

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 40/360 = 0.111$ $lab \cdot tch$ and $lab \cdot nch$

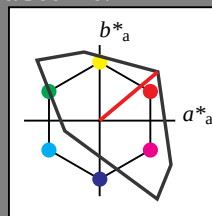
D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 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}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	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

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

Output: Colorimetric Offset Reflective System ORS18

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

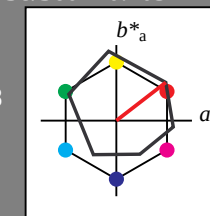
D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness

1,00



%Gamut

 $u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
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	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

relative Inform. Technology (IT)	
olvi3*	1.0 1.0 1.0 (1.0)
olvi4*	0.0 0.0 0.0 (0.0)
olvi5*	1.0 1.0 1.0 (1.0)
olvi6*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	95.41 -0.98 4.75
LAB*LABa	95.41 0.0 0.0
LAB*LABb	95.41 0.0 0.0
LAB*LABc	95.41 0.0 0.0
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 0.0
relative Natural Colour (NC)	
lab*trj	1.0 0.0 0.0
lab*trc	1.0 0.0 0.0
lab*trc	1.0 0.0 0.0
lab*trc	1.0 0.0 0.0

relative Inform. Technology (IT)	
olvi3*	0.75 0.75 0.75 (1.0)
olvi4*	0.25 0.25 0.25 (0.0)
olvi5*	1.0 1.0 1.0 (1.0)
olvi6*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	76.06 -0.61 3.44
LAB*LABa	76.06 0.0 0.0
LAB*LABb	76.06 0.0 0.0
LAB*LABc	76.06 0.0 0.0
relative CIELAB lab*	
lab*lab	0.75 0.75 0.75 (1.0)
lab*tch	0.75 0.75 0.75 (1.0)
lab*nch	0.25 0.25 0.25 (0.0)
relative Natural Colour (NC)	
lab*trj	0.75 0.75 0.75 (1.0)
lab*trc	0.25 0.25 0.25 (0.0)
lab*trc	0.25 0.25 0.25 (0.0)
lab*trc	0.25 0.25 0.25 (0.0)

relative Inform. Technology (IT)	
olvi3*	0.5 0.5 0.5 (1.0)
olvi4*	0.25 0.25 0.25 (0.0)
olvi5*	1.0 1.0 1.0 (1.0)
olvi6*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	56.71 0.24 2.14
LAB*LABa	56.71 0.0 0.0
LAB*LABb	56.71 0.0 0.0
LAB*LABc	56.71 0.0 0.0
relative CIELAB lab*	
lab*lab	0.5 0.5 0.5 (1.0)
lab*tch	0.5 0.5 0.5 (1.0)
lab*nch	0.25 0.25 0.25 (0.0)
relative Natural Colour (NC)	
lab*trj	0.5 0.5 0.5 (1.0)
lab*trc	0.25 0.25 0.25 (0.0)
lab*trc	0.25 0.25 0.25 (0.0)
lab*trc	0.25 0.25 0.25 (0.0)

relative Inform. Technology (IT)	
olvi3*	0.25 0.25 0.25 (1.0)
olvi4*	0.5 0.5 0.5 (1.0)
olvi5*	1.0 1.0 1.0 (1.0)
olvi6*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	44.84 16.33 13.97
LAB*LABa	44.84 16.33 13.97
LAB*LABb	44.84 16.33 13.97
LAB*LABc	44.84 16.33 13.97
relative CIELAB lab*	
lab*lab	0.25 0.25 0.25 (1.0)
lab*tch	0.25 0.25 0.25 (1.0)
lab*nch	0.5 0.5 0.5 (1.0)
relative Natural Colour (NC)	
lab*trj	0.25 0.25 0.25 (1.0)
lab*trc	0.5 0.5 0.5 (1.0)
lab*trc	0.5 0.5 0.5 (1.0)
lab*trc	0.5 0.5 0.5 (1.0)

relative Inform. Technology (IT)	
olvi3*	0.125 0.125 0.125 (1.0)
olvi4*	0.25 0.25 0.25 (1.0)
olvi5*	1.0 1.0 1.0 (1.0)
olvi6*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	37.36 0.13 0.83
LAB*LABa	37.36 0.13 0.83
LAB*LABb	37.36 0.13 0.83
LAB*LABc	37.36 0.13 0.83
relative CIELAB lab*	
lab*lab	0.125 0.125 0.125 (1.0)
lab*tch	0.125 0.125 0.125 (1.0)
lab*nch	0.25 0.25 0.25 (1.0)
relative Natural Colour (NC)	
lab*trj	0.125 0.125 0.125 (1.0)
lab*trc	0.25 0.25 0.25 (1.0)
lab*trc	0.25 0.25 0.25 (1.0)
lab*trc	0.25 0.25 0.25 (1.0)

relative Inform. Technology (IT)	
olvi3*	0.0625 0.0625 0.0625 (1.0)
olvi4*	0.125 0.125 0.125 (1.0)
olvi5*	1.0 1.0 1.0 (1.0)
olvi6*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	25.16 0.07 12.66
LAB*LABa	25.16 0.07 12.66
LAB*LABb	25.16 0.07 12.66
LAB*LABc	25.16 0.07 12.66
relative CIELAB lab*	
lab*lab	0.0625 0.0625 0.0625 (1.0)
lab*tch	0.0625 0.0625 0.0625 (1.0)
lab*nch	0.125 0.125 0.125 (1.0)
relative Natural Colour (NC)	
lab*trj	0.0625 0.0625 0.0625 (1.0)
lab*trc	0.125 0.125 0.125 (1.0)
lab*trc	0.125 0.125 0.125 (1.0)
lab*trc	0.125 0.125 0.125 (1.0)

relative Inform. Technology (IT)	
olvi3*	0.03125 0.03125 0.03125 (1.0)
olvi4*	0.0625 0.0625 0.0625 (1.0)
olvi5*	1.0 1.0 1.0 (1.0)
olvi6*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	18.02 0.01 0.47
LAB*LABa	18.02 0.01 0.47
LAB*LABb	18.02 0.01 0.47
LAB*LABc	18.02 0.01 0.47
relative CIELAB lab*	
lab*lab	0.03125 0.03125 0.03125 (1.0)
lab*tch	0.03125 0.03125 0.03125 (1.0)
lab*nch	0.0625 0.0625 0.0625 (1.0)
relative Natural Colour (NC)	
lab*trj	0.03125 0.03125 0.03125 (1.0)
lab*trc	0.0625 0.0625 0.0625 (1.0)
lab*trc	0.0625 0.0625 0.0625 (1.0)
lab*trc	0.0625 0.0625 0.0625 (1.0)

relative Inform. Technology (IT)	
olvi3*	0.015625 0.015625 0.015625 (1.0)
olvi4*	0.03125 0.03125 0.03125 (1.0)
olvi5*	1.0 1.0 1.0 (1.0)
olvi6*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	10.01 0.00 0.24
LAB*LABa	10.01 0.00 0.24
LAB*LABb	10.01 0.00 0.24
LAB*LABc	10.01 0.00 0.24
relative CIELAB lab*	
lab*lab	0.015625 0.015625 0.015625 (1.0)
lab*tch	0.015625 0.015625 0.015625 (1.0)
lab*nch	0.03125 0.03125 0.03125 (1.0)
relative Natural Colour (NC)	
lab*trj	0.015625 0.015625 0.015625 (1.0)
lab*trc	0.03125 0.03125 0.03125 (1.0)
lab*trc	0.03125 0.03125 0.03125 (1.0)
lab*trc	0.03125 0.03125 0.03125 (1.0)

relative Inform. Technology (IT)	
olvi3*	0.0078125 0.0078125 0.0078125 (1.0)
olvi4*	0.015625 0.015625 0.015625 (1.0)
olvi5*	1.0 1.0 1.0 (1.0)
olvi6*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	5.00 0.00 0.12
LAB*LABa	5.00 0.00 0.12
LAB*LABb	5.00 0.00 0.12
LAB*LABc	5.00 0.00 0.12
relative CIELAB lab*	
lab*lab	0.0078125 0.0078125 0.0078125 (1.0)
lab*tch	0.0078125 0.0078125 0.0078125 (1.0)
lab*nch	0.015625 0.015625 0.015625 (1.0)
relative Natural Colour (NC)	
lab*trj	0.0078125 0.0078125 0.0078125 (1.0)
lab*trc	0.015625 0.015625 0.015625 (1.0)
lab*trc	0.015625 0.015625 0.015625 (1.0)
lab*trc	0.015625 0.015625 0.015625 (1.0)

relative Inform. Technology (IT)	
olvi3*	0.00390625 0.00390625 0.00390625 (1.0)
olvi4*	0.0078125 0.0078125 0.0078125 (1.0)
olvi5*	1.0 1.0 1.0 (1.0)
olvi6*	0.0 0.0 0.0 (0.0)
standard and adapted CIELAB	
LAB*LAB	2.50 0.00 0.06
LAB*LABa	2.50 0.00 0.06
LAB*LABb	2.50 0.00 0.06
LAB*LABc	2.50 0.00 0.06
relative CIELAB lab*	
lab*lab	0.00390625 0.00390625 0.00390625 (1.0)
lab*tch	0.00390625 0.00390625 0.00390625 (1.0)
lab*nch	0.0078125 0.0078125 0.0078125 (1.0)
relative Natural Colour (NC)	
lab*trj	0.00390625 0.00390625 0.00390625 (1.0)
lab*trc	0.0078125 0.0078125 0.0078125 (1.0)
lab*trc	0.0078125 0.0078125 0.0078125 (1.0)
lab*trc	0.0078125 0.0078125 0.0078125 (1.0)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

OE450-7, 5 step scales for constant CIELAB hue 40/360 = 0.111 (left)

BAM-test chart OE45; Colorimetric systems ORS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

input: $cmv0^* setcmykcolor$

output: Startup (S) data dependend

Input: Colorimetric Television Luminous System TLS00

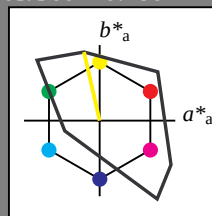
for hue $h^* = lab \cdot h = 103/360 = 0.286$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness

 $u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	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

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

Output: Colorimetric Offset Reflective System ORS18

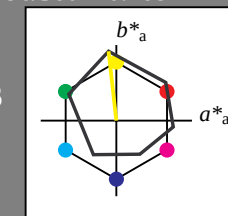
for hue $h^* = lab \cdot h = 96/360 = 0.268$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

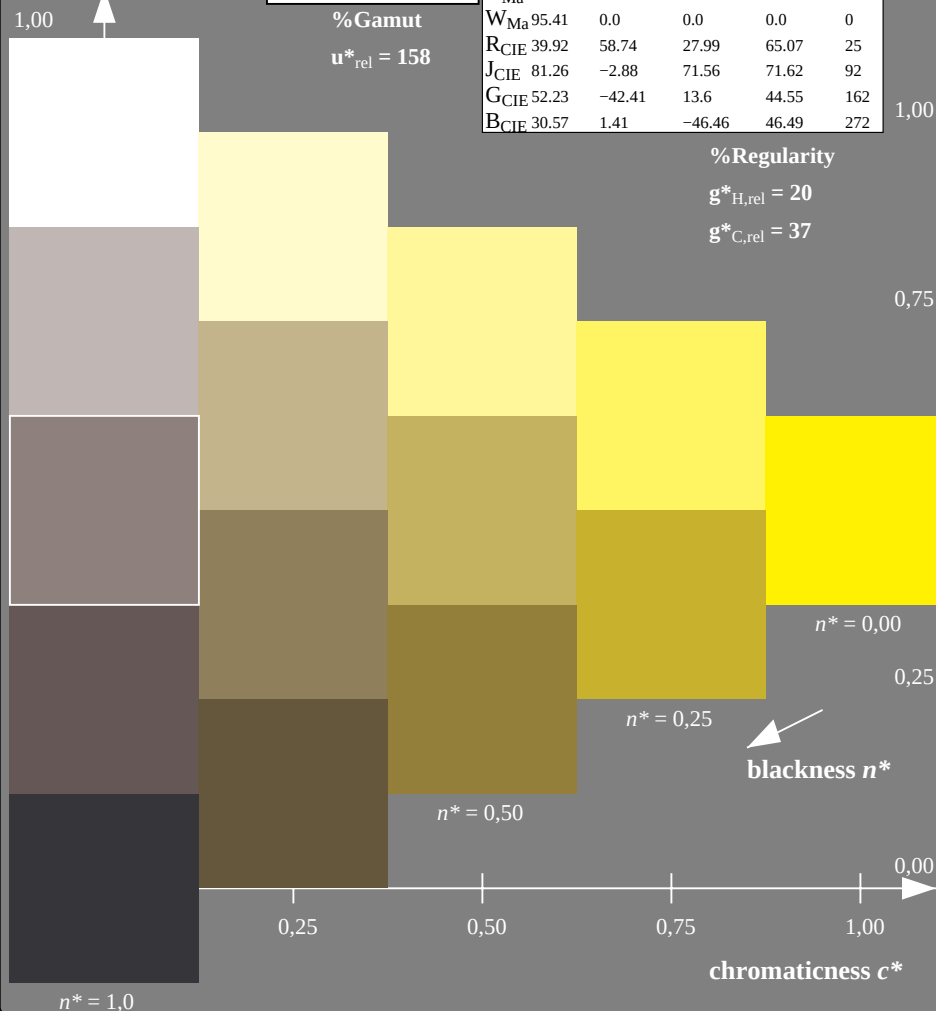
triangle lightness

 $u^*_{rel} = 93$

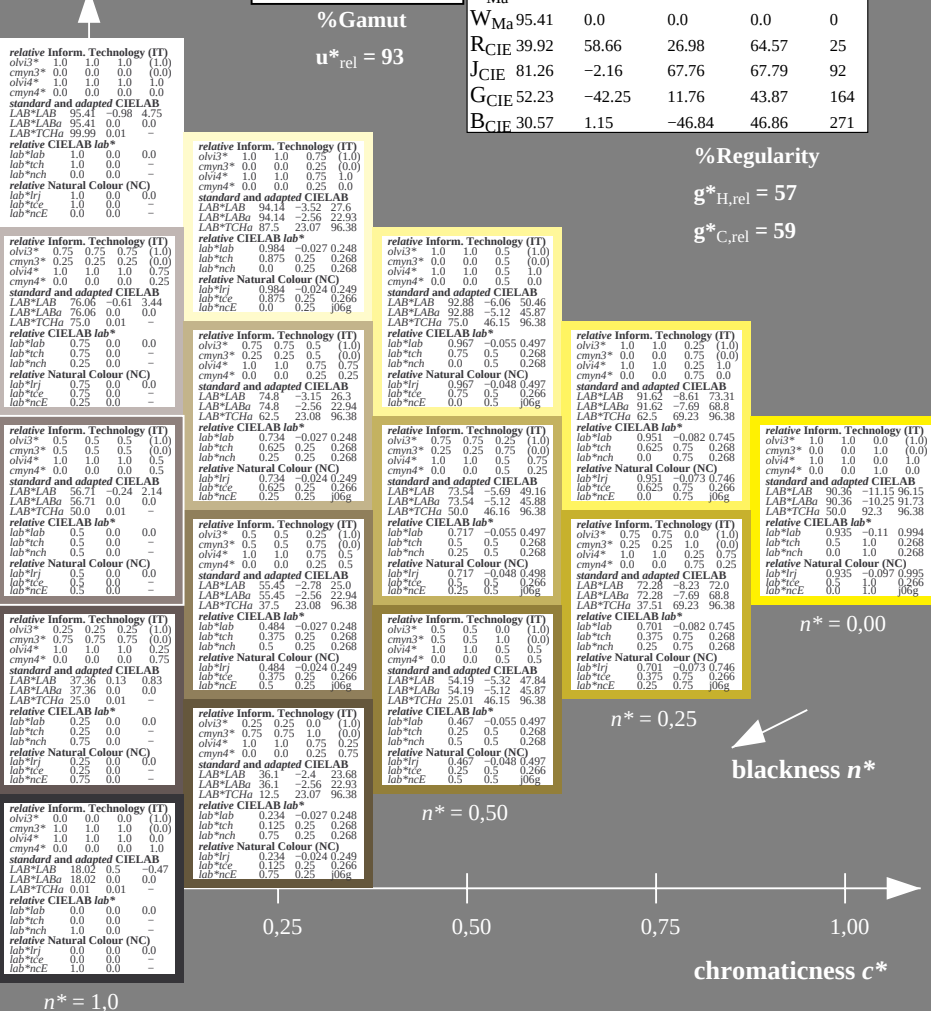
ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
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	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$ 

OE450-7, 5 step scales for constant CIELAB hue 103/360 = 0.286 (left)



5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

BAM-test chart OE45; Colorimetric systems ORS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

input: $cmy0^* \text{ setcmykcolor}$

output: Startup (S) data dependend

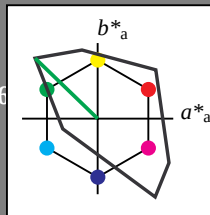
Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 136/360 = 0.378$

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

D65: hue L
LCH*Ma: 84 115 136
olv*Ma: 0.0 1.0 0.0

triangle lightness



$u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	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

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

OE450-7, 5 step scales for constant CIELAB hue 136/360 = 0.378 (left)



BAM-test chart OE45; Colorimetric systems ORS18 & ORS18
D65: 5 step colour scales and coordinate data for 10 hues

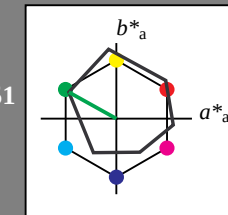
Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 151/360 = 0.419$

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

D65: hue L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0

triangle lightness



$u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
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	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

input: $cmY0^* \text{ set } cmykcolor$
output: Startup (S) data dependend

Input: Colorimetric Television Luminous System TLS00

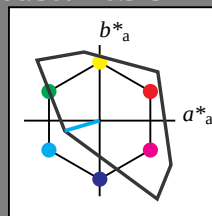
for hue $h^* = lab \cdot h = 196/360 = 0.545$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness

 $u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	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

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

1,00

0,75

blackness n^* $n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 1,0$ chromaticness c^*

OE450-7, 5 step scales for constant CIELAB hue 196/360 = 0.545 (left)



BAM-test chart OE45; Colorimetric systems ORS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Offset Reflective System ORS18

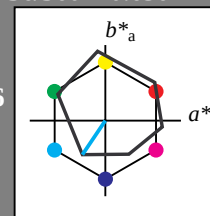
for hue $h^* = lab \cdot h = 236/360 = 0.656$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness

 $u^*_{rel} = 93$

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 -0.98 4.75
LAB*LABa 95.41 0.0 0.0
LAB*LABb 95.41 0.0 0.0
LAB*TCha 95.41 0.0 0.0
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 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*LABb 76.06 0.0 0.0
LAB*TCha 76.06 0.0 0.0
relative CIELAB lab*
lab*lab 0.75 0.75 0.75 (1.0)
lab*tch 0.75 0.75 0.75 (1.0)
lab*nch 0.25 0.25 0.25 (0.0)
relative Natural Colour (NC)
lab*trj 0.75 0.75 0.75 (1.0)
lab*tce 0.75 0.75 0.75 (1.0)
lab*nce 0.25 0.25 0.25 (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 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.24 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 56.71 0.0 0.0
LAB*TCha 56.71 0.0 0.0
relative CIELAB lab*
lab*lab 0.5 0.5 0.5 (1.0)
lab*tch 0.5 0.5 0.5 (1.0)
lab*nch 0.5 0.5 0.5 (1.0)
relative Natural Colour (NC)
lab*trj 0.5 0.5 0.5 (1.0)
lab*tce 0.5 0.5 0.5 (1.0)
lab*nce 0.5 0.5 0.5 (1.0)

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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.36 0.0 0.0
LAB*TCha 37.36 0.0 0.0
relative CIELAB lab*
lab*lab 0.25 0.25 0.25 (1.0)
lab*tch 0.25 0.25 0.25 (1.0)
lab*nch 0.75 0.75 0.75 (0.0)
relative Natural Colour (NC)
lab*trj 0.25 0.25 0.25 (1.0)
lab*tce 0.25 0.25 0.25 (1.0)
lab*nce 0.75 0.75 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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 -0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*TCha 18.02 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0 (1.0)
lab*tch 0.0 0.0 0.0 (1.0)
lab*nch 1.0 1.0 1.0 (0.0)
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0 (1.0)
lab*tce 0.0 0.0 0.0 (1.0)
lab*nce 1.0 1.0 1.0 (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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 -0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*TCha 18.02 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0 (1.0)
lab*tch 0.0 0.0 0.0 (1.0)
lab*nch 1.0 1.0 1.0 (0.0)
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0 (1.0)
lab*tce 0.0 0.0 0.0 (1.0)
lab*nce 1.0 1.0 1.0 (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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 -0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*TCha 18.02 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0 (1.0)
lab*tch 0.0 0.0 0.0 (1.0)
lab*nch 1.0 1.0 1.0 (0.0)
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0 (1.0)
lab*tce 0.0 0.0 0.0 (1.0)
lab*nce 1.0 1.0 1.0 (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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 -0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*TCha 18.02 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0 (1.0)
lab*tch 0.0 0.0 0.0 (1.0)
lab*nch 1.0 1.0 1.0 (0.0)
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0 (1.0)
lab*tce 0.0 0.0 0.0 (1.0)
lab*nce 1.0 1.0 1.0 (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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 -0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*TCha 18.02 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0 (1.0)
lab*tch 0.0 0.0 0.0 (1.0)
lab*nch 1.0 1.0 1.0 (0.0)
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0 (1.0)
lab*tce 0.0 0.0 0.0 (1.0)
lab*nce 1.0 1.0 1.0 (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 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.5 -0.47
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*TCha 18.02 0.0 0.0
relative CIELAB lab*
lab*lab 0.0 0.0 0.0 (1.0)
lab*tch 0.0 0.0 0.0 (1.0)
lab*nch 1.0 1.0 1.0 (0.0)
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0 (1.0)
lab*tce 0.0 0.0 0.0 (1.0)
lab*nce 1.0 1.0 1.0 (0.0)

 $n^* = 1,0$

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

input: $cmY0^* set cmykcolor$

output: Startup (S) data dependend

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
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	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

1,00

0,75

blackness n^* $n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ $n^* = 1,0$ chromaticness c^*

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 306/360 = 0.851$

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

D65: hue V
LCH*Ma: 30 129 306
olv*Ma: 0.0 0.0 1.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

0,50

$n^* = 0,50$

0,75

$n^* = 0,75$

1,00

$n^* = 1,0$

chromaticness c^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	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

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

0,50

$n^* = 0,50$

0,75

$n^* = 0,75$

1,00

$n^* = 1,0$

chromaticness c^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

Output: Colorimetric Offset Reflective System ORS18

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

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

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness

1,00

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

0,50

$n^* = 0,50$

0,75

$n^* = 0,75$

1,00

$n^* = 1,0$

chromaticness c^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
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	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

0,50

$n^* = 0,50$

0,75

$n^* = 0,75$

1,00

$n^* = 1,0$

chromaticness c^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

BAM-test chart OE45; Colorimetric systems ORS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

input: $cmY0^* \text{ set } cmYkcolor$

output: Startup (S) data dependent

Input: Colorimetric Television Luminous System TLS00

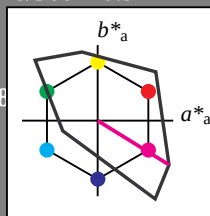
for hue $h^* = lab \cdot h = 328/360 = 0.912$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness

 $u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	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

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

1,00

0,75

 $n^* = 0,00$

0,25

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

Output: Colorimetric Offset Reflective System ORS18

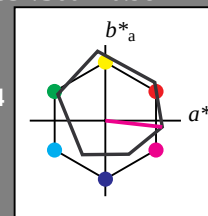
for hue $h^* = lab \cdot h = 354/360 = 0.982$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness

 $u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
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	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

1,00

0,75

 $n^* = 0,00$

0,25

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

OE450-7, 5 step scales for constant CIELAB hue 328/360 = 0.912 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

BAM-test chart OE45; Colorimetric systems ORS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

input: $cmY0^* set cmykcolor$

output: Startup (S) data dependend

Input: Colorimetric Television Luminous System TLS00

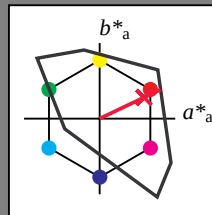
for hue $h^* = lab \cdot h = 25/360 = 0.071$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness



%Gamut

 $u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	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

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

Output: Colorimetric Offset Reflective System ORS18

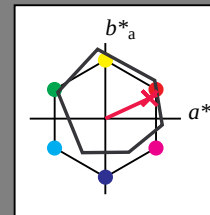
for hue $h^* = lab \cdot h = 25/360 = 0.069$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness



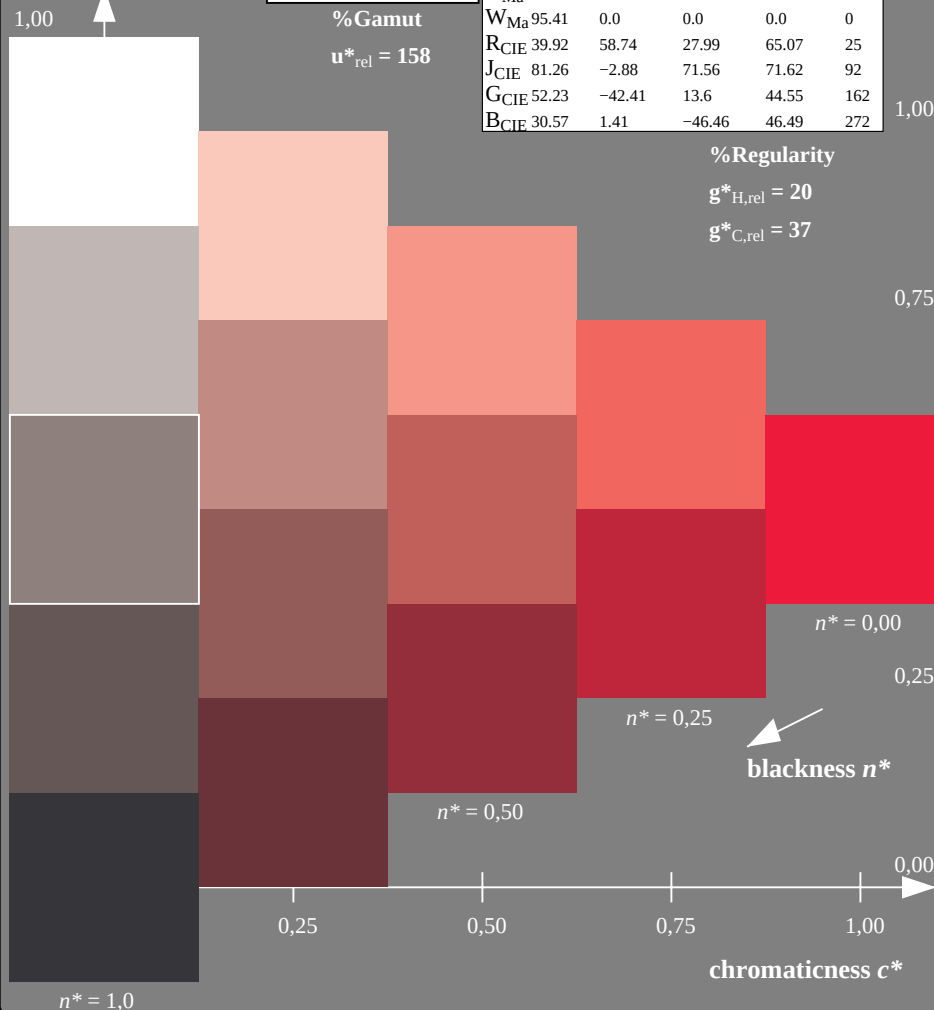
%Gamut

 $u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
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	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

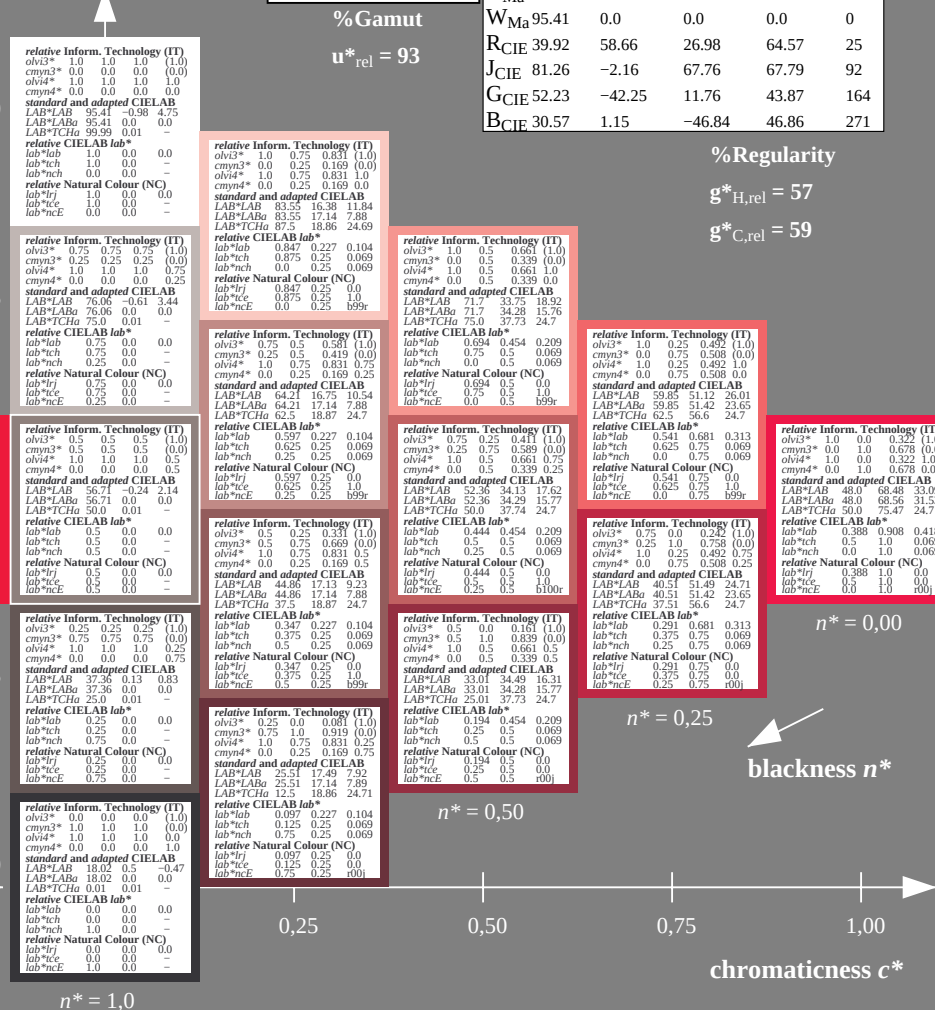
%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$ 

OE450-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

BAM-test chart OE45; Colorimetric systems ORS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues



5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

input: $cmy0^* \text{ setcmykcolor}$

output: Startup (S) data dependend

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 92/360 = 0.256$ $lab \cdot tch$ and $lab \cdot nch$

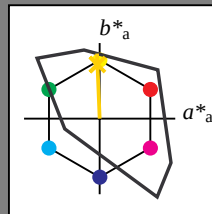
D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness

1,00



%Gamut

 $u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	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

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

1,00

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

relative Inform. Technology (IT)	0.013	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB	LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	95.99	0.01	0.0		
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	0.0		
relative Natural Colour (NC)	lab*trj	1.0	0.0	0.0	
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	0.0		
lab*nch	0.0				

Input: Colorimetric Television Luminous System TLS00

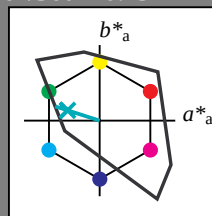
for hue $h^* = lab \cdot h = 162/360 = 0.451$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness

 $u^*_{rel} = 158$

TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	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

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

1,00

0,75

blackness n^* $n^* = 0,00$ $n^* = 0,25$ $n^* = 0,50$ chromaticness c^* $n^* = 1,0$

OE450-7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)



BAM-test chart OE45; Colorimetric systems ORS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Offset Reflective System ORS18

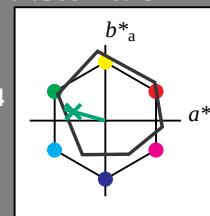
for hue $h^* = lab \cdot h = 164/360 = 0.457$ $lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness

 $u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
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	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

0,75

0,25

0,00

0,25

0,00

0,00

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

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

input: $cmY0^* \text{ set } cmykcolor$

output: Startup (S) data dependend

Input: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 272/360 = 0.755$

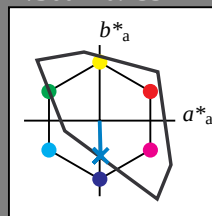
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness



TLS00; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	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

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

1,00

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 271/360 = 0.754$

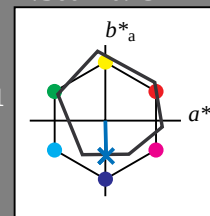
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 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	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
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	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,00$

$n^* = 0,25$

blackness n^*

chromaticness c^*

1,00

OE450-7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

BAM-test chart OE45; Colorimetric systems ORS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

input: $cmY0^* \text{ set } cmykcolor$

output: Startup (S) data dependend