

Input: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 31/360 = 0.086$

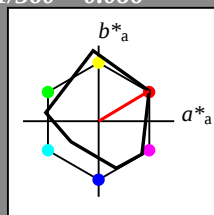
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 50 78 31

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

Output: Colorimetric Reflective System ORS18

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

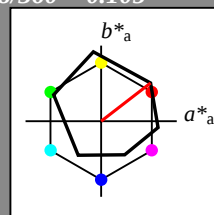
lab^*tch and lab^*nch

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

Input: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 94/360 = 0.262$

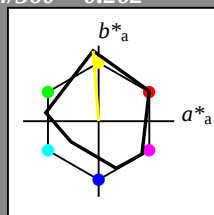
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 93 94

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

Output: Colorimetric Reflective System ORS18

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

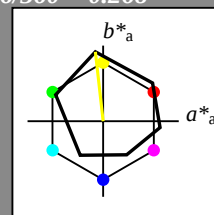
lab^*tch and lab^*nch

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)
 $lab^*lrj = 0.967 \ -0.048 \ 0.497$
 $lab^*tce = 0.75 \ 0.5 \ 0.266$
 $lab^*nce = 0.0 \ 0.5 \ 0.06g$

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*
 $lab^*lab = 0.467 \ -0.055 \ 0.497$
 $lab^*tch = 0.25 \ 0.5 \ 0.268$
 $lab^*nch = 0.5 \ 0.5 \ 0.268$

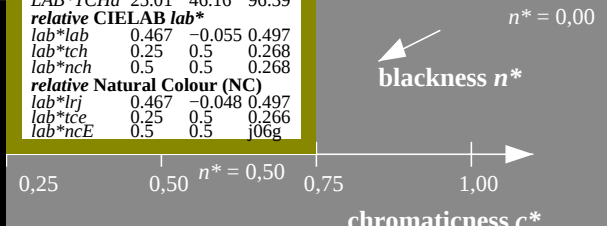
relative Natural Colour (NC)
 $lab^*lrj = 0.467 \ -0.048 \ 0.497$
 $lab^*tce = 0.25 \ 0.5 \ 0.266$
 $lab^*nce = 0.5 \ 0.5 \ 0.06g$

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)
 $lab^*lrj = 0.935 \ -0.097 \ 0.995$
 $lab^*tce = 0.5 \ 1.0 \ 0.266$
 $lab^*nce = 0.0 \ 1.0 \ 0.06g$



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

TE060-7, 3 step scales for constant CIELAB hue 94/360 = 0.262 (left)

BAM-test chart TE06; Colorimetric systems MRS18a & ORS18 input: $olv^* setrgbcolor$

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

output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 171/360 = 0.475$

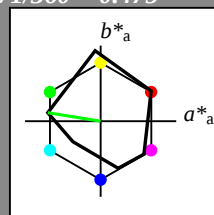
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 52 71 171

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

Output: Colorimetric Reflective System ORS18

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

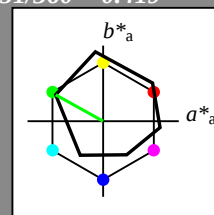
lab^*tch and lab^*nch

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

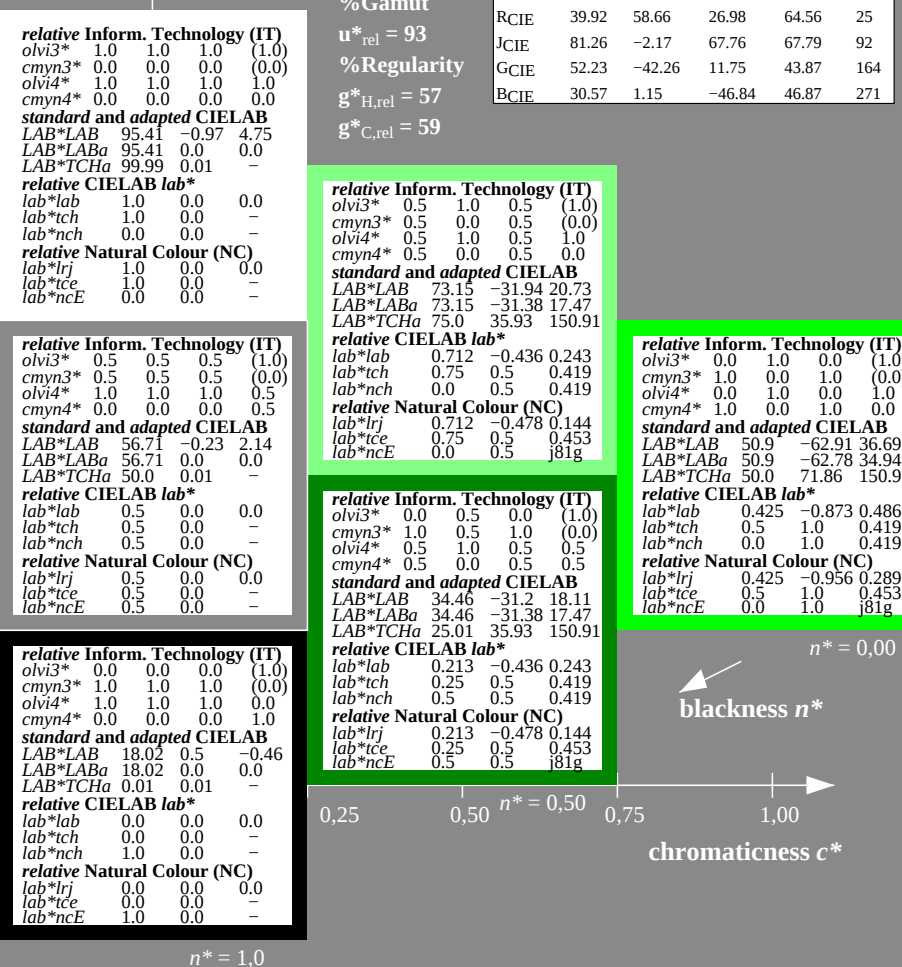
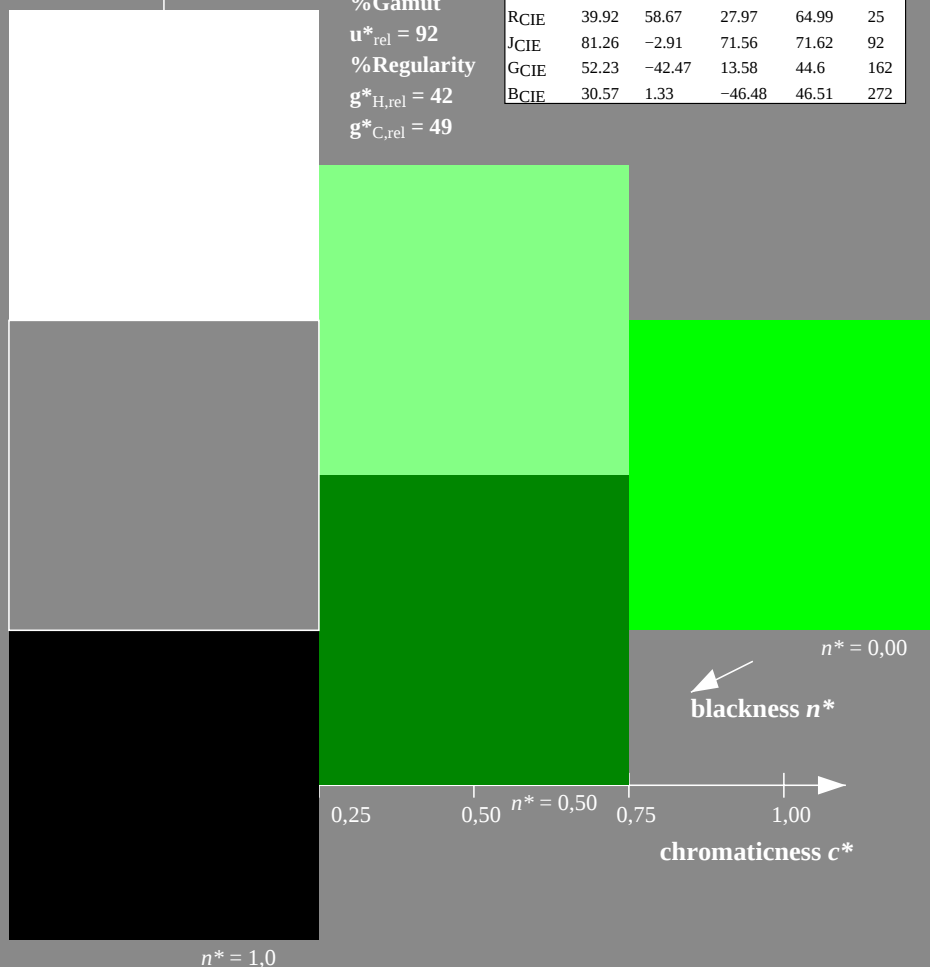
relative Natural Colour (NC)
lab*lrj 0.213 -0.478 0.144
lab*tce 0.25 0.5 0.453
lab*nce 0.5 0.5 j81g

relative Inform. Technology (IT)
olvi3* 0.0 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 -62.91 36.69
LAB*LABa 50.9 -62.78 34.94
LAB*TCHa 50.0 71.86 150.91

relative CIELAB lab*
lab*lab 0.425 -0.873 0.486
lab*tch 0.5 1.0 0.419
lab*nch 0.0 1.0 0.419

relative Natural Colour (NC)
lab*lrj 0.425 -0.956 0.289
lab*tce 0.5 1.0 0.453
lab*nce 0.0 1.0 j81g



TE060-7, 3 step scales for constant CIELAB hue 171/360 = 0.475 (left)

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

BAM-test chart TE06; Colorimetric systems MRS18a & ORS18 input: olv* setrgbcolor

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

output: olv* setrgbcolor / w* setgray

Input: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 217/360 = 0.601$

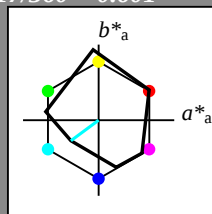
lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 45 46 217

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

Output: Colorimetric Reflective System ORS18

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

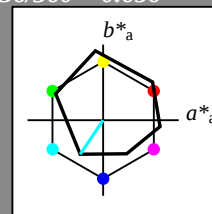
lab^*tch and lab^*nch

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*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 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*TCHa 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*TCHa 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*TCHa 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

0,25 0,50 $n^* = 0,50$ 0,75 1,00
chromaticness c^*

blackness n^*

$n^* = 0,00$

$n^* = 1,0$

TE060-7, 3 step scales for constant CIELAB hue 217/360 = 0.601 (left)

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

BAM-test chart TE06; Colorimetric systems MRS18a & ORS18 input: olv* setrgbcolor

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

output: olv* setrgbcolor / w* setgray

Input: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 290/360 = 0.807$

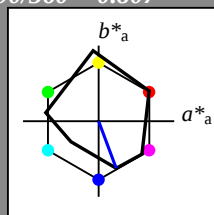
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 37 66 290

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

Output: Colorimetric Reflective System ORS18

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

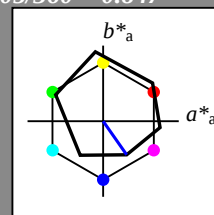
lab^*tch and lab^*nch

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 b29r

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 b29r

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

standard and adapted CIELAB
 $LAB^*LAB = 25.72$ 31.46 -44.36
 $LAB^*LABa = 25.72$ 31.1 -44.41
 $LAB^*TCHa = 50.0$ 54.23 305.0

relative CIELAB lab*
 $lab^*lab = 0.1$ 0.573 -0.818
 $lab^*tch = 0.5$ 1.0 0.847
 $lab^*nch = 0.0$ 1.0 0.847

relative Natural Colour (NC)
 $lab^*lrj = 0.1$ 0.449 -0.892
 $lab^*tce = 0.5$ 1.0 0.824
 $lab^*nce = 0.0$ 1.0 b29r

0,25 0,50 $n^* = 0,50$ 0,75 1,00
chromaticness c^*

blackness n^*

$n^* = 0,00$

$n^* = 1,0$

TE060-7, 3 step scales for constant CIELAB hue 290/360 = 0.807 (left)

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

BAM-test chart TE06; Colorimetric systems MRS18a & ORS18 input: $olv^* setrgbcolor$

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

output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 323/360 = 0.896$

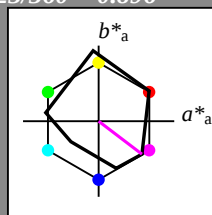
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 35 72 323

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

Output: Colorimetric Reflective System ORS18

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

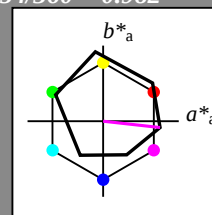
lab^*tch and lab^*nch

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*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 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*TCHa 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 b72r

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*TCHa 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 b72r

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*TCHa 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 b72r

chromaticness c^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

chromaticness c^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

blackness n^*

Input: Colorimetric Reflective System MRS18a

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

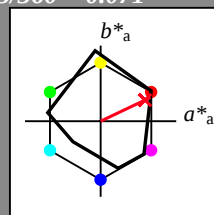
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 73 25

olv*Ma: 1.0 0.0 0.1

triangle lightness t^*



%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

Output: Colorimetric Reflective System ORS18

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

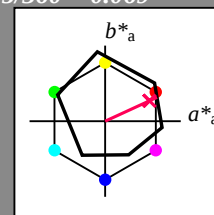
lab^*tch and lab^*nch

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

$n^* = 0,00$

blackness n^*

0,25 0,50 $n^* = 0,50$ 0,75 1,00
chromaticness c^*

$n^* = 1,0$

TE060-7, 3 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

BAM-test chart TE06; Colorimetric systems MRS18a & ORS18 input: olv* setrgbcolor

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

output: olv* setrgbcolor / w* setgray

Input: Colorimetric Reflective System MRS18a

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

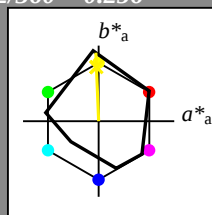
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 89 91 92

olv*Ma: 1.0 0.95 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

Output: Colorimetric Reflective System ORS18

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

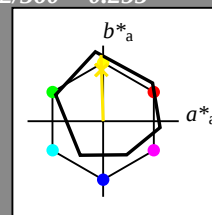
lab^*tch and lab^*nch

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 0.25

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 0.25

relative Inform. Technology (IT)
olvi3* 1.0 0.901 0.0 (1.0)
cmyn3* 0.0 0.099 1.0 (0.0)
olvi4* 1.0 0.902 0.0 1.0
cmyn4* 0.0 0.098 1.0 0.0

standard and adapted CIELAB
LAB*LAB 86.19 -3.62 91.83
LAB*LABa 86.19 -2.82 87.69
LAB*TCHa 50.0 87.73 91.85

relative CIELAB lab*
lab*lab 0.881 -0.031 0.999
lab*tch 0.5 1.0 0.255
lab*nch 0.0 1.0 0.255

relative Natural Colour (NC)
lab*lrj 0.881 0.0 1.0
lab*tce 0.5 1.0 0.25
lab*nce 0.0 1.0 0.25

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* 0.0 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 -

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

TE060-7, 3 step scales for constant CIELAB hue 92/360 = 0.256 (left)

BAM-test chart TE06; Colorimetric systems MRS18a & ORS18 input: olv* setrgbcolor

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

output: olv* setrgbcolor / w* setgray

Input: Colorimetric Reflective System MRS18a

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

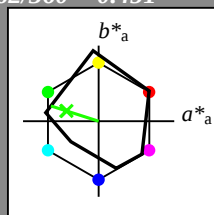
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 56 66 162

olv*Ma: 0.11 1.0 0.0

triangle lightness t^*



MRS18a; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

Output: Colorimetric Reflective System ORS18

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

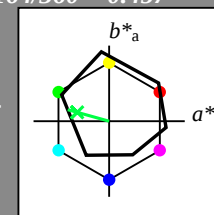
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



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

%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

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 0.623 (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*TCHa 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*TCHa 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*TCHa 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

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*TCHa 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*TCHa 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 MRS18a

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

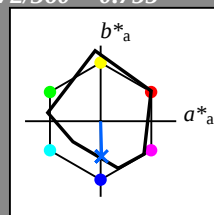
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 40 49 272

olv*Ma: 0.0 0.36 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.8	40.02	77.87	31
JMa	90.7	-7.27	93.19	93.48	94
GMa	52.11	-69.93	11.26	70.85	171
G50BMa	45.03	-36.65	-27.13	45.61	217
BMa	36.65	23.26	-62.27	66.49	290
B50RMa	34.94	57.27	-43.6	71.99	323
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.67	27.97	64.99	25
JCIE	81.26	-2.91	71.56	71.62	92
GCIE	52.23	-42.47	13.58	44.6	162
BCIE	30.57	1.33	-46.48	46.51	272

Output: Colorimetric Reflective System ORS18

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

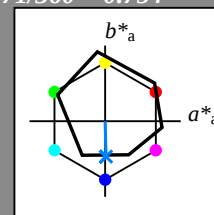
lab^*tch and lab^*nch

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
 $LAB^*TCHa = 99.99$ 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)
 $olvi3^* = 0.5$ 0.744 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
 $LAB^*TCHa = 75.0$ 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
 $LAB^*TCHa = 25.01$ 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

relative Inform. Technology (IT)
 $olvi3^* = 0.0$ 0.488 1.0 (1.0)
 $cmyn3^* = 1.0$ 0.512 0.0 (0.0)
 $olvi4^* = 0.0$ 0.488 1.0 1.0
 $cmyn4^* = 1.0$ 0.512 0.0 0.0

standard and adapted CIELAB
 $LAB^*LAB = 41.79$ 1.14 -43.56
 $LAB^*LABa = 41.79$ 1.1 -44.7
 $LAB^*TCHa = 50.0$ 44.73 271.4

relative CIELAB lab*
 $lab^*lab = 0.307$ 0.024 -0.998
 $lab^*tch = 0.5$ 1.0 0.754
 $lab^*nch = 0.0$ 1.0 0.754

relative Natural Colour (NC)
 $lab^*lrj = 0.307$ 0.0 -0.999
 $lab^*tce = 0.5$ 1.0 0.75
 $lab^*nce = 0.0$ 1.0 b00r

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

TE060-7, 3 step scales for constant CIELAB hue 272/360 = 0.755 (left)

BAM-test chart TE06; Colorimetric systems MRS18a & ORS18 input: $olv^* setrgbcolor$

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

output: $olv^* setrgbcolor / w^* setgray$