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*

b^*_a a^*_a

%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	65.39	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

%Regularity

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

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

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 −0.98 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*tce 1.0 0.0 –
lab*ncE 0.0 0.0 –

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 76.06 −0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.0 0.01 –
relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 –
lab*nch 0.25 0.0 –
relative Natural Colour (NC)
lab*lrj 0.75 0.0 0.0
lab*tce 0.75 0.0 –
lab*ncE 0.25 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 56.71 −0.24 2.14
LAB*LABa 56.71 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* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*LABa 37.36 0.0 0.0
LAB*TCHa 25.0 0.01 –
relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 –
lab*nch 0.75 0.0 –
relative Natural Colour (NC)
lab*lrj 0.25 0.0 0.0
lab*tce 0.25 0.0 –
lab*ncE 0.75 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 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*tce 0.0 0.0 –
lab*ncE 1.0 0.0 –

relative Inform. Technology (IT)
olvi3* 1.0 0.75 0.75 (1.0)
cmyn3* 0.0 0.25 0.25 (0.0)
olvi4* 1.0 0.75 0.75 1.0
cmyn4* 0.0 0.25 0.25 0.0
standard and adapted CIELAB
LAB*LAB 83.54 15.58 16.58
LAB*LABa 83.54 16.34 12.62
LAB*TCHa 87.5 20.65 37.69
relative CIELAB lab*
lab*lab 0.847 0.198 0.153
lab*tch 0.875 0.25 0.105
lab*nch 0.0 0.25 0.105
relative Natural Colour (NC)
lab*lrj 0.847 0.238 0.075
lab*tce 0.875 0.25 0.048
lab*ncE 0.0 0.25 r19j

relative Inform. Technology (IT)
olvi3* 0.75 0.5 0.5 (1.0)
cmyn3* 0.25 0.5 0.5 (0.0)
olvi4* 1.0 0.75 0.75 0.75
cmyn4* 0.0 0.25 0.25 0.25
standard and adapted CIELAB
LAB*LAB 64.19 15.96 15.28
LAB*LABa 64.19 16.35 12.63
LAB*TCHa 62.5 20.66 37.69
relative CIELAB lab*
lab*lab 0.597 0.198 0.153
lab*tch 0.625 0.25 0.105
lab*nch 0.25 0.25 0.105
relative Natural Colour (NC)
lab*lrj 0.597 0.239 0.075
lab*tce 0.625 0.25 0.048
lab*ncE 0.25 0.25 r19j

relative Inform. Technology (IT)
olvi3* 0.5 0.25 0.25 (1.0)
cmyn3* 0.5 0.75 0.75 (0.0)
olvi4* 1.0 0.75 0.75 0.5
cmyn4* 0.0 0.25 0.25 0.5
standard and adapted CIELAB
LAB*LAB 44.84 16.33 13.97
LAB*LABa 44.84 16.35 12.63
LAB*TCHa 37.5 20.66 37.69
relative CIELAB lab*
lab*lab 0.347 0.198 0.153
lab*tch 0.375 0.25 0.105
lab*nch 0.5 0.25 0.105
relative Natural Colour (NC)
lab*lrj 0.347 0.239 0.075
lab*tce 0.375 0.25 0.048
lab*ncE 0.5 0.25 r19j

relative Inform. Technology (IT)
olvi3* 0.25 0.0 0.0 (1.0)
cmyn3* 0.75 1.0 1.0 (0.0)
olvi4* 1.0 0.75 0.75 0.25
cmyn4* 0.0 0.25 0.25 0.75
standard and adapted CIELAB
LAB*LAB 25.5 16.7 12.66
LAB*LABa 25.5 16.34 12.62
LAB*TCHa 12.5 20.65 37.69
relative CIELAB lab*
lab*lab 0.097 0.198 0.153
lab*tch 0.125 0.25 0.105
lab*nch 0.75 0.25 0.105
relative Natural Colour (NC)
lab*lrj 0.097 0.238 0.075
lab*tce 0.125 0.25 0.048
lab*ncE 0.75 0.25 r19j

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 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*tce 0.75 0.5 0.048
lab*ncE 0.0 0.5 r19j

relative Inform. Technology (IT)
olvi3* 0.75 0.25 0.25 (1.0)
cmyn3* 0.25 0.75 0.75 (0.0)
olvi4* 1.0 0.5 0.5 0.75
cmyn4* 0.0 0.5 0.5 0.25
standard and adapted CIELAB
LAB*LAB 52.33 32.53 27.11
LAB*LABa 52.33 32.69 25.26
LAB*TCHa 50.0 41.31 37.69
relative CIELAB lab*
lab*lab 0.443 0.396 0.306
lab*tch 0.5 0.5 0.105
lab*nch 0.25 0.5 0.105
relative Natural Colour (NC)
lab*lrj 0.443 0.477 0.15
lab*tce 0.5 0.5 0.048
lab*ncE 0.25 0.5 r19j

relative Inform. Technology (IT)
olvi3* 0.5 0.0 0.0 (1.0)
cmyn3* 0.5 1.0 1.0 (0.0)
olvi4* 1.0 0.5 0.5 0.5
cmyn4* 0.0 0.5 0.5 0.5
standard and adapted CIELAB
LAB*LAB 32.98 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*tce 0.25 0.5 0.048
lab*ncE 0.5 0.5 r19j

relative Inform. Technology (IT)
olvi3* 1.0 0.25 0.25 (1.0)
cmyn3* 0.0 0.75 0.75 (0.0)
olvi4* 1.0 0.25 0.25 1.0
cmyn4* 0.0 0.75 0.75 0.0
standard and adapted CIELAB
LAB*LAB 59.8 48.73 40.24
LAB*LABa 59.8 49.03 37.88
LAB*TCHa 62.5 61.96 37.69
relative CIELAB lab*
lab*lab 0.54 0.593 0.458
lab*tch 0.625 0.75 0.105
lab*nch 0.0 0.75 0.105
relative Natural Colour (NC)
lab*lrj 0.54 0.716 0.224
lab*tce 0.625 0.75 0.048
lab*ncE 0.0 0.75 r19j

relative Inform. Technology (IT)
olvi3* 0.75 0.0 0.0 (1.0)
cmyn3* 0.25 1.0 1.0 (0.0)
olvi4* 1.0 0.25 0.25 0.75
cmyn4* 0.0 0.75 0.75 0.25
standard and adapted CIELAB
LAB*LAB 40.46 49.1 38.93
LAB*LABa 40.46 49.03 37.88
LAB*TCHa 37.51 61.96 37.69
relative CIELAB lab*
lab*lab 0.29 0.593 0.458
lab*tch 0.375 0.75 0.105
lab*nch 0.25 0.75 0.105
relative Natural Colour (NC)
lab*lrj 0.29 0.716 0.224
lab*tce 0.375 0.75 0.048
lab*ncE 0.25 0.75 r19j

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 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*tce 0.5 1.0 0.048
lab*ncE 0.0 1.0 r19j

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^*

NE540−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

Output: 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*

b^*_a a^*_a

%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	65.39	50.52	82.63	38
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M_{Ma}	48.13	75.28	−8.36	75.74	354
N_{Ma}	18.01	0.0	0.0	0.0	0
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G_{CIE}	52.23	−42.25	11.76	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.86	271

%Regularity

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

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

(15 relative Inform. Technology (IT) / CIELAB / Natural Colour (NC) cells identical to the left side)

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

blackness n^*

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

chromaticness c^*

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

See for similar files: http://www.ps.bam.de/NE54/
Technical information: http://www.ps.bam.de
Version 2.1, io=1,1, CIELAB

BAM registration: 20060101-NE54/10S/S54E00F1.PS/.TXT
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta

/NE54/ Form: 1/10, Serie: 1/1, Page: 1 Page: count: 1