

http://130.149.60.45/~farbmetrik/ME34/ME34L0NA.TXT /PS; start output  
N: No Output Linearization (OL) data in File (F), Startup (S) or Device (D)

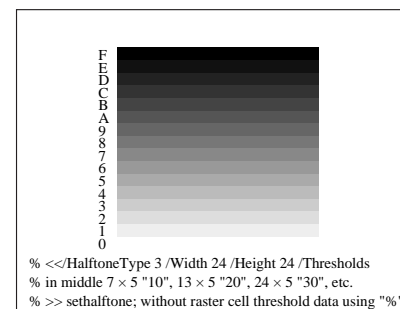
### PSL1-program code: color image and separations with 4 basic colors CMYN

```
%!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 { setcmykcolor
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
```

ME340-7, B8\_27

TUB-test chart ME34; Richter: Computer graphics, colorimetry  
Colour book series: *PostScript* and CIE colour spaces no. 8



### 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)

ME341-3, B8\_30\_1

### colorness and value in CIEBasedABC

*-color ABC*	value ABC	color space eg. device coordinates
Lab*	XYZ	CIE 1931 XYZ linear color 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

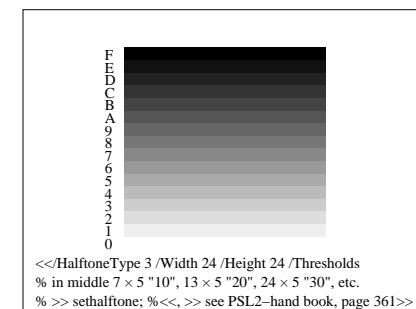
ME341-5, B8\_31\_1

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

PSL2-program	Software	output	measure
$X_{aim}$	$L \rightarrow L^* \rightarrow L$		$X_{real}$
$Y_{aim}$	$\rightarrow M \rightarrow M^* \rightarrow M \rightarrow$		$Y_{real}$
$Z_{aim}$	$N \rightarrow N^* \rightarrow N$		$Z_{real}$
matrix1	decode1	decode2	matrix2
$3 \times 3$	{0.5 exp}	{2.0 exp}	$3 \times 3$

ME341-7, B8\_32\_1

input: *cmyk setcmykcolor*  
output: no colour data change

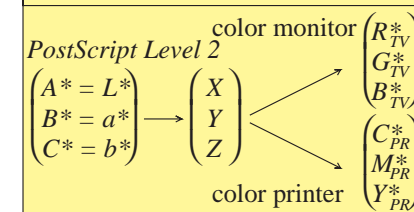


### manufacturer, hardware, operating system and Adobe-PostScript

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

ME341-4, B8\_30\_2

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



ME341-6, B8\_31\_2

TUB registration: 20101101-ME34/ME34L0NA.TXT /PS  
application for measurement of printer or monitor systems

TUB material: code=rh4ta