

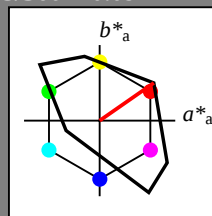
Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab \cdot h = 35/360 = 0.097$

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

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0

triangle lightness



$u^*_{rel} = 118$

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

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

blackness n^*

chromaticness c^*

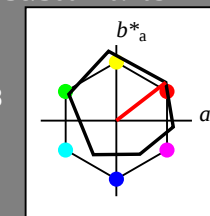
Output: Colorimetric Offset Reflective System ORS18

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



$u^*_{rel} = 93$

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

$n^* = 0,25$

blackness n^*

chromaticness c^*

NE460-7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

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

BAM-test chart NE46; Colorimetric systems TLS18 & ORS18

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

input: `olv* setrgbcolor`

output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$

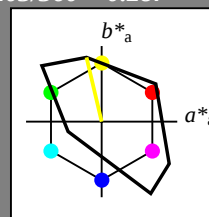
lab*tch* and *lab*nch

D65: hue Y

LCH*Ma: 93 87 103

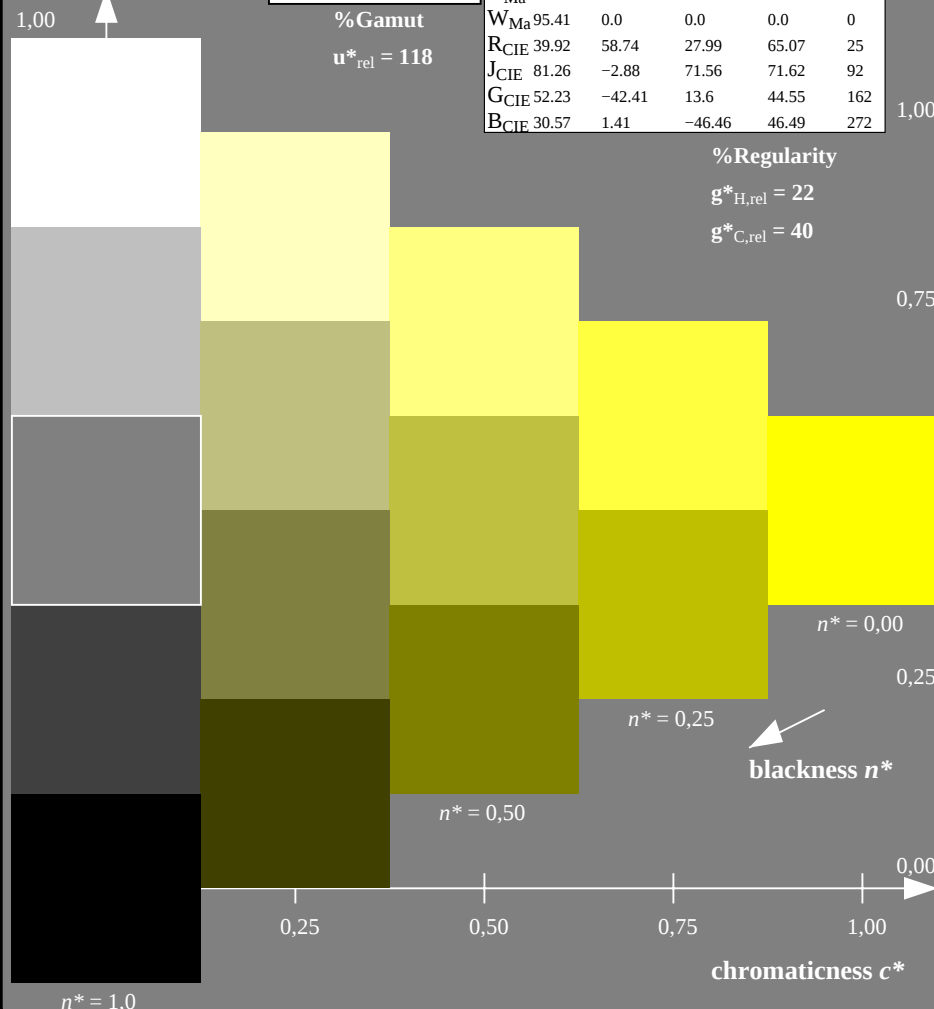
olv*Ma: 1.0 1.0 0.0

triangle lightness


$$\mathbf{u}_{\text{rel}}^* = 118$$

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

%Regularity

$$g^*_{H\text{ rel}} = 22$$
$$g^*_{C,rel} = 40$$
NE460-7, 5 step scales for constant CIELAB hue $103/360 = 0.287$ (left)

BAM-test chart NE46: Colorimetric systems TLS18 & ORS18

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

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$

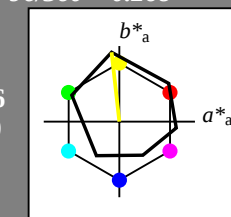
lab*tch and lab*nch

D65: hue Y

LCH*Ma: 90 92 96

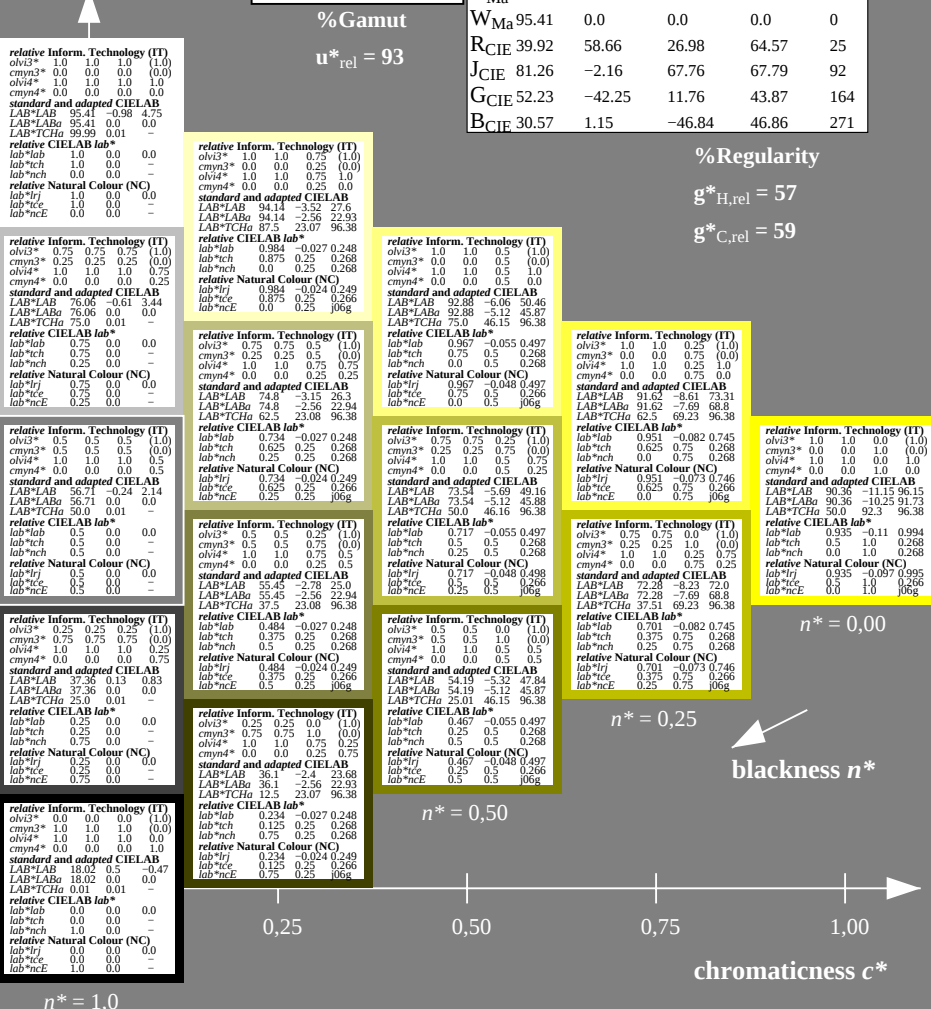
olv*Ma: 1.0 1.0 0.0

triangle lightness


$$\mathbf{u}_{\text{rel}}^* = 93$$

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	27

%Regularity

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


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

input: *olv** *setrgbcolor*

output: *no change compared to input*

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab \cdot h = 137/360 = 0.38$

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

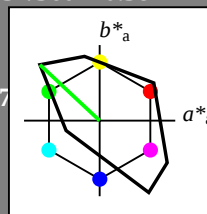
D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness

1,00



% Gamut

$u^*_{rel} = 118$

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

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

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	-0.98	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		
LAB*LABd	95.41	0.0	0.0		
LAB*LABe	95.41	0.0	0.0		
LAB*LABf	95.41	0.0	0.0		
LAB*LABg	95.41	0.0	0.0		
LAB*LABh	95.41	0.0	0.0		
LAB*LABi	95.41	0.0	0.0		
LAB*LABj	95.41	0.0	0.0		
LAB*LABk	95.41	0.0	0.0		
LAB*LABl	95.41	0.0	0.0		
LAB*LABm	95.41	0.0	0.0		
LAB*LABn	95.41	0.0	0.0		
LAB*LABo	95.41	0.0	0.0		
LAB*LABp	95.41	0.0	0.0		
LAB*LABq	95.41	0.0	0.0		
LAB*LABr	95.41	0.0	0.0		
LAB*LABs	95.41	0.0	0.0		
LAB*LABt	95.41	0.0	0.0		
LAB*LABu	95.41	0.0	0.0		
LAB*LABv	95.41	0.0	0.0		
LAB*LABw	95.41	0.0	0.0		
LAB*LABx	95.41	0.0	0.0		
LAB*LABy	95.41	0.0	0.0		
LAB*LABz	95.41	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*LABc	76.06	0.0	0.0		
LAB*LABd	76.06	0.0	0.0		
LAB*LABe	76.06	0.0	0.0		
LAB*LABf	76.06	0.0	0.0		
LAB*LABg	76.06	0.0	0.0		
LAB*LABh	76.06	0.0	0.0		
LAB*LABi	76.06	0.0	0.0		
LAB*LABj	76.06	0.0	0.0		
LAB*LABk	76.06	0.0	0.0		
LAB*LABl	76.06	0.0	0.0		
LAB*LABm	76.06	0.0	0.0		
LAB*LABn	76.06	0.0	0.0		
LAB*LABo	76.06	0.0	0.0		
LAB*LABp	76.06	0.0	0.0		
LAB*LABq	76.06	0.0	0.0		
LAB*LABr	76.06	0.0	0.0		
LAB*LABs	76.06	0.0	0.0		
LAB*LABt	76.06	0.0	0.0		
LAB*LABu	76.06	0.0	0.0		
LAB*LABv	76.06	0.0	0.0		
LAB*LABw	76.06	0.0	0.0		
LAB*LABx	76.06	0.0	0.0		
LAB*LABy	76.06	0.0	0.0		
LAB*LABz	76.06	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	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*LABc	56.71	0.0	0.0		
LAB*LABd	56.71	0.0	0.0		
LAB*LABe	56.71	0.0	0.0		
LAB*LABf	56.71	0.0	0.0		
LAB*LABg	56.71	0.0	0.0		
LAB*LABh	56.71	0.0	0.0		
LAB*LABi	56.71	0.0	0.0		
LAB*LABj	56.71	0.0	0.0		
LAB*LABk	56.71	0.0	0.0		
LAB*LABl	56.71	0.0	0.0		
LAB*LABm	56.71	0.0	0.0		
LAB*LABn	56.71	0.0	0.0		
LAB*LABo	56.71	0.0	0.0		
LAB*LABp	56.71	0.0	0.0		
LAB*LABq	56.71	0.0	0.0		
LAB*LABr	56.71	0.0	0.0		
LAB*LABs	56.71	0.0	0.0		
LAB*LABt	56.71	0.0	0.0		
LAB*LABu	56.71	0.0	0.0		
LAB*LABv	56.71	0.0	0.0		
LAB*LABw	56.71	0.0	0.0		
LAB*LABx	56.71	0.0	0.0		
LAB*LABy	56.71	0.0	0.0		
LAB*LABz	56.71	0.0	0.0		

relative Inform. Technology (IT)					
olvi3*	0.25	0.25	0.25	(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	45.38	-0.15	1.13		
LAB*LABa	45.38	0.0	0.0		
LAB*LABb	45.38	0.0	0.0		
LAB*LABc	45.38	0.0	0.0		
LAB*LABd	45.38	0.0	0.0		
LAB*LABe	45.38	0.0	0.0		
LAB*LABf	45.38	0.0	0.0		
LAB*LABg	45.38	0.0	0.0		
LAB*LABh	45.38	0.0	0.0		
LAB*LABi	45.38	0.0	0.0		
LAB*LABj	45.38	0.0	0.0		
LAB*LABk	45.38	0.0	0.0		
LAB*LABl	45.38	0.0	0.0		
LAB*LABm	45.38	0.0	0.0		
LAB*LABn	45.38	0.0	0.0		
LAB*LABo	45.38	0.0	0.0		
LAB*LABp	45.38	0.0	0.0		
LAB*LABq	45.38	0.0	0.0		
LAB*LABr	45.38	0.0	0.0		
LAB*LABs	45.38	0.0	0.0		
LAB*LABt	45.38	0.0	0.0		
LAB*LABu	45.38	0.0	0.0		
LAB*LABv	45.38	0.0	0.0		
LAB*LABw	45.38	0.0	0.0		
LAB*LABx	45.38	0.0	0.0		
LAB*LABy	45.38	0.0	0.0		
LAB*LABz	45.38	0.0	0.0		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	(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	37.36	0.13	0.83		
LAB*LABa	37.36	0.0	0.0		
LAB*LABb	37.36	0.0	0.0		
LAB*LABc	37.36	0.0	0.0		
LAB*LABd	37.36	0.0	0.0		
LAB*LABe	37.36	0.0	0.0		
LAB*LABf	37.36	0.0	0.0		
LAB*LABg	37.36	0.0	0.0		
LAB*LABh	37.36	0.0	0.0		
LAB*LABi	37.36	0.0	0.0		
LAB*LABj	37.36	0.0	0.0		
LAB*LABk	37.36	0.0	0.0		
LAB*LABl	37.36	0.0	0.0		
LAB*LABm	37.36	0.0	0.0		
LAB*LABn	37.36	0.0	0.0		
LAB*LABo	37.36	0.0	0.0		
LAB*LABp	37.36	0.0	0.0		
LAB*LABq	37.36	0.0	0.0		
LAB*LABr	37.36	0.0	0.0		
LAB*LABs	37.36	0.0	0.0		
LAB*LABt	37.36	0.0	0.0		
LAB*LABu	37.36	0.0	0.0		
LAB*LABv	37.36	0.0	0.0		
LAB*LABw	37.36	0.0	0.0		
LAB*LABx	37.36	0.0	0.0		
LAB*LABy	37.36	0.0	0.0		
LAB*LABz	37.36	0.0	0.0		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	(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	25.0	0.01			
LAB*LABa	25.0	0.0	0.0		
LAB*LABb	25.0	0.0	0.0		
LAB*LABc	25.0	0.0	0.0		
LAB*LABd	25.0	0.0	0.0		
LAB*LABe	25.0	0.0	0.0		
LAB*LABf	25.0	0.0	0.0		
LAB*LABg	25.0	0.0	0.0		
LAB*LABh	25.0	0.0	0.0		
LAB*LABi	25.0	0.0	0.0		
LAB*LABj	25.0	0.0	0.0		
LAB*LABk	25.0	0.0	0.0		
LAB*LABl	25.0	0.0	0.0		
LAB*LABm	25.0	0.0	0.0		
LAB*LABn	25.0	0.0	0.0		
LAB*LABo	25.0	0.0	0.0		
LAB*LABp	25.0	0.0	0.0		
LAB*LABq	25.0	0.0	0.0		
LAB*LABr	25.0	0.0	0.0		
LAB*LABs	25.0	0.0	0.0		
LAB*LABt	25.0	0.0	0.0		
LAB*LABu	25.0	0.0	0.0		
LAB*LABv	25.0	0.0	0.0		
LAB*LABw	25.0	0.0	0.0		
LAB*LABx	25.0	0.0	0.0		
LAB*LABy	25.0	0.0	0.0		
LAB*LABz	25.0	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	37.36	0.13	0.83	
LAB*LAB _a	37.36	0.0	0.0	

Input: Colorimetric Television Luminous System TLS18

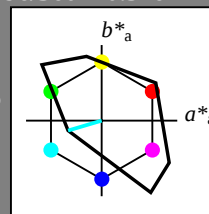
for hue $h^* = lab \cdot h = 196/360 = 0.546$

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

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

triangle lightness

1,00



% Gamut

$u^*_{rel} = 118$

TLS18; adapted (a) CIELAB data

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

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

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	-0.98	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		
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*TCHa	75.0	0.01	0.0		
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		
lab*trj	0.75	0.0	0.0		
lab*tce	0.75	0.0	0.0		
lab*nce	0.25	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	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*TCHa	50.0	0.01	0.0		
relative CIELAB lab*					
lab*lab	0.5	0.0	0.0		
lab*tch	0.5	0.0	0.0		
lab*nch	0.5	0.0	0.0		
lab*trj	0.5	0.0	0.0		
lab*tce	0.5	0.0	0.0		
lab*nce	0.5	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	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*TCHa	25.0	0.01	0.0		
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		
lab*trj	0.25	0.0	0.0		
lab*tce	0.25	0.0	0.0		
lab*nce	0.75	0.0	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*TCHa	0.01	0.01	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	0.0	0.0		
lab*trj	0.0	0.0	0.0		
lab*tce	0.0	0.0	0.0		
lab*nce	1.0	0.0	0.0		

$n^* = 1,0$

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

BAM-test chart NE46; Colorimetric systems TLS18 & ORS18

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

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

output: no change compared to input

chromaticness c^*

0,25 0,50 0,75 1,00

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 0,75$

$n^* = 1,00$

$n^* = 1,25$

$n^* = 1,50$

$n^* = 1,75$

$n^* = 2,00$

$n^* = 2,25$

$n^* = 2,50$

$n^* = 2,75$

$n^* = 3,00$

$n^* = 3,25$

$n^* = 3,50$

$n^* = 3,75$

$n^* = 4,00$

$n^* = 4,25$

$n^* = 4,50$

$n^* = 4,75$

$n^* = 5,00$

$n^* = 5,25$

$n^* = 5,50$

$n^* = 5,75$

$n^* = 6,00$

$n^* = 6,25$

$n^* = 6,50$

$n^* = 6,75$

$n^* = 7,00$

$n^* = 7,25$

$n^* = 7,50$

$n^* = 7,75$

$n^* = 8,00$

$n^* = 8,25$

$n^* = 8,50$

$n^* = 8,75$

$n^* = 9,00$

$n^* = 9,25$

$n^* = 9,50$

$n^* = 9,75$

$n^* = 10,00$

$n^* = 10,25$

$n^* = 10,50$

$n^* = 10,75$

$n^* = 11,00$

$n^* = 11,25$

$n^* = 11,50$

$n^* = 11,75$

$n^* = 12,00$

$n^* = 12,25$

$n^* = 12,50$

$n^* = 12,75$

$n^* = 13,00$

$n^* = 13,25$

$n^* = 13,50$

$n^* = 13,75$

$n^* = 14,00$

$n^* = 14,25$

$n^* = 14,50$

$n^* = 14,75$

$n^* = 15,00$

$n^* = 15,25$

$n^* = 15,50$

$n^* = 15,75$

$n^* = 16,00$

$n^* = 16,25$

$n^* = 16,50$

$n^* = 16,75$

$n^* = 17,00$

$n^* = 17,25$

$n^* = 17,50$

$n^* = 17,75$

$n^* = 18,00$

$n^* = 18,25$

$n^* = 18,50$

$n^* = 18,75$

$n^* = 19,00$

$n^* = 19,25$

$n^* = 19,50$

$n^* = 19,75$

$n^* = 20,00$

$n^* = 20,25$

$n^* = 20,50$

$n^* = 20,75$

$n^* = 21,00$

$n^* = 21,25$

$n^* = 21,50$

$n^* = 21,75$

$n^* = 22,00$

$n^* = 22,25$

$n^* = 22,50$

$n^* = 22,75$

$n^* = 23,00$

$n^* = 23,25$

$n^* = 23,50$

$n^* = 23,75$

$n^* = 24,00$

$n^* = 24,25$

$n^* = 24,50$

$n^* = 24,75$

$n^* = 25,00$

$n^* = 25,25$

$n^* = 25,50$

$n^* = 25,75$

$n^* = 26,00$

$n^* = 26,25$

$n^* = 26,50$

$n^* = 26,75$

$n^* = 27,00$

$n^* = 27,25$

$n^* = 27,50$

$n^* = 27,75$

$n^* = 28,00$

$n^* = 28,25$

$n^* = 28,50$

$n^* = 28,75$

$n^* = 29,00$

$n^* = 29,25$

$n^* = 29,50$

$n^* = 29,75$

$n^* = 30,00$

$n^* = 30,25$

$n^* = 30,50$

$n^* = 30,75$

$n^* = 31,00$

$n^* = 31,25$

$n^* = 31,50$

$n^* = 31,75$

$n^* = 32,00$

$n^* = 32,25$

$n^* = 32,50$

$n^* = 32,75$

$n^* = 33,00$

$n^* = 33,25$

$n^* = 33,50$

$n^* = 33,75$

$n^* = 34,00$

$n^* = 34,25$

$n^* = 34,50$

$n^* = 34,75$

$n^* = 35,00$

$n^* = 35,25$

$n^* = 35,50$

$n^* = 35,75$

Input: Colorimetric Television Luminous System TLS18

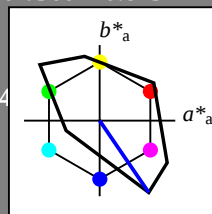
for hue $h^* = lab \cdot h = 304/360 = 0.845$

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

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

triangle lightness

1,00



%Gamut
 $u^*_{rel} = 118$

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

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

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	-0.98	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		
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	77.99	7.12	-7.51		
LAB*LABa	77.99	7.77	-11.09		
LAB*LABb	87.5	13.55	305.0		
relative CIELAB lab*					
lab*lab	0.75	0.75	0.75	(1.0)	
lab*tch	0.75	0.75	0.75	(0.0)	
lab*nch	0.0	0.0	0.0	0.0	
lab*trj	0.75	0.75	0.75	0.75	
lab*tce	0.75	0.75	0.75	0.75	
lab*nce	0.0	0.0	0.0	0.0	

relative Inform. Technology (IT)					
olvi3*	0.5	0.5	0.5	(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	60.56	6.06	-6.06		
LAB*LABa	60.56	6.06	-6.06		
LAB*LABb	60.56	6.06	-6.06		
LAB*LABc	60.56	6.06	-6.06		
relative CIELAB lab*					
lab*lab	0.5	0.5	0.5	(1.0)	
lab*tch	0.5	0.5	0.5	(0.0)	
lab*nch	0.0	0.0	0.0	0.0	
lab*trj	0.5	0.5	0.5	0.5	
lab*tce	0.5	0.5	0.5	0.5	
lab*nce	0.0	0.0	0.0	0.0	

relative Inform. Technology (IT)					
olvi3*	0.25	0.25	0.25	(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	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	0.25	0.25	0.25	(1.0)	
lab*tch	0.25	0.25	0.25	(0.0)	
lab*nch	0.0	0.0	0.0	0.0	
lab*trj	0.25	0.25	0.25	0.25	
lab*tce	0.25	0.25	0.25	0.25	
lab*nce	0.0	0.0	0.0	0.0	

relative Inform. Technology (IT)					
olvi3*	0.125	0.125	0.125	(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	52.76	0.12	1.12		
LAB*LABa	52.76	0.0	0.0		
LAB*LABb	52.76	0.0	0.0		
LAB*LABc	52.76	0.0	0.0		
relative CIELAB lab*					
lab*lab	0.125	0.125	0.125	(1.0)	
lab*tch	0.125	0.125	0.125	(0.0)	
lab*nch	0.0	0.0	0.0	0.0	
lab*trj	0.125	0.125	0.125	0.125	
lab*tce	0.125	0.125	0.125	0.125	
lab*nce	0.0	0.0	0.0	0.0	

relative Inform. Technology (IT)					
olvi3*	0.0625	0.0625	0.0625	(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	49.88	0.06	0.06		
LAB*LABa	49.88	0.0	0.0		
LAB*LABb	49.88	0.0	0.0		
LAB*LABc	49.88	0.0	0.0		
relative CIELAB lab*					
lab*lab	0.0625	0.0625	0.0625	(1.0)	
lab*tch	0.0625	0.0625	0.0625	(0.0)	
lab*nch	0.0	0.0	0.0	0.0	
lab*trj	0.0625	0.0625	0.0625	0.0625	
lab*tce	0.0625	0.0625	0.0625	0.0625	
lab*nce	0.0	0.0	0.0	0.0	

relative Inform. Technology (IT)					
olvi3*	0.03125	0.03125	0.03125	(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	47.94	0.03	0.03		
LAB*LABa	47.94	0.0	0.0		
LAB*LABb	47.94	0.0	0.0		
LAB*LABc	47.94	0.0	0.0		
relative CIELAB lab*					
lab*lab	0.03125	0.03125	0.03125	(1.0)	
lab*tch	0.03125	0.03125	0.03125	(0.0)	
lab*nch	0.0	0.0	0.0	0.0	
lab*trj	0.03125	0.03125	0.03125	0.03125	
lab*tce	0.03125	0.03125	0.03125	0.03125	
lab*nce	0.0	0.0	0.0	0.0	

relative Inform. Technology (IT)					
olvi3*	0.015625	0.015625	0.015625	(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	46.86	0.015	0.015		
LAB*LABa	46.86	0.0	0.0		
LAB*LABb	46.86	0.0	0.0		
LAB*LABc	46.86	0.0	0.0		
relative CIELAB lab*					
lab*lab	0.015625	0.015625	0.015625	(1.0)	
lab*tch	0.015625	0.015625	0.015625	(0.0)	
lab*nch	0.0	0.0	0.0	0.0	
lab*trj	0.015625	0.015625	0.015625	0.015625	
lab*tce	0.015625	0.015625	0.015625	0.015625	
lab*nce	0.0	0.0	0.0	0.0	

relative Inform. Technology (IT)					
olvi3*	0.0078125	0.0078125	0.0078125	(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	45.73	0.0078	0.0078		
LAB*LABa	45.73	0.0	0.0		
LAB*LABb	45.73	0.0	0.0		
LAB*LABc	45.73	0.0	0.0		
relative CIELAB lab*					
lab*lab	0.0078125	0.0078125	0.0078125	(1.0)	
lab*tch	0.0078125	0.0078125	0.0078125	(0.0)	
lab*nch	0.0	0.0	0.0	0.0	
lab*trj	0.0078125	0.0078125	0.0078125	0.0078125	
lab*tce	0.0078125	0.0078125	0.0078125	0.0078125	
lab*nce	0.0	0.0	0.0	0.0	

relative Inform. Technology (IT)					
olvi3*	0.00390625	0.00390625	0.00390625	(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	44.55	0.0039	0.0039		
LAB*LABa	44.55	0.0	0.0		
LAB*LABb	44.55	0.0	0.0		
LAB*LABc	44.55	0.0	0.0		
relative CIELAB lab*					
lab*lab	0.00390625	0.00390625	0.00390625	(1.0)	
lab*tch	0.00390625	0.00390625	0.00390625	(0.0)	
lab*nch	0.0	0.0	0.0	0.0	
lab*trj	0.00390625	0.00390625	0.00390625	0.00390625	
lab*tce	0.00390625	0.00390625	0.00390625	0.00390625	
lab*nce	0.0	0.0	0.0	0.0	

relative Inform. Technology (IT)					
olvi3*	0.001953125	0.001953125	0.001953125	(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	43.14	0.00195	0.00195		
LAB*LABa	43.14	0.0	0.0		
LAB*LABb	43.14	0.0	0.0		
LAB*LABc	43.14	0.0	0.0		
relative CIELAB lab*					
lab*lab	0.001953125	0.001953125	0.001953125	(1.0)	
lab*tch	0.001953125	0.001953125	0.001953125	(0.0)	
lab*nch	0.0	0.0	0.0	0.0	
lab*trj	0.001953125	0.001953125	0.001953125	0.001953125	
lab*tce	0.001953125	0.001953125	0.001953125	0.001953125	
lab*nce	0.0	0.0	0.0	0.0	

relative Inform. Technology (IT)					
olvi3*	0.0009765625	0.0009765625	0.0009765625	(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					

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab \cdot h = 328/360 = 0.911$

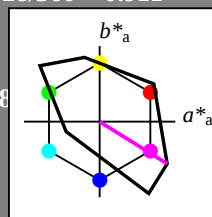
$lab \cdot tch$ and $lab \cdot nch$

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness



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

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

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 $h^* = lab \cdot h = 354/360 = 0.982$

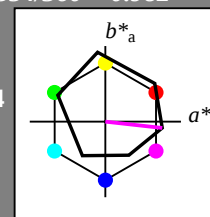
$lab \cdot tch$ and $lab \cdot nch$

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness



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^*

NE460-7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

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

BAM-test chart NE46; Colorimetric systems TLS18 & ORS18

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

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

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

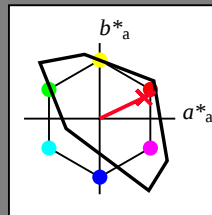
$lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness



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

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

1,00

0,75

blackness n^*

chromaticness c^*

NE460-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)



BAM-test chart NE46; Colorimetric systems TLS18 & ORS18

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

Output: Colorimetric Offset Reflective System ORS18

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

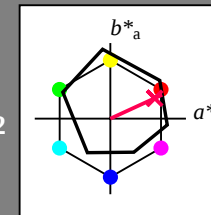
$lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness



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

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

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

blackness n^*

chromaticness c^*

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

input: $olv^* \cdot setrgbcolor$

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

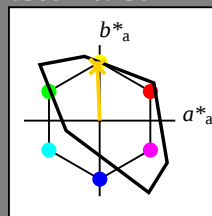
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness



% Gamut

$u^*_{rel} = 118$

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

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 92/360 = 0.255$

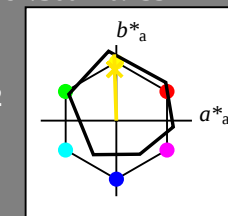
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness



% Gamut

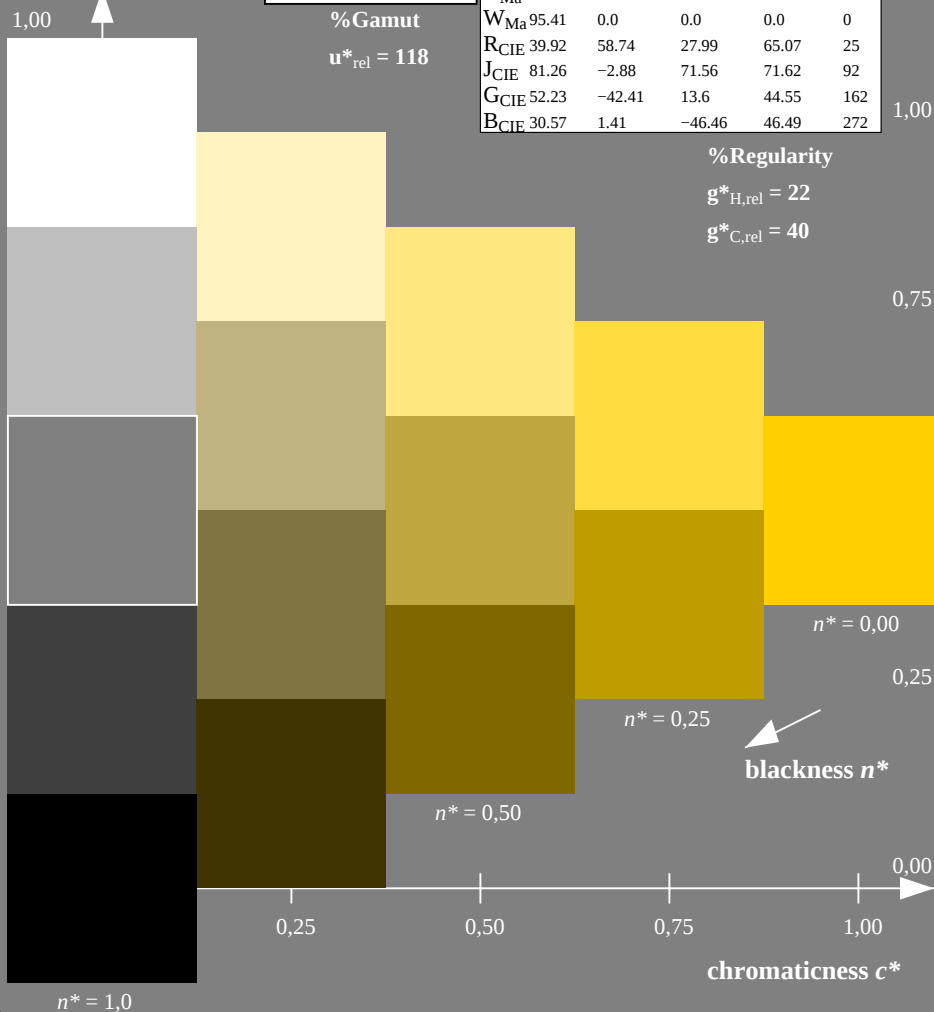
$u^*_{rel} = 93$

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

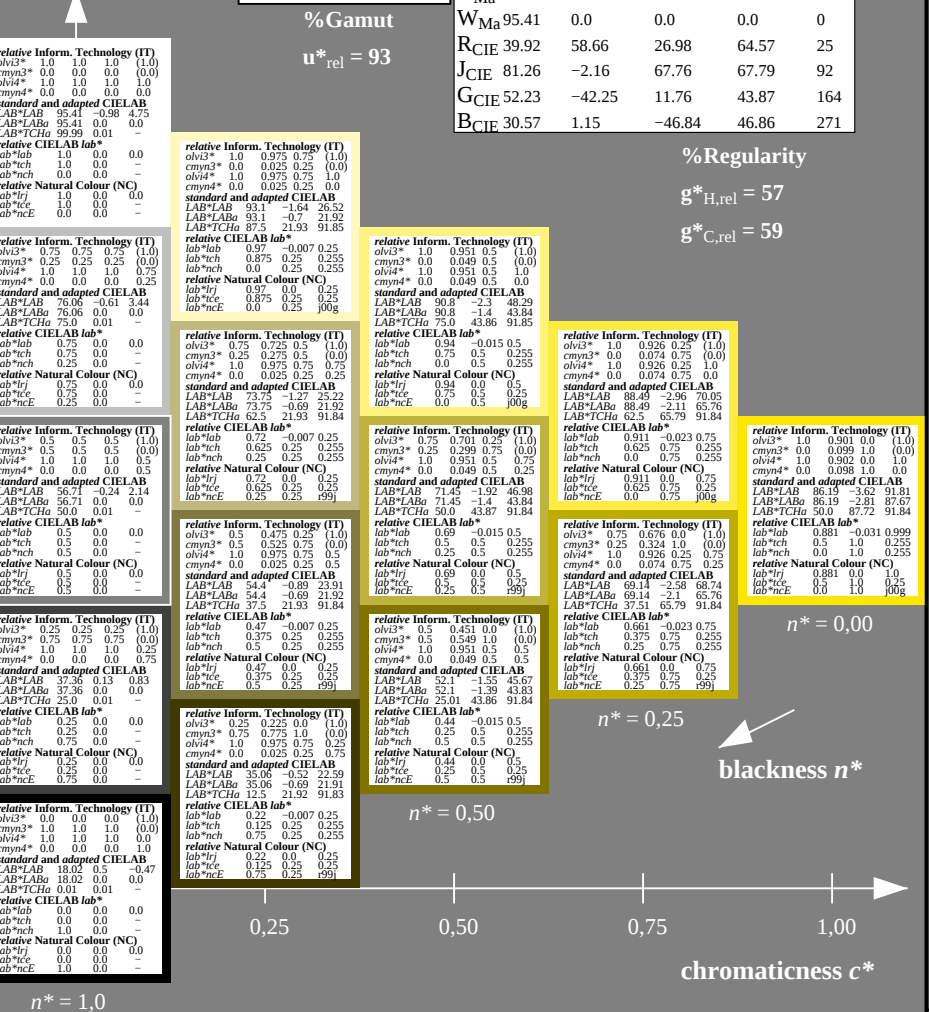
% Regularity

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

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



NE460-7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)



5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

BAM-test chart NE46; Colorimetric systems TLS18 & ORS18

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

input: $olv^* \cdot setrgbcolor$

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

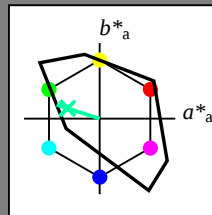
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness



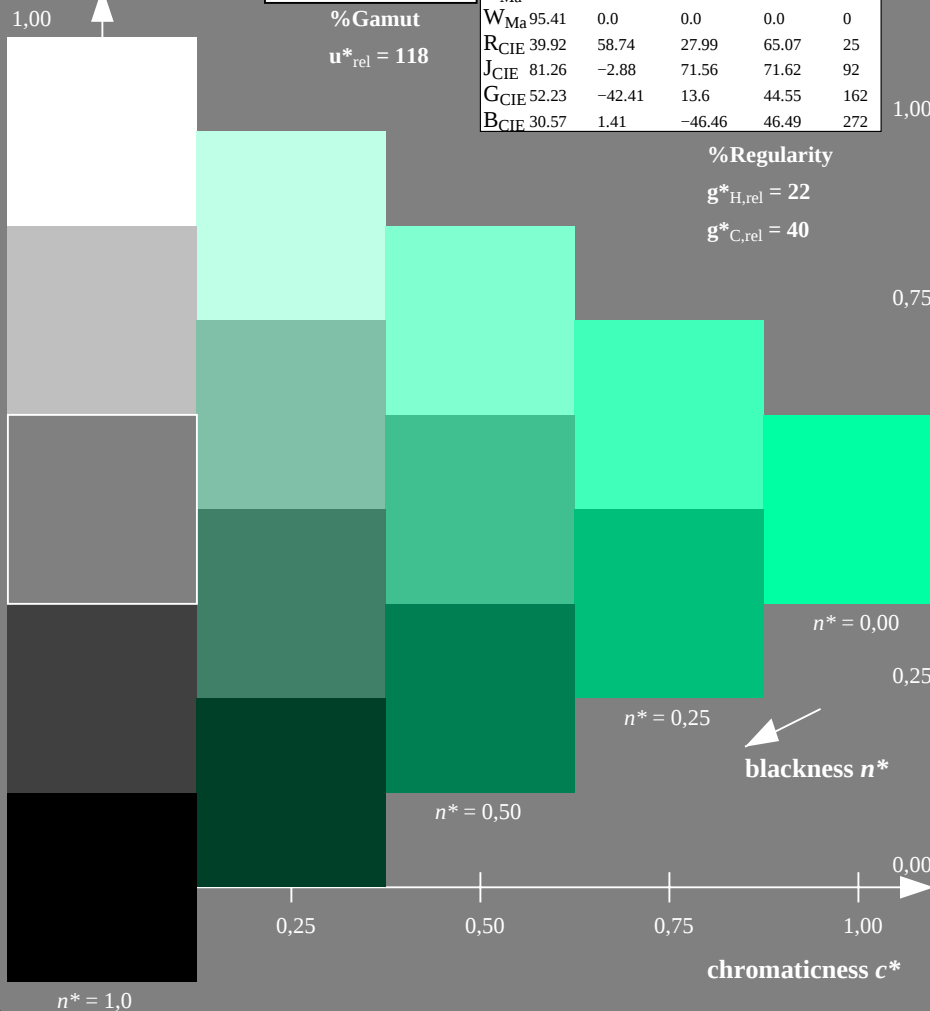
TLS18; adapted (a) CIELAB data

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

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$



NE460-7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

BAM-test chart NE46; Colorimetric systems TLS18 & ORS18

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

Output: Colorimetric Offset Reflective System ORS18

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

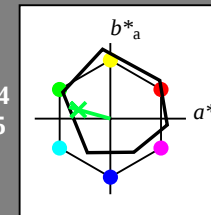
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness



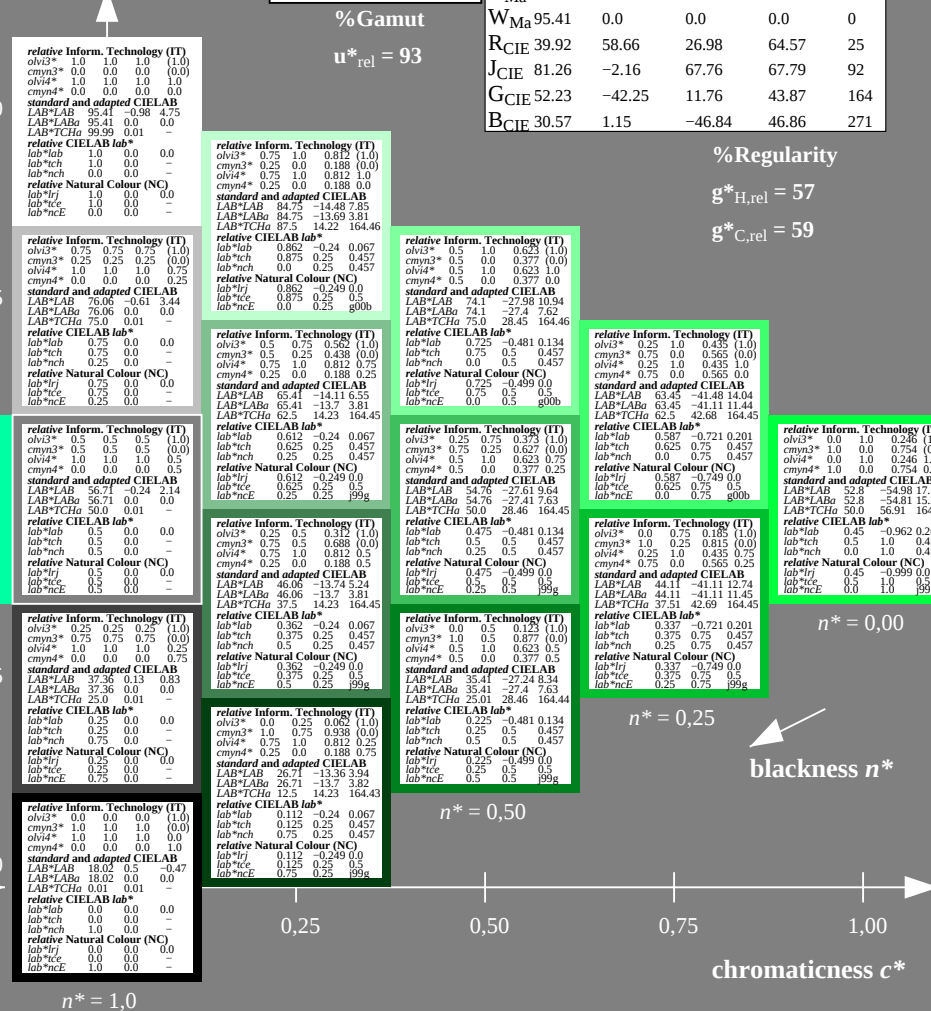
ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	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

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

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



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

input: $olv \cdot setrgbcolor$

output: no change compared to input

Input: Colorimetric Television Luminous System TLS18

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

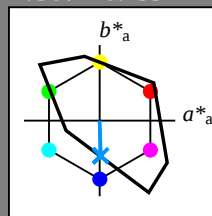
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness



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

%Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

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

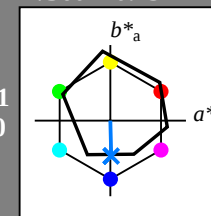
$lab \cdot tch$ and $lab \cdot nch$

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

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

NE460-7, 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 NE46; Colorimetric systems TLS18 & ORS18

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

input: $olv^* \cdot setrgbcolor$

output: no change compared to input