

VG → VG

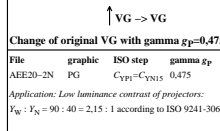
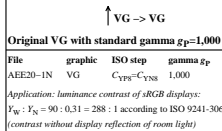
Original VG with standard gamma  $g_p=1,000$

File graphic ISO step gamma  $g_p$   
AEE21-1N PG  $C_{YPS}=C_{YN8}$  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)

AEE21-2N



#### Output test of color 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.

AEE21-3N

#### Ergonomics of human-system interaction ISO 9241-306:2018

Part 306: Field assessment methods for electronic visual displays

For test charts see

<http://standards.iso.org/iso/9241/306/ed-2/index.html>

For similar ISO-test charts in A4 size see

<http://standards.iso.org/iso/9241/306/ed-2/AE18/AE18.HTM>

For similar ISO-test charts with output questions see

<http://standards.iso.org/iso/9241/306/ed-2/AE18/AE18F0PXF.PDF>

For similar ISO/IEC test-charts according to ISO/IEC 15775,

and ISO/IEC TR 24705 see

<http://farbe.li.tu-berlin.de/A/24705TE.html>

For the relation and links to many other standards see

<http://farbe.li.tu-berlin.de/EE68/EE68L0NP.PDF>

#### Ergonomic and colorimetric colour image reproduction

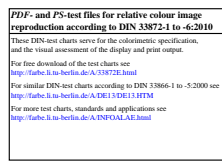
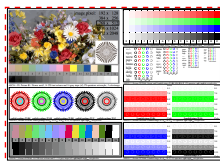
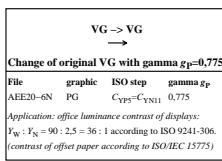
For the ergonomic and colorimetric colour image reproduction see  
*Richier, Klaus (2016), Output linearization method OLM16 for  
displays, printers, and offset, 61 pages, 1.4MB.*  
[http://farbe.li.tu-berlin.de/OC/TLIN16\\_01.PDF](http://farbe.li.tu-berlin.de/OC/TLIN16_01.PDF)  
(Content similar to CIE R8-09-2015, free download for CIE-members.)

For a list of publications of Klaus Richier see

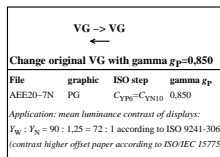
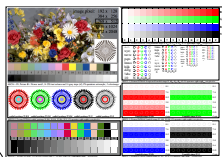
<http://farbe.li.tu-berlin.de/XY91FEN.html>

For basic information in 6 languages (EN, GE, FR, IT, SP, NO):  
*Klaus Richier (2015), Colour, colour vision, and elementary colours  
in colour information technology, 86 pages, 2.2 MB, see  
<http://standards.iso.org/iso/9241/306/ed-2/ES15.PDF>*

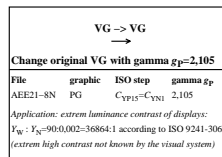
AEE21-4N



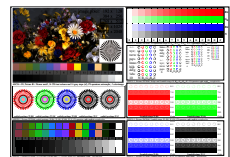
AEE21-5N



AEE20-8N



AEE21-7N



TUB-test chart AEE2; RGB colours with ISO image  
1 VG[0-1], 5 VG gamma transfer, similar ISO 9241-306:AE18

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