

Input: Colorimetric Offset Reflective System ORS18

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

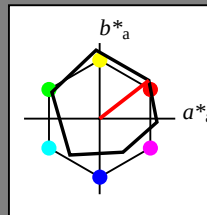
lab^*tch and lab^*nch

D50: hue O

LCH*Ma: 48 82 38

olv*Ma: 1.0 0.0 0.0

triangle lightness



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 $h^* = lab^*h = 38/360 = 0.107$

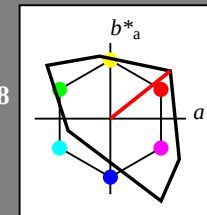
lab^*tch and lab^*nch

D50: hue O

LCH*Ma: 54 101 38

olv*Ma: 1.0 0.0 0.0

triangle lightness

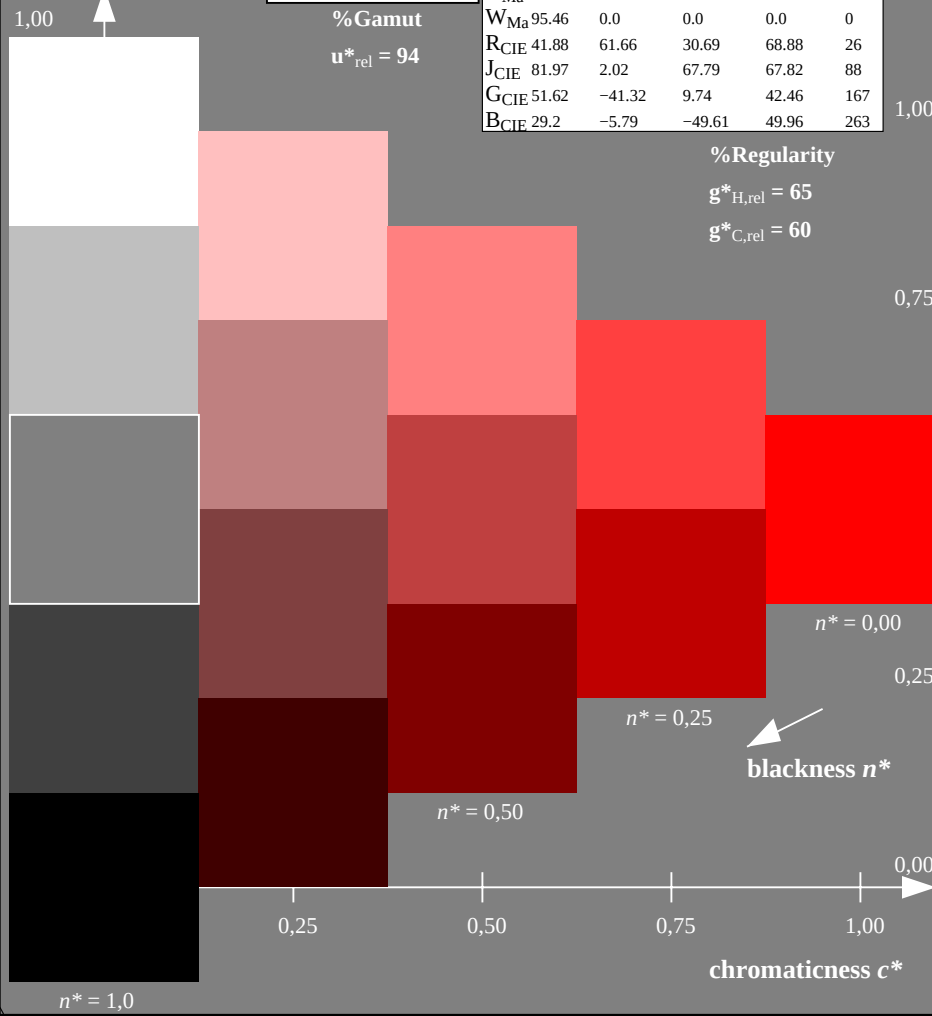


TLS00; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	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

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

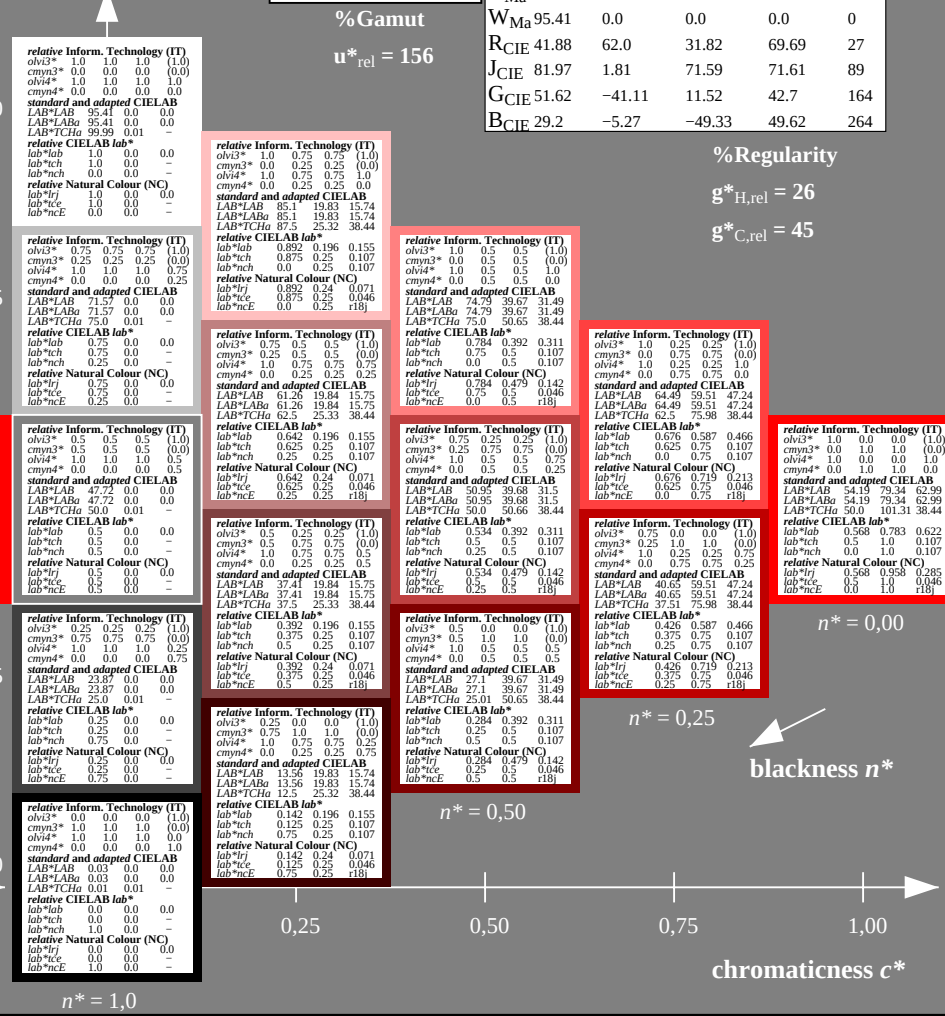
$g^*_{C,rel} = 45$



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

BAM-test chart PE40; Colorimetric systems ORS18 & TLS00

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



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

input: $olv^* setrgbcolor$

output: no change compared to input

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
olv*Ma: 1.0 1.0 0.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 94$

%Regularity

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

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

0,75

0,50

0,25

0,00

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

PE400-7, 5 step scales for constant CIELAB hue 93/360 = 0.258 (left)

BAM-test chart PE40; Colorimetric systems ORS18 & TLS00

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

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

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

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

0,75

0,50

0,25

0,00

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

PE400-7, 5 step scales for constant CIELAB hue 93/360 = 0.258 (left)

BAM-test chart PE40; Colorimetric systems ORS18 & TLS00

D50: 5 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

1,00

%Gamut

$u^*_{rel} = 156$

%Regularity

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

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

0,75

0,50

0,25

0,00

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

PE400-7, 5 step scales for constant CIELAB hue 100/360 = 0.277 (right)

BAM-test chart PE40; Colorimetric systems ORS18 & TLS00

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

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

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

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

0,75

0,50

0,25

0,00

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

PE400-7, 5 step scales for constant CIELAB hue 100/360 = 0.277 (right)

BAM-test chart PE40; Colorimetric systems ORS18 & TLS00

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

input: $olv^* setrgbcolor$

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

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

$lab \cdot tch$ and $lab \cdot nch$

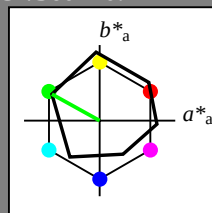
D50: hue L

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)					
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*TCBa	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	-		

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 140/360 = 0.389$

$lab \cdot tch$ and $lab \cdot nch$

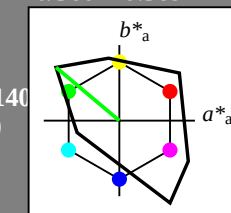
D50: hue L

LCH*Ma: 83 109 140

olv*Ma: 0.0 1.0 0.0

triangle lightness

1,00



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

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

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

0,75

relative Inform. Technology (IT)					
olvi3*	0.75	0.75	0.75	(1.0)	
cmyn3*	0.25	0.25	0.25	(0.0)	
olvi4*	1.0	1.0	1.0	0.75	
cmyn4*	0.0	0.0	0.0	0.25	
standard and adapted CIELAB					
LAB*LAB	71.57	0.0	0.0		
LAB*LaBa	71.57	0.0	0.0		
LAB*TCBa	75.0	0.01	-		
relative CIELAB lab*					
lab*lab	0.75	0.0	0.0		
lab*tch	0.75	0.0	-		
lab*nch	0.25	0.0	-		
relative Natural Colour (NC)					
lab*trj	0.75	0.0	0.0		
lab*tce	0.25	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	0.0	0.5	
standard and adapted CIELAB					
LAB*LAB	47.72	0.0	0.0		
LAB*LaBa	47.72	0.0	0.0		
LAB*TCBa	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*trj	0.5	0.0	0.0		
lab*tce	0.5	0.0	-		
lab*nce	0.0	0.0	-		

relative Inform. Technology (IT)					
olvi3*	0.25	0.25	0.25	(1.0)	
cmyn3*	0.75	0.75	0.75	(0.0)	
olvi4*	1.0	1.0	1.0	0.25	
cmyn4*	0.0	0.0	0.0	0.75	
standard and adapted CIELAB					
LAB*LAB	23.87	0.0	0.0		
LAB*LaBa	23.87	0.0	0.0		
LAB*TCBa	25.0	0.01	-		
relative CIELAB lab*					
lab*lab	0.25	0.0	0.0		
lab*tch	0.25	0.0	-		
lab*nch	0.75	0.0	-		
relative Natural Colour (NC)					
lab*trj	0.25	0.0	0.0		
lab*tce	0.25	0.0	-		
lab*nce	0.75	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*TCBa	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*trj	0.0	0.0	0.0		
lab*tce	0.0	0.0	-		
lab*nce	1.0	0.0	-		

$n^* = 1,0$

5 step scales for constant CIELAB hue 140/360 = 0.389 (right)

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	0.0	0.5	
standard and adapted CIELAB					
LAB*LAB	68.41	-20.93	17.6		
LAB*LaBa	68.41	-20.93	17.6		
LAB*TCBa	62.5	27.35	139.94		
relative CIELAB lab*					
lab*lab	0.5	0.5	0.5		
lab*tch	0.5	0.5	0.5		
lab*nch	0.5	0.5	0.5		
relative Natural Colour (NC)					
lab*trj	0.5	0.5	0.5		
lab*tce	0.5	0.5	0.5		
lab*nce	0.5	0.5	0.5		

relative Inform. Technology (IT)					
olvi3*	0.25	0.25	0.25	(1.0)	
cmyn3*	0.75	0.75	0.75	(0.0)	
olvi4*	1.0	1.0	1.0	0.25	
cmyn4*	0.0	0.0	0.0	0.75	
standard and adapted CIELAB					
LAB*LAB	65.26	-41.86	35.21		
LAB*LaBa	65.26	-41.86	35.21		
LAB*TCBa	50.0	54.7	139.94		
relative CIELAB lab*					
lab*lab	0.25	0.25	0.25		
lab*tch	0.25	0.25	0.25		
lab*nch	0.75	0.75	0.75		
relative Natural Colour (NC)					
lab*trj	0.25	0.25	0.25		
lab*tce	0.25	0.25	0.25		
lab*nce	0.75	0.75	0.75		

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	44.56	-20.93	17.6		
LAB*LaBa	44.56	-20.93	17.6		
LAB*TCBa	37.5	27.35	139.94		
relative CIELAB lab*					
lab*lab	0.0	0.0	0.0		
lab*tch	0.0	0.0	0.0		
lab*nch	1.0	1.0	1.0		
relative Natural Colour (NC)					
lab*trj	0.0	0.0	0.0		
lab*tce	0.0	0.0	0.0		
lab*nce	1.0	1.0	1.0		

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	0.0	0.0	0.0		
LAB*LaBa	0.0	0.0	0.0		
LAB*TCBa	0.0	0.0	0.0		
relative CIELAB lab*					
lab*lab	0.0	0.0	0.0		
lab*tch	0.0	0.0	0.0		
lab*nch	1.0	1.0	1.0		
relative Natural Colour (NC)					
lab*trj	0.0	0.0	0.0		
lab*tce	0.0	0.0	0.0		
lab*nce	1.0	1.0	1.0		

input: olv* setrgbcolor

output: no change compared to input

PE400-7, 5 step scales for constant CIELAB hue 151/360 = 0.42 (left)

BAM-test chart PE40; Colorimetric systems ORS18 & TLS00

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

BAM material: code=rha4ta

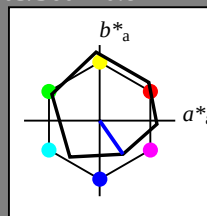
Input: Colorimetric Offset Reflective System ORS18

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					
	$L^*=L^*_a$	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

0,25

0,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

PE400-7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)



BAM-test chart PE40; Colorimetric systems ORS18 & TLS00

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

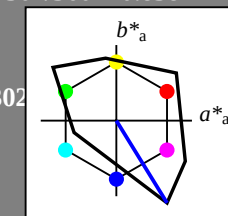
Output: Colorimetric Television Luminous System TLS00

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					
	$L^*=L^*_a$	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

0,25

0,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

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

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

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

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

lab^*tch and lab^*nch

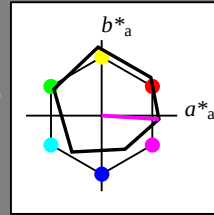
D50: hue M

LCH*Ma: 50 76 356

olv*Ma: 1.0 0.0 1.0

triangle lightness

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

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

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

1,00

Output: Colorimetric Television Luminous System TLS00

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

lab^*tch and lab^*nch

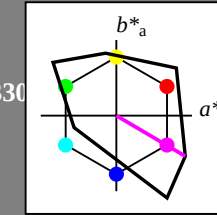
D50: hue M

LCH*Ma: 59 106 330

olv*Ma: 1.0 0.0 1.0

triangle lightness

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

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

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

1,00

PE400-7, 5 step scales for constant CIELAB hue 356/360 = 0.99 (left)



BAM-test chart PE40; Colorimetric systems ORS18 & TLS00

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

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

input: $olv^* setrgbcolor$

output: *no change compared to input*



Input: Colorimetric Offset Reflective System ORS18

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

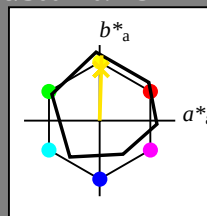
lab^*tch and lab^*nch

D50: hue J

LCH*Ma: 86 86 88

olv*Ma: 1.0 0.9 0.0

triangle lightness



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^*

Output: Colorimetric Television Luminous System TLS00

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

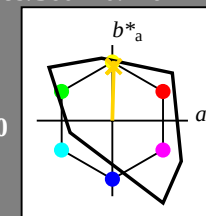
lab^*tch and lab^*nch

D50: hue J

LCH*Ma: 87 79 89

olv*Ma: 1.0 0.83 0.0

triangle lightness



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

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

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



BAM-test chart PE40; Colorimetric systems ORS18 & TLS00

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

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

input: $olv^* setrgb color$

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

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

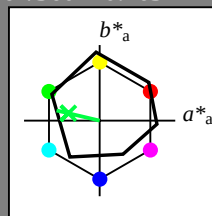
$lab \cdot tch$ and $lab \cdot nch$

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

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

Output: Colorimetric Television Luminous System TLS00

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

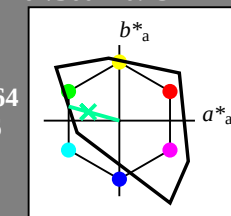
$lab \cdot tch$ and $lab \cdot nch$

D50: hue G

LCH*Ma: 84 70 164

olv*Ma: 0.0 1.0 0.6

triangle lightness



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

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

PE400-7, 5 step scales for constant CIELAB hue 167/360 = 0.463 (left)



BAM-test chart PE40; Colorimetric systems ORS18 & TLS00

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

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

input: $olv^* setrgbcolor$

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 263/360 = 0.731$

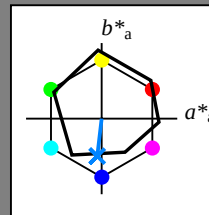
lab^*tch and lab^*nch

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^*

PE400-7, 5 step scales for constant CIELAB hue 263/360 = 0.731 (left)



BAM-test chart PE40; Colorimetric systems ORS18 & TLS00

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

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 264/360 = 0.733$

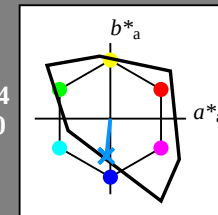
lab^*tch and lab^*nch

D50: hue B

LCH*Ma: 61 54 264

olv*Ma: 0.0 0.59 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

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

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

blackness n^*

chromaticness c^*

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

input: $olv^*setrgbcolor$

output: no change compared to input