

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab \cdot h = 94/360 = 0.261$

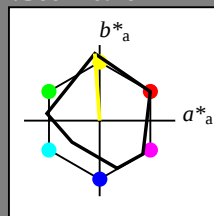
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 91 89 94

rgb*Ma: 1.0 1.0 0.0

triangle lightness



MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

1,00

0,75

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,00$

chromaticness c^*

TE450-7, 5 step scales for constant CIELAB hue 94/360 = 0.261 (left)



BAM-test chart TE45; Colorimetric systems MRS18 & ORS18
D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Reflective System ORS18

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

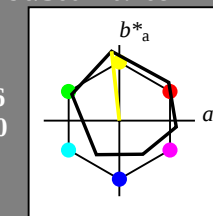
$lab \cdot tch$ and $lab \cdot nch$

D65: hue Y

LCH*Ma: 90 92 96

rgb*Ma: 1.0 1.0 0.0

triangle lightness



ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

1,00

0,75

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,00$

chromaticness c^*

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

input: $olv^* \cdot setrgbcolor$

output: no change compared to input

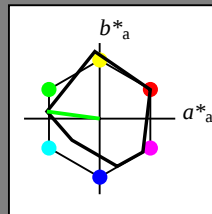
Input: Colorimetric Reflective System MRS18

for hue $h^* = lab \cdot h = 172/360 = 0.479$

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

D65: hue G
LCH*Ma: 52 70 172
rgb*Ma: 0.0 1.0 0.0

triangle lightness



MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

1,00

0,75

0,25

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

TE450-7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)



BAM-test chart TE45; Colorimetric systems MRS18 & ORS18
D65: 5 step colour scales and coordinate data for 10 hues

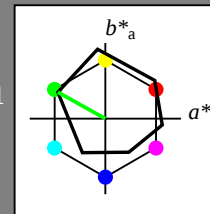
Output: Colorimetric Reflective System ORS18

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
rgb*Ma: 0.0 1.0 0.0

triangle lightness



ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

1,00

0,75

0,25

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

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

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

Input: Colorimetric Reflective System MRS18

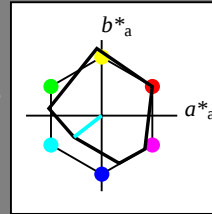
for hue $h^* = lab \cdot h = 218/360 = 0.605$

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

D65: hue G50B
LCH*Ma: 45 46 218
rgb*Ma: 0.0 1.0 1.0

triangle lightness

1,00



%Gamut

$u^*_{rel} = 91$

MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

1,00

relative Inform. Technology (IT)					
olvi3*	1.0	1.0	1.0	(1.0)	
olvi3*	0.0	0.0	0.0	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
olvi4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	95.41	-0.97	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)	
olvi3*	0.25	0.25	0.25	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
olvi4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	86.21	-8.38	-7.1		
LAB*LABa	86.21	-8.38	-7.1		
LAB*LABb	86.21	-8.38	-7.1		
LAB*LABc	86.21	-8.38	-7.1		
LAB*LABd	86.21	-8.38	-7.1		
LAB*LABe	86.21	-8.38	-7.1		
LAB*LABf	86.21	-8.38	-7.1		
LAB*LABg	86.21	-8.38	-7.1		
LAB*LABh	86.21	-8.38	-7.1		
LAB*LABi	86.21	-8.38	-7.1		
LAB*LABj	86.21	-8.38	-7.1		
LAB*LABk	86.21	-8.38	-7.1		
LAB*LABl	86.21	-8.38	-7.1		
LAB*LABm	86.21	-8.38	-7.1		
LAB*LABn	86.21	-8.38	-7.1		
LAB*LABo	86.21	-8.38	-7.1		
LAB*LABp	86.21	-8.38	-7.1		
LAB*LABq	86.21	-8.38	-7.1		
LAB*LABr	86.21	-8.38	-7.1		
LAB*LABs	86.21	-8.38	-7.1		
LAB*LABt	86.21	-8.38	-7.1		
LAB*LABu	86.21	-8.38	-7.1		
LAB*LABv	86.21	-8.38	-7.1		
LAB*LABw	86.21	-8.38	-7.1		
LAB*LABx	86.21	-8.38	-7.1		
LAB*LABy	86.21	-8.38	-7.1		
LAB*LABz	86.21	-8.38	-7.1		

relative Inform. Technology (IT)					
olvi3*	0.5	0.5	0.5	(1.0)	
olvi3*	0.25	0.25	0.25	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
olvi4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	76.06	-0.6	3.44		
LAB*LABa	76.06	-0.6	3.44		
LAB*LABb	76.06	-0.6	3.44		
LAB*LABc	76.06	-0.6	3.44		
LAB*LABd	76.06	-0.6	3.44		
LAB*LABe	76.06	-0.6	3.44		
LAB*LABf	76.06	-0.6	3.44		
LAB*LABg	76.06	-0.6	3.44		
LAB*LABh	76.06	-0.6	3.44		
LAB*LABi	76.06	-0.6	3.44		
LAB*LABj	76.06	-0.6	3.44		
LAB*LABk	76.06	-0.6	3.44		
LAB*LABl	76.06	-0.6	3.44		
LAB*LABm	76.06	-0.6	3.44		
LAB*LABn	76.06	-0.6	3.44		
LAB*LABo	76.06	-0.6	3.44		
LAB*LABp	76.06	-0.6	3.44		
LAB*LABq	76.06	-0.6	3.44		
LAB*LABr	76.06	-0.6	3.44		
LAB*LABs	76.06	-0.6	3.44		
LAB*LABt	76.06	-0.6	3.44		
LAB*LABu	76.06	-0.6	3.44		
LAB*LABv	76.06	-0.6	3.44		
LAB*LABw	76.06	-0.6	3.44		
LAB*LABx	76.06	-0.6	3.44		
LAB*LABy	76.06	-0.6	3.44		
LAB*LABz	76.06	-0.6	3.44		

relative Inform. Technology (IT)					
olvi3*	0.25	0.25	0.25	(1.0)	
olvi3*	0.0	0.0	0.0	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
olvi4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	56.71	-0.23	2.14		
LAB*LABa	56.71	-0.23	2.14		
LAB*LABb	56.71	-0.23	2.14		
LAB*LABc	56.71	-0.23	2.14		
LAB*LABd	56.71	-0.23	2.14		
LAB*LABe	56.71	-0.23	2.14		
LAB*LABf	56.71	-0.23	2.14		
LAB*LABg	56.71	-0.23	2.14		
LAB*LABh	56.71	-0.23	2.14		
LAB*LABi	56.71	-0.23	2.14		
LAB*LABj	56.71	-0.23	2.14		
LAB*LABk	56.71	-0.23	2.14		
LAB*LABl	56.71	-0.23	2.14		
LAB*LABm	56.71	-0.23	2.14		
LAB*LABn	56.71	-0.23	2.14		
LAB*LABo	56.71	-0.23	2.14		
LAB*LABp	56.71	-0.23	2.14		
LAB*LABq	56.71	-0.23	2.14		
LAB*LABr	56.71	-0.23	2.14		
LAB*LABs	56.71	-0.23	2.14		
LAB*LABt	56.71	-0.23	2.14		
LAB*LABu	56.71	-0.23	2.14		
LAB*LABv	56.71	-0.23	2.14		
LAB*LABw	56.71	-0.23	2.14		
LAB*LABx	56.71	-0.23	2.14		
LAB*LABy	56.71	-0.23	2.14		
LAB*LABz	56.71	-0.23	2.14		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	(1.0)	
olvi3*	0.0	0.0	0.0	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
olvi4*	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		
LAB*LABd	37.36	0.13	0.83		
LAB*LABe	37.36	0.13	0.83		
LAB*LABf	37.36	0.13	0.83		
LAB*LABg	37.36	0.13	0.83		
LAB*LABh	37.36	0.13	0.83		
LAB*LABi	37.36	0.13	0.83		
LAB*LABj	37.36	0.13	0.83		
LAB*LABk	37.36	0.13	0.83		
LAB*LABl	37.36	0.13	0.83		
LAB*LABm	37.36	0.13	0.83		
LAB*LABn	37.36	0.13	0.83		
LAB*LABo	37.36	0.13	0.83		
LAB*LABp	37.36	0.13	0.83		
LAB*LABq	37.36	0.13	0.83		
LAB*LABr	37.36	0.13	0.83		
LAB*LABs	37.36	0.13	0.83		
LAB*LABt	37.36	0.13	0.83		
LAB*LABu	37.36	0.13	0.83		
LAB*LABv	37.36	0.13	0.83		
LAB*LABw	37.36	0.13	0.83		
LAB*LABx	37.36	0.13	0.83		
LAB*LABy	37.36	0.13	0.83		
LAB*LABz	37.36	0.13	0.83		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	(1.0)	
olvi3*	0.0	0.0	0.0	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
olvi4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	18.02	0.5	-0.46		
LAB*LABa	18.02	0.5	-0.46		
LAB*LABb	18.02	0.5	-0.46		
LAB*LABc	18.02	0.5	-0.46		
LAB*LABd	18.02	0.5	-0.46		
LAB*LABe	18.02	0.5	-0.46		
LAB*LABf	18.02	0.5	-0.46		
LAB*LABg	18.02	0.5	-0.46		
LAB*LABh	18.02	0.5	-0.46		
LAB*LABi	18.02	0.5	-0.46		
LAB*LABj	18.02	0.5	-0.46		
LAB*LABk	18.02	0.5	-0.46		
LAB*LABl	18.02	0.5	-0.46		
LAB*LABm	18.02	0.5	-0.46		
LAB*LABn	18.02	0.5	-0.46		
LAB*LABo	18.02	0.5	-0.46		
LAB*LABp	18.02	0.5	-0.46		
LAB*LABq	18.02	0.5	-0.46		
LAB*LABr	18.02	0.5	-0.46		
LAB*LABs	18.02	0.5	-0.46		
LAB*LABt	18.02	0.5	-0.46		
LAB*LABu	18.02	0.5	-0.46		
LAB*LABv	18.02	0.5	-0.46		
LAB*LABw	18.02	0.5	-0.46		
LAB*LABx	18.02	0.5	-0.46		
LAB*LABy	18.02	0.5	-0.46		
LAB*LABz	18.02	0.5	-0.46		

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*LABa	37.36	0.0	0.0	

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab \cdot h = 290/360 = 0.806$

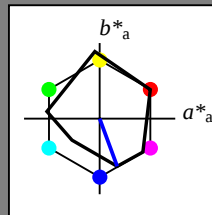
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 37 67 290

rgb*Ma: 0.0 0.0 1.0

triangle lightness

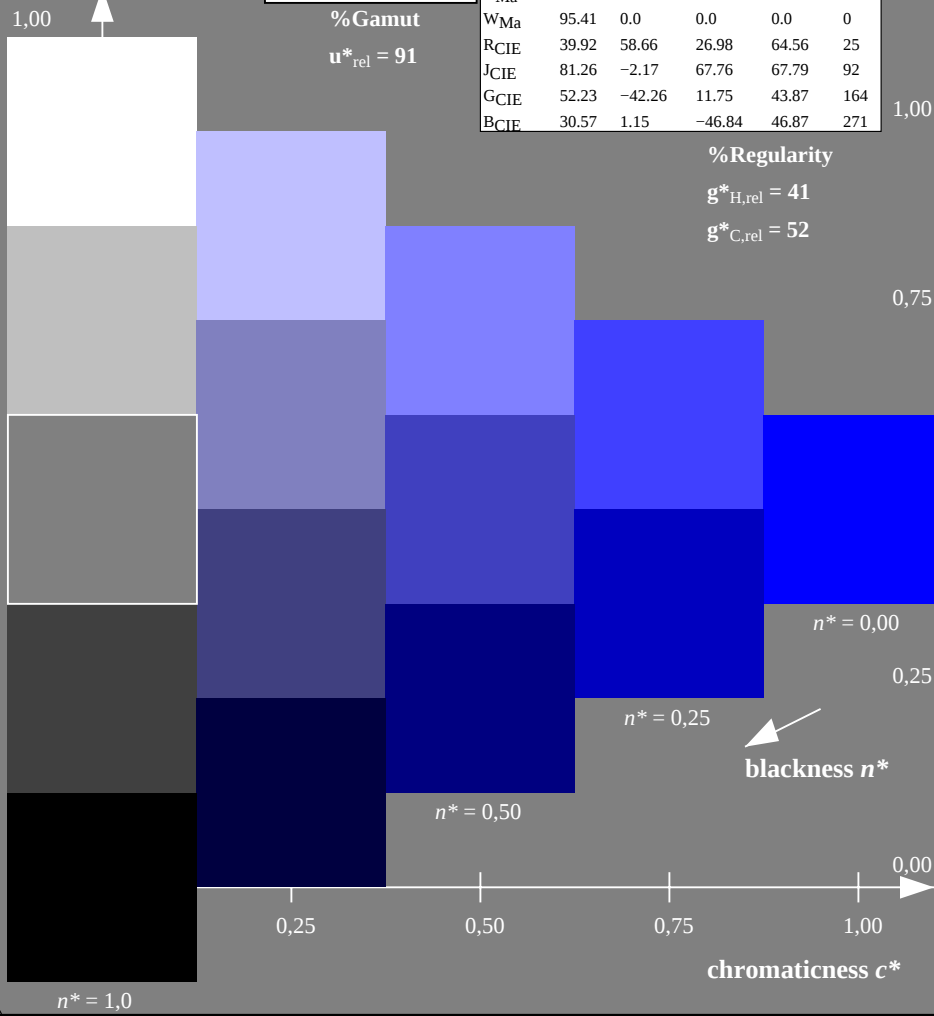


MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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	64.56	25
J _{CIE}	81.26	-2.17	67.76	67.79	92
G _{CIE}	52.23	-42.26	11.75	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



TE450-7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

BAM-test chart TE45; Colorimetric systems MRS18 & ORS18

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

Output: Colorimetric Reflective System ORS18

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

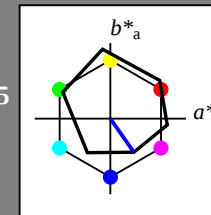
$lab \cdot tch$ and $lab \cdot nch$

D65: hue V

LCH*Ma: 26 54 305

rgb*Ma: 0.0 0.0 1.0

triangle lightness

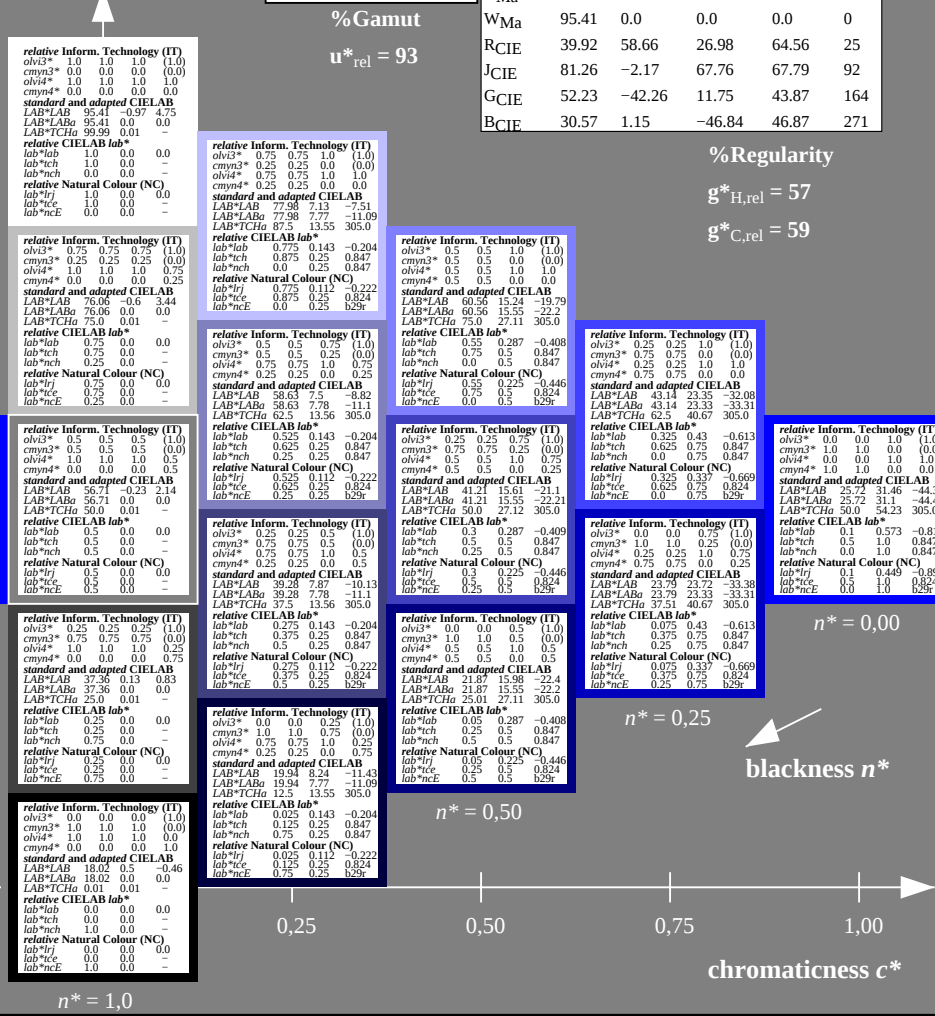


ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.37	50.52	82.62	38
Y _{Ma}	90.37	-10.27	91.77	92.34	96
L _{Ma}	50.9	-62.79	34.95	71.87	151
C _{Ma}	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	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	64.56	25
J _{CIE}	81.26	-2.17	67.76	67.79	92
G _{CIE}	52.23	-42.26	11.75	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.87	271

%Regularity

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

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



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

input: $olv^* \cdot setrgbcolor$

output: no change compared to input

Input: Colorimetric Reflective System MRS18

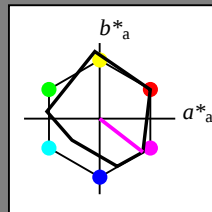
for hue $h^* = lab \cdot h = 322/360 = 0.895$

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

D65: hue B50R
LCH*Ma: 35 72 322
rgb*Ma: 1.0 0.0 1.0

triangle lightness

1,00



%Gamut

$u^*_{rel} = 91$

MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

1,00

relative Inform. Technology (IT)					
olvi3*	1.0	1.0	1.0	1.0	(1.0)
olvi4*	0.0	0.0	0.0	0.0	(0.0)
olvi5*	1.0	1.0	1.0	1.0	(1.0)
olvi6*	0.0	0.0	0.0	0.0	(0.0)
olvi7*	0.0	0.0	0.0	0.0	(0.0)
olvi8*	0.0	0.0	0.0	0.0	(0.0)
olvi9*	0.0	0.0	0.0	0.0	(0.0)
olvi10*	0.0	0.0	0.0	0.0	(0.0)
olvi11*	0.0	0.0	0.0	0.0	(0.0)
olvi12*	0.0	0.0	0.0	0.0	(0.0)
olvi13*	0.0	0.0	0.0	0.0	(0.0)
olvi14*	0.0	0.0	0.0	0.0	(0.0)
olvi15*	0.0	0.0	0.0	0.0	(0.0)
olvi16*	0.0	0.0	0.0	0.0	(0.0)
olvi17*	0.0	0.0	0.0	0.0	(0.0)
olvi18*	0.0	0.0	0.0	0.0	(0.0)
olvi19*	0.0	0.0	0.0	0.0	(0.0)
olvi20*	0.0	0.0	0.0	0.0	(0.0)
olvi21*	0.0	0.0	0.0	0.0	(0.0)
olvi22*	0.0	0.0	0.0	0.0	(0.0)
olvi23*	0.0	0.0	0.0	0.0	(0.0)
olvi24*	0.0	0.0	0.0	0.0	(0.0)
olvi25*	0.0	0.0	0.0	0.0	(0.0)
olvi26*	0.0	0.0	0.0	0.0	(0.0)
olvi27*	0.0	0.0	0.0	0.0	(0.0)
olvi28*	0.0	0.0	0.0	0.0	(0.0)
olvi29*	0.0	0.0	0.0	0.0	(0.0)
olvi30*	0.0	0.0	0.0	0.0	(0.0)
olvi31*	0.0	0.0	0.0	0.0	(0.0)
olvi32*	0.0	0.0	0.0	0.0	(0.0)
olvi33*	0.0	0.0	0.0	0.0	(0.0)
olvi34*	0.0	0.0	0.0	0.0	(0.0)
olvi35*	0.0	0.0	0.0	0.0	(0.0)
olvi36*	0.0	0.0	0.0	0.0	(0.0)
olvi37*	0.0	0.0	0.0	0.0	(0.0)
olvi38*	0.0	0.0	0.0	0.0	(0.0)
olvi39*	0.0	0.0	0.0	0.0	(0.0)
olvi40*	0.0	0.0	0.0	0.0	(0.0)
olvi41*	0.0	0.0	0.0	0.0	(0.0)
olvi42*	0.0	0.0	0.0	0.0	(0.0)
olvi43*	0.0	0.0	0.0	0.0	(0.0)
olvi44*	0.0	0.0	0.0	0.0	(0.0)
olvi45*	0.0	0.0	0.0	0.0	(0.0)
olvi46*	0.0	0.0	0.0	0.0	(0.0)
olvi47*	0.0	0.0	0.0	0.0	(0.0)
olvi48*	0.0	0.0	0.0	0.0	(0.0)
olvi49*	0.0	0.0	0.0	0.0	(0.0)
olvi50*	0.0	0.0	0.0	0.0	(0.0)
olvi51*	0.0	0.0	0.0	0.0	(0.0)
olvi52*	0.0	0.0	0.0	0.0	(0.0)
olvi53*	0.0	0.0	0.0	0.0	(0.0)
olvi54*	0.0	0.0	0.0	0.0	(0.0)
olvi55*	0.0	0.0	0.0	0.0	(0.0)
olvi56*	0.0	0.0	0.0	0.0	(0.0)
olvi57*	0.0	0.0	0.0	0.0	(0.0)
olvi58*	0.0	0.0	0.0	0.0	(0.0)
olvi59*	0.0	0.0	0.0	0.0	(0.0)
olvi60*	0.0	0.0	0.0	0.0	(0.0)
olvi61*	0.0	0.0	0.0	0.0	(0.0)
olvi62*	0.0	0.0	0.0	0.0	(0.0)
olvi63*	0.0	0.0	0.0	0.0	(0.0)
olvi64*	0.0	0.0	0.0	0.0	(0.0)
olvi65*	0.0	0.0	0.0	0.0	(0.0)
olvi66*	0.0	0.0	0.0	0.0	(0.0)
olvi67*	0.0	0.0	0.0	0.0	(0.0)
olvi68*	0.0	0.0	0.0	0.0	(0.0)
olvi69*	0.0	0.0	0.0	0.0	(0.0)
olvi70*	0.0	0.0	0.0	0.0	(0.0)
olvi71*	0.0	0.0	0.0	0.0	(0.0)
olvi72*	0.0	0.0	0.0	0.0	(0.0)
olvi73*	0.0	0.0	0.0	0.0	(0.0)
olvi74*	0.0	0.0	0.0	0.0	(0.0)
olvi75*	0.0	0.0	0.0	0.0	(0.0)
olvi76*	0.0	0.0	0.0	0.0	(0.0)
olvi77*	0.0	0.0	0.0	0.0	(0.0)
olvi78*	0.0	0.0	0.0	0.0	(0.0)
olvi79*	0.0	0.0	0.0	0.0	(0.0)
olvi80*	0.0	0.0	0.0	0.0	(0.0)
olvi81*	0.0	0.0	0.0	0.0	(0.0)
olvi82*	0.0	0.0	0.0	0.0	(0.0)
olvi83*	0.0	0.0	0.0	0.0	(0.0)
olvi84*	0.0	0.0	0.0	0.0	(0.0)
olvi85*	0.0	0.0	0.0	0.0	(0.0)
olvi86*	0.0	0.0	0.0	0.0	(0.0)
olvi87*	0.0	0.0	0.0	0.0	(0.0)
olvi88*	0.0	0.0	0.0	0.0	(0.0)
olvi89*	0.0	0.0	0.0	0.0	(0.0)
olvi90*	0.0	0.0	0.0	0.0	(0.0)
olvi91*	0.0	0.0	0.0	0.0	(0.0)
olvi92*	0.0	0.0	0.0	0.0	(0.0)
olvi93*	0.0	0.0	0.0	0.0	(0.0)
olvi94*	0.0	0.0	0.0	0.0	(0.0)
olvi95*	0.0	0.0	0.0	0.0	(0.0)
olvi96*	0.0	0.0	0.0	0.0	(0.0)
olvi97*	0.0	0.0	0.0	0.0	(0.0)
olvi98*	0.0	0.0	0.0	0.0	(0.0)
olvi99*	0.0	0.0	0.0	0.0	(0.0)
olvi100*	0.0	0.0	0.0	0.0	(0.0)

Output: Colorimetric Reflective System ORS18

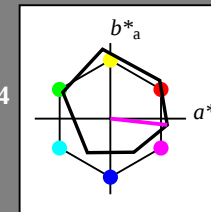
for hue $h^* = lab \cdot h = 354/360 = 0.982$

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

D65: hue M
LCH*Ma: 48 76 354
rgb*Ma: 1.0 0.0 1.0

triangle lightness

1,00



%Gamut

$u^*_{rel} = 93$

ORS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

0,75

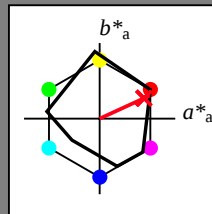
LAB*TCHa 99.99 0.01 -				
relative CIELAB lab*				
lab*lab	1.0	0.0	0.0	
lab*tch	1.0	0.0	-	
lab*nch	0.0	0.0	-	
relative Natural Colour (NC)				
lab*lrj	1.0	0.0	0.0	
lab*tce	1.0	0.0	-	
lab*nce	0.0	0.0	-	
relative Inform. Technology (IT)				
olvi3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olvi4*	1.0	1.0	1.0	0.75

Input: Colorimetric Reflective System MRS18

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

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

D65: hue R
LCH*Ma: 48 73 25
rgb*Ma: 1.0 0.0 0.1
triangle lightness



MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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	64.56	25
J _{CIE}	81.26	-2.17	67.76	67.79	92
G _{CIE}	52.23	-42.26	11.75	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

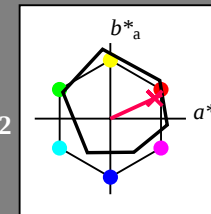
$g^*_{C,rel} = 52$

Output: Colorimetric 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
rgb*Ma: 1.0 0.0 0.32
triangle lightness

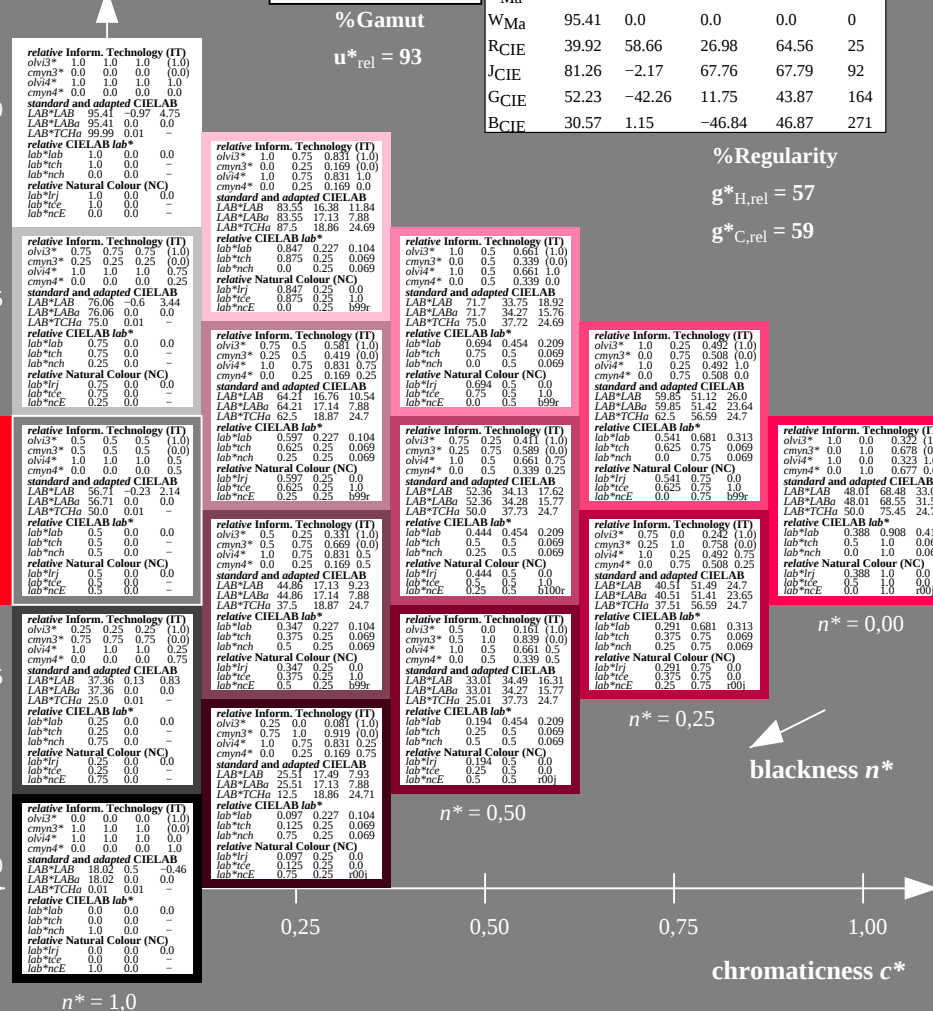
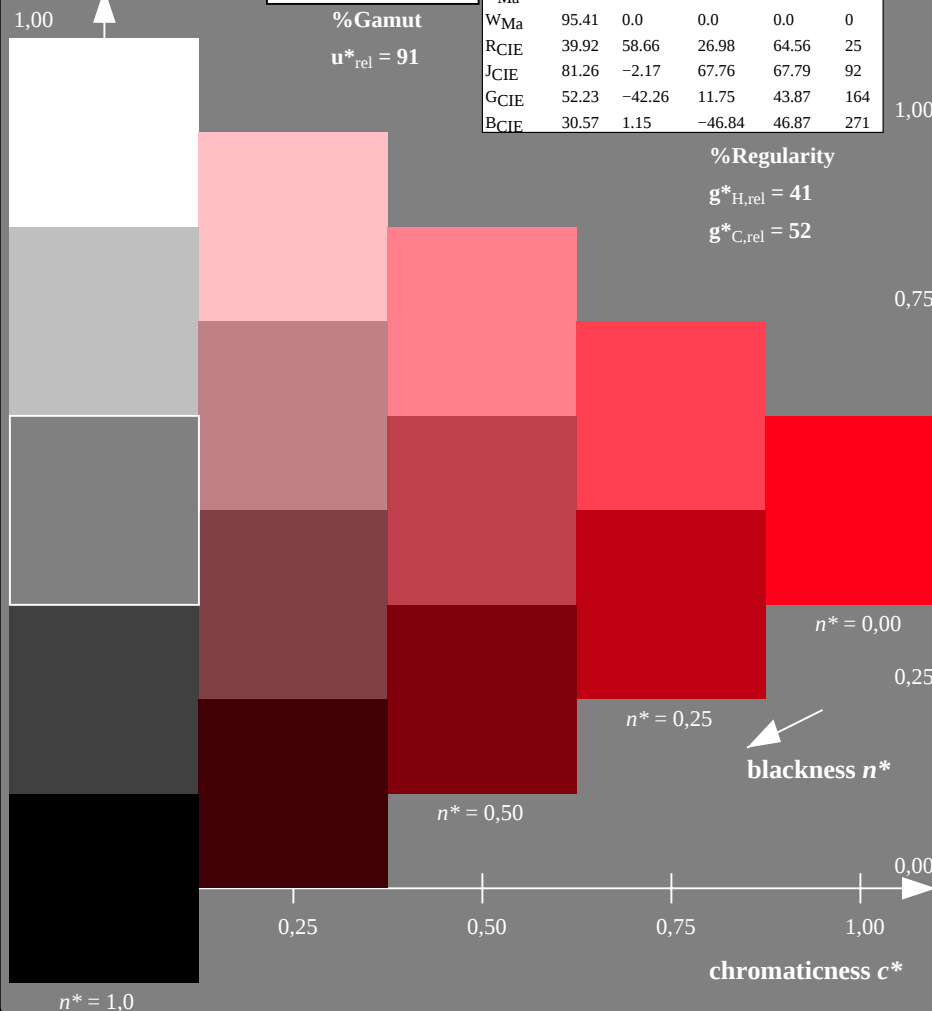


ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.37	50.52	82.62	38
Y _{Ma}	90.37	-10.27	91.77	92.34	96
L _{Ma}	50.9	-62.79	34.95	71.87	151
C _{Ma}	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	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	64.56	25
J _{CIE}	81.26	-2.17	67.76	67.79	92
G _{CIE}	52.23	-42.26	11.75	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.87	271

%Regularity

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

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



TE450-7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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

BAM-test chart TE45; Colorimetric systems MRS18 & ORS18

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

input: $olv^* \cdot setrgbcolor$

output: no change compared to input

Input: Colorimetric Reflective System MRS18

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

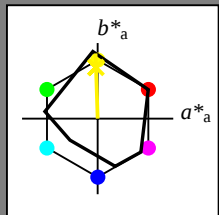
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 89 86 92

rgb*Ma: 1.0 0.95 0.0

triangle lightness



MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

0,00

chromaticness c^*

TE450-7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)



BAM-test chart TE45; Colorimetric systems MRS18 & ORS18
D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Reflective System ORS18

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

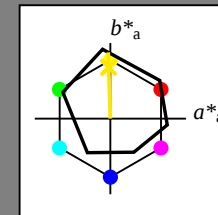
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 86 88 92

rgb*Ma: 1.0 0.9 0.0

triangle lightness



ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

0,00

chromaticness c^*

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

input: $olv^* \cdot setrgbcolor$

output: no change compared to input

Input: Colorimetric Reflective System MRS18

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

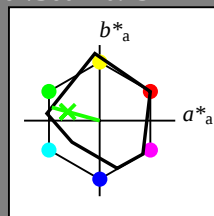
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 56 66 164

rgb*Ma: 0.1 1.0 0.0

triangle lightness



MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

1,00

0,75

0,50

0,25

0,00

0,00

0,00

Output: Colorimetric Reflective System ORS18

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

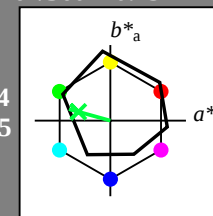
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 53 57 164

rgb*Ma: 0.0 1.0 0.25

triangle lightness



ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

1,00

0,75

0,50

0,25

0,00

0,00

0,00

TE450-7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)



BAM-test chart TE45; Colorimetric systems MRS18 & ORS18
D65: 5 step colour scales and coordinate data for 10 hues

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

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

Input: Colorimetric Reflective System MRS18

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

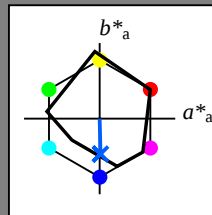
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 40 50 271

rgb*Ma: 0.0 0.37 1.0

triangle lightness

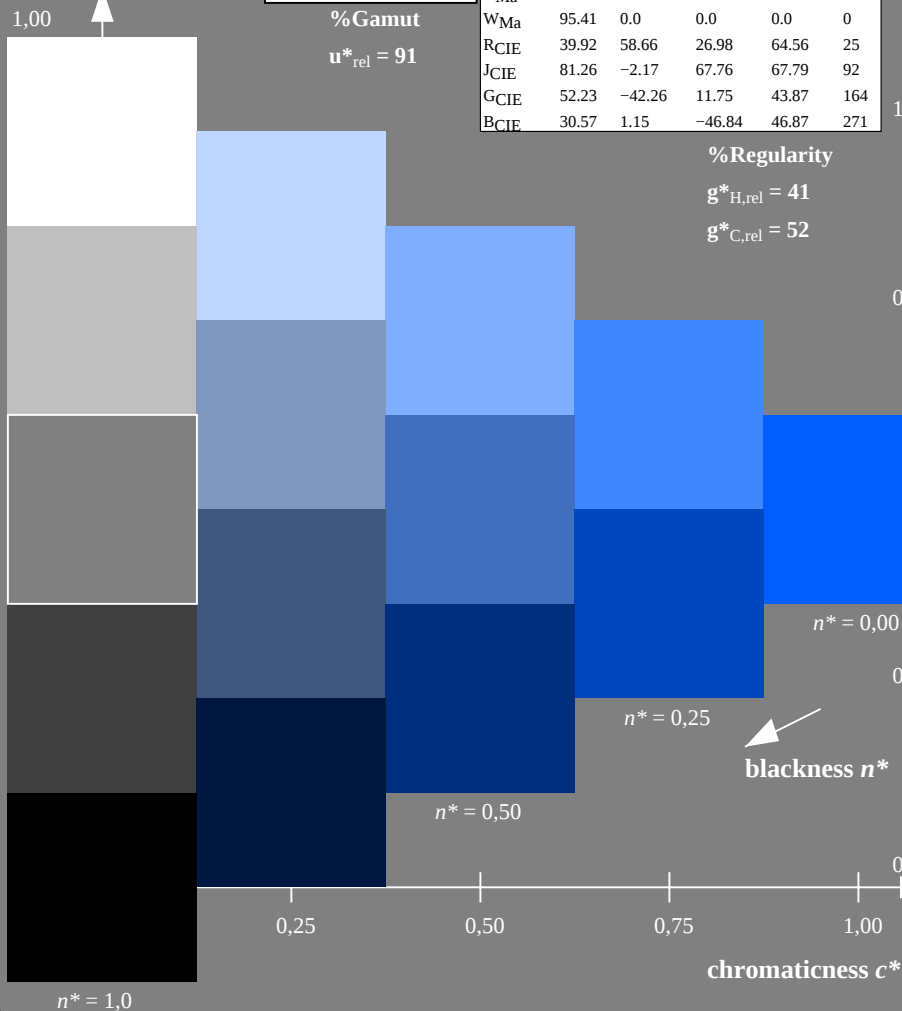


MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



TE450-7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

Output: Colorimetric Reflective System ORS18

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

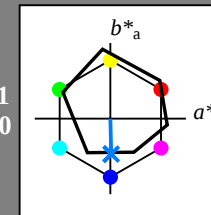
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 42 45 271

rgb*Ma: 0.0 0.49 1.0

triangle lightness

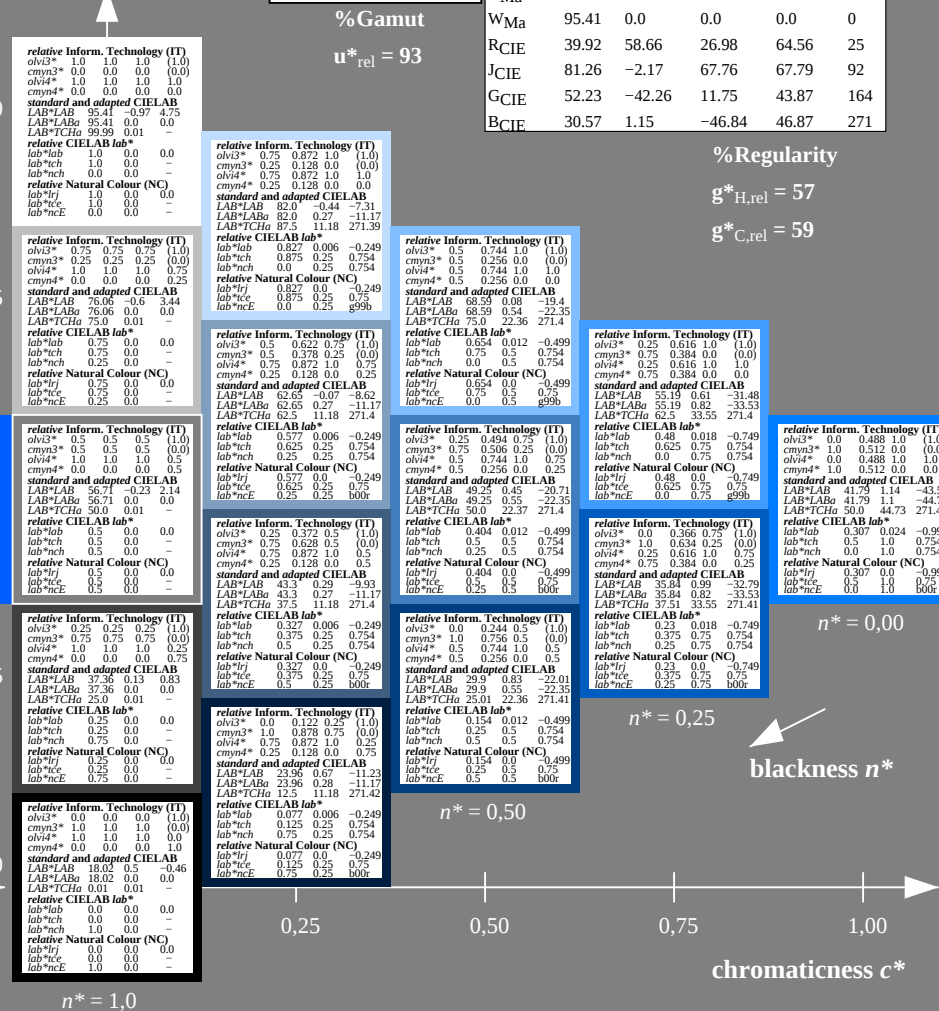


ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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



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

BAM-test chart TE45; Colorimetric systems MRS18 & ORS18

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

input: $olv^* \cdot setrgbcolor$

output: no change compared to input