

Input and output:

Colorimetric Printer Reflective System FRS15_90a

data for any colour:

u^*_d and number *no.* = 00 .. 15

device hue text:

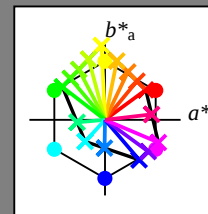
u^*_d = 16 hues *o00y*, *o25y*, ..., *m50o*

contrast reduction factor:

$c_R = 0.9$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
<i>o00y</i>	38.8	53.92	39.68	66.95	36	<i>r16j</i>
<i>o25y</i>	47.46	42.34	51.25	66.48	50	<i>r37j</i>
<i>o50y</i>	56.54	30.2	63.39	70.22	65	<i>r58j</i>
<i>o75y</i>	67.39	15.68	77.9	79.47	79	<i>r79j</i>
<i>y00l</i>	82.58	-4.64	98.22	98.33	93	<i>j01g</i>
<i>y25l</i>	70.85	-21.66	80.19	83.07	105	<i>j18g</i>
<i>y50l</i>	61.91	-34.63	66.45	74.93	118	<i>j36g</i>
<i>y75l</i>	54.24	-45.77	54.66	71.29	130	<i>j53g</i>
<i>l00c</i>	46.95	-56.34	43.46	71.15	142	<i>j71g</i>
<i>l50c</i>	51.91	-36.84	-3.21	36.98	185	<i>g21b</i>
<i>c00v</i>	54.62	-26.2	-28.68	38.85	228	<i>g60b</i>
<i>c50v</i>	42.22	-0.61	-37.35	37.36	269	<i>g97b</i>
<i>v00m</i>	20.01	45.2	-52.87	69.56	311	<i>b34r</i>
<i>v50m</i>	29.93	57.31	-42.0	71.05	324	<i>b45r</i>
<i>m00o</i>	40.88	70.68	-29.99	76.78	337	<i>b57r</i>
<i>m50o</i>	39.77	61.72	7.23	62.15	7	<i>b83r</i>



%Gamut

$u^*_{rel} = 88$

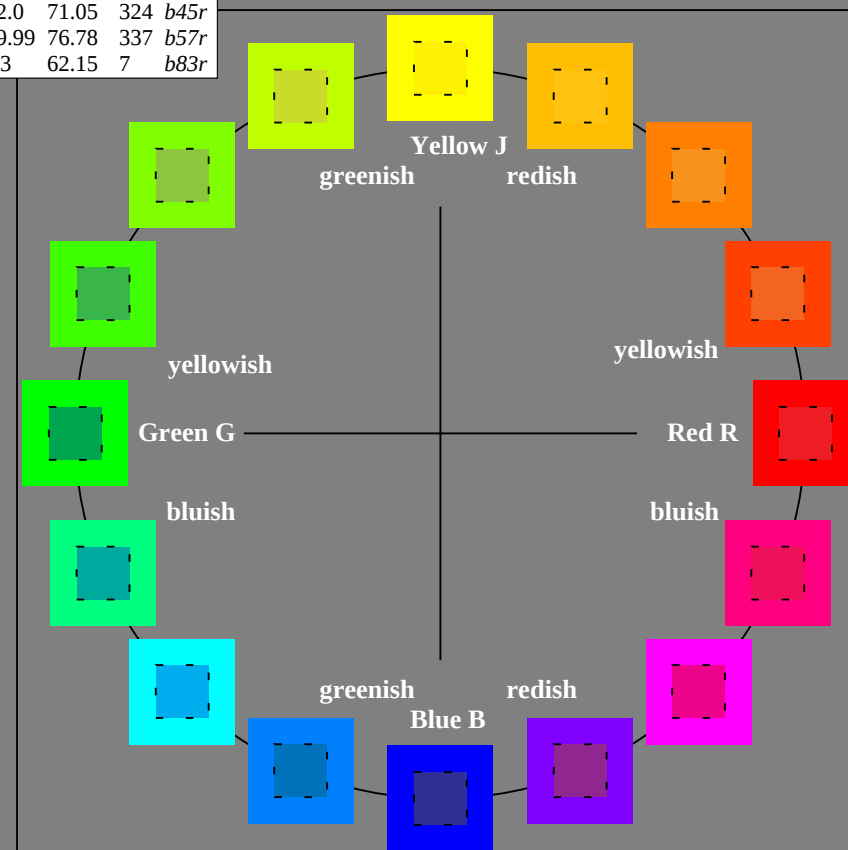
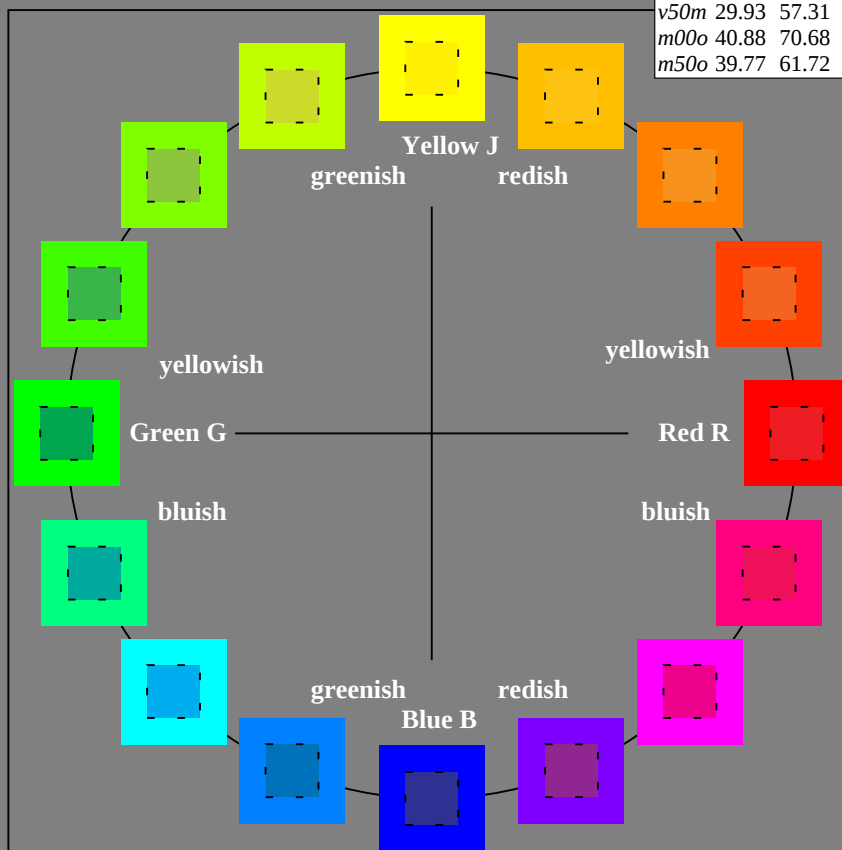
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{CIE}	39.92	58.74	27.99	65.07	92
Y _{CIE}	81.26	-2.89	71.56	71.62	95
L _{CIE}	52.23	-42.42	13.6	44.55	162
V _{CIE}	30.57	1.41	-46.47	46.49	272



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.101$

data for any colour:

lab^*tch^* and lab^*icu^*

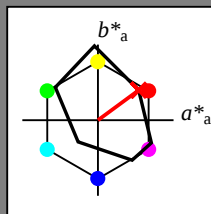
Hue texts:

$u^*_d = o00y$ $u^*_e = r16j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 39 54 40

$LAB^*LCH^*_{Ma}$: 39 67 36

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

$lab^*rgb^*_{Ma}$: 1.0 0.16 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

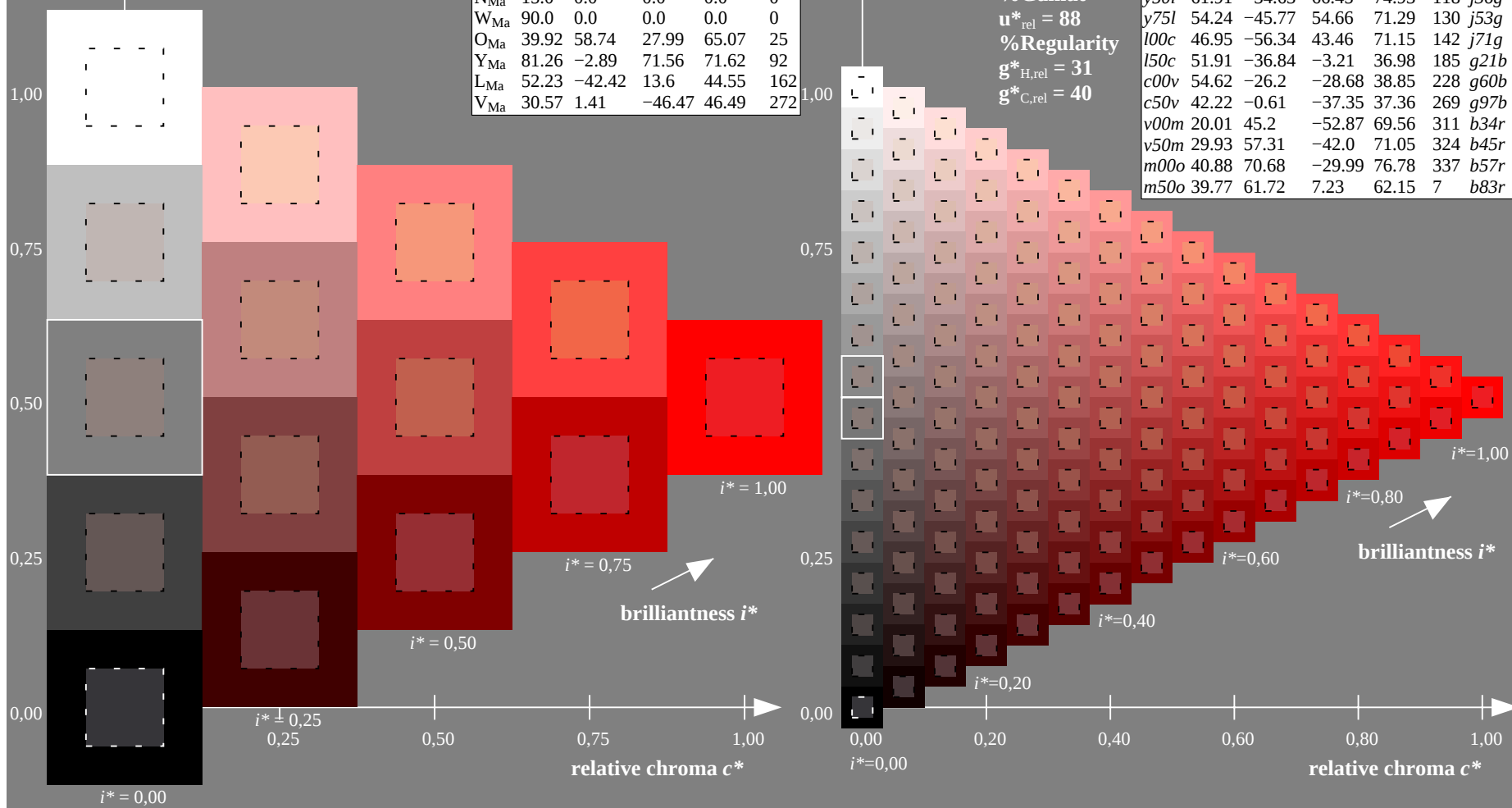
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
<i>o00y</i>	38.8	53.92	39.68	66.95	36	<i>r16j</i>
<i>o25y</i>	47.46	42.34	51.25	66.48	50	<i>r37j</i>
<i>o50y</i>	56.54	30.2	63.39	70.22	65	<i>r58j</i>
<i>o75y</i>	67.39	15.68	77.9	79.47	79	<i>r79j</i>
<i>y00l</i>	82.58	-4.64	98.22	98.33	93	<i>j01g</i>
<i>y25l</i>	70.85	-21.66	80.19	83.07	105	<i>j18g</i>
<i>y50l</i>	61.91	-34.63	66.45	74.93	118	<i>j36g</i>
<i>y75l</i>	54.24	-45.77	54.66	71.29	130	<i>j53g</i>
<i>l00c</i>	46.95	-56.34	43.46	71.15	142	<i>j71g</i>
<i>l50c</i>	51.91	-36.84	-3.21	36.98	185	<i>g21b</i>
<i>c00v</i>	54.62	-26.2	-28.68	38.85	228	<i>g60b</i>
<i>c50v</i>	42.22	-0.61	-37.35	37.36	269	<i>g97b</i>
<i>v00m</i>	20.01	45.2	-52.87	69.56	311	<i>b34r</i>
<i>v50m</i>	29.93	57.31	-42.0	71.05	324	<i>b45r</i>
<i>m00o</i>	40.88	70.68	-29.99	76.78	337	<i>b57r</i>
<i>m50o</i>	39.77	61.72	7.23	62.15	7	<i>b83r</i>



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.14$

data for any colour:

lab^*tch^* and lab^*icu^*

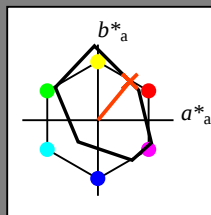
Hue texts:

$u^*_d = o25y$ $u^*_e = r37j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 42 51

$LAB^*LCH^*_{Ma}$: 47 66 50

$lab^*olv^*_{Ma}$: 1.0 0.25 0.0

$lab^*rgb^*_{Ma}$: 1.0 0.37 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

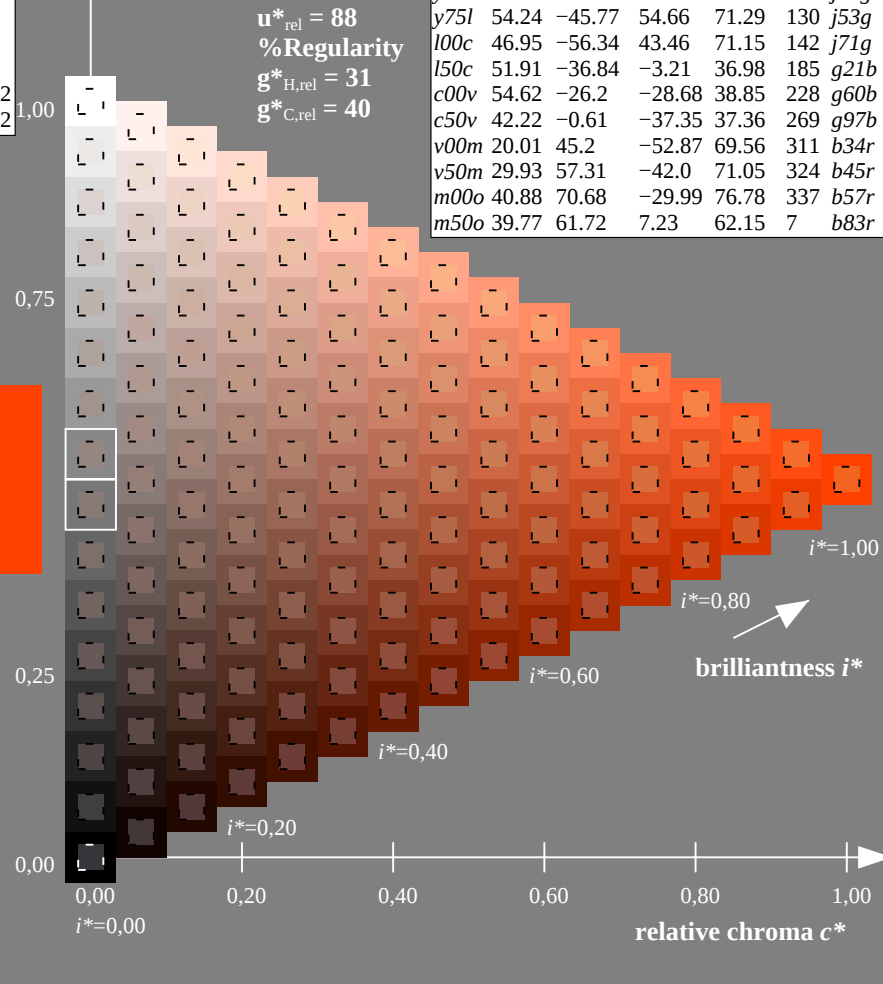
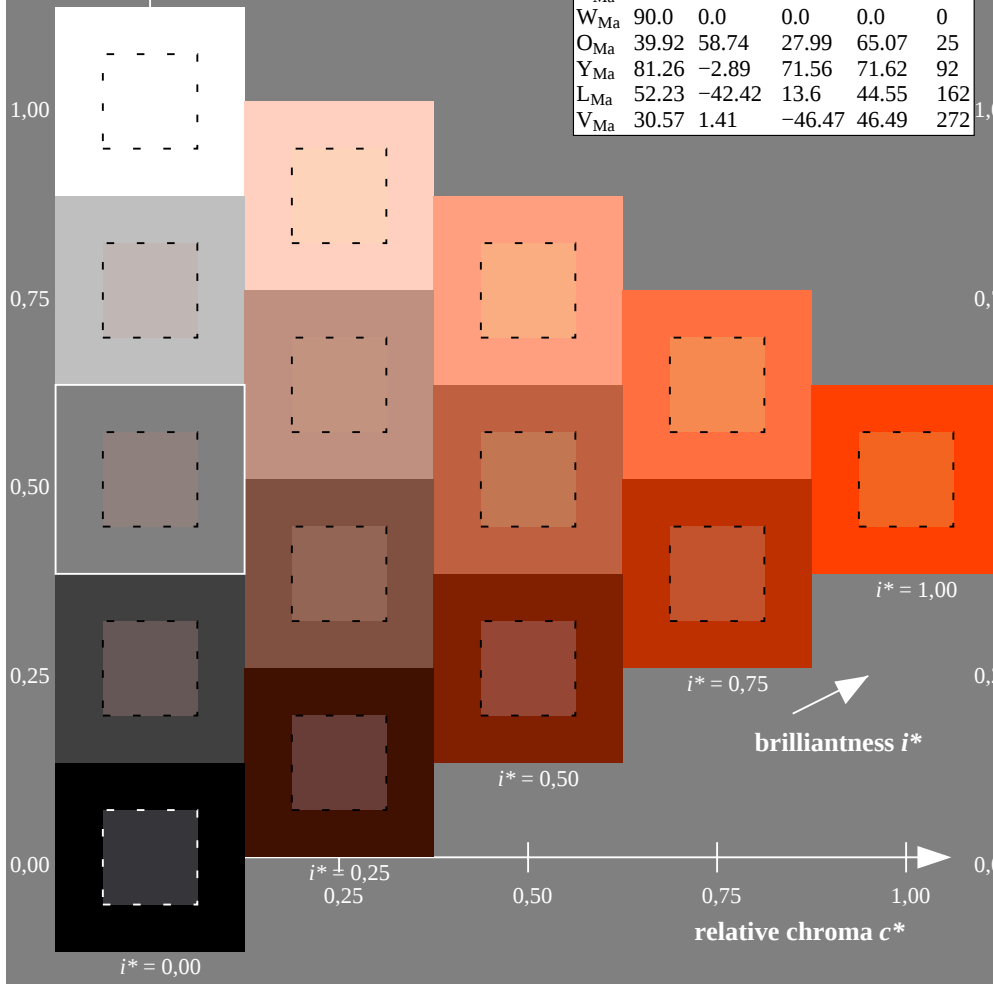
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = o25y$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.179$

data for any colour:

lab^*tch^* and lab^*icu^*

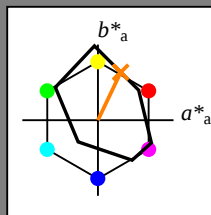
Hue texts:

$u^*_d = o50y$ $u^*_e = r58j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 57 30 63

$LAB^*LCH^*_{Ma}$: 57 70 64

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

$lab^*rgb^*_{Ma}$: 1.0 0.58 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

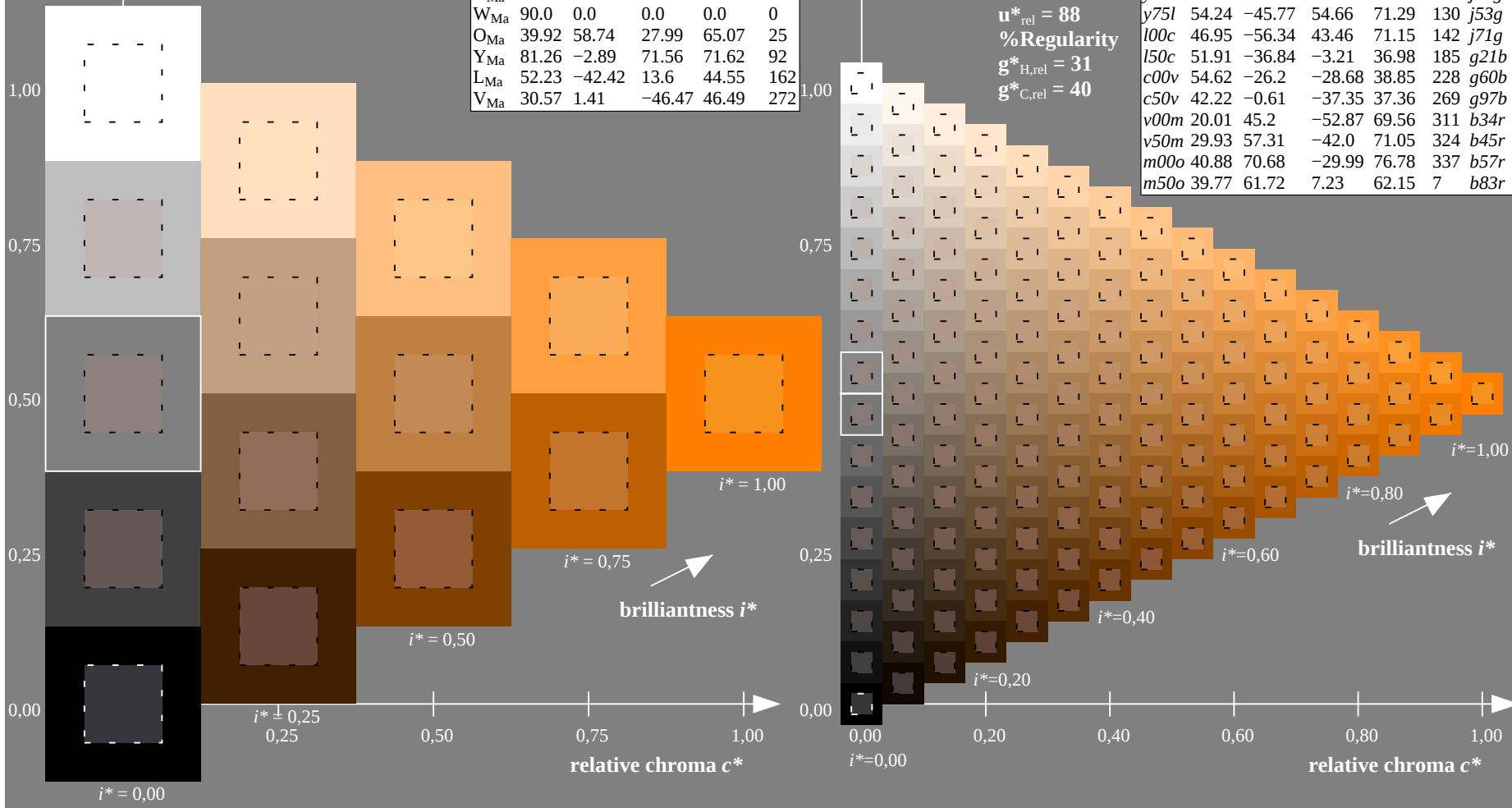
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = o50y$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.258$

data for any colour:

lab^*tch^* and lab^*icu^*

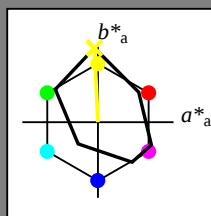
Hue texts:

$u^*_d = y00l$ $u^*_e = j01g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 83 -5 98

$LAB^*LCH^*_{Ma}$: 83 98 92

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

$lab^*rgb^*_{Ma}$: 0.99 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

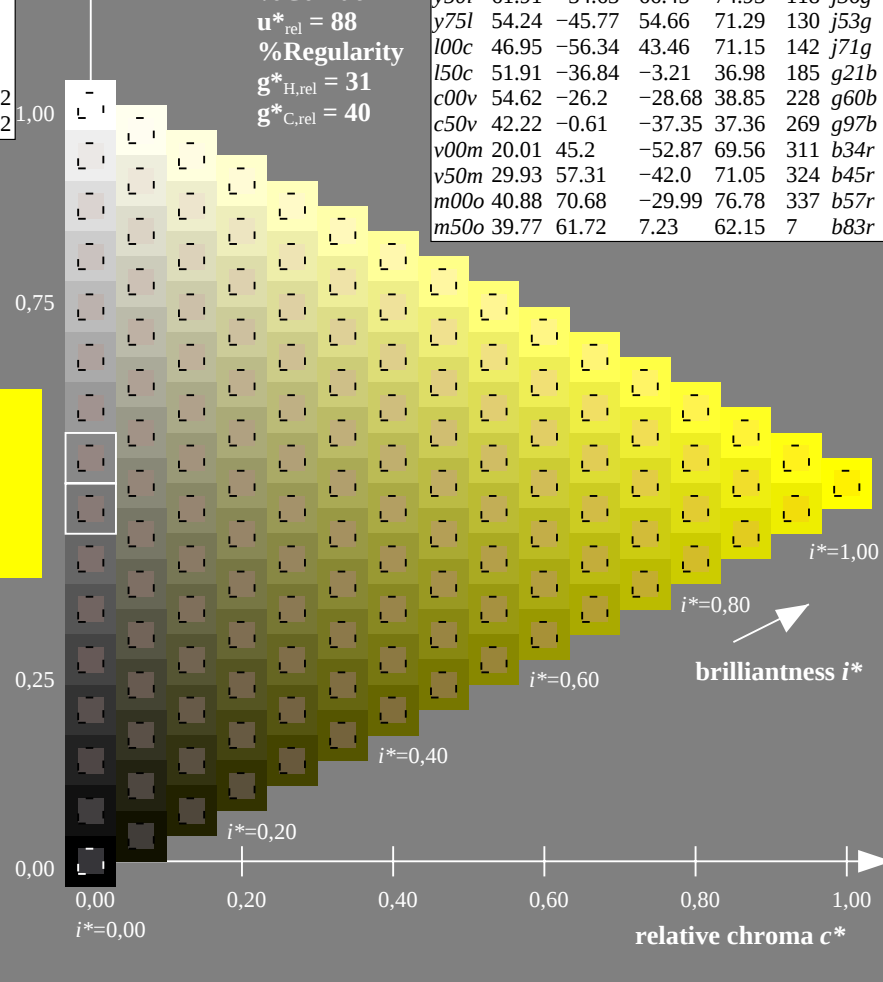
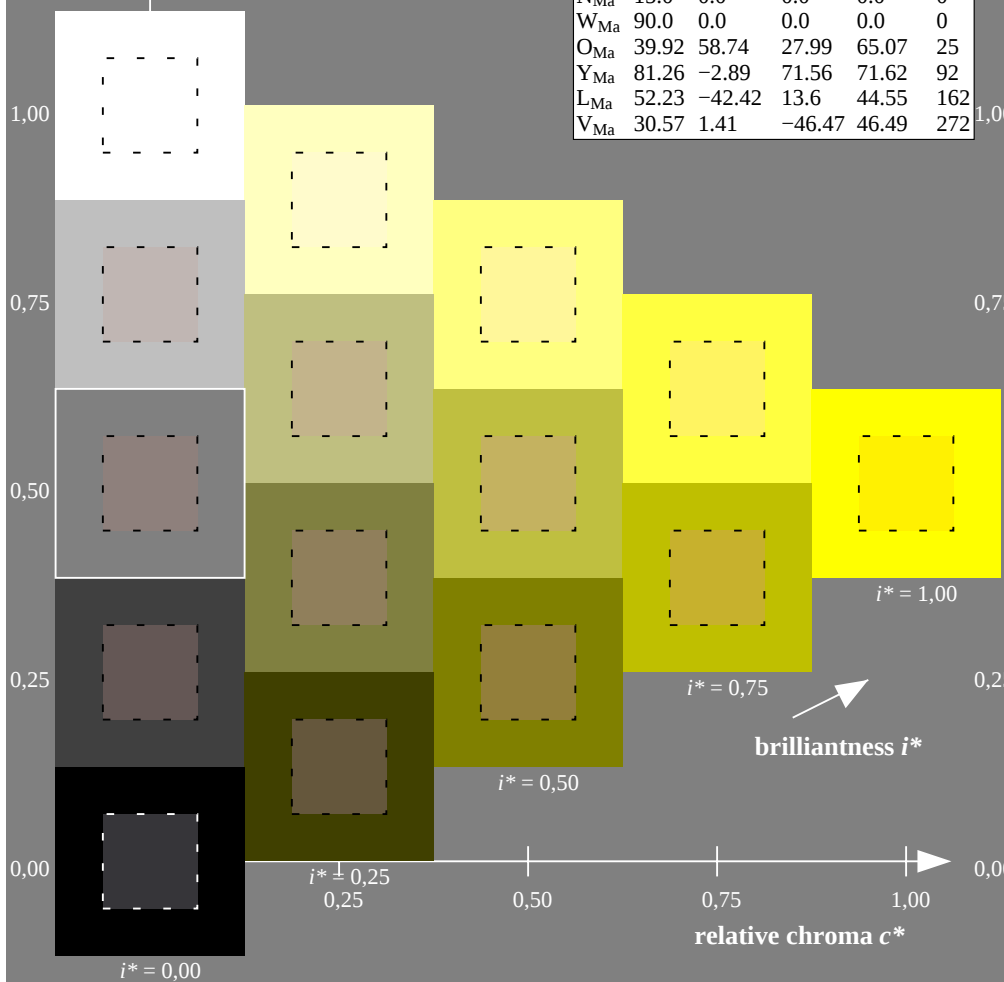
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y00l$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.292$

data for any colour:

lab^*tch^* and lab^*icu^*

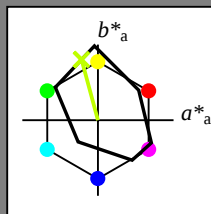
Hue texts:

$u^*_d = y25l$ $u^*_e = j18g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 71 -22 80

$LAB^*LCH^*_{Ma}$: 71 83 105

$lab^*olv^*_{Ma}$: 0.75 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.82 1.0 0.0

triangle lightness t^*

%Gamut

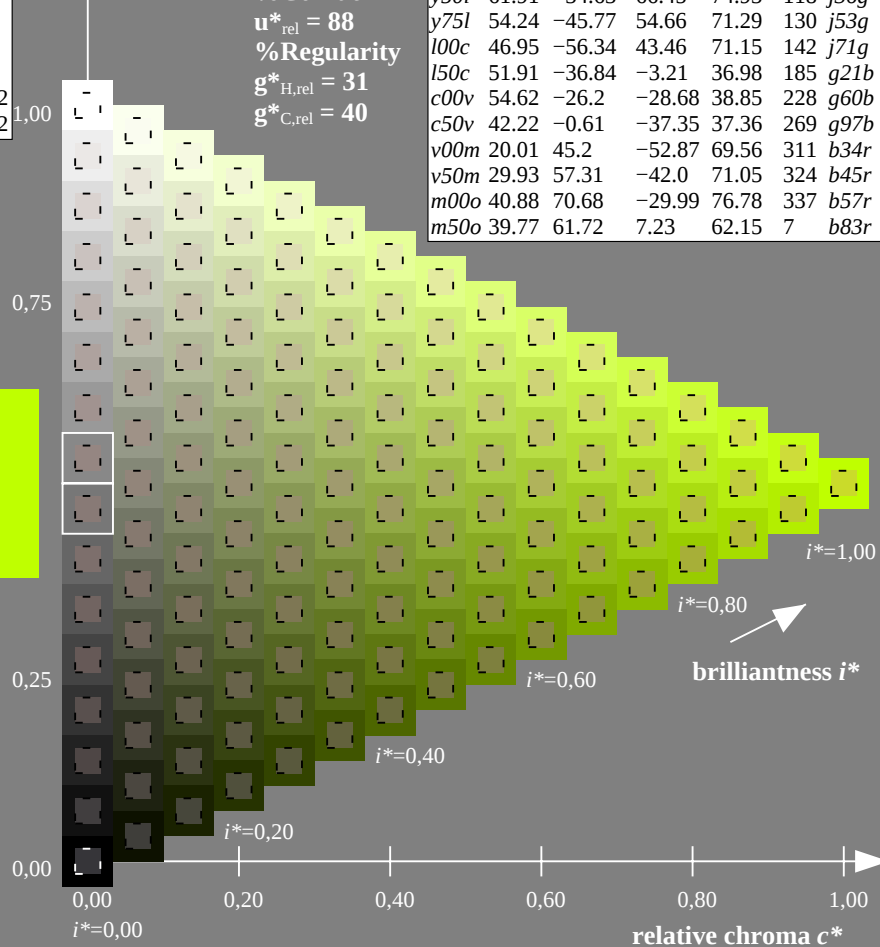
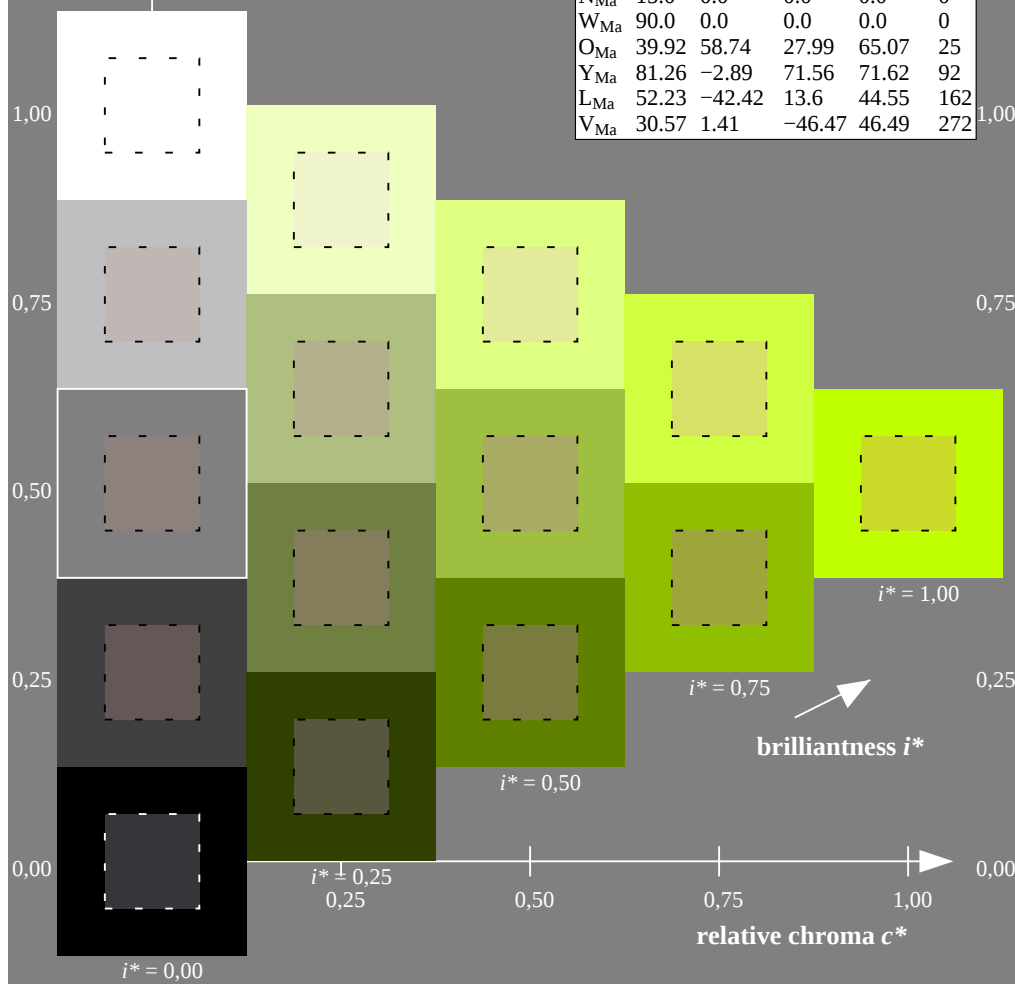
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.326$

data for any colour:

lab^*tch^* and lab^*icu^*

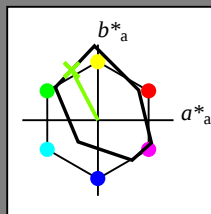
Hue texts:

$u^*_d = y50l$ $u^*_e = j36g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 62 -35 66

$LAB^*LCH^*_{Ma}$: 62 75 117

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

$lab^*rgb^*_{Ma}$: 0.64 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

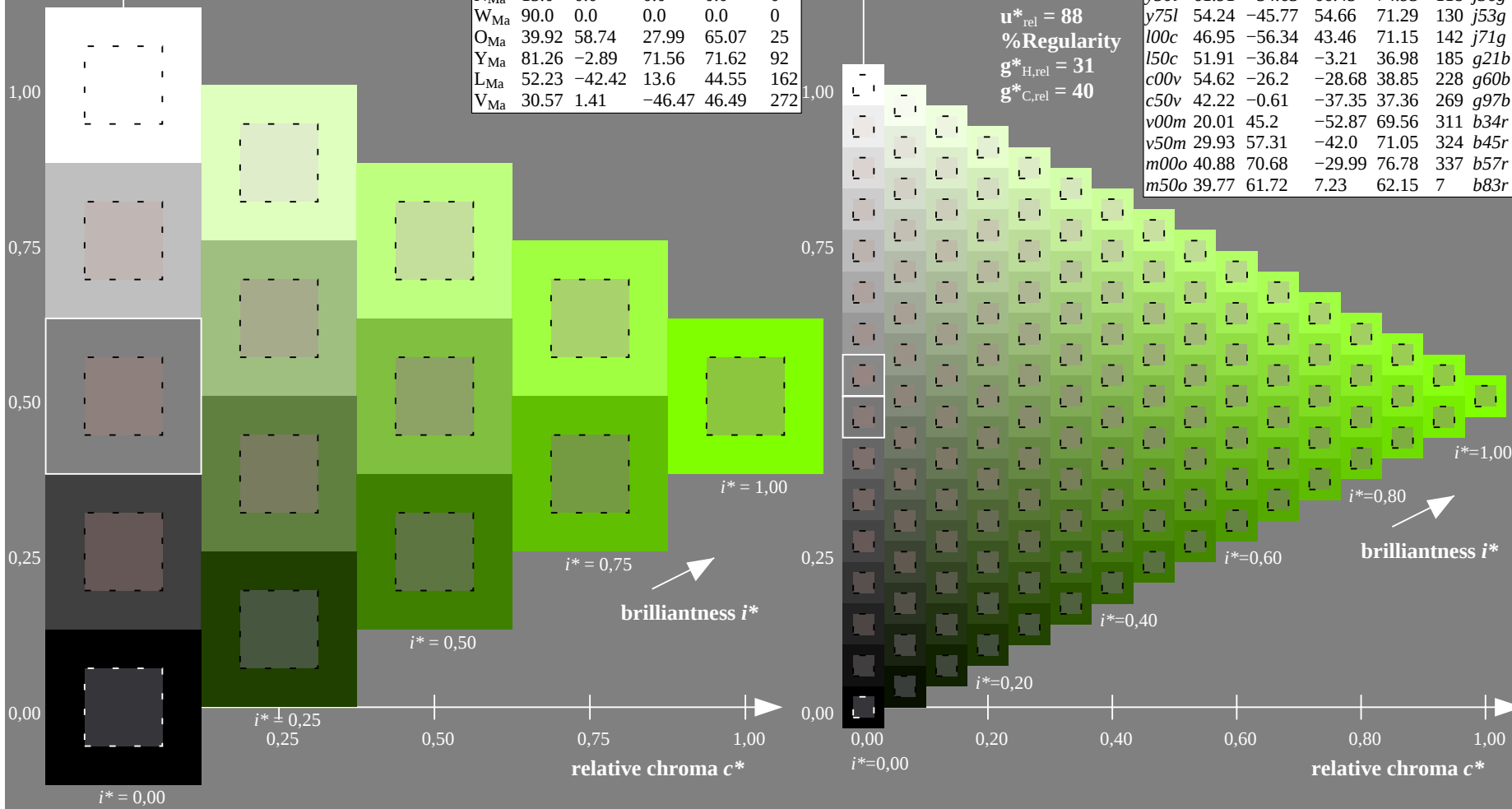
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y50l$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.361$
data for any colour:

lab^*tch^* and lab^*icu^*

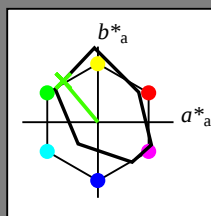
Hue texts:

$u^*_d = y75l$ $u^*_e = j53g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 54 -46 55

$LAB^*LCH^*_{Ma}$: 54 71 129

$lab^*olv^*_{Ma}$: 0.25 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.46 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

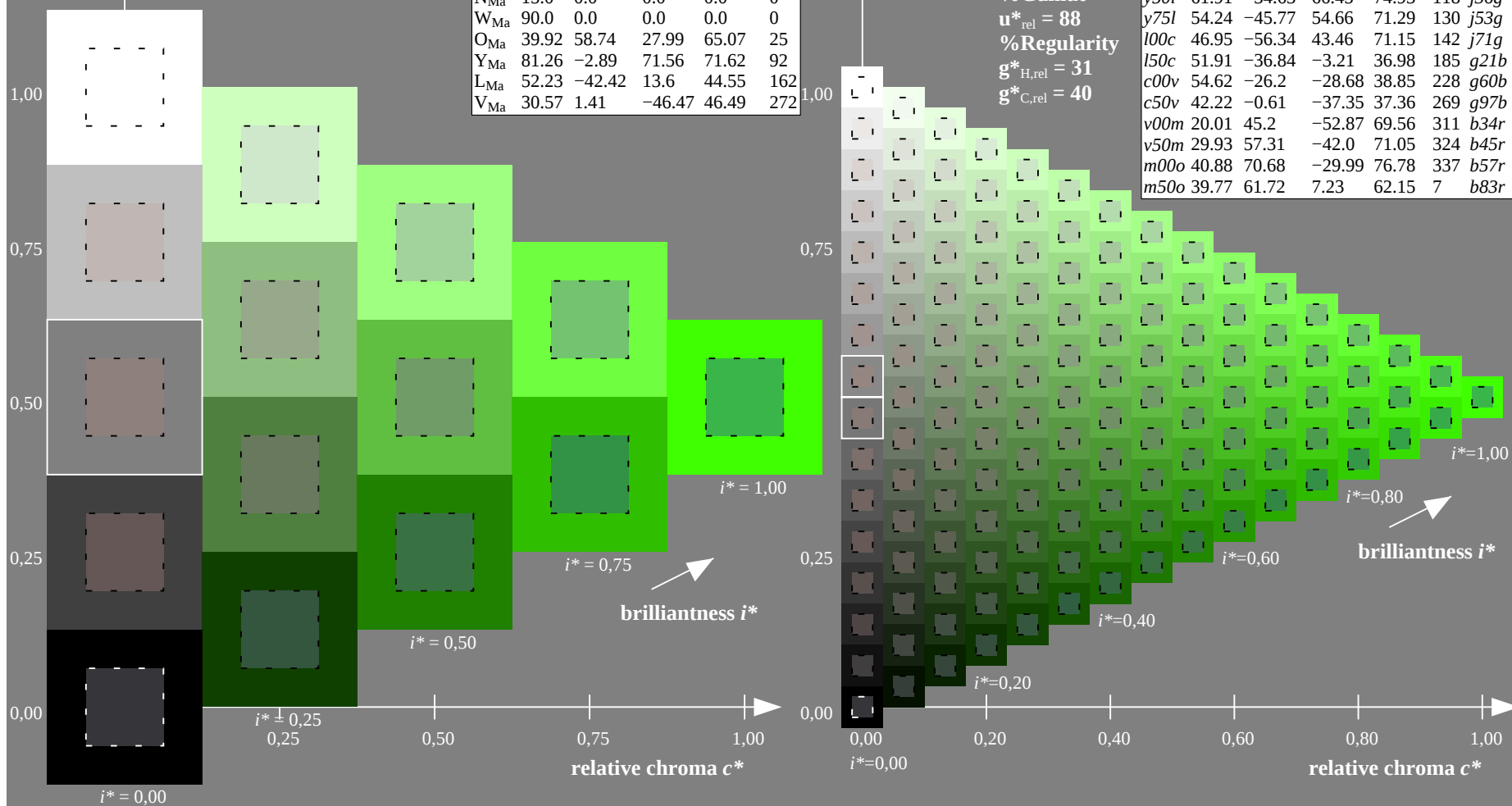
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.395$

data for any colour:

lab^*tch^* and lab^*icu^*

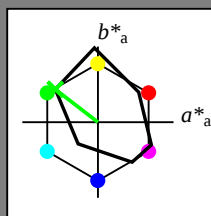
Hue texts:

$u^*_d = 100c$ $u^*_e = j71g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 -56 43

$LAB^*LCH^*_{Ma}$: 47 71 142

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

$lab^*rgb^*_{Ma}$: 0.28 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

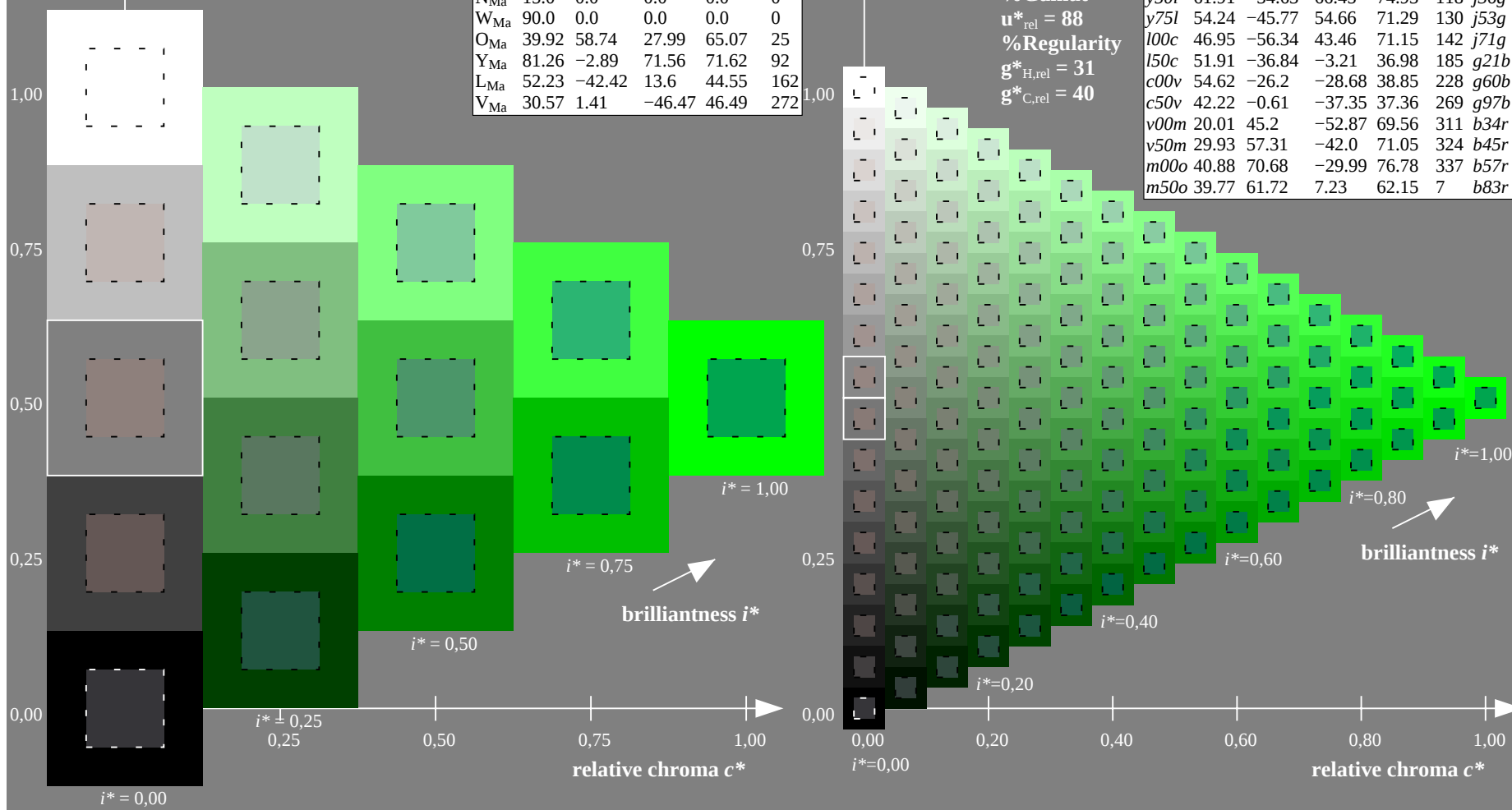
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.514$

data for any colour:

lab^*tch^* and lab^*icu^*

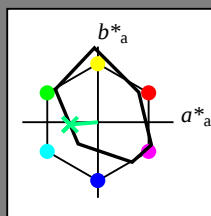
Hue texts:

$u^*_d = 150c$ $u^*_e = g21b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 52 -37 -3

$LAB^*LCH^*_{Ma}$: 52 37 184

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

$lab^*rgb^*_{Ma}$: 0.0 1.0 0.42

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

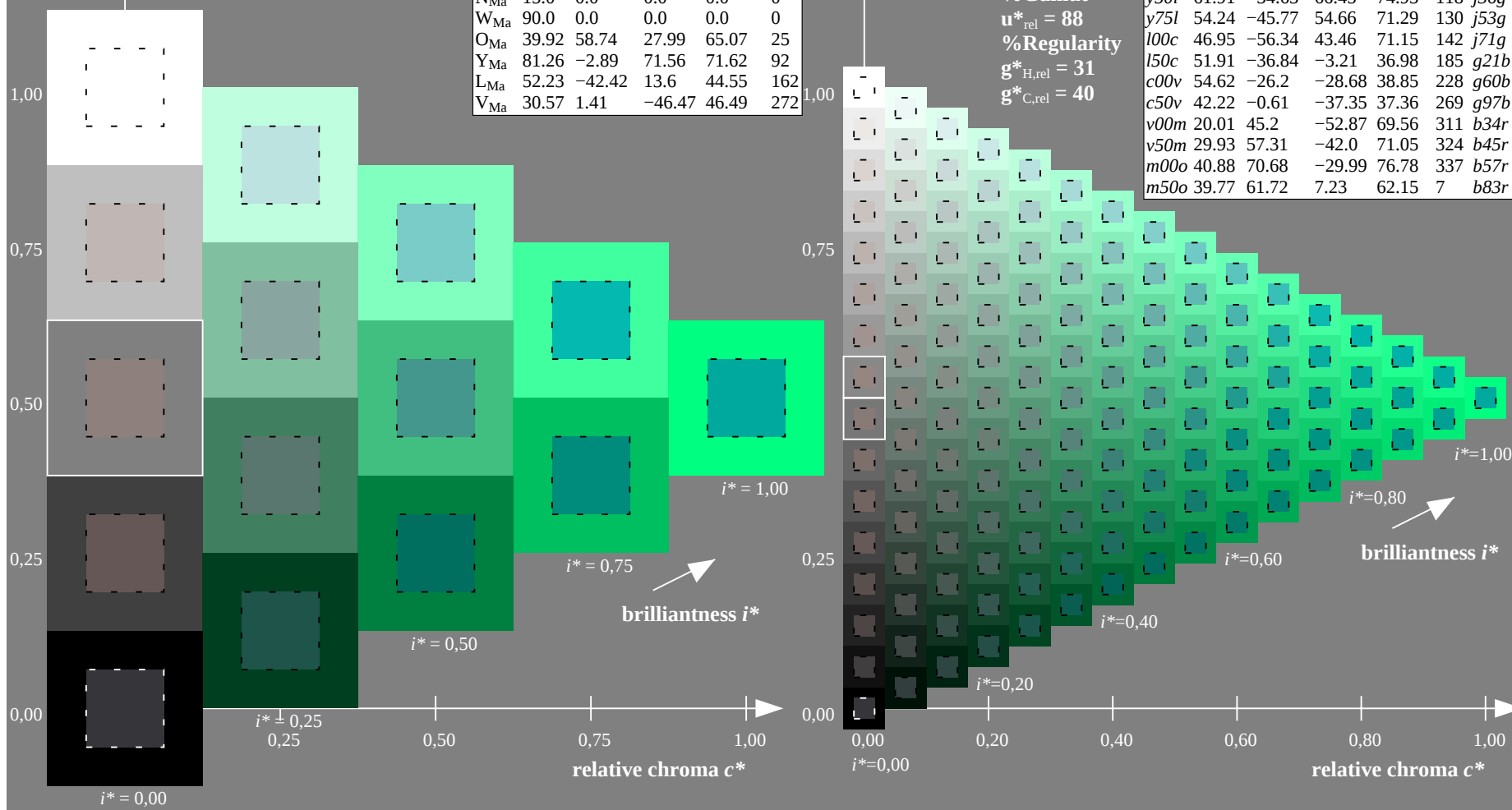
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = 150c$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.632$

data for any colour:

lab^*tch^* and lab^*icu^*

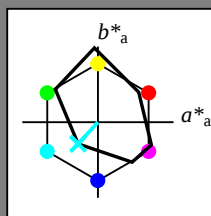
Hue texts:

$u^*_d = c00v$ $u^*_e = g60b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 55 -26 -29

$LAB^*LCH^*_{Ma}$: 55 39 227

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

$lab^*rgb^*_{Ma}$: 0.0 0.81 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

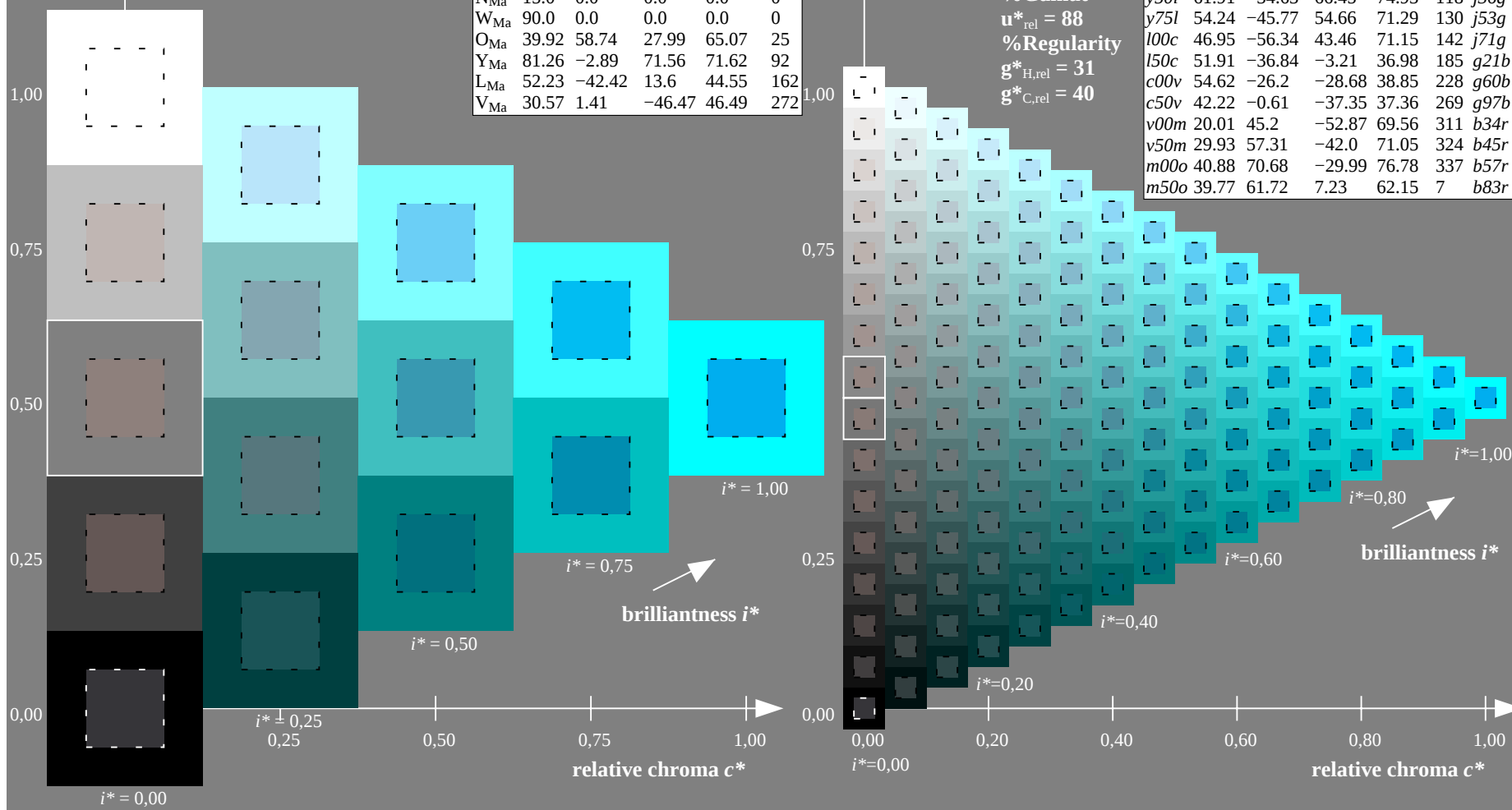
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = c00v$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.747$

data for any colour:

lab^*tch^* and lab^*icu^*

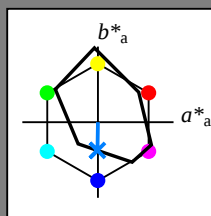
Hue texts:

$u^*_d = c50v$ $u^*_e = g97b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 42 -1 -37

$LAB^*LCH^*_{Ma}$: 42 37 269

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

$lab^*rgb^*_{Ma}$: 0.0 0.05 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

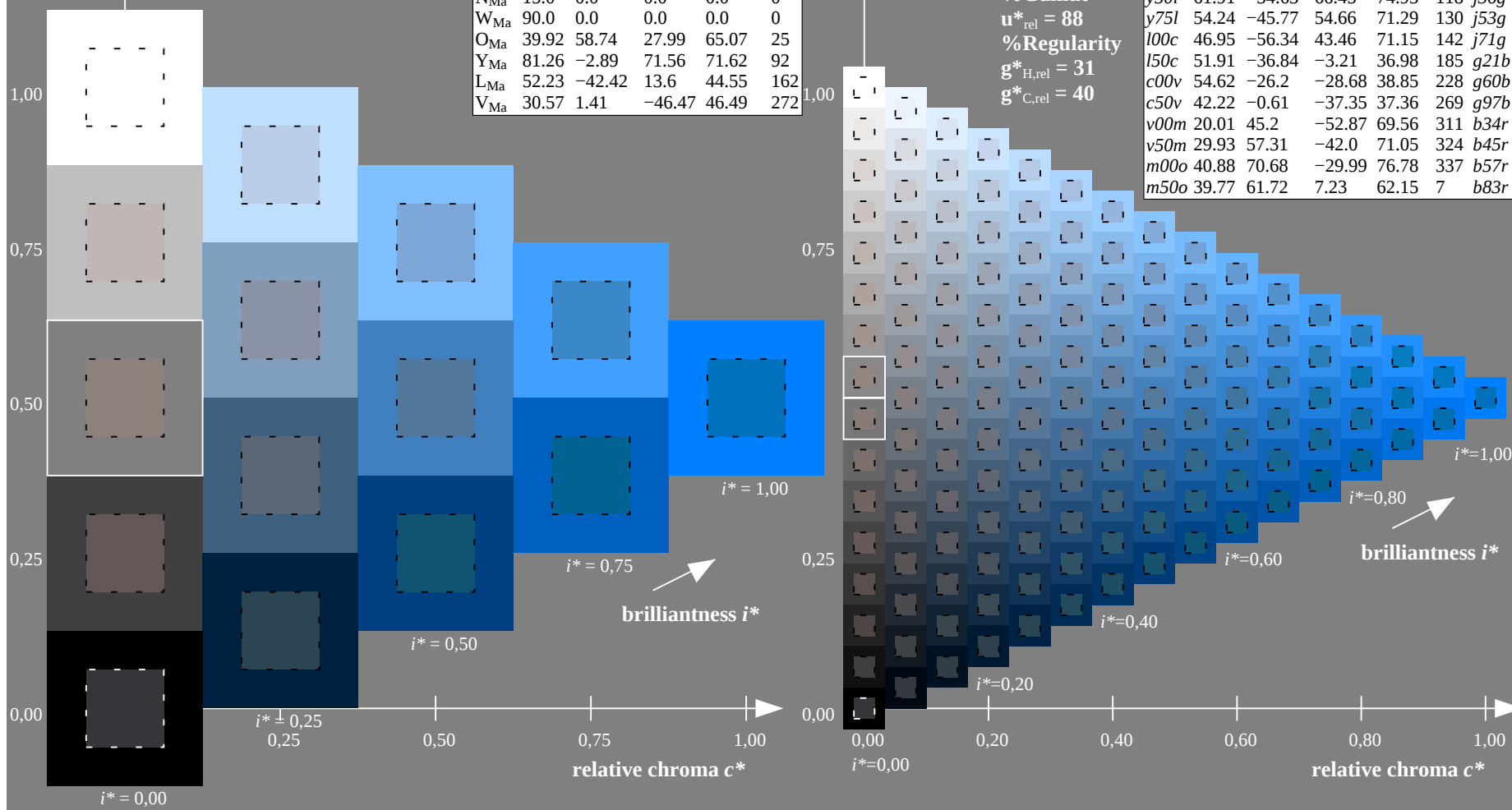
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = c50v$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.863$

data for any colour:

lab^*tch^* and lab^*icu^*

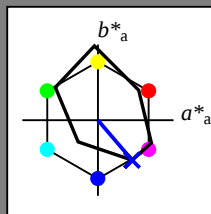
Hue texts:

$u^*_d = v00m$ $u^*_e = b34r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	38.8	53.92	39.68	66.95	36
YMa	82.58	-4.64	98.22	98.33	93
LMa	46.95	-56.34	43.46	71.15	142
CMa	54.62	-26.2	-28.68	38.85	228
VMa	20.01	45.2	-52.87	69.56	311
MMa	40.88	70.68	-29.99	76.78	337
NMa	15.0	0.0	0.0	0.0	0
WMa	90.0	0.0	0.0	0.0	0
OMa	39.92	58.74	27.99	65.07	25
YMa	81.26	-2.89	71.56	71.62	92
LMa	52.23	-42.42	13.6	44.55	162
VMa	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

LAB^*LAB^*Ma : 20 45 -53

LAB^*LCH^*Ma : 20 70 310

lab^*olv^*Ma : 0.0 0.0 1.0

lab^*rgb^*Ma : 0.68 0.0 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

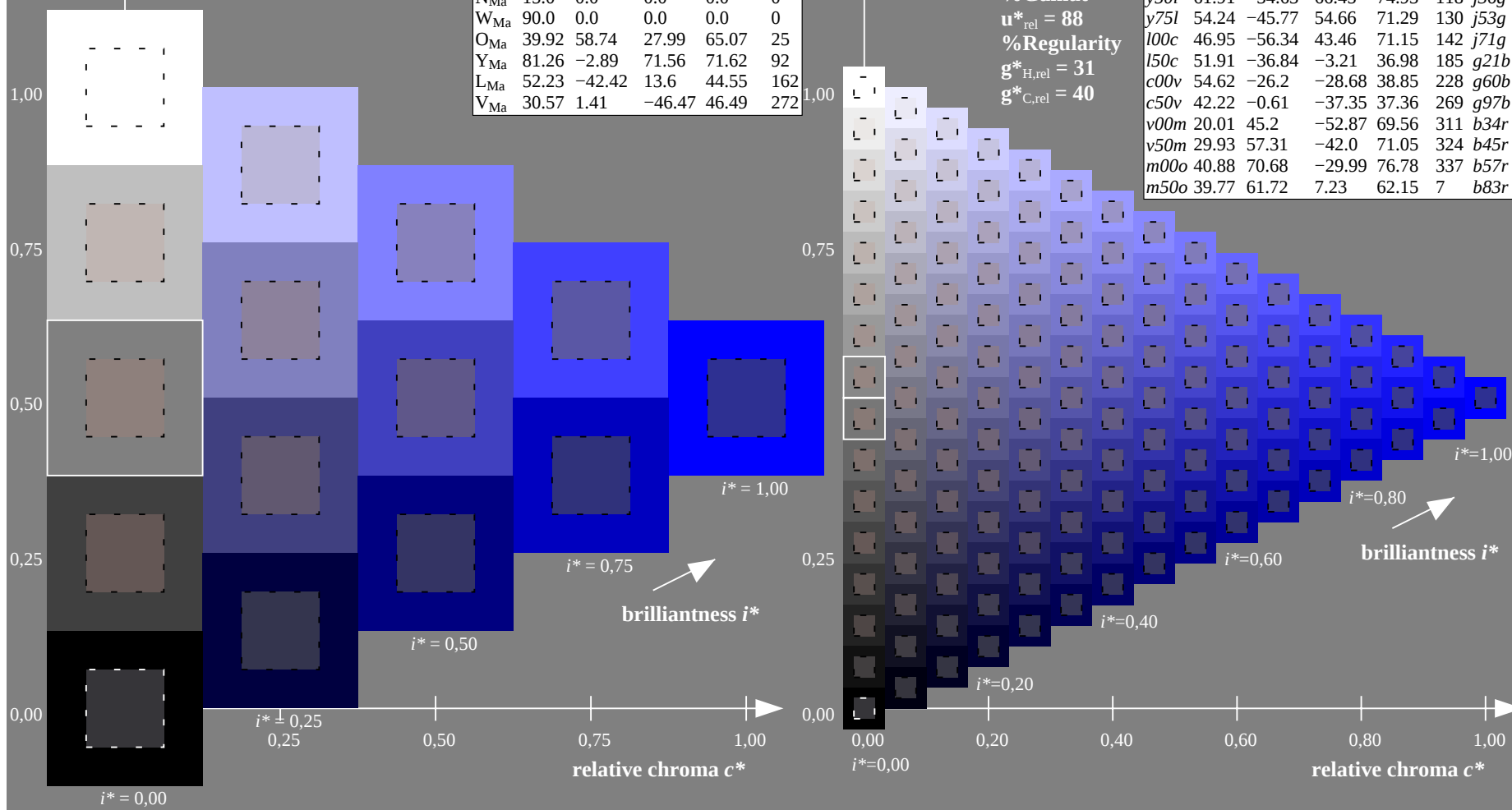
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = v00m$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.899$

data for any colour:

lab^*tch^* and lab^*icu^*

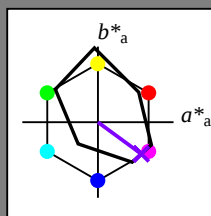
Hue texts:

$u^*_d = v50m$ $u^*_e = b45r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	38.8	53.92	39.68	66.95	36
YMa	82.58	-4.64	98.22	98.33	93
LMa	46.95	-56.34	43.46	71.15	142
CMa	54.62	-26.2	-28.68	38.85	228
VMa	20.01	45.2	-52.87	69.56	311
MMa	40.88	70.68	-29.99	76.78	337
NMa	15.0	0.0	0.0	0.0	0
WMa	90.0	0.0	0.0	0.0	0
OMa	39.92	58.74	27.99	65.07	25
YMa	81.26	-2.89	71.56	71.62	92
LMa	52.23	-42.42	13.6	44.55	162
VMa	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

LAB^*LAB^*Ma : 30 57 -42

LAB^*LCH^*Ma : 30 71 323

lab^*olv^*Ma : 0.5 0.0 1.0

lab^*rgb^*Ma : 0.91 0.0 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

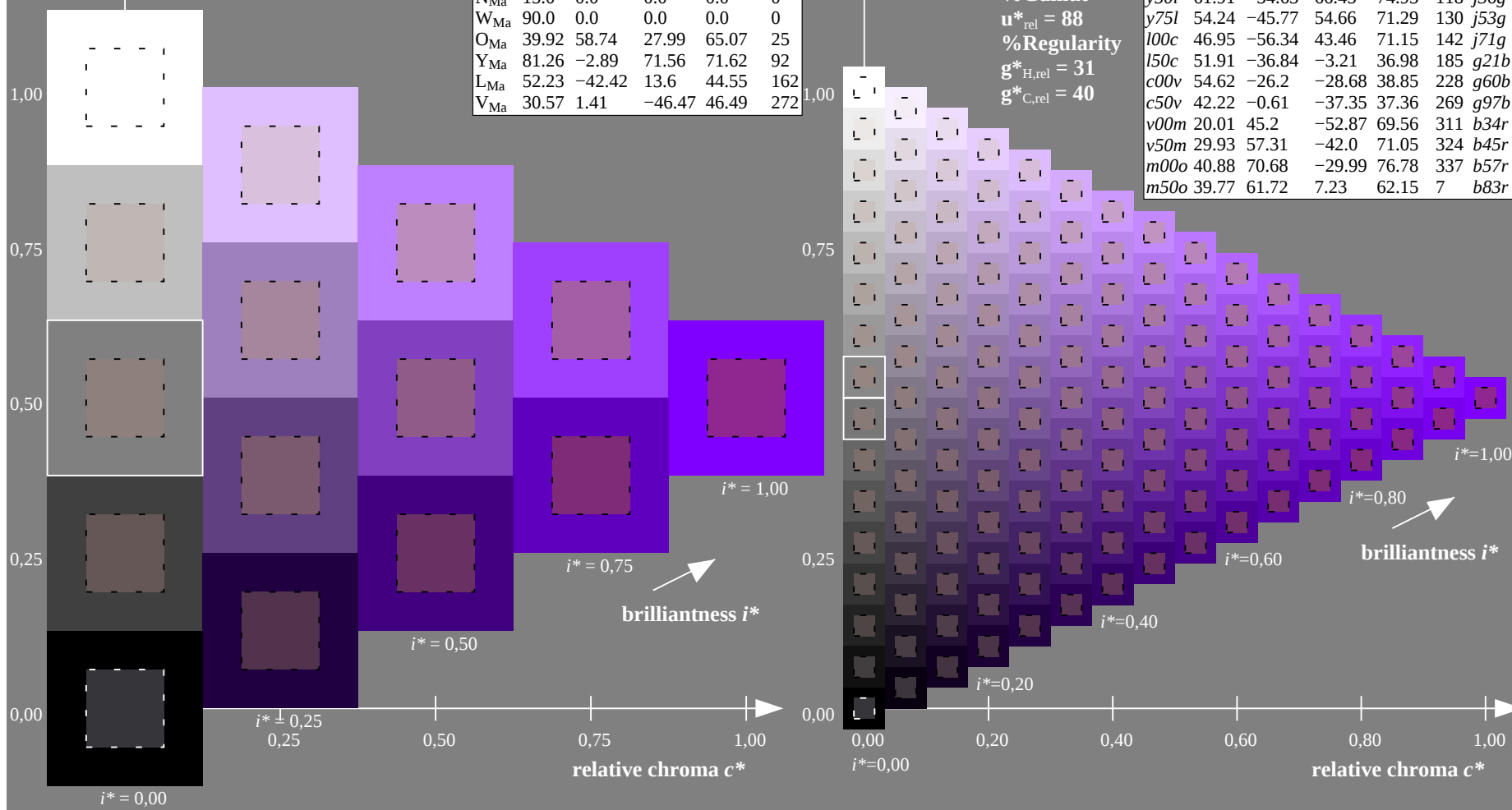
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = v50m$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.936$

data for any colour:

lab^*tch^* and lab^*icu^*

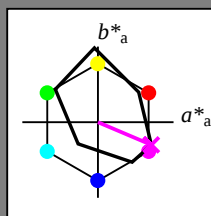
Hue texts:

$u^*_d = m00o$ $u^*_e = b57r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 41 71 -30

$LAB^*LCH^*_{Ma}$: 41 77 337

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.85

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

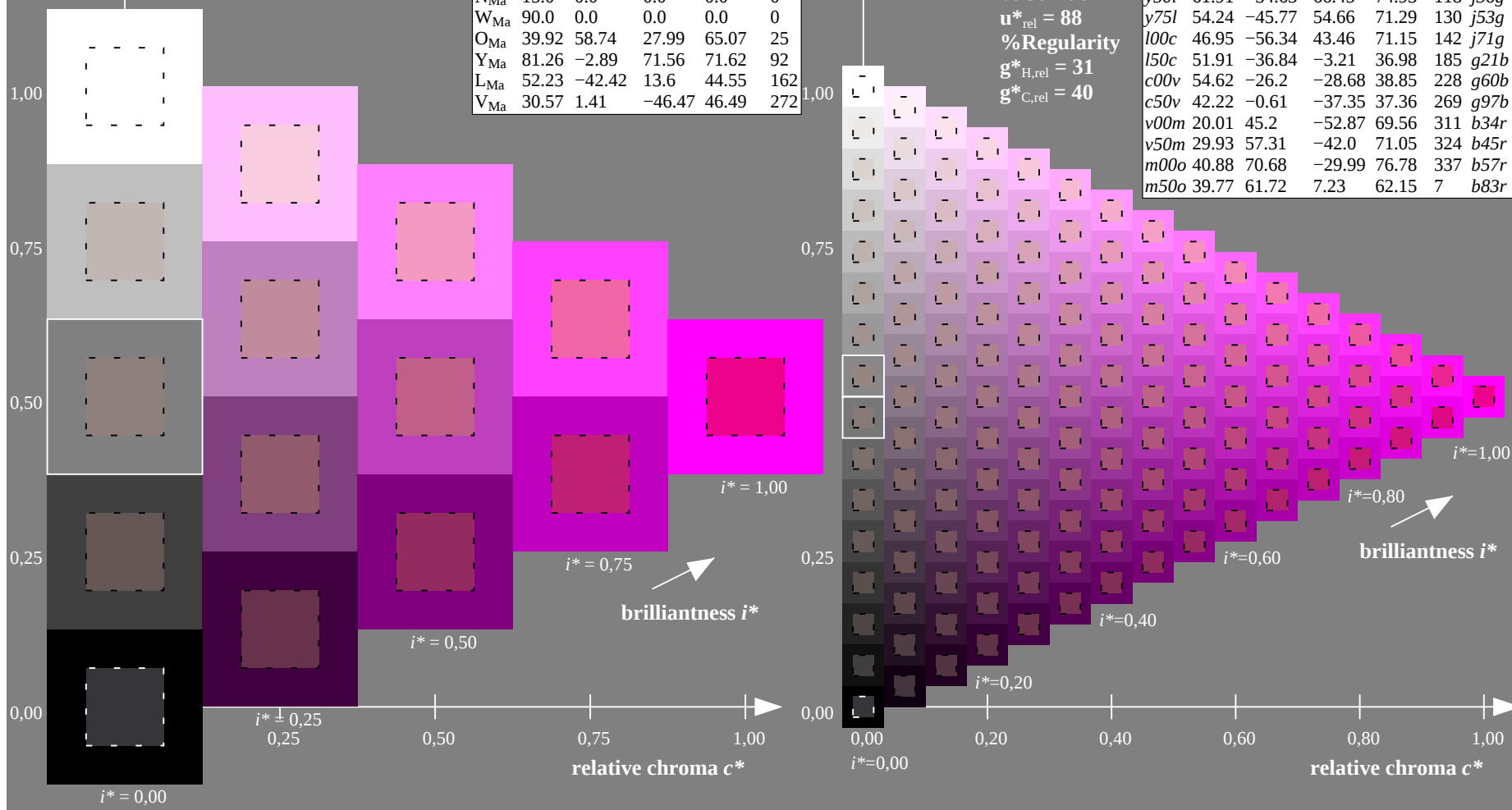
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = m00o$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.019$

data for any colour:

lab^*tch^* and lab^*icu^*

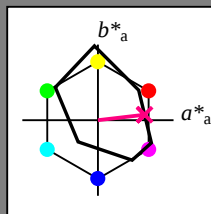
Hue texts:

$u^*_d = m50o$ $u^*_e = b83r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 40 62 7

$LAB^*LCH^*_{Ma}$: 40 62 6

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.33

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

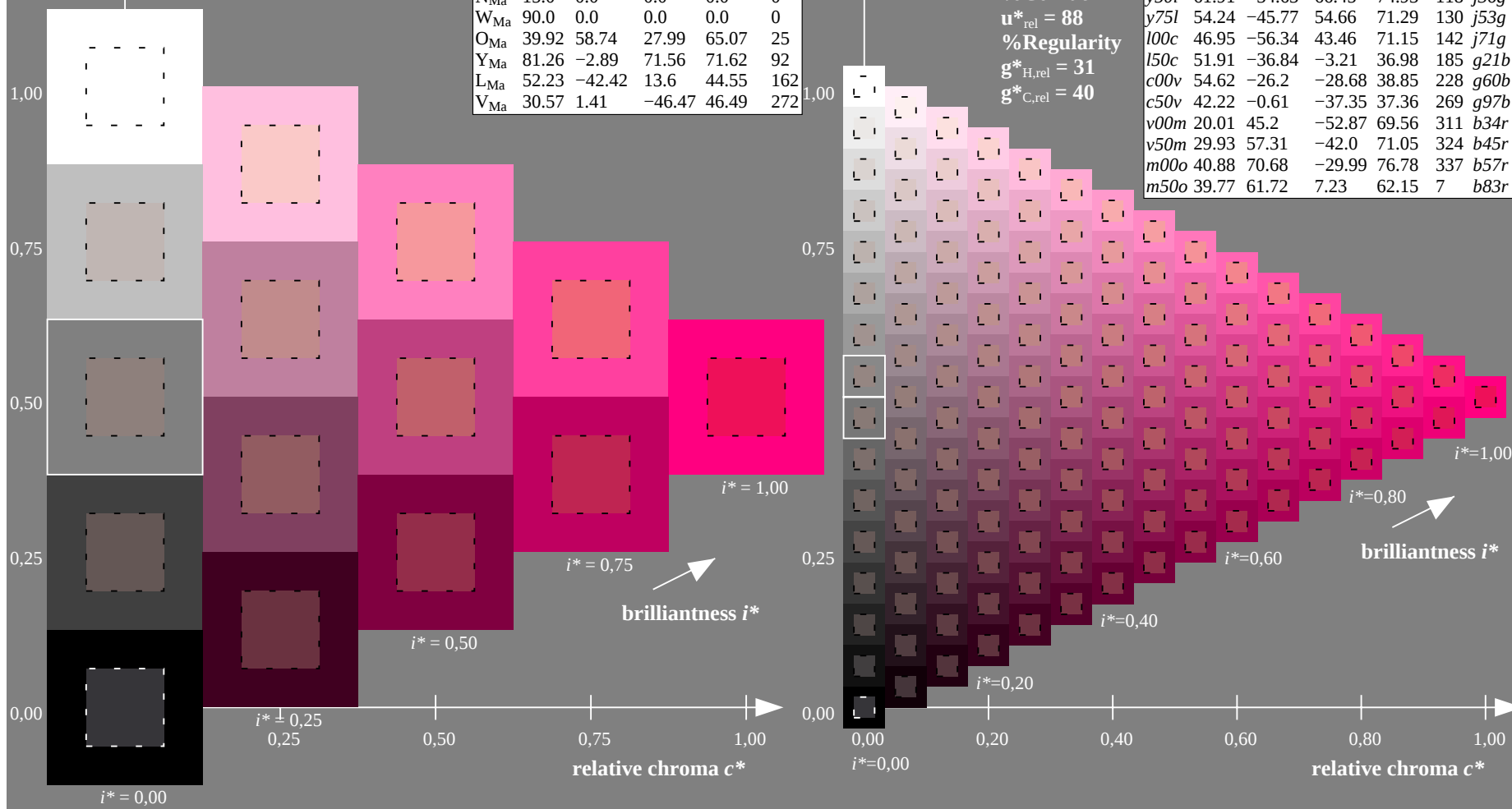
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

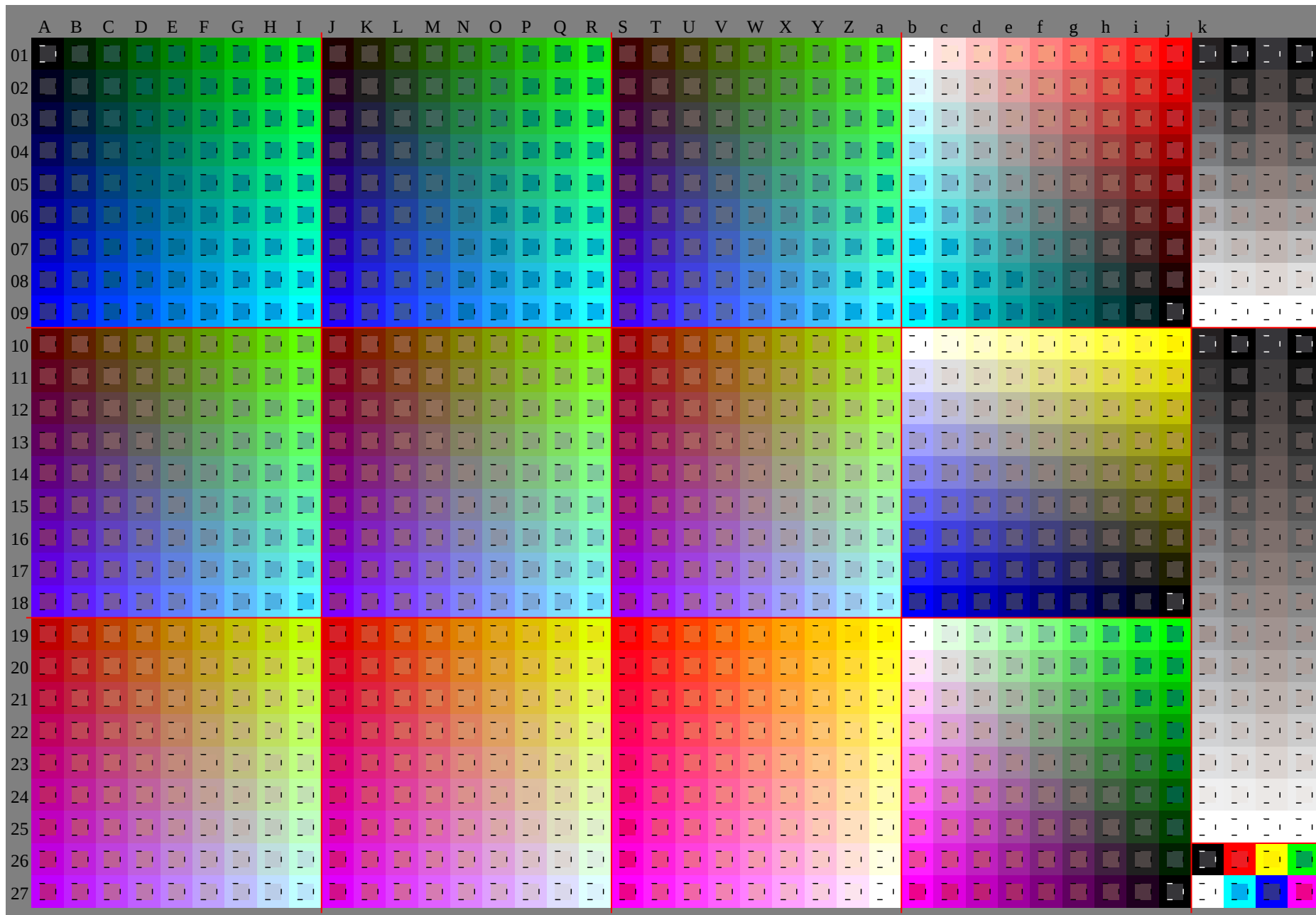
FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = m50o$



See for similar files: <http://www.ps.bam.de/Ee67/>; www.ps.bam.de/Ee.HTM
Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1, CIELAB, ColSpX=0



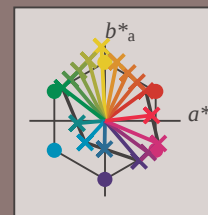
BAM registration: 20081001-Ee67/10L/L67E00FP.PS/.PDF BAM material: code=rh4ta
application for evaluation and measurement of printer or monitor systems

Input and output:
Colorimetric Printer Reflective System FRS15_90a
data for any colour:

u^*_d and number $no.$ = 00 .. 15
device hue text:
 $u^*_d = 16$ hues $o00y, o25y, \dots, m50o$
contrast reduction factor:
 $c_R = 0.9$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$



%Gamut

$u^*_{rel} = 88$

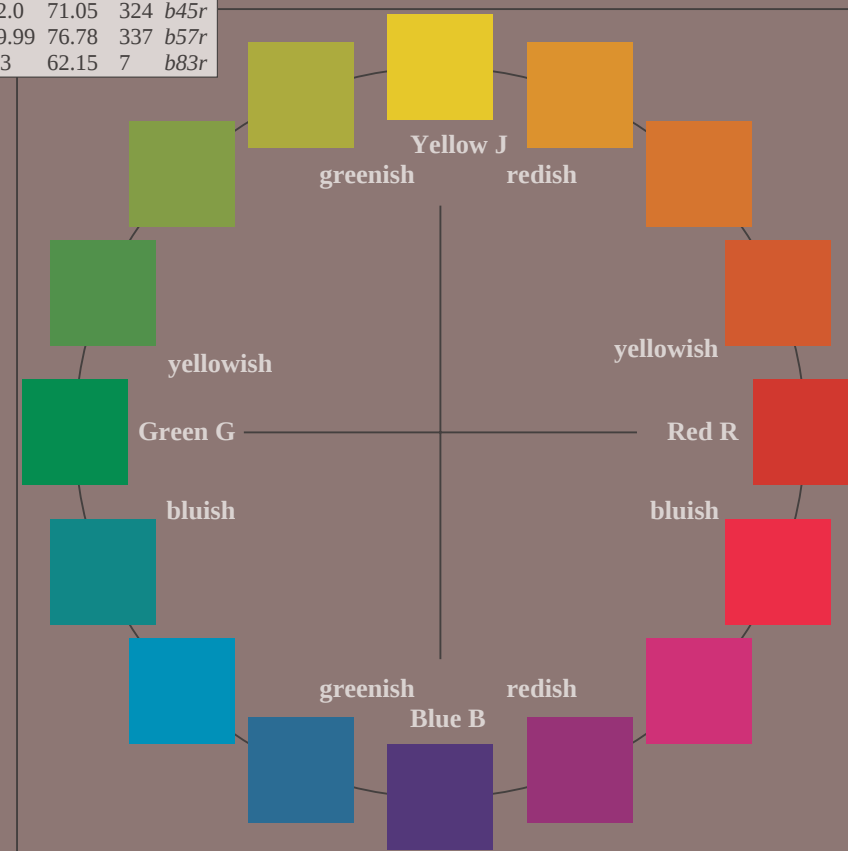
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	38.8	53.92	39.68	66.95	36
Y_{Ma}	82.58	-4.64	98.22	98.33	93
L_{Ma}	46.95	-56.34	43.46	71.15	142
C_{Ma}	54.62	-26.2	-28.68	38.85	228
V_{Ma}	20.01	45.2	-52.87	69.56	311
M_{Ma}	40.88	70.68	-29.99	76.78	337
N_{Ma}	15.0	0.0	0.0	0.0	0
W_{Ma}	90.0	0.0	0.0	0.0	0
O_{CIE}	39.92	58.74	27.99	65.07	25
Y_{CIE}	81.26	-2.89	71.56	71.62	92
L_{CIE}	52.23	-42.42	13.6	44.55	162
V_{CIE}	30.57	1.41	-46.47	46.49	272



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.101$

data for any colour:

lab^*tch^* and lab^*icu^*

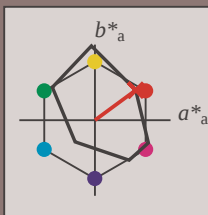
Hue texts:

$u^*_d = o00y$ $u^*_e = r16j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 39 54 40

$LAB^*LCH^*_{Ma}$: 39 67 36

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

$lab^*rgb^*_{Ma}$: 1.0 0.16 0.0

triangle lightness t^*

%Gamut

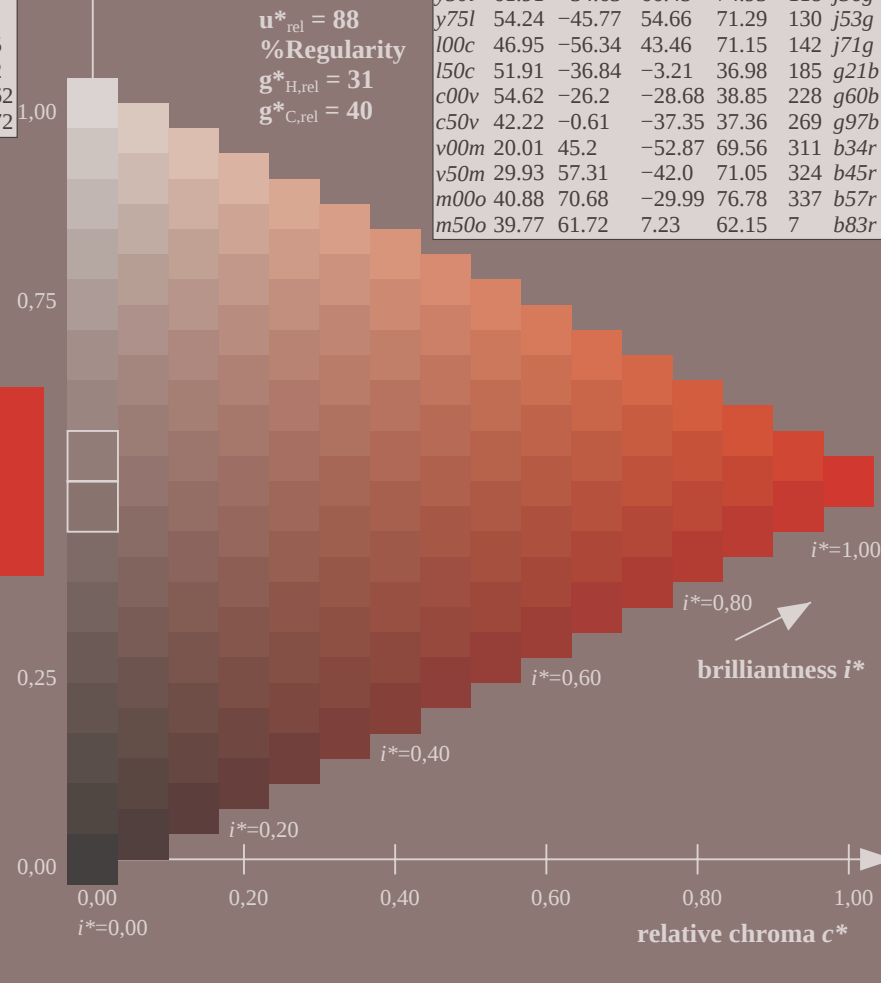
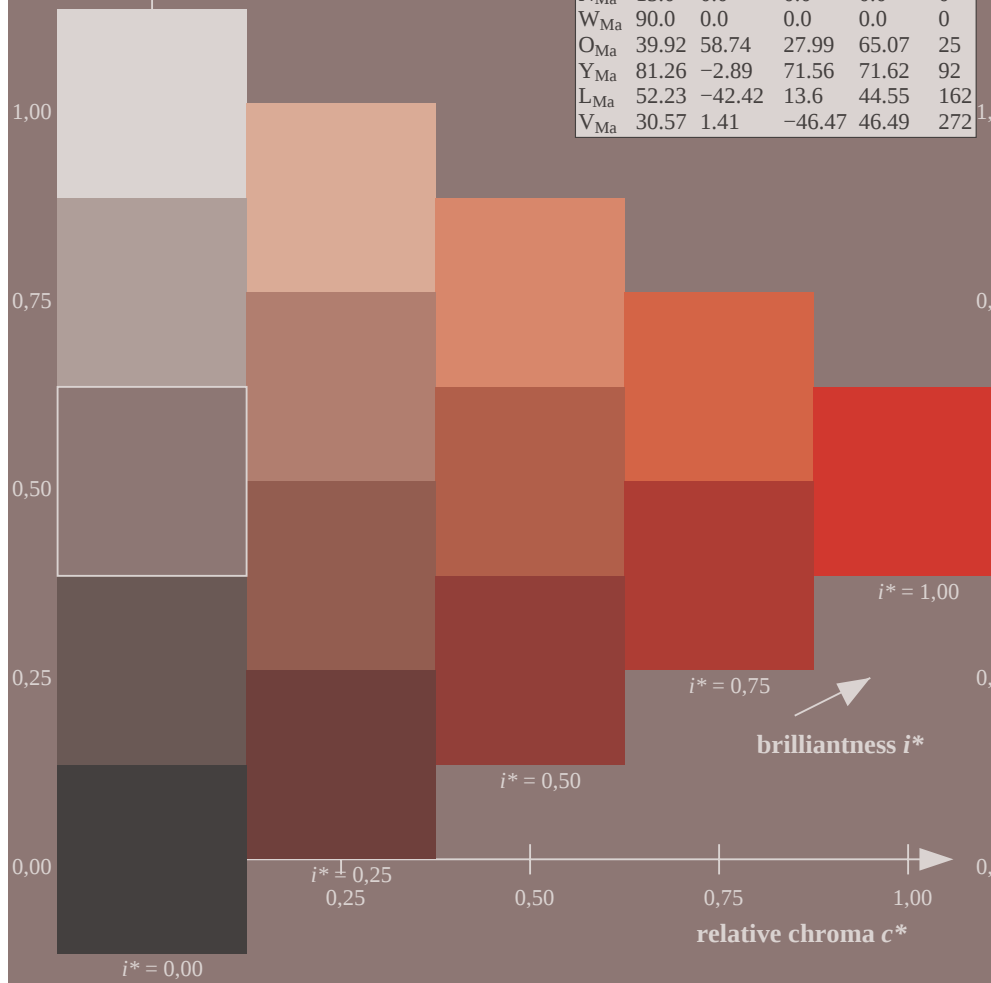
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
<i>o00y</i>	38.8	53.92	39.68	66.95	36	<i>r16j</i>
<i>o25y</i>	47.46	42.34	51.25	66.48	50	<i>r37j</i>
<i>o50y</i>	56.54	30.2	63.39	70.22	65	<i>r58j</i>
<i>o75y</i>	67.39	15.68	77.9	79.47	79	<i>r79j</i>
<i>y00l</i>	82.58	-4.64	98.22	98.33	93	<i>j01g</i>
<i>y25l</i>	70.85	-21.66	80.19	83.07	105	<i>j18g</i>
<i>y50l</i>	61.91	-34.63	66.45	74.93	118	<i>j36g</i>
<i>y75l</i>	54.24	-45.77	54.66	71.29	130	<i>j53g</i>
<i>l00c</i>	46.95	-56.34	43.46	71.15	142	<i>j71g</i>
<i>l50c</i>	51.91	-36.84	-3.21	36.98	185	<i>g21b</i>
<i>c00v</i>	54.62	-26.2	-28.68	38.85	228	<i>g60b</i>
<i>c50v</i>	42.22	-0.61	-37.35	37.36	269	<i>g97b</i>
<i>v00m</i>	20.01	45.2	-52.87	69.56	311	<i>b34r</i>
<i>v50m</i>	29.93	57.31	-42.0	71.05	324	<i>b45r</i>
<i>m00o</i>	40.88	70.68	-29.99	76.78	337	<i>b57r</i>
<i>m50o</i>	39.77	61.72	7.23	62.15	7	<i>b83r</i>



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.14$

data for any colour:

lab^*tch^* and lab^*icu^*

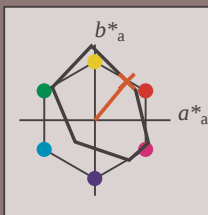
Hue texts:

$u^*_d = o25y$ $u^*_e = r37j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 42 51

$LAB^*LCH^*_{Ma}$: 47 66 50

$lab^*olv^*_{Ma}$: 1.0 0.25 0.0

$lab^*rgb^*_{Ma}$: 1.0 0.37 0.0

triangle lightness t^*

%Gamut

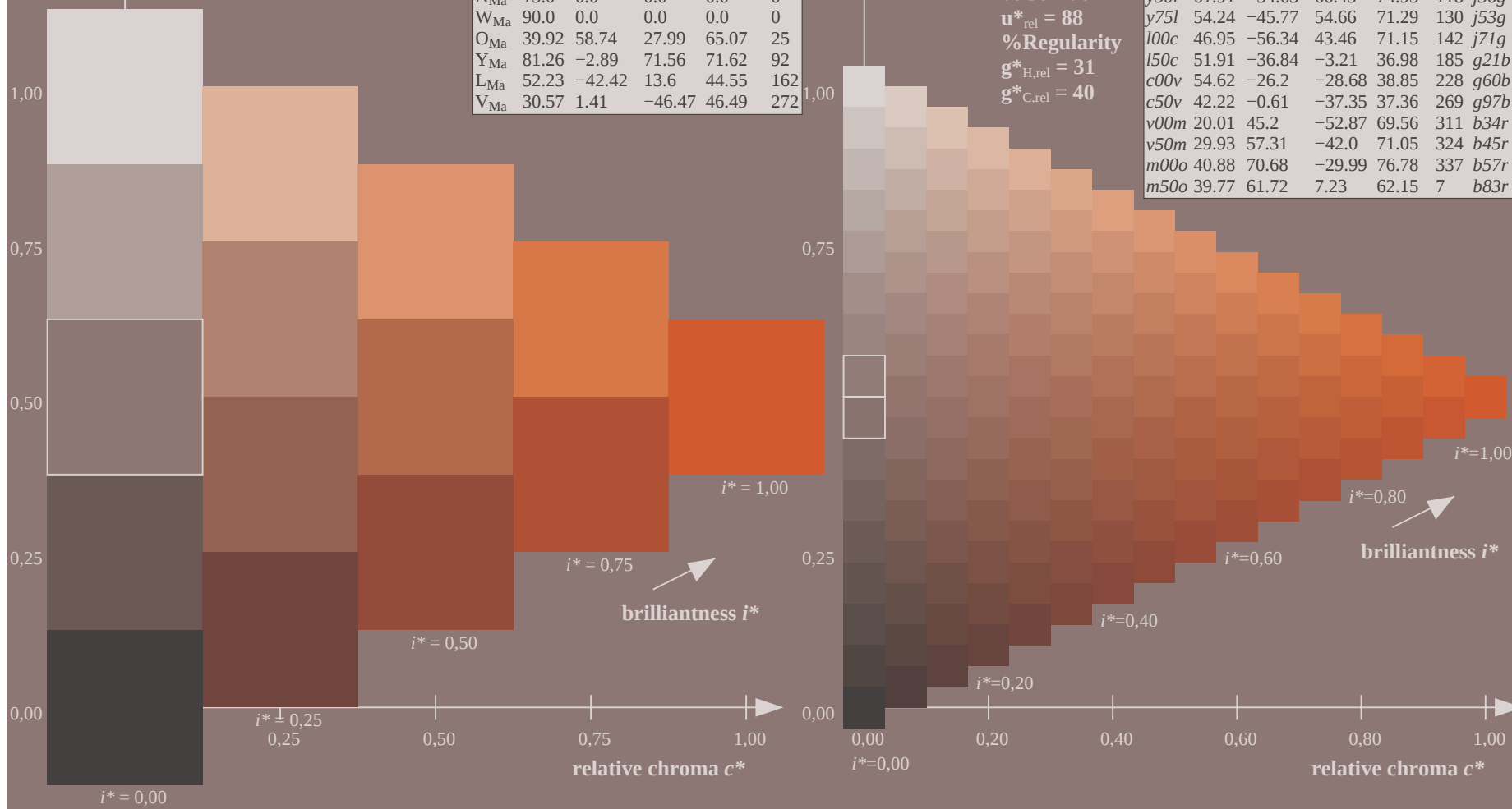
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.179$

data for any colour:

lab^*tch^* and lab^*icu^*

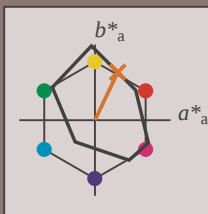
Hue texts:

$u^*_d = o50y$ $u^*_e = r58j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 57 30 63

$LAB^*LCH^*_{Ma}$: 57 70 64

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

$lab^*rgb^*_{Ma}$: 1.0 0.58 0.0

triangle lightness t^*

%Gamut

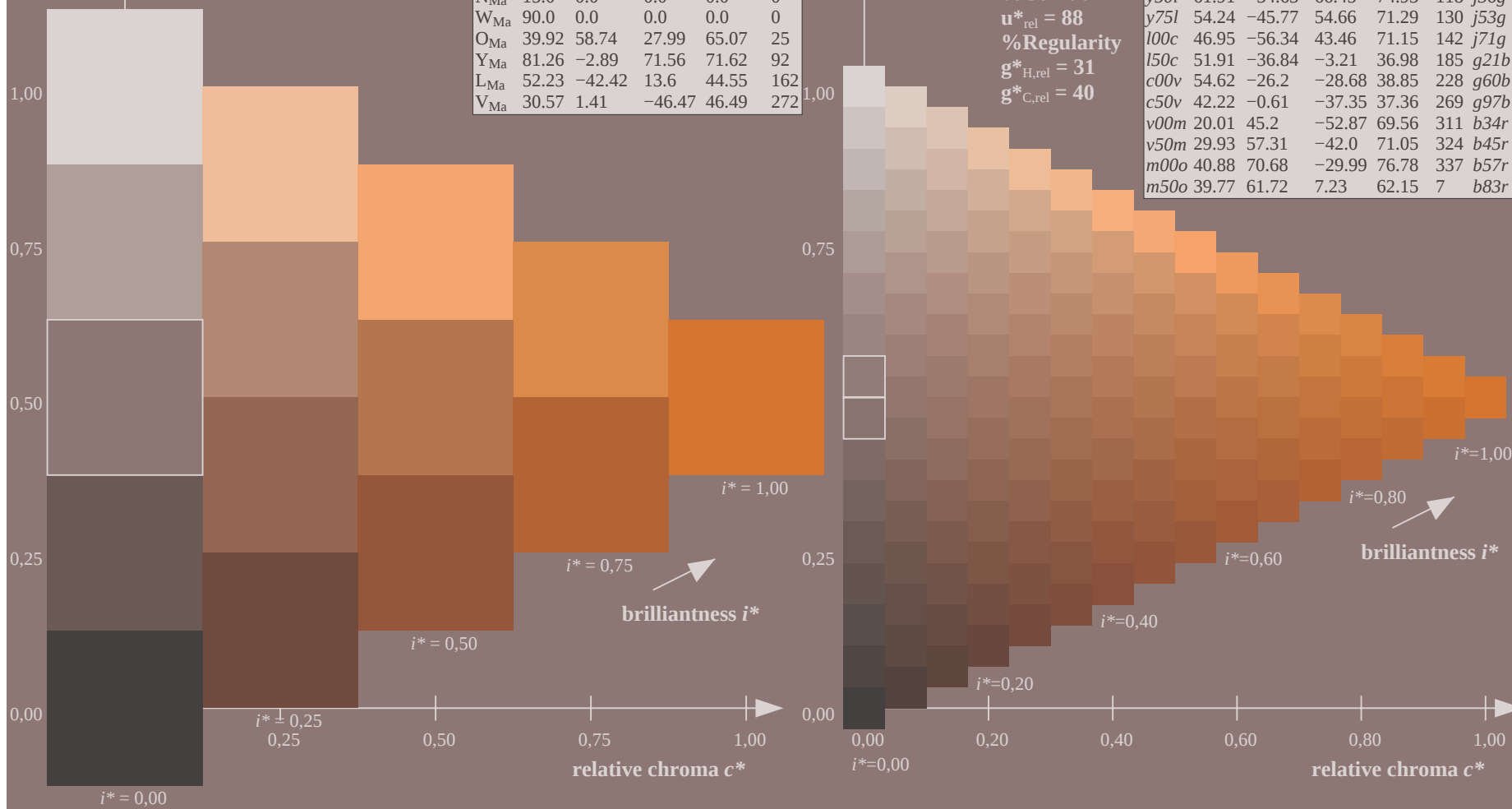
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.218$

data for any colour:

lab^*tch^* and lab^*icu^*

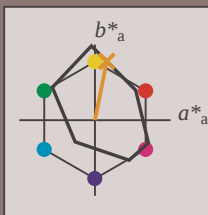
Hue texts:

$u^*_d = o75y$ $u^*_e = r79j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data					
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 67 16 78

$LAB^*LCH^*_{Ma}$: 67 79 78

$lab^*olv^*_{Ma}$: 1.0 0.75 0.0

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

triangle lightness t^*

%Gamut

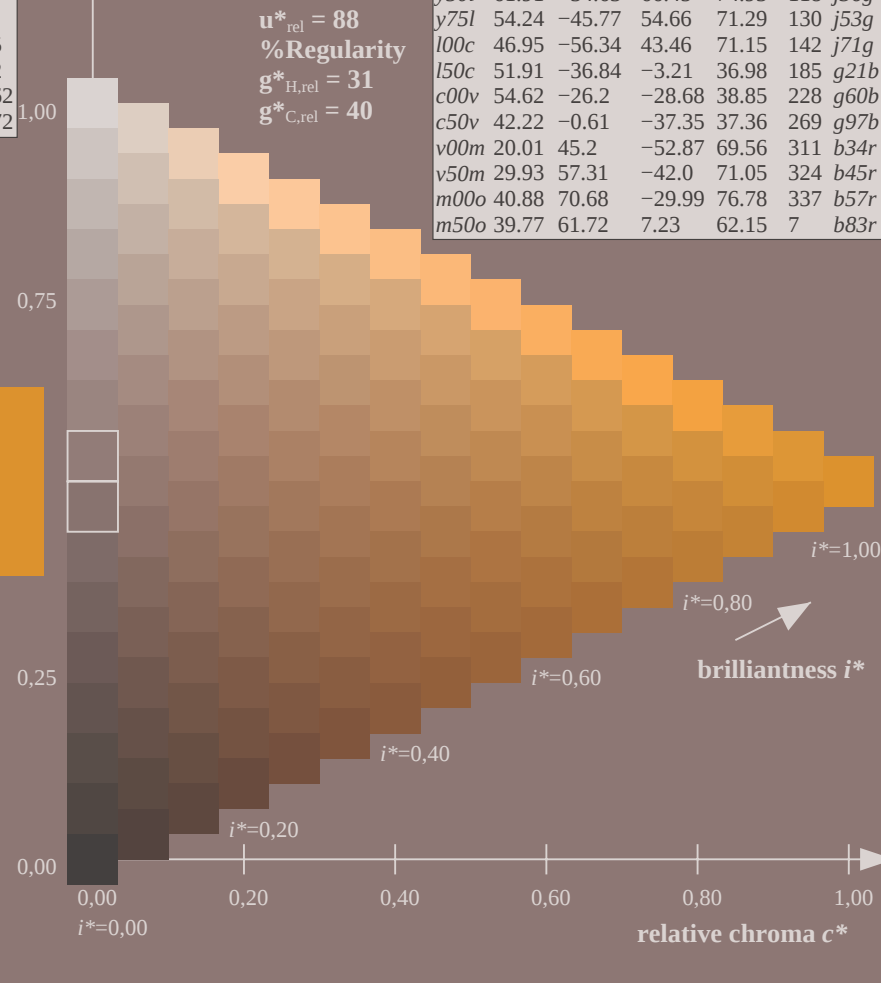
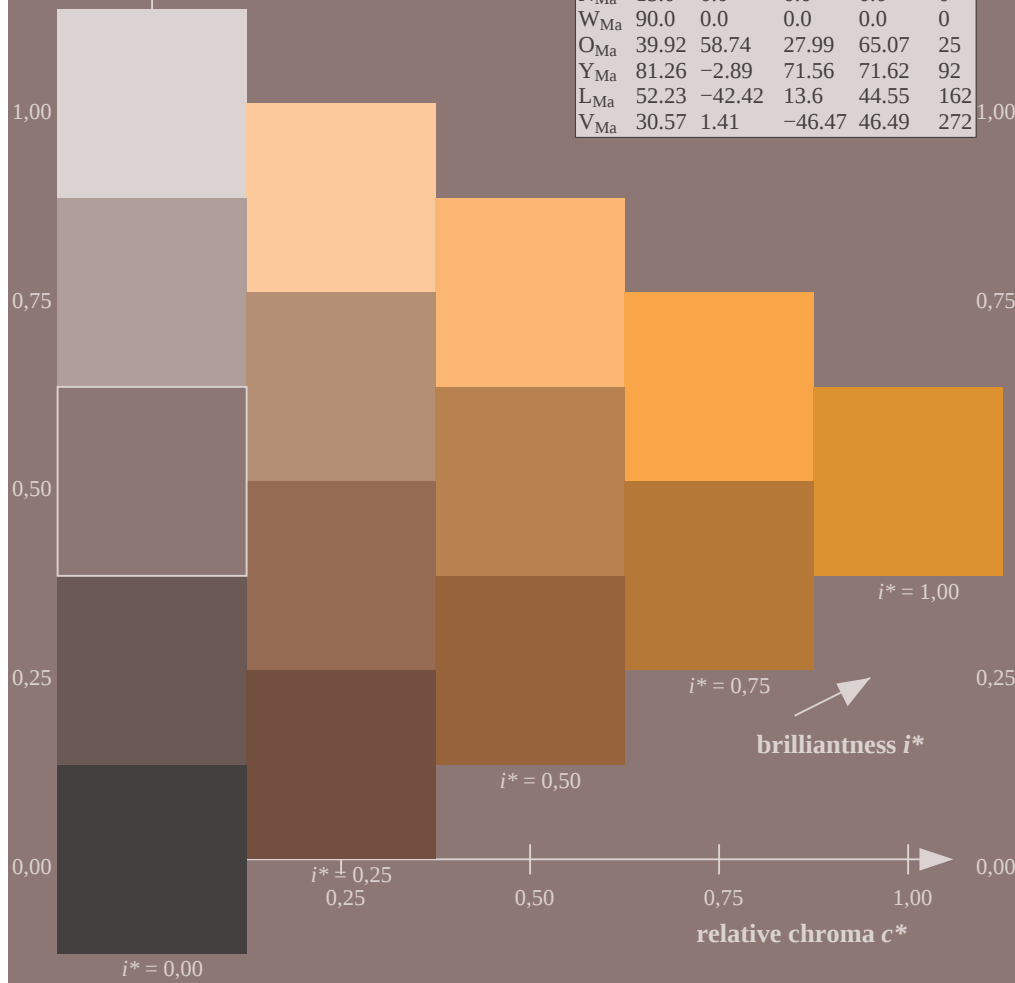
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data					
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36
o25y	47.46	42.34	51.25	66.48	50
o50y	56.54	30.2	63.39	70.22	65
o75y	67.39	15.68	77.9	79.47	79
y00l	82.58	-4.64	98.22	98.33	93
y25l	70.85	-21.66	80.19	83.07	105
y50l	61.91	-34.63	66.45	74.93	118
y75l	54.24	-45.77	54.66	71.29	130
l00c	46.95	-56.34	43.46	71.15	142
l50c	51.91	-36.84	-3.21	36.98	185
c00v	54.62	-26.2	-28.68	38.85	228
c50v	42.22	-0.61	-37.35	37.36	269
v00m	20.01	45.2	-52.87	69.56	311
v50m	29.93	57.31	-42.0	71.05	324
m00o	40.88	70.68	-29.99	76.78	337
m50o	39.77	61.72	7.23	62.15	7



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.258$

data for any colour:

lab^*tch^* and lab^*icu^*

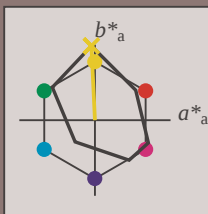
Hue texts:

$u^*_d = y00l$ $u^*_e = j01g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 83 -5 98

$LAB^*LCH^*_{Ma}$: 83 98 92

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

$lab^*rgb^*_{Ma}$: 0.99 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

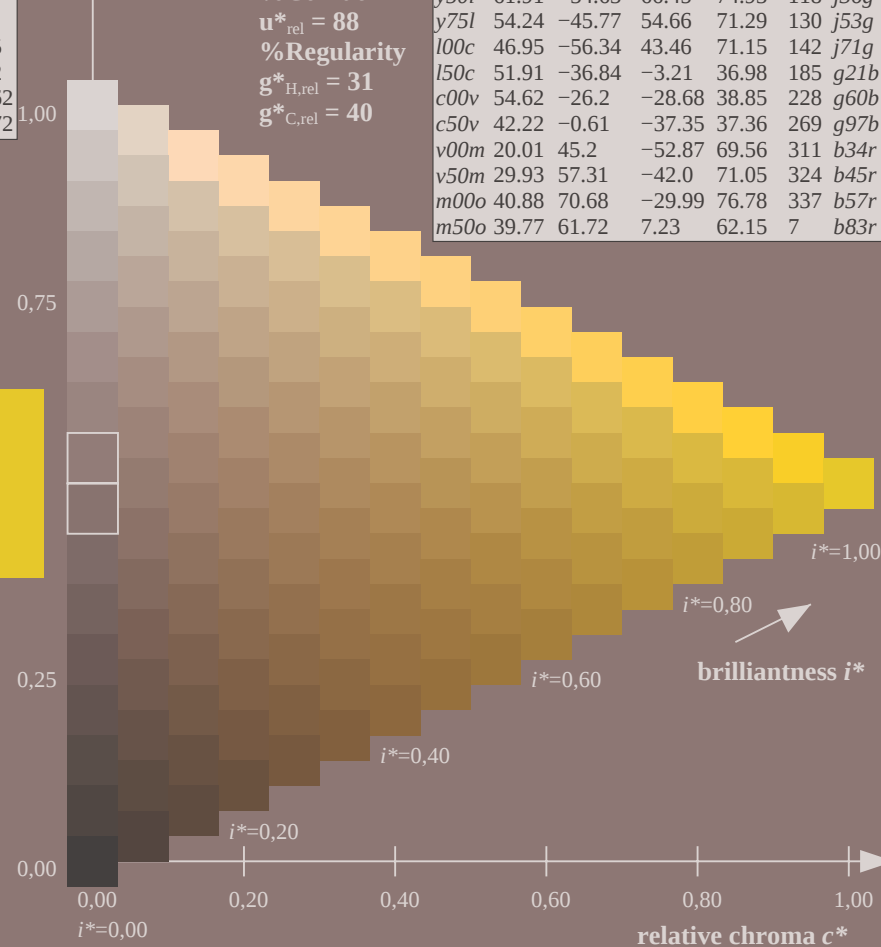
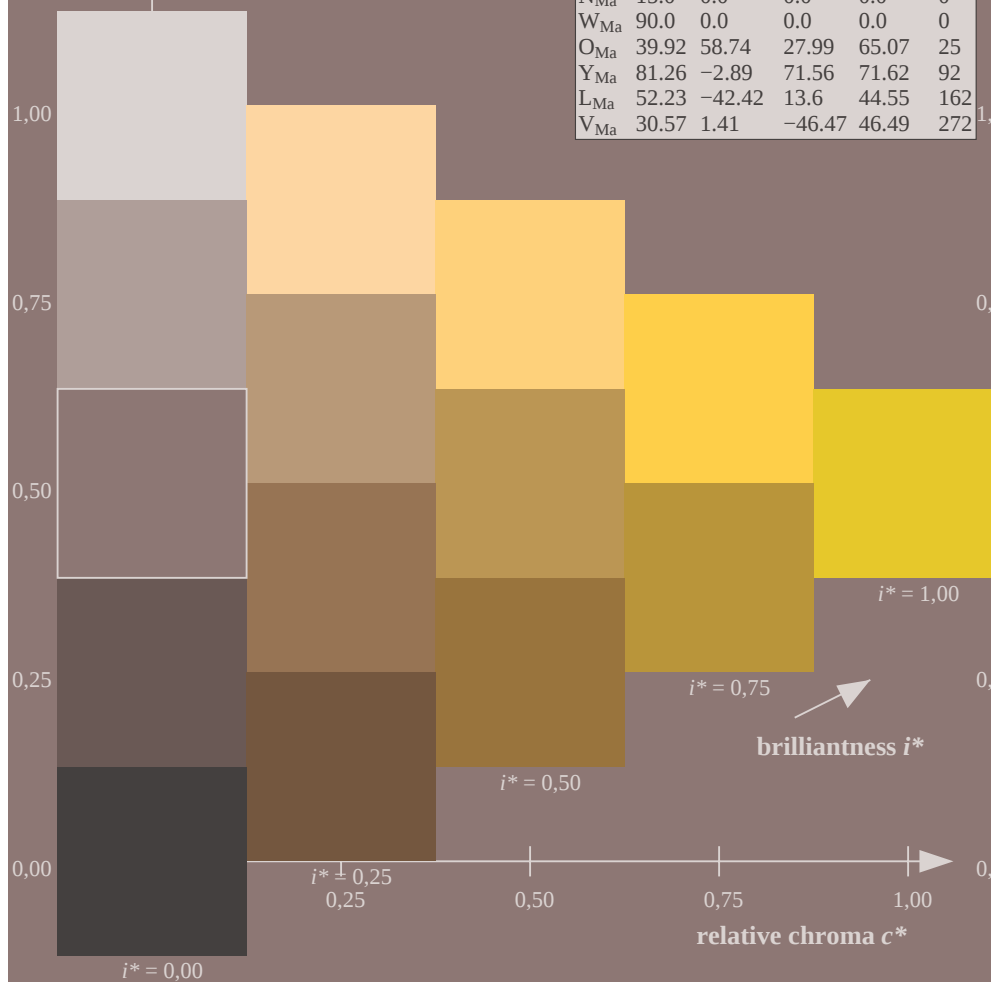
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.292$

data for any colour:

lab^*tch^* and lab^*icu^*

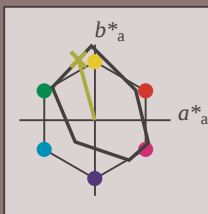
Hue texts:

$u^*_d = y25l$ $u^*_e = j18g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 71 -22 80

$LAB^*LCH^*_{Ma}$: 71 83 105

$lab^*olv^*_{Ma}$: 0.75 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.82 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

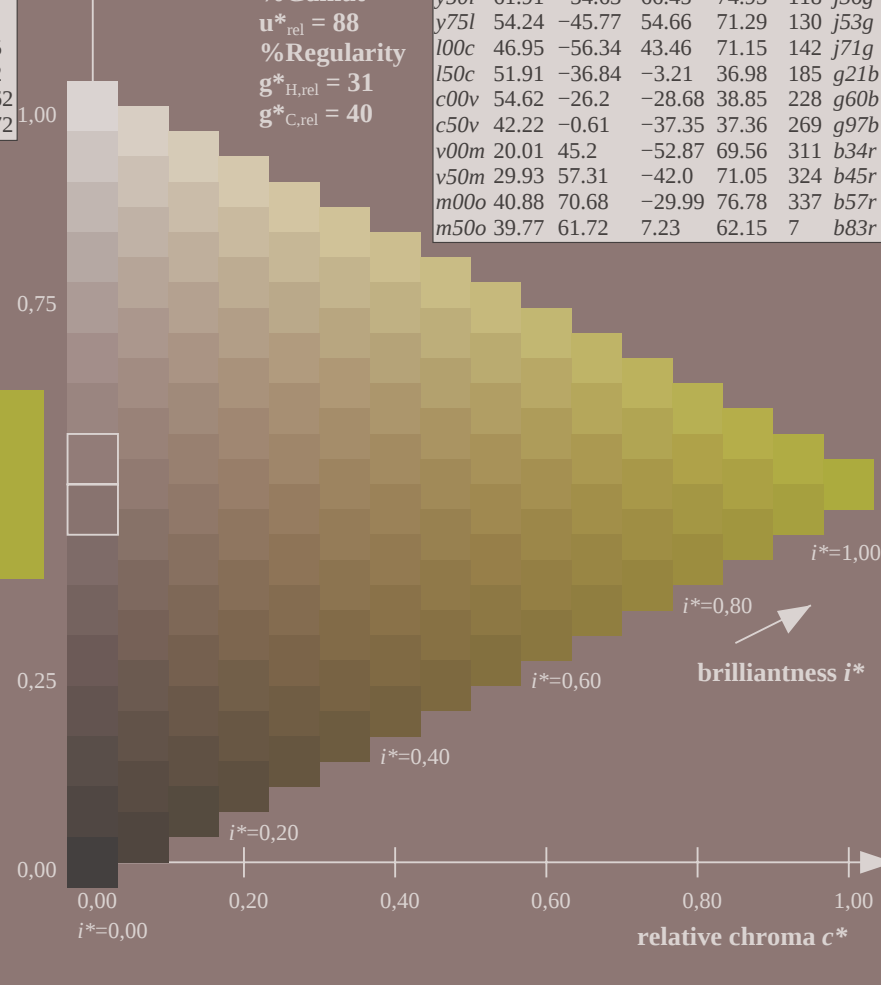
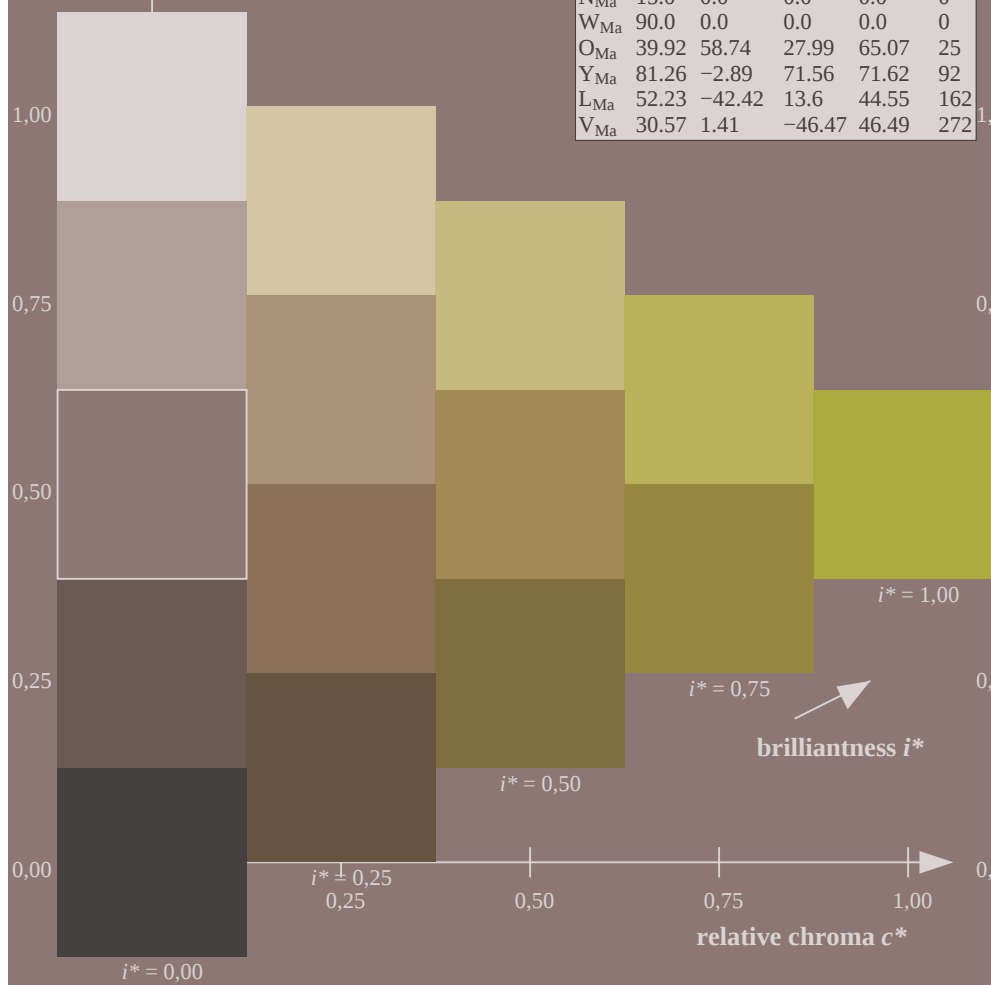
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.326$

data for any colour:

lab^*tch^* and lab^*icu^*

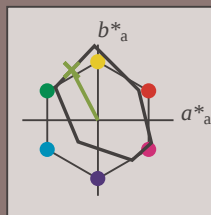
Hue texts:

$u^*_d = y50l$ $u^*_e = j36g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 62 -35 66

$LAB^*LCH^*_{Ma}$: 62 75 117

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

$lab^*rgb^*_{Ma}$: 0.64 1.0 0.0

triangle lightness t^*

%Gamut

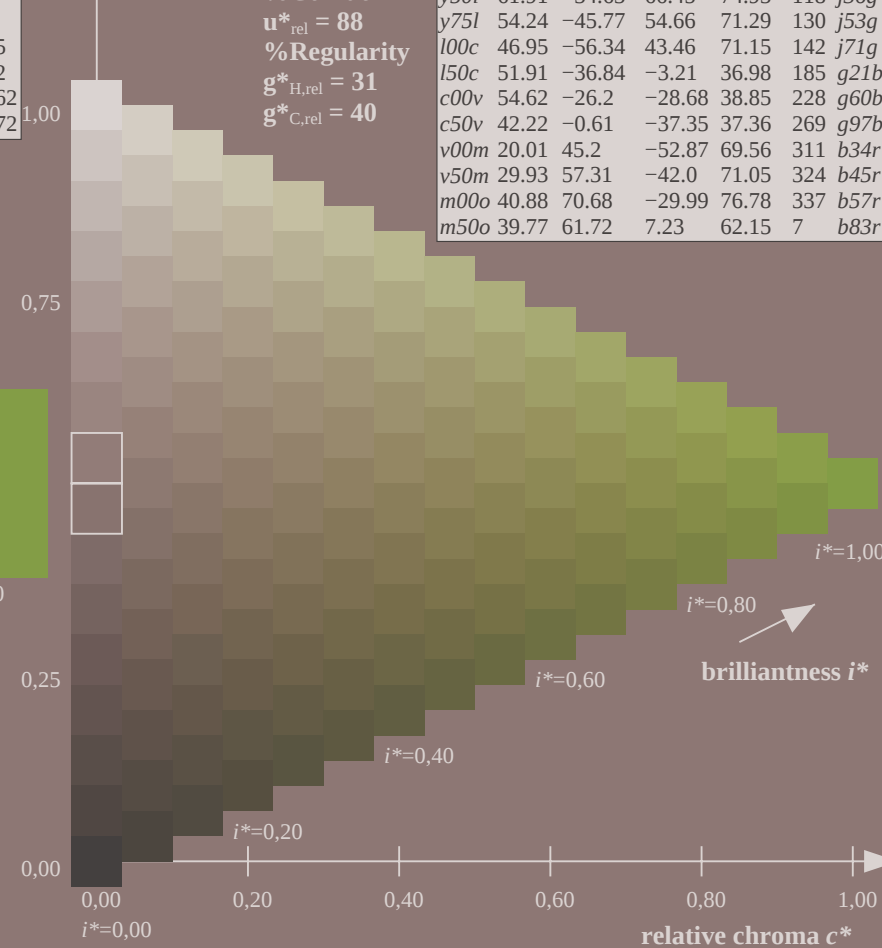
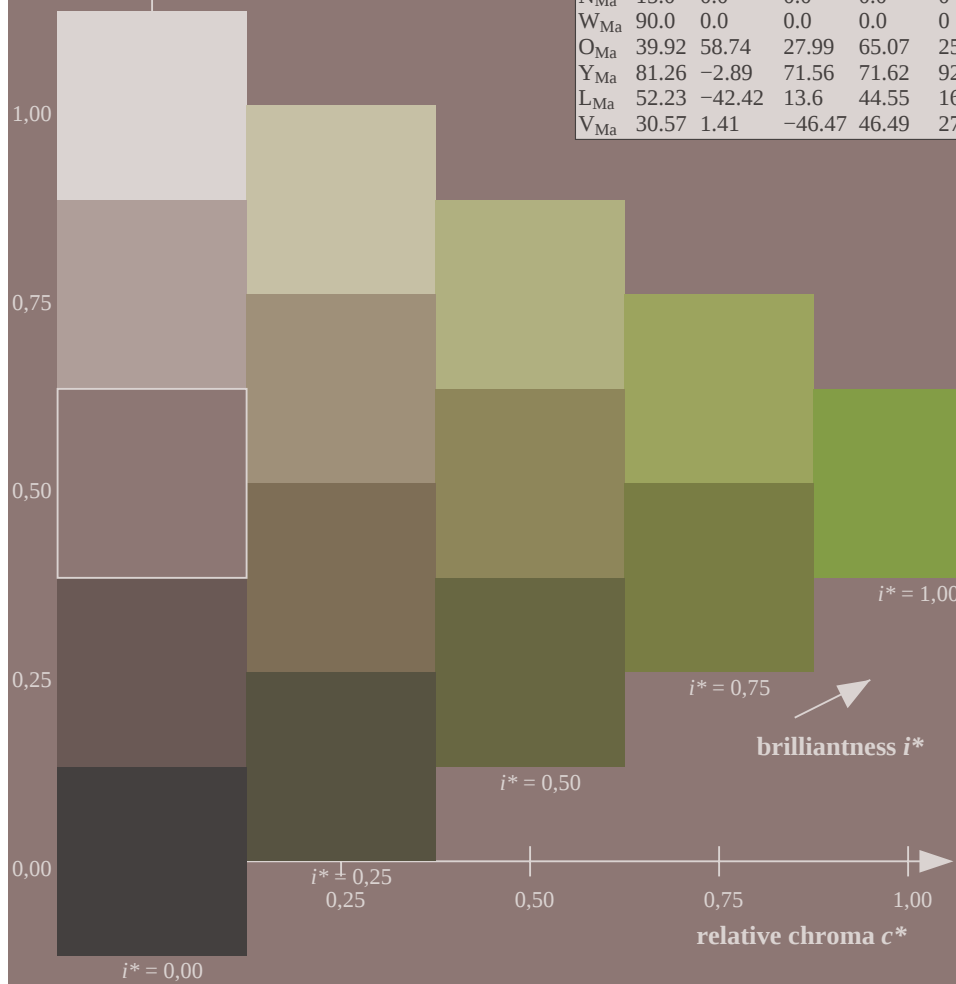
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.361$

data for any colour:

lab^*tch^* and lab^*icu^*

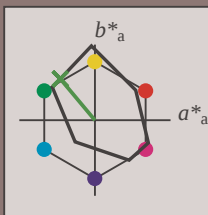
Hue texts:

$u^*_d = y75l$ $u^*_e = j53g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 54 -46 55

$LAB^*LCH^*_{Ma}$: 54 71 129

$lab^*olv^*_{Ma}$: 0.25 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.46 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

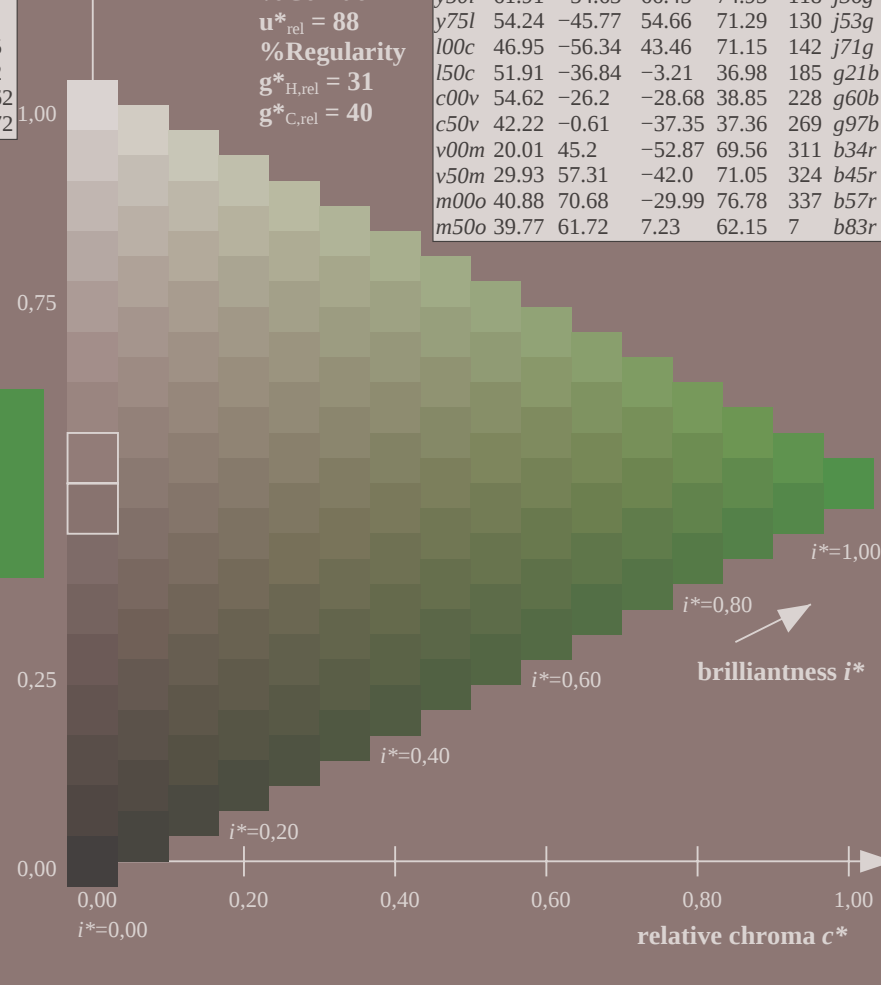
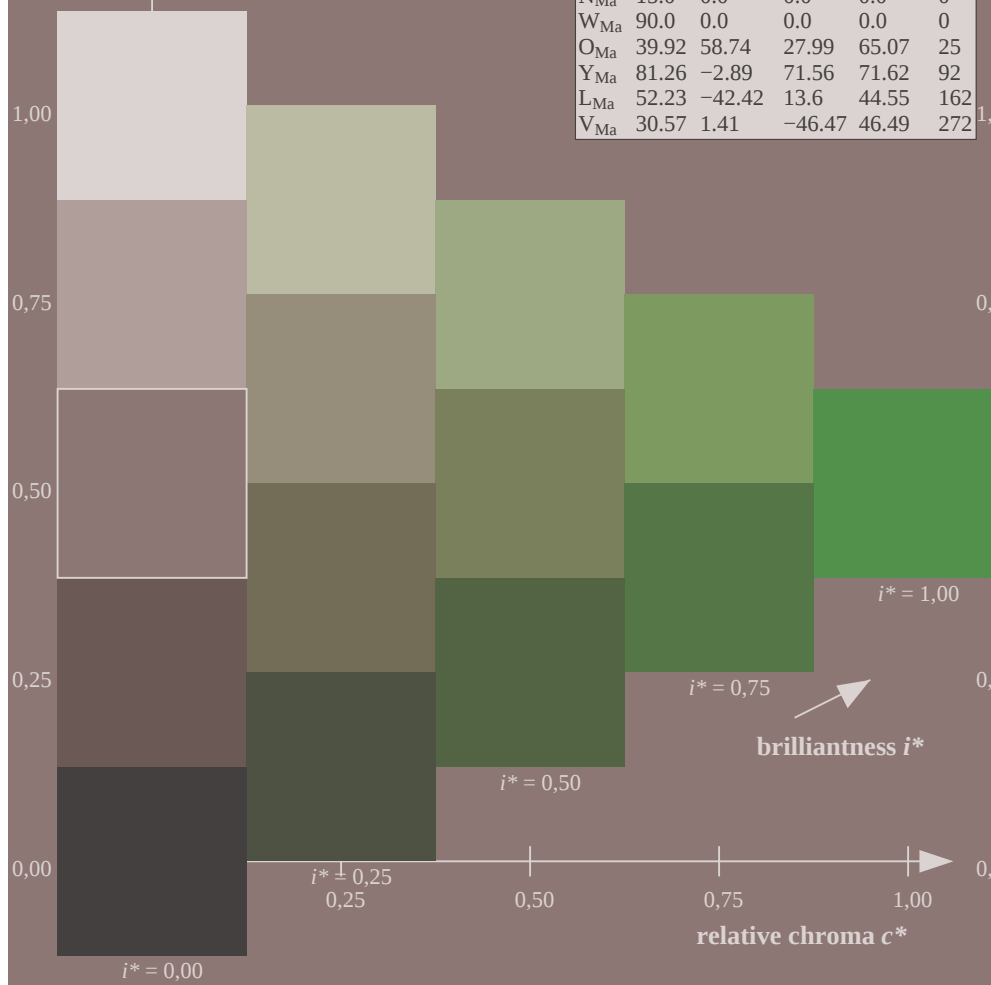
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.395$

data for any colour:

lab^*tch^* and lab^*icu^*

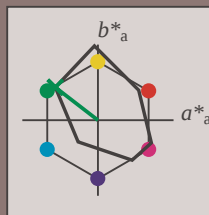
Hue texts:

$u^*_d = 100c$ $u^*_e = j71g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 -56 43

$LAB^*LCH^*_{Ma}$: 47 71 142

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

$lab^*rgb^*_{Ma}$: 0.28 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

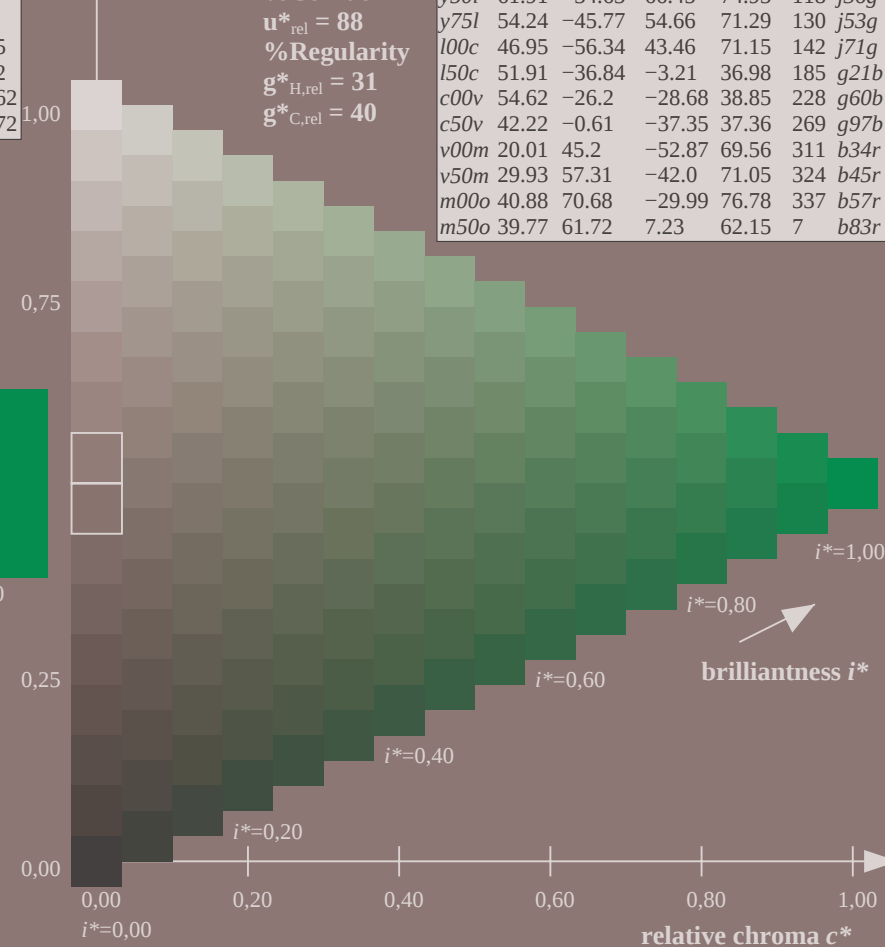
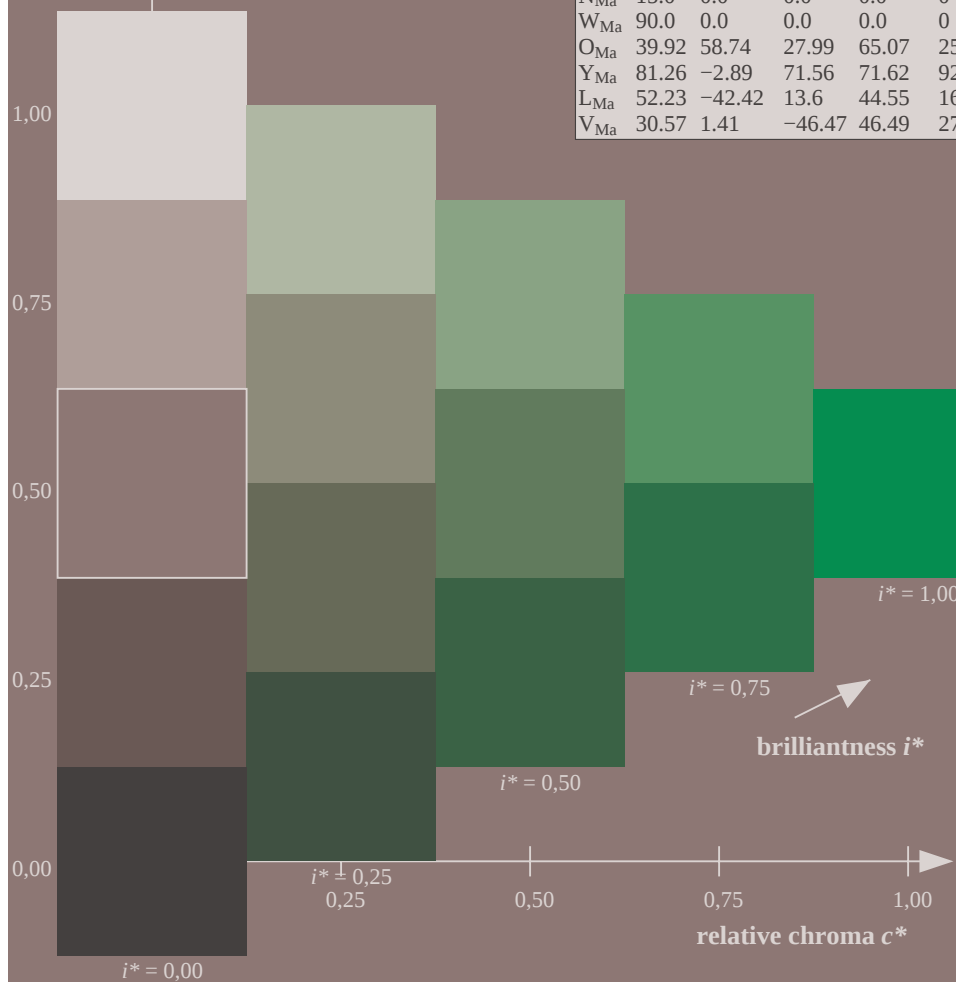
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.514$

data for any colour:

lab^*tch^* and lab^*icu^*

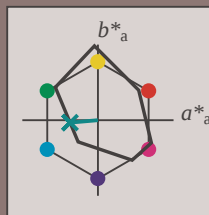
Hue texts:

$u^*_d = 150c$ $u^*_e = g21b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 52 -37 -3

$LAB^*LCH^*_{Ma}$: 52 37 184

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

$lab^*rgb^*_{Ma}$: 0.0 1.0 0.42

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

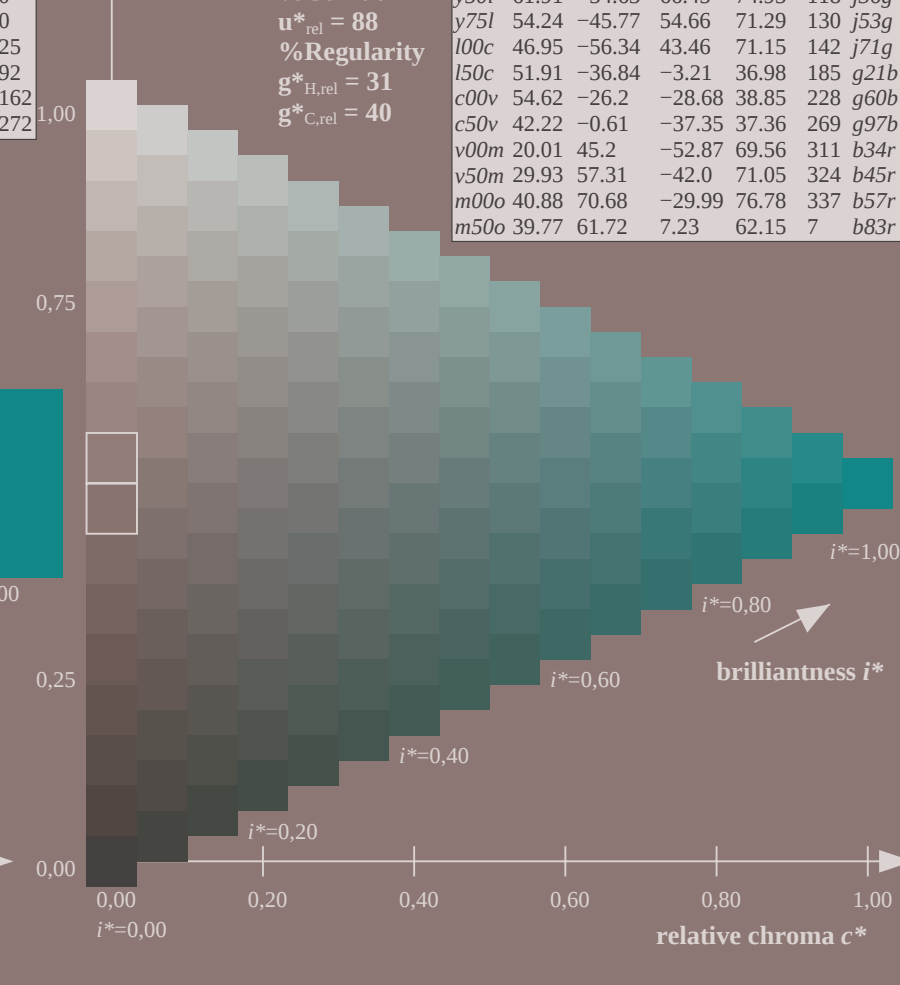
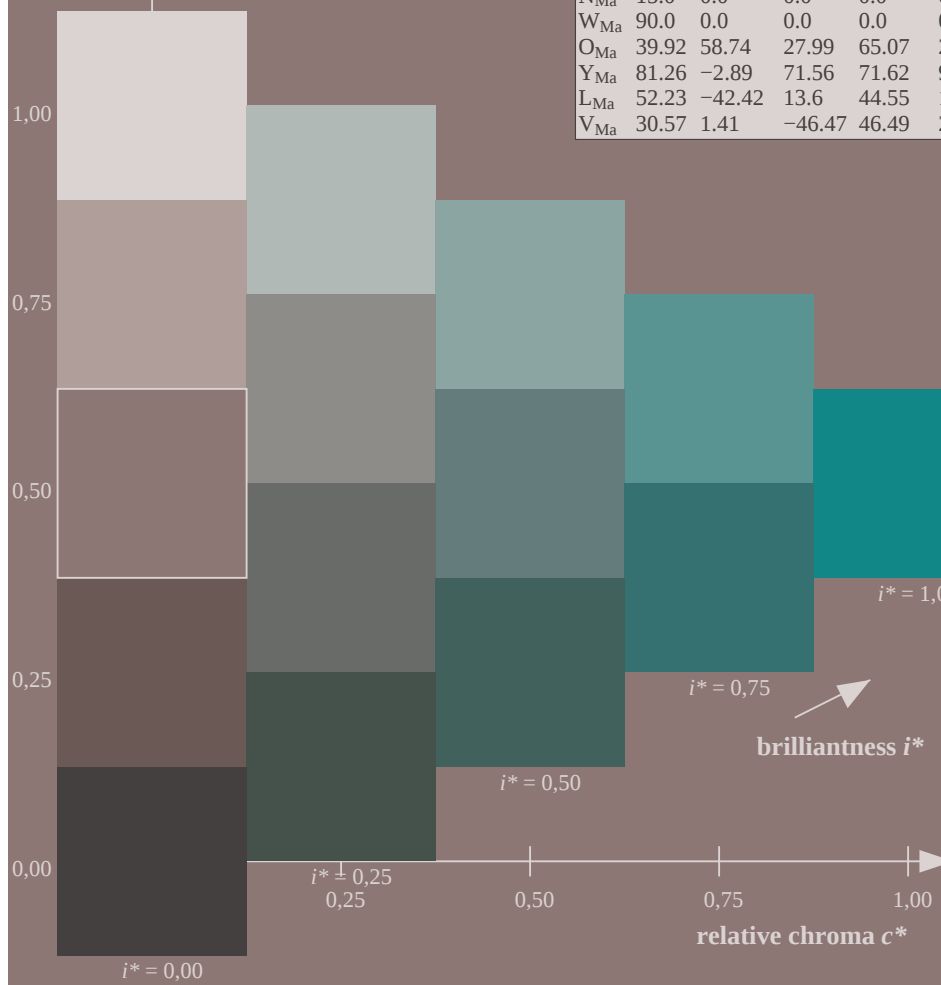
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.632$

data for any colour:

lab^*tch^* and lab^*icu^*

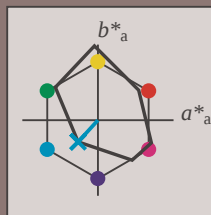
Hue texts:

$u^*_d = c00v$ $u^*_e = g60b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 55 -26 -29

$LAB^*LCH^*_{Ma}$: 55 39 227

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

$lab^*rgb^*_{Ma}$: 0.0 0.81 1.0

triangle lightness t^*

%Gamut

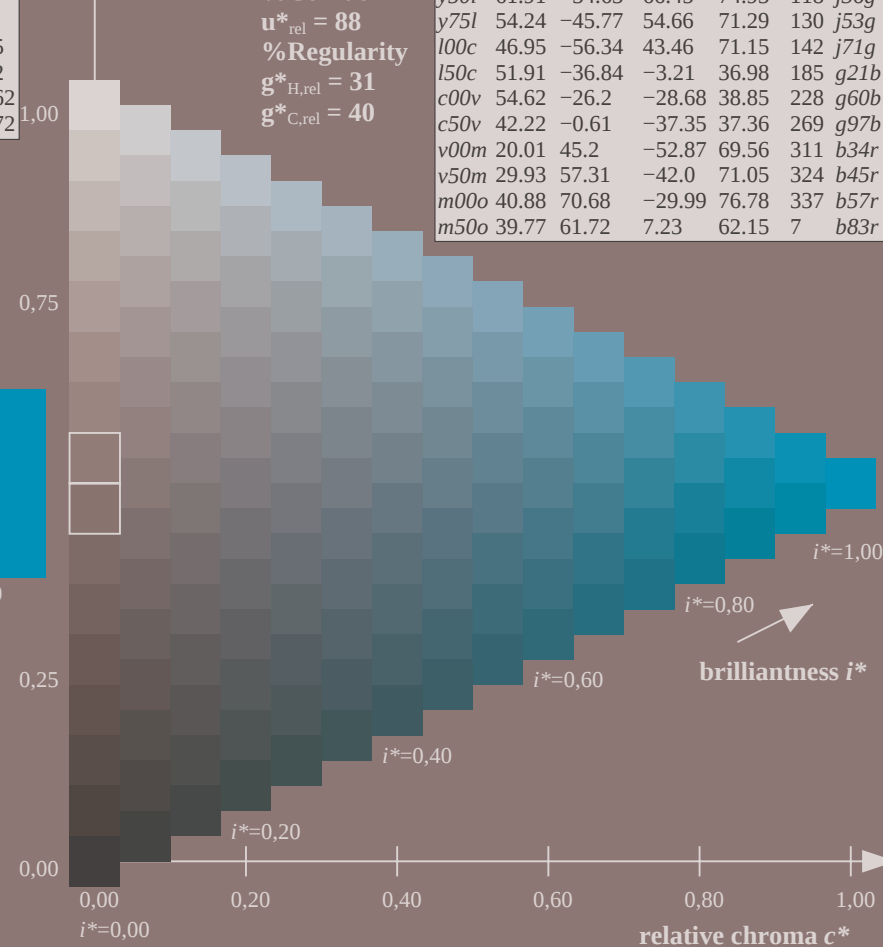
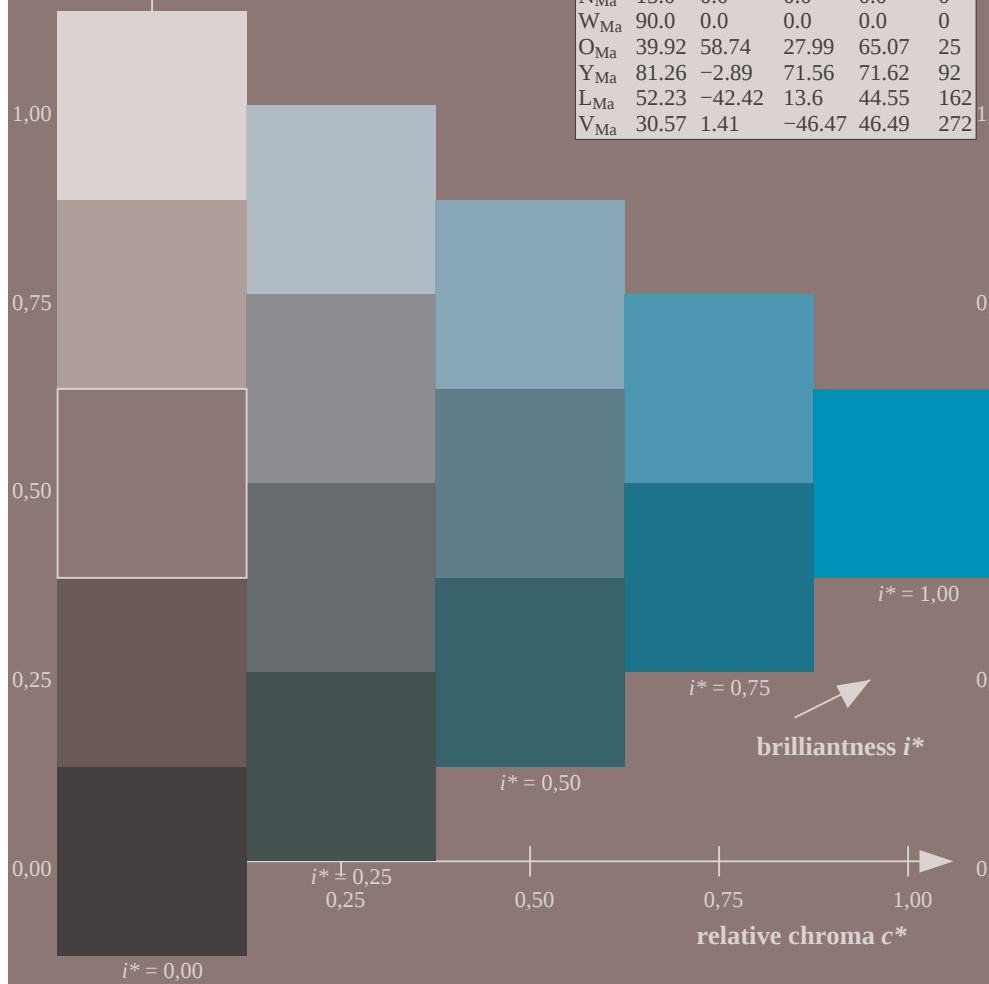
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.747$

data for any colour:

lab^*tch^* and lab^*icu^*

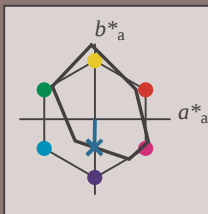
Hue texts:

$u^*_d = c50v$ $u^*_e = g97b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 42 -1 -37

$LAB^*LCH^*_{Ma}$: 42 37 269

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

$lab^*rgb^*_{Ma}$: 0.0 0.05 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

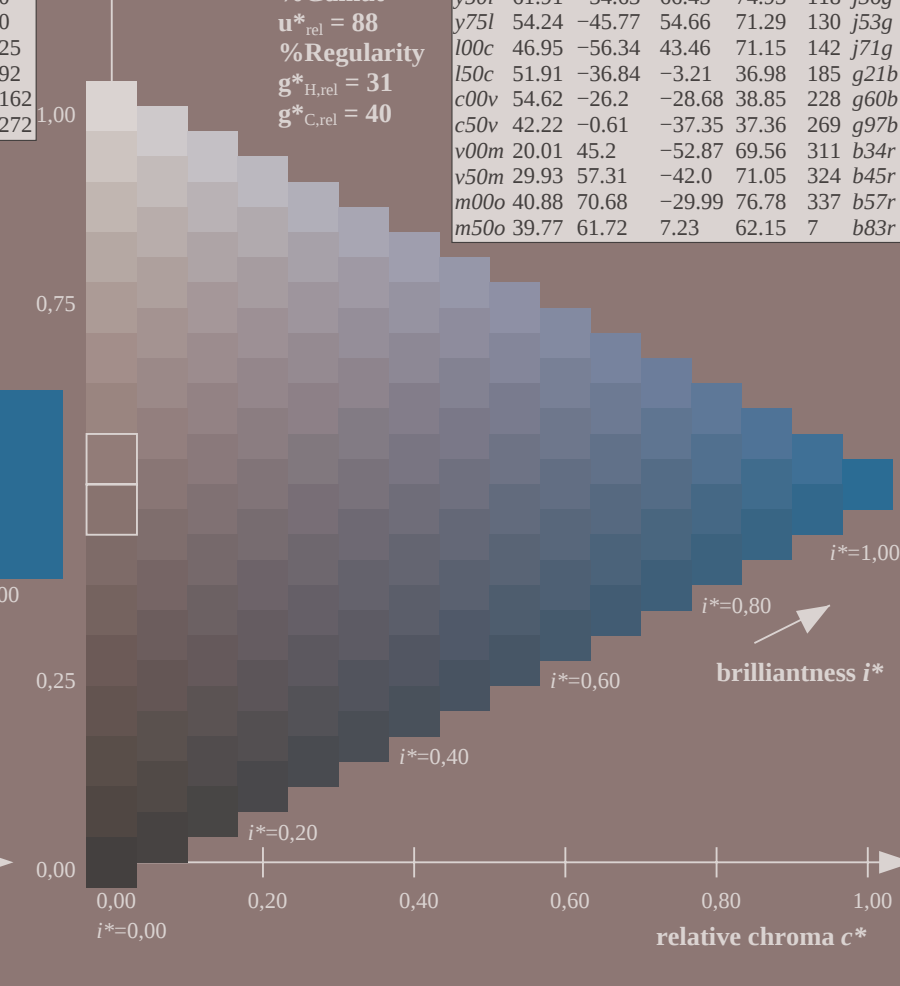
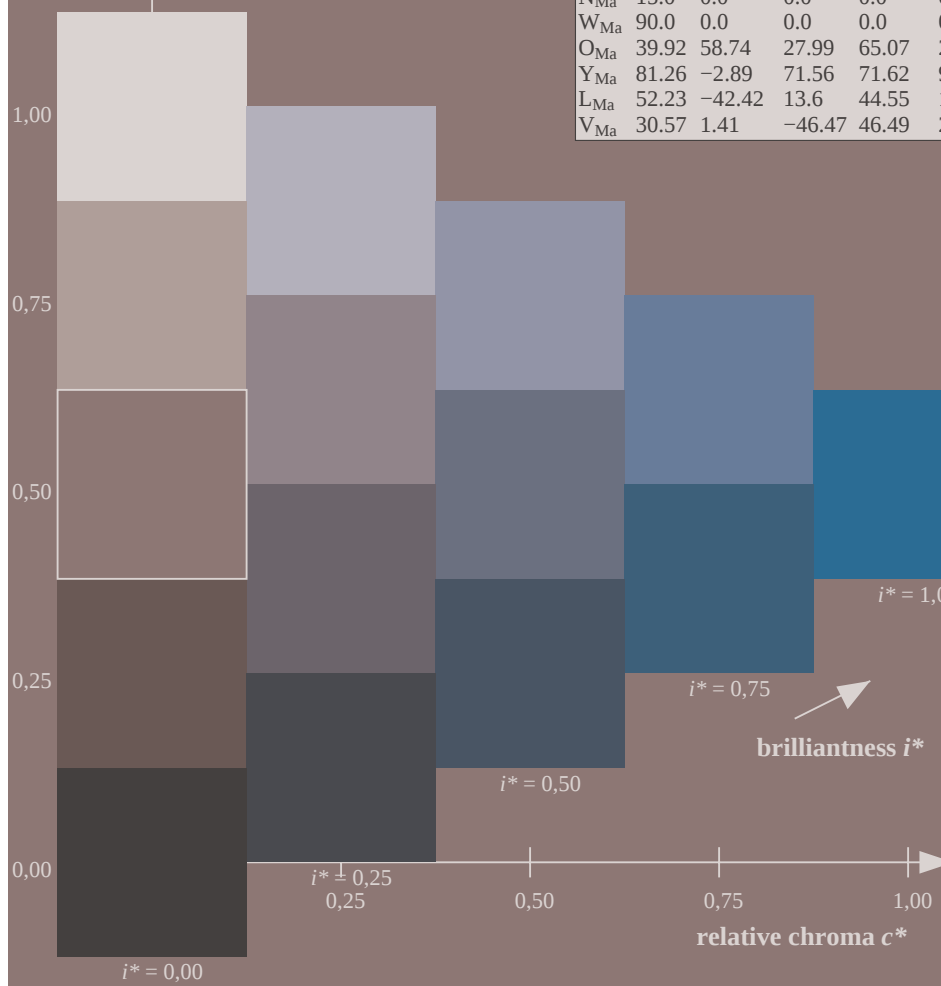
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = c50v$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.863$

data for any colour:

lab^*tch^* and lab^*icu^*

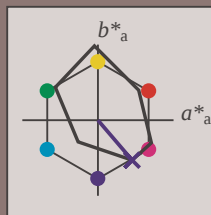
Hue texts:

$u^*_d = v00m$ $u^*_e = b34r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
OMa	38.8	53.92	39.68	66.95	36	
YMa	82.58	-4.64	98.22	98.33	93	
LMa	46.95	-56.34	43.46	71.15	142	
CMa	54.62	-26.2	-28.68	38.85	228	
VMa	20.01	45.2	-52.87	69.56	311	
MMa	40.88	70.68	-29.99	76.78	337	
NMa	15.0	0.0	0.0	0.0	0	
WMa	90.0	0.0	0.0	0.0	0	
OMa	39.92	58.74	27.99	65.07	25	
YMa	81.26	-2.89	71.56	71.62	92	
LMa	52.23	-42.42	13.6	44.55	162	
VMa	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 20 45 -53

$LAB^*LCH^*_{Ma}$: 20 70 310

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

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

triangle lightness t^*

%Gamut

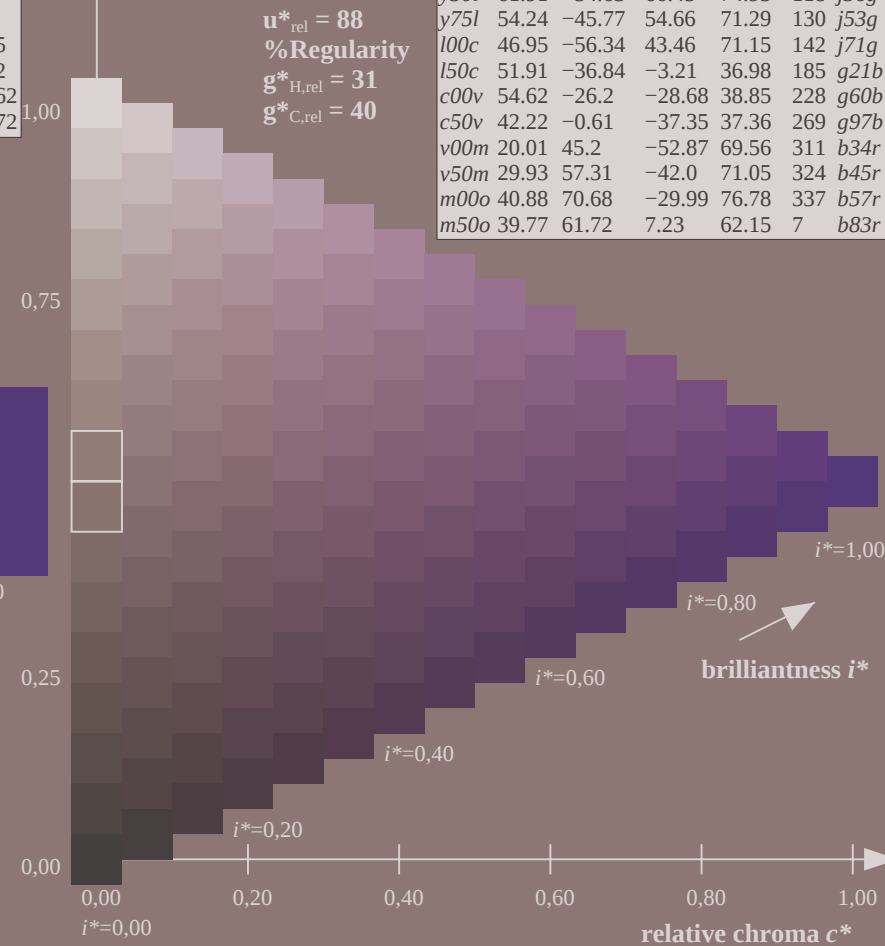
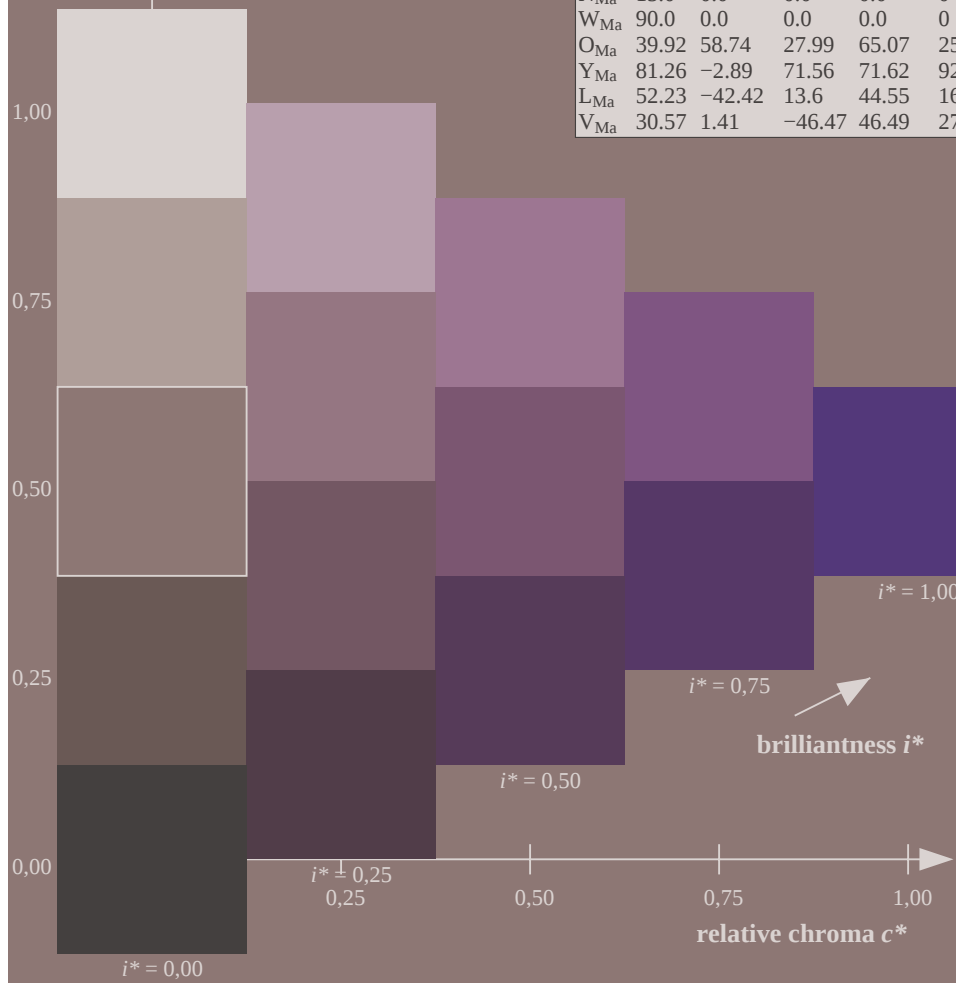
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.899$

data for any colour:

lab^*tch^* and lab^*icu^*

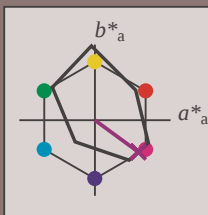
Hue texts:

$u^*_d = v50m$ $u^*_e = b45r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 30 57 -42

$LAB^*LCH^*_{Ma}$: 30 71 323

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

$lab^*rgb^*_{Ma}$: 0.91 0.0 1.0

triangle lightness t^*

%Gamut

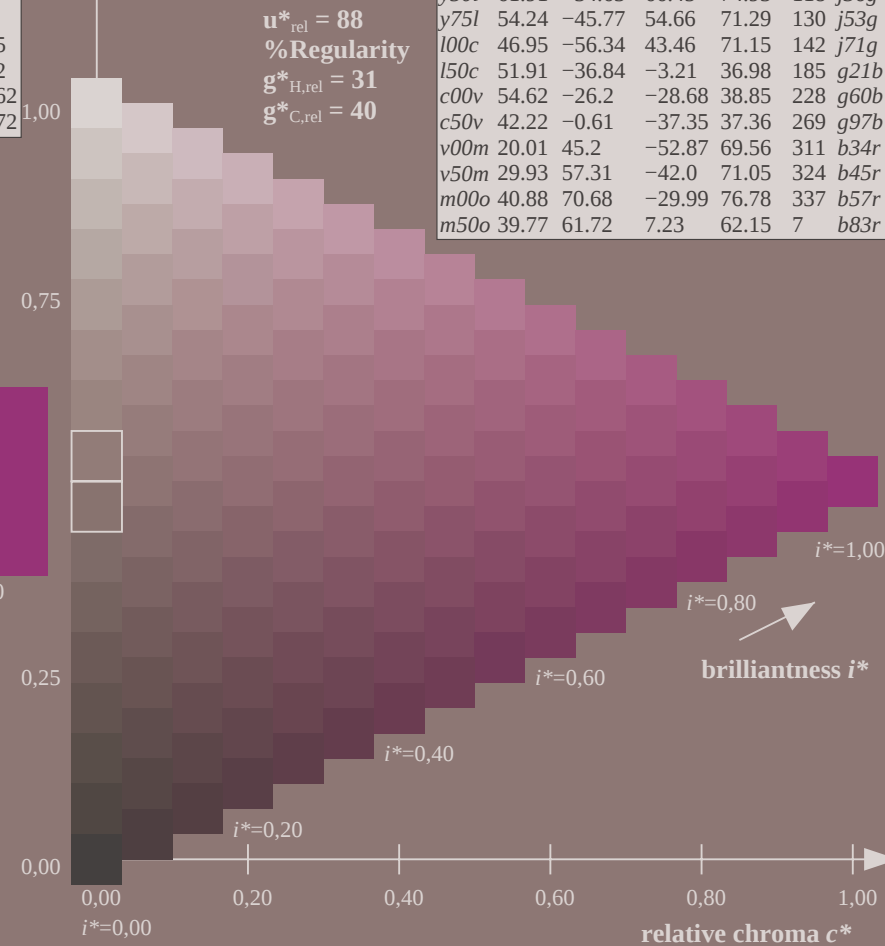
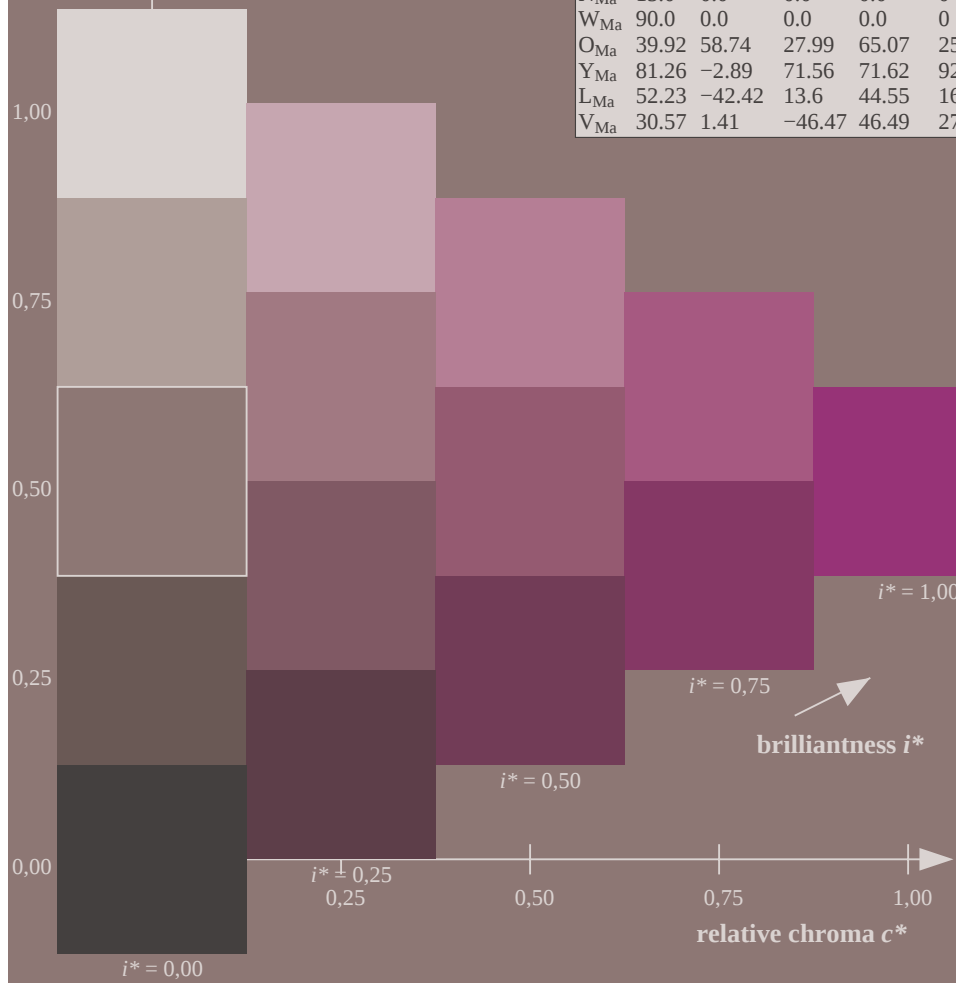
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.936$

data for any colour:

lab^*tch^* and lab^*icu^*

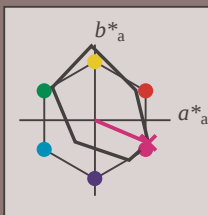
Hue texts:

$u^*_d = m00o$ $u^*_e = b57r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 41 71 -30

$LAB^*LCH^*_{Ma}$: 41 77 337

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.85

triangle lightness t^*

%Gamut

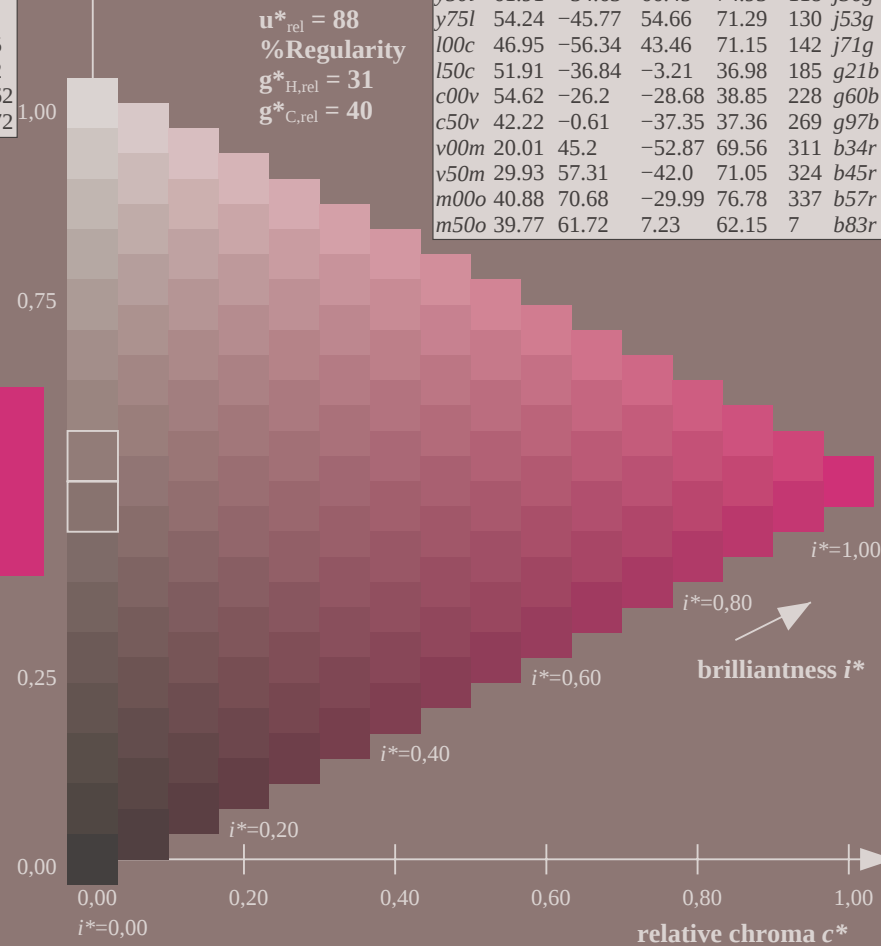
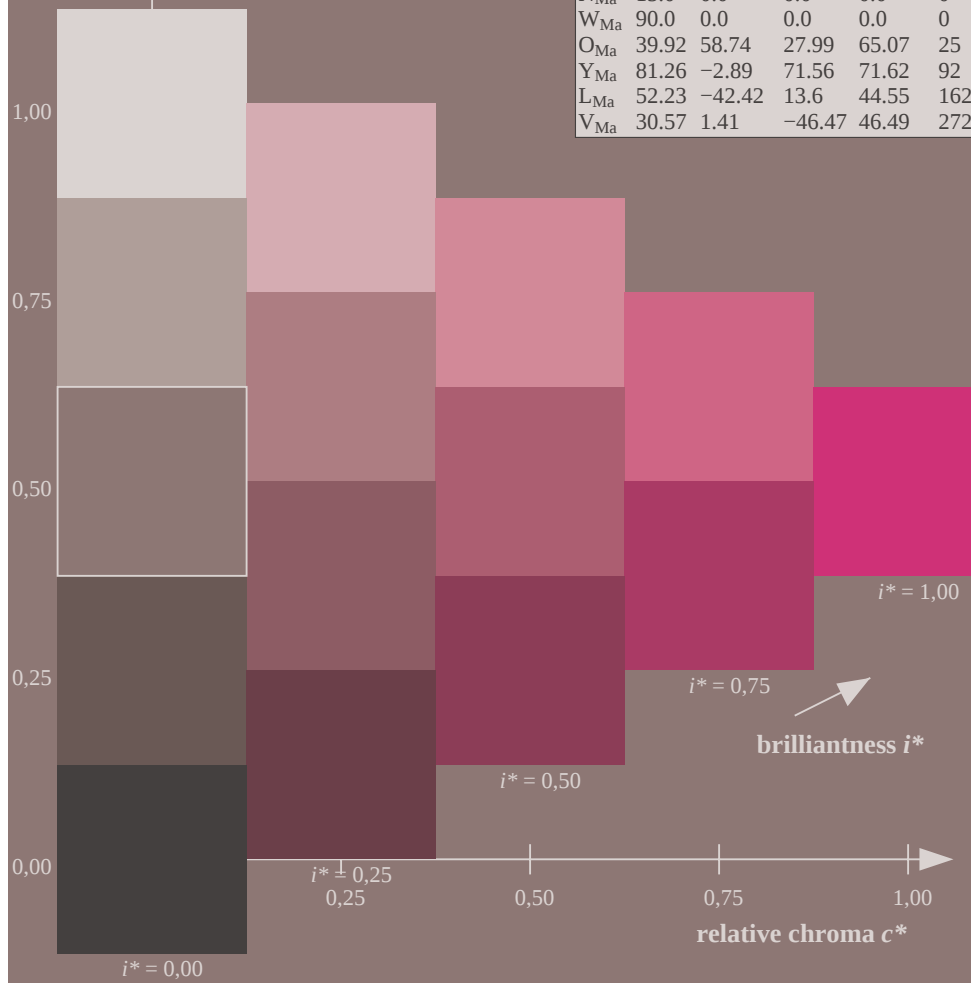
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.019$

data for any colour:

lab^*tch^* and lab^*icu^*

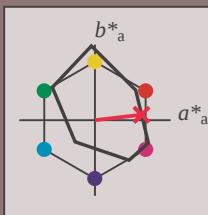
Hue texts:

$u^*_d = m50o$ $u^*_e = b83r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 40 62 7

$LAB^*LCH^*_{Ma}$: 40 62 6

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.33

triangle lightness t^*

%Gamut

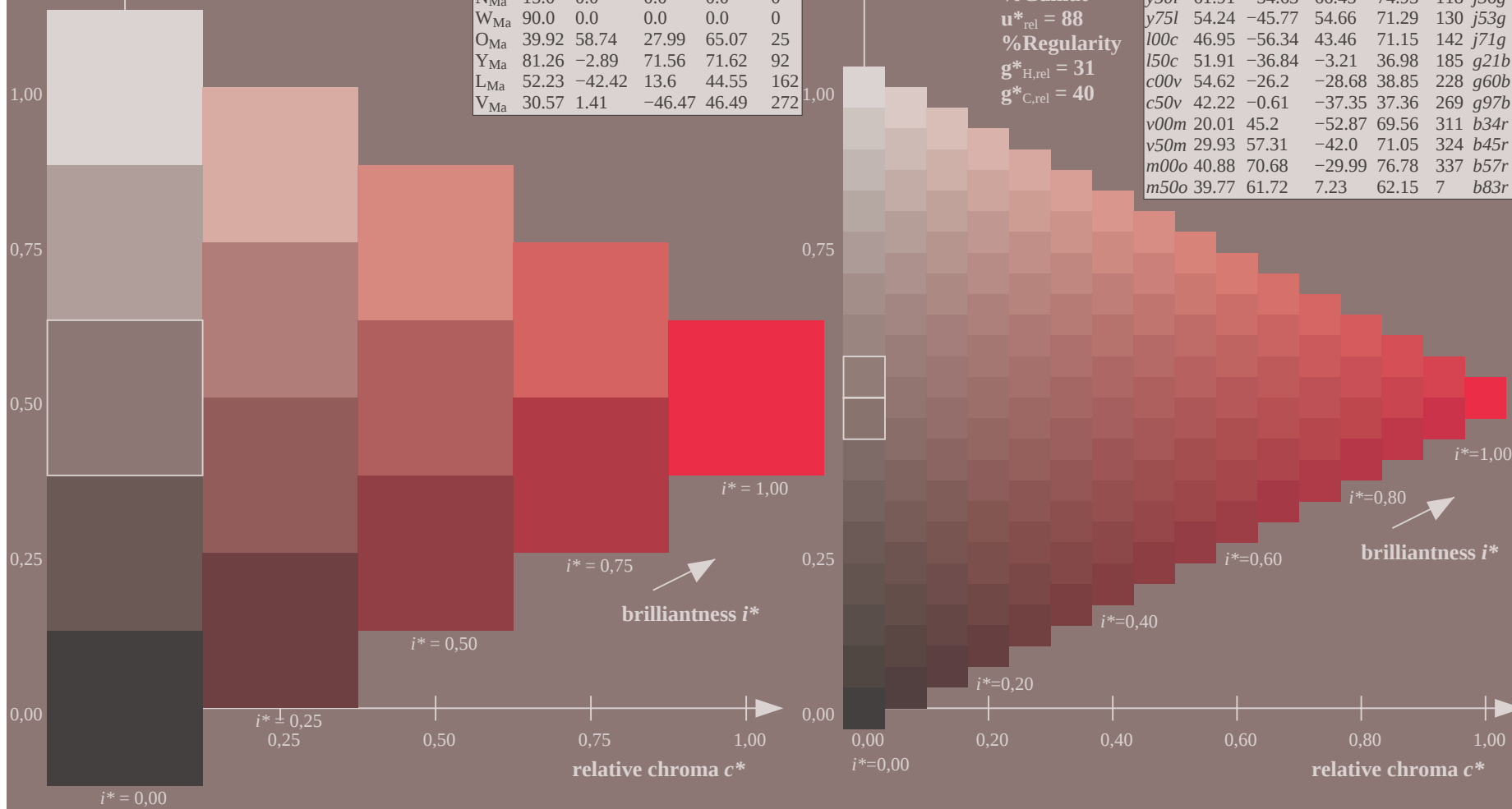
$u^*_{rel} = 88$

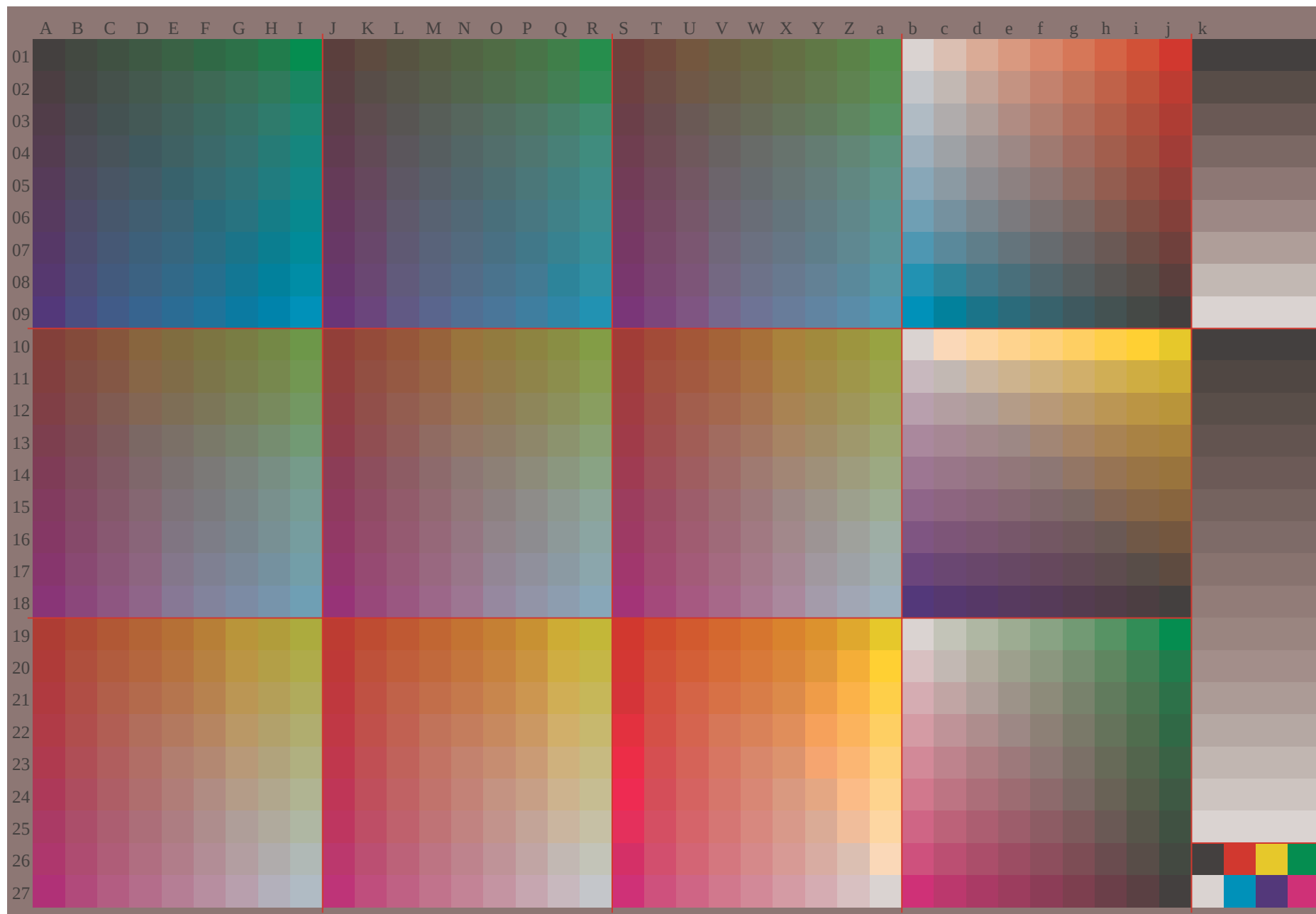
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



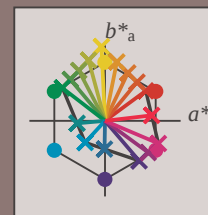


Input and output:
Colorimetric Printer Reflective System FRS15_90a
data for any colour:

u^*_d and number $no.$ = 00 .. 15
device hue text:
 u^*_d = 16 hues $o00y$, $o25y$, ..., $m50o$
contrast reduction factor:
 $c_R = 0.9$

FRS15_90a; adapted (a) CIELAB data

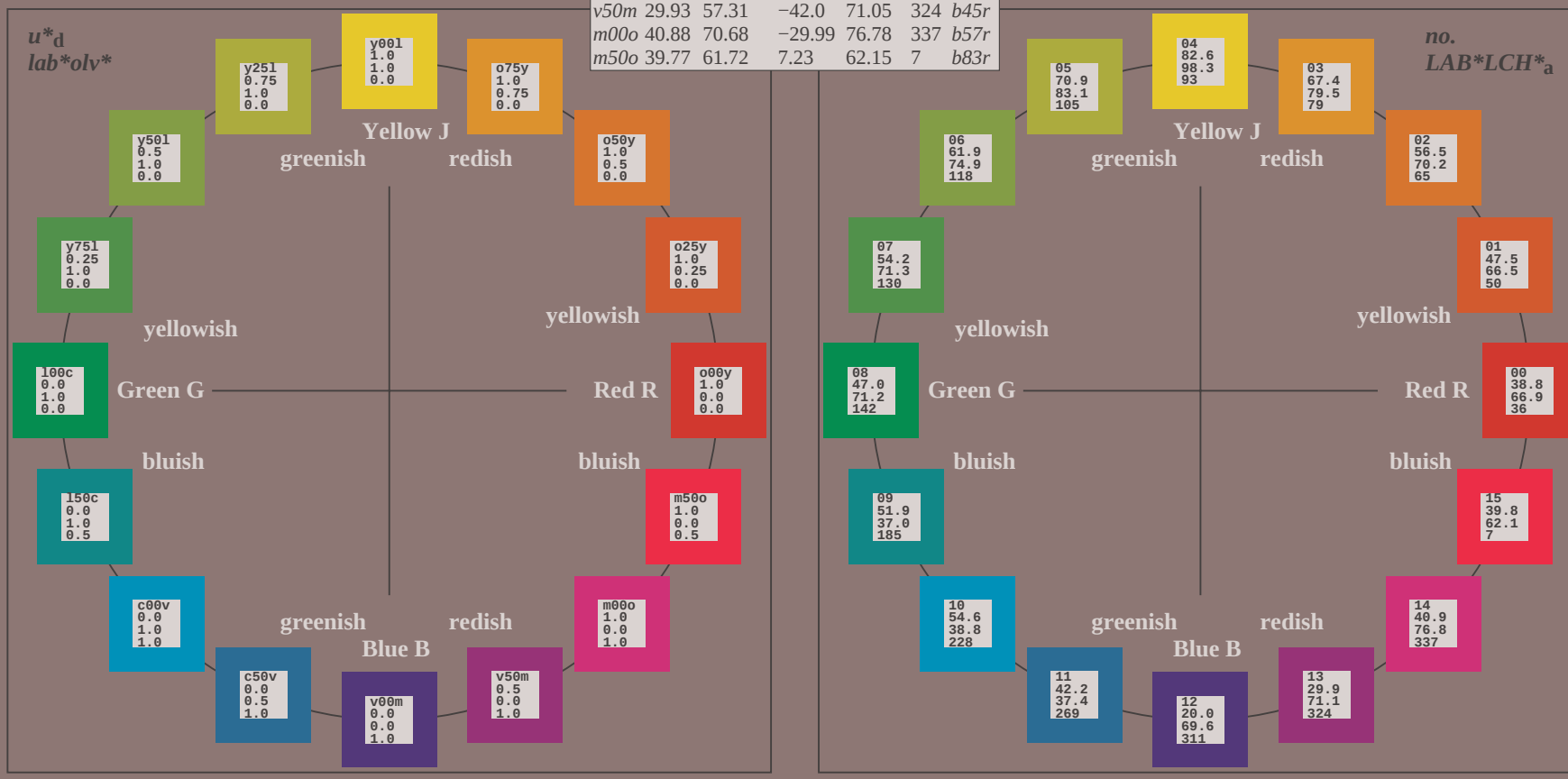
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$



%Gamut
 $u^*_{rel} = 88$
%Regularity
 $g^*_{H,rel} = 31$
 $g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	38.8	53.92	39.68	66.95	36
Y_{Ma}	82.58	-4.64	98.22	98.33	93
L_{Ma}	46.95	-56.34	43.46	71.15	142
C_{Ma}	54.62	-26.2	-28.68	38.85	228
V_{Ma}	20.01	45.2	-52.87	69.56	311
M_{Ma}	40.88	70.68	-29.99	76.78	337
N_{Ma}	15.0	0.0	0.0	0.0	0
W_{Ma}	90.0	0.0	0.0	0.0	0
O_{CIE}	39.92	58.74	27.99	65.07	25
Y_{CIE}	81.26	-2.89	71.56	71.62	92
L_{CIE}	52.23	-42.42	13.6	44.55	162
V_{CIE}	30.57	1.41	-46.47	46.49	272



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.101$

data for any colour:

lab^*tch^* and lab^*icu^*

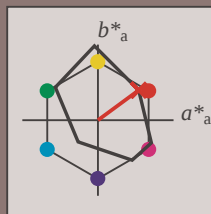
Hue texts:

$u^*_d = o00y$ $u^*_e = r16j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 39 54 40

$LAB^*LCH^*_{Ma}$: 39 67 36

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

$lab^*rgb^*_{Ma}$: 1.0 0.16 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

lab^*olv^*

$i^* = 1.00$

$i^* = 0.80$

brilliantness i^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.14$

data for any colour:

lab^*tch^* and lab^*icu^*

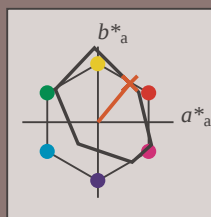
Hue texts:

$u^*_d = o25y$ $u^*_e = r37j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 42 51

$LAB^*LCH^*_{Ma}$: 47 66 50

$lab^*olv^*_{Ma}$: 1.0 0.25 0.0

$lab^*rgb^*_{Ma}$: 1.0 0.37 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

lab^*olv^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = \text{lab} \cdot h^* = h_{ab}/360 = 0.218$

data for any colour:

$\text{lab} \cdot \text{tch}^*$ and $\text{lab} \cdot \text{icu}^*$

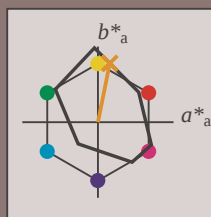
Hue texts:

$u^*_d = o75y$ $u^*_e = r79j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$\text{LAB} \cdot \text{LAB} \cdot \text{Ma}$: 67 16 78

$\text{LAB} \cdot \text{LCH} \cdot \text{Ma}$: 67 79 78

$\text{lab} \cdot \text{olv} \cdot \text{Ma}$: 1.0 0.75 0.0

$\text{lab} \cdot \text{rgb} \cdot \text{Ma}$: 1.0 0.8 0.0

triangle lightness t^*

% Gamut

$u^*_{\text{rel}} = 88$

% Regularity

$g^*_{H,\text{rel}} = 31$

$g^*_{C,\text{rel}} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$\text{lab} \cdot \text{olv} \cdot$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.258$

data for any colour:

lab^*tch^* and lab^*icu^*

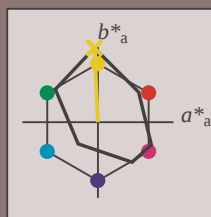
Hue texts:

$u^*_d = y00l$ $u^*_e = j01g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 83 -5 98

$LAB^*LCH^*_{Ma}$: 83 98 92

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

$lab^*rgb^*_{Ma}$: 0.99 1.0 0.0

triangle lightness t^*

% Gamut

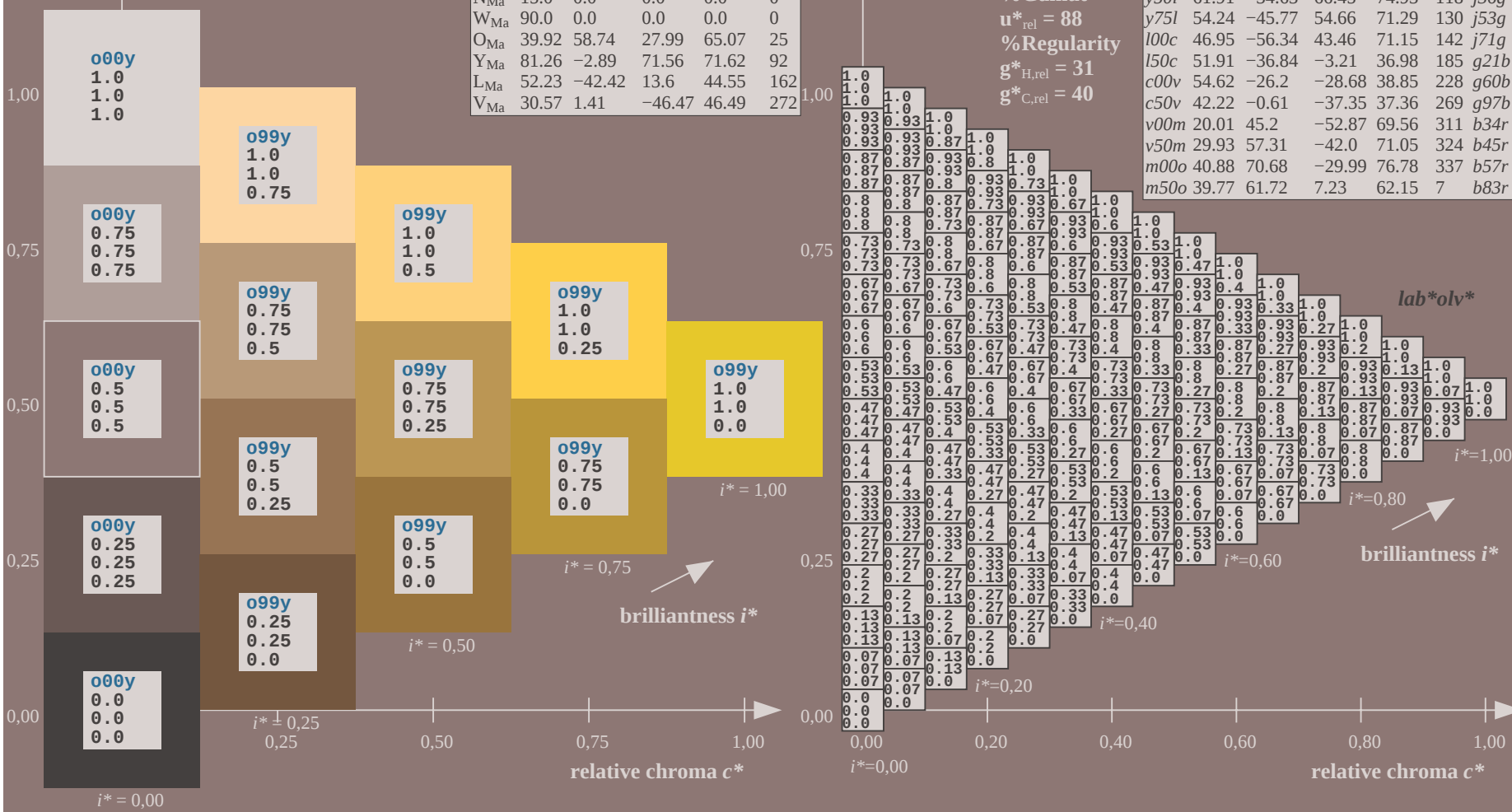
$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.292$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

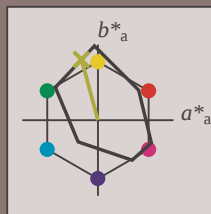
Hue texts:

$u^*_d = y25l$ $u^*_e = j18g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 71 -22 80

$LAB \cdot LCH \cdot Ma$: 71 83 105

$lab \cdot olv \cdot Ma$: 0.75 1.0 0.0

$lab \cdot rgb \cdot Ma$: 0.82 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

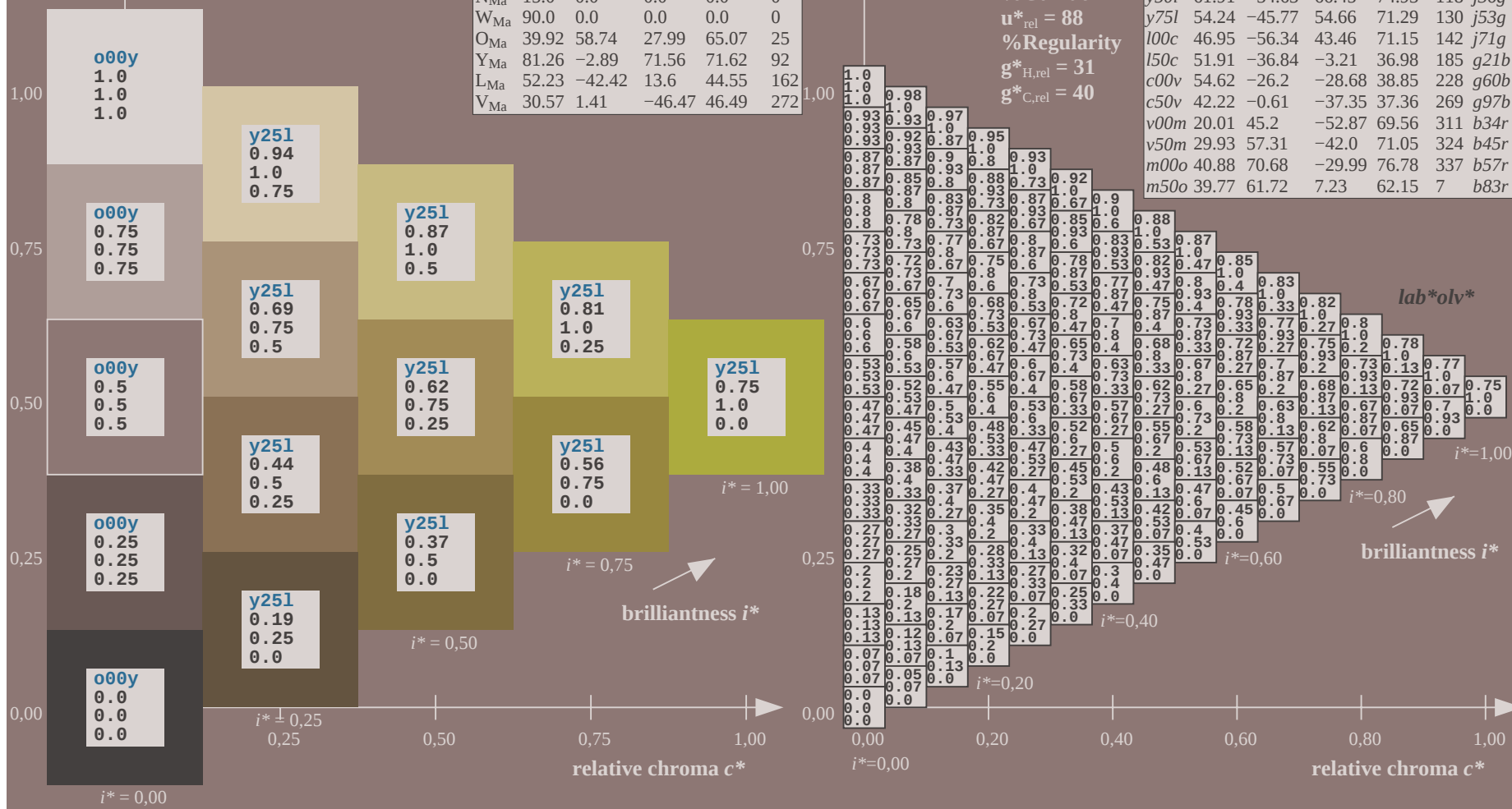
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y25l$
 $lab \cdot olv^*$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.326$

data for any colour:

lab^*tch^* and lab^*icu^*

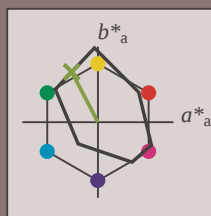
Hue texts:

$u^*_d = y50l$ $u^*_e = j36g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 62 -35 66

$LAB^*LCH^*_{Ma}$: 62 75 117

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

$lab^*rgb^*_{Ma}$: 0.64 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

lab^*olv^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.361$

data for any colour:

lab^*tch^* and lab^*icu^*

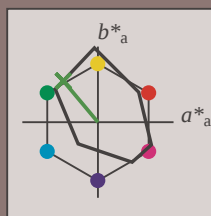
Hue texts:

$u^*_d = y75l$ $u^*_e = j53g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 54 -46 55

$LAB^*LCH^*_{Ma}$: 54 71 129

$lab^*olv^*_{Ma}$: 0.25 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.46 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

lab^*olv^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.395$

data for any colour:

lab^*tch^* and lab^*icu^*

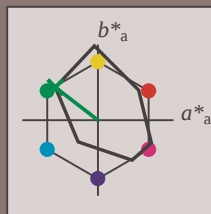
Hue texts:

$u^*_d = 100c$ $u^*_e = j71g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 -56 43

$LAB^*LCH^*_{Ma}$: 47 71 142

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

$lab^*rgb^*_{Ma}$: 0.28 1.0 0.0

triangle lightness t^*

% Gamut

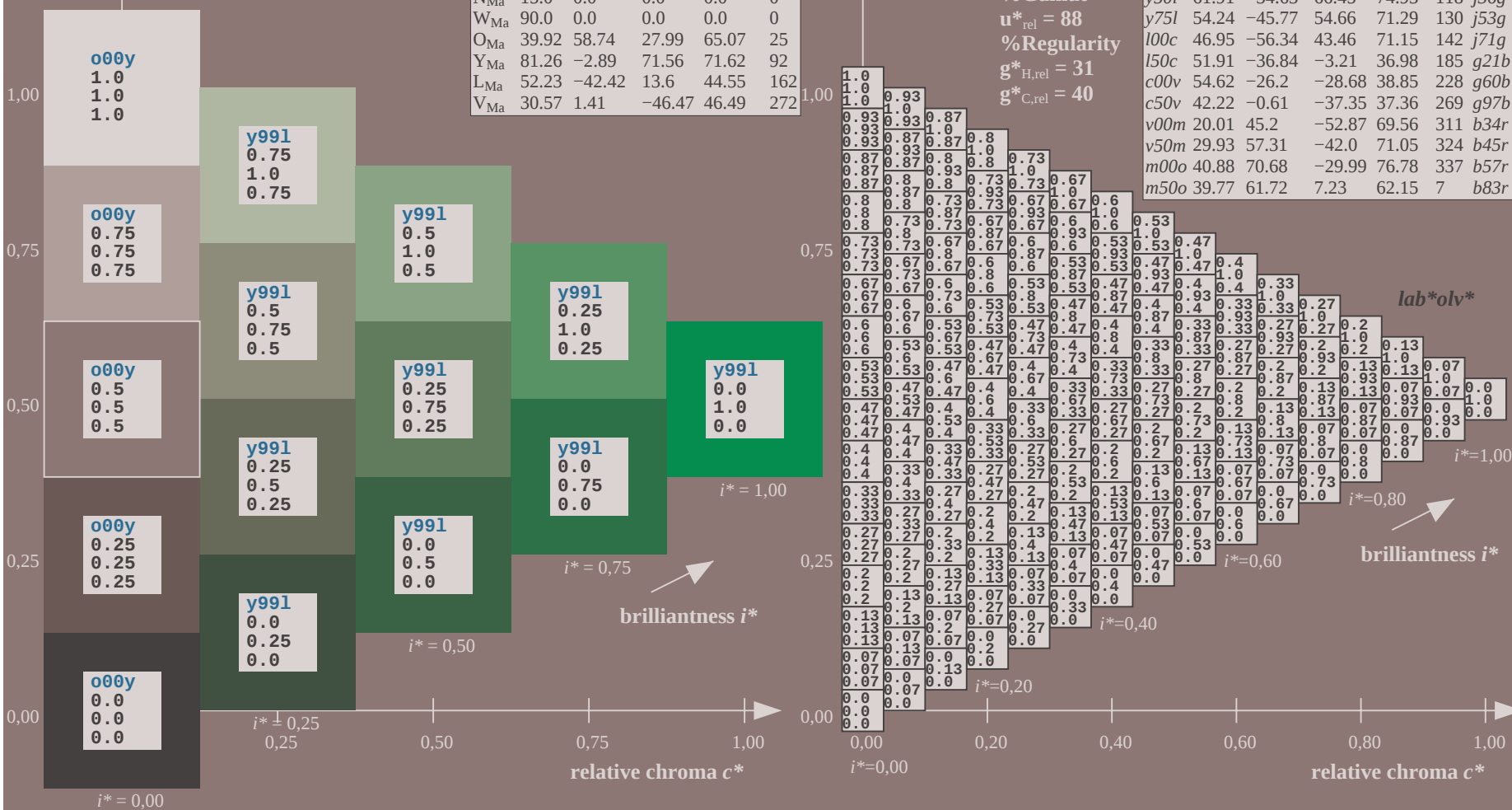
$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.514$

data for any colour:

lab^*tch^* and lab^*icu^*

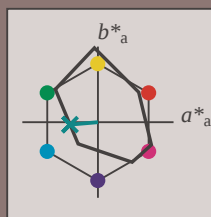
Hue texts:

$u^*_d = l50c$ $u^*_e = g21b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	r16j
Y _{Ma}	82.58	-4.64	98.22	98.33	93	r37j
L _{Ma}	46.95	-56.34	43.46	71.15	142	r58j
C _{Ma}	54.62	-26.2	-28.68	38.85	228	r79j
V _{Ma}	20.01	45.2	-52.87	69.56	311	j01g
M _{Ma}	40.88	70.68	-29.99	76.78	337	j18g
N _{Ma}	15.0	0.0	0.0	0.0	0	j36g
W _{Ma}	90.0	0.0	0.0	0.0	0	j53g
O _{Ma}	39.92	58.74	27.99	65.07	25	j71g
Y _{Ma}	81.26	-2.89	71.56	71.62	92	g21b
L _{Ma}	52.23	-42.42	13.6	44.55	162	g60b
V _{Ma}	30.57	1.41	-46.47	46.49	272	g97b

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 52 -37 -3

$LAB^*LCH^*_{Ma}$: 52 37 184

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

$lab^*rgb^*_{Ma}$: 0.0 1.0 0.42

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

lab^*olv^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.632$

data for any colour:

lab^*tch^* and lab^*icu^*

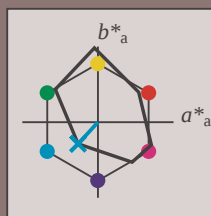
Hue texts:

$u^*_d = c00v$ $u^*_e = g60b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	r16j
Y _{Ma}	82.58	-4.64	98.22	98.33	93	r37j
L _{Ma}	46.95	-56.34	43.46	71.15	142	r58j
C _{Ma}	54.62	-26.2	-28.68	38.85	228	r79j
V _{Ma}	20.01	45.2	-52.87	69.56	311	j01g
M _{Ma}	40.88	70.68	-29.99	76.78	337	j18g
N _{Ma}	15.0	0.0	0.0	0.0	0	j36g
W _{Ma}	90.0	0.0	0.0	0.0	0	j53g
O _{Ma}	39.92	58.74	27.99	65.07	25	j71g
Y _{Ma}	81.26	-2.89	71.56	71.62	92	g21b
L _{Ma}	52.23	-42.42	13.6	44.55	162	g60b
V _{Ma}	30.57	1.41	-46.47	46.49	272	g97b

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 55 -26 -29

$LAB^*LCH^*_{Ma}$: 55 39 227

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

$lab^*rgb^*_{Ma}$: 0.0 0.81 1.0

triangle lightness t^*

% Gamut

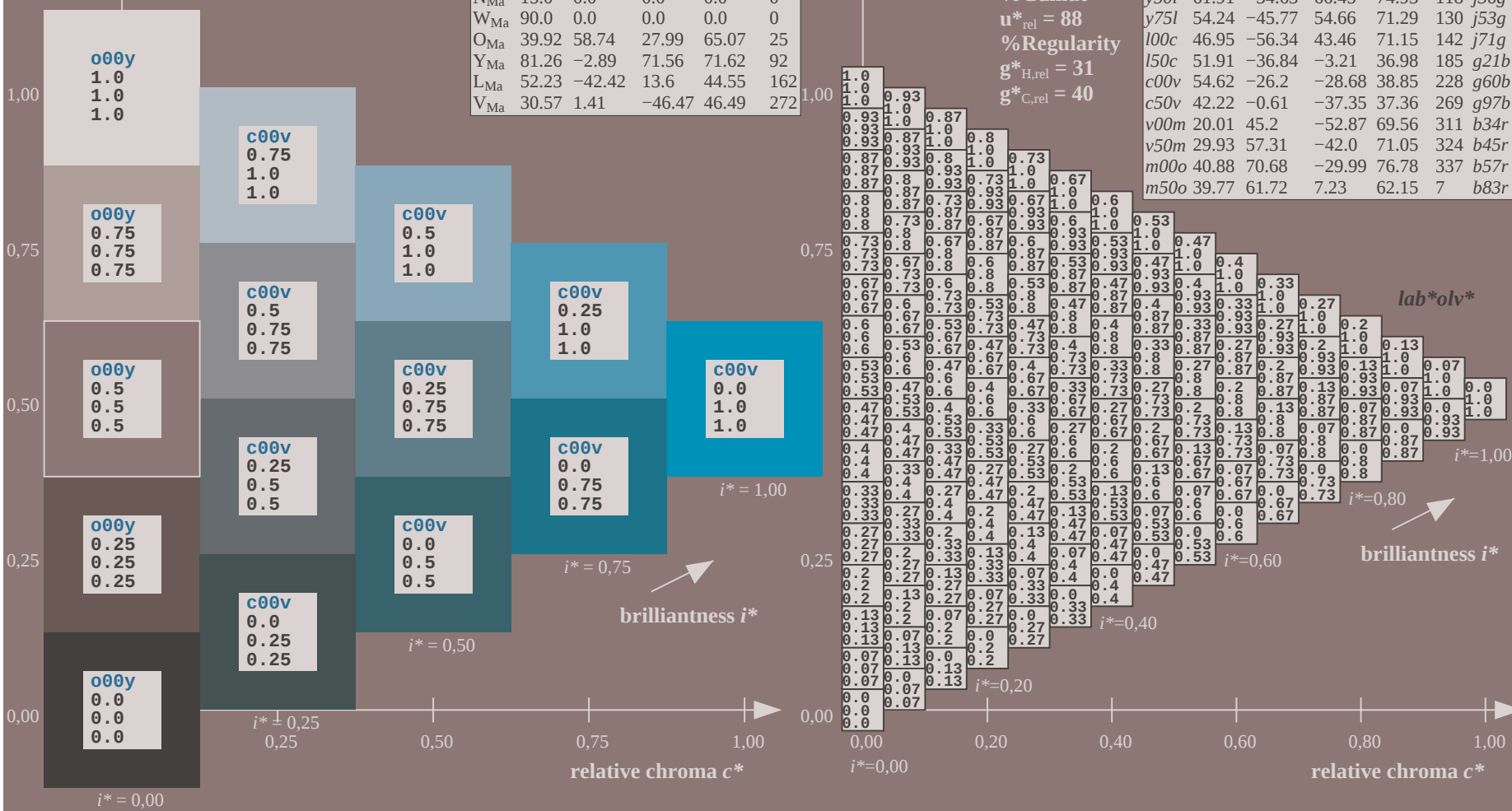
$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.747$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

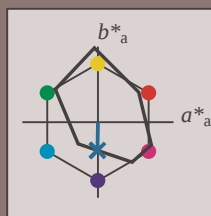
Hue texts:

$u^*_d = c50v$ $u^*_e = g97b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	r16j
Y _{Ma}	82.58	-4.64	98.22	98.33	93	r37j
L _{Ma}	46.95	-56.34	43.46	71.15	142	r58j
C _{Ma}	54.62	-26.2	-28.68	38.85	228	r79j
V _{Ma}	20.01	45.2	-52.87	69.56	311	j01g
M _{Ma}	40.88	70.68	-29.99	76.78	337	j18g
N _{Ma}	15.0	0.0	0.0	0.0	0	j36g
W _{Ma}	90.0	0.0	0.0	0.0	0	j53g
O _{Ma}	39.92	58.74	27.99	65.07	25	j71g
Y _{Ma}	81.26	-2.89	71.56	71.62	92	g21b
L _{Ma}	52.23	-42.42	13.6	44.55	162	g60b
V _{Ma}	30.57	1.41	-46.47	46.49	272	g97b

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 42 -1 -37

$LAB \cdot LCH \cdot Ma$: 42 37 269

$lab \cdot olv \cdot Ma$: 0.0 0.5 1.0

$lab \cdot rgb \cdot Ma$: 0.0 0.05 1.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab \cdot olv \cdot$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.863$

data for any colour:

lab^*tch^* and lab^*icu^*

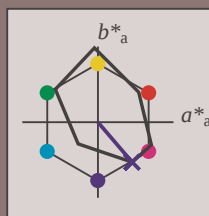
Hue texts:

$u^*_d = v00m$ $u^*_e = b34r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 20 45 -53

$LAB^*LCH^*_{Ma}$: 20 70 310

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

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

triangle lightness t^*

% Gamut

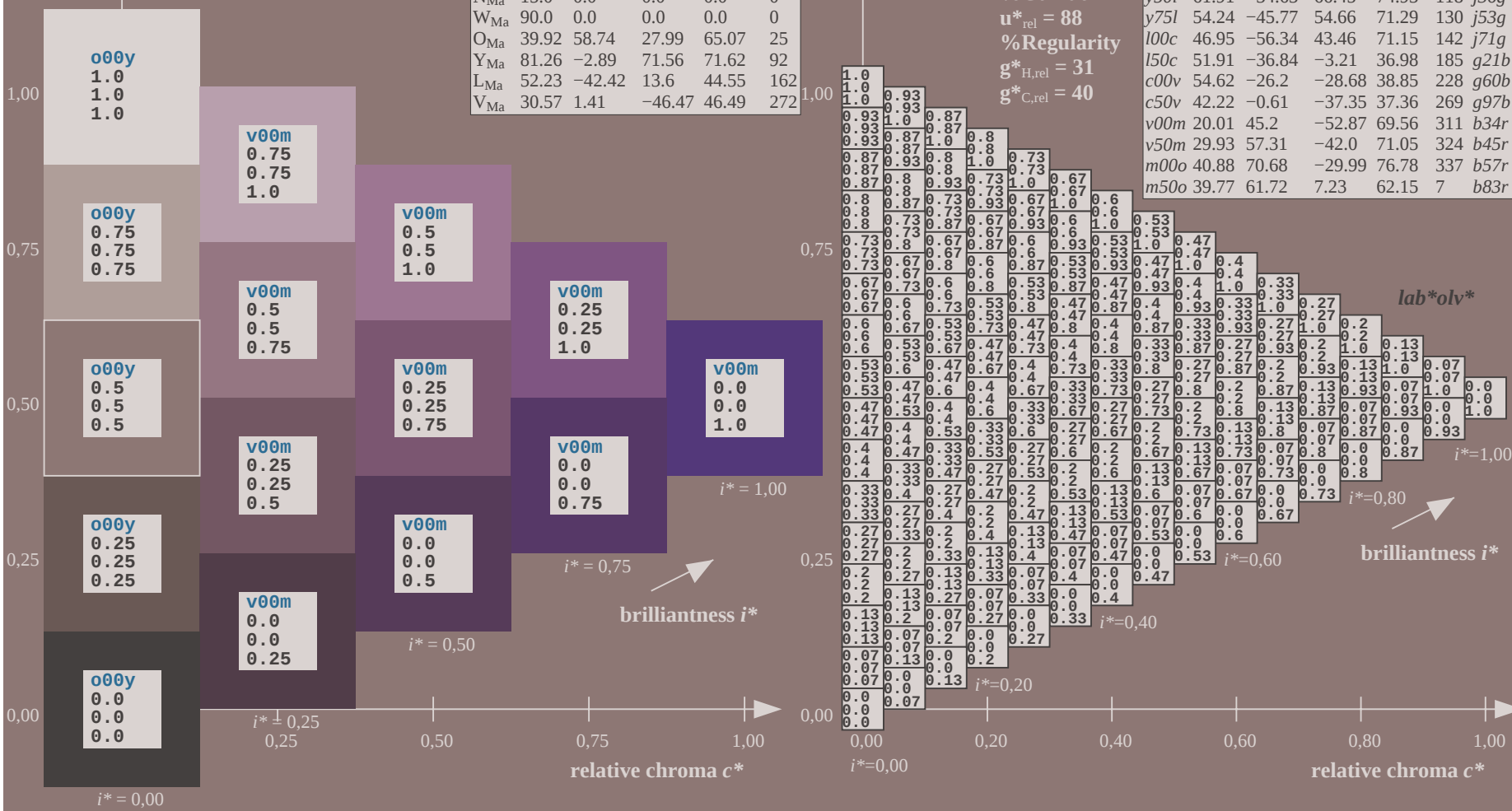
$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.899$

data for any colour:

lab^*tch^* and lab^*icu^*

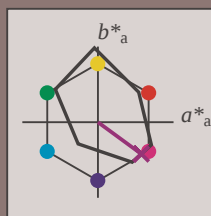
Hue texts:

$u^*_d = v50m$ $u^*_e = b45r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 30 57 -42

$LAB^*LCH^*_{Ma}$: 30 71 323

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

$lab^*rgb^*_{Ma}$: 0.91 0.0 1.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

lab^*olv^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.936$

data for any colour:

lab^*tch^* and lab^*icu^*

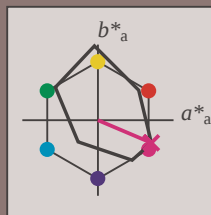
Hue texts:

$u^*_d = m00o$ $u^*_e = b57r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 41 71 -30

$LAB^*LCH^*_{Ma}$: 41 77 337

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.85

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

lab^*olv^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.019$

data for any colour:

lab^*tch^* and lab^*icu^*

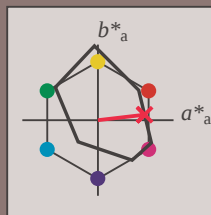
Hue texts:

$u^*_d = m50o$ $u^*_e = b83r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 40 62 7

$LAB^*LCH^*_{Ma}$: 40 62 6

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.33

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

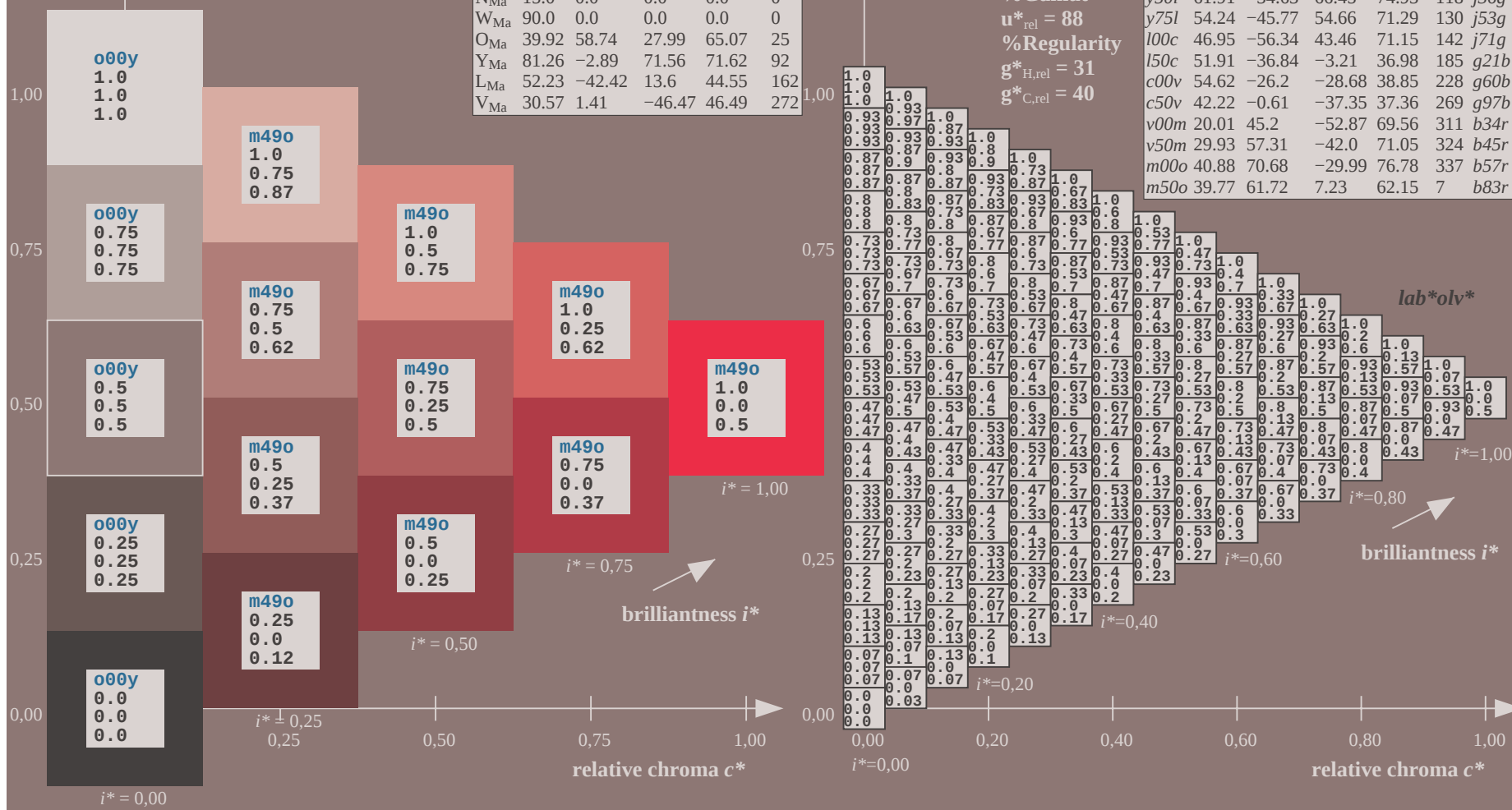
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = m50o$
 lab^*olv^*



See for similar files: <http://www.ps.bam.de/Ee67/>; www.ps.bam.de/Ee67/
Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1, CIELAB, ColSpx=0

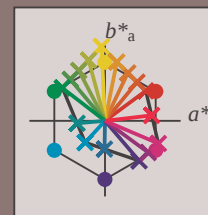
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	a	b	c	d	e	f	g	h	i	j	k	lab*oly*					
01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0		
	0.0	0.13	0.25	0.38	0.50	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.38	0.50	0.63	0.75	0.88	1.0	0.0	0.12	0.25	0.38	0.50	0.63	0.75	0.88	1.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.0	0.0	0.0	0.0			
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.0	0.0	0.0	0.0		
02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.13	0.13	0.13	0.13		
	0.0	0.12	0.25	0.38	0.50	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.38	0.50	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.38	0.50	0.63	0.75	0.88	1.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.13	0.13	0.13	0.13			
	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	1.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.13	0.13	0.13	0.13		
03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.25	0.25	0.25	0.25		
	0.0	0.12	0.25	0.38	0.50	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.38	0.50	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.38	0.50	0.63	0.75	0.88	1.0	1.0	0.87	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.25	0.25	0.25	0.25			
	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.25	0.25	0.25	0.25		
04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.38	0.38	0.38	0.38		
	0.0	0.12	0.25	0.37	0.50	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.37	0.50	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.37	0.50	0.63	0.75	0.88	1.0	1.0	0.87	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.38	0.38	0.38	0.38			
	0.38	0.38	0.38	0.38	0.37	0.37	0.37	0.37	0.37	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.37	0.37	0.37	0.37	0.38	1.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.38	0.38	0.38	0.38		
05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
	0.0	0.12	0.25	0.37	0.50	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.37	0.50	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.37	0.50	0.63	0.75	0.88	1.0	1.0	0.87	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.5	0.5	0.5	0.5			
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.5	0.5	0.5	0.5	
06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.63	0.63	0.63	0.63		
	0.0	0.12	0.25	0.37	0.50	0.62	0.75	0.88	1.0	0.0	0.13	0.25	0.37	0.50	0.62	0.75	0.88	1.0	0.0	0.13	0.25	0.37	0.50	0.62	0.75	0.88	1.0	1.0	0.87	0.75	0.62	0.5	0.38	0.25	0.13	0.0	0.63	0.63	0.63	0.63			
	0.63	0.63	0.63	0.63	0.63	0.63	0.62	0.62	0.62	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.62	0.62	1.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.63	0.63	0.63	
07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.75	0.75	0.75	0.75		
	0.0	0.12	0.25	0.37	0.50	0.62	0.75	0.88	1.0	0.0	0.13	0.25	0.37	0.50	0.62	0.75	0.88	1.0	0.0	0.13	0.25	0.37	0.50	0.62	0.75	0.88	1.0	1.0	0.87	0.75	0.62	0.5	0.37	0.25	0.13	0.0	0.75	0.75	0.75	0.75			
	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.75	0.75	0.75	0.75	
08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.88	0.88	0.88	0.88		
	0.0	0.12	0.25	0.37	0.50	0.62	0.75	0.87	1.0	0.0	0.13	0.25	0.37	0.50	0.62	0.75	0.87	1.0	0.0	0.13	0.25	0.37	0.50	0.62	0.75	0.87	1.0	1.0	0.87	0.75	0.62	0.5	0.37	0.25	0.13	0.0	0.88	0.88	0.88	0.88			
	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.87	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.88	0.88	0.88	0.88	
09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.0	1.0	1.0	1.0		
	0.0	0.12	0.25	0.37	0.50	0.62	0.75	0.87	1.0	0.0	0.13	0.25	0.37	0.50	0.62	0.75	0.87	1.0	0.0	0.13	0.25	0.37	0.50	0.62	0.75	0.87	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0			
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0			
10	0.38	0.38	0.38	0.37	0.37	0.37	0.37	0.37	0.37	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.63	0.63	0.63	0.63	0.63	0.62	0.62	0.62	0.62	0.62	0.62	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
	0.0	0.12	0.25	0.38	0.50	0.63	0.75	0.88	1.0	0.0	0.12	0.25	0.37	0.50	0.63	0.75	0.88	1.0	0.0	0.12	0.25	0.37	0.50	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.38	0.38	0.38	0.37	0.37	0.37	0.37	0.37	0.37	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.63	0.63	0.63	0.63	0.63	0.62	0.62	0.62	0.62	0.62	0.62	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
11	0.38	0.38	0.38	0.37	0.37	0.37	0.37	0.37	0.37	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.63	0.63	0.63	0.63	0.63	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62

Input and output:
Colorimetric Printer Reflective System FRS15_90a
data for any colour:

u^*_d and number $no.$ = 00 .. 15
device hue text:
 u^*_d = 16 hues $o00y$, $o25y$, ..., $m50o$
contrast reduction factor:
 $c_R = 0.9$

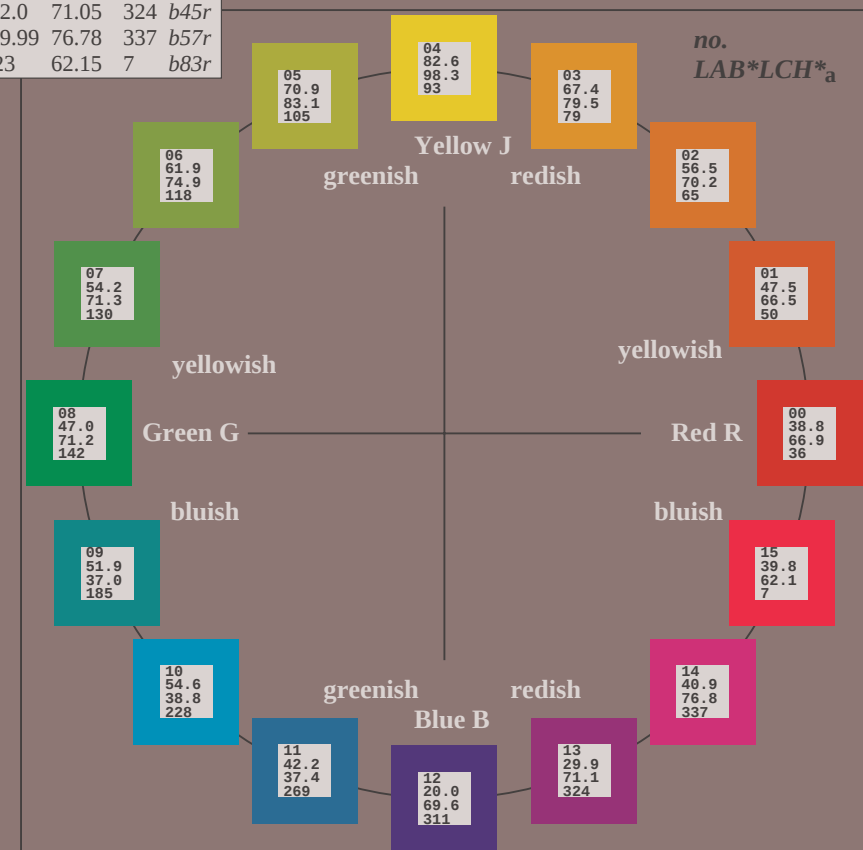
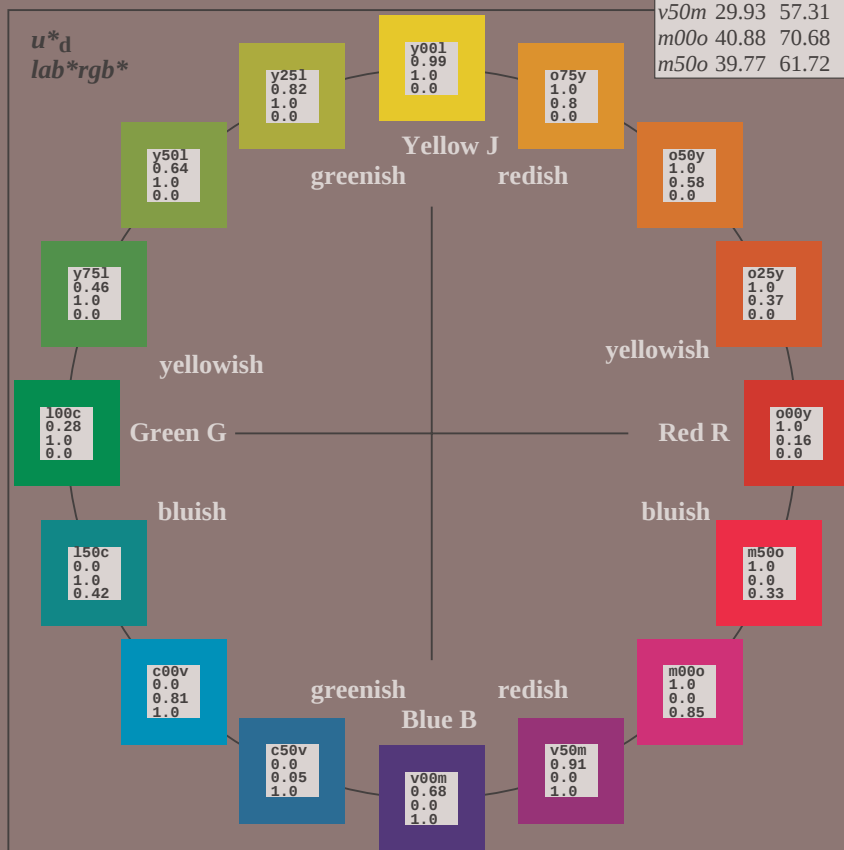
FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$



FRS15_90a; adapted (a) CIELAB data

Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	38.8	53.92	39.68	66.95	36
Y_{Ma}	82.58	-4.64	98.22	98.33	93
L_{Ma}	46.95	-56.34	43.46	71.15	142
C_{Ma}	54.62	-26.2	-28.68	38.85	228
V_{Ma}	20.01	45.2	-52.87	69.56	311
M_{Ma}	40.88	70.68	-29.99	76.78	337
N_{Ma}	15.0	0.0	0.0	0.0	0
W_{Ma}	90.0	0.0	0.0	0.0	0
O_{CIE}	39.92	58.74	27.99	65.07	25
Y_{CIE}	81.26	-2.89	71.56	71.62	92
L_{CIE}	52.23	-42.42	13.6	44.55	162
V_{CIE}	30.57	1.41	-46.47	46.49	272



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.101$

data for any colour:

lab^*tch^* and lab^*icu^*

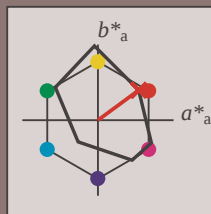
Hue texts:

$u^*_d = o00y$ $u^*_e = r16j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 39 54 40

$LAB^*LCH^*_{Ma}$: 39 67 36

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

$lab^*rgb^*_{Ma}$: 1.0 0.16 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

lab^*rgb^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.14$

data for any colour:

lab^*tch^* and lab^*icu^*

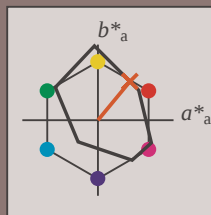
Hue texts:

$u^*_d = o25y$ $u^*_e = r37j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 42 51

$LAB^*LCH^*_{Ma}$: 47 66 50

$lab^*olv^*_{Ma}$: 1.0 0.25 0.0

$lab^*rgb^*_{Ma}$: 1.0 0.37 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = o25y$
 lab^*rgb^*

lab^*rgb^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.179$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

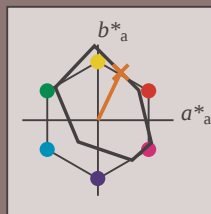
Hue texts:

$u^*_d = o50y$ $u^*_e = r58j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 57 30 63

$LAB \cdot LCH \cdot Ma$: 57 70 64

$lab \cdot olv \cdot Ma$: 1.0 0.5 0.0

$lab \cdot rgb \cdot Ma$: 1.0 0.58 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab \cdot rgb^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.218$

data for any colour:

lab^*tch^* and lab^*icu^*

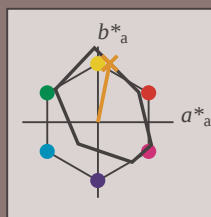
Hue texts:

$u^*_d = o75y$ $u^*_e = r79j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 67 16 78

$LAB^*LCH^*_{Ma}$: 67 79 78

$lab^*olv^*_{Ma}$: 1.0 0.75 0.0

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

triangle lightness t^*

% Gamut

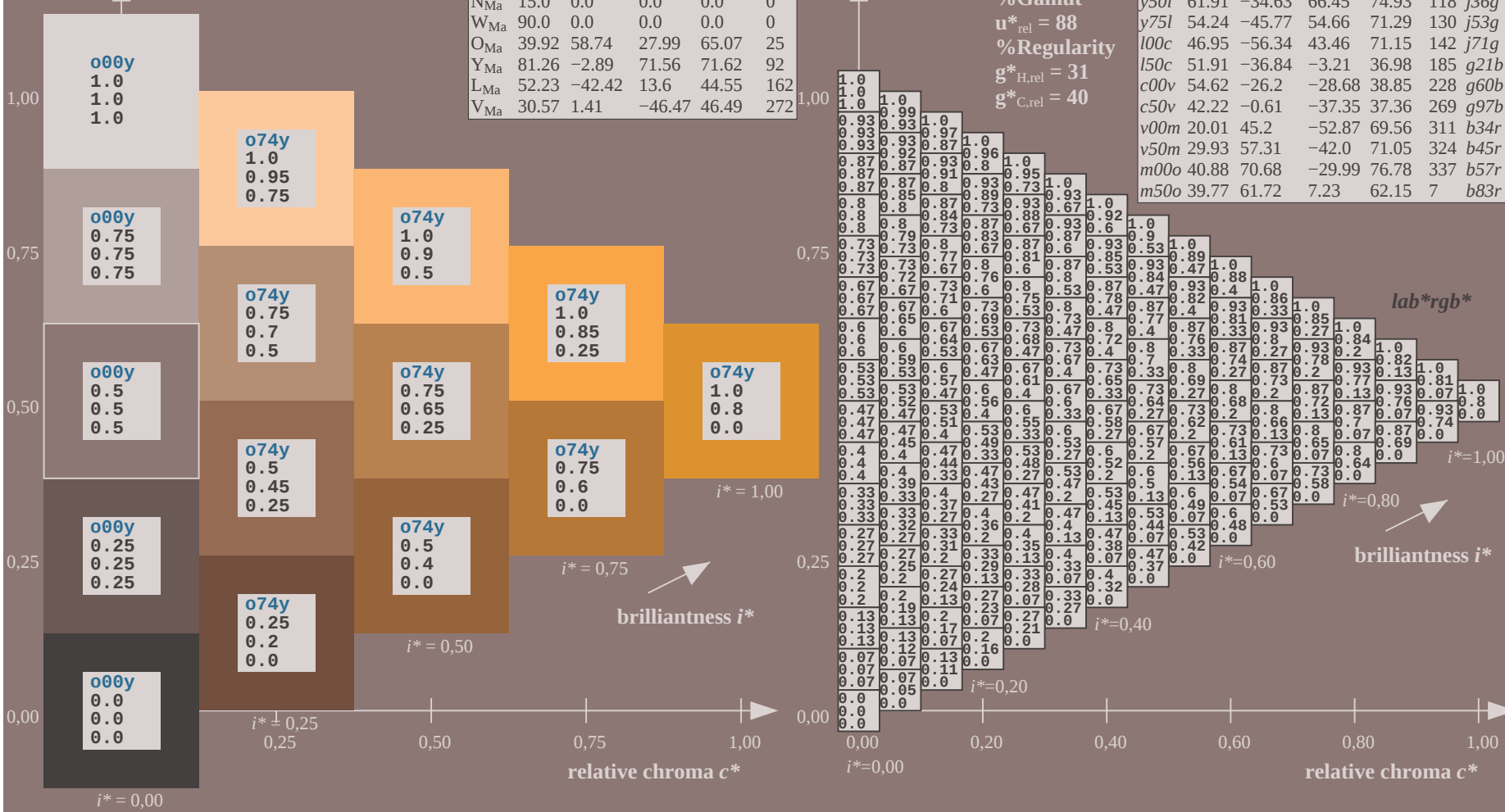
$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.258$

data for any colour:

lab^*tch^* and lab^*icu^*

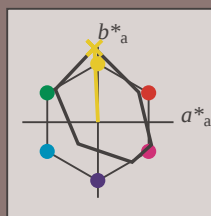
Hue texts:

$u^*_d = y00l$ $u^*_e = j01g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 83 -5 98

$LAB^*LCH^*_{Ma}$: 83 98 92

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

$lab^*rgb^*_{Ma}$: 0.99 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

lab^*rgb^*

$i^* = 1.00$

$i^* = 0.80$

brilliantness i^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.292$

data for any colour:

lab^*tch^* and lab^*icu^*

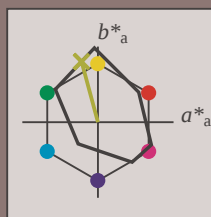
Hue texts:

$u^*_d = y25l$ $u^*_e = j18g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 71 -22 80

$LAB^*LCH^*_{Ma}$: 71 83 105

$lab^*olv^*_{Ma}$: 0.75 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.82 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

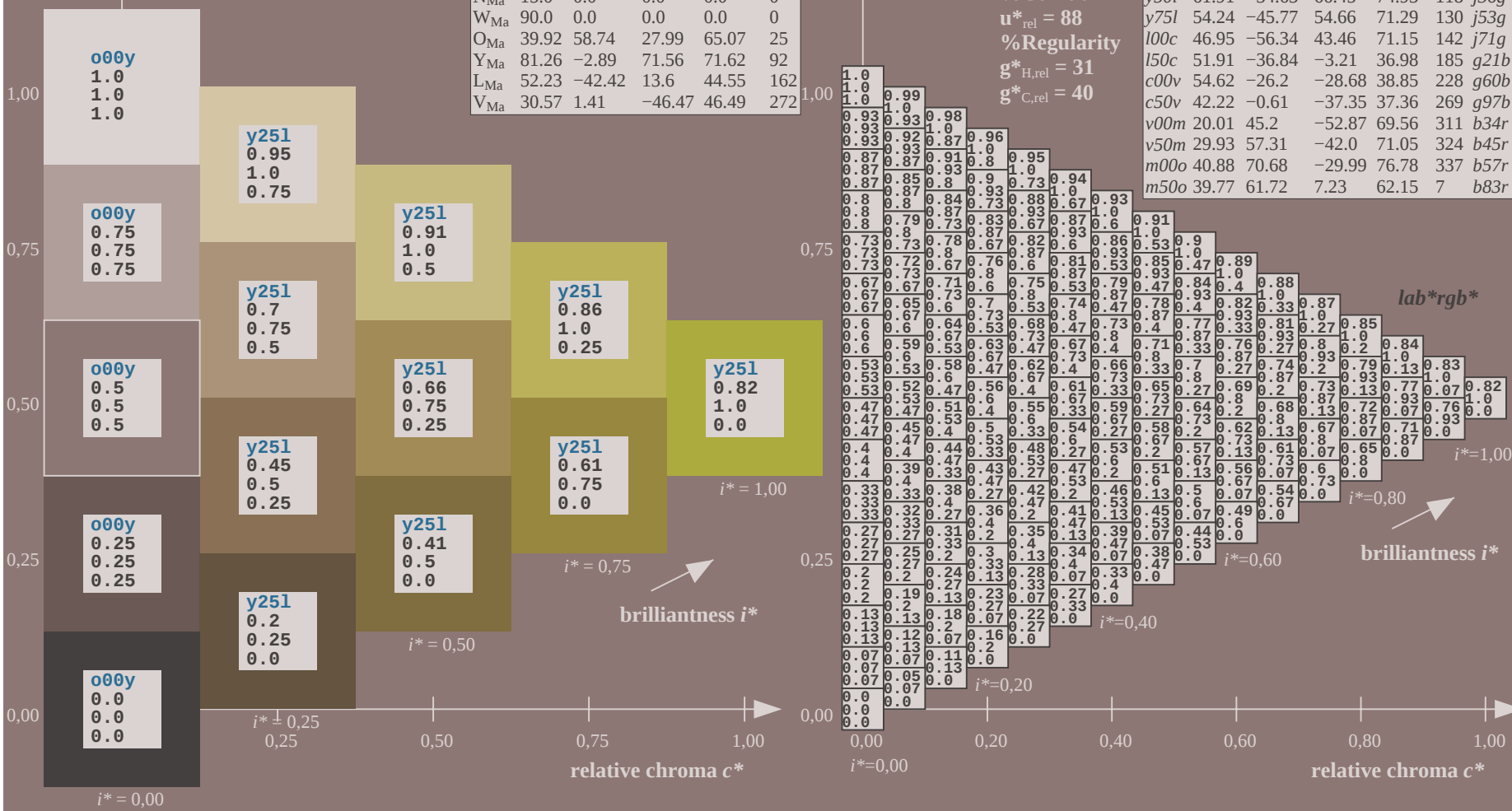
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y25l$
 lab^*rgb^*



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.326$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

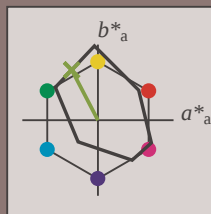
Hue texts:

$u^*_d = y50l$ $u^*_e = j36g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 62 -35 66

$LAB \cdot LCH \cdot Ma$: 62 75 117

$lab \cdot olv \cdot Ma$: 0.5 1.0 0.0

$lab \cdot rgb \cdot Ma$: 0.64 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab \cdot rgb^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

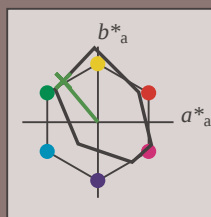
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.361$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = y75l$ $u^*_e = j53g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 54 -46 55

$LAB^*LCH^*_{Ma}$: 54 71 129

$lab^*olv^*_{Ma}$: 0.25 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.46 1.0 0.0

triangle lightness t^*

% Gamut

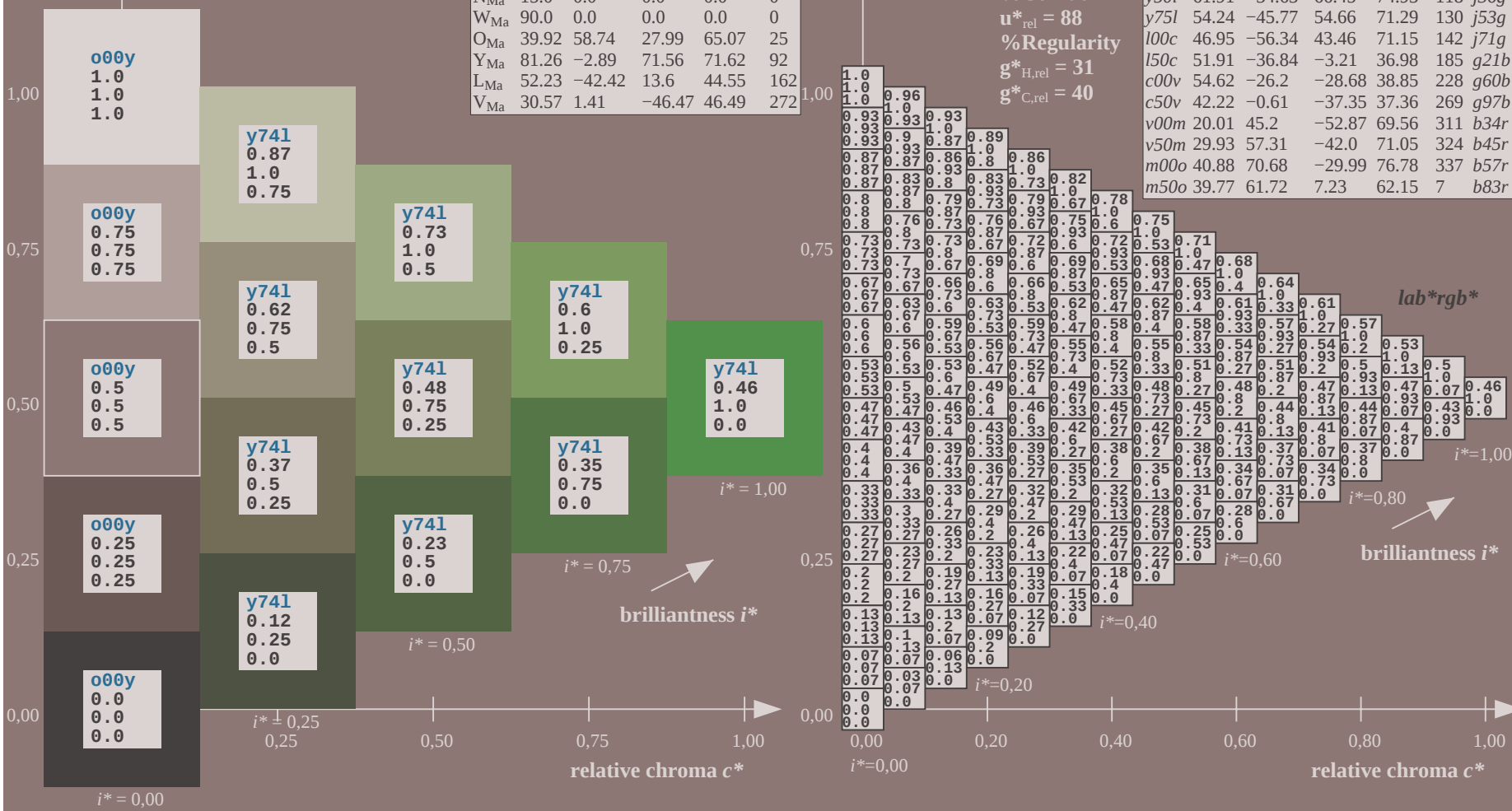
$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.395$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

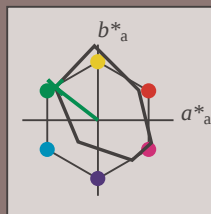
Hue texts:

$u^*_d = 100c$ $u^*_e = j71g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 47 -56 43

$LAB \cdot LCH \cdot Ma$: 47 71 142

$lab \cdot olv \cdot Ma$: 0.0 1.0 0.0

$lab \cdot rgb \cdot Ma$: 0.28 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab \cdot rgb \cdot$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.514$

data for any colour:

lab^*tch^* and lab^*icu^*

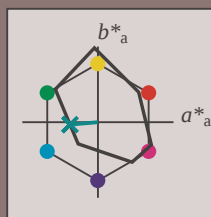
Hue texts:

$u^*_d = l50c$ $u^*_e = g21b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 52 -37 -3

$LAB^*LCH^*_{Ma}$: 52 37 184

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

$lab^*rgb^*_{Ma}$: 0.0 1.0 0.42

triangle lightness t^*

% Gamut

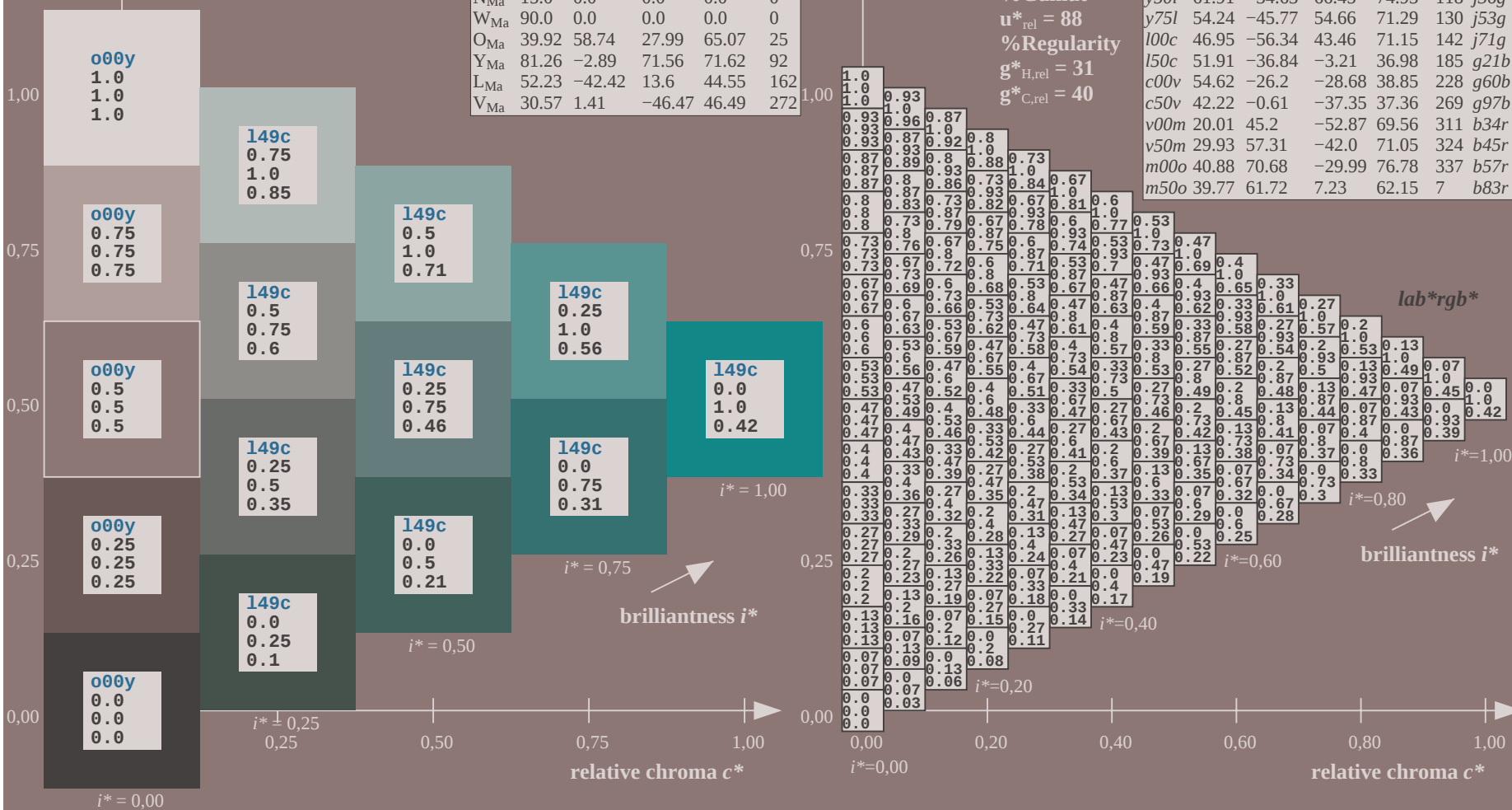
$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.632$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

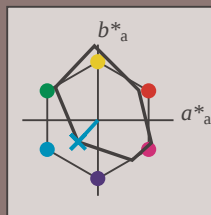
Hue texts:

$u^*_d = c00v$ $u^*_e = g60b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 55 -26 -29

$LAB \cdot LCH \cdot Ma$: 55 39 227

$lab \cdot olv \cdot Ma$: 0.0 1.0 1.0

$lab \cdot rgb \cdot Ma$: 0.0 0.81 1.0

triangle lightness t^*

% Gamut

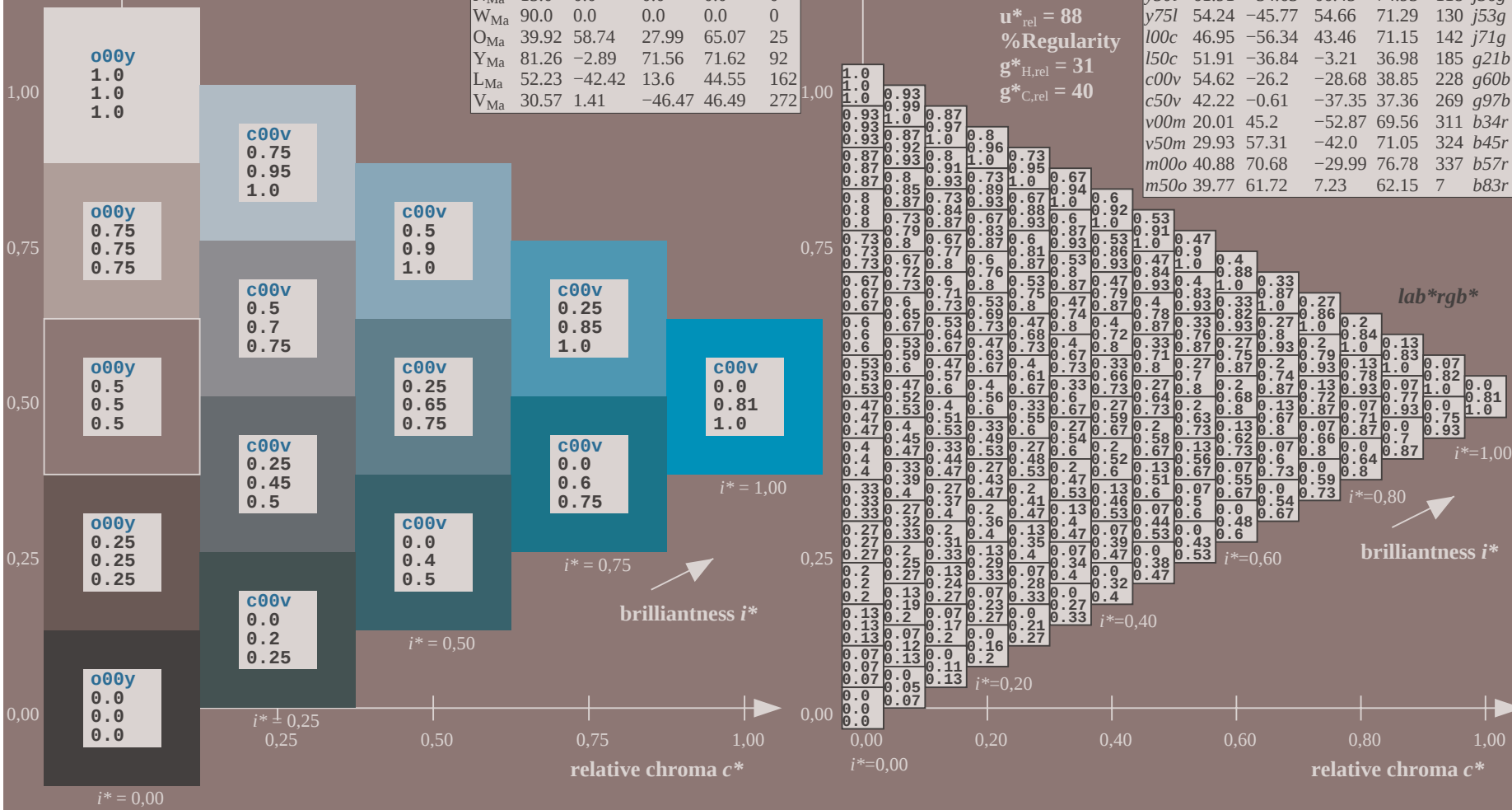
$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.863$

data for any colour:

lab^*tch^* and lab^*icu^*

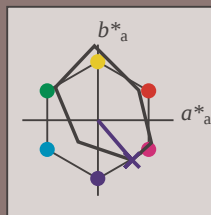
Hue texts:

$u^*_d = v00m$ $u^*_e = b34r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 20 45 -53

$LAB^*LCH^*_{Ma}$: 20 70 310

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

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

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

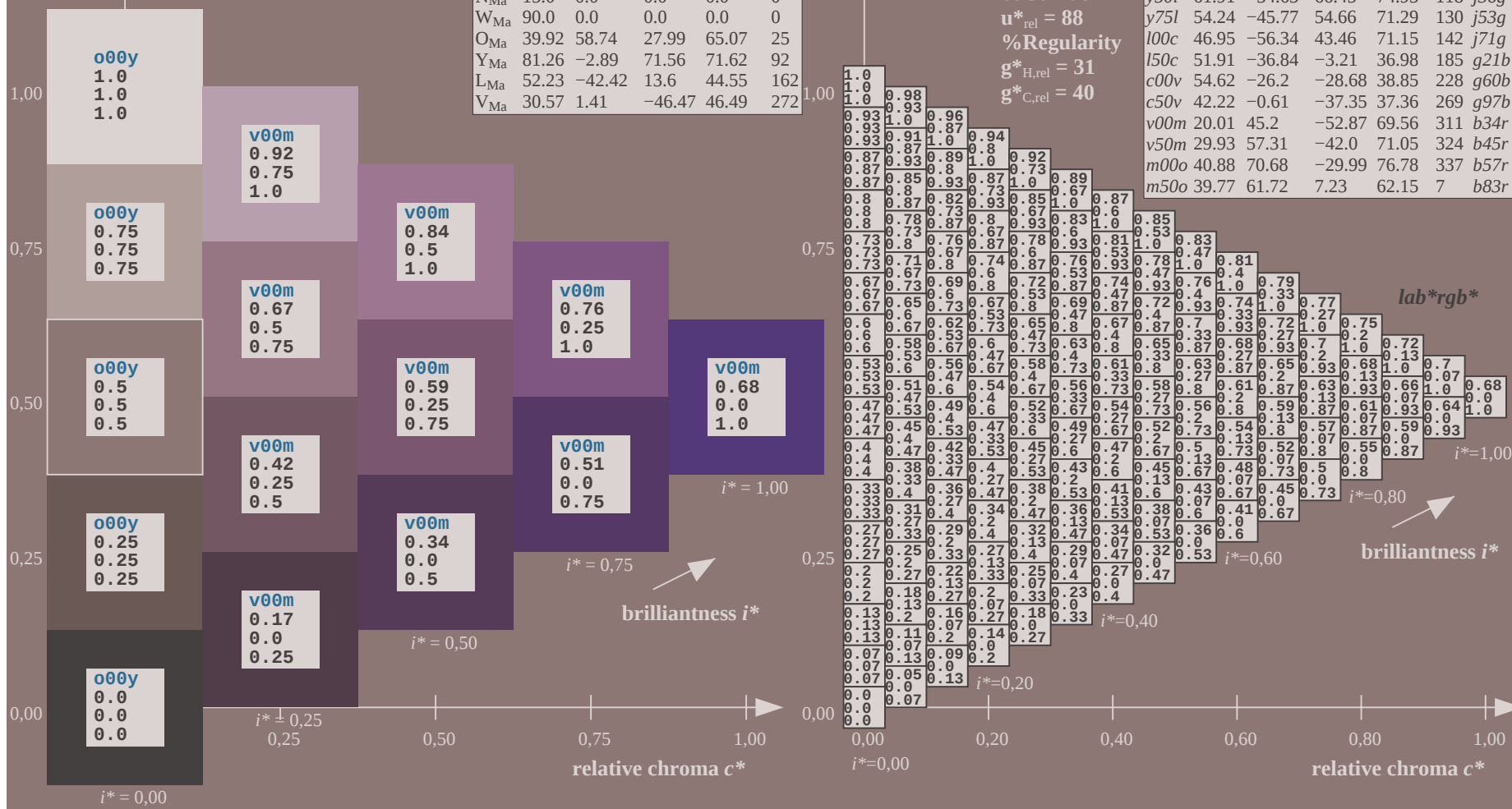
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = v00m$
 lab^*rgb^*



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.899$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

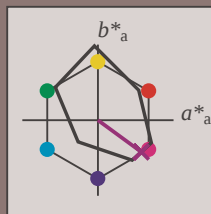
Hue texts:

$u^*_d = v50m$ $u^*_e = b45r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 30 57 -42

$LAB \cdot LCH \cdot Ma$: 30 71 323

$lab \cdot olv \cdot Ma$: 0.5 0.0 1.0

$lab \cdot rgb \cdot Ma$: 0.91 0.0 1.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab \cdot rgb^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.936$

data for any colour:

lab^*tch^* and lab^*icu^*

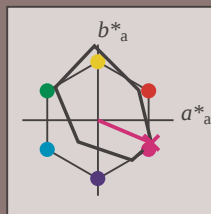
Hue texts:

$u^*_d = m00o$ $u^*_e = b57r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 41 71 -30

$LAB^*LCH^*_{Ma}$: 41 77 337

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.85

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

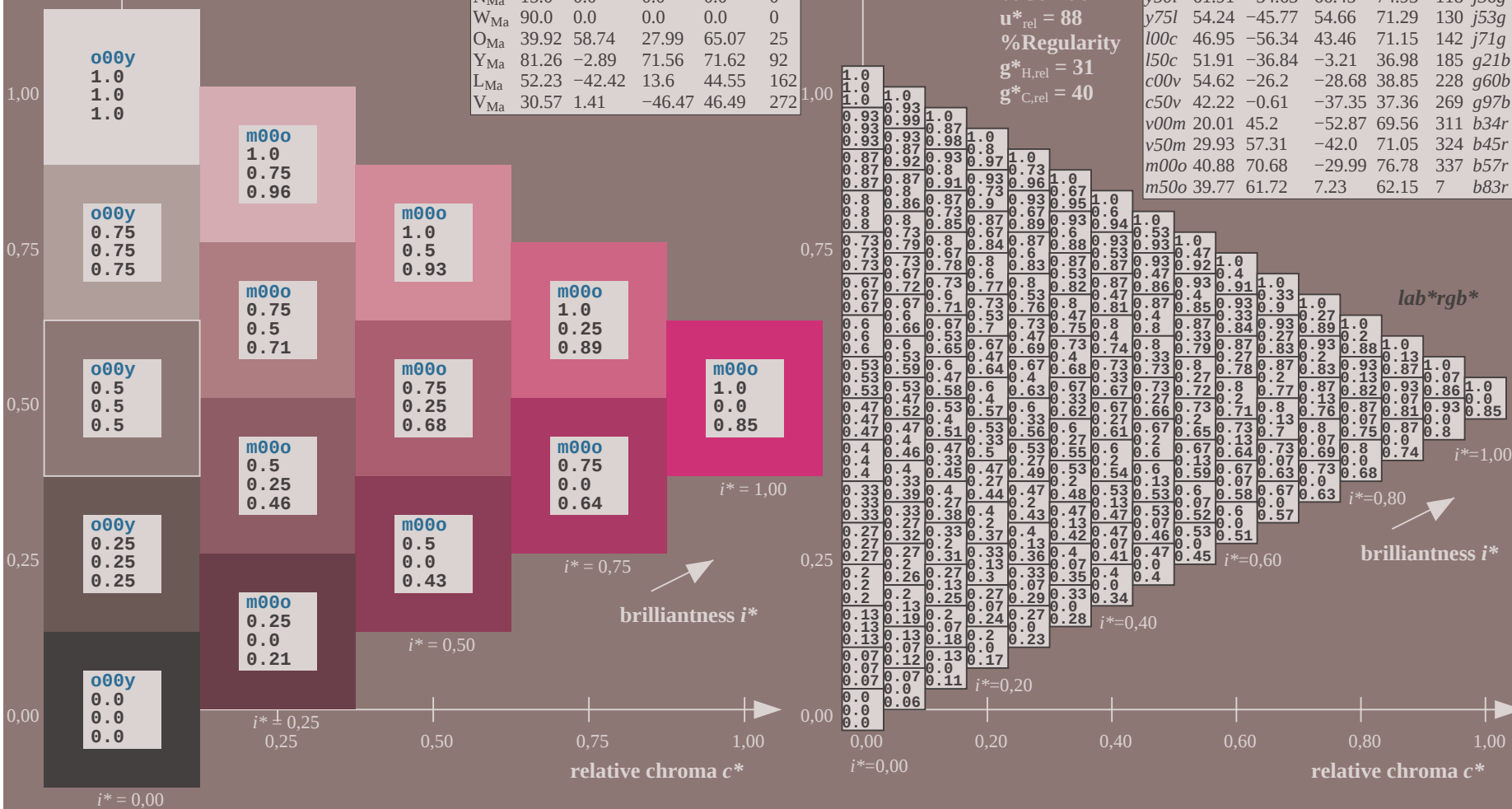
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = m00o$
 lab^*rgb^*



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.019$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

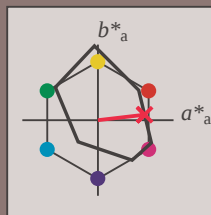
Hue texts:

$u^*_d = m50o$ $u^*_e = b83r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 40 62 7

$LAB \cdot LCH \cdot Ma$: 40 62 6

$lab \cdot olv \cdot Ma$: 1.0 0.0 0.5

$lab \cdot rgb \cdot Ma$: 1.0 0.0 0.33

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

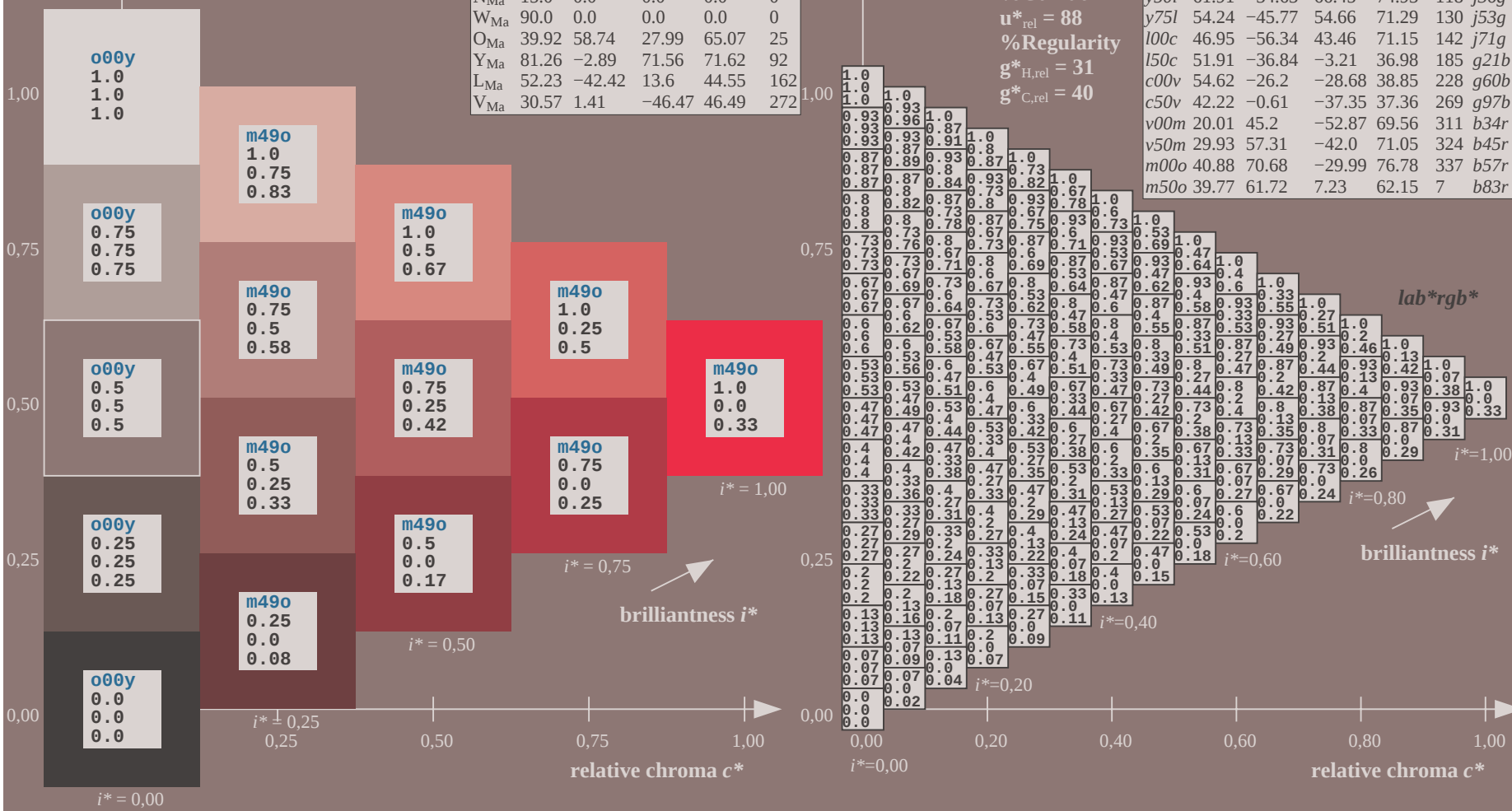
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = m50o$
 $lab \cdot rgb^*$



See for similar files: <http://www.ps.bam.de/Ee67/>; www.ps.bam.de/Ee.HTM
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1, CIELAB, ColSpx=0

BAM registration: 20081001-Eeb//10L/L6/E00f.p.s/.PDF BAM material: code=rhata4
application for evaluation and measurement of printer or monitor systems

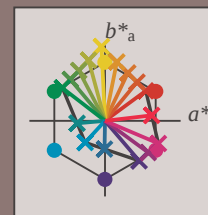
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	a	b	c	d	e	f	g	h	i	j	k	lab*rgb*		
01	0.0	0.04	0.07	0.11	0.14	0.18	0.21	0.25	0.28	0.13	0.12	0.16	0.2	0.23	0.27	0.3	0.34	0.37	0.25	0.25	0.28	0.32	0.36	0.39	0.43	0.46	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
	0.0	0.13	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.02	0.13	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.04	0.15	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.0	0.0	0.0	0.0	0.0
02	0.09	0.0	0.0	0.0	0.0	0.03	0.06	0.1	0.13	0.13	0.13	0.16	0.2	0.23	0.27	0.3	0.34	0.37	0.25	0.25	0.28	0.32	0.36	0.39	0.43	0.46	1.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
	0.13	0.1	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.0	0.15	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.98	0.88	0.77	0.67	0.56	0.46	0.35	0.25	0.14	0.13	0.13	0.13	
	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.11	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.13	0.13	0.13	0.13	0.13	0.13	0.13	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.13	0.13	0.13	0.13	
03	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.21	0.13	0.13	0.13	0.13	0.15	0.19	0.22	0.25	0.25	0.25	0.29	0.32	0.36	0.39	0.43	0.46	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	0.0	0.01	0.2	0.38	0.5	0.63	0.75	0.88	1.0	0.0	0.13	0.23	0.38	0.5	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.95	0.85	0.75	0.65	0.54	0.44	0.33	0.23	0.12	0.25	0.25	0.25	
	0.25	0.25	0.25	0.25	0.21	0.16	0.12	0.07	0.03	0.25	0.25	0.25	0.23	0.18	0.14	0.13	0.13	0.13	0.21	0.23	0.25	0.25	0.25	0.25	0.25	0.25	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.25	0.25	0.25	0.25	
04	0.26	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.3	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.37	0.35	0.34	0.25	0.25	0.25	0.25	0.28	0.31	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
	0.0	0.0	0.11	0.3	0.5	0.63	0.75	0.88	1.0	0.0	0.13	0.14	0.33	0.5	0.63	0.75	0.88	1.0	0.0	0.13	0.25	0.35	0.5	0.63	0.75	0.88	1.0	0.93	0.83	0.73	0.63	0.52	0.42	0.31	0.21	0.1	0.38	0.38	0.38	
	0.38	0.38	0.38	0.38	0.4	0.36	0.31	0.27	0.22	0.38	0.38	0.38	0.38	0.38	0.38	0.33	0.29	0.24	0.2	0.38	0.38	0.38	0.35	0.31	0.26	0.25	0.25	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.38	0.38	0.38	
05	0.34	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.38	0.2	0.13	0.13	0.13	0.13	0.13	0.13	0.46	0.42	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
	0.0	0.02	0.11	0.4	0.63	0.63	0.63	0.63	0.63	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.46	0.42	0.25	0.26	0.25	0.25	0.25	0.25	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.5	0.5	0.5		
	0.5	0.5	0.5	0.5	0.5	0.55	0.51	0.46	0.42	0.5	0.5	0.5	0.5	0.5	0.53	0.48	0.44	0.39	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.5	0.5	0.5		
06	0.43	0.24	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.47	0.28	0.13	0.13	0.13	0.13	0.13	0.13	0.54	0.52	0.51	0.32	0.25	0.25	0.25	0.25	0.98	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	
	0.0	0.0	0.13	0.31	0.5	0.75	0.88	1.0	0.0	0.13	0.13	0.15	0.34	0.53	0.75	0.88	1.0	0.0	0.13	0.25	0.25	0.36	0.55	0.75	0.88	1.0	0.88	0.78	0.68	0.58	0.48	0.38	0.27	0.17	0.06	0.63	0.63	0.63		
	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.63	0.63	0.63		
07	0.51	0.33	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.55	0.37	0.19	0.13	0.13	0.13	0.13	0.13	0.63	0.61	0.59	0.41	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
	0.0	0.0	0.04	0.23	0.42	0.6	0.88	1.0	0.0	0.13	0.13	0.13	0.25	0.44	0.63	0.88	1.0	0.0	0.13	0.25	0.25	0.27	0.46	0.65	0.88	1.0	0.85	0.75	0.65	0.55	0.45	0.35	0.25	0.15	0.04	0.75	0.75	0.75		
	0.75	0.75	0.75	0.75	0.75	0.75	0.85	0.8	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.83	0.78	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.75	0.75	0.75		
08	0.6	0.41	0.23	0.05	0.0	0.0	0.0	0.0	0.0	0.66	0.64	0.45	0.27	0.13	0.13	0.13	0.13	0.13	0.71	0.69	0.68	0.49	0.31	0.25	0.25	0.25	0.25	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.88	0.88	
	0.0	0.0	0.0	0.0	0.14	0.33	0.52	0.71	1.0	0.0	0.13	0.13	0.13	0.16	0.35	0.54	0.73	1.0	0.0	0.13	0.25	0.25	0.38	0.56	0.75	1.0	0.83	0.73	0.63	0.53	0.43	0.33	0.23	0.13	0.02	0.88	0.88			
	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.97	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.95	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.88	0.88		
09	0.68	0.5	0.32	0.14	0.0	0.0	0.0	0.0	0.0	0.74	0.72	0.54	0.36	0.17	0.13	0.13	0.13	0.13	0.8	0.78	0.78	0.58	0.4	0.25	0.25	0.25	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	
	0.0	0.0	0.0	0.0	0.05	0.24	0.43	0.62	0.81	0.6	0.13	0.13	0.13	0.26	0.45	0.64	0.83	0.9	0.13	0.25	0.25	0.25	0.29	0.48	0.67	0.85	0.81	0.71	0.6	0.5	0.4	0.3	0.2	0.1	0.0	1.0	1.0	1.0		
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
10	0.38	0.38	0.38	0.37	0.41	0.44	0.48	0.52	0.55	0.5	0.5	0.5	0.5	0.5	0.53	0.57	0.6	0.64	0.63	0.63	0.63	0.63	0.62	0.66	0.69	0.73	1.0	1.0	0.0	0.0	1.0	1.0	1.0	0.99	0.98	0.98				
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.0	0.0			
	0.38	0.38	0.38	0.37	0.41	0.44	0.48	0.52	0.55	0.5	0.5	0.5	0.5	0.5	0.53	0.57	0.6	0.64	0.63	0.63	0.63	0.63	0.62	0.66	0.69	0.73	0.98	0.88	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87		
11	0.0	0.17	0.27	0.38	0.5	0.63	0.75	0.88	1.0	0.0	0.19	0.29	0.4	0.5	0.63	0.75	0.88	1.0	0.0	0.21	0.31	0.42	0.52	0.63	0.75	0.88	1.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88		
	0.06	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.03	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.01	0.13	0.13	0.13	0.13	0.13	0.13	0.13	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.07	0.07			
	0.38	0.38	0.38	0.37	0.41	0.45	0.48	0.52	0.55	0.5	0.5	0.5	0.5	0.5	0.53	0.57	0.61	0.64	0.63	0.63	0.63	0.63	0.62	0.66	0.69	0.73	0.92	0.84	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75		
12	0.0	0.13	0.27	0.38	0.5	0.63	0.75	0.88	1.0	0.0	0.13	0.29	0.4	0.5	0.63	0.75	0.88	1.0	0.0	0.13	0.31	0.42	0.52	0.63	0.75	0.88	1.0	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75		
	0.19	0.21	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.17	0.18	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.14	0.16	0.25	0.25	0.25	0.25	0.25	0.25	1.0	0.88	0.75	0.63	0.5	0.38	0.25	0.13	0.0	0.13	0.13			
	0.38	0.38	0.38	0.38	0.41	0.45	0.48	0.52	0.55	0.5	0.5	0.5	0.5	0.5	0.53	0.57	0.6																							

Input and output:
Colorimetric Printer Reflective System FRS15_90a
data for any colour:

u^*_d and number $no.$ = 00 .. 15
device hue text:
 u^*_d = 16 hues $o00y$, $o25y$, ..., $m50o$
contrast reduction factor:
 $c_R = 0.9$

FRS15_90a; adapted (a) CIELAB data

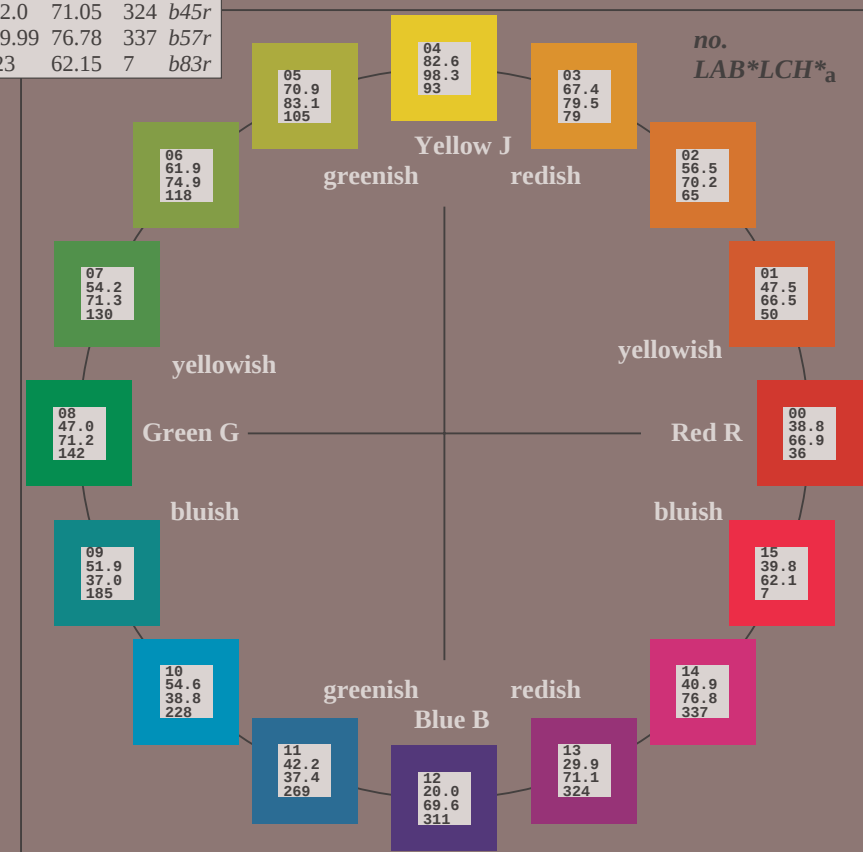
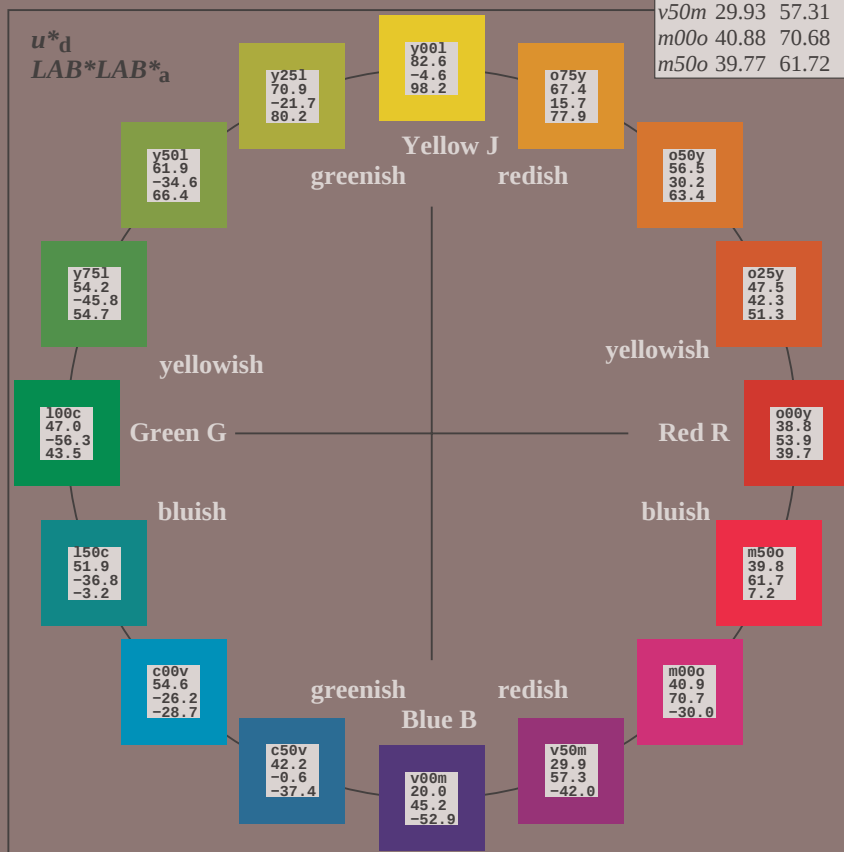
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$



%Gamut
 $u^*_{rel} = 88$
%Regularity
 $g^*_{H,rel} = 31$
 $g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	38.8	53.92	39.68	66.95	36
Y_{Ma}	82.58	-4.64	98.22	98.33	93
L_{Ma}	46.95	-56.34	43.46	71.15	142
C_{Ma}	54.62	-26.2	-28.68	38.85	228
V_{Ma}	20.01	45.2	-52.87	69.56	311
M_{Ma}	40.88	70.68	-29.99	76.78	337
N_{Ma}	15.0	0.0	0.0	0.0	0
W_{Ma}	90.0	0.0	0.0	0.0	0
O_{CIE}	39.92	58.74	27.99	65.07	25
Y_{CIE}	81.26	-2.89	71.56	71.62	92
L_{CIE}	52.23	-42.42	13.6	44.55	162
V_{CIE}	30.57	1.41	-46.47	46.49	272



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.101$

data for any colour:

lab^*tch^* and lab^*icu^*

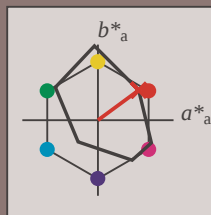
Hue texts:

$u^*_d = o00y$ $u^*_e = r16j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_Ma$: 39 54 40

$LAB^*LCH^*_Ma$: 39 67 36

$lab^*olv^*_Ma$: 1.0 0.0 0.0

$lab^*rgb^*_Ma$: 1.0 0.16 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
<i>o00y</i>	38.8	53.92	39.68	66.95	36	<i>r16j</i>
<i>o25y</i>	47.46	42.34	51.25	66.48	50	<i>r37j</i>
<i>o50y</i>	56.54	30.2	63.39	70.22	65	<i>r58j</i>
<i>o75y</i>	67.39	15.68	77.9	79.47	79	<i>r79j</i>
<i>y00l</i>	82.58	-4.64	98.22	98.33	93	<i>j01g</i>
<i>y25l</i>	70.85	-21.66	80.19	83.07	105	<i>j18g</i>
<i>y50l</i>	61.91	-34.63	66.45	74.93	118	<i>j36g</i>
<i>y75l</i>	54.24	-45.77	54.66	71.29	130	<i>j53g</i>
<i>l00c</i>	46.95	-56.34	43.46	71.15	142	<i>j71g</i>
<i>l50c</i>	51.91	-36.84	-3.21	36.98	185	<i>g21b</i>
<i>c00v</i>	54.62	-26.2	-28.68	38.85	228	<i>g60b</i>
<i>c50v</i>	42.22	-0.61	-37.35	37.36	269	<i>g97b</i>
<i>v00m</i>	20.01	45.2	-52.87	69.56	311	<i>b34r</i>
<i>v50m</i>	29.93	57.31	-42.0	71.05	324	<i>b45r</i>
<i>m00o</i>	40.88	70.68	-29.99	76.78	337	<i>b57r</i>
<i>m50o</i>	39.77	61.72	7.23	62.15	7	<i>b83r</i>

$LAB^*LAB^*_a$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.14$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

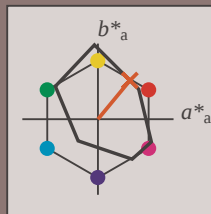
Hue texts:

$u^*_d = o25y$ $u^*_e = r37j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 47 42 51

$LAB \cdot LCH^*_{Ma}$: 47 66 50

$lab \cdot olv^*_{Ma}$: 1.0 0.25 0.0

$lab \cdot rgb^*_{Ma}$: 1.0 0.37 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$LAB \cdot LAB^*_{Ma}$

$i^* = 1.00$

brilliantness i^*

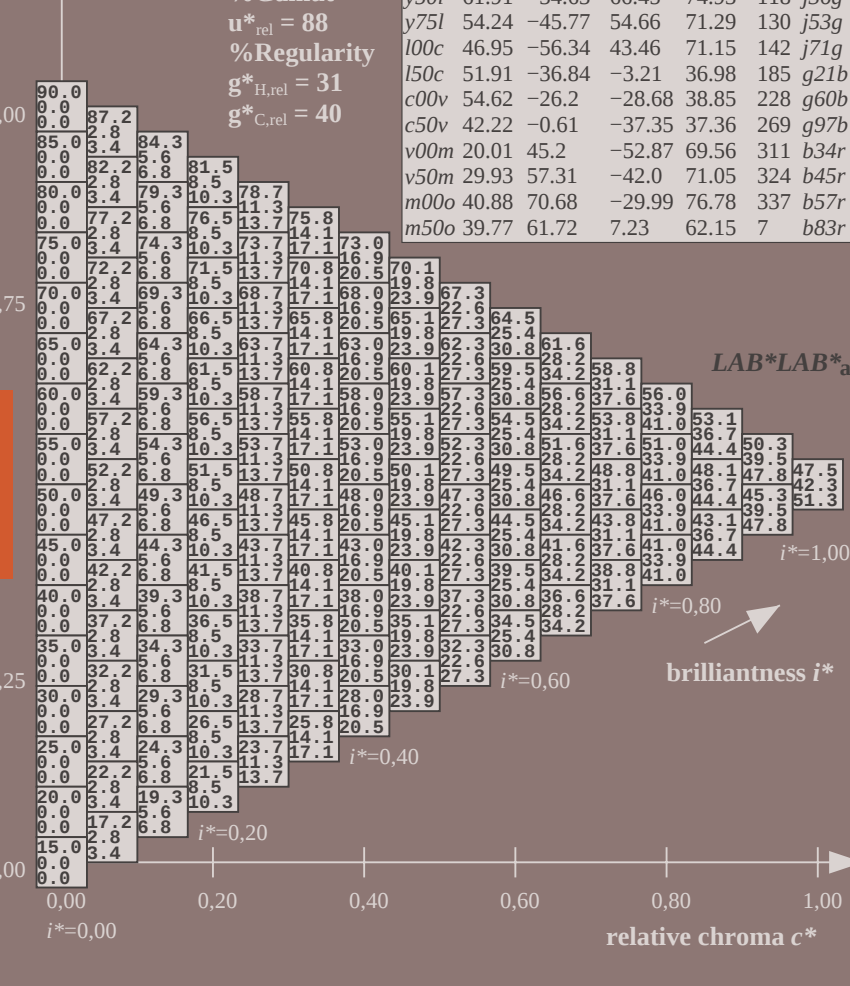
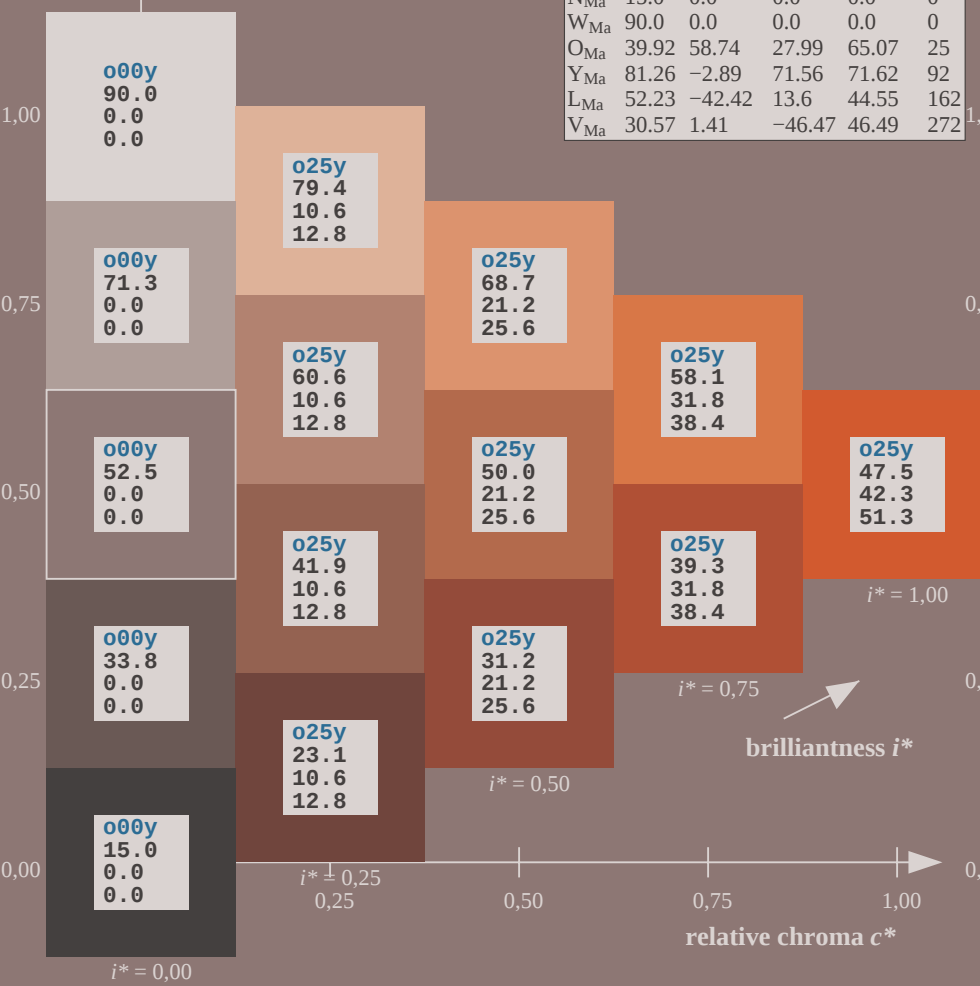
$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.179$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

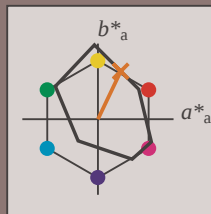
Hue texts:

$u^*_d = o50y$ $u^*_e = r58j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 57 30 63

$LAB \cdot LCH^*_{Ma}$: 57 70 64

$lab \cdot olv^*_{Ma}$: 1.0 0.5 0.0

$lab \cdot rgb^*_{Ma}$: 1.0 0.58 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$LAB \cdot LAB^*_{a}$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.218$

data for any colour:

lab^*tch^* and lab^*icu^*

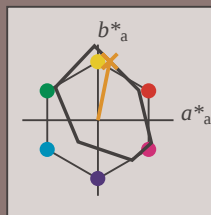
Hue texts:

$u^*_d = o75y$ $u^*_e = r79j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93	93
L _{Ma}	46.95	-56.34	43.46	71.15	142	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228	228
V _{Ma}	20.01	45.2	-52.87	69.56	311	311
M _{Ma}	40.88	70.68	-29.99	76.78	337	337
N _{Ma}	15.0	0.0	0.0	0.0	0	0
W _{Ma}	90.0	0.0	0.0	0.0	0	0
O _{Ma}	39.92	58.74	27.99	65.07	25	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92	92
L _{Ma}	52.23	-42.42	13.6	44.55	162	162
V _{Ma}	30.57	1.41	-46.47	46.49	272	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 67 16 78

$LAB^*LCH^*_{Ma}$: 67 79 78

$lab^*olv^*_{Ma}$: 1.0 0.75 0.0

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

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = o75y$
 $LAB^*LAB^*_a$

$LAB^*LAB^*_a$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

See for similar files: <http://www.ps.bam.de/Ee67/>; www.ps.bam.de/Ee67/
Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1, CIELAB, ColSpX=0

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.258$

data for any colour:

lab^*tch^* and lab^*icu^*

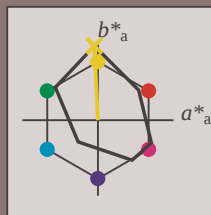
Hue texts:

$u^*_d = y00l$ $u^*_e = j01g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 83 -5 98

$LAB^*LCH^*_{Ma}$: 83 98 92

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

$lab^*rgb^*_{Ma}$: 0.99 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y00l$
 $LAB^*LAB^*_{Ma}$

$LAB^*LAB^*_{Ma}$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

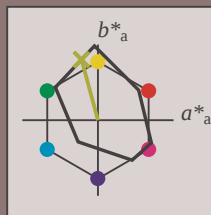
$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.292$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = y25l$ $u^*_e = j18g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	r16j
Y _{Ma}	82.58	-4.64	98.22	98.33	93	r37j
L _{Ma}	46.95	-56.34	43.46	71.15	142	r58j
C _{Ma}	54.62	-26.2	-28.68	38.85	228	r79j
V _{Ma}	20.01	45.2	-52.87	69.56	311	j01g
M _{Ma}	40.88	70.68	-29.99	76.78	337	j18g
N _{Ma}	15.0	0.0	0.0	0.0	0	j36g
W _{Ma}	90.0	0.0	0.0	0.0	0	j53g
O _{Ma}	39.92	58.74	27.99	65.07	25	j71g
Y _{Ma}	81.26	-2.89	71.56	71.62	92	g21b
L _{Ma}	52.23	-42.42	13.6	44.55	162	g60b
V _{Ma}	30.57	1.41	-46.47	46.49	272	g97b

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 71 -22 80

$LAB^*LCH^*_{Ma}$: 71 83 105

$lab^*olv^*_{Ma}$: 0.75 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.82 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

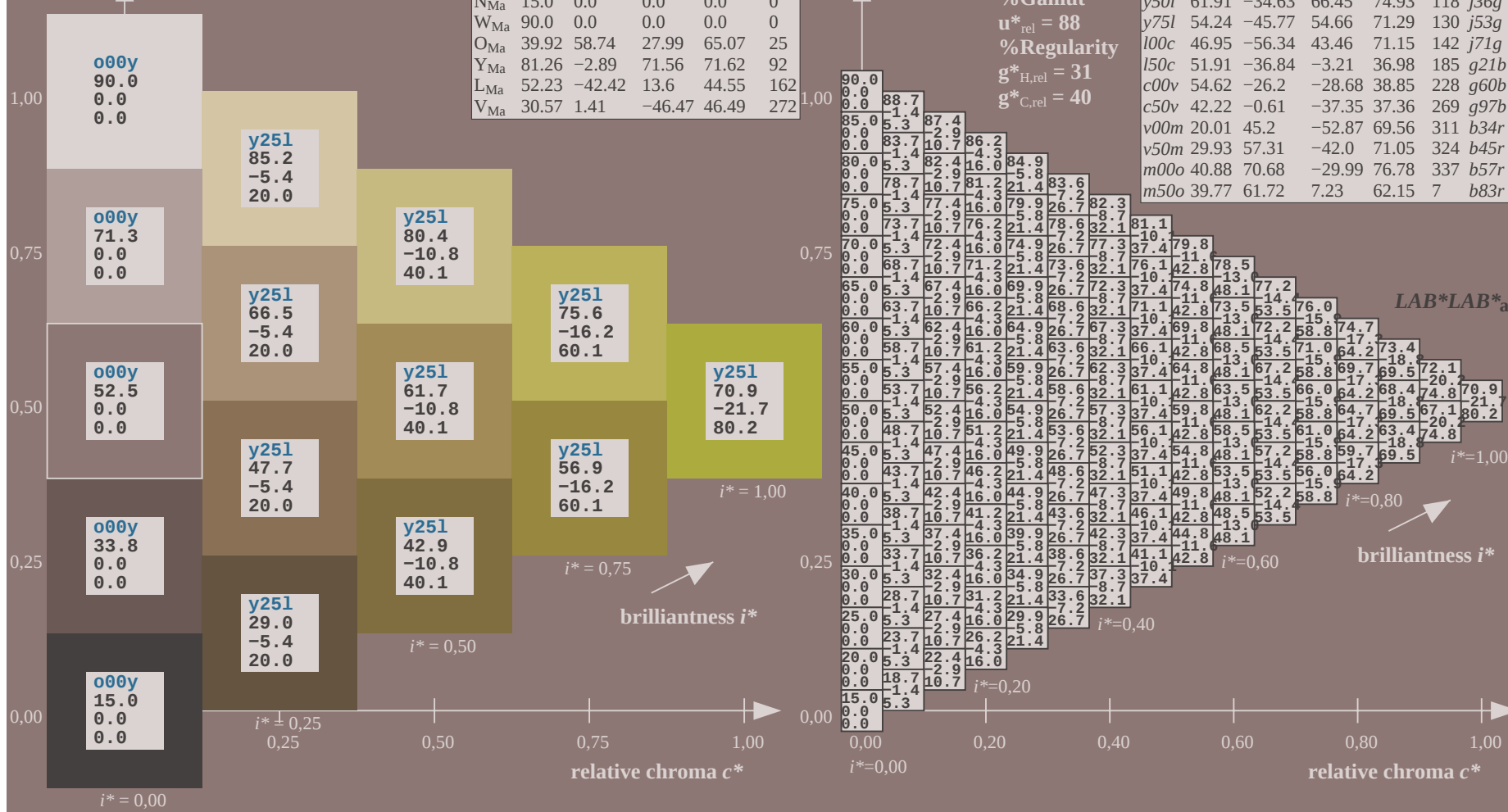
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y25l$
 $LAB^*LAB^*_a$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.326$

data for any colour:

lab^*tch^* and lab^*icu^*

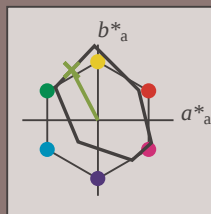
Hue texts:

$u^*_d = y50l$ $u^*_e = j36g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_Ma$: 62 -35 66

$LAB^*LCH^*_Ma$: 62 75 117

$lab^*olv^*_Ma$: 0.5 1.0 0.0

$lab^*rgb^*_Ma$: 0.64 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y50l$
 $LAB^*LAB^*_a$

$LAB^*LAB^*_a$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

$$u_d^* = 100c$$

A diagram of a hexagonal lattice. A green line segment connects two green dots. The horizontal axis is labeled a^* and the vertical axis is labeled b^* .

Data for maximum colour (Ma):

LAB*LAB*_{Ma}: 47 -56 43

*LAB*LCH**_{M3}: 47 71 142

 $lgb*oly*_M3: 0.0 \quad 1.0 \quad 0.0$

lab*rgb*Ma: 0.28 1.0 0.0

triangle lightness t^*

%Gamut

$$u_d^* \quad L^*=L_a^* \quad a_a^* \quad b_a^* \quad C_{ab,a}^* \quad h_{ab,a}^* \quad u_e^*$$

o25y	47.46	42.34	51.25	66.48	50	r37j
o50	56.54	39.3	63.39	79.33	65	r52j

075y	87.55	15.68	77.5	75.47	75	175j
y00l	82.58	-4.64	98.22	98.33	93	j01a

$$y_{50l} \quad 61.91 \quad -34.63 \quad 66.45 \quad 74.93 \quad 118 \quad j_{36g}$$

100c	46.95	-56.34	43.46	71.15	142	<i>j</i> /1g
150c	51.91	-36.84	-3.31	36.98	185	<i>a</i> 21b

c50v	42.22	-0.61	-37.35	37.36	269	<i>g97b</i>
------	-------	-------	--------	-------	-----	-------------

v50m	29.93	57.31	-42.0	71.05	324	b45r
22	42.22	72.62	22.22	76.72	327	b55r

13500	55.77	61.72	7.25	62.15	7	6051
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20.3	67.0	
64.9	30.0	64.2

LAB*LAB_a

54.9	23.2	54.2	29.0	53.4	34.8	52.7	
-26.7	-33.8	-41.3	-48.8	-40.8			

26.3	29.2	33.8	41.5	54.8	48.8	56.3
20.3	47.0	26.1	46.3	31.9	45.6	37.7
					44.8	43.5

20.3	42.0	26.1	41.3	31.9	40.6	37.7	$i^*=1,00$
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20.3	30.0	26.1	37.5	31.9
34.9	22.2	34.2	29.0	

$i^* = 0,80$

brilliantness i^*

no / www sel...
www0*.net



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.632$

data for any colour:

lab^*tch^* and lab^*icu^*

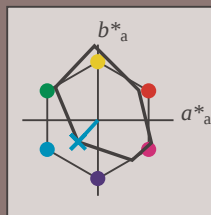
Hue texts:

$u^*_d = c00v$ $u^*_e = g60b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 55 -26 -29

$LAB^*LCH^*_{Ma}$: 55 39 227

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

$lab^*rgb^*_{Ma}$: 0.0 0.81 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

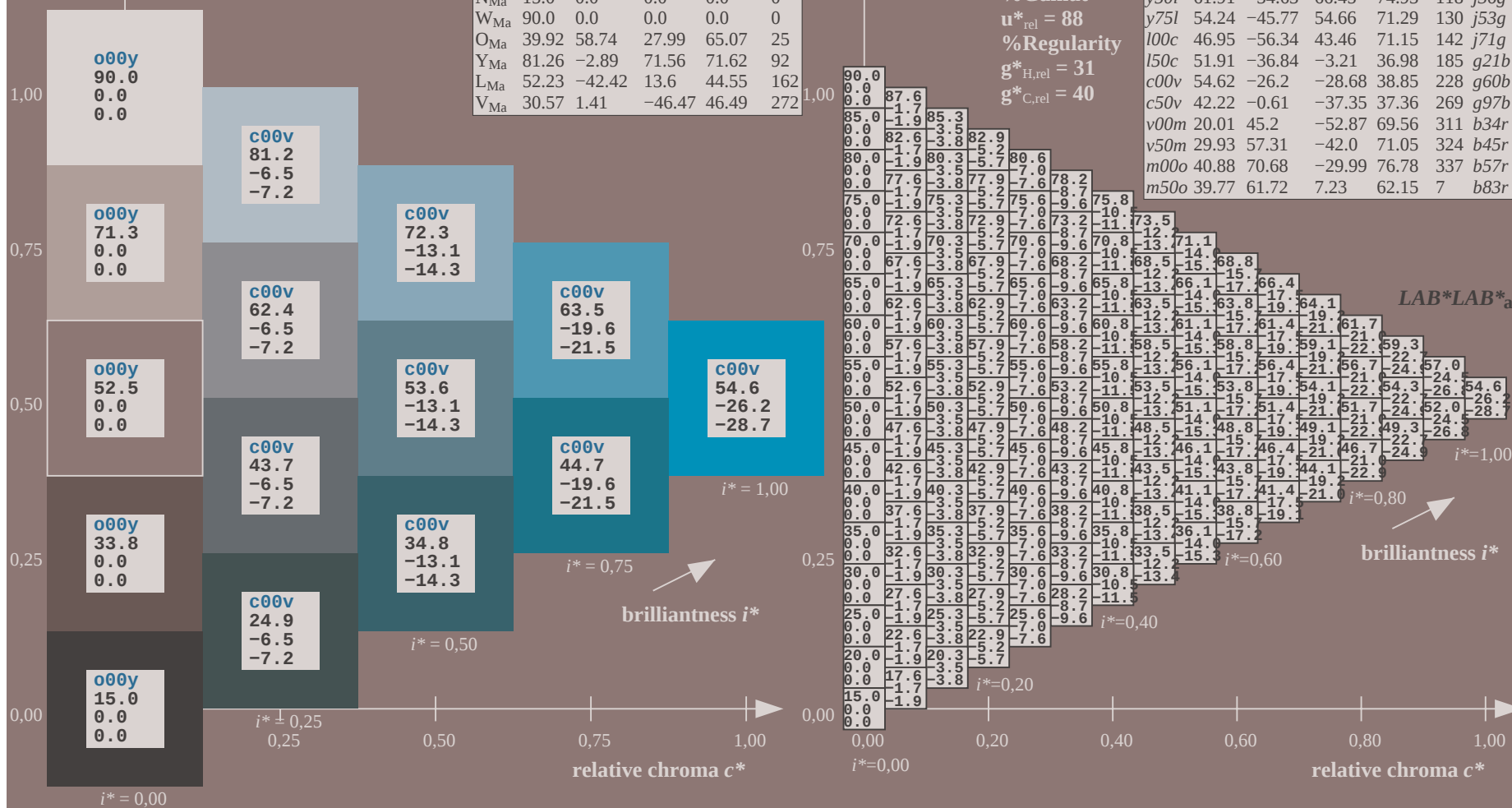
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

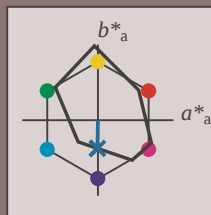
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = c00v$
 $LAB^*LAB^*_a$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.747$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = c50v$ $u^*_e = g97b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	r16j
Y _{Ma}	82.58	-4.64	98.22	98.33	93	r37j
L _{Ma}	46.95	-56.34	43.46	71.15	142	r58j
C _{Ma}	54.62	-26.2	-28.68	38.85	228	r79j
V _{Ma}	20.01	45.2	-52.87	69.56	311	j01g
M _{Ma}	40.88	70.68	-29.99	76.78	337	j18g
N _{Ma}	15.0	0.0	0.0	0.0	0	j36g
W _{Ma}	90.0	0.0	0.0	0.0	0	j53g
O _{Ma}	39.92	58.74	27.99	65.07	25	j71g
Y _{Ma}	81.26	-2.89	71.56	71.62	92	g21b
L _{Ma}	52.23	-42.42	13.6	44.55	162	g60b
V _{Ma}	30.57	1.41	-46.47	46.49	272	g97b

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 42 -1 -37

$LAB \cdot LCH^*_{Ma}$: 42 37 269

$lab \cdot olv^*_{Ma}$: 0.0 0.5 1.0

$lab \cdot rgb^*_{Ma}$: 0.0 0.05 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$LAB \cdot LAB^*_{a}$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

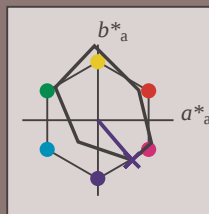
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.863$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = v00m$ $u^*_e = b34r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	r16j
Y _{Ma}	82.58	-4.64	98.22	98.33	93	r37j
L _{Ma}	46.95	-56.34	43.46	71.15	142	r58j
C _{Ma}	54.62	-26.2	-28.68	38.85	228	r79j
V _{Ma}	20.01	45.2	-52.87	69.56	311	j01g
M _{Ma}	40.88	70.68	-29.99	76.78	337	j18g
N _{Ma}	15.0	0.0	0.0	0.0	0	j36g
W _{Ma}	90.0	0.0	0.0	0.0	0	j53g
O _{Ma}	39.92	58.74	27.99	65.07	25	j71g
Y _{Ma}	81.26	-2.89	71.56	71.62	92	g21b
L _{Ma}	52.23	-42.42	13.6	44.55	162	g60b
V _{Ma}	30.57	1.41	-46.47	46.49	272	g97b

Data for maximum colour (Ma):

$LAB^*LAB^*_Ma$: 20 45 -53

$LAB^*LCH^*_Ma$: 20 70 310

$lab^*olv^*_Ma$: 0.0 0.0 1.0

$lab^*rgb^*_Ma$: 0.68 0.0 1.0

triangle lightness t^*

%Gamut

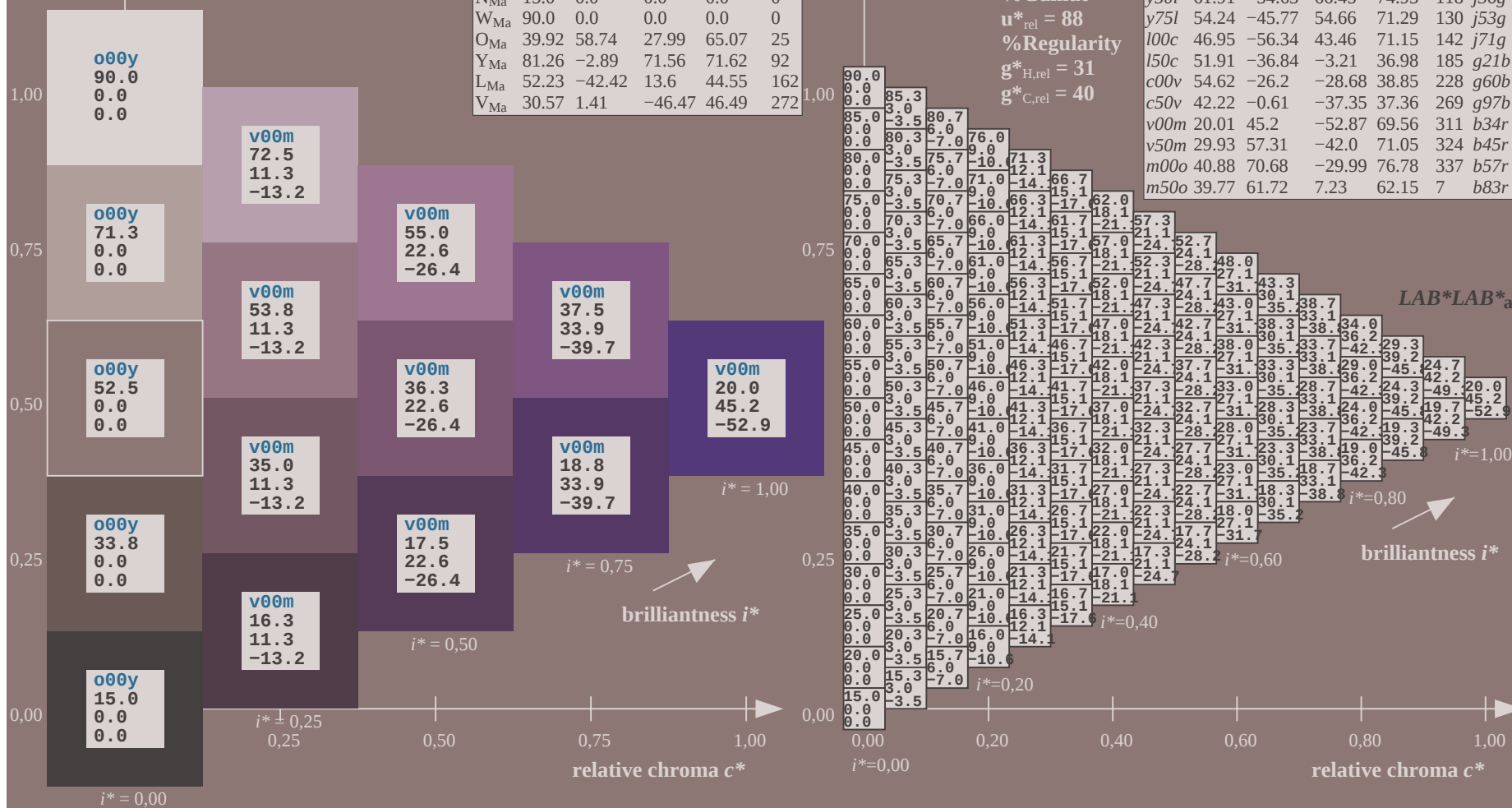
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.899$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

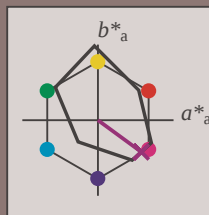
Hue texts:

$u^*_d = v50m$ $u^*_e = b45r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 30 57 -42

$LAB \cdot LCH^*_{Ma}$: 30 71 323

$lab \cdot olv^*_{Ma}$: 0.5 0.0 1.0

$lab \cdot rgb^*_{Ma}$: 0.91 0.0 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = v50m$
 $LAB \cdot LAB^*_{Ma}$

$LAB \cdot LAB^*_{Ma}$

brilliantness i^*

$i^* = 1.00$

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.936$

data for any colour:

lab^*tch^* and lab^*icu^*

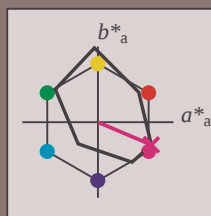
Hue texts:

$u^*_d = m00o$ $u^*_e = b57r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 41 71 -30

$LAB^*LCH^*_{Ma}$: 41 77 337

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.85

triangle lightness t^*

%Gamut

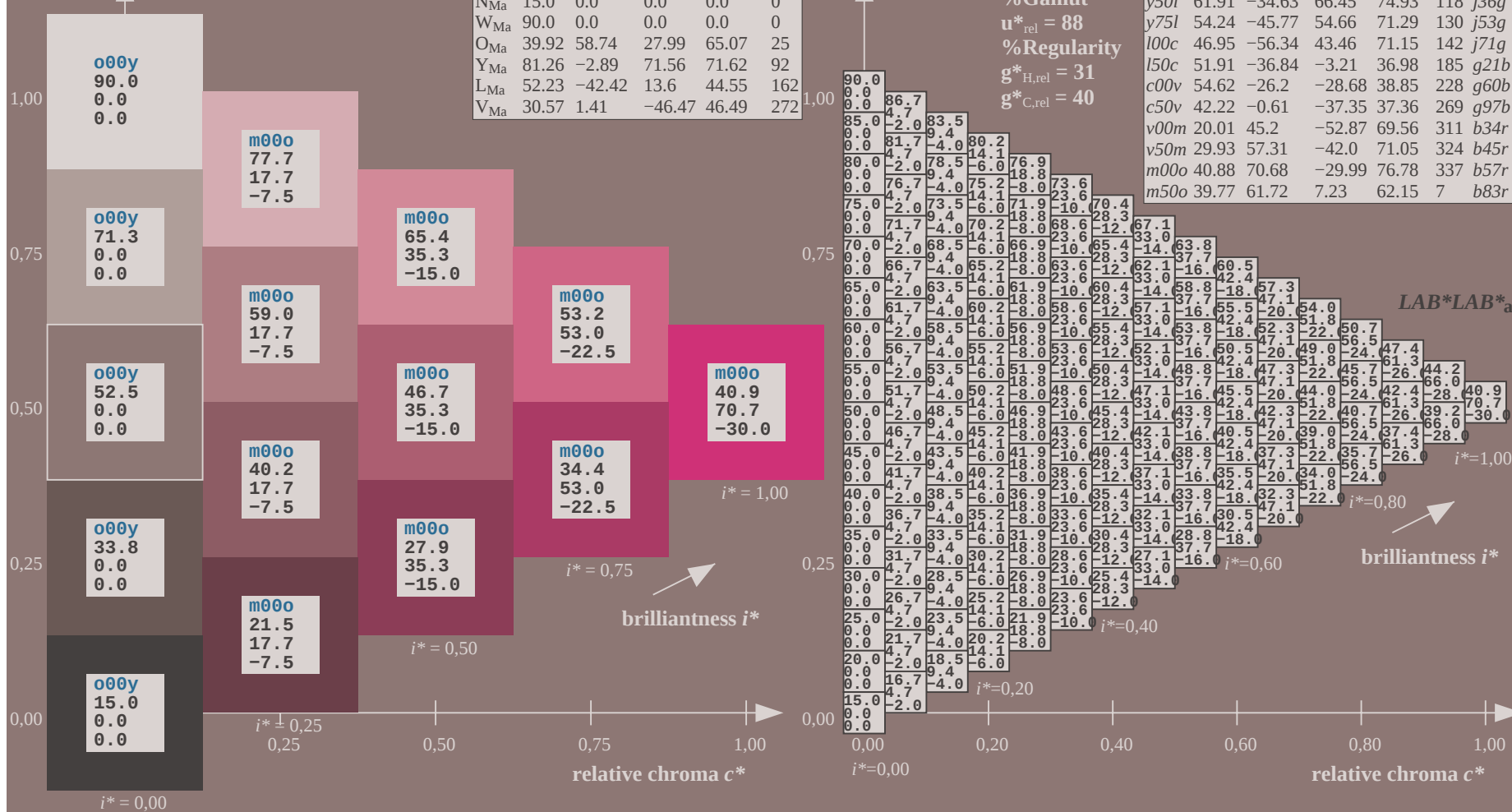
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.019$

data for any colour:

lab^*tch^* and lab^*icu^*

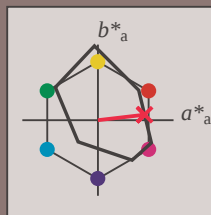
Hue texts:

$u^*_d = m50o$ $u^*_e = b83r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 40 62 7

$LAB^*LCH^*_{Ma}$: 40 62 6

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.33

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = m50o$
 $LAB^*LAB^*_{Ma}$

$LAB^*LAB^*_{Ma}$

$i^* = 1.00$

brilliantness i^*

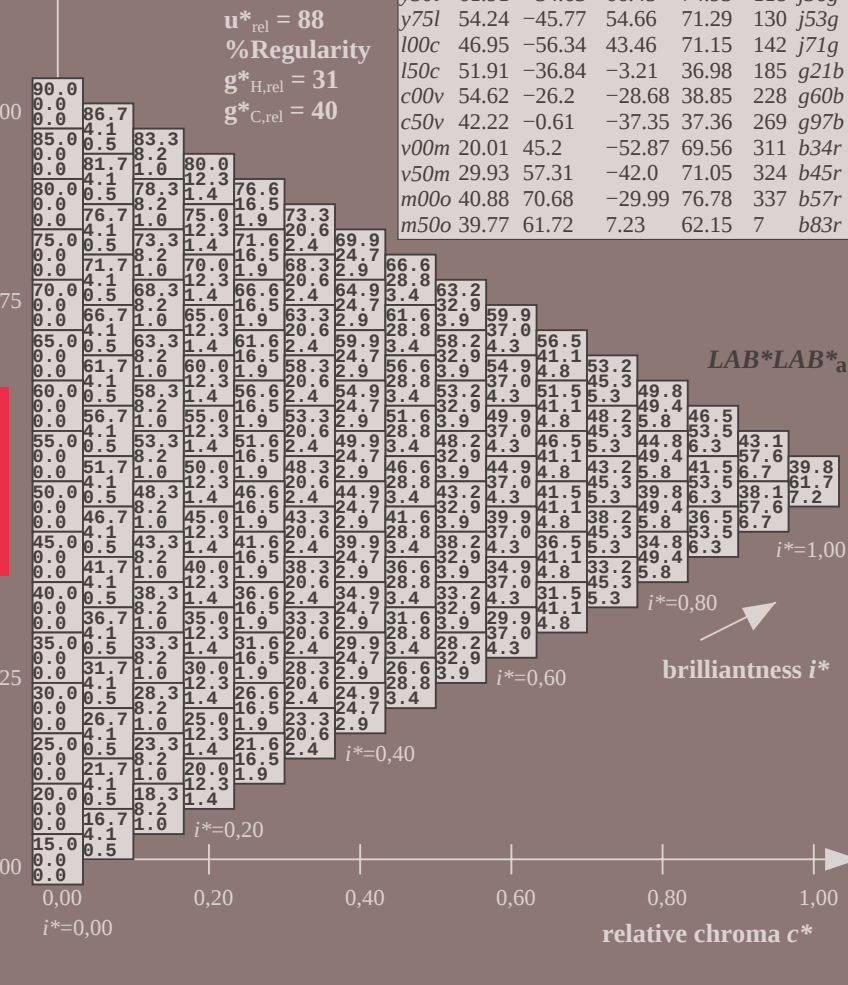
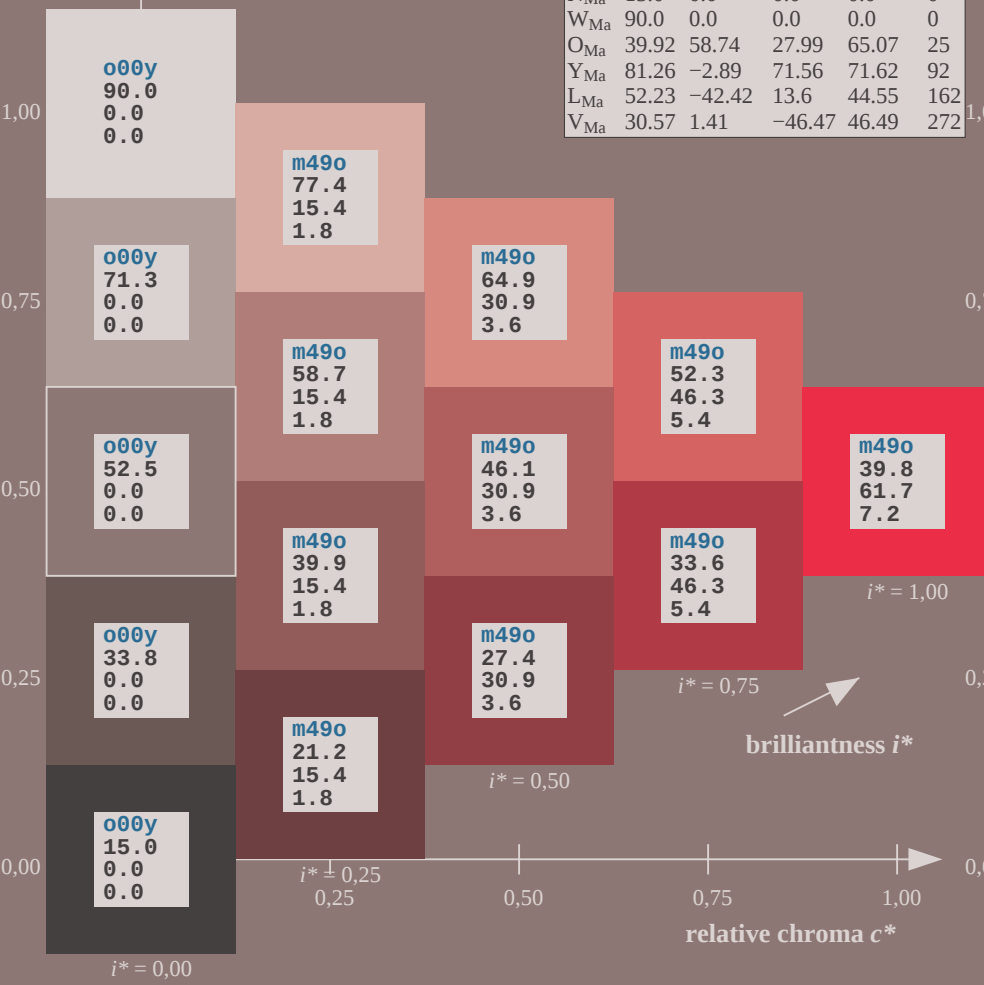
$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$



See for similar files: <http://www.ps.bam.de/Ee67/>; www.ps.bam.de/Ee67/
Technical information: <http://www.ps.bam.de> Version 2.1, io=1, CIELAB, ColSpx=0

BAM registration: 20081001-Ee67/10L/L67E00FP.PS/.PDF BAM material: code=rhatha
application for evaluation and measurement of printer or monitor systems

	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	a	b	c	d	e	f	g	h	i	j	k	LAB*	LAB*	
01	15.0	19.0	23.0	27.0	31.0	35.0	39.0	43.0	47.0	51.0	55.0	59.0	63.0	67.0	71.0	75.0	79.0	83.0	87.0	91.0	95.0	99.0	103.0	107.0	111.0	115.0	119.0	123.0	127.0	131.0	135.0	139.0	143.0	147.0	151.0	155.0	159.0	163.0	167.0	
02	5.7	-3.3	-9.2	-15.4	-21.8	-28.3	-35.0	-41.9	-48.8	-55.8	-62.8	-69.8	-76.8	-83.8	-90.8	-97.8	-104.8	-111.8	-118.8	-125.8	-132.8	-139.8	-146.8	-153.8	-160.8	-167.8	-174.8	-181.8	-188.8	-195.8	-202.8	-209.8	-216.8	-223.8	-230.8	-237.8	-244.8	-251.8	-258.8	
03	11.3	-0.2	-6.5	-12.5	-18.4	-24.5	-30.7	-37.1	-43.5	-49.8	-56.1	-62.4	-68.7	-75.0	-81.3	-87.6	-93.9	-100.2	-106.5	-112.8	-119.1	-125.4	-131.7	-138.0	-144.3	-150.6	-156.9	-163.2	-169.5	-175.8	-182.1	-188.4	-194.7	-201.0	-207.3	-213.6	-219.9	-226.2	-232.5	
04	16.9	23.4	26.7	29.9	34.1	38.4	42.7	46.9	51.2	55.4	59.7	63.9	68.2	72.4	76.7	80.9	85.2	89.4	93.7	97.9	102.2	106.4	110.7	114.9	119.2	123.4	127.7	131.9	136.2	140.4	144.7	148.9	153.2	157.4	161.7	165.9	170.2	174.4	178.7	
05	22.6	7.7	-0.3	-6.6	-13.1	-19.4	-25.6	-31.9	-38.2	-44.5	-50.8	-57.1	-63.4	-69.7	-76.0	-82.3	-88.6	-94.9	-101.2	-107.5	-113.8	-120.1	-126.4	-132.7	-139.0	-145.3	-151.6	-157.9	-164.2	-170.5	-176.8	-183.1	-189.4	-195.7	-202.0	-208.3	-214.6	-220.9		
06	28.1	25.9	30.3	33.6	36.9	40.2	43.5	46.8	50.1	53.4	56.7	60.0	63.3	66.6	69.9	73.2	76.5	79.8	83.1	86.4	89.7	93.0	96.3	99.6	102.9	106.2	109.5	112.8	116.1	119.4	122.7	126.0	129.3	132.6	135.9	139.2	142.5	145.8	149.1	
07	33.9	27.4	31.8	35.4	38.5	41.5	44.4	47.3	50.2	53.1	56.0	58.9	61.8	64.7	67.6	70.5	73.4	76.3	79.2	82.1	85.0	87.9	90.8	93.7	96.6	99.5	102.4	105.3	108.2	111.1	114.0	116.9	119.8	122.7	125.6	128.5	131.4	134.3	137.2	
08	39.7	31.0	35.4	39.0	42.0	44.9	47.8	50.7	53.6	56.5	59.4	62.3	65.2	68.1	71.0	73.9	76.8	79.7	82.6	85.5	88.4	91.3	94.2	97.1	100.0	102.9	105.8	108.7	111.6	114.5	117.4	120.3	123.2	126.1	129.0	131.9	134.8	137.7	140.6	
09	45.2	37.5	41.9	45.5	49.1	52.7	56.3	59.9	63.5	67.1	70.7	74.3	77.9	81.5	85.1	88.7	92.3	95.9	99.5	103.1	106.7	110.3	113.9	117.5	121.1	124.7	128.3	131.9	135.5	139.1	142.7	146.3	149.9	153.5	157.1	160.7	164.3	167.9	171.5	
10	50.9	42.8	47.2	50.8	54.4	58.0	61.6	65.2	68.8	72.4	76.0	79.6	83.2	86.8	90.4	94.0	97.6	101.2	104.8	108.4	112.0	115.6	119.2	122.8	126.4	130.0	133.6	137.2	140.8	144.4	148.0	151.6	155.2	158.8	162.4	166.0	169.6	173.2	176.8	
11	56.6	48.5	52.9	56.5	60.1	63.7	67.3	70.9	74.5	78.1	81.7	85.3	88.9	92.5	96.1	99.7	103.3	106.9	110.5	114.1	117.7	121.3	124.9	128.5	132.1	135.7	139.3	142.9	146.5	150.1	153.7	157.3	160.9	164.5	168.1	171.7	175.3	178.9	182.5	
12	62.3	54.2	58.6	62.2	65.8	69.4	73.0	76.6	80.2	83.8	87.4	91.0	94.6	98.2	101.8	105.4	109.0	112.6	116.2	119.8	123.4	127.0	130.6	134.2	137.8	141.4	145.0	148.6	152.2	155.8	159.4	163.0	166.6	170.2	173.8	177.4	181.0	184.6	188.2	
13	68.0	60.0	64.4	68.0	71.6	75.2	78.8	82.4	86.0	89.6	93.2	96.8	100.4	104.0	107.6	111.2	114.8	118.4	122.0	125.6	129.2	132.8	136.4	140.0	143.6	147.2	150.8	154.4	158.0	161.6	165.2	168.8	172.4	176.0	179.6	183.2	186.8	190.4	194.0	
14	73.7	65.7	70.1	73.7	77.3	80.9	84.5	88.1	91.7	95.3	98.9	102.5	106.1	109.7	113.3	116.9	120.5	124.1	127.7	131.3	134.9	138.5	142.1	145.7	149.3	152.9	156.5	160.1	163.7	167.3	170.9	174.5	178.1	181.7	185.3	188.9	192.5	196.1	199.7	
15	79.4	71.4	75.8	79.4	83.0	86.6	90.2	93.8	97.4	101.0	104.6	108.2	111.8	115.4	119.0	122.6	126.2	129.8	133.4	137.0	140.6	144.2	147.8	151.4	155.0	158.6	162.2	165.8	169.4	173.0	176.6	180.2	183.8	187.4	191.0	194.6	198.2	201.8	205.4	
16	85.1	77.1	81.5	85.1	88.7	92.3	95.9	99.5	103.1	106.7	110.3	113.9	117.5	121.1	124.7	128.3	131.9	135.5	139.1	142.7	146.3	149.9	153.5	157.1	160.7	164.3	167.9	171.5	175.1	178.7	182.3	185.9	189.5	193.1	196.7	200.3	203.9	207.5	211.1	
17	90.8	82.8	87.2	90.8	94.4	98.0	101.6	105.2	108.8	112.4	116.0	119.6	123.2	126.8	130.4	134.0	137.6	141.2	144.8	148.4	152.0	155.6	159.2	162.8	166.4	170.0	173.6	177.2	180.8	184.4	188.0	191.6	195.2	198.8	202.4	206.0	209.6	213.2	216.8	
18	96.5	88.5	92.9	96.5	100.1	103.7	107.3	110.9	114.5	118.1	121.7	125.3	128.9	132.5	136.1	139.7	143.3	146.9	150.5	154.1	157.7	161.3	164.9	168.5	172.1	175.7	179.3	182.9	186.5	190.1	193.7	197.3	200.9	204.5	208.1	211.7	215.3	218.9	222.5	
19	102.2	94.2	98.6	102.2	105.8	109.4	113.0	116.6	120.2	123.8	127.4	131.0	134.6	138.2	141.8	145.4	149.0	152.6	156.2	159.8	163.4	167.0	170.6	174.2	177.8	181.4	185.0	188.6	192.2	195.8	199.4	203.0	206.6	210.2	213.8	217.4	221.0	224.6	228.2	
20	107.9	99.9	104.3	107.9	111.5	115.1	118.7	122.3	125.9	129.5	133.1	136.7	140.3	143.9	147.5	151.1	154.7	158.3	161.9	165.5	169.1	172.7	176.3	179.9	183.5	187.1	190.7	194.3	197.9	201.5	205.1	208.7	212.3	215.9	219.5	223.1	226.7	230.3	233.9	
21	113.6	105.6	110.0	113.6	117.2	120.8	124.4	128.0	131.6	135.2	138.8	142.4	146.0	149.6	153.2	156.8	160.4	164.0	167.6	171.2	174.8	178.4	182.0	185.6	189.2	192.8	196.4	200.0	203.6	207.2	210.8	214.4	218.0	221.6	225.2	228.8	232.4	236.0	239.6	243.2
22	119.3	111.3	115.7	119.3	122.9	126.5	130.1	133.7	137.3	140.9	144.5	148.1	151.7	155.3	158.9	162.5	166.1	169.7	173.3	176.9	180.5	184.1	187.7	191.3	194.9	198.5	202.1	205.7	209.3	212.9	216.5	220.1	223.7	227.3	230.9	234.5	238.1	241.7	245.3	248.9
23	125.0	117.0	121.4	125.0	128.6	132.2	135.8	139.4	143.0	146.6	150.2	153.8	157.4	161.0	164.6	168.2	171.8	175.4	179.0	182.6	186.2	189.8	193.4	197.0	200.6	204.2	207.8	211.4	215.0	218.6	222.2	225.8	229.4	233.0	236.6	240.2	243.8	247.4	251.0	254.6
24	130.7	122.7	127.1	130.7	134.3	137.9	141.5	145.1	148.7	152.3	155.9	159.5	163.1	166.7	170.3	173.9	177.5	181.1	184.7	188.3	191.9	195.5	199.1	202.7	206.3	209.9	213.5	217.1	220.7	224.3	227.9	231.5	235.1	238.7	242.3	245.9	249.5	253.1	256.7	260.3
25	136.4	128.4	132.8	136.4	140.0	143.6	147.2	150.8	154.4	158.0	161.6	165.2	168.8	172.4	176.0	179.6	183.2	186.8	190.4	194.0	197.6	201.2	204.8	208.4	212.0	215.6	219.2	222.8	226.4	230.0	233.6	237.2	240.8	244.4	248.0	251.6	255.2	258.8	262.4	266.0
26	142.1	134.1	138.5	142.1	145.7	149.3	152.9	156.5	160.1	163.7	167.3	170.9	174.5	178.1	181.7	185.3	188.9	192.5	196.1	199.7	203.3	206.9	210.5	214.1	217.7	221.3	224.9	228.5	232.1	235.7	239.3	242.9	246.5	250.1	253.7	257.3	260.9	264.5	268.1	271.7
27	147.8	139.8	144.2	147.8	151.4	155.0	158.6	162.2	165.8	169.4	173.0	176.6	180.2	183.8	187.4	191.0	194.6	198.2	201.8	205.4	209.0	212.6	216.2	219.8	223.4	227.0	230.6	234.2	237.8	241.4	245.0	248.6	252.2	255.8	259.4	263.0	266.6	270.2	273.8	277.4

Input and output:

Colorimetric Printer Reflective System FRS15_90a
data for any colour:

u^*_d and number $no.$ = 00 .. 15

device hue text:

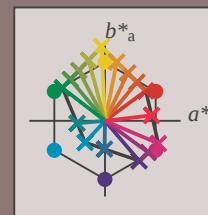
u^*_d = 16 hues $o00y$, $o25y$, ..., $m50o$

contrast reduction factor:

$c_R = 0.9$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$



%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	38.8	53.92	39.68	66.95	36
Y_{Ma}	82.58	-4.64	98.22	98.33	93
L_{Ma}	46.95	-56.34	43.46	71.15	142
C_{Ma}	54.62	-26.2	-28.68	38.85	228
V_{Ma}	20.01	45.2	-52.87	69.56	311
M_{Ma}	40.88	70.68	-29.99	76.78	337
N_{Ma}	15.0	0.0	0.0	0.0	0
W_{Ma}	90.0	0.0	0.0	0.0	0
O_{CIE}	39.92	58.74	27.99	65.07	25
Y_{CIE}	81.26	-2.89	71.56	71.62	92
L_{CIE}	52.23	-42.42	13.6	44.55	162
V_{CIE}	30.57	1.41	-46.47	46.49	272



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.101$

data for any colour:

lab^*tch^* and lab^*icu^*

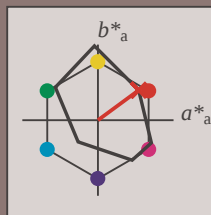
Hue texts:

$u^*_d = o00y$ $u^*_e = r16j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 39 54 40

$LAB^*LCH^*_{Ma}$: 39 67 36

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

$lab^*rgb^*_{Ma}$: 1.0 0.16 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$LAB^*LCH^*_{Ma}$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

$i^*=0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.14$

data for any colour:

lab^*tch^* and lab^*icu^*

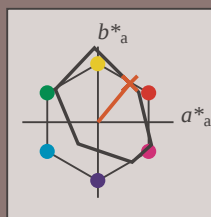
Hue texts:

$u^*_d = o25y$ $u^*_e = r37j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 42 51

$LAB^*LCH^*_{Ma}$: 47 66 50

$lab^*olv^*_{Ma}$: 1.0 0.25 0.0

$lab^*rgb^*_{Ma}$: 1.0 0.37 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$LAB^*LCH^*_{Ma}$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

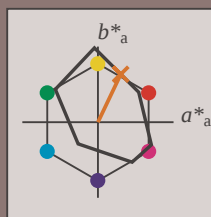
$i^*=0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.179$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = o50y$ $u^*_e = r58j$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 57 30 63
 $LAB^*LCH^*_{Ma}$: 57 70 64
 $lab^*olv^*_{Ma}$: 1.0 0.5 0.0
 $lab^*rgb^*_{Ma}$: 1.0 0.58 0.0
triangle lightness t^*

%Gamut
 $u^*_{rel} = 88$
%Regularity
 $g^*_{H,rel} = 31$
 $g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$LAB^*LCH^*_{Ma}$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

$i^*=0.00$

BAM registration: 20081001-Ee67/10L/L67E00FP.PS/.PDF BAM material: code=rh4ta4
- application for evaluation and measurement of printer or monitor systems

$u^*_d = 0.75y$
 $LAB^*LCH^*_a$

FRS15_90a; adapted (a) CIELAB data

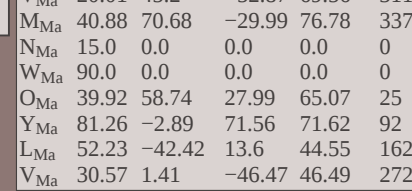
$$u_d^* \quad L^* = L_a^* \quad d_a^* \quad b_a^* \quad C_{ab,a}^* \quad h_{ab,a}^*$$

O _{Ma}	38.8	53.92	39.68	66.95	36
H	22.52	1.64	22.22	22.22	22

Y _{Ma}	82.58	-4.64	98.22	98.33	93
I	46.05	-56.34	43.46	71.15	142

L _{Ma}	46.95	-56.34	43.46	71.15	142
C _x	54.62	-26.2	-28.68	38.85	228

V_{M2}	20.01	45.2	-52.87	69.56	311
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FRS15_90a; adapted (a) CIELAB data

$$u_d^* \quad L^* = L_a^* \quad d_a^* \quad b_a^* \quad C_{ab,a}^* \quad h_{ab,i}^*$$

000y	38.8	53.92	39.68	66.95	36
25	47.46	43.34	54.35	66.48	52

025y	47.46	42.34	51.25	66.48	50
050y	56.54	30.2	63.30	70.22	65

050y	56.54	30.2	63.39	70.22	65
075y	67.39	15.68	77.9	79.47	79

075y	07.55	15.00	77.5	75.47	75
y00l	82.58	-4.64	98.22	98.33	93

y25l	70.85	-21.66	80.19	83.07	105
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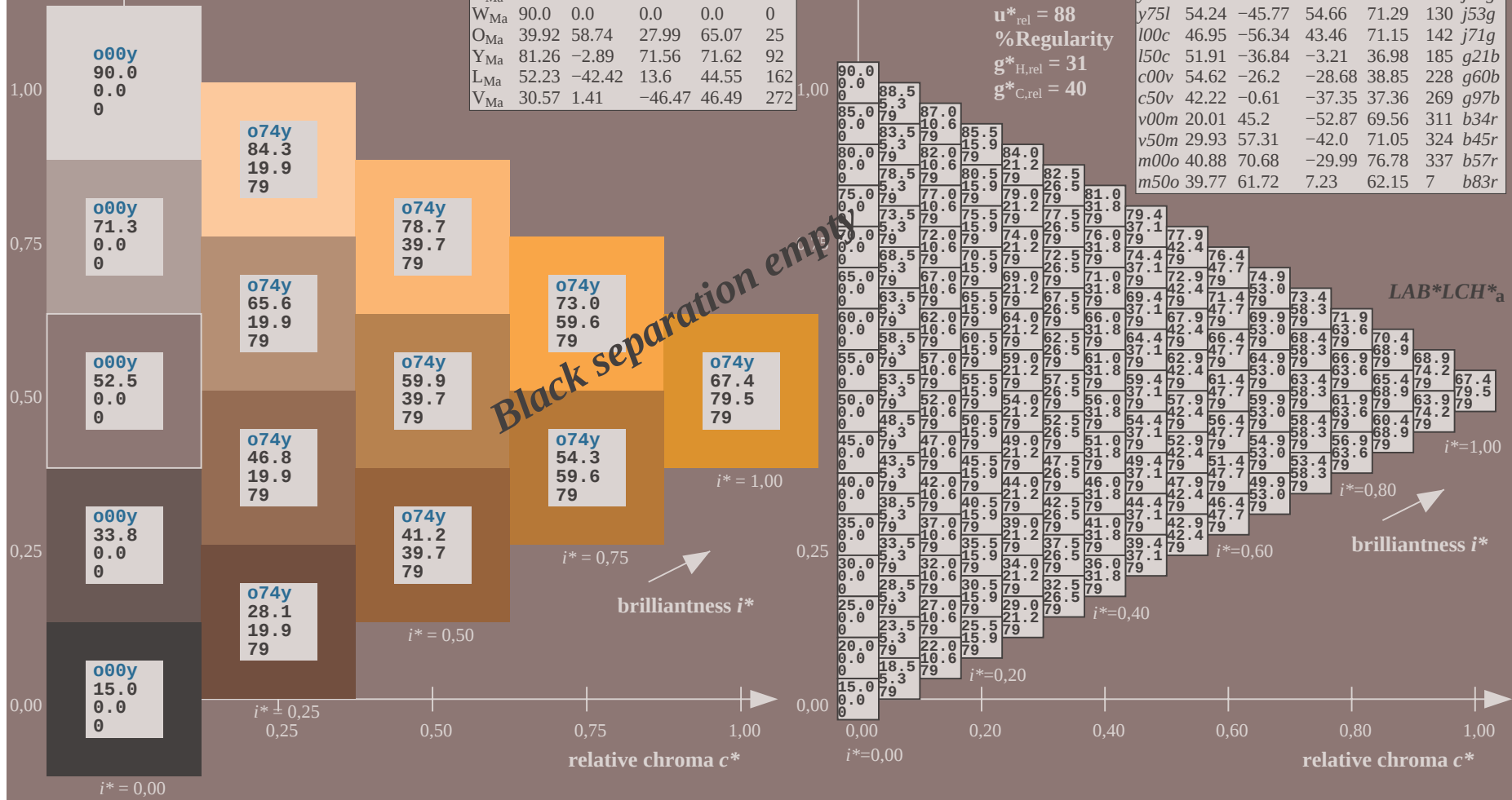
<i>y50l</i>	61.91	-34.63	66.45	74.93	118
<i>y51l</i>	54.24	-47.77	54.68	51.88	128

y75l	54.24	-45.77	54.66	71.29	130
100	46.05	56.34	43.46	71.15	142

100c	46.95	-56.34	43.46	71.15	142
150c	51.91	-36.84	-3.21	36.98	185

150C	51.91	50.04	5.21	50.90	105
600V	54.62	-26.2	-28.68	38.85	228

c50v	42.22	-0.61	-37.35	37.36	269
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Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.258$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

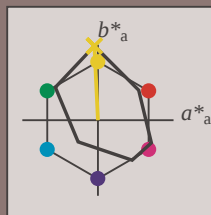
Hue texts:

$u^*_d = y00l$ $u^*_e = j01g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 83 -5 98

$LAB \cdot LCH \cdot Ma$: 83 98 92

$lab \cdot olv \cdot Ma$: 1.0 1.0 0.0

$lab \cdot rgb \cdot Ma$: 0.99 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y00l$
 $LAB \cdot LCH \cdot a$

$LAB \cdot LCH \cdot a$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

$i^*=0.00$

Black separation empty

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = \text{lab} \cdot h^* = h_{ab}/360 = 0.292$

data for any colour:

$\text{lab} \cdot \text{tch}^*$ and $\text{lab} \cdot \text{icu}^*$

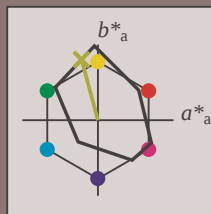
Hue texts:

$u^*_d = y25l$ $u^*_e = j18g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$\text{LAB} \cdot \text{LAB}^*_{\text{Ma}}$: 71 -22 80

$\text{LAB} \cdot \text{LCH}^*_{\text{Ma}}$: 71 83 105

$\text{lab} \cdot \text{olv}^*_{\text{Ma}}$: 0.75 1.0 0.0

$\text{lab} \cdot \text{rgb}^*_{\text{Ma}}$: 0.82 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{\text{rel}} = 88$

%Regularity

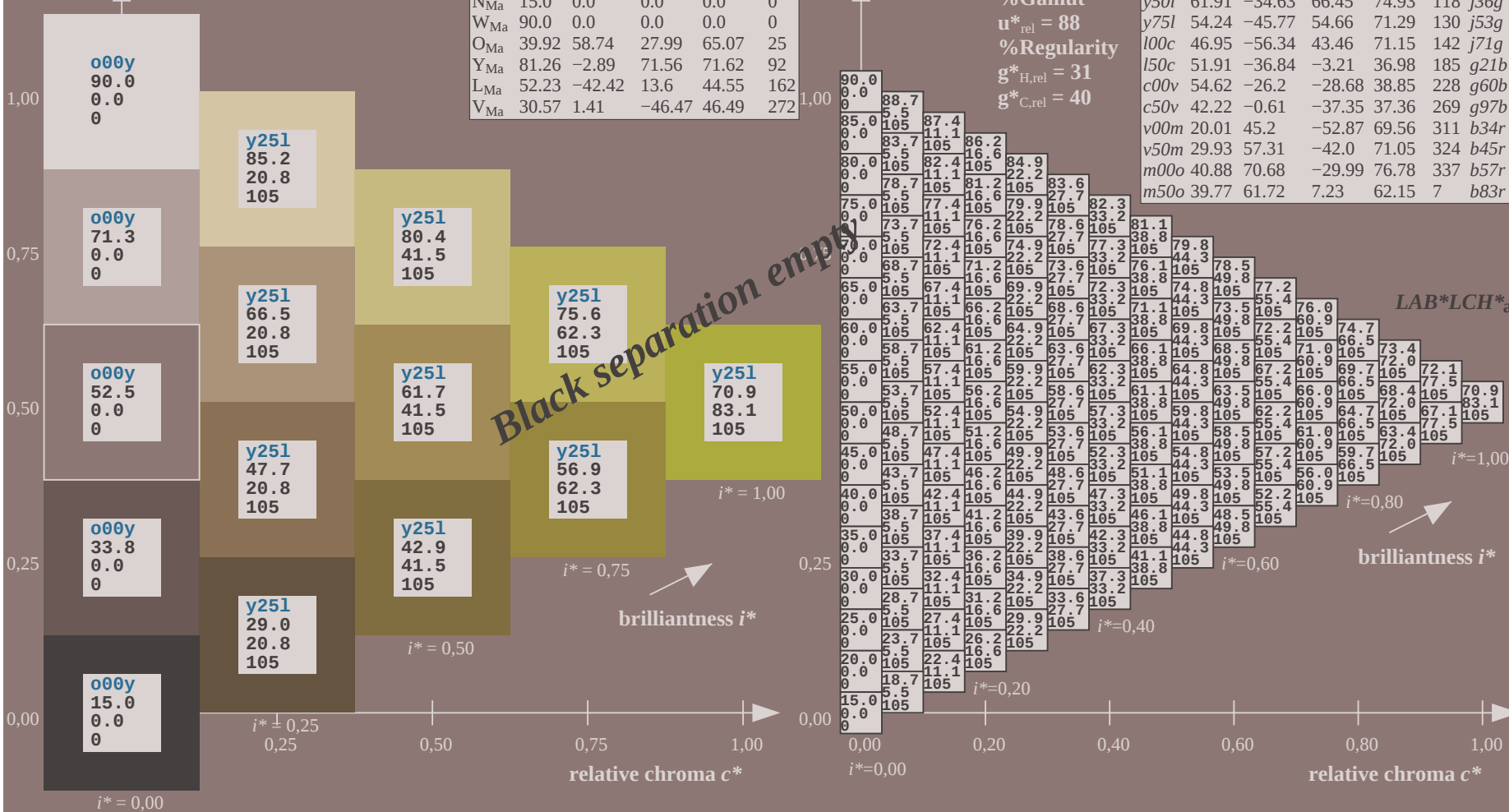
$g^*_{H,\text{rel}} = 31$

$g^*_{C,\text{rel}} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y25l$
 $\text{LAB} \cdot \text{LCH}^*_{\text{Ma}}$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.326$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

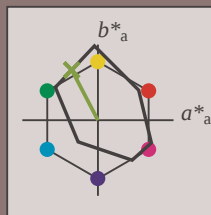
Hue texts:

$u^*_d = y50l$ $u^*_e = j36g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 62 -35 66

$LAB \cdot LCH \cdot Ma$: 62 75 117

$lab \cdot olv \cdot Ma$: 0.5 1.0 0.0

$lab \cdot rgb \cdot Ma$: 0.64 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y50l$
 $LAB \cdot LCH \cdot a$

$LAB \cdot LCH \cdot a$

$i^* = 1.00$

$i^* = 0.80$

brilliantness i^*

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

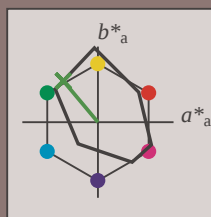
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.361$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = y75l$ $u^*_e = j53g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 54 -46 55

$LAB \cdot LCH^*_{Ma}$: 54 71 129

$lab \cdot olv^*_{Ma}$: 0.25 1.0 0.0

$lab \cdot rgb^*_{Ma}$: 0.46 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

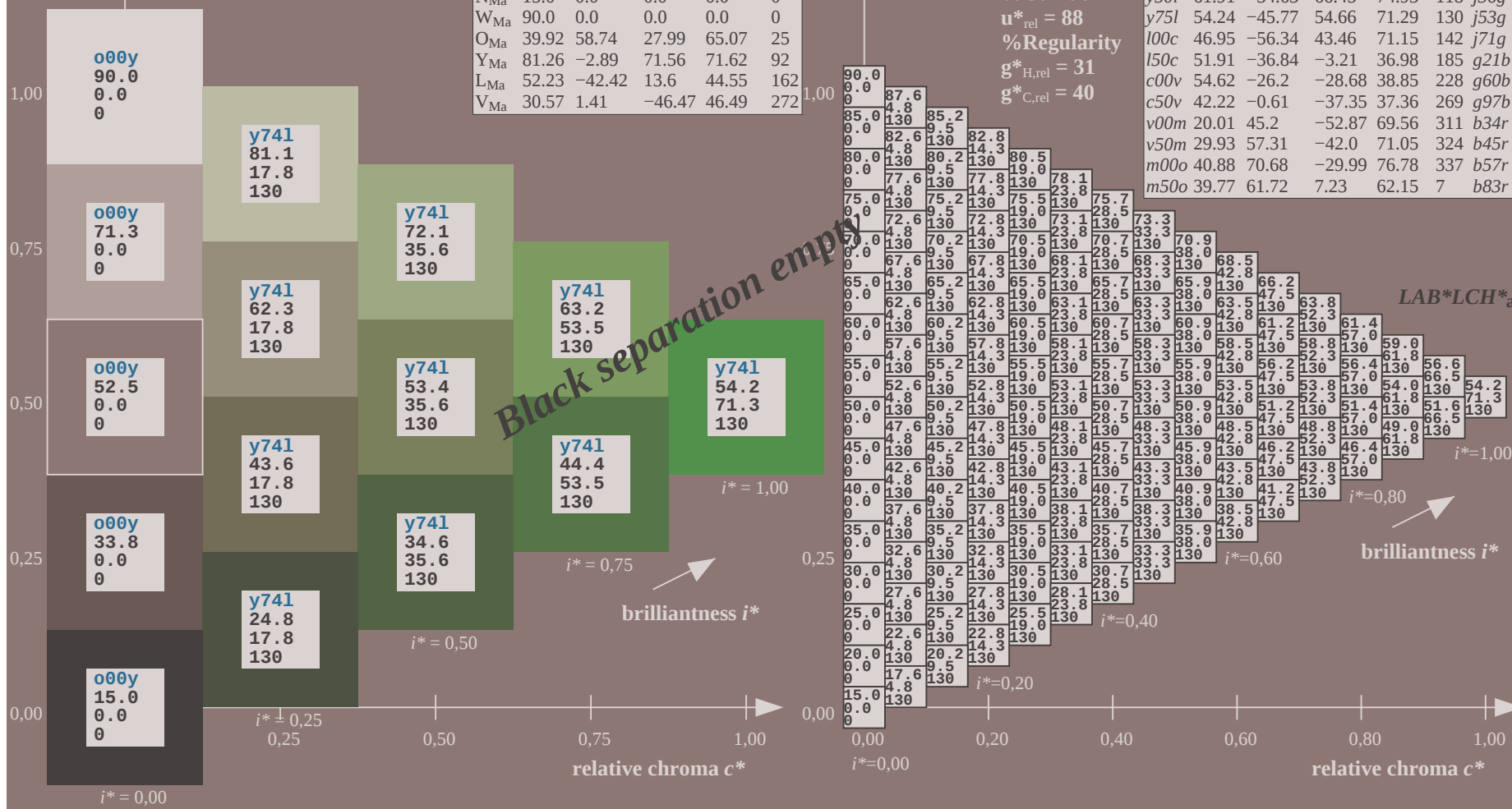
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

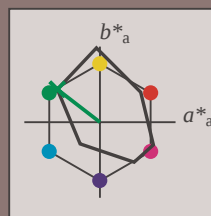
FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y75l$
 $LAB \cdot LCH^*_{Ma}$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.395$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = 100c$ $u^*_e = j71g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 -56 43

$LAB^*LCH^*_{Ma}$: 47 71 142

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

$lab^*rgb^*_{Ma}$: 0.28 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = 100c$
 $LAB^*LCH^*_{Ma}$

$LAB^*LCH^*_{Ma}$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

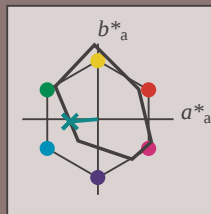
$i^* = 0.20$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.514$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = 150c$ $u^*_e = g21b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 52 -37 -3

$LAB^*LCH^*_{Ma}$: 52 37 184

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

$lab^*rgb^*_{Ma}$: 0.0 1.0 0.42

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

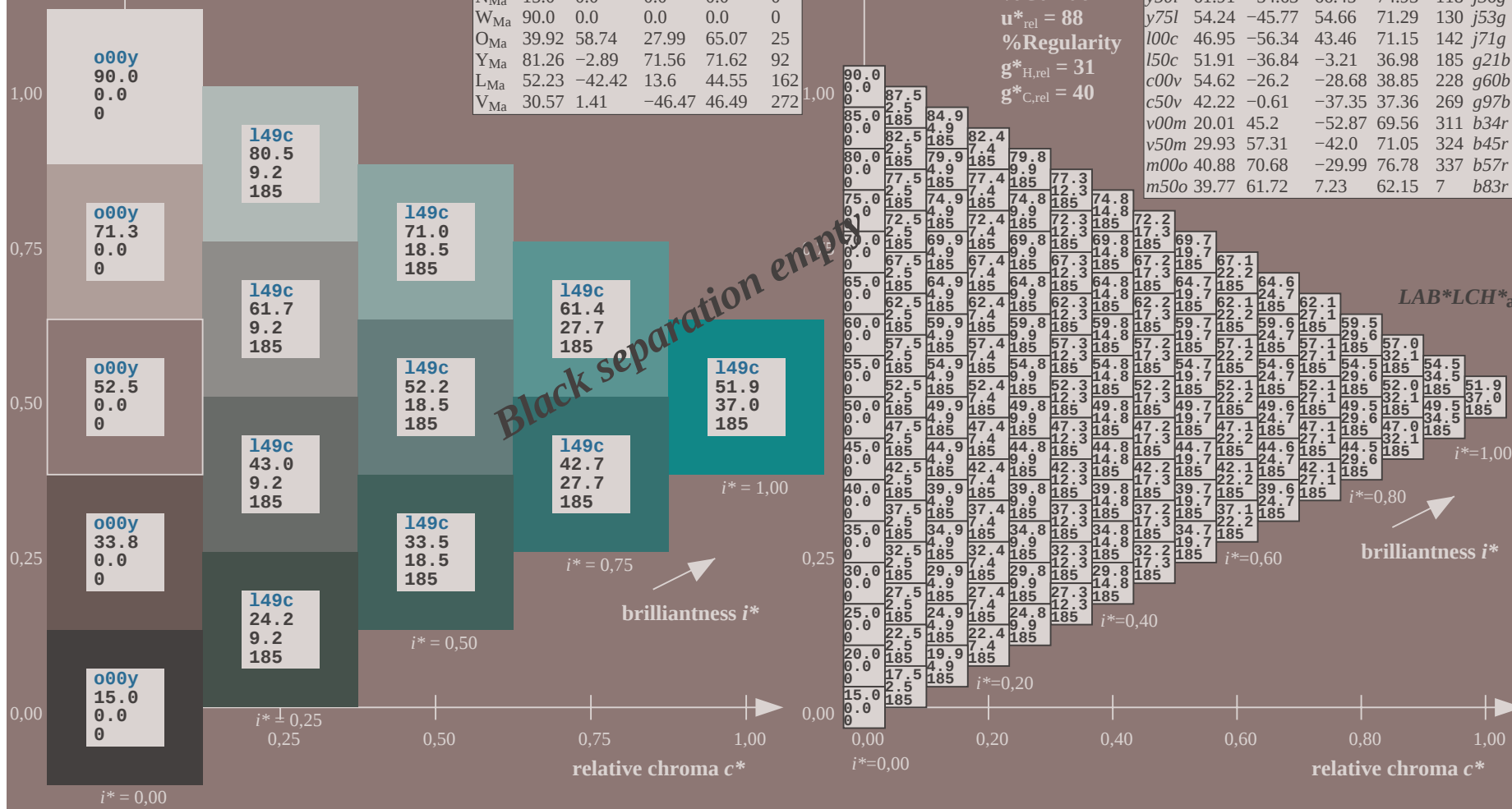
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

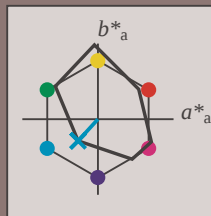
FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = 150c$
 $LAB^*LCH^*_{Ma}$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.632$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = c00v$ $u^*_e = g60b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 55 -26 -29

$LAB^*LCH^*_{Ma}$: 55 39 227

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

$lab^*rgb^*_{Ma}$: 0.0 0.81 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

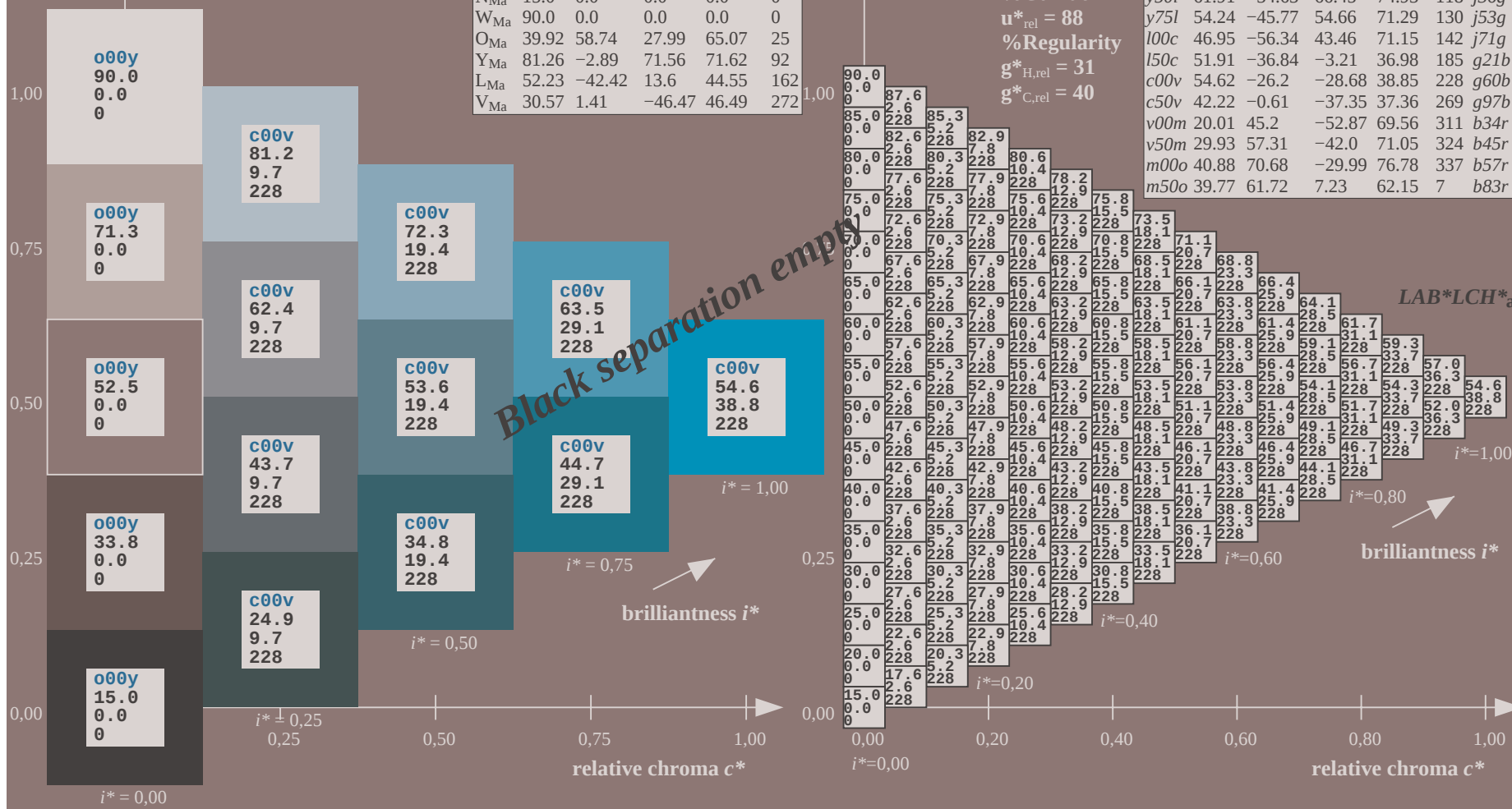
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = c00v$
 $LAB^*LCH^*_{Ma}$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.747$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

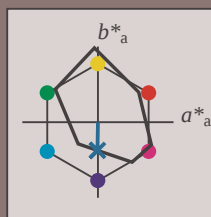
Hue texts:

$u^*_d = c50v$ $u^*_e = g97b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 42 -1 -37

$LAB \cdot LCH \cdot Ma$: 42 37 269

$lab \cdot olv \cdot Ma$: 0.0 0.5 1.0

$lab \cdot rgb \cdot Ma$: 0.0 0.05 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$LAB \cdot LCH \cdot a$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

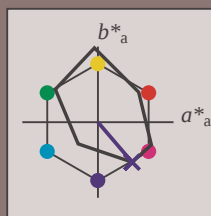
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.863$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = v00m$ $u^*_e = b34r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	r16j
Y _{Ma}	82.58	-4.64	98.22	98.33	93	r37j
L _{Ma}	46.95	-56.34	43.46	71.15	142	r58j
C _{Ma}	54.62	-26.2	-28.68	38.85	228	r79j
V _{Ma}	20.01	45.2	-52.87	69.56	311	j01g
M _{Ma}	40.88	70.68	-29.99	76.78	337	j18g
N _{Ma}	15.0	0.0	0.0	0.0	0	j36g
W _{Ma}	90.0	0.0	0.0	0.0	0	j53g
O _{Ma}	39.92	58.74	27.99	65.07	25	j71g
Y _{Ma}	81.26	-2.89	71.56	71.62	92	g21b
L _{Ma}	52.23	-42.42	13.6	44.55	162	g60b
V _{Ma}	30.57	1.41	-46.47	46.49	272	g97b

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 20 45 -53

$LAB^*LCH^*_{Ma}$: 20 70 310

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

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

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = v00m$
 $LAB^*LCH^*_{Ma}$

$LAB^*LCH^*_{Ma}$

$i^* = 1.00$

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

brilliantness i^*

Black separation empty

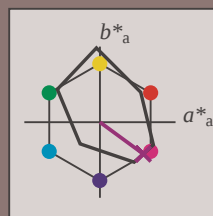
brilliantness i^*

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.899$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = v50m$ $u^*_e = b45r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 30 57 -42

$LAB^*LCH^*_{Ma}$: 30 71 323

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

$lab^*rgb^*_{Ma}$: 0.91 0.0 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = v50m$
 $LAB^*LCH^*_{Ma}$

$LAB^*LCH^*_{Ma}$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

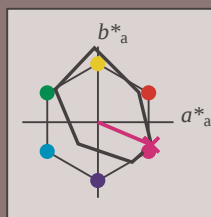
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.936$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = m00o$ $u^*_e = b57r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	r16j
Y _{Ma}	82.58	-4.64	98.22	98.33	93	r37j
L _{Ma}	46.95	-56.34	43.46	71.15	142	r58j
C _{Ma}	54.62	-26.2	-28.68	38.85	228	r79j
V _{Ma}	20.01	45.2	-52.87	69.56	311	j01g
M _{Ma}	40.88	70.68	-29.99	76.78	337	j18g
N _{Ma}	15.0	0.0	0.0	0.0	0	j36g
W _{Ma}	90.0	0.0	0.0	0.0	0	j53g
O _{Ma}	39.92	58.74	27.99	65.07	25	j71g
Y _{Ma}	81.26	-2.89	71.56	71.62	92	g21b
L _{Ma}	52.23	-42.42	13.6	44.55	162	g60b
V _{Ma}	30.57	1.41	-46.47	46.49	272	g97b

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 41 71 -30

$LAB^*LCH^*_{Ma}$: 41 77 337

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.85

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$LAB^*LCH^*_{a}$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

$i^*=0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.019$

data for any colour:

lab^*tch^* and lab^*icu^*

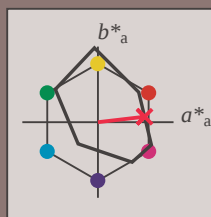
Hue texts:

$u^*_d = m50o$ $u^*_e = b83r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 40 62 7

$LAB^*LCH^*_{Ma}$: 40 62 6

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.33

triangle lightness t^*

%Gamut

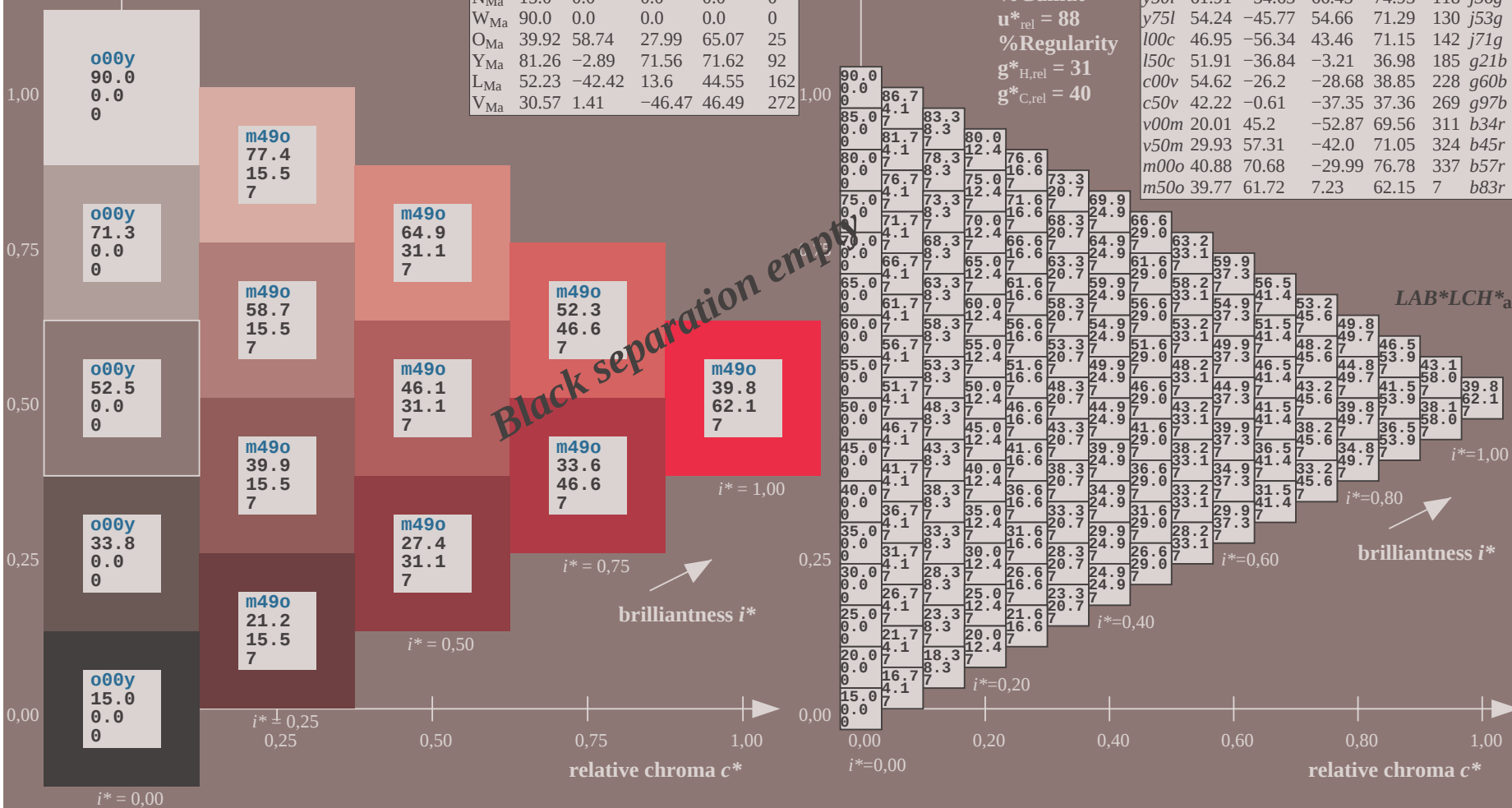
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



See for similar files: <http://www.ps.bam.de/Ee67/>; www.ps.bam.de/Ee.HTM
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1.1, CIELAB, ColSpx=0

BAM registration: 20081001-E67/10L/L67E00FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems

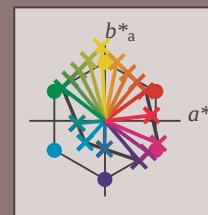
[illegible]

Input and output:
Colorimetric Printer Reflective System FRS15_90a
data for any colour:

u^*_d and number $no.$ = 00 .. 15
device hue text:
 u^*_d = 16 hues $o00y$, $o25y$, ..., $m50o$
contrast reduction factor:
 $c_R = 0.9$

FRS15_90a; adapted (a) CIELAB data

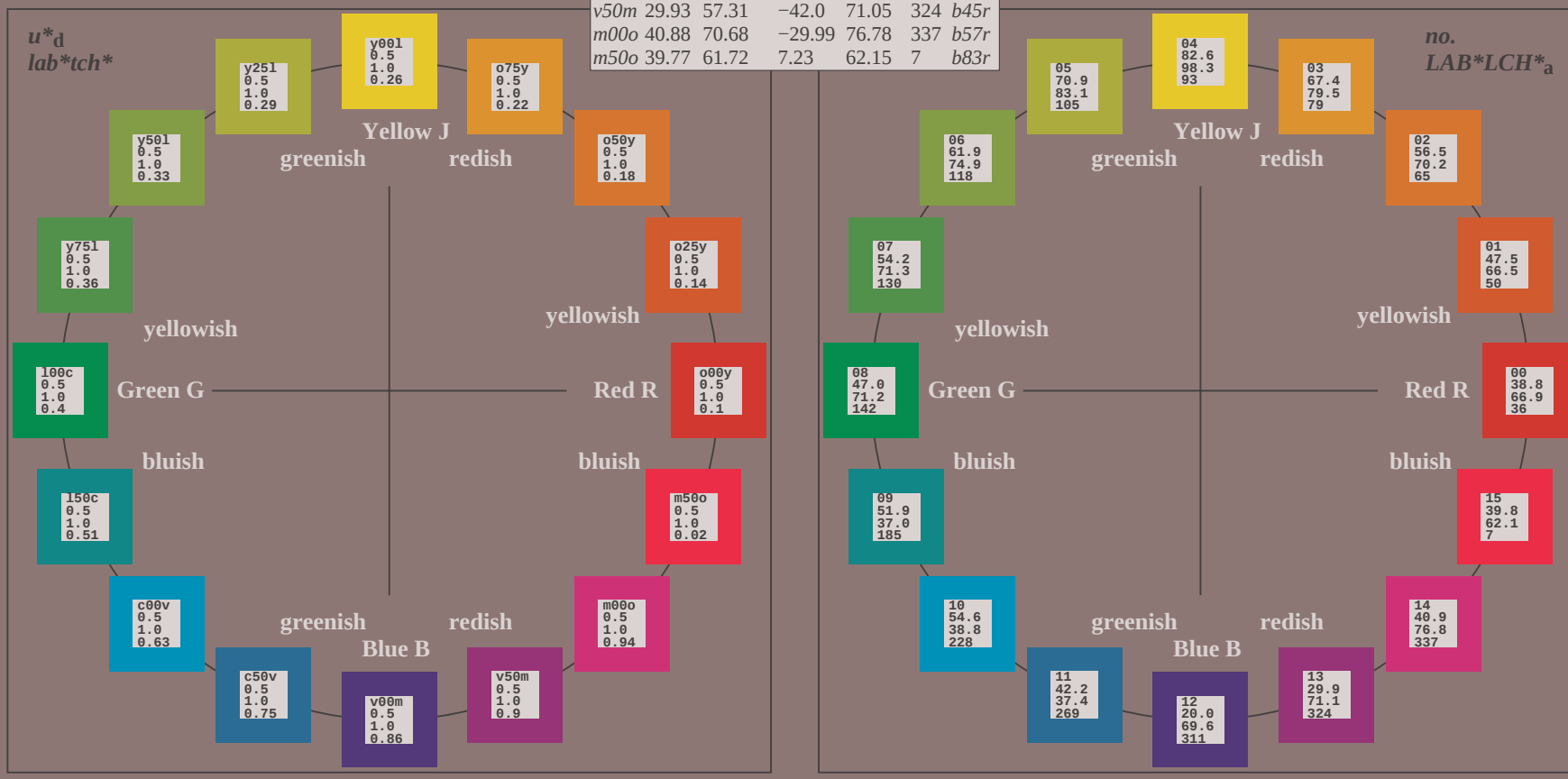
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$



%Gamut
 $u^*_{rel} = 88$
%Regularity
 $g^*_{H,rel} = 31$
 $g^*_{C,rel} = 40$

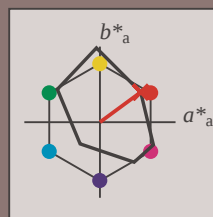
FRS15_90a; adapted (a) CIELAB data

Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	38.8	53.92	39.68	66.95	36
Y_{Ma}	82.58	-4.64	98.22	98.33	93
L_{Ma}	46.95	-56.34	43.46	71.15	142
C_{Ma}	54.62	-26.2	-28.68	38.85	228
V_{Ma}	20.01	45.2	-52.87	69.56	311
M_{Ma}	40.88	70.68	-29.99	76.78	337
N_{Ma}	15.0	0.0	0.0	0.0	0
W_{Ma}	90.0	0.0	0.0	0.0	0
O_{CIE}	39.92	58.74	27.99	65.07	25
Y_{CIE}	81.26	-2.89	71.56	71.62	92
L_{CIE}	52.23	-42.42	13.6	44.55	162
V_{CIE}	30.57	1.41	-46.47	46.49	272



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.101$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = o00y$ $u^*_e = r16j$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 39 54 40

$LAB^*LCH^*_{Ma}$: 39 67 36

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

$lab^*rgb^*_{Ma}$: 1.0 0.16 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
$u^*_d = o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

lab^*tch^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.14$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

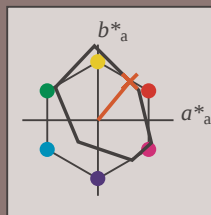
Hue texts:

$u^*_d = o25y$ $u^*_e = r37j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 47 42 51

$LAB \cdot LCH \cdot Ma$: 47 66 50

$lab \cdot olv \cdot Ma$: 1.0 0.25 0.0

$lab \cdot rgb \cdot Ma$: 1.0 0.37 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

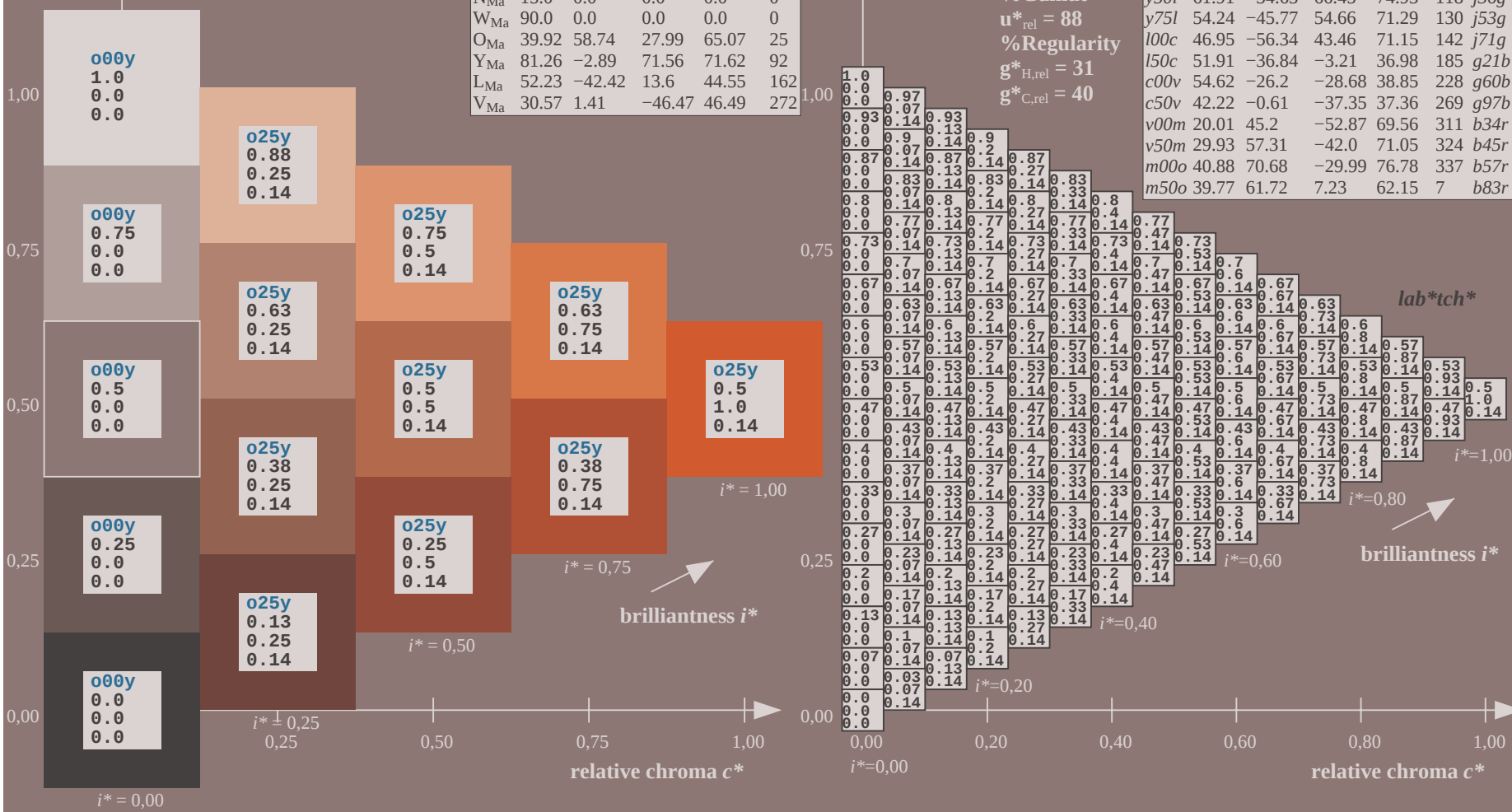
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = o25y$
 $lab \cdot tch^*$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.179$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

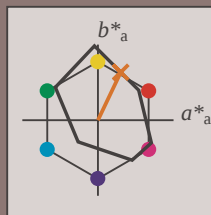
Hue texts:

$u^*_d = o50y$ $u^*_e = r58j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 57 30 63

$LAB \cdot LCH \cdot Ma$: 57 70 64

$lab \cdot olv \cdot Ma$: 1.0 0.5 0.0

$lab \cdot rgb \cdot Ma$: 1.0 0.58 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

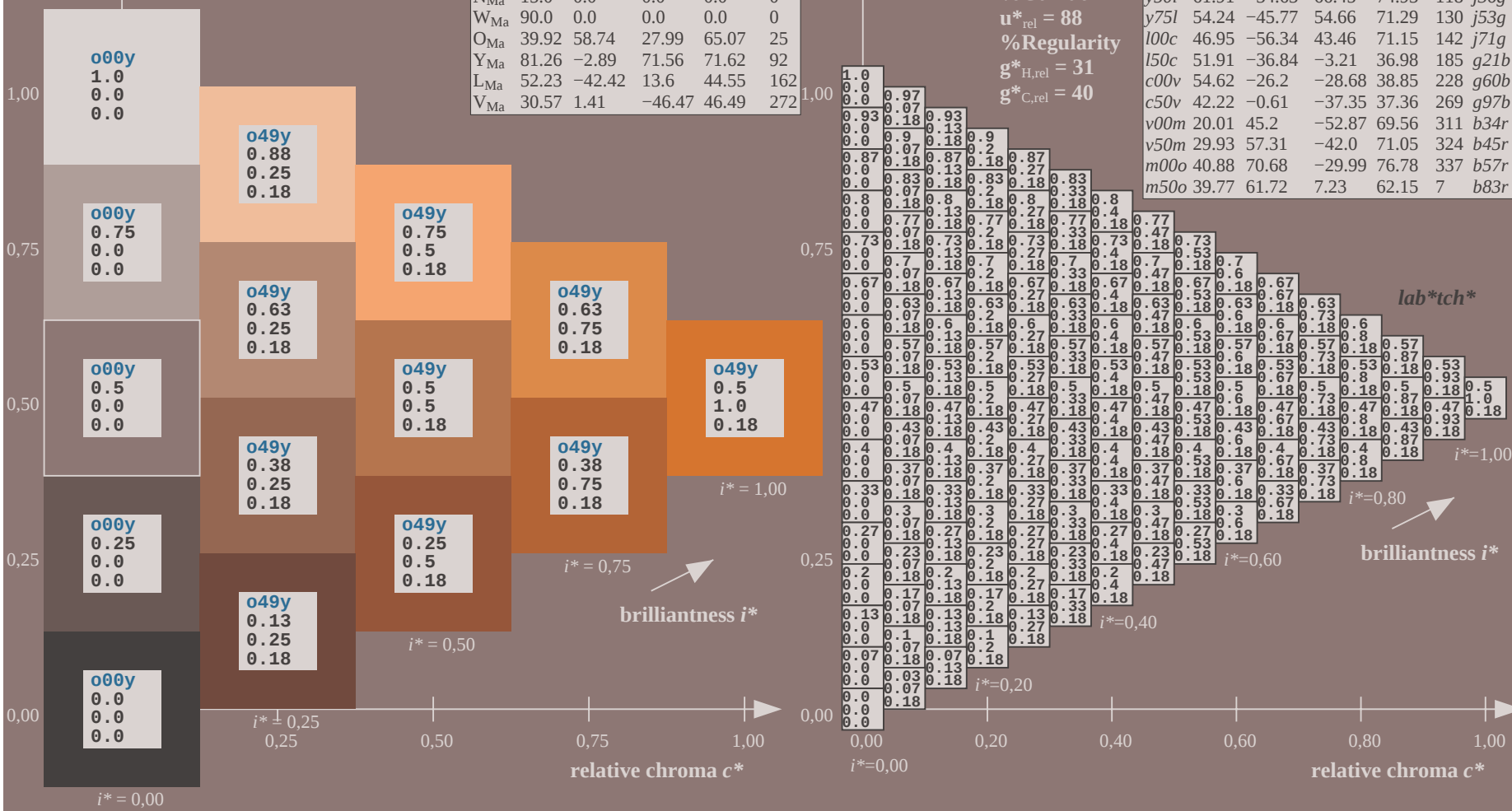
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = o50y$
 $lab \cdot tch^*$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.258$

data for any colour:

lab^*tch^* and lab^*icu^*

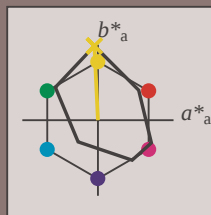
Hue texts:

$u^*_d = y00l$ $u^*_e = j01g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 83 -5 98

$LAB^*LCH^*_{Ma}$: 83 98 92

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

$lab^*rgb^*_{Ma}$: 0.99 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

lab^*tch^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.292$

data for any colour:

lab^*tch^* and lab^*icu^*

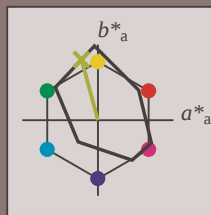
Hue texts:

$u^*_d = y25l$ $u^*_e = j18g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 71 -22 80

$LAB^*LCH^*_{Ma}$: 71 83 105

$lab^*olv^*_{Ma}$: 0.75 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.82 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

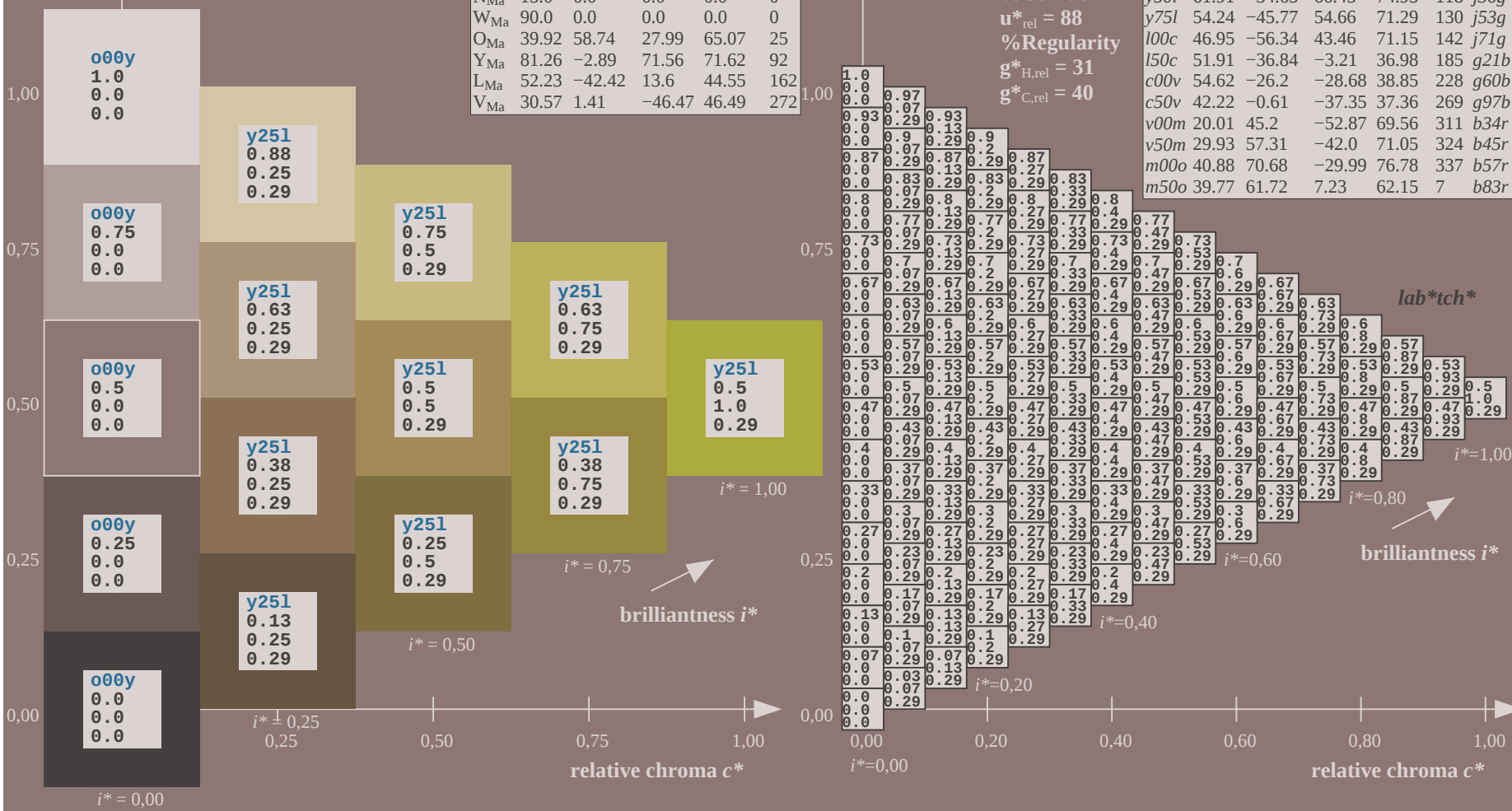
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36		r16j
o25y	47.46	42.34	51.25	66.48	50		r37j
o50y	56.54	30.2	63.39	70.22	65		r58j
o75y	67.39	15.68	77.9	79.47	79		r79j
y00l	82.58	-4.64	98.22	98.33	93		j01g
y25l	70.85	-21.66	80.19	83.07	105		j18g
y50l	61.91	-34.63	66.45	74.93	118		j36g
y75l	54.24	-45.77	54.66	71.29	130		j53g
l00c	46.95	-56.34	43.46	71.15	142		j71g
l50c	51.91	-36.84	-3.21	36.98	185		g21b
c00v	54.62	-26.2	-28.68	38.85	228		g60b
c50v	42.22	-0.61	-37.35	37.36	269		g97b
v00m	20.01	45.2	-52.87	69.56	311		b34r
v50m	29.93	57.31	-42.0	71.05	324		b45r
m00o	40.88	70.68	-29.99	76.78	337		b57r
m50o	39.77	61.72	7.23	62.15	7		b83r

$u^*_d = y25l$
 lab^*tch^*



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.326$

data for any colour:

lab^*tch^* and lab^*icu^*

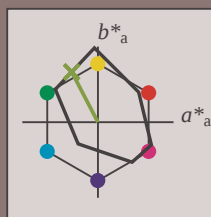
Hue texts:

$u^*_d = y50l$ $u^*_e = j36g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 62 -35 66

$LAB^*LCH^*_{Ma}$: 62 75 117

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

$lab^*rgb^*_{Ma}$: 0.64 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

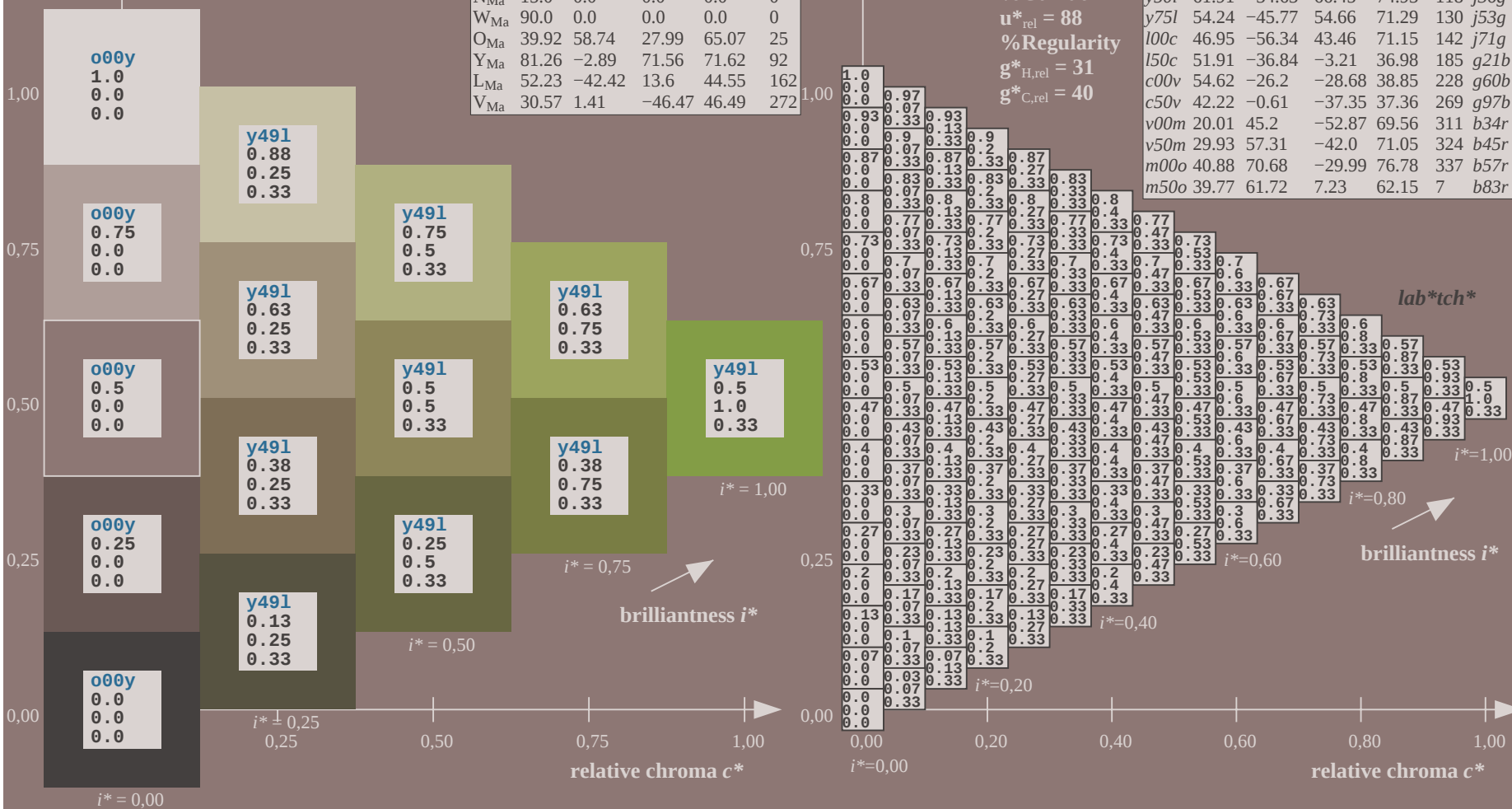
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

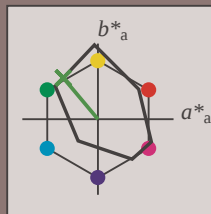
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y50l$
 lab^*tch^*



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.361$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = y75l$ $u^*_e = j53g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 54 -46 55

$LAB^*LCH^*_{Ma}$: 54 71 129

$lab^*olv^*_{Ma}$: 0.25 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.46 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36	$r16j$
o25y	47.46	42.34	51.25	66.48	50	$r37j$
o50y	56.54	30.2	63.39	70.22	65	$r58j$
o75y	67.39	15.68	77.9	79.47	79	$r79j$
y00l	82.58	-4.64	98.22	98.33	93	$j01g$
y25l	70.85	-21.66	80.19	83.07	105	$j18g$
y50l	61.91	-34.63	66.45	74.93	118	$j36g$
y75l	54.24	-45.77	54.66	71.29	130	$j53g$
l00c	46.95	-56.34	43.46	71.15	142	$j71g$
l50c	51.91	-36.84	-3.21	36.98	185	$g21b$
c00v	54.62	-26.2	-28.68	38.85	228	$g60b$
c50v	42.22	-0.61	-37.35	37.36	269	$g97b$
v00m	20.01	45.2	-52.87	69.56	311	$b34r$
v50m	29.93	57.31	-42.0	71.05	324	$b45r$
m00o	40.88	70.68	-29.99	76.78	337	$b57r$
m50o	39.77	61.72	7.23	62.15	7	$b83r$

lab^*tch^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.395$

data for any colour:

lab^*tch^* and lab^*icu^*

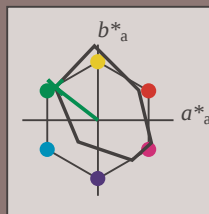
Hue texts:

$u^*_d = 100c$ $u^*_e = j71g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 -56 43

$LAB^*LCH^*_{Ma}$: 47 71 142

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

$lab^*rgb^*_{Ma}$: 0.28 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36		r16j
o25y	47.46	42.34	51.25	66.48	50		r37j
o50y	56.54	30.2	63.39	70.22	65		r58j
o75y	67.39	15.68	77.9	79.47	79		r79j
y00l	82.58	-4.64	98.22	98.33	93		j01g
y25l	70.85	-21.66	80.19	83.07	105		j18g
y50l	61.91	-34.63	66.45	74.93	118		j36g
y75l	54.24	-45.77	54.66	71.29	130		j53g
l00c	46.95	-56.34	43.46	71.15	142		j71g
l50c	51.91	-36.84	-3.21	36.98	185		g21b
c00v	54.62	-26.2	-28.68	38.85	228		g60b
c50v	42.22	-0.61	-37.35	37.36	269		g97b
v00m	20.01	45.2	-52.87	69.56	311		b34r
v50m	29.93	57.31	-42.0	71.05	324		b45r
m00o	40.88	70.68	-29.99	76.78	337		b57r
m50o	39.77	61.72	7.23	62.15	7		b83r

lab^*tch^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.514$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

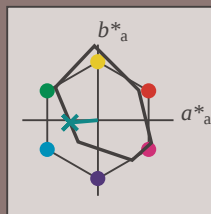
Hue texts:

$u^*_d = l50c$ $u^*_e = g21b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 52 -37 -3

$LAB \cdot LCH \cdot Ma$: 52 37 184

$lab \cdot olv \cdot Ma$: 0.0 1.0 0.5

$lab \cdot rgb \cdot Ma$: 0.0 1.0 0.42

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36		r16j
o25y	47.46	42.34	51.25	66.48	50		r37j
o50y	56.54	30.2	63.39	70.22	65		r58j
o75y	67.39	15.68	77.9	79.47	79		r79j
y00l	82.58	-4.64	98.22	98.33	93		j01g
y25l	70.85	-21.66	80.19	83.07	105		j18g
y50l	61.91	-34.63	66.45	74.93	118		j36g
y75l	54.24	-45.77	54.66	71.29	130		j53g
l00c	46.95	-56.34	43.46	71.15	142		j71g
l50c	51.91	-36.84	-3.21	36.98	185		g21b
c00v	54.62	-26.2	-28.68	38.85	228		g60b
c50v	42.22	-0.61	-37.35	37.36	269		g97b
v00m	20.01	45.2	-52.87	69.56	311		b34r
v50m	29.93	57.31	-42.0	71.05	324		b45r
m00o	40.88	70.68	-29.99	76.78	337		b57r
m50o	39.77	61.72	7.23	62.15	7		b83r

$u^*_d = l50c$
 $lab \cdot tch^*$

$lab \cdot tch^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

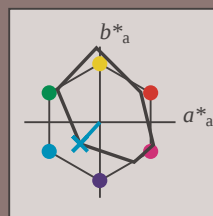
Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.632$ data for any colour:

*lab*tch** and *lab*icu**

Hue texts:

$$u^*_d = c00v \quad u^*_e = g60b$$

contrast reduction factor:

 $c_B = 0.9$ triangle lightness t^* 

FRS15_90a; adapted (a) CIELAB data

u_d^*	$L^* = L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
O_{Ma}	38.8	53.92	39.68	66.95	36
Y_{Ma}	82.58	-4.64	98.22	98.33	93
L_{Ma}	46.95	-56.34	43.46	71.15	142
C_{Ma}	54.62	-26.2	-28.68	38.85	228
V_{Ma}	20.01	45.2	-52.87	69.56	311
M_{Ma}	40.88	70.68	-29.99	76.78	337
N_{Ma}	15.0	0.0	0.0	0.0	0
W_{Ma}	90.0	0.0	0.0	0.0	0
O_{Ma}	39.92	58.74	27.99	65.07	25
Y_{Ma}	81.26	-2.89	71.56	71.62	92
L_{Ma}	52.23	-42.42	13.6	44.55	162
V_{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

LAB*LAB*Ma: 55 -26 -29

LAB*LCH*M₂: 55 39 227

 $lab*ply*Ma: 0.0 \quad 1.0 \quad 1.0$

*lch*rch** = 0.0 0.91 1.0

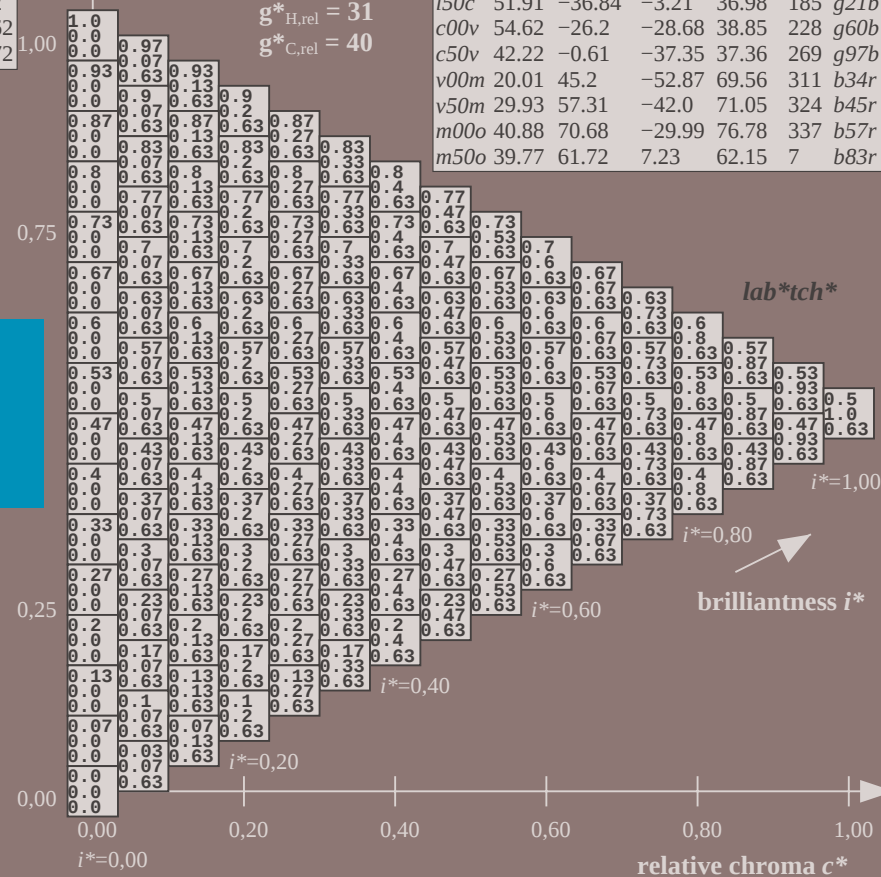
100 100 100 Ma: 0.0 0.01 1.0

triangle lightness t^*

%Gamut

$$\mathbf{u}_{\text{rel}}^* = 88$$

%Regularity

$$g_{\text{H,rel}}^* = 31$$
$$g^*_{C,rel} = 40$$


lab*tch*

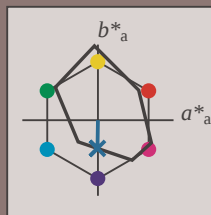
$$i^*=1,00$$

BAM-test chart Ee67; Colorimetric systems, Page 120/198
D65: colour scales and 9 data tables for 16 hues 000y to m75o

input: 000n / w / nnn0 / www set...
output: ->LAB*->cmv0* setcmvk

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.747$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = c50v$ $u^*_e = g97b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 42 -1 -37

$LAB^*LCH^*_{Ma}$: 42 37 269

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

$lab^*rgb^*_{Ma}$: 0.0 0.05 1.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36	$r16j$
o25y	47.46	42.34	51.25	66.48	50	$r37j$
o50y	56.54	30.2	63.39	70.22	65	$r58j$
o75y	67.39	15.68	77.9	79.47	79	$r79j$
y00l	82.58	-4.64	98.22	98.33	93	$j01g$
y25l	70.85	-21.66	80.19	83.07	105	$j18g$
y50l	61.91	-34.63	66.45	74.93	118	$j36g$
y75l	54.24	-45.77	54.66	71.29	130	$j53g$
l00c	46.95	-56.34	43.46	71.15	142	$j71g$
l50c	51.91	-36.84	-3.21	36.98	185	$g21b$
c00v	54.62	-26.2	-28.68	38.85	228	$g60b$
c50v	42.22	-0.61	-37.35	37.36	269	$g97b$
v00m	20.01	45.2	-52.87	69.56	311	$b34r$
v50m	29.93	57.31	-42.0	71.05	324	$b45r$
m00o	40.88	70.68	-29.99	76.78	337	$b57r$
m50o	39.77	61.72	7.23	62.15	7	$b83r$

lab^*tch^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.863$

data for any colour:

lab^*tch^* and lab^*icu^*

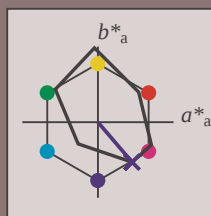
Hue texts:

$u^*_d = v00m$ $u^*_e = b34r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 20 45 -53

$LAB^*LCH^*_{Ma}$: 20 70 310

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

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

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

lab^*tch^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

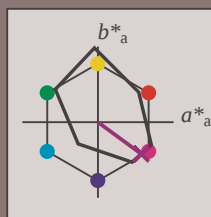
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.899$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = v50m$ $u^*_e = b45r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 30 57 -42

$LAB^*LCH^*_{Ma}$: 30 71 323

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

$lab^*rgb^*_{Ma}$: 0.91 0.0 1.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

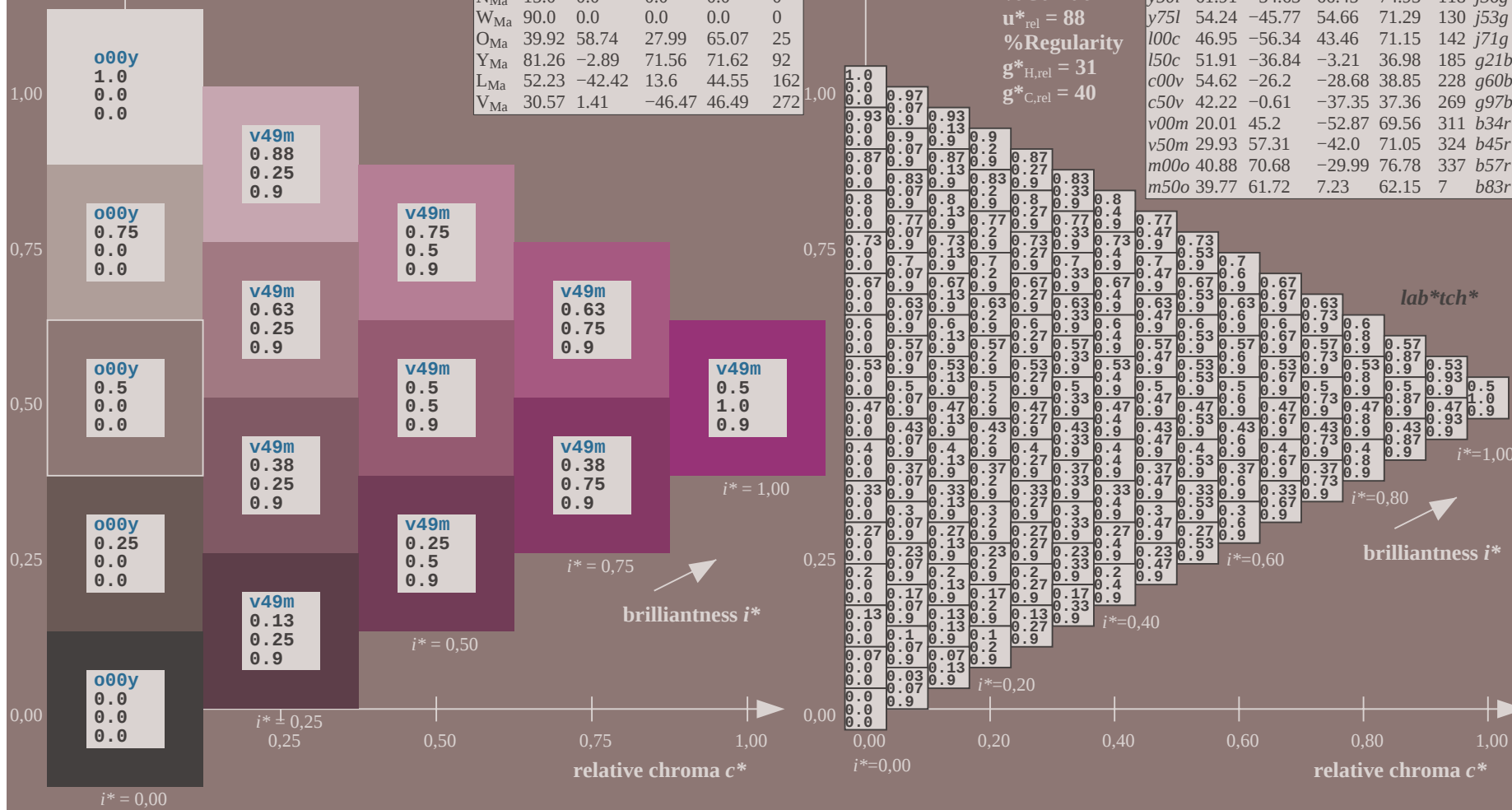
% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36	$r16j$
o25y	47.46	42.34	51.25	66.48	50	$r37j$
o50y	56.54	30.2	63.39	70.22	65	$r58j$
o75y	67.39	15.68	77.9	79.47	79	$r79j$
y00l	82.58	-4.64	98.22	98.33	93	$j01g$
y25l	70.85	-21.66	80.19	83.07	105	$j18g$
y50l	61.91	-34.63	66.45	74.93	118	$j36g$
y75l	54.24	-45.77	54.66	71.29	130	$j53g$
l00c	46.95	-56.34	43.46	71.15	142	$j71g$
l50c	51.91	-36.84	-3.21	36.98	185	$g21b$
c00v	54.62	-26.2	-28.68	38.85	228	$g60b$
c50v	42.22	-0.61	-37.35	37.36	269	$g97b$
v00m	20.01	45.2	-52.87	69.56	311	$b34r$
v50m	29.93	57.31	-42.0	71.05	324	$b45r$
m00o	40.88	70.68	-29.99	76.78	337	$b57r$
m50o	39.77	61.72	7.23	62.15	7	$b83r$

$u^*_d = v50m$
 lab^*tch^*



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.936$

data for any colour:

lab^*tch^* and lab^*icu^*

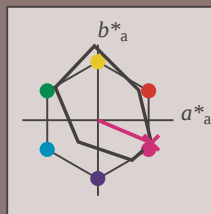
Hue texts:

$u^*_d = m00o$ $u^*_e = b57r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 41 71 -30

$LAB^*LCH^*_{Ma}$: 41 77 337

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.85

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

lab^*tch^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.019$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

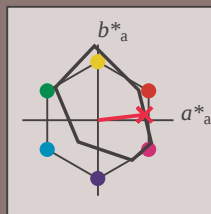
Hue texts:

$u^*_d = m50o$ $u^*_e = b83r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 40 62 7

$LAB \cdot LCH \cdot Ma$: 40 62 6

$lab \cdot olv \cdot Ma$: 1.0 0.0 0.5

$lab \cdot rgb \cdot Ma$: 1.0 0.0 0.33

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

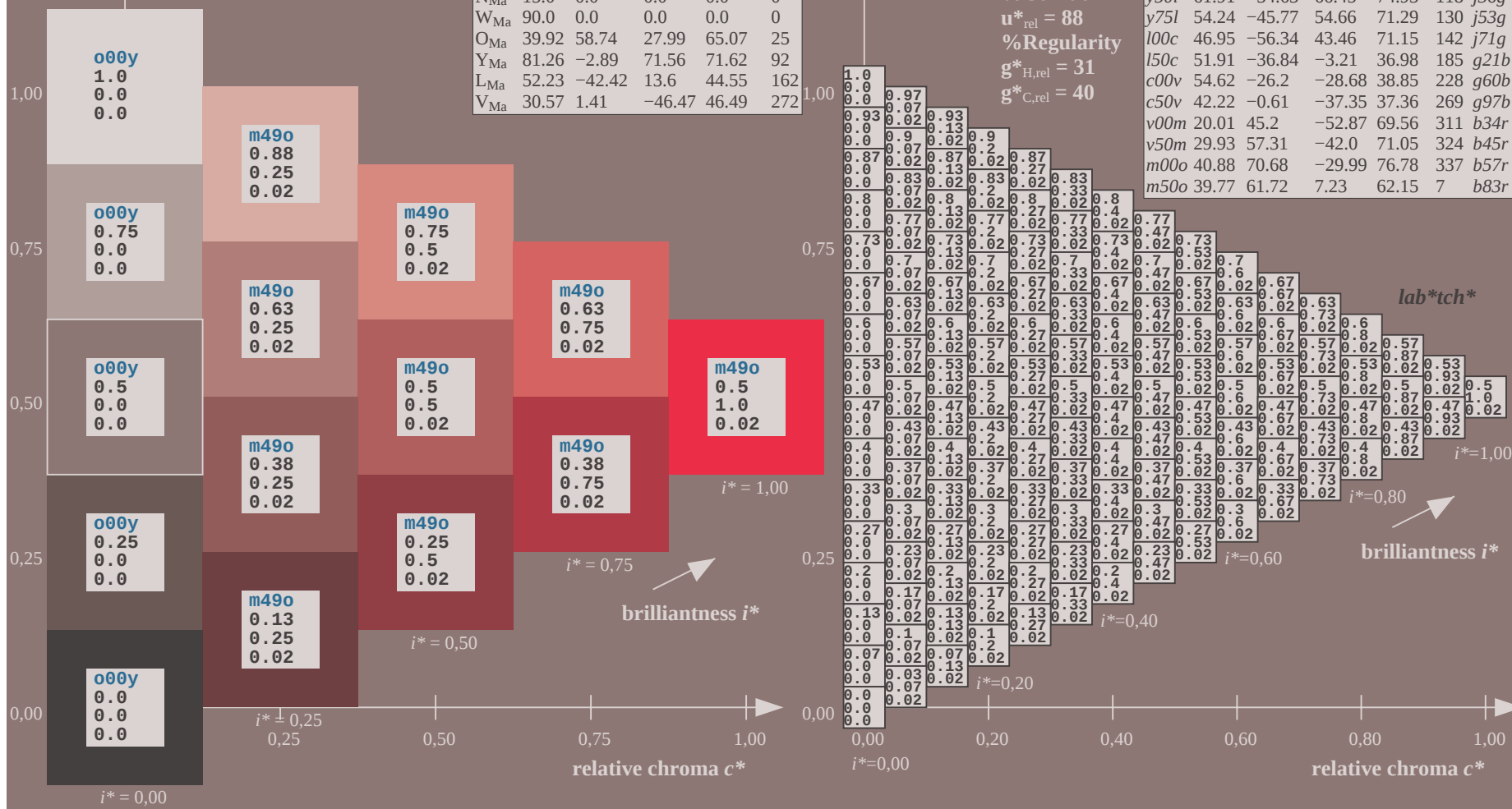
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = m50o$
 $lab \cdot tch^*$



BAM registration: 20081001-Ee6710L/L67E00FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems

BAM-test chart Ee67; Colorimetric systems, Page 126/198
D65: colour scales and 9 data tables for 16 hues $000y$ to $m7$

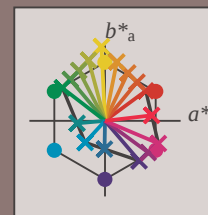
A quarter-circle sector is shown, with its center at the origin of a coordinate system. The radius is labeled as 8. The central angle is labeled as 90 degrees.

Input and output:
Colorimetric Printer Reflective System FRS15_90a
data for any colour:

u^*_d and number $no.$ = 00 .. 15
device hue text:
 u^*_d = 16 hues $o00y$, $o25y$, ..., $m50o$
contrast reduction factor:
 $c_R = 0.9$

FRS15_90a; adapted (a) CIELAB data

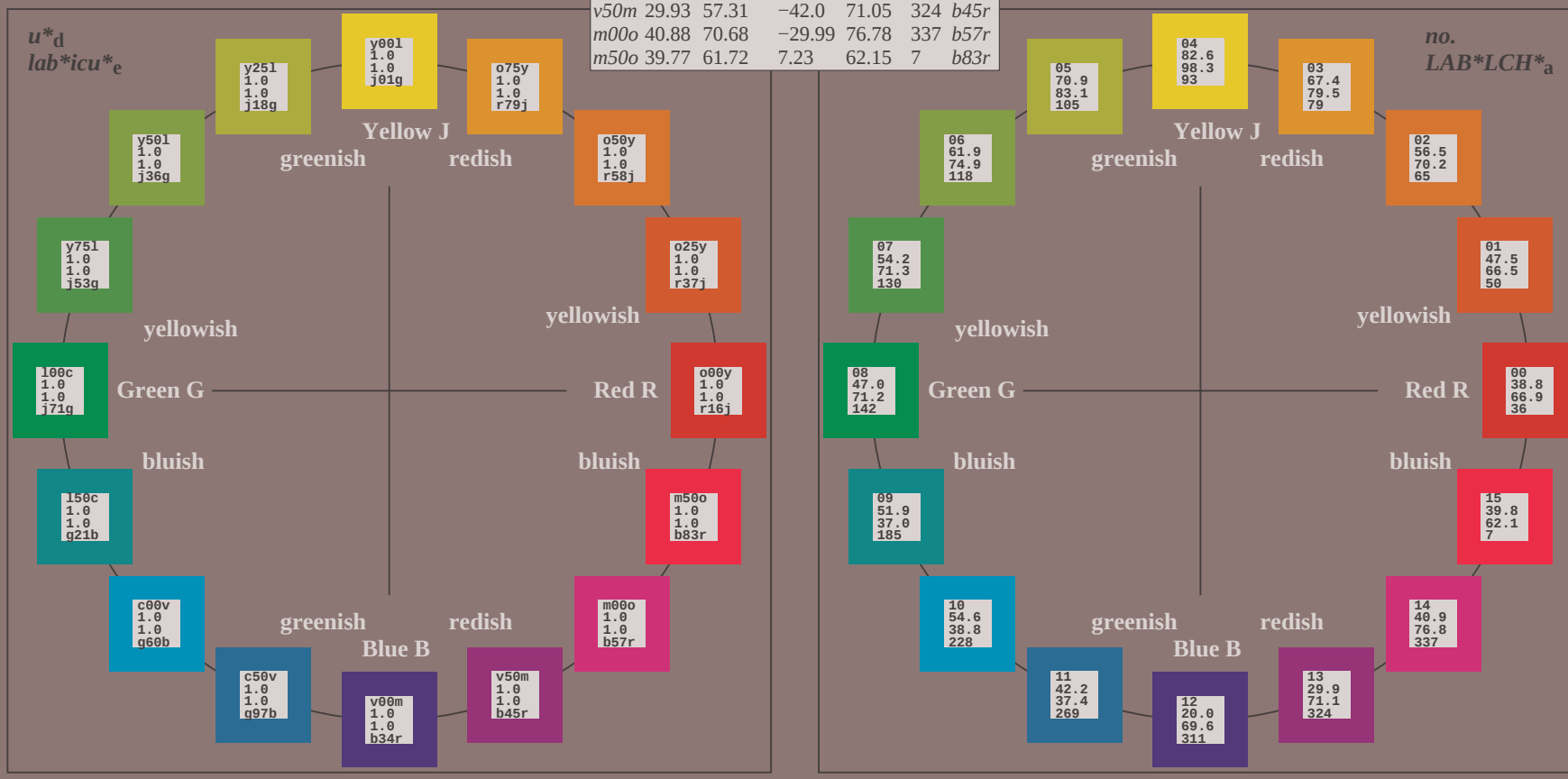
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$



%Gamut
 $u^*_{rel} = 88$
%Regularity
 $g^*_{H,rel} = 31$
 $g^*_{C,rel} = 40$

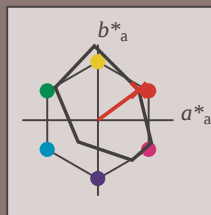
FRS15_90a; adapted (a) CIELAB data

Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	38.8	53.92	39.68	66.95	36
Y_{Ma}	82.58	-4.64	98.22	98.33	93
L_{Ma}	46.95	-56.34	43.46	71.15	142
C_{Ma}	54.62	-26.2	-28.68	38.85	228
V_{Ma}	20.01	45.2	-52.87	69.56	311
M_{Ma}	40.88	70.68	-29.99	76.78	337
N_{Ma}	15.0	0.0	0.0	0.0	0
W_{Ma}	90.0	0.0	0.0	0.0	0
O_{CIE}	39.92	58.74	27.99	65.07	25
Y_{CIE}	81.26	-2.89	71.56	71.62	92
L_{CIE}	52.23	-42.42	13.6	44.55	162
V_{CIE}	30.57	1.41	-46.47	46.49	272



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.101$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = o00y$ $u^*_e = r16j$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 39 54 40

$LAB^*LCH^*_{Ma}$: 39 67 36

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

$lab^*rgb^*_{Ma}$: 1.0 0.16 0.0

triangle lightness t^*

%Gamut

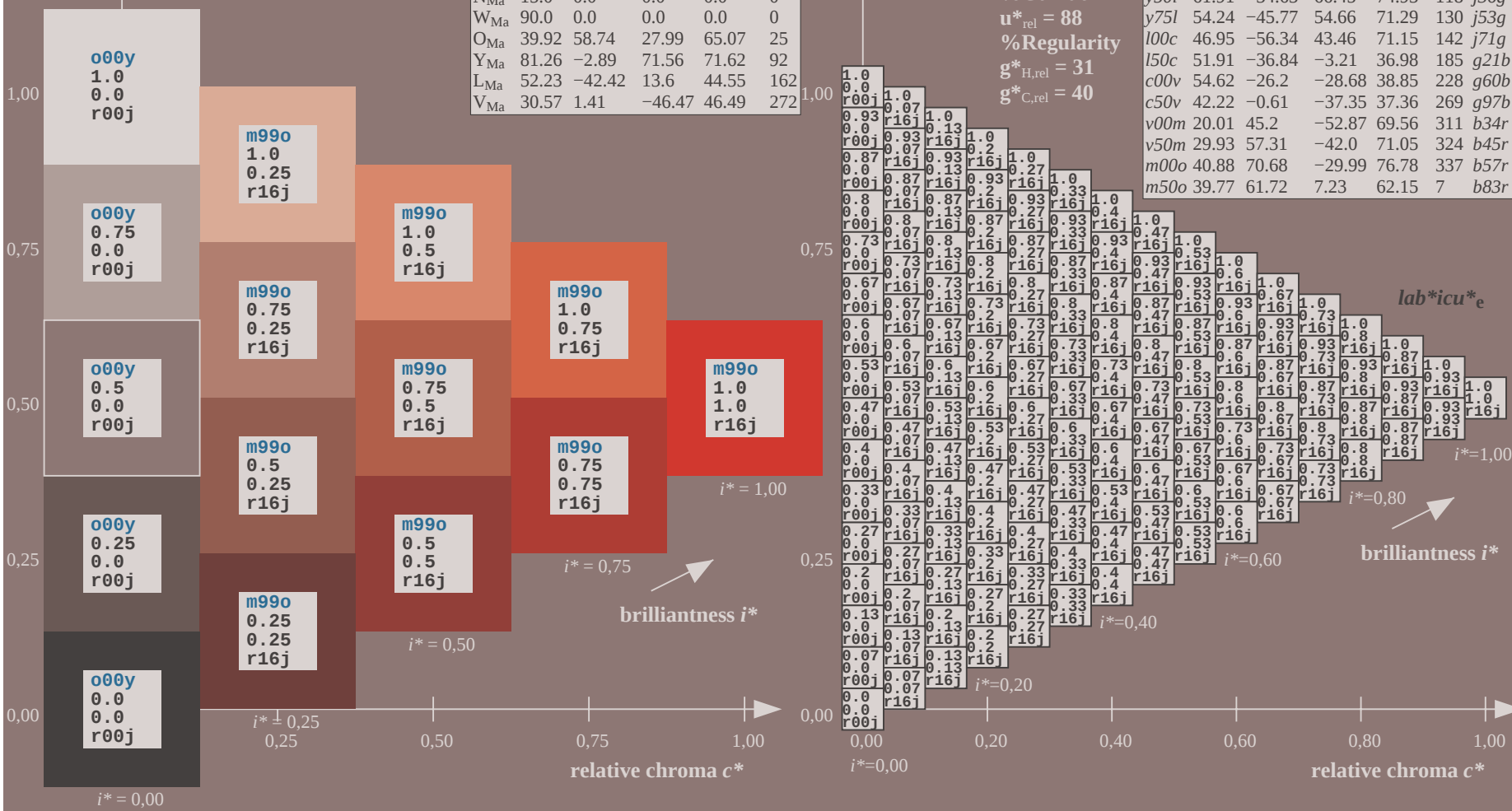
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.14$

data for any colour:

lab^*tch^* and lab^*icu^*

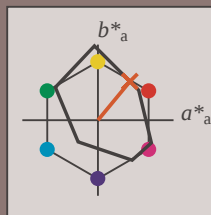
Hue texts:

$u^*_d = o25y$ $u^*_e = r37j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 42 51

$LAB^*LCH^*_{Ma}$: 47 66 50

$lab^*olv^*_{Ma}$: 1.0 0.25 0.0

$lab^*rgb^*_{Ma}$: 1.0 0.37 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab^*icu^*_e$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

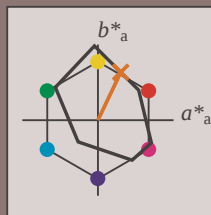
$i^* = 0.40$

$i^* = 0.20$

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.179$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:

$u^*_d = o50y$ $u^*_e = r58j$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 57 30 63

$LAB^*LCH^*_{Ma}$: 57 70 64

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

$lab^*rgb^*_{Ma}$: 1.0 0.58 0.0

triangle lightness t^*

%Gamut

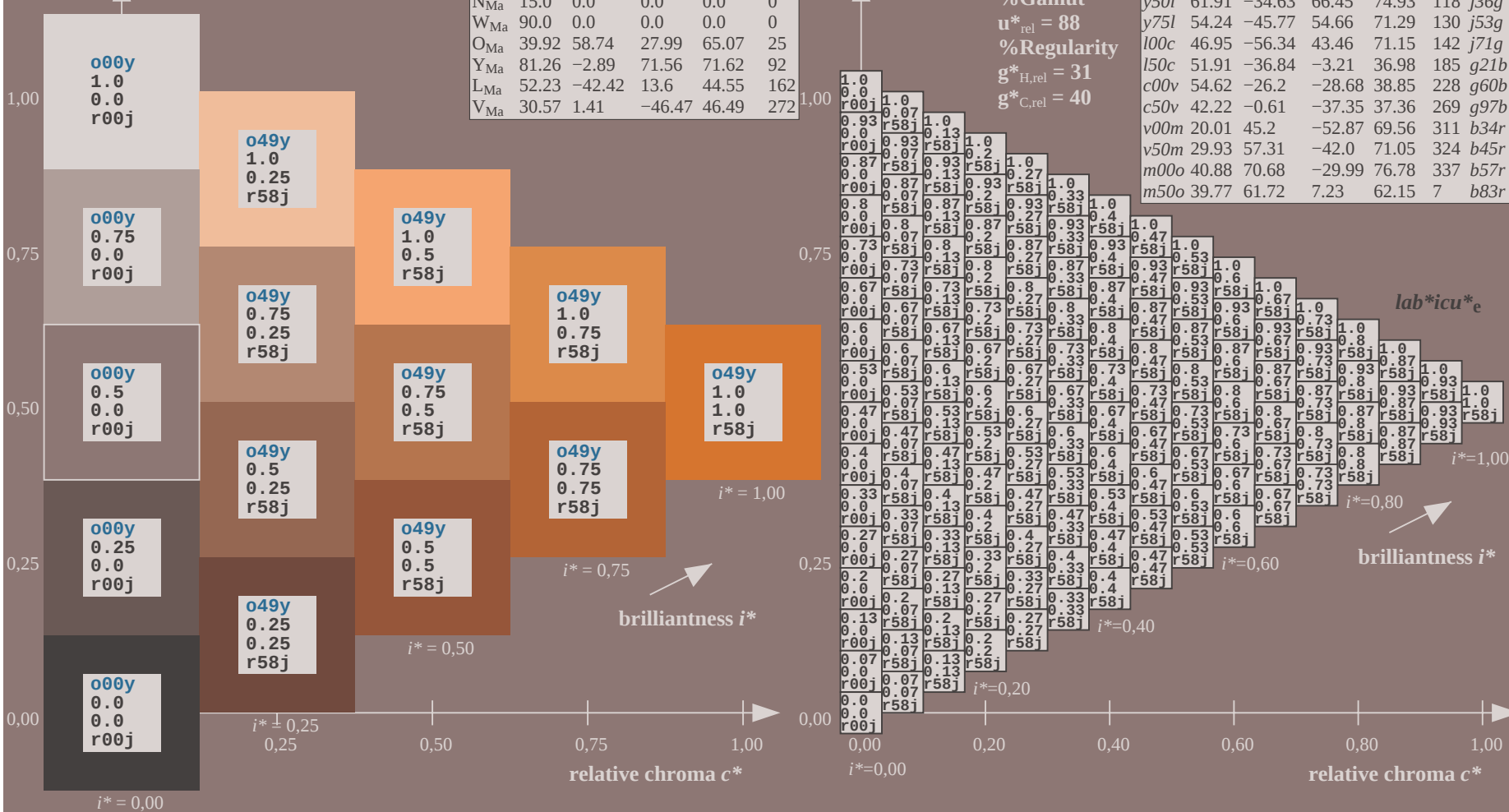
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.218$

data for any colour:

lab^*tch^* and lab^*icu^*

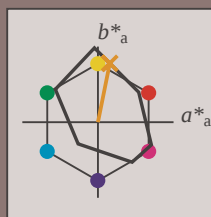
Hue texts:

$u^*_d = o75y$ $u^*_e = r79j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 67 16 78

$LAB^*LCH^*_{Ma}$: 67 79 78

$lab^*olv^*_{Ma}$: 1.0 0.75 0.0

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

triangle lightness t^*

%Gamut

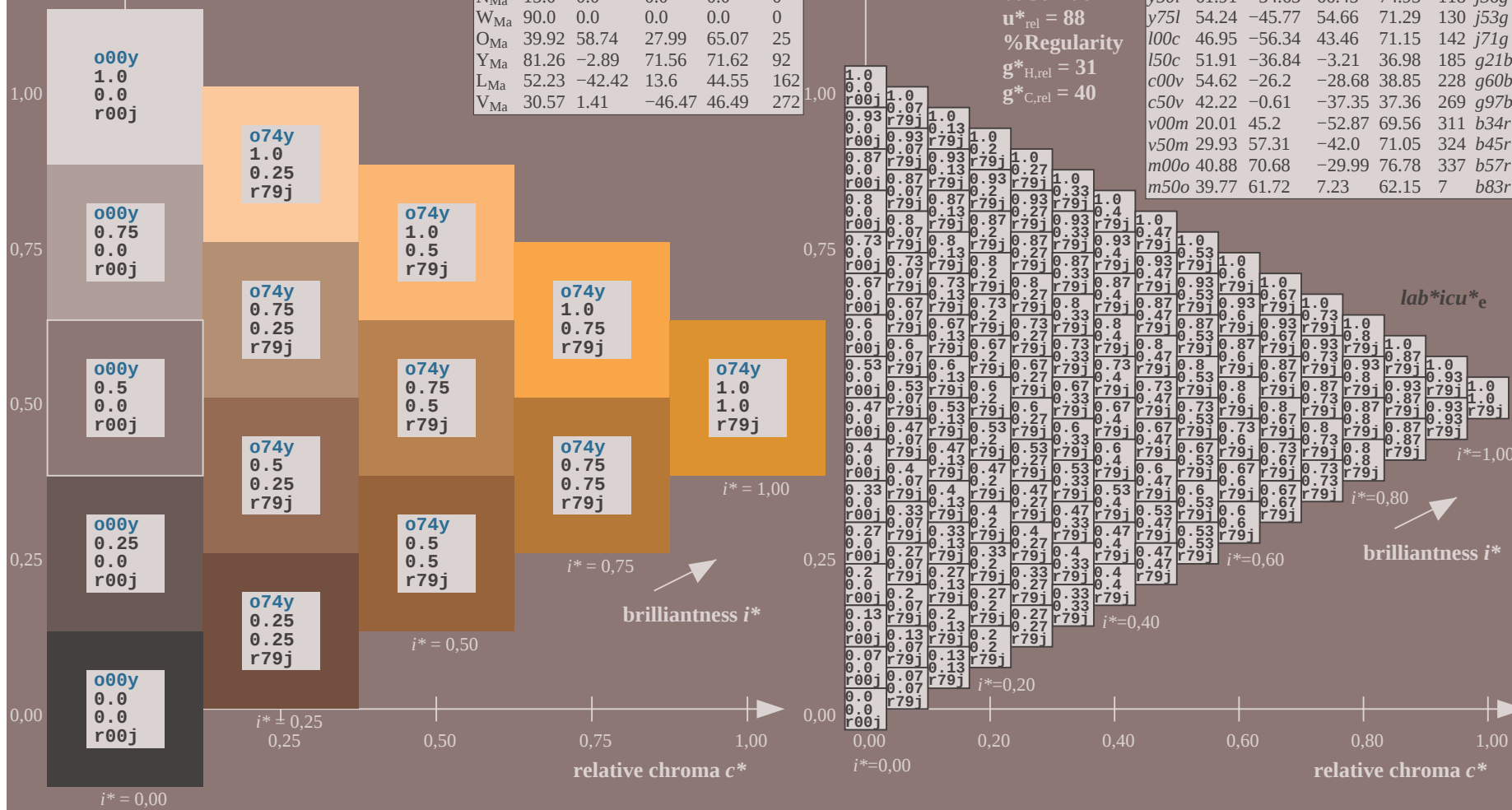
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.258$

data for any colour:

lab^*tch^* and lab^*icu^*

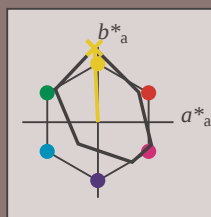
Hue texts:

$u^*_d = y00l$ $u^*_e = j01g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 83 -5 98

$LAB^*LCH^*_{Ma}$: 83 98 92

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

$lab^*rgb^*_{Ma}$: 0.99 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab^*icu^*_e$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.292$

data for any colour:

lab^*tch^* and lab^*icu^*

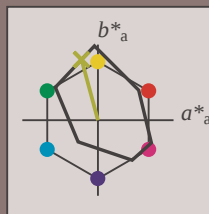
Hue texts:

$u^*_d = y25l$ $u^*_e = j18g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 71 -22 80

$LAB^*LCH^*_{Ma}$: 71 83 105

$lab^*olv^*_{Ma}$: 0.75 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.82 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

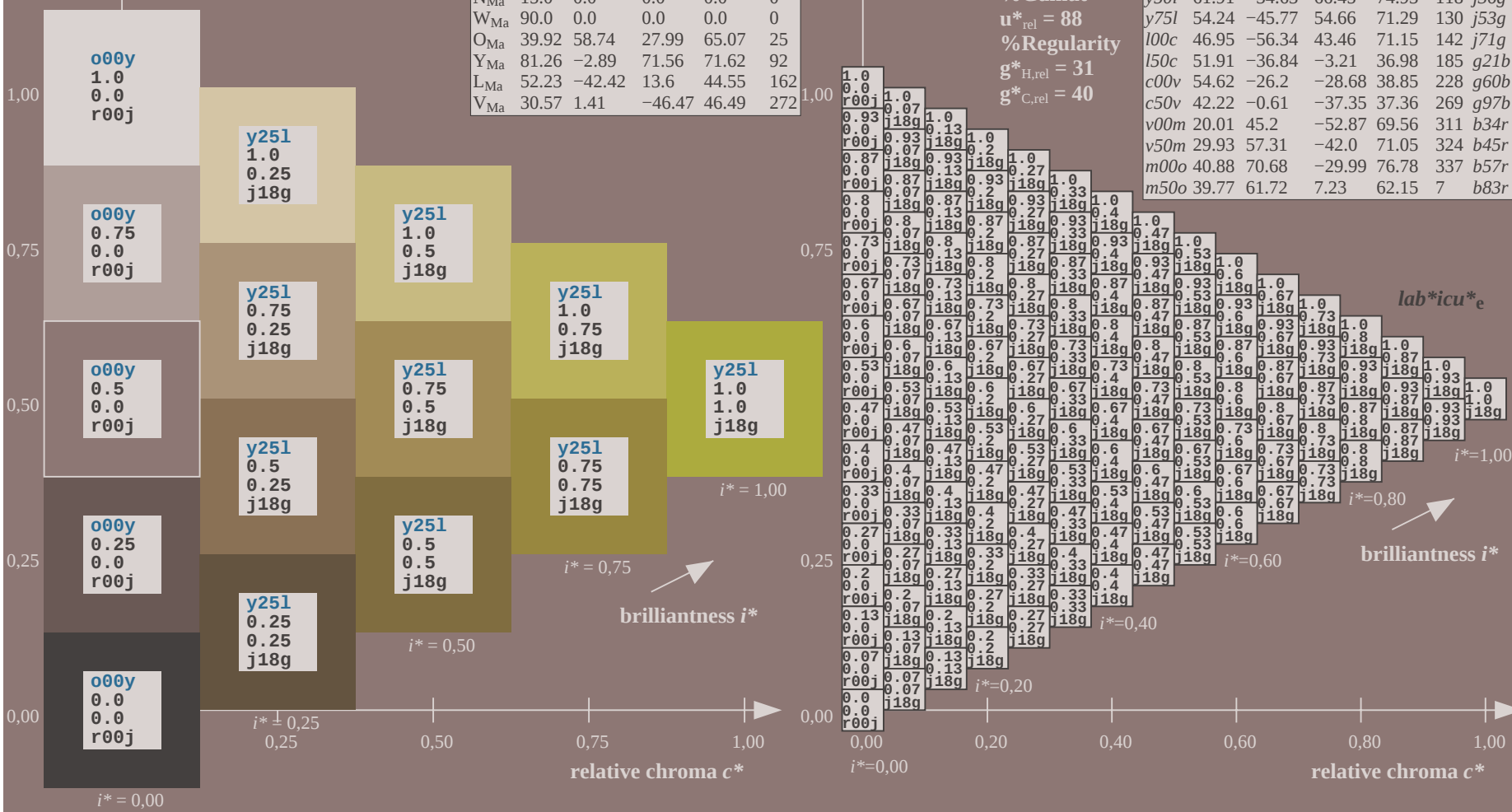
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = y25l$
 $lab^*icu^*_e$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.326$

data for any colour:

lab^*tch^* and lab^*icu^*

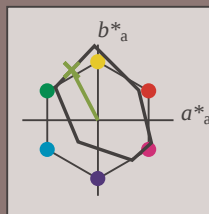
Hue texts:

$u^*_d = y50l$ $u^*_e = j36g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 62 -35 66

$LAB^*LCH^*_{Ma}$: 62 75 117

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

$lab^*rgb^*_{Ma}$: 0.64 1.0 0.0

triangle lightness t^*

%Gamut

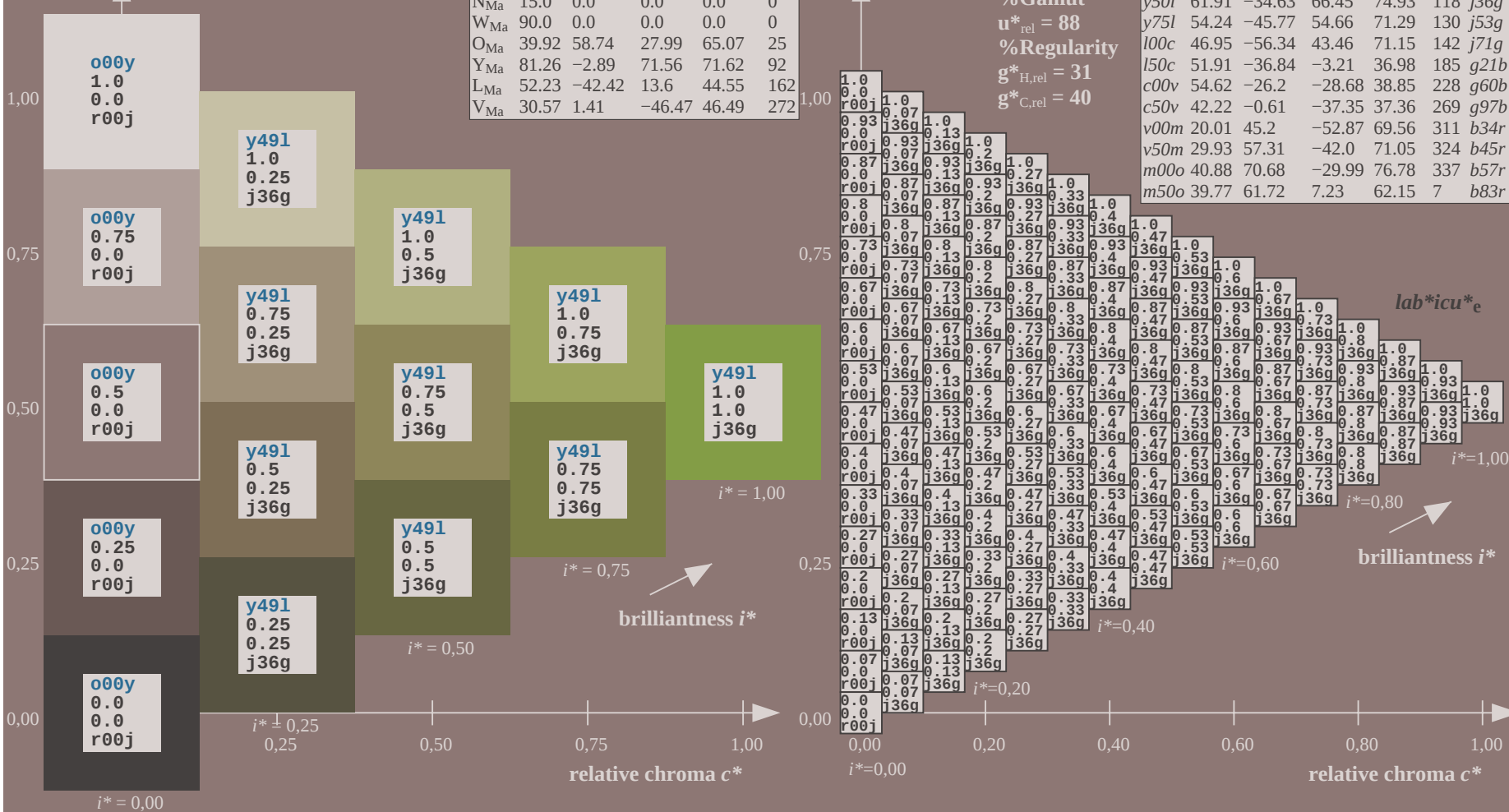
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

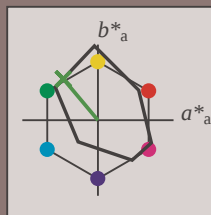
$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.361$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = y75l$ $u^*_e = j53g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 54 -46 55

$LAB^*LCH^*_{Ma}$: 54 71 129

$lab^*olv^*_{Ma}$: 0.25 1.0 0.0

$lab^*rgb^*_{Ma}$: 0.46 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab^*icu^*_e$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

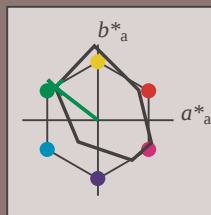
$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.395$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = 100c$ $u^*_e = j71g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 47 -56 43

$LAB^*LCH^*_{Ma}$: 47 71 142

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

$lab^*rgb^*_{Ma}$: 0.28 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab^*icu^*_e$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

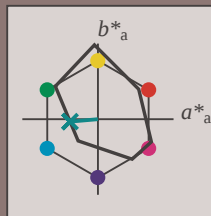
$i^*=0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.514$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = l50c$ $u^*_e = g21b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 52 -37 -3

$LAB^*LCH^*_{Ma}$: 52 37 184

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

$lab^*rgb^*_{Ma}$: 0.0 1.0 0.42

triangle lightness t^*

% Gamut

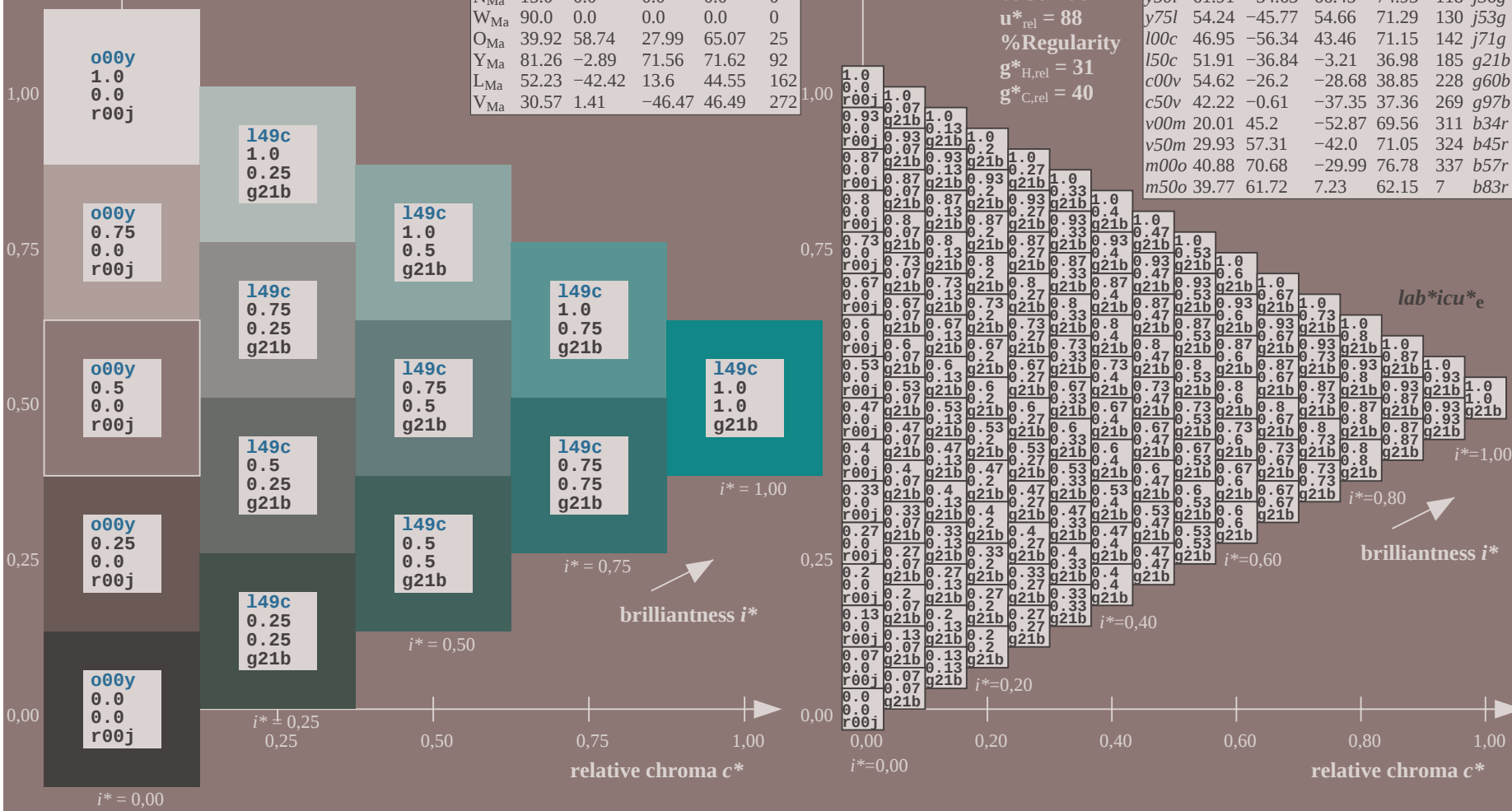
$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

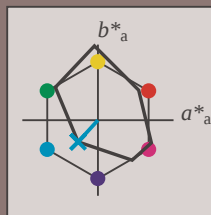
$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.632$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = c00v$ $u^*_e = g60b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 55 -26 -29

$LAB^*LCH^*_{Ma}$: 55 39 227

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

$lab^*rgb^*_{Ma}$: 0.0 0.81 1.0

triangle lightness t^*

% Gamut

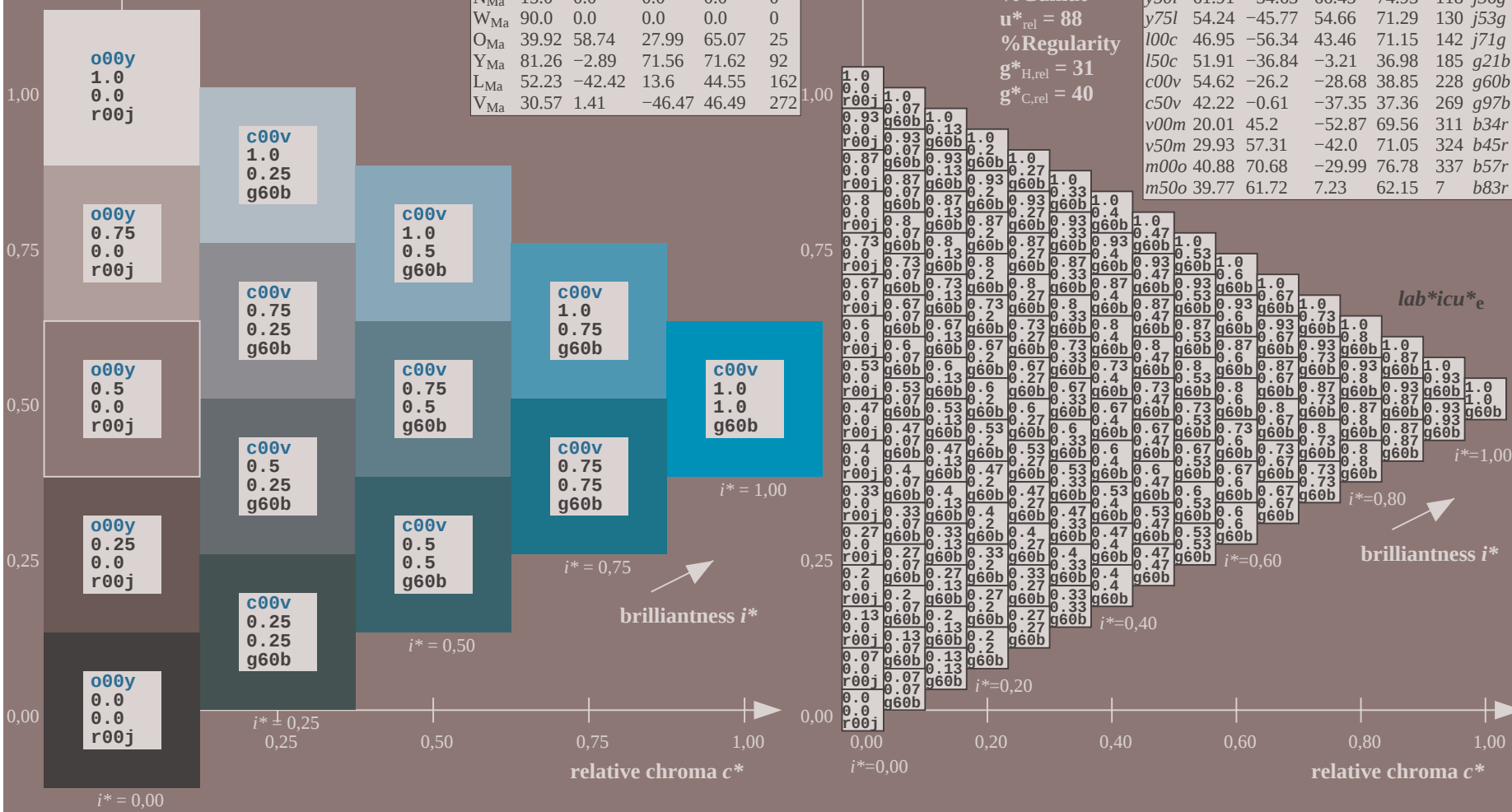
$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

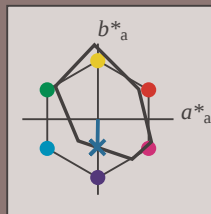
$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.747$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = c50v$ $u^*_e = g97b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 42 -1 -37

$LAB \cdot LCH \cdot Ma$: 42 37 269

$lab \cdot olv \cdot Ma$: 0.0 0.5 1.0

$lab \cdot rgb \cdot Ma$: 0.0 0.05 1.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab \cdot icu^*_e$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.863$

data for any colour:

lab^*tch^* and lab^*icu^*

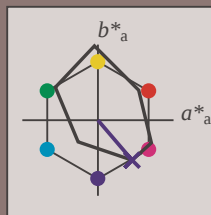
Hue texts:

$u^*_d = v00m$ $u^*_e = b34r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	38.8	53.92	39.68	66.95	36
Y _{Ma}	82.58	-4.64	98.22	98.33	93
L _{Ma}	46.95	-56.34	43.46	71.15	142
C _{Ma}	54.62	-26.2	-28.68	38.85	228
V _{Ma}	20.01	45.2	-52.87	69.56	311
M _{Ma}	40.88	70.68	-29.99	76.78	337
N _{Ma}	15.0	0.0	0.0	0.0	0
W _{Ma}	90.0	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 20 45 -53

$LAB^*LCH^*_{Ma}$: 20 70 310

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

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

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab^*icu^*_e$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

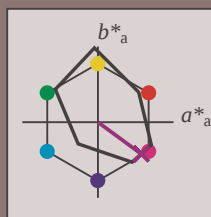
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.899$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = v50m$ $u^*_e = b45r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 30 57 -42

$LAB^*LCH^*_{Ma}$: 30 71 323

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

$lab^*rgb^*_{Ma}$: 0.91 0.0 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$lab^*icu^*_e$

$i^* = 1.00$

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

brilliantness i^*

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.936$

data for any colour:

lab^*tch^* and lab^*icu^*

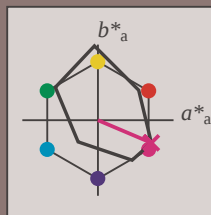
Hue texts:

$u^*_d = m00o$ $u^*_e = b57r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 41 71 -30

$LAB^*LCH^*_{Ma}$: 41 77 337

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.85

triangle lightness t^*

%Gamut

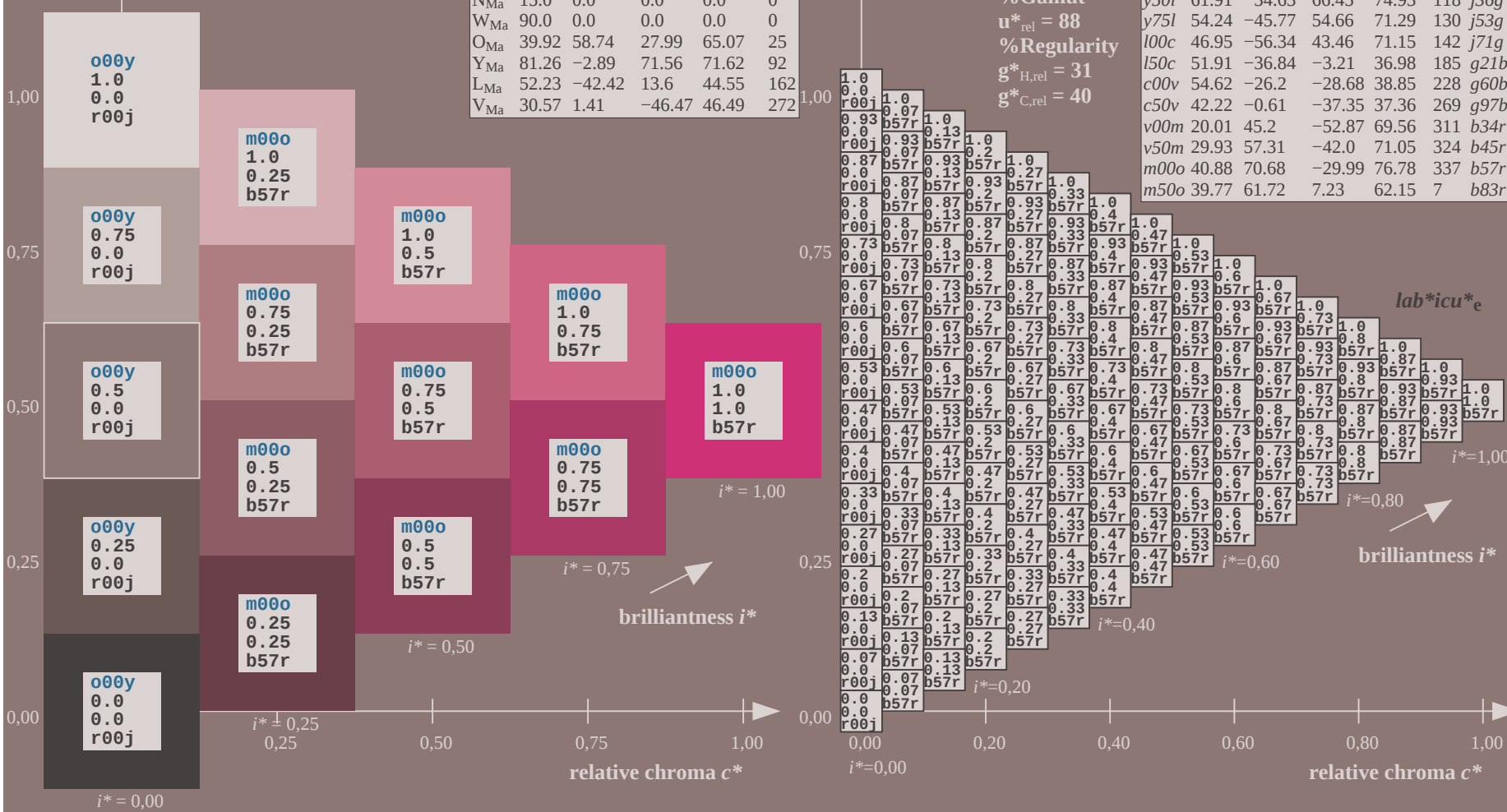
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.019$

data for any colour:

lab^*tch^* and lab^*icu^*

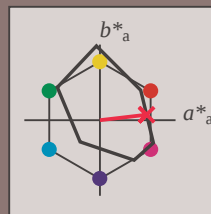
Hue texts:

$u^*_d = m50o$ $u^*_e = b83r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	38.8	53.92	39.68	66.95	36	
Y _{Ma}	82.58	-4.64	98.22	98.33	93	
L _{Ma}	46.95	-56.34	43.46	71.15	142	
C _{Ma}	54.62	-26.2	-28.68	38.85	228	
V _{Ma}	20.01	45.2	-52.87	69.56	311	
M _{Ma}	40.88	70.68	-29.99	76.78	337	
N _{Ma}	15.0	0.0	0.0	0.0	0	
W _{Ma}	90.0	0.0	0.0	0.0	0	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 40 62 7

$LAB^*LCH^*_{Ma}$: 40 62 6

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.33

triangle lightness t^*

%Gamut

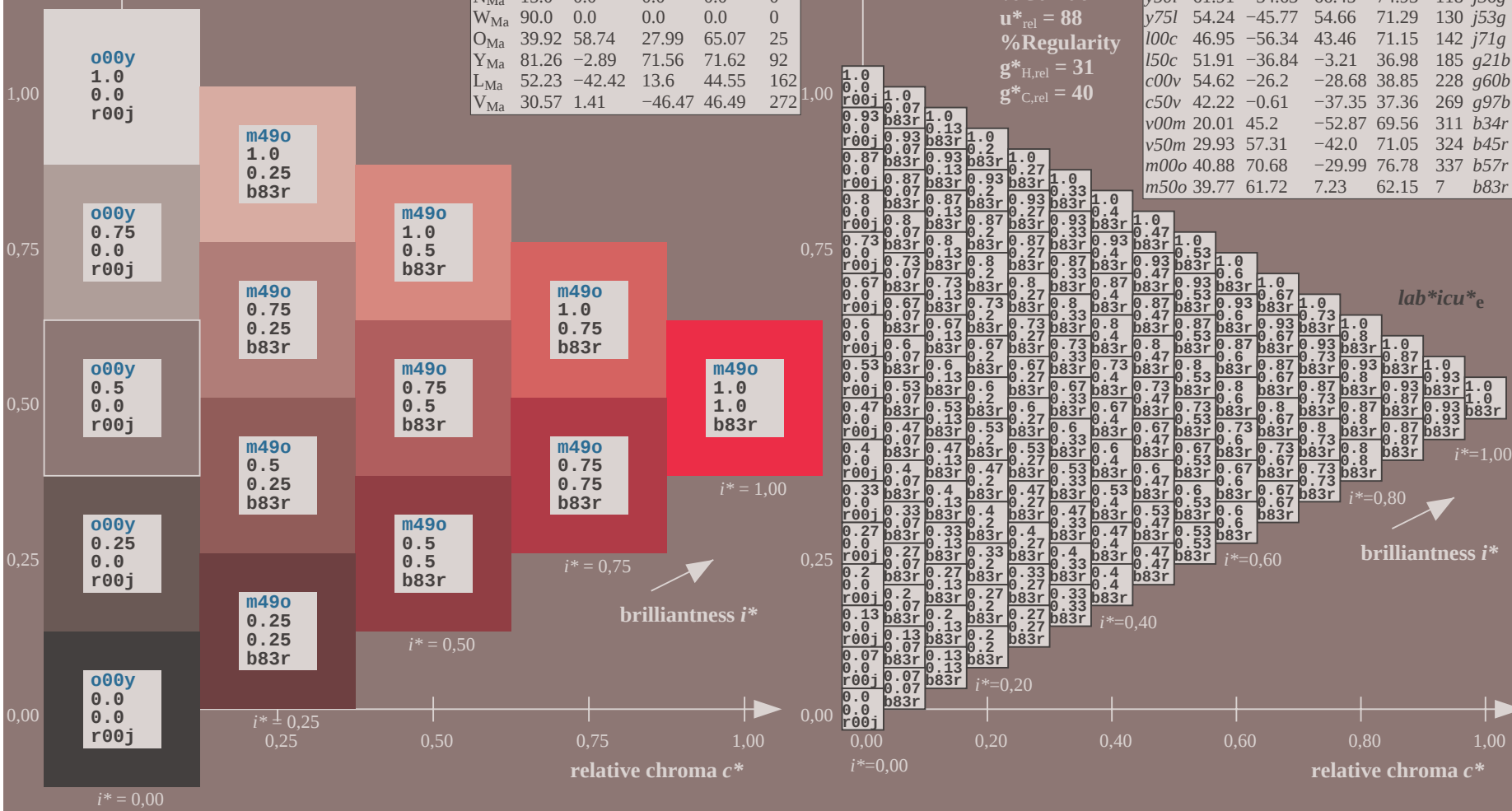
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data						
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r



See for similar files: <http://www.ps.bam.de/Ee67/>; www.ps.bam.de
Technical information: <http://www.ps.bam.de> Version 2.1, io=1, CIELAB, ColSpX=0

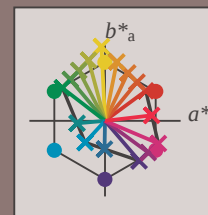
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	a	b	c	d	e	f	g	h	i	j	k	lab*icu*	e							
01	0.0	0.13	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.13	0.13	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.25	0.25	0.38	0.5	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0					
02	0.13	0.13	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.13	0.13	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.25	0.25	0.38	0.5	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0				
03	0.25	0.25	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.25	0.25	0.25	0.38	0.5	0.63	0.75	0.88	1.0	0.25	0.25	0.38	0.5	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0			
04	0.38	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	0.38	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0		
05	0.5	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	0.5	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0			
06	0.63	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	0.63	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0			
07	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0		
08	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	
09	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
10	0.38	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	0.38	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	0.38	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
11	0.5	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	0.5	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	0.5	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
12	0.63	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	0.63	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	0.63	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
13	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
14	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
15	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
16	0.38	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	0.38	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	0.38	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
17	0.5	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	0.5	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	0.5	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
18	0.63	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	0.63	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	0.63	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
19	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
20	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
21	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
22	0.38	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	0.38	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	0.38	0.38	0.38	0.38	0.5	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
23	0.5	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	0.5	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	0.5	0.5	0.5	0.5	0.5	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
24	0.63	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	0.63	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	0.63	0.63	0.63	0.63	0.63	0.63	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
25	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	0.75	0.75	0.75	0.75	0.75	0.75	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
26	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
27	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Input and output:
Colorimetric Printer Reflective System FRS15_90a
data for any colour:

u^*_d and number $no.$ = 00 .. 15
device hue text:
 u^*_d = 16 hues $o00y$, $o25y$, ..., $m50o$
contrast reduction factor:
 $c_R = 0.9$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$



%Gamut

$u^*_{rel} = 88$

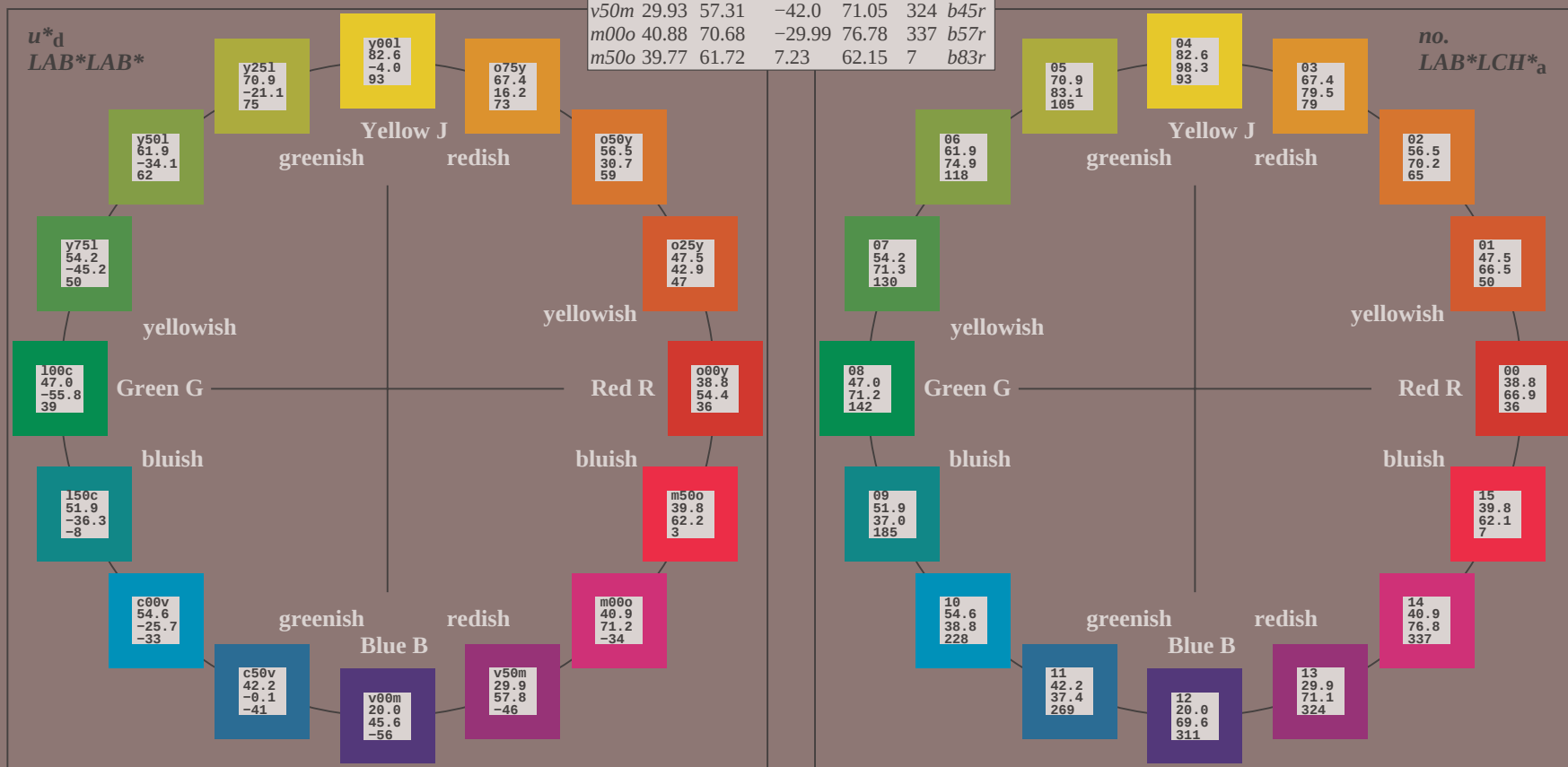
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

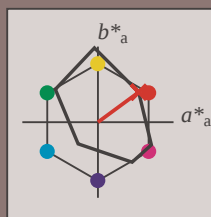
FRS15_90; CIELAB data

Name	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_{CIE}	39.92	58.74	27.99	65.07	25
Y_{CIE}	81.26	-2.89	71.56	71.62	92
L_{CIE}	52.23	-42.42	13.6	44.55	162
V_{CIE}	30.57	1.41	-46.47	46.49	272



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.101$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = o00y$ $u^*_e = r16j$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



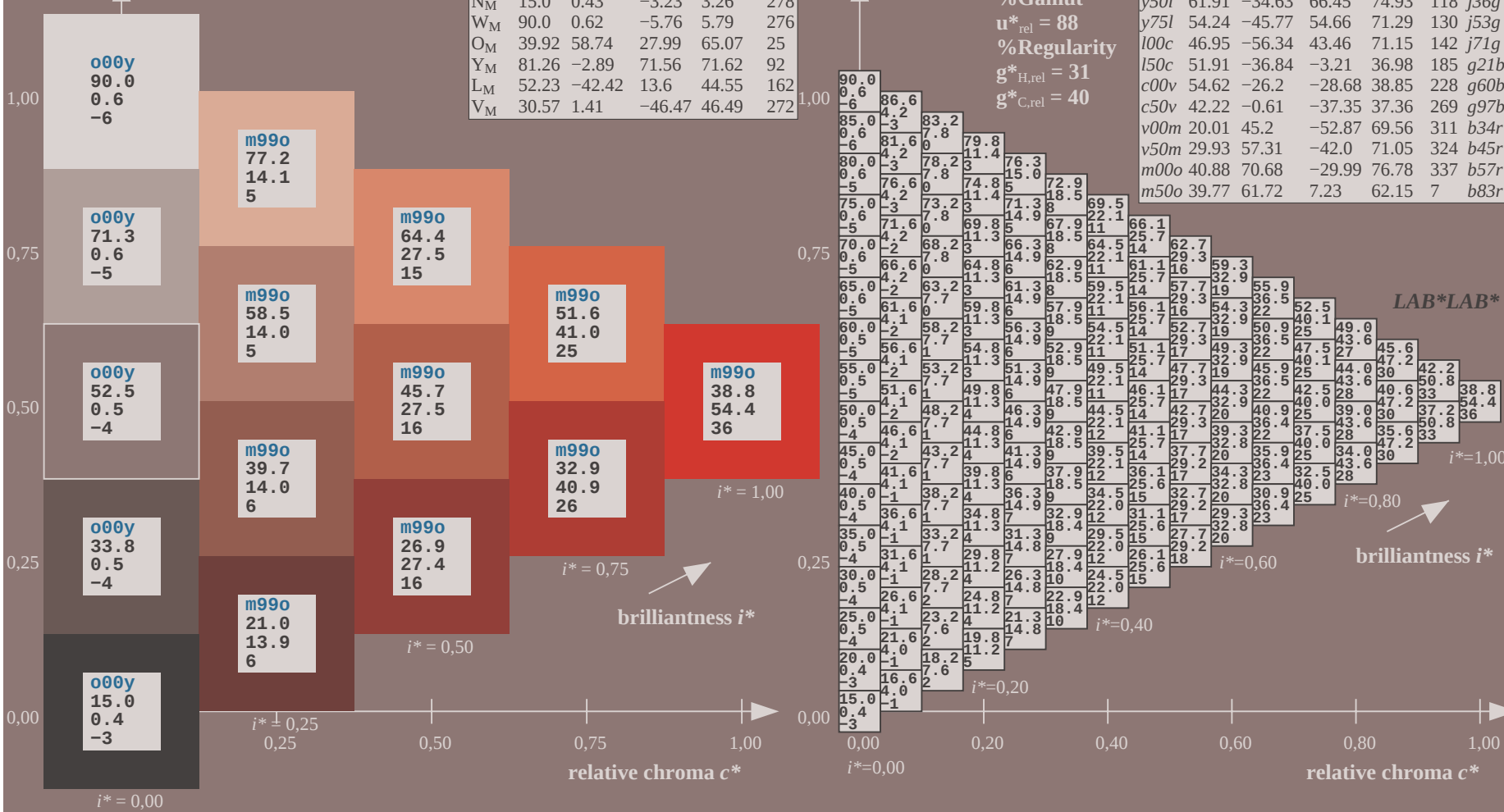
FRS15_90; CIELAB data					
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 39 54 40
 $LAB \cdot LCH^*_{Ma}$: 39 67 36
 $lab \cdot olv^*_{Ma}$: 1.0 0.0 0.0
 $lab \cdot rgb^*_{Ma}$: 1.0 0.16 0.0
triangle lightness t^*

%Gamut
 $u^*_{rel} = 88$
%Regularity
 $g^*_{H,rel} = 31$
 $g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.14$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

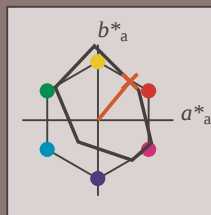
Hue texts:

$u^*_d = o25y$ $u^*_e = r37j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 47 42 51

$LAB \cdot LCH^*_{Ma}$: 47 66 50

$lab \cdot olv^*_{Ma}$: 1.0 0.25 0.0

$lab \cdot rgb^*_{Ma}$: 1.0 0.37 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

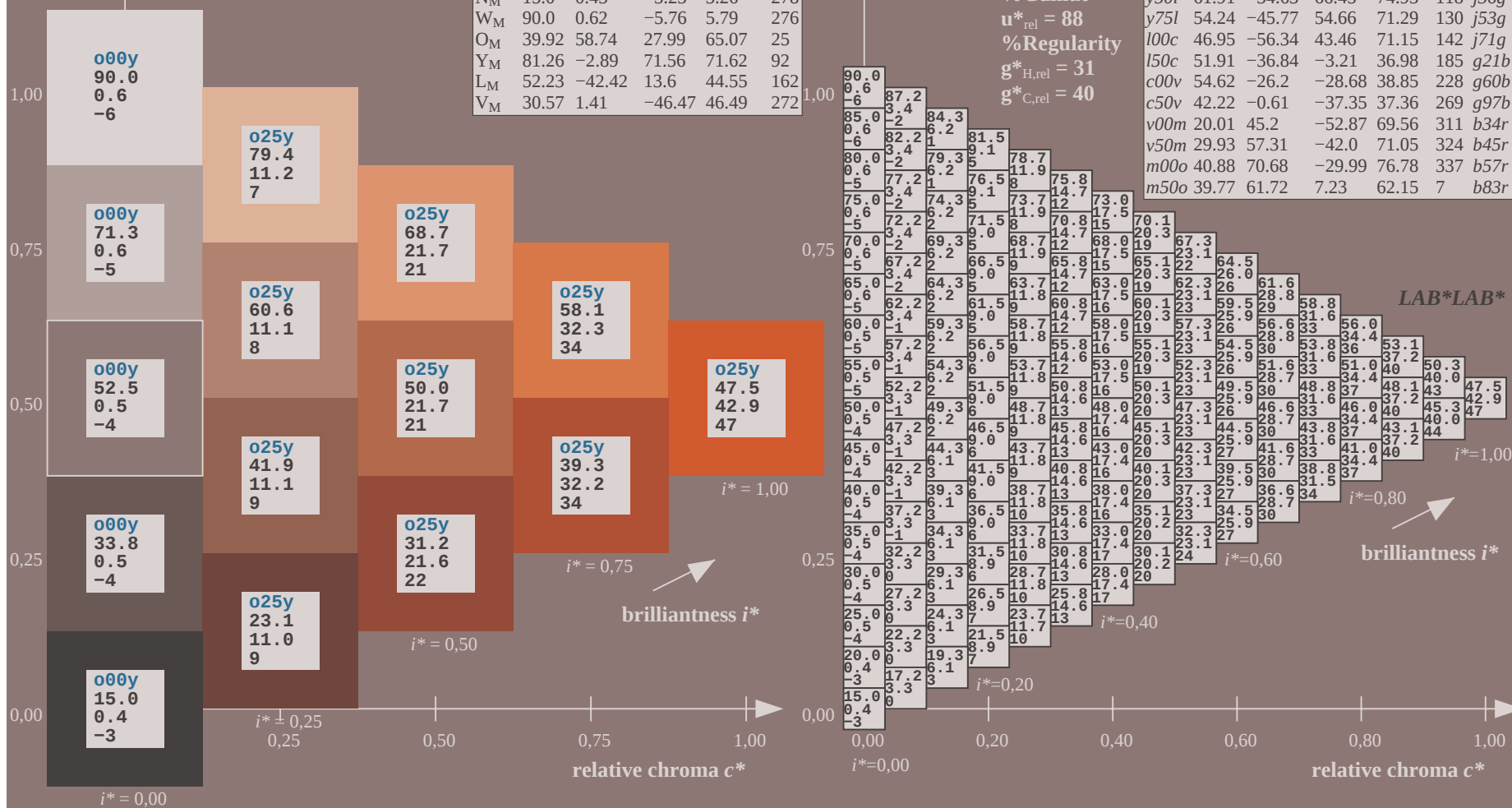
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

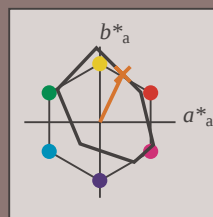
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$u^*_d = o25y$
 $LAB \cdot LAB^*$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.179$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = o50y$ $u^*_e = r58j$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



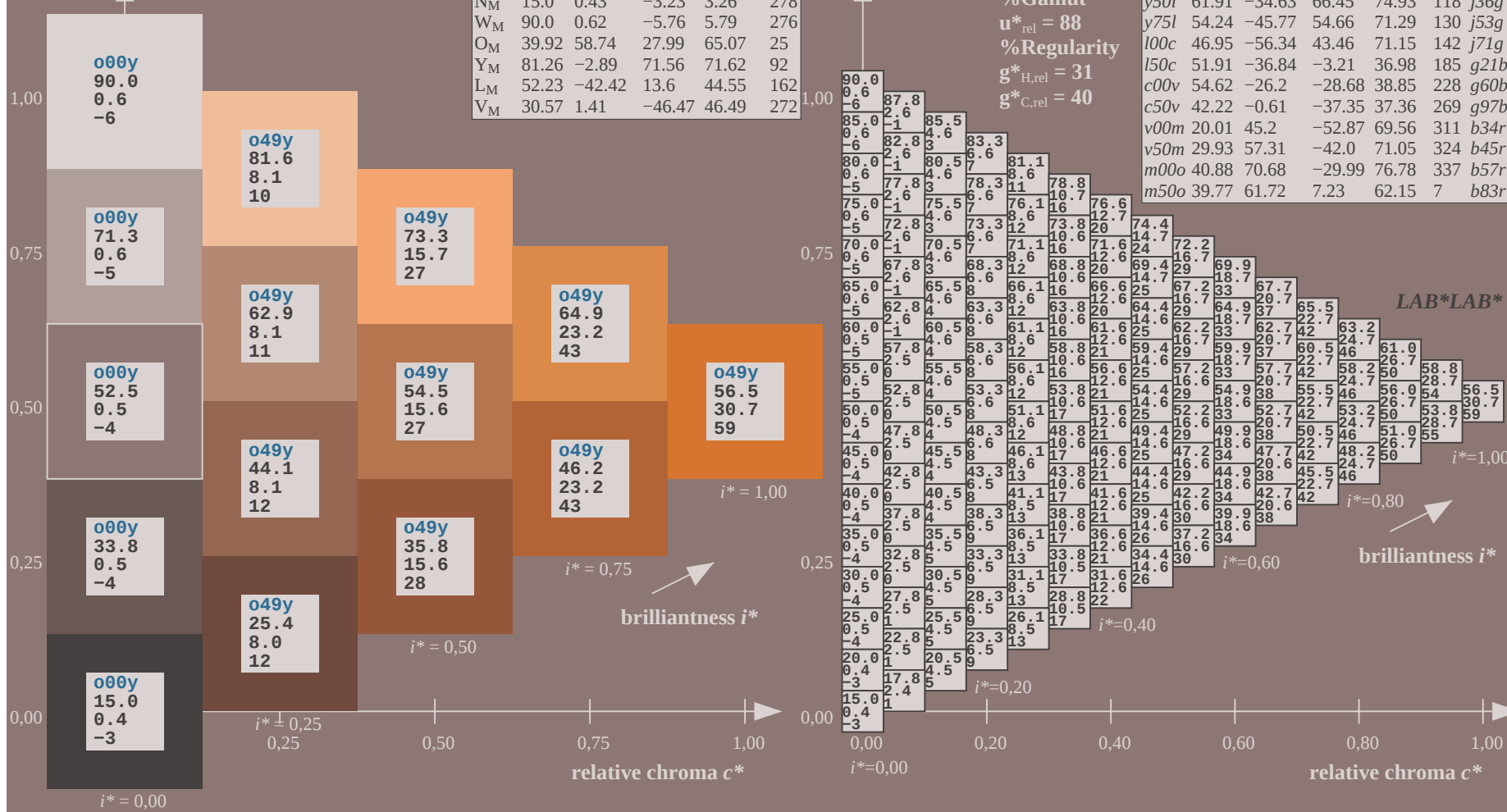
FRS15_90; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O _M	38.8	54.41	35.65	65.05	33	
Y _M	82.58	-4.04	92.72	92.8	92	
L _M	46.95	-55.83	39.15	68.19	145	
C _M	54.62	-25.67	-33.25	42.01	232	
V _M	20.01	45.64	-56.27	72.45	309	
M _M	40.88	71.17	-34.09	78.92	334	
N _M	15.0	0.43	-3.23	3.26	278	
W _M	90.0	0.62	-5.76	5.79	276	
O _M	39.92	58.74	27.99	65.07	25	
Y _M	81.26	-2.89	71.56	71.62	92	
L _M	52.23	-42.42	13.6	44.55	162	
V _M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

LAB^*LAB^*Ma : 57 30 63
 LAB^*LCH^*Ma : 57 70 64
 lab^*olv^*Ma : 1.0 0.5 0.0
 lab^*rgb^*Ma : 1.0 0.58 0.0
triangle lightness t^*

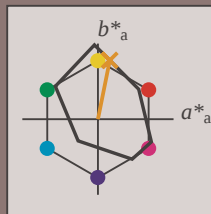
%Gamut
 $u^*_{rel} = 88$
%Regularity
 $g^*_{H,rel} = 31$
 $g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.218$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = o75y$ $u^*_e = r79j$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O _M	38.8	54.41	35.65	65.05	33	
Y _M	82.58	-4.04	92.72	92.8	92	
L _M	46.95	-55.83	39.15	68.19	145	
C _M	54.62	-25.67	-33.25	42.01	232	
V _M	20.01	45.64	-56.27	72.45	309	
M _M	40.88	71.17	-34.09	78.92	334	
N _M	15.0	0.43	-3.23	3.26	278	
W _M	90.0	0.62	-5.76	5.79	276	
O _M	39.92	58.74	27.99	65.07	25	
Y _M	81.26	-2.89	71.56	71.62	92	
L _M	52.23	-42.42	13.6	44.55	162	
V _M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

LAB^*LAB^*Ma : 67 16 78

LAB^*LCH^*Ma : 67 79 78

lab^*olv^*Ma : 1.0 0.75 0.0

lab^*rgb^*Ma : 1.0 0.8 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*$	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	

LAB^*LAB^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.258$
data for any colour:
 lab^*tch^* and lab^*icu^*

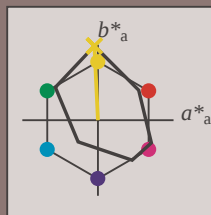
Hue texts:

$u^*_d = y00l$ $u^*_e = j01g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O	39.92	58.74	27.99	65.07	25
Y	81.26	-2.89	71.56	71.62	92
L	52.23	-42.42	13.6	44.55	162
V	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*Ma: 83 -5 98$

$LAB^*LCH^*Ma: 83 98 92$

$lab^*olv^*Ma: 1.0 1.0 0.0$

$lab^*rgb^*Ma: 0.99 1.0 0.0$

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

$u^*_d = y00l$
 LAB^*LAB^*

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

LAB^*LAB^*

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

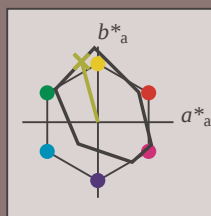
$i^*=0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.292$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = y25l$ $u^*_e = j18g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O_M	38.8	54.41	35.65	65.05	33	
Y_M	82.58	-4.04	92.72	92.8	92	
L_M	46.95	-55.83	39.15	68.19	145	
C_M	54.62	-25.67	-33.25	42.01	232	
V_M	20.01	45.64	-56.27	72.45	309	
M_M	40.88	71.17	-34.09	78.92	334	
N_M	15.0	0.43	-3.23	3.26	278	
W_M	90.0	0.62	-5.76	5.79	276	
O_M	39.92	58.74	27.99	65.07	25	
Y_M	81.26	-2.89	71.56	71.62	92	
L_M	52.23	-42.42	13.6	44.55	162	
V_M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*Ma: 71 -22 80$

$LAB^*LCH^*Ma: 71 83 105$

$lab^*olv^*Ma: 0.75 1.0 0.0$

$lab^*rgb^*Ma: 0.82 1.0 0.0$

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data								
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e		
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$		
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$		
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$		
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$		
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$		
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$		
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$		
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$		
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$		
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$		
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$		
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$		
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$		
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$		
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$		
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$		

LAB^*LAB^*

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

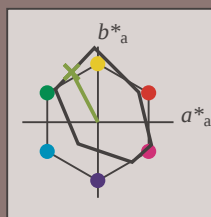
$i^*=0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.326$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = y50l$ $u^*_e = j36g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90; CIELAB data						
u^*_d	$L^*=L^*_a$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O _M	38.8	54.41	35.65	65.05	33	
Y _M	82.58	-4.04	92.72	92.8	92	
L _M	46.95	-55.83	39.15	68.19	145	
C _M	54.62	-25.67	-33.25	42.01	232	
V _M	20.01	45.64	-56.27	72.45	309	
M _M	40.88	71.17	-34.09	78.92	334	
N _M	15.0	0.43	-3.23	3.26	278	
W _M	90.0	0.62	-5.76	5.79	276	
O _M	39.92	58.74	27.99	65.07	25	
Y _M	81.26	-2.89	71.56	71.62	92	
L _M	52.23	-42.42	13.6	44.55	162	
V _M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 62 -35 66

$LAB \cdot LCH^*_{Ma}$: 62 75 117

$lab \cdot olv^*_{Ma}$: 0.5 1.0 0.0

$lab \cdot rgb^*_{Ma}$: 0.64 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data								
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e		
o00y	38.8	53.92	39.68	66.95	36	r16j		
o25y	47.46	42.34	51.25	66.48	50	r37j		
o50y	56.54	30.2	63.39	70.22	65	r58j		
o75y	67.39	15.68	77.9	79.47	79	r79j		
y00l	82.58	-4.64	98.22	98.33	93	j01g		
y25l	70.85	-21.66	80.19	83.07	105	j18g		
y50l	61.91	-34.63	66.45	74.93	118	j36g		
y75l	54.24	-45.77	54.66	71.29	130	j53g		
l00c	46.95	-56.34	43.46	71.15	142	j71g		
l50c	51.91	-36.84	-3.21	36.98	185	g21b		
c00v	54.62	-26.2	-28.68	38.85	228	g60b		
c50v	42.22	-0.61	-37.35	37.36	269	g97b		
v00m	20.01	45.2	-52.87	69.56	311	b34r		
v50m	29.93	57.31	-42.0	71.05	324	b45r		
m00o	40.88	70.68	-29.99	76.78	337	b57r		
m50o	39.77	61.72	7.23	62.15	7	b83r		

$LAB \cdot LAB^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

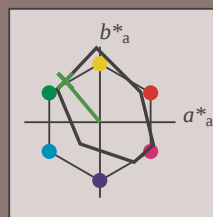
$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.361$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = y75l$ $u^*_e = j53g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O _M	38.8	54.41	35.65	65.05	33	
Y _M	82.58	-4.04	92.72	92.8	92	
L _M	46.95	-55.83	39.15	68.19	145	
C _M	54.62	-25.67	-33.25	42.01	232	
V _M	20.01	45.64	-56.27	72.45	309	
M _M	40.88	71.17	-34.09	78.92	334	
N _M	15.0	0.43	-3.23	3.26	278	
W _M	90.0	0.62	-5.76	5.79	276	
O _M	39.92	58.74	27.99	65.07	25	
Y _M	81.26	-2.89	71.56	71.62	92	
L _M	52.23	-42.42	13.6	44.55	162	
V _M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

LAB^*LAB^*Ma : 54 -46 55

LAB^*LCH^*Ma : 54 71 129

lab^*olv^*Ma : 0.25 1.0 0.0

lab^*rgb^*Ma : 0.46 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data								
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e		
o00y	38.8	53.92	39.68	66.95	36	r16j		
o25y	47.46	42.34	51.25	66.48	50	r37j		
o50y	56.54	30.2	63.39	70.22	65	r58j		
o75y	67.39	15.68	77.9	79.47	79	r79j		
y00l	82.58	-4.64	98.22	98.33	93	j01g		
y25l	70.85	-21.66	80.19	83.07	105	j18g		
y50l	61.91	-34.63	66.45	74.93	118	j36g		
y75l	54.24	-45.77	54.66	71.29	130	j53g		
l00c	46.95	-56.34	43.46	71.15	142	j71g		
l50c	51.91	-36.84	-3.21	36.98	185	g21b		
c00v	54.62	-26.2	-28.68	38.85	228	g60b		
c50v	42.22	-0.61	-37.35	37.36	269	g97b		
v00m	20.01	45.2	-52.87	69.56	311	b34r		
v50m	29.93	57.31	-42.0	71.05	324	b45r		
m00o	40.88	70.68	-29.99	76.78	337	b57r		
m50o	39.77	61.72	7.23	62.15	7	b83r		

LAB^*LAB^*

$i^*=1.00$

brilliantness i^*

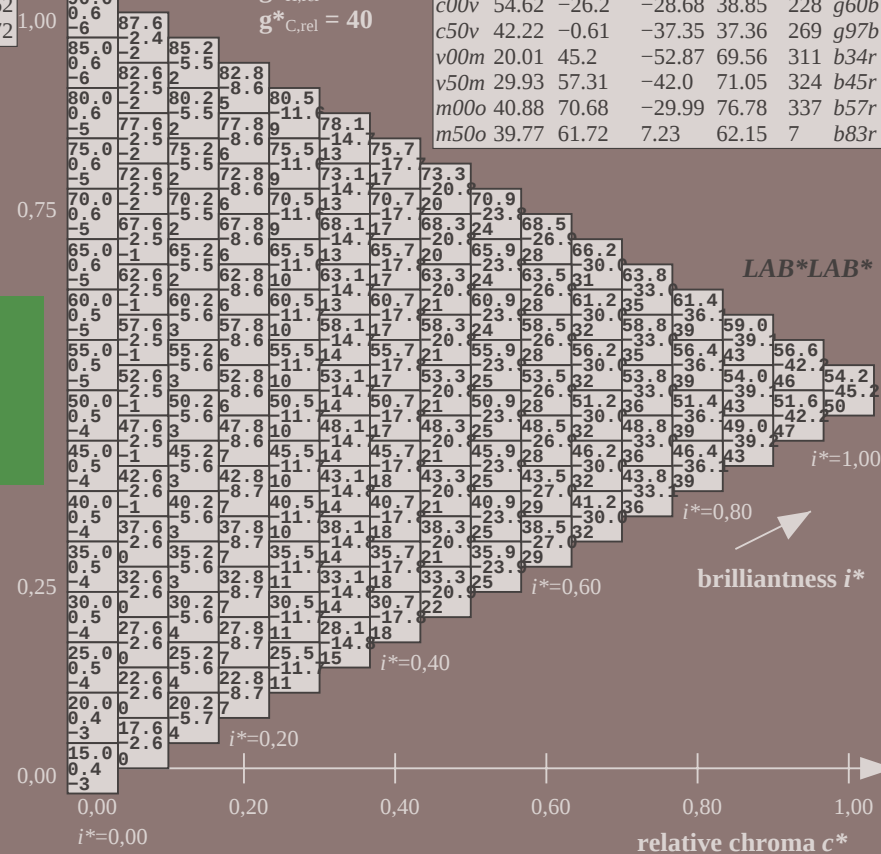
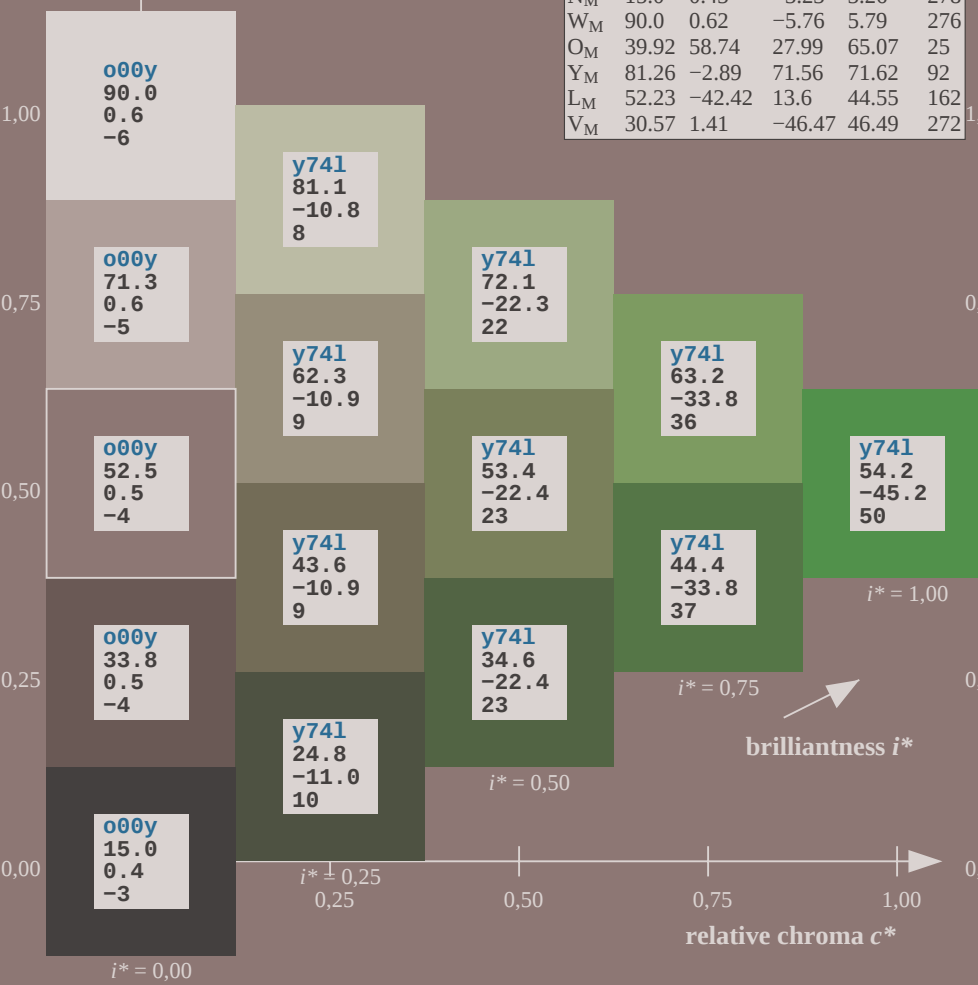
$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

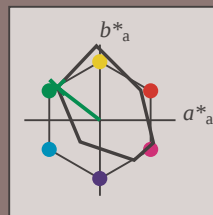
$i^*=0.20$

$i^*=0.00$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.395$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = 100c$ $u^*_e = j71g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O _M	38.8	54.41	35.65	65.05	33	
Y _M	82.58	-4.04	92.72	92.8	92	
L _M	46.95	-55.83	39.15	68.19	145	
C _M	54.62	-25.67	-33.25	42.01	232	
V _M	20.01	45.64	-56.27	72.45	309	
M _M	40.88	71.17	-34.09	78.92	334	
N _M	15.0	0.43	-3.23	3.26	278	
W _M	90.0	0.62	-5.76	5.79	276	
O _M	39.92	58.74	27.99	65.07	25	
Y _M	81.26	-2.89	71.56	71.62	92	
L _M	52.23	-42.42	13.6	44.55	162	
V _M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

LAB^*LAB^*Ma : 47 -56 43

LAB^*LCH^*Ma : 47 71 142

lab^*olv^*Ma : 0.0 1.0 0.0

lab^*rgb^*Ma : 0.28 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data								
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e		
o00y	38.8	53.92	39.68	66.95	36	r16j		
o25y	47.46	42.34	51.25	66.48	50	r37j		
o50y	56.54	30.2	63.39	70.22	65	r58j		
o75y	67.39	15.68	77.9	79.47	79	r79j		
y00l	82.58	-4.64	98.22	98.33	93	j01g		
y25l	70.85	-21.66	80.19	83.07	105	j18g		
y50l	61.91	-34.63	66.45	74.93	118	j36g		
y75l	54.24	-45.77	54.66	71.29	130	j53g		
l00c	46.95	-56.34	43.46	71.15	142	j71g		
l50c	51.91	-36.84	-3.21	36.98	185	g21b		
c00v	54.62	-26.2	-28.68	38.85	228	g60b		
c50v	42.22	-0.61	-37.35	37.36	269	g97b		
v00m	20.01	45.2	-52.87	69.56	311	b34r		
v50m	29.93	57.31	-42.0	71.05	324	b45r		
m00o	40.88	70.68	-29.99	76.78	337	b57r		
m50o	39.77	61.72	7.23	62.15	7	b83r		

LAB^*LAB^*

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

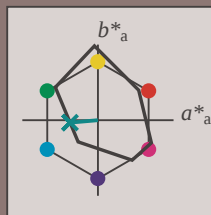
$i^*=0.40$

$i^*=0.20$

$i^*=0.00$

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.514$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u_d^* = 150c$ $u_e^* = g21b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90; CIELAB data						
u_d^*	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O _M	38.8	54.41	35.65	65.05	33	
Y _M	82.58	-4.04	92.72	92.8	92	
L _M	46.95	-55.83	39.15	68.19	145	
C _M	54.62	-25.67	-33.25	42.01	232	
V _M	20.01	45.64	-56.27	72.45	309	
M _M	40.88	71.17	-34.09	78.92	334	
N _M	15.0	0.43	-3.23	3.26	278	
W _M	90.0	0.62	-5.76	5.79	276	
O _M	39.92	58.74	27.99	65.07	25	
Y _M	81.26	-2.89	71.56	71.62	92	
L _M	52.23	-42.42	13.6	44.55	162	
V _M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 52 -37 -3

$LAB \cdot LCH^*_{Ma}$: 52 37 184

$lab \cdot olv^*_{Ma}$: 0.0 1.0 0.5

$lab \cdot rgb^*_{Ma}$: 0.0 1.0 0.42

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data								
u_d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e		
o00y	38.8	53.92	39.68	66.95	36	r16j		
o25y	47.46	42.34	51.25	66.48	50	r37j		
o50y	56.54	30.2	63.39	70.22	65	r58j		
o75y	67.39	15.68	77.9	79.47	79	r79j		
y00l	82.58	-4.64	98.22	98.33	93	j01g		
y25l	70.85	-21.66	80.19	83.07	105	j18g		
y50l	61.91	-34.63	66.45	74.93	118	j36g		
y75l	54.24	-45.77	54.66	71.29	130	j53g		
l00c	46.95	-56.34	43.46	71.15	142	j71g		
l50c	51.91	-36.84	-3.21	36.98	185	g21b		
c00v	54.62	-26.2	-28.68	38.85	228	g60b		
c50v	42.22	-0.61	-37.35	37.36	269	g97b		
v00m	20.01	45.2	-52.87	69.56	311	b34r		
v50m	29.93	57.31	-42.0	71.05	324	b45r		
m00o	40.88	70.68	-29.99	76.78	337	b57r		
m50o	39.77	61.72	7.23	62.15	7	b83r		

$LAB \cdot LAB^*$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

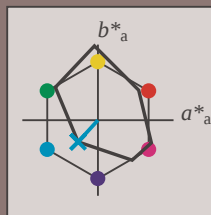
$i^*=0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.632$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = c00v$ $u^*_e = g60b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O _M	38.8	54.41	35.65	65.05	33	
Y _M	82.58	-4.04	92.72	92.8	92	
L _M	46.95	-55.83	39.15	68.19	145	
C _M	54.62	-25.67	-33.25	42.01	232	
V _M	20.01	45.64	-56.27	72.45	309	
M _M	40.88	71.17	-34.09	78.92	334	
N _M	15.0	0.43	-3.23	3.26	278	
W _M	90.0	0.62	-5.76	5.79	276	
O _M	39.92	58.74	27.99	65.07	25	
Y _M	81.26	-2.89	71.56	71.62	92	
L _M	52.23	-42.42	13.6	44.55	162	
V _M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 55 -26 -29

$LAB \cdot LCH^*_{Ma}$: 55 39 227

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

$lab \cdot rgb^*_{Ma}$: 0.0 0.81 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data									
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e			
o00y	38.8	53.92	39.68	66.95	36	r16j			
o25y	47.46	42.34	51.25	66.48	50	r37j			
o50y	56.54	30.2	63.39	70.22	65	r58j			
o75y	67.39	15.68	77.9	79.47	79	r79j			
y00l	82.58	-4.64	98.22	98.33	93	j01g			
y25l	70.85	-21.66	80.19	83.07	105	j18g			
y50l	61.91	-34.63	66.45	74.93	118	j36g			
y75l	54.24	-45.77	54.66	71.29	130	j53g			
l00c	46.95	-56.34	43.46	71.15	142	j71g			
l50c	51.91	-36.84	-3.21	36.98	185	g21b			
c00v	54.62	-26.2	-28.68	38.85	228	g60b			
c50v	42.22	-0.61	-37.35	37.36	269	g97b			
v00m	20.01	45.2	-52.87	69.56	311	b34r			
v50m	29.93	57.31	-42.0	71.05	324	b45r			
m00o	40.88	70.68	-29.99	76.78	337	b57r			
m50o	39.77	61.72	7.23	62.15	7	b83r			

$LAB \cdot LAB^*$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

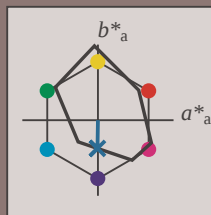
$i^*=0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = \text{lab} \cdot h^* = h_{ab}/360 = 0.747$
data for any colour:
 $\text{lab} \cdot \text{tch}^*$ and $\text{lab} \cdot \text{icu}^*$

Hue texts:
 $u^*_d = c50v$ $u^*_e = g97b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O _M	38.8	54.41	35.65	65.05	33	
Y _M	82.58	-4.04	92.72	92.8	92	
L _M	46.95	-55.83	39.15	68.19	145	
C _M	54.62	-25.67	-33.25	42.01	232	
V _M	20.01	45.64	-56.27	72.45	309	
M _M	40.88	71.17	-34.09	78.92	334	
N _M	15.0	0.43	-3.23	3.26	278	
W _M	90.0	0.62	-5.76	5.79	276	
O _M	39.92	58.74	27.99	65.07	25	
Y _M	81.26	-2.89	71.56	71.62	92	
L _M	52.23	-42.42	13.6	44.55	162	
V _M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$\text{LAB} \cdot \text{LAB}^* \text{Ma}: 42 \ -1 \ -37$

$\text{LAB} \cdot \text{LCH}^* \text{Ma}: 42 \ 37 \ 269$

$\text{lab} \cdot \text{olv}^* \text{Ma}: 0.0 \ 0.5 \ 1.0$

$\text{lab} \cdot \text{rgb}^* \text{Ma}: 0.0 \ 0.05 \ 1.0$

triangle lightness t^*

% Gamut

$u^*_{\text{rel}} = 88$

% Regularity

$g^*_{H,\text{rel}} = 31$

$g^*_{C,\text{rel}} = 40$

FRS15_90a; adapted (a) CIELAB data								
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e		
o00y	38.8	53.92	39.68	66.95	36	r16j		
o25y	47.46	42.34	51.25	66.48	50	r37j		
o50y	56.54	30.2	63.39	70.22	65	r58j		
o75y	67.39	15.68	77.9	79.47	79	r79j		
y00l	82.58	-4.64	98.22	98.33	93	j01g		
y25l	70.85	-21.66	80.19	83.07	105	j18g		
y50l	61.91	-34.63	66.45	74.93	118	j36g		
y75l	54.24	-45.77	54.66	71.29	130	j53g		
l00c	46.95	-56.34	43.46	71.15	142	j71g		
l50c	51.91	-36.84	-3.21	36.98	185	g21b		
c00v	54.62	-26.2	-28.68	38.85	228	g60b		
c50v	42.22	-0.61	-37.35	37.36	269	g97b		
v00m	20.01	45.2	-52.87	69.56	311	b34r		
v50m	29.93	57.31	-42.0	71.05	324	b45r		
m00o	40.88	70.68	-29.99	76.78	337	b57r		
m50o	39.77	61.72	7.23	62.15	7	b83r		

$\text{LAB} \cdot \text{LAB}^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

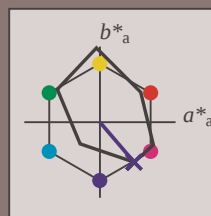
relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.863$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:

$u^*_d = v00m$ $u^*_e = b34r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O_M	38.8	54.41	35.65	65.05	33	
Y_M	82.58	-4.04	92.72	92.8	92	
L_M	46.95	-55.83	39.15	68.19	145	
C_M	54.62	-25.67	-33.25	42.01	232	
V_M	20.01	45.64	-56.27	72.45	309	
M_M	40.88	71.17	-34.09	78.92	334	
N_M	15.0	0.43	-3.23	3.26	278	
W_M	90.0	0.62	-5.76	5.79	276	
O_M	39.92	58.74	27.99	65.07	25	
Y_M	81.26	-2.89	71.56	71.62	92	
L_M	52.23	-42.42	13.6	44.55	162	
V_M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_Ma$: 20 45 -53

$LAB^*LCH^*_Ma$: 20 70 310

$lab^*olv^*_Ma$: 0.0 0.0 1.0

$lab^*rgb^*_Ma$: 0.68 0.0 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data									
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e			
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$			
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$			
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$			
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$			
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$			
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$			
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$			
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$			
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$			
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$			
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$			
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$			
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$			
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$			
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$			
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$			

LAB^*LAB^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

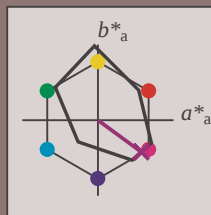
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = \text{lab} \cdot h^* = h_{ab}/360 = 0.899$
data for any colour:
 $\text{lab} \cdot \text{tch}^*$ and $\text{lab} \cdot \text{icu}^*$

Hue texts:
 $u^*_d = v50m$ $u^*_e = b45r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O _M	38.8	54.41	35.65	65.05	33	
Y _M	82.58	-4.04	92.72	92.8	92	
L _M	46.95	-55.83	39.15	68.19	145	
C _M	54.62	-25.67	-33.25	42.01	232	
V _M	20.01	45.64	-56.27	72.45	309	
M _M	40.88	71.17	-34.09	78.92	334	
N _M	15.0	0.43	-3.23	3.26	278	
W _M	90.0	0.62	-5.76	5.79	276	
O _M	39.92	58.74	27.99	65.07	25	
Y _M	81.26	-2.89	71.56	71.62	92	
L _M	52.23	-42.42	13.6	44.55	162	
V _M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$\text{LAB} \cdot \text{LAB}^* \text{Ma}: 30 \ 57 \ -42$

$\text{LAB} \cdot \text{LCH}^* \text{Ma}: 30 \ 71 \ 323$

$\text{lab} \cdot \text{olv}^* \text{Ma}: 0.5 \ 0.0 \ 1.0$

$\text{lab} \cdot \text{rgb}^* \text{Ma}: 0.91 \ 0.0 \ 1.0$

triangle lightness t^*

%Gamut

$u^*_{\text{rel}} = 88$

%Regularity

$g^*_{H,\text{rel}} = 31$

$g^*_{C,\text{rel}} = 40$

FRS15_90a; adapted (a) CIELAB data								
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e		
o00y	38.8	53.92	39.68	66.95	36	r16j		
o25y	47.46	42.34	51.25	66.48	50	r37j		
o50y	56.54	30.2	63.39	70.22	65	r58j		
o75y	67.39	15.68	77.9	79.47	79	r79j		
y00l	82.58	-4.64	98.22	98.33	93	j01g		
y25l	70.85	-21.66	80.19	83.07	105	j18g		
y50l	61.91	-34.63	66.45	74.93	118	j36g		
y75l	54.24	-45.77	54.66	71.29	130	j53g		
l00c	46.95	-56.34	43.46	71.15	142	j71g		
l50c	51.91	-36.84	-3.21	36.98	185	g21b		
c00v	54.62	-26.2	-28.68	38.85	228	g60b		
c50v	42.22	-0.61	-37.35	37.36	269	g97b		
v00m	20.01	45.2	-52.87	69.56	311	b34r		
v50m	29.93	57.31	-42.0	71.05	324	b45r		
m00o	40.88	70.68	-29.99	76.78	337	b57r		
m50o	39.77	61.72	7.23	62.15	7	b83r		

$\text{LAB} \cdot \text{LAB}^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

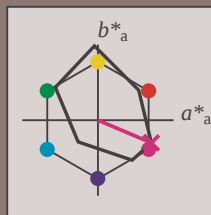
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.936$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = m00o$ $u^*_e = b57r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O _M	38.8	54.41	35.65	65.05	33	
Y _M	82.58	-4.04	92.72	92.8	92	
L _M	46.95	-55.83	39.15	68.19	145	
C _M	54.62	-25.67	-33.25	42.01	232	
V _M	20.01	45.64	-56.27	72.45	309	
M _M	40.88	71.17	-34.09	78.92	334	
N _M	15.0	0.43	-3.23	3.26	278	
W _M	90.0	0.62	-5.76	5.79	276	
O _M	39.92	58.74	27.99	65.07	25	
Y _M	81.26	-2.89	71.56	71.62	92	
L _M	52.23	-42.42	13.6	44.55	162	
V _M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*Ma: 41\ 71\ -30$

$LAB^*LCH^*Ma: 41\ 77\ 337$

$lab^*olv^*Ma: 1.0\ 0.0\ 1.0$

$lab^*rgb^*Ma: 1.0\ 0.0\ 0.85$

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data								
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e		
o00y	38.8	53.92	39.68	66.95	36	r16j		
o25y	47.46	42.34	51.25	66.48	50	r37j		
o50y	56.54	30.2	63.39	70.22	65	r58j		
o75y	67.39	15.68	77.9	79.47	79	r79j		
y00l	82.58	-4.64	98.22	98.33	93	j01g		
y25l	70.85	-21.66	80.19	83.07	105	j18g		
y50l	61.91	-34.63	66.45	74.93	118	j36g		
y75l	54.24	-45.77	54.66	71.29	130	j53g		
l00c	46.95	-56.34	43.46	71.15	142	j71g		
l50c	51.91	-36.84	-3.21	36.98	185	g21b		
c00v	54.62	-26.2	-28.68	38.85	228	g60b		
c50v	42.22	-0.61	-37.35	37.36	269	g97b		
v00m	20.01	45.2	-52.87	69.56	311	b34r		
v50m	29.93	57.31	-42.0	71.05	324	b45r		
m00o	40.88	70.68	-29.99	76.78	337	b57r		
m50o	39.77	61.72	7.23	62.15	7	b83r		

LAB^*LAB^*

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.019$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

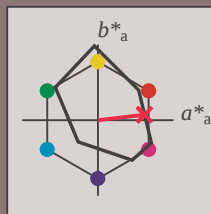
Hue texts:

$u^*_d = m50o$ $u^*_e = b83r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 40 62 7

$LAB \cdot LCH^*_{Ma}$: 40 62 6

$lab \cdot olv^*_{Ma}$: 1.0 0.0 0.5

$lab \cdot rgb^*_{Ma}$: 1.0 0.0 0.33

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

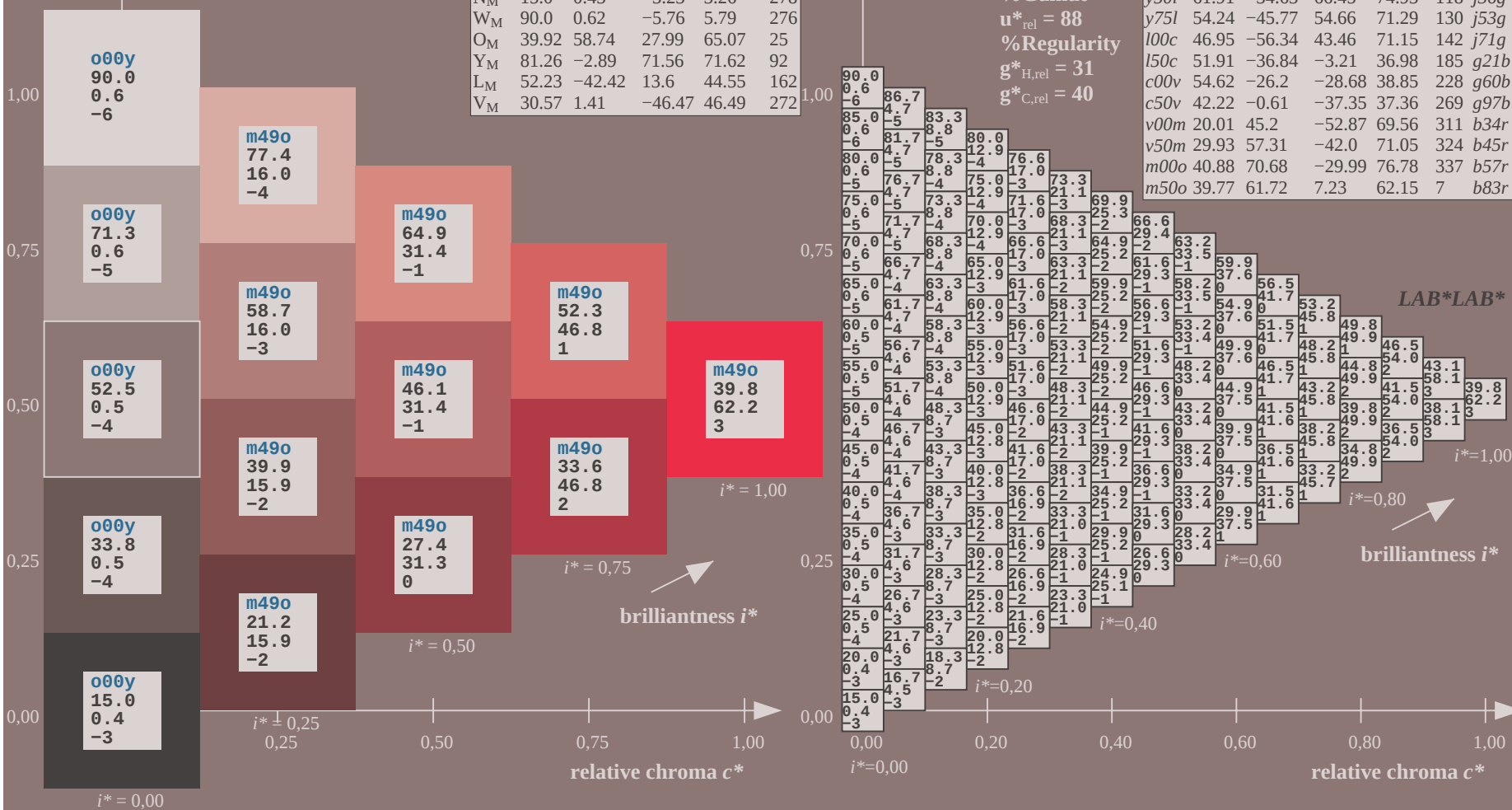
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$u^*_d = m50o$
 $LAB \cdot LAB^*$



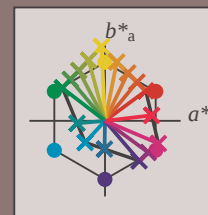
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	a	b	c	d	e	f	g	h	i	j	k	LAB*LAB*																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
01	15.0	19.0	23.0	27.0	31.0	35.0	39.0	43.0	47.0	51.0	55.0	59.0	63.0	67.0	71.0	75.0	79.0	83.0	87.0	91.0	95.0	99.0	103.0	107.0	111.0	115.0	119.0	123.0	127.0	131.0	135.0	139.0	143.0	147.0	151.0	155.0	159.0	163.0	167.0	171.0	175.0	179.0	183.0	187.0	191.0	195.0	199.0	203.0	207.0	211.0	215.0	219.0	223.0	227.0	231.0	235.0	239.0	243.0	247.0	251.0	255.0	259.0	263.0	267.0	271.0	275.0	279.0	283.0	287.0	291.0	295.0	299.0	303.0	307.0	311.0	315.0	319.0	323.0	327.0	331.0	335.0	339.0	343.0	347.0	351.0	355.0	359.0	363.0	367.0	371.0	375.0	379.0	383.0	387.0	391.0	395.0	399.0	403.0	407.0	411.0	415.0	419.0	423.0	427.0	431.0	435.0	439.0	443.0	447.0	451.0	455.0	459.0	463.0	467.0	471.0	475.0	479.0	483.0	487.0	491.0	495.0	499.0	503.0	507.0	511.0	515.0	519.0	523.0	527.0	531.0	535.0	539.0	543.0	547.0	551.0	555.0	559.0	563.0	567.0	571.0	575.0	579.0	583.0	587.0	591.0	595.0	599.0	603.0	607.0	611.0	615.0	619.0	623.0	627.0	631.0	635.0	639.0	643.0	647.0	651.0	655.0	659.0	663.0	667.0	671.0	675.0	679.0	683.0	687.0	691.0	695.0	699.0	703.0	707.0	711.0	715.0	719.0	723.0	727.0	731.0	735.0	739.0	743.0	747.0	751.0	755.0	759.0	763.0	767.0	771.0	775.0	779.0	783.0	787.0	791.0	795.0	799.0	803.0	807.0	811.0	815.0	819.0	823.0	827.0	831.0	835.0	839.0	843.0	847.0	851.0	855.0	859.0	863.0	867.0	871.0	875.0	879.0	883.0	887.0	891.0	895.0	899.0	903.0	907.0	911.0	915.0	919.0	923.0	927.0	931.0	935.0	939.0	943.0	947.0	951.0	955.0	959.0	963.0	967.0	971.0	975.0	979.0	983.0	987.0	991.0	995.0	999.0	1003.0	1007.0	1011.0	1015.0	1019.0	1023.0	1027.0	1031.0	1035.0	1039.0	1043.0	1047.0	1051.0	1055.0	1059.0	1063.0	1067.0	1071.0	1075.0	1079.0	1083.0	1087.0	1091.0	1095.0	1099.0	1103.0	1107.0	1111.0	1115.0	1119.0	1123.0	1127.0	1131.0	1135.0	1139.0	1143.0	1147.0	1151.0	1155.0	1159.0	1163.0	1167.0	1171.0	1175.0	1179.0	1183.0	1187.0	1191.0	1195.0	1199.0	1203.0	1207.0	1211.0	1215.0	1219.0	1223.0	1227.0	1231.0	1235.0	1239.0	1243.0	1247.0	1251.0	1255.0	1259.0	1263.0	1267.0	1271.0	1275.0	1279.0	1283.0	1287.0	1291.0	1295.0	1299.0	1303.0	1307.0	1311.0	1315.0	1319.0	1323.0	1327.0	1331.0	1335.0	1339.0	1343.0	1347.0	1351.0	1355.0	1359.0	1363.0	1367.0	1371.0	1375.0	1379.0	1383.0	1387.0	1391.0	1395.0	1399.0	1403.0	1407.0	1411.0	1415.0	1419.0	1423.0	1427.0	1431.0	1435.0	1439.0	1443.0	1447.0	1451.0	1455.0	1459.0	1463.0	1467.0	1471.0	1475.0	1479.0	1483.0	1487.0	1491.0	1495.0	1499.0	1503.0	1507.0	1511.0	1515.0	1519.0	1523.0	1527.0	1531.0	1535.0	1539.0	1543.0	1547.0	1551.0	1555.0	1559.0	1563.0	1567.0	1571.0	1575.0	1579.0	1583.0	1587.0	1591.0	1595.0	1599.0	1603.0	1607.0	1611.0	1615.0	1619.0	1623.0	1627.0	1631.0	1635.0	1639.0	1643.0	1647.0	1651.0	1655.0	1659.0	1663.0	1667.0	1671.0	1675.0	1679.0	1683.0	1687.0	1691.0	1695.0	1699.0	1703.0	1707.0	1711.0	1715.0	1719.0	1723.0	1727.0	1731.0	1735.0	1739.0	1743.0	1747.0	1751.0	1755.0	1759.0	1763.0	1767.0	1771.0	1775.0	1779.0	1783.0	1787.0	1791.0	1795.0	1799.0	1803.0	1807.0	1811.0	1815.0	1819.0	1823.0	1827.0	1831.0	1835.0	1839.0	1843.0	1847.0	1851.0	1855.0	1859.0	1863.0	1867.0	1871.0	1875.0	1879.0	1883.0	1887.0	1891.0	1895.0	1899.0	1903.0	1907.0	1911.0	1915.0	1919.0	1923.0	1927.0	1931.0	1935.0	1939.0	1943.0	1947.0	1951.0	1955.0	1959.0	1963.0	1967.0	1971.0	1975.0	1979.0	1983.0	1987.0	1991.0	1995.0	1999.0	2003.0	2007.0	2011.0	2015.0	2019.0	2023.0	2027.0	2031.0	2035.0	2039.0	2043.0	2047.0	2051.0	2055.0	2059.0	2063.0	2067.0	2071.0	2075.0	2079.0	2083.0	2087.0	2091.0	2095.0	2099.0	2103.0	2107.0	2111.0	2115.0	2119.0	2123.0	2127.0	2131.0	2135.0	2139.0	2143.0	2147.0	2151.0	2155.0	2159.0	2163.0	2167.0	2171.0	2175.0	2179.0	2183.0	2187.0	2191.0	2195.0	2199.0	2203.0	2207.0	2211.0	2215.0	2219.0	2223.0	2227.0	2231.0	2235.0	2239.0	2243.0	2247.0	2251.0	2255.0	2259.0	2263.0	2267.0	2271.0	2275.0	2279.0	2283.0	2287.0	2291.0	2295.0	2299.0	2303.0	2307.0	2311.0	2315.0	2319.0	2323.0	2327.0	2331.0	2335.0	2339.0	2343.0	2347.0	2351.0	2355.0	2359.0	2363.0	2367.0	2371.0	2375.0	2379.0	2383.0	2387.0	2391.0	2395.0	2399.0	2403.0	2407.0	2411.0	2415.0	2419.0	2423.0	2427.0	2431.0	2435.0	2439.0	2443.0	2447.0	2451.0	2455.0	2459.0	2463.0	2467.0	2471.0	2475.0	2479.0	2483.0	2487.0	2491.0	2495.0	2499.0	2503.0	2507.0	2511.0	2515.0	2519.0	2523.0	2527.0	2531.0	2535.0	2539.0	2543.0	2547.0	2551.0	2555.0	2559.0	2563.0	2567.0	2571.0	2575.0	2579.0	2583.0	2587.0	2591.0	2595.0	2599.0	2603.0	2607.0	2611.0	2615.0	2619.0	2623.0	2627.0	2631.0	2635.0	2639.0	2643.0	2647.0	2651.0	2655.0	2659.0	2663.0	2667.0	2671.0	2675.0	2679.0	2683.0	2687.0	2691.0	2695.0	2699.0	2703.0	2707.0	2711.0	2715.0	2719.0	2723.0	2727.0	2731.0	2735.0	2739.0	2743.0	2747.0	2751.0	2755.0	2759.0	2763.0	2767.0	2771.0	2775.0	2779.0	2783.0	2787.0	2791.0	2795.0	2799.0	2803.0	2807.0	2811.0	2815.0	2819.0	2823.0	2827.0	2831.0	2835.0	2839.0	2843.0	2847.0	2851.0	2855.0	2859.0	2863.0	2867.0	2871.0	2875.0	2879.0	2883.0	2887.0	2891.0	2895.0	2899.0	2903.0	2907.0	2911.0	2915.0	2919.0	2923.0	2927.0	2931.0	2935.0	2939.0	2943.0	2947.0	2951.0	2955.0	2959.0	2963.0	2967.0	2971.0	2975.0	2979.0	2983.0	2987.0	2991.0	2995.0	2999.0	3003.0	3007.0	3011.0	3015.0	3019.0	3023.0	3027.0	3031.0	3035.0	3039.0	3043.0	3047.0	3051.0	3055.0	3059.0	3063.0	3067.0	3071.0	3075.0	3079.0	3083.0	3087.0	3091.0	3095.0	3099.0	3103.0	3107.0	3111.0	3115.0	3119.0	3123.0	3127.0	3131.0	3135.0	3139.0	3143.0	3147.0	3151.0	3155.0	3159.0	3163.0	3167.0	3171.0	3175.0	3179.0	3183.0	3187.0	3191.0	3195.0	3199.0	3203.0	3207.0	3211.0	3215.0	3219.0	3223.0	3227.0	3231.0	3235.0	3239.0	3243.0	3247.0	3251.0	3255.0	3259.0	3263.0	3267.0	3271.0	3275.0	3279.0	3283.0	3287.0	3291.0	3295.0	3299.0	3303.0	3307.0	3311.0	3315.0	3319.0	3323.0	3327.0	3331.0	3335.0	3339.0	3343.0	3347.0	3351.0	3355.0	3359.0	3363.0	3367.0	3371.0	3375.0	3379.0	3383.0	3387.0	3391.0	3395.0	3399.0	3403.0	3407.0	3411.0	3415.0	3419.0	3423.0	3427.0	3431.0	3435.0	3439.0	3443.0	3447.0	3451.0	3455.0	3459.0	3463.0	3467.0	3471.0	3475.0	3479.0	3483.0	3487.0	3491.0	3495.0	3499.0	3503.0	3507.0	3511.0	3515.0	3519.0	3523.0	3527.0	3531.0	3535.0	3539.0	3543.0	3547.0	3551.0	3555.0	3559.0	3563.0	3567.0	3571.0	3575.0	3579.0	3583.0	3587.0	3591.0	3595.0	3599.0	3603.0	3607.0	3611.0	3615.0	3619.0	3623.0	3627.0	3631.0	3635.0	3639.0	3643.0	3647.0	3651.0	3655.0	3659.0	3663.0	3667.0	3671.0	3675.0	3679.0	3683.0	3687.0	3691.0	3695.0	3699.0	3703.0	3707.0	3711.0	3715.0	3719.0	3723.0	3727.0	3731

Input and output:
Colorimetric Printer Reflective System FRS15_90a
data for any colour:

u^*_d and number $no.$ = 00 .. 15
device hue text:
 u^*_d = 16 hues $o00y$, $o25y$, ..., $m50o$
contrast reduction factor:
 $c_R = 0.9$

FRS15_90a; adapted (a) CIELAB data

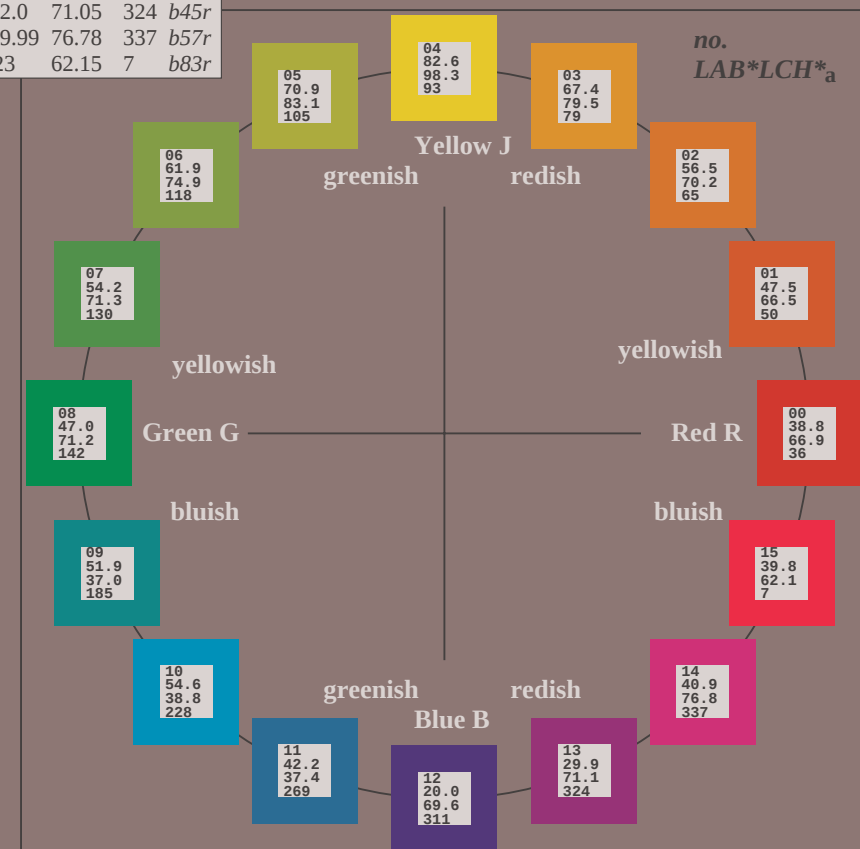
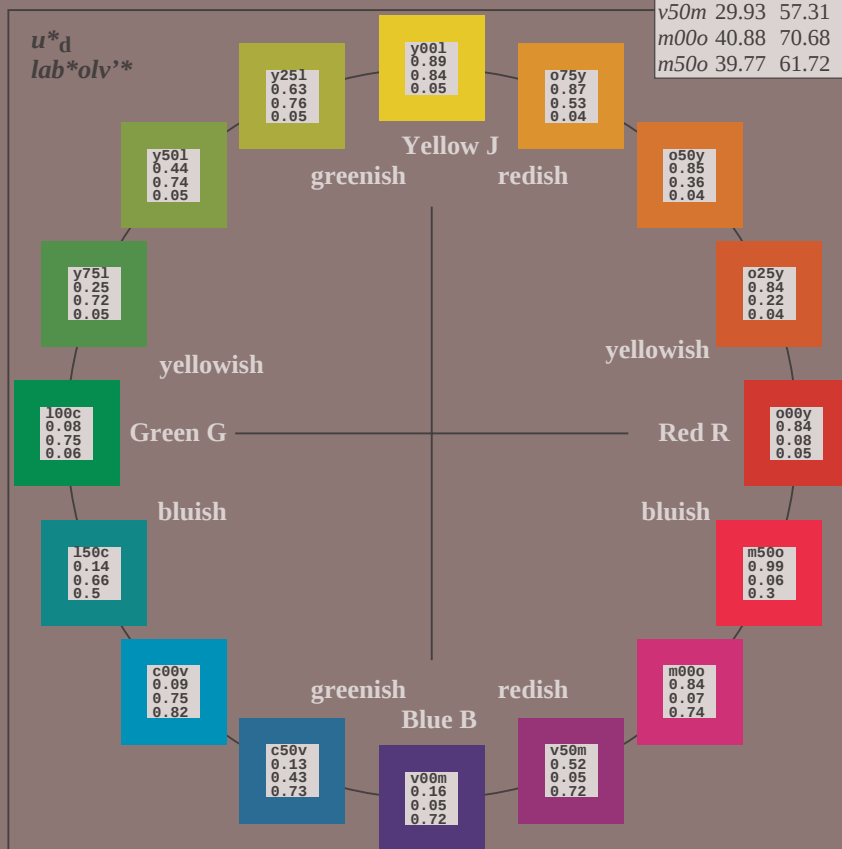
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$



%Gamut
 $u^*_{rel} = 88$
%Regularity
 $g^*_{H,rel} = 31$
 $g^*_{C,rel} = 40$

FRS15_90a; CIELAB data

Name	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_{CIE}	39.92	58.74	27.99	65.07	25
Y_{CIE}	81.26	-2.89	71.56	71.62	92
L_{CIE}	52.23	-42.42	13.6	44.55	162
V_{CIE}	30.57	1.41	-46.47	46.49	272



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.101$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

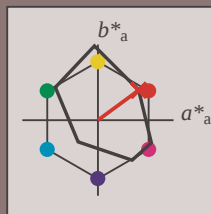
Hue texts:

$u^*_d = o00y$ $u^*_e = r16j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*_a$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 39 54 40

$LAB \cdot LCH \cdot Ma$: 39 67 36

$lab \cdot olv \cdot Ma$: 1.0 0.0 0.0

$lab \cdot rgb \cdot Ma$: 1.0 0.16 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

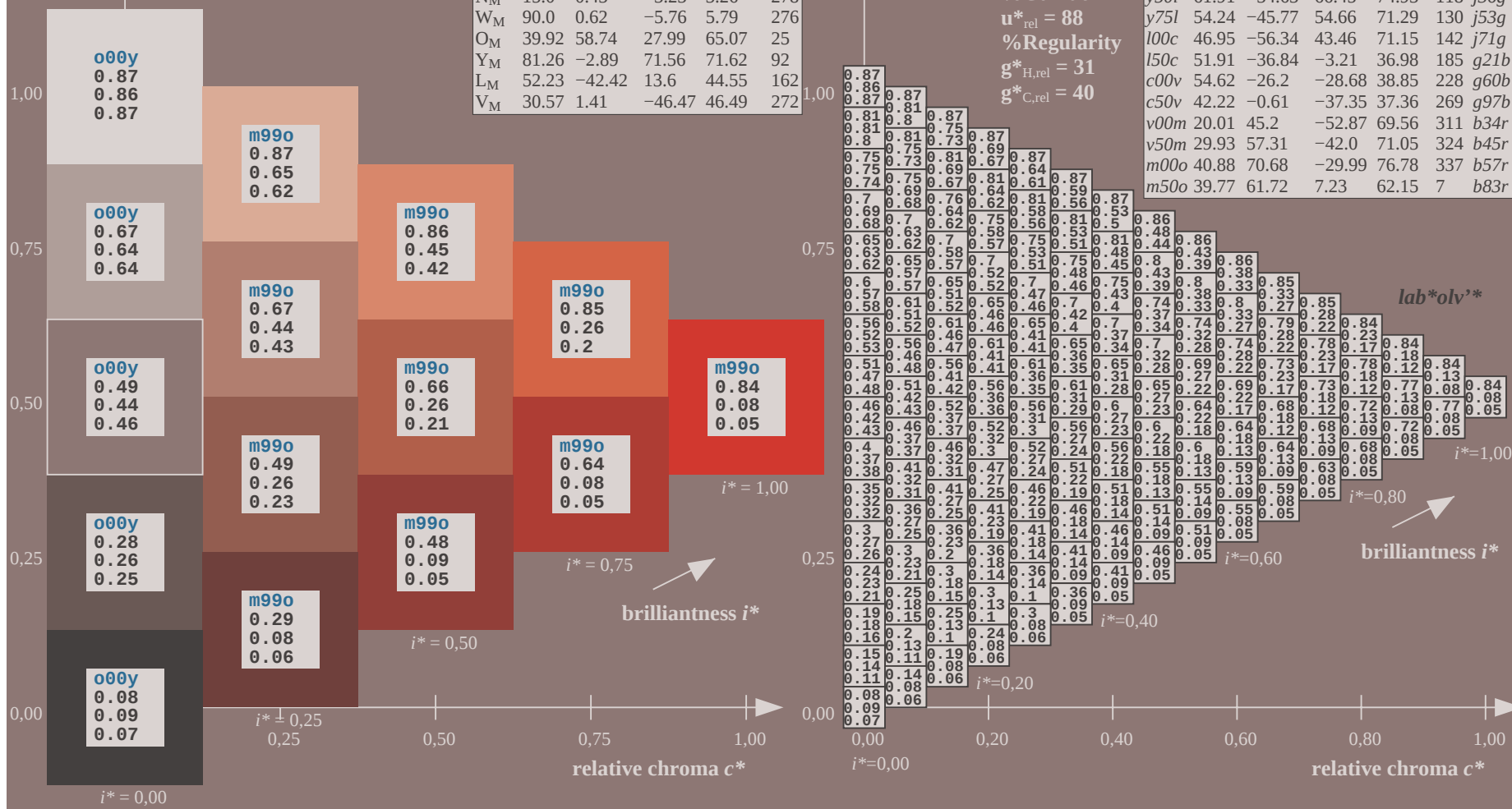
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$u^*_d = o00y$
 $lab \cdot olv \cdot ^*$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.14$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

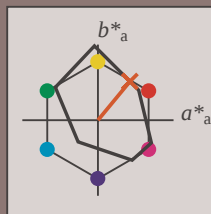
Hue texts:

$u^*_d = o25y$ $u^*_e = r37j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 47 42 51

$LAB \cdot LCH \cdot Ma$: 47 66 50

$lab \cdot olv \cdot Ma$: 1.0 0.25 0.0

$lab \cdot rgb \cdot Ma$: 1.0 0.37 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$lab \cdot olv \cdot Ma$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.179$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

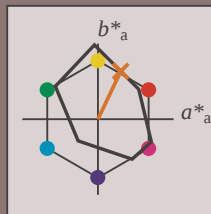
Hue texts:

$u^*_d = o50y$ $u^*_e = r58j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 57 30 63

$LAB \cdot LCH \cdot Ma$: 57 70 64

$lab \cdot olv \cdot Ma$: 1.0 0.5 0.0

$lab \cdot rgb \cdot Ma$: 1.0 0.58 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$lab \cdot olv \cdot Ma$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.218$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

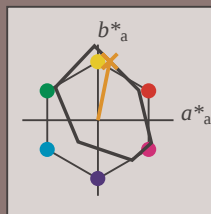
Hue texts:

$u^*_d = o75y$ $u^*_e = r79j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 67 16 78

$LAB \cdot LCH \cdot Ma$: 67 79 78

$lab \cdot olv \cdot Ma$: 1.0 0.75 0.0

$lab \cdot rgb \cdot Ma$: 1.0 0.8 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$u^*_d = o75y$
 $lab \cdot olv \cdot ^*$

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.258$
data for any colour: Data for maximum colour (Ma):

*u**_d = y00l
*lab**olv'*

*lab*tch** and *lab*icu**

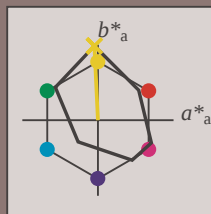
Hue texts:

$$u_d^* = y00l \quad u_e^* = j01a$$

contrast reduction factor:

 $c_D = 0.9$ triangle lightness t^*

triangle lightness t



FRS15_90a; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O _M	38.8	54.41	35.65	65.05	33	
Y _M	82.58	-4.04	92.72	92.8	92	
L _M	46.95	-55.83	39.15	68.19	143	
C _M	54.62	-25.67	-33.25	42.01	233	
V _M	20.01	45.64	-56.27	72.45	309	
M _M	40.88	71.17	-34.09	78.92	334	
N _M	15.0	0.43	-3.23	3.26	278	
W _M	90.0	0.62	-5.76	5.79	270	
O _M	39.92	58.74	27.99	65.07	25	
Y _M	81.26	-2.89	71.56	71.62	92	
L _M	52.23	-42.42	13.6	44.55	162	
V _M	30.57	1.41	-46.47	46.49	273	

Data for maximum colour (Ma):

LAB*LAB*5 : 83 -5 09

LAD*LEGH* 03 03 03

LAB*LCH*Ma: 83 98 9

*lab*olv**Ma: 1.0 1.0 0.0

*lab*rgb*_Ma*: 0.99 1.0 0.0

triangle lightness t^*

triangle lightness t

%Gamut

$$\mathbf{u}_{r\rho}^* = 88$$

%Regularity

$$g_{H,rel}^* = 31$$
$$g^*_{C,rel} = 40$$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
<i>o00y</i>	38.8	53.92	39.68	66.95	36	<i>r16i</i>	
<i>o25y</i>	47.46	42.34	51.25	66.48	50	<i>r37j</i>	
<i>o50y</i>	56.54	30.2	63.39	70.22	65	<i>r58j</i>	
<i>o75y</i>	67.39	15.68	77.9	79.47	79	<i>r79j</i>	
<i>y00l</i>	82.58	-4.64	98.22	98.33	93	<i>j01g</i>	
<i>y25l</i>	70.85	-21.66	80.19	83.07	105	<i>j18g</i>	
<i>y50l</i>	61.91	-34.63	66.45	74.93	118	<i>j36g</i>	
<i>y75l</i>	54.24	-45.77	54.66	71.29	130	<i>j53g</i>	
<i>l00c</i>	46.95	-56.34	43.46	71.15	142	<i>j71g</i>	
<i>l50c</i>	51.91	-36.84	-3.21	36.98	185	<i>g21b</i>	
<i>c00v</i>	54.62	-26.2	-28.68	38.85	228	<i>g60b</i>	
<i>c50v</i>	42.22	-0.61	-37.35	37.36	269	<i>g97b</i>	
<i>v00m</i>	20.01	45.2	-52.87	69.56	311	<i>b34r</i>	
<i>v50m</i>	29.93	57.31	-42.0	71.05	324	<i>b45r</i>	
<i>m00o</i>	40.88	70.68	-29.99	76.78	337	<i>b57r</i>	
<i>m50o</i>	39.77	61.72	7.23	62.15	7	<i>b83r</i>	

*lab*olv'**

 $i^* = 1,00$ brilliantness i^*

BAM-test chart Ee67; Colorimetric systems, Page 168/198
D65: colour scales and 9 data tables for 16 hues o00y to m75o

input: 000n / w / nnn0 / www set...
output: ->LAB*->cmy0* setcmyk

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.292$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

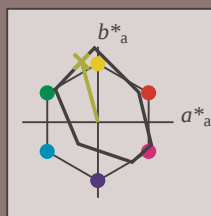
Hue texts:

$u^*_d = y25l$ $u^*_e = j18g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data						
	u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33	
Y_M	82.58	-4.04	92.72	92.8	92	
L_M	46.95	-55.83	39.15	68.19	145	
C_M	54.62	-25.67	-33.25	42.01	232	
V_M	20.01	45.64	-56.27	72.45	309	
M_M	40.88	71.17	-34.09	78.92	334	
N_M	15.0	0.43	-3.23	3.26	278	
W_M	90.0	0.62	-5.76	5.79	276	
O_M	39.92	58.74	27.99	65.07	25	
Y_M	81.26	-2.89	71.56	71.62	92	
L_M	52.23	-42.42	13.6	44.55	162	
V_M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 71 -22 80

$LAB \cdot LCH \cdot Ma$: 71 83 105

$lab \cdot olv \cdot Ma$: 0.75 1.0 0.0

$lab \cdot rgb \cdot Ma$: 0.82 1.0 0.0

triangle lightness t^*

% Gamut

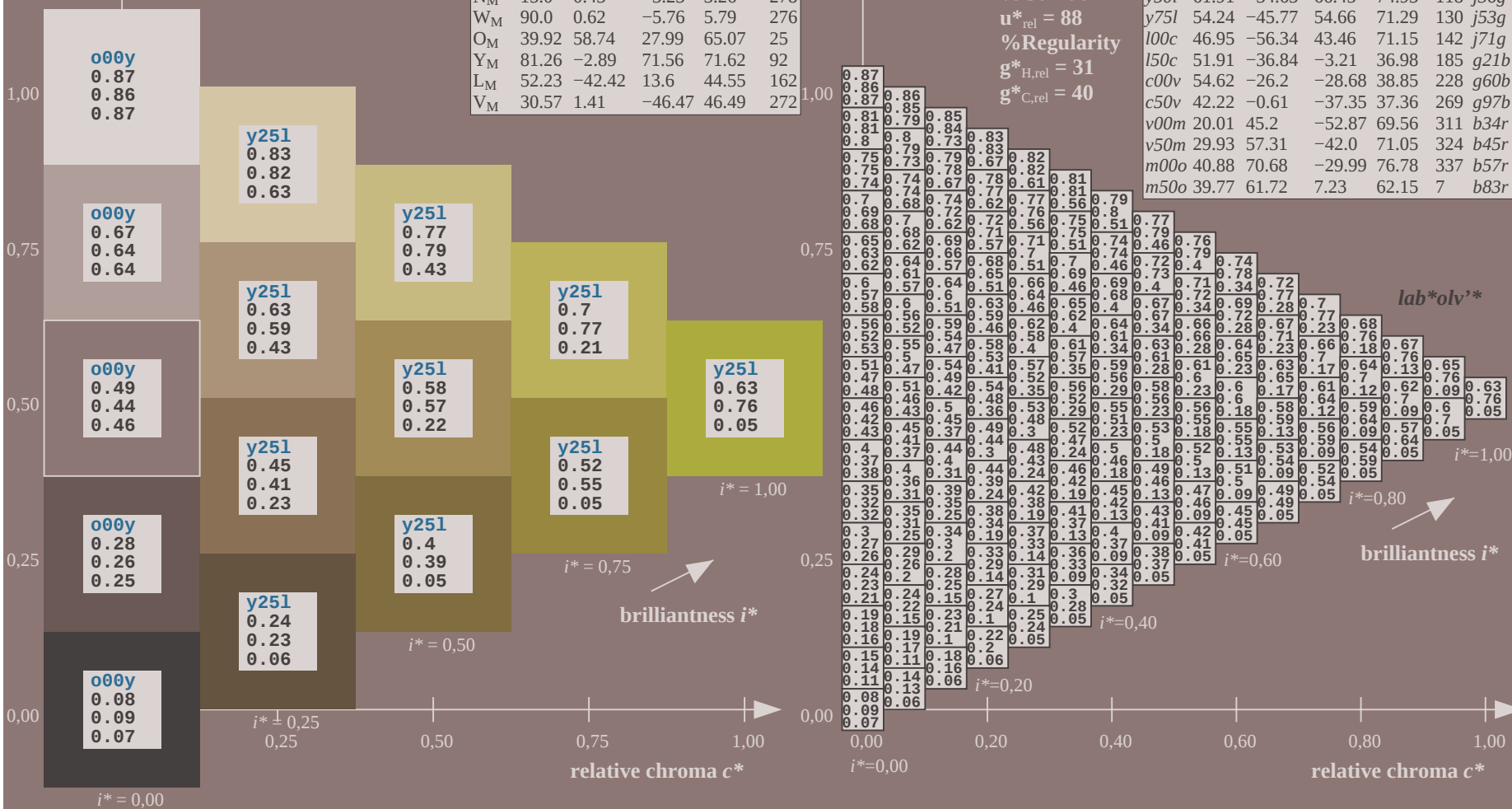
$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$	
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$	
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$	
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$	
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$	
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$	
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$	
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$	
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$	
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$	
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$	
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$	
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$	
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$	
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$	
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$	



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.326$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

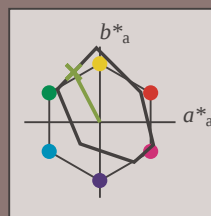
Hue texts:

$u^*_d = y50l$ $u^*_e = j36g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data						
	u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33	
Y_M	82.58	-4.04	92.72	92.8	92	
L_M	46.95	-55.83	39.15	68.19	145	
C_M	54.62	-25.67	-33.25	42.01	232	
V_M	20.01	45.64	-56.27	72.45	309	
M_M	40.88	71.17	-34.09	78.92	334	
N_M	15.0	0.43	-3.23	3.26	278	
W_M	90.0	0.62	-5.76	5.79	276	
O_M	39.92	58.74	27.99	65.07	25	
Y_M	81.26	-2.89	71.56	71.62	92	
L_M	52.23	-42.42	13.6	44.55	162	
V_M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 62 -35 66

$LAB \cdot LCH \cdot Ma$: 62 75 117

$lab \cdot olv \cdot Ma$: 0.5 1.0 0.0

$lab \cdot rgb \cdot Ma$: 0.64 1.0 0.0

triangle lightness t^*

%Gamut

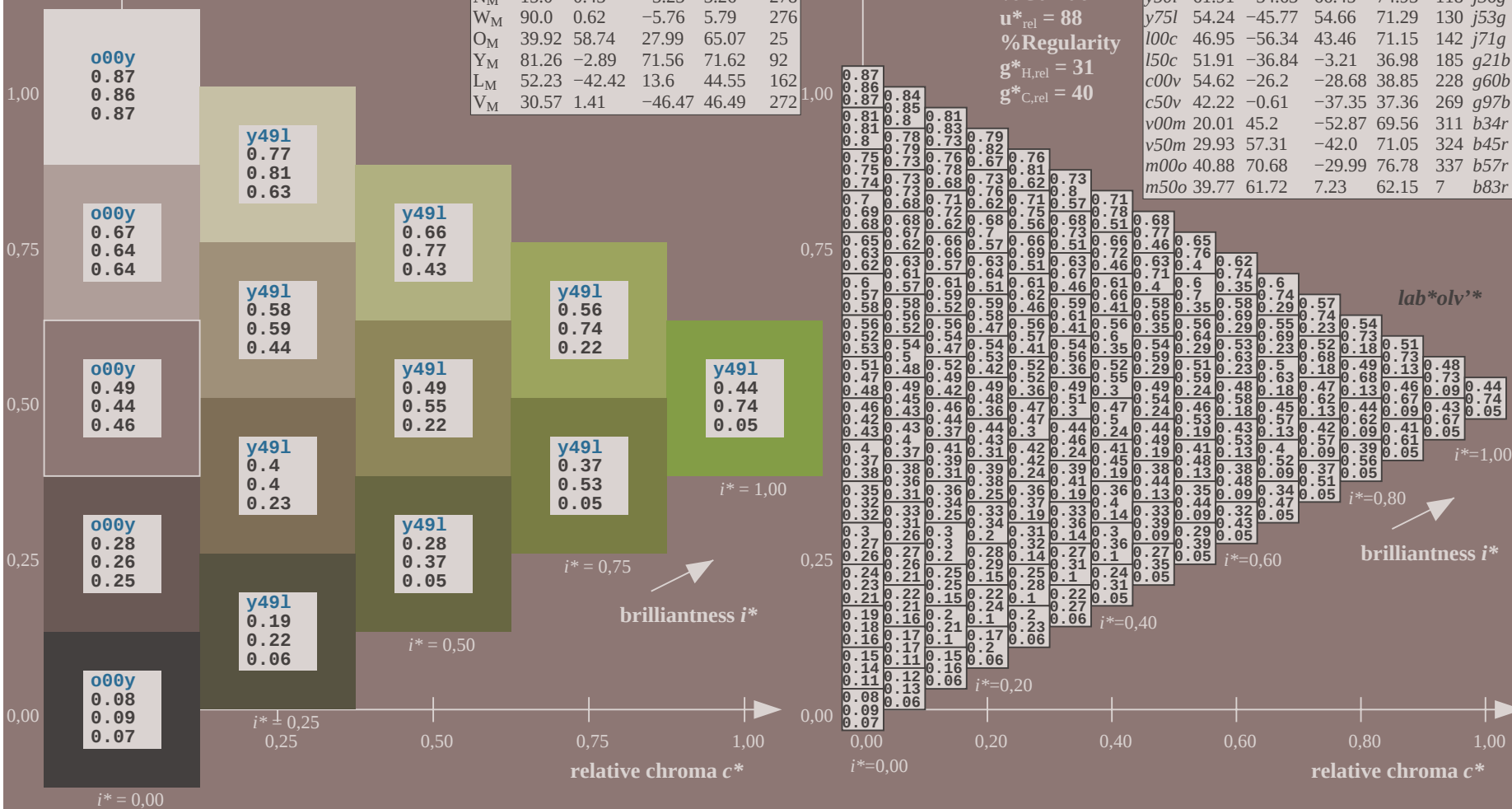
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$	
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$	
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$	
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$	
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$	
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$	
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$	
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$	
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$	
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$	
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$	
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$	
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$	
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$	
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$	
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$	



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.361$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

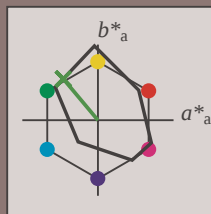
Hue texts:

$u^*_d = y75l$ $u^*_e = j53g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

	u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33	
Y_M	82.58	-4.04	92.72	92.8	92	
L_M	46.95	-55.83	39.15	68.19	145	
C_M	54.62	-25.67	-33.25	42.01	232	
V_M	20.01	45.64	-56.27	72.45	309	
M_M	40.88	71.17	-34.09	78.92	334	
N_M	15.0	0.43	-3.23	3.26	278	
W_M	90.0	0.62	-5.76	5.79	276	
O_M	39.92	58.74	27.99	65.07	25	
Y_M	81.26	-2.89	71.56	71.62	92	
L_M	52.23	-42.42	13.6	44.55	162	
V_M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 54 -46 55

$LAB \cdot LCH^*_{Ma}$: 54 71 129

$lab \cdot olv^*_{Ma}$: 0.25 1.0 0.0

$lab \cdot rgb^*_{Ma}$: 0.46 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

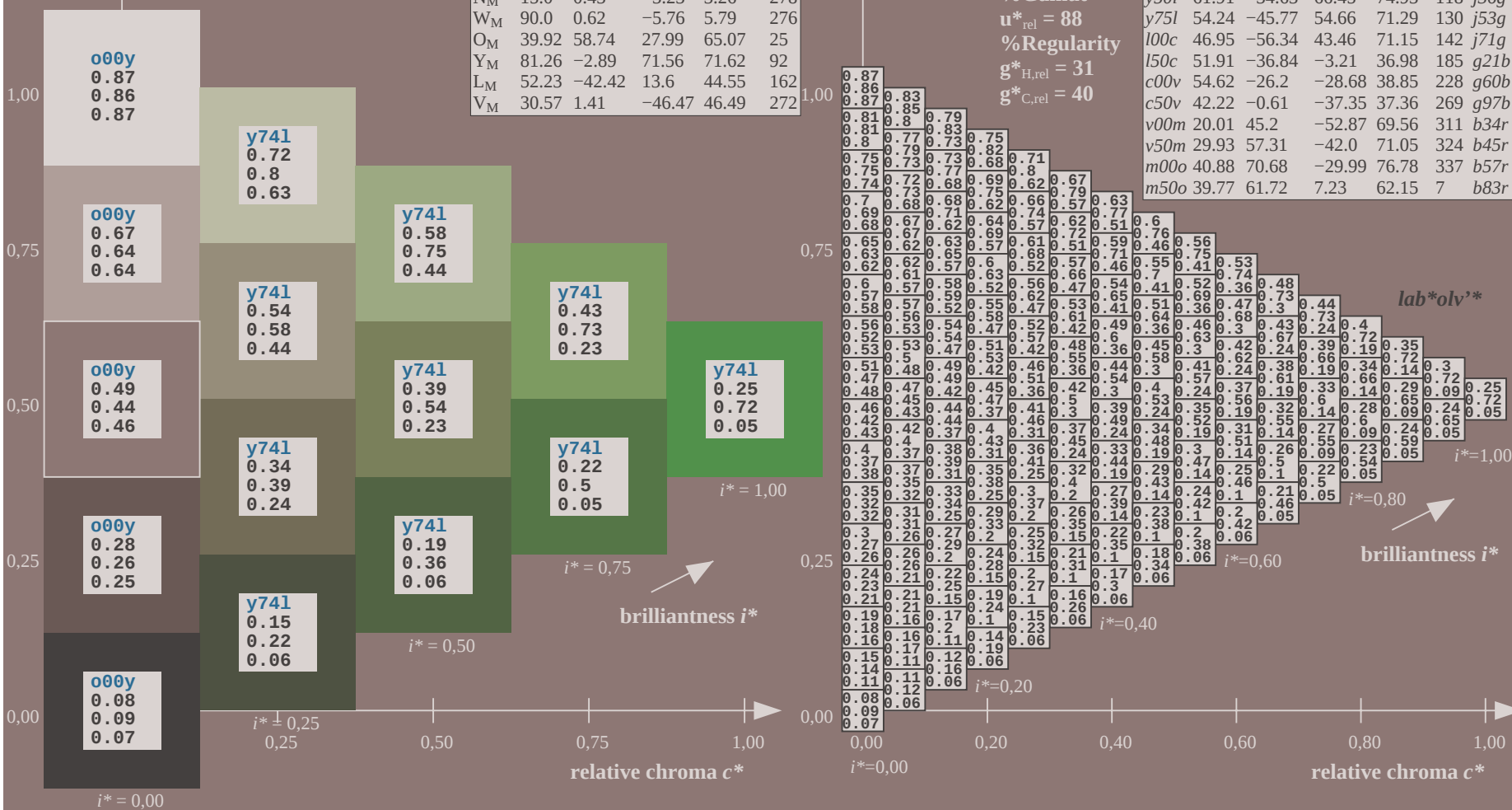
% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

	u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92		39.68	66.95	36	$r16j$
$o25y$	47.46	42.34		51.25	66.48	50	$r37j$
$o50y$	56.54	30.2		63.39	70.22	65	$r58j$
$o75y$	67.39	15.68		77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64		98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66		80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63		66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77		54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34		43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84		-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2		-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61		-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2		-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31		-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68		-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72		7.23	62.15	7	$b83r$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.395$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

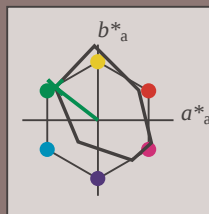
Hue texts:

$u^*_d = 100c$ $u^*_e = j71g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*_a$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 47 -56 43

$LAB \cdot LCH \cdot Ma$: 47 71 142

$lab \cdot olv \cdot Ma$: 0.0 1.0 0.0

$lab \cdot rgb \cdot Ma$: 0.28 1.0 0.0

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

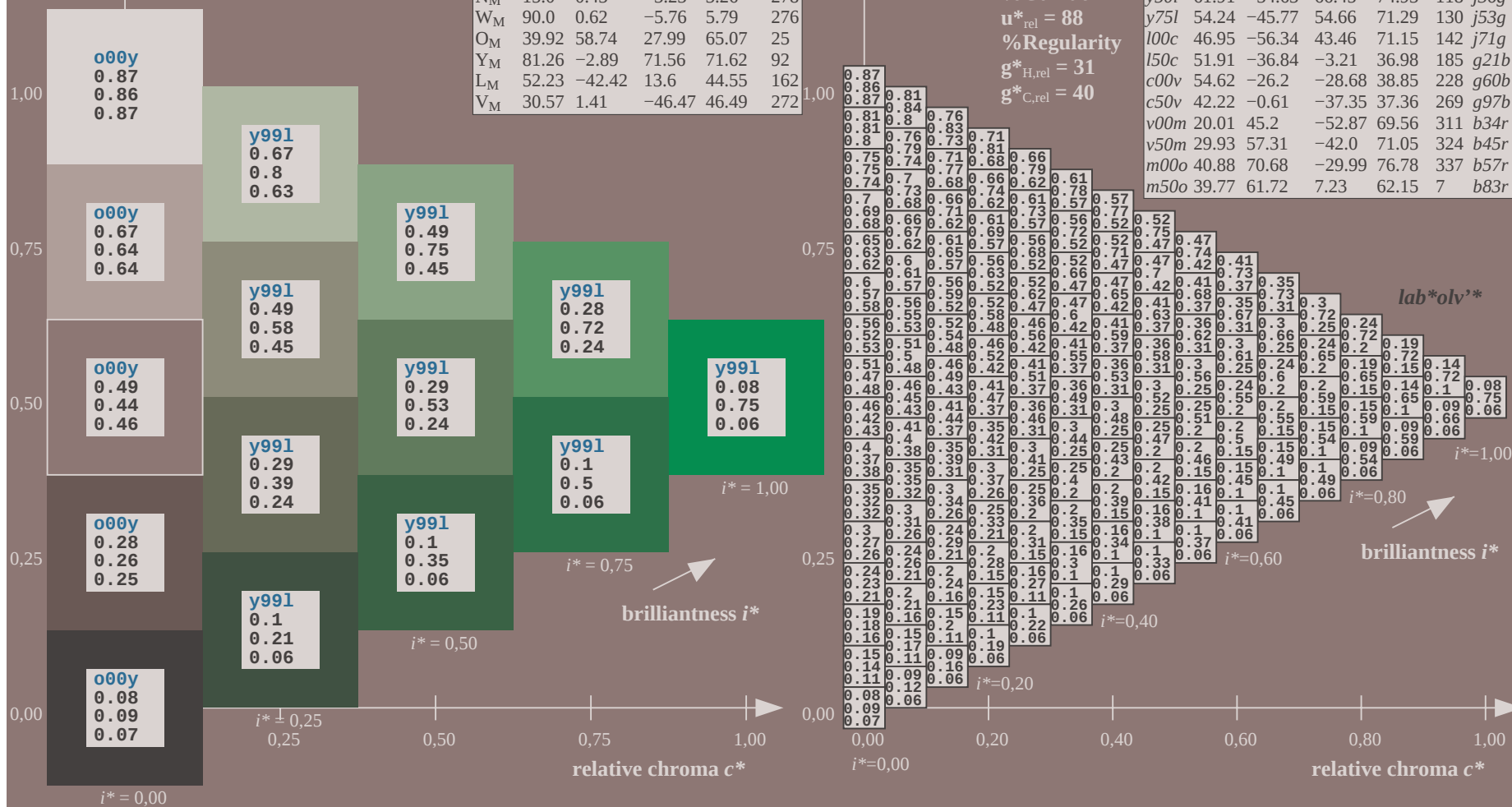
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$u^*_d = 100c$
 $lab \cdot olv \cdot ^*$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.514$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

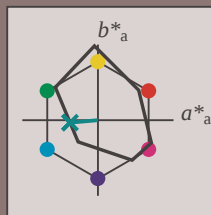
Hue texts:

$u^*_d = l50c$ $u^*_e = g21b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 52 -37 -3

$LAB \cdot LCH \cdot Ma$: 52 37 184

$lab \cdot olv \cdot Ma$: 0.0 1.0 0.5

$lab \cdot rgb \cdot Ma$: 0.0 1.0 0.42

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$u^*_d = l50c$
 $lab \cdot olv^*$

$lab \cdot olv^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.632$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

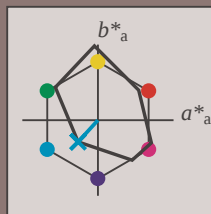
Hue texts:

$u^*_d = c00v$ $u^*_e = g60b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 55 -26 -29

$LAB \cdot LCH \cdot Ma$: 55 39 227

$lab \cdot olv \cdot Ma$: 0.0 1.0 1.0

$lab \cdot rgb \cdot Ma$: 0.0 0.81 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$lab \cdot olv \cdot Ma$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.747$

data for any colour:

lab^*tch^* and lab^*icu^*

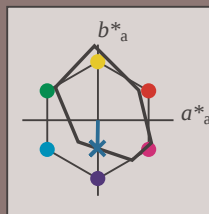
Hue texts:

$u^*_d = c50v$ $u^*_e = g97b$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 42 -1 -37

$LAB^*LCH^*_{Ma}$: 42 37 269

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

$lab^*rgb^*_{Ma}$: 0.0 0.05 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

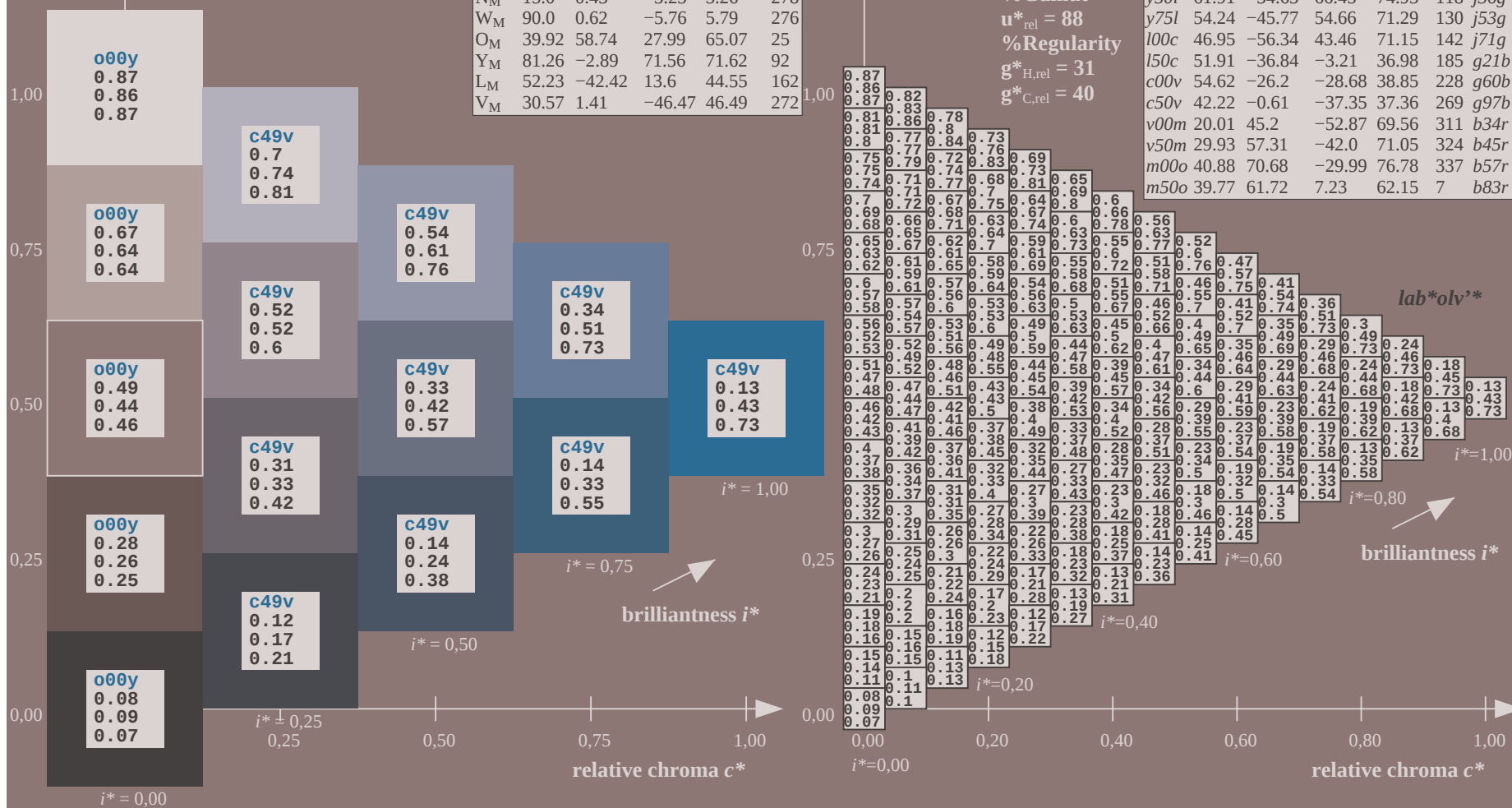
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$u^*_d = c50v$
 lab^*olv^*



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.863$

data for any colour:

lab^*tch^* and lab^*icu^*

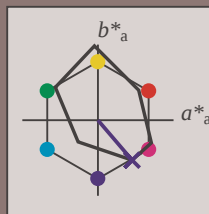
Hue texts:

$u^*_d = v00m$ $u^*_e = b34r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 20 45 -53

$LAB^*LCH^*_{Ma}$: 20 70 310

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

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

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

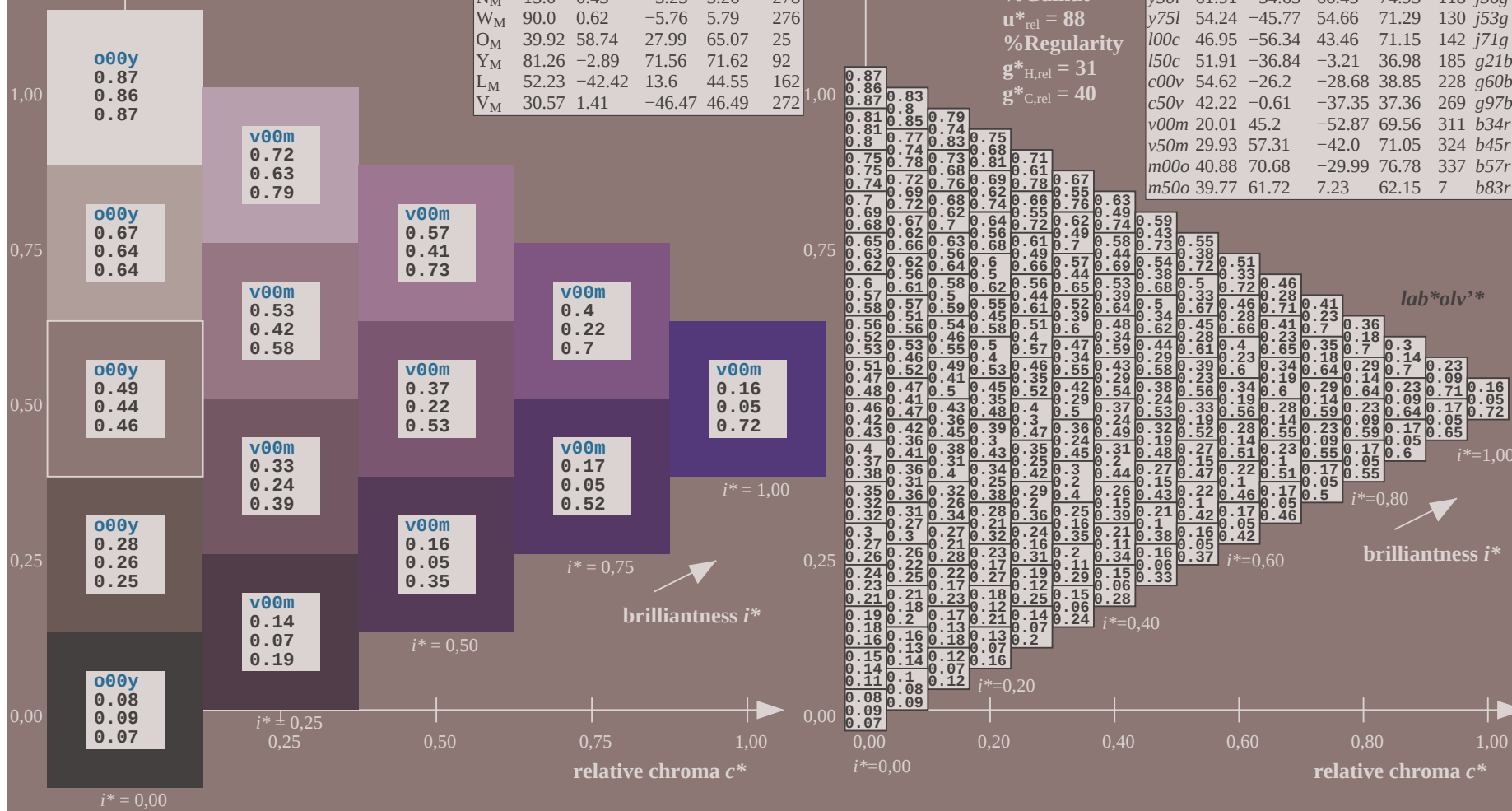
$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$u^*_d = v00m$
 lab^*olv^*



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.899$

data for any colour:

lab^*tch^* and lab^*icu^*

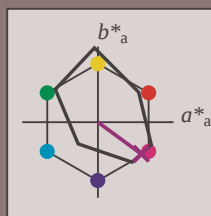
Hue texts:

$u^*_d = v50m$ $u^*_e = b45r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data						
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}	
O_M	38.8	54.41	35.65	65.05	33	
Y_M	82.58	-4.04	92.72	92.8	92	
L_M	46.95	-55.83	39.15	68.19	145	
C_M	54.62	-25.67	-33.25	42.01	232	
V_M	20.01	45.64	-56.27	72.45	309	
M_M	40.88	71.17	-34.09	78.92	334	
N_M	15.0	0.43	-3.23	3.26	278	
W_M	90.0	0.62	-5.76	5.79	276	
O_M	39.92	58.74	27.99	65.07	25	
Y_M	81.26	-2.89	71.56	71.62	92	
L_M	52.23	-42.42	13.6	44.55	162	
V_M	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 30 57 -42

$LAB^*LCH^*_{Ma}$: 30 71 323

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

$lab^*rgb^*_{Ma}$: 0.91 0.0 1.0

triangle lightness t^*

%Gamut

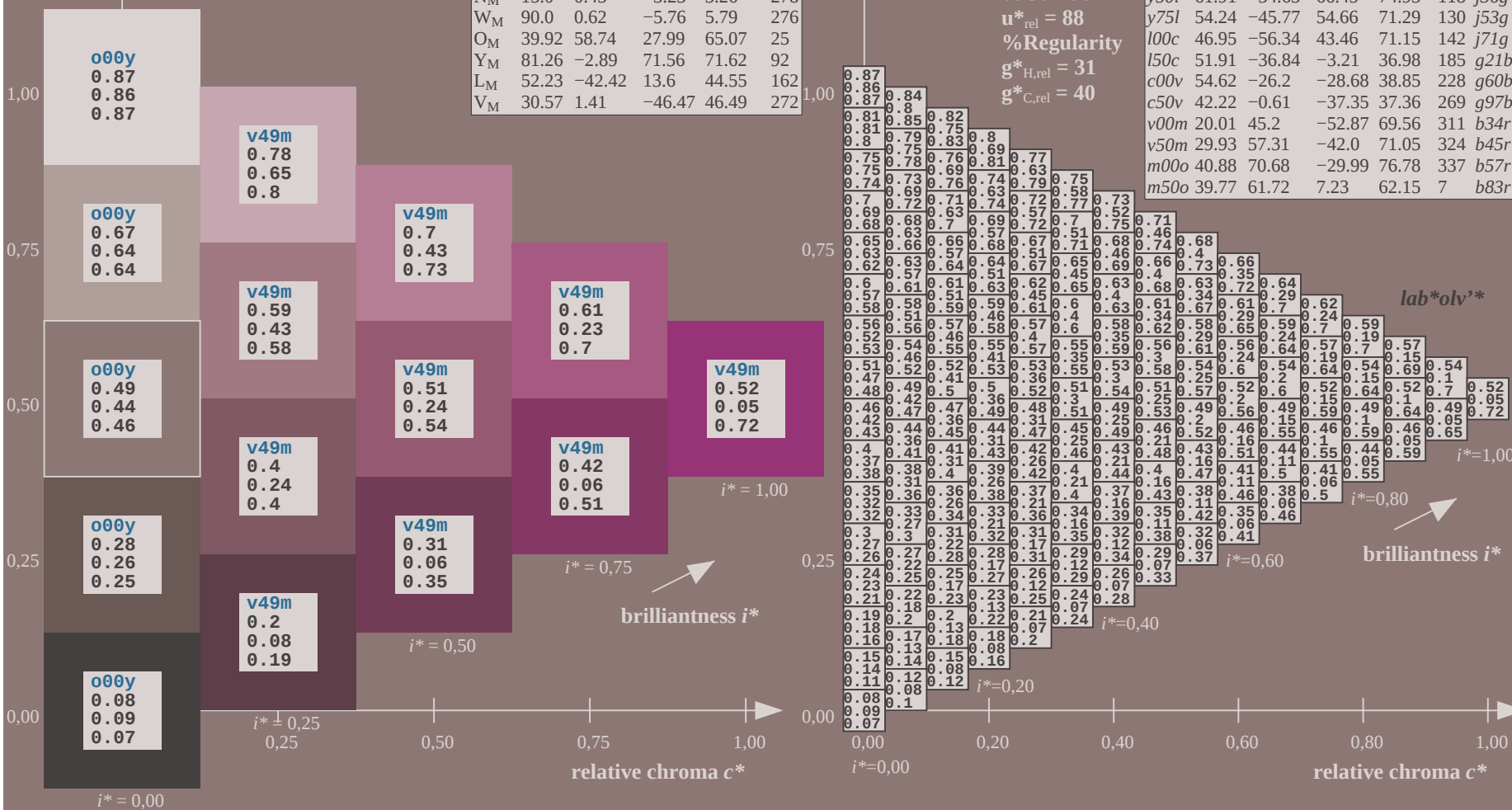
$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data								
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e		
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$		
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$		
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$		
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$		
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$		
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$		
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$		
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$		
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$		
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$		
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$		
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$		
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$		
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$		
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$		
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$		



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.936$

data for any colour:

lab^*tch^* and lab^*icu^*

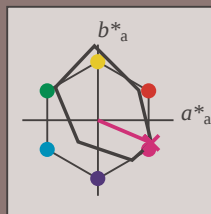
Hue texts:

$u^*_d = m00o$ $u^*_e = b57r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 41 71 -30

$LAB^*LCH^*_{Ma}$: 41 77 337

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.85

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

lab^*olv^*

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.019$

data for any colour:

$lab \cdot tch^*$ and $lab \cdot icu^*$

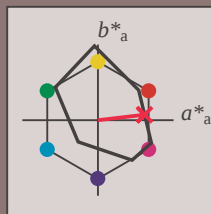
Hue texts:

$u^*_d = m50o$ $u^*_e = b83r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma: 40 \ 62 \ 7$

$LAB \cdot LCH \cdot Ma: 40 \ 62 \ 6$

$lab \cdot olv \cdot Ma: 1.0 \ 0.0 \ 0.5$

$lab \cdot rgb \cdot Ma: 1.0 \ 0.0 \ 0.33$

triangle lightness t^*

% Gamut

$u^*_{rel} = 88$

% Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

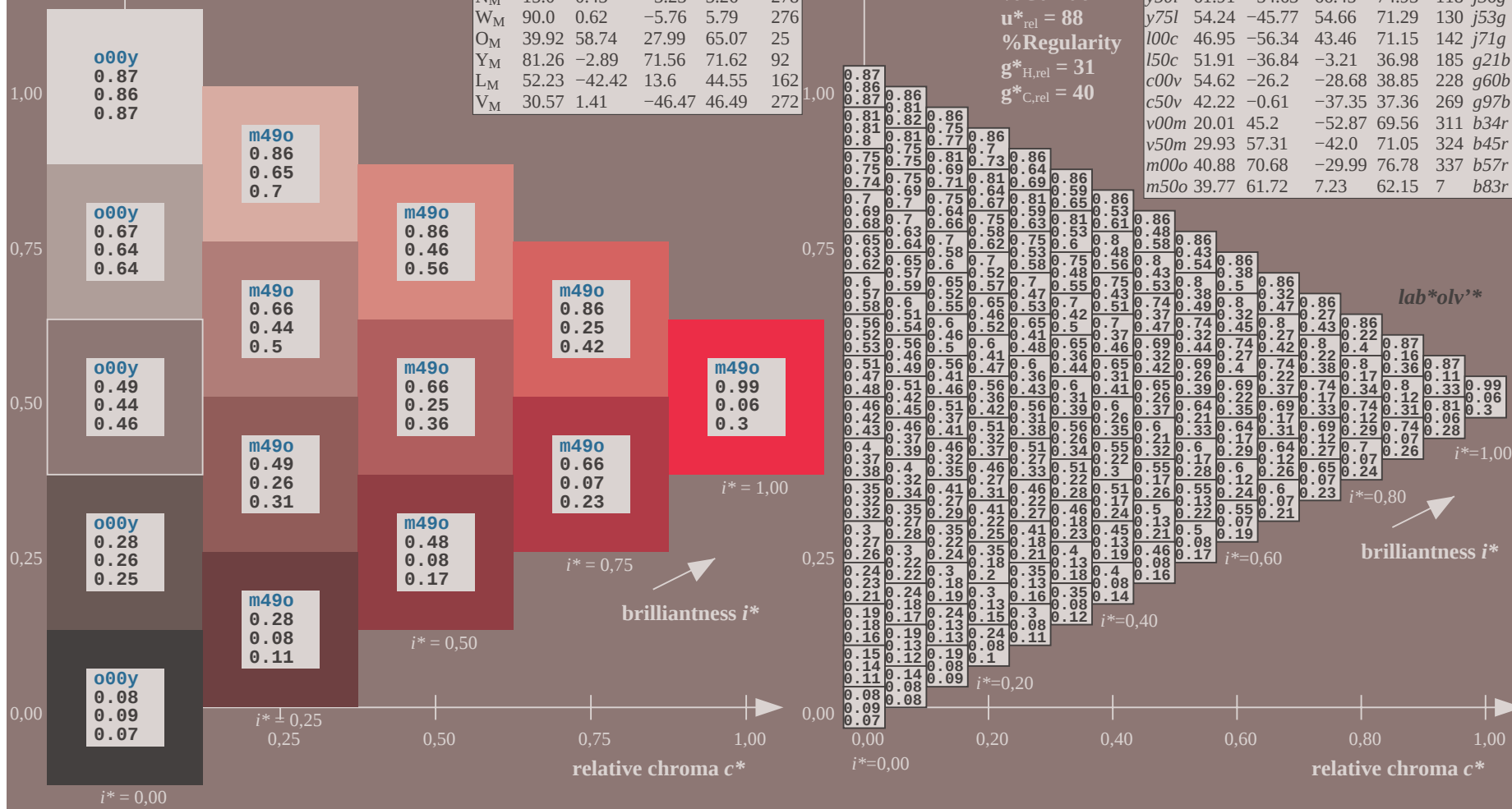
FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$

$u^*_d = m50o$
 $lab \cdot olv \cdot ^*$

See for similar files: <http://www.ps.bam.de/Ee67/>; www.ps.bam.de/Ee67/
Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1, CIELAB, ColSpX=0

BAM registration: 20081001-Ee67/10L/L67E00FP.PS/.PDF BAM material: code=rh4ta
application for evaluation and measurement of printer or monitor systems



See for similar files: <http://www.ps.bam.de/Ee67/>; www.ps.bam.de/Ee.HTM
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1.1, CIELAB, ColSpx=0

BAM registration: 20081001-Ee67/10L/L67E00FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems

[illegible]

Input and output:

Colorimetric Printer Reflective System FRS15_90a
data for any colour:

u^*_d and number $no.$ = 00 .. 15

device hue text:

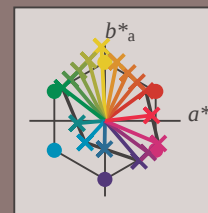
u^*_d = 16 hues $o00y$, $o25y$, ..., $m50o$

contrast reduction factor:

$c_R = 0.9$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$



%Gamut

$u^*_{rel} = 88$

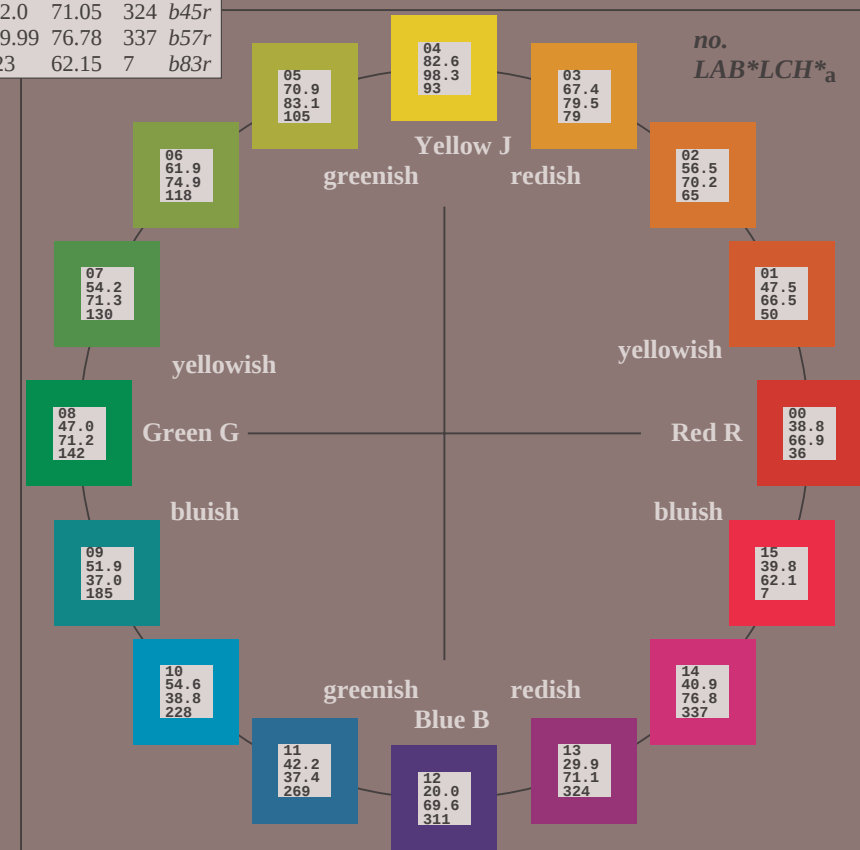
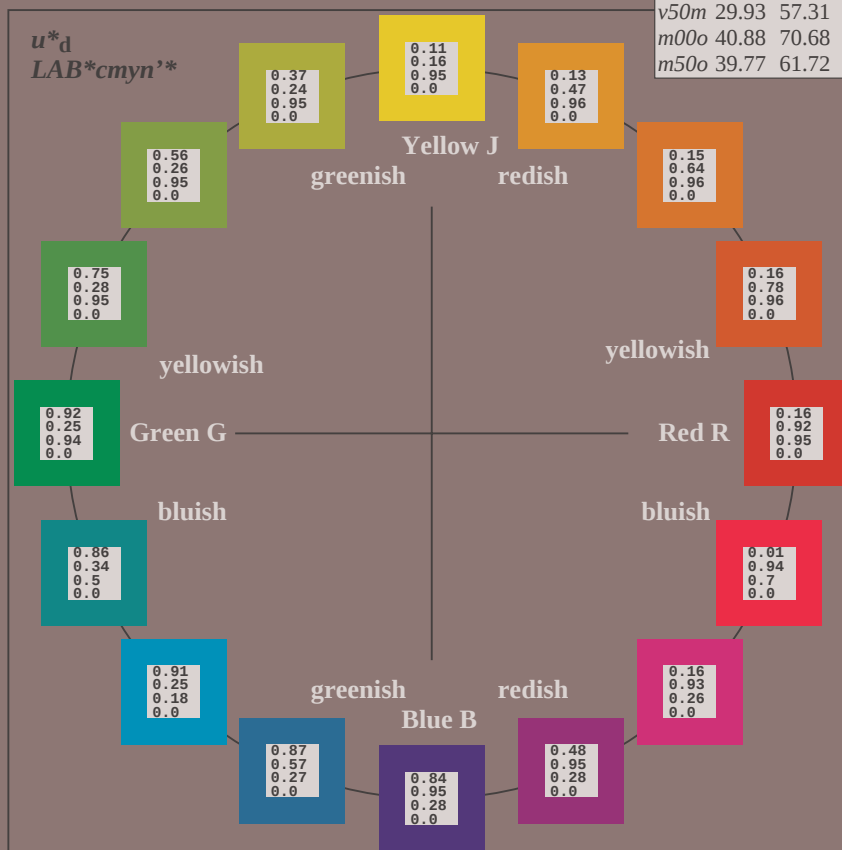
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

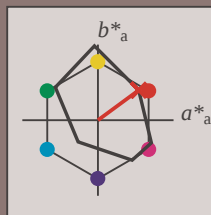
FRS15_90a; CIELAB data

Name	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_{CIE}	39.92	58.74	27.99	65.07	25
Y_{CIE}	81.26	-2.89	71.56	71.62	92
L_{CIE}	52.23	-42.42	13.6	44.55	162
V_{CIE}	30.57	1.41	-46.47	46.49	272



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.101$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = o00y$ $u^*_e = r16j$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; CIELAB data					
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 39 54 40

$LAB \cdot LCH \cdot Ma$: 39 67 36

$lab \cdot olv \cdot Ma$: 1.0 0.0 0.0

$lab \cdot rgb \cdot Ma$: 1.0 0.16 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*$	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
<i>o00y</i>	38.8	53.92	39.68	66.95	36	<i>r16j</i>	
<i>o25y</i>	47.46	42.34	51.25	66.48	50	<i>r37j</i>	
<i>o50y</i>	56.54	30.2	63.39	70.22	65	<i>r58j</i>	
<i>o75y</i>	67.39	15.68	77.9	79.47	79	<i>r79j</i>	
<i>y00l</i>	82.58	-4.64	98.22	98.33	93	<i>j01g</i>	
<i>y25l</i>	70.85	-21.66	80.19	83.07	105	<i>j18g</i>	
<i>y50l</i>	61.91	-34.63	66.45	74.93	118	<i>j36g</i>	
<i>y75l</i>	54.24	-45.77	54.66	71.29	130	<i>j53g</i>	
<i>l00c</i>	46.95	-56.34	43.46	71.15	142	<i>j71g</i>	
<i>l50c</i>	51.91	-36.84	-3.21	36.98	185	<i>g21b</i>	
<i>c00v</i>	54.62	-26.2	-28.68	38.85	228	<i>g60b</i>	
<i>c50v</i>	42.22	-0.61	-37.35	37.36	269	<i>g97b</i>	
<i>v00m</i>	20.01	45.2	-52.87	69.56	311	<i>b34r</i>	
<i>v50m</i>	29.93	57.31	-42.0	71.05	324	<i>b45r</i>	
<i>m00o</i>	40.88	70.68	-29.99	76.78	337	<i>b57r</i>	
<i>m50o</i>	39.77	61.72	7.23	62.15	7	<i>b83r</i>	

$LAB \cdot cmy^n \cdot$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

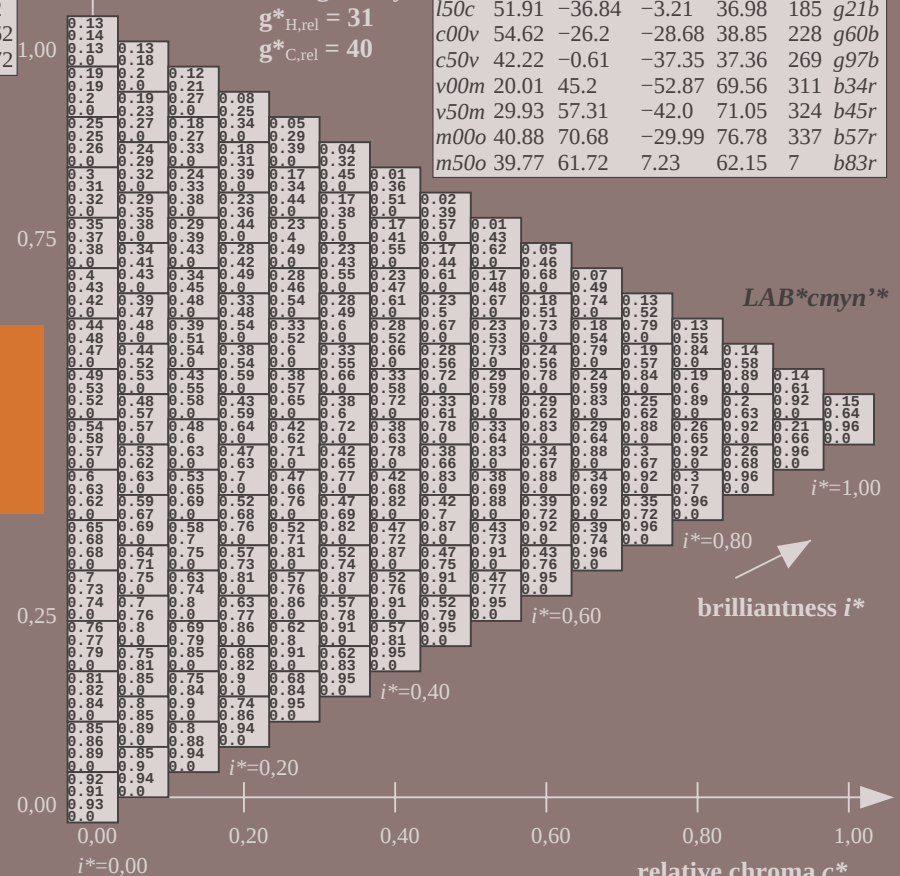
$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

BAM material: code=rha4ta



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.218$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

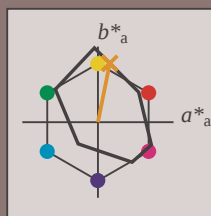
Hue texts:

$u^*_d = o75y$ $u^*_e = r79j$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data					
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 67 16 78

$LAB \cdot LCH \cdot Ma$: 67 79 78

$lab \cdot olv \cdot Ma$: 1.0 0.75 0.0

$lab \cdot rgb \cdot Ma$: 1.0 0.8 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

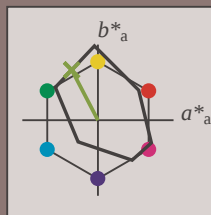
FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*$	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	

$LAB \cdot cmy^n \cdot u^*$

brilliantness i^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.326$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = y50l$ $u^*_e = j36g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; CIELAB data					
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 62 -35 66

$LAB \cdot LCH \cdot Ma$: 62 75 117

$lab \cdot olv \cdot Ma$: 0.5 1.0 0.0

$lab \cdot rgb \cdot Ma$: 0.64 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*$	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	

$LAB \cdot cmy^n^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

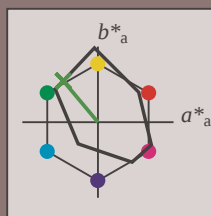
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.361$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = y75l$ $u^*_e = j53g$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; CIELAB data					
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 54 -46 55

$LAB \cdot LCH^*_{Ma}$: 54 71 129

$lab \cdot olv^*_{Ma}$: 0.25 1.0 0.0

$lab \cdot rgb^*_{Ma}$: 0.46 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*$	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	

$LAB \cdot cmy^n^*$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

$i^*=0.00$

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.395$

data for any colour:

lab^*tch^* and lab^*icu^*

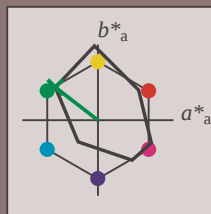
Hue texts:

$u^*_d = 100c$ $u^*_e = j71g$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data

u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

LAB^*LAB^*Ma : 47 -56 43

LAB^*LCH^*Ma : 47 71 142

lab^*olv^*Ma : 0.0 1.0 0.0

lab^*rgb^*Ma : 0.28 1.0 0.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data

u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e
o00y	38.8	53.92	39.68	66.95	36	r16j
o25y	47.46	42.34	51.25	66.48	50	r37j
o50y	56.54	30.2	63.39	70.22	65	r58j
o75y	67.39	15.68	77.9	79.47	79	r79j
y00l	82.58	-4.64	98.22	98.33	93	j01g
y25l	70.85	-21.66	80.19	83.07	105	j18g
y50l	61.91	-34.63	66.45	74.93	118	j36g
y75l	54.24	-45.77	54.66	71.29	130	j53g
l00c	46.95	-56.34	43.46	71.15	142	j71g
l50c	51.91	-36.84	-3.21	36.98	185	g21b
c00v	54.62	-26.2	-28.68	38.85	228	g60b
c50v	42.22	-0.61	-37.35	37.36	269	g97b
v00m	20.01	45.2	-52.87	69.56	311	b34r
v50m	29.93	57.31	-42.0	71.05	324	b45r
m00o	40.88	70.68	-29.99	76.78	337	b57r
m50o	39.77	61.72	7.23	62.15	7	b83r

$LAB^*cmy^n^*$

$i^* = 1.00$

$i^* = 0.80$

brilliantness i^*

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

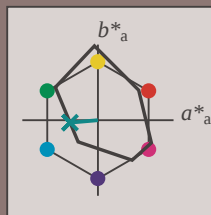
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.514$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = l50c$ $u^*_e = g21b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; CIELAB data					
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

LAB^*LAB^*Ma : 52 -37 -3

LAB^*LCH^*Ma : 52 37 184

$lab \cdot olv^*Ma$: 0.0 1.0 0.5

$lab \cdot rgb^*Ma$: 0.0 1.0 0.42

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*$	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	

$LAB^*cmy^n^*$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

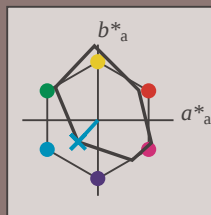
$i^*=0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.632$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = c00v$ $u^*_e = g60b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; CIELAB data					
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O_M	38.8	54.41	35.65	65.05	33
Y_M	82.58	-4.04	92.72	92.8	92
L_M	46.95	-55.83	39.15	68.19	145
C_M	54.62	-25.67	-33.25	42.01	232
V_M	20.01	45.64	-56.27	72.45	309
M_M	40.88	71.17	-34.09	78.92	334
N_M	15.0	0.43	-3.23	3.26	278
W_M	90.0	0.62	-5.76	5.79	276
O_M	39.92	58.74	27.99	65.07	25
Y_M	81.26	-2.89	71.56	71.62	92
L_M	52.23	-42.42	13.6	44.55	162
V_M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB \cdot Ma$: 55 -26 -29

$LAB \cdot LCH \cdot Ma$: 55 39 227

$lab \cdot olv \cdot Ma$: 0.0 1.0 1.0

$lab \cdot rgb \cdot Ma$: 0.0 0.81 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*$	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
$o00y$	38.8	53.92	39.68	66.95	36	$r16j$	
$o25y$	47.46	42.34	51.25	66.48	50	$r37j$	
$o50y$	56.54	30.2	63.39	70.22	65	$r58j$	
$o75y$	67.39	15.68	77.9	79.47	79	$r79j$	
$y00l$	82.58	-4.64	98.22	98.33	93	$j01g$	
$y25l$	70.85	-21.66	80.19	83.07	105	$j18g$	
$y50l$	61.91	-34.63	66.45	74.93	118	$j36g$	
$y75l$	54.24	-45.77	54.66	71.29	130	$j53g$	
$l00c$	46.95	-56.34	43.46	71.15	142	$j71g$	
$l50c$	51.91	-36.84	-3.21	36.98	185	$g21b$	
$c00v$	54.62	-26.2	-28.68	38.85	228	$g60b$	
$c50v$	42.22	-0.61	-37.35	37.36	269	$g97b$	
$v00m$	20.01	45.2	-52.87	69.56	311	$b34r$	
$v50m$	29.93	57.31	-42.0	71.05	324	$b45r$	
$m00o$	40.88	70.68	-29.99	76.78	337	$b57r$	
$m50o$	39.77	61.72	7.23	62.15	7	$b83r$	

$LAB \cdot cmy^n \cdot u^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

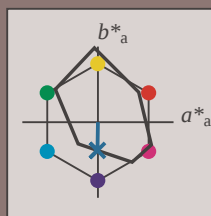
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.747$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = c50v$ $u^*_e = g97b$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; CIELAB data					
u^*_d	$L^*=L^*_a$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*Ma: 42 -1 -37$

$LAB^*LCH^*Ma: 42 37 269$

$lab^*olv^*Ma: 0.0 0.5 1.0$

$lab^*rgb^*Ma: 0.0 0.05 1.0$

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	

$LAB^*cmy^n^*$

$i^*=1.00$

brilliantness i^*

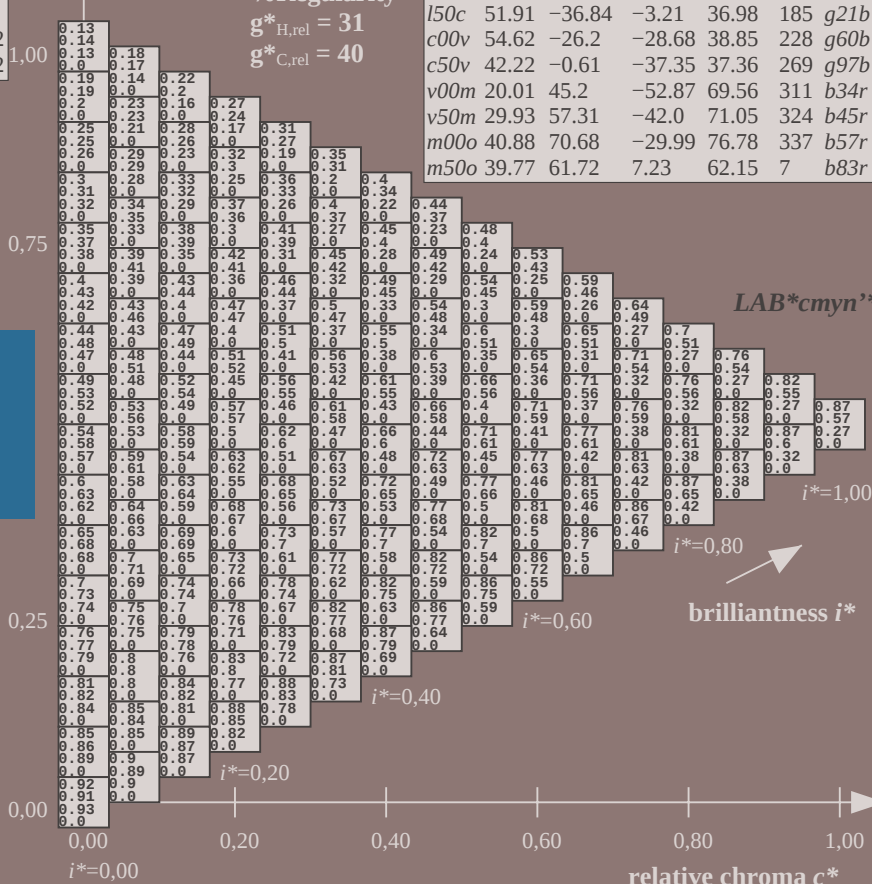
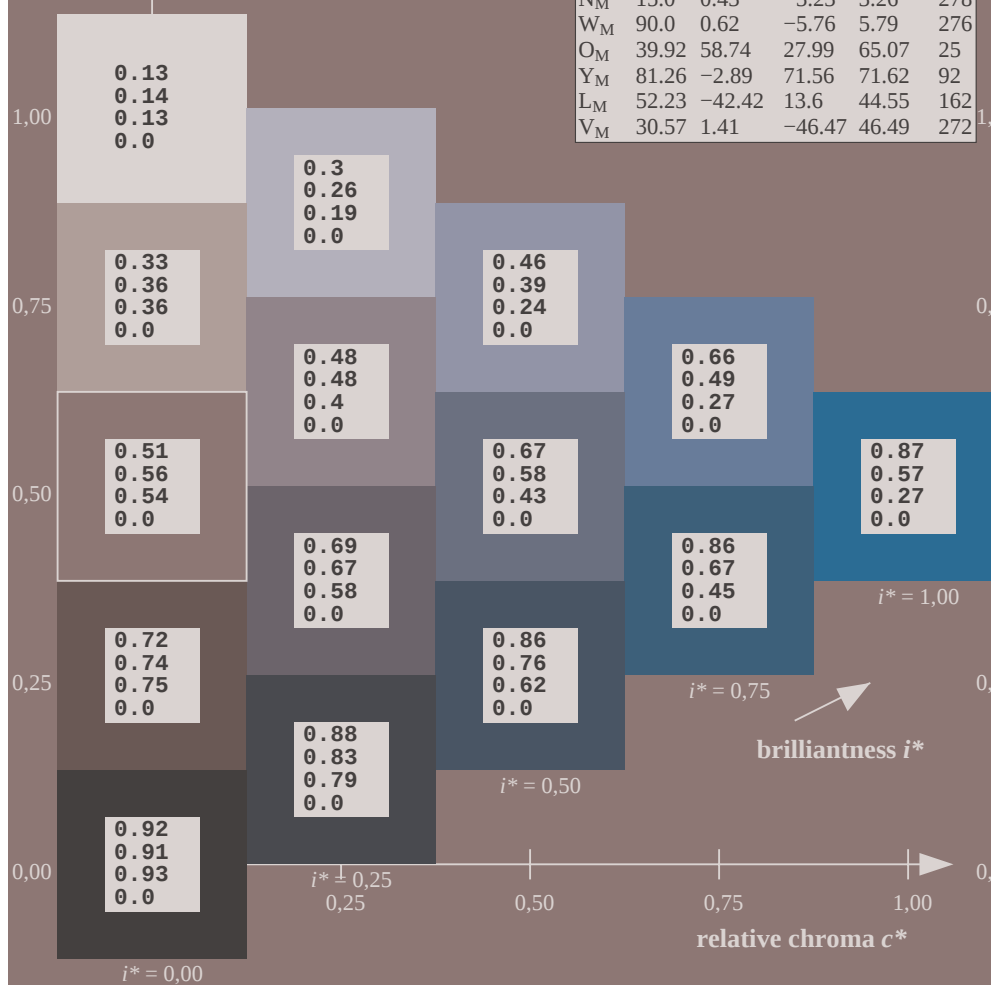
$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

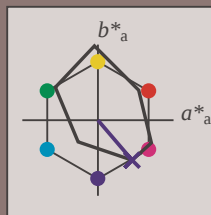
$i^*=0.20$

$i^*=0.00$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab \cdot h^* = h_{ab}/360 = 0.863$
data for any colour:
 $lab \cdot tch^*$ and $lab \cdot icu^*$

Hue texts:
 $u^*_d = v00m$ $u^*_e = b34r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; CIELAB data					
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB \cdot LAB^*_{Ma}$: 20 45 -53

$LAB \cdot LCH^*_{Ma}$: 20 70 310

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

$lab \cdot rgb^*_{Ma}$: 0.68 0.0 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

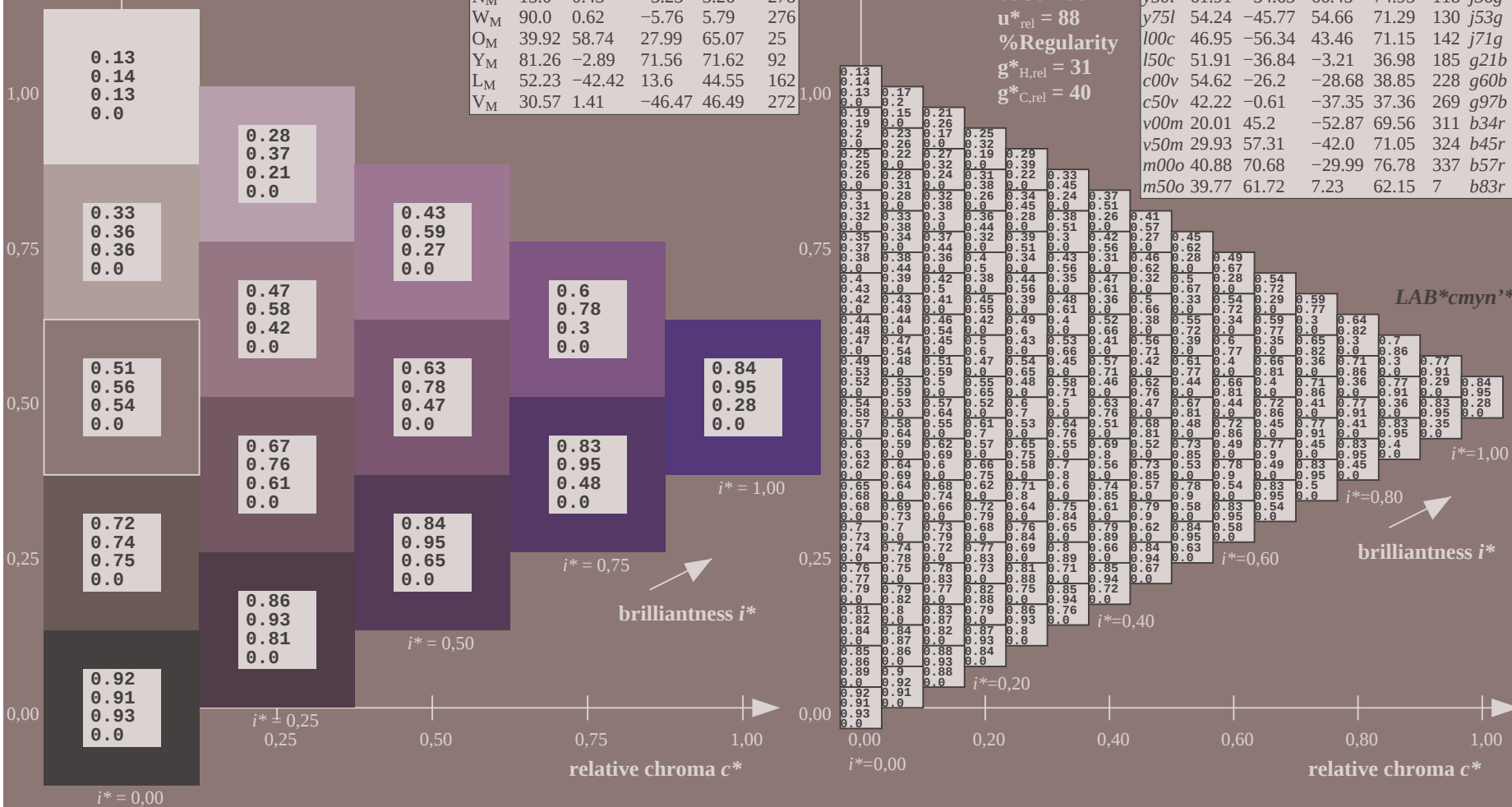
%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

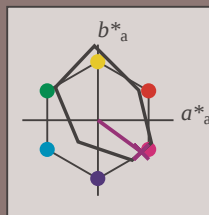
FRS15_90a; adapted (a) CIELAB data					
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
o00y	38.8	53.92	39.68	66.95	36
o25y	47.46	42.34	51.25	66.48	50
o50y	56.54	30.2	63.39	70.22	65
o75y	67.39	15.68	77.9	79.47	79
y00l	82.58	-4.64	98.22	98.33	93
y25l	70.85	-21.66	80.19	83.07	105
y50l	61.91	-34.63	66.45	74.93	118
y75l	54.24	-45.77	54.66	71.29	130
l00c	46.95	-56.34	43.46	71.15	142
l50c	51.91	-36.84	-3.21	36.98	185
c00v	54.62	-26.2	-28.68	38.85	228
c50v	42.22	-0.61	-37.35	37.36	269
v00m	20.01	45.2	-52.87	69.56	311
v50m	29.93	57.31	-42.0	71.05	324
m00o	40.88	70.68	-29.99	76.78	337
m50o	39.77	61.72	7.23	62.15	7

$u^*_d = v00m$
 $LAB \cdot cmy^n^*$



Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.899$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = v50m$ $u^*_e = b45r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; CIELAB data					
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 30 57 -42

$LAB^*LCH^*_{Ma}$: 30 71 323

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

$lab^*rgb^*_{Ma}$: 0.91 0.0 1.0

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	

$LAB^*cmy^n^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

$i^* = 0.00$

See for similar files: <http://www.ps.bam.de/Ee67/>; www.ps.bam.de/Ee67/10L/L67E00FP.PS/.PDF
Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1, CIELAB, ColSpx=0

BAM registration: 20081001-Ee67/10L/L67E00FP.PS/.PDF BAM material: code=rhdata
application for evaluation and measurement of printer or monitor systems

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.936$

data for any colour:

lab^*tch^* and lab^*icu^*

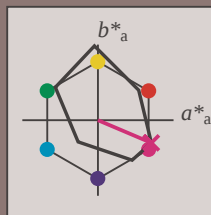
Hue texts:

$u^*_d = m00o$ $u^*_e = b57r$

contrast reduction factor:

$c_R = 0.9$

triangle lightness t^*



FRS15_90a; CIELAB data					
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

LAB^*LAB^*Ma : 41 71 -30

LAB^*LCH^*Ma : 41 77 337

lab^*olv^*Ma : 1.0 0.0 1.0

lab^*rgb^*Ma : 1.0 0.0 0.85

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*$	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	

$LAB^*cmy^n^*$

$i^* = 1.00$

brilliantness i^*

$i^* = 0.80$

$i^* = 0.60$

$i^* = 0.40$

$i^* = 0.20$

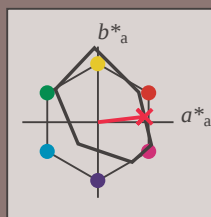
$i^* = 0.00$

relative chroma c^*

relative chroma c^*

Input and output: Colorimetric Printer Reflective System FRS15_90a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.019$
data for any colour:
 lab^*tch^* and lab^*icu^*

Hue texts:
 $u^*_d = m50o$ $u^*_e = b83r$
contrast reduction factor:
 $c_R = 0.9$
triangle lightness t^*



FRS15_90a; CIELAB data					
u^*_d	$L^*=L^*$	a^*	b^*	C^*_{ab}	h^*_{ab}
O _M	38.8	54.41	35.65	65.05	33
Y _M	82.58	-4.04	92.72	92.8	92
L _M	46.95	-55.83	39.15	68.19	145
C _M	54.62	-25.67	-33.25	42.01	232
V _M	20.01	45.64	-56.27	72.45	309
M _M	40.88	71.17	-34.09	78.92	334
N _M	15.0	0.43	-3.23	3.26	278
W _M	90.0	0.62	-5.76	5.79	276
O _M	39.92	58.74	27.99	65.07	25
Y _M	81.26	-2.89	71.56	71.62	92
L _M	52.23	-42.42	13.6	44.55	162
V _M	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 40 62 7

$LAB^*LCH^*_{Ma}$: 40 62 6

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

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.33

triangle lightness t^*

%Gamut

$u^*_{rel} = 88$

%Regularity

$g^*_{H,rel} = 31$

$g^*_{C,rel} = 40$

FRS15_90a; adapted (a) CIELAB data							
u^*_d	$L^*=L^*$	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*_e	
o00y	38.8	53.92	39.68	66.95	36	r16j	
o25y	47.46	42.34	51.25	66.48	50	r37j	
o50y	56.54	30.2	63.39	70.22	65	r58j	
o75y	67.39	15.68	77.9	79.47	79	r79j	
y00l	82.58	-4.64	98.22	98.33	93	j01g	
y25l	70.85	-21.66	80.19	83.07	105	j18g	
y50l	61.91	-34.63	66.45	74.93	118	j36g	
y75l	54.24	-45.77	54.66	71.29	130	j53g	
l00c	46.95	-56.34	43.46	71.15	142	j71g	
l50c	51.91	-36.84	-3.21	36.98	185	g21b	
c00v	54.62	-26.2	-28.68	38.85	228	g60b	
c50v	42.22	-0.61	-37.35	37.36	269	g97b	
v00m	20.01	45.2	-52.87	69.56	311	b34r	
v50m	29.93	57.31	-42.0	71.05	324	b45r	
m00o	40.88	70.68	-29.99	76.78	337	b57r	
m50o	39.77	61.72	7.23	62.15	7	b83r	

$LAB^*cmy^n^*$

$i^*=1.00$

brilliantness i^*

$i^*=0.80$

$i^*=0.60$

$i^*=0.40$

$i^*=0.20$

$i^*=0.00$

