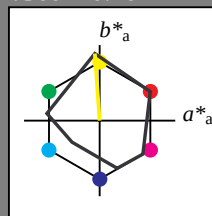


Input: Colorimetric Reflective System MRS18

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

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,00$

chromaticness c^*

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

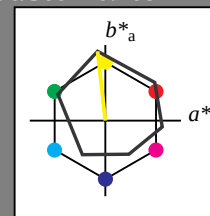


BAM-test chart UE45; Colorimetric systems MRS18 & ORS18
D65: 5 step colour scales and coordinate data for 10 hues

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

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

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

blackness n^*

$n^* = 0,00$

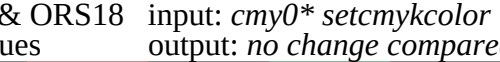
$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,00$

chromaticness c^*

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



input: $cmY0^* set cmykcolor$
output: no change compared to input

BAM material: code=rh4ta

-8	
-6	

Input: Colorimetric Reflective System MRS18

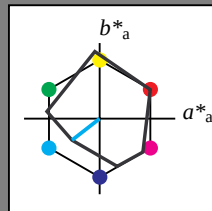
for hue $h^* = lab \cdot h = 218/360 = 0.605$

$lab \cdot tch$ 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

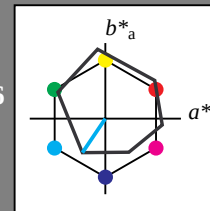
for hue $h^* = lab \cdot h = 236/360 = 0.656$

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

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

triangle lightness

1,00



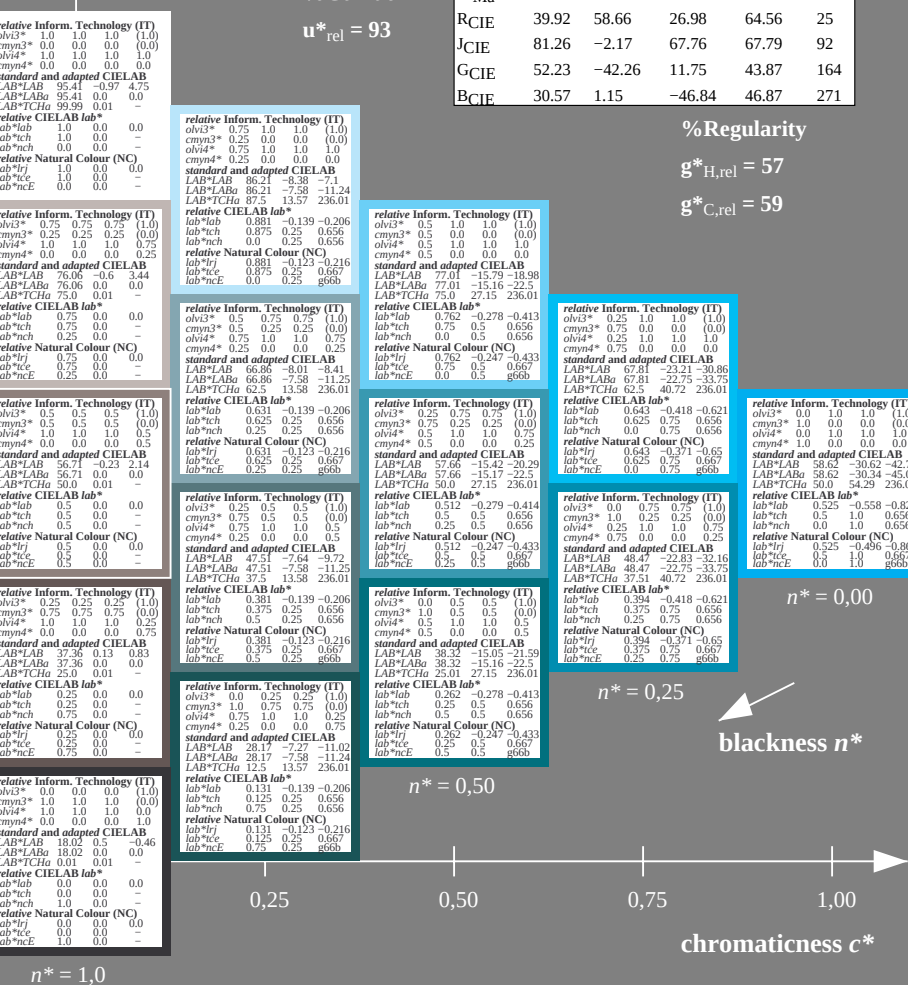
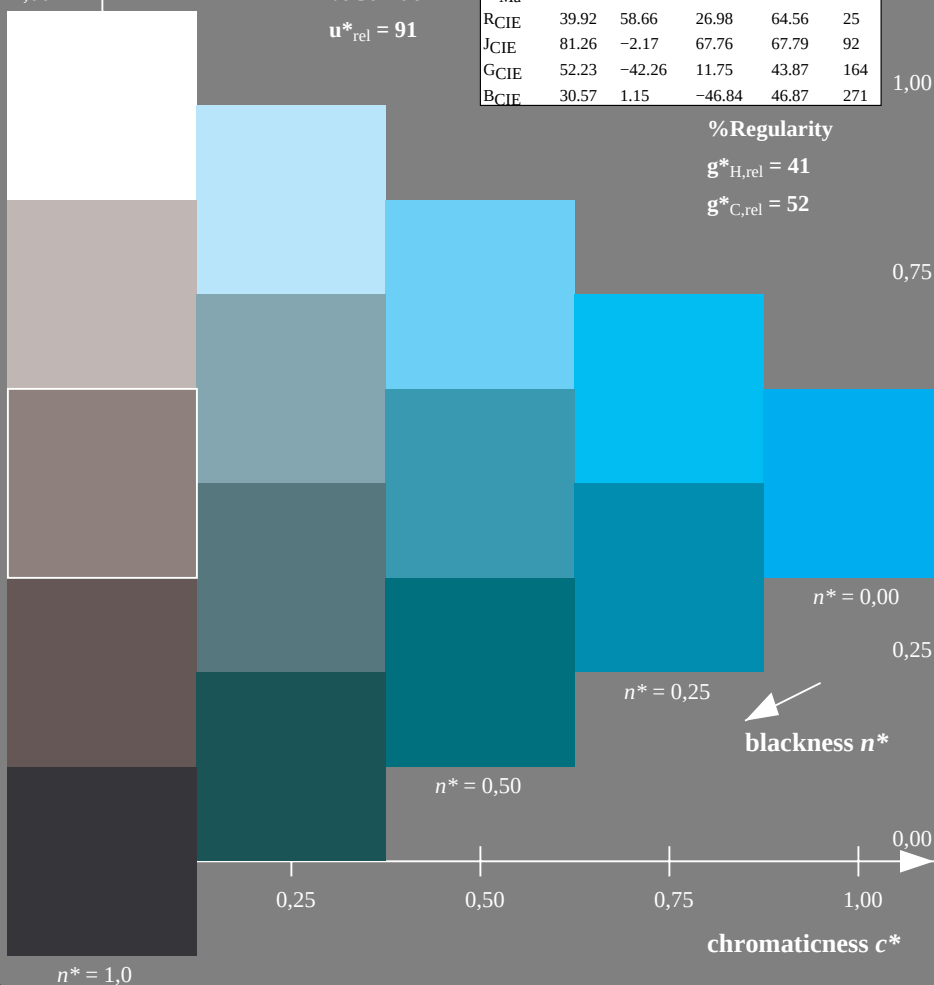
ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0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

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

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

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

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 $lab \cdot nch$

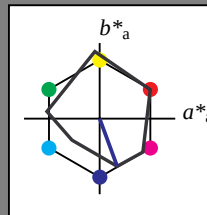
D65: hue B

LCH*Ma: 37 67 290

rgb*Ma: 0.0 0.0 1.0

triangle lightness

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*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*trc	1.0	0.0	0.0		
lab*ncc	0.0	0.0	0.0		

relative Inform. Technology (IT)					
olvi3*	0.75	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	0.25	(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	77.98	7.13	-7.51		
LAB*LABa	77.98	7.13	-7.51		
LAB*LABb	77.98	7.13	-7.51		
LAB*LABc	77.98	7.13	-7.51		
LAB*LABd	77.98	7.13	-7.51		
LAB*LABe	77.98	7.13	-7.51		
LAB*LABf	77.98	7.13	-7.51		
LAB*LABg	77.98	7.13	-7.51		
LAB*LABh	77.98	7.13	-7.51		
LAB*LABi	77.98	7.13	-7.51		
LAB*LABj	77.98	7.13	-7.51		
LAB*LABk	77.98	7.13	-7.51		
LAB*LABl	77.98	7.13	-7.51		
LAB*LABm	77.98	7.13	-7.51		
LAB*LABn	77.98	7.13	-7.51		
LAB*LABo	77.98	7.13	-7.51		
LAB*LABp	77.98	7.13	-7.51		
LAB*LABq	77.98	7.13	-7.51		
LAB*LABr	77.98	7.13	-7.51		
LAB*LABs	77.98	7.13	-7.51		
LAB*LABt	77.98	7.13	-7.51		
LAB*LABu	77.98	7.13	-7.51		
LAB*LABv	77.98	7.13	-7.51		
LAB*LABw	77.98	7.13	-7.51		
LAB*LABx	77.98	7.13	-7.51		
LAB*LABy	77.98	7.13	-7.51		
LAB*LABz	77.98	7.13	-7.51		

relative Inform. Technology (IT)					
olvi3*	0.5	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	0.5	(0.0)
olvi4*	0.75	0.75	0.75	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB					
LAB*LAB	60.56	15.24	-19.79		
LAB*LABa	60.56	15.24	-19.79		
LAB*LABb	60.56	15.24	-19.79		
LAB*LABc	60.56	15.24	-19.79		
LAB*LABd	60.56	15.24	-19.79		
LAB*LABe	60.56	15.24	-19.79		
LAB*LABf	60.56	15.24	-19.79		
LAB*LABg	60.56	15.24	-19.79		
LAB*LABh	60.56	15.24	-19.79		
LAB*LABi	60.56	15.24	-19.79		
LAB*LABj	60.56	15.24	-19.79		
LAB*LABk	60.56	15.24	-19.79		
LAB*LABl	60.56	15.24	-19.79		
LAB*LABm	60.56	15.24	-19.79		
LAB*LABn	60.56	15.24	-19.79		
LAB*LABo	60.56	15.24	-19.79		
LAB*LABp	60.56	15.24	-19.79		
LAB*LABq	60.56	15.24	-19.79		
LAB*LABr	60.56	15.24	-19.79		
LAB*LABs	60.56	15.24	-19.79		
LAB*LABt	60.56	15.24	-19.79		
LAB*LABu	60.56	15.24	-19.79		
LAB*LABv	60.56	15.24	-19.79		
LAB*LABw	60.56	15.24	-19.79		
LAB*LABx	60.56	15.24	-19.79		
LAB*LABy	60.56	15.24	-19.79		
LAB*LABz	60.56	15.24	-19.79		

relative Inform. Technology (IT)					
olvi3*	0.25	0.25	0.25	0.25	(1.0)
cmyn3*	0.25	0.25	0.25	0.25	(0.0)
olvi4*	0.75	0.75	0.75	0.75	(1.0)
cmyn4*	0.0	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*	0.25	0.25	0.25	0.25	(1.0)
cmyn3*	0.25	0.25	0.25	0.25	(0.0)
olvi4*	0.75	0.75	0.75	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB					
LAB*LAB	41.21	15.61	-21.1		
LAB*LABa	41.21	15.61	-21.1		
LAB*LABb	41.21	15.61	-21.1		
LAB*LABc	41.21	15.61	-21.1		
LAB*LABd	41.21	15.61	-21.1		
LAB*LABe	41.21	15.61	-21.1		
LAB*LABf	41.21	15.61	-21.1		
LAB*LABg	41.21	15.61	-21.1		
LAB*LABh	41.21	15.61	-21.1		
LAB*LABi	41.21	15.61	-21.1		
LAB*LABj	41.21	15.61	-21.1		
LAB*LABk	41.21	15.61	-21.1		
LAB*LABl	41.21	15.61	-21.1		
LAB*LABm	41.21	15.61	-21.1		
LAB*LABn	41.21	15.61	-21.1		
LAB*LABo	41.21	15.61	-21.1		
LAB*LABp	41.21	15.61	-21.1		
LAB*LABq	41.21	15.61	-21.1		
LAB*LABr	41.21	15.61	-21.1		
LAB*LABs	41.21	15.61	-21.1		
LAB*LABt	41.21	15.61	-21.1		
LAB*LABu	41.21	15.61	-21.1		
LAB*LABv	41.21	15.61	-21.1		
LAB*LABw	41.21	15.61	-21.1		
LAB*LABx	41.21	15.61	-21.1		
LAB*LABy	41.21	15.61	-21.1		
LAB*LABz	41.21	15.61	-21.1		

relative Inform. Technology (IT)					
olvi3*	0.25	0.25	0.25	0.25	(1.0)
cmyn3*	0.25	0.25	0.25	0.25	(0.0)
olvi4*	0.75	0.75	0.75	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB					
LAB*LAB	39.28	7.87	-10.13		
LAB*LABa	39.28	7.87	-10.13		
LAB*LABb	39.28	7.87	-10.13		
LAB*LABc	39.28	7.87	-10.13		
LAB*LABd	39.28	7.87	-10.13		
LAB*LABe	39.28	7.87	-10.13		
LAB*LABf	39.28	7.87	-10.13		
LAB*LABg	39.28	7.87	-10.13		
LAB*LABh	39.28	7.87	-10.13		
LAB*LABi	39.28	7.87	-10.13		
LAB*LABj	39.28	7.87	-10.13		
LAB*LABk	39.28	7.87	-10.13		
LAB*LABl	39.28	7.87	-10.13		
LAB*LABm	39.28	7.87	-10.13		
LAB*LABn	39.28	7.87	-10.13		
LAB*LABo	39.28	7.87	-10.13		
LAB*LABp	39.28	7.87	-10.13		
LAB*LABq	39.28	7.87	-10.13		
LAB*LABr	39.28	7.87	-10.13		
LAB*LABs	39.28	7.87	-10.13		
LAB*LABt	39.28	7.87	-10.13		
LAB*LABu	39.28	7.87	-10.13		
LAB*LABv	39.28	7.87	-10.13		
LAB*LABw	39.28	7.87	-10.13		
LAB*LABx	39.28	7.87	-10.13		
LAB*LABy	39.28	7.87	-10.13		
LAB*LABz	39.28	7.87	-10.13		

<i>olvi3*</i>	0.25	0.25	0.25	(1.0)
<i>cmyn3*</i>	0.75	0.75	0.75	(0.0)
<i>olvi4*</i>	1.0	1.0	1.0	0.25
<i>cmyn4*</i>	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	
LAB*TCHa	25.0	0.01	-	
relative CIELAB lab*				
<i>lab*lab</i>	0.25	0.0	0.0	

Input: Colorimetric Reflective System MRS18

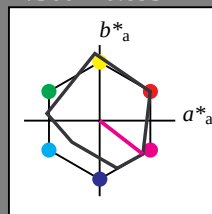
for hue $h^* = lab \cdot h = 322/360 = 0.895$

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

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

triangle lightness

1,00



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*TCha	98.99	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	-0.6	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)	
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*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	-0.46		
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	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		

relative Natural Colour (NC)					
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 Natural Colour (NC)					
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 Natural Colour (NC)					
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 Natural Colour (NC)					
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 Natural Colour (NC)					
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 Natural Colour (NC)					
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*	0.25	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	25.54	18.81	-2.08		
LAB*LABa	25.54	18.81	-2.08		
LAB*TCha	12.5	18.92	353.66		
relative CIELAB lab*					
lab*lab	0.097	0.248	-0.027		
lab*tch	0.125	0.25	0.982		
lab*nch	0.75	0.25	0.982		
lab*trj	0.097	0.227	-0.103		
lab*tce	0.125	0.25	0.932		
lab*nce	0.75	0.25	0.932		

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	44.89	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	0.375	0.25	0.982		
lab*nch	0.75	0.25	0.982		
lab*trj	0.347	0.227	-0.103		
lab*tce	0.375	0.25	0.932		
lab*nce	0.75	0.25	0.932		

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	32.42	37.48	-2.31		
LAB*LABa	32.42	37.63	-4.17		
LAB*TCha	50.0	37.86	353.66		
relative CIELAB lab*					
lab*lab	0.445	0.497	-0.054		
lab*tch	0.5	0.5	0.982		
lab*nch	0.5	0.5	0.982		
lab*trj	0.445	0.454	-0.208		
lab*tce	0.5	0.5	0.932		
lab*nce	0.5	0.5	0.932		

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	52.42	37.48	-2.31		
LAB*LABa	52.42	37.63	-4.17		
LAB*TCha	50.0	37.86	353.66		
relative CIELAB lab*					
lab*lab	0.695	0.497	-0.054		
lab*tch	0.75	0.25	0.982		
lab*nch	0.75	0.25	0.982		
lab*trj	0.695	0.454	-0.208		
lab*tce	0.75	0.25	0.932		
lab*nce	0.75	0.25	0.932		

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	40.61	56.51	-5.2		
LAB*LABa	40.61	56.44	-6.26		
LAB*TCha	37.51	56.79	353.66		
relative CIELAB lab*					
lab*lab	0.542	0.745	-0.082		
lab*tch	0.625	0.75	0.982		
lab*nch	0.625	0.75	0.982		
lab*trj	0.542	0.682	-0.312		
lab*tce	0.625	0.75	0.932		
lab*nce	0.625	0.75	0.932		

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	40.61	56.51	-5.2		
LAB*LABa	40.61	56.44	-6.26		
LAB*TCha	37.51	56.79	353.66		
relative CIELAB lab*					
lab*lab	0.542	0.745	-0.082		
lab*tch	0.625	0.75	0.982		
lab*nch	0.625	0.75	0.982		
lab*trj	0.542	0.682	-0.312		
lab*tce	0.625	0.75	0.932		
lab*nce	0.625	0.75	0.932		

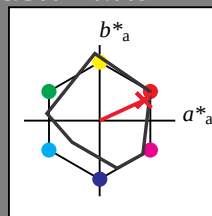
relative Inform. Technology (IT)					
olvi3*	0.75	0.75	0.75	(1.0)	

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

blackness n^*

chromaticness c^*

UE450-7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

BAM-test chart UE45; Colorimetric systems MRS18 & ORS18

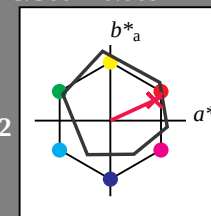
D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Reflective System ORS18

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

$lab \cdot tch$ 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
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

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

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

1,00

0,75

blackness n^*

chromaticness c^*

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

input: $cmY0^* set cmykcolor$

output: no change compared to input

Input: Colorimetric Reflective System MRS18

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

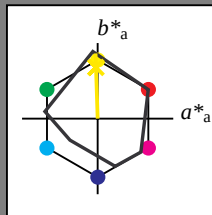
lab^*tch and lab^*nch

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

$n^* = 0,25$

$n^* = 0,50$

0,25

0,50

0,75

1,00

chromaticness c^*

UE450-7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (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 $h^* = lab^*h = 92/360 = 0.255$

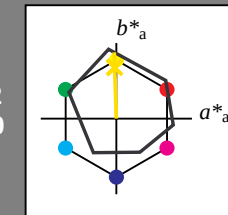
lab^*tch and lab^*nch

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

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

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

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

0,25

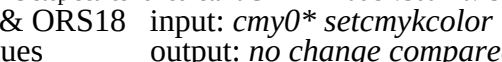
0,50

0,75

1,00

chromaticness c^*

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



input: $cmY0^* set cmykcolor$

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

1,00

%Gamut

$u^*_{rel} = 91$

%Regularity

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

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

0,75

%Regularity

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

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

0,50

%Regularity

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

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

0,25

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

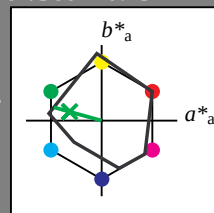
%Regularity

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

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

0,00

%Regularity



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

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

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

0,75

%Regularity

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

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

0,50

%Regularity

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

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

0,25

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

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

1,00

%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

0,75

%Regularity

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

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

0,50

%Regularity

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

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

0,25

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

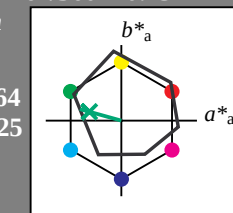
%Regularity

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

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

0,00

%Regularity



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
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
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

0,75

%Regularity

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

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

0,50

%Regularity

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

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

0,25

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

0,00

%Regularity

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

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

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

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

output: no change compared to input

Input: Colorimetric Reflective System MRS18

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

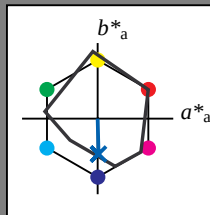
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 40 50 271

rgb*Ma: 0.0 0.37 1.0

triangle lightness

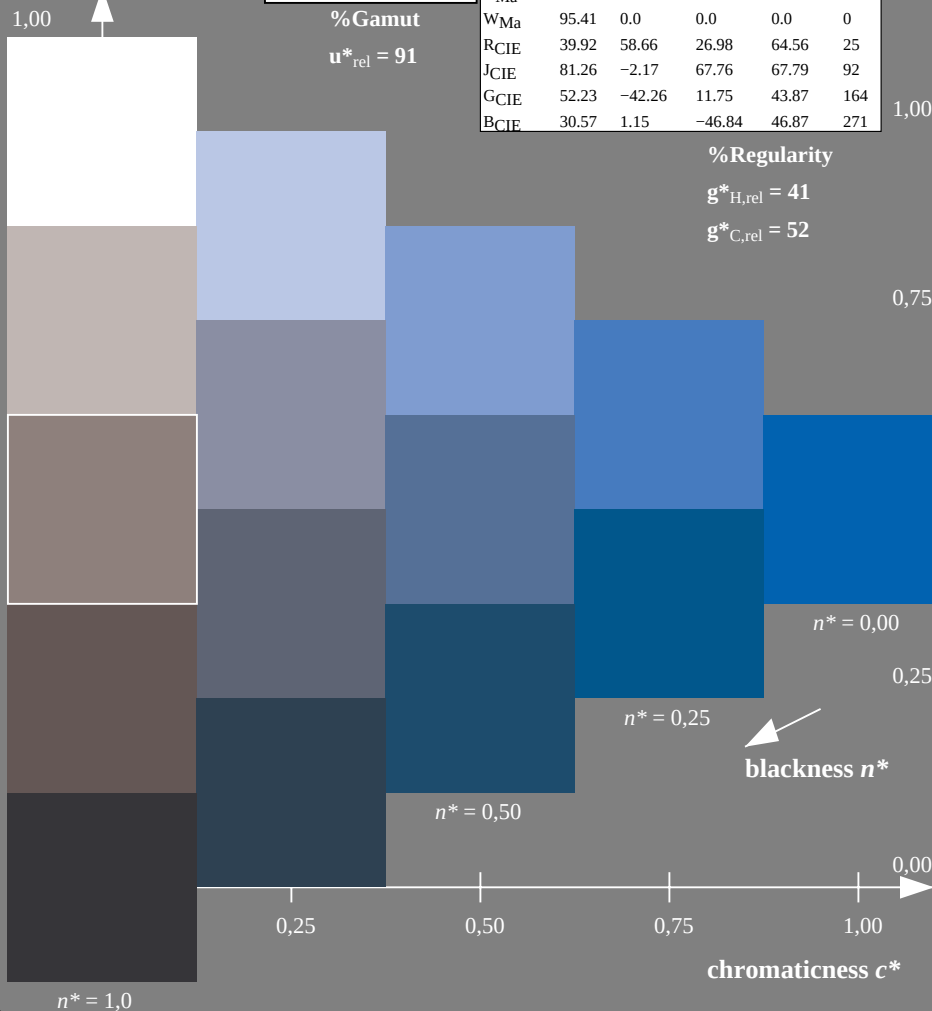


MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	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 $h^* = lab \cdot h = 271/360 = 0.754$

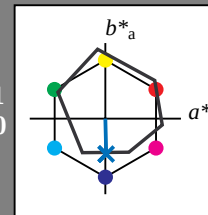
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 42 45 271

rgb*Ma: 0.0 0.49 1.0

triangle lightness

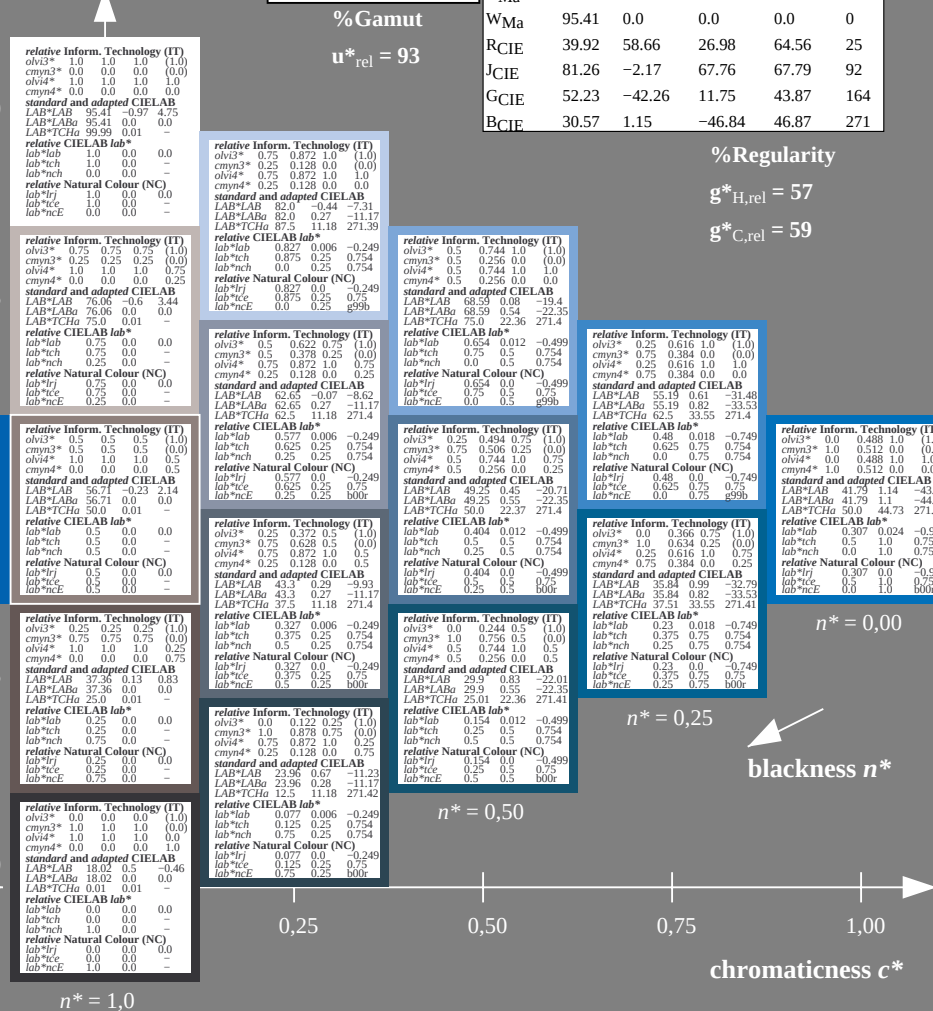


ORS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
N _{Ma}	18.01	0.0	0.0	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: $cmY0^* set cmykcolor$

output: no change compared to input