

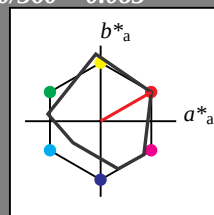
Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 30/360 = 0.083$ lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 50 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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

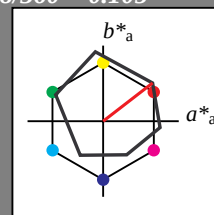
Output: Colorimetric Reflective System ORS18

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

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

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

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
BCIE	30.57	1.15	-46.84	46.87	271

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	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*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	0.5
cmyn4*	0.0	0.0	0.0	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	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	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	-

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.5	(1.0)
cmyn3*	0.0	0.5	0.5	(0.0)
olvi4*	1.0	0.5	0.5	1.0
cmyn4*	0.0	0.5	0.5	0.0

standard and adapted CIELAB

LAB*LAB	71.67	32.15	28.41
LAB*LABa	71.67	32.68	25.25
LAB*TCHa	75.0	41.3	37.7

relative CIELAB lab*

lab*lab	0.693	0.396	0.306
lab*tch	0.75	0.5	0.105
lab*nch	0.0	0.5	0.105

relative Natural Colour (NC)

lab*lrj	0.693	0.477	0.15
lab*tce	0.75	0.5	0.048
lab*nce	0.0	0.5	r19j

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.0	(1.0)
cmyn3*	0.5	1.0	1.0	(0.0)
olvi4*	1.0	0.5	0.5	0.5
cmyn4*	0.0	0.5	0.5	0.5

standard and adapted CIELAB

LAB*LAB	32.98	32.9	25.8
LAB*LABa	32.98	32.68	25.25
LAB*TCHa	25.01	41.3	37.7

relative CIELAB lab*

lab*lab	0.193	0.396	0.306
lab*tch	0.25	0.5	0.105
lab*nch	0.5	0.5	0.105

relative Natural Colour (NC)

lab*lrj	0.193	0.477	0.15
lab*tce	0.25	0.5	0.048
lab*nce	0.5	0.5	r19j

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.0	(1.0)
cmyn3*	0.0	1.0	1.0	(0.0)
olvi4*	1.0	0.0	0.0	1.0
cmyn4*	0.0	1.0	1.0	0.0

standard and adapted CIELAB

LAB*LAB	47.95	65.29	52.06
LAB*LABa	47.95	65.36	50.51
LAB*TCHa	50.0	82.6	37.7

relative CIELAB lab*

lab*lab	0.387	0.791	0.611
lab*tch	0.5	1.0	0.105
lab*nch	0.0	1.0	0.105

relative Natural Colour (NC)

lab*lrj	0.387	0.954	0.299
lab*tce	0.5	1.0	0.048
lab*nce	0.0	1.0	r19j

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

UE050-7, 3 step scales for constant CIELAB hue 30/360 = 0.083 (left)

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

BAM-test chart UE05; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmv0^*$ setcmkcolor

output: Startup (S) data dependend

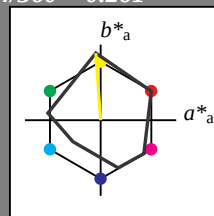
Input: Colorimetric Reflective System MRS18

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

D65: hue J

LCH*Ma: 91 89 94

olv*Ma: 1.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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

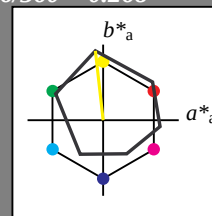
Output: Colorimetric Reflective System ORS18

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

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

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

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
BCIE	30.57	1.15	-46.84	46.87	271

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	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*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	0.5
cmyn4*	0.0	0.0	0.0	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	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	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	-

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.5	(1.0)
cmyn3*	0.0	0.0	0.5	(0.0)
olvi4*	1.0	1.0	0.5	1.0
cmyn4*	0.0	0.0	0.5	0.0

standard and adapted CIELAB

LAB*LAB	92.88	-6.06	50.46
LAB*LABa	92.88	-5.13	45.87
LAB*TCHa	75.0	46.16	96.39

relative CIELAB lab*

lab*lab	0.967	-0.055	0.497
lab*tch	0.75	0.5	0.268
lab*nch	0.0	0.5	0.268

relative Natural Colour (NC)

lab*lrj	0.967	-0.048	0.497
lab*tce	0.75	0.5	0.266
lab*nce	0.0	0.5	j06g

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.0	(1.0)
cmyn3*	0.5	0.5	1.0	(0.0)
olvi4*	1.0	1.0	0.5	0.5
cmyn4*	0.0	0.0	0.5	0.5

standard and adapted CIELAB

LAB*LAB	54.19	-5.32	47.85
LAB*LABa	54.19	-5.13	45.87
LAB*TCHa	25.01	46.16	96.39

relative CIELAB lab*

lab*lab	0.467	-0.055	0.497
lab*tch	0.25	0.5	0.268
lab*nch	0.5	0.5	0.268

relative Natural Colour (NC)

lab*lrj	0.467	-0.048	0.497
lab*tce	0.25	0.5	0.266
lab*nce	0.5	0.5	j06g

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.0	(1.0)
cmyn3*	0.0	0.0	1.0	(0.0)
olvi4*	1.0	1.0	0.0	1.0
cmyn4*	0.0	0.0	1.0	0.0

standard and adapted CIELAB

LAB*LAB	90.37	-11.15	96.17
LAB*LABa	90.37	-10.26	91.75
LAB*TCHa	50.0	92.32	96.39

relative CIELAB lab*

lab*lab	0.935	-0.11	0.994
lab*tch	0.5	1.0	0.268
lab*nch	0.0	1.0	0.268

relative Natural Colour (NC)

lab*lrj	0.935	-0.097	0.995
lab*tce	0.5	1.0	0.266
lab*nce	0.0	1.0	j06g

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

UE050-7, 3 step scales for constant CIELAB hue 94/360 = 0.261 (left)

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

BAM-test chart UE05; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmv0^* setcmykcolor$

output: Startup (S) data dependend

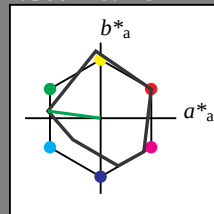
Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 172/360 = 0.479$ lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 52 70 172

olv*Ma: 0.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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

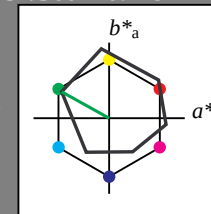
Output: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$ lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

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

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
BCIE	30.57	1.15	-46.84	46.87	271

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 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)
 $olvi3^*$ 0.5 0.5 0.5 (1.0)
 $cmyn3^*$ 0.5 0.5 0.5 (0.0)
 $olvi4^*$ 1.0 1.0 1.0 0.5
 $cmyn4^*$ 0.0 0.0 0.0 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 -

relative CIELAB lab^*
 lab^*lab 0.5 0.0 0.0
 lab^*tch 0.5 0.0 -
 lab^*nch 0.5 0.0 -

relative Natural Colour (NC)
 lab^*lrj 0.5 0.0 0.0
 lab^*tce 0.5 0.0 -
 lab^*nce 0.5 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 0.0
 $cmyn4^*$ 0.0 0.0 0.0 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 -

relative CIELAB lab^*
 lab^*lab 0.0 0.0 0.0
 lab^*tch 0.0 0.0 -
 lab^*nch 1.0 0.0 -

relative Natural Colour (NC)
 lab^*lrj 0.0 0.0 0.0
 lab^*tce 0.0 0.0 -
 lab^*nce 1.0 0.0 -

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
 $cmyn4^*$ 0.5 0.0 0.5 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 0.712 -0.436 0.243
 lab^*tch 0.75 0.5 0.419
 lab^*nch 0.0 0.5 0.419

relative Natural Colour (NC)
 lab^*lrj 0.712 -0.478 0.144
 lab^*tce 0.75 0.5 0.453
 lab^*nce 0.0 0.5 j81g

relative Inform. Technology (IT)
 $olvi3^*$ 0.0 0.5 0.0 (1.0)
 $cmyn3^*$ 1.0 0.5 1.0 (0.0)
 $olvi4^*$ 0.5 1.0 0.5 0.5
 $cmyn4^*$ 0.5 0.0 0.5 0.5

standard and adapted CIELAB
 LAB^*LAB 34.46 -31.2 18.11
 LAB^*LABa 34.46 -31.38 17.47
 LAB^*TCHa 25.01 35.93 150.91

relative CIELAB lab^*
 lab^*lab 0.213 -0.436 0.243
 lab^*tch 0.25 0.5 0.419
 lab^*nch 0.5 0.5 0.419

relative Natural Colour (NC)
 lab^*lrj 0.213 -0.478 0.144
 lab^*tce 0.25 0.5 0.453
 lab^*nce 0.5 0.5 j81g

relative Inform. Technology (IT)
 $olvi3^*$ 0.0 0.5 0.0 (1.0)
 $cmyn3^*$ 1.0 0.5 1.0 (0.0)
 $olvi4^*$ 0.5 1.0 0.5 0.5
 $cmyn4^*$ 0.5 0.0 0.5 0.5

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 -

relative CIELAB lab^*
 lab^*lab 0.0 0.0 0.0
 lab^*tch 0.0 0.0 -
 lab^*nch 1.0 0.0 -

relative Natural Colour (NC)
 lab^*lrj 0.0 0.0 0.0
 lab^*tce 0.0 0.0 -
 lab^*nce 1.0 0.0 -

BAM-test chart UE05; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

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

input: $cmv0^*$ setcmykcolor

output: Startup (S) data depend

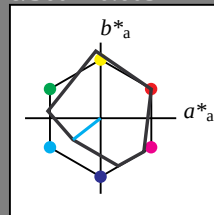
Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 218/360 = 0.605$ lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 45 46 218

olv*Ma: 0.0 1.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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

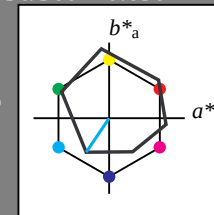
Output: Colorimetric Reflective System ORS18

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

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

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

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
BCIE	30.57	1.15	-46.84	46.87	271

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*TCa	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*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	0.5
cmyn4*	0.0	0.0	0.0	0.5

standard and adapted CIELAB

LAB*LAB	56.71	-0.23	2.14
LAB*LABa	56.71	0.0	0.0
LAB*TCa	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-0.46
LAB*LABa	18.02	0.0	0.0
LAB*TCa	0.01	0.01	-

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	1.0	1.0	(1.0)
cmyn3*	0.5	0.0	0.0	(0.0)
olvi4*	0.5	1.0	1.0	1.0
cmyn4*	0.5	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB	77.01	-15.79	-18.98
LAB*LABa	77.01	-15.16	-22.5
LAB*TCa	75.0	27.15	236.01

relative CIELAB lab*

lab*lab	0.762	-0.278	-0.413
lab*tch	0.75	0.5	0.656
lab*nch	0.0	0.5	0.656

relative Natural Colour (NC)

lab*lrj	0.762	-0.247	-0.433
lab*tce	0.75	0.5	0.667
lab*nce	0.0	0.5	g66b

relative Inform. Technology (IT)

olvi3*	0.0	0.5	0.5	(1.0)
cmyn3*	1.0	0.5	0.5	(0.0)
olvi4*	0.5	1.0	1.0	0.5
cmyn4*	0.5	0.0	0.0	0.5

standard and adapted CIELAB

LAB*LAB	38.32	-15.05	-21.59
LAB*LABa	38.32	-15.16	-22.5
LAB*TCa	25.01	27.15	236.01

relative CIELAB lab*

lab*lab	0.262	-0.278	-0.413
lab*tch	0.25	0.5	0.656
lab*nch	0.5	0.5	0.656

relative Natural Colour (NC)

lab*lrj	0.262	-0.247	-0.433
lab*tce	0.25	0.5	0.667
lab*nce	0.5	0.5	g66b

relative Inform. Technology (IT)

olvi3*	0.0	1.0	1.0	(1.0)
cmyn3*	1.0	0.0	0.0	(0.0)
olvi4*	0.0	1.0	1.0	1.0
cmyn4*	1.0	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB	58.62	-30.62	-42.73
LAB*LABa	58.62	-30.34	-45.01
LAB*TCa	50.0	54.29	236.01

relative CIELAB lab*

lab*lab	0.525	-0.558	-0.828
lab*tch	0.5	1.0	0.656
lab*nch	0.0	1.0	0.656

relative Natural Colour (NC)

lab*lrj	0.525	-0.496	-0.867
lab*tce	0.5	1.0	0.667
lab*nce	0.0	1.0	g66b

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

UE050-7, 3 step scales for constant CIELAB hue 218/360 = 0.605 (left)

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

BAM-test chart UE05; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmv0^* setcmykcolor$

output: Startup (S) data dependend

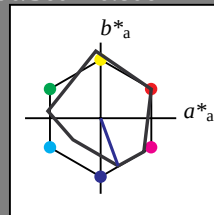
Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 290/360 = 0.806$ lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 37 67 290

olv*Ma: 0.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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

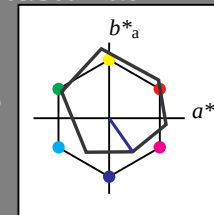
Output: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$ lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

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

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
BCIE	30.57	1.15	-46.84	46.87	271

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	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*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	0.5
cmyn4*	0.0	0.0	0.0	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	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	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	-

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	1.0	(1.0)
cmyn3*	0.5	0.5	0.0	(0.0)
olvi4*	0.5	0.5	1.0	1.0
cmyn4*	0.5	0.5	0.0	0.0

standard and adapted CIELAB

LAB*LAB	60.56	15.24	-19.79
LAB*LABa	60.56	15.55	-22.2
LAB*TCHa	75.0	27.11	305.0

relative CIELAB lab*

lab*lab	0.55	0.287	-0.408
lab*tch	0.75	0.5	0.847
lab*nch	0.0	0.5	0.847

relative Natural Colour (NC)

lab*lrj	0.55	0.225	-0.446
lab*tce	0.75	0.5	0.824
lab*nce	0.0	0.5	0.824

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.5	(1.0)
cmyn3*	1.0	1.0	0.5	(0.0)
olvi4*	0.5	0.5	1.0	0.5
cmyn4*	0.5	0.5	0.0	0.5

standard and adapted CIELAB

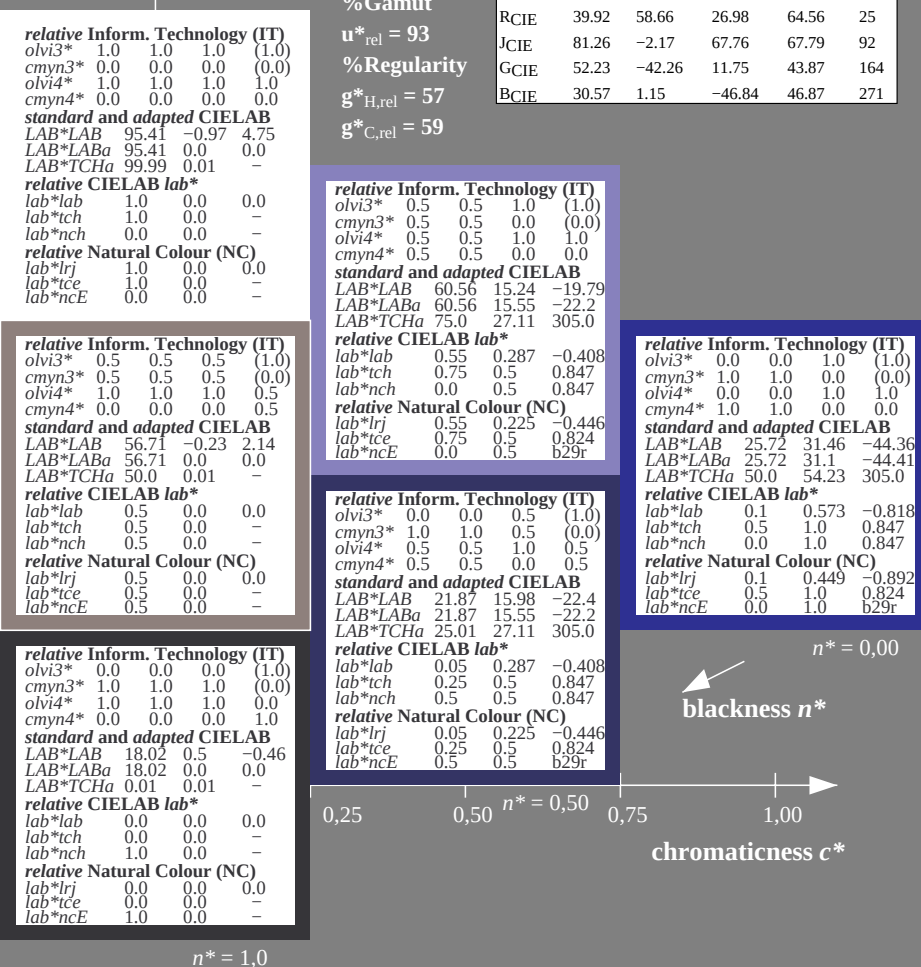
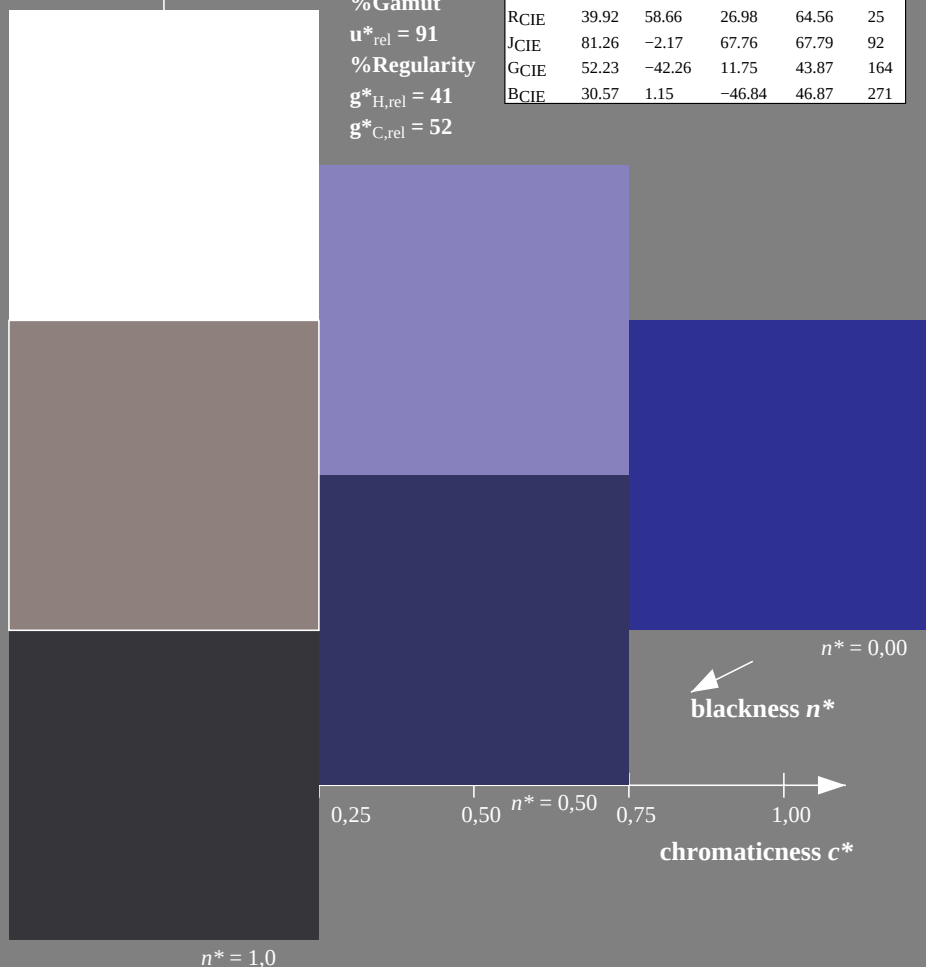
LAB*LAB	21.87	15.98	-22.4
LAB*LABa	21.87	15.55	-22.2
LAB*TCHa	25.01	27.11	305.0

relative CIELAB lab*

lab*lab	0.05	0.287	-0.408
lab*tch	0.25	0.5	0.847
lab*nch	0.5	0.5	0.847

relative Natural Colour (NC)

lab*lrj	0.05	0.225	-0.446
lab*tce	0.25	0.5	0.824
lab*nce	0.5	0.5	0.824



UE050-7, 3 step scales for constant CIELAB hue 290/360 = 0.806 (left)

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

BAM-test chart UE05; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmv0^* setcmykcolor$

output: Startup (S) data depend

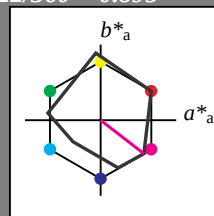
Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 322/360 = 0.895$ lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 35 72 322

olv*Ma: 1.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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

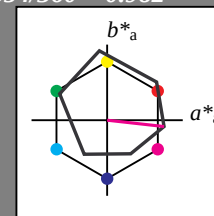
Output: Colorimetric Reflective System ORS18

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

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

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

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
BCIE	30.57	1.15	-46.84	46.87	271

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*TCa	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*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	0.5
cmyn4*	0.0	0.0	0.0	0.5

standard and adapted CIELAB

LAB*LAB	56.71	-0.23	2.14
LAB*LABa	56.71	0.0	0.0
LAB*TCa	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-0.46
LAB*LABa	18.02	0.0	0.0
LAB*TCa	0.01	0.01	-

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	1.0	0.5	1.0	(1.0)
cmyn3*	0.0	0.5	0.0	(0.0)
olvi4*	1.0	0.5	1.0	1.0
cmyn4*	0.0	0.5	0.0	0.0

standard and adapted CIELAB

LAB*LAB	71.77	37.1	-1.01
LAB*LABa	71.77	37.63	-4.17
LAB*TCa	75.0	37.86	353.66

relative CIELAB lab*

lab*lab	0.695	0.497	-0.054
lab*tch	0.75	0.5	0.982
lab*nch	0.0	0.5	0.982

relative Natural Colour (NC)

lab*lrj	0.695	0.454	-0.208
lab*tce	0.75	0.5	0.932
lab*nce	0.0	0.5	0.72r

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.5	(1.0)
cmyn3*	0.5	1.0	0.5	(0.0)
olvi4*	1.0	0.5	1.0	0.5
cmyn4*	0.0	0.5	0.0	0.5

standard and adapted CIELAB

LAB*LAB	33.08	37.84	-3.62
LAB*LABa	33.08	37.63	-4.17
LAB*TCa	25.01	37.86	353.66

relative CIELAB lab*

lab*lab	0.195	0.497	-0.054
lab*tch	0.25	0.5	0.982
lab*nch	0.5	0.5	0.982

relative Natural Colour (NC)

lab*lrj	0.195	0.454	-0.208
lab*tce	0.25	0.5	0.932
lab*nce	0.5	0.5	0.72r

relative Inform. Technology (IT)

olvi3*	1.0	0.0	1.0	(1.0)
cmyn3*	0.0	1.0	0.0	(0.0)
olvi4*	1.0	0.0	1.0	1.0
cmyn4*	0.0	1.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB	48.14	75.18	-6.78
LAB*LABa	48.14	75.25	-8.35
LAB*TCa	50.0	75.71	353.66

relative CIELAB lab*

lab*lab	0.389	0.994	-0.109
lab*tch	0.5	1.0	0.982
lab*nch	0.0	1.0	0.982

relative Natural Colour (NC)

lab*lrj	0.389	0.909	-0.416
lab*tce	0.5	1.0	0.932
lab*nce	0.0	1.0	0.72r

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

UE050-7, 3 step scales for constant CIELAB hue 322/360 = 0.895 (left)

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

BAM-test chart UE05; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmv0^* setcmykcolor$

output: Startup (S) data dependend

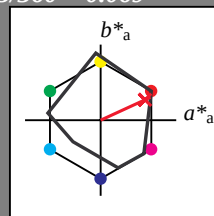
Input: Colorimetric Reflective System MRS18

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

D65: hue R

LCH*Ma: 48 73 25

olv*Ma: 1.0 0.0 0.1

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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

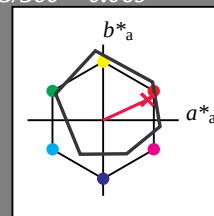
Output: Colorimetric Reflective System ORS18

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

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

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

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
BCIE	30.57	1.15	-46.84	46.87	271

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*TCa	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*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	0.5
cmyn4*	0.0	0.0	0.0	0.5

standard and adapted CIELAB

LAB*LAB	56.71	-0.23	2.14
LAB*LABa	56.71	0.0	0.0
LAB*TCa	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-0.46
LAB*LABa	18.02	0.0	0.0
LAB*TCa	0.01	0.01	-

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.661	(1.0)
cmyn3*	0.0	0.5	0.339	(0.0)
olvi4*	1.0	0.5	0.661	1.0
cmyn4*	0.0	0.5	0.339	0.0

standard and adapted CIELAB

LAB*LAB	71.7	33.75	18.92
LAB*LABa	71.7	34.27	15.76
LAB*TCa	75.0	37.72	24.69

relative CIELAB lab*

lab*lab	0.694	0.454	0.209
lab*tch	0.75	0.5	0.069
lab*nch	0.0	0.5	0.069

relative Natural Colour (NC)

lab*lrj	0.694	0.5	0.0
lab*tce	0.75	0.5	1.0
lab*nce	0.0	0.5	0.99r

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.161	(1.0)
cmyn3*	0.5	1.0	0.839	(0.0)
olvi4*	1.0	0.5	0.661	0.5
cmyn4*	0.0	0.5	0.339	0.5

standard and adapted CIELAB

LAB*LAB	33.01	34.49	16.31
LAB*LABa	33.01	34.27	15.77
LAB*TCa	25.01	37.73	24.7

relative CIELAB lab*

lab*lab	0.194	0.454	0.209
lab*tch	0.25	0.5	0.069
lab*nch	0.5	0.5	0.069

relative Natural Colour (NC)

lab*lrj	0.194	0.5	0.0
lab*tce	0.25	0.5	0.0
lab*nce	0.5	0.5	0.00j

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.322	(1.0)
cmyn3*	0.0	1.0	0.678	(0.0)
olvi4*	1.0	0.0	0.323	1.0
cmyn4*	0.0	1.0	0.677	0.0

standard and adapted CIELAB

LAB*LAB	48.01	68.48	33.09
LAB*LABa	48.01	68.55	31.53
LAB*TCa	50.0	75.45	24.7

relative CIELAB lab*

lab*lab	0.388	0.908	0.418
lab*tch	0.5	1.0	0.069
lab*nch	0.0	1.0	0.069

relative Natural Colour (NC)

lab*lrj	0.388	1.0	0.0
lab*tce	0.5	1.0	0.0
lab*nce	0.0	1.0	0.00j

blackness n^*

chromaticness c^*

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

 $n^* = 1,0$ $n^* = 0,00$

UE050-7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

BAM-test chart UE05; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

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

input: $cmv0^* setcmykcolor$

output: Startup (S) data dependend

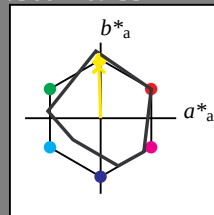
Input: Colorimetric Reflective System MRS18

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

D65: hue J

LCH*Ma: 89 86 92

olv*Ma: 1.0 0.95 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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

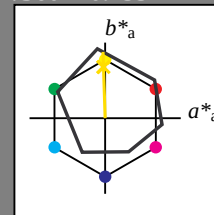
Output: Colorimetric Reflective System ORS18

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

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

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

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
BCIE	30.57	1.15	-46.84	46.87	271

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	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*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	0.5
cmyn4*	0.0	0.0	0.0	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	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	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	-

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	1.0	0.951	0.5	(1.0)
cmyn3*	0.0	0.049	0.5	(0.0)
olvi4*	1.0	0.951	0.5	1.0
cmyn4*	0.0	0.049	0.5	0.0

standard and adapted CIELAB

LAB*LAB	90.8	-2.3	48.29
LAB*LABa	90.8	-1.41	43.85
LAB*TCHa	75.0	43.87	91.85

relative CIELAB lab*

lab*lab	0.94	-0.015	0.5
lab*tch	0.75	0.5	0.255
lab*nch	0.0	0.5	0.255

relative Natural Colour (NC)

lab*lrj	0.94	0.0	0.5
lab*tce	0.75	0.5	0.25
lab*nce	0.0	0.5	j00g

relative Inform. Technology (IT)

olvi3*	0.5	0.451	0.0	(1.0)
cmyn3*	0.5	0.549	1.0	(0.0)
olvi4*	1.0	0.951	0.5	0.5
cmyn4*	0.0	0.049	0.5	0.5

standard and adapted CIELAB

LAB*LAB	52.1	-1.55	45.68
LAB*LABa	52.1	-1.4	43.84
LAB*TCHa	25.01	43.87	91.84

relative CIELAB lab*

lab*lab	0.44	-0.015	0.5
lab*tch	0.25	0.5	0.255
lab*nch	0.5	0.5	0.255

relative Natural Colour (NC)

lab*lrj	0.44	0.0	0.5
lab*tce	0.25	0.5	0.25
lab*nce	0.5	0.5	j99j

blackness n^*

chromaticness c^*

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

 $n^* = 1,0$

UE050-7, 3 step scales for constant CIELAB hue 92/360 = 0.255 (left)

BAM-test chart UE05; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

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

input: $cmY0^*$ setcmykcolor

output: Startup (S) data dependend

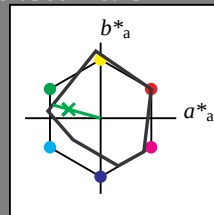
Input: Colorimetric Reflective System MRS18

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

D65: hue G

LCH*Ma: 56 66 164

olv*Ma: 0.1 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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

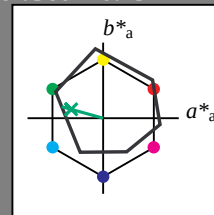
Output: Colorimetric Reflective System ORS18

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

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

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

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
BCIE	30.57	1.15	-46.84	46.87	271

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*TCa	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*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	0.5
cmyn4*	0.0	0.0	0.0	0.5

standard and adapted CIELAB

LAB*LAB	56.71	-0.23	2.14
LAB*LABa	56.71	0.0	0.0
LAB*TCa	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-0.46
LAB*LABa	18.02	0.0	0.0
LAB*TCa	0.01	0.01	-

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	1.0	0.623	(1.0)
cmyn3*	0.5	0.0	0.377	(0.0)
olvi4*	0.5	1.0	0.623	1.0
cmyn4*	0.5	0.0	0.377	0.0

standard and adapted CIELAB

LAB*LAB	74.1	-27.96	10.94
LAB*LABa	74.1	-27.39	7.62
LAB*TCa	75.0	28.44	164.46

relative CIELAB lab*

lab*lab	0.725	-0.481	0.134
lab*tch	0.75	0.5	0.457
lab*nch	0.0	0.5	0.457

relative Natural Colour (NC)

lab*lrj	0.725	-0.499	0.0
lab*tce	0.75	0.5	0.5
lab*nce	0.0	0.5	g00b

relative Inform. Technology (IT)

olvi3*	0.0	0.5	0.123	(1.0)
cmyn3*	1.0	0.5	0.877	(0.0)
olvi4*	0.5	1.0	0.623	0.5
cmyn4*	0.5	0.0	0.377	0.5

standard and adapted CIELAB

LAB*LAB	35.41	-27.22	8.34
LAB*LABa	35.41	-27.39	7.63
LAB*TCa	25.01	28.44	164.45

relative CIELAB lab*

lab*lab	0.225	-0.481	0.134
lab*tch	0.25	0.5	0.457
lab*nch	0.5	0.5	0.457

relative Natural Colour (NC)

lab*lrj	0.225	-0.499	0.0
lab*tce	0.25	0.5	0.5
lab*nce	0.5	0.5	g99g

relative Inform. Technology (IT)

olvi3*	0.0	1.0	0.246	(1.0)
cmyn3*	1.0	0.0	0.754	(0.0)
olvi4*	0.0	1.0	0.246	1.0
cmyn4*	1.0	0.0	0.754	0.0

standard and adapted CIELAB

LAB*LAB	52.8	-54.95	17.13
LAB*LABa	52.8	-54.79	15.24
LAB*TCa	50.0	56.88	164.45

relative CIELAB lab*

lab*lab	0.45	-0.962	0.268
lab*tch	0.5	1.0	0.457
lab*nch	0.0	1.0	0.457

relative Natural Colour (NC)

lab*lrj	0.45	-0.999	0.0
lab*tce	0.5	1.0	0.5
lab*nce	0.0	1.0	g99g

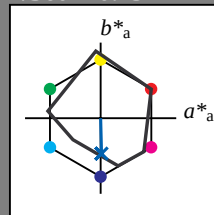
Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 271/360 = 0.754$ lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 40 50 271

olv*Ma: 0.0 0.37 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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

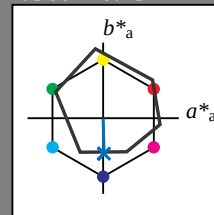
Output: Colorimetric Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$ lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

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

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
BCIE	30.57	1.15	-46.84	46.87	271

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*TCa	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*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	0.5
cmyn4*	0.0	0.0	0.0	0.5

standard and adapted CIELAB

LAB*LAB	56.71	-0.23	2.14
LAB*LABa	56.71	0.0	0.0
LAB*TCa	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-0.46
LAB*LABa	18.02	0.0	0.0
LAB*TCa	0.01	0.01	-

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.744	1.0	(1.0)
cmyn3*	0.5	0.256	0.0	(0.0)
olvi4*	0.5	0.744	1.0	1.0
cmyn4*	0.5	0.256	0.0	0.0

standard and adapted CIELAB

LAB*LAB	68.59	0.08	-19.4
LAB*LABa	68.59	0.54	-22.35
LAB*TCa	75.0	22.36	271.4

relative CIELAB lab*

lab*lab	0.654	0.012	-0.499
lab*tch	0.75	0.5	0.754
lab*nch	0.0	0.5	0.754

relative Natural Colour (NC)

lab*lrj	0.654	0.0	-0.499
lab*tce	0.75	0.5	0.75
lab*nce	0.0	0.5	g99b

relative Inform. Technology (IT)

olvi3*	0.0	0.244	0.5	(1.0)
cmyn3*	1.0	0.756	0.5	(0.0)
olvi4*	0.5	0.744	1.0	0.5
cmyn4*	0.5	0.256	0.0	0.5

standard and adapted CIELAB

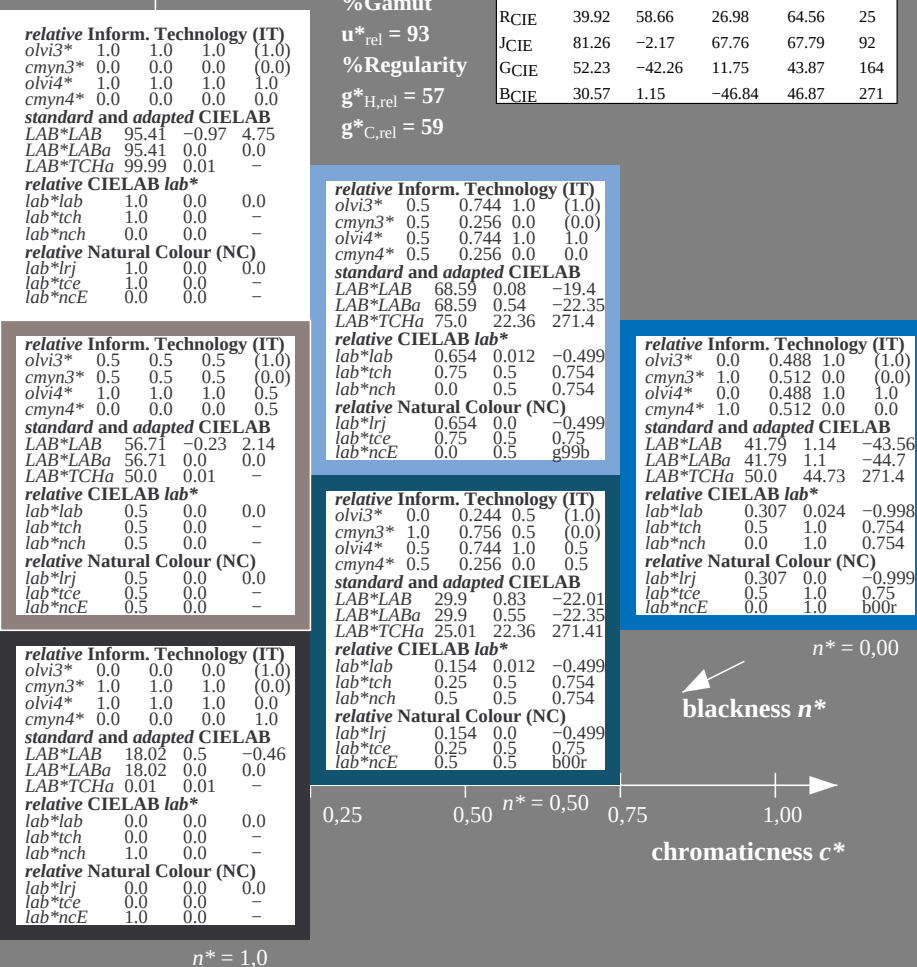
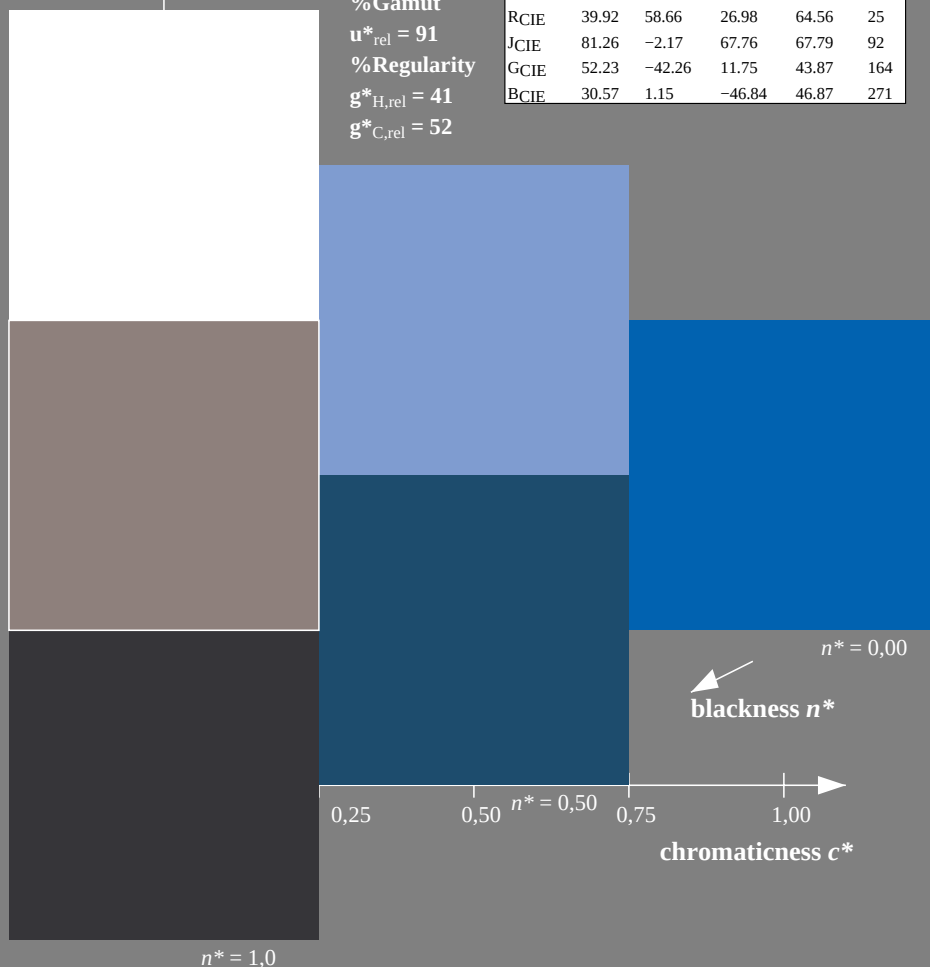
LAB*LAB	29.9	0.83	-22.01
LAB*LABa	29.9	0.55	-22.35
LAB*TCa	25.01	22.36	271.41

relative CIELAB lab*

lab*lab	0.154	0.012	-0.499
lab*tch	0.25	0.5	0.754
lab*nch	0.5	0.5	0.754

relative Natural Colour (NC)

lab*lrj	0.154	0.0	-0.499
lab*tce	0.25	0.5	0.75
lab*nce	0.5	0.5	b00r



UE050-7, 3 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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

BAM-test chart UE05; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmv0^* setcmykcolor$

output: Startup (S) data dependend