

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.106$

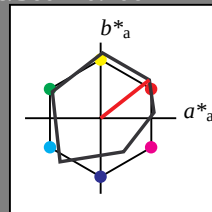
lab^*tch and lab^*nch

A: hue O

LCH*Ma: 48 82 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	64.42	50.58	81.9	38
Y _{Ma}	92.62	2.41	86.36	86.39	88
L _{Ma}	50.9	-63.82	35.02	72.81	151
C _{Ma}	51.25	-53.68	-57.69	78.82	227
V _{Ma}	25.72	30.34	-44.37	53.76	304
M _{Ma}	56.25	70.59	7.57	70.99	6
N _{Ma}	18.11	0.0	0.0	0.0	0
W _{Ma}	95.6	0.0	0.0	0.0	0
R _{CIE}	47.79	60.85	41.08	73.41	34
J _{CIE}	83.82	6.52	66.9	67.22	84
G _{CIE}	49.0	-36.83	2.78	36.95	176
B _{CIE}	25.14	-18.35	-56.22	59.15	252

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 35/360 = 0.097$

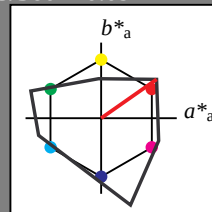
lab^*tch and lab^*nch

A: hue O

LCH*Ma: 66 90 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.56	73.34	51.39	89.55	35
Y _{Ma}	94.78	-3.49	52.24	52.36	94
L _{Ma}	77.48	-92.97	36.0	99.71	159
C _{Ma}	78.36	-82.69	-22.74	85.77	195
V _{Ma}	12.55	38.81	-114.81	121.2	289
M _{Ma}	66.71	76.08	-29.8	81.71	339
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	47.79	61.74	42.56	74.99	35
J _{CIE}	83.82	7.06	70.78	71.13	84
G _{CIE}	49.0	-35.95	4.34	36.22	173
B _{CIE}	25.14	-17.24	-56.24	58.84	253

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* 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 80.48 36.66 25.69
LAB*LABa 80.48 36.66 25.69
LAB*TCHa 75.0 44.77 35.02

relative CIELAB lab*
lab*lab 0.843 0.409 0.287
lab*tch 0.75 0.5 0.097
lab*nch 0.0 0.5 0.097

relative Natural Colour (NC)
lab*lrj 0.843 0.5 0.007
lab*tce 0.75 0.5 0.002
lab*nce 0.0 0.5 0.002

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 32.79 36.66 25.69
LAB*LABa 32.79 36.66 25.69
LAB*TCHa 25.01 44.77 35.02

relative CIELAB lab*
lab*lab 0.344 0.409 0.287
lab*tch 0.25 0.5 0.097
lab*nch 0.5 0.5 0.097

relative Natural Colour (NC)
lab*lrj 0.344 0.5 0.007
lab*tce 0.25 0.5 0.002
lab*nce 0.5 0.5 0.002

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 65.56 73.33 51.38
LAB*LABa 65.56 73.33 51.38
LAB*TCHa 50.0 89.53 35.02

relative CIELAB lab*
lab*lab 0.687 0.819 0.574
lab*tch 0.5 1.0 0.097
lab*nch 0.0 1.0 0.097

relative Natural Colour (NC)
lab*lrj 0.687 1.0 0.014
lab*tce 0.5 1.0 0.002
lab*nce 0.0 1.0 0.002

$n^* = 0,00$

blackness n^*

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

$n^* = 1,0$

SE00-7, 3 step scales for constant CIELAB hue 38/360 = 0.106 (left)

BAM-test chart SE00; Colorimetric systems ORS18 & TLS00

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

3 step scales for constant CIELAB hue 35/360 = 0.097 (right)

input: $cmY0^* setcmykcolor$

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 88/360 = 0.246$

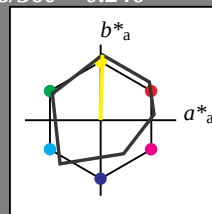
lab^*tch and lab^*nch

A: hue Y

LCH*Ma: 93 86 88

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	64.42	50.58	81.9	38
Y _{Ma}	92.62	2.41	86.36	86.39	88
L _{Ma}	50.9	-63.82	35.02	72.81	151
C _{Ma}	51.25	-53.68	-57.69	78.82	227
V _{Ma}	25.72	30.34	-44.37	53.76	304
M _{Ma}	56.25	70.59	7.57	70.99	6
N _{Ma}	18.11	0.0	0.0	0.0	0
W _{Ma}	95.6	0.0	0.0	0.0	0
R _{CIE}	47.79	60.85	41.08	73.41	34
J _{CIE}	83.82	6.52	66.9	67.22	84
G _{CIE}	49.0	-36.83	2.78	36.95	176
B _{CIE}	25.14	-18.35	-56.22	59.15	252

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 94/360 = 0.261$

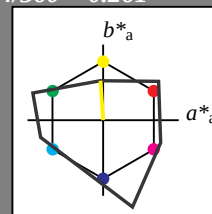
lab^*tch and lab^*nch

A: hue Y

LCH*Ma: 95 52 94

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.56	73.34	51.39	89.55	35
Y _{Ma}	94.78	-3.49	52.24	52.36	94
L _{Ma}	77.48	-92.97	36.0	99.71	159
C _{Ma}	78.36	-82.69	-22.74	85.77	195
V _{Ma}	12.55	38.81	-114.81	121.2	289
M _{Ma}	66.71	76.08	-29.8	81.71	339
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	47.79	61.74	42.56	74.99	35
J _{CIE}	83.82	7.06	70.78	71.13	84
G _{CIE}	49.0	-35.95	4.34	36.22	173
B _{CIE}	25.14	-17.24	-56.24	58.84	253

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*	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	95.09	-1.74	26.11
LAB*LABa	95.09	-1.74	26.11
LAB*TCHa	75.0	26.17	93.83

relative CIELAB lab*

lab*lab	0.997	-0.032	0.499
lab*tch	0.75	0.5	0.261
lab*nch	0.0	0.5	0.261

relative Natural Colour (NC)

lab*lrj	0.997	-0.083	0.493
lab*tce	0.75	0.5	0.277
lab*nce	0.0	0.5	j10g

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	47.4	-1.74	26.11
LAB*LABa	47.4	-1.74	26.11
LAB*TCHa	25.01	26.17	93.83

relative CIELAB lab*

lab*lab	0.497	-0.032	0.499
lab*tch	0.25	0.5	0.261
lab*nch	0.5	0.5	0.261

relative Natural Colour (NC)

lab*lrj	0.497	-0.083	0.493
lab*tce	0.25	0.5	0.277
lab*nce	0.5	0.5	j10g

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	94.77	-3.49	52.23
LAB*LABa	94.77	-3.49	52.23
LAB*TCHa	50.0	52.35	93.83

relative CIELAB lab*

lab*lab	0.993	-0.066	0.998
lab*tch	0.5	1.0	0.261
lab*nch	0.0	1.0	0.261

relative Natural Colour (NC)

lab*lrj	0.993	-0.167	0.986
lab*tce	0.5	1.0	0.277
lab*nce	0.0	1.0	j10g

SE00-7, 3 step scales for constant CIELAB hue 88/360 = 0.246 (left)

3 step scales for constant CIELAB hue 94/360 = 0.261 (right)

BAM-test chart SE00; Colorimetric systems ORS18 & TLS00

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

input: $cmv0^* setcmykcolor$

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

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

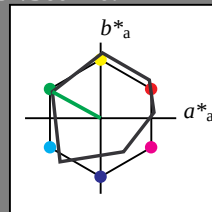
lab^*tch and lab^*nch

A: hue L

LCH*Ma: 51 73 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	64.42	50.58	81.9	38
Y _{Ma}	92.62	2.41	86.36	86.39	88
L _{Ma}	50.9	-63.82	35.02	72.81	151
C _{Ma}	51.25	-53.68	-57.69	78.82	227
V _{Ma}	25.72	30.34	-44.37	53.76	304
M _{Ma}	56.25	70.59	7.57	70.99	6
N _{Ma}	18.11	0.0	0.0	0.0	0
W _{Ma}	95.6	0.0	0.0	0.0	0
R _{CIE}	47.79	60.85	41.08	73.41	34
J _{CIE}	83.82	6.52	66.9	67.22	84
G _{CIE}	49.0	-36.83	2.78	36.95	176
B _{CIE}	25.14	-18.35	-56.22	59.15	252

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 159/360 = 0.441$

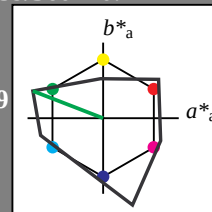
lab^*tch and lab^*nch

A: hue L

LCH*Ma: 77 100 159

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.56	73.34	51.39	89.55	35
Y _{Ma}	94.78	-3.49	52.24	52.36	94
L _{Ma}	77.48	-92.97	36.0	99.71	159
C _{Ma}	78.36	-82.69	-22.74	85.77	195
V _{Ma}	12.55	38.81	-114.81	121.2	289
M _{Ma}	66.71	76.08	-29.8	81.71	339
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	47.79	61.74	42.56	74.99	35
J _{CIE}	83.82	7.06	70.78	71.13	84
G _{CIE}	49.0	-35.95	4.34	36.22	173
B _{CIE}	25.14	-17.24	-56.24	58.84	253

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*TCa 99.99 0.01 -

relative CIELAB lab*

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

relative Natural Colour (NC)

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

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

standard and adapted CIELAB

LAB*LAB 47.72 0.0 0.0
LAB*LABa 47.72 0.0 0.0
LAB*TCa 50.0 0.01 -

relative CIELAB lab*

lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 -
lab*nch 0.5 0.0 -

relative Natural Colour (NC)

lab*lrj 0.5 0.0 0.0
lab*tce 0.5 0.0 -
lab*nce 0.5 0.0 -

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

standard and adapted CIELAB

LAB*LAB 0.03 0.0 0.0
LAB*LABa 0.03 0.0 0.0
LAB*TCa 0.01 0.01 -

relative CIELAB lab*

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

relative Natural Colour (NC)

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

relative Inform. Technology (IT)
olvi3* 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 86.44 -46.47 18.0
LAB*LABa 86.44 -46.47 18.0
LAB*TCa 75.0 49.84 158.83

relative CIELAB lab*

lab*lab 0.906 -0.465 0.18
lab*tch 0.75 0.5 0.441
lab*nch 0.0 0.5 0.441

relative Natural Colour (NC)

lab*lrj 0.906 -0.483 0.125
lab*tce 0.75 0.5 0.46
lab*nce 0.0 0.5 0.83g

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 38.75 -46.47 18.0
LAB*LABa 38.75 -46.47 18.0
LAB*TCa 25.01 49.84 158.83

relative CIELAB lab*

lab*lab 0.406 -0.465 0.18
lab*tch 0.25 0.5 0.441
lab*nch 0.5 0.5 0.441

relative Natural Colour (NC)

lab*lrj 0.406 -0.483 0.125
lab*tce 0.25 0.5 0.46
lab*nce 0.5 0.5 0.83g

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

standard and adapted CIELAB

LAB*LAB 77.47 -92.95 35.99
LAB*LABa 77.47 -92.95 35.99
LAB*TCa 50.0 99.69 158.83

relative CIELAB lab*

lab*lab 0.812 -0.931 0.361
lab*tch 0.5 1.0 0.441
lab*nch 0.0 1.0 0.441

relative Natural Colour (NC)

lab*lrj 0.812 -0.967 0.25
lab*tce 0.5 1.0 0.46
lab*nce 0.0 1.0 0.83g

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

blackness n^*

$n^* = 0,00$

$n^* = 1,0$

SE00-7, 3 step scales for constant CIELAB hue 151/360 = 0.42 (left)

3 step scales for constant CIELAB hue 159/360 = 0.441 (right)

BAM-test chart SE00; Colorimetric systems ORS18 & TLS00

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

input: $cmY0^* setcmykcolor$

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 227/360 = 0.631$

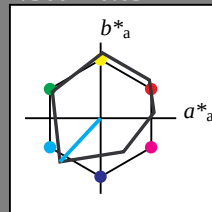
lab^*tch and lab^*nch

A: hue C

LCH*Ma: 51 79 227

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	64.42	50.58	81.9	38
Y _{Ma}	92.62	2.41	86.36	86.39	88
L _{Ma}	50.9	-63.82	35.02	72.81	151
C _{Ma}	51.25	-53.68	-57.69	78.82	227
V _{Ma}	25.72	30.34	-44.37	53.76	304
M _{Ma}	56.25	70.59	7.57	70.99	6
N _{Ma}	18.11	0.0	0.0	0.0	0
W _{Ma}	95.6	0.0	0.0	0.0	0
R _{CIE}	47.79	60.85	41.08	73.41	34
J _{CIE}	83.82	6.52	66.9	67.22	84
G _{CIE}	49.0	-36.83	2.78	36.95	176
B _{CIE}	25.14	-18.35	-56.22	59.15	252

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 195/360 = 0.543$

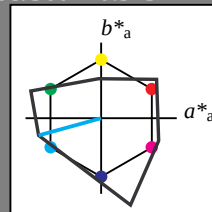
lab^*tch and lab^*nch

A: hue C

LCH*Ma: 78 86 195

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.56	73.34	51.39	89.55	35
Y _{Ma}	94.78	-3.49	52.24	52.36	94
L _{Ma}	77.48	-92.97	36.0	99.71	159
C _{Ma}	78.36	-82.69	-22.74	85.77	195
V _{Ma}	12.55	38.81	-114.81	121.2	289
M _{Ma}	66.71	76.08	-29.8	81.71	339
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	47.79	61.74	42.56	74.99	35
J _{CIE}	83.82	7.06	70.78	71.13	84
G _{CIE}	49.0	-35.95	4.34	36.22	173
B _{CIE}	25.14	-17.24	-56.24	58.84	253

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* 0.5 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 86.88 -41.33 -11.36
LAB*LABa 86.88 -41.33 -11.36
LAB*TCHa 75.0 42.88 195.38

relative CIELAB lab*
lab*lab 0.911 -0.481 -0.132
lab*tch 0.75 0.5 0.543
lab*nch 0.0 0.5 0.543

relative Natural Colour (NC)
lab*lrj 0.911 -0.452 -0.211
lab*tce 0.75 0.5 0.57
lab*nce 0.0 0.5 g27b

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 39.19 -41.33 -11.36
LAB*LABa 39.19 -41.33 -11.36
LAB*TCHa 25.01 42.88 195.38

relative CIELAB lab*
lab*lab 0.411 -0.481 -0.132
lab*tch 0.25 0.5 0.543
lab*nch 0.5 0.5 0.543

relative Natural Colour (NC)
lab*lrj 0.411 -0.452 -0.211
lab*tce 0.25 0.5 0.57
lab*nce 0.5 0.5 g27b

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

standard and adapted CIELAB
LAB*LAB 78.35 -82.67 -22.74
LAB*LABa 78.35 -82.67 -22.74
LAB*TCHa 50.0 85.75 195.38

relative CIELAB lab*
lab*lab 0.821 -0.963 -0.264
lab*tch 0.5 1.0 0.543
lab*nch 0.0 1.0 0.543

relative Natural Colour (NC)
lab*lrj 0.821 -0.904 -0.423
lab*tce 0.5 1.0 0.57
lab*nce 0.0 1.0 g27b

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

blackness n^*

$n^* = 0,00$

$n^* = 1,0$

SE00-7, 3 step scales for constant CIELAB hue 227/360 = 0.631 (left)



BAM-test chart SE00; Colorimetric systems ORS18 & TLS00

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

3 step scales for constant CIELAB hue 195/360 = 0.543 (right)

input: $cmY0^* setcmykcolor$

output: no change compared to input



Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 304/360 = 0.845$

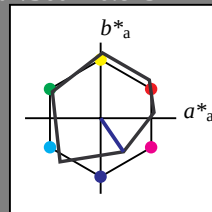
lab^*tch and lab^*nch

A: hue V

LCH*Ma: 26 54 304

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	64.42	50.58	81.9	38
Y _{Ma}	92.62	2.41	86.36	86.39	88
L _{Ma}	50.9	-63.82	35.02	72.81	151
C _{Ma}	51.25	-53.68	-57.69	78.82	227
V _{Ma}	25.72	30.34	-44.37	53.76	304
M _{Ma}	56.25	70.59	7.57	70.99	6
N _{Ma}	18.11	0.0	0.0	0.0	0
W _{Ma}	95.6	0.0	0.0	0.0	0
R _{CIE}	47.79	60.85	41.08	73.41	34
J _{CIE}	83.82	6.52	66.9	67.22	84
G _{CIE}	49.0	-36.83	2.78	36.95	176
B _{CIE}	25.14	-18.35	-56.22	59.15	252

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 289/360 = 0.802$

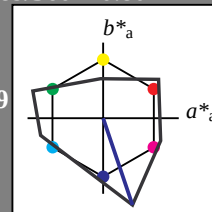
lab^*tch and lab^*nch

A: hue V

LCH*Ma: 13 121 289

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.56	73.34	51.39	89.55	35
Y _{Ma}	94.78	-3.49	52.24	52.36	94
L _{Ma}	77.48	-92.97	36.0	99.71	159
C _{Ma}	78.36	-82.69	-22.74	85.77	195
V _{Ma}	12.55	38.81	-114.81	121.2	289
M _{Ma}	66.71	76.08	-29.8	81.71	339
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	47.79	61.74	42.56	74.99	35
J _{CIE}	83.82	7.06	70.78	71.13	84
G _{CIE}	49.0	-35.95	4.34	36.22	173
B _{CIE}	25.14	-17.24	-56.24	58.84	253

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	0.5	(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	6.29	19.4	-57.39
LAB*LABa	6.29	19.4	-57.39
LAB*TCHa	25.01	60.59	288.68

relative CIELAB lab*

lab*lab	0.066	0.16	-0.473
lab*tch	0.25	0.5	0.802
lab*nch	0.5	0.5	0.802

relative Natural Colour (NC)

lab*lrj	0.066	0.193	-0.46
lab*tce	0.25	0.5	0.813
lab*nce	0.5	0.5	0.813

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*LAB	12.56	38.8	-114.7
LAB*LABa	12.56	38.8	-114.7
LAB*TCHa	50.0	121.18	288.68

relative CIELAB lab*

lab*lab	0.132	0.32	-0.946
lab*tch	0.5	1.0	0.802
lab*nch	0.0	1.0	0.802

relative Natural Colour (NC)

lab*lrj	0.132	0.386	-0.921
lab*tce	0.5	1.0	0.813
lab*nce	0.0	1.0	0.813

BAM-test chart SE00; Colorimetric systems ORS18 & TLS00

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

3 step scales for constant CIELAB hue 289/360 = 0.802 (right)

input: $cmY0^* setcmykcolor$

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 6/360 = 0.017$

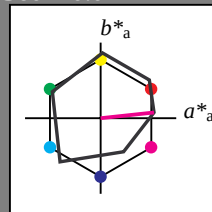
lab^*tch and lab^*nch

A: hue M

LCH*Ma: 56 71 6

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	64.42	50.58	81.9	38
Y _{Ma}	92.62	2.41	86.36	86.39	88
L _{Ma}	50.9	-63.82	35.02	72.81	151
C _{Ma}	51.25	-53.68	-57.69	78.82	227
V _{Ma}	25.72	30.34	-44.37	53.76	304
M _{Ma}	56.25	70.59	7.57	70.99	6
N _{Ma}	18.11	0.0	0.0	0.0	0
W _{Ma}	95.6	0.0	0.0	0.0	0
R _{CIE}	47.79	60.85	41.08	73.41	34
J _{CIE}	83.82	6.52	66.9	67.22	84
G _{CIE}	49.0	-36.83	2.78	36.95	176
B _{CIE}	25.14	-18.35	-56.22	59.15	252

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 339/360 = 0.941$

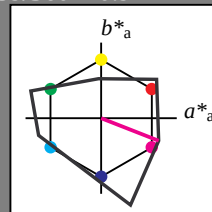
lab^*tch and lab^*nch

A: hue M

LCH*Ma: 67 82 339

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.56	73.34	51.39	89.55	35
Y _{Ma}	94.78	-3.49	52.24	52.36	94
L _{Ma}	77.48	-92.97	36.0	99.71	159
C _{Ma}	78.36	-82.69	-22.74	85.77	195
V _{Ma}	12.55	38.81	-114.81	121.2	289
M _{Ma}	66.71	76.08	-29.8	81.71	339
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	47.79	61.74	42.56	74.99	35
J _{CIE}	83.82	7.06	70.78	71.13	84
G _{CIE}	49.0	-35.95	4.34	36.22	173
B _{CIE}	25.14	-17.24	-56.24	58.84	253

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* 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 81.05 38.03 -14.89
LAB*LABa 81.05 38.03 -14.89
LAB*TCHa 75.0 40.85 338.6

relative CIELAB lab*
lab*lab 0.85 0.465 -0.181
lab*tch 0.75 0.5 0.941
lab*nch 0.0 0.5 0.941

relative Natural Colour (NC)
lab*lrj 0.85 0.407 -0.29
lab*tce 0.75 0.5 0.901
lab*nce 0.0 0.5 b60r

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

standard and adapted CIELAB
LAB*LAB 33.36 38.03 -14.89
LAB*LABa 33.36 38.03 -14.89
LAB*TCHa 25.01 40.85 338.6

relative CIELAB lab*
lab*lab 0.35 0.465 -0.181
lab*tch 0.25 0.5 0.941
lab*nch 0.5 0.5 0.941

relative Natural Colour (NC)
lab*lrj 0.35 0.407 -0.29
lab*tce 0.25 0.5 0.901
lab*nce 0.5 0.5 b60r

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 66.71 76.06 -29.79
LAB*LABa 66.71 76.06 -29.79
LAB*TCHa 50.0 81.7 338.6

relative CIELAB lab*
lab*lab 0.699 0.931 -0.364
lab*tch 0.5 1.0 0.941
lab*nch 0.0 1.0 0.941

relative Natural Colour (NC)
lab*lrj 0.699 0.813 -0.581
lab*tce 0.5 1.0 0.901
lab*nce 0.0 1.0 b60r

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

SE00-7, 3 step scales for constant CIELAB hue 6/360 = 0.017 (left)

3 step scales for constant CIELAB hue 339/360 = 0.941 (right)

BAM-test chart SE00; Colorimetric systems ORS18 & TLS00

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

input: $cmY0^* setcmykcolor$

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 34/360 = 0.095$

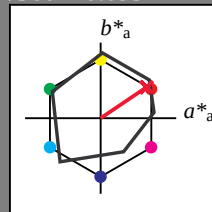
lab^*tch and lab^*nch

A: hue R

LCH*Ma: 49 79 34

olv*Ma: 1.0 0.0 0.15

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	64.42	50.58	81.9	38
Y _{Ma}	92.62	2.41	86.36	86.39	88
L _{Ma}	50.9	-63.82	35.02	72.81	151
C _{Ma}	51.25	-53.68	-57.69	78.82	227
V _{Ma}	25.72	30.34	-44.37	53.76	304
M _{Ma}	56.25	70.59	7.57	70.99	6
N _{Ma}	18.11	0.0	0.0	0.0	0
W _{Ma}	95.6	0.0	0.0	0.0	0
R _{CIE}	47.79	60.85	41.08	73.41	34
J _{CIE}	83.82	6.52	66.9	67.22	84
G _{CIE}	49.0	-36.83	2.78	36.95	176
B _{CIE}	25.14	-18.35	-56.22	59.15	252

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 35/360 = 0.096$

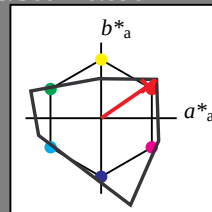
lab^*tch and lab^*nch

A: hue R

LCH*Ma: 66 89 35

olv*Ma: 1.0 0.0 0.01

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.56	73.34	51.39	89.55	35
Y _{Ma}	94.78	-3.49	52.24	52.36	94
L _{Ma}	77.48	-92.97	36.0	99.71	159
C _{Ma}	78.36	-82.69	-22.74	85.77	195
V _{Ma}	12.55	38.81	-114.81	121.2	289
M _{Ma}	66.71	76.08	-29.8	81.71	339
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	47.79	61.74	42.56	74.99	35
J _{CIE}	83.82	7.06	70.78	71.13	84
G _{CIE}	49.0	-35.95	4.34	36.22	173
B _{CIE}	25.14	-17.24	-56.24	58.84	253

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* 1.0 0.5 0.505 (1.0)
cmyn3* 0.0 0.5 0.495 (0.0)
olvi4* 1.0 0.5 0.505 1.0
cmyn4* 0.0 0.5 0.495 0.0

standard and adapted CIELAB
LAB*LAB 80.48 36.68 25.28
LAB*LABa 80.48 36.68 25.28
LAB*TCHa 75.0 44.55 34.58

relative CIELAB lab*
lab*lab 0.844 0.412 0.284
lab*tch 0.75 0.5 0.096
lab*nch 0.0 0.5 0.096

relative Natural Colour (NC)
lab*lrj 0.844 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 0.005 (1.0)
cmyn3* 0.5 1.0 0.995 (0.0)
olvi4* 1.0 0.5 0.505 0.5
cmyn4* 0.0 0.5 0.495 0.5
standard and adapted CIELAB
LAB*LAB 32.79 36.68 25.29
LAB*LABa 32.79 36.68 25.29
LAB*TCHa 25.01 44.55 34.59

relative CIELAB lab*
lab*lab 0.344 0.412 0.284
lab*tch 0.25 0.5 0.096
lab*nch 0.5 0.5 0.096

relative Natural Colour (NC)
lab*lrj 0.344 0.5 0.0
lab*tce 0.25 0.5 0.0
lab*nce 0.5 0.5 0.00j

relative Inform. Technology (IT)
olvi3* 1.0 0.0 0.0 (1.0)
cmyn3* 0.0 1.0 0.99 (0.0)
olvi4* 1.0 0.0 0.01 1.0
cmyn4* 0.0 1.0 0.99 0.0
standard and adapted CIELAB
LAB*LAB 65.57 73.35 50.57
LAB*LABa 65.57 73.35 50.57
LAB*TCHa 50.0 89.1 34.58

relative CIELAB lab*
lab*lab 0.687 0.823 0.568
lab*tch 0.5 1.0 0.096
lab*nch 0.0 1.0 0.096

relative Natural Colour (NC)
lab*lrj 0.687 1.0 0.0
lab*tce 0.5 1.0 0.0
lab*nce 0.0 1.0 0.00j

BAM-test chart SE00; Colorimetric systems ORS18 & TLS00

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

3 step scales for constant CIELAB hue 35/360 = 0.096 (right)

input: $cmv0^* setcmykcolor$

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 84/360 = 0.235$

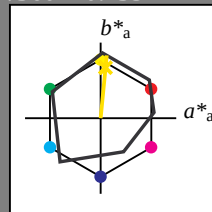
lab^*tch and lab^*nch

A: hue J

LCH*Ma: 89 83 84

olv*Ma: 1.0 0.91 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	64.42	50.58	81.9	38
Y _{Ma}	92.62	2.41	86.36	86.39	88
L _{Ma}	50.9	-63.82	35.02	72.81	151
C _{Ma}	51.25	-53.68	-57.69	78.82	227
V _{Ma}	25.72	30.34	-44.37	53.76	304
M _{Ma}	56.25	70.59	7.57	70.99	6
N _{Ma}	18.11	0.0	0.0	0.0	0
W _{Ma}	95.6	0.0	0.0	0.0	0
R _{CIE}	47.79	60.85	41.08	73.41	34
J _{CIE}	83.82	6.52	66.9	67.22	84
G _{CIE}	49.0	-36.83	2.78	36.95	176
B _{CIE}	25.14	-18.35	-56.22	59.15	252

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 84/360 = 0.234$

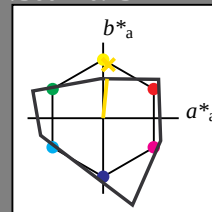
lab^*tch and lab^*nch

A: hue J

LCH*Ma: 91 52 84

olv*Ma: 1.0 0.89 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.56	73.34	51.39	89.55	35
Y _{Ma}	94.78	-3.49	52.24	52.36	94
L _{Ma}	77.48	-92.97	36.0	99.71	159
C _{Ma}	78.36	-82.69	-22.74	85.77	195
V _{Ma}	12.55	38.81	-114.81	121.2	289
M _{Ma}	66.71	76.08	-29.8	81.71	339
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	47.79	61.74	42.56	74.99	35
J _{CIE}	83.82	7.06	70.78	71.13	84
G _{CIE}	49.0	-35.95	4.34	36.22	173
B _{CIE}	25.14	-17.24	-56.24	58.84	253

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*	1.0	0.943	0.5	(1.0)
cmyn3*	0.0	0.057	0.5	(0.0)
olvi4*	1.0	0.943	0.5	1.0
cmyn4*	0.0	0.057	0.5	0.0

standard and adapted CIELAB

LAB*LAB	93.43	2.59	26.07
LAB*LABa	93.43	2.59	26.07
LAB*TCHa	75.0	26.2	84.32

relative CIELAB lab*

lab*lab	0.979	0.049	0.497
lab*tch	0.75	0.5	0.234
lab*nch	0.0	0.5	0.234

relative Natural Colour (NC)

lab*lrj	0.979	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	0.443	0.0	(1.0)
cmyn3*	0.5	0.557	1.0	(0.0)
olvi4*	1.0	0.943	0.5	0.5
cmyn4*	0.0	0.057	0.5	0.5

standard and adapted CIELAB

LAB*LAB	45.74	2.6	26.07
LAB*LABa	45.74	2.6	26.07
LAB*TCHa	25.01	26.2	84.3

relative CIELAB lab*

lab*lab	0.479	0.05	0.497
lab*tch	0.25	0.5	0.234
lab*nch	0.5	0.5	0.234

relative Natural Colour (NC)

lab*lrj	0.479	0.0	0.5
lab*tce	0.25	0.5	0.25
lab*nce	0.5	0.5	r99j

relative Inform. Technology (IT)

olvi3*	1.0	0.887	0.0	(1.0)
cmyn3*	0.0	0.113	1.0	(0.0)
olvi4*	1.0	0.887	0.0	1.0
cmyn4*	0.0	0.113	1.0	0.0

standard and adapted CIELAB

LAB*LAB	91.46	5.19	52.13
LAB*LABa	91.46	5.19	52.13
LAB*TCHa	50.0	52.39	84.31

relative CIELAB lab*

lab*lab	0.959	0.099	0.995
lab*tch	0.5	1.0	0.234
lab*nch	0.0	1.0	0.234

relative Natural Colour (NC)

lab*lrj	0.959	0.0	1.0
lab*tce	0.5	1.0	0.25
lab*nce	0.0	1.0	j00g

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 176/360 = 0.488$

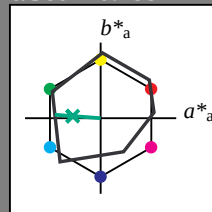
lab^*tch and lab^*nch

A: hue G

LCH*Ma: 51 61 176

olv*Ma: 0.0 1.0 0.33

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	64.42	50.58	81.9	38
Y _{Ma}	92.62	2.41	86.36	86.39	88
L _{Ma}	50.9	-63.82	35.02	72.81	151
C _{Ma}	51.25	-53.68	-57.69	78.82	227
V _{Ma}	25.72	30.34	-44.37	53.76	304
M _{Ma}	56.25	70.59	7.57	70.99	6
N _{Ma}	18.11	0.0	0.0	0.0	0
W _{Ma}	95.6	0.0	0.0	0.0	0
R _{CIE}	47.79	60.85	41.08	73.41	34
J _{CIE}	83.82	6.52	66.9	67.22	84
G _{CIE}	49.0	-36.83	2.78	36.95	176
B _{CIE}	25.14	-18.35	-56.22	59.15	252

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 173/360 = 0.481$

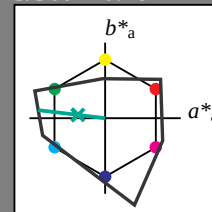
lab^*tch and lab^*nch

A: hue G

LCH*Ma: 78 89 173

olv*Ma: 0.0 1.0 0.43

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.56	73.34	51.39	89.55	35
Y _{Ma}	94.78	-3.49	52.24	52.36	94
L _{Ma}	77.48	-92.97	36.0	99.71	159
C _{Ma}	78.36	-82.69	-22.74	85.77	195
V _{Ma}	12.55	38.81	-114.81	121.2	289
M _{Ma}	66.71	76.08	-29.8	81.71	339
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	47.79	61.74	42.56	74.99	35
J _{CIE}	83.82	7.06	70.78	71.13	84
G _{CIE}	49.0	-35.95	4.34	36.22	173
B _{CIE}	25.14	-17.24	-56.24	58.84	253

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 1.0 0.715 (1.0)
cmyn3* 0.5 0.0 0.285 (0.0)
olvi4* 0.5 1.0 0.716 1.0
cmyn4* 0.5 0.0 0.284 0.0

standard and adapted CIELAB

LAB*LAB 86.63 -44.26 5.34

LAB*LABa 86.63 -44.26 5.34

LAB*TCHa 75.0 44.59 173.12

relative CIELAB lab*

lab*lab 0.908 -0.495 0.06

lab*tch 0.75 0.5 0.481

lab*nch 0.0 0.5 0.481

relative Natural Colour (NC)

lab*lrj 0.908 -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 1.0 0.431 (1.0)
cmyn3* 1.0 0.0 0.569 (0.0)
olvi4* 0.0 1.0 0.431 1.0
cmyn4* 1.0 0.0 0.569 0.0

standard and adapted CIELAB

LAB*LAB 77.85 -88.52 10.69

LAB*LABa 77.85 -88.52 10.69

LAB*TCHa 50.0 89.18 173.12

relative CIELAB lab*

lab*lab 0.816 -0.992 0.12

lab*tch 0.5 1.0 0.481

lab*nch 0.0 1.0 0.481

relative Natural Colour (NC)

lab*lrj 0.816 -0.999 0.0

lab*tce 0.5 1.0 0.5

lab*nce 0.0 1.0 199g

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 0.5 0.215 (1.0)
cmyn3* 1.0 0.5 0.785 (0.0)
olvi4* 0.5 1.0 0.715 0.5
cmyn4* 0.5 0.0 0.285 0.5

standard and adapted CIELAB

LAB*LAB 38.94 -44.26 5.35

LAB*LABa 38.94 -44.26 5.35

LAB*TCHa 25.01 44.59 173.11

relative CIELAB lab*

lab*lab 0.408 -0.495 0.06

lab*tch 0.25 0.5 0.481

lab*nch 0.5 0.5 0.481

relative Natural Colour (NC)

lab*lrj 0.408 -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 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 0.5 0.215 (1.0)
cmyn3* 1.0 0.5 0.785 (0.0)
olvi4* 0.5 1.0 0.715 0.5
cmyn4* 0.5 0.0 0.285 0.5

standard and adapted CIELAB

LAB*LAB 38.94 -44.26 5.35

LAB*LABa 38.94 -44.26 5.35

LAB*TCHa 25.01 44.59 173.11

relative CIELAB lab*

lab*lab 0.408 -0.495 0.06

lab*tch 0.25 0.5 0.481

lab*nch 0.5 0.5 0.481

relative Natural Colour (NC)

lab*lrj 0.408 -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 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 0.5 0.215 (1.0)
cmyn3* 1.0 0.5 0.785 (0.0)
olvi4* 0.5 1.0 0.715 0.5
cmyn4* 0.5 0.0 0.285 0.5

standard and adapted CIELAB

LAB*LAB 38.94 -44.26 5.35

LAB*LABa 38.94 -44.26 5.35

LAB*TCHa 25.01 44.59 173.11

relative CIELAB lab*

lab*lab 0.408 -0.495 0.06

lab*tch 0.25 0.5 0.481

lab*nch 0.5 0.5 0.481

relative Natural Colour (NC)

lab*lrj 0.408 -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 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 0.5 0.215 (1.0)
cmyn3* 1.0 0.5 0.785 (0.0)
olvi4* 0.5 1.0 0.715 0.5
cmyn4* 0.5 0.0 0.285 0.5

standard and adapted CIELAB

LAB*LAB 38.94 -44.26 5.35

LAB*LABa 38.94 -44.26 5.35

LAB*TCHa 25.01 44.59 173.11

relative CIELAB lab*

lab*lab 0.408 -0.495 0.06

lab*tch 0.25 0.5 0.481

lab*nch 0.5 0.5 0.481

relative Natural Colour (NC)

lab*lrj 0.408 -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 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 0.5 0.215 (1.0)
cmyn3* 1.0 0.5 0.785 (0.0)
olvi4* 0.5 1.0 0.715 0.5
cmyn4* 0.5 0.0 0.285 0.5

standard and adapted CIELAB

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 252/360 = 0.7$

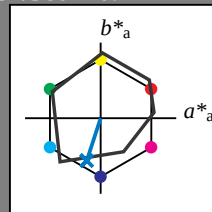
lab^*tch and lab^*nch

A: hue B

LCH*Ma: 40 55 252

olv*Ma: 0.0 0.56 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	64.42	50.58	81.9	38
Y _{Ma}	92.62	2.41	86.36	86.39	88
L _{Ma}	50.9	-63.82	35.02	72.81	151
C _{Ma}	51.25	-53.68	-57.69	78.82	227
V _{Ma}	25.72	30.34	-44.37	53.76	304
M _{Ma}	56.25	70.59	7.57	70.99	6
N _{Ma}	18.11	0.0	0.0	0.0	0
W _{Ma}	95.6	0.0	0.0	0.0	0
R _{CIE}	47.79	60.85	41.08	73.41	34
J _{CIE}	83.82	6.52	66.9	67.22	84
G _{CIE}	49.0	-36.83	2.78	36.95	176
B _{CIE}	25.14	-18.35	-56.22	59.15	252

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 253/360 = 0.703$

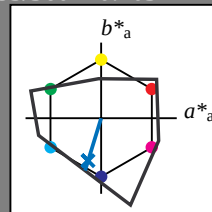
lab^*tch and lab^*nch

A: hue B

LCH*Ma: 45 72 253

olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	65.56	73.34	51.39	89.55	35
Y _{Ma}	94.78	-3.49	52.24	52.36	94
L _{Ma}	77.48	-92.97	36.0	99.71	159
C _{Ma}	78.36	-82.69	-22.74	85.77	195
V _{Ma}	12.55	38.81	-114.81	121.2	289
M _{Ma}	66.71	76.08	-29.8	81.71	339
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	47.79	61.74	42.56	74.99	35
J _{CIE}	83.82	7.06	70.78	71.13	84
G _{CIE}	49.0	-35.95	4.34	36.22	173
B _{CIE}	25.14	-17.24	-56.24	58.84	253

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* 0.5 0.747 1.0 (1.0)
cmyn3* 0.5 0.253 0.0 (0.0)
olvi4* 0.5 0.747 1.0 1.0
cmyn4* 0.5 0.253 0.0 0.0

standard and adapted CIELAB
LAB*LAB 70.24 -10.62 -34.63
LAB*LABa 70.24 -10.62 -34.63
LAB*TCHa 75.0 36.24 252.94

relative CIELAB lab*
lab*lab 0.736 -0.146 -0.477
lab*tch 0.75 0.5 0.703
lab*nch 0.0 0.5 0.703

relative Natural Colour (NC)
lab*lrj 0.736 0.0 -0.499
lab*tce 0.75 0.5 0.75
lab*nce 0.0 0.5 0.99b

relative Inform. Technology (IT)
olvi3* 0.0 0.247 0.5 (1.0)
cmyn3* 1.0 0.753 0.5 (0.0)
olvi4* 0.5 0.747 1.0 0.5
cmyn4* 0.5 0.253 0.0 0.5

standard and adapted CIELAB
LAB*LAB 22.55 -10.61 -34.64
LAB*LABa 22.55 -10.61 -34.64
LAB*TCHa 25.01 36.24 252.96

relative CIELAB lab*
lab*lab 0.236 -0.145 -0.477
lab*tch 0.25 0.5 0.703
lab*nch 0.5 0.5 0.703

relative Natural Colour (NC)
lab*lrj 0.236 0.0 -0.499
lab*tce 0.25 0.5 0.75
lab*nce 0.5 0.5 0.00r

relative Inform. Technology (IT)
olvi3* 0.0 0.494 1.0 (1.0)
cmyn3* 1.0 0.506 0.0 (0.0)
olvi4* 0.0 0.494 1.0 1.0
cmyn4* 1.0 0.506 0.0 0.0

standard and adapted CIELAB
LAB*LAB 45.08 -21.24 -69.28
LAB*LABa 45.08 -21.24 -69.28
LAB*TCHa 50.0 72.48 252.95

relative CIELAB lab*
lab*lab 0.472 -0.292 -0.955
lab*tch 0.5 1.0 0.703
lab*nch 0.0 1.0 0.703

relative Natural Colour (NC)
lab*lrj 0.472 0.0 -0.999
lab*tce 0.5 1.0 0.75
lab*nce 0.0 1.0 0.00r

0,25 0,50 0,75 1,00
chromaticness c^*

blackness n^*

$n^* = 0,00$

$n^* = 1,0$

SE00-7, 3 step scales for constant CIELAB hue 252/360 = 0.7 (left)

BAM-test chart SE00; Colorimetric systems ORS18 & TLS00

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

3 step scales for constant CIELAB hue 253/360 = 0.703 (right)

input: $cmv0^* setcmvcolor$

output: no change compared to input