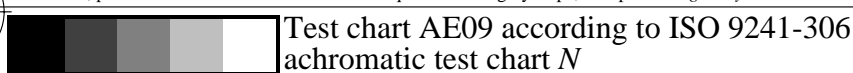
AE090-3, picture A1W_{dd}: Element A: radial gratings N-W, W-N, N-Z, and W-Z; PS operator: *rgb/cmy0/w/000n*

L^*/Y_{input} (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_I (max.)
$w^*=I^*_{CIE LAB, r}$ (relative)							
w^*_{input}	0,000	0,250	0,500	0,750	1,000	N_0 (min.)	W_I (max.)

AE090-5, picture A2W_{dd}: Element B: 5 visual equidistant L^* -grey steps + N_0 + W_I ; PS operator: *rgb/cmy0/w/000n*

L^*/Y_{input} (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
$w^*=I^*_{CIE LAB, r}$ (relative)																
w^*_{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

AE090-7, picture A3W_{dd}: Element C: 16 visual equidistant L^* -grey steps; PS operator: *rgb/cmy0/w/000n*

background step	0	1	ring step	0-1
Hex code			Hex code	
7		8	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

AE091-1, picture A4W_{dd}: 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

AE091-3, picture A5W_{dd}: 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

AE091-5, picture A6W_{dd}: Element F: Line raster under 90° (or 0°); PS operator: *rgb/cmy0/w/000n*input: *rgb/cmy0/000n/w set...*
output: *->rgb_{dd} setrgbcolor*

Test of visual linearized output of pictures A1W_{dd} to A3W_{dd} please underline **Yes/No**

Output test with computer display () or the external display () please mark by (x)!

Test of the radial grating according to picture A1W_{dd}

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_{dd}

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_{dd}

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,

AE090-3dd: 00301

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

PDF file:
 http://farbe.li.tu-berlin.de/AE09/AE09F0PX_CY8_1.PDF **underline: Yes/No**

PS file:
 http://farbe.li.tu-berlin.de/AE09/AE09F0PX_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 AE09F0PX_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 AE09F0PX_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,

AE090-7dd: 00301

Form A: Test chart AE09 according to ISO 9241-306
 achromatic test chart N

Test of visual linearized output of pictures A4W_{dd} to A6W_{dd} please underline **Yes/No**

Output test with computer display () or the external display () please mark by (x)!

Test of Landolt rings N-W according to picture A4W_{dd}

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

background - ring	Yes/No
0 - 1	Yes/No
7 - 8	Yes/No
E - F	Yes/No
2 - 0	Yes/No
8 - 6	Yes/No
F - D	Yes/No

Test of the radial grating under 45° according to picture A5W_{dd}

Can equally spaced lines be seen? **Yes/No**
 Visual testing: for radial diameter from 15 to 60 lpi lpi
 Test with magnifying glass (e.g. 6x) - from 15 to

Test of the radial grating under 90° according to picture A6W_{dd}

Can equally spaced lines be seen? **Yes/No**
 Visual testing: for radial diameter from 15 to 60 lpi lpi
 Test with magnifying glass (e.g. 6x) - from 15 to

part 2,

AE091-3dd: 00301

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 **underline: Yes/No**
 or with test charts using colour points according to Ishihara **underline: Yes/unknown**
 or tested with, please specify: **underline: Yes/unknown**

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

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

PDF file: http://farbe.li.tu-berlin.de/AE09/AE09F0PX_CY8_3.PDF **underline: Yes/No**

PS file: http://farbe.li.tu-berlin.de/AE09/AE09F0PX_CY8_3.PS **underline: Yes/No**

picture A7_{dd} contrast range: (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0)
 compare standard print output according to ISO/IEC 15775 with range F:0 **underline: Yes/No**
 Remark: In daylighted offices the contrast range is in many cases:
 on display between: >F:0 and E:0 (monitor), D:0 and 3:0 (data projector)

Only for optional colorimetric specification with PDF/PS file output

PDF file: http://farbe.li.tu-berlin.de/AE09/AE09F0PX_CY8_3.PDF **underline: Yes/No**

PS file: http://farbe.li.tu-berlin.de/AE09/AE09F0PX_CY8_3.PS **underline: Yes/No**

picture A7_{dd} **underline: Yes/No**
 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,

AE091-7dd: 00301

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

see similar files: <http://farbe.li.tu-berlin.de/AE09/AE09L0NP.PDF> /.PS
technical information: <http://farbe.li.tu-berlin.de/> or <http://farbe.li.tu-berlin.de/AE09.HTM>

TUB Registration: 20190301-AE09/AE09L0NP.PDF /.PS
application for measurement or viewing of display and print output
TUB material: code=rh4ta

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

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

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

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

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

part 1,

AE090-3dd: 00302



part 2,

AE091-3dd: 00302

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

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

AE090-7dd: 00302

In-out: Test chart AE09 according to ISO 9241-306
Viewing Y contrast $Y_W: Y_N = 88,9:0,31$; Y_N -range 0,0 to <0,46

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