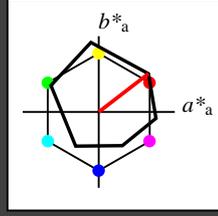


Input: Colorimetric Offset Reflective System ORS18

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	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
NMa	48.13	75.28	-8.36	75.74	354
NNMa	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	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	30.57	1.15	-46.84	46.86	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	-0.98	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	-0.24	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	-0.47
LAB*LABa	18.02	0.0	0.0
LAB*TCHa	8.01	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	-

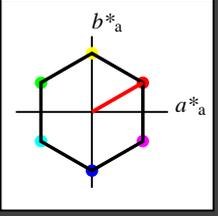
$n^* = 1.0$

Output: Colorimetric Standard Reflective System SRS18

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

D65: hue O
 LCH*Ma: 57 77 30
 olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	56.71	67.03	38.7	77.4	30
YMa	56.71	0.0	77.4	77.4	90
LMa	56.71	-67.02	38.7	77.4	150
CMa	56.71	-67.02	-38.69	77.4	210
VMa	56.71	0.0	-77.39	77.4	270
NMa	56.71	67.03	-38.69	77.4	330
NNMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Gamut
 $u^*_{rel} = 100$
 %Regularity
 $g^*_{H,rel} = 100$
 $g^*_{C,rel} = 100$

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	0.0	0.0
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	56.72	0.0	0.0
LAB*LABa	56.72	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	18.03	0.0	0.0
LAB*LABa	18.03	0.0	0.0
LAB*TCHa	8.01	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	-

$n^* = 1.0$

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	32.69	25.25
LAB*TCHa	75.0	41.31	37.69

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	32.69	25.25
LAB*TCHa	25.01	41.31	37.69

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

$n^* = 0.50$

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	47.94	65.3	52.06
LAB*LABa	47.94	65.37	50.51
LAB*TCHa	50.0	82.61	37.69

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

$n^* = 0.00$

blackness n^*

chromaticness c^*

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	76.06	33.51	19.35
LAB*LABa	76.06	33.51	19.35
LAB*TCHa	75.0	38.69	30.0

relative CIELAB lab*

lab*lab	0.75	0.433	0.25
lab*tch	0.75	0.5	0.083
lab*nch	0.0	0.5	0.083

relative Natural Colour (NC)

lab*lrj	0.75	0.497	0.053
lab*tce	0.75	0.5	0.017
lab*nce	0.0	0.5	r06j

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	37.36	33.51	19.35
LAB*LABa	37.36	33.51	19.35
LAB*TCHa	25.01	38.69	30.0

relative CIELAB lab*

lab*lab	0.25	0.433	0.25
lab*tch	0.25	0.5	0.083
lab*nch	0.5	0.5	0.083

relative Natural Colour (NC)

lab*lrj	0.25	0.497	0.053
lab*tce	0.25	0.5	0.017
lab*nce	0.5	0.5	r06j

$n^* = 0.50$

blackness n^*

chromaticness c^*

NE120-7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left)

3 step scales for constant CIELAB hue 30/360 = 0.083 (right)

BAM-test chart NE12; Colorimetric systems ORS18 & SRS18
 D65: 2 coordinate data of 3 step colour scales for 10 hues

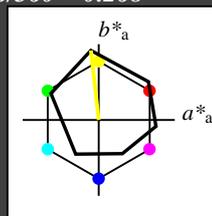
input: $olv^* setrgbcolor$
 output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Offset 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^*



ORS18; adapted (a) CIELAB data

	L^*	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
NMa	48.13	75.28	-8.36	75.74	354
MMa	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	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	30.57	1.15	-46.84	46.86	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	-0.98	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*	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	-5.12	45.87
LAB*TCHa	75.0	46.15	96.38

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	0.266

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	-0.24	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*	0.5	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	47.84
LAB*LABa	54.19	-5.12	45.87
LAB*TCHa	25.01	46.15	96.38

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	0.266

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	-0.47
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	-

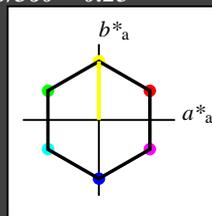
$n^* = 1.0$

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
 lab^*tch and lab^*nch

D65: hue Y
 LCH*Ma: 57 77 90
 olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	L^*	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	56.71	67.03	38.7	77.4	30
YMa	56.71	0.0	77.4	77.4	90
LMa	56.71	-67.02	38.7	77.4	150
CMa	56.71	-67.02	-38.69	77.4	210
VMa	56.71	0.0	-77.39	77.4	270
NMa	56.71	67.03	-38.69	77.4	330
MMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

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	0.0	0.0
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*	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	76.06	0.0	38.69
LAB*LABa	76.06	0.0	38.69
LAB*TCHa	75.0	38.69	90.0

relative CIELAB lab*

lab*lab	0.75	0.0	0.5
lab*tch	0.75	0.5	0.25
lab*nch	0.0	0.5	0.25

relative Natural Colour (NC)

lab*lrj	0.75	0.027	0.499
lab*tce	0.75	0.5	0.241
lab*nce	0.0	0.5	0.241

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	56.72	0.0	0.0
LAB*LABa	56.72	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*	0.5	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	37.36	0.0	38.69
LAB*LABa	37.36	0.0	38.69
LAB*TCHa	25.01	38.69	90.0

relative CIELAB lab*

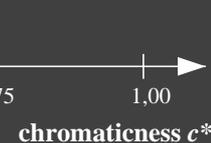
lab*lab	0.25	0.0	0.5
lab*tch	0.25	0.5	0.25
lab*nch	0.5	0.5	0.25

relative Natural Colour (NC)

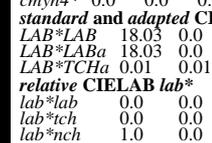
lab*lrj	0.25	0.027	0.499
lab*tce	0.25	0.5	0.241
lab*nce	0.5	0.5	0.241

$n^* = 0.00$

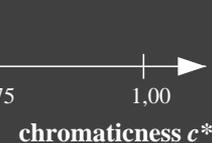
$n^* = 0.00$
 blackness n^*



$n^* = 0.00$
 blackness n^*



$n^* = 0.00$
 blackness n^*



NE120-7, 3 step scales for constant CIELAB hue 96/360 = 0.268 (left)

3 step scales for constant CIELAB hue 90/360 = 0.25 (right)

BAM-test chart NE12; Colorimetric systems ORS18 & SRS18
 D65: 2 coordinate data of 3 step colour scales for 10 hues

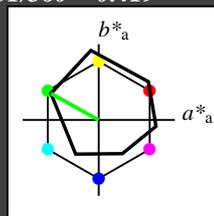
input: $olv^* setrgbcolor$
 output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Offset 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^*



ORS18; adapted (a) CIELAB data

	L^*	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
MMa	48.13	75.28	-8.36	75.74	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	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	30.57	1.15	-46.84	46.86	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	-0.98	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	-0.24	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	-0.47
LAB*LABa	18.02	0.0	0.0
LAB*TCHa	18.01	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	-

$n^* = 1.0$

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	-31.96	20.73
LAB*LABa	73.15	-31.4	17.48
LAB*TCHa	75.0	35.95	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	0.419

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	-31.22	18.12
LAB*LABa	34.46	-31.4	17.48
LAB*TCHa	25.01	35.95	150.91

relative CIELAB lab*

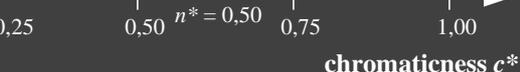
lab*lab	0.213	-0.436	0.243
lab*tch	0.25	0.5	0.419
lab*nch	0.5	0.5	0.419

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	0.419

$n^* = 0.00$

blackness n^*



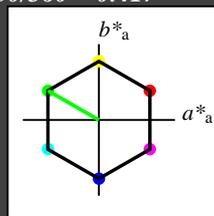
chromaticness c^*

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 150/360 = 0.417$
 lab^*tch and lab^*nch

D65: hue L
 LCH*Ma: 57 77 150
 olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	L^*	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	56.71	67.03	38.7	77.4	30
YMa	56.71	0.0	77.4	77.4	90
LMa	56.71	-67.02	38.7	77.4	150
CMa	56.71	-67.02	-38.69	77.4	210
VMa	56.71	0.0	-77.39	77.4	270
MMa	56.71	67.03	-38.69	77.4	330
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

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	0.0	0.0
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	56.72	0.0	0.0
LAB*LABa	56.72	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*	0.5	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	76.06	-33.5	19.35
LAB*LABa	76.06	-33.5	19.35
LAB*TCHa	75.0	38.69	150.0

relative CIELAB lab*

lab*lab	0.75	-0.432	0.25
lab*tch	0.75	0.5	0.417
lab*nch	0.0	0.5	0.417

relative Natural Colour (NC)

lab*lrj	0.75	-0.48	0.136
lab*tce	0.75	0.5	0.456
lab*nce	0.0	0.5	0.417

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	37.36	-33.5	19.35
LAB*LABa	37.36	-33.5	19.35
LAB*TCHa	25.01	38.69	150.0

relative CIELAB lab*

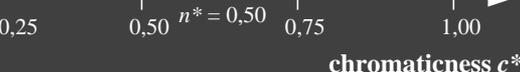
lab*lab	0.25	-0.432	0.25
lab*tch	0.25	0.5	0.417
lab*nch	0.5	0.5	0.417

relative Natural Colour (NC)

lab*lrj	0.25	-0.48	0.136
lab*tce	0.25	0.5	0.456
lab*nce	0.5	0.5	0.417

$n^* = 0.00$

blackness n^*



chromaticness c^*

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	18.03	0.0	0.0
LAB*LABa	18.03	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	-

$n^* = 1.0$

NE120-7, 3 step scales for constant CIELAB hue 151/360 = 0.419 (left)

3 step scales for constant CIELAB hue 150/360 = 0.417 (right)

BAM-test chart NE12; Colorimetric systems ORS18 & SRS18
 D65: 2 coordinate data of 3 step colour scales for 10 hues

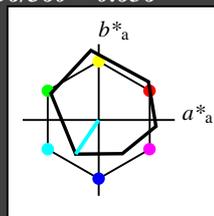
input: $olv^* setrgbcolor$
 output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Offset 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^*



ORS18; adapted (a) CIELAB data

	L^*	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
NMa	48.13	75.28	-8.36	75.74	354
NNa	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	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	30.57	1.15	-46.84	46.86	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	-0.98	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	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	-15.8	-18.98
LAB*LABa	77.01	-15.16	-22.5
LAB*TCHa	75.0	27.14	236.02

relative CIELAB lab*

lab*lab	0.762	-0.278	-0.414
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	0.666

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	58.62	-30.61	-42.73
LAB*LABa	58.62	-30.33	-45.01
LAB*TCHa	50.0	54.29	236.02

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)

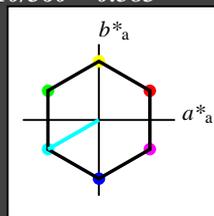
lab*lrj	0.525	-0.496	-0.867
lab*tce	0.5	1.0	0.667
lab*nce	0.0	1.0	0.666

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
 lab^*tch and lab^*nch

D65: hue C
 LCH*Ma: 57 77 210
 olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	L^*	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	56.71	67.03	38.7	77.4	30
YMa	56.71	0.0	77.4	77.4	90
LMa	56.71	-67.02	38.7	77.4	150
CMa	56.71	-67.02	-38.69	77.4	210
VMa	56.71	0.0	-77.39	77.4	270
NMa	56.71	67.03	-38.69	77.4	330
NNa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Gamut
 $u^*_{rel} = 100$
 %Regularity
 $g^*_{H,rel} = 100$
 $g^*_{C,rel} = 100$

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	0.0	0.0
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	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	76.06	-33.5	-19.34
LAB*LABa	76.06	-33.5	-19.34
LAB*TCHa	75.0	38.69	210.0

relative CIELAB lab*

lab*lab	0.75	-0.432	-0.249
lab*tch	0.75	0.5	0.583
lab*nch	0.0	0.5	0.583

relative Natural Colour (NC)

lab*lrj	0.75	-0.386	-0.315
lab*tce	0.75	0.5	0.609
lab*nce	0.0	0.5	0.609

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	56.71	-67.01	-38.68
LAB*LABa	56.71	-67.01	-38.68
LAB*TCHa	50.0	77.38	210.0

relative CIELAB lab*

lab*lab	0.5	-0.865	-0.499
lab*tch	0.5	1.0	0.583
lab*nch	0.0	1.0	0.583

relative Natural Colour (NC)

lab*lrj	0.5	-0.773	-0.632
lab*tce	0.5	1.0	0.609
lab*nce	0.0	1.0	0.609

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	-0.47
LAB*LABa	18.02	0.0	0.0
LAB*TCHa	8.01	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	0.5	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	-21.6
LAB*LABa	38.32	-15.16	-22.5
LAB*TCHa	25.01	27.14	236.02

relative CIELAB lab*

lab*lab	0.262	-0.278	-0.414
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	0.666

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*	1.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.03	0.0	0.0
LAB*LABa	18.03	0.0	0.0
LAB*TCHa	8.01	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*	1.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.03	0.0	0.0
LAB*LABa	18.03	0.0	0.0
LAB*TCHa	8.01	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	0.5	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	37.36	-33.5	-19.34
LAB*LABa	37.36	-33.5	-19.34
LAB*TCHa	25.01	38.69	210.0

relative CIELAB lab*

lab*lab	0.25	-0.432	-0.249
lab*tch	0.25	0.5	0.583
lab*nch	0.5	0.5	0.583

relative Natural Colour (NC)

lab*lrj	0.25	-0.386	-0.315
lab*tce	0.25	0.5	0.609
lab*nce	0.5	0.5	0.609

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	37.36	-33.5	-19.34
LAB*LABa	37.36	-33.5	-19.34
LAB*TCHa	25.01	38.69	210.0

relative CIELAB lab*

lab*lab	0.25	-0.432	-0.249
lab*tch	0.25	0.5	0.583
lab*nch	0.5	0.5	0.583

relative Natural Colour (NC)

lab*lrj	0.25	-0.386	-0.315
lab*tce	0.25	0.5	0.609
lab*nce	0.5	0.5	0.609

See for similar files: <http://www.ps.bam.de/NE12/>
 Technical information: <http://www.ps.bam.de>
 Version 2.1, io=1,1, CIELAB

BAM registration: 20060101-NE12/10S/S12E03FP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 /NE12/ Form: 4/10, Serie: 1/1, Page: 4 Page count: 4

NE120-7, 3 step scales for constant CIELAB hue 236/360 = 0.656 (left)

3 step scales for constant CIELAB hue 210/360 = 0.583 (right)

BAM-test chart NE12; Colorimetric systems ORS18 & SRS18
 D65: 2 coordinate data of 3 step colour scales for 10 hues

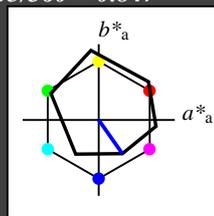
input: $olv^* setrgbcolor$
 output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Offset 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^*



ORS18; adapted (a) CIELAB data

	L^*	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
MMa	48.13	75.28	-8.36	75.74	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	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	30.57	1.15	-46.84	46.86	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	-0.98	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	-0.24	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	-0.47
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	-

$n^* = 1.0$

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	15.23	-19.79
LAB*LABa	60.56	15.55	-22.19
LAB*TCHa	75.0	27.1	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	0.29r

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	15.97	-22.4
LAB*LABa	21.87	15.55	-22.19
LAB*TCHa	25.01	27.1	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	0.29r

$n^* = 0.50$

chromaticness c^*

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	25.73	31.44	-44.34
LAB*LABa	25.73	31.09	-44.39
LAB*TCHa	50.0	54.21	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	0.29r

$n^* = 0.00$

blackness n^*

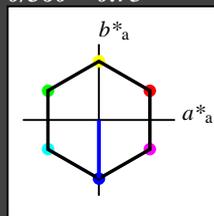
chromaticness c^*

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
 lab^*tch and lab^*nch

D65: hue V
 LCH*Ma: 57 77 270
 olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	L^*	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	56.71	67.03	38.7	77.4	30
YMa	56.71	0.0	77.4	77.4	90
LMa	56.71	-67.02	38.7	77.4	150
CMa	56.71	-67.02	-38.69	77.4	210
VMa	56.71	0.0	-77.39	77.4	270
MMa	56.71	67.03	-38.69	77.4	330
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

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	0.0	0.0
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	56.72	0.0	-38.68
LAB*LABa	56.72	0.0	-38.68
LAB*TCHa	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.75	0.0	-0.499
lab*tch	0.75	0.5	0.75
lab*nch	0.0	0.5	0.75

relative Natural Colour (NC)

lab*lrj	0.75	-0.011	-0.499
lab*tce	0.75	0.5	0.746
lab*nce	0.0	0.5	0.98b

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	37.36	0.0	-38.68
LAB*LABa	37.36	0.0	-38.68
LAB*TCHa	25.01	38.69	270.0

relative CIELAB lab*

lab*lab	0.25	0.0	-0.499
lab*tch	0.25	0.5	0.75
lab*nch	0.5	0.5	0.75

relative Natural Colour (NC)

lab*lrj	0.25	-0.011	-0.499
lab*tce	0.25	0.5	0.746
lab*nce	0.5	0.5	0.98b

$n^* = 0.00$

blackness n^*

chromaticness c^*

$n^* = 1.0$

3 step scales for constant CIELAB hue 270/360 = 0.75 (right)

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

NE120-7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)

BAM-test chart NE12; Colorimetric systems ORS18 & SRS18
 D65: 2 coordinate data of 3 step colour scales for 10 hues

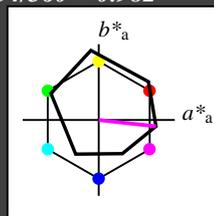


Input: Colorimetric Offset Reflective System ORS18

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^*



ORS18; adapted (a) CIELAB data

	L^*	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
NMa	48.13	75.28	-8.36	75.74	354
MMa	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	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	30.57	1.15	-46.84	46.86	271

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

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olv4*	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	-0.98	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)

olv3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.0	0.5	0.5	(0.0)
olv4*	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	-0.24	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)

olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olv4*	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	-0.47
LAB*LABa	18.02	0.0	0.0
LAB*TCHa	8.01	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	-

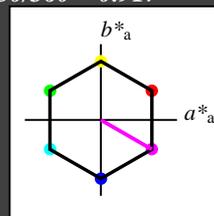
$n^* = 1.0$

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
 lab^*tch and lab^*nch

D65: hue M
 LCH*Ma: 57 77 330
 olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	L^*	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	56.71	67.03	38.7	77.4	30
YMa	56.71	0.0	77.4	77.4	90
LMa	56.71	-67.02	38.7	77.4	150
CMa	56.71	-67.02	-38.69	77.4	210
VMa	56.71	0.0	-77.39	77.4	270
NMa	56.71	67.03	-38.69	77.4	330
MMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Gamut
 $u^*_{rel} = 100$
 %Regularity
 $g^*_{H,rel} = 100$
 $g^*_{C,rel} = 100$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olv4*	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	0.0	0.0
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)

olv3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.0	0.5	0.5	(0.0)
olv4*	1.0	1.0	1.0	0.5
cmyn4*	0.0	0.0	0.0	0.5

standard and adapted CIELAB

LAB*LAB	56.72	0.0	0.0
LAB*LABa	56.72	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)

olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olv4*	1.0	1.0	1.0	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.03	0.0	0.0
LAB*LABa	18.03	0.0	0.0
LAB*TCHa	8.01	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	-

$n^* = 1.0$

relative Inform. Technology (IT)

olv3*	1.0	0.5	1.0	(1.0)
cmyn3*	0.0	0.5	0.0	(0.0)
olv4*	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	0.72r

standard and adapted CIELAB

LAB*LAB	33.07	37.84	-3.62
LAB*LABa	33.07	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	0.72r

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-0.47
LAB*LABa	18.02	0.0	0.0
LAB*TCHa	8.01	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	-

$n^* = 0.50$

$n^* = 0.00$

blackness n^*

chromaticness c^*

relative Inform. Technology (IT)

olv3*	1.0	0.5	1.0	(1.0)
cmyn3*	0.0	0.5	0.0	(0.0)
olv4*	1.0	0.5	1.0	1.0
cmyn4*	0.0	0.5	0.0	0.0

standard and adapted CIELAB

LAB*LAB	76.06	33.51	-19.34
LAB*LABa	76.06	33.51	-19.34
LAB*TCHa	75.0	38.69	330.0

relative CIELAB lab*

lab*lab	0.75	0.433	-0.249
lab*tch	0.75	0.5	0.917
lab*nch	0.0	0.5	0.917

relative Natural Colour (NC)

lab*lrj	0.75	0.36	-0.346
lab*tce	0.75	0.5	0.878
lab*nce	0.0	0.5	0.51r

standard and adapted CIELAB

LAB*LAB	37.36	33.51	-19.34
LAB*LABa	37.36	33.51	-19.34
LAB*TCHa	25.01	38.69	330.0

relative CIELAB lab*

lab*lab	0.75	0.433	-0.249
lab*tch	0.75	0.5	0.917
lab*nch	0.0	0.5	0.917

relative Natural Colour (NC)

lab*lrj	0.75	0.36	-0.346
lab*tce	0.75	0.5	0.878
lab*nce	0.5	0.5	0.51r

standard and adapted CIELAB

LAB*LAB	18.03	0.0	0.0
LAB*LABa	18.03	0.0	0.0
LAB*TCHa	8.01	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	-

$n^* = 0.00$

blackness n^*

chromaticness c^*

NE120-7, 3 step scales for constant CIELAB hue 354/360 = 0.982 (left)

3 step scales for constant CIELAB hue 330/360 = 0.917 (right)

BAM-test chart NE12; Colorimetric systems ORS18 & SRS18
 D65: 2 coordinate data of 3 step colour scales for 10 hues

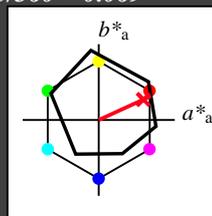
input: $olv^* setrgbcolor$
 output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Offset 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^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
NMa	48.13	75.28	-8.36	75.74	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	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	30.57	1.15	-46.84	46.86	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	-0.98	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*	0.0	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	-0.24	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	-0.47
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	-

$n^* = 1.0$

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	34.28	15.76
LAB*TCHa	75.0	37.73	24.7

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	34.28	15.77
LAB*TCHa	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

$n^* = 0.50$

$n^* = 0.50$

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	0.322	1.0
cmyn4*	0.0	1.0	0.678	0.0

standard and adapted CIELAB

LAB*LAB	48.0	68.48	33.09
LAB*LABa	48.0	68.56	31.53
LAB*TCHa	50.0	75.47	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^*

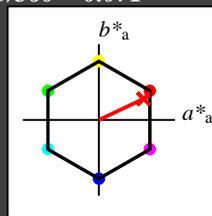
chromaticness c^*

Output: Colorimetric Standard Reflective System SRS18

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

D65: hue R
 LCH*Ma: 57 74 25
 olv*Ma: 1.0 0.0 0.09

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	56.71	67.03	38.7	77.4	30
YMa	56.71	0.0	77.4	77.4	90
LMa	56.71	-67.02	38.7	77.4	150
CMa	56.71	-67.02	-38.69	77.4	210
VMa	56.71	0.0	-77.39	77.4	270
NMa	56.71	67.03	-38.69	77.4	330
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

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	0.0	0.0
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*	0.0	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	56.72	0.0	0.0
LAB*LABa	56.72	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	18.03	0.0	0.0
LAB*LABa	18.03	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	-

$n^* = 1.0$

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.544	(1.0)
cmyn3*	0.0	0.5	0.456	(0.0)
olvi4*	1.0	0.5	0.544	1.0
cmyn4*	0.0	0.5	0.456	0.0

standard and adapted CIELAB

LAB*LAB	76.06	33.51	15.97
LAB*LABa	76.06	33.51	15.97
LAB*TCHa	75.0	37.12	25.48

relative CIELAB lab*

lab*lab	0.75	0.451	0.215
lab*tch	0.75	0.5	0.071
lab*nch	0.0	0.5	0.071

relative Natural Colour (NC)

lab*lrj	0.75	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	0.044	(1.0)
cmyn3*	0.5	1.0	0.956	(0.0)
olvi4*	1.0	0.5	0.544	0.5
cmyn4*	0.0	0.5	0.456	0.5

standard and adapted CIELAB

LAB*LAB	37.36	33.51	15.97
LAB*LABa	37.36	33.51	15.97
LAB*TCHa	25.01	37.12	25.49

relative CIELAB lab*

lab*lab	0.25	0.451	0.215
lab*tch	0.25	0.5	0.071
lab*nch	0.5	0.5	0.071

relative Natural Colour (NC)

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

$n^* = 0.50$

$n^* = 0.50$

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.087	(1.0)
cmyn3*	0.0	1.0	0.913	(0.0)
olvi4*	1.0	0.0	0.087	1.0
cmyn4*	0.0	1.0	0.913	0.0

standard and adapted CIELAB

LAB*LAB	56.71	67.02	31.94
LAB*LABa	56.71	67.02	31.94
LAB*TCHa	50.0	74.24	25.48

relative CIELAB lab*

lab*lab	0.5	0.903	0.43
lab*tch	0.5	1.0	0.071
lab*nch	0.0	1.0	0.071

relative Natural Colour (NC)

lab*lrj	0.5	1.0	0.0
lab*tce	0.5	1.0	0.0

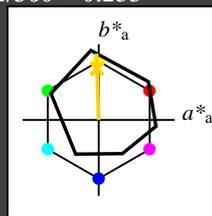
Input: Colorimetric Offset Reflective System ORS18

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^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
NMa	48.13	75.28	-8.36	75.74	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	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	30.57	1.15	-46.84	46.86	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 -0.98 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* 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 -1.4 43.84
 LAB*TCHa 75.0 43.86 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 0.0g

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 -0.24 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* 0.5 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 45.67
 LAB*LABa 52.1 -1.39 43.83
 LAB*TCHa 25.01 43.86 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 0.0g

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 -0.47
 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 0.5 (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 18.03 0.0 0.0
 LAB*LABa 18.03 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 -

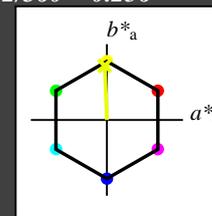
Output: Colorimetric Standard Reflective System SRS18

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

lab^*tch and lab^*nch

D65: hue J
 LCH*Ma: 57 76 92
 olv*Ma: 0.95 1.0 0.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	56.71	67.03	38.7	77.4	30
YMa	56.71	0.0	77.4	77.4	90
LMa	56.71	-67.02	38.7	77.4	150
CMa	56.71	-67.02	-38.69	77.4	210
VMa	56.71	0.0	-77.39	77.4	270
NMa	56.71	67.03	-38.69	77.4	330
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

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 0.0 0.0
 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* 0.977 1.0 0.5 (1.0)
 cmyn3* 0.023 0.0 0.5 (0.0)
 olvi4* 0.977 1.0 0.5 1.0
 cmyn4* 0.023 0.0 0.5 0.0

standard and adapted CIELAB
 LAB*LAB 76.06 -1.51 37.81
 LAB*LABa 76.06 -1.51 37.81
 LAB*TCHa 75.0 37.84 92.3

relative CIELAB lab*
 lab*lab 0.75 -0.019 0.499
 lab*tch 0.75 0.5 0.256
 lab*nch 0.0 0.5 0.256

relative Natural Colour (NC)
 lab*lrj 0.75 0.0 0.5
 lab*tce 0.75 0.5 0.25
 lab*nce 0.0 0.5 0.0g

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 86.19 -3.62 91.81
 LAB*LABa 86.19 -2.81 87.67
 LAB*TCHa 50.0 87.72 91.84

relative CIELAB lab*
 lab*lab 0.881 0.0 1.0
 lab*tch 0.5 1.0 0.25
 lab*nch 0.0 1.0 0.25

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 0.0g

relative Inform. Technology (IT)
 olvi3* 0.477 0.5 0.0 (1.0)
 cmyn3* 0.523 0.5 1.0 (0.0)
 olvi4* 0.977 1.0 0.5 0.5
 cmyn4* 0.023 0.0 0.5 0.5

standard and adapted CIELAB
 LAB*LAB 37.36 -1.52 37.81
 LAB*LABa 37.36 -1.52 37.81
 LAB*TCHa 25.01 37.84 92.31

relative CIELAB lab*
 lab*lab 0.25 -0.019 0.499
 lab*tch 0.25 0.5 0.256
 lab*nch 0.5 0.5 0.256

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

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 18.03 0.0 0.0
 LAB*LABa 18.03 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 -

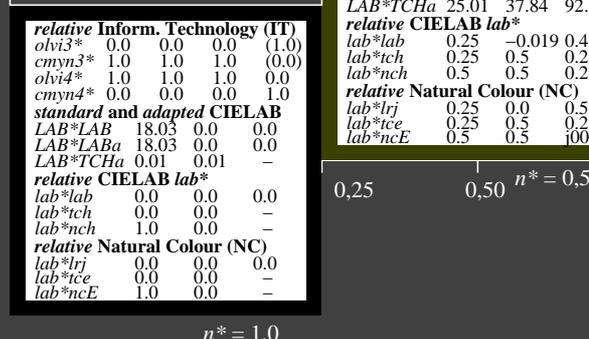
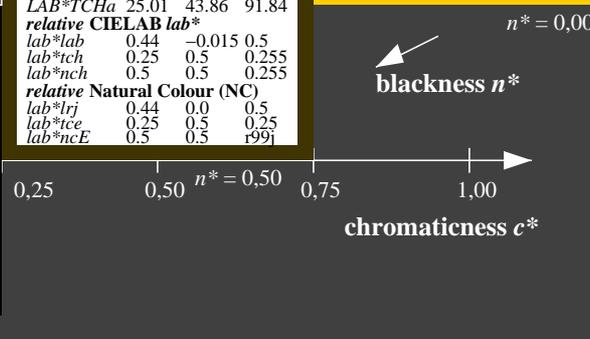
relative Natural Colour (NC)
 lab*lrj 0.0 0.0 0.0
 lab*tce 0.0 0.0 -
 lab*nce 1.0 0.0 -

relative Inform. Technology (IT)
 olvi3* 0.954 1.0 0.0 (1.0)
 cmyn3* 0.046 0.0 1.0 (0.0)
 olvi4* 0.955 1.0 0.0 1.0
 cmyn4* 0.045 0.0 1.0 0.0

standard and adapted CIELAB
 LAB*LAB 56.71 -3.04 75.62
 LAB*LABa 56.71 -3.04 75.62
 LAB*TCHa 50.0 75.69 92.31

relative CIELAB lab*
 lab*lab 0.5 -0.039 0.999
 lab*tch 0.5 1.0 0.256
 lab*nch 0.0 1.0 0.256

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



NE120-7, 3 step scales for constant CIELAB hue 92/360 = 0.255 (left)

3 step scales for constant CIELAB hue 92/360 = 0.256 (right)

BAM-test chart NE12; Colorimetric systems ORS18 & SRS18
 D65: 2 coordinate data of 3 step colour scales for 10 hues

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

See for similar files: <http://www.ps.bam.de/NE12/>
 Technical information: <http://www.ps.bam.de>
 Version 2.1, io=1,1, CIELAB

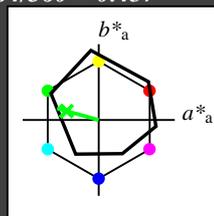
BAM registration: 20060101-NE12/10S/S12E07FP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 /NE12/ Form: 8/10, Serie: 1/1, Page: 8 Page count: 8

Input: Colorimetric Offset 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	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
MMa	48.13	75.28	-8.36	75.74	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	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	30.57	1.15	-46.84	46.86	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	-0.98	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	-0.24	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	-0.47
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	-

$n^* = 1.0$

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	-27.98	10.94
LAB*LABa	74.1	-27.4	7.62
LAB*TCHa	75.0	28.45	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	-27.24	8.34
LAB*LABa	35.41	-27.4	7.63
LAB*TCHa	25.01	28.46	164.44

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

$n^* = 0.50$

chromaticness c^*

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	-54.98	17.14
LAB*LABa	52.8	-54.81	15.26
LAB*TCHa	50.0	56.91	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

$n^* = 0.00$

blackness n^*

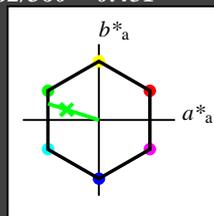
chromaticness c^*

Output: Colorimetric Standard Reflective System SRS18

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

D65: hue G
 LCH*Ma: 57 70 162
 olv*Ma: 0.0 1.0 0.22

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	56.71	67.03	38.7	77.4	30
YMa	56.71	0.0	77.4	77.4	90
LMa	56.71	-67.02	38.7	77.4	150
CMa	56.71	-67.02	-38.69	77.4	210
VMa	56.71	0.0	-77.39	77.4	270
MMa	56.71	67.03	-38.69	77.4	330
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

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	0.0	0.0
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	56.72	0.0	0.0
LAB*LABa	56.72	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	18.03	0.0	0.0
LAB*LABa	18.03	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	-

$n^* = 1.0$

$n^* = 0.50$

chromaticness c^*

blackness n^*

$n^* = 0.00$

chromaticness c^*

blackness n^*

NE120-7, 3 step scales for constant CIELAB hue 164/360 = 0.457 (left)

3 step scales for constant CIELAB hue 162/360 = 0.451 (right)

BAM-test chart NE12; Colorimetric systems ORS18 & SRS18
 D65: 2 coordinate data of 3 step colour scales for 10 hues

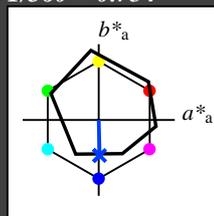
input: $olv^* setrgbcolor$
 output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Offset 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^*



ORS18; adapted (a) CIELAB data

	L^*	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	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	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	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	-0.98	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	-0.24	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	-0.47
LAB*LABa	18.02	0.0	0.0
LAB*TCHa	18.01	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	-

$n^* = 1.0$

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	68.6	0.07	-19.39
LAB*LABa	68.6	0.55	-22.34
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	0.82	-22.01
LAB*LABa	29.9	0.55	-22.34
LAB*TCHa	25.01	22.36	271.42

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	g99r

$n^* = 0.00$

blackness n^*

chromaticness c^*

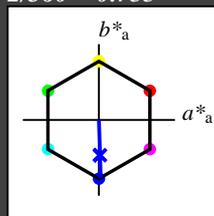
0,25 0,50 $n^* = 0,50$ 0,75 1,00

Output: Colorimetric Standard Reflective System SRS18

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

D65: hue B
 LCH*Ma: 57 76 272
 olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	L^*	a^*	b^*	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	56.71	67.03	38.7	77.4	30
Y _{Ma}	56.71	0.0	77.4	77.4	90
L _{Ma}	56.71	-67.02	38.7	77.4	150
C _{Ma}	56.71	-67.02	-38.69	77.4	210
V _{Ma}	56.71	0.0	-77.39	77.4	270
M _{Ma}	56.71	67.03	-38.69	77.4	330
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	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Gamut

$u^*_{rel} = 100$

%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

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	0.0	0.0
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	56.72	0.0	0.0
LAB*LABa	56.72	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	18.03	0.0	0.0
LAB*LABa	18.03	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*	0.517	0.5	1.0	(1.0)
cmyn3*	0.483	0.5	0.0	(0.0)
olvi4*	0.517	0.5	1.0	1.0
cmyn4*	0.483	0.5	0.0	0.0

standard and adapted CIELAB

LAB*LAB	76.06	1.15	-38.02
LAB*LABa	76.06	1.15	-38.02
LAB*TCHa	75.0	38.04	271.74

relative CIELAB lab*

lab*lab	0.75	0.015	-0.499
lab*tch	0.75	0.5	0.755
lab*nch	0.0	0.5	0.755

relative Natural Colour (NC)

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

relative Inform. Technology (IT)

olvi3*	0.017	0.0	0.5	(1.0)
cmyn3*	0.983	1.0	0.5	(0.0)
olvi4*	0.517	0.5	1.0	0.5
cmyn4*	0.483	0.5	0.0	0.5

standard and adapted CIELAB

LAB*LAB	37.36	1.15	-38.02
LAB*LABa	37.36	1.15	-38.02
LAB*TCHa	25.01	38.05	271.73

relative CIELAB lab*

lab*lab	0.25	0.015	-0.499
lab*tch	0.25	0.5	0.755
lab*nch	0.5	0.5	0.755

relative Natural Colour (NC)

lab*lrj	0.25	0.0	-0.499
lab*tce	0.25	0.5	0.75
lab*nce	0.5	0.5	g99b

$n^* = 0.00$

blackness n^*

chromaticness c^*

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

$n^* = 1.0$

NE120-7, 3 step scales for constant CIELAB hue 271/360 = 0.754 (left)

3 step scales for constant CIELAB hue 272/360 = 0.755 (right)

BAM-test chart NE12; Colorimetric systems ORS18 & SRS18
 D65: 2 coordinate data of 3 step colour scales for 10 hues

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