Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.451$ $u^*_E = g00b$

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

Hue texts: $u^*_E = g00b$ $u^*_A = I23c$

contrast reduction factor: $c_{IE} = 0.9$

triangle lightness t^*

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 55 −44 14

$LAB^*LCH^*_{Ma}$: 55 46 162

$lab^*rgb^*_{Ma}$: 0.0 1.0 0.0

$lab^*olv^*_{Ma}$: 0.0 1.0 0.23

triangle lightness t^*

%Gamut $u^*_{sol} = 88$

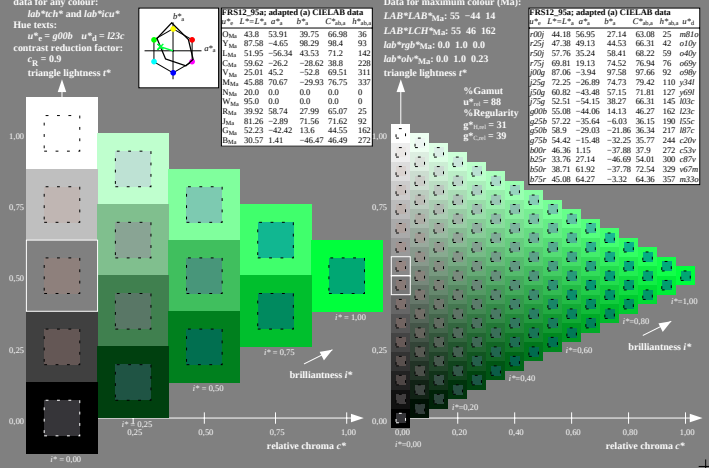
%Regularity $g^*_{H,ext} = 31$ $g^*_{C,ext} = 39$

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	u^*_A
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33c	



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.527$ $u^*_E = g25b$

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

Hue texts: $u^*_E = g25b$ $u^*_A = I55c$

contrast reduction factor: $c_{IE} = 0.9$

triangle lightness t^*

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 57 −36 −6

$LAB^*LCH^*_{Ma}$: 57 36 189

$lab^*rgb^*_{Ma}$: 0.0 1.0 0.5

$lab^*olv^*_{Ma}$: 0.0 1.0 0.55

triangle lightness t^*

%Gamut $u^*_{sol} = 88$

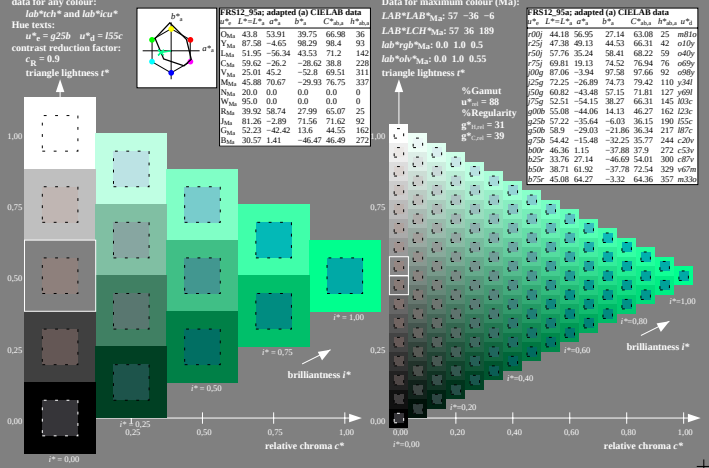
%Regularity $g^*_{H,ext} = 31$ $g^*_{C,ext} = 39$

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	u^*_A
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33c	



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.603$ $u^*_E = g50b$

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

Hue texts: $u^*_E = g50b$ $u^*_A = I87c$

contrast reduction factor: $c_{IE} = 0.9$

triangle lightness t^*

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 59 −29 −22

$LAB^*LCH^*_{Ma}$: 59 36 216

$lab^*rgb^*_{Ma}$: 0.0 1.0 1.0

$lab^*olv^*_{Ma}$: 0.0 1.0 0.88

triangle lightness t^*

%Gamut $u^*_{sol} = 88$

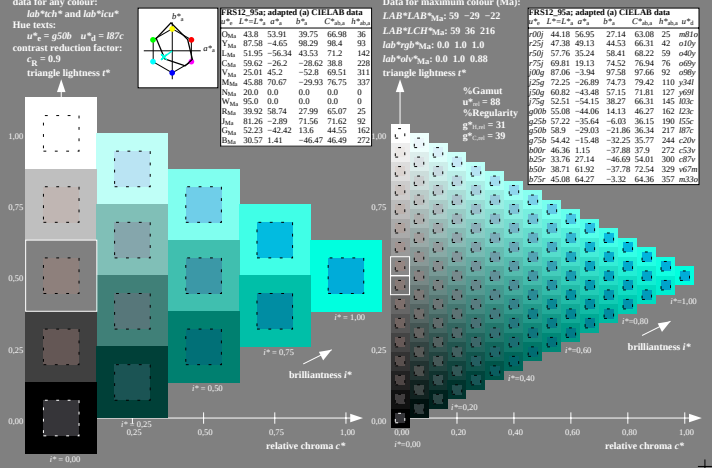
%Regularity $g^*_{H,ext} = 31$ $g^*_{C,ext} = 39$

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	u^*_A
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33c	



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.679$ $u^*_E = g75b$

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

Hue texts: $u^*_E = g75b$ $u^*_A = c20v$

contrast reduction factor: $c_{IE} = 0.9$

triangle lightness t^*

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 54 −15 −32

$LAB^*LCH^*_{Ma}$: 54 36 244

$lab^*rgb^*_{Ma}$: 0.0 0.5 1.0

$lab^*olv^*_{Ma}$: 0.0 0.8 1.0

triangle lightness t^*

%Gamut $u^*_{sol} = 88$

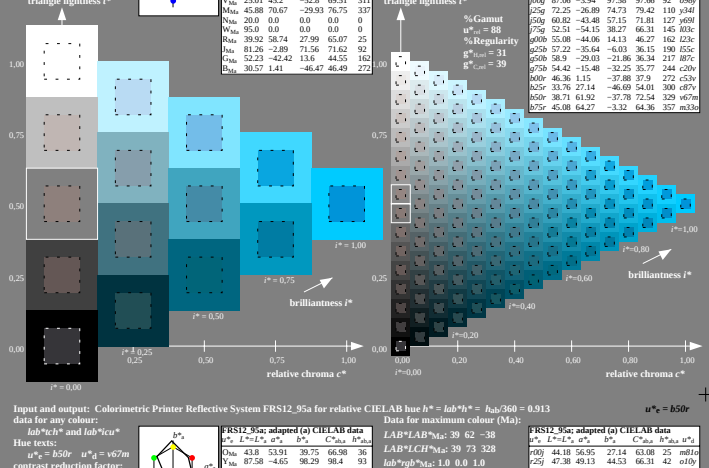
%Regularity $g^*_{H,ext} = 31$ $g^*_{C,ext} = 39$

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	u^*_A
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33c	



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.755$ $u^*_E = b00r$

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

Hue texts: $u^*_E = b00r$ $u^*_A = c53v$

contrast reduction factor: $c_{IE} = 0.9$

triangle lightness t^*

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 46 1 −38

$LAB^*LCH^*_{Ma}$: 46 38 271

$lab^*rgb^*_{Ma}$: 0.0 0.0 1.0

$lab^*olv^*_{Ma}$: 0.0 0.47 1.0

triangle lightness t^*

%Gamut $u^*_{sol} = 88$

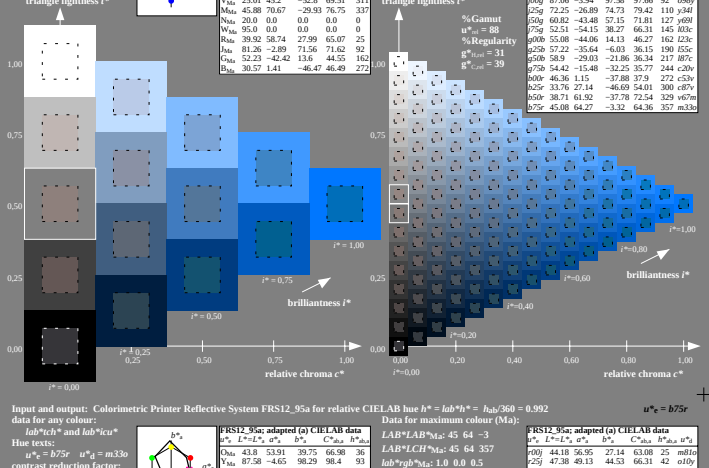
%Regularity $g^*_{H,ext} = 31$ $g^*_{C,ext} = 39$

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	u^*_A
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33c	



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.834$ $u^*_E = b25r$

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

Hue texts: $u^*_E = b25r$ $u^*_A = c87v$

contrast reduction factor: $c_{IE} = 0.9$

triangle lightness t^*

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 34 27 −47

$LAB^*LCH^*_{Ma}$: 34 54 300

$lab^*rgb^*_{Ma}$: 0.5 0.0 1.0

$lab^*olv^*_{Ma}$: 0.0 0.13 1.0

triangle lightness t^*

%Gamut $u^*_{sol} = 88$

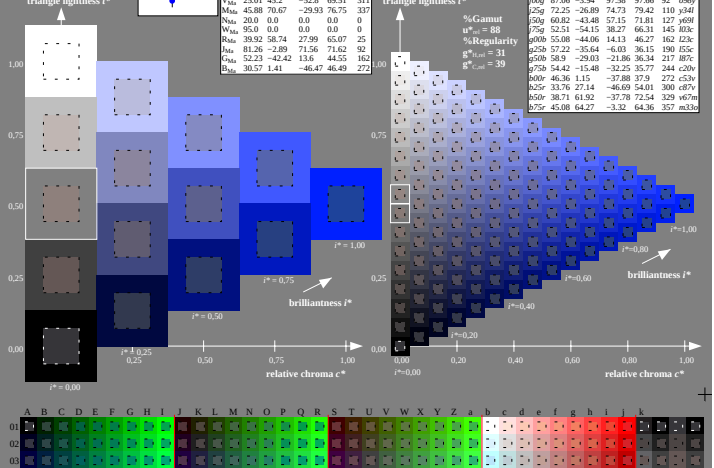
%Regularity $g^*_{H,ext} = 31$ $g^*_{C,ext} = 39$

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	u^*_A
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33c	



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.913$ $u^*_E = b50r$

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

Hue texts: $u^*_E = b50r$ $u^*_A = v67m$

contrast reduction factor: $c_{IE} = 0.9$

triangle lightness t^*

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 39 62 −38

$LAB^*LCH^*_{Ma}$: 39 73 328

$lab^*rgb^*_{Ma}$: 1.0 0.0 1.0

$lab^*olv^*_{Ma}$: 0.68 0.0 1.0

triangle lightness t^*

%Gamut $u^*_{sol} = 88$

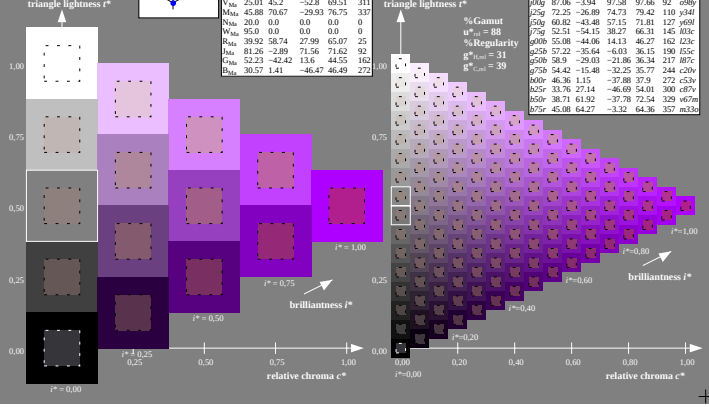
%Regularity $g^*_{H,ext} = 31$ $g^*_{C,ext} = 39$

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	u^*_A
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33c	



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.992$ $u^*_E = b75r$

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

Hue texts: $u^*_E = b75r$ $u^*_A = m33o$

contrast reduction factor: $c_{IE} = 0.9$

triangle lightness t^*

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 45 64 −3

$LAB^*LCH^*_{Ma}$: 45 64 357

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.5

$lab^*olv^*_{Ma}$: 1.0 0.0 0.66

triangle lightness t^*

%Gamut $u^*_{sol} = 88$

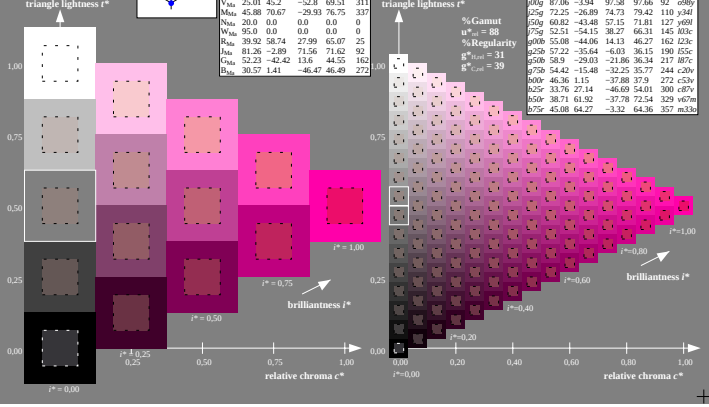
%Regularity $g^*_{H,ext} = 31$ $g^*_{C,ext} = 39$

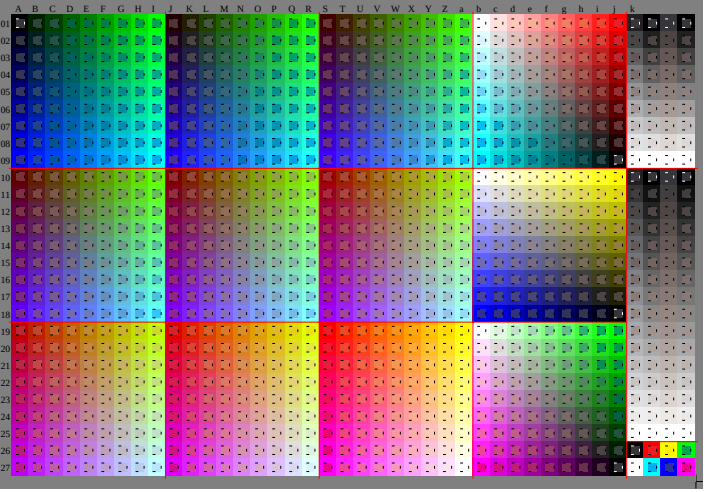
FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_A	a^*_A	b^*_A	$C^*_{ab,A}$	$h^*_{ab,A}$	u^*_A
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33c	





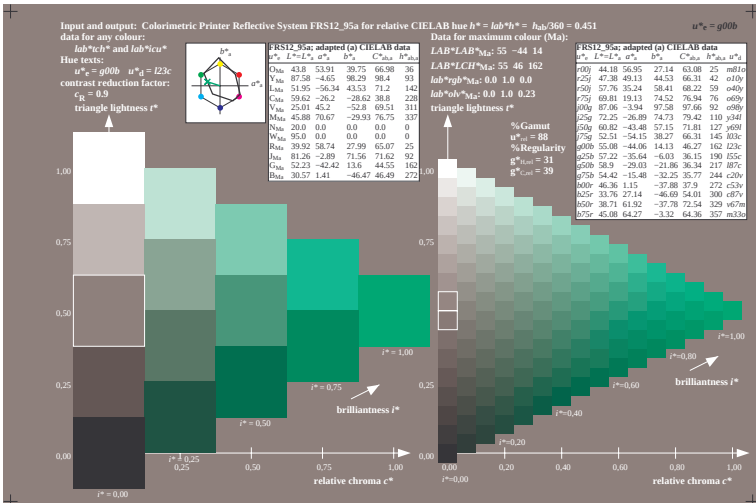
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.451$ $u^*_E = g00b$

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

Hue texts: $u^*_E = g00b$ $u^*_\Delta = I23c$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 55 −44 14 $LAB^*LCH^*_{Ma}$: 55 46 162 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.0 $lab^*olv^*_{Ma}$: 0.0 1.0 0.23



FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}
O_{Ma}	43.8	53.91	39.75	66.98	36
Y_{Ma}	87.58	−4.65	98.29	98.4	93
L_{Ma}	51.95	−56.34	43.53	71.2	142
C_{Ma}	59.62	−26.2	−28.62	38.8	228
V_{Ma}	25.01	45.2	−52.8	69.51	311
M_{Ma}	45.88	70.67	−29.93	76.75	337
N_{Ma}	20.0	0.0	0.0	0.0	0
W_{Ma}	95.0	0.0	0.0	0.0	0
R_{Ma}	39.92	58.74	27.99	65.07	25
J_{Ma}	81.26	−2.89	71.56	71.62	92
G_{Ma}	52.23	−42.42	13.6	44.55	162
B_{Ma}	30.57	1.41	−46.47	46.49	272

FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}	
r00j	44.18	56.95	27.14	63.08	25	m81r
r25j	47.38	49.13	44.53	66.31	42	o10y
r50j	57.76	35.24	58.41	68.22	59	o40y
r75j	69.81	19.13	74.52	76.94	76	o69y
g00g	87.06	−3.94	97.58	97.66	92	o98y
g25g	72.25	−26.89	74.73	79.42	110	y34f
g50g	60.82	−43.48	57.15	71.81	127	y69f
g75g	52.51	−54.15	38.27	66.31	145	l03c
g00b	55.08	−44.06	14.13	46.27	162	l23c
g25b	57.22	−35.64	−6.03	36.15	190	l55c
g50b	58.9	−29.03	−21.86	36.34	217	l87c
g75b	54.42	−15.48	−32.25	35.77	244	c20v
b00r	46.36	1.15	−37.88	37.9	272	c53v
b25r	33.76	27.14	−46.69	54.01	300	c87v
b50r	38.71	61.92	−37.78	72.54	329	v67m
b75r	45.08	64.27	−3.32	64.36	357	m33c

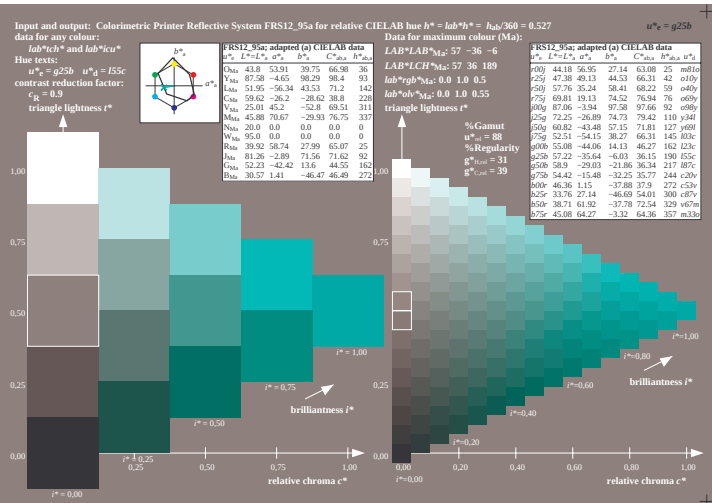
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.527$ $u^*_E = g25b$

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

Hue texts: $u^*_E = g25b$ $u^*_\Delta = I55c$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 57 −36 −6 $LAB^*LCH^*_{Ma}$: 57 36 189 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.5 $lab^*olv^*_{Ma}$: 0.0 1.0 0.55



FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}
O_{Ma}	43.8	53.91	39.75	66.98	36
Y_{Ma}	87.58	−4.65	98.29	98.4	93
L_{Ma}	51.95	−56.34	43.53	71.2	142
C_{Ma}	59.62	−26.2	−28.62	38.8	228
V_{Ma}	25.01	45.2	−52.8	69.51	311
M_{Ma}	45.88	70.67	−29.93	76.75	337
N_{Ma}	20.0	0.0	0.0	0.0	0
W_{Ma}	95.0	0.0	0.0	0.0	0
R_{Ma}	39.92	58.74	27.99	65.07	25
J_{Ma}	81.26	−2.89	71.56	71.62	92
G_{Ma}	52.23	−42.42	13.6	44.55	162
B_{Ma}	30.57	1.41	−46.47	46.49	272

FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}	
r00j	44.18	56.95	27.14	63.08	25	m81r
r25j	47.38	49.13	44.53	66.31	42	o10y
r50j	57.76	35.24	58.41	68.22	59	o40y
r75j	69.81	19.13	74.52	76.94	76	o69y
g00g	87.06	−3.94	97.58	97.66	92	o98y
g25g	72.25	−26.89	74.73	79.42	110	y34f
g50g	60.82	−43.48	57.15	71.81	127	y69f
g75g	52.51	−54.15	38.27	66.31	145	l03c
g00b	55.08	−44.06	14.13	46.27	162	l23c
g25b	57.22	−35.64	−6.03	36.15	190	l55c
g50b	58.9	−29.03	−21.86	36.34	217	l87c
g75b	54.42	−15.48	−32.25	35.77	244	c20v
b00r	46.36	1.15	−37.88	37.9	272	c53v
b25r	33.76	27.14	−46.69	54.01	300	c87v
b50r	38.71	61.92	−37.78	72.54	329	v67m
b75r	45.08	64.27	−3.32	64.36	357	m33c

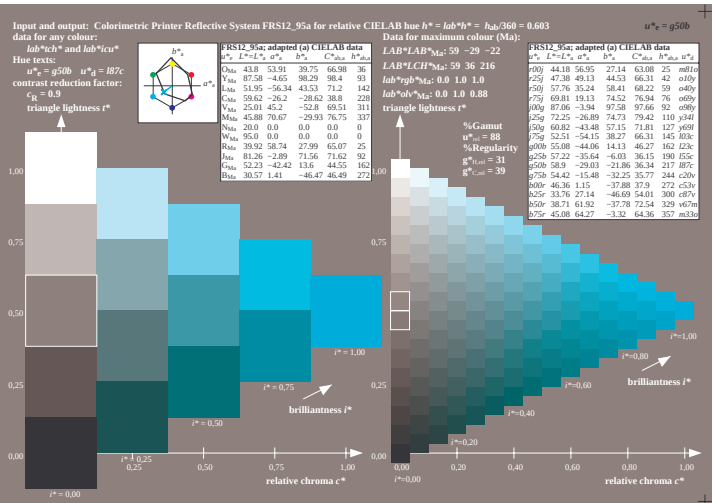
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.603$ $u^*_E = g50b$

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

Hue texts: $u^*_E = g50b$ $u^*_\Delta = I87c$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 59 −29 −22 $LAB^*LCH^*_{Ma}$: 59 36 216 $lab^*rgb^*_{Ma}$: 0.0 1.0 1.0 $lab^*olv^*_{Ma}$: 0.0 1.0 0.88



FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}
O_{Ma}	43.8	53.91	39.75	66.98	36
Y_{Ma}	87.58	−4.65	98.29	98.4	93
L_{Ma}	51.95	−56.34	43.53	71.2	142
C_{Ma}	59.62	−26.2	−28.62	38.8	228
V_{Ma}	25.01	45.2	−52.8	69.51	311
M_{Ma}	45.88	70.67	−29.93	76.75	337
N_{Ma}	20.0	0.0	0.0	0.0	0
W_{Ma}	95.0	0.0	0.0	0.0	0
R_{Ma}	39.92	58.74	27.99	65.07	25
J_{Ma}	81.26	−2.89	71.56	71.62	92
G_{Ma}	52.23	−42.42	13.6	44.55	162
B_{Ma}	30.57	1.41	−46.47	46.49	272

FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}	
r00j	44.18	56.95	27.14	63.08	25	m81r
r25j	47.38	49.13	44.53	66.31	42	o10y
r50j	57.76	35.24	58.41	68.22	59	o40y
r75j	69.81	19.13	74.52	76.94	76	o69y
g00g	87.06	−3.94	97.58	97.66	92	o98y
g25g	72.25	−26.89	74.73	79.42	110	y34f
g50g	60.82	−43.48	57.15	71.81	127	y69f
g75g	52.51	−54.15	38.27	66.31	145	l03c
g00b	55.08	−44.06	14.13	46.27	162	l23c
g25b	57.22	−35.64	−6.03	36.15	190	l55c
g50b	58.9	−29.03	−21.86	36.34	217	l87c
g75b	54.42	−15.48	−32.25	35.77	244	c20v
b00r	46.36	1.15	−37.88	37.9	272	c53v
b25r	33.76	27.14	−46.69	54.01	300	c87v
b50r	38.71	61.92	−37.78	72.54	329	v67m
b75r	45.08	64.27	−3.32	64.36	357	m33c

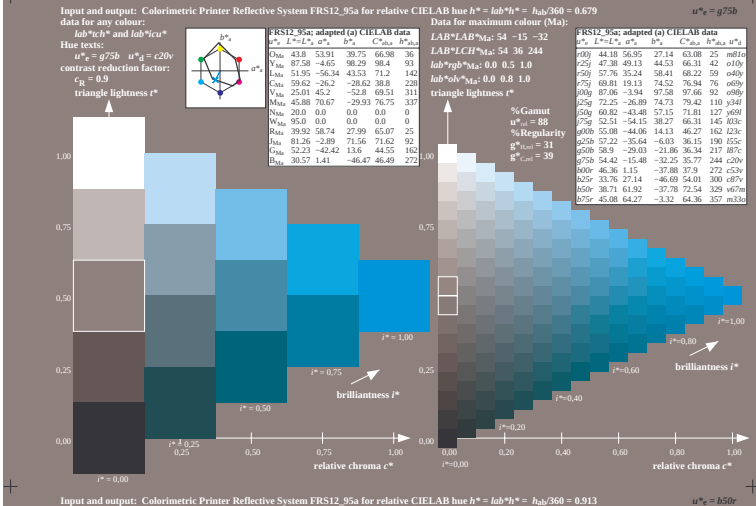
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.679$ $u^*_E = g75b$

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

Hue texts: $u^*_E = g75b$ $u^*_\Delta = c20v$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 54 −15 −32 $LAB^*LCH^*_{Ma}$: 54 36 244 $lab^*rgb^*_{Ma}$: 0.0 0.5 1.0 $lab^*olv^*_{Ma}$: 0.0 0.8 1.0



FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}
O_{Ma}	43.8	53.91	39.75	66.98	36
Y_{Ma}	87.58	−4.65	98.29	98.4	93
L_{Ma}	51.95	−56.34	43.53	71.2	142
C_{Ma}	59.62	−26.2	−28.62	38.8	228
V_{Ma}	25.01	45.2	−52.8	69.51	311
M_{Ma}	45.88	70.67	−29.93	76.75	337
N_{Ma}	20.0	0.0	0.0	0.0	0
W_{Ma}	95.0	0.0	0.0	0.0	0
R_{Ma}	39.92	58.74	27.99	65.07	25
J_{Ma}	81.26	−2.89	71.56	71.62	92
G_{Ma}	52.23	−42.42	13.6	44.55	162
B_{Ma}	30.57	1.41	−46.47	46.49	272

FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}	
r00j	44.18	56.95	27.14	63.08	25	m81r
r25j	47.38	49.13	44.53	66.31	42	o10y
r50j	57.76	35.24	58.41	68.22	59	o40y
r75j	69.81	19.13	74.52	76.94	76	o69y
g00g	87.06	−3.94	97.58	97.66	92	o98y
g25g	72.25	−26.89	74.73	79.42	110	y34f
g50g	60.82	−43.48	57.15	71.81	127	y69f
g75g	52.51	−54.15	38.27	66.31	145	l03c
g00b	55.08	−44.06	14.13	46.27	162	l23c
g25b	57.22	−35.64	−6.03	36.15	190	l55c
g50b	58.9	−29.03	−21.86	36.34	217	l87c
g75b	54.42	−15.48	−32.25	35.77	244	c20v
b00r	46.36	1.15	−37.88	37.9	272	c53v
b25r	33.76	27.14	−46.69	54.01	300	c87v
b50r	38.71	61.92	−37.78	72.54	329	v67m
b75r	45.08	64.27	−3.32	64.36	357	m33c

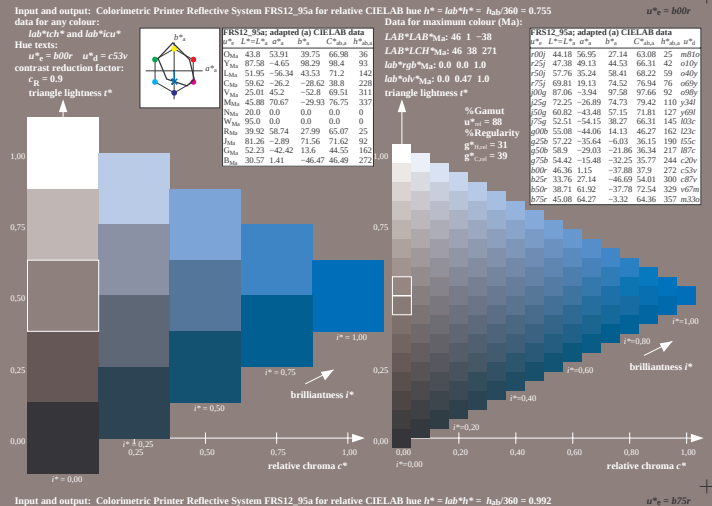
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.755$ $u^*_E = b00r$

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

Hue texts: $u^*_E = b00r$ $u^*_\Delta = c53v$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 46 1 −38 $LAB^*LCH^*_{Ma}$: 46 38 271 $lab^*rgb^*_{Ma}$: 0.0 0.0 1.0 $lab^*olv^*_{Ma}$: 0.0 0.47 1.0



FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}
O_{Ma}	43.8	53.91	39.75	66.98	36
Y_{Ma}	87.58	−4.65	98.29	98.4	93
L_{Ma}	51.95	−56.34	43.53	71.2	142
C_{Ma}	59.62	−26.2	−28.62	38.8	228
V_{Ma}	25.01	45.2	−52.8	69.51	311
M_{Ma}	45.88	70.67	−29.93	76.75	337
N_{Ma}	20.0	0.0	0.0	0.0	0
W_{Ma}	95.0	0.0	0.0	0.0	0
R_{Ma}	39.92	58.74	27.99	65.07	25
J_{Ma}	81.26	−2.89	71.56	71.62	92
G_{Ma}	52.23	−42.42	13.6	44.55	162
B_{Ma}	30.57	1.41	−46.47	46.49	272

FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}	
r00j	44.18	56.95	27.14	63.08	25	m81r
r25j	47.38	49.13	44.53	66.31	42	o10y
r50j	57.76	35.24	58.41	68.22	59	o40y
r75j	69.81	19.13	74.52	76.94	76	o69y
g00g	87.06	−3.94	97.58	97.66	92	o98y
g25g	72.25	−26.89	74.73	79.42	110	y34f
g50g	60.82	−43.48	57.15	71.81	127	y69f
g75g	52.51	−54.15	38.27	66.31	145	l03c
g00b	55.08	−44.06	14.13	46.27	162	l23c
g25b	57.22	−35.64	−6.03	36.15	190	l55c
g50b	58.9	−29.03	−21.86	36.34	217	l87c
g75b	54.42	−15.48	−32.25	35.77	244	c20v
b00r	46.36	1.15	−37.88	37.9	272	c53v
b25r	33.76	27.14	−46.69	54.01	300	c87v
b50r	38.71	61.92	−37.78	72.54	329	v67m
b75r	45.08	64.27	−3.32	64.36	357	m33c

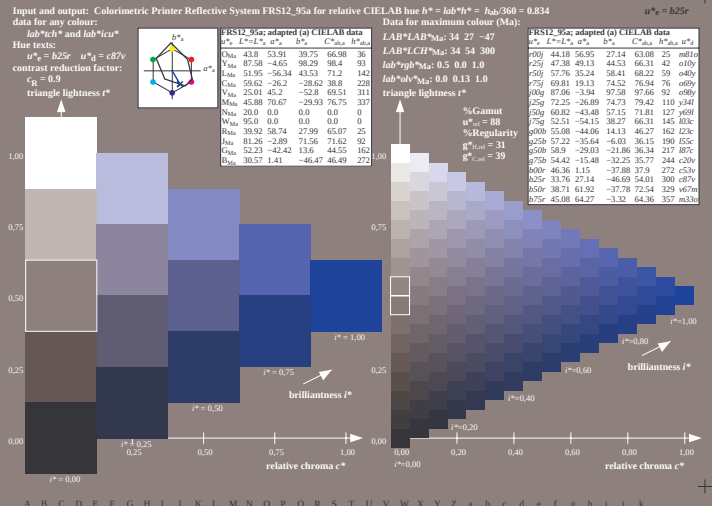
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.834$ $u^*_E = b25r$

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

Hue texts: $u^*_E = b25r$ $u^*_\Delta = c87v$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 34 27 −47 $LAB^*LCH^*_{Ma}$: 34 54 300 $lab^*rgb^*_{Ma}$: 0.5 0.0 1.0 $lab^*olv^*_{Ma}$: 0.0 0.13 1.0



FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}
O_{Ma}	43.8	53.91	39.75	66.98	36
Y_{Ma}	87.58	−4.65	98.29	98.4	93
L_{Ma}	51.95	−56.34	43.53	71.2	142
C_{Ma}	59.62	−26.2	−28.62	38.8	228
V_{Ma}	25.01	45.2	−52.8	69.51	311
M_{Ma}	45.88	70.67	−29.93	76.75	337
N_{Ma}	20.0	0.0	0.0	0.0	0
W_{Ma}	95.0	0.0	0.0	0.0	0
R_{Ma}	39.92	58.74	27.99	65.07	25
J_{Ma}	81.26	−2.89	71.56	71.62	92
G_{Ma}	52.23	−42.42	13.6	44.55	162
B_{Ma}	30.57	1.41	−46.47	46.49	272

FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}	
r00j	44.18	56.95	27.14	63.08	25	m81r
r25j	47.38	49.13	44.53	66.31	42	o10y
r50j	57.76	35.24	58.41	68.22	59	o40y
r75j	69.81	19.13	74.52	76.94	76	o69y
g00g	87.06	−3.94	97.58	97.66	92	o98y
g25g	72.25	−26.89	74.73	79.42	110	y34f
g50g	60.82	−43.48	57.15	71.81	127	y69f
g75g	52.51	−54.15	38.27	66.31	145	l03c
g00b	55.08	−44.06	14.13	46.27	162	l23c
g25b	57.22	−35.64	−6.03	36.15	190	l55c
g50b	58.9	−29.03	−21.86	36.34	217	l87c
g75b	54.42	−15.48	−32.25	35.77	244	c20v
b00r	46.36	1.15	−37.88	37.9	272	c53v
b25r	33.76	27.14	−46.69	54.01	300	c87v
b50r	38.71	61.92	−37.78	72.54	329	v67m
b75r	45.08	64.27	−3.32	64.36	357	m33c

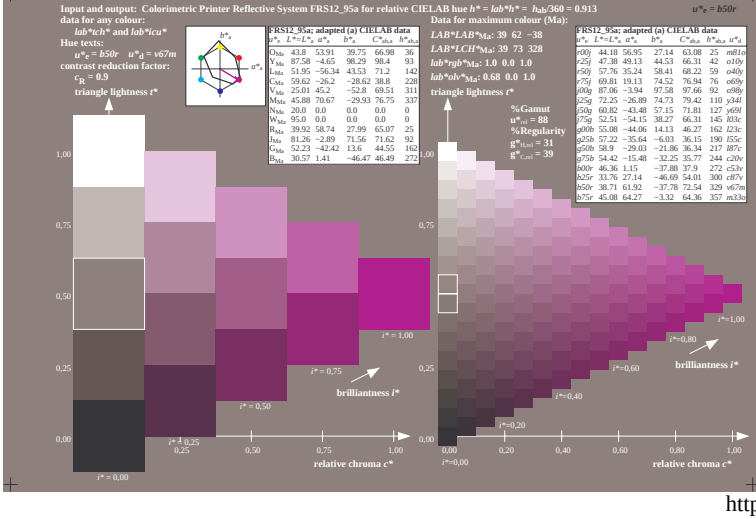
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.913$ $u^*_E = b50r$

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

Hue texts: $u^*_E = b50r$ $u^*_\Delta = v67m$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 39 62 −38 $LAB^*LCH^*_{Ma}$: 39 73 328 $lab^*rgb^*_{Ma}$: 1.0 0.0 1.0 $lab^*olv^*_{Ma}$: 0.68 0.0 1.0



FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}
O_{Ma}	43.8	53.91	39.75	66.98	36
Y_{Ma}	87.58	−4.65	98.29	98.4	93
L_{Ma}	51.95	−56.34	43.53	71.2	142
C_{Ma}	59.62	−26.2	−28.62	38.8	228
V_{Ma}	25.01	45.2	−52.8	69.51	311
M_{Ma}	45.88	70.67	−29.93	76.75	337
N_{Ma}	20.0	0.0	0.0	0.0	0
W_{Ma}	95.0	0.0	0.0	0.0	0
R_{Ma}	39.92	58.74	27.99	65.07	25
J_{Ma}	81.26	−2.89	71.56	71.62	92
G_{Ma}	52.23	−42.42	13.6	44.55	162
B_{Ma}	30.57	1.41	−46.47	46.49	272

FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}	
r00j	44.18	56.95	27.14	63.08	25	m81r
r25j	47.38	49.13	44.53	66.31	42	o10y
r50j	57.76	35.24	58.41	68.22	59	o40y
r75j	69.81	19.13	74.52	76.94	76	o69y
g00g	87.06	−3.94	97.58	97.66	92	o98y
g25g	72.25	−26.89	74.73	79.42	110	y34f
g50g	60.82	−43.48	57.15	71.81	127	y69f
g75g	52.51	−54.15	38.27	66.31	145	l03c
g00b	55.08	−44.06	14.13	46.27	162	l23c
g25b	57.22	−35.64	−6.03	36.15	190	l55c
g50b	58.9	−29.03	−21.86	36.34	217	l87c
g75b	54.42	−15.48	−32.25	35.77	244	c20v
b00r	46.36	1.15	−37.88	37.9	272	c53v
b25r	33.76	27.14	−46.69	54.01	300	c87v
b50r	38.71	61.92	−37.78	72.54	329	v67m
b75r	45.08	64.27	−3.32	64.36	357	m33c

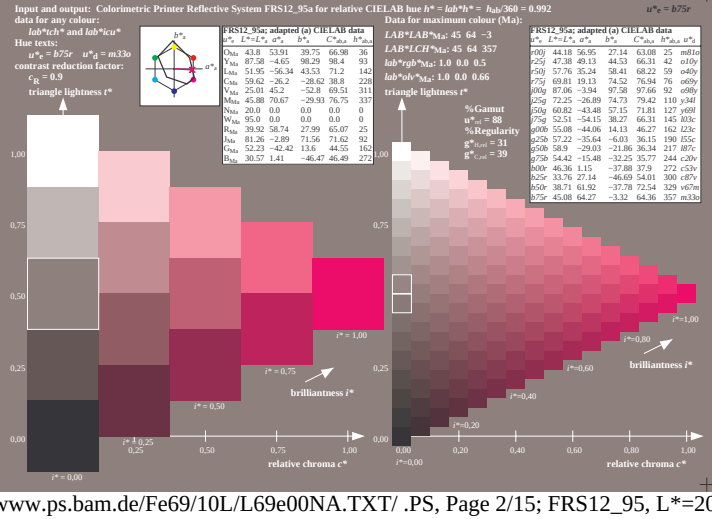
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.992$ $u^*_E = b75r$

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

Hue texts: $u^*_E = b75r$ $u^*_\Delta = m33o$

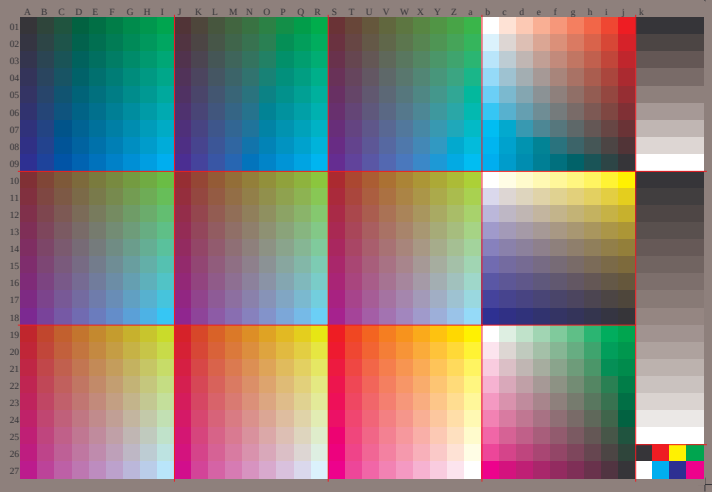
contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 45 64 −3 $LAB^*LCH^*_{Ma}$: 45 64 357 $lab^*rgb^*_{Ma}$: 1.0 0.0 0.5 $lab^*olv^*_{Ma}$: 1.0 0.0 0.66



FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}
O_{Ma}	43.8	53.91	39.75	66.98	36
Y_{Ma}	87.58	−4.65	98.29	98.4	93
L_{Ma}	51.95	−56.34	43.53	71.2	142
C_{Ma}	59.62	−26.2	−28.62	38.8	228
V_{Ma}	25.01	45.2	−52.8	69.51	311
M_{Ma}	45.88	70.67	−29.93	76.75	337
N_{Ma}	20.0	0.0	0.0	0.0	0
W_{Ma}	95.0	0.0	0.0	0.0	0
R_{Ma}	39.92	58.74	27.99	65.07	25
J_{Ma}	81.26	−2.89	71.56	71.62	92
G_{Ma}	52.23	−42.42	13.6	44.55	162
B_{Ma}	30.57	1.41	−46.47	46.49	272

FRS12_95a; adapted (a) CIELAB data	L^*_{ta}	C^*_{ta}	h^*_{ta}	a^*_{ta}	b^*_{ta}	
r00j	44.18	56.95	27.14	63.08	25	m81r
r25j	47.38	49.13	44.53	66.31	42	o10y
r50j	57.76	35.24	58.41	68.22	59	o40y
r75j	69.81	19.13	74.52	76.94	76	o69y
g00g	87.06	−3.94	97.58	97.66	92	o98y
g25g	72.25	−26.89	74.73	79.42	110	y34f
g50g	60.82	−43.48	57.15	71.81	127	y69f
g75g	52.51	−54.15	38.27	66.31	145	l03c
g00b	55.08	−44.06	14.13	46.27	162	l23c
g25b	57.22	−35.64	−6.03	36.15	190	l55c
g50b	58.9	−29.03	−21.86	36.34	217	l87c
g75b	54.42	−15.48	−32.25	35.77	244	c20v
b00r	46.36	1.15	−37.88	37.9	272	c53v
b25r	33.76	27.14	−46.69	54.01	300	c87v
b50r	38.71	61.92	−37.78	72.54	329	v67m
b75r	45.08	64.27	−3.32	64.36	357	m33c



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.451$ $u^*_E = g00b$

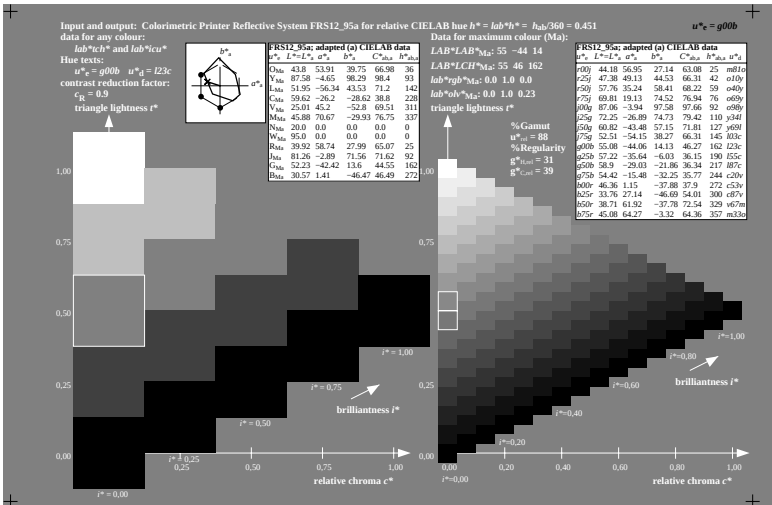
data for any colour: lab^*ch^* and lab^*icu^*

Hue texts: $u^*_E = g00b$ $u^*_d = I23c$

contrast reduction factor: $c_B = 0.9$

triangle lightness t^*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 55 −44 14 $LAB^*LCH^*_{Ma}$: 55 46 162 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.0 $lab^*olv^*_{Ma}$: 0.0 1.0 0.23



FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25		m81n
r25j	47.38	49.13	44.53	66.31	42		o10y
r50j	57.76	35.24	58.41	68.22	59		o40y
r75j	69.81	19.13	74.52	76.94	76		o69y
y00g	87.06	−3.94	97.58	97.66	92		o98y
y25g	72.25	−26.89	74.73	79.42	110		y34f
y50g	60.82	−43.48	57.15	71.81	127		y69f
y75g	52.51	−54.15	38.27	66.31	145		l03c
g00b	55.08	−44.06	14.13	46.27	162		l23c
g25b	57.22	−35.64	−6.03	36.15	190		l55c
g50b	58.9	−29.03	−21.86	36.34	217		l87c
g75b	54.42	−15.48	−32.25	35.77	244		c20v
b00r	46.36	1.15	−37.88	37.9	272		c53v
b25r	33.76	27.14	−46.69	54.01	300		c87v
b50r	38.71	61.92	−37.78	72.54	329		v67m
b75r	45.08	64.27	−3.32	64.36	357		m33c

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.527$ $u^*_E = g25b$

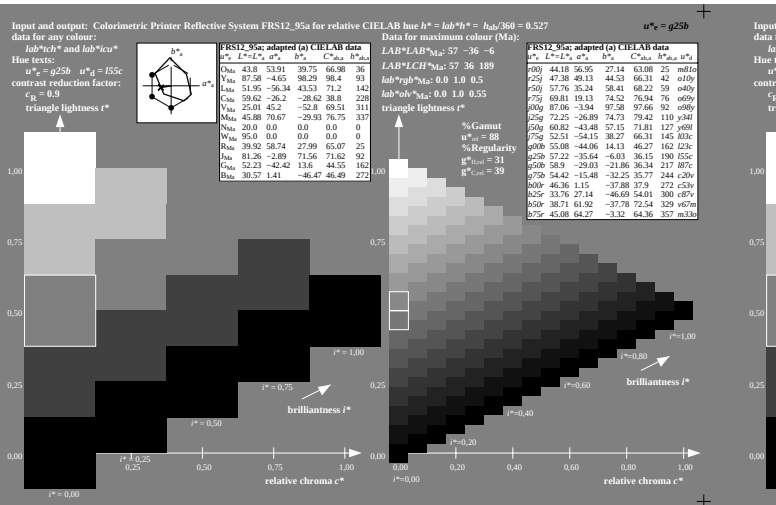
data for any colour: lab^*ch^* and lab^*icu^*

Hue texts: $u^*_E = g25b$ $u^*_d = I55c$

contrast reduction factor: $c_B = 0.9$

triangle lightness t^*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 57 −36 −6 $LAB^*LCH^*_{Ma}$: 57 36 189 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.5 $lab^*olv^*_{Ma}$: 0.0 1.0 0.55



FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25		m81n
r25j	47.38	49.13	44.53	66.31	42		o10y
r50j	57.76	35.24	58.41	68.22	59		o40y
r75j	69.81	19.13	74.52	76.94	76		o69y
y00g	87.06	−3.94	97.58	97.66	92		o98y
y25g	72.25	−26.89	74.73	79.42	110		y34f
y50g	60.82	−43.48	57.15	71.81	127		y69f
y75g	52.51	−54.15	38.27	66.31	145		l03c
g00b	55.08	−44.06	14.13	46.27	162		l23c
g25b	57.22	−35.64	−6.03	36.15	190		l55c
g50b	58.9	−29.03	−21.86	36.34	217		l87c
g75b	54.42	−15.48	−32.25	35.77	244		c20v
b00r	46.36	1.15	−37.88	37.9	272		c53v
b25r	33.76	27.14	−46.69	54.01	300		c87v
b50r	38.71	61.92	−37.78	72.54	329		v67m
b75r	45.08	64.27	−3.32	64.36	357		m33c

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.603$ $u^*_E = g50b$

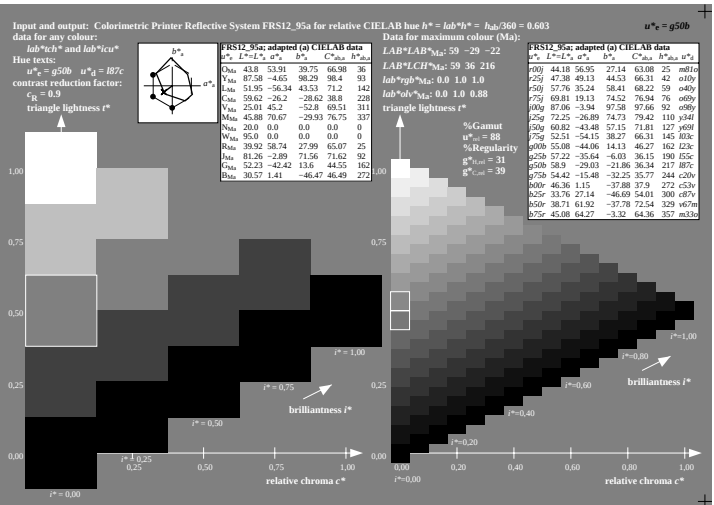
data for any colour: lab^*ch^* and lab^*icu^*

Hue texts: $u^*_E = g50b$ $u^*_d = I87c$

contrast reduction factor: $c_B = 0.9$

triangle lightness t^*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 59 −29 −22 $LAB^*LCH^*_{Ma}$: 59 36 216 $lab^*rgb^*_{Ma}$: 0.0 1.0 1.0 $lab^*olv^*_{Ma}$: 0.0 1.0 0.88



FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25		m81n
r25j	47.38	49.13	44.53	66.31	42		o10y
r50j	57.76	35.24	58.41	68.22	59		o40y
r75j	69.81	19.13	74.52	76.94	76		o69y
y00g	87.06	−3.94	97.58	97.66	92		o98y
y25g	72.25	−26.89	74.73	79.42	110		y34f
y50g	60.82	−43.48	57.15	71.81	127		y69f
y75g	52.51	−54.15	38.27	66.31	145		l03c
g00b	55.08	−44.06	14.13	46.27	162		l23c
g25b	57.22	−35.64	−6.03	36.15	190		l55c
g50b	58.9	−29.03	−21.86	36.34	217		l87c
g75b	54.42	−15.48	−32.25	35.77	244		c20v
b00r	46.36	1.15	−37.88	37.9	272		c53v
b25r	33.76	27.14	−46.69	54.01	300		c87v
b50r	38.71	61.92	−37.78	72.54	329		v67m
b75r	45.08	64.27	−3.32	64.36	357		m33c

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.679$ $u^*_E = g75b$

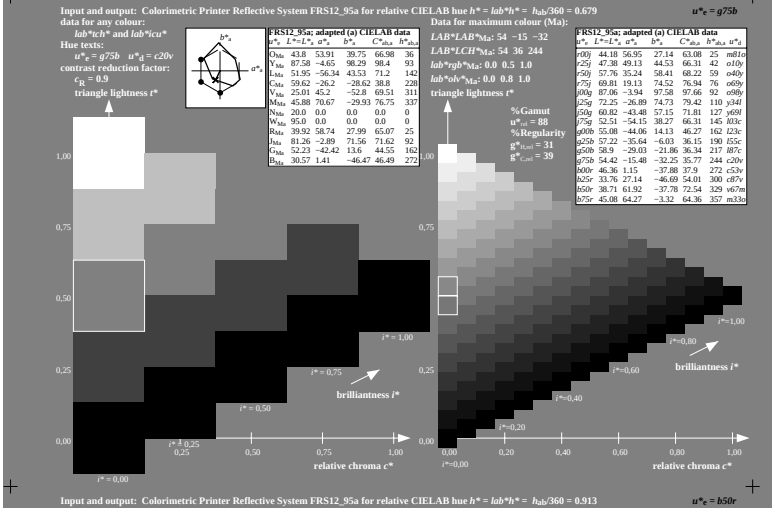
data for any colour: lab^*ch^* and lab^*icu^*

Hue texts: $u^*_E = g75b$ $u^*_d = c20v$

contrast reduction factor: $c_B = 0.9$

triangle lightness t^*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 54 −15 −32 $LAB^*LCH^*_{Ma}$: 54 36 244 $lab^*rgb^*_{Ma}$: 0.0 0.5 1.0 $lab^*olv^*_{Ma}$: 0.0 0.8 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25		m81n
r25j	47.38	49.13	44.53	66.31	42		o10y
r50j	57.76	35.24	58.41	68.22	59		o40y
r75j	69.81	19.13	74.52	76.94	76		o69y
y00g	87.06	−3.94	97.58	97.66	92		o98y
y25g	72.25	−26.89	74.73	79.42	110		y34f
y50g	60.82	−43.48	57.15	71.81	127		y69f
y75g	52.51	−54.15	38.27	66.31	145		l03c
g00b	55.08	−44.06	14.13	46.27	162		l23c
g25b	57.22	−35.64	−6.03	36.15	190		l55c
g50b	58.9	−29.03	−21.86	36.34	217		l87c
g75b	54.42	−15.48	−32.25	35.77	244		c20v
b00r	46.36	1.15	−37.88	37.9	272		c53v
b25r	33.76	27.14	−46.69	54.01	300		c87v
b50r	38.71	61.92	−37.78	72.54	329		v67m
b75r	45.08	64.27	−3.32	64.36	357		m33c

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.755$ $u^*_E = b00r$

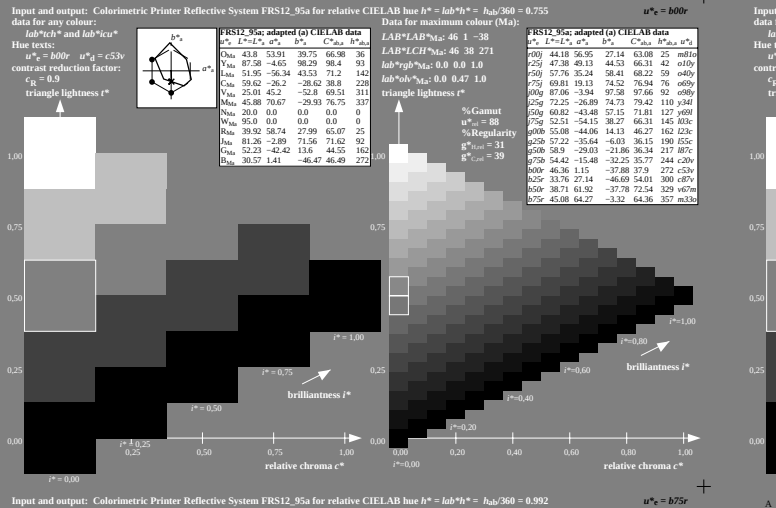
data for any colour: lab^*ch^* and lab^*icu^*

Hue texts: $u^*_E = b00r$ $u^*_d = c53v$

contrast reduction factor: $c_B = 0.9$

triangle lightness t^*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 46 1 −38 $LAB^*LCH^*_{Ma}$: 46 38 271 $lab^*rgb^*_{Ma}$: 0.0 0.0 1.0 $lab^*olv^*_{Ma}$: 0.0 0.47 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25		m81n
r25j	47.38	49.13	44.53	66.31	42		o10y
r50j	57.76	35.24	58.41	68.22	59		o40y
r75j	69.81	19.13	74.52	76.94	76		o69y
y00g	87.06	−3.94	97.58	97.66	92		o98y
y25g	72.25	−26.89	74.73	79.42	110		y34f
y50g	60.82	−43.48	57.15	71.81	127		y69f
y75g	52.51	−54.15	38.27	66.31	145		l03c
g00b	55.08	−44.06	14.13	46.27	162		l23c
g25b	57.22	−35.64	−6.03	36.15	190		l55c
g50b	58.9	−29.03	−21.86	36.34	217		l87c
g75b	54.42	−15.48	−32.25	35.77	244		c20v
b00r	46.36	1.15	−37.88	37.9	272		c53v
b25r	33.76	27.14	−46.69	54.01	300		c87v
b50r	38.71	61.92	−37.78	72.54	329		v67m
b75r	45.08	64.27	−3.32	64.36	357		m33c

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.834$ $u^*_E = b25r$

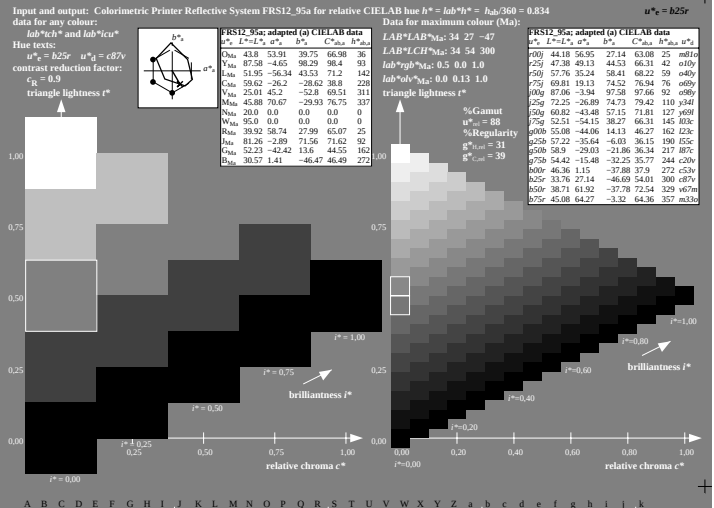
data for any colour: lab^*ch^* and lab^*icu^*

Hue texts: $u^*_E = b25r$ $u^*_d = c87v$

contrast reduction factor: $c_B = 0.9$

triangle lightness t^*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 34 27 −47 $LAB^*LCH^*_{Ma}$: 34 54 300 $lab^*rgb^*_{Ma}$: 0.5 0.0 1.0 $lab^*olv^*_{Ma}$: 0.0 0.13 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25		m81n
r25j	47.38	49.13	44.53	66.31	42		o10y
r50j	57.76	35.24	58.41	68.22	59		o40y
r75j	69.81	19.13	74.52	76.94	76		o69y
y00g	87.06	−3.94	97.58	97.66	92		o98y
y25g	72.25	−26.89	74.73	79.42	110		y34f
y50g	60.82	−43.48	57.15	71.81	127		y69f
y75g	52.51	−54.15	38.27	66.31	145		l03c
g00b	55.08	−44.06	14.13	46.27	162		l23c
g25b	57.22	−35.64	−6.03	36.15	190		l55c
g50b	58.9	−29.03	−21.86	36.34	217		l87c
g75b	54.42	−15.48	−32.25	35.77	244		c20v
b00r	46.36	1.15	−37.88	37.9	272		c53v
b25r	33.76	27.14	−46.69	54.01	300		c87v
b50r	38.71	61.92	−37.78	72.54	329		v67m
b75r	45.08	64.27	−3.32	64.36	357		m33c

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.913$ $u^*_E = b50r$

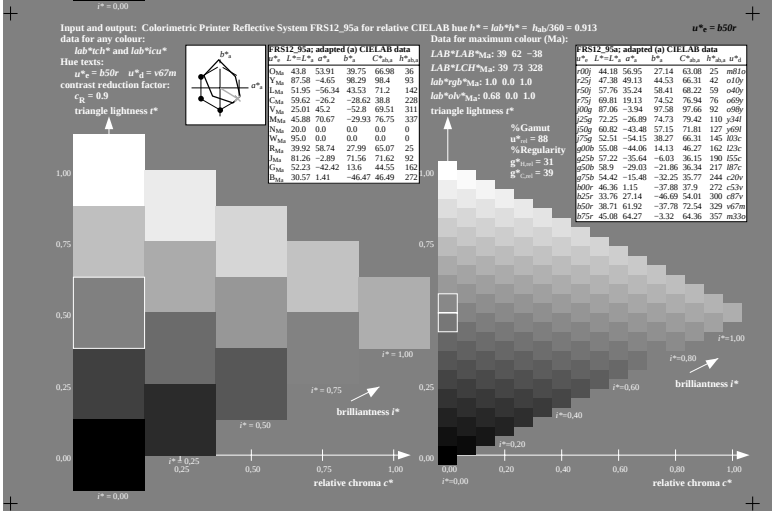
data for any colour: lab^*ch^* and lab^*icu^*

Hue texts: $u^*_E = b50r$ $u^*_d = v67m$

contrast reduction factor: $c_B = 0.9$

triangle lightness t^*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 39 62 −38 $LAB^*LCH^*_{Ma}$: 39 73 328 $lab^*rgb^*_{Ma}$: 1.0 0.0 1.0 $lab^*olv^*_{Ma}$: 0.68 0.0 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25		m81n
r25j	47.38	49.13	44.53	66.31	42		o10y
r50j	57.76	35.24	58.41	68.22	59		o40y
r75j	69.81	19.13	74.52	76.94	76		o69y
y00g	87.06	−3.94	97.58	97.66	92		o98y
y25g	72.25	−26.89	74.73	79.42	110		y34f
y50g	60.82	−43.48	57.15	71.81	127		y69f
y75g	52.51	−54.15	38.27	66.31	145		l03c
g00b	55.08	−44.06	14.13	46.27	162		l23c
g25b	57.22	−35.64	−6.03	36.15	190		l55c
g50b	58.9	−29.03	−21.86	36.34	217		l87c
g75b	54.42	−15.48	−32.25	35.77	244		c20v
b00r	46.36	1.15	−37.88	37.9	272		c53v
b25r	33.76	27.14	−46.69	54.01	300		c87v
b50r	38.71	61.92	−37.78	72.54	329		v67m
b75r	45.08	64.27	−3.32	64.36	357		m33c

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.992$ $u^*_E = b75r$

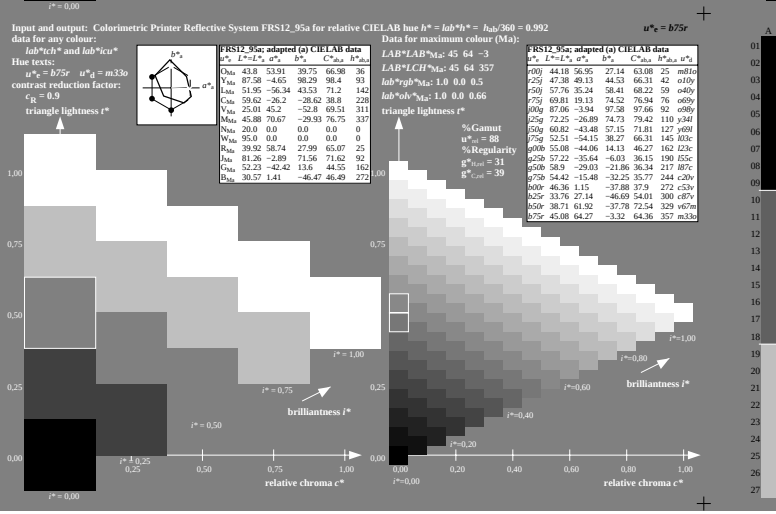
data for any colour: lab^*ch^* and lab^*icu^*

Hue texts: $u^*_E = b75r$ $u^*_d = m33o$

contrast reduction factor: $c_B = 0.9$

triangle lightness t^*

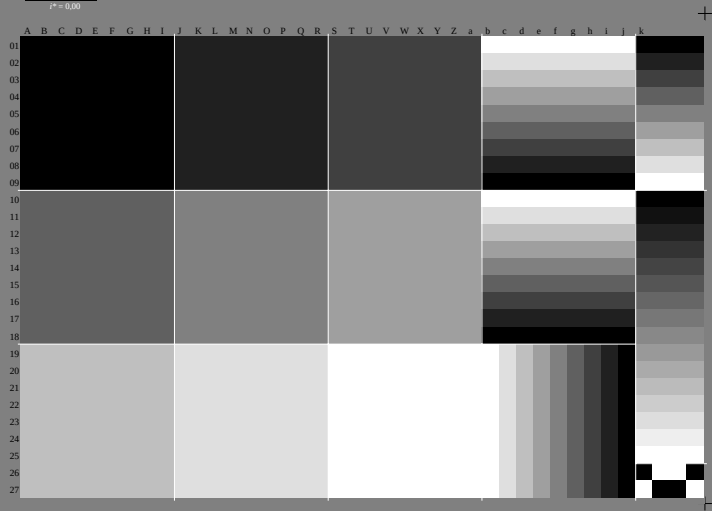
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 45 64 −3 $LAB^*LCH^*_{Ma}$: 45 64 357 $lab^*rgb^*_{Ma}$: 1.0 0.0 0.5 $lab^*olv^*_{Ma}$: 1.0 0.0 0.66



FRS12_95a; adapted (a) CIELAB data

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

	L^*	L^{*-1}_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25		m81n
r25j	47.38	49.13	44.53	66.31	42		o10y
r50j	57.76	35.24	58.41	68.22	59		o40y
r75j	69.81	19.13	74.52	76.94	76		o69y
y00g	87.06	−3.94	97.58	97.66	92		o98y
y25g	72.25	−26.89	74.73	79.42	110		y34f
y50g	60.82	−43.48	57.15	71.81	127		y69f
y75g	52.51	−54.15	38.27	66.31	145		l03c
g00b	55.08	−44.06	14.13	46.27	162		l23c
g25b	57.22	−35.64	−6.03	36.15	190		l55c
g50b	58.9	−29.03	−21.86	36.34	217		l87c
g75b	54.42	−15.48	−32.25	35.77	244		c20v
b00r	46.36	1.15	−37.88	37.9	272		c53v
b25r	33.76	27.14	−46.69	54.01	300		c87v
b50r	38.71	61.92	−37.78	72.54	329		v67m
b75r	45.08	64.27	−3.32	64.36	357		m33c



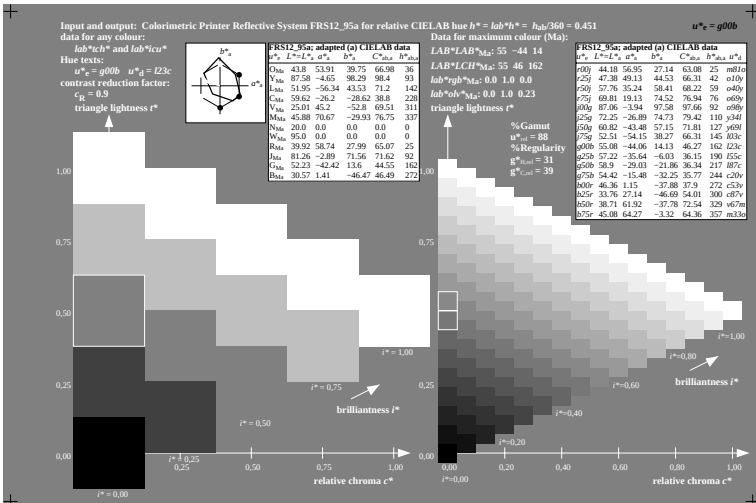
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.451$ $u^*_E = g00b$

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

Hue texts: $u^*_E = g00b$ $u^*_\Delta = I23c$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 55 −44 14 $LAB^*LCH^*_{Ma}$: 55 46 162 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.0 $lab^*olv^*_{Ma}$: 0.0 1.0 0.23



FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33o	

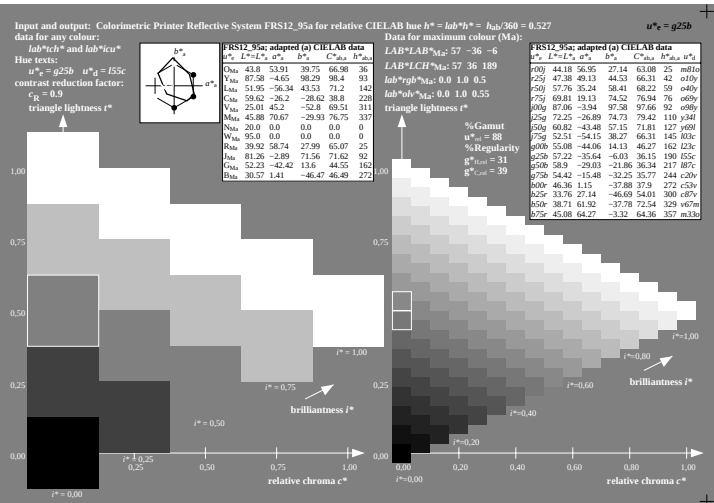
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.527$ $u^*_E = g25b$

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

Hue texts: $u^*_E = g25b$ $u^*_\Delta = I55c$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 57 −36 −6 $LAB^*LCH^*_{Ma}$: 57 36 189 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.5 $lab^*olv^*_{Ma}$: 0.0 1.0 0.55



FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33o	

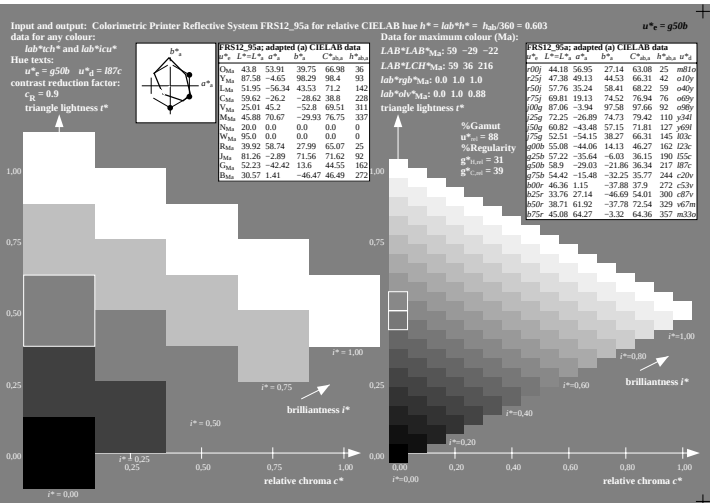
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.603$ $u^*_E = g50b$

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

Hue texts: $u^*_E = g50b$ $u^*_\Delta = I87c$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 59 −29 −22 $LAB^*LCH^*_{Ma}$: 59 36 216 $lab^*rgb^*_{Ma}$: 0.0 1.0 1.0 $lab^*olv^*_{Ma}$: 0.0 1.0 0.88



FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33o	

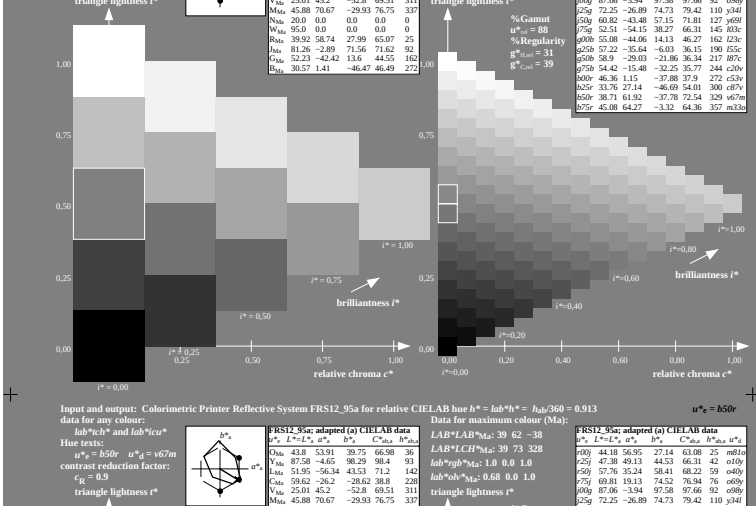
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.679$ $u^*_E = g75b$

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

Hue texts: $u^*_E = g75b$ $u^*_\Delta = c20v$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 54 −15 −32 $LAB^*LCH^*_{Ma}$: 54 36 244 $lab^*rgb^*_{Ma}$: 0.0 0.5 1.0 $lab^*olv^*_{Ma}$: 0.0 0.8 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33o	

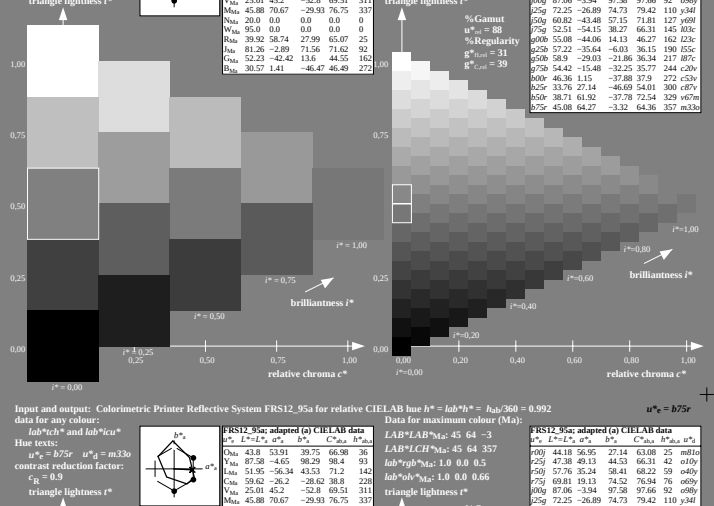
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.755$ $u^*_E = b00r$

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

Hue texts: $u^*_E = b00r$ $u^*_\Delta = c53v$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 46 1 −38 $LAB^*LCH^*_{Ma}$: 46 38 271 $lab^*rgb^*_{Ma}$: 0.0 0.0 1.0 $lab^*olv^*_{Ma}$: 0.0 0.47 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33o	

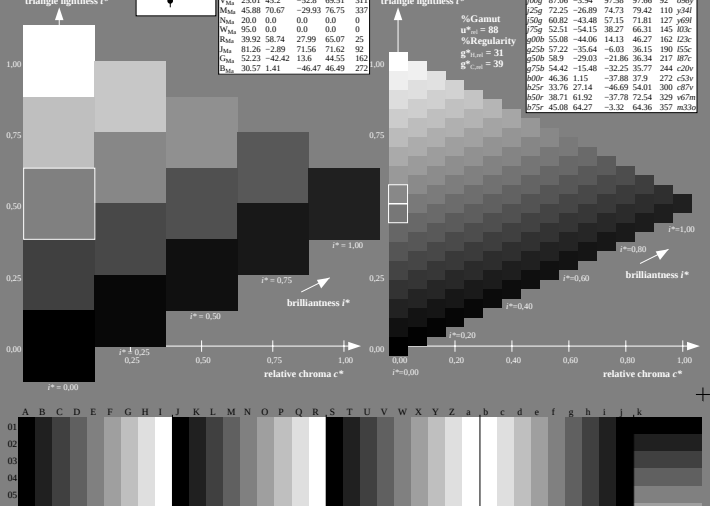
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.834$ $u^*_E = b25r$

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

Hue texts: $u^*_E = b25r$ $u^*_\Delta = c87v$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 34 27 −47 $LAB^*LCH^*_{Ma}$: 34 54 300 $lab^*rgb^*_{Ma}$: 0.5 0.0 1.0 $lab^*olv^*_{Ma}$: 0.0 0.13 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33o	

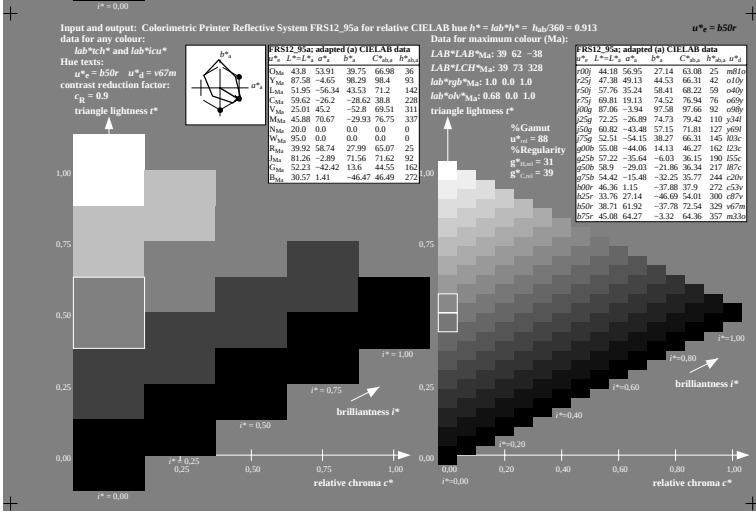
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.913$ $u^*_E = b50r$

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

Hue texts: $u^*_E = b50r$ $u^*_\Delta = v67m$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 39 62 −38 $LAB^*LCH^*_{Ma}$: 39 73 328 $lab^*rgb^*_{Ma}$: 1.0 0.0 1.0 $lab^*olv^*_{Ma}$: 0.68 0.0 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33o	

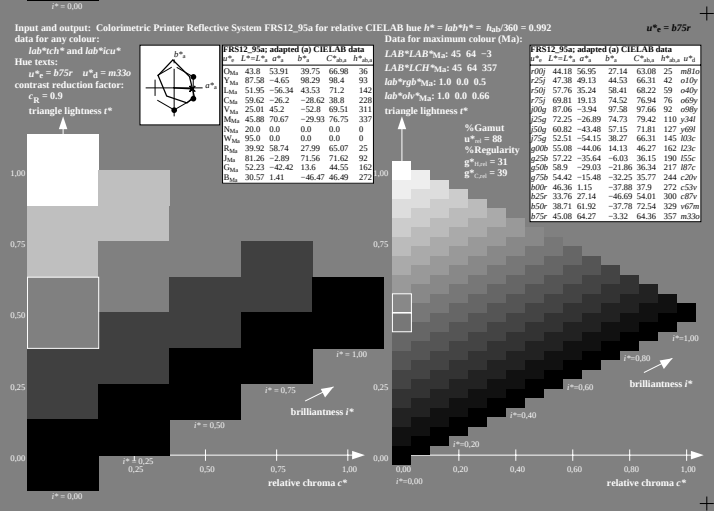
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.992$ $u^*_E = b75r$

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

Hue texts: $u^*_E = b75r$ $u^*_\Delta = m33o$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 45 64 −3 $LAB^*LCH^*_{Ma}$: 45 64 357 $lab^*rgb^*_{Ma}$: 1.0 0.0 0.5 $lab^*olv^*_{Ma}$: 1.0 0.0 0.66

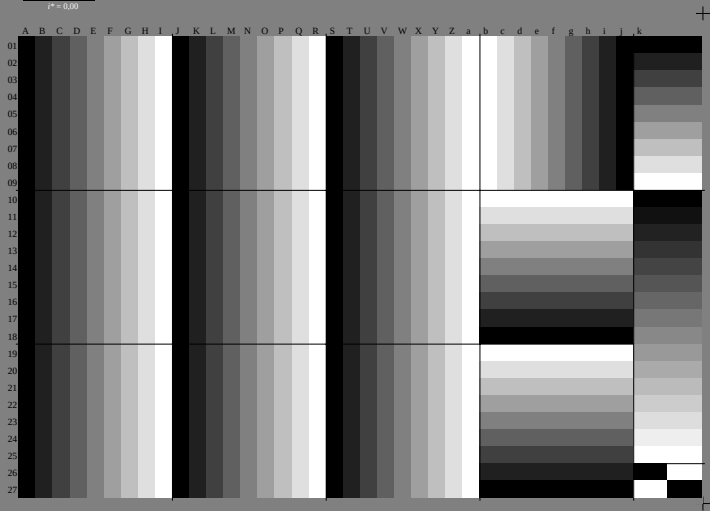


FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98	36		
Y_{Ma}	87.58	−4.65	98.29	98.4	93		
L_{Ma}	51.95	−56.34	43.53	71.2	142		
C_{Ma}	59.62	−26.2	−28.62	38.8	228		
V_{Ma}	25.01	45.2	−52.8	69.51	311		
M_{Ma}	45.88	70.67	−29.93	76.75	337		
N_{Ma}	20.0	0.0	0.0	0.0	0		
W_{Ma}	95.0	0.0	0.0	0.0	0		
R_{Ma}	39.92	58.74	27.99	65.07	25		
J_{Ma}	81.26	−2.89	71.56	71.62	92		
C_{Ma}	52.23	−42.42	13.6	44.55	162		
B_{Ma}	30.57	1.41	−46.47	46.49	272		

FRS12_95a; adapted (a) CIELAB data

	L^*	$L^*-L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
r00j	44.18	56.95	27.14	63.08	25	m81o	
r25j	47.38	49.13	44.53	66.31	42	o10y	
r50j	57.76	35.24	58.41	68.22	59	o40y	
r75j	69.81	19.13	74.52	76.94	76	o69y	
y00g	87.06	−3.94	97.58	97.66	92	o98y	
y25g	72.25	−26.89	74.73	79.42	110	y34f	
y50g	60.82	−43.48	57.15	71.81	127	y69f	
y75g	52.51	−54.15	38.27	66.31	145	l03c	
g00b	55.08	−44.06	14.13	46.27	162	l23c	
g25b	57.22	−35.64	−6.03	36.15	190	l55c	
g50b	58.9	−29.03	−21.86	36.34	217	l87c	
g75b	54.42	−15.48	−32.25	35.77	244	c20v	
b00r	46.36	1.15	−37.88	37.9	272	c53v	
b25r	33.76	27.14	−46.69	54.01	300	c87v	
b50r	38.71	61.92	−37.78	72.54	329	v67m	
b75r	45.08	64.27	−3.32	64.36	357	m33o	



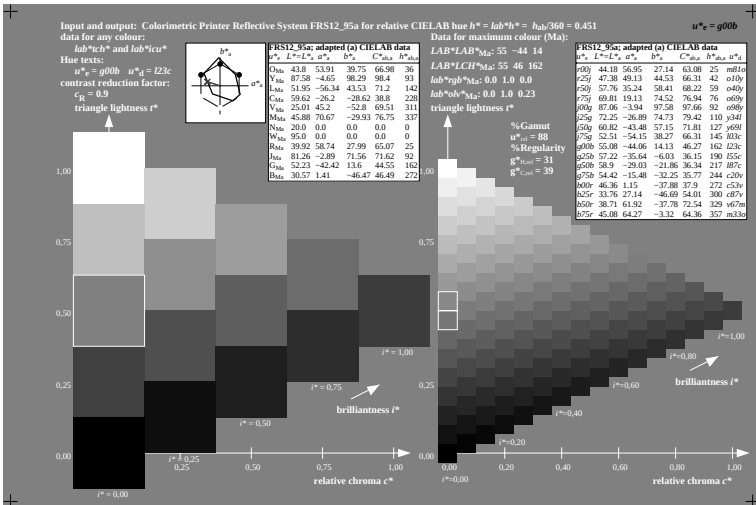
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.451$ $u^*_E = g00b$

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

Hue texts: $u^*_E = g00b$ $u^*_d = I23c$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 55 −44 14 $LAB^*LCH^*_{Ma}$: 55 46 162 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.0 $lab^*olv^*_{Ma}$: 0.0 1.0 0.23



FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98
Y_{Ma}	87.58	−4.65	98.29	98.4
L_{Ma}	51.95	−56.34	43.53	71.2
C_{Ma}	59.62	−26.2	−28.62	38.8
V_{Ma}	25.01	45.2	−52.8	69.51
M_{Ma}	45.88	70.67	−29.93	76.75
N_{Ma}	20.0	0.0	0.0	0.0
W_{Ma}	95.0	0.0	0.0	0.0
R_{Ma}	39.92	58.74	27.99	65.07
J_{Ma}	81.26	−2.89	71.56	71.62
C_{Ma}	52.23	−42.42	13.6	44.55
B_{Ma}	30.57	1.41	−46.47	46.49

FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a	
r00j	44.18	56.95	27.14	63.08	25 m81o
r25j	47.38	49.13	44.53	66.31	42 o10y
r50j	57.76	35.24	58.41	68.22	59 o40y
r75j	69.81	19.13	74.52	76.94	76 o69y
g00g	87.06	−3.94	97.58	97.66	92 o98y
g25g	72.25	−26.89	74.73	79.42	110 y34f
g50g	60.82	−43.48	57.15	71.81	127 y69f
g75g	52.51	−54.15	38.27	66.31	145 l03c
g00b	55.08	−44.06	14.13	46.27	162 l23c
g25b	57.22	−35.64	−6.03	36.15	190 l55c
g50b	58.9	−29.03	−21.86	36.34	217 l87c
g75b	54.42	−15.48	−32.25	35.77	244 c20v
b00r	46.36	1.15	−37.88	37.9	272 c53v
b25r	33.76	27.14	−46.69	54.01	300 c87v
b50r	38.71	61.92	−37.78	72.54	329 v67m
b75r	45.08	64.27	−3.32	64.36	357 m33c

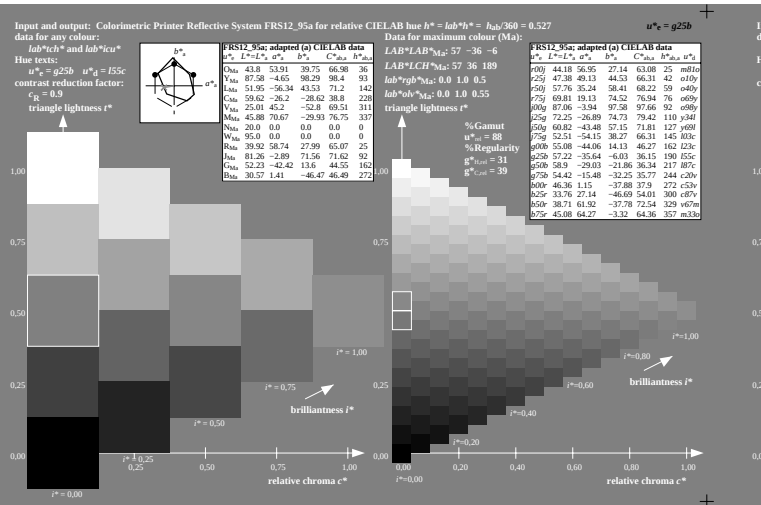
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.527$ $u^*_E = g25b$

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

Hue texts: $u^*_E = g25b$ $u^*_d = I55c$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 57 −36 −6 $LAB^*LCH^*_{Ma}$: 57 36 189 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.5 $lab^*olv^*_{Ma}$: 0.0 1.0 0.55



FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98
Y_{Ma}	87.58	−4.65	98.29	98.4
L_{Ma}	51.95	−56.34	43.53	71.2
C_{Ma}	59.62	−26.2	−28.62	38.8
V_{Ma}	25.01	45.2	−52.8	69.51
M_{Ma}	45.88	70.67	−29.93	76.75
N_{Ma}	20.0	0.0	0.0	0.0
W_{Ma}	95.0	0.0	0.0	0.0
R_{Ma}	39.92	58.74	27.99	65.07
J_{Ma}	81.26	−2.89	71.56	71.62
C_{Ma}	52.23	−42.42	13.6	44.55
B_{Ma}	30.57	1.41	−46.47	46.49

FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a	
r00j	44.18	56.95	27.14	63.08	25 m81o
r25j	47.38	49.13	44.53	66.31	42 o10y
r50j	57.76	35.24	58.41	68.22	59 o40y
r75j	69.81	19.13	74.52	76.94	76 o69y
g00g	87.06	−3.94	97.58	97.66	92 o98y
g25g	72.25	−26.89	74.73	79.42	110 y34f
g50g	60.82	−43.48	57.15	71.81	127 y69f
g75g	52.51	−54.15	38.27	66.31	145 l03c
g00b	55.08	−44.06	14.13	46.27	162 l23c
g25b	57.22	−35.64	−6.03	36.15	190 l55c
g50b	58.9	−29.03	−21.86	36.34	217 l87c
g75b	54.42	−15.48	−32.25	35.77	244 c20v
b00r	46.36	1.15	−37.88	37.9	272 c53v
b25r	33.76	27.14	−46.69	54.01	300 c87v
b50r	38.71	61.92	−37.78	72.54	329 v67m
b75r	45.08	64.27	−3.32	64.36	357 m33c

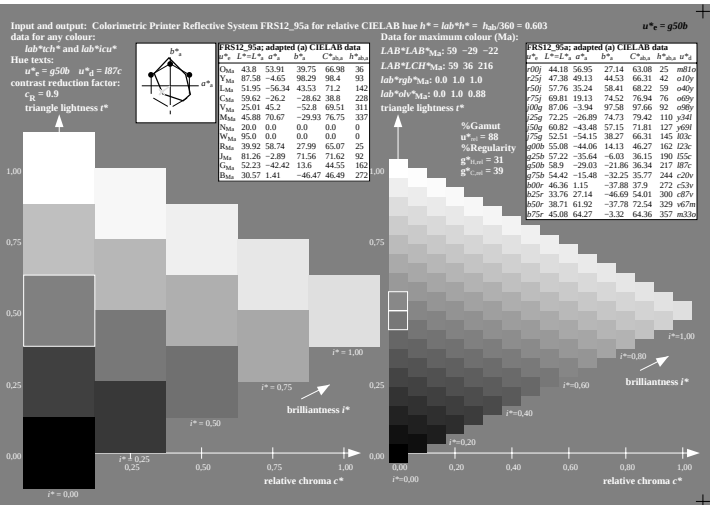
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.603$ $u^*_E = g50b$

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

Hue texts: $u^*_E = g50b$ $u^*_d = I87c$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 59 −29 −22 $LAB^*LCH^*_{Ma}$: 59 36 216 $lab^*rgb^*_{Ma}$: 0.0 1.0 1.0 $lab^*olv^*_{Ma}$: 0.0 1.0 0.88



FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98
Y_{Ma}	87.58	−4.65	98.29	98.4
L_{Ma}	51.95	−56.34	43.53	71.2
C_{Ma}	59.62	−26.2	−28.62	38.8
V_{Ma}	25.01	45.2	−52.8	69.51
M_{Ma}	45.88	70.67	−29.93	76.75
N_{Ma}	20.0	0.0	0.0	0.0
W_{Ma}	95.0	0.0	0.0	0.0
R_{Ma}	39.92	58.74	27.99	65.07
J_{Ma}	81.26	−2.89	71.56	71.62
C_{Ma}	52.23	−42.42	13.6	44.55
B_{Ma}	30.57	1.41	−46.47	46.49

FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a	
r00j	44.18	56.95	27.14	63.08	25 m81o
r25j	47.38	49.13	44.53	66.31	42 o10y
r50j	57.76	35.24	58.41	68.22	59 o40y
r75j	69.81	19.13	74.52	76.94	76 o69y
g00g	87.06	−3.94	97.58	97.66	92 o98y
g25g	72.25	−26.89	74.73	79.42	110 y34f
g50g	60.82	−43.48	57.15	71.81	127 y69f
g75g	52.51	−54.15	38.27	66.31	145 l03c
g00b	55.08	−44.06	14.13	46.27	162 l23c
g25b	57.22	−35.64	−6.03	36.15	190 l55c
g50b	58.9	−29.03	−21.86	36.34	217 l87c
g75b	54.42	−15.48	−32.25	35.77	244 c20v
b00r	46.36	1.15	−37.88	37.9	272 c53v
b25r	33.76	27.14	−46.69	54.01	300 c87v
b50r	38.71	61.92	−37.78	72.54	329 v67m
b75r	45.08	64.27	−3.32	64.36	357 m33c

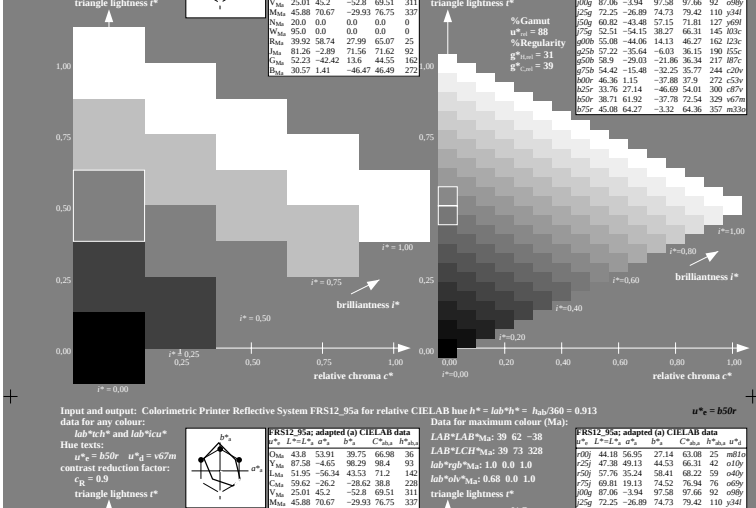
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.679$ $u^*_E = g75b$

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

Hue texts: $u^*_E = g75b$ $u^*_d = c20v$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 54 −15 −32 $LAB^*LCH^*_{Ma}$: 54 36 244 $lab^*rgb^*_{Ma}$: 0.0 0.5 1.0 $lab^*olv^*_{Ma}$: 0.0 0.8 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98
Y_{Ma}	87.58	−4.65	98.29	98.4
L_{Ma}	51.95	−56.34	43.53	71.2
C_{Ma}	59.62	−26.2	−28.62	38.8
V_{Ma}	25.01	45.2	−52.8	69.51
M_{Ma}	45.88	70.67	−29.93	76.75
N_{Ma}	20.0	0.0	0.0	0.0
W_{Ma}	95.0	0.0	0.0	0.0
R_{Ma}	39.92	58.74	27.99	65.07
J_{Ma}	81.26	−2.89	71.56	71.62
C_{Ma}	52.23	−42.42	13.6	44.55
B_{Ma}	30.57	1.41	−46.47	46.49

FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a	
r00j	44.18	56.95	27.14	63.08	25 m81o
r25j	47.38	49.13	44.53	66.31	42 o10y
r50j	57.76	35.24	58.41	68.22	59 o40y
r75j	69.81	19.13	74.52	76.94	76 o69y
g00g	87.06	−3.94	97.58	97.66	92 o98y
g25g	72.25	−26.89	74.73	79.42	110 y34f
g50g	60.82	−43.48	57.15	71.81	127 y69f
g75g	52.51	−54.15	38.27	66.31	145 l03c
g00b	55.08	−44.06	14.13	46.27	162 l23c
g25b	57.22	−35.64	−6.03	36.15	190 l55c
g50b	58.9	−29.03	−21.86	36.34	217 l87c
g75b	54.42	−15.48	−32.25	35.77	244 c20v
b00r	46.36	1.15	−37.88	37.9	272 c53v
b25r	33.76	27.14	−46.69	54.01	300 c87v
b50r	38.71	61.92	−37.78	72.54	329 v67m
b75r	45.08	64.27	−3.32	64.36	357 m33c

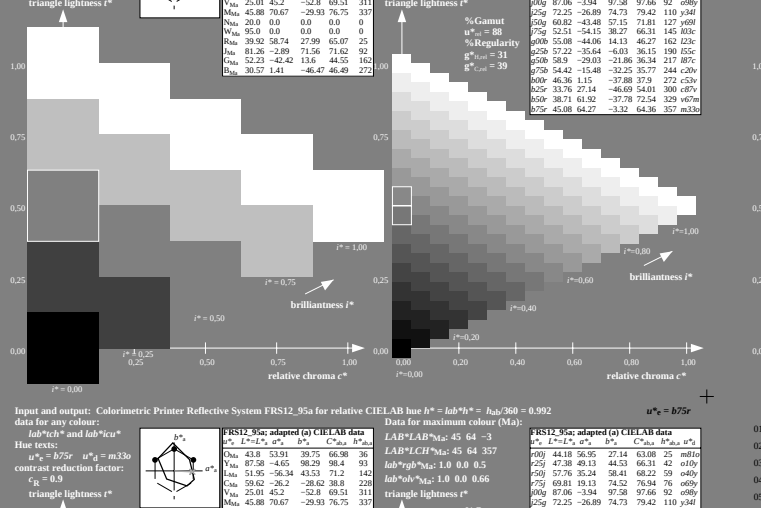
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.755$ $u^*_E = b00r$

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

Hue texts: $u^*_E = b00r$ $u^*_d = c53v$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 46 1 −38 $LAB^*LCH^*_{Ma}$: 46 38 271 $lab^*rgb^*_{Ma}$: 0.0 0.0 1.0 $lab^*olv^*_{Ma}$: 0.0 0.47 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98
Y_{Ma}	87.58	−4.65	98.29	98.4
L_{Ma}	51.95	−56.34	43.53	71.2
C_{Ma}	59.62	−26.2	−28.62	38.8
V_{Ma}	25.01	45.2	−52.8	69.51
M_{Ma}	45.88	70.67	−29.93	76.75
N_{Ma}	20.0	0.0	0.0	0.0
W_{Ma}	95.0	0.0	0.0	0.0
R_{Ma}	39.92	58.74	27.99	65.07
J_{Ma}	81.26	−2.89	71.56	71.62
C_{Ma}	52.23	−42.42	13.6	44.55
B_{Ma}	30.57	1.41	−46.47	46.49

FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a	
r00j	44.18	56.95	27.14	63.08	25 m81o
r25j	47.38	49.13	44.53	66.31	42 o10y
r50j	57.76	35.24	58.41	68.22	59 o40y
r75j	69.81	19.13	74.52	76.94	76 o69y
g00g	87.06	−3.94	97.58	97.66	92 o98y
g25g	72.25	−26.89	74.73	79.42	110 y34f
g50g	60.82	−43.48	57.15	71.81	127 y69f
g75g	52.51	−54.15	38.27	66.31	145 l03c
g00b	55.08	−44.06	14.13	46.27	162 l23c
g25b	57.22	−35.64	−6.03	36.15	190 l55c
g50b	58.9	−29.03	−21.86	36.34	217 l87c
g75b	54.42	−15.48	−32.25	35.77	244 c20v
b00r	46.36	1.15	−37.88	37.9	272 c53v
b25r	33.76	27.14	−46.69	54.01	300 c87v
b50r	38.71	61.92	−37.78	72.54	329 v67m
b75r	45.08	64.27	−3.32	64.36	357 m33c

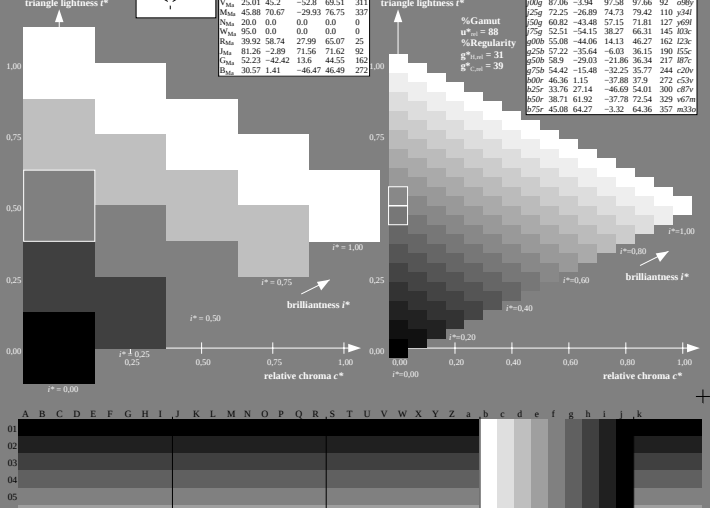
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.834$ $u^*_E = b25r$

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

Hue texts: $u^*_E = b25r$ $u^*_d = c87v$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 34 27 −47 $LAB^*LCH^*_{Ma}$: 34 54 300 $lab^*rgb^*_{Ma}$: 0.5 0.0 1.0 $lab^*olv^*_{Ma}$: 0.0 0.13 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98
Y_{Ma}	87.58	−4.65	98.29	98.4
L_{Ma}	51.95	−56.34	43.53	71.2
C_{Ma}	59.62	−26.2	−28.62	38.8
V_{Ma}	25.01	45.2	−52.8	69.51
M_{Ma}	45.88	70.67	−29.93	76.75
N_{Ma}	20.0	0.0	0.0	0.0
W_{Ma}	95.0	0.0	0.0	0.0
R_{Ma}	39.92	58.74	27.99	65.07
J_{Ma}	81.26	−2.89	71.56	71.62
C_{Ma}	52.23	−42.42	13.6	44.55
B_{Ma}	30.57	1.41	−46.47	46.49

FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a	
r00j	44.18	56.95	27.14	63.08	25 m81o
r25j	47.38	49.13	44.53	66.31	42 o10y
r50j	57.76	35.24	58.41	68.22	59 o40y
r75j	69.81	19.13	74.52	76.94	76 o69y
g00g	87.06	−3.94	97.58	97.66	92 o98y
g25g	72.25	−26.89	74.73	79.42	110 y34f
g50g	60.82	−43.48	57.15	71.81	127 y69f
g75g	52.51	−54.15	38.27	66.31	145 l03c
g00b	55.08	−44.06	14.13	46.27	162 l23c
g25b	57.22	−35.64	−6.03	36.15	190 l55c
g50b	58.9	−29.03	−21.86	36.34	217 l87c
g75b	54.42	−15.48	−32.25	35.77	244 c20v
b00r	46.36	1.15	−37.88	37.9	272 c53v
b25r	33.76	27.14	−46.69	54.01	300 c87v
b50r	38.71	61.92	−37.78	72.54	329 v67m
b75r	45.08	64.27	−3.32	64.36	357 m33c

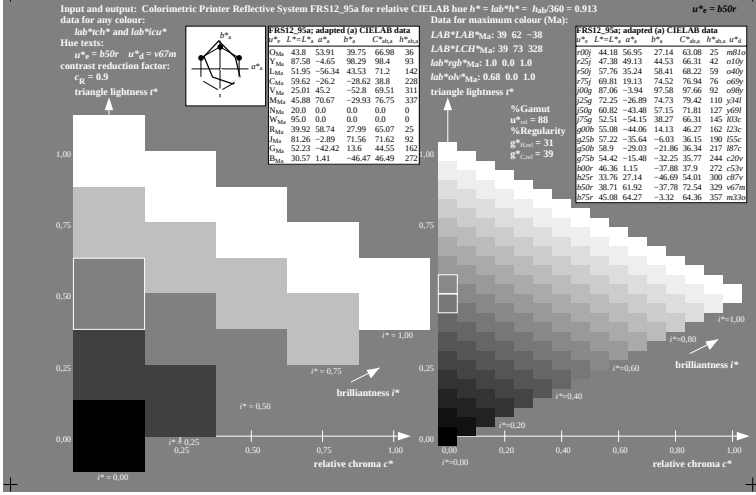
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.913$ $u^*_E = b50r$

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

Hue texts: $u^*_E = b50r$ $u^*_d = v67m$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 39 62 −38 $LAB^*LCH^*_{Ma}$: 39 73 328 $lab^*rgb^*_{Ma}$: 1.0 0.0 1.0 $lab^*olv^*_{Ma}$: 0.68 0.0 1.0



FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98
Y_{Ma}	87.58	−4.65	98.29	98.4
L_{Ma}	51.95	−56.34	43.53	71.2
C_{Ma}	59.62	−26.2	−28.62	38.8
V_{Ma}	25.01	45.2	−52.8	69.51
M_{Ma}	45.88	70.67	−29.93	76.75
N_{Ma}	20.0	0.0	0.0	0.0
W_{Ma}	95.0	0.0	0.0	0.0
R_{Ma}	39.92	58.74	27.99	65.07
J_{Ma}	81.26	−2.89	71.56	71.62
C_{Ma}	52.23	−42.42	13.6	44.55
B_{Ma}	30.57	1.41	−46.47	46.49

FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a	
r00j	44.18	56.95	27.14	63.08	25 m81o
r25j	47.38	49.13	44.53	66.31	42 o10y
r50j	57.76	35.24	58.41	68.22	59 o40y
r75j	69.81	19.13	74.52	76.94	76 o69y
g00g	87.06	−3.94	97.58	97.66	92 o98y
g25g	72.25	−26.89	74.73	79.42	110 y34f
g50g	60.82	−43.48	57.15	71.81	127 y69f
g75g	52.51	−54.15	38.27	66.31	145 l03c
g00b	55.08	−44.06	14.13	46.27	162 l23c
g25b	57.22	−35.64	−6.03	36.15	190 l55c
g50b	58.9	−29.03	−21.86	36.34	217 l87c
g75b	54.42	−15.48	−32.25	35.77	244 c20v
b00r	46.36	1.15	−37.88	37.9	272 c53v
b25r	33.76	27.14	−46.69	54.01	300 c87v
b50r	38.71	61.92	−37.78	72.54	329 v67m
b75r	45.08	64.27	−3.32	64.36	357 m33c

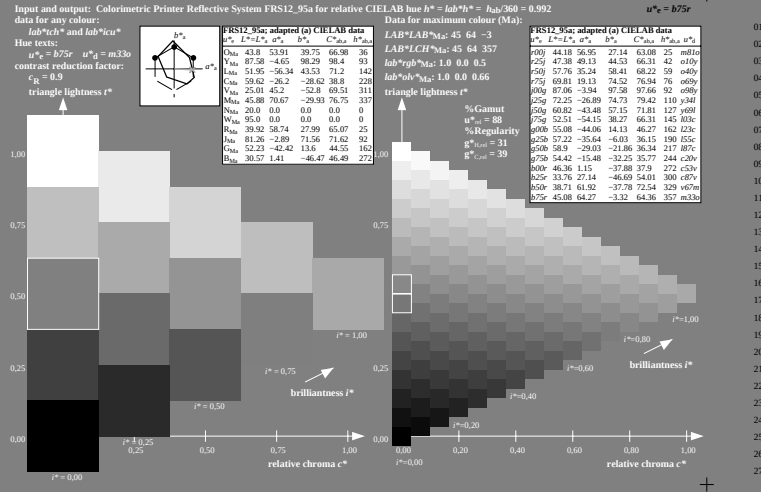
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.992$ $u^*_E = b75r$

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

Hue texts: $u^*_E = b75r$ $u^*_d = m33o$

contrast reduction factor: $c_{lg} = 0.9$

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 45 64 −3 $LAB^*LCH^*_{Ma}$: 45 64 357 $lab^*rgb^*_{Ma}$: 1.0 0.0 0.5 $lab^*olv^*_{Ma}$: 1.0 0.0 0.66

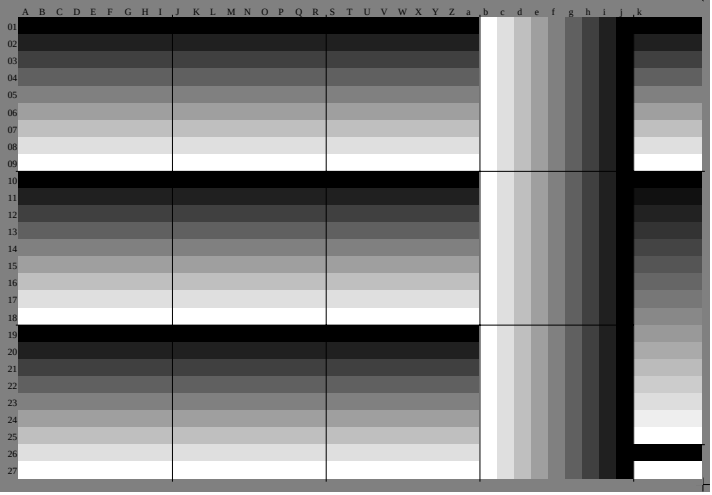


FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a
O_{Ma}	43.8	53.91	39.75	66.98
Y_{Ma}	87.58	−4.65	98.29	98.4
L_{Ma}	51.95	−56.34	43.53	71.2
C_{Ma}	59.62	−26.2	−28.62	38.8
V_{Ma}	25.01	45.2	−52.8	69.51
M_{Ma}	45.88	70.67	−29.93	76.75
N_{Ma}	20.0	0.0	0.0	0.0
W_{Ma}	95.0	0.0	0.0	0.0
R_{Ma}	39.92	58.74	27.99	65.07
J_{Ma}	81.26	−2.89	71.56	71.62
C_{Ma}	52.23	−42.42	13.6	44.55
B_{Ma}	30.57	1.41	−46.47	46.49

FRS12_95a; adapted (a) CIELAB data

	L^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_a	
r00j	44.18	56.95	27.14	63.08	25 m81o
r25j	47.38	49.13	44.53	66.31	42 o10y
r50j	57.76	35.24	58.41	68.22	59 o40y
r75j	69.81	19.13	74.52	76.94	76 o69y
g00g	87.06	−3.94	97.58	97.66	92 o98y
g25g	72.25	−26.89	74.73	79.42	110 y34f
g50g	60.82	−43.48	57.15	71.81	127 y69f
g75g	52.51	−54.15	38.27	66.31	145 l03c
g00b	55.08	−44.06	14.13	46.27	162 l23c
g25b	57.22	−35.64	−6.03	36.15	190 l55c
g50b	58.9	−29.03	−21.86	36.34	217 l87c
g75b	54.42	−15.48	−32.25	35.77	244 c20v
b00r	46.36	1.15	−37.88	37.9	272 c53v
b25r	33.76	27.14	−46.69	54.01	300 c87v
b50r	38.71	61.92	−37.78	72.54	329 v67m
b75r	45.08	64.27	−3.32	64.36	357 m33c

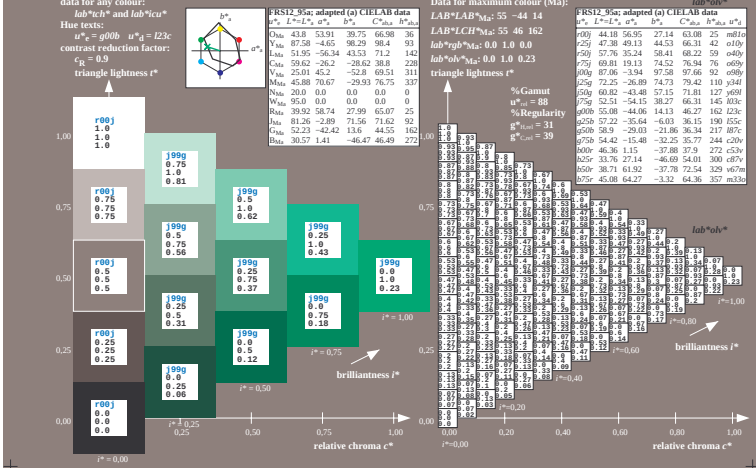


Black separation empty

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.451$ — $u^*_c = g00b$ / lab^*ov^*

data for any colour: lab^*ch^* and lab^*icu^*; Hue texts: $u^*_c = g00b$ $u^*_d = I23c$; contrast reduction factor: $c_{lg} = 0.9$; triangle lightness t^*

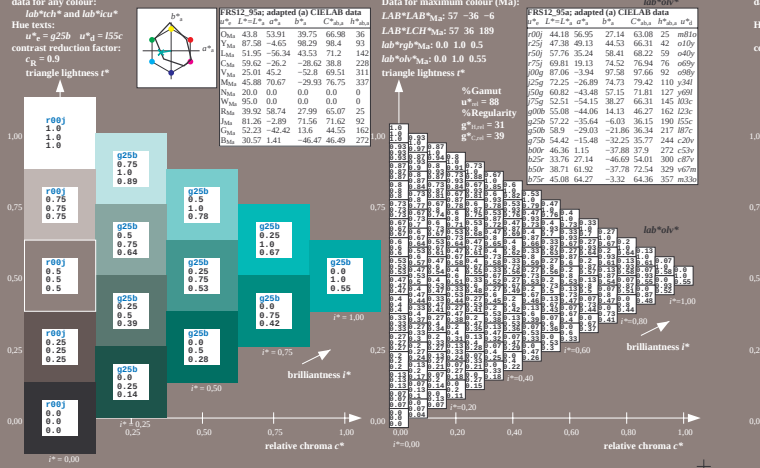
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 55 −44 14; $LAB^*LCH^*_{Ma}$: 55 46 162; $lab^*rgb^*_{Ma}$: 0.0 1.0 0.0; $lab^*ov^*_{Ma}$: 0.0 1.0 0.23; triangle lightness t^*



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.527$ — $u^*_c = g25b$ / lab^*ov^*

data for any colour: lab^*ch^* and lab^*icu^*; Hue texts: $u^*_c = g25b$ $u^*_d = I55c$; contrast reduction factor: $c_{lg} = 0.9$; triangle lightness t^*

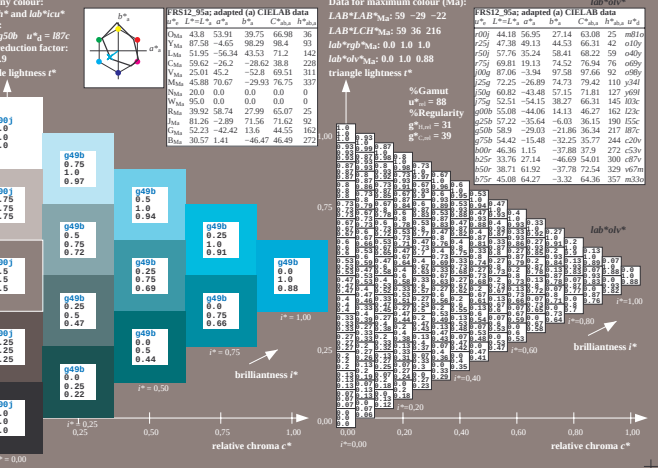
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 57 −36 −6; $LAB^*LCH^*_{Ma}$: 57 36 189; $lab^*rgb^*_{Ma}$: 0.0 1.0 0.5; $lab^*ov^*_{Ma}$: 0.0 1.0 0.55; triangle lightness t^*



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.603$ — $u^*_c = g50b$ / lab^*ov^*

data for any colour: lab^*ch^* and lab^*icu^*; Hue texts: $u^*_c = g50b$ $u^*_d = I87c$; contrast reduction factor: $c_{lg} = 0.9$; triangle lightness t^*

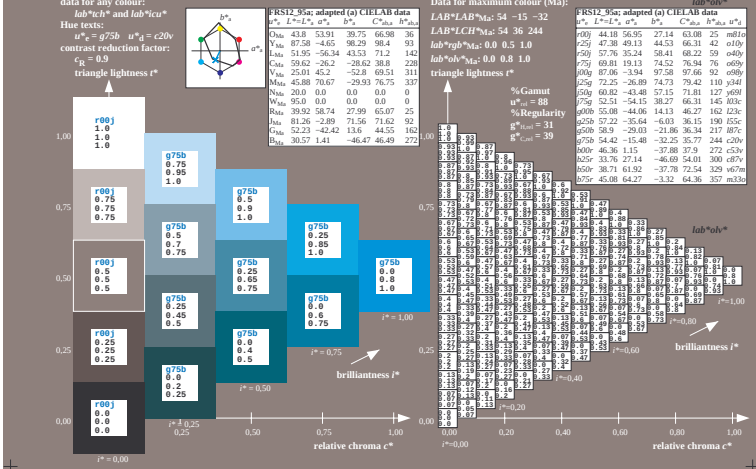
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 59 −29 −22; $LAB^*LCH^*_{Ma}$: 59 36 216; $lab^*rgb^*_{Ma}$: 0.0 1.0 1.0; $lab^*ov^*_{Ma}$: 0.0 1.0 0.88; triangle lightness t^*



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.679$ — $u^*_c = g75b$ / lab^*ov^*

data for any colour: lab^*ch^* and lab^*icu^*; Hue texts: $u^*_c = g75b$ $u^*_d = c20v$; contrast reduction factor: $c_{lg} = 0.9$; triangle lightness t^*

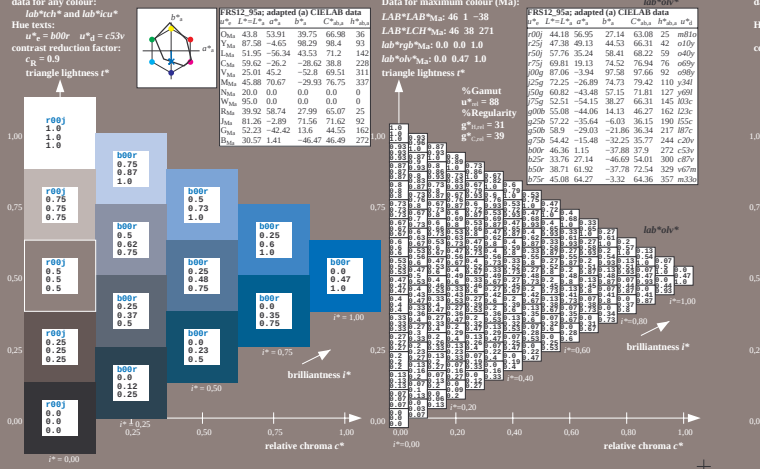
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 54 −15 −32; $LAB^*LCH^*_{Ma}$: 54 36 244; $lab^*rgb^*_{Ma}$: 0.0 0.5 1.0; $lab^*ov^*_{Ma}$: 0.0 0.8 1.0; triangle lightness t^*



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.755$ — $u^*_c = b00r$ / lab^*ov^*

data for any colour: lab^*ch^* and lab^*icu^*; Hue texts: $u^*_c = b00r$ $u^*_d = c53v$; contrast reduction factor: $c_{lg} = 0.9$; triangle lightness t^*

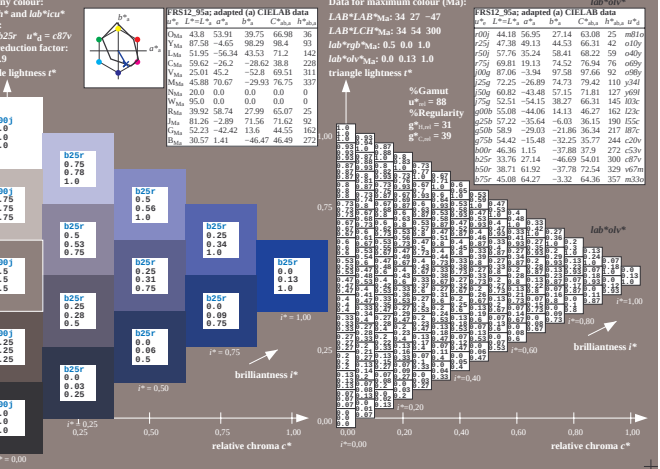
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 46 1 −38; $LAB^*LCH^*_{Ma}$: 46 38 271; $lab^*rgb^*_{Ma}$: 0.0 0.0 1.0; $lab^*ov^*_{Ma}$: 0.0 0.47 1.0; triangle lightness t^*



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.834$ — $u^*_c = b25r$ / lab^*ov^*

data for any colour: lab^*ch^* and lab^*icu^*; Hue texts: $u^*_c = b25r$ $u^*_d = c87v$; contrast reduction factor: $c_{lg} = 0.9$; triangle lightness t^*

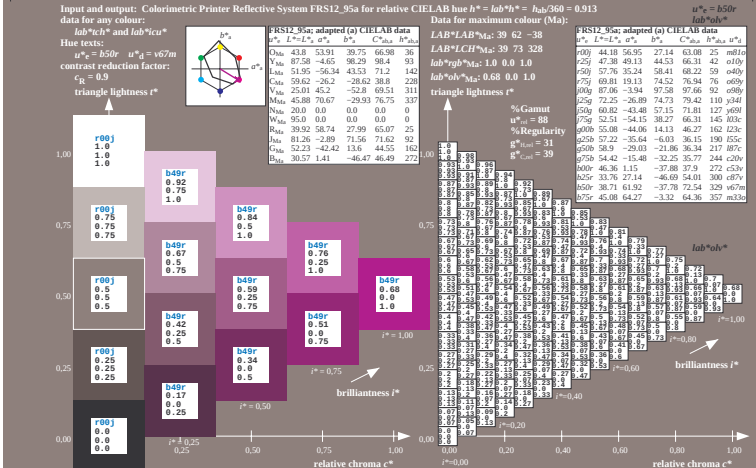
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 34 27 −47; $LAB^*LCH^*_{Ma}$: 34 54 300; $lab^*rgb^*_{Ma}$: 0.5 0.0 1.0; $lab^*ov^*_{Ma}$: 0.0 0.13 1.0; triangle lightness t^*



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.913$ — $u^*_c = b50r$ / lab^*ov^*

data for any colour: lab^*ch^* and lab^*icu^*; Hue texts: $u^*_c = b50r$ $u^*_d = v67m$; contrast reduction factor: $c_{lg} = 0.9$; triangle lightness t^*

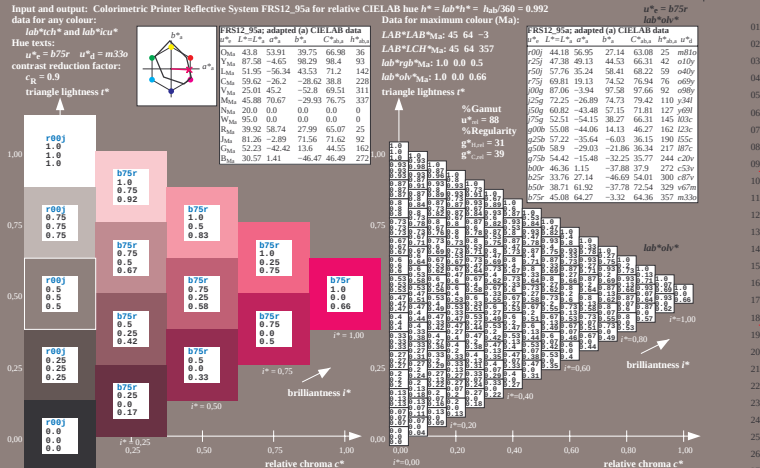
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 39 62 −38; $LAB^*LCH^*_{Ma}$: 39 73 328; $lab^*rgb^*_{Ma}$: 1.0 0.0 1.0; $lab^*ov^*_{Ma}$: 0.68 0.0 1.0; triangle lightness t^*

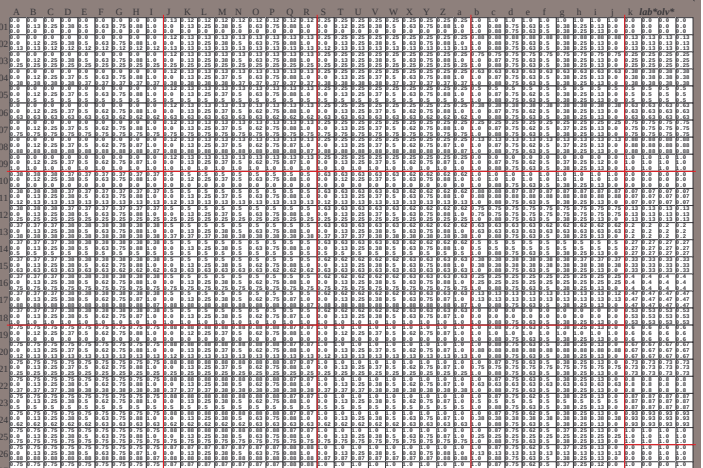


Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.992$ — $u^*_c = b75r$ / lab^*ov^*

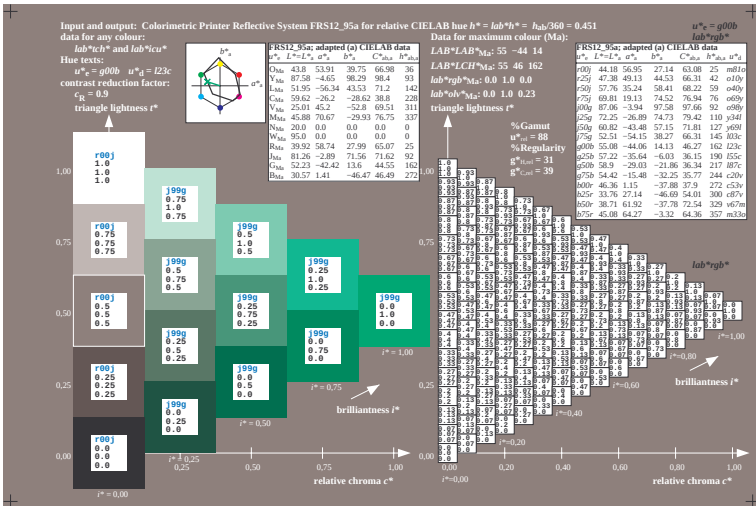
data for any colour: lab^*ch^* and lab^*icu^*; Hue texts: $u^*_c = b75r$ $u^*_d = m33o$; contrast reduction factor: $c_{lg} = 0.9$; triangle lightness t^*

Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 45 64 −3; $LAB^*LCH^*_{Ma}$: 45 64 357; $lab^*rgb^*_{Ma}$: 1.0 0.0 0.5; $lab^*ov^*_{Ma}$: 1.0 0.0 0.66; triangle lightness t^*

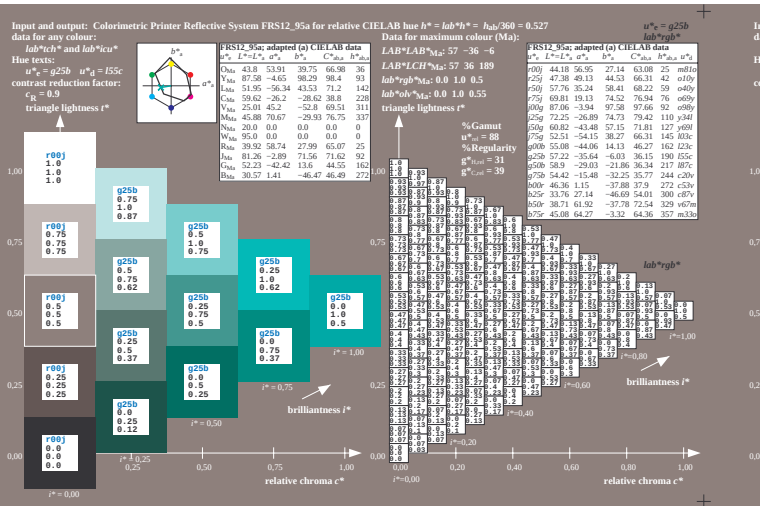




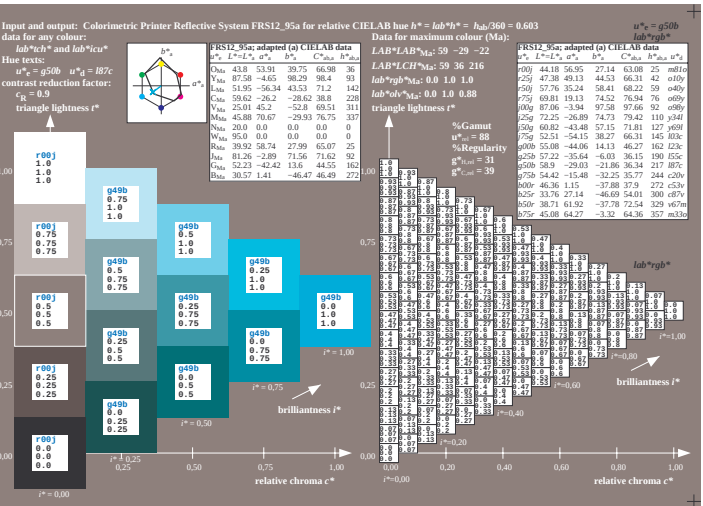
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.451$
data for any colour: $u^*_c = g00b$ lab^*rgb^*
lab^*ch^* and lab^*icu^*
Hue texts: $u^*_T = g00b$ $u^*_{\Delta} = I23c$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 55 −44 14
$LAB^*LCH^*_{Ma}$: 55 46 162
$lab^*rgb^*_{Ma}$: 0.0 1.0 0.0
$lab^*olv^*_{Ma}$: 0.0 1.0 0.23
%Gamut $u^*_{vol} = 88$
%Regularity $g^*_{FLnt} = 31$ $g^*_{C,nt} = 39$



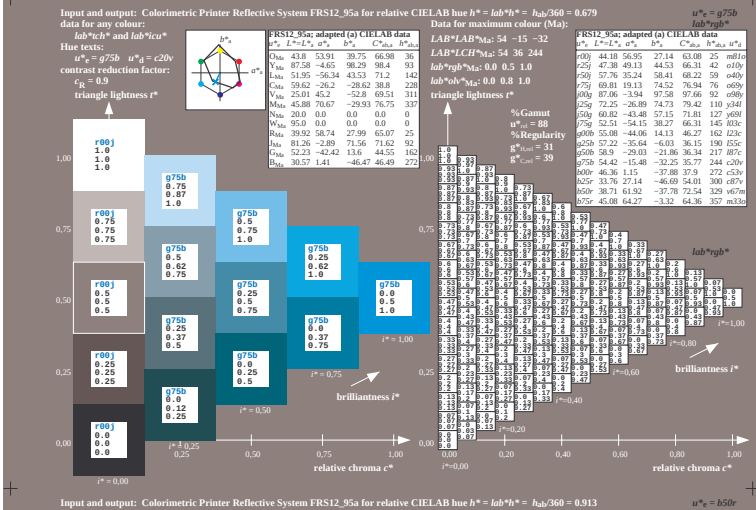
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.527$
data for any colour: $u^*_c = g25b$ lab^*rgb^*
lab^*ch^* and lab^*icu^*
Hue texts: $u^*_T = g25b$ $u^*_{\Delta} = I55c$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 57 −36 −6
$LAB^*LCH^*_{Ma}$: 57 36 189
$lab^*rgb^*_{Ma}$: 0.0 1.0 0.5
$lab^*olv^*_{Ma}$: 0.0 1.0 0.55
%Gamut $u^*_{vol} = 88$
%Regularity $g^*_{FLnt} = 31$ $g^*_{C,nt} = 39$



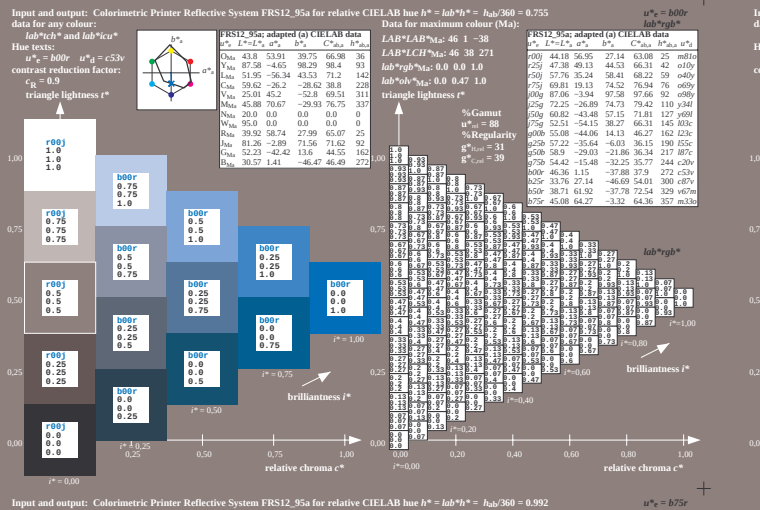
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.603$
data for any colour: $u^*_c = g50b$ lab^*rgb^*
lab^*ch^* and lab^*icu^*
Hue texts: $u^*_T = g50b$ $u^*_{\Delta} = I87c$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 59 −29 −22
$LAB^*LCH^*_{Ma}$: 59 36 216
$lab^*rgb^*_{Ma}$: 0.0 1.0 1.0
$lab^*olv^*_{Ma}$: 0.0 1.0 0.88
%Gamut $u^*_{vol} = 88$
%Regularity $g^*_{FLnt} = 31$ $g^*_{C,nt} = 39$



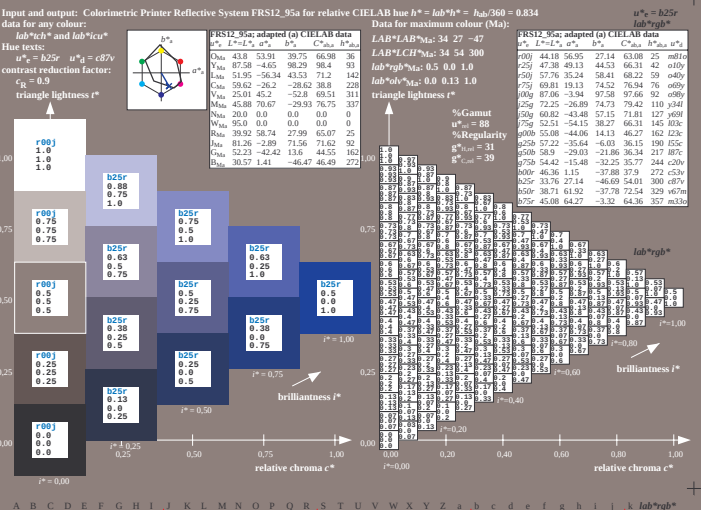
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.679$
data for any colour: $u^*_c = g75b$ lab^*rgb^*
lab^*ch^* and lab^*icu^*
Hue texts: $u^*_T = g75b$ $u^*_{\Delta} = c20v$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 54 −15 −32
$LAB^*LCH^*_{Ma}$: 54 36 244
$lab^*rgb^*_{Ma}$: 0.0 0.5 1.0
$lab^*olv^*_{Ma}$: 0.0 0.8 1.0
%Gamut $u^*_{vol} = 88$
%Regularity $g^*_{FLnt} = 31$ $g^*_{C,nt} = 39$



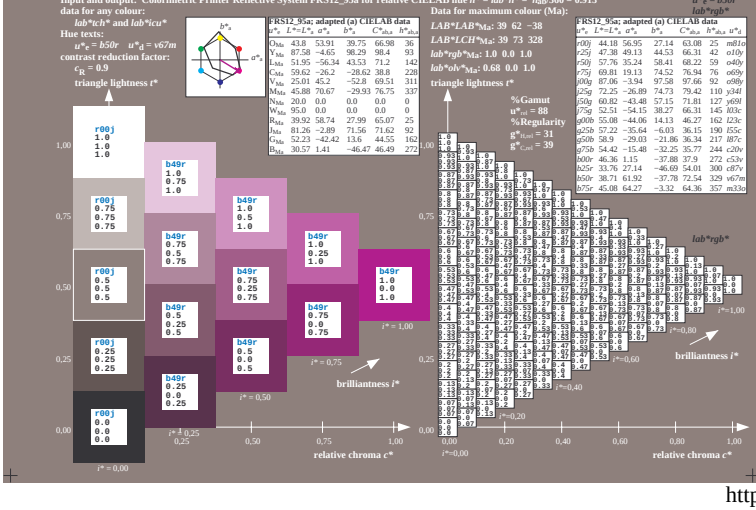
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.755$
data for any colour: $u^*_c = b00r$ lab^*rgb^*
lab^*ch^* and lab^*icu^*
Hue texts: $u^*_T = b00r$ $u^*_{\Delta} = c53v$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 46 1 −38
$LAB^*LCH^*_{Ma}$: 46 38 271
$lab^*rgb^*_{Ma}$: 0.0 0.0 1.0
$lab^*olv^*_{Ma}$: 0.0 0.47 1.0
%Gamut $u^*_{vol} = 88$
%Regularity $g^*_{FLnt} = 31$ $g^*_{C,nt} = 39$



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.834$
data for any colour: $u^*_c = b25r$ lab^*rgb^*
lab^*ch^* and lab^*icu^*
Hue texts: $u^*_T = b25r$ $u^*_{\Delta} = c87v$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 34 27 −47
$LAB^*LCH^*_{Ma}$: 34 54 300
$lab^*rgb^*_{Ma}$: 0.5 0.0 1.0
$lab^*olv^*_{Ma}$: 0.0 0.13 1.0
%Gamut $u^*_{vol} = 88$
%Regularity $g^*_{FLnt} = 31$ $g^*_{C,nt} = 39$



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.913$
data for any colour: $u^*_c = b50r$ lab^*rgb^*
lab^*ch^* and lab^*icu^*
Hue texts: $u^*_T = b50r$ $u^*_{\Delta} = v67m$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 39 62 −38
$LAB^*LCH^*_{Ma}$: 39 73 328
$lab^*rgb^*_{Ma}$: 1.0 0.0 1.0
$lab^*olv^*_{Ma}$: 0.68 0.0 1.0
%Gamut $u^*_{vol} = 88$
%Regularity $g^*_{FLnt} = 31$ $g^*_{C,nt} = 39$



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.992$
data for any colour: $u^*_c = b75r$ lab^*rgb^*
lab^*ch^* and lab^*icu^*
Hue texts: $u^*_T = b75r$ $u^*_{\Delta} = m33o$
contrast reduction factor: $c_{lg} = 0.9$
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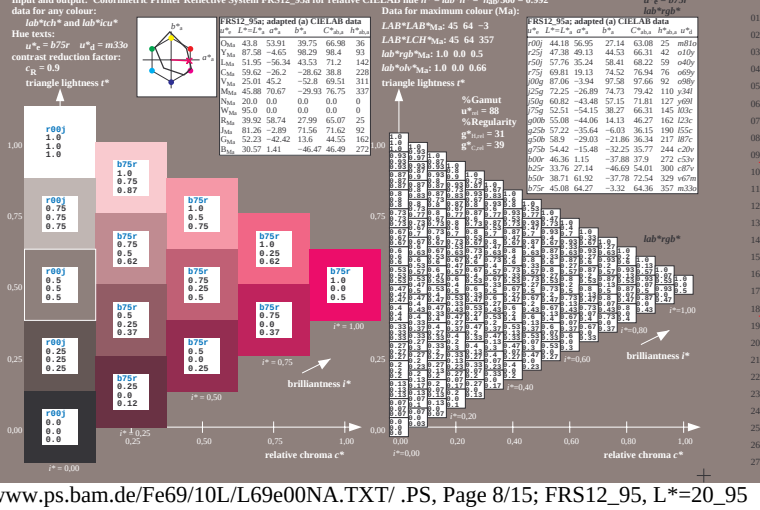
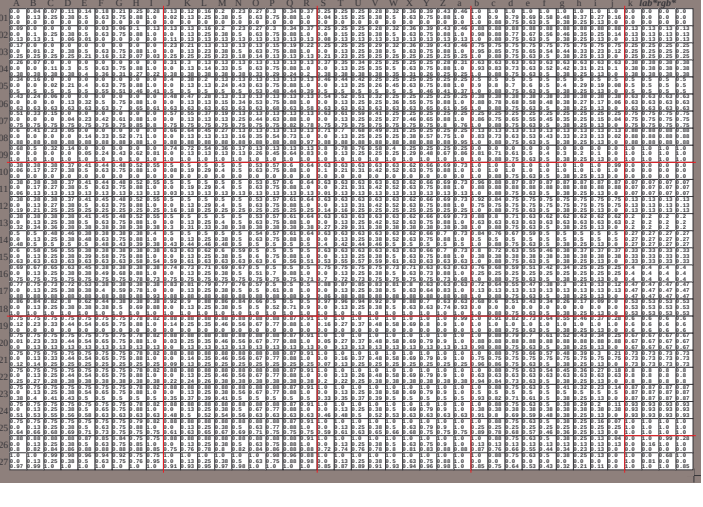
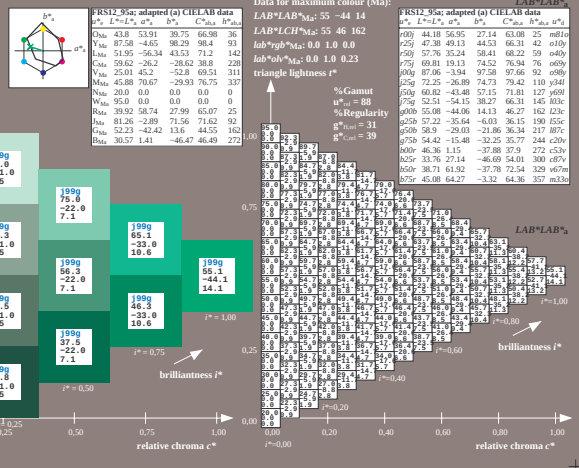
Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 45 64 −3
$LAB^*LCH^*_{Ma}$: 45 64 357
$lab^*rgb^*_{Ma}$: 1.0 0.0 0.5
$lab^*olv^*_{Ma}$: 1.0 0.0 0.66
%Gamut $u^*_{vol} = 88$
%Regularity $g^*_{FLnt} = 31$ $g^*_{C,nt} = 39$

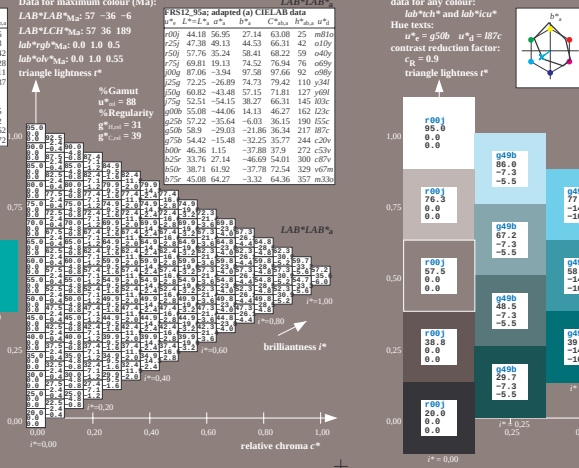




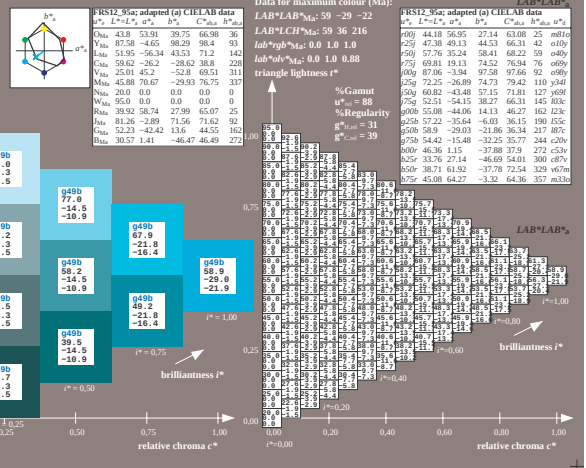
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.451$ $u^*_c = g00b$ $LAB^*LAB^*_a$
data for any colour: lab^*lch^* and lab^*icu^*
Hue texts: $u^*_c = g00b$ $u^*_d = I23c$
contrast reduction factor: $c_R = 0.9$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 55 −44 14 $LAB^*LCH^*_{Ma}$: 55 46 162 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.0 $lab^*olv^*_{Ma}$: 0.0 1.0 0.23



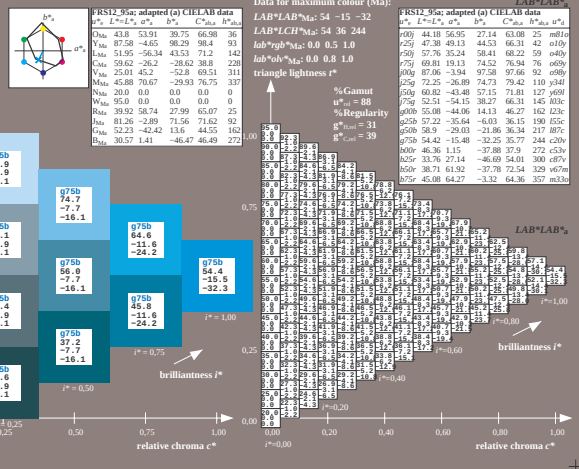
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.527$ $u^*_c = g25b$ $LAB^*LAB^*_a$
data for any colour: lab^*lch^* and lab^*icu^*
Hue texts: $u^*_c = g25b$ $u^*_d = I55c$
contrast reduction factor: $c_R = 0.9$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 57 −36 −6 $LAB^*LCH^*_{Ma}$: 57 36 189 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.5 $lab^*olv^*_{Ma}$: 0.0 1.0 0.55



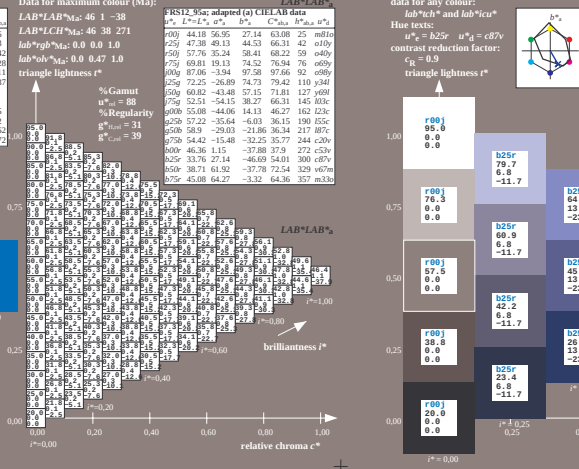
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.603$ $u^*_c = g50b$ $LAB^*LAB^*_a$
data for any colour: lab^*lch^* and lab^*icu^*
Hue texts: $u^*_c = g50b$ $u^*_d = I87c$
contrast reduction factor: $c_R = 0.9$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 59 −29 −22 $LAB^*LCH^*_{Ma}$: 59 36 216 $lab^*rgb^*_{Ma}$: 0.0 1.0 1.0 $lab^*olv^*_{Ma}$: 0.0 1.0 0.88



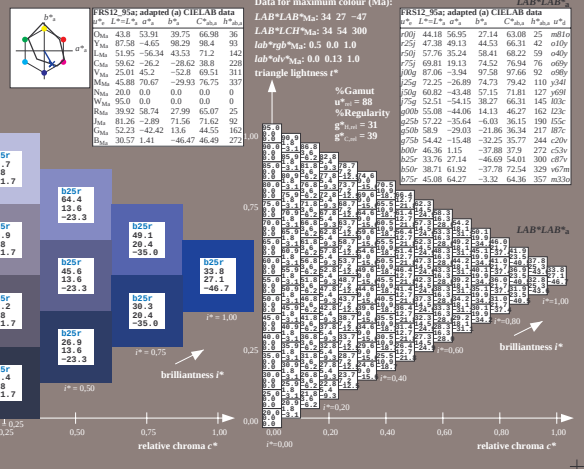
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.679$ $u^*_c = g75b$ $LAB^*LAB^*_a$
data for any colour: lab^*lch^* and lab^*icu^*
Hue texts: $u^*_c = g75b$ $u^*_d = c20v$
contrast reduction factor: $c_R = 0.9$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 54 −15 −32 $LAB^*LCH^*_{Ma}$: 54 36 244 $lab^*rgb^*_{Ma}$: 0.0 0.5 1.0 $lab^*olv^*_{Ma}$: 0.0 0.8 1.0



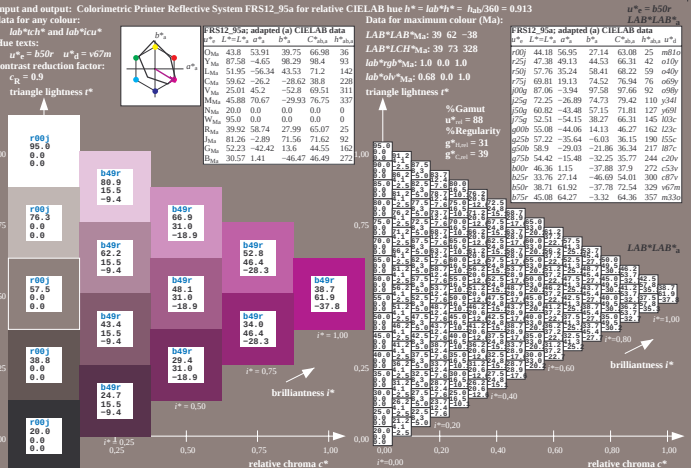
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.755$ $u^*_c = b00r$ $LAB^*LAB^*_a$
data for any colour: lab^*lch^* and lab^*icu^*
Hue texts: $u^*_c = b00r$ $u^*_d = c53v$
contrast reduction factor: $c_R = 0.9$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 46 1 −38 $LAB^*LCH^*_{Ma}$: 46 38 271 $lab^*rgb^*_{Ma}$: 0.0 0.0 1.0 $lab^*olv^*_{Ma}$: 0.0 0.47 1.0



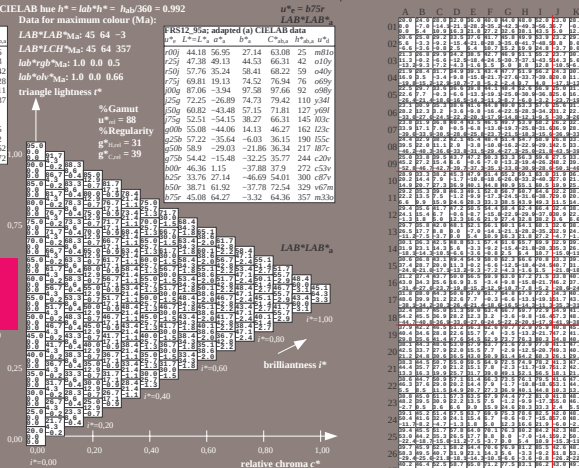
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.834$ $u^*_c = b25r$ $LAB^*LAB^*_a$
data for any colour: lab^*lch^* and lab^*icu^*
Hue texts: $u^*_c = b25r$ $u^*_d = c87v$
contrast reduction factor: $c_R = 0.9$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 34 27 −47 $LAB^*LCH^*_{Ma}$: 34 54 300 $lab^*rgb^*_{Ma}$: 0.5 0.0 1.0 $lab^*olv^*_{Ma}$: 0.0 0.13 1.0

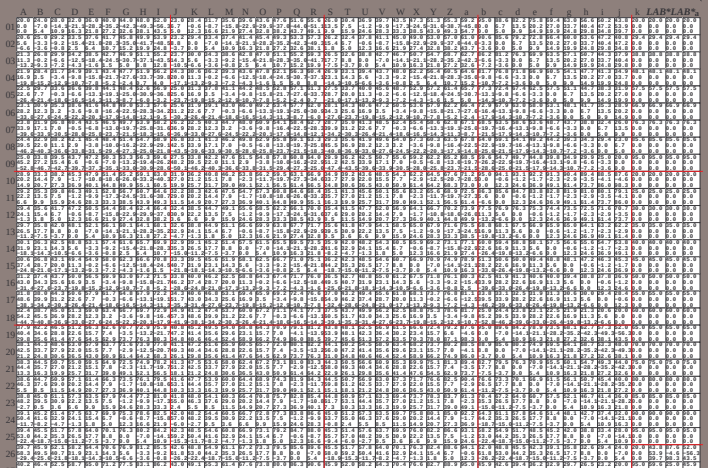


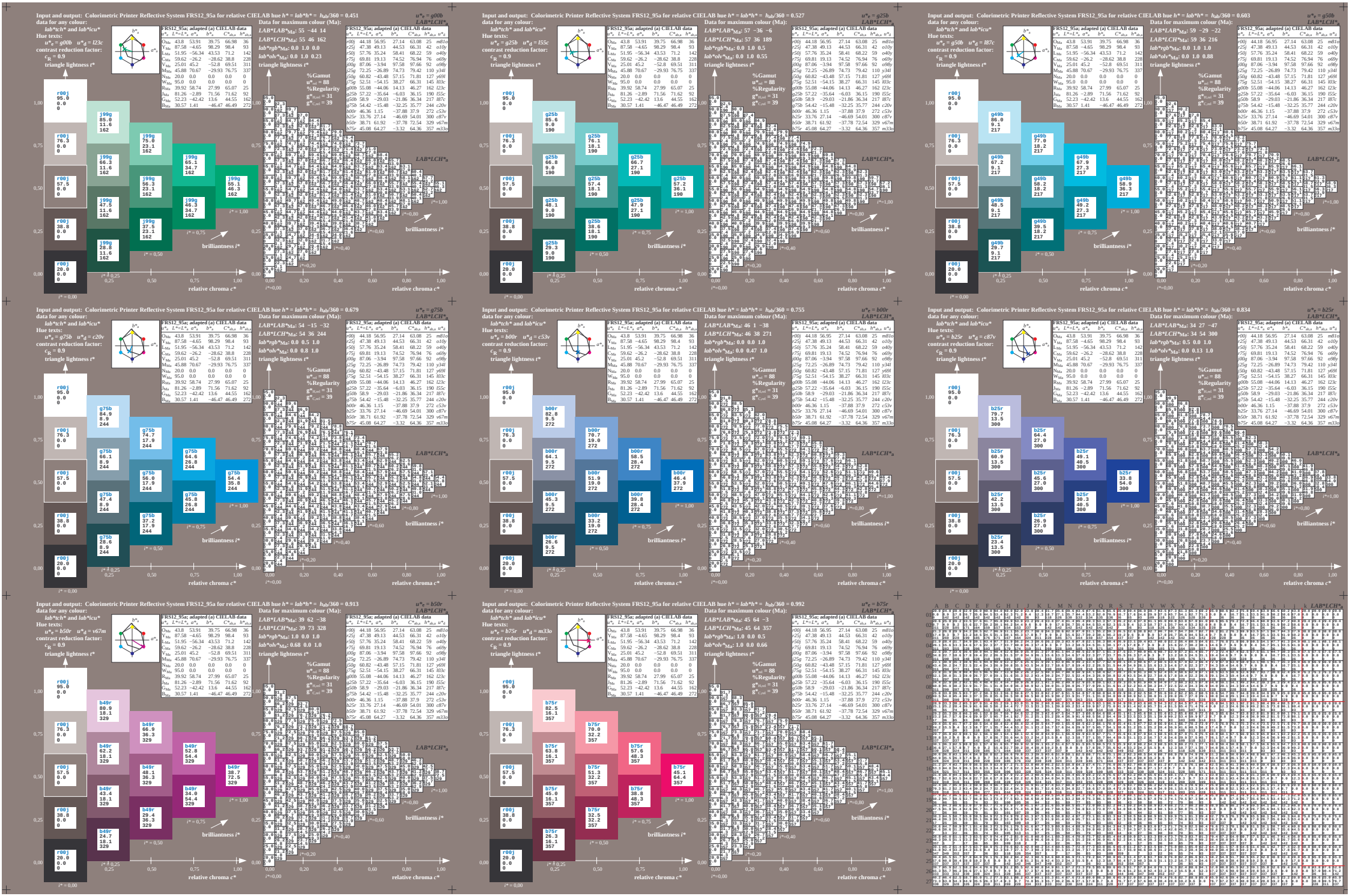
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.913$ $u^*_c = b50r$ $LAB^*LAB^*_a$
data for any colour: lab^*lch^* and lab^*icu^*
Hue texts: $u^*_c = b50r$ $u^*_d = v67m$
contrast reduction factor: $c_R = 0.9$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 39 62 −38 $LAB^*LCH^*_{Ma}$: 39 73 328 $lab^*rgb^*_{Ma}$: 1.0 0.0 1.0 $lab^*olv^*_{Ma}$: 0.68 0.0 1.0

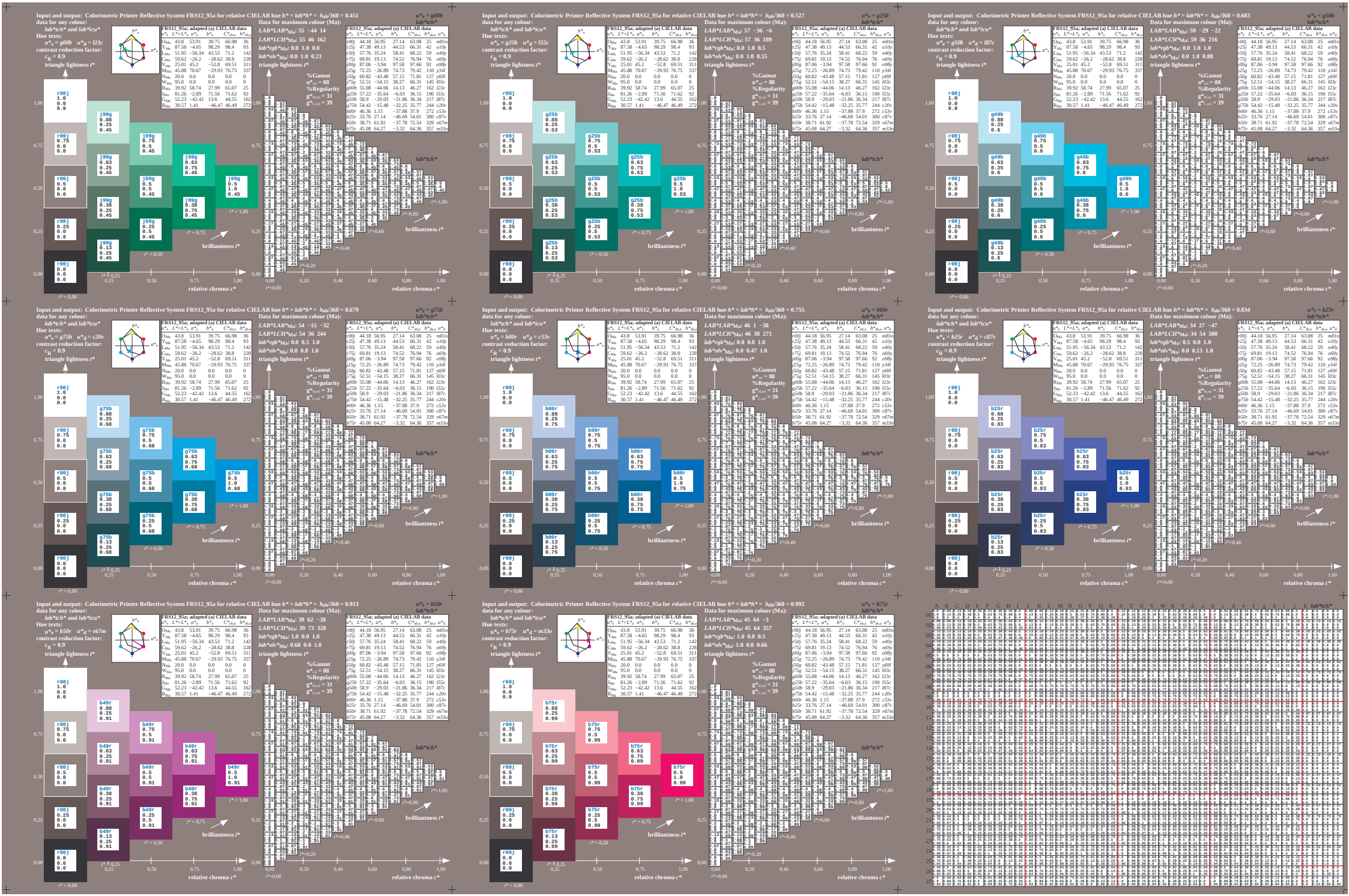


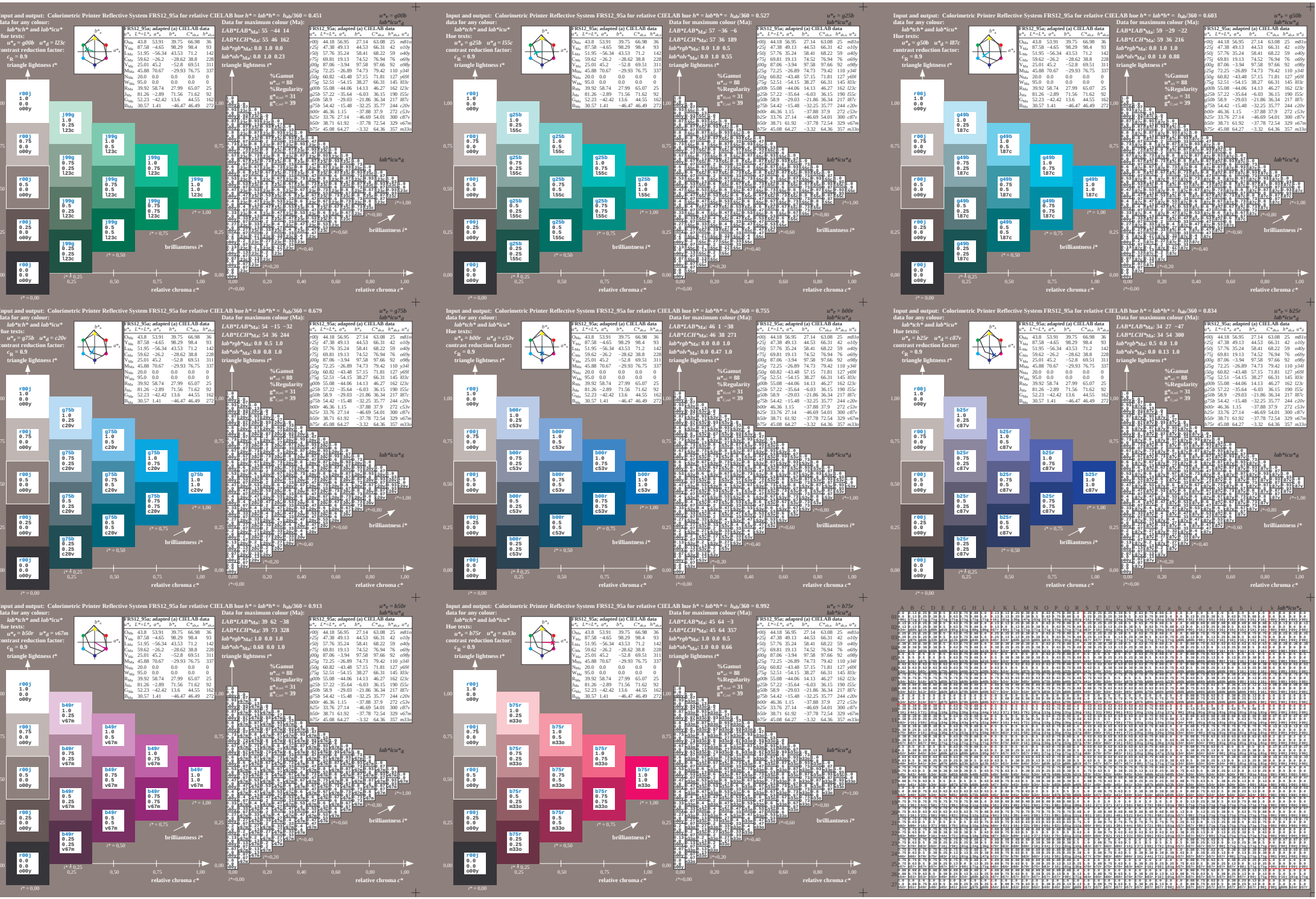
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.992$ $u^*_c = b75r$ $LAB^*LAB^*_a$
data for any colour: lab^*lch^* and lab^*icu^*
Hue texts: $u^*_c = b75r$ $u^*_d = m33o$
contrast reduction factor: $c_R = 0.9$
triangle lightness t^*
Data for maximum colour (Ma): $LAB^*LAB^*_{Ma}$: 45 64 −3 $LAB^*LCH^*_{Ma}$: 45 64 357 $lab^*rgb^*_{Ma}$: 1.0 0.0 0.5 $lab^*olv^*_{Ma}$: 1.0 0.0 0.66

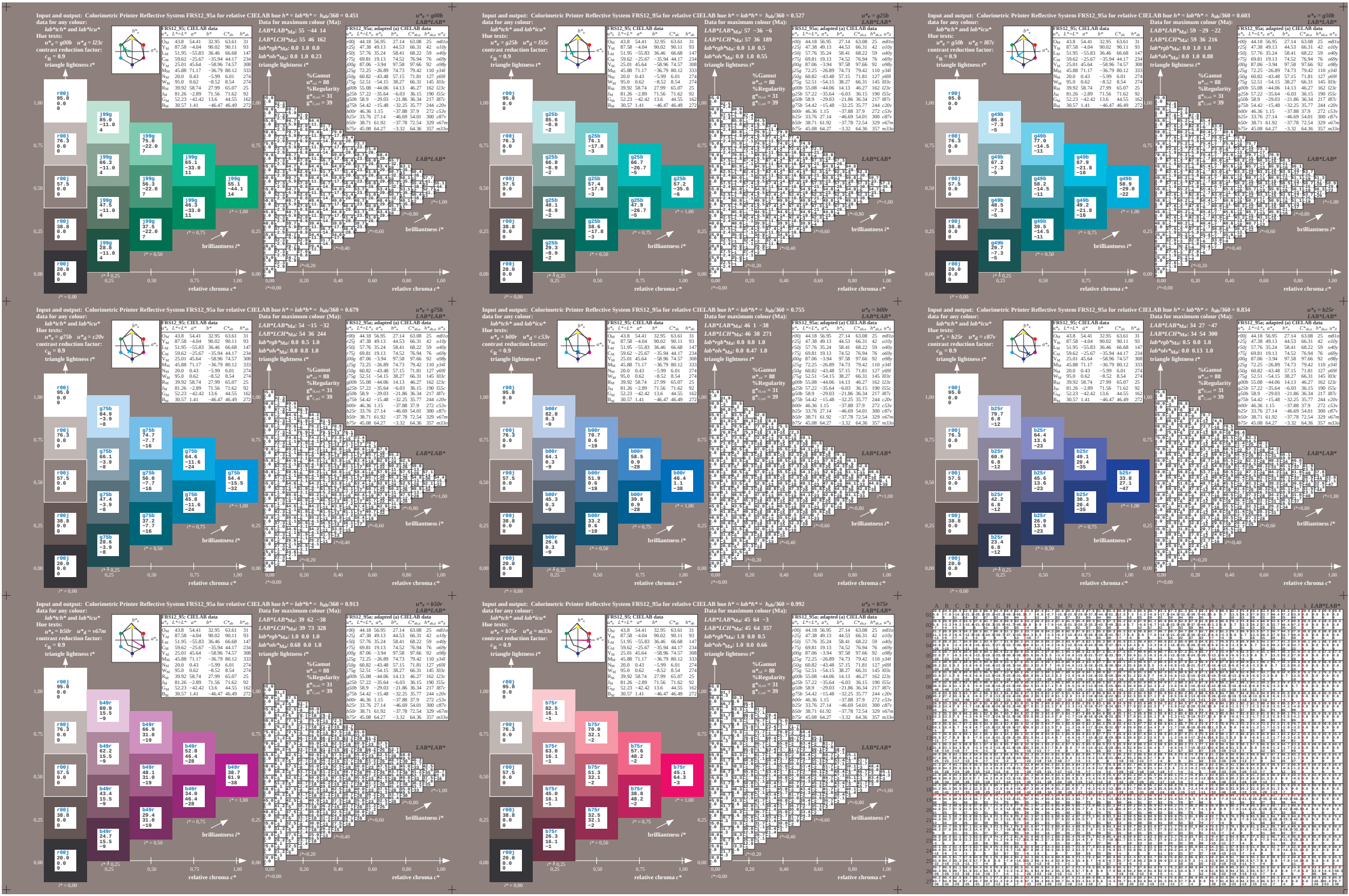





Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.451
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.527
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.603
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.679
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.755
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.834
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.913
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.992
data for any colour:
lab*ch* and lab*icu*
Hue texts:
contrast reduction factor:
triangle lightness t*
Data for maximum colour (Ma):
FRS12_95a; adapted (a) CIELAB data
%Gamut
%Regularity
relative chroma c*
brilliantness i*
LAB*LCH*a


Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.451
data for any colour:
lab*tch* and lab*icu*
Hue texts:
u*c = g00b u*d = I23c
contrast reduction factor:
cIg = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 55 −44 14
LAB*LCH*Ma: 55 46 162
lab*rgb*Ma: 0.0 1.0 0.0
lab*olv*Ma: 0.0 1.0 0.23
u*c = g00b
lab*tch*
FRS12_95a; adapted a) CIELAB data
%Gamut
u*int = 88
%Regularity
g*tLint = 31
g*CJint = 39
lab*tch*
brilliantness i*
relative chroma c*
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.527
data for any colour:
lab*tch* and lab*icu*
Hue texts:
u*c = g25b u*d = I55c
contrast reduction factor:
cIg = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 57 −36 −6
LAB*LCH*Ma: 57 36 189
lab*rgb*Ma: 0.0 1.0 0.5
lab*olv*Ma: 0.0 1.0 0.55
u*c = g25b
lab*tch*
FRS12_95a; adapted a) CIELAB data
%Gamut
u*int = 88
%Regularity
g*tLint = 31
g*CJint = 39
lab*tch*
brilliantness i*
relative chroma c*
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.603
data for any colour:
lab*tch* and lab*icu*
Hue texts:
u*c = g50b u*d = I87c
contrast reduction factor:
cIg = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 59 −29 −22
LAB*LCH*Ma: 59 36 216
lab*rgb*Ma: 0.0 1.0 1.0
lab*olv*Ma: 0.0 1.0 0.88
u*c = g50b
lab*tch*
FRS12_95a; adapted a) CIELAB data
%Gamut
u*int = 88
%Regularity
g*tLint = 31
g*CJint = 39
lab*tch*
brilliantness i*
relative chroma c*
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.679
data for any colour:
lab*tch* and lab*icu*
Hue texts:
u*c = g75b u*d = c20v
contrast reduction factor:
cIg = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 54 −15 −32
LAB*LCH*Ma: 54 36 244
lab*rgb*Ma: 0.0 0.5 1.0
lab*olv*Ma: 0.0 0.8 1.0
u*c = g75b
lab*tch*
FRS12_95a; adapted a) CIELAB data
%Gamut
u*int = 88
%Regularity
g*tLint = 31
g*CJint = 39
lab*tch*
brilliantness i*
relative chroma c*
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.755
data for any colour:
lab*tch* and lab*icu*
Hue texts:
u*c = b00r u*d = c53v
contrast reduction factor:
cIg = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 46 1 −38
LAB*LCH*Ma: 46 38 271
lab*rgb*Ma: 0.0 0.0 1.0
lab*olv*Ma: 0.0 0.47 1.0
u*c = b00r
lab*tch*
FRS12_95a; adapted a) CIELAB data
%Gamut
u*int = 88
%Regularity
g*tLint = 31
g*CJint = 39
lab*tch*
brilliantness i*
relative chroma c*
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.834
data for any colour:
lab*tch* and lab*icu*
Hue texts:
u*c = b25r u*d = c87v
contrast reduction factor:
cIg = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 34 27 −47
LAB*LCH*Ma: 34 54 300
lab*rgb*Ma: 0.5 0.0 1.0
lab*olv*Ma: 0.0 0.13 1.0
u*c = b25r
lab*tch*
FRS12_95a; adapted a) CIELAB data
%Gamut
u*int = 88
%Regularity
g*tLint = 31
g*CJint = 39
lab*tch*
brilliantness i*
relative chroma c*
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.913
data for any colour:
lab*tch* and lab*icu*
Hue texts:
u*c = b50r u*d = v67m
contrast reduction factor:
cIg = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 39 62 −38
LAB*LCH*Ma: 39 73 328
lab*rgb*Ma: 1.0 0.0 1.0
lab*olv*Ma: 0.68 0.0 1.0
u*c = b50r
lab*tch*
FRS12_95a; adapted a) CIELAB data
%Gamut
u*int = 88
%Regularity
g*tLint = 31
g*CJint = 39
lab*tch*
brilliantness i*
relative chroma c*
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.992
data for any colour:
lab*tch* and lab*icu*
Hue texts:
u*c = b75r u*d = m33o
contrast reduction factor:
cIg = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 45 64 −3
LAB*LCH*Ma: 45 64 357
lab*rgb*Ma: 1.0 0.0 0.5
lab*olv*Ma: 1.0 0.0 0.66
u*c = b75r
lab*tch*
FRS12_95a; adapted a) CIELAB data
%Gamut
u*int = 88
%Regularity
g*tLint = 31
g*CJint = 39
lab*tch*
brilliantness i*
relative chroma c*
lab*tch*


Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.451
u*c = g00b lab*icu*d
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.527
u*c = g25b lab*icu*d
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.603
u*c = g50b lab*icu*d
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.679
u*c = g75b lab*icu*d
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.755
u*c = b00r lab*icu*d
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.834
u*c = b25r lab*icu*d
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.913
u*c = b50r lab*icu*d
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.992
u*c = b75r lab*icu*d
data for any colour:
lab*ch* and lab*icu*
Hue texts:
u*c = g00b u*d = I23c
u*c = g25b u*d = I55c
u*c = g50b u*d = I87c
u*c = g75b u*d = c20v
u*c = b00r u*d = c53v
u*c = b25r u*d = c87v
u*c = b50r u*d = v67m
u*c = b75r u*d = m33o
contrast reduction factor:
cIR = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 55 −44 14
LAB*LCH*Ma: 55 46 162
lab*rgb*Ma: 0.0 1.0 0.0
lab*olv*Ma: 0.0 1.0 0.23
LAB*LAB*Ma: 57 −36 −6
LAB*LCH*Ma: 57 36 189
lab*rgb*Ma: 0.0 1.0 0.5
lab*olv*Ma: 0.0 1.0 0.55
LAB*LAB*Ma: 59 −29 −22
LAB*LCH*Ma: 59 36 216
lab*rgb*Ma: 0.0 1.0 1.0
lab*olv*Ma: 0.0 1.0 0.88
LAB*LAB*Ma: 54 −15 −32
LAB*LCH*Ma: 54 36 244
lab*rgb*Ma: 0.0 0.5 1.0
lab*olv*Ma: 0.0 0.8 1.0
LAB*LAB*Ma: 46 1 −38
LAB*LCH*Ma: 46 38 271
lab*rgb*Ma: 0.0 0.0 1.0
lab*olv*Ma: 0.0 0.47 1.0
LAB*LAB*Ma: 34 27 −47
LAB*LCH*Ma: 34 54 300
lab*rgb*Ma: 0.5 0.0 1.0
lab*olv*Ma: 0.0 0.13 1.0
LAB*LAB*Ma: 39 62 −38
LAB*LCH*Ma: 39 73 328
lab*rgb*Ma: 1.0 0.0 1.0
lab*olv*Ma: 0.68 0.0 1.0
LAB*LAB*Ma: 45 64 −3
LAB*LCH*Ma: 45 64 357
lab*rgb*Ma: 1.0 0.0 0.5
lab*olv*Ma: 1.0 0.0 0.66
%Gamut
u*sat = 88
%Regularity
g*IL,ut = 31
g*C,ut = 39
FRS12_95a; adapted (a) CIELAB data
relative chroma c*
brilliantness j*
lab*icu*d


Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.451
data for any colour:
lab*ch* and lab*icu*
Hue texts:
u*c = g00b u*a = I23c
contrast reduction factor:
cR = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 55 −44 14
LAB*LCH*Ma: 55 46 162
lab*rgb*Ma: 0.0 1.0 0.0
lab*olv*Ma: 0.0 1.0 0.23
u*c = g00b
LAB*LAB*
FRS12_95: CIELAB data
FRS12_95a; adapted a) CIELAB data
%Gamut
u*out = 88
%Regularity
g*R,int = 31
g*C,int = 39
LAB*LAB*
brilliantness i*
relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.679
data for any colour:
lab*ch* and lab*icu*
Hue texts:
u*c = g75b u*a = c20v
contrast reduction factor:
cR = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 54 −15 −32
LAB*LCH*Ma: 54 36 244
lab*rgb*Ma: 0.0 0.5 1.0
lab*olv*Ma: 0.0 0.8 1.0
u*c = g75b
LAB*LAB*
FRS12_95: CIELAB data
FRS12_95a; adapted a) CIELAB data
%Gamut
u*out = 88
%Regularity
g*R,int = 31
g*C,int = 39
LAB*LAB*
brilliantness i*
relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.913
data for any colour:
lab*ch* and lab*icu*
Hue texts:
u*c = b50r u*a = v67m
contrast reduction factor:
cR = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 39 62 −38
LAB*LCH*Ma: 39 73 328
lab*rgb*Ma: 1.0 0.0 1.0
lab*olv*Ma: 0.68 0.0 1.0
u*c = b50r
LAB*LAB*
FRS12_95: CIELAB data
FRS12_95a; adapted a) CIELAB data
%Gamut
u*out = 88
%Regularity
g*R,int = 31
g*C,int = 39
LAB*LAB*
brilliantness i*
relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.527
data for any colour:
lab*ch* and lab*icu*
Hue texts:
u*c = g25b u*a = I55c
contrast reduction factor:
cR = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 57 −36 −6
LAB*LCH*Ma: 57 36 189
lab*rgb*Ma: 0.0 1.0 0.5
lab*olv*Ma: 0.0 1.0 0.55
u*c = g25b
LAB*LAB*
FRS12_95: CIELAB data
FRS12_95a; adapted a) CIELAB data
%Gamut
u*out = 88
%Regularity
g*R,int = 31
g*C,int = 39
LAB*LAB*
brilliantness i*
relative chroma c*

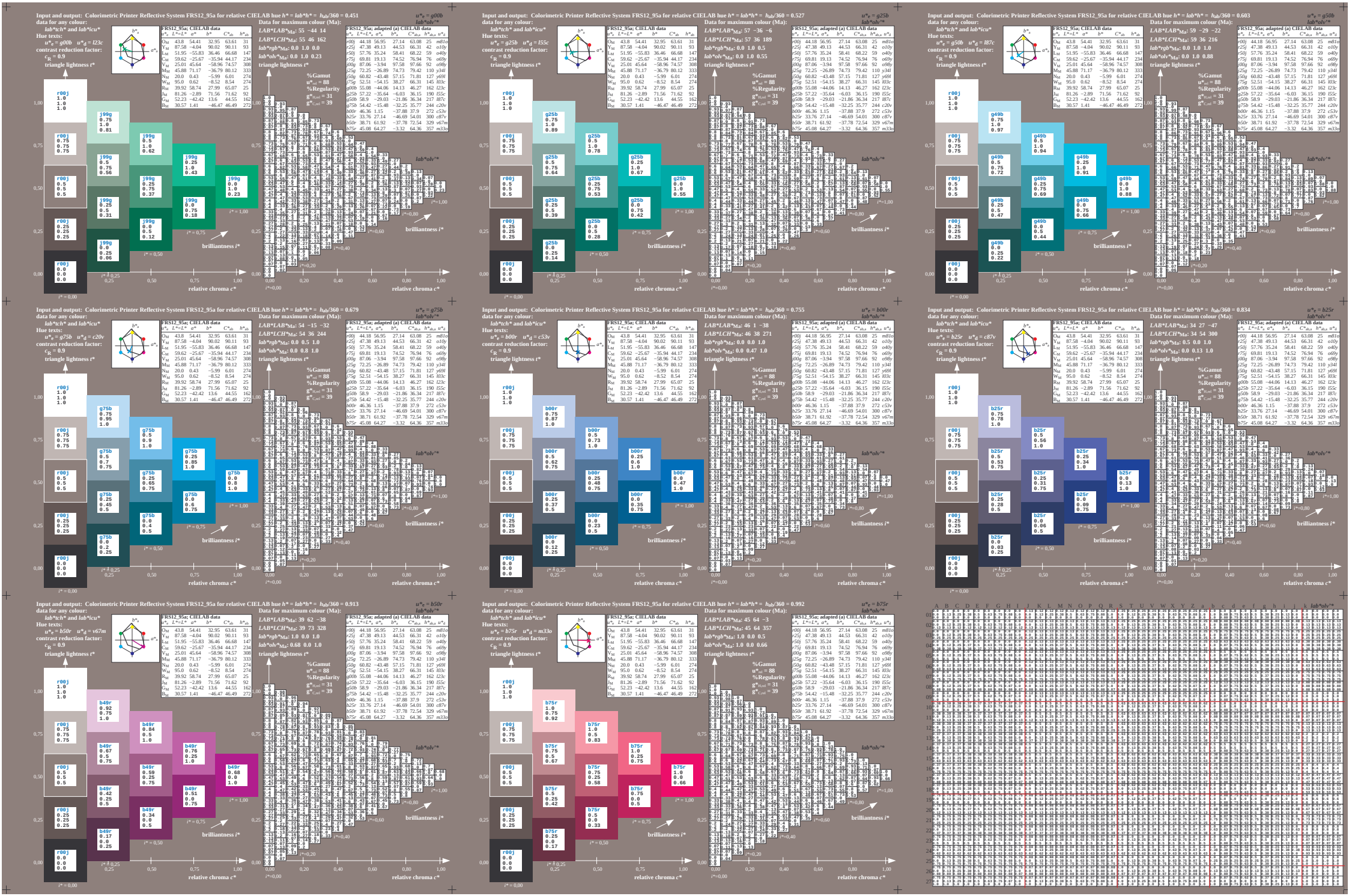
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.755
data for any colour:
lab*ch* and lab*icu*
Hue texts:
u*c = b00r u*a = c53v
contrast reduction factor:
cR = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 46 1 −38
LAB*LCH*Ma: 46 38 271
lab*rgb*Ma: 0.0 0.0 1.0
lab*olv*Ma: 0.0 0.47 1.0
u*c = b00r
LAB*LAB*
FRS12_95: CIELAB data
FRS12_95a; adapted a) CIELAB data
%Gamut
u*out = 88
%Regularity
g*R,int = 31
g*C,int = 39
LAB*LAB*
brilliantness i*
relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.992
data for any colour:
lab*ch* and lab*icu*
Hue texts:
u*c = b75r u*a = m33o
contrast reduction factor:
cR = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 45 64 −3
LAB*LCH*Ma: 45 64 357
lab*rgb*Ma: 1.0 0.0 0.5
lab*olv*Ma: 1.0 0.0 0.66
u*c = b75r
LAB*LAB*
FRS12_95: CIELAB data
FRS12_95a; adapted a) CIELAB data
%Gamut
u*out = 88
%Regularity
g*R,int = 31
g*C,int = 39
LAB*LAB*
brilliantness i*
relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.603
data for any colour:
lab*ch* and lab*icu*
Hue texts:
u*c = g50b u*a = I87c
contrast reduction factor:
cR = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 59 −29 −22
LAB*LCH*Ma: 59 36 216
lab*rgb*Ma: 0.0 1.0 1.0
lab*olv*Ma: 0.0 1.0 0.88
u*c = g50b
LAB*LAB*
FRS12_95: CIELAB data
FRS12_95a; adapted a) CIELAB data
%Gamut
u*out = 88
%Regularity
g*R,int = 31
g*C,int = 39
LAB*LAB*
brilliantness i*
relative chroma c*

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.834
data for any colour:
lab*ch* and lab*icu*
Hue texts:
u*c = b25r u*a = c87v
contrast reduction factor:
cR = 0.9
triangle lightness t*
Data for maximum colour (Ma):
LAB*LAB*Ma: 34 27 −47
LAB*LCH*Ma: 34 54 300
lab*rgb*Ma: 0.5 0.0 1.0
lab*olv*Ma: 0.0 0.13 1.0
u*c = b25r
LAB*LAB*
FRS12_95: CIELAB data
FRS12_95a; adapted a) CIELAB data
%Gamut
u*out = 88
%Regularity
g*R,int = 31
g*C,int = 39
LAB*LAB*
brilliantness i*
relative chroma c*

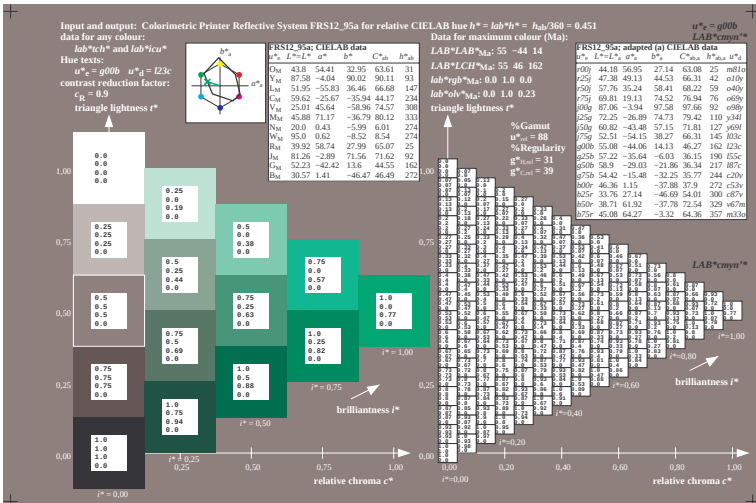
LAB*LAB*


Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.451
data for any colour: lab*ch* and lab*icu*
Hue texts: u*c = g00b u*d = I23c
contrast reduction factor: cB = 0.9
triangle lightness t*
Data for maximum colour (Ma): LAB*LAB*Ma: 55 −44 14 LAB*LCH*Ma: 55 46 162 lab*rgb*Ma: 0.0 1.0 0.0 lab*olv*Ma: 0.0 1.0 0.23
u*e = g00b lab*olv/*
%Gamut u*sol = 88 %Regularity g*TLnt = 31 g*CJnt = 39
FRS12_95a; CIELAB data
FRS12_95a; adapted (a) CIELAB data
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.527
data for any colour: lab*ch* and lab*icu*
Hue texts: u*c = g25b u*d = I55c
contrast reduction factor: cB = 0.9
triangle lightness t*
Data for maximum colour (Ma): LAB*LAB*Ma: 57 −36 −6 LAB*LCH*Ma: 57 36 189 lab*rgb*Ma: 0.0 1.0 0.5 lab*olv*Ma: 0.0 1.0 0.55
u*e = g25b lab*olv/*
%Gamut u*sol = 88 %Regularity g*TLnt = 31 g*CJnt = 39
FRS12_95a; CIELAB data
FRS12_95a; adapted (a) CIELAB data
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.603
data for any colour: lab*ch* and lab*icu*
Hue texts: u*c = g50b u*d = I87c
contrast reduction factor: cB = 0.9
triangle lightness t*
Data for maximum colour (Ma): LAB*LAB*Ma: 59 −29 −22 LAB*LCH*Ma: 59 36 216 lab*rgb*Ma: 0.0 1.0 1.0 lab*olv*Ma: 0.0 1.0 0.88
u*e = g50b lab*olv/*
%Gamut u*sol = 88 %Regularity g*TLnt = 31 g*CJnt = 39
FRS12_95a; CIELAB data
FRS12_95a; adapted (a) CIELAB data
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.679
data for any colour: lab*ch* and lab*icu*
Hue texts: u*c = g75b u*d = c20v
contrast reduction factor: cB = 0.9
triangle lightness t*
Data for maximum colour (Ma): LAB*LAB*Ma: 54 −15 −32 LAB*LCH*Ma: 54 36 244 lab*rgb*Ma: 0.0 0.5 1.0 lab*olv*Ma: 0.0 0.8 1.0
u*e = g75b lab*olv/*
%Gamut u*sol = 88 %Regularity g*TLnt = 31 g*CJnt = 39
FRS12_95a; CIELAB data
FRS12_95a; adapted (a) CIELAB data
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.755
data for any colour: lab*ch* and lab*icu*
Hue texts: u*c = b00r u*d = c53v
contrast reduction factor: cB = 0.9
triangle lightness t*
Data for maximum colour (Ma): LAB*LAB*Ma: 46 1 −38 LAB*LCH*Ma: 46 38 271 lab*rgb*Ma: 0.0 0.0 1.0 lab*olv*Ma: 0.0 0.47 1.0
u*e = b00r lab*olv/*
%Gamut u*sol = 88 %Regularity g*TLnt = 31 g*CJnt = 39
FRS12_95a; CIELAB data
FRS12_95a; adapted (a) CIELAB data
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.834
data for any colour: lab*ch* and lab*icu*
Hue texts: u*c = b25r u*d = c87v
contrast reduction factor: cB = 0.9
triangle lightness t*
Data for maximum colour (Ma): LAB*LAB*Ma: 34 27 −47 LAB*LCH*Ma: 34 54 300 lab*rgb*Ma: 0.5 0.0 1.0 lab*olv*Ma: 0.0 0.13 1.0
u*e = b25r lab*olv/*
%Gamut u*sol = 88 %Regularity g*TLnt = 31 g*CJnt = 39
FRS12_95a; CIELAB data
FRS12_95a; adapted (a) CIELAB data
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.913
data for any colour: lab*ch* and lab*icu*
Hue texts: u*c = b50r u*d = v67m
contrast reduction factor: cB = 0.9
triangle lightness t*
Data for maximum colour (Ma): LAB*LAB*Ma: 39 62 −38 LAB*LCH*Ma: 39 73 328 lab*rgb*Ma: 1.0 0.0 1.0 lab*olv*Ma: 0.68 0.0 1.0
u*e = b50r lab*olv/*
%Gamut u*sol = 88 %Regularity g*TLnt = 31 g*CJnt = 39
FRS12_95a; CIELAB data
FRS12_95a; adapted (a) CIELAB data
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue h* = lab*h* = hab/360 = 0.992
data for any colour: lab*ch* and lab*icu*
Hue texts: u*c = b75r u*d = m33o
contrast reduction factor: cB = 0.9
triangle lightness t*
Data for maximum colour (Ma): LAB*LAB*Ma: 45 64 −3 LAB*LCH*Ma: 45 64 357 lab*rgb*Ma: 1.0 0.0 0.5 lab*olv*Ma: 1.0 0.0 0.66
u*e = b75r lab*olv/*
%Gamut u*sol = 88 %Regularity g*TLnt = 31 g*CJnt = 39
FRS12_95a; CIELAB data
FRS12_95a; adapted (a) CIELAB data
relative chroma c*
brilliantness i*

Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.451$
data for any colour: $u^*_E = g00b$
*lab*ch** and *lab*icu**
Hue texts: LAB^*cmyn^*
$u^*_E = g00b$ $u^*_A = I23c$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 55 −44 14
$LAB^*LCH^*_{Ma}$: 55 46 162
$lab^*rgb^*_{Ma}$: 0.0 1.0 0.0
$lab^*olv^*_{Ma}$: 0.0 1.0 0.23
triangle lightness t^*

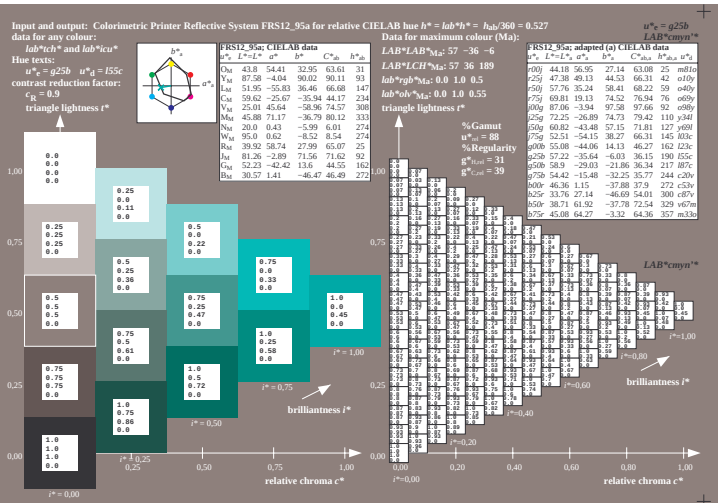
%Gamut $u^*_{sat} = 88$
%Regularity $g^*_{FLat} = 31$ $g^*_{C,sat} = 39$



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.527$
data for any colour: $u^*_E = g25b$
*lab*ch** and *lab*icu**
Hue texts: LAB^*cmyn^*
$u^*_E = g25b$ $u^*_A = I55c$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 57 −36 −6
$LAB^*LCH^*_{Ma}$: 57 36 189
$lab^*rgb^*_{Ma}$: 0.0 1.0 0.5
$lab^*olv^*_{Ma}$: 0.0 1.0 0.55
triangle lightness t^*

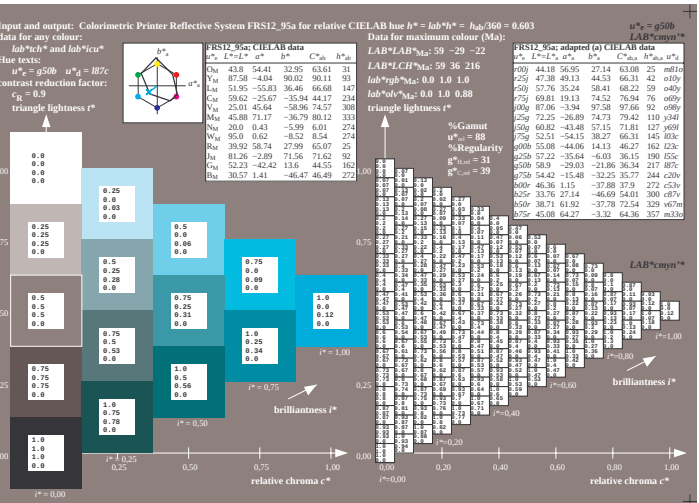
%Gamut $u^*_{sat} = 88$
%Regularity $g^*_{FLat} = 31$ $g^*_{C,sat} = 39$



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.603$
data for any colour: $u^*_E = g50b$
*lab*ch** and *lab*icu**
Hue texts: LAB^*cmyn^*
$u^*_E = g50b$ $u^*_A = I87c$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 59 −29 −22
$LAB^*LCH^*_{Ma}$: 59 36 216
$lab^*rgb^*_{Ma}$: 0.0 1.0 1.0
$lab^*olv^*_{Ma}$: 0.0 1.0 0.88
triangle lightness t^*

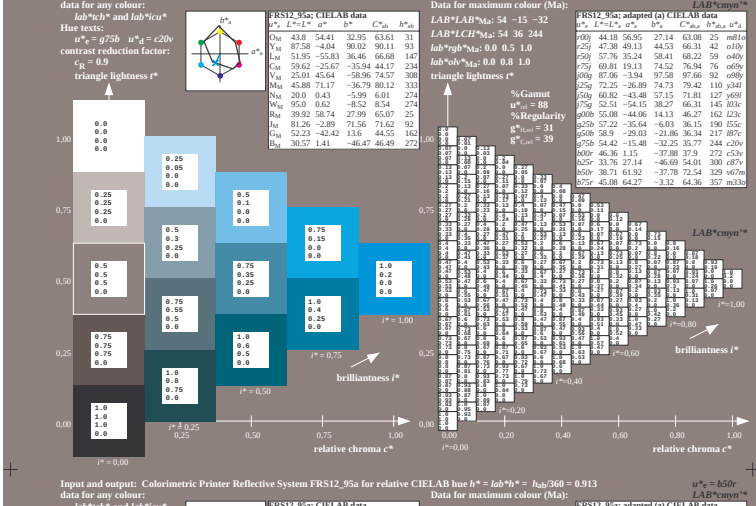
%Gamut $u^*_{sat} = 88$
%Regularity $g^*_{FLat} = 31$ $g^*_{C,sat} = 39$



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.679$
data for any colour: $u^*_E = g75b$
*lab*ch** and *lab*icu**
Hue texts: LAB^*cmyn^*
$u^*_E = g75b$ $u^*_A = c20v$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 54 −15 −32
$LAB^*LCH^*_{Ma}$: 54 36 244
$lab^*rgb^*_{Ma}$: 0.0 0.5 1.0
$lab^*olv^*_{Ma}$: 0.0 0.8 1.0
triangle lightness t^*

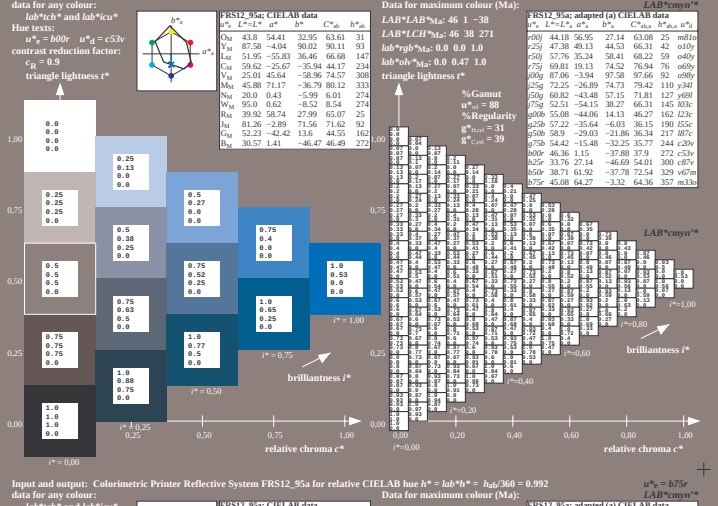
%Gamut $u^*_{sat} = 88$
%Regularity $g^*_{FLat} = 31$ $g^*_{C,sat} = 39$



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.755$
data for any colour: $u^*_E = b00r$
*lab*ch** and *lab*icu**
Hue texts: LAB^*cmyn^*
$u^*_E = b00r$ $u^*_A = c53v$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 46 1 −38
$LAB^*LCH^*_{Ma}$: 46 38 271
$lab^*rgb^*_{Ma}$: 0.0 0.0 1.0
$lab^*olv^*_{Ma}$: 0.0 0.47 1.0
triangle lightness t^*

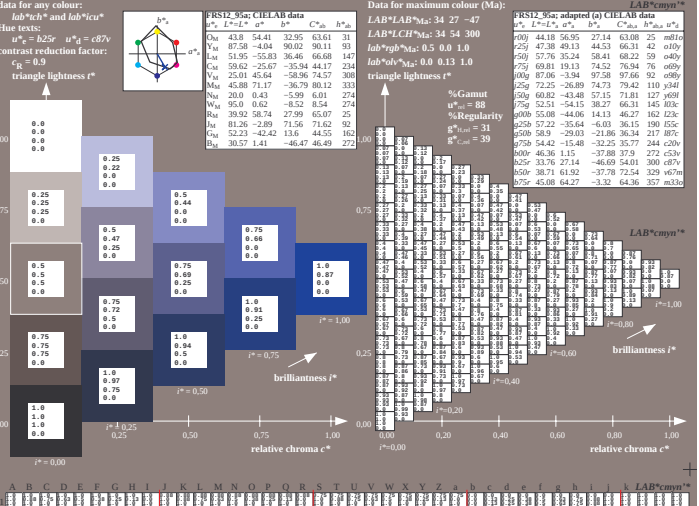
%Gamut $u^*_{sat} = 88$
%Regularity $g^*_{FLat} = 31$ $g^*_{C,sat} = 39$



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.834$
data for any colour: $u^*_E = b25r$
*lab*ch** and *lab*icu**
Hue texts: LAB^*cmyn^*
$u^*_E = b25r$ $u^*_A = c87v$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 34 27 −47
$LAB^*LCH^*_{Ma}$: 34 54 300
$lab^*rgb^*_{Ma}$: 0.5 0.0 1.0
$lab^*olv^*_{Ma}$: 0.0 0.13 1.0
triangle lightness t^*

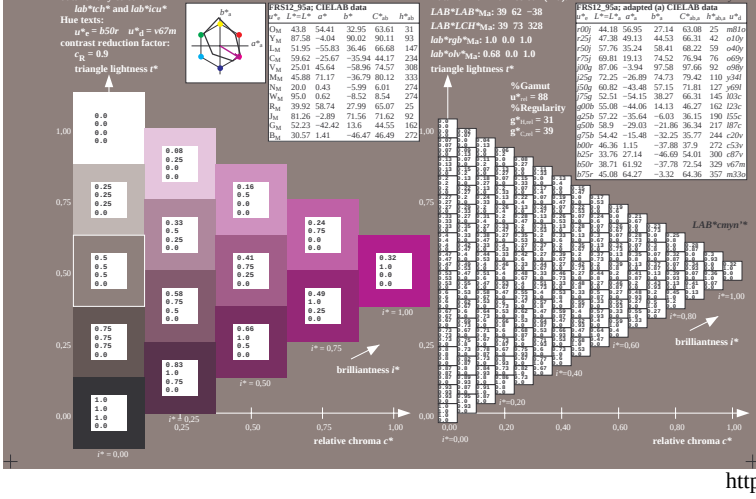
%Gamut $u^*_{sat} = 88$
%Regularity $g^*_{FLat} = 31$ $g^*_{C,sat} = 39$



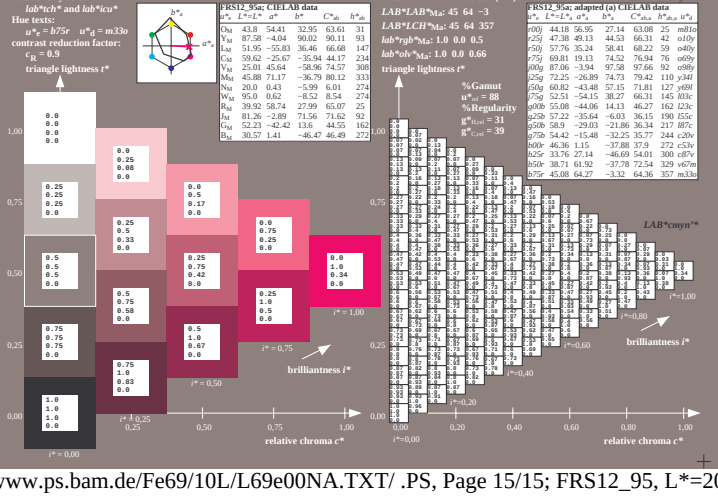
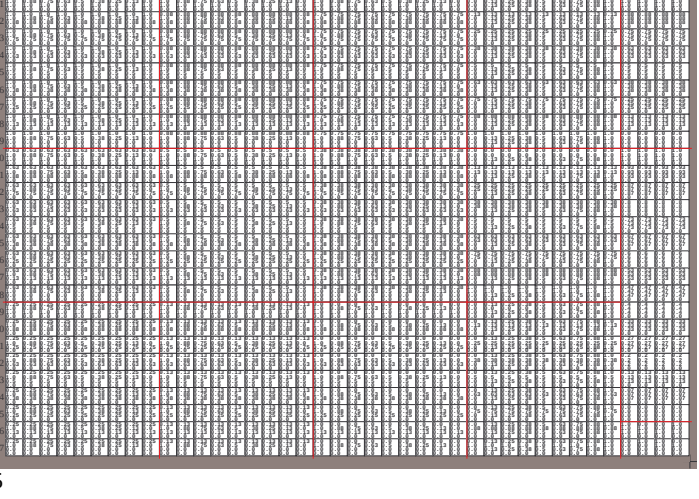
Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.913$
data for any colour: $u^*_E = b50r$
*lab*ch** and *lab*icu**
Hue texts: LAB^*cmyn^*
$u^*_E = b50r$ $u^*_A = v67m$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 39 62 −38
$LAB^*LCH^*_{Ma}$: 39 73 328
$lab^*rgb^*_{Ma}$: 1.0 0.0 1.0
$lab^*olv^*_{Ma}$: 0.68 0.0 1.0
triangle lightness t^*

%Gamut $u^*_{sat} = 88$
%Regularity $g^*_{FLat} = 31$ $g^*_{C,sat} = 39$



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = lab^*h^* = h_{lab}/360 = 0.992$
data for any colour: $u^*_E = b75r$
*lab*ch** and *lab*icu**
Hue texts: LAB^*cmyn^*
$u^*_E = b75r$ $u^*_A = m33o$
contrast reduction factor: $c_{lg} = 0.9$
triangle lightness t^*

Data for maximum colour (Ma):
$LAB^*LAB^*_{Ma}$: 45 64 −3
$LAB^*LCH^*_{Ma}$: 45 64 357
$lab^*rgb^*_{Ma}$: 1.0 0.0 0.5
$lab^*olv^*_{Ma}$: 1.0 0.0 0.66
triangle lightness t^*

%Gamut $u^*_{sat} = 88$
%Regularity $g^*_{FLat} = 31$ $g^*_{C,sat} = 39$