

Input: Colorimetric Offset Reflective System ORS18

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

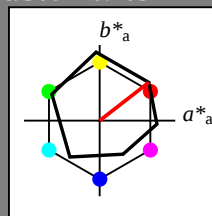
D50: hue O

LCH*Ma: 48 82 38

olv*Ma: 1.0 0.0 0.0

triangle lightness

1,00

 $u^*_{rel} = 94$

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

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

Output: Colorimetric Television Luminous System TLS00

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

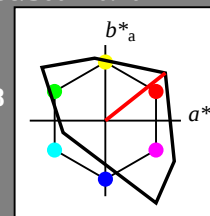
D50: hue O

LCH*Ma: 54 101 38

olv*Ma: 1.0 0.0 0.0

triangle lightness

1,00



%Gamut

 $u^*_{rel} = 156$

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

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

PE400-7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

BAM-test chart PE40; Colorimetric systems ORS18 & ORS18

D50: 5 step colour scales and coordinate data for 10 hues

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

input: $olv^* \cdot setrgbcolor$

output: Startup (S) data dependend

Input: Colorimetric Offset Reflective System ORS18

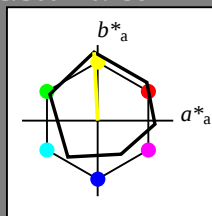
for hue $h^* = lab \cdot h = 93/360 = 0.258$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue Y

LCH*Ma: 91 91 93

olv*Ma: 1.0 1.0 0.0

triangle lightness



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

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

Output: Colorimetric Television Luminous System TLS00

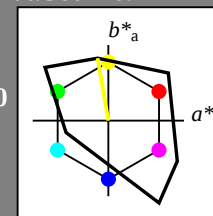
for hue $h^* = lab \cdot h = 100/360 = 0.277$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue Y

LCH*Ma: 93 84 100

olv*Ma: 1.0 1.0 0.0

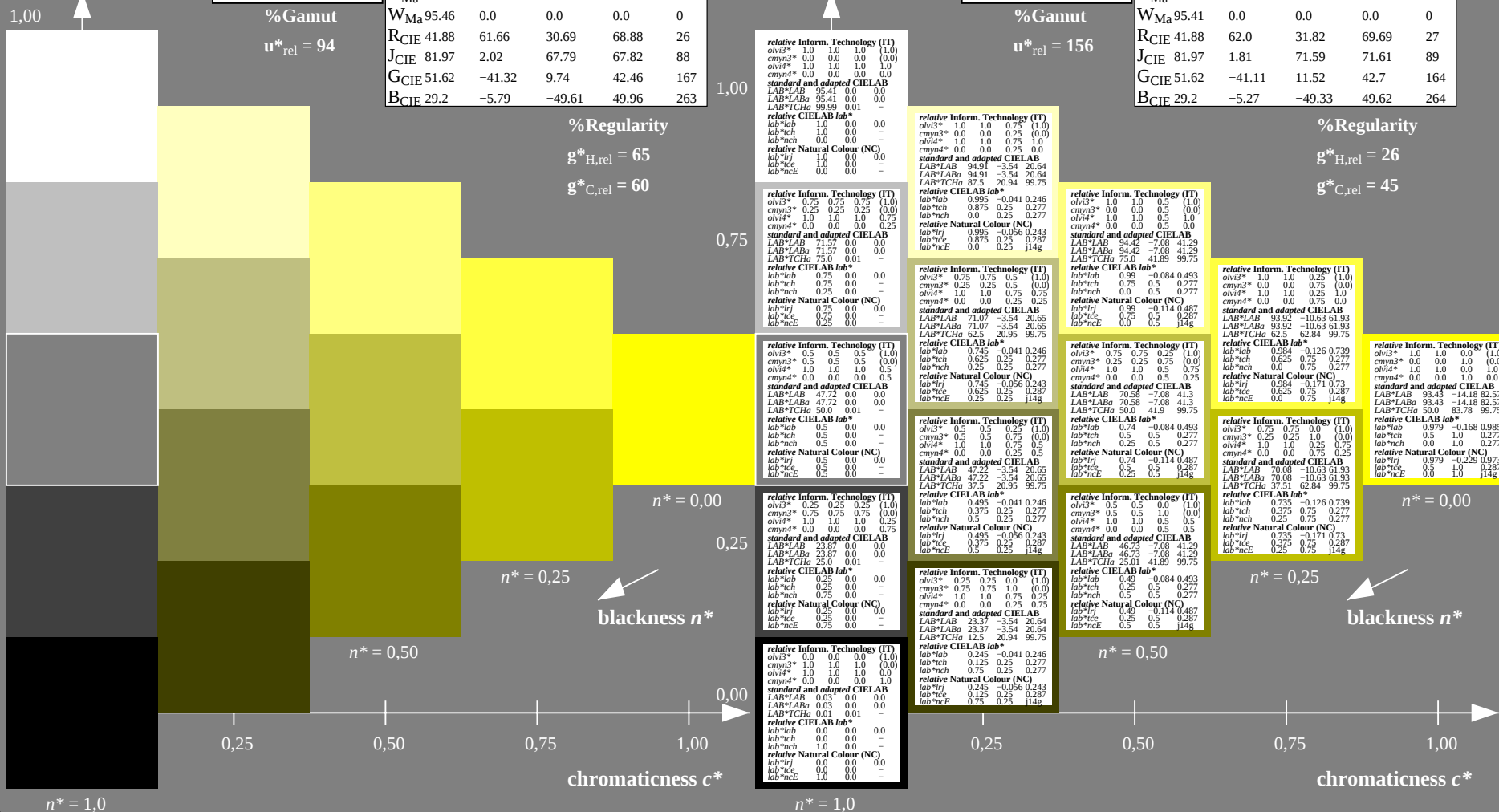
triangle lightness



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

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$ 

PE40-7, 5 step scales for constant CIELAB hue 93/360 = 0.258 (left)

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

BAM-test chart PE40; Colorimetric systems ORS18 & ORS18

D50: 5 step colour scales and coordinate data for 10 hues

input: $olv^* \text{ setrgbcolor}$

output: Startup (S) data dependend

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 151/360 = 0.42$ $lab \cdot tch$ and $lab \cdot nch$

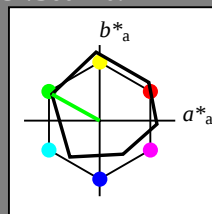
D50: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness

1,00



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

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

1,00

relative Inform. Technology (IT)

$olv3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$
 $olv4^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$

standard and adapted CIELAB

$LAB^*LAB = 95.41 \ 0.0 \ 0.0$
 $LAB^*TCha = 98.99 \ 0.01 \ -$

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)

$lab^*trj = 1.0 \ 0.0 \ 0.0$
 $lab^*tce = 1.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 71.57 \ 0.0 \ 0.0$
 $LAB^*TCha = 75.0 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.75 \ 0.0 \ 0.0$
 $lab^*tch = 0.75 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.75 \ 0.0 \ 0.0$
 $lab^*tce = 0.25 \ 0.0 \ -$
 $lab^*nce = 0.25 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 47.72 \ 0.0 \ 0.0$
 $LAB^*TCha = 50.0 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.5 \ 0.0 \ 0.0$
 $lab^*tch = 0.5 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.5 \ 0.0 \ 0.0$
 $lab^*tce = 0.25 \ 0.0 \ -$
 $lab^*nce = 0.25 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 23.87 \ 0.0 \ 0.0$
 $LAB^*TCha = 25.0 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.25 \ 0.0 \ 0.0$
 $lab^*tch = 0.25 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.25 \ 0.0 \ 0.0$
 $lab^*tce = 0.125 \ 0.0 \ -$
 $lab^*nce = 0.125 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

standard and adapted CIELAB

$LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCha = 0.01 \ 0.01 \ -$

relative CIELAB lab*

$lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)

$lab^*trj = 0.0 \ 0.0 \ 0$

Input: Colorimetric Offset Reflective System ORS18

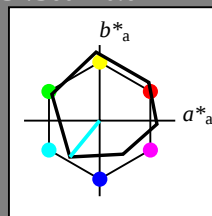
for hue $h^* = lab^*h = 231/360 = 0.641$ lab^*tch and lab^*nch

D50: hue C

LCH*Ma: 57 62 231

olv*Ma: 0.0 1.0 1.0

triangle lightness



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

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

1,00

0,75

blackness n^* chromaticness c^*

PE40-7, 5 step scales for constant CIELAB hue 231/360 = 0.641 (left)

BAM-test chart PE40; Colorimetric systems ORS18 & ORS18

D50: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Television Luminous System TLS00

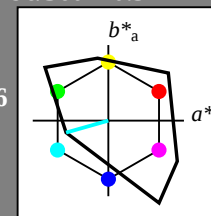
for hue $h^* = lab^*h = 196/360 = 0.544$ lab^*tch and lab^*nch

D50: hue C

LCH*Ma: 85 58 196

olv*Ma: 0.0 1.0 1.0

triangle lightness



%Gamut

 $u^*_{rel} = 156$

1,00

0,75

blackness n^* chromaticness c^*

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

input: $olv^*setrgbcolor$

output: Startup (S) data dependend

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

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

relative Inform. Technology (IT)

relative CIELAB lab*

relative Natural Colour (NC)

standard and adapted CIELAB

relative CIELAB lab*

relative Natural Colour (NC)

standard and adapted CIELAB

relative CIELAB lab*

relative Natural Colour (NC)

relative Inform. Technology (IT)

relative CIELAB lab*

relative Natural Colour (NC)

standard and adapted CIELAB

relative CIELAB lab*

relative Natural Colour (NC)

standard and adapted CIELAB

relative CIELAB lab*

relative Natural Colour (NC)

Input: Colorimetric Offset Reflective System ORS18

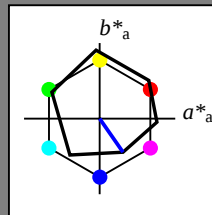
for hue $h^* = lab \cdot h = 305/360 = 0.847$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness



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

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

1,00

0,75

 $n^* = 0,00$

0,25

 $n^* = 0,25$ $n^* = 0,50$ chromaticness c^*

PE40-7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

BAM-test chart PE40; Colorimetric systems ORS18 & ORS18

D50: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Television Luminous System TLS00

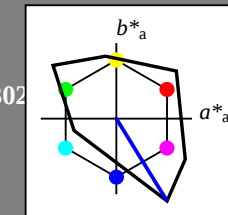
for hue $h^* = lab \cdot h = 302/360 = 0.838$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue V

LCH*Ma: 26 128 302

olv*Ma: 0.0 0.0 1.0

triangle lightness



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

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$ $n^* = 0,00$

0,25

 $n^* = 0,25$ $n^* = 0,50$ chromaticness c^*

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

input: $olv^* \cdot setrgbcolor$

output: Startup (S) data dependend

Input: Colorimetric Offset Reflective System ORS18

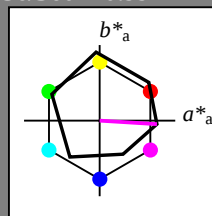
for hue $h^* = lab \cdot h = 356/360 = 0.99$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue M

LCH*Ma: 50 76 356

olv*Ma: 1.0 0.0 1.0

triangle lightness



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

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

1,00

0,75

 $n^* = 0,00$

0,25

 $n^* = 0,25$ $n^* = 0,50$ chromaticness c^*

PE40-7, 5 step scales for constant CIELAB hue 356/360 = 0.99 (left)

BAM-test chart PE40; Colorimetric systems ORS18 & ORS18

D50: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Television Luminous System TLS00

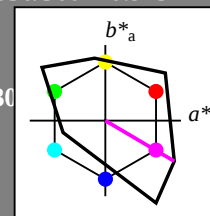
for hue $h^* = lab \cdot h = 330/360 = 0.915$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue M

LCH*Ma: 59 106 330

olv*Ma: 1.0 0.0 1.0

triangle lightness



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

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$ $n^* = 0,00$

0,25

 $n^* = 0,25$ $n^* = 0,50$ chromaticness c^*

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

input: $olv \cdot setrgbcolor$

output: Startup (S) data dependend

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 26/360 = 0.074$ $lab \cdot tch$ and $lab \cdot nch$

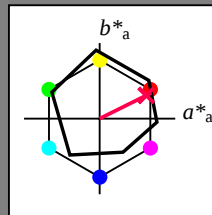
D50: hue R

LCH*Ma: 49 76 26

olv*Ma: 1.0 0.0 0.3

triangle lightness

1,00



%Gamut

 $u^*_{rel} = 94$

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

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

1,00

relative Inform. Technology (IT)	
olv3*	1.0 1.0 1.0 (1.0)
cmyn3*	0.0 0.0 0.0 (0.0)
olv4*	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*Lab	95.41 0.0 0.0
LAB*TCa	98.99 0.01 -
relative CIELAB lab*	
lab*lab	1.0 0.0 0.0
lab*tch	1.0 0.0 0.0
lab*nch	0.0 0.0 -
relative Natural Colour (NC)	
lab*lrj	1.0 0.0 0.0
lab*lr	1.0 0.0 0.0
lab*lrce	1.0 0.0 0.0
lab*lrnce	0.0 0.0 -

relative Inform. Technology (IT)	
olv3*	0.75 0.75 0.75 (1.0)
cmyn3*	0.25 0.25 0.25 (0.0)
olv4*	1.0 1.0 1.0 (1.0)
cmyn4*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	71.57 0.0 0.0
LAB*Lab	71.57 0.0 0.0
LAB*TCa	75.0 0.01 -
relative CIELAB lab*	
lab*lab	0.75 0.0 0.0
lab*tch	0.75 0.0 0.0
lab*nch	0.25 0.0 0.0
relative Natural Colour (NC)	
lab*lrj	0.75 0.0 0.0
lab*lr	0.75 0.0 0.0
lab*lrce	0.25 0.0 0.0
lab*lrnce	0.25 0.0 -

relative Inform. Technology (IT)	
olv3*	0.5 0.5 0.5 (1.0)
cmyn3*	0.5 0.5 0.5 (0.0)
olv4*	1.0 1.0 1.0 (1.0)
cmyn4*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	47.72 0.0 0.0
LAB*Lab	47.72 0.0 0.0
LAB*TCa	50.0 0.01 -
relative CIELAB lab*	
lab*lab	0.5 0.0 0.0
lab*tch	0.5 0.0 0.0
lab*nch	0.0 0.0 0.0
relative Natural Colour (NC)	
lab*lrj	0.5 0.0 0.0
lab*lr	0.5 0.0 0.0
lab*lrce	0.5 0.0 0.0
lab*lrnce	0.5 0.0 -

relative Inform. Technology (IT)	
olv3*	0.25 0.25 0.25 (1.0)
cmyn3*	0.75 0.75 0.75 (0.0)
olv4*	1.0 1.0 1.0 (1.0)
cmyn4*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	23.87 0.0 0.0
LAB*Lab	23.87 0.0 0.0
LAB*TCa	25.0 0.01 -
relative CIELAB lab*	
lab*lab	0.25 0.0 0.0
lab*tch	0.25 0.0 0.0
lab*nch	0.75 0.0 0.0
relative Natural Colour (NC)	
lab*lrj	0.25 0.0 0.0
lab*lr	0.25 0.0 0.0
lab*lrce	0.25 0.0 0.0
lab*lrnce	0.75 0.0 -

relative Inform. Technology (IT)	
olv3*	0.0 0.0 0.0 (1.0)
cmyn3*	1.0 1.0 1.0 (0.0)
olv4*	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*Lab	0.03 0.0 0.0
LAB*TCa	0.03 0.01 -
relative CIELAB lab*	
lab*lab	0.0 0.0 0.0
lab*tch	0.0 0.0 0.0
lab*nch	1.0 0.0 0.0
relative Natural Colour (NC)	
lab*lrj	0.0 0.0 0.0
lab*lr	0.0 0.0 0.0
lab*lrce	0.0 0.0 0.0
lab*lrnce	1.0 0.0 -

 $n^* = 1,0$

5 step scales for constant CIELAB hue 27/360 = 0.075 (right)

input: $olv^* \text{ setrgbcolor}$

output: Startup (S) data dependend

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 27/360 = 0.075$ $lab \cdot tch$ and $lab \cdot nch$

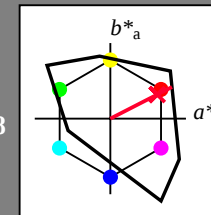
D50: hue R

LCH*Ma: 55 92 27

olv*Ma: 1.0 0.0 0.18

triangle lightness

1,00



%Gamut

 $u^*_{rel} = 156$

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

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

relative Inform. Technology (IT)	
olv3*	1.0 0.75 0.75 (1.0)
cmyn3*	0.0 0.25 0.25 (0.0)
olv4*	1.0 0.75 0.75 (1.0)
cmyn4*	0.0 0.25 0.25 (0.0)
standard and adapted CIELAB	
LAB*LAB	85.31 20.37 10.45
LAB*Lab	85.31 20.37 10.45
LAB*TCa	87.5 22.89 27.16
relative CIELAB lab*	
lab*lab	0.894 0.25 0.0
lab*tch	0.875 0.25 0.075
lab*nch	0.0 0.25 0.075
relative Natural Colour (NC)	
lab*lrj	0.894 0.25 0.0
lab*lr	0.875 0.25 0.0
lab*lrce	0.875 0.25 0.0
lab*lrnce	0.0 0.25 0.075

relative Inform. Technology (IT)	
olv3*	0.75 0.5 0.5 (1.0)
cmyn3*	0.25 0.5 0.5 (0.0)
olv4*	1.0 0.75 0.75 (1.0)
cmyn4*	0.0 0.25 0.25 (0.0)
standard and adapted CIELAB	
LAB*LAB	61.46 20.38 10.46
LAB*Lab	61.46 20.38 10.46
LAB*TCa	62.5 22.9 27.17
relative CIELAB lab*	
lab*lab	0.644 0.222 0.114
lab*tch	0.525 0.25 0.075
lab*nch	0.25 0.25 0.075
relative Natural Colour (NC)	
lab*lrj	0.644 0.25 0.0
lab*lr	0.525 0.25 0.0
lab*lrce	0.525 0.25 0.0
lab*lrnce	0.25 0.25 0.075

relative Inform. Technology (IT)	
olv3*	0.5 0.25 0.25 (1.0)
cmyn3*	0.5 0.75 0.75 (0.0)
olv4*	1.0 0.75 0.75 (1.0)
cmyn4*	0.0 0.25 0.25 (0.0)
standard and adapted CIELAB	
LAB*LAB	37.61 20.38 10.46
LAB*Lab	37.61 20.38 10.46
LAB*TCa	37.5 22.9 27.17
relative CIELAB lab*	
lab*lab	0.394 0.222 0.114
lab*tch	0.375 0.25 0.075
lab*nch	0.5 0.25 0.075
relative Natural Colour (NC)	
lab*lrj	0.394 0.25 0.0
lab*lr	0.375 0.25 0.0
lab*lrce	0.375 0.25 0.0
lab*lrnce	0.5 0.25 0.075

relative Inform. Technology (IT)	
olv3*	0.25 0.0 0.0 (1.0)
cmyn3*	0.75 1.0 0.955 (0.0)
olv4*	1.0 0.75 0.75 (1.0)
cmyn4*	0.0 0.25 0.25 (0.0)
standard and adapted CIELAB	
LAB*LAB	13.77 20.37 10.46
LAB*Lab	13.77 20.37 10.46
LAB*TCa	12.5 22.9 27.19
relative CIELAB lab*	
lab*lab	0.144 0.222 0.114
lab*tch	0.125 0.25 0.075
lab*nch	0.75 0.25 0.075
relative Natural Colour (NC)	
lab*lrj	0.144 0.25 0.0
lab*lr	0.125 0.25 0.0
lab*lrce	0.125 0.25 0.0
lab*lrnce	0.75 0.25 0.075

relative Inform. Technology (IT)	
olv3*	0.0 0.0 0.0 (1.0)
cmyn3*	1.0 1.0 1.0 (0.0)
olv4*	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*Lab	0.03 0.0 0.0
LAB*TCa	0.03 0.01 -
relative CIELAB lab*	
lab*lab	0.0 0.0 0.0
lab*tch	0.0 0.0 0.0
lab*nch	1.0 0.0 0.0
relative Natural Colour (NC)	
lab*lrj	0.0 0.0 0.0
lab*lr	0.0 0.0 0.0
lab*lrce	0.0 0.0 0.0
lab*lrnce	1.0 0.0 -

 $n^* = 1,0$

relative Inform. Technology (IT)	
olv3*	1.0 0.5 0.591 (1.0)
cmyn3*	0.0 0.5 0.489 (0.0)
olv4*	1.0 0.5 0.591 (1.0)
cmyn4*	0.0 0.5 0.489 (0.0)
standard and adapted CIELAB	
LAB*LAB	75.21 40.74 20.91
LAB*Lab	75.21 40.74 20.91
LAB*TCa	75.0 45.8 27.17
relative CIELAB lab*	
lab*lab	0.788 0.445 0.228
lab*tch	0.75 0.5 0.075
lab*nch	0.0 0.5 0.075
relative Natural Colour (NC)	
lab*lrj	0.788 0.5 0.0
lab*lr	0.75 0.5 0.0
lab*lrce	0.75 0.5 0.0
lab*lrnce	0.0 0.5 0.075

relative Inform. Technology (IT)	
olv3*	0.75 0.25 0.341 (1.0)
cmyn3*	0.25 0.75 0.659 (0.0)
olv4*	1.0 0.5 0.591 (1.0)
cmyn4*	0.0 0.5 0.489 (0.0)
standard and adapted CIELAB	
LAB*LAB	51.36 40.75 20.92
LAB*Lab	51.36 40.75 20.92
LAB*TCa	50.0 45.81 27.17
relative CIELAB lab*	
lab*lab	0.538 0.445 0.228
lab*tch	0.5 0.5 0.075
lab*nch	0.25 0.5 0.075
relative Natural Colour (NC)	
lab*lrj	0.538 0.5 0.0
lab*lr	0.5 0.5 0.0
lab*lrce	0.5 0.5 0.0
lab*lrnce	0.25 0.5 0.075

relative Inform. Technology (IT)	
olv3*	0.5 0.0 0.091 (1.0)
cmyn3*	0.5 1.0 0.909 (0.0)
olv4*	1.0 0.5 0.591 (1.0)
cmyn4*	0.0 0.5 0.489 (0.0)
standard and adapted CIELAB	
LAB*LAB	27.42 40.74 20.92
LAB*Lab	27.42 40.74 20.92
LAB*TCa	25.01 45.8 27.18
relative CIELAB lab*	
lab*lab	0.288 0.445 0.228
lab*tch	0.25 0.5 0.075
lab*nch	0.5 0.5 0.075
relative Natural Colour (NC)	
lab*lrj	0.288 0.5 0.0
lab*lr	0.25 0.5 0.0
lab*lrce	0.25 0.5 0.0
lab*lrnce	0.5 0.5 0.075

relative Inform. Technology (IT)	
olv3*	0.25 0.0 0.045 (1.0)
cmyn3*	0.75 1.0 0.955 (0.0)
olv4*	1.0 0.75 0.75 (1.0)
cmyn4*	0.0 0.25 0.25 (0.0)
standard and adapted CIELAB	
LAB*LAB	13.77 20.37 10.46
LAB*Lab	13.77 20.37 10.46
LAB*TCa	12.5 22.9 27.19
relative CIELAB lab*	
lab*lab	0.144 0.222 0.114
lab*tch	0.125 0.25 0.075
lab*nch	0.75 0.25 0.075
relative Natural Colour (NC)	
lab*lrj	0.144 0.25 0.0
lab*lr	0.125 0.25 0.0
lab*lrce	0.125 0.25 0.0
lab*lrnce	0.75 0.25 0.075

relative Inform. Technology (IT)	
olv3*	0.0 0.0 0.0 (1.0)
cmyn3*	1.0 1.0 1.0 (0.0)
olv4*	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*Lab	0.03 0.0 0.0
LAB*TCa	0.03 0.01 -
relative CIELAB lab*	
lab*lab	0.0 0.0 0.0
lab*tch	0.0 0.0 0.0
lab*nch	1.0 0.0 0.0
relative Natural Colour (NC)	
lab*lrj	0.0 0.0 0.0
lab*lr	0.0 0.0 0.0
lab*lrce	0.0 0.0 0.0
lab*lrnce	1.0 0.0 -

 $n^* = 0,00$

relative Inform. Technology (IT)	
olv3*	0.75 0.0 0.136 (1.0)
cmyn3*	0.0 0.75 0.614 (0.0)
olv4*	1.0 0.25 0.396 (1.0)
cmyn4*	0.0 0.75 0.614 (0.0)
standard and adapted CIELAB	
LAB*LAB	65.11 61.12 31.37
LAB*Lab	65.11 61.12 31.37
LAB*TCa	62.5 68.7 27.17
relative CIELAB lab*	
lab*lab	0.682 0.667 0.342
lab*tch	0.625 0.75 0.075
lab*nch	0.0 0.75 0.075
relative Natural Colour (NC)	
lab*lrj	0.682 0.75 0.0
lab*lr	0.625 0.75 0.0
lab*lrce	0.625 0.75 0.0
lab*lrnce	0.0 0.75 0.075

relative Inform. Technology (IT)	
olv3*	0.5 0.0 0.086 (1.0)
cmyn3*	0.5 1.0 0.964 (0.0)
olv4*	1.0 0.25 0.396 (1.0)
cmyn4*	0.0 0.75 0.614 (0.0)
standard and adapted CIELAB	
LAB*LAB	55.02 81.49 41.83
LAB*Lab	55.02 81.49 41.83
LAB*TCa	50.0 91.6 27.17
relative CIELAB lab*	
lab*lab	0.577 0.889

Input: Colorimetric Offset Reflective System ORS18

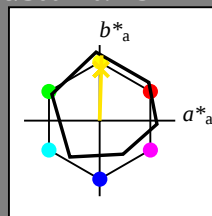
for hue $h^* = lab \cdot h = 88/360 = 0.245$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue J

LCH*Ma: 86 86 88

olv*Ma: 1.0 0.9 0.0

triangle lightness



ORS18; adapted (a) CIELAB data					
	$L^* = L^*_{a,b}$	$a^*_{a,b}$	$b^*_{a,b}$	$C^*_{a,b}$	$h^*_{a,b}$
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

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

Output: Colorimetric Television Luminous System TLS00

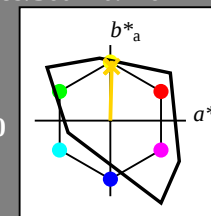
for hue $h^* = lab \cdot h = 89/360 = 0.246$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue J

LCH*Ma: 87 79 89

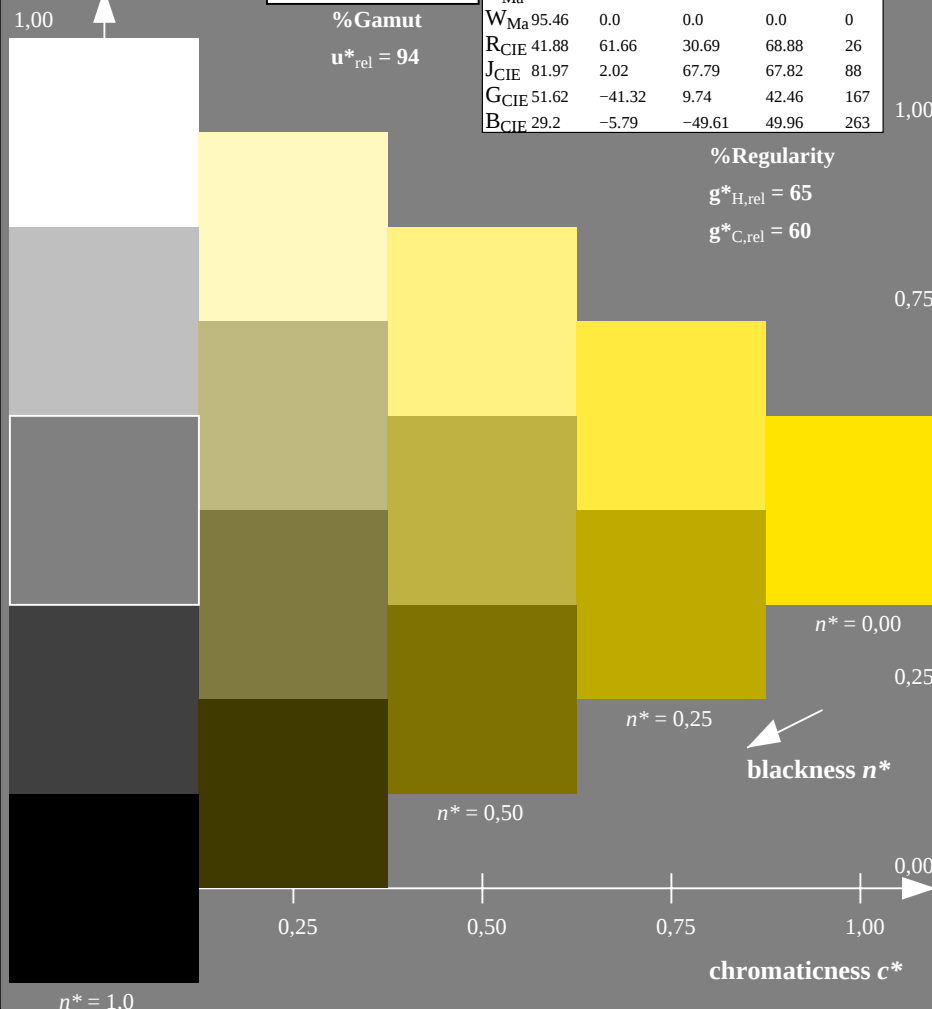
olv*Ma: 1.0 0.83 0.0

triangle lightness



TLS00; adapted (a) CIELAB data					
	$L^* = L^*_{a,b}$	$a^*_{a,b}$	$b^*_{a,b}$	$C^*_{a,b}$	$h^*_{a,b}$
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

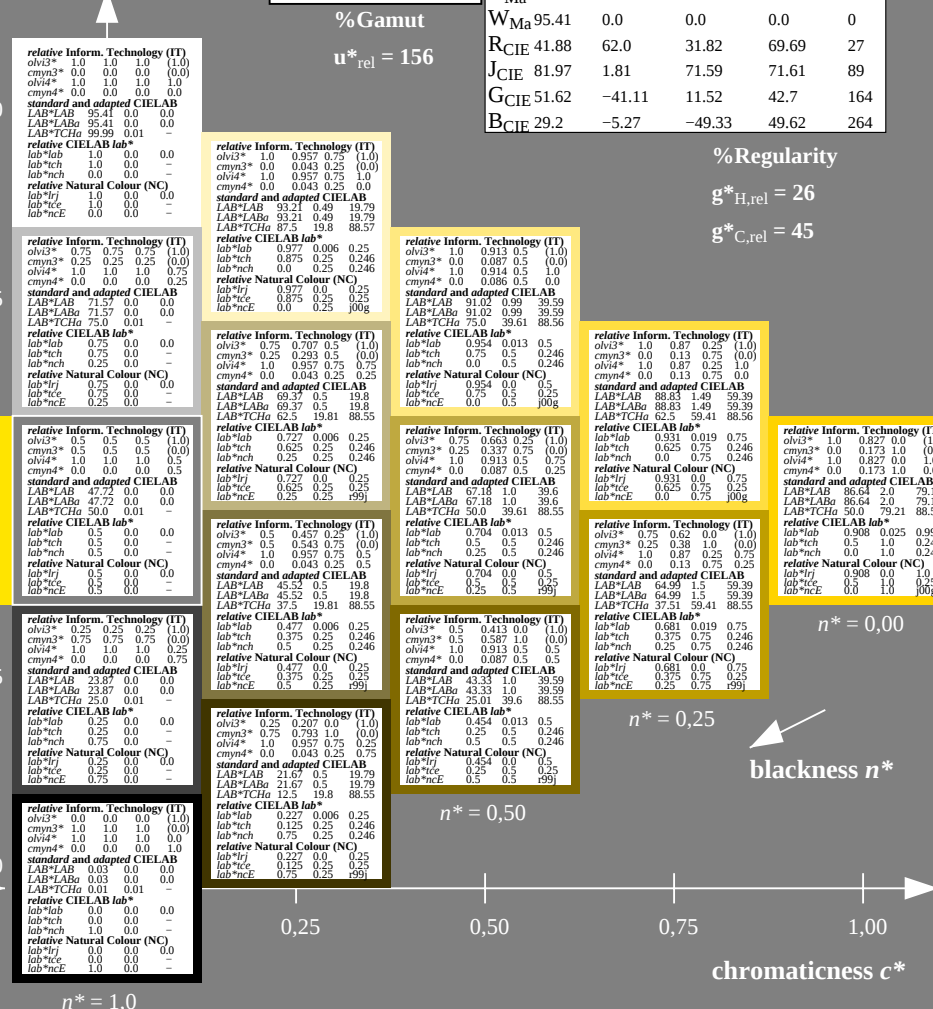
%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$ 

PE400-7, 5 step scales for constant CIELAB hue 88/360 = 0.245 (left)

BAM-test chart PE40; Colorimetric systems ORS18 & ORS18

D50: 5 step colour scales and coordinate data for 10 hues



5 step scales for constant CIELAB hue 89/360 = 0.246 (right)

input: olv* setrgbcolor

output: Startup (S) data dependend

Input: Colorimetric Offset Reflective System ORS18

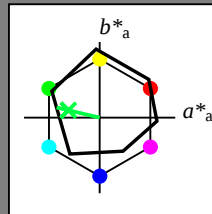
for hue $h^* = lab \cdot h = 167/360 = 0.463$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue G

LCH*Ma: 52 59 167

olv*Ma: 0.0 1.0 0.26

triangle lightness



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

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

1,00

0,75

 $n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ chromaticness c^*

PE40-7, 5 step scales for constant CIELAB hue 167/360 = 0.463 (left)

BAM-test chart PE40; Colorimetric systems ORS18 & ORS18

D50: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Television Luminous System TLS00

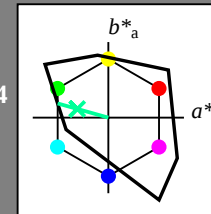
for hue $h^* = lab \cdot h = 164/360 = 0.457$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue G

LCH*Ma: 84 70 164

olv*Ma: 0.0 1.0 0.6

triangle lightness



%Gamut

 $u^*_{rel} = 156$

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

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

1,00

0,75

 $n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ chromaticness c^*

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

input: $olv^* \cdot setrgbcolor$

output: Startup (S) data dependend

Input: Colorimetric Offset Reflective System ORS18

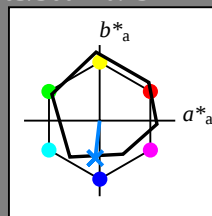
for hue $h^* = lab \cdot h = 263/360 = 0.731$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue B

LCH*Ma: 42 47 263

olv*Ma: 0.0 0.52 1.0

triangle lightness



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

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

1,00

0,75

blackness n^* chromaticness c^*

Output: Colorimetric Television Luminous System TLS00

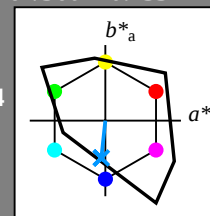
for hue $h^* = lab \cdot h = 264/360 = 0.733$ $lab \cdot tch$ and $lab \cdot nch$

D50: hue B

LCH*Ma: 61 54 264

olv*Ma: 0.0 0.59 1.0

triangle lightness



%Gamut

 $u^*_{rel} = 156$

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

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$ blackness n^* chromaticness c^*

PE40-7, 5 step scales for constant CIELAB hue 263/360 = 0.731 (left)



BAM-test chart PE40; Colorimetric systems ORS18 & ORS18

D50: 5 step colour scales and coordinate data for 10 hues

5 step scales for constant CIELAB hue 264/360 = 0.733 (right)

input: $olv^* \cdot setrgbcolor$

output: Startup (S) data dependend