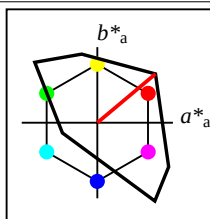


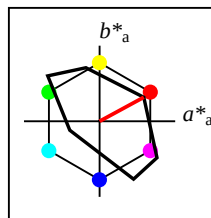
%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

TLS00	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	50.5	76.91	64.55	100.41	40
Y _M	92.66	-20.67	90.75	93.08	103
L _M	83.62	-82.73	79.9	115.02	136
C _M	86.88	-46.14	-13.53	48.1	196
V _M	30.39	76.06	-103.59	128.52	306
M _M	57.31	94.35	-58.39	110.96	328
N _M	0.01	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

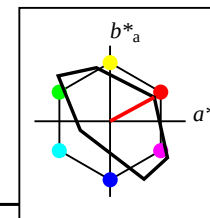
TLS00a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.91	64.55	100.41	40
Y _{Ma}	92.66	-20.67	90.75	93.08	103
L _{Ma}	83.62	-82.73	79.9	115.02	136
C _{Ma}	86.88	-46.14	-13.53	48.1	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.31	94.35	-58.39	110.96	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

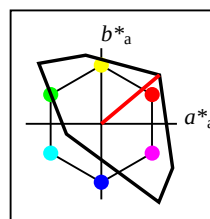
TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Workflow choices
for colour samples:
1. No colour change
2. Hue change
3. Chroma change



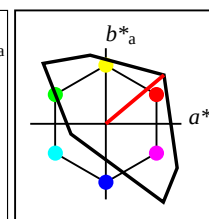
%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

TLS00a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.91	64.55	100.41	40
Y _{Ma}	92.66	-20.67	90.75	93.08	103
L _{Ma}	83.62	-82.73	79.9	115.02	136
C _{Ma}	86.88	-46.14	-13.53	48.1	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.31	94.35	-58.39	110.96	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

TLS00	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	50.5	76.91	64.55	100.41	40
Y _M	92.66	-20.67	90.75	93.08	103
L _M	83.62	-82.73	79.9	115.02	136
C _M	86.88	-46.14	-13.53	48.1	196
V _M	30.39	76.06	-103.59	128.52	306
M _M	57.31	94.35	-58.39	110.96	328
N _M	0.01	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

YE680-7, Colour Management Workflow: Device Colour Input Data of the Colour Space TLS00 -> Device Colour Output Data of Output Space TLS00, page 1/32

BAM-test chart YE68; Colorimetric workflow TLS00->TLS00
D65: 6 basic colours; Device and sample data; page 1/32

input: olv^* setrgbcolor
output: no change compared to input

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS00: Output (o) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 1.0 1.0 0.0
LCHMi = 92.7 93.1 103
LCHo = 92.7 93.1 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.0 1.0 0.0
LCHMi = 83.6 115.0 136
LCHo = 83.6 115.0 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 1.0 1.0
LCHMi = 86.9 48.1 196
LCHo = 86.9 48.1 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.545

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.0 0.0
LCHMi = 50.5 100.4 40
LCHo = 50.5 100.4 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.111

M Magenta red

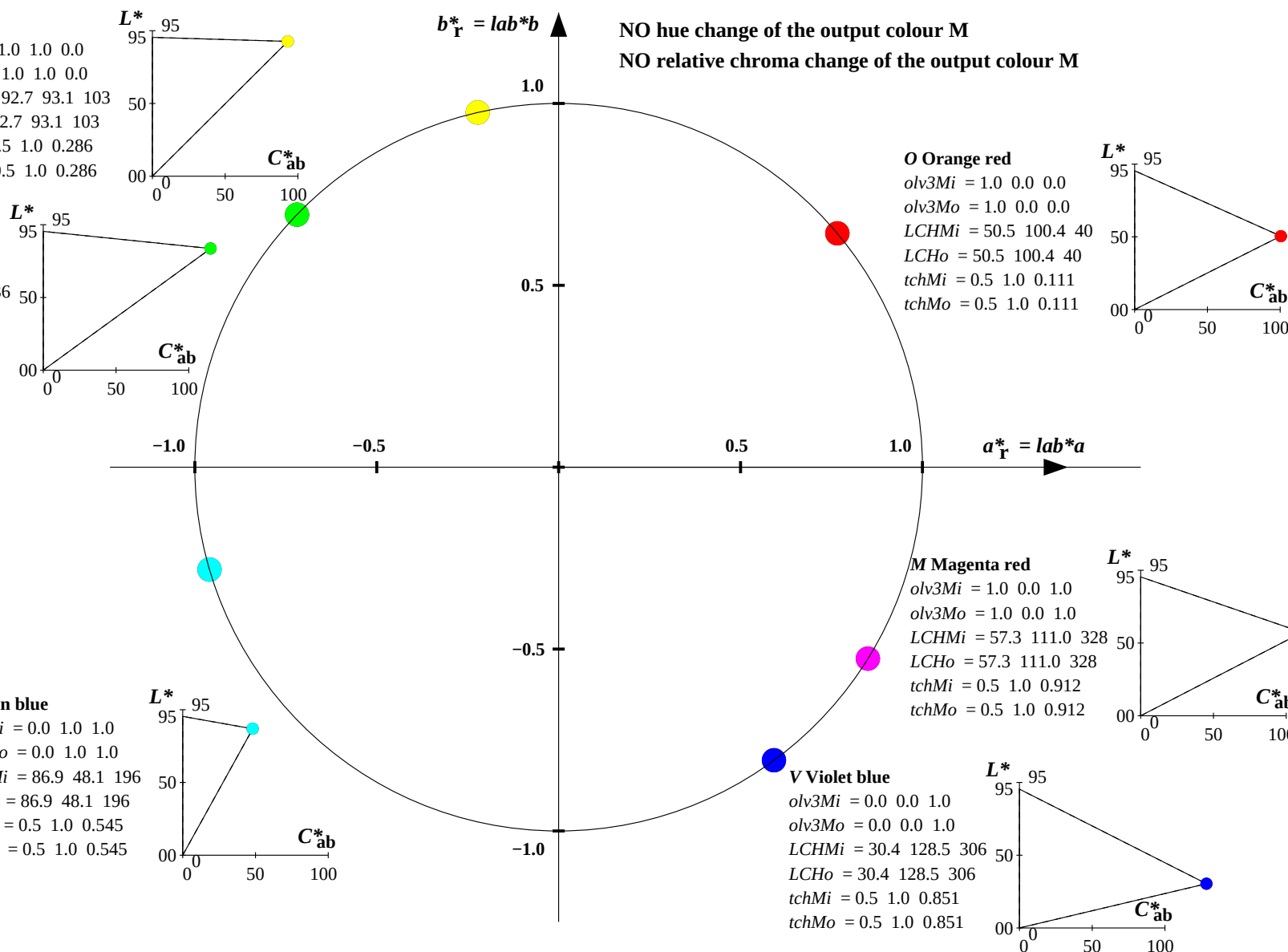
olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 1.0
LCHMi = 57.3 111.0 328
LCHo = 57.3 111.0 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.912

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.0 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 30.4 128.5 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.851

NO hue change of the output colour M

NO relative chroma change of the output colour M



Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (---) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS00: Output (o) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.698 1.0 0.0
LCHMi = 92.7 93.1 103
LCHo = 89.9 99.7 113
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.313

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.0 1.0 0.166
LCHMi = 83.6 115.0 136
LCHo = 84.2 103.9 146
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.406

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 0.909 1.0
LCHMi = 86.9 48.1 196
LCHo = 81.7 55.4 206
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.573

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.159 0.0
LCHMi = 50.5 100.4 40
LCHo = 57.2 99.2 50
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.139

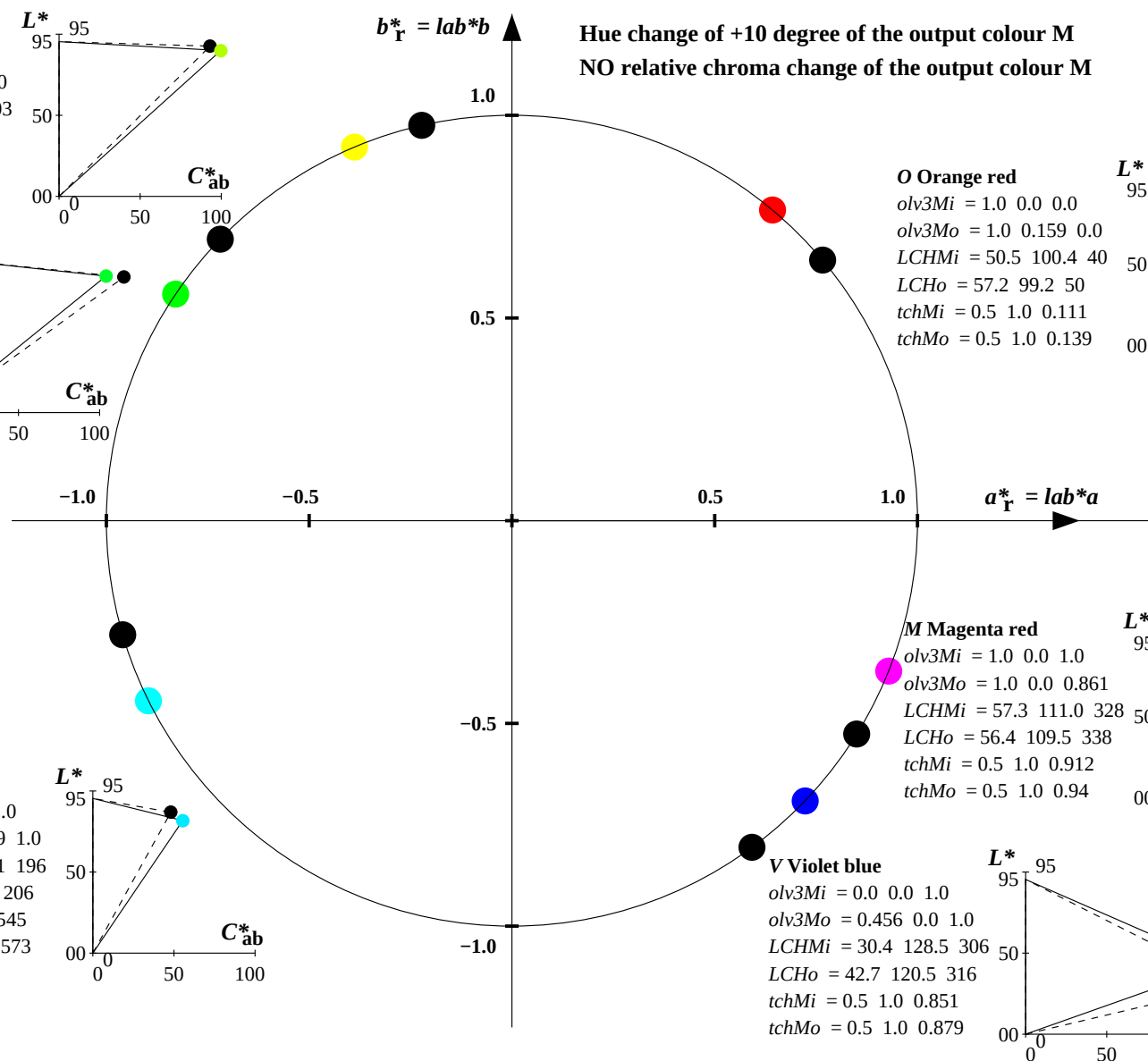
M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.861
LCHMi = 57.3 111.0 328
LCHo = 56.4 109.5 338
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.94

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.456 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 42.7 120.5 316
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.879

Hue change of +10 degree of the output colour M
NO relative chroma change of the output colour M



Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS00: Output (o) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.75 0.75 0.25
LCHMi = 92.7 93.1 103
LCHo = 70.2 46.5 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 0.5 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.25 0.75 0.25
LCHMi = 83.6 115.0 136
LCHo = 65.7 57.5 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 0.5 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.25 0.75 0.75
LCHMi = 86.9 48.1 196
LCHo = 67.3 24.0 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 0.5 0.545

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 0.75 0.25 0.25
LCHMi = 50.5 100.4 40
LCHo = 49.1 50.2 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 0.5 0.111

M Magenta red

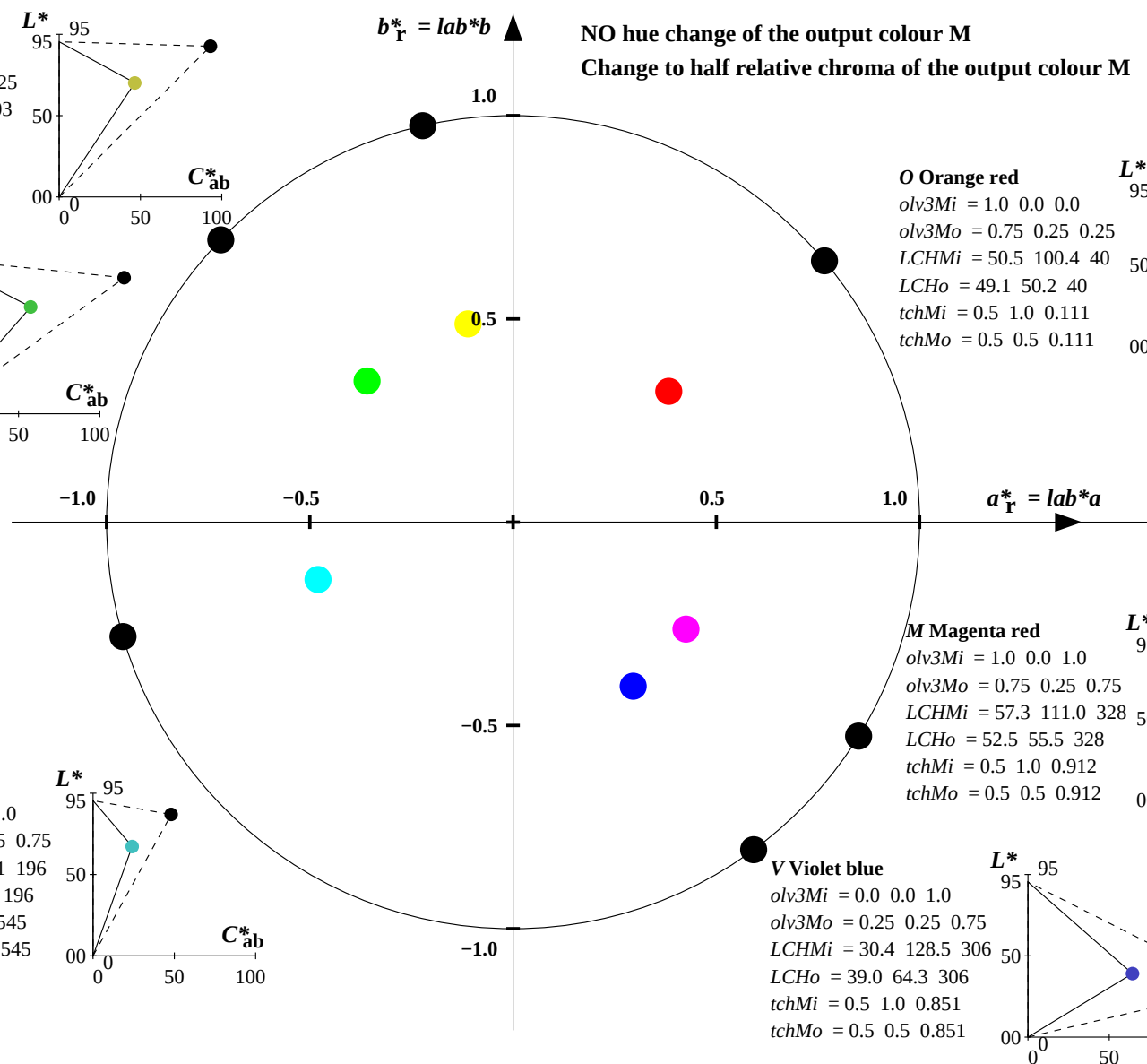
olv3Mi = 1.0 0.0 1.0
olv3Mo = 0.75 0.25 0.75
LCHMi = 57.3 111.0 328
LCHo = 52.5 55.5 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 0.5 0.912

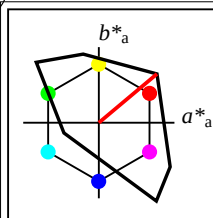
V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.25 0.25 0.75
LCHMi = 30.4 128.5 306
LCHo = 39.0 64.3 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 0.5 0.851

NO hue change of the output colour M

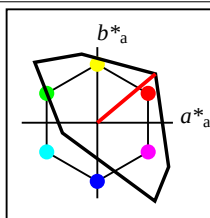
Change to half relative chroma of the output colour M





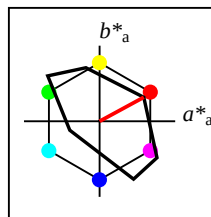
%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

TLS00	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	50.5	76.91	64.55	100.41	40
Y _M	92.66	-20.67	90.75	93.08	103
L _M	83.62	-82.73	79.9	115.02	136
C _M	86.88	-46.14	-13.53	48.1	196
V _M	30.39	76.06	-103.59	128.52	306
M _M	57.31	94.35	-58.39	110.96	328
N _M	0.01	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

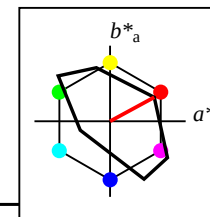
TLS00a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.91	64.55	100.41	40
Y _{Ma}	92.66	-20.67	90.75	93.08	103
L _{Ma}	83.62	-82.73	79.9	115.02	136
C _{Ma}	86.88	-46.14	-13.53	48.1	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.31	94.35	-58.39	110.96	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

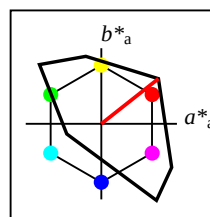
TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Workflow choices
for colour samples:
1. No colour change
2. Hue change
3. Chroma change



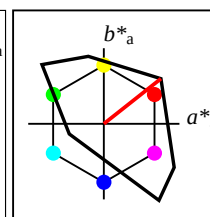
%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 146$
%Regularity
 $g^*_{H,rel} = 21$
 $g^*_{C,rel} = 38$

TLS06a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	51.08	75.54	59.69	96.28	38
Y _{Ma}	92.68	-20.5	89.24	91.57	103
L _{Ma}	83.72	-81.78	78.32	113.24	136
C _{Ma}	86.94	-45.71	-13.42	47.65	196
V _{Ma}	31.77	72.91	-101.29	124.81	306
M _{Ma}	57.74	93.06	-57.7	109.5	328
N _{Ma}	5.69	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 146$
%Regularity
 $g^*_{H,rel} = 21$
 $g^*_{C,rel} = 38$

TLS06	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	51.08	75.54	59.69	96.28	38
Y _M	92.68	-20.5	89.24	91.57	103
L _M	83.72	-81.78	78.32	113.24	136
C _M	86.94	-45.71	-13.42	47.65	196
V _M	31.77	72.91	-101.29	124.81	306
M _M	57.74	93.06	-57.7	109.5	328
N _M	5.69	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (---) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS06: Output (o) colorimetric system; Six hue angles of the colour device: (38.3, 102.9, 136.2, 196.4, 305.7, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 1.0 0.998 0.0
LCHMi = 92.7 93.1 103
LCHo = 92.6 91.6 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.007 1.0 0.0
LCHMi = 83.6 115.0 136
LCHo = 83.8 113.1 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 1.0 1.0
LCHMi = 86.9 48.1 196
LCHo = 86.9 47.7 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.545

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.026 0.0
LCHMi = 50.5 100.4 40
LCHo = 52.2 96.2 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.111

M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.999
LCHMi = 57.3 111.0 328
LCHo = 57.7 109.5 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.912

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.024 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 32.4 124.4 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.851

NO hue change of the output colour M

NO relative chroma change of the output colour M

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (---) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS06: Output (o) colorimetric system; Six hue angles of the colour device: (38.3, 102.9, 136.2, 196.4, 305.7, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.703 1.0 0.0
LCHMi = 92.7 93.1 103
LCHo = 90.0 98.0 113
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.313

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.0 1.0 0.162
LCHMi = 83.6 115.0 136
LCHo = 84.2 102.6 146
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.406

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 0.909 1.0
LCHMi = 86.9 48.1 196
LCHo = 81.9 54.7 206
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.573

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.181 0.0
LCHMi = 50.5 100.4 40
LCHo = 58.6 95.4 50
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.139

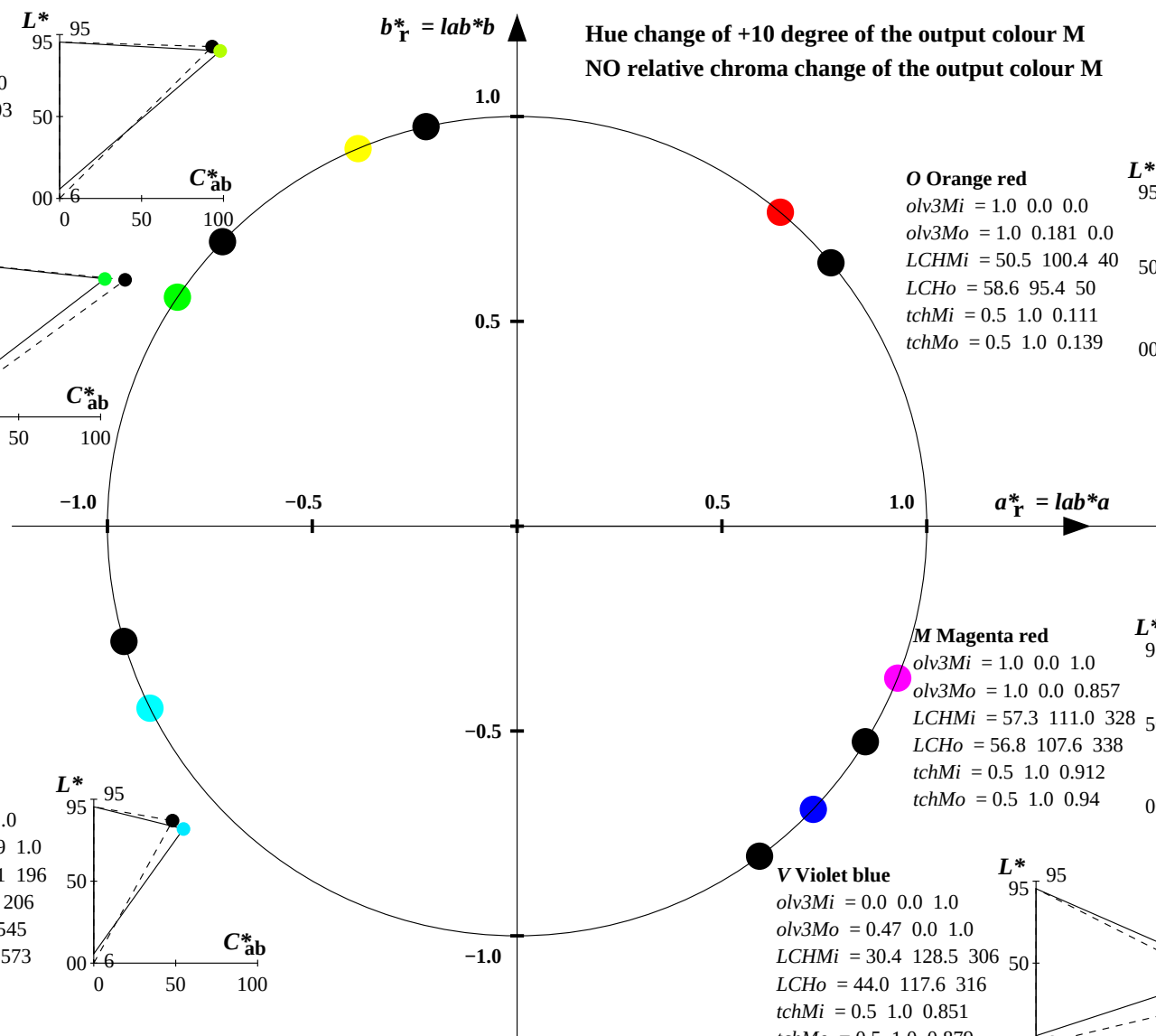
M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.857
LCHMi = 57.3 111.0 328
LCHo = 56.8 107.6 338
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.94

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.47 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 44.0 117.6 316
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.879

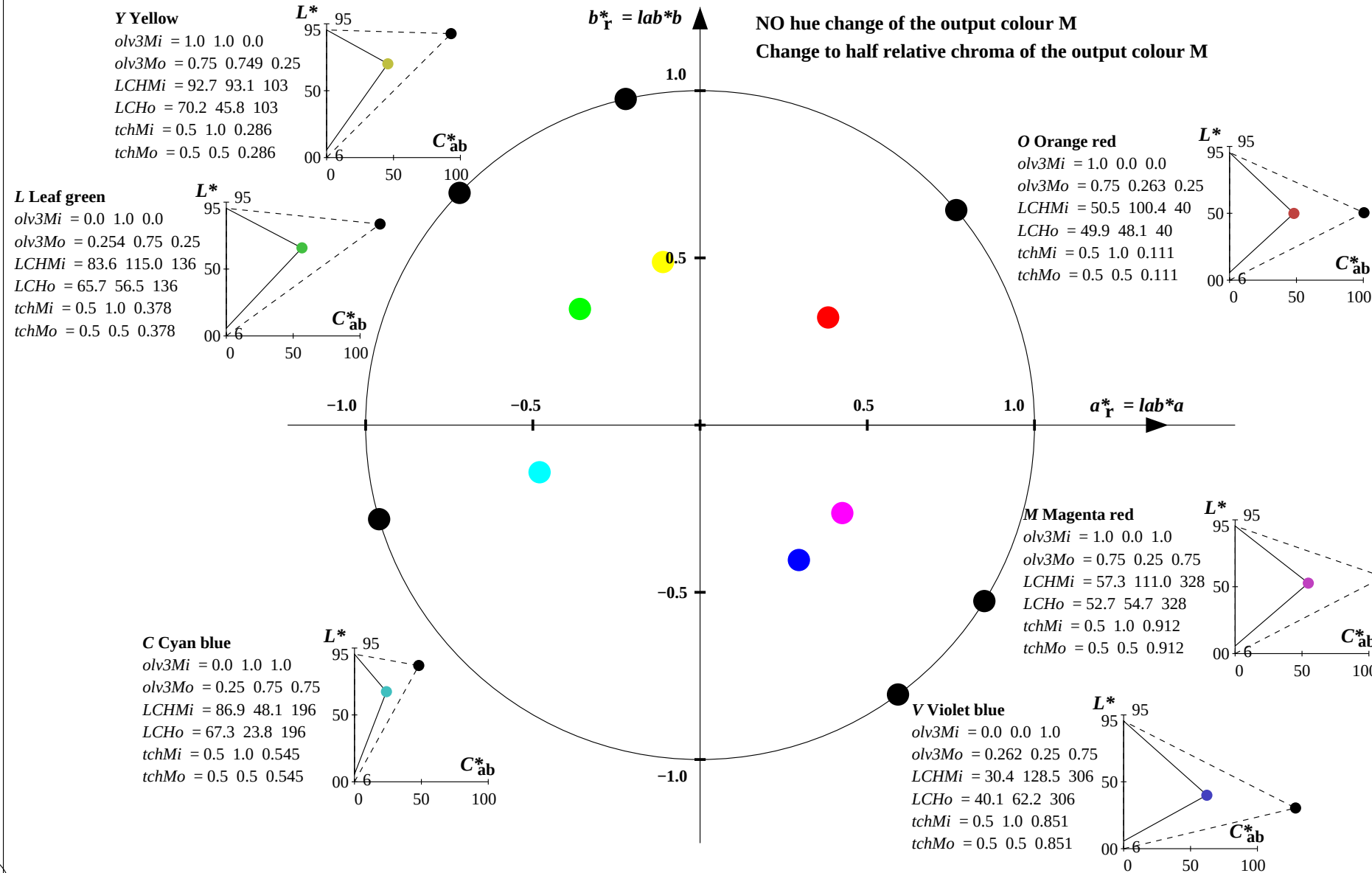
Hue change of +10 degree of the output colour M
NO relative chroma change of the output colour M



Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (---) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS06: Output (o) colorimetric system; Six hue angles of the colour device: (38.3, 102.9, 136.2, 196.4, 305.7, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)



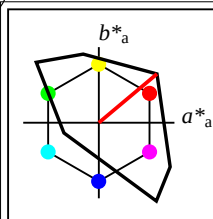
YE680-7, Colour Management Workflow: Device Colour Input Data of the Colour Space TLS00 -> Device Colour Output Data of Output Space TLS06, page 8/32

BAM-test chart YE68; Colorimetric workflow TLS00->TLS06

D65: 6 basic colours; Device and sample data; page 8/32

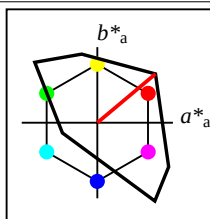
input: olv* setrgbcolor

output: no change compared to input



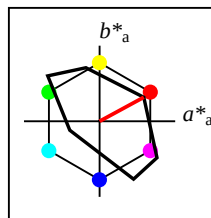
%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

TLS00	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	50.5	76.91	64.55	100.41	40
Y _M	92.66	-20.67	90.75	93.08	103
L _M	83.62	-82.73	79.9	115.02	136
C _M	86.88	-46.14	-13.53	48.1	196
V _M	30.39	76.06	-103.59	128.52	306
M _M	57.31	94.35	-58.39	110.96	328
N _M	0.01	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

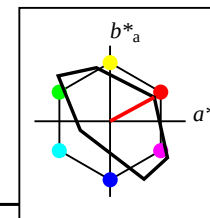
TLS00a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.91	64.55	100.41	40
Y _{Ma}	92.66	-20.67	90.75	93.08	103
L _{Ma}	83.62	-82.73	79.9	115.02	136
C _{Ma}	86.88	-46.14	-13.53	48.1	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.31	94.35	-58.39	110.96	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

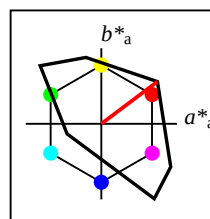
TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Workflow choices
for colour samples:
1. No colour change
2. Hue change
3. Chroma change



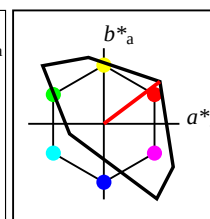
%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 134$
%Regularity
 $g^*_{H,rel} = 21$
 $g^*_{C,rel} = 39$

TLS11a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	51.65	74.2	55.83	92.86	37
Y _{Ma}	92.7	-20.34	87.77	90.1	103
L _{Ma}	83.81	-80.84	76.81	111.52	136
C _{Ma}	87.01	-45.27	-13.32	47.2	196
V _{Ma}	33.06	70.03	-99.08	121.34	305
M _{Ma}	58.17	91.8	-57.02	108.07	328
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 134$
%Regularity
 $g^*_{H,rel} = 21$
 $g^*_{C,rel} = 39$

TLS11	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	51.65	74.2	55.83	92.86	37
Y _M	92.7	-20.34	87.77	90.1	103
L _M	83.81	-80.84	76.81	111.52	136
C _M	87.01	-45.27	-13.32	47.2	196
V _M	33.06	70.03	-99.08	121.34	305
M _M	58.17	91.8	-57.02	108.07	328
N _M	10.99	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

YE680-7, Colour Management Workflow: Device Colour Input Data of the Colour Space TLS00 -> Device Colour Output Data of Output Space TLS11, page 9/32

BAM-test chart YE68; Colorimetric workflow TLS00->TLS11
D65: 6 basic colours; Device and sample data; page 9/32

input: $olv^* setrgbcolor$
output: no change compared to input

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (---) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS11: Output (o) colorimetric system; Six hue angles of the colour device: (37.0, 103.1, 136.5, 196.4, 305.3, 328.1); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 1.0 0.997 0.0
LCHMi = 92.7 93.1 103
LCHo = 92.6 90.1 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.014 1.0 0.0
LCHMi = 83.6 115.0 136
LCHo = 83.9 111.2 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 1.0 0.999
LCHMi = 86.9 48.1 196
LCHo = 87.0 47.3 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.545

O Orange red

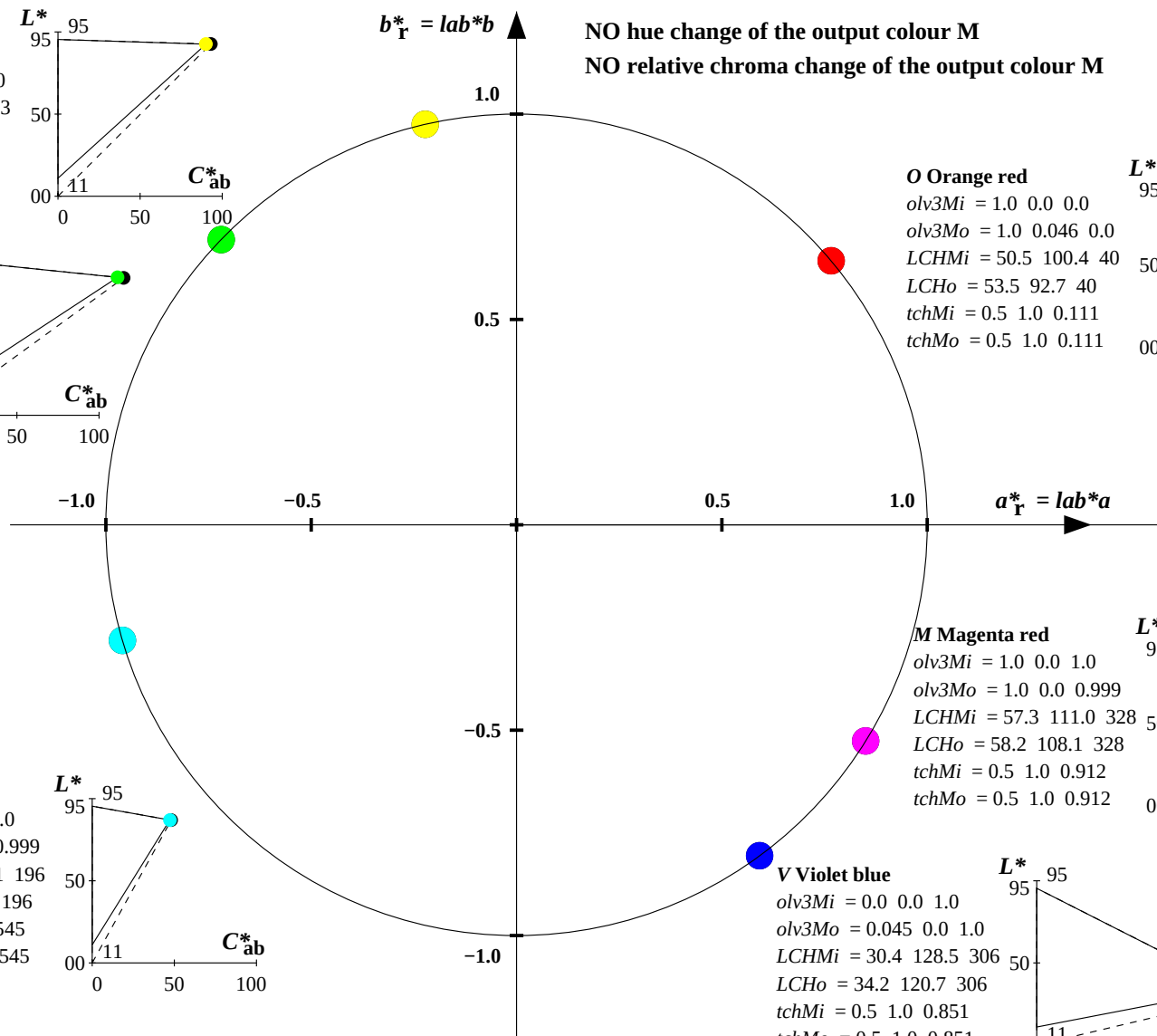
olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.046 0.0
LCHMi = 50.5 100.4 40
LCHo = 53.5 92.7 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.111

M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.999
LCHMi = 57.3 111.0 328
LCHo = 58.2 108.1 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.912

V Violet blue

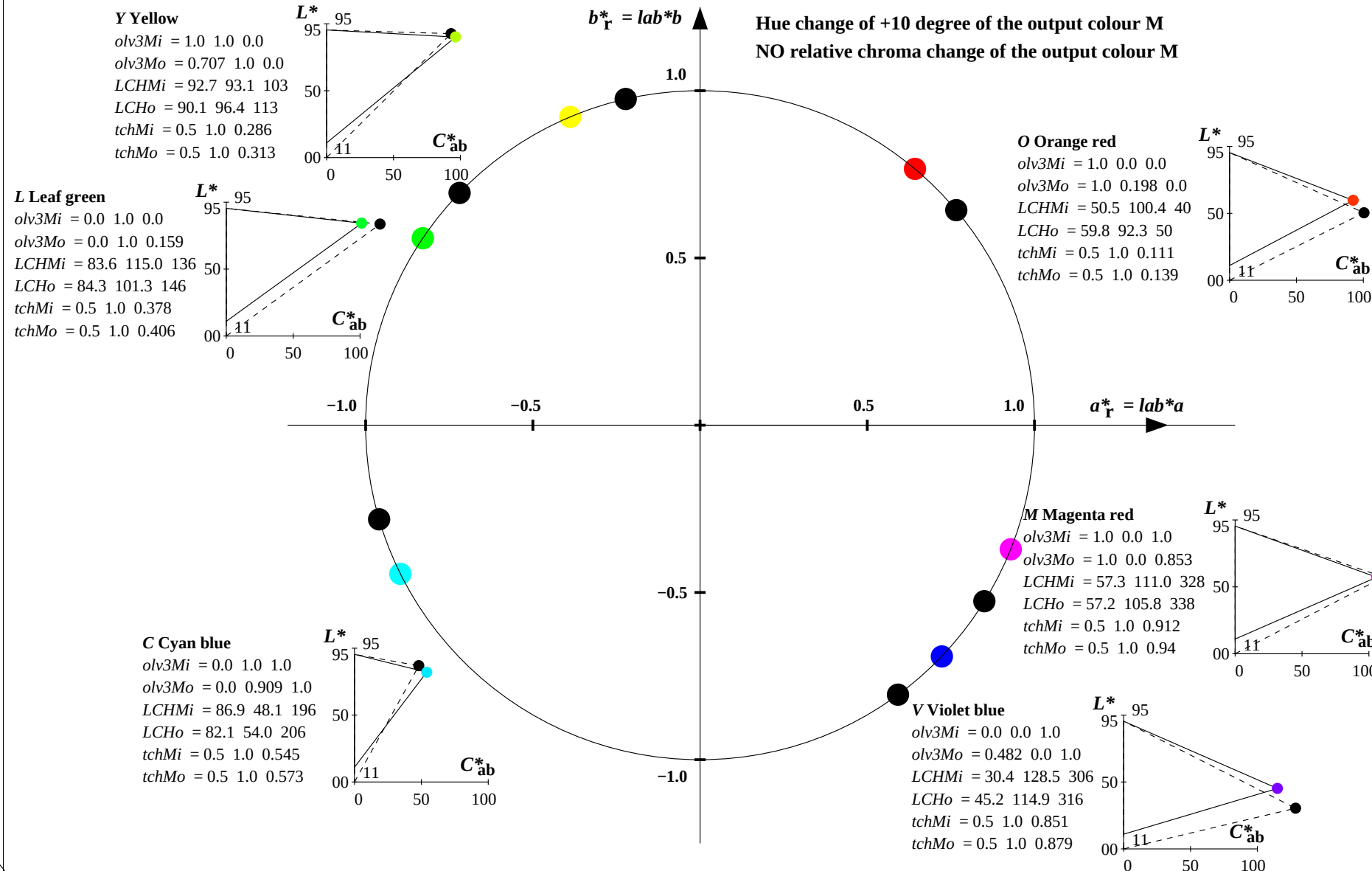
olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.045 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 34.2 120.7 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.851



Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (---) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS11: Output (o) colorimetric system; Six hue angles of the colour device: (37.0, 103.1, 136.5, 196.4, 305.3, 328.1); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)



YE680-7, Colour Management Workflow: Device Colour Input Data of the Colour Space TLS00 -> Device Colour Output Data of Output Space TLS11, page 11/32

BAM-test chart YE68; Colorimetric workflow TLS00->TLS11 input: olv* setrgbcolor
D65: 6 basic colours; Device and sample data; page 11/32 output: no change compared to input

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS11: Output (o) colorimetric system; Six hue angles of the colour device: (37.0, 103.1, 136.5, 196.4, 305.3, 328.1); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.75 0.748 0.25
LCHMi = 92.7 93.1 103
LCHo = 70.1 45.1 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 0.5 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.257 0.75 0.25
LCHMi = 83.6 115.0 136
LCHo = 65.8 55.6 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 0.5 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.25 0.75 0.75
LCHMi = 86.9 48.1 196
LCHo = 67.4 23.6 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 0.5 0.545

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 0.75 0.273 0.25
LCHMi = 50.5 100.4 40
LCHo = 50.6 46.4 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 0.5 0.111

M Magenta red

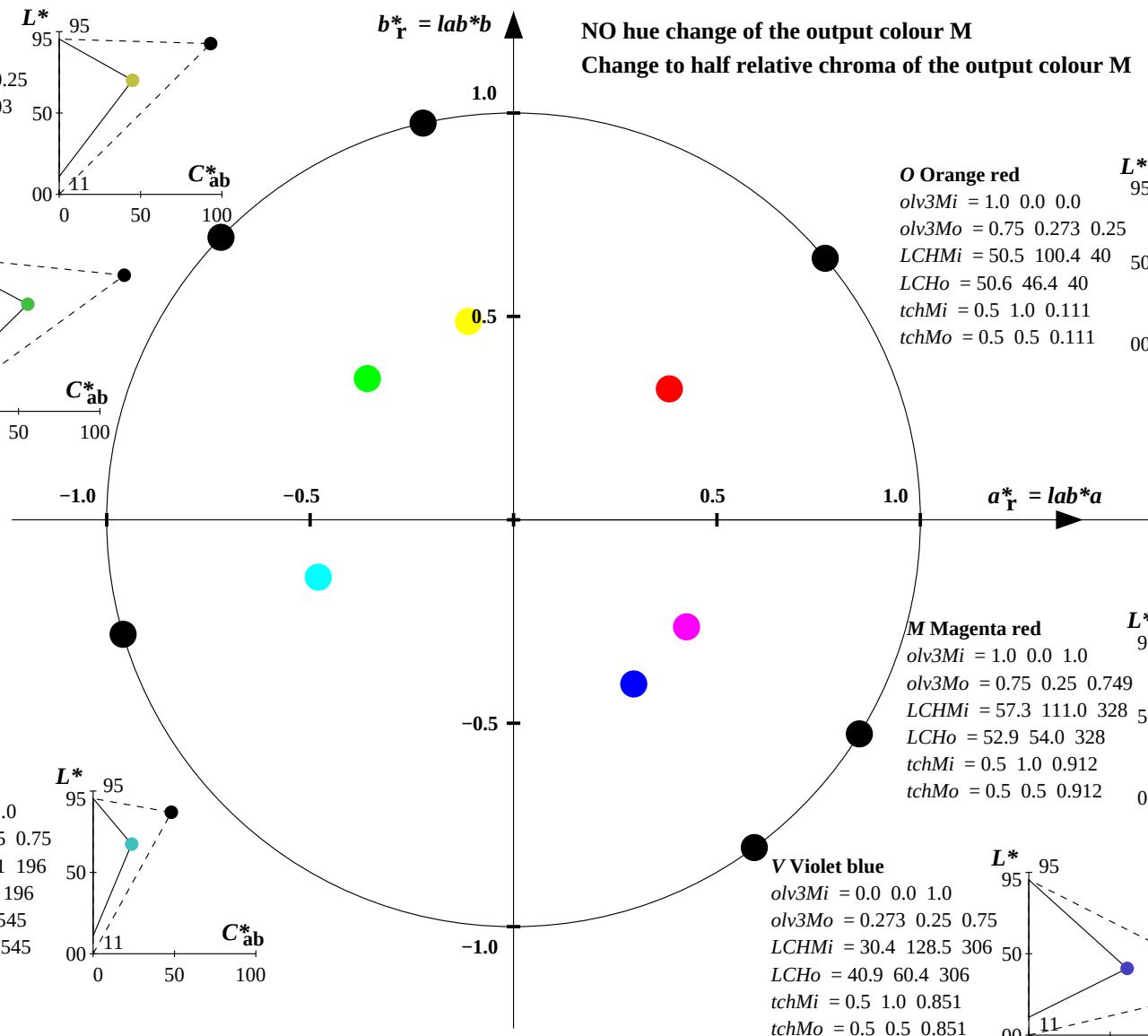
olv3Mi = 1.0 0.0 1.0
olv3Mo = 0.75 0.25 0.749
LCHMi = 57.3 111.0 328
LCHo = 52.9 54.0 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 0.5 0.912

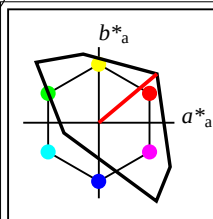
V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.273 0.25 0.75
LCHMi = 30.4 128.5 306
LCHo = 40.9 60.4 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 0.5 0.851

NO hue change of the output colour M

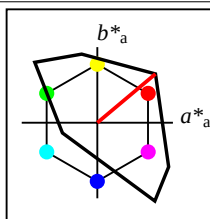
Change to half relative chroma of the output colour M





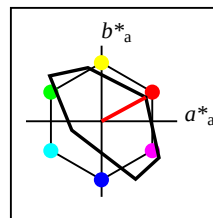
%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

TLS00	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	50.5	76.91	64.55	100.41	40
Y _M	92.66	-20.67	90.75	93.08	103
L _M	83.62	-82.73	79.9	115.02	136
C _M	86.88	-46.14	-13.53	48.1	196
V _M	30.39	76.06	-103.59	128.52	306
M _M	57.31	94.35	-58.39	110.96	328
N _M	0.01	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

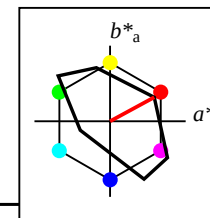
TLS00a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.91	64.55	100.41	40
Y _{Ma}	92.66	-20.67	90.75	93.08	103
L _{Ma}	83.62	-82.73	79.9	115.02	136
C _{Ma}	86.88	-46.14	-13.53	48.1	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.31	94.35	-58.39	110.96	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

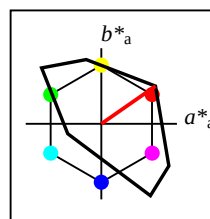
TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Workflow choices
for colour samples:
1. No colour change
2. Hue change
3. Chroma change



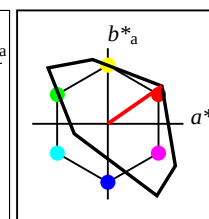
%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 118$
%Regularity
 $g^*_{H,rel} = 22$
 $g^*_{C,rel} = 40$

TLS18a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 118$
%Regularity
 $g^*_{H,rel} = 22$
 $g^*_{C,rel} = 40$

TLS18	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	52.76	71.63	49.88	87.29	35
Y _M	92.74	-20.02	84.97	87.3	103
L _M	84.0	-78.98	73.94	108.2	137
C _M	87.14	-44.41	-13.11	46.32	196
V _M	35.47	64.92	-95.06	115.12	304
M _M	59.01	89.33	-55.67	105.26	328
N _M	18.01	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (---) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS18: Output (o) colorimetric system; Six hue angles of the colour device: (34.9, 103.3, 136.9, 196.5, 304.3, 328.1); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 1.0 0.994 0.0
LCHMi = 92.7 93.1 103
LCHo = 92.5 87.3 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.027 1.0 0.0
LCHMi = 83.6 115.0 136
LCHo = 84.2 107.6 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 1.0 0.998
LCHMi = 86.9 48.1 196
LCHo = 87.1 46.4 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.545

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.075 0.0
LCHMi = 50.5 100.4 40
LCHo = 55.8 87.3 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.111

M Magenta red

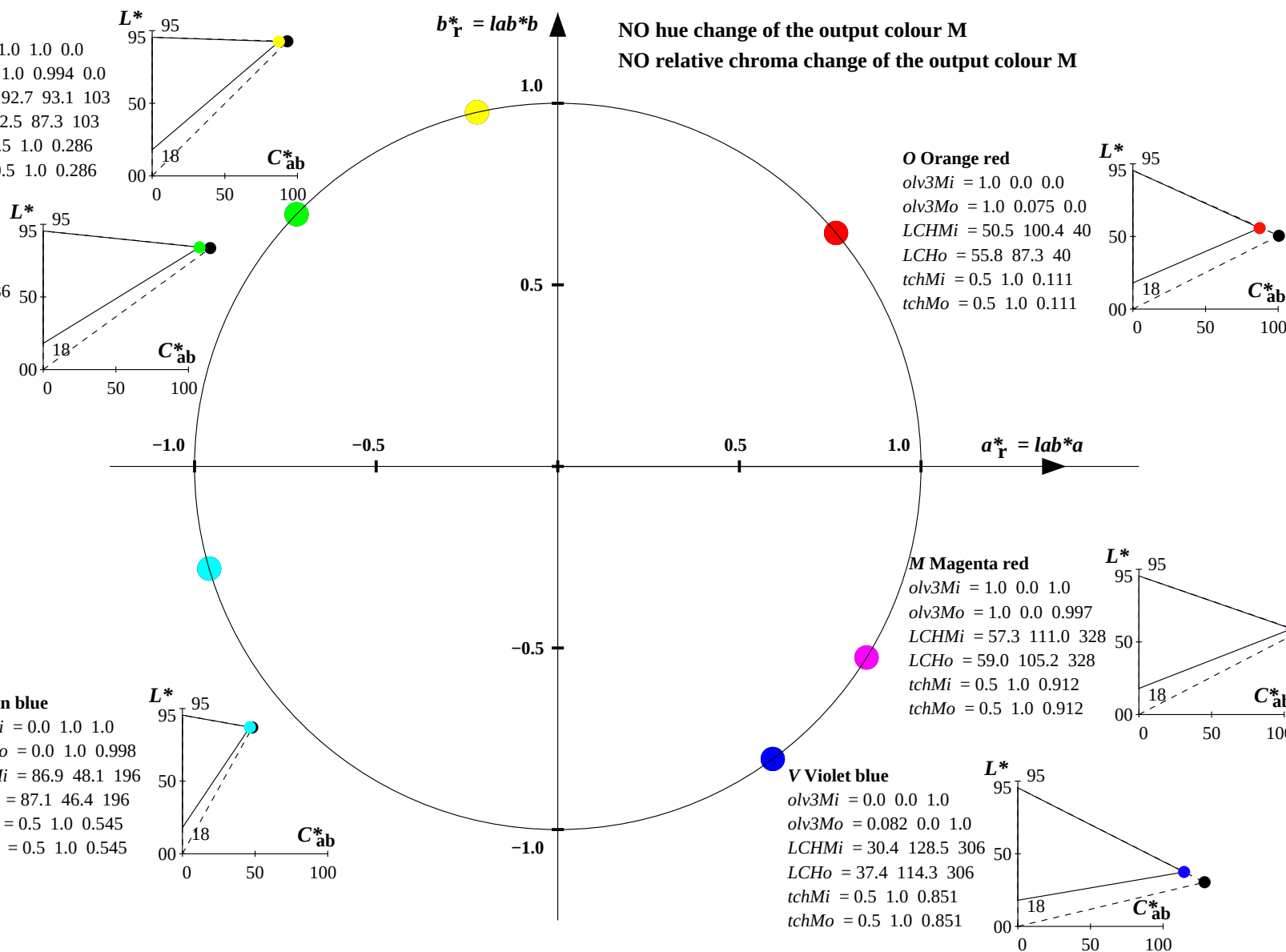
olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.997
LCHMi = 57.3 111.0 328
LCHo = 59.0 105.2 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.912

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.082 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 37.4 114.3 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.851

NO hue change of the output colour M

NO relative chroma change of the output colour M



YE680-7, Colour Management Workflow: Device Colour Input Data of the Colour Space TLS00 -> Device Colour Output Data of Output Space TLS18, page 14/32

BAM-test chart YE68; Colorimetric workflow TLS00->TLS18

D65: 6 basic colours; Device and sample data; page 14/32

input: olv* setrgbcolor

output: no change compared to input

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (---) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS18: Output (o) colorimetric system; Six hue angles of the colour device: (34.9, 103.3, 136.9, 196.5, 304.3, 328.1); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.715 1.0 0.0
LCHMi = 92.7 93.1 103
LCHo = 90.2 93.3 113
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.313

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.0 1.0 0.153
LCHMi = 83.6 115.0 136
LCHo = 84.5 98.7 146
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.406

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 0.908 1.0
LCHMi = 86.9 48.1 196
LCHo = 82.4 52.6 206
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.573

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.222 0.0
LCHMi = 50.5 100.4 40
LCHo = 61.6 87.3 50
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.139

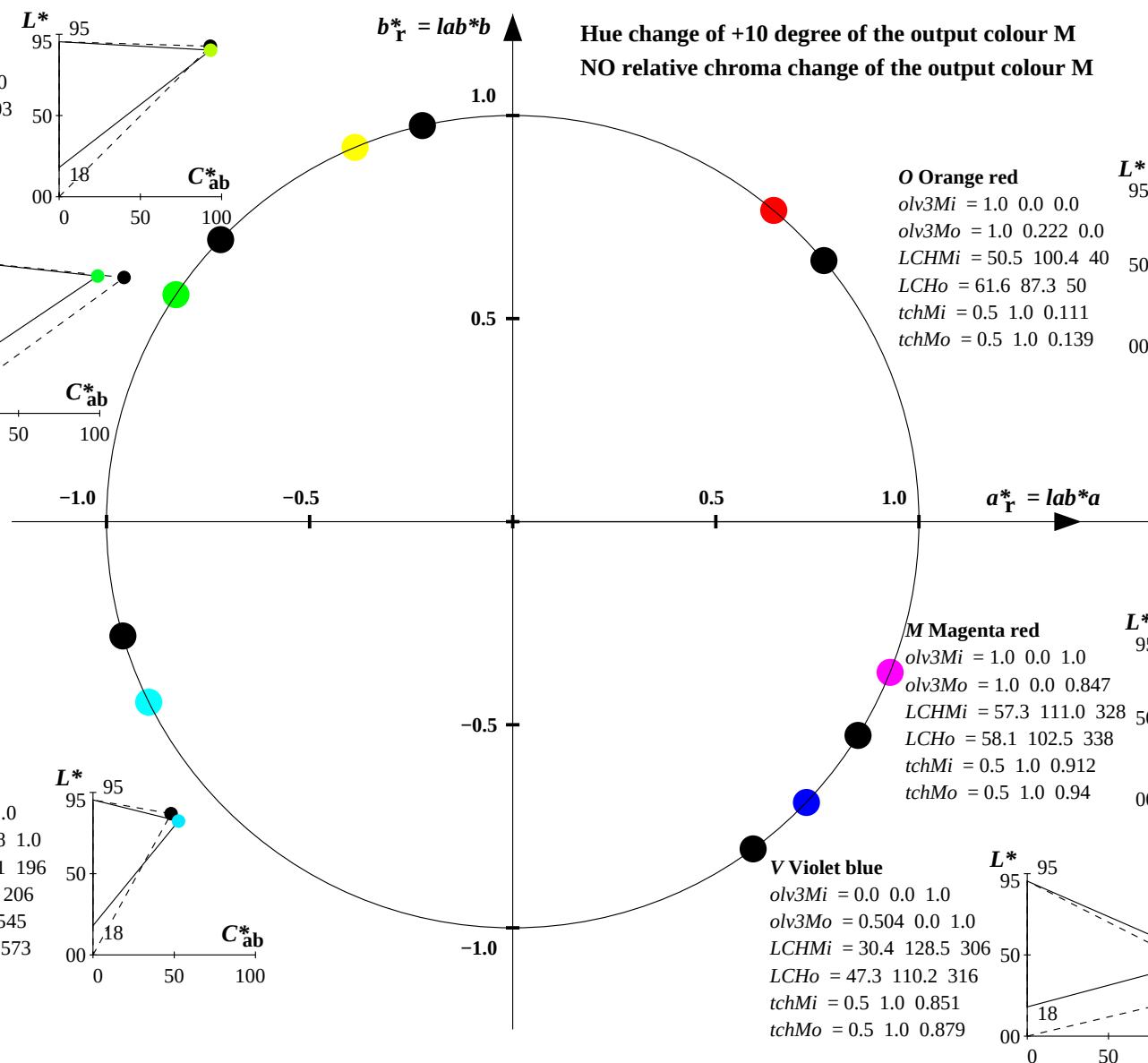
M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.847
LCHMi = 57.3 111.0 328
LCHo = 58.1 102.5 338
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.94

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.504 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 47.3 110.2 316
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.879

Hue change of +10 degree of the output colour M
NO relative chroma change of the output colour M



Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS18: Output (o) colorimetric system; Six hue angles of the colour device: (34.9, 103.3, 136.9, 196.5, 304.3, 328.1); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.75 0.747 0.25
LCHMi = 92.7 93.1 103
LCHo = 70.1 43.6 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 0.5 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.263 0.75 0.25
LCHMi = 83.6 115.0 136
LCHo = 66.0 53.8 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 0.5 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.25 0.75 0.749
LCHMi = 86.9 48.1 196
LCHo = 67.4 23.2 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 0.5 0.545

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 0.75 0.288 0.25
LCHMi = 50.5 100.4 40
LCHo = 51.7 43.6 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 0.5 0.111

M Magenta red

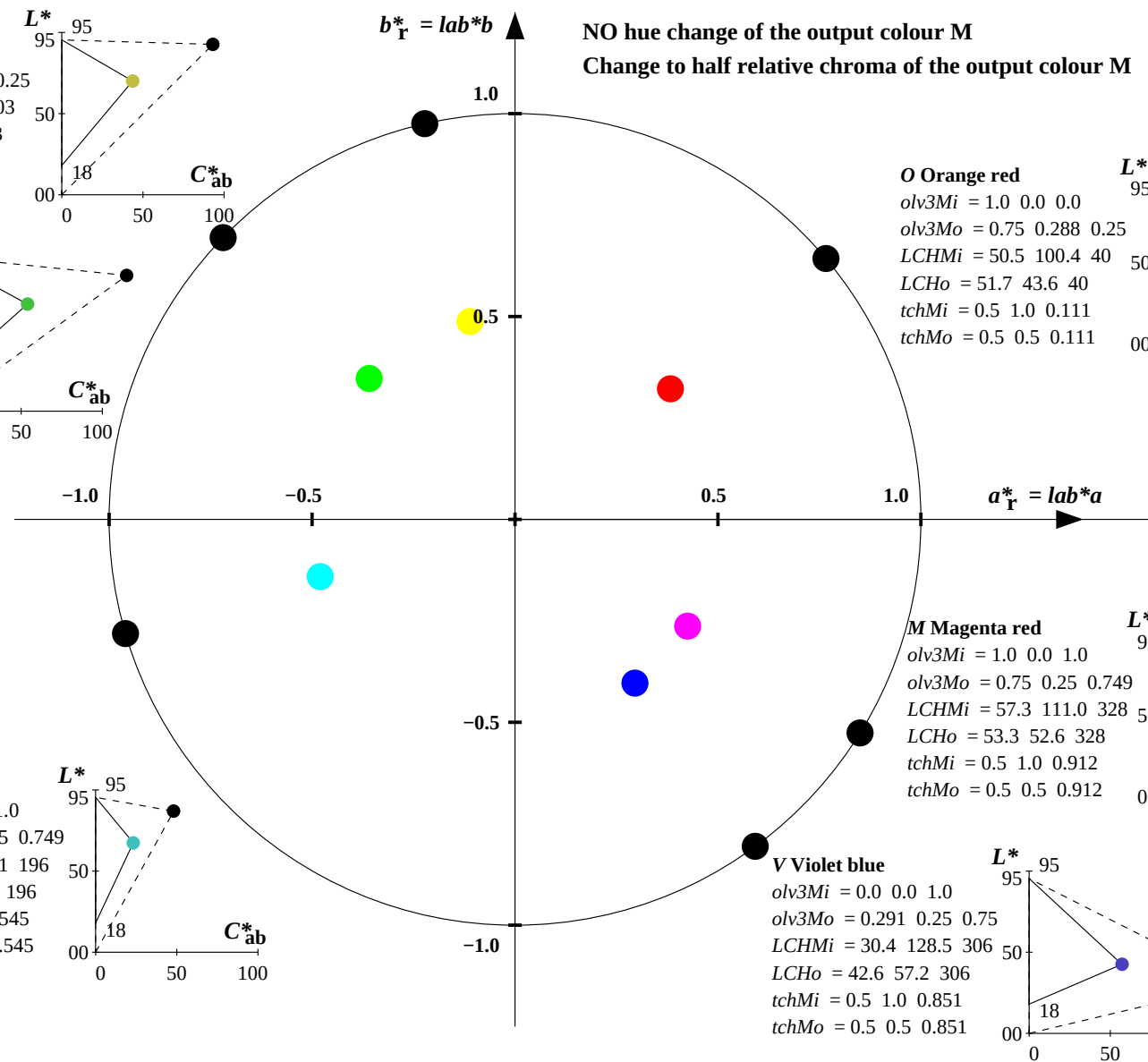
olv3Mi = 1.0 0.0 1.0
olv3Mo = 0.75 0.25 0.749
LCHMi = 57.3 111.0 328
LCHo = 53.3 52.6 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 0.5 0.912

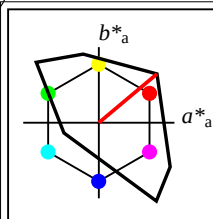
V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.291 0.25 0.75
LCHMi = 30.4 128.5 306
LCHo = 42.6 57.2 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 0.5 0.851

NO hue change of the output colour M

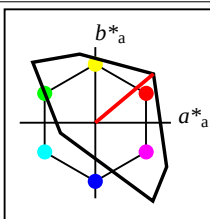
Change to half relative chroma of the output colour M





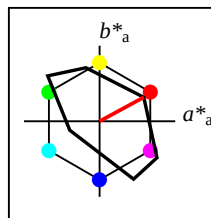
%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

TLS00	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	50.5	76.91	64.55	100.41	40
Y _M	92.66	-20.67	90.75	93.08	103
L _M	83.62	-82.73	79.9	115.02	136
C _M	86.88	-46.14	-13.53	48.1	196
V _M	30.39	76.06	-103.59	128.52	306
M _M	57.31	94.35	-58.39	110.96	328
N _M	0.01	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

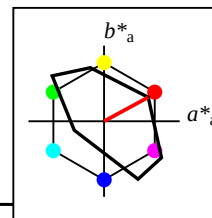
TLS00a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.91	64.55	100.41	40
Y _{Ma}	92.66	-20.67	90.75	93.08	103
L _{Ma}	83.62	-82.73	79.9	115.02	136
C _{Ma}	86.88	-46.14	-13.53	48.1	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.31	94.35	-58.39	110.96	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

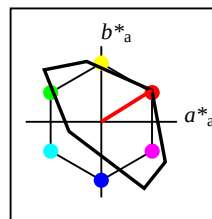
TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Workflow choices
for colour samples:
1. No colour change
2. Hue change
3. Chroma change



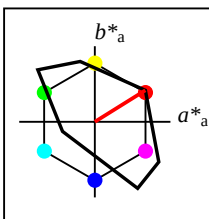
%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 98$
%Regularity
 $g^*_{H,rel} = 24$
 $g^*_{C,rel} = 43$

TLS28a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.88	66.84	41.69	78.78	32
Y _{Ma}	92.82	-19.38	79.81	82.13	104
L _{Ma}	84.37	-75.38	68.76	102.04	138
C _{Ma}	87.4	-42.71	-12.69	44.57	197
V _{Ma}	39.7	56.66	-88.01	104.68	303
M _{Ma}	60.64	84.61	-53.07	99.88	328
N _{Ma}	26.85	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 98$
%Regularity
 $g^*_{H,rel} = 24$
 $g^*_{C,rel} = 43$

TLS28	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	54.88	66.84	41.69	78.78	32
Y _M	92.82	-19.38	79.81	82.13	104
L _M	84.37	-75.38	68.76	102.04	138
C _M	87.4	-42.71	-12.69	44.57	197
V _M	39.7	56.66	-88.01	104.68	303
M _M	60.64	84.61	-53.07	99.88	328
N _M	26.85	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

YE680-7, Colour Management Workflow: Device Colour Input Data of the Colour Space TLS00 -> Device Colour Output Data of Output Space TLS28, page 17/32

BAM-test chart YE68; Colorimetric workflow TLS00->TLS28
D65: 6 basic colours; Device and sample data; page 17/32

input: $olv^* setrgbcolor$
output: no change compared to input

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)
TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)
TLS28: Output (o) colorimetric system; Six hue angles of the colour device: (32.0, 103.7, 137.6, 196.6, 302.8, 327.9); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 1.0 0.989 0.0
LCHMi = 92.7 93.1 103
LCHo = 92.4 82.1 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.048 1.0 0.0
LCHMi = 83.6 115.0 136
LCHo = 84.8 101.1 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 1.0 0.997
LCHMi = 86.9 48.1 196
LCHo = 87.4 44.8 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.545

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.112 0.0
LCHMi = 50.5 100.4 40
LCHo = 59.1 79.2 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.111

M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.995
LCHMi = 57.3 111.0 328
LCHo = 60.6 99.8 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.912

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.14 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 42.6 104.0 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.851

NO hue change of the output colour M
NO relative chroma change of the output colour M

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS28: Output (o) colorimetric system; Six hue angles of the colour device: (32.0, 103.7, 137.6, 196.6, 302.8, 327.9); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.73 1.0 0.0
LCHMi = 92.7 93.1 103
LCHo = 90.5 87.5 113
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.313

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.0 1.0 0.142
LCHMi = 83.6 115.0 136
LCHo = 84.8 93.9 146
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.406

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 0.908 1.0
LCHMi = 86.9 48.1 196
LCHo = 83.0 50.1 206
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.573

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.252 0.0
LCHMi = 50.5 100.4 40
LCHo = 64.4 79.6 50
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.139

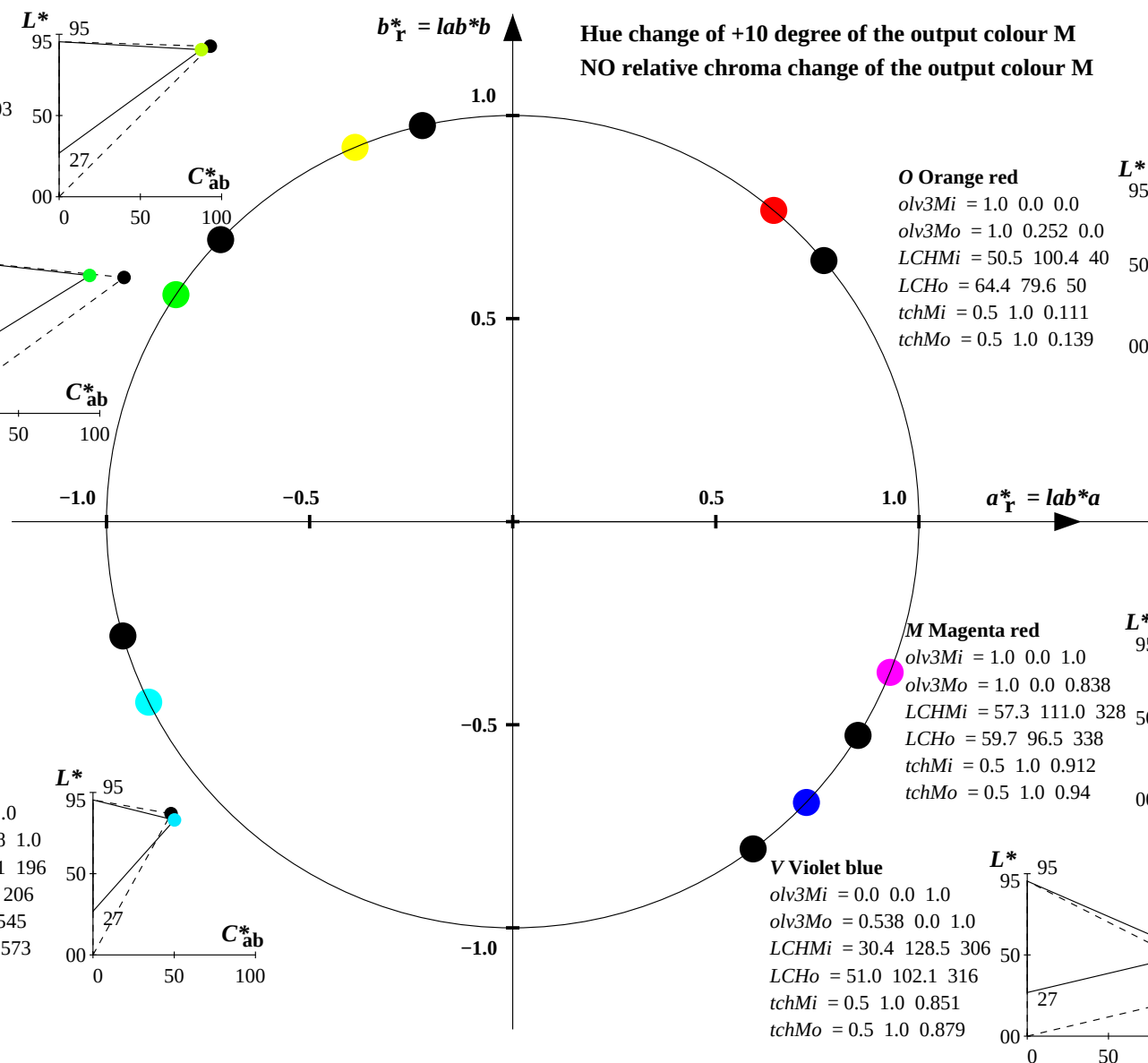
M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.838
LCHMi = 57.3 111.0 328
LCHo = 59.7 96.5 338
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.94

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.538 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 51.0 102.1 316
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.879

Hue change of +10 degree of the output colour M
NO relative chroma change of the output colour M



YE680-7, Colour Management Workflow: Device Colour Input Data of the Colour Space TLS00 -> Device Colour Output Data of Output Space TLS28, page 19/32

BAM-test chart YE68; Colorimetric workflow TLS00->TLS28

D65: 6 basic colours; Device and sample data; page 19/32

input: olv* setrgbcolor

output: no change compared to input

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS28: Output (o) colorimetric system; Six hue angles of the colour device: (32.0, 103.7, 137.6, 196.6, 302.8, 327.9); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.75 0.744 0.25
LCHMi = 92.7 93.1 103
LCHo = 70.0 41.0 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 0.5 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.274 0.75 0.25
LCHMi = 83.6 115.0 136
LCHo = 66.2 50.5 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 0.5 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.25 0.75 0.748
LCHMi = 86.9 48.1 196
LCHo = 67.5 22.4 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 0.5 0.545

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 0.75 0.306 0.25
LCHMi = 50.5 100.4 40
LCHo = 53.4 39.6 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 0.5 0.111

M Magenta red

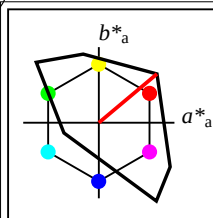
olv3Mi = 1.0 0.0 1.0
olv3Mo = 0.75 0.25 0.747
LCHMi = 57.3 111.0 328
LCHo = 54.2 49.9 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 0.5 0.912

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.32 0.25 0.75
LCHMi = 30.4 128.5 306
LCHo = 45.2 52.0 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 0.5 0.851

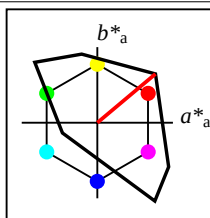
NO hue change of the output colour M

Change to half relative chroma of the output colour M



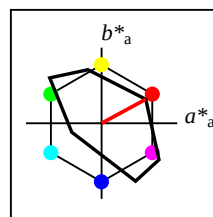
%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

TLS00	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	50.5	76.91	64.55	100.41	40
Y _M	92.66	-20.67	90.75	93.08	103
L _M	83.62	-82.73	79.9	115.02	136
C _M	86.88	-46.14	-13.53	48.1	196
V _M	30.39	76.06	-103.59	128.52	306
M _M	57.31	94.35	-58.39	110.96	328
N _M	0.01	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

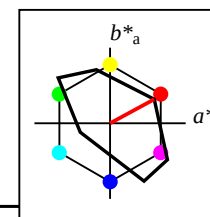
TLS00a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.91	64.55	100.41	40
Y _{Ma}	92.66	-20.67	90.75	93.08	103
L _{Ma}	83.62	-82.73	79.9	115.02	136
C _{Ma}	86.88	-46.14	-13.53	48.1	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.31	94.35	-58.39	110.96	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

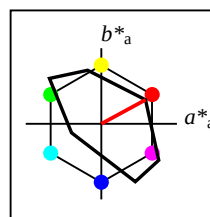
TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Workflow choices
for colour samples:
1. No colour change
2. Hue change
3. Chroma change



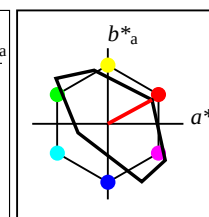
%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

TLS38	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	58.77	58.45	31.73	66.51	28
Y _M	92.98	-18.1	70.81	73.09	104
L _M	85.11	-68.57	60.02	91.14	139
C _M	87.92	-39.41	-11.86	41.17	197
V _M	46.64	44.93	-76.55	88.77	300
M _M	63.71	75.92	-48.21	89.94	328
N _M	37.99	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS38: Output (o) colorimetric system; Six hue angles of the colour device: (28.5, 104.3, 138.8, 196.8, 300.4, 327.6); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 1.0 0.98 0.0
LCHMi = 92.7 93.1 103
LCHo = 92.3 73.0 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.082 1.0 0.0
LCHMi = 83.6 115.0 136
LCHo = 85.8 89.7 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 1.0 0.993
LCHMi = 86.9 48.1 196
LCHo = 87.9 41.5 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.545

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.152 0.0
LCHMi = 50.5 100.4 40
LCHo = 64.0 67.5 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.111

M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.989
LCHMi = 57.3 111.0 328
LCHo = 63.7 89.7 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.912

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.216 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 50.3 89.0 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.851

NO hue change of the output colour M

NO relative chroma change of the output colour M

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (---) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS38: Output (o) colorimetric system; Six hue angles of the colour device: (28.5, 104.3, 138.8, 196.8, 300.4, 327.6); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.753 1.0 0.0
LCHMi = 92.7 93.1 103
LCHo = 91.0 77.5 113
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.313

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.0 1.0 0.124
LCHMi = 83.6 115.0 136
LCHo = 85.5 84.9 146
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.406

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 0.907 1.0
LCHMi = 86.9 48.1 196
LCHo = 84.1 45.6 206
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.573

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.284 0.0
LCHMi = 50.5 100.4 40
LCHo = 68.5 68.4 50
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.139

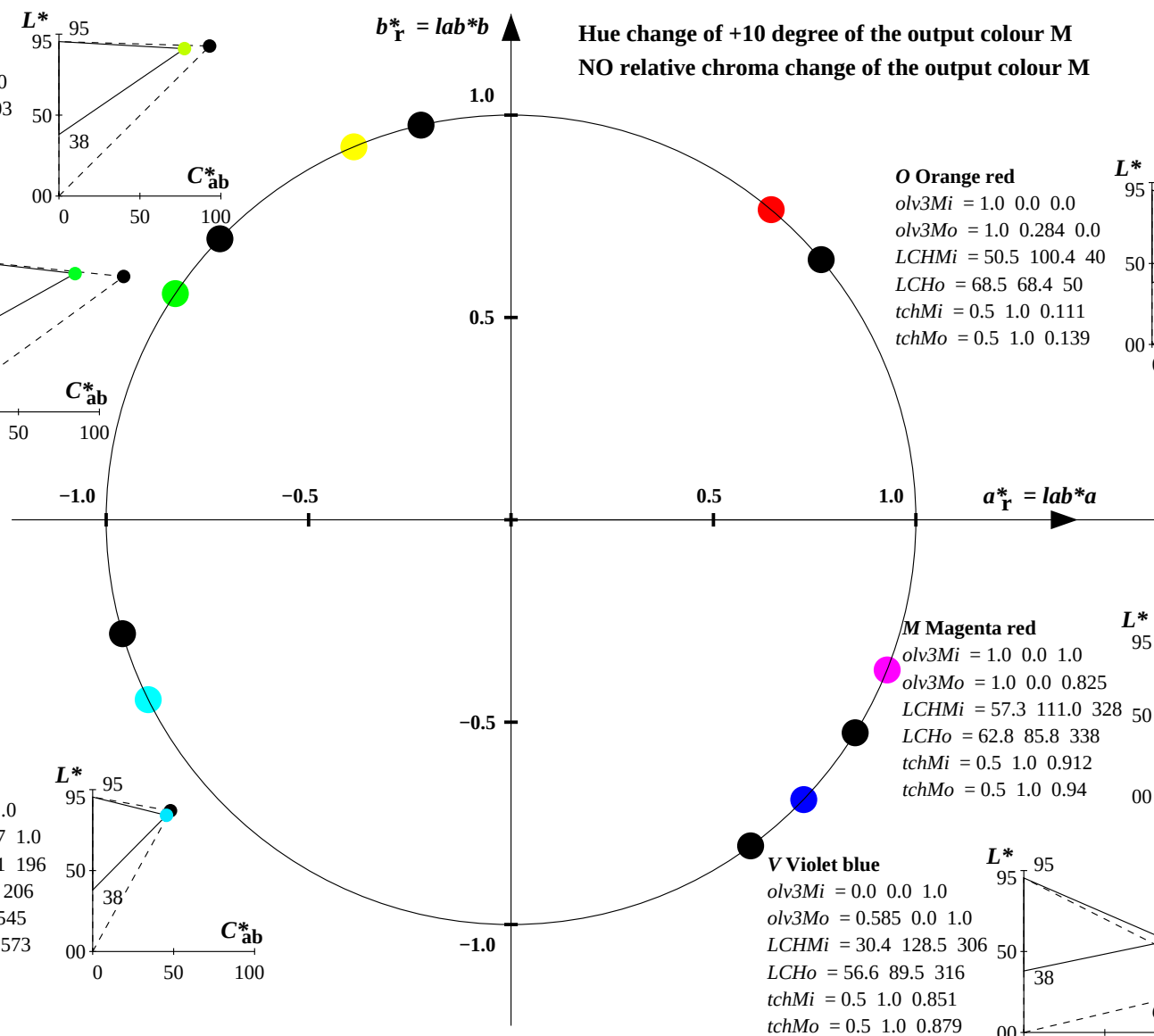
M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.825
LCHMi = 57.3 111.0 328
LCHo = 62.8 85.8 338
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.94

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.585 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 56.6 89.5 316
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.879

Hue change of +10 degree of the output colour M
NO relative chroma change of the output colour M



Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS38: Output (o) colorimetric system; Six hue angles of the colour device: (28.5, 104.3, 138.8, 196.8, 300.4, 327.6); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.75 0.74 0.25
LCHMi = 92.7 93.1 103
LCHo = 70.0 36.5 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 0.5 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.291 0.75 0.25
LCHMi = 83.6 115.0 136
LCHo = 66.7 44.8 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 0.5 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.25 0.75 0.746
LCHMi = 86.9 48.1 196
LCHo = 67.8 20.8 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 0.5 0.545

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 0.75 0.326 0.25
LCHMi = 50.5 100.4 40
LCHo = 55.8 33.8 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 0.5 0.111

M Magenta red

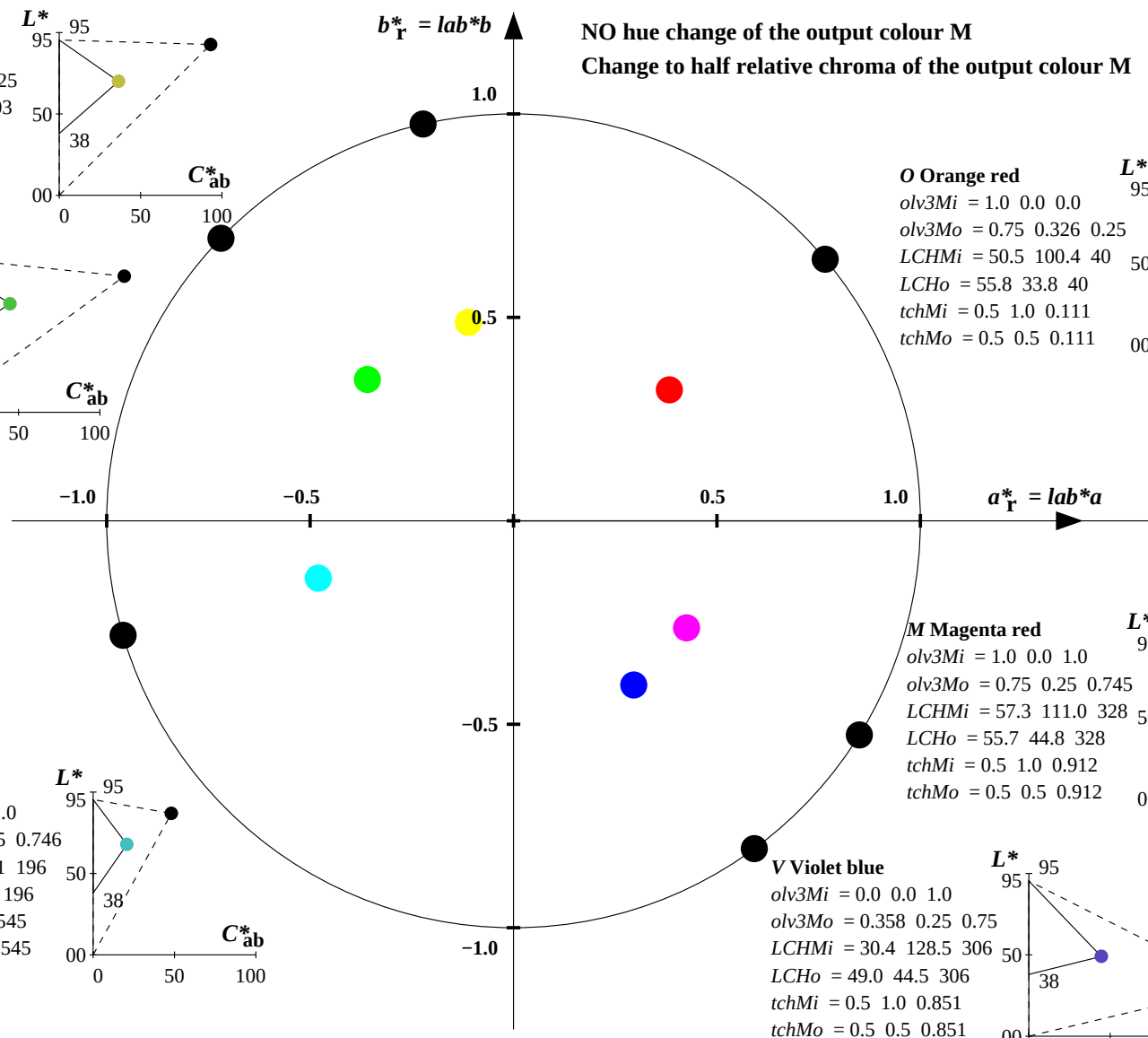
olv3Mi = 1.0 0.0 1.0
olv3Mo = 0.75 0.25 0.745
LCHMi = 57.3 111.0 328
LCHo = 55.7 44.8 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 0.5 0.912

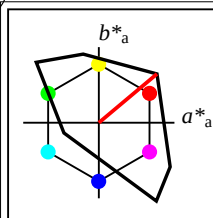
V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.358 0.25 0.75
LCHMi = 30.4 128.5 306
LCHo = 49.0 44.5 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 0.5 0.851

NO hue change of the output colour M

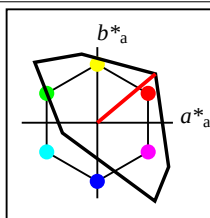
Change to half relative chroma of the output colour M





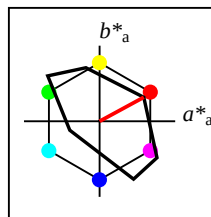
%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

TLS00	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	50.5	76.91	64.55	100.41	40
Y _M	92.66	-20.67	90.75	93.08	103
L _M	83.62	-82.73	79.9	115.02	136
C _M	86.88	-46.14	-13.53	48.1	196
V _M	30.39	76.06	-103.59	128.52	306
M _M	57.31	94.35	-58.39	110.96	328
N _M	0.01	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

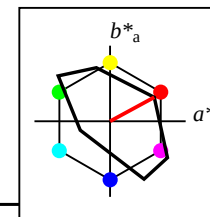
TLS00a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.91	64.55	100.41	40
Y _{Ma}	92.66	-20.67	90.75	93.08	103
L _{Ma}	83.62	-82.73	79.9	115.02	136
C _{Ma}	86.88	-46.14	-13.53	48.1	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.31	94.35	-58.39	110.96	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

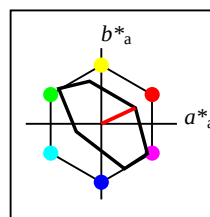
TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Workflow choices
for colour samples:
1. No colour change
2. Hue change
3. Chroma change



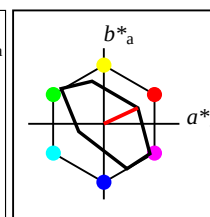
%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 43$
%Regularity
 $g^*_{H,rel} = 30$
 $g^*_{C,rel} = 48$

TLS50a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.53	45.06	20.98	49.7	25
Y _{Ma}	93.3	-15.6	56.27	58.4	106
L _{Ma}	86.55	-56.3	46.52	73.04	140
C _{Ma}	88.94	-33.18	-10.23	34.73	197
V _{Ma}	57.17	30.66	-59.39	66.85	297
M _{Ma}	69.22	60.95	-39.56	72.67	327
N _{Ma}	52.02	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



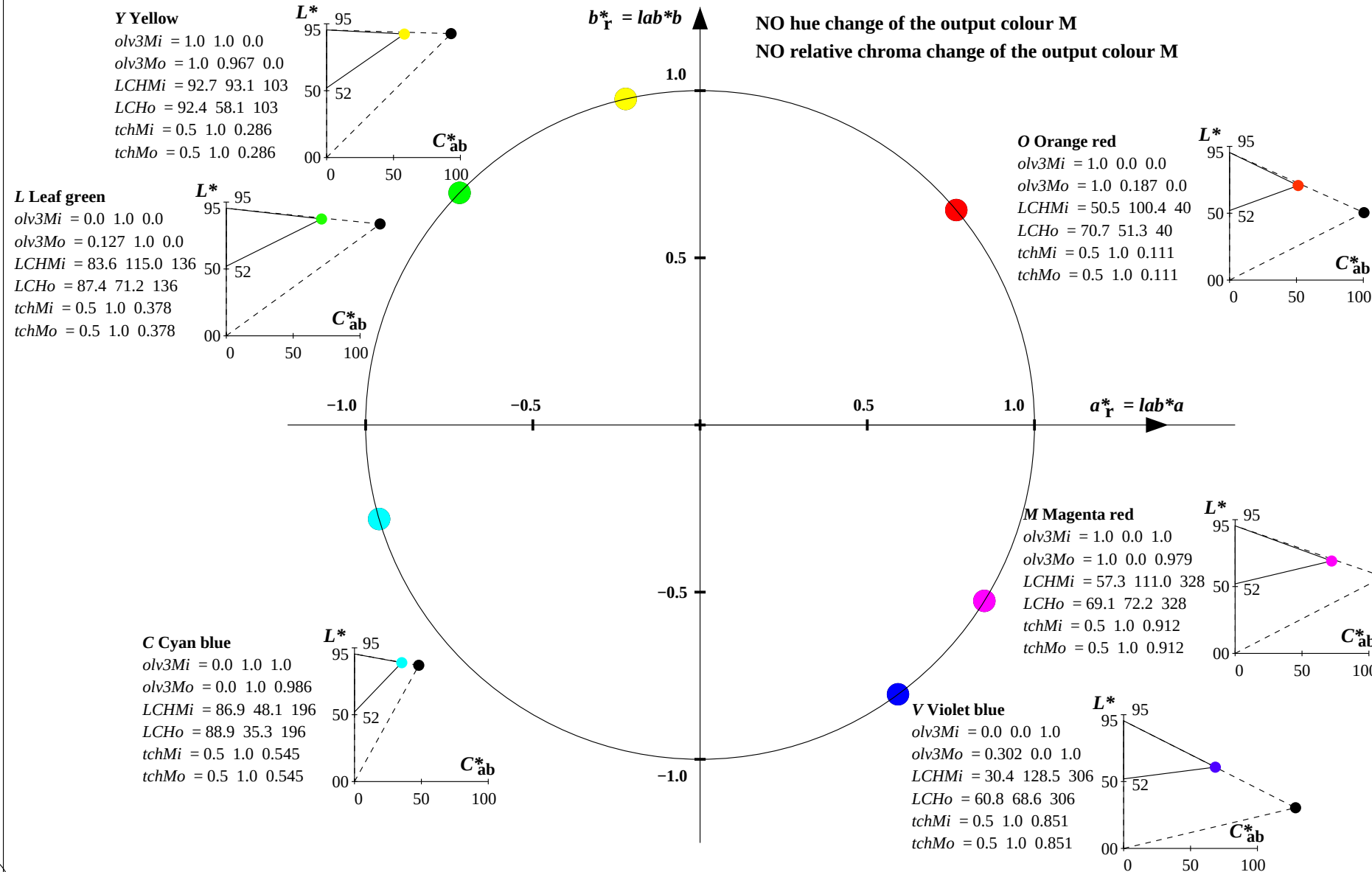
%Gamut
 $u^*_{rel} = 43$
%Regularity
 $g^*_{H,rel} = 30$
 $g^*_{C,rel} = 48$

TLS50	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	65.53	45.06	20.98	49.7	25
Y _M	93.3	-15.6	56.27	58.4	106
L _M	86.55	-56.3	46.52	73.04	140
C _M	88.94	-33.18	-10.23	34.73	197
V _M	57.17	30.66	-59.39	66.85	297
M _M	69.22	60.95	-39.56	72.67	327
N _M	52.02	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*a$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS50: Output (o) colorimetric system; Six hue angles of the colour device: (25.0, 105.5, 140.4, 197.1, 297.3, 327.0); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)



YE680-7, Colour Management Workflow: Device Colour Input Data of the Colour Space TLS00 -> Device Colour Output Data of Output Space TLS50, page 26/32

BAM-test chart YE68; Colorimetric workflow TLS00->TLS50

D65: 6 basic colours; Device and sample data; page 26/32

```
input: olv* setrgbcolor
```

output: no change compared to input

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS50: Output (o) colorimetric system; Six hue angles of the colour device: (25.0, 105.5, 140.4, 197.1, 297.3, 327.0); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.79 1.0 0.0
LCHMi = 92.7 93.1 103
LCHo = 91.9 61.5 113
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.313

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.0 1.0 0.098
LCHMi = 83.6 115.0 136
LCHo = 86.8 69.3 146
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.406

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 0.908 1.0
LCHMi = 86.9 48.1 196
LCHo = 86.0 37.7 206
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.573

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.311 0.0
LCHMi = 50.5 100.4 40
LCHo = 74.2 52.4 50
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.139

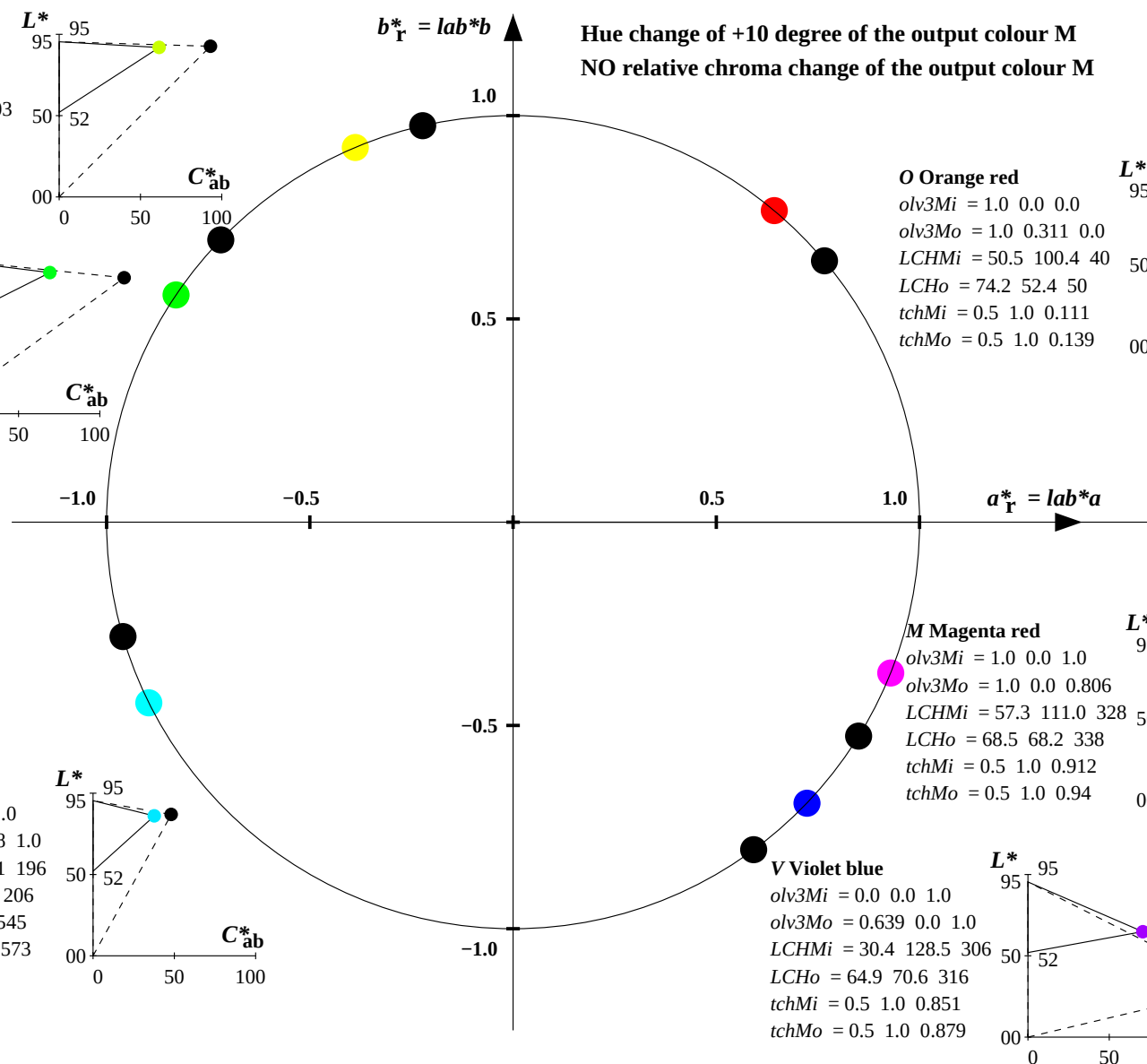
M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.806
LCHMi = 57.3 111.0 328
LCHo = 68.5 68.2 338
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.94

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.639 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 64.9 70.6 316
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.879

Hue change of +10 degree of the output colour M
NO relative chroma change of the output colour M



YE680-7, Colour Management Workflow: Device Colour Input Data of the Colour Space TLS00 -> Device Colour Output Data of Output Space TLS50, page 27/32

BAM-test chart YE68; Colorimetric workflow TLS00->TLS50

D65: 6 basic colours; Device and sample data; page 27/32

input: olv* setrgbcolor

output: no change compared to input

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS50: Output (o) colorimetric system; Six hue angles of the colour device: (25.0, 105.5, 140.4, 197.1, 297.3, 327.0); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.75 0.733 0.25
LCHMi = 92.7 93.1 103
LCHo = 70.0 29.1 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 0.5 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.314 0.75 0.25
LCHMi = 83.6 115.0 136
LCHo = 67.6 35.6 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 0.5 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.25 0.75 0.743
LCHMi = 86.9 48.1 196
LCHo = 68.3 17.6 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 0.5 0.545

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 0.75 0.343 0.25
LCHMi = 50.5 100.4 40
LCHo = 59.2 25.7 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 0.5 0.111

M Magenta red

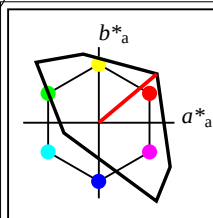
olv3Mi = 1.0 0.0 1.0
olv3Mo = 0.75 0.25 0.739
LCHMi = 57.3 111.0 328
LCHo = 58.4 36.1 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 0.5 0.912

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.401 0.25 0.75
LCHMi = 30.4 128.5 306
LCHo = 54.3 34.3 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 0.5 0.851

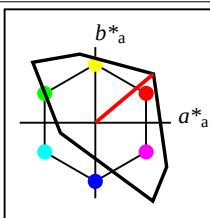
NO hue change of the output colour M

Change to half relative chroma of the output colour M



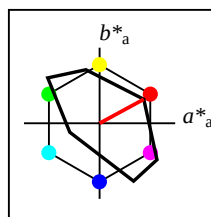
%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

TLS00	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	50.5	76.91	64.55	100.41	40
Y _M	92.66	-20.67	90.75	93.08	103
L _M	83.62	-82.73	79.9	115.02	136
C _M	86.88	-46.14	-13.53	48.1	196
V _M	30.39	76.06	-103.59	128.52	306
M _M	57.31	94.35	-58.39	110.96	328
N _M	0.01	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

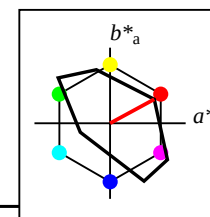
TLS00a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.91	64.55	100.41	40
Y _{Ma}	92.66	-20.67	90.75	93.08	103
L _{Ma}	83.62	-82.73	79.9	115.02	136
C _{Ma}	86.88	-46.14	-13.53	48.1	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.31	94.35	-58.39	110.96	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

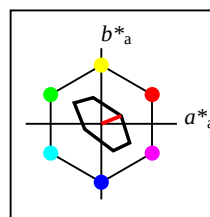
TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

Workflow choices
for colour samples:
1. No colour change
2. Hue change
3. Chroma change



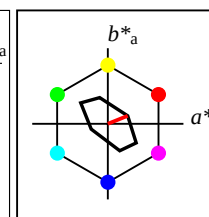
%Gamut
 $u^*_{rel} = 72$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

TLS38a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	58.77	58.45	31.73	66.51	28
Y _{Ma}	92.98	-18.1	70.81	73.09	104
L _{Ma}	85.11	-68.57	60.02	91.14	139
C _{Ma}	87.92	-39.41	-11.86	41.17	197
V _{Ma}	46.64	44.93	-76.55	88.77	300
M _{Ma}	63.71	75.92	-48.21	89.94	328
N _{Ma}	37.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 16$
%Regularity
 $g^*_{H,rel} = 34$
 $g^*_{C,rel} = 51$

TLS70a; adapted CIELAB data	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	76.43	26.27	10.57	28.32	22
Y _{Ma}	93.93	-10.76	34.63	36.27	107
L _{Ma}	89.32	-35.8	27.64	45.24	142
C _{Ma}	90.93	-21.95	-7.07	23.07	198
V _{Ma}	72.1	15.76	-35.63	38.97	294
M _{Ma}	78.5	37.52	-25.23	45.22	326
N _{Ma}	69.7	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Gamut
 $u^*_{rel} = 16$
%Regularity
 $g^*_{H,rel} = 34$
 $g^*_{C,rel} = 51$

TLS70	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _M	76.43	26.27	10.57	28.32	22
Y _M	93.93	-10.76	34.63	36.27	107
L _M	89.32	-35.8	27.64	45.24	142
C _M	90.93	-21.95	-7.07	23.07	198
V _M	72.1	15.76	-35.63	38.97	294
M _M	78.5	37.52	-25.23	45.22	326
N _M	69.7	0.0	0.0	0.0	0
W _M	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

BAM-test chart YE68; Colorimetric workflow TLS00->TLS70

D65: 6 basic colours; Device and sample data; page 29/32

input: $olv^* setrgbcolor$

output: no change compared to input

Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (--) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS70: Output (o) colorimetric system; Six hue angles of the colour device: (21.9, 107.3, 142.3, 197.9, 293.9, 326.1); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 1.0 0.948 0.0
LCHMi = 92.7 93.1 103
LCHo = 93.0 35.9 103
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.286

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.181 1.0 0.0
LCHMi = 83.6 115.0 136
LCHo = 90.2 43.6 136
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.378

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 1.0 0.973
LCHMi = 86.9 48.1 196
LCHo = 90.9 23.7 196
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.545

O Orange red

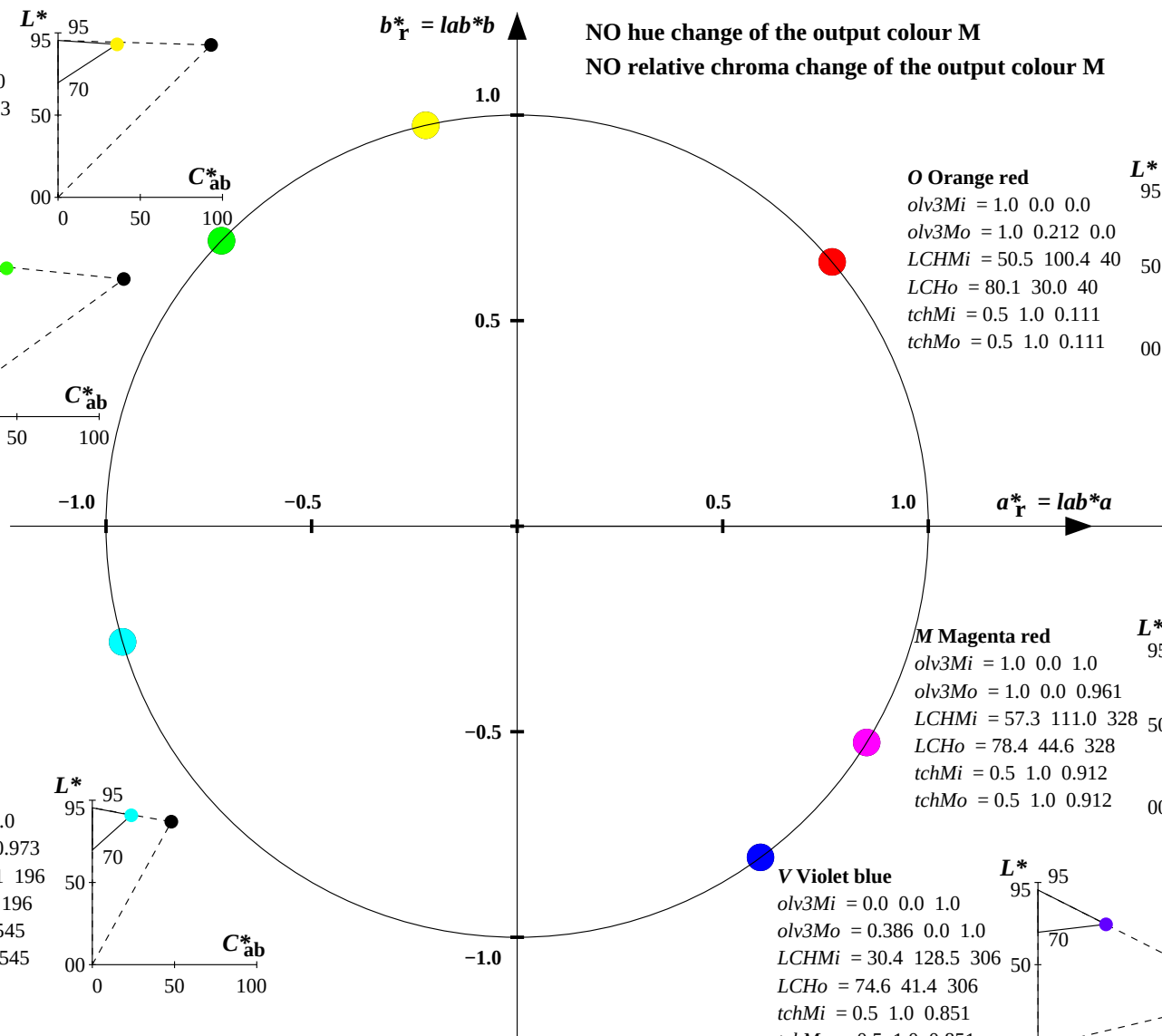
olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.212 0.0
LCHMi = 50.5 100.4 40
LCHo = 80.1 30.0 40
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.111

M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.961
LCHMi = 57.3 111.0 328
LCHo = 78.4 44.6 328
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.912

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.386 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 74.6 41.4 306
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.851



Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (---) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS70: Output (o) colorimetric system; Six hue angles of the colour device: (21.9, 107.3, 142.3, 197.9, 293.9, 326.1); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

Y Yellow

olv3Mi = 1.0 1.0 0.0
olv3Mo = 0.841 1.0 0.0
LCHMi = 92.7 93.1 103
LCHo = 93.2 37.7 113
tchMi = 0.5 1.0 0.286
tchMo = 0.5 1.0 0.313

L Leaf green

olv3Mi = 0.0 1.0 0.0
olv3Mo = 0.0 1.0 0.066
LCHMi = 83.6 115.0 136
LCHo = 89.4 43.8 146
tchMi = 0.5 1.0 0.378
tchMo = 0.5 1.0 0.406

C Cyan blue

olv3Mi = 0.0 1.0 1.0
olv3Mo = 0.0 0.912 1.0
LCHMi = 86.9 48.1 196
LCHo = 89.3 24.5 206
tchMi = 0.5 1.0 0.545
tchMo = 0.5 1.0 0.573

O Orange red

olv3Mi = 1.0 0.0 0.0
olv3Mo = 1.0 0.329 0.0
LCHMi = 50.5 100.4 40
LCHo = 82.2 30.9 50
tchMi = 0.5 1.0 0.111
tchMo = 0.5 1.0 0.139

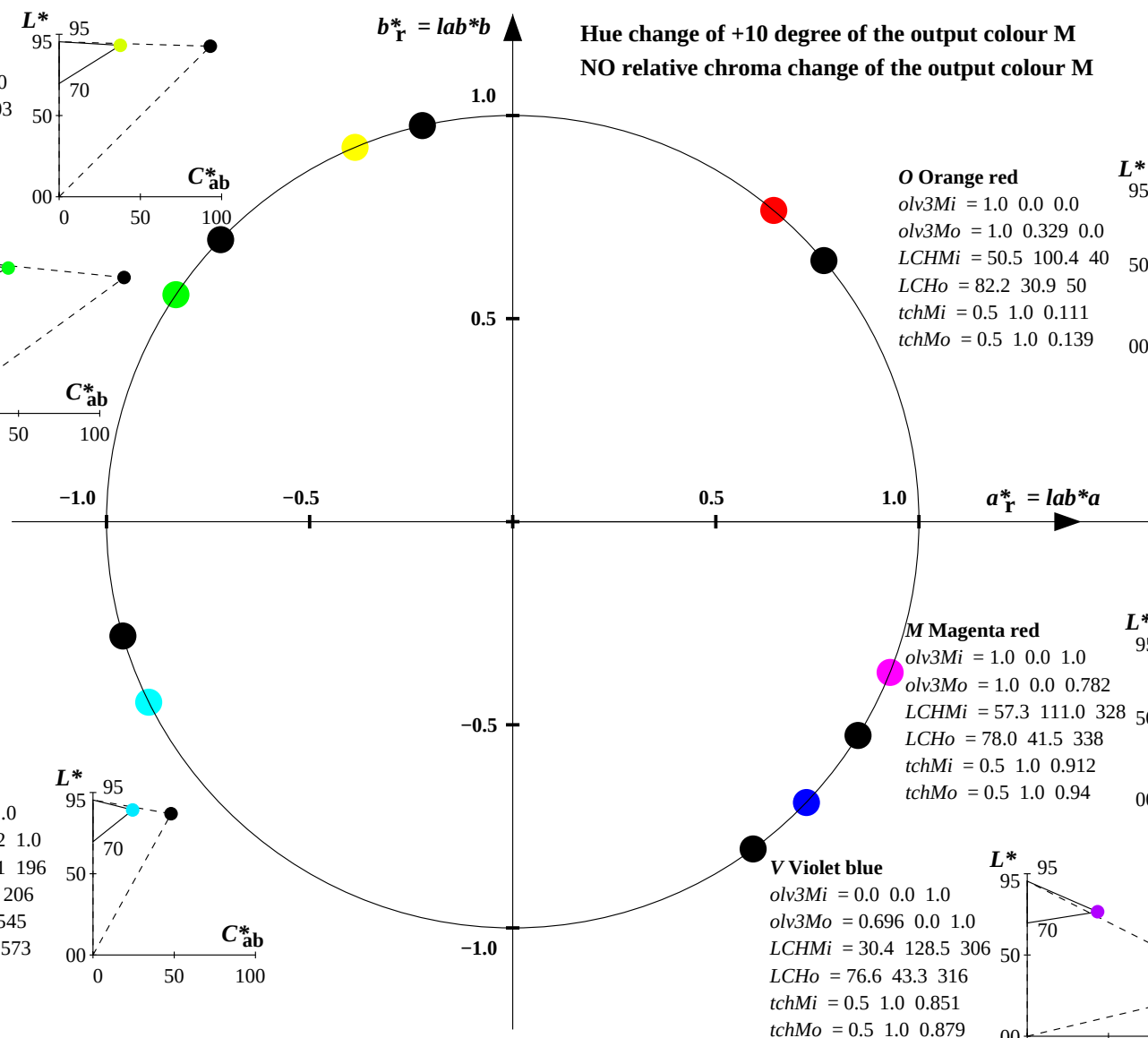
M Magenta red

olv3Mi = 1.0 0.0 1.0
olv3Mo = 1.0 0.0 0.782
LCHMi = 57.3 111.0 328
LCHo = 78.0 41.5 338
tchMi = 0.5 1.0 0.912
tchMo = 0.5 1.0 0.94

V Violet blue

olv3Mi = 0.0 0.0 1.0
olv3Mo = 0.696 0.0 1.0
LCHMi = 30.4 128.5 306
LCHo = 76.6 43.3 316
tchMi = 0.5 1.0 0.851
tchMo = 0.5 1.0 0.879

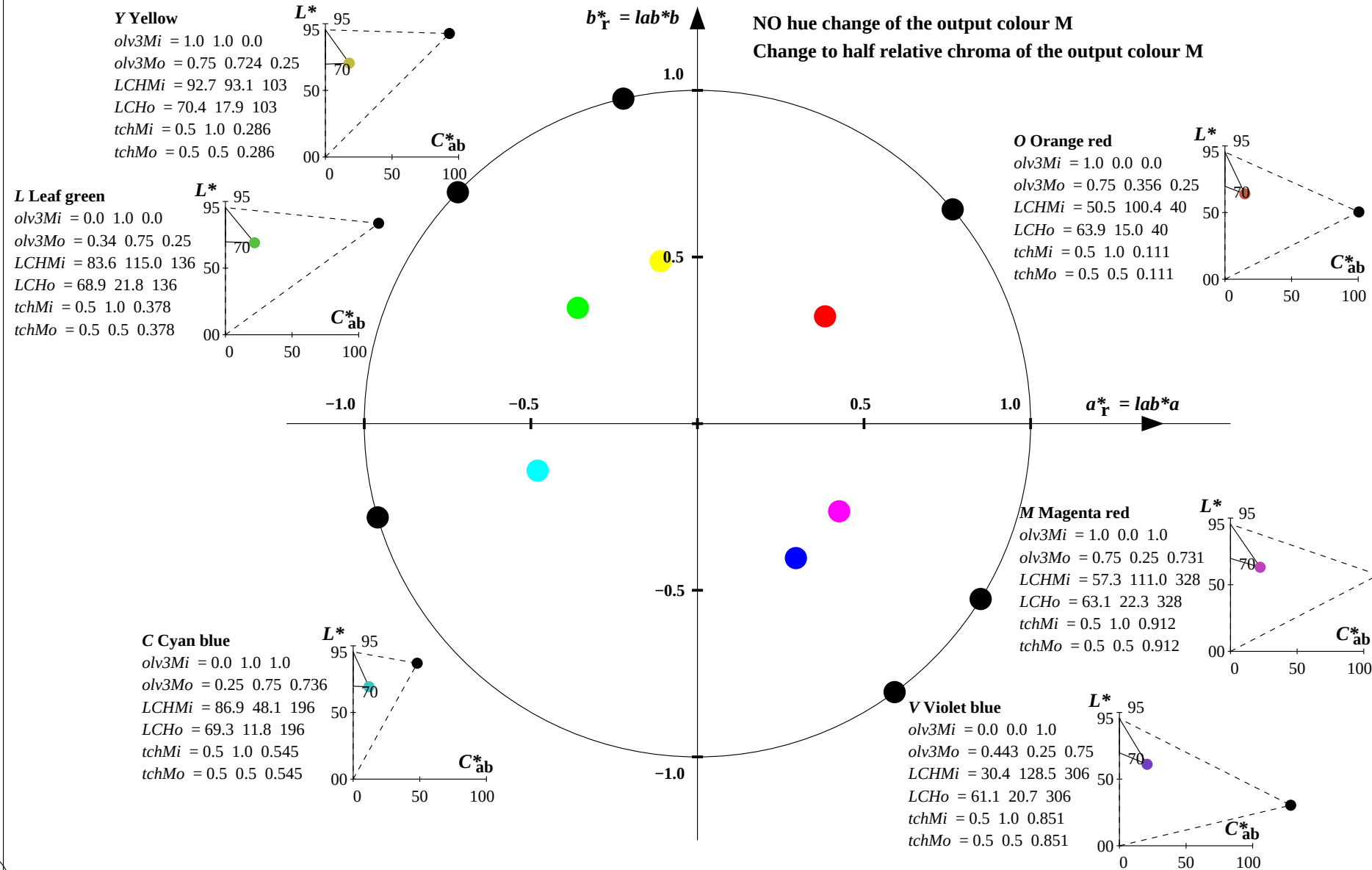
Hue change of +10 degree of the output colour M
NO relative chroma change of the output colour M



Relative CIELAB chroma diagram: ($a_r^* = lab^*a$, $b_r^* = lab^*b$) and absolute CIELAB hue triangle diagram: (L^* , C_{ab}^*) for input (---) and output (---)

TLS00: Input (i) colorimetric system; Six hue angles of the colour device: (40.0, 102.8, 136.0, 196.4, 306.3, 328.2); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)

TLS70: Output (o) colorimetric system; Six hue angles of the colour device: (21.9, 107.3, 142.3, 197.9, 293.9, 326.1); Four hue angles of the elementary colours: (25.5, 92.3, 162.2, 271.7)



YE680-7, Colour Management Workflow: Device Colour Input Data of the Colour Space TLS00 -> Device Colour Output Data of Output Space TLS70, page 32/32

BAM-test chart YE68; Colorimetric workflow TLS00->TLS70
D65: 6 basic colours; Device and sample data; page 32/32

input: olv* setrgbcolor
output: no change compared to input