

see similar files: <http://farbe.li.tu-berlin.de/AEZ2/AEZ2L0NP.PDF> / .PS; Frame file in VG; start output
technical information: <http://farbe.li.tu-berlin.de> or <http://130.149.60.45/~farbmetrik>

```
Frame File PostScript Code for 1-Minus-Relation (1MR) to setrgbcolor
01 %!PS-Adobe-3.0 EPSF-3.0, 1MR for change to setrgbcolor
02 /FFM_setrgbcolor {setrgbcolor} bind def
03 /1MR-0000 {%BEG procedure 1MR-0000
04 %1MR-Transform of setgray and setcmykcolor to FFM_setrgbcolor
05
06 /setgray {%BEG procedure setgray to setrgbcolor
07   dup dup FFM_setrgbcolor
08   } def %END procedure setgray to setrgbcolor
09
10 /setcmykcolor {%BEG procedure setcmykcolor to setrgbcolor
11 /FFM_c exch def /FFM_y exch def /FFM_m exch def /FFM_k exch def
12 FFM_k 0 eq {1 FFM_c sub 1 FFM_m sub 1 FFM_y sub FFM_setrgbcolor}
13   {1 FFM_k sub dup dup FFM_setcmykcolor} ifelse
14   } def %END procedure setcmykcolor to setrgbcolor
15
16 } def %END procedure 1MR-0000
17 %Trailer %END 1-Minus-Relation (1MR) to setrgbcolor
```

Remarks:
line 02: necessary for the revised definition of `rgb setrgbcolor`.
The FF_PS file shall include line 02 before the use of 1MR-0000.
line 06 to 08: change of `w setgray` to `rgb setrgbcolor`.
line 10 to 14: change of `cmyk setcmykcolor` to `rgb setrgbcolor`.
AEZ21-(1/3)N includes the procedure 1MR-0000, see AEZ21-3N.

AEZ20-1N

VG-PS without or with 1MR and transfer from VG-PDF to PG-eps

The following files include changes (Yes/No):

File	1MR	gamma	value	remark
AEZ21-1N.PS	No	Yes	1,000	VG original
AEZ21-3N.PS	Yes	Yes	1,000	VG with 1MR
AEZ20-2N.eps	No	Yes	1,000	VG original -> PG
AEZ20-4N.eps	Yes	Yes	1,000	VG with 1MR -> PG

```
01 %BEG PS-Code used in the files of this page AEZ2
02
03 /iproc1MR 0 def %AEZ21-1N: 0 def, AEZ21-3N: 1 def
04 %1MR-0000G where {pop 1MR-0000G}{1MR-0000F} ifelse
05 /iproc1MR 1 eq {1MR-0000} if
06
07 %Used in AEZ20-2N.eps, AEZ21-1N.PS: No 1MR
08 %Used in AEZ20-4N.eps, AEZ21-3N.PS: with 1MR
09 %Used for the above files in AEZ2L0NP.PS
10
11 %END PS-Code used in the files of this page AEZ2
```

Remarks:
lines 03 to 05: possible PS Operators (%=not used).

AEZ20-3N

File transfer VG-PDF of AEZ21-1N to PG-eps of AEZ20-2N

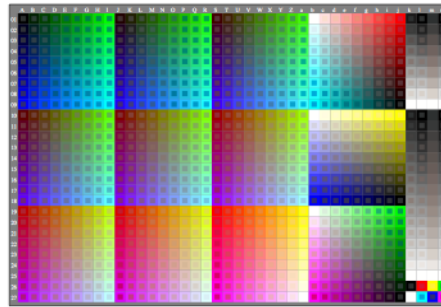
Software: GraphicConverter V5.2 (2010) included in Mac OSX V10.6.8.
Download of V11 (2020) with equal output, see <http://www.lennesoft.com>.

```
01 %!PS-Adobe-3.0 EPSF-3.0
02 %%Creator: GraphicConverter V5.2.2 X
03 %%Title: AEZ21-1N.eps
04 %%CreationDate: 2020-03-14
05 %%Pages: 1
06 %%BoundingBox: 0 0 168 120
07 %%EndComments
08 %%BeginProlog
09 /readstring {
10   currentfile exch readhexstring pop
11 } bind def
12 /rpicstr 350 string def
13 /gpicstr 350 string def
14 /bpicstr 350 string def
15 %%EndProlog
16 %%Page: 1 1
17 gsave
18 0 0 translate
19 168 120 scale
20 350 252 8
21 [ 350 0 0 -252 0 252 ]
22 { /picstr readstring }
23 { /picstr readstring }
24 { /bpicstr readstring }
25 true 3
26 colorimage
27 ffffffffffffffffffffffff
28 ...
29 %about 6600 lines deleted here
30 ...
31 ffffffffffffffff
32 grestore
33 showpage
34 %%EOF
```

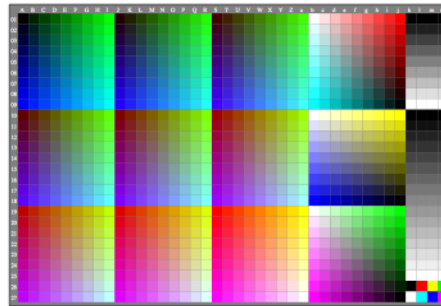
Remarks:
line 06: the original `%%BoundingBox 70 85 238 206` is not used.
line 18: The original shift of the zero point is not used.
For all the original data see AEZ21-4N.
lines 27 to 31: only a few of the about 6600 lines are listed here.

AEZ20-7N

<http://farbe.li.tu-berlin.de/AEZ2/AEZ2L0NP.PDF> / .PS; Frame file in VG; start output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 1/1



AEZ21-1N, File: <http://farbe.li.tu-berlin.de/AEZ2/AEZ21-1N.PS>, No 1MR, gamma $g_p=1,000$, $C_{Yp}=C_{Ys}$



AEZ21-3N, File: <http://farbe.li.tu-berlin.de/AEZ2/AEZ21-3N.PS>, 1MR, gamma $g_p=1,000$, $C_{Yp}=C_{Ys}$

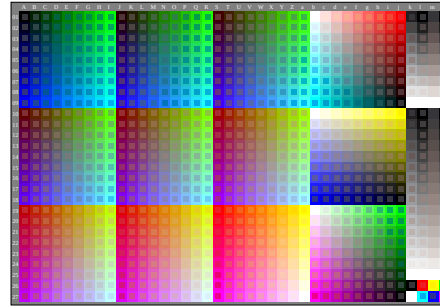
File transfer VG-PDF of AEZ21-1N to PG-eps of AEZ20-2N

Software: GraphicConverter V5.2 (2010) included in Mac OSX V10.6.8.
Download of V11 (2020) with equal output, see <http://www.lennesoft.com>.

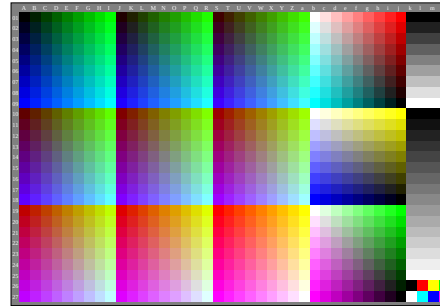
```
01 %!PS-Adobe-3.0 EPSF-3.0 %NEW NAME: AEZ20-2N
02 %%Creator: GraphicConverter V5.2.2 X
03 %%Title: AEZ21-3N.eps
04 %%CreationDate: 2020-03-14
05 %%Pages: 1
06 %%BoundingBox: 70 85 238 206 %<- 0 0 168 120
07 %%EndComments
08 %%BeginProlog
09 /readstring {
10   currentfile exch readhexstring pop
11 } bind def
12 /rpicstr 350 string def
13 /gpicstr 350 string def
14 /bpicstr 350 string def
15 %%EndProlog
16 %%Page: 1 1
17 gsave
18 70 85 translate %<- 0 0 translate
19 168 120 scale
20 350 252 8
21 [ 350 0 0 -252 0 252 ]
22 { /picstr readstring }
23 { /picstr readstring }
24 { /bpicstr readstring }
25 true 3
26 colorimage
27 ffffffffffffffffffffffff
28 ...
29 %about 6600 lines deleted here
30 ...
31 ffffffffffffffff
32 grestore
33 showpage
34 %%EOF
```

Remarks:
line 06: the original `%%BoundingBox 70 85 238 206` is used.
line 18: The original shift of the zero point is used.
For all the original data see AEZ21-4N.
lines 27 to 31: only a few of the about 6600 lines are listed here.

AEZ20-8N



AEZ21-1N, File: <http://farbe.li.tu-berlin.de/AEZ2/AEZ21-1N.PS>, No 1MR, gamma $g_p=1,000$, $C_{Yp}=C_{Ys}$



AEZ21-3N, File: <http://farbe.li.tu-berlin.de/AEZ2/AEZ21-3N.PS>, 1MR, gamma $g_p=1,000$, $C_{Yp}=C_{Ys}$

File transfer VG-PDF of AEZ21-3N to PG-eps of AEZ20-4N

Software: GraphicConverter V5.2 (2010) included in Mac OSX V10.6.8.
Download of V11 (2020) with equal output, see <http://www.lennesoft.com>.

```
01 %!PS-Adobe-3.0 EPSF-3.0
02 %%Creator: GraphicConverter V5.2.2 X
03 %%Title: AEZ21-3N.eps
04 %%CreationDate: 2020-03-14
05 %%Pages: 1
06 %%BoundingBox: 0 0 168 120
07 %%EndComments
08 %%BeginProlog
09 /readstring {
10   currentfile exch readhexstring pop
11 } bind def
12 /rpicstr 350 string def
13 /gpicstr 350 string def
14 /bpicstr 350 string def
15 %%EndProlog
16 %%Page: 1 1
17 gsave
18 0 0 translate
19 168 120 scale
20 350 252 8
21 [ 350 0 0 -252 0 252 ]
22 { /picstr readstring }
23 { /picstr readstring }
24 { /bpicstr readstring }
25 true 3
26 colorimage
27 ffffffffffffffffffffffff
28 ...
29 %about 6600 lines deleted here
30 ...
31 ffffffffffffffff
32 grestore
33 showpage
34 %%EOF
```

Remarks:
line 06: the original `%%BoundingBox 70 85 238 206` is not used.
line 18: The original shift of the zero point is not used.
For all the original data see AEZ21-4N.
lines 27 to 31: only a few of the about 6600 lines are listed here.

AEZ21-7N

Main content of the two coded VG-PS files AEZ21-(1/3)N

Reference: Adobe Systems: PostScript Language Reference Manual, see
<http://www.adobe.com/jp/print/postscript/pdfs/PLRM.pdf>

```
01 %!PS-Adobe-3.0 EPSF-3.0 AEZ21-1N
02 %%BoundingBox: 70 85 238 206
03 ...
04 /FFM_setrgbcolor {setrgbcolor} bind def
05 /1MR-0000 {%BEG procedure 1MR-0000
06 %Transfer setgray and setcmykcolor to FFM_setrgbcolor
07 ...
08 } def %END procedure 1MR-0000
09
10 /iproc1MR 0 def %31-1N: 0 def, 31-3N: 1 def
11 %1MR-0000G where {pop 1MR-0000G}{1MR-0000F} ifelse
12 /iproc1MR 1 eq {1MR-0000} if
13 ...
14 73 86.5 moveto (AEZ21-1N, ) show
15 /iproc1MR 0 eq {(No 1MR) show}{(1MR) show} ifelse
16 72 90 translate
17 0.00237 NM dup scale
18
19 0 setgray
20 0 0 moveto 24600 0 rlineto 0 16900 rlineto
21   -24600 0 rlineto closepath stroke
22 ...
23 /xa 600 def /ya 600 def
24 /xd 600 def /xd2 300 def /xd4 150 def
25 r g b setrgbcolor
26 x a y x d dup rec fill
27 1 r sub 1 g sub 1 b sub 0 setcmykcolor
28 x a xd4 add ya xd4 add xd2 dup rec fill
29 ...
30 showpage
31 %%EOF
```

Remarks:
line 02: Definition of the original `%%BoundingBox 70 85 238 206`.
line 04 to 08: Definition of the procedure 1MR, compare AEZ20-1N.
line 10 to 12: Use of 1MR for `/iproc1MR 1 def`.
line 16: The original shift of the zero point is `72 90 translate`.
line 14 to 15: The text output is below the zero point of the rectangle.
line 20 to 21: Draw of the rectangle in mm reduced by a factor 0.237.
line 23 into 26: Fill of large squares with colours by `rgb setrgbcolor`.
line 27 to 28: Fill small squares with colours by `cmyk setcmykcolor`.

AEZ21-4N

File transfer VG-PDF of AEZ21-3N to PG-eps of AEZ20-4N

Software: GraphicConverter V5.2 (2010) included in Mac OSX V10.6.8.
Download of V11 (2020) with equal output, see <http://www.lennesoft.com>.

```
01 %!PS-Adobe-3.0 EPSF-3.0 %NEW NAME: AEZ20-4N
02 %%Creator: GraphicConverter V5.2.2 X
03 %%Title: AEZ21-3N.eps
04 %%CreationDate: 2020-03-14
05 %%Pages: 1
06 %%BoundingBox: 70 85 238 206 %<- 0 0 168 120
07 %%EndComments
08 %%BeginProlog
09 /readstring {
10   currentfile exch readhexstring pop
11 } bind def
12 /rpicstr 350 string def
13 /gpicstr 350 string def
14 /bpicstr 350 string def
15 %%EndProlog
16 %%Page: 1 1
17 gsave
18 70 85 translate %<- 0 0 translate
19 168 120 scale
20 350 252 8
21 [ 350 0 0 -252 0 252 ]
22 { /picstr readstring }
23 { /picstr readstring }
24 { /bpicstr readstring }
25 true 3
26 colorimage
27 ffffffffffffffffffffffff
28 ...
29 %about 6600 lines deleted here
30 ...
31 ffffffffffffffff
32 grestore
33 showpage
34 %%EOF
```

Remarks:
line 06: the original `%%BoundingBox 70 85 238 206` is not used.
line 18: The original shift of the zero point is used.
For all the original data see AEZ21-4N.
lines 27 to 31: only a few of the about 6600 lines are listed here.

AEZ21-8N

TUB-test chart AEZ2; ; VG except PG in AEZ20-(2/4)N
PostScript-output steering of test chart AE49 of ISO 9241-306

input: `w/rgb/cmyk -> rgb(1MR)?`
output: gamma $g_p = 1,000$