

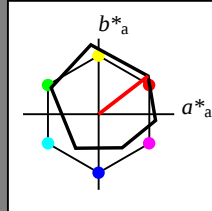
Input: Colorimetric Offset Reflective System ORS18

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^* 

%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	-

 $n^* = 1.0$

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

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

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	-

 $n^* = 0.00$ blackness n^*

chromaticness c^*

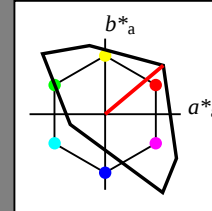
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$ lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 158$

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

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	47.72	0.0	0.0
LAB*LABa	47.72	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	0.03	0.0	0.0
LAB*LABa	0.03	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	-

 $n^* = 1.0$ $n^* = 0.00$ blackness n^*

chromaticness c^*

NE100-7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left)

3 step scales for constant CIELAB hue 40/360 = 0.111 (right)

BAM-test chart NE10; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

input: olv* setrgbcolor

output: Startup (S) data dependend

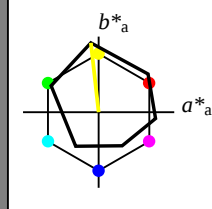
Input: Colorimetric Offset Reflective System ORS18

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^* 

%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	-

 $n^* = 1.0$

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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

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	0.0	(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	-

 $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

 $n^* = 0.50$ $n^* = 1.0$

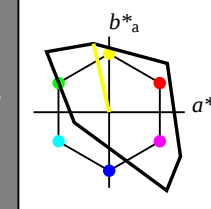
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$ lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 158$

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

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	47.72	0.0	0.0
LAB*LABa	47.72	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	0.03	0.0	0.0
LAB*LABa	0.03	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*	0.0	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	0.03	0.0	0.0
LAB*LABa	0.03	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	-

 $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

 $n^* = 0.50$ $n^* = 1.0$

NE100-7, 3 step scales for constant CIELAB hue 96/360 = 0.268 (left)

3 step scales for constant CIELAB hue 103/360 = 0.286 (right)

BAM-test chart NE10; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

input: olv* setrgbcolor

output: Startup (S) data dependend

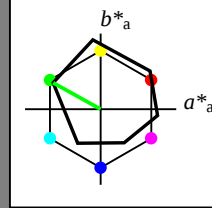
Input: Colorimetric Offset Reflective System ORS18

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^* 

%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	-

 $n^* = 1.0$

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

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

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	0.0	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	-

 $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

 $n^* = 1.0$

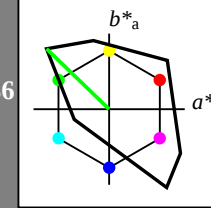
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 136/360 = 0.378$ lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 158$

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

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	47.72	0.0	0.0
LAB*LABa	47.72	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	0.0	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	0.03	0.0	0.0
LAB*LABa	0.03	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	-

 $n^* = 1.0$ $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

 $n^* = 1.0$

NE100-7, 3 step scales for constant CIELAB hue 151/360 = 0.419 (left)

3 step scales for constant CIELAB hue 136/360 = 0.378 (right)

BAM-test chart NE10; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

input: olv* setrgbcolor

output: Startup (S) data dependend

Input: Colorimetric Offset Reflective System ORS18

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

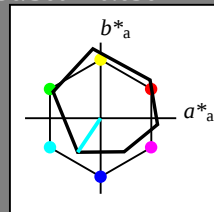
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%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 -

$n^* = 1,0$

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

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 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 -21.6
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 g66b

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (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 -

$n^* = 0,00$

blackness n^*

chromaticness c^*

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$

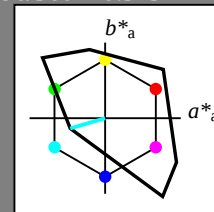
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

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 47.72 0.0 0.0
LAB*LABa 47.72 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 0.0 0.0 (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 0.03 0.0 0.0
LAB*LABa 0.03 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 -

$n^* = 1,0$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	-20.69	90.75	93.08	103
LMa	83.63	-82.75	79.9	115.04	136
CMa	86.88	-46.16	-13.55	48.12	196
VMa	30.39	76.06	-103.59	128.52	306
MMa	57.3	94.35	-58.41	110.97	328
NMa	0.01	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

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 91.14 -23.07 -6.77
LAB*LABa 91.14 -23.07 -6.77
LAB*TCHa 75.0 24.06 196.37

relative CIELAB lab*
lab*lab 0.955 -0.479 -0.14
lab*tch 0.75 0.5 0.545
lab*nch 0.0 0.5 0.545

relative Natural Colour (NC)
lab*lrj 0.955 -0.44 -0.234
lab*tce 0.75 0.5 0.578
lab*nce 0.0 0.5 g31b

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 43.45 -23.07 -6.77
LAB*LABa 43.45 -23.07 -6.77
LAB*TCHa 25.01 24.06 196.37

relative CIELAB lab*
lab*lab 0.455 -0.479 -0.14
lab*tch 0.25 0.5 0.545
lab*nch 0.5 0.5 0.545

relative Natural Colour (NC)
lab*lrj 0.455 -0.44 -0.234
lab*tce 0.25 0.5 0.578
lab*nce 0.5 0.5 g31b

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 0.0 0.0 (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 0.03 0.0 0.0
LAB*LABa 0.03 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 -

$n^* = 0,00$

blackness n^*

chromaticness c^*

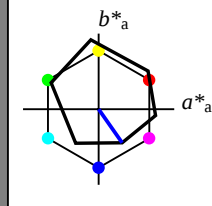
Input: Colorimetric Offset Reflective System ORS18

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^* 

%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	-

 $n^* = 1.0$

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

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	0.829

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	0.829

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.0	(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	0.03	0.0	0.0
LAB*LABa	0.03	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	-

 $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

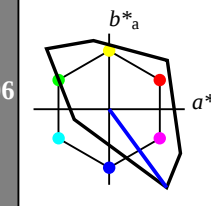
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$ lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 158$

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

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	47.72	0.0	0.0
LAB*LABa	47.72	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	0.03	0.0	0.0
LAB*LABa	0.03	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	-

 $n^* = 1.0$

TLS00; adapted (a) CIELAB data

$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa 50.5	76.92	64.55	100.42	40
YMa 92.66	-20.69	90.75	93.08	103
LMa 83.63	-82.75	79.9	115.04	136
CMa 86.88	-46.16	-13.55	48.12	196
VMa 30.39	76.06	-103.59	128.52	306
MMa 57.3	94.35	-58.41	110.97	328
NMa 0.01	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

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	62.9	38.02	-51.78
LAB*LABa	62.9	38.02	-51.78
LAB*TCHa	75.0	64.25	306.29

relative CIELAB lab*

lab*lab	0.659	0.296	-0.402
lab*tch	0.75	0.5	0.851
lab*nch	0.0	0.5	0.851

relative Natural Colour (NC)

lab*lrj	0.659	0.23	-0.443
lab*tce	0.75	0.5	0.826
lab*nce	0.0	0.5	0.830

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	15.21	38.02	-51.78
LAB*LABa	15.21	38.02	-51.78
LAB*TCHa	25.01	64.25	306.29

relative CIELAB lab*

lab*lab	0.159	0.296	-0.402
lab*tch	0.25	0.5	0.851
lab*nch	0.5	0.5	0.851

relative Natural Colour (NC)

lab*lrj	0.159	0.23	-0.443
lab*tce	0.25	0.5	0.826
lab*nce	0.5	0.5	0.830

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.0	(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	0.03	0.0	0.0
LAB*LABa	0.03	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	-

 $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

NE100-7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)

3 step scales for constant CIELAB hue 306/360 = 0.851 (right)

BAM-test chart NE10; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

input: olv* setrgbcolor

output: *Startup (S) data dependend*

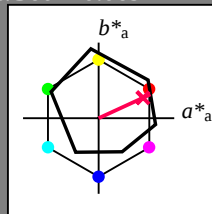
Input: Colorimetric Offset Reflective System ORS18

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^* 

%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	-

 $n^* = 1.0$

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

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	0.999

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	0.001

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^*

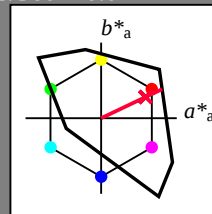
Output: Colorimetric Television Luminous System TLS00

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

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 158$

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

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	47.72	0.0	0.0
LAB*LABa	47.72	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	0.03	0.0	0.0
LAB*LABa	0.03	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	-

 $n^* = 1.0$

TLS00; adapted (a) CIELAB data

$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa 50.5	76.92	64.55	100.42	40
YMa 92.66	-20.69	90.75	93.08	103
LMa 83.63	-82.75	79.9	115.04	136
CMa 86.88	-46.16	-13.55	48.12	196
VMa 30.39	76.06	-103.59	128.52	306
MMa 57.3	94.35	-58.41	110.97	328
NMa 0.01	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

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.606	(1.0)
cmyn3*	0.0	0.5	0.394	(0.0)
olvi4*	1.0	0.5	0.606	1.0
cmyn4*	0.0	0.5	0.394	0.0

standard and adapted CIELAB

LAB*LAB	73.67	40.3	19.2
LAB*LABa	73.67	40.3	19.2
LAB*TCHa	75.0	44.64	25.47

relative CIELAB lab*

lab*lab	0.772	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	0.772	0.5	0.0
lab*tce	0.75	0.5	1.0
lab*nce	0.0	0.5	0.999

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.106	(1.0)
cmyn3*	0.5	1.0	0.894	(0.0)
olvi4*	1.0	0.5	0.606	0.5
cmyn4*	0.0	0.5	0.394	0.5

standard and adapted CIELAB

LAB*LAB	25.98	40.3	19.21
LAB*LABa	25.98	40.3	19.21
LAB*TCHa	25.01	44.65	25.49

relative CIELAB lab*

lab*lab	0.272	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	0.272	0.5	0.0
lab*tce	0.25	0.5	0.0
lab*nce	0.5	0.5	0.001

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^*

NE100-7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

3 step scales for constant CIELAB hue 25/360 = 0.071 (right)

BAM-test chart NE10; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

input: olv* setrgbcolor

output: Startup (S) data dependend

Input: Colorimetric Offset Reflective System ORS18

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

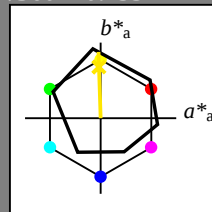
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%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* 0.5 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 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 -

$n^* = 1,0$

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

relative Inform. Technology (IT)
olv3* 1.0 0.951 0.5 (1.0)
cmyn3* 0.0 0.049 0.5 (0.0)
olv4* 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 j00g

relative Inform. Technology (IT)
olv3* 0.5 0.451 0.0 (1.0)
cmyn3* 0.5 0.549 1.0 (0.0)
olv4* 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 j99j

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^*

Output: Colorimetric Television Luminous System TLS00

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

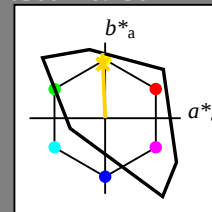
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

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* 0.5 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 47.72 0.0 0.0
LAB*LABa 47.72 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 0.03 0.0 0.0
LAB*LABa 0.03 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 -

$n^* = 1,0$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	-20.69	90.75	93.08	103
LMa	83.63	-82.75	79.9	115.04	136
CMa	86.88	-46.16	-13.55	48.12	196
VMa	30.39	76.06	-103.59	128.52	306
MMa	57.3	94.35	-58.41	110.97	328
NMa	0.01	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

relative Inform. Technology (IT)
olv3* 1.0 0.912 0.5 (1.0)
cmyn3* 0.0 0.088 0.5 (0.0)
olv4* 1.0 0.912 0.5 1.0
cmyn4* 0.0 0.088 0.5 0.0

standard and adapted CIELAB
LAB*LAB 90.31 -1.74 43.06
LAB*LABa 90.31 -1.74 43.06
LAB*TCHa 75.0 43.09 92.32

relative CIELAB lab*
lab*lab 0.947 -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 0.947 0.0 0.5
lab*tce 0.75 0.5 0.25
lab*nce 0.0 0.5 j00g

relative Inform. Technology (IT)
olv3* 0.5 0.412 0.0 (1.0)
cmyn3* 0.5 0.588 1.0 (0.0)
olv4* 1.0 0.912 0.5 0.5
cmyn4* 0.0 0.088 0.5 0.5

standard and adapted CIELAB
LAB*LAB 42.62 -1.73 43.05
LAB*LABa 42.62 -1.73 43.05
LAB*TCHa 25.01 43.09 92.31

relative CIELAB lab*
lab*lab 0.447 -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 0.447 0.0 0.5
lab*tce 0.25 0.5 0.25
lab*nce 0.5 0.5 j99j

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^*

NE100-7, 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 NE10; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

input: olv* setrgbcolor

output: Startup (S) data dependend

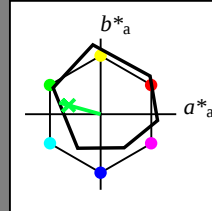
Input: Colorimetric Offset Reflective System ORS18

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^* 

%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	-

 $n^* = 1.0$

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*	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

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	-

 $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

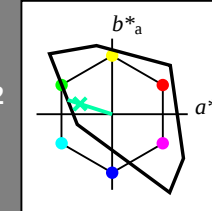
Output: Colorimetric Television Luminous System TLS00

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

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 158$

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

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	47.72	0.0	0.0
LAB*LABa	47.72	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	0.03	0.0	0.0
LAB*LABa	0.03	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	-

 $n^* = 1.0$ $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

NE100-7, 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 NE10; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

input: olv* setrgbcolor

output: Startup (S) data dependend

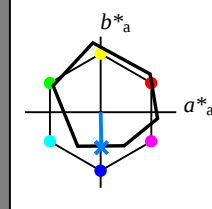
Input: Colorimetric Offset Reflective System ORS18

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^* 

%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	-

 $n^* = 1.0$

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

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	b00r

 $n^* = 0.50$ blackness n^* chromaticness c^*

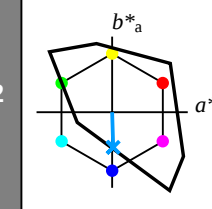
Output: Colorimetric Television Luminous System TLS00

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

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 158$

%Regularity

 $g^*_{H,rel} = 20$ $g^*_{C,rel} = 37$

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	47.72	0.0	0.0
LAB*LABa	47.72	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	0.03	0.0	0.0
LAB*LABa	0.03	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	-

 $n^* = 1.0$

TLS00; adapted (a) CIELAB data

$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa 50.5	76.92	64.55	100.42	40
YMa 92.66	-20.69	90.75	93.08	103
LMa 83.63	-82.75	79.9	115.04	136
CMa 86.88	-46.16	-13.55	48.12	196
VMa 30.39	76.06	-103.59	128.52	306
MMa 57.3	94.35	-58.41	110.97	328
NMa 0.01	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

relative Inform. Technology (IT)

olvi3*	0.5	0.805	1.0	(1.0)
cmyn3*	0.5	0.195	0.0	(0.0)
olvi4*	0.5	0.805	1.0	1.0
cmyn4*	0.5	0.195	0.0	0.0

standard and adapted CIELAB

LAB*LAB	80.13	0.73	-24.31
LAB*LABa	80.13	0.73	-24.31
LAB*TCHa	75.0	24.33	271.72

relative CIELAB lab*

lab*lab	0.84	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	0.84	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	0.305	0.5	(1.0)
cmyn3*	1.0	0.695	0.5	(0.0)
olvi4*	0.5	0.805	1.0	0.5
cmyn4*	0.5	0.195	0.0	0.5

standard and adapted CIELAB

LAB*LAB	32.44	0.74	-24.32
LAB*LABa	32.44	0.74	-24.32
LAB*TCHa	25.01	24.34	271.75

relative CIELAB lab*

lab*lab	0.34	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	0.34	0.0	-0.499
lab*tce	0.25	0.5	0.75
lab*nce	0.5	0.5	b00r

 $n^* = 0.50$ blackness n^* chromaticness c^*

NE100-7, 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 NE10; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

input: olv* setrgbcolor

output: Startup (S) data dependend