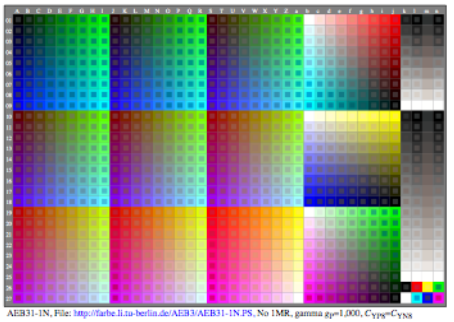
Frame File PostScript Code for 1-Minus-Relation (1MR) to *setrgbcolor*

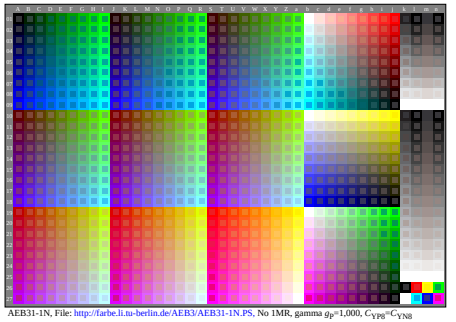
```
01 %!PS-Adobe-3.0 EPSF-3.0, 1MR for change to setrgbcolor
02 /FFM_setrgbcolor {setrgbcolor} bind def
03 /1MR-0000 {%BEG procedure 1MR-0000
04 %1MR-Transform of setgray and setcmykcolor to FFM_setrgbcolor
05
06 /setgray {%BEG procedure setgray to setrgbcolor
07          dup dup FFM_setrgbcolor
08         } def %END procedure setgray to setrgbcolor
09
10 /setcmykcolor {%BEG procedure setcmykcolor to setrgbcolor
11 /FFM_k exch def /FFM_y exch def /FFM_m exch def /FFM_c 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_setrgbcolor} 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*.
AEB31−(1/3)N includes the procedure 1MR−0000, see AEB31−3N.

AEB30−1N



AEB31-1N, File: http://farbe.li.tu-berlin.de/AEB3/AEB31-1N.PS, No 1MR, gamma g_P=1,000, C_{YP8}=C_{YN8}



AEB31-1N, File: http://farbe.li.tu-berlin.de/AEB3/AEB31-1N.PS, No 1MR, gamma g_P=1,000, C_{YP8}=C_{YN8}

Main content of the two coded VG-PS files AEB31−(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 AEB31-1N
02 %%BoundingBox: 70 85 238 206
03 ...
04 /FFM_setrgbcolor {setrgbcolor} bind def
05 /1MR-0000 {%BEG procedure 1MR-0000
06 %Transfer setgray and setcymkcolor 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 (AEB31-1N, ) show
15 iproc1MR 0 eq {(No 1MR) show}{(1MR) show} ifelse
16 72 90 translate
17 0.00237 MM 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 xa ya xd dup rec fill
27 1 r sub 1 g sub 1 b sub 0 setcmykcolor
28 xa 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 AEB30−1N.
line 10 to 12: Use of 1MR for **`/iproc1MR 1 def.`**
line 16: The original shift of the cero point is **`72 90 translate.`**
line 14 to 15: The text output is below the cero point of the rectangle.
line 20 to 21: Draw of the rectangle in mm reduced by a factor 0,237.
line 23 mto 26: Fill of large squares with colours by **`rgb setrgbcolor.`**
line 27 to 28: Fill small squares with colours by **`cmyk setcmykcolor.`**

AEB31−4N

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

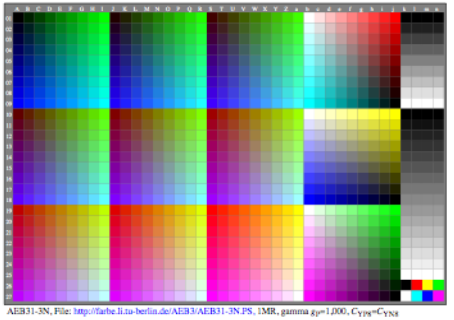
The following files include changes (Yes/No):

File	1MR	gamma	value	remark
AEB31−1N.PS	No	Yes	1,000	VG original
AEB31−3N.PS	Yes	Yes	1,000	VG with 1MR
AEB30−2N.eps	No	Yes	1,000	VG original −> PG
AEB30−4N.eps	Yes	Yes	1,000	VG with 1MR −> PG

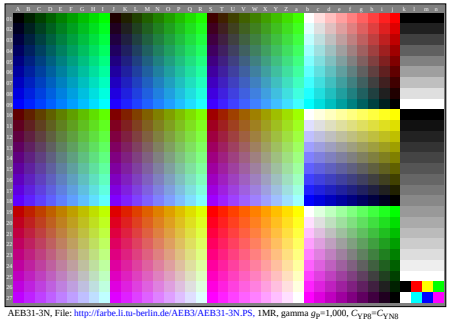
```
01 %BEG PS-Code used in the files of this page AEB3
02
03 /iproc1MR 0 def %AEB31-1N: 0 def, AEB31-3N: 1 def
04 %/1MR-0000G where {pop 1MR-0000G}{1MR-0000F} ifelse
05 iproc1MR 1 eq {1MR-0000} if
06
07 %Used in AEB30-2N.eps, AEB31-1N.PS:  No  1MR
08 %Used in AEB30-4N.eps, AEB31-3N.PS: with 1MR
09 %Used for the above files in AEB3L0NP.PS
10
11 %END PS-Code used in the files of this page AEB3
```

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

AEB30−3N



AEB31-3N, File: http://farbe.li.tu-berlin.de/AEB3/AEB31-3N.PS, 1MR, gamma g_P=1,000, C_{YP8}=C_{YN8}



AEB31-3N, File: http://farbe.li.tu-berlin.de/AEB3/AEB31-3N.PS, 1MR, gamma g_P=1,000, C_{YP8}=C_{YN8}

File transfer VG-PDF of AEB31−1N to PG-eps of AEB30−2N

Software: *GraphicConcerter V5.2 (2010) included in Mac OSX V10.6.8.*
Download of V11 (2020) with equal output, see *http://www.lemkesoft.com.*

```
01 %!PS-Adobe-3.0 EPSF-3.0
02 %%Creator: GraphicConverter V5.2.2 X
03 %%Title: AEB31-1N.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 { rpicstr readstring }
23 { gpicstr readstring }
24 { bpicstr readstring }
25 true 3
26 colorimage
27 fffffffffffffffffffff
28 ...
29 %about 6600 lines deleted here
30 ...
31 ffffffffffff
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 cero point is not used.
For all the original data see AEB31−4N.
lines 27 to 31: only a few of the about 6600 lines are listed here.

AEB30−7N

File transfer VG-PDF of AEB31−1N to PG-eps of AEB30−2N

Software: *GraphicConcerter V5.2 (2010) included in Mac OSX V10.6.8.*
Download of V11 (2020) with equal output, see *http://www.lemkesoft.com.*

```
01 %!PS-Adobe-3.0 EPSF-3.0 %NEW NAME: AEB30-2N
02 %%Creator: GraphicConverter V5.2.2 X
03 %%Title: AEB31-1N.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 { rpicstr readstring }
23 { gpicstr readstring }
24 { bpicstr readstring }
25 true 3
26 colorimage
27 fffffffffffffffffffff
28 ...
29 %about 6600 lines deleted here
30 ...
31 ffffffffffff
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 cero point is used.
For all the original data see AEB31−4N.
lines 27 to 31: only a few of the about 6600 lines are listed here.

AEB30−8N

File transfer VG-PDF of AEB31−3N to PG-eps of AEB30−4N

Software: *GraphicConcerter V5.2 (2010) included in Mac OSX V10.6.8.*
Download of V11 (2020) with equal output, see *http://www.lemkesoft.com.*

```
01 %!PS-Adobe-3.0 EPSF-3.0
02 %%Creator: GraphicConverter V5.2.2 X
03 %%Title: AEB31-3N.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 { rpicstr readstring }
23 { gpicstr readstring }
24 { bpicstr readstring }
25 true 3
26 colorimage
27 fffffffffffffffffffff
28 ...
29 %about 6600 lines deleted here
30 ...
31 ffffffffffff
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 cero point is not used.
For all the original data see AEB31−4N.
lines 27 to 31: only a few of the about 6600 lines are listed here.

AEB31−7N

File transfer VG-PDF of AEB31−3N to PG-eps of AEB30−4N

Software: *GraphicConcerter V5.2 (2010) included in Mac OSX V10.6.8.*
Download of V11 (2020) with equal output, see *http://www.lemkesoft.com.*

```
01 %!PS-Adobe-3.0 EPSF-3.0 %NEW NAME: AEB30-4N
02 %%Creator: GraphicConverter V5.2.2 X
03 %%Title: AEB31-3N.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 { rpicstr readstring }
23 { gpicstr readstring }
24 { bpicstr readstring }
25 true 3
26 colorimage
27 fffffffffffffffffffff
28 ...
29 %about 6600 lines deleted here
30 ...
31 ffffffffffff
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 cero point is used.
For all the original data see AEB31−4N.
lines 27 to 31: only a few of the about 6600 lines are listed here.

AEB31−8N