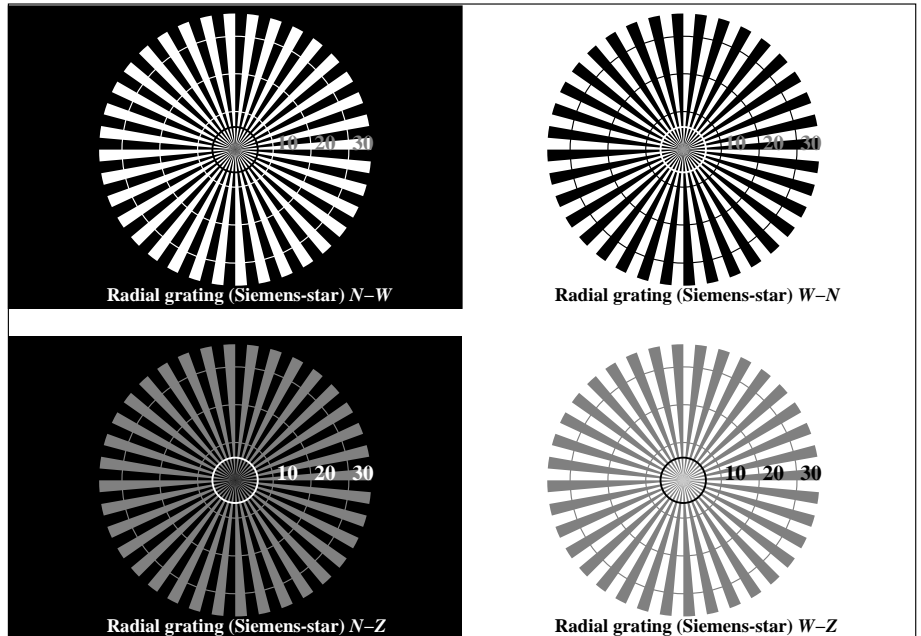


See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1.1, CIELAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thdata



OE520-3N, Picture A1-130-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$

$L^*/Y_{intended}$ (absolute)	0.0/0.0	23.8/4.0	47.7/16.5	71.5/43.0	95.4/88.5	N_0 (min.)	W_1 (max.)
$w^* w^* w^*$ setrgb $g_p=1.0$ No. and Hex code	00;4	01;3	02;2	03;1	04;0		
$w^* = l^*$ CIELAB, r (relative)							
$w^*_{intended}$	0,000	0,250	0,500	0,750	1,000	N_0 (min.)	W_1 (max.)
w^*_{out}	0.0	0.25	0.5	0.75	1.0		

OE520-5N, Picture A2-130-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$

$L^*/Y_{intended}$ (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 $g_p=1.0$ 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^*_{out}	0.0	0.067	0.133	0.2	0.267	0.333	0.4	0.467	0.533	0.6	0.667	0.733	0.8	0.867	0.933	1.0

OE520-7N, Picture A3-130-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

OE52: similar ME16 according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:0,31$; Y_N range 0,0 to <0,46

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

OE521-1N, Picture A4-130-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$

	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

OE521-3N, Picture A5-130-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

	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

OE521-5N, Picture A6-130-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

input: $cm\dot{y}0$ (\rightarrow rgb^*_d) $setcmyk$
 output 130-0: $g_p=1.0$; $g_N=1.0$

Test for the best visual linearized output of Picture A7-130-0 Yes/No
Output test with the computer display () or the external display ()

Test of the radial grating according to picture A1-130-0

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 A2-130-0

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: Steps

Test of 16 visual equidistant L*-grey steps according to picture A3-130-0

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: Steps

Part 1 OE520-3N-130-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE52/OE52L0NP.PDF Yes/No

PS-File: http://130.149.60.45/farbmetrik/OE52/OE52L0NA.PS or Yes/No

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

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

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

For device output with PDF-file OE52L0NP.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 device output with PS-file OE52L0NA.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:Special remarks, e. g. output of Landscape (L)

Part 3 OE520-7N-130-1

Test for the best visual linearized output of Picture A7-130-0 Yes/No
Output test with the computer display () or the external display ()

Test of the Landolt-rings N-W according to picture A4-130-0

N-W-radial grating:
 Is the recognition frequency of the Landolt-rings > 50% (5 of 8 at least)?
 background - ring
 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 A5-130-0

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

Test of the radial grating under 90° according to picture A6-130-0

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

Part 2 OE521-3N-130-1

Documentation of assessor colour vision properties for visual assessment

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

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

Office workplace illumination is daylight (clouded/north sky) Yes/No
PDF file: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF Yes/No
PS file: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS Yes/No
Picture A7-130-2: 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 range
*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://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF Yes/No
picture A7-130-2

PS-File: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS Yes/No
picture A7-130-2 or Yes/No

colour measurement and specification for:
 CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: Yes/No
 If No, please give other parameters:

Colorimetric specification with PS file for colours in the columns A to T
 Exchange of CIELAB data in file www.ps.bam.de/De17/10L/L17e00NP.PS and transfer
 of the PS-file L17e00NP.PS in PDF-file L17e00NP.PDF Yes/No
 If No, please describe other method:

Part 4 OE521-7N-130-1

See similar ISO test charts: http://www.ps.bam.de/24705TE, http://www.ps.bam.de/9241E
Technical information: http://www.ps.bam.de/33872E Version 2.1, io=1,1, CIELAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=thata

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB

i	LAB*ref	I*out	LAB*out	LAB*out/c-ref	ΔE*
1	0.0	0.0	0.0	0.0	0.01
2	6.36	0.0	0.07	6.36	0.01
3	12.72	0.0	0.13	12.72	0.01
4	19.08	0.0	0.2	19.08	0.01
5	25.44	0.0	0.27	25.44	0.01
6	31.8	0.0	0.33	31.8	0.01
7	38.16	0.0	0.4	38.16	0.01
8	44.52	0.0	0.47	44.52	0.01
9	50.89	0.0	0.53	50.89	0.01
10	57.25	0.0	0.6	57.25	0.01
11	63.61	0.0	0.67	63.61	0.01
12	69.97	0.0	0.73	69.97	0.01
13	76.33	0.0	0.8	76.33	0.01
14	82.69	0.0	0.87	82.69	0.01
15	89.05	0.0	0.93	89.05	0.01
16	95.41	0.0	1.0	95.41	0.01
17	0.0	0.0	0.0	0.0	0.01
18	23.85	0.0	0.25	23.85	0.01
19	47.71	0.0	0.5	47.71	0.01
20	71.56	0.0	0.75	71.56	0.01
21	95.41	0.0	1.0	95.41	0.01

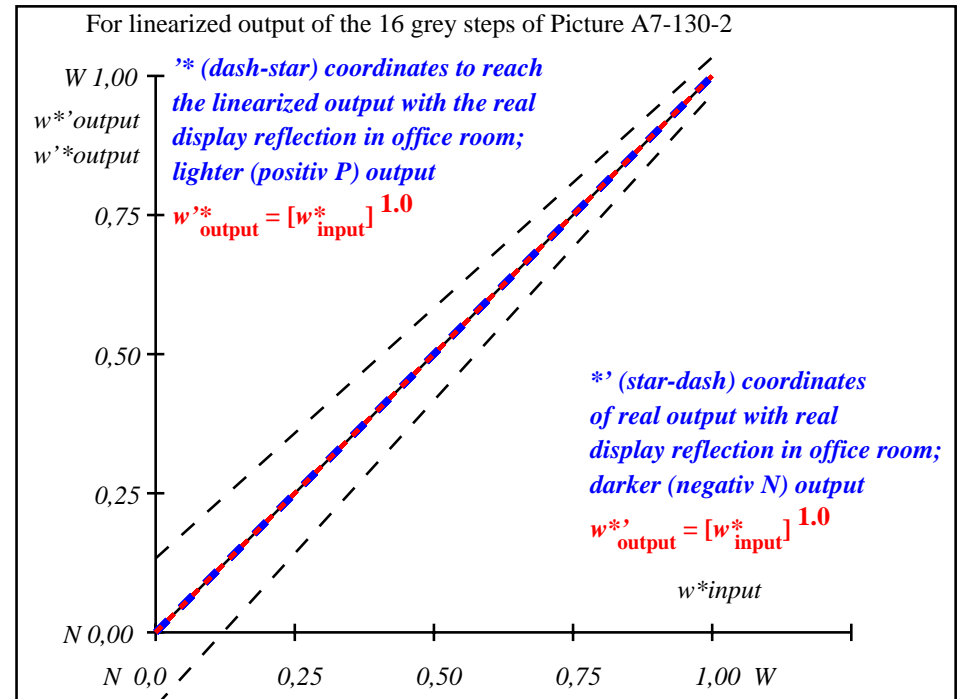
Start output S1
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

Mean lightness difference (16 steps) $\Delta E^*_{CIELAB} = 0.0$

Mean lightness difference (5 steps) $\Delta L^*_{CIELAB} = 0.0$

Mean colour reproduction index: $R^*_{ab,m} = 100$

OE520-3N-130-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE521-3N-130-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{intended}$ (absolute)	0.0/0.0	6.4/0.7	12.7/1.5	19.1/2.8	25.4/4.6	31.8/7.0	38.2/10.2	44.5/14.2	50.9/19.2	57.2/25.2	63.6/32.3	70.0/40.7	76.3/50.4	82.7/61.6	89.0/74.3	95.4/88.6
$w^* w^* w^*$ setrgb $g_p=1.0$																
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^*_{out}	0.0	0.067	0.133	0.2	0.267	0.333	0.4	0.467	0.533	0.6	0.667	0.733	0.8	0.867	0.933	1.0

OE520-7N, Picture A7-130-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* setrgbcolor$

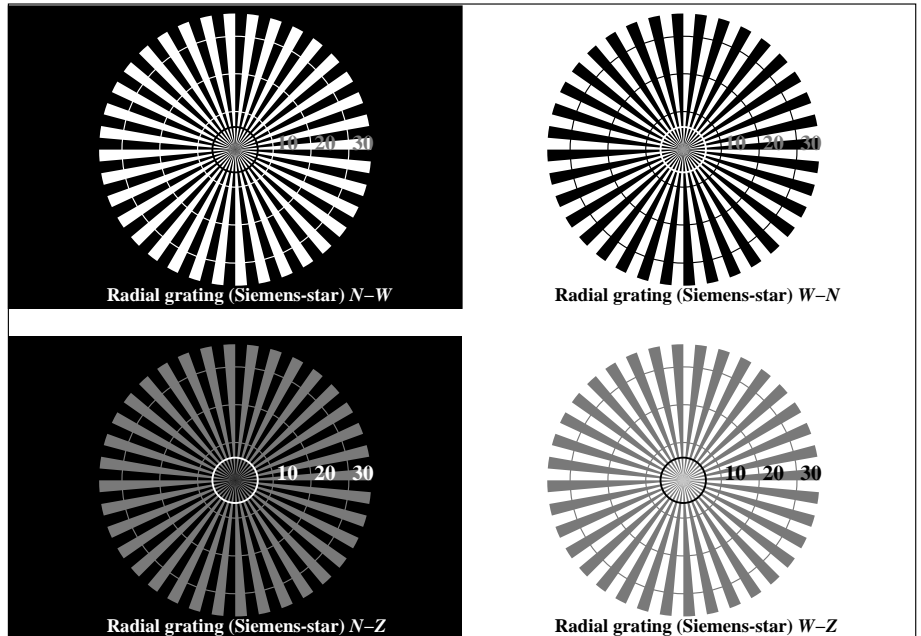
OE52: In-output relation according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:0,31$; Y_N range 0,0 to <0,46

input: $cmy0 (->rgb*_d) setcmyk$
 output 130-2: $g_p=1.0$; $g_N=1.0$

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thadata

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1.1, CIELAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thata



OE520-3N, Picture A1-131-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* setrgbcolor$

$L^*/Y_{intended}$ (absolute)	5.6/0.6	28.1/5.5	50.5/18.8	72.9/45.1	95.4/88.5	N_0 (min.)	W_1 (max.)
$w^* w^* w^*$ setrgb	[Color patches]						
$g_N=1.18$ No. and Hex code	00;4	01;3	02;2	03;1	04;0		
$w^*=l^*$ CIELAB, r (relative)	[Color patches]						
$w^*_{intended}$	0.000	0.250	0.500	0.750	1.000	N_0 (min.)	W_1 (max.)
w^*_{out}	0.0	0.194	0.441	0.712	1.0		

OE520-5N, Picture A2-131-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* setrgbcolor$

$L^*/Y_{intended}$ (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
$w^* w^* w^*$ setrgb	[Color patches]															
$g_N=1.08$ 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)	[Color patches]															
$w^*_{intended}$	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^*_{out}	0.0	0.053	0.112	0.175	0.239	0.304	0.371	0.439	0.506	0.575	0.645	0.714	0.785	0.857	0.927	1.0

OE520-7N, Picture A3-131-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* setrgbcolor$

OE52: similar ME16 according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:0,62$; Y_N range 0,46 to <0,93

background step 0	[Color patches]	1 ring step	0-1
Hex code		Hex code	
7	[Color patches]	8	7-8
E	[Color patches]	F	E-F
2	[Color patches]	0	2-0
8	[Color patches]	6	8-6
F	[Color patches]	D	F-D

OE521-1N, Picture A4-131-0: Landolt-rings W-N; PS operator: $w^* w^* w^* setrgbcolor$

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

OE521-3N, Picture A5-131-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* setrgbcolor$

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

OE521-5N, Picture A6-131-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* setrgbcolor$

input: $cmy_0 (->rgb^*_d)$ setcmyk
 output 130-0: $g_p=1.0$; $g_N=1.08$

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIHLAB

Test for the best visual linearized output of Picture A7-131-0 Yes/No
Output test with the computer display () or the external display ()

Test of the radial grating according to picture A1-131-0
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 A2-131-0
 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: Steps

Test of 16 visual equidistant L*-grey steps according to picture A3-131-0
 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: Steps

Part 1 OE520-3N-138-1

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

PDF-File: <http://130.149.60.45/farbmetrik/OE52/OE52L0NP.PDF> underline Yes/No

PS-File: <http://130.149.60.45/farbmetrik/OE52/OE52L0NA.PS> or underline Yes/No

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

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

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

For device output with PDF-file OE52L0NP.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 device output with PS-file OE52L0NA.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: Special remarks, e. g. output of Landscape (L)

Part 3 OE520-7N-131-1

Test for the best visual linearized output of Picture A7-131-0 Yes/No
Output test with the computer display () or the external display ()

Test of the Landolt-rings N-W according to picture A4-131-0
N-W-radial grating:
 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 A5-131-0
 Can equally spaced lines be seen?
 Visual testing: for radial diameter from 15 to 60 lpi Yes/No
 Test with a magnifying glass (e.g. 6x): - from 15 lpi: to lpi

Test of the radial grating under 90° according to picture A6-131-0
 Can equally spaced lines be seen?
 Visual testing: for radial diameter from 15 to 60 lpi Yes/No
 Test with a magnifying glass (e.g. 6x): - from 15 lpi: to lpi

Part 2 OE521-3N-131-1

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

For visual evaluation of the display (monitor, data projector) output
 Office workplace illumination is daylight (clouded/north sky) underline Yes/No
PDF file: <http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF> underline Yes/No
PS file: <http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS> underline Yes/No
Picture A7-131-2: 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 range
 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://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF> underline Yes/No
picture A7-131-2
PS-File: <http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS> or underline Yes/No
picture A7-131-2

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 with PS file for colours in the columns A to T
 Exchange of CIELAB data in file www.ps.bam.de/De17/10L/L17e00NP.PS and transfer
 of the PS-file L17e00NP.PS in PDF-file L17e00NP.PDF underline Yes/No
 If No, please describe other method:

Part 4 OE521-7N-131-1

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=thata

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thadata

i	LAB*ref	I*out	LAB*out	LAB*out/c-ref	ΔE*	Start output S1
1	5.69	0.0	0.0	5.69	0.0	0.01
2	11.67	0.0	0.05	10.49	0.0	0.0
3	17.65	0.0	0.11	15.85	0.0	0.0
4	23.63	0.0	0.18	21.44	0.0	0.0
5	29.62	0.0	0.24	27.18	0.0	0.0
6	35.6	0.0	0.3	33.05	0.0	0.0
7	41.58	0.0	0.37	39.01	0.0	0.0
8	47.56	0.0	0.44	45.05	0.0	0.0
9	53.54	0.0	0.51	51.16	0.0	0.0
10	59.52	0.0	0.58	57.34	0.0	0.0
11	65.5	0.0	0.65	63.57	0.0	0.0
12	71.48	0.0	0.72	69.85	0.0	0.0
13	77.47	0.0	0.79	76.18	0.0	0.0
14	83.45	0.0	0.86	82.55	0.0	0.0
15	89.43	0.0	0.93	88.96	0.0	0.0
16	95.41	0.0	1.0	95.41	0.0	0.0
17	5.69	0.0	0.0	5.69	0.0	0.0
18	28.12	0.0	0.22	25.74	0.0	0.0
19	50.55	0.0	0.47	48.1	0.0	0.0
20	72.98	0.0	0.73	71.43	0.0	0.0
21	95.41	0.0	1.0	95.41	0.0	0.0

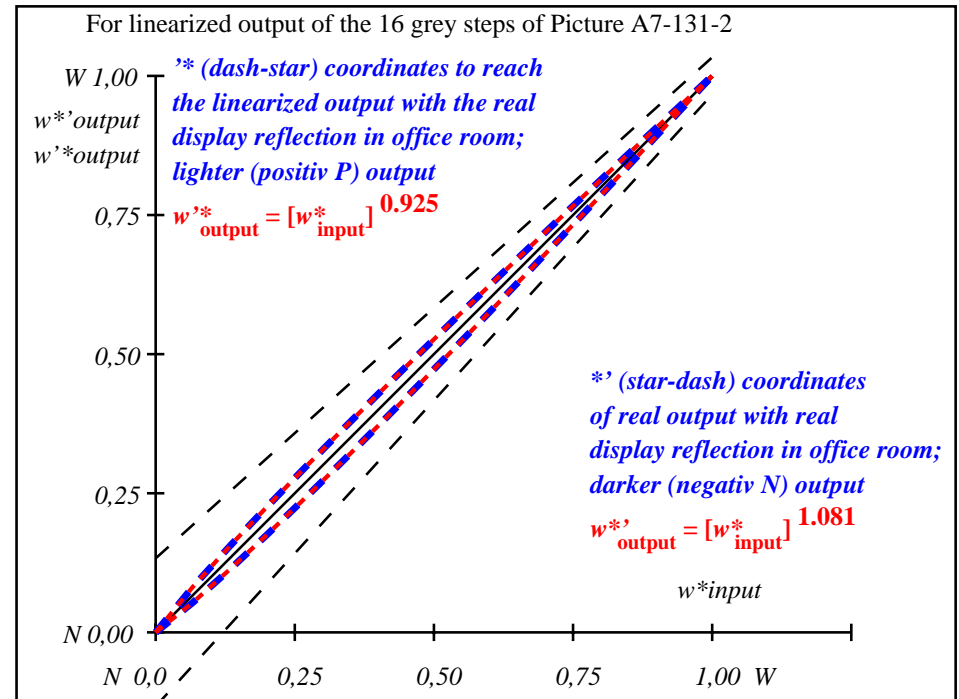
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

Mean lightness difference (16 steps) $\Delta E^*_{CIELAB} = 1.6$

Mean lightness difference (5 steps) $\Delta L^*_{CIELAB} = 1.3$

Mean colour reproduction index: $R^*_{ab,m} = 93$

OE520-3N-131-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE521-3N-131-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{intended}$ (absolute)	5.7/0.6	11.7/1.4	17.7/2.4	23.6/4.0	29.6/6.1	35.6/8.8	41.6/12.2	47.6/16.5	53.5/21.5	59.5/27.6	65.5/34.7	71.5/42.9	77.5/52.3	83.4/63.0	89.4/75.1	95.4/88.6
$w^* w^* w^*$ setrgb $g_N=1.08$																
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^*_{out}	0.0	0.054	0.113	0.176	0.24	0.305	0.371	0.439	0.506	0.576	0.645	0.715	0.786	0.857	0.928	1.0

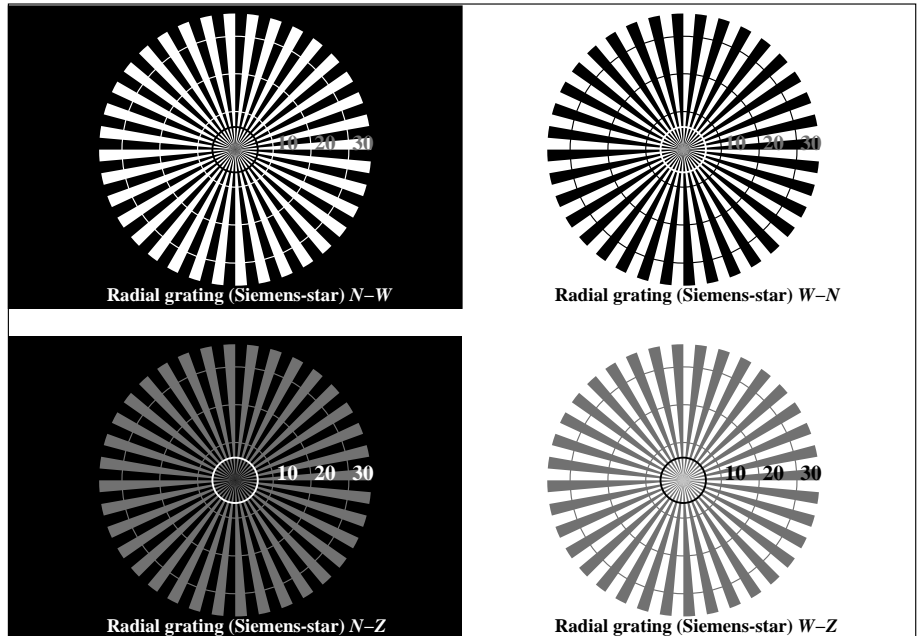
OE520-7N, Picture A7-131-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* setrgbcolor$

OE52: In-output relation according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:0,62$; Y_N range 0,46 to <0,93

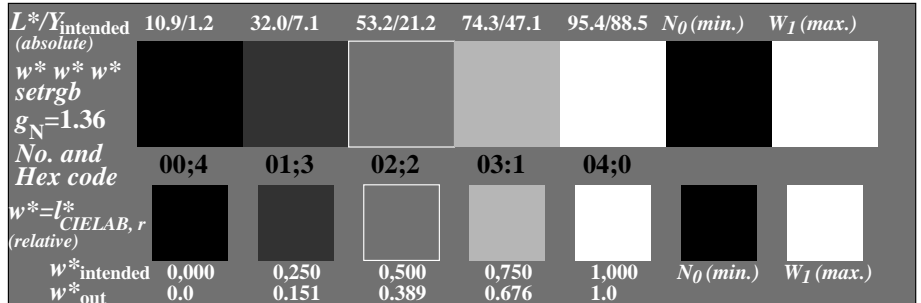
input: $cmy0 (->rgb_d) setcmyk$
 output 130-2: $g_P=1.0$; $g_N=1.08$

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB

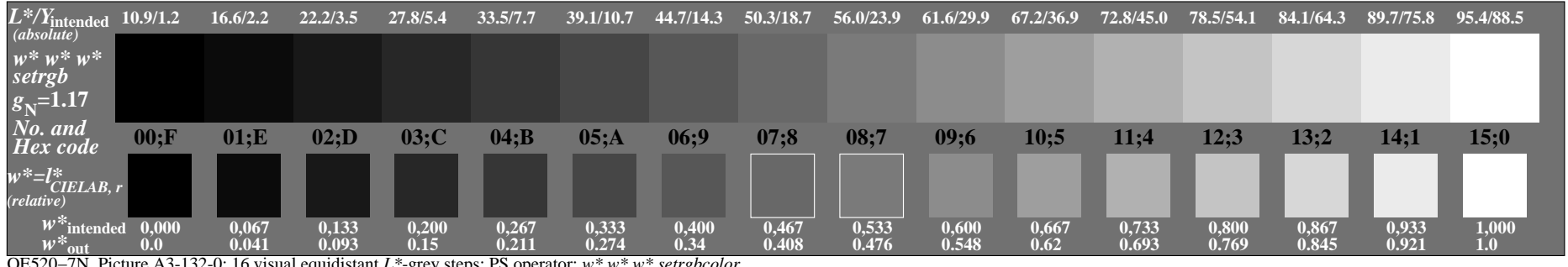
TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thata



OE520-3N, Picture A1-132-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$

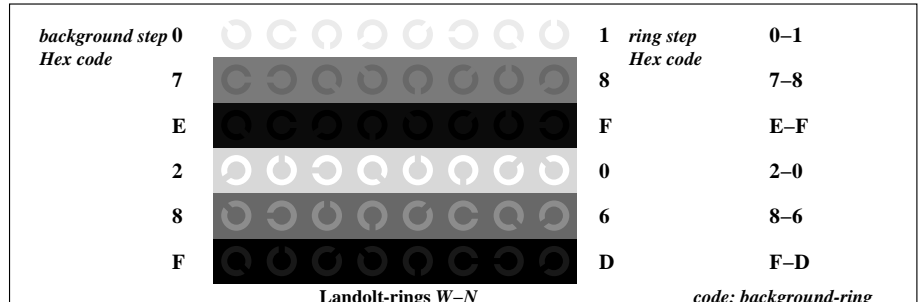


OE520-5N, Picture A2-132-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$

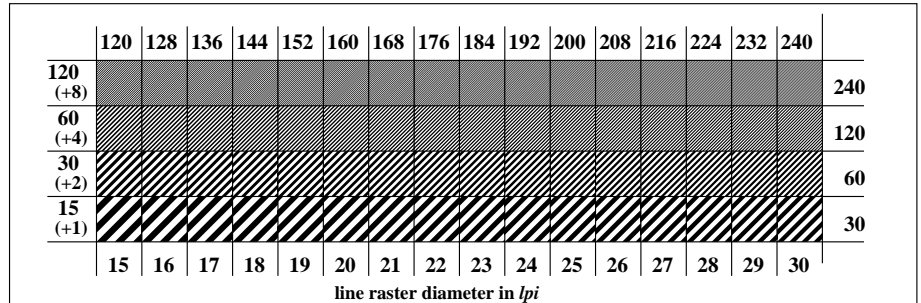


OE520-7N, Picture A3-132-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

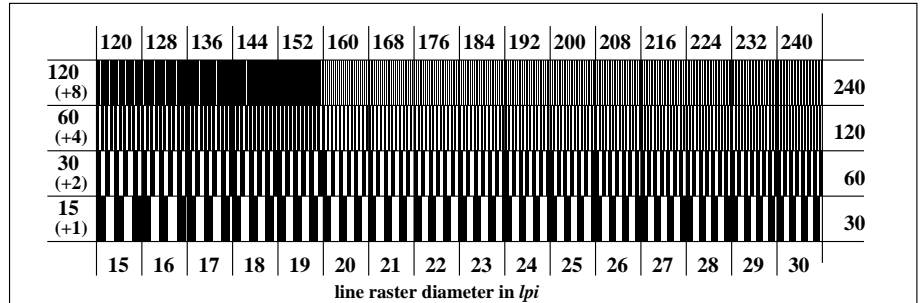
OE52: similar ME16 according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:1,25$; Y_N range 0,93 to <1,87



OE521-1N, Picture A4-132-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE521-3N, Picture A5-132-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE521-5N, Picture A6-132-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

input: $cm\dot{y}0$ (-> rgb^*_d) $setcmyk$
 output 130-0: $g_p=1.0$; $g_N=1.17$

Test for the best visual linearized output of Picture A7-132-0 Yes/No
Output test with the computer display () or the external display ()

Test of the radial grating according to picture A1-132-0
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 A2-132-0
 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: Steps

Test of 16 visual equidistant L*-grey steps according to picture A3-132-0
 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: Steps

Part 1 OE520-3N-1316-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE52/OE52L0NP.PDF Yes/No

PS-File: http://130.149.60.45/farbmetrik/OE52/OE52L0NA.PS or Yes/No

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

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

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

For device output with PDF-file OE52L0NP.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 device output with PS-file OE52L0NA.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:Special remarks, e. g. output of Landscape (L)

Part 3 OE520-7N-132-1

Test for the best visual linearized output of Picture A7-132-0 Yes/No
Output test with the computer display () or the external display ()

Test of the Landolt-rings N-W according to picture A4-132-0
N-W-radial grating:
 Is the recognition frequency of the Landolt-rings > 50% (5 of 8 at least)?
 background - ring
 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 A5-132-0
 Can equally spaced lines be seen?
 Visual testing: for radial diameter from 15 to 60 lpi Yes/No
 Test with a magnifying glass (e.g. 6x): - from 15 lpi to lpi

Test of the radial grating under 90° according to picture A6-132-0
 Can equally spaced lines be seen?
 Visual testing: for radial diameter from 15 to 60 lpi Yes/No
 Test with a magnifying glass (e.g. 6x): - from 15 lpi to lpi

Part 2 OE521-3N-132-1

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

For visual evaluation of the display (monitor, data projector) output
 Office workplace illumination is daylight (clouded/north sky) Yes/No
PDF file: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF Yes/No
PS file: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS Yes/No
Picture A7-132-2: 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 range
 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://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF Yes/No
picture A7-132-2
PS-File: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS Yes/No
picture A7-132-2 or Yes/No

colour measurement and specification for:
 CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: Yes/No
 If No, please give other parameters:

Colorimetric specification with PS file for colours in the columns A to T
 Exchange of CIELAB data in file www.ps.bam.de/De17/10L/L17e00NP.PS and transfer
 of the PS-file L17e00NP.PS in PDF-file L17e00NP.PDF Yes/No
 If No, please describe other method:

Part 4 OE521-7N-132-1

See similar ISO test charts: http://www.ps.bam.de/24705TE, http://www.ps.bam.de/9241E
Technical information: http://www.ps.bam.de/33872E Version 2.1, io=1,1, CIELAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=thata

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB

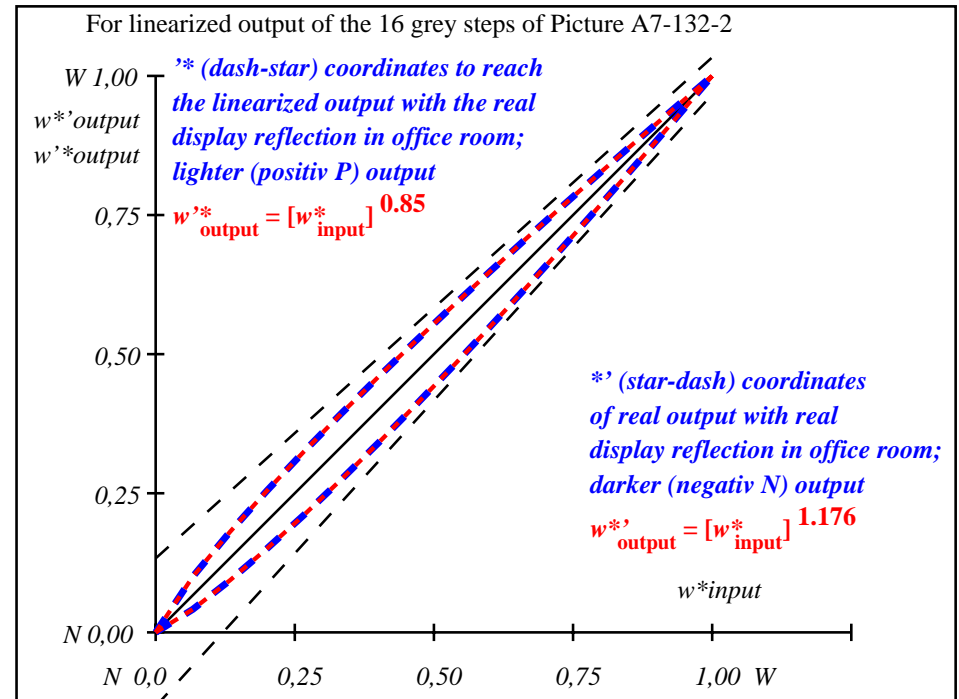
TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thadata

i	LAB*ref	L*out	LAB*out	LAB*out/c-ref	ΔE*
1	10.99	0.0	10.99	0.0	0.01
2	16.62	0.0	14.48	-0.00	2.14
3	22.25	0.0	18.88	-0.00	3.37
4	27.88	0.0	23.7	-0.00	4.17
5	33.5	0.0	28.82	-0.00	4.68
6	39.13	0.0	34.17	-0.00	4.96
7	44.76	0.0	39.72	-0.00	5.04
8	50.39	0.0	45.43	-0.00	4.96
9	56.02	0.0	51.29	-0.00	4.73
10	61.64	0.0	57.28	-0.00	4.37
11	67.27	0.0	63.38	-0.00	3.89
12	72.9	0.0	69.6	-0.00	3.3
13	78.53	0.0	75.92	-0.00	2.61
14	84.15	0.0	82.33	-0.00	1.82
15	89.78	0.0	88.83	-0.00	0.95
16	95.41	0.0	95.41	0.0	0.01
17	10.99	0.0	10.99	0.0	0.01
18	32.1	0.0	27.52	-0.00	4.58
19	53.2	0.0	48.34	-0.00	4.86
20	74.31	0.0	71.17	-0.00	3.13
21	95.41	0.0	95.41	0.0	0.01

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

Mean lightness difference (16 steps) $\Delta E^*_{CIELAB} = 3.2$
 Mean lightness difference (5 steps) $\Delta L^*_{CIELAB} = 2.5$
 Mean colour reproduction index: $R^*_{ab,m} = 86$

OE520-3N-132-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE521-3N-132-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (absolute)	11.0/1.3	16.6/2.2	22.2/3.6	27.9/5.4	33.5/7.8	39.1/10.7	44.8/14.4	50.4/18.7	56.0/23.9	61.6/30.0	67.3/37.0	72.9/45.0	78.5/54.1	84.2/64.4	89.8/75.8	95.4/88.6
$w^* w^* w^*$ setrgb $g_N=1.18$																
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^*_{out}	0.0	0.042	0.093	0.151	0.211	0.274	0.34	0.408	0.477	0.548	0.621	0.694	0.769	0.845	0.922	1.0

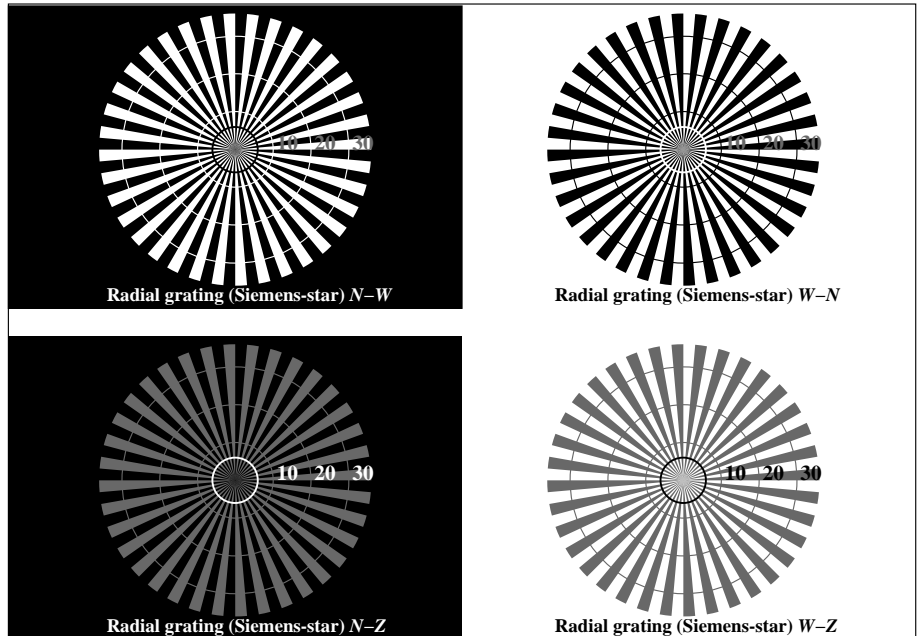
OE520-7N, Picture A7-132-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* setrgbcolor$

OE52: In-output relation according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:1,25$; Y_N range 0,93 to <1,87

input: $cmy0 (->rgb_d) setcmyk$
 output 130-2: $g_P=1.0$; $g_N=1.17$

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1.1, CIELAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thdata



OE520-3N, Picture A1-133-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$

$L^*/Y_{intended}$ (absolute)	18.0/2.5	37.3/9.7	56.7/24.6	76.0/49.9	95.4/88.5	N_0 (min.)	W_1 (max.)
$w^* w^* w^*$ setrgb $g_N=1.54$	[Color swatches]						
No. and Hex code	00;4	01;3	02;2	03;1	04;0		
$w^* = l^*$ CIELAB, r (relative)	[Color swatches]						
$w^*_{intended}$	0,000	0,250	0,500	0,750	1,000	N_0 (min.)	W_1 (max.)
w^*_{out}	0.0	0.118	0.343	0.642	1.0		

OE520-5N, Picture A2-133-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$

$L^*/Y_{intended}$ (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	74.7/47.9	79.9/56.5	85.0/66.1	90.2/76.8	95.4/88.5
$w^* w^* w^*$ setrgb $g_N=1.29$	[Color swatches]															
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)	[Color swatches]															
$w^*_{intended}$	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^*_{out}	0.0	0.03	0.074	0.125	0.218	0.306	0.374	0.444	0.517	0.593	0.669	0.749	0.831	0.914	1.0	

OE520-7N, Picture A3-133-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

OE52: similar ME16 according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:2,5$; Y_N range 1,87 to <3,75

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

OE521-1N, Picture A4-133-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$

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

OE521-3N, Picture A5-133-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

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

OE521-5N, Picture A6-133-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

input: $cm\dot{y}0$ (-> rgb^*_d) $setcmyk$
 output 130-0: $g_p=1.0$; $g_N=1.29$

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIHLAB

Test for the best visual linearized output of Picture A7-133-0 Yes/No
Output test with the computer display () or the external display ()

Test of the radial grating according to picture A1-133-0
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 A2-133-0
 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: Steps

Test of 16 visual equidistant L*-grey steps according to picture A3-133-0
 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: Steps

Part 1 OE520-3N-1324-1

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

PDF-File: <http://130.149.60.45/farbmetrik/OE52/OE52L0NP.PDF> underline Yes/No

PS-File: <http://130.149.60.45/farbmetrik/OE52/OE52L0NA.PS> or underline Yes/No

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

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

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

For device output with PDF-file OE52L0NP.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 device output with PS-file OE52L0NA.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: Special remarks, e. g. output of Landscape (L)

Part 3 OE520-7N-133-1

Test for the best visual linearized output of Picture A7-133-0 Yes/No
Output test with the computer display () or the external display ()

Test of the Landolt-rings N-W according to picture A4-133-0
N-W-radial grating:
 Is the recognition frequency of the Landolt-rings > 50% (5 of 8 at least)?
 background - ring
 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 A5-133-0
 Can equally spaced lines be seen?
 Visual testing: for radial diameter from 15 to 60 lpi Yes/No
 Test with a magnifying glass (e.g. 6x): - from 15 lpi: to lpi

Test of the radial grating under 90° according to picture A6-133-0
 Can equally spaced lines be seen?
 Visual testing: for radial diameter from 15 to 60 lpi Yes/No
 Test with a magnifying glass (e.g. 6x): - from 15 lpi: to lpi

Part 2 OE521-3N-133-1

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

For visual evaluation of the display (monitor, data projector) output
 Office workplace illumination is daylight (clouded/north sky) underline Yes/No
PDF file: <http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF> underline Yes/No
PS file: <http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS> underline Yes/No
Picture A7-133-2: 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 range
*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://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF> underline Yes/No
picture A7-133-2
PS-File: <http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS> or underline Yes/No
picture A7-133-2

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 with PS file for colours in the columns A to T
 Exchange of CIELAB data in file www.ps.bam.de/De17/10L/L17e00NP.PS and transfer
 of the PS-file L17e00NP.PS in PDF-file L17e00NP.PDF underline Yes/No
 If No, please describe other method:

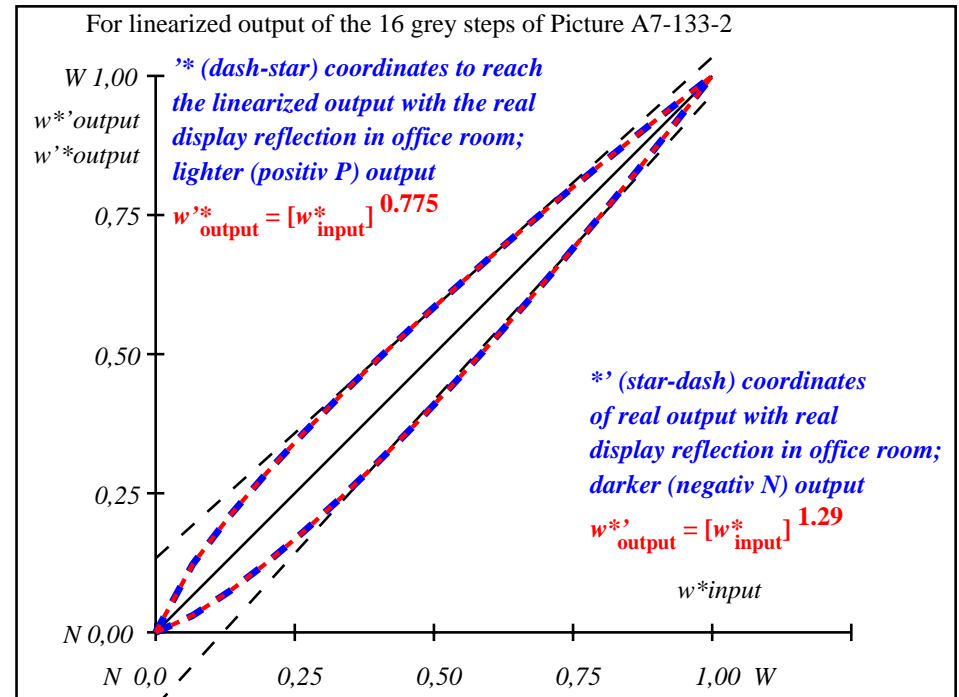
Part 4 OE521-7N-133-1

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=thata

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIPLAB

i	LAB*ref	I*out	LAB*out	LAB*out/c-ref	ΔE*	Start output S1
1	18.01	0.0	18.01	0.0	0.01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G
2	23.17	0.0	20.36	-2.8	2.81	
3	28.33	0.0	23.76	-4.56	4.57	
4	33.49	0.0	27.71	-5.77	5.78	
5	38.65	0.0	32.07	-6.57	6.58	
6	43.81	0.0	36.76	-7.04	7.05	
7	48.97	0.0	41.74	-7.22	7.23	
8	54.13	0.0	46.96	-7.16	7.17	
9	59.29	0.0	52.4	-6.88	6.89	
10	64.45	0.0	58.05	-6.39	6.4	
11	69.61	0.0	63.88	-5.72	5.73	
12	74.77	0.0	69.88	-4.88	4.89	
13	79.93	0.0	76.05	-3.87	3.88	
14	85.09	0.0	82.36	-2.72	2.73	
15	90.25	0.0	88.82	-1.42	1.43	Mean lightness difference (16 steps)
16	95.41	0.0	95.41	0.0	0.01	ΔE* _{CIELAB} = 4.6
17	18.01	0.0	18.01	0.0	0.01	
18	37.36	0.0	30.95	-6.4	6.41	
19	56.71	0.0	49.66	-7.04	7.05	
20	76.06	0.0	71.41	-4.64	4.65	Mean lightness difference (5 steps)
21	95.41	0.0	95.41	0.0	0.01	ΔL* _{CIELAB} = 3.6
Mean colour reproduction index:					R*_{ab,m} = 80	

OE520-3N-133-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE521-3N-133-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{intended}$ (absolute)	18.0/2.5	23.2/3.8	28.3/5.6	33.5/7.8	38.6/10.5	43.8/13.7	49.0/17.6	54.1/22.1	59.3/27.3	64.4/33.4	69.6/40.2	74.8/47.9	79.9/56.6	85.1/66.2	90.2/76.8	95.4/88.6
$w^* w^* w^*$ setrgb $g_N=1.29$ 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)	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^*_{out}	0.0	0.031	0.074	0.125	0.242	0.307	0.374	0.444	0.517	0.593	0.67	0.75	0.832	0.914	1.0	

OE520-7N, Picture A7-133-2: 16 visual equidistant L*-grey steps; PS operator: $w^* w^* w^*$ setrgbcolor

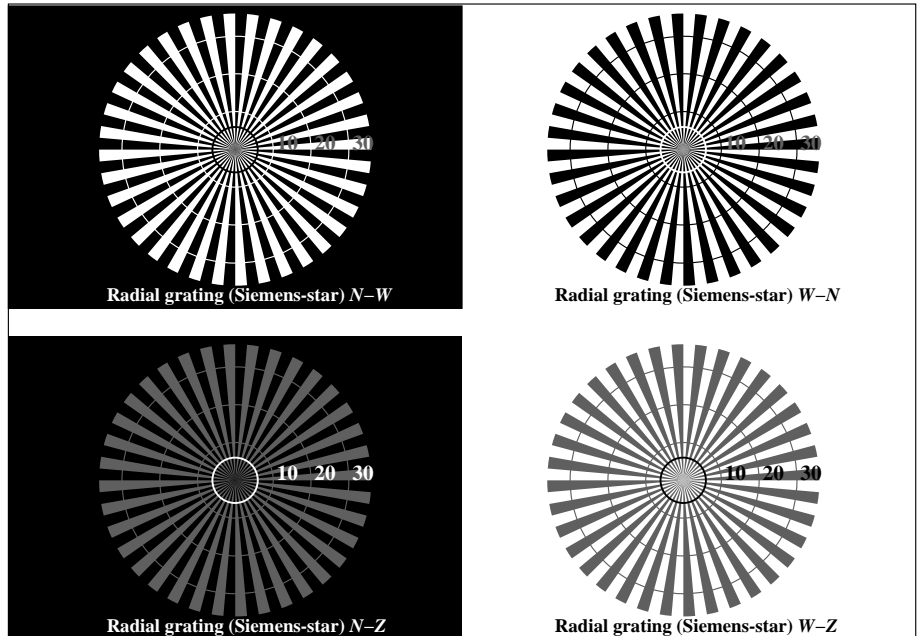
OE52: In-output relation according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:2,5$; Y_N range 1,87 to <3,75

input: $cmy0 (->rgb_d)$ setcmyk
 output 130-2: $g_P=1.0$; $g_N=1.29$

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thadata

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thata



OE520-3N, Picture A1-134-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: w* w* w* setrgbcolor

$L^*/Y_{intended}$ (absolute)	26.8/5.0	43.9/13.8	61.1/29.3	78.2/53.6	95.4/88.5	N_0 (min.)	W_1 (max.)
w* w* w* setrgb	[Color swatches]						
$g_N=1.72$	[Color swatches]						
No. and Hex code	00;4	01;3	02;2	03;1	04;0		
w* = l* CIELAB, r (relative)	[Color swatches]						
w* _{intended}	0,000	0,250	0,500	0,750	1,000	N_0 (min.)	W_1 (max.)
w* _{out}	0.0	0.092	0.303	0.609	1.0		

OE520-5N, Picture A2-134-0: 5 equidistant L*-grey steps+N0+W1; PS operator: w* w* w* setrgbcolor

$L^*/Y_{intended}$ (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
w* w* w* setrgb	[Color swatches]															
$g_N=1.42$	[Color swatches]															
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)	[Color swatches]															
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* _{out}	0.0	0.021	0.056	0.1	0.151	0.207	0.27	0.336	0.407	0.482	0.56	0.641	0.727	0.815	0.905	1.0

OE520-7N, Picture A3-134-0: 16 visual equidistant L*-grey steps; PS operator: w* w* w* setrgbcolor

OE52: similar ME16 according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:5$; Y_N range 3,75 to <7,5

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

OE521-1N, Picture A4-134-0: Landolt-rings W-N; PS operator: w* w* w* setrgbcolor

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

OE521-3N, Picture A5-134-0: Line raster under 45° (or 135°); PS operator: w* w* w* setrgbcolor

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

OE521-5N, Picture A6-134-0: Line raster under 90° (or 0°); PS operator: w* w* w* setrgbcolor

input: cmy0 (->rgb*_d) setcmyk
 output 130-0: $g_p=1.0$; $g_N=1.42$

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIHLAB

Test for the best visual linearized output of Picture A7-134-0 Yes/No
Output test with the computer display () or the external display ()

Test of the radial grating according to picture A1-134-0
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 A2-134-0
 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: Steps

Test of 16 visual equidistant L*-grey steps according to picture A3-134-0
 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: Steps

Part 1 OE520-3N-1332-1

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

PDF-File: <http://130.149.60.45/farbmetrik/OE52/OE52L0NP.PDF> underline Yes/No

PS-File: <http://130.149.60.45/farbmetrik/OE52/OE52L0NA.PS> or underline Yes/No

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

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

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

For device output with PDF-file OE52L0NP.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 device output with PS-file OE52L0NA.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: Special remarks, e. g. output of Landscape (L)

Part 3 OE520-7N-134-1

Test for the best visual linearized output of Picture A7-134-0 Yes/No
Output test with the computer display () or the external display ()

Test of the Landolt-rings N-W according to picture A4-134-0
N-W-radial grating:
 Is the recognition frequency of the Landolt-rings > 50% (5 of 8 at least)?
 background - ring
 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 A5-134-0
 Can equally spaced lines be seen?
 Visual testing: for radial diameter from 15 to 60 lpi Yes/No
 Test with a magnifying glass (e.g. 6x): - from 15 lpi: to lpi

Test of the radial grating under 90° according to picture A6-134-0
 Can equally spaced lines be seen?
 Visual testing: for radial diameter from 15 to 60 lpi Yes/No
 Test with a magnifying glass (e.g. 6x): - from 15 lpi: to lpi

Part 2 OE521-3N-134-1

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

For visual evaluation of the display (monitor, data projector) output
 Office workplace illumination is daylight (clouded/north sky) underline Yes/No
PDF file: <http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF> underline Yes/No
PS file: <http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS> underline Yes/No
Picture A7-134-2: 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 range
 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://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF> underline Yes/No
picture A7-134-2
PS-File: <http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS> or underline Yes/No
picture A7-134-2

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 with PS file for colours in the columns A to T
 Exchange of CIELAB data in file www.ps.bam.de/De17/10L/L17e00NP.PS and transfer
 of the PS-file L17e00NP.PS in PDF-file L17e00NP.PDF underline Yes/No
 If No, please describe other method:

Part 4 OE521-7N-134-1

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=thata

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIILAB

i	LAB*ref	L*out	LAB*out	LAB*out/c-ref	ΔE*	Start output S1
1	26.85	0.0	0.0	26.85	0.0	0.0
2	31.42	0.0	0.02	28.28	0.0	-3.13
3	35.99	0.0	0.06	30.7	0.0	-5.28
4	40.56	0.0	0.1	33.73	0.0	-6.82
5	45.13	0.0	0.15	37.22	0.0	-7.9
6	49.7	0.0	0.21	41.12	0.0	-8.57
7	54.27	0.0	0.27	45.37	0.0	-8.9
8	58.84	0.0	0.34	49.93	0.0	-8.91
9	63.41	0.0	0.41	54.78	0.0	-8.63
10	67.99	0.0	0.48	59.9	0.0	-8.08
11	72.56	0.0	0.56	65.27	0.0	-7.28
12	77.13	0.0	0.64	70.87	0.0	-6.25
13	81.7	0.0	0.73	76.7	0.0	-4.99
14	86.27	0.0	0.82	82.73	0.0	-3.52
15	90.84	0.0	0.91	88.97	0.0	-1.85
16	95.41	0.0	1.0	95.41	0.0	0.0
17	26.85	0.0	0.0	26.85	0.0	0.0
18	43.99	0.0	0.14	36.31	0.0	-7.67
19	61.13	0.0	0.37	52.32	0.0	-8.8
20	78.27	0.0	0.66	72.31	0.0	-5.95
21	95.41	0.0	1.0	95.41	0.0	0.0

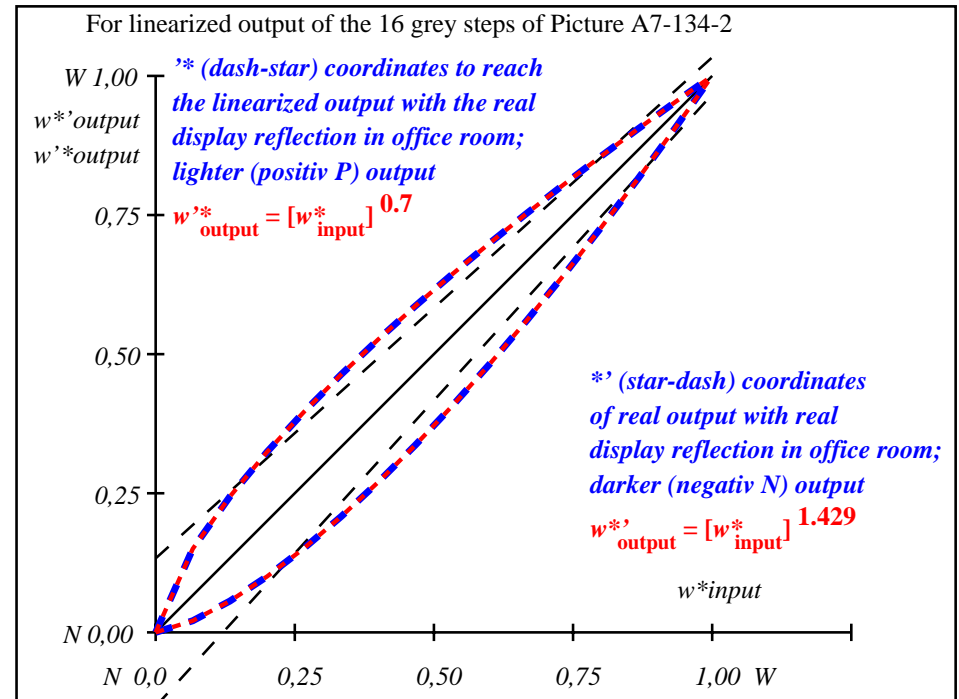
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

Mean lightness difference (16 steps) $\Delta E^*_{CIELAB} = 5.6$

Mean lightness difference (5 steps) $\Delta L^*_{CIELAB} = 4.5$

Mean colour reproduction index: $R^*_{ab,m} = 75$

OE520-3N-134-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE521-3N-134-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{intended}$ (absolute)	26.8/5.0	31.4/6.8	36.0/9.0	40.6/11.6	45.1/14.6	49.7/18.2	54.3/22.2	58.8/26.9	63.4/32.1	68.0/38.0	72.6/44.5	77.1/51.7	81.7/59.7	86.3/68.5	90.8/78.1	95.4/88.6
$w^* w^* w^*$ setrgb																
$g_N=1.43$																
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^*_{out}	0.0	0.021	0.056	0.1	0.152	0.208	0.27	0.337	0.407	0.482	0.561	0.642	0.727	0.816	0.906	1.0

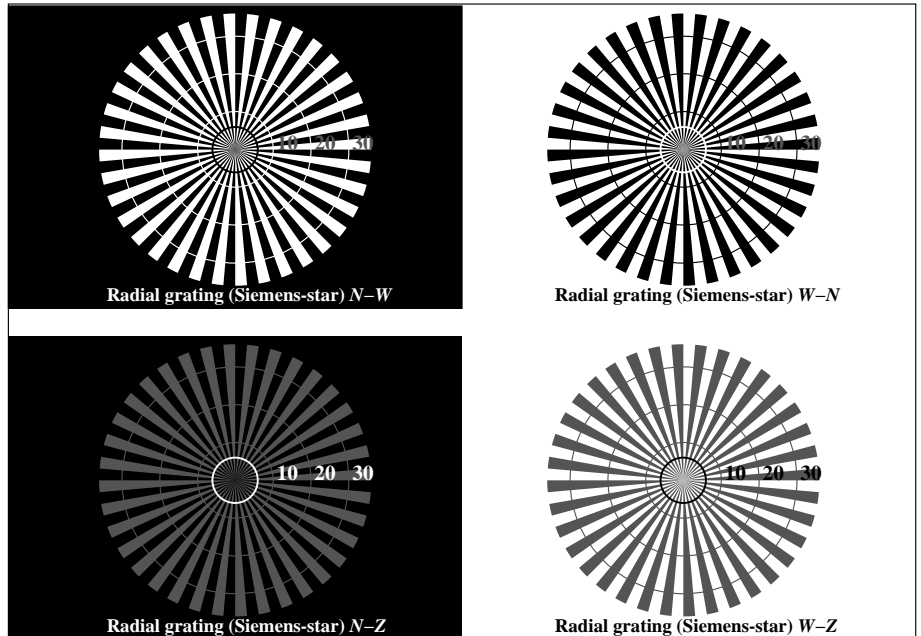
OE520-7N, Picture A7-134-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^*$ setrgbcolor

OE52: In-output relation according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:5$; Y_N range 3,75 to <7,5

input: $cmY0$ (\rightarrow rgb^*_d) setcmyk
 output 130-2: $g_P=1.0$; $g_N=1.42$

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIILAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thata4ta



OE520-3N, Picture A1-135-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* setrgbcolor$

$L^*/Y_{intended}$ (absolute)	37.9/10.0	52.3/20.4	66.6/36.2	81.0/58.5	95.4/88.5	N_0 (min.)	W_1 (max.)
$w^* w^* w^*$ setrgb $g_N=1.9$	[Color swatches]						
No. and Hex code	00;4	01;3	02;2	03;1	04;0		
$w^* = l^*$ CIELAB, r (relative)	[Color swatches]						
$w^*_{intended}$	0,000	0,250	0,500	0,750	1,000	N_0 (min.)	W_1 (max.)
w^*_{out}	0.0	0.071	0.267	0.578	1.0		

OE520-5N, Picture A2-135-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* setrgbcolor$

$L^*/Y_{intended}$ (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
$w^* w^* w^*$ setrgb $g_N=1.6$	[Color swatches]															
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)	[Color swatches]															
$w^*_{intended}$	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^*_{out}	0.0	0.013	0.039	0.076	0.12	0.172	0.23	0.295	0.365	0.441	0.523	0.608	0.699	0.795	0.894	1.0

OE520-7N, Picture A3-135-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* setrgbcolor$

OE52: similar ME16 according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:10$; Y_N range 7,5 to <15

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

OE521-1N, Picture A4-135-0: Landolt-rings W-N; PS operator: $w^* w^* w^* setrgbcolor$

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

OE521-3N, Picture A5-135-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* setrgbcolor$

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

OE521-5N, Picture A6-135-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* setrgbcolor$

input: $cmY0$ ($\rightarrow rgb^*_d$) $setcmYk$
 output 130-0: $g_P=1.0$; $g_N=1.6$

Test for the best visual linearized output of Picture A7-135-0 Yes/No
Output test with the computer display () or the external display ()

Test of the radial grating according to picture A1-135-0

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 A2-135-0

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: Steps

Test of 16 visual equidistant L*-grey steps according to picture A3-135-0

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: Steps

Part 1 OE520-3N-1340-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE52/OE52L0NP.PDF Yes/No

PS-File: http://130.149.60.45/farbmetrik/OE52/OE52L0NA.PS or Yes/No

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

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

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

For device output with PDF-file OE52L0NP.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 device output with PS-file OE52L0NA.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:Special remarks, e. g. output of Landscape (L)

Part 3 OE520-7N-135-1

Test for the best visual linearized output of Picture A7-135-0 Yes/No
Output test with the computer display () or the external display ()

Test of the Landolt-rings N-W according to picture A4-135-0

N-W-radial grating:
 Is the recognition frequency of the Landolt-rings > 50% (5 of 8 at least)?
 background - ring
 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 A5-135-0

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

Test of the radial grating under 90° according to picture A6-135-0

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

Part 2 OE521-3N-135-1

Documentation of assessor colour vision properties for visual assessment

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

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

Office workplace illumination is daylight (clouded/north sky) Yes/No
PDF file: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF Yes/No
PS file: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS Yes/No
Picture A7-135-2: 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 range
 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://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF Yes/No
picture A7-135-2

PS-File: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS Yes/No
picture A7-135-2 or Yes/No

colour measurement and specification for:
 CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: Yes/No
 If No, please give other parameters:

Colorimetric specification with PS file for colours in the columns A to T

Exchange of CIELAB data in file www.ps.bam.de/De17/10L/L17e00NP.PS and transfer
 of the PS-file L17e00NP.PS in PDF-file L17e00NP.PDF Yes/No
 If No, please describe other method:

Part 4 OE521-7N-135-1

See similar ISO test charts: http://www.ps.bam.de/24705TE, http://www.ps.bam.de/9241E
Technical information: http://www.ps.bam.de/33872E Version 2.1, io=1,1, CIELAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=thata

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB

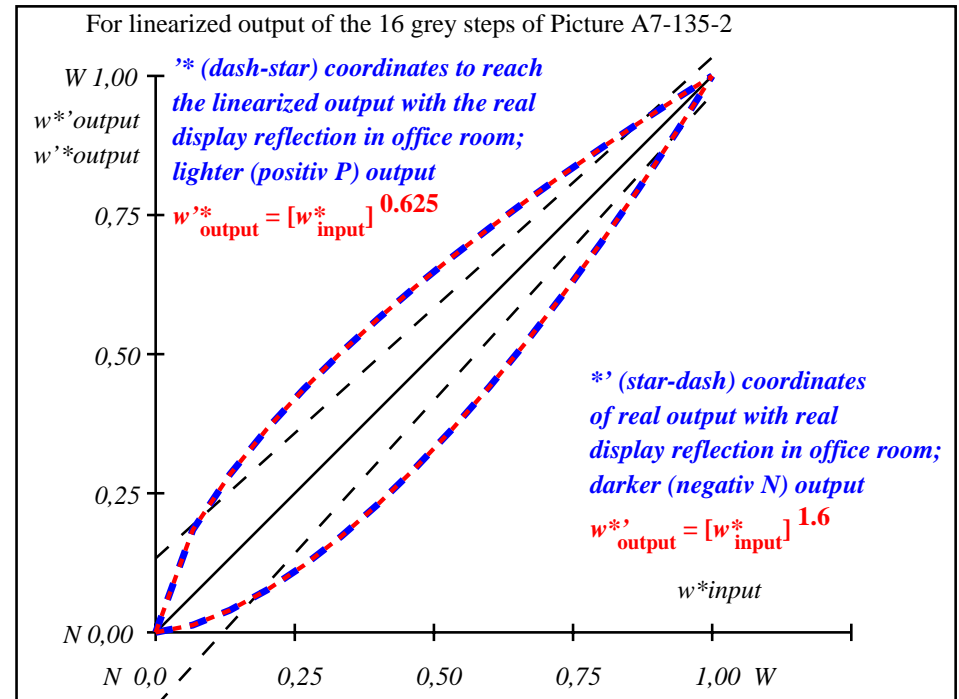
TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=rhadata

i	LAB*ref	I*out	LAB*out	LAB*out/c-ref	ΔE*					
1	37.99	0.0	0.0	37.99	0.0	0.0	0.0	0.0	0.01	0.01
2	41.81	0.0	0.0	0.01	38.74	0.0	0.0	-3.06	0.0	3.07
3	45.64	0.0	0.0	0.04	40.27	0.0	0.0	-5.36	0.0	5.37
4	49.47	0.0	0.0	0.08	42.36	0.0	0.0	-7.1	0.0	7.11
5	53.3	0.0	0.0	0.12	44.91	0.0	0.0	-8.37	0.0	8.38
6	57.13	0.0	0.0	0.17	47.89	0.0	0.0	-9.23	0.0	9.24
7	60.96	0.0	0.0	0.23	51.24	0.0	0.0	-9.7	0.0	9.71
8	64.78	0.0	0.0	0.3	54.95	0.0	0.0	-9.82	0.0	9.83
9	68.61	0.0	0.0	0.37	58.99	0.0	0.0	-9.61	0.0	9.62
10	72.44	0.0	0.0	0.44	63.34	0.0	0.0	-9.09	0.0	9.1
11	76.27	0.0	0.0	0.52	68.0	0.0	0.0	-8.26	0.0	8.27
12	80.1	0.0	0.0	0.61	72.95	0.0	0.0	-7.14	0.0	7.15
13	83.93	0.0	0.0	0.7	78.17	0.0	0.0	-5.75	0.0	5.76
14	87.75	0.0	0.0	0.8	83.66	0.0	0.0	-4.08	0.0	4.09
15	91.58	0.0	0.0	0.9	89.41	0.0	0.0	-2.16	0.0	2.17
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.01
17	37.99	0.0	0.0	0.0	37.99	0.0	0.0	0.0	0.0	0.01
18	52.34	0.0	0.0	0.11	44.23	0.0	0.0	-8.1	0.0	8.11
19	66.7	0.0	0.0	0.33	56.93	0.0	0.0	-9.76	0.0	9.77
20	81.05	0.0	0.0	0.63	74.23	0.0	0.0	-6.82	0.0	6.83
21	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.01

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

Mean lightness difference (16 steps) $\Delta E^*_{CIELAB} = 6.2$
 Mean lightness difference (5 steps) $\Delta L^*_{CIELAB} = 4.9$
 Mean colour reproduction index: $R^*_{ab,m} = 73$

OE520-3N-135-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE521-3N-135-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{intended}$ (absolute)	38.0/10.1	41.8/12.4	45.6/15.0	49.5/18.0	53.3/21.3	57.1/25.1	61.0/29.2	64.8/33.8	68.6/38.8	72.4/44.3	76.3/50.3	80.1/56.9	83.9/63.9	87.8/71.6	91.6/79.8	95.4/88.6
$w^* w^* w^*$ setrgb $g_N=1.6$ 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)	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
$w^*_{intended}$	0.0	0.013	0.027	0.040	0.053	0.067	0.080	0.093	0.107	0.120	0.133	0.147	0.160	0.173	0.187	0.200
w^*_{out}	0.0	0.013	0.027	0.040	0.053	0.067	0.080	0.093	0.107	0.120	0.133	0.147	0.160	0.173	0.187	0.200

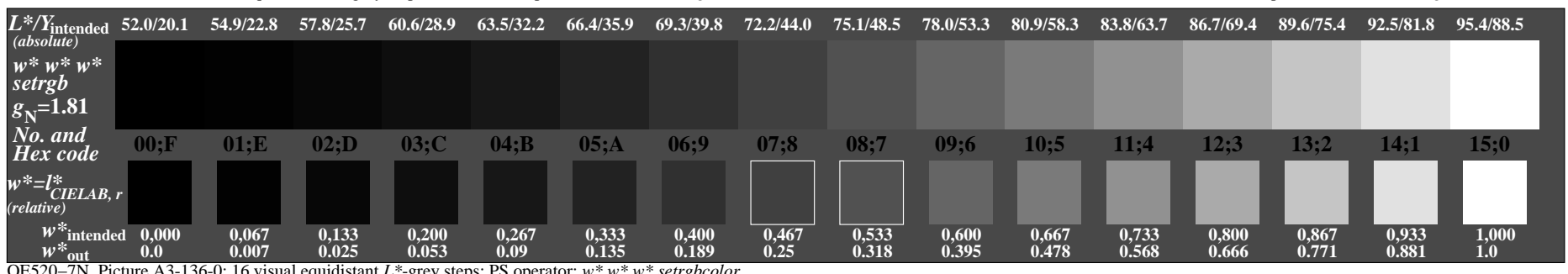
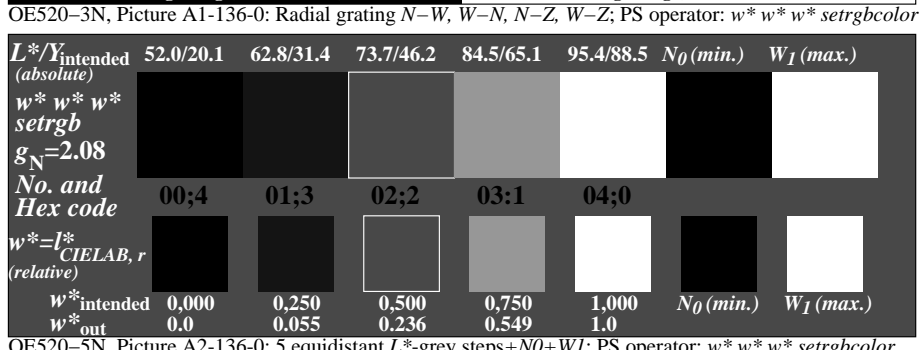
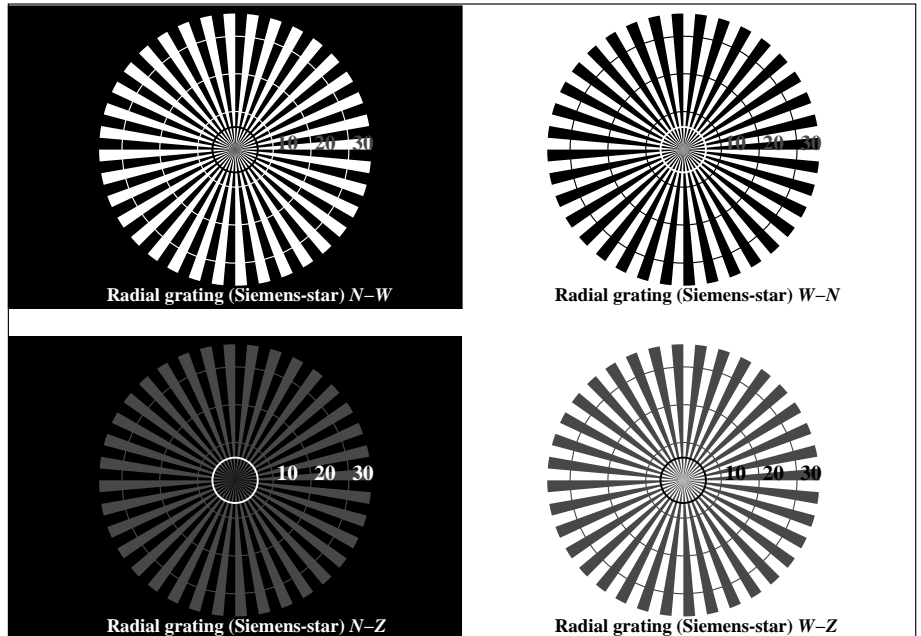
OE520-7N, Picture A7-135-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* setrgbcolor$

OE52: In-output relation according to ISO 9241-306; 1MR, DH
 Viewing $Y_W: Y_N=88,9:10$; Y_N range 7,5 to <15

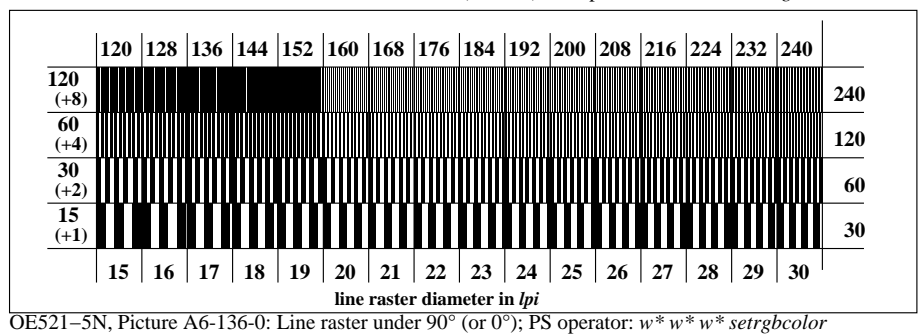
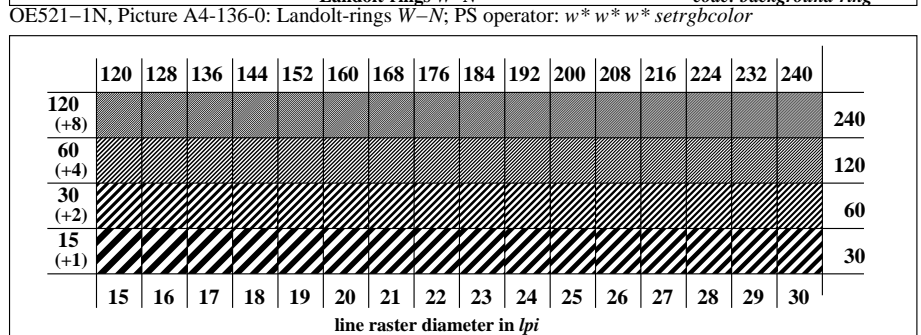
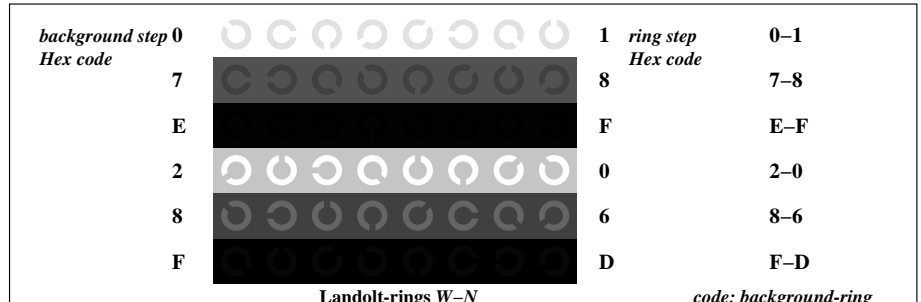
input: $cmY0 (->rgb_d) setcmyk$
 output 130-2: $g_P=1.0$; $g_N=1.6$

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thata



OE52: similar ME16 according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:20$; Y_N range 15 to <30



input: $cmY0$ ($\rightarrow rgb^*_d$) $setcmyk$
 output 130-0: $g_p=1.0$; $g_N=1.81$

Test for the best visual linearized output of Picture A7-136-0 Yes/No
Output test with the computer display () or the external display ()

Test of the radial grating according to picture A1-136-0

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 A2-136-0

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: Steps

Test of 16 visual equidistant L*-grey steps according to picture A3-136-0

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: Steps

Part 1 OE520-3N-1348-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE52/OE52L0NP.PDF underline Yes/No

PS-File: http://130.149.60.45/farbmetrik/OE52/OE52L0NA.PS or underline Yes/No

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

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

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

For device output with PDF-file OE52L0NP.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 device output with PS-file OE52L0NA.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: Special remarks, e. g. output of Landscape (L)

Part 3 OE520-7N-136-1

Test for the best visual linearized output of Picture A7-136-0 Yes/No
Output test with the computer display () or the external display ()

Test of the Landolt-rings N-W according to picture A4-136-0

N-W-radial grating:
 Is the recognition frequency of the Landolt-rings > 50% (5 of 8 at least)?
 background - ring
 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 A5-136-0

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

Test of the radial grating under 90° according to picture A6-136-0

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

Part 2 OE521-3N-136-1

Documentation of assessor colour vision properties for visual assessment

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

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

Office workplace illumination is daylight (clouded/north sky) underline Yes/No
PDF file: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF underline Yes/No
PS file: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS underline Yes/No
Picture A7-136-2: 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 range
*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://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF underline Yes/No
picture A7-136-2

PS-File: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS or underline Yes/No
picture A7-136-2

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 with PS file for colours in the columns A to T
 Exchange of CIELAB data in file www.ps.bam.de/De17/10L/L17e00NP.PS and transfer
 of the PS-file L17e00NP.PS in PDF-file L17e00NP.PDF underline Yes/No
 If No, please describe other method:

Part 4 OE521-7N-136-1

See similar ISO test charts: http://www.ps.bam.de/24705TE, http://www.ps.bam.de/9241E
Technical information: http://www.ps.bam.de/33872E Version 2.1, io=1,1, CIELAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=thata

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIE LAB

i	LAB*ref	I*out	LAB*out	LAB*out/c-ref	ΔE*	Start output S1
1	52.02	0.0	0.0	52.02	0.0	0.0
2	54.91	0.0	0.01	52.33	0.0	-2.57
3	57.8	0.0	0.03	53.13	0.0	-4.66
4	60.7	0.0	0.05	54.34	0.0	-6.34
5	63.59	0.0	0.09	55.94	0.0	-7.64
6	66.48	0.0	0.14	57.9	0.0	-8.57
7	69.37	0.0	0.19	60.22	0.0	-9.15
8	72.27	0.0	0.25	62.87	0.0	-9.39
9	75.16	0.0	0.32	65.85	0.0	-9.3
10	78.05	0.0	0.4	69.16	0.0	-8.88
11	80.95	0.0	0.48	72.78	0.0	-8.16
12	83.84	0.0	0.57	76.71	0.0	-7.12
13	86.73	0.0	0.67	80.94	0.0	-5.78
14	89.62	0.0	0.77	85.47	0.0	-4.15
15	92.52	0.0	0.88	90.29	0.0	-2.21
16	95.41	0.0	1.0	95.41	0.0	0.0
17	52.02	0.0	0.0	52.02	0.0	0.0
18	62.87	0.0	0.08	55.51	0.0	-7.35
19	73.71	0.0	0.28	64.32	0.0	-9.38
20	84.56	0.0	0.59	77.74	0.0	-6.82
21	95.41	0.0	1.0	95.41	0.0	0.0

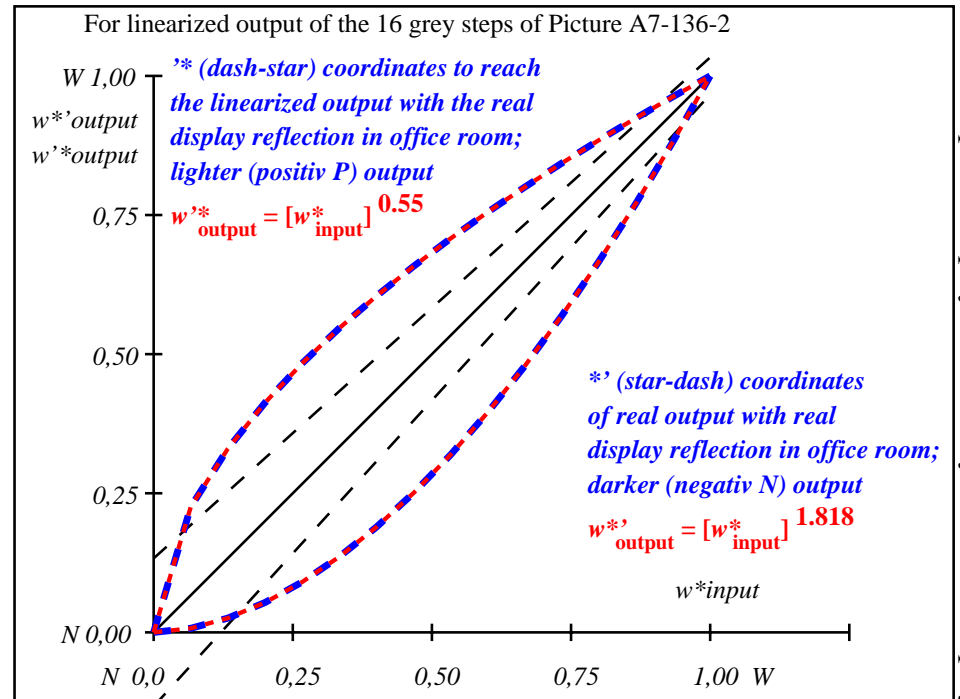
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

Mean lightness difference (16 steps) $\Delta E^*_{CIELAB} = 5.9$

Mean lightness difference (5 steps) $\Delta L^*_{CIELAB} = 4.7$

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

OE520-3N-136-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE521-3N-136-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{intended}$ (absolute)	52.0/20.2	54.9/22.8	57.8/25.8	60.7/28.9	63.6/32.3	66.5/36.0	69.4/39.9	72.3/44.1	75.2/48.5	78.1/53.3	80.9/58.4	83.8/63.8	86.7/69.5	89.6/75.5	92.5/81.9	95.4/88.6
$w^* w^* w^*$ setrgb $g_N=1.82$																
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^*_{out}	0.0	0.007	0.026	0.054	0.091	0.135	0.189	0.25	0.319	0.395	0.479	0.569	0.666	0.771	0.882	1.0

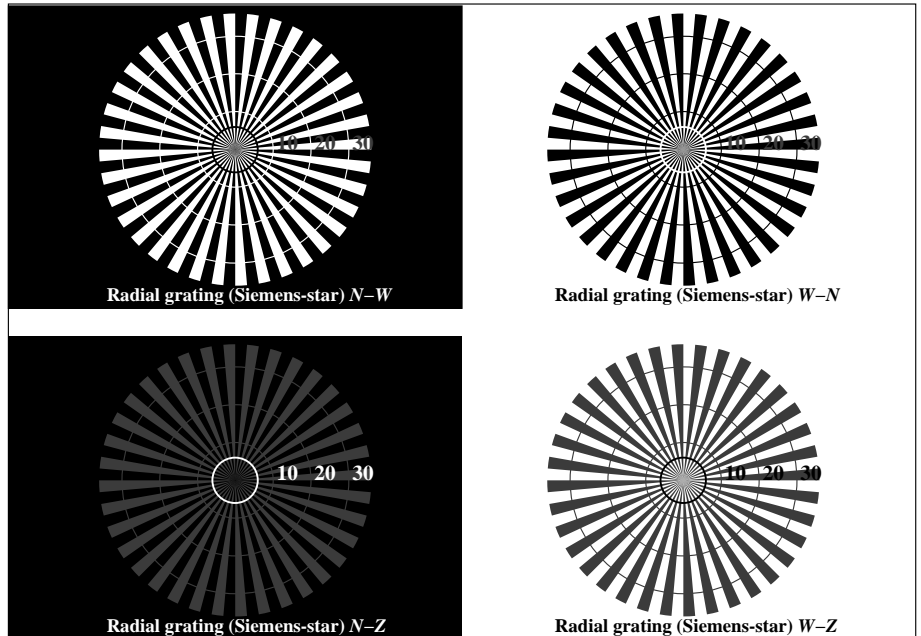
OE520-7N, Picture A7-136-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* setrgbcolor$

OE52: In-output relation according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:20$; Y_N range 15 to <30

input: $cmY0 (->rgb^*_d) setcmyk$
 output 130-2: $g_P=1.0$; $g_N=1.81$

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thadata

See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIILAB



OE520-3N, Picture A1-137-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$

$L^*/Y_{intended}$ (absolute)	69.6/40.3	76.1/50.0	82.5/61.3	88.9/74.1	95.4/88.5	N_0 (min.)	W_1 (max.)
$w^* w^* w^*$ setrgb	[Color patches]						
$g_N=2.26$ No. and Hex code	00;4	01;3	02;2	03;1	04;0		
$w^*=l^*$ CIELAB, r (relative)	[Color patches]						
$w^*_{intended}$	0,000	0,250	0,500	0,750	1,000	N_0 (min.)	W_1 (max.)
w^*_{out}	0.0	0.043	0.208	0.521	1.0		

OE520-5N, Picture A2-137-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$

$L^*/Y_{intended}$ (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
$w^* w^* w^*$ setrgb	[Color patches]															
$g_N=2.1$ 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)	[Color patches]															
$w^*_{intended}$	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^*_{out}	0.0	0.003	0.014	0.033	0.062	0.098	0.145	0.201	0.265	0.341	0.426	0.52	0.625	0.74	0.864	1.0

OE520-7N, Picture A3-137-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

OE52: similar ME16 according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:40$; Y_N range 30 to <60

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

OE521-1N, Picture A4-137-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$

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

OE521-3N, Picture A5-137-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

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

OE521-5N, Picture A6-137-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

input: $cm\dot{y}0$ (\rightarrow rgb^*_d) $setcmyk$
 output 130-0: $g_p=1.0$; $g_N=2.1$

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=thata

Test for the best visual linearized output of Picture A7-137-0 Yes/No
Output test with the computer display () or the external display ()

Test of the radial grating according to picture A1-137-0

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 A2-137-0

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: Steps

Test of 16 visual equidistant L*-grey steps according to picture A3-137-0

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: Steps

Part 1 OE520-3N-1356-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE52/OE52L0NP.PDF Yes/No

PS-File: http://130.149.60.45/farbmetrik/OE52/OE52L0NA.PS or underline Yes/No

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

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

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

For device output with PDF-file OE52L0NP.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 device output with PS-file OE52L0NA.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:Special remarks, e. g. output of Landscape (L)

Part 3 OE520-7N-137-1

Test for the best visual linearized output of Picture A7-137-0 Yes/No
Output test with the computer display () or the external display ()

Test of the Landolt-rings N-W according to picture A4-137-0

N-W-radial grating:
 Is the recognition frequency of the Landolt-rings > 50% (5 of 8 at least)?
 background - ring
 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 A5-137-0

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

Test of the radial grating under 90° according to picture A6-137-0

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

Part 2 OE521-3N-137-1

Documentation of assessor colour vision properties for visual assessment

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

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

Office workplace illumination is daylight (clouded/north sky) underline Yes/No
PDF file: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF underline Yes/No
PS file: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS underline Yes/No
Picture A7-137-2: 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 range
*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://130.149.60.45/farbmetrik/OE52/OE52F1P2.PDF underline Yes/No
picture A7-137-2

PS-File: http://130.149.60.45/farbmetrik/OE52/OE52F1P2.PS or underline Yes/No
picture A7-137-2

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 with PS file for colours in the columns A to T

Exchange of CIELAB data in file www.ps.bam.de/De17/10L/L17e00NP.PS and transfer
 of the PS-file L17e00NP.PS in PDF-file L17e00NP.PDF underline Yes/No
 If No, please describe other method:

Part 4 OE521-7N-137-1

See similar ISO test charts: http://www.ps.bam.de/24705TE, http://www.ps.bam.de/9241E
Technical information: http://www.ps.bam.de/33872E Version 2.1, io=1,1, CIELAB

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=thata

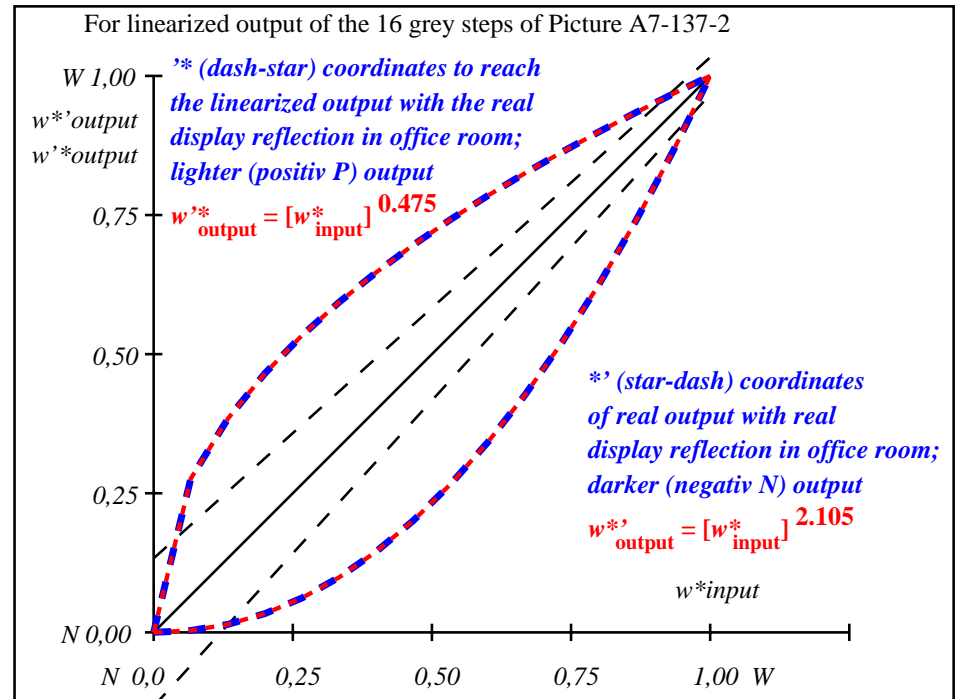
See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
 Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB

i	LAB*ref	L*out	LAB*out	LAB*out/c-ref	ΔE^*				
1	69.7	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.01
2	71.41	0.0	0.0	69.78	0.0	0.0	-1.62	0.0	1.63
3	73.13	0.0	0.0	70.07	0.0	0.0	-3.05	0.0	3.06
4	74.84	0.0	0.0	70.57	0.0	0.0	-4.26	0.0	4.27
5	76.55	0.0	0.0	71.29	0.0	0.0	-5.26	0.0	5.27
6	78.27	0.0	0.0	72.24	0.0	0.0	-6.02	0.0	6.03
7	79.98	0.0	0.0	73.43	0.0	0.0	-6.54	0.0	6.55
8	81.7	0.0	0.0	74.86	0.0	0.0	-6.82	0.0	6.83
9	83.41	0.0	0.0	76.54	0.0	0.0	-6.86	0.0	6.87
10	85.12	0.0	0.0	78.47	0.0	0.0	-6.65	0.0	6.66
11	86.84	0.0	0.0	80.65	0.0	0.0	-6.18	0.0	6.19
12	88.55	0.0	0.0	83.08	0.0	0.0	-5.46	0.0	5.47
13	90.27	0.0	0.0	85.77	0.0	0.0	-4.49	0.0	4.5
14	91.98	0.0	0.0	88.72	0.0	0.0	-3.25	0.0	3.26
15	93.7	0.0	0.0	91.93	0.0	0.0	-1.75	0.0	1.76
16	95.41	0.0	0.0	95.41	0.0	0.0	0.0	0.0	0.01
17	69.7	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.01
18	76.13	0.0	0.0	71.09	0.0	0.0	-5.03	0.0	5.04
19	82.55	0.0	0.0	75.67	0.0	0.0	-6.87	0.0	6.88
20	88.98	0.0	0.0	83.73	0.0	0.0	-5.24	0.0	5.25
21	95.41	0.0	0.0	95.41	0.0	0.0	0.0	0.0	0.01

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

Mean lightness difference (16 steps) $\Delta E^*_{CIELAB} = 4.3$
 Mean lightness difference (5 steps) $\Delta L^*_{CIELAB} = 3.4$
 Mean colour reproduction index: $R^*_{ab,m} = 81$

OE520-3N-137-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE521-3N-137-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{intended}$ (absolute)	69.7/40.3	71.4/42.8	73.1/45.4	74.8/48.0	76.6/50.8	78.3/53.7	80.0/56.6	81.7/59.7	83.4/62.9	85.1/66.3	86.8/69.7	88.6/73.2	90.3/76.9	92.0/80.7	93.7/84.6	95.4/88.6
$w^* w^* w^*$ setrgb $g_N=2.11$ 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)	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
$w^*_{intended}$	0.0	0.003	0.014	0.034	0.062	0.099	0.145	0.201	0.266	0.341	0.426	0.52	0.625	0.74	0.864	1.0

OE520-7N, Picture A7-137-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* setrgbcolor$

OE52: In-output relation according to ISO 9241-306; 1MR, DH
 Viewing Y contrast $Y_W:Y_N=88,9:40$; Y_N range 30 to <60

input: $cmY0 (->rgb^*_d) setcmyk$
 output 130-2: $g_P=1.0$; $g_N=2.1$

TUB registration: 20110801-OE52/OE52L0NA.TXT /.PS
 application for output of displays: monitor systems or data projector systems
 TUB material: code=rhadata