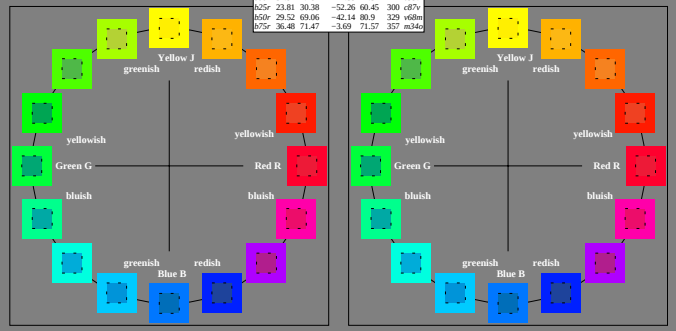
Input and output: Colorimetric Printer Reflective System FRS09_92a
data for any colour:
u^*_e and number *no.* = 00 .. 15
elementary hue text:
u^*_e = 16 hues *r00j, r25j, ..., b75r*
contrast reduction factor:
ϵ_R = 1.0

FRS09_92a; adapted (a) CIELAB data							
u^*_e	$L^*=L^*_a$	u^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_d	
r00j	35.47	63.32	30.17	70.15	25	*m81o*	
r25j	39.12	54.56	49.45	73.64	42	*o10y*	
r50j	50.64	39.15	64.89	75.79	59	*o40y*	
r75j	64.01	21.26	82.83	85.52	76	*o69y*	
j00g	83.18	−4.38	108.53	108.62	92	*o98y*	
j25g	66.73	−29.89	83.06	88.28	110	*y34l*	
j50g	54.03	−48.31	63.49	79.78	127	*y69l*	
j75g	44.73	−60.33	42.64	73.88	145	*l03c*	
g00b	47.59	−49.08	15.74	51.54	162	*l23c*	
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*	
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*	
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*	
b00r	37.91	1.28	−42.35	42.37	272	*c53c*	
b25r	23.81	30.38	−52.26	60.45	300	*c87c*	
b50r	29.52	69.06	−42.14	80.9	329	*c68m*	
b75r	36.48	71.47	−3.69	71.57	357	*m34o*	

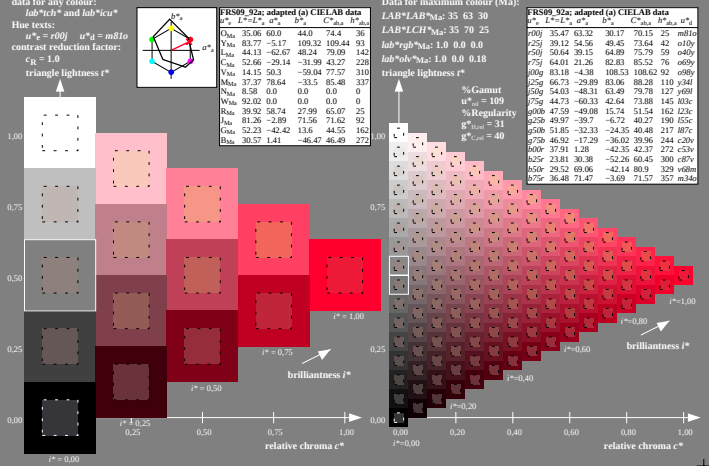
FRS09_92a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	u^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O_{Ma}	35.06	60.0	44.0	74.4	36	
Y_{Ma}	83.77	−5.17	109.32	109.44	93	
L_{Ma}	44.13	−62.67	48.24	79.09	142	
C_{Ma}	52.66	−29.14	−31.99	43.27	228	
V_{Ma}	14.15	50.3	−59.04	77.57	310	
M_{Ma}	37.37	78.64	−33.5	85.48	337	
N_{Ma}	8.58	0.0	0.0	0.0	0	
W_{Ma}	92.02	0.0	0.0	0.0	0	
R_{CIE}	39.92	58.74	27.99	65.07	25	
J_{CIE}	81.26	−2.89	71.56	71.62	92	
G_{CIE}	52.23	−42.42	13.6	44.55	162	
B_{CIE}	30.57	1.41	−46.47	46.49	272	

%Gamut $u^*_{gt,i}$ = 109
%Regularity $g^*_{R,int}$ = 31
$g^*_{C,int}$ = 40



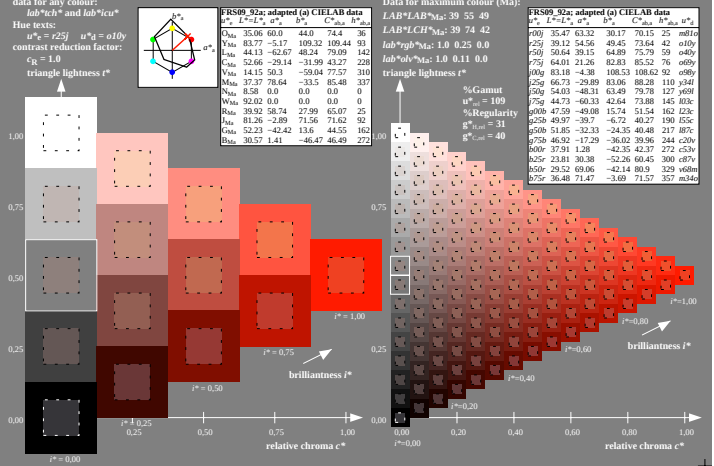
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.071$ u^*_e = *r00j*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r00j* u^*_d = *m81o*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 35 63 30
*LAB*LCH**$_{Ma}$: 35 70 25
*lab*rgb**$_{Ma}$: 1.0 0.0 0.0
*lab*olv**$_{Ma}$: 1.0 0.0 0.18



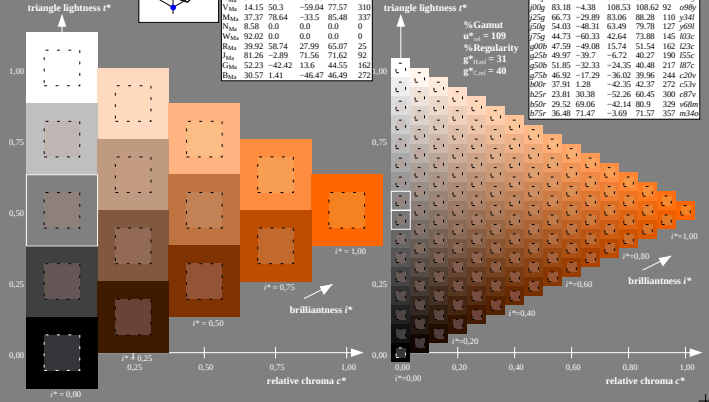
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.117$ u^*_e = *r25j*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r25j* u^*_d = *o10y*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 39 55 49
*LAB*LCH**$_{Ma}$: 39 74 42
*lab*rgb**$_{Ma}$: 1.0 0.25 0.0
*lab*olv**$_{Ma}$: 1.0 0.11 0.0



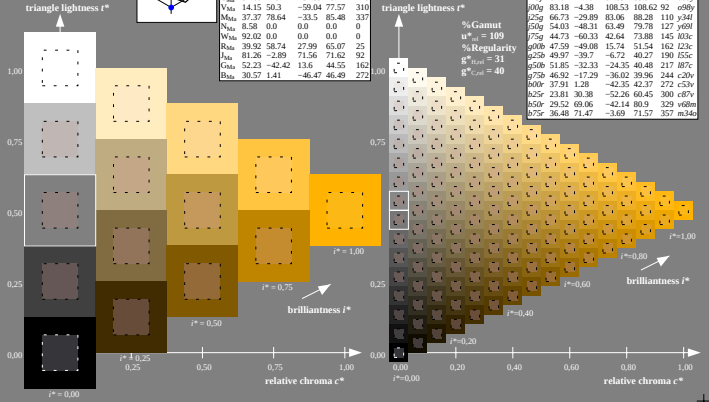
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.164$ u^*_e = *r50j*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r50j* u^*_d = *o40y*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 51 39 65
*LAB*LCH**$_{Ma}$: 51 76 58
*lab*rgb**$_{Ma}$: 1.0 0.5 0.0
*lab*olv**$_{Ma}$: 1.0 0.4 0.0



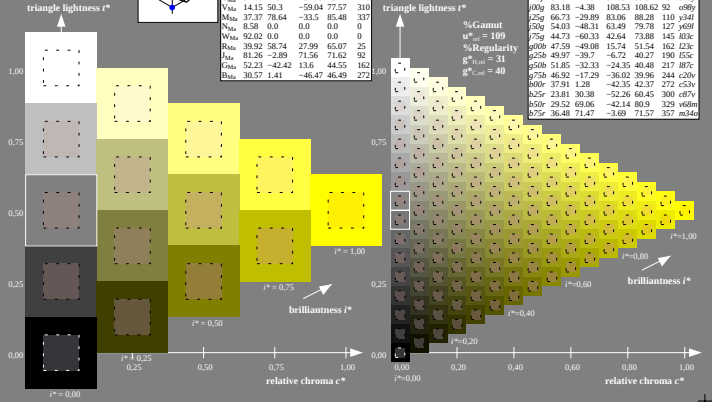
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.21$ u^*_e = *r75j*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r75j* u^*_d = *o69y*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 64 21 83
*LAB*LCH**$_{Ma}$: 64 86 75
*lab*rgb**$_{Ma}$: 1.0 0.75 0.0
*lab*olv**$_{Ma}$: 1.0 0.7 0.0



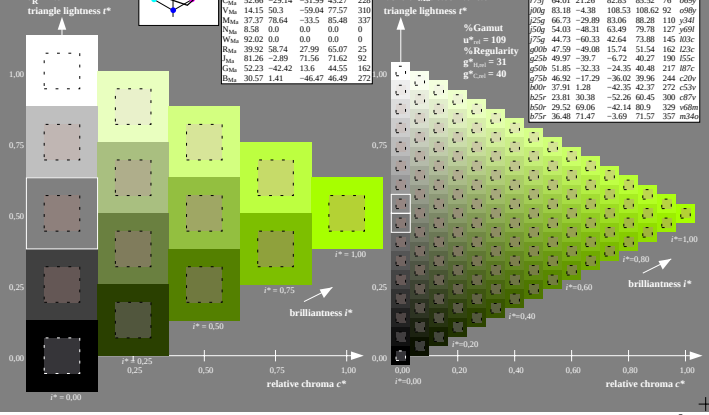
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.256$ u^*_e = *j00g*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j00g* u^*_d = *o98y*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 83 −4 109
*LAB*LCH**$_{Ma}$: 83 109 92
*lab*rgb**$_{Ma}$: 1.0 1.0 0.0
*lab*olv**$_{Ma}$: 1.0 0.99 0.0



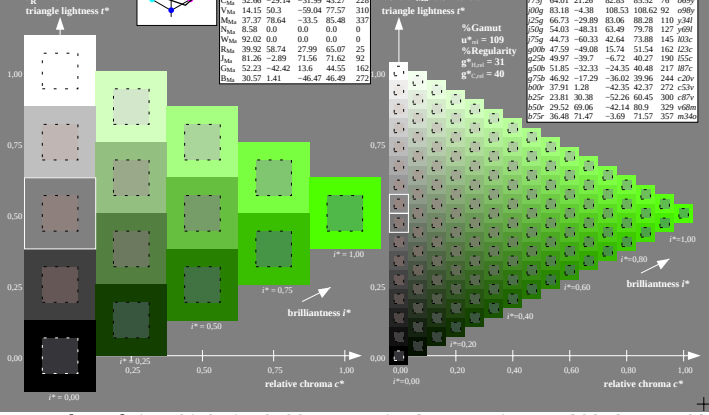
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.305$ u^*_e = *j25g*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j25g* u^*_d = *y34l*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 67 −30 83
*LAB*LCH**$_{Ma}$: 67 88 109
*lab*rgb**$_{Ma}$: 0.75 1.0 0.0
*lab*olv**$_{Ma}$: 0.66 1.0 0.0



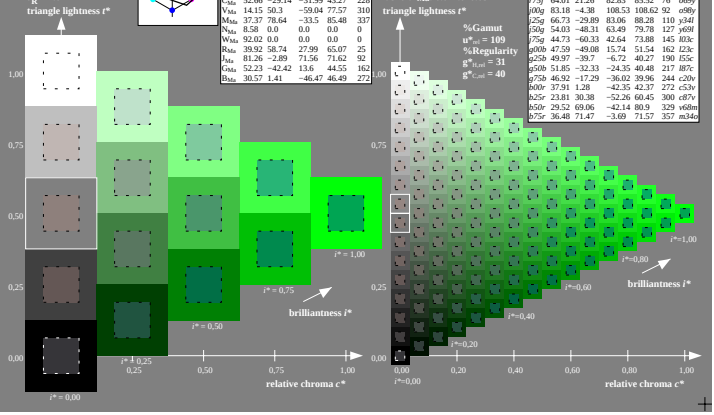
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.354$ u^*_e = *j50g*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j50g* u^*_d = *y69l*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 54 −48 63
*LAB*LCH**$_{Ma}$: 54 80 127
*lab*rgb**$_{Ma}$: 0.5 1.0 0.0
*lab*olv**$_{Ma}$: 0.3 1.0 0.0



Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.402$ u^*_e = *j75g*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j75g* u^*_d = *l03c*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 45 −60 43
*LAB*LCH**$_{Ma}$: 45 74 144
*lab*rgb**$_{Ma}$: 0.25 1.0 0.0
*lab*olv**$_{Ma}$: 0.0 1.0 0.03



Input and output: Colorimetric Printer Reflective System FRS09_92a
data for any colour:
u^*_e and number $no.$ = 00 .. 15
elementary hue text:
u^*_e = 16 hues *r00j, r25j, ..., b75r*
contrast reduction factor:
c_R = 1.0

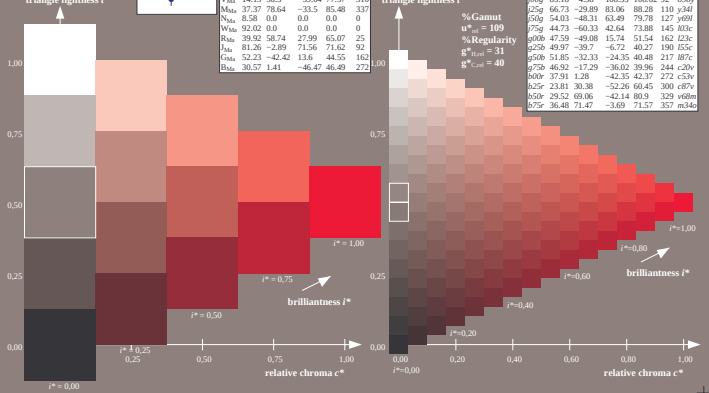
FRS09_92a; adapted (a) CIELAB data							
u^*_e	$L^*=L^*_a$	a^*_e	b^*_e	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a	
r00j	35.47	63.32	30.17	70.15	25	*m81o*	
r25j	39.12	54.56	49.45	73.64	42	*o10y*	
r50j	50.64	39.15	64.89	75.79	59	*o40y*	
r75j	64.01	21.26	82.83	85.52	76	*o69y*	
y00g	83.18	−4.38	108.53	108.62	92	*o98y*	
y25g	66.73	−29.89	83.06	88.28	110	*y34l*	
y50g	54.03	−48.31	63.49	79.78	127	*y69l*	
y75g	44.73	−60.33	42.64	73.88	145	*l03c*	
g00b	47.59	−49.08	15.74	51.54	162	*l23c*	
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*	
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*	
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*	
b00r	37.91	1.28	−42.35	42.37	272	*c53v*	
b25r	23.81	30.38	−52.26	60.45	300	*c87v*	
b50r	29.52	69.06	−42.14	80.9	329	*v68m*	
b75r	36.48	71.47	−3.69	71.57	357	*m34o*	

FRS09_92a; adapted (a) CIELAB data							
Name	$L^*=L^*_a$	a^*_e	b^*_e	$C^*_{ab,a}$	$h^*_{ab,a}$		
O_{Ma}	35.06	60.0	44.0	74.4	36		
Y_{Ma}	83.77	−5.17	109.32	109.44	93		
L_{Ma}	44.13	−62.67	48.24	79.09	142		
C_{Ma}	52.66	−29.14	−31.99	43.27	228		
V_{Ma}	14.15	50.3	−59.04	77.57	310		
M_{Ma}	37.37	78.64	−33.5	85.48	337		
N_{Ma}	8.58	0.0	0.0	0.0	0		
W_{Ma}	92.02	0.0	0.0	0.0	0		
R_{CIE}	39.92	58.74	27.99	65.07	25		
J_{CIE}	81.26	−2.89	71.56	71.62	92		
G_{CIE}	52.23	−42.42	13.6	44.55	162		
B_{CIE}	30.57	1.41	−46.47	46.49	272		

%Gamut $u^*_{gt,i}$ = 109
%Regularity $g^*_{R,ri}$ = 31
$g^*_{C,ri}$ = 40

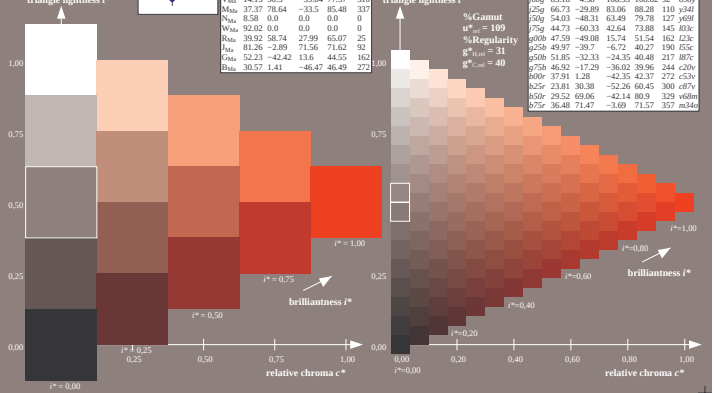
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360$ = 0.071 u^*_e = *r00j*
data for any colour:
*lab*c*h** and *lab*i*cu**
Hue texts:
u^*_e = *r00j* u^*_d = *m81o*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 35 63 30
*LAB*LCH**$_{Ma}$: 35 70 25
*lab*rgb**$_{Ma}$: 1.0 0.0 0.0
*lab*olv**$_{Ma}$: 1.0 0.0 0.18



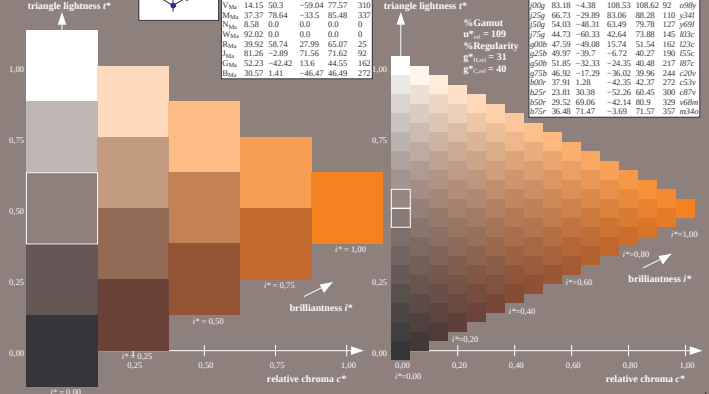
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360$ = 0.117 u^*_e = *r25j*
data for any colour:
*lab*c*h** and *lab*i*cu**
Hue texts:
u^*_e = *r25j* u^*_d = *o10y*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 39 55 49
*LAB*LCH**$_{Ma}$: 39 74 42
*lab*rgb**$_{Ma}$: 1.0 0.25 0.0
*lab*olv**$_{Ma}$: 1.0 0.11 0.0



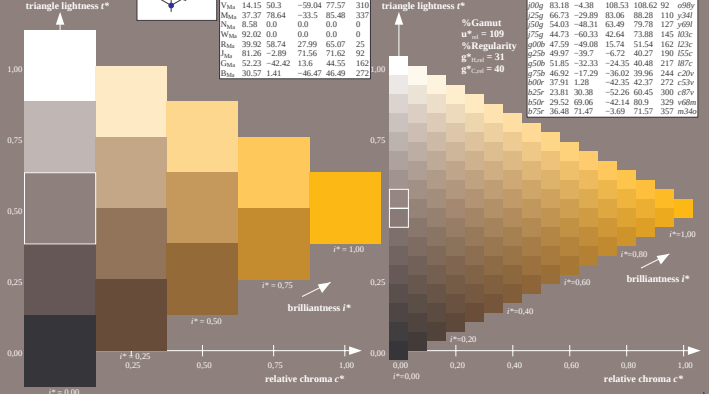
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360$ = 0.164 u^*_e = *r50j*
data for any colour:
*lab*c*h** and *lab*i*cu**
Hue texts:
u^*_e = *r50j* u^*_d = *o40y*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 51 39 65
*LAB*LCH**$_{Ma}$: 51 76 58
*lab*rgb**$_{Ma}$: 1.0 0.5 0.0
*lab*olv**$_{Ma}$: 1.0 0.4 0.0



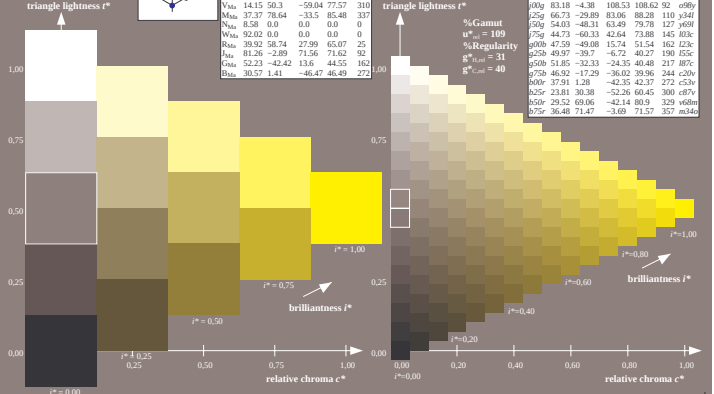
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360$ = 0.21 u^*_e = *r75j*
data for any colour:
*lab*c*h** and *lab*i*cu**
Hue texts:
u^*_e = *r75j* u^*_d = *o69y*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 64 21 83
*LAB*LCH**$_{Ma}$: 64 86 75
*lab*rgb**$_{Ma}$: 1.0 0.75 0.0
*lab*olv**$_{Ma}$: 1.0 0.7 0.0



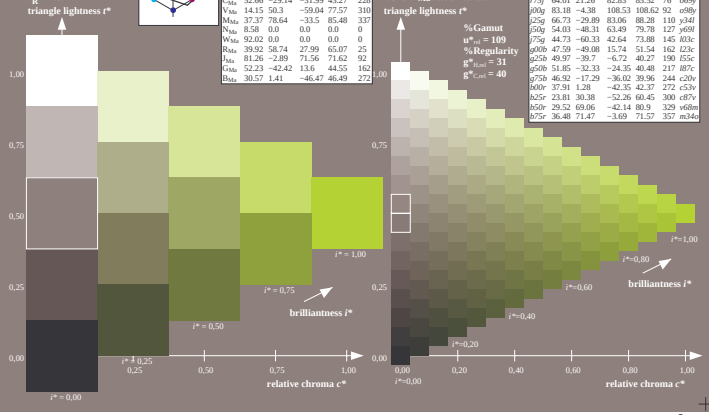
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360$ = 0.256 u^*_e = *j00g*
data for any colour:
*lab*c*h** and *lab*i*cu**
Hue texts:
u^*_e = *j00g* u^*_d = *o98y*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 83 −4 109
*LAB*LCH**$_{Ma}$: 83 109 92
*lab*rgb**$_{Ma}$: 1.0 1.0 0.0
*lab*olv**$_{Ma}$: 1.0 0.99 0.0



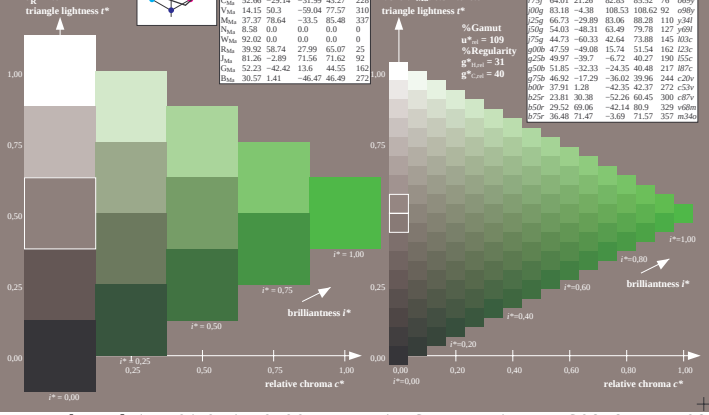
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360$ = 0.305 u^*_e = *j25g*
data for any colour:
*lab*c*h** and *lab*i*cu**
Hue texts:
u^*_e = *j25g* u^*_d = *y34l*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 67 −30 83
*LAB*LCH**$_{Ma}$: 67 88 109
*lab*rgb**$_{Ma}$: 0.75 1.0 0.0
*lab*olv**$_{Ma}$: 0.66 1.0 0.0



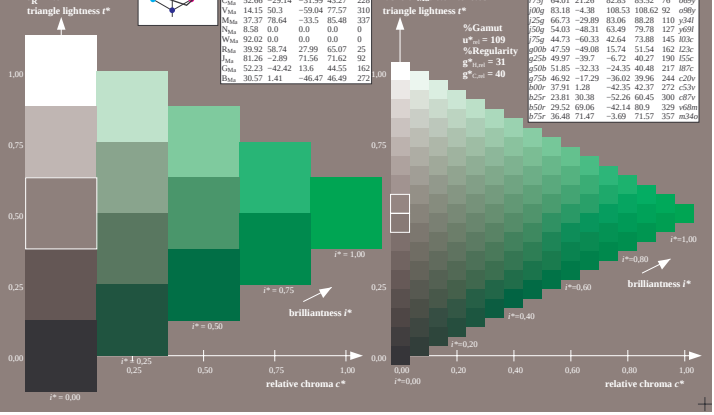
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360$ = 0.354 u^*_e = *j50g*
data for any colour:
*lab*c*h** and *lab*i*cu**
Hue texts:
u^*_e = *j50g* u^*_d = *y69l*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 54 −48 63
*LAB*LCH**$_{Ma}$: 54 80 127
*lab*rgb**$_{Ma}$: 0.5 1.0 0.0
*lab*olv**$_{Ma}$: 0.3 1.0 0.0



Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360$ = 0.402 u^*_e = *j75g*
data for any colour:
*lab*c*h** and *lab*i*cu**
Hue texts:
u^*_e = *j75g* u^*_d = *l03c*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 45 −60 43
*LAB*LCH**$_{Ma}$: 45 74 144
*lab*rgb**$_{Ma}$: 0.25 1.0 0.0
*lab*olv**$_{Ma}$: 0.0 1.0 0.03



Input and output:
Colorimetric Printer Reflective System FRS09_92a
data for any colour:
u^*_e and number *no.* = **00 .. 15**
elementary hue text:
u^*_e = **16 hues** *r00j, r25j, ..., b75r*
contrast reduction factor:
ε_R = **1.0**

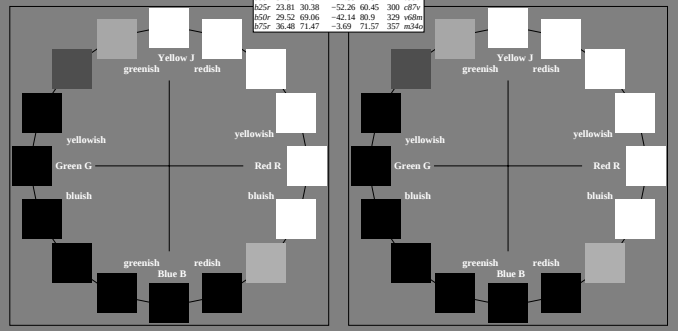
FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	u^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_d
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o69y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

FRS09_92a; adapted (a) CIELAB data

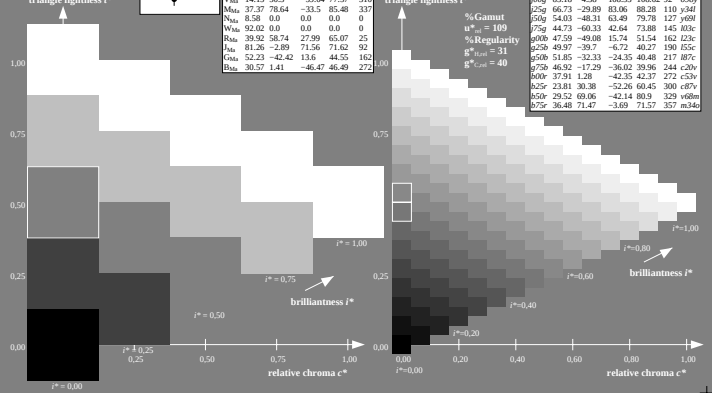
Name	$L^*=L^*_a$	u^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	35.06	60.0	44.0	74.4	36
Y_{Ma}	83.77	−5.17	109.32	109.44	93
L_{Ma}	44.13	−62.67	48.24	79.09	142
C_{Ma}	52.66	−29.14	−31.99	43.27	228
V_{Ma}	14.15	50.3	−59.04	77.57	310
M_{Ma}	37.37	78.64	−33.5	85.48	337
N_{Ma}	8.58	0.0	0.0	0.0	0
W_{Ma}	92.02	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.89	71.56	71.62	92
G_{CIE}	52.23	−42.42	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.47	46.49	272

%Gamut u^*_{gmt} = **109**
%Regularity g^*_{Reg} = **31**
$g^*_{C,ref}$ = **40**



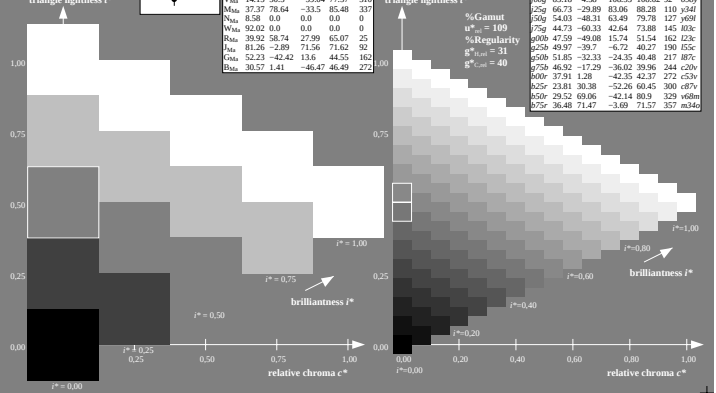
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.071$ u^*_e = ***r00j***
data for any colour:
*lab*c*h** **and** *lab*c*u**
Hue texts:
u^*_e = ***r00j*** u^*_d = ***m81o***
contrast reduction factor:
ε_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **35 63 30**
$LAB^*LCH^*_{Ma}$: **35 70 25**
$lab^*rgb^*_{Ma}$: **1.0 0.0 0.0**
$lab^*olv^*_{Ma}$: **1.0 0.0 0.18**



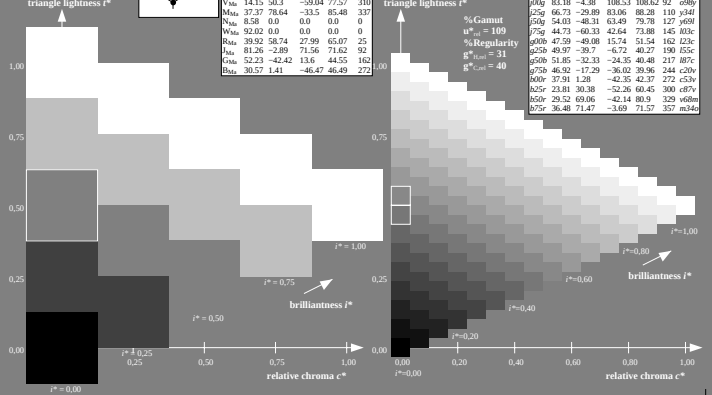
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.117$ u^*_e = ***r25j***
data for any colour:
*lab*c*h** **and** *lab*c*u**
Hue texts:
u^*_e = ***r25j*** u^*_d = ***o10y***
contrast reduction factor:
ε_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **39 55 49**
$LAB^*LCH^*_{Ma}$: **39 74 42**
$lab^*rgb^*_{Ma}$: **1.0 0.25 0.0**
$lab^*olv^*_{Ma}$: **1.0 0.11 0.0**



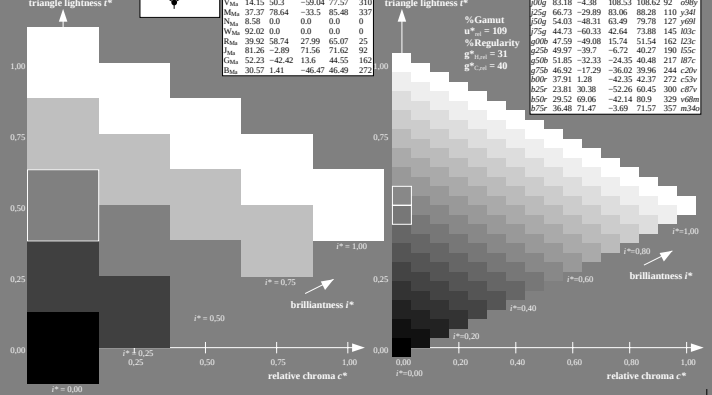
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.164$ u^*_e = ***r50j***
data for any colour:
*lab*c*h** **and** *lab*c*u**
Hue texts:
u^*_e = ***r50j*** u^*_d = ***o40y***
contrast reduction factor:
ε_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **51 39 65**
$LAB^*LCH^*_{Ma}$: **51 76 58**
$lab^*rgb^*_{Ma}$: **1.0 0.5 0.0**
$lab^*olv^*_{Ma}$: **1.0 0.4 0.0**



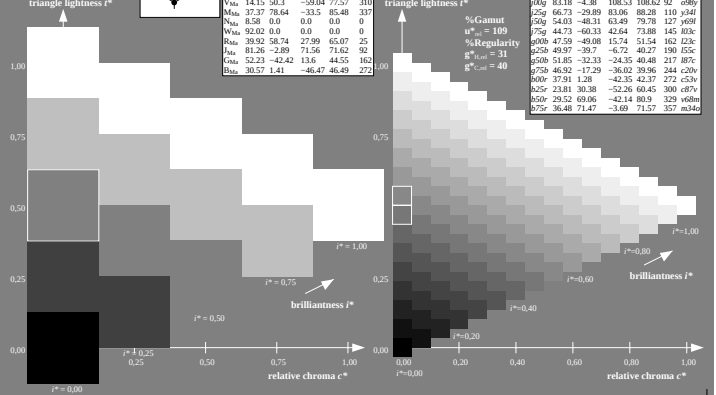
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.21$ u^*_e = ***r75j***
data for any colour:
*lab*c*h** **and** *lab*c*u**
Hue texts:
u^*_e = ***r75j*** u^*_d = ***o69y***
contrast reduction factor:
ε_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **64 21 83**
$LAB^*LCH^*_{Ma}$: **64 86 75**
$lab^*rgb^*_{Ma}$: **1.0 0.75 0.0**
$lab^*olv^*_{Ma}$: **1.0 0.7 0.0**



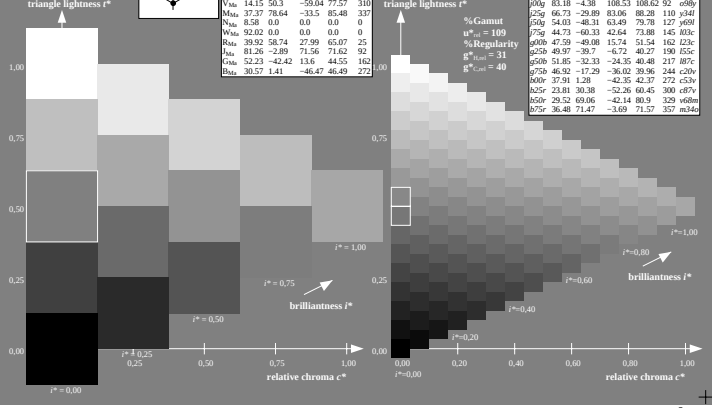
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.256$ u^*_e = ***j00g***
data for any colour:
*lab*c*h** **and** *lab*c*u**
Hue texts:
u^*_e = ***j00g*** u^*_d = ***o98y***
contrast reduction factor:
ε_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **83 −4 109**
$LAB^*LCH^*_{Ma}$: **83 109 92**
$lab^*rgb^*_{Ma}$: **1.0 1.0 0.0**
$lab^*olv^*_{Ma}$: **1.0 0.99 0.0**



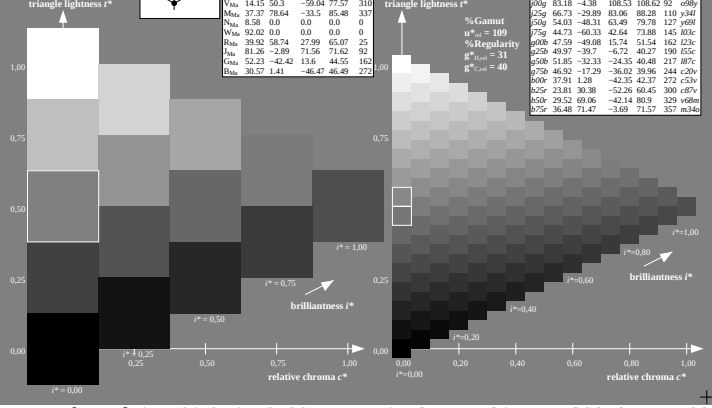
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.305$ u^*_e = ***j25g***
data for any colour:
*lab*c*h** **and** *lab*c*u**
Hue texts:
u^*_e = ***j25g*** u^*_d = ***y34l***
contrast reduction factor:
ε_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **67 −30 83**
$LAB^*LCH^*_{Ma}$: **67 88 109**
$lab^*rgb^*_{Ma}$: **0.75 1.0 0.0**
$lab^*olv^*_{Ma}$: **0.66 1.0 0.0**



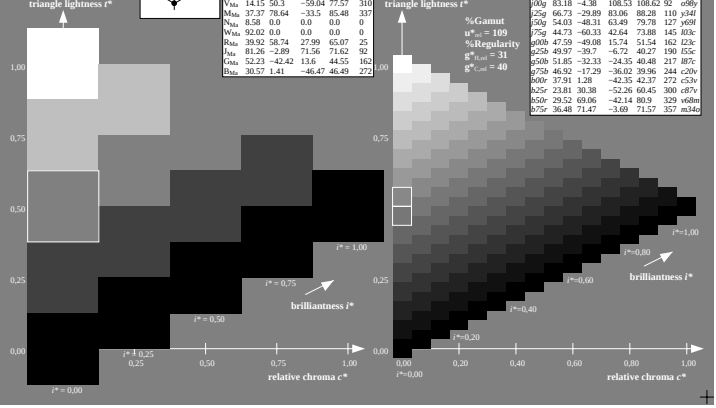
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.354$ u^*_e = ***j50g***
data for any colour:
*lab*c*h** **and** *lab*c*u**
Hue texts:
u^*_e = ***j50g*** u^*_d = ***y69l***
contrast reduction factor:
ε_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **54 −48 63**
$LAB^*LCH^*_{Ma}$: **54 80 127**
$lab^*rgb^*_{Ma}$: **0.5 1.0 0.0**
$lab^*olv^*_{Ma}$: **0.3 1.0 0.0**



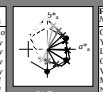
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.402$ u^*_e = ***j75g***
data for any colour:
*lab*c*h** **and** *lab*c*u**
Hue texts:
u^*_e = ***j75g*** u^*_d = ***l03c***
contrast reduction factor:
ε_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **45 −60 43**
$LAB^*LCH^*_{Ma}$: **45 74 144**
$lab^*rgb^*_{Ma}$: **0.25 1.0 0.0**
$lab^*olv^*_{Ma}$: **0.0 1.0 0.03**



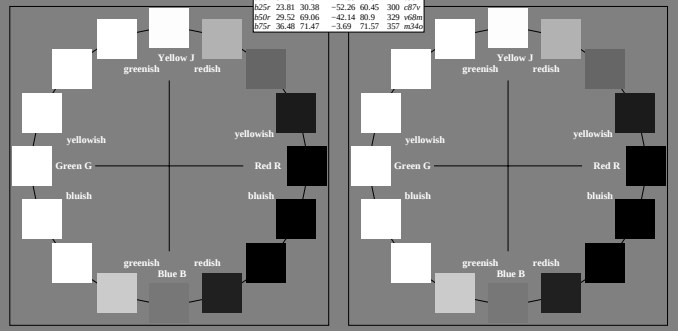
Input and output: Colorimetric Printer Reflective System FRS09_92a
data for any colour:
u^*_e, and number *no.* = 00 .. 15
elementary hue text:
u^*_e = 16 hues *r00j, r25j, ..., b75r*
contrast reduction factor:
ϵ_R = 1.0

FRS09_92a; adapted (a) CIELAB data							
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_d	
r00j	35.47	63.32	30.17	70.15	25	*m81o*	
r25j	39.12	54.56	49.45	73.64	42	*o10y*	
r50j	50.64	39.15	64.89	75.79	59	*o40y*	
r75j	64.01	21.26	82.83	85.52	76	*o69y*	
j00g	83.18	−4.38	108.53	108.62	92	*o98y*	
j25g	66.73	−29.89	83.06	88.28	110	*y34l*	
j50g	54.03	−48.31	63.49	79.78	127	*y69l*	
j75g	44.73	−60.33	42.64	73.88	145	*l03c*	
g00b	47.59	−49.08	15.74	51.54	162	*l23c*	
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*	
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*	
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*	
b00r	37.91	1.28	−42.35	42.37	272	*c53v*	
b25r	23.81	30.38	−52.26	60.45	300	*c87v*	
b50r	29.52	69.06	−42.14	80.9	329	*v68m*	
b75r	36.48	71.47	−3.69	71.57	357	*m34o*	



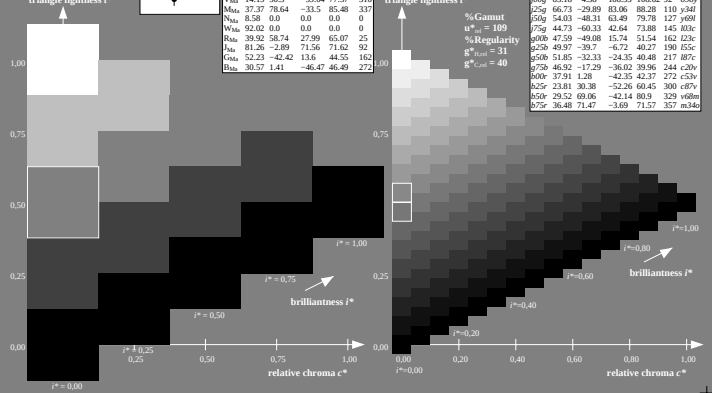
FRS09_92a; adapted (a) CIELAB data							
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$		
O_{Ma}	35.06	60.0	44.0	74.4	36		
Y_{Ma}	83.77	−5.17	109.32	109.44	93		
L_{Ma}	44.13	−62.67	48.24	79.09	142		
C_{Ma}	52.66	−29.14	−31.99	43.27	228		
V_{Ma}	14.15	50.3	−59.04	77.57	310		
M_{Ma}	37.37	78.64	−33.5	85.48	337		
N_{Ma}	8.58	0.0	0.0	0.0	0		
W_{Ma}	92.02	0.0	0.0	0.0	0		
R_{CIE}	39.92	58.74	27.99	65.07	25		
J_{CIE}	81.26	−2.89	71.56	71.62	92		
G_{CIE}	52.23	−42.42	13.6	44.55	162		
B_{CIE}	30.57	1.41	−46.47	46.49	272		

%Gamut
u^*_{gcl} = 109
%Regularity
g^*_{Rcl} = 31
$g^*_{C,cl}$ = 40



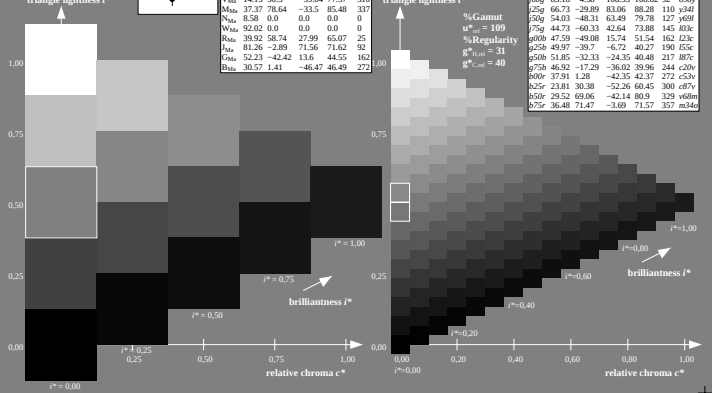
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.071$ u^*_e = *r00j*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r00j* u^*_d = *m81o*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 35 63 30
*LAB*LCH**$_{Ma}$: 35 70 25
*lab*rgb**$_{Ma}$: 1.0 0.0 0.0
*lab*olv**$_{Ma}$: 1.0 0.0 0.18



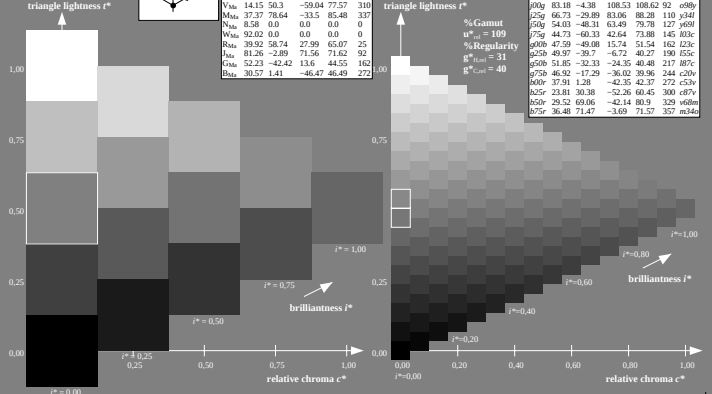
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.117$ u^*_e = *r25j*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r25j* u^*_d = *o10y*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 39 55 49
*LAB*LCH**$_{Ma}$: 39 74 42
*lab*rgb**$_{Ma}$: 1.0 0.25 0.0
*lab*olv**$_{Ma}$: 1.0 0.11 0.0



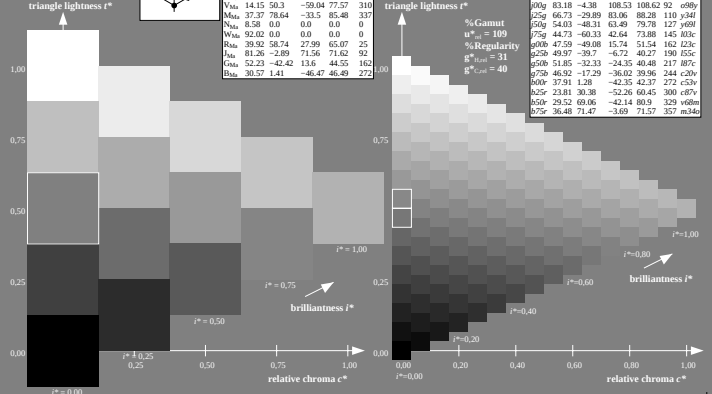
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.164$ u^*_e = *r50j*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r50j* u^*_d = *o40y*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 51 39 65
*LAB*LCH**$_{Ma}$: 51 76 58
*lab*rgb**$_{Ma}$: 1.0 0.5 0.0
*lab*olv**$_{Ma}$: 1.0 0.4 0.0



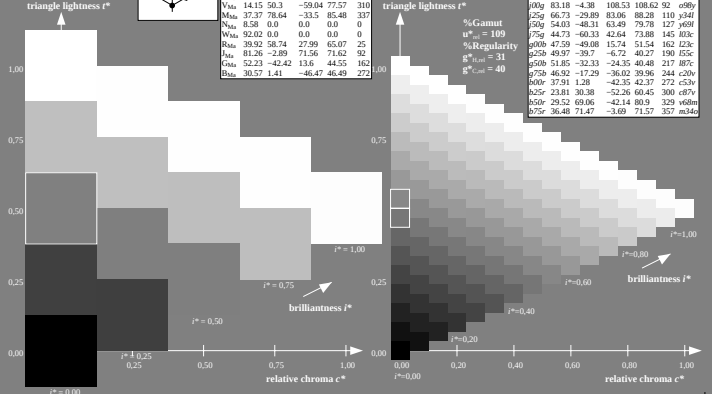
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.21$ u^*_e = *r75j*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r75j* u^*_d = *o69y*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 64 21 83
*LAB*LCH**$_{Ma}$: 64 86 75
*lab*rgb**$_{Ma}$: 1.0 0.75 0.0
*lab*olv**$_{Ma}$: 1.0 0.7 0.0



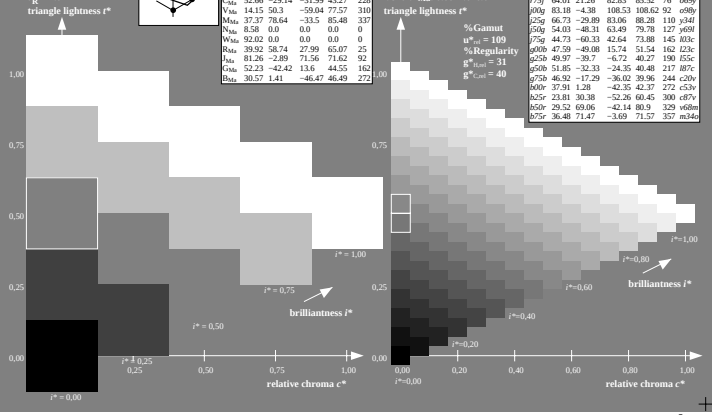
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.256$ u^*_e = *j00g*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j00g* u^*_d = *o98y*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 83 −4 109
*LAB*LCH**$_{Ma}$: 83 109 92
*lab*rgb**$_{Ma}$: 1.0 1.0 0.0
*lab*olv**$_{Ma}$: 1.0 0.99 0.0



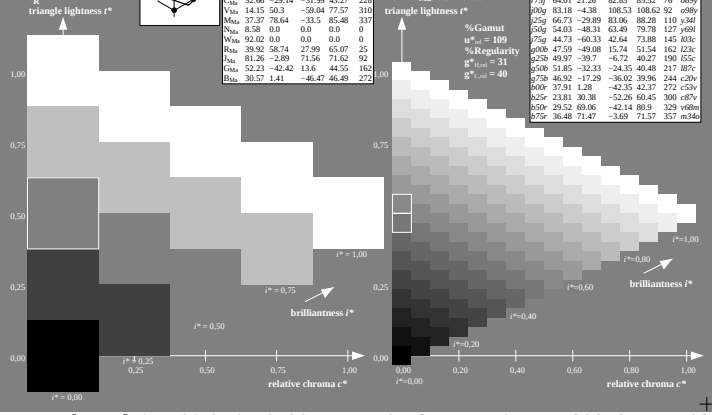
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.305$ u^*_e = *j25g*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j25g* u^*_d = *y34l*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 67 −30 83
*LAB*LCH**$_{Ma}$: 67 88 109
*lab*rgb**$_{Ma}$: 0.75 1.0 0.0
*lab*olv**$_{Ma}$: 0.66 1.0 0.0



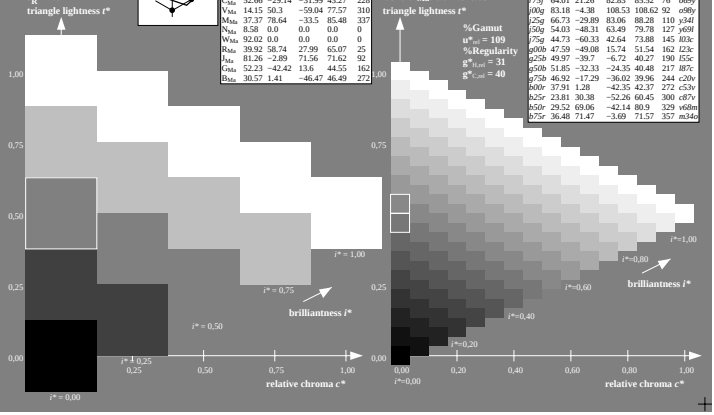
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.354$ u^*_e = *j50g*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j50g* u^*_d = *y69l*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 54 −48 63
*LAB*LCH**$_{Ma}$: 54 80 127
*lab*rgb**$_{Ma}$: 0.5 1.0 0.0
*lab*olv**$_{Ma}$: 0.3 1.0 0.0



Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.402$ u^*_e = *j75g*
data for any colour:
*lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j75g* u^*_d = *l03c*
contrast reduction factor:
ϵ_R = 1.0
triangle lightness *t**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 45 −60 43
*LAB*LCH**$_{Ma}$: 45 74 144
*lab*rgb**$_{Ma}$: 0.25 1.0 0.0
*lab*olv**$_{Ma}$: 0.0 1.0 0.03



Input and output:
Colorimetric Printer Reflective System FRS09_92a
data for any colour:
u^*_e and number *no.* = **00 .. 15**
elementary hue text:
u^*_e = **16 hues** *r00j, r25j, ..., b75r*
contrast reduction factor:
ϵ_R = **1.0**

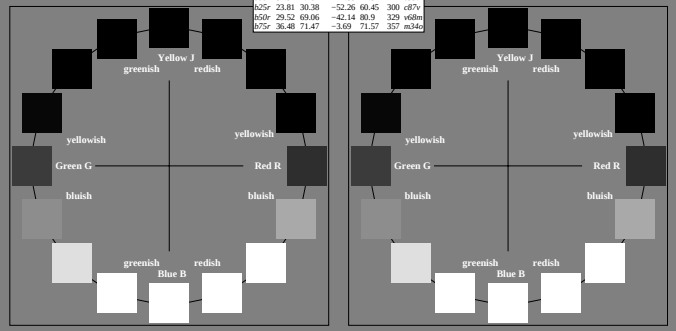
FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	u^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_d
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o69y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

%Gamut
$u^*_{L,rel}$ = **109**
%Regularity
$g^*_{R,rel}$ = **31**
$g^*_{C,rel}$ = **40**

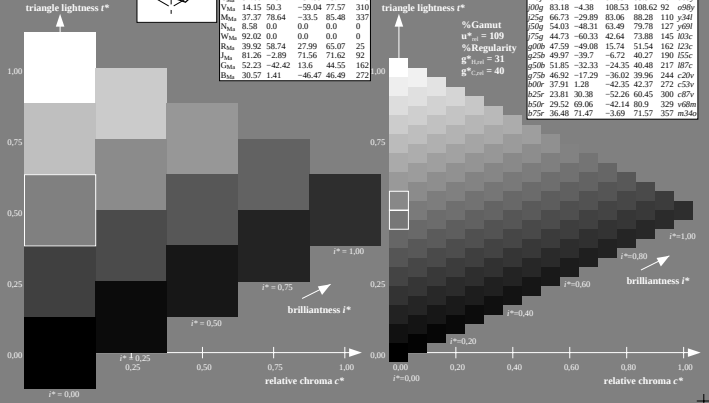
FRS09_92a; adapted (a) CIELAB data

Name	$L^*=L^*_a$	u^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	35.06	60.0	44.0	74.4	36
Y_{Ma}	83.77	−5.17	109.32	109.44	93
L_{Ma}	44.13	−62.67	48.24	79.09	142
C_{Ma}	52.66	−29.14	−31.99	43.27	228
V_{Ma}	14.15	50.3	−59.04	77.57	310
M_{Ma}	37.37	78.64	−33.5	85.48	337
N_{Ma}	8.58	0.0	0.0	0.0	0
W_{Ma}	92.02	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.89	71.56	71.62	92
G_{CIE}	52.23	−42.42	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.47	46.49	272



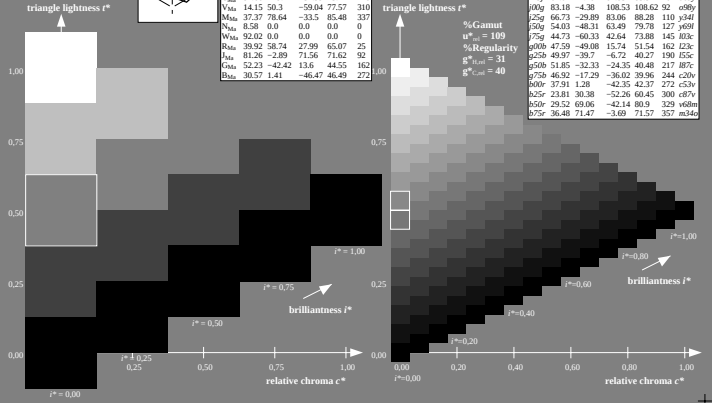
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.071$ $u^*_e = r00j$
data for any colour:
*lab*c*h** **and** *lab*i*cu**
Hue texts:
u^*_e = *r00j* u^*_d = *m81o*
contrast reduction factor:
ϵ_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **35 63 30**
$LAB^*LCH^*_{Ma}$: **35 70 25**
$lab^*rgb^*_{Ma}$: **1.0 0.0 0.0**
$lab^*olv^*_{Ma}$: **1.0 0.0 0.18**



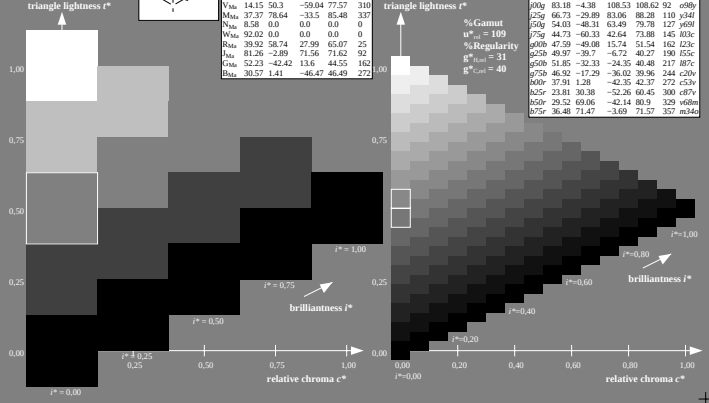
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.117$ $u^*_e = r25j$
data for any colour:
*lab*c*h** **and** *lab*i*cu**
Hue texts:
u^*_e = *r25j* u^*_d = *o10y*
contrast reduction factor:
ϵ_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **39 55 49**
$LAB^*LCH^*_{Ma}$: **39 74 42**
$lab^*rgb^*_{Ma}$: **1.0 0.25 0.0**
$lab^*olv^*_{Ma}$: **1.0 0.11 0.0**



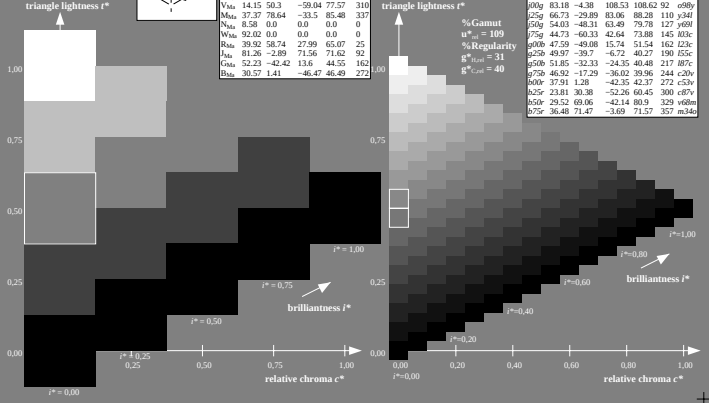
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.164$ $u^*_e = r50j$
data for any colour:
*lab*c*h** **and** *lab*i*cu**
Hue texts:
u^*_e = *r50j* u^*_d = *o40y*
contrast reduction factor:
ϵ_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **51 39 65**
$LAB^*LCH^*_{Ma}$: **51 76 58**
$lab^*rgb^*_{Ma}$: **1.0 0.5 0.0**
$lab^*olv^*_{Ma}$: **1.0 0.4 0.0**



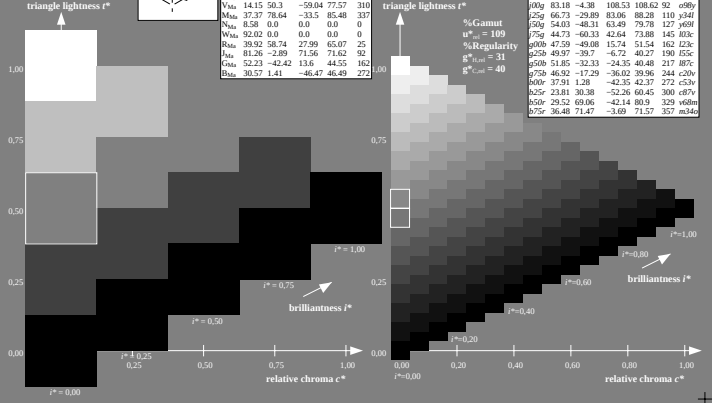
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.21$ $u^*_e = r75j$
data for any colour:
*lab*c*h** **and** *lab*i*cu**
Hue texts:
u^*_e = *r75j* u^*_d = *o69y*
contrast reduction factor:
ϵ_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **64 21 83**
$LAB^*LCH^*_{Ma}$: **64 86 75**
$lab^*rgb^*_{Ma}$: **1.0 0.75 0.0**
$lab^*olv^*_{Ma}$: **1.0 0.7 0.0**



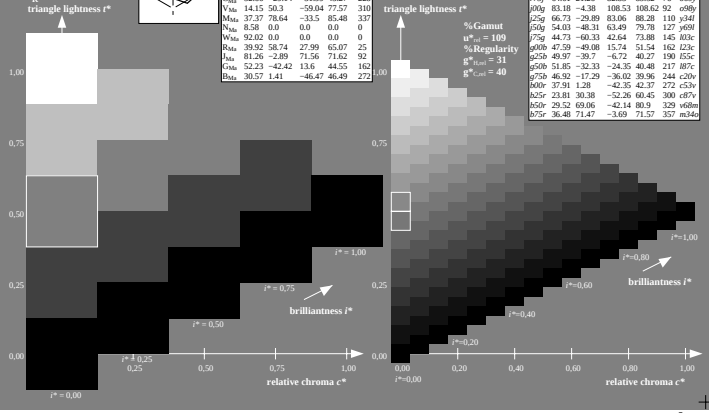
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.256$ $u^*_e = j00g$
data for any colour:
*lab*c*h** **and** *lab*i*cu**
Hue texts:
u^*_e = *j00g* u^*_d = *o98y*
contrast reduction factor:
ϵ_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **83 −4 109**
$LAB^*LCH^*_{Ma}$: **83 109 92**
$lab^*rgb^*_{Ma}$: **1.0 1.0 0.0**
$lab^*olv^*_{Ma}$: **1.0 0.99 0.0**



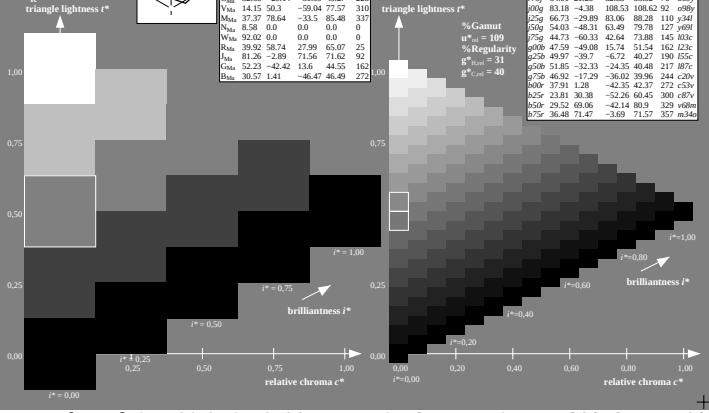
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.305$ $u^*_e = j25g$
data for any colour:
*lab*c*h** **and** *lab*i*cu**
Hue texts:
u^*_e = *j25g* u^*_d = *y34l*
contrast reduction factor:
ϵ_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **67 −30 83**
$LAB^*LCH^*_{Ma}$: **67 88 109**
$lab^*rgb^*_{Ma}$: **0.75 1.0 0.0**
$lab^*olv^*_{Ma}$: **0.66 1.0 0.0**



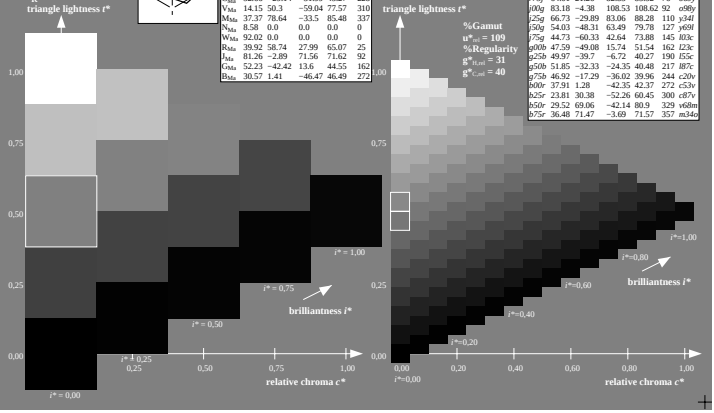
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.354$ $u^*_e = j50g$
data for any colour:
*lab*c*h** **and** *lab*i*cu**
Hue texts:
u^*_e = *j50g* u^*_d = *y69l*
contrast reduction factor:
ϵ_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **54 −48 63**
$LAB^*LCH^*_{Ma}$: **54 80 127**
$lab^*rgb^*_{Ma}$: **0.5 1.0 0.0**
$lab^*olv^*_{Ma}$: **0.3 1.0 0.0**



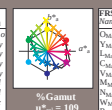
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.402$ $u^*_e = j75g$
data for any colour:
*lab*c*h** **and** *lab*i*cu**
Hue texts:
u^*_e = *j75g* u^*_d = *l03c*
contrast reduction factor:
ϵ_R = **1.0**
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: **45 −60 43**
$LAB^*LCH^*_{Ma}$: **45 74 144**
$lab^*rgb^*_{Ma}$: **0.25 1.0 0.0**
$lab^*olv^*_{Ma}$: **0.0 1.0 0.03**



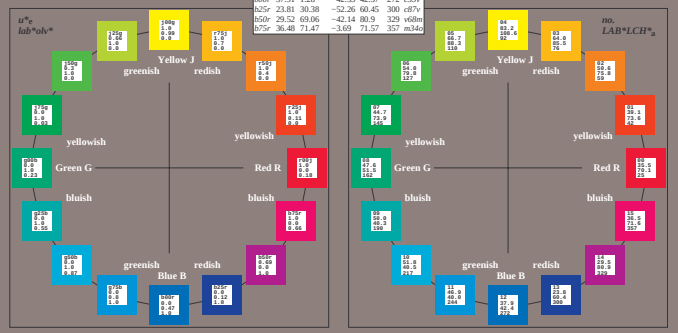
Input and output: Colorimetric Printer Reflective System FRS09_92a
data for any colour:
u^*_e and number *no.* = 00 .. 15
elementary hue text:
u^*_e = 16 hues *r00j, r25j, ..., b75r*
contrast reduction factor:
c_R = 1.0

FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_e	b^*_e	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o66y*
j00g	83.18	−4.38	108.53	108.62	92	*e98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*



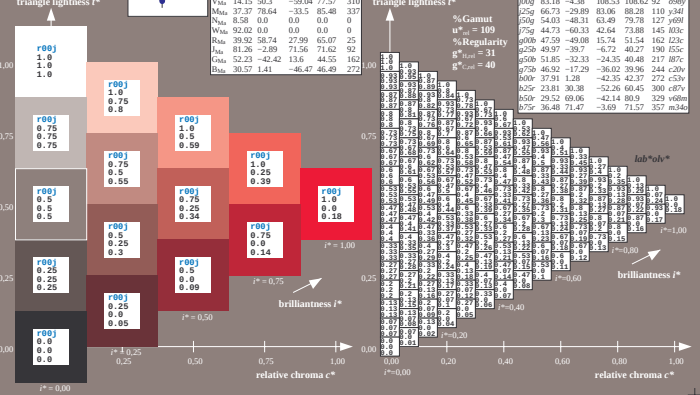
%Gamut $u^*_{e,i}$ = 109
%Regularity
$g^*_{R,ref}$ = 31
$g^*_{C,ref}$ = 40

FRS09_92a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O_{Ma}	35.06	60.0	44.0	74.4	36	
Y_{Ma}	83.77	−5.17	109.32	109.44	93	
L_{Ma}	44.13	−62.67	48.24	79.09	142	
C_{Ma}	52.66	−29.14	−31.99	43.27	228	
V_{Ma}	14.15	50.3	−59.04	77.57	310	
M_{Ma}	37.37	78.64	−33.5	85.48	337	
N_{Ma}	8.58	0.0	0.0	0.0	0	
W_{Ma}	92.02	0.0	0.0	0.0	0	
R_{CIE}	39.92	58.74	27.99	65.07	25	
J_{CIE}	81.26	−2.89	71.56	71.62	92	
G_{CIE}	52.23	−42.42	13.6	44.55	162	
B_{CIE}	30.57	1.41	−46.47	46.49	272	



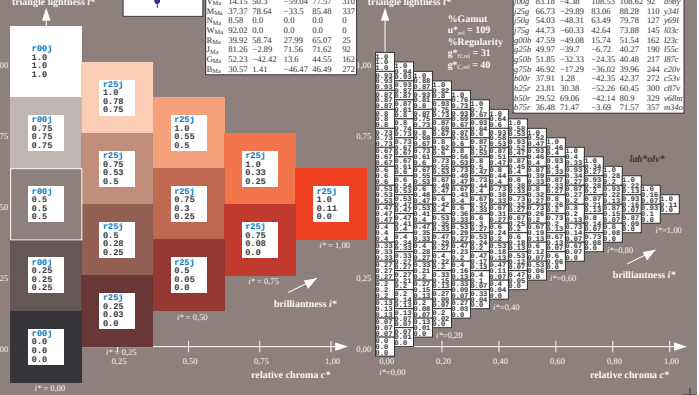
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.071$ u^*_e = *r00j*
data for any colour: *lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r00j* u^*_d = *m81o*
contrast reduction factor:
c_R = 1.0
triangle lightness *l**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 35 63 30
*LAB*LCH**$_{Ma}$: 35 70 25
*lab*rgb**$_{Ma}$: 1.0 0.0 0.0
*lab*olv**$_{Ma}$: 1.0 0.0 0.18



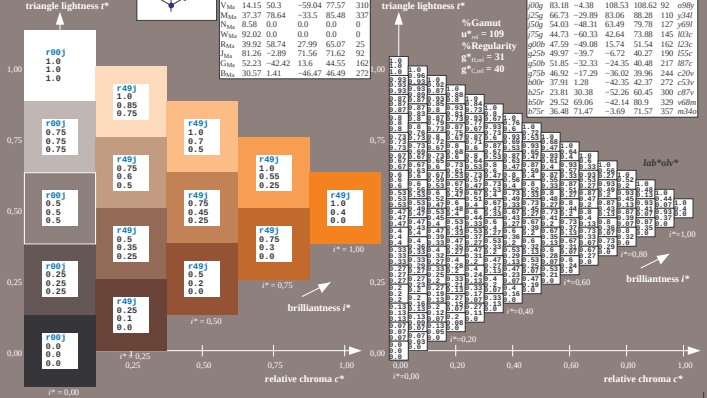
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.117$ u^*_e = *r25j*
data for any colour: *lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r25j* u^*_d = *o10y*
contrast reduction factor:
c_R = 1.0
triangle lightness *l**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 39 55 49
*LAB*LCH**$_{Ma}$: 39 74 42
*lab*rgb**$_{Ma}$: 1.0 0.25 0.0
*lab*olv**$_{Ma}$: 1.0 0.11 0.0



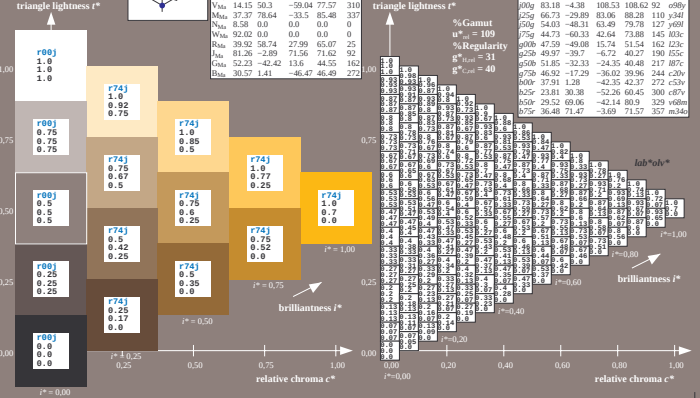
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.164$ u^*_e = *r50j*
data for any colour: *lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r50j* u^*_d = *o40y*
contrast reduction factor:
c_R = 1.0
triangle lightness *l**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 51 39 65
*LAB*LCH**$_{Ma}$: 51 76 58
*lab*rgb**$_{Ma}$: 1.0 0.5 0.0
*lab*olv**$_{Ma}$: 1.0 0.4 0.0



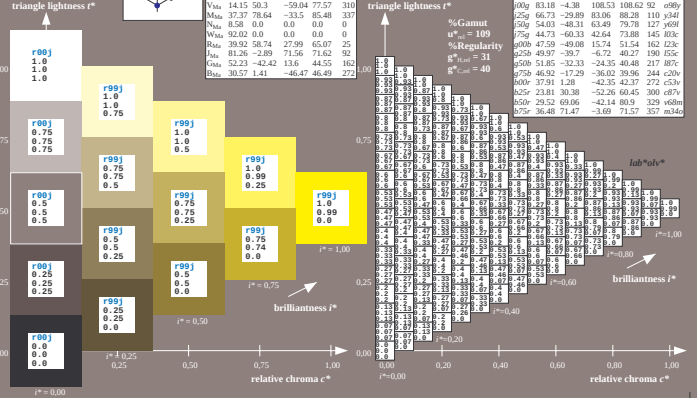
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.21$ u^*_e = *r75j*
data for any colour: *lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *r75j* u^*_d = *o69y*
contrast reduction factor:
c_R = 1.0
triangle lightness *l**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 64 21 83
*LAB*LCH**$_{Ma}$: 64 86 75
*lab*rgb**$_{Ma}$: 1.0 0.75 0.0
*lab*olv**$_{Ma}$: 1.0 0.7 0.0



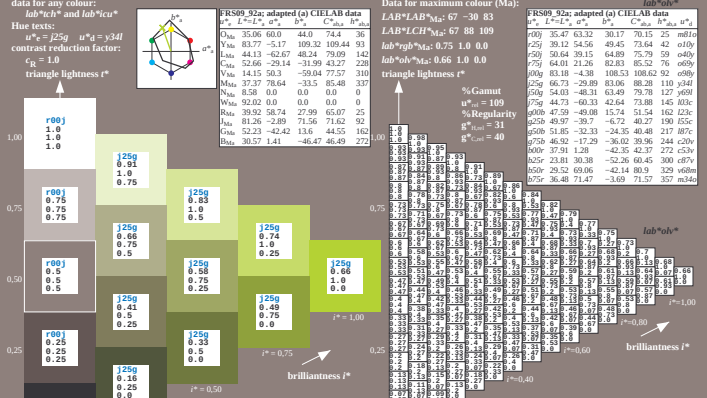
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.256$ u^*_e = *j00g*
data for any colour: *lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j00g* u^*_d = *o98y*
contrast reduction factor:
c_R = 1.0
triangle lightness *l**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 83 −4 109
*LAB*LCH**$_{Ma}$: 83 109 92
*lab*rgb**$_{Ma}$: 1.0 1.0 0.0
*lab*olv**$_{Ma}$: 1.0 0.99 0.0



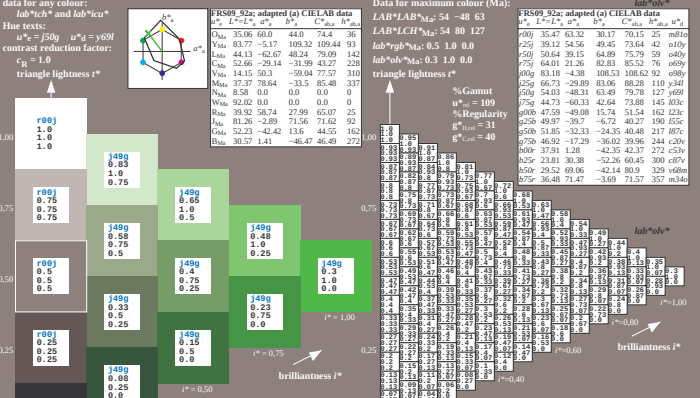
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.305$ u^*_e = *j25g*
data for any colour: *lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j25g* u^*_d = *y34l*
contrast reduction factor:
c_R = 1.0
triangle lightness *l**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 67 −30 83
*LAB*LCH**$_{Ma}$: 67 88 109
*lab*rgb**$_{Ma}$: 0.75 1.0 0.0
*lab*olv**$_{Ma}$: 0.66 1.0 0.0



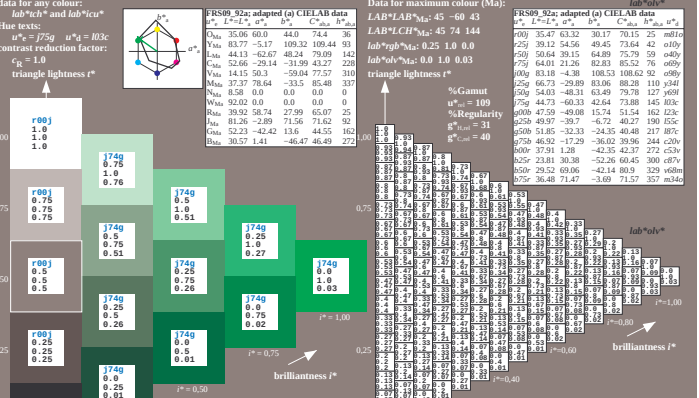
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.354$ u^*_e = *j50g*
data for any colour: *lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j50g* u^*_d = *y69l*
contrast reduction factor:
c_R = 1.0
triangle lightness *l**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 54 −48 63
*LAB*LCH**$_{Ma}$: 54 80 127
*lab*rgb**$_{Ma}$: 0.5 1.0 0.0
*lab*olv**$_{Ma}$: 0.3 1.0 0.0



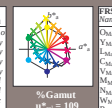
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.402$ u^*_e = *j75g*
data for any colour: *lab*c*h** and *lab*c*u**
Hue texts:
u^*_e = *j75g* u^*_d = *l03c*
contrast reduction factor:
c_R = 1.0
triangle lightness *l**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 45 −60 43
*LAB*LCH**$_{Ma}$: 45 74 144
*lab*rgb**$_{Ma}$: 0.25 1.0 0.0
*lab*olv**$_{Ma}$: 0.0 1.0 0.03



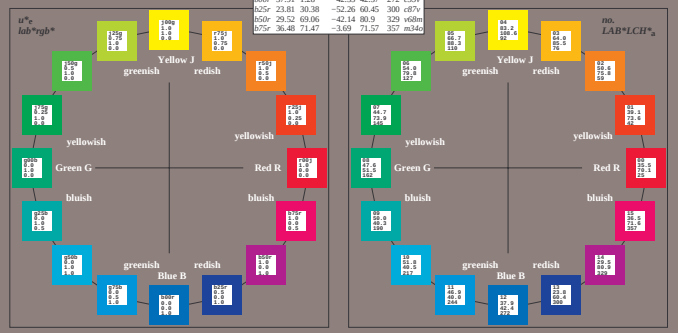
Input and output: Colorimetric Printer Reflective System FRS09_92a
data for any colour:
u^*_e and number *no.* = 00 .. 15
elementary hue text:
u^*_e = 16 hues *r00j, r25j, ..., b75r*
contrast reduction factor:
c_R = 1.0

FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o66y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

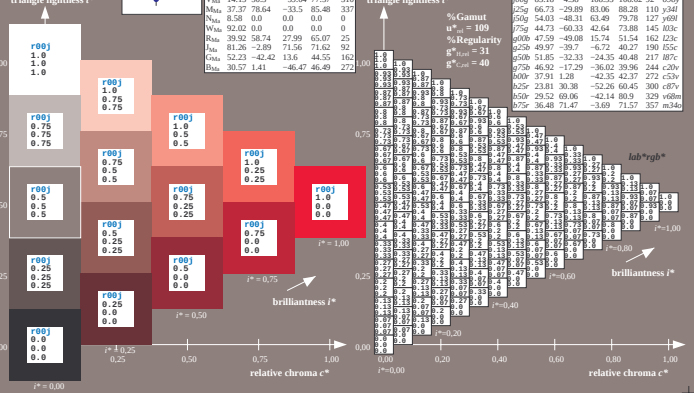


%Gamut $u^*_{e,i}$ = 109
%Regularity
$R^*_{L,ref}$ = 31
$R^*_{C,ref}$ = 40

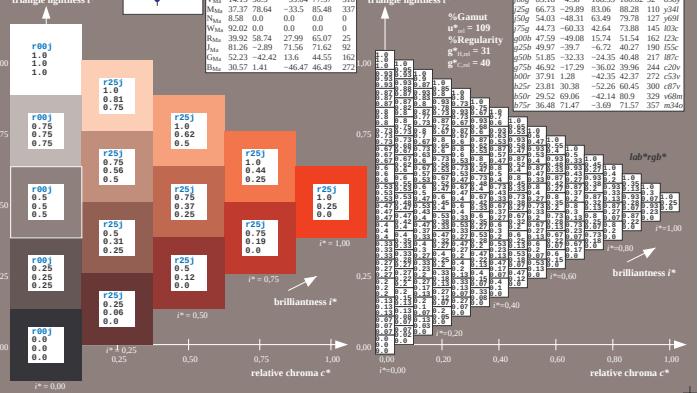
FRS09_92a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O_{Mn}	35.06	60.0	44.0	74.4	36	
Y_{Mn}	83.77	−5.17	109.32	109.44	93	
L_{Mn}	44.13	−62.67	48.24	79.09	142	
C_{Mn}	52.66	−29.14	−31.99	43.27	228	
V_{Mn}	14.15	50.3	−59.04	77.57	310	
M_{Mn}	37.37	78.64	−33.5	85.48	337	
N_{Mn}	8.58	0.0	0.0	0.0	0	
W_{Mn}	92.02	0.0	0.0	0.0	0	
R_{CIE}	39.92	58.74	27.99	65.07	25	
J_{CIE}	81.26	−2.89	71.56	71.62	92	
G_{CIE}	52.23	−42.42	13.6	44.55	162	
D_{CIE}	30.57	1.41	−46.47	46.49	272	



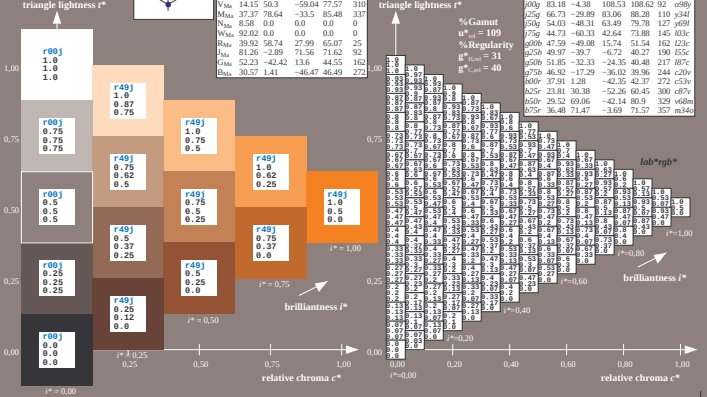
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.071$ u^*_e = *r00j*
data for any colour: *lab*h*h** and *lab*c*u**
Hue texts:
u^*_e = *r00j* *u*d* = *m81o*
contrast reduction factor:
c_R = 1.0
triangle lightness *
Data for maximum colour (Ma):
*LAB*LAB*$_{Ma}$: 35 63 30
*LAB*LCH*$_{Ma}$: 35 70 25
*lab*rgb*$_{Ma}$: 1.0 0.0 0.0
*lab*olv*$_{Ma}$: 1.0 0.0 0.18



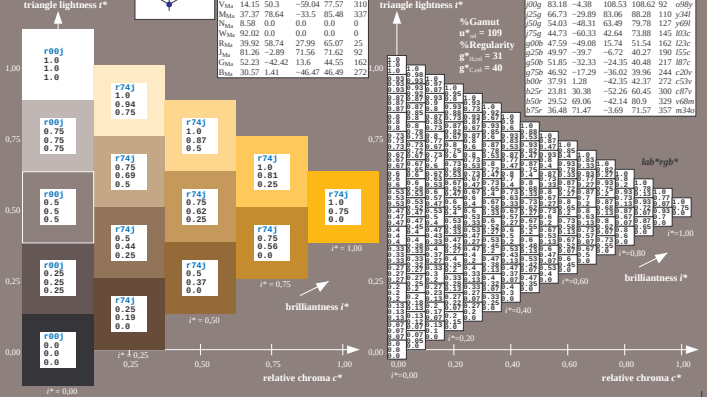
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.117$ u^*_e = *r25j*
data for any colour: *lab*h*h** and *lab*c*u**
Hue texts:
u^*_e = *r25j* *u*d* = *o10y*
contrast reduction factor:
c_R = 1.0
triangle lightness *
Data for maximum colour (Ma):
*LAB*LAB*$_{Ma}$: 39 55 49
*LAB*LCH*$_{Ma}$: 39 74 42
*lab*rgb*$_{Ma}$: 1.0 0.25 0.0
*lab*olv*$_{Ma}$: 1.0 0.11 0.0



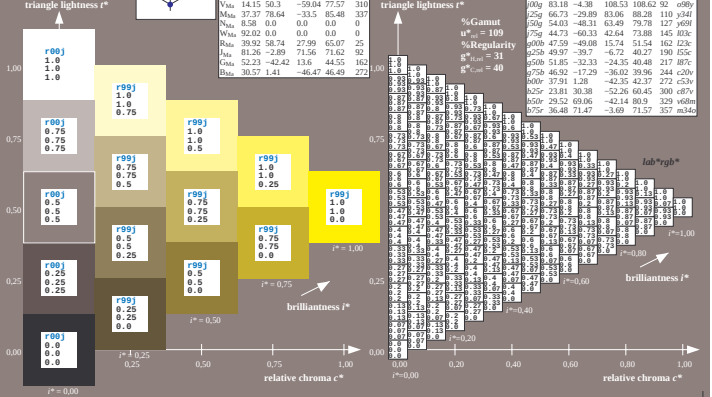
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.164$ u^*_e = *r50j*
data for any colour: *lab*h*h** and *lab*c*u**
Hue texts:
u^*_e = *r50j* *u*d* = *o40y*
contrast reduction factor:
c_R = 1.0
triangle lightness *
Data for maximum colour (Ma):
*LAB*LAB*$_{Ma}$: 51 39 65
*LAB*LCH*$_{Ma}$: 51 76 58
*lab*rgb*$_{Ma}$: 1.0 0.5 0.0
*lab*olv*$_{Ma}$: 1.0 0.4 0.0



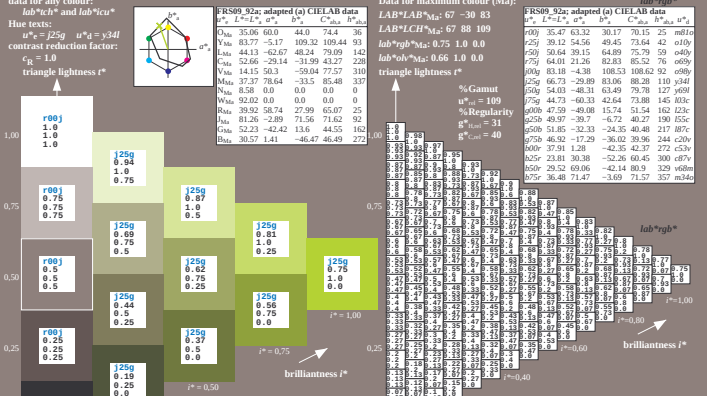
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.21$ u^*_e = *r75j*
data for any colour: *lab*h*h** and *lab*c*u**
Hue texts:
u^*_e = *r75j* *u*d* = *o69y*
contrast reduction factor:
c_R = 1.0
triangle lightness *
Data for maximum colour (Ma):
*LAB*LAB*$_{Ma}$: 64 21 83
*LAB*LCH*$_{Ma}$: 64 86 75
*lab*rgb*$_{Ma}$: 1.0 0.75 0.0
*lab*olv*$_{Ma}$: 1.0 0.7 0.0



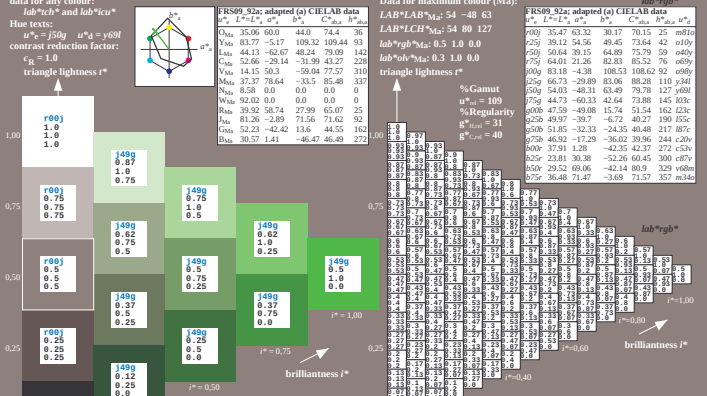
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.256$ u^*_e = *j00g*
data for any colour: *lab*h*h** and *lab*c*u**
Hue texts:
u^*_e = *j00g* *u*d* = *o98y*
contrast reduction factor:
c_R = 1.0
triangle lightness *
Data for maximum colour (Ma):
*LAB*LAB*$_{Ma}$: 83 −4 109
*LAB*LCH*$_{Ma}$: 83 109 92
*lab*rgb*$_{Ma}$: 1.0 1.0 0.0
*lab*olv*$_{Ma}$: 1.0 0.99 0.0



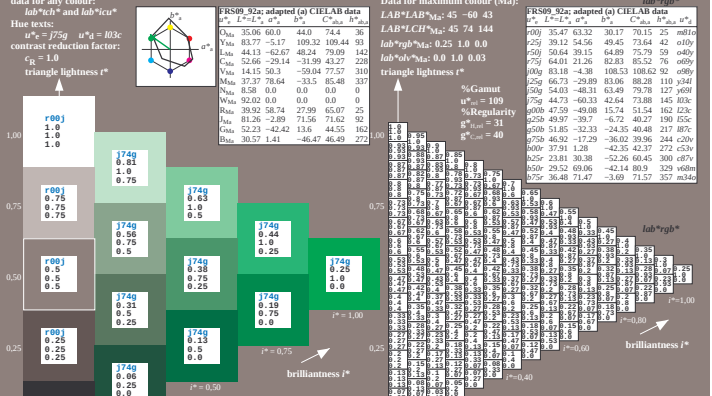
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.305$ u^*_e = *j25g*
data for any colour: *lab*h*h** and *lab*c*u**
Hue texts:
u^*_e = *j25g* *u*d* = *y34l*
contrast reduction factor:
c_R = 1.0
triangle lightness *
Data for maximum colour (Ma):
*LAB*LAB*$_{Ma}$: 67 −30 83
*LAB*LCH*$_{Ma}$: 67 88 109
*lab*rgb*$_{Ma}$: 0.75 1.0 0.0
*lab*olv*$_{Ma}$: 0.66 1.0 0.0

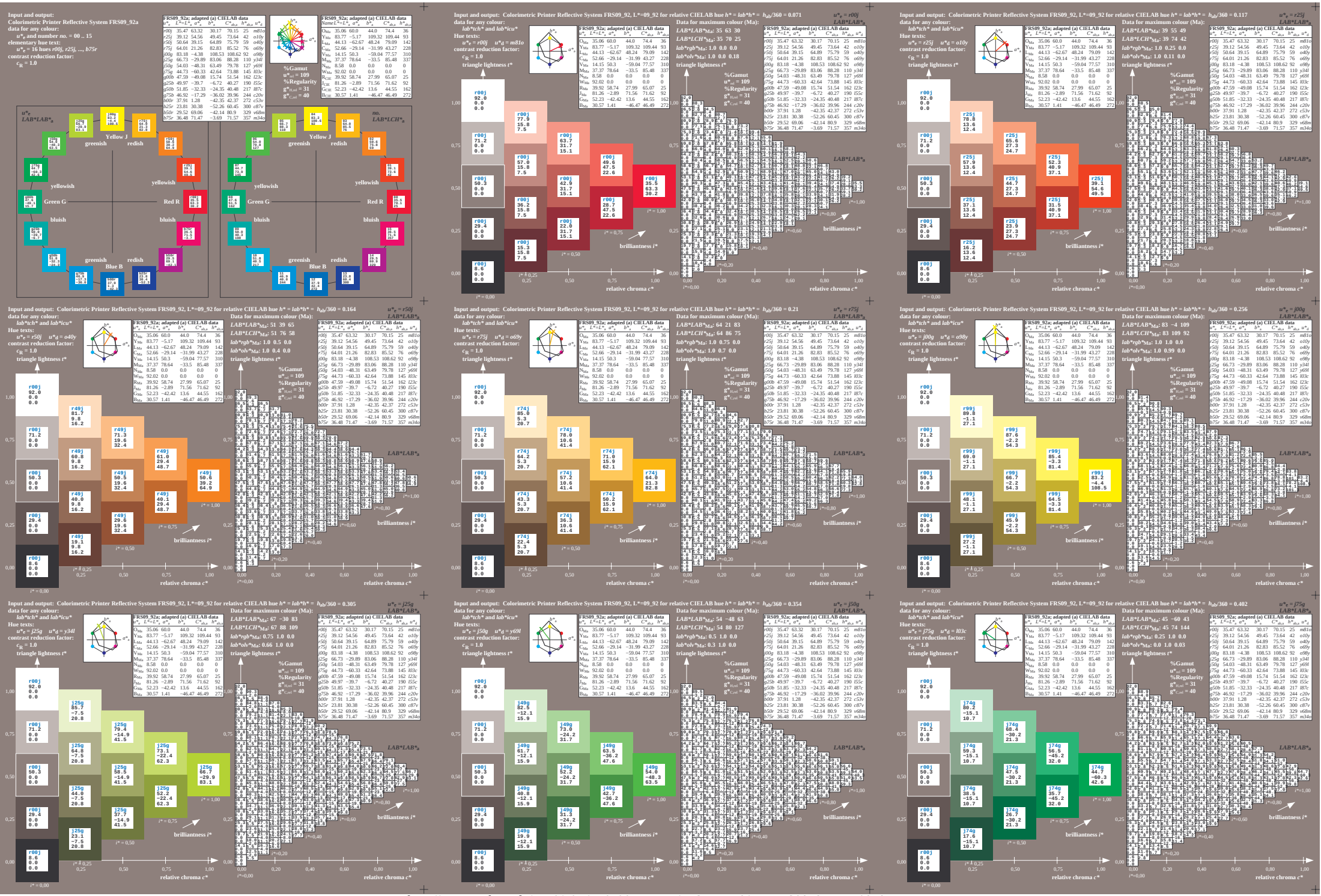


Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.354$ u^*_e = *j50g*
data for any colour: *lab*h*h** and *lab*c*u**
Hue texts:
u^*_e = *j50g* *u*d* = *y69l*
contrast reduction factor:
c_R = 1.0
triangle lightness *
Data for maximum colour (Ma):
*LAB*LAB*$_{Ma}$: 54 −48 63
*LAB*LCH*$_{Ma}$: 54 80 127
*lab*rgb*$_{Ma}$: 0.5 1.0 0.0
*lab*olv*$_{Ma}$: 0.3 1.0 0.0



Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.402$ u^*_e = *j75g*
data for any colour: *lab*h*h** and *lab*c*u**
Hue texts:
u^*_e = *j75g* *u*d* = *l03c*
contrast reduction factor:
c_R = 1.0
triangle lightness *
Data for maximum colour (Ma):
*LAB*LAB*$_{Ma}$: 45 −60 43
*LAB*LCH*$_{Ma}$: 45 74 144
*lab*rgb*$_{Ma}$: 0.25 1.0 0.0
*lab*olv*$_{Ma}$: 0.0 1.0 0.03

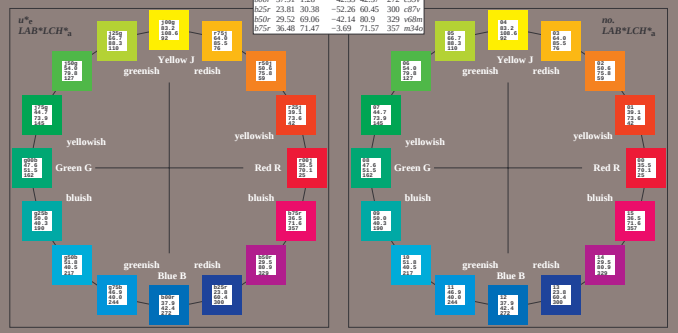




http://www.ps.bam.de/Fe40/10L/L40e00NP.PDF/ .PS, Page 9/15; FRS09_92, L*=09_92

Input and output: Colorimetric Printer Reflective System FRS09_92a
data for any colour:
u^*_e and number $no.$ = 00 .. 15
elementary hue text:
u^*_e = 16 hues *r00j, r25j, ..., b75r*
contrast reduction factor:
c_R = 1.0

FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o69y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

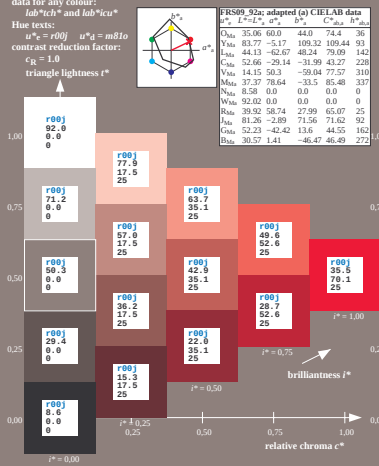


%Gamut u^*_{ref} = 109
%Regularity
g^*_{Lref} = 31
$g^*_{C,ref}$ = 40

FRS09_92a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O_{Mn}	35.06	60.0	44.0	74.4	36	
Y_{Mn}	83.77	−5.17	109.32	109.44	93	
L_{Mn}	44.13	−62.67	48.24	79.09	142	
C_{Mn}	52.66	−29.14	−31.99	43.27	228	
V_{Mn}	14.15	50.3	−59.04	77.57	310	
M_{Mn}	37.37	78.64	−33.5	85.48	337	
N_{Mn}	8.58	0.0	0.0	0.0	0	
W_{Mn}	92.02	0.0	0.0	0.0	0	
R_{CIE}	39.92	58.74	27.99	65.07	25	
J_{CIE}	81.26	−2.89	71.56	71.62	92	
G_{CIE}	52.23	−42.42	13.6	44.55	162	
B_{CIE}	30.57	1.41	−46.47	46.49	272	

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.071$ u^*_e = *r00j*
data for any colour: *LAB*LCH*a*
*lab*h*h* and *lab*c*u*
Hue texts:
u^*_e = *r00j* u^*_d = *m81o*
contrast reduction factor:
c_R = 1.0
triangle lightness *

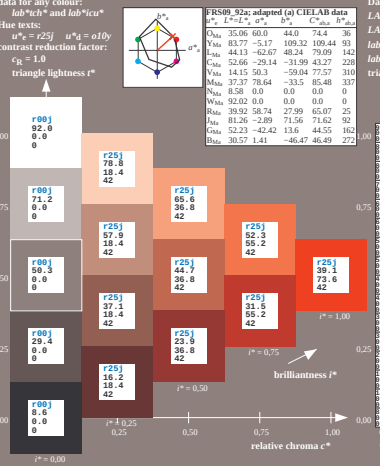
Data for maximum colour (Ma):
*LAB*LAB*Ma*: 35 63 30
*LAB*LCH*Ma*: 35 70 25
*lab*rgb*Ma*: 1.0 0.0 0.0
*lab*olv*Ma*: 1.0 0.0 0.18



FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o69y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.117$ u^*_e = *r25j*
data for any colour: *LAB*LCH*a*
*lab*h*h* and *lab*c*u*
Hue texts:
u^*_e = *r25j* u^*_d = *o10y*
contrast reduction factor:
c_R = 1.0
triangle lightness *

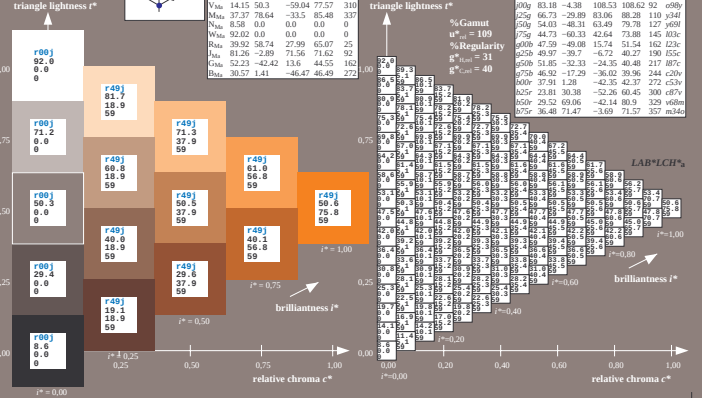
Data for maximum colour (Ma):
*LAB*LAB*Ma*: 39 55 49
*LAB*LCH*Ma*: 39 74 42
*lab*rgb*Ma*: 1.0 0.25 0.0
*lab*olv*Ma*: 1.0 0.11 0.0



FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o69y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.164$ u^*_e = *r50j*
data for any colour: *LAB*LCH*a*
*lab*h*h* and *lab*c*u*
Hue texts:
u^*_e = *r50j* u^*_d = *o40y*
contrast reduction factor:
c_R = 1.0
triangle lightness *

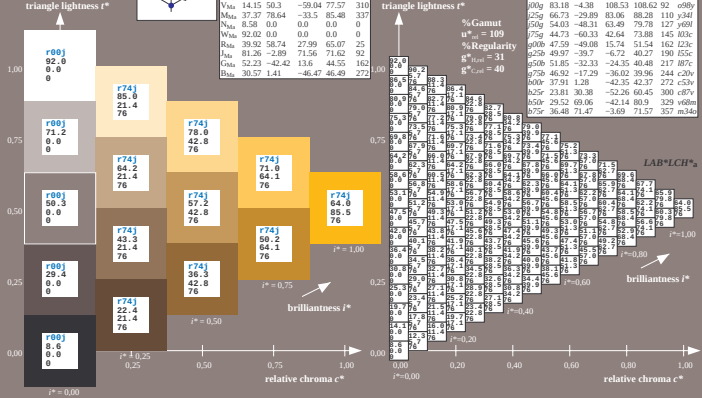
Data for maximum colour (Ma):
*LAB*LAB*Ma*: 51 39 65
*LAB*LCH*Ma*: 51 76 58
*lab*rgb*Ma*: 1.0 0.5 0.0
*lab*olv*Ma*: 1.0 0.4 0.0



FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o69y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.21$ u^*_e = *r75j*
data for any colour: *LAB*LCH*a*
*lab*h*h* and *lab*c*u*
Hue texts:
u^*_e = *r75j* u^*_d = *o69y*
contrast reduction factor:
c_R = 1.0
triangle lightness *

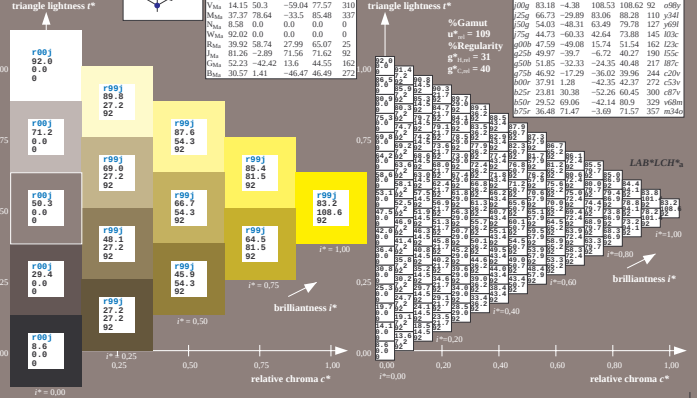
Data for maximum colour (Ma):
*LAB*LAB*Ma*: 64 21 83
*LAB*LCH*Ma*: 64 86 75
*lab*rgb*Ma*: 1.0 0.75 0.0
*lab*olv*Ma*: 1.0 0.7 0.0



FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o69y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.256$ u^*_e = *j00g*
data for any colour: *LAB*LCH*a*
*lab*h*h* and *lab*c*u*
Hue texts:
u^*_e = *j00g* u^*_d = *o98y*
contrast reduction factor:
c_R = 1.0
triangle lightness *

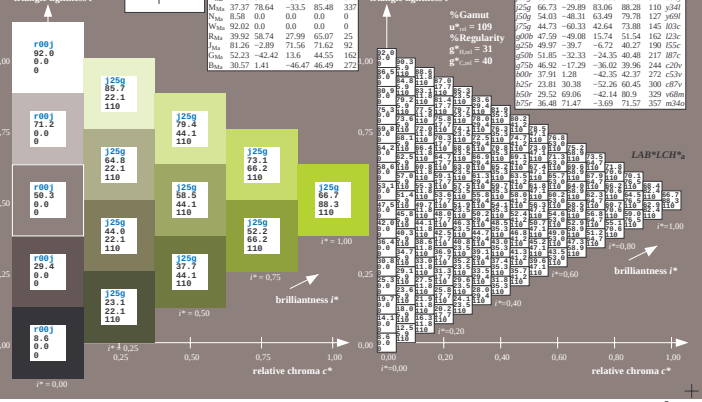
Data for maximum colour (Ma):
*LAB*LAB*Ma*: 83 −4 109
*LAB*LCH*Ma*: 83 109 92
*lab*rgb*Ma*: 1.0 1.0 0.0
*lab*olv*Ma*: 1.0 0.99 0.0



FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o69y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.305$ u^*_e = *j25g*
data for any colour: *LAB*LCH*a*
*lab*h*h* and *lab*c*u*
Hue texts:
u^*_e = *j25g* u^*_d = *y34l*
contrast reduction factor:
c_R = 1.0
triangle lightness *

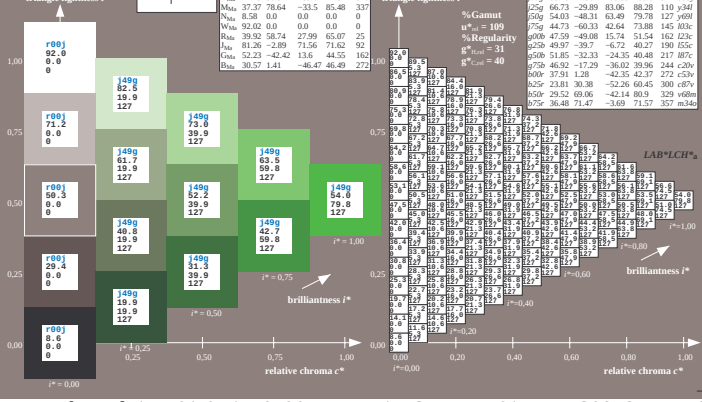
Data for maximum colour (Ma):
*LAB*LAB*Ma*: 67 −30 83
*LAB*LCH*Ma*: 67 88 109
*lab*rgb*Ma*: 0.75 1.0 0.0
*lab*olv*Ma*: 0.66 1.0 0.0



FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o69y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.354$ u^*_e = *j50g*
data for any colour: *LAB*LCH*a*
*lab*h*h* and *lab*c*u*
Hue texts:
u^*_e = *j50g* u^*_d = *y69l*
contrast reduction factor:
c_R = 1.0
triangle lightness *

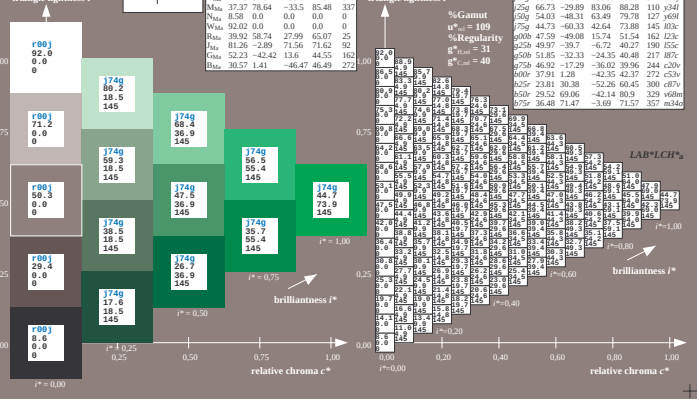
Data for maximum colour (Ma):
*LAB*LAB*Ma*: 54 −48 63
*LAB*LCH*Ma*: 54 80 127
*lab*rgb*Ma*: 0.5 1.0 0.0
*lab*olv*Ma*: 0.3 1.0 0.0



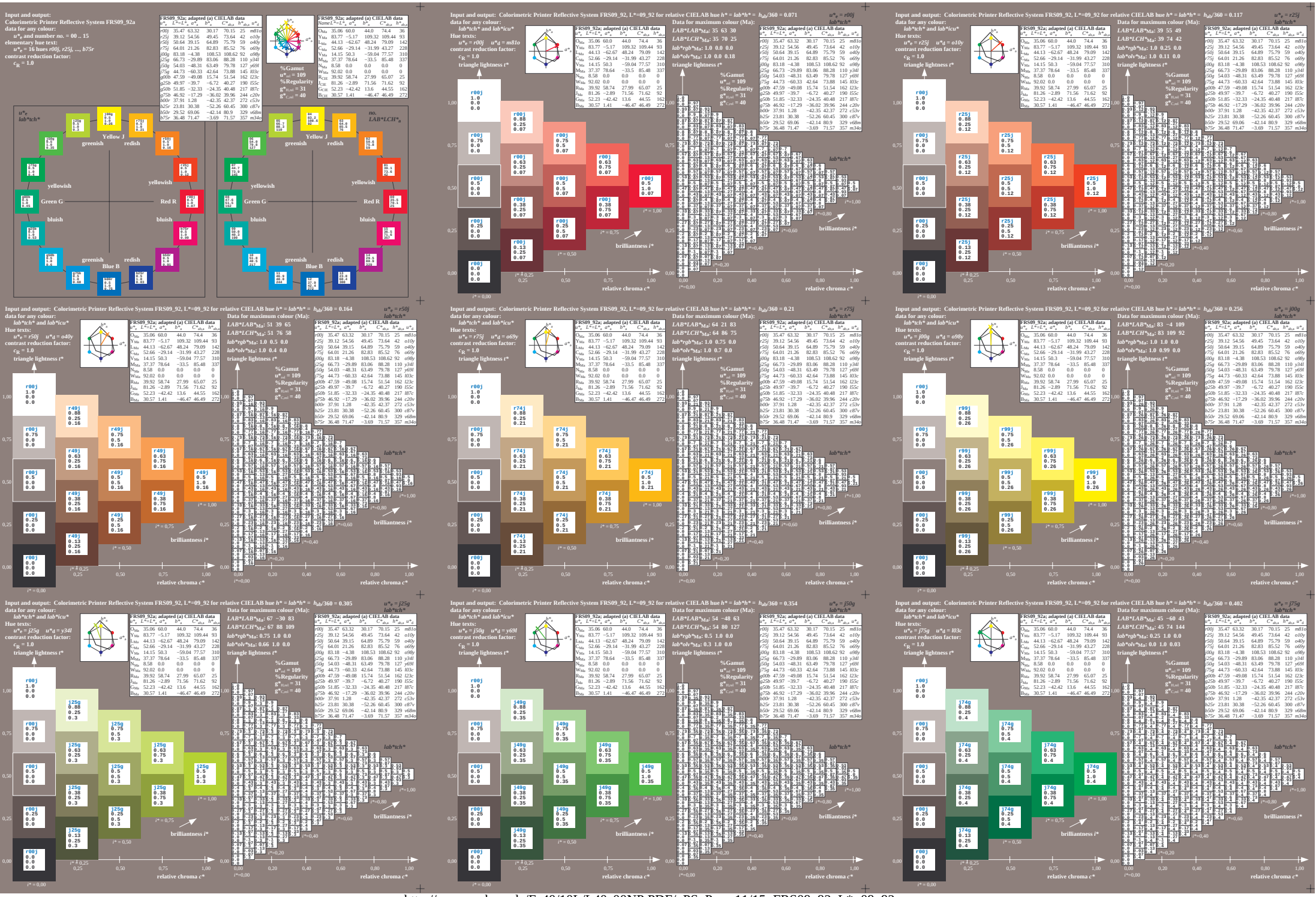
FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o69y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.402$ u^*_e = *j75g*
data for any colour: *LAB*LCH*a*
*lab*h*h* and *lab*c*u*
Hue texts:
u^*_e = *j75g* u^*_d = *l03c*
contrast reduction factor:
c_R = 1.0
triangle lightness *

Data for maximum colour (Ma):
*LAB*LAB*Ma*: 45 −60 43
*LAB*LCH*Ma*: 45 74 144
*lab*rgb*Ma*: 0.25 1.0 0.0
*lab*olv*Ma*: 0.0 1.0 0.03



FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	35.47	63.32	30.17	70.15	25	*m81o*
r25j	39.12	54.56	49.45	73.64	42	*o10y*
r50j	50.64	39.15	64.89	75.79	59	*o40y*
r75j	64.01	21.26	82.83	85.52	76	*o69y*
j00g	83.18	−4.38	108.53	108.62	92	*o98y*
j25g	66.73	−29.89	83.06	88.28	110	*y34l*
j50g	54.03	−48.31	63.49	79.78	127	*y69l*
j75g	44.73	−60.33	42.64	73.88	145	*l03c*
g00b	47.59	−49.08	15.74	51.54	162	*l23c*
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*
b00r	37.91	1.28	−42.35	42.37	272	*c53v*
b25r	23.81	30.38	−52.26	60.45	300	*c87v*
b50r	29.52	69.06	−42.14	80.9	329	*v68m*
b75r	36.48	71.47	−3.69	71.57	357	*m34o*

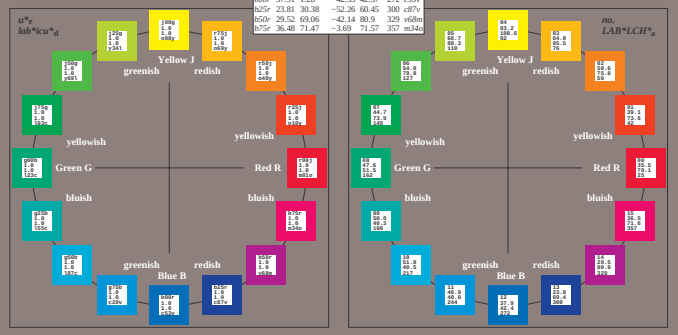

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue h* = lab*h* = hab/360 = 0.071
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue h* = lab*h* = hab/360 = 0.117
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue h* = lab*h* = hab/360 = 0.164
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue h* = lab*h* = hab/360 = 0.21
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue h* = lab*h* = hab/360 = 0.256
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue h* = lab*h* = hab/360 = 0.305
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue h* = lab*h* = hab/360 = 0.354
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue h* = lab*h* = hab/360 = 0.402
relative chroma c*
brilliantness i*
lab*ch*

Input and output: Colorimetric Printer Reflective System FRS09_92a
data for any colour: u^*_e and number no. = 00 .. 15
elementary hue text: u^*_e = 16 hues r00j, r25j, ..., b75r
contrast reduction factor: c_R = 1.0

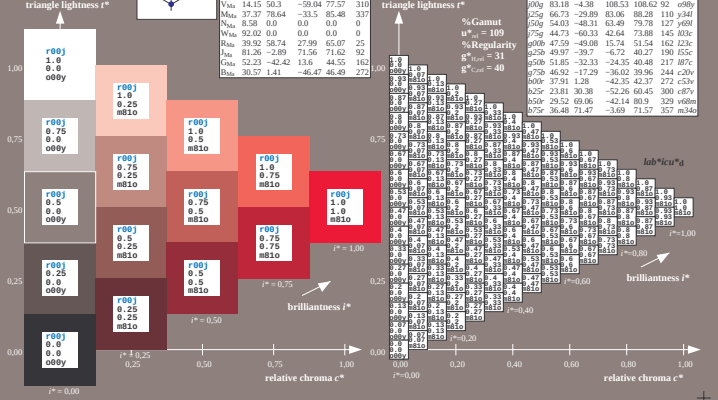
FRS09_92a; adapted (a) CIELAB data						
u^*_e	$L^*=L^*_a$	a^*_e	b^*_e	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_d
r00j	35.47	63.32	30.17	70.15	25	m81o
r25j	39.12	54.56	49.45	73.64	42	o10y
r50j	50.64	39.15	64.89	75.79	59	o40y
r75j	64.01	21.26	82.83	85.52	76	o69y
j00g	83.18	−4.38	108.53	108.62	92	o98y
j25g	66.73	−29.89	83.06	88.28	110	y34l
j50g	54.03	−48.31	63.49	79.78	127	y69l
j75g	44.73	−60.33	42.64	73.88	145	l03c
g00b	47.59	−49.08	15.74	51.54	162	l23c
g25b	49.97	−39.7	−6.72	40.27	190	l55c
g50b	51.85	−32.33	−24.35	40.48	217	l87c
g75b	46.92	−17.29	−36.02	39.96	244	c20c
b00r	37.91	1.28	−42.35	42.37	272	c53v
b25r	23.81	30.38	−52.26	60.45	300	c87v
b50r	29.52	69.06	−42.14	80.9	329	v68m
b75r	36.48	71.47	−3.69	71.57	357	m34o

FRS09_92a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	a^*_e	b^*_e	$C^*_{ab,a}$	$h^*_{ab,a}$	
O_{Ma}	35.06	60.0	44.0	74.4	36	
Y_{Ma}	83.77	−5.17	109.32	109.44	93	
L_{Ma}	44.13	−62.67	48.24	79.09	142	
C_{Ma}	52.66	−29.14	−31.99	43.27	228	
V_{Ma}	14.15	50.3	−59.04	77.57	310	
M_{Ma}	37.37	78.64	−33.5	85.48	337	
N_{Ma}	8.58	0.0	0.0	0.0	0	
W_{Ma}	92.02	0.0	0.0	0.0	0	
R_{CIE}	39.92	58.74	27.99	65.07	25	
J_{CIE}	81.26	−2.89	71.56	71.62	92	
G_{CIE}	52.23	−42.42	13.6	44.55	162	
B_{CIE}	30.57	1.41	−46.47	46.49	272	

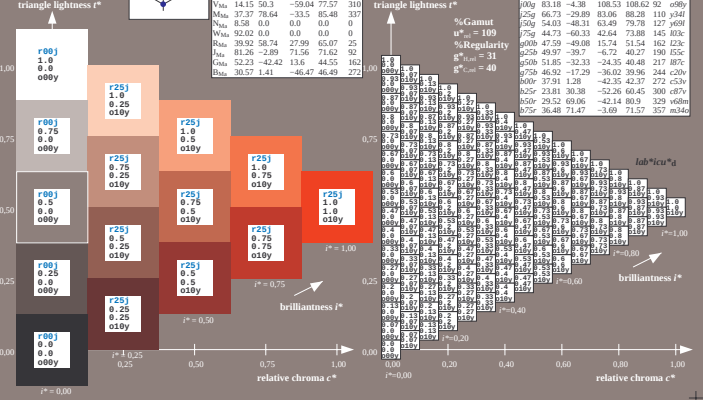
%Gamut $u^*_{e,i}$ = 109
%Regularity $g^*_{R,ref}$ = 31
$g^*_{C,ref}$ = 40



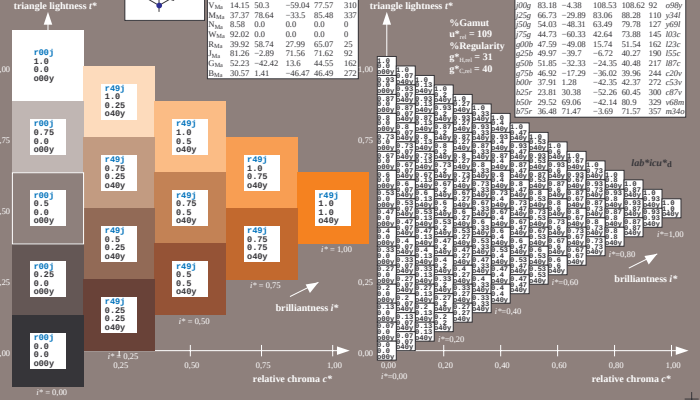
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.071$ u^*_e = r00j
data for any colour: lab^*h^* and lab^*icu^*
Hue texts: u^*_e = r00j u^*_d = m81o
contrast reduction factor: c_R = 1.0
triangle lightness t*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 35 63 30
$LAB^*LCH^*_{Ma}$: 35 70 25
$lab^*rgb^*_{Ma}$: 1.0 0.0 0.0
$lab^*olv^*_{Ma}$: 1.0 0.0 0.18



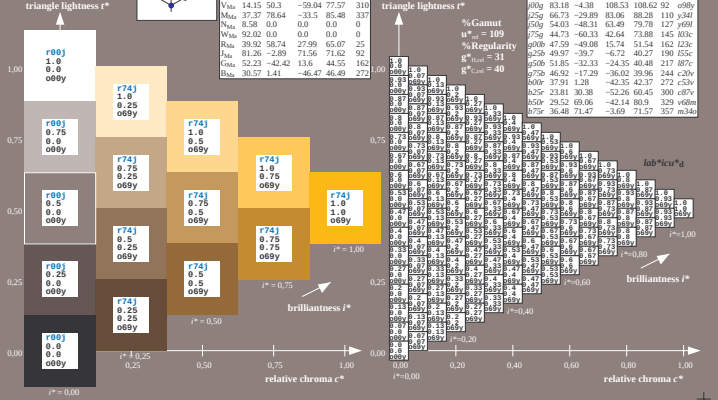
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.117$ u^*_e = r25j
data for any colour: lab^*h^* and lab^*icu^*
Hue texts: u^*_e = r25j u^*_d = o10y
contrast reduction factor: c_R = 1.0
triangle lightness t*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 39 55 49
$LAB^*LCH^*_{Ma}$: 39 74 42
$lab^*rgb^*_{Ma}$: 1.0 0.25 0.0
$lab^*olv^*_{Ma}$: 1.0 0.11 0.0



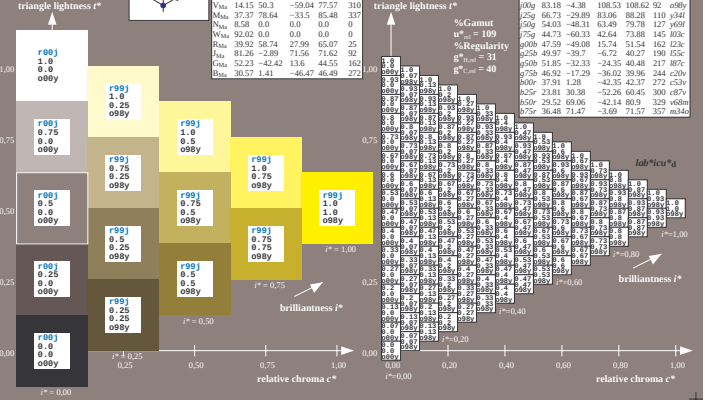
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.164$ u^*_e = r50j
data for any colour: lab^*h^* and lab^*icu^*
Hue texts: u^*_e = r50j u^*_d = o40y
contrast reduction factor: c_R = 1.0
triangle lightness t*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 51 39 65
$LAB^*LCH^*_{Ma}$: 51 76 58
$lab^*rgb^*_{Ma}$: 1.0 0.5 0.0
$lab^*olv^*_{Ma}$: 1.0 0.4 0.0



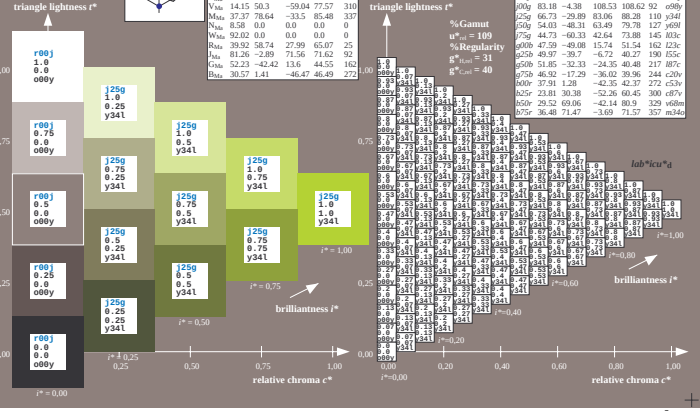
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.21$ u^*_e = r75j
data for any colour: lab^*h^* and lab^*icu^*
Hue texts: u^*_e = r75j u^*_d = o69y
contrast reduction factor: c_R = 1.0
triangle lightness t*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 64 21 83
$LAB^*LCH^*_{Ma}$: 64 86 75
$lab^*rgb^*_{Ma}$: 1.0 0.75 0.0
$lab^*olv^*_{Ma}$: 1.0 0.7 0.0



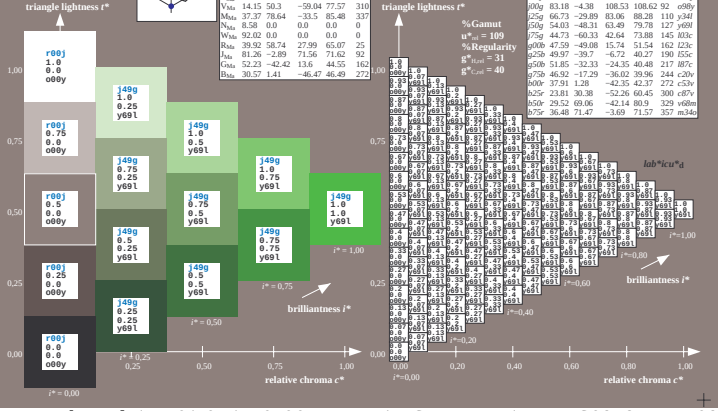
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.256$ u^*_e = j00g
data for any colour: lab^*h^* and lab^*icu^*
Hue texts: u^*_e = j00g u^*_d = o98y
contrast reduction factor: c_R = 1.0
triangle lightness t*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 83 −4 109
$LAB^*LCH^*_{Ma}$: 83 109 92
$lab^*rgb^*_{Ma}$: 1.0 1.0 0.0
$lab^*olv^*_{Ma}$: 1.0 0.99 0.0



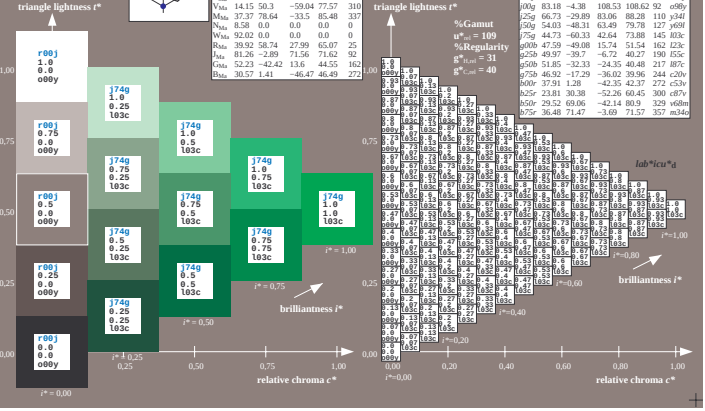
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.305$ u^*_e = j25g
data for any colour: lab^*h^* and lab^*icu^*
Hue texts: u^*_e = j25g u^*_d = y34l
contrast reduction factor: c_R = 1.0
triangle lightness t*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 67 −30 83
$LAB^*LCH^*_{Ma}$: 67 88 109
$lab^*rgb^*_{Ma}$: 0.75 1.0 0.0
$lab^*olv^*_{Ma}$: 0.66 1.0 0.0



Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.354$ u^*_e = j50g
data for any colour: lab^*h^* and lab^*icu^*
Hue texts: u^*_e = j50g u^*_d = y69l
contrast reduction factor: c_R = 1.0
triangle lightness t*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 54 −48 63
$LAB^*LCH^*_{Ma}$: 54 80 127
$lab^*rgb^*_{Ma}$: 0.5 1.0 0.0
$lab^*olv^*_{Ma}$: 0.3 1.0 0.0



Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.402$ u^*_e = j75g
data for any colour: lab^*h^* and lab^*icu^*
Hue texts: u^*_e = j75g u^*_d = l03c
contrast reduction factor: c_R = 1.0
triangle lightness t*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 45 −60 43
$LAB^*LCH^*_{Ma}$: 45 74 144
$lab^*rgb^*_{Ma}$: 0.25 1.0 0.0
$lab^*olv^*_{Ma}$: 0.0 1.0 0.03



Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.071$ $u^*_e = r00j$ LAB*LAB*

data for any colour: lab^*lch^* and lab^*icu^*

Hue texts: $u^*_e = r00j$ $u^*_d = m81o$

contrast reduction factor: $c_R = 1.0$

triangle lightness i*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 35 63 30 $LAB^*LCH^*_{Ma}$: 35 70 25 $lab^*rgb^*_{Ma}$: 1.0 0.0 0.0 $lab^*olv^*_{Ma}$: 1.0 0.0 0.18

%Gamut $u^*_{gmt} = 109$ %Regularity $R^*_{Reg} = 31$ $R^*_{C,ref} = 40$

brilliantness i*

relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.117$ $u^*_e = r25j$ LAB*LAB*

data for any colour: lab^*lch^* and lab^*icu^*

Hue texts: $u^*_e = r25j$ $u^*_d = o10y$

contrast reduction factor: $c_R = 1.0$

triangle lightness i*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 39 55 49 $LAB^*LCH^*_{Ma}$: 39 74 42 $lab^*rgb^*_{Ma}$: 1.0 0.25 0.0 $lab^*olv^*_{Ma}$: 1.0 0.11 0.0

%Gamut $u^*_{gmt} = 109$ %Regularity $R^*_{Reg} = 31$ $R^*_{C,ref} = 40$

brilliantness i*

relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.164$ $u^*_e = r50j$ LAB*LAB*

data for any colour: lab^*lch^* and lab^*icu^*

Hue texts: $u^*_e = r50j$ $u^*_d = o40y$

contrast reduction factor: $c_R = 1.0$

triangle lightness i*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 51 39 65 $LAB^*LCH^*_{Ma}$: 51 76 58 $lab^*rgb^*_{Ma}$: 1.0 0.5 0.0 $lab^*olv^*_{Ma}$: 1.0 0.4 0.0

%Gamut $u^*_{gmt} = 109$ %Regularity $R^*_{Reg} = 31$ $R^*_{C,ref} = 40$

brilliantness i*

relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.21$ $u^*_e = r75j$ LAB*LAB*

data for any colour: lab^*lch^* and lab^*icu^*

Hue texts: $u^*_e = r75j$ $u^*_d = o69y$

contrast reduction factor: $c_R = 1.0$

triangle lightness i*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 64 21 83 $LAB^*LCH^*_{Ma}$: 64 86 75 $lab^*rgb^*_{Ma}$: 1.0 0.75 0.0 $lab^*olv^*_{Ma}$: 1.0 0.7 0.0

%Gamut $u^*_{gmt} = 109$ %Regularity $R^*_{Reg} = 31$ $R^*_{C,ref} = 40$

brilliantness i*

relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.256$ $u^*_e = j00g$ LAB*LAB*

data for any colour: lab^*lch^* and lab^*icu^*

Hue texts: $u^*_e = j00g$ $u^*_d = o98y$

contrast reduction factor: $c_R = 1.0$

triangle lightness i*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 83 -4 109 $LAB^*LCH^*_{Ma}$: 83 109 92 $lab^*rgb^*_{Ma}$: 1.0 1.0 0.0 $lab^*olv^*_{Ma}$: 1.0 0.99 0.0

%Gamut $u^*_{gmt} = 109$ %Regularity $R^*_{Reg} = 31$ $R^*_{C,ref} = 40$

brilliantness i*

relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.305$ $u^*_e = j25g$ LAB*LAB*

data for any colour: lab^*lch^* and lab^*icu^*

Hue texts: $u^*_e = j25g$ $u^*_d = y34l$

contrast reduction factor: $c_R = 1.0$

triangle lightness i*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 67 -30 83 $LAB^*LCH^*_{Ma}$: 67 88 109 $lab^*rgb^*_{Ma}$: 0.75 1.0 0.0 $lab^*olv^*_{Ma}$: 0.66 1.0 0.0

%Gamut $u^*_{gmt} = 109$ %Regularity $R^*_{Reg} = 31$ $R^*_{C,ref} = 40$

brilliantness i*

relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.354$ $u^*_e = j50g$ LAB*LAB*

data for any colour: lab^*lch^* and lab^*icu^*

Hue texts: $u^*_e = j50g$ $u^*_d = y69l$

contrast reduction factor: $c_R = 1.0$

triangle lightness i*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 54 -48 63 $LAB^*LCH^*_{Ma}$: 54 80 127 $lab^*rgb^*_{Ma}$: 0.5 1.0 0.0 $lab^*olv^*_{Ma}$: 0.3 1.0 0.0

%Gamut $u^*_{gmt} = 109$ %Regularity $R^*_{Reg} = 31$ $R^*_{C,ref} = 40$

brilliantness i*

relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.402$ $u^*_e = j75g$ LAB*LAB*

data for any colour: lab^*lch^* and lab^*icu^*

Hue texts: $u^*_e = j75g$ $u^*_d = l03c$

contrast reduction factor: $c_R = 1.0$

triangle lightness i*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 45 -60 43 $LAB^*LCH^*_{Ma}$: 45 74 144 $lab^*rgb^*_{Ma}$: 0.25 1.0 0.0 $lab^*olv^*_{Ma}$: 0.0 1.0 0.03

%Gamut $u^*_{gmt} = 109$ %Regularity $R^*_{Reg} = 31$ $R^*_{C,ref} = 40$

brilliantness i*

relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.071$ $u^*_e = r00j$ lab^*o/v^*
data for any colour: lab^*c/h^* and lab^*c/u^*
Hue texts: $u^*_e = r00j$ $u^*_d = m81o$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 35 63 30 $LAB^*LCH^*_{Ma}$: 35 70 25 $lab^*rgb^*_{Ma}$: 1.0 0.0 0.0 lab^*o/v^*_{Ma}: 1.0 0.0 0.18
%Gamut $u^*_{e,i}$ = 109 %Regularity R^*_{Ioi} = 31 $R^*_{C,oi}$ = 40
relative chroma c^*
brilliantness i^*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.117$ $u^*_e = r25j$ lab^*o/v^*
data for any colour: lab^*c/h^* and lab^*c/u^*
Hue texts: $u^*_e = r25j$ $u^*_d = o10y$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 39 55 49 $LAB^*LCH^*_{Ma}$: 39 74 42 $lab^*rgb^*_{Ma}$: 1.0 0.25 0.0 lab^*o/v^*_{Ma}: 1.0 0.11 0.0
%Gamut $u^*_{e,i}$ = 109 %Regularity R^*_{Ioi} = 31 $R^*_{C,oi}$ = 40
relative chroma c^*
brilliantness i^*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.164$ $u^*_e = r50j$ lab^*o/v^*
data for any colour: lab^*c/h^* and lab^*c/u^*
Hue texts: $u^*_e = r50j$ $u^*_d = o40y$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 51 39 65 $LAB^*LCH^*_{Ma}$: 51 76 58 $lab^*rgb^*_{Ma}$: 1.0 0.5 0.0 lab^*o/v^*_{Ma}: 1.0 0.4 0.0
%Gamut $u^*_{e,i}$ = 109 %Regularity R^*_{Ioi} = 31 $R^*_{C,oi}$ = 40
relative chroma c^*
brilliantness i^*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.21$ $u^*_e = r75j$ lab^*o/v^*
data for any colour: lab^*c/h^* and lab^*c/u^*
Hue texts: $u^*_e = r75j$ $u^*_d = o69y$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 64 21 83 $LAB^*LCH^*_{Ma}$: 64 86 75 $lab^*rgb^*_{Ma}$: 1.0 0.75 0.0 lab^*o/v^*_{Ma}: 1.0 0.7 0.0
%Gamut $u^*_{e,i}$ = 109 %Regularity R^*_{Ioi} = 31 $R^*_{C,oi}$ = 40
relative chroma c^*
brilliantness i^*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.256$ $u^*_e = j00g$ lab^*o/v^*
data for any colour: lab^*c/h^* and lab^*c/u^*
Hue texts: $u^*_e = j00g$ $u^*_d = o98y$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 83 -4 109 $LAB^*LCH^*_{Ma}$: 83 109 92 $lab^*rgb^*_{Ma}$: 1.0 1.0 0.0 lab^*o/v^*_{Ma}: 1.0 0.99 0.0
%Gamut $u^*_{e,i}$ = 109 %Regularity R^*_{Ioi} = 31 $R^*_{C,oi}$ = 40
relative chroma c^*
brilliantness i^*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.305$ $u^*_e = j25g$ lab^*o/v^*
data for any colour: lab^*c/h^* and lab^*c/u^*
Hue texts: $u^*_e = j25g$ $u^*_d = y34l$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 67 -30 83 $LAB^*LCH^*_{Ma}$: 67 88 109 $lab^*rgb^*_{Ma}$: 0.75 1.0 0.0 lab^*o/v^*_{Ma}: 0.66 1.0 0.0
%Gamut $u^*_{e,i}$ = 109 %Regularity R^*_{Ioi} = 31 $R^*_{C,oi}$ = 40
relative chroma c^*
brilliantness i^*

Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.354$ $u^*_e = j50g$ lab^*o/v^*
data for any colour: lab^*c/h^* and lab^*c/u^*
Hue texts: $u^*_e = j50g$ $u^*_d = y69l$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 54 -48 63 $LAB^*LCH^*_{Ma}$: 54 80 127 $lab^*rgb^*_{Ma}$: 0.5 1.0 0.0 lab^*o/v^*_{Ma}: 0.3 1.0 0.0
%Gamut $u^*_{e,i}$ = 109 %Regularity R^*_{Ioi} = 31 $R^*_{C,oi}$ = 40
relative chroma c^*
brilliantness i^*

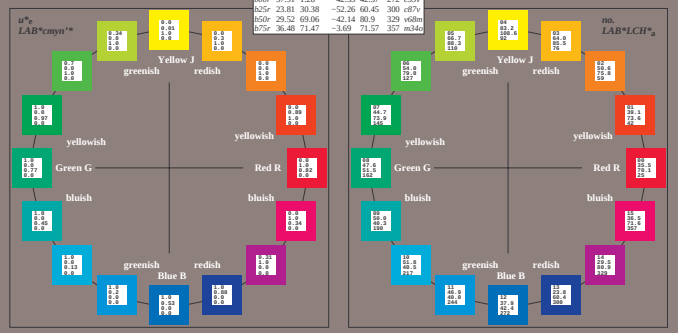
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.402$ $u^*_e = j75g$ lab^*o/v^*
data for any colour: lab^*c/h^* and lab^*c/u^*
Hue texts: $u^*_e = j75g$ $u^*_d = l03c$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 45 -60 43 $LAB^*LCH^*_{Ma}$: 45 74 144 $lab^*rgb^*_{Ma}$: 0.25 1.0 0.0 lab^*o/v^*_{Ma}: 0.0 1.0 0.03
%Gamut $u^*_{e,i}$ = 109 %Regularity R^*_{Ioi} = 31 $R^*_{C,oi}$ = 40
relative chroma c^*
brilliantness i^*

Input and output:
Colorimetric Printer Reflective System FRS09_92a
data for any colour:
u^*_e and number *no.* = 00 .. 15
elementary hue text:
u^*_e = 16 hues *r00j, r25j, ..., b75r*
contrast reduction factor:
c_R = 1.0

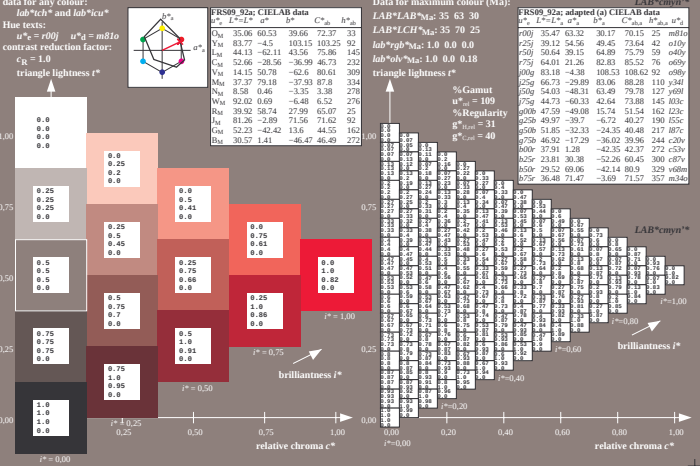
FRS09_92a; adapted (a) CIELAB data							
u^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a	
r00j	35.47	63.32	30.17	70.15	25	*m81o*	
r25j	39.12	54.56	49.45	73.64	42	*o10y*	
r50j	50.64	39.15	64.89	75.79	59	*o40y*	
r75j	64.01	21.26	82.83	85.52	76	*o69y*	
j00g	83.18	−4.38	108.53	108.62	92	*o98y*	
j25g	66.73	−29.89	83.06	88.28	110	*y34l*	
j50g	54.03	−48.31	63.49	79.78	127	*y69l*	
j75g	44.73	−60.33	42.64	73.88	145	*l03c*	
g00b	47.59	−49.08	15.74	51.54	162	*l23c*	
g25b	49.97	−39.7	−6.72	40.27	190	*l55c*	
g50b	51.85	−32.33	−24.35	40.48	217	*l87c*	
g75b	46.92	−17.29	−36.02	39.96	244	*c20c*	
b00r	37.91	1.28	−42.35	42.37	272	*c53v*	
b25r	23.81	30.38	−52.26	60.45	300	*c87v*	
b50r	29.52	69.06	−42.14	80.9	329	*v68m*	
b75r	36.48	71.47	−3.69	71.57	357	*m34o*	

%Gamut
$u^*_{e,i}$ = 109
%Regularity
$g^*_{R,ref}$ = 31
$g^*_{C,ref}$ = 40

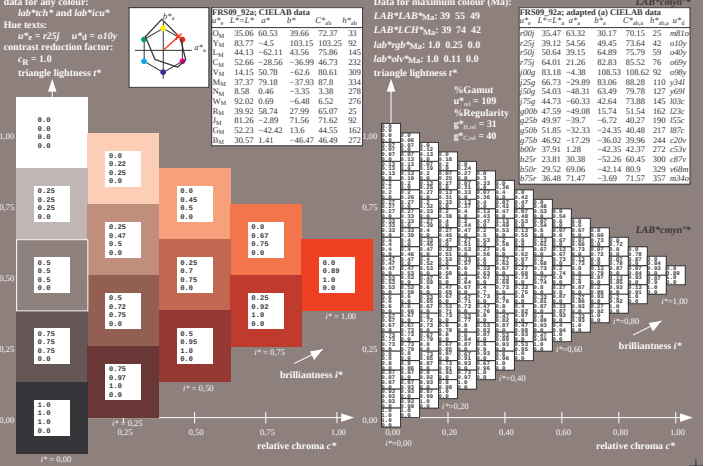
FRS09_92a; CIELAB data					
Name	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Mi}	35.06	60.53	39.66	72.37	33
Y_{Mi}	83.77	−4.5	103.15	103.25	92
L_{Mi}	44.13	−62.11	43.56	75.86	145
C_{Mi}	52.66	−28.56	−36.99	46.73	232
V_{Mi}	14.15	50.78	−62.6	80.61	309
M_{Mi}	37.37	79.18	−37.93	87.8	334
N_{Mi}	8.58	0.46	−3.35	3.38	278
W_{Mi}	92.02	0.69	−6.48	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.89	71.56	71.62	92
G_{CIE}	52.23	−42.42	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.47	46.49	272



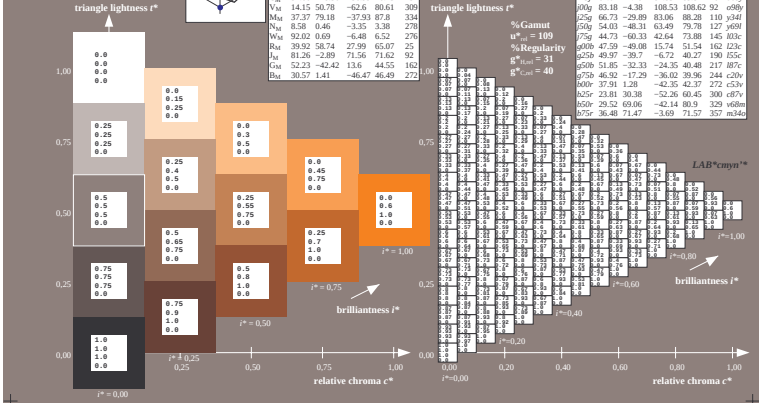
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.071$ u^*_e = *r00j*
data for any colour: *LAB*LCH*$_{Ma}$*: 35 63 30
*lab*rgb*$_{Ma}$*: 1.0 0.0 0.0
*lab*olv*$_{Ma}$*: 1.0 0.0 0.18
Hue texts:
u^*_e = *r00j* u^*_d = *m81o*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**



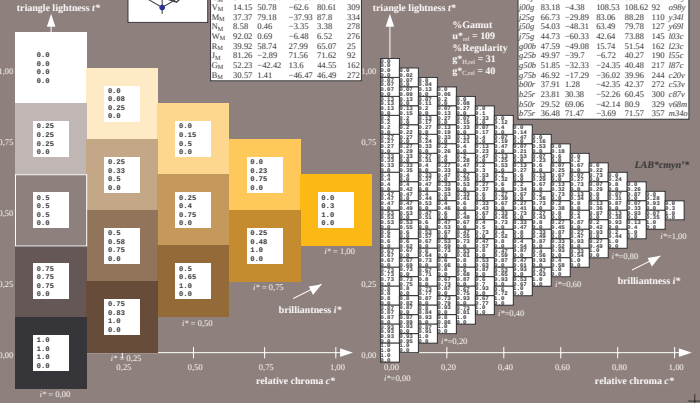
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.117$ u^*_e = *r25j*
data for any colour: *LAB*LCH*$_{Ma}$*: 39 55 49
*lab*rgb*$_{Ma}$*: 1.0 0.25 0.0
*lab*olv*$_{Ma}$*: 1.0 0.11 0.0
Hue texts:
u^*_e = *r25j* u^*_d = *o10y*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**



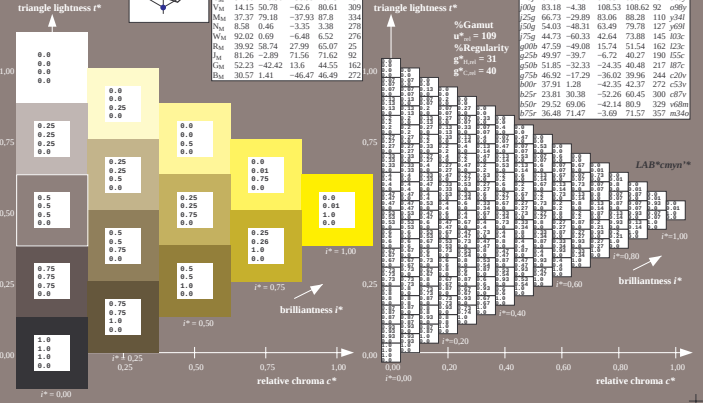
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.164$ u^*_e = *r50j*
data for any colour: *LAB*LCH*$_{Ma}$*: 51 39 65
*lab*rgb*$_{Ma}$*: 1.0 0.5 0.0
*lab*olv*$_{Ma}$*: 1.0 0.4 0.0
Hue texts:
u^*_e = *r50j* u^*_d = *o40y*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**



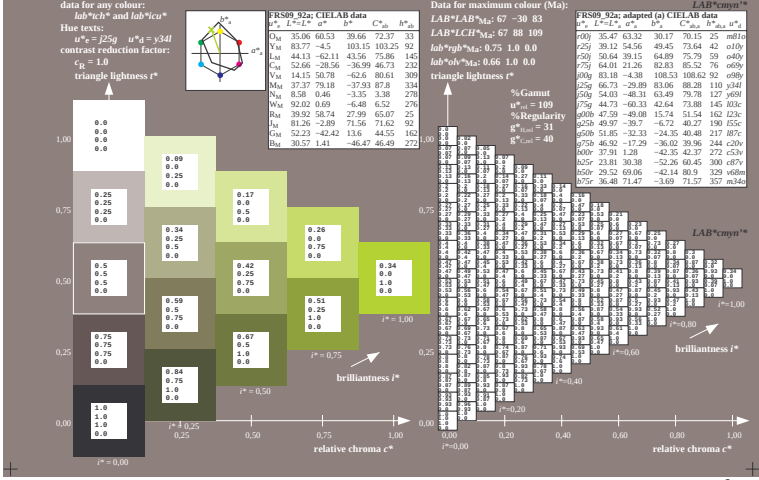
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.21$ u^*_e = *r75j*
data for any colour: *LAB*LCH*$_{Ma}$*: 64 21 83
*lab*rgb*$_{Ma}$*: 1.0 0.75 0.0
*lab*olv*$_{Ma}$*: 1.0 0.7 0.0
Hue texts:
u^*_e = *r75j* u^*_d = *o69y*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**



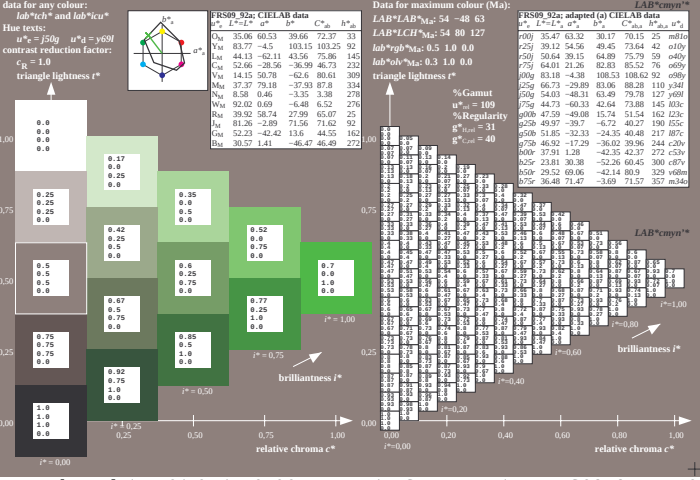
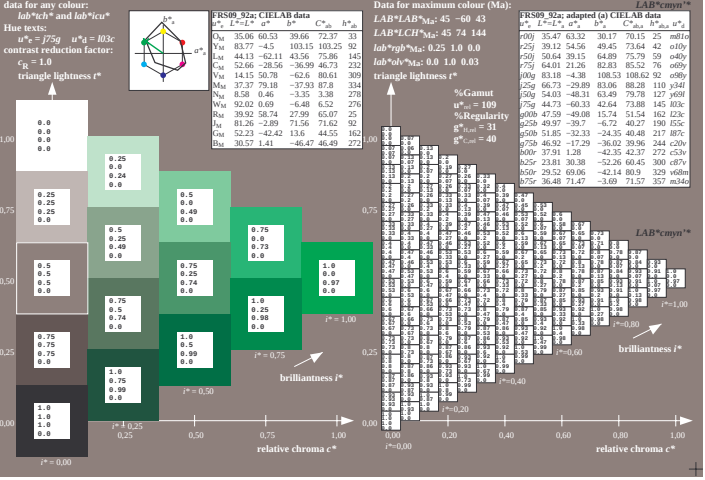
Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.256$ u^*_e = *j00g*
data for any colour: *LAB*LCH*$_{Ma}$*: 83 −4 109
*lab*rgb*$_{Ma}$*: 1.0 1.0 0.0
*lab*olv*$_{Ma}$*: 1.0 0.99 0.0
Hue texts:
u^*_e = *j00g* u^*_d = *o98y*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**



Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.305$ u^*_e = *j25g*
data for any colour: *LAB*LCH*$_{Ma}$*: 67 −30 83
*lab*rgb*$_{Ma}$*: 0.75 1.0 0.0
*lab*olv*$_{Ma}$*: 0.66 1.0 0.0
Hue texts:
u^*_e = *j25g* u^*_d = *y34l*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**



Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.354$ u^*_e = *j50g*
data for any colour: *LAB*LCH*$_{Ma}$*: 54 −48 63
*lab*rgb*$_{Ma}$*: 0.5 1.0 0.0
*lab*olv*$_{Ma}$*: 0.3 1.0 0.0
Hue texts:
u^*_e = *j50g* u^*_d = *y69l*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**



Input and output: Colorimetric Printer Reflective System FRS09_92, L*=09_92 for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.402$ u^*_e = *j75g*
data for any colour: *LAB*LCH*$_{Ma}$*: 45 −60 43
*lab*rgb*$_{Ma}$*: 0.25 1.0 0.0
*lab*olv*$_{Ma}$*: 0.0 1.0 0.03
Hue texts:
u^*_e = *j75g* u^*_d = *l03c*
contrast reduction factor:
c_R = 1.0
triangle lightness *t**