

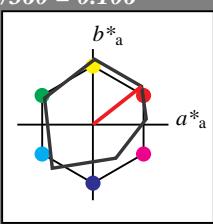
Input: Colorimetric Offset Reflective System ORS18

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
 $u^*_{rel} = 96$

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

relative Inform. Technology (IT)
olv3* 1.0 0.75 0.75 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 0.75 0.75 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.6 0.0 0.3 4.65
LAB*TCh 95.25 0.0 0.0
LAB*TCh 99.99 0.01

relative CIELAB lab*
lab*tch 1.0 0.0 0.0
lab*nch 1.0 0.0 0.0
lab*ncE 1.0 0.0 0.0
lab*ncE 1.0 0.0 0.0

relative Inform. Technology (ID)
olv3* 0.75 0.25 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.25 0.62 3.36
LAB*TCh 76.23 0.0 0.0
LAB*TCh 75.01 0.0 0.0

relative CIELAB lab*
lab*tch 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
relative Natural Colour (NC)
lab*irj 0.75 0.0 0.0
lab*rcE 0.75 0.0 0.0
lab*ncE 0.25 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.5 0.5 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.25 0.62 3.36
LAB*TCh 76.23 0.0 0.0
LAB*TCh 75.01 0.0 0.0

relative CIELAB lab*
lab*tch 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
relative Natural Colour (NC)
lab*irj 0.75 0.0 0.0
lab*rcE 0.75 0.0 0.0
lab*ncE 0.25 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.86 0.8 2.08
LAB*TCh 56.86 0.0 0.0
LAB*TCh 50.01 0.0 0.0

relative CIELAB lab*
lab*tch 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
relative Natural Colour (NC)
lab*irj 0.75 0.0 0.0
lab*rcE 0.75 0.0 0.0
lab*ncE 0.25 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.86 0.8 2.08
LAB*TCh 56.86 0.0 0.0
LAB*TCh 50.01 0.0 0.0

relative CIELAB lab*
lab*tch 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
relative Natural Colour (NC)
lab*irj 0.75 0.0 0.0
lab*rcE 0.75 0.0 0.0
lab*ncE 0.25 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 37.49 0.99 0.79
LAB*TCh 37.49 0.0 0.0
LAB*TCh 35.25 0.0 0.0

relative CIELAB lab*
lab*tch 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
relative Natural Colour (NC)
lab*irj 0.25 0.0 0.0
lab*rcE 0.25 0.0 0.0
lab*ncE 0.25 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 18.12 1.18 -0.49
LAB*TCh 18.12 0.0 0.0
LAB*TCh 0.01 0.0 0.0

relative CIELAB lab*
lab*tch 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*irj 0.0 0.0 0.0
lab*rcE 0.0 0.0 0.0
lab*ncE 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (0.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 1.0 1.0 (0.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.12 1.18 -0.49
LAB*TCh 18.12 0.0 0.0
LAB*TCh 0.01 0.0 0.0

relative CIELAB lab*
lab*tch 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*irj 0.0 0.0 0.0
lab*rcE 0.0 0.0 0.0
lab*ncE 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 0.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.12 1.18 -0.49
LAB*TCh 18.12 0.0 0.0
LAB*TCh 0.01 0.0 0.0

relative CIELAB lab*
lab*tch 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*irj 0.0 0.0 0.0
lab*rcE 0.0 0.0 0.0
lab*ncE 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv4* 0.0 0.0 0.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.12 1.18 -0.49
LAB*TCh 18.12 0.0 0.0
LAB*TCh 0.01 0.0 0.0

relative CIELAB lab*
lab*tch 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*irj 0.0 0.0 0.0
lab*rcE 0.0 0.0 0.0
lab*ncE 0.0 0.0 0.0

 $n^* = 1,0$

relative Inform. Technology (IT)
olv3* 0.09 0.197 0.154
cmyn3* 0.75 1.0 0.0 (0.0)
olv4* 0.25 0.25 0.106
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.12 1.18 -0.49
LAB*TCh 18.12 0.0 0.0
LAB*TCh 0.01 0.0 0.0

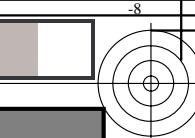
relative CIELAB lab*
lab*tch 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*irj 0.096 0.248 0.032
lab*rcE 0.75 0.25 0.081
lab*ncE 0.75 0.25 0.081

relative Inform. Technology (IT)
olv3* 0.094 0.197 0.154
cmyn3* 0.75 1.0 0.0 (0.0)
olv4* 0.25 0.25 0.106
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.12 1.18 -0.49
LAB*TCh 18.12 0.0 0.0
LAB*TCh 0.01 0.0 0.0

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

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

See for similar files: <http://www.ps.bam.de/SE50/>

Version 2.1, io=0

Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 151/360 = 0.42$

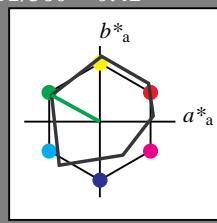
lab^*tch and lab^*nch

A: hue L

LCH*Ma: 51 73 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



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

relative Inform. Technology (IT)	olv1* ³	0.0	1.0	(1.0)
cmy1* ³	0.25	0.25	0.25	(0.0)
olv1* ⁴	1.0	1.0	0.75	(0.0)
cmy1* ⁴	0.0	0.0	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	76.23	0.62	3.36	
LAB*La _{Ma}	76.23	0.62	3.36	
LAB*TCh _{Ma}	75.0	0.01	-	
relative CIELAB lab*				
lab*tch	0.75	0.0	0.0	
lab*nch	0.75	0.0	0.0	
relative Natural Colour (NC)				
lab*rc	0.75	0.0	0.0	
lab*ncE	0.75	0.0	0.0	

relative Inform. Technology (IT)	olv1* ³	0.5	0.5	(1.0)
cmy1* ³	0.25	0.25	0.25	(0.0)
olv1* ⁴	1.0	1.0	0.75	(0.0)
cmy1* ⁴	0.0	0.0	0.0	0.25
standard and adapted CIELAB				
LAB*LAB	65.05	22.11	13.88	
LAB*La _{Ma}	65.05	22.11	13.88	
LAB*TCh _{Ma}	65.05	18.2	15.25	
relative CIELAB lab*				
lab*tch	0.60	-0.218	0.12	
lab*nch	0.875	0.25	0.433	
relative Natural Colour (NC)				
lab*rc	0.60	-0.227	0.102	
lab*ncE	0.875	0.25	0.433	

relative Inform. Technology (IT)	olv1* ³	0.5	0.5	(1.0)
cmy1* ³	0.25	0.25	0.25	(0.0)
olv1* ⁴	0.75	0.75	0.75	(0.0)
cmy1* ⁴	0.0	0.0	0.0	0.25
standard and adapted CIELAB				
LAB*LAB	58.66	0.8	2.08	
LAB*La _{Ma}	58.66	0.8	2.08	
LAB*TCh _{Ma}	50.01	0.01	-	
relative CIELAB lab*				
lab*tch	0.5	0.0	0.0	
lab*nch	0.75	0.0	0.0	
relative Natural Colour (NC)				
lab*rc	0.5	0.0	0.0	
lab*ncE	0.75	0.0	0.0	

relative Inform. Technology (IT)	olv1* ³	0.5	0.5	(1.0)
cmy1* ³	0.25	0.25	0.25	(0.0)
olv1* ⁴	0.75	0.75	0.75	(0.0)
cmy1* ⁴	0.0	0.0	0.0	0.25
standard and adapted CIELAB				
LAB*LAB	37.49	0.99	0.79	
LAB*La _{Ma}	37.49	0.99	0.79	
LAB*TCh _{Ma}	25.01	0.01	-	
relative CIELAB lab*				
lab*tch	0.25	0.0	0.0	
lab*nch	0.75	0.0	0.0	
relative Natural Colour (NC)				
lab*rc	0.25	0.0	0.0	
lab*ncE	0.75	0.0	0.0	

relative Inform. Technology (IT)	olv1* ³	0.0	0.0	(1.0)
cmy1* ³	1.0	1.0	1.0	(0.0)
olv1* ⁴	0.75	0.75	0.75	(0.0)
cmy1* ⁴	0.0	0.0	0.0	1.0
standard and adapted CIELAB				
LAB*LAB	18.12	1.18	-0.49	
LAB*La _{Ma}	18.12	1.18	-0.49	
LAB*TCh _{Ma}	0.01	0.01	-	
relative CIELAB lab*				
lab*tch	0.0	0.0	0.0	
lab*nch	1.0	0.0	0.0	
relative Natural Colour (NC)				
lab*rc	0.0	0.0	0.0	
lab*ncE	1.0	0.0	0.0	

$n^* = 1,0$

SE500-7, 5 step scales for constant CIELAB hue 151/360 = 0.42 (left)

BAM-test chart SE50; Colorimetric systems ORS18 & TLS00

A: 2 coordinate data of 5 step colour scales for 10 hues

C M Y O L V

Output: Colorimetric Television Luminous System TLS00

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

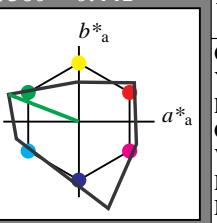
lab^*tch and lab^*nch

A: hue L

LCH*Ma: 77 100 159

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



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

%Regularity

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

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

%Regularity

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

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

0,75

0,50

0,25

0,00

0,25

0,50

0,75

1,00

0,75

0,50

0,25

0,00

0,25

0,50

0,75

1,00

0,75

0,50

0,25

0,00

0,25

0,50

0,75

1,00

0,75

0,50

0,25

0,00

0,25

0,50

0,75

1,00

0,75

0,50

0,25

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0,25

0,50

0,75

1,00

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0,50

0,25

0,00

0,25

0,50

0,75

1,00

0,75

0,50

0,25

0,00

0,25

0,50

0,75

1,00

0,75

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 0,75$

$n^* = 1,00$

$n^* = 0,50$

$n^* = 0,75$

$n^* = 1,00$

relative Inform. Technology (IT)				
olv3*	0,5	0,5	0,5	(1,0)
cmy3*	0,5	0,5	0,5	(0,0)
olv4*	1,0	1,0	0,75	
cmy4*	0,0	0,0	0,0	0,75

relative Natural Colour (NC)				
lab* <i>l</i>	0,75	0,75	0,75	-
lab* <i>tch</i>	0,75	0,75	0,75	-
lab* <i>nc</i>	0,75	0,75	0,75	-
lab* <i>ne</i>	0,75	0,75	0,75	-

standard and adapted CIELAB				
LAB* <i>LAB</i>	76,23	0,62	3,36	
LAB* <i>Tch</i>	75,19	0,01	-	
LAB* <i>Tch</i>	75,19	0,01	-	
LAB* <i>Tch</i>	75,19	0,01	-	

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

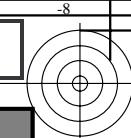
relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75	0,75	0,75	(1,0)
lab* <i>tch</i>	0,75	0,75	0,75	(0,0)
lab* <i>nc</i>	0,75	0,75	0,75	(0,0)
lab* <i>ne</i>	0,75	0,75	0,75	-

relative CIELAB lab*				
lab* <i>l</i>	0,75			



Input: Colorimetric Offset Reflective System ORS18

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

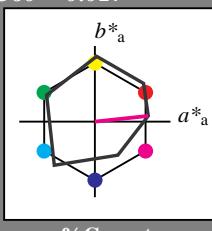
lab^*tch and lab^*nch

A: hue M

LCH*Ma: 56 71 6

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



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

relative Inform. Technology (IT)
 olv^3* 1.0 1.0 1.0 (1.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)
 olv^4* 1.0 1.0 1.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0
standard and adapted CIELAB
 LAB^*LAB 95.6 0.0 0.3 4.65
 LAB^*Tch 0.0 1.0 0.0
 LAB^*Tch 99.99 0.01

relative CIELAB lab*
 lab^*l 0.75 0.0 0.0
 lab^*tch 1.0 0.0 0.0
 lab^*nch 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 1.0 0.0 0.0
 lab^*nre 1.0 0.0 0.0
 lab^*nCE 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv^3* 0.75 0.25 0.25 (0.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)
 olv^4* 0.75 0.25 0.25 (0.0)
 $cmy4*$ 0.0 0.0 0.0
standard and adapted CIELAB
 LAB^*LAB 76.23 0.62 3.36
 LAB^*Tch 75.23 0.00 0.0
 LAB^*Tch 75.23 0.00 0.0

relative CIELAB lab*
 lab^*l 0.75 0.0 0.0
 lab^*tch 0.75 0.0 0.0
 lab^*nch 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.75 0.0 0.0
 lab^*nre 0.25 0.0 0.0
 lab^*nCE 0.25 0.0 0.0

relative Inform. Technology (IT)
 olv^3* 0.5 0.5 0.5 (1.0)
 $cmy3*$ 0.5 0.5 0.5 (0.0)
 olv^4* 0.5 0.5 0.5 (1.0)
 $cmy4*$ 0.0 0.0 0.0
standard and adapted CIELAB
 LAB^*LAB 56.86 0.8 2.08
 LAB^*Tch 0.0 1.0 0.0
 LAB^*Tch 50.0 0.0 0.0

relative CIELAB lab*
 lab^*l 0.5 0.0 0.0
 lab^*tch 0.5 0.0 0.0
 lab^*nch 0.5 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.5 0.0 0.0
 lab^*nre 0.5 0.0 0.0
 lab^*nCE 0.5 0.0 0.0

relative Inform. Technology (IT)
 olv^3* 0.5 0.25 0.25 (0.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)
 olv^4* 0.5 0.25 0.25 (0.0)
 $cmy4*$ 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.75 0.0 0.0
 lab^*nre 0.25 0.0 0.0
 lab^*nCE 0.25 0.0 0.0

relative Inform. Technology (IT)
 olv^3* 0.5 0.25 0.25 (0.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)
 olv^4* 0.5 0.25 0.25 (0.0)
 $cmy4*$ 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.75 0.0 0.0
 lab^*nre 0.25 0.0 0.0
 lab^*nCE 0.25 0.0 0.0

relative Inform. Technology (IT)
 olv^3* 0.75 0.75 0.75 (0.0)
 $cmy3*$ 0.75 0.75 0.75 (0.0)
 olv^4* 0.75 0.75 0.75 (0.0)
 $cmy4*$ 0.0 0.0 0.0
standard and adapted CIELAB
 LAB^*LAB 37.49 0.99 0.79
 LAB^*Tch 37.49 0.00 0.0
 LAB^*Tch 25.00 0.00 0.0

relative CIELAB lab*
 lab^*l 0.25 0.0 0.0
 lab^*tch 0.25 0.0 0.0
 lab^*nch 0.25 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.25 0.0 0.0
 lab^*nre 0.25 0.0 0.0
 lab^*nCE 0.25 0.0 0.0

relative Inform. Technology (IT)
 olv^3* 0.75 0.75 0.75 (0.0)
 $cmy3*$ 0.75 0.75 0.75 (0.0)
 olv^4* 1.0 1.0 1.0 (0.25)
 $cmy4*$ 0.0 0.0 0.0
standard and adapted CIELAB
 LAB^*LAB 18.12 1.18 -0.49
 LAB^*Tch 0.0 1.0 0.0
 LAB^*Tch 0.01 0.0 0.0

relative CIELAB lab*
 lab^*l 0.0 0.0 0.0
 lab^*tch 0.0 0.0 0.0
 lab^*nch 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.0 0.0 0.0
 lab^*nre 0.0 0.0 0.0
 lab^*nCE 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 1.0 1.0 1.0 (0.0)
 olv^4* 1.0 1.0 1.0 (0.0)
 $cmy4*$ 0.0 0.0 0.0
standard and adapted CIELAB
 LAB^*LAB 99.99 0.01 0.01
 LAB^*Tch 0.01 0.0 0.0

relative CIELAB lab*
 lab^*l 0.0 0.0 0.0
 lab^*tch 0.0 0.0 0.0
 lab^*nch 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.0 0.0 0.0
 lab^*nre 0.0 0.0 0.0
 lab^*nCE 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 1.0 1.0 1.0 (0.0)
 olv^4* 1.0 1.0 1.0 (0.0)
 $cmy4*$ 0.0 0.0 0.0
standard and adapted CIELAB
 LAB^*LAB 99.99 0.01 0.01
 LAB^*Tch 0.01 0.0 0.0

relative CIELAB lab*
 lab^*l 0.0 0.0 0.0
 lab^*tch 0.0 0.0 0.0
 lab^*nch 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.0 0.0 0.0
 lab^*nre 0.0 0.0 0.0
 lab^*nCE 0.0 0.0 0.0

$n^* = 1,0$

ORS18; adapted (a) CIELAB data

	$L^*=L_a^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	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

relative Inform. Technology (IT)
 olv^3* 1.0 1.0 1.0 (1.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)
 olv^4* 1.0 1.0 1.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0
standard and adapted CIELAB
 LAB^*LAB 95.41 0.01 0.01
 LAB^*Tch 0.01 0.0 0.0

relative CIELAB lab*
 lab^*l 0.75 0.0 0.0
 lab^*tch 1.0 0.0 0.0
 lab^*nch 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 1.0 0.0 0.0
 lab^*nre 0.0 0.0 0.0
 lab^*nCE 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv^3* 0.75 0.25 0.25 (0.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)
 olv^4* 0.75 0.25 0.25 (0.0)
 $cmy4*$ 0.0 0.0 0.0
standard and adapted CIELAB
 LAB^*LAB 75.92 35.91 7.13
 LAB^*Tch 75.92 35.49 3.12

relative CIELAB lab*
 lab^*l 0.746 0.497 0.053
 lab^*tch 0.875 0.25 0.017
 lab^*nch 0.0 0.25 0.017
relative Natural Colour (NC)
 lab^*lrc 0.746 0.476 -0.151
 lab^*nre 0.75 0.5 0.951
 lab^*nCE 0.0 0.5 0.80r

relative Inform. Technology (IT)
 olv^3* 0.75 0.25 0.25 (0.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)
 olv^4* 0.75 0.25 0.25 (0.0)
 $cmy4*$ 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.619 0.746 0.088
 lab^*nre 0.619 0.725 0.017
 lab^*nCE 0.0 0.75 0.80r

relative CIELAB lab*
 lab^*l 0.623 0.249 0.027
 lab^*tch 0.875 0.25 0.017
 lab^*nch 0.0 0.25 0.017
relative Natural Colour (NC)
 lab^*lrc 0.623 0.228 0.053
 lab^*nre 0.623 0.25 0.80r
 lab^*nCE 0.0 0.25 0.80r

relative Inform. Technology (IT)
 olv^3* 0.75 0.25 0.25 (0.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)
 olv^4* 0.75 0.25 0.25 (0.0)
 $cmy4*$ 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.619 0.715 0.237
 lab^*nre 0.619 0.703 0.237
 lab^*nCE 0.0 0.75 0.80r

relative CIELAB lab*
 lab^*l 0.496 0.397 0.103
 lab^*tch 0.875 0.25 0.017
 lab^*nch 0.0 0.25 0.017
relative Natural Colour (NC)
 lab^*lrc 0.496 0.476 0.151
 lab^*nre 0.496 0.503 0.951
 lab^*nCE 0.0 0.5 0.80r

relative Inform. Technology (IT)
 olv^3* 0.75 0.25 0.25 (0.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)
 olv^4* 0.75 0.25 0.25 (0.0)
 $cmy4*$ 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.373 0.253 0.075
 lab^*nre 0.373 0.25 0.80r
 lab^*nCE 0.0 0.25 0.80r

relative CIELAB lab*
 lab^*l 0.373 0.253 0.075
 lab^*tch 0.875 0.25 0.017
 lab^*nch 0.0 0.25 0.017
relative Natural Colour (NC)
 lab^*lrc 0.373 0.253 0.075
 lab^*nre 0.373 0.25 0.80r
 lab^*nCE 0.0 0.25 0.80r

relative Inform. Technology (IT)
 olv^3* 0.75 0.25 0.25 (0.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)
 olv^4* 0.75 0.25 0.25 (0.0)
 $cmy4*$ 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*lrc 0.373 0.253 0.075
 lab^*nre 0.373 0.25 0.80r
 lab^*nCE 0.0 0.25 0.80r

relative CIELAB lab*
 lab^*l 0.246 0.497 0.053
 lab^*tch 0.875 0.25 0.017
 lab^*nch 0.0 0.25 0.017
relative Natural Colour (NC)
 lab^*lrc 0.246 0.476 0.151
 lab^*nre 0.246 0.503 0.951
 lab^*nCE 0.0 0.5 0.80r

relative CIELAB lab*
 lab^*l 0.123 0.248 0.027
 lab^*tch 0.875 0.25 0.017
 lab^*nch 0.0 0.25 0.017
relative Natural Colour (NC)
 lab^*lrc 0.123 0.228 -0.075
 lab^*nre 0.123 0.25 0.80r
 lab^*nCE 0.0 0.25 0.80r

relative CIELAB lab*
 lab^*l 0.012 0.248 0.027
 lab^*tch 0.875 0.25 0.017
 lab^*nch 0.0 0.25 0.017
relative Natural Colour (NC)
 lab^*lrc 0.012 0.228 0.071
 lab^*nre 0.012 0.25 0.80r
 lab^*nCE 0.0 0.25 0.80r

$n^* = 0,50$

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

$n^* = 1,0$

SE500-7, 5 step scales for constant CIELAB hue 6/360 = 0.017 (left)

BAM-test chart SE50; Colorimetric systems ORS18 & TLS00
A: 2 coordinate data of 5 step colour scales for 10 hues

Output: Colorimetric Television Luminous System TLS00

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

lab^*tch and lab^*nch

A: hue M

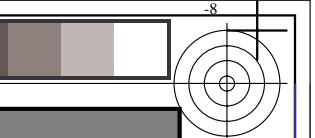
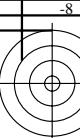
LCH*Ma: 67 82 339

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*

%Gamut

<p



BAM registration: 20060101-SE50/10S/S50E06NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems

See for similar files: <http://www.ps.bam.de/SE50/>

Version 2.1, io=00

Input: Colorimetric Offset Reflective System ORS18

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

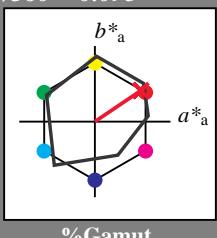
lab^*tch and lab^*nch

A: hue R

LCH*Ma: 49 79 34

olv*Ma: 1.0 0.0 0.15

triangle lightness t^*



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

relative Inform. Technology (IT)
 olv^3* 1.0 1.0 1.0 (1.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)
 olv^4* 1.0 1.0 1.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
 LAB^*LAB 95.6 0.3 4.65
 LAB^*Tch 0.0 0.0 0.0
 LAB^*Tch 99.99 0.01

relative CIELAB lab*
 lab^*lab 0.0 0.0 0.0
 lab^*tch 1.0 0.0 0.0
 lab^*nch 0.0 0.0 0.0
relative Natural Colour (NC)
 lab^*r 0.0 0.0 0.0
 lab^*c 0.0 0.0 0.0
 lab^*nC 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv^3* 0.75 0.25 0.75 (1.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)
 olv^4* 1.0 1.0 1.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
 LAB^*LAB 76.23 0.62 3.36
 LAB^*Tch 75.23 0.0 0.0
 LAB^*Tch 75.23 0.0 0.01

relative CIELAB lab*
 lab^*lab 0.75 0.0 0.0
 lab^*tch 0.75 0.0 0.0
 lab^*nch 0.75 0.0 0.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.5 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

relative CIELAB lab*
 lab^*lab 0.75 0.25 0.58 (1.0)
 lab^*tch 0.25 0.25 0.25 (0.0)
 lab^*nch 0.75 0.788 1.0
relative Natural Colour (NC)
 lab^*r 0.75 0.0 0.0
 lab^*c 0.75 0.0 0.0
 lab^*nC 0.75 0.0 0.0

Output: Colorimetric Television Luminous System TLS00

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

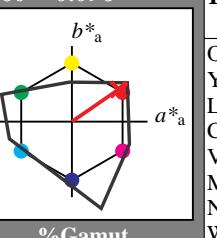
lab^*tch and lab^*nch

A: hue R

LCH*Ma: 66 89 35

olv*Ma: 1.0 0.0 0.01

triangle lightness t^*



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

%Regularity

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

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

relative Inform. Technology (IT)
 olv^3* 1.0 0.75 0.753 (1.0)
 $cmy3*$ 0.0 0.25 0.247 (0.0)
 olv^4* 1.0 0.0 0.0 (0.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
 LAB^*LAB 87.94 18.33 12.64
 LAB^*Tch 87.5 22.27 34.58

relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)

relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)

relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)

relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)

relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)

relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)

relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)

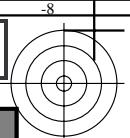
relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)

relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)

relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)

relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)

relative CIELAB lab*
 lab^*lab 0.92 0.206 0.142
 lab^*tch 1.0 0.5 0.495 (0.0)
 lab^*nch 0.0 0.25 0.098 (0.0)
relative Natural Colour (NC)
 lab^*r 0.92 0.25 0.247 (0.0)
 lab^*c 0.875 0.25 1.0
 lab^*nC 0.0 0.25 0.099 (0.0)



Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 84/360 = 0.235$

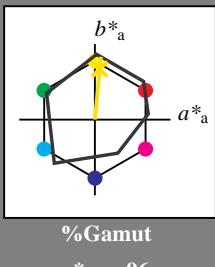
lab^*tch and lab^*nch

A: hue J

LCH*Ma: 89 83 84

olv*Ma: 1.0 0.91 0.0

triangle lightness t^*



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

relative Inform. Technology (IT)
olv3* 1.0 0.977 0.75 (1.0)
cmy3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 0.977 0.75 (1.0)
cmy4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.6 0.3 4.65
LAB*TCh 95.6 0.0 0.0
LAB*TCh 99.99 0.01

relative CIELAB lab*
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
lab*ncE 0.0 0.0 0.0
lab*ncE 0.0 0.0 0.0

relative Inform. Technology (ID)
olv3* 0.75 0.27 0.5 (1.0)
cmy3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 1.0 1.0 0.75
cmy4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.25 0.62 3.36
LAB*TCh 76.25 0.0 0.0
LAB*TCh 75.99 0.01

relative CIELAB lab*
lab*tch 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
relative Natural Colour (NC)
lab*irJ 0.75 0.0 0.0
lab*rcE 0.75 0.0 0.0
lab*ncE 0.25 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.727 0.5 (1.0)
cmy3* 0.25 0.273 0.5 (0.0)
olv4* 1.0 0.977 0.75 (1.0)
cmy4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 74.46 2.66 24.03
LAB*TCh 74.46 2.00 20.77
LAB*TCh 62.5 0.0 0.0

relative CIELAB lab*
lab*tch 0.727 0.024 0.249
lab*tch 0.25 0.25 0.235
relative Natural Colour (NC)
lab*irJ 0.727 0.0 0.235
lab*rcE 0.25 0.25 0.235
standard and adapted CIELAB
LAB*LAB 56.86 8.8 2.08
LAB*TCh 56.86 8.8 2.08
LAB*TCh 50.0 0.0 0.0

relative CIELAB lab*
lab*tch 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
relative Natural Colour (NC)
lab*irJ 0.5 0.0 0.0
lab*rcE 0.5 0.0 0.0
lab*ncE 0.5 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.477 0.25 (1.0)
cmy3* 0.25 0.25 0.25 (0.0)
olv4* 1.0 0.977 0.75 (1.0)
cmy4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.49 0.99 0.79
LAB*TCh 37.49 0.0 0.0
LAB*TCh 37.49 0.01

relative CIELAB lab*
lab*tch 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
relative Natural Colour (NC)
lab*irJ 0.25 0.0 0.0
lab*rcE 0.25 0.0 0.0
lab*ncE 0.25 0.0 0.0

relative Inform. Technology (IT)
olv3* 1.0 0.0 0.0 (1.0)
cmy3* 1.0 1.0 1.0 (0.0)
olv4* 1.0 0.0 0.0 (1.0)
cmy4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.12 1.18 -0.49
LAB*TCh 18.12 1.18 -0.49
LAB*TCh 0.01 0.0 0.0

relative CIELAB lab*
lab*tch 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*irJ 0.0 0.0 0.0
lab*rcE 0.0 0.0 0.0
lab*ncE 1.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 1.0 0.977 0.75 (1.0)
cmy3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 0.977 0.75 (1.0)
cmy4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 93.8 2.46 20.31
LAB*TCh 93.8 2.02 20.77
LAB*TCh 93.8 0.0 0.0

relative Inform. Technology (ID)
olv3* 1.0 0.977 0.75 (1.0)
cmy3* 0.0 0.0 0.0 (0.0)
olv4* 1.0 0.977 0.75 (1.0)
cmy4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 92.06 4.5 45.96
LAB*TCh 92.06 4.04 41.54
LAB*TCh 92.06 4.17 33.84

relative CIELAB lab*
lab*tch 0.954 0.048 0.498
lab*tch 0.25 0.25 0.25
relative Natural Colour (NC)
lab*irJ 0.954 0.0 0.5
lab*rcE 0.75 0.0 0.5
standard and adapted CIELAB
LAB*LAB 90.29 6.54 66.61
LAB*TCh 90.29 6.06 62.31
LAB*TCh 62.6 0.0 0.0

relative CIELAB lab*
lab*tch 0.954 0.048 0.498
lab*tch 0.25 0.25 0.25
relative Natural Colour (NC)
lab*irJ 0.954 0.0 0.5
lab*rcE 0.75 0.0 0.5
standard and adapted CIELAB
LAB*LAB 74.46 2.66 24.03
LAB*TCh 74.46 2.00 20.77
LAB*TCh 62.5 0.0 0.0

relative CIELAB lab*
lab*tch 0.727 0.024 0.249
lab*tch 0.25 0.25 0.235
relative Natural Colour (NC)
lab*irJ 0.727 0.0 0.235
lab*rcE 0.25 0.25 0.235
standard and adapted CIELAB
LAB*LAB 56.86 8.8 2.08
LAB*TCh 56.86 8.8 2.08
LAB*TCh 50.0 0.0 0.0

relative CIELAB lab*
lab*tch 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
relative Natural Colour (NC)
lab*irJ 0.5 0.0 0.0
lab*rcE 0.5 0.0 0.0
lab*ncE 0.5 0.0 0.0

relative CIELAB lab*
lab*tch 0.474 0.024 0.249
lab*tch 0.25 0.25 0.235
relative Natural Colour (NC)
lab*irJ 0.474 0.0 0.235
lab*rcE 0.25 0.25 0.235
standard and adapted CIELAB
LAB*LAB 53.32 4.89 43.38
LAB*TCh 53.32 4.05 41.53
LAB*TCh 50.0 0.0 0.0

relative CIELAB lab*
lab*tch 0.454 0.048 0.498
lab*tch 0.25 0.25 0.235
relative Natural Colour (NC)
lab*irJ 0.454 0.0 0.5
lab*rcE 0.25 0.25 0.235
standard and adapted CIELAB
LAB*LAB 35.71 3.03 21.44
LAB*TCh 35.71 2.00 20.76
LAB*TCh 35.71 0.0 0.0

relative CIELAB lab*
lab*tch 0.222 0.024 0.249
lab*tch 0.25 0.25 0.235
relative Natural Colour (NC)
lab*irJ 0.222 0.0 0.25
lab*rcE 0.25 0.25 0.235
standard and adapted CIELAB
LAB*LAB 18.12 1.18 -0.49
LAB*TCh 18.12 1.18 -0.49
LAB*TCh 0.01 0.0 0.0

relative CIELAB lab*
lab*tch 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*irJ 0.0 0.0 0.0
lab*rcE 0.0 0.0 0.0
lab*ncE 1.0 0.0 0.0

$n^* = 1,0$

relative Inform. Technology (IT)
olv3* 1.0 0.954 0.5 (1.0)
cmy3* 0.0 0.046 0.5 (0.0)
olv4* 1.0 0.954 0.5 (1.0)
cmy4* 0.0 0.046 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 92.06 4.5 45.96
LAB*TCh 92.06 4.04 41.54
LAB*TCh 92.06 4.17 33.84

relative Inform. Technology (ID)
olv3* 1.0 0.954 0.5 (1.0)
cmy3* 0.0 0.046 0.5 (0.0)
olv4* 1.0 0.954 0.5 (1.0)
cmy4* 0.0 0.046 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 90.29 6.54 66.61
LAB*TCh 90.29 6.06 62.31
LAB*TCh 62.6 0.0 0.0

relative CIELAB lab*
lab*tch 0.954 0.048 0.498
lab*tch 0.25 0.25 0.25
relative Natural Colour (NC)
lab*irJ 0.954 0.0 0.5
lab*rcE 0.75 0.0 0.5
standard and adapted CIELAB
LAB*LAB 74.46 2.66 24.03
LAB*TCh 74.46 2.00 20.77
LAB*TCh 62.5 0.0 0.0

relative CIELAB lab*
lab*tch 0.727 0.024 0.249
lab*tch 0.25 0.25 0.235
relative Natural Colour (NC)
lab*irJ 0.727 0.0 0.235
lab*rcE 0.25 0.25 0.235
standard and adapted CIELAB
LAB*LAB 56.86 8.8 2.08
LAB*TCh 56.86 8.8 2.08
LAB*TCh 50.0 0.0 0.0

relative CIELAB lab*
lab*tch 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
relative Natural Colour (NC)
lab*irJ 0.5 0.0 0.0
lab*rcE 0.5 0.0 0.0
lab*ncE 0.5 0.0 0.0

relative CIELAB lab*
lab*tch 0.474 0.024 0.249
lab*tch 0.25 0.25 0.235
relative Natural Colour (NC)
lab*irJ 0.474 0.0 0.235
lab*rcE 0.25 0.25 0.235
standard and adapted CIELAB
LAB*LAB 53.32 4.89 43.38
LAB*TCh 53.32 4.05 41.53
LAB*TCh 50.0 0.0 0.0

relative CIELAB lab*
lab*tch 0.454 0.048 0.498
lab*tch 0.25 0.25 0.235
relative Natural Colour (NC)
lab*irJ 0.454 0.0 0.5
lab*rcE 0.25 0.25 0.235
standard and adapted CIELAB
LAB*LAB 35.71 3.03 21.44
LAB*TCh 35.71 2.00 20.76
LAB*TCh 35.71 0.0 0.0

relative CIELAB lab*
lab*tch 0.222 0.024 0.249
lab*tch 0.25 0.25 0.235
relative Natural Colour (NC)
lab*irJ 0.222 0.0 0.25
lab*rcE 0.25 0.25 0.235
standard and adapted CIELAB
LAB*LAB 18.12 1.18 -0.49
LAB*TCh 18.12 1.18 -0.49
LAB*TCh 0.01 0.0 0.0

relative CIELAB lab*
lab*tch 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*irJ 0.0 0.0 0.0
lab*rcE 0.0 0.0 0.0
lab*ncE 1.0 0.0 0.0

$n^* = 0,50$

chromaticness c^*

$n^* = 1,00$

blackness n^*

$n^* = 0,25$

$n^* = 0,50$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,00$

$n^* = 0,00$

$n^* = 0,00$

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^*



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

%Regularity

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

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

%Regularity

$g^*_{H,rel} = 0,00$

$g^*_{C,rel} = 0,00$

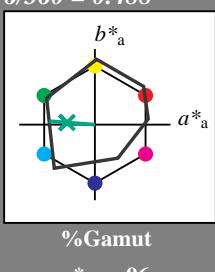
%Regularity

$g^*_{H,rel} = 0,00$



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^*



	$L^*=L_a^*$	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

relative Inform. Technology (IT)
 olv^3* 1.0 1.0 1.0 (1.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)
 olv^4* 1.0 1.0 1.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 95.6 0.0 4.65
 LAB^*LCh 99.9 0.01
 LAB^*TCh 99.9 0.01

relative CIELAB lab*

lab^*tch 0.0 0.0 0.0
 lab^*nch 1.0 0.0 0.0

relative Natural Colour (NC)
 lab^*lrc 1.0 0.0 0.0
 lab^*nCE 0.0 0.0 0.0

relative CIELAB lab*

olv^3* 0.5 0.25 0.25 (0.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)

olv^4* 1.0 1.0 1.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 76.23 0.62 3.36
 LAB^*LCh 75.23 0.0 0.0
 LAB^*TCh 75.23 0.01 0.0

relative CIELAB lab*

lab^*tch 0.5 0.0 0.0
 lab^*nch 0.5 0.0 0.0

relative Natural Colour (NC)
 lab^*lrc 0.75 0.0 0.0
 lab^*nCE 0.25 0.0 0.0

relative CIELAB lab*

olv^3* 0.5 0.5 0.5 (1.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)

olv^4* 1.0 1.0 1.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 56.86 0.8 2.08
 LAB^*LCh 56.86 0.0 0.0
 LAB^*TCh 50.0 0.01 0.0

relative CIELAB lab*

lab^*tch 0.5 0.0 0.0
 lab^*nch 0.5 0.0 0.0

relative Natural Colour (NC)
 lab^*lrc 0.75 0.0 0.0
 lab^*nCE 0.25 0.0 0.0

relative CIELAB lab*

olv^3* 0.5 0.75 0.75 (0.0)
 $cmy3*$ 0.25 0.25 0.25 (0.0)

olv^4* 1.0 1.0 1.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 37.49 0.99 0.79
 LAB^*LCh 37.49 0.0 0.0
 LAB^*TCh 25.01 0.0 0.0

relative CIELAB lab*

lab^*tch 0.25 0.0 0.0
 lab^*nch 0.25 0.0 0.0

relative Natural Colour (NC)
 lab^*lrc 0.25 0.0 0.0
 lab^*nCE 0.25 0.0 0.0

relative CIELAB lab*

olv^3* 0.0 0.0 0.0 (1.0)
 $cmy3*$ 1.0 1.0 1.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 18.12 1.18 -0.49
 LAB^*LCh 18.12 0.0 0.0
 LAB^*TCh 0.01 0.0 0.0

relative CIELAB lab*

lab^*tch 0.0 0.0 0.0
 lab^*nch 1.0 0.0 0.0
 lab^*nCE 0.0 0.0 0.0

relative Natural Colour (NC)
 lab^*lrc 0.0 0.0 0.0
 lab^*nCE 1.0 0.0 0.0

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 0.01 0.01

relative CIELAB lab*

lab^*tch 0.108 -0.248 0.019
 lab^*nch 0.25 0.25 0.488

relative Natural Colour (NC)
 lab^*lrc 0.106 -0.249 0.0
 lab^*nCE 0.75 0.25 199g

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 36.34 -14.01 1.2
 LAB^*LCh 26.34 -1.34 0.0
 LAB^*TCh 15.11 15.11 0.0

relative CIELAB lab*

lab^*tch 0.212 -0.497 0.038
 lab^*nch 0.25 0.5 0.488

relative Natural Colour (NC)
 lab^*lrc 0.212 -0.499 0.0
 lab^*nCE 0.25 0.5 0.3

relative CIELAB lab*

olv^3* 0.0 0.0 0.0 (1.0)
 $cmy3*$ 1.0 1.0 1.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 18.12 1.18 -0.49
 LAB^*LCh 18.12 0.0 0.0
 LAB^*TCh 0.01 0.0 0.0

relative CIELAB lab*

lab^*tch 0.0 0.0 0.0
 lab^*nch 1.0 0.0 0.0
 lab^*nCE 0.0 0.0 0.0

relative Natural Colour (NC)
 lab^*lrc 0.0 0.0 0.0
 lab^*nCE 1.0 0.0 0.0

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv^4* 0.0 0.0 0.0 (1.0)
 $cmy4*$ 0.0 0.0 0.0 (0.0)

standard and adapted CIELAB
 LAB^*LAB 99.9 0.01 0.01
 LAB^*LCh 99.9 0.01 0.01
 LAB^*TCh 15.11 15.11 0.01

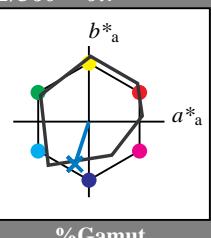
relative CIELAB lab*

olv^3* 1.0 1.0 1.0 (0.0)
 $cmy3*$ 0.0 0.0 0.0 (0.0)

olv



Input: Colorimetric Offset Reflective System ORS18

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

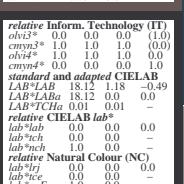
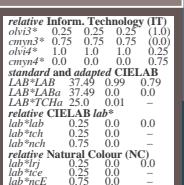
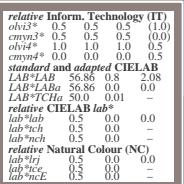
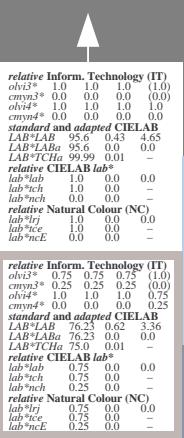
ORS18; adapted (a) CIELAB data

	$L^*=L_a^*$	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

A: hue B

LCH*Ma: 40 55 252

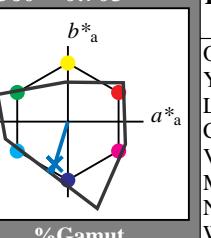
olv*Ma: 0.0 0.56 1.0

triangle lightness t^*  $n^* = 1,0$

SE500-7, 5 step scales for constant CIELAB hue 252/360 = 0.7 (left)

See for similar files: <http://www.ps.bam.de/SE50/>Technical information: <http://www.ps.bam.de> Version 2.1, io=00

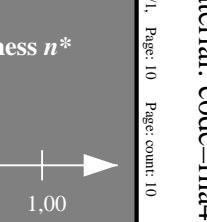
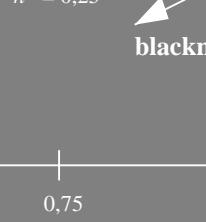
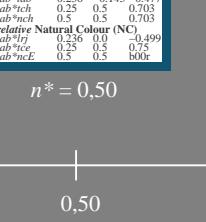
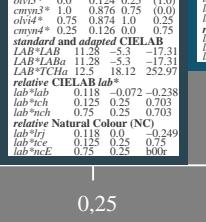
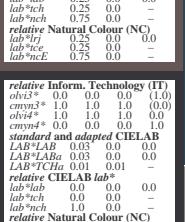
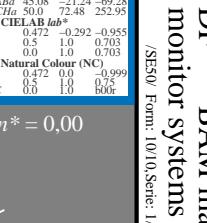
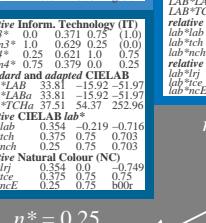
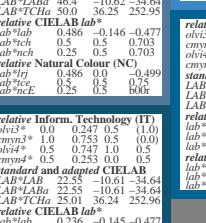
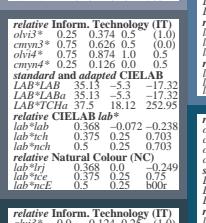
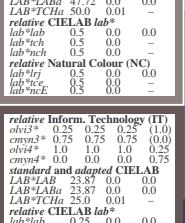
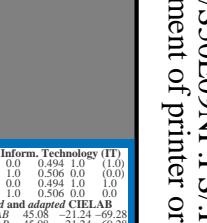
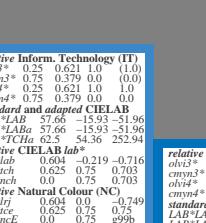
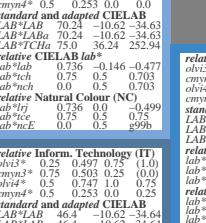
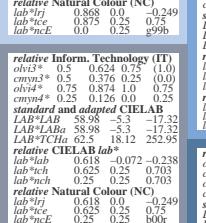
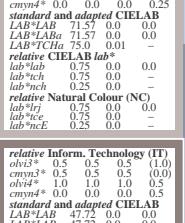
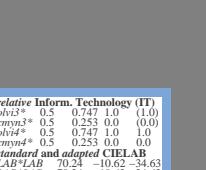
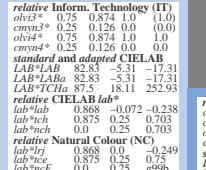
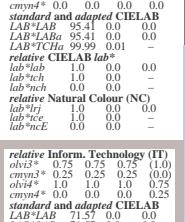
Output: Colorimetric Television Luminous System TLS00

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

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

%Regularity

 $g^*_{H,rel} = -385$ $g^*_{C,rel} = 62$  $n^* = 1,0$

SE500-7, 5 step scales for constant CIELAB hue 253/360 = 0.703 (right)

BAM-test chart SE50; Colorimetric systems ORS18 & TLS00
A: 2 coordinate data of 5 step colour scales for 10 huesinput: $cmy0^*$ setcmykcolor
output: no change compared to inputBAM registration: 20060101-SE50/10S/S50E09NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems

/SE50 Form:10/10/Serie: 1/1, Page: 10 Page: count: 10