

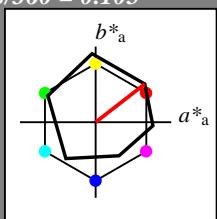
**Input: Colorimetric Offset Reflective System ORS18**

for hue $h^* = lab^*h = 38/360 = 0.105$
 lab^*tch and lab^*nch

D50: hue O

LCH*Ma: 48 82 38

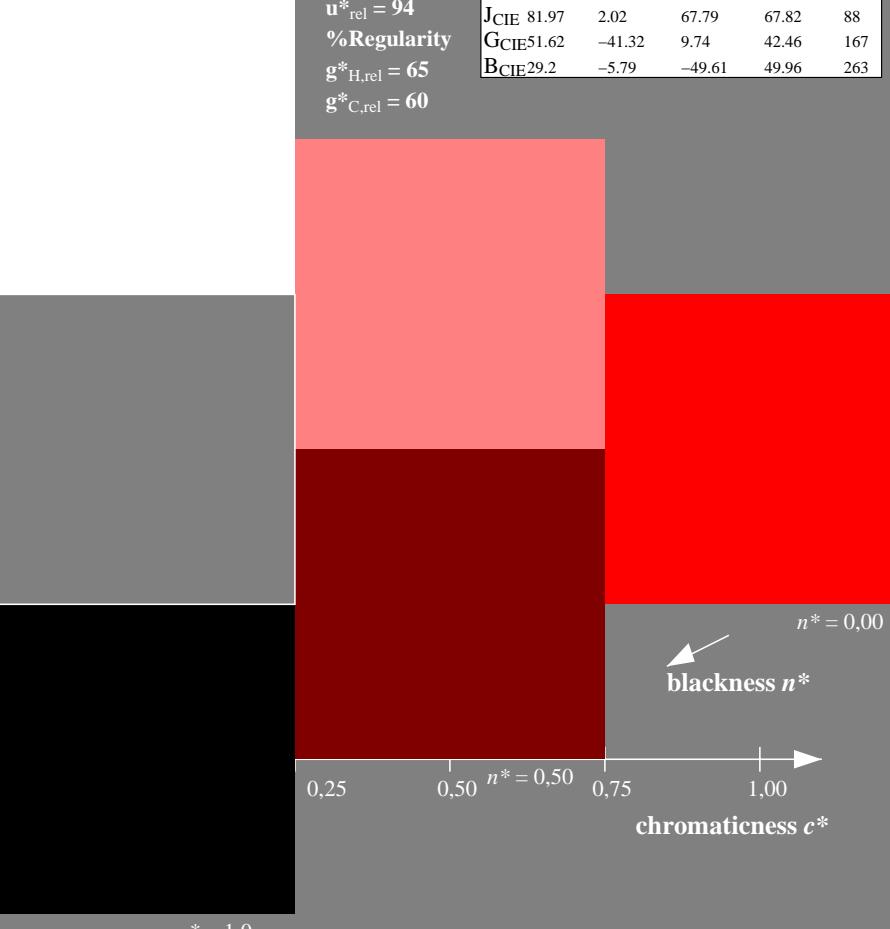
olv*Ma: 1.0 0.0 0.0

triangle lightness t^* **ORS18; adapted (a) CIELAB data**

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263

%Gamut

$u^*_{rel} = 94$
%Regularity
 $g^*_{H,rel} = 65$
 $g^*_{C,rel} = 60$

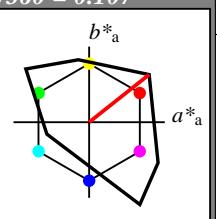
**Output: Colorimetric Television Luminous System TLS00**

for hue $h^* = lab^*h = 38/360 = 0.107$
 lab^*tch and lab^*nch

D50: hue O

LCH*Ma: 54 101 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^* **TLS00; adapted (a) CIELAB data**

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264

%Gamut
 $u^*_{rel} = 156$
%Regularity
 $g^*_{H,rel} = 26$
 $g^*_{C,rel} = 45$

relative Inform. Technology (IT)

$olvi3^*$ 1.0 1.0 1.0 (1.0)
 $cmyn3^*$ 0.0 0.0 0.0 (0.0)

$olvi4^*$ 1.0 1.0 1.0 1.0
 $cmyn4^*$ 0.0 0.0 0.0 0.0

standard and adapted CIELAB

LAB^*LAB 95.41 0.0 0.0
 LAB^*LABa 95.41 0.0 0.0
 LAB^*TChA 99.99 0.01 -

relative CIELAB lab*

lab^*lab 1.0 0.0 0.0
 lab^*tch 1.0 0.0 -

lab^*nch 0.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 1.0 0.0 0.0
 lab^*ice 1.0 0.0 -

lab^*ncE 0.0 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.5 0.5 0.5 (1.0)
 $cmyn3^*$ 0.5 0.5 0.5 (0.0)

$olvi4^*$ 1.0 1.0 1.0 0.5
 $cmyn4^*$ 0.0 0.0 0.5 0.0

standard and adapted CIELAB

LAB^*LAB 47.72 0.0 0.0
 LAB^*LABa 47.72 0.0 0.0
 LAB^*TChA 50.0 0.01 -

relative CIELAB lab*

lab^*lab 0.5 0.0 0.0
 lab^*tch 0.5 0.0 -

lab^*nch 0.5 0.0 -

relative Natural Colour (NC)

lab^*lrj 0.5 0.0 0.0
 lab^*ice 0.5 0.0 -

lab^*ncE 0.5 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.0 0.0 0.0 (1.0)
 $cmyn3^*$ 1.0 1.0 1.0 (0.0)

$olvi4^*$ 1.0 1.0 1.0 0.0
 $cmyn4^*$ 0.0 0.0 0.0 1.0

standard and adapted CIELAB

LAB^*LAB 0.03 0.0 0.0
 LAB^*LABa 0.03 0.0 0.0
 LAB^*TChA 0.01 0.01 -

relative CIELAB lab*

lab^*lab 0.0 0.0 0.0
 lab^*tch 0.0 0.0 -

lab^*nch 1.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 0.0 0.0 0.0
 lab^*ice 0.0 0.0 -

lab^*ncE 1.0 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.5 0.5 0.5 (1.0)
 $cmyn3^*$ 0.5 0.5 0.5 (0.0)

$olvi4^*$ 1.0 1.0 1.0 1.0
 $cmyn4^*$ 0.0 0.0 0.5 0.0

standard and adapted CIELAB

LAB^*LAB 27.1 39.67 31.49
 LAB^*LABa 27.1 39.67 31.49
 LAB^*TChA 25.01 50.65 38.44

relative CIELAB lab*

lab^*lab 0.784 0.392 0.311
 lab^*tch 0.75 0.5 0.107
 lab^*nch 0.0 0.5 0.107

relative Natural Colour (NC)

lab^*lrj 0.784 0.479 0.142
 lab^*ice 0.75 0.5 0.046
 lab^*ncE 0.0 0.5 r18j

relative Inform. Technology (IT)

$olvi3^*$ 0.5 0.0 0.0 (1.0)
 $cmyn3^*$ 0.5 1.0 1.0 (0.0)

$olvi4^*$ 1.0 0.5 0.5 0.5
 $cmyn4^*$ 0.0 0.5 0.5 0.5

standard and adapted CIELAB

LAB^*LAB 27.1 39.67 31.49
 LAB^*LABa 27.1 39.67 31.49
 LAB^*TChA 25.01 50.65 38.44

relative CIELAB lab*

lab^*lab 0.284 0.392 0.311
 lab^*tch 0.25 0.5 0.107
 lab^*nch 0.5 0.5 0.107

relative Natural Colour (NC)

lab^*lrj 0.284 0.479 0.142
 lab^*ice 0.25 0.5 0.046
 lab^*ncE 0.5 0.5 r18j

relative Inform. Technology (IT)

$olvi3^*$ 1.0 0.0 0.0 (1.0)
 $cmyn3^*$ 0.0 1.0 1.0 (0.0)

$olvi4^*$ 1.0 0.0 0.0 1.0
 $cmyn4^*$ 0.0 1.0 1.0 0.0

standard and adapted CIELAB

LAB^*LAB 54.19 79.34 62.99
 LAB^*LABa 54.19 79.34 62.99
 LAB^*TChA 50.0 101.31 38.44

relative CIELAB lab*

lab^*lab 0.568 0.783 0.622
 lab^*tch 0.5 1.0 0.107
 lab^*nch 0.0 1.0 0.107

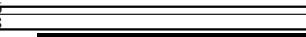
relative Natural Colour (NC)

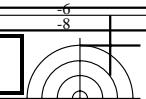
lab^*lrj 0.568 0.958 0.285
 lab^*ice 0.5 1.0 0.046
 lab^*ncE 0.0 1.0 r18j

3 step scales for constant CIELAB hue 38/360 = 0.107 (right)

input: $olv^* setrgbcolor$

output: no change compared to input





BAM registration: 20060101-PE0010L/L00E01NP.PS/PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor Systems
PEI00 Form 2/10 Series: 1/1 Page: 2 Page count: 2

Input: Colorimetric Offset Reflective System ORS18

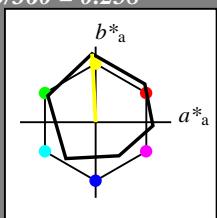
for hue $h^* = lab^*h = 93/360 = 0.258$
 lab^*tch and lab^*nch

D50: hue Y

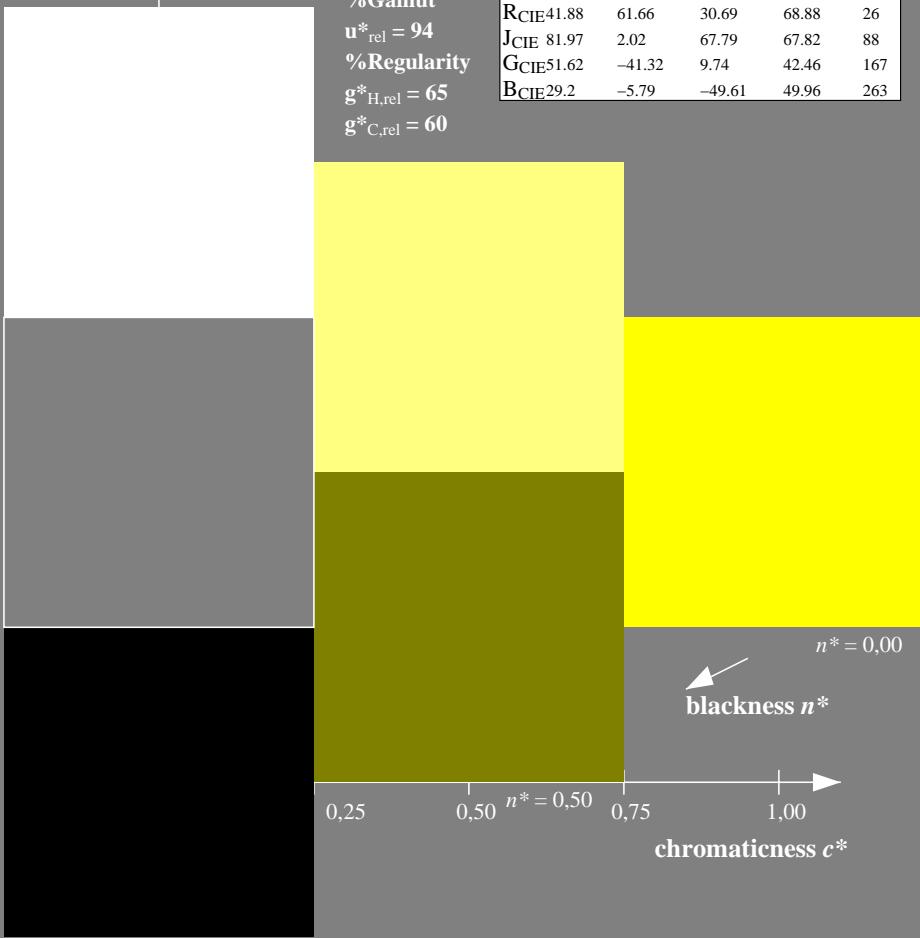
LCH*Ma: 91 91 93

poly*Ma: 1.0 1.0 0.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data					
	$L^* = L_a^*$	$a^* = a_a^*$	$b^* = b_a^*$	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263



PF000-7 3 step scales for constant CIELAB hue 93/360 = 0.258 (left)

BAM-test chart PE00; Colorimetric systems ORS18 & TLS00
D50; 3 step colour scales and coordinate data for 10 hues

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 100/360 = 0.277$

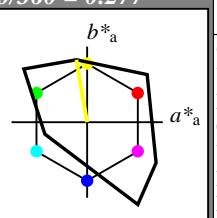
*lab*tch* and *lab*nch*

D50: hue Y

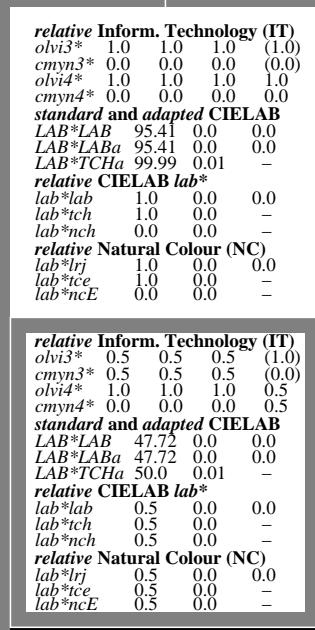
LCH*Ma: 93 84 100

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data					
	$L^* = L^*_a$	$a^* a$	$b^* a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264

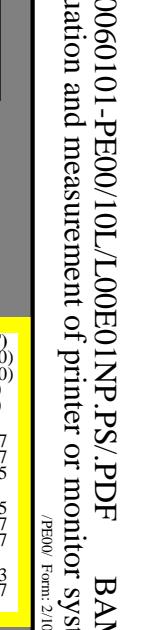


relative Inform. Technology (IT)
<i>olvi3*</i> 0.0 0.0 0.0 (1.0)
<i>cmyn3*</i> 1.0 1.0 1.0 (0.0)
<i>olvi4*</i> 1.0 1.0 1.0 0.0
<i>cmyn4*</i> 0.0 0.0 0.0 1.0
standard and adapted CIELAB
<i>LAB*^LAB</i> 0.03 0.0 0.0
<i>LAB*^LAbA</i> 0.03 0.0 0.0
<i>LAB*^TChA</i> 0.01 0.01 –
relative CIELAB lab*
<i>lab*^Lab</i> 0.0 0.0 0.0
<i>lab*^Tch</i> 0.0 0.0 –
<i>lab*^Nch</i> 1.0 0.0 –
relative Natural Colour (NC)
<i>lab*^IIr</i> 0.0 0.0 0.0
<i>lab*^Cce</i> 0.0 0.0 –
<i>lab*^Nce</i> 1.0 0.0 –

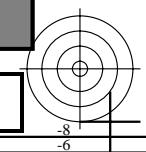
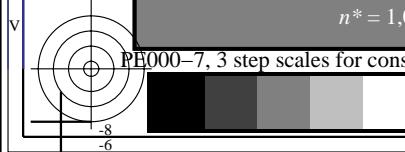
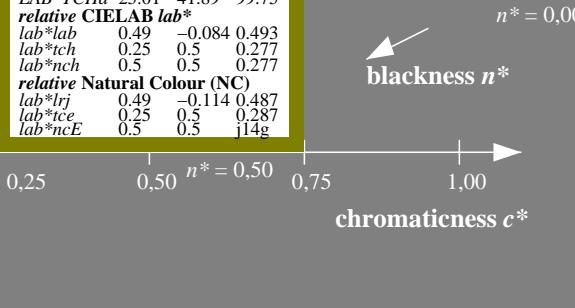
3 step scales for constant CIELAB hue 100/360 = 0.277 (right)

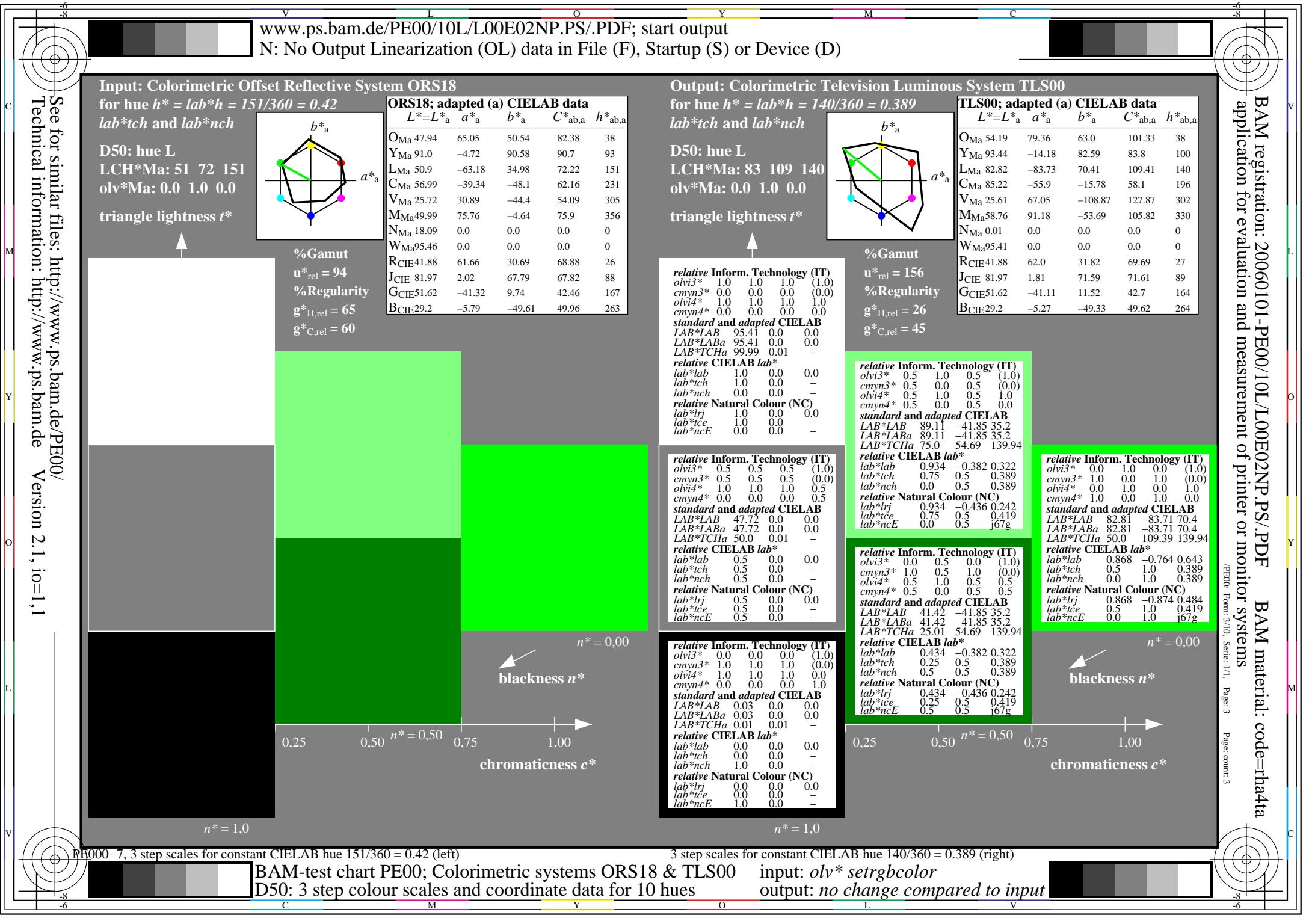
z TLS00 input: *olv* setrgbcolor*

output: no change compared to input



F BAM material: code=rha4ta
onitor systems
(PE00) Form: 2/10, Serie: 1/1, Page: 2 Page count: 2





Input: Colorimetric Offset Reflective System ORS18

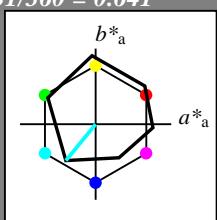
for hue $h^* = lab^*h = 231/360 = 0.641$
 lab^*tch and lab^*nch

D50: hue C

LCH*Ma: 57 62 231

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^* = L^*_{ab}$	a^*_{ab}	b^*_{ab}	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263

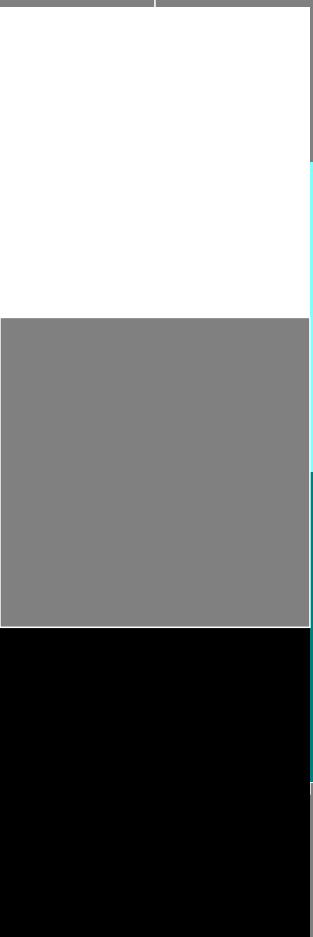
%Gamut

$u^*_{rel} = 94$

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$



$n^* = 1,0$

$n^* = 0,00$
 blackness n^*
 chromaticness c^*

$n^* = 0,50$

$0,25 \quad 0,50 \quad 0,75 \quad 1,00$

Output: Colorimetric Television Luminous System TLS00

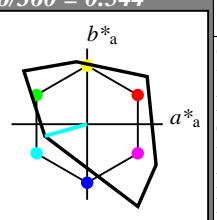
for hue $h^* = lab^*h = 196/360 = 0.544$
 lab^*tch and lab^*nch

D50: hue C

LCH*Ma: 85 58 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^* = L^*_{ab}$	a^*_{ab}	b^*_{ab}	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264

%Gamut

$u^*_{rel} = 156$

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

relative Inform. Technology (IT)

$olvi3^*$ 1.0 1.0 1.0 (1.0)

$cmy3^*$ 0.0 0.0 0.0 (0.0)

$olvi4^*$ 1.0 1.0 1.0 1.0

$cmy4^*$ 0.0 0.0 0.0 0.0

standard and adapted CIELAB

LAB^*LAB 95.41 0.0 0.0

LAB^*LABa 95.41 0.0 0.0

LAB^*TChA 99.99 0.01 -

relative CIELAB lab*

lab^*lab 1.0 0.0 0.0

lab^*tch 1.0 0.0 -

lab^*nch 0.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 1.0 0.0 0.0

lab^*ice 1.0 0.0 -

lab^*ncE 0.0 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.5 1.0 1.0 (1.0)

$cmy3^*$ 0.5 0.0 0.0 (0.0)

$olvi4^*$ 0.5 1.0 1.0 1.0

$cmy4^*$ 0.5 0.0 0.0 0.0

standard and adapted CIELAB

LAB^*LAB 90.31 -27.94 -7.88

LAB^*LABa 90.31 -27.94 -7.88

LAB^*TChA 75.00 29.04 195.77

relative CIELAB lab*

lab^*lab 0.947 -0.439 -0.237

lab^*tce 0.75 0.5 0.579

lab^*ncE 0.0 0.5 g31b

relative Inform. Technology (IT)

$olvi3^*$ 0.0 0.5 0.5 (1.0)

$cmy3^*$ 1.0 0.5 0.5 (0.0)

$olvi4^*$ 0.5 1.0 1.0 0.5

$cmy4^*$ 0.5 0.0 0.0 0.5

standard and adapted CIELAB

LAB^*LAB 42.62 -27.94 -7.88

LAB^*LABa 42.62 -27.94 -7.88

LAB^*TChA 25.01 29.04 195.77

relative CIELAB lab*

lab^*lab 0.447 -0.439 -0.237

lab^*tce 0.25 0.5 0.579

lab^*ncE 0.5 0.5 g31b

$n^* = 0,00$

blackness n^*

$n^* = 0,50$

chromaticness c^*

3 step scales for constant CIELAB hue 196/360 = 0.544 (right)

input: $olv^* setrgbcolor$

output: no change compared to input



$n^* = 0,00$

blackness n^*

$n^* = 0,50$

chromaticness c^*

PE000-7, 3 step scales for constant CIELAB hue 231/360 = 0.641 (left)

BAM-test chart PE00; Colorimetric systems ORS18 & TLS00

D50: 3 step colour scales and coordinate data for 10 hues

C

M

Y

O

L

V

V

c

M

O

L

V

v

Input: Colorimetric Offset Reflective System ORS18

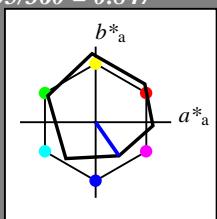
for hue $h^* = lab^*h = 305/360 = 0.847$
 lab^*tch and lab^*nch

D50: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

ORS18; adapted (a) CIELAB data

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263

triangle lightness t^*

relative Inform. Technology (IT)

olv_i3^* 1.0 1.0 1.0 (1.0)

cmy_n3^* 0.0 0.0 0.0 (0.0)

olv_i4^* 1.0 1.0 1.0 1.0

cmy_n4^* 0.0 0.0 0.0 0.0

standard and adapted CIELAB

LAB^*LAB 95.41 0.0 0.0

LAB^*LAB_a 95.41 0.0 0.0

LAB^*TCh_a 99.99 0.01 -

relative CIELAB lab*

lab^*lab 1.0 0.0 0.0

lab^*tch 1.0 0.0 -

lab^*nch 0.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 1.0 0.0 0.0

lab^*ice 1.0 0.0 -

lab^*ncE 0.0 0.0 -

relative Inform. Technology (IT)

olv_i3^* 0.5 0.5 1.0 (1.0)

cmy_n3^* 0.5 0.5 0.0 (0.0)

olv_i4^* 0.5 0.5 1.0 1.0

cmy_n4^* 0.5 0.5 0.0 0.0

standard and adapted CIELAB

LAB^*LAB 60.51 33.52 -54.42

LAB^*LAB_a 60.51 33.52 -54.42

LAB^*TCh_a 75.0 63.92 301.63

relative CIELAB lab*

lab^*lab 0.634 0.262 -0.425

lab^*tch 0.75 0.5 0.838

lab^*nch 0.0 0.5 0.838

relative Natural Colour (NC)

lab^*lrj 0.634 0.231 -0.442

lab^*ice 0.75 0.5 0.827

lab^*ncE 0.0 0.5 b30r

relative Inform. Technology (IT)

olv_i3^* 0.0 0.0 0.5 (1.0)

cmy_n3^* 1.0 1.0 0.5 (0.0)

olv_i4^* 0.5 0.5 1.0 0.5

cmy_n4^* 0.5 0.5 0.0 0.5

standard and adapted CIELAB

LAB^*LAB 25.61 67.04 -108.82

LAB^*LAB_a 25.61 67.04 -108.82

LAB^*TCh_a 50.0 127.84 301.63

relative CIELAB lab*

lab^*lab 0.268 0.524 -0.85

lab^*tch 0.5 1.0 0.838

lab^*nch 0.0 1.0 0.838

relative Natural Colour (NC)

lab^*lrj 0.268 0.462 -0.885

lab^*ice 0.5 1.0 0.827

lab^*ncE 0.0 1.0 b30r

PE00-7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)

BAM-test chart PE00; Colorimetric systems ORS18 & TLS00
 D50: 3 step colour scales and coordinate data for 10 hues

3 step scales for constant CIELAB hue 302/360 = 0.838 (right)

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

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

n* = 0,50

n* = 1,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

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chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

n* = 1,0

n* = 0,50

n* = 0,00

chromaticness c^*

blackness n^*

Input: Colorimetric Offset Reflective System ORS18

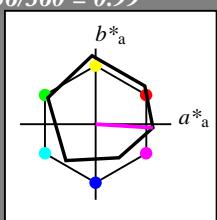
for hue $h^* = lab^*h = 356/360 = 0.99$
 lab^*tch and lab^*nch

D50: hue M

LCH*Ma: 50 76 356

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

ORS18; adapted (a) CIELAB data

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 330/360 = 0.915$

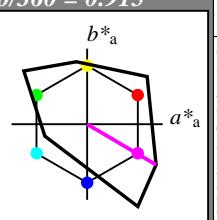
lab^*tch and lab^*nch

D50: hue M

LCH*Ma: 59 106 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 156$

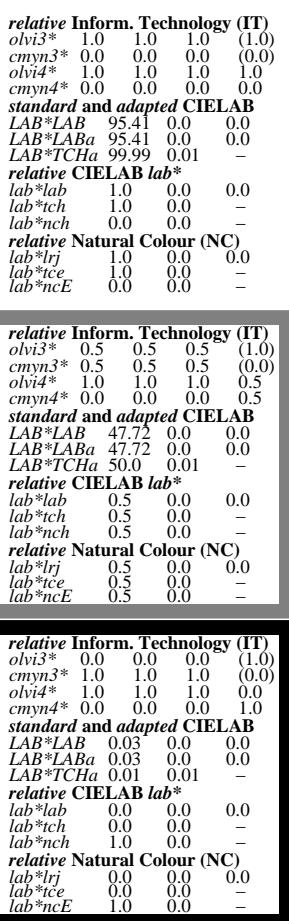
%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

TLS00; adapted (a) CIELAB data

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264



	relative Inform. Technology (IT)
olv _{i3} *	1.0 1.0 1.0 (1,0)
cmy _{n3} *	0.0 0.0 0.0 (0,0)
olv _{i4} *	1.0 1.0 1.0 1.0
cmy _{n4} *	0.0 0.0 0.0 0.0
standard and adapted CIELAB	
LAB*LAB	95.41 0.0 0.0
LAB*LABa	95.41 0.0 0.0
LAB*TCh _a	99.99 0.01 -
relative CIELAB lab*	
lab*lab	1.0 0.0 0.0
lab*tch	1.0 0.0 -
lab*nch	0.0 0.0 -
relative Natural Colour (NC)	
lab*lrj	1.0 0.0 0.0
lab*tce	1.0 0.0 -
lab*ncE	0.0 0.0 -

	relative Inform. Technology (IT)
olv _{i3} *	1.0 0.5 1.0 (1,0)
cmy _{n3} *	0.0 0.5 0.0 (0,0)
olv _{i4} *	1.0 0.5 1.0 1.0
cmy _{n4} *	0.0 0.5 0.0 0.0
standard and adapted CIELAB	
LAB*LAB	77.08 45.58 -26.83
LAB*LABa	77.08 45.58 -26.83
LAB*TCh _a	75.0 52.9 329.5
relative CIELAB lab*	
lab*lab	0.808 0.431 -0.253
lab*tch	0.75 0.5 0.915
lab*nch	0.0 0.5 0.915
relative Natural Colour (NC)	
lab*lrj	0.808 0.371 -0.334
lab*tce	0.75 0.5 0.883
lab*ncE	0.0 0.5 b53r

	relative Inform. Technology (IT)
olv _{i3} *	0.5 0.5 0.5 (1,0)
cmy _{n3} *	0.5 0.5 0.5 (0,0)
olv _{i4} *	1.0 1.0 1.0 0.5
cmy _{n4} *	0.0 0.0 0.0 0.5
standard and adapted CIELAB	
LAB*LAB	47.72 0.0 0.0
LAB*LABa	47.72 0.0 0.0
LAB*TCh _a	50.0 0.01 -
relative CIELAB lab*	
lab*lab	0.5 0.0 0.0
lab*tch	0.5 0.0 -
lab*nch	0.5 0.0 -
relative Natural Colour (NC)	
lab*lrj	0.5 0.0 0.0
lab*tce	0.5 0.0 -
lab*ncE	0.5 0.0 -

	relative Inform. Technology (IT)
olv _{i3} *	0.0 0.0 0.0 (1,0)
cmy _{n3} *	1.0 1.0 1.0 (0,0)
olv _{i4} *	1.0 1.0 1.0 0.0
cmy _{n4} *	0.0 0.0 0.0 1.0
standard and adapted CIELAB	
LAB*LAB	0.03 0.0 0.0
LAB*LABa	0.03 0.0 0.0
LAB*TCh _a	0.01 0.01 -
relative CIELAB lab*	
lab*lab	0.0 0.0 0.0
lab*tch	0.0 0.0 -
lab*nch	1.0 0.0 -
relative Natural Colour (NC)	
lab*lrj	0.0 0.0 0.0
lab*tce	0.0 0.0 -
lab*ncE	1.0 0.0 -

	relative Inform. Technology (IT)
olv _{i3} *	0.0 0.0 0.0 (1,0)
cmy _{n3} *	0.5 1.0 0.5 (0,0)
olv _{i4} *	1.0 0.5 1.0 0.5
cmy _{n4} *	0.0 0.5 0.0 0.5
standard and adapted CIELAB	
LAB*LAB	29.39 45.58 -26.83
LAB*LABa	29.39 45.58 -26.83
LAB*TCh _a	25.01 52.9 329.5
relative CIELAB lab*	
lab*lab	0.308 0.431 -0.253
lab*tch	0.25 0.5 0.915
lab*nch	0.5 0.5 0.915
relative Natural Colour (NC)	
lab*lrj	0.308 0.371 -0.334
lab*tce	0.25 0.5 0.883
lab*ncE	0.5 0.5 b53r

3 step scales for constant CIELAB hue 330/360 = 0.915 (right)

input: `olv* setrgbcolor`

output: no change compared to input

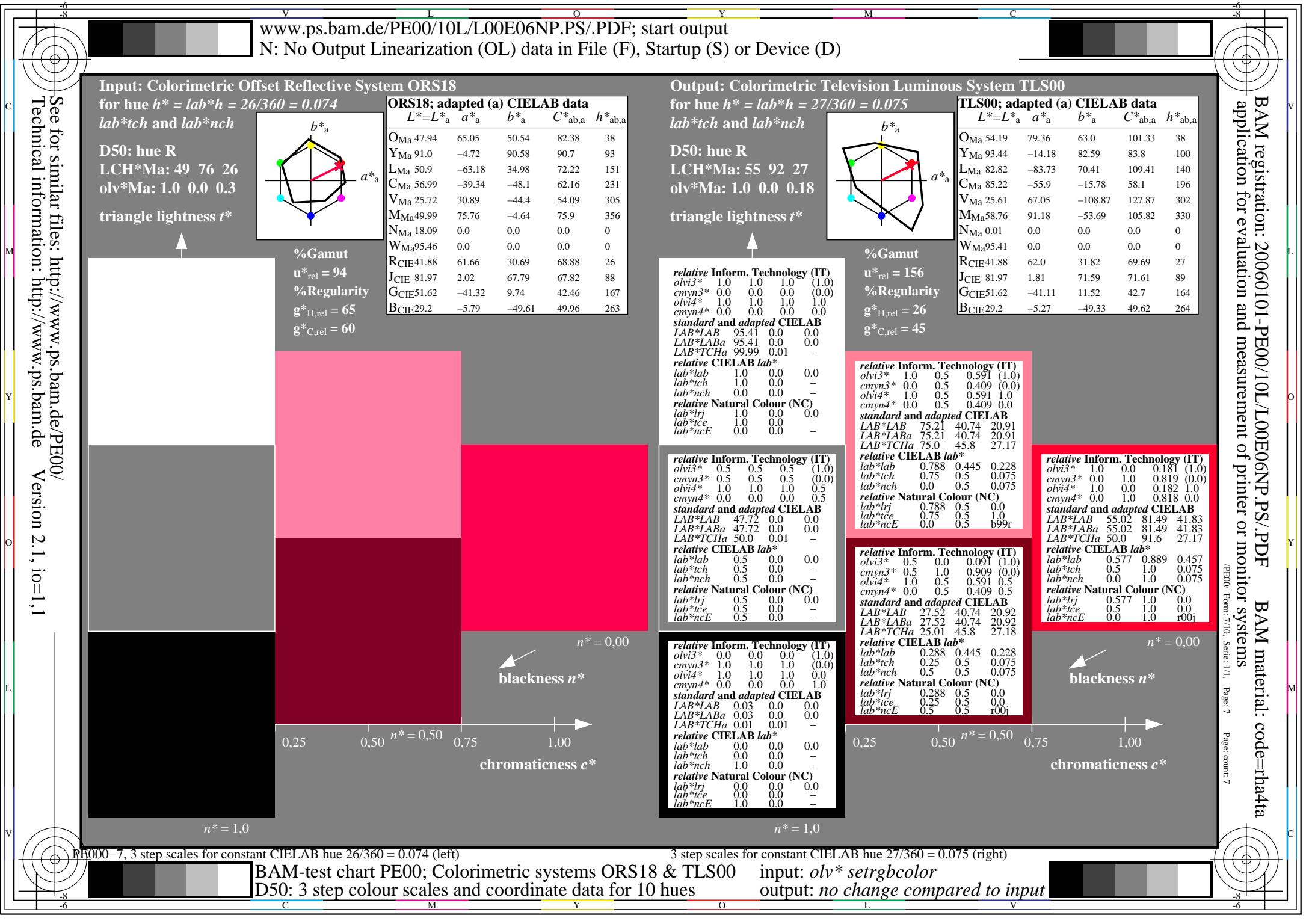
PE00-7, 3 step scales for constant CIELAB hue 356/360 = 0.99 (left)

BAM-test chart PE00; Colorimetric systems ORS18 & TLS00
 D50: 3 step colour scales and coordinate data for 10 hues

See for similar files: <http://www.ps.bam.de/PE00/>

Technical information: <http://www.ps.bam.de>

Version 2.1, io=1,1



Input: Colorimetric Offset Reflective System ORS18

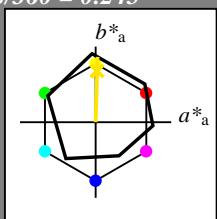
for hue $h^* = lab^*h = 88/360 = 0.245$
 lab^*tch and lab^*nch

D50: hue J

LCH*Ma: 86 86 88

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263

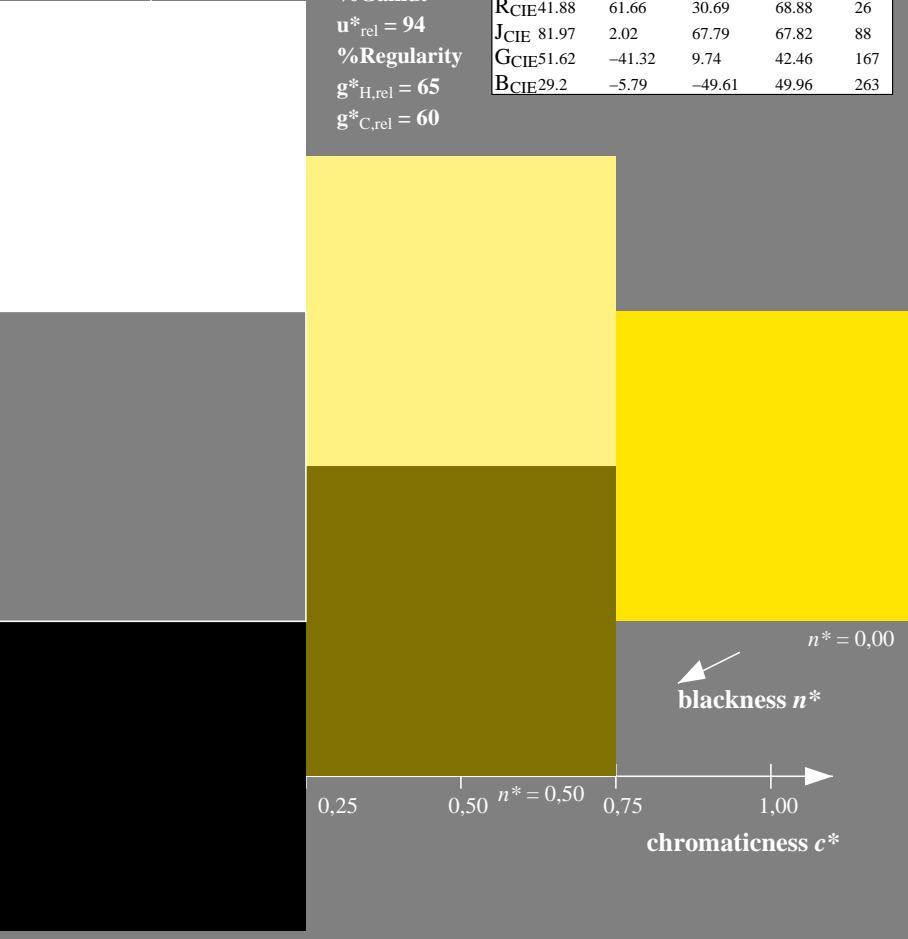
%Gamut

$u^*_{rel} = 94$

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$



Output: Colorimetric Television Luminous System TLS00

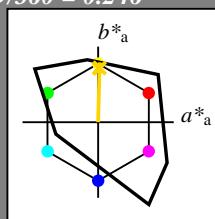
for hue $h^* = lab^*h = 89/360 = 0.246$
 lab^*tch and lab^*nch

D50: hue J

LCH*Ma: 87 79 89

olv*Ma: 1.0 0.83 0.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264

%Gamut

$u^*_{rel} = 156$

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

relative Inform. Technology (IT)

$olvi3^*$ 1.0 1.0 1.0 (1.0)
 $cmyn3^*$ 0.0 0.0 0.0 (0.0)

$olvi4^*$ 1.0 1.0 1.0 1.0
 $cmyn4^*$ 0.0 0.0 0.0 0.0

standard and adapted CIELAB

LAB^*LAB 95.41 0.0 0.0
 LAB^*LABa 95.41 0.0 0.0
 LAB^*TChA 99.99 0.01 -

relative CIELAB lab*

lab^*lab 1.0 0.0 0.0
 lab^*tch 1.0 0.0 -

lab^*nch 0.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 1.0 0.0 0.0
 lab^*ice 1.0 0.0 -

lab^*ncE 0.0 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.5 0.5 0.5 (1.0)
 $cmyn3^*$ 0.5 0.5 0.5 (0.0)

$olvi4^*$ 1.0 1.0 1.0 0.5
 $cmyn4^*$ 0.0 0.0 0.5 0.5

standard and adapted CIELAB

LAB^*LAB 47.72 0.0 0.0
 LAB^*LABa 47.72 0.0 0.0
 LAB^*TChA 50.0 0.01 -

relative CIELAB lab*

lab^*lab 0.5 0.0 0.0
 lab^*tch 0.5 0.0 -

lab^*nch 0.5 0.0 -

relative Natural Colour (NC)

lab^*lrj 0.5 0.0 0.0
 lab^*ice 0.5 0.0 -

lab^*ncE 0.5 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.0 0.0 0.0 (1.0)
 $cmyn3^*$ 1.0 1.0 1.0 (0.0)

$olvi4^*$ 1.0 1.0 1.0 0.0
 $cmyn4^*$ 0.0 0.0 0.0 1.0

standard and adapted CIELAB

LAB^*LAB 0.03 0.0 0.0
 LAB^*LABa 0.03 0.0 0.0
 LAB^*TChA 0.01 0.01 -

relative CIELAB lab*

lab^*lab 0.0 0.0 0.0
 lab^*tch 0.0 0.0 -

lab^*nch 1.0 0.0 -

relative Natural Colour (NC)

lab^*lrj 0.0 0.0 0.0
 lab^*ice 0.0 0.0 -

lab^*ncE 1.0 0.0 -

relative Inform. Technology (IT)

$olvi3^*$ 0.5 0.413 0.0 (1.0)
 $cmyn3^*$ 0.5 0.587 1.0 (0.0)

$olvi4^*$ 1.0 0.913 0.5 0.5
 $cmyn4^*$ 0.0 0.087 0.5 0.5

standard and adapted CIELAB

LAB^*LAB 43.33 1.0 39.59
 LAB^*LABa 43.33 1.0 39.59
 LAB^*TChA 25.01 39.6 88.55

relative CIELAB lab*

lab^*lab 0.454 0.013 0.5
 lab^*tch 0.25 0.5 0.246

lab^*nch 0.5 0.5 0.246

relative Natural Colour (NC)

lab^*lrj 0.454 0.0 0.5
 lab^*ice 0.25 0.5 0.25

lab^*ncE 0.5 0.5 r99j

relative Inform. Technology (IT)

$olvi3^*$ 0.0 0.413 0.0 (1.0)
 $cmyn3^*$ 0.5 0.587 1.0 (0.0)

$olvi4^*$ 1.0 0.913 0.5 0.5
 $cmyn4^*$ 0.0 0.087 0.5 0.5

standard and adapted CIELAB

LAB^*LAB 43.33 1.0 39.59
 LAB^*LABa 43.33 1.0 39.59
 LAB^*TChA 25.01 39.6 88.55

relative CIELAB lab*

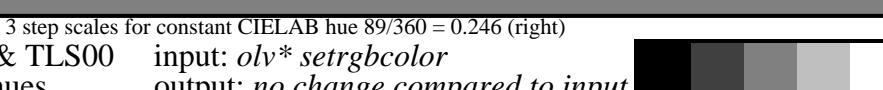
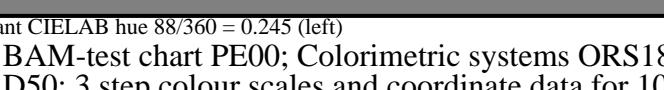
lab^*lab 0.454 0.013 0.5
 lab^*tch 0.25 0.5 0.246

lab^*nch 0.5 0.5 0.246

relative Natural Colour (NC)

lab^*lrj 0.454 0.0 0.5
 lab^*ice 0.25 0.5 0.25

lab^*ncE 0.5 0.5 r99j



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