www.ps.bam.de/TE51/L51E00N1.PS/.TXT; start output
N: No Output Linearization (OL) data in File (F), Startup (S) or Device (D)

See for similar files: http://www.ps.bam.de/TE51/
Technical information: http://www.ps.bam.de Version 2.1, io=1.1

BAM registration: 20060101-TE51/L51E00N1.PS/.TXT
application for evaluation and measurement of printer or monitor systems

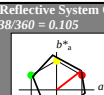
BAM material: code=tha4a
TE51 (page=1/8, Sect=L1, Dup=1 Page=cover.1

Input: Colorimetric 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
rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 93

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	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	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

%Regularity

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

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

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

n^* = 0,00
n^* = 0,25
n^* = 0,50
n^* = 1.0

blackness n^*

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

chromaticness c^*

relative Inform. Technology (IT)
$sha2^*$ 1.0 1.0 1.0 (1.0)
$cma2^*$ 0.0 1.0 1.0 (1.0)
$sha4^*$ 1.0 1.0 0.0 0.5
$cma4^*$ 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB^*Abs 50.00 0.0 0.0
LAB^*Chr 95.41 0.0 0.0
LAB^*Chr2 99.99 0.0 0.0
relative CIELAB lab*
lab^*sh 1.0 0.0 0.0
lab^*cm 1.0 0.0 0.0
lab^*tc 1.0 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 1.0 0.0 –
lab^*Cx 1.0 0.0 –
lab^*Ce 1.0 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.75 0.75 0.75 (1.0)
$cma2^*$ 0.75 0.75 0.75 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.75
$cma4^*$ 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB^*Abs 76.08 0.0 0.0
LAB^*Chr 76.08 0.0 0.0
LAB^*Chr2 76.08 0.0 0.0
relative CIELAB lab*
lab^*sh 0.75 0.0 0.0
lab^*cm 0.75 0.0 0.0
lab^*tc 0.25 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.5 0.0 –
lab^*Cx 0.25 0.0 –
lab^*Ce 0.25 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.5 0.5 0.5 (1.0)
$cma2^*$ 0.5 0.5 0.5 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.5
$cma4^*$ 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB^*Abs 63.54 0.0 0.0
LAB^*Chr 50.0 0.0 0.0
LAB^*Chr2 50.0 0.0 0.0
relative CIELAB lab*
lab^*sh 0.5 0.0 0.0
lab^*cm 0.5 0.0 0.0
lab^*tc 0.5 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.5 0.0 –
lab^*Cx 0.5 0.0 –
lab^*Ce 0.5 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.75 0.75 0.75 (1.0)
$cma2^*$ 0.75 0.75 0.75 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.25
$cma4^*$ 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB^*Abs 37.36 0.0 0.0
LAB^*Chr 25.46 0.0 0.0
LAB^*Chr2 25.46 0.0 0.0
relative CIELAB lab*
lab^*sh 0.25 0.0 0.0
lab^*cm 0.25 0.0 0.0
lab^*tc 0.25 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.25 0.0 –
lab^*Cx 0.25 0.0 –
lab^*Ce 0.25 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 1.0 1.0 1.0 (1.0)
$cma2^*$ 0.0 0.0 0.0 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.0
$cma4^*$ 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB^*Abs 100.0 0.0 0.0
LAB^*Chr 0.0 0.0 0.0
LAB^*Chr2 0.0 0.0 0.0
relative CIELAB lab*
lab^*sh 0.0 0.0 0.0
lab^*cm 0.0 0.0 0.0
lab^*tc 0.0 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.0 0.0 –
lab^*Cx 0.0 0.0 –
lab^*Ce 0.0 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.5 0.5 0.5 (1.0)
$cma2^*$ 0.5 0.5 0.5 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.5
$cma4^*$ 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB^*Abs 63.54 0.0 0.0
LAB^*Chr 50.0 0.0 0.0
LAB^*Chr2 50.0 0.0 0.0
relative CIELAB lab*
lab^*sh 0.5 0.0 0.0
lab^*cm 0.5 0.0 0.0
lab^*tc 0.5 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.5 0.0 –
lab^*Cx 0.5 0.0 –
lab^*Ce 0.5 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.75 0.75 0.75 (1.0)
$cma2^*$ 0.75 0.75 0.75 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.75
$cma4^*$ 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB^*Abs 76.08 0.0 0.0
LAB^*Chr 76.08 0.0 0.0
LAB^*Chr2 76.08 0.0 0.0
relative CIELAB lab*
lab^*sh 0.75 0.0 0.0
lab^*cm 0.75 0.0 0.0
lab^*tc 0.25 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.5 0.0 –
lab^*Cx 0.25 0.0 –
lab^*Ce 0.25 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 1.0 1.0 1.0 (1.0)
$cma2^*$ 0.0 0.0 0.0 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.0
$cma4^*$ 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB^*Abs 100.0 0.0 0.0
LAB^*Chr 0.0 0.0 0.0
LAB^*Chr2 0.0 0.0 0.0
relative CIELAB lab*
lab^*sh 0.0 0.0 0.0
lab^*cm 0.0 0.0 0.0
lab^*tc 0.0 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.0 0.0 –
lab^*Cx 0.0 0.0 –
lab^*Ce 0.0 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.5 0.5 0.5 (1.0)
$cma2^*$ 0.5 0.5 0.5 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.5
$cma4^*$ 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB^*Abs 63.54 0.0 0.0
LAB^*Chr 50.0 0.0 0.0
LAB^*Chr2 50.0 0.0 0.0
relative CIELAB lab*
lab^*sh 0.5 0.0 0.0
lab^*cm 0.5 0.0 0.0
lab^*tc 0.5 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.5 0.0 –
lab^*Cx 0.5 0.0 –
lab^*Ce 0.5 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.75 0.75 0.75 (1.0)
$cma2^*$ 0.75 0.75 0.75 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.25
$cma4^*$ 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB^*Abs 37.36 0.0 0.0
LAB^*Chr 25.46 0.0 0.0
LAB^*Chr2 25.46 0.0 0.0
relative CIELAB lab*
lab^*sh 0.25 0.0 0.0
lab^*cm 0.25 0.0 0.0
lab^*tc 0.25 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.25 0.0 –
lab^*Cx 0.25 0.0 –
lab^*Ce 0.25 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.75 0.75 0.75 (1.0)
$cma2^*$ 0.75 0.75 0.75 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.75
$cma4^*$ 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB^*Abs 76.08 0.0 0.0
LAB^*Chr 76.08 0.0 0.0
LAB^*Chr2 76.08 0.0 0.0
relative CIELAB lab*
lab^*sh 0.75 0.0 0.0
lab^*cm 0.75 0.0 0.0
lab^*tc 0.25 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.5 0.0 –
lab^*Cx 0.25 0.0 –
lab^*Ce 0.25 0.0 –

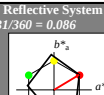
relative Inform. Technology (IT)
$sha2^*$ 1.0 1.0 1.0 (1.0)
$cma2^*$ 0.0 0.0 0.0 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.0
$cma4^*$ 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB^*Abs 100.0 0.0 0.0
LAB^*Chr 0.0 0.0 0.0
LAB^*Chr2 0.0 0.0 0.0
relative CIELAB lab*
lab^*sh 0.0 0.0 0.0
lab^*cm 0.0 0.0 0.0
lab^*tc 0.0 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.0 0.0 –
lab^*Cx 0.0 0.0 –
lab^*Ce 0.0 0.0 –

Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 31/360 = 0.086
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 50 78 31
rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

u^*_{rel} = 92

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.56	57.27	−43.6	71.99	323
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	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Regularity

$g^*_{H,rel}$ = 42

$g^*_{C,rel}$ = 49

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

n^* = 0,00
n^* = 0,25
n^* = 0,50
n^* = 1.0

blackness n^*

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

chromaticness c^*

relative Inform. Technology (IT)
$sha2^*$ 1.0 1.0 1.0 (1.0)
$cma2^*$ 0.0 1.0 1.0 (1.0)
$sha4^*$ 1.0 1.0 0.0 0.5
$cma4^*$ 0.0 0.0 0.0 0.0
standard and adapted CIELAB
LAB^*Abs 50.00 0.0 0.0
LAB^*Chr 95.41 0.0 0.0
LAB^*Chr2 99.99 0.0 0.0
relative CIELAB lab*
lab^*sh 1.0 0.0 0.0
lab^*cm 1.0 0.0 0.0
lab^*tc 1.0 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 1.0 0.0 –
lab^*Cx 1.0 0.0 –
lab^*Ce 1.0 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.75 0.75 0.75 (1.0)
$cma2^*$ 0.75 0.75 0.75 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.75
$cma4^*$ 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB^*Abs 76.08 0.0 0.0
LAB^*Chr 76.08 0.0 0.0
LAB^*Chr2 76.08 0.0 0.0
relative CIELAB lab*
lab^*sh 0.75 0.0 0.0
lab^*cm 0.75 0.0 0.0
lab^*tc 0.25 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.5 0.0 –
lab^*Cx 0.25 0.0 –
lab^*Ce 0.25 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.5 0.5 0.5 (1.0)
$cma2^*$ 0.5 0.5 0.5 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.5
$cma4^*$ 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB^*Abs 63.54 0.0 0.0
LAB^*Chr 50.0 0.0 0.0
LAB^*Chr2 50.0 0.0 0.0
relative CIELAB lab*
lab^*sh 0.5 0.0 0.0
lab^*cm 0.5 0.0 0.0
lab^*tc 0.5 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.5 0.0 –
lab^*Cx 0.5 0.0 –
lab^*Ce 0.5 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.75 0.75 0.75 (1.0)
$cma2^*$ 0.75 0.75 0.75 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.25
$cma4^*$ 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB^*Abs 37.36 0.0 0.0
LAB^*Chr 25.46 0.0 0.0
LAB^*Chr2 25.46 0.0 0.0
relative CIELAB lab*
lab^*sh 0.25 0.0 0.0
lab^*cm 0.25 0.0 0.0
lab^*tc 0.25 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.25 0.0 –
lab^*Cx 0.25 0.0 –
lab^*Ce 0.25 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 1.0 1.0 1.0 (1.0)
$cma2^*$ 0.0 0.0 0.0 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.0
$cma4^*$ 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB^*Abs 100.0 0.0 0.0
LAB^*Chr 0.0 0.0 0.0
LAB^*Chr2 0.0 0.0 0.0
relative CIELAB lab*
lab^*sh 0.0 0.0 0.0
lab^*cm 0.0 0.0 0.0
lab^*tc 0.0 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.0 0.0 –
lab^*Cx 0.0 0.0 –
lab^*Ce 0.0 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.5 0.5 0.5 (1.0)
$cma2^*$ 0.5 0.5 0.5 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.5
$cma4^*$ 0.0 0.0 0.0 0.5
standard and adapted CIELAB
LAB^*Abs 63.54 0.0 0.0
LAB^*Chr 50.0 0.0 0.0
LAB^*Chr2 50.0 0.0 0.0
relative CIELAB lab*
lab^*sh 0.5 0.0 0.0
lab^*cm 0.5 0.0 0.0
lab^*tc 0.5 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.5 0.0 –
lab^*Cx 0.5 0.0 –
lab^*Ce 0.5 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 0.75 0.75 0.75 (1.0)
$cma2^*$ 0.75 0.75 0.75 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.75
$cma4^*$ 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB^*Abs 76.08 0.0 0.0
LAB^*Chr 76.08 0.0 0.0
LAB^*Chr2 76.08 0.0 0.0
relative CIELAB lab*
lab^*sh 0.75 0.0 0.0
lab^*cm 0.75 0.0 0.0
lab^*tc 0.25 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.5 0.0 –
lab^*Cx 0.25 0.0 –
lab^*Ce 0.25 0.0 –

relative Inform. Technology (IT)
$sha2^*$ 1.0 1.0 1.0 (1.0)
$cma2^*$ 0.0 0.0 0.0 (1.0)
$sha4^*$ 1.0 1.0 1.0 0.0
$cma4^*$ 0.0 0.0 0.0 1.0
standard and adapted CIELAB
LAB^*Abs 100.0 0.0 0.0
LAB^*Chr 0.0 0.0 0.0
LAB^*Chr2 0.0 0.0 0.0
relative CIELAB lab*
lab^*sh 0.0 0.0 0.0
lab^*cm 0.0 0.0 0.0
lab^*tc 0.0 0.0 0.0
relative Natural Colour (NC)
lab^*Qy 0.0 0.0 –
lab^*Cx 0.0 0.0 –
lab^*Ce 0.0 0.0 –

TE510−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)
5 step scales for constant CIELAB hue 31/360 = 0.086 (right)

BAM-test chart TE51; Colorimetric systems ORS18 & MRS18a input: *olv* setrgbcolor*
D65: 2 coordinate data of 5 step colour scales for 10 hues output: *no change compared to input*