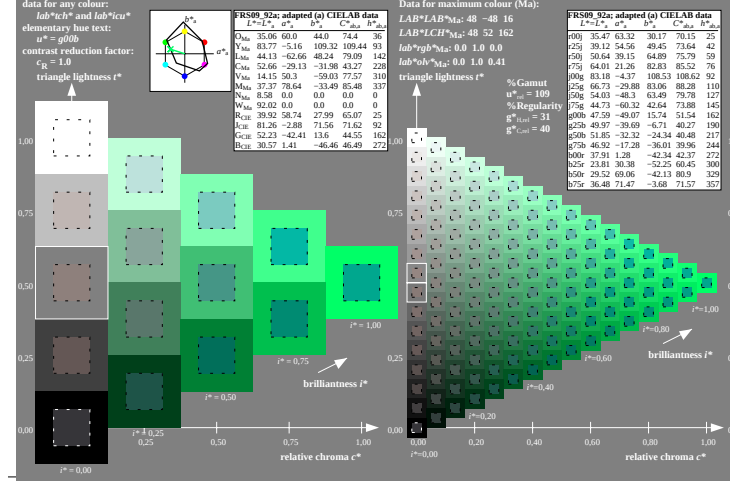
Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$ ***u* = g00b***

data for any colour: ***lab*tch* and lab*icu****
elementary hue text: ***u* = g00b***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 48 −48 16**
***LAB*LCH*Ma*: 48 52 162**
***lab*rgb*Ma*: 0.0 1.0 0.0**
***lab*olv*Ma*: 0.0 1.0 0.41**

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



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

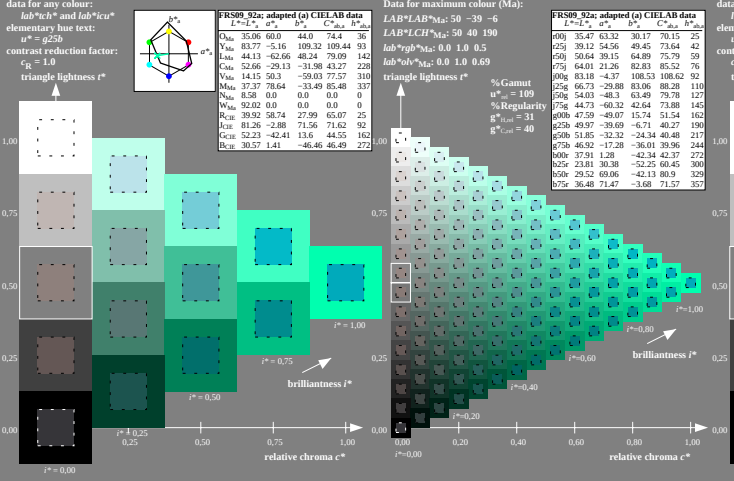
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$ ***u* = g25b***

data for any colour: ***lab*tch* and lab*icu****
elementary hue text: ***u* = g25b***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 50 −39 −6**
***LAB*LCH*Ma*: 50 40 190**
***lab*rgb*Ma*: 0.0 1.0 0.5**
***lab*olv*Ma*: 0.0 1.0 0.69**

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



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

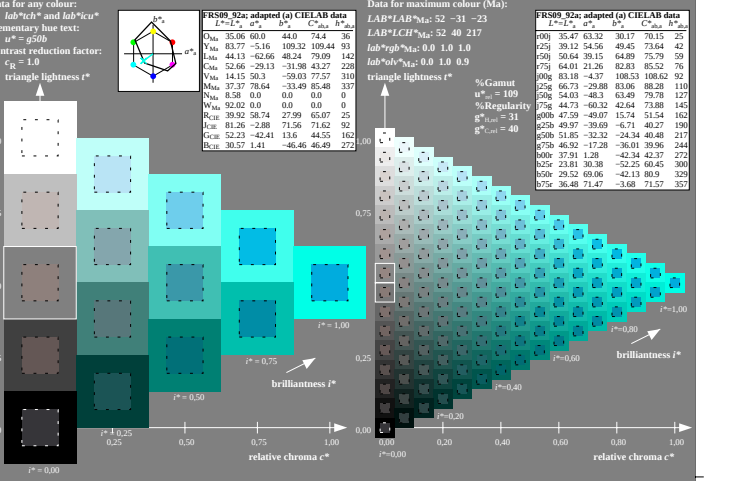
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 217/360 = 0.603$ ***u* = g50b***

data for any colour: ***lab*tch* and lab*icu****
elementary hue text: ***u* = g50b***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 52 −31 −23**
***LAB*LCH*Ma*: 52 40 217**
***lab*rgb*Ma*: 0.0 1.0 1.0**
***lab*olv*Ma*: 0.0 1.0 0.9**

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



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

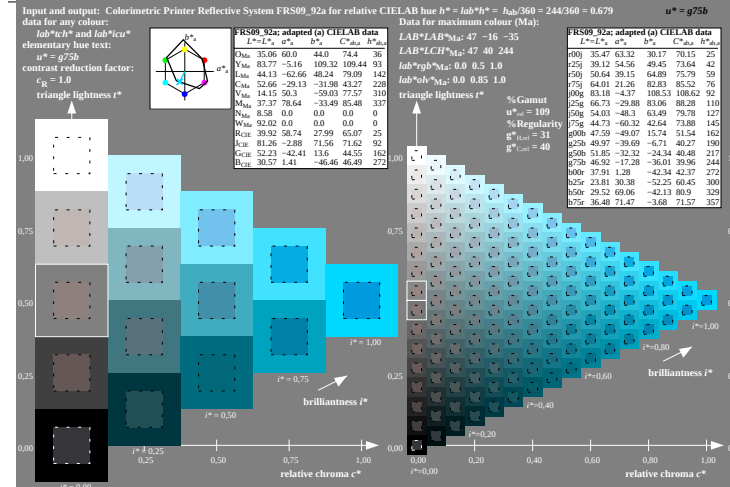
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 244/360 = 0.679$ ***u* = g75b***

data for any colour: ***lab*tch* and lab*icu****
elementary hue text: ***u* = g75b***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 47 −16 −35**
***LAB*LCH*Ma*: 47 40 244**
***lab*rgb*Ma*: 0.0 0.5 1.0**
***lab*olv*Ma*: 0.0 0.85 1.0**

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



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

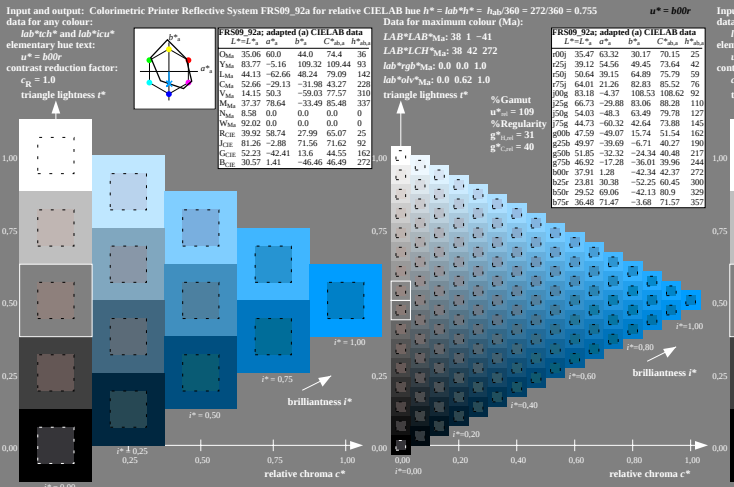
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 272/360 = 0.755$ ***u* = b00r***

data for any colour: ***lab*tch* and lab*icu****
elementary hue text: ***u* = b00r***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 38 1 −41**
***LAB*LCH*Ma*: 38 42 272**
***lab*rgb*Ma*: 0.0 0.0 1.0**
***lab*olv*Ma*: 0.0 0.62 1.0**

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



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

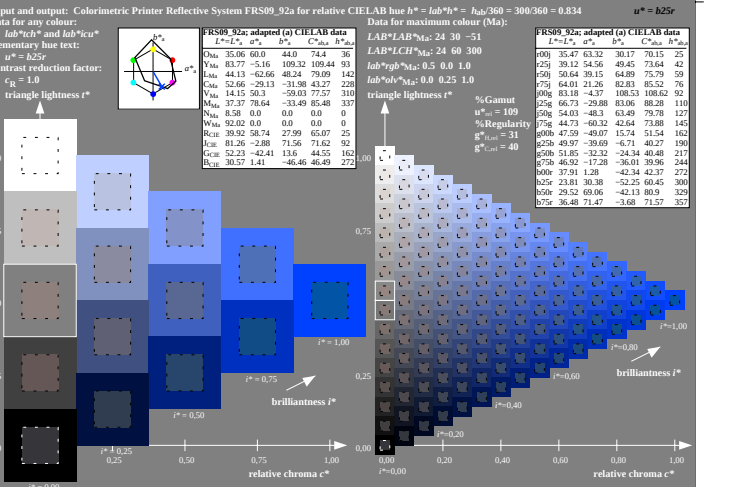
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 300/360 = 0.834$ ***u* = b25r***

data for any colour: ***lab*tch* and lab*icu****
elementary hue text: ***u* = b25r***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 24 30 −51**
***LAB*LCH*Ma*: 24 60 300**
***lab*rgb*Ma*: 0.5 0.0 1.0**
***lab*olv*Ma*: 0.0 0.25 1.0**

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



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

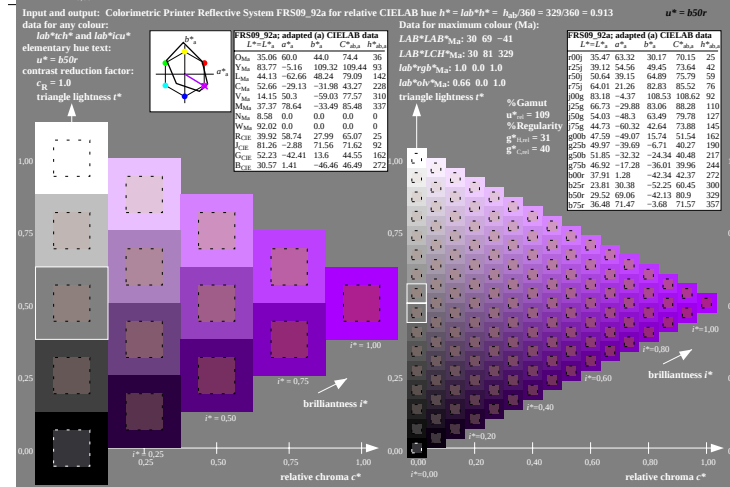
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 329/360 = 0.913$ ***u* = b50r***

data for any colour: ***lab*tch* and lab*icu****
elementary hue text: ***u* = b50r***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 30 69 −41**
***LAB*LCH*Ma*: 30 81 329**
***lab*rgb*Ma*: 1.0 0.0 1.0**
***lab*olv*Ma*: 0.66 0.0 1.0**

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



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

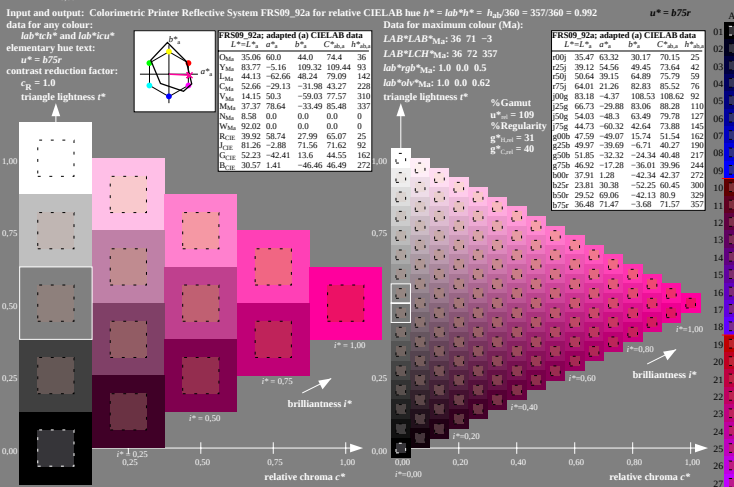
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 357/360 = 0.992$ ***u* = b75r***

data for any colour: ***lab*tch* and lab*icu****
elementary hue text: ***u* = b75r***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 36 71 −3**
***LAB*LCH*Ma*: 36 72 357**
***lab*rgb*Ma*: 1.0 0.0 0.5**
***lab*olv*Ma*: 1.0 0.0 0.62**

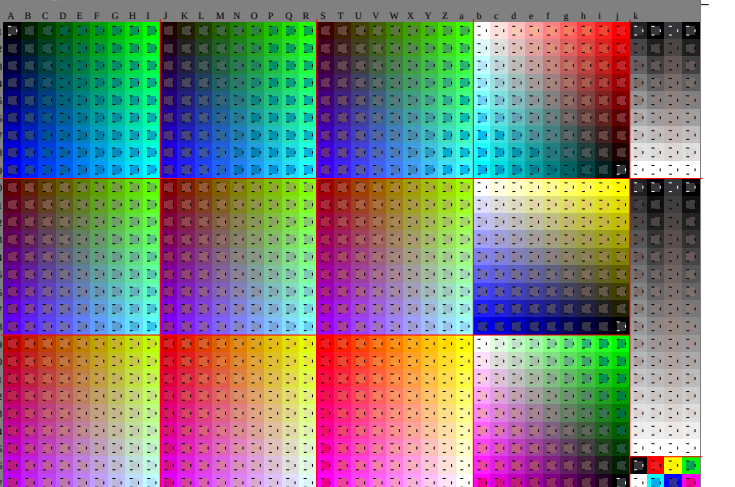
%Gamut $u^*_{out} = 109$
%Regularity $g^*_{H,rel} = 31$ $g^*_{C,rel} = 40$



FRS09_92a; adapted (a) CIELAB data

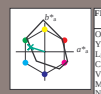
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	35.06	60.0	44.0	74.4	36
Y_{Ma}	83.77	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	85.48	337
N_{Ma}	8.58	0.0	0.0	0.0	0
W_{Ma}	92.02	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$ — ***u* = g00b***

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: ***u* = g00b***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*



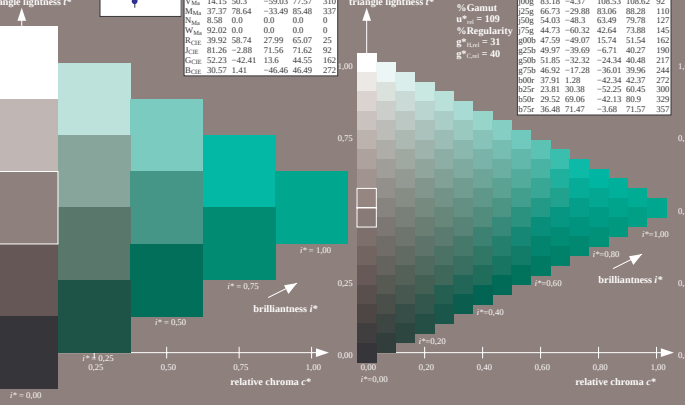
Data for maximum colour (Ma):
***LAB*LAB*$_{Ma}$*: 48 −48 16**
***LAB*LCH*$_{Ma}$*: 48 52 162**
***lab*rgb*$_{Ma}$*: 0.0 1.0 0.0**
***lab*olv*$_{Ma}$*: 0.0 1.0 0.41**

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$ — ***u* = g25b***

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: ***u* = g25b***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

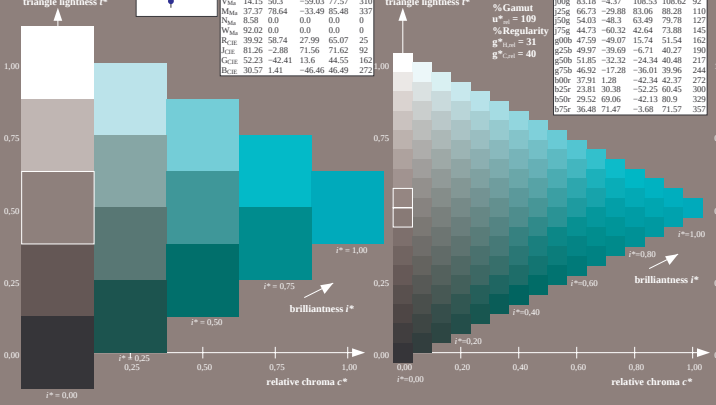
Data for maximum colour (Ma):
***LAB*LAB*$_{Ma}$*: 50 −39 −6**
***LAB*LCH*$_{Ma}$*: 50 40 190**
***lab*rgb*$_{Ma}$*: 0.0 1.0 0.5**
***lab*olv*$_{Ma}$*: 0.0 1.0 0.69**

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

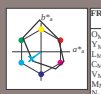
FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 217/360 = 0.603$ — ***u* = g50b***

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: ***u* = g50b***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*



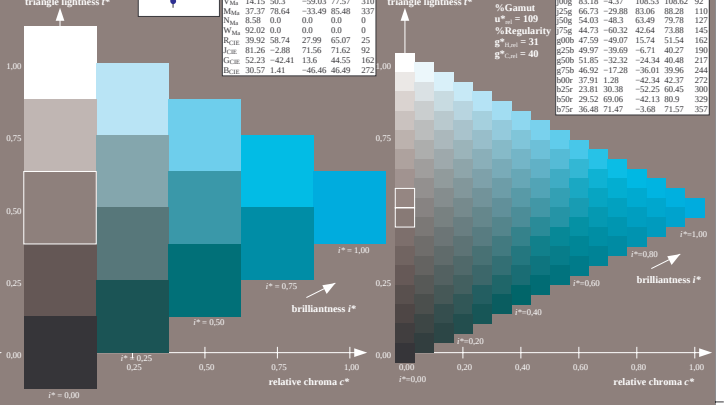
Data for maximum colour (Ma):
***LAB*LAB*$_{Ma}$*: 52 −31 −23**
***LAB*LCH*$_{Ma}$*: 52 40 217**
***lab*rgb*$_{Ma}$*: 0.0 1.0 1.0**
***lab*olv*$_{Ma}$*: 0.0 1.0 0.9**

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

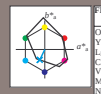
FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 244/360 = 0.679$ — ***u* = g75b***

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: ***u* = g75b***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*



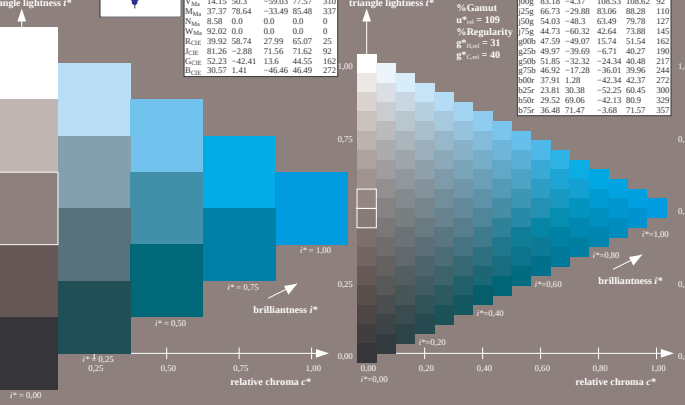
Data for maximum colour (Ma):
***LAB*LAB*$_{Ma}$*: 47 −16 −35**
***LAB*LCH*$_{Ma}$*: 47 40 244**
***lab*rgb*$_{Ma}$*: 0.0 0.5 1.0**
***lab*olv*$_{Ma}$*: 0.0 0.85 1.0**

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 272/360 = 0.755$ — ***u* = b00r***

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: ***u* = b00r***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

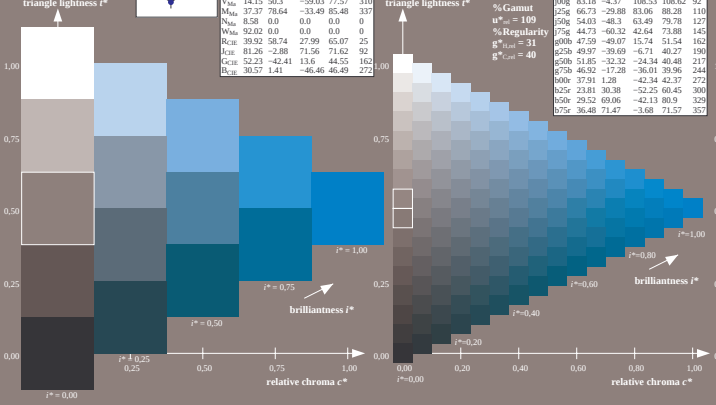
Data for maximum colour (Ma):
***LAB*LAB*$_{Ma}$*: 38 1 −41**
***LAB*LCH*$_{Ma}$*: 38 42 272**
***lab*rgb*$_{Ma}$*: 0.0 0.0 1.0**
***lab*olv*$_{Ma}$*: 0.0 0.62 1.0**

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 300/360 = 0.834$ — ***u* = b25r***

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: ***u* = b25r***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

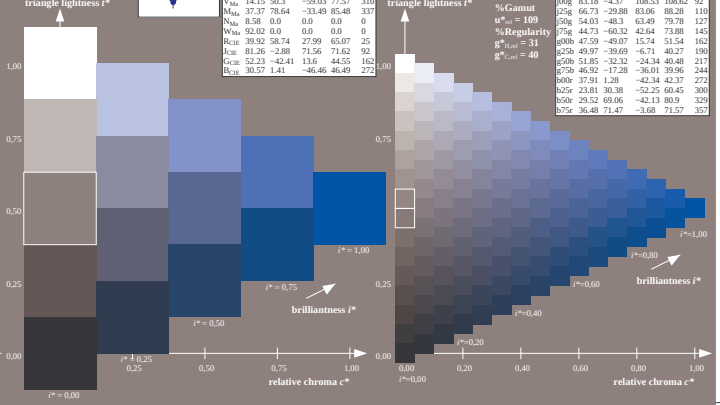
Data for maximum colour (Ma):
***LAB*LAB*$_{Ma}$*: 24 30 −51**
***LAB*LCH*$_{Ma}$*: 24 60 300**
***lab*rgb*$_{Ma}$*: 0.5 0.0 1.0**
***lab*olv*$_{Ma}$*: 0.0 0.25 1.0**

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 329/360 = 0.913$ — ***u* = b50r***

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: ***u* = b50r***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

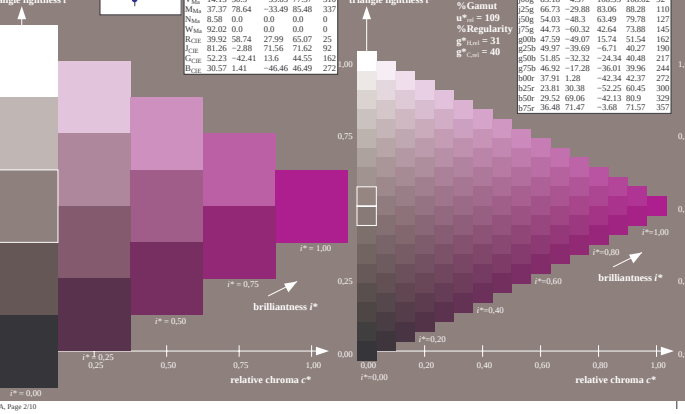
Data for maximum colour (Ma):
***LAB*LAB*$_{Ma}$*: 30 69 −41**
***LAB*LCH*$_{Ma}$*: 30 81 329**
***lab*rgb*$_{Ma}$*: 1.0 0.0 1.0**
***lab*olv*$_{Ma}$*: 0.66 0.0 1.0**

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 357/360 = 0.992$ — ***u* = b75r***

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: ***u* = b75r***
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

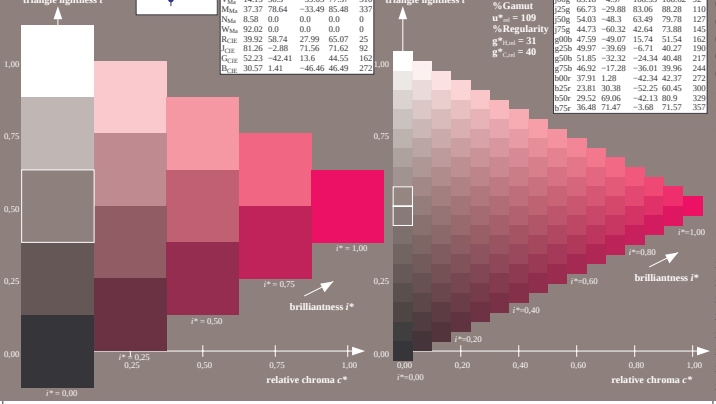
Data for maximum colour (Ma):
***LAB*LAB*$_{Ma}$*: 36 71 −3**
***LAB*LCH*$_{Ma}$*: 36 72 357**
***lab*rgb*$_{Ma}$*: 1.0 0.0 0.5**
***lab*olv*$_{Ma}$*: 1.0 0.0 0.62**

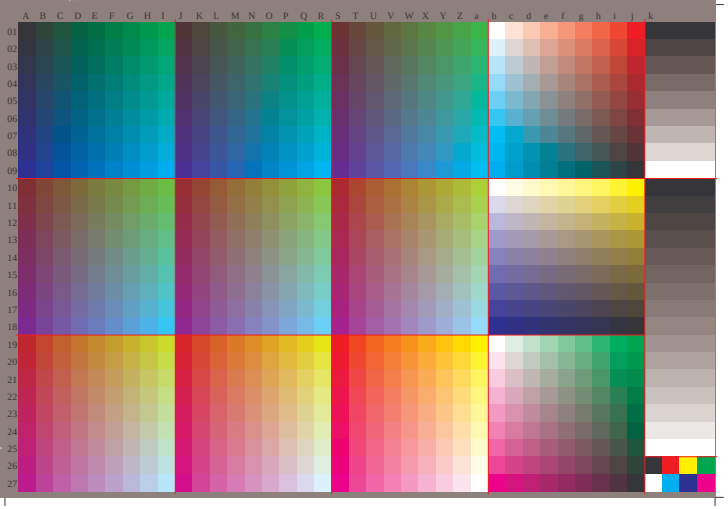
FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



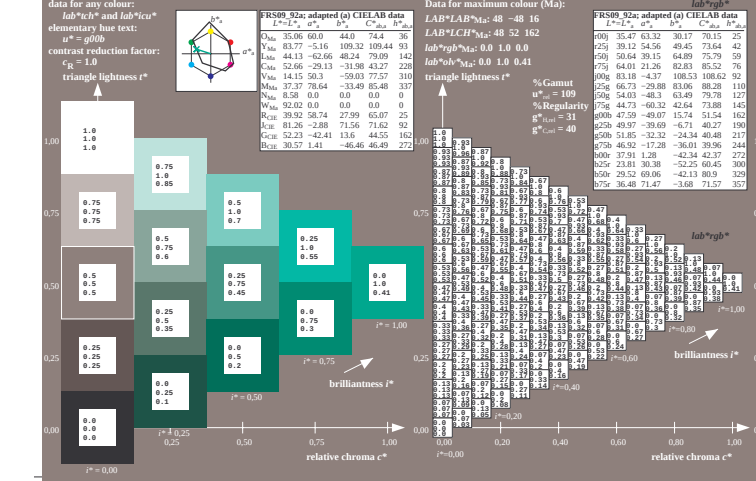


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g00b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 48 −48 16
$LAB^*LCH^*_{Ma}$: 48 52 162
$lab^*rgb^*_{Ma}$: 0.0 1.0 0.0
$lab^*olv^*_{Ma}$: 0.0 1.0 0.41

$u^* = g00b$
lab^*rgb^*

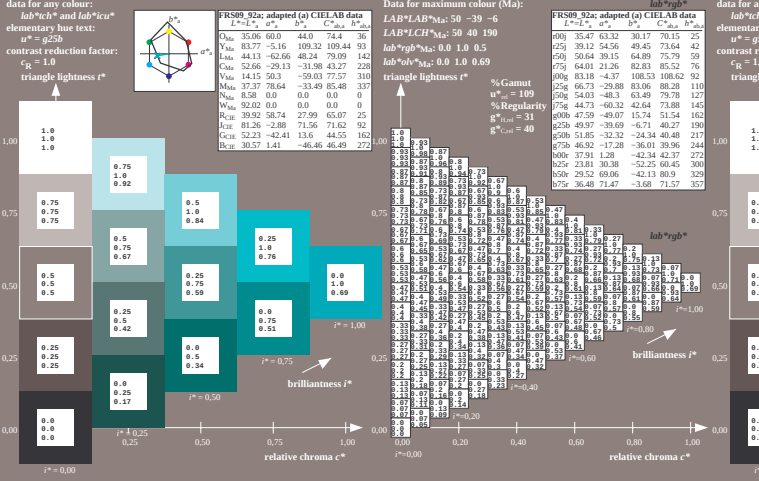


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g25b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 50 −39 −6
$LAB^*LCH^*_{Ma}$: 50 40 190
$lab^*rgb^*_{Ma}$: 0.0 1.0 0.5
$lab^*olv^*_{Ma}$: 0.0 1.0 0.69

$u^* = g25b$
lab^*rgb^*

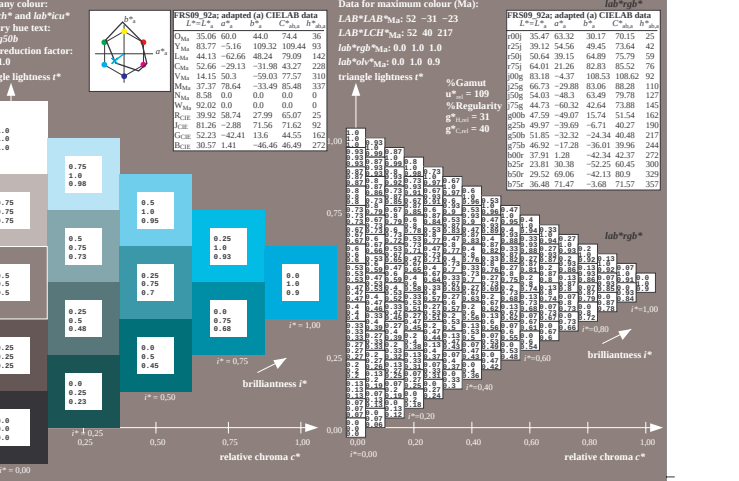


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 217/360 = 0.603$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g50b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 52 −31 −23
$LAB^*LCH^*_{Ma}$: 52 40 217
$lab^*rgb^*_{Ma}$: 0.0 1.0 1.0
$lab^*olv^*_{Ma}$: 0.0 1.0 0.9

$u^* = g50b$
lab^*rgb^*

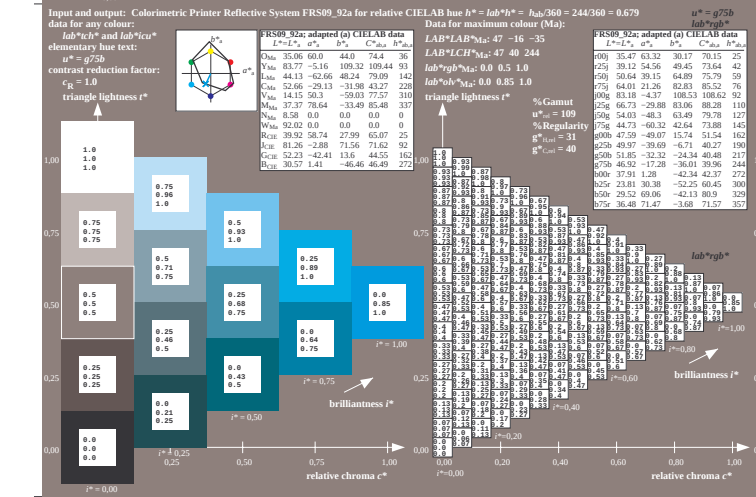


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 244/360 = 0.679$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g75b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 47 −16 −35
$LAB^*LCH^*_{Ma}$: 47 40 244
$lab^*rgb^*_{Ma}$: 0.0 0.5 1.0
$lab^*olv^*_{Ma}$: 0.0 0.85 1.0

$u^* = g75b$
lab^*rgb^*

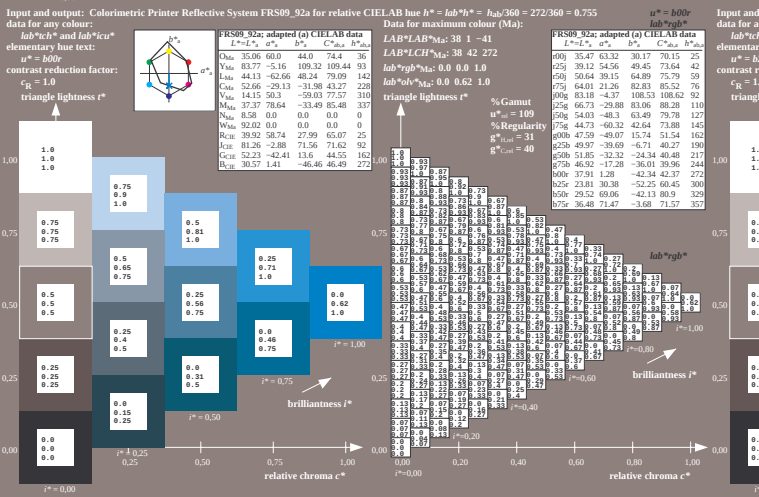


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 272/360 = 0.755$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b00r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 38 1 −41
$LAB^*LCH^*_{Ma}$: 38 42 272
$lab^*rgb^*_{Ma}$: 0.0 0.0 1.0
$lab^*olv^*_{Ma}$: 0.0 0.62 1.0

$u^* = b00r$
lab^*rgb^*

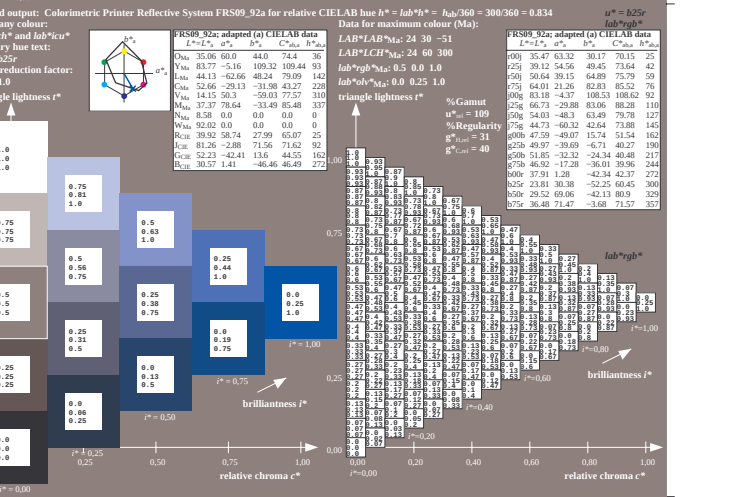


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 300/360 = 0.834$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b25r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 24 30 −51
$LAB^*LCH^*_{Ma}$: 24 60 300
$lab^*rgb^*_{Ma}$: 0.5 0.0 1.0
$lab^*olv^*_{Ma}$: 0.0 0.25 1.0

$u^* = b25r$
lab^*rgb^*

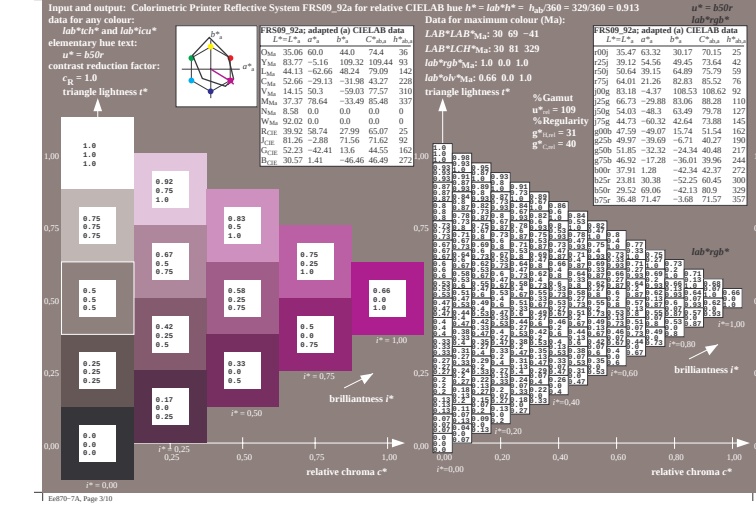


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 329/360 = 0.913$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b50r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 30 69 −41
$LAB^*LCH^*_{Ma}$: 30 81 329
$lab^*rgb^*_{Ma}$: 1.0 0.0 1.0
$lab^*olv^*_{Ma}$: 0.66 0.0 1.0

$u^* = b50r$
lab^*rgb^*

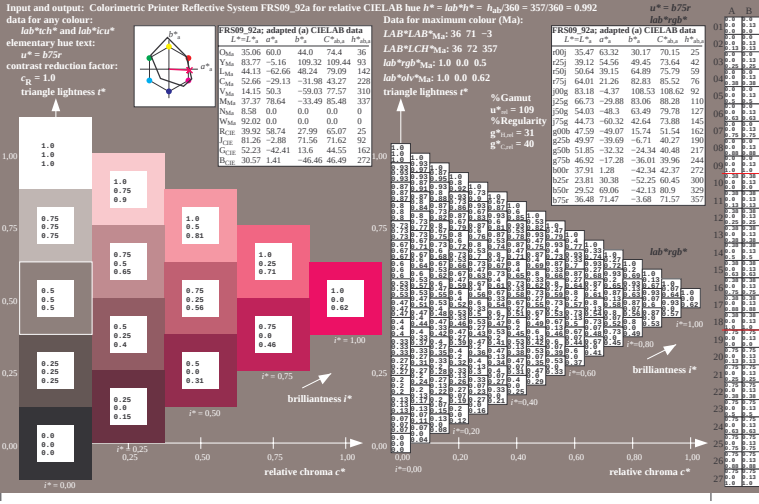


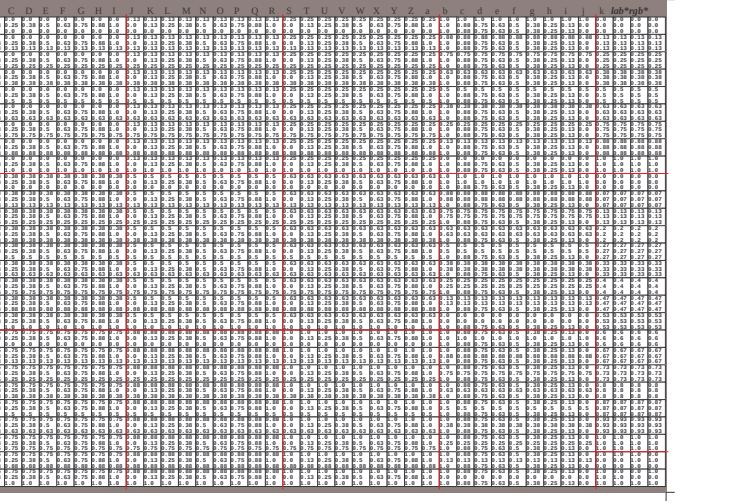
Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 357/360 = 0.992$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b75r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 36 71 −3
$LAB^*LCH^*_{Ma}$: 36 72 357
$lab^*rgb^*_{Ma}$: 1.0 0.0 0.5
$lab^*olv^*_{Ma}$: 1.0 0.0 0.62

$u^* = b75r$
lab^*rgb^*

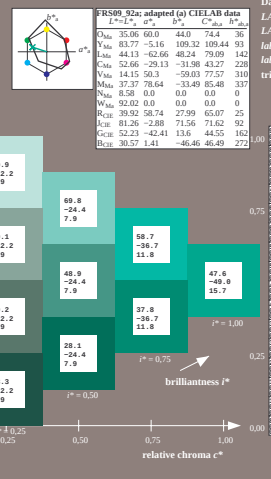




Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$

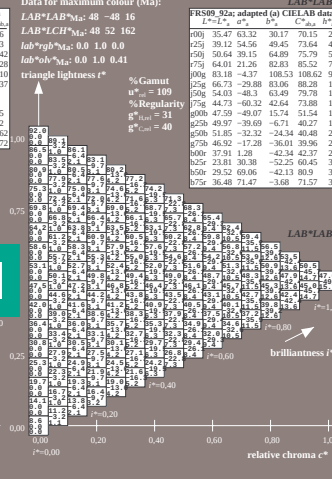
data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g00b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

*LAB*LAB**$_{Ma}$: 48 −48 16
*LAB*LCH**$_{Ma}$: 48 52 162
*lab*rgb**$_{Ma}$: 0.0 1.0 0.0
*lab*olv**$_{Ma}$: 0.0 1.0 0.41



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
C_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272



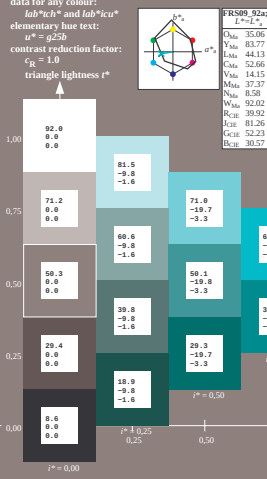
FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$

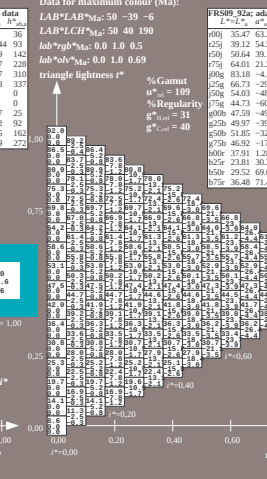
data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g25b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

*LAB*LAB**$_{Ma}$: 50 −39 −6
*LAB*LCH**$_{Ma}$: 50 40 190
*lab*rgb**$_{Ma}$: 0.0 1.0 0.5
*lab*olv**$_{Ma}$: 0.0 1.0 0.69



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
C_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
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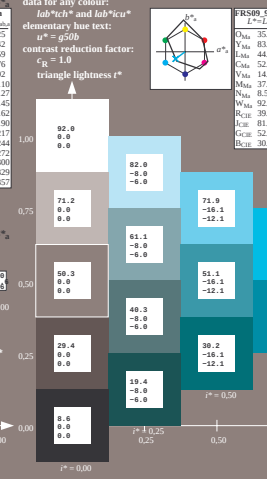
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 217/360 = 0.603$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g50b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 52 −31 −23
*LAB*LCH**$_{Ma}$: 52 40 217
*lab*rgb**$_{Ma}$: 0.0 1.0 1.0
*lab*olv**$_{Ma}$: 0.0 1.0 0.9



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
C_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

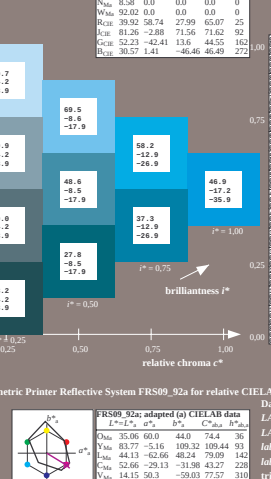
FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 244/360 = 0.679$

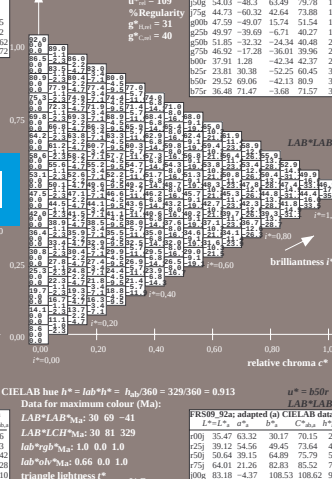
data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g75b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 47 −16 −35
*LAB*LCH**$_{Ma}$: 47 40 244
*lab*rgb**$_{Ma}$: 0.0 0.5 1.0
*lab*olv**$_{Ma}$: 0.0 0.85 1.0



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
C_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272



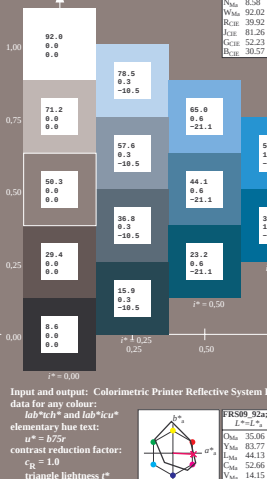
FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 272/360 = 0.755$

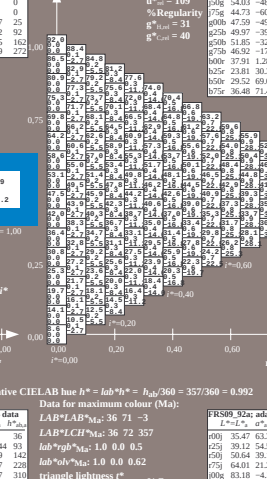
data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b00r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 38 1 −41
*LAB*LCH**$_{Ma}$: 38 42 272
*lab*rgb**$_{Ma}$: 0.0 0.0 1.0
*lab*olv**$_{Ma}$: 0.0 0.62 1.0



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
C_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272



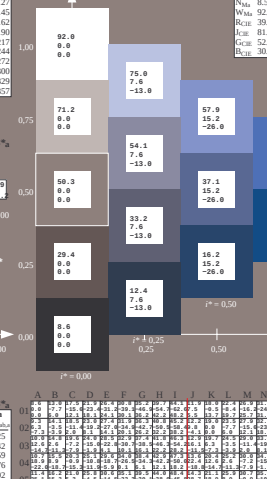
FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 300/360 = 0.834$

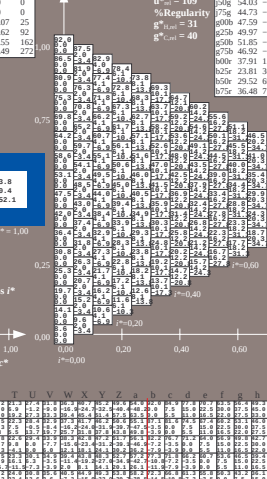
data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b25r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 24 30 −51
*LAB*LCH**$_{Ma}$: 24 60 300
*lab*rgb**$_{Ma}$: 0.5 0.0 1.0
*lab*olv**$_{Ma}$: 0.0 0.25 1.0



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
C_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272



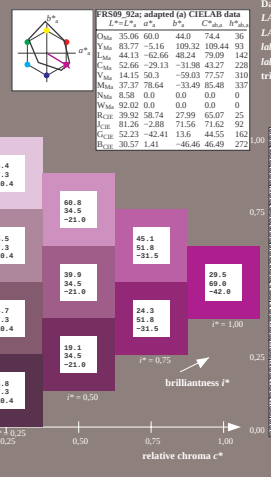
FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 329/360 = 0.913$

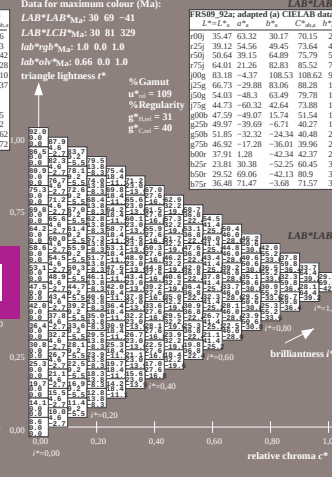
data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b50r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 30 69 −41
*LAB*LCH**$_{Ma}$: 30 81 329
*lab*rgb**$_{Ma}$: 1.0 0.0 1.0
*lab*olv**$_{Ma}$: 0.66 0.0 1.0



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
C_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272



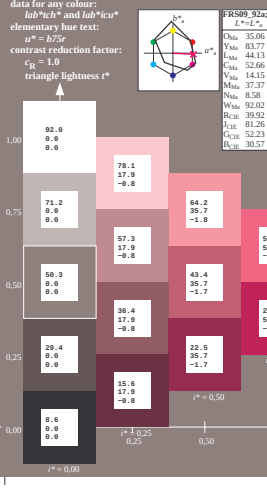
FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 357/360 = 0.992$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b75r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 36 71 −3
*LAB*LCH**$_{Ma}$: 36 72 357
*lab*rgb**$_{Ma}$: 1.0 0.0 0.5
*lab*olv**$_{Ma}$: 1.0 0.0 0.62



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
C_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

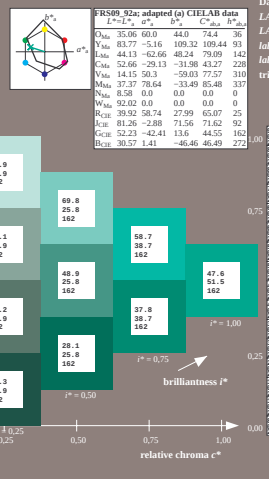
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$

data for any colour: *lab*ch** and *lab*icu**
elementary hue text: *u* = g00b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

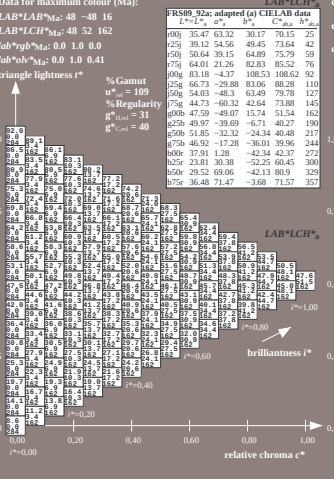
u = g00b*
*LAB*LCH*a*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 48 −48 16**
***LAB*LCH*Ma*: 48 52 162**
***lab*rgb*Ma*: 0.0 1.0 0.0**
***lab*olv*Ma*: 0.0 1.0 0.41**



triangle lightness t^*

%Gamut $u^*_{0,1} = 109$
%Regularity $g^*_{H,rel} = 31$
$g^*_{C,rel} = 40$



FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

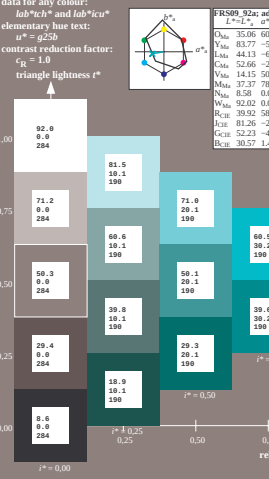
FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$

data for any colour: *lab*ch** and *lab*icu**
elementary hue text: *u* = g25b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

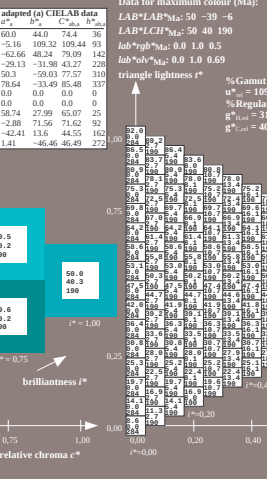
u = g25b*
*LAB*LCH*a*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 50 −39 −6**
***LAB*LCH*Ma*: 50 40 190**
***lab*rgb*Ma*: 0.0 1.0 0.5**
***lab*olv*Ma*: 0.0 1.0 0.69**



triangle lightness t^*

%Gamut $u^*_{0,1} = 109$
%Regularity $g^*_{H,rel} = 31$
$g^*_{C,rel} = 40$



FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

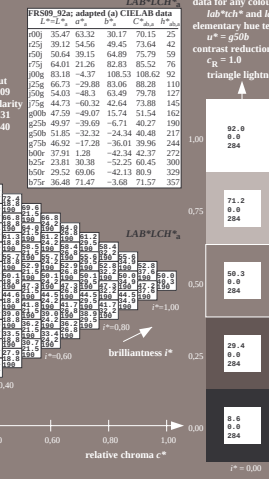
FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 217/360 = 0.603$

data for any colour: *lab*ch** and *lab*icu**
elementary hue text: *u* = g50b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = g50b*
*LAB*LCH*a*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 52 −31 −23**
***LAB*LCH*Ma*: 52 40 217**
***lab*rgb*Ma*: 0.0 1.0 1.0**
***lab*olv*Ma*: 0.0 1.0 0.9**



triangle lightness t^*

%Gamut $u^*_{0,1} = 109$
%Regularity $g^*_{H,rel} = 31$
$g^*_{C,rel} = 40$

FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

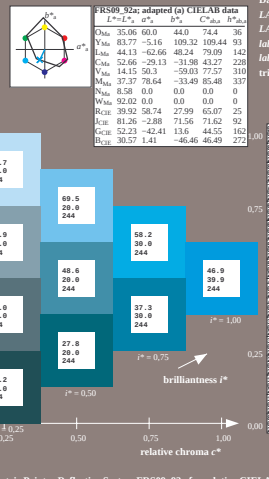
FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 244/360 = 0.679$

data for any colour: *lab*ch** and *lab*icu**
elementary hue text: *u* = g75b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

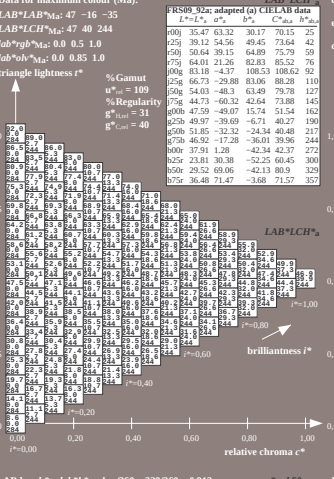
u = g75b*
*LAB*LCH*a*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 47 −16 −35**
***LAB*LCH*Ma*: 47 40 244**
***lab*rgb*Ma*: 0.0 0.5 1.0**
***lab*olv*Ma*: 0.0 0.85 1.0**



triangle lightness t^*

%Gamut $u^*_{0,1} = 109$
%Regularity $g^*_{H,rel} = 31$
$g^*_{C,rel} = 40$



FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

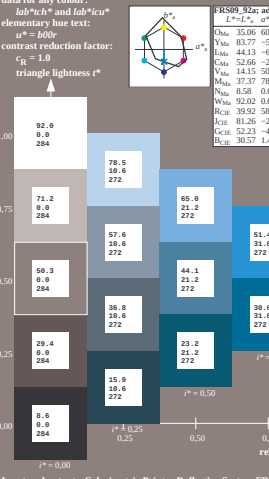
FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 272/360 = 0.755$

data for any colour: *lab*ch** and *lab*icu**
elementary hue text: *u* = b00r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

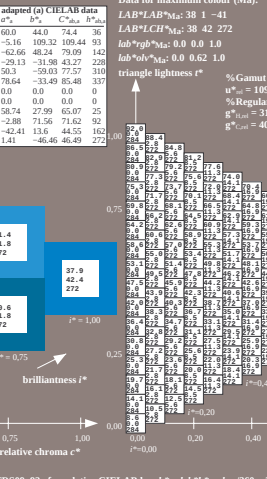
u = b00r*
*LAB*LCH*a*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 38 1 −41**
***LAB*LCH*Ma*: 38 42 272**
***lab*rgb*Ma*: 0.0 0.0 1.0**
***lab*olv*Ma*: 0.0 0.62 1.0**



triangle lightness t^*

%Gamut $u^*_{0,1} = 109$
%Regularity $g^*_{H,rel} = 31$
$g^*_{C,rel} = 40$



FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

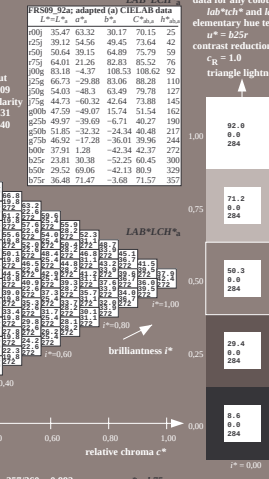
FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 300/360 = 0.834$

data for any colour: *lab*ch** and *lab*icu**
elementary hue text: *u* = b25r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = b25r*
*LAB*LCH*a*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 24 30 −51**
***LAB*LCH*Ma*: 24 60 300**
***lab*rgb*Ma*: 0.5 0.0 1.0**
***lab*olv*Ma*: 0.0 0.25 1.0**



triangle lightness t^*

%Gamut $u^*_{0,1} = 109$
%Regularity $g^*_{H,rel} = 31$
$g^*_{C,rel} = 40$

FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

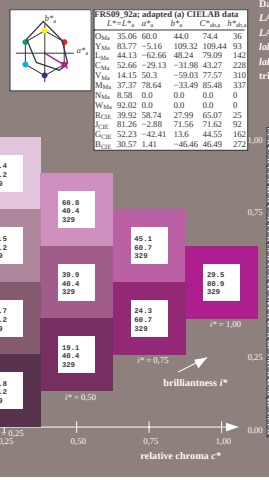
FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 329/360 = 0.913$

data for any colour: *lab*ch** and *lab*icu**
elementary hue text: *u* = b50r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

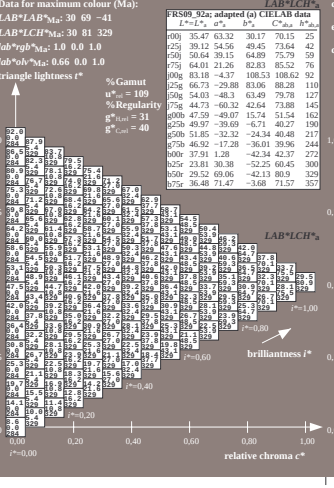
u = b50r*
*LAB*LCH*a*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 30 69 −41**
***LAB*LCH*Ma*: 30 81 329**
***lab*rgb*Ma*: 1.0 0.0 1.0**
***lab*olv*Ma*: 0.66 0.0 1.0**



triangle lightness t^*

%Gamut $u^*_{0,1} = 109$
%Regularity $g^*_{H,rel} = 31$
$g^*_{C,rel} = 40$



FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

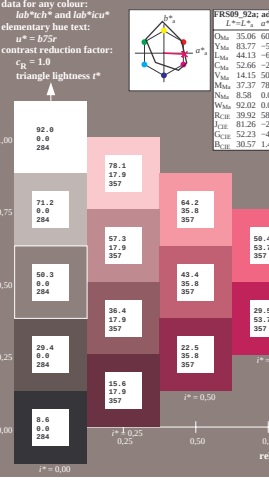
FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 357/360 = 0.992$

data for any colour: *lab*ch** and *lab*icu**
elementary hue text: *u* = b75r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

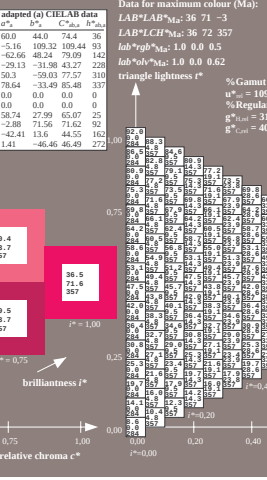
u = b75r*
*LAB*LCH*a*

Data for maximum colour (Ma):
***LAB*LAB*Ma*: 36 71 −3**
***LAB*LCH*Ma*: 36 72 357**
***lab*rgb*Ma*: 1.0 0.0 0.5**
***lab*olv*Ma*: 1.0 0.0 0.62**



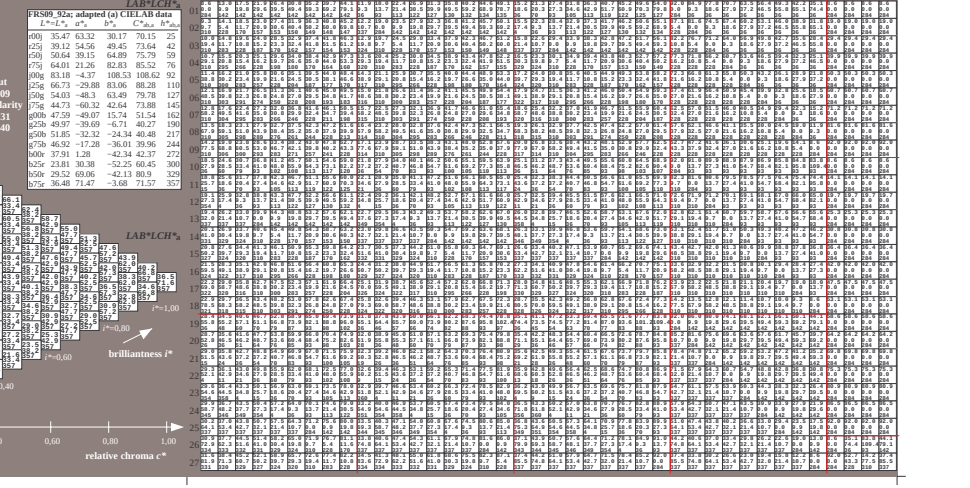
triangle lightness t^*

%Gamut $u^*_{0,1} = 109$
%Regularity $g^*_{H,rel} = 31$
$g^*_{C,rel} = 40$



FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

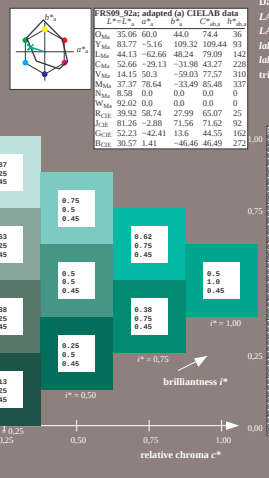

LAB*LCH*a

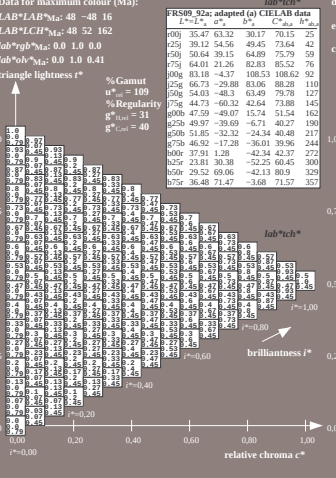
Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: *u* = g00b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma): *LAB*LAB**$_{Ma}$: 48 −48 16 *LAB*LCH**$_{Ma}$: 48 52 162 *lab*rgb**$_{Ma}$: 0.0 1.0 0.0 *lab*olv**$_{Ma}$: 0.0 1.0 0.41

u = g00b* *lab*tch**





FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

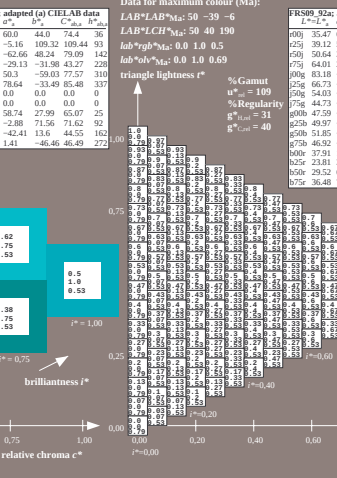
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: *u* = g25b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma): *LAB*LAB**$_{Ma}$: 50 −39 −6 *LAB*LCH**$_{Ma}$: 50 40 190 *lab*rgb**$_{Ma}$: 0.0 1.0 0.5 *lab*olv**$_{Ma}$: 0.0 1.0 0.69

u = g25b* *lab*tch**



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

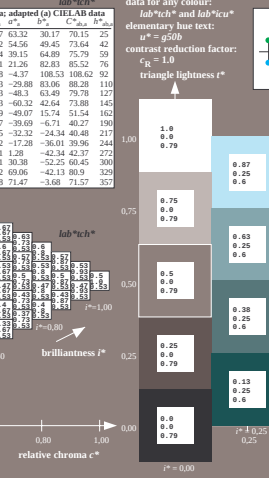
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

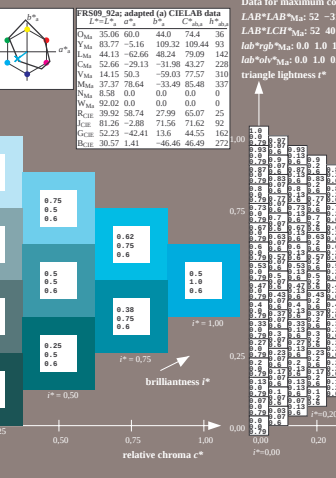
Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 217/360 = 0.603$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: *u* = g50b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma): *LAB*LAB**$_{Ma}$: 52 −31 −23 *LAB*LCH**$_{Ma}$: 52 40 217 *lab*rgb**$_{Ma}$: 0.0 1.0 1.0 *lab*olv**$_{Ma}$: 0.0 1.0 0.9

u = g50b* *lab*tch**





FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

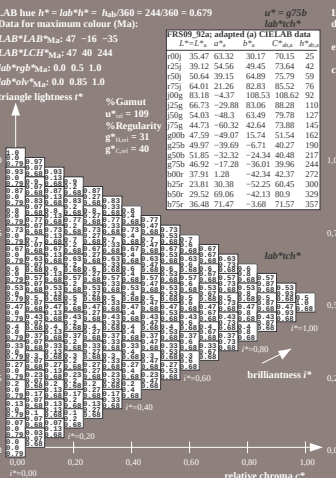
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 244/360 = 0.679$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: *u* = g75b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma): *LAB*LAB**$_{Ma}$: 47 −16 −35 *LAB*LCH**$_{Ma}$: 47 40 244 *lab*rgb**$_{Ma}$: 0.0 0.5 1.0 *lab*olv**$_{Ma}$: 0.0 0.85 1.0

u = g75b* *lab*tch**



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

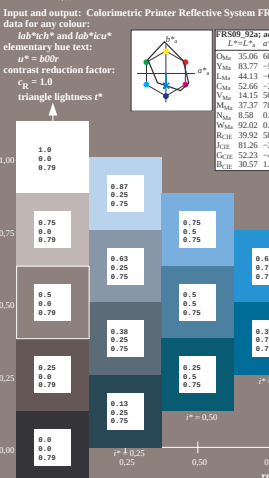
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

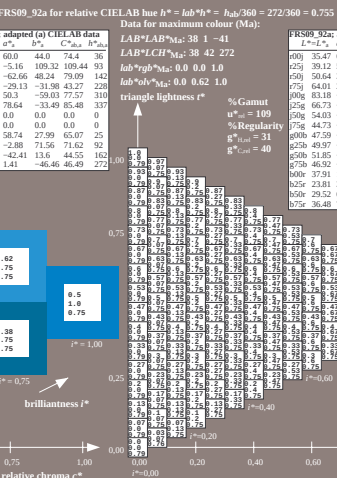
Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 272/360 = 0.755$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: *u* = b00r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma): *LAB*LAB**$_{Ma}$: 38 1 −41 *LAB*LCH**$_{Ma}$: 38 42 272 *lab*rgb**$_{Ma}$: 0.0 0.0 1.0 *lab*olv**$_{Ma}$: 0.0 0.62 1.0

u = b00r* *lab*tch**





FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

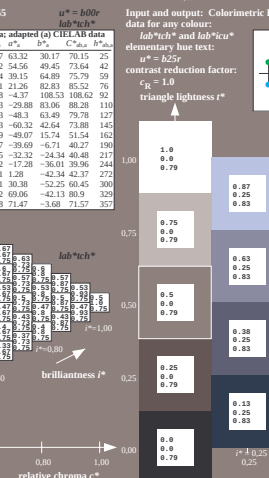
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

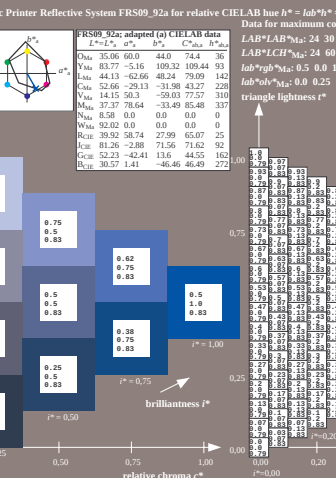
Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 300/360 = 0.834$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: *u* = b25r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma): *LAB*LAB**$_{Ma}$: 24 30 −51 *LAB*LCH**$_{Ma}$: 24 60 300 *lab*rgb**$_{Ma}$: 0.5 0.0 1.0 *lab*olv**$_{Ma}$: 0.0 0.25 1.0

u = b25r* *lab*tch**





FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

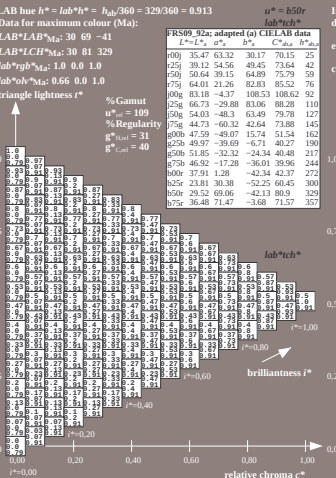
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 329/360 = 0.913$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: *u* = b50r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma): *LAB*LAB**$_{Ma}$: 30 69 −41 *LAB*LCH**$_{Ma}$: 30 81 329 *lab*rgb**$_{Ma}$: 1.0 0.0 1.0 *lab*olv**$_{Ma}$: 0.66 0.0 1.0

u = b50r* *lab*tch**



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

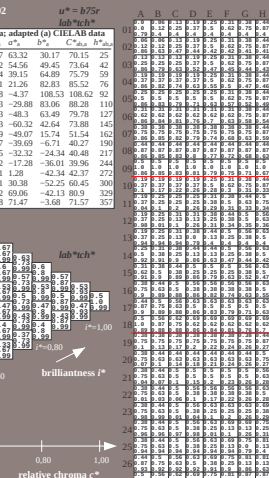
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 357/360 = 0.992$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: *u* = b75r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma): *LAB*LAB**$_{Ma}$: 36 71 −3 *LAB*LCH**$_{Ma}$: 36 72 357 *lab*rgb**$_{Ma}$: 1.0 0.0 0.5 *lab*olv**$_{Ma}$: 1.0 0.0 0.62

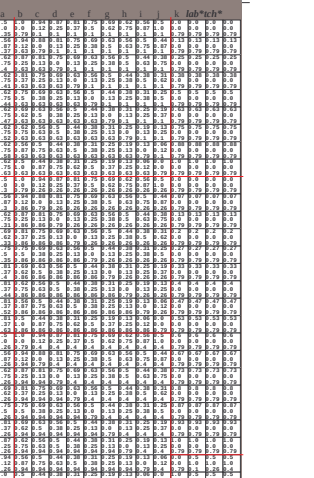
u = b75r* *lab*tch**



FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	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	−5.16	109.32	109.44	93
L_{Ma}	44.13	−62.66	48.24	79.09	142
C_{Ma}	52.66	−29.13	−31.98	43.27	228
V_{Ma}	14.15	50.3	−59.03	77.57	310
M_{Ma}	37.37	78.64	−33.49	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	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357

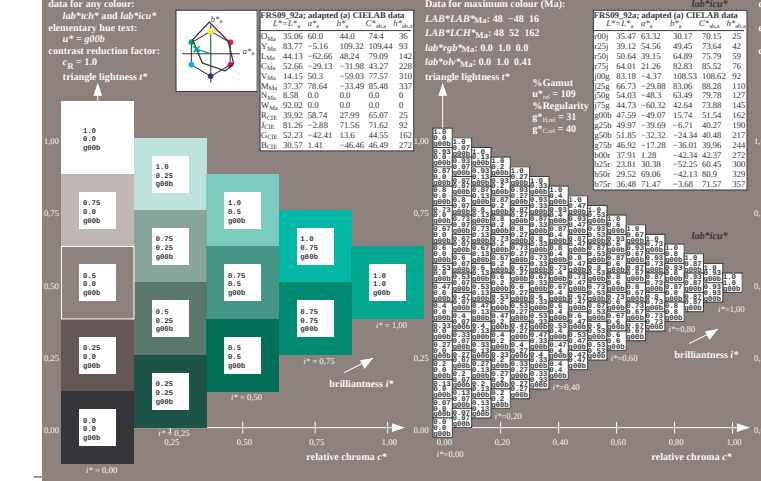


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$

data for any colour: *lab*ich** and *lab*icu**
elementary hue text: $u^* = g00b$
contrast reduction factor: $c_R = 1.0$
triangle lightness i^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 48 −48 16
$LAB^*LCH^*_{Ma}$: 48 52 162
$lab^*rgb^*_{Ma}$: 0.0 1.0 0.0
$lab^*olv^*_{Ma}$: 0.0 1.0 0.41

$u^* = g00b$
lab^*icu^*

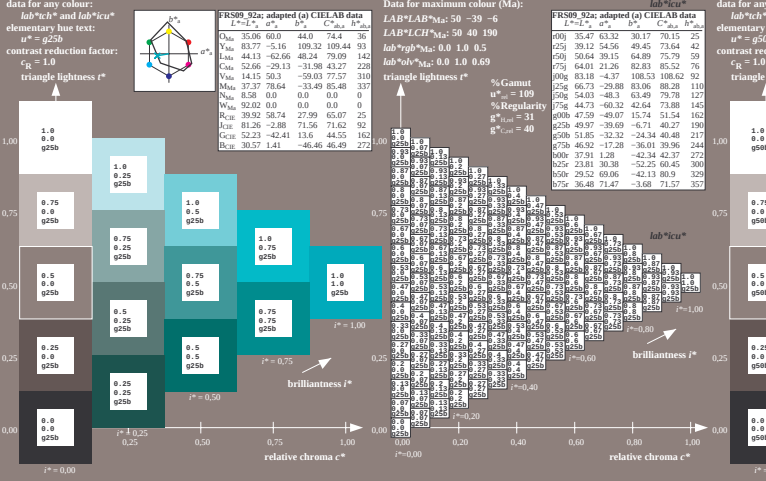


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$

data for any colour: *lab*ich** and *lab*icu**
elementary hue text: $u^* = g25b$
contrast reduction factor: $c_R = 1.0$
triangle lightness i^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 50 −39 −6
$LAB^*LCH^*_{Ma}$: 50 40 190
$lab^*rgb^*_{Ma}$: 0.0 1.0 0.5
$lab^*olv^*_{Ma}$: 0.0 1.0 0.69

$u^* = g25b$
lab^*icu^*

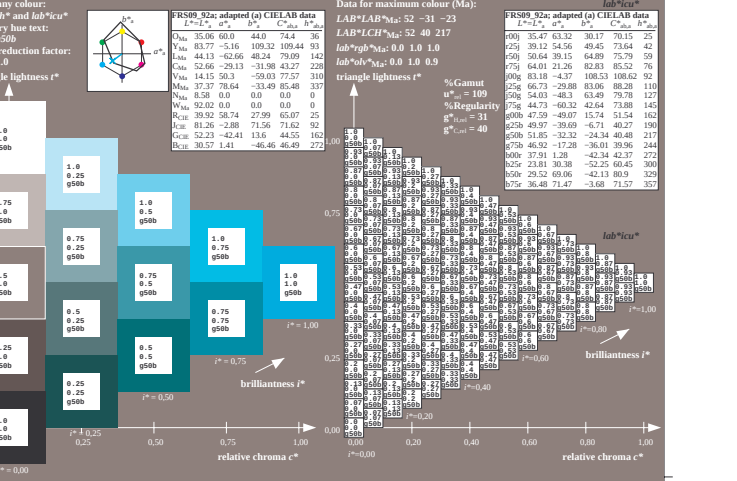


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 217/360 = 0.603$

data for any colour: *lab*ich** and *lab*icu**
elementary hue text: $u^* = g50b$
contrast reduction factor: $c_R = 1.0$
triangle lightness i^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 52 −31 −23
$LAB^*LCH^*_{Ma}$: 52 40 217
$lab^*rgb^*_{Ma}$: 0.0 1.0 1.0
$lab^*olv^*_{Ma}$: 0.0 1.0 0.9

$u^* = g50b$
lab^*icu^*

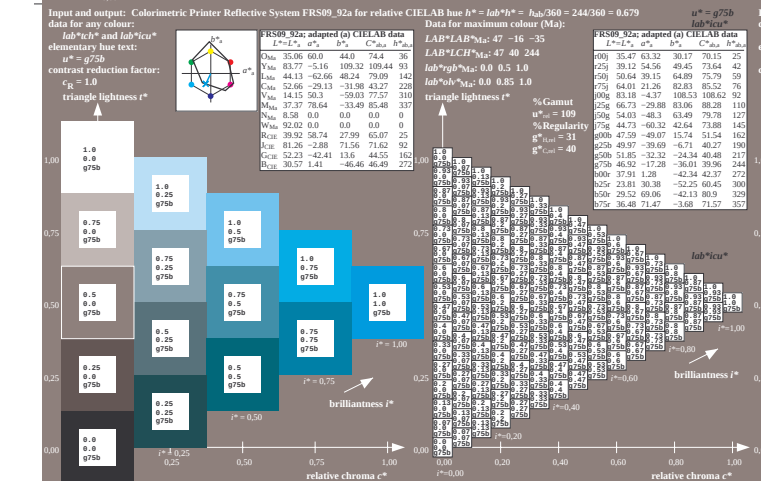


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 244/360 = 0.679$

data for any colour: *lab*ich** and *lab*icu**
elementary hue text: $u^* = g75b$
contrast reduction factor: $c_R = 1.0$
triangle lightness i^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 47 −16 −35
$LAB^*LCH^*_{Ma}$: 47 40 244
$lab^*rgb^*_{Ma}$: 0.0 0.5 1.0
$lab^*olv^*_{Ma}$: 0.0 0.85 1.0

$u^* = g75b$
lab^*icu^*

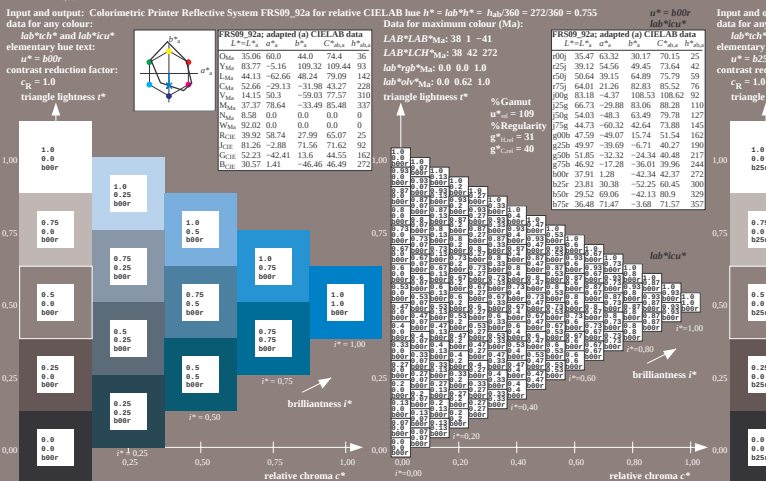


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 272/360 = 0.755$

data for any colour: *lab*ich** and *lab*icu**
elementary hue text: $u^* = b00r$
contrast reduction factor: $c_R = 1.0$
triangle lightness i^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 38 1 −41
$LAB^*LCH^*_{Ma}$: 38 42 272
$lab^*rgb^*_{Ma}$: 0.0 0.0 1.0
$lab^*olv^*_{Ma}$: 0.0 0.62 1.0

$u^* = b00r$
lab^*icu^*

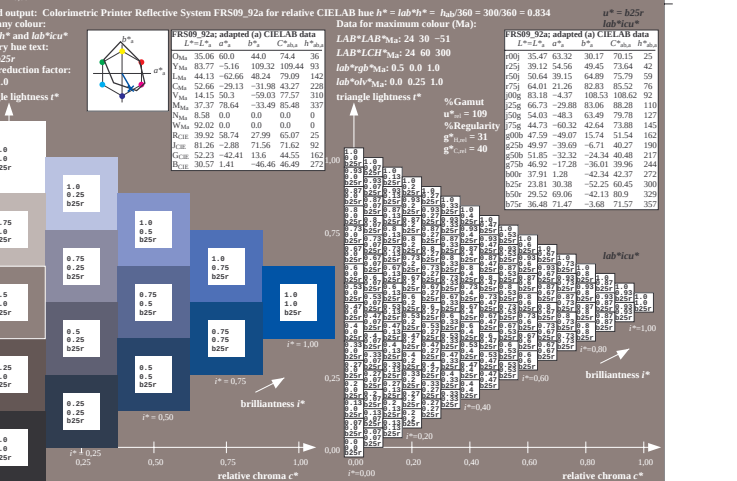


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 300/360 = 0.834$

data for any colour: *lab*ich** and *lab*icu**
elementary hue text: $u^* = b25r$
contrast reduction factor: $c_R = 1.0$
triangle lightness i^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 24 30 −51
$LAB^*LCH^*_{Ma}$: 24 60 300
$lab^*rgb^*_{Ma}$: 0.5 0.0 1.0
$lab^*olv^*_{Ma}$: 0.0 0.25 1.0

$u^* = b25r$
lab^*icu^*

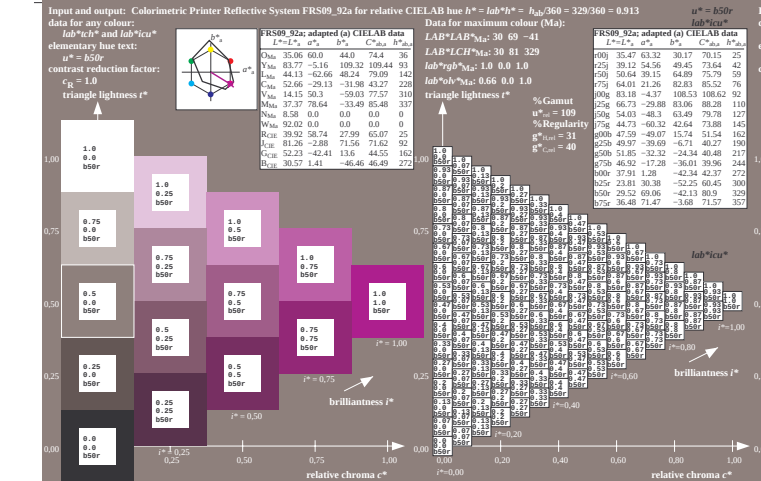


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 329/360 = 0.913$

data for any colour: *lab*ich** and *lab*icu**
elementary hue text: $u^* = b50r$
contrast reduction factor: $c_R = 1.0$
triangle lightness i^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 30 69 −41
$LAB^*LCH^*_{Ma}$: 30 81 329
$lab^*rgb^*_{Ma}$: 1.0 0.0 1.0
$lab^*olv^*_{Ma}$: 0.66 0.0 1.0

$u^* = b50r$
lab^*icu^*

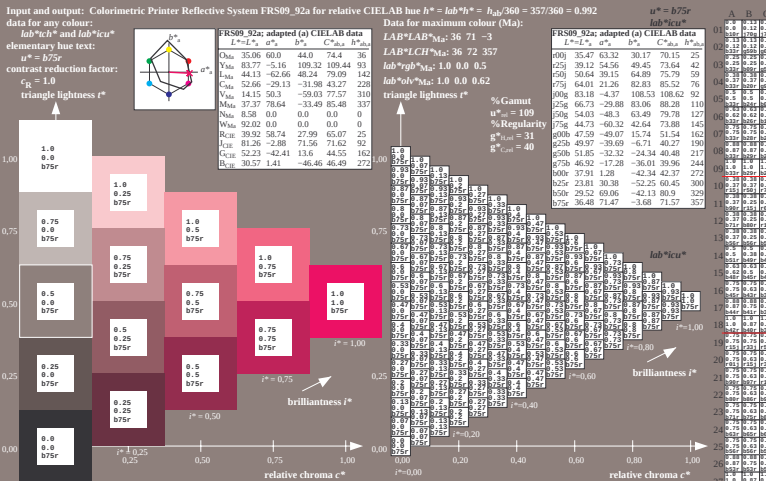


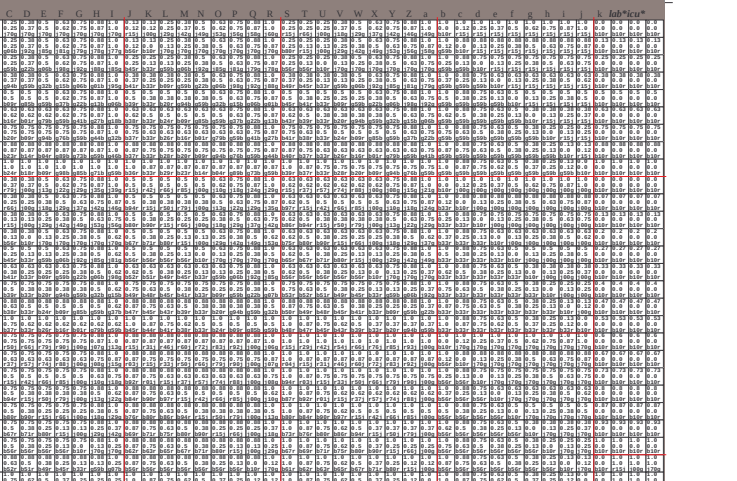
Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 357/360 = 0.992$

data for any colour: *lab*ich** and *lab*icu**
elementary hue text: $u^* = b75r$
contrast reduction factor: $c_R = 1.0$
triangle lightness i^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 36 71 −3
$LAB^*LCH^*_{Ma}$: 36 72 357
$lab^*rgb^*_{Ma}$: 1.0 0.0 0.5
$lab^*olv^*_{Ma}$: 1.0 0.0 0.62

$u^* = b75r$
lab^*icu^*



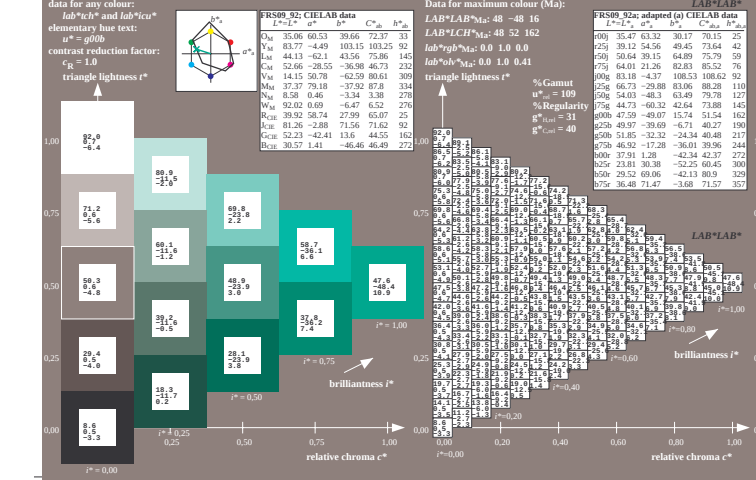


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$

data for any colour: *lab*tch* and lab*icu**
elementary hue text: *u* = g00b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = g00b*
*LAB*LAB**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 48 −48 16
*LAB*LCH**$_{Ma}$: 48 52 162
*lab*rgb**$_{Ma}$: 0.0 1.0 0.0
*lab*olv**$_{Ma}$: 0.0 1.0 0.41

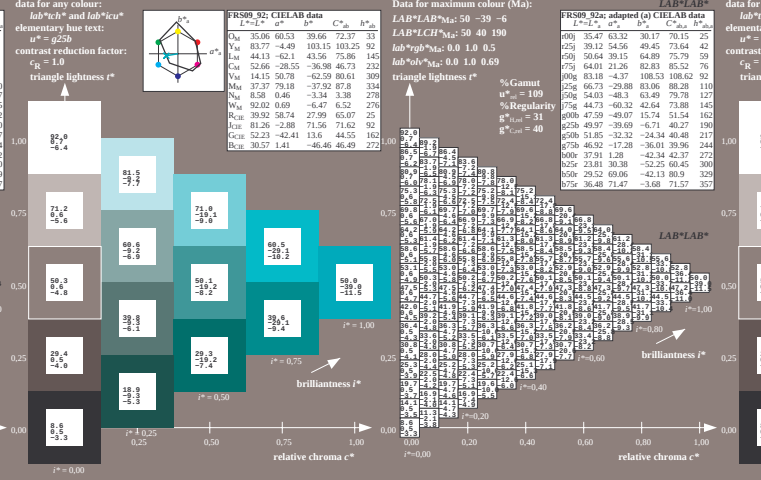


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$

data for any colour: *lab*tch* and lab*icu**
elementary hue text: *u* = g25b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = g25b*
*LAB*LAB**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 50 −39 −6
*LAB*LCH**$_{Ma}$: 50 40 190
*lab*rgb**$_{Ma}$: 0.0 1.0 0.5
*lab*olv**$_{Ma}$: 0.0 1.0 0.9

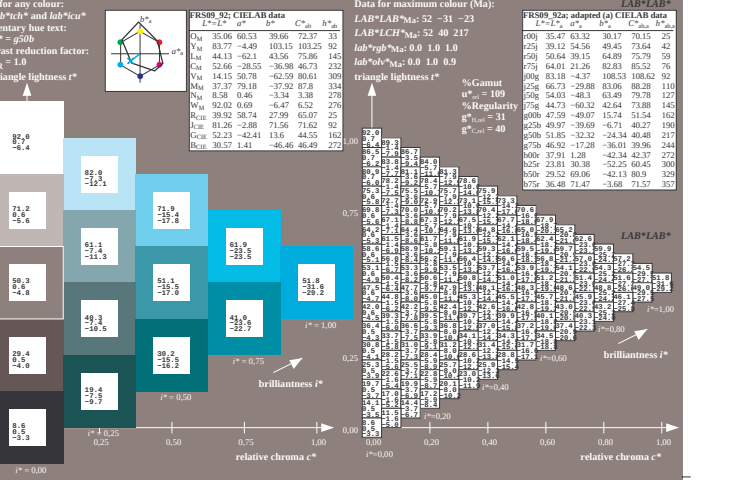


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 217/360 = 0.603$

data for any colour: *lab*tch* and lab*icu**
elementary hue text: *u* = g50b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = g50b*
*LAB*LAB**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 52 −31 −23
*LAB*LCH**$_{Ma}$: 52 40 217
*lab*rgb**$_{Ma}$: 0.0 1.0 1.0
*lab*olv**$_{Ma}$: 0.0 1.0 0.9

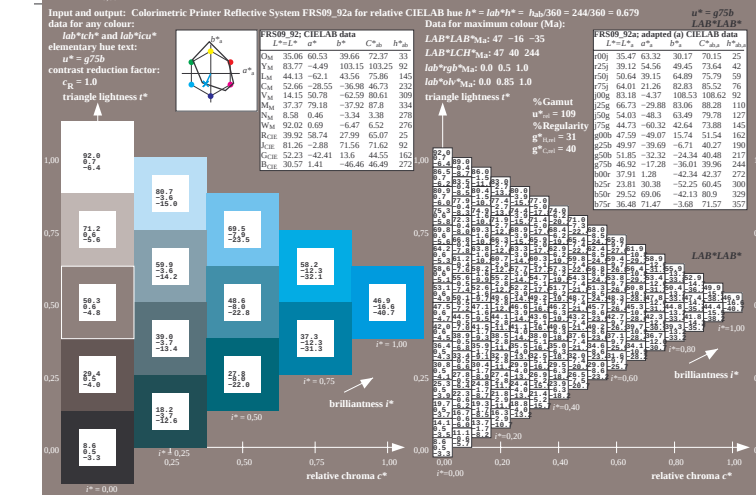


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 244/360 = 0.679$

data for any colour: *lab*tch* and lab*icu**
elementary hue text: *u* = g75b*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = g75b*
*LAB*LAB**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 47 −16 −35
*LAB*LCH**$_{Ma}$: 47 40 244
*lab*rgb**$_{Ma}$: 0.0 0.5 1.0
*lab*olv**$_{Ma}$: 0.0 0.85 1.0

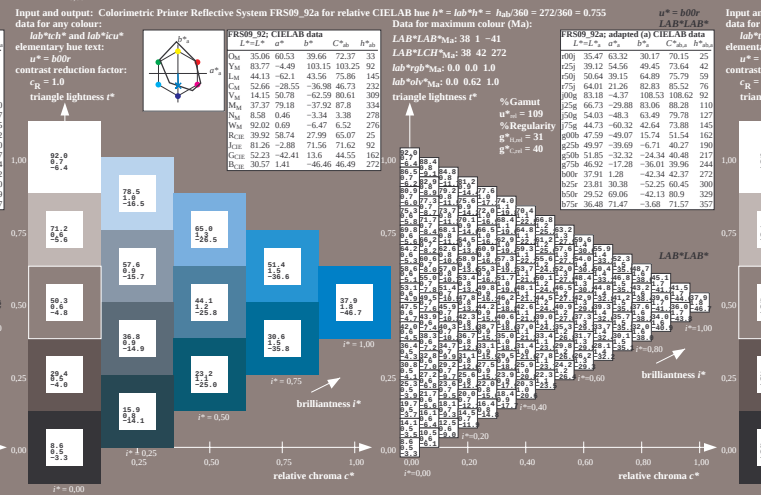


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 272/360 = 0.755$

data for any colour: *lab*tch* and lab*icu**
elementary hue text: *u* = b00r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = b00r*
*LAB*LAB**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 38 1 −41
*LAB*LCH**$_{Ma}$: 38 42 272
*lab*rgb**$_{Ma}$: 0.0 0.0 1.0
*lab*olv**$_{Ma}$: 0.0 0.62 1.0

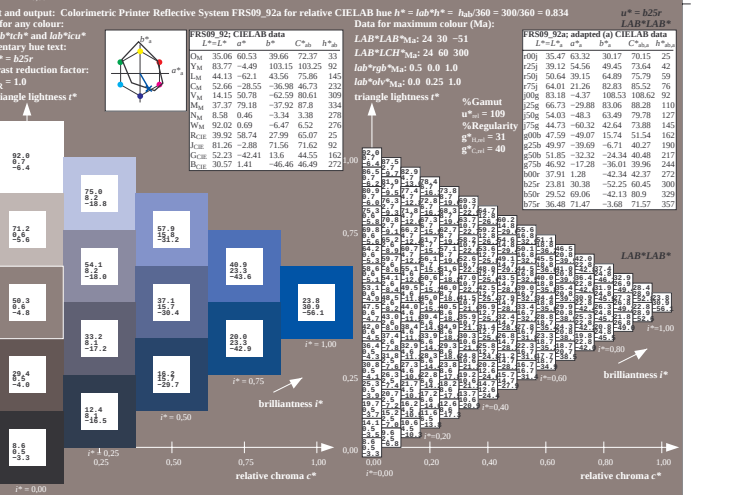


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 300/360 = 0.834$

data for any colour: *lab*tch* and lab*icu**
elementary hue text: *u* = b25r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = b25r*
*LAB*LAB**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 24 30 −51
*LAB*LCH**$_{Ma}$: 24 60 300
*lab*rgb**$_{Ma}$: 0.5 0.0 1.0
*lab*olv**$_{Ma}$: 0.0 0.25 1.0

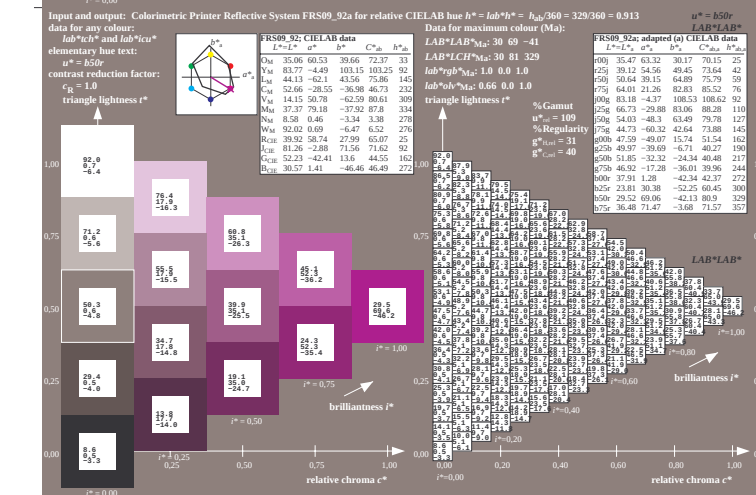


Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 329/360 = 0.913$

data for any colour: *lab*tch* and lab*icu**
elementary hue text: *u* = b50r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = b50r*
*LAB*LAB**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 30 69 −41
*LAB*LCH**$_{Ma}$: 30 81 329
*lab*rgb**$_{Ma}$: 1.0 0.0 1.0
*lab*olv**$_{Ma}$: 0.66 0.0 1.0

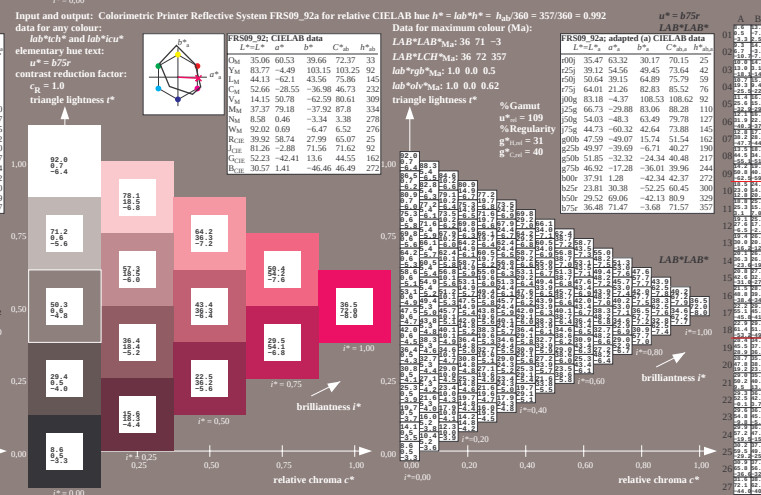


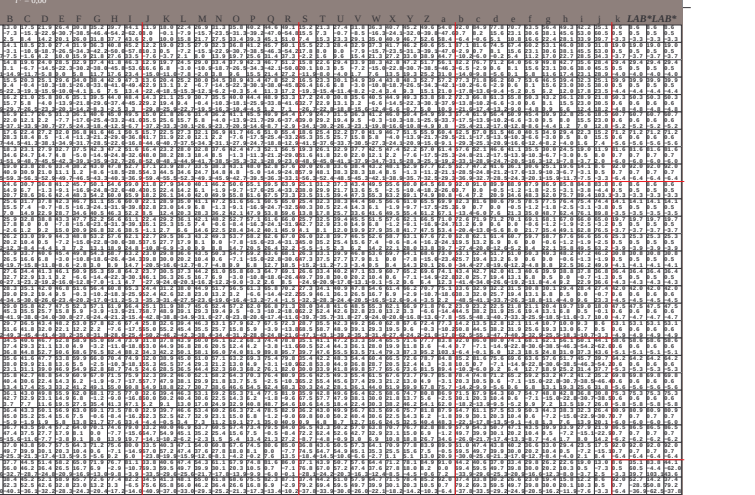
Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 357/360 = 0.992$

data for any colour: *lab*tch* and lab*icu**
elementary hue text: *u* = b75r*
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = b75r*
*LAB*LAB**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 36 71 −3
*LAB*LCH**$_{Ma}$: 36 72 357
*lab*rgb**$_{Ma}$: 1.0 0.0 0.5
*lab*olv**$_{Ma}$: 1.0 0.0 0.62





Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g00b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 48 −48 16
$LAB^*LCH^*_{Ma}$: 48 52 162
$lab^*rgb^*_{Ma}$: 0.0 1.0 0.0
$lab^*olv^*_{Ma}$: 0.0 1.0 0.41

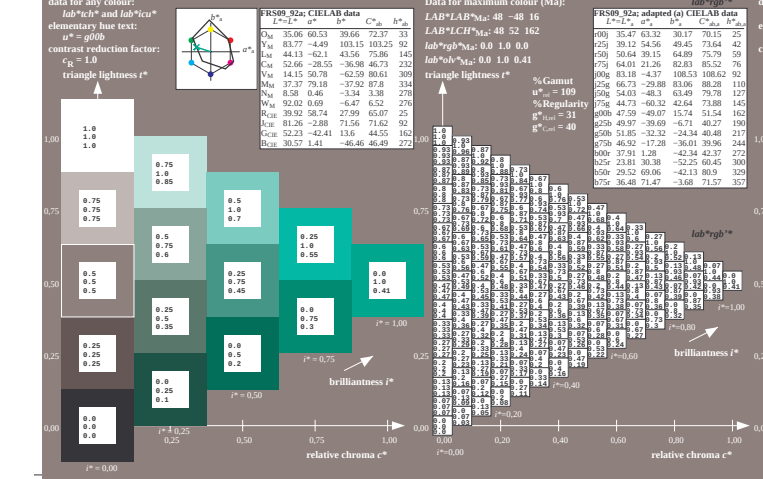
$u^* = g00b$
$lab^*rgb'^*$

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Md}	35.06	60.53	39.66	72.37	33
Y_{Md}	83.77	−4.49	103.15	103.25	92
L_{Md}	44.13	−62.1	43.56	75.86	145
C_{Md}	52.66	−28.55	−36.98	46.73	232
V_{Md}	14.15	50.78	−62.59	80.61	309
M_{Md}	37.37	79.18	−37.92	87.8	334
N_{Md}	8.58	0.46	−3.34	3.38	278
W_{Md}	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g25b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 50 −39 −6
$LAB^*LCH^*_{Ma}$: 50 40 190
$lab^*rgb^*_{Ma}$: 0.0 1.0 0.5
$lab^*olv^*_{Ma}$: 0.0 1.0 0.69

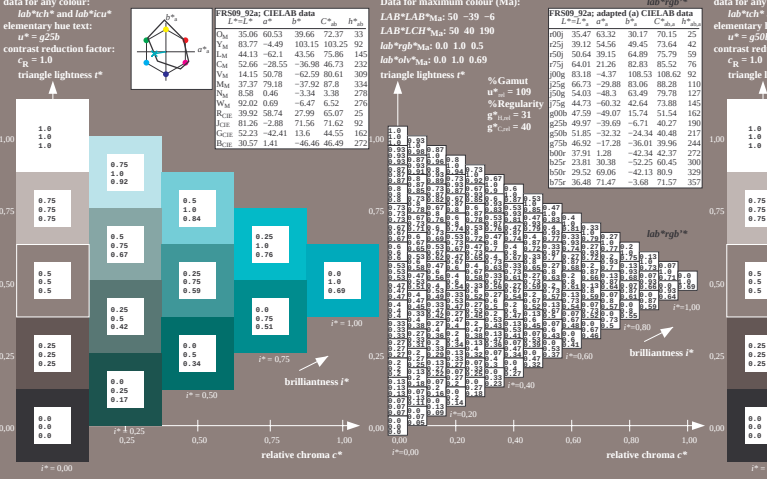
$u^* = g25b$
$lab^*rgb'^*$

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Md}	35.06	60.53	39.66	72.37	33
Y_{Md}	83.77	−4.49	103.15	103.25	92
L_{Md}	44.13	−62.1	43.56	75.86	145
C_{Md}	52.66	−28.55	−36.98	46.73	232
V_{Md}	14.15	50.78	−62.59	80.61	309
M_{Md}	37.37	79.18	−37.92	87.8	334
N_{Md}	8.58	0.46	−3.34	3.38	278
W_{Md}	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 217/360 = 0.603$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g50b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 52 −31 −23
$LAB^*LCH^*_{Ma}$: 52 40 217
$lab^*rgb^*_{Ma}$: 0.0 1.0 1.0
$lab^*olv^*_{Ma}$: 0.0 1.0 0.9

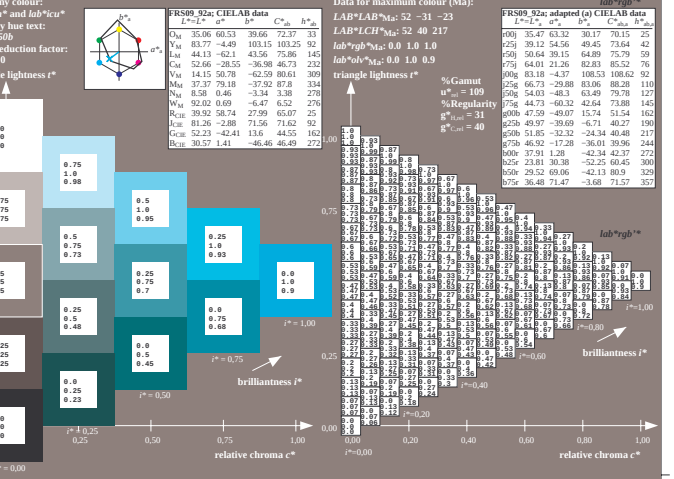
$u^* = g50b$
$lab^*rgb'^*$

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Md}	35.06	60.53	39.66	72.37	33
Y_{Md}	83.77	−4.49	103.15	103.25	92
L_{Md}	44.13	−62.1	43.56	75.86	145
C_{Md}	52.66	−28.55	−36.98	46.73	232
V_{Md}	14.15	50.78	−62.59	80.61	309
M_{Md}	37.37	79.18	−37.92	87.8	334
N_{Md}	8.58	0.46	−3.34	3.38	278
W_{Md}	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 244/360 = 0.679$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g75b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 47 −16 −35
$LAB^*LCH^*_{Ma}$: 47 40 244
$lab^*rgb^*_{Ma}$: 0.0 0.5 1.0
$lab^*olv^*_{Ma}$: 0.0 0.85 1.0

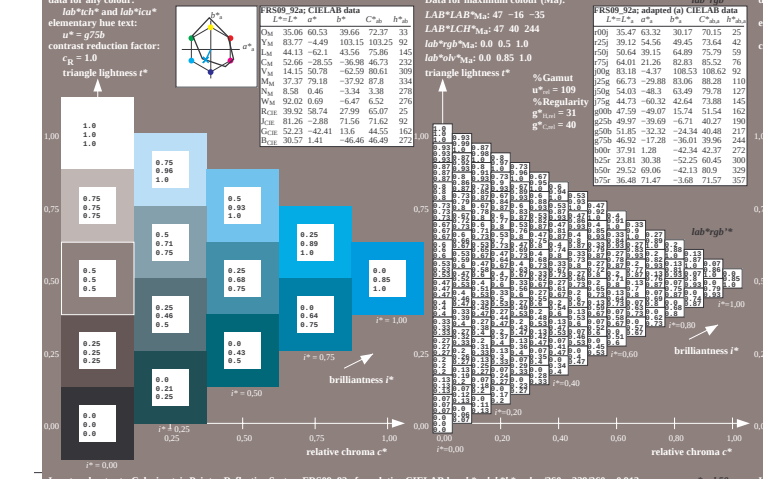
$u^* = g75b$
$lab^*rgb'^*$

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Md}	35.06	60.53	39.66	72.37	33
Y_{Md}	83.77	−4.49	103.15	103.25	92
L_{Md}	44.13	−62.1	43.56	75.86	145
C_{Md}	52.66	−28.55	−36.98	46.73	232
V_{Md}	14.15	50.78	−62.59	80.61	309
M_{Md}	37.37	79.18	−37.92	87.8	334
N_{Md}	8.58	0.46	−3.34	3.38	278
W_{Md}	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 272/360 = 0.755$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b00r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 38 1 −41
$LAB^*LCH^*_{Ma}$: 38 42 272
$lab^*rgb^*_{Ma}$: 0.0 0.0 1.0
$lab^*olv^*_{Ma}$: 0.0 0.62 1.0

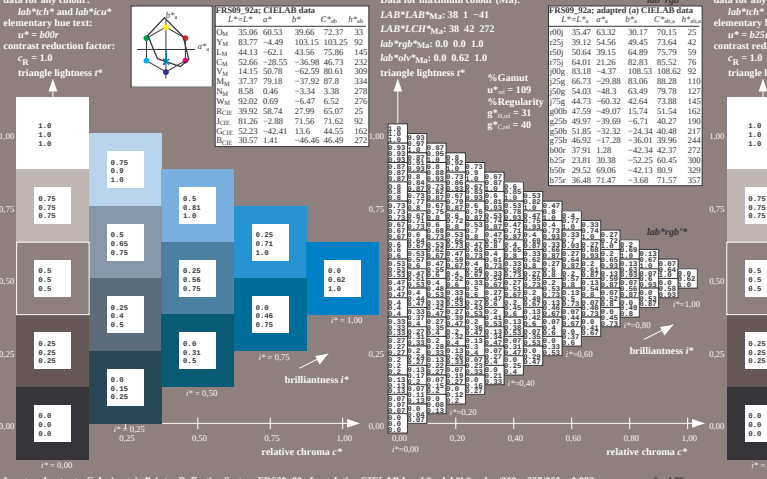
$u^* = b00r$
$lab^*rgb'^*$

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Md}	35.06	60.53	39.66	72.37	33
Y_{Md}	83.77	−4.49	103.15	103.25	92
L_{Md}	44.13	−62.1	43.56	75.86	145
C_{Md}	52.66	−28.55	−36.98	46.73	232
V_{Md}	14.15	50.78	−62.59	80.61	309
M_{Md}	37.37	79.18	−37.92	87.8	334
N_{Md}	8.58	0.46	−3.34	3.38	278
W_{Md}	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 300/360 = 0.834$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b25r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 24 30 −51
$LAB^*LCH^*_{Ma}$: 24 60 300
$lab^*rgb^*_{Ma}$: 0.5 0.0 1.0
$lab^*olv^*_{Ma}$: 0.0 0.25 1.0

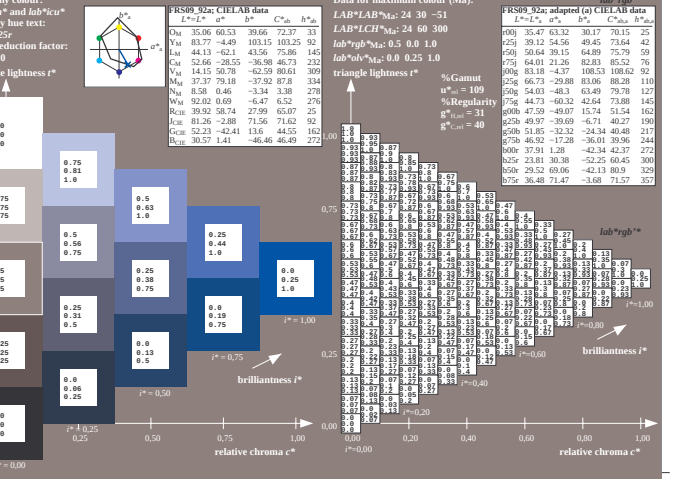
$u^* = b25r$
$lab^*rgb'^*$

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Md}	35.06	60.53	39.66	72.37	33
Y_{Md}	83.77	−4.49	103.15	103.25	92
L_{Md}	44.13	−62.1	43.56	75.86	145
C_{Md}	52.66	−28.55	−36.98	46.73	232
V_{Md}	14.15	50.78	−62.59	80.61	309
M_{Md}	37.37	79.18	−37.92	87.8	334
N_{Md}	8.58	0.46	−3.34	3.38	278
W_{Md}	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 329/360 = 0.913$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b50r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 30 69 −41
$LAB^*LCH^*_{Ma}$: 30 81 329
$lab^*rgb^*_{Ma}$: 1.0 0.0 1.0
$lab^*olv^*_{Ma}$: 0.66 0.0 1.0

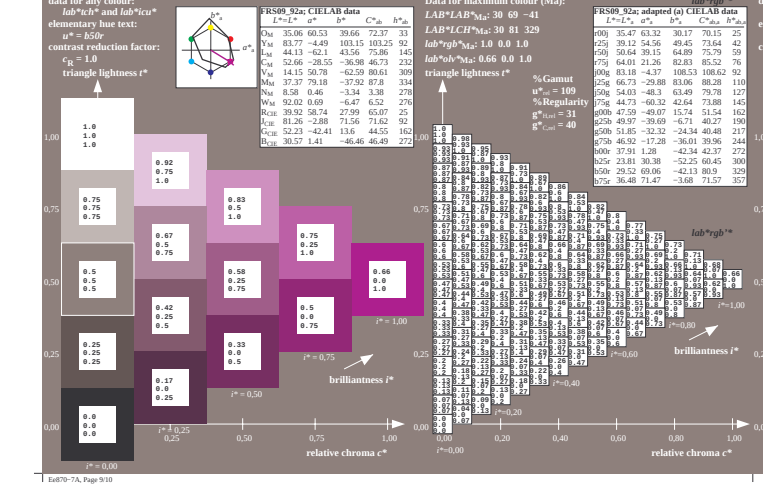
$u^* = b50r$
$lab^*rgb'^*$

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Md}	35.06	60.53	39.66	72.37	33
Y_{Md}	83.77	−4.49	103.15	103.25	92
L_{Md}	44.13	−62.1	43.56	75.86	145
C_{Md}	52.66	−28.55	−36.98	46.73	232
V_{Md}	14.15	50.78	−62.59	80.61	309
M_{Md}	37.37	79.18	−37.92	87.8	334
N_{Md}	8.58	0.46	−3.34	3.38	278
W_{Md}	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 357/360 = 0.992$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b75r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 36 71 −3
$LAB^*LCH^*_{Ma}$: 36 72 357
$lab^*rgb^*_{Ma}$: 1.0 0.0 0.5
$lab^*olv^*_{Ma}$: 1.0 0.0 0.62

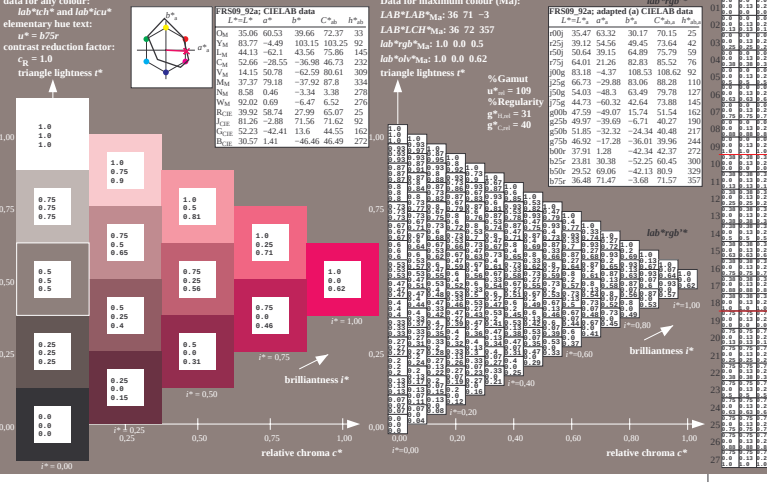
$u^* = b75r$
$lab^*rgb'^*$

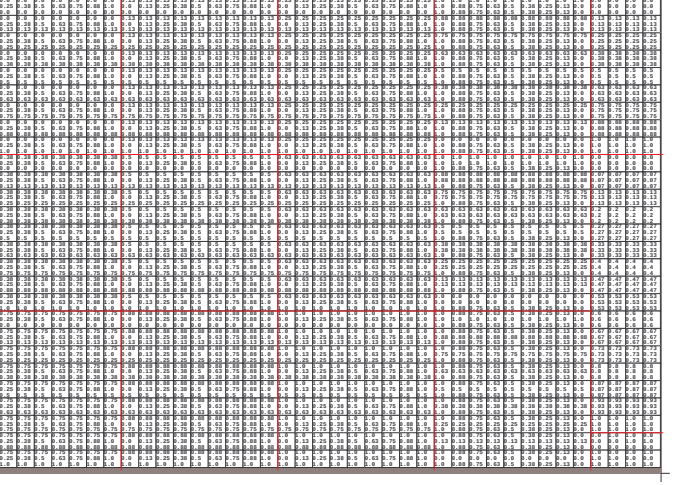
FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Md}	35.06	60.53	39.66	72.37	33
Y_{Md}	83.77	−4.49	103.15	103.25	92
L_{Md}	44.13	−62.1	43.56	75.86	145
C_{Md}	52.66	−28.55	−36.98	46.73	232
V_{Md}	14.15	50.78	−62.59	80.61	309
M_{Md}	37.37	79.18	−37.92	87.8	334
N_{Md}	8.58	0.46	−3.34	3.38	278
W_{Md}	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357





Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g00b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = g00b*
*LAB*cmyn'**

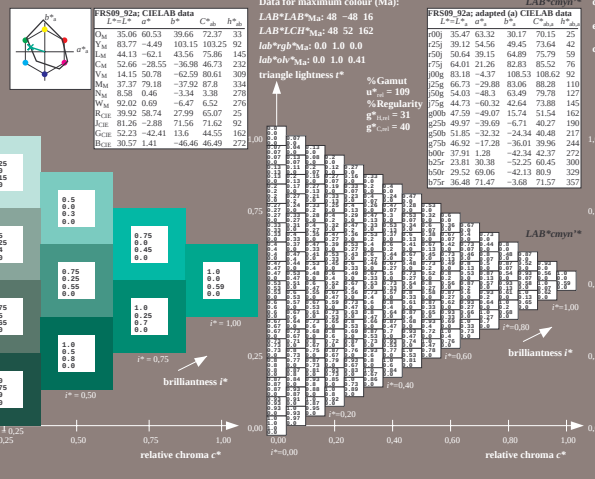
Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 48 −48 16
*LAB*LCH**$_{Ma}$: 48 52 162
*lab*rgb**$_{Ma}$: 0.0 1.0 0.0
*lab*olv**$_{Ma}$: 0.0 1.0 0.41

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Ma}	35.06	60.53	39.66	72.37	33
Y_M	83.77	−4.49	103.15	103.25	92
L_M	44.13	−62.1	43.56	75.86	145
C_M	52.66	−28.55	−36.98	46.73	232
V_M	14.15	50.78	−62.59	80.61	309
M_{Ma}	37.37	79.18	−37.92	87.8	334
N_M	8.58	0.46	−3.34	3.38	278
W_M	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g25b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = g25b*
*LAB*cmyn'**

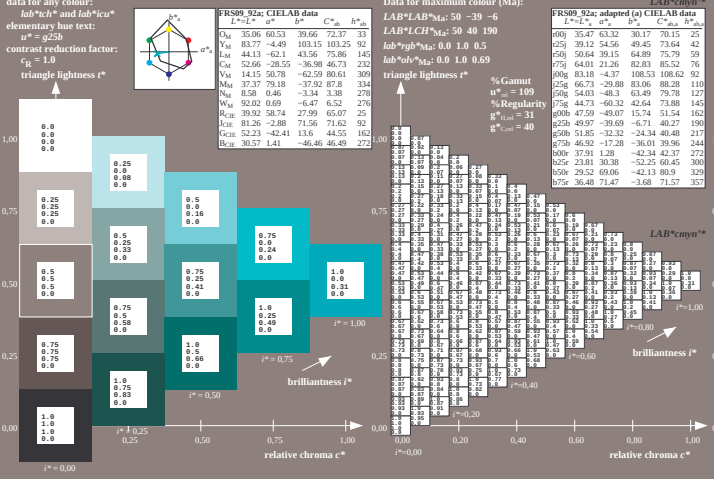
Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 50 −39 −6
*LAB*LCH**$_{Ma}$: 50 40 190
*lab*rgb**$_{Ma}$: 0.0 1.0 0.5
*lab*olv**$_{Ma}$: 0.0 1.0 0.69

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Ma}	35.06	60.53	39.66	72.37	33
Y_M	83.77	−4.49	103.15	103.25	92
L_M	44.13	−62.1	43.56	75.86	145
C_M	52.66	−28.55	−36.98	46.73	232
V_M	14.15	50.78	−62.59	80.61	309
M_{Ma}	37.37	79.18	−37.92	87.8	334
N_M	8.58	0.46	−3.34	3.38	278
W_M	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 217/360 = 0.603$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g50b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = g50b*
*LAB*cmyn'**

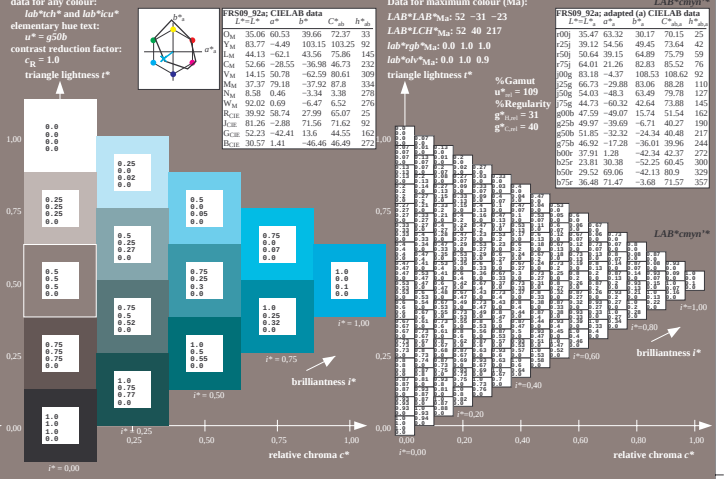
Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 52 −31 −23
*LAB*LCH**$_{Ma}$: 52 40 217
*lab*rgb**$_{Ma}$: 0.0 1.0 1.0
*lab*olv**$_{Ma}$: 0.0 1.0 0.9

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Ma}	35.06	60.53	39.66	72.37	33
Y_M	83.77	−4.49	103.15	103.25	92
L_M	44.13	−62.1	43.56	75.86	145
C_M	52.66	−28.55	−36.98	46.73	232
V_M	14.15	50.78	−62.59	80.61	309
M_{Ma}	37.37	79.18	−37.92	87.8	334
N_M	8.58	0.46	−3.34	3.38	278
W_M	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 244/360 = 0.679$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = g75b$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = g75b*
*LAB*cmyn'**

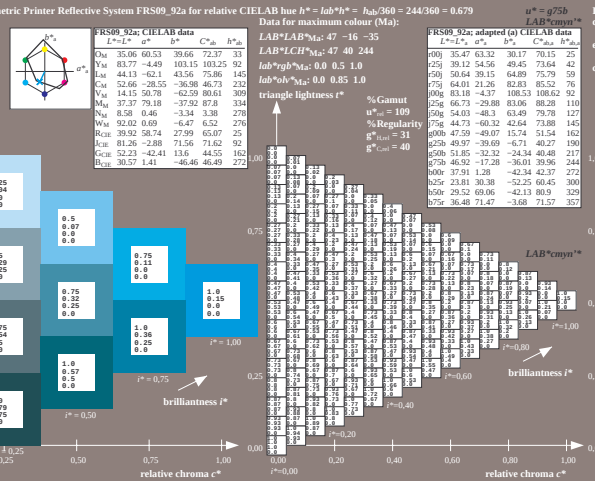
Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 47 −16 −35
*LAB*LCH**$_{Ma}$: 47 40 244
*lab*rgb**$_{Ma}$: 0.0 0.5 1.0
*lab*olv**$_{Ma}$: 0.0 0.85 1.0

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Ma}	35.06	60.53	39.66	72.37	33
Y_M	83.77	−4.49	103.15	103.25	92
L_M	44.13	−62.1	43.56	75.86	145
C_M	52.66	−28.55	−36.98	46.73	232
V_M	14.15	50.78	−62.59	80.61	309
M_{Ma}	37.37	79.18	−37.92	87.8	334
N_M	8.58	0.46	−3.34	3.38	278
W_M	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 272/360 = 0.755$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b00r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = b00r*
*LAB*cmyn'**

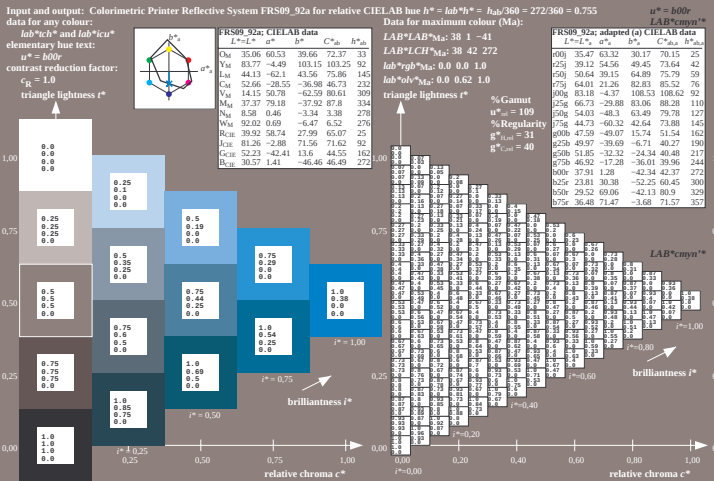
Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 38 1 −41
*LAB*LCH**$_{Ma}$: 38 42 272
*lab*rgb**$_{Ma}$: 0.0 0.0 1.0
*lab*olv**$_{Ma}$: 0.0 0.62 1.0

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Ma}	35.06	60.53	39.66	72.37	33
Y_M	83.77	−4.49	103.15	103.25	92
L_M	44.13	−62.1	43.56	75.86	145
C_M	52.66	−28.55	−36.98	46.73	232
V_M	14.15	50.78	−62.59	80.61	309
M_{Ma}	37.37	79.18	−37.92	87.8	334
N_M	8.58	0.46	−3.34	3.38	278
W_M	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 300/360 = 0.834$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b25r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = b25r*
*LAB*cmyn'**

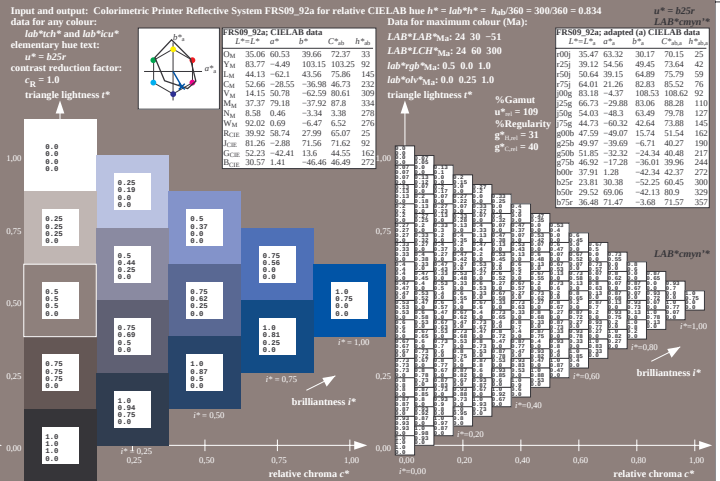
Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 24 30 −51
*LAB*LCH**$_{Ma}$: 24 60 300
*lab*rgb**$_{Ma}$: 0.5 0.0 1.0
*lab*olv**$_{Ma}$: 0.0 0.25 1.0

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Ma}	35.06	60.53	39.66	72.37	33
Y_M	83.77	−4.49	103.15	103.25	92
L_M	44.13	−62.1	43.56	75.86	145
C_M	52.66	−28.55	−36.98	46.73	232
V_M	14.15	50.78	−62.59	80.61	309
M_{Ma}	37.37	79.18	−37.92	87.8	334
N_M	8.58	0.46	−3.34	3.38	278
W_M	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 329/360 = 0.913$

data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b50r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = b50r*
*LAB*cmyn'**

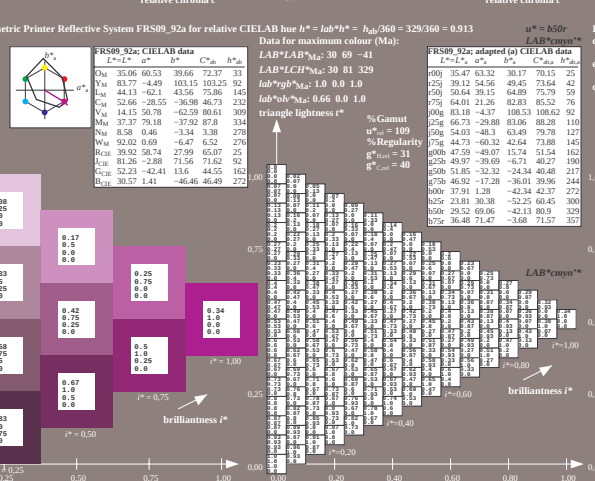
Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 30 69 −41
*LAB*LCH**$_{Ma}$: 30 81 329
*lab*rgb**$_{Ma}$: 1.0 0.0 1.0
*lab*olv**$_{Ma}$: 0.66 0.0 1.0

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Ma}	35.06	60.53	39.66	72.37	33
Y_M	83.77	−4.49	103.15	103.25	92
L_M	44.13	−62.1	43.56	75.86	145
C_M	52.66	−28.55	−36.98	46.73	232
V_M	14.15	50.78	−62.59	80.61	309
M_{Ma}	37.37	79.18	−37.92	87.8	334
N_M	8.58	0.46	−3.34	3.38	278
W_M	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
g50b	51.85	−32.32	−24.34	40.48	217
g75b	46.92	−17.28	−36.01	39.96	244
b00r	37.91	1.28	−42.34	42.37	272
b25r	23.81	30.38	−52.25	60.45	300
b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357



Input and output: Colorimetric Printer Reflective System FRS09_92a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 357/360 = 0.992$

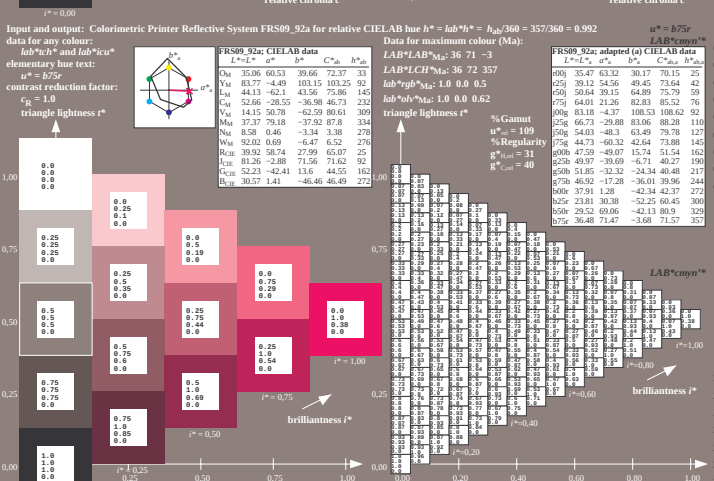
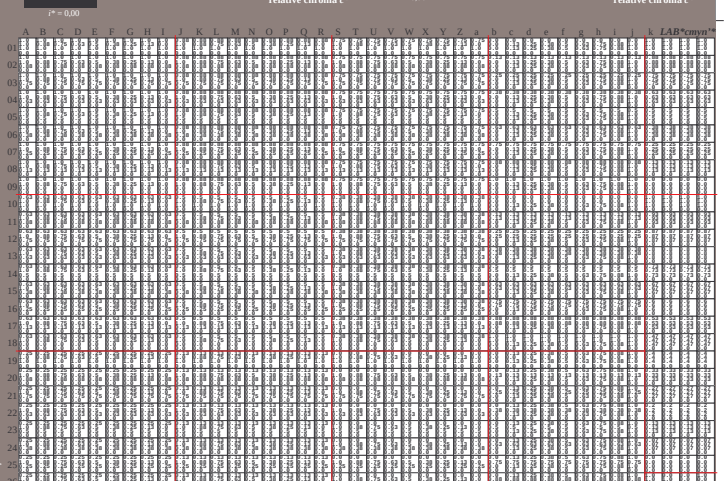
data for any colour: *lab*tch** and *lab*icu**
elementary hue text: $u^* = b75r$
contrast reduction factor: $c_R = 1.0$
triangle lightness t^*

u = b75r*
*LAB*cmyn'**

Data for maximum colour (Ma):
*LAB*LAB**$_{Ma}$: 36 71 −3
*LAB*LCH**$_{Ma}$: 36 72 357
*lab*rgb**$_{Ma}$: 1.0 0.0 0.5
*lab*olv**$_{Ma}$: 1.0 0.0 0.62

FRS09_92a; CIELAB data

	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_{Ma}	35.06	60.53	39.66	72.37	33
Y_M	83.77	−4.49	103.15	103.25	92
L_M	44.13	−62.1	43.56	75.86	145
C_M	52.66	−28.55	−36.98	46.73	232
V_M	14.15	50.78	−62.59	80.61	309
M_{Ma}	37.37	79.18	−37.92	87.8	334
N_M	8.58	0.46	−3.34	3.38	278
W_M	92.02	0.69	−6.47	6.52	276
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

FRS09_92a; adapted (a) CIELAB data

	$L^*=L^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
r00j	35.47	63.32	30.17	70.15	25
r25j	39.12	54.56	49.45	73.64	42
r50j	50.64	39.15	64.89	75.79	59
r75j	64.01	21.26	82.83	85.52	76
g00g	83.18	−4.37	108.53	108.62	92
g25g	66.73	−29.88	83.06	88.28	110
g50g	54.03	−48.3	63.49	79.78	127
g75g	44.73	−60.32	42.64	73.88	145
g00b	47.59	−49.07	15.74	51.54	162
g25b	49.97	−39.69	−6.71	40.27	190
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b50r	29.52	69.06	−42.13	80.9	329
b75r	36.48	71.47	−3.68	71.57	357