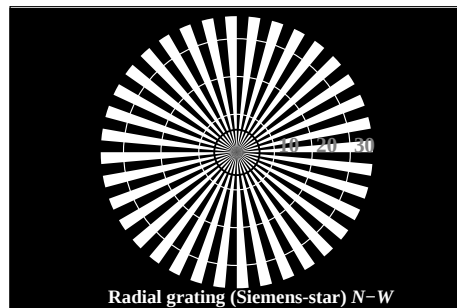
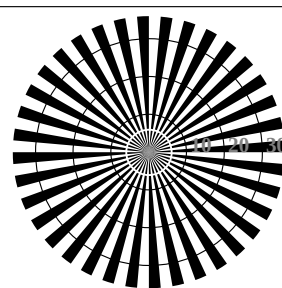


See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1

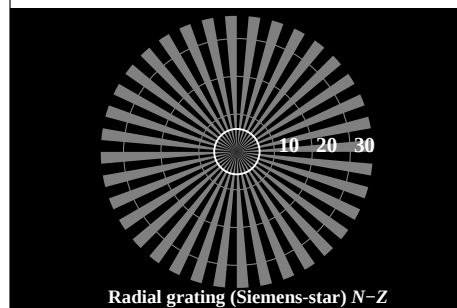
TUB registration: 20110801-OE51/OE51L0NP.PDF /.PS TUB material: code=rha4ta
application for output of displays: monitor systems or data projector systems



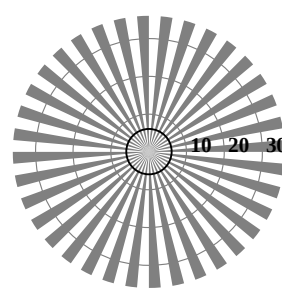
Radial grating (Siemens-star) N-W



Radial grating (Siemens-star) W-N

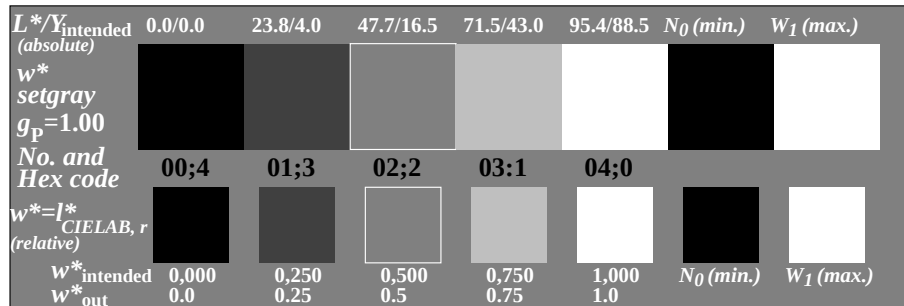


Radial grating (Siemens-star) N-Z

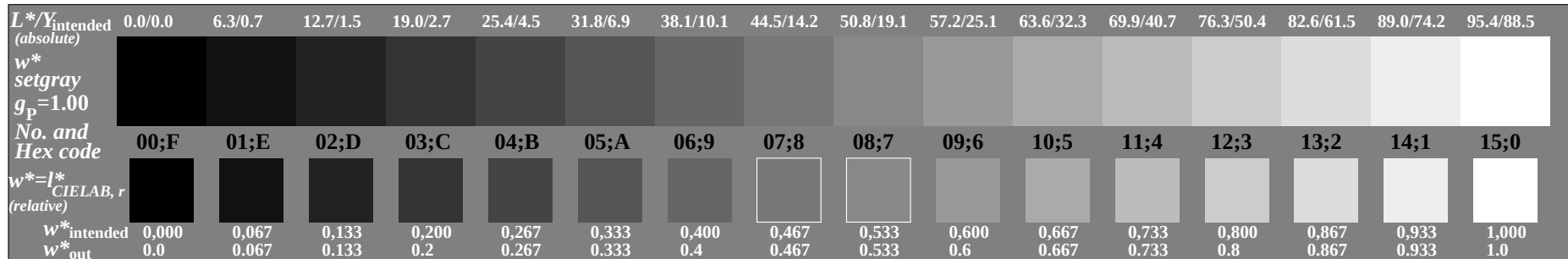


Radial grating (Siemens-star) W-Z

OE510-3N, Picture A1-010-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: w* setgray



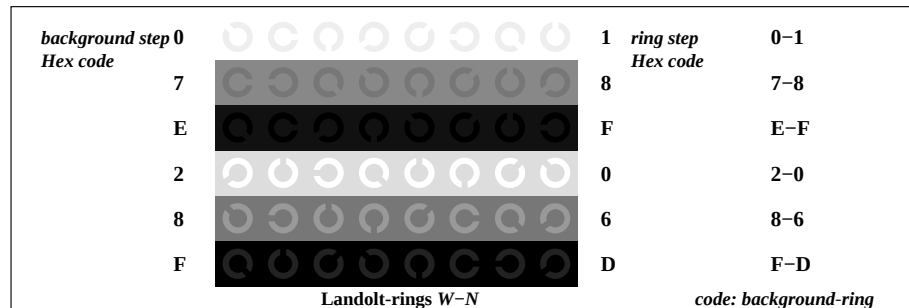
OE510-5N, Picture A2-010-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: w* setgray



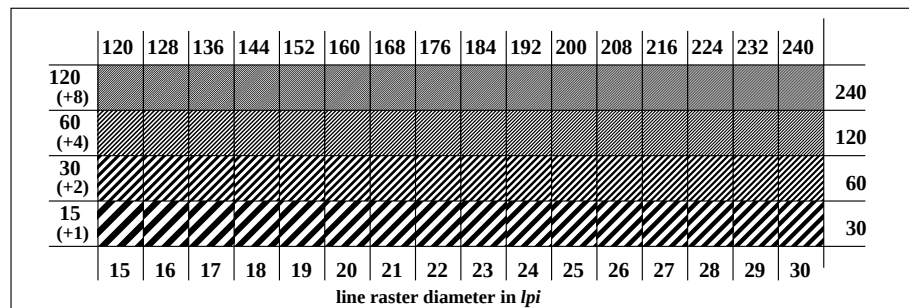
OE510-7N, Picture A3-010-0: 16 visual equidistant L^* -grey steps; PS operator: w* setgray

OE51: similar ME16 according to ISO 9241-306; DH
Viewing Y contrast $Y_W:Y_N=88,9:0,31$; Y_N range 0,0 to <0,46

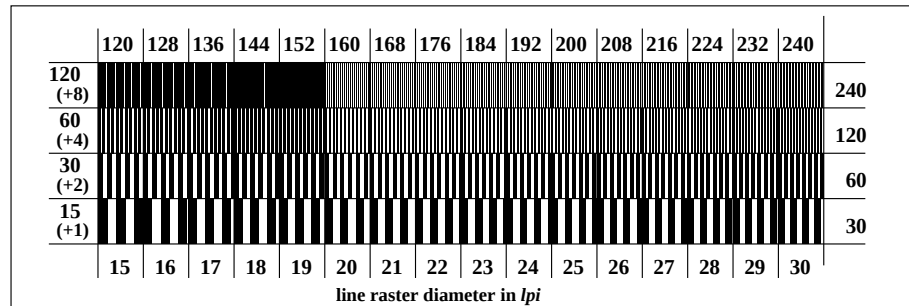
input: w (->rgb*a) setgray
output 010-0: no change



OE511-1N, Picture A4-010-0: Landolt-rings W-N; PS operator: w* setgray



OE511-3N, Picture A5-010-0: Line raster under 45° (or 135°); PS operator: w* setgray



OE511-5N, Picture A6-010-0: Line raster under 90° (or 0°); PS operator: w* setgray

Test for the best visual linearized output of Picture A7-010-0		Yes/No
Output test with the computer display () or the external display ()		
Test of the radial grating according to picture A1-010-0		
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 A2-010-0		
Are the 5 steps on the upper rows distinguishable?		Yes/No
If No: How many steps can be distinguished?		 Steps
Test of 16 visual equidistant L*-grey steps according to picture A3-010-0		
Are the 16 steps on the upper rows distinguishable?		Yes/No
If No: How many steps can be distinguished?		 Steps

Part 1

OE510-3N-010-1

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

PDF-File: <http://130.149.60.45/farbmetrik/OE51/OE51L0NP.PDF> Yes/No

PS-File: <http://130.149.60.45/farbmetrik/OE51/OE51L0NA.PS> 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 OE51L0NP.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 OE51L0NA.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

OE510-7N-010-1

OE51: Form A for test chart according to ISO 9241-306; DH
Viewing Y contrast $Y_W:Y_N=88,9:0,31$; Y_N range 0,0 to <0,46

Test for the best visual linearized output of Picture A7-010-0		Yes/No
Output test with the computer display () or the external display ()		
Test of the Landolt-rings N-W according to picture A4-010-0		
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 A5-010-0		
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 A6-010-0		
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

OE511-3N-010-1

Documentation of assessor colour vision properties for visual assessment

The assessor has **normal** colour vision according to one test:
either according to DIN 6160:1996 with Anomaloskop of Nagel
or with test charts using colour points according to Ishihara
or tested with, please specify:

Yes/No
Yes/unknown
Yes/unknown
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/OE51/OE51F1P2.PDF>

Yes/No

PS file: <http://130.149.60.45/farbmetrik/OE51/OE51F1P2.PS>

Yes/No

Picture A7-010-2: contrast range: (>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/OE51/OE51F1P2.PDF>

picture A7-010-2

Yes/No

PS-File: <http://130.149.60.45/farbmetrik/OE51/OE51F1P2.PS>

picture A7-010-2

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

OE511-7N-010-1

input: w (->rgb*a) setgray
output 010-1: no change

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

i	LAB*ref	L*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

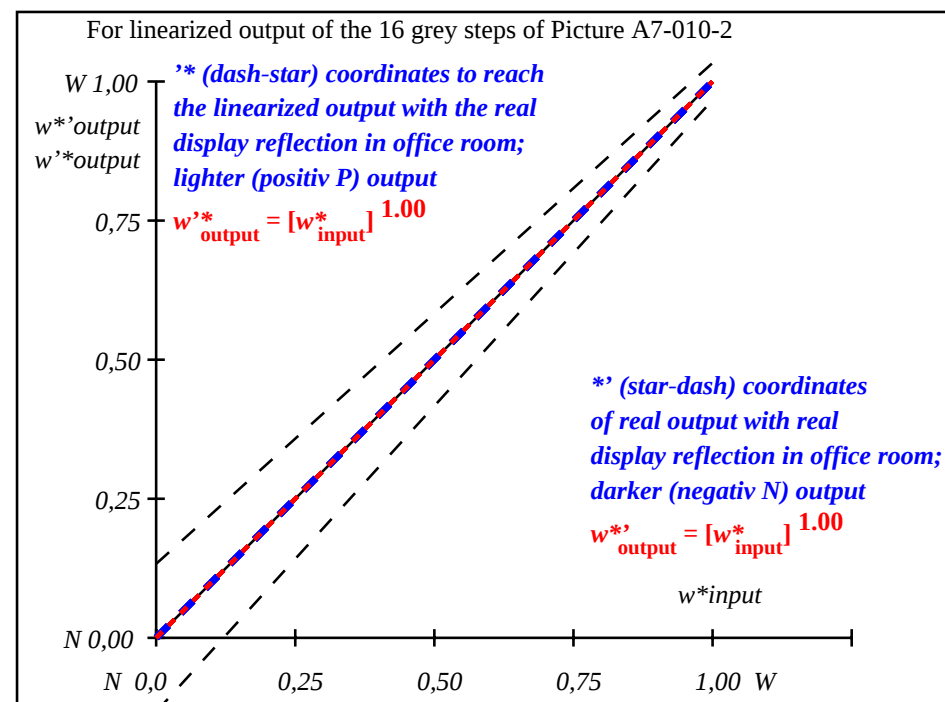
Start output S1
Specification according to
ISO/IEC 15775 Annex G
and DIN 33866-1 Annex G

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

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

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

OE510-3N-010-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE511-3N-010-2: 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^* setgray $g_p=1.00$ 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
$w^*=J^*$ $_{\text{CIELAB},r}$ (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

OE510-7N, Picture A7-010-2: 16 visual equidistant L^* -grey steps; PS operator: w^* setgray

OE51: In-output relation according to ISO 9241-306; DH
Viewing Y contrast $Y_W:Y_N=88,9:0,31$; Y_N range 0,0 to <0,46

input: w ($\rightarrow \text{rgb}^*_d$) setgray
output 010-2: no change