.368	0.625	0.25	56.8	−19.5	16.7	25.7	139.4	0.339	0.0	0.545	0.445	131	0.316	1.0	0.0	63.8	−52.2	44.7	68.7	139.4
291	G00B_062_025$_{dd}$	0.375	0.625	0.375	0.625	0.25	0.5	150	0.375	0.625	0.375	58.4	−16.9	7.7	18.5	155.5	0.317	0.0	0.405	0.439	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
292	G25B_062_025$_{dd}$	0.375	0.625	0.5	0.625	0.25	0.5	180	0.375	0.625	0.5	58.6	−12.8	−2.2	13.0	189.8	0.286	0.0	0.23	0.457	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
293	G50B_062_025$_{dd}$	0.375	0.625	0.625	0.625	0.25	0.5	210	0.375	0.625	0.625	58.1	−7.5	−10.7	13.1	235.1	0.212	0.0	0.033	0.498	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
294	G65B_075_037$_{dd}$	0.375	0.625	0.75	0.75	0.375	0.562	229	0.375	0.631	0.75	61.2	−8.7	−18.2	20.2	244.5	0.316	0.06	0.0	0.382	228	0.0	0.683	1.0	51.6	−23.2	−48.6	53.9	244.5
295	G75B_087_050$_{dd}$	0.375	0.625	0.875	0.875	0.5	0.625	240	0.375	0.625	0.875	61.9	−6.6	−24.7	25.5	254.9	0.448	0.21	0.0	0.236	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
296	G80B_100_062$_{dd}$	0.375	0.625	1.0	1.0	0.625	0.687	247	0.375	0.614	1.0	62.0	−4.2	−30.8	31.1	262.1	0.516	0.31	0.0	0.071	247	0.0	0.383	1.0	41.7	−6.8	−49.3	49.7	262.1
297	Y50G_075_075$_{dd}$	0.375	0.75	0.0	0.75	0.75	0.375	120	0.375	0.75	0.0	59.2	−31.3	41.1	51.6	127.3	0.442	0.0	0.887	0.297	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
298	Y61G_075_062$_{dd}$	0.375	0.75	0.125	0.75	0.625	0.437	127	0.364	0.75	0.125	59.7	−29.5	30.3	42.3	134.2	0.451	0.0	0.756	0.329	127	0.383	1.0	0.0	66.8	−47.2	48.5	67.7	134.2
299	Y76G_075_050$_{dd}$	0.375	0.75	0.25	0.75	0.5	0.5	136	0.366	0.75	0.25	59.9	−28.9	19.8	35.1	145.5	0.465	0.0	0.643	0.315	137	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145.5
300	G00B_075_037$_{dd}$	0.375	0.75	0.375	0.75	0.375	0.562	150	0.375	0.75	0.375	62.2	−25.3	11.5	27.8	155.5	0.422	0.0	0.515	0.313	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
301	G15B_075_037$_{dd}$	0.375	0.75	0.5	0.75	0.375	0.562	169	0.375	0.75	0.493	62.2	−22.5	2.1	22.6	174.6	0.419	0.0	0.385	0.325	168	0.0	1.0	0.316	54.3	−60.1	5.6	60.3	174.6
302	G34B_075_037$_{dd}$	0.375	0.75	0.625	0.75	0.375	0.562	191	0.375	0.75	0.631	62.6	−15.8	−8.8	18.0	209.1	0.369	0.0	0.185	0.361	191	0.0	1.0	0.683	55.2	−42.1	−23.4	48.2	209.1
303	G50B_075_037$_{dd}$	0.375	0.75	0.75	0.75	0.375	0.562	210	0.375	0.75	0.75	61.8	−11.2	−16.1	19.6	235.1	0.312	0.0	0.012	0.401	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
304	G61B_087_050$_{dd}$	0.375	0.75	0.875	0.875	0.5	0.625	224	0.375	0.758	0.875	65.3	−13.1	−23.6	26.9	240.9	0.446	0.073	0.0	0.258	222	0.0	0.766	1.0	52.9	−26.2	−47.2	53.9	240.9
305	G69B_100_062$_{dd}$	0.375	0.75	1.0	1.0	0.625	0.687	233	0.375	0.76	1.0	67.3	−12.6	−30.9	33.4	247.7	0.545	0.213	0.0	0.037	232	0.0	0.616	1.0	50.2	−20.2	−49.5	53.5	247.7
306	Y58G_087_087$_{dd}$	0.375	0.875	0.0	0.875	0.875	0.437	125	0.364	0.875	0.0	62.5	−40.0	44.0	59.5	132.2	0.537	0.0	0.936	0.19	125	0.416	1.0	0.0	68.0	−45.7	50.3	68.0	132.2
307	Y68G_087_075$_{dd}$	0.375	0.875	0.125	0.875	0.75	0.5	131	0.362	0.875	0.125	62.8	−39.1	33.5	51.5	139.4	0.553	0.0	0.813	0.21	131	0.316	1.0	0.0	63.8	−52.2	44.7	68.7	139.4
308	Y81G_087_062$_{dd}$	0.375	0.875	0.25	0.875	0.625	0.562	139	0.364	0.875	0.25	63.6	−37.4	23.3	44.1	148.1	0.566	0.0	0.703	0.198	140	0.183	1.0	0.0	58.7	−59.9	37.3	70.6	148.1
309	G00B_087_050$_{dd}$	0.375	0.875	0.375	0.875	0.5	0.625	150	0.375	0.875	0.375	66.0	−33.8	15.4	37.1	155.5	0.54	0.0	0.588	0.188	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
310	G11B_087_050$_{dd}$	0.375	0.875	0.5	0.875	0.5	0.625	164	0.375	0.875	0.491	65.8	−31.8	7.0	32.6	167.4	0.554	0.0	0.48	0.195	162	0.0	1.0	0.233	53.7	−63.6	14.1	65.2	167.4
311	G25B_087_050$_{dd}$	0.375	0.875	0.625	0.875	0.5	0.625	180	0.375	0.875	0.625	66.4	−25.7	−4.4	26.1	189.8	0.521	0.0	0.315	0.216	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
312	G38B_087_050$_{dd}$	0.375	0.875	0.75	0.875	0.5	0.625	196	0.375	0.875	0.758	66.4	−19.6	−13.9	24.0	215.4	0.463	0.0	0.179	0.249	197	0.0	1.0	0.766	55.1	−39.2	−27.9	48.1	215.4
313	G50B_087_050$_{dd}$	0.375	0.875	0.875	0.875	0.5	0.625	210	0.375	0.875	0.875	65.4	−15.0	−21.5	26.2	235.1	0.425	0.004	0.0	0.295	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
314	G59B_100_062$_{dd}$	0.375	0.875	1.0	1.0	0.625	0.687	221	0.375	0.885	1.0	69.0	−16.9	−28.7	33.3	239.5	0.53	0.071	0.0	0.129	219	0.0	0.816	1.0	53.0	−27.0	−46.0	53.4	239.5
315	Y63G_100_100$_{dd}$	0.375	1.0	0.0	1.0	1.0	0.5	128	0.366	1.0	0.0	66.1	−48.2	47.5	67.7	135.3	0.632	0.0	1.0	0.0	128	0.366	1.0	0.0	66.1	−48.2	47.5	67.7	135.3
316	Y73G_100_087$_{dd}$	0.375	1.0	0.125	1.0	0.875	0.562	134	0.358	1.0	0.125	65.7	−49.0	36.3	61.0	143.4	0.634	0.0	0.84	0.125	135	0.266	1.0	0.0	61.4	−56.0	41.5	69.7	143.4
317	Y85G_100_075$_{dd}$	0.375	1.0	0.25	1.0	0.75	0.625	141	0.362	1.0	0.25	67.2	−45.9	26.7	53.1	149.7	0.63	0.0	0.723	0.125	142	0.15	1.0	0.0	57.7	−61.2	35.6	70.9	149.7
318	G00B_100_062$_{dd}$	0.375	1.0	0.375	1.0	0.625	0.687	150	0.375	1.0	0.375	69.9	−42.3	19.2	46.4	155.5	0.625	0.0	0.625	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
319	G09B_100_062$_{dd}$	0.375	1.0	0.5	1.0	0.625	0.687	161	0.375	1.0	0.489	69.5	−40.6	11.3	42.2	164.4	0.624	0.0	0.561	0.125	159	0.0	1.0	0.183	53.8	−65.0	18.1	67.5	164.4
320	G19B_100_062$_{dd}$	0.375	1.0	0.625	1.0	0.625	0.687	173	0.375	1.0	0.614	70.1	−35.3	−0.3	35.3	180.6	0.603	0.0	0.42	0.125	172	0.0	1.0	0.383	54.7	−56.5	−0.6	56.5	180.6
321	G30B_100_062$_{dd}$	0.375	1.0	0.75	1.0	0.625	0.687	187	0.375	1.0	0.76	70.5	−27.9	−12.1	30.4	203.4	0.585	0.0	0.27	0.0	187	0.0	1.0	0.616	55.3	−44.7	−19.4	48.7	203.4
322	G40B_100_062$_{dd}$	0.375	1.0	0.875	1.0	0.625	0.687	199	0.375	1.0	0.885	70.2	−23.8	−18.9	30.4	218.4	0.562	0.0	0.159	0.097	200	0.0	1.0	0.816	54.8	−38.1	−30.3	48.7	218.4
323	G50B_100_062$_{dd}$	0.375	1.0	1.0	1.0	0.625	0.687	210	0.375	1.0	1.0	69.1	−18.7	−26.9	32.8	235.1	0.525	0.01	0.0	0.162	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1

delta

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

2−1032230−F0

n	HIC*Fdd	rgb_Fdd			ict_Fdd			hsi_F,dd	rgb*Fdd			LabCh*Fdd				
324	R00Y_050_050dd	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	35.7	28.6	18.9	34.3	33.4
325	R26Y_050_050dd	0.5	0.0	0.125	0.5	0.5	0.25	376	0.5	0.0	0.116	35.7	28.0	14.2	31.4	26.9
326	R00Y_050_050dd	0.5	0.0	0.25	0.5	0.5	0.25	360	0.5	0.0	0.25	35.8	29.4	5.2	29.9	10.0
327	B61R_050_050dd	0.5	0.0	0.375	0.5	0.5	0.25	344	0.5	0.0	0.383	36.6	32.3	−3.5	32.5	353.7
328	B50R_050_050dd	0.5	0.0	0.5	0.5	0.5	0.25	330	0.5	0.0	0.5	36.0	32.7	−6.3	33.3	348.9
329	B40R_062_062dd	0.5	0.0	0.625	0.625	0.625	0.312	319	0.51	0.0	0.625	36.3	36.1	−12.0	38.1	341.5
330	B34R_075_075dd	0.5	0.0	0.75	0.75	0.75	0.375	311	0.512	0.0	0.75	36.2	38.7	−18.5	42.9	334.4
331	B29R_087_087dd	0.5	0.0	0.875	0.875	0.875	0.437	305	0.51	0.0	0.875	36.6	40.8	−24.9	47.9	328.5
332	B25R_100_100dd	0.5	0.0	1.0	1.0	1.0	0.5	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
333	R23Y_050_050dd	0.5	0.125	0.0	0.5	0.5	0.25	44	0.5	0.116	0.0	40.6	21.7	27.2	34.8	51.4
334	R00Y_050_037dd	0.5	0.125	0.125	0.5	0.375	0.312	390	0.5	0.124	0.124	41.7	21.4	14.1	25.7	33.4
335	R18Y_050_037dd	0.5	0.125	0.25	0.5	0.375	0.312	371	0.5	0.124	0.243	41.7	21.2	8.7	22.9	22.3
336	B65R_050_037dd	0.5	0.125	0.375	0.5	0.375	0.312	349	0.5	0.124	0.381	42.1	23.7	−0.6	23.7	358.3
337	B50R_050_037dd	0.5	0.125	0.5	0.5	0.375	0.312	330	0.5	0.124	0.5	41.9	24.5	−4.7	24.9	348.9
338	B38R_062_050dd	0.5	0.125	0.625	0.625	0.5	0.375	316	0.508	0.125	0.625	42.1	27.9	−10.4	29.8	339.4
339	B30R_075_062dd	0.5	0.125	0.75	0.75	0.625	0.437	307	0.51	0.125	0.75	42.3	30.0	−17.2	34.6	330.2
340	B25R_087_075dd	0.5	0.125	0.875	0.875	0.75	0.5	300	0.5	0.125	0.875	42.8	32.3	−23.1	39.8	324.4
341	B20R_100_087dd	0.5	0.125	1.0	1.0	0.875	0.562	295	0.489	0.125	1.0	42.8	34.9	−29.5	45.7	319.8
342	R50Y_050_050dd	0.5	0.25	0.0	0.5	0.5	0.25	60	0.5	0.25	0.0	47.1	9.6	33.1	34.5	73.8
343	R31Y_050_037dd	0.5	0.25	0.125	0.5	0.375	0.312	49	0.5	0.243	0.124	47.0	13.3	21.8	25.5	58.6
344	R00Y_050_025dd	0.5	0.25	0.25	0.5	0.25	0.375	390	0.5	0.249	0.249	47.7	14.3	9.4	17.1	33.4
345	R00Y_050_025dd	0.5	0.25	0.375	0.5	0.25	0.375	360	0.5	0.249	0.375	47.8	14.7	2.6	14.9	10.0
346	B50R_050_025dd	0.5	0.25	0.5	0.5	0.25	0.375	330	0.5	0.249	0.5	47.9	16.3	−3.1	16.6	348.9
347	B34R_062_037dd	0.5	0.25	0.625	0.625	0.375	0.437	311	0.506	0.25	0.625	48.0	19.3	−9.2	21.4	334.4
348	B25R_075_050dd	0.5	0.25	0.75	0.75	0.5	0.5	300	0.5	0.25	0.75	48.5	21.5	−15.4	26.5	324.4
349	B19R_087_062dd	0.5	0.25	0.875	0.875	0.625	0.562	293	0.489	0.25	0.875	48.4	24.1	−21.7	32.4	317.9
350	B15R_100_075dd	0.5	0.25	1.0	1.0	0.75	0.625	289	0.487	0.25	1.0	48.5	26.0	−27.9	38.2	312.9
351	R76Y_050_050dd	0.5	0.375	0.0	0.5	0.5	0.25	76	0.5	0.383	0.0	53.7	−1.4	38.4	38.4	92.2
352	R68Y_050_037dd	0.5	0.375	0.125	0.5	0.375	0.312	71	0.5	0.381	0.124	53.4	2.0	27.7	27.8	85.7
353	R50Y_050_025dd	0.5	0.375	0.25	0.5	0.25	0.375	60	0.5	0.375	0.249	53.5	4.8	16.5	17.2	73.8
354	R00Y_050_012dd	0.5	0.375	0.375	0.5	0.125	0.437	390	0.5	0.375	0.375	53.8	7.1	4.7	8.5	33.4
355	B50R_050_012dd	0.5	0.375	0.5	0.5	0.125	0.437	330	0.5	0.375	0.5	53.8	8.1	−1.5	8.3	348.9
356	B25R_062_025dd	0.5	0.375	0.625	0.625	0.25	0.5	300	0.5	0.375	0.625	54.1	10.7	−7.7	13.2	324.4
357	B15R_075_037dd	0.5	0.375	0.75	0.75	0.375	0.562	289	0.493	0.375	0.75	54.1	13.0	−13.9	19.1	312.9
358	B11R_087_050dd	0.5	0.375	0.875	0.875	0.5	0.625	284	0.491	0.375	0.875	54.4	14.8	−19.9	24.8	306.6
359	B09R_100_062dd	0.5	0.375	1.0	1.0	0.625	0.687	281	0.489	0.375	1.0	55.5	16.8	−25.6	30.6	303.2
360	Y00G_050_050dd	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.5	0.0	57.7	−7.9	42.3	43.0	100.5
361	Y00G_050_037dd	0.5	0.5	0.125	0.5	0.375	0.312	90	0.5	0.5	0.124	58.2	−5.9	31.7	32.3	100.5
362	Y00G_050_025dd	0.5	0.5	0.25	0.5	0.25	0.375	90	0.5	0.5	0.249	58.7	−3.9	21.1	21.5	100.5
363	Y00G_050_012dd	0.5	0.5	0.375	0.5	0.125	0.437	90	0.5	0.5	0.375	59.3	−1.9	10.5	10.7	100.5
364	NW_050dd	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0
365	B00R_062_012dd	0.5	0.5	0.625	0.625	0.125	0.562	270	0.5	0.5	0.625	60.9	2.1	−5.5	5.9	290.8
366	B00R_075_025dd	0.5	0.5	0.75	0.75	0.25	0.625	270	0.5	0.5	0.75	62.0	4.2	−11.1	11.9	290.8
367	B00R_087_037dd	0.5	0.5	0.875	0.875	0.375	0.687	270	0.5	0.5	0.875	63.1	6.3	−16.7	17.8	290.8
368	B00R_100_050dd	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.5	1.0	64.2	8.4	−22.3	23.8	290.8
369	Y18G_062_062dd	0.5	0.625	0.0	0.625	0.625	0.312	101	0.51	0.625	0.0	66.1	−12.3	54.9	56.2	102.6
370	Y23G_062_050dd	0.5	0.625	0.125	0.625	0.5	0.375	104	0.508	0.625	0.125	66.1	−10.4	43.2	44.5	103.6
371	Y31G_062_037dd	0.5	0.625	0.25	0.625	0.375	0.437	109	0.506	0.625	0.25	64.6	−10.3	28.7	30.5	109.8
372	Y50G_062_025dd	0.5	0.625	0.375	0.625	0.25	0.5	120	0.5	0.625	0.375	62.6	−10.4	13.7	17.2	127.3
373	G00B_062_012dd	0.5	0.625	0.5	0.625	0.125	0.562	150	0.5	0.625	0.5	63.6	−8.4	3.8	9.2	155.5
374	G50B_062_012dd	0.5	0.625	0.625	0.625	0.125	0.562	210	0.5	0.625	0.625	63.5	−3.7	−5.3	6.5	235.1
375	G75B_075_025dd	0.5	0.625	0.75	0.75	0.25	0.625	240	0.5	0.625	0.75	65.4	−3.3	−12.3	12.7	254.9
376	G84B_087_037dd	0.5	0.625	0.875	0.875	0.375	0.687	251	0.5	0.618	0.875	65.6	−0.8	−18.4	18.4	267.3
377	G88B_100_050dd	0.5	0.625	1.0	1.0	0.5	0.75	256	0.5	0.616	1.0	66.2	1.6	−24.1	24.2	273.8
378	Y31G_075_075dd	0.5	0.75	0.0	0.75	0.75	0.375	109	0.512	0.75	0.0	69.4	−20.7	57.4	61.0	109.8
379	Y38G_075_062dd	0.5	0.75	0.125	0.75	0.625	0.437	113	0.51	0.75	0.125	67.5	−20.3	41.9	46.6	115.8
380	Y50G_075_050dd	0.5	0.75	0.25	0.75	0.5	0.5	120	0.5	0.75	0.25	65.4	−20.8	27.4	34.4	127.3
381	Y68G_075_037dd	0.5	0.75	0.375	0.75	0.375	0.562	131	0.493	0.75	0.375	65.8	−19.5	16.7	25.7	139.4
382	G00B_075_025dd	0.5	0.75	0.5	0.75	0.25	0.625	150	0.5	0.75	0.5	67.4	−16.9	7.7	18.5	155.5
383	G25B_075_025dd	0.5	0.75	0.625	0.75	0.25	0.625	180	0.5	0.75	0.625	67.6	−12.8	−2.2	13.0	189.8
384	G50B_075_025dd	0.5	0.75	0.75	0.75	0.25	0.625	210	0.5	0.75	0.75	67.1	−7.5	−10.7	13.1	235.1
385	G65B_087_037dd	0.5	0.75	0.875	0.875	0.375	0.687	229	0.5	0.756	0.875	70.2	−8.7	−18.2	20.2	244.5
386	G75B_100_050dd	0.5	0.75	1.0	1.0	0.5	0.75	240	0.5	0.75	1.0	70.9	−6.6	−24.7	25.5	254.9
387	Y41G_087_087dd	0.5	0.875	0.0	0.875	0.875	0.437	115	0.51	0.875	0.0	70.3	−31.0	55.7	63.8	119.1
388	Y50G_087_075dd	0.5	0.875	0.125	0.875	0.75	0.5	120	0.5	0.875	0.125	68.2	−31.3	41.1	51.6	127.3
389	Y61G_087_062dd	0.5	0.875	0.25	0.875	0.625	0.562	127	0.489	0.875	0.25	68.7	−29.5	30.3	42.3	134.2
390	Y76G_087_050dd	0.5	0.875	0.375	0.875	0.5	0.625	136	0.491	0.875	0.375	68.9	−28.9	19.8	35.1	145.5
391	G00B_087_037dd	0.5	0.875	0.5	0.875	0.375	0.687	150	0.5	0.875	0.5	71.2	−25.3	11.5	27.8	155.5
392	G15B_087_037dd	0.5	0.875	0.625	0.875	0.375	0.687	169	0.5	0.875	0.618	71.2	−22.5	2.1	22.6	174.6
393	G34B_087_037dd	0.5	0.875	0.75	0.875	0.375	0.687	191	0.5	0.875	0.756	71.6	−15.8	−8.8	18.0	209.1
394	G50B_087_037dd	0.5	0.875	0.875	0.875	0.375	0.687	210	0.5	0.875	0.875	70.8	−11.2	−16.1	19.6	235.1
395	G61B_100_050dd	0.5	0.875	1.0	1.0	0.5	0.75	224	0.5	0.883	1.0	74.3	−13.1	−23.6	26.9	240.9
396	Y50G_100_100dd	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
397	Y58G_100_087dd	0.5	1.0	0.125	1.0	0.875	0.562	125	0.489	1.0	0.125	71.5	−40.0	44.0	59.5	132.2
398	Y68G_100_075dd	0.5	1.0	0.25	1.0	0.75	0.625	131	0.487	1.0	0.25	71.8	−39.1	33.5	51.5	139.4
399	Y81G_100_062dd	0.5	1.0	0.375	1.0	0.625	0.687	139	0.489	1.0	0.375	72.6	−37.4	23.3	44.1	148.1
400	G00B_100_050dd	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.5	75.0	−33.8	15.4	37.1	155.5
401	G11B_100_050dd	0.5	1.0	0.625	1.0	0.5	0.75	164	0.5	1.0	0.616	74.8	−31.8	7.0	32.6	167.4
402	G25B_100_050dd	0.5	1.0	0.75	1.0	0.5	0.75	180	0.5	1.0	0.75	75.4	−25.7	−4.4	26.1	189.8
403	G38B_100_050dd	0.5	1.0	0.875	1.0	0.5	0.75	196	0.5	1.0	0.883	75.4	−19.6	−13.9	24.0	215.4
404	G50B_100_050dd	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	1.0	74.4	−15.0	−21.5	26.2	235.1

n	cmyn*sep,Fdd				hsiM,dd	rgb*Mdd			LabCh*Mdd				
324	0.0	0.803	0.705	0.52	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
325	0.0	0.802	0.601	0.54	377	1.0	0.0	0.233	47.5	56.0	28.4	62.8	26.9
326	0.0	0.78	0.415	0.544	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
327	0.0	0.761	0.215	0.547	342	1.0	0.0	0.766	49.3	64.7	−7.1	65.1	353.7
328	0.0	0.757	0.143	0.571	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
329	0.035	0.778	0.0	0.535	320	0.816	0.0	1.0	43.9	57.8	−19.3	61.0	341.5
330	0.214	0.853	0.0	0.406	311	0.683	0.0	1.0	40.4	51.6	−24.7	57.2	334.4
331	0.334	0.921	0.0	0.263	305	0.583	0.0	1.0	38.4	46.7	−28.5	54.7	328.5
332	0.498	0.999	0.0	0.0	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
333	0.0	0.66	0.77	0.477	42	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4
334	0.0	0.642	0.511	0.497	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
335	0.0	0.613	0.41	0.517	371	1.0	0.0	0.316	47.4	56.5	23.2	61.1	22.3
336	0.0	0.593	0.236	0.529	348	1.0	0.0	0.683	48.6	63.2	−1.8	63.2	358.3
337	0.0	0.584	0.155	0.542	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
338	0.0	0.599	0.002	0.533	317	0.766	0.0	1.0	42.4	55.8	−20.9	59.6	339.4
339	0.189	0.675	0.0	0.413	307	0.616	0.0	1.0	38.9	48.1	−27.5	55.4	330.2
340	0.328	0.755	0.0	0.268	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
341	0.391	0.759	0.0	0.151	294	0.416	0.0	1.0	35.2	39.9	−33.7	52.2	319.8
342	0.0	0.442	0.766	0.476	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
343	0.0	0.506	0.601	0.48	48	1.0	0.316	0.0	61.6	35.5	58.2	68.2	58.6
344	0.0	0.464	0.385	0.493	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
345	0.0	0.426	0.259	0.515	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
346	0.0	0.415	0.143	0.521	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
347	0.0	0.427	0.014	0.517	311	0.683	0.0	1.0	40.4	51.6	−24.7	57.2	334.4
348	0.157	0.496	0.0	0.414	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
349	0.296	0.608	0.0	0.266	292	0.383	0.0	1.0	34.4	38.5	−34.7	51.9	317.9
350	0.37	0.632	0.0	0.165	288	0.316	0.0	1.0	32.7	34.7	−37.2	50.9	312.9
351	0.0	0.228	0.742	0.491	77	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92.2
352	0.0	0.285	0.6	0.497	71	1.0	0.683	0.0	78.6	5.4	73.9	74.1	85.7
353	0.0	0.295	0.439	0.496	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
354	0.0	0.268	0.248	0.506	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
355	0.0	0.244	0.124	0.514	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
356	0.0	0.253	0.015	0.504	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
357	0.153	0.342	0.0	0.409	288	0.316	0.0	1.0	32.7	34.7	−37.2	50.9	312.9
358	0.275	0.447	0.0	0.278	282	0.233	0.0	1.0	31.1	29.6	−39.8	49.6	306.6
359	0.351	0.492	0.0	0.169	279	0.183	0.0	1.0	31.3	26.8	−41.0	49.0	303.2
360	0.0	0.051	0.73	0.52	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
361	0.0	0.086	0.585	0.523	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
362	0.0	0.093	0.437	0.514	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
363	0.0	0.069	0.273	0.512	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
364	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
365	0.056	0.088	0.0	0.459	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
366	0.124	0.172	0.0	0.392	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
367	0.239	0.28	0.0	0.264	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
368	0.316	0.347	0.0	0.157	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
369	0.066	0.0	0.815	0.401	99	0.816	1.0	0.0	91.5	−19.6	87.8	90.0	102.6
370	0.02	0.0	0.656	0.442	102	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103.6
371	0.062	0.0	0.508	0.458	108	0.683	1.0	0.0	84.6	−27.6	76.5	81.3	109.8
372	0.14	0.0	0.364	0.453	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
373	0.151	0.0	0.216	0.435	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
374	0.102	0.0	0.018	0.449	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
375	0.17	0.062	0.0	0.382	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
376	0.301	0.202	0.0	0.248	251	0.0	0.316	1.0	39.3	−2.3	−49.1	49.1	267.3
377	0.368	0.295	0.0	0.131	257	0.0	0.233	1.0	36.6	3.2	−48.3	48.4	273.8
378	0.267	0.0	0.882	0.276	108	0.683	1.0	0.0	84.6	−27.6	76.5	81.3	109.8
379	0.273	0.0	0.726	0.321	112	0.616	1.0	0.0	79.3	−32.5	67.1	74.6	115.8
380	0.301	0.0	0.609	0.334	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
381	0.305	0.0	0.487	0.33	131	0.316	1.0	0.0	63.8	−52.2	44.7	68.7	139.4
382	0.294	0.0	0.356	0.322	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
383	0.266	0.0	0.197	0.344	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
384	0.183	0.0	0.023	0.384	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
385	0.304	0.072	0.0	0.249	228	0.0	0.683	1.0	51.6	−23.2	−48.6	53.9	244.5
386	0.4	0.21	0.0	0.065	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
387	0.413	0.0	0.933	0.165	114	0.583	1.0	0.0	76.9	−35.5	63.7	72.9	119.1
388	0.429	0.0	0.791	0.212	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
389	0.42	0.0	0.693	0.208	127	0.383	1.0	0.0	66.8	−47.2	48.5	67.7	134.2
390	0.432	0.0	0.585	0.2	137	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145.5
391	0.393	0.0	0.453	0.192	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
392	0.406	0.0	0.332	0.2	168	0.0	1.0	0.316	54.3	−60.1	5.6	60.3	174.6
393	0.349	0.0	0.171	0.236	191	0.0	1.0	0.683	55.2	−42.1	−23.4	48.2	209.1
394	0.286	0.0	0.004	0.284	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
395	0.394	0.073	0.0	0.114	222	0.0	0.766	1.0	52.9	−26.2	−47.2	53.9	240.9
396	0.5	0.0	1.0	0.0	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
397	0.494	0.0	0.824	0.004	125	0.416	1.0	0.0	68.0	−45.7	50.3	68.0	132.2
398	0.488	0.0	0.721	0.0	131	0.316	1.0	0.0	63.8	−52.2	44.7	68.7	139.4
399	0.498	0.0	0.644	0.0	140	0.183	1.0	0.0	58.7	−59.9	37.3	70.6	148.1
400	0.498	0.0	0.623	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
401	0.428	0.0	0.422	0.125	162	0.0	1.0	0.233	53.7	−63.6	14.1	65.2	167.4
402	0.44	0.0	0.284	0.125	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
403	0.4	0.0	0.141	0.126	197	0.0	1.0	0.766	55.1	−39.2	−27.9	48.1	215.4
404	0.374	0.013	0.0	0.158	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1

delta

2−1032330−F0

QS490−7N, 24/33−F

gráfico TUB-QS49; código de tono: H^*_d=Y25G_d
colores y differencia en color, $\Delta E'^*$

entrada: *rgb/cmyk* −> *rgb*dd
salida: 3D-linealización a *cmyk**dd

TUB matrícula: 20130201-QS49/QS49L0FP.PDF /.PS
aplicación para la medida salida de impresora láser, separación cmyn6* (CMYK)

TUB material: code=rha4ta

2−1032330−F0

TUB matrícula: 20130201-QS49/QS49L0FP.PDF /.PS
aplicación para la medida salida de impresora láser, separación cmyn6* (CMYK)
TUB material: code=rha4ta

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			*h*$_{si\_Fdd}$	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$					*cmyn**$_{sep,Fdd}$				*h*$_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
405	R00Y_062_062$_{dd}$	0.625	0.0	0.0	0.625	0.625	0.312	390	0.625	0.0	0.0	38.6	35.7	23.6	42.8	33.4	0.0	0.858	0.748	0.394	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
406	R31Y_062_062$_{dd}$	0.625	0.0	0.125	0.625	0.625	0.312	379	0.625	0.0	0.114	38.7	35.1	19.4	40.1	28.9	0.0	0.848	0.661	0.405	380	1.0	0.0	0.183	47.6	56.2	31.1	64.2	28.9
407	R11Y_062_062$_{dd}$	0.625	0.0	0.25	0.625	0.625	0.312	367	0.625	0.0	0.239	38.5	35.6	11.8	37.5	18.3	0.0	0.838	0.521	0.408	367	1.0	0.0	0.383	47.4	57.0	18.9	60.0	18.3
408	B69R_062_062$_{dd}$	0.625	0.0	0.375	0.625	0.625	0.312	353	0.625	0.0	0.385	38.9	38.5	1.6	38.5	2.5	0.0	0.83	0.346	0.413	352	1.0	0.0	0.616	47.9	61.6	2.7	61.7	2.5
409	B59R_062_062$_{dd}$	0.625	0.0	0.5	0.625	0.625	0.312	341	0.625	0.0	0.51	39.8	40.9	−5.4	41.2	352.3	0.0	0.814	0.191	0.413	339	1.0	0.0	0.816	49.4	65.4	−8.7	66.0	352.3
410	B50R_062_062$_{dd}$	0.625	0.0	0.625	0.625	0.625	0.312	330	0.625	0.0	0.625	39.0	40.8	−7.9	41.6	348.9	0.0	0.81	0.129	0.441	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
411	B42R_075_075$_{dd}$	0.625	0.0	0.75	0.75	0.75	0.375	321	0.637	0.0	0.75	39.6	44.3	−13.6	46.4	342.9	0.018	0.837	0.0	0.404	322	0.85	0.0	1.0	44.9	59.1	−18.2	61.9	342.9
412	B36R_087_087$_{dd}$	0.625	0.0	0.875	0.875	0.875	0.437	314	0.641	0.0	0.875	39.3	47.5	−19.5	51.3	337.6	0.161	0.915	0.0	0.277	315	0.733	0.0	1.0	41.5	54.3	−22.3	58.7	337.6
413	B31R_100_100$_{dd}$	0.625	0.0	1.0	1.0	1.0	0.5	308	0.633	0.0	1.0	39.2	48.9	−26.9	55.8	331.1	0.367	1.0	0.0	0.0	308	0.633	0.0	1.0	39.2	48.9	−26.9	55.8	331.1
414	R18Y_062_062$_{dd}$	0.625	0.125	0.0	0.625	0.625	0.312	41	0.625	0.114	0.0	43.2	30.3	32.7	44.6	47.1	0.0	0.728	0.842	0.358	39	1.0	0.183	0.0	54.9	48.5	52.3	71.4	47.1
415	R00Y_062_050$_{dd}$	0.625	0.125	0.125	0.625	0.5	0.375	390	0.625	0.125	0.125	44.7	28.6	18.9	34.3	33.4	0.0	0.726	0.594	0.368	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
416	R26Y_062_050$_{dd}$	0.625	0.125	0.25	0.625	0.5	0.375	376	0.625	0.125	0.241	44.7	28.0	14.2	31.4	26.9	0.0	0.707	0.518	0.384	377	1.0	0.0	0.233	47.5	56.0	28.4	62.8	26.9
417	R00Y_062_050$_{dd}$	0.625	0.125	0.375	0.625	0.5	0.375	360	0.625	0.125	0.375	44.8	29.4	5.2	29.9	10.0	0.0	0.689	0.364	0.399	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
418	B61R_062_050$_{dd}$	0.625	0.125	0.5	0.625	0.5	0.375	344	0.625	0.125	0.508	45.6	32.3	−3.5	32.5	353.7	0.0	0.67	0.201	0.408	342	1.0	0.0	0.766	49.3	64.7	−7.1	65.1	353.7
419	B50R_062_050$_{dd}$	0.625	0.125	0.625	0.625	0.5	0.375	330	0.625	0.125	0.625	45.0	32.7	−6.3	33.3	348.9	0.0	0.662	0.141	0.428	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
420	B40R_075_062$_{dd}$	0.625	0.125	0.75	0.75	0.625	0.437	319	0.635	0.125	0.75	45.3	36.1	−12.0	38.1	341.5	0.01	0.678	0.0	0.408	320	0.816	0.0	1.0	43.9	57.8	−19.3	61.0	341.5
421	B34R_087_075$_{dd}$	0.625	0.125	0.875	0.875	0.75	0.5	311	0.637	0.125	0.875	45.2	38.7	−18.5	42.9	334.4	0.195	0.761	0.0	0.266	311	0.683	0.0	1.0	40.4	51.6	−24.7	57.2	334.4
422	B29R_100_087$_{dd}$	0.625	0.125	1.0	1.0	0.875	0.562	305	0.635	0.125	1.0	45.6	40.8	−24.9	47.9	328.5	0.3	0.778	0.0	0.141	305	0.583	0.0	1.0	38.4	46.7	−28.5	54.7	328.5
423	R38Y_062_062$_{dd}$	0.625	0.25	0.0	0.625	0.625	0.312	53	0.625	0.239	0.0	49.5	18.2	38.0	42.1	64.4	0.0	0.549	0.836	0.355	52	1.0	0.383	0.0	65.0	29.1	60.8	67.4	64.4
424	R23Y_062_050$_{dd}$	0.625	0.25	0.125	0.625	0.5	0.375	44	0.625	0.241	0.125	49.6	21.7	27.2	34.8	51.4	0.0	0.614	0.678	0.351	42	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4
425	R00Y_062_037$_{dd}$	0.625	0.25	0.25	0.625	0.375	0.437	390	0.625	0.25	0.25	50.7	21.4	14.1	25.7	33.4	0.0	0.573	0.47	0.367	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
426	R18Y_062_037$_{dd}$	0.625	0.25	0.375	0.625	0.375	0.437	371	0.625	0.25	0.368	50.7	21.2	8.7	22.9	22.3	0.0	0.549	0.382	0.388	371	1.0	0.0	0.316	47.4	56.5	23.2	61.1	22.3
427	B65R_062_037$_{dd}$	0.625	0.25	0.5	0.625	0.375	0.437	349	0.625	0.25	0.506	51.1	23.7	−0.6	23.7	358.3	0.0	0.533	0.226	0.403	348	1.0	0.0	0.683	48.6	63.2	−1.8	63.2	358.3
428	B50R_062_037$_{dd}$	0.625	0.25	0.625	0.625	0.375	0.437	330	0.625	0.25	0.625	50.9	24.5	−4.7	24.9	348.9	0.0	0.524	0.153	0.417	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
429	B38R_075_050$_{dd}$	0.625	0.25	0.75	0.75	0.5	0.5	316	0.633	0.25	0.75	51.1	27.9	−10.4	29.8	339.4	0.0	0.538	0.017	0.406	317	0.766	0.0	1.0	42.4	55.8	−20.9	59.6	339.4
430	B30R_087_062$_{dd}$	0.625	0.25	0.875	0.875	0.625	0.562	307	0.635	0.25	0.875	51.3	30.0	−17.2	34.6	330.2	0.196	0.644	0.0	0.247	307	0.616	0.0	1.0	38.9	48.1	−27.5	55.4	330.2
431	B25R_100_075$_{dd}$	0.625	0.25	1.0	1.0	0.75	0.625	300	0.625	0.25	1.0	51.8	32.3	−23.1	39.8	324.4	0.274	0.651	0.0	0.151	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
432	R61Y_062_062$_{dd}$	0.625	0.375	0.0	0.625	0.625	0.312	67	0.625	0.385	0.0	55.5	7.5	44.0	44.6	80.3	0.0	0.378	0.834	0.353	67	1.0	0.616	0.0	74.6	12.0	70.4	71.4	80.3
433	R50Y_062_050$_{dd}$	0.625	0.375	0.125	0.625	0.5	0.375	60	0.625	0.375	0.125	56.1	9.6	33.1	34.5	73.8	0.0	0.413	0.684	0.371	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
434	R31Y_062_037$_{dd}$	0.625	0.375	0.25	0.625	0.375	0.437	49	0.625	0.368	0.25	56.0	13.3	21.8	25.5	58.6	0.0	0.443	0.543	0.358	48	1.0	0.316	0.0	61.6	35.5	58.2	68.2	58.6
435	R00Y_062_025$_{dd}$	0.625	0.375	0.375	0.625	0.25	0.5	390	0.625	0.375	0.375	56.7	14.3	9.4	17.1	33.4	0.0	0.418	0.361	0.377	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
436	R00Y_062_025$_{dd}$	0.625	0.375	0.5	0.625	0.25	0.5	360	0.625	0.375	0.5	56.8	14.7	2.6	14.9	10.0	0.0	0.39	0.243	0.4	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
437	B50R_062_025$_{dd}$	0.625	0.375	0.625	0.625	0.25	0.5	330	0.625	0.375	0.625	56.9	16.3	−3.1	16.6	348.9	0.0	0.383	0.141	0.406	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
438	B34R_075_037$_{dd}$	0.625	0.375	0.75	0.75	0.375	0.562	311	0.631	0.375	0.75	57.0	19.3	−9.2	21.4	334.4	0.007	0.387	0.0	0.401	311	0.683	0.0	1.0	40.4	51.6	−24.7	57.2	334.4
439	B25R_087_050$_{dd}$	0.625	0.375	0.875	0.875	0.5	0.625	300	0.625	0.375	0.875	57.5	21.5	−15.4	26.5	324.4	0.176	0.491	0.0	0.247	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
440	B19R_100_062$_{dd}$	0.625	0.375	1.0	1.0	0.625	0.687	293	0.614	0.375	1.0	57.4	24.1	−21.7	32.4	317.9	0.262	0.528	0.0	0.16	292	0.383	0.0	1.0	34.4	38.5	−34.7	51.9	317.9
441	R81Y_062_062$_{dd}$	0.625	0.5	0.0	0.625	0.625	0.312	79	0.625	0.51	0.0	62.3	−3.6	47.7	47.9	94.3	0.0	0.184	0.761	0.402	80	1.0	0.816	0.0	85.4	−5.8	76.4	76.6	94.3
442	R76Y_062_050$_{dd}$	0.625	0.5	0.125	0.625	0.5	0.375	76	0.625	0.508	0.125	62.7	−1.4	38.4	38.4	92.2	0.0	0.211	0.65	0.399	77	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92.2
443	R68Y_062_037$_{dd}$	0.625	0.5	0.25	0.625	0.375	0.437	71	0.625	0.506	0.25	62.4	2.0	27.7	27.8	85.7	0.0	0.25	0.536	0.387	71	1.0	0.683	0.0	78.6	5.4	73.9	74.1	85.7
444	R50Y_062_025$_{dd}$	0.625	0.5	0.375	0.625	0.25	0.5	60	0.625	0.5	0.375	62.5	4.8	16.5	17.2	73.8	0.0	0.256	0.397	0.383	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
445	R00Y_062_012$_{dd}$	0.625	0.5	0.5	0.625	0.125	0.562	390	0.625	0.5	0.5	62.8	7.1	4.7	8.5	33.4	0.0	0.233	0.219	0.395	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
446	B50R_062_012$_{dd}$	0.625	0.5	0.625	0.625	0.125	0.562	330	0.625	0.5	0.625	62.8	8.1	−1.5	8.3	348.9	0.0	0.208	0.101	0.406	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
447	B25R_075_025$_{dd}$	0.625	0.5	0.75	0.75	0.25	0.625	300	0.625	0.5	0.75	63.1	10.7	−7.7	13.2	324.4	0.016	0.225	0.0	0.391	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
448	B15R_087_037$_{dd}$	0.625	0.5	0.875	0.875	0.375	0.687	289	0.618	0.5	0.875	63.1	13.0	−13.9	19.1	312.9	0.162	0.333	0.0	0.263	288	0.316	0.0	1.0	32.7	34.7	−37.2	50.9	312.9
449	B11R_100_050$_{dd}$	0.625	0.5	1.0	1.0	0.5	0.75	284	0.616	0.5	1.0	63.4	14.8	−19.9	24.8	306.6	0.255	0.388	0.0	0.172	282	0.233	0.0	1.0	31.1	29.6	−39.8	49.6	306.6
450	Y00G_062_062$_{dd}$	0.625	0.625	0.0	0.625	0.625	0.312	90	0.625	0.625	0.0	66.1	−9.9	52.9	53.8	100.5	0.0	0.017	0.772	0.423	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
451	Y00G_062_050$_{dd}$	0.625	0.625	0.125	0.625	0.5	0.375	90	0.625	0.625	0.125	66.7	−7.9	42.3	43.0	100.5	0.0	0.061	0.642	0.418	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
452	Y00G_062_037$_{dd}$	0.625	0.625	0.25	0.625	0.375	0.437	90	0.625	0.625	0.25	67.2	−5.9	31.7	32.3	100.5	0.0	0.082	0.522	0.409	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
453	Y00G_062_025$_{dd}$	0.625	0.625	0.375	0.625	0.25	0.5	90	0.625	0.625	0.375	67.7	−3.9	21.1	21.5	100.5	0.0	0.071	0.387	0.405	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
454	Y00G_062_012$_{dd}$	0.625	0.625	0.5	0.625	0.125	0.562	90	0.625	0.625	0.5	68.3	−1.9	10.5	10.7	100.5	0.0	0.053	0.239	0.406	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
455	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
456	B00R_075_012$_{dd}$	0.625	0.625	0.75	0.75	0.125	0.687	270	0.625	0.625	0.75	69.9	2.1	−5.5	5.9	290.8	0.055	0.08	0.0	0.357	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
457	B00R_087_025$_{dd}$	0.625	0.625	0.875	0.875	0.25	0.75	270	0.625	0.625	0.875	71.0	4.2	−11.1	11.9	290.8	0.136	0.173	0.0	0.26	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
458	B00R_100_037$_{dd}$	0.625	0.625	1.0	1.0	0.375	0.812	270	0.625	0.625	1.0	72.1	6.3	−16.7	17.8	290.8	0.222	0.262	0.0	0.139	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
459	Y15G_075_075$_{dd}$	0.625	0.75	0.0	0.75	0.75	0.375	99	0.637	0.75	0.0	75.1	−14.1	66.5	68.0	101.9	0.08	0.0	0.877	0.3	97	0.85	1.0	0.0	92.2	−18.8	88.7	90.7	101.9
460	Y18G_075_062$_{dd}$	0.625	0.75	0.125	0.75	0.625	0.437	101	0.635	0.75	0.125	75.1	−12.3	54.9	56.2	102.6	0.04	0.0	0.719	0.326	99	0.816	1.0	0.0	91.5	−19.6	87.8	90.0	102.6
461	Y23G_075_050$_{dd}$	0.625	0.75	0.25	0.75	0.5	0.5	104	0.633	0.75	0.25	75.1	−10.4	43.2	44.5	103.6	0.005	0.0	0.601	0.344	102	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103.6
462	Y31G_075_037$_{dd}$	0.625	0.75	0.375	0.75	0.375	0.562	109	0.631	0.75	0.375	73.6	−10.3	28.7	30.5	109.8	0.066	0.0	0.46	0.347	108	0.683	1.0	0.0	84.6	−27.6	76.5	81.3	109.8
463	Y50G_075_025$_{dd}$	0.625	0.75	0.5	0.75	0.25	0.625	120	0.625	0.75	0.5	71.6	−10.4	13.7	17.2	127.3	0.134	0.0	0.324	0.345	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
464	G00B_075_012$_{dd}$	0.625	0.75	0.625	0.75	0.125	0.687	150	0.625	0.75	0.625	72.6	−8.4	3.8	9.2	155.5	0.141	0.0	0.193	0.33	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
465	G50B_075_012$_{dd}$	0.625	0.75	0.75	0.75	0.125	0.687	210	0.625	0.75	0.75	72.5	−3.7	−5.3	6.5	235.1	0.095	0.0	0.011	0.343	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
466	G75B_087_025$_{dd}$	0.625	0.75	0.875	0.875	0.25	0.75	240	0.625	0.75	0.875	74.4	−3.3	−12.3	12.7	254.9	0.185	0.077	0.0	0.249	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
467	G84B_100_037$_{dd}$	0.625	0.75	1.0	1.0	0.375	0.812	251	0.625	0.743	1.0	74.6	−0.8	−18.4	18.4	267.3	0.279	0.202	0.0	0.096	251	0.0	0.316	1.0	39.3	−2.3	−49.1	49.1	267.3
468	Y26G_087_087$_{dd}$	0.625	0.875	0.0	0.875	0.875	0.437	106	0.641	0.875	0.0	80.6	−20.2	73.2	75.9	105.4	0.233	0.0	0.946	0.161	104	0.733	1.0	0.0	88.7	−23.1	83.7	86.8	105.4
469	Y31G_087_075$_{dd}$	0.625	0.875	0.125	0.875	0.75	0.5	109	0.637	0.875	0.125	78.4	−20.7	57.4	61.0	109.8	0.248	0.0	0.786	0.185	108	0.683	1.0	0.0	84.6	−27.6	76.5	81.3	109.8
470	Y38G_087_062$_{dd}$	0.625	0.875	0.25	0.875	0.625	0.562	113	0.635	0.875	0.25	76.5	−20.3	41.9	46.6	115.8	0.255	0.0	0.68	0.208	112	0.616	1.0	0.0	79.3	−32.5	67.1	74.6	115.8
471	Y50G_087_050$_{dd}$	0.625	0.875	0.375	0.875	0.5	0.625	120	0.625	0.875	0.375	74.4	−20.8	27.4	34.4	127.3	0.28	0.0	0.555	0.219	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
472	Y68G_087_037$_{dd}$	0.625	0.875	0.5	0.875	0.375	0.687	131	0.618	0.875	0.5	74.8	−19.5	16.7	25.7	139.4	0.288	0.0	0.431	0.21	131	0.316	1.0	0.0	63.8	−52.2	44.7	68.7	139.4
473	G00B_087_025$_{dd}$	0.625	0.875	0.625	0.875	0.25	0.75	150	0.625	0.875	0.625	76.4	−16.9	7.7	18.5	155.5	0.28	0.0	0.307	0.199	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
474	G25B_087_025$_{dd}$	0.625	0.875	0.75	0.875	0.25	0.75	180	0.625	0.875	0.75	76.6	−12.8	−2.2	13.0	189.8	0.249	0.0	0.168	0.222	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
475	G50B_087_025$_{dd}$	0.625	0.875	0.875	0.875	0.25	0.75	210	0.625	0.875	0.875	76.1	−7.5	−10.7	13.1	235.1	0.18	0.0	0.002	0.265	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
476	G65B_100_037$_{dd}$	0.625	0.875	1.0	1.0	0.375	0.812	229	0.625	0.881	1.0	79.2	−8.7	−18.2	20.2	244.5	0.292	0.08	0.0	0.096	228	0.0	0.683	1.0	51.6	−23.2	−48.6	53.9	244.5
477	Y36G_100_100$_{dd}$	0.625	1.0	0.0	1.0	1.0	0.5	112	0.633	1.0	0.0	80.5	−31.2	69.2	75.9	114.2	0.367	0.0	1.0	0.0	111	0.633	1.0	0.0	80.5	−31.2	69.2	75.9	114.2
478	Y41G_100_087$_{dd}$	0.625	1.0	0.125	1.0	0.875	0.562	115	0.635	1.0	0.125	79.2	−31.0	55.7	63.8	119.1	0.388	0.0	0.815	0.015	114	0.583	1.0	0.0	76.9	−35.5	63.7	72.9	119.1
479	Y50G_100_075$_{dd}$	0.625	1.0	0.25	1.0	0.75	0.625	120	0.625	1.0	0.25	77.1	−31.3	41.1	51.6	127.3	0.394	0.0	0.709	0.025	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
480	Y61G_100_062$_{dd}$	0.625	1.0	0.375	1.0	0.625	0.687	127	0.614	1.0	0.375	77.7	−29.5	30.3	42.3	134.2	0.376	0.0	0.605	0.016	127	0.383	1.0	0.0	66.8	−47.2	48.5	67.7	134.2
481	Y76G_100_050$_{dd}$	0.625	1.0	0.5	1.0	0.5	0.75	136	0.616	1.0	0.5	77.9	−28.9	19.8	35.1	145.5	0.404	0.0	0.515	0.0	137	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145.5
482	G00B_100_037$_{dd}$	0.625	1.0	0.625	1.0	0.375	0.812	150	0.625	1.0	0.625	80.2	−25.3	11.5	27.8	155.5	0.394	0.0	0.389	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
483	G15B_100_037$_{dd}$	0.625	1.0	0.75	1.0	0.375	0.812	169	0.625	1.0	0.743	80.2	−22.5	2.1	22.6	174.6	0.356	0.0	0.284	0.125	168	0.0	1.0	0.316	54.3	−60.1	5.6	60.3	174.6
484	G34B_100_037$_{dd}$	0.625	1.0	0.875	1.0	0.375	0.812	191	0.625	1.0	0.881	80.6	−15.8	−8.8	18.0	209.1	0.342	0.0	0.144	0.074	191	0.0	1.0	0.683	55.2	−42.1	−23.4	48.2	209.1
485	G50B_100_037$_{dd}$	0.625	1.0	1.0	1.0	0.375	0.812	210	0.625	1.0	1.0	79.8	−11.2	−16.1	19.6	235.1	0.274	0.002	0.0	0.151	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1

delta

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

2−1032430−F0

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$				*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
486	R00Y_075_075$_{dd}$	0.75	0.0	0.0	0.75	0.75	0.375	390	0.75	0.0	0.0	41.6	42.9	28.3	51.4	33.4	0.0	0.889	0.834	0.254	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
487	R35Y_075_075$_{dd}$	0.75	0.0	0.125	0.75	0.75	0.375	381	0.75	0.0	0.112	41.7	42.2	24.6	48.9	30.3	0.0	0.888	0.755	0.255	382	1.0	0.0	0.15	47.6	56.3	32.9	65.2	30.3
488	R18Y_075_075$_{dd}$	0.75	0.0	0.25	0.75	0.75	0.375	371	0.75	0.0	0.237	41.5	42.4	17.4	45.8	22.3	0.0	0.886	0.612	0.267	371	1.0	0.0	0.316	47.4	56.5	23.2	61.1	22.3
489	R00Y_075_075$_{dd}$	0.75	0.0	0.375	0.75	0.75	0.375	360	0.75	0.0	0.375	41.8	44.2	7.8	44.9	10.0	0.0	0.877	0.442	0.262	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
490	B65R_075_075$_{dd}$	0.75	0.0	0.5	0.75	0.75	0.375	349	0.75	0.0	0.512	42.4	47.4	−1.3	47.4	358.3	0.0	0.867	0.291	0.262	348	1.0	0.0	0.683	48.6	63.2	−1.8	63.2	358.3
491	B57R_075_075$_{dd}$	0.75	0.0	0.625	0.75	0.75	0.375	339	0.75	0.0	0.637	43.0	49.4	−7.4	49.9	351.4	0.0	0.858	0.166	0.265	337	1.0	0.0	0.85	49.4	65.8	−9.9	66.6	351.4
492	B50R_075_075$_{dd}$	0.75	0.0	0.75	0.75	0.75	0.375	330	0.75	0.0	0.75	42.1	49.0	−9.5	49.9	348.9	0.0	0.863	0.125	0.295	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
493	B43R_087_087$_{dd}$	0.75	0.0	0.875	0.875	0.875	0.437	322	0.758	0.0	0.875	42.7	52.3	−15.4	54.5	343.5	0.0	0.902	0.0	0.255	322	0.866	0.0	1.0	45.4	59.8	−17.6	62.3	343.5
494	B38R_100_100$_{dd}$	0.75	0.0	1.0	1.0	1.0	0.5	316	0.766	0.0	1.0	42.4	55.8	−20.9	59.6	339.4	0.234	0.999	0.0	0.0	317	0.766	0.0	1.0	42.4	55.8	−20.9	59.6	339.4
495	R15Y_075_075$_{dd}$	0.75	0.125	0.0	0.75	0.75	0.375	39	0.75	0.112	0.0	45.8	38.8	37.9	54.3	44.3	0.0	0.779	0.895	0.25	37	1.0	0.15	0.0	53.2	51.8	50.6	72.4	44.3
496	R00Y_075_062$_{dd}$	0.75	0.125	0.125	0.75	0.625	0.437	390	0.75	0.125	0.125	47.6	35.7	23.6	42.8	33.4	0.0	0.767	0.638	0.238	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
497	R31Y_075_062$_{dd}$	0.75	0.125	0.25	0.75	0.625	0.437	379	0.75	0.125	0.239	47.7	35.1	19.4	40.1	28.9	0.0	0.752	0.559	0.246	380	1.0	0.0	0.183	47.6	56.2	31.1	64.2	28.9
498	R11Y_075_062$_{dd}$	0.75	0.125	0.375	0.75	0.625	0.437	367	0.75	0.125	0.364	47.5	35.6	11.8	37.5	18.3	0.0	0.74	0.431	0.26	367	1.0	0.0	0.383	47.4	57.0	18.9	60.0	18.3
499	B69R_075_062$_{dd}$	0.75	0.125	0.5	0.75	0.625	0.437	353	0.75	0.125	0.51	47.9	38.5	1.6	38.5	2.5	0.0	0.737	0.277	0.268	352	1.0	0.0	0.616	47.9	61.6	2.7	61.7	2.5
500	B59R_075_062$_{dd}$	0.75	0.125	0.625	0.75	0.625	0.437	341	0.75	0.125	0.635	48.8	40.9	−5.4	41.2	352.3	0.0	0.727	0.152	0.27	339	1.0	0.0	0.816	49.4	65.4	−8.7	66.0	352.3
501	B50R_075_062$_{dd}$	0.75	0.125	0.75	0.75	0.625	0.437	330	0.75	0.125	0.75	48.0	40.8	−7.9	41.6	348.9	0.0	0.725	0.106	0.298	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
502	B42R_087_075$_{dd}$	0.75	0.125	0.875	0.875	0.75	0.5	321	0.762	0.125	0.875	48.6	44.3	−13.6	46.4	342.9	0.025	0.749	0.0	0.252	322	0.85	0.0	1.0	44.9	59.1	−18.2	61.9	342.9
503	B36R_100_087$_{dd}$	0.75	0.125	1.0	1.0	0.875	0.562	314	0.766	0.125	1.0	48.3	47.5	−19.5	51.3	337.6	0.185	0.813	0.0	0.081	315	0.733	0.0	1.0	41.5	54.3	−22.3	58.7	337.6
504	R31Y_075_075$_{dd}$	0.75	0.25	0.0	0.75	0.75	0.375	49	0.75	0.237	0.0	52.2	26.6	43.7	51.1	58.6	0.0	0.635	0.893	0.249	48	1.0	0.316	0.0	61.6	35.5	58.2	68.2	58.6
505	R18Y_075_062$_{dd}$	0.75	0.25	0.125	0.75	0.625	0.437	41	0.75	0.239	0.125	52.2	30.3	32.7	44.6	47.1	0.0	0.677	0.737	0.221	39	1.0	0.183	0.0	54.9	48.5	52.3	71.4	47.1
506	R00Y_075_050$_{dd}$	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	53.7	28.6	18.9	34.3	33.4	0.0	0.632	0.514	0.234	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
507	R26Y_075_050$_{dd}$	0.75	0.25	0.375	0.75	0.5	0.5	376	0.75	0.25	0.366	53.7	28.0	14.2	31.4	26.9	0.0	0.618	0.441	0.249	377	1.0	0.0	0.233	47.5	56.0	28.4	62.8	26.9
508	R00Y_075_050$_{dd}$	0.75	0.25	0.5	0.75	0.5	0.5	360	0.75	0.25	0.5	53.8	29.4	5.2	29.9	10.0	0.0	0.623	0.305	0.26	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
509	B61R_075_050$_{dd}$	0.75	0.25	0.625	0.75	0.5	0.5	344	0.75	0.25	0.633	54.5	32.3	−3.5	32.5	353.7	0.0	0.613	0.168	0.264	342	1.0	0.0	0.766	49.3	64.7	−7.1	65.1	353.7
510	B50R_075_050$_{dd}$	0.75	0.25	0.75	0.75	0.5	0.5	330	0.75	0.25	0.75	54.0	32.7	−6.3	33.3	348.9	0.0	0.609	0.12	0.286	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
511	B40R_087_062$_{dd}$	0.75	0.25	0.875	0.875	0.625	0.562	319	0.76	0.25	0.875	54.3	36.1	−12.0	38.1	341.5	0.008	0.623	0.0	0.258	320	0.816	0.0	1.0	43.9	57.8	−19.3	61.0	341.5
512	B34R_100_075$_{dd}$	0.75	0.25	1.0	1.0	0.75	0.625	311	0.762	0.25	1.0	54.2	38.7	−18.5	42.9	334.4	0.171	0.687	0.0	0.114	311	0.683	0.0	1.0	40.4	51.6	−24.7	57.2	334.4
513	R50Y_075_075$_{dd}$	0.75	0.375	0.0	0.75	0.75	0.375	60	0.75	0.375	0.0	58.8	14.4	49.7	51.7	73.8	0.0	0.451	0.866	0.252	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
514	R38Y_075_062$_{dd}$	0.75	0.375	0.125	0.75	0.625	0.437	53	0.75	0.364	0.125	58.5	18.2	38.0	42.1	64.4	0.0	0.494	0.731	0.234	52	1.0	0.383	0.0	65.0	29.1	60.8	67.4	64.4
515	R23Y_075_050$_{dd}$	0.75	0.375	0.25	0.75	0.5	0.5	44	0.75	0.366	0.25	58.6	21.7	27.2	34.8	51.4	0.0	0.537	0.608	0.215	42	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4
516	R00Y_075_037$_{dd}$	0.75	0.375	0.375	0.75	0.375	0.562	390	0.75	0.375	0.375	59.7	21.4	14.1	25.7	33.4	0.0	0.512	0.403	0.23	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
517	R18Y_075_037$_{dd}$	0.75	0.375	0.5	0.75	0.375	0.562	371	0.75	0.375	0.493	59.7	21.2	8.7	22.9	22.3	0.0	0.5	0.318	0.246	371	1.0	0.0	0.316	47.4	56.5	23.2	61.1	22.3
518	B65R_075_037$_{dd}$	0.75	0.375	0.625	0.75	0.375	0.562	349	0.75	0.375	0.631	60.1	23.7	−0.6	23.7	358.3	0.0	0.486	0.186	0.252	348	1.0	0.0	0.683	48.6	63.2	−1.8	63.2	358.3
519	B50R_075_037$_{dd}$	0.75	0.375	0.75	0.75	0.375	0.562	330	0.75	0.375	0.75	59.9	24.5	−4.7	24.9	348.9	0.0	0.475	0.11	0.269	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
520	B38R_087_050$_{dd}$	0.75	0.375	0.875	0.875	0.5	0.625	316	0.758	0.375	0.875	60.1	27.9	−10.4	29.8	339.4	0.006	0.485	0.0	0.251	317	0.766	0.0	1.0	42.4	55.8	−20.9	59.6	339.4
521	B30R_100_062$_{dd}$	0.75	0.375	1.0	1.0	0.625	0.687	307	0.76	0.375	1.0	60.3	30.0	−17.2	34.6	330.2	0.166	0.55	0.0	0.128	307	0.616	0.0	1.0	38.9	48.1	−27.5	55.4	330.2
522	R68Y_075_075$_{dd}$	0.75	0.5	0.0	0.75	0.75	0.375	71	0.75	0.512	0.0	64.9	4.0	55.4	55.6	85.7	0.0	0.301	0.838	0.266	71	1.0	0.683	0.0	78.6	5.4	73.9	74.1	85.7
523	R61Y_075_062$_{dd}$	0.75	0.5	0.125	0.75	0.625	0.437	67	0.75	0.51	0.125	64.5	7.5	44.0	44.6	80.3	0.0	0.34	0.721	0.254	67	1.0	0.616	0.0	74.6	12.0	70.4	71.4	80.3
524	R50Y_075_050$_{dd}$	0.75	0.5	0.25	0.75	0.5	0.5	60	0.75	0.5	0.25	65.1	9.6	33.1	34.5	73.8	0.0	0.359	0.616	0.236	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
525	R31Y_075_037$_{dd}$	0.75	0.5	0.375	0.75	0.375	0.562	49	0.75	0.493	0.375	65.0	13.3	21.8	25.5	58.6	0.0	0.389	0.467	0.223	48	1.0	0.316	0.0	61.6	35.5	58.2	68.2	58.6
526	R00Y_075_025$_{dd}$	0.75	0.5	0.5	0.75	0.25	0.625	390	0.75	0.5	0.5	65.7	14.3	9.4	17.1	33.4	0.0	0.367	0.29	0.241	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
527	R00Y_075_025$_{dd}$	0.75	0.5	0.625	0.75	0.25	0.625	360	0.75	0.5	0.625	65.8	14.7	2.6	14.9	10.0	0.0	0.335	0.188	0.265	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
528	B50R_075_025$_{dd}$	0.75	0.5	0.75	0.75	0.25	0.625	330	0.75	0.5	0.75	65.9	16.3	−3.1	16.6	348.9	0.0	0.324	0.091	0.273	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
529	B34R_087_037$_{dd}$	0.75	0.5	0.875	0.875	0.375	0.687	311	0.756	0.5	0.875	66.0	19.3	−9.2	21.4	334.4	0.017	0.345	0.0	0.254	311	0.683	0.0	1.0	40.4	51.6	−24.7	57.2	334.4
530	B25R_100_050$_{dd}$	0.75	0.5	1.0	1.0	0.5	0.75	300	0.75	0.5	1.0	66.5	21.5	−15.4	26.5	324.4	0.151	0.42	0.0	0.137	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
531	R85Y_075_075$_{dd}$	0.75	0.625	0.0	0.75	0.75	0.375	81	0.75	0.637	0.0	70.9	−5.7	57.0	57.3	95.7	0.0	0.137	0.768	0.312	81	1.0	0.85	0.0	86.6	−7.6	76.0	76.4	95.7
532	R81Y_075_062$_{dd}$	0.75	0.625	0.125	0.75	0.625	0.437	79	0.75	0.635	0.125	71.3	−3.6	47.7	47.9	94.3	0.0	0.164	0.687	0.295	80	1.0	0.816	0.0	85.4	−5.8	76.4	76.6	94.3
533	R76Y_075_050$_{dd}$	0.75	0.625	0.25	0.75	0.5	0.5	76	0.75	0.633	0.25	71.7	−1.4	38.4	38.4	92.2	0.0	0.188	0.599	0.275	77	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92.2
534	R68Y_075_037$_{dd}$	0.75	0.625	0.375	0.75	0.375	0.562	71	0.75	0.631	0.375	71.4	2.0	27.7	27.8	85.7	0.0	0.212	0.462	0.258	71	1.0	0.683	0.0	78.6	5.4	73.9	74.1	85.7
535	R50Y_075_025$_{dd}$	0.75	0.625	0.5	0.75	0.25	0.625	60	0.75	0.625	0.5	71.5	4.8	16.5	17.2	73.8	0.0	0.218	0.328	0.259	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
536	R00Y_075_012$_{dd}$	0.75	0.625	0.625	0.75	0.125	0.687	390	0.75	0.625	0.625	71.8	7.1	4.7	8.5	33.4	0.0	0.196	0.173	0.269	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
537	B50R_075_012$_{dd}$	0.75	0.625	0.75	0.75	0.125	0.687	330	0.75	0.625	0.75	71.8	8.1	−1.5	8.3	348.9	0.0	0.177	0.07	0.282	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
538	B25R_087_025$_{dd}$	0.75	0.625	0.875	0.875	0.25	0.75	300	0.75	0.625	0.875	72.1	10.7	−7.7	13.2	324.4	0.026	0.209	0.0	0.251	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
539	B15R_100_037$_{dd}$	0.75	0.625	1.0	1.0	0.375	0.812	289	0.743	0.625	1.0	72.1	13.0	−13.9	19.1	312.9	0.148	0.304	0.0	0.139	288	0.316	0.0	1.0	32.7	34.7	−37.2	50.9	312.9
540	Y00G_075_075$_{dd}$	0.75	0.75	0.0	0.75	0.75	0.375	90	0.75	0.75	0.0	74.6	−11.8	63.5	64.6	100.5	0.009	0.0	0.817	0.33	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
541	Y00G_075_062$_{dd}$	0.75	0.75	0.125	0.75	0.625	0.437	90	0.75	0.75	0.125	75.1	−9.9	52.9	53.8	100.5	0.0	0.031	0.695	0.32	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
542	Y00G_075_050$_{dd}$	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.75	0.25	75.7	−7.9	42.3	43.0	100.5	0.0	0.062	0.597	0.302	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
543	Y00G_075_037$_{dd}$	0.75	0.75	0.375	0.75	0.375	0.562	90	0.75	0.75	0.375	76.2	−5.9	31.7	32.3	100.5	0.0	0.061	0.451	0.289	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
544	Y00G_075_025$_{dd}$	0.75	0.75	0.5	0.75	0.25	0.625	90	0.75	0.75	0.5	76.7	−3.9	21.1	21.5	100.5	0.0	0.052	0.321	0.288	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
545	Y00G_075_012$_{dd}$	0.75	0.75	0.625	0.75	0.125	0.687	90	0.75	0.75	0.625	77.3	−1.9	10.5	10.7	100.5	0.0	0.036	0.186	0.287	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
546	NW_075$_{dd}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
547	B00R_087_012$_{dd}$	0.75	0.75	0.875	0.875	0.125	0.812	270	0.75	0.75	0.875	78.9	2.1	−5.5	5.9	290.8	0.063	0.09	0.0	0.206	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
548	B00R_100_025$_{dd}$	0.75	0.75	1.0	1.0	0.25	0.875	270	0.75	0.75	1.0	80.0	4.2	−11.1	11.9	290.8	0.138	0.189	0.0	0.096	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
549	Y13G_087_087$_{dd}$	0.75	0.875	0.0	0.875	0.875	0.437	98	0.758	0.875	0.0	84.0	−16.0	78.0	79.7	101.6	0.095	0.0	0.91	0.187	97	0.866	1.0	0.0	92.6	−18.3	89.2	91.0	101.6
550	Y15G_087_075$_{dd}$	0.75	0.875	0.125	0.875	0.75	0.5	99	0.762	0.875	0.125	84.1	−14.1	66.5	68.0	101.9	0.061	0.0	0.766	0.181	97	0.85	1.0	0.0	92.2	−18.8	88.7	90.7	101.9
551	Y18G_087_062$_{dd}$	0.75	0.875	0.25	0.875	0.625	0.562	101	0.76	0.875	0.25	84.1	−12.3	54.9	56.2	102.6	0.033	0.0	0.678	0.189	99	0.816	1.0	0.0	91.5	−19.6	87.8	90.0	102.6
552	Y23G_087_050$_{dd}$	0.75	0.875	0.375	0.875	0.5	0.625	104	0.758	0.875	0.375	84.1	−10.4	43.2	44.5	103.6	0.017	0.0	0.519	0.188	102	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103.6
553	Y31G_087_037$_{dd}$	0.75	0.875	0.5	0.875	0.375	0.687	109	0.756	0.875	0.5	82.6	−10.3	28.7	30.5	109.8	0.062	0.0	0.377	0.211	108	0.683	1.0	0.0	84.6	−27.6	76.5	81.3	109.8
554	Y50G_087_025$_{dd}$	0.75	0.875	0.625	0.875	0.25	0.75	120	0.75	0.875	0.625	80.6	−10.4	13.7	17.2	127.3	0.132	0.0	0.268	0.215	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
555	G00B_087_012$_{dd}$	0.75	0.875	0.75	0.875	0.125	0.812	150	0.75	0.875	0.75	81.6	−8.4	3.8	9.2	155.5	0.137	0.0	0.148	0.195	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
556	G50B_087_012$_{dd}$	0.75	0.875	0.875	0.875	0.125	0.812	210	0.75	0.875	0.875	81.4	−3.7	−5.3	6.5	235.1	0.093	0.012	0.0	0.202	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
557	G75B_100_025$_{dd}$	0.75	0.875	1.0	1.0	0.25	0.875	240	0.75	0.875	1.0	83.4	−3.3	−12.3	12.7	254.9	0.2	0.131	0.0	0.054	240	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9
558	Y23G_100_100$_{dd}$	0.75	1.0	0.0	1.0	1.0	0.5	104	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103.6	0.234	0.0	1.0	0.0	102	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103.6
559	Y26G_100_087$_{dd}$	0.75	1.0	0.125	1.0	0.875	0.562	106	0.766	1.0	0.125	89.6	−20.2	73.2	75.9	105.4	0.196	0.0	0.826	0.0	104	0.733	1.0	0.0	88.7	−23.1	83.7	86.8	105.4
560	Y31G_100_075$_{dd}$	0.75	1.0	0.25	1.0	0.75	0.625	109	0.762	1.0	0.25	87.4	−20.7	57.4	61.0	109.8	0.219	0.0	0.704	0.025	108	0.683	1.0	0.0	84.6	−27.6	76.5	81.3	109.8
561	Y38G_100_062$_{dd}$	0.75	1.0	0.375	1.0	0.625	0.687	113	0.76	1.0	0.375	85.5	−20.3	41.9	46.6	115.8	0.223	0.0	0.547	0.046	112	0.616	1.0	0.0	79.3	−32.5	67.1	74.6	115.8
562	Y50G_100_050$_{dd}$	0.75	1.0	0.5	1.0	0.5	0.75	120	0.75	1.0	0.5	83.4	−20.8	27.4	34.4	127.3	0.269	0.0	0.458	0.046	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
563	Y68G_100_037$_{dd}$	0.75	1.0	0.625	1.0	0.375	0.812	131	0.743	1.0	0.625	83.8	−19.5	16.7	25.7	139.4	0.301	0.0	0.372	0.021	131	0.316	1.0	0.0	63.8	−52.2	44.7	68.7	139.4
564	G00B_100_025$_{dd}$	0.75	1.0	0.75	1.0	0.25	0.875	150	0.75	1.0	0.75	85.4	−16.9	7.7	18.5	155.5	0.304	0.0	0.255	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
565	G25B_100_025$_{dd}$	0.75	1.0	0.875	1.0	0.25	0.875	180	0.75	1.0	0.875	85.6	−12.8	−2.2	13.0	189.8	0.267	0.0	0.147	0.019	180	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8
566	G50B_100_025$_{dd}$	0.75	1.0	1.0	1.0	0.25	0.875	210	0.75	1.0	1.0	85.1	−7.5	−10.7	13.1	235.1	0.159	0.002	0.0	0.13	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1

delta

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$				*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
567	R00Y_087_087$_{dd}$	0.875	0.0	0.0	0.875	0.875	0.437	390	0.875	0.0	0.0	44.6	50.0	33.1	60.0	33.4	0.0	0.939	0.922	0.141	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
568	R36Y_087_087$_{dd}$	0.875	0.0	0.125	0.875	0.875	0.437	382	0.875	0.0	0.116	44.6	49.3	29.6	57.5	30.9	0.0	0.933	0.819	0.14	382	1.0	0.0	0.133	47.6	56.3	33.8	65.7	30.9
569	R23Y_087_087$_{dd}$	0.875	0.0	0.25	0.875	0.875	0.437	374	0.875	0.0	0.233	44.5	49.0	23.1	54.3	25.2	0.0	0.928	0.697	0.147	375	1.0	0.0	0.266	47.5	56.1	26.5	62.0	25.2
570	R08Y_087_087$_{dd}$	0.875	0.0	0.375	0.875	0.875	0.437	365	0.875	0.0	0.364	44.5	50.5	14.4	52.5	15.9	0.0	0.927	0.559	0.147	365	1.0	0.0	0.416	47.5	57.7	16.5	60.0	15.9
571	B70R_087_087$_{dd}$	0.875	0.0	0.5	0.875	0.875	0.437	355	0.875	0.0	0.51	44.9	53.3	4.3	53.5	4.6	0.0	0.925	0.409	0.146	354	1.0	0.0	0.583	47.9	60.9	4.9	61.1	4.6
572	B63R_087_087$_{dd}$	0.875	0.0	0.625	0.875	0.875	0.437	346	0.875	0.0	0.641	45.9	56.2	−4.6	56.4	355.2	0.0	0.898	0.245	0.153	344	1.0	0.0	0.733	49.1	64.2	−5.3	64.4	355.2
573	B56R_087_087$_{dd}$	0.875	0.0	0.75	0.875	0.875	0.437	338	0.875	0.0	0.758	46.3	57.8	−9.1	58.5	350.9	0.0	0.911	0.173	0.147	337	1.0	0.0	0.866	49.5	66.0	−10.4	66.9	350.9
574	B50R_087_087$_{dd}$	0.875	0.0	0.875	0.875	0.875	0.437	330	0.875	0.0	0.875	45.1	57.2	−11.1	58.3	348.9	0.0	0.925	0.137	0.168	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
575	B44R_100_100$_{dd}$	0.875	0.0	1.0	1.0	1.0	0.5	323	0.883	0.0	1.0	45.8	60.5	−17.0	62.8	344.2	0.116	0.999	0.0	0.0	323	0.883	0.0	1.0	45.8	60.5	−17.0	62.8	344.2
576	R13Y_087_087$_{dd}$	0.875	0.125	0.0	0.875	0.875	0.437	38	0.875	0.116	0.0	48.8	46.8	43.4	63.8	42.9	0.0	0.823	0.927	0.156	37	1.0	0.133	0.0	52.3	53.4	49.7	73.0	42.9
577	R00Y_087_075$_{dd}$	0.875	0.125	0.125	0.875	0.75	0.5	390	0.875	0.125	0.125	50.6	42.9	28.3	51.4	33.4	0.0	0.798	0.666	0.148	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
578	R35Y_087_075$_{dd}$	0.875	0.125	0.25	0.875	0.75	0.5	381	0.875	0.125	0.237	50.7	42.2	24.6	48.9	30.3	0.0	0.787	0.604	0.155	382	1.0	0.0	0.15	47.6	56.3	32.9	65.2	30.3
579	R18Y_087_075$_{dd}$	0.875	0.125	0.375	0.875	0.75	0.5	371	0.875	0.125	0.362	50.5	42.4	17.4	45.8	22.3	0.0	0.777	0.491	0.163	371	1.0	0.0	0.316	47.4	56.5	23.2	61.1	22.3
580	R00Y_087_075$_{dd}$	0.875	0.125	0.5	0.875	0.75	0.5	360	0.875	0.125	0.5	50.8	44.2	7.8	44.9	10.0	0.0	0.77	0.357	0.168	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
581	B65R_087_075$_{dd}$	0.875	0.125	0.625	0.875	0.75	0.5	349	0.875	0.125	0.637	51.4	47.4	−1.3	47.4	358.3	0.0	0.765	0.231	0.166	348	1.0	0.0	0.683	48.6	63.2	−1.8	63.2	358.3
582	B57R_087_075$_{dd}$	0.875	0.125	0.75	0.875	0.75	0.5	339	0.875	0.125	0.762	52.0	49.4	−7.4	49.9	351.4	0.0	0.764	0.139	0.163	337	1.0	0.0	0.85	49.4	65.8	−9.9	66.6	351.4
583	B50R_087_075$_{dd}$	0.875	0.125	0.875	0.875	0.75	0.5	330	0.875	0.125	0.875	51.1	49.0	−9.5	49.9	348.9	0.0	0.765	0.097	0.185	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
584	B43R_100_087$_{dd}$	0.875	0.125	1.0	1.0	0.875	0.562	322	0.883	0.125	1.0	51.7	52.3	−15.4	54.5	343.5	0.014	0.786	0.0	0.134	322	0.866	0.0	1.0	45.4	59.8	−17.6	62.3	343.5
585	R26Y_087_087$_{dd}$	0.875	0.25	0.0	0.875	0.875	0.437	46	0.875	0.233	0.0	54.7	35.2	49.0	60.3	54.2	0.0	0.701	0.938	0.154	44	1.0	0.266	0.0	59.1	40.2	56.0	69.0	54.2
586	R15Y_087_075$_{dd}$	0.875	0.25	0.125	0.875	0.75	0.5	39	0.875	0.237	0.125	54.8	38.8	37.9	54.3	44.3	0.0	0.738	0.76	0.115	37	1.0	0.15	0.0	53.2	51.8	50.6	72.4	44.3
587	R00Y_087_062$_{dd}$	0.875	0.25	0.25	0.875	0.625	0.562	390	0.875	0.25	0.25	56.6	35.7	23.6	42.8	33.4	0.0	0.693	0.542	0.127	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
588	R31Y_087_062$_{dd}$	0.875	0.25	0.375	0.875	0.625	0.562	379	0.875	0.25	0.364	56.7	35.1	19.4	40.1	28.9	0.0	0.679	0.485	0.138	380	1.0	0.0	0.183	47.6	56.2	31.1	64.2	28.9
589	R11Y_087_062$_{dd}$	0.875	0.25	0.5	0.875	0.625	0.562	367	0.875	0.25	0.489	56.5	35.6	11.8	37.5	18.3	0.0	0.669	0.38	0.151	367	1.0	0.0	0.383	47.4	57.0	18.9	60.0	18.3
590	B69R_087_062$_{dd}$	0.875	0.25	0.625	0.875	0.625	0.562	353	0.875	0.25	0.635	56.9	38.5	1.6	38.5	2.5	0.0	0.665	0.251	0.156	352	1.0	0.0	0.616	47.9	61.6	2.7	61.7	2.5
591	B59R_087_062$_{dd}$	0.875	0.25	0.75	0.875	0.625	0.562	341	0.875	0.25	0.76	57.8	40.9	−5.4	41.2	352.3	0.0	0.658	0.143	0.152	339	1.0	0.0	0.816	49.4	65.4	−8.7	66.0	352.3
592	B50R_087_062$_{dd}$	0.875	0.25	0.875	0.875	0.625	0.562	330	0.875	0.25	0.875	57.0	40.8	−7.9	41.6	348.9	0.0	0.656	0.1	0.171	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
593	B42R_100_075$_{dd}$	0.875	0.25	1.0	1.0	0.75	0.625	321	0.887	0.25	1.0	57.6	44.3	−13.6	46.4	342.9	0.005	0.678	0.0	0.132	322	0.85	0.0	1.0	44.9	59.1	−18.2	61.9	342.9
594	R41Y_087_087$_{dd}$	0.875	0.375	0.0	0.875	0.875	0.437	55	0.875	0.364	0.0	61.2	23.1	54.7	59.4	67.0	0.0	0.549	0.937	0.154	54	1.0	0.416	0.0	66.6	26.4	62.5	67.9	67.0
595	R31Y_087_075$_{dd}$	0.875	0.375	0.125	0.875	0.75	0.5	49	0.875	0.362	0.125	61.2	26.6	43.7	51.1	58.6	0.0	0.581	0.782	0.12	48	1.0	0.316	0.0	61.6	35.5	58.2	68.2	58.6
596	R18Y_087_062$_{dd}$	0.875	0.375	0.25	0.875	0.625	0.562	41	0.875	0.364	0.25	61.2	30.3	32.7	44.6	47.1	0.0	0.619	0.639	0.092	39	1.0	0.183	0.0	54.9	48.5	52.3	71.4	47.1
597	R00Y_087_050$_{dd}$	0.875	0.375	0.375	0.875	0.5	0.625	390	0.875	0.375	0.375	62.7	28.6	18.9	34.3	33.4	0.0	0.578	0.457	0.114	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
598	R26Y_087_050$_{dd}$	0.875	0.375	0.5	0.875	0.5	0.625	376	0.875	0.375	0.491	62.7	28.0	14.2	31.4	26.9	0.0	0.564	0.394	0.131	377	1.0	0.0	0.233	47.5	56.0	28.4	62.8	26.9
599	R00Y_087_050$_{dd}$	0.875	0.375	0.625	0.875	0.5	0.625	360	0.875	0.375	0.625	62.8	29.4	5.2	29.9	10.0	0.0	0.551	0.262	0.142	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
600	B61R_087_050$_{dd}$	0.875	0.375	0.75	0.875	0.5	0.625	344	0.875	0.375	0.758	63.5	32.3	−3.5	32.5	353.7	0.0	0.537	0.147	0.143	342	1.0	0.0	0.766	49.3	64.7	−7.1	65.1	353.7
601	B50R_087_050$_{dd}$	0.875	0.375	0.875	0.875	0.5	0.625	330	0.875	0.375	0.875	63.0	32.7	−6.3	33.3	348.9	0.0	0.532	0.102	0.159	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
602	B40R_100_062$_{dd}$	0.875	0.375	1.0	1.0	0.625	0.687	319	0.885	0.375	1.0	63.3	36.1	−12.0	38.1	341.5	0.011	0.56	0.0	0.129	320	0.816	0.0	1.0	43.9	57.8	−19.3	61.0	341.5
603	R58Y_087_087$_{dd}$	0.875	0.5	0.0	0.875	0.875	0.437	65	0.875	0.51	0.0	67.2	12.3	60.6	61.9	78.4	0.0	0.41	0.938	0.156	65	1.0	0.583	0.0	73.4	14.1	69.3	70.7	78.4
604	R50Y_087_075$_{dd}$	0.875	0.5	0.125	0.875	0.75	0.5	60	0.875	0.5	0.125	67.8	14.4	49.7	51.7	73.8	0.0	0.427	0.78	0.13	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
605	R38Y_087_062$_{dd}$	0.875	0.5	0.25	0.875	0.625	0.562	53	0.875	0.489	0.25	67.5	18.2	38.0	42.1	64.4	0.0	0.467	0.662	0.101	52	1.0	0.383	0.0	65.0	29.1	60.8	67.4	64.4
606	R23Y_087_050$_{dd}$	0.875	0.5	0.375	0.875	0.5	0.625	44	0.875	0.491	0.375	67.6	21.7	27.2	34.8	51.4	0.0	0.49	0.525	0.085	42	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4
607	R00Y_087_037$_{dd}$	0.875	0.5	0.5	0.875	0.375	0.687	390	0.875	0.5	0.5	68.7	21.4	14.1	25.7	33.4	0.0	0.454	0.344	0.11	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
608	R18Y_087_037$_{dd}$	0.875	0.5	0.625	0.875	0.375	0.687	371	0.875	0.5	0.618	68.7	21.2	8.7	22.9	22.3	0.0	0.43	0.264	0.133	371	1.0	0.0	0.316	47.4	56.5	23.2	61.1	22.3
609	B65R_087_037$_{dd}$	0.875	0.5	0.75	0.875	0.375	0.687	349	0.875	0.5	0.756	69.1	23.7	−0.6	23.7	358.3	0.0	0.414	0.15	0.143	348	1.0	0.0	0.683	48.6	63.2	−1.8	63.2	358.3
610	B50R_087_037$_{dd}$	0.875	0.5	0.875	0.875	0.375	0.687	330	0.875	0.5	0.875	68.9	24.5	−4.7	24.9	348.9	0.0	0.408	0.09	0.154	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
611	B38R_100_050$_{dd}$	0.875	0.5	1.0	1.0	0.5	0.75	316	0.883	0.5	1.0	69.1	27.9	−10.4	29.8	339.4	0.0	0.43	0.0	0.137	317	0.766	0.0	1.0	42.4	55.8	−20.9	59.6	339.4
612	R73Y_087_087$_{dd}$	0.875	0.625	0.0	0.875	0.875	0.437	74	0.875	0.641	0.0	74.6	0.0	66.7	66.7	90.0	0.0	0.237	0.873	0.186	75	1.0	0.733	0.0	81.8	−0.1	76.3	76.3	90.0
613	R68Y_087_075$_{dd}$	0.875	0.625	0.125	0.875	0.75	0.5	71	0.875	0.637	0.125	73.9	4.0	55.4	55.6	85.7	0.0	0.29	0.767	0.149	71	1.0	0.683	0.0	78.6	5.4	73.9	74.1	85.7
614	R61Y_087_062$_{dd}$	0.875	0.625	0.25	0.875	0.625	0.562	67	0.875	0.635	0.25	73.5	7.5	44.0	44.6	80.3	0.0	0.336	0.684	0.119	67	1.0	0.616	0.0	74.6	12.0	70.4	71.4	80.3
615	R50Y_087_050$_{dd}$	0.875	0.625	0.375	0.875	0.5	0.625	60	0.875	0.625	0.375	74.1	9.6	33.1	34.5	73.8	0.0	0.329	0.535	0.103	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
616	R31Y_087_037$_{dd}$	0.875	0.625	0.5	0.875	0.375	0.687	49	0.875	0.618	0.5	74.0	13.3	21.8	25.5	58.6	0.0	0.355	0.407	0.092	48	1.0	0.316	0.0	61.6	35.5	58.2	68.2	58.6
617	R00Y_087_025$_{dd}$	0.875	0.625	0.625	0.875	0.25	0.75	390	0.875	0.625	0.625	74.7	14.3	9.4	17.1	33.4	0.0	0.32	0.239	0.112	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
618	R00Y_087_025$_{dd}$	0.875	0.625	0.75	0.875	0.25	0.75	360	0.875	0.625	0.75	74.8	14.7	2.6	14.9	10.0	0.0	0.292	0.153	0.136	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
619	B50R_087_025$_{dd}$	0.875	0.625	0.875	0.875	0.25	0.75	330	0.875	0.625	0.875	74.9	16.3	−3.1	16.6	348.9	0.0	0.285	0.071	0.144	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
620	B34R_100_037$_{dd}$	0.875	0.625	1.0	1.0	0.375	0.812	311	0.881	0.625	1.0	75.0	19.3	−9.2	21.4	334.4	0.023	0.311	0.0	0.118	311	0.683	0.0	1.0	40.4	51.6	−24.7	57.2	334.4
621	R86Y_087_087$_{dd}$	0.875	0.75	0.0	0.875	0.875	0.437	82	0.875	0.758	0.0	79.3	−7.5	66.3	66.8	96.4	0.0	0.103	0.793	0.208	82	1.0	0.866	0.0	87.3	−8.6	75.8	76.3	96.4
622	R85Y_087_075$_{dd}$	0.875	0.75	0.125	0.875	0.75	0.5	81	0.875	0.762	0.125	79.9	−5.7	57.0	57.3	95.7	0.0	0.13	0.726	0.183	81	1.0	0.85	0.0	86.6	−7.6	76.0	76.4	95.7
623	R81Y_087_062$_{dd}$	0.875	0.75	0.25	0.875	0.625	0.562	79	0.875	0.76	0.25	80.3	−3.6	47.7	47.9	94.3	0.0	0.154	0.644	0.159	80	1.0	0.816	0.0	85.4	−5.8	76.4	76.6	94.3
624	R76Y_087_050$_{dd}$	0.875	0.75	0.375	0.875	0.5	0.625	76	0.875	0.758	0.375	80.7	−1.4	38.4	38.4	92.2	0.0	0.161	0.523	0.143	77	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92.2
625	R68Y_087_037$_{dd}$	0.875	0.75	0.5	0.875	0.375	0.687	71	0.875	0.756	0.5	80.3	2.0	27.7	27.8	85.7	0.0	0.188	0.406	0.126	71	1.0	0.683	0.0	78.6	5.4	73.9	74.1	85.7
626	R50Y_087_025$_{dd}$	0.875	0.75	0.625	0.875	0.25	0.75	60	0.875	0.75	0.625	80.5	4.8	16.5	17.2	73.8	0.0	0.181	0.268	0.126	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
627	R00Y_087_012$_{dd}$	0.875	0.75	0.75	0.875	0.125	0.812	390	0.875	0.75	0.75	80.8	7.1	4.7	8.5	33.4	0.0	0.17	0.142	0.132	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
628	B50R_087_012$_{dd}$	0.875	0.75	0.875	0.875	0.125	0.812	330	0.875	0.75	0.875	80.8	8.1	−1.5	8.3	348.9	0.0	0.159	0.054	0.145	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
629	B25R_100_025$_{dd}$	0.875	0.75	1.0	1.0	0.25	0.875	300	0.875	0.75	1.0	81.1	10.7	−7.7	13.2	324.4	0.039	0.203	0.0	0.101	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4
630	Y00G_087_087$_{dd}$	0.875	0.875	0.0	0.875	0.875	0.437	90	0.875	0.875	0.0	83.1	−13.8	74.1	75.3	100.5	0.035	0.0	0.832	0.208	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
631	Y00G_087_075$_{dd}$	0.875	0.875	0.125	0.875	0.75	0.5	90	0.875	0.875	0.125	83.6	−11.8	63.5	64.6	100.5	0.005	0.0	0.737	0.204	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
632	Y00G_087_062$_{dd}$	0.875	0.875	0.25	0.875	0.625	0.562	90	0.875	0.875	0.25	84.1	−9.9	52.9	53.8	100.5	0.0	0.025	0.651	0.182	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
633	Y00G_087_050$_{dd}$	0.875	0.875	0.375	0.875	0.5	0.625	90	0.875	0.875	0.375	84.7	−7.9	42.3	43.0	100.5	0.0	0.039	0.512	0.161	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
634	Y00G_087_037$_{dd}$	0.875	0.875	0.5	0.875	0.375	0.687	90	0.875	0.875	0.5	85.2	−5.9	31.7	32.3	100.5	0.0	0.044	0.385	0.156	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
635	Y00G_087_025$_{dd}$	0.875	0.875	0.625	0.875	0.25	0.75	90	0.875	0.875	0.625	85.7	−3.9	21.1	21.5	100.5	0.0	0.029	0.257	0.153	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
636	Y00G_087_012$_{dd}$	0.875	0.875	0.75	0.875	0.125	0.812	90	0.875	0.875	0.75	86.3	−1.9	10.5	10.7	100.5	0.0	0.029	0.15	0.152	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
637	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
638	B00R_100_012$_{dd}$	0.875	0.875	1.0	1.0	0.125	0.937	270	0.875	0.875	1.0	87.9	2.1	−5.5	5.9	290.8	0.079	0.113	0.0	0.056	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
639	Y11G_100_100$_{dd}$	0.875	1.0	0.0	1.0	1.0	0.5	97	0.883	1.0	0.0	92.7	−18.0	89.1	90.9	101.4	0.116	0.0	1.0	0.0	96	0.883	1.0	0.0	92.7	−18.0	89.1	90.9	101.4
640	Y13G_100_087$_{dd}$	0.875	1.0	0.125	1.0	0.875	0.562	98	0.883	1.0	0.125	93.0	−16.0	78.0	79.7	101.6	0.0	0.0	0.875	0.0	97	0.866	1.0	0.0	92.6	−18.3	89.2	91.0	101.6
641	Y15G_100_075$_{dd}$	0.875	1.0	0.25	1.0	0.75	0.625	99	0.887	1.0	0.25	93.1	−14.1	66.5	68.0	101.9	0.0	0.0	0.767	0.0	97	0.85	1.0	0.0	92.2	−18.8	88.7	90.7	101.9
642	Y18G_100_062$_{dd}$	0.875	1.0	0.375	1.0	0.625	0.687	101	0.885	1.0	0.375	93.1	−12.3	54.9	56.2	102.6	0.0	0.0	0.636	0.0	99	0.816	1.0	0.0	91.5	−19.6	87.8	90.0	102.6
643	Y23G_100_050$_{dd}$	0.875	1.0	0.5	1.0	0.5	0.75	104	0.883	1.0	0.5	93.1	−10.4	43.2	44.5	103.6	0.0	0.008	0.474	0.0	102	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103.6
644	Y31G_100_037$_{dd}$	0.875	1.0	0.625	1.0	0.375	0.812	109	0.881	1.0	0.625	91.6	−10.3	28.7	30.5	109.8	0.061	0.0	0.321	0.039	108	0.683	1.0	0.0	84.6	−27.6	76.5	81.3	109.8
645	Y50G_100_025$_{dd}$	0.875	1.0	0.75	1.0	0.25	0.875	120	0.875	1.0	0.75	89.6	−10.4	13.7	17.2	127.3	0.131	0.0	0.218	0.054	119	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3
646	G00B_100_012$_{dd}$	0.875	1.0	0.875	1.0	0.125	0.937	150	0.875	1.0	0.875	90.6	−8.4	3.8	9.2	155.5	0.139	0.0	0.132	0.014	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
647	G50B_100_012$_{dd}$	0.875	1.0	1.0	1.0	0.125	0.937	210	0.875	1.0	1.0	90.4	−3.7	−5.3	6.5	235.1	0.102	0.029	0.0	0.025	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1

delta

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

2−1032630−F0

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$				*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$			
648	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
649	R38Y_100_100$_{dd}$	1.0	0.0	0.125	1.0	1.0	0.5	383	1.0	0.0	0.116	47.6	56.4	34.5	66.1	31.4	0.0	1.0	0.886	0.0	383	1.0	0.0	0.116	47.6	56.4	34.5	66.1	31.4
650	R26Y_100_100$_{dd}$	1.0	0.0	0.25	1.0	1.0	0.5	376	1.0	0.0	0.233	47.5	56.0	28.4	62.8	26.9	0.0	1.0	0.766	0.0	377	1.0	0.0	0.233	47.5	56.0	28.4	62.8	26.9
651	R13Y_100_100$_{dd}$	1.0	0.0	0.375	1.0	1.0	0.5	368	1.0	0.0	0.366	47.4	56.8	20.0	60.2	19.4	0.0	0.998	0.631	0.0	368	1.0	0.0	0.366	47.4	56.8	20.0	60.2	19.4
652	R00Y_100_100$_{dd}$	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0	0.0	1.0	0.5	0.0	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
653	B68R_100_100$_{dd}$	1.0	0.0	0.625	1.0	1.0	0.5	352	1.0	0.0	0.633	48.0	62.0	1.5	62.0	1.4	0.0	0.987	0.367	0.007	351	1.0	0.0	0.633	48.0	62.0	1.5	62.0	1.4
654	B61R_100_100$_{dd}$	1.0	0.0	0.75	1.0	1.0	0.5	344	1.0	0.0	0.766	49.3	64.7	−7.1	65.1	353.7	0.0	0.99	0.235	0.004	342	1.0	0.0	0.766	49.3	64.7	−7.1	65.1	353.7
655	B55R_100_100$_{dd}$	1.0	0.0	0.875	1.0	1.0	0.5	337	1.0	0.0	0.883	49.4	66.1	−10.9	67.0	350.6	0.0	0.998	0.12	0.002	336	1.0	0.0	0.883	49.4	66.1	−10.9	67.0	350.6
656	B50R_100_100$_{dd}$	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9	0.0	1.0	0.0	0.0	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
657	R11Y_100_100$_{dd}$	1.0	0.125	0.0	1.0	1.0	0.5	37	1.0	0.116	0.0	51.6	54.5	48.4	72.9	41.6	0.0	0.873	0.974	0.005	36	1.0	0.116	0.0	51.6	54.5	48.4	72.9	41.6
658	R00Y_100_087$_{dd}$	1.0	0.125	0.125	1.0	0.875	0.562	390	1.0	0.125	0.125	53.6	50.0	33.1	60.0	33.4	0.0	0.812	0.672	0.031	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
659	R36Y_100_087$_{dd}$	1.0	0.125	0.25	1.0	0.875	0.562	382	1.0	0.125	0.241	53.6	49.3	29.6	57.5	30.9	0.0	0.803	0.628	0.041	382	1.0	0.0	0.133	47.6	56.3	33.8	65.7	30.9
660	R23Y_100_087$_{dd}$	1.0	0.125	0.375	1.0	0.875	0.562	374	1.0	0.125	0.358	53.5	49.0	23.1	54.3	25.2	0.0	0.795	0.544	0.056	375	1.0	0.0	0.266	47.5	56.1	26.5	62.0	25.2
661	R08Y_100_087$_{dd}$	1.0	0.125	0.5	1.0	0.875	0.562	365	1.0	0.125	0.489	53.5	50.5	14.4	52.5	15.9	0.0	0.79	0.433	0.063	365	1.0	0.0	0.416	47.5	57.7	16.5	60.0	15.9
662	B70R_100_087$_{dd}$	1.0	0.125	0.625	1.0	0.875	0.562	355	1.0	0.125	0.635	53.9	53.3	4.3	53.5	4.6	0.0	0.786	0.324	0.06	354	1.0	0.0	0.583	47.9	60.9	4.9	61.1	4.6
663	B63R_100_087$_{dd}$	1.0	0.125	0.75	1.0	0.875	0.562	346	1.0	0.125	0.766	54.9	56.2	−4.6	56.4	355.2	0.0	0.784	0.215	0.05	344	1.0	0.0	0.733	49.1	64.2	−5.3	64.4	355.2
664	B56R_100_087$_{dd}$	1.0	0.125	0.875	1.0	0.875	0.562	338	1.0	0.125	0.883	55.3	57.8	−9.1	58.5	350.9	0.0	0.788	0.132	0.037	337	1.0	0.0	0.866	49.5	66.0	−10.4	66.9	350.9
665	B50R_100_087$_{dd}$	1.0	0.125	1.0	1.0	0.875	0.562	330	1.0	0.125	1.0	54.1	57.2	−11.1	58.3	348.9	0.0	0.794	0.094	0.064	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
666	R23Y_100_100$_{dd}$	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4	0.0	0.767	1.0	0.0	42	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4
667	R13Y_100_087$_{dd}$	1.0	0.25	0.125	1.0	0.875	0.562	38	1.0	0.241	0.125	57.8	46.8	43.4	63.8	42.9	0.0	0.762	0.749	0.0	37	1.0	0.133	0.0	52.3	53.4	49.7	73.0	42.9
668	R00Y_100_075$_{dd}$	1.0	0.25	0.25	1.0	0.75	0.625	390	1.0	0.25	0.25	59.6	42.9	28.3	51.4	33.4	0.0	0.704	0.553	0.005	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
669	R35Y_100_075$_{dd}$	1.0	0.25	0.375	1.0	0.75	0.625	381	1.0	0.25	0.362	59.7	42.2	24.6	48.9	30.3	0.0	0.694	0.509	0.018	382	1.0	0.0	0.15	47.6	56.3	32.9	65.2	30.3
670	R18Y_100_075$_{dd}$	1.0	0.25	0.5	1.0	0.75	0.625	371	1.0	0.25	0.487	59.5	42.4	17.4	45.8	22.3	0.0	0.686	0.432	0.035	371	1.0	0.0	0.316	47.4	56.5	23.2	61.1	22.3
671	R00Y_100_075$_{dd}$	1.0	0.25	0.625	1.0	0.75	0.625	360	1.0	0.25	0.625	59.8	44.2	7.8	44.9	10.0	0.0	0.682	0.331	0.041	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
672	B65R_100_075$_{dd}$	1.0	0.25	0.75	1.0	0.75	0.625	349	1.0	0.25	0.762	60.4	47.4	−1.3	47.4	358.3	0.0	0.688	0.231	0.033	348	1.0	0.0	0.683	48.6	63.2	−1.8	63.2	358.3
673	B57R_100_075$_{dd}$	1.0	0.25	0.875	1.0	0.75	0.625	339	1.0	0.25	0.887	61.0	49.4	−7.4	49.9	351.4	0.0	0.689	0.14	0.023	337	1.0	0.0	0.85	49.4	65.8	−9.9	66.6	351.4
674	B50R_100_075$_{dd}$	1.0	0.25	1.0	1.0	0.75	0.625	330	1.0	0.25	1.0	60.1	49.0	−9.5	49.9	348.9	0.0	0.693	0.1	0.047	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
675	R36Y_100_100$_{dd}$	1.0	0.375	0.0	1.0	1.0	0.5	52	1.0	0.366	0.0	64.2	30.6	60.1	67.5	63.0	0.0	0.632	0.999	0.0	51	1.0	0.366	0.0	64.2	30.6	60.1	67.5	63.0
676	R26Y_100_087$_{dd}$	1.0	0.375	0.125	1.0	0.875	0.562	46	1.0	0.358	0.125	63.7	35.2	49.0	60.3	54.2	0.0	0.625	0.75	0.0	44	1.0	0.266	0.0	59.1	40.2	56.0	69.0	54.2
677	R15Y_100_075$_{dd}$	1.0	0.375	0.25	1.0	0.75	0.625	39	1.0	0.362	0.25	63.8	38.8	37.9	54.3	44.3	0.0	0.647	0.623	0.0	37	1.0	0.15	0.0	53.2	51.8	50.6	72.4	44.3
678	R00Y_100_062$_{dd}$	1.0	0.375	0.375	1.0	0.625	0.687	390	1.0	0.375	0.375	65.6	35.7	23.6	42.8	33.4	0.0	0.603	0.466	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
679	R31Y_100_062$_{dd}$	1.0	0.375	0.5	1.0	0.625	0.687	379	1.0	0.375	0.489	65.7	35.1	19.4	40.1	28.9	0.0	0.597	0.433	0.002	380	1.0	0.0	0.183	47.6	56.2	31.1	64.2	28.9
680	R11Y_100_062$_{dd}$	1.0	0.375	0.625	1.0	0.625	0.687	367	1.0	0.375	0.614	65.5	35.6	11.8	37.5	18.3	0.0	0.587	0.352	0.021	367	1.0	0.0	0.383	47.4	57.0	18.9	60.0	18.3
681	B69R_100_062$_{dd}$	1.0	0.375	0.75	1.0	0.625	0.687	353	1.0	0.375	0.76	65.9	38.5	1.6	38.5	2.5	0.0	0.589	0.242	0.022	352	1.0	0.0	0.616	47.9	61.6	2.7	61.7	2.5
682	B59R_100_062$_{dd}$	1.0	0.375	0.875	1.0	0.625	0.687	341	1.0	0.375	0.885	66.8	40.9	−5.4	41.2	352.3	0.0	0.588	0.145	0.011	339	1.0	0.0	0.816	49.4	65.4	−8.7	66.0	352.3
683	B50R_100_062$_{dd}$	1.0	0.375	1.0	1.0	0.625	0.687	330	1.0	0.375	1.0	66.0	40.8	−7.9	41.6	348.9	0.0	0.588	0.103	0.032	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
684	R50Y_100_100$_{dd}$	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8	0.0	0.5	1.0	0.0	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
685	R41Y_100_087$_{dd}$	1.0	0.5	0.125	1.0	0.875	0.562	55	1.0	0.489	0.125	70.2	23.1	54.7	59.4	67.0	0.0	0.498	0.768	0.0	54	1.0	0.416	0.0	66.6	26.4	62.5	67.9	67.0
686	R31Y_100_075$_{dd}$	1.0	0.5	0.25	1.0	0.75	0.625	49	1.0	0.487	0.25	70.2	26.6	43.7	51.1	58.6	0.0	0.498	0.651	0.0	48	1.0	0.316	0.0	61.6	35.5	58.2	68.2	58.6
687	R18Y_100_062$_{dd}$	1.0	0.5	0.375	1.0	0.625	0.687	41	1.0	0.489	0.375	70.2	30.3	32.7	44.6	47.1	0.0	0.528	0.522	0.0	39	1.0	0.183	0.0	54.9	48.5	52.3	71.4	47.1
688	R00Y_100_050$_{dd}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	71.7	28.6	18.9	34.3	33.4	0.0	0.504	0.398	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
689	R26Y_100_050$_{dd}$	1.0	0.5	0.625	1.0	0.5	0.75	376	1.0	0.5	0.616	71.7	28.0	14.2	31.4	26.9	0.0	0.499	0.356	0.0	377	1.0	0.0	0.233	47.5	56.0	28.4	62.8	26.9
690	R00Y_100_050$_{dd}$	1.0	0.5	0.75	1.0	0.5	0.75	360	1.0	0.5	0.75	71.8	29.4	5.2	29.9	10.0	0.0	0.49	0.253	0.01	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
691	B61R_100_050$_{dd}$	1.0	0.5	0.875	1.0	0.5	0.75	344	1.0	0.5	0.883	72.5	32.3	−3.5	32.5	353.7	0.0	0.483	0.149	0.004	342	1.0	0.0	0.766	49.3	64.7	−7.1	65.1	353.7
692	B50R_100_050$_{dd}$	1.0	0.5	1.0	1.0	0.5	0.75	330	1.0	0.5	1.0	72.0	32.7	−6.3	33.3	348.9	0.0	0.478	0.108	0.022	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
693	R63Y_100_100$_{dd}$	1.0	0.625	0.0	1.0	1.0	0.5	68	1.0	0.633	0.0	75.4	10.6	71.2	72.0	81.5	0.0	0.367	1.0	0.0	68	1.0	0.633	0.0	75.4	10.6	71.2	72.0	81.5
694	R58Y_100_087$_{dd}$	1.0	0.625	0.125	1.0	0.875	0.562	65	1.0	0.635	0.125	76.2	12.3	60.6	61.9	78.4	0.0	0.369	0.773	0.0	65	1.0	0.583	0.0	73.4	14.1	69.3	70.7	78.4
695	R50Y_100_075$_{dd}$	1.0	0.625	0.25	1.0	0.75	0.625	60	1.0	0.625	0.25	76.8	14.4	49.7	51.7	73.8	0.0	0.376	0.66	0.0	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
696	R38Y_100_062$_{dd}$	1.0	0.625	0.375	1.0	0.625	0.687	53	1.0	0.614	0.375	76.5	18.2	38.0	42.1	64.4	0.0	0.392	0.545	0.0	52	1.0	0.383	0.0	65.0	29.1	60.8	67.4	64.4
697	R23Y_100_050$_{dd}$	1.0	0.625	0.5	1.0	0.5	0.75	44	1.0	0.616	0.5	76.6	21.7	27.2	34.8	51.4	0.0	0.419	0.438	0.0	42	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51.4
698	R00Y_100_037$_{dd}$	1.0	0.625	0.625	1.0	0.375	0.812	390	1.0	0.625	0.625	77.7	21.4	14.1	25.7	33.4	0.0	0.403	0.307	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
699	R18Y_100_037$_{dd}$	1.0	0.625	0.75	1.0	0.375	0.812	371	1.0	0.625	0.743	77.7	21.2	8.7	22.9	22.3	0.0	0.396	0.255	0.0	371	1.0	0.0	0.316	47.4	56.5	23.2	61.1	22.3
700	B65R_100_037$_{dd}$	1.0	0.625	0.875	1.0	0.375	0.812	349	1.0	0.625	0.881	78.1	23.7	−0.6	23.7	358.3	0.0	0.393	0.164	0.0	348	1.0	0.0	0.683	48.6	63.2	−1.8	63.2	358.3
701	B50R_100_037$_{dd}$	1.0	0.625	1.0	1.0	0.375	0.812	330	1.0	0.625	1.0	77.9	24.5	−4.7	24.9	348.9	0.0	0.386	0.115	0.012	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
702	R76Y_100_100$_{dd}$	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92.2	0.0	0.233	0.999	0.001	77	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92.2
703	R73Y_100_087$_{dd}$	1.0	0.75	0.125	1.0	0.875	0.562	74	1.0	0.766	0.125	83.6	0.0	66.7	66.7	90.0	0.0	0.25	0.875	0.0	75	1.0	0.733	0.0	81.8	−0.1	76.3	76.3	90.0
704	R68Y_100_075$_{dd}$	1.0	0.75	0.25	1.0	0.75	0.625	71	1.0	0.762	0.25	82.9	4.0	55.4	55.6	85.7	0.0	0.257	0.686	0.0	71	1.0	0.683	0.0	78.6	5.4	73.9	74.1	85.7
705	R61Y_100_062$_{dd}$	1.0	0.75	0.375	1.0	0.625	0.687	67	1.0	0.76	0.375	82.5	7.5	44.0	44.6	80.3	0.0	0.278	0.532	0.0	67	1.0	0.616	0.0	74.6	12.0	70.4	71.4	80.3
706	R50Y_100_050$_{dd}$	1.0	0.75	0.5	1.0	0.5	0.75	60	1.0	0.75	0.5	83.1	9.6	33.1	34.5	73.8	0.0	0.283	0.426	0.0	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
707	R31Y_100_037$_{dd}$	1.0	0.75	0.625	1.0	0.375	0.812	49	1.0	0.743	0.625	83.0	13.3	21.8	25.5	58.6	0.0	0.306	0.376	0.0	48	1.0	0.316	0.0	61.6	35.5	58.2	68.2	58.6
708	R00Y_100_025$_{dd}$	1.0	0.75	0.75	1.0	0.25	0.875	390	1.0	0.75	0.75	83.7	14.3	9.4	17.1	33.4	0.0	0.304	0.223	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
709	R00Y_100_025$_{dd}$	1.0	0.75	0.875	1.0	0.25	0.875	360	1.0	0.75	0.875	83.8	14.7	2.6	14.9	10.0	0.0	0.288	0.16	0.0	360	1.0	0.0	0.5	47.8	58.9	10.4	59.9	10.0
710	B50R_100_025$_{dd}$	1.0	0.75	1.0	1.0	0.25	0.875	330	1.0	0.75	1.0	83.9	16.3	−3.1	16.6	348.9	0.0	0.275	0.062	0.008	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
711	R88Y_100_100$_{dd}$	1.0	0.875	0.0	1.0	1.0	0.5	83	1.0	0.883	0.0	87.8	−9.4	76.3	76.9	97.0	0.0	0.117	0.999	0.0	83	1.0	0.883	0.0	87.8	−9.4	76.3	76.9	97.0
712	R86Y_100_087$_{dd}$	1.0	0.875	0.125	1.0	0.875	0.562	82	1.0	0.883	0.125	88.3	−7.5	66.3	66.8	96.4	0.0	0.125	0.875	0.0	82	1.0	0.866	0.0	87.3	−8.6	75.8	76.3	96.4
713	R85Y_100_075$_{dd}$	1.0	0.875	0.25	1.0	0.75	0.625	81	1.0	0.887	0.25	88.9	−5.7	57.0	57.3	95.7	0.0	0.125	0.75	0.0	81	1.0	0.85	0.0	86.6	−7.6	76.0	76.4	95.7
714	R81Y_100_062$_{dd}$	1.0	0.875	0.375	1.0	0.625	0.687	79	1.0	0.885	0.375	89.3	−3.6	47.7	47.9	94.3	0.0	0.125	0.591	0.0	80	1.0	0.816	0.0	85.4	−5.8	76.4	76.6	94.3
715	R76Y_100_050$_{dd}$	1.0	0.875	0.5	1.0	0.5	0.75	76	1.0	0.883	0.5	89.7	−1.4	38.4	38.4	92.2	0.0	0.125	0.443	0.0	77	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92.2
716	R68Y_100_037$_{dd}$	1.0	0.875	0.625	1.0	0.375	0.812	71	1.0	0.881	0.625	89.3	2.0	27.7	27.8	85.7	0.0	0.157	0.327	0.0	71	1.0	0.683	0.0	78.6	5.4	73.9	74.1	85.7
717	R50Y_100_025$_{dd}$	1.0	0.875	0.75	1.0	0.25	0.875	60	1.0	0.875	0.75	89.5	4.8	16.5	17.2	73.8	0.0	0.206	0.25	0.0	59	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8
718	R00Y_100_012$_{dd}$	1.0	0.875	0.875	1.0	0.125	0.937	390	1.0	0.875	0.875	89.8	7.1	4.7	8.5	33.4	0.0	0.173	0.132	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
719	B50R_100_012$_{dd}$	1.0	0.875	1.0	1.0	0.125	0.937	330	1.0	0.875	1.0	89.8	8.1	−1.5	8.3	348.9	0.0	0.168	0.034	0.007	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
720	Y00G_100_100$_{dd}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5	0.0	0.0	1.0	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
721	Y00G_100_087$_{dd}$	1.0	1.0	0.125	1.0	0.875	0.562	90	1.0	1.0	0.125	92.1	−13.8	74.1	75.3	100.5	0.102	0.0	0.791	0.024	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
722	Y00G_100_075$_{dd}$	1.0	1.0	0.25	1.0	0.75	0.625	90	1.0	1.0	0.25	92.6	−11.8	63.5	64.6	100.5	0.0	0.0	0.75	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
723	Y00G_100_062$_{dd}$	1.0	1.0	0.375	1.0	0.625	0.687	90	1.0	1.0	0.375	93.1	−9.9	52.9	53.8	100.5	0.0	0.014	0.621	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
724	Y00G_100_050$_{dd}$	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	1.0	0.5	93.7	−7.9	42.3	43.0	100.5	0.0	0.012	0.457	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
725	Y00G_100_037$_{dd}$	1.0	1.0	0.625	1.0	0.375	0.812	90	1.0	1.0	0.625	94.2	−5.9	31.7	32.3	100.5	0.0	0.026	0.323	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
726	Y00G_100_025$_{dd}$	1.0	1.0	0.75	1.0	0.25	0.875	90	1.0	1.0	0.75	94.7	−3.9	21.1	21.5	100.5	0.0	0.069	0.25	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
727	Y00G_100_012$_{dd}$	1.0	1.0	0.875	1.0	0.125	0.937	90	1.0	1.0	0.875	95.3	−1.9	10.5	10.7	100.5	0.0	0.033	0.125	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
728	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**delta**	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
colores y differencia en color, $\Delta E'$*

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

TUB matrícula: 20130201-QS49/QS49L0FP.PDF /.PS TUB material: code=rha4ta
aplicación para la medida salida de impresora láser, separación cmyn6* (CMYK)

http://130.149.60.45/~farbmetrik/QS49/QS49L0FP.PDF /.PS; 3D-linealización
F: 3D-linealización QS49/QS49LS30FP.DAT en archivo (F), página 29/33

n	HIC^*_{Fdd}	$rgb_{\_Fdd}$			$ict_{\_Fdd}$			$h_{si\_F,dd}$	rgb^*_{Fdd}			$LabCh^*_{Fdd}$					$cmyn^*_{sep,Fdd}$				$h_{siM,dd}$	rgb^*_{Mdd}			$LabCh^*_{Mdd}$				
729	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
730	G50B_100_012$_{dd}$	0.875	1.0	1.0	1.0	0.125	0.937	210	0.875	1.0	1.0	90.4	−3.7	−5.3	6.5	235.1	0.102	0.029	0.0	0.025	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
731	G50B_100_025$_{dd}$	0.75	1.0	1.0	1.0	0.25	0.875	210	0.75	1.0	1.0	85.1	−7.5	−10.7	13.1	235.1	0.159	0.002	0.0	0.13	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
732	G50B_100_037$_{dd}$	0.625	1.0	1.0	1.0	0.375	0.812	210	0.625	1.0	1.0	79.8	−11.2	−16.1	19.6	235.1	0.274	0.002	0.0	0.151	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
733	G50B_100_050$_{dd}$	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	1.0	74.4	−15.0	−21.5	26.2	235.1	0.374	0.013	0.0	0.158	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
734	G50B_100_062$_{dd}$	0.375	1.0	1.0	1.0	0.625	0.687	210	0.375	1.0	1.0	69.1	−18.7	−26.9	32.8	235.1	0.525	0.01	0.0	0.162	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
735	G50B_100_075$_{dd}$	0.25	1.0	1.0	1.0	0.75	0.625	210	0.25	1.0	1.0	63.8	−22.5	−32.3	39.3	235.1	0.677	0.004	0.0	0.142	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
736	G50B_100_087$_{dd}$	0.125	1.0	1.0	1.0	0.875	0.562	210	0.125	1.0	1.0	58.4	−26.2	−37.7	45.9	235.1	0.81	0.035	0.0	0.116	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
737	G50B_100_100$_{dd}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1	0.999	0.0	0.0	0.0	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
738	R00Y_100_012$_{dd}$	1.0	0.875	0.875	1.0	0.125	0.937	390	1.0	0.875	0.875	89.8	7.1	4.7	8.5	33.4	0.0	0.173	0.132	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
739	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
740	G50B_087_012$_{dd}$	0.75	0.875	0.875	0.875	0.125	0.812	210	0.75	0.875	0.875	81.4	−3.7	−5.3	6.5	235.1	0.093	0.012	0.0	0.202	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
741	G50B_087_025$_{dd}$	0.625	0.875	0.875	0.875	0.25	0.75	210	0.625	0.875	0.875	76.1	−7.5	−10.7	13.1	235.1	0.18	0.0	0.002	0.265	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
742	G50B_087_037$_{dd}$	0.5	0.875	0.875	0.875	0.375	0.687	210	0.5	0.875	0.875	70.8	−11.2	−16.1	19.6	235.1	0.286	0.0	0.004	0.284	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
743	G50B_087_050$_{dd}$	0.375	0.875	0.875	0.875	0.5	0.625	210	0.375	0.875	0.875	65.4	−15.0	−21.5	26.2	235.1	0.425	0.004	0.0	0.295	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
744	G50B_087_062$_{dd}$	0.25	0.875	0.875	0.875	0.625	0.562	210	0.25	0.875	0.875	60.1	−18.7	−26.9	32.8	235.1	0.599	0.0	0.008	0.279	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
745	G50B_087_075$_{dd}$	0.125	0.875	0.875	0.875	0.75	0.5	210	0.125	0.875	0.875	54.8	−22.5	−32.3	39.3	235.1	0.753	0.02	0.0	0.286	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
746	G50B_087_087$_{dd}$	0.0	0.875	0.875	0.875	0.875	0.437	210	0.0	0.875	0.875	49.4	−26.2	−37.7	45.9	235.1	0.889	0.055	0.0	0.368	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
747	R00Y_100_025$_{dd}$	1.0	0.75	0.75	1.0	0.25	0.875	390	1.0	0.75	0.75	83.7	14.3	9.4	17.1	33.4	0.0	0.304	0.223	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
748	R00Y_087_012$_{dd}$	0.875	0.75	0.75	0.875	0.125	0.812	390	0.875	0.75	0.75	80.8	7.1	4.7	8.5	33.4	0.0	0.17	0.142	0.132	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
749	NW_075$_{dd}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
750	G50B_075_012$_{dd}$	0.625	0.75	0.75	0.75	0.125	0.687	210	0.625	0.75	0.75	72.5	−3.7	−5.3	6.5	235.1	0.095	0.0	0.011	0.343	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
751	G50B_075_025$_{dd}$	0.5	0.75	0.75	0.75	0.25	0.625	210	0.5	0.75	0.75	67.1	−7.5	−10.7	13.1	235.1	0.183	0.0	0.023	0.384	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
752	G50B_075_037$_{dd}$	0.375	0.75	0.75	0.75	0.375	0.562	210	0.375	0.75	0.75	61.8	−11.2	−16.1	19.6	235.1	0.312	0.0	0.012	0.401	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
753	G50B_075_050$_{dd}$	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.75	56.4	−15.0	−21.5	26.2	235.1	0.477	0.0	0.015	0.398	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
754	G50B_075_062$_{dd}$	0.125	0.75	0.75	0.75	0.625	0.437	210	0.125	0.75	0.75	51.1	−18.7	−26.9	32.8	235.1	0.655	0.0	0.005	0.41	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
755	G50B_075_075$_{dd}$	0.0	0.75	0.75	0.75	0.75	0.375	210	0.0	0.75	0.75	45.8	−22.5	−32.3	39.3	235.1	0.81	0.015	0.0	0.472	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
756	R00Y_100_037$_{dd}$	1.0	0.625	0.625	1.0	0.375	0.812	390	1.0	0.625	0.625	77.7	21.4	14.1	25.7	33.4	0.0	0.403	0.307	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
757	R00Y_087_025$_{dd}$	0.875	0.625	0.625	0.875	0.25	0.75	390	0.875	0.625	0.625	74.7	14.3	9.4	17.1	33.4	0.0	0.32	0.239	0.112	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
758	R00Y_075_012$_{dd}$	0.75	0.625	0.625	0.75	0.125	0.687	390	0.75	0.625	0.625	71.8	7.1	4.7	8.5	33.4	0.0	0.196	0.173	0.269	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
759	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
760	G50B_062_012$_{dd}$	0.5	0.625	0.625	0.625	0.125	0.562	210	0.5	0.625	0.625	63.5	−3.7	−5.3	6.5	235.1	0.102	0.0	0.018	0.449	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
761	G50B_062_025$_{dd}$	0.375	0.625	0.625	0.625	0.25	0.5	210	0.375	0.625	0.625	58.1	−7.5	−10.7	13.1	235.1	0.212	0.0	0.033	0.498	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
762	G50B_062_037$_{dd}$	0.25	0.625	0.625	0.625	0.375	0.437	210	0.25	0.625	0.625	52.8	−11.2	−16.1	19.6	235.1	0.359	0.0	0.025	0.509	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
763	G50B_062_050$_{dd}$	0.125	0.625	0.625	0.625	0.5	0.375	210	0.125	0.625	0.625	47.4	−15.0	−21.5	26.2	235.1	0.529	0.0	0.018	0.522	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
764	G50B_062_062$_{dd}$	0.0	0.625	0.625	0.625	0.625	0.312	210	0.0	0.625	0.625	42.1	−18.7	−26.9	32.8	235.1	0.72	0.019	0.0	0.57	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
765	R00Y_100_050$_{dd}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	71.7	28.6	18.9	34.3	33.4	0.0	0.504	0.398	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
766	R00Y_087_037$_{dd}$	0.875	0.5	0.5	0.875	0.375	0.687	390	0.875	0.5	0.5	68.7	21.4	14.1	25.7	33.4	0.0	0.454	0.344	0.11	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
767	R00Y_075_025$_{dd}$	0.75	0.5	0.5	0.75	0.25	0.625	390	0.75	0.5	0.5	65.7	14.3	9.4	17.1	33.4	0.0	0.367	0.29	0.241	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
768	R00Y_062_012$_{dd}$	0.625	0.5	0.5	0.625	0.125	0.562	390	0.625	0.5	0.5	62.8	7.1	4.7	8.5	33.4	0.0	0.233	0.219	0.395	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
769	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
770	G50B_050_012$_{dd}$	0.375	0.5	0.5	0.5	0.125	0.437	210	0.375	0.5	0.5	54.5	−3.7	−5.3	6.5	235.1	0.117	0.0	0.031	0.561	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
771	G50B_050_025$_{dd}$	0.25	0.5	0.5	0.5	0.25	0.375	210	0.249	0.5	0.5	49.1	−7.5	−10.7	13.1	235.1	0.245	0.0	0.027	0.588	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
772	G50B_050_037$_{dd}$	0.125	0.5	0.5	0.5	0.375	0.312	210	0.124	0.5	0.5	43.8	−11.2	−16.1	19.6	235.1	0.366	0.0	0.035	0.626	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
773	G50B_050_050$_{dd}$	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.5	38.4	−15.0	−21.5	26.2	235.1	0.614	0.003	0.0	0.662	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
774	R00Y_100_062$_{dd}$	1.0	0.375	0.375	1.0	0.625	0.687	390	1.0	0.375	0.375	65.6	35.7	23.6	42.8	33.4	0.0	0.603	0.466	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
775	R00Y_087_050$_{dd}$	0.875	0.375	0.375	0.875	0.5	0.625	390	0.875	0.375	0.375	62.7	28.6	18.9	34.3	33.4	0.0	0.578	0.457	0.114	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
776	R00Y_075_037$_{dd}$	0.75	0.375	0.375	0.75	0.375	0.562	390	0.75	0.375	0.375	59.7	21.4	14.1	25.7	33.4	0.0	0.512	0.403	0.23	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
777	R00Y_062_025$_{dd}$	0.625	0.375	0.375	0.625	0.25	0.5	390	0.625	0.375	0.375	56.7	14.3	9.4	17.1	33.4	0.0	0.418	0.361	0.377	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
778	R00Y_050_012$_{dd}$	0.5	0.375	0.375	0.5	0.125	0.437	390	0.5	0.375	0.375	53.8	7.1	4.7	8.5	33.4	0.0	0.268	0.248	0.506	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
779	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
780	G50B_037_012$_{dd}$	0.25	0.375	0.375	0.375	0.125	0.312	210	0.249	0.375	0.375	45.5	−3.7	−5.3	6.5	235.1	0.109	0.0	0.04	0.661	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
781	G50B_037_025$_{dd}$	0.125	0.375	0.375	0.375	0.25	0.25	210	0.124	0.375	0.375	40.1	−7.5	−10.7	13.1	235.1	0.295	0.0	0.03	0.687	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
782	G50B_037_037$_{dd}$	0.0	0.375	0.375	0.375	0.375	0.187	210	0.0	0.375	0.375	34.8	−11.2	−16.1	19.6	235.1	0.444	0.0	0.028	0.732	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
783	R00Y_100_075$_{dd}$	1.0	0.25	0.25	1.0	0.75	0.625	390	1.0	0.25	0.25	59.6	42.9	28.3	51.4	33.4	0.0	0.704	0.553	0.005	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
784	R00Y_087_062$_{dd}$	0.875	0.25	0.25	0.875	0.625	0.562	390	0.875	0.25	0.25	56.6	35.7	23.6	42.8	33.4	0.0	0.693	0.542	0.127	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
785	R00Y_075_050$_{dd}$	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	53.7	28.6	18.9	34.3	33.4	0.0	0.632	0.514	0.234	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
786	R00Y_062_037$_{dd}$	0.625	0.25	0.25	0.625	0.375	0.437	390	0.625	0.25	0.25	50.7	21.4	14.1	25.7	33.4	0.0	0.573	0.47	0.367	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
787	R00Y_050_025$_{dd}$	0.5	0.25	0.25	0.5	0.25	0.375	390	0.5	0.249	0.249	47.7	14.3	9.4	17.1	33.4	0.0	0.464	0.385	0.493	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
788	R00Y_037_012$_{dd}$	0.375	0.25	0.25	0.375	0.125	0.312	390	0.375	0.249	0.249	44.8	7.1	4.7	8.5	33.4	0.0	0.274	0.266	0.628	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
789	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
790	G50B_025_012$_{dd}$	0.125	0.25	0.25	0.25	0.125	0.187	210	0.124	0.25	0.25	36.5	−3.7	−5.3	6.5	235.1	0.159	0.0	0.032	0.767	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
791	G50B_025_025$_{dd}$	0.0	0.25	0.25	0.25	0.25	0.125	210	0.0	0.25	0.25	31.1	−7.5	−10.7	13.1	235.1	0.43	0.005	0.0	0.817	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
792	R00Y_100_087$_{dd}$	1.0	0.125	0.125	1.0	0.875	0.562	390	1.0	0.125	0.125	53.6	50.0	33.1	60.0	33.4	0.0	0.812	0.672	0.031	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
793	R00Y_087_075$_{dd}$	0.875	0.125	0.125	0.875	0.75	0.5	390	0.875	0.125	0.125	50.6	42.9	28.3	51.4	33.4	0.0	0.798	0.666	0.148	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
794	R00Y_075_062$_{dd}$	0.75	0.125	0.125	0.75	0.625	0.437	390	0.75	0.125	0.125	47.6	35.7	23.6	42.8	33.4	0.0	0.767	0.638	0.238	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
795	R00Y_062_050$_{dd}$	0.625	0.125	0.125	0.625	0.5	0.375	390	0.625	0.125	0.125	44.7	28.6	18.9	34.3	33.4	0.0	0.726	0.594	0.368	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
796	R00Y_050_037$_{dd}$	0.5	0.125	0.125	0.5	0.375	0.312	390	0.5	0.124	0.124	41.7	21.4	14.1	25.7	33.4	0.0	0.642	0.511	0.497	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
797	R00Y_037_025$_{dd}$	0.375	0.125	0.125	0.375	0.25	0.25	390	0.375	0.124	0.124	38.7	14.3	9.4	17.1	33.4	0.0	0.53	0.432	0.631	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
798	R00Y_025_012$_{dd}$	0.25	0.125	0.125	0.25	0.125	0.187	390	0.25	0.124	0.124	35.8	7.1	4.7	8.5	33.4	0.0	0.34	0.304	0.724	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
799	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
800	G50B_012_012$_{dd}$	0.0	0.125	0.125	0.125	0.125	0.062	210	0.0	0.125	0.125	27.5	−3.7	−5.3	6.5	235.1	0.349	0.0	0.024	0.936	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
801	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
802	R00Y_087_087$_{dd}$	0.875	0.0	0.0	0.875	0.875	0.437	390	0.875	0.0	0.0	44.6	50.0	33.1	60.0	33.4	0.0	0.939	0.922	0.141	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
803	R00Y_075_075$_{dd}$	0.75	0.0	0.0	0.75	0.75	0.375	390	0.75	0.0	0.0	41.6	42.9	28.3	51.4	33.4	0.0	0.889	0.834	0.254	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
804	R00Y_062_062$_{dd}$	0.625	0.0	0.0	0.625	0.625	0.312	390	0.625	0.0	0.0	38.6	35.7	23.6	42.8	33.4	0.0	0.858	0.748	0.394	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
805	R00Y_050_050$_{dd}$	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	35.7	28.6	18.9	34.3	33.4	0.0	0.803	0.705	0.52	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
806	R00Y_037_037$_{dd}$	0.375	0.0	0.0	0.375	0.375	0.187	390	0.375	0.0	0.0	32.7	21.4	14.1	25.7	33.4	0.0	0.736	0.635	0.64	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
807	R00Y_025_025$_{dd}$	0.25	0.0	0.0	0.25	0.25	0.125	390	0.25	0.0	0.0	29.7	14.3	9.4	17.1	33.4	0.0	0.624	0.53	0.722	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
808	R00Y_012_012$_{dd}$	0.125	0.0	0.0	0.125	0.125	0.062	390	0.125	0.0	0.0	26.8	7.1	4.7	8.5	33.4	0.0	0.482	0.398	0.864	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
809	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

delta

2−1032830−F0

QS490−7N, 29/33−F

gráfico TUB-QS49; código de tono: H^*_d=Y25G$_d$
colores y differencia en color, $\Delta E'^*$

entrada: *rgb/cmyk* −> rgb_{dd}
salida: 3D-linealización a $cmyk^*_{dd}$

vea archivos semejantes: http://130.149.60.45/~farbmetrik/QS49/QS49.HTM
información técnica: http://www.ps.bam.de o http://130.149.60.45/~farbmetrik

2−1032830−F0

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$					*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
810	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
811	B00R_100_012$_{dd}$	0.875	0.875	1.0	1.0	0.125	0.937	270	0.875	0.875	1.0	87.9	2.1	−5.5	5.9	290.8	0.079	0.113	0.0	0.056	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
812	B00R_100_025$_{dd}$	0.75	0.75	1.0	1.0	0.25	0.875	270	0.75	0.75	1.0	80.0	4.2	−11.1	11.9	290.8	0.138	0.189	0.0	0.096	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
813	B00R_100_037$_{dd}$	0.625	0.625	1.0	1.0	0.375	0.812	270	0.625	0.625	1.0	72.1	6.3	−16.7	17.8	290.8	0.222	0.262	0.0	0.139	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
814	B00R_100_050$_{dd}$	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.5	1.0	64.2	8.4	−22.3	23.8	290.8	0.316	0.347	0.0	0.157	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
815	B00R_100_062$_{dd}$	0.375	0.375	1.0	1.0	0.625	0.687	270	0.375	0.375	1.0	56.2	10.5	−27.8	29.8	290.8	0.409	0.442	0.0	0.162	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
816	B00R_100_075$_{dd}$	0.25	0.25	1.0	1.0	0.75	0.625	270	0.25	0.25	1.0	48.3	12.7	−33.4	35.7	290.8	0.534	0.55	0.0	0.17	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
817	B00R_100_087$_{dd}$	0.125	0.125	1.0	1.0	0.875	0.562	270	0.125	0.125	1.0	40.4	14.8	−39.0	41.7	290.8	0.688	0.705	0.0	0.173	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
818	B00R_100_100$_{dd}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8	1.0	1.0	0.0	0.0	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
819	Y00G_100_012$_{dd}$	1.0	1.0	0.875	1.0	0.125	0.937	90	1.0	1.0	0.875	95.3	−1.9	10.5	10.7	100.5	0.0	0.033	0.125	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
820	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
821	B00R_087_012$_{dd}$	0.75	0.75	0.875	0.875	0.125	0.812	270	0.75	0.75	0.875	78.9	2.1	−5.5	5.9	290.8	0.063	0.09	0.0	0.206	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
822	B00R_087_025$_{dd}$	0.625	0.625	0.875	0.875	0.25	0.75	270	0.625	0.625	0.875	71.0	4.2	−11.1	11.9	290.8	0.136	0.173	0.0	0.26	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
823	B00R_087_037$_{dd}$	0.5	0.5	0.875	0.875	0.375	0.687	270	0.5	0.5	0.875	63.1	6.3	−16.7	17.8	290.8	0.239	0.28	0.0	0.264	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
824	B00R_087_050$_{dd}$	0.375	0.375	0.875	0.875	0.5	0.625	270	0.375	0.375	0.875	55.2	8.4	−22.3	23.8	290.8	0.349	0.395	0.0	0.27	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
825	B00R_087_062$_{dd}$	0.25	0.25	0.875	0.875	0.625	0.562	270	0.25	0.25	0.875	47.2	10.5	−27.8	29.8	290.8	0.474	0.525	0.0	0.292	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
826	B00R_087_075$_{dd}$	0.125	0.125	0.875	0.875	0.75	0.5	270	0.125	0.125	0.875	39.3	12.7	−33.4	35.7	290.8	0.641	0.694	0.0	0.326	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
827	B00R_087_087$_{dd}$	0.0	0.0	0.875	0.875	0.875	0.437	270	0.0	0.0	0.875	31.4	14.8	−39.0	41.7	290.8	0.824	0.833	0.0	0.422	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
828	Y00G_100_025$_{dd}$	1.0	1.0	0.75	1.0	0.25	0.875	90	1.0	1.0	0.75	94.7	−3.9	21.1	21.5	100.5	0.0	0.069	0.25	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
829	Y00G_087_012$_{dd}$	0.875	0.875	0.75	0.875	0.125	0.812	90	0.875	0.875	0.75	86.3	−1.9	10.5	10.7	100.5	0.0	0.029	0.15	0.152	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
830	NW_075$_{dd}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
831	B00R_075_012$_{dd}$	0.625	0.625	0.75	0.75	0.125	0.687	270	0.625	0.625	0.75	69.9	2.1	−5.5	5.9	290.8	0.055	0.08	0.0	0.357	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
832	B00R_075_025$_{dd}$	0.5	0.5	0.75	0.75	0.25	0.625	270	0.5	0.5	0.75	62.0	4.2	−11.1	11.9	290.8	0.124	0.172	0.0	0.392	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
833	B00R_075_037$_{dd}$	0.375	0.375	0.75	0.75	0.375	0.562	270	0.375	0.375	0.75	54.1	6.3	−16.7	17.8	290.8	0.238	0.289	0.0	0.407	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
834	B00R_075_050$_{dd}$	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.25	0.75	46.2	8.4	−22.3	23.8	290.8	0.364	0.428	0.0	0.425	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
835	B00R_075_062$_{dd}$	0.125	0.125	0.75	0.75	0.625	0.437	270	0.125	0.125	0.75	38.2	10.5	−27.8	29.8	290.8	0.526	0.606	0.0	0.44	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
836	B00R_075_075$_{dd}$	0.0	0.0	0.75	0.75	0.75	0.375	270	0.0	0.0	0.75	30.3	12.7	−33.4	35.7	290.8	0.739	0.797	0.0	0.519	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
837	Y00G_100_037$_{dd}$	1.0	1.0	0.625	1.0	0.375	0.812	90	1.0	1.0	0.625	94.2	−5.9	31.7	32.3	100.5	0.0	0.026	0.323	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
838	Y00G_087_025$_{dd}$	0.875	0.875	0.625	0.875	0.25	0.75	90	0.875	0.875	0.625	85.7	−3.9	21.1	21.5	100.5	0.0	0.029	0.257	0.153	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
839	Y00G_075_012$_{dd}$	0.75	0.75	0.625	0.75	0.125	0.687	90	0.75	0.75	0.625	77.3	−1.9	10.5	10.7	100.5	0.0	0.036	0.186	0.287	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
840	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
841	B00R_062_012$_{dd}$	0.5	0.5	0.625	0.625	0.125	0.562	270	0.5	0.5	0.625	60.9	2.1	−5.5	5.9	290.8	0.056	0.088	0.0	0.459	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
842	B00R_062_025$_{dd}$	0.375	0.375	0.625	0.625	0.25	0.5	270	0.375	0.375	0.625	53.0	4.2	−11.1	11.9	290.8	0.113	0.187	0.0	0.511	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
843	B00R_062_037$_{dd}$	0.25	0.25	0.625	0.625	0.375	0.437	270	0.25	0.25	0.625	45.1	6.3	−16.7	17.8	290.8	0.26	0.334	0.0	0.532	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
844	B00R_062_050$_{dd}$	0.125	0.125	0.625	0.625	0.5	0.375	270	0.125	0.125	0.625	37.2	8.4	−22.3	23.8	290.8	0.398	0.503	0.0	0.545	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
845	B00R_062_062$_{dd}$	0.0	0.0	0.625	0.625	0.625	0.312	270	0.0	0.0	0.625	29.2	10.5	−27.8	29.8	290.8	0.642	0.747	0.0	0.586	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
846	Y00G_100_050$_{dd}$	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	1.0	0.5	93.7	−7.9	42.3	43.0	100.5	0.0	0.012	0.457	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
847	Y00G_087_037$_{dd}$	0.875	0.875	0.5	0.875	0.375	0.687	90	0.875	0.875	0.5	85.2	−5.9	31.7	32.3	100.5	0.0	0.044	0.385	0.156	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
848	Y00G_075_025$_{dd}$	0.75	0.75	0.5	0.75	0.25	0.625	90	0.75	0.75	0.5	76.7	−3.9	21.1	21.5	100.5	0.0	0.052	0.321	0.288	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
849	Y00G_062_012$_{dd}$	0.625	0.625	0.5	0.625	0.125	0.562	90	0.625	0.625	0.5	68.3	−1.9	10.5	10.7	100.5	0.0	0.053	0.239	0.406	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
850	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
851	B00R_050_012$_{dd}$	0.375	0.375	0.5	0.5	0.125	0.437	270	0.375	0.375	0.5	51.9	2.1	−5.5	5.9	290.8	0.046	0.1	0.0	0.578	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
852	B00R_050_025$_{dd}$	0.25	0.25	0.5	0.5	0.25	0.375	270	0.249	0.249	0.5	44.0	4.2	−11.1	11.9	290.8	0.128	0.213	0.0	0.624	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
853	B00R_050_037$_{dd}$	0.125	0.125	0.5	0.5	0.375	0.312	270	0.124	0.124	0.5	36.1	6.3	−16.7	17.8	290.8	0.276	0.393	0.0	0.636	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
854	B00R_050_050$_{dd}$	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.0	0.5	28.2	8.4	−22.3	23.8	290.8	0.501	0.649	0.0	0.669	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
855	Y00G_100_062$_{dd}$	1.0	1.0	0.375	1.0	0.625	0.687	90	1.0	1.0	0.375	93.1	−9.9	52.9	53.8	100.5	0.0	0.014	0.621	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
856	Y00G_087_050$_{dd}$	0.875	0.875	0.375	0.875	0.5	0.625	90	0.875	0.875	0.375	84.7	−7.9	42.3	43.0	100.5	0.0	0.039	0.512	0.161	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
857	Y00G_075_037$_{dd}$	0.75	0.75	0.375	0.75	0.375	0.562	90	0.75	0.75	0.375	76.2	−5.9	31.7	32.3	100.5	0.0	0.061	0.451	0.289	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
858	Y00G_062_025$_{dd}$	0.625	0.625	0.375	0.625	0.25	0.5	90	0.625	0.625	0.375	67.7	−3.9	21.1	21.5	100.5	0.0	0.071	0.387	0.405	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
859	Y00G_050_012$_{dd}$	0.5	0.5	0.375	0.5	0.125	0.437	90	0.5	0.5	0.375	59.3	−1.9	10.5	10.7	100.5	0.0	0.069	0.273	0.512	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
860	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
861	B00R_037_012$_{dd}$	0.25	0.25	0.375	0.375	0.125	0.312	270	0.249	0.249	0.375	42.9	2.1	−5.5	5.9	290.8	0.03	0.103	0.0	0.682	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
862	B00R_037_025$_{dd}$	0.125	0.125	0.375	0.375	0.25	0.25	270	0.124	0.124	0.375	35.0	4.2	−11.1	11.9	290.8	0.207	0.302	0.0	0.715	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
863	B00R_037_037$_{dd}$	0.0	0.0	0.375	0.375	0.375	0.187	270	0.0	0.0	0.375	27.1	6.3	−16.7	17.8	290.8	0.377	0.528	0.0	0.756	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
864	Y00G_100_075$_{dd}$	1.0	1.0	0.25	1.0	0.75	0.625	90	1.0	1.0	0.25	92.6	−11.8	63.5	64.6	100.5	0.0	0.0	0.75	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
865	Y00G_087_062$_{dd}$	0.875	0.875	0.25	0.875	0.625	0.562	90	0.875	0.875	0.25	84.1	−9.9	52.9	53.8	100.5	0.0	0.025	0.651	0.182	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
866	Y00G_075_050$_{dd}$	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.75	0.25	75.7	−7.9	42.3	43.0	100.5	0.0	0.062	0.597	0.302	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
867	Y00G_062_037$_{dd}$	0.625	0.625	0.25	0.625	0.375	0.437	90	0.625	0.625	0.25	67.2	−5.9	31.7	32.3	100.5	0.0	0.082	0.522	0.409	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
868	Y00G_050_025$_{dd}$	0.5	0.5	0.25	0.5	0.25	0.375	90	0.5	0.5	0.249	58.7	−3.9	21.1	21.5	100.5	0.0	0.093	0.437	0.514	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
869	Y00G_037_012$_{dd}$	0.375	0.375	0.25	0.375	0.125	0.312	90	0.375	0.375	0.249	50.3	−1.9	10.5	10.7	100.5	0.0	0.077	0.298	0.626	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
870	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
871	B00R_025_012$_{dd}$	0.125	0.125	0.25	0.25	0.125	0.187	270	0.124	0.124	0.25	33.9	2.1	−5.5	5.9	290.8	0.069	0.156	0.0	0.781	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
872	B00R_025_025$_{dd}$	0.0	0.0	0.25	0.25	0.25	0.125	270	0.0	0.0	0.25	26.0	4.2	−11.1	11.9	290.8	0.383	0.476	0.0	0.865	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
873	Y00G_100_087$_{dd}$	1.0	1.0	0.125	1.0	0.875	0.562	90	1.0	1.0	0.125	92.1	−13.8	74.1	75.3	100.5	0.102	0.0	0.791	0.024	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
874	Y00G_087_075$_{dd}$	0.875	0.875	0.125	0.875	0.75	0.5	90	0.875	0.875	0.125	83.6	−11.8	63.5	64.6	100.5	0.005	0.0	0.737	0.204	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
875	Y00G_075_062$_{dd}$	0.75	0.75	0.125	0.75	0.625	0.437	90	0.75	0.75	0.125	75.1	−9.9	52.9	53.8	100.5	0.0	0.031	0.695	0.32	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
876	Y00G_062_050$_{dd}$	0.625	0.625	0.125	0.625	0.5	0.375	90	0.625	0.625	0.125	66.7	−7.9	42.3	43.0	100.5	0.0	0.061	0.642	0.418	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
877	Y00G_050_037$_{dd}$	0.5	0.5	0.125	0.5	0.375	0.312	90	0.5	0.5	0.124	58.2	−5.9	31.7	32.3	100.5	0.0	0.086	0.585	0.523	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
878	Y00G_037_025$_{dd}$	0.375	0.375	0.125	0.375	0.25	0.25	90	0.375	0.375	0.124	49.7	−3.9	21.1	21.5	100.5	0.0	0.087	0.479	0.636	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
879	Y00G_025_012$_{dd}$	0.25	0.25	0.125	0.25	0.125	0.187	90	0.25	0.25	0.124	41.3	−1.9	10.5	10.7	100.5	0.0	0.074	0.336	0.72	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
880	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
881	B00R_012_012$_{dd}$	0.0	0.0	0.125	0.125	0.125	0.062	270	0.0	0.0	0.125	24.9	2.1	−5.5	5.9	290.8	0.296	0.35	0.0	0.938	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
882	Y00G_100_100$_{dd}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5	0.0	0.0	1.0	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
883	Y00G_087_087$_{dd}$	0.875	0.875	0.0	0.875	0.875	0.437	90	0.875	0.875	0.0	83.1	−13.8	74.1	75.3	100.5	0.035	0.0	0.832	0.208	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
884	Y00G_075_075$_{dd}$	0.75	0.75	0.0	0.75	0.75	0.375	90	0.75	0.75	0.0	74.6	−11.8	63.5	64.6	100.5	0.009	0.0	0.817	0.33	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
885	Y00G_062_062$_{dd}$	0.625	0.625	0.0	0.625	0.625	0.312	90	0.625	0.625	0.0	66.1	−9.9	52.9	53.8	100.5	0.0	0.017	0.772	0.423	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
886	Y00G_050_050$_{dd}$	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.5	0.0	57.7	−7.9	42.3	43.0	100.5	0.0	0.051	0.73	0.52	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
887	Y00G_037_037$_{dd}$	0.375	0.375	0.0	0.375	0.375	0.187	90	0.375	0.375	0.0	49.2	−5.9	31.7	32.3	100.5	0.0	0.083	0.65	0.635	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
888	Y00G_025_025$_{dd}$	0.25	0.25	0.0	0.25	0.25	0.125	90	0.25	0.25	0.0	40.7	−3.9	21.1	21.5	100.5	0.0	0.095	0.556	0.718	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
889	Y00G_012_012$_{dd}$	0.125	0.125	0.0	0.125	0.125	0.062	90	0.125	0.125	0.0	32.3	−1.9	10.5	10.7	100.5	0.0	0.072	0.456	0.829	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
890	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

delta

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
colores y differencia en color, $\Delta E'$*

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

2−1032930−F0

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$					*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
891	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
892	B50R_100_012$_{dd}$	1.0	0.875	1.0	1.0	0.125	0.937	330	1.0	0.875	1.0	89.8	8.1	−1.5	8.3	348.9	0.0	0.168	0.034	0.007	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
893	B50R_100_025$_{dd}$	1.0	0.75	1.0	1.0	0.25	0.875	330	1.0	0.75	1.0	83.9	16.3	−3.1	16.6	348.9	0.0	0.275	0.062	0.008	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
894	B50R_100_037$_{dd}$	1.0	0.625	1.0	1.0	0.375	0.812	330	1.0	0.625	1.0	77.9	24.5	−4.7	24.9	348.9	0.0	0.386	0.115	0.012	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
895	B50R_100_050$_{dd}$	1.0	0.5	1.0	1.0	0.5	0.75	330	1.0	0.5	1.0	72.0	32.7	−6.3	33.3	348.9	0.0	0.478	0.108	0.022	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
896	B50R_100_062$_{dd}$	1.0	0.375	1.0	1.0	0.625	0.687	330	1.0	0.375	1.0	66.0	40.8	−7.9	41.6	348.9	0.0	0.588	0.103	0.032	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
897	B50R_100_075$_{dd}$	1.0	0.25	1.0	1.0	0.75	0.625	330	1.0	0.25	1.0	60.1	49.0	−9.5	49.9	348.9	0.0	0.693	0.1	0.047	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
898	B50R_100_087$_{dd}$	1.0	0.125	1.0	1.0	0.875	0.562	330	1.0	0.125	1.0	54.1	57.2	−11.1	58.3	348.9	0.0	0.794	0.094	0.064	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
899	B50R_100_100$_{dd}$	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9	0.0	1.0	0.0	0.0	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
900	G00B_100_012$_{dd}$	0.875	1.0	0.875	1.0	0.125	0.937	150	0.875	1.0	0.875	90.6	−8.4	3.8	9.2	155.5	0.139	0.0	0.132	0.014	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
901	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
902	B50R_087_012$_{dd}$	0.875	0.75	0.875	0.875	0.125	0.812	330	0.875	0.75	0.875	80.8	8.1	−1.5	8.3	348.9	0.0	0.159	0.054	0.145	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
903	B50R_087_025$_{dd}$	0.875	0.625	0.875	0.875	0.25	0.75	330	0.875	0.625	0.875	74.9	16.3	−3.1	16.6	348.9	0.0	0.285	0.071	0.144	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
904	B50R_087_037$_{dd}$	0.875	0.5	0.875	0.875	0.375	0.687	330	0.875	0.5	0.875	68.9	24.5	−4.7	24.9	348.9	0.0	0.408	0.09	0.154	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
905	B50R_087_050$_{dd}$	0.875	0.375	0.875	0.875	0.5	0.625	330	0.875	0.375	0.875	63.0	32.7	−6.3	33.3	348.9	0.0	0.532	0.102	0.159	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
906	B50R_087_062$_{dd}$	0.875	0.25	0.875	0.875	0.625	0.562	330	0.875	0.25	0.875	57.0	40.8	−7.9	41.6	348.9	0.0	0.656	0.1	0.171	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
907	B50R_087_075$_{dd}$	0.875	0.125	0.875	0.875	0.75	0.5	330	0.875	0.125	0.875	51.1	49.0	−9.5	49.9	348.9	0.0	0.765	0.097	0.185	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
908	B50R_087_087$_{dd}$	0.875	0.0	0.875	0.875	0.875	0.437	330	0.875	0.0	0.875	45.1	57.2	−11.1	58.3	348.9	0.0	0.925	0.137	0.168	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
909	G00B_100_025$_{dd}$	0.75	1.0	0.75	1.0	0.25	0.875	150	0.75	1.0	0.75	85.4	−16.9	7.7	18.5	155.5	0.304	0.0	0.255	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
910	G00B_087_012$_{dd}$	0.75	0.875	0.75	0.875	0.125	0.812	150	0.75	0.875	0.75	81.6	−8.4	3.8	9.2	155.5	0.137	0.0	0.148	0.195	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
911	NW_075$_{dd}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
912	B50R_075_012$_{dd}$	0.75	0.625	0.75	0.75	0.125	0.687	330	0.75	0.625	0.75	71.8	8.1	−1.5	8.3	348.9	0.0	0.177	0.07	0.282	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
913	B50R_075_025$_{dd}$	0.75	0.5	0.75	0.75	0.25	0.625	330	0.75	0.5	0.75	65.9	16.3	−3.1	16.6	348.9	0.0	0.324	0.091	0.273	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
914	B50R_075_037$_{dd}$	0.75	0.375	0.75	0.75	0.375	0.562	330	0.75	0.375	0.75	59.9	24.5	−4.7	24.9	348.9	0.0	0.475	0.11	0.269	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
915	B50R_075_050$_{dd}$	0.75	0.25	0.75	0.75	0.5	0.5	330	0.75	0.25	0.75	54.0	32.7	−6.3	33.3	348.9	0.0	0.609	0.12	0.286	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
916	B50R_075_062$_{dd}$	0.75	0.125	0.75	0.75	0.625	0.437	330	0.75	0.125	0.75	48.0	40.8	−7.9	41.6	348.9	0.0	0.725	0.106	0.298	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
917	B50R_075_075$_{dd}$	0.75	0.0	0.75	0.75	0.75	0.375	330	0.75	0.0	0.75	42.1	49.0	−9.5	49.9	348.9	0.0	0.863	0.125	0.295	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
918	G00B_100_037$_{dd}$	0.625	1.0	0.625	1.0	0.375	0.812	150	0.625	1.0	0.625	80.2	−25.3	11.5	27.8	155.5	0.394	0.0	0.389	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
919	G00B_087_025$_{dd}$	0.625	0.875	0.625	0.875	0.25	0.75	150	0.625	0.875	0.625	76.4	−16.9	7.7	18.5	155.5	0.28	0.0	0.307	0.199	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
920	G00B_075_012$_{dd}$	0.625	0.75	0.625	0.75	0.125	0.687	150	0.625	0.75	0.625	72.6	−8.4	3.8	9.2	155.5	0.141	0.0	0.193	0.33	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
921	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
922	B50R_062_012$_{dd}$	0.625	0.5	0.625	0.625	0.125	0.562	330	0.625	0.5	0.625	62.8	8.1	−1.5	8.3	348.9	0.0	0.208	0.101	0.406	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
923	B50R_062_025$_{dd}$	0.625	0.375	0.625	0.625	0.25	0.5	330	0.625	0.375	0.625	56.9	16.3	−3.1	16.6	348.9	0.0	0.383	0.141	0.406	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
924	B50R_062_037$_{dd}$	0.625	0.25	0.625	0.625	0.375	0.437	330	0.625	0.25	0.625	50.9	24.5	−4.7	24.9	348.9	0.0	0.524	0.153	0.417	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
925	B50R_062_050$_{dd}$	0.625	0.125	0.625	0.625	0.5	0.375	330	0.625	0.125	0.625	45.0	32.7	−6.3	33.3	348.9	0.0	0.662	0.141	0.428	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
926	B50R_062_062$_{dd}$	0.625	0.0	0.625	0.625	0.625	0.312	330	0.625	0.0	0.625	39.0	40.8	−7.9	41.6	348.9	0.0	0.81	0.129	0.441	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
927	G00B_100_050$_{dd}$	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.5	75.0	−33.8	15.4	37.1	155.5	0.498	0.0	0.623	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
928	G00B_087_037$_{dd}$	0.5	0.875	0.5	0.875	0.375	0.687	150	0.5	0.875	0.5	71.2	−25.3	11.5	27.8	155.5	0.393	0.0	0.453	0.192	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
929	G00B_075_025$_{dd}$	0.5	0.75	0.5	0.75	0.25	0.625	150	0.5	0.75	0.5	67.4	−16.9	7.7	18.5	155.5	0.294	0.0	0.356	0.322	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
930	G00B_062_012$_{dd}$	0.5	0.625	0.5	0.625	0.125	0.562	150	0.5	0.625	0.5	63.6	−8.4	3.8	9.2	155.5	0.151	0.0	0.216	0.435	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
931	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
932	B50R_050_012$_{dd}$	0.5	0.375	0.5	0.5	0.125	0.437	330	0.5	0.375	0.5	53.8	8.1	−1.5	8.3	348.9	0.0	0.244	0.124	0.514	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
933	B50R_050_025$_{dd}$	0.5	0.25	0.5	0.5	0.25	0.375	330	0.5	0.249	0.5	47.9	16.3	−3.1	16.6	348.9	0.0	0.415	0.143	0.521	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
934	B50R_050_037$_{dd}$	0.5	0.125	0.5	0.5	0.375	0.312	330	0.5	0.124	0.5	41.9	24.5	−4.7	24.9	348.9	0.0	0.584	0.155	0.542	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
935	B50R_050_050$_{dd}$	0.5	0.0	0.5	0.5	0.5	0.25	330	0.5	0.0	0.5	36.0	32.7	−6.3	33.3	348.9	0.0	0.757	0.143	0.571	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
936	G00B_100_062$_{dd}$	0.375	1.0	0.375	1.0	0.625	0.687	150	0.375	1.0	0.375	69.9	−42.3	19.2	46.4	155.5	0.625	0.0	0.625	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
937	G00B_087_050$_{dd}$	0.375	0.875	0.375	0.875	0.5	0.625	150	0.375	0.875	0.375	66.0	−33.8	15.4	37.1	155.5	0.54	0.0	0.588	0.188	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
938	G00B_075_037$_{dd}$	0.375	0.75	0.375	0.75	0.375	0.562	150	0.375	0.75	0.375	62.2	−25.3	11.5	27.8	155.5	0.422	0.0	0.515	0.313	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
939	G00B_062_025$_{dd}$	0.375	0.625	0.375	0.625	0.25	0.5	150	0.375	0.625	0.375	58.4	−16.9	7.7	18.5	155.5	0.317	0.0	0.405	0.439	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
940	G00B_050_012$_{dd}$	0.375	0.5	0.375	0.5	0.125	0.437	150	0.375	0.5	0.375	54.6	−8.4	3.8	9.2	155.5	0.184	0.0	0.248	0.547	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
941	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
942	B50R_037_012$_{dd}$	0.375	0.25	0.375	0.375	0.125	0.312	330	0.375	0.249	0.375	44.8	8.1	−1.5	8.3	348.9	0.0	0.257	0.126	0.633	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
943	B50R_037_025$_{dd}$	0.375	0.125	0.375	0.375	0.25	0.25	330	0.375	0.124	0.375	38.9	16.3	−3.1	16.6	348.9	0.0	0.477	0.145	0.646	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
944	B50R_037_037$_{dd}$	0.375	0.0	0.375	0.375	0.375	0.187	330	0.375	0.0	0.375	32.9	24.5	−4.7	24.9	348.9	0.0	0.693	0.169	0.665	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
945	G00B_100_075$_{dd}$	0.25	1.0	0.25	1.0	0.75	0.625	150	0.25	1.0	0.25	64.7	−50.7	23.1	55.7	155.5	0.702	0.0	0.707	0.125	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
946	G00B_087_062$_{dd}$	0.25	0.875	0.25	0.875	0.625	0.562	150	0.25	0.875	0.25	60.9	−42.3	19.2	46.4	155.5	0.657	0.0	0.689	0.187	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
947	G00B_075_050$_{dd}$	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.25	57.0	−33.8	15.4	37.1	155.5	0.586	0.0	0.642	0.285	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
948	G00B_062_037$_{dd}$	0.25	0.625	0.25	0.625	0.375	0.437	150	0.25	0.625	0.25	53.2	−25.3	11.5	27.8	155.5	0.471	0.0	0.548	0.41	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
949	G00B_050_025$_{dd}$	0.25	0.5	0.25	0.5	0.25	0.375	150	0.249	0.5	0.249	49.4	−16.9	7.7	18.5	155.5	0.346	0.0	0.444	0.531	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
950	G00B_037_012$_{dd}$	0.25	0.375	0.25	0.375	0.125	0.312	150	0.249	0.375	0.249	45.6	−8.4	3.8	9.2	155.5	0.189	0.0	0.293	0.641	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
951	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
952	B50R_025_012$_{dd}$	0.25	0.125	0.25	0.25	0.125	0.187	330	0.25	0.124	0.25	35.8	8.1	−1.5	8.3	348.9	0.0	0.312	0.13	0.734	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
953	B50R_025_025$_{dd}$	0.25	0.0	0.25	0.25	0.25	0.125	330	0.25	0.0	0.25	29.9	16.3	−3.1	16.6	348.9	0.0	0.579	0.168	0.743	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
954	G00B_100_087$_{dd}$	0.125	1.0	0.125	1.0	0.875	0.562	150	0.125	1.0	0.125	59.5	−59.2	26.9	65.0	155.5	0.841	0.0	0.841	0.125	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
955	G00B_087_075$_{dd}$	0.125	0.875	0.125	0.875	0.75	0.5	150	0.125	0.875	0.125	55.7	−50.7	23.1	55.7	155.5	0.791	0.0	0.805	0.196	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
956	G00B_075_062$_{dd}$	0.125	0.75	0.125	0.75	0.625	0.437	150	0.125	0.75	0.125	51.9	−42.3	19.2	46.4	155.5	0.729	0.0	0.776	0.295	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
957	G00B_062_050$_{dd}$	0.125	0.625	0.125	0.625	0.5	0.375	150	0.125	0.625	0.125	48.0	−33.8	15.4	37.1	155.5	0.628	0.0	0.704	0.415	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
958	G00B_050_037$_{dd}$	0.125	0.5	0.125	0.5	0.375	0.312	150	0.124	0.5	0.124	44.2	−25.3	11.5	27.8	155.5	0.529	0.0	0.641	0.534	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
959	G00B_037_025$_{dd}$	0.125	0.375	0.125	0.375	0.25	0.25	150	0.124	0.375	0.124	40.4	−16.9	7.7	18.5	155.5	0.415	0.0	0.527	0.659	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
960	G00B_025_012$_{dd}$	0.125	0.25	0.125	0.25	0.125	0.187	150	0.124	0.25	0.124	36.6	−8.4	3.8	9.2	155.5	0.259	0.0	0.361	0.766	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
961	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
962	B50R_012_012$_{dd}$	0.125	0.0	0.125	0.125	0.125	0.062	330	0.125	0.0	0.125	26.8	8.1	−1.5	8.3	348.9	0.0	0.459	0.135	0.876	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9
963	G00B_100_100$_{dd}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5	1.0	0.0	1.0	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
964	G00B_087_087$_{dd}$	0.0	0.875	0.0	0.875	0.875	0.437	150	0.0	0.875	0.0	50.5	−59.2	26.9	65.0	155.5	0.822	0.0	0.901	0.294	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
965	G00B_075_075$_{dd}$	0.0	0.75	0.0	0.75	0.75	0.375	150	0.0	0.75	0.0	46.7	−50.7	23.1	55.7	155.5	0.744	0.0	0.852	0.388	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
966	G00B_062_062$_{dd}$	0.0	0.625	0.0	0.625	0.625	0.312	150	0.0	0.625	0.0	42.9	−42.3	19.2	46.4	155.5	0.683	0.0	0.809	0.476	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
967	G00B_050_050$_{dd}$	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.0	39.0	−33.8	15.4	37.1	155.5	0.655	0.0	0.778	0.617	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
968	G00B_037_037$_{dd}$	0.0	0.375	0.0	0.375	0.375	0.187	150	0.0	0.375	0.0	35.2	−25.3	11.5	27.8	155.5	0.657	0.0	0.687	0.749	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
969	G00B_025_025$_{dd}$	0.0	0.25	0.0	0.25	0.25	0.125	150	0.0	0.25	0.0	31.4	−16.9	7.7	18.5	155.5	0.484	0.0	0.484	0.874	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
970	G00B_012_012$_{dd}$	0.0	0.125	0.0	0.125	0.125	0.062	150	0.0	0.125	0.0	27.6	−8.4	3.8	9.2	155.5	0.279	0.0	0.279	0.944	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
971	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

delta

2−1033030−F0

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$				*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$			
972	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
973	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
974	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
975	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
976	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
977	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
978	NW_075$_{dd}$	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	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
979	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
980	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
981	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
982	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
983	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
984	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
985	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
986	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
987	NW_075$_{dd}$	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	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
988	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
989	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
990	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
991	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
992	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
993	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
994	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
995	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
996	NW_075$_{dd}$	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	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
997	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
998	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
999	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1000	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1001	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1002	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1003	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1004	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1005	NW_075$_{dd}$	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	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1006	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1007	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1008	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1009	NW_006$_{dd}$	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	28.6	0.0	0.0	0.0	0.0	0.016	0.054	0.865	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1010	NW_013$_{dd}$	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.4	0.0	0.0	0.0	0.0	0.053	0.109	0.809	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1011	NW_020$_{dd}$	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.2	0.0	0.0	0.0	0.0	0.034	0.068	0.76	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1012	NW_026$_{dd}$	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	42.9	0.0	0.0	0.0	0.0	0.039	0.092	0.701	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1013	NW_033$_{dd}$	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	47.8	0.0	0.0	0.0	0.0	0.044	0.085	0.652	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1014	NW_040$_{dd}$	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.6	0.0	0.0	0.0	0.0	0.023	0.048	0.608	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1015	NW_046$_{dd}$	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.3	0.0	0.0	0.0	0.0	0.038	0.078	0.539	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1016	NW_053$_{dd}$	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.2	0.0	0.0	0.0	0.0	0.017	0.04	0.482	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1017	NW_060$_{dd}$	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.0	0.0	0.0	0.0	0.0	0.028	0.064	0.427	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1018	NW_066$_{dd}$	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.7	0.0	0.0	0.0	0.0	0.015	0.038	0.381	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1019	NW_073$_{dd}$	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	0.017	0.033	0.301	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1020	NW_080$_{dd}$	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.4	0.0	0.0	0.0	0.0	0.01	0.011	0.23	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1021	NW_086$_{dd}$	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.1	0.0	0.0	0.0	0.0	0.019	0.02	0.164	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1022	NW_093$_{dd}$	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	91.0	0.0	0.0	0.0	0.0	0.016	0.005	0.103	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1023	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1024	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1025	NW_006$_{dd}$	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	28.6	0.0	0.0	0.0	0.0	0.016	0.054	0.865	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1026	NW_013$_{dd}$	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.4	0.0	0.0	0.0	0.0	0.053	0.109	0.809	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1027	NW_020$_{dd}$	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.2	0.0	0.0	0.0	0.0	0.034	0.068	0.76	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1028	NW_026$_{dd}$	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	42.9	0.0	0.0	0.0	0.0	0.039	0.092	0.701	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1029	NW_033$_{dd}$	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	47.8	0.0	0.0	0.0	0.0	0.044	0.085	0.652	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1030	NW_040$_{dd}$	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.6	0.0	0.0	0.0	0.0	0.023	0.048	0.608	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1031	NW_046$_{dd}$	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.3	0.0	0.0	0.0	0.0	0.038	0.078	0.539	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1032	NW_053$_{dd}$	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.2	0.0	0.0	0.0	0.0	0.017	0.04	0.482	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1033	NW_060$_{dd}$	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.0	0.0	0.0	0.0	0.0	0.028	0.064	0.427	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1034	NW_066$_{dd}$	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.7	0.0	0.0	0.0	0.0	0.015	0.038	0.381	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1035	NW_073$_{dd}$	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	0.017	0.033	0.301	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1036	NW_080$_{dd}$	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.4	0.0	0.0	0.0	0.0	0.01	0.011	0.23	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1037	NW_086$_{dd}$	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.1	0.0	0.0	0.0	0.0	0.019	0.02	0.164	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1038	NW_093$_{dd}$	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	91.0	0.0	0.0	0.0	0.0	0.016	0.005	0.103	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1039	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1040	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1041	NW_006$_{dd}$	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	28.6	0.0	0.0	0.0	0.0	0.016	0.054	0.865	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1042	NW_013$_{dd}$	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.4	0.0	0.0	0.0	0.0	0.053	0.109	0.809	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1043	NW_020$_{dd}$	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.2	0.0	0.0	0.0	0.0	0.034	0.068	0.76	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1044	NW_026$_{dd}$	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	42.9	0.0	0.0	0.0	0.0	0.039	0.092	0.701	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1045	NW_033$_{dd}$	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	47.8	0.0	0.0	0.0	0.0	0.044	0.085	0.652	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1046	NW_040$_{dd}$	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.6	0.0	0.0	0.0	0.0	0.023	0.048	0.608	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1047	NW_046$_{dd}$	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.3	0.0	0.0	0.0	0.0	0.038	0.078	0.539	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1048	NW_053$_{dd}$	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.2	0.0	0.0	0.0	0.0	0.017	0.04	0.482	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1049	NW_060$_{dd}$	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.0	0.0	0.0	0.0	0.0	0.028	0.064	0.427	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1050	NW_066$_{dd}$	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.7	0.0	0.0	0.0	0.0	0.015	0.038	0.381	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1051	NW_073$_{dd}$	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	0.017	0.033	0.301	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1052	NW_080$_{dd}$	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.4	0.0	0.0	0.0	0.0	0.01	0.011	0.23	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

delta

gráfico TUB-QS49; código de tono: H*$_d$=Y25G$_d$
colores y differencia en color, $\Delta E'$*

entrada: *rgb/cmyk* −> *rgb*$_{dd}$
salida: 3D-linealización a *cmyk**$_{dd}$

2−1033130−F0

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$					*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
1053	NW_086$_{dd}$	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.1	0.0	0.0	0.0	0.0	0.0	0.019	0.02	0.164	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1054	NW_093$_{dd}$	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	91.0	0.0	0.0	0.0	0.0	0.0	0.016	0.005	0.103	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1055	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1056	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1057	NW_006$_{dd}$	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	28.6	0.0	0.0	0.0	0.0	0.0	0.016	0.054	0.865	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1058	NW_013$_{dd}$	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.4	0.0	0.0	0.0	0.0	0.0	0.053	0.109	0.809	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1059	NW_020$_{dd}$	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.2	0.0	0.0	0.0	0.0	0.0	0.034	0.068	0.76	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1060	NW_026$_{dd}$	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	42.9	0.0	0.0	0.0	0.0	0.0	0.039	0.092	0.701	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1061	NW_033$_{dd}$	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	47.8	0.0	0.0	0.0	0.0	0.0	0.044	0.085	0.652	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1062	NW_040$_{dd}$	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.6	0.0	0.0	0.0	0.0	0.0	0.023	0.048	0.608	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1063	NW_046$_{dd}$	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.3	0.0	0.0	0.0	0.0	0.0	0.038	0.078	0.539	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1064	NW_053$_{dd}$	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.2	0.0	0.0	0.0	0.0	0.0	0.017	0.04	0.482	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1065	NW_060$_{dd}$	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.0	0.0	0.0	0.0	0.0	0.0	0.028	0.064	0.427	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1066	NW_066$_{dd}$	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.7	0.0	0.0	0.0	0.0	0.0	0.015	0.038	0.381	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1067	NW_073$_{dd}$	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	0.0	0.017	0.033	0.301	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1068	NW_080$_{dd}$	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.4	0.0	0.0	0.0	0.0	0.0	0.01	0.011	0.23	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1069	NW_086$_{dd}$	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.1	0.0	0.0	0.0	0.0	0.0	0.019	0.02	0.164	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1070	NW_093$_{dd}$	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	91.0	0.0	0.0	0.0	0.0	0.0	0.016	0.005	0.103	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1071	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1072	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1073	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1074	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4
1075	G50B_100_100$_{dd}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1	0.999	0.0	0.0	0.0	210	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1
1076	Y00G_100_100$_{dd}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5	0.0	0.0	1.0	0.0	89	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5
1077	B00R_100_100$_{dd}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8	1.0	1.0	0.0	0.0	270	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8
1078	G00B_100_100$_{dd}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5	1.0	0.0	1.0	0.0	149	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5
1079	B50R_100_100$_{dd}$	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9	0.0	1.0	0.0	0.0	330	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9

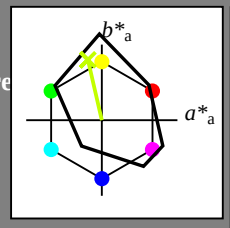
delta

Entrada i salida: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel}$ = h_{ab}/360 = 102/360 = 0.28

H**₋ = Y25G₋

Datos del dispositivo (d) o elemental (e) color:
***HIC**₋**
código de tono para les colore esta página:
***H**₋ = Y25G₋**

triàngulo claridad *T



FRS06a; datos adaptados CIELAB (a)

name	*L*=L**a	*a**a	*b**a	*C**ab,a	*h**ab,a
R₋,Ma	32.5	62.3	46.4	77.7	36
Y₋,Ma	82.7	−3.1	113.9	114.0	91
G₋,Ma	39.4	−61.8	45.8	76.9	143
C₋,Ma	47.8	−26.8	−34.2	43.4	231
B₋,Ma	10.1	55.1	−61.0	82.2	312
M₋,Ma	34.5	80.6	−33.9	87.5	337
N₋,Ma	6.2	0.0	0.0	0.0	0
W₋,Ma	91.9	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

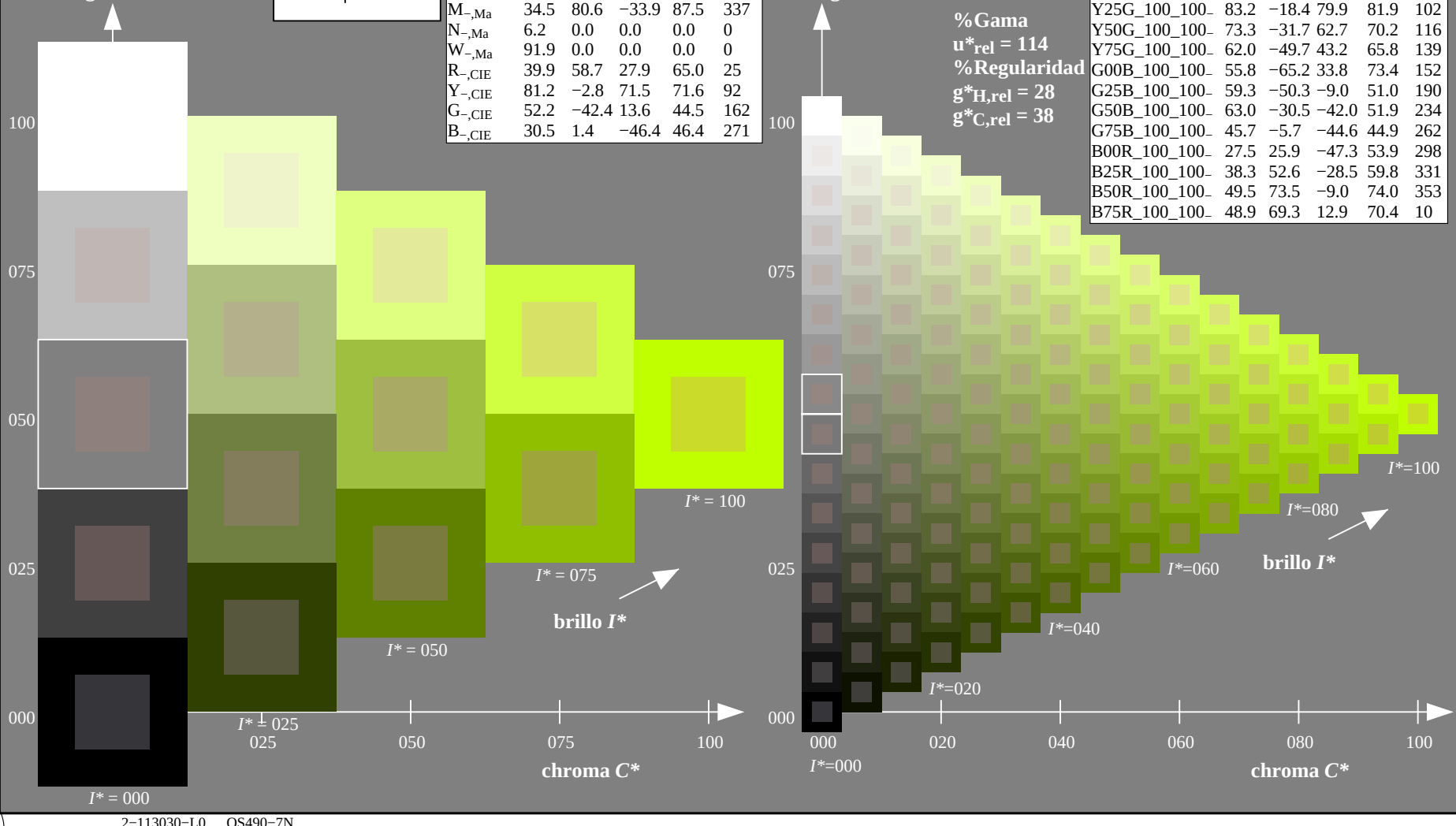
Los datos de color máximo (Ma):
***LabCh**₋,Ma: 83 −18 79 81 102**
***HIC**₋,Ma: Y25G_100_100₋**
***rgbic**₋,Ma:**
0.76 1.0 0.0 1.0 1.0

triàngulo claridad *T

%Gama
u*rel = 114
%Regularidad
g*H,rel = 28
g*C,rel = 38

ORS20a; datos adaptados CIELAB (a)

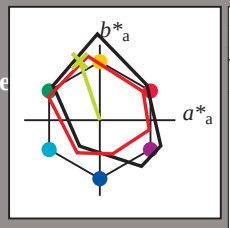
H₋	*L*=L**a	*a**a	*b**a	*C**ab,a	*h**ab,a
R00Y_100_100₋	48.4	66.1	40.2	77.3	31
R25Y_100_100₋	56.8	48.0	50.5	69.6	46
R50Y_100_100₋	68.6	25.0	63.9	68.6	68
R75Y_100_100₋	80.6	4.8	77.2	77.3	86
Y00G_100_100₋	90.2	−9.6	88.2	88.7	96
Y25G_100_100₋	83.2	−18.4	79.9	81.9	102
Y50G_100_100₋	73.3	−31.7	62.7	70.2	116
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



Entrada i salida: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel}$ = h_{ab}/360 = 108/360 = 0.3

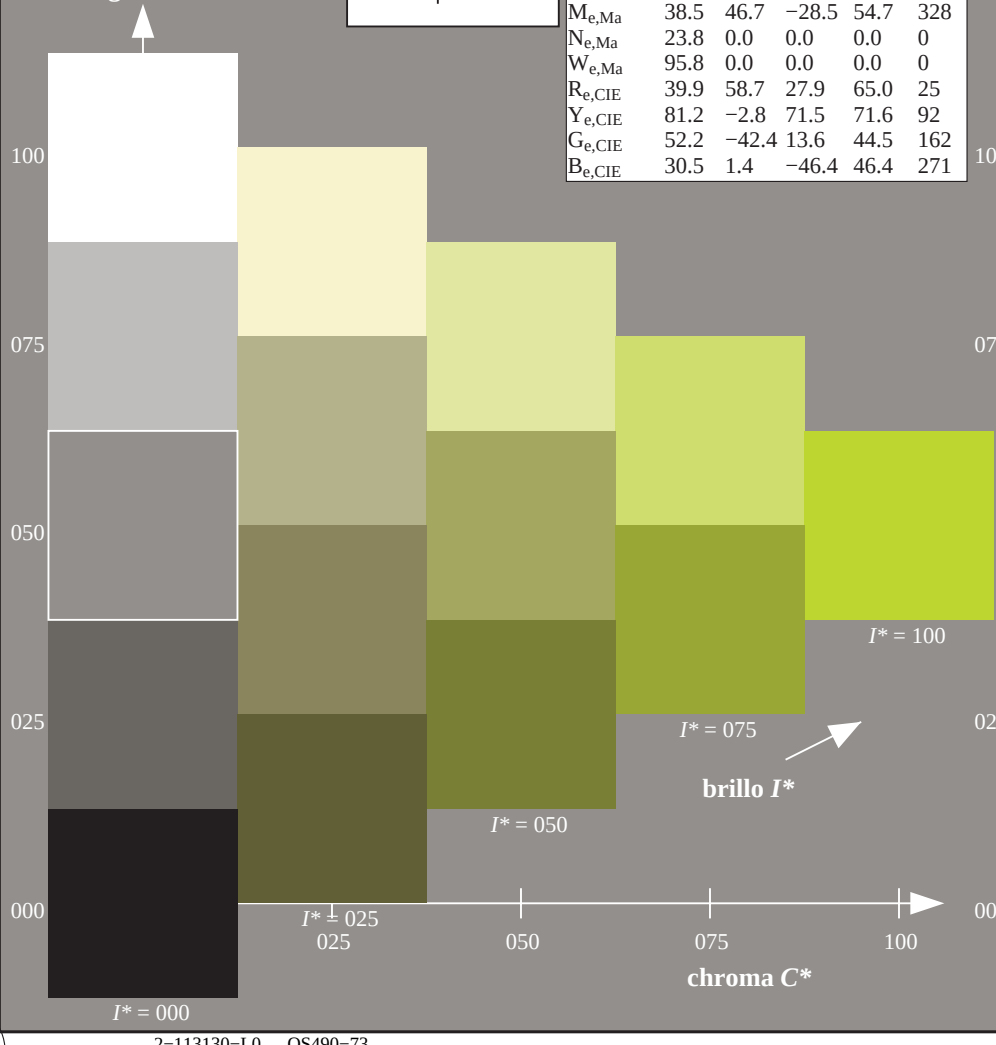
Datos del dispositivo (d) o elemental (e) color:
***HIC*$^*_e$**
código de tono para les colore esta página:
***H*$^*_e$ = Y25G$_e$**

triàngulo claridad *T



LRS18a; datos adaptados CIELAB (a)

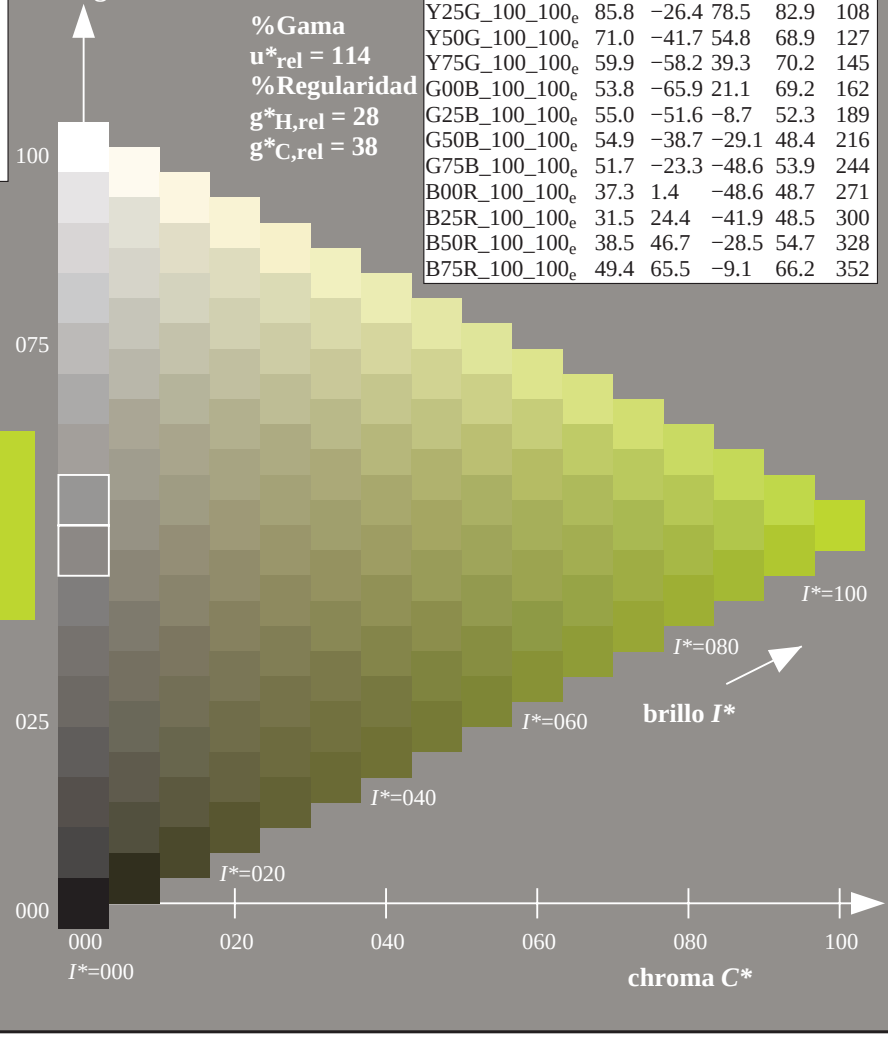
name	*L*=L*a*	*a*a*	*b*a*	*C*ab,a*	*h*ab,a*
$R_{e,Ma}$	47.5	56.0	26.7	62.1	25
$Y_{e,Ma}$	83.6	−3.1	76.8	76.9	92
$G_{e,Ma}$	53.8	−65.9	21.1	69.2	162
$C_{e,Ma}$	54.9	−38.7	−29.1	48.4	216
$B_{e,Ma}$	37.3	1.4	−48.6	48.7	271
$M_{e,Ma}$	38.5	46.7	−28.5	54.7	328
$N_{e,Ma}$	23.8	0.0	0.0	0.0	0
$W_{e,Ma}$	95.8	0.0	0.0	0.0	0
$R_{e,CIE}$	39.9	58.7	27.9	65.0	25
$Y_{e,CIE}$	81.2	−2.8	71.5	71.6	92
$G_{e,CIE}$	52.2	−42.4	13.6	44.5	162
$B_{e,CIE}$	30.5	1.4	−46.4	46.4	271



Los datos de color máximo (Ma):
***LabCh*$^*_{e,Ma}$: 85 −26 78 82 108**
***HIC*$^*_{e,Ma}$: Y25G_100_100$_e$**
***rgbic*$^*_{e,Ma}$:**
0.69 1.0 0.0 1.0 1.0

triàngulo claridad *T**

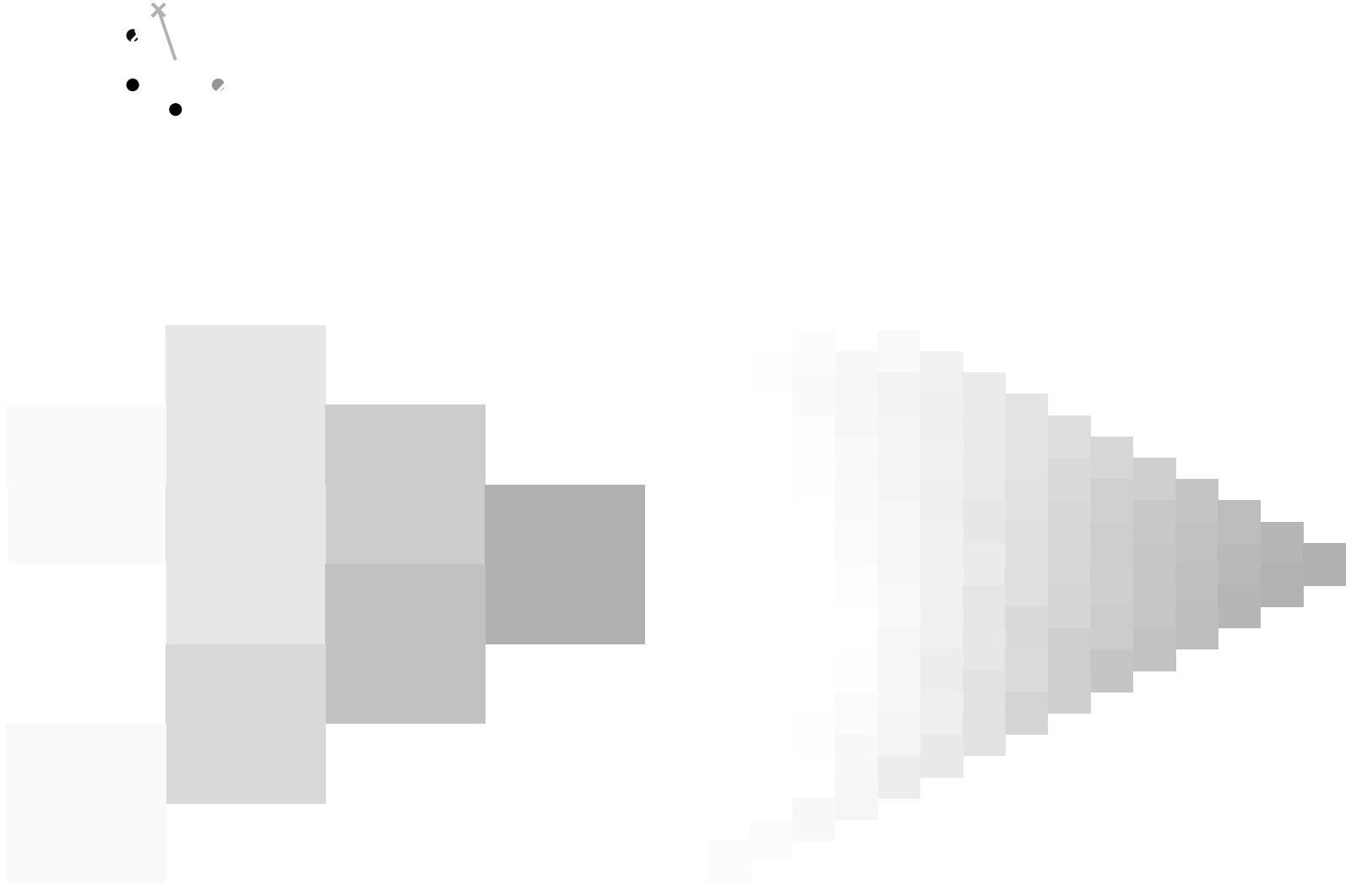
%Gama
u$^*_{rel}$ = 114
%Regularidad
g$^*_{H,rel}$ = 28
g$^*_{C,rel}$ = 38



LRS18a; datos adaptados CIELAB (a)

*H*e*	*L*=L*a*	*a*a*	*b*a*	*C*ab,a*	*h*ab,a*
R00Y_100_100$_e$	47.5	56.0	26.7	62.1	25
R25Y_100_100$_e$	51.4	54.8	47.7	72.6	41
R50Y_100_100$_e$	61.8	35.2	58.4	68.2	58
R75Y_100_100$_e$	72.3	16.1	68.2	70.1	76
Y00G_100_100$_e$	83.6	−3.1	76.8	76.9	92
Y25G_100_100$_e$	85.8	−26.4	78.5	82.9	108
Y50G_100_100$_e$	71.0	−41.7	54.8	68.9	127
Y75G_100_100$_e$	59.9	−58.2	39.3	70.2	145
G00B_100_100$_e$	53.8	−65.9	21.1	69.2	162
G25B_100_100$_e$	55.0	−51.6	−8.7	52.3	189
G50B_100_100$_e$	54.9	−38.7	−29.1	48.4	216
G75B_100_100$_e$	51.7	−23.3	−48.6	53.9	244
B00R_100_100$_e$	37.3	1.4	−48.6	48.7	271
B25R_100_100$_e$	31.5	24.4	−41.9	48.5	300
B50R_100_100$_e$	38.5	46.7	−28.5	54.7	328
B75R_100_100$_e$	49.4	65.5	−9.1	66.2	352

***H*$^*_e$ = Y25G$_e$**



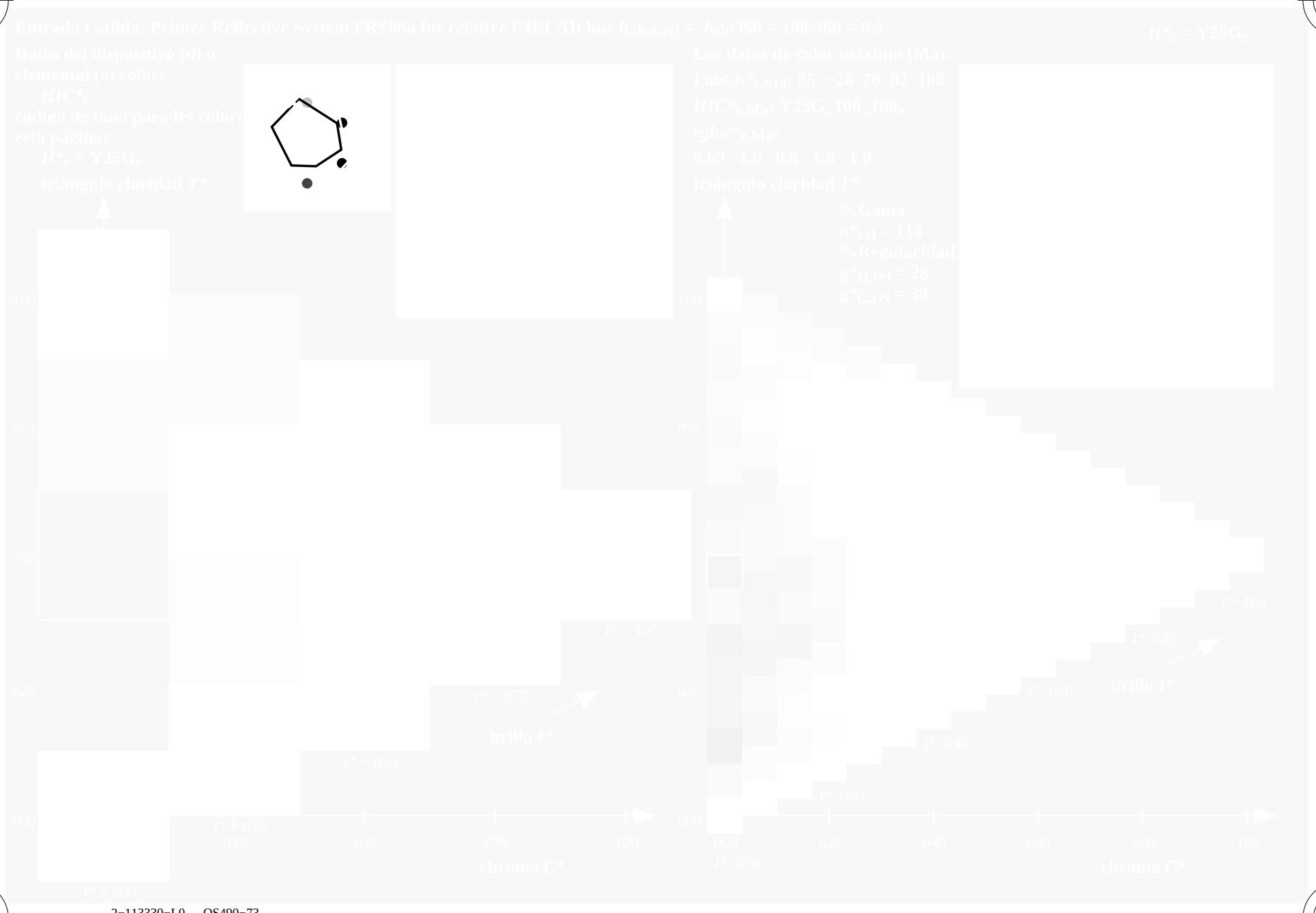
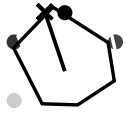


gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
gráfico según a DIN 33872, 3D=1, de=1, *cmyk**

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

Entrada i salida: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel}$ = h_{ab}/360 = 108/360 = 0.3

Datos del dispositivo (d) o elemental (e) color:
*HIC**$_e$
código de tono para les colore esta página:
H^*_e = Y25G$_e$
triàngulo claridad *T**



Los datos de color máximo (Ma):
*LabCh**$_{e,Ma}$: 85 −26 78 82 108
*HIC**$_{e,Ma}$: Y25G_100_100$_e$
*rgbic**$_{e,Ma}$:
0.69 1.0 0.0 1.0 1.0
triàngulo claridad *T**

H^*_e = Y25G$_e$

%Gama
u^*_{rel} = 114
%Regularidad
$g^*_{H,rel}$ = 28
$g^*_{C,rel}$ = 38

100
075
050
025
000
*I** = 100
*I** = 075
*I** = 050
*I** = 025
*I** = 000
brillo *I**
025 050 075 100
*I** ⊥ 025
chroma *C*

100
075
025
000
*I**=100
*I**=080
*I**=060
*I**=040
*I**=020
*I**=000
brillo *I*
000 020 040 060 080 100
chroma *C*

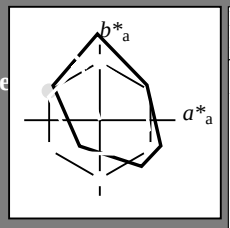
2−113430−L0 QS490−73
gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
gráfico según a DIN 33872, 3D=1, de=1, *cmyk**
2−113430−F0

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

Entrada i salida: Printer Reflective System FRS06a for relative CIELAB hue $h_{ab,a,rel}$ = h_{ab}/360 = 108/360 = 0.3

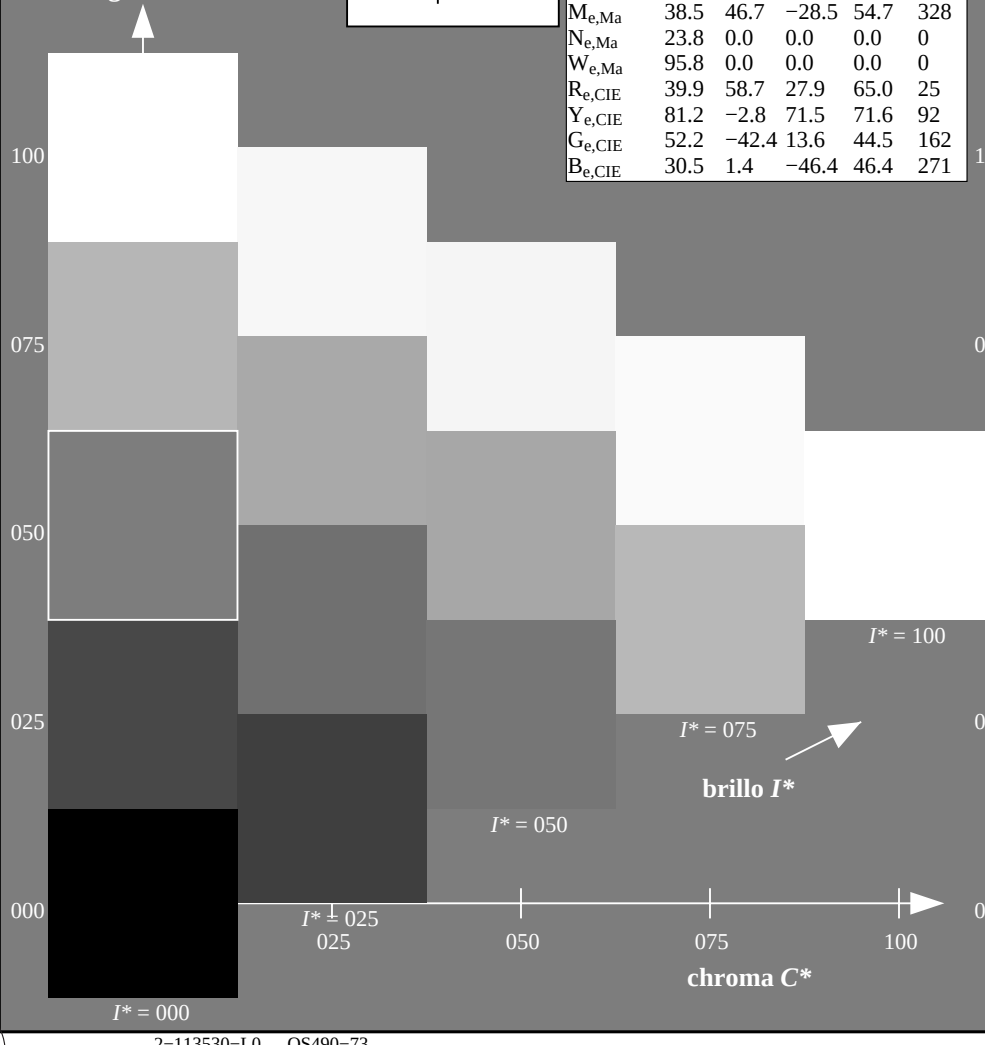
H^*_e = Y25G$_e$

Datos del dispositivo (d) o elemental (e) color:
***HIC*$^*_e$**
código de tono para les colore esta página:
H^*_e = Y25G$_e$
triàngulo claridad *T



LRS18a; datos adaptados CIELAB (a)

name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$R_{e,Ma}$	47.5	56.0	26.7	62.1	25
$Y_{e,Ma}$	83.6	−3.1	76.8	76.9	92
$G_{e,Ma}$	53.8	−65.9	21.1	69.2	162
$C_{e,Ma}$	54.9	−38.7	−29.1	48.4	216
$B_{e,Ma}$	37.3	1.4	−48.6	48.7	271
$M_{e,Ma}$	38.5	46.7	−28.5	54.7	328
$N_{e,Ma}$	23.8	0.0	0.0	0.0	0
$W_{e,Ma}$	95.8	0.0	0.0	0.0	0
$R_{e,CIE}$	39.9	58.7	27.9	65.0	25
$Y_{e,CIE}$	81.2	−2.8	71.5	71.6	92
$G_{e,CIE}$	52.2	−42.4	13.6	44.5	162
$B_{e,CIE}$	30.5	1.4	−46.4	46.4	271

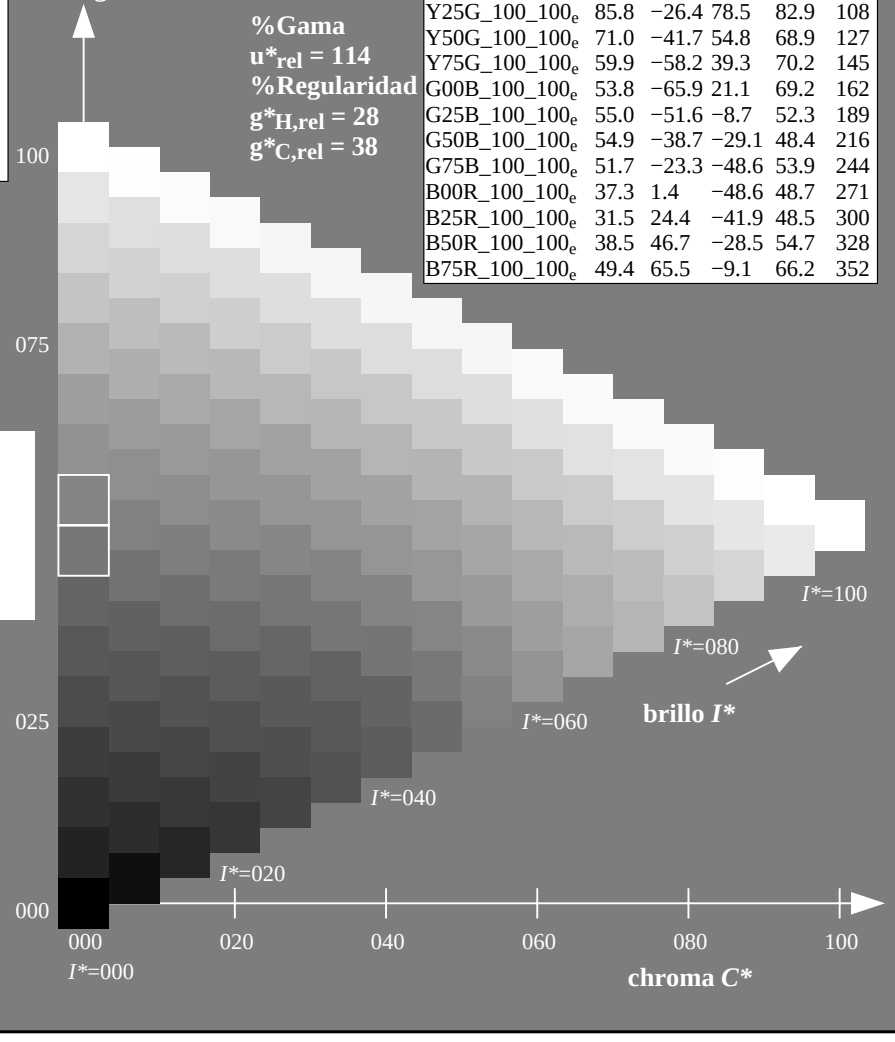


Los datos de color máximo (Ma):
***LabCh*$^*_{e,Ma}$: 85 −26 78 82 108**
***HIC*$^*_{e,Ma}$: Y25G_100_100$_e$**
***rgbic*$^*_{e,Ma}$:**
0.69 1.0 0.0 1.0 1.0
triàngulo claridad *T**

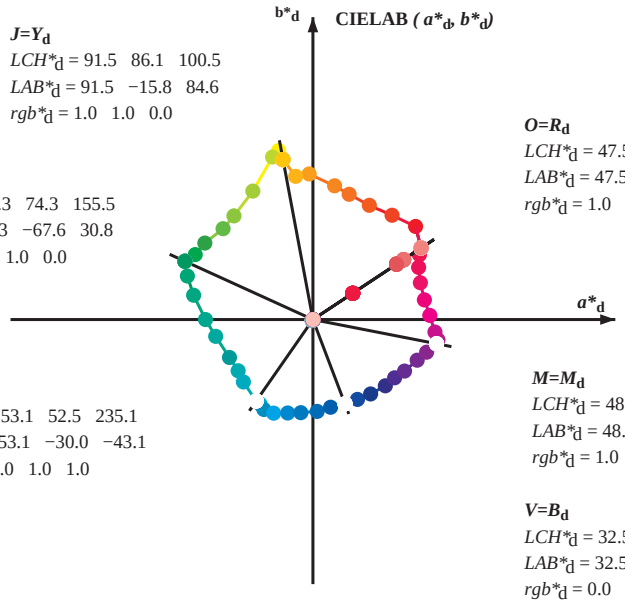
%Gama
u^*_{rel} = 114
%Regularidad
$g^*_{H,rel}$ = 28
$g^*_{C,rel}$ = 38

LRS18a; datos adaptados CIELAB (a)

H^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100$_e$	47.5	56.0	26.7	62.1	25
R25Y_100_100$_e$	51.4	54.8	47.7	72.6	41
R50Y_100_100$_e$	61.8	35.2	58.4	68.2	58
R75Y_100_100$_e$	72.3	16.1	68.2	70.1	76
Y00G_100_100$_e$	83.6	−3.1	76.8	76.9	92
Y25G_100_100$_e$	85.8	−26.4	78.5	82.9	108
Y50G_100_100$_e$	71.0	−41.7	54.8	68.9	127
Y75G_100_100$_e$	59.9	−58.2	39.3	70.2	145
G00B_100_100$_e$	53.8	−65.9	21.1	69.2	162
G25B_100_100$_e$	55.0	−51.6	−8.7	52.3	189
G50B_100_100$_e$	54.9	−38.7	−29.1	48.4	216
G75B_100_100$_e$	51.7	−23.3	−48.6	53.9	244
B00R_100_100$_e$	37.3	1.4	−48.6	48.7	271
B25R_100_100$_e$	31.5	24.4	−41.9	48.5	300
B50R_100_100$_e$	38.5	46.7	−28.5	54.7	328
B75R_100_100$_e$	49.4	65.5	−9.1	66.2	352



Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6



CIELAB (a^*_d, b^*_d)

$J=Y_d$
LCH^*_d = 91.5 86.1 100.5
LAB^*_d = 91.5 −15.8 84.6
rgb^*_d = 1.0 1.0 0.0

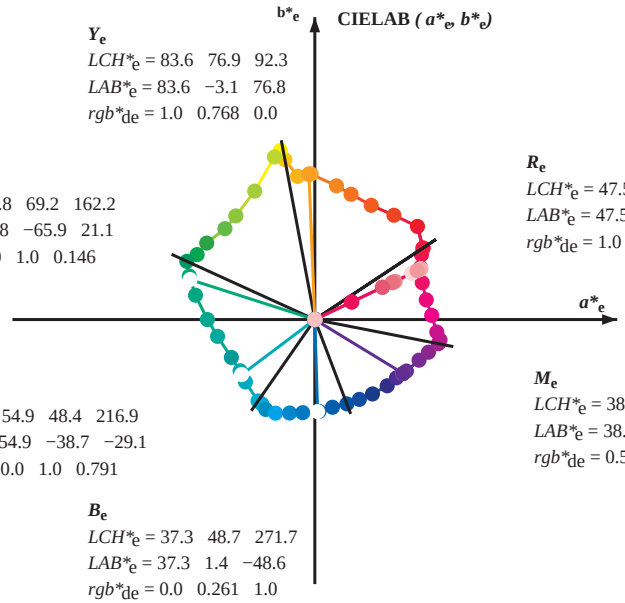
$L=G_d$
LCH^*_d = 54.3 74.3 155.5
LAB^*_d = 54.3 −67.6 30.8
rgb^*_d = 0.0 1.0 0.0

$O=R_d$
LCH^*_d = 47.5 68.6 33.4
LAB^*_d = 47.5 57.2 37.8
rgb^*_d = 1.0 0.0 0.0

$C=C_d$
LCH^*_d = 53.1 52.5 235.1
LAB^*_d = 53.1 −30.0 −43.1
rgb^*_d = 0.0 1.0 1.0

$M=M_d$
LCH^*_d = 48.1 66.6 348.9
LAB^*_d = 48.1 65.4 −12.7
rgb^*_d = 1.0 0.0 1.0

$V=B_d$
LCH^*_d = 32.5 47.7 290.8
LAB^*_d = 32.5 16.9 −44.6
rgb^*_d = 0.0 0.0 1.0



CIELAB (a^*_e, b^*_e)

Y_e
LCH^*_e = 83.6 76.9 92.3
LAB^*_e = 83.6 −3.1 76.8
rgb^*_{de} = 1.0 0.768 0.0

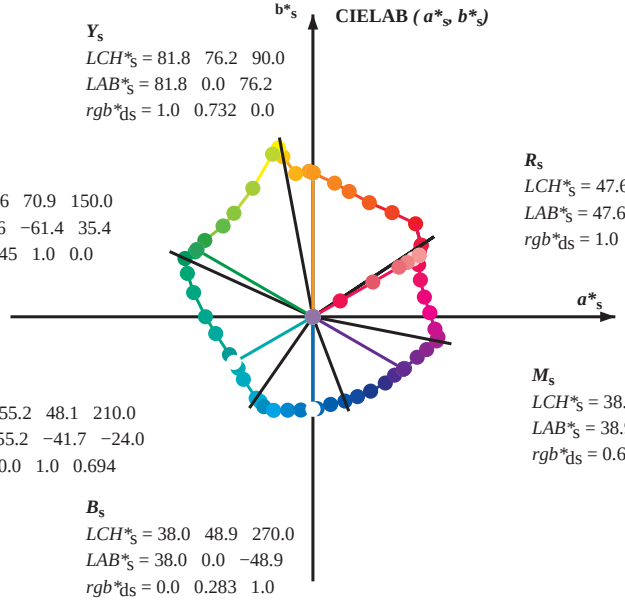
G_e
LCH^*_e = 53.8 69.2 162.2
LAB^*_e = 53.8 −65.9 21.1
rgb^*_{de} = 0.0 1.0 0.146

R_e
LCH^*_e = 47.5 62.1 25.4
LAB^*_e = 47.5 56.0 26.7
rgb^*_{de} = 1.0 0.0 0.263

C_e
LCH^*_e = 54.9 48.4 216.9
LAB^*_e = 54.9 −38.7 −29.1
rgb^*_{de} = 0.0 1.0 0.791

M_e
LCH^*_e = 38.5 54.7 328.6
LAB^*_e = 38.5 46.7 −28.5
rgb^*_{de} = 0.584 0.0 1.0

B_e
LCH^*_e = 37.3 48.7 271.7
LAB^*_e = 37.3 1.4 −48.6
rgb^*_{de} = 0.0 0.261 1.0



CIELAB (a^*_s, b^*_s)

Y_s
LCH^*_s = 81.8 76.2 90.0
LAB^*_s = 81.8 0.0 76.2
rgb^*_{ds} = 1.0 0.732 0.0

G_s
LCH^*_s = 57.6 70.9 150.0
LAB^*_s = 57.6 −61.4 35.4
rgb^*_{ds} = 0.145 1.0 0.0

R_s
LCH^*_s = 47.6 65.0 30.0
LAB^*_s = 47.6 56.3 32.5
rgb^*_{ds} = 1.0 0.0 0.157

C_s
LCH^*_s = 55.2 48.1 210.0
LAB^*_s = 55.2 −41.7 −24.0
rgb^*_{ds} = 0.0 1.0 0.694

M_s
LCH^*_s = 38.9 55.3 330.0
LAB^*_s = 38.9 47.9 −27.6
rgb^*_{ds} = 0.612 0.0 1.0

B_s
LCH^*_s = 38.0 48.9 270.0
LAB^*_s = 38.0 0.0 −48.9
rgb^*_{ds} = 0.0 0.283 1.0

(a^*_d, b^*_d), (a^*_s, b^*_s), (a^*_e, b^*_e)

rgb^*_d LCH^*_d LAB^*_d

$h_{ab,s}$ rgb^*_d

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

$h_{ab,s}$

s: $h_{ab,si}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0, 390.0 (i=0,6)

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

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

$h_{ab,e}$

e: $h_{ab,ei}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6, 385.5 (i=0,6)

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

$$h_{360ab,eij} = h_{ab,ei} + j\ [h_{ab,ei+1} - h_{ab,ei}\ ]\ /60\ (\ i = 0, 1, ..., 5;\ j = 0, 1, ..., 59) \quad (5)$$

h_{ab},$h_{ab,d}$

rgb^*_{de}

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
círculo de tono, 48 pasos; *rgb−LabCh**mesas

entrada: *rgb/cmyk −> rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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**$_{de}$
33.4	30.0	25.4	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	1.0	0.0	0.0	47.6	57.2	37.9	68.6	33	1.0	0.0	0.158	47.7	56.3	32.5	65.0	30	1.0	0.0	0.263	47.6	56.1	26.7	62.1	25	
42.1	37.5	33.8	1.0	0.125	0.0	51.9	54.3	49.2	73.2	42.1	1.0	0.117	0.0	51.7	54.6	48.5	73.0	41	1.0	0.05	0.0	49.4	56.3	42.4	70.5	37	1.0	0.0	0.012	47.6	57.2	37.5	68.4	33	
52.8	45.0	42.1	1.0	0.25	0.0	58.2	41.8	55.1	69.2	52.8	1.0	0.25	0.0	58.3	41.8	55.2	69.2	52	1.0	0.158	0.0	53.6	51.1	51.1	72.2	45	1.0	0.125	0.0	52.0	54.3	49.2	73.3	42	
63.7	52.5	50.5	1.0	0.375	0.0	64.6	29.8	60.4	67.3	63.7	1.0	0.367	0.0	64.2	30.6	60.1	67.5	63	1.0	0.24	0.0	57.8	42.8	54.8	69.6	52	1.0	0.216	0.0	56.6	45.2	53.9	70.3	49	
73.8	60.0	58.8	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8	1.0	0.5	0.0	70.5	19.2	66.3	69.0	73	1.0	0.332	0.0	62.5	34.0	58.9	68.0	60	1.0	0.32	0.0	61.8	35.2	58.4	68.2	58	
80.7	67.5	67.2	1.0	0.625	0.0	74.9	11.4	70.7	71.6	80.7	1.0	0.617	0.0	74.6	12.0	70.5	71.5	80	1.0	0.416	0.0	66.6	26.5	62.5	67.9	67	1.0	0.412	0.0	66.4	26.9	62.3	67.9	66	
91.5	75.0	75.6	1.0	0.75	0.0	82.9	−2.0	76.9	77.0	91.5	1.0	0.75	0.0	83.0	−1.9	77.0	77.0	−268	1.0	0.521	0.0	71.3	18.0	67.1	69.5	75	1.0	0.532	0.0	71.6	17.3	67.5	69.7	75	
96.8	82.5	83.9	1.0	0.875	0.0	87.6	−9.0	75.7	76.3	96.8	1.0	0.867	0.0	87.3	−8.5	75.9	76.4	96	1.0	0.639	0.0	75.8	10.1	71.6	72.3	82	1.0	0.655	0.0	76.9	8.4	72.5	73.0	83	
100.5	90.0	92.3	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5	1.0	1.0	0.0	91.6	−15.7	84.7	86.2	100	1.0	0.732	0.0	81.8	0.0	76.3	76.3	90	1.0	0.769	0.0	83.7	−3.0	76.8	76.9	92	
101.4	97.5	101.0	0.875	1.0	0.0	92.8	−18.1	89.4	91.2	101.4	0.883	1.0	0.0	92.7	−17.9	89.1	90.9	101	1.0	0.88	0.0	87.8	−9.3	76.2	76.7	97	1.0	0.996	0.0	91.5	−15.5	84.4	85.8	100	
103.9	105.0	109.7	0.75	1.0	0.0	90.1	−21.3	86.0	88.6	103.9	0.75	1.0	0.0	90.1	−21.3	86.0	88.7	103	0.738	1.0	0.0	89.2	−22.5	84.4	87.4	105	0.684	1.0	0.0	84.7	−27.5	76.7	81.5	109	
115.0	112.5	118.5	0.625	1.0	0.0	79.9	−31.7	67.9	75.0	115.0	0.633	1.0	0.0	80.6	−31.1	69.2	75.9	114	0.659	1.0	0.0	82.7	−29.4	73.0	78.8	112	0.595	1.0	0.0	77.8	−34.4	65.0	73.6	117	
127.3	120.0	127.2	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127	0.574	1.0	0.0	76.3	−36.2	62.8	72.6	120	0.501	1.0	0.0	71.0	−41.6	54.9	68.9	127	
134.7	127.5	136.0	0.375	1.0	0.0	66.5	−47.5	48.0	67.6	134.7	0.383	1.0	0.0	66.9	−47.1	48.5	67.7	134	0.503	1.0	0.0	71.2	−41.5	55.2	69.1	127	0.366	1.0	0.0	66.2	−48.2	47.6	67.8	135	
144.7	135.0	144.7	0.25	1.0	0.0	60.6	−57.2	40.4	70.1	144.7	0.25	1.0	0.0	60.6	−57.2	40.5	70.1	144	0.372	1.0	0.0	66.4	−47.8	47.9	67.7	135	0.25	1.0	0.0	60.6	−57.1	40.5	70.1	144	
151.0	142.5	153.4	0.125	1.0	0.0	57.0	−62.2	34.4	71.1	151.0	0.133	1.0	0.0	57.3	−61.8	34.8	71.0	150	0.284	1.0	0.0	62.3	−54.6	42.7	69.4	142	0.073	1.0	0.0	55.9	−64.4	33.0	72.5	152	
155.5	150.0	162.2	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5	0.0	1.0	0.0	54.3	−67.6	30.8	74.4	155	0.146	1.0	0.0	57.6	−61.3	35.5	70.9	150	0.0	1.0	0.147	53.8	−65.9	21.1	69.3	162	
160.8	157.5	169.0	0.0	1.0	0.125	53.8	−66.4	23.0	70.2	160.8	0.0	1.0	0.117	53.9	−66.4	23.5	70.6	160	0.0	1.0	0.035	54.2	−67.3	28.6	73.2	157	0.0	1.0	0.251	53.8	−63.0	12.7	64.4	168	
168.5	165.0	175.9	0.0	1.0	0.25	53.7	−63.1	12.8	64.4	168.5	0.0	1.0	0.25	53.8	−63.1	12.8	64.4	168	0.0	1.0	0.192	53.8	−64.7	17.4	67.1	165	0.0	1.0	0.331	54.4	−59.3	4.2	59.5	175	
179.9	172.5	182.7	0.0	1.0	0.375	54.7	−56.8	0.0	56.8	179.9	0.0	1.0	0.367	54.7	−57.2	0.8	57.3	179	0.0	1.0	0.288	54.1	−61.4	8.6	62.1	172	0.0	1.0	0.405	54.8	−55.6	−2.1	55.7	182	
189.8	180.0	189.6	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8	0.0	1.0	0.5	55.0	−51.4	−8.8	52.2	189	0.0	1.0	0.375	54.8	−56.7	0.0	56.8	180	0.0	1.0	0.497	55.0	−51.5	−8.6	52.3	189	
204.4	187.5	196.4	0.0	1.0	0.625	55.3	−44.1	−20.0	48.5	204.4	0.0	1.0	0.617	55.3	−44.6	−19.3	48.8	203	0.0	1.0	0.464	55.0	−53.0	−6.4	53.5	187	0.0	1.0	0.553	55.2	−48.6	−13.9	50.7	195	
214.4	195.0	203.2	0.0	1.0	0.75	55.2	−39.5	−27.1	47.9	214.4	0.0	1.0	0.75	55.2	−39.4	−27.0	47.9	214	0.0	1.0	0.544	55.2	−49.1	−13.1	50.9	195	0.0	1.0	0.615	55.3	−44.7	−19.2	48.8	203	
221.9	202.5	210.1	0.0	1.0	0.875	54.4	−36.7	−33.0	49.4	221.9	0.0	1.0	0.867	54.5	−36.9	−32.6	49.4	221	0.0	1.0	0.604	55.3	−45.5	−18.3	49.1	202	0.0	1.0	0.69	55.3	−41.8	−23.8	48.2	209	
235.1	210.0	216.9	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1	0.0	1.0	1.0	53.1	−29.9	−43.0	52.5	235	0.0	1.0	0.694	55.3	−41.6	−24.0	48.2	210	0.0	1.0	0.792	55.0	−38.6	−29.0	48.4	216	
237.9	217.5	223.8	0.0	0.875	1.0	53.1	−27.9	−44.7	52.7	237.9	0.0	0.883	1.0	53.1	−28.0	−44.5	52.8	237	0.0	1.0	0.792	55.0	−38.6	−29.1	48.5	217	0.0	1.0	0.888	54.3	−36.1	−34.1	49.8	223	
241.3	225.0	230.6	0.0	0.75	1.0	52.9	−25.9	−47.5	54.1	241.3	0.0	0.75	1.0	52.9	−25.8	−47.5	54.2	241	0.0	1.0	0.904	54.2	−35.4	−35.4	50.2	225	0.0	1.0	0.957	53.6	−32.5	−39.7	51.5	230	
247.2	232.5	237.5	0.0	0.625	1.0	50.5	−20.8	−49.5	53.7	247.2	0.0	0.633	1.0	50.7	−21.1	−49.3	53.8	246	0.0	1.0	0.97	53.5	−31.8	−40.7	51.8	232	0.0	0.916	1.0	53.1	−28.6	−44.1	52.7	237	
254.9	240.0	244.3	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9	0.0	0.5	1.0	46.2	−13.2	−49.3	51.2	254	0.0	0.801	1.0	53.0	−26.7	−46.3	53.6	240	0.0	0.686	1.0	51.7	−23.3	−48.5	54.0	244	
262.6	247.5	251.2	0.0	0.375	1.0	41.4	−6.3	−49.2	49.6	262.6	0.0	0.383	1.0	41.7	−6.7	−49.2	49.8	262	0.0	0.63	1.0	50.7	−20.9	−49.4	53.8	247	0.0	0.568	1.0	48.6	−17.2	−49.5	52.6	250	
272.6	255.0	258.0	0.0	0.25	1.0	36.8	2.2	−48.5	48.6	272.6	0.0	0.25	1.0	36.9	2.2	−48.5	48.6	272	0.0	0.499	1.0	46.1	−13.1	−49.3	51.2	255	0.0	0.449	1.0	44.2	−10.4	−49.4	50.6	258	
281.4	262.5	264.8	0.0	0.125	1.0	35.0	9.4	−46.3	47.3	281.4	0.0	0.133	1.0	35.2	8.9	−46.5	47.4	280	0.0	0.386	1.0	41.8	−6.8	−49.2	49.8	262	0.0	0.353	1.0	40.6	−4.7	−49.2	49.5	264	
290.8	270.0	271.7	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8	0.0	0.0	1.0	32.6	16.9	−44.5	47.7	290	0.0	0.283	1.0	38.1	0.0	−48.8	48.9	270	0.0	0.261	1.0	37.3	1.5	−48.6	48.7	271	
299.2	277.5	278.8	0.125	0.0	1.0	31.6	23.6	−42.2	48.4	299.2	0.117	0.0	1.0	31.7	23.2	−42.3	48.4	298	0.0	0.188	1.0	36.0	5.8	−47.5	48.0	277	0.0	0.169	1.0	35.7	7.0	−47.2	47.8	278	
307.8	285.0	285.9	0.25	0.0	1.0	31.0	30.5	−39.3	49.8	307.8	0.25	0.0	1.0	31.0	30.6	−39.3	49.9	307	0.0	0.078	1.0	34.1	12.3	−45.8	47.5	285	0.0	0.065	1.0	33.9	13.1	−45.6	47.5	285	
317.5	292.5	293.0	0.375	0.0	1.0	34.2	38.2	−35.0	51.8	317.5	0.367	0.0	1.0	34.0	37.8	−35.3	51.7	316	0.018	0.0	1.0	32.4	17.9	−44.2	47.8	292	0.026	0.0	1.0	32.4	18.4	−44.1	47.9	292	
324.4	300.0	300.1	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4	0.5	0.0	1.0	37.2	43.2	−30.8	53.1	324	0.136	0.0	1.0	31.6	24.3	−41.9	48.5	300	0.139	0.0	1.0	31.5	24.4	−41.9	48.6	300	
330.6	307.5	307.2	0.625	0.0	1.0	39.1	48.4	−27.2	55.6	330.6	0.617	0.0	1.0	39.0	48.1	−27.4	55.4	330	0.238	0.0	1.0	31.1	29.9	−39.6	49.7	307	0.235	0.0	1.0	31.1	29.8	−39.7	49.7	306	
338.7	315.0	314.3	0.75	0.0	1.0	41.8	55.1	−21.4	59.1	338.7	0.75	0.0	1.0	41.9	55.2	−21.4	59.2	338	0.343	0.0	1.0	33.4	36.3	−36.2	51.4	315	0.335	0.0	1.0	33.2	35.8	−36.5	51.2	314	
343.9	322.5	321.4	0.875	0.0	1.0	45.6	60.1	−17.3	62.6	343.9	0.867	0.0	1.0	45.4	59.8	−17.5	62.4	343	0.456	0.0	1.0	36.2	41.5	−32.3	52.7	322	0.439	0.0	1.0	35.8	40.8	−32.9	52.5	321	
348.9	330.0	328.6	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9	1.0	0.0	1.0	48.2	65.4	−12.7	66.7	348	0.612	0.0	1.0	38.9	47.9	−27.6	55.4	330	0.584	0.0	1.0	38.5	46.8	−28.4	54.8	328	
350.7	337.5	335.7	1.0	0.0	0.875	49.5	66.1	−10.7	67.0	350.7	1.0	0.0	0.883	49.5	66.1	−10.8	67.0	350	0.723	0.0	1.0	41.3	53.8	−22.7	58.4	337	0.696	0.0	1.0	40.7	52.3	−24.0	57.6	335	
354.2	345.0	342.8	1.0	0.0	0.75	49.3	64.5	−6.5	64.8	354.2	1.0	0.0	0.75	49.3	64.6	−6.5	64.9	354	0.902	0.0	1.0	46.2	61.3	−16.3	63.5	345	0.848	0.0	1.0	44.9	59.1	−18.2	61.9	342	
361.9	352.5	349.9	1.0	0.0	0.625	48.0	61.8	2.1	61.8	361.9	1.0	0.0	0.633	48.1	62.0	1.6	62.0	361	1.0	0.0	0.83	49.5	65.6	−9.1	66.3	352	1.0	0.0	0.964	48.6	65.6	−12.1	66.8	349	
370.0	360.0	357.0	1.0	0.0	0.5	47.8	58.9	10.4	59.9	370.0	1.0	0.0	0.5	47.8	59.0	10.4	59.9	370	1.0	0.0	0.657	48.3	62.6	0.0	62.6	360	1.0	0.0	0.828	49.5	65.6	−9.0	66.2	352	
378.9	367.5	364.1	1.0	0.0	0.375	47.4	56.8	19.5	60.0	378.9	1.0	0.0	0.383	47.4	57.0	18.9	60.1	378	1.0	0.0	0.547	47.9	60.2	7.4	60.6	367	1.0	0.0	0.659	48.4	62.7	−0.1	62.7	359	
386.2	375.0	371.2	1.0	0.0	0.25	47.5	55.9	27.5	62.3	386.2	1.0	0.0	0.25	47.6	55.9	27.6	62.4	386	1.0	0.0	0.43	47.6	58.0	15.5	60.0	375	1.0	0.0	0.519	47.8	59.5	9.2	60.2	368	
391.3	382.5	378.3	1.0	0.0	0.125	47.6	56.3	34.2	65.9	391.3	1.0	0.0	0.133	47.7	56.4	33.8	65.7	390	1.0	0.0	0.323	47.5	56.6	22.9	61.0	382	1.0	0.0	0.408	47.5	57.6	17.1	60.0	376	
393.4	390.0	385.4	1.0	0.0	0.0	47.5	57.2	37.8	68.6	393.4	1.0	0.0	0.0	47.6	57.2	37.9	68.6	393	1.0	0.0	0.158	47.7	56.3	32.5	65.0	390	1.0	0.0	0.263	47.6	56.1	26.7	62.1	385	

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
círculo de tono, 48 pasos; *rgb*−*LabCh**mesas

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; Six hue angles of the elementary colours *RYGCBM*$_e$: $h_{ab,e}$ = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6

$h_{ab,d}$	$h_{ab,s}$	$h_{ab,e}$	*rgb** dd64M			*LAB** ddx64M (x=LabCh)					*rgb** dex361M			*LAB** dex361M				
33.4	30.0	25.4	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33.4	1.0	0.0	0.263	47.6	56.1	26.7	62.1	25
42.1	37.5	33.8	1.0	0.125	0.0	51.9	54.3	49.2	73.2	42.1	1.0	0.0	0.012	47.6	57.2	37.5	68.4	33
52.8	45.0	42.1	1.0	0.25	0.0	58.2	41.8	55.1	69.2	52.8	1.0	0.125	0.0	52.0	54.3	49.2	73.3	42
63.7	52.5	50.5	1.0	0.375	0.0	64.6	29.8	60.4	67.3	63.7	1.0	0.216	0.0	56.6	45.2	53.9	70.3	49
73.8	60.0	58.8	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73.8	1.0	0.32	0.0	61.8	35.2	58.4	68.2	58
80.7	67.5	67.2	1.0	0.625	0.0	74.9	11.4	70.7	71.6	80.7	1.0	0.412	0.0	66.4	26.9	62.3	67.9	66
91.5	75.0	75.6	1.0	0.75	0.0	82.9	−2.0	76.9	77.0	91.5	1.0	0.532	0.0	71.6	17.3	67.5	69.7	75
96.8	82.5	83.9	1.0	0.875	0.0	87.6	−9.0	75.7	76.3	96.8	1.0	0.655	0.0	76.9	8.4	72.5	73.0	83
100.5	90.0	92.3	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100.5	1.0	0.769	0.0	83.7	−3.0	76.8	76.9	92
101.4	97.5	101.0	0.875	1.0	0.0	92.8	−18.1	89.4	91.2	101.4	1.0	0.996	0.0	91.5	−15.5	84.4	85.8	100
103.9	105.0	109.7	0.75	1.0	0.0	90.1	−21.3	86.0	88.6	103.9	0.684	1.0	0.0	84.7	−27.5	76.7	81.5	109
115.0	112.5	118.5	0.625	1.0	0.0	79.9	−31.7	67.9	75.0	115.0	0.595	1.0	0.0	77.8	−34.4	65.0	73.6	117
127.3	120.0	127.2	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127.3	0.501	1.0	0.0	71.0	−41.6	54.9	68.9	127
134.7	127.5	136.0	0.375	1.0	0.0	66.5	−47.5	48.0	67.6	134.7	0.366	1.0	0.0	66.2	−48.2	47.6	67.8	135
144.7	135.0	144.7	0.25	1.0	0.0	60.6	−57.2	40.4	70.1	144.7	0.25	1.0	0.0	60.6	−57.1	40.5	70.1	144
151.0	142.5	153.4	0.125	1.0	0.0	57.0	−62.2	34.4	71.1	151.0	0.073	1.0	0.0	55.9	−64.4	33.0	72.5	152
155.5	150.0	162.2	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155.5	0.0	1.0	0.147	53.8	−65.9	21.1	69.3	162
160.8	157.5	169.0	0.0	1.0	0.125	53.8	−66.4	23.0	70.2	160.8	0.0	1.0	0.251	53.8	−63.0	12.7	64.4	168
168.5	165.0	175.9	0.0	1.0	0.25	53.7	−63.1	12.8	64.4	168.5	0.0	1.0	0.331	54.4	−59.3	4.2	59.5	175
179.9	172.5	182.7	0.0	1.0	0.375	54.7	−56.8	0.0	56.8	179.9	0.0	1.0	0.405	54.8	−55.6	−2.1	55.7	182
189.8	180.0	189.6	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189.8	0.0	1.0	0.497	55.0	−51.5	−8.6	52.3	189
204.4	187.5	196.4	0.0	1.0	0.625	55.3	−44.1	−20.0	48.5	204.4	0.0	1.0	0.553	55.2	−48.6	−13.9	50.7	195
214.4	195.0	203.2	0.0	1.0	0.75	55.2	−39.5	−27.1	47.9	214.4	0.0	1.0	0.615	55.3	−44.7	−19.2	48.8	203
221.9	202.5	210.1	0.0	1.0	0.875	54.4	−36.7	−33.0	49.4	221.9	0.0	1.0	0.69	55.3	−41.8	−23.8	48.2	209
235.1	210.0	216.9	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235.1	0.0	1.0	0.792	55.0	−38.6	−29.0	48.4	216
237.9	217.5	223.8	0.0	0.875	1.0	53.1	−27.9	−44.7	52.7	237.9	0.0	1.0	0.888	54.3	−36.1	−34.1	49.8	223
241.3	225.0	230.6	0.0	0.75	1.0	52.9	−25.9	−47.5	54.1	241.3	0.0	1.0	0.957	53.6	−32.5	−39.7	51.5	230
247.2	232.5	237.5	0.0	0.625	1.0	50.5	−20.8	−49.5	53.7	247.2	0.0	0.916	1.0	53.1	−28.6	−44.1	52.7	237
254.9	240.0	244.3	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254.9	0.0	0.686	1.0	51.7	−23.3	−48.5	54.0	244
262.6	247.5	251.2	0.0	0.375	1.0	41.4	−6.3	−49.2	49.6	262.6	0.0	0.568	1.0	48.6	−17.2	−49.5	52.6	250
272.6	255.0	258.0	0.0	0.25	1.0	36.8	2.2	−48.5	48.6	272.6	0.0	0.449	1.0	44.2	−10.4	−49.4	50.6	258
281.4	262.5	264.8	0.0	0.125	1.0	35.0	9.4	−46.3	47.3	281.4	0.0	0.353	1.0	40.6	−4.7	−49.2	49.5	264
290.8	270.0	271.7	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290.8	0.0	0.261	1.0	37.3	1.5	−48.6	48.7	271
299.2	277.5	278.8	0.125	0.0	1.0	31.6	23.6	−42.2	48.4	299.2	0.0	0.169	1.0	35.7	7.0	−47.2	47.8	278
307.8	285.0	285.9	0.25	0.0	1.0	31.0	30.5	−39.3	49.8	307.8	0.0	0.065	1.0	33.9	13.1	−45.6	47.5	285
317.5	292.5	293.0	0.375	0.0	1.0	34.2	38.2	−35.0	51.8	317.5	0.026	0.0	1.0	32.4	18.4	−44.1	47.9	292
324.4	300.0	300.1	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324.4	0.139	0.0	1.0	31.5	24.4	−41.9	48.6	300
330.6	307.5	307.2	0.625	0.0	1.0	39.1	48.4	−27.2	55.6	330.6	0.235	0.0	1.0	31.1	29.8	−39.7	49.7	306
338.7	315.0	314.3	0.75	0.0	1.0	41.8	55.1	−21.4	59.1	338.7	0.335	0.0	1.0	33.2	35.8	−36.5	51.2	314
343.9	322.5	321.4	0.875	0.0	1.0	45.6	60.1	−17.3	62.6	343.9	0.439	0.0	1.0	35.8	40.8	−32.9	52.5	321
348.9	330.0	328.6	1.0	0.0	1.0	48.1	65.4	−12.7	66.6	348.9	0.584	0.0	1.0	38.5	46.8	−28.4	54.8	328
350.7	337.5	335.7	1.0	0.0	0.875	49.5	66.1	−10.7	67.0	350.7	0.696	0.0	1.0	40.7	52.3	−24.0	57.6	335
354.2	345.0	342.8	1.0	0.0	0.75	49.3	64.5	−6.5	64.8	354.2	0.848	0.0	1.0	44.9	59.1	−18.2	61.9	342
361.9	352.5	349.9	1.0	0.0	0.625	48.0	61.8	2.1	61.8	361.9	1.0	0.0	0.964	48.6	65.6	−12.1	66.8	349
370.0	360.0	357.0	1.0	0.0	0.5	47.8	58.9	10.4	59.9	370.0	1.0	0.0	0.828	49.5	65.6	−9.0	66.2	352
378.9	367.5	364.1	1.0	0.0	0.375	47.4	56.8	19.5	60.0	378.9	1.0	0.0	0.659	48.4	62.7	−0.1	62.7	359
386.2	375.0	371.2	1.0	0.0	0.25	47.5	55.9	27.5	62.3	386.2	1.0	0.0	0.519	47.8	59.5	9.2	60.2	368
391.3	382.5	378.3	1.0	0.0	0.125	47.6	56.3	34.2	65.9	391.3	1.0	0.0	0.408	47.5	57.6	17.1	60.0	376
393.4	390.0	385.4	1.0	0.0	0.0	47.5	57.2	37.8	68.6	393.4	1.0	0.0	0.263	47.6	56.1	26.7	62.1	385

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

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
círculo de tono, 48 pasos; *rgb*−*LabCh*mesas

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk*$^*_{de}$

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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*
33	30	25	1.0	0.0	0.0	47.5	57.2	37.8	68.6	33	R_d	1.0	0.0	0.158	47.7	56.3	32.5	65.0	30	R_s	1.0	0.0	0.0	1.0	0.0	0.263	47.6	56.1	26.7	62.1	25	R_e	1.0	0.0	0.0			
34	31	26	1.0	0.016	0.0	48.1	56.9	39.3	69.2	34		1.0	0.0	0.133	47.7	56.4	33.9	65.8	31		1.0	0.017	0.0	1.0	0.0	0.242	47.6	56.0	28.0	62.6	26		1.0	0.017	0.0			
35	32	27	1.0	0.033	0.0	48.7	56.6	40.8	69.8	35		1.0	0.0	0.085	47.7	56.7	35.4	66.8	32		1.0	0.033	0.0	1.0	0.0	0.214	47.6	56.1	29.5	63.4	27		1.0	0.033	0.0			
36	33	28	1.0	0.05	0.0	49.3	56.3	42.3	70.4	36		1.0	0.0	0.028	47.6	57.1	37.0	68.0	33		1.0	0.05	0.0	1.0	0.0	0.187	47.6	56.2	30.9	64.2	28		1.0	0.05	0.0			
38	34	29	1.0	0.066	0.0	49.9	55.9	43.9	71.1	38		1.0	0.007	0.0	47.8	57.1	38.5	68.9	34		1.0	0.067	0.0	1.0	0.0	0.159	47.7	56.3	32.4	65.0	29		1.0	0.067	0.0			
39	35	31	1.0	0.083	0.0	50.5	55.5	45.4	71.7	39		1.0	0.022	0.0	48.4	56.9	39.8	69.4	35		1.0	0.083	0.0	1.0	0.0	0.132	47.7	56.4	33.9	65.8	31		1.0	0.083	0.0			
40	36	32	1.0	0.1	0.0	51.0	55.0	46.9	72.3	40		1.0	0.036	0.0	48.9	56.6	41.1	70.0	36		1.0	0.1	0.0	1.0	0.0	0.076	47.6	56.7	35.7	67.0	32		1.0	0.1	0.0			
41	37	33	1.0	0.116	0.0	51.6	54.5	48.4	72.9	41		1.0	0.05	0.0	49.4	56.3	42.4	70.5	37		1.0	0.117	0.0	1.0	0.0	0.012	47.6	57.2	37.5	68.4	33		1.0	0.117	0.0			
42	38	34	1.0	0.133	0.0	52.3	53.4	49.7	73.0	42		1.0	0.065	0.0	49.9	56.0	43.7	71.0	38		1.0	0.133	0.0	1.0	0.013	0.0	48.0	57.0	39.0	69.1	34		1.0	0.133	0.0			
44	39	35	1.0	0.15	0.0	53.2	51.8	50.6	72.4	44		1.0	0.079	0.0	50.4	55.6	45.0	71.6	39		1.0	0.15	0.0	1.0	0.029	0.0	48.6	56.7	40.5	69.7	35		1.0	0.15	0.0			
45	40	36	1.0	0.166	0.0	54.0	50.2	51.5	71.9	45		1.0	0.094	0.0	50.9	55.2	46.4	72.1	40		1.0	0.167	0.0	1.0	0.045	0.0	49.2	56.4	41.9	70.3	36		1.0	0.167	0.0			
47	41	37	1.0	0.183	0.0	54.9	48.5	52.3	71.4	47		1.0	0.108	0.0	51.4	54.8	47.7	72.7	41		1.0	0.183	0.0	1.0	0.061	0.0	49.7	56.1	43.4	70.9	37		1.0	0.183	0.0			
48	42	38	1.0	0.2	0.0	55.7	46.8	53.1	70.8	48		1.0	0.122	0.0	51.9	54.4	49.0	73.2	42		1.0	0.2	0.0	1.0	0.077	0.0	50.3	55.7	44.8	71.5	38		1.0	0.2	0.0			
50	43	39	1.0	0.216	0.0	56.6	45.2	53.8	70.3	50		1.0	0.134	0.0	52.5	53.4	49.8	73.0	43		1.0	0.217	0.0	1.0	0.093	0.0	50.8	55.3	46.3	72.1	39		1.0	0.217	0.0			
51	44	41	1.0	0.233	0.0	57.4	43.5	54.5	69.7	51		1.0	0.146	0.0	53.0	52.2	50.4	72.6	44		1.0	0.233	0.0	1.0	0.109	0.0	51.4	54.8	47.8	72.7	41		1.0	0.233	0.0			
52	45	42	1.0	0.25	0.0	58.2	41.8	55.1	69.2	52		1.0	0.158	0.0	53.6	51.1	51.1	72.2	45		1.0	0.25	0.0	1.0	0.125	0.0	52.0	54.3	49.2	73.3	42		1.0	0.25	0.0			
54	46	43	1.0	0.266	0.0	59.1	40.2	56.0	69.0	54		1.0	0.17	0.0	54.2	49.9	51.7	71.8	46		1.0	0.267	0.0	1.0	0.138	0.0	52.6	53.0	50.0	72.9	43		1.0	0.267	0.0			
55	47	44	1.0	0.283	0.0	59.9	38.6	56.8	68.7	55		1.0	0.181	0.0	54.8	48.7	52.3	71.5	47		1.0	0.283	0.0	1.0	0.151	0.0	53.3	51.8	50.7	72.4	44		1.0	0.283	0.0			
57	48	45	1.0	0.3	0.0	60.8	37.1	57.5	68.5	57		1.0	0.193	0.0	55.4	47.6	52.8	71.1	48		1.0	0.3	0.0	1.0	0.164	0.0	54.0	50.5	51.4	72.0	45		1.0	0.3	0.0			
58	49	46	1.0	0.316	0.0	61.6	35.5	58.2	68.2	58		1.0	0.205	0.0	56.0	46.4	53.4	70.7	49		1.0	0.317	0.0	1.0	0.177	0.0	54.6	49.2	52.1	71.6	46		1.0	0.317	0.0			
60	50	47	1.0	0.333	0.0	62.5	33.9	58.9	68.0	60		1.0	0.217	0.0	56.6	45.2	53.9	70.3	50		1.0	0.333	0.0	1.0	0.19	0.0	55.3	47.9	52.7	71.2	47		1.0	0.333	0.0			
61	51	48	1.0	0.35	0.0	63.3	32.2	59.5	67.7	61		1.0	0.228	0.0	57.2	44.0	54.4	69.9	51		1.0	0.35	0.0	1.0	0.203	0.0	55.9	46.5	53.3	70.8	48		1.0	0.35	0.0			
63	52	49	1.0	0.366	0.0	64.2	30.6	60.1	67.5	63		1.0	0.24	0.0	57.8	42.8	54.8	69.6	52		1.0	0.367	0.0	1.0	0.216	0.0	56.6	45.2	53.9	70.3	49		1.0	0.367	0.0			
64	53	51	1.0	0.383	0.0	65.0	29.1	60.8	67.4	64		1.0	0.252	0.0	58.4	41.7	55.3	69.2	53		1.0	0.383	0.0	1.0	0.23	0.0	57.3	43.9	54.4	69.9	51		1.0	0.383	0.0			
65	54	52	1.0	0.4	0.0	65.8	27.8	61.7	67.7	65		1.0	0.263	0.0	59.0	40.6	55.9	69.1	54		1.0	0.4	0.0	1.0	0.243	0.0	57.9	42.6	54.9	69.5	52		1.0	0.4	0.0			
67	55	53	1.0	0.416	0.0	66.6	26.4	62.5	67.9	67		1.0	0.275	0.0	59.6	39.5	56.4	68.9	55		1.0	0.417	0.0	1.0	0.256	0.0	58.6	41.3	55.5	69.2	53		1.0	0.417	0.0			
68	56	54	1.0	0.433	0.0	67.3	25.0	63.3	68.1	68		1.0	0.286	0.0	60.1	38.4	57.0	68.7	56		1.0	0.433	0.0	1.0	0.268	0.0	59.2	40.1	56.1	69.0	54		1.0	0.433	0.0			
69	57	55	1.0	0.45	0.0	68.1	23.6	64.1	68.3	69		1.0	0.298	0.0	60.7	37.3	57.5	68.5	57		1.0	0.45	0.0	1.0	0.281	0.0	59.9	38.9	56.7	68.8	55		1.0	0.45	0.0			
71	58	56	1.0	0.466	0.0	68.9	22.1	64.8	68.5	71		1.0	0.309	0.0	61.3	36.2	58.0	68.4	58		1.0	0.467	0.0	1.0	0.294	0.0	60.5	37.7	57.3	68.6	56		1.0	0.467	0.0			
72	59	57	1.0	0.483	0.0	69.7	20.7	65.6	68.8	72		1.0	0.321	0.0	61.9	35.1	58.5	68.2	59		1.0	0.483	0.0	1.0	0.307	0.0	61.2	36.5	57.9	68.4	57		1.0	0.483	0.0			
73	60	58	1.0	0.5	0.0	70.5	19.2	66.2	69.0	73		1.0	0.332	0.0	62.5	34.0	58.9	68.0	60		1.0	0.5	0.0	1.0	0.32	0.0	61.8	35.2	58.4	68.2	58		1.0	0.5	0.0			
74	61	60	1.0	0.516	0.0	71.0	18.2	66.9	69.3	74		1.0	0.344	0.0	63.1	32.9	59.3	67.8	61		1.0	0.517	0.0	1.0	0.332	0.0	62.5	34.0	58.9	68.0	60		1.0	0.517	0.0			
75	62	61	1.0	0.533	0.0	71.6	17.2	67.5	69.7	75		1.0	0.355	0.0	63.6	31.8	59.8	67.7	62		1.0	0.533	0.0	1.0	0.345	0.0	63.1	32.8	59.4	67.8	61		1.0	0.533	0.0			
76	63	62	1.0	0.55	0.0	72.2	16.2	68.1	70.0	76		1.0	0.367	0.0	64.2	30.6	60.1	67.5	63		1.0	0.55	0.0	1.0	0.358	0.0	63.8	31.5	59.9	67.6	62		1.0	0.55	0.0			
77	64	63	1.0	0.566	0.0	72.8	15.1	68.7	70.4	77		1.0	0.378	0.0	64.8	29.6	60.6	67.4	64		1.0	0.567	0.0	1.0	0.371	0.0	64.4	30.3	60.3	67.4	63		1.0	0.567	0.0			
78	65	64	1.0	0.583	0.0	73.4	14.1	69.3	70.7	78		1.0	0.391	0.0	65.4	28.6	61.3	67.6	65		1.0	0.583	0.0	1.0	0.384	0.0	65.1	29.1	60.9	67.5	64		1.0	0.583	0.0			
79	66	65	1.0	0.6	0.0	74.0	13.0	69.9	71.1	79		1.0	0.403	0.0	66.0	27.6	61.9	67.8	66		1.0	0.6	0.0	1.0	0.398	0.0	65.7	28.0	61.6	67.7	65		1.0	0.6	0.0			
80	67	66	1.0	0.616	0.0	74.6	12.0	70.4	71.4	80		1.0	0.416	0.0	66.6	26.5	62.5	67.9	67		1.0	0.617	0.0	1.0	0.412	0.0	66.4	26.9	62.3	67.9	66		1.0	0.617	0.0			
81	68	67	1.0	0.633	0.0	75.4	10.6	71.2	72.0	81		1.0	0.428	0.0	67.1	25.5	63.1	68.1	68		1.0	0.633	0.0	1.0	0.425	0.0	67.0	25.7	63.0	68.0	67		1.0	0.633	0.0			
82	69	68	1.0	0.65	0.0	76.5	8.9	72.1	72.7	82		1.0	0.44	0.0	67.7	24.5	63.7	68.2	69		1.0	0.65	0.0	1.0	0.439	0.0	67.7	24.5	63.7	68.2	68		1.0	0.65	0.0			
84	70	70	1.0	0.666	0.0	77.5	7.2	73.0	73.4	84		1.0	0.453	0.0	68.3	23.4	64.3	68.4	70		1.0	0.667	0.0	1.0	0.453	0.0	68.3	23.4	64.3	68.4	70		1.0	0.667	0.0			
85	71	71	1.0	0.683	0.0	78.6	5.4	73.9	74.1	85		1.0	0.465	0.0	68.9	22.3	64.8	68.6	71		1.0	0.683	0.0	1.0	0.467	0.0	69.0	22.2	64.9	68.6	71		1.0	0.683	0.0			
87	72	72	1.0	0.7	0.0	79.7	3.6	74.7	74.8	87		1.0	0.477	0.0	69.5	21.2	65.4	68.7	72		1.0	0.7	0.0	1.0	0.481	0.0	69.6	20.9	65.5	68.8	72		1.0	0.7	0.0			
88	73	73	1.0	0.716	0.0	80.8	1.7	75.5	75.5	88		1.0	0.49	0.0	70.0	20.1	65.9	68.9	73		1.0	0.717	0.0	1.0	0.494	0.0	70.2	19.7	66.1	68.9	73		1.0	0.717	0.0			
−269	74	74	1.0	0.733	0.0	81.8	−0.1	76.3	76.3	−269		1.0	0.503	0.0	70.6	19.0	66.4	69.1	74		1.0	0.733	0.0	1.0	0.512	0.0	70.9	18.5	66.7	69.3	74		1.0	0.733	0.0			
−268	75	75	1.0	0.75	0.0	82.9	−2.0	76.9	77.0	−268	R_d	1.0	0.521	0.0	71.3	18.0	67.1	69.5	75		1.0	0.75	0.0	1.0	0.532	0.0	71.6	17.3	67.5	69.7	75		1.0	0.75	0.0			

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
círculo de tono, 48 pasos; *rgb−LabCh**mesas

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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		
−268	75	75	1.0	0.75	0.0	82.9	−2.0	76.9	77.0	−268 R_d	1.0	0.521	0.0	71.3	18.0	67.1	69.5	75	1.0	0.75	0.0	1.0	0.532	0.0	71.6	17.3	67.5	69.7	75	1.0	0.75	0.0
92	76	76	1.0	0.766	0.0	83.5	−2.9	76.8	76.9	92	1.0	0.539	0.0	71.9	16.9	67.8	69.8	76	1.0	0.767	0.0	1.0	0.552	0.0	72.3	16.1	68.2	70.1	76	1.0	0.767	0.0
92	77	77	1.0	0.783	0.0	84.2	−3.9	76.7	76.8	92	1.0	0.557	0.0	72.5	15.8	68.4	70.2	77	1.0	0.783	0.0	1.0	0.572	0.0	73.0	14.9	69.0	70.5	77	1.0	0.783	0.0
93	78	78	1.0	0.8	0.0	84.8	−4.8	76.5	76.7	93	1.0	0.575	0.0	73.1	14.7	69.1	70.6	78	1.0	0.8	0.0	1.0	0.592	0.0	73.7	13.6	69.7	71.0	78	1.0	0.8	0.0
94	79	80	1.0	0.816	0.0	85.4	−5.8	76.4	76.6	94	1.0	0.593	0.0	73.8	13.5	69.7	71.0	79	1.0	0.817	0.0	1.0	0.612	0.0	74.4	12.3	70.3	71.4	80	1.0	0.817	0.0
95	80	81	1.0	0.833	0.0	86.0	−6.7	76.2	76.5	95	1.0	0.611	0.0	74.4	12.4	70.3	71.4	80	1.0	0.833	0.0	1.0	0.629	0.0	75.2	11.0	71.0	71.9	81	1.0	0.833	0.0
95	81	82	1.0	0.85	0.0	86.6	−7.6	76.0	76.4	95	1.0	0.627	0.0	75.1	11.2	70.9	71.8	81	1.0	0.85	0.0	1.0	0.642	0.0	76.0	9.7	71.8	72.4	82	1.0	0.85	0.0
96	82	83	1.0	0.866	0.0	87.3	−8.6	75.8	76.3	96	1.0	0.639	0.0	75.8	10.1	71.6	72.3	82	1.0	0.867	0.0	1.0	0.655	0.0	76.9	8.4	72.5	73.0	83	1.0	0.867	0.0
97	83	84	1.0	0.883	0.0	87.8	−9.4	76.3	76.9	97	1.0	0.651	0.0	76.6	8.9	72.2	72.8	83	1.0	0.883	0.0	1.0	0.668	0.0	77.7	7.0	73.2	73.5	84	1.0	0.883	0.0
97	84	85	1.0	0.9	0.0	88.4	−10.3	77.6	78.2	97	1.0	0.662	0.0	77.3	7.7	72.9	73.3	84	1.0	0.9	0.0	1.0	0.681	0.0	78.5	5.6	73.9	74.1	85	1.0	0.9	0.0
98	85	86	1.0	0.916	0.0	88.9	−11.2	78.8	79.6	98	1.0	0.674	0.0	78.1	6.4	73.5	73.8	85	1.0	0.917	0.0	1.0	0.694	0.0	79.4	4.2	74.5	74.6	86	1.0	0.917	0.0
98	86	87	1.0	0.933	0.0	89.4	−12.0	80.0	80.9	98	1.0	0.686	0.0	78.8	5.2	74.1	74.3	86	1.0	0.933	0.0	1.0	0.707	0.0	80.2	2.8	75.1	75.2	87	1.0	0.933	0.0
99	87	88	1.0	0.95	0.0	89.9	−12.9	81.1	82.2	99	1.0	0.697	0.0	79.6	3.9	74.7	74.8	87	1.0	0.95	0.0	1.0	0.72	0.0	81.1	1.4	75.7	75.7	88	1.0	0.95	0.0
99	88	90	1.0	0.966	0.0	90.5	−13.9	82.3	83.5	99	1.0	0.709	0.0	80.3	2.6	75.2	75.3	88	1.0	0.967	0.0	1.0	0.733	0.0	81.9	0.0	76.3	76.3	90	1.0	0.967	0.0
100	89	91	1.0	0.983	0.0	91.0	−14.8	83.5	84.8	100	1.0	0.721	0.0	81.1	1.3	75.8	75.8	89	1.0	0.983	0.0	1.0	0.746	0.0	82.7	−1.5	76.8	76.9	91	1.0	0.983	0.0
100	90	92	1.0	1.0	0.0	91.5	−15.8	84.6	86.1	100 Y_d	1.0	0.732	0.0	81.8	0.0	76.3	76.3	90 Y_s	1.0	1.0	0.0	1.0	0.769	0.0	83.7	−3.0	76.8	76.9	92 Y_e	1.0	1.0	0.0
100	91	93	0.983	1.0	0.0	91.7	−16.1	85.3	86.8	100	1.0	0.744	0.0	82.6	−1.2	76.7	76.8	91	0.983	1.0	0.0	1.0	0.796	0.0	84.7	−4.6	76.6	76.8	93	0.983	1.0	0.0
100	92	94	0.966	1.0	0.0	91.9	−16.4	85.9	87.5	100	1.0	0.761	0.0	83.4	−2.6	76.9	77.0	92	0.967	1.0	0.0	1.0	0.823	0.0	85.7	−6.1	76.4	76.6	94	0.967	1.0	0.0
100	93	95	0.95	1.0	0.0	92.0	−16.7	86.5	88.2	100	1.0	0.785	0.0	84.3	−3.9	76.7	76.8	93	0.95	1.0	0.0	1.0	0.851	0.0	86.7	−7.6	76.1	76.5	95	0.95	1.0	0.0
101	94	96	0.933	1.0	0.0	92.2	−17.0	87.2	88.8	101	1.0	0.808	0.0	85.1	−5.2	76.5	76.7	94	0.933	1.0	0.0	1.0	0.879	0.0	87.8	−9.2	76.1	76.7	96	0.933	1.0	0.0
101	95	98	0.916	1.0	0.0	92.4	−17.3	87.8	89.5	101	1.0	0.832	0.0	86.0	−6.6	76.3	76.6	95	0.917	1.0	0.0	1.0	0.918	0.0	89.0	−11.2	78.9	79.7	98	0.917	1.0	0.0
101	96	99	0.9	1.0	0.0	92.5	−17.6	88.4	90.2	101	1.0	0.855	0.0	86.9	−7.9	76.0	76.4	96	0.9	1.0	0.0	1.0	0.957	0.0	90.2	−13.3	81.7	82.8	99	0.9	1.0	0.0
101	97	100	0.883	1.0	0.0	92.7	−18.0	89.1	90.9	101	1.0	0.88	0.0	87.8	−9.3	76.2	76.7	97	0.883	1.0	0.0	1.0	0.996	0.0	91.5	−15.5	84.4	85.8	100	0.883	1.0	0.0
101	98	101	0.866	1.0	0.0	92.6	−18.3	89.2	91.0	101	1.0	0.914	0.0	88.8	−10.9	78.6	79.4	98	0.867	1.0	0.0	0.867	1.0	0.0	92.6	−18.3	89.2	91.1	101	0.867	1.0	0.0
101	99	102	0.85	1.0	0.0	92.2	−18.8	88.7	90.7	101	1.0	0.947	0.0	89.9	−12.7	81.0	82.0	99	0.85	1.0	0.0	0.808	1.0	0.0	91.4	−19.8	87.6	89.9	102	0.85	1.0	0.0
102	100	103	0.833	1.0	0.0	91.9	−19.2	88.3	90.3	102	1.0	0.98	0.0	91.0	−14.6	83.3	84.6	100	0.833	1.0	0.0	0.75	1.0	0.0	90.1	−21.3	86.0	88.6	103	0.833	1.0	0.0
102	101	105	0.816	1.0	0.0	91.5	−19.6	87.8	90.0	102	0.943	1.0	0.0	92.2	−16.8	86.9	88.5	101	0.817	1.0	0.0	0.737	1.0	0.0	89.0	−22.7	84.2	87.2	105	0.817	1.0	0.0
102	102	106	0.8	1.0	0.0	91.1	−20.1	87.4	89.7	102	0.849	1.0	0.0	92.2	−18.8	88.7	90.7	102	0.8	1.0	0.0	0.724	1.0	0.0	88.0	−24.0	82.3	85.8	106	0.8	1.0	0.0
103	103	107	0.783	1.0	0.0	90.8	−20.5	86.9	89.3	103	0.798	1.0	0.0	91.2	−20.1	87.4	89.7	103	0.783	1.0	0.0	0.71	1.0	0.0	86.9	−25.2	80.5	84.3	107	0.783	1.0	0.0
103	104	108	0.766	1.0	0.0	90.4	−20.9	86.5	89.0	103	0.749	1.0	0.0	90.1	−21.3	86.0	88.6	104	0.767	1.0	0.0	0.697	1.0	0.0	85.8	−26.4	78.6	82.9	108	0.767	1.0	0.0
103	105	109	0.75	1.0	0.0	90.1	−21.3	86.0	88.6	103	0.738	1.0	0.0	89.2	−22.5	84.4	87.4	105	0.75	1.0	0.0	0.684	1.0	0.0	84.7	−27.5	76.7	81.5	109	0.75	1.0	0.0
105	106	110	0.733	1.0	0.0	88.7	−23.1	83.7	86.8	105	0.727	1.0	0.0	88.2	−23.6	82.8	86.1	106	0.733	1.0	0.0	0.671	1.0	0.0	83.7	−28.5	74.8	80.0	110	0.733	1.0	0.0
106	107	112	0.716	1.0	0.0	87.3	−24.7	81.3	85.0	106	0.716	1.0	0.0	87.3	−24.7	81.2	84.9	107	0.717	1.0	0.0	0.658	1.0	0.0	82.6	−29.5	72.8	78.6	112	0.717	1.0	0.0
108	108	113	0.7	1.0	0.0	86.0	−26.2	78.9	83.2	108	0.704	1.0	0.0	86.4	−25.8	79.6	83.7	108	0.7	1.0	0.0	0.645	1.0	0.0	81.5	−30.4	70.9	77.2	113	0.7	1.0	0.0
109	109	114	0.683	1.0	0.0	84.6	−27.6	76.5	81.3	109	0.693	1.0	0.0	85.5	−26.7	78.0	82.5	109	0.683	1.0	0.0	0.632	1.0	0.0	80.4	−31.3	69.0	75.7	114	0.683	1.0	0.0
111	110	115	0.666	1.0	0.0	83.3	−28.9	74.1	79.5	111	0.682	1.0	0.0	84.5	−27.7	76.3	81.2	110	0.667	1.0	0.0	0.619	1.0	0.0	79.5	−32.2	67.4	74.7	115	0.667	1.0	0.0
112	111	116	0.65	1.0	0.0	81.9	−30.1	71.6	77.7	112	0.67	1.0	0.0	83.6	−28.6	74.7	80.0	111	0.65	1.0	0.0	0.607	1.0	0.0	78.6	−33.3	66.2	74.2	116	0.65	1.0	0.0
114	112	117	0.633	1.0	0.0	80.5	−31.2	69.2	75.9	114	0.659	1.0	0.0	82.7	−29.4	73.0	78.8	112	0.633	1.0	0.0	0.595	1.0	0.0	77.8	−34.4	65.0	73.6	117	0.633	1.0	0.0
115	113	119	0.616	1.0	0.0	79.3	−32.5	67.1	74.6	115	0.648	1.0	0.0	81.8	−30.2	71.4	77.5	113	0.617	1.0	0.0	0.584	1.0	0.0	77.0	−35.4	63.8	73.0	119	0.617	1.0	0.0
117	114	120	0.6	1.0	0.0	78.1	−34.0	65.4	73.8	117	0.637	1.0	0.0	80.9	−30.9	69.7	76.3	114	0.6	1.0	0.0	0.572	1.0	0.0	76.1	−36.4	62.5	72.4	120	0.6	1.0	0.0
119	115	121	0.583	1.0	0.0	76.9	−35.5	63.7	72.9	119	0.625	1.0	0.0	79.9	−31.6	68.0	75.1	115	0.583	1.0	0.0	0.56	1.0	0.0	75.3	−37.4	61.3	71.8	121	0.583	1.0	0.0
120	116	122	0.566	1.0	0.0	75.7	−36.9	62.0	72.1	120	0.615	1.0	0.0	79.2	−32.6	67.0	74.5	116	0.567	1.0	0.0	0.548	1.0	0.0	74.4	−38.3	60.0	71.3	122	0.567	1.0	0.0
122	117	123	0.55	1.0	0.0	74.5	−38.2	60.2	71.3	122	0.605	1.0	0.0	78.5	−33.5	66.0	74.1	117	0.55	1.0	0.0	0.536	1.0	0.0	73.6	−39.2	58.8	70.7	123	0.55	1.0	0.0
124	118	124	0.533	1.0	0.0	73.3	−39.4	58.4	70.5	124	0.595	1.0	0.0	77.8	−34.4	64.9	73.6	118	0.533	1.0	0.0	0.524	1.0	0.0	72.7	−40.0	57.5	70.1	124	0.533	1.0	0.0
125	119	126	0.516	1.0	0.0	72.1	−40.6	56.6	69.7	125	0.585	1.0	0.0	77.0	−35.3	63.9	73.1	119	0.517	1.0	0.0	0.512	1.0	0.0	71.9	−40.9	56.2	69.5	126	0.517	1.0	0.0
127	120	127	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127	0.574	1.0	0.0	76.3	−36.2	62.8	72.6	120	0.5	1.0	0.0	0.501	1.0	0.0	71.0	−41.6	54.9	68.9	127	0.5	1.0	0.0

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
círculo de tono, 48 pasos; *rgb*−*LabCh**mesas

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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		
127	120	127	0.5	1.0	0.0	70.9	−41.7	54.8	68.9	127	0.574	1.0	0.0	76.3	−36.2	62.8	72.6	120	0.5	1.0	0.0	0.501	1.0	0.0	71.0	−41.6	54.9	68.9	127	0.5	1.0	0.0
128	121	128	0.483	1.0	0.0	70.4	−42.6	53.9	68.7	128	0.564	1.0	0.0	75.6	−37.0	61.8	72.1	121	0.483	1.0	0.0	0.481	1.0	0.0	70.3	−42.6	53.8	68.7	128	0.483	1.0	0.0
129	122	129	0.466	1.0	0.0	69.8	−43.4	53.0	68.5	129	0.554	1.0	0.0	74.9	−37.8	60.7	71.6	122	0.467	1.0	0.0	0.462	1.0	0.0	69.6	−43.6	52.8	68.5	129	0.467	1.0	0.0
130	123	130	0.45	1.0	0.0	69.2	−44.2	52.1	68.3	130	0.544	1.0	0.0	74.1	−38.6	59.6	71.1	123	0.45	1.0	0.0	0.442	1.0	0.0	68.9	−44.5	51.7	68.3	130	0.45	1.0	0.0
131	124	131	0.433	1.0	0.0	68.6	−45.0	51.2	68.2	131	0.534	1.0	0.0	73.4	−39.4	58.5	70.6	124	0.433	1.0	0.0	0.422	1.0	0.0	68.3	−45.4	50.7	68.1	131	0.433	1.0	0.0
132	125	133	0.416	1.0	0.0	68.0	−45.7	50.3	68.0	132	0.524	1.0	0.0	72.7	−40.1	57.4	70.1	125	0.417	1.0	0.0	0.403	1.0	0.0	67.6	−46.3	49.6	67.9	133	0.417	1.0	0.0
133	126	134	0.4	1.0	0.0	67.4	−46.5	49.4	67.8	133	0.513	1.0	0.0	72.0	−40.8	56.3	69.6	126	0.4	1.0	0.0	0.383	1.0	0.0	66.9	−47.1	48.5	67.7	134	0.4	1.0	0.0
134	127	135	0.383	1.0	0.0	66.8	−47.2	48.5	67.7	134	0.503	1.0	0.0	71.2	−41.5	55.2	69.1	127	0.383	1.0	0.0	0.366	1.0	0.0	66.2	−48.2	47.6	67.8	135	0.383	1.0	0.0
135	128	136	0.366	1.0	0.0	66.1	−48.2	47.5	67.7	135	0.489	1.0	0.0	70.6	−42.3	54.2	68.8	128	0.367	1.0	0.0	0.352	1.0	0.0	65.5	−49.4	46.8	68.1	136	0.367	1.0	0.0
136	129	137	0.35	1.0	0.0	65.4	−49.5	46.6	68.1	136	0.472	1.0	0.0	70.0	−43.1	53.3	68.6	129	0.35	1.0	0.0	0.337	1.0	0.0	64.8	−50.5	46.0	68.4	137	0.35	1.0	0.0
138	130	138	0.333	1.0	0.0	64.6	−50.9	45.7	68.4	138	0.455	1.0	0.0	69.4	−43.9	52.4	68.4	130	0.333	1.0	0.0	0.323	1.0	0.0	64.1	−51.7	45.1	68.7	138	0.333	1.0	0.0
139	131	140	0.316	1.0	0.0	63.8	−52.2	44.7	68.7	139	0.438	1.0	0.0	68.8	−44.7	51.5	68.3	131	0.317	1.0	0.0	0.308	1.0	0.0	63.4	−52.8	44.2	68.9	140	0.317	1.0	0.0
140	132	141	0.3	1.0	0.0	63.0	−53.5	43.7	69.1	140	0.421	1.0	0.0	68.2	−45.5	50.6	68.1	132	0.3	1.0	0.0	0.294	1.0	0.0	62.7	−53.9	43.3	69.2	141	0.3	1.0	0.0
142	133	142	0.283	1.0	0.0	62.2	−54.7	42.6	69.4	142	0.404	1.0	0.0	67.6	−46.2	49.7	67.9	133	0.283	1.0	0.0	0.279	1.0	0.0	62.0	−55.0	42.4	69.5	142	0.283	1.0	0.0
143	134	143	0.266	1.0	0.0	61.4	−56.0	41.5	69.7	143	0.387	1.0	0.0	67.0	−47.0	48.7	67.7	134	0.267	1.0	0.0	0.265	1.0	0.0	61.3	−56.1	41.4	69.8	143	0.267	1.0	0.0
144	135	144	0.25	1.0	0.0	60.6	−57.2	40.4	70.1	144	0.372	1.0	0.0	66.4	−47.8	47.9	67.7	135	0.25	1.0	0.0	0.25	1.0	0.0	60.6	−57.1	40.5	70.1	144	0.25	1.0	0.0
145	136	145	0.233	1.0	0.0	60.1	−57.9	39.6	70.2	145	0.359	1.0	0.0	65.8	−48.8	47.2	67.9	136	0.233	1.0	0.0	0.227	1.0	0.0	60.0	−58.1	39.4	70.3	145	0.233	1.0	0.0
146	137	147	0.216	1.0	0.0	59.6	−58.6	38.9	70.3	146	0.347	1.0	0.0	65.2	−49.8	46.5	68.2	137	0.217	1.0	0.0	0.204	1.0	0.0	59.3	−59.1	38.3	70.5	147	0.217	1.0	0.0
147	138	148	0.2	1.0	0.0	59.1	−59.3	38.1	70.5	147	0.334	1.0	0.0	64.7	−50.8	45.8	68.4	138	0.2	1.0	0.0	0.181	1.0	0.0	58.6	−60.0	37.2	70.7	148	0.2	1.0	0.0
148	139	149	0.183	1.0	0.0	58.7	−59.9	37.3	70.6	148	0.322	1.0	0.0	64.1	−51.7	45.1	68.7	139	0.183	1.0	0.0	0.158	1.0	0.0	58.0	−60.9	36.1	70.8	149	0.183	1.0	0.0
148	140	150	0.166	1.0	0.0	58.2	−60.6	36.4	70.7	148	0.309	1.0	0.0	63.5	−52.7	44.3	68.9	140	0.167	1.0	0.0	0.135	1.0	0.0	57.3	−61.8	34.9	71.0	150	0.167	1.0	0.0
149	141	151	0.15	1.0	0.0	57.7	−61.2	35.6	70.9	149	0.297	1.0	0.0	62.9	−53.7	43.5	69.2	141	0.15	1.0	0.0	0.106	1.0	0.0	56.6	−63.0	33.9	71.6	151	0.15	1.0	0.0
150	142	152	0.133	1.0	0.0	57.2	−61.9	34.8	71.0	150	0.284	1.0	0.0	62.3	−54.6	42.7	69.4	142	0.133	1.0	0.0	0.073	1.0	0.0	55.9	−64.4	33.0	72.5	152	0.133	1.0	0.0
151	143	154	0.116	1.0	0.0	56.8	−62.5	34.1	71.3	151	0.272	1.0	0.0	61.7	−55.5	41.9	69.7	143	0.117	1.0	0.0	0.041	1.0	0.0	55.2	−65.8	32.1	73.3	154	0.117	1.0	0.0
151	144	155	0.1	1.0	0.0	56.4	−63.3	33.7	71.7	151	0.259	1.0	0.0	61.1	−56.5	41.1	69.9	144	0.1	1.0	0.0	0.008	1.0	0.0	54.5	−67.2	31.1	74.2	155	0.1	1.0	0.0
152	145	156	0.083	1.0	0.0	56.1	−64.0	33.2	72.1	152	0.245	1.0	0.0	60.5	−57.4	40.2	70.1	145	0.083	1.0	0.0	0.0	1.0	0.021	54.3	−67.4	29.5	73.7	156	0.083	1.0	0.0
153	146	157	0.066	1.0	0.0	55.7	−64.7	32.8	72.6	153	0.225	1.0	0.0	59.9	−58.2	39.3	70.3	146	0.067	1.0	0.0	0.0	1.0	0.048	54.1	−67.2	27.8	72.8	157	0.067	1.0	0.0
153	147	158	0.049	1.0	0.0	55.4	−65.5	32.3	73.0	153	0.205	1.0	0.0	59.3	−59.0	38.4	70.5	147	0.05	1.0	0.0	0.0	1.0	0.075	54.0	−66.9	26.1	71.9	158	0.05	1.0	0.0
154	148	159	0.033	1.0	0.0	55.0	−66.2	31.8	73.5	154	0.186	1.0	0.0	58.8	−59.8	37.4	70.6	148	0.033	1.0	0.0	0.0	1.0	0.102	53.9	−66.6	24.4	71.0	159	0.033	1.0	0.0
154	149	161	0.016	1.0	0.0	54.7	−66.9	31.3	73.9	154	0.166	1.0	0.0	58.2	−60.6	36.5	70.8	149	0.017	1.0	0.0	0.0	1.0	0.128	53.8	−66.3	22.8	70.2	161	0.017	1.0	0.0
155	150	162	0.0	1.0	0.0	54.3	−67.6	30.8	74.3	155	G_d	0.146	1.0	0.0	57.6	−61.3	35.5	70.9	150	G_s	0.0	1.0	0.0	0.0	1.0	0.147	53.8	−65.9	21.1	69.3	162	G_e	0.0	1.0	0.0
156	151	163	0.0	1.0	0.016	54.2	−67.5	29.7	73.8	156	0.126	1.0	0.0	57.0	−62.1	34.5	71.1	151	0.0	1.0	0.017	0.0	1.0	0.162	53.8	−65.5	19.9	68.6	163	0.0	1.0	0.017
156	152	164	0.0	1.0	0.033	54.2	−67.4	28.6	73.2	156	0.099	1.0	0.0	56.4	−63.3	33.7	71.8	152	0.0	1.0	0.033	0.0	1.0	0.177	53.8	−65.2	18.7	67.9	164	0.0	1.0	0.033
157	153	164	0.0	1.0	0.05	54.1	−67.2	27.6	72.7	157	0.071	1.0	0.0	55.9	−64.5	32.9	72.5	153	0.0	1.0	0.05	0.0	1.0	0.192	53.8	−64.8	17.4	67.2	164	0.0	1.0	0.05
158	154	165	0.0	1.0	0.066	54.0	−67.1	26.6	72.1	158	0.042	1.0	0.0	55.3	−65.7	32.1	73.3	154	0.0	1.0	0.067	0.0	1.0	0.207	53.8	−64.4	16.2	66.5	165	0.0	1.0	0.067
159	155	166	0.0	1.0	0.083	53.9	−66.9	25.5	71.6	159	0.014	1.0	0.0	54.7	−67.0	31.3	74.0	155	0.0	1.0	0.083	0.0	1.0	0.222	53.8	−63.9	15.0	65.8	166	0.0	1.0	0.083
159	156	167	0.0	1.0	0.1	53.9	−66.7	24.5	71.1	159	0.0	1.0	0.011	54.3	−67.5	30.1	74.0	156	0.0	1.0	0.1	0.0	1.0	0.237	53.8	−63.5	13.9	65.1	167	0.0	1.0	0.1
160	157	168	0.0	1.0	0.116	53.8	−66.5	23.5	70.5	160	0.0	1.0	0.035	54.2	−67.3	28.6	73.2	157	0.0	1.0	0.117	0.0	1.0	0.251	53.8	−63.0	12.7	64.4	168	0.0	1.0	0.117
161	158	169	0.0	1.0	0.133	53.8	−66.2	22.3	69.9	161	0.0	1.0	0.058	54.1	−67.1	27.2	72.5	158	0.0	1.0	0.133	0.0	1.0	0.261	53.9	−62.6	11.6	63.8	169	0.0	1.0	0.133
162	159	170	0.0	1.0	0.15	53.8	−65.8	20.8	69.1	162	0.0	1.0	0.081	54.0	−66.9	25.7	71.7	159	0.0	1.0	0.15	0.0	1.0	0.271	54.0	−62.2	10.5	63.2	170	0.0	1.0	0.15
163	160	171	0.0	1.0	0.166	53.8	−65.5	19.4	68.3	163	0.0	1.0	0.104	53.9	−66.6	24.3	71.0	160	0.0	1.0	0.167	0.0	1.0	0.281	54.0	−61.7	9.4	62.6	171	0.0	1.0	0.167
164	161	172	0.0	1.0	0.183	53.8	−65.0	18.1	67.5	164	0.0	1.0	0.127	53.8	−66.3	22.9	70.2	161	0.0	1.0	0.183	0.0	1.0	0.291	54.1	−61.3	8.3	61.9	172	0.0	1.0	0.183
165	162	173	0.0	1.0	0.2	53.8	−64.6	16.7	66.7	165	0.0	1.0	0.143	53.8	−65.9	21.5	69.4	162	0.0	1.0	0.2	0.0	1.0	0.301	54.2	−60.8	7.3	61.3	173	0.0	1.0	0.2
166	163	174	0.0	1.0	0.216	53.7	−64.1	15.4	66.0	166	0.0	1.0	0.16	53.8	−65.6	20.1	68.7	163	0.0	1.0	0.217	0.0	1.0	0.311	54.3	−60.3	6.3	60.7	174	0.0	1.0	0.217
167	164	175	0.0	1.0	0.233	53.7	−63.6	14.1	65.2	167	0.0	1.0	0.176	53.8	−65.2	18.7	67.9	164	0.0	1.0	0.233	0.0	1.0	0.321	54.3	−59.8	5.2	60.1	175	0.0	1.0	0.233
168	165	175	0.0	1.0	0.25	53.7	−63.1	12.8	64.4	168	0.0	1.0	0.192	53.8	−64.7	17.4	67.1	165	0.0	1.0	0.25	0.0	1.0	0.331	54.4	−59.3	4.2	59.5	175	0.0	1.0	0.25

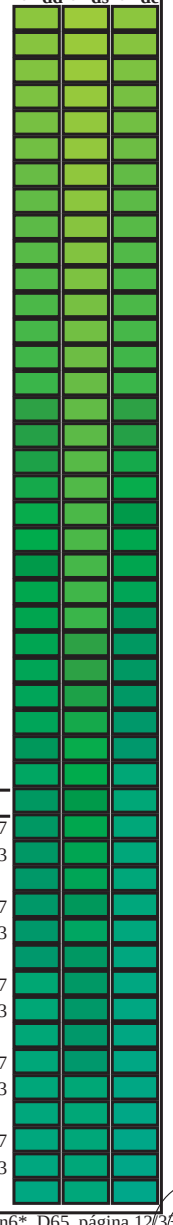
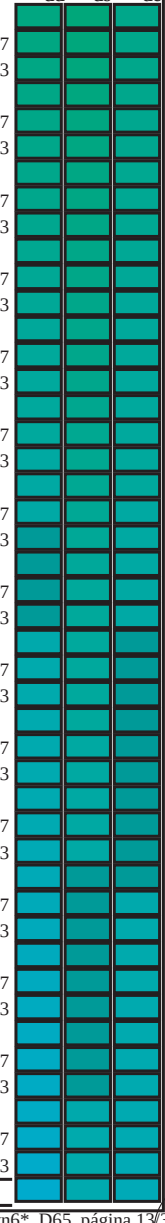


gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
círculo de tono, 48 pasos; *rgb−LabCh**mesas

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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*de361Mi*			*LAB*dex361Mi (x=LabCh)*					*rgb*dd361Mi*			*rgb*dd* *rgb*ds* *rgb*de*
168	165	175	0.0	1.0	0.25	53.7	−63.1	12.8	64.4	168	0.0	1.0	0.192	53.8	−64.7	17.4	67.1	165	0.0	1.0	0.25	0.0	1.0	0.331	54.4	−59.3	4.2	59.5	175	0.0	1.0	0.25	
170	166	176	0.0	1.0	0.266	53.9	−62.4	10.9	63.4	170	0.0	1.0	0.209	53.8	−64.3	16.1	66.4	166	0.0	1.0	0.267	0.0	1.0	0.341	54.5	−58.7	3.3	58.9	176	0.0	1.0	0.267	
171	167	177	0.0	1.0	0.283	54.0	−61.7	9.1	62.4	171	0.0	1.0	0.225	53.8	−63.8	14.8	65.6	167	0.0	1.0	0.283	0.0	1.0	0.351	54.6	−58.2	2.3	58.3	177	0.0	1.0	0.283	
173	168	178	0.0	1.0	0.3	54.1	−60.9	7.3	61.3	173	0.0	1.0	0.242	53.8	−63.3	13.5	64.8	168	0.0	1.0	0.3	0.0	1.0	0.361	54.7	−57.6	1.4	57.7	178	0.0	1.0	0.3	
174	169	179	0.0	1.0	0.316	54.3	−60.1	5.6	60.3	174	0.0	1.0	0.255	53.8	−62.8	12.2	64.1	169	0.0	1.0	0.317	0.0	1.0	0.371	54.7	−57.0	0.4	57.1	179	0.0	1.0	0.317	
176	170	180	0.0	1.0	0.333	54.4	−59.2	3.9	59.3	176	0.0	1.0	0.266	53.9	−62.4	11.0	63.5	170	0.0	1.0	0.333	0.0	1.0	0.382	54.8	−56.5	−0.4	56.6	180	0.0	1.0	0.333	
177	171	181	0.0	1.0	0.35	54.5	−58.2	2.3	58.3	177	0.0	1.0	0.277	54.0	−61.9	9.8	62.8	171	0.0	1.0	0.35	0.0	1.0	0.393	54.8	−56.0	−1.3	56.2	181	0.0	1.0	0.35	
179	172	182	0.0	1.0	0.366	54.7	−57.3	0.8	57.3	179	0.0	1.0	0.288	54.1	−61.4	8.6	62.1	172	0.0	1.0	0.367	0.0	1.0	0.405	54.8	−55.6	−2.1	55.7	182	0.0	1.0	0.367	
180	173	183	0.0	1.0	0.383	54.7	−56.5	−0.6	56.5	180	0.0	1.0	0.299	54.2	−60.9	7.5	61.5	173	0.0	1.0	0.383	0.0	1.0	0.416	54.9	−55.1	−3.0	55.3	183	0.0	1.0	0.383	
181	174	184	0.0	1.0	0.4	54.8	−55.8	−1.8	55.9	181	0.0	1.0	0.31	54.3	−60.4	6.4	60.8	174	0.0	1.0	0.4	0.0	1.0	0.428	54.9	−54.6	−3.8	54.9	184	0.0	1.0	0.4	
183	175	185	0.0	1.0	0.416	54.8	−55.2	−3.1	55.2	183	0.0	1.0	0.321	54.3	−59.8	5.2	60.1	175	0.0	1.0	0.417	0.0	1.0	0.439	54.9	−54.1	−4.7	54.5	185	0.0	1.0	0.417	
184	176	185	0.0	1.0	0.433	54.8	−54.5	−4.3	54.6	184	0.0	1.0	0.332	54.4	−59.2	4.1	59.5	176	0.0	1.0	0.433	0.0	1.0	0.451	54.9	−53.6	−5.5	54.0	185	0.0	1.0	0.433	
185	177	186	0.0	1.0	0.45	54.9	−53.7	−5.5	54.0	185	0.0	1.0	0.343	54.5	−58.6	3.1	58.8	177	0.0	1.0	0.45	0.0	1.0	0.463	55.0	−53.1	−6.3	53.6	186	0.0	1.0	0.45	
187	178	187	0.0	1.0	0.466	54.9	−53.0	−6.6	53.4	187	0.0	1.0	0.354	54.6	−58.0	2.0	58.1	178	0.0	1.0	0.467	0.0	1.0	0.474	55.0	−52.6	−7.1	53.2	187	0.0	1.0	0.467	
188	179	188	0.0	1.0	0.483	55.0	−52.2	−7.8	52.8	188	0.0	1.0	0.365	54.7	−57.3	1.0	57.5	179	0.0	1.0	0.483	0.0	1.0	0.486	55.0	−52.1	−7.9	52.8	188	0.0	1.0	0.483	
189	180	189	0.0	1.0	0.5	55.0	−51.4	−8.9	52.2	189	0.0	1.0	0.375	54.8	−56.7	0.0	56.8	180	0.0	1.0	0.5	0.0	1.0	0.497	55.0	−51.5	−8.6	52.3	189	0.0	1.0	0.5	
191	181	190	0.0	1.0	0.516	55.0	−50.6	−10.5	51.7	191	0.0	1.0	0.388	54.8	−56.2	−0.9	56.3	181	0.0	1.0	0.517	0.0	1.0	0.506	55.1	−51.1	−9.4	52.1	190	0.0	1.0	0.517	
193	182	191	0.0	1.0	0.533	55.1	−49.7	−12.1	51.2	193	0.0	1.0	0.401	54.8	−55.7	−1.8	55.9	182	0.0	1.0	0.533	0.0	1.0	0.514	55.1	−50.7	−10.2	51.8	191	0.0	1.0	0.533	
195	183	192	0.0	1.0	0.55	55.1	−48.8	−13.7	50.7	195	0.0	1.0	0.414	54.9	−55.2	−2.8	55.4	183	0.0	1.0	0.55	0.0	1.0	0.522	55.1	−50.3	−10.9	51.6	192	0.0	1.0	0.55	
197	184	193	0.0	1.0	0.566	55.2	−47.8	−15.2	50.2	197	0.0	1.0	0.426	54.9	−54.7	−3.7	54.9	184	0.0	1.0	0.567	0.0	1.0	0.529	55.1	−49.9	−11.7	51.4	193	0.0	1.0	0.567	
199	185	194	0.0	1.0	0.583	55.2	−46.8	−16.6	49.7	199	0.0	1.0	0.439	54.9	−54.2	−4.6	54.5	185	0.0	1.0	0.583	0.0	1.0	0.537	55.1	−49.5	−12.4	51.1	194	0.0	1.0	0.583	
201	186	195	0.0	1.0	0.6	55.2	−45.8	−18.0	49.2	201	0.0	1.0	0.452	54.9	−53.6	−5.5	54.0	186	0.0	1.0	0.6	0.0	1.0	0.545	55.2	−49.0	−13.1	50.9	195	0.0	1.0	0.6	
203	187	195	0.0	1.0	0.616	55.3	−44.7	−19.4	48.7	203	0.0	1.0	0.464	55.0	−53.0	−6.4	53.5	187	0.0	1.0	0.617	0.0	1.0	0.553	55.2	−48.6	−13.9	50.7	195	0.0	1.0	0.617	
205	188	196	0.0	1.0	0.633	55.3	−43.8	−20.5	48.4	205	0.0	1.0	0.477	55.0	−52.5	−7.3	53.1	188	0.0	1.0	0.633	0.0	1.0	0.561	55.2	−48.2	−14.6	50.4	196	0.0	1.0	0.633	
206	189	197	0.0	1.0	0.65	55.3	−43.3	−21.5	48.3	206	0.0	1.0	0.49	55.0	−51.9	−8.1	52.6	189	0.0	1.0	0.65	0.0	1.0	0.568	55.2	−47.7	−15.3	50.2	197	0.0	1.0	0.65	
207	190	198	0.0	1.0	0.666	55.3	−42.7	−22.5	48.3	207	0.0	1.0	0.502	55.1	−51.3	−9.0	52.2	190	0.0	1.0	0.667	0.0	1.0	0.576	55.2	−47.2	−15.9	50.0	198	0.0	1.0	0.667	
209	191	199	0.0	1.0	0.683	55.2	−42.1	−23.4	48.2	209	0.0	1.0	0.51	55.1	−50.9	−9.8	51.9	191	0.0	1.0	0.683	0.0	1.0	0.584	55.3	−46.7	−16.6	49.7	199	0.0	1.0	0.683	
210	192	200	0.0	1.0	0.7	55.2	−41.5	−24.4	48.1	210	0.0	1.0	0.519	55.1	−50.5	−10.6	51.7	192	0.0	1.0	0.7	0.0	1.0	0.592	55.3	−46.3	−17.3	49.5	200	0.0	1.0	0.7	
211	193	201	0.0	1.0	0.716	55.2	−40.8	−25.3	48.0	211	0.0	1.0	0.527	55.1	−50.0	−11.5	51.4	193	0.0	1.0	0.717	0.0	1.0	0.6	55.3	−45.8	−17.9	49.3	201	0.0	1.0	0.717	
213	194	202	0.0	1.0	0.733	55.2	−40.2	−26.2	48.0	213	0.0	1.0	0.536	55.1	−49.6	−12.3	51.2	194	0.0	1.0	0.733	0.0	1.0	0.607	55.3	−45.2	−18.6	49.0	202	0.0	1.0	0.733	
214	195	203	0.0	1.0	0.75	55.2	−39.5	−27.1	47.9	214	0.0	1.0	0.544	55.2	−49.1	−13.1	50.9	195	0.0	1.0	0.75	0.0	1.0	0.615	55.3	−44.7	−19.2	48.8	203	0.0	1.0	0.75	
215	196	204	0.0	1.0	0.766	55.1	−39.2	−27.9	48.1	215	0.0	1.0	0.553	55.2	−48.6	−13.9	50.7	196	0.0	1.0	0.767	0.0	1.0	0.623	55.4	−44.2	−19.8	48.6	204	0.0	1.0	0.767	
216	197	205	0.0	1.0	0.783	55.0	−38.8	−28.7	48.3	216	0.0	1.0	0.561	55.2	−48.1	−14.6	50.4	197	0.0	1.0	0.783	0.0	1.0	0.633	55.3	−43.8	−20.5	48.5	205	0.0	1.0	0.783	
217	198	206	0.0	1.0	0.8	54.9	−38.5	−29.5	48.5	217	0.0	1.0	0.57	55.2	−47.6	−15.4	50.2	198	0.0	1.0	0.8	0.0	1.0	0.645	55.3	−43.4	−21.1	48.4	206	0.0	1.0	0.8	
218	199	206	0.0	1.0	0.816	54.8	−38.1	−30.3	48.7	218	0.0	1.0	0.578	55.2	−47.1	−16.1	49.9	199	0.0	1.0	0.817	0.0	1.0	0.656	55.3	−43.0	−21.8	48.4	206	0.0	1.0	0.817	
219	200	207	0.0	1.0	0.833	54.7	−37.7	−31.1	48.9	219	0.0	1.0	0.587	55.3	−46.6	−16.9	49.6	200	0.0	1.0	0.833	0.0	1.0	0.667	55.3	−42.6	−22.5	48.3	207	0.0	1.0	0.833	
220	201	208	0.0	1.0	0.85	54.6	−37.3	−31.9	49.1	220	0.0	1.0	0.596	55.3	−46.0	−17.6	49.4	201	0.0	1.0	0.85	0.0	1.0	0.679	55.3	−42.2	−23.1	48.3	208	0.0	1.0	0.85	
221	202	209	0.0	1.0	0.866	54.5	−36.9	−32.6	49.3	221	0.0	1.0	0.604	55.3	−45.5	−18.3	49.1	202	0.0	1.0	0.867	0.0	1.0	0.69	55.3	−41.8	−23.8	48.2	209	0.0	1.0	0.867	
222	203	210	0.0	1.0	0.883	54.3	−36.4	−33.7	49.6	222	0.0	1.0	0.613	55.3	−44.9	−19.0	48.9	203	0.0	1.0	0.883	0.0	1.0	0.702	55.3	−41.4	−24.4	48.2	210	0.0	1.0	0.883	
224	204	211	0.0	1.0	0.9	54.2	−35.6	−35.1	50.0	224	0.0	1.0	0.621	55.3	−44.3	−19.7	48.6	204	0.0	1.0	0.9	0.0	1.0	0.713	55.3	−40.9	−25.0	48.1	211	0.0	1.0	0.9	
226	205	212	0.0	1.0	0.916	54.0	−34.8	−36.5	50.4	226	0.0	1.0	0.632	55.3	−43.8	−20.4	48.5	205	0.0	1.0	0.917	0.0	1.0	0.724	55.3	−40.5	−25.7	48.1	212	0.0	1.0	0.917	
228	206	213	0.0	1.0	0.933	53.8	−33.9	−37.8	50.8	228	0.0	1.0	0.644	55.3	−43.4	−21.1	48.4	206	0.0	1.0	0.933	0.0	1.0	0.736	55.2	−40.0	−26.3	48.0	213	0.0	1.0	0.933	
229	207	214	0.0	1.0	0.95	53.6	−33.0	−39.2	51.2	229	0.0	1.0	0.657	55.3	−43.0	−21.9	48.4	207	0.0	1.0	0.95	0.0	1.0	0.747	55.2	−39.5	−26.9	48.0	214	0.0	1.0	0.95	
231	208	215	0.0	1.0	0.966	53.4	−32.0	−40.5	51.7	231	0.0	1.0	0.669	55.3	−42.6	−22.6	48.3	208	0.0	1.0	0.967	0.0	1.0	0.761	55.2	−39.2	−27.6	48.1	215	0.0	1.0	0.967	
233	209	216	0.0	1.0	0.983	53.3	−31.0	−41.8	52.1	233	0.0	1.0	0.682	55.3	−42.1	−23.3	48.3	209	0.0	1.0	0.983	0.0	1.0	0.777	55.1	−38.9	−28.3	48.3	216	0.0	1.0	0.983	
235	210	216	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235	C_d	0.0	1.0	0.694	55.3	−41.6	−24.0	48.2	210	C_s	0.0	1.0	1.0	0.0	1.0	0.792	55.0	−38.6	−29.0	48.4	216	C_e	0.0	1.0	1.0	



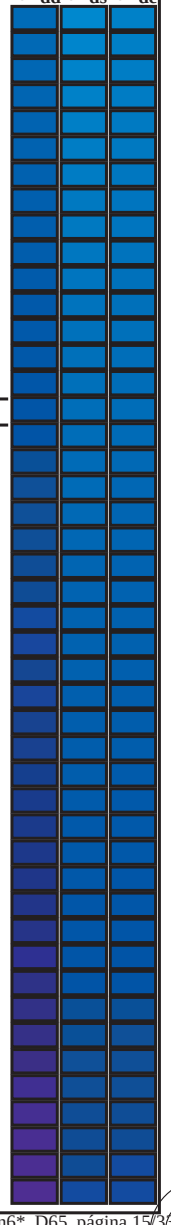
Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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		
235	210	216	0.0	1.0	1.0	53.1	−30.0	−43.1	52.5	235	C_d	0.0	1.0	0.694	55.3	−41.6	−24.0	48.2	210	C_s	0.0	1.0	1.0	0.0	1.0	0.792	55.0	−38.6	−29.0	48.4	216	C_e	0.0	1.0	1.0
235	211	217	0.0	0.983	1.0	53.1	−29.7	−43.3	52.5	235		0.0	1.0	0.707	55.3	−41.2	−24.7	48.1	211		0.0	0.983	1.0	0.0	1.0	0.807	54.9	−38.3	−29.8	48.6	217		0.0	0.983	1.0
235	212	218	0.0	0.966	1.0	53.1	−29.4	−43.5	52.5	235		0.0	1.0	0.719	55.3	−40.7	−25.4	48.1	212		0.0	0.967	1.0	0.0	1.0	0.822	54.8	−37.9	−30.5	48.8	218		0.0	0.967	1.0
236	213	219	0.0	0.95	1.0	53.1	−29.2	−43.7	52.6	236		0.0	1.0	0.732	55.3	−40.2	−26.1	48.0	213		0.0	0.95	1.0	0.0	1.0	0.837	54.7	−37.6	−31.2	49.0	219		0.0	0.95	1.0
236	214	220	0.0	0.933	1.0	53.1	−28.9	−43.9	52.6	236		0.0	1.0	0.744	55.2	−39.7	−26.7	48.0	214		0.0	0.933	1.0	0.0	1.0	0.853	54.6	−37.2	−31.9	49.2	220		0.0	0.933	1.0
237	215	221	0.0	0.916	1.0	53.1	−28.6	−44.2	52.6	237		0.0	1.0	0.759	55.2	−39.3	−27.5	48.1	215		0.0	0.917	1.0	0.0	1.0	0.868	54.5	−36.9	−32.6	49.4	221		0.0	0.917	1.0
237	216	222	0.0	0.9	1.0	53.1	−28.3	−44.4	52.7	237		0.0	1.0	0.775	55.1	−38.9	−28.3	48.3	216		0.0	0.9	1.0	0.0	1.0	0.88	54.4	−36.5	−33.4	49.6	222		0.0	0.9	1.0
237	217	223	0.0	0.883	1.0	53.1	−28.1	−44.6	52.7	237		0.0	1.0	0.792	55.0	−38.6	−29.1	48.5	217		0.0	0.883	1.0	0.0	1.0	0.888	54.3	−36.1	−34.1	49.8	223		0.0	0.883	1.0
238	218	224	0.0	0.866	1.0	53.0	−27.8	−44.9	52.8	238		0.0	1.0	0.809	54.9	−38.2	−29.9	48.7	218		0.0	0.867	1.0	0.0	1.0	0.897	54.2	−35.7	−34.8	50.0	224		0.0	0.867	1.0
238	219	225	0.0	0.85	1.0	53.0	−27.5	−45.3	53.0	238		0.0	1.0	0.825	54.8	−37.9	−30.6	48.9	219		0.0	0.85	1.0	0.0	1.0	0.906	54.1	−35.3	−35.5	50.2	225		0.0	0.85	1.0
239	220	226	0.0	0.833	1.0	53.0	−27.3	−45.6	53.2	239		0.0	1.0	0.842	54.7	−37.5	−31.4	49.1	220		0.0	0.833	1.0	0.0	1.0	0.914	54.1	−34.9	−36.2	50.4	226		0.0	0.833	1.0
239	221	227	0.0	0.816	1.0	53.0	−27.0	−46.0	53.4	239		0.0	1.0	0.859	54.6	−37.1	−32.2	49.3	221		0.0	0.817	1.0	0.0	1.0	0.923	54.0	−34.4	−36.9	50.6	227		0.0	0.817	1.0
240	222	227	0.0	0.8	1.0	52.9	−26.7	−46.4	53.6	240		0.0	1.0	0.875	54.5	−36.7	−33.0	49.5	222		0.0	0.8	1.0	0.0	1.0	0.932	53.9	−34.0	−37.6	50.8	227		0.0	0.8	1.0
240	223	228	0.0	0.783	1.0	52.9	−26.5	−46.8	53.8	240		0.0	1.0	0.885	54.4	−36.2	−33.8	49.7	223		0.0	0.783	1.0	0.0	1.0	0.94	53.8	−33.5	−38.3	51.1	228		0.0	0.783	1.0
240	224	229	0.0	0.766	1.0	52.9	−26.2	−47.2	53.9	240		0.0	1.0	0.894	54.3	−35.8	−34.6	49.9	224		0.0	0.767	1.0	0.0	1.0	0.949	53.7	−33.0	−39.0	51.3	229		0.0	0.767	1.0
241	225	230	0.0	0.75	1.0	52.9	−25.9	−47.5	54.1	241		0.0	1.0	0.904	54.2	−35.4	−35.4	50.2	225		0.0	0.75	1.0	0.0	1.0	0.957	53.6	−32.5	−39.7	51.5	230		0.0	0.75	1.0
242	226	231	0.0	0.733	1.0	52.6	−25.2	−47.8	54.1	242		0.0	1.0	0.913	54.1	−34.9	−36.2	50.4	226		0.0	0.733	1.0	0.0	1.0	0.966	53.5	−32.0	−40.4	51.7	231		0.0	0.733	1.0
242	227	232	0.0	0.716	1.0	52.2	−24.5	−48.1	54.0	242		0.0	1.0	0.923	54.0	−34.4	−36.9	50.6	227		0.0	0.717	1.0	0.0	1.0	0.975	53.4	−31.5	−41.1	51.9	232		0.0	0.717	1.0
243	228	233	0.0	0.7	1.0	51.9	−23.9	−48.4	54.0	243		0.0	1.0	0.932	53.9	−33.9	−37.7	50.9	228		0.0	0.7	1.0	0.0	1.0	0.983	53.3	−31.0	−41.7	52.1	233		0.0	0.7	1.0
244	229	234	0.0	0.683	1.0	51.6	−23.2	−48.6	53.9	244		0.0	1.0	0.942	53.8	−33.4	−38.5	51.1	229		0.0	0.683	1.0	0.0	1.0	0.992	53.2	−30.4	−42.4	52.3	234		0.0	0.683	1.0
245	230	235	0.0	0.666	1.0	51.3	−22.5	−48.9	53.8	245		0.0	1.0	0.951	53.7	−32.9	−39.2	51.3	230		0.0	0.667	1.0	0.0	0.997	1.0	53.1	−29.9	−43.1	52.5	235		0.0	0.667	1.0
246	231	236	0.0	0.65	1.0	51.0	−21.8	−49.1	53.8	246		0.0	1.0	0.961	53.6	−32.3	−40.0	51.6	231		0.0	0.65	1.0	0.0	0.956	1.0	53.1	−29.2	−43.6	52.6	236		0.0	0.65	1.0
246	232	237	0.0	0.633	1.0	50.7	−21.1	−49.4	53.7	246		0.0	1.0	0.97	53.5	−31.8	−40.7	51.8	232		0.0	0.633	1.0	0.0	0.916	1.0	53.1	−28.6	−44.1	52.7	237		0.0	0.633	1.0
247	233	237	0.0	0.616	1.0	50.2	−20.2	−49.5	53.5	247		0.0	1.0	0.98	53.4	−31.2	−41.5	52.0	233		0.0	0.617	1.0	0.0	0.876	1.0	53.1	−27.9	−44.6	52.8	237		0.0	0.617	1.0
248	234	238	0.0	0.6	1.0	49.7	−19.2	−49.6	53.2	248		0.0	1.0	0.989	53.2	−30.6	−42.2	52.3	234		0.0	0.6	1.0	0.0	0.842	1.0	53.1	−27.4	−45.4	53.1	238		0.0	0.6	1.0
249	235	239	0.0	0.583	1.0	49.1	−18.2	−49.6	52.8	249		0.0	1.0	0.999	53.1	−30.0	−42.9	52.5	235		0.0	0.583	1.0	0.0	0.809	1.0	53.0	−26.8	−46.2	53.5	239		0.0	0.583	1.0
250	236	240	0.0	0.566	1.0	48.5	−17.2	−49.6	52.5	250		0.0	0.963	1.0	53.1	−29.3	−43.5	52.6	236		0.0	0.567	1.0	0.0	0.775	1.0	53.0	−26.3	−46.9	53.9	240		0.0	0.567	1.0
251	237	241	0.0	0.55	1.0	47.9	−16.2	−49.5	52.2	251		0.0	0.918	1.0	53.1	−28.6	−44.1	52.7	237		0.0	0.55	1.0	0.0	0.745	1.0	52.8	−25.6	−47.6	54.2	241		0.0	0.55	1.0
252	238	242	0.0	0.533	1.0	47.3	−15.2	−49.5	51.8	252		0.0	0.874	1.0	53.1	−27.9	−44.7	52.8	238		0.0	0.533	1.0	0.0	0.726	1.0	52.5	−24.9	−47.9	54.1	242		0.0	0.533	1.0
253	239	243	0.0	0.516	1.0	46.7	−14.3	−49.4	51.5	253		0.0	0.838	1.0	53.0	−27.3	−45.5	53.2	239		0.0	0.517	1.0	0.0	0.706	1.0	52.1	−24.1	−48.2	54.0	243		0.0	0.517	1.0
254	240	244	0.0	0.5	1.0	46.1	−13.3	−49.4	51.1	254		0.0	0.801	1.0	53.0	−26.7	−46.3	53.6	240		0.0	0.5	1.0	0.0	0.686	1.0	51.7	−23.3	−48.5	54.0	244		0.0	0.5	1.0
255	241	245	0.0	0.483	1.0	45.5	−12.3	−49.4	50.9	255		0.0	0.764	1.0	52.9	−26.1	−47.2	54.0	241		0.0	0.483	1.0	0.0	0.667	1.0	51.4	−22.4	−48.8	53.9	245		0.0	0.483	1.0
256	242	246	0.0	0.466	1.0	44.8	−11.4	−49.4	50.7	256		0.0	0.737	1.0	52.7	−25.3	−47.7	54.1	242		0.0	0.467	1.0	0.0	0.647	1.0	51.0	−21.6	−49.1	53.8	246		0.0	0.467	1.0
258	243	247	0.0	0.45	1.0	44.2	−10.5	−49.4	50.5	258		0.0	0.716	1.0	52.3	−24.4	−48.1	54.1	243		0.0	0.45	1.0	0.0	0.628	1.0	50.6	−20.8	−49.4	53.8	247		0.0	0.45	1.0
259	244	248	0.0	0.433	1.0	43.6	−9.5	−49.4	50.3	259		0.0	0.694	1.0	51.9	−23.6	−48.4	54.0	244		0.0	0.433	1.0	0.0	0.612	1.0	50.1	−19.9	−49.5	53.5	248		0.0	0.433	1.0
260	245	248	0.0	0.416	1.0	42.9	−8.6	−49.4	50.1	260		0.0	0.673	1.0	51.5	−22.7	−48.8	53.9	245		0.0	0.417	1.0	0.0	0.597	1.0	49.6	−19.0	−49.5	53.2	248		0.0	0.417	1.0
261	246	249	0.0	0.4	1.0	42.3	−7.7	−49.3	49.9	261		0.0	0.651	1.0	51.1	−21.8	−49.1	53.8	246		0.0	0.4	1.0	0.0	0.582	1.0	49.1	−18.1	−49.5	52.9	249		0.0	0.4	1.0
262	247	250	0.0	0.383	1.0	41.7	−6.8	−49.3	49.7	262		0.0	0.63	1.0	50.7	−20.9	−49.4	53.8	247		0.0	0.383	1.0	0.0	0.568	1.0	48.6	−17.2	−49.5	52.6	250		0.0	0.383	1.0
263	248	251	0.0	0.366	1.0	41.1	−5.7	−49.2	49.6	263		0.0	0.612	1.0	50.1	−19.9	−49.5	53.5	248		0.0	0.367	1.0	0.0	0.553	1.0	48.0	−16.3	−49.5	52.3	251		0.0	0.367	1.0
264	249	252	0.0	0.35	1.0	40.5	−4.6	−49.2	49.4	264		0.0	0.596	1.0	49.6	−18.9	−49.5	53.1	249		0.0	0.35	1.0	0.0	0.538	1.0	47.5	−15.5	−49.5	52.0	252		0.0	0.35	1.0
265	250	253	0.0	0.333	1.0	39.9	−3.4	−49.2	49.3	265		0.0	0.58	1.0	49.0	−18.0	−49.5	52.8	250		0.0	0.333	1.0	0.0	0.523	1.0	47.0	−14.6	−49.4	51.6	253		0.0	0.333	1.0
267	251	254	0.0	0.316	1.0	39.3	−2.3	−49.1	49.1	267		0.0	0.564	1.0	48.4	−17.0	−49.5	52.5	251		0.0	0.317	1.0	0.0	0.508	1.0	46.5	−13.7	−49.4	51.3	254		0.0	0.317	1.0
268	252	255	0.0	0.3	1.0	38.7	−1.1	−49.0	49.0	268		0.0	0.547	1.0	47.8	−16.0	−49.5	52.1	252		0.0	0.3	1.0	0.0	0.494	1.0	45.9	−12.9	−49.3	51.1	255		0.0	0.3	1.0
269	253	256	0.0	0.283	1.0	38.1	0.0	−48.9	48.9	269		0.0	0.531	1.0	47.3	−15.0	−49.4	51.8	253		0.0	0.283	1.0	0.0	0.479	1.0	45.4	−12.0	−49.4	50.9	256		0.0	0.283	1.0
271	254	257	0.0	0.266	1.0	37.4	1.1	−48.7	48.7	271		0.0	0.515	1.0	46.7	−14.1	−49.4	51.5	254		0.0	0.267	1.0	0.0	0.464	1.0	44.8	−11.2	−49.4	50.7	257		0.0	0.267	1.0
272	255	258	0.0	0.25	1.0	36.8	2.2	−48.5	48.6	272		0.0	0.499	1.0	46.1	−13.1	−49.3	51.2	255		0.0	0.25	1.0	0.0	0.449	1.0	44.2	−10.4	−49.4	50.6	258		0.0	0.25	1.0

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

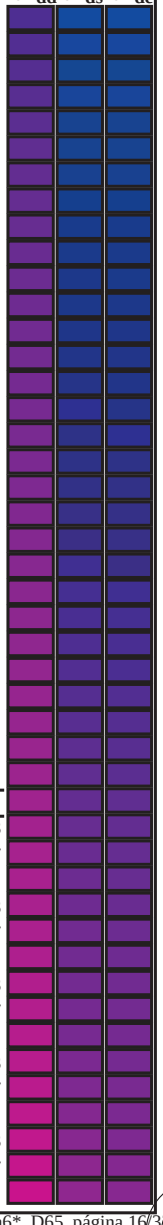
Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, D65 for input or output; Six hue angles of the 60 degree standard colours *RYGCBM*$_s$: $h_{ab,ds}$ = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours *RYGCBM*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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*
272	255	258	0.0	0.25	1.0	36.8	2.2	−48.5	48.6	272	0.0	0.499	1.0	46.1	−13.1	−49.3	51.2	255	0.0	0.25	1.0	0.0	0.449	1.0	44.2	−10.4	−49.4	50.6	258	0.0	0.25	1.0	
273	256	258	0.0	0.233	1.0	36.6	3.2	−48.3	48.4	273	0.0	0.482	1.0	45.5	−12.2	−49.4	51.0	256	0.0	0.233	1.0	0.0	0.435	1.0	43.7	−9.5	−49.4	50.4	258	0.0	0.233	1.0	
274	257	259	0.0	0.216	1.0	36.4	4.1	−48.0	48.2	274	0.0	0.466	1.0	44.9	−11.3	−49.4	50.8	257	0.0	0.217	1.0	0.0	0.42	1.0	43.1	−8.7	−49.3	50.2	259	0.0	0.217	1.0	
276	258	260	0.0	0.2	1.0	36.1	5.1	−47.8	48.1	276	0.0	0.45	1.0	44.3	−10.4	−49.4	50.6	258	0.0	0.2	1.0	0.0	0.405	1.0	42.6	−7.9	−49.3	50.0	260	0.0	0.2	1.0	
277	259	261	0.0	0.183	1.0	35.9	6.1	−47.5	47.9	277	0.0	0.434	1.0	43.7	−9.5	−49.4	50.4	259	0.0	0.183	1.0	0.0	0.39	1.0	42.0	−7.1	−49.3	49.9	261	0.0	0.183	1.0	
278	260	262	0.0	0.166	1.0	35.6	7.0	−47.2	47.7	278	0.0	0.418	1.0	43.0	−8.6	−49.3	50.2	260	0.0	0.167	1.0	0.0	0.376	1.0	41.4	−6.3	−49.2	49.7	262	0.0	0.167	1.0	
279	261	263	0.0	0.15	1.0	35.4	8.0	−46.9	47.5	279	0.0	0.402	1.0	42.4	−7.7	−49.3	50.0	261	0.0	0.15	1.0	0.0	0.364	1.0	41.0	−5.5	−49.2	49.6	263	0.0	0.15	1.0	
280	262	264	0.0	0.133	1.0	35.2	8.9	−46.5	47.4	280	0.0	0.386	1.0	41.8	−6.8	−49.2	49.8	262	0.0	0.133	1.0	0.0	0.353	1.0	40.6	−4.7	−49.2	49.5	264	0.0	0.133	1.0	
282	263	265	0.0	0.116	1.0	34.9	9.9	−46.3	47.3	282	0.0	0.371	1.0	41.3	−6.0	−49.2	49.7	263	0.0	0.117	1.0	0.0	0.341	1.0	40.2	−3.9	−49.1	49.4	265	0.0	0.117	1.0	
283	264	266	0.0	0.1	1.0	34.5	10.9	−46.1	47.4	283	0.0	0.358	1.0	40.8	−5.1	−49.2	49.5	264	0.0	0.1	1.0	0.0	0.33	1.0	39.8	−3.1	−49.1	49.3	266	0.0	0.1	1.0	
284	265	267	0.0	0.083	1.0	34.2	11.9	−45.9	47.4	284	0.0	0.346	1.0	40.4	−4.2	−49.2	49.4	265	0.0	0.083	1.0	0.0	0.318	1.0	39.4	−2.3	−49.0	49.2	267	0.0	0.083	1.0	
285	266	268	0.0	0.066	1.0	33.9	12.9	−45.7	47.5	285	0.0	0.333	1.0	39.9	−3.3	−49.1	49.3	266	0.0	0.067	1.0	0.0	0.307	1.0	39.0	−1.5	−49.0	49.1	268	0.0	0.067	1.0	
287	267	269	0.0	0.049	1.0	33.5	13.9	−45.4	47.5	287	0.0	0.321	1.0	39.5	−2.5	−49.1	49.2	267	0.0	0.05	1.0	0.0	0.296	1.0	38.5	−0.8	−48.9	49.0	269	0.0	0.05	1.0	
288	268	269	0.0	0.033	1.0	33.2	14.9	−45.2	47.6	288	0.0	0.308	1.0	39.0	−1.6	−49.0	49.1	268	0.0	0.033	1.0	0.0	0.284	1.0	38.1	0.0	−48.8	48.9	269	0.0	0.033	1.0	
289	269	270	0.0	0.016	1.0	32.9	15.9	−44.9	47.6	289	0.0	0.296	1.0	38.5	−0.8	−48.9	49.0	269	0.0	0.017	1.0	0.0	0.273	1.0	37.7	0.7	−48.7	48.8	270	0.0	0.017	1.0	
290	270	271	0.0	0.0	1.0	32.5	16.9	−44.6	47.7	290	B_d	0.0	0.283	1.0	38.1	0.0	−48.8	48.9	270	B_s	0.0	0.0	1.0	0.0	0.261	1.0	37.3	1.5	−48.6	48.7	271	B_e	0.0	0.0	1.0	
291	271	272	0.016	0.0	1.0	32.4	17.8	−44.3	47.8	291	0.0	0.27	1.0	37.6	0.9	−48.7	48.8	271	0.017	0.0	1.0	0.0	0.249	1.0	36.9	2.3	−48.5	48.6	272	0.017	0.0	1.0	
293	272	273	0.033	0.0	1.0	32.3	18.7	−44.0	47.9	293	0.0	0.258	1.0	37.2	1.7	−48.6	48.7	272	0.033	0.0	1.0	0.0	0.236	1.0	36.7	3.1	−48.3	48.5	273	0.033	0.0	1.0	
294	273	274	0.05	0.0	1.0	32.1	19.6	−43.7	47.9	294	0.0	0.245	1.0	36.8	2.5	−48.4	48.6	273	0.05	0.0	1.0	0.0	0.222	1.0	36.5	3.9	−48.1	48.3	274	0.05	0.0	1.0	
295	274	275	0.066	0.0	1.0	32.0	20.5	−43.4	48.0	295	0.0	0.231	1.0	36.6	3.4	−48.2	48.4	274	0.067	0.0	1.0	0.0	0.209	1.0	36.3	4.6	−47.9	48.2	275	0.067	0.0	1.0	
296	275	276	0.083	0.0	1.0	31.9	21.4	−43.1	48.1	296	0.0	0.217	1.0	36.4	4.2	−48.0	48.3	275	0.083	0.0	1.0	0.0	0.196	1.0	36.1	5.4	−47.7	48.1	276	0.083	0.0	1.0	
297	276	277	0.1	0.0	1.0	31.8	22.3	−42.7	48.2	297	0.0	0.202	1.0	36.2	5.0	−47.8	48.1	276	0.1	0.0	1.0	0.0	0.182	1.0	35.9	6.2	−47.4	47.9	277	0.1	0.0	1.0	
298	277	278	0.116	0.0	1.0	31.6	23.1	−42.4	48.3	298	0.0	0.188	1.0	36.0	5.8	−47.5	48.0	277	0.117	0.0	1.0	0.0	0.169	1.0	35.7	7.0	−47.2	47.8	278	0.117	0.0	1.0	
299	278	279	0.133	0.0	1.0	31.5	24.1	−42.0	48.4	299	0.0	0.174	1.0	35.8	6.7	−47.3	47.8	278	0.133	0.0	1.0	0.0	0.155	1.0	35.5	7.7	−46.9	47.6	279	0.133	0.0	1.0	
300	279	280	0.15	0.0	1.0	31.4	25.0	−41.7	48.6	300	0.0	0.16	1.0	35.6	7.5	−47.0	47.7	279	0.15	0.0	1.0	0.0	0.142	1.0	35.3	8.5	−46.6	47.5	280	0.15	0.0	1.0	
302	280	281	0.166	0.0	1.0	31.4	25.9	−41.4	48.8	302	0.0	0.146	1.0	35.4	8.3	−46.7	47.5	280	0.167	0.0	1.0	0.0	0.129	1.0	35.1	9.2	−46.4	47.4	281	0.167	0.0	1.0	
303	281	282	0.183	0.0	1.0	31.3	26.8	−41.0	49.0	303	0.0	0.132	1.0	35.2	9.0	−46.4	47.4	281	0.183	0.0	1.0	0.0	0.116	1.0	34.9	10.0	−46.2	47.4	282	0.183	0.0	1.0	
304	282	283	0.2	0.0	1.0	31.2	27.8	−40.6	49.2	304	0.0	0.118	1.0	34.9	9.8	−46.2	47.4	282	0.2	0.0	1.0	0.0	0.103	1.0	34.6	10.8	−46.1	47.4	283	0.2	0.0	1.0	
305	283	284	0.216	0.0	1.0	31.1	28.7	−40.2	49.4	305	0.0	0.104	1.0	34.7	10.7	−46.1	47.4	283	0.217	0.0	1.0	0.0	0.09	1.0	34.4	11.5	−45.9	47.4	284	0.217	0.0	1.0	
306	284	285	0.233	0.0	1.0	31.1	29.6	−39.8	49.6	306	0.0	0.091	1.0	34.4	11.5	−45.9	47.4	284	0.233	0.0	1.0	0.0	0.078	1.0	34.1	12.3	−45.8	47.5	285	0.233	0.0	1.0	
307	285	285	0.25	0.0	1.0	31.0	30.5	−39.3	49.8	307	0.0	0.078	1.0	34.1	12.3	−45.8	47.5	285	0.25	0.0	1.0	0.0	0.065	1.0	33.9	13.1	−45.6	47.5	285	0.25	0.0	1.0	
309	286	286	0.266	0.0	1.0	31.4	31.6	−38.8	50.1	309	0.0	0.064	1.0	33.9	13.1	−45.6	47.5	286	0.267	0.0	1.0	0.0	0.052	1.0	33.6	13.8	−45.4	47.6	286	0.267	0.0	1.0	
310	287	287	0.283	0.0	1.0	31.8	32.6	−38.3	50.3	310	0.0	0.051	1.0	33.6	13.9	−45.4	47.6	287	0.283	0.0	1.0	0.0	0.04	1.0	33.4	14.6	−45.2	47.6	287	0.283	0.0	1.0	
311	288	288	0.3	0.0	1.0	32.3	33.6	−37.8	50.6	311	0.0	0.038	1.0	33.3	14.7	−45.2	47.6	288	0.3	0.0	1.0	0.0	0.027	1.0	33.1	15.4	−45.0	47.6	288	0.3	0.0	1.0	
312	289	289	0.316	0.0	1.0	32.7	34.7	−37.2	50.9	312	0.0	0.024	1.0	33.1	15.5	−44.9	47.6	289	0.317	0.0	1.0	0.0	0.014	1.0	32.9	16.1	−44.8	47.7	289	0.317	0.0	1.0	
314	290	290	0.333	0.0	1.0	33.1	35.7	−36.6	51.2	314	0.0	0.011	1.0	32.8	16.3	−44.7	47.7	290	0.333	0.0	1.0	0.0	0.001	1.0	32.6	16.9	−44.5	47.7	290	0.333	0.0	1.0	
315	291	291	0.35	0.0	1.0	33.6	36.7	−36.0	51.4	315	0.003	0.0	1.0	32.5	17.1	−44.5	47.7	291	0.35	0.0	1.0	0.012	0.0	1.0	32.5	17.6	−44.3	47.8	291	0.35	0.0	1.0	
316	292	292	0.366	0.0	1.0	34.0	37.7	−35.3	51.7	316	0.018	0.0	1.0	32.4	17.9	−44.2	47.8	292	0.367	0.0	1.0	0.026	0.0	1.0	32.4	18.4	−44.1	47.9	292	0.367	0.0	1.0	
317	293	293	0.383	0.0	1.0	34.4	38.5	−34.7	51.9	317	0.033	0.0	1.0	32.3	18.7	−44.0	47.9	293	0.383	0.0	1.0	0.041	0.0	1.0	32.3	19.1	−43.9	47.9	293	0.383	0.0	1.0	
318	294	294	0.4	0.0	1.0	34.8	39.2	−34.2	52.1	318	0.047	0.0	1.0	32.2	19.5	−43.7	48.0	294	0.4	0.0	1.0	0.055	0.0	1.0	32.1	19.9	−43.6	48.0	294	0.4	0.0	1.0	
319	295	295	0.416	0.0	1.0	35.2	39.9	−33.7	52.2	319	0.062	0.0	1.0	32.1	20.3	−43.5	48.1	295	0.417	0.0	1.0	0.069	0.0	1.0	32.0	20.7	−43.3	48.1	295	0.417	0.0	1.0	
320	296	296	0.433	0.0	1.0	35.6	40.5	−33.1	52.4	320	0.077	0.0	1.0	32.0	21.1	−43.2	48.1	296	0.433	0.0	1.0	0.083	0.0	1.0	31.9	21.4	−43.1	48.2	296	0.433	0.0	1.0	
321	297	297	0.45	0.0	1.0	36.0	41.2	−32.6	52.5	321	0.092	0.0	1.0	31.9	21.9	−42.9	48.2	297	0.45	0.0	1.0	0.097	0.0	1.0	31.8	22.2	−42.8	48.2	297	0.45	0.0	1.0	
322	298	298	0.466	0.0	1.0	36.4	41.8	−32.0	52.7	322	0.107	0.0	1.0	31.7	22.7	−42.5	48.3	298	0.467	0.0	1.0	0.111	0.0	1.0	31.7	22.9	−42.5	48.3	298	0.467	0.0	1.0	
323	299	299	0.483	0.0	1.0	36.8	42.5	−31.4	52.9	323	0.122	0.0	1.0	31.6	23.5	−42.2	48.4	299	0.483	0.0	1.0	0.125	0.0	1.0	31.6	23.6	−42.1	48.4	299	0.483	0.0	1.0	
324	300	300	0.5	0.0	1.0	37.2	43.1	−30.8	53.0	324	0.136	0.0	1.0	31.6	24.3	−41.9	48.5	300	0.5	0.0	1.0	0.139	0.0	1.0	31.5	24.4	−41.9	48.6	300	0.5	0.0	1.0	



Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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*
324	300	300	0.5 0.0 1.0	37.2 43.1 −30.8 53.0 324	0.136 0.0 1.0	31.6 24.3 −41.9 48.5 300	0.5 0.0 1.0	0.139 0.0 1.0	31.5 24.4 −41.9 48.6 300	0.5 0.0 1.0
325	301	301	0.516 0.0 1.0	37.4 43.8 −30.4 53.4 325	0.151 0.0 1.0	31.5 25.1 −41.6 48.7 301	0.517 0.0 1.0	0.153 0.0 1.0	31.5 25.2 −41.6 48.7 301	0.517 0.0 1.0
326	302	302	0.533 0.0 1.0	37.7 44.5 −29.9 53.7 326	0.165 0.0 1.0	31.4 25.9 −41.3 48.9 302	0.533 0.0 1.0	0.166 0.0 1.0	31.4 26.0 −41.3 48.9 302	0.533 0.0 1.0
326	303	303	0.55 0.0 1.0	37.9 45.3 −29.5 54.0 326	0.18 0.0 1.0	31.4 26.7 −41.0 49.0 303	0.55 0.0 1.0	0.18 0.0 1.0	31.4 26.7 −41.0 49.0 303	0.55 0.0 1.0
327	304	303	0.566 0.0 1.0	38.2 46.0 −29.0 54.4 327	0.194 0.0 1.0	31.3 27.5 −40.7 49.2 304	0.567 0.0 1.0	0.194 0.0 1.0	31.3 27.5 −40.7 49.2 303	0.567 0.0 1.0
328	305	304	0.583 0.0 1.0	38.4 46.7 −28.5 54.7 328	0.209 0.0 1.0	31.2 28.3 −40.3 49.4 305	0.583 0.0 1.0	0.208 0.0 1.0	31.2 28.3 −40.4 49.4 304	0.583 0.0 1.0
329	306	305	0.6 0.0 1.0	38.7 47.4 −28.0 55.1 329	0.224 0.0 1.0	31.1 29.1 −40.0 49.5 306	0.6 0.0 1.0	0.222 0.0 1.0	31.2 29.0 −40.0 49.5 305	0.6 0.0 1.0
330	307	306	0.616 0.0 1.0	38.9 48.1 −27.5 55.4 330	0.238 0.0 1.0	31.1 29.9 −39.6 49.7 307	0.617 0.0 1.0	0.235 0.0 1.0	31.1 29.8 −39.7 49.7 306	0.617 0.0 1.0
331	308	307	0.633 0.0 1.0	39.2 48.9 −26.9 55.8 331	0.252 0.0 1.0	31.1 30.7 −39.2 49.9 308	0.633 0.0 1.0	0.249 0.0 1.0	31.0 30.5 −39.3 49.8 307	0.633 0.0 1.0
332	309	308	0.65 0.0 1.0	39.6 49.8 −26.2 56.3 332	0.265 0.0 1.0	31.4 31.5 −38.8 50.1 309	0.65 0.0 1.0	0.261 0.0 1.0	31.3 31.3 −39.0 50.0 308	0.65 0.0 1.0
333	310	309	0.666 0.0 1.0	40.0 50.7 −25.4 56.8 333	0.278 0.0 1.0	31.8 32.3 −38.4 50.3 310	0.667 0.0 1.0	0.274 0.0 1.0	31.6 32.1 −38.6 50.2 309	0.667 0.0 1.0
334	311	310	0.683 0.0 1.0	40.4 51.6 −24.7 57.2 334	0.291 0.0 1.0	32.1 33.1 −38.0 50.5 311	0.683 0.0 1.0	0.286 0.0 1.0	32.0 32.8 −38.2 50.4 310	0.683 0.0 1.0
335	312	311	0.7 0.0 1.0	40.7 52.5 −23.9 57.7 335	0.304 0.0 1.0	32.4 33.9 −37.6 50.7 312	0.7 0.0 1.0	0.298 0.0 1.0	32.3 33.6 −37.8 50.6 311	0.7 0.0 1.0
336	313	312	0.716 0.0 1.0	41.1 53.4 −23.1 58.2 336	0.317 0.0 1.0	32.8 34.7 −37.2 50.9 313	0.717 0.0 1.0	0.31 0.0 1.0	32.6 34.3 −37.4 50.8 312	0.717 0.0 1.0
337	314	313	0.733 0.0 1.0	41.5 54.3 −22.3 58.7 337	0.33 0.0 1.0	33.1 35.5 −36.7 51.1 314	0.733 0.0 1.0	0.323 0.0 1.0	32.9 35.1 −37.0 51.0 313	0.733 0.0 1.0
338	315	314	0.75 0.0 1.0	41.8 55.1 −21.4 59.1 338	0.343 0.0 1.0	33.4 36.3 −36.2 51.4 315	0.75 0.0 1.0	0.335 0.0 1.0	33.2 35.8 −36.5 51.2 314	0.75 0.0 1.0
339	316	315	0.766 0.0 1.0	42.4 55.8 −20.9 59.6 339	0.356 0.0 1.0	33.8 37.1 −35.7 51.6 316	0.767 0.0 1.0	0.347 0.0 1.0	33.5 36.6 −36.0 51.4 315	0.767 0.0 1.0
340	317	316	0.783 0.0 1.0	42.9 56.5 −20.4 60.1 340	0.368 0.0 1.0	34.1 37.9 −35.2 51.8 317	0.783 0.0 1.0	0.359 0.0 1.0	33.9 37.3 −35.6 51.6 316	0.783 0.0 1.0
340	318	317	0.8 0.0 1.0	43.4 57.2 −19.8 60.5 340	0.384 0.0 1.0	34.5 38.6 −34.7 52.0 318	0.8 0.0 1.0	0.371 0.0 1.0	34.2 38.0 −35.1 51.8 317	0.8 0.0 1.0
341	319	318	0.816 0.0 1.0	43.9 57.8 −19.3 61.0 341	0.402 0.0 1.0	34.9 39.3 −34.1 52.1 319	0.817 0.0 1.0	0.387 0.0 1.0	34.6 38.8 −34.6 52.0 318	0.817 0.0 1.0
342	320	319	0.833 0.0 1.0	44.4 58.5 −18.7 61.4 342	0.42 0.0 1.0	35.3 40.1 −33.5 52.3 320	0.833 0.0 1.0	0.404 0.0 1.0	35.0 39.4 −34.0 52.2 319	0.833 0.0 1.0
342	321	320	0.85 0.0 1.0	44.9 59.1 −18.2 61.9 342	0.438 0.0 1.0	35.8 40.8 −32.9 52.5 321	0.85 0.0 1.0	0.421 0.0 1.0	35.4 40.1 −33.5 52.3 320	0.85 0.0 1.0
343	322	321	0.866 0.0 1.0	45.4 59.8 −17.6 62.3 343	0.456 0.0 1.0	36.2 41.5 −32.3 52.7 322	0.867 0.0 1.0	0.439 0.0 1.0	35.8 40.8 −32.9 52.5 321	0.867 0.0 1.0
344	323	321	0.883 0.0 1.0	45.8 60.5 −17.0 62.8 344	0.474 0.0 1.0	36.6 42.2 −31.7 52.8 323	0.883 0.0 1.0	0.456 0.0 1.0	36.2 41.5 −32.3 52.6 321	0.883 0.0 1.0
344	324	322	0.9 0.0 1.0	46.1 61.2 −16.4 63.4 344	0.492 0.0 1.0	37.1 42.9 −31.1 53.0 324	0.9 0.0 1.0	0.473 0.0 1.0	36.6 42.1 −31.7 52.8 322	0.9 0.0 1.0
345	325	323	0.916 0.0 1.0	46.5 61.9 −15.9 63.9 345	0.512 0.0 1.0	37.4 43.7 −30.5 53.3 325	0.917 0.0 1.0	0.49 0.0 1.0	37.0 42.8 −31.1 53.0 323	0.917 0.0 1.0
346	326	324	0.933 0.0 1.0	46.8 62.6 −15.3 64.5 346	0.532 0.0 1.0	37.7 44.5 −29.9 53.7 326	0.933 0.0 1.0	0.508 0.0 1.0	37.4 43.5 −30.6 53.2 324	0.933 0.0 1.0
346	327	325	0.95 0.0 1.0	47.1 63.3 −14.6 65.0 346	0.552 0.0 1.0	38.0 45.4 −29.4 54.1 327	0.95 0.0 1.0	0.527 0.0 1.0	37.6 44.3 −30.1 53.6 325	0.95 0.0 1.0
347	328	326	0.966 0.0 1.0	47.5 64.0 −14.0 65.5 347	0.572 0.0 1.0	38.3 46.2 −28.8 54.5 328	0.967 0.0 1.0	0.546 0.0 1.0	37.9 45.1 −29.5 54.0 326	0.967 0.0 1.0
348	329	327	0.983 0.0 1.0	47.8 64.7 −13.4 66.1 348	0.592 0.0 1.0	38.6 47.1 −28.2 54.9 329	0.983 0.0 1.0	0.565 0.0 1.0	38.2 46.0 −29.0 54.4 327	0.983 0.0 1.0
348	330	328	1.0 0.0 1.0	48.1 65.4 −12.7 66.6 348	M_d 0.612 0.0 1.0	38.9 47.9 −27.6 55.4 330	M_s 1.0 0.0 1.0	0.584 0.0 1.0	38.5 46.8 −28.4 54.8 328	M_e 1.0 0.0 1.0
349	331	329	1.0 0.0 0.983	48.3 65.5 −12.5 66.7 349	0.631 0.0 1.0	39.2 48.8 −26.9 55.8 331	1.0 0.0 0.983	0.603 0.0 1.0	38.8 47.6 −27.9 55.2 329	1.0 0.0 0.983
349	332	330	1.0 0.0 0.966	48.5 65.6 −12.2 66.7 349	0.646 0.0 1.0	39.6 49.6 −26.3 56.2 332	1.0 0.0 0.967	0.623 0.0 1.0	39.1 48.4 −27.3 55.6 330	1.0 0.0 0.967
349	333	331	1.0 0.0 0.95	48.7 65.7 −11.9 66.8 349	0.662 0.0 1.0	39.9 50.5 −25.6 56.7 333	1.0 0.0 0.95	0.638 0.0 1.0	39.4 49.2 −26.7 56.0 331	1.0 0.0 0.95
349	334	332	1.0 0.0 0.933	48.9 65.8 −11.7 66.8 349	0.677 0.0 1.0	40.3 51.3 −24.9 57.1 334	1.0 0.0 0.933	0.652 0.0 1.0	39.7 50.0 −26.0 56.4 332	1.0 0.0 0.933
350	335	333	1.0 0.0 0.916	49.0 65.9 −11.4 66.9 350	0.692 0.0 1.0	40.6 52.1 −24.2 57.5 335	1.0 0.0 0.917	0.667 0.0 1.0	40.0 50.8 −25.4 56.8 333	1.0 0.0 0.917
350	336	334	1.0 0.0 0.9	49.2 66.0 −11.1 66.9 350	0.708 0.0 1.0	41.0 53.0 −23.5 58.0 336	1.0 0.0 0.9	0.681 0.0 1.0	40.4 51.6 −24.7 57.2 334	1.0 0.0 0.9
350	337	335	1.0 0.0 0.883	49.4 66.1 −10.9 67.0 350	0.723 0.0 1.0	41.3 53.8 −22.7 58.4 337	1.0 0.0 0.883	0.696 0.0 1.0	40.7 52.3 −24.0 57.6 335	1.0 0.0 0.883
350	338	336	1.0 0.0 0.866	49.5 66.0 −10.4 66.9 350	0.738 0.0 1.0	41.6 54.6 −22.0 58.9 338	1.0 0.0 0.867	0.711 0.0 1.0	41.0 53.1 −23.3 58.1 336	1.0 0.0 0.867
351	339	337	1.0 0.0 0.85	49.4 65.8 −9.9 66.6 351	0.756 0.0 1.0	42.1 55.4 −21.2 59.4 339	1.0 0.0 0.85	0.725 0.0 1.0	41.3 53.9 −22.6 58.5 337	1.0 0.0 0.85
351	340	338	1.0 0.0 0.833	49.4 65.6 −9.3 66.3 351	0.78 0.0 1.0	42.8 56.4 −20.4 60.0 340	1.0 0.0 0.833	0.74 0.0 1.0	41.7 54.6 −21.9 58.9 338	1.0 0.0 0.833
352	341	339	1.0 0.0 0.816	49.4 65.4 −8.7 66.0 352	0.804 0.0 1.0	43.5 57.4 −19.7 60.7 341	1.0 0.0 0.817	0.757 0.0 1.0	42.1 55.5 −21.1 59.4 339	1.0 0.0 0.817
352	342	339	1.0 0.0 0.8	49.4 65.2 −8.2 65.7 352	0.828 0.0 1.0	44.3 58.3 −18.9 61.3 342	1.0 0.0 0.8	0.78 0.0 1.0	42.8 56.4 −20.4 60.0 339	1.0 0.0 0.8
353	343	340	1.0 0.0 0.783	49.3 65.0 −7.6 65.4 353	0.852 0.0 1.0	45.0 59.3 −18.0 62.0 343	1.0 0.0 0.783	0.802 0.0 1.0	43.5 57.3 −19.7 60.6 340	1.0 0.0 0.783
353	344	341	1.0 0.0 0.766	49.3 64.7 −7.1 65.1 353	0.877 0.0 1.0	45.7 60.2 −17.2 62.7 344	1.0 0.0 0.767	0.825 0.0 1.0	44.2 58.2 −19.0 61.3 341	1.0 0.0 0.767
354	345	342	1.0 0.0 0.75	49.3 64.5 −6.5 64.8 354	0.902 0.0 1.0	46.2 61.3 −16.3 63.5 345	1.0 0.0 0.75	0.848 0.0 1.0	44.9 59.1 −18.2 61.9 342	1.0 0.0 0.75



Data of Maximum color M in colorimetric system Laser printer output; separation cmyn6*, 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*$_d$: $h_{ab,d}$ = 33.5, 100.6, 155.5, 235.2, 290.8, 348.9; 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*
354	345	342	1.0	0.0	0.75	49.3	64.5	−6.5	64.8	354	0.902	0.0	1.0	46.2	61.3	−16.3	63.5	345	1.0	0.0	0.75	0.848	0.0	1.0	44.9	59.1	−18.2	61.9	342	1.0	0.0	0.75	
355	346	343	1.0	0.0	0.733	49.1	64.2	−5.3	64.4	355	0.926	0.0	1.0	46.7	62.4	−15.5	64.3	346	1.0	0.0	0.733	0.871	0.0	1.0	45.6	60.0	−17.4	62.5	343	1.0	0.0	0.733	
356	347	344	1.0	0.0	0.716	48.9	63.9	−4.1	64.0	356	0.951	0.0	1.0	47.2	63.4	−14.5	65.1	347	1.0	0.0	0.717	0.895	0.0	1.0	46.1	61.0	−16.6	63.2	344	1.0	0.0	0.717	
357	348	345	1.0	0.0	0.7	48.7	63.5	−2.9	63.6	357	0.976	0.0	1.0	47.7	64.5	−13.6	65.9	348	1.0	0.0	0.7	0.918	0.0	1.0	46.5	62.0	−15.7	64.0	345	1.0	0.0	0.7	
358	349	346	1.0	0.0	0.683	48.6	63.2	−1.8	63.2	358	1.0	0.0	0.996	48.2	65.4	−12.6	66.7	349	1.0	0.0	0.683	0.942	0.0	1.0	47.0	63.0	−14.9	64.8	346	1.0	0.0	0.683	
359	350	347	1.0	0.0	0.666	48.4	62.8	−0.6	62.8	359	1.0	0.0	0.927	49.0	65.9	−11.5	66.9	350	1.0	0.0	0.667	0.966	0.0	1.0	47.5	64.0	−14.0	65.5	347	1.0	0.0	0.667	
360	351	348	1.0	0.0	0.65	48.2	62.4	0.4	62.4	360	1.0	0.0	0.866	49.5	66.1	−10.4	66.9	351	1.0	0.0	0.65	0.989	0.0	1.0	48.0	65.0	−13.1	66.3	348	1.0	0.0	0.65	
361	352	349	1.0	0.0	0.633	48.0	62.0	1.5	62.0	361	1.0	0.0	0.83	49.5	65.6	−9.1	66.3	352	1.0	0.0	0.633	1.0	0.0	0.964	48.6	65.6	−12.1	66.8	349	1.0	0.0	0.633	
362	353	350	1.0	0.0	0.616	47.9	61.6	2.7	61.7	362	1.0	0.0	0.794	49.4	65.2	−7.9	65.6	353	1.0	0.0	0.617	1.0	0.0	0.899	49.3	66.0	−11.1	67.0	350	1.0	0.0	0.617	
363	354	351	1.0	0.0	0.6	47.9	61.3	3.8	61.4	363	1.0	0.0	0.757	49.3	64.7	−6.7	65.0	354	1.0	0.0	0.6	1.0	0.0	0.853	49.5	65.9	−9.9	66.7	351	1.0	0.0	0.6	
364	355	352	1.0	0.0	0.583	47.9	60.9	4.9	61.1	364	1.0	0.0	0.737	49.2	64.3	−5.5	64.6	355	1.0	0.0	0.583	1.0	0.0	0.819	49.4	65.5	−8.7	66.1	352	1.0	0.0	0.583	
365	356	353	1.0	0.0	0.566	47.9	60.6	6.0	60.9	365	1.0	0.0	0.721	49.0	64.0	−4.4	64.2	356	1.0	0.0	0.567	1.0	0.0	0.785	49.4	65.0	−7.6	65.5	353	1.0	0.0	0.567	
366	357	354	1.0	0.0	0.55	47.8	60.2	7.1	60.6	366	1.0	0.0	0.705	48.9	63.7	−3.2	63.8	357	1.0	0.0	0.55	1.0	0.0	0.75	49.3	64.6	−6.5	64.9	354	1.0	0.0	0.55	
367	358	355	1.0	0.0	0.533	47.8	59.8	8.2	60.4	367	1.0	0.0	0.689	48.7	63.4	−2.1	63.4	358	1.0	0.0	0.533	1.0	0.0	0.735	49.2	64.3	−5.4	64.5	355	1.0	0.0	0.533	
368	359	356	1.0	0.0	0.516	47.8	59.4	9.3	60.1	368	1.0	0.0	0.673	48.5	63.0	−1.0	63.0	359	1.0	0.0	0.517	1.0	0.0	0.72	49.0	64.0	−4.3	64.1	356	1.0	0.0	0.517	
370	360	352	1.0	0.0	0.5	47.8	58.9	10.4	59.9	370	1.0	0.0	0.657	48.3	62.6	0.0	62.6	360	1.0	0.0	0.5	1.0	0.0	0.828	49.5	65.6	−9.0	66.2	352	1.0	0.0	0.5	
371	361	353	1.0	0.0	0.483	47.7	58.7	11.6	59.9	371	1.0	0.0	0.641	48.2	62.2	1.1	62.2	361	1.0	0.0	0.483	1.0	0.0	0.787	49.4	65.1	−7.7	65.5	353	1.0	0.0	0.483	
372	362	354	1.0	0.0	0.466	47.7	58.5	12.8	59.9	372	1.0	0.0	0.625	48.0	61.8	2.2	61.8	362	1.0	0.0	0.467	1.0	0.0	0.749	49.3	64.5	−6.4	64.8	354	1.0	0.0	0.467	
373	363	355	1.0	0.0	0.45	47.6	58.3	14.0	59.9	373	1.0	0.0	0.609	48.0	61.5	3.2	61.6	363	1.0	0.0	0.45	1.0	0.0	0.731	49.1	64.2	−5.1	64.4	355	1.0	0.0	0.45	
374	364	356	1.0	0.0	0.433	47.5	58.0	15.2	60.0	374	1.0	0.0	0.594	48.0	61.2	4.3	61.4	364	1.0	0.0	0.433	1.0	0.0	0.713	48.9	63.9	−3.8	64.0	356	1.0	0.0	0.433	
375	365	357	1.0	0.0	0.416	47.5	57.7	16.5	60.0	375	1.0	0.0	0.578	47.9	60.9	5.3	61.1	365	1.0	0.0	0.417	1.0	0.0	0.695	48.7	63.5	−2.5	63.5	357	1.0	0.0	0.417	
377	366	358	1.0	0.0	0.4	47.4	57.3	17.7	60.0	377	1.0	0.0	0.562	47.9	60.5	6.4	60.9	366	1.0	0.0	0.4	1.0	0.0	0.677	48.6	63.1	−1.3	63.1	358	1.0	0.0	0.4	
378	367	359	1.0	0.0	0.383	47.4	57.0	18.9	60.0	378	1.0	0.0	0.547	47.9	60.2	7.4	60.6	367	1.0	0.0	0.383	1.0	0.0	0.659	48.4	62.7	−0.1	62.7	359	1.0	0.0	0.383	
379	368	360	1.0	0.0	0.366	47.4	56.8	20.0	60.2	379	1.0	0.0	0.531	47.9	59.8	8.4	60.4	368	1.0	0.0	0.367	1.0	0.0	0.641	48.2	62.2	1.1	62.2	360	1.0	0.0	0.367	
380	369	362	1.0	0.0	0.35	47.4	56.7	21.1	60.5	380	1.0	0.0	0.516	47.8	59.4	9.4	60.2	369	1.0	0.0	0.35	1.0	0.0	0.624	48.0	61.8	2.3	61.8	362	1.0	0.0	0.35	
381	370	363	1.0	0.0	0.333	47.4	56.6	22.1	60.8	381	1.0	0.0	0.5	47.8	59.0	10.4	59.9	370	1.0	0.0	0.333	1.0	0.0	0.606	48.0	61.5	3.4	61.5	363	1.0	0.0	0.333	
382	371	364	1.0	0.0	0.316	47.4	56.5	23.2	61.1	382	1.0	0.0	0.486	47.8	58.8	11.4	59.9	371	1.0	0.0	0.317	1.0	0.0	0.589	47.9	61.1	4.6	61.3	364	1.0	0.0	0.317	
383	372	365	1.0	0.0	0.3	47.5	56.4	24.3	61.4	383	1.0	0.0	0.472	47.7	58.6	12.5	60.0	372	1.0	0.0	0.3	1.0	0.0	0.571	47.9	60.7	5.8	61.0	365	1.0	0.0	0.3	
384	373	366	1.0	0.0	0.283	47.5	56.2	25.4	61.7	384	1.0	0.0	0.458	47.7	58.4	13.5	60.0	373	1.0	0.0	0.283	1.0	0.0	0.554	47.9	60.3	6.9	60.7	366	1.0	0.0	0.283	
385	374	367	1.0	0.0	0.266	47.5	56.1	26.5	62.0	385	1.0	0.0	0.444	47.6	58.2	14.5	60.0	374	1.0	0.0	0.267	1.0	0.0	0.537	47.9	59.9	8.1	60.5	367	1.0	0.0	0.267	
386	375	368	1.0	0.0	0.25	47.5	55.9	27.5	62.3	386	1.0	0.0	0.43	47.6	58.0	15.5	60.0	375	1.0	0.0	0.25	1.0	0.0	0.519	47.8	59.5	9.2	60.2	368	1.0	0.0	0.25	
386	376	369	1.0	0.0	0.233	47.5	56.0	28.4	62.8	386	1.0	0.0	0.416	47.5	57.7	16.5	60.0	376	1.0	0.0	0.233	1.0	0.0	0.502	47.8	59.1	10.3	59.9	369	1.0	0.0	0.233	
387	377	370	1.0	0.0	0.216	47.6	56.1	29.3	63.3	387	1.0	0.0	0.402	47.5	57.4	17.6	60.1	377	1.0	0.0	0.217	1.0	0.0	0.486	47.8	58.8	11.4	59.9	370	1.0	0.0	0.217	
388	378	372	1.0	0.0	0.2	47.6	56.1	30.2	63.8	388	1.0	0.0	0.388	47.5	57.1	18.6	60.1	378	1.0	0.0	0.2	1.0	0.0	0.471	47.7	58.6	12.6	60.0	372	1.0	0.0	0.2	
388	379	373	1.0	0.0	0.183	47.6	56.2	31.1	64.2	388	1.0	0.0	0.374	47.4	56.8	19.6	60.1	379	1.0	0.0	0.183	1.0	0.0	0.455	47.7	58.4	13.7	60.0	373	1.0	0.0	0.183	
389	380	374	1.0	0.0	0.166	47.6	56.3	32.0	64.7	389	1.0	0.0	0.357	47.4	56.8	20.7	60.4	380	1.0	0.0	0.167	1.0	0.0	0.439	47.6	58.1	14.9	60.0	374	1.0	0.0	0.167	
390	381	375	1.0	0.0	0.15	47.6	56.3	32.9	65.2	390	1.0	0.0	0.34	47.5	56.7	21.8	60.7	381	1.0	0.0	0.15	1.0	0.0	0.424	47.6	57.9	16.0	60.0	375	1.0	0.0	0.15	
390	382	376	1.0	0.0	0.133	47.6	56.3	33.8	65.7	390	1.0	0.0	0.323	47.5	56.6	22.9	61.0	382	1.0	0.0	0.133	1.0	0.0	0.408	47.5	57.6	17.1	60.0	376	1.0	0.0	0.133	
391	383	377	1.0	0.0	0.116	47.6	56.4	34.5	66.1	391	1.0	0.0	0.306	47.5	56.5	24.0	61.4	383	1.0	0.0	0.117	1.0	0.0	0.393	47.5	57.2	18.2	60.1	377	1.0	0.0	0.117	
391	384	378	1.0	0.0	0.1	47.6	56.5	34.9	66.5	391	1.0	0.0	0.289	47.5	56.3	25.1	61.7	384	1.0	0.0	0.1	1.0	0.0	0.377	47.4	56.9	19.4	60.1	378	1.0	0.0	0.1	
392	385	379	1.0	0.0	0.083	47.6	56.6	35.4	66.8	392	1.0	0.0	0.272	47.6	56.2	26.2	62.0	385	1.0	0.0	0.083	1.0	0.0	0.358	47.4	56.8	20.6	60.4	379	1.0	0.0	0.083	
392	386	381	1.0	0.0	0.066	47.6	56.7	35.9	67.2	392	1.0	0.0	0.255	47.6	56.0	27.3	62.3	386	1.0	0.0	0.067	1.0	0.0	0.339	47.5	56.7	21.8	60.7	381	1.0	0.0	0.067	
392	387	382	1.0	0.0	0.049	47.6	56.9	36.4	67.5	392	1.0	0.0	0.232	47.6	56.0	28.5	62.9	387	1.0	0.0	0.05	1.0	0.0	0.32	47.5	56.6	23.0	61.1	382	1.0	0.0	0.05	
392	388	383	1.0	0.0	0.033	47.6	57.0	36.8	67.9	392	1.0	0.0	0.207	47.6	56.2	29.9	63.6	388	1.0	0.0	0.033	1.0	0.0	0.301	47.5	56.4	24.2	61.4	383	1.0	0.0	0.033	
393	389	384	1.0	0.0	0.016	47.6	57.1	37.3	68.2	393	1.0	0.0	0.182	47.6	56.3	31.2	64.3	389	1.0	0.0	0.017	1.0	0.0	0.282	47.5	56.3	25.5	61.8	384	1.0	0.0	0.017	
393	390	385	1.0	0.0	0.0	47.5	57.2	37.8	68.6	393	R_d	1.0	0.0	0.158	47.7	56.3	32.5	65.0	390	R_s	1.0	0.0	0.0	1.0	0.0	0.263	47.6	56.1	26.7	62.1	385	R_e	1.0	0.0	0.0	

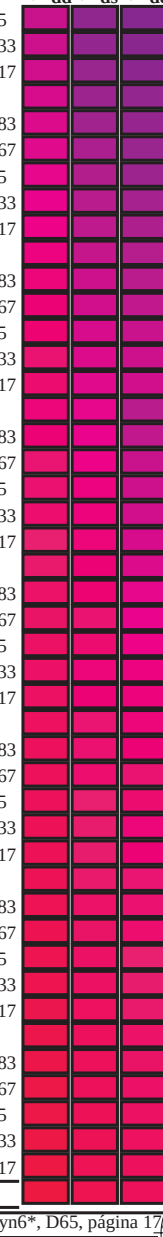


gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
círculo de tono, 48 pasos; *rgb*−*LabCh**mesas

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

n/j	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$					*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
0/648	R00Y_100_100$_{de}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4	0.0	1.0	0.735	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
1/657	R13Y_100_100$_{de}$	1.0	0.125	0.0	1.0	1.0	0.5	37	1.0	0.0	0.012	47.5	57.1	37.5	68.3	33.2	0.0	1.0	0.989	0.0	389	1.0	0.0	0.012	47.5	57.1	37.5	68.3	33.2
2/666	R25Y_100_100$_{de}$	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.108	0.0	51.4	54.8	47.7	72.6	41.0	0.0	0.886	0.987	0.001	35	1.0	0.108	0.0	51.4	54.8	47.7	72.6	41.0
3/675	R38Y_100_100$_{de}$	1.0	0.375	0.0	1.0	1.0	0.5	52	1.0	0.216	0.0	56.5	45.2	53.8	70.3	49.9	0.0	0.785	1.0	0.0	41	1.0	0.216	0.0	56.5	45.2	53.8	70.3	49.9
4/684	R50Y_100_100$_{de}$	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8	0.0	0.683	1.0	0.0	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
5/693	R63Y_100_100$_{de}$	1.0	0.625	0.0	1.0	1.0	0.5	68	1.0	0.425	0.0	67.0	25.7	63.0	68.0	67.8	0.0	0.576	1.0	0.0	55	1.0	0.425	0.0	67.0	25.7	63.0	68.0	67.8
6/702	R75Y_100_100$_{de}$	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.551	0.0	72.3	16.1	68.2	70.1	76.7	0.0	0.448	1.0	0.0	63	1.0	0.551	0.0	72.3	16.1	68.2	70.1	76.7
7/711	R88Y_100_100$_{de}$	1.0	0.875	0.0	1.0	1.0	0.5	83	1.0	0.668	0.0	77.7	7.0	73.1	73.5	84.5	0.0	0.329	1.0	0.0	70	1.0	0.668	0.0	77.7	7.0	73.1	73.5	84.5
8/720	Y00G_100_100$_{de}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3	0.0	0.231	0.999	0.001	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
9/639	Y13G_100_100$_{de}$	0.875	1.0	0.0	1.0	1.0	0.5	97	1.0	0.995	0.0	91.4	−15.5	84.4	85.8	100.4	0.0	0.0	1.0	0.0	89	1.0	0.995	0.0	91.4	−15.5	84.4	85.8	100.4
10/558	Y25G_100_100$_{de}$	0.75	1.0	0.0	1.0	1.0	0.5	104	0.697	1.0	0.0	85.8	−26.4	78.5	82.9	108.6	0.304	0.0	1.0	0.0	107	0.697	1.0	0.0	85.8	−26.4	78.5	82.9	108.6
11/477	Y38G_100_100$_{de}$	0.625	1.0	0.0	1.0	1.0	0.5	112	0.595	1.0	0.0	77.7	−34.4	64.9	73.5	117.9	0.403	0.0	1.0	0.0	113	0.595	1.0	0.0	77.7	−34.4	64.9	73.5	117.9
12/396	Y50G_100_100$_{de}$	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2	0.497	0.0	1.0	0.0	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
13/315	Y63G_100_100$_{de}$	0.375	1.0	0.0	1.0	1.0	0.5	128	0.351	1.0	0.0	65.4	−49.4	46.7	68.0	136.5	0.647	0.0	1.0	0.0	129	0.351	1.0	0.0	65.4	−49.4	46.7	68.0	136.5
14/234	Y75G_100_100$_{de}$	0.25	1.0	0.0	1.0	1.0	0.5	136	0.227	1.0	0.0	59.9	−58.2	39.3	70.2	145.9	0.755	0.0	0.974	0.125	137	0.227	1.0	0.0	59.9	−58.2	39.3	70.2	145.9
15/153	Y88G_100_100$_{de}$	0.125	1.0	0.0	1.0	1.0	0.5	143	0.04	1.0	0.0	55.2	−65.9	32.0	73.3	154.0	0.959	0.0	0.999	0.0	147	0.04	1.0	0.0	55.2	−65.9	32.0	73.3	154.0
16/72	G00C_100_100$_{de}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2	0.943	0.0	0.798	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
17/73	G13C_100_100$_{de}$	0.0	1.0	0.125	1.0	1.0	0.5	157	0.0	1.0	0.251	53.7	−63.1	12.7	64.3	168.6	1.0	0.0	0.748	0.0	163	0.0	1.0	0.251	53.7	−63.1	12.7	64.3	168.6
18/74	G25C_100_100$_{de}$	0.0	1.0	0.25	1.0	1.0	0.5	164	0.0	1.0	0.32	54.3	−59.8	5.2	60.1	175.0	1.0	0.0	0.683	0.0	168	0.0	1.0	0.32	54.3	−59.8	5.2	60.1	175.0
19/75	G38C_100_100$_{de}$	0.0	1.0	0.375	1.0	1.0	0.5	172	0.0	1.0	0.404	54.8	−55.6	−2.2	55.7	182.3	1.0	0.0	0.593	0.0	173	0.0	1.0	0.404	54.8	−55.6	−2.2	55.7	182.3
20/76	G50C_100_100$_{de}$	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6	1.0	0.0	0.498	0.0	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
21/77	G63C_100_100$_{de}$	0.0	1.0	0.625	1.0	1.0	0.5	188	0.0	1.0	0.56	55.1	−48.2	−14.6	50.4	196.9	0.959	0.0	0.417	0.125	183	0.0	1.0	0.56	55.1	−48.2	−14.6	50.4	196.9
22/78	G75C_100_100$_{de}$	0.0	1.0	0.75	1.0	1.0	0.5	196	0.0	1.0	0.622	55.3	−44.3	−19.9	48.5	204.2	1.0	0.0	0.377	0.0	188	0.0	1.0	0.622	55.3	−44.3	−19.9	48.5	204.2
23/79	G88C_100_100$_{de}$	0.0	1.0	0.875	1.0	1.0	0.5	203	0.0	1.0	0.701	55.2	−41.4	−24.5	48.1	210.5	1.0	0.0	0.286	0.0	193	0.0	1.0	0.701	55.2	−41.4	−24.5	48.1	210.5
24/80	C00B_100_100$_{de}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9	1.0	0.0	0.2	0.0	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
25/71	C13B_100_100$_{de}$	0.0	0.875	1.0	1.0	1.0	0.5	217	0.0	1.0	0.888	54.3	−36.1	−34.1	49.7	223.3	0.999	0.0	0.122	0.003	204	0.0	1.0	0.888	54.3	−36.1	−34.1	49.7	223.3
26/62	C25B_100_100$_{de}$	0.0	0.75	1.0	1.0	1.0	0.5	224	0.0	1.0	0.948	53.6	−33.1	−39.1	51.2	229.7	0.951	0.0	0.0	0.25	207	0.0	1.0	0.948	53.6	−33.1	−39.1	51.2	229.7
27/53	C38B_100_100$_{de}$	0.0	0.625	1.0	1.0	1.0	0.5	232	0.0	0.915	1.0	53.1	−28.6	−44.2	52.6	237.0	0.999	0.081	0.0	0.0	214	0.0	0.915	1.0	53.1	−28.6	−44.2	52.6	237.0
28/44	C50B_100_100$_{de}$	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3	1.0	0.313	0.0	0.0	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
29/35	C63B_100_100$_{de}$	0.0	0.375	1.0	1.0	1.0	0.5	248	0.0	0.552	1.0	48.0	−16.4	−49.6	52.2	251.6	1.0	0.443	0.0	0.0	236	0.0	0.552	1.0	48.0	−16.4	−49.6	52.2	251.6
30/26	C75B_100_100$_{de}$	0.0	0.25	1.0	1.0	1.0	0.5	256	0.0	0.434	1.0	43.6	−9.6	−49.4	50.3	258.9	1.0	0.558	0.0	0.0	244	0.0	0.434	1.0	43.6	−9.6	−49.4	50.3	258.9
31/17	C88B_100_100$_{de}$	0.0	0.125	1.0	1.0	1.0	0.5	263	0.0	0.341	1.0	40.1	−4.0	−49.2	49.4	265.3	0.999	0.655	0.0	0.0	250	0.0	0.341	1.0	40.1	−4.0	−49.2	49.4	265.3
32/8	B00M_100_100$_{de}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7	1.0	0.738	0.0	0.0	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
33/89	B13M_100_100$_{de}$	0.125	0.0	1.0	1.0	1.0	0.5	277	0.0	0.168	1.0	35.7	6.9	−47.2	47.7	278.3	0.988	0.816	0.0	0.0	260	0.0	0.168	1.0	35.7	6.9	−47.2	47.7	278.3
34/170	B25M_100_100$_{de}$	0.25	0.0	1.0	1.0	1.0	0.5	284	0.0	0.077	1.0	34.1	12.2	−45.8	47.4	285.0	0.978	0.865	0.0	0.125	266	0.0	0.077	1.0	34.1	12.2	−45.8	47.4	285.0
35/251	B38M_100_100$_{de}$	0.375	0.0	1.0	1.0	1.0	0.5	292	0.026	0.0	1.0	32.3	18.3	−44.1	47.8	292.5	0.942	0.938	0.0	0.125	271	0.026	0.0	1.0	32.3	18.3	−44.1	47.8	292.5
36/332	B50M_100_100$_{de}$	0.5	0.0	1.0	1.0	1.0	0.5	300	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1	0.858	1.0	0.0	0.0	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
37/413	B63M_100_100$_{de}$	0.625	0.0	1.0	1.0	1.0	0.5	308	0.249	0.0	1.0	31.0	30.5	−39.4	49.8	307.7	0.749	0.999	0.0	0.0	283	0.249	0.0	1.0	31.0	30.5	−39.4	49.8	307.7
38/494	B75M_100_100$_{de}$	0.75	0.0	1.0	1.0	1.0	0.5	316	0.347	0.0	1.0	33.5	36.5	−36.1	51.4	315.3	0.65	1.0	0.0	0.0	289	0.347	0.0	1.0	33.5	36.5	−36.1	51.4	315.3
39/575	B88M_100_100$_{de}$	0.875	0.0	1.0	1.0	1.0	0.5	323	0.455	0.0	1.0	36.1	41.4	−32.4	52.6	321.9	0.542	1.0	0.0	0.0	297	0.455	0.0	1.0	36.1	41.4	−32.4	52.6	321.9
40/656	M00R_100_100$_{de}$	1.0	0.0	1.0	1.0	1.0	0.5	330	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6	0.415	1.0	0.0	0.0	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
41/655	M13R_100_100$_{de}$	1.0	0.0	0.875	1.0	1.0	0.5	337	0.696	0.0	1.0	40.6	52.3	−24.1	57.6	335.2	0.304	0.999	0.0	0.0	312	0.696	0.0	1.0	40.6	52.3	−24.1	57.6	335.2
42/654	M25R_100_100$_{de}$	1.0	0.0	0.75	1.0	1.0	0.5	344	0.825	0.0	1.0	44.1	58.2	−19.0	61.2	341.8	0.176	0.998	0.0	0.0	320	0.825	0.0	1.0	44.1	58.2	−19.0	61.2	341.8
43/653	M38R_100_100$_{de}$	1.0	0.0	0.625	1.0	1.0	0.5	352	1.0	0.0	0.964	48.5	65.6	−12.2	66.7	349.4	0.0	0.999	0.033	0.0	331	1.0	0.0	0.964	48.5	65.6	−12.2	66.7	349.4
44/652	M50R_100_100$_{de}$	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0	0.0	0.994	0.174	0.001	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
45/651	M63R_100_100$_{de}$	1.0	0.0	0.375	1.0	1.0	0.5	368	1.0	0.0	0.641	48.1	62.2	1.0	62.2	0.9	0.0	0.991	0.359	0.004	350	1.0	0.0	0.641	48.1	62.2	1.0	62.2	0.9
46/650	M75R_100_100$_{de}$	1.0	0.0	0.25	1.0	1.0	0.5	376	1.0	0.0	0.501	47.8	59.0	10.2	59.9	9.8	0.0	0.999	0.495	0.0	359	1.0	0.0	0.501	47.8	59.0	10.2	59.9	9.8
47/649	M88R_100_100$_{de}$	1.0	0.0	0.125	1.0	1.0	0.5	383	1.0	0.0	0.392	47.4	57.2	18.2	60.0	17.6	0.0	1.0	0.605	0.0	367	1.0	0.0	0.392	47.4	57.2	18.2	60.0	17.6
48/648	R00Y_100_100$_{de}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4	0.0	1.0	0.735	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
49/0	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
50/91	NW_013$_{de}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
51/182	NW_025$_{de}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
52/273	NW_038$_{de}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
53/364	NW_050$_{de}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
54/455	NW_063$_{de}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
55/546	NW_075$_{de}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
56/637	NW_088$_{de}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
57/728	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

delta

n/j	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$					*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
0/648	R00Y_100_100$_{de}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4	0.0	1.0	0.735	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
1/666	R25Y_100_100$_{de}$	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.108	0.0	51.4	54.8	47.7	72.6	41.0	0.0	0.886	0.987	0.001	35	1.0	0.108	0.0	51.4	54.8	47.7	72.6	41.0
2/684	R50Y_100_100$_{de}$	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8	0.0	0.683	1.0	0.0	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
3/702	R75Y_100_100$_{de}$	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.551	0.0	72.3	16.1	68.2	70.1	76.7	0.0	0.448	1.0	0.0	63	1.0	0.551	0.0	72.3	16.1	68.2	70.1	76.7
4/720	Y00G_100_100$_{de}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3	0.0	0.231	0.999	0.001	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
5/558	Y25G_100_100$_{de}$	0.75	1.0	0.0	1.0	1.0	0.5	104	0.697	1.0	0.0	85.8	−26.4	78.5	82.9	108.6	0.304	0.0	1.0	0.0	107	0.697	1.0	0.0	85.8	−26.4	78.5	82.9	108.6
6/396	Y50G_100_100$_{de}$	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2	0.497	0.0	1.0	0.0	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
7/234	Y75G_100_100$_{de}$	0.25	1.0	0.0	1.0	1.0	0.5	136	0.227	1.0	0.0	59.9	−58.2	39.3	70.2	145.9	0.755	0.0	0.974	0.125	137	0.227	1.0	0.0	59.9	−58.2	39.3	70.2	145.9
8/72	G00B_100_100$_{de}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2	0.943	0.0	0.798	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
9/72	G00B_100_100$_{de}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2	0.943	0.0	0.798	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
10/76	G25B_100_100$_{de}$	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6	1.0	0.0	0.498	0.0	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
11/80	G50B_100_100$_{de}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9	1.0	0.0	0.2	0.0	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
12/44	G75B_100_100$_{de}$	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3	1.0	0.313	0.0	0.0	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
13/8	B00M_100_100$_{de}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7	1.0	0.738	0.0	0.0	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
14/332	B25R_100_100$_{de}$	0.5	0.0	1.0	1.0	1.0	0.5	300	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1	0.858	1.0	0.0	0.0	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
15/656	B50R_100_100$_{de}$	1.0	0.0	1.0	1.0	1.0	0.5	330	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6	0.415	1.0	0.0	0.0	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
16/652	B75R_100_100$_{de}$	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0	0.0	0.994	0.174	0.001	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
17/648	R00Y_100_100$_{de}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4	0.0	1.0	0.735	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
18/688	R00Y_100_050$_{de}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.631	71.6	28.0	13.3	31.0	25.4	0.0	0.499	0.348	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
19/706	R50Y_100_050$_{de}$	1.0	0.75	0.5	1.0	0.5	0.75	60	1.0	0.659	0.5	78.8	17.6	29.2	34.1	58.8	0.0	0.376	0.444	0.0	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
20/724	Y00G_100_050$_{de}$	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	0.884	0.5	89.7	−1.5	38.4	38.4	92.3	0.0	0.125	0.443	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
21/562	Y50G_100_050$_{de}$	0.75	1.0	0.5	1.0	0.5	0.75	120	0.75	1.0	0.5	83.4	−20.8	27.4	34.4	127.2	0.269	0.0	0.458	0.046	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
22/400	G00B_100_050$_{de}$	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.573	74.8	−32.9	10.5	34.6	162.2	0.515	0.0	0.498	0.0	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
23/404	G50B_100_050$_{de}$	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	0.895	75.4	−19.3	−14.5	24.2	216.9	0.399	0.0	0.132	0.128	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
24/368	B00R_100_050$_{de}$	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.63	1.0	66.5	0.7	−24.3	24.3	271.7	0.373	0.288	0.0	0.127	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
25/692	B50R_100_050$_{de}$	1.0	0.5	1.0	1.0	0.5	0.75	330	0.792	0.5	1.0	67.1	23.3	−14.2	27.3	328.6	0.121	0.428	0.0	0.13	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
26/688	R00Y_100_050$_{de}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.631	71.6	28.0	13.3	31.0	25.4	0.0	0.499	0.348	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
27/506	R00Y_075_050$_{de}$	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.381	53.7	28.0	13.3	31.0	25.4	0.0	0.618	0.428	0.251	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
28/524	R50Y_075_050$_{de}$	0.75	0.5	0.25	0.75	0.5	0.5	60	0.75	0.409	0.25	60.8	17.6	29.2	34.1	58.8	0.0	0.476	0.613	0.22	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
29/542	Y00G_075_050$_{de}$	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.634	0.25	71.7	−1.5	38.4	38.4	92.3	0.0	0.187	0.598	0.276	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
30/380	Y50G_075_050$_{de}$	0.5	0.75	0.25	0.75	0.5	0.5	120	0.5	0.75	0.25	65.4	−20.8	27.4	34.4	127.2	0.301	0.0	0.609	0.334	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
31/218	G00B_075_050$_{de}$	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.323	56.8	−32.9	10.5	34.6	162.2	0.604	0.0	0.579	0.286	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
32/222	G50B_075_050$_{de}$	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.645	57.4	−19.3	−14.5	24.2	216.9	0.522	0.0	0.176	0.36	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
33/186	B00R_075_050$_{de}$	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.38	0.75	48.5	0.7	−24.3	24.3	271.7	0.442	0.341	0.0	0.398	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
34/510	B50R_075_050$_{de}$	0.75	0.25	0.75	0.75	0.5	0.5	330	0.542	0.25	0.75	49.1	23.3	−14.2	27.3	328.6	0.122	0.504	0.0	0.411	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
35/506	R00Y_075_050$_{de}$	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.381	53.7	28.0	13.3	31.0	25.4	0.0	0.618	0.428	0.251	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
36/324	R00Y_050_050$_{de}$	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.131	35.7	28.0	13.3	31.0	25.4	0.0	0.799	0.583	0.542	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
37/342	R50Y_050_050$_{de}$	0.5	0.25	0.0	0.5	0.5	0.25	60	0.5	0.159	0.0	42.8	17.6	29.2	34.1	58.8	0.0	0.586	0.768	0.476	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
38/360	Y00G_050_050$_{de}$	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.384	0.0	53.7	−1.5	38.4	38.4	92.3	0.0	0.227	0.741	0.491	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
39/198	Y50G_050_050$_{de}$	0.25	0.5	0.0	0.5	0.5	0.25	120	0.25	0.5	0.0	47.4	−20.8	27.4	34.4	127.2	0.349	0.0	0.75	0.532	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
40/36	G00B_050_050$_{de}$	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.073	38.8	−32.9	10.5	34.6	162.2	0.694	0.0	0.714	0.614	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
41/40	G50B_050_050$_{de}$	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.395	39.4	−19.3	−14.5	24.2	216.9	0.626	0.0	0.211	0.61	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
42/4	B00R_050_050$_{de}$	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.13	0.5	30.5	0.7	−24.3	24.3	271.7	0.591	0.497	0.0	0.652	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
43/328	B50R_050_050$_{de}$	0.5	0.0	0.5	0.5	0.5	0.25	330	0.292	0.0	0.5	31.1	23.3	−14.2	27.3	328.6	0.158	0.714	0.0	0.651	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
44/324	R00Y_050_050$_{de}$	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.131	35.7	28.0	13.3	31.0	25.4	0.0	0.799	0.583	0.542	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
45/0	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
46/91	NW_013$_{de}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
47/182	NW_025$_{de}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
48/273	NW_038$_{de}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
49/364	NW_050$_{de}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
50/455	NW_063$_{de}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
51/546	NW_075$_{de}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
52/637	NW_088$_{de}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
53/728	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

delta

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, $\Delta E'$*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

2−1131830−F0

TUB matrícula: 20130201-QS49/QS49L0FP.PDF /.PS
aplicación para la medida salida de impresora láser, separación cmyn6* (CMYK)
TUB material: code=rha4ta

n=j	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$				*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$			
0	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1	B00R_012_012$_{de}$	0.0	0.0	0.125	0.125	0.125	0.062	270	0.0	0.032	0.125	25.5	0.1	−6.0	6.0	271.7	0.347	0.246	0.0	0.937	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
2	B00R_025_025$_{de}$	0.0	0.0	0.25	0.25	0.25	0.125	270	0.0	0.065	0.25	27.2	0.3	−12.1	12.1	271.7	0.453	0.37	0.0	0.835	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
3	B00R_037_037$_{de}$	0.0	0.0	0.375	0.375	0.375	0.187	270	0.0	0.097	0.375	28.8	0.5	−18.2	18.2	271.7	0.438	0.38	0.0	0.74	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
4	B00R_050_050$_{de}$	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.13	0.5	30.5	0.7	−24.3	24.3	271.7	0.591	0.497	0.0	0.652	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
5	B00R_062_062$_{de}$	0.0	0.0	0.625	0.625	0.625	0.312	270	0.0	0.163	0.625	32.2	0.9	−30.4	30.4	271.7	0.729	0.579	0.0	0.563	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
6	B00R_075_075$_{de}$	0.0	0.0	0.75	0.75	0.75	0.375	270	0.0	0.195	0.75	33.9	1.1	−36.5	36.5	271.7	0.827	0.62	0.0	0.485	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
7	B00R_087_087$_{de}$	0.0	0.0	0.875	0.875	0.875	0.437	270	0.0	0.228	0.875	35.6	1.2	−42.6	42.6	271.7	0.902	0.643	0.0	0.388	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
8	B00R_100_100$_{de}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7	1.0	0.738	0.0	0.0	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
9	G00B_012_012$_{de}$	0.0	0.125	0.0	0.125	0.125	0.062	150	0.0	0.125	0.018	27.5	−8.2	2.6	8.6	162.2	0.279	0.0	0.279	0.944	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
10	G50B_012_012$_{de}$	0.0	0.125	0.125	0.125	0.125	0.062	210	0.0	0.125	0.098	27.7	−4.8	−3.6	6.0	216.9	0.313	0.0	0.125	0.935	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
11	G75B_025_025$_{de}$	0.0	0.125	0.25	0.25	0.25	0.125	240	0.0	0.171	0.25	30.8	−5.8	−12.1	13.4	244.3	0.426	0.095	0.0	0.799	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
12	G84B_037_037$_{de}$	0.0	0.125	0.375	0.375	0.375	0.187	251	0.0	0.19	0.375	32.3	−5.1	−18.5	19.2	254.3	0.456	0.216	0.0	0.724	239	0.0	0.508	1.0	46.4	−13.8	−49.4	51.3	254.3
13	G88B_050_050$_{de}$	0.0	0.125	0.5	0.5	0.5	0.25	256	0.0	0.217	0.5	33.7	−4.8	−24.7	25.1	258.9	0.614	0.357	0.0	0.64	244	0.0	0.434	1.0	43.6	−9.6	−49.4	50.3	258.9
14	G90B_062_062$_{de}$	0.0	0.125	0.625	0.625	0.625	0.312	259	0.0	0.244	0.625	35.1	−4.5	−30.8	31.1	261.6	0.75	0.457	0.0	0.545	247	0.0	0.39	1.0	42.0	−7.2	−49.3	49.8	261.6
15	G92B_075_075$_{de}$	0.0	0.125	0.75	0.75	0.75	0.375	261	0.0	0.273	0.75	36.7	−4.1	−36.9	37.1	263.5	0.841	0.521	0.0	0.443	248	0.0	0.364	1.0	41.0	−5.5	−49.2	49.5	263.5
16	G93B_087_087$_{de}$	0.0	0.125	0.875	0.875	0.875	0.437	262	0.0	0.308	0.875	38.5	−4.1	−43.1	43.3	264.4	0.908	0.551	0.0	0.322	249	0.0	0.352	1.0	40.6	−4.7	−49.2	49.4	264.4
17	G94B_100_100$_{de}$	0.0	0.125	1.0	1.0	1.0	0.5	263	0.0	0.341	1.0	40.1	−4.0	−49.2	49.4	265.3	0.999	0.655	0.0	0.0	250	0.0	0.341	1.0	40.1	−4.0	−49.2	49.4	265.3
18	G00B_025_025$_{de}$	0.0	0.25	0.0	0.25	0.25	0.125	150	0.0	0.25	0.036	31.3	−16.4	5.2	17.3	162.2	0.484	0.0	0.484	0.874	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
19	G25B_025_025$_{de}$	0.0	0.25	0.125	0.25	0.25	0.125	180	0.0	0.25	0.124	31.6	−12.9	−2.1	13.0	189.6	0.522	0.0	0.248	0.807	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
20	G50B_025_025$_{de}$	0.0	0.25	0.25	0.25	0.25	0.125	210	0.0	0.25	0.197	31.6	−9.6	−7.2	12.1	216.9	0.471	0.0	0.163	0.811	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
21	G65B_037_037$_{de}$	0.0	0.25	0.375	0.375	0.375	0.187	229	0.0	0.375	0.372	34.8	−11.4	−15.9	19.6	234.3	0.448	0.0	0.039	0.73	209	0.0	1.0	0.992	53.2	−30.5	−42.5	52.3	234.3
22	G75B_050_050$_{de}$	0.0	0.25	0.5	0.5	0.5	0.25	240	0.0	0.343	0.5	37.7	−11.6	−24.3	26.9	244.3	0.63	0.147	0.0	0.634	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
23	G80B_062_062$_{de}$	0.0	0.25	0.625	0.625	0.625	0.312	247	0.0	0.354	0.625	39.2	−10.8	−31.0	32.8	250.7	0.754	0.295	0.0	0.517	235	0.0	0.567	1.0	48.5	−17.3	−49.6	52.5	250.7
24	G84B_075_075$_{de}$	0.0	0.25	0.75	0.75	0.75	0.375	251	0.0	0.381	0.75	40.8	−10.3	−37.0	38.5	254.3	0.848	0.388	0.0	0.399	239	0.0	0.508	1.0	46.4	−13.8	−49.4	51.3	254.3
25	G86B_087_087$_{de}$	0.0	0.25	0.875	0.875	0.875	0.437	254	0.0	0.406	0.875	42.1	−9.8	−43.2	44.4	257.1	0.915	0.448	0.0	0.296	242	0.0	0.464	1.0	44.7	−11.2	−49.4	50.7	257.1
26	G88B_100_100$_{de}$	0.0	0.25	1.0	1.0	1.0	0.5	256	0.0	0.434	1.0	43.6	−9.6	−49.4	50.3	258.9	1.0	0.558	0.0	0.0	244	0.0	0.434	1.0	43.6	−9.6	−49.4	50.3	258.9
27	G00B_037_037$_{de}$	0.0	0.375	0.0	0.375	0.375	0.187	150	0.0	0.375	0.055	35.0	−24.7	7.9	25.9	162.2	0.686	0.0	0.686	0.75	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
28	G15B_037_037$_{de}$	0.0	0.375	0.125	0.375	0.375	0.187	169	0.0	0.375	0.138	35.4	−21.4	0.1	21.4	179.5	0.637	0.0	0.506	0.713	171	0.0	1.0	0.37	54.7	−57.0	0.4	57.0	179.5
29	G34B_037_037$_{de}$	0.0	0.375	0.25	0.375	0.375	0.187	191	0.0	0.375	0.218	35.6	−17.5	−6.2	18.6	199.6	0.587	0.0	0.33	0.717	185	0.0	1.0	0.583	55.2	−46.8	−16.7	49.7	199.6
30	G50B_037_037$_{de}$	0.0	0.375	0.375	0.375	0.375	0.187	210	0.0	0.375	0.296	35.5	−14.5	−10.9	18.1	216.9	0.528	0.0	0.199	0.721	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
31	G61B_050_050$_{de}$	0.0	0.375	0.5	0.5	0.5	0.25	224	0.0	0.5	0.474	38.7	−16.5	−19.5	25.6	229.7	0.624	0.0	0.075	0.646	207	0.0	1.0	0.948	53.6	−33.1	−39.1	51.2	229.7
32	G69B_062_062$_{de}$	0.0	0.375	0.625	0.625	0.625	0.312	233	0.0	0.547	0.625	42.1	−17.4	−27.9	32.9	237.9	0.725	0.062	0.0	0.554	216	0.0	0.875	1.0	53.1	−27.9	−44.7	52.7	237.9
33	G75B_075_075$_{de}$	0.0	0.375	0.75	0.75	0.75	0.375	240	0.0	0.514	0.75	44.7	−17.5	−36.4	40.4	244.3	0.853	0.22	0.0	0.385	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
34	G79B_087_087$_{de}$	0.0	0.375	0.875	0.875	0.875	0.437	245	0.0	0.522	0.875	46.3	−16.7	−43.4	46.5	248.9	0.922	0.348	0.0	0.263	233	0.0	0.597	1.0	49.6	−19.1	−49.6	53.1	248.9
35	G81B_100_100$_{de}$	0.0	0.375	1.0	1.0	1.0	0.5	248	0.0	0.552	1.0	48.0	−16.4	−49.6	52.2	251.6	1.0	0.443	0.0	0.0	236	0.0	0.552	1.0	48.0	−16.4	−49.6	52.2	251.6
36	G00B_050_050$_{de}$	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.073	38.8	−32.9	10.5	34.6	162.2	0.694	0.0	0.714	0.614	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
37	G11B_050_050$_{de}$	0.0	0.5	0.125	0.5	0.5	0.25	164	0.0	0.5	0.16	39.0	−29.9	2.6	30.0	175.0	0.687	0.0	0.558	0.597	168	0.0	1.0	0.32	54.3	−59.8	5.2	60.1	175.0
38	G25B_050_050$_{de}$	0.0	0.5	0.25	0.5	0.5	0.25	180	0.0	0.5	0.248	39.4	−25.8	−4.3	26.1	189.6	0.662	0.0	0.425	0.584	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
39	G38B_050_050$_{de}$	0.0	0.5	0.375	0.5	0.5	0.25	196	0.0	0.5	0.311	39.6	−22.1	−9.9	24.2	204.2	0.635	0.0	0.308	0.586	188	0.0	1.0	0.622	55.3	−44.3	−19.9	48.5	204.2
40	G50B_050_050$_{de}$	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.395	39.4	−19.3	−14.5	24.2	216.9	0.626	0.0	0.211	0.61	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
41	G59B_062_062$_{de}$	0.0	0.5	0.625	0.625	0.625	0.312	221	0.0	0.625	0.576	42.6	−21.5	−23.1	31.6	227.0	0.715	0.0	0.112	0.556	206	0.0	1.0	0.922	53.9	−34.5	−37.0	50.6	227.0
42	G65B_075_075$_{de}$	0.0	0.5	0.75	0.75	0.75	0.375	229	0.0	0.75	0.744	45.8	−22.8	−31.8	39.2	234.3	0.805	0.0	0.001	0.479	209	0.0	1.0	0.992	53.2	−30.5	−42.5	52.3	234.3
43	G70B_087_087$_{de}$	0.0	0.5	0.875	0.875	0.875	0.437	235	0.0	0.707	0.875	49.3	−23.5	−40.4	46.8	239.7	0.908	0.183	0.0	0.292	220	0.0	0.808	1.0	53.0	−26.9	−46.2	53.5	239.7
44	G75B_100_100$_{de}$	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3	1.0	0.313	0.0	0.0	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
45	G00B_062_062$_{de}$	0.0	0.625	0.0	0.625	0.625	0.312	150	0.0	0.625	0.091	42.5	−41.2	13.2	43.2	162.2	0.728	0.0	0.727	0.499	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
46	G09B_062_062$_{de}$	0.0	0.625	0.125	0.625	0.625	0.312	161	0.0	0.625	0.181	42.7	−38.3	5.2	38.7	172.2	0.742	0.0	0.593	0.499	166	0.0	1.0	0.29	54.1	−61.3	8.3	61.9	172.2
47	G19B_062_062$_{de}$	0.0	0.625	0.25	0.625	0.625	0.312	173	0.0	0.625	0.26	43.2	−34.5	−1.9	34.5	183.2	0.733	0.0	0.473	0.487	174	0.0	1.0	0.416	54.8	−55.2	−3.1	55.3	183.2
48	G30B_062_062$_{de}$	0.0	0.625	0.375	0.625	0.625	0.312	187	0.0	0.625	0.345	43.4	−30.4	−8.7	31.6	195.9	0.726	0.0	0.374	0.494	183	0.0	1.0	0.552	55.1	−48.7	−13.9	50.6	195.9
49	G40B_062_062$_{de}$	0.0	0.625	0.5	0.625	0.625	0.312	199	0.0	0.625	0.41	43.5	−26.9	−13.6	30.2	206.9	0.714	0.0	0.297	0.504	190	0.0	1.0	0.656	55.3	−43.1	−21.9	48.3	206.9
50	G50B_062_062$_{de}$	0.0	0.625	0.625	0.625	0.625	0.312	210	0.0	0.625	0.494	43.3	−24.1	−18.2	30.2	216.9	0.709	0.0	0.219	0.524	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
51	G57B_075_075$_{de}$	0.0	0.625	0.75	0.75	0.75	0.375	219	0.0	0.75	0.679	46.5	−26.5	−26.7	37.6	225.1	0.795	0.0	0.117	0.459	205	0.0	1.0	0.905	54.1	−35.3	−35.6	50.2	225.1
52	G63B_087_087$_{de}$	0.0	0.625	0.875	0.875	0.875	0.437	226	0.0	0.875	0.845	49.7	−28.1	−35.4	45.2	231.5	0.87	0.0	0.0	0.399	208	0.0	1.0	0.966	53.4	−32.1	−40.5	51.6	231.5
53	G68B_100_100$_{de}$	0.0	0.625	1.0	1.0	1.0	0.5	232	0.0	0.915	1.0	53.1	−28.6	−44.2	52.6	237.0	0.999	0.081	0.0	0.0	214	0.0	0.915	1.0	53.1	−28.6	−44.2	52.6	237.0
54	G00B_075_075$_{de}$	0.0	0.75	0.0	0.75	0.75	0.375	150	0.0	0.75	0.11	46.3	−49.4	15.8	51.9	162.2	0.794	0.0	0.731	0.412	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
55	G07B_075_075$_{de}$	0.0	0.75	0.125	0.75	0.75	0.375	159	0.0	0.75	0.203	46.4	−46.7	7.8	47.3	170.4	0.794	0.0	0.609	0.415	165	0.0	1.0	0.271	53.9	−62.2	10.4	63.1	170.4
56	G15B_075_075$_{de}$	0.0	0.75	0.25	0.75	0.75	0.375	169	0.0	0.75	0.277	47.0	−42.8	0.3	42.8	179.5	0.787	0.0	0.503	0.408	171	0.0	1.0	0.37	54.7	−57.0	0.4	57.0	179.5
57	G25B_075_075$_{de}$	0.0	0.75	0.375	0.75	0.75	0.375	180	0.0	0.75	0.373	47.2	−38.7	−6.5	39.2	189.6	0.785	0.0	0.423	0.414	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
58	G34B_075_075$_{de}$	0.0	0.75	0.5	0.75	0.75	0.375	191	0.0	0.75	0.437	47.4	−35.1	−12.5	37.3	199.6	0.784	0.0	0.352	0.422	185	0.0	1.0	0.583	55.2	−46.8	−16.7	49.7	199.6
59	G42B_075_075$_{de}$	0.0	0.75	0.625	0.75	0.75	0.375	201	0.0	0.75	0.509	47.4	−31.7	−17.4	36.2	208.7	0.779	0.0	0.282	0.428	191	0.0	1.0	0.678	55.3	−42.3	−23.2	48.2	208.7
60	G50B_075_075$_{de}$	0.0	0.75	0.75	0.75	0.75	0.375	210	0.0	0.75	0.593	47.1	−29.0	−21.8	36.3	216.9	0.782	0.0	0.203	0.44	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
61	G56B_087_087$_{de}$	0.0	0.75	0.875	0.875	0.875	0.437	218	0.0	0.875	0.784	50.4	−31.3	−30.5	43.7	224.2	0.853	0.0	0.12	0.376	204	0.0	1.0	0.896	54.2	−35.7	−34.9	49.9	224.2
62	G61B_100_100$_{de}$	0.0	0.75	1.0	1.0	1.0	0.5	224	0.0	1.0	0.948	53.6	−33.1	−39.1	51.2	229.7	0.951	0.0	0.0	0.25	207	0.0	1.0	0.948	53.6	−33.1	−39.1	51.2	229.7
63	G00B_087_087$_{de}$	0.0	0.875	0.0	0.875	0.875	0.437	150	0.0	0.875	0.128	50.0	−57.7	18.5	60.6	162.2	0.877	0.0	0.782	0.25	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
64	G06B_087_087$_{de}$	0.0	0.875	0.125	0.875	0.875	0.437	158	0.0	0.875	0.228	50.1	−54.8	10.1	55.7	169.5	0.875	0.0	0.635	0.25	164	0.0	1.0	0.261	53.8	−62.7	11.5	63.7	169.5
65	G13B_087_087$_{de}$	0.0	0.875	0.25	0.875	0.875	0.437	166	0.0	0.875	0.298	50.6	−51.4	2.8	51.5	176.8	0.873	0.0	0.59	0.25	169	0.0	1.0	0.34	54.5	−58.8	3.2	58.9	176.8
66	G20B_087_087$_{de}$	0.0	0.875	0.375	0.875	0.875	0.437	175	0.0	0.875	0.384	51.0	−47.4	−4.1	47.6	185.0	0.849	0.0	0.476	0.317	176	0.0	1.0	0.439	54.9	−54.2	−4.7	54.4	185.0
67	G29B_087_087$_{de}$	0.0	0.875	0.5	0.875	0.875	0.437	185	0.0	0.875	0.47	51.2	−43.3	−10.9	44.7	194.1	0.845	0.0	0.401	0.328	182	0.0	1.0	0.537	55.1	−49.5	−12.5	51.1	194.1
68	G36B_087_087$_{de}$	0.0	0.875	0.625	0.875	0.875	0.437	194	0.0	0.875	0.531	51.3	−39.6	−16.3	42.9	202.3	0.875	0.0	0.315	0.25	187	0.0	1.0	0.607	55.3	−45.3	−18.6	49.0	202.3
69	G43B_087_087$_{de}$	0.0	0.875	0.75	0.875	0.875	0.437	202	0.0	0.875	0.603	51.3	−36.6	−20.8	42.1	209.6	0.839	0.0	0.26	0.35	192	0.0	1.0	0.69	55.2	−41.8	−23.8	48.2	209.6
70	G50B_087_087$_{de}$	0.0	0.875	0.875	0.875	0.875	0.437	210	0.0	0.875	0.692	51.0	−33.8	−25.5	42.3	216.9	0.874	0.0	0.25	0.0	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
71	G55B_100_100$_{de}$	0.0	0.875	1.0	1.0	1.0	0.5	217	0.0	1.0	0.888	54.3	−36.1	−34.1	49.7	223.3	0.999	0.0	0.122	0.003	204	0.0	1.0	0.888	54.3	−36.1	−34.1	49.7	223.3
72	G00B_100_100$_{de}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2	0.943	0.0	0.798	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
73	G05B_100_100$_{de}$	0.0	1.0	0.125	1.0	1.0	0.5	157	0.0	1.0	0.251	53.7	−63.1	12.7	64.3	168.6	1.0	0.0	0.748	0.0	163	0.0	1.0	0.251	53.7	−63.1	12.7	64.3	168.6
74	G11B_100_100$_{de}$	0.0	1.0	0.25	1.0	1.0	0.5	164	0.0	1.0	0.32	54.3	−59.8	5.2	60.1	175.0	1.0	0.0	0.683	0.0	168	0.0	1.0	0.32	54.3	−59.8	5.2	60.1	175.0
75	G18B_100_100$_{de}$	0.0	1.0	0.375	1.0	1.0	0.5	172	0.0	1.0	0.404	54.8	−55.6	−2.2	55.7	182.3	1.0	0.0	0.593	0.0	173	0.0	1.0	0.404	54.8	−55.6	−2.2	55.7	182.3
76	G25B_100_100$_{de}$	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6	1.0	0.0	0.498	0.0	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
77	G31B_100_100$_{de}$	0.0	1.0	0.625	1.0	1.0	0.5	188	0.0	1.0	0.56	55.1	−48.2	−14.6	50.4	196.9	0.959	0.0	0.417	0.125	183	0.0	1.0	0.56	55.1	−48.2	−14.6	50.4	196.9
78	G38B_100_100$_{de}$	0.0	1.0	0.75	1.0	1.0	0.5	196	0.0	1.0	0.622	55.3	−44.3	−19.9	48.5	204.2	1.0	0.0	0.377	0.0	188	0.0	1.0	0.622	55.3	−44.3	−19.9	48.5	204.2
79	G44B_100_100$_{de}$	0.0	1.0	0.875	1.0	1.0	0.5	203	0.0	1.0	0.701	55.2	−41.4	−24.5	48.1	210.5	1.0	0.0	0.286	0.0	193	0.0	1.0	0.701	55.2	−41.4	−24.5	48.1	210.5
80	G50B_100_100$_{de}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9	1.0	0.0	0.2	0.0	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9

delta

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$				*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
81	R00Y_012_012$_{de}$	0.125	0.0	0.0	0.125	0.125	0.062	390	0.125	0.0	0.032	26.8	7.0	3.3	7.7	25.4	0.0	0.468	0.339	0.872	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
82	B50R_012_012$_{de}$	0.125	0.0	0.125	0.125	0.125	0.062	330	0.073	0.0	0.125	25.6	5.8	−3.5	6.8	328.6	0.018	0.379	0.0	0.924	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
83	B25R_025_025$_{de}$	0.125	0.0	0.25	0.25	0.25	0.125	300	0.034	0.0	0.25	25.7	6.1	−10.4	12.1	300.1	0.306	0.481	0.0	0.874	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
84	B15R_037_037$_{de}$	0.125	0.0	0.375	0.375	0.375	0.187	289	0.0	0.005	0.375	27.2	6.0	−16.8	17.8	289.7	0.379	0.519	0.0	0.755	269	0.0	0.014	1.0	32.8	16.1	−44.8	47.6	289.7
85	B11R_050_050$_{de}$	0.125	0.0	0.5	0.5	0.5	0.25	284	0.0	0.038	0.5	28.9	6.1	−22.9	23.7	285.0	0.524	0.601	0.0	0.662	266	0.0	0.077	1.0	34.1	12.2	−45.8	47.4	285.0
86	B09R_062_062$_{de}$	0.125	0.0	0.625	0.625	0.625	0.312	281	0.0	0.072	0.625	30.7	6.2	−28.9	29.5	282.1	0.678	0.672	0.0	0.573	263	0.0	0.115	1.0	34.8	9.9	−46.2	47.3	282.1
87	B07R_075_075$_{de}$	0.125	0.0	0.75	0.75	0.75	0.375	279	0.0	0.106	0.75	32.4	6.3	−35.0	35.6	280.2	0.785	0.703	0.0	0.499	262	0.0	0.141	1.0	35.3	8.4	−46.7	47.5	280.2
88	B06R_087_087$_{de}$	0.125	0.0	0.875	0.875	0.875	0.437	278	0.0	0.135	0.875	34.0	6.7	−41.1	41.6	279.3	0.871	0.725	0.0	0.411	261	0.0	0.155	1.0	35.5	7.7	−47.0	47.6	279.3
89	B05R_100_100$_{de}$	0.125	0.0	1.0	1.0	1.0	0.5	277	0.0	0.168	1.0	35.7	6.9	−47.2	47.7	278.3	0.988	0.816	0.0	0.0	260	0.0	0.168	1.0	35.7	6.9	−47.2	47.7	278.3
90	Y00G_012_012$_{de}$	0.125	0.125	0.0	0.125	0.125	0.062	90	0.125	0.096	0.0	31.3	−0.3	9.6	9.6	92.3	0.0	0.143	0.445	0.828	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
91	NW_012$_{de}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
92	B00R_025_012$_{de}$	0.125	0.125	0.25	0.25	0.125	0.187	270	0.124	0.157	0.25	34.5	0.1	−6.0	6.0	271.7	0.11	0.11	0.0	0.778	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
93	B00R_037_025$_{de}$	0.125	0.125	0.375	0.375	0.25	0.25	270	0.124	0.19	0.375	36.2	0.3	−12.1	12.1	271.7	0.267	0.229	0.0	0.704	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
94	B00R_050_037$_{de}$	0.125	0.125	0.5	0.5	0.375	0.312	270	0.124	0.222	0.5	37.8	0.5	−18.2	18.2	271.7	0.321	0.273	0.0	0.628	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
95	B00R_062_050$_{de}$	0.125	0.125	0.625	0.625	0.5	0.375	270	0.125	0.255	0.625	39.5	0.7	−24.3	24.3	271.7	0.491	0.394	0.0	0.531	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
96	B00R_075_062$_{de}$	0.125	0.125	0.75	0.75	0.625	0.437	270	0.125	0.288	0.75	41.2	0.9	−30.4	30.4	271.7	0.66	0.509	0.0	0.401	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
97	B00R_087_075$_{de}$	0.125	0.125	0.875	0.875	0.75	0.5	270	0.125	0.32	0.875	42.9	1.1	−36.5	36.5	271.7	0.762	0.579	0.0	0.261	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
98	B00R_100_087$_{de}$	0.125	0.125	1.0	1.0	0.875	0.562	270	0.125	0.353	1.0	44.6	1.2	−42.6	42.6	271.7	0.755	0.564	0.0	0.139	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
99	Y50G_025_025$_{de}$	0.125	0.25	0.0	0.25	0.25	0.125	120	0.125	0.25	0.0	35.6	−10.4	13.7	17.2	127.2	0.271	0.0	0.599	0.779	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
100	G00B_025_012$_{de}$	0.125	0.25	0.125	0.25	0.125	0.187	150	0.124	0.25	0.143	36.5	−8.2	2.6	8.6	162.2	0.262	0.0	0.333	0.765	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
101	G50B_025_012$_{de}$	0.125	0.25	0.25	0.25	0.125	0.187	210	0.124	0.25	0.223	36.7	−4.8	−3.6	6.0	216.9	0.183	0.0	0.103	0.763	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
102	G75B_037_025$_{de}$	0.125	0.25	0.375	0.375	0.25	0.25	240	0.124	0.296	0.375	39.8	−5.8	−12.1	13.4	244.3	0.286	0.043	0.0	0.684	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
103	G84B_050_037$_{de}$	0.125	0.25	0.5	0.5	0.375	0.312	251	0.124	0.315	0.5	41.3	−5.1	−18.5	19.2	254.3	0.343	0.145	0.0	0.619	239	0.0	0.508	1.0	46.4	−13.8	−49.4	51.3	254.3
104	G88B_062_050$_{de}$	0.125	0.25	0.625	0.625	0.5	0.375	256	0.125	0.342	0.625	42.7	−4.8	−24.7	25.1	258.9	0.527	0.286	0.0	0.515	244	0.0	0.434	1.0	43.6	−9.6	−49.4	50.3	258.9
105	G90B_075_062$_{de}$	0.125	0.25	0.75	0.75	0.625	0.437	259	0.125	0.369	0.75	44.1	−4.5	−30.8	31.1	261.6	0.684	0.414	0.0	0.366	247	0.0	0.39	1.0	42.0	−7.2	−49.3	49.8	261.6
106	G92B_087_075$_{de}$	0.125	0.25	0.875	0.875	0.75	0.5	261	0.125	0.398	0.875	45.7	−4.1	−36.9	37.1	263.5	0.756	0.479	0.0	0.226	248	0.0	0.364	1.0	41.0	−5.5	−49.2	49.5	263.5
107	G93B_100_087$_{de}$	0.125	0.25	1.0	1.0	0.875	0.562	262	0.125	0.433	1.0	47.5	−4.1	−43.1	43.3	264.4	0.747	0.46	0.0	0.038	249	0.0	0.352	1.0	40.6	−4.7	−49.2	49.4	264.4
108	Y68G_037_037$_{de}$	0.125	0.375	0.0	0.375	0.375	0.187	131	0.115	0.375	0.0	38.6	−19.8	16.5	25.8	140.0	0.418	0.0	0.697	0.681	132	0.308	1.0	0.0	63.4	−52.8	44.2	68.9	140.0
109	G00B_037_025$_{de}$	0.125	0.375	0.125	0.375	0.25	0.25	150	0.124	0.375	0.161	40.3	−16.4	5.2	17.3	162.2	0.425	0.0	0.487	0.656	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
110	G25B_037_025$_{de}$	0.125	0.375	0.25	0.375	0.25	0.25	180	0.124	0.375	0.249	40.6	−12.9	−2.1	13.0	189.6	0.387	0.0	0.308	0.653	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
111	G50B_037_025$_{de}$	0.125	0.375	0.375	0.375	0.25	0.25	210	0.124	0.375	0.322	40.6	−9.6	−7.2	12.1	216.9	0.332	0.0	0.152	0.669	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
112	G65B_050_037$_{de}$	0.125	0.375	0.5	0.5	0.375	0.312	229	0.124	0.5	0.497	43.8	−11.4	−15.9	19.6	234.3	0.37	0.0	0.043	0.624	209	0.0	1.0	0.992	53.2	−30.5	−42.5	52.3	234.3
113	G75B_062_050$_{de}$	0.125	0.375	0.625	0.625	0.5	0.375	240	0.125	0.468	0.625	46.7	−11.6	−24.3	26.9	244.3	0.545	0.111	0.0	0.5	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
114	G80B_075_062$_{de}$	0.125	0.375	0.75	0.75	0.625	0.437	247	0.125	0.479	0.75	48.2	−10.8	−31.0	32.8	250.7	0.683	0.254	0.0	0.349	235	0.0	0.567	1.0	48.5	−17.3	−49.6	52.5	250.7
115	G84B_087_075$_{de}$	0.125	0.375	0.875	0.875	0.75	0.5	251	0.125	0.506	0.875	49.7	−10.3	−37.0	38.5	254.3	0.742	0.361	0.0	0.194	239	0.0	0.508	1.0	46.4	−13.8	−49.4	51.3	254.3
116	G86B_100_087$_{de}$	0.125	0.375	1.0	1.0	0.875	0.562	254	0.125	0.531	1.0	51.1	−9.8	−43.2	44.4	257.1	0.746	0.391	0.0	0.016	242	0.0	0.464	1.0	44.7	−11.2	−49.4	50.7	257.1
117	Y76G_050_050$_{de}$	0.125	0.5	0.0	0.5	0.5	0.25	136	0.113	0.5	0.0	41.9	−29.1	19.6	35.1	145.9	0.521	0.0	0.761	0.56	137	0.227	1.0	0.0	59.9	−58.2	39.3	70.2	145.9
118	G00B_050_037$_{de}$	0.125	0.5	0.125	0.5	0.375	0.312	150	0.124	0.5	0.18	44.0	−24.7	7.9	25.9	162.2	0.539	0.0	0.582	0.533	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
119	G15B_050_037$_{de}$	0.125	0.5	0.25	0.5	0.375	0.312	169	0.124	0.5	0.263	44.4	−21.4	0.1	21.4	179.5	0.502	0.0	0.417	0.534	171	0.0	1.0	0.37	54.7	−57.0	0.4	57.0	179.5
120	G34B_050_037$_{de}$	0.125	0.5	0.375	0.5	0.375	0.312	191	0.124	0.5	0.343	44.6	−17.5	−6.2	18.6	199.6	0.467	0.0	0.29	0.558	185	0.0	1.0	0.583	55.2	−46.8	−16.7	49.7	199.6
121	G50B_050_037$_{de}$	0.125	0.5	0.5	0.5	0.375	0.312	210	0.124	0.5	0.421	44.5	−14.5	−10.9	18.1	216.9	0.426	0.0	0.182	0.585	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
122	G61B_062_050$_{de}$	0.125	0.5	0.625	0.625	0.5	0.375	224	0.125	0.625	0.599	47.7	−16.5	−19.5	25.6	229.7	0.543	0.0	0.085	0.504	207	0.0	1.0	0.948	53.6	−33.1	−39.1	51.2	229.7
123	G69B_075_062$_{de}$	0.125	0.5	0.75	0.75	0.625	0.437	233	0.125	0.672	0.75	51.1	−17.4	−27.9	32.9	237.9	0.654	0.036	0.0	0.397	216	0.0	0.875	1.0	53.1	−27.9	−44.7	52.7	237.9
124	G75B_087_075$_{de}$	0.125	0.5	0.875	0.875	0.75	0.5	240	0.125	0.639	0.875	53.7	−17.5	−36.4	40.4	244.3	0.769	0.194	0.0	0.187	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
125	G79B_100_087$_{de}$	0.125	0.5	1.0	1.0	0.875	0.562	245	0.125	0.647	1.0	55.3	−16.7	−43.4	46.5	248.9	0.782	0.292	0.0	0.001	233	0.0	0.597	1.0	49.6	−19.1	−49.6	53.1	248.9
126	Y81G_062_062$_{de}$	0.125	0.625	0.0	0.625	0.625	0.312	139	0.098	0.625	0.0	45.1	−38.1	22.5	44.2	149.4	0.613	0.0	0.812	0.452	141	0.157	1.0	0.0	57.9	−60.9	36.0	70.8	149.4
127	G00B_062_050$_{de}$	0.125	0.625	0.125	0.625	0.5	0.375	150	0.125	0.625	0.198	47.8	−32.9	10.5	34.6	162.2	0.641	0.0	0.633	0.417	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
128	G11B_062_050$_{de}$	0.125	0.625	0.25	0.625	0.5	0.375	164	0.125	0.625	0.285	48.0	−29.9	2.6	30.0	175.0	0.628	0.0	0.498	0.423	168	0.0	1.0	0.32	54.3	−59.8	5.2	60.1	175.0
129	G25B_062_050$_{de}$	0.125	0.625	0.375	0.625	0.5	0.375	180	0.125	0.625	0.373	48.4	−25.8	−4.3	26.1	189.6	0.607	0.0	0.391	0.438	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
130	G38B_062_050$_{de}$	0.125	0.625	0.5	0.625	0.5	0.375	196	0.125	0.625	0.436	48.5	−22.1	−9.9	24.2	204.2	0.583	0.0	0.298	0.454	188	0.0	1.0	0.622	55.3	−44.3	−19.9	48.5	204.2
131	G50B_062_050$_{de}$	0.125	0.625	0.625	0.625	0.5	0.375	210	0.125	0.625	0.52	48.4	−19.3	−14.5	24.2	216.9	0.562	0.0	0.201	0.474	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
132	G59B_075_062$_{de}$	0.125	0.625	0.75	0.75	0.625	0.437	221	0.125	0.75	0.701	51.6	−21.5	−23.1	31.6	227.0	0.675	0.0	0.116	0.385	206	0.0	1.0	0.922	53.9	−34.5	−37.0	50.6	227.0
133	G65B_087_075$_{de}$	0.125	0.625	0.875	0.875	0.75	0.5	229	0.125	0.875	0.869	54.8	−22.8	−31.8	39.2	234.3	0.751	0.007	0.0	0.294	209	0.0	1.0	0.992	53.2	−30.5	−42.5	52.3	234.3
134	G70B_100_087$_{de}$	0.125	0.625	1.0	1.0	0.875	0.562	235	0.125	0.832	1.0	58.3	−23.5	−40.4	46.8	239.7	0.813	0.125	0.0	0.041	220	0.0	0.808	1.0	53.0	−26.9	−46.2	53.5	239.7
135	Y85G_075_075$_{de}$	0.125	0.75	0.0	0.75	0.75	0.375	141	0.079	0.75	0.0	48.4	−47.3	25.4	53.7	151.7	0.696	0.0	0.859	0.364	144	0.105	1.0	0.0	56.6	−63.0	33.9	71.6	151.7
136	G00B_075_062$_{de}$	0.125	0.75	0.125	0.75	0.625	0.437	150	0.125	0.75	0.216	51.5	−41.2	13.2	43.2	162.2	0.745	0.0	0.692	0.301	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
137	G09B_075_062$_{de}$	0.125	0.75	0.25	0.75	0.625	0.437	161	0.125	0.75	0.306	51.7	−38.3	5.2	38.7	172.2	0.738	0.0	0.569	0.312	166	0.0	1.0	0.29	54.1	−61.3	8.3	61.9	172.2
138	G19B_075_062$_{de}$	0.125	0.75	0.375	0.75	0.625	0.437	173	0.125	0.75	0.385	52.2	−34.5	−1.9	34.5	183.2	0.717	0.0	0.467	0.327	174	0.0	1.0	0.416	54.8	−55.2	−3.1	55.3	183.2
139	G30B_075_062$_{de}$	0.125	0.75	0.5	0.75	0.625	0.437	187	0.125	0.75	0.47	52.4	−30.4	−8.7	31.6	195.9	0.702	0.0	0.368	0.343	183	0.0	1.0	0.552	55.1	−48.7	−13.9	50.6	195.9
140	G40B_075_062$_{de}$	0.125	0.75	0.625	0.75	0.625	0.437	199	0.125	0.75	0.535	52.5	−26.9	−13.6	30.2	206.9	0.686	0.0	0.287	0.356	190	0.0	1.0	0.656	55.3	−43.1	−21.9	48.3	206.9
141	G50B_075_062$_{de}$	0.125	0.75	0.75	0.75	0.625	0.437	210	0.125	0.75	0.619	52.3	−24.1	−18.2	30.2	216.9	0.68	0.0	0.214	0.367	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
142	G57B_087_075$_{de}$	0.125	0.75	0.875	0.875	0.75	0.5	219	0.125	0.875	0.804	55.5	−26.5	−26.7	37.6	225.1	0.762	0.0	0.121	0.283	205	0.0	1.0	0.905	54.1	−35.3	−35.6	50.2	225.1
143	G63B_100_087$_{de}$	0.125	0.75	1.0	1.0	0.875	0.562	226	0.125	1.0	0.97	58.7	−28.1	−35.4	45.2	231.5	0.807	0.0	0.021	0.134	208	0.0	1.0	0.966	53.4	−32.1	−40.5	51.6	231.5
144	Y86G_087_087$_{de}$	0.125	0.875	0.0	0.875	0.875	0.437	142	0.064	0.875	0.0	51.9	−56.4	28.8	63.4	152.9	0.784	0.0	0.917	0.27	146	0.073	1.0	0.0	55.9	−64.5	33.0	72.4	152.9
145	G00B_087_075$_{de}$	0.125	0.875	0.125	0.875	0.75	0.5	150	0.125	0.875	0.235	55.3	−49.4	15.8	51.9	162.2	0.807	0.0	0.709	0.199	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
146	G07B_087_075$_{de}$	0.125	0.875	0.25	0.875	0.75	0.5	159	0.125	0.875	0.328	55.4	−46.7	7.8	47.3	170.4	0.804	0.0	0.608	0.208	165	0.0	1.0	0.271	53.9	−62.2	10.4	63.1	170.4
147	G15B_087_075$_{de}$	0.125	0.875	0.375	0.875	0.75	0.5	169	0.125	0.875	0.402	56.0	−42.8	0.3	42.8	179.5	0.783	0.0	0.508	0.224	171	0.0	1.0	0.37	54.7	−57.0	0.4	57.0	179.5
148	G25B_087_075$_{de}$	0.125	0.875	0.5	0.875	0.75	0.5	180	0.125	0.875	0.498	56.2	−38.7	−6.5	39.2	189.6	0.778	0.0	0.426	0.238	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
149	G34B_087_075$_{de}$	0.125	0.875	0.625	0.875	0.75	0.5	191	0.125	0.875	0.562	56.4	−35.1	−12.5	37.3	199.6	0.777	0.0	0.358	0.25	185	0.0	1.0	0.583	55.2	−46.8	−16.7	49.7	199.6
150	G42B_087_075$_{de}$	0.125	0.875	0.75	0.875	0.75	0.5	201	0.125	0.875	0.634	56.4	−31.7	−17.4	36.2	208.7	0.769	0.0	0.29	0.261	191	0.0	1.0	0.678	55.3	−42.3	−23.2	48.2	208.7
151	G50B_087_075$_{de}$	0.125	0.875	0.875	0.875	0.75	0.5	210	0.125	0.875	0.718	56.1	−29.0	−21.8	36.3	216.9	0.762	0.0	0.208	0.27	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
152	G56B_100_087$_{de}$	0.125	0.875	1.0	1.0	0.875	0.562	218	0.125	1.0	0.909	59.4	−31.3	−30.5	43.7	224.2	0.82	0.0	0.133	0.013	204	0.0	1.0	0.896	54.2	−35.7	−34.9	49.9	224.2
153	Y88G_100_100$_{de}$	0.125	1.0	0.0	1.0	1.0	0.5	143	0.04	1.0	0.0	55.2	−65.9	32.0	73.3	154.0	0.959	0.0	0.999	0.0	147	0.04	1.0	0.0	55.2	−65.9	32.0	73.3	154.0
154	G00B_100_087$_{de}$	0.125	1.0	0.125	1.0	0.875	0.562	150	0.125	1.0	0.253	59.0	−57.7	18.5	60.6	162.2	0.841	0.0	0.701	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
155	G06B_100_087$_{de}$	0.125	1.0	0.25	1.0	0.875	0.562	158	0.125	1.0	0.353	59.1	−54.8	10.1	55.7	169.5	0.834	0.0	0.617	0.125	164	0.0	1.0	0.261	53.8	−62.7	11.5	63.7	169.5
156	G13B_100_087$_{de}$	0.125	1.0	0.375	1.0	0.875	0.562	166	0.125	1.0	0.423	59.6	−51.4	2.8	51.5	176.8	0.828	0.0	0.559	0.125	169	0.0	1.0	0.34	54.5	−58.8	3.2	58.9	176.8
157	G20B_100_087$_{de}$	0.125	1.0	0.5	1.0	0.875	0.562	175	0.125	1.0	0.509	60.0	−47.4	−4.1	47.6	185.0	0.823	0.0	0.45	0.125	176	0.0	1.0	0.439	54.9	−54.2	−4.7	54.4	185.0
158	G29B_100_087$_{de}$	0.125	1.0	0.625	1.0	0.875	0.562	185	0.125	1.0	0.595	60.2	−43.3	−10.9	44.7	194.1	0.82	0.0	0.369	0.125	182	0.0	1.0	0.537	55.1	−49.5	−12.5	51.1	194.1
159	G36B_100_087$_{de}$	0.125	1.0	0.75	1.0	0.875	0.562	194	0.125	1.0	0.656	60.3	−39.6	−16.3	42.9	202.3	0.816	0.0	0.306	0.125	187	0.0	1.0	0.607	55.3	−45.3	−18.6	49.0	202.3
160	G43B_100_087$_{de}$	0.125	1.0	0.875	1.0	0.875	0.562	202	0.125	1.0	0.728	60.3	−36.6	−20.8	42.1	209.6	0.81	0.0	0.243	0.125	192	0.0	1.0	0.69	55.2	−41.8	−23.8	48.2	209.6
161	G50B_100_087$_{de}$	0.125	1.0	1.0	1.0	0.875	0.562	210	0.125	1.0	0.817	60.0	−33.8	−25.5	42.3	216.9	0.805	0.0	0.174	0.125	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9

delta

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$				*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$			
162	R00Y_025_025$_{de}$	0.25	0.0	0.0	0.25	0.25	0.125	390	0.25	0.0	0.065	29.7	14.0	6.6	15.5	25.4	0.0	0.596	0.435	0.728	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
163	R00Y_025_025$_{de}$	0.25	0.0	0.125	0.25	0.25	0.125	360	0.25	0.0	0.206	30.2	16.3	−2.2	16.5	352.0	0.0	0.581	0.194	0.737	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
164	B50R_025_025$_{de}$	0.25	0.0	0.25	0.25	0.25	0.125	330	0.146	0.0	0.25	27.5	11.6	−7.1	13.6	328.6	0.032	0.522	0.0	0.817	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
165	B34R_037_037$_{de}$	0.25	0.0	0.375	0.375	0.375	0.187	311	0.107	0.0	0.375	26.8	12.3	−14.3	18.9	310.5	0.256	0.615	0.0	0.765	286	0.285	0.0	1.0	31.9	32.8	−38.2	50.4	310.5
166	B25R_050_050$_{de}$	0.25	0.0	0.5	0.5	0.5	0.25	300	0.069	0.0	0.5	27.6	12.2	−20.9	24.2	300.1	0.451	0.704	0.0	0.675	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
167	B19R_062_062$_{de}$	0.25	0.0	0.625	0.625	0.625	0.312	293	0.025	0.0	0.625	29.1	11.9	−27.4	29.9	293.5	0.615	0.759	0.0	0.586	272	0.04	0.0	1.0	32.2	19.1	−43.9	47.9	293.5
168	B15R_075_075$_{de}$	0.25	0.0	0.75	0.75	0.75	0.375	289	0.0	0.01	0.75	30.6	12.0	−33.6	35.7	289.7	0.746	0.789	0.0	0.517	269	0.0	0.014	1.0	32.8	16.1	−44.8	47.6	289.7
169	B13R_087_087$_{de}$	0.25	0.0	0.875	0.875	0.875	0.437	286	0.0	0.045	0.875	32.3	12.0	−39.8	41.6	286.9	0.843	0.798	0.0	0.415	267	0.0	0.052	1.0	33.6	13.8	−45.5	47.5	286.9
170	B11R_100_100$_{de}$	0.25	0.0	1.0	1.0	1.0	0.5	284	0.0	0.077	1.0	34.1	12.2	−45.8	47.4	285.0	0.978	0.865	0.0	0.125	266	0.0	0.077	1.0	34.1	12.2	−45.8	47.4	285.0
171	R50Y_025_025$_{de}$	0.25	0.125	0.0	0.25	0.25	0.125	60	0.25	0.079	0.0	33.3	8.8	14.6	17.0	58.8	0.0	0.459	0.588	0.708	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
172	R00Y_025_012$_{de}$	0.25	0.125	0.125	0.25	0.125	0.187	390	0.25	0.124	0.157	35.8	7.0	3.3	7.7	25.4	0.0	0.323	0.264	0.729	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
173	B50R_025_012$_{de}$	0.25	0.125	0.25	0.25	0.125	0.187	330	0.198	0.124	0.25	34.6	5.8	−3.5	6.8	328.6	0.0	0.238	0.046	0.765	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
174	B25R_037_025$_{de}$	0.25	0.125	0.375	0.375	0.25	0.25	300	0.159	0.124	0.375	34.7	6.1	−10.4	12.1	300.1	0.17	0.328	0.0	0.719	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
175	B15R_050_037$_{de}$	0.25	0.125	0.5	0.5	0.375	0.312	289	0.124	0.13	0.5	36.2	6.0	−16.8	17.8	289.7	0.278	0.386	0.0	0.635	269	0.0	0.014	1.0	32.8	16.1	−44.8	47.6	289.7
176	B11R_062_050$_{de}$	0.25	0.125	0.625	0.625	0.5	0.375	284	0.125	0.163	0.625	37.9	6.1	−22.9	23.7	285.0	0.419	0.466	0.0	0.539	266	0.0	0.077	1.0	34.1	12.2	−45.8	47.4	285.0
177	B09R_075_062$_{de}$	0.25	0.125	0.75	0.75	0.625	0.437	281	0.125	0.197	0.75	39.7	6.2	−28.9	29.5	282.1	0.585	0.56	0.0	0.424	263	0.0	0.115	1.0	34.8	9.9	−46.2	47.3	282.1
178	B07R_087_075$_{de}$	0.25	0.125	0.875	0.875	0.75	0.5	279	0.125	0.231	0.875	41.4	6.3	−35.0	35.6	280.2	0.711	0.633	0.0	0.293	262	0.0	0.141	1.0	35.3	8.4	−46.7	47.5	280.2
179	B06R_100_087$_{de}$	0.25	0.125	1.0	1.0	0.875	0.562	278	0.125	0.26	1.0	43.0	6.7	−41.1	41.6	279.3	0.724	0.613	0.0	0.149	261	0.0	0.155	1.0	35.5	7.7	−47.0	47.6	279.3
180	Y00G_025_025$_{de}$	0.25	0.25	0.0	0.25	0.25	0.125	90	0.25	0.192	0.0	38.8	−0.7	19.2	19.2	92.3	0.0	0.185	0.557	0.717	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
181	Y00G_025_012$_{de}$	0.25	0.25	0.125	0.25	0.125	0.187	90	0.25	0.221	0.124	40.3	−0.3	9.6	9.6	92.3	0.0	0.122	0.33	0.721	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
182	NW_025$_{de}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
183	B00R_037_012$_{de}$	0.25	0.25	0.375	0.375	0.125	0.312	270	0.249	0.282	0.375	43.5	0.1	−6.0	6.0	271.7	0.06	0.066	0.0	0.677	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
184	B00R_050_025$_{de}$	0.25	0.25	0.5	0.5	0.25	0.375	270	0.249	0.315	0.5	45.2	0.3	−12.1	12.1	271.7	0.188	0.161	0.0	0.611	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
185	B00R_062_037$_{de}$	0.25	0.25	0.625	0.625	0.375	0.437	270	0.25	0.347	0.625	46.8	0.5	−18.2	18.2	271.7	0.319	0.254	0.0	0.518	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
186	B00R_075_050$_{de}$	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.38	0.75	48.5	0.7	−24.3	24.3	271.7	0.442	0.341	0.0	0.398	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
187	B00R_087_062$_{de}$	0.25	0.25	0.875	0.875	0.625	0.562	270	0.25	0.413	0.875	50.2	0.9	−30.4	30.4	271.7	0.569	0.427	0.0	0.245	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
188	B00R_100_075$_{de}$	0.25	0.25	1.0	1.0	0.75	0.625	270	0.25	0.445	1.0	51.9	1.1	−36.5	36.5	271.7	0.617	0.453	0.0	0.135	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
189	Y31G_037_037$_{de}$	0.25	0.375	0.0	0.375	0.375	0.187	109	0.236	0.375	0.0	45.0	−11.7	25.8	28.4	114.4	0.173	0.0	0.667	0.642	111	0.631	1.0	0.0	80.4	−31.3	68.9	75.7	114.4
190	Y50G_037_025$_{de}$	0.25	0.375	0.125	0.375	0.25	0.25	120	0.25	0.375	0.124	44.6	−10.4	13.7	17.2	127.2	0.198	0.0	0.485	0.653	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
191	G00B_037_012$_{de}$	0.25	0.375	0.25	0.375	0.125	0.312	150	0.249	0.375	0.268	45.5	−8.2	2.6	8.6	162.2	0.19	0.0	0.271	0.642	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
192	G50B_037_012$_{de}$	0.25	0.375	0.375	0.375	0.125	0.312	210	0.249	0.375	0.348	45.7	−4.8	−3.6	6.0	216.9	0.129	0.0	0.095	0.655	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
193	G75B_050_025$_{de}$	0.25	0.375	0.5	0.5	0.25	0.375	240	0.249	0.421	0.5	48.8	−5.8	−12.1	13.4	244.3	0.24	0.038	0.0	0.586	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
194	G84B_062_037$_{de}$	0.25	0.375	0.625	0.625	0.375	0.437	251	0.25	0.44	0.625	50.3	−5.1	−18.5	19.2	254.3	0.344	0.136	0.0	0.504	239	0.0	0.508	1.0	46.4	−13.8	−49.4	51.3	254.3
195	G88B_075_050$_{de}$	0.25	0.375	0.75	0.75	0.5	0.5	256	0.25	0.467	0.75	51.7	−4.8	−24.7	25.1	258.9	0.465	0.241	0.0	0.383	244	0.0	0.434	1.0	43.6	−9.6	−49.4	50.3	258.9
196	G90B_087_062$_{de}$	0.25	0.375	0.875	0.875	0.625	0.562	259	0.25	0.494	0.875	53.1	−4.5	−30.8	31.1	261.6	0.586	0.35	0.0	0.224	247	0.0	0.39	1.0	42.0	−7.2	−49.3	49.8	261.6
197	G92B_100_075$_{de}$	0.25	0.375	1.0	1.0	0.75	0.625	261	0.25	0.523	1.0	54.7	−4.1	−36.9	37.1	263.5	0.636	0.382	0.0	0.062	248	0.0	0.364	1.0	41.0	−5.5	−49.2	49.5	263.5
198	Y50G_050_050$_{de}$	0.25	0.5	0.0	0.5	0.5	0.25	120	0.25	0.5	0.0	47.4	−20.8	27.4	34.4	127.2	0.349	0.0	0.75	0.532	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
199	Y68G_050_037$_{de}$	0.25	0.5	0.125	0.5	0.375	0.312	131	0.24	0.5	0.124	47.6	−19.8	16.5	25.8	140.0	0.375	0.0	0.621	0.543	132	0.308	1.0	0.0	63.4	−52.8	44.2	68.9	140.0
200	G00B_050_025$_{de}$	0.25	0.5	0.25	0.5	0.25	0.375	150	0.249	0.5	0.286	49.3	−16.4	5.2	17.3	162.2	0.352	0.0	0.409	0.531	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
201	G25B_050_025$_{de}$	0.25	0.5	0.375	0.5	0.25	0.375	180	0.249	0.5	0.374	49.6	−12.9	−2.1	13.0	189.6	0.323	0.0	0.261	0.548	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
202	G50B_050_025$_{de}$	0.25	0.5	0.5	0.5	0.25	0.375	210	0.249	0.5	0.447	49.6	−9.6	−7.2	12.1	216.9	0.277	0.0	0.133	0.57	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
203	G65B_062_037$_{de}$	0.25	0.5	0.625	0.625	0.375	0.437	229	0.25	0.625	0.622	52.8	−11.4	−15.9	19.6	234.3	0.362	0.0	0.032	0.507	209	0.0	1.0	0.992	53.2	−30.5	−42.5	52.3	234.3
204	G75B_075_050$_{de}$	0.25	0.5	0.75	0.75	0.5	0.5	240	0.25	0.593	0.75	55.7	−11.6	−24.3	26.9	244.3	0.482	0.094	0.0	0.371	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
205	G80B_087_062$_{de}$	0.25	0.5	0.875	0.875	0.625	0.562	247	0.25	0.604	0.875	57.2	−10.8	−31.0	32.8	250.7	0.6	0.233	0.0	0.206	235	0.0	0.567	1.0	48.5	−17.3	−49.6	52.5	250.7
206	G84B_100_075$_{de}$	0.25	0.5	1.0	1.0	0.75	0.625	251	0.25	0.631	1.0	58.7	−10.3	−37.0	38.5	254.3	0.645	0.305	0.0	0.028	239	0.0	0.508	1.0	46.4	−13.8	−49.4	51.3	254.3
207	Y61G_062_062$_{de}$	0.25	0.625	0.0	0.625	0.625	0.312	127	0.228	0.625	0.0	50.3	−30.1	29.7	42.3	135.4	0.472	0.0	0.812	0.422	128	0.366	1.0	0.0	66.1	−48.2	47.5	67.7	135.4
208	Y76G_062_050$_{de}$	0.25	0.625	0.125	0.625	0.5	0.375	136	0.238	0.625	0.125	50.9	−29.1	19.6	35.1	145.9	0.504	0.0	0.695	0.42	137	0.227	1.0	0.0	59.9	−58.2	39.3	70.2	145.9
209	G00B_062_037$_{de}$	0.25	0.625	0.25	0.625	0.375	0.437	150	0.25	0.625	0.305	53.0	−24.7	7.9	25.9	162.2	0.483	0.0	0.503	0.411	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
210	G15B_062_037$_{de}$	0.25	0.625	0.375	0.625	0.375	0.437	169	0.25	0.625	0.388	53.4	−21.4	0.1	21.4	179.5	0.471	0.0	0.382	0.425	171	0.0	1.0	0.37	54.7	−57.0	0.4	57.0	179.5
211	G34B_062_037$_{de}$	0.25	0.625	0.5	0.625	0.375	0.437	191	0.25	0.625	0.468	53.6	−17.5	−6.2	18.6	199.6	0.437	0.0	0.261	0.448	185	0.0	1.0	0.583	55.2	−46.8	−16.7	49.7	199.6
212	G50B_062_037$_{de}$	0.25	0.625	0.625	0.625	0.375	0.437	210	0.25	0.625	0.546	53.5	−14.5	−10.9	18.1	216.9	0.401	0.0	0.156	0.475	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
213	G61B_075_050$_{de}$	0.25	0.625	0.75	0.75	0.5	0.5	224	0.25	0.75	0.724	56.7	−16.5	−19.5	25.6	229.7	0.496	0.0	0.071	0.383	207	0.0	1.0	0.948	53.6	−33.1	−39.1	51.2	229.7
214	G69B_087_062$_{de}$	0.25	0.625	0.875	0.875	0.625	0.562	233	0.25	0.797	0.875	60.1	−17.4	−27.9	32.9	237.9	0.594	0.033	0.0	0.267	216	0.0	0.875	1.0	53.1	−27.9	−44.7	52.7	237.9
215	G75B_100_075$_{de}$	0.25	0.625	1.0	1.0	0.75	0.625	240	0.25	0.764	1.0	62.7	−17.5	−36.4	40.4	244.3	0.682	0.187	0.0	0.038	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
216	Y68G_075_075$_{de}$	0.25	0.75	0.0	0.75	0.75	0.375	131	0.231	0.75	0.0	53.5	−39.6	33.1	51.7	140.0	0.577	0.0	0.88	0.318	132	0.308	1.0	0.0	63.4	−52.8	44.2	68.9	140.0
217	Y81G_075_062$_{de}$	0.25	0.75	0.125	0.75	0.625	0.437	139	0.223	0.75	0.125	54.1	−38.1	22.5	44.2	149.4	0.624	0.0	0.768	0.296	141	0.157	1.0	0.0	57.9	−60.9	36.0	70.8	149.4
218	G00B_075_050$_{de}$	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.323	56.8	−32.9	10.5	34.6	162.2	0.604	0.0	0.579	0.286	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
219	G11B_075_050$_{de}$	0.25	0.75	0.375	0.75	0.5	0.5	164	0.25	0.75	0.41	57.0	−29.9	2.6	30.0	175.0	0.603	0.0	0.459	0.299	168	0.0	1.0	0.32	54.3	−59.8	5.2	60.1	175.0
220	G25B_075_050$_{de}$	0.25	0.75	0.5	0.75	0.5	0.5	180	0.25	0.75	0.498	57.4	−25.8	−4.3	26.1	189.6	0.575	0.0	0.352	0.32	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
221	G38B_075_050$_{de}$	0.25	0.75	0.625	0.75	0.5	0.5	196	0.25	0.75	0.561	57.5	−22.1	−9.9	24.2	204.2	0.545	0.0	0.259	0.341	188	0.0	1.0	0.622	55.3	−44.3	−19.9	48.5	204.2
222	G50B_075_050$_{de}$	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.645	57.4	−19.3	−14.5	24.2	216.9	0.522	0.0	0.176	0.36	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
223	G59B_087_062$_{de}$	0.25	0.75	0.875	0.875	0.625	0.562	221	0.25	0.875	0.826	60.6	−21.5	−23.1	31.6	227.0	0.631	0.0	0.109	0.252	206	0.0	1.0	0.922	53.9	−34.5	−37.0	50.6	227.0
224	G65B_100_075$_{de}$	0.25	0.75	1.0	1.0	0.75	0.625	229	0.25	1.0	0.994	63.8	−22.8	−31.8	39.2	234.3	0.678	0.0	0.008	0.141	209	0.0	1.0	0.992	53.2	−30.5	−42.5	52.3	234.3
225	Y73G_087_087$_{de}$	0.25	0.875	0.0	0.875	0.875	0.437	134	0.231	0.875	0.0	56.6	−49.1	36.2	61.0	143.5	0.674	0.0	0.932	0.237	135	0.264	1.0	0.0	61.3	−56.1	41.4	69.8	143.5
226	Y85G_087_075$_{de}$	0.25	0.875	0.125	0.875	0.75	0.5	141	0.204	0.875	0.125	57.4	−47.3	25.4	53.7	151.7	0.713	0.0	0.804	0.2	144	0.105	1.0	0.0	56.6	−63.0	33.9	71.6	151.7
227	G00B_087_062$_{de}$	0.25	0.875	0.25	0.875	0.625	0.562	150	0.25	0.875	0.341	60.5	−41.2	13.2	43.2	162.2	0.678	0.0	0.616	0.189	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
228	G09B_087_062$_{de}$	0.25	0.875	0.375	0.875	0.625	0.562	161	0.25	0.875	0.431	60.7	−38.3	5.2	38.7	172.2	0.684	0.0	0.511	0.195	166	0.0	1.0	0.29	54.1	−61.3	8.3	61.9	172.2
229	G19B_087_062$_{de}$	0.25	0.875	0.5	0.875	0.625	0.562	173	0.25	0.875	0.51	61.2	−34.5	−1.9	34.5	183.2	0.675	0.0	0.419	0.201	174	0.0	1.0	0.416	54.8	−55.2	−3.1	55.3	183.2
230	G30B_087_062$_{de}$	0.25	0.875	0.625	0.875	0.625	0.562	187	0.25	0.875	0.595	61.4	−30.4	−8.7	31.6	195.9	0.663	0.0	0.328	0.212	183	0.0	1.0	0.552	55.1	−48.7	−13.9	50.6	195.9
231	G40B_087_062$_{de}$	0.25	0.875	0.75	0.875	0.625	0.562	199	0.25	0.875	0.66	61.5	−26.9	−13.6	30.2	206.9	0.648	0.0	0.256	0.224	190	0.0	1.0	0.656	55.3	−43.1	−21.9	48.3	206.9
232	G50B_087_062$_{de}$	0.25	0.875	0.875	0.875	0.625	0.562	210	0.25	0.875	0.744	61.3	−24.1	−18.2	30.2	216.9	0.639	0.0	0.193	0.236	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
233	G57B_100_075$_{de}$	0.25	0.875	1.0	1.0	0.75	0.625	219	0.25	1.0	0.929	64.5	−26.5	−26.7	37.6	225.1	0.697	0.0	0.129	0.058	205	0.0	1.0	0.905	54.1	−35.3	−35.6	50.2	225.1
234	Y76G_100_100$_{de}$	0.25	1.0	0.0	1.0	1.0	0.5	136	0.227	1.0	0.0	59.9	−58.2	39.3	70.2	145.9	0.755	0.0	0.974	0.125	137	0.227	1.0	0.0	59.9	−58.2	39.3	70.2	145.9
235	Y86G_100_087$_{de}$	0.25	1.0	0.125	1.0	0.875	0.562	142	0.189	1.0	0.125	60.8	−56.4	28.8	63.4	152.9	0.764	0.0	0.808	0.125	146	0.073	1.0	0.0	55.9	−64.5	33.0	72.4	152.9
236	G00B_100_075$_{de}$	0.25	1.0	0.25	1.0	0.75	0.625	150	0.25	1.0	0.36	64.3	−49.4	15.8	51.9	162.2	0.717	0.0	0.63	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
237	G07B_100_075$_{de}$	0.25	1.0	0.375	1.0	0.75	0.625	159	0.25	1.0	0.453	64.4	−46.7	7.8	47.3	170.4	0.727	0.0	0.56	0.125	165	0.0	1.0	0.271	53.9	−62.2	10.4	63.1	170.4
238	G15B_100_075$_{de}$	0.25	1.0	0.5	1.0	0.75	0.625	169	0.25	1.0	0.527	65.0	−42.8	0.3	42.8	179.5	0.714	0.0	0.451	0.125	171	0.0	1.0	0.37	54.7	−57.0	0.4	57.0	179.5
239	G25B_100_075$_{de}$	0.25	1.0	0.625	1.0	0.75	0.625	180	0.25	1.0	0.623	65.2	−38.7	−6.5	39.2	189.6	0.702	0.0	0.37	0.125	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
240	G34B_100_075$_{de}$	0.25	1.0	0.75	1.0	0.75	0.625	191	0.25	1.0	0.687	65.3	−35.1	−12.5	37.3	199.6	0.702	0.0	0.296	0.125	185	0.0	1.0	0.583	55.2	−46.8	−16.7	49.7	199.6
241	G42B_100_075$_{de}$	0.25	1.0	0.875	1.0	0.75	0.625	201	0.25	1.0	0.759	65.4	−31.7	−17.4	36.2	208.7	0.687	0.0	0.256	0.0	191	0.0	1.0	0.678	55.3	−42.3	−23.2	48.2	208.7
242	G50B_100_075$_{de}$	0.25	1.0	1.0	1.0	0.75	0.625	210	0.25	1.0	0.843	65.1	−29.0	−21.8	36.3	216.9	0.699	0.0	0.213	0.001	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9

delta

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

2−1132130−F0

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$				*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
243	R00Y_037_037$_{de}$	0.375	0.0	0.0	0.375	0.375	0.187	390	0.375	0.0	0.098	32.7	21.0	10.0	23.2	25.4	0.0	0.729	0.525	0.651	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
244	R18Y_037_037$_{de}$	0.375	0.0	0.125	0.375	0.375	0.187	371	0.375	0.0	0.22	32.8	22.9	1.7	22.9	4.3	0.0	0.708	0.33	0.658	354	1.0	0.0	0.588	47.9	61.1	4.6	61.2	4.3
245	B65R_037_037$_{de}$	0.375	0.0	0.25	0.375	0.375	0.187	349	0.353	0.0	0.375	32.5	23.6	−5.6	24.2	346.6	0.0	0.679	0.142	0.678	327	0.941	0.0	1.0	47.0	63.0	−14.9	64.7	346.6
246	B50R_037_037$_{de}$	0.375	0.0	0.375	0.375	0.375	0.187	330	0.219	0.0	0.375	29.3	17.5	−10.7	20.5	328.6	0.057	0.602	0.0	0.749	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
247	B38R_050_050$_{de}$	0.375	0.0	0.5	0.5	0.5	0.25	316	0.173	0.0	0.5	28.6	18.2	−18.0	25.7	315.3	0.317	0.734	0.0	0.663	289	0.347	0.0	1.0	33.5	36.5	−36.1	51.4	315.3
248	B30R_062_062$_{de}$	0.375	0.0	0.625	0.625	0.625	0.312	307	0.147	0.0	0.625	28.3	18.6	−24.8	31.0	306.8	0.504	0.817	0.0	0.585	283	0.235	0.0	1.0	31.0	29.7	−39.7	49.6	306.8
249	B25R_075_075$_{de}$	0.375	0.0	0.75	0.75	0.75	0.375	300	0.104	0.0	0.75	29.6	18.3	−31.4	36.4	300.1	0.645	0.829	0.0	0.512	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
250	B20R_087_087$_{de}$	0.375	0.0	0.875	0.875	0.875	0.437	295	0.06	0.0	0.875	31.0	18.0	−38.0	42.0	295.4	0.788	0.857	0.0	0.408	273	0.068	0.0	1.0	32.0	20.6	−43.4	48.0	295.4
251	B18R_100_100$_{de}$	0.375	0.0	1.0	1.0	1.0	0.5	292	0.026	0.0	1.0	32.3	18.3	−44.1	47.8	292.5	0.942	0.938	0.0	0.125	271	0.026	0.0	1.0	32.3	18.3	−44.1	47.8	292.5
252	R31Y_037_037$_{de}$	0.375	0.125	0.0	0.375	0.375	0.187	49	0.375	0.066	0.0	35.3	18.4	19.5	26.8	46.6	0.0	0.664	0.713	0.615	39	1.0	0.177	0.0	54.6	49.1	52.0	71.6	46.6
253	R00Y_037_025$_{de}$	0.375	0.125	0.125	0.375	0.25	0.25	390	0.375	0.124	0.19	38.7	14.0	6.6	15.5	25.4	0.0	0.501	0.37	0.64	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
254	R00Y_037_025$_{de}$	0.375	0.125	0.25	0.375	0.25	0.25	360	0.375	0.124	0.331	39.2	16.3	−2.2	16.5	352.0	0.0	0.48	0.167	0.64	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
255	B50R_037_025$_{de}$	0.375	0.125	0.375	0.375	0.25	0.25	330	0.271	0.124	0.375	36.5	11.6	−7.1	13.6	328.6	0.003	0.376	0.0	0.71	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
256	B34R_050_037$_{de}$	0.375	0.125	0.5	0.5	0.375	0.312	311	0.232	0.124	0.5	35.8	12.3	−14.3	18.9	310.5	0.192	0.478	0.0	0.643	286	0.285	0.0	1.0	31.9	32.8	−38.2	50.4	310.5
257	B25R_062_050$_{de}$	0.375	0.125	0.625	0.625	0.5	0.375	300	0.194	0.125	0.625	36.6	12.2	−20.9	24.2	300.1	0.355	0.549	0.0	0.549	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
258	B19R_075_062$_{de}$	0.375	0.125	0.75	0.75	0.625	0.437	293	0.15	0.125	0.75	38.1	11.9	−27.4	29.9	293.5	0.507	0.618	0.0	0.441	272	0.04	0.0	1.0	32.2	19.1	−43.9	47.9	293.5
259	B15R_087_075$_{de}$	0.375	0.125	0.875	0.875	0.75	0.5	289	0.125	0.135	0.875	39.6	12.0	−33.6	35.7	289.7	0.649	0.689	0.0	0.322	269	0.0	0.014	1.0	32.8	16.1	−44.8	47.6	289.7
260	B13R_100_087$_{de}$	0.375	0.125	1.0	1.0	0.875	0.562	286	0.125	0.17	1.0	41.3	12.0	−39.8	41.6	286.9	0.701	0.67	0.0	0.163	267	0.0	0.052	1.0	33.6	13.8	−45.5	47.5	286.9
261	R68Y_037_037$_{de}$	0.375	0.25	0.0	0.375	0.375	0.187	71	0.375	0.175	0.0	40.7	8.3	24.3	25.7	71.1	0.0	0.443	0.685	0.614	57	1.0	0.466	0.0	68.9	22.1	64.9	68.5	71.1
262	R50Y_037_025$_{de}$	0.375	0.25	0.125	0.375	0.25	0.25	60	0.375	0.204	0.124	42.3	8.8	14.6	17.0	58.8	0.0	0.417	0.492	0.625	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
263	R00Y_037_012$_{de}$	0.375	0.25	0.25	0.375	0.125	0.312	390	0.375	0.249	0.282	44.8	7.0	3.3	7.7	25.4	0.0	0.262	0.233	0.632	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
264	B50R_037_012$_{de}$	0.375	0.25	0.375	0.375	0.125	0.312	330	0.323	0.249	0.375	43.6	5.8	−3.5	6.8	328.6	0.0	0.195	0.06	0.661	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
265	B25R_050_025$_{de}$	0.375	0.25	0.5	0.5	0.25	0.375	300	0.284	0.249	0.5	43.7	6.1	−10.4	12.1	300.1	0.098	0.237	0.0	0.627	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
266	B15R_062_037$_{de}$	0.375	0.25	0.625	0.625	0.375	0.437	289	0.25	0.255	0.625	45.2	6.0	−16.8	17.8	289.7	0.264	0.33	0.0	0.531	269	0.0	0.014	1.0	32.8	16.1	−44.8	47.6	289.7
267	B11R_075_050$_{de}$	0.375	0.25	0.75	0.75	0.5	0.5	284	0.25	0.288	0.75	46.9	6.1	−22.9	23.7	285.0	0.386	0.401	0.0	0.416	266	0.0	0.077	1.0	34.1	12.2	−45.8	47.4	285.0
268	B09R_087_062$_{de}$	0.375	0.25	0.875	0.875	0.625	0.562	281	0.25	0.322	0.875	48.7	6.2	−28.9	29.5	282.1	0.517	0.48	0.0	0.27	263	0.0	0.115	1.0	34.8	9.9	−46.2	47.3	282.1
269	B07R_100_075$_{de}$	0.375	0.25	1.0	1.0	0.75	0.625	279	0.25	0.356	1.0	50.4	6.3	−35.0	35.6	280.2	0.579	0.493	0.0	0.152	262	0.0	0.141	1.0	35.3	8.4	−46.7	47.5	280.2
270	Y00G_037_037$_{de}$	0.375	0.375	0.0	0.375	0.375	0.187	90	0.375	0.288	0.0	46.2	−1.1	28.8	28.8	92.3	0.0	0.213	0.654	0.627	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
271	Y00G_037_025$_{de}$	0.375	0.375	0.125	0.375	0.25	0.25	90	0.375	0.317	0.124	47.8	−0.7	19.2	19.2	92.3	0.0	0.17	0.48	0.634	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
272	Y00G_037_012$_{de}$	0.375	0.375	0.25	0.375	0.125	0.312	90	0.375	0.346	0.249	49.3	−0.3	9.6	9.6	92.3	0.0	0.111	0.294	0.626	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
273	NW_037$_{de}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
274	B00R_050_012$_{de}$	0.375	0.375	0.5	0.5	0.125	0.437	270	0.375	0.407	0.5	52.5	0.1	−6.0	6.0	271.7	0.075	0.066	0.0	0.574	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
275	B00R_062_025$_{de}$	0.375	0.375	0.625	0.625	0.25	0.5	270	0.375	0.44	0.625	54.2	0.3	−12.1	12.1	271.7	0.161	0.131	0.0	0.505	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
276	B00R_075_037$_{de}$	0.375	0.375	0.75	0.75	0.375	0.562	270	0.375	0.472	0.75	55.8	0.5	−18.2	18.2	271.7	0.287	0.221	0.0	0.396	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
277	B00R_087_050$_{de}$	0.375	0.375	0.875	0.875	0.5	0.625	270	0.375	0.505	0.875	57.5	0.7	−24.3	24.3	271.7	0.424	0.32	0.0	0.245	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
278	B00R_100_062$_{de}$	0.375	0.375	1.0	1.0	0.625	0.687	270	0.375	0.538	1.0	59.2	0.9	−30.4	30.4	271.7	0.494	0.364	0.0	0.133	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
279	Y23G_050_050$_{de}$	0.375	0.5	0.0	0.5	0.5	0.25	104	0.348	0.5	0.0	54.8	−13.2	39.2	41.4	108.6	0.149	0.0	0.749	0.538	107	0.697	1.0	0.0	85.8	−26.4	78.5	82.9	108.6
280	Y31G_050_037$_{de}$	0.375	0.5	0.125	0.5	0.375	0.312	109	0.361	0.5	0.124	54.0	−11.7	25.8	28.4	114.4	0.133	0.0	0.564	0.579	111	0.631	1.0	0.0	80.4	−31.3	68.9	75.7	114.4
281	Y50G_050_025$_{de}$	0.375	0.5	0.25	0.5	0.25	0.375	120	0.375	0.5	0.249	53.6	−10.4	13.7	17.2	127.2	0.154	0.0	0.407	0.568	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
282	G00B_050_012$_{de}$	0.375	0.5	0.375	0.5	0.125	0.437	150	0.375	0.5	0.393	54.5	−8.2	2.6	8.6	162.2	0.187	0.0	0.229	0.547	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
283	G50B_050_012$_{de}$	0.375	0.5	0.5	0.5	0.125	0.437	210	0.375	0.5	0.473	54.7	−4.8	−3.6	6.0	216.9	0.139	0.0	0.078	0.556	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
284	G75B_062_025$_{de}$	0.375	0.5	0.625	0.625	0.25	0.5	240	0.375	0.546	0.625	57.8	−5.8	−12.1	13.4	244.3	0.194	0.015	0.0	0.5	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
285	G84B_075_037$_{de}$	0.375	0.5	0.75	0.75	0.375	0.562	251	0.375	0.565	0.75	59.3	−5.1	−18.5	19.2	254.3	0.307	0.127	0.0	0.382	239	0.0	0.508	1.0	46.4	−13.8	−49.4	51.3	254.3
286	G88B_087_050$_{de}$	0.375	0.5	0.875	0.875	0.5	0.625	256	0.375	0.592	0.875	60.7	−4.8	−24.7	25.1	258.9	0.445	0.239	0.0	0.238	244	0.0	0.434	1.0	43.6	−9.6	−49.4	50.3	258.9
287	G90B_100_062$_{de}$	0.375	0.5	1.0	1.0	0.625	0.687	259	0.375	0.619	1.0	62.1	−4.5	−30.8	31.1	261.6	0.516	0.306	0.0	0.069	247	0.0	0.39	1.0	42.0	−7.2	−49.3	49.8	261.6
288	Y38G_062_062$_{de}$	0.375	0.625	0.0	0.625	0.625	0.312	113	0.364	0.625	0.0	57.0	−22.1	39.8	45.6	119.1	0.332	0.0	0.828	0.403	114	0.583	1.0	0.0	76.9	−35.5	63.7	73.0	119.1
289	Y50G_062_050$_{de}$	0.375	0.625	0.125	0.625	0.5	0.375	120	0.375	0.625	0.125	56.4	−20.8	27.4	34.4	127.2	0.338	0.0	0.682	0.454	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
290	Y68G_062_037$_{de}$	0.375	0.625	0.25	0.625	0.375	0.437	131	0.365	0.625	0.25	56.6	−19.8	16.5	25.8	140.0	0.344	0.0	0.546	0.444	132	0.308	1.0	0.0	63.4	−52.8	44.2	68.9	140.0
291	G00B_062_025$_{de}$	0.375	0.625	0.375	0.625	0.25	0.5	150	0.375	0.625	0.411	58.3	−16.4	5.2	17.3	162.2	0.319	0.0	0.37	0.44	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
292	G25B_062_025$_{de}$	0.375	0.625	0.5	0.625	0.25	0.5	180	0.375	0.625	0.499	58.6	−12.9	−2.1	13.0	189.6	0.287	0.0	0.231	0.457	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
293	G50B_062_025$_{de}$	0.375	0.625	0.625	0.625	0.25	0.5	210	0.375	0.625	0.572	58.6	−9.6	−7.2	12.1	216.9	0.245	0.0	0.117	0.478	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
294	G65B_075_037$_{de}$	0.375	0.625	0.75	0.75	0.375	0.562	229	0.375	0.75	0.747	61.8	−11.4	−15.9	19.6	234.3	0.314	0.0	0.018	0.399	209	0.0	1.0	0.992	53.2	−30.5	−42.5	52.3	234.3
295	G75B_087_050$_{de}$	0.375	0.625	0.875	0.875	0.5	0.625	240	0.375	0.718	0.875	64.7	−11.6	−24.3	26.9	244.3	0.453	0.113	0.0	0.243	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
296	G80B_100_062$_{de}$	0.375	0.625	1.0	1.0	0.625	0.687	247	0.375	0.729	1.0	66.2	−10.8	−31.0	32.8	250.7	0.538	0.236	0.0	0.04	235	0.0	0.567	1.0	48.5	−17.3	−49.6	52.5	250.7
297	Y50G_075_075$_{de}$	0.375	0.75	0.0	0.75	0.75	0.375	120	0.375	0.75	0.0	59.2	−31.3	41.1	51.7	127.2	0.441	0.0	0.887	0.297	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
298	Y61G_075_062$_{de}$	0.375	0.75	0.125	0.75	0.625	0.437	127	0.353	0.75	0.125	59.3	−30.1	29.7	42.3	135.4	0.464	0.0	0.757	0.326	128	0.366	1.0	0.0	66.1	−48.2	47.5	67.7	135.4
299	Y76G_075_050$_{de}$	0.375	0.75	0.25	0.75	0.5	0.5	136	0.363	0.75	0.25	59.9	−29.1	19.6	35.1	145.9	0.469	0.0	0.643	0.314	137	0.227	1.0	0.0	59.9	−58.2	39.3	70.2	145.9
300	G00B_075_037$_{de}$	0.375	0.75	0.375	0.75	0.375	0.562	150	0.375	0.75	0.43	62.0	−24.7	7.9	25.9	162.2	0.425	0.0	0.471	0.317	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
301	G15B_075_037$_{de}$	0.375	0.75	0.5	0.75	0.375	0.562	169	0.375	0.75	0.513	62.4	−21.4	0.1	21.4	179.5	0.413	0.0	0.351	0.329	171	0.0	1.0	0.37	54.7	−57.0	0.4	57.0	179.5
302	G34B_075_037$_{de}$	0.375	0.75	0.625	0.75	0.375	0.562	191	0.375	0.75	0.593	62.6	−17.5	−6.2	18.6	199.6	0.389	0.0	0.238	0.349	185	0.0	1.0	0.583	55.2	−46.8	−16.7	49.7	199.6
303	G50B_075_037$_{de}$	0.375	0.75	0.75	0.75	0.375	0.562	210	0.375	0.75	0.671	62.5	−14.5	−10.9	18.1	216.9	0.351	0.0	0.138	0.374	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
304	G61B_087_050$_{de}$	0.375	0.75	0.875	0.875	0.5	0.625	224	0.375	0.875	0.849	65.7	−16.5	−19.5	25.6	229.7	0.439	0.0	0.057	0.282	207	0.0	1.0	0.948	53.6	−33.1	−39.1	51.2	229.7
305	G69B_100_062$_{de}$	0.375	0.75	1.0	1.0	0.625	0.687	233	0.375	0.922	1.0	69.1	−17.4	−27.9	32.9	237.9	0.525	0.05	0.0	0.142	216	0.0	0.875	1.0	53.1	−27.9	−44.7	52.7	237.9
306	Y58G_087_087$_{de}$	0.375	0.875	0.0	0.875	0.875	0.437	125	0.352	0.875	0.0	62.1	−40.5	43.3	59.4	133.0	0.545	0.0	0.934	0.195	126	0.402	1.0	0.0	67.5	−46.3	49.5	67.9	133.0
307	Y68G_087_075$_{de}$	0.375	0.875	0.125	0.875	0.75	0.5	131	0.356	0.875	0.125	62.5	−39.6	33.1	51.7	140.0	0.561	0.0	0.814	0.209	132	0.308	1.0	0.0	63.4	−52.8	44.2	68.9	140.0
308	Y81G_087_062$_{de}$	0.375	0.875	0.25	0.875	0.625	0.562	139	0.348	0.875	0.25	63.1	−38.1	22.5	44.2	149.4	0.579	0.0	0.7	0.197	141	0.157	1.0	0.0	57.9	−60.9	36.0	70.8	149.4
309	G00B_087_050$_{de}$	0.375	0.875	0.375	0.875	0.5	0.625	150	0.375	0.875	0.448	65.8	−32.9	10.5	34.6	162.2	0.551	0.0	0.527	0.192	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
310	G11B_087_050$_{de}$	0.375	0.875	0.5	0.875	0.5	0.625	164	0.375	0.875	0.535	66.0	−29.9	2.6	30.0	175.0	0.55	0.0	0.418	0.199	168	0.0	1.0	0.32	54.3	−59.8	5.2	60.1	175.0
311	G25B_087_050$_{de}$	0.375	0.875	0.625	0.875	0.5	0.625	180	0.375	0.875	0.623	66.4	−25.8	−4.3	26.1	189.6	0.521	0.0	0.316	0.215	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
312	G38B_087_050$_{de}$	0.375	0.875	0.75	0.875	0.5	0.625	196	0.375	0.875	0.686	66.5	−22.1	−9.9	24.2	204.2	0.487	0.0	0.237	0.233	188	0.0	1.0	0.622	55.3	−44.3	−19.9	48.5	204.2
313	G50B_087_050$_{de}$	0.375	0.875	0.875	0.875	0.5	0.625	210	0.375	0.875	0.77	66.4	−19.3	−14.5	24.2	216.9	0.462	0.0	0.172	0.251	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
314	G59B_100_062$_{de}$	0.375	0.875	1.0	1.0	0.625	0.687	221	0.375	1.0	0.951	69.6	−21.5	−23.1	31.6	227.0	0.549	0.0	0.079	0.138	206	0.0	1.0	0.922	53.9	−34.5	−37.0	50.6	227.0
315	Y63G_100_100$_{de}$	0.375	1.0	0.0	1.0	1.0	0.5	128	0.351	1.0	0.0	65.4	−49.4	46.7	68.0	136.5	0.647	0.0	1.0	0.0	129	0.351	1.0	0.0	65.4	−49.4	46.7	68.0	136.5
316	Y73G_100_087$_{de}$	0.375	1.0	0.125	1.0	0.875	0.562	134	0.356	1.0	0.125	65.6	−49.1	36.2	61.0	143.5	0.636	0.0	0.84	0.125	135	0.264	1.0	0.0	61.3	−56.1	41.4	69.8	143.5
317	Y85G_100_075$_{de}$	0.375	1.0	0.25	1.0	0.75	0.625	141	0.329	1.0	0.25	66.4	−47.3	25.4	53.7	151.7	0.65	0.0	0.717	0.125	144	0.105	1.0	0.0	56.6	−63.0	33.9	71.6	151.7
318	G00B_100_062$_{de}$	0.375	1.0	0.375	1.0	0.625	0.687	150	0.375	1.0	0.466	69.5	−41.2	13.2	43.2	162.2	0.622	0.0	0.561	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
319	G09B_100_062$_{de}$	0.375	1.0	0.5	1.0	0.625	0.687	161	0.375	1.0	0.556	69.7	−38.3	5.2	38.7	172.2	0.616	0.0	0.437	0.125	166	0.0	1.0	0.29	54.1	−61.3	8.3	61.9	172.2
320	G19B_100_062$_{de}$	0.375	1.0	0.625	1.0	0.625	0.687	173	0.375	1.0	0.635	70.2	−34.5	−1.9	34.5	183.2	0.625	0.0	0.375	0.0	174	0.0	1.0	0.416	54.8	−55.2	−3.1	55.3	183.2
321	G30B_100_062$_{de}$	0.375	1.0	0.75	1.0	0.625	0.687	187	0.375	1.0	0.72	70.4	−30.4	−8.7	31.6	195.9	0.603	0.0	0.283	0.125	183	0.0	1.0	0.552	55.1	−48.7	−13.9	50.6	195.9
322	G40B_100_062$_{de}$	0.375	1.0	0.875	1.0	0.625	0.687	199	0.375	1.0	0.785	70.5	−26.9	−13.6	30.2	206.9	0.589	0.0	0.264	0.0	190	0.0	1.0	0.656	55.3	−43.1	−21.9	48.3	206.9
323	G50B_100_062$_{de}$	0.375	1.0	1.0	1.0	0.625	0.687	210	0.375	1.0	0.869	70.3	−24.1	−18.2	30.2	216.9	0.563	0.0	0.173	0.087	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9

delta

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

2−1132230−F0

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$				*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
324	R00Y_050_050$_{de}$	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.131	35.7	28.0	13.3	31.0	25.4	0.0	0.799	0.583	0.542	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
325	R26Y_050_050$_{de}$	0.5	0.0	0.125	0.5	0.5	0.25	376	0.5	0.0	0.25	35.8	29.5	5.1	29.9	9.8	0.0	0.78	0.414	0.544	359	1.0	0.0	0.501	47.8	59.0	10.2	59.9	9.8
326	R00Y_050_050$_{de}$	0.5	0.0	0.25	0.5	0.5	0.25	360	0.5	0.0	0.413	36.6	32.7	−4.5	33.1	352.0	0.0	0.76	0.192	0.547	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
327	B61R_050_050$_{de}$	0.5	0.0	0.375	0.5	0.5	0.25	344	0.412	0.0	0.5	34.0	29.1	−9.5	30.6	341.8	0.0	0.72	0.029	0.646	320	0.825	0.0	1.0	44.1	58.2	−19.0	61.2	341.8
328	B50R_050_050$_{de}$	0.5	0.0	0.5	0.5	0.5	0.25	330	0.292	0.0	0.5	31.1	23.3	−14.2	27.3	328.6	0.158	0.714	0.0	0.651	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
329	B40R_062_062$_{de}$	0.5	0.0	0.625	0.625	0.625	0.312	319	0.242	0.0	0.625	30.5	24.2	−21.6	32.4	318.1	0.359	0.801	0.0	0.543	292	0.387	0.0	1.0	34.5	38.7	−34.6	51.9	318.1
330	B34R_075_075$_{de}$	0.5	0.0	0.75	0.75	0.75	0.375	311	0.214	0.0	0.75	29.9	24.6	−28.7	37.8	310.5	0.525	0.865	0.0	0.455	286	0.285	0.0	1.0	31.9	32.8	−38.2	50.4	310.5
331	B29R_087_087$_{de}$	0.5	0.0	0.875	0.875	0.875	0.437	305	0.181	0.0	0.875	30.2	24.7	−35.4	43.1	304.9	0.699	0.901	0.0	0.369	281	0.207	0.0	1.0	31.2	28.2	−40.4	49.3	304.9
332	B25R_100_100$_{de}$	0.5	0.0	1.0	1.0	1.0	0.5	300	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1	0.858	1.0	0.0	0.0	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
333	R23Y_050_050$_{de}$	0.5	0.125	0.0	0.5	0.5	0.25	44	0.5	0.054	0.0	37.6	27.4	23.8	36.3	41.0	0.0	0.763	0.772	0.484	35	1.0	0.108	0.0	51.4	54.8	47.7	72.6	41.0
334	R00Y_050_037$_{de}$	0.5	0.125	0.125	0.5	0.375	0.312	390	0.5	0.124	0.223	41.7	21.0	10.0	23.2	25.4	0.0	0.617	0.433	0.513	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
335	R18Y_050_037$_{de}$	0.5	0.125	0.25	0.5	0.375	0.312	371	0.5	0.124	0.345	41.8	22.9	1.7	22.9	4.3	0.0	0.598	0.282	0.53	354	1.0	0.0	0.588	47.9	61.1	4.6	61.2	4.3
336	B65R_050_037$_{de}$	0.5	0.125	0.375	0.5	0.375	0.312	349	0.478	0.124	0.5	41.5	23.6	−5.6	24.2	346.6	0.0	0.57	0.133	0.562	327	0.941	0.0	1.0	47.0	63.0	−14.9	64.7	346.6
337	B50R_050_037$_{de}$	0.5	0.125	0.5	0.5	0.375	0.312	330	0.344	0.124	0.5	38.3	17.5	−10.7	20.5	328.6	0.048	0.492	0.0	0.643	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
338	B38R_062_050$_{de}$	0.5	0.125	0.625	0.625	0.5	0.375	316	0.298	0.125	0.625	37.6	18.2	−18.0	25.7	315.3	0.261	0.594	0.0	0.547	289	0.347	0.0	1.0	33.5	36.5	−36.1	51.4	315.3
339	B30R_075_062$_{de}$	0.5	0.125	0.75	0.75	0.625	0.437	307	0.272	0.125	0.75	37.3	18.6	−24.8	31.0	306.8	0.423	0.677	0.0	0.446	283	0.235	0.0	1.0	31.0	29.7	−39.7	49.6	306.8
340	B25R_087_075$_{de}$	0.5	0.125	0.875	0.875	0.75	0.5	300	0.229	0.125	0.875	38.6	18.3	−31.4	36.4	300.1	0.557	0.733	0.0	0.333	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
341	B20R_100_087$_{de}$	0.5	0.125	1.0	1.0	0.875	0.562	295	0.185	0.125	1.0	40.0	18.0	−38.0	42.0	295.4	0.654	0.73	0.0	0.174	273	0.068	0.0	1.0	32.0	20.6	−43.4	48.0	295.4
342	R50Y_050_050$_{de}$	0.5	0.25	0.0	0.5	0.5	0.25	60	0.5	0.159	0.0	42.8	17.6	29.2	34.1	58.8	0.0	0.586	0.768	0.476	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
343	R31Y_050_037$_{de}$	0.5	0.25	0.125	0.5	0.375	0.312	49	0.5	0.191	0.124	44.3	18.4	19.5	26.8	46.6	0.0	0.599	0.591	0.476	39	1.0	0.177	0.0	54.6	49.1	52.0	71.6	46.6
344	R00Y_050_025$_{de}$	0.5	0.25	0.25	0.5	0.25	0.375	390	0.5	0.249	0.315	47.7	14.0	6.6	15.5	25.4	0.0	0.44	0.333	0.507	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
345	R00Y_050_025$_{de}$	0.5	0.25	0.375	0.5	0.25	0.375	360	0.5	0.249	0.456	48.2	16.3	−2.2	16.5	352.0	0.0	0.42	0.163	0.513	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
346	B50R_050_025$_{de}$	0.5	0.25	0.5	0.5	0.25	0.375	330	0.396	0.249	0.5	45.5	11.6	−7.1	13.6	328.6	0.0	0.298	0.03	0.614	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
347	B34R_062_037$_{de}$	0.5	0.25	0.625	0.625	0.375	0.437	311	0.357	0.25	0.625	44.8	12.3	−14.3	18.9	310.5	0.17	0.389	0.0	0.542	286	0.285	0.0	1.0	31.9	32.8	−38.2	50.4	310.5
348	B25R_075_050$_{de}$	0.5	0.25	0.75	0.75	0.5	0.5	300	0.319	0.25	0.75	45.6	12.2	−20.9	24.2	300.1	0.311	0.458	0.0	0.435	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
349	B19R_087_062$_{de}$	0.5	0.25	0.875	0.875	0.625	0.562	293	0.275	0.25	0.875	47.1	11.9	−27.4	29.9	293.5	0.457	0.538	0.0	0.295	272	0.04	0.0	1.0	32.2	19.1	−43.9	47.9	293.5
350	B15R_100_075$_{de}$	0.5	0.25	1.0	1.0	0.75	0.625	289	0.25	0.26	1.0	48.5	12.0	−33.6	35.7	289.7	0.539	0.543	0.0	0.168	269	0.0	0.014	1.0	32.8	16.1	−44.8	47.6	289.7
351	R76Y_050_050$_{de}$	0.5	0.375	0.0	0.5	0.5	0.25	76	0.5	0.275	0.0	48.0	8.0	34.1	35.0	76.7	0.0	0.412	0.766	0.476	63	1.0	0.551	0.0	72.3	16.1	68.2	70.1	76.7
352	R68Y_050_037$_{de}$	0.5	0.375	0.125	0.5	0.375	0.312	71	0.5	0.3	0.124	49.7	8.3	24.3	25.7	71.1	0.0	0.41	0.603	0.488	57	1.0	0.466	0.0	68.9	22.1	64.9	68.5	71.1
353	R50Y_050_025$_{de}$	0.5	0.375	0.25	0.5	0.25	0.375	60	0.5	0.329	0.249	51.3	8.8	14.6	17.0	58.8	0.0	0.373	0.436	0.487	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
354	R00Y_050_012$_{de}$	0.5	0.375	0.375	0.5	0.125	0.437	390	0.5	0.375	0.407	53.8	7.0	3.3	7.7	25.4	0.0	0.254	0.22	0.512	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
355	B50R_050_012$_{de}$	0.5	0.375	0.5	0.5	0.125	0.437	330	0.448	0.375	0.5	52.6	5.8	−3.5	6.8	328.6	0.0	0.177	0.054	0.553	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
356	B25R_062_025$_{de}$	0.5	0.375	0.625	0.625	0.25	0.5	300	0.409	0.375	0.625	52.7	6.1	−10.4	12.1	300.1	0.083	0.209	0.0	0.514	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
357	B15R_075_037$_{de}$	0.5	0.375	0.75	0.75	0.375	0.562	289	0.375	0.38	0.75	54.2	6.0	−16.8	17.8	289.7	0.241	0.286	0.0	0.406	269	0.0	0.014	1.0	32.8	16.1	−44.8	47.6	289.7
358	B11R_087_050$_{de}$	0.5	0.375	0.875	0.875	0.5	0.625	284	0.375	0.413	0.875	55.9	6.1	−22.9	23.7	285.0	0.372	0.373	0.0	0.261	266	0.0	0.077	1.0	34.1	12.2	−45.8	47.4	285.0
359	B09R_100_062$_{de}$	0.5	0.375	1.0	1.0	0.625	0.687	281	0.375	0.447	1.0	57.7	6.2	−28.9	29.5	282.1	0.445	0.404	0.0	0.154	263	0.0	0.115	1.0	34.8	9.9	−46.2	47.3	282.1
360	Y00G_050_050$_{de}$	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.384	0.0	53.7	−1.5	38.4	38.4	92.3	0.0	0.227	0.741	0.491	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
361	Y00G_050_037$_{de}$	0.5	0.5	0.125	0.5	0.375	0.312	90	0.5	0.413	0.124	55.2	−1.1	28.8	28.8	92.3	0.0	0.215	0.588	0.506	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
362	Y00G_050_025$_{de}$	0.5	0.5	0.25	0.5	0.25	0.375	90	0.5	0.442	0.249	56.8	−0.7	19.2	19.2	92.3	0.0	0.171	0.435	0.508	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
363	Y00G_050_012$_{de}$	0.5	0.5	0.375	0.5	0.125	0.437	90	0.5	0.471	0.375	58.3	−0.3	9.6	9.6	92.3	0.0	0.106	0.27	0.511	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
364	NW_050$_{de}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
365	B00R_062_012$_{de}$	0.5	0.5	0.625	0.625	0.125	0.562	270	0.5	0.532	0.625	61.5	0.1	−6.0	6.0	271.7	0.082	0.064	0.0	0.453	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
366	B00R_075_025$_{de}$	0.5	0.5	0.75	0.75	0.25	0.625	270	0.5	0.565	0.75	63.2	0.3	−12.1	12.1	271.7	0.158	0.123	0.0	0.387	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
367	B00R_087_037$_{de}$	0.5	0.5	0.875	0.875	0.375	0.687	270	0.5	0.597	0.875	64.8	0.5	−18.2	18.2	271.7	0.292	0.22	0.0	0.252	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
368	B00R_100_050$_{de}$	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.63	1.0	66.5	0.7	−24.3	24.3	271.7	0.373	0.288	0.0	0.127	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
369	Y18G_062_062$_{de}$	0.5	0.625	0.0	0.625	0.625	0.312	101	0.46	0.625	0.0	64.5	−14.2	52.6	54.5	105.1	0.148	0.0	0.821	0.391	104	0.736	1.0	0.0	89.0	−22.7	84.1	87.2	105.1
370	Y23G_062_050$_{de}$	0.5	0.625	0.125	0.625	0.5	0.375	104	0.473	0.625	0.125	63.8	−13.2	39.2	41.4	108.6	0.118	0.0	0.665	0.447	107	0.697	1.0	0.0	85.8	−26.4	78.5	82.9	108.6
371	Y31G_062_037$_{de}$	0.5	0.625	0.25	0.625	0.375	0.437	109	0.486	0.625	0.25	63.0	−11.7	25.8	28.4	114.4	0.111	0.0	0.507	0.462	111	0.631	1.0	0.0	80.4	−31.3	68.9	75.7	114.4
372	Y50G_062_025$_{de}$	0.5	0.625	0.375	0.625	0.25	0.5	120	0.5	0.625	0.375	62.6	−10.4	13.7	17.2	127.2	0.139	0.0	0.364	0.453	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
373	G00B_062_012$_{de}$	0.5	0.625	0.5	0.625	0.125	0.562	150	0.5	0.625	0.518	63.5	−8.2	2.6	8.6	162.2	0.154	0.0	0.198	0.436	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
374	G50B_062_012$_{de}$	0.5	0.625	0.625	0.625	0.125	0.562	210	0.5	0.625	0.598	63.7	−4.8	−3.6	6.0	216.9	0.117	0.0	0.059	0.443	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
375	G75B_075_025$_{de}$	0.5	0.625	0.75	0.75	0.25	0.625	240	0.5	0.671	0.75	66.8	−5.8	−12.1	13.4	244.3	0.174	0.018	0.0	0.383	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
376	G84B_087_037$_{de}$	0.5	0.625	0.875	0.875	0.375	0.687	251	0.5	0.69	0.875	68.3	−5.1	−18.5	19.2	254.3	0.31	0.137	0.0	0.242	239	0.0	0.508	1.0	46.4	−13.8	−49.4	51.3	254.3
377	G88B_100_050$_{de}$	0.5	0.625	1.0	1.0	0.5	0.75	256	0.5	0.717	1.0	69.7	−4.8	−24.7	25.1	258.9	0.398	0.23	0.0	0.078	244	0.0	0.434	1.0	43.6	−9.6	−49.4	50.3	258.9
378	Y31G_075_075$_{de}$	0.5	0.75	0.0	0.75	0.75	0.375	109	0.473	0.75	0.0	66.2	−23.5	51.7	56.8	114.4	0.319	0.0	0.872	0.285	111	0.631	1.0	0.0	80.4	−31.3	68.9	75.7	114.4
379	Y38G_075_062$_{de}$	0.5	0.75	0.125	0.75	0.625	0.437	113	0.489	0.75	0.125	66.0	−22.1	39.8	45.6	119.1	0.307	0.0	0.735	0.323	114	0.583	1.0	0.0	76.9	−35.5	63.7	73.0	119.1
380	Y50G_075_050$_{de}$	0.5	0.75	0.25	0.75	0.5	0.5	120	0.5	0.75	0.25	65.4	−20.8	27.4	34.4	127.2	0.301	0.0	0.609	0.334	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
381	Y68G_075_037$_{de}$	0.5	0.75	0.375	0.75	0.375	0.562	131	0.49	0.75	0.375	65.6	−19.8	16.5	25.8	140.0	0.31	0.0	0.489	0.329	132	0.308	1.0	0.0	63.4	−52.8	44.2	68.9	140.0
382	G00B_075_025$_{de}$	0.5	0.75	0.5	0.75	0.25	0.625	150	0.5	0.75	0.536	67.3	−16.4	5.2	17.3	162.2	0.3	0.0	0.327	0.323	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
383	G25B_075_025$_{de}$	0.5	0.75	0.625	0.75	0.25	0.625	180	0.5	0.75	0.624	67.6	−12.9	−2.1	13.0	189.6	0.266	0.0	0.198	0.344	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
384	G50B_075_025$_{de}$	0.5	0.75	0.75	0.75	0.25	0.625	210	0.5	0.75	0.697	67.6	−9.6	−7.2	12.1	216.9	0.214	0.0	0.095	0.368	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
385	G65B_087_037$_{de}$	0.5	0.75	0.875	0.875	0.375	0.687	229	0.5	0.875	0.872	70.8	−11.4	−15.9	19.6	234.3	0.288	0.0	0.011	0.283	209	0.0	1.0	0.992	53.2	−30.5	−42.5	52.3	234.3
386	G75B_100_050$_{de}$	0.5	0.75	1.0	1.0	0.5	0.75	240	0.5	0.843	1.0	73.7	−11.6	−24.3	26.9	244.3	0.407	0.117	0.0	0.078	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
387	Y41G_087_087$_{de}$	0.5	0.875	0.0	0.875	0.875	0.437	115	0.489	0.875	0.0	68.8	−32.7	53.6	62.8	121.4	0.437	0.0	0.936	0.168	116	0.559	1.0	0.0	75.2	−37.4	61.2	71.8	121.4
388	Y50G_087_075$_{de}$	0.5	0.875	0.125	0.875	0.75	0.5	120	0.5	0.875	0.125	68.2	−31.3	41.1	51.7	127.2	0.429	0.0	0.791	0.212	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
389	Y61G_087_062$_{de}$	0.5	0.875	0.25	0.875	0.625	0.562	127	0.478	0.875	0.25	68.3	−30.1	29.7	42.3	135.4	0.431	0.0	0.695	0.208	128	0.366	1.0	0.0	66.1	−48.2	47.5	67.7	135.4
390	Y76G_087_050$_{de}$	0.5	0.875	0.375	0.875	0.5	0.625	136	0.488	0.875	0.375	68.9	−29.1	19.6	35.1	145.9	0.435	0.0	0.585	0.2	137	0.227	1.0	0.0	59.9	−58.2	39.3	70.2	145.9
391	G00B_087_037$_{de}$	0.5	0.875	0.5	0.875	0.375	0.687	150	0.5	0.875	0.555	71.0	−24.7	7.9	25.9	162.2	0.407	0.0	0.41	0.194	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
392	G15B_087_037$_{de}$	0.5	0.875	0.625	0.875	0.375	0.687	169	0.5	0.875	0.638	71.4	−21.4	0.1	21.4	179.5	0.397	0.0	0.304	0.204	171	0.0	1.0	0.37	54.7	−57.0	0.4	57.0	179.5
393	G34B_087_037$_{de}$	0.5	0.875	0.75	0.875	0.375	0.687	191	0.5	0.875	0.718	71.6	−17.5	−6.2	18.6	199.6	0.368	0.0	0.212	0.224	185	0.0	1.0	0.583	55.2	−46.8	−16.7	49.7	199.6
394	G50B_087_037$_{de}$	0.5	0.875	0.875	0.875	0.375	0.687	210	0.5	0.875	0.796	71.5	−14.5	−10.9	18.1	216.9	0.333	0.0	0.134	0.249	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
395	G61B_100_050$_{de}$	0.5	0.875	1.0	1.0	0.5	0.75	224	0.5	1.0	0.974	74.7	−16.5	−19.5	25.6	229.7	0.38	0.0	0.037	0.155	207	0.0	1.0	0.948	53.6	−33.1	−39.1	51.2	229.7
396	Y50G_100_100$_{de}$	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2	0.497	0.0	1.0	0.0	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
397	Y58G_100_087$_{de}$	0.5	1.0	0.125	1.0	0.875	0.562	125	0.477	1.0	0.125	71.0	−40.5	43.3	59.4	133.0	0.506	0.0	0.825	0.004	126	0.402	1.0	0.0	67.5	−46.3	49.5	67.9	133.0
398	Y68G_100_075$_{de}$	0.5	1.0	0.25	1.0	0.75	0.625	131	0.481	1.0	0.25	71.5	−39.6	33.1	51.7	140.0	0.5	0.0	0.75	0.0	132	0.308	1.0	0.0	63.4	−52.8	44.2	68.9	140.0
399	Y81G_100_062$_{de}$	0.5	1.0	0.375	1.0	0.625	0.687	139	0.473	1.0	0.375	72.1	−38.1	22.5	44.2	149.4	0.509	0.0	0.639	0.0	141	0.157	1.0	0.0	57.9	−60.9	36.0	70.8	149.4
400	G00B_100_050$_{de}$	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.573	74.8	−32.9	10.5	34.6	162.2	0.515	0.0	0.498	0.0	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
401	G11B_100_050$_{de}$	0.5	1.0	0.625	1.0	0.5	0.75	164	0.5	1.0	0.66	75.0	−29.9	2.6	30.0	175.0	0.5	0.0	0.375	0.0	168	0.0	1.0	0.32	54.3	−59.8	5.2	60.1	175.0
402	G25B_100_050$_{de}$	0.5	1.0	0.75	1.0	0.5	0.75	180	0.5	1.0	0.748	75.4	−25.8	−4.3	26.1	189.6	0.44	0.0	0.284	0.125	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
403	G38B_100_050$_{de}$	0.5	1.0	0.875	1.0	0.5	0.75	196	0.5	1.0	0.811	75.5	−22.1	−9.9	24.2	204.2	0.466	0.0	0.233	0.025	188	0.0	1.0	0.622	55.3	−44.3	−19.9	48.5	204.2
404	G50B_100_050$_{de}$	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	0.895	75.4	−19.3	−14.5	24.2	216.9	0.399	0.0	0.132	0.128	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9

delta

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, $\Delta E'$*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$				*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
405	R00Y_062_062$_{de}$	0.625	0.0	0.0	0.625	0.625	0.312	390	0.625	0.0	0.164	38.6	35.0	16.7	38.8	25.4	0.0	0.842	0.612	0.41	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
406	R31Y_062_062$_{de}$	0.625	0.0	0.125	0.625	0.625	0.312	379	0.625	0.0	0.284	38.7	36.4	8.5	37.4	13.2	0.0	0.836	0.466	0.409	362	1.0	0.0	0.454	47.6	58.3	13.7	59.9	13.2
407	R11Y_062_062$_{de}$	0.625	0.0	0.25	0.625	0.625	0.312	367	0.625	0.0	0.412	39.1	39.1	0.0	39.1	359.8	0.0	0.829	0.312	0.41	349	1.0	0.0	0.659	48.3	62.6	−0.1	62.6	359.8
408	B69R_062_062$_{de}$	0.625	0.0	0.375	0.625	0.625	0.312	353	0.625	0.0	0.562	39.7	41.2	−6.9	41.8	350.4	0.0	0.812	0.157	0.42	335	1.0	0.0	0.899	49.2	66.0	−11.1	66.9	350.4
409	B59R_062_062$_{de}$	0.625	0.0	0.5	0.625	0.625	0.312	341	0.473	0.0	0.625	35.2	34.6	−13.2	37.1	339.0	0.091	0.784	0.0	0.549	316	0.756	0.0	1.0	42.1	55.4	−21.2	59.3	339.0
410	B50R_062_062$_{de}$	0.625	0.0	0.625	0.625	0.625	0.312	330	0.365	0.0	0.625	33.0	29.2	−17.8	34.2	328.6	0.243	0.791	0.0	0.543	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
411	B42R_075_075$_{de}$	0.625	0.0	0.75	0.75	0.75	0.375	321	0.316	0.0	0.75	32.4	30.0	−25.1	39.2	320.0	0.412	0.858	0.0	0.421	294	0.421	0.0	1.0	35.3	40.1	−33.5	52.3	320.0
412	B36R_087_087$_{de}$	0.625	0.0	0.875	0.875	0.875	0.437	314	0.282	0.0	0.875	31.7	30.7	−32.4	44.6	313.4	0.567	0.926	0.0	0.295	288	0.322	0.0	1.0	32.9	35.0	−37.0	51.0	313.4
413	B31R_100_100$_{de}$	0.625	0.0	1.0	1.0	1.0	0.5	308	0.249	0.0	1.0	31.0	30.5	−39.4	49.8	307.7	0.749	0.999	0.0	0.0	283	0.249	0.0	1.0	31.0	30.5	−39.4	49.8	307.7
414	R18Y_062_062$_{de}$	0.625	0.125	0.0	0.625	0.625	0.312	41	0.625	0.038	0.0	40.0	35.0	27.1	44.3	37.7	0.0	0.83	0.803	0.373	33	1.0	0.06	0.0	49.7	56.0	43.3	70.8	37.7
415	R00Y_062_050$_{de}$	0.625	0.125	0.125	0.625	0.5	0.375	390	0.625	0.125	0.256	44.7	28.0	13.3	31.0	25.4	0.0	0.705	0.503	0.387	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
416	R26Y_062_050$_{de}$	0.625	0.125	0.25	0.625	0.5	0.375	376	0.625	0.125	0.375	44.8	29.5	5.1	29.9	9.8	0.0	0.689	0.363	0.399	359	1.0	0.0	0.501	47.8	59.0	10.2	59.9	9.8
417	R00Y_062_050$_{de}$	0.625	0.125	0.375	0.625	0.5	0.375	360	0.625	0.125	0.538	45.6	32.7	−4.5	33.1	352.0	0.0	0.669	0.182	0.409	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
418	B61R_062_050$_{de}$	0.625	0.125	0.5	0.625	0.5	0.375	344	0.537	0.125	0.625	43.0	29.1	−9.5	30.6	341.8	0.0	0.611	0.038	0.507	320	0.825	0.0	1.0	44.1	58.2	−19.0	61.2	341.8
419	B50R_062_050$_{de}$	0.625	0.125	0.625	0.625	0.5	0.375	330	0.417	0.125	0.625	40.1	23.3	−14.2	27.3	328.6	0.141	0.595	0.0	0.541	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
420	B40R_075_062$_{de}$	0.625	0.125	0.75	0.75	0.625	0.437	319	0.367	0.125	0.75	39.5	24.2	−21.6	32.4	318.1	0.32	0.681	0.0	0.421	292	0.387	0.0	1.0	34.5	38.7	−34.6	51.9	318.1
421	B34R_087_075$_{de}$	0.625	0.125	0.875	0.875	0.75	0.5	311	0.339	0.125	0.875	38.9	24.6	−28.7	37.8	310.5	0.473	0.772	0.0	0.307	286	0.285	0.0	1.0	31.9	32.8	−38.2	50.4	310.5
422	B29R_100_087$_{de}$	0.625	0.125	1.0	1.0	0.875	0.562	305	0.306	0.125	1.0	39.2	24.7	−35.4	43.1	304.9	0.579	0.772	0.0	0.171	281	0.207	0.0	1.0	31.2	28.2	−40.4	49.3	304.9
423	R38Y_062_062$_{de}$	0.625	0.25	0.0	0.625	0.625	0.312	53	0.625	0.143	0.0	44.7	27.4	34.0	43.6	51.0	0.0	0.685	0.841	0.358	42	1.0	0.229	0.0	57.2	43.9	54.4	69.9	51.0
424	R23Y_062_050$_{de}$	0.625	0.25	0.125	0.625	0.5	0.375	44	0.625	0.179	0.125	46.6	27.4	23.8	36.3	41.0	0.0	0.701	0.656	0.344	35	1.0	0.108	0.0	51.4	54.8	47.7	72.6	41.0
425	R00Y_062_037$_{de}$	0.625	0.25	0.25	0.625	0.375	0.437	390	0.625	0.25	0.348	50.7	21.0	10.0	23.2	25.4	0.0	0.552	0.402	0.385	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
426	R18Y_062_037$_{de}$	0.625	0.25	0.375	0.625	0.375	0.437	371	0.625	0.25	0.47	50.8	22.9	1.7	22.9	4.3	0.0	0.537	0.267	0.402	354	1.0	0.0	0.588	47.9	61.1	4.6	61.2	4.3
427	B65R_062_037$_{de}$	0.625	0.25	0.5	0.625	0.375	0.437	349	0.603	0.25	0.625	50.5	23.6	−5.6	24.2	346.6	0.0	0.508	0.13	0.435	327	0.941	0.0	1.0	47.0	63.0	−14.9	64.7	346.6
428	B50R_062_037$_{de}$	0.625	0.25	0.625	0.625	0.375	0.437	330	0.469	0.25	0.625	47.3	17.5	−10.7	20.5	328.6	0.035	0.412	0.0	0.526	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
429	B38R_075_050$_{de}$	0.625	0.25	0.75	0.75	0.5	0.5	316	0.423	0.25	0.75	46.6	18.2	−18.0	25.7	315.3	0.225	0.496	0.0	0.425	289	0.347	0.0	1.0	33.5	36.5	−36.1	51.4	315.3
430	B30R_087_062$_{de}$	0.625	0.25	0.875	0.875	0.625	0.562	307	0.397	0.25	0.875	46.3	18.6	−24.8	31.0	306.8	0.38	0.588	0.0	0.304	283	0.235	0.0	1.0	31.0	29.7	−39.7	49.6	306.8
431	B25R_100_075$_{de}$	0.625	0.25	1.0	1.0	0.75	0.625	300	0.354	0.25	1.0	47.6	18.3	−31.4	36.4	300.1	0.474	0.594	0.0	0.173	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
432	R61Y_062_062$_{de}$	0.625	0.375	0.0	0.625	0.625	0.312	67	0.625	0.257	0.0	50.4	16.7	38.9	42.4	66.6	0.0	0.525	0.837	0.354	54	1.0	0.411	0.0	66.3	26.8	62.3	67.8	66.6
433	R50Y_062_050$_{de}$	0.625	0.375	0.125	0.625	0.5	0.375	60	0.625	0.284	0.125	51.8	17.6	29.2	34.1	58.8	0.0	0.547	0.681	0.357	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
434	R31Y_062_037$_{de}$	0.625	0.375	0.25	0.625	0.375	0.437	49	0.625	0.316	0.25	53.3	18.4	19.5	26.8	46.6	0.0	0.528	0.534	0.346	39	1.0	0.177	0.0	54.6	49.1	52.0	71.6	46.6
435	R00Y_062_025$_{de}$	0.625	0.375	0.375	0.625	0.25	0.5	390	0.625	0.375	0.44	56.7	14.0	6.6	15.5	25.4	0.0	0.399	0.312	0.391	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
436	R00Y_062_025$_{de}$	0.625	0.375	0.5	0.625	0.25	0.5	360	0.625	0.375	0.581	57.2	16.3	−2.2	16.5	352.0	0.0	0.389	0.16	0.398	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
437	B50R_062_025$_{de}$	0.625	0.375	0.625	0.625	0.25	0.5	330	0.521	0.375	0.625	54.5	11.6	−7.1	13.6	328.6	0.0	0.274	0.034	0.493	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
438	B34R_075_037$_{de}$	0.625	0.375	0.75	0.75	0.375	0.562	311	0.482	0.375	0.75	53.8	12.3	−14.3	18.9	310.5	0.163	0.339	0.0	0.412	286	0.285	0.0	1.0	31.9	32.8	−38.2	50.4	310.5
439	B25R_087_050$_{de}$	0.625	0.375	0.875	0.875	0.5	0.625	300	0.444	0.375	0.875	54.6	12.2	−20.9	24.2	300.1	0.304	0.424	0.0	0.275	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
440	B19R_100_062$_{de}$	0.625	0.375	1.0	1.0	0.625	0.687	293	0.4	0.375	1.0	56.0	11.9	−27.4	29.9	293.5	0.393	0.452	0.0	0.164	272	0.04	0.0	1.0	32.2	19.1	−43.9	47.9	293.5
441	R81Y_062_062$_{de}$	0.625	0.5	0.0	0.625	0.625	0.312	79	0.625	0.382	0.0	55.4	7.7	43.9	44.6	80.0	0.0	0.381	0.834	0.352	67	1.0	0.611	0.0	74.4	12.3	70.3	71.3	80.0
442	R76Y_062_050$_{de}$	0.625	0.5	0.125	0.625	0.5	0.375	76	0.625	0.4	0.125	57.0	8.0	34.1	35.0	76.7	0.0	0.386	0.687	0.372	63	1.0	0.551	0.0	72.3	16.1	68.2	70.1	76.7
443	R68Y_062_037$_{de}$	0.625	0.5	0.25	0.625	0.375	0.437	71	0.625	0.425	0.25	58.7	8.3	24.3	25.7	71.1	0.0	0.358	0.546	0.371	57	1.0	0.466	0.0	68.9	22.1	64.9	68.5	71.1
444	R50Y_062_025$_{de}$	0.625	0.5	0.375	0.625	0.25	0.5	60	0.625	0.454	0.375	60.3	8.8	14.6	17.0	58.8	0.0	0.33	0.401	0.372	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
445	R00Y_062_012$_{de}$	0.625	0.5	0.5	0.625	0.125	0.562	390	0.625	0.5	0.532	62.8	7.0	3.3	7.7	25.4	0.0	0.221	0.193	0.4	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
446	B50R_062_012$_{de}$	0.625	0.5	0.625	0.625	0.125	0.562	330	0.573	0.5	0.625	61.6	5.8	−3.5	6.8	328.6	0.0	0.143	0.034	0.445	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
447	B25R_075_025$_{de}$	0.625	0.5	0.75	0.75	0.25	0.625	300	0.534	0.5	0.75	61.7	6.1	−10.4	12.1	300.1	0.102	0.192	0.0	0.394	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
448	B15R_087_037$_{de}$	0.625	0.5	0.875	0.875	0.375	0.687	289	0.5	0.505	0.875	63.2	6.0	−16.8	17.8	289.7	0.242	0.277	0.0	0.263	269	0.0	0.014	1.0	32.8	16.1	−44.8	47.6	289.7
449	B11R_100_050$_{de}$	0.625	0.5	1.0	1.0	0.5	0.75	284	0.5	0.538	1.0	64.9	6.1	−22.9	23.7	285.0	0.334	0.328	0.0	0.149	266	0.0	0.077	1.0	34.1	12.2	−45.8	47.4	285.0
450	Y00G_062_062$_{de}$	0.625	0.625	0.0	0.625	0.625	0.312	90	0.625	0.48	0.0	61.2	−1.9	48.0	48.0	92.3	0.0	0.217	0.784	0.39	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
451	Y00G_062_050$_{de}$	0.625	0.625	0.125	0.625	0.5	0.375	90	0.625	0.509	0.125	62.7	−1.5	38.4	38.4	92.3	0.0	0.21	0.65	0.399	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
452	Y00G_062_037$_{de}$	0.625	0.625	0.25	0.625	0.375	0.437	90	0.625	0.538	0.25	64.2	−1.1	28.8	28.8	92.3	0.0	0.188	0.523	0.397	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
453	Y00G_062_025$_{de}$	0.625	0.625	0.375	0.625	0.25	0.5	90	0.625	0.567	0.375	65.7	−0.7	19.2	19.2	92.3	0.0	0.145	0.388	0.396	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
454	Y00G_062_012$_{de}$	0.625	0.625	0.5	0.625	0.125	0.562	90	0.625	0.596	0.5	67.3	−0.3	9.6	9.6	92.3	0.0	0.086	0.237	0.404	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
455	NW_062$_{de}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
456	B00R_075_012$_{de}$	0.625	0.625	0.75	0.75	0.125	0.687	270	0.625	0.657	0.75	70.5	0.1	−6.0	6.0	271.7	0.076	0.06	0.0	0.351	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
457	B00R_087_025$_{de}$	0.625	0.625	0.875	0.875	0.25	0.75	270	0.625	0.69	0.875	72.2	0.3	−12.1	12.1	271.7	0.171	0.131	0.0	0.256	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
458	B00R_100_037$_{de}$	0.625	0.625	1.0	1.0	0.375	0.812	270	0.625	0.722	1.0	73.8	0.5	−18.2	18.2	271.7	0.271	0.212	0.0	0.112	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
459	Y15G_075_075$_{de}$	0.625	0.75	0.0	0.75	0.75	0.375	99	0.606	0.75	0.0	74.4	−14.9	65.7	67.4	102.7	0.111	0.0	0.882	0.296	100	0.808	1.0	0.0	91.3	−19.9	87.6	89.8	102.7
460	Y18G_075_062$_{de}$	0.625	0.75	0.125	0.75	0.625	0.437	101	0.585	0.75	0.125	73.5	−14.2	52.6	54.5	105.1	0.1	0.0	0.724	0.326	104	0.736	1.0	0.0	89.0	−22.7	84.1	87.2	105.1
461	Y23G_075_050$_{de}$	0.625	0.75	0.25	0.75	0.5	0.5	104	0.598	0.75	0.25	72.8	−13.2	39.2	41.4	108.6	0.096	0.0	0.6	0.343	107	0.697	1.0	0.0	85.8	−26.4	78.5	82.9	108.6
462	Y31G_075_037$_{de}$	0.625	0.75	0.375	0.75	0.375	0.562	109	0.611	0.75	0.375	72.0	−11.7	25.8	28.4	114.4	0.11	0.0	0.457	0.346	111	0.631	1.0	0.0	80.4	−31.3	68.9	75.7	114.4
463	Y50G_075_025$_{de}$	0.625	0.75	0.5	0.75	0.25	0.625	120	0.625	0.75	0.5	71.6	−10.4	13.7	17.2	127.2	0.133	0.0	0.324	0.345	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
464	G00B_075_012$_{de}$	0.625	0.75	0.625	0.75	0.125	0.687	150	0.625	0.75	0.643	72.5	−8.2	2.6	8.6	162.2	0.143	0.0	0.176	0.329	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
465	G50B_075_012$_{de}$	0.625	0.75	0.75	0.75	0.125	0.687	210	0.625	0.75	0.723	72.7	−4.8	−3.6	6.0	216.9	0.108	0.0	0.053	0.338	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
466	G75B_087_025$_{de}$	0.625	0.75	0.875	0.875	0.25	0.75	240	0.625	0.796	0.875	75.8	−5.8	−12.1	13.4	244.3	0.189	0.037	0.0	0.249	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
467	G84B_100_037$_{de}$	0.625	0.75	1.0	1.0	0.375	0.812	251	0.625	0.815	1.0	77.3	−5.1	−18.5	19.2	254.3	0.292	0.153	0.0	0.072	239	0.0	0.508	1.0	46.4	−13.8	−49.4	51.3	254.3
468	Y26G_087_087$_{de}$	0.625	0.875	0.0	0.875	0.875	0.437	106	0.587	0.875	0.0	76.1	−25.0	65.4	70.0	110.9	0.319	0.0	0.938	0.157	108	0.67	1.0	0.0	83.6	−28.6	74.7	80.0	110.9
469	Y31G_087_075$_{de}$	0.625	0.875	0.125	0.875	0.75	0.5	109	0.598	0.875	0.125	75.2	−23.5	51.7	56.8	114.4	0.296	0.0	0.777	0.196	111	0.631	1.0	0.0	80.4	−31.3	68.9	75.7	114.4
470	Y38G_087_062$_{de}$	0.625	0.875	0.25	0.875	0.625	0.562	113	0.614	0.875	0.25	75.0	−22.1	39.8	45.6	119.1	0.286	0.0	0.685	0.205	114	0.583	1.0	0.0	76.9	−35.5	63.7	73.0	119.1
471	Y50G_087_050$_{de}$	0.625	0.875	0.375	0.875	0.5	0.625	120	0.625	0.875	0.375	74.4	−20.8	27.4	34.4	127.2	0.279	0.0	0.555	0.219	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
472	Y68G_087_037$_{de}$	0.625	0.875	0.5	0.875	0.375	0.687	131	0.615	0.875	0.5	74.6	−19.8	16.5	25.8	140.0	0.292	0.0	0.432	0.21	132	0.308	1.0	0.0	63.4	−52.8	44.2	68.9	140.0
473	G00B_087_025$_{de}$	0.625	0.875	0.625	0.875	0.25	0.75	150	0.625	0.875	0.661	76.3	−16.4	5.2	17.3	162.2	0.284	0.0	0.28	0.201	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
474	G25B_087_025$_{de}$	0.625	0.875	0.75	0.875	0.25	0.75	180	0.625	0.875	0.749	76.6	−12.9	−2.1	13.0	189.6	0.249	0.0	0.169	0.222	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
475	G50B_087_025$_{de}$	0.625	0.875	0.875	0.875	0.25	0.75	210	0.625	0.875	0.822	76.6	−9.6	−7.2	12.1	216.9	0.204	0.0	0.073	0.249	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
476	G65B_100_037$_{de}$	0.625	0.875	1.0	1.0	0.375	0.812	229	0.625	1.0	0.997	79.8	−11.4	−15.9	19.6	234.3	0.274	0.0	0.002	0.152	209	0.0	1.0	0.992	53.2	−30.5	−42.5	52.3	234.3
477	Y36G_100_100$_{de}$	0.625	1.0	0.0	1.0	1.0	0.5	112	0.595	1.0	0.0	77.7	−34.4	64.9	73.5	117.9	0.403	0.0	1.0	0.0	113	0.595	1.0	0.0	77.7	−34.4	64.9	73.5	117.9
478	Y41G_100_087$_{de}$	0.625	1.0	0.125	1.0	0.875	0.562	115	0.614	1.0	0.125	77.8	−32.7	53.6	62.8	121.4	0.408	0.0	0.818	0.013	116	0.559	1.0	0.0	75.2	−37.4	61.2	71.8	121.4
479	Y50G_100_075$_{de}$	0.625	1.0	0.25	1.0	0.75	0.625	120	0.625	1.0	0.25	77.2	−31.3	41.1	51.7	127.2	0.394	0.0	0.709	0.025	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
480	Y61G_100_062$_{de}$	0.625	1.0	0.375	1.0	0.625	0.687	127	0.603	1.0	0.375	77.3	−30.1	29.7	42.3	135.4	0.387	0.0	0.61	0.012	128	0.366	1.0	0.0	66.1	−48.2	47.5	67.7	135.4
481	Y76G_100_050$_{de}$	0.625	1.0	0.5	1.0	0.5	0.75	136	0.613	1.0	0.5	77.9	−29.1	19.6	35.1	145.9	0.406	0.0	0.515	0.0	137	0.227	1.0	0.0	59.9	−58.2	39.3	70.2	145.9
482	G00B_100_037$_{de}$	0.625	1.0	0.625	1.0	0.375	0.812	150	0.625	1.0	0.68	80.0	−24.7	7.9	25.9	162.2	0.407	0.0	0.376	0.0	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
483	G15B_100_037$_{de}$	0.625	1.0	0.75	1.0	0.375	0.812	169	0.625	1.0	0.763	80.4	−21.4	0.1	21.4	179.5	0.407	0.0	0.25	0.0	171	0.0	1.0	0.37	54.7	−57.0	0.4	57.0	179.5
484	G34B_100_037$_{de}$	0.625	1.0	0.875	1.0	0.375	0.812	191	0.625	1.0	0.843	80.6	−17.5	−6.2	18.6	199.6	0.385	0.0	0.198	0.011	185	0.0	1.0	0.583	55.2	−46.8	−16.7	49.7	199.6
485	G50B_100_037$_{de}$	0.625	1.0	1.0	1.0	0.375	0.812	210	0.625	1.0	0.921	80.5	−14.5	−10.9	18.1	216.9	0.305	0.0	0.095	0.125	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9

delta

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$					*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
486	R00Y_075_075$_{de}$	0.75	0.0	0.0	0.75	0.75	0.375	390	0.75	0.0	0.197	41.6	42.0	20.0	46.5	25.4	0.0	0.884	0.66	0.266	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
487	R35Y_075_075$_{de}$	0.75	0.0	0.125	0.75	0.75	0.375	381	0.75	0.0	0.317	41.6	43.3	11.9	45.0	15.4	0.0	0.882	0.516	0.264	365	1.0	0.0	0.423	47.5	57.8	15.9	60.0	15.4
488	R18Y_075_075$_{de}$	0.75	0.0	0.25	0.75	0.75	0.375	371	0.75	0.0	0.441	41.9	45.8	3.4	45.9	4.3	0.0	0.875	0.373	0.265	354	1.0	0.0	0.588	47.9	61.1	4.6	61.2	4.3
489	R00Y_075_075$_{de}$	0.75	0.0	0.375	0.75	0.75	0.375	360	0.75	0.0	0.62	43.0	49.1	−6.8	49.6	352.0	0.0	0.858	0.177	0.264	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
490	B65R_075_075$_{de}$	0.75	0.0	0.5	0.75	0.75	0.375	349	0.706	0.0	0.75	41.2	47.2	−11.2	48.5	346.6	0.0	0.853	0.079	0.341	327	0.941	0.0	1.0	47.0	63.0	−14.9	64.7	346.6
491	B57R_075_075$_{de}$	0.75	0.0	0.625	0.75	0.75	0.375	339	0.543	0.0	0.75	36.9	40.4	−17.0	43.8	337.1	0.171	0.854	0.0	0.407	314	0.725	0.0	1.0	41.3	53.8	−22.7	58.4	337.1
492	B50R_075_075$_{de}$	0.75	0.0	0.75	0.75	0.75	0.375	330	0.438	0.0	0.75	34.8	35.0	−21.4	41.0	328.6	0.3	0.849	0.0	0.407	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
493	B43R_087_087$_{de}$	0.75	0.0	0.875	0.875	0.875	0.437	322	0.383	0.0	0.875	34.2	35.7	−28.8	45.9	321.0	0.463	0.917	0.0	0.278	295	0.438	0.0	1.0	35.7	40.8	−33.0	52.4	321.0
494	B38R_100_100$_{de}$	0.75	0.0	1.0	1.0	1.0	0.5	316	0.347	0.0	1.0	33.5	36.5	−36.1	51.4	315.3	0.65	1.0	0.0	0.0	289	0.347	0.0	1.0	33.5	36.5	−36.1	51.4	315.3
495	R15Y_075_075$_{de}$	0.75	0.125	0.0	0.75	0.75	0.375	39	0.75	0.021	0.0	42.4	42.5	30.3	52.2	35.5	0.0	0.873	0.855	0.25	31	1.0	0.028	0.0	48.6	56.7	40.4	69.6	35.5
496	R00Y_075_062$_{de}$	0.75	0.125	0.125	0.75	0.625	0.437	390	0.75	0.125	0.289	47.6	35.0	16.7	38.8	25.4	0.0	0.745	0.508	0.25	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
497	R31Y_075_062$_{de}$	0.75	0.125	0.25	0.75	0.625	0.437	379	0.75	0.125	0.409	47.7	36.4	8.5	37.4	13.2	0.0	0.738	0.383	0.262	362	1.0	0.0	0.454	47.6	58.3	13.7	59.9	13.2
498	R11Y_075_062$_{de}$	0.75	0.125	0.375	0.75	0.625	0.437	367	0.75	0.125	0.537	48.1	39.1	0.0	39.1	359.8	0.0	0.734	0.246	0.268	349	1.0	0.0	0.659	48.3	62.6	−0.1	62.6	359.8
499	B69R_075_062$_{de}$	0.75	0.125	0.5	0.75	0.625	0.437	353	0.75	0.125	0.687	48.7	41.2	−6.9	41.8	350.4	0.0	0.726	0.124	0.276	335	1.0	0.0	0.899	49.2	66.0	−11.1	66.9	350.4
500	B59R_075_062$_{de}$	0.75	0.125	0.625	0.75	0.625	0.437	341	0.598	0.125	0.75	44.2	34.6	−13.2	37.1	339.0	0.058	0.678	0.0	0.416	316	0.756	0.0	1.0	42.1	55.4	−21.2	59.3	339.0
501	B50R_075_062$_{de}$	0.75	0.125	0.75	0.75	0.625	0.437	330	0.49	0.125	0.75	42.0	29.2	−17.8	34.2	328.6	0.206	0.674	0.0	0.413	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
502	B42R_087_075$_{de}$	0.75	0.125	0.875	0.875	0.75	0.5	321	0.441	0.125	0.875	41.4	30.0	−25.1	39.2	320.0	0.38	0.769	0.0	0.273	294	0.421	0.0	1.0	35.3	40.1	−33.5	52.3	320.0
503	B36R_100_087$_{de}$	0.75	0.125	1.0	1.0	0.875	0.562	314	0.407	0.125	1.0	40.7	30.7	−32.4	44.6	313.4	0.479	0.768	0.0	0.157	288	0.322	0.0	1.0	32.9	35.0	−37.0	51.0	313.4
504	R31Y_075_075$_{de}$	0.75	0.25	0.0	0.75	0.75	0.375	49	0.75	0.132	0.0	46.9	36.8	39.0	53.7	46.6	0.0	0.755	0.897	0.25	39	1.0	0.177	0.0	54.6	49.1	52.0	71.6	46.6
505	R18Y_075_062$_{de}$	0.75	0.25	0.125	0.75	0.625	0.437	41	0.75	0.163	0.125	49.0	35.0	27.1	44.3	37.7	0.0	0.75	0.683	0.226	33	1.0	0.06	0.0	49.7	56.0	43.3	70.8	37.7
506	R00Y_075_050$_{de}$	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.381	53.7	28.0	13.3	31.0	25.4	0.0	0.618	0.428	0.251	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
507	R26Y_075_050$_{de}$	0.75	0.25	0.375	0.75	0.5	0.5	376	0.75	0.25	0.5	53.8	29.5	5.1	29.9	9.8	0.0	0.623	0.305	0.26	359	1.0	0.0	0.501	47.8	59.0	10.2	59.9	9.8
508	R00Y_075_050$_{de}$	0.75	0.25	0.5	0.75	0.5	0.5	360	0.75	0.25	0.663	54.6	32.7	−4.5	33.1	352.0	0.0	0.613	0.153	0.264	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
509	B61R_075_050$_{de}$	0.75	0.25	0.625	0.75	0.5	0.5	344	0.662	0.25	0.75	52.0	29.1	−9.5	30.6	341.8	0.0	0.561	0.051	0.38	320	0.825	0.0	1.0	44.1	58.2	−19.0	61.2	341.8
510	B50R_075_050$_{de}$	0.75	0.25	0.75	0.75	0.5	0.5	330	0.542	0.25	0.75	49.1	23.3	−14.2	27.3	328.6	0.122	0.504	0.0	0.411	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
511	B40R_087_062$_{de}$	0.75	0.25	0.875	0.875	0.625	0.562	319	0.492	0.25	0.875	48.5	24.2	−21.6	32.4	318.1	0.294	0.609	0.0	0.266	292	0.387	0.0	1.0	34.5	38.7	−34.6	51.9	318.1
512	B34R_100_075$_{de}$	0.75	0.25	1.0	1.0	0.75	0.625	311	0.464	0.25	1.0	47.9	24.6	−28.7	37.8	310.5	0.387	0.626	0.0	0.17	286	0.285	0.0	1.0	31.9	32.8	−38.2	50.4	310.5
513	R50Y_075_075$_{de}$	0.75	0.375	0.0	0.75	0.75	0.375	60	0.75	0.239	0.0	52.3	26.4	43.8	51.1	58.8	0.0	0.632	0.893	0.249	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
514	R38Y_075_062$_{de}$	0.75	0.375	0.125	0.75	0.625	0.437	53	0.75	0.268	0.125	53.7	27.4	34.0	43.6	51.0	0.0	0.635	0.74	0.226	42	1.0	0.229	0.0	57.2	43.9	54.4	69.9	51.0
515	R23Y_075_050$_{de}$	0.75	0.375	0.25	0.75	0.5	0.5	44	0.75	0.304	0.25	55.6	27.4	23.8	36.3	41.0	0.0	0.617	0.579	0.212	35	1.0	0.108	0.0	51.4	54.8	47.7	72.6	41.0
516	R00Y_075_037$_{de}$	0.75	0.375	0.375	0.75	0.375	0.562	390	0.75	0.375	0.473	59.7	21.0	10.0	23.2	25.4	0.0	0.501	0.337	0.244	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
517	R18Y_075_037$_{de}$	0.75	0.375	0.5	0.75	0.375	0.562	371	0.75	0.375	0.595	59.8	22.9	1.7	22.9	4.3	0.0	0.489	0.219	0.255	354	1.0	0.0	0.588	47.9	61.1	4.6	61.2	4.3
518	B65R_075_037$_{de}$	0.75	0.375	0.625	0.75	0.375	0.562	349	0.728	0.375	0.75	59.5	23.6	−5.6	24.2	346.6	0.0	0.462	0.092	0.296	327	0.941	0.0	1.0	47.0	63.0	−14.9	64.7	346.6
519	B50R_075_037$_{de}$	0.75	0.375	0.75	0.75	0.375	0.562	330	0.594	0.375	0.75	56.3	17.5	−10.7	20.5	328.6	0.052	0.373	0.0	0.401	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
520	B38R_087_050$_{de}$	0.75	0.375	0.875	0.875	0.5	0.625	316	0.548	0.375	0.875	55.6	18.2	−18.0	25.7	315.3	0.231	0.476	0.0	0.26	289	0.347	0.0	1.0	33.5	36.5	−36.1	51.4	315.3
521	B30R_100_062$_{de}$	0.75	0.375	1.0	1.0	0.625	0.687	307	0.522	0.375	1.0	55.3	18.6	−24.8	31.0	306.8	0.333	0.506	0.0	0.171	283	0.235	0.0	1.0	31.0	29.7	−39.7	49.6	306.8
522	R68Y_075_075$_{de}$	0.75	0.5	0.0	0.75	0.75	0.375	71	0.75	0.35	0.0	57.6	16.6	48.6	51.4	71.1	0.0	0.483	0.872	0.249	57	1.0	0.466	0.0	68.9	22.1	64.9	68.5	71.1
523	R61Y_075_062$_{de}$	0.75	0.5	0.125	0.75	0.625	0.437	67	0.75	0.382	0.125	59.4	16.7	38.9	42.4	66.6	0.0	0.473	0.731	0.236	54	1.0	0.411	0.0	66.3	26.8	62.3	67.8	66.6
524	R50Y_075_050$_{de}$	0.75	0.5	0.25	0.75	0.5	0.5	60	0.75	0.409	0.25	60.8	17.6	29.2	34.1	58.8	0.0	0.476	0.613	0.22	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
525	R31Y_075_037$_{de}$	0.75	0.5	0.375	0.75	0.375	0.562	49	0.75	0.441	0.375	62.3	18.4	19.5	26.8	46.6	0.0	0.468	0.462	0.213	39	1.0	0.177	0.0	54.6	49.1	52.0	71.6	46.6
526	R00Y_075_025$_{de}$	0.75	0.5	0.5	0.75	0.25	0.625	390	0.75	0.5	0.565	65.7	14.0	6.6	15.5	25.4	0.0	0.348	0.249	0.256	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
527	R00Y_075_025$_{de}$	0.75	0.5	0.625	0.75	0.25	0.625	360	0.75	0.5	0.706	66.2	16.3	−2.2	16.5	352.0	0.0	0.328	0.107	0.263	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
528	B50R_075_025$_{de}$	0.75	0.5	0.75	0.75	0.25	0.625	330	0.646	0.5	0.75	63.5	11.6	−7.1	13.6	328.6	0.0	0.232	0.001	0.39	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
529	B34R_087_037$_{de}$	0.75	0.5	0.875	0.875	0.375	0.687	311	0.607	0.5	0.875	62.8	12.3	−14.3	18.9	310.5	0.171	0.329	0.0	0.266	286	0.285	0.0	1.0	31.9	32.8	−38.2	50.4	310.5
530	B25R_100_050$_{de}$	0.75	0.5	1.0	1.0	0.5	0.75	300	0.569	0.5	1.0	63.6	12.2	−20.9	24.2	300.1	0.281	0.372	0.0	0.167	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
531	R85Y_075_075$_{de}$	0.75	0.625	0.0	0.75	0.75	0.375	81	0.75	0.481	0.0	62.9	7.2	53.8	54.3	82.2	0.0	0.348	0.853	0.261	69	1.0	0.642	0.0	76.0	9.7	71.7	72.4	82.2
532	R81Y_075_062$_{de}$	0.75	0.625	0.125	0.75	0.625	0.437	79	0.75	0.507	0.125	64.4	7.7	43.9	44.6	80.0	0.0	0.343	0.722	0.253	67	1.0	0.611	0.0	74.4	12.3	70.3	71.3	80.0
533	R76Y_075_050$_{de}$	0.75	0.625	0.25	0.75	0.5	0.5	76	0.75	0.525	0.25	66.0	8.0	34.1	35.0	76.7	0.0	0.336	0.619	0.238	63	1.0	0.551	0.0	72.3	16.1	68.2	70.1	76.7
534	R68Y_075_037$_{de}$	0.75	0.625	0.375	0.75	0.375	0.562	71	0.75	0.55	0.375	67.7	8.3	24.3	25.7	71.1	0.0	0.31	0.467	0.236	57	1.0	0.466	0.0	68.9	22.1	64.9	68.5	71.1
535	R50Y_075_025$_{de}$	0.75	0.625	0.5	0.75	0.25	0.625	60	0.75	0.579	0.5	69.3	8.8	14.6	17.0	58.8	0.0	0.29	0.329	0.241	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
536	R00Y_075_012$_{de}$	0.75	0.625	0.625	0.75	0.125	0.687	390	0.75	0.625	0.657	71.8	7.0	3.3	7.7	25.4	0.0	0.185	0.15	0.277	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
537	B50R_075_012$_{de}$	0.75	0.625	0.75	0.75	0.125	0.687	330	0.698	0.625	0.75	70.6	5.8	−3.5	6.8	328.6	0.0	0.119	0.01	0.336	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
538	B25R_087_025$_{de}$	0.75	0.625	0.875	0.875	0.25	0.75	300	0.659	0.625	0.875	70.7	6.1	−10.4	12.1	300.1	0.113	0.188	0.0	0.26	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
539	B15R_100_037$_{de}$	0.75	0.625	1.0	1.0	0.375	0.812	289	0.625	0.63	1.0	72.2	6.0	−16.8	17.8	289.7	0.225	0.26	0.0	0.137	269	0.0	0.014	1.0	32.8	16.1	−44.8	47.6	289.7
540	Y00G_075_075$_{de}$	0.75	0.75	0.0	0.75	0.75	0.375	90	0.75	0.576	0.0	68.7	−2.3	57.6	57.6	92.3	0.0	0.2	0.811	0.294	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
541	Y00G_075_062$_{de}$	0.75	0.75	0.125	0.75	0.625	0.437	90	0.75	0.605	0.125	70.2	−1.9	48.0	48.0	92.3	0.0	0.196	0.701	0.287	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
542	Y00G_075_050$_{de}$	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.634	0.25	71.7	−1.5	38.4	38.4	92.3	0.0	0.187	0.598	0.276	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
543	Y00G_075_037$_{de}$	0.75	0.75	0.375	0.75	0.375	0.562	90	0.75	0.663	0.375	73.2	−1.1	28.8	28.8	92.3	0.0	0.157	0.453	0.272	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
544	Y00G_075_025$_{de}$	0.75	0.75	0.5	0.75	0.25	0.625	90	0.75	0.692	0.5	74.7	−0.7	19.2	19.2	92.3	0.0	0.116	0.325	0.28	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
545	Y00G_075_012$_{de}$	0.75	0.75	0.625	0.75	0.125	0.687	90	0.75	0.721	0.625	76.3	−0.3	9.6	9.6	92.3	0.0	0.066	0.186	0.285	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
546	NW_075$_{de}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
547	B00R_087_012$_{de}$	0.75	0.75	0.875	0.875	0.125	0.812	270	0.75	0.782	0.875	79.5	0.1	−6.0	6.0	271.7	0.083	0.073	0.0	0.201	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
548	B00R_100_025$_{de}$	0.75	0.75	1.0	1.0	0.25	0.875	270	0.75	0.815	1.0	81.2	0.3	−12.1	12.1	271.7	0.178	0.169	0.0	0.075	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
549	Y13G_087_087$_{de}$	0.75	0.875	0.0	0.875	0.875	0.437	98	0.758	0.875	0.0	84.0	−16.0	78.0	79.7	101.6	0.095	0.0	0.91	0.187	97	0.867	1.0	0.0	92.6	−18.3	89.2	91.0	101.6
550	Y15G_087_075$_{de}$	0.75	0.875	0.125	0.875	0.75	0.5	99	0.731	0.875	0.125	83.4	−14.9	65.7	67.4	102.7	0.086	0.0	0.767	0.184	100	0.808	1.0	0.0	91.3	−19.9	87.6	89.8	102.7
551	Y18G_087_062$_{de}$	0.75	0.875	0.25	0.875	0.625	0.562	101	0.71	0.875	0.25	82.5	−14.2	52.6	54.5	105.1	0.09	0.0	0.68	0.198	104	0.736	1.0	0.0	89.0	−22.7	84.1	87.2	105.1
552	Y23G_087_050$_{de}$	0.75	0.875	0.375	0.875	0.5	0.625	104	0.723	0.875	0.375	81.8	−13.2	39.2	41.4	108.6	0.095	0.0	0.522	0.204	107	0.697	1.0	0.0	85.8	−26.4	78.5	82.9	108.6
553	Y31G_087_037$_{de}$	0.75	0.875	0.5	0.875	0.375	0.687	109	0.736	0.875	0.5	81.0	−11.7	25.8	28.4	114.4	0.106	0.0	0.384	0.216	111	0.631	1.0	0.0	80.4	−31.3	68.9	75.7	114.4
554	Y50G_087_025$_{de}$	0.75	0.875	0.625	0.875	0.25	0.75	120	0.75	0.875	0.625	80.6	−10.4	13.7	17.2	127.2	0.131	0.0	0.268	0.215	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
555	G00B_087_012$_{de}$	0.75	0.875	0.75	0.875	0.125	0.812	150	0.75	0.875	0.768	81.5	−8.2	2.6	8.6	162.2	0.138	0.0	0.135	0.196	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
556	G50B_087_012$_{de}$	0.75	0.875	0.875	0.875	0.125	0.812	210	0.75	0.875	0.848	81.7	−4.8	−3.6	6.0	216.9	0.098	0.0	0.024	0.205	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
557	G75B_100_025$_{de}$	0.75	0.875	1.0	1.0	0.25	0.875	240	0.75	0.921	1.0	84.8	−5.8	−12.1	13.4	244.3	0.205	0.095	0.0	0.054	227	0.0	0.686	1.0	51.7	−23.3	−48.6	53.9	244.3
558	Y23G_100_100$_{de}$	0.75	1.0	0.0	1.0	1.0	0.5	104	0.697	1.0	0.0	85.8	−26.4	78.5	82.9	108.6	0.304	0.0	1.0	0.0	107	0.697	1.0	0.0	85.8	−26.4	78.5	82.9	108.6
559	Y26G_100_087$_{de}$	0.75	1.0	0.125	1.0	0.875	0.562	106	0.712	1.0	0.125	85.1	−25.0	65.4	70.0	110.9	0.292	0.0	0.817	0.01	108	0.67	1.0	0.0	83.6	−28.6	74.7	80.0	110.9
560	Y31G_100_075$_{de}$	0.75	1.0	0.25	1.0	0.75	0.625	109	0.723	1.0	0.25	84.2	−23.5	51.7	56.8	114.4	0.269	0.0	0.695	0.033	111	0.631	1.0	0.0	80.4	−31.3	68.9	75.7	114.4
561	Y38G_100_062$_{de}$	0.75	1.0	0.375	1.0	0.625	0.687	113	0.739	1.0	0.375	84.0	−22.1	39.8	45.6	119.1	0.257	0.0	0.562	0.039	114	0.583	1.0	0.0	76.9	−35.5	63.7	73.0	119.1
562	Y50G_100_050$_{de}$	0.75	1.0	0.5	1.0	0.5	0.75	120	0.75	1.0	0.5	83.4	−20.8	27.4	34.4	127.2	0.269	0.0	0.458	0.046	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
563	Y68G_100_037$_{de}$	0.75	1.0	0.625	1.0	0.375	0.812	131	0.74	1.0	0.625	83.6	−19.8	16.5	25.8	140.0	0.307	0.0	0.375	0.019	132	0.308	1.0	0.0	63.4	−52.8	44.2	68.9	140.0
564	G00B_100_025$_{de}$	0.75	1.0	0.75	1.0	0.25	0.875	150	0.75	1.0	0.786	85.3	−16.4	5.2	17.3	162.2	0.311	0.0	0.25	0.0	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
565	G25B_100_025$_{de}$	0.75	1.0	0.875	1.0	0.25	0.875	180	0.75	1.0	0.874	85.6	−12.9	−2.1	13.0	189.6	0.267	0.0	0.147	0.018	179	0.0	1.0	0.497	55.0	−51.6	−8.7	52.3	189.6
566	G50B_100_025$_{de}$	0.75	1.0	1.0	1.0	0.25	0.875	210	0.75	1.0	0.947	85.6	−9.6	−7.2	12.1	216.9	0.201	0.0	0.061	0.087	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9

delta

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

2−1132530−F0

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$					*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
567	R00Y_087_087$_{de}$	0.875	0.0	0.0	0.875	0.875	0.437	390	0.875	0.0	0.23	44.5	49.0	23.3	54.3	25.4	0.0	0.928	0.7	0.147	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
568	R36Y_087_087$_{de}$	0.875	0.0	0.125	0.875	0.875	0.437	382	0.875	0.0	0.357	44.5	50.3	14.9	52.5	16.5	0.0	0.927	0.568	0.148	366	1.0	0.0	0.408	47.5	57.5	17.1	60.0	16.5
569	R23Y_087_087$_{de}$	0.875	0.0	0.25	0.875	0.875	0.437	374	0.875	0.0	0.469	44.8	52.4	7.0	52.9	7.6	0.0	0.923	0.446	0.148	357	1.0	0.0	0.536	47.8	59.9	8.0	60.4	7.6
570	R08Y_087_087$_{de}$	0.875	0.0	0.375	0.875	0.875	0.437	365	0.875	0.0	0.608	45.6	55.5	−2.2	55.6	357.6	0.0	0.905	0.289	0.151	347	1.0	0.0	0.695	48.7	63.4	−2.6	63.5	357.6
571	B70R_087_087$_{de}$	0.875	0.0	0.5	0.875	0.875	0.437	355	0.875	0.0	0.716	46.2	57.2	−7.7	57.8	352.3	0.0	0.905	0.196	0.149	339	1.0	0.0	0.818	49.4	65.4	−8.8	66.0	352.3
572	B63R_087_087$_{de}$	0.875	0.0	0.625	0.875	0.875	0.437	346	0.762	0.0	0.875	42.8	52.5	−15.2	54.6	343.7	0.0	0.903	0.004	0.25	323	0.87	0.0	1.0	45.5	60.0	−17.4	62.5	343.7
573	B56R_087_087$_{de}$	0.875	0.0	0.75	0.875	0.875	0.437	338	0.621	0.0	0.875	38.8	46.4	−20.5	50.8	336.1	0.193	0.918	0.0	0.271	313	0.71	0.0	1.0	41.0	53.1	−23.4	58.0	336.1
574	B50R_087_087$_{de}$	0.875	0.0	0.875	0.875	0.875	0.437	330	0.511	0.0	0.875	36.6	40.9	−24.9	47.9	328.6	0.333	0.921	0.0	0.263	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
575	B44R_100_100$_{de}$	0.875	0.0	1.0	1.0	1.0	0.5	323	0.455	0.0	1.0	36.1	41.4	−32.4	52.6	321.9	0.542	1.0	0.0	0.0	297	0.455	0.0	1.0	36.1	41.4	−32.4	52.6	321.9
576	R13Y_087_087$_{de}$	0.875	0.125	0.0	0.875	0.875	0.437	38	0.875	0.011	0.0	45.0	49.8	34.1	60.4	34.3	0.0	0.93	0.924	0.141	30	1.0	0.012	0.0	48.0	57.0	39.0	69.1	34.3
577	R00Y_087_075$_{de}$	0.875	0.125	0.125	0.875	0.75	0.5	390	0.875	0.125	0.322	50.6	42.0	20.0	46.5	25.4	0.0	0.778	0.527	0.16	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
578	R35Y_087_075$_{de}$	0.875	0.125	0.25	0.875	0.75	0.5	381	0.875	0.125	0.442	50.6	43.3	11.9	45.0	15.4	0.0	0.774	0.416	0.167	365	1.0	0.0	0.423	47.5	57.8	15.9	60.0	15.4
579	R18Y_087_075$_{de}$	0.875	0.125	0.375	0.875	0.75	0.5	371	0.875	0.125	0.566	50.9	45.8	3.4	45.9	4.3	0.0	0.769	0.298	0.17	354	1.0	0.0	0.588	47.9	61.1	4.6	61.2	4.3
580	R00Y_087_075$_{de}$	0.875	0.125	0.5	0.875	0.75	0.5	360	0.875	0.125	0.745	52.0	49.1	−6.8	49.6	352.0	0.0	0.764	0.148	0.163	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
581	B65R_087_075$_{de}$	0.875	0.125	0.625	0.875	0.75	0.5	349	0.831	0.125	0.875	50.2	47.2	−11.2	48.5	346.6	0.0	0.756	0.054	0.215	327	0.941	0.0	1.0	47.0	63.0	−14.9	64.7	346.6
582	B57R_087_075$_{de}$	0.875	0.125	0.75	0.875	0.75	0.5	339	0.668	0.125	0.875	45.9	40.4	−17.0	43.8	337.1	0.15	0.761	0.0	0.271	314	0.725	0.0	1.0	41.3	53.8	−22.7	58.4	337.1
583	B50R_087_075$_{de}$	0.875	0.125	0.875	0.875	0.75	0.5	330	0.563	0.125	0.875	43.8	35.0	−21.4	41.0	328.6	0.279	0.757	0.0	0.262	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
584	B43R_100_087$_{de}$	0.875	0.125	1.0	1.0	0.875	0.562	322	0.508	0.125	1.0	43.2	35.7	−28.8	45.9	321.0	0.378	0.76	0.0	0.149	295	0.438	0.0	1.0	35.7	40.8	−33.0	52.4	321.0
585	R26Y_087_087$_{de}$	0.875	0.25	0.0	0.875	0.875	0.437	46	0.875	0.12	0.0	49.0	46.4	43.7	63.7	43.3	0.0	0.819	0.929	0.156	37	1.0	0.138	0.0	52.6	53.0	49.9	72.8	43.3
586	R15Y_087_075$_{de}$	0.875	0.25	0.125	0.875	0.75	0.5	39	0.875	0.146	0.125	51.4	42.5	30.3	52.2	35.5	0.0	0.792	0.693	0.141	31	1.0	0.028	0.0	48.6	56.7	40.4	69.6	35.5
587	R00Y_087_062$_{de}$	0.875	0.25	0.25	0.875	0.625	0.562	390	0.875	0.25	0.414	56.6	35.0	16.7	38.8	25.4	0.0	0.673	0.446	0.144	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
588	R31Y_087_062$_{de}$	0.875	0.25	0.375	0.875	0.625	0.562	379	0.875	0.25	0.534	56.7	36.4	8.5	37.4	13.2	0.0	0.667	0.339	0.153	362	1.0	0.0	0.454	47.6	58.3	13.7	59.9	13.2
589	R11Y_087_062$_{de}$	0.875	0.25	0.5	0.875	0.625	0.562	367	0.875	0.25	0.662	57.1	39.1	0.0	39.1	359.8	0.0	0.664	0.224	0.154	349	1.0	0.0	0.659	48.3	62.6	−0.1	62.6	359.8
590	B69R_087_062$_{de}$	0.875	0.25	0.625	0.875	0.625	0.562	353	0.875	0.25	0.812	57.7	41.2	−6.9	41.8	350.4	0.0	0.657	0.12	0.156	335	1.0	0.0	0.899	49.2	66.0	−11.1	66.9	350.4
591	B59R_087_062$_{de}$	0.875	0.25	0.75	0.875	0.625	0.562	341	0.723	0.25	0.875	53.2	34.6	−13.2	37.1	339.0	0.06	0.635	0.0	0.261	316	0.756	0.0	1.0	42.1	55.4	−21.2	59.3	339.0
592	B50R_087_062$_{de}$	0.875	0.25	0.875	0.875	0.625	0.562	330	0.615	0.25	0.875	51.0	29.2	−17.8	34.2	328.6	0.21	0.639	0.0	0.248	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
593	B42R_100_075$_{de}$	0.875	0.25	1.0	1.0	0.75	0.625	321	0.566	0.25	1.0	50.4	30.0	−25.1	39.2	320.0	0.313	0.646	0.0	0.154	294	0.421	0.0	1.0	35.3	40.1	−33.5	52.3	320.0
594	R41Y_087_087$_{de}$	0.875	0.375	0.0	0.875	0.875	0.437	55	0.875	0.223	0.0	54.2	36.1	48.5	60.5	53.3	0.0	0.711	0.936	0.154	44	1.0	0.255	0.0	58.5	41.3	55.4	69.1	53.3
595	R31Y_087_075$_{de}$	0.875	0.375	0.125	0.875	0.75	0.5	49	0.875	0.257	0.125	55.9	36.8	39.0	53.7	46.6	0.0	0.715	0.766	0.116	39	1.0	0.177	0.0	54.6	49.1	52.0	71.6	46.6
596	R18Y_087_062$_{de}$	0.875	0.375	0.25	0.875	0.625	0.562	41	0.875	0.288	0.25	58.0	35.0	27.1	44.3	37.7	0.0	0.679	0.582	0.107	33	1.0	0.06	0.0	49.7	56.0	43.3	70.8	37.7
597	R00Y_087_050$_{de}$	0.875	0.375	0.375	0.875	0.5	0.625	390	0.875	0.375	0.506	62.7	28.0	13.3	31.0	25.4	0.0	0.562	0.381	0.134	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
598	R26Y_087_050$_{de}$	0.875	0.375	0.5	0.875	0.5	0.625	376	0.875	0.375	0.625	62.8	29.5	5.1	29.9	9.8	0.0	0.551	0.261	0.142	359	1.0	0.0	0.501	47.8	59.0	10.2	59.9	9.8
599	R00Y_087_050$_{de}$	0.875	0.375	0.625	0.875	0.5	0.625	360	0.875	0.375	0.788	63.6	32.7	−4.5	33.1	352.0	0.0	0.536	0.133	0.143	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
600	B61R_087_050$_{de}$	0.875	0.375	0.75	0.875	0.5	0.625	344	0.787	0.375	0.875	61.0	29.1	−9.5	30.6	341.8	0.0	0.493	0.021	0.23	320	0.825	0.0	1.0	44.1	58.2	−19.0	61.2	341.8
601	B50R_087_050$_{de}$	0.875	0.375	0.875	0.875	0.5	0.625	330	0.667	0.375	0.875	58.1	23.3	−14.2	27.3	328.6	0.138	0.494	0.0	0.246	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
602	B40R_100_062$_{de}$	0.875	0.375	1.0	1.0	0.625	0.687	319	0.617	0.375	1.0	57.5	24.2	−21.6	32.4	318.1	0.26	0.528	0.0	0.16	292	0.387	0.0	1.0	34.5	38.7	−34.6	51.9	318.1
603	R58Y_087_087$_{de}$	0.875	0.5	0.0	0.875	0.875	0.437	65	0.875	0.336	0.0	59.9	25.4	53.2	59.0	64.4	0.0	0.579	0.932	0.154	52	1.0	0.384	0.0	65.0	29.0	60.9	67.5	64.4
604	R50Y_087_075$_{de}$	0.875	0.5	0.125	0.875	0.75	0.5	60	0.875	0.364	0.125	61.3	26.4	43.8	51.1	58.8	0.0	0.578	0.783	0.12	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
605	R38Y_087_062$_{de}$	0.875	0.5	0.25	0.875	0.625	0.562	53	0.875	0.393	0.25	62.7	27.4	34.0	43.6	51.0	0.0	0.583	0.65	0.095	42	1.0	0.229	0.0	57.2	43.9	54.4	69.9	51.0
606	R23Y_087_050$_{de}$	0.875	0.5	0.375	0.875	0.5	0.625	44	0.875	0.429	0.375	64.6	27.4	23.8	36.3	41.0	0.0	0.56	0.503	0.084	35	1.0	0.108	0.0	51.4	54.8	47.7	72.6	41.0
607	R00Y_087_037$_{de}$	0.875	0.5	0.5	0.875	0.375	0.687	390	0.875	0.5	0.598	68.7	21.0	10.0	23.2	25.4	0.0	0.433	0.28	0.129	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
608	R18Y_087_037$_{de}$	0.875	0.5	0.625	0.875	0.375	0.687	371	0.875	0.5	0.72	68.8	22.9	1.7	22.9	4.3	0.0	0.417	0.18	0.144	354	1.0	0.0	0.588	47.9	61.1	4.6	61.2	4.3
609	B65R_087_037$_{de}$	0.875	0.5	0.75	0.875	0.375	0.687	349	0.853	0.5	0.875	68.5	23.6	−5.6	24.2	346.6	0.0	0.395	0.072	0.174	327	0.941	0.0	1.0	47.0	63.0	−14.9	64.7	346.6
610	B50R_087_037$_{de}$	0.875	0.5	0.875	0.875	0.375	0.687	330	0.719	0.5	0.875	65.3	17.5	−10.7	20.5	328.6	0.061	0.342	0.0	0.254	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
611	B38R_100_050$_{de}$	0.875	0.5	1.0	1.0	0.5	0.75	316	0.673	0.5	1.0	64.6	18.2	−18.0	25.7	315.3	0.207	0.407	0.0	0.157	289	0.347	0.0	1.0	33.5	36.5	−36.1	51.4	315.3
612	R73Y_087_087$_{de}$	0.875	0.625	0.0	0.875	0.875	0.437	74	0.875	0.447	0.0	65.0	16.2	58.4	60.6	74.4	0.0	0.459	0.936	0.156	60	1.0	0.511	0.0	70.9	18.5	66.7	69.2	74.4
613	R68Y_087_075$_{de}$	0.875	0.625	0.125	0.875	0.75	0.5	71	0.875	0.475	0.125	66.6	16.6	48.6	51.4	71.1	0.0	0.455	0.782	0.128	57	1.0	0.466	0.0	68.9	22.1	64.9	68.5	71.1
614	R61Y_087_062$_{de}$	0.875	0.625	0.25	0.875	0.625	0.562	67	0.875	0.507	0.25	68.4	16.7	38.9	42.4	66.6	0.0	0.449	0.666	0.1	54	1.0	0.411	0.0	66.3	26.8	62.3	67.8	66.6
615	R50Y_087_050$_{de}$	0.875	0.625	0.375	0.875	0.5	0.625	60	0.875	0.534	0.375	69.8	17.6	29.2	34.1	58.8	0.0	0.436	0.53	0.088	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
616	R31Y_087_037$_{de}$	0.875	0.625	0.5	0.875	0.375	0.687	49	0.875	0.566	0.5	71.3	18.4	19.5	26.8	46.6	0.0	0.423	0.4	0.084	39	1.0	0.177	0.0	54.6	49.1	52.0	71.6	46.6
617	R00Y_087_025$_{de}$	0.875	0.625	0.625	0.875	0.25	0.75	390	0.875	0.625	0.69	74.7	14.0	6.6	15.5	25.4	0.0	0.302	0.201	0.127	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
618	R00Y_087_025$_{de}$	0.875	0.625	0.75	0.875	0.25	0.75	360	0.875	0.625	0.831	75.2	16.3	−2.2	16.5	352.0	0.0	0.289	0.085	0.134	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
619	B50R_087_025$_{de}$	0.875	0.625	0.875	0.875	0.25	0.75	330	0.771	0.625	0.875	72.5	11.6	−7.1	13.6	328.6	0.009	0.212	0.0	0.249	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
620	B34R_100_037$_{de}$	0.875	0.625	1.0	1.0	0.375	0.812	311	0.732	0.625	1.0	71.8	12.3	−14.3	18.9	310.5	0.158	0.301	0.0	0.143	286	0.285	0.0	1.0	31.9	32.8	−38.2	50.4	310.5
621	R86Y_087_087$_{de}$	0.875	0.75	0.0	0.875	0.875	0.437	82	0.875	0.573	0.0	70.2	7.3	63.4	63.8	83.4	0.0	0.34	0.916	0.164	70	1.0	0.655	0.0	76.8	8.3	72.4	72.9	83.4
622	R85Y_087_075$_{de}$	0.875	0.75	0.125	0.875	0.75	0.5	81	0.875	0.606	0.125	71.9	7.2	53.8	54.3	82.2	0.0	0.334	0.773	0.143	69	1.0	0.642	0.0	76.0	9.7	71.7	72.4	82.2
623	R81Y_087_062$_{de}$	0.875	0.75	0.25	0.875	0.625	0.562	79	0.875	0.632	0.25	73.4	7.7	43.9	44.6	80.0	0.0	0.338	0.684	0.118	67	1.0	0.611	0.0	74.4	12.3	70.3	71.3	80.0
624	R76Y_087_050$_{de}$	0.875	0.75	0.375	0.875	0.5	0.625	76	0.875	0.65	0.375	75.0	8.0	34.1	35.0	76.7	0.0	0.308	0.538	0.105	63	1.0	0.551	0.0	72.3	16.1	68.2	70.1	76.7
625	R68Y_087_037$_{de}$	0.875	0.75	0.5	0.875	0.375	0.687	71	0.875	0.675	0.5	76.7	8.3	24.3	25.7	71.1	0.0	0.284	0.41	0.102	57	1.0	0.466	0.0	68.9	22.1	64.9	68.5	71.1
626	R50Y_087_025$_{de}$	0.875	0.75	0.625	0.875	0.25	0.75	60	0.875	0.704	0.625	78.3	8.8	14.6	17.0	58.8	0.0	0.251	0.272	0.107	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
627	R00Y_087_012$_{de}$	0.875	0.75	0.75	0.875	0.125	0.812	390	0.875	0.75	0.782	80.8	7.0	3.3	7.7	25.4	0.0	0.161	0.121	0.139	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
628	B50R_087_012$_{de}$	0.875	0.75	0.875	0.875	0.125	0.812	330	0.823	0.75	0.875	79.6	5.8	−3.5	6.8	328.6	0.0	0.112	0.002	0.196	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
629	B25R_100_025$_{de}$	0.875	0.75	1.0	1.0	0.25	0.875	300	0.784	0.75	1.0	79.7	6.1	−10.4	12.1	300.1	0.114	0.195	0.0	0.104	277	0.138	0.0	1.0	31.5	24.4	−41.9	48.5	300.1
630	Y00G_087_087$_{de}$	0.875	0.875	0.0	0.875	0.875	0.437	90	0.875	0.672	0.0	76.1	−2.7	67.2	67.2	92.3	0.0	0.194	0.844	0.192	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
631	Y00G_087_075$_{de}$	0.875	0.875	0.125	0.875	0.75	0.5	90	0.875	0.701	0.125	77.7	−2.3	57.6	57.6	92.3	0.0	0.193	0.75	0.17	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
632	Y00G_087_062$_{de}$	0.875	0.875	0.25	0.875	0.625	0.562	90	0.875	0.73	0.25	79.2	−1.9	48.0	48.0	92.3	0.0	0.189	0.664	0.15	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
633	Y00G_087_050$_{de}$	0.875	0.875	0.375	0.875	0.5	0.625	90	0.875	0.759	0.375	80.7	−1.5	38.4	38.4	92.3	0.0	0.159	0.522	0.143	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
634	Y00G_087_037$_{de}$	0.875	0.875	0.5	0.875	0.375	0.687	90	0.875	0.788	0.5	82.2	−1.1	28.8	28.8	92.3	0.0	0.134	0.394	0.142	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
635	Y00G_087_025$_{de}$	0.875	0.875	0.625	0.875	0.25	0.75	90	0.875	0.817	0.625	83.7	−0.7	19.2	19.2	92.3	0.0	0.084	0.262	0.148	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
636	Y00G_087_012$_{de}$	0.875	0.875	0.75	0.875	0.125	0.812	90	0.875	0.846	0.75	85.3	−0.3	9.6	9.6	92.3	0.0	0.055	0.15	0.149	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
637	NW_087$_{de}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
638	B00R_100_012$_{de}$	0.875	0.875	1.0	1.0	0.125	0.937	270	0.875	0.907	1.0	88.5	0.1	−6.0	6.0	271.7	0.099	0.104	0.0	0.045	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
639	Y11G_100_100$_{de}$	0.875	1.0	0.0	1.0	1.0	0.5	97	1.0	0.995	0.0	91.4	−15.5	84.4	85.8	100.4	0.0	0.0	1.0	0.0	89	1.0	0.995	0.0	91.4	−15.5	84.4	85.8	100.4
640	Y13G_100_087$_{de}$	0.875	1.0	0.125	1.0	0.875	0.562	98	0.883	1.0	0.125	93.0	−16.0	78.0	79.7	101.6	0.0	0.0	0.875	0.0	97	0.867	1.0	0.0	92.6	−18.3	89.2	91.0	101.6
641	Y15G_100_075$_{de}$	0.875	1.0	0.25	1.0	0.75	0.625	99	0.856	1.0	0.25	92.4	−14.9	65.7	67.4	102.7	0.125	0.0	0.749	0.0	100	0.808	1.0	0.0	91.3	−19.9	87.6	89.8	102.7
642	Y18G_100_062$_{de}$	0.875	1.0	0.375	1.0	0.625	0.687	101	0.835	1.0	0.375	91.5	−14.2	52.6	54.5	105.1	0.073	0.0	0.601	0.007	104	0.736	1.0	0.0	89.0	−22.7	84.1	87.2	105.1
643	Y23G_100_050$_{de}$	0.875	1.0	0.5	1.0	0.5	0.75	104	0.848	1.0	0.5	90.8	−13.2	39.2	41.4	108.6	0.094	0.0	0.443	0.039	107	0.697	1.0	0.0	85.8	−26.4	78.5	82.9	108.6
644	Y31G_100_037$_{de}$	0.875	1.0	0.625	1.0	0.375	0.812	109	0.861	1.0	0.625	90.0	−11.7	25.8	28.4	114.4	0.108	0.0	0.318	0.05	111	0.631	1.0	0.0	80.4	−31.3	68.9	75.7	114.4
645	Y50G_100_025$_{de}$	0.875	1.0	0.75	1.0	0.25	0.875	120	0.875	1.0	0.75	89.6	−10.4	13.7	17.2	127.2	0.13	0.0	0.218	0.054	119	0.5	1.0	0.0	71.0	−41.7	54.8	68.9	127.2
646	G00B_100_012$_{de}$	0.875	1.0	0.875	1.0	0.125	0.937	150	0.875	1.0	0.893	90.5	−8.2	2.6	8.6	162.2	0.141	0.0	0.123	0.014	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
647	G50B_100_012$_{de}$	0.875	1.0	1.0	1.0	0.125	0.937	210	0.875	1.0	0.973	90.7	−4.8	−3.6	6.0	216.9	0.093	0.0	0.012	0.036	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9

delta

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$					*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
648	R00Y_100_100$_{de}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4	0.0	1.0	0.735	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
649	R38Y_100_100$_{de}$	1.0	0.0	0.125	1.0	1.0	0.5	383	1.0	0.0	0.392	47.4	57.2	18.2	60.0	17.6	0.0	1.0	0.605	0.0	367	1.0	0.0	0.392	47.4	57.2	18.2	60.0	17.6
650	R26Y_100_100$_{de}$	1.0	0.0	0.25	1.0	1.0	0.5	376	1.0	0.0	0.501	47.8	59.0	10.2	59.9	9.8	0.0	0.999	0.495	0.0	359	1.0	0.0	0.501	47.8	59.0	10.2	59.9	9.8
651	R13Y_100_100$_{de}$	1.0	0.0	0.375	1.0	1.0	0.5	368	1.0	0.0	0.641	48.1	62.2	1.0	62.2	0.9	0.0	0.991	0.359	0.004	350	1.0	0.0	0.641	48.1	62.2	1.0	62.2	0.9
652	R00Y_100_100$_{de}$	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0	0.0	0.994	0.174	0.001	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
653	B68R_100_100$_{de}$	1.0	0.0	0.625	1.0	1.0	0.5	352	1.0	0.0	0.964	48.5	65.6	−12.2	66.7	349.4	0.0	0.999	0.033	0.0	331	1.0	0.0	0.964	48.5	65.6	−12.2	66.7	349.4
654	B61R_100_100$_{de}$	1.0	0.0	0.75	1.0	1.0	0.5	344	0.825	0.0	1.0	44.1	58.2	−19.0	61.2	341.8	0.176	0.998	0.0	0.0	320	0.825	0.0	1.0	44.1	58.2	−19.0	61.2	341.8
655	B55R_100_100$_{de}$	1.0	0.0	0.875	1.0	1.0	0.5	337	0.696	0.0	1.0	40.6	52.3	−24.1	57.6	335.2	0.304	0.999	0.0	0.0	312	0.696	0.0	1.0	40.6	52.3	−24.1	57.6	335.2
656	B50R_100_100$_{de}$	1.0	0.0	1.0	1.0	1.0	0.5	330	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6	0.415	1.0	0.0	0.0	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
657	R11Y_100_100$_{de}$	1.0	0.125	0.0	1.0	1.0	0.5	37	1.0	0.0	0.012	47.5	57.1	37.5	68.3	33.2	0.0	1.0	0.989	0.0	389	1.0	0.0	0.012	47.5	57.1	37.5	68.3	33.2
658	R00Y_100_087$_{de}$	1.0	0.125	0.125	1.0	0.875	0.562	390	1.0	0.125	0.355	53.5	49.0	23.3	54.3	25.4	0.0	0.795	0.546	0.056	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
659	R36Y_100_087$_{de}$	1.0	0.125	0.25	1.0	0.875	0.562	382	1.0	0.125	0.482	53.5	50.3	14.9	52.5	16.5	0.0	0.79	0.439	0.064	366	1.0	0.0	0.408	47.5	57.5	17.1	60.0	16.5
660	R23Y_100_087$_{de}$	1.0	0.125	0.375	1.0	0.875	0.562	374	1.0	0.125	0.594	53.8	52.4	7.0	52.9	7.6	0.0	0.785	0.352	0.062	357	1.0	0.0	0.536	47.8	59.9	8.0	60.4	7.6
661	R08Y_100_087$_{de}$	1.0	0.125	0.5	1.0	0.875	0.562	365	1.0	0.125	0.733	54.6	55.5	−2.2	55.6	357.6	0.0	0.786	0.244	0.053	347	1.0	0.0	0.695	48.7	63.4	−2.6	63.5	357.6
662	B70R_100_087$_{de}$	1.0	0.125	0.625	1.0	0.875	0.562	355	1.0	0.125	0.841	55.2	57.2	−7.7	57.8	352.3	0.0	0.786	0.161	0.042	339	1.0	0.0	0.818	49.4	65.4	−8.8	66.0	352.3
663	B63R_100_087$_{de}$	1.0	0.125	0.75	1.0	0.875	0.562	346	0.887	0.125	1.0	51.8	52.5	−15.2	54.6	343.7	0.008	0.785	0.0	0.135	323	0.87	0.0	1.0	45.5	60.0	−17.4	62.5	343.7
664	B56R_100_087$_{de}$	1.0	0.125	0.875	1.0	0.875	0.562	338	0.746	0.125	1.0	47.8	46.4	−20.5	50.8	336.1	0.205	0.81	0.0	0.083	313	0.71	0.0	1.0	41.0	53.1	−23.4	58.0	336.1
665	B50R_100_087$_{de}$	1.0	0.125	1.0	1.0	0.875	0.562	330	0.636	0.125	1.0	45.6	40.9	−24.9	47.9	328.6	0.299	0.778	0.0	0.141	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
666	R23Y_100_100$_{de}$	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.108	0.0	51.4	54.8	47.7	72.6	41.0	0.0	0.886	0.987	0.001	35	1.0	0.108	0.0	51.4	54.8	47.7	72.6	41.0
667	R13Y_100_087$_{de}$	1.0	0.25	0.125	1.0	0.875	0.562	38	1.0	0.136	0.125	54.0	49.8	34.1	60.4	34.3	0.0	0.808	0.68	0.024	30	1.0	0.012	0.0	48.0	57.0	39.0	69.1	34.3
668	R00Y_100_075$_{de}$	1.0	0.25	0.25	1.0	0.75	0.625	390	1.0	0.25	0.447	59.6	42.0	20.0	46.5	25.4	0.0	0.687	0.459	0.031	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
669	R35Y_100_075$_{de}$	1.0	0.25	0.375	1.0	0.75	0.625	381	1.0	0.25	0.567	59.6	43.3	11.9	45.0	15.4	0.0	0.684	0.376	0.04	365	1.0	0.0	0.423	47.5	57.8	15.9	60.0	15.4
670	R18Y_100_075$_{de}$	1.0	0.25	0.5	1.0	0.75	0.625	371	1.0	0.25	0.691	59.9	45.8	3.4	45.9	4.3	0.0	0.687	0.283	0.04	354	1.0	0.0	0.588	47.9	61.1	4.6	61.2	4.3
671	R00Y_100_075$_{de}$	1.0	0.25	0.625	1.0	0.75	0.625	360	1.0	0.25	0.87	61.0	49.1	−6.8	49.6	352.0	0.0	0.688	0.148	0.024	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
672	B65R_100_075$_{de}$	1.0	0.25	0.75	1.0	0.75	0.625	349	0.956	0.25	1.0	59.2	47.2	−11.2	48.5	346.6	0.0	0.686	0.061	0.081	327	0.941	0.0	1.0	47.0	63.0	−14.9	64.7	346.6
673	B57R_100_075$_{de}$	1.0	0.25	0.875	1.0	0.75	0.625	339	0.793	0.25	1.0	54.9	40.4	−17.0	43.8	337.1	0.129	0.693	0.0	0.118	314	0.725	0.0	1.0	41.3	53.8	−22.7	58.4	337.1
674	B50R_100_075$_{de}$	1.0	0.25	1.0	1.0	0.75	0.625	330	0.688	0.25	1.0	52.8	35.0	−21.4	41.0	328.6	0.233	0.664	0.0	0.143	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
675	R36Y_100_100$_{de}$	1.0	0.375	0.0	1.0	1.0	0.5	52	1.0	0.216	0.0	56.5	45.2	53.8	70.3	49.9	0.0	0.785	1.0	0.0	41	1.0	0.216	0.0	56.5	45.2	53.8	70.3	49.9
676	R26Y_100_087$_{de}$	1.0	0.375	0.125	1.0	0.875	0.562	46	1.0	0.245	0.125	58.0	46.4	43.7	63.7	43.3	0.0	0.759	0.749	0.0	37	1.0	0.138	0.0	52.6	53.0	49.9	72.8	43.3
677	R15Y_100_075$_{de}$	1.0	0.375	0.25	1.0	0.75	0.625	39	1.0	0.271	0.25	60.4	42.5	30.3	52.2	35.5	0.0	0.696	0.566	0.0	31	1.0	0.028	0.0	48.6	56.7	40.4	69.6	35.5
678	R00Y_100_062$_{de}$	1.0	0.375	0.375	1.0	0.625	0.687	390	1.0	0.375	0.539	65.6	35.0	16.7	38.8	25.4	0.0	0.591	0.405	0.012	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
679	R31Y_100_062$_{de}$	1.0	0.375	0.5	1.0	0.625	0.687	379	1.0	0.375	0.659	65.7	36.4	8.5	37.4	13.2	0.0	0.587	0.317	0.021	362	1.0	0.0	0.454	47.6	58.3	13.7	59.9	13.2
680	R11Y_100_062$_{de}$	1.0	0.375	0.625	1.0	0.625	0.687	367	1.0	0.375	0.787	66.1	39.1	0.0	39.1	359.8	0.0	0.589	0.219	0.018	349	1.0	0.0	0.659	48.3	62.6	−0.1	62.6	359.8
681	B69R_100_062$_{de}$	1.0	0.375	0.75	1.0	0.625	0.687	353	1.0	0.375	0.937	66.7	41.2	−6.9	41.8	350.4	0.0	0.589	0.123	0.015	335	1.0	0.0	0.899	49.2	66.0	−11.1	66.9	350.4
682	B59R_100_062$_{de}$	1.0	0.375	0.875	1.0	0.625	0.687	341	0.848	0.375	1.0	62.2	34.6	−13.2	37.1	339.0	0.053	0.561	0.0	0.131	316	0.756	0.0	1.0	42.1	55.4	−21.2	59.3	339.0
683	B50R_100_062$_{de}$	1.0	0.375	1.0	1.0	0.625	0.687	330	0.74	0.375	1.0	60.0	29.2	−17.8	34.2	328.6	0.177	0.545	0.0	0.133	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
684	R50Y_100_100$_{de}$	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8	0.0	0.683	1.0	0.0	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
685	R41Y_100_087$_{de}$	1.0	0.5	0.125	1.0	0.875	0.562	55	1.0	0.348	0.125	63.2	36.1	48.5	60.5	53.3	0.0	0.631	0.749	0.0	44	1.0	0.255	0.0	58.5	41.3	55.4	69.1	53.3
686	R31Y_100_075$_{de}$	1.0	0.5	0.25	1.0	0.75	0.625	49	1.0	0.382	0.25	64.9	36.8	39.0	53.7	46.6	0.0	0.628	0.623	0.0	39	1.0	0.177	0.0	54.6	49.1	52.0	71.6	46.6
687	R18Y_100_062$_{de}$	1.0	0.5	0.375	1.0	0.625	0.687	41	1.0	0.413	0.375	67.0	35.0	27.1	44.3	37.7	0.0	0.587	0.498	0.0	33	1.0	0.06	0.0	49.7	56.0	43.3	70.8	37.7
688	R00Y_100_050$_{de}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.631	71.6	28.0	13.3	31.0	25.4	0.0	0.499	0.348	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
689	R26Y_100_050$_{de}$	1.0	0.5	0.625	1.0	0.5	0.75	376	1.0	0.5	0.75	71.8	29.5	5.1	29.9	9.8	0.0	0.49	0.253	0.01	359	1.0	0.0	0.501	47.8	59.0	10.2	59.9	9.8
690	R00Y_100_050$_{de}$	1.0	0.5	0.75	1.0	0.5	0.75	360	1.0	0.5	0.913	72.6	32.7	−4.5	33.1	352.0	0.0	0.483	0.137	0.003	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
691	B61R_100_050$_{de}$	1.0	0.5	0.875	1.0	0.5	0.75	344	0.912	0.5	1.0	70.0	29.1	−9.5	30.6	341.8	0.0	0.443	0.029	0.106	320	0.825	0.0	1.0	44.1	58.2	−19.0	61.2	341.8
692	B50R_100_050$_{de}$	1.0	0.5	1.0	1.0	0.5	0.75	330	0.792	0.5	1.0	67.1	23.3	−14.2	27.3	328.6	0.121	0.428	0.0	0.13	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
693	R63Y_100_100$_{de}$	1.0	0.625	0.0	1.0	1.0	0.5	68	1.0	0.425	0.0	67.0	25.7	63.0	68.0	67.8	0.0	0.576	1.0	0.0	55	1.0	0.425	0.0	67.0	25.7	63.0	68.0	67.8
694	R58Y_100_087$_{de}$	1.0	0.625	0.125	1.0	0.875	0.562	65	1.0	0.461	0.125	68.9	25.4	53.2	59.0	64.4	0.0	0.508	0.757	0.0	52	1.0	0.384	0.0	65.0	29.0	60.9	67.5	64.4
695	R50Y_100_075$_{de}$	1.0	0.625	0.25	1.0	0.75	0.625	60	1.0	0.489	0.25	70.3	26.4	43.8	51.1	58.8	0.0	0.498	0.652	0.0	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
696	R38Y_100_062$_{de}$	1.0	0.625	0.375	1.0	0.625	0.687	53	1.0	0.518	0.375	71.7	27.4	34.0	43.6	51.0	0.0	0.498	0.536	0.0	42	1.0	0.229	0.0	57.2	43.9	54.4	69.9	51.0
697	R23Y_100_050$_{de}$	1.0	0.625	0.5	1.0	0.5	0.75	44	1.0	0.554	0.5	73.6	27.4	23.8	36.3	41.0	0.0	0.498	0.427	0.0	35	1.0	0.108	0.0	51.4	54.8	47.7	72.6	41.0
698	R00Y_100_037$_{de}$	1.0	0.625	0.625	1.0	0.375	0.812	390	1.0	0.625	0.723	77.7	21.0	10.0	23.2	25.4	0.0	0.396	0.268	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
699	R18Y_100_037$_{de}$	1.0	0.625	0.75	1.0	0.375	0.812	371	1.0	0.625	0.845	77.8	22.9	1.7	22.9	4.3	0.0	0.393	0.187	0.002	354	1.0	0.0	0.588	47.9	61.1	4.6	61.2	4.3
700	B65R_100_037$_{de}$	1.0	0.625	0.875	1.0	0.375	0.812	349	0.978	0.625	1.0	77.5	23.6	−5.6	24.2	346.6	0.0	0.371	0.094	0.033	327	0.941	0.0	1.0	47.0	63.0	−14.9	64.7	346.6
701	B50R_100_037$_{de}$	1.0	0.625	1.0	1.0	0.375	0.812	330	0.844	0.625	1.0	74.3	17.5	−10.7	20.5	328.6	0.059	0.31	0.0	0.123	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
702	R76Y_100_100$_{de}$	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.551	0.0	72.3	16.1	68.2	70.1	76.7	0.0	0.448	1.0	0.0	63	1.0	0.551	0.0	72.3	16.1	68.2	70.1	76.7
703	R73Y_100_087$_{de}$	1.0	0.75	0.125	1.0	0.875	0.562	74	1.0	0.572	0.125	74.0	16.2	58.4	60.6	74.4	0.0	0.411	0.766	0.0	60	1.0	0.511	0.0	70.9	18.5	66.7	69.2	74.4
704	R68Y_100_075$_{de}$	1.0	0.75	0.25	1.0	0.75	0.625	71	1.0	0.6	0.25	75.6	16.6	48.6	51.4	71.1	0.0	0.387	0.658	0.0	57	1.0	0.466	0.0	68.9	22.1	64.9	68.5	71.1
705	R61Y_100_062$_{de}$	1.0	0.75	0.375	1.0	0.625	0.687	67	1.0	0.632	0.375	77.4	16.7	38.9	42.4	66.6	0.0	0.376	0.548	0.0	54	1.0	0.411	0.0	66.3	26.8	62.3	67.8	66.6
706	R50Y_100_050$_{de}$	1.0	0.75	0.5	1.0	0.5	0.75	60	1.0	0.659	0.5	78.8	17.6	29.2	34.1	58.8	0.0	0.376	0.444	0.0	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
707	R31Y_100_037$_{de}$	1.0	0.75	0.625	1.0	0.375	0.812	49	1.0	0.691	0.625	80.3	18.4	19.5	26.8	46.6	0.0	0.375	0.375	0.0	39	1.0	0.177	0.0	54.6	49.1	52.0	71.6	46.6
708	R00Y_100_025$_{de}$	1.0	0.75	0.75	1.0	0.25	0.875	390	1.0	0.75	0.815	83.7	14.0	6.6	15.5	25.4	0.0	0.295	0.2	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
709	R00Y_100_025$_{de}$	1.0	0.75	0.875	1.0	0.25	0.875	360	1.0	0.75	0.956	84.2	16.3	−2.2	16.5	352.0	0.0	0.279	0.08	0.0	339	1.0	0.0	0.827	49.4	65.5	−9.1	66.2	352.0
710	B50R_100_025$_{de}$	1.0	0.75	1.0	1.0	0.25	0.875	330	0.896	0.75	1.0	81.5	11.6	−7.1	13.6	328.6	0.024	0.205	0.0	0.1	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
711	R88Y_100_100$_{de}$	1.0	0.875	0.0	1.0	1.0	0.5	83	1.0	0.668	0.0	77.7	7.0	73.1	73.5	84.5	0.0	0.329	1.0	0.0	70	1.0	0.668	0.0	77.7	7.0	73.1	73.5	84.5
712	R86Y_100_087$_{de}$	1.0	0.875	0.125	1.0	0.875	0.562	82	1.0	0.698	0.125	79.2	7.3	63.4	63.8	83.4	0.0	0.314	0.823	0.0	70	1.0	0.655	0.0	76.8	8.3	72.4	72.9	83.4
713	R85Y_100_075$_{de}$	1.0	0.875	0.25	1.0	0.75	0.625	81	1.0	0.731	0.25	80.9	7.2	53.8	54.3	82.2	0.0	0.292	0.678	0.0	69	1.0	0.642	0.0	76.0	9.7	71.7	72.4	82.2
714	R81Y_100_062$_{de}$	1.0	0.875	0.375	1.0	0.625	0.687	79	1.0	0.757	0.375	82.4	7.7	43.9	44.6	80.0	0.0	0.28	0.532	0.0	67	1.0	0.611	0.0	74.4	12.3	70.3	71.3	80.0
715	R76Y_100_050$_{de}$	1.0	0.875	0.5	1.0	0.5	0.75	76	1.0	0.775	0.5	84.0	8.0	34.1	35.0	76.7	0.0	0.263	0.422	0.0	63	1.0	0.551	0.0	72.3	16.1	68.2	70.1	76.7
716	R68Y_100_037$_{de}$	1.0	0.875	0.625	1.0	0.375	0.812	71	1.0	0.8	0.625	85.7	8.3	24.3	25.7	71.1	0.0	0.25	0.375	0.0	57	1.0	0.466	0.0	68.9	22.1	64.9	68.5	71.1
717	R50Y_100_025$_{de}$	1.0	0.875	0.75	1.0	0.25	0.875	60	1.0	0.829	0.75	87.3	8.8	14.6	17.0	58.8	0.0	0.25	0.252	0.0	48	1.0	0.319	0.0	61.8	35.2	58.4	68.2	58.8
718	R00Y_100_012$_{de}$	1.0	0.875	0.875	1.0	0.125	0.937	390	1.0	0.875	0.907	89.8	7.0	3.3	7.7	25.4	0.0	0.17	0.125	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
719	B50R_100_012$_{de}$	1.0	0.875	1.0	1.0	0.125	0.937	330	0.948	0.875	1.0	88.6	5.8	−3.5	6.8	328.6	0.017	0.134	0.0	0.047	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
720	Y00G_100_100$_{de}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3	0.0	0.231	0.999	0.001	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
721	Y00G_100_087$_{de}$	1.0	1.0	0.125	1.0	0.875	0.562	90	1.0	0.797	0.125	85.1	−2.7	67.2	67.2	92.3	0.0	0.25	0.875	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
722	Y00G_100_075$_{de}$	1.0	1.0	0.25	1.0	0.75	0.625	90	1.0	0.826	0.25	86.7	−2.3	57.6	57.6	92.3	0.0	0.153	0.749	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
723	Y00G_100_062$_{de}$	1.0	1.0	0.375	1.0	0.625	0.687	90	1.0	0.855	0.375	88.2	−1.9	48.0	48.0	92.3	0.0	0.133	0.595	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
724	Y00G_100_050$_{de}$	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	0.884	0.5	89.7	−1.5	38.4	38.4	92.3	0.0	0.125	0.443	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
725	Y00G_100_037$_{de}$	1.0	1.0	0.625	1.0	0.375	0.812	90	1.0	0.913	0.625	91.2	−1.1	28.8	28.8	92.3	0.0	0.125	0.375	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
726	Y00G_100_025$_{de}$	1.0	1.0	0.75	1.0	0.25	0.875	90	1.0	0.942	0.75	92.7	−0.7	19.2	19.2	92.3	0.0	0.125	0.25	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
727	Y00G_100_012$_{de}$	1.0	1.0	0.875	1.0	0.125	0.937	90	1.0	0.971	0.875	94.3	−0.3	9.6	9.6	92.3	0.0	0.062	0.128	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
728	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

delta

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

2−1132730−F0

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$					*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
729	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
730	G50B_100_012$_{de}$	0.875	1.0	1.0	1.0	0.125	0.937	210	0.875	1.0	0.973	90.7	−4.8	−3.6	6.0	216.9	0.093	0.0	0.012	0.036	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
731	G50B_100_025$_{de}$	0.75	1.0	1.0	1.0	0.25	0.875	210	0.75	1.0	0.947	85.6	−9.6	−7.2	12.1	216.9	0.201	0.0	0.061	0.087	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
732	G50B_100_037$_{de}$	0.625	1.0	1.0	1.0	0.375	0.812	210	0.625	1.0	0.921	80.5	−14.5	−10.9	18.1	216.9	0.305	0.0	0.095	0.125	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
733	G50B_100_050$_{de}$	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	0.895	75.4	−19.3	−14.5	24.2	216.9	0.399	0.0	0.132	0.128	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
734	G50B_100_062$_{de}$	0.375	1.0	1.0	1.0	0.625	0.687	210	0.375	1.0	0.869	70.3	−24.1	−18.2	30.2	216.9	0.563	0.0	0.173	0.087	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
735	G50B_100_075$_{de}$	0.25	1.0	1.0	1.0	0.75	0.625	210	0.25	1.0	0.843	65.1	−29.0	−21.8	36.3	216.9	0.699	0.0	0.213	0.001	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
736	G50B_100_087$_{de}$	0.125	1.0	1.0	1.0	0.875	0.562	210	0.125	1.0	0.817	60.0	−33.8	−25.5	42.3	216.9	0.805	0.0	0.174	0.125	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
737	G50B_100_100$_{de}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9	1.0	0.0	0.2	0.0	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
738	R00Y_100_012$_{de}$	1.0	0.875	0.875	1.0	0.125	0.937	390	1.0	0.875	0.907	89.8	7.0	3.3	7.7	25.4	0.0	0.17	0.125	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
739	NW_087$_{de}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
740	G50B_087_012$_{de}$	0.75	0.875	0.875	0.875	0.125	0.812	210	0.75	0.875	0.848	81.7	−4.8	−3.6	6.0	216.9	0.098	0.0	0.024	0.205	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
741	G50B_087_025$_{de}$	0.625	0.875	0.875	0.875	0.25	0.75	210	0.625	0.875	0.822	76.6	−9.6	−7.2	12.1	216.9	0.204	0.0	0.073	0.249	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
742	G50B_087_037$_{de}$	0.5	0.875	0.875	0.875	0.375	0.687	210	0.5	0.875	0.796	71.5	−14.5	−10.9	18.1	216.9	0.333	0.0	0.134	0.249	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
743	G50B_087_050$_{de}$	0.375	0.875	0.875	0.875	0.5	0.625	210	0.375	0.875	0.77	66.4	−19.3	−14.5	24.2	216.9	0.462	0.0	0.172	0.251	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
744	G50B_087_062$_{de}$	0.25	0.875	0.875	0.875	0.625	0.562	210	0.25	0.875	0.744	61.3	−24.1	−18.2	30.2	216.9	0.639	0.0	0.193	0.236	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
745	G50B_087_075$_{de}$	0.125	0.875	0.875	0.875	0.75	0.5	210	0.125	0.875	0.718	56.1	−29.0	−21.8	36.3	216.9	0.762	0.0	0.208	0.27	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
746	G50B_087_087$_{de}$	0.0	0.875	0.875	0.875	0.875	0.437	210	0.0	0.875	0.692	51.0	−33.8	−25.5	42.3	216.9	0.874	0.0	0.25	0.0	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
747	R00Y_100_025$_{de}$	1.0	0.75	0.75	1.0	0.25	0.875	390	1.0	0.75	0.815	83.7	14.0	6.6	15.5	25.4	0.0	0.295	0.2	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
748	R00Y_087_012$_{de}$	0.875	0.75	0.75	0.875	0.125	0.812	390	0.875	0.75	0.782	80.8	7.0	3.3	7.7	25.4	0.0	0.161	0.121	0.139	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
749	NW_075$_{de}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
750	G50B_075_012$_{de}$	0.625	0.75	0.75	0.75	0.125	0.687	210	0.625	0.75	0.723	72.7	−4.8	−3.6	6.0	216.9	0.108	0.0	0.053	0.338	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
751	G50B_075_025$_{de}$	0.5	0.75	0.75	0.75	0.25	0.625	210	0.5	0.75	0.697	67.6	−9.6	−7.2	12.1	216.9	0.214	0.0	0.095	0.368	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
752	G50B_075_037$_{de}$	0.375	0.75	0.75	0.75	0.375	0.562	210	0.375	0.75	0.671	62.5	−14.5	−10.9	18.1	216.9	0.351	0.0	0.138	0.374	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
753	G50B_075_050$_{de}$	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.645	57.4	−19.3	−14.5	24.2	216.9	0.522	0.0	0.176	0.36	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
754	G50B_075_062$_{de}$	0.125	0.75	0.75	0.75	0.625	0.437	210	0.125	0.75	0.619	52.3	−24.1	−18.2	30.2	216.9	0.68	0.0	0.214	0.367	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
755	G50B_075_075$_{de}$	0.0	0.75	0.75	0.75	0.75	0.375	210	0.0	0.75	0.593	47.1	−29.0	−21.8	36.3	216.9	0.782	0.0	0.203	0.44	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
756	R00Y_100_037$_{de}$	1.0	0.625	0.625	1.0	0.375	0.812	390	1.0	0.625	0.723	77.7	21.0	10.0	23.2	25.4	0.0	0.396	0.268	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
757	R00Y_087_025$_{de}$	0.875	0.625	0.625	0.875	0.25	0.75	390	0.875	0.625	0.69	74.7	14.0	6.6	15.5	25.4	0.0	0.302	0.201	0.127	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
758	R00Y_075_012$_{de}$	0.75	0.625	0.625	0.75	0.125	0.687	390	0.75	0.625	0.657	71.8	7.0	3.3	7.7	25.4	0.0	0.185	0.15	0.277	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
759	NW_062$_{de}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
760	G50B_062_012$_{de}$	0.5	0.625	0.625	0.625	0.125	0.562	210	0.5	0.625	0.598	63.7	−4.8	−3.6	6.0	216.9	0.117	0.0	0.059	0.443	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
761	G50B_062_025$_{de}$	0.375	0.625	0.625	0.625	0.25	0.5	210	0.375	0.625	0.572	58.6	−9.6	−7.2	12.1	216.9	0.245	0.0	0.117	0.478	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
762	G50B_062_037$_{de}$	0.25	0.625	0.625	0.625	0.375	0.437	210	0.25	0.625	0.546	53.5	−14.5	−10.9	18.1	216.9	0.401	0.0	0.156	0.475	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
763	G50B_062_050$_{de}$	0.125	0.625	0.625	0.625	0.5	0.375	210	0.125	0.625	0.52	48.4	−19.3	−14.5	24.2	216.9	0.562	0.0	0.201	0.474	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
764	G50B_062_062$_{de}$	0.0	0.625	0.625	0.625	0.625	0.312	210	0.0	0.625	0.494	43.3	−24.1	−18.2	30.2	216.9	0.709	0.0	0.219	0.524	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
765	R00Y_100_050$_{de}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.631	71.6	28.0	13.3	31.0	25.4	0.0	0.499	0.348	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
766	R00Y_087_037$_{de}$	0.875	0.5	0.5	0.875	0.375	0.687	390	0.875	0.5	0.598	68.7	21.0	10.0	23.2	25.4	0.0	0.433	0.28	0.129	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
767	R00Y_075_025$_{de}$	0.75	0.5	0.5	0.75	0.25	0.625	390	0.75	0.5	0.565	65.7	14.0	6.6	15.5	25.4	0.0	0.348	0.249	0.256	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
768	R00Y_062_012$_{de}$	0.625	0.5	0.5	0.625	0.125	0.562	390	0.625	0.5	0.532	62.8	7.0	3.3	7.7	25.4	0.0	0.221	0.193	0.4	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
769	NW_050$_{de}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
770	G50B_050_012$_{de}$	0.375	0.5	0.5	0.5	0.125	0.437	210	0.375	0.5	0.473	54.7	−4.8	−3.6	6.0	216.9	0.139	0.0	0.078	0.556	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
771	G50B_050_025$_{de}$	0.25	0.5	0.5	0.5	0.25	0.375	210	0.249	0.5	0.447	49.6	−9.6	−7.2	12.1	216.9	0.277	0.0	0.133	0.57	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
772	G50B_050_037$_{de}$	0.125	0.5	0.5	0.5	0.375	0.312	210	0.124	0.5	0.421	44.5	−14.5	−10.9	18.1	216.9	0.426	0.0	0.182	0.585	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
773	G50B_050_050$_{de}$	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.395	39.4	−19.3	−14.5	24.2	216.9	0.626	0.0	0.211	0.61	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
774	R00Y_100_062$_{de}$	1.0	0.375	0.375	1.0	0.625	0.687	390	1.0	0.375	0.539	65.6	35.0	16.7	38.8	25.4	0.0	0.591	0.405	0.012	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
775	R00Y_087_050$_{de}$	0.875	0.375	0.375	0.875	0.5	0.625	390	0.875	0.375	0.506	62.7	28.0	13.3	31.0	25.4	0.0	0.562	0.381	0.134	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
776	R00Y_075_037$_{de}$	0.75	0.375	0.375	0.75	0.375	0.562	390	0.75	0.375	0.473	59.7	21.0	10.0	23.2	25.4	0.0	0.501	0.337	0.244	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
777	R00Y_062_025$_{de}$	0.625	0.375	0.375	0.625	0.25	0.5	390	0.625	0.375	0.44	56.7	14.0	6.6	15.5	25.4	0.0	0.399	0.312	0.391	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
778	R00Y_050_012$_{de}$	0.5	0.375	0.375	0.5	0.125	0.437	390	0.5	0.375	0.407	53.8	7.0	3.3	7.7	25.4	0.0	0.254	0.22	0.512	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
779	NW_037$_{de}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
780	G50B_037_012$_{de}$	0.25	0.375	0.375	0.375	0.125	0.312	210	0.249	0.375	0.348	45.7	−4.8	−3.6	6.0	216.9	0.129	0.0	0.095	0.655	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
781	G50B_037_025$_{de}$	0.125	0.375	0.375	0.375	0.25	0.25	210	0.124	0.375	0.322	40.6	−9.6	−7.2	12.1	216.9	0.332	0.0	0.152	0.669	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
782	G50B_037_037$_{de}$	0.0	0.375	0.375	0.375	0.375	0.187	210	0.0	0.375	0.296	35.5	−14.5	−10.9	18.1	216.9	0.528	0.0	0.199	0.721	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
783	R00Y_100_075$_{de}$	1.0	0.25	0.25	1.0	0.75	0.625	390	1.0	0.25	0.447	59.6	42.0	20.0	46.5	25.4	0.0	0.687	0.459	0.031	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
784	R00Y_087_062$_{de}$	0.875	0.25	0.25	0.875	0.625	0.562	390	0.875	0.25	0.414	56.6	35.0	16.7	38.8	25.4	0.0	0.673	0.446	0.144	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
785	R00Y_075_050$_{de}$	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.381	53.7	28.0	13.3	31.0	25.4	0.0	0.618	0.428	0.251	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
786	R00Y_062_037$_{de}$	0.625	0.25	0.25	0.625	0.375	0.437	390	0.625	0.25	0.348	50.7	21.0	10.0	23.2	25.4	0.0	0.552	0.402	0.385	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
787	R00Y_050_025$_{de}$	0.5	0.25	0.25	0.5	0.25	0.375	390	0.5	0.249	0.315	47.7	14.0	6.6	15.5	25.4	0.0	0.44	0.333	0.507	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
788	R00Y_037_012$_{de}$	0.375	0.25	0.25	0.375	0.125	0.312	390	0.375	0.249	0.282	44.8	7.0	3.3	7.7	25.4	0.0	0.262	0.233	0.632	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
789	NW_025$_{de}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
790	G50B_025_012$_{de}$	0.125	0.25	0.25	0.25	0.125	0.187	210	0.124	0.25	0.223	36.7	−4.8	−3.6	6.0	216.9	0.183	0.0	0.103	0.763	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
791	G50B_025_025$_{de}$	0.0	0.25	0.25	0.25	0.25	0.125	210	0.0	0.25	0.197	31.6	−9.6	−7.2	12.1	216.9	0.471	0.0	0.163	0.811	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
792	R00Y_100_087$_{de}$	1.0	0.125	0.125	1.0	0.875	0.562	390	1.0	0.125	0.355	53.5	49.0	23.3	54.3	25.4	0.0	0.795	0.546	0.056	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
793	R00Y_087_075$_{de}$	0.875	0.125	0.125	0.875	0.75	0.5	390	0.875	0.125	0.322	50.6	42.0	20.0	46.5	25.4	0.0	0.778	0.527	0.16	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
794	R00Y_075_062$_{de}$	0.75	0.125	0.125	0.75	0.625	0.437	390	0.75	0.125	0.289	47.6	35.0	16.7	38.8	25.4	0.0	0.745	0.508	0.25	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
795	R00Y_062_050$_{de}$	0.625	0.125	0.125	0.625	0.5	0.375	390	0.625	0.125	0.256	44.7	28.0	13.3	31.0	25.4	0.0	0.705	0.503	0.387	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
796	R00Y_050_037$_{de}$	0.5	0.125	0.125	0.5	0.375	0.312	390	0.5	0.124	0.223	41.7	21.0	10.0	23.2	25.4	0.0	0.617	0.433	0.513	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
797	R00Y_037_025$_{de}$	0.375	0.125	0.125	0.375	0.25	0.25	390	0.375	0.124	0.19	38.7	14.0	6.6	15.5	25.4	0.0	0.501	0.37	0.64	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
798	R00Y_025_012$_{de}$	0.25	0.125	0.125	0.25	0.125	0.187	390	0.25	0.124	0.157	35.8	7.0	3.3	7.7	25.4	0.0	0.323	0.264	0.729	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
799	NW_012$_{de}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
800	G50B_012_012$_{de}$	0.0	0.125	0.125	0.125	0.125	0.062	210	0.0	0.125	0.098	27.7	−4.8	−3.6	6.0	216.9	0.313	0.0	0.125	0.935	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
801	R00Y_100_100$_{de}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4	0.0	1.0	0.735	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
802	R00Y_087_087$_{de}$	0.875	0.0	0.0	0.875	0.875	0.437	390	0.875	0.0	0.23	44.5	49.0	23.3	54.3	25.4	0.0	0.928	0.7	0.147	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
803	R00Y_075_075$_{de}$	0.75	0.0	0.0	0.75	0.75	0.375	390	0.75	0.0	0.197	41.6	42.0	20.0	46.5	25.4	0.0	0.884	0.66	0.266	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
804	R00Y_062_062$_{de}$	0.625	0.0	0.0	0.625	0.625	0.312	390	0.625	0.0	0.164	38.6	35.0	16.7	38.8	25.4	0.0	0.842	0.612	0.41	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
805	R00Y_050_050$_{de}$	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.131	35.7	28.0	13.3	31.0	25.4	0.0	0.799	0.583	0.542	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
806	R00Y_037_037$_{de}$	0.375	0.0	0.0	0.375	0.375	0.187	390	0.375	0.0	0.098	32.7	21.0	10.0	23.2	25.4	0.0	0.729	0.525	0.651	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
807	R00Y_025_025$_{de}$	0.25	0.0	0.0	0.25	0.25	0.125	390	0.25	0.0	0.065	29.7	14.0	6.6	15.5	25.4	0.0	0.596	0.435	0.728	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
808	R00Y_012_012$_{de}$	0.125	0.0	0.0	0.125	0.125	0.062	390	0.125	0.0	0.032	26.8	7.0	3.3	7.7	25.4	0.0	0.468	0.339	0.872	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
809	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

delta

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

TUB matrícula: 20130201-QS49/QS49L0FP.PDF /.PS
aplicación para la medida salida de impresora láser, separación cmyn6* (CMYK)
TUB material: code=rha4ta

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$					*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
810	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
811	B00R_100_012$_{de}$	0.875	0.875	1.0	1.0	0.125	0.937	270	0.875	0.907	1.0	88.5	0.1	−6.0	6.0	271.7	0.099	0.104	0.0	0.045	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
812	B00R_100_025$_{de}$	0.75	0.75	1.0	1.0	0.25	0.875	270	0.75	0.815	1.0	81.2	0.3	−12.1	12.1	271.7	0.178	0.169	0.0	0.075	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
813	B00R_100_037$_{de}$	0.625	0.625	1.0	1.0	0.375	0.812	270	0.625	0.722	1.0	73.8	0.5	−18.2	18.2	271.7	0.271	0.212	0.0	0.112	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
814	B00R_100_050$_{de}$	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.63	1.0	66.5	0.7	−24.3	24.3	271.7	0.373	0.288	0.0	0.127	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
815	B00R_100_062$_{de}$	0.375	0.375	1.0	1.0	0.625	0.687	270	0.375	0.538	1.0	59.2	0.9	−30.4	30.4	271.7	0.494	0.364	0.0	0.133	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
816	B00R_100_075$_{de}$	0.25	0.25	1.0	1.0	0.75	0.625	270	0.25	0.445	1.0	51.9	1.1	−36.5	36.5	271.7	0.617	0.453	0.0	0.135	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
817	B00R_100_087$_{de}$	0.125	0.125	1.0	1.0	0.875	0.562	270	0.125	0.353	1.0	44.6	1.2	−42.6	42.6	271.7	0.755	0.564	0.0	0.139	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
818	B00R_100_100$_{de}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7	1.0	0.738	0.0	0.0	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
819	Y00G_100_012$_{de}$	1.0	1.0	0.875	1.0	0.125	0.937	90	1.0	0.971	0.875	94.3	−0.3	9.6	9.6	92.3	0.0	0.062	0.128	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
820	NW_087$_{de}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
821	B00R_087_012$_{de}$	0.75	0.75	0.875	0.875	0.125	0.812	270	0.75	0.782	0.875	79.5	0.1	−6.0	6.0	271.7	0.083	0.073	0.0	0.201	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
822	B00R_087_025$_{de}$	0.625	0.625	0.875	0.875	0.25	0.75	270	0.625	0.69	0.875	72.2	0.3	−12.1	12.1	271.7	0.171	0.131	0.0	0.256	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
823	B00R_087_037$_{de}$	0.5	0.5	0.875	0.875	0.375	0.687	270	0.5	0.597	0.875	64.8	0.5	−18.2	18.2	271.7	0.292	0.22	0.0	0.252	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
824	B00R_087_050$_{de}$	0.375	0.375	0.875	0.875	0.5	0.625	270	0.375	0.505	0.875	57.5	0.7	−24.3	24.3	271.7	0.424	0.32	0.0	0.245	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
825	B00R_087_062$_{de}$	0.25	0.25	0.875	0.875	0.625	0.562	270	0.25	0.413	0.875	50.2	0.9	−30.4	30.4	271.7	0.569	0.427	0.0	0.245	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
826	B00R_087_075$_{de}$	0.125	0.125	0.875	0.875	0.75	0.5	270	0.125	0.32	0.875	42.9	1.1	−36.5	36.5	271.7	0.762	0.579	0.0	0.261	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
827	B00R_087_087$_{de}$	0.0	0.0	0.875	0.875	0.875	0.437	270	0.0	0.228	0.875	35.6	1.2	−42.6	42.6	271.7	0.902	0.643	0.0	0.388	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
828	Y00G_100_025$_{de}$	1.0	1.0	0.75	1.0	0.25	0.875	90	1.0	0.942	0.75	92.7	−0.7	19.2	19.2	92.3	0.0	0.125	0.25	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
829	Y00G_087_012$_{de}$	0.875	0.875	0.75	0.875	0.125	0.812	90	0.875	0.846	0.75	85.3	−0.3	9.6	9.6	92.3	0.0	0.055	0.15	0.149	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
830	NW_075$_{de}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
831	B00R_075_012$_{de}$	0.625	0.625	0.75	0.75	0.125	0.687	270	0.625	0.657	0.75	70.5	0.1	−6.0	6.0	271.7	0.076	0.06	0.0	0.351	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
832	B00R_075_025$_{de}$	0.5	0.5	0.75	0.75	0.25	0.625	270	0.5	0.565	0.75	63.2	0.3	−12.1	12.1	271.7	0.158	0.123	0.0	0.387	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
833	B00R_075_037$_{de}$	0.375	0.375	0.75	0.75	0.375	0.562	270	0.375	0.472	0.75	55.8	0.5	−18.2	18.2	271.7	0.287	0.221	0.0	0.396	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
834	B00R_075_050$_{de}$	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.38	0.75	48.5	0.7	−24.3	24.3	271.7	0.442	0.341	0.0	0.398	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
835	B00R_075_062$_{de}$	0.125	0.125	0.75	0.75	0.625	0.437	270	0.125	0.288	0.75	41.2	0.9	−30.4	30.4	271.7	0.66	0.509	0.0	0.401	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
836	B00R_075_075$_{de}$	0.0	0.0	0.75	0.75	0.75	0.375	270	0.0	0.195	0.75	33.9	1.1	−36.5	36.5	271.7	0.827	0.62	0.0	0.485	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
837	Y00G_100_037$_{de}$	1.0	1.0	0.625	1.0	0.375	0.812	90	1.0	0.913	0.625	91.2	−1.1	28.8	28.8	92.3	0.0	0.125	0.375	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
838	Y00G_087_025$_{de}$	0.875	0.875	0.625	0.875	0.25	0.75	90	0.875	0.817	0.625	83.7	−0.7	19.2	19.2	92.3	0.0	0.084	0.262	0.148	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
839	Y00G_075_012$_{de}$	0.75	0.75	0.625	0.75	0.125	0.687	90	0.75	0.721	0.625	76.3	−0.3	9.6	9.6	92.3	0.0	0.066	0.186	0.285	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
840	NW_062$_{de}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
841	B00R_062_012$_{de}$	0.5	0.5	0.625	0.625	0.125	0.562	270	0.5	0.532	0.625	61.5	0.1	−6.0	6.0	271.7	0.082	0.064	0.0	0.453	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
842	B00R_062_025$_{de}$	0.375	0.375	0.625	0.625	0.25	0.5	270	0.375	0.44	0.625	54.2	0.3	−12.1	12.1	271.7	0.161	0.131	0.0	0.505	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
843	B00R_062_037$_{de}$	0.25	0.25	0.625	0.625	0.375	0.437	270	0.25	0.347	0.625	46.8	0.5	−18.2	18.2	271.7	0.319	0.254	0.0	0.518	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
844	B00R_062_050$_{de}$	0.125	0.125	0.625	0.625	0.5	0.375	270	0.125	0.255	0.625	39.5	0.7	−24.3	24.3	271.7	0.491	0.394	0.0	0.531	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
845	B00R_062_062$_{de}$	0.0	0.0	0.625	0.625	0.625	0.312	270	0.0	0.163	0.625	32.2	0.9	−30.4	30.4	271.7	0.729	0.579	0.0	0.563	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
846	Y00G_100_050$_{de}$	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	0.884	0.5	89.7	−1.5	38.4	38.4	92.3	0.0	0.125	0.443	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
847	Y00G_087_037$_{de}$	0.875	0.875	0.5	0.875	0.375	0.687	90	0.875	0.788	0.5	82.2	−1.1	28.8	28.8	92.3	0.0	0.134	0.394	0.142	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
848	Y00G_075_025$_{de}$	0.75	0.75	0.5	0.75	0.25	0.625	90	0.75	0.692	0.5	74.7	−0.7	19.2	19.2	92.3	0.0	0.116	0.325	0.28	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
849	Y00G_062_012$_{de}$	0.625	0.625	0.5	0.625	0.125	0.562	90	0.625	0.596	0.5	67.3	−0.3	9.6	9.6	92.3	0.0	0.086	0.237	0.404	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
850	NW_050$_{de}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
851	B00R_050_012$_{de}$	0.375	0.375	0.5	0.5	0.125	0.437	270	0.375	0.407	0.5	52.5	0.1	−6.0	6.0	271.7	0.075	0.066	0.0	0.574	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
852	B00R_050_025$_{de}$	0.25	0.25	0.5	0.5	0.25	0.375	270	0.249	0.315	0.5	45.2	0.3	−12.1	12.1	271.7	0.188	0.161	0.0	0.611	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
853	B00R_050_037$_{de}$	0.125	0.125	0.5	0.5	0.375	0.312	270	0.124	0.222	0.5	37.8	0.5	−18.2	18.2	271.7	0.321	0.273	0.0	0.628	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
854	B00R_050_050$_{de}$	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.13	0.5	30.5	0.7	−24.3	24.3	271.7	0.591	0.497	0.0	0.652	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
855	Y00G_100_062$_{de}$	1.0	1.0	0.375	1.0	0.625	0.687	90	1.0	0.855	0.375	88.2	−1.9	48.0	48.0	92.3	0.0	0.133	0.595	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
856	Y00G_087_050$_{de}$	0.875	0.875	0.375	0.875	0.5	0.625	90	0.875	0.759	0.375	80.7	−1.5	38.4	38.4	92.3	0.0	0.159	0.522	0.143	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
857	Y00G_075_037$_{de}$	0.75	0.75	0.375	0.75	0.375	0.562	90	0.75	0.663	0.375	73.2	−1.1	28.8	28.8	92.3	0.0	0.157	0.453	0.272	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
858	Y00G_062_025$_{de}$	0.625	0.625	0.375	0.625	0.25	0.5	90	0.625	0.567	0.375	65.7	−0.7	19.2	19.2	92.3	0.0	0.145	0.388	0.396	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
859	Y00G_050_012$_{de}$	0.5	0.5	0.375	0.5	0.125	0.437	90	0.5	0.471	0.375	58.3	−0.3	9.6	9.6	92.3	0.0	0.106	0.27	0.511	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
860	NW_037$_{de}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
861	B00R_037_012$_{de}$	0.25	0.25	0.375	0.375	0.125	0.312	270	0.249	0.282	0.375	43.5	0.1	−6.0	6.0	271.7	0.06	0.066	0.0	0.677	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
862	B00R_037_025$_{de}$	0.125	0.125	0.375	0.375	0.25	0.25	270	0.124	0.19	0.375	36.2	0.3	−12.1	12.1	271.7	0.267	0.229	0.0	0.704	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
863	B00R_037_037$_{de}$	0.0	0.0	0.375	0.375	0.375	0.187	270	0.0	0.097	0.375	28.8	0.5	−18.2	18.2	271.7	0.438	0.38	0.0	0.74	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
864	Y00G_100_075$_{de}$	1.0	1.0	0.25	1.0	0.75	0.625	90	1.0	0.826	0.25	86.7	−2.3	57.6	57.6	92.3	0.0	0.153	0.749	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
865	Y00G_087_062$_{de}$	0.875	0.875	0.25	0.875	0.625	0.562	90	0.875	0.73	0.25	79.2	−1.9	48.0	48.0	92.3	0.0	0.189	0.664	0.15	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
866	Y00G_075_050$_{de}$	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.634	0.25	71.7	−1.5	38.4	38.4	92.3	0.0	0.187	0.598	0.276	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
867	Y00G_062_037$_{de}$	0.625	0.625	0.25	0.625	0.375	0.437	90	0.625	0.538	0.25	64.2	−1.1	28.8	28.8	92.3	0.0	0.188	0.523	0.397	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
868	Y00G_050_025$_{de}$	0.5	0.5	0.25	0.5	0.25	0.375	90	0.5	0.442	0.249	56.8	−0.7	19.2	19.2	92.3	0.0	0.171	0.435	0.508	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
869	Y00G_037_012$_{de}$	0.375	0.375	0.25	0.375	0.125	0.312	90	0.375	0.346	0.249	49.3	−0.3	9.6	9.6	92.3	0.0	0.111	0.294	0.626	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
870	NW_025$_{de}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
871	B00R_025_012$_{de}$	0.125	0.125	0.25	0.25	0.125	0.187	270	0.124	0.157	0.25	34.5	0.1	−6.0	6.0	271.7	0.11	0.11	0.0	0.778	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
872	B00R_025_025$_{de}$	0.0	0.0	0.25	0.25	0.25	0.125	270	0.0	0.065	0.25	27.2	0.3	−12.1	12.1	271.7	0.453	0.37	0.0	0.835	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
873	Y00G_100_087$_{de}$	1.0	1.0	0.125	1.0	0.875	0.562	90	1.0	0.797	0.125	85.1	−2.7	67.2	67.2	92.3	0.0	0.25	0.875	0.0	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
874	Y00G_087_075$_{de}$	0.875	0.875	0.125	0.875	0.75	0.5	90	0.875	0.701	0.125	77.7	−2.3	57.6	57.6	92.3	0.0	0.193	0.75	0.17	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
875	Y00G_075_062$_{de}$	0.75	0.75	0.125	0.75	0.625	0.437	90	0.75	0.605	0.125	70.2	−1.9	48.0	48.0	92.3	0.0	0.196	0.701	0.287	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
876	Y00G_062_050$_{de}$	0.625	0.625	0.125	0.625	0.5	0.375	90	0.625	0.509	0.125	62.7	−1.5	38.4	38.4	92.3	0.0	0.21	0.65	0.399	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
877	Y00G_050_037$_{de}$	0.5	0.5	0.125	0.5	0.375	0.312	90	0.5	0.413	0.124	55.2	−1.1	28.8	28.8	92.3	0.0	0.215	0.588	0.506	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
878	Y00G_037_025$_{de}$	0.375	0.375	0.125	0.375	0.25	0.25	90	0.375	0.317	0.124	47.8	−0.7	19.2	19.2	92.3	0.0	0.17	0.48	0.634	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
879	Y00G_025_012$_{de}$	0.25	0.25	0.125	0.25	0.125	0.187	90	0.25	0.221	0.124	40.3	−0.3	9.6	9.6	92.3	0.0	0.122	0.33	0.721	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
880	NW_012$_{de}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
881	B00R_012_012$_{de}$	0.0	0.0	0.125	0.125	0.125	0.062	270	0.0	0.032	0.125	25.5	0.1	−6.0	6.0	271.7	0.347	0.246	0.0	0.937	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
882	Y00G_100_100$_{de}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3	0.0	0.231	0.999	0.001	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
883	Y00G_087_087$_{de}$	0.875	0.875	0.0	0.875	0.875	0.437	90	0.875	0.672	0.0	76.1	−2.7	67.2	67.2	92.3	0.0	0.194	0.844	0.192	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
884	Y00G_075_075$_{de}$	0.75	0.75	0.0	0.75	0.75	0.375	90	0.75	0.576	0.0	68.7	−2.3	57.6	57.6	92.3	0.0	0.2	0.811	0.294	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
885	Y00G_062_062$_{de}$	0.625	0.625	0.0	0.625	0.625	0.312	90	0.625	0.48	0.0	61.2	−1.9	48.0	48.0	92.3	0.0	0.217	0.784	0.39	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
886	Y00G_050_050$_{de}$	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.384	0.0	53.7	−1.5	38.4	38.4	92.3	0.0	0.227	0.741	0.491	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
887	Y00G_037_037$_{de}$	0.375	0.375	0.0	0.375	0.375	0.187	90	0.375	0.288	0.0	46.2	−1.1	28.8	28.8	92.3	0.0	0.213	0.654	0.627	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
888	Y00G_025_025$_{de}$	0.25	0.25	0.0	0.25	0.25	0.125	90	0.25	0.192	0.0	38.8	−0.7	19.2	19.2	92.3	0.0	0.185	0.557	0.717	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
889	Y00G_012_012$_{de}$	0.125	0.125	0.0	0.125	0.125	0.062	90	0.125	0.096	0.0	31.3	−0.3	9.6	9.6	92.3	0.0	0.143	0.445	0.828	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
890	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
																	delta												

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$				*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
891	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
892	B50R_100_012$_{de}$	1.0	0.875	1.0	1.0	0.125	0.937	330	0.948	0.875	1.0	88.6	5.8	−3.5	6.8	328.6	0.017	0.134	0.0	0.047	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
893	B50R_100_025$_{de}$	1.0	0.75	1.0	1.0	0.25	0.875	330	0.896	0.75	1.0	81.5	11.6	−7.1	13.6	328.6	0.024	0.205	0.0	0.1	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
894	B50R_100_037$_{de}$	1.0	0.625	1.0	1.0	0.375	0.812	330	0.844	0.625	1.0	74.3	17.5	−10.7	20.5	328.6	0.059	0.31	0.0	0.123	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
895	B50R_100_050$_{de}$	1.0	0.5	1.0	1.0	0.5	0.75	330	0.792	0.5	1.0	67.1	23.3	−14.2	27.3	328.6	0.121	0.428	0.0	0.13	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
896	B50R_100_062$_{de}$	1.0	0.375	1.0	1.0	0.625	0.687	330	0.74	0.375	1.0	60.0	29.2	−17.8	34.2	328.6	0.177	0.545	0.0	0.133	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
897	B50R_100_075$_{de}$	1.0	0.25	1.0	1.0	0.75	0.625	330	0.688	0.25	1.0	52.8	35.0	−21.4	41.0	328.6	0.233	0.664	0.0	0.143	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
898	B50R_100_087$_{de}$	1.0	0.125	1.0	1.0	0.875	0.562	330	0.636	0.125	1.0	45.6	40.9	−24.9	47.9	328.6	0.299	0.778	0.0	0.141	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
899	B50R_100_100$_{de}$	1.0	0.0	1.0	1.0	1.0	0.5	330	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6	0.415	1.0	0.0	0.0	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
900	G00B_100_012$_{de}$	0.875	1.0	0.875	1.0	0.125	0.937	150	0.875	1.0	0.893	90.5	−8.2	2.6	8.6	162.2	0.141	0.0	0.123	0.014	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
901	NW_087$_{de}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
902	B50R_087_012$_{de}$	0.875	0.75	0.875	0.875	0.125	0.812	330	0.823	0.75	0.875	79.6	5.8	−3.5	6.8	328.6	0.0	0.112	0.002	0.196	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
903	B50R_087_025$_{de}$	0.875	0.625	0.875	0.875	0.25	0.75	330	0.771	0.625	0.875	72.5	11.6	−7.1	13.6	328.6	0.009	0.212	0.0	0.249	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
904	B50R_087_037$_{de}$	0.875	0.5	0.875	0.875	0.375	0.687	330	0.719	0.5	0.875	65.3	17.5	−10.7	20.5	328.6	0.061	0.342	0.0	0.254	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
905	B50R_087_050$_{de}$	0.875	0.375	0.875	0.875	0.5	0.625	330	0.667	0.375	0.875	58.1	23.3	−14.2	27.3	328.6	0.138	0.494	0.0	0.246	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
906	B50R_087_062$_{de}$	0.875	0.25	0.875	0.875	0.625	0.562	330	0.615	0.25	0.875	51.0	29.2	−17.8	34.2	328.6	0.21	0.639	0.0	0.248	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
907	B50R_087_075$_{de}$	0.875	0.125	0.875	0.875	0.75	0.5	330	0.563	0.125	0.875	43.8	35.0	−21.4	41.0	328.6	0.279	0.757	0.0	0.262	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
908	B50R_087_087$_{de}$	0.875	0.0	0.875	0.875	0.875	0.437	330	0.511	0.0	0.875	36.6	40.9	−24.9	47.9	328.6	0.333	0.921	0.0	0.263	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
909	G00B_100_025$_{de}$	0.75	1.0	0.75	1.0	0.25	0.875	150	0.75	1.0	0.786	85.3	−16.4	5.2	17.3	162.2	0.311	0.0	0.25	0.0	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
910	G00B_087_012$_{de}$	0.75	0.875	0.75	0.875	0.125	0.812	150	0.75	0.875	0.768	81.5	−8.2	2.6	8.6	162.2	0.138	0.0	0.135	0.196	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
911	NW_075$_{de}$	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	0.0	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
912	B50R_075_012$_{de}$	0.75	0.625	0.75	0.75	0.125	0.687	330	0.698	0.625	0.75	70.6	5.8	−3.5	6.8	328.6	0.0	0.119	0.01	0.336	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
913	B50R_075_025$_{de}$	0.75	0.5	0.75	0.75	0.25	0.625	330	0.646	0.5	0.75	63.5	11.6	−7.1	13.6	328.6	0.0	0.232	0.001	0.39	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
914	B50R_075_037$_{de}$	0.75	0.375	0.75	0.75	0.375	0.562	330	0.594	0.375	0.75	56.3	17.5	−10.7	20.5	328.6	0.052	0.373	0.0	0.401	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
915	B50R_075_050$_{de}$	0.75	0.25	0.75	0.75	0.5	0.5	330	0.542	0.25	0.75	49.1	23.3	−14.2	27.3	328.6	0.122	0.504	0.0	0.411	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
916	B50R_075_062$_{de}$	0.75	0.125	0.75	0.75	0.625	0.437	330	0.49	0.125	0.75	42.0	29.2	−17.8	34.2	328.6	0.206	0.674	0.0	0.413	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
917	B50R_075_075$_{de}$	0.75	0.0	0.75	0.75	0.75	0.375	330	0.438	0.0	0.75	34.8	35.0	−21.4	41.0	328.6	0.3	0.849	0.0	0.407	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
918	G00B_100_037$_{de}$	0.625	1.0	0.625	1.0	0.375	0.812	150	0.625	1.0	0.68	80.0	−24.7	7.9	25.9	162.2	0.407	0.0	0.376	0.0	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
919	G00B_087_025$_{de}$	0.625	0.875	0.625	0.875	0.25	0.75	150	0.625	0.875	0.661	76.3	−16.4	5.2	17.3	162.2	0.284	0.0	0.28	0.201	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
920	G00B_075_012$_{de}$	0.625	0.75	0.625	0.75	0.125	0.687	150	0.625	0.75	0.643	72.5	−8.2	2.6	8.6	162.2	0.143	0.0	0.176	0.329	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
921	NW_062$_{de}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
922	B50R_062_012$_{de}$	0.625	0.5	0.625	0.625	0.125	0.562	330	0.573	0.5	0.625	61.6	5.8	−3.5	6.8	328.6	0.0	0.143	0.034	0.445	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
923	B50R_062_025$_{de}$	0.625	0.375	0.625	0.625	0.25	0.5	330	0.521	0.375	0.625	54.5	11.6	−7.1	13.6	328.6	0.0	0.274	0.034	0.493	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
924	B50R_062_037$_{de}$	0.625	0.25	0.625	0.625	0.375	0.437	330	0.469	0.25	0.625	47.3	17.5	−10.7	20.5	328.6	0.035	0.412	0.0	0.526	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
925	B50R_062_050$_{de}$	0.625	0.125	0.625	0.625	0.5	0.375	330	0.417	0.125	0.625	40.1	23.3	−14.2	27.3	328.6	0.141	0.595	0.0	0.541	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
926	B50R_062_062$_{de}$	0.625	0.0	0.625	0.625	0.625	0.312	330	0.365	0.0	0.625	33.0	29.2	−17.8	34.2	328.6	0.243	0.791	0.0	0.543	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
927	G00B_100_050$_{de}$	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.573	74.8	−32.9	10.5	34.6	162.2	0.515	0.0	0.498	0.0	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
928	G00B_087_037$_{de}$	0.5	0.875	0.5	0.875	0.375	0.687	150	0.5	0.875	0.555	71.0	−24.7	7.9	25.9	162.2	0.407	0.0	0.41	0.194	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
929	G00B_075_025$_{de}$	0.5	0.75	0.5	0.75	0.25	0.625	150	0.5	0.75	0.536	67.3	−16.4	5.2	17.3	162.2	0.3	0.0	0.327	0.323	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
930	G00B_062_012$_{de}$	0.5	0.625	0.5	0.625	0.125	0.562	150	0.5	0.625	0.518	63.5	−8.2	2.6	8.6	162.2	0.154	0.0	0.198	0.436	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
931	NW_050$_{de}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
932	B50R_050_012$_{de}$	0.5	0.375	0.5	0.5	0.125	0.437	330	0.448	0.375	0.5	52.6	5.8	−3.5	6.8	328.6	0.0	0.177	0.054	0.553	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
933	B50R_050_025$_{de}$	0.5	0.25	0.5	0.5	0.25	0.375	330	0.396	0.249	0.5	45.5	11.6	−7.1	13.6	328.6	0.0	0.298	0.03	0.614	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
934	B50R_050_037$_{de}$	0.5	0.125	0.5	0.5	0.375	0.312	330	0.344	0.124	0.5	38.3	17.5	−10.7	20.5	328.6	0.048	0.492	0.0	0.643	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
935	B50R_050_050$_{de}$	0.5	0.0	0.5	0.5	0.5	0.25	330	0.292	0.0	0.5	31.1	23.3	−14.2	27.3	328.6	0.158	0.714	0.0	0.651	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
936	G00B_100_062$_{de}$	0.375	1.0	0.375	1.0	0.625	0.687	150	0.375	1.0	0.466	69.5	−41.2	13.2	43.2	162.2	0.622	0.0	0.561	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
937	G00B_087_050$_{de}$	0.375	0.875	0.375	0.875	0.5	0.625	150	0.375	0.875	0.448	65.8	−32.9	10.5	34.6	162.2	0.551	0.0	0.527	0.192	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
938	G00B_075_037$_{de}$	0.375	0.75	0.375	0.75	0.375	0.562	150	0.375	0.75	0.43	62.0	−24.7	7.9	25.9	162.2	0.425	0.0	0.471	0.317	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
939	G00B_062_025$_{de}$	0.375	0.625	0.375	0.625	0.25	0.5	150	0.375	0.625	0.411	58.3	−16.4	5.2	17.3	162.2	0.319	0.0	0.37	0.44	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
940	G00B_050_012$_{de}$	0.375	0.5	0.375	0.5	0.125	0.437	150	0.375	0.5	0.393	54.5	−8.2	2.6	8.6	162.2	0.187	0.0	0.229	0.547	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
941	NW_037$_{de}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
942	B50R_037_012$_{de}$	0.375	0.25	0.375	0.375	0.125	0.312	330	0.323	0.249	0.375	43.6	5.8	−3.5	6.8	328.6	0.0	0.195	0.06	0.661	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
943	B50R_037_025$_{de}$	0.375	0.125	0.375	0.375	0.25	0.25	330	0.271	0.124	0.375	36.5	11.6	−7.1	13.6	328.6	0.003	0.376	0.0	0.71	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
944	B50R_037_037$_{de}$	0.375	0.0	0.375	0.375	0.375	0.187	330	0.219	0.0	0.375	29.3	17.5	−10.7	20.5	328.6	0.057	0.602	0.0	0.749	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
945	G00B_100_075$_{de}$	0.25	1.0	0.25	1.0	0.75	0.625	150	0.25	1.0	0.36	64.3	−49.4	15.8	51.9	162.2	0.717	0.0	0.63	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
946	G00B_087_062$_{de}$	0.25	0.875	0.25	0.875	0.625	0.562	150	0.25	0.875	0.341	60.5	−41.2	13.2	43.2	162.2	0.678	0.0	0.616	0.189	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
947	G00B_075_050$_{de}$	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.323	56.8	−32.9	10.5	34.6	162.2	0.604	0.0	0.579	0.286	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
948	G00B_062_037$_{de}$	0.25	0.625	0.25	0.625	0.375	0.437	150	0.25	0.625	0.305	53.0	−24.7	7.9	25.9	162.2	0.483	0.0	0.503	0.411	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
949	G00B_050_025$_{de}$	0.25	0.5	0.25	0.5	0.25	0.375	150	0.249	0.5	0.286	49.3	−16.4	5.2	17.3	162.2	0.352	0.0	0.409	0.531	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
950	G00B_037_012$_{de}$	0.25	0.375	0.25	0.375	0.125	0.312	150	0.249	0.375	0.268	45.5	−8.2	2.6	8.6	162.2	0.19	0.0	0.271	0.642	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
951	NW_025$_{de}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
952	B50R_025_012$_{de}$	0.25	0.125	0.25	0.25	0.125	0.187	330	0.198	0.124	0.25	34.6	5.8	−3.5	6.8	328.6	0.0	0.238	0.046	0.765	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
953	B50R_025_025$_{de}$	0.25	0.0	0.25	0.25	0.25	0.125	330	0.146	0.0	0.25	27.5	11.6	−7.1	13.6	328.6	0.032	0.522	0.0	0.817	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
954	G00B_100_087$_{de}$	0.125	1.0	0.125	1.0	0.875	0.562	150	0.125	1.0	0.253	59.0	−57.7	18.5	60.6	162.2	0.841	0.0	0.701	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
955	G00B_087_075$_{de}$	0.125	0.875	0.125	0.875	0.75	0.5	150	0.125	0.875	0.235	55.3	−49.4	15.8	51.9	162.2	0.807	0.0	0.709	0.199	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
956	G00B_075_062$_{de}$	0.125	0.75	0.125	0.75	0.625	0.437	150	0.125	0.75	0.216	51.5	−41.2	13.2	43.2	162.2	0.745	0.0	0.692	0.301	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
957	G00B_062_050$_{de}$	0.125	0.625	0.125	0.625	0.5	0.375	150	0.125	0.625	0.198	47.8	−32.9	10.5	34.6	162.2	0.641	0.0	0.633	0.417	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
958	G00B_050_037$_{de}$	0.125	0.5	0.125	0.5	0.375	0.312	150	0.124	0.5	0.18	44.0	−24.7	7.9	25.9	162.2	0.539	0.0	0.582	0.533	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
959	G00B_037_025$_{de}$	0.125	0.375	0.125	0.375	0.25	0.25	150	0.124	0.375	0.161	40.3	−16.4	5.2	17.3	162.2	0.425	0.0	0.487	0.656	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
960	G00B_025_012$_{de}$	0.125	0.25	0.125	0.25	0.125	0.187	150	0.124	0.25	0.143	36.5	−8.2	2.6	8.6	162.2	0.262	0.0	0.333	0.765	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
961	NW_012$_{de}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
962	B50R_012_012$_{de}$	0.125	0.0	0.125	0.125	0.125	0.062	330	0.073	0.0	0.125	25.6	5.8	−3.5	6.8	328.6	0.018	0.379	0.0	0.924	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6
963	G00B_100_100$_{de}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2	0.943	0.0	0.798	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
964	G00B_087_087$_{de}$	0.0	0.875	0.0	0.875	0.875	0.437	150	0.0	0.875	0.128	50.0	−57.7	18.5	60.6	162.2	0.877	0.0	0.782	0.25	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
965	G00B_075_075$_{de}$	0.0	0.75	0.0	0.75	0.75	0.375	150	0.0	0.75	0.11	46.3	−49.4	15.8	51.9	162.2	0.794	0.0	0.731	0.412	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
966	G00B_062_062$_{de}$	0.0	0.625	0.0	0.625	0.625	0.312	150	0.0	0.625	0.091	42.5	−41.2	13.2	43.2	162.2	0.728	0.0	0.727	0.499	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
967	G00B_050_050$_{de}$	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.073	38.8	−32.9	10.5	34.6	162.2	0.694	0.0	0.714	0.614	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
968	G00B_037_037$_{de}$	0.0	0.375	0.0	0.375	0.375	0.187	150	0.0	0.375	0.055	35.0	−24.7	7.9	25.9	162.2	0.686	0.0	0.686	0.75	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
969	G00B_025_025$_{de}$	0.0	0.25	0.0	0.25	0.25	0.125	150	0.0	0.25	0.036	31.3	−16.4	5.2	17.3	162.2	0.484	0.0	0.484	0.874	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
970	G00B_012_012$_{de}$	0.0	0.125	0.0	0.125	0.125	0.062	150	0.0	0.125	0.018	27.5	−8.2	2.6	8.6	162.2	0.279	0.0	0.279	0.944	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
971	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
																	delta											

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, ΔE'*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$				*cmyn**$_{sep,Fde}$				$h_{siM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$			
972	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
973	NW_012$_{de}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
974	NW_025$_{de}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
975	NW_037$_{de}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
976	NW_050$_{de}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
977	NW_062$_{de}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
978	NW_075$_{de}$	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	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
979	NW_087$_{de}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
980	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
981	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
982	NW_012$_{de}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
983	NW_025$_{de}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
984	NW_037$_{de}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
985	NW_050$_{de}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
986	NW_062$_{de}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
987	NW_075$_{de}$	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	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
988	NW_087$_{de}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
989	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
990	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
991	NW_012$_{de}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
992	NW_025$_{de}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
993	NW_037$_{de}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
994	NW_050$_{de}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
995	NW_062$_{de}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
996	NW_075$_{de}$	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	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
997	NW_087$_{de}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
998	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
999	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1000	NW_012$_{de}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	32.8	0.0	0.0	0.0	0.0	0.054	0.11	0.815	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1001	NW_025$_{de}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	41.8	0.0	0.0	0.0	0.0	0.032	0.082	0.716	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1002	NW_037$_{de}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	50.8	0.0	0.0	0.0	0.0	0.026	0.052	0.629	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1003	NW_050$_{de}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	59.8	0.0	0.0	0.0	0.0	0.029	0.059	0.51	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1004	NW_062$_{de}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.8	0.0	0.0	0.0	0.0	0.028	0.063	0.409	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1005	NW_075$_{de}$	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	0.015	0.029	0.286	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1006	NW_087$_{de}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.8	0.0	0.0	0.0	0.0	0.017	0.018	0.158	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1007	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1008	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1009	NW_006$_{de}$	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	28.6	0.0	0.0	0.0	0.0	0.016	0.054	0.865	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1010	NW_013$_{de}$	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.4	0.0	0.0	0.0	0.0	0.053	0.109	0.809	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1011	NW_020$_{de}$	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.2	0.0	0.0	0.0	0.0	0.034	0.068	0.76	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1012	NW_026$_{de}$	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	42.9	0.0	0.0	0.0	0.0	0.039	0.092	0.701	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1013	NW_033$_{de}$	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	47.8	0.0	0.0	0.0	0.0	0.044	0.085	0.652	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1014	NW_040$_{de}$	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.6	0.0	0.0	0.0	0.0	0.023	0.048	0.608	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1015	NW_046$_{de}$	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.3	0.0	0.0	0.0	0.0	0.038	0.078	0.539	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1016	NW_053$_{de}$	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.2	0.0	0.0	0.0	0.0	0.017	0.04	0.482	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1017	NW_060$_{de}$	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.0	0.0	0.0	0.0	0.0	0.028	0.064	0.427	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1018	NW_066$_{de}$	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.7	0.0	0.0	0.0	0.0	0.015	0.038	0.381	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1019	NW_073$_{de}$	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	0.017	0.033	0.301	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1020	NW_080$_{de}$	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.4	0.0	0.0	0.0	0.0	0.01	0.011	0.23	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1021	NW_086$_{de}$	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.1	0.0	0.0	0.0	0.0	0.019	0.02	0.164	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1022	NW_093$_{de}$	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	91.0	0.0	0.0	0.0	0.0	0.016	0.005	0.103	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1023	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1024	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1025	NW_006$_{de}$	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	28.6	0.0	0.0	0.0	0.0	0.016	0.054	0.865	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1026	NW_013$_{de}$	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.4	0.0	0.0	0.0	0.0	0.053	0.109	0.809	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1027	NW_020$_{de}$	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.2	0.0	0.0	0.0	0.0	0.034	0.068	0.76	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1028	NW_026$_{de}$	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	42.9	0.0	0.0	0.0	0.0	0.039	0.092	0.701	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1029	NW_033$_{de}$	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	47.8	0.0	0.0	0.0	0.0	0.044	0.085	0.652	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1030	NW_040$_{de}$	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.6	0.0	0.0	0.0	0.0	0.023	0.048	0.608	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1031	NW_046$_{de}$	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.3	0.0	0.0	0.0	0.0	0.038	0.078	0.539	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1032	NW_053$_{de}$	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.2	0.0	0.0	0.0	0.0	0.017	0.04	0.482	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1033	NW_060$_{de}$	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.0	0.0	0.0	0.0	0.0	0.028	0.064	0.427	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1034	NW_066$_{de}$	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.7	0.0	0.0	0.0	0.0	0.015	0.038	0.381	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1035	NW_073$_{de}$	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	0.017	0.033	0.301	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1036	NW_080$_{de}$	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.4	0.0	0.0	0.0	0.0	0.01	0.011	0.23	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1037	NW_086$_{de}$	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.1	0.0	0.0	0.0	0.0	0.019	0.02	0.164	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1038	NW_093$_{de}$	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	91.0	0.0	0.0	0.0	0.0	0.016	0.005	0.103	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1039	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1040	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1041	NW_006$_{de}$	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	28.6	0.0	0.0	0.0	0.0	0.016	0.054	0.865	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1042	NW_013$_{de}$	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.4	0.0	0.0	0.0	0.0	0.053	0.109	0.809	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1043	NW_020$_{de}$	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.2	0.0	0.0	0.0	0.0	0.034	0.068	0.76	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1044	NW_026$_{de}$	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	42.9	0.0	0.0	0.0	0.0	0.039	0.092	0.701	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1045	NW_033$_{de}$	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	47.8	0.0	0.0	0.0	0.0	0.044	0.085	0.652	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1046	NW_040$_{de}$	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.6	0.0	0.0	0.0	0.0	0.023	0.048	0.608	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1047	NW_046$_{de}$	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.3	0.0	0.0	0.0	0.0	0.038	0.078	0.539	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1048	NW_053$_{de}$	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.2	0.0	0.0	0.0	0.0	0.017	0.04	0.482	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1049	NW_060$_{de}$	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.0	0.0	0.0	0.0	0.0	0.028	0.064	0.427	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1050	NW_066$_{de}$	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.7	0.0	0.0	0.0	0.0	0.015	0.038	0.381	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1051	NW_073$_{de}$	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	0.017	0.033	0.301	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1052	NW_080$_{de}$	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.4	0.0	0.0	0.0	0.0	0.01	0.011	0.23	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0

delta

gráfico TUB-QS49; código de tono: H*$_e$=Y25G$_e$
colores y differencia en color, $\Delta E'$*

entrada: *rgb/cmyk* −> *rgb*$_{de}$
salida: 3D-linealización a *cmyk**$_{de}$

2−1133130−F0

n	HIC*$_{Fde}$	*rgb*$_{Fde}$			*ict*$_{Fde}$			h_{Si_Fde}	*rgb**$_{Fde}$			*LabCh**$_{Fde}$				*cmyn**$_{sep,Fde}$				$h_{SiM,de}$	*rgb**$_{Mde}$			*LabCh**$_{Mde}$				
1053	NW_086$_{de}$	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.1	0.0	0.0	0.0	0.0	0.019	0.02	0.164	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1054	NW_093$_{de}$	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	91.0	0.0	0.0	0.0	0.0	0.016	0.005	0.103	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1055	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1056	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1057	NW_006$_{de}$	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	28.6	0.0	0.0	0.0	0.0	0.016	0.054	0.865	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1058	NW_013$_{de}$	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.4	0.0	0.0	0.0	0.0	0.053	0.109	0.809	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1059	NW_020$_{de}$	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.2	0.0	0.0	0.0	0.0	0.034	0.068	0.76	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1060	NW_026$_{de}$	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	42.9	0.0	0.0	0.0	0.0	0.039	0.092	0.701	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1061	NW_033$_{de}$	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	47.8	0.0	0.0	0.0	0.0	0.044	0.085	0.652	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1062	NW_040$_{de}$	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.6	0.0	0.0	0.0	0.0	0.023	0.048	0.608	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1063	NW_046$_{de}$	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.3	0.0	0.0	0.0	0.0	0.038	0.078	0.539	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1064	NW_053$_{de}$	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.2	0.0	0.0	0.0	0.0	0.017	0.04	0.482	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1065	NW_060$_{de}$	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.0	0.0	0.0	0.0	0.0	0.028	0.064	0.427	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1066	NW_066$_{de}$	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.7	0.0	0.0	0.0	0.0	0.015	0.038	0.381	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1067	NW_073$_{de}$	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	0.017	0.033	0.301	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1068	NW_080$_{de}$	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.4	0.0	0.0	0.0	0.0	0.01	0.011	0.23	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1069	NW_086$_{de}$	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.1	0.0	0.0	0.0	0.0	0.019	0.02	0.164	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1070	NW_093$_{de}$	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	91.0	0.0	0.0	0.0	0.0	0.016	0.005	0.103	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1071	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1072	NW_000$_{de}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1073	NW_100$_{de}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.8	0.0	0.0	0.0	0.0
1074	R00Y_100_100$_{de}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4	0.0	1.0	0.735	0.0	375	1.0	0.0	0.263	47.5	56.0	26.7	62.1	25.4
1075	G50B_100_100$_{de}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9	1.0	0.0	0.2	0.0	198	0.0	1.0	0.791	54.9	−38.7	−29.1	48.4	216.9
1076	Y00G_100_100$_{de}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3	0.0	0.231	0.999	0.001	77	1.0	0.768	0.0	83.6	−3.1	76.8	76.9	92.3
1077	B00R_100_100$_{de}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7	1.0	0.738	0.0	0.0	255	0.0	0.261	1.0	37.3	1.4	−48.6	48.7	271.7
1078	G00B_100_100$_{de}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2	0.943	0.0	0.798	0.125	157	0.0	1.0	0.146	53.8	−65.9	21.1	69.2	162.2
1079	B50R_100_100$_{de}$	1.0	0.0	1.0	1.0	1.0	0.5	330	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6	0.415	1.0	0.0	0.0	305	0.584	0.0	1.0	38.5	46.7	−28.5	54.7	328.6

delta