

http://130.149.60.45/~farbmetrik/NE34/NE34L0NP.PDF /.PS; start output
N: No Output Linearization (OL) data in File (F), Startup (S) or Device (D)

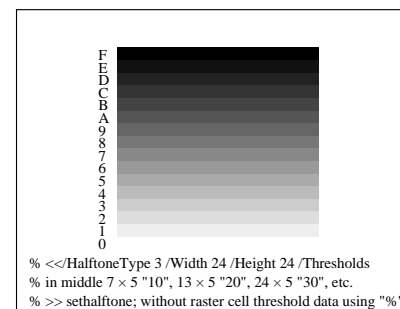
PSL1-program code: color image and separations with 4 basic colors CMYN

```
%!PS-Adobe-3.0 d2:[rr.p9f]B7251-7n.eps/B9481-8N.eps 12.2.96
%%BoundingBox: 72 90 226 204
/Times-Roman findfont dup length dict begin
{1 index /FID ne {def} {pop pop} ifelse }forall
/Encoding ISOLatin1Encoding def currentdict end
/Times-ISOL1 exch definefont pop
/FS {findfont exch scalefont setfont} bind def
/MM {72 25.4 div mul} def /str {8 string} bind def
%%EndProlog

72 90 translate 0.01 MM 0.01 MM scale
/ausz 4 def %color separation 0=C, 1=M, 2=Y, 3=N, 4=F
/recfi {/height exch def /width exch def /ys exch def /xs exch def
xs ys moveto width 0 rlineto
0 height rlineto width neg 0 rlineto closepath
ausz 0 eq { pop pop pop 1 exch sub setgray %C
060 135 {pop} setscreen fill } if
ausz 1 eq { pop pop 1 exch sub setgray pop %M
060 090 {pop} setscreen fill } if
ausz 2 eq { pop 1 exch sub setgray pop pop %Y
060 000 {pop} setscreen fill } if
ausz 3 eq { 1 exch sub setgray pop pop pop %N
060 045 {pop} setscreen fill } if
ausz 4 eq { setcmyk_olvcolor
060 135 {pop} 060 090 {pop} 060 000 {pop} %F
060 045 {pop} setcolorscreen fill } if bind def
ausz 3 ge {0.0 0.0 0.0 0.5 0 0 5400 4000 recfi}
{0.0 setgray 0 0 moveto 5400 0 rlineto 0 4000
rlineto -5400 0 rlineto closepath stroke} ifelse
ausz 3 ge {1.0 setgray 300 /Times-ISOL1 FS 100 3600 moveto
(basic colors, mixed colors, area coverage) show } if
/xyw {4000 12 div} bind def /xw {5 xyw mul} bind def
/x01 {5 xyw mul} bind def /y0 {1.2 xyw mul} bind def
/x02 {10 xyw mul} bind def
/colors1 %CMYN color rows from bottom to top
[[{1.0 0.0 0.0 0.0} {0.0 1.0 0.0 0.0} {0.0 0.0 1.0 0.0}
{0.0 1.0 1.0 0.0} {1.0 0.0 1.0 0.0} {1.0 1.0 0.0 0.0}
{1.0 1.0 1.0 0.0} {0.0 0.0 0.0 0.0} {0.0 0.0 0.0 1.0}] bind def
/colors2
[[{0.5 0.0 0.0 0.0} {0.0 0.5 0.0 0.0} {0.0 0.0 0.5 0.0}
{0.0 0.5 0.5 0.0} {0.5 0.0 0.5 0.0} {0.5 0.5 0.0 0.0}
{0.5 0.5 0.5 0.0} {0.0 0.0 0.0 0.0} {0.0 0.0 0.0 0.5}] bind def
0 1 8 {/i exch def colors1 i get exec
x01 i xyw mul y0 add xw xyw recfi} for
0 1 8 {/i exch def colors2 i get exec
x02 i xyw mul y0 add xw xyw recfi} for
ausz 3 ge {1.0 setgray 300 /TimesI-ISOL1 FS
/N8 (C M Y O=M+Y L=C+Y V=C+M C+M+Y W N ) def
0 1 8 {/nr exch def nr xyw mul y0 add x01 1300 sub exch
moveto 40 0 N8 nr 6 mul 6 getinterval ashow}for 300 /Times-Roman FS
x01 400 add y0 300 sub moveto (100) show 30 0 rmoveto (%) show
x02 600 add y0 300 sub moveto (70) show 30 0 rmoveto (%) show} if
showpage
```

NE340-7, B8_27

TUB-test chart NE34; Richter: Computer graphics, colorimetry
Colour book series: *PostScript* and CIE colour spaces no. 8



NE341-1, B8_28_1

PC-operating systems for Intel 486 product name and graphic software

| manufact. | NeXT | Microsoft | IBM |
|------------------|--------------------|-------------------|-------------------|
| product name | NeXT-step V.3.3 | Windows NT V.3.1 | OS/2 V.2.1 |
| scope | 300 MByte | 100 MByte | 40 MByte |
| storages | 16 MByte | 12 MByte | 8 MByte |
| graphic software | Display-PostScript | Graphic G.I.(GDI) | Presentat. M.(PM) |

NE341-3, B8_30_1

| *-color ABC* | value ABC | color space eg. device coordinates |
|--------------|-----------|---|
| Lab* | XYZ | CIE 1931 XYZ linear color space measure CIELAB 1976 $L^*a^*b^*$ CIELAB measurement |
| OLV* | OLV | linear color space OLV linear scanner, image setter |
| RGB* | RGB | Btx-color space OLV* nonlinear space RGB* quadrat./logarithm. scanner |

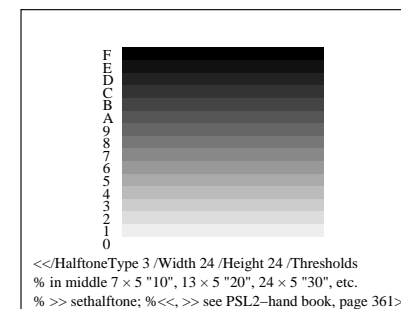
NE341-5, B8_31_1

CIEBasedABC-color space in PSL2 color rendering $XYZ_{aim} - XYZ_{real}$

| PSL2-program | Soft-ware | out-put | mea-sure |
|--|-----------------|--|------------|
| X_{aim} | L | $\rightarrow L^* \rightarrow L$ | X_{real} |
| Y_{aim} | $\rightarrow M$ | $\rightarrow M^* \rightarrow M \rightarrow Y_{real}$ | |
| Z_{aim} | N | $\rightarrow N^* \rightarrow N$ | Z_{real} |
| matrix1 decode1 decode2 matrix2 3 × 3 {0.5 exp} {2.0 exp} 3 × 3 | | | |

NE341-7, B8_32_1

input: *rgb setrgbcolor*
output: no colour data change



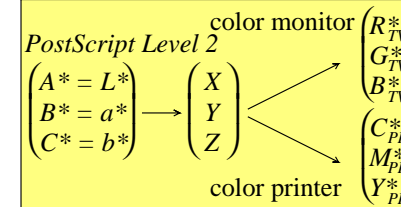
NE341-2, B8_28_2

manufacturer, hardware, operating system and Adobe-PostScript

| manu-facturer | Hardware | operating system | Post-Script |
|---------------|-----------------|------------------|-------------|
| Digital | VAX, AXP | OSF/1 | Level 2 |
| IBM | RISC 6000 | AIX | Level 2 |
| Sun | SPARC | Solaris | Level 2 |
| Adobe | SPARC | X-Window | Level 2 |
| NeXT | Intel, Motorola | Mach | Level 2 |

NE341-4, B8_30_2

CIEBasedABC-device independent CIELAB \rightarrow PostScript \rightarrow devices- coordinates internal coordinates



NE341-6, B8_31_2

TUB registration: 20101101-NE34/NE34L0NP.PDF /.PS
application for measurement of printer or monitor systems

TUB material: code=rh4ta