

Input: Colorimetric Reflective System MRS18

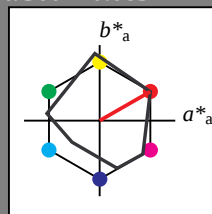
for hue $h^* = lab \cdot h = 30/360 = 0.083$

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

D65: hue R
LCH*Ma: 50 77 30
rgb*Ma: 1.0 0.0 0.0

triangle lightness

1,00



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)	
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	-0.97	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)	
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	-0.6	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	0.23	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*	0.75	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*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*	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	-0.46		
LAB*LABa	18.02	0.0	0.0		
LAB*LABb	18.02	0.0	0.0		
LAB*LABc	18.02	0.0	0.0		
LAB*LABd	18.02	0.0	0.0		
LAB*LABe	18.02	0.0	0.0		
LAB*LABf	18.02	0.0	0.0		
LAB*LABg	18.02	0.0	0.0		
LAB*LABh	18.02	0.0	0.0		
LAB*LABi	18.02	0.0	0.0		
LAB*LABj	18.02	0.0	0.0		
LAB*LABk	18.02	0.0	0.0		
LAB*LABl	18.02	0.0	0.0		
LAB*LABm	18.02	0.0	0.0		
LAB*LABn	18.02	0.0	0.0		
LAB*LABo	18.02	0.0	0.0		
LAB*LABp	18.02	0.0	0.0		
LAB*LABq	18.02	0.0	0.0		
LAB*LABr	18.02	0.0	0.0		
LAB*LABs	18.02	0.0	0.0		
LAB*LABt	18.02	0.0	0.0		
LAB*LABu	18.02	0.0	0.0		
LAB*LABv	18.02	0.0	0.0		
LAB*LABw	18.02	0.0	0.0		
LAB*LABx	18.02	0.0	0.0		
LAB*LABy	18.02	0.0	0.0		
LAB*LABz	18.02	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	0.01	0.01	0.01		
LAB*LABa	0.01	0.0	0.0		
LAB*LABb	0.01	0.0	0.0		
LAB*LABc	0.01	0.0	0.0		
LAB*LABd	0.01	0.0	0.0		
LAB*LABe	0.01	0.0	0.0		
LAB*LABf	0.01	0.0	0.0		
LAB*LABg	0.01	0.0	0.0		
LAB*LABh	0.01	0.0	0.0		
LAB*LABi	0.01	0.0	0.0		
LAB*LABj	0.01	0.0	0.0		
LAB*LABk	0.01	0.0	0.0		
LAB*LABl	0.01	0.0	0.0		
LAB*LABm	0.01	0.0	0.0		
LAB*LABn	0.01	0.0	0.0		
LAB*LABo	0.01	0.0	0.0		
LAB*LABp	0.01	0.0	0.0		
LAB*LABq	0.01	0.0	0.0		
LAB*LABr	0.01	0.0	0.0		
LAB*LABs	0.01	0.0	0.0		
LAB*LABt	0.01	0.0	0.0		
LAB*LABu	0.01	0.0	0.0		
LAB*LABv	0.01	0.0	0.0		
LAB*LABw	0.01	0.0	0.0		
LAB*LABx	0.01	0.0	0.0		
LAB*LABy	0.01	0.0	0.0		
LAB*LABz	0.01	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	0.0	0.0	0.0		
LAB*LABa	0.0	0.0	0.0		
LAB*LABb	0.0	0.0	0.0		
LAB*LABc	0.0	0.0	0.0		
LAB*LABd	0.0	0.0	0.0		
LAB*LABe	0.0	0.0	0.0		
LAB*LABf	0.0	0.0	0.0		
LAB*LABg	0.0	0.0	0.0		
LAB*LABh	0.0	0.0	0.0		
LAB*LABi	0.0	0.0	0.0		
LAB*LABj	0.0	0.0	0.0		
LAB*LABk	0.0	0.0	0.0		
LAB*LABl	0.0	0.0	0.0		
LAB*LABm	0.0	0.0	0.0		
LAB*LABn	0.0	0.0	0.0		
LAB*LABo	0.0	0.0	0.0		
LAB*LABp	0.0	0.0	0.0		
LAB*LABq	0.0	0.0	0.0		
LAB*LABr	0.0	0.0	0.0		
LAB*LABs	0.0	0.0	0.0		
LAB*LABt	0.0	0.0	0.0		
LAB*LABu	0.0	0.0	0.0		
LAB*LABv	0.0	0.0	0.0		
LAB*LABw	0.0	0.0	0.0		
LAB*LABx	0.0	0.0	0.0		
LAB*LABy	0.0	0.0	0.0		
LAB*LABz	0.0	0.0	0.0		

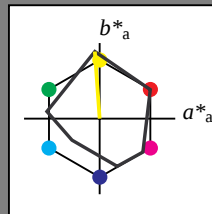
Input: Colorimetric Reflective System MRS18

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

lab^*tch and lab^*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	$C^*_{ab,a}$	$h^*_{ab,a}$
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

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

0,00

chromaticness c^*

$n^* = 1,0$

UE450-7, 5 step scales for constant CIELAB hue 94/360 = 0.261 (left)



BAM-test chart UE45; Colorimetric systems MRS18 & ORS18

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

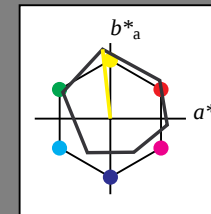
Output: Colorimetric Reflective System ORS18

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

lab^*tch and lab^*nch

D65: hue Y
LCH*Ma: 90 92 96
rgb*Ma: 1.0 1.0 0.0

triangle lightness



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

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

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

1,00

0,75

$n^* = 0,00$

0,25

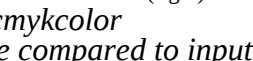
$n^* = 0,25$

$n^* = 0,50$

0,00

chromaticness c^*

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



input: $cmY0^* set cmykcolor$

output: no change compared to input

Input: Colorimetric Reflective System MRS18

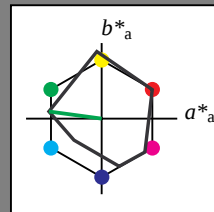
for hue $h^* = lab \cdot h = 172/360 = 0.479$

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

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

triangle lightness

1,00



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
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	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)
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	-0.97	4.75		
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	99.91	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*tce	1.0	0.0	0.0		
lab*nce	0.0	0.0	0.0		

Output: Colorimetric Reflective System ORS18

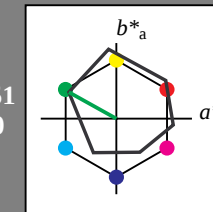
for hue $h^* = lab \cdot h = 151/360 = 0.419$

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

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

triangle lightness

1,00



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
NMa	18.01	0.0	0.0	0.0	0
WMa	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
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%Regularity

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

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

1,00

relative Inform. Technology (IT)					
olvi3*	0.75	1.0	0.75	1.0	(1.0)
cmyn3*	0.25	0.0	0.25	0.0	(0.0)
olvi4*	0.75	1.0	0.75	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB					
LAB*LAB	84.28	-16.45	12.74		
LAB*LABa	84.28	-15.68	8.73		
LAB*TCHa	87.5	17.96	150.91		
relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*tch	0.75	0.25	0.419		
lab*nch	0.0	0.25	0.419		
relative Natural Colour (NC)					
lab*trj	1.0	0.0	0.0		
lab*tce	0.75	0.25	0.453		
lab*nce	0.0	0.25	0.453		

relative Inform. Technology (IT)

cmyn3* 0.25 0.0 0.25 0.0

olvi4* 0.75 1.0 0.75 1.0

cmyn4* 0.0 0.0 0.0 0.0

standard and adapted CIELAB

LAB*LAB 84.28 -16.45 12.74

LAB*LABa 84.28 -15.68 8.73

LAB*TCHa 87.5 17.96 150.91

relative CIELAB lab*

lab*lab 1.0 0.0 0.0

lab*tch 0.75 0.25 0.419

lab*nch 0.0 0.25 0.419

relative Natural Colour (NC)

lab*trj 1.0 0.0 0.0

lab*tce 0.75 0.25 0.453

lab*nce 0.0 0.25 0.453

relative Inform. Technology (IT)

olvi3* 0.5 0.75 0.5 1.0

cmyn3* 0.5 0.25 0.5 0.0

olvi4* 0.5 1.0 0.5 0.75

cmyn4* 0.0 0.0 0.0 0.5

standard and adapted CIELAB

LAB*LAB 64.93 -16.09 11.44

LAB*LABa 64.93 -15.69 8.74

LAB*TCHa 62.5 17.97 150.91

relative CIELAB lab*

lab*lab 1.0 0.0 0.0

lab*tch 0.5 0.25 0.419

lab*nch 0.0 0.25 0.419

relative Natural Colour (NC)

lab*trj 1.0 0.0 0.0

lab*tce 0.5 0.25 0.453

lab*nce 0.0 0.25 0.453

relative Inform. Technology (IT)

olvi3* 0.5 1.0 0.5 1.0

cmyn3* 0.5 0.0 0.5 0.0

olvi4* 0.5 1.0 0.5 1.0

cmyn4* 0.0 0.0 0.0 0.0

standard and adapted CIELAB

LAB*LAB 73.15 -31.94 20.73

LAB*LABa 73.15 -31.38 17.47

LAB*TCHa 75.0 35.93 150.91

relative CIELAB lab*

lab*lab 1.0 0.0 0.0

lab*tch 0.5 0.5 0.419

lab*nch 0.0 0.5 0.419

relative Natural Colour (NC)

lab*trj 1.0 0.0 0.0

lab*tce 0.5 0.5 0.453

lab*nce 0.0 0.5 0.453

relative Inform. Technology (IT)

olvi3* 0.25 0.75 0.25 1.0

cmyn3* 0.75 0.25 0.75 0.0

olvi4* 0.5 1.0 0.5 0.75

cmyn4* 0.5 0.0 0.5 0.25

standard and adapted CIELAB

LAB*LAB 53.8 -31.57 19.42

LAB*LABa 53.8 -31.39 17.47

LAB*TCHa 50.0 35.94 150.91

relative CIELAB lab*

lab*lab 1.0 0.0 0.0

lab*tch 0.5 0.5 0.419

lab*nch 0.0 0.5 0.419

relative Natural Colour (NC)

lab*trj 1.0 0.0 0.0

lab*tce 0.5 0.5 0.453

lab*nce 0.0 0.5 0.453

relative Inform. Technology (IT)

olvi3* 0.25 1.0 0.25 1.0

cmyn3* 0.75 0.0 0.75 0.0

olvi4* 0.25 1.0 0.25 1.0

cmyn4* 0.75 0.0 0.75 0.0

standard and adapted CIELAB

LAB*LAB 62.02 -47.43 28.71

LAB*LABa 62.02 -47.09 26.21

LAB*TCHa 62.5 53.9 150.91

relative CIELAB lab*

lab*lab 1.0 0.0 0.0

lab*tch 0.25 0.75 0.419

lab*nch 0.0 0.75 0.419

relative Natural Colour (NC)

lab*trj 1.0 0.0 0.0

lab*tce 0.25 0.75 0.453

lab*nce 0.0 0.75 0.453

relative Inform. Technology (IT)

olvi3* 0.0 0.75 0.0 1.0

cmyn3* 1.0 0.0 1.0 0.0

olvi4* 0.0 1.0 0.0 1.0

cmyn4* 1.0 0.0 1.0 0.0

standard and adapted CIELAB

LAB*LAB 50.9 -62.78 34.94

LAB*LABa 50.9 -62.78 34.94

LAB*TCHa 50.0 71.86 150.91

relative CIELAB lab*

lab*lab 1.0 0.0 0.0

lab*tch 0.25 0.75 0.419

lab*nch 0.0 0.75 0.419

relative Natural Colour (NC)

lab*trj 1.0 0.0 0.0

lab*tce 0.25 0.75 0.453

lab*nce 0.0 0.75 0.453

relative Inform. Technology (IT)

olvi3* 0.0 1.0 0.0 1.0

cmyn3* 1.0 0.0 1.0 0.0

olvi4* 0.0 1.0 0.0 1.0

cmyn4* 1.0 0.0 1.0 0.0

standard and adapted CIELAB

LAB*LAB 50.9 -62.78 34.94

LAB*LABa 50.9 -62.78 34.94

LAB*TCHa 50.0 71.86 150.91

relative CIELAB lab*

lab*lab 1.0 0.0 0.0

lab*tch 0.25 0.75 0.419

lab*nch 0.0 0.75 0.419

relative Natural Colour (NC)

lab*trj 1.0 0.0 0.0

lab*tce 0.25 0.75 0.453

lab*nce 0.0 0.75 0.453

relative Inform. Technology (IT)

olvi3* 0.0 0.75 0.0 1.0

cmyn3* 1.0 0.0 1.0 0.0

olvi4* 0.0 1.0 0.0 1.0

cmyn4* 1.0 0.0 1.0 0.0

standard and adapted CIELAB

LAB*LAB 50.9 -62.78 34.94

LAB*LABa 50.9 -62.78 34.94

LAB*TCHa 50.0 71.86 150.91

relative CIELAB lab*

lab*lab 1.0 0.0 0.0

lab*tch 0.25 0.75 0.419

lab*nch 0.0 0.75 0.419

relative Natural Colour (NC)

lab*trj 1.0 0.0 0.0

lab*tce 0.25 0.75 0.453

lab*nce 0.0 0.75 0.453

UE450-7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

BAM-test chart UE45; Colorimetric systems MRS18 & ORS18

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

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

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

output: no change compared to input

Input: Colorimetric Reflective System MRS18

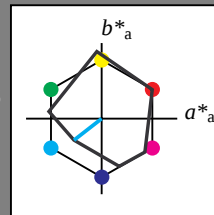
for hue $h^* = lab \cdot h = 218/360 = 0.605$

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

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

triangle lightness

1,00



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

Output: Colorimetric Reflective System ORS18

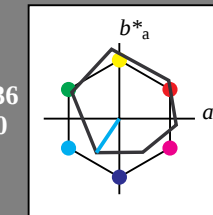
for hue $h^* = lab \cdot h = 236/360 = 0.656$

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

D65: hue C
LCH*Ma: 59 54 236
rgb*Ma: 0.0 1.0 1.0

triangle lightness

1,00



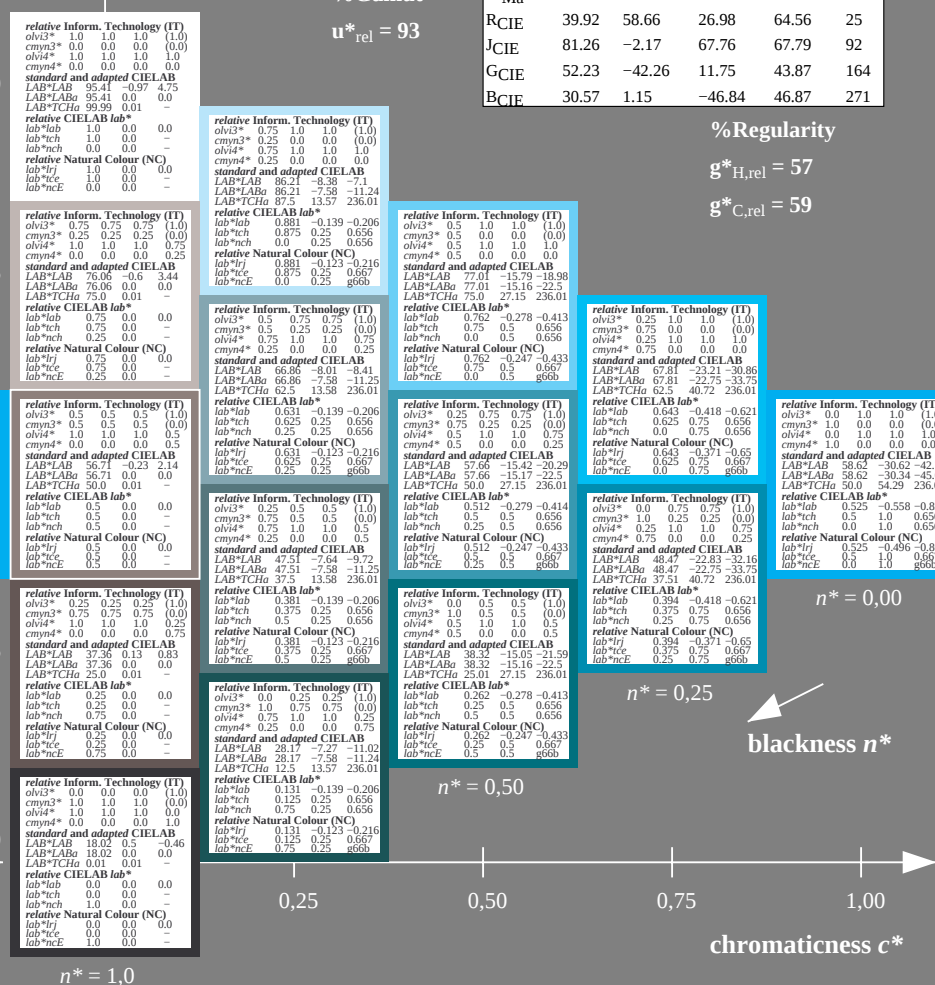
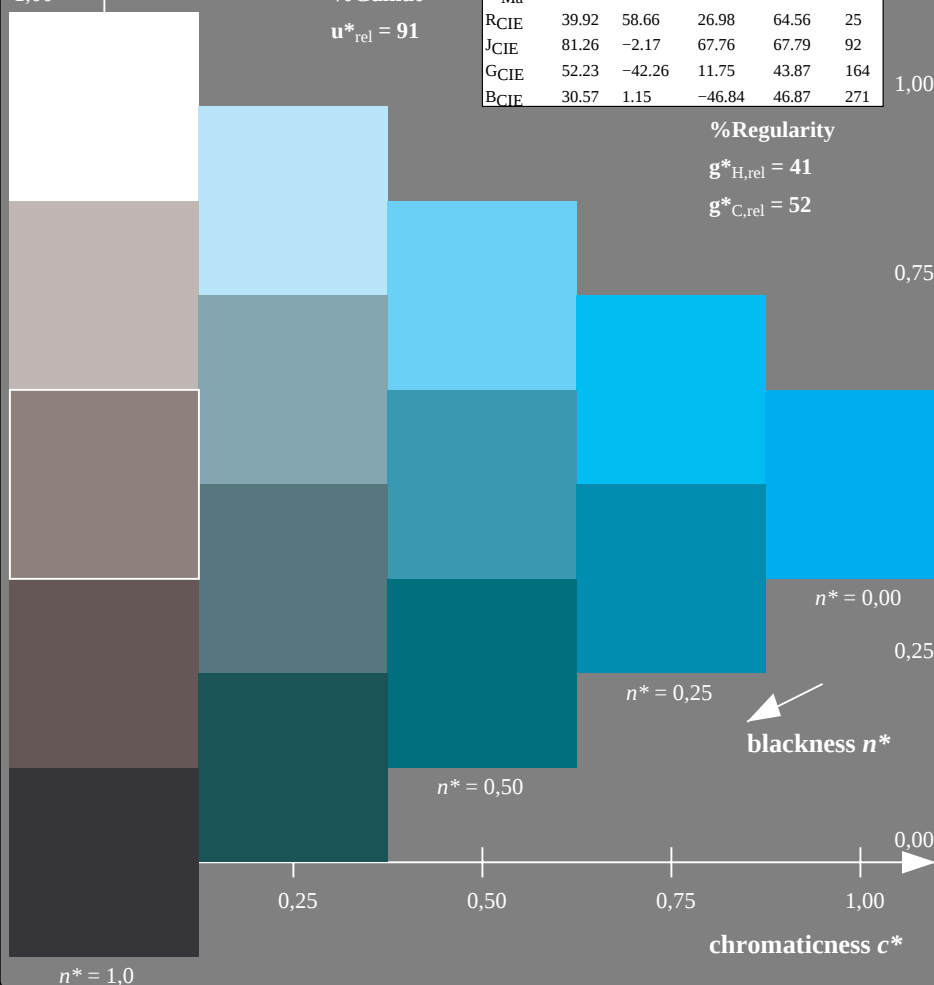
ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CLMa	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	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



UE450-7, 5 step scales for constant CIELAB hue 218/360 = 0.605 (left)

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

BAM-test chart UE45; Colorimetric systems MRS18 & ORS18

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

input: $cmY0^* set cmykcolor$

output: no change compared to input

Input: Colorimetric Reflective System MRS18

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

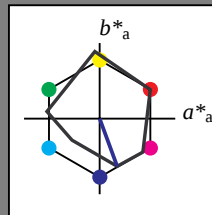
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 37 67 290

rgb*Ma: 0.0 0.0 1.0

triangle lightness

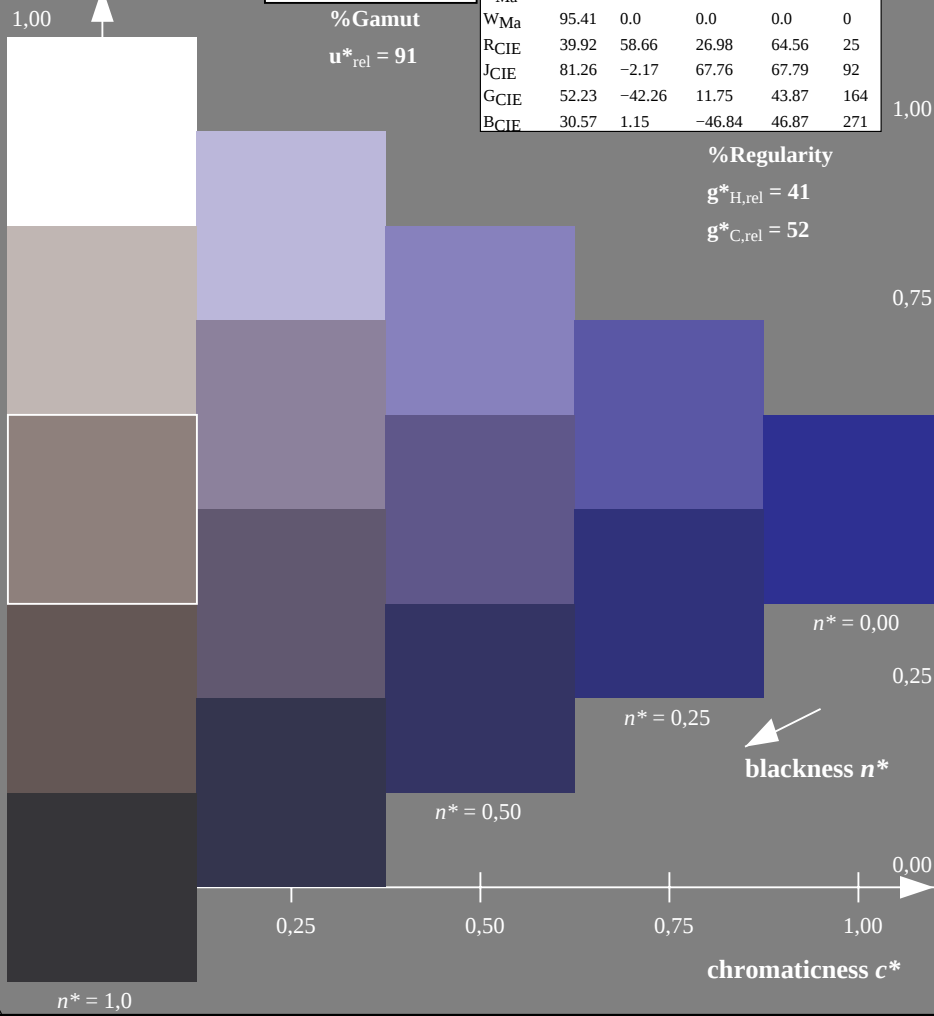


MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{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

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

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



UE450-7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

Output: Colorimetric Reflective System ORS18

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

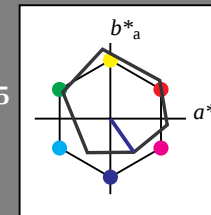
$lab \cdot tch$ and $lab \cdot nch$

D65: hue V

LCH*Ma: 26 54 305

rgb*Ma: 0.0 0.0 1.0

triangle lightness

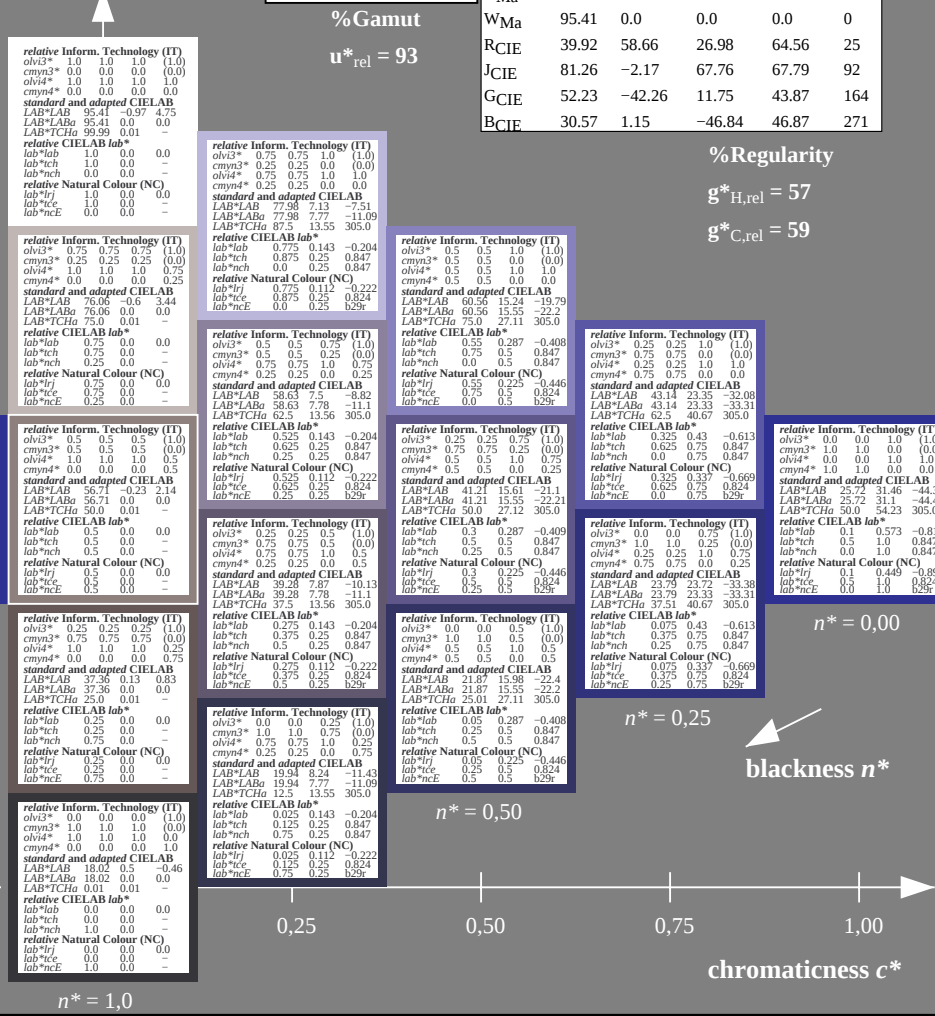


ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	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

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

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



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

BAM-test chart UE45; Colorimetric systems MRS18 & ORS18

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

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

output: no change compared to input

Input: Colorimetric Reflective System MRS18

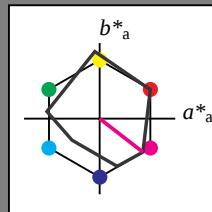
for hue $h^* = lab \cdot h = 322/360 = 0.895$

$lab \cdot tch$ 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
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	-0.97	4.75		
LAB*LABa	95.41	0.0	0.0		
LAB*TCha	99.99	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		
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*	1.0	0.75	1.0	1.0	1.0
cmyn3*	0.0	0.25	0.0	0.0	0.0
olvi4*	1.0	0.75	1.0	1.0	1.0
cmyn4*	0.0	0.25	0.0	0.0	0.0
standard and adapted CIELAB					
LAB*LAB	83.59	18.06	1.87		
LAB*LABa	83.59	18.81	2.08		
LAB*TCha	87.5	18.82	353.66		
relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*tch	0.875	0.25	0.982		
lab*nch	0.0	0.25	0.982		
lab*trj	0.847	0.227	-0.103		
lab*tce	0.875	0.25	0.932		
lab*nce	0.0	0.25	0.932		

relative Inform. Technology (IT)					
olvi3*	0.75	0.75	0.75	1.0	1.0
cmyn3*	0.25	0.25	0.25	0.0	0.0
olvi4*	1.0	1.0	1.0	0.75	0.75
cmyn4*	0.0	0.0	0.0	0.25	0.25
standard and adapted CIELAB					
LAB*LAB	76.06	-0.6	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	1.0
cmyn3*	0.5	0.5	0.5	0.0	0.0
olvi4*	1.0	1.0	1.0	0.5	0.5
cmyn4*	0.0	0.0	0.0	0.5	0.5
standard and adapted CIELAB					
LAB*LAB	56.71	0.23	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	1.0
cmyn3*	0.25	0.25	0.25	0.0	0.0
olvi4*	1.0	1.0	1.0	0.25	0.25
cmyn4*	0.0	0.0	0.0	0.25	0.25
standard and adapted CIELAB					
LAB*LAB	44.8	18.8	-0.73		
LAB*LABa	44.89	18.82	-2.08		
LAB*TCha	37.5	18.93	353.66		
relative CIELAB lab*					
lab*lab	0.347	0.248	-0.027		
lab*tch	0.347	0.25	0.982		
lab*nch	0.25	0.25	0.982		
lab*trj	0.347	0.227	-0.103		
lab*tce	0.347	0.25	0.932		
lab*nce	0.25	0.25	0.932		

relative Inform. Technology (IT)					
olvi3*	0.0	0.5	1.0	1.0	1.0
cmyn3*	0.5	0.75	0.5	0.0	0.0
olvi4*	1.0	0.75	1.0	0.5	0.5
cmyn4*	0.0	0.25	0.0	0.5	0.5
standard and adapted CIELAB					
LAB*LAB	44.8	18.8	-0.73		
LAB*LABa	44.89	18.82	-2.08		
LAB*TCha	37.5	18.93	353.66		
relative CIELAB lab*					
lab*lab	0.445	0.454	-0.208		
lab*tch	0.445	0.454	-0.208		
lab*nch	0.25	0.5	0.932		
lab*trj	0.445	0.454	-0.208		
lab*tce	0.445	0.454	-0.208		
lab*nce	0.25	0.5	0.932		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.5	1.0	1.0
cmyn3*	0.0	0.0	0.5	0.0	0.0
olvi4*	1.0	1.0	0.5	1.0	1.0
cmyn4*	0.0	0.0	0.5	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	0.25	0.0	0.0		
lab*trj	0.25	0.0	0.0		
lab*tce	0.25	0.0	0.0		
lab*nce	0.25	0.0	0.0		

relative Inform. Technology (IT)					
olvi3*	0.25	0.0	0.5	1.0	1.0
cmyn3*	0.75	1.0	0.75	0.0	0.0
olvi4*	1.0	1.0	1.0	0.0	0.0
cmyn4*	0.0	0.0	0.0	0.75	0.75
standard and adapted CIELAB					
LAB*LAB	18.02	0.5	-0.46		
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	0.0	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		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	1.0	1.0
cmyn3*	1.0	1.0	1.0	0.0	0.0
olvi4*	1.0	1.0	1.0	0.0	0.0
cmyn4*	0.0	0.0	0.0	1.0	1.0
standard and adapted CIELAB					
LAB*LAB	18.02	0.5	-0.46		
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	0.0	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		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	1.0	1.0
cmyn3*	1.0	1.0	1.0	0.0	0.0
olvi4*	1.0	1.0	1.0	0.0	0.0
cmyn4*	0.0	0.0	0.0	1.0	1.0
standard and adapted CIELAB					
LAB*LAB	18.02	0.5	-0.46		
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	0.0	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		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	1.0	1.0
cmyn3*	1.0	1.0	1.0	0.0	0.0
olvi4*	1.0	1.0	1.0	0.0	0.0
cmyn4*	0.0	0.0	0.0	1.0	1.0
standard and adapted CIELAB					
LAB*LAB	18.02	0.5	-0.46		
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	0.0	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		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	1.0	1.0
cmyn3*	1.0	1.0	1.0	0.0	0.0
olvi4*	1.0	1.0	1.0	0.0	0.0
cmyn4*	0.0	0.0	0.0	1.0	1.0
standard and adapted CIELAB					
LAB*LAB	18.02	0.5	-0.46		
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	0.0	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		

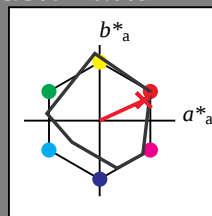
relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	1.0	1.0
cmyn3*	1.0	1.0	1.0	0.0	0.0
olvi4*	1.0	1.0	1.0	0.0	0.0
cmyn4*	0.0	0.0	0.0	1.0	1.0
standard and adapted CIELAB					
LAB*LAB	18.02	0.5	-0.46		
LAB*LABa	18.02	0.0	0.0		
LAB*TCha	0.01	0.01	0.0		
relative CIELAB lab*					
lab*lab	0.0	0.0	0.0		
lab*tch	0.0	0.0	0.0		
lab*nch	0.0	0.0	0.0		
lab*trj	0.0	0.0	0.0		
lab*tce	0.0	0.0			

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	$C^*_{ab,a}$	$h^*_{ab,a}$
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

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

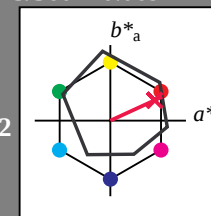
chromaticness c^*

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	$C^*_{ab,a}$	$h^*_{ab,a}$
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

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

UE450-7, 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 UE45; Colorimetric systems MRS18 & ORS18

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

input: $cmY0^* set cmykcolor$

output: no change compared to input

Input: Colorimetric Reflective System MRS18

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

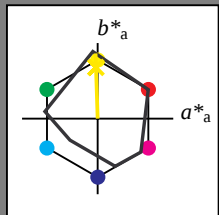
$lab \cdot tch$ and $lab \cdot nch$

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^*

Output: Colorimetric Reflective System ORS18

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

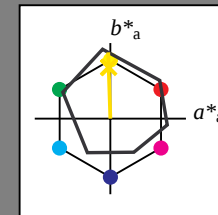
$lab \cdot tch$ and $lab \cdot nch$

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^*

UE450-7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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

BAM-test chart UE45; Colorimetric systems MRS18 & ORS18

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

input: $cmY0^* set cmykcolor$

output: no change compared to input

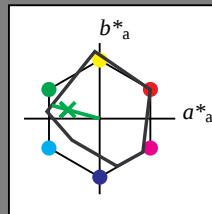
Input: Colorimetric Reflective System MRS18

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

lab^*tch and lab^*nch

D65: hue G
LCH*Ma: 56 66 164
rgb*Ma: 0.1 1.0 0.0

triangle lightness

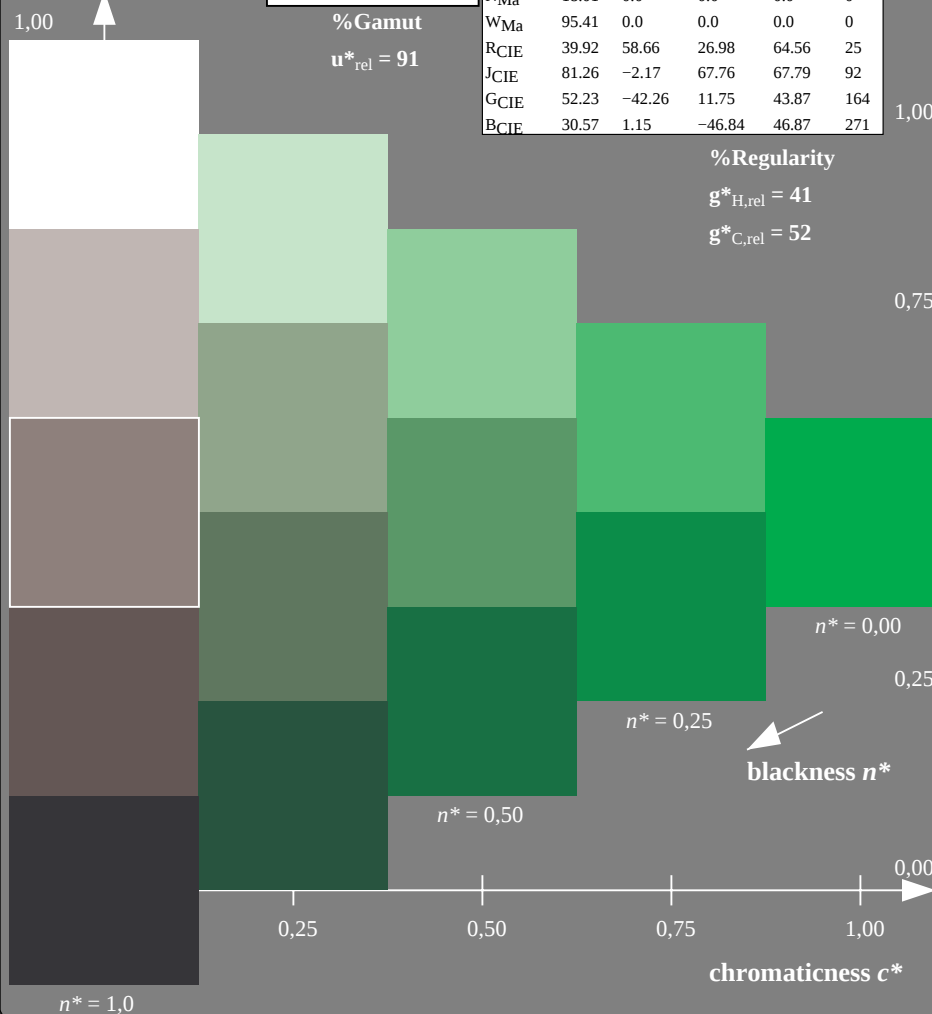


MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	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

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

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



UE450-7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

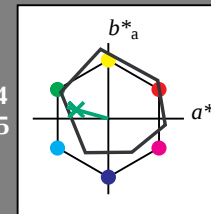
Output: Colorimetric Reflective System ORS18

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

lab^*tch and lab^*nch

D65: hue G
LCH*Ma: 53 57 164
rgb*Ma: 0.0 1.0 0.25

triangle lightness

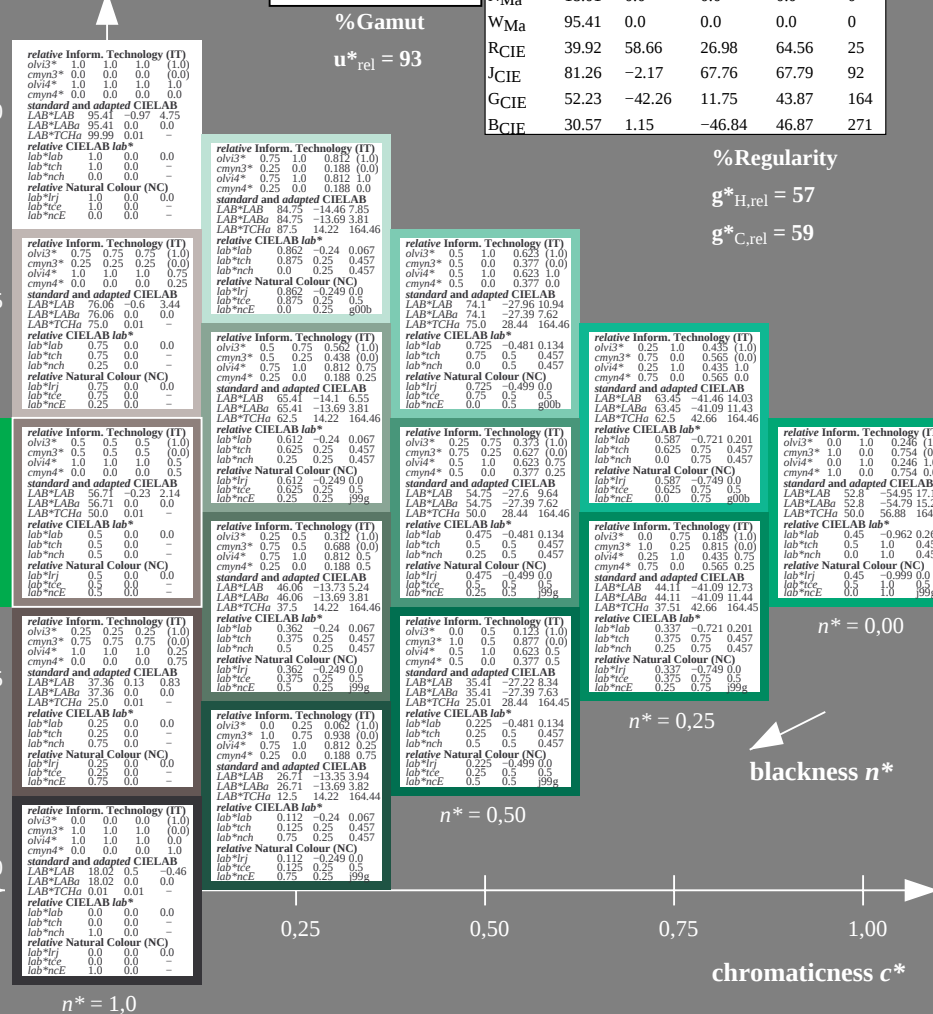


ORS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	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 164/360 = 0.457 (right)

BAM-test chart UE45; Colorimetric systems MRS18 & ORS18

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

input: $cmY0^* setcmykcolor$

output: no change compared to input

Input: Colorimetric Reflective System MRS18

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

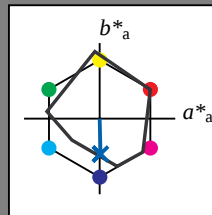
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 40 50 271

rgb*Ma: 0.0 0.37 1.0

triangle lightness

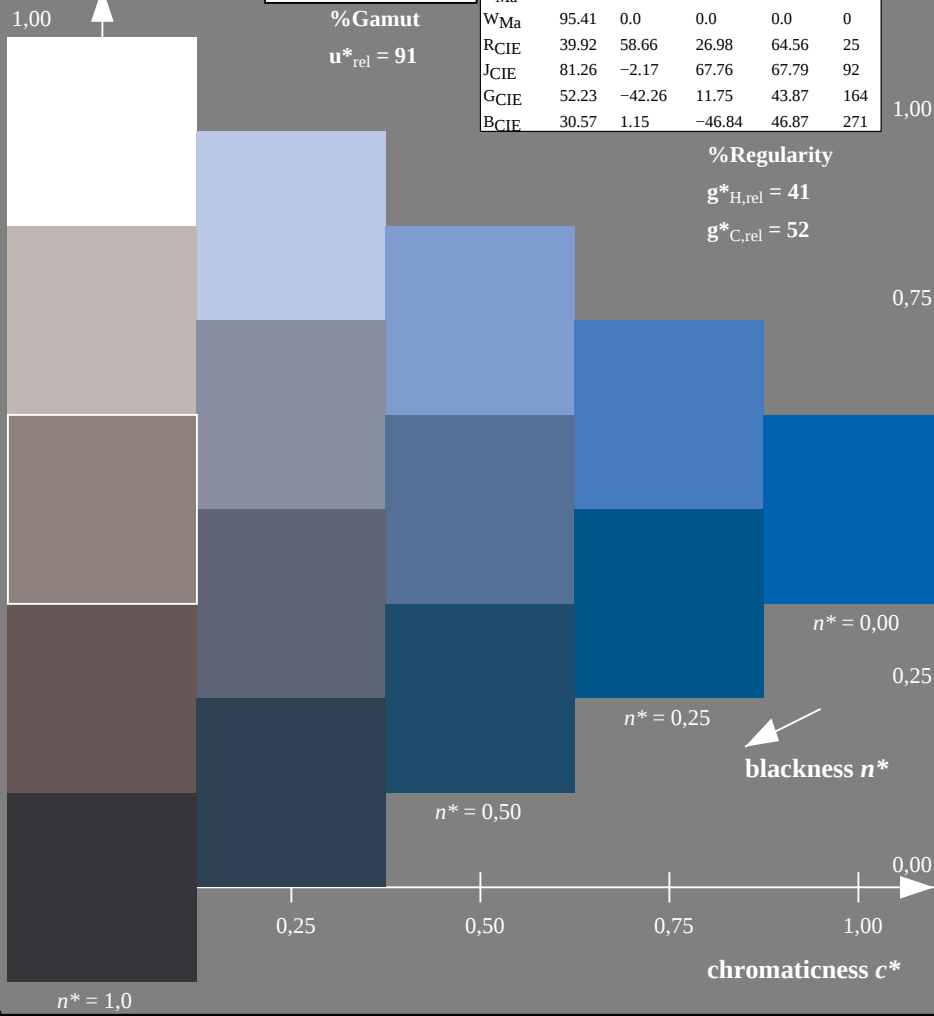


MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{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

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

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



UE450-7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

BAM-test chart UE45; Colorimetric systems MRS18 & ORS18

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

Output: Colorimetric Reflective System ORS18

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

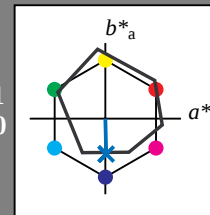
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 42 45 271

rgb*Ma: 0.0 0.49 1.0

triangle lightness

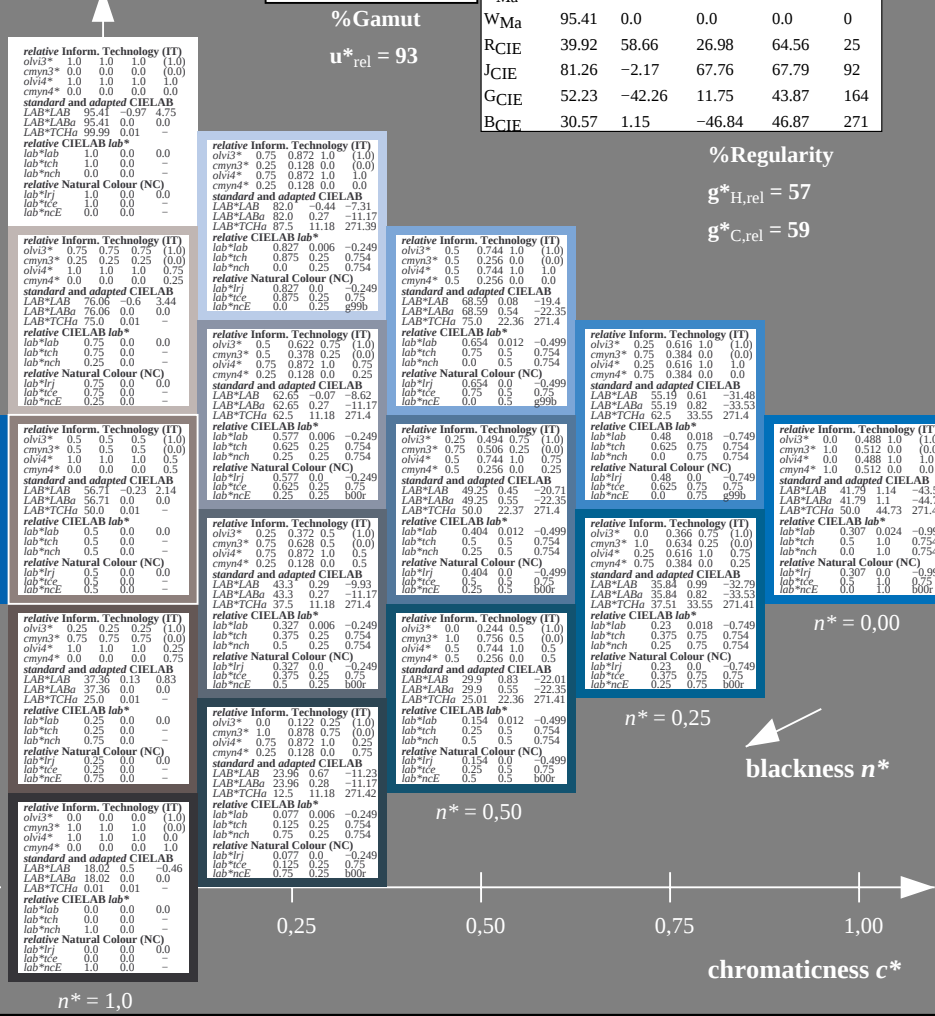


ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	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)

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

output: no change compared to input