BAM registration: 20060101-NE10/10S/S10E00F1.PS/.TXT
application for evaluation and measurement of printer or monitor systems
BAM material: code=tha4ta
Origin: Fonts, Sect: GL, Page: 1
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See for similar files: http://www.ps.bam.de/NE10/
Technical information: http://www.ps.bam.de Version 2.1, io=1.1, CIELAB

Input: Colorimetric Offset Reflective System ORS18

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

D65: hue O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0

triangle lightness *t**

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	
M_{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^*_{tol} = 93
%Regularity
$g^*_{R,tol}$ = 57
$g^*_{C,rel}$ = 59

relative **Intensity. 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	
*cmyn4**	0.0	0.0	0.0	

***standard and adapted* CIELAB**

*LAB*LAB*	95.41	−0.98	4.75
*LAB*LABa*	95.41	0.0	0.0
*LAB*TCHa*	99.99	0.01	–

relative* CIELAB *lab*

*lab*lab*	1.0	0.0	0.0
*lab*tch*	1.0	0.0	–
*lab*nch*	0.0	0.0	–

***relative* Natural Colour (NC)**

*lab*lrj*	1.0	0.0	0.0
*lab*tcc*	1.0	0.0	–
*lab*ncc*	0.0	0.0	–

relative **Intensity. Technology (IT)**

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

***standard and adapted* CIELAB**

*LAB*LAB*	71.67	32.15	28.41
*LAB*LABa*	71.67	32.69	25.25
*LAB*TCHa*	75.0	41.31	37.69

relative* CIELAB *lab*

*lab*lab*	0.693	0.396	0.306
*lab*tch*	0.75	0.5	0.105
*lab*nch*	0.0	0.5	0.105

***relative* Natural Colour (NC)**

*lab*lrj*	0.693	0.477	0.15
*lab*tcc*	0.75	0.5	0.048
*lab*ncc*	0.0	0.5	r19j

relative **Intensity. Technology (IT)**

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

***standard and adapted* CIELAB**

*LAB*LAB*	32.98	32.9	25.8
*LAB*LABa*	32.98	32.69	25.25
*LAB*TCHa*	25.01	41.31	37.69

relative* CIELAB *lab*

*lab*lab*	0.193	0.396	0.306
*lab*tch*	0.25	0.5	0.105
*lab*nch*	0.5	0.5	0.105

***relative* Natural Colour (NC)**

*lab*lrj*	0.193	0.477	0.15
*lab*tcc*	0.25	0.5	0.048
*lab*ncE*	0.5	0.5	r19j

relative **Intensity. Technology (IT)**

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

***standard and adapted* CIELAB**

*LAB*LAB*	18.02	0.5	−0.47
*LAB*LABa*	18.02	0.0	0.0
*LAB*TCHa*	0.01	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.0	0.0	0.0
*lab*tch*	0.0	0.0	–
*lab*nch*	1.0	0.0	–

***relative* Natural Colour (NC)**

*lab*lrj*	0.0	0.0	0.0
*lab*tcc*	0.0	0.0	–
*lab*ncc*	0.0	0.0	–

relative **Intensity. Technology (IT)**

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

***standard and adapted* CIELAB**

*LAB*LAB*	47.94	65.3	52.06
*LAB*LABa*	47.94	65.37	50.51
*LAB*TCHa*	50.0	82.61	37.69

relative* CIELAB *lab*

*lab*lab*	0.387	0.791	0.611
*lab*tch*	0.5	1.0	0.105
*lab*nch*	0.0	1.0	0.105

***relative* Natural Colour (NC)**

*lab*lrj*	0.387	0.954	0.299
*lab*tcc*	0.5	1.0	0.048
*lab*ncE*	0.0	1.0	r19j

n = 0,00*

blackness *n**

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

chromaticness *c**

n = 1,0*

Output: Colorimetric Television Luminous System TLS00

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

D65: hue O
LCH*Ma: 51 100 40
olv*Ma: 1.0 0.0 0.0

triangle lightness *t**

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	
M_{Ma} 58.39	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^*_{tol} = 158
%Regularity
$g^*_{R,tol}$ = 20
$g^*_{C,rel}$ = 37

relative **Intensity. Technology (IT)**

*olvi3**	1.0	0.5	(1.0)
*cmyn3**	0.0	0.5	(0.0)
*olvi4**	1.0	0.5	1.0
*cmyn4**	0.0	0.5	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*tcc*	1.0	0.0	–
*lab*ncE*	0.0	0.0	–

relative **Intensity. Technology (IT)**

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

***standard and adapted* CIELAB**

*LAB*LAB*	47.72	0.0	0.0
*LAB*LABa*	47.72	0.0	0.0
*LAB*TCHa*	50.0	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.5	0.0	0.0
*lab*tch*	0.5	0.0	–
*lab*nch*	0.5	0.0	–

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	0.0	0.0
*lab*tcc*	0.5	0.0	–
*lab*ncE*	0.5	0.0	–

relative **Intensity. Technology (IT)**

*olvi3**	0.0	0.0	0.0
*cmyn3**	1.0	1.0	1.0
*olvi4**	1.0	1.0	1.0
*cmyn4**	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*tcc*	0.0	0.0	–
*lab*ncc*	0.0	0.0	–

relative **Intensity. Technology (IT)**

*olvi3**	1.0	0.5	(1.0)
*cmyn3**	0.0	0.5	(0.0)
*olvi4**	1.0	0.5	1.0
*cmyn4**	0.0	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*	0.75	0.5	0.111

***relative* Natural Colour (NC)**

*lab*lrj*	0.765	0.471	0.167
*lab*tcc*	0.75	0.5	0.054
*lab*ncE*	0.0	0.5	r21j

relative **Intensity. Technology (IT)**

*olvi3**	0.5	0.0	(1.0)
*cmyn3**	0.5	1.0	(0.0)
*olvi4**	1.0	0.5	0.5
*cmyn4**	0.0	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*tcc*	0.25	0.5	0.054
*lab*ncE*	0.5	0.5	r21j

relative **Intensity. Technology (IT)**

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

***standard and adapted* CIELAB**

*LAB*LAB*	0.529	0.766	0.643
*LAB*LABa*	0.5	1.0	0.111
*LAB*TCHa*	0.0	1.0	0.111

relative* CIELAB *lab*

*lab*lab*	0.529	0.942	0.335
*lab*tch*	0.5	1.0	0.054
*lab*nch*	0.0	1.0	r21j

n = 0,00*

blackness *n**

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

chromaticness *c**

n = 1,0*

NE100–7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left) | 3 step scales for constant CIELAB hue 40/360 = 0.111 (right)

BAM-test chart NE10; Colorimetric systems ORS18 & TLS00
D65: 2 coordinate data of 3 step colour scales for 10 hues

input: *olv* setrgbcolor*
output: *olv* setrgbcolor / w* setgray*