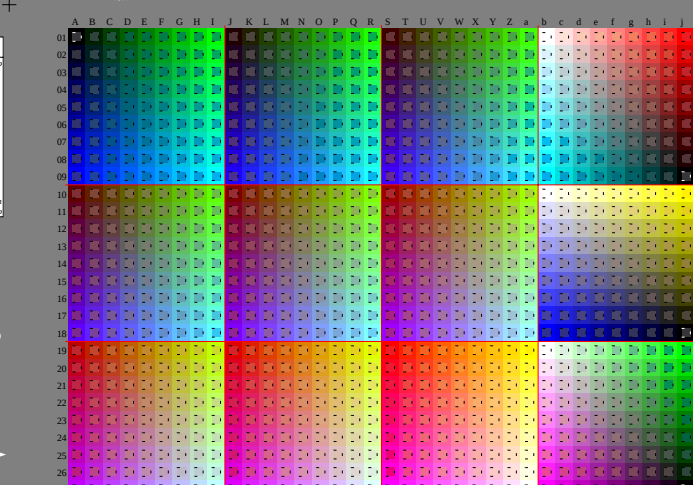
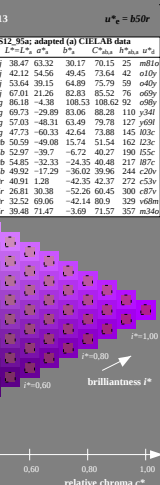
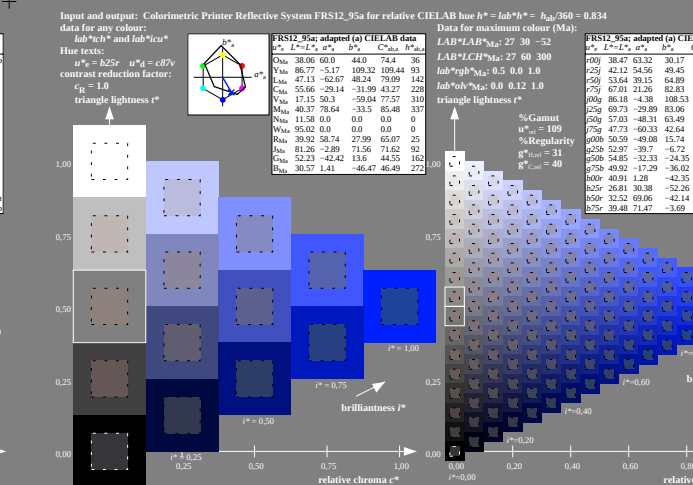
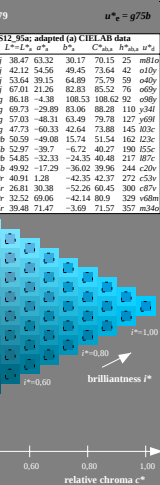
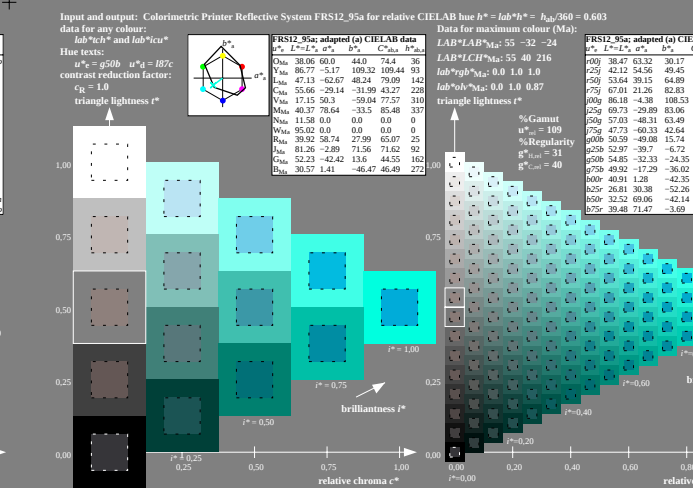
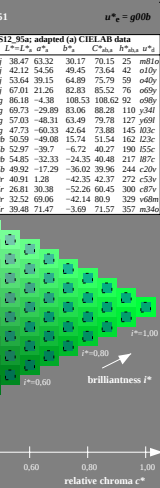




$$u^*_{\mathbf{c}} = q00b$$

FRS12.95a; adapted (a) CIE Lab data				LAB*/LCH*/M*51 -49 -16			
	L^*	a^*	b^*	L^*	C_{ab}^*	h_{ab}^*	M^*
D ₅₀	38.06	60.00	44.0	74.4	36	100	51
R ₅₀	17.17	-17.17	33.33	100.32	100	100	51
G ₅₀	47.13	-62.67	-44.28	79.9	142	100	51
M ₅₀	55.66	-29.14	-31.99	43.27	77	100	51
V ₅₀	17.15	50.15	59.04	73.57	228	100	51
M ₅₀	40.37	78.64	-33.5	85.48	337	100	51
N ₅₀	11.58	0.0	0.0	0.0	0	0	0
R ₅₀	95.02	0.0	0.0	0.0	0	0	0
G ₅₀	39.92	58.74	27.99	50.07	25	100	51
M ₅₀	81.26	-2.89	71.56	71.62	92	100	51
G ₅₀	52.23	-42.42	13.6	44.55	162	100	51
B ₅₀	30.57	14.1	-46.47	49.9	272	100	51



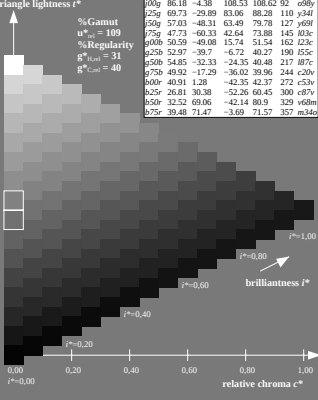
triangle lightness (*)

%Gamut
u* = 10

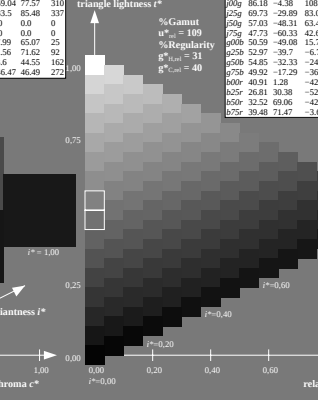
%Regul
u* = 10

%G₅₀ = 3

%G₅₀ = 3

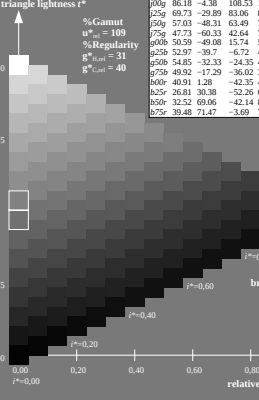

$$u^*_{\epsilon} = q25b$$

FRS12.95a; adapted (a) CIELAB data								LAB*LAB* _M ; 53 - 40 - 189				LAB*LCH* _M ; 53 - 40 - 189				lab*rgb* _M ; 0.0 1.0 0.5				lab*oh* _M ; 0.0 1.0 0.55				triangle lightness <i>r</i> *				%Gamut <i>u</i> * = 1.0 %Regul <i>r</i> * = 1.0 <i>r</i> * = 0.5 <i>r</i> * = 0.0			
	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>C</i> _{95a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>M</i> _{95a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>M</i> _{95a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>M</i> _{95a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>M</i> _{95a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>M</i> _{95a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>M</i> _{95a}			
X ₀	38.06	60.00	44.0	74.4	36	51.7	39.1	39.92	58.74	27.99	35.07	39.92	58.74	27.99	35.07	39.92	58.74	27.99	35.07	39.92	58.74	27.99	35.07	39.92	58.74	27.99	35.07	39.92			
Y ₀	47.13	-62.67	48.0	74.4	36	14.6	39.1	47.13	-62.67	48.0	74.4	36	14.6	39.1	47.13	-62.67	48.0	74.4	36	14.6	39.1	47.13	-62.67	48.0	74.4	36	14.6	39.1			
Z ₀	55.66	-29.14	-31.99	43.27	228	22.8	39.1	55.66	-29.14	-31.99	43.27	228	22.8	39.1	55.66	-29.14	-31.99	43.27	228	22.8	39.1	55.66	-29.14	-31.99	43.27	228	22.8	39.1			
M ₀	17.15	50.3	-59.04	77.57	310	31.0	39.1	17.15	50.3	-59.04	77.57	310	31.0	39.1	17.15	50.3	-59.04	77.57	310	31.0	39.1	17.15	50.3	-59.04	77.57	310	31.0	39.1			
M ₄₀	40.37	78.64	-33.5	85.48	337	33.7	39.1	40.37	78.64	-33.5	85.48	337	33.7	39.1	40.37	78.64	-33.5	85.48	337	33.7	39.1	40.37	78.64	-33.5	85.48	337	33.7	39.1			
M ₆₀	11.58	0.0	0.0	0.0	0	0	0	11.58	0.0	0.0	0.0	0	0	0	11.58	0.0	0.0	0.0	0	0	0	11.58	0.0	0.0	0.0	0	0	0			
M ₈₀	95.02	0.0	0.0	0.0	0	0	0	95.02	0.0	0.0	0.0	0	0	0	95.02	0.0	0.0	0.0	0	0	0	95.02	0.0	0.0	0.0	0	0	0			
M ₉₅	39.92	58.74	27.99	35.07	39.92	58.74	27.99	39.92	58.74	27.99	35.07	39.92	58.74	27.99	39.92	58.74	27.99	35.07	39.92	58.74	27.99	39.92	58.74	27.99	35.07	39.92	58.74	27.99			
R ₀	81.26	-2.89	71.56	71.62	92	9.2	39.1	81.26	-2.89	71.56	71.62	92	9.2	39.1	81.26	-2.89	71.56	71.62	92	9.2	39.1	81.26	-2.89	71.56	71.62	92	9.2	39.1			
R ₄₀	52.23	-42.42	13.3	44.55	162	16.2	39.1	52.23	-42.42	13.3	44.55	162	16.2	39.1	52.23	-42.42	13.3	44.55	162	16.2	39.1	52.23	-42.42	13.3	44.55	162	16.2	39.1			
R ₆₀	30.57	1.41	-46.47	46.49	272	27.2	39.1	30.57	1.41	-46.47	46.49	272	27.2	39.1	30.57	1.41	-46.47	46.49	272	27.2	39.1	30.57	1.41	-46.47	46.49	272	27.2	39.1			



A diagram of a benzene ring with a substituent labeled b_a^+ at the top position. The ring is oriented with a vertical axis. The substituent is represented by a vertical line with a circle at the top, containing the label b_a^+ . The ring has a horizontal line passing through its center, and a vertical line passing through its center, intersecting at the origin. The ring is drawn with a double bond on the left side and a single bond on the right side. The substituent is attached to the top carbon atom of the ring.

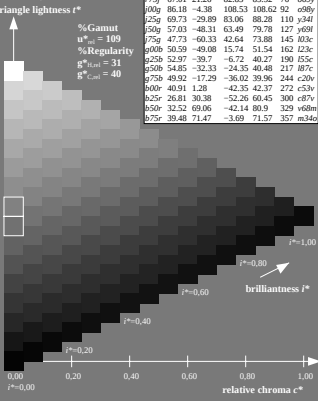
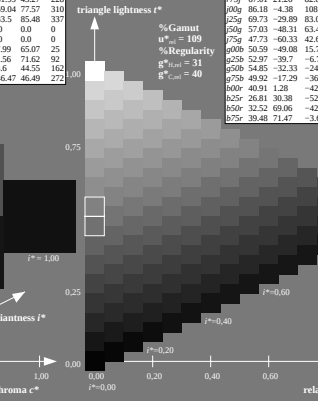
	FRS2-L ² Δ ² adapted (α) CIELAB data				LAB*LAB* _M : 55–32	
	L*	a*	b*	C _{ab}	h _{ab}	LAB*LAB* _M : 55–40
O ₁	38.06	60.00	44.0	74.4	36	lab*rgb* _M : 50 0 1.0
O ₂	-5.17	-17.1	19.1	22.1	120	lab*oh* _M : 0.0 1.0 0.87
O ₃	41.3	-62.67	48.24	79.09	144	triangle lightness t*
O ₄	55.65	-29.14	-31.99	43.27	228	
V ₁	17.15	0.33	-59.04	77.57	310	
M ₁	40.37	78.64	-33.5	85.48	337	
N ₁	11.58	0.0	0.0	0.0	0	%Ga
W ₁	95.02	0.0	0.0	0.0	0	u*
Y ₁	39.92	58.74	27.99	55.07	25	%Re
I ₁	1.26	-2.89	71.56	71.62	92	g*
J ₁	52.23	-42.42	13.6	44.55	162	g* _h
G ₁	30.57	1.41	-46.47	46.49	272	g* _h


$$u^*_c = 975b$$

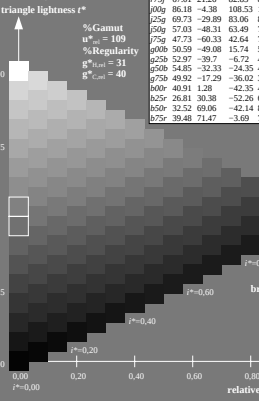
F815.15.95; adapted (a) CH16 data				LAB*LAB*Ma ₁₀ : 50 - 17 - 36	
	L^*	g^*	B^*	C_{LAB}	h^*
D_{LAB}	38.06	60.00	74.4	3.6	0
V_{LAB}	47.13	62.67	48.4	5.14	93
B_{LAB}	47.13	62.67	48.4	79.09	142
S_{LAB}	55.66	-29.14	-31.99	43.27	228
V_{LAB}	17.15	50.3	-50.94	77.57	310
M_{LAB}	40.37	78.64	-33.5	85.48	337
N_{LAB}	11.58	0	0	0	0
W_{LAB}	95.02	0	0	0	0
S_{LAB}	39.92	58.74	27.99	65.07	25
J_{LAB}	81.26	-2.89	71.56	71.62	92
S_{LAB}	52.23	-42.42	13.6	44.55	162
B_{LAB}	30.57	14.1	-46.47	46.49	272

triangle lightness r^*

%Gum = 10
 $u^*_{\text{LAB}} = 3$
 %Regula = 10
 $g^*_{\text{LAB}} = 3$
 $g^*_{\text{Cani}} = 10$


$$u^*_c = b00r$$
[illegible]

F812.2-Ma: adapted (a) CIE/BAF data					LAB*LAB*Ma: 27 30 35	
	L^*	a^*	b^*	C_{lab}	M_{lab}	
O ₄₅₄	38.06	60.0	-44.5	109.32	36	
O ₄₈₆	44.17	54.5	-41.7	109.44	36	
O ₅₀₀	47.13	-62.67	-48.24	79.09	147	
O ₅₀₅	55.65	-29.14	-31.99	43.27	228	
O ₅₁₀	71.16	0.33	-59.04	77.57	310	
O ₅₁₅	84.37	78.64	-33.5	85.48	337	
N ₄₄₀	11.58	0.0	0.0	0.0	0	%Ga ₀
N ₄₅₀	95.02	0.0	0.0	0.0	0	%Re ₀
N ₄₆₀	39.92	58.74	27.99	35.07	25	
N ₄₇₀	18.26	-2.89	71.56	71.62	92	
N ₄₈₀	52.23	-42.42	13.6	44.55	162	
N ₄₉₀	30.07	1.41	-46.47	46.49	272	


$$u^*_r = b50r$$

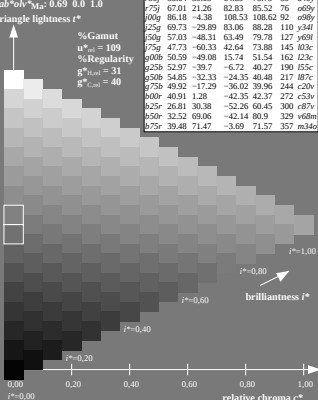
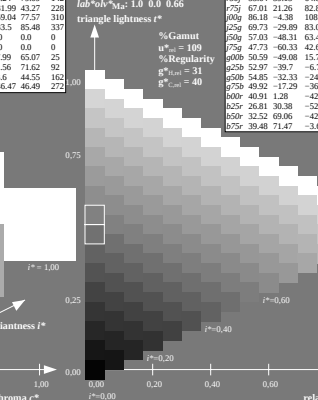
FRS2.95a; adapted (a) CIE Lab data				LAB*/LAB* M33 69 41	
L^*	a^*	b^*	C_{90}	C_{90}	C_{90}
X_{star}	38.06	60.00	44.0	74.4	36.6
Y_{star}	57.17	-1.17	10.32	32.4	44.93
Z_{star}	47.13	-62.67	-44.8	79.9	14.2
M_{star}	55.66	-29.14	-31.99	43.27	22.28
V_{star}	17.15	50.3	-59.04	77.57	31.0
M_{405}	40.37	78.64	-33.5	85.48	33.7
M_{435}	11.58	0.0	0.0	0.0	0.0
M_{450}	55.02	0.0	0.0	0.0	0.0
M_{475}	29.52	58.74	-27.99	67.07	2.5
M_{490}	81.26	-2.89	71.56	71.62	9.2
M_{505}	52.23	-42.42	13.6	44.55	16.2
M_{520}	30.57	14.1	-46.47	46.49	27.2

%Gamut
 $u^* = 10$

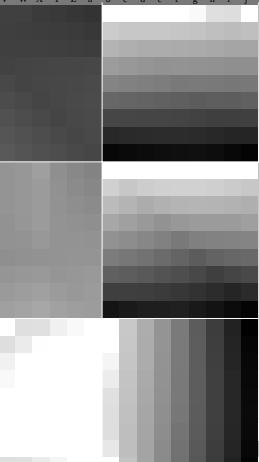
% Range
 $u^* = 10$

% Htini = 4

$C_{90}^* = 4$


$$u^* = b75r$$
[illegible]

b i i



Input and output: Colorimetric Reflective System FRS12.9 CIELAB data

data for your colour:

$\text{lab}^*\text{a}^*\text{b}^*$ and $\text{lab}^*\text{c}_{\text{M}}^*$

Hue tests:

$u^* = b^*/a^*$ $v^* = v_{680}$
contrast reduction factor:
 $R = 1.0$
triangle lightness L^*



FRS12.9 adopted (a) CIELAB data

	D_{50}	L^*	a^*	b^*	C_M^*	M^*_w
D_{50}	38.06	60.0	44.0	74.4	36	
V_{50}	86.77	-5.17	109.32	109.44	93	
L_{50}	47.13	-62.67	48.24	79.09	142	
C_{50}	55.66	-29.14	-31.99	43.27	226	
V_{50}	17.15	50.3	-29.04	77.57	310	
M_{50}	40.37	78.64	-33.5	85.48	337	
N_{50}	11.58	0.0	0.0	0.0	0	
W_{50}	95.02	0.0	0.0	0.0	0	
R_{50}	39.92	58.74	27.99	65.07	25	
S_{50}	81.26	-2.89	71.56	71.62	92	
G_{50}	52.23	-42.42	13.6	44.55	162	
P_{50}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$\text{LAB}^*\text{LAB}^*\text{Ma}$: 33 69 -42
 $\text{LAB}^*\text{LCH}^*\text{Ma}$: 33 81 328
 $\text{lab}^*\text{ab}^*\text{Ma}$: 1.0 0.0 1.0
 $\text{lab}^*\text{wb}^*\text{Ma}$: 0.69 0.0 1.0

triangle lightness L^*

$u^*_{\text{Gamut}} = 109$
 $v^*_{\text{Regularity}} = 31$
 $R^*_{\text{Cat}} = 40$

$i^* = 1.00$
 $i^* = 0.75$
 $i^* = 0.50$
 $i^* = 0.25$
 $i^* = 0.00$

relative chroma c^*

$j^* = 1.00$
 $j^* = 0.80$
 $j^* = 0.60$
 $j^* = 0.40$
 $j^* = 0.20$
 $j^* = 0.00$

brilliantness i^*

Input and output: Colorimetric Printer/Reflective System FR512_95a for relative CIELAB hue $h^* = \text{lab}^*h^* = h_{360}/360 = 0.992$
 data for any colour: lab^*u^* and lab^*v^*
 Hue tests:
 $u^* = b75r$ $u^*_d = m34o$
 contrast reduction factor:
 $r = 1.0$
 triangle lightness l^*

LAB*LAB*Ma: 39 71 -4
 LAB*LCH*Ma: 39 72 357
 lab*rgb*Ma: 1.0 0.0 0.5
 lab*triangle lightness l^*
 triangle lightness l^*
 $\% \text{Gamut} = 109$
 $\% \text{Regularity} = 31$
 $g^*_{\text{max}} = 40$

FR512_95a adopted (a) CIELAB data
 l^* a^* b^* C_{90} M_a h^*_a u^*_a v^*_a

Oma	38.06	60.0	44.0	74.4	36		
Yma	36.77	-5.17	109.32	109.44	93		
Uma	47.13	-62.67	48.24	79.99	142		
Vma	55.66	-29.14	-31.99	43.27	228		
Wma	77.15	20.3	-29.04	77.57	310		
Mma	89.37	78.64	-33.5	85.48	337		
Nma	11.58	0.0	0.0	0.0	0		
Wma	55.02	0.0	0.0	0.0	0		
Rma	39.92	58.74	27.99	65.87	25		
Gma	61.26	-2.89	71.56	71.62	92		
Bma	52.23	-42.42	13.6	44.55	162		
Dma	30.57	1.41	-46.47	46.49	272		

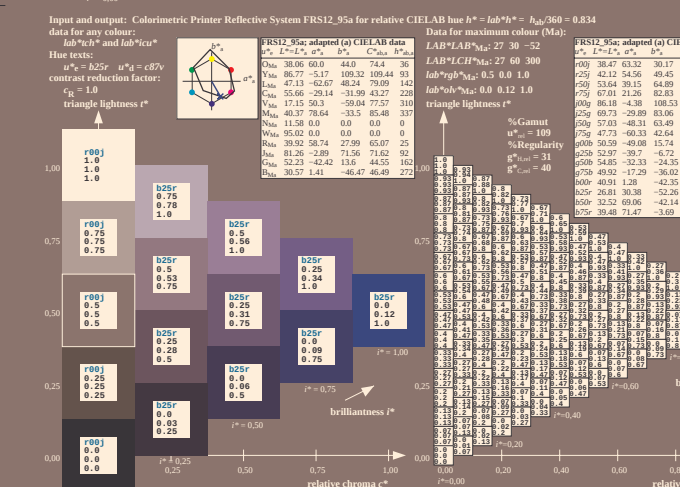
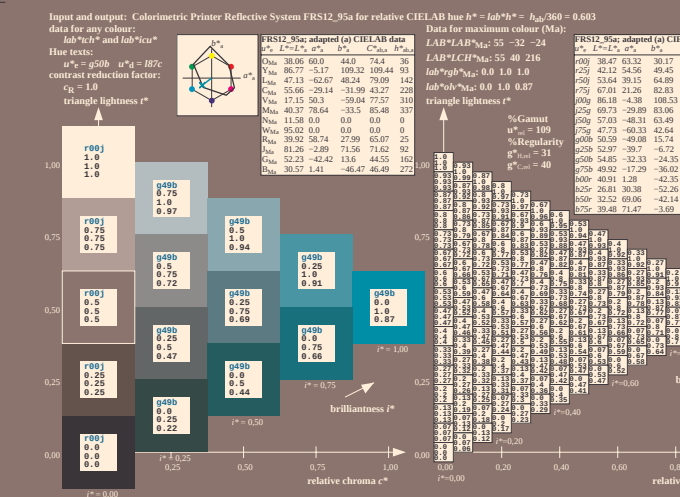
FR512_95a adopted (a) CIELAB data
 l^* a^* b^* C_{90} M_a h^*_a u^*_a v^*_a

m00	38.47	63.32	30.17	70.15	25	m010	
r25	42.12	54.56	49.45	76.64	42	o10r	
m50	53.64	39.15	64.89	75.79	59	o40	
r75	67.01	21.26	83.93	85.52	76	o60r	
m100	86.16	-4.38	108.53	108.62	93	o80r	
r25r	69.73	-29.89	83.06	88.28	110	y34r	
m50r	57.03	-48.31	63.49	78.78	127	o80r	
r75r	47.73	-60.33	42.64	73.88	145	103r	
m100r	50.59	-49.08	15.74	51.54	162	223r	
r25r	52.97	-39.7	-6.72	49.37	190	135r	
m50r	54.85	-32.33	-24.35	40.48	217	187r	
r75r	49.52	-17.29	-36.03	28.08	244	220r	
m100r	40.91	1.28	-42.5	42.37	272	323r	
r25r	26.81	30.38	-52.26	46.45	300	67r	
m50r	32.52	69.06	-42.14	49.8	329	106r	
r75r	39.48	71.47	-3.69	71.57	357	m34o	

relative lightness l^*
 $l^* = 1.00$
 $l^* = 0.80$
 $l^* = 0.60$
 $l^* = 0.40$
 $l^* = 0.20$
 $l^* = 0.00$
 brilliancy l^*
 $l^* = 0.75$
 $l^* = 0.50$
 $l^* = 0.25$
 $l^* = 0.00$
 relative chroma c^*
 $c^* = 0.00$
 $c^* = 0.25$
 $c^* = 0.50$
 $c^* = 0.75$
 $c^* = 1.00$

[illegible]

Black separation empty



Input and output: Colorimetric Printer Reflective System FRS12_95a for relative CIELAB hue $h^* = \text{lab}^*h^* = h_{310}/360 = 0.603$

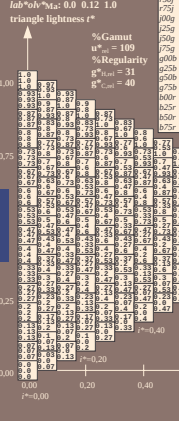
Data for maximum colour (Ma):

LAB*LCH*Ma: 55 40 216

 $lab*rgb*Ma: 0.0 \ 1.0 \ 1.0$ 

Data for maximum colour (Ma):
LAP*LAP* = 27.20 - 52

LAB*LAB*Ma: 27 30 32	u^*, l
LAB*LCH*Ma: 27 60 300	$r00s$

 $lab*rgb_{Ma}: 0.5 \ 0.0 \ 1.0$ 

V W X Y Z a b c d e

0.28	0.32	0.35	0.39	0.43	0.46	1.0	1.0	1.0	1.0
0.38	0.5	0.63	0.75	0.88	1.0	2.0	0.9	0.79	0.69
0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.88	0.75	0.63

0.28	0.32	0.36	0.39	0.43	0.46	0.88	0.88	0.88	0.88
0.38	0.5	0.63	0.75	0.88	1.0	0.98	0.88	0.77	0.67
0.12	0.12	0.12	0.12	0.12	0.12	1.0	0.88	0.75	0.63
0.28	0.32	0.36	0.39	0.43	0.46	0.88	0.88	0.88	0.88

0.38	0.5	0.63	0.75	0.88	1.0	0.25	0.35	0.75	0.65
0.25	0.25	0.25	0.25	0.25	0.25	1.0	0.88	0.75	0.63
0.25	0.25	0.25	0.25	0.27	0.31	0.63	0.63	0.63	0.63

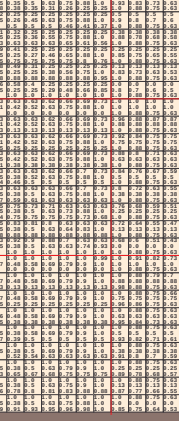


Figure 1 illustrates the relationship between color space coordinates and perceptual attributes. The main plot shows the relationship between triangle lightness L^* (Y-axis) and relative chroma c^* (X-axis). The color wheel and 3D cube provide visual context for the color patches. The smaller plots show the relationship between triangle lightness L^* and relative chroma c^* for specific color patches, and the relationship between triangle lightness L^* and relative chroma c^* for the entire color space.

Color Wheel Data:

Color	L^*	a^*	b^*
Red	38.00	60.00	44.0
Orange	44.0	74.4	36
Yellow	86.7	-5.17	109.32
Green	47.13	-62.67	40.24
Cyan	55.96	-29.14	-31.99
Blue	17.15	50.3	-59.64
Purple	30.37	70.64	-33.5
Pink	11.28	0.0	0.0
White	55.02	0.0	0.0
Black	39.52	58.74	27.99

3D Cube Data:

Color	L^*	a^*	b^*
Red	81.26	-2.89	71.56
Orange	32.23	-62.42	131.6
Yellow	35.57	14.1	-46.47

2D Color Space Data:

Color	L^*	a^*	b^*
Red	80.0	0.0	0.0
Orange	74.2	-0.1	0.0
Yellow	64.1	-0.1	-0.1
Green	43.3	-0.1	-0.1
Cyan	32.4	-0.1	-0.1
Blue	11.1	0.0	0.0

Brilliance and Replacability Data:

Color	L^*	a^*	b^*	%Gamut	%Replacability
Red	80.0	0.0	0.0	100	31
Orange	74.2	-0.1	0.0	100	31
Yellow	64.1	-0.1	-0.1	100	31
Green	43.3	-0.1	-0.1	100	31
Cyan	32.4	-0.1	-0.1	100	31
Blue	11.1	0.0	0.0	100	31

Input and output: Coloristic Printer Reflective System FRS12_95a for relative CIE LAB hue $h^* = \text{lab}^*h^* = \text{lab}^*h^* = \text{lab}^*h^*/360 = 0.834$ and for any colour:
 lab^*c^* and lab^*u^*
 Hue text:
 $u^* = b25r \quad u^*a^* = \text{cru}$
 contrast reduction factor:
 $c_R = 1.0$
 triangle lightness l^*

FRS12_95a; adapted (c) CHLAB data
 Lab L^* a^* b^* C_{90} C_{50} C_{16}
 Obs: 30.06 60.00 44.0 74.4 36
 Y15: 86.77 -5.17 109.32 109.43 93
 Y25: 72.13 -62.67 49.14 79.09 142
 C10: 55.66 -29.14 -31.99 43.27 228
 Y10: 17.15 50.3 -59.04 77.57 310
 Y5: 40.37 78.64 -33.5 85.48 337
 N10: 11.58 0.00 0.0 0.0 0
 Y5: 55.02 0.10 0.0 0.0 0
 R10: 30.52 58.74 27.99 65.07 25
 J40: 18.25 -2.89 71.56 71.62 92
 C20: 52.22 -42.42 13.6 44.25 163
 R10: 30.57 14.16 -46.47 46.49 272

Lab L^* a^* b^* C_{90} C_{50} C_{16}
 LAB L^* a^* b^* : 27 30 -52
 Lab L^* a^* b^* : 0.5 0.0 1.0
 Lab L^* a^* b^* : 0.0 0.12 1.0
 triangle lightness l^*

%Gamut
 $u^* = 100$
 $\% \text{Regularity}$
 $r_{\text{cru}} = 31$
 $r_{\text{cru}} = 40$

relative chroma c^*

brilliantness l^*

[illegible]

$h^* = lab^*h^* = h_{50}/360 = 0.603$
for maximum colour (Ma):

LAB_{Ma} : 55 -32 -24	R_{452} 88.82
a^*_{Lab} : 1.1 -1.2	a^*_{Lab} 35.47
b^*_{Lab} : 55.40 216	b^*_{Lab} 42.12
h^*_{Lab} : 0.0 1.0 1.0	h^*_{Lab} 33.64
h^*_{Lab} : 0.0 1.0 0.87	h^*_{Lab} 37.01
lightness L^*	500 86.18
	550 69.73
	560 57.03
	750 47.43
	400 50.58
	420 52.97
	440 54.61
	470 49.92
	490 40.91
	520 26.81
	550 33.52
	575 30.48

%Gamut
 $u^* = 109$
%Regularity
 $g^*_{Lab} = 31$
 $g^*_{Lab} = 40$

$r^2 = 0.40$
 $r^2 = 0.20$

[illegible]

	X	Y	Z	T	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	JJ	JK	JL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY
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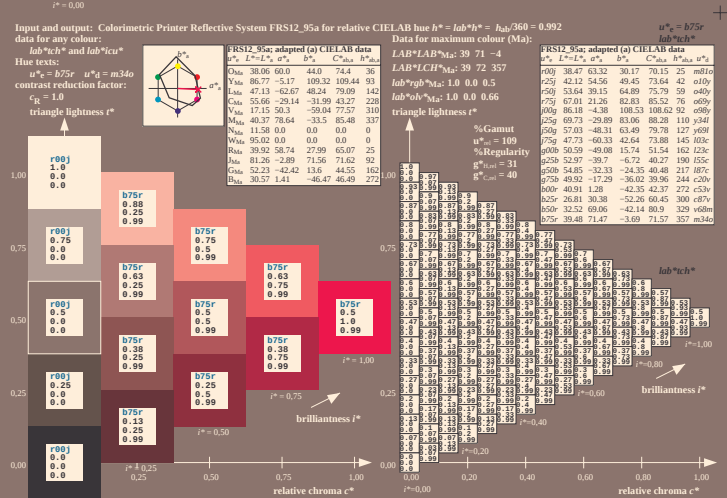
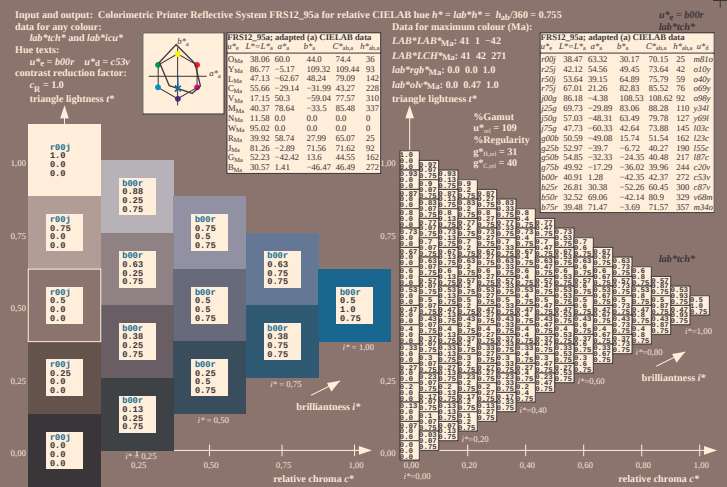
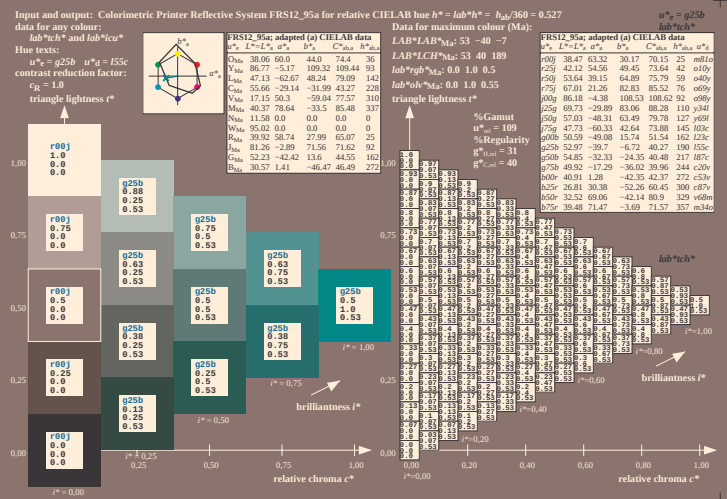
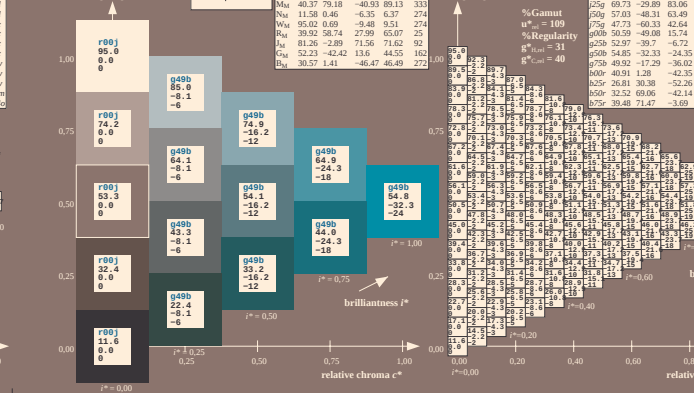


Figure 1 displays a 10x10 grid of heatmaps showing the relative expression of 10 genes (PRS12, PRS2, PRS3, PRS4, PRS5, PRS6, PRS7, PRS8, PRS9, PRS10) across 10 cell lines (C1, C2, C3, C4, C5, C6, C7, C8, C9, C10). The color scale ranges from 0.40 (blue) to 0.80 (red). The grid is labeled with gene names on the left and cell line names on the top. A color bar on the right indicates the relative expression level, with a scale from 0 to 1.00.

[illegible]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81																			

Data for any colour:		Data for maximum colour (Ma):	
for $\lambda_{\text{obs}}^{\text{obs}}$ and $\lambda_{\text{obs}}^{\text{icu}}$			
Host type	F812-SC, CH16AB data	F812-SC, adapted to CH16AB data	F812-SC, adopted to CH16AB data
	C_{H}^{H} b_{H}^{H}	C_{H}^{H} b_{H}^{H}	C_{H}^{H} b_{H}^{H}
	$\text{LAB}^{\text{H}}/\text{AB}^{\text{H}}$: 55 - 32 - 24	$\text{LAB}^{\text{H}}/\text{AB}^{\text{H}}$: 55 - 32 - 24	$\text{LAB}^{\text{H}}/\text{AB}^{\text{H}}$: 55 - 32 - 24
	$\text{LAB}^{\text{H}}/CH_{16}^{\text{H}}$: 55 40 216	$\text{LAB}^{\text{H}}/CH_{16}^{\text{H}}$: 55 40 216	$\text{LAB}^{\text{H}}/CH_{16}^{\text{H}}$: 55 40 216
$\alpha_{\text{H}} = g_{\text{H}}^{\text{H}} - u_{\text{H}}^{\text{H}} = 187^{\circ}$			
contrast reduction factor:			
$C_{\text{R}} = 1.0$			
triangle lightness *			



Input and output: Colorimetric Printer Reflective System FRS12.95a for relative CIELAB hue $h^* = \text{lab}^*h^* = h_{ab}/360 = 0.834$

Color for any colour:
 $\text{lab}^*L^*a^*b^*$ and $\text{lab}^*L^*a^*b^*$

Hue texts:
 $u^* = c/25$ $v^* = c/75$
 contrast reduction factor:



Lab* L*a*b*, CIE1931 data

	L^*	a^*	b^*	C_{ab}^*	h_{ab}^*
On	38.60	60.53	36.66	70.77	31
Y	88.79	-4.55	10.15	10.20	93
Bl	39.12	-22.11	40.10	50.24	295

Data for maximum colour (Ma):
 $\text{Lab}^*L^*a^*b^*$ 27 30 -52
 $\text{Lab}^*L^*a^*b^*$ 27 60 300
 $\text{Lab}^*L^*a^*b^*$ 0.5 0.0 1.0

Lab* L*a*b*, adapted (a) CIE1931 data

	L^*	a^*	b^*	C_{ab}^*	h_{ab}^*
On	38.67	63.33	30.17		
Y	82.92	-4.21	54.96	49.99	60.89
Bl	39.12	-22.11	40.10	50.24	295

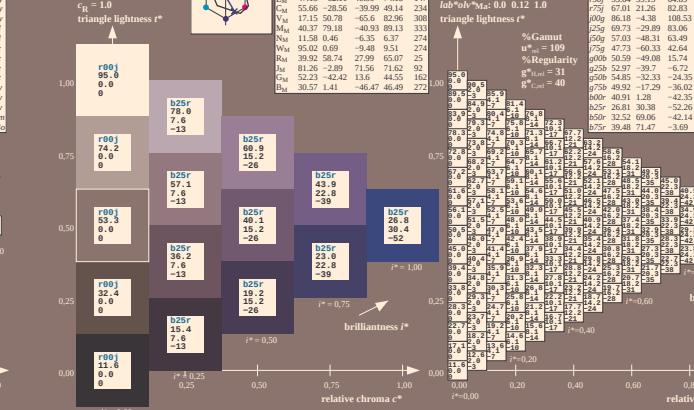


Figure 1. The amino acid sequence of the 120 amino acid protein, p120, is shown. The amino acid sequence is shown in the top panel, with the amino acid sequence of the protein, p120, shown in the bottom panel. The amino acid sequence is shown in the top panel, with the amino acid sequence of the protein, p120, shown in the bottom panel. The amino acid sequence is shown in the top panel, with the amino acid sequence of the protein, p120, shown in the bottom panel.

