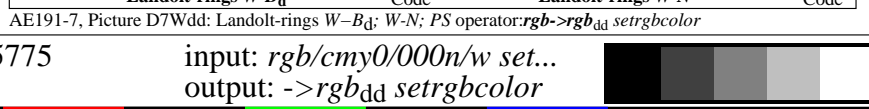
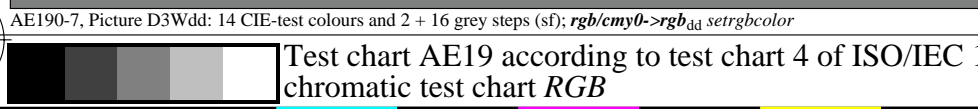
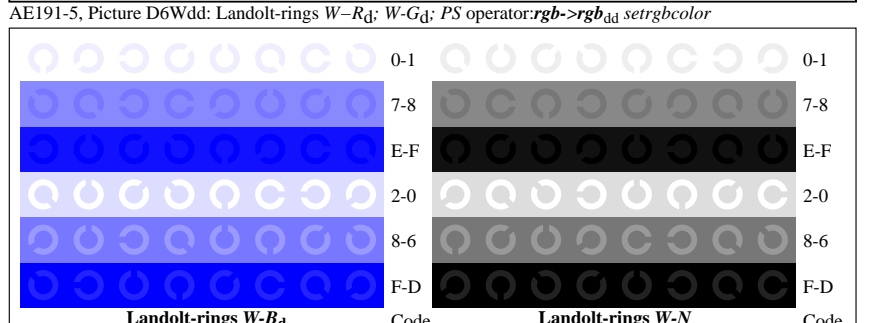
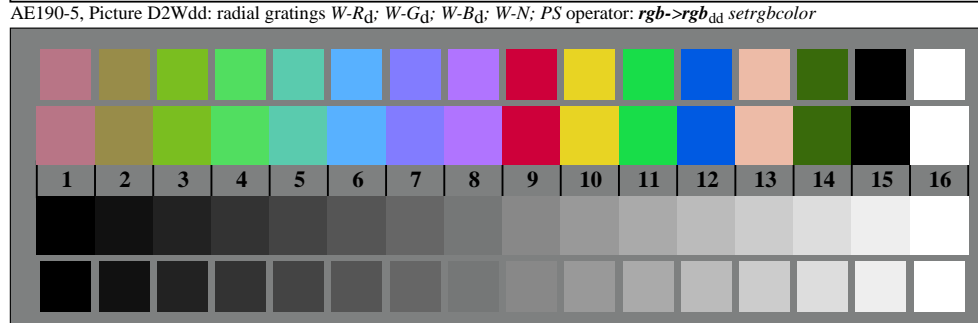
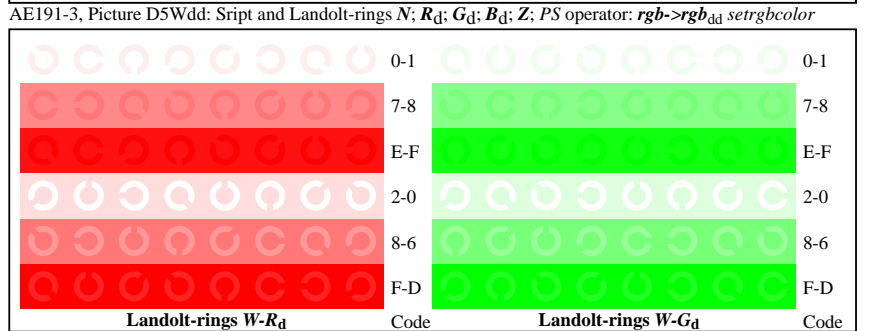
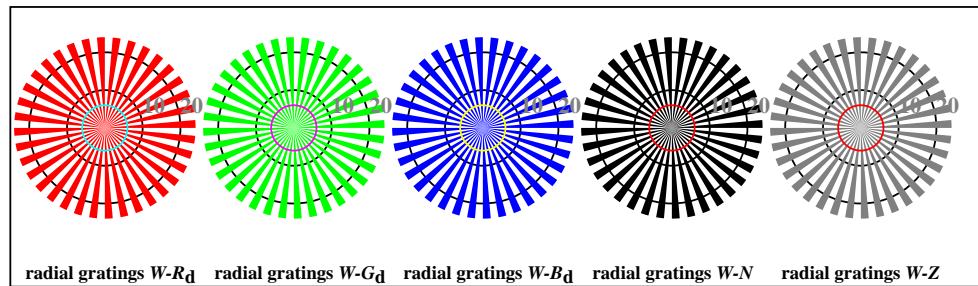
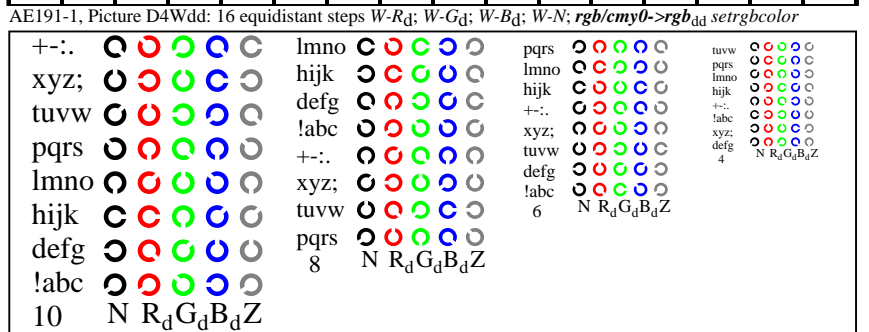
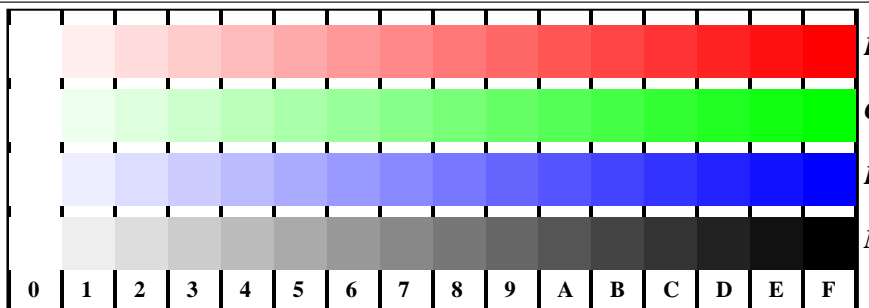
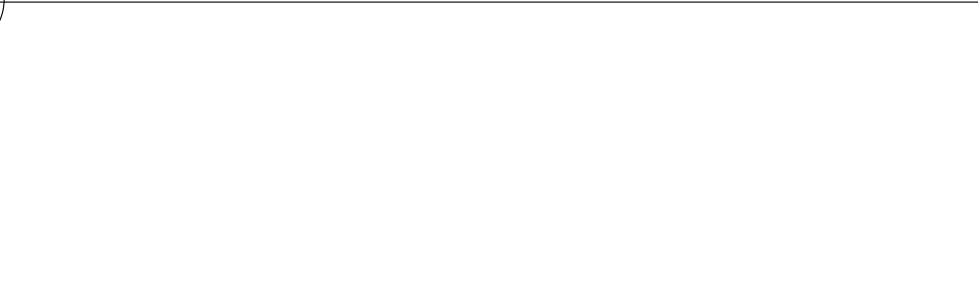


see similar files: <http://farbe.li.tu-berlin.de/AE19/AE19.HTM>
 technical information: <http://farbe.li.tu-berlin.de/> or <http://farbe.li.tu-berlin.de/AE.HTM>

TUB Registration: 20190301-AE19/AE19L0NP.PDF /.PS
 application for measurement or viewing of display and print output
 TUB material: code=rh4ta



Test chart AE19 according to test chart 4 of ISO/IEC 15775
 chromatic test chart RGB

input: $rgb/cmy0/000n/w$ set...
 output: $\rightarrow rgb_{dd}$ setrgbcolor

Test of visual linearized output of pictures D2W_{dd} to D3W_{dd} please underline Yes/No
Output test with computer display () or the external display () please mark by (x)!

Test of the resolution of radial gratings W-R_d, W-G_d, W-B_d according to picture D2W_{dd}
Is the resolution diameter < 6 mm? Yes/No
Test with magnifying glass (e.g. 6x) resolution diameter mm

Test of the 14 CIE-test colours according to picture D3W_{dd}
Are clear (immediately conspicuous) differences recognized between reproduction and test chart? Yes/No
If Yes: How many colours have clear differences? of the given 14 steps: Steps

Test of 16 visual equidistant L*-grey steps according to picture D3W_{dd}
Are the 16 steps on the upper rows distinguishable? Yes/No
If No: How many steps can be distinguished? of the given 16 steps: Steps

part 1, AE190-3dd: 00301

Documentation of file format, hardware and software for this test:

PDF file: http://farbe.li.tu-berlin.de/AE19/AE19F0PX_CY8_1.PDF underline: Yes/No
PS file: http://farbe.li.tu-berlin.de/AE19/AE19F0PX_CY8_1.PS underline: Yes/No

Used computer operating system: either one of Windows/Mac/Unix/other and version:.....

This evaluation is for the output: underline: monitor/data projector/printer
Device model, driver and version:.....

output with PDF/PS-file: underline: PDF/PS file

For output with PDF file AE19F0PX_CY8_1.PDF
either PDF-file transfer "download, copy" to PDF device.....
or with computer system interpretation by "Display-PDF".....
or with software. e. g. Adobe-Reader-/Acrobat and version:.....
or with software e. g. Ghostscript and version:.....

For output with PS file AE19F0PX_CY8_1.PS
either PS-file transfer "download, copy" to PS device.....
or with computer system interpretation by "Display-PS".....
or with software e. g. Ghostscript and version:.....
or with software e. g. Mac-Yap and version:.....

Special remarks: e. g. output of Landscape (L)
.....
.....
.....

part 3, AE190-7dd: 00301

Test of 16 visually equally spaced steps of the colour rows W-R_d, W-G_d, W-B_d, and W-N according to picture D4W_{dd}
W-R_d Are all the 16 steps distinguishable? Yes/No
White - Red: If No: How many steps can be distinguished? of the given 16 steps: Steps
W-G_d Are all the 16 steps distinguishable? Yes/No
White - Green: If No: How many steps can be distinguished? of the given 16 steps: Steps
W-B_d Are all the 16 steps distinguishable? Yes/No
White - Blue: If No: How many steps can be distinguished? of the given 16 steps: Steps
W-N Are all the 16 steps distinguishable? Yes/No
White - Black: If No: How many steps can be distinguished? of the given 16 steps: Steps

Test of characters and Landolt-rings in four sizes according to picture D5W_{dd}
Is the recognition > 50% for letters (17 of 32 at least)? , and for Landolt-rings (minimum 5 of 8)?
Relative size Letters Rings N Rings R_d Rings G_d Rings B_d
10 Yes/No Yes/No Yes/No Yes/No Yes/No
8 Yes/No Yes/No Yes/No Yes/No Yes/No
6 Yes/No Yes/No Yes/No Yes/No Yes/No
4 Yes/No Yes/No Yes/No Yes/No Yes/No

Test of the recognition frequency of the Landolt rings W-R_d, W-G_d, W-B_d, and W-N according to picture D6W_{dd}, and D7W_{dd}
Is the recognition frequency of the Landolt rings > 50% (5 of 8 at least)?

Colour row W-R_d background - ring Colour row W-G_d background - ring Colour row W-B_d background - ring Colour row W-N background - ring
0 - 1 Yes/No 0 - 1 Yes/No 0 - 1 Yes/No 0 - 1 Yes/No
7 - 8 Yes/No 7 - 8 Yes/No 7 - 8 Yes/No 7 - 8 Yes/No
E - F Yes/No E - F Yes/No E - F Yes/No E - F Yes/No
2 - 0 Yes/No 2 - 0 Yes/No 2 - 0 Yes/No 2 - 0 Yes/No
8 - 6 Yes/No 8 - 6 Yes/No 8 - 6 Yes/No 8 - 6 Yes/No
F - D Yes/No F - D Yes/No F - D Yes/No F - D Yes/No

part 2, AE191-3Ndd: 00301

Documentation of assessor colour-vision properties for visual assessment

The assessor has normal colour vision according to one test: underline: Yes/No
either according to DIN 6160:1996 with Anomaloskop of Nagel underline: Yes/unknown
or with test charts using colour points according to Ishihara underline: Yes/unknown
or tested with, please specify: underline: Yes/unknown

For visual evaluation of the display (Monitor, data projector) output

Office workplace illumination is daylight (clouded/north sky) underline: Yes/No

PDF file: http://farbe.li.tu-berlin.de/AE19/AE19F0PX_CY8_3.PDF underline: Yes/No

PS file: http://farbe.li.tu-berlin.de/AE19/AE19F0PX_CY8_3.PS underline: Yes/No

picture A7_{dd} contrast range: (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0) underline: Yes/No

compare standard print output according to ISO/IEC 15775 with range F:0 underline: Yes/No

Remark: In daylighted offices the contrast range is in many cases: on display between: >F:0 and E:0 (monitor), D:0 and 3:0 (data projector)

Only for optional colorimetric specification with PDF/PS file output

PDF file: http://farbe.li.tu-berlin.de/AE19/AE19F0PX_CY8_3.PDF underline: Yes/No

picture A7_{dd} underline: Yes/No

PS file: http://farbe.li.tu-berlin.de/AE19/AE19F0PX_CY8_3.PS or underline: Yes/No

colour measurement and specification for:

CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: underline: Yes/No

If No, please give other parameters:

Colorimetric specification for 17 step colours of http://farbe.li.tu-berlin.de/OE70/OE70L1NP.PDF

Exchange of CIELAB data in file http://farbe.li.tu-berlin.de/AE82/AE82L0NP.TXT and transfer

of the PS file AE82L0NP.PS (=.TXT) to the PDF-file AE82L0NP.PDF underline: Yes/No

If No, please describe other method:

part 4, AE191-7dd: 00301

see similar files: http://farbe.li.tu-berlin.de/AE19/AE19.HTM
technical information: http://farbe.li.tu-berlin.de/ or http://farbe.li.tu-berlin.de/AE.HTM

TUB Registration: 20190301-AE19/AE19L0NP.PDF /.PS
application for measurement or viewing of display and print output
TUB material: code=rha4ta

see similar files: http://farbe.li.tu-berlin.de/AE19/AE19.HTM
 technical information: http://farbe.li.tu-berlin.de/ or http://farbe.li.tu-berlin.de/AE.HTM

TUB Registration: 20190301-AE19/AE19L0NP.PDF /.PS
 application for measurement or viewing of display and print output
 TUB material: code=rh4ta

<i>i</i>	LAB^*_{ref}	l^*_{out}	LAB^*_{out}	$LAB^*_{out-ref}$	ΔE^*
1	0,00	0,00	0,00	0,00	0,01
2	6,36	0,00	0,06	0,00	0,01
3	12,72	0,00	0,13	0,00	0,01
4	19,08	0,00	0,20	0,00	0,01
5	25,44	0,00	0,26	0,00	0,01
6	31,80	0,00	0,33	0,00	0,01
7	38,16	0,00	0,40	0,00	0,01
8	44,52	0,00	0,46	0,00	0,01
9	50,88	0,00	0,53	0,00	0,01
10	57,24	0,00	0,60	0,00	0,01
11	63,60	0,00	0,66	0,00	0,01
12	69,96	0,00	0,73	0,00	0,01
13	76,32	0,00	0,80	0,00	0,01
14	82,68	0,00	0,86	0,00	0,01
15	89,04	0,00	0,93	0,00	0,01
16	95,41	0,00	1,00	0,00	0,01
17	0,00	0,00	0,00	0,00	0,01
18	23,85	0,00	0,25	0,00	0,01
19	47,70	0,00	0,50	0,00	0,01
20	71,55	0,00	0,75	0,00	0,01
21	95,41	0,00	1,00	0,00	0,01

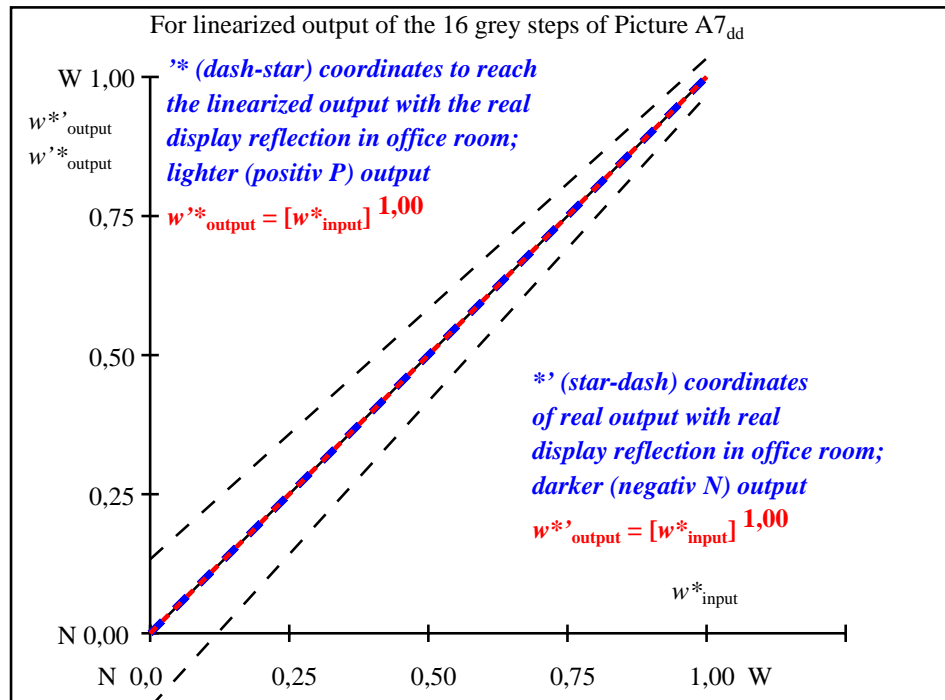
Start output S1
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

Mean lightness difference (16 steps)
 $\Delta E^*_{CIELAB} = 0,0$

Mean lightness difference (5 steps)
 $\Delta L^*_{CIELAB} = 0,0$

Mean colour reproduction index: $R^*_{ab,m} = 99,9$

part 1, AE190-3dd: 00302



part 2, AE191-3dd: 00302

$L^*/Y_{intended}$ (absolute)	0,0/0,0	6,3/0,7	12,7/1,5	19,0/2,7	25,4/4,5	31,8/6,9	38,1/10,1	44,5/14,2	50,8/19,1	57,2/25,1	63,6/32,3	69,9/40,7	76,3/50,4	82,6/61,5	89,0/74,2	95,4/88,5
$w^* w^* w^*$ setrgb																
$gp=1,000$																
No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^*=l^*_{CIELAB, r}$ (relative)																
$w^*_{intended}$	0,000	0,067	0,133	0,200	0,267	0,333	0,400	0,467	0,533	0,600	0,667	0,733	0,800	0,867	0,933	1,000
w^*_{output}	0,000	0,067	0,133	0,200	0,267	0,333	0,400	0,467	0,533	0,600	0,667	0,733	0,800	0,867	0,933	1,000

part 3, picture A7_{dd}: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^*$ setrgbcolor AE190-7dd: 00302

In-out: Test chart AE19 according to test chart 4 of ISO/IEC 15775
 Viewing Y contrast $Y_W:Y_N=88,9:0,31$; Y_N -range 0,0 to <0,46
 input: $rgb/cmy0/000n/w$ set...
 output: $->rgb_{dd}$ setrgbcolor