

Input: Colorimetric Offset Reflective System ORS18

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

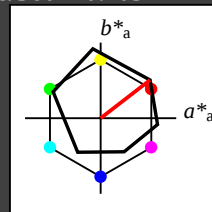
lab^*tch and lab^*nch

A: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

Output: Colorimetric Television Luminous System TLS00

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

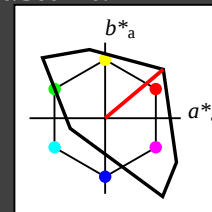
lab^*tch and lab^*nch

A: hue O

LCH*Ma: 51 100 40

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

relative Inform. Technology (IT)				
olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	1.0
cmyn4*	0.0	0.0	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	95.41	0.0	0.0	
LAB*LABa	95.41	0.0	0.0	
LAB*TCHa	99.99	0.01	-	
relative CIELAB lab*				
lab*lab	1.0	0.0	0.0	
lab*tch	1.0	0.0	-	
lab*nch	0.0	0.0	-	
relative Natural Colour (NC)				
lab*lrj	1.0	0.0	0.0	
lab*tce	1.0	0.0	-	
lab*nce	0.0	0.0	-	

relative Inform. Technology (IT)				
olvi3*	1.0	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	72.95	38.45	32.27	
LAB*LABa	72.95	38.45	32.27	
LAB*TCHa	75.0	50.2	40.0	
relative CIELAB lab*				
lab*lab	0.765	0.383	0.321	
lab*tch	0.75	0.5	0.111	
lab*nch	0.0	0.5	0.111	
relative Natural Colour (NC)				
lab*lrj	0.765	0.471	0.167	
lab*tce	0.75	0.5	0.054	
lab*nce	0.0	0.5	r21j	

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	25.26	38.45	32.27	
LAB*LABa	25.26	38.45	32.27	
LAB*TCHa	25.01	50.2	40.0	
relative CIELAB lab*				
lab*lab	0.265	0.383	0.321	
lab*tch	0.25	0.5	0.111	
lab*nch	0.5	0.5	0.111	
relative Natural Colour (NC)				
lab*lrj	0.265	0.471	0.167	
lab*tce	0.25	0.5	0.054	
lab*nce	0.5	0.5	r21j	

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	50.5	76.9	64.54	
LAB*LABa	50.5	76.9	64.54	
LAB*TCHa	50.0	100.4	40.0	
relative CIELAB lab*				
lab*lab	0.529	0.766	0.643	
lab*tch	0.5	1.0	0.111	
lab*nch	0.0	1.0	0.111	
relative Natural Colour (NC)				
lab*lrj	0.529	0.942	0.335	
lab*tce	0.5	1.0	0.054	
lab*nce	0.0	1.0	r21j	

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	25.26	38.45	32.27	
LAB*LABa	25.26	38.45	32.27	
LAB*TCHa	25.01	50.2	40.0	
relative CIELAB lab*				
lab*lab	0.265	0.383	0.321	
lab*tch	0.25	0.5	0.111	
lab*nch	0.5	0.5	0.111	
relative Natural Colour (NC)				
lab*lrj	0.265	0.471	0.167	
lab*tce	0.25	0.5	0.054	
lab*nce	0.5	0.5	r21j	

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	50.5	76.9	64.54	
LAB*LABa	50.5	76.9	64.54	
LAB*TCHa	50.0	100.4	40.0	
relative CIELAB lab*				
lab*lab	0.529	0.766	0.643	
lab*tch	0.5	1.0	0.111	
lab*nch	0.0	1.0	0.111	
relative Natural Colour (NC)				
lab*lrj	0.529	0.942	0.335	
lab*tce	0.5	1.0	0.054	
lab*nce	0.0	1.0	r21j	

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	0.0	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	25.26	38.45	32.27	
LAB*LABa	25.26	38.45	32.27	
LAB*TCHa	25.01	50.2	40.0	
relative CIELAB lab*				
lab*lab	0.265	0.383	0.321	
lab*tch	0.25	0.5	0.111	
lab*nch	0.5	0.5	0.111	
relative Natural Colour (NC)				
lab*lrj	0.265	0.471	0.167	
lab*tce	0.25	0.5	0.054	
lab*nce	0.5	0.5	r21j	

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	0.0	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	50.5	76.9	64.54	
LAB*LABa	50.5	76.9	64.54	
LAB*TCHa	50.0	100.4	40.0	
relative CIELAB lab*				
lab*lab	0.529	0.766	0.643	
lab*tch	0.5	1.0	0.111	
lab*nch	0.0	1.0	0.111	
relative Natural Colour (NC)				
lab*lrj	0.529	0.942	0.335	
lab*tce	0.5	1.0	0.054	
lab*nce	0.0	1.0	r21j	

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	-	

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$

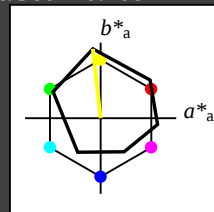
lab^*tch and lab^*nch

A: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

Output: Colorimetric Television Luminous System TLS00

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

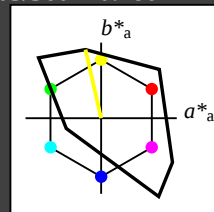
lab^*tch and lab^*nch

A: hue Y

LCH*Ma: 93 93 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

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 94.03 -10.34 45.37
LAB*LABa 94.03 -10.34 45.37
LAB*TCHa 75.0 46.53 102.85

relative CIELAB lab*
lab*lab 0.985 -0.11 0.487
lab*tch 0.75 0.5 0.286
lab*nch 0.0 0.5 0.286

relative Natural Colour (NC)
lab*lrj 0.985 -0.116 0.486
lab*tce 0.75 0.5 0.288
lab*nce 0.0 0.5 j15g

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 46.34 -10.34 45.37
LAB*LABa 46.34 -10.34 45.37
LAB*TCHa 25.01 46.53 102.85

relative CIELAB lab*
lab*lab 0.486 -0.11 0.487
lab*tch 0.25 0.5 0.286
lab*nch 0.5 0.5 0.286

relative Natural Colour (NC)
lab*lrj 0.486 -0.116 0.486
lab*tce 0.25 0.5 0.288
lab*nce 0.5 0.5 j15g

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 92.65 -20.69 90.73
LAB*LABa 92.65 -20.69 90.73
LAB*TCHa 50.0 93.06 102.85

relative CIELAB lab*
lab*lab 0.971 -0.221 0.975
lab*tch 0.5 1.0 0.286
lab*nch 0.0 1.0 0.286

relative Natural Colour (NC)
lab*lrj 0.971 -0.233 0.972
lab*tce 0.5 1.0 0.288
lab*nce 0.0 1.0 j15g

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

blackness n^*

$n^* = 0,00$

$n^* = 1,0$

RE000-7, 3 step scales for constant CIELAB hue 96/360 = 0.268 (left)

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00

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

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

input: $olv^* setrgbcolor$

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



Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$

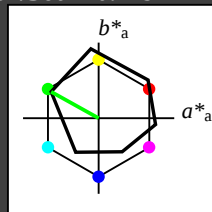
lab^*tch and lab^*nch

A: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

Output: Colorimetric Television Luminous System TLS00

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

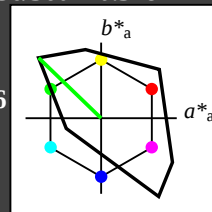
lab^*tch and lab^*nch

A: hue L

LCH*Ma: 84 115 136

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

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 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 89.51 -41.36 39.94
LAB*LABa 89.51 -41.36 39.94
LAB*TCHa 75.0 57.51 136.01

relative CIELAB lab*
lab*lab 0.938 -0.359 0.347
lab*tch 0.75 0.5 0.378
lab*nch 0.0 0.5 0.378

relative Natural Colour (NC)
lab*lrj 0.938 -0.415 0.278
lab*tce 0.75 0.5 0.406
lab*nce 0.0 0.5 0.62g

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 41.82 -41.36 39.94
LAB*LABa 41.82 -41.36 39.94
LAB*TCHa 25.01 57.51 136.01

relative CIELAB lab*
lab*lab 0.438 -0.359 0.347
lab*tch 0.25 0.5 0.378
lab*nch 0.5 0.5 0.378

relative Natural Colour (NC)
lab*lrj 0.438 -0.415 0.278
lab*tce 0.25 0.5 0.406
lab*nce 0.5 0.5 0.62g

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 83.62 -82.73 79.88
LAB*LABa 83.62 -82.73 79.88
LAB*TCHa 50.0 115.01 136.01

relative CIELAB lab*
lab*lab 0.876 -0.718 0.694
lab*tch 0.5 1.0 0.378
lab*nch 0.0 1.0 0.378

relative Natural Colour (NC)
lab*lrj 0.876 -0.83 0.555
lab*tce 0.5 1.0 0.406
lab*nce 0.0 1.0 0.62g

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

blackness n^*

$n^* = 0,00$

$n^* = 1,0$

RE000-7, 3 step scales for constant CIELAB hue 151/360 = 0.419 (left)

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00

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

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

input: $olv^* setrgbcolor$

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

Input: Colorimetric Offset Reflective System ORS18

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

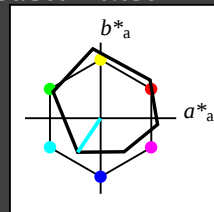
lab^*tch and lab^*nch

A: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

Output: Colorimetric Television Luminous System TLS00

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

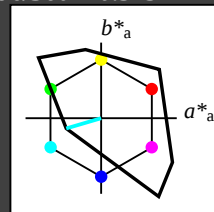
lab^*tch and lab^*nch

A: hue C

LCH*Ma: 87 48 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

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

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

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

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

standard and adapted CIELAB
LAB*LAB 43.45 -23.07 -6.77
LAB*LABa 43.45 -23.07 -6.77
LAB*TCHa 25.01 24.06 196.37

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

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

relative Inform. Technology (IT)
olvi3* 0.0 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 86.87 -46.15 -13.55
LAB*LABa 86.87 -46.15 -13.55
LAB*TCHa 50.0 48.11 196.37

relative CIELAB lab*
lab*lab 0.911 -0.958 -0.281
lab*tch 0.5 1.0 0.545
lab*nch 0.0 1.0 0.545

relative Natural Colour (NC)
lab*lrj 0.911 -0.881 -0.469
lab*tce 0.5 1.0 0.578
lab*nce 0.0 1.0 g31b

3 step scales for constant CIELAB hue 196/360 = 0.545 (right)

input: $olv^* setrgbcolor$

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

RE000-7, 3 step scales for constant CIELAB hue 236/360 = 0.656 (left)

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00

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

Input: Colorimetric Offset Reflective System ORS18

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

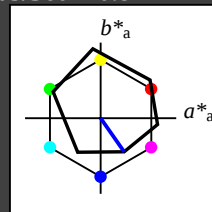
lab^*tch and lab^*nch

A: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

Output: Colorimetric Television Luminous System TLS00

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

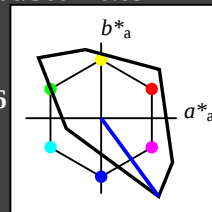
lab^*tch and lab^*nch

A: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

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

standard and adapted CIELAB

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

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*lrj	0.659	0.23	-0.443
lab*tce	0.75	0.5	0.826
lab*nce	0.0	0.5	b30r

relative Inform. Technology (IT)

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

standard and adapted CIELAB

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

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*lrj	0.159	0.23	-0.443
lab*tce	0.25	0.5	0.826
lab*nce	0.5	0.5	b30r

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	30.39	76.04	-103.57
LAB*LABa	30.39	76.04	-103.57
LAB*TCHa	50.0	128.5	306.29

relative CIELAB lab*

lab*lab	0.318	0.592	-0.805
lab*tch	0.5	1.0	0.851
lab*nch	0.0	1.0	0.851

relative Natural Colour (NC)

lab*lrj	0.318	0.459	-0.887
lab*tce	0.5	1.0	0.826
lab*nce	0.0	1.0	b30r

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

standard and adapted CIELAB

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

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*lrj	0.159	0.23	-0.443
lab*tce	0.25	0.5	0.826
lab*nce	0.5	0.5	b30r

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

standard and adapted CIELAB

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

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*lrj	0.159	0.23	-0.443
lab*tce	0.25	0.5	0.826
lab*nce	0.5	0.5	b30r

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

standard and adapted CIELAB

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

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*lrj	0.159	0.23	-0.443
lab*tce	0.25	0.5	0.826
lab*nce	0.5	0.5	b30r

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00

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

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

input: $olv^*setrgbcolor$

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

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$

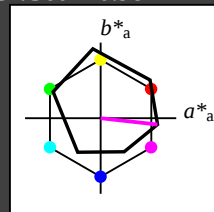
lab^*tch and lab^*nch

A: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$

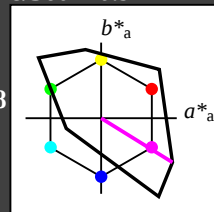
lab^*tch and lab^*nch

A: hue M

LCH*Ma: 57 111 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

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 76.35 47.17 -29.19
LAB*LABa 76.35 47.17 -29.19
LAB*TCHa 75.0 55.47 328.23

relative CIELAB lab*
lab*lab 0.8 0.425 -0.262
lab*tch 0.75 0.5 0.912
lab*nch 0.0 0.5 0.912

relative Natural Colour (NC)
lab*lrj 0.8 0.352 -0.354
lab*tce 0.75 0.5 0.874
lab*nce 0.0 0.5 b49r

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 28.66 47.17 -29.19
LAB*LABa 28.66 47.17 -29.19
LAB*TCHa 25.01 55.47 328.23

relative CIELAB lab*
lab*lab 0.3 0.425 -0.262
lab*tch 0.25 0.5 0.912
lab*nch 0.5 0.5 0.912

relative Natural Colour (NC)
lab*lrj 0.3 0.352 -0.354
lab*tce 0.25 0.5 0.874
lab*nce 0.5 0.5 b49r

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 57.3 94.33 -58.4
LAB*LABa 57.3 94.33 -58.4
LAB*TCHa 50.0 110.95 328.23

relative CIELAB lab*
lab*lab 0.601 0.85 -0.525
lab*tch 0.5 1.0 0.912
lab*nch 0.0 1.0 0.912

relative Natural Colour (NC)
lab*lrj 0.601 0.703 -0.71
lab*tce 0.5 1.0 0.874
lab*nce 0.0 1.0 b49r

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 28.66 47.17 -29.19
LAB*LABa 28.66 47.17 -29.19
LAB*TCHa 25.01 55.47 328.23

relative CIELAB lab*
lab*lab 0.3 0.425 -0.262
lab*tch 0.25 0.5 0.912
lab*nch 0.5 0.5 0.912

relative Natural Colour (NC)
lab*lrj 0.3 0.352 -0.354
lab*tce 0.25 0.5 0.874
lab*nce 0.5 0.5 b49r

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 57.3 94.33 -58.4
LAB*LABa 57.3 94.33 -58.4
LAB*TCHa 50.0 110.95 328.23

relative CIELAB lab*
lab*lab 0.601 0.85 -0.525
lab*tch 0.5 1.0 0.912
lab*nch 0.0 1.0 0.912

relative Natural Colour (NC)
lab*lrj 0.601 0.703 -0.71
lab*tce 0.5 1.0 0.874
lab*nce 0.0 1.0 b49r

RE000-7, 3 step scales for constant CIELAB hue 354/360 = 0.982 (left)

3 step scales for constant CIELAB hue 328/360 = 0.912 (right)

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00

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

input: $olv^* setrgbcolor$

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

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$

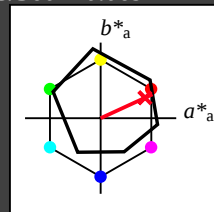
lab^*tch and lab^*nch

A: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

Output: Colorimetric Television Luminous System TLS00

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

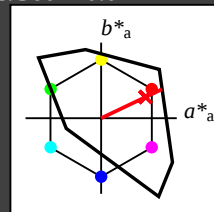
lab^*tch and lab^*nch

A: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

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

standard and adapted CIELAB
LAB*LAB 73.67 40.3 19.2
LAB*LABa 73.67 40.3 19.2
LAB*TCHa 75.0 44.64 25.47

relative CIELAB lab*
lab*lab 0.772 0.451 0.215
lab*tch 0.75 0.5 0.071
lab*nch 0.0 0.5 0.071

relative Natural Colour (NC)
lab*lrj 0.772 0.5 0.0
lab*tce 0.75 0.5 1.0
lab*nce 0.0 0.5 0.99r

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.106 (1.0)
cmyn3* 0.5 1.0 0.894 (0.0)
olvi4* 1.0 0.5 0.606 0.5
cmyn4* 0.0 0.5 0.394 0.5

standard and adapted CIELAB
LAB*LAB 25.98 40.3 19.21
LAB*LABa 25.98 40.3 19.21
LAB*TCHa 25.01 44.65 25.49

relative CIELAB lab*
lab*lab 0.272 0.451 0.215
lab*tch 0.25 0.5 0.071
lab*nch 0.5 0.5 0.071

relative Natural Colour (NC)
lab*lrj 0.272 0.5 0.0
lab*tce 0.25 0.5 0.0
lab*nce 0.5 0.5 0.00j

relative Inform. Technology (IT)
olvi3* 1.0 0.0 0.213 (1.0)
cmyn3* 0.0 1.0 0.787 (0.0)
olvi4* 1.0 0.0 0.213 1.0
cmyn4* 0.0 1.0 0.787 0.0

standard and adapted CIELAB
LAB*LAB 51.94 80.61 38.42
LAB*LABa 51.94 80.61 38.42
LAB*TCHa 50.0 89.29 25.48

relative CIELAB lab*
lab*lab 0.544 0.903 0.43
lab*tch 0.5 1.0 0.071
lab*nch 0.0 1.0 0.071

relative Natural Colour (NC)
lab*lrj 0.544 1.0 0.0
lab*tce 0.5 1.0 0.0
lab*nce 0.0 1.0 0.00j

$n^* = 0,00$

blackness n^*

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

$n^* = 1,0$

$n^* = 0,00$

blackness n^*

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

$n^* = 1,0$

RE000-7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00

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

input: $olv^*setrgbcolor$

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

Input: Colorimetric Offset Reflective System ORS18

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

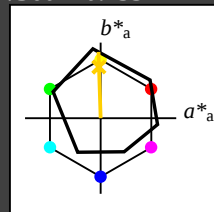
lab^*tch and lab^*nch

A: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

Output: Colorimetric Television Luminous System TLS00

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

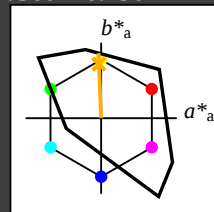
lab^*tch and lab^*nch

A: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

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 0.912 0.5 (1.0)
cmyn3* 0.0 0.088 0.5 (0.0)
olvi4* 1.0 0.912 0.5 1.0
cmyn4* 0.0 0.088 0.5 0.0

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

relative CIELAB lab*
lab*lab 0.947 -0.019 0.499
lab*tch 0.75 0.5 0.256
lab*nch 0.0 0.5 0.256

relative Natural Colour (NC)
lab*lrj 0.947 0.0 0.5
lab*tce 0.75 0.5 0.25
lab*nce 0.0 0.5 0.00g

relative Inform. Technology (IT)
olvi3* 0.5 0.412 0.0 (1.0)
cmyn3* 0.5 0.588 1.0 (0.0)
olvi4* 1.0 0.912 0.5 0.5
cmyn4* 0.0 0.088 0.5 0.5

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

relative CIELAB lab*
lab*lab 0.447 -0.019 0.499
lab*tch 0.25 0.5 0.256
lab*nch 0.5 0.5 0.256

relative Natural Colour (NC)
lab*lrj 0.447 0.0 0.5
lab*tce 0.25 0.5 0.25
lab*nce 0.5 0.5 0.00g

relative Inform. Technology (IT)
olvi3* 1.0 0.824 0.0 (1.0)
cmyn3* 0.0 0.176 1.0 (0.0)
olvi4* 1.0 0.824 0.0 1.0
cmyn4* 0.0 0.176 1.0 0.0

standard and adapted CIELAB
LAB*LAB 85.22 -3.47 86.11
LAB*LABa 85.22 -3.47 86.11
LAB*TCHa 50.0 86.18 92.32

relative CIELAB lab*
lab*lab 0.893 -0.039 0.999
lab*tch 0.5 1.0 0.256
lab*nch 0.0 1.0 0.256

relative Natural Colour (NC)
lab*lrj 0.893 0.0 1.0
lab*tce 0.5 1.0 0.25
lab*nce 0.0 1.0 0.00g

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

blackness n^*

$n^* = 0,00$

$n^* = 1,0$

RE000-7, 3 step scales for constant CIELAB hue 92/360 = 0.255 (left)

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00

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

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

input: $olv^* setrgbcolor$

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

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$

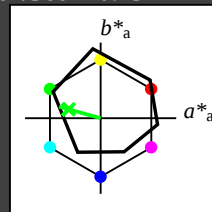
lab^*tch and lab^*nch

A: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

Output: Colorimetric Television Luminous System TLS00

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

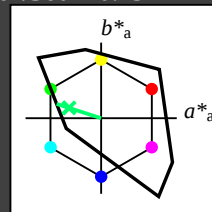
lab^*tch and lab^*nch

A: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

triangle lightness t^*



%Gamut

$u^*_{rel} = 158$

%Regularity

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

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

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

relative Inform. Technology (IT)
olvi3* 0.5 1.0 0.826 (1.0)
cmyn3* 0.5 0.0 0.174 (0.0)
olvi4* 0.5 1.0 0.827 1.0
cmyn4* 0.5 0.0 0.173 0.0

standard and adapted CIELAB
LAB*LAB 90.57 -29.42 9.43
LAB*LABa 90.57 -29.42 9.43
LAB*TCa 75.0 30.9 162.23

relative CIELAB lab*
lab*lab 0.949 -0.475 0.153
lab*tch 0.75 0.5 0.451
lab*nch 0.0 0.5 0.451

relative Natural Colour (NC)
lab*lrj 0.949 -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 0.653 (1.0)
cmyn3* 1.0 0.0 0.347 (0.0)
olvi4* 0.0 1.0 0.653 1.0
cmyn4* 1.0 0.0 0.347 0.0

standard and adapted CIELAB
LAB*LAB 85.74 -58.84 18.87
LAB*LABa 85.74 -58.84 18.87
LAB*TCa 50.0 61.8 162.23

relative CIELAB lab*
lab*lab 0.899 -0.951 0.305
lab*tch 0.5 1.0 0.451
lab*nch 0.0 1.0 0.451

relative Natural Colour (NC)
lab*lrj 0.899 -0.999 0.0
lab*tce 0.5 1.0 0.5
lab*nce 0.0 1.0 g00b

relative Inform. Technology (IT)
olvi3* 0.0 0.5 0.326 (1.0)
cmyn3* 1.0 0.5 0.674 (0.0)
olvi4* 0.5 1.0 0.826 0.5
cmyn4* 0.5 0.0 0.174 0.5

standard and adapted CIELAB
LAB*LAB 42.88 -29.42 9.44
LAB*LABa 42.88 -29.42 9.44
LAB*TCa 25.01 30.91 162.22

relative CIELAB lab*
lab*lab 0.449 -0.475 0.153
lab*tch 0.25 0.5 0.451
lab*nch 0.5 0.5 0.451

relative Natural Colour (NC)
lab*lrj 0.449 -0.499 0.0
lab*tce 0.25 0.5 0.5
lab*nce 0.5 0.5 g99g

relative Inform. Technology (IT)
olvi3* 0.5 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 -

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00

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

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

input: $olv^*setrgbcolor$

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

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$

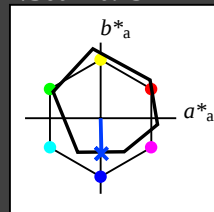
lab^*tch and lab^*nch

A: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data					
$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma} 47.94	65.39	50.52	82.63	38	
Y _{Ma} 90.37	-10.26	91.75	92.32	96	
L _{Ma} 50.9	-62.83	34.96	71.91	151	
C _{Ma} 58.62	-30.34	-45.01	54.3	236	
V _{Ma} 25.72	31.1	-44.4	54.22	305	
M _{Ma} 48.13	75.28	-8.36	75.74	354	
N _{Ma} 18.01	0.0	0.0	0.0	0	
W _{Ma} 95.41	0.0	0.0	0.0	0	
R _{CIE} 39.92	58.66	26.98	64.57	25	
J _{CIE} 81.26	-2.16	67.76	67.79	92	
G _{CIE} 52.23	-42.25	11.76	43.87	164	
B _{CIE} 30.57	1.15	-46.84	46.86	271	

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

Output: Colorimetric Television Luminous System TLS00

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

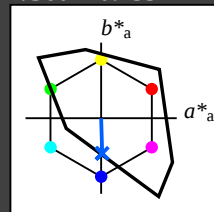
lab^*tch and lab^*nch

A: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data					
$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma} 50.5	76.92	64.55	100.42	40	
Y _{Ma} 92.66	-20.69	90.75	93.08	103	
L _{Ma} 83.63	-82.75	79.9	115.04	136	
C _{Ma} 86.88	-46.16	-13.55	48.12	196	
V _{Ma} 30.39	76.06	-103.59	128.52	306	
M _{Ma} 57.3	94.35	-58.41	110.97	328	
N _{Ma} 0.01	0.0	0.0	0.0	0	
W _{Ma} 95.41	0.0	0.0	0.0	0	
R _{CIE} 39.92	58.74	27.99	65.07	25	
J _{CIE} 81.26	-2.88	71.56	71.62	92	
G _{CIE} 52.23	-42.41	13.6	44.55	162	
B _{CIE} 30.57	1.41	-46.46	46.49	272	

%Gamut

$u^*_{rel} = 158$

%Regularity

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

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

relative Inform. Technology (IT)					
olvi3*	1.0	1.0	1.0	(1.0)	
cmyn3*	0.0	0.0	0.0	(0.0)	
olvi4*	1.0	1.0	1.0	1.0	
cmyn4*	0.0	0.0	0.0	0.0	
standard and adapted CIELAB					
LAB*LAB	95.41	0.0	0.0		
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	99.99	0.01	-		
relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*tch	1.0	0.0	-		
lab*nch	0.0	0.0	-		
relative Natural Colour (NC)					
lab*lrj	1.0	0.0	0.0		
lab*tce	1.0	0.0	-		
lab*nce	0.0	0.0	-		

relative Inform. Technology (IT)					
olvi3*	0.5	0.805	1.0	(1.0)	
cmyn3*	0.5	0.195	0.0	(0.0)	
olvi4*	0.5	0.805	1.0	1.0	
cmyn4*	0.5	0.195	0.0	0.0	
standard and adapted CIELAB					
LAB*LAB	80.13	0.73	-24.31		
LAB*LABa	80.13	0.73	-24.31		
LAB*TCHa	75.0	24.33	271.72		
relative CIELAB lab*					
lab*lab	0.84	0.015	-0.499		
lab*tch	0.75	0.5	0.755		
lab*nch	0.0	0.5	0.755		
relative Natural Colour (NC)					
lab*lrj	0.84	0.0	-0.499		
lab*tce	0.75	0.5	0.75		
lab*nce	0.0	0.5	g99b		

relative Inform. Technology (IT)					
olvi3*	0.0	0.305	0.5	(1.0)	
cmyn3*	1.0	0.695	0.5	(0.0)	
olvi4*	0.5	0.805	1.0	0.5	
cmyn4*	0.5	0.195	0.0	0.5	
standard and adapted CIELAB					
LAB*LAB	32.44	0.74	-24.32		
LAB*LABa	32.44	0.74	-24.32		
LAB*TCHa	25.01	24.34	271.75		
relative CIELAB lab*					
lab*lab	0.34	0.015	-0.499		
lab*tch	0.25	0.5	0.755		
lab*nch	0.5	0.5	0.755		
relative Natural Colour (NC)					
lab*lrj	0.34	0.0	-0.499		
lab*tce	0.25	0.5	0.75		
lab*nce	0.5	0.5	b00r		

relative Inform. Technology (IT)					
olvi3*	0.0	0.61	1.0	(1.0)	
cmyn3*	1.0	0.39	0.0	(0.0)	
olvi4*	0.0	0.61	1.0	1.0	
cmyn4*	1.0	0.39	0.0	0.0	
standard and adapted CIELAB					
LAB*LAB	64.86	1.47	-48.64		
LAB*LABa	64.86	1.47	-48.64		
LAB*TCHa	50.0	48.67	271.74		
relative CIELAB lab*					
lab*lab	0.68	0.03	-0.998		
lab*tch	0.5	1.0	0.755		
lab*nch	0.0	1.0	0.755		
relative Natural Colour (NC)					
lab*lrj	0.68	0.0	-0.999		
lab*tce	0.5	1.0	0.75		
lab*nce	0.0	1.0	g99b		

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	-		

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

$n^* = 1,0$

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

$n^* = 1,0$

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

$n^* = 0,00$

blackness n^*

RE000-7, 3 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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

BAM-test chart RE00; Colorimetric systems ORS18 & TLS00

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

input: $olv^* setrgbcolor$

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