

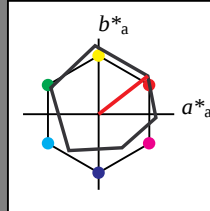
Input: Colorimetric Offset Reflective System ORS18

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

D50: hue O

LCH*Ma: 48 82 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 94$

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

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	95.46	-0.39	4.69
LAB*LABa	95.46	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	56.78	0.13	2.11
LAB*LABa	56.78	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	18.1	0.67	-0.46
LAB*LABa	18.1	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	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	29.2	-5.79	-49.61	49.96	263

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	71.7	32.45	28.38
LAB*LABa	71.7	32.52	25.26
LAB*TCHa	75.0	41.18	37.84

relative CIELAB lab*

lab*lab	0.693	0.395	0.307
lab*tch	0.75	0.5	0.105
lab*nch	0.0	0.5	0.105

relative Natural Colour (NC)

lab*lrj	0.693	0.479	0.143
lab*tce	0.75	0.5	0.046
lab*nce	0.0	0.5	r18j

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	33.02	32.98	25.8
LAB*LABa	33.02	32.52	25.26
LAB*TCHa	25.01	41.18	37.84

relative CIELAB lab*

lab*lab	0.193	0.395	0.307
lab*tch	0.25	0.5	0.105
lab*nch	0.5	0.5	0.105

relative Natural Colour (NC)

lab*lrj	0.193	0.479	0.143
lab*tce	0.25	0.5	0.046
lab*nce	0.5	0.5	r18j

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	18.1	0.67	-0.46
LAB*LABa	18.1	0.0	0.0
LAB*TCHa	0.01	0.01	-

relative CIELAB lab*

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

relative Natural Colour (NC)

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

relative Inform. Technology (IT)

olvi3*	1.0	0.0	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	65.04	50.53
LAB*TCHa	50.0	82.36	37.84

relative CIELAB lab*

lab*lab	0.386	0.79	0.613
lab*tch	0.5	1.0	0.105
lab*nch	0.0	1.0	0.105

relative Natural Colour (NC)

lab*lrj	0.386	0.958	0.285
lab*tce	0.5	1.0	0.046
lab*nce	0.0	1.0	r18j

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	-

blackness $n^* = 0.00$

chromaticness c^*

$n^* = 0.50$

$n^* = 1.0$

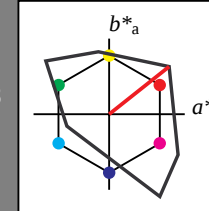
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 38/360 = 0.107$ lab^*tch and lab^*nch

D50: hue O

LCH*Ma: 54 101 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 156$

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

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	-

blackness $n^* = 0.00$

chromaticness c^*

$n^* = 0.50$

$n^* = 1.0$

TLS00; adapted (a) CIELAB data

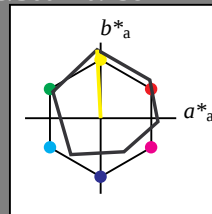
	$L^*=L^*_{\rm a}$	$a^*_{\rm a}$	$b^*_{\rm a}$	$C^*_{\rm ab,a}$	$h^*_{\rm ab,a}$
OMa	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 93/360 = 0.258$ lab^*tch and lab^*nch

D50: hue Y

LCH*Ma: 91 91 93

ol v^* Ma: 1.0 1.0 0.0triangle lightness t^* 

%Gamut

 $u^*_{rel} = 94$

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

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	95.46	-0.39	4.69
LAB*LABa	95.46	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	56.78	0.13	2.11
LAB*LABa	56.78	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	18.1	0.67	-0.46
LAB*LABa	18.1	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	65.05	50.54	82.38	38
YMa 91.0	-4.72	90.58	90.7	93
LMa 50.9	-63.18	34.98	72.22	151
CMa 56.99	-39.34	-48.1	62.16	231
VMa 25.72	30.89	-44.4	54.09	305
MMa 49.99	75.76	-4.64	75.9	356
NMa 18.09	0.0	0.0	0.0	0
WMa 95.46	0.0	0.0	0.0	0
RCIE 41.88	61.66	30.69	68.88	26
JCIE 81.97	2.02	67.79	67.82	88
GCIE 51.62	-41.32	9.74	42.46	167
BCIE 29.2	-5.79	-49.61	49.96	263

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	93.22	-2.72	49.83
LAB*LABa	93.22	-2.36	45.28
LAB*TCHa	75.0	45.34	92.99

relative CIELAB lab*

lab*lab	0.971	-0.025	0.499
lab*tch	0.75	0.5	0.258
lab*nch	0.0	0.5	0.258

relative Natural Colour (NC)

lab*lrj	0.971	-0.046	0.498
lab*tce	0.75	0.5	0.265
lab*nce	0.0	0.5	0.265

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	54.55	-2.19	47.25
LAB*LABa	54.55	-2.36	45.28
LAB*TCHa	25.01	45.34	92.99

relative CIELAB lab*

lab*lab	0.471	-0.025	0.499
lab*tch	0.25	0.5	0.258
lab*nch	0.5	0.5	0.258

relative Natural Colour (NC)

lab*lrj	0.471	-0.046	0.498
lab*tce	0.25	0.5	0.265
lab*nce	0.5	0.5	0.265

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	18.1	0.67	-0.46
LAB*LABa	18.1	0.0	0.0
LAB*TCHa	0.01	0.01	-

 $n^* = 0.50$

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	90.99	-5.06	94.96
LAB*LABa	90.99	-4.72	90.56
LAB*TCHa	50.0	90.68	92.99

relative CIELAB lab*

lab*lab	0.942	-0.051	0.998
lab*tch	0.5	1.0	0.258
lab*nch	0.0	1.0	0.258

relative Natural Colour (NC)

lab*lrj	0.942	-0.093	0.995
lab*tce	0.5	1.0	0.265
lab*nce	0.0	1.0	0.265

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	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	-

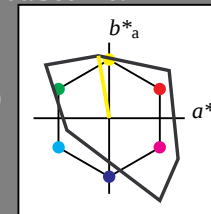
 $n^* = 1.0$ blackness n^* chromaticness c^*

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 100/360 = 0.277$ lab^*tch and lab^*nch

D50: hue Y

LCH*Ma: 93 84 100

ol v^* Ma: 1.0 1.0 0.0triangle lightness t^* 

%Gamut

 $u^*_{rel} = 156$

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

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

standard and adapted CIELAB

LAB*LAB	46.73	-7.08	41.29
LAB*LABa	46.73	-7.08	41.29
LAB*TCHa	25.01	41.89	99.75

relative CIELAB lab*

lab*lab	0.49	-0.084	0.493
lab*tch	0.25	0.5	0.277
lab*nch	0.5	0.5	0.277

relative Natural Colour (NC)

lab*lrj	0.49	-0.114	0.487
lab*tce	0.25	0.5	0.287
lab*nce	0.5	0.5	0.287

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

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	94.42	-7.08	41.29
LAB*LABa	94.42	-7.08	41.29
LAB*TCHa	75.0	41.89	99.75

relative CIELAB lab*

lab*lab	0.99	-0.084	0.493
lab*tch	0.75	0.5	0.277
lab*nch	0.0	0.5	0.277

relative Natural Colour (NC)

lab*lrj	0.99	-0.114	0.487
lab*tce	0.75	0.5	0.287
lab*nce	0.0	0.5	0.287

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	46.73	-7.08	41.29
LAB*LABa	46.73	-7.08	41.29
LAB*TCHa	25.01	41.89	99.75

relative CIELAB lab*

lab*lab	0.49	-0.084	0.493
lab*tch	0.25	0.5	0.277
lab*nch	0.5	0.5	0.277

relative Natural Colour (NC)

lab*lrj	0.49	-0.114	0.487
lab*tce	0.25	0.5	0.287
lab*nce	0.5	0.5	0.287

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	18.1	0.67	-0.46
LAB*LABa	18.1	0.0	0.0
LAB*TCHa	0.01	0.01	-

 $n^* = 1.0$ blackness n^* chromaticness c^*

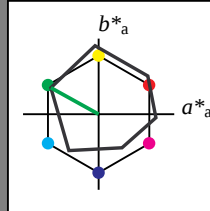
Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.42$ lab^*tch and lab^*nch

D50: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 94$

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

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	95.46	-0.39	4.69
LAB*LABa	95.46	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	56.78	0.13	2.11
LAB*LABa	56.78	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	18.1	0.67	-0.46
LAB*LABa	18.1	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	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	29.2	-5.79	-49.61	49.96	263

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	73.18	-31.67	20.7
LAB*LABa	73.18	-31.58	17.49
LAB*TCHa	75.0	36.1	151.03

relative CIELAB lab*

lab*lab	0.712	-0.436	0.242
lab*tch	0.75	0.5	0.42
lab*nch	0.0	0.5	0.42

relative Natural Colour (NC)

lab*lrj	0.712	-0.474	0.155
lab*tce	0.75	0.5	0.45
lab*nce	0.0	0.5	0.42

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	34.5	-31.13	18.12
LAB*LABa	34.5	-31.58	17.49
LAB*TCHa	25.01	36.1	151.03

relative CIELAB lab*

lab*lab	0.212	-0.436	0.242
lab*tch	0.25	0.5	0.42
lab*nch	0.5	0.5	0.42

relative Natural Colour (NC)

lab*lrj	0.212	-0.474	0.155
lab*tce	0.25	0.5	0.45
lab*nce	0.5	0.5	0.42

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	-

 $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

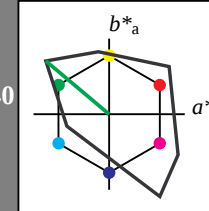
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 140/360 = 0.389$ lab^*tch and lab^*nch

D50: hue L

LCH*Ma: 83 109 140

olv*Ma: 0.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 156$

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

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

QE100-7, 3 step scales for constant CIELAB hue 151/360 = 0.42 (left)

3 step scales for constant CIELAB hue 140/360 = 0.389 (right)

BAM-test chart QE10; Colorimetric systems ORS18 & ORS18

D50: 2 coordinate data of 3 step colour scales for 10 hues

input: $cmY0^* setcmykcolor$

output: Startup (S) data dependend

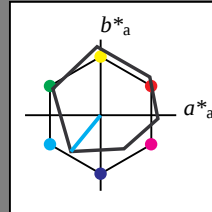
Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 231/360 = 0.641$ lab^*tch and lab^*nch

D50: hue C

LCH*Ma: 57 62 231

olv*Ma: 0.0 1.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 94$

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

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	95.46	-0.39	4.69
LAB*LABa	95.46	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	56.78	0.13	2.11
LAB*LABa	56.78	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	18.1	0.67	-0.46
LAB*LABa	18.1	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	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	29.2	-5.79	-49.61	49.96	263

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	76.22	-19.8	-20.63
LAB*LABa	76.22	-19.66	-24.04
LAB*TCHa	75.0	31.07	230.72

relative CIELAB lab*

lab*lab	0.751	-0.315	-0.386
lab*tch	0.75	0.5	0.641
lab*nch	0.0	0.5	0.641

relative Natural Colour (NC)

lab*lrj	0.751	-0.252	-0.43
lab*tce	0.75	0.5	0.666
lab*nce	0.0	0.5	0.666

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	37.54	-19.26	-23.2
LAB*LABa	37.54	-19.66	-24.04
LAB*TCHa	25.01	31.07	230.72

relative CIELAB lab*

lab*lab	0.251	-0.315	-0.386
lab*tch	0.25	0.5	0.641
lab*nch	0.5	0.5	0.641

relative Natural Colour (NC)

lab*lrj	0.251	-0.252	-0.43
lab*tce	0.25	0.5	0.666
lab*nce	0.5	0.5	0.666

relative Inform. Technology (IT)

olvi3*	0.0	0.5	0.5	(1.0)
cmyn3*	1.0	0.5	0.5	(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	18.1	0.67	-0.46
LAB*LABa	18.1	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

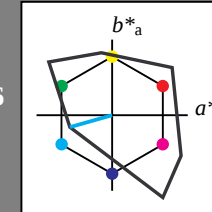
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.544$ lab^*tch and lab^*nch

D50: hue C

LCH*Ma: 85 58 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 156$

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

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

QE100-7, 3 step scales for constant CIELAB hue 231/360 = 0.641 (left)

3 step scales for constant CIELAB hue 196/360 = 0.544 (right)

BAM-test chart QE10; Colorimetric systems ORS18 & ORS18

D50: 2 coordinate data of 3 step colour scales for 10 hues

input: $cmY0^* setcmykcolor$

output: Startup (S) data dependend

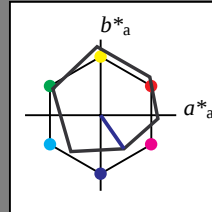
Input: Colorimetric Offset Reflective System ORS18

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

D50: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 94$

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

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	95.46	-0.39	4.69
LAB*LABa	95.46	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	56.78	0.13	2.11
LAB*LABa	56.78	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	18.1	0.67	-0.46
LAB*LABa	18.1	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	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	29.2	-5.79	-49.61	49.96	263

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	60.59	15.52	-19.82
LAB*LABa	60.59	15.44	-22.19
LAB*TCHa	75.0	27.04	304.82

relative CIELAB lab*

lab*lab	0.549	0.285	-0.409
lab*tch	0.75	0.5	0.847
lab*nch	0.0	0.5	0.847

relative Natural Colour (NC)

lab*lrj	0.549	0.252	-0.431
lab*tce	0.75	0.5	0.834
lab*nce	0.0	0.5	0.834

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	21.91	16.06	-22.4
LAB*LABa	21.91	15.44	-22.19
LAB*TCHa	25.01	27.04	304.82

relative CIELAB lab*

lab*lab	0.049	0.285	-0.409
lab*tch	0.25	0.5	0.847
lab*nch	0.5	0.5	0.847

relative Natural Colour (NC)

lab*lrj	0.049	0.252	-0.431
lab*tce	0.25	0.5	0.834
lab*nce	0.5	0.5	0.834

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	18.1	0.67	-0.46
LAB*LABa	18.1	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

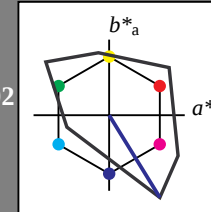
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 302/360 = 0.838$ lab^*tch and lab^*nch

D50: hue V

LCH*Ma: 26 128 302

olv*Ma: 0.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 156$

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

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	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	-

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

chromaticness c^*

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

QE100-7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)

3 step scales for constant CIELAB hue 302/360 = 0.838 (right)

BAM-test chart QE10; Colorimetric systems ORS18 & ORS18

D50: 2 coordinate data of 3 step colour scales for 10 hues

input: `cmv0* setcmvcolor`output: *Startup (S) data dependend*

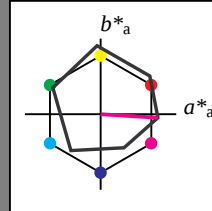
Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 356/360 = 0.99$ lab^*tch and lab^*nch

D50: hue M

LCH*Ma: 50 76 356

olv*Ma: 1.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 94$

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

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	95.46	-0.39	4.69
LAB*LABa	95.46	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	56.78	0.13	2.11
LAB*LABa	56.78	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	18.1	0.67	-0.46
LAB*LABa	18.1	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	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	29.2	-5.79	-49.61	49.96	263

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	72.72	37.79	0.86
LAB*LABa	72.72	37.87	-2.31
LAB*TCHa	75.0	37.94	356.49

relative CIELAB lab*

lab*lab	0.706	0.499	-0.03
lab*tch	0.75	0.5	0.99
lab*nch	0.0	0.5	0.99

relative Natural Colour (NC)

lab*lrj	0.706	0.464	-0.186
lab*tce	0.75	0.5	0.939
lab*nce	0.0	0.5	0.75r

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	34.04	38.32	-1.71
LAB*LABa	34.04	37.87	-2.31
LAB*TCHa	25.01	37.94	356.49

relative CIELAB lab*

lab*lab	0.206	0.499	-0.03
lab*tch	0.25	0.5	0.99
lab*nch	0.5	0.5	0.99

relative Natural Colour (NC)

lab*lrj	0.206	0.464	-0.186
lab*tce	0.25	0.5	0.939
lab*nce	0.5	0.5	0.75r

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	18.1	0.67	-0.46
LAB*LABa	18.1	0.0	0.0
LAB*TCHa	0.01	0.01	-

relative CIELAB lab*

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

relative Natural Colour (NC)

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

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	49.99	75.97	-2.97
LAB*LABa	49.99	75.75	-4.64
LAB*TCHa	50.0	75.89	356.49

relative CIELAB lab*

lab*lab	0.412	0.998	-0.06
lab*tch	0.5	1.0	0.99
lab*nch	0.0	1.0	0.99

relative Natural Colour (NC)

lab*lrj	0.412	0.928	-0.372
lab*tce	0.5	1.0	0.939
lab*nce	0.0	1.0	0.75r

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	-

 $n^* = 0.00$ blackness n^* chromaticness c^*

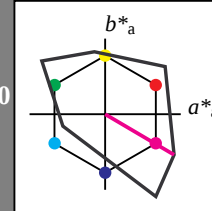
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 330/360 = 0.915$ lab^*tch and lab^*nch

D50: hue M

LCH*Ma: 59 106 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 156$

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

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	-

 $n^* = 1.0$

3 step scales for constant CIELAB hue 330/360 = 0.915 (right)

input: $cmY0^* setcmykcolor$

output: Startup (S) data dependend

BAM-test chart QE10; Colorimetric systems ORS18 & ORS18

D50: 2 coordinate data of 3 step colour scales for 10 hues

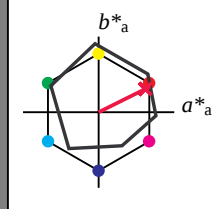
Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 26/360 = 0.074$ lab^*tch and lab^*nch

D50: hue R

LCH*Ma: 49 76 26

olv*Ma: 1.0 0.0 0.3

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 94$

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

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	95.46	-0.39	4.69
LAB*LABa	95.46	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	56.78	0.13	2.11
LAB*LABa	56.78	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	18.1	0.67	-0.46
LAB*LABa	18.1	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	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	29.2	-5.79	-49.61	49.96	263

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.65	(1.0)
cmyn3*	0.0	0.5	0.35	(0.0)
olvi4*	1.0	0.5	0.65	1.0
cmyn4*	0.0	0.5	0.35	0.0

standard and adapted CIELAB

LAB*LAB	72.0	34.05	20.12
LAB*LABa	72.0	34.13	16.99
LAB*TCHa	75.0	38.12	26.46

relative CIELAB lab*

lab*lab	0.697	0.448	0.223
lab*tch	0.75	0.5	0.074
lab*nch	0.0	0.5	0.074

relative Natural Colour (NC)

lab*lrj	0.697	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	0.15	(1.0)
cmyn3*	0.5	1.0	0.85	(0.0)
olvi4*	1.0	0.5	0.65	0.5
cmyn4*	0.0	0.5	0.35	0.5

standard and adapted CIELAB

LAB*LAB	33.33	34.58	17.55
LAB*LABa	33.33	34.13	16.99
LAB*TCHa	25.01	38.12	26.47

relative CIELAB lab*

lab*lab	0.197	0.447	0.223
lab*tch	0.25	0.5	0.074
lab*nch	0.5	0.5	0.074

relative Natural Colour (NC)

lab*lrj	0.197	0.5	0.0
lab*tce	0.25	0.5	0.0
lab*nce	0.5	0.5	0.074

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	18.1	0.67	-0.46
LAB*LABa	18.1	0.0	0.0
LAB*TCHa	0.01	0.01	-

relative CIELAB lab*

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

relative Natural Colour (NC)

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

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.3	(1.0)
cmyn3*	0.0	1.0	0.7	(0.0)
olvi4*	1.0	0.0	0.3	1.0
cmyn4*	0.0	1.0	0.7	0.0

standard and adapted CIELAB

LAB*LAB	48.56	68.5	35.55
LAB*LABa	48.56	68.25	33.98
LAB*TCHa	50.0	76.24	26.47

relative CIELAB lab*

lab*lab	0.394	0.895	0.446
lab*tch	0.5	1.0	0.074
lab*nch	0.0	1.0	0.074

relative Natural Colour (NC)

lab*lrj	0.394	1.0	0.0
lab*tce	0.5	1.0	0.0
lab*nce	0.0	1.0	0.074

 $n^* = 0.00$ blackness n^*

chromaticness c^*

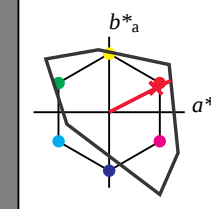
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 27/360 = 0.075$ lab^*tch and lab^*nch

D50: hue R

LCH*Ma: 55 92 27

olv*Ma: 1.0 0.0 0.18

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 156$

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

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	-

 $n^* = 1.0$

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.591	(1.0)
cmyn3*	0.0	0.5	0.409	(0.0)
olvi4*	1.0	0.5	0.591	1.0
cmyn4*	0.0	0.5	0.409	0.0

standard and adapted CIELAB

LAB*LAB	75.21	40.74	20.91
LAB*LABa	75.21	40.74	20.91
LAB*TCHa	75.0	45.8	27.17

relative CIELAB lab*

lab*lab	0.788	0.445	0.228
lab*tch	0.75	0.5	0.075
lab*nch	0.0	0.5	0.075

relative Natural Colour (NC)

lab*lrj	0.788	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	0.091	(1.0)
cmyn3*	0.5	1.0	0.909	(0.0)
olvi4*	1.0	0.5	0.591	0.5
cmyn4*	0.0	0.5	0.409	0.5

standard and adapted CIELAB

LAB*LAB	27.52	40.74	20.92
LAB*LABa	27.52	40.74	20.92
LAB*TCHa	25.01	45.8	27.18

relative CIELAB lab*

lab*lab	0.288	0.445	0.228
lab*tch	0.25	0.5	0.075
lab*nch	0.5	0.5	0.075

relative Natural Colour (NC)

lab*lrj	0.288	0.5	0.0
lab*tce	0.25	0.5	0.0
lab*nce	0.5	0.5	0.075

 $n^* = 0.00$ blackness n^*

chromaticness c^*

3 step scales for constant CIELAB hue 27/360 = 0.075 (right)

input: $cmY0^* setcmykcolor$

output: Startup (S) data dependend

BAM-test chart QE10; Colorimetric systems ORS18 & ORS18

D50: 2 coordinate data of 3 step colour scales for 10 hues

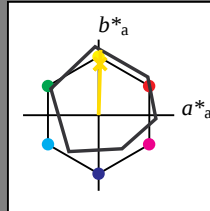
Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 88/360 = 0.245$ lab^*tch and lab^*nch

D50: hue J

LCH*Ma: 86 86 88

olv*Ma: 1.0 0.9 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 94$

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

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	95.46	-0.39	4.69
LAB*LABa	95.46	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	56.78	0.13	2.11
LAB*LABa	56.78	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	18.1	0.67	-0.46
LAB*LABa	18.1	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	65.05	50.54	82.38	38
YMa 91.0	-4.72	90.58	90.7	93
LMa 50.9	-63.18	34.98	72.22	151
CMa 56.99	-39.34	-48.1	62.16	231
VMa 25.72	30.89	-44.4	54.09	305
MMa 49.99	75.76	-4.64	75.9	356
NMa 18.09	0.0	0.0	0.0	0
WMa 95.46	0.0	0.0	0.0	0
RCIE 41.88	61.66	30.69	68.88	26
JCIE 81.97	2.02	67.79	67.82	88
GCIE 51.62	-41.32	9.74	42.46	167
BCIE 29.2	-5.79	-49.61	49.96	263

relative Inform. Technology (IT)

olvi3*	1.0	0.948	0.5	(1.0)
cmyn3*	0.0	0.052	0.5	(0.0)
olvi4*	1.0	0.948	0.5	1.0
cmyn4*	0.0	0.052	0.5	0.0

standard and adapted CIELAB

LAB*LAB	90.97	0.94	47.59
LAB*LABa	90.97	1.28	43.19
LAB*TCHa	75.0	43.21	88.3

relative CIELAB lab*

lab*lab	0.942	0.015	0.5
lab*tch	0.75	0.5	0.245
lab*nch	0.0	0.5	0.245

relative Natural Colour (NC)

lab*lrj	0.942	0.0	0.5
lab*tce	0.75	0.5	0.25
lab*nce	0.0	0.5	j00g

relative Inform. Technology (IT)

olvi3*	0.5	0.448	0.0	(1.0)
cmyn3*	0.5	0.552	1.0	(0.0)
olvi4*	1.0	0.948	0.5	0.5
cmyn4*	0.0	0.052	0.5	0.5

standard and adapted CIELAB

LAB*LAB	52.29	1.49	45.0
LAB*LABa	52.29	1.29	43.18
LAB*TCHa	25.01	43.2	88.29

relative CIELAB lab*

lab*lab	0.442	0.015	0.5
lab*tch	0.25	0.5	0.245
lab*nch	0.5	0.5	0.245

relative Natural Colour (NC)

lab*lrj	0.442	0.0	0.5
lab*tce	0.25	0.5	0.25
lab*nce	0.5	0.5	r99j

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^*

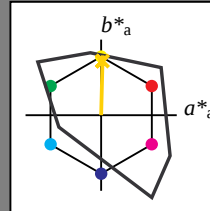
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 89/360 = 0.246$ lab^*tch and lab^*nch

D50: hue J

LCH*Ma: 87 79 89

olv*Ma: 1.0 0.83 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 156$

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

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^*

TLS00; adapted (a) CIELAB data

$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa 54.19	79.36	63.0	101.33	38
YMa 93.44	-14.18	82.59	83.8	100
LMa 82.82	-83.73	70.41	109.41	140
CMa 85.22	-55.9	-15.78	58.1	196
VMa 25.61	67.05	-108.87	127.87	302
MMa 58.76	91.18	-53.69	105.82	330
NMa 0.01	0.0	0.0	0.0	0
WMa 95.41	0.0	0.0	0.0	0
RCIE 41.88	62.0	31.82	69.69	27
JCIE 81.97	1.81	71.59	71.61	89
GCIE 51.62	-41.11	11.52	42.7	164
BCIE 29.2	-5.27	-49.33	49.62	264

relative Inform. Technology (IT)

olvi3*	1.0	0.913	0.5	(1.0)
cmyn3*	0.0	0.087	0.5	(0.0)
olvi4*	1.0	0.914	0.5	1.0
cmyn4*	0.0	0.086	0.5	0.0

standard and adapted CIELAB

LAB*LAB	91.02	0.99	39.59
LAB*LABa	91.02	0.99	39.59
LAB*TCHa	75.0	39.61	88.56

relative CIELAB lab*

lab*lab	0.954	0.013	0.5
lab*tch	0.75	0.5	0.246
lab*nch	0.0	0.5	0.246

relative Natural Colour (NC)

lab*lrj	0.954	0.0	0.5
lab*tce	0.75	0.5	0.25
lab*nce	0.0	0.5	j00g

relative Inform. Technology (IT)

olvi3*	0.5	0.413	0.0	(1.0)
cmyn3*	0.5	0.587	1.0	(0.0)
olvi4*	1.0	0.913	0.5	0.5
cmyn4*	0.0	0.087	0.5	0.5

standard and adapted CIELAB

LAB*LAB	43.33	1.0	39.59
LAB*LABa	43.33	1.0	39.59
LAB*TCHa	25.01	39.6	88.55

relative CIELAB lab*

lab*lab	0.454	0.013	0.5
lab*tch	0.25	0.5	0.246
lab*nch	0.5	0.5	0.246

relative Natural Colour (NC)

lab*lrj	0.454	0.0	0.5
lab*tce	0.25	0.5	0.25
lab*nce	0.5	0.5	r99j

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	-

 $n^* = 0.50$

QE100-7, 3 step scales for constant CIELAB hue 88/360 = 0.245 (left)

3 step scales for constant CIELAB hue 89/360 = 0.246 (right)

BAM-test chart QE10; Colorimetric systems ORS18 & ORS18

D50: 2 coordinate data of 3 step colour scales for 10 hues

input: `cmv0* setcmvcolor`output: `Startup (S) data dependend`

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 167/360 = 0.463$

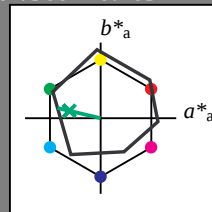
lab^*tch and lab^*nch

D50: hue G

LCH*Ma: 52 59 167

olv*Ma: 0.0 1.0 0.26

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

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 95.46 -0.39 4.69
LAB*LABa 95.46 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 56.78 0.13 2.11
LAB*LABa 56.78 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 18.1 0.67 -0.46
LAB*LABa 18.1 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	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	29.2	-5.79	-49.61	49.96	263

relative Inform. Technology (IT)
olvi3* 0.5 1.0 0.63 (1.0)
cmyn3* 0.5 0.0 0.37 (0.0)
olvi4* 0.5 1.0 0.63 1.0
cmyn4* 0.5 0.0 0.37 0.0

standard and adapted CIELAB
LAB*LAB 73.97 -28.59 9.98
LAB*LABa 73.97 -28.49 6.72
LAB*TCHa 75.0 29.28 166.74

relative CIELAB lab*
lab*lab 0.722 -0.486 0.115
lab*tch 0.75 0.5 0.463
lab*nch 0.0 0.5 0.463

relative Natural Colour (NC)
lab*lrj 0.722 -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 0.13 (1.0)
cmyn3* 1.0 0.5 0.87 (0.0)
olvi4* 0.5 1.0 0.63 0.5
cmyn4* 0.5 0.0 0.37 0.5

standard and adapted CIELAB
LAB*LAB 35.29 -28.06 7.41
LAB*LABa 35.29 -28.49 6.73
LAB*TCHa 25.01 29.28 166.72

relative CIELAB lab*
lab*lab 0.222 -0.486 0.115
lab*tch 0.25 0.5 0.463
lab*nch 0.5 0.5 0.463

relative Natural Colour (NC)
lab*lrj 0.222 -0.499 0.0
lab*tce 0.25 0.5 0.5
lab*nce 0.5 0.5 199g

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 18.1 0.67 -0.46
LAB*LABa 18.1 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 $h^* = lab^*h = 164/360 = 0.457$

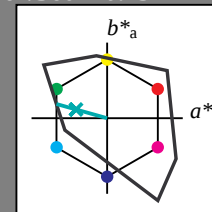
lab^*tch and lab^*nch

D50: hue G

LCH*Ma: 84 70 164

olv*Ma: 0.0 1.0 0.6

triangle lightness t^*



%Gamut

$u^*_{rel} = 156$

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

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	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

relative Inform. Technology (IT)
olvi3* 0.5 1.0 0.799 (1.0)
cmyn3* 0.5 0.0 0.201 (0.0)
olvi4* 0.5 1.0 0.8 1.0
cmyn4* 0.5 0.0 0.2 0.0

standard and adapted CIELAB
LAB*LAB 89.83 -33.52 9.39
LAB*LABa 89.83 -33.52 9.39
LAB*TCHa 75.0 34.82 164.36

relative CIELAB lab*
lab*lab 0.941 -0.48 0.135
lab*tch 0.75 0.5 0.457
lab*nch 0.0 0.5 0.457

relative Natural Colour (NC)
lab*lrj 0.941 -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 0.299 (1.0)
cmyn3* 1.0 0.5 0.701 (0.0)
olvi4* 0.5 1.0 0.799 0.5
cmyn4* 0.5 0.0 0.201 0.5

standard and adapted CIELAB
LAB*LAB 42.13 -33.52 9.4
LAB*LABa 42.13 -33.52 9.4
LAB*TCHa 25.01 34.82 164.34

relative CIELAB lab*
lab*lab 0.442 -0.48 0.135
lab*tch 0.25 0.5 0.457
lab*nch 0.5 0.5 0.457

relative Natural Colour (NC)
lab*lrj 0.442 -0.499 0.0
lab*tce 0.25 0.5 0.5
lab*nce 0.5 0.5 199g

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 -

blackness n^*

chromaticness c^*

QE100-7, 3 step scales for constant CIELAB hue 167/360 = 0.463 (left)

3 step scales for constant CIELAB hue 164/360 = 0.457 (right)

BAM-test chart QE10; Colorimetric systems ORS18 & ORS18

D50: 2 coordinate data of 3 step colour scales for 10 hues

input: `cmv0* setcmkcolor`

output: `Startup (S) data dependend`

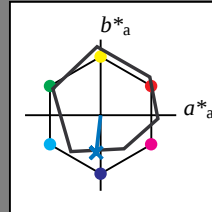
Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 263/360 = 0.731$ lab^*tch and lab^*nch

D50: hue B

LCH*Ma: 42 47 263

olv*Ma: 0.0 0.52 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 94$

%Regularity

 $g^*_{H,rel} = 65$ $g^*_{C,rel} = 60$

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	95.46	-0.39	4.69
LAB*LABa	95.46	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	56.78	0.13	2.11
LAB*LABa	56.78	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	18.1	0.67	-0.46
LAB*LABa	18.1	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	65.05	50.54	82.38	38
YMa	91.0	-4.72	90.58	90.7	93
LMa	50.9	-63.18	34.98	72.22	151
CMa	56.99	-39.34	-48.1	62.16	231
VMa	25.72	30.89	-44.4	54.09	305
MMa	49.99	75.76	-4.64	75.9	356
NMa	18.09	0.0	0.0	0.0	0
WMa	95.46	0.0	0.0	0.0	0
RCIE	41.88	61.66	30.69	68.88	26
JCIE	81.97	2.02	67.79	67.82	88
GCIE	51.62	-41.32	9.74	42.46	167
BCIE	29.2	-5.79	-49.61	49.96	263

relative Inform. Technology (IT)

olvi3*	0.5	0.758	1.0	(1.0)
cmyn3*	0.5	0.242	0.0	(0.0)
olvi4*	0.5	0.758	1.0	1.0
cmyn4*	0.5	0.242	0.0	0.0

standard and adapted CIELAB

LAB*LAB	68.67	-2.73	-20.23
LAB*LABa	68.67	-2.7	-23.15
LAB*TCHa	75.0	23.32	263.33

relative CIELAB lab*

lab*lab	0.654	-0.057	-0.496
lab*tch	0.75	0.5	0.731
lab*nch	0.0	0.5	0.731

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	0.258	0.5	(1.0)
cmyn3*	1.0	0.742	0.5	(0.0)
olvi4*	0.5	0.758	1.0	0.5
cmyn4*	0.5	0.242	0.0	0.5

standard and adapted CIELAB

LAB*LAB	29.99	-2.19	-22.81
LAB*LABa	29.99	-2.69	-23.15
LAB*TCHa	25.01	23.31	263.35

relative CIELAB lab*

lab*lab	0.154	-0.057	-0.496
lab*tch	0.25	0.5	0.732
lab*nch	0.5	0.5	0.732

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

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

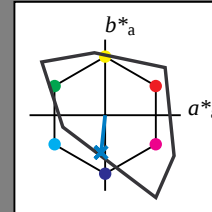
Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 264/360 = 0.733$ lab^*tch and lab^*nch

D50: hue B

LCH*Ma: 61 54 264

olv*Ma: 0.0 0.59 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 156$

%Regularity

 $g^*_{H,rel} = 26$ $g^*_{C,rel} = 45$

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	54.19	79.36	63.0	101.33	38
YMa	93.44	-14.18	82.59	83.8	100
LMa	82.82	-83.73	70.41	109.41	140
CMa	85.22	-55.9	-15.78	58.1	196
VMa	25.61	67.05	-108.87	127.87	302
MMa	58.76	91.18	-53.69	105.82	330
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	41.88	62.0	31.82	69.69	27
JCIE	81.97	1.81	71.59	71.61	89
GCIE	51.62	-41.11	11.52	42.7	164
BCIE	29.2	-5.27	-49.33	49.62	264

relative Inform. Technology (IT)

olvi3*	0.5	0.796	1.0	(1.0)
cmyn3*	0.5	0.204	0.0	(0.0)
olvi4*	0.5	0.796	1.0	1.0
cmyn4*	0.5	0.204	0.0	0.0

standard and adapted CIELAB

LAB*LAB	78.15	-2.87	-26.86
LAB*LABa	78.15	-2.87	-26.86
LAB*TCHa	75.0	27.02	263.88

relative CIELAB lab*

lab*lab	0.819	-0.052	-0.496
lab*tch	0.75	0.5	0.733
lab*nch	0.0	0.5	0.733

relative Natural Colour (NC)

lab*lrj	0.819	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	0.296	0.5	(1.0)
cmyn3*	1.0	0.704	0.5	(0.0)
olvi4*	0.5	0.796	1.0	0.5
cmyn4*	0.5	0.204	0.0	0.5

standard and adapted CIELAB

LAB*LAB	30.46	-2.86	-26.87
LAB*LABa	30.46	-2.86	-26.87
LAB*TCHa	25.01	27.03	263.9

relative CIELAB lab*

lab*lab	0.319	-0.052	-0.496
lab*tch	0.25	0.5	0.733
lab*nch	0.5	0.5	0.733

relative Natural Colour (NC)

lab*lrj	0.319	0.0	-0.499
lab*tce	0.25	0.5	0.75
lab*nce	0.5	0.5	g99r

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

QE100-7, 3 step scales for constant CIELAB hue 263/360 = 0.731 (left)

3 step scales for constant CIELAB hue 264/360 = 0.733 (right)

BAM-test chart QE10; Colorimetric systems ORS18 & ORS18