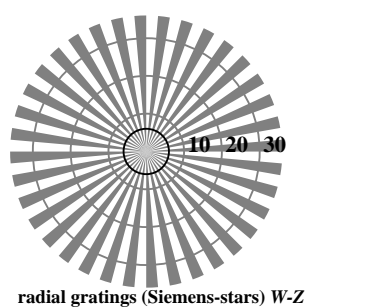
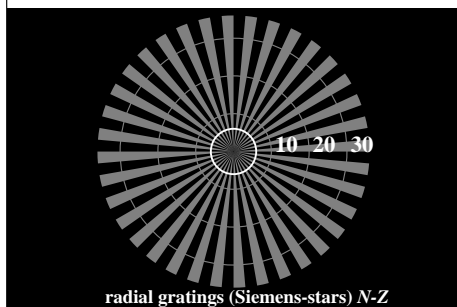
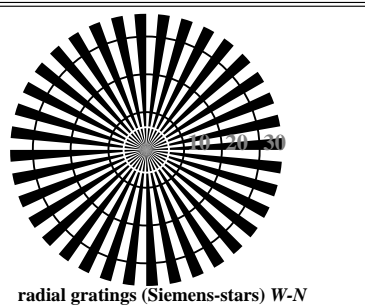
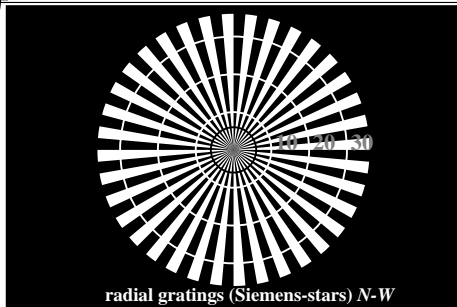


see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0NA.PDF> / .PS, Page 1/24, *rgb/cmy0/000n/w->rgb<sub>de</sub>*  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.itu-berlin.de/AE.HTM>



AE060-3, picture A1W<sub>de</sub>: Element A: radial gratings N-W, W-N, N-Z, and W-Z; PS operator: *rgb/cmy0/w/000n*

$L^*/Y_{\text{intended}}$ (absolute)	18,0/2,5	37,3/9,7	56,7/24,6	76,0/49,8	95,4/88,5	$N_0$ (min.)	$W_1$ (max.)
$w^* = I^*_{\text{CIELAB}, r}$ (relative)							
$w^*_{\text{input}}$	0,000	0,250	0,500	0,750	1,000	$N_0$ (min.)	$W_1$ (max.)

AE060-5, picture A2W<sub>de</sub>: Element B: 5 visual equidistant  $L^*$ -grey steps +  $N_0$  +  $W_1$ ; PS operator: *rgb/cmy0/w/000n*

$L^*/Y_{\text{intended}}$ (absolute)	18,0/2,5	23,1/3,8	28,3/5,5	33,4/7,7	38,6/10,4	43,8/13,7	48,9/17,5	54,1/22,0	59,2/27,3	64,4/33,3	69,6/40,1	74,7/47,8	79,9/56,5	85,0/66,1	90,2/76,8	95,4/88,5
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
$w^* = I^*_{\text{CIELAB}, r}$ (relative)																
$w^*_{\text{input}}$	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

AE060-7, picture A3W<sub>de</sub>: Element C: 16 visual equidistant  $L^*$ -grey steps; PS operator: *rgb/cmy0/w/000n*



Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

background step	0	1	ring step	0-1
Hex code	7	8	Hex code	7-8
E		F	E-F	
2		0	2-0	
8		6	8-6	
F		D	F-D	

Landolt-rings W-N

code: background - ring

AE061-1, picture A4W<sub>de</sub>: Element D: Landolt-rings W-N; PS operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

line raster diameter in lpi

AE061-3, picture A5W<sub>de</sub>: Element E: Line raster under 45° (or 135°); PS-operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

line raster diameter in lpi

AE061-5, picture A6W<sub>de</sub>: Element F: Line raster under 90° (or 0°); PS-operator: *rgb/cmy0/w/000n*

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*



TUB Registration: 20172201-AE06/AE06L0FA.TXT /.PS  
application for measurement or viewing of display output

TUB material: code=th4ta

see similar files: [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY8\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY8_1.PDF) underline: Yes/No  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.li.tu-berlin.de/AE.HTM>

<http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 2/24  
F: 3D-linearization AE06/AE06LF0PX.PDF / .PS in file (F)

**Test of visual linearized output of pictures A1W<sub>de</sub> to A3W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**  
**Test of the radial grating according to picture A1W<sub>de</sub>**  
N-W-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-N-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
N-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
**Test of 5 visual equidistant L\*-grey steps according to picture A2W<sub>de</sub>**  
Are the 5 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 5 steps:  
**Test of 16 visual equidistant L\*-grey steps according to picture A3W<sub>de</sub>**  
Are the 16 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 16 steps:

part 1, AE060-3de: 11001

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

**PDF file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY8\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY8_1.PDF) underline: Yes/No

**PS file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY8\\_1.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_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 AE06F0PX\_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 AE06F0PX\_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, AE060-7de: 11001

Form A: Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

**Test of visual linearized output of pictures A4W<sub>de</sub> to A6W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**

**Test of Landolt rings N-W according to picture A4W<sub>de</sub>**

Is the recognition frequency of the Landolt rings > 50% (5 of 8 at least)?

**background - ring**

0 - 1	<b>Yes/No</b>
7 - 8	<b>Yes/No</b>
E - F	<b>Yes/No</b>
2 - 0	<b>Yes/No</b>
8 - 6	<b>Yes/No</b>
F - D	<b>Yes/No</b>

**Test of the radial grating under 45° according to picture A5W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

**Test of the radial grating under 90° according to picture A6W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

part 2, AE061-3de: 11001

**Documentation of assessor colour-vision properties for visual assessment**

The assessor has **normal** colour vision according to one test:

either according to DIN 6160:1996 with Anomaloskop of Nagel

or with test charts using colour points according to Ishihara

or tested with, please specify: .....

underline: Yes/No

underline: Yes/unknown

underline: Yes/unknown

underline: Yes/unknown

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

Office workplace illumination is daylight (clouded/north sky)

**PDF file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY8\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY8_3.PDF) underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY8\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY8_3.PS) underline: Yes/No

**picture A7<sub>de</sub> contrast range:** (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0)

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY8\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY8_3.PDF)

**picture A7<sub>de</sub>** underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY8\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY8_3.PS)

**picture A7<sub>de</sub>** 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, AE061-7de: 11001

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*

TUB Registration: 20172201-AE06/AE06L0FA.TXT / .PS  
application for measurement or viewing of display output

TUB material: code=th4ta

see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0FA.TXT> /PS  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.li.tu-berlin.de/AE.HTM>

i	LAB <sup>*</sup> <sub>ref</sub>	L <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out-ref</sub>	ΔE <sup>*</sup>	Start output S1
1	0,00	0,00	0,00	0,00	0,00	0,01
2	6,36	0,00	0,06	6,36	0,00	0,01
3	12,72	0,00	0,13	12,72	0,00	0,01
4	19,08	0,00	0,20	19,08	0,00	0,01
5	25,44	0,00	0,26	25,44	0,00	0,01
6	31,80	0,00	0,33	31,80	0,00	0,01
7	38,16	0,00	0,40	38,16	0,00	0,01
8	44,52	0,00	0,46	44,52	0,00	0,01
9	50,88	0,00	0,53	50,88	0,00	0,01
10	57,24	0,00	0,60	57,24	0,00	0,01
11	63,60	0,00	0,66	63,60	0,00	0,01
12	69,96	0,00	0,73	69,96	0,00	0,01
13	76,32	0,00	0,80	76,32	0,00	0,01
14	82,68	0,00	0,86	82,68	0,00	0,01
15	89,04	0,00	0,93	89,04	0,00	0,01
16	95,41	0,00	1,00	95,41	0,00	0,01
17	0,00	0,00	0,00	0,00	0,00	0,01
18	23,85	0,00	0,25	23,85	0,00	0,01
19	47,70	0,00	0,50	47,70	0,00	0,01
20	71,55	0,00	0,75	71,55	0,00	0,01
21	95,41	0,00	1,00	95,41	0,00	0,01

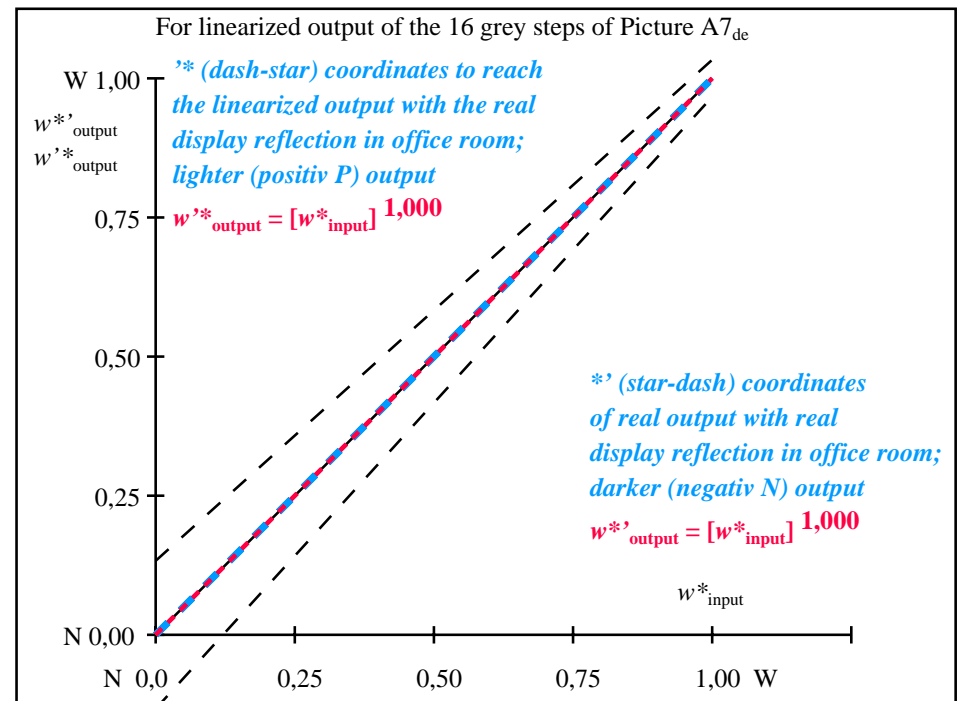
Mean lightness difference (16 steps)  
 $\Delta E^*_{\text{CIELAB}} = 0,0$

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

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

part 1,

AE060-3de: 11002



part 2,

AE061-3de: 11002

$L^*/Y_{\text{intended}}$ (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
0 0 0 n* setcmyk 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
$w^* = l^*_{\text{CIELAB}, r}$ (relative)																
$w^*_{\text{intended}}$	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
$w^*_{\text{output}}$	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<sub>de</sub>: 16 visual equidistant  $L^*$ -grey steps; PS operator: 0 0 0 n\* setcmykcolor

AE060-7de: 11002

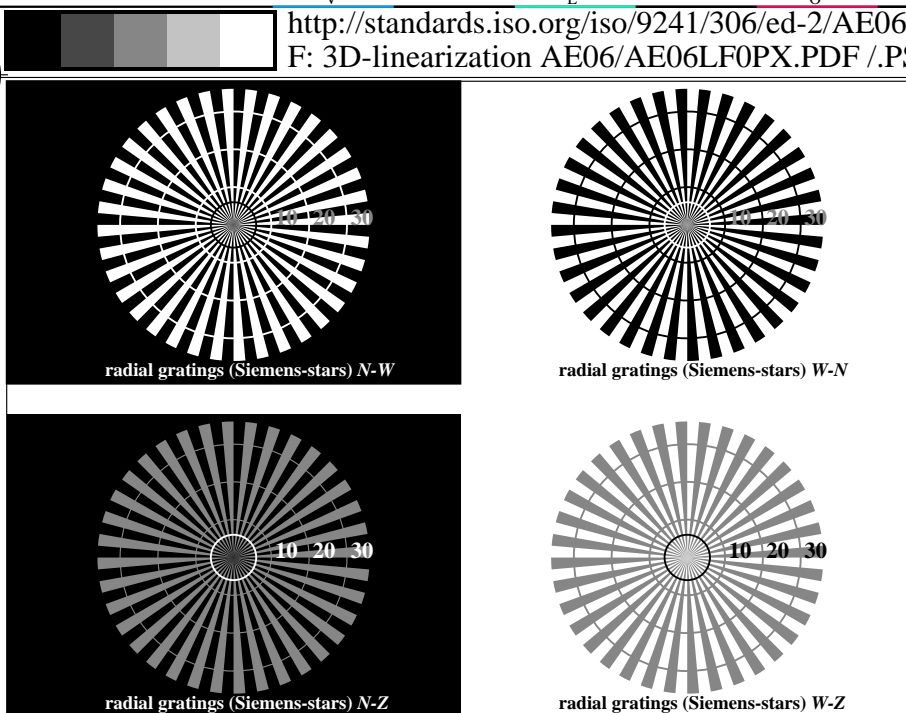
In-out: Test chart AE06 according to ISO 9241-306:2008  
Viewing  $Y$  contrast  $Y_W:Y_N=88,9:0,31$ ;  $Y_N$ -range 0,0 to <0,46

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

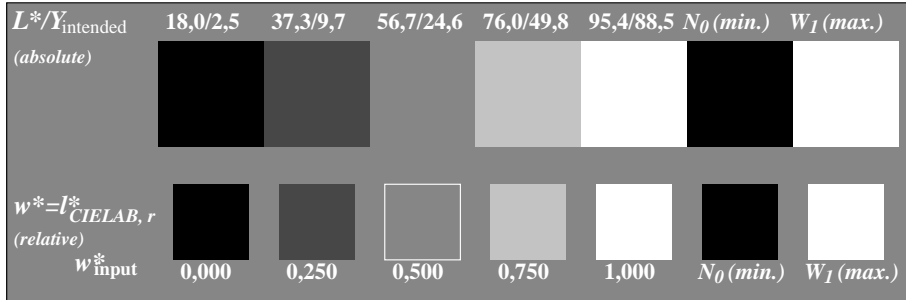
TUB Registration: 20172201-AE06/AE06L0FA.TXT /PS  
application for measurement or viewing of display output

TUB material: code=th4ta

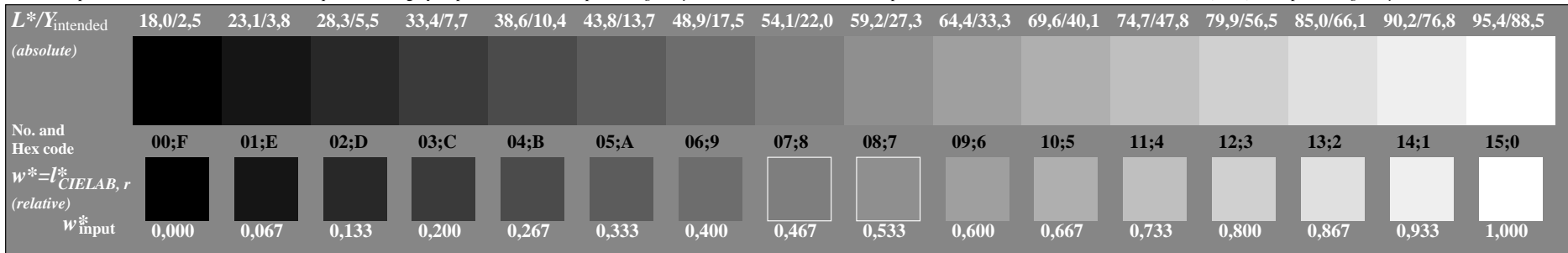
see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0NA.PDF> / .PS, Page 4/24, *rgb/cmy0/000n/w->rgb<sub>de</sub>*  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.itu-berlin.de/AE.HTM>



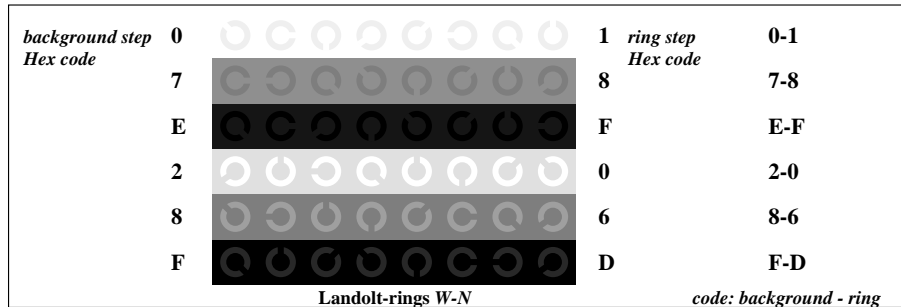
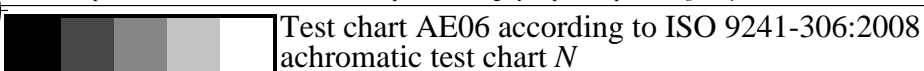
AE060-3, picture A1W<sub>de</sub>: Element A: radial gratings N-W, W-N, N-Z, and W-Z; PS operator: *rgb/cmy0/w/000n*



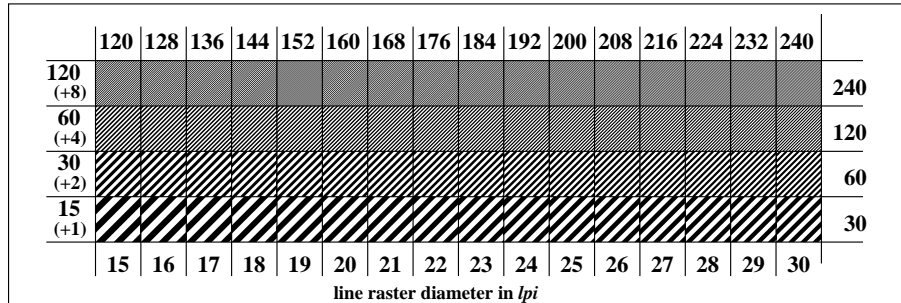
AE060-5, picture A2W<sub>de</sub>: Element B: 5 visual equidistant  $L^*$ -grey steps +  $N_0$  +  $W_1$ ; PS operator: *rgb/cmy0/w/000n*



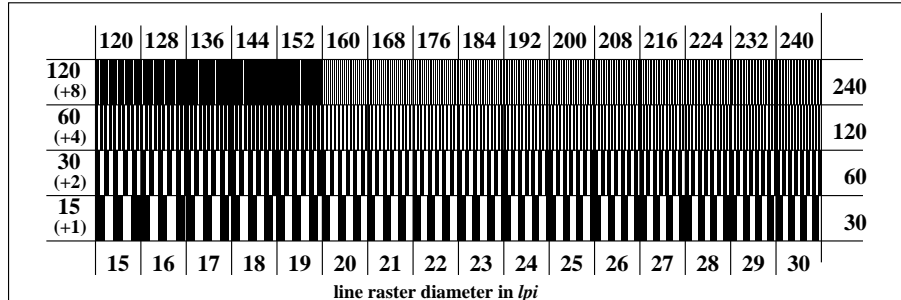
AE060-7, picture A3W<sub>de</sub>: Element C: 16 visual equidistant  $L^*$ -grey steps; PS operator: *rgb/cmy0/w/000n*



AE061-1, picture A4W<sub>de</sub>: Element D: Landolt-rings W-N; PS operator: *rgb/cmy0/w/000n*



AE061-3, picture A5W<sub>de</sub>: Element E: Line raster under 45° (or 135°); PS-operator: *rgb/cmy0/w/000n*



AE061-5, picture A6W<sub>de</sub>: Element F: Line raster under 90° (or 0°); PS-operator: *rgb/cmy0/w/000n*

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*

TUB Registration: 20172201-AE06/AE06L0FA.TXT /.PS  
application for measurement or viewing of display output

TUB material: code=th4ta



see similar files: [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY7\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY7_1.PDF) underline: Yes/No  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.li.tu-berlin.de/AE.HTM>

<http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 5/24  
F: 3D-linearization AE06/AE06LF0PX.PDF / .PS in file (F)

**Test of visual linearized output of pictures A1W<sub>de</sub> to A3W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**  
**Test of the radial grating according to picture A1W<sub>de</sub>**  
N-W-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-N-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
N-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
**Test of 5 visual equidistant L\*-grey steps according to picture A2W<sub>de</sub>**  
Are the 5 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
**Test of 16 visual equidistant L\*-grey steps according to picture A3W<sub>de</sub>**  
Are the 16 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps

part 1, AE060-3de: 11011

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

**PDF file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY7\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY7_1.PDF) underline: Yes/No

**PS file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY7\\_1.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY7_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 AE06F0PX\_CY7\_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 AE06F0PX\_CY7\_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,

AE060-7de: 11011

Form A: Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

**Test of visual linearized output of pictures A4W<sub>de</sub> to A6W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**

**Test of Landolt rings N-W according to picture A4W<sub>de</sub>**

Is the recognition frequency of the Landolt rings > 50% (5 of 8 at least)?

**background - ring**

0 - 1	<b>Yes/No</b>
7 - 8	<b>Yes/No</b>
E - F	<b>Yes/No</b>
2 - 0	<b>Yes/No</b>
8 - 6	<b>Yes/No</b>
F - D	<b>Yes/No</b>

**Test of the radial grating under 45° according to picture A5W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

**Test of the radial grating under 90° according to picture A6W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

part 2,

AE061-3de: 11011

**Documentation of assessor colour-vision properties for visual assessment**

The assessor has **normal** colour vision according to one test:

either according to DIN 6160:1996 with Anomaloskop of Nagel

or with test charts using colour points according to Ishihara

or tested with, please specify: .....

underline: Yes/No

underline: Yes/unknown

underline: Yes/unknown

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY7\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY7_3.PDF) underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY7\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY7_3.PS) underline: Yes/No

**picture A7<sub>de</sub> contrast range:** (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0)

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY7\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY7_3.PDF)

**picture A7<sub>de</sub>**

underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY7\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY7_3.PS)

**picture A7<sub>de</sub>**

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,

AE061-7de: 11011

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*

TUB Registration: 20172201-AE06/AE06L0FA.TXT / .PS  
application for measurement or viewing of display output

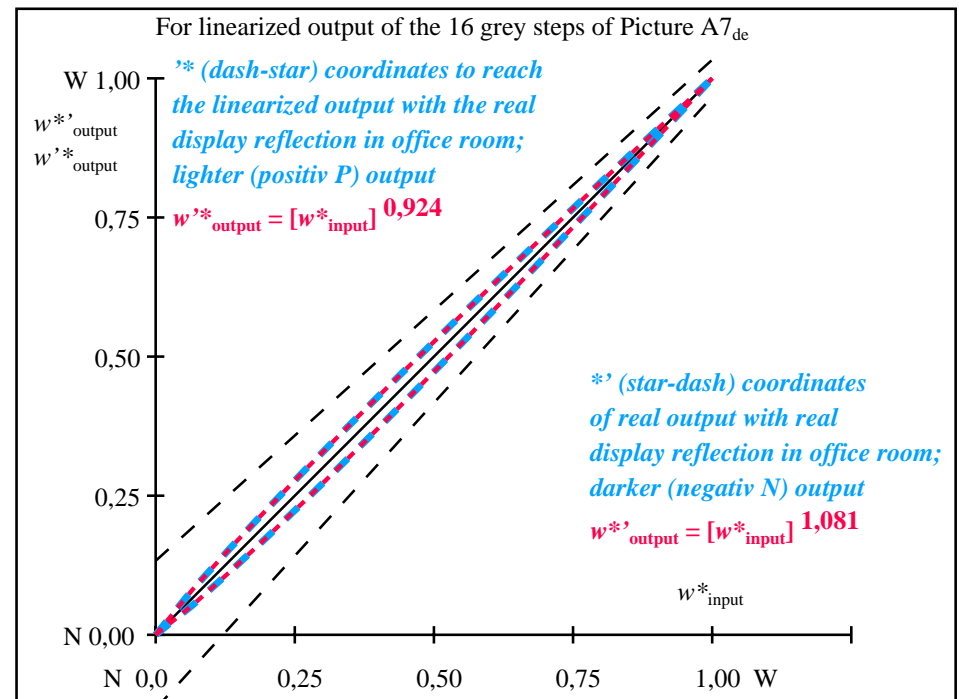
TUB material: code=th4ta

see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0NA.PDF> /  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.it.tu-berlin.de/AE.HTM>

i	LAB <sup>*</sup> <sub>ref</sub>	L <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out-ref</sub>	ΔE <sup>*</sup>	Start output S1
1	5,69 0,00 0,00	0,00	5,69 0,00 0,00	0,00 0,00 0,00	0,01	Specification according to
2	11,67 0,00 0,00	0,10	14,73 0,00 0,00	3,05 0,00 0,00	3,05	ISO/IEC 15775 Annex G
3	17,65 0,00 0,00	0,18	21,95 0,00 0,00	4,30 0,00 0,00	4,30	and DIN 33866-1 Annex G
4	23,63 0,00 0,00	0,25	28,62 0,00 0,00	4,99 0,00 0,00	4,99	
5	29,61 0,00 0,00	0,32	34,96 0,00 0,00	5,34 0,00 0,00	5,34	
6	35,59 0,00 0,00	0,39	41,05 0,00 0,00	5,45 0,00 0,00	5,45	
7	41,57 0,00 0,00	0,46	46,96 0,00 0,00	5,38 0,00 0,00	5,38	
8	47,55 0,00 0,00	0,52	52,72 0,00 0,00	5,16 0,00 0,00	5,16	
9	53,54 0,00 0,00	0,58	58,35 0,00 0,00	4,81 0,00 0,00	4,81	
10	59,52 0,00 0,00	0,64	63,88 0,00 0,00	4,36 0,00 0,00	4,36	
11	65,50 0,00 0,00	0,70	69,31 0,00 0,00	3,81 0,00 0,00	3,81	
12	71,48 0,00 0,00	0,76	74,67 0,00 0,00	3,18 0,00 0,00	3,18	
13	77,46 0,00 0,00	0,82	79,95 0,00 0,00	2,48 0,00 0,00	2,48	
14	83,44 0,00 0,00	0,88	85,16 0,00 0,00	1,71 0,00 0,00	1,71	
15	89,42 0,00 0,00	0,94	90,31 0,00 0,00	0,88 0,00 0,00	0,88	
16	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	
17	5,69 0,00 0,00	0,00	5,69 0,00 0,00	0,00 0,00 0,00	0,01	Mean lightness difference
18	18,12 0,00 0,00	0,30	33,40 0,00 0,00	5,28 0,00 0,00	5,28	(16 steps)
19	50,55 0,00 0,00	0,55	55,55 0,00 0,00	5,00 0,00 0,00	5,00	ΔE <sup>*</sup> <sub>CIELAB</sub> = 3,4
20	72,98 0,00 0,00	0,78	75,99 0,00 0,00	3,01 0,00 0,00	3,01	Mean lightness difference
21	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	(5 steps)
						ΔL <sup>*</sup> <sub>CIELAB</sub> = 2,6
						Mean colour reproduction index: R <sup>*</sup> <sub>ab,m</sub> = 85,0

part 1,

AE060-3de: 11012



part 2,

AE061-3de: 11012

L <sup>*</sup> /Y <sub>intended</sub> (absolute)	5,6/0,6	11,6/1,3	17,6/2,4	23,6/3,9	29,6/6,0	35,5/8,8	41,5/12,2	47,5/16,4	53,5/21,5	59,5/27,5	65,5/34,6	71,4/42,8	77,4/52,3	83,4/63,0	89,4/75,0	95,4/88,5
0 0 0 n <sup>*</sup> setcmyk gp=0,924 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 <sup>*</sup> =l <sup>*</sup> CIELAB, r (relative)	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 <sup>*</sup> intended w <sup>*</sup> output	0,000 0,000	0,067 0,082	0,133 0,154	0,200 0,225	0,267 0,294	0,333 0,361	0,400 0,428	0,467 0,494	0,533 0,558	0,600 0,623	0,667 0,687	0,733 0,750	0,800 0,813	0,867 0,876	0,933 0,937	1,000 1,000

part 3, picture A7<sub>de</sub>: 16 visual equidistant L<sup>\*</sup>-grey steps; PS operator: 0 0 0 n<sup>\*</sup> setcmykcolor

AE060-7de: 11012

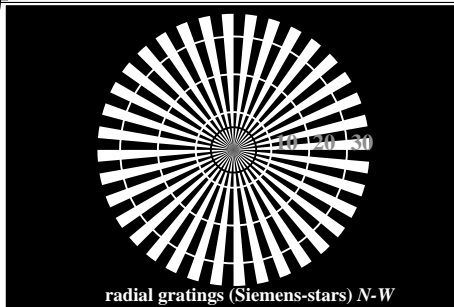
In-out: Test chart AE06 according to ISO 9241-306:2008  
Viewing Y contrast Y<sub>W</sub>:Y<sub>N</sub>=88,9:0,62; Y<sub>N</sub>-range 0,46 to <0,93

input: rgb/cmy0/000n/w set...  
output: ->rgb<sub>de</sub> setrgbcolor

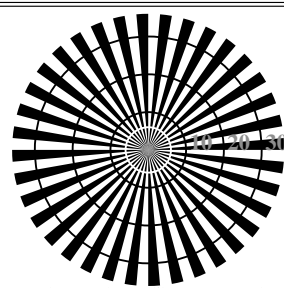
TUB Registration: 20172201-AE06/AE06L0FA.TXT /.PS  
application for measurement or viewing of display output

TUB material: code=th4ta

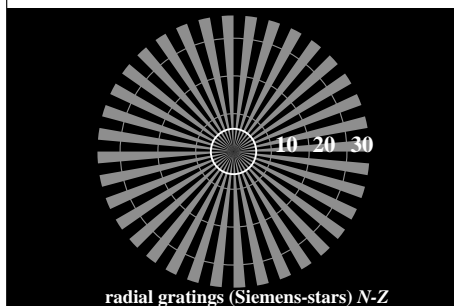
see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0NA.PDF> / .PS, Page 7/24, *rgb/cmy0/000n/w->rgb<sub>de</sub>*  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.itu-berlin.de/AE.HTM>



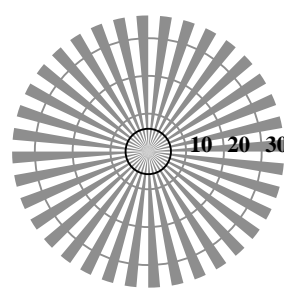
radial gratings (Siemens-stars) N-W



radial gratings (Siemens-stars) W-N



radial gratings (Siemens-stars) N-Z



radial gratings (Siemens-stars) W-Z

AE060-3, picture A1W<sub>de</sub>: Element A: radial gratings N-W, W-N, N-Z, and W-Z; PS operator: *rgb/cmy0/w/000n*

$L^*/Y_{\text{intended}}$ (absolute)	18,0/2,5	37,3/9,7	56,7/24,6	76,0/49,8	95,4/88,5	$N_0$ (min.)	$W_1$ (max.)
$w^* = I^*_{\text{CIELAB}, r}$ (relative) $w^*_{\text{input}}$	0,000	0,250	0,500	0,750	1,000	$N_0$ (min.)	$W_1$ (max.)

AE060-5, picture A2W<sub>de</sub>: Element B: 5 visual equidistant  $L^*$ -grey steps +  $N_0$  +  $W_1$ ; PS operator: *rgb/cmy0/w/000n*

$L^*/Y_{\text{intended}}$ (absolute)	18,0/2,5	23,1/3,8	28,3/5,5	33,4/7,7	38,6/10,4	43,8/13,7	48,9/17,5	54,1/22,0	59,2/27,3	64,4/33,3	69,6/40,1	74,7/47,8	79,9/56,5	85,0/66,1	90,2/76,8	95,4/88,5
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
$w^* = I^*_{\text{CIELAB}, r}$ (relative) $w^*_{\text{input}}$	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

AE060-7, picture A3W<sub>de</sub>: Element C: 16 visual equidistant  $L^*$ -grey steps; PS operator: *rgb/cmy0/w/000n*



Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

background step Hex code	0	7	E	2	8	F
ring step Hex code	0-1	7-8	E-F	2-0	8-6	F-D

Landolt-rings W-N

code: background - ring

AE061-1, picture A4W<sub>de</sub>: Element D: Landolt-rings W-N; PS operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

line raster diameter in lpi

AE061-3, picture A5W<sub>de</sub>: Element E: Line raster under 45° (or 135°); PS-operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

line raster diameter in lpi

AE061-5, picture A6W<sub>de</sub>: Element F: Line raster under 90° (or 0°); PS-operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

input: *rgb/cmy0/000n/w set...*  
output: -> *rgb<sub>de</sub> setrgbcolor*



TUB Registration: 20172201-AE06/AE06L0FA.TXT /.PS  
application for measurement or viewing of display output

TUB material: code=th4ta

see similar files: [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY6\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY6_1.PDF) underline: Yes/No  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.li.tu-berlin.de/AE.HTM>

<http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 8/24  
F: 3D-linearization AE06/AE06LF0PX.PDF / .PS in file (F)

**Test of visual linearized output of pictures A1W<sub>de</sub> to A3W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**  
**Test of the radial grating according to picture A1W<sub>de</sub>**  
N-W-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-N-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
N-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
**Test of 5 visual equidistant L\*-grey steps according to picture A2W<sub>de</sub>**  
Are the 5 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
**Test of 16 visual equidistant L\*-grey steps according to picture A3W<sub>de</sub>**  
Are the 16 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps

part 1, AE060-3de: 11021

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

**PDF file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY6\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY6_1.PDF) underline: Yes/No

**PS file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY6\\_1.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY6_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 AE06F0PX\_CY6\_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 AE06F0PX\_CY6\_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, AE060-7de: 11021

Form A: Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

**Test of visual linearized output of pictures A4W<sub>de</sub> to A6W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**

**Test of Landolt rings N-W according to picture A4W<sub>de</sub>**

Is the recognition frequency of the Landolt rings > 50% (5 of 8 at least)?

**background - ring**

0 - 1	<b>Yes/No</b>
7 - 8	<b>Yes/No</b>
E - F	<b>Yes/No</b>
2 - 0	<b>Yes/No</b>
8 - 6	<b>Yes/No</b>
F - D	<b>Yes/No</b>

**Test of the radial grating under 45° according to picture A5W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

**Test of the radial grating under 90° according to picture A6W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

part 2, AE061-3de: 11021

**Documentation of assessor colour-vision properties for visual assessment**

The assessor has **normal** colour vision according to one test:

either according to DIN 6160:1996 with Anomaloskop of Nagel

or with test charts using colour points according to Ishihara

or tested with, please specify: .....

underline: Yes/No

underline: Yes/unknown

underline: Yes/unknown

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY6\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY6_3.PDF) underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY6\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY6_3.PS) underline: Yes/No

**picture A7<sub>de</sub> contrast range:** (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0)

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY6\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY6_3.PDF)

**picture A7<sub>de</sub>** underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY6\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY6_3.PS)

**picture A7<sub>de</sub>** 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, AE061-7de: 11021

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*

TUB Registration: 20172201-AE06/AE06L0FA.TXT / .PS  
application for measurement or viewing of display output

TUB material: code=th4ta



see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0FA.TXT> /PS  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.itu-berlin.de/AE.HTM>

i	LAB <sup>*</sup> <sub>ref</sub>	L <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out-ref</sub>	ΔE <sup>*</sup>	Start output S1
1	10,99 0,00 0,00	0,00	10,99 0,00 0,00	0,00 0,00 0,00	0,01	Specification according to
2	16,62 0,00 0,00	0,13	22,51 0,00 0,00	5,89 0,00 0,00	5,89	ISO/IEC 15775 Annex G
3	22,24 0,00 0,00	0,22	30,17 0,00 0,00	7,93 0,00 0,00	7,93	and DIN 33866-1 Annex G
4	27,87 0,00 0,00	0,30	36,84 0,00 0,00	8,96 0,00 0,00	8,96	
5	33,50 0,00 0,00	0,37	42,93 0,00 0,00	9,42 0,00 0,00	9,42	
6	39,13 0,00 0,00	0,44	48,62 0,00 0,00	9,49 0,00 0,00	9,49	
7	44,75 0,00 0,00	0,50	54,02 0,00 0,00	9,26 0,00 0,00	9,26	
8	50,38 0,00 0,00	0,57	59,19 0,00 0,00	8,80 0,00 0,00	8,80	
9	56,01 0,00 0,00	0,62	64,16 0,00 0,00	8,15 0,00 0,00	8,15	
10	61,64 0,00 0,00	0,68	68,97 0,00 0,00	7,33 0,00 0,00	7,33	
11	67,27 0,00 0,00	0,74	73,64 0,00 0,00	6,37 0,00 0,00	6,37	
12	72,89 0,00 0,00	0,79	78,19 0,00 0,00	5,29 0,00 0,00	5,29	
13	78,52 0,00 0,00	0,84	82,63 0,00 0,00	4,10 0,00 0,00	4,10	
14	84,15 0,00 0,00	0,90	86,97 0,00 0,00	2,82 0,00 0,00	2,82	
15	89,78 0,00 0,00	0,95	91,23 0,00 0,00	1,45 0,00 0,00	1,45	
16	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	
17	10,99 0,00 0,00	0,00	10,99 0,00 0,00	0,00 0,00 0,00	0,01	
18	32,09 0,00 0,00	0,36	41,45 0,00 0,00	9,35 0,00 0,00	9,35	
19	53,20 0,00 0,00	0,60	61,70 0,00 0,00	8,50 0,00 0,00	8,50	
20	74,30 0,00 0,00	0,80	79,31 0,00 0,00	5,00 0,00 0,00	5,00	
21	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	

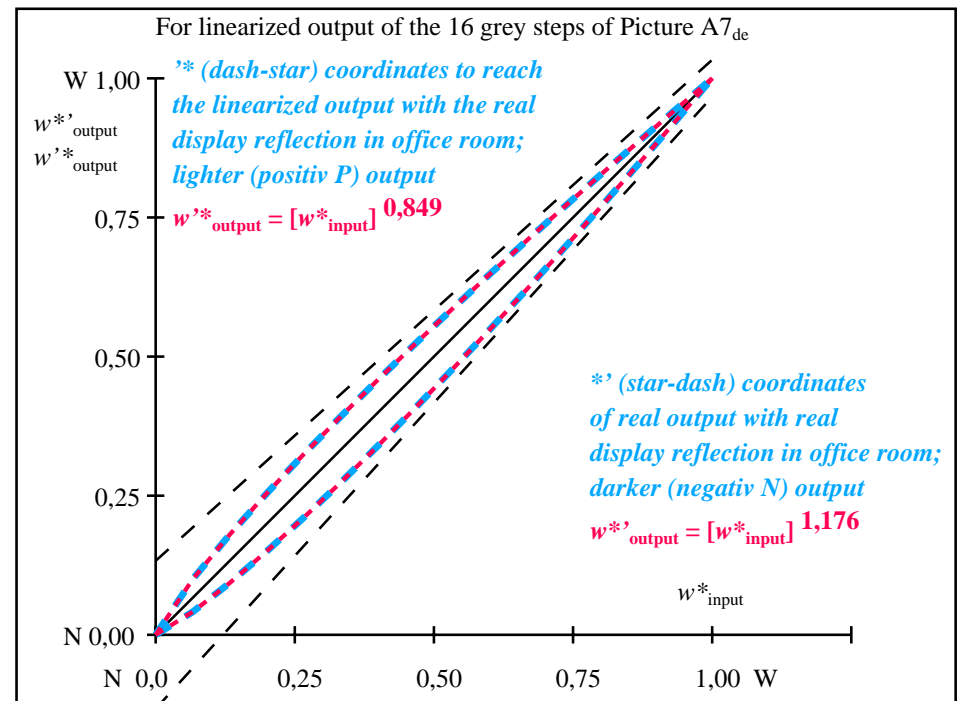
Mean lightness difference (16 steps)  
 $\Delta E^*_{\text{CIELAB}} = 5,9$

Mean lightness difference (5 steps)  
 $\Delta L^*_{\text{CIELAB}} = 4,5$

Mean colour reproduction index:  $R^*_{\text{ab,m}} = 74,1$

part 1,

AE060-3de: 11022



part 2,

AE061-3de: 11022

$L^*/Y_{\text{intended}}$ (absolute)	10,9/1,2	16,6/2,2	22,2/3,5	27,8/5,4	33,5/7,7	39,1/10,7	44,7/14,3	50,3/18,7	56,0/23,9	61,6/29,9	67,2/36,9	72,8/45,0	78,5/54,1	84,1/64,3	89,7/75,8	95,4/88,5
0 0 0 n <sup>*</sup> setcmyk gp=0,849 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
$w^* = l^*_{\text{CIELAB}, r}$ (relative)	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
$w^*_{\text{intended}}$ $w^*_{\text{output}}$	0,000 0,000	0,067 0,100	0,133 0,180	0,200 0,254	0,267 0,325	0,333 0,392	0,400 0,458	0,467 0,523	0,533 0,585	0,600 0,647	0,667 0,708	0,733 0,767	0,800 0,827	0,867 0,885	0,933 0,942	1,000 1,000

part 3, picture A7<sub>de</sub>: 16 visual equidistant L<sup>\*</sup>-grey steps; PS operator: 0 0 0 n<sup>\*</sup> setcmykcolor

AE060-7de: 11022

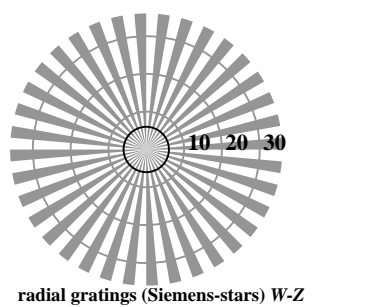
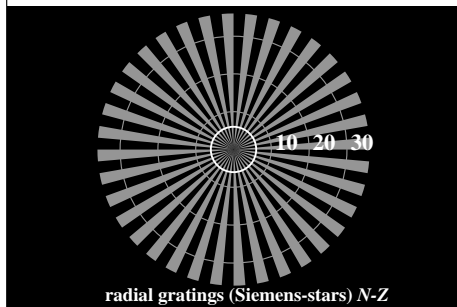
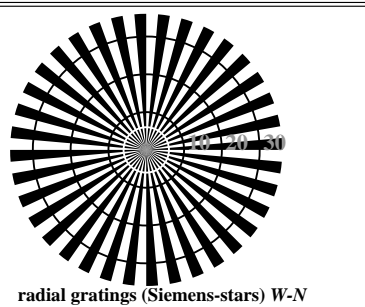
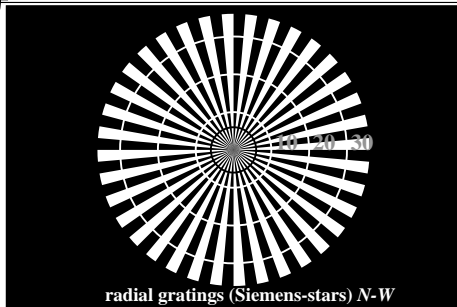
In-out: Test chart AE06 according to ISO 9241-306:2008  
Viewing Y contrast  $Y_W:Y_N=88,9:1,25$ ;  $Y_N$ -range 0,93 to <1,87

input: rgb/cmy0/000n/w set...  
output: ->rgb<sub>de</sub> setrgbcolor

TUB Registration: 20172201-AE06/AE06L0FA.TXT /PS  
application for measurement or viewing of display output

TUB material: code=th4ta

see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0FA.TXT/.PS>  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.itu-berlin.de/AE.HTM>



AE060-3, picture A1W<sub>de</sub>: Element A: radial gratings N-W, W-N, N-Z, and W-Z; PS operator: *rgb/cmy0/w/000n*

$L^*/Y_{\text{intended}}$ (absolute)	18,0/2,5	37,3/9,7	56,7/24,6	76,0/49,8	95,4/88,5	$N_0$ (min.)	$W_1$ (max.)
$w^* = I^*_{\text{CIELAB}, r}$ (relative)							
$w^*_{\text{input}}$	0,000	0,250	0,500	0,750	1,000	$N_0$ (min.)	$W_1$ (max.)

AE060-5, picture A2W<sub>de</sub>: Element B: 5 visual equidistant  $L^*$ -grey steps +  $N_0$  +  $W_1$ ; PS operator: *rgb/cmy0/w/000n*

$L^*/Y_{\text{intended}}$ (absolute)	18,0/2,5	23,1/3,8	28,3/5,5	33,4/7,7	38,6/10,4	43,8/13,7	48,9/17,5	54,1/22,0	59,2/27,3	64,4/33,3	69,6/40,1	74,7/47,8	79,9/56,5	85,0/66,1	90,2/76,8	95,4/88,5
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
$w^* = I^*_{\text{CIELAB}, r}$ (relative)																
$w^*_{\text{input}}$	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

AE060-7, picture A3W<sub>de</sub>: Element C: 16 visual equidistant  $L^*$ -grey steps; PS operator: *rgb/cmy0/w/000n*



Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

background step 0		1	ring step 0-1
Hex code 7		8	Hex code 7-8
E		F	E-F
2		0	2-0
8		6	8-6
F		D	F-D

Landolt-rings W-N

code: background - ring

AE061-1, picture A4W<sub>de</sub>: Element D: Landolt-rings W-N; PS operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

line raster diameter in lpi

AE061-3, picture A5W<sub>de</sub>: Element E: Line raster under 45° (or 135°); PS-operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

line raster diameter in lpi

AE061-5, picture A6W<sub>de</sub>: Element F: Line raster under 90° (or 0°); PS-operator: *rgb/cmy0/w/000n*

input: *rgb/cmy0/000n/w set...*  
output: -> *rgb<sub>de</sub> setrgbcolor*



TUB Registration: 20172201-AE06/AE06L0FA.TXT /.PS  
application for measurement or viewing of display output

TUB material: code=th4ta

see similar files: [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY5\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY5_1.PDF) underline: Yes/No  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.li.tu-berlin.de/AE.HTM>

<http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 11/24  
F: 3D-linearization AE06/AE06LF0PX.PDF / .PS in file (F)

**Test of visual linearized output of pictures A1W<sub>de</sub> to A3W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**  
**Test of the radial grating according to picture A1W<sub>de</sub>**  
N-W-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-N-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
N-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
**Test of 5 visual equidistant L\*-grey steps according to picture A2W<sub>de</sub>**  
Are the 5 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 5 steps:  
**Test of 16 visual equidistant L\*-grey steps according to picture A3W<sub>de</sub>**  
Are the 16 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 16 steps:

part 1, AE060-3de: 11031

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

**PDF file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY5\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY5_1.PDF) underline: Yes/No

**PS file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY5\\_1.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY5_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 AE06F0PX\_CY5\_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 AE06F0PX\_CY5\_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, AE060-7de: 11031

Form A: Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

**Test of visual linearized output of pictures A4W<sub>de</sub> to A6W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**

**Test of Landolt rings N-W according to picture A4W<sub>de</sub>**

Is the recognition frequency of the Landolt rings > 50% (5 of 8 at least)?

**background - ring**

0 - 1	<b>Yes/No</b>
7 - 8	<b>Yes/No</b>
E - F	<b>Yes/No</b>
2 - 0	<b>Yes/No</b>
8 - 6	<b>Yes/No</b>
F - D	<b>Yes/No</b>

**Test of the radial grating under 45° according to picture A5W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

**Test of the radial grating under 90° according to picture A6W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

part 2, AE061-3de: 11031

**Documentation of assessor colour-vision properties for visual assessment**

The assessor has **normal** colour vision according to one test:

either according to DIN 6160:1996 with Anomaloskop of Nagel

or with test charts using colour points according to Ishihara

or tested with, please specify: .....

underline: Yes/No

underline: Yes/unknown

underline: Yes/unknown

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY5\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY5_3.PDF) underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY5\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY5_3.PS) underline: Yes/No

**picture A7<sub>de</sub> contrast range:** (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0)

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY5\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY5_3.PDF)

**picture A7<sub>de</sub>** underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY5\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY5_3.PS)

**picture A7<sub>de</sub>** 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, AE061-7de: 11031

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*

TUB Registration: 20172201-AE06/AE06L0FA.TXT / .PS  
application for measurement or viewing of display output

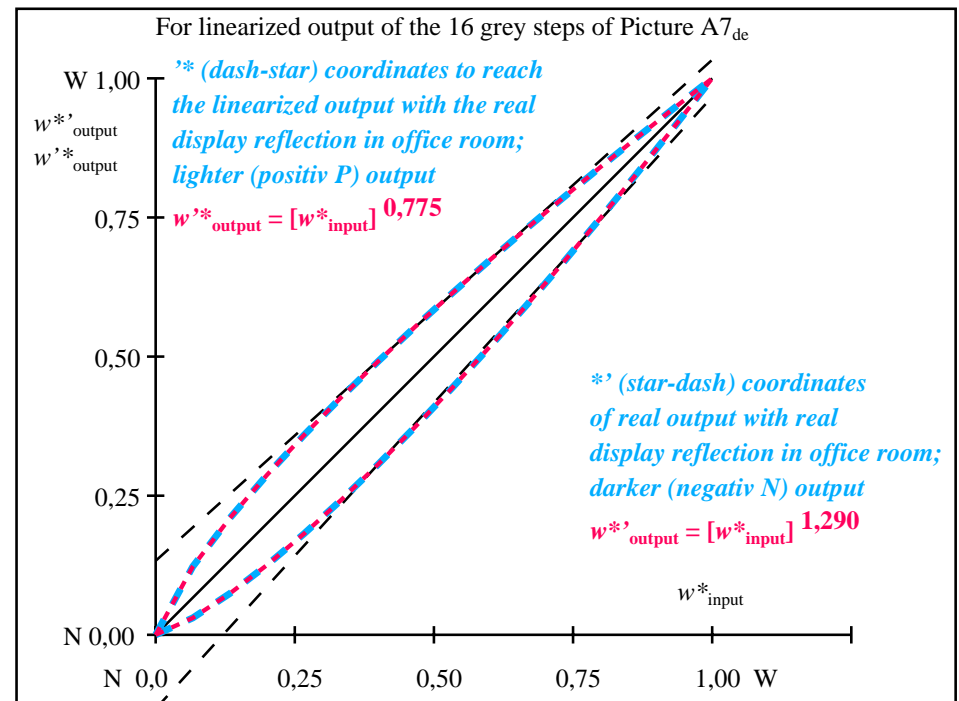
TUB material: code=th4ta

see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0FA.TXT> /PS  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.it.tu-berlin.de/AE.HTM>

i	LAB <sup>*</sup> <sub>ref</sub>	L <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out-ref</sub>	ΔE <sup>*</sup>	Start output S1
1	18,00 0,00 0,00	0,00	18,00 0,00 0,00	0,00 0,00 0,00	0,01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G
2	23,16 0,00 0,00	0,17	31,34 0,00 0,00	8,17 0,00 0,00	8,17	
3	28,32 0,00 0,00	0,27	38,92 0,00 0,00	10,59 0,00 0,00	10,59	
4	33,48 0,00 0,00	0,35	45,22 0,00 0,00	11,73 0,00 0,00	11,73	
5	38,64 0,00 0,00	0,42	50,81 0,00 0,00	12,16 0,00 0,00	12,16	
6	43,80 0,00 0,00	0,48	55,93 0,00 0,00	12,12 0,00 0,00	12,12	
7	48,96 0,00 0,00	0,55	60,70 0,00 0,00	11,73 0,00 0,00	11,73	
8	54,12 0,00 0,00	0,60	65,19 0,00 0,00	11,06 0,00 0,00	11,06	
9	59,28 0,00 0,00	0,66	69,46 0,00 0,00	10,17 0,00 0,00	10,17	
10	64,44 0,00 0,00	0,71	73,55 0,00 0,00	9,11 0,00 0,00	9,11	
11	69,60 0,00 0,00	0,76	77,49 0,00 0,00	7,88 0,00 0,00	7,88	
12	74,76 0,00 0,00	0,81	81,29 0,00 0,00	6,52 0,00 0,00	6,52	
13	79,92 0,00 0,00	0,86	84,96 0,00 0,00	5,03 0,00 0,00	5,03	
14	85,08 0,00 0,00	0,91	88,54 0,00 0,00	3,45 0,00 0,00	3,45	Mean lightness difference (16 steps) ΔE <sup>*</sup> <sub>CIELAB</sub> = 7,5
15	90,24 0,00 0,00	0,95	92,01 0,00 0,00	1,76 0,00 0,00	1,76	
16	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	
17	18,00 0,00 0,00	0,00	18,00 0,00 0,00	0,00 0,00 0,00	0,01	
18	37,35 0,00 0,00	0,40	49,47 0,00 0,00	12,11 0,00 0,00	12,11	
19	56,70 0,00 0,00	0,63	67,35 0,00 0,00	10,64 0,00 0,00	10,64	Mean lightness difference (5 steps) ΔL <sup>*</sup> <sub>CIELAB</sub> = 5,7
20	76,05 0,00 0,00	0,82	82,22 0,00 0,00	6,16 0,00 0,00	6,16	
21	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	Mean colour reproduction index: R <sup>*</sup> <sub>ab,m</sub> = 67,0

part 1,

AE060-3de: 11032



part 2,

AE061-3de: 11032

L <sup>*</sup> /Y <sub>intended</sub> (absolute)	18,0/2,5	23,1/3,8	28,3/5,5	33,4/7,7	38,6/10,4	43,8/13,7	48,9/17,5	54,1/22,0	59,2/27,3	64,4/33,3	69,6/40,1	74,7/47,9	79,9/56,5	85,0/66,1	90,2/76,8	95,4/88,5
0 0 0 n <sup>*</sup> setcmyk gp=0,775 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 <sup>*</sup> =l <sup>*</sup> CIELAB, r (relative)	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 <sup>*</sup> <sub>intended</sub> w <sup>*</sup> <sub>output</sub>	0,000 0,000	0,067 0,123	0,133 0,209	0,200 0,287	0,267 0,359	0,333 0,426	0,400 0,491	0,467 0,554	0,533 0,614	0,600 0,673	0,667 0,730	0,733 0,786	0,800 0,841	0,867 0,895	0,933 0,947	1,000 1,000

part 3, picture A7<sub>de</sub>: 16 visual equidistant L<sup>\*</sup>-grey steps; PS operator: 0 0 0 n<sup>\*</sup> setcmykcolor

AE060-7de: 11032

In-out: Test chart AE06 according to ISO 9241-306:2008  
Viewing Y contrast Y<sub>W</sub>:Y<sub>N</sub>=88,9:2,5; Y<sub>N</sub>-range 1,87 to <3,75

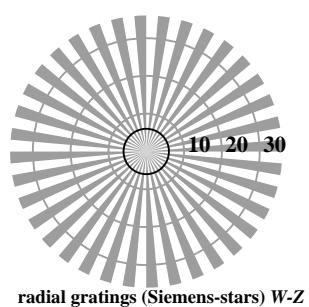
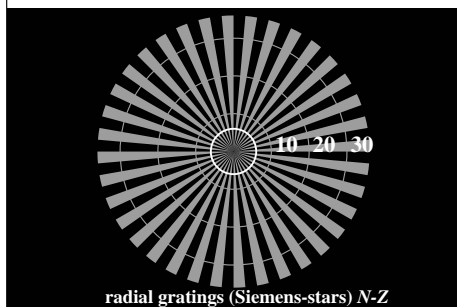
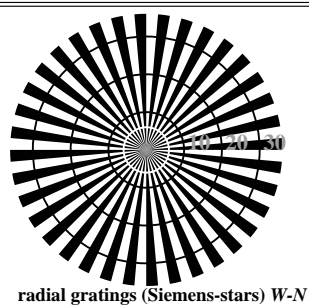
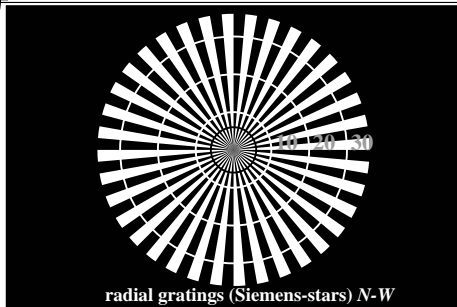
input: rgb/cmy0/000n/w set...  
output: ->rgb<sub>de</sub> setrgbcolor

TUB Registration: 20172201-AE06/AE06L0FA.TXT /PS  
application for measurement or viewing of display output

TUB material: code=th4ta



see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0FA.TXT/.PS>  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.itu-berlin.de/AE.HTM>



AE060-3, picture A1W<sub>de</sub>: Element A: radial gratings N-W, W-N, N-Z, and W-Z; PS operator: *rgb/cmy0/w/000n*

$L^*/Y_{\text{intended}}$ (absolute)	18,0/2,5	37,3/9,7	56,7/24,6	76,0/49,8	95,4/88,5	$N_0$ (min.)	$W_1$ (max.)
$w^* = I^*_{\text{CIELAB}, r}$ (relative) $w^*_{\text{input}}$	0,000	0,250	0,500	0,750	1,000	$N_0$ (min.)	$W_1$ (max.)

AE060-5, picture A2W<sub>de</sub>: Element B: 5 visual equidistant  $L^*$ -grey steps +  $N_0$  +  $W_1$ ; PS operator: *rgb/cmy0/w/000n*

$L^*/Y_{\text{intended}}$ (absolute)	18,0/2,5	23,1/3,8	28,3/5,5	33,4/7,7	38,6/10,4	43,8/13,7	48,9/17,5	54,1/22,0	59,2/27,3	64,4/33,3	69,6/40,1	74,7/47,8	79,9/56,5	85,0/66,1	90,2/76,8	95,4/88,5
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
$w^* = I^*_{\text{CIELAB}, r}$ (relative) $w^*_{\text{input}}$	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

AE060-7, picture A3W<sub>de</sub>: Element C: 16 visual equidistant  $L^*$ -grey steps; PS operator: *rgb/cmy0/w/000n*



Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

background step Hex code	0	7	E	2	8	F
ring step Hex code	0-1	7-8	E-F	2-0	8-6	F-D

Landolt-rings W-N

code: background - ring

AE061-1, picture A4W<sub>de</sub>: Element D: Landolt-rings W-N; PS operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

line raster diameter in lpi

AE061-3, picture A5W<sub>de</sub>: Element E: Line raster under 45° (or 135°); PS-operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

line raster diameter in lpi

AE061-5, picture A6W<sub>de</sub>: Element F: Line raster under 90° (or 0°); PS-operator: *rgb/cmy0/w/000n*

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*



TUB Registration: 20172201-AE06/AE06L0FA.TXT /.PS  
application for measurement or viewing of display output

TUB material: code=th4ta

see similar files: [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY4\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY4_1.PDF) underline: Yes/No  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.li.tu-berlin.de/AE.HTM>

<http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 14/24  
F: 3D-linearization AE06/AE06LF0PX.PDF / .PS in file (F)

**Test of visual linearized output of pictures A1W<sub>de</sub> to A3W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**  
**Test of the radial grating according to picture A1W<sub>de</sub>**  
N-W-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-N-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
N-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
**Test of 5 visual equidistant L\*-grey steps according to picture A2W<sub>de</sub>**  
Are the 5 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 5 steps:  
**Test of 16 visual equidistant L\*-grey steps according to picture A3W<sub>de</sub>**  
Are the 16 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 16 steps:

part 1, AE060-3de: 11041

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

**PDF file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY4\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY4_1.PDF) underline: Yes/No

**PS file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY4\\_1.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY4_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 AE06F0PX\_CY4\_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 AE06F0PX\_CY4\_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, AE060-7de: 11041

Form A: Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

**Test of visual linearized output of pictures A4W<sub>de</sub> to A6W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**

**Test of Landolt rings N-W according to picture A4W<sub>de</sub>**

Is the recognition frequency of the Landolt rings > 50% (5 of 8 at least)?

**background - ring**

0 - 1	<b>Yes/No</b>
7 - 8	<b>Yes/No</b>
E - F	<b>Yes/No</b>
2 - 0	<b>Yes/No</b>
8 - 6	<b>Yes/No</b>
F - D	<b>Yes/No</b>

**Test of the radial grating under 45° according to picture A5W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

**Test of the radial grating under 90° according to picture A6W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

part 2, AE061-3de: 11041

**Documentation of assessor colour-vision properties for visual assessment**

The assessor has **normal** colour vision according to one test:

either according to DIN 6160:1996 with Anomaloskop of Nagel

or with test charts using colour points according to Ishihara

or tested with, please specify: .....

underline: Yes/No

underline: Yes/unknown

underline: Yes/unknown

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY4\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY4_3.PDF) underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY4\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY4_3.PS) underline: Yes/No

**picture A7<sub>de</sub> contrast range:** (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0)

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY4\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY4_3.PDF)

**picture A7<sub>de</sub>** underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY4\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY4_3.PS)

**picture A7<sub>de</sub>** 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, AE061-7de: 11041

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*

TUB Registration: 20172201-AE06/AE06L0FA.TXT / .PS  
application for measurement or viewing of display output

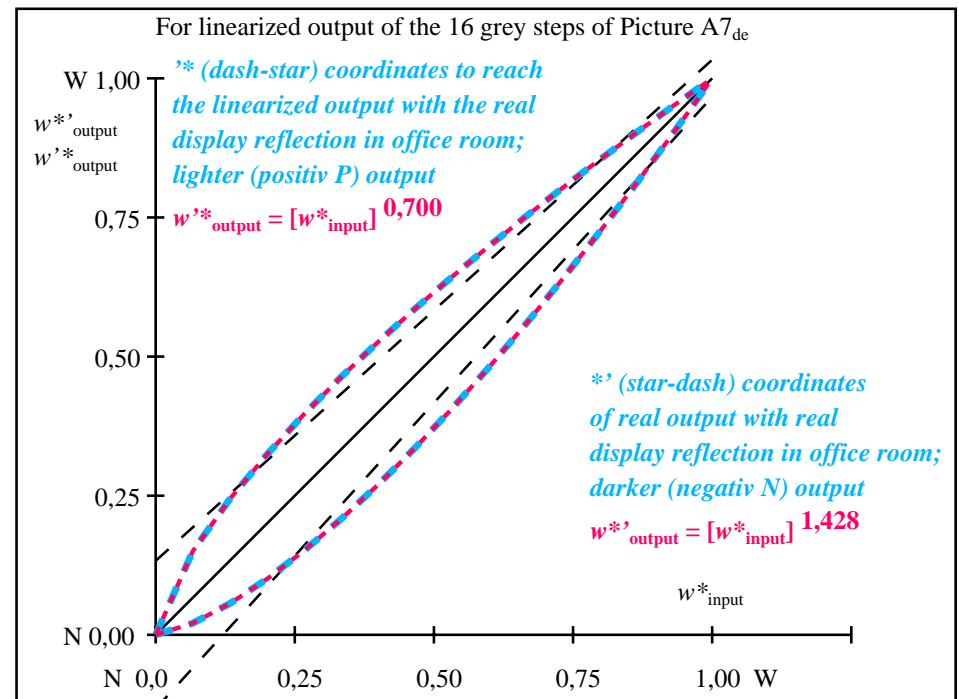
TUB material: code=th4ta

see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0FA.TXT> /PS  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.it.tu-berlin.de/AE.HTM>

i	LAB <sup>*</sup> <sub>ref</sub>	L <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out-ref</sub>	ΔE <sup>*</sup>	Start output S1
1	26,84 0,00 0,00	0,00	26,84 0,00 0,00	0,00 0,00 0,00	0,01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G
2	31,41 0,00 0,00	0,20	41,04 0,00 0,00	9,62 0,00 0,00	9,62	
3	35,98 0,00 0,00	0,30	48,09 0,00 0,00	12,10 0,00 0,00	12,10	
4	40,56 0,00 0,00	0,39	53,74 0,00 0,00	13,18 0,00 0,00	13,18	
5	45,13 0,00 0,00	0,46	58,64 0,00 0,00	13,51 0,00 0,00	13,51	
6	49,70 0,00 0,00	0,52	63,04 0,00 0,00	13,34 0,00 0,00	13,34	
7	54,27 0,00 0,00	0,58	67,09 0,00 0,00	12,82 0,00 0,00	12,82	
8	58,84 0,00 0,00	0,64	70,86 0,00 0,00	12,02 0,00 0,00	12,02	
9	63,41 0,00 0,00	0,69	74,42 0,00 0,00	11,00 0,00 0,00	11,00	
10	67,98 0,00 0,00	0,74	77,79 0,00 0,00	9,80 0,00 0,00	9,80	
11	72,55 0,00 0,00	0,78	81,01 0,00 0,00	8,45 0,00 0,00	8,45	
12	77,12 0,00 0,00	0,83	84,09 0,00 0,00	6,97 0,00 0,00	6,97	
13	81,69 0,00 0,00	0,87	87,06 0,00 0,00	5,37 0,00 0,00	5,37	
14	86,26 0,00 0,00	0,92	89,93 0,00 0,00	3,66 0,00 0,00	3,66	Mean lightness difference (16 steps) ΔE <sup>*</sup> <sub>CIELAB</sub> = 8,3
15	90,83 0,00 0,00	0,96	92,71 0,00 0,00	1,87 0,00 0,00	1,87	
16	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	
17	26,84 0,00 0,00	0,00	26,84 0,00 0,00	0,00 0,00 0,00	0,01	
18	43,98 0,00 0,00	0,44	57,47 0,00 0,00	13,48 0,00 0,00	13,48	
19	61,12 0,00 0,00	0,66	72,66 0,00 0,00	11,54 0,00 0,00	11,54	Mean lightness difference (5 steps) ΔL <sup>*</sup> <sub>CIELAB</sub> = 6,3
20	78,26 0,00 0,00	0,84	84,85 0,00 0,00	6,58 0,00 0,00	6,58	
21	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	Mean colour reproduction index: R <sup>*</sup> <sub>ab,m</sub> = 63,7

part 1,

AE060-3de: 11042



part 2,

AE061-3de: 11042

L <sup>*</sup> /Y <sub>intended</sub> (absolute)	26,8/5,0	31,4/6,8	35,9/9,0	40,5/11,5	45,1/14,6	49,7/18,1	54,2/22,2	58,8/26,8	63,4/32,0	67,9/37,9	72,5/44,4	77,1/51,7	81,6/59,7	86,2/68,5	90,8/78,1	95,4/88,5
0 0 0 n <sup>*</sup> setcmyk gp=0,700 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 <sup>*</sup> =l <sup>*</sup> CIELAB, r (relative)	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 <sup>*</sup> intended w <sup>*</sup> output	0,000 0,000	0,067 0,150	0,133 0,243	0,200 0,324	0,267 0,396	0,333 0,463	0,400 0,526	0,467 0,586	0,533 0,643	0,600 0,699	0,667 0,753	0,733 0,804	0,800 0,855	0,867 0,904	0,933 0,952	1,000 1,000

part 3, picture A7<sub>de</sub>: 16 visual equidistant L<sup>\*</sup>-grey steps; PS operator: 0 0 0 n<sup>\*</sup> setcmykcolor

AE060-7de: 11042

In-out: Test chart AE06 according to ISO 9241-306:2008  
Viewing Y contrast Y<sub>W</sub>:Y<sub>N</sub>=88,9:5; Y<sub>N</sub>-range 3,75 to <7,5

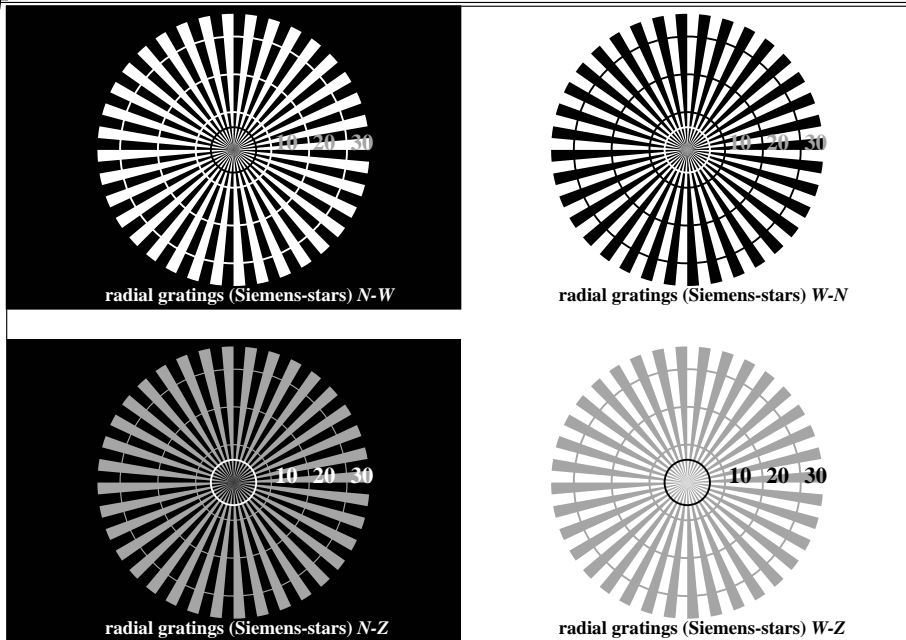
input: rgb/cmy0/000n/w set...  
output: ->rgb<sub>de</sub> setrgbcolor

TUB Registration: 20172201-AE06/AE06L0FA.TXT /PS  
application for measurement or viewing of display output

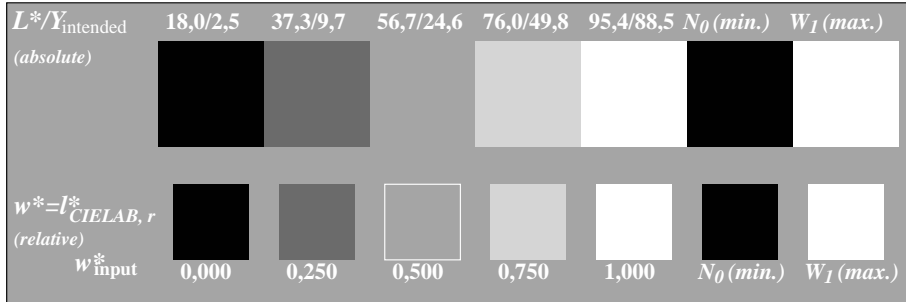
TUB material: code=th4ta

see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 16/24  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.itu-berlin.de/AE.HTM>

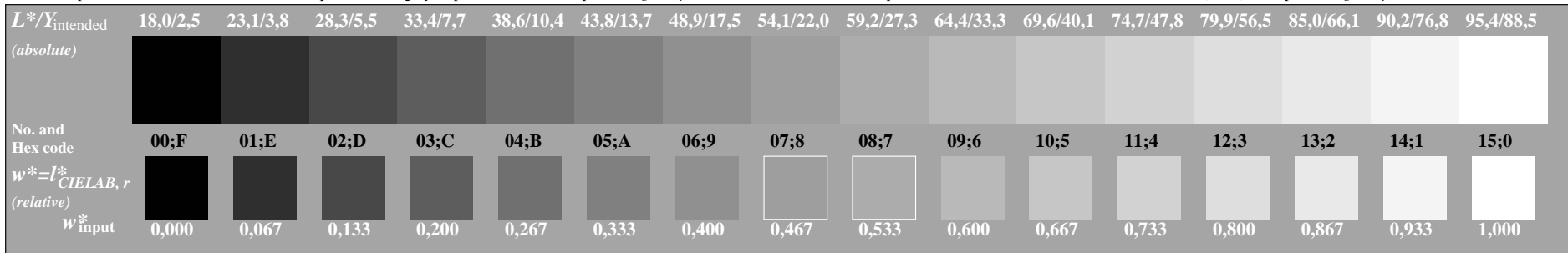
<http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 16/24  
F: 3D-linearization AE06/AE06LF0PX.PDF / .PS in file (F)



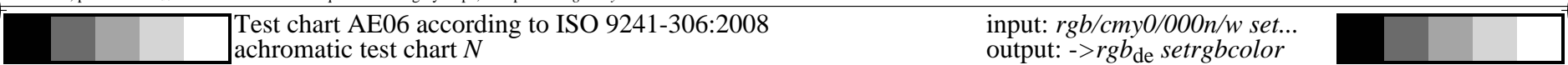
AE060-3, picture A1W<sub>de</sub>: Element A: radial gratings N-W, W-N, N-Z, and W-Z; PS operator: *rgb/cmy0/w/000n*



AE060-5, picture A2W<sub>de</sub>: Element B: 5 visual equidistant  $L^*$ -grey steps +  $N_0$  +  $W_1$ ; PS operator: *rgb/cmy0/w/000n*

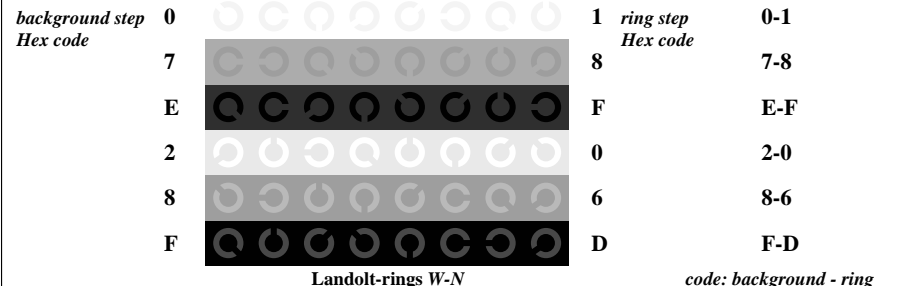


AE060-7, picture A3W<sub>de</sub>: Element C: 16 visual equidistant  $L^*$ -grey steps; PS operator: *rgb/cmy0/w/000n*

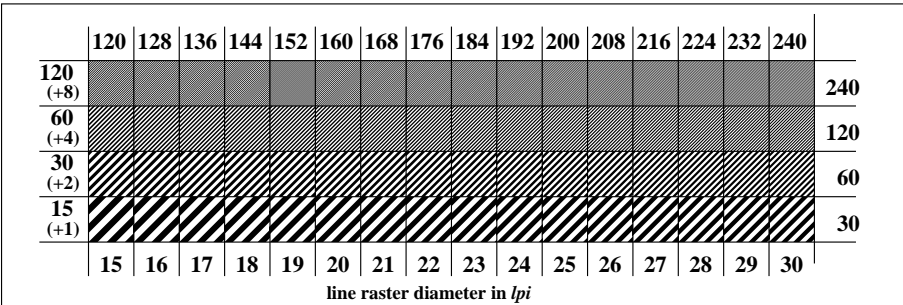


Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

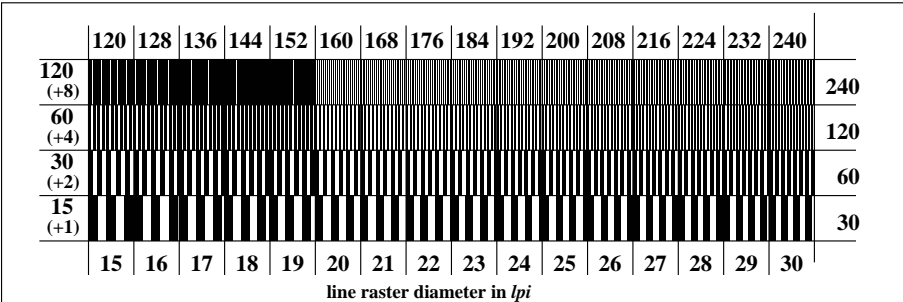
input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*



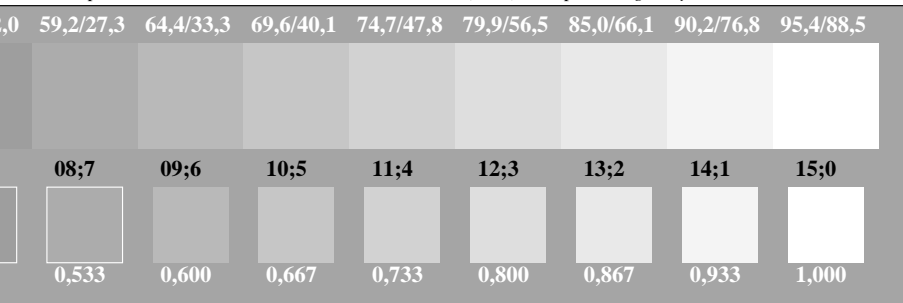
AE061-1, picture A4W<sub>de</sub>: Element D: Landolt-rings W-N; PS operator: *rgb/cmy0/w/000n*



AE061-3, picture A5W<sub>de</sub>: Element E: Line raster under 45° (or 135°); PS-operator: *rgb/cmy0/w/000n*



AE061-5, picture A6W<sub>de</sub>: Element F: Line raster under 90° (or 0°); PS-operator: *rgb/cmy0/w/000n*



TUB Registration: 20172201-AE06/AE06L0FA.TXT / .PS  
application for measurement or viewing of display output

TUB material: code=th4ta



see similar files: [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY3\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY3_1.PDF) underline: Yes/No  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.li.tu-berlin.de/AE.HTM>

<http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 17/24  
F: 3D-linearization AE06/AE06LF0PX.PDF / .PS in file (F)

**Test of visual linearized output of pictures A1W<sub>de</sub> to A3W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**  
**Test of the radial grating according to picture A1W<sub>de</sub>**  
N-W-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-N-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
N-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
**Test of 5 visual equidistant L\*-grey steps according to picture A2W<sub>de</sub>**  
Are the 5 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 5 steps:  
**Test of 16 visual equidistant L\*-grey steps according to picture A3W<sub>de</sub>**  
Are the 16 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 16 steps:

part 1, AE060-3de: 11051

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

**PDF file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY3\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY3_1.PDF) underline: Yes/No

**PS file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY3\\_1.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY3_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 AE06F0PX\_CY3\_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 AE06F0PX\_CY3\_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, AE060-7de: 11051

Form A: Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

**Test of visual linearized output of pictures A4W<sub>de</sub> to A6W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**

**Test of Landolt rings N-W according to picture A4W<sub>de</sub>**

Is the recognition frequency of the Landolt rings > 50% (5 of 8 at least)?

**background - ring**

0 - 1	<b>Yes/No</b>
7 - 8	<b>Yes/No</b>
E - F	<b>Yes/No</b>
2 - 0	<b>Yes/No</b>
8 - 6	<b>Yes/No</b>
F - D	<b>Yes/No</b>

**Test of the radial grating under 45° according to picture A5W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

**Test of the radial grating under 90° according to picture A6W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

part 2, AE061-3de: 11051

**Documentation of assessor colour-vision properties for visual assessment**

The assessor has **normal** colour vision according to one test:

either according to DIN 6160:1996 with Anomaloskop of Nagel

or with test charts using colour points according to Ishihara

or tested with, please specify: .....

underline: Yes/No

underline: Yes/unknown

underline: Yes/unknown

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY3\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY3_3.PDF) underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY3\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY3_3.PS) underline: Yes/No

**picture A7<sub>de</sub> contrast range:** (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0)

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY3\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY3_3.PDF)

**picture A7<sub>de</sub>** underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY3\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY3_3.PS)

**picture A7<sub>de</sub>** 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,

AE061-7de: 11051

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*

TUB Registration: 20172201-AE06/AE06L0FA.TXT / .PS  
application for measurement or viewing of display output

TUB material: code=th4ta

see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0FA.TXT> /PS  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.li.tu-berlin.de/AE.HTM>

i	LAB* <sub>ref</sub>	L* <sub>out</sub>	LAB* <sub>out</sub>	LAB* <sub>out-ref</sub>	ΔE*
1	37,98 0,00 0,00	0,00	37,98 0,00 0,00	0,00 0,00 0,00	0,01
2	41,81 0,00 0,00	0,24	51,79 0,00 0,00	9,97 0,00 0,00	9,97
3	45,64 0,00 0,00	0,34	57,87 0,00 0,00	12,22 0,00 0,00	12,22
4	49,47 0,00 0,00	0,42	62,60 0,00 0,00	13,13 0,00 0,00	13,13
5	53,29 0,00 0,00	0,49	66,62 0,00 0,00	13,32 0,00 0,00	13,32
6	57,12 0,00 0,00	0,56	70,19 0,00 0,00	13,06 0,00 0,00	13,06
7	60,95 0,00 0,00	0,61	73,43 0,00 0,00	12,48 0,00 0,00	12,48
8	64,78 0,00 0,00	0,66	76,43 0,00 0,00	11,65 0,00 0,00	11,65
9	68,61 0,00 0,00	0,71	79,23 0,00 0,00	10,62 0,00 0,00	10,62
10	72,44 0,00 0,00	0,76	81,87 0,00 0,00	9,43 0,00 0,00	9,43
11	76,26 0,00 0,00	0,80	84,37 0,00 0,00	8,10 0,00 0,00	8,10
12	80,09 0,00 0,00	0,84	86,76 0,00 0,00	6,66 0,00 0,00	6,66
13	83,92 0,00 0,00	0,88	89,04 0,00 0,00	5,12 0,00 0,00	5,12
14	87,75 0,00 0,00	0,92	91,24 0,00 0,00	3,49 0,00 0,00	3,49
15	91,58 0,00 0,00	0,96	93,36 0,00 0,00	1,78 0,00 0,00	1,78
16	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01
17	37,98 0,00 0,00	0,00	37,98 0,00 0,00	0,00 0,00 0,00	0,01
18	52,34 0,00 0,00	0,48	65,66 0,00 0,00	13,32 0,00 0,00	13,32
19	66,69 0,00 0,00	0,69	77,85 0,00 0,00	11,15 0,00 0,00	11,15
20	81,05 0,00 0,00	0,85	87,34 0,00 0,00	6,28 0,00 0,00	6,28
21	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01

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

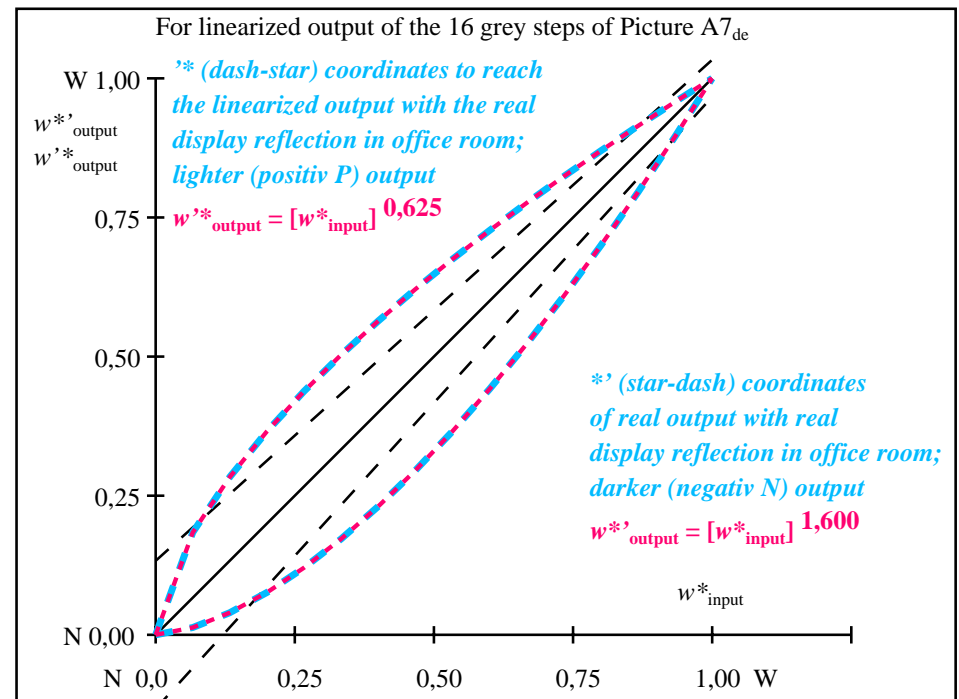
**Mean lightness difference**  
**(16 steps)**  
 $\Delta E^*_{\text{CIELAB}} = 8,1$

**Mean lightness difference**  
**(5 steps)**  
 $\Delta L^*_{\text{CIELAB}} = 6,1$

**Mean colour reproduction index:  $R^*_{\text{ab,m}} = 64,5$**

part 1,

AE060-3de: 11052



part 2,

AE061-3de: 11052

$L^*/Y_{\text{intended}}$ (absolute)	37,9/10,0	41,8/12,3	45,6/15,0	49,4/17,9	53,2/21,3	57,1/25,0	60,9/29,1	64,7/33,7	68,6/38,8	72,4/44,3	76,2/50,3	80,0/56,8	83,9/63,9	87,7/71,5	91,5/79,7	95,4/88,5
0 0 0 n* setcmyk gp=0,625 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
$w^* = l^*_{\text{CIELAB}, r}$ (relative)	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
$w^*_{\text{intended}}$ $w^*_{\text{output}}$	0,000 0,000	0,067 0,184	0,133 0,283	0,200 0,365	0,267 0,438	0,333 0,502	0,400 0,564	0,467 0,621	0,533 0,674	0,600 0,726	0,667 0,776	0,733 0,823	0,800 0,869	0,867 0,914	0,933 0,957	1,000 1,000

part 3, picture A7<sub>de</sub>: 16 visual equidistant  $L^*$ -grey steps; PS operator: 0 0 0 n\* setcmykcolor

AE060-7de: 11052

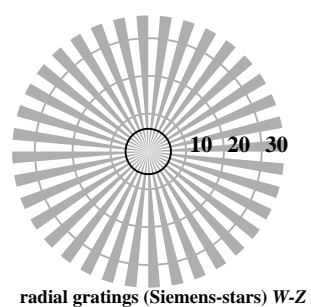
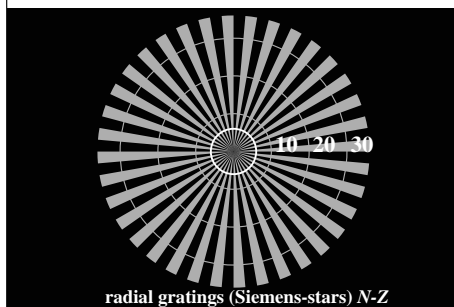
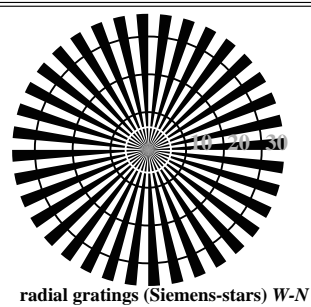
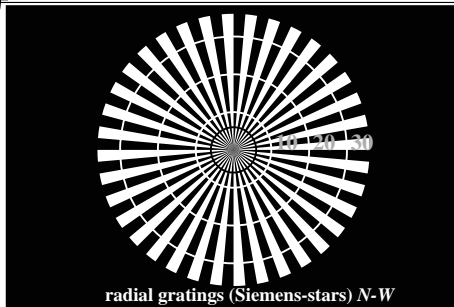
In-out: Test chart AE06 according to ISO 9241-306:2008  
Viewing  $Y$  contrast  $Y_W:Y_N=88,9:10$ ;  $Y_N$ -range 7,5 to <15

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

TUB Registration: 20172201-AE06/AE06L0FA.TXT /PS  
application for measurement or viewing of display output

TUB material: code=th4ta

see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0NA.PDF> / .PS, Page 19/24, *rgb/cmy0/000n/w->rgb<sub>de</sub>*  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.itu-berlin.de/AE.HTM>



AE060-3, picture A1W<sub>de</sub>: Element A: radial gratings N-W, W-N, N-Z, and W-Z; PS operator: *rgb/cmy0/w/000n*

$L^*/Y_{\text{intended}}$ (absolute)	18,0/2,5	37,3/9,7	56,7/24,6	76,0/49,8	95,4/88,5	$N_0$ (min.)	$W_1$ (max.)
$w^* = I^*_{\text{CIELAB}, r}$ (relative)							
$w^*_{\text{input}}$	0,000	0,250	0,500	0,750	1,000	$N_0$ (min.)	$W_1$ (max.)

AE060-5, picture A2W<sub>de</sub>: Element B: 5 visual equidistant  $L^*$ -grey steps +  $N_0$  +  $W_1$ ; PS operator: *rgb/cmy0/w/000n*

$L^*/Y_{\text{intended}}$ (absolute)	18,0/2,5	23,1/3,8	28,3/5,5	33,4/7,7	38,6/10,4	43,8/13,7	48,9/17,5	54,1/22,0	59,2/27,3	64,4/33,3	69,6/40,1	74,7/47,8	79,9/56,5	85,0/66,1	90,2/76,8	95,4/88,5
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
$w^* = I^*_{\text{CIELAB}, r}$ (relative)																
$w^*_{\text{input}}$	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

AE060-7, picture A3W<sub>de</sub>: Element C: 16 visual equidistant  $L^*$ -grey steps; PS operator: *rgb/cmy0/w/000n*



Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

background step Hex code	0	7	E	2	8	F
ring step Hex code	0-1	7-8	E-F	2-0	8-6	F-D

Landolt-rings W-N

code: background - ring

AE061-1, picture A4W<sub>de</sub>: Element D: Landolt-rings W-N; PS operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

line raster diameter in lpi

AE061-3, picture A5W<sub>de</sub>: Element E: Line raster under 45° (or 135°); PS-operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

line raster diameter in lpi

AE061-5, picture A6W<sub>de</sub>: Element F: Line raster under 90° (or 0°); PS-operator: *rgb/cmy0/w/000n*

	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	
120 (+8)																	240
60 (+4)																	120
30 (+2)																	60
15 (+1)																	30
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*



TUB Registration: 20172201-AE06/AE06L0FA.TXT /.PS  
application for measurement or viewing of display output

TUB material: code=th4ta

see similar files: [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY2\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY2_1.PDF) underline: Yes/No  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.li.tu-berlin.de/AE.HTM>

<http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 20/24  
F: 3D-linearization AE06/AE06LF0PX.PDF / .PS in file (F)

**Test of visual linearized output of pictures A1W<sub>de</sub> to A3W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**  
**Test of the radial grating according to picture A1W<sub>de</sub>**  
N-W-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-N-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
N-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
**Test of 5 visual equidistant L\*-grey steps according to picture A2W<sub>de</sub>**  
Are the 5 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 5 steps:  
**Test of 16 visual equidistant L\*-grey steps according to picture A3W<sub>de</sub>**  
Are the 16 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 16 steps:

part 1, AE060-3de: 11061

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

**PDF file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY2\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY2_1.PDF) underline: Yes/No

**PS file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY2\\_1.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY2_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 AE06F0PX\_CY2\_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 AE06F0PX\_CY2\_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,

AE060-7de: 11061

Form A: Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

**Test of visual linearized output of pictures A4W<sub>de</sub> to A6W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**

**Test of Landolt rings N-W according to picture A4W<sub>de</sub>**

Is the recognition frequency of the Landolt rings > 50% (5 of 8 at least)?

**background - ring**

0 - 1	<b>Yes/No</b>
7 - 8	<b>Yes/No</b>
E - F	<b>Yes/No</b>
2 - 0	<b>Yes/No</b>
8 - 6	<b>Yes/No</b>
F - D	<b>Yes/No</b>

**Test of the radial grating under 45° according to picture A5W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

**Test of the radial grating under 90° according to picture A6W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

part 2,

AE061-3de: 11061

**Documentation of assessor colour-vision properties for visual assessment**

The assessor has **normal** colour vision according to one test:

either according to DIN 6160:1996 with Anomaloskop of Nagel

or with test charts using colour points according to Ishihara

or tested with, please specify: .....

underline: Yes/No

underline: Yes/unknown

underline: Yes/unknown

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY2\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY2_3.PDF) underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY2\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY2_3.PS) underline: Yes/No

**picture A7<sub>de</sub> contrast range:** (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0)

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY2\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY2_3.PDF)

**picture A7<sub>de</sub>** underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY2\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY2_3.PS)

**picture A7<sub>de</sub>** 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,

AE061-7de: 11061

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*

TUB Registration: 20172201-AE06/AE06L0FA.TXT / .PS  
application for measurement or viewing of display output

TUB material: code=th4ta

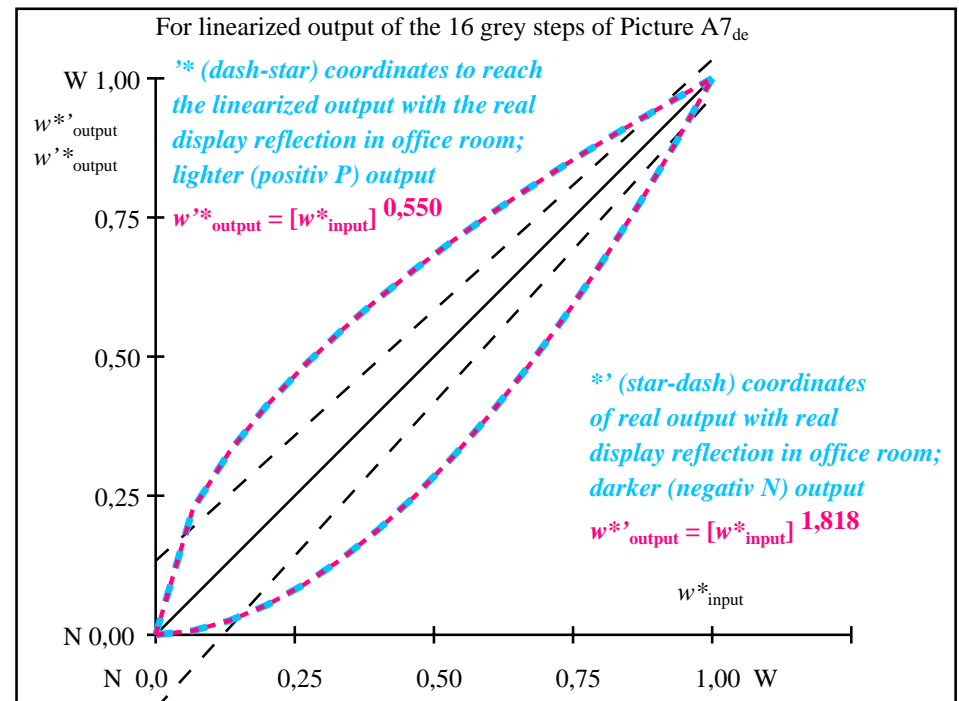


see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0FA.TXT> /PS  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.it.tu-berlin.de/AE.HTM>

i	LAB <sup>*</sup> <sub>ref</sub>	L <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out</sub>	LAB <sup>*</sup> <sub>out-ref</sub>	ΔE <sup>*</sup>	Start output S1
1	52,01 0,00 0,00	0,00	52,01 0,00 0,00	0,00 0,00 0,00	0,01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G
2	54,91 0,00 0,00	0,27	63,82 0,00 0,00	8,90 0,00 0,00	8,90	
3	57,80 0,00 0,00	0,37	68,48 0,00 0,00	10,68 0,00 0,00	10,68	
4	60,69 0,00 0,00	0,46	72,03 0,00 0,00	11,33 0,00 0,00	11,33	
5	63,58 0,00 0,00	0,52	75,00 0,00 0,00	11,41 0,00 0,00	11,41	
6	66,48 0,00 0,00	0,58	77,60 0,00 0,00	11,12 0,00 0,00	11,12	
7	69,37 0,00 0,00	0,64	79,94 0,00 0,00	10,57 0,00 0,00	10,57	
8	72,26 0,00 0,00	0,69	82,09 0,00 0,00	9,83 0,00 0,00	9,83	
9	75,16 0,00 0,00	0,73	84,09 0,00 0,00	8,93 0,00 0,00	8,93	
10	78,05 0,00 0,00	0,78	85,96 0,00 0,00	7,90 0,00 0,00	7,90	
11	80,94 0,00 0,00	0,82	87,72 0,00 0,00	6,77 0,00 0,00	6,77	
12	83,83 0,00 0,00	0,86	89,39 0,00 0,00	5,56 0,00 0,00	5,56	
13	86,73 0,00 0,00	0,89	90,99 0,00 0,00	4,26 0,00 0,00	4,26	
14	89,62 0,00 0,00	0,93	92,52 0,00 0,00	2,90 0,00 0,00	2,90	
15	92,51 0,00 0,00	0,96	93,99 0,00 0,00	1,47 0,00 0,00	1,47	
16	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	
17	52,01 0,00 0,00	0,00	52,01 0,00 0,00	0,00 0,00 0,00	0,01	
18	62,86 0,00 0,00	0,51	74,30 0,00 0,00	11,43 0,00 0,00	11,43	
19	73,71 0,00 0,00	0,71	83,11 0,00 0,00	9,39 0,00 0,00	9,39	
20	84,56 0,00 0,00	0,87	89,80 0,00 0,00	5,24 0,00 0,00	5,24	
21	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	
Mean lightness difference (16 steps) ΔE <sup>*</sup> <sub>CIELAB</sub> = 6,9						
Mean lightness difference (5 steps) ΔL <sup>*</sup> <sub>CIELAB</sub> = 5,2						
Mean colour reproduction index: R <sup>*</sup> <sub>ab,m</sub> = 69,8						

part 1,

AE060-3de: 11062



part 2,

AE061-3de: 11062

L <sup>*</sup> /Y <sub>intended</sub> (absolute)	52,0/20,1	54,9/22,8	57,8/25,7	60,6/28,9	63,5/32,2	66,4/35,9	69,3/39,8	72,2/44,0	75,1/48,5	78,0/53,3	80,9/58,3	83,8/63,7	86,7/69,4	89,6/75,4	92,5/81,8	95,4/88,5
0 0 0 n <sup>*</sup> setcmyk gp=0,550 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 <sup>*</sup> =l <sup>*</sup> CIELAB, r (relative)	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 <sup>*</sup> intended w <sup>*</sup> output	0,000 0,000	0,067 0,226	0,133 0,329	0,200 0,412	0,267 0,483	0,333 0,546	0,400 0,604	0,467 0,657	0,533 0,707	0,600 0,755	0,667 0,800	0,733 0,842	0,800 0,884	0,867 0,924	0,933 0,962	1,000 1,000

part 3, picture A7<sub>de</sub>: 16 visual equidistant L<sup>\*</sup>-grey steps; PS operator: 0 0 0 n<sup>\*</sup> setcmykcolor

AE060-7de: 11062

In-out: Test chart AE06 according to ISO 9241-306:2008  
Viewing Y contrast Y<sub>W</sub>:Y<sub>N</sub>=88,9:20; Y<sub>N</sub>-range 15 to <30

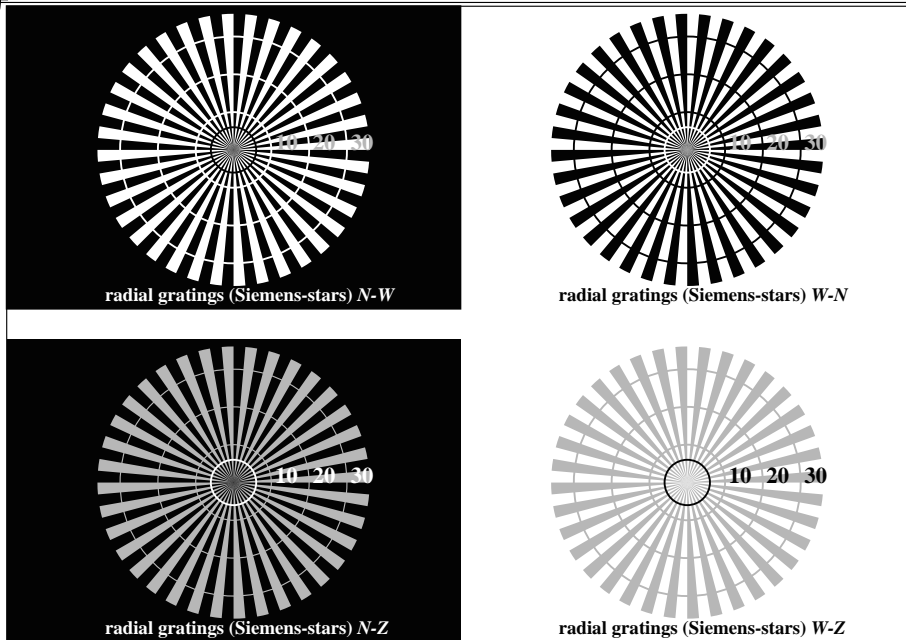
input: rgb/cmy0/000n/w set...  
output: ->rgb<sub>de</sub> setrgbcolor

TUB Registration: 20172201-AE06/AE06L0FA.TXT /PS  
application for measurement or viewing of display output

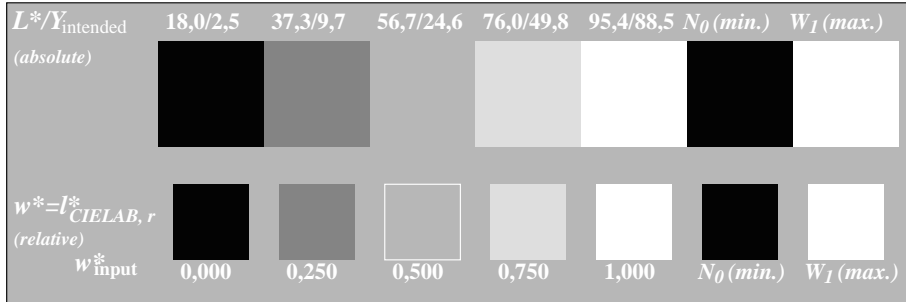
TUB material: code=th4ta

see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 22/24  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.itu-berlin.de/AE.HTM>

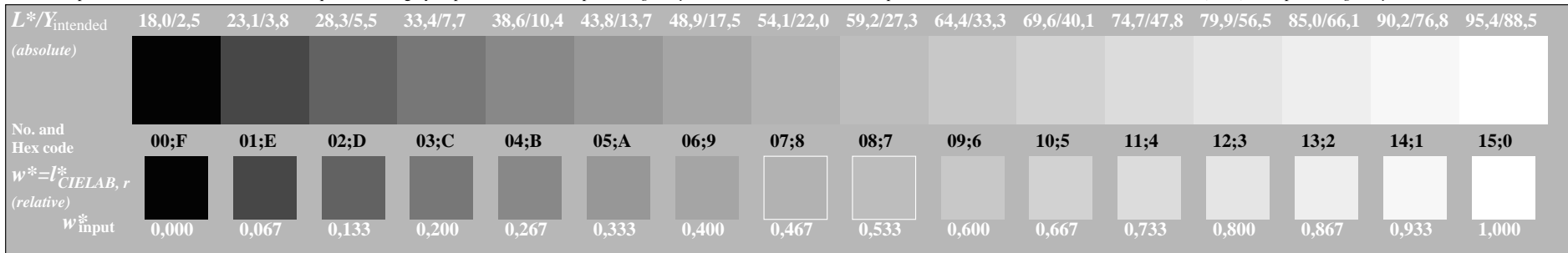
<http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 22/24  
F: 3D-linearization AE06/AE06LF0PX.PDF / .PS in file (F)



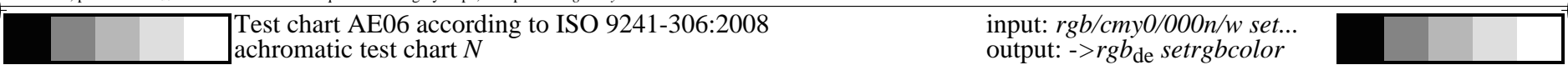
AE060-3, picture A1W<sub>de</sub>: Element A: radial gratings N-W, W-N, N-Z, and W-Z; PS operator: *rgb/cmy0/w/000n*



AE060-5, picture A2W<sub>de</sub>: Element B: 5 visual equidistant L\*-grey steps + N<sub>0</sub> + W<sub>1</sub>; PS operator: *rgb/cmy0/w/000n*

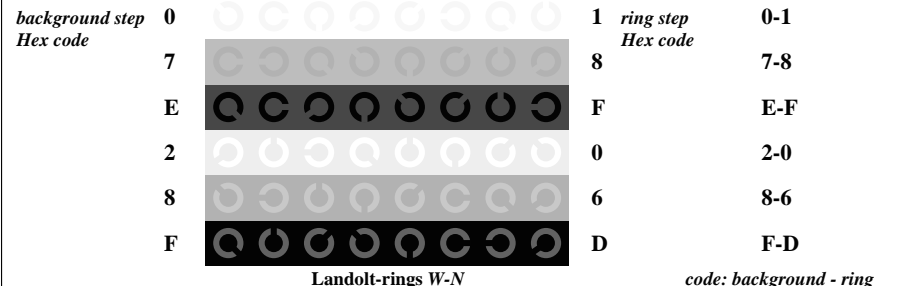


AE060-7, picture A3W<sub>de</sub>: Element C: 16 visual equidistant L\*-grey steps; PS operator: *rgb/cmy0/w/000n*

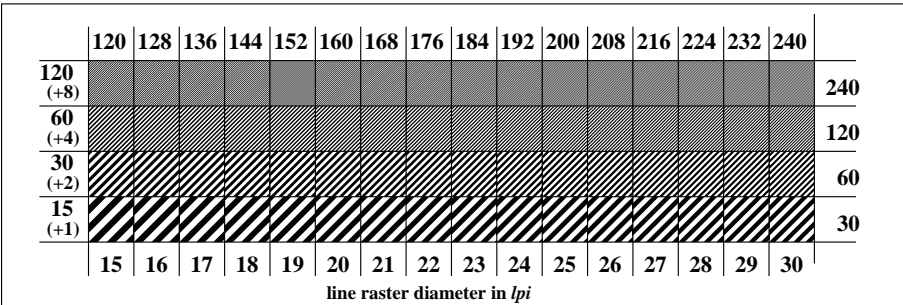


Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

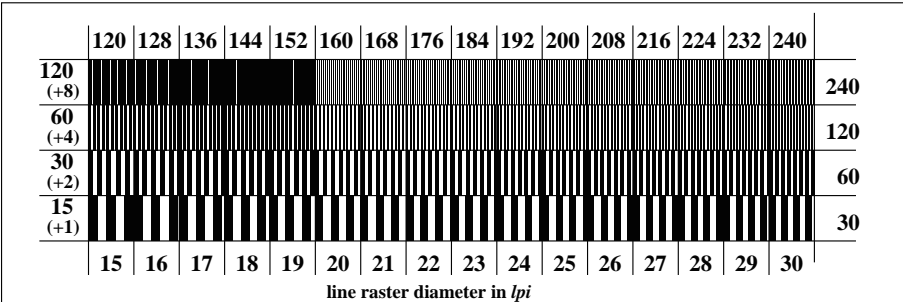
input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*



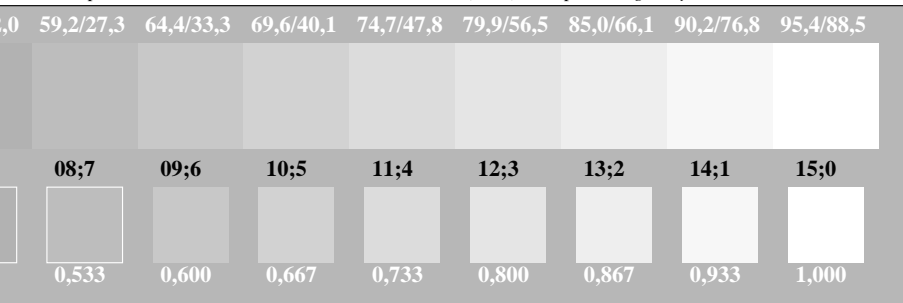
AE061-1, picture A4W<sub>de</sub>: Element D: Landolt-rings W-N; PS operator: *rgb/cmy0/w/000n*



AE061-3, picture A5W<sub>de</sub>: Element E: Line raster under 45° (or 135°); PS-operator: *rgb/cmy0/w/000n*



AE061-5, picture A6W<sub>de</sub>: Element F: Line raster under 90° (or 0°); PS-operator: *rgb/cmy0/w/000n*



TUB Registration: 20172201-AE06/AE06L0FA.TXT / .PS  
application for measurement or viewing of display output

TUB material: code=th4ta

see similar files: [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY1\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY1_1.PDF) underline: Yes/No  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.li.tu-berlin.de/AE.HTM>

<http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX.PDF> / .PS; 3D-linearization, page 23/24  
F: 3D-linearization AE06/AE06LF0PX.PDF / .PS in file (F)

**Test of visual linearized output of pictures A1W<sub>de</sub> to A3W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**  
**Test of the radial grating according to picture A1W<sub>de</sub>**  
N-W-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-N-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
N-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
W-Z-radial grating: Is the resolution diameter < 6 mm? **Yes/No**  
Test with magnifying glass (e.g. 6x) resolution diameter ..... mm  
**Test of 5 visual equidistant L\*-grey steps according to picture A2W<sub>de</sub>**  
Are the 5 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 5 steps:  
**Test of 16 visual equidistant L\*-grey steps according to picture A3W<sub>de</sub>**  
Are the 16 steps on the upper rows distinguishable? **Yes/No**  
If No: How many steps can be distinguished? ..... Steps  
of the given 16 steps:

part 1, AE060-3de: 11071

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

**PDF file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY1\\_1.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY1_1.PDF) underline: Yes/No

**PS file:**

[http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY1\\_1.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY1_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 AE06F0PX\_CY1\_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 AE06F0PX\_CY1\_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, AE060-7de: 11071

Form A: Test chart AE06 according to ISO 9241-306:2008  
achromatic test chart N

**Test of visual linearized output of pictures A4W<sub>de</sub> to A6W<sub>de</sub> please underline Yes/No**  
**Output test with the computer display ( ) or the external display ( ) please mark by (x)!**

**Test of Landolt rings N-W according to picture A4W<sub>de</sub>**

Is the recognition frequency of the Landolt rings > 50% (5 of 8 at least)?

**background - ring**

0 - 1	<b>Yes/No</b>
7 - 8	<b>Yes/No</b>
E - F	<b>Yes/No</b>
2 - 0	<b>Yes/No</b>
8 - 6	<b>Yes/No</b>
F - D	<b>Yes/No</b>

**Test of the radial grating under 45° according to picture A5W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

**Test of the radial grating under 90° according to picture A6W<sub>de</sub>**

Can equally spaced lines be seen?

Visual testing: for radial diameter from 15 to 60 lpi **Yes/No**

Test with magnifying glass (e.g. 6x) - from 15 to ..... lpi

part 2, AE061-3de: 11071

**Documentation of assessor colour-vision properties for visual assessment**

The assessor has **normal** colour vision according to one test:

either according to DIN 6160:1996 with Anomaloskop of Nagel

or with test charts using colour points according to Ishihara

or tested with, please specify: .....

underline: Yes/No

underline: Yes/unknown

underline: Yes/unknown

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY1\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY1_3.PDF) underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY1\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY1_3.PS) underline: Yes/No

**picture A7<sub>de</sub> contrast range:** (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0)

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://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY1\\_3.PDF](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY1_3.PDF)

**picture A7<sub>de</sub>** underline: Yes/No

**PS file:** [http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX\\_CY1\\_3.PS](http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06F0PX_CY1_3.PS)

**picture A7<sub>de</sub>** 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, AE061-7de: 11071

input: *rgb/cmy0/000n/w set...*  
output: *->rgb<sub>de</sub> setrgbcolor*

TUB Registration: 20172201-AE06/AE06L0FA.TXT / .PS  
application for measurement or viewing of display output

TUB material: code=th4ta

see similar files: <http://standards.iso.org/iso/9241/306/ed-2/AE06/AE06L0FA.TXT> /PS  
technical information: <http://www.ps.bam.de/9241E> or <http://farbe.it.tu-berlin.de/AE.HTM>

i	LAB* <sub>ref</sub>	L* <sub>out</sub>	LAB* <sub>out</sub>	LAB* <sub>out-ref</sub>	ΔE*	Start output S1
1	69,69 0,00 0,00	0,00	69,69 0,00 0,00	0,00 0,00 0,00	0,01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G
2	71,41 0,00 0,00	0,30	77,45 0,00 0,00	6,04 0,00 0,00	6,04	
3	73,12 0,00 0,00	0,41	80,23 0,00 0,00	7,11 0,00 0,00	7,11	
4	74,83 0,00 0,00	0,49	82,31 0,00 0,00	7,47 0,00 0,00	7,47	
5	76,55 0,00 0,00	0,55	84,02 0,00 0,00	7,47 0,00 0,00	7,47	
6	78,26 0,00 0,00	0,61	85,51 0,00 0,00	7,24 0,00 0,00	7,24	
7	79,98 0,00 0,00	0,66	86,83 0,00 0,00	6,85 0,00 0,00	6,85	
8	81,69 0,00 0,00	0,71	88,04 0,00 0,00	6,35 0,00 0,00	6,35	
9	83,41 0,00 0,00	0,75	89,16 0,00 0,00	5,75 0,00 0,00	5,75	
10	85,12 0,00 0,00	0,79	90,20 0,00 0,00	5,08 0,00 0,00	5,08	
11	86,83 0,00 0,00	0,83	91,18 0,00 0,00	4,34 0,00 0,00	4,34	
12	88,55 0,00 0,00	0,87	92,11 0,00 0,00	3,55 0,00 0,00	3,55	
13	90,26 0,00 0,00	0,90	92,99 0,00 0,00	2,72 0,00 0,00	2,72	
14	91,98 0,00 0,00	0,93	93,83 0,00 0,00	1,85 0,00 0,00	1,85	
15	93,69 0,00 0,00	0,96	94,63 0,00 0,00	0,94 0,00 0,00	0,94	
16	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	
17	69,69 0,00 0,00	0,00	69,69 0,00 0,00	0,00 0,00 0,00	0,01	
18	76,12 0,00 0,00	0,54	83,62 0,00 0,00	7,49 0,00 0,00	7,49	
19	82,55 0,00 0,00	0,73	88,61 0,00 0,00	6,06 0,00 0,00	6,06	
20	88,98 0,00 0,00	0,88	92,33 0,00 0,00	3,35 0,00 0,00	3,35	
21	95,41 0,00 0,00	1,00	95,41 0,00 0,00	0,00 0,00 0,00	0,01	

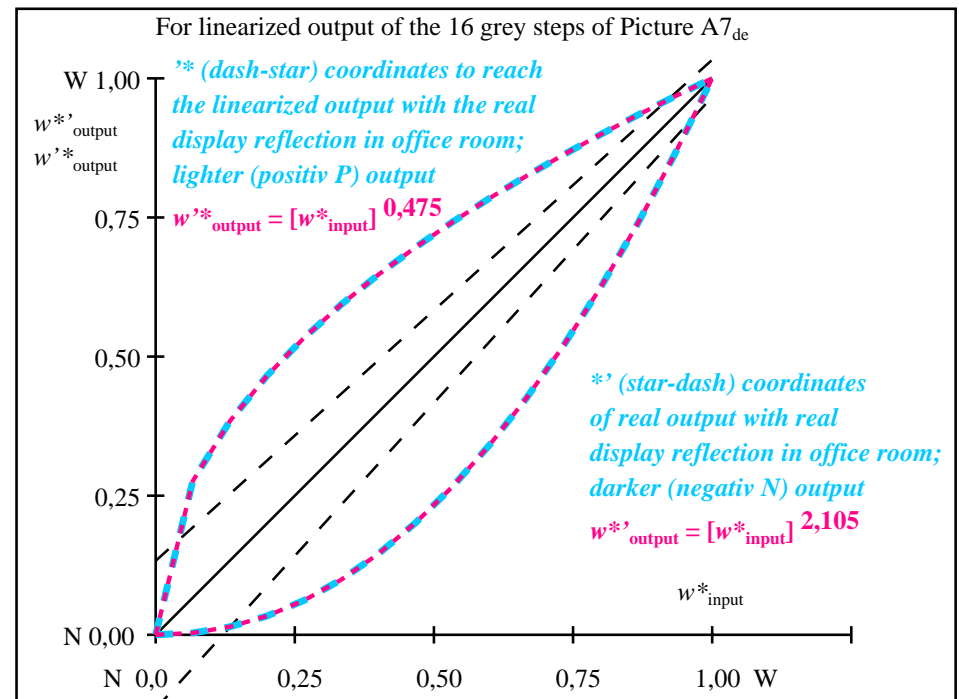
Mean lightness difference  
(16 steps)  
 $\Delta E^*_{\text{CIELAB}} = 4,5$

Mean lightness difference  
(5 steps)  
 $\Delta L^*_{\text{CIELAB}} = 3,3$

Mean colour reproduction index:  $R^*_{\text{ab,m}} = 80,3$

part 1,

AE060-3de: 11072



part 2,

AE061-3de: 11072

$L^*/Y_{\text{intended}}$ (absolute)	69,6/40,3	71,4/42,7	73,1/45,3	74,8/48,0	76,5/50,7	78,2/53,6	79,9/56,6	81,6/59,7	83,4/62,9	85,1/66,2	86,8/69,6	88,5/73,2	90,2/76,8	91,9/80,6	93,6/84,5	95,4/88,5
0 0 0 n* setcmyk gp=0,475 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
$w^* = l^*_{\text{CIELAB}, r}$ (relative)	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
$w^*_{\text{intended}}$ $w^*_{\text{output}}$	0,000 0,000	0,067 0,276	0,133 0,383	0,200 0,465	0,267 0,534	0,333 0,593	0,400 0,647	0,467 0,696	0,533 0,741	0,600 0,784	0,667 0,825	0,733 0,862	0,800 0,899	0,867 0,934	0,933 0,967	1,000 1,000

part 3, picture A7<sub>de</sub>: 16 visual equidistant  $L^*$ -grey steps; PS operator: 0 0 0 n\* setcmykcolor

AE060-7de: 11072

In-out: Test chart AE06 according to ISO 9241-306:2008  
Viewing  $Y$  contrast  $Y_W:Y_N=88,9:40$ ;  $Y_N$ -range 30 to <60

input:  $rgb/cmy0/000n/w$  set...  
output:  $->rgb_{de}$  setrgbcolor

TUB Registration: 20172201-AE06/AE06L0FA.TXT /PS  
application for measurement or viewing of display output

TUB material: code=th4ta