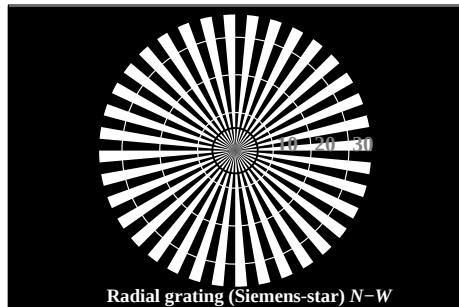


See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB



Radial grating (Siemens-star) N-W



Radial grating (Siemens-star) W-N

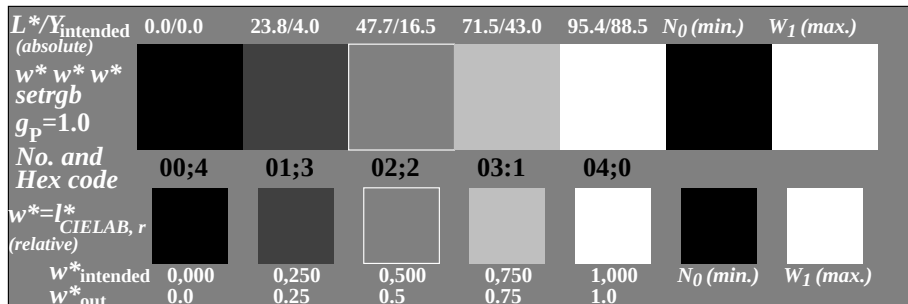


Radial grating (Siemens-star) N-Z

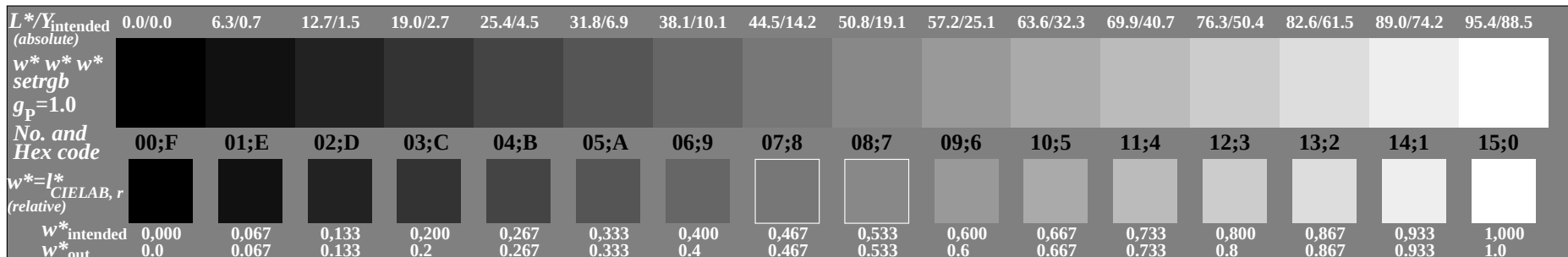


Radial grating (Siemens-star) W-Z

OE600-3N, Picture A1-130-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE600-5N, Picture A2-130-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE600-7N, Picture A3-130-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

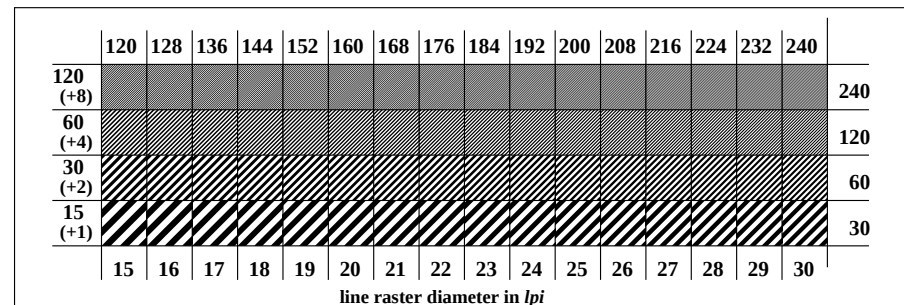
OE60: similar ME16 according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:0,31$; Y_N range 0,0 to <0,46

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

Landolt-rings W-N

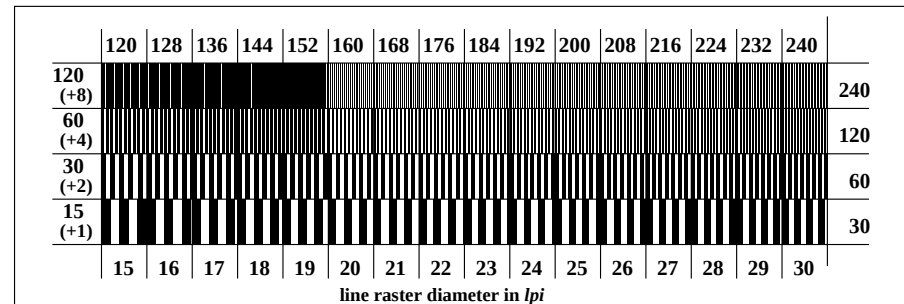
code: background-ring

OE601-1N, Picture A4-130-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$



line raster diameter in lpi

OE601-3N, Picture A5-130-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

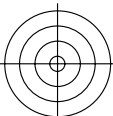


line raster diameter in lpi

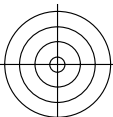
OE601-5N, Picture A6-130-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

input: 000n ($\rightarrow \text{rgb}^*_{\text{de}}$) setcmyk
output 130-0: $g_p=1.0$; $g_N=1.0$

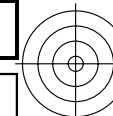
TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta



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

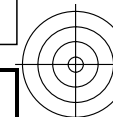


<http://130.149.60.45/~farbmetrik/OE60/OE60L0NA.TXT> / .PS; linearized output, Page 2/3
 F: Output Linearization (OL) data OE60/OE60L0NA.TXT / .PS in File (F)



TUB registration: 20110801-OE60/OE60L0NA.TXT / .PS
 application for output of displays: monitor systems or data projector systems

TUB material: code=rh4ta



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

OE600-3N-130-1

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

PDF-File: <http://130.149.60.45/farbmetrik/OE60/OE60L0NP.PDF> underline Yes/No

PS-File: <http://130.149.60.45/farbmetrik/OE60/OE60L0NA.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 OE60L0NP.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 OE60L0NA.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

OE600-7N-130-1



OE60: Form A for test chart according to ISO 9241-306; 1MR, DEHinput: 000n (->rgb*_{de}) setcmyk
 Viewing Y contrast $Y_W:Y_N=88,9:0,31$; Y_N range 0,0 to <0,46 output 130-1: $g_P=1.0$; $g_N=1.0$



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 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

OE601-3N-130-1

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/OE60/OE60F1P2.PDF> underline Yes/No

PS file: <http://130.149.60.45/farbmetrik/OE60/OE60F1P2.PS> underline 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 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/OE60/OE60F1P2.PDF> underline Yes/No

PS-File: <http://130.149.60.45/farbmetrik/OE60/OE60F1P2.PS> or underline Yes/No

picture A7-130-2
 picture A7-130-2

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

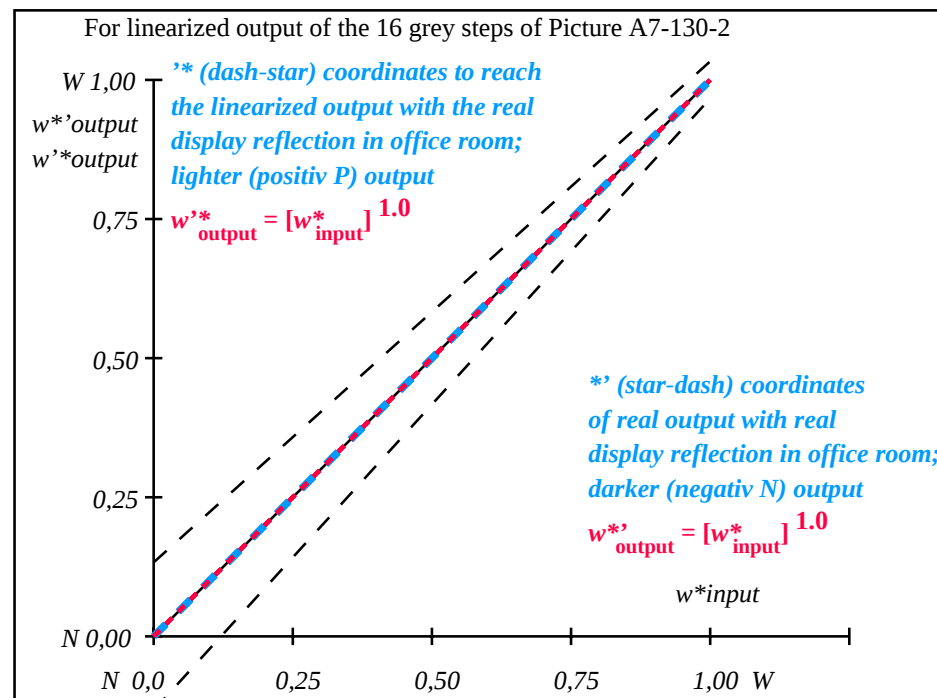
OE601-7N-130-1



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

i	LAB*ref	L*out	LAB*out	LAB*out/c-ref	ΔE*	Start output S1
1	0.0	0.0	0.0	0.0	0.0	0.01
2	6.36	0.0	0.07	6.36	0.0	0.01
3	12.72	0.0	0.13	12.72	0.0	0.01
4	19.08	0.0	0.2	19.08	0.0	0.01
5	25.44	0.0	0.27	25.44	0.0	0.01
6	31.8	0.0	0.33	31.8	0.0	0.01
7	38.16	0.0	0.4	38.16	0.0	0.01
8	44.52	0.0	0.47	44.52	0.0	0.01
9	50.89	0.0	0.53	50.89	0.0	0.01
10	57.25	0.0	0.6	57.25	0.0	0.01
11	63.61	0.0	0.67	63.61	0.0	0.01
12	69.97	0.0	0.73	69.97	0.0	0.01
13	76.33	0.0	0.8	76.33	0.0	0.01
14	82.69	0.0	0.87	82.69	0.0	0.01
15	89.05	0.0	0.93	89.05	0.0	0.01
16	95.41	0.0	1.0	95.41	0.0	0.01
17	0.0	0.0	0.0	0.0	0.0	0.01
18	23.85	0.0	0.25	23.85	0.0	0.01
19	47.71	0.0	0.5	47.71	0.0	0.01
20	71.56	0.0	0.75	71.56	0.0	0.01
21	95.41	0.0	1.0	95.41	0.0	0.01
Mean lightness difference (16 steps)						ΔE* _{CIELAB} = 0.0
Mean lightness difference (5 steps)						ΔL* _{CIELAB} = 0.0
Mean colour reproduction index:						R* _{ab,m} = 100

OE600-3N-130-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE601-3N-130-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{\text{intended}}$ (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
$w^* = [L^*_{\text{CIELAB}, r}]$ (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

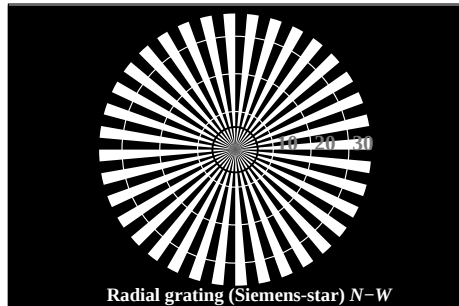
OE600-7N, Picture A7-130-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^*$ setrgbcolor

OE60: In-output relation according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:0,31$; Y_N range 0,0 to <0,46

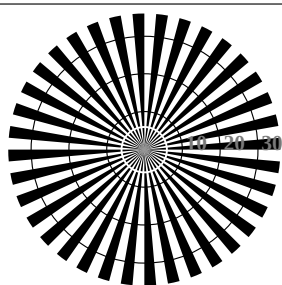
input: 000n (->rgb*_{de}) setcmyk
output 130-2: $g_P=1.0$; $g_N=1.0$

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta

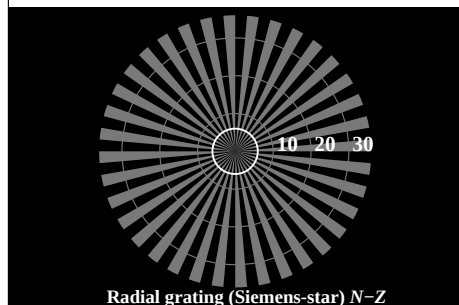
See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB



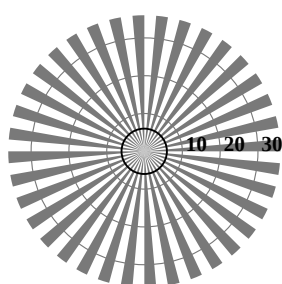
Radial grating (Siemens-star) N-W



Radial grating (Siemens-star) W-N

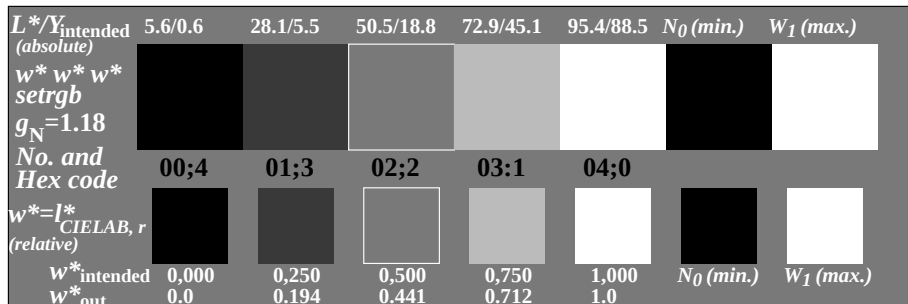


Radial grating (Siemens-star) N-Z

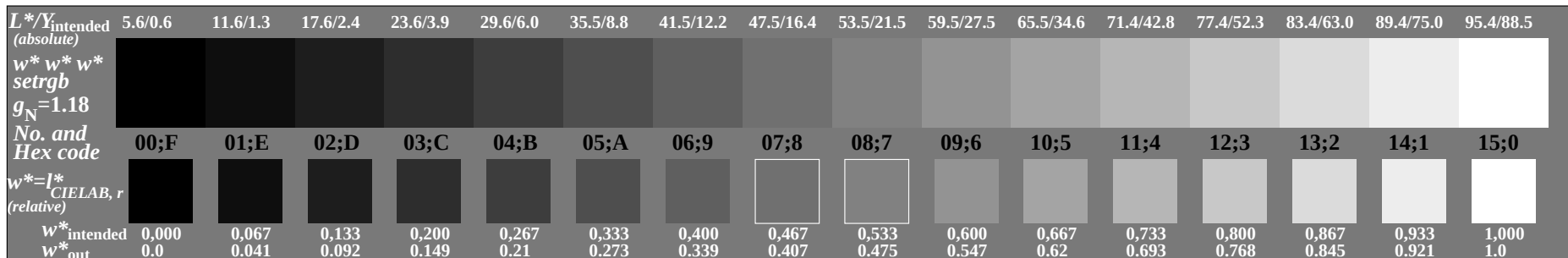


Radial grating (Siemens-star) W-Z

OE600-3N, Picture A1-131-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE600-5N, Picture A2-131-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE600-7N, Picture A3-131-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

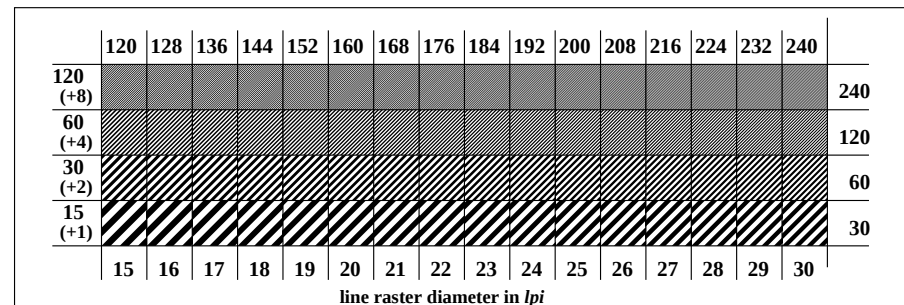
OE60: similar ME16 according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:0,62$; Y_N range 0,46 to <0,93

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

Landolt-rings W-N

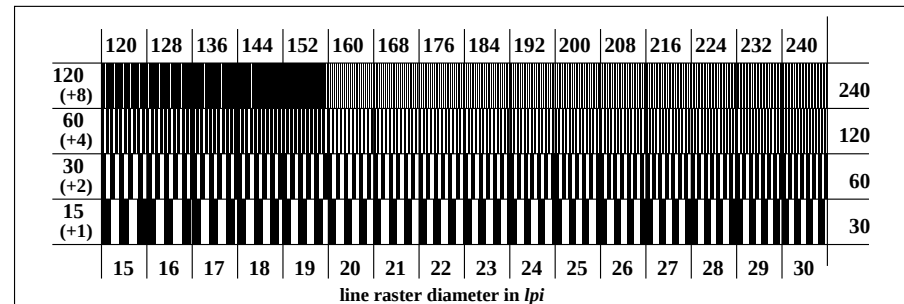
code: background-ring

OE601-1N, Picture A4-131-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$



line raster diameter in lpi

OE601-3N, Picture A5-131-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

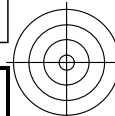
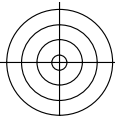


line raster diameter in lpi

OE601-5N, Picture A6-131-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

input: 000n ($\rightarrow \text{rgb}^*_{\text{de}}$) setcmyk
output 130-0: $g_P=1.0$; $g_N=1.08$

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta



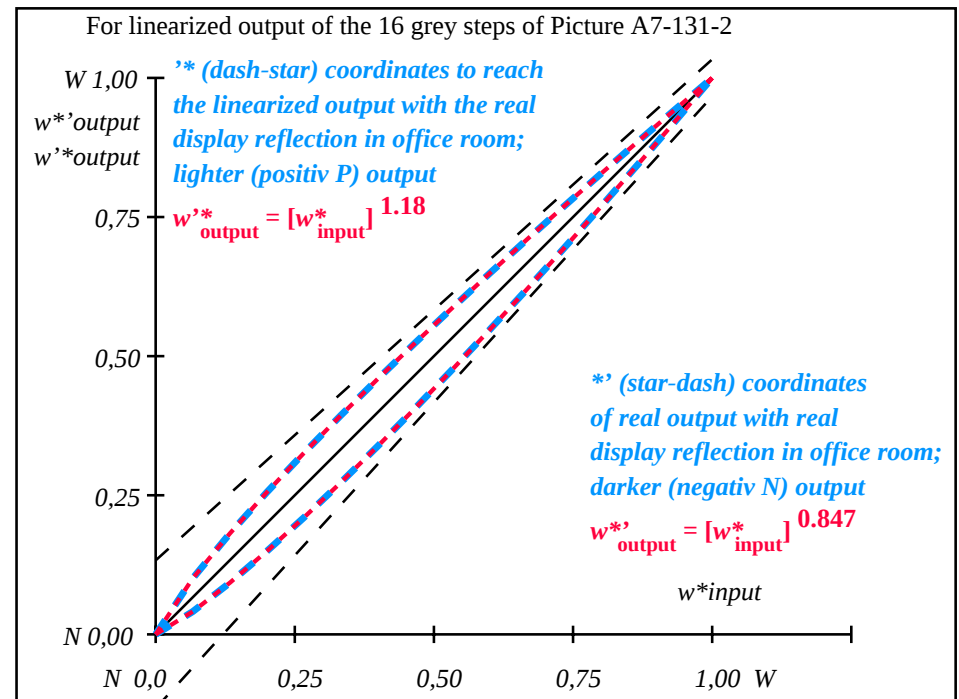
OE601-7N-131-1

C_{YN7} (144:1): $q_P=1.0$; $q_N=1.08$ <http://130.149.60.45/~farbmetrik/OE60/OE60F1NX.PDF> /.PS

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*	Start output S1
1	5.69 0.0 0.0	0.0 0.0 0.0	5.69 0.0 0.0	0.0 0.0 0.0	0.01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G
2	11.67 0.0 0.0	0.04 9.36 0.0	0.0 -2.3 0.0	0.0 2.31		
3	17.65 0.0 0.0	0.09 14.01 0.0	0.0 -3.63 0.0	0.0 3.64		
4	23.63 0.0 0.0	0.15 19.12 0.0	0.0 -4.5 0.0	0.0 4.51		
5	29.62 0.0 0.0	0.21 24.55 0.0	0.0 -5.06 0.0	0.0 5.07		
6	35.6 0.0 0.0	0.27 30.23 0.0	0.0 -5.36 0.0	0.0 5.37		
7	41.58 0.0 0.0	0.34 36.12 0.0	0.0 -5.45 0.0	0.0 5.46		
8	47.56 0.0 0.0	0.41 42.19 0.0	0.0 -5.36 0.0	0.0 5.37		
9	53.54 0.0 0.0	0.48 48.42 0.0	0.0 -5.11 0.0	0.0 5.12		
10	59.52 0.0 0.0	0.55 54.79 0.0	0.0 -4.72 0.0	0.0 4.73		
11	65.5 0.0 0.0	0.62 61.29 0.0	0.0 -4.2 0.0	0.0 4.21		
12	71.48 0.0 0.0	0.69 67.91 0.0	0.0 -3.56 0.0	0.0 3.57		
13	77.47 0.0 0.0	0.77 74.64 0.0	0.0 -2.82 0.0	0.0 2.83		
14	83.45 0.0 0.0	0.84 81.47 0.0	0.0 -1.97 0.0	0.0 1.98		
15	89.43 0.0 0.0	0.92 88.4 0.0	0.0 -1.02 0.0	0.0 1.03	Mean lightness difference (16 steps)	
16	95.41 0.0 0.0	1.0 95.41 0.0	0.0 0.0 0.0	0.0 0.01	ΔE*CIELAB = 3.4	
17	5.69 0.0 0.0	0.0 5.69 0.0	0.0 0.0 0.0	0.0 0.01		
18	28.12 0.0 0.0	0.19 23.17 0.0	0.0 -4.94 0.0	0.0 4.95		
19	50.55 0.0 0.0	0.44 45.29 0.0	0.0 -5.25 0.0	0.0 5.26		
20	72.98 0.0 0.0	0.71 69.58 0.0	0.0 -3.39 0.0	0.0 3.4	Mean lightness difference (5 steps)	
21	95.41 0.0 0.0	1.0 95.41 0.0	0.0 0.0 0.0	0.0 0.01	ΔL*CIELAB = 2.7	
Mean colour reproduction index:					R* _{ab,m} = 85	

OE600-3N-131-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE601-3N-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																
$g_N=1.18$ 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	0.041	0.093	0.15	0.211	0.273	0.339	0.407	0.476	0.547	0.62	0.693	0.769	0.845	0.921	1.0

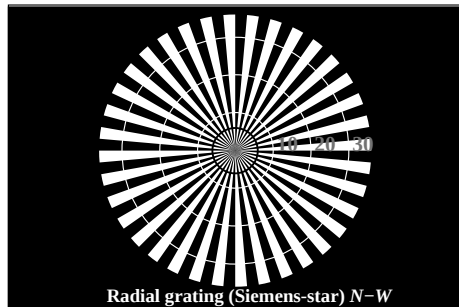
OE600-7N, Picture A7-131-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^*$ setrgbcolor

OE60: In-output relation according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88.9:0.62$; Y_N range 0.46 to <0.93

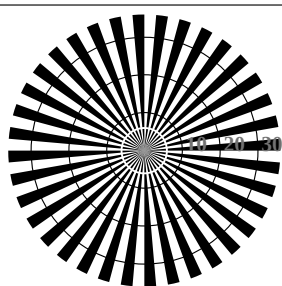
input: 000n (->rgb*_{de}) setcmyk
output 130-2: $g_P=1.0$; $g_N=1.08$

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta

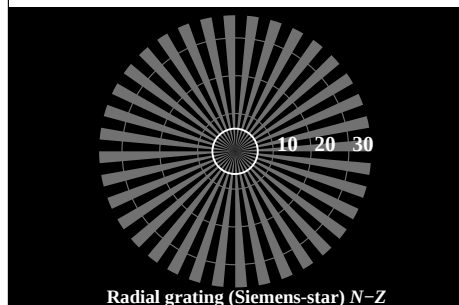
See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB



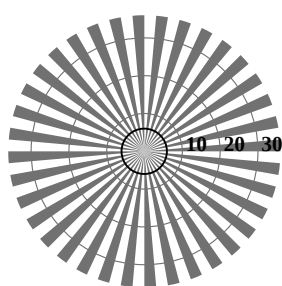
Radial grating (Siemens-star) N-W



Radial grating (Siemens-star) W-N

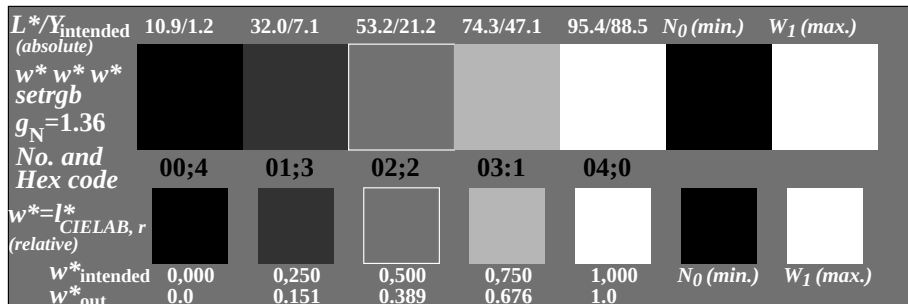


Radial grating (Siemens-star) N-Z

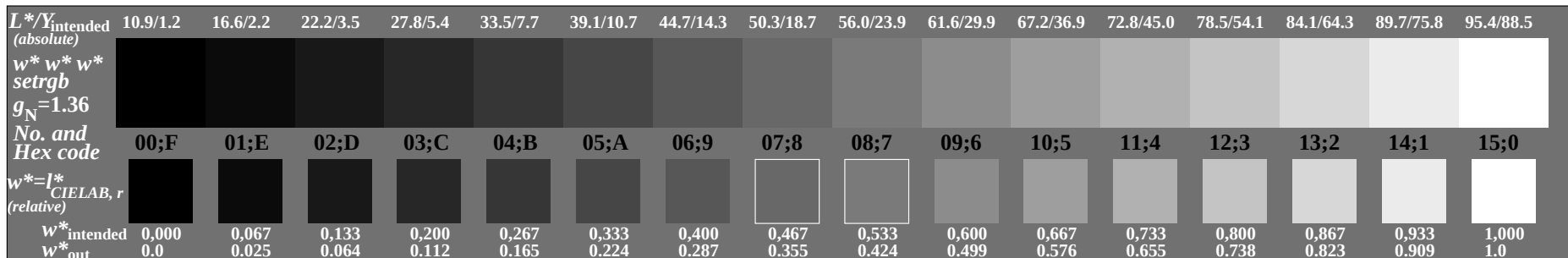


Radial grating (Siemens-star) W-Z

OE600-3N, Picture A1-132-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE600-5N, Picture A2-132-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$

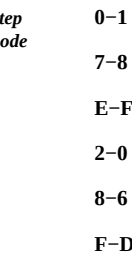


OE600-7N, Picture A3-132-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

OE60: similar ME16 according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:1,25$; Y_N range 0,93 to <1,87

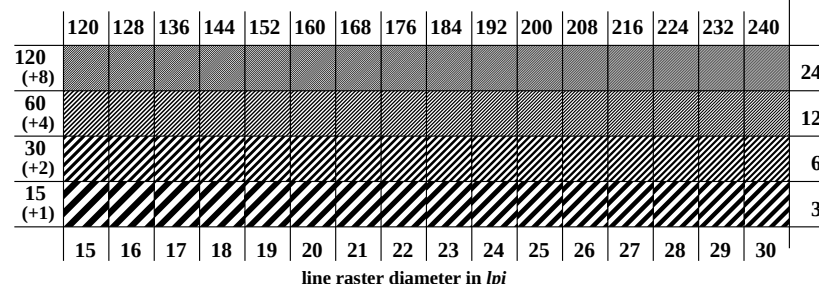


Landolt-rings W-N

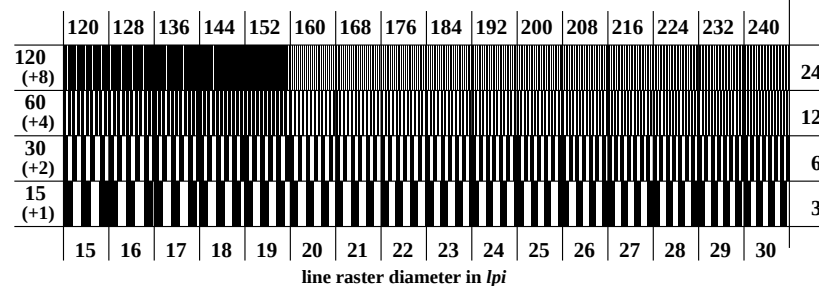


code: background-ring

OE601-1N, Picture A4-132-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$



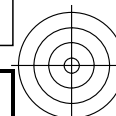
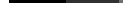
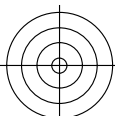
OE601-3N, Picture A5-132-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE601-5N, Picture A6-132-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

input: 000n ($\rightarrow \text{rgb}^*_{\text{de}}$) setcmyk
output 130-0: $g_P=1.0$; $g_N=1.17$

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta



OE60/OE60L0NA.PDF /.PS, Page 8/24, FF LM: $000n \rightarrow rqb_{de}$; 1MR, DEH C_{YN6} (72:1); $qp=1.0$; $qN=1.17$ <http://130.149.60.45/~farbmetrik/OE60/OE60F1NX.PDF> /.PS

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

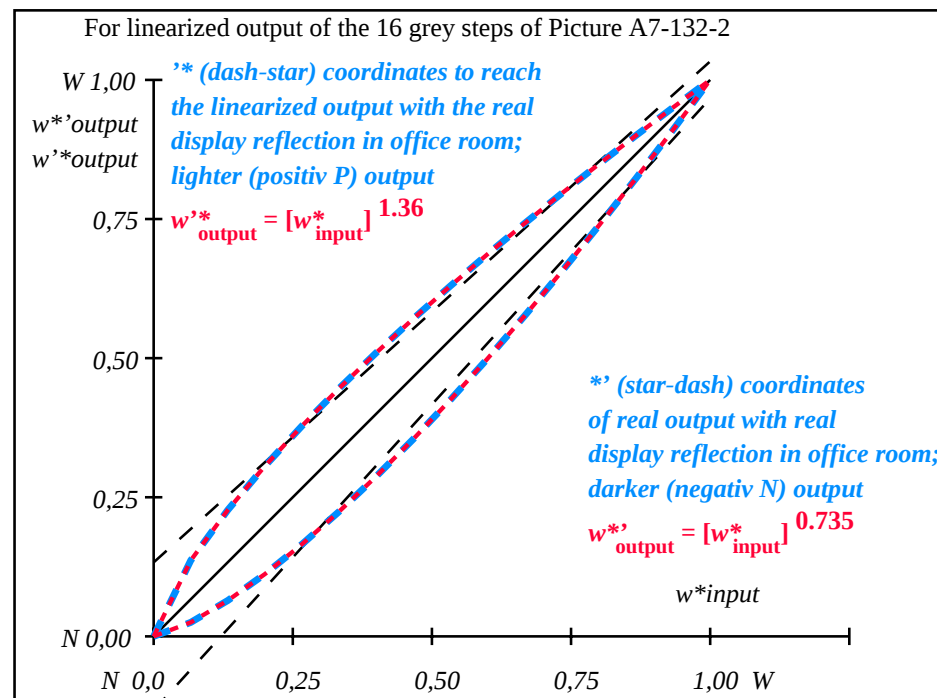
i	LAB*ref	L*out	LAB*out	LAB*out/c-ref	ΔE*	Start output S1
1	10.99	0.0	0.0	10.99	0.0	0.0
2	16.62	0.0	0.03	13.12	0.0	-3.49
3	22.25	0.0	0.06	16.44	0.0	-5.8
4	27.88	0.0	0.11	20.45	0.0	-7.41
5	33.5	0.0	0.17	24.98	0.0	-8.51
6	39.13	0.0	0.22	29.94	0.0	-9.18
7	44.76	0.0	0.29	35.27	0.0	-9.48
8	50.39	0.0	0.35	40.93	0.0	-9.44
9	56.02	0.0	0.43	46.9	0.0	-9.11
10	61.64	0.0	0.5	53.13	0.0	-8.5
11	67.27	0.0	0.58	59.63	0.0	-7.63
12	72.9	0.0	0.66	66.36	0.0	-6.53
13	78.53	0.0	0.74	73.31	0.0	-5.2
14	84.15	0.0	0.82	80.48	0.0	-3.66
15	89.78	0.0	0.91	87.85	0.0	-1.92
16	95.41	0.0	1.0	95.41	0.0	0.0
17	10.99	0.0	0.0	10.99	0.0	0.0
18	32.1	0.0	0.15	23.81	0.0	-8.28
19	53.2	0.0	0.39	43.88	0.0	-9.31
20	74.31	0.0	0.68	68.08	0.0	-6.22
21	95.41	0.0	1.0	95.41	0.0	0.0

Mean lightness difference (16 steps) $\Delta E^*_{\text{CIELAB}} = 6.0$

Mean lightness difference (5 steps) $\Delta E^*_{\text{CIELAB}} = 4.8$

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

OE600-3N-132-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE601-3N-132-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

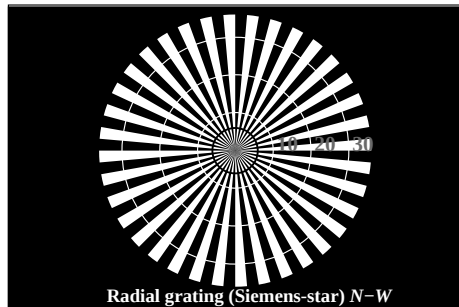
$L^*/Y^*_{\text{intended}}$ (absolute)	11.0/1.3	16.6/2.2	22.2/3.6	27.9/5.4	33.5/7.8	39.1/10.7	44.8/14.4	50.4/18.7	56.0/23.9	61.6/30.0	67.3/37.0	72.9/45.0	78.5/54.1	84.2/64.4	89.8/75.8	95.4/88.6
$w^* w^* w^*$ setrgb																
$g_N=1.36$ No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^* = [L^*_{\text{CIELAB}, r}]$ (relative)																
w^*_{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	0.025	0.064	0.112	0.166	0.224	0.288	0.355	0.425	0.499	0.577	0.655	0.738	0.824	0.91	1.0

OE600-7N, Picture A7-132-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

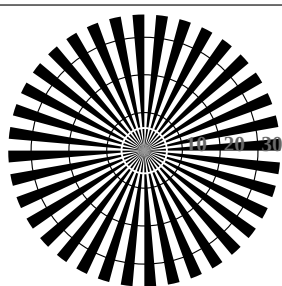
OE60: In-output relation according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:1,25$; Y_N range 0,93 to <1,87

input: 000n ($\rightarrow \text{rgb}^*_{\text{de}}$) setcmyk
output 130-2: $g_P=1.0$; $g_N=1.17$

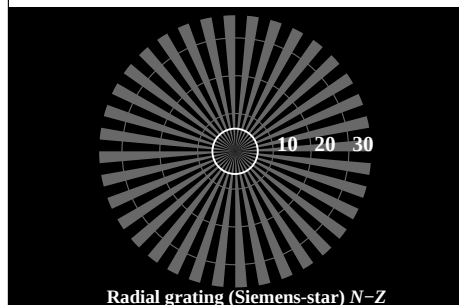
TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta



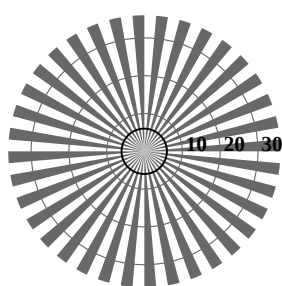
Radial grating (Siemens-star) N-W



Radial grating (Siemens-star) W-N

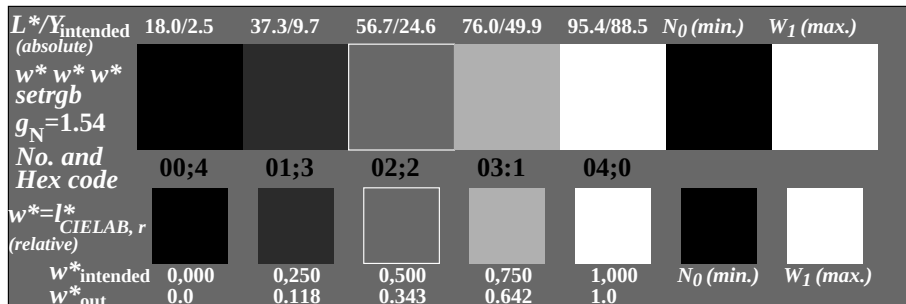


Radial grating (Siemens-star) N-Z

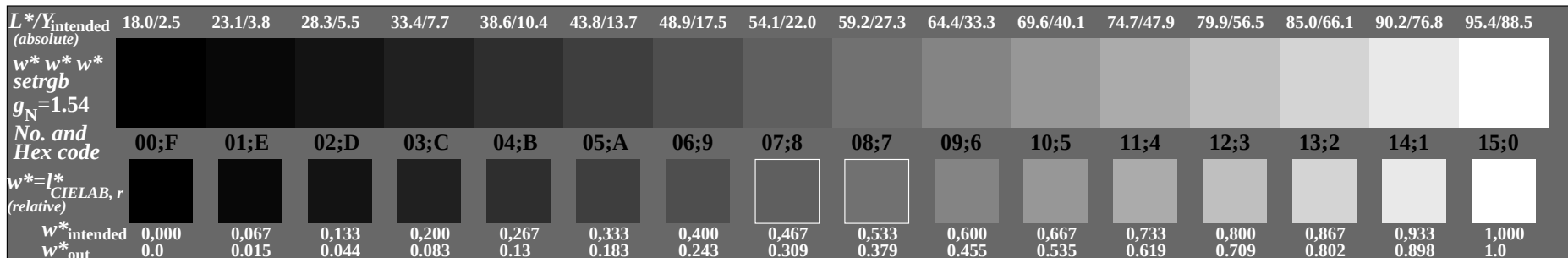


Radial grating (Siemens-star) W-Z

OE600-3N, Picture A1-133-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE600-5N, Picture A2-133-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE600-7N, Picture A3-133-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

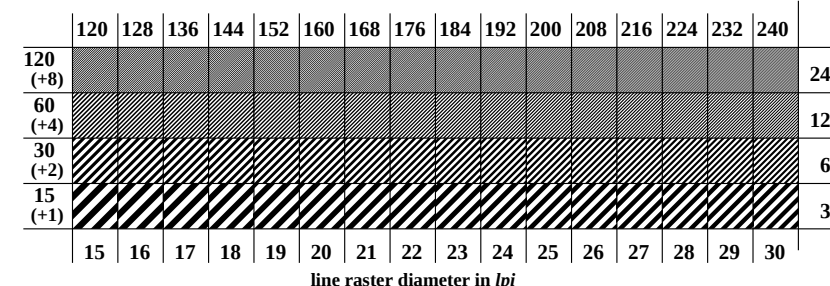
OE60: similar ME16 according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:2,5$; Y_N range 1,87 to <3,75

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

Landolt-rings W-N

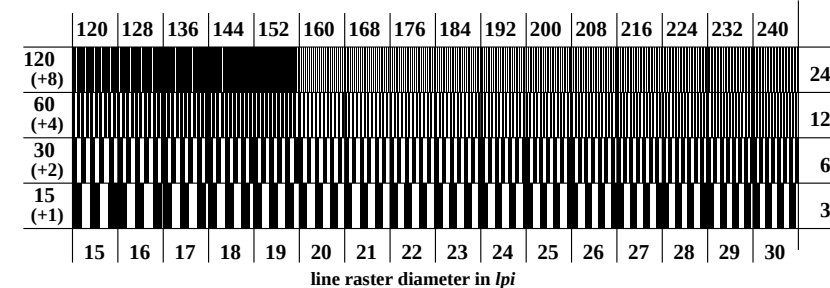
code: background-ring

OE601-1N, Picture A4-133-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$



line raster diameter in lpi

OE601-3N, Picture A5-133-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$



line raster diameter in lpi

OE601-5N, Picture A6-133-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

input: 000n (->rgb*_de) setcmyk
output 130-0: $g_P=1.0$; $g_N=1.29$

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)	 mm
W-N-radial grating:	Is the resolution diameter < 6 mm?	Yes/No
	Test with magnifying glass (e.g. 6x)	 mm
N-Z-radial grating:	Is the resolution diameter < 6 mm?	Yes/No
	Test with magnifying glass (e.g. 6x)	 mm
W-Z-radial grating:	Is the resolution diameter < 6 mm?	Yes/No
	Test with magnifying glass (e.g. 6x)	 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
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

Part 1 OE600-3N-1324-1

Documentation of file format, hardware and software for this test:	
PDF-File:	http://130.149.60.45/farbmetrik/OE60/OE60L0NP.PDF underline Yes/No
PS-File:	http://130.149.60.45/farbmetrik/OE60/OE60L0NA.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 OE60L0NP.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 OE60L0NA.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 OE600-7N-133-1

OE60: Form A for test chart according to ISO 9241-306; 1MR, DEHinput: 000n (->rgb*_{de}) setcmyk
Viewing Y contrast $Y_W:Y_N=88,9:2,5$; Y_N range 1,87 to <3,75 output 130-1: $g_P=1.0$; $g_N=1.29$

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)?	Yes/No
	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 A5-133-0		
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 OE601-3N-133-1

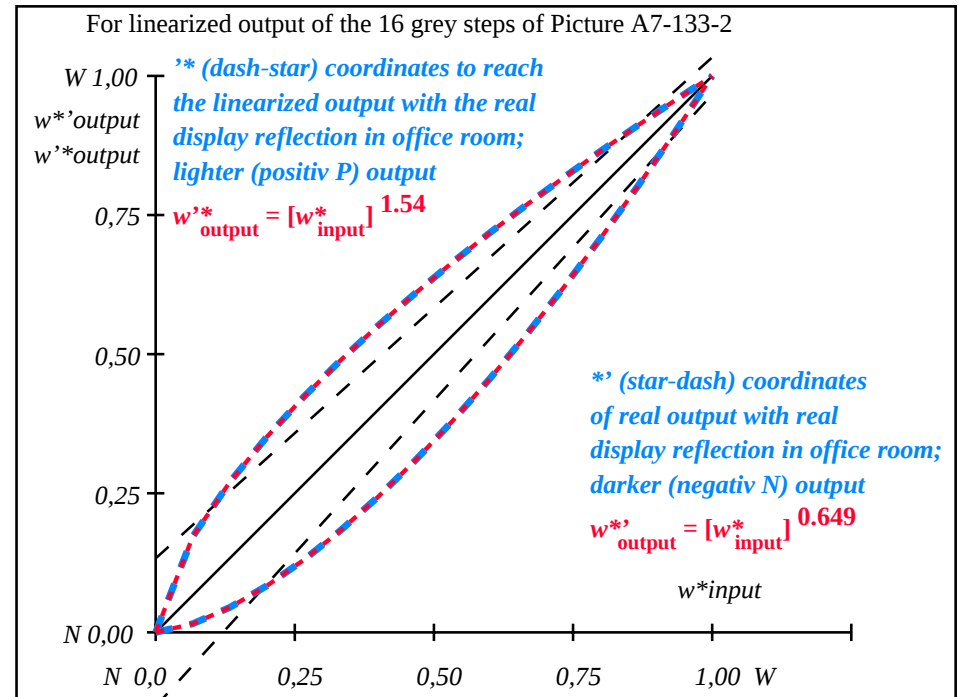
Documentation of assessor colour vision properties for visual assessment	
The assessor has normal colour vision according to one test:	
either according to DIN 6160:1996 with Anomaloskop of Nagel	underline Yes/No
or with test charts using colour points according to Ishihara	underline Yes/unknown
or tested with, please specify:	underline Yes/unknown
For visual evaluation of the display (monitor, data projector) output	
Office workplace illumination is daylight (clouded/north sky)	underline Yes/No
PDF file: http://130.149.60.45/farbmetrik/OE60/OE60F1P2.PDF	underline Yes/No
PS file: http://130.149.60.45/farbmetrik/OE60/OE60F1P2.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)	underline range
compare standard print output according to ISO/IEC 15775 with range F:0	
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/OE60/OE60F1P2.PDF	underline Yes/No
PS-File: http://130.149.60.45/farbmetrik/OE60/OE60F1P2.PS	underline Yes/No
colour measurement and specification for:	
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry:	underline Yes/No
If No, please give other parameters:	
Colorimetric specification 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 OE601-7N-133-1

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

i	LAB*ref	L*out	LAB*out	LAB*out/c-ref	ΔE*	Start output S1
1	18.01	0.0	0.0	0.0	0.01	Specification according to
2	23.17	0.0	0.02	-3.95	0.0	ISO/IEC 15775 Annex G
3	28.33	0.0	0.04	-6.83	0.0	and DIN 33866-1 Annex G
4	33.49	0.0	0.08	-8.98	0.0	
5	38.65	0.0	0.13	-10.52	0.0	
6	43.81	0.0	0.18	-11.53	0.0	
7	48.97	0.0	0.24	-12.07	0.0	
8	54.13	0.0	0.31	-12.18	0.0	
9	59.29	0.0	0.38	-11.87	0.0	
10	64.45	0.0	0.46	-11.19	0.0	
11	69.61	0.0	0.54	-10.14	0.0	
12	74.77	0.0	0.62	-8.74	0.0	
13	79.93	0.0	0.71	-7.02	0.0	
14	85.09	0.0	0.8	-4.98	0.0	
15	90.25	0.0	0.9	-2.63	0.0	Mean lightness difference (16 steps)
16	95.41	0.0	1.0	0.0	0.01	ΔE*CIELAB = 7.7
17	18.01	0.0	0.0	0.0	0.0	
18	37.36	0.0	0.12	-10.19	0.0	
19	56.71	0.0	0.34	-12.07	0.0	
20	76.06	0.0	0.64	-8.34	0.0	Mean lightness difference (5 steps)
21	95.41	0.0	1.0	0.0	0.01	ΔL*CIELAB = 6.1
Mean colour reproduction index:					R* _{ab,m} = 66	

OE600-3N-133-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE601-3N-133-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{\text{intended}}$ (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																
$g_N=1.54$ No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^* = [L^*_{\text{CIELAB}, r}]$ (relative)																
w^*_{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	0.016	0.045	0.084	0.131	0.184	0.244	0.31	0.379	0.455	0.536	0.62	0.709	0.803	0.899	1.0

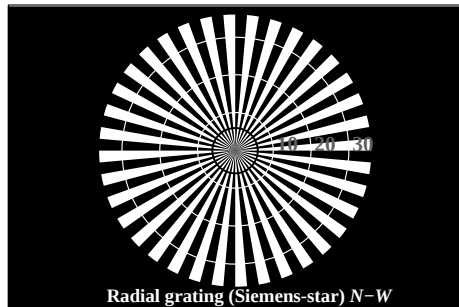
OE600-7N, Picture A7-133-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

OE60: In-output relation according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:2,5$; Y_N range 1,87 to <3,75

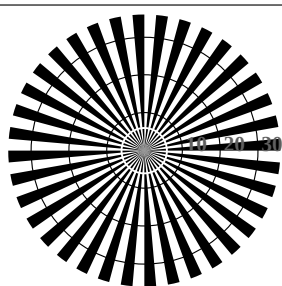
input: 000n (->rgb*_{de}) setcmyk
output 130-2: $g_P=1.0$; $g_N=1.29$

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta

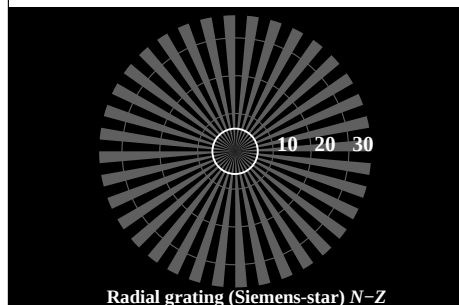
See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB



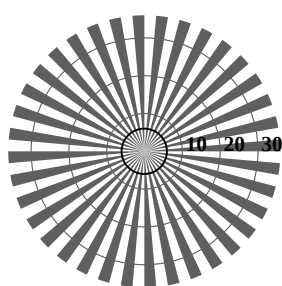
Radial grating (Siemens-star) N-W



Radial grating (Siemens-star) W-N

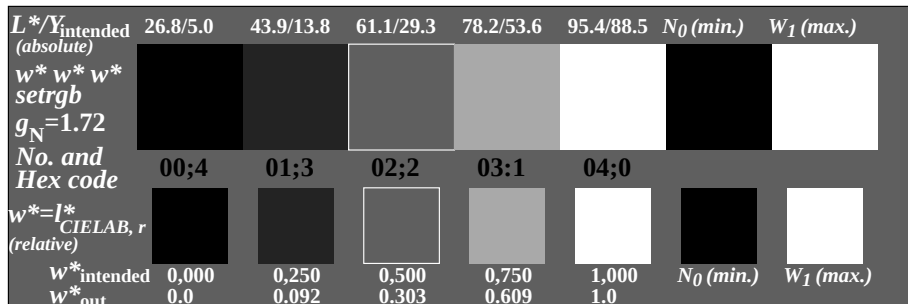


Radial grating (Siemens-star) N-Z

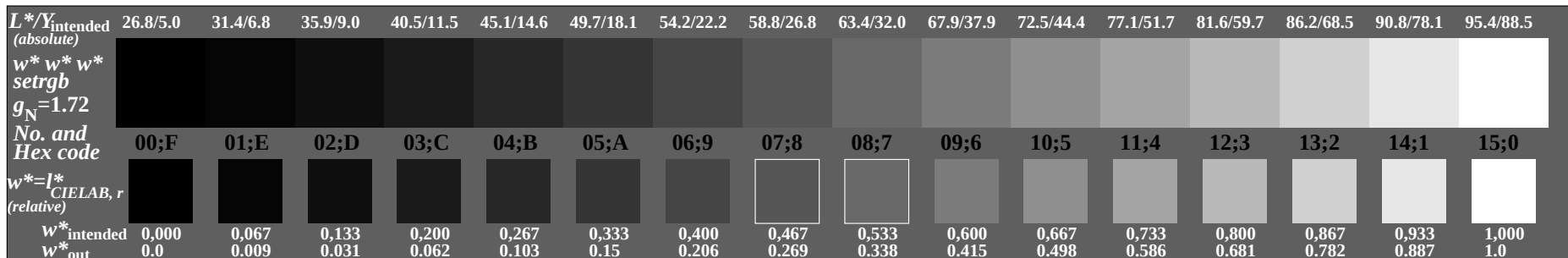


Radial grating (Siemens-star) W-Z

OE600-3N, Picture A1-134-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$



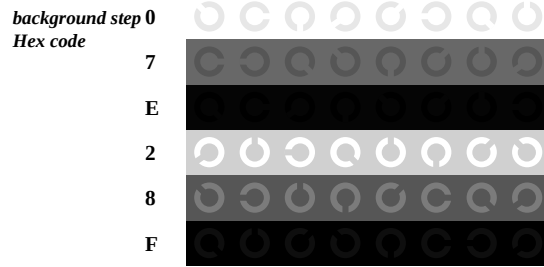
OE600-5N, Picture A2-134-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$



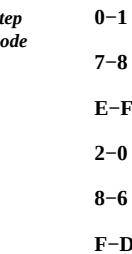
OE600-7N, Picture A3-134-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

OE60: similar ME16 according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:5$; Y_N range 3,75 to <7,5

input: $000n (->rgb^*_{de}) \text{setcmyk}$
output 130-0: $g_P=1.0$; $g_N=1.42$

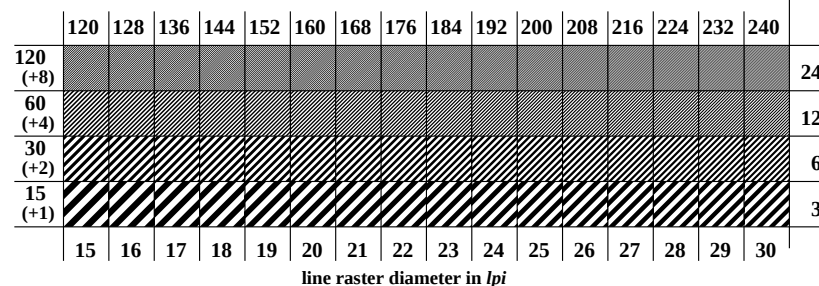


Landolt-rings W-N



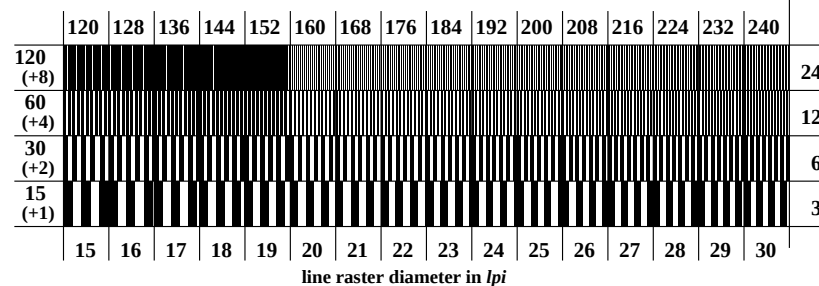
code: background-ring

OE601-1N, Picture A4-134-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$



line raster diameter in lpi

OE601-3N, Picture A5-134-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$



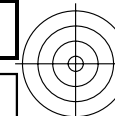
line raster diameter in lpi

OE601-5N, Picture A6-134-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta



F: Output Linearization (OL) data OE60/OE60L0NA.TXT /.PS in File (F)



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

TUB registration: 20110801-OE60/OE60LONA.TXT /.PS TUB material: code=rha4ta
+ application for output of displays: monitor systems or data projector systems

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? Test with magnifying glass (e.g. 6x) resolution diameter	Yes/No mm
W-N-radial grating:	Is the resolution diameter < 6 mm? Test with magnifying glass (e.g. 6x) resolution diameter	Yes/No mm
N-Z-radial grating:	Is the resolution diameter < 6 mm? Test with magnifying glass (e.g. 6x) resolution diameter	Yes/No mm
W-Z-radial grating:	Is the resolution diameter < 6 mm? Test with magnifying glass (e.g. 6x) resolution diameter	Yes/No mm

Test of 5 visual equidistant L^*-grey steps according to picture A2-134-0	
Are the 5 steps on the upper row distinguishable?	Yes/No
If No: How many steps can be distinguished?	
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? If No: How many steps can be distinguished? of the given 16 steps:	 Steps Yes/No Steps
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Documentation of file format, hardware and software for this test:

PDF-File: <http://130.149.60.45/farbmetrik/OE60/OE60L0NP.PDF> **underline Yes/No**

PS-File: <http://130.149.60.45/farbmetrik/OE60/OE60L0NA.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
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For device output with PDF-file OE60L0NP.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 OE60L0NA.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:.....

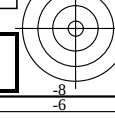
Special remarks:Special remarks, e. g. output of Landscape (L)

Part 3



OE60: Form A for test chart according to ISO 9241-306; 1MR, DEInput: 000n (->rgb*_de) setcmyk
Viewing Y contrast $Y_W:Y_N=88,9:5$; Y_N range 3,75 to <7,5 output 130-1: $q_P=1.0$; $q_N=1.42$

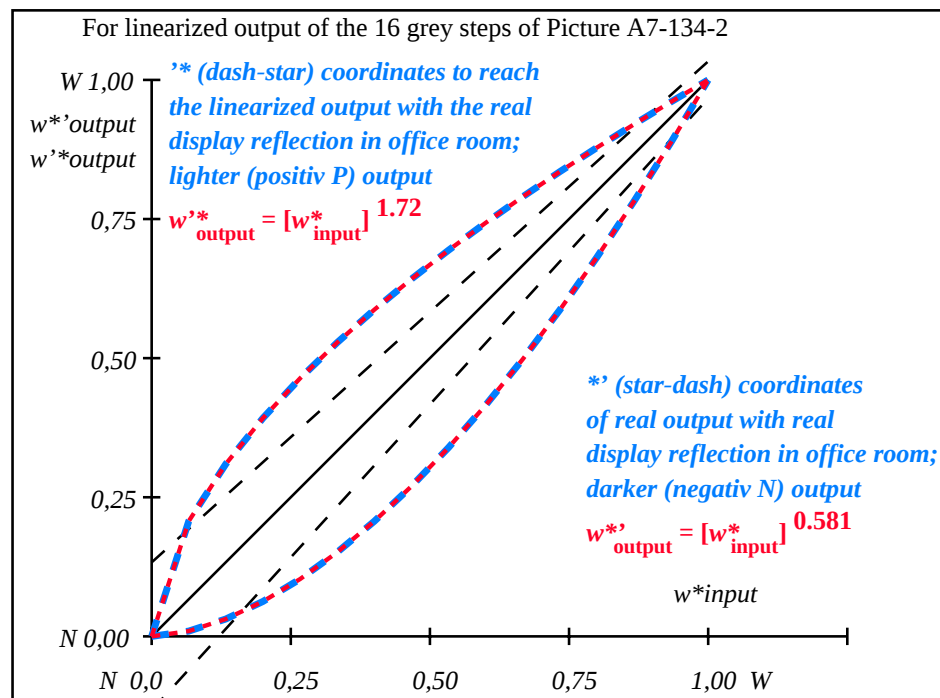
OE601-7N-134-1



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

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	0.01	27.5	0.0	-3.91
3	35.99	0.0	0.03	28.99	0.0	-6.99
4	40.56	0.0	0.06	31.15	0.0	-9.4
5	45.13	0.0	0.1	33.91	0.0	-11.21
6	49.7	0.0	0.15	37.21	0.0	-12.48
7	54.27	0.0	0.21	41.03	0.0	-13.24
8	58.84	0.0	0.27	45.33	0.0	-13.5
9	63.41	0.0	0.34	50.1	0.0	-13.3
10	67.99	0.0	0.42	55.33	0.0	-12.65
11	72.56	0.0	0.5	60.98	0.0	-11.56
12	77.13	0.0	0.59	67.06	0.0	-10.05
13	81.7	0.0	0.68	73.56	0.0	-8.13
14	86.27	0.0	0.78	80.45	0.0	-5.81
15	90.84	0.0	0.89	87.74	0.0	-3.09
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	0.09	33.17	0.0	-10.81
19	61.13	0.0	0.3	47.66	0.0	-13.46
20	78.27	0.0	0.61	68.65	0.0	-9.61
21	95.41	0.0	1.0	95.41	0.0	0.0
Mean lightness difference (16 steps)					ΔE*CIELAB =	8.5
Mean lightness difference (5 steps)					ΔL*CIELAB =	6.8
Mean colour reproduction index:					R* _{ab,m} =	63

OE600-3N-134-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE601-3N-134-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{\text{intended}}$ (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 $g_N=1.72$ No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^*=l^*_{\text{CIELAB},r}$ (relative)																
w^*_{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	0,01	0,031	0,063	0,103	0,151	0,207	0,27	0,339	0,415	0,498	0,586	0,681	0,782	0,888	1,0

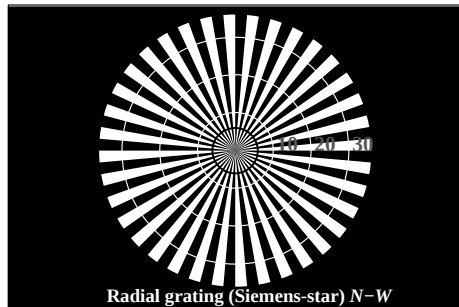
OE600-7N, Picture A7-134-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

OE60: In-output relation according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:5$; Y_N range 3,75 to <7,5

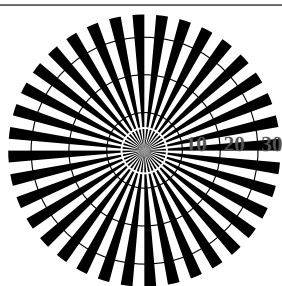
input: 000n ($\rightarrow \text{rgb}^*_{\text{de}}$) setcmyk
output 130-2: $g_P=1.0$; $g_N=1.42$

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta

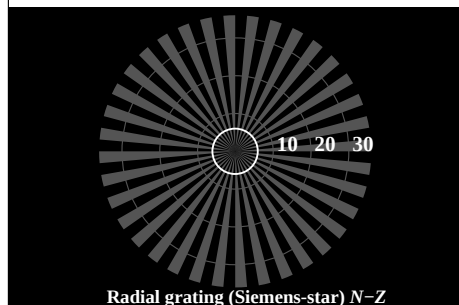
See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB



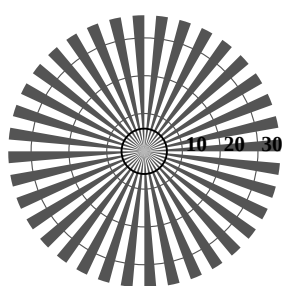
Radial grating (Siemens-star) N-W



Radial grating (Siemens-star) W-N

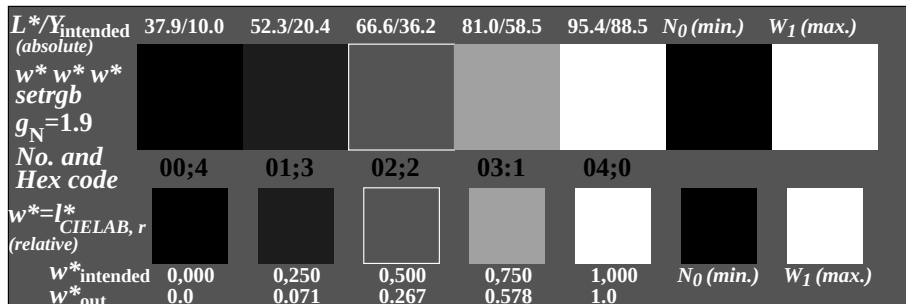


Radial grating (Siemens-star) N-Z

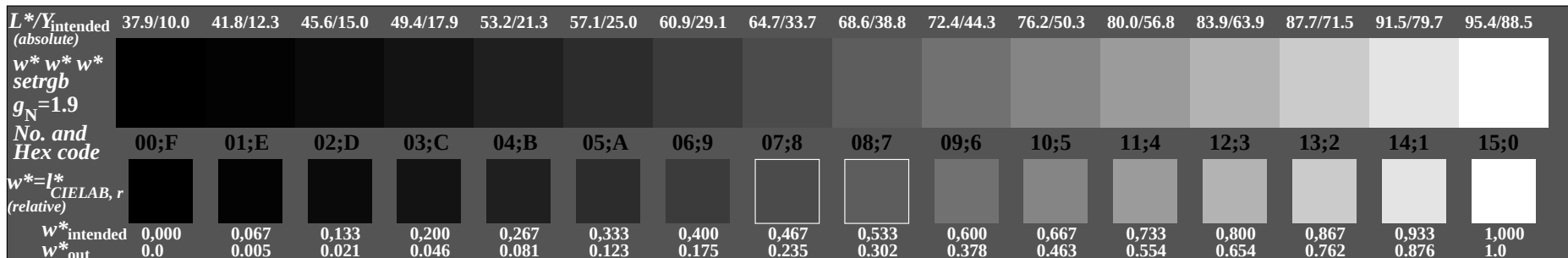


Radial grating (Siemens-star) W-Z

OE600-3N, Picture A1-135-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$



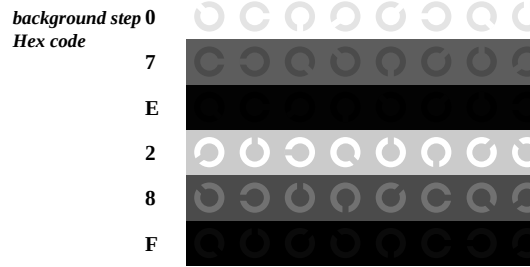
OE600-5N, Picture A2-135-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE600-7N, Picture A3-135-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

OE60: similar ME16 according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:10$; Y_N range 7,5 to <15

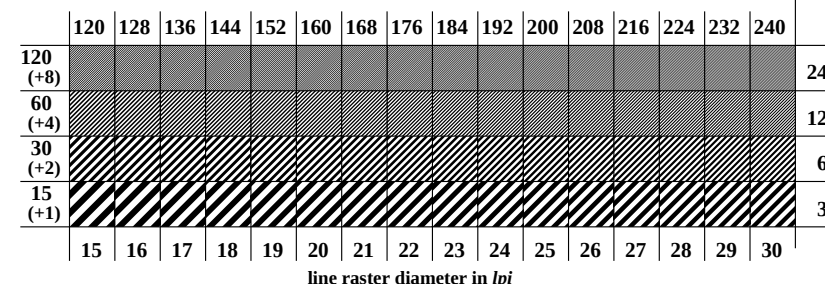
input: $000n (->rgb^*_{de}) \text{setcmyk}$
output 130-0: $g_P=1.0$; $g_N=1.6$



Landolt-rings W-N

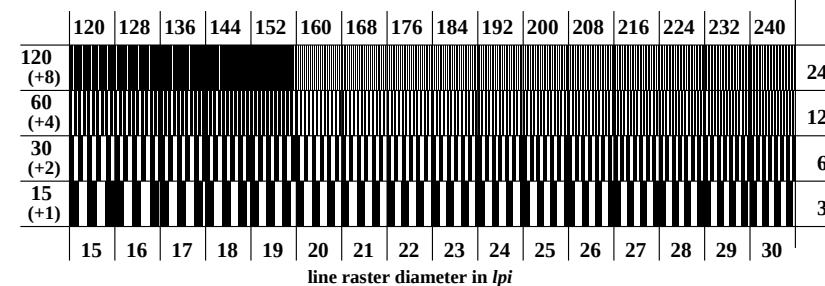
code: background-ring

OE601-1N, Picture A4-135-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$



line raster diameter in lpi

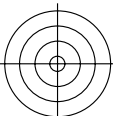
OE601-3N, Picture A5-135-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$



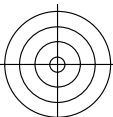
line raster diameter in lpi

OE601-5N, Picture A6-135-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

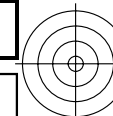
TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta



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

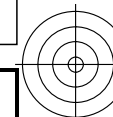


<http://130.149.60.45/~farbmetrik/OE60/OE60L0NA.TXT> / .PS; linearized output, Page 2/3
 F: Output Linearization (OL) data OE60/OE60L0NA.TXT / .PS in File (F)



TUB registration: 20110801-OE60/OE60L0NA.TXT / .PS
 application for output of displays: monitor systems or data projector systems

TUB material: code=rh4ta



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 OE600-3N-1340-1

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

PDF-File: <http://130.149.60.45/farbmetrik/OE60/OE60L0NP.PDF> underline Yes/No

PS-File: <http://130.149.60.45/farbmetrik/OE60/OE60L0NA.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 OE60L0NP.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 OE60L0NA.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 OE600-7N-135-1



OE60: Form A for test chart according to ISO 9241-306; 1MR, DEHinput: 000n (->rgb*_de) setcmyk
 Viewing Y contrast $Y_W:Y_N=88,9:10$; Y_N range 7,5 to <15
 output 130-1: $g_P=1.0$; $g_N=1.6$



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 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 OE601-3N-135-1

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/OE60/OE60F1P2.PDF> underline Yes/No

PS file: <http://130.149.60.45/farbmetrik/OE60/OE60F1P2.PS> underline 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 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/OE60/OE60F1P2.PDF> underline Yes/No

PS-File: <http://130.149.60.45/farbmetrik/OE60/OE60F1P2.PS> or underline Yes/No

picture A7-135-2
 picture A7-135-2

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:

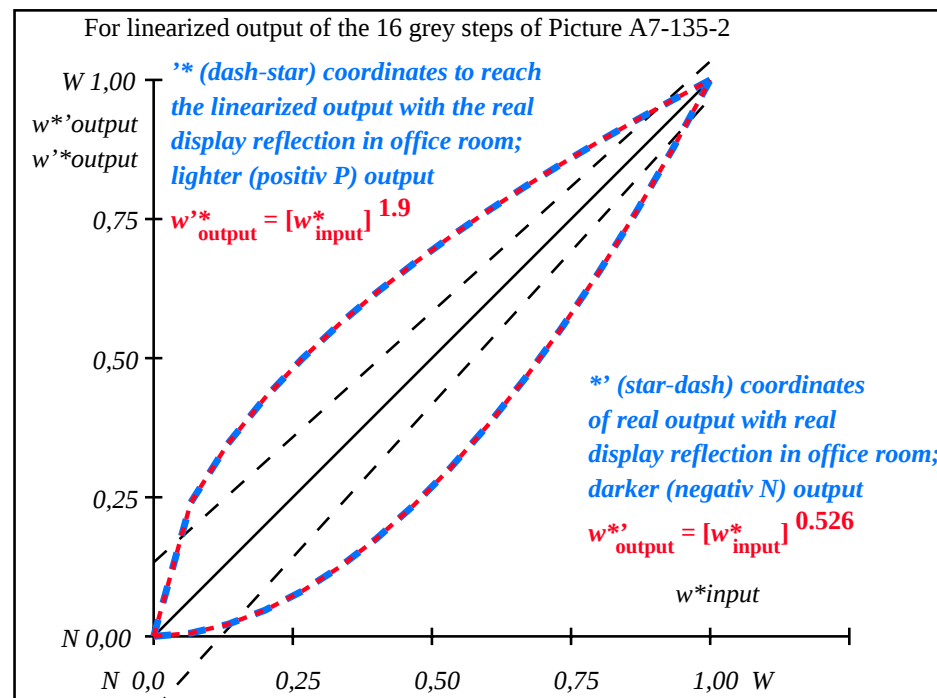
Part 4

OE601-7N-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

i	LAB*ref	L*out	LAB*out	LAB*out/c-ref	ΔE*	Start output S1
1	37.99	0.0	0.0	37.99	0.0	0.0
2	41.81	0.0	0.0	38.32	0.0	-3.48
3	45.64	0.0	0.0	39.23	0.0	-6.4
4	49.47	0.0	0.0	40.68	0.0	-8.78
5	53.3	0.0	0.0	42.65	0.0	-10.64
6	57.13	0.0	0.0	45.11	0.0	-12.01
7	60.96	0.0	0.0	48.06	0.0	-12.89
8	64.78	0.0	0.0	51.48	0.0	-13.29
9	68.61	0.0	0.0	55.38	0.0	-13.22
10	72.44	0.0	0.0	59.74	0.0	-12.69
11	76.27	0.0	0.0	64.56	0.0	-11.69
12	80.1	0.0	0.0	69.84	0.0	-10.25
13	83.93	0.0	0.0	75.57	0.0	-8.35
14	87.75	0.0	0.0	81.74	0.0	-6.0
15	91.58	0.0	0.0	88.35	0.0	-3.22
16	95.41	0.0	0.0	95.41	0.0	0.0
17	37.99	0.0	0.0	37.99	0.0	0.0
18	52.34	0.0	0.0	42.11	0.0	-10.22
19	66.7	0.0	0.0	53.37	0.0	-13.32
20	81.05	0.0	0.0	71.23	0.0	-9.81
21	95.41	0.0	0.0	95.41	0.0	0.0
Mean lightness difference (16 steps)					ΔE* _{CIELAB} = 8.3	
Mean lightness difference (5 steps)					ΔE* _{CIELAB} = 6.7	
Mean colour reproduction index:					R* _{ab,m} = 64	

OE600-3N-135-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE601-3N-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 =1.9																
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*=[* 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	0,006	0,022	0,047	0,081	0,124	0,175	0,235	0,303	0,379	0,463	0,554	0,654	0,762	0,877	1,0

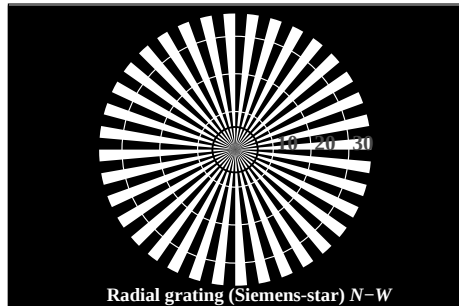
OE600-7N, Picture A7-135-2: 16 visual equidistant L*-grey steps; PS operator: w* w* w* setrgbcolor

OE60: In-output relation according to ISO 9241-306; 1MR, DEH
Viewing Y contrast Y_W:Y_N=88,9:10; Y_N range 7,5 to <15

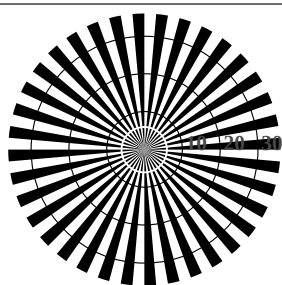
input: 000n (->rgb*_{de}) setcmyk
output 130-2: g_P=1.0; g_N=1.6

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta

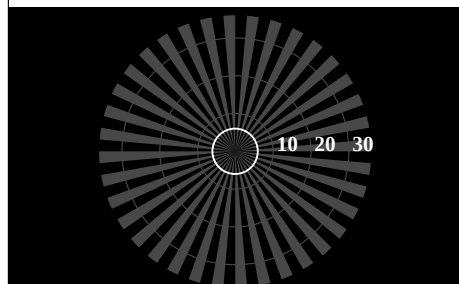
See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB



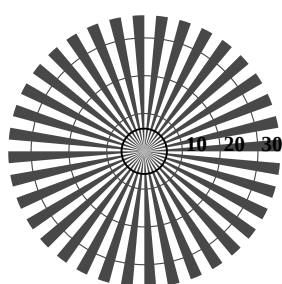
Radial grating (Siemens-star) N-W



Radial grating (Siemens-star) W-N

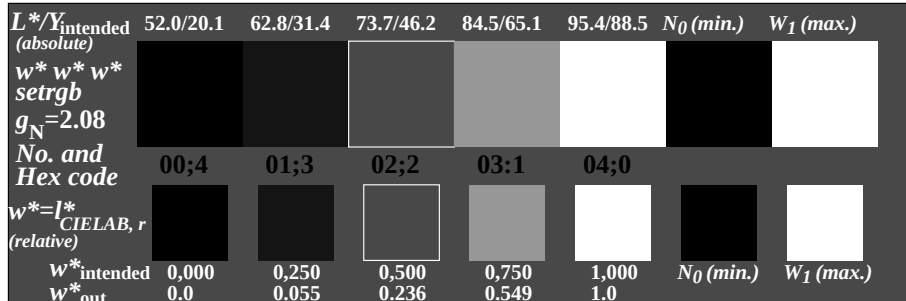


Radial grating (Siemens-star) N-Z

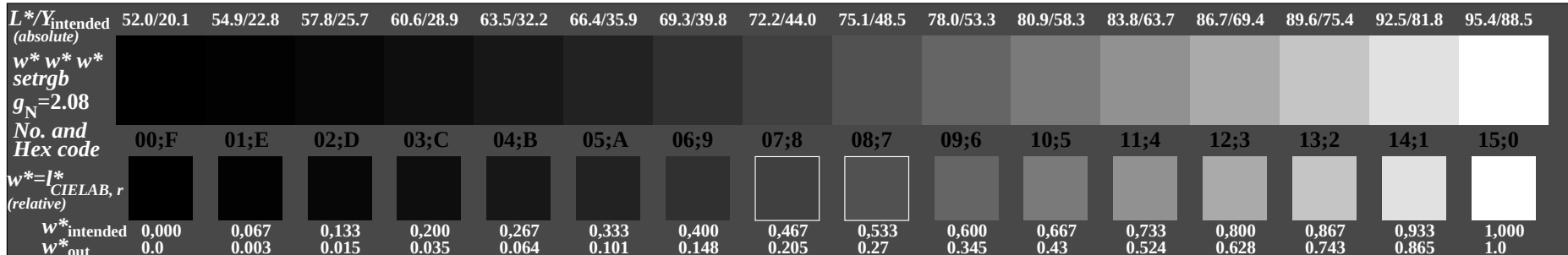


Radial grating (Siemens-star) W-Z

OE600-3N, Picture A1-136-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$

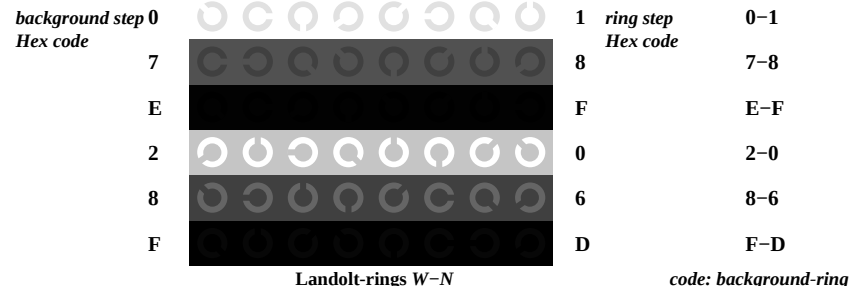


OE600-5N, Picture A2-136-0: 5 equidistant L^* -grey steps+ N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE600-7N, Picture A3-136-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

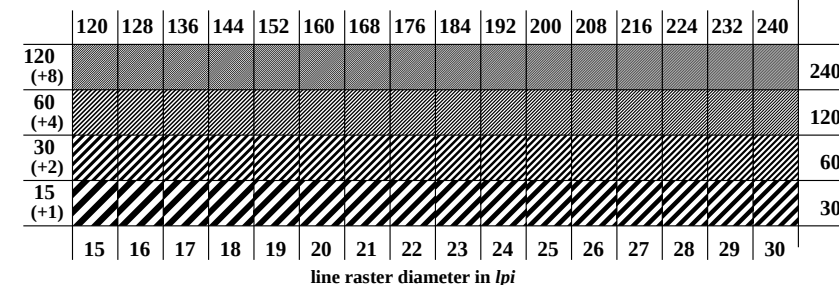
OE60: similar ME16 according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:20$; Y_N range 15 to <30



Landolt-rings W-N

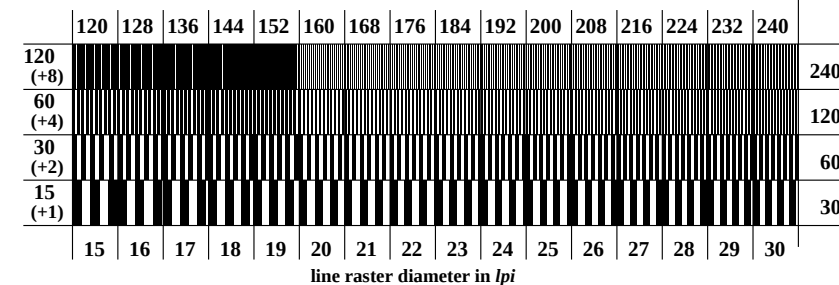
code: background-ring

OE601-1N, Picture A4-136-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$



line raster diameter in lpi

OE601-3N, Picture A5-136-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

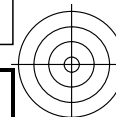
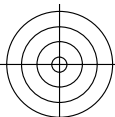


line raster diameter in lpi

OE601-5N, Picture A6-136-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

input: $000n (->rgb^*_{de}) \text{setcmyk}$
output 130-0: $g_P=1.0$; $g_N=1.81$

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta

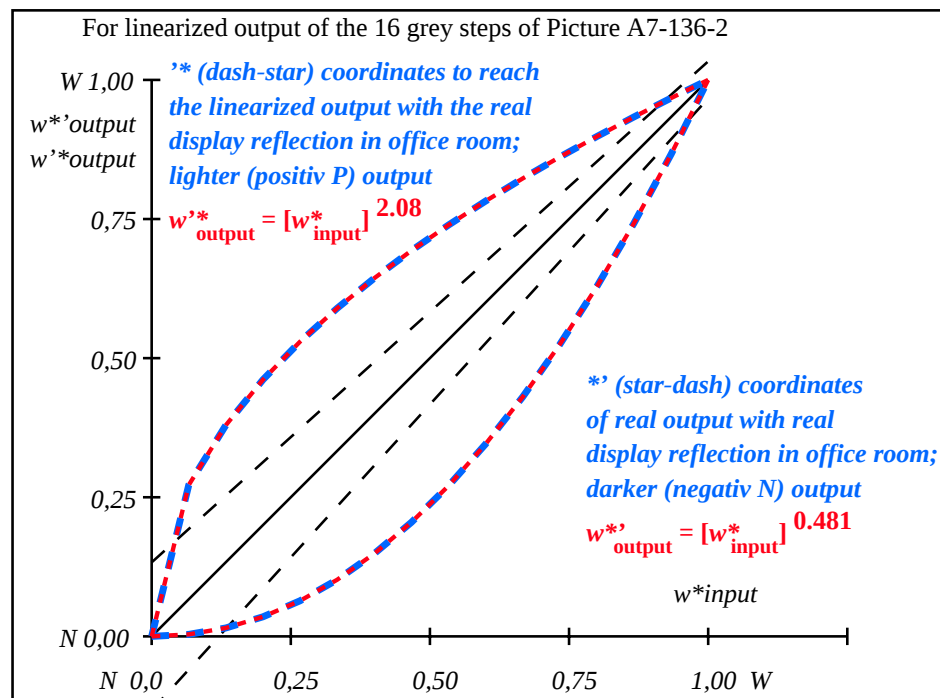


OE60/OE60L0NA.PDF /PS, Page 20/24, FF LM: $000n \rightarrow rqb_{\text{de}}$; 1MR, DEH C_{YN2} (4.5:1); $g_P=1.0$; $g_N=1.81$ <http://130.149.60.45/~farbmetrik/OE60/OE60F1NX.PDF> /PS

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*	Start output S1
1	52.02 0.0 0.0	0.0 0.0	52.02 0.0 0.0	0.0 0.0 0.0	0.01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G
2	54.91 0.0 0.0	0.0 0.0	52.17 0.0 0.0	-2.73 0.0 0.0	2.74	
3	57.8 0.0 0.0	0.0 0.02	52.67 0.0 0.0	-5.12 0.0 0.0	5.13	
4	60.7 0.0 0.0	0.0 0.04	53.54 0.0 0.0	-7.14 0.0 0.0	7.15	
5	63.59 0.0 0.0	0.0 0.06	54.79 0.0 0.0	-8.79 0.0 0.0	8.8	
6	66.48 0.0 0.0	0.0 0.1	56.43 0.0 0.0	-10.04 0.0 0.0	10.05	
7	69.37 0.0 0.0	0.0 0.15	58.47 0.0 0.0	-10.89 0.0 0.0	10.9	
8	72.27 0.0 0.0	0.0 0.2	60.91 0.0 0.0	-11.35 0.0 0.0	11.36	
9	75.16 0.0 0.0	0.0 0.27	63.75 0.0 0.0	-11.4 0.0 0.0	11.41	
10	78.05 0.0 0.0	0.0 0.35	67.01 0.0 0.0	-11.03 0.0 0.0	11.04	
11	80.95 0.0 0.0	0.0 0.43	70.69 0.0 0.0	-10.25 0.0 0.0	10.26	
12	83.84 0.0 0.0	0.0 0.52	74.78 0.0 0.0	-9.05 0.0 0.0	9.06	
13	86.73 0.0 0.0	0.0 0.63	79.3 0.0 0.0	-7.42 0.0 0.0	7.43	
14	89.62 0.0 0.0	0.0 0.74	84.24 0.0 0.0	-5.38 0.0 0.0	5.39	
15	92.52 0.0 0.0	0.0 0.87	89.61 0.0 0.0	-2.9 0.0 0.0	2.91	Mean lightness difference (16 steps)
16	95.41 0.0 0.0	0.0 1.0	95.41 0.0 0.0	0.0 0.0 0.0	0.01	ΔE*CIELAB = 7.1
17	52.02 0.0 0.0	0.0 0.0	52.02 0.0 0.0	0.0 0.0 0.0	0.01	
18	62.87 0.0 0.0	0.0 0.06	54.44 0.0 0.0	-8.41 0.0 0.0	8.42	
19	73.71 0.0 0.0	0.0 0.24	62.28 0.0 0.0	-11.42 0.0 0.0	11.43	
20	84.56 0.0 0.0	0.0 0.55	75.87 0.0 0.0	-8.68 0.0 0.0	8.69	Mean lightness difference (5 steps)
21	95.41 0.0 0.0	0.0 1.0	95.41 0.0 0.0	0.0 0.0 0.0	0.01	ΔL*CIELAB = 5.7
Mean colour reproduction index:					R* _{ab,m} = 69	

OE600-3N-136-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE601-3N-136-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{\text{intended}}$ (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																
$g_N=2.08$ 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
$w^*=l^*_{\text{CIELAB},r}$ (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	0.004	0.015	0.035	0.064	0.102	0.149	0.205	0.27	0.346	0.431	0.524	0.629	0.743	0.866	1.0

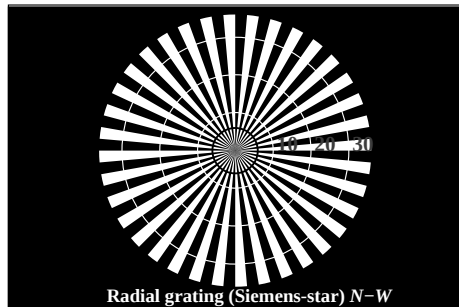
OE600-7N, Picture A7-136-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^*$ setrgbcolor

OE60: In-output relation according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:20$; Y_N range 15 to <30

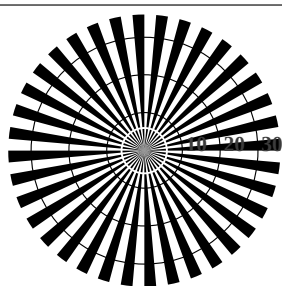
input: 000n (->rgb*_{de}) setcmyk
output 130-2: $g_P=1.0$; $g_N=1.81$

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta

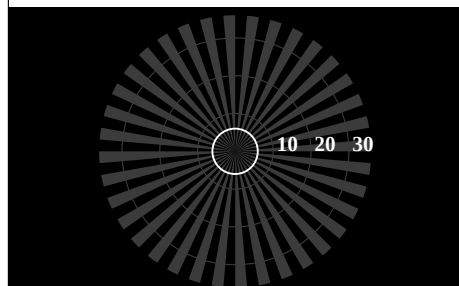
See similar ISO test charts: <http://www.ps.bam.de/24705TE>, <http://www.ps.bam.de/9241E>
Technical information: <http://www.ps.bam.de/33872E> Version 2.1, io=1,1, CIELAB



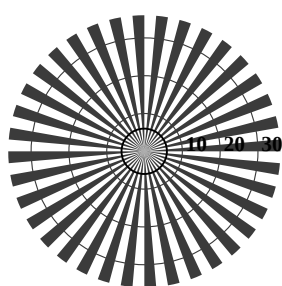
Radial grating (Siemens-star) N-W



Radial grating (Siemens-star) W-N

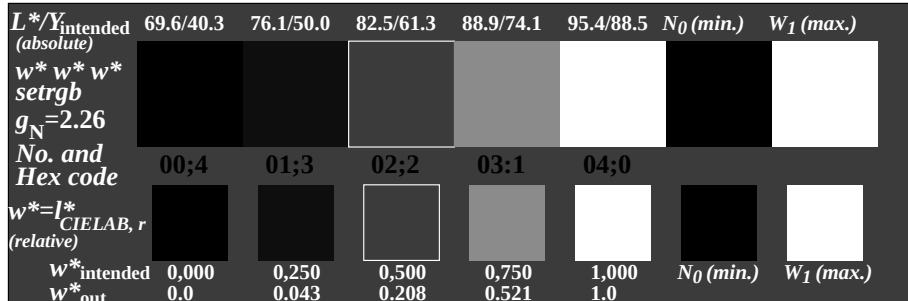


Radial grating (Siemens-star) N-Z

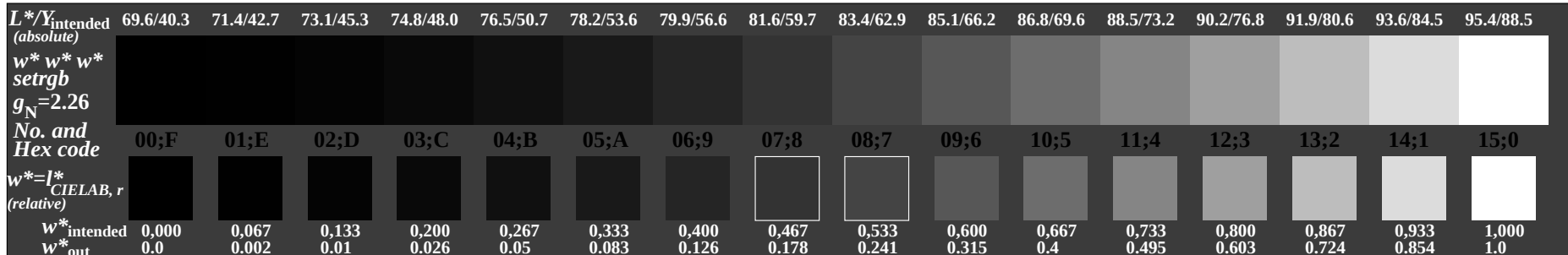


Radial grating (Siemens-star) W-Z

OE600-3N, Picture A1-137-0: Radial grating N-W, W-N, N-Z, W-Z; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE600-5N, Picture A2-137-0: 5 equidistant L^* -grey steps + N_0 + W_1 ; PS operator: $w^* w^* w^* \text{setrgbcolor}$



OE600-7N, Picture A3-137-0: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

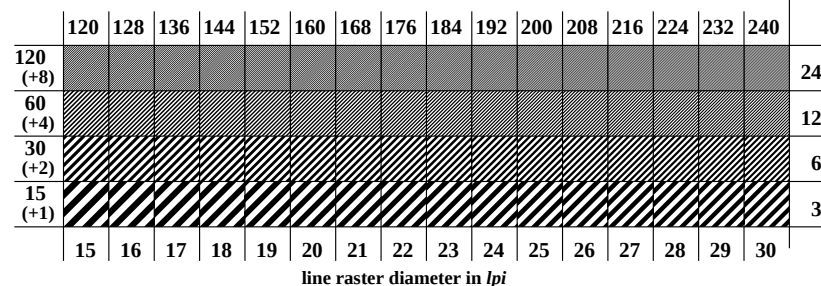
OE60: similar ME16 according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:40$; Y_N range 30 to <60

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

Landolt-rings W-N

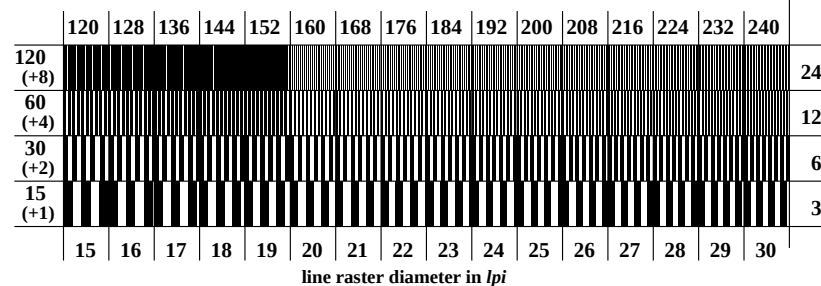
code: background-ring

OE601-1N, Picture A4-137-0: Landolt-rings W-N; PS operator: $w^* w^* w^* \text{setrgbcolor}$



line raster diameter in lpi

OE601-3N, Picture A5-137-0: Line raster under 45° (or 135°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

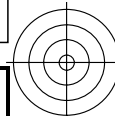
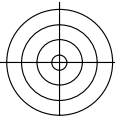


line raster diameter in lpi

OE601-5N, Picture A6-137-0: Line raster under 90° (or 0°); PS operator: $w^* w^* w^* \text{setrgbcolor}$

input: 000n ($\rightarrow \text{rgb}^*_{\text{de}}$) setcmyk
output 130-0: $g_P=1.0$; $g_N=2.1$

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta



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*	Start output S1
1	69.7	0.0	0.0	0.0	0.0	0.01
2	71.41	0.0	0.0	0.0	0.0	1.66
3	73.13	0.0	0.01	0.0	0.0	3.16
4	74.84	0.0	0.03	0.0	0.0	4.47
5	76.55	0.0	0.05	0.0	0.0	5.56
6	78.27	0.0	0.08	0.0	0.0	6.42
7	79.98	0.0	0.13	0.0	0.0	7.04
8	81.7	0.0	0.18	0.0	0.0	7.41
9	83.41	0.0	0.24	0.0	0.0	7.5
10	85.12	0.0	0.32	0.0	0.0	7.32
11	86.84	0.0	0.4	0.0	0.0	6.86
12	88.55	0.0	0.5	0.0	0.0	6.1
13	90.27	0.0	0.6	0.0	0.0	5.04
14	91.98	0.0	0.72	0.0	0.0	3.68
15	93.7	0.0	0.86	0.0	0.0	2.0
16	95.41	0.0	1.0	0.0	0.0	0.01
17	69.7	0.0	0.0	0.0	0.0	0.01
18	76.13	0.0	0.04	0.0	0.0	5.31
19	82.55	0.0	0.21	0.0	0.0	7.49
20	88.98	0.0	0.52	0.0	0.0	5.86
21	95.41	0.0	1.0	0.0	0.0	0.01

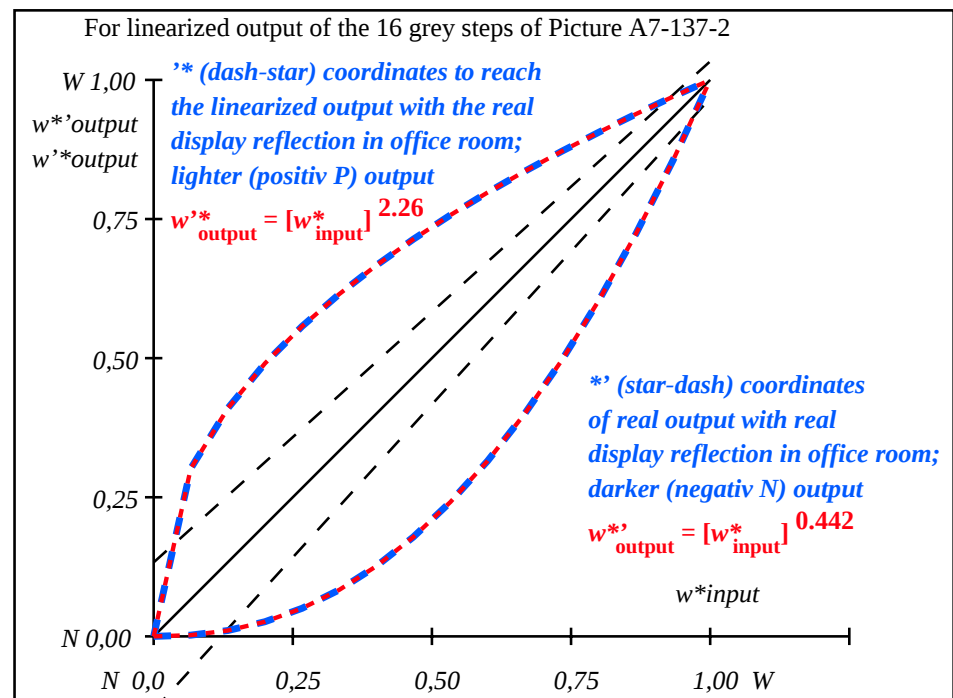
Specification according to
ISO/IEC 15775 Annex G
and DIN 33866-1 Annex G

Mean lightness difference (16 steps)
 $\Delta E^*_{\text{CIELAB}} = 4.6$

Mean lightness difference (5 steps)
 $\Delta E^*_{\text{CIELAB}} = 3.7$

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

OE600-3N-137-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE601-3N-137-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y^*_{\text{intended}}$ (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																
$g_N=2.26$ No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^* = [L^*_{\text{CIELAB}}]^r$ (relative)																
w^*_{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	0.002	0.01	0.026	0.051	0.083	0.126	0.179	0.241	0.315	0.4	0.496	0.604	0.724	0.855	1.0

OE600-7N, Picture A7-137-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* \text{setrgbcolor}$

OE60: In-output relation according to ISO 9241-306; 1MR, DEH
Viewing Y contrast $Y_W:Y_N=88,9:40$; Y_N range 30 to <60

input: 000n (->rgb*_de) setcmyk
output 130-2: $g_P=1.0$; $g_N=2.1$

TUB registration: 20110801-OE60/OE60L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rh4ta