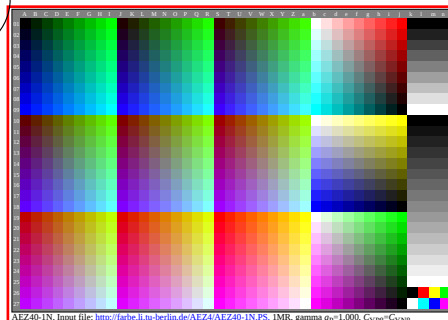


http://farbe.li.tu-berlin.de/AEZ4/AEZ4L0NP.PDF /.PS; only vector graphic VG; start output N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 1/1

see similar files: <http://farbe.li.tu-berlin.de/AEZ4/AEZ4L0NP.PDF> / .PS  
technical information: <http://farbe.li.tu-berlin.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20200201-AEZ4/AEZ4L0NP.PDF /.PS  
application for evaluation and measurement of display or print output

TUB material: code=rha4ta



AEZ40-1N, Input file: <http://farbe.li.tu-berlin.de/AEZ4/AEZ40-1N.PS>, 1MR, gamma  $g_p=1,000$ ,  $C_{YP8}=C_{YN8}$

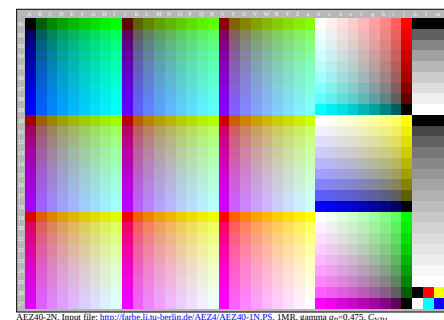
↑ VG -> VG

Original VG with standard gamma  $g_p=1,000$

| File     | graphic | ISO step          | gamma $g_p$ |
|----------|---------|-------------------|-------------|
| AEZ40-1N | VG      | $C_{YP8}=C_{YN8}$ | 1,000       |

Application: luminance contrast of sRGB displays:  
 $Y_W : Y_N = 90 : 0,31 = 288 : 1$  according to ISO 9241-306.  
(contrast without display reflection of room light)

AEZ40-3N



AEZ40-2N, Input file: <http://farbe.li.tu-berlin.de/AEZ4/AEZ40-2N.PS>, 1MR, gamma  $g_p=0,475$ ,  $C_{YP1}$

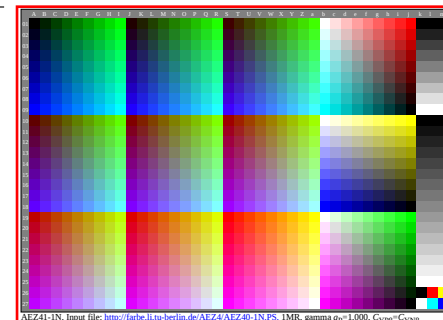
↑ VG -> VG

Change of original VG with gamma  $g_p=0,475$

| File     | graphic | ISO step           | gamma $g_p$ |
|----------|---------|--------------------|-------------|
| AEZ40-2N | PG      | $C_{YP1}=C_{YN15}$ | 0,475       |

Application: Low luminance contrast of projectors:  
 $Y_W : Y_N = 90 : 40 = 2,15 : 1$  according to ISO 9241-306.

AEZ40-4N



AEZ41-1N, Input file: <http://farbe.li.tu-berlin.de/AEZ4/AEZ41-1N.PS>, 1MR, gamma  $g_p=1,000$ ,  $C_{YP8}=C_{YN8}$

VG -> VG  
←

Original VG with standard gamma  $g_p=1,000$

| File     | graphic | ISO step          | gamma $g_p$ |
|----------|---------|-------------------|-------------|
| AEZ41-1N | PG      | $C_{YP8}=C_{YN8}$ | 1,000       |

Application: luminance contrast of sRGB displays:  
 $Y_W : Y_N = 90 : 0,31 = 288 : 1$  according to ISO 9241-306.  
(contrast without display reflection of room light)

AEZ41-2N

#### Output test of colour devices at the work places

The visual colours change by the software and:  
on displays with the reflection of the room light.  
in print with the printer driver and the workflow.

The luminance contrast ratio between White W and Black N determine, if the 9 gray steps between N and W appear equally spaced.  
**Equal spacing shall appear for the intended device output:**  
on displays for the output within the broken red rectangle, in print for the output within the continuous red rectangle.

If this is NOT the case, then determine visually with the next page the ISO-contrast step which gives the intended result.  
You may ask the device manufacturer for software solutions.  
You may change the PDF-file gamma to produce the intended result.  
Different gamma-change methods in VG or PG graphics are available.

AEZ41-3N

#### PDF- and PS-test files for relative colour image reproduction according to DIN 33872-1 to -6:2010

These DIN-test charts serve for the colorimetric specification, and the visual assessment of the display and print output.

For free download of the test charts see  
<http://farbe.li.tu-berlin.de/A/33872E.html>

For similar DIN-test charts according to DIN 33866-1 to -5:2000 see  
<http://farbe.li.tu-berlin.de/A/DE13/DE13.HTM>

For more test charts, standards and applications see  
<http://farbe.li.tu-berlin.de/A/INFOALAE.html>

AEZ41-5N

VG -> VG  
→

Change original VG with gamma  $g_p=2,105$

| File     | graphic | ISO step           | gamma $g_p$ |
|----------|---------|--------------------|-------------|
| AEZ41-8N | PG      | $C_{YP15}=C_{YN1}$ | 2,105       |

Application: extrem luminance contrast of displays:  
 $Y_W : Y_N = 90 : 0,002 = 36864 : 1$  according to ISO 9241-306.  
(extrem high contrast not known by the visual system)

AEZ41-7N

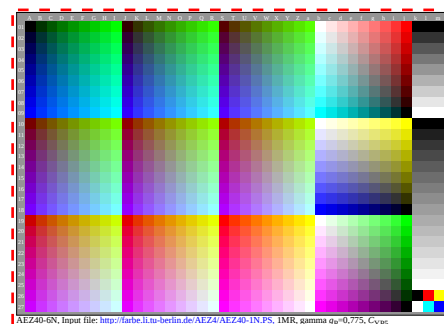
VG -> VG  
→

Change of original VG with gamma  $g_p=0,775$

| File     | graphic | ISO step           | gamma $g_p$ |
|----------|---------|--------------------|-------------|
| AEZ40-6N | PG      | $C_{YP5}=C_{YN11}$ | 0,775       |

Application: office luminance contrast of displays:  
 $Y_W : Y_N = 90 : 2,5 = 36 : 1$  according to ISO 9241-306.  
(contrast of offset paper according to ISO/IEC 15775)

AEZ40-5N



AEZ40-6N, Input file: <http://farbe.li.tu-berlin.de/AEZ4/AEZ40-6N.PS>, 1MR, gamma  $g_p=0,775$ ,  $C_{YP5}$

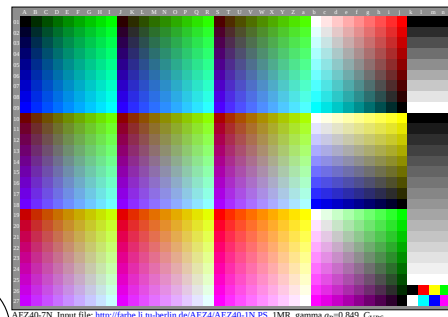
VG -> VG  
←

Change original VG with gamma  $g_p=0,850$

| File     | graphic | ISO step           | gamma $g_p$ |
|----------|---------|--------------------|-------------|
| AEZ40-7N | PG      | $C_{YP6}=C_{YN10}$ | 0,850       |

Application: mean luminance contrast of displays:  
 $Y_W : Y_N = 90 : 1,25 = 72 : 1$  according to ISO 9241-306.  
(contrast higher offset paper according to ISO/IEC 15775)

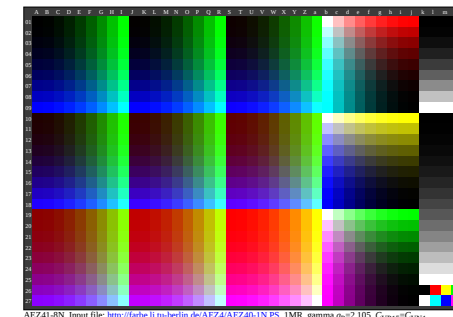
AEZ40-8N



AEZ40-7N, Input file: <http://farbe.li.tu-berlin.de/AEZ4/AEZ40-7N.PS>, 1MR, gamma  $g_p=0,849$ ,  $C_{YP6}$

TUB-test chart AEZ4; all colour figures in vector graphic VG  
1 VG[0-1], 5 VG gamma transfer, similar ISO 9241-306:AE49

input: w/rgb/cmyk -> rgb (1MR)  
output: change of gamma  $g_p$



AEZ41-8N, Input file: <http://farbe.li.tu-berlin.de/AEZ4/AEZ41-8N.PS>, 1MR, gamma  $g_p=2,105$ ,  $C_{YP15}=C_{YN1}$