Input: 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**

ORS18; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

%Gamut
$\mathbf{u^*_{tol} = 93}$
%Regularity
$\mathbf{g^*_{H,rel} = 57}$
$\mathbf{g^*_{C,rel} = 59}$

***relative* Inform. Technology (IT)**

*olvi3**	1.0	0.5	(1.0)
*cmyn3**	0.0	0.0	(0.0)
*olvi4**	1.0	1.0	1.0
*cmyn4**	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*tcc*	1.0	0.0	–
*lab*ncc*	1.0	0.0	–

***relative* Inform. Technology (IT)**

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

***standard and adapted* CIELAB**

*LAB*LAB*	50.23	−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*tcc*	0.5	0.0	–
*lab*ncc*	0.5	0.0	–

***relative* Inform. Technology (IT)**

*olvi3**	0.0	0.0	(1.0)
*cmyn3**	1.0	1.0	(0.0)
*olvi4**	1.0	1.0	1.0
*cmyn4**	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*tcc*	0.0	0.0	–
*lab*ncc*	0.0	0.0	–

***relative* Inform. Technology (IT)**

*olvi3**	1.0	0.5	(1.0)
*cmyn3**	0.0	0.5	(0.0)
*olvi4**	1.0	0.5	1.0
*cmyn4**	0.0	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*	0.25	0.5	0.105

***relative* Natural Colour (NC)**

*lab*lrj*	0.693	0.477	0.15
*lab*tcc*	0.75	0.5	0.048
*lab*ncE*	0.0	0.5	r19j

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.0	(1.0)
*cmyn3**	0.5	1.0	(0.0)
*olvi4**	1.0	0.5	0.5
*cmyn4**	0.0	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	1.0	0.105

***relative* Natural Colour (NC)**

*lab*lrj*	0.193	0.477	0.15
*lab*tcc*	0.25	0.5	0.048
*lab*ncE*	0.5	0.5	r19j

***relative* Inform. Technology (IT)**

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

***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*tcc*	0.5	1.0	0.048
*lab*ncE*	0.0	1.0	r19j

Output: 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**

MRS18a; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.3	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Gamut
$\mathbf{u^*_{tol} = 92}$
%Regularity
$\mathbf{g^*_{H,rel} = 42}$
$\mathbf{g^*_{C,rel} = 49}$

***relative* Inform. Technology (IT)**

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

***standard and adapted* CIELAB**

*LAB*LAB*	72.52	33.43	20.01
*LAB*LABa*	72.52	33.39	20.01
*LAB*TCHa*	75.0	38.93	30.93

relative* CIELAB *lab*

*lab*lab*	0.704	0.429	0.257
*lab*tch*	0.75	0.5	0.086
*lab*nch*	0.75	0.5	0.086

***relative* Natural Colour (NC)**

*lab*lrj*	0.704	0.496	0.064
*lab*tcc*	0.75	0.5	0.02
*lab*ncE*	0.0	0.5	r08j

***relative* Inform. Technology (IT)**

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

***standard and adapted* CIELAB**

*LAB*LAB*	33.82	33.47	20.03
*LAB*LABa*	33.82	33.39	20.01
*LAB*TCHa*	25.01	38.93	30.93

relative* CIELAB *lab*

*lab*lab*	0.204	0.429	0.257
*lab*tch*	0.25	0.5	0.086
*lab*nch*	0.5	0.5	0.086

***relative* Natural Colour (NC)**

*lab*lrj*	0.204	0.496	0.064
*lab*tcc*	0.25	0.5	0.02
*lab*ncE*	0.5	0.5	r08j

***relative* Inform. Technology (IT)**

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

***standard and adapted* CIELAB**

*LAB*LAB*	18.02	0.1	0.02
*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*tcc*	0.0	0.0	–
*lab*ncc*	0.0	0.0	–

***relative* Inform. Technology (IT)**

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

***standard and adapted* CIELAB**

*LAB*LAB*	49.63	66.84	40.03
*LAB*LABa*	49.63	66.78	40.02
*LAB*TCHa*	50.0	77.85	30.93

relative* CIELAB *lab*

*lab*lab*	0.409	0.858	0.514
*lab*tch*	0.5	1.0	0.086
*lab*nch*	0.0	1.0	0.086

***relative* Natural Colour (NC)**

*lab*lrj*	0.409	0.992	0.128
*lab*tcc*	0.5	1.0	0.02
*lab*ncE*	0.0	1.0	r08j

BAM-test chart TE11; Colorimetric systems ORS18 & MRS18a input: *olv* setrgbcolor*
D65: 2 coordinate data of 3 step colour scales for 10 hues output: *no change compared to input*