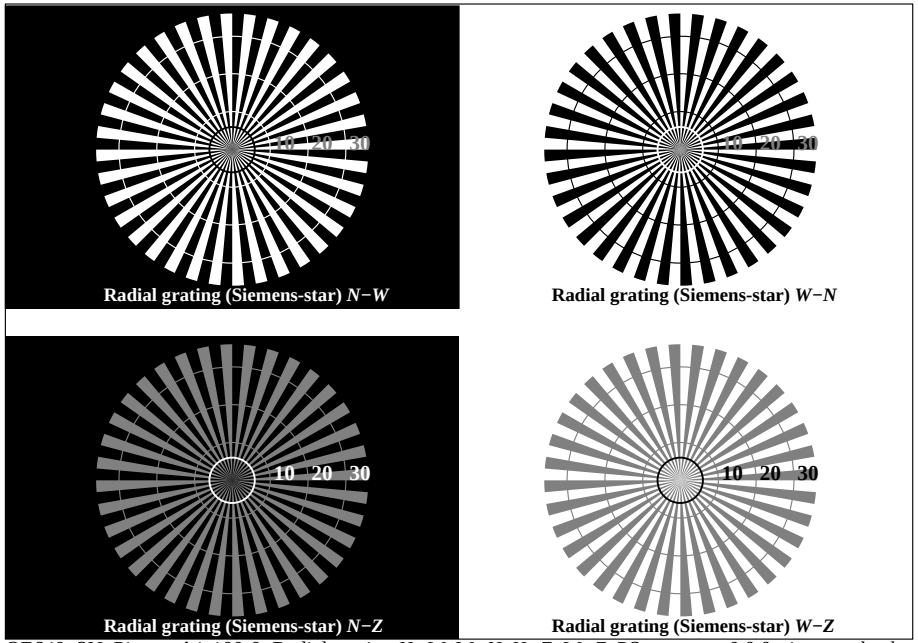
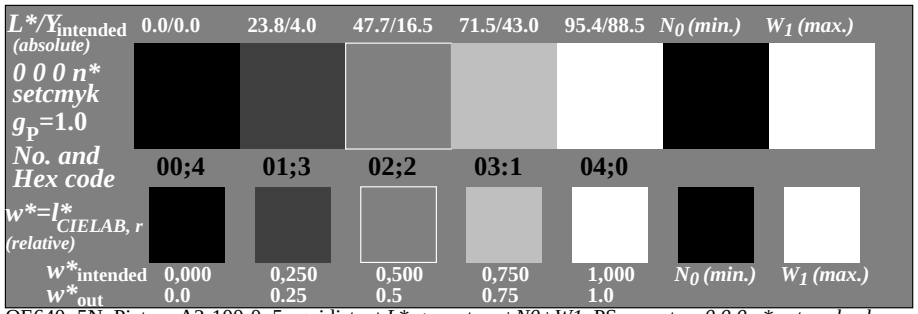
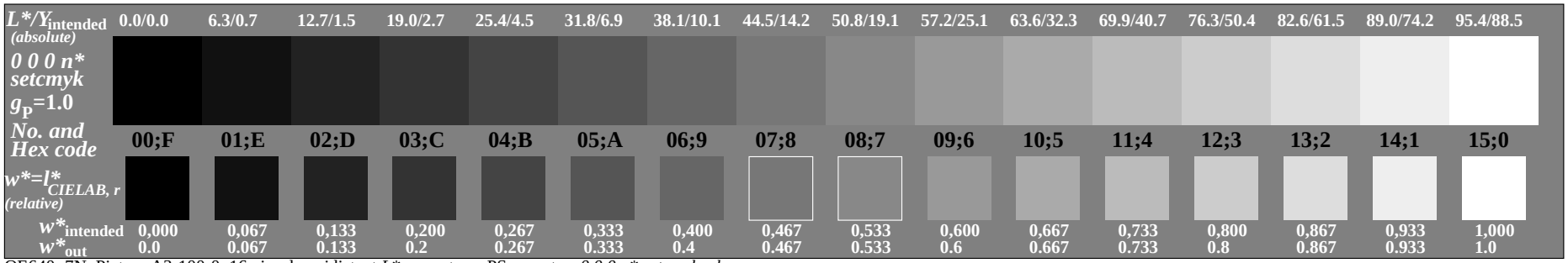


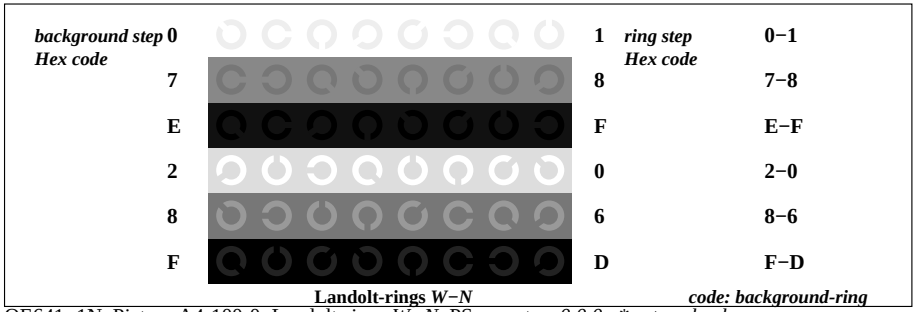
OE640−3N, Picture A1-100-0: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *0 0 0 n* setcmykcolor*



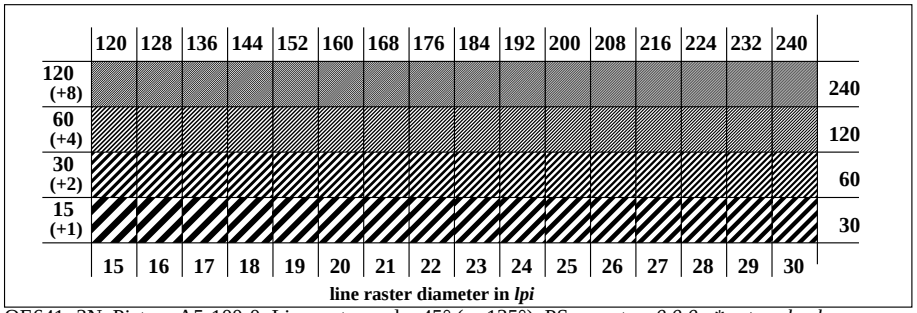
OE640−5N, Picture A2-100-0: 5 equidistant *L**-grey steps+*N0+W1*; PS operator: *0 0 0 n* setcmykcolor*



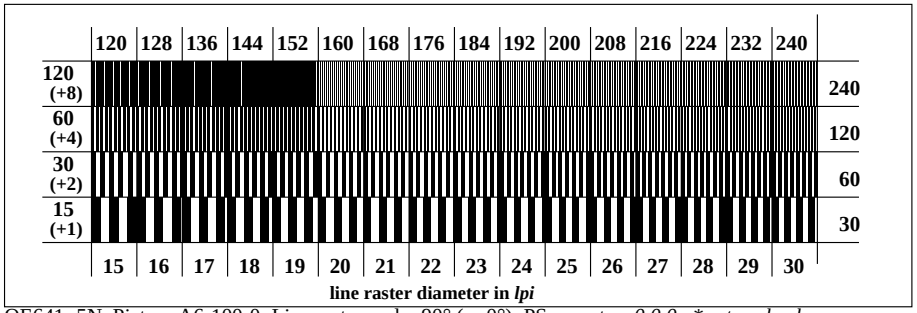
OE640−7N, Picture A3-100-0: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*



OE641−1N, Picture A4-100-0: Landolt-rings *W−N*; PS operator: *0 0 0 n* setcmykcolor*



OE641−3N, Picture A5-100-0: Line raster under 45° (or 135°); PS operator: *0 0 0 n* setcmykcolor*



OE641−5N, Picture A6-100-0: Line raster under 90° (or 0°); PS operator: *0 0 0 n* setcmykcolor*

Test for the best visual linearized output of Picture A7-100-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-100-0

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**-100-0
Are the 5 steps on the upper rows 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**-100-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-100-1

Test for the best visual linearized output of Picture A7-100-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-100-0
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 A5-100-0
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 A6-100-0
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 OE641−3N-100-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-100-1

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-100-2: **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/OE64/OE64F1P2.PDF
picture A7-100-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-100-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-100-1

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

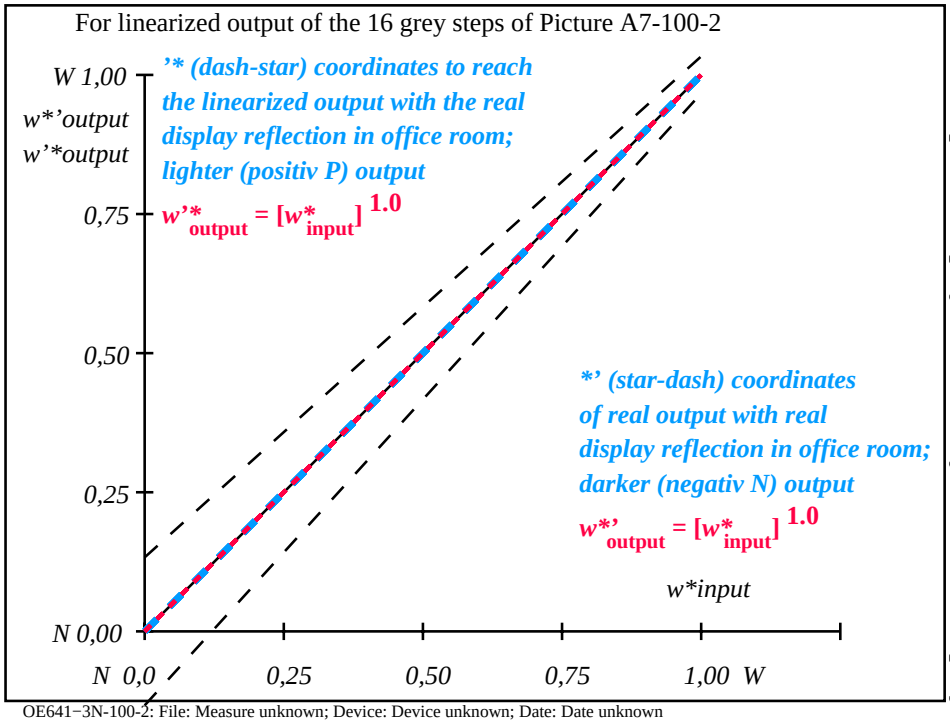
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 0.0

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 0.0

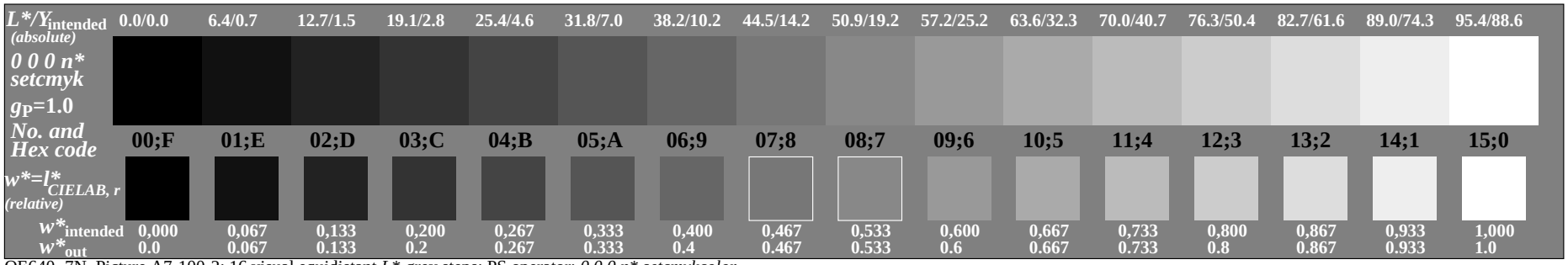
Mean colour reproduction index: $R^*_{ab,m}$ = 100

OE640−3N-100-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-100-2



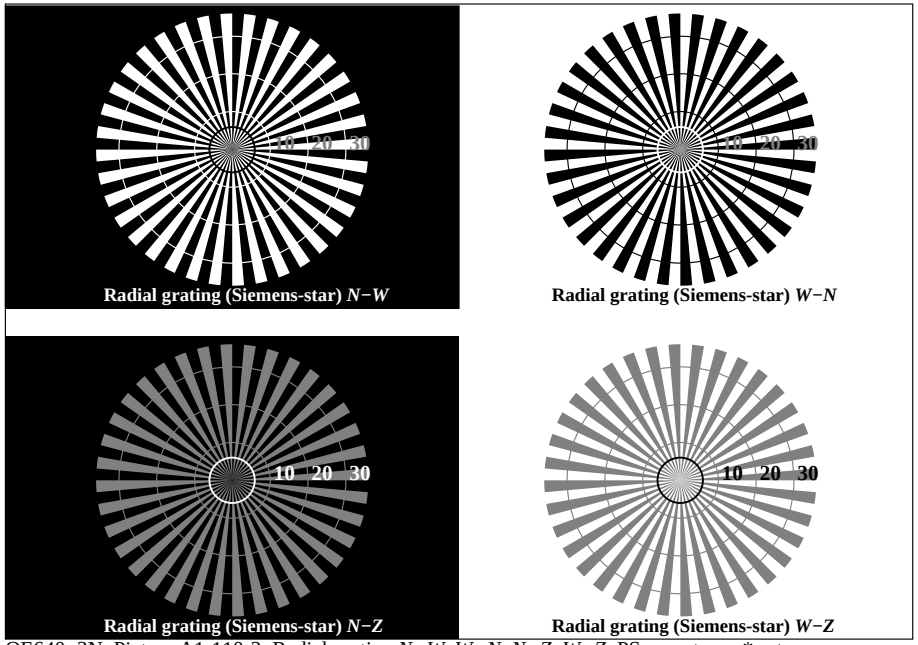
OE641−3N-100-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



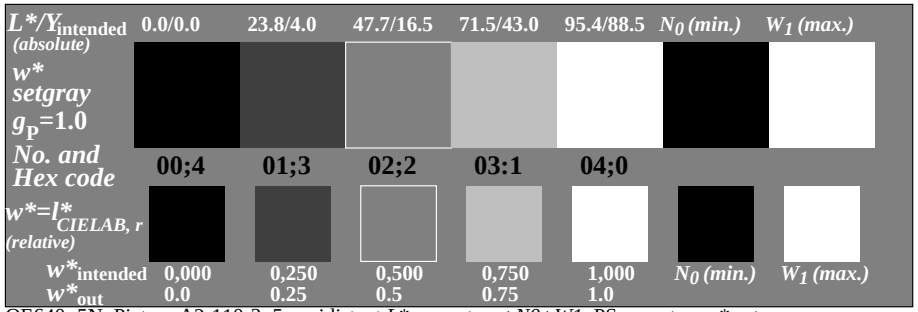
OE640−7N, Picture A7-100-2: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

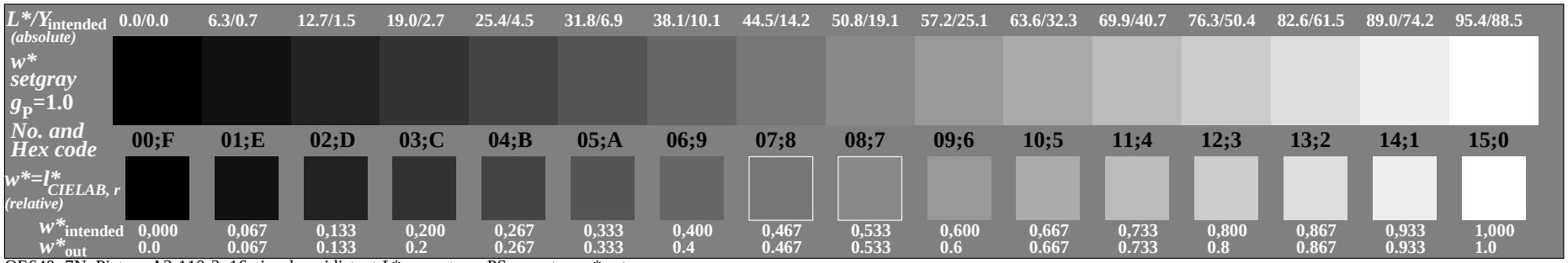
input: *all (−>rgb*de) setrgbcolor*
output 130-2: g_P=1.0; g_N=1.0



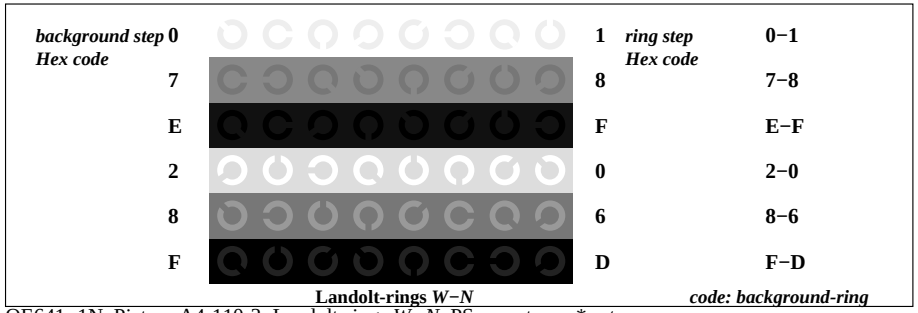
OE640−3N, Picture A1-110-3: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* setgray*



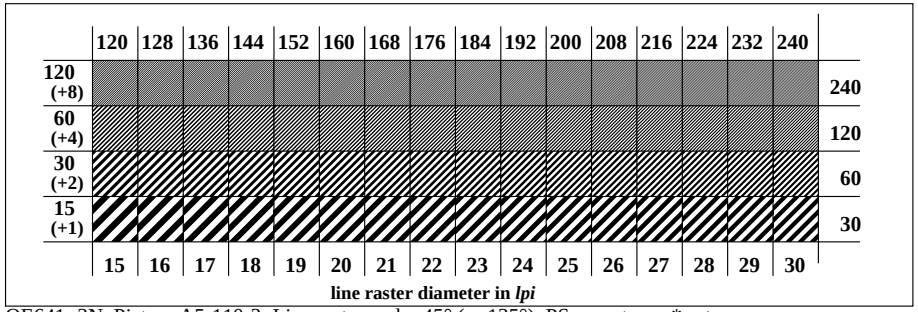
OE640−5N, Picture A2-110-3: 5 equidistant *L**-grey steps+*N0+W1*; PS operator: *w* setgray*



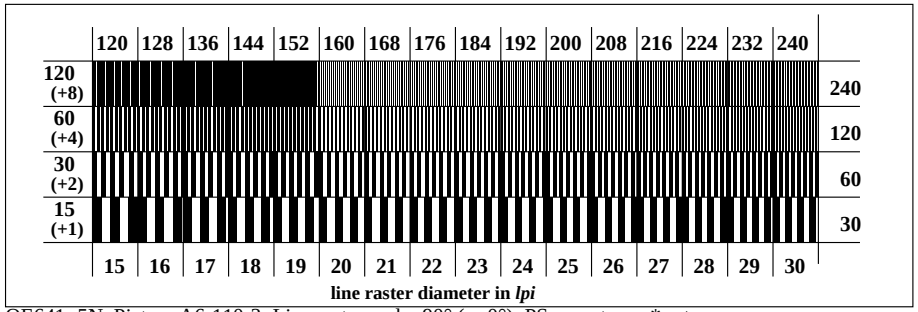
OE640−7N, Picture A3-110-3: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*



OE641−1N, Picture A4-110-3: Landolt-rings *W−N*; PS operator: *w* setgray*



OE641−3N, Picture A5-110-3: Line raster under 45° (or 135°); PS operator: *w* setgray*



OE641−5N, Picture A6-110-3: Line raster under 90° (or 0°); PS operator: *w* setgray*

Test for the best visual linearized output of Picture A7-110-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-110-0

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**-110-0
Are the 5 steps on the upper rows 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**-110-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-110-4

Test for the best visual linearized output of Picture A7-110-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-110-0
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 A5-110-0
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 A6-110-0
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 OE641−3N-110-4

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-110-4

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-110-2: **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/OE64/OE64F1P2.PDF
picture A7-110-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-110-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-110-4

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

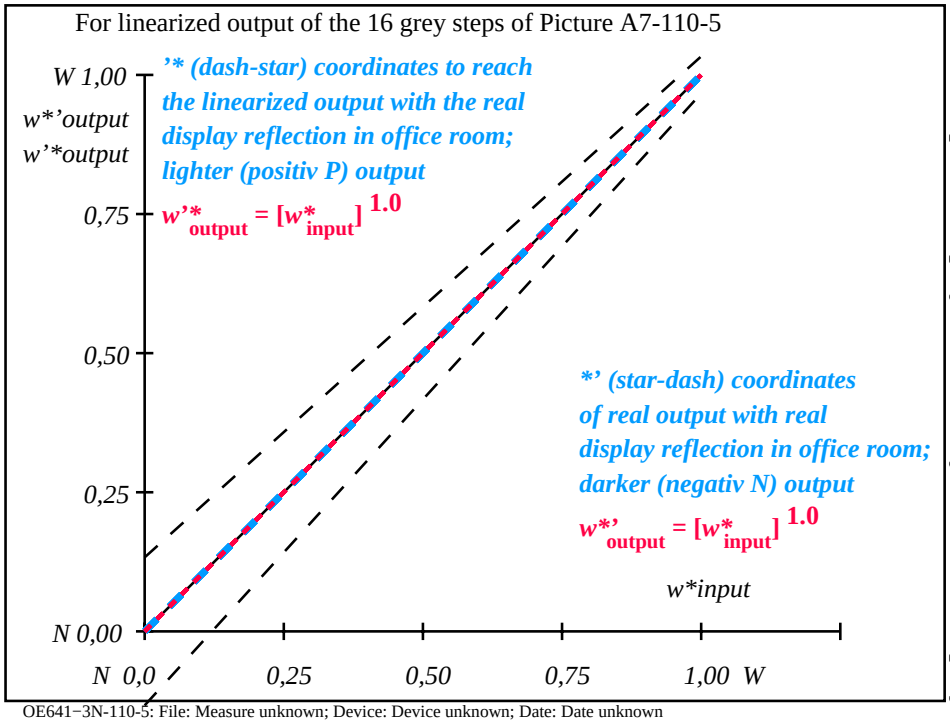
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 0.0

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 0.0

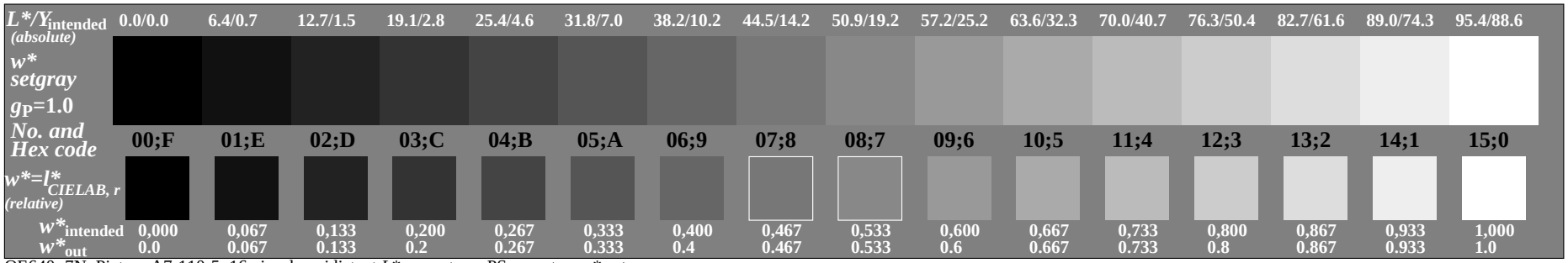
Mean colour reproduction index: $R^*_{ab,m}$ = 100

OE640−3N-110-5: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-110-5



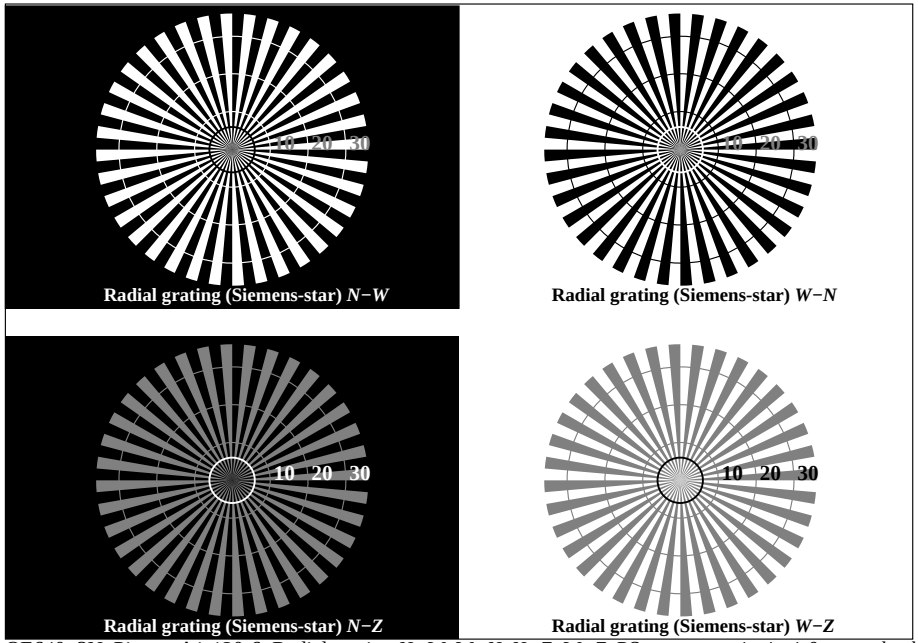
OE641−3N-110-5: File: Measure unknown; Device: Device unknown; Date: Date unknown



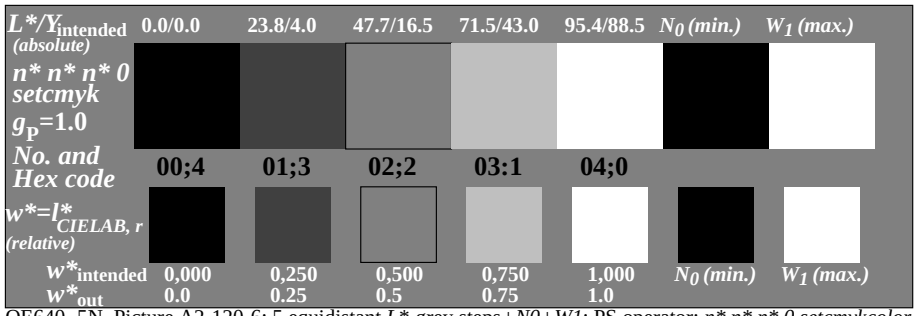
OE640−7N, Picture A7-110-5: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*

OE64: 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

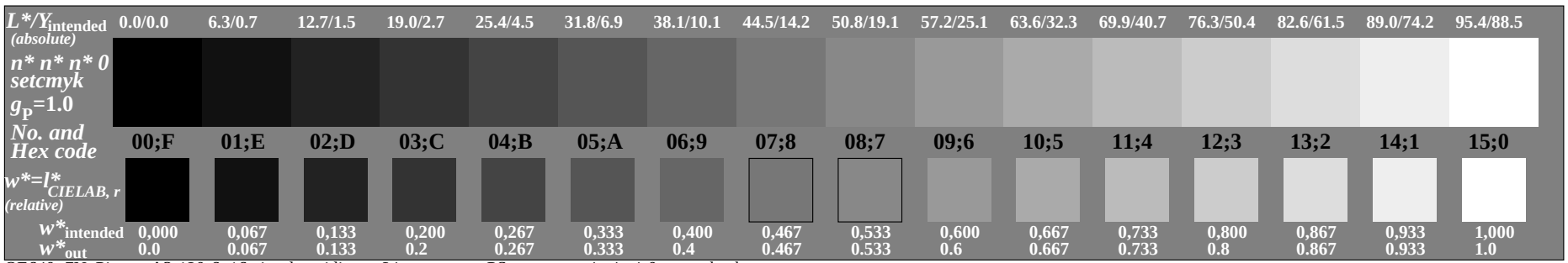
input: *all (−>rgb*de) setrgbcolor*
output 130-5: g_P=1.0; g_N=1.0



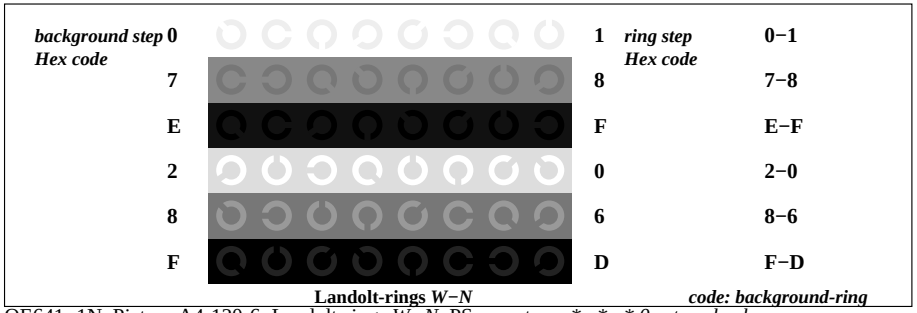
OE640−3N, Picture A1-120-6: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *n* n* n* 0 setcmykcolor*



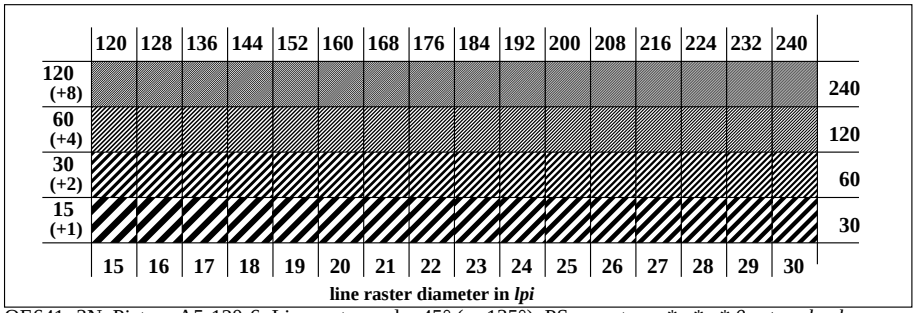
OE640−5N, Picture A2-120-6: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *n* n* n* 0 setcmykcolor*



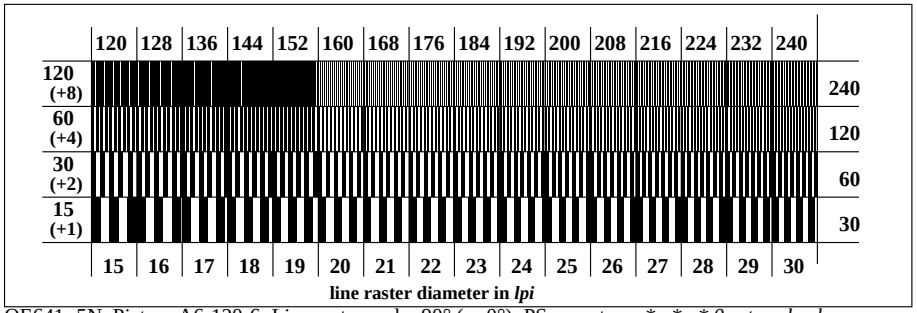
OE640−7N, Picture A3-120-6: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*



OE641−1N, Picture A4-120-6: Landolt-rings *W−N*; PS operator: *n* n* n* 0 setcmykcolor*



OE641−3N, Picture A5-120-6: Line raster under 45° (or 135°); PS operator: *n* n* n* 0 setcmykcolor*



OE641−5N, Picture A6-120-6: Line raster under 90° (or 0°); PS operator: *n* n* n* 0 setcmykcolor*

Test for the best visual linearized output of Picture A7-120-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-120-0

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**-120-0
Are the 5 steps on the upper rows 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**-120-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-120-7

Test for the best visual linearized output of Picture A7-120-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N−W* according to picture A4-120-0
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 A5-120-0
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 A6-120-0
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 OE641−3N-120-7

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-120-7

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-120-2: **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/OE64/OE64F1P2.PDF
picture A7-120-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-120-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-120-7

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

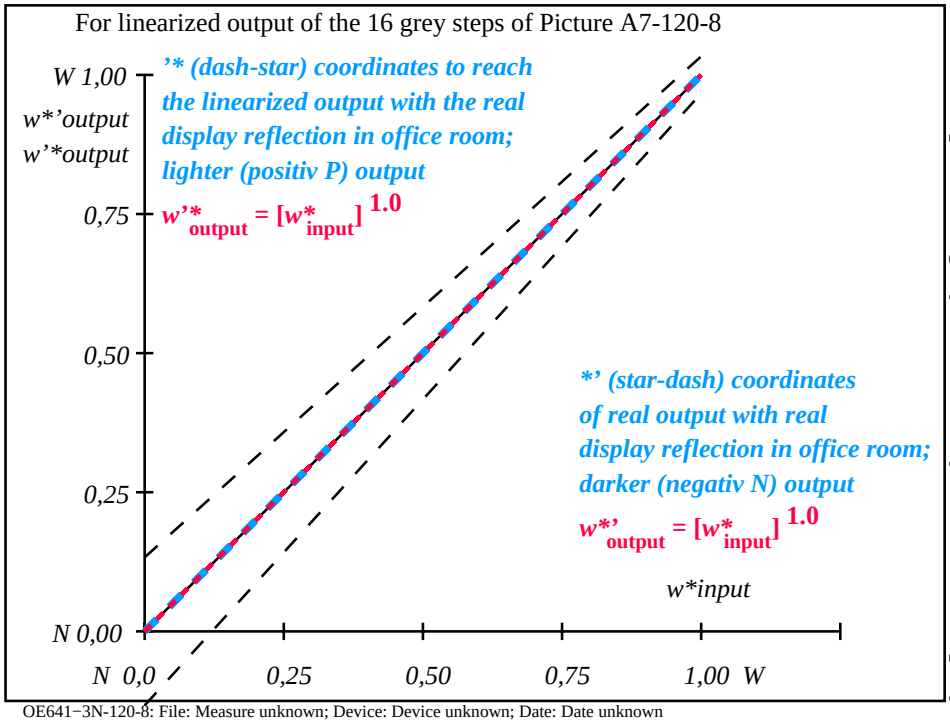
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 0.0

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 0.0

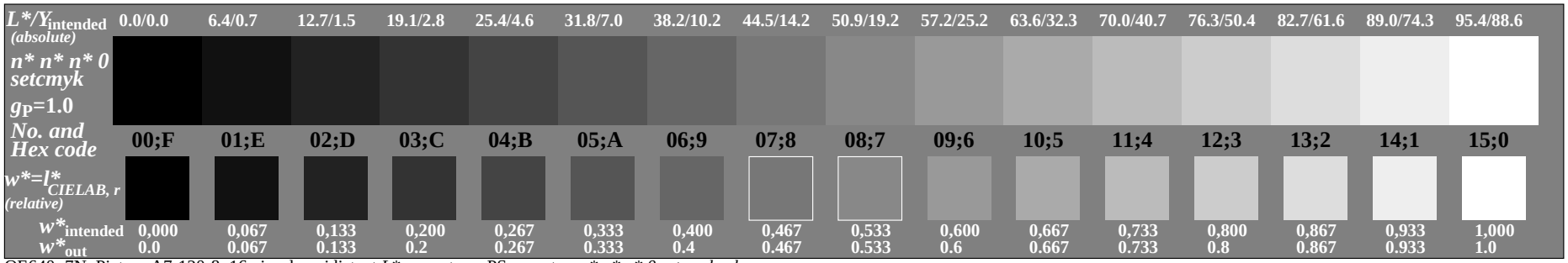
Mean colour reproduction index: $R^*_{ab,m}$ = 100

OE640−3N-120-8: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-120-8



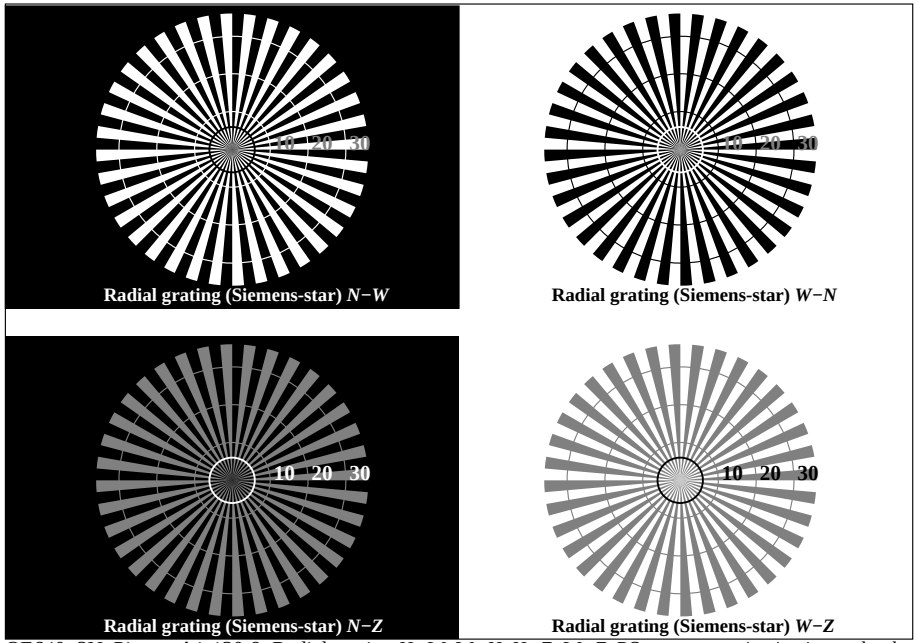
OE641−3N-120-8: File: Measure unknown; Device: Device unknown; Date: Date unknown



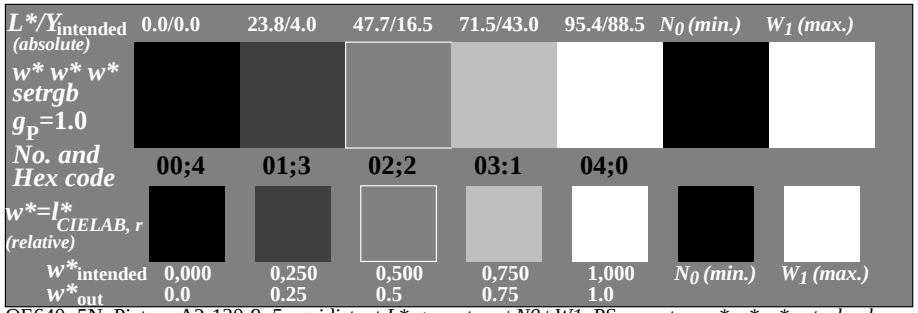
OE640−7N, Picture A7-120-8: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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

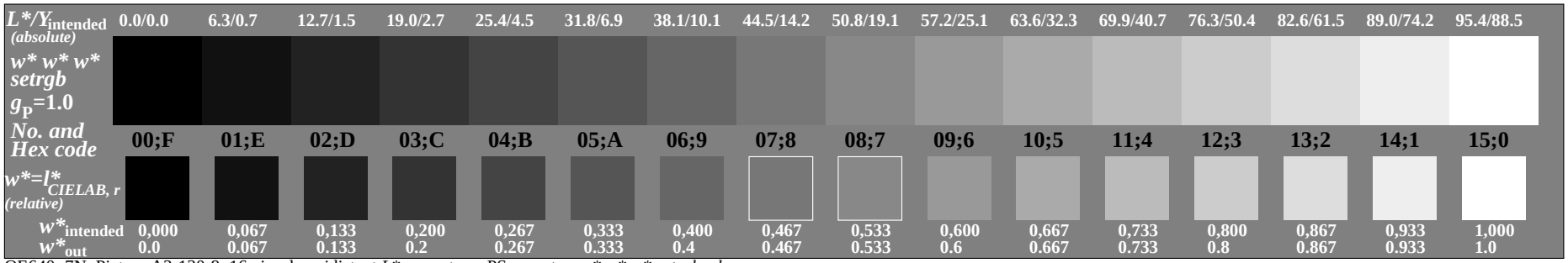
input: *all (−>rgb*de) setrgbcolor*
output 130-8: g_P=1.0; g_N=1.0



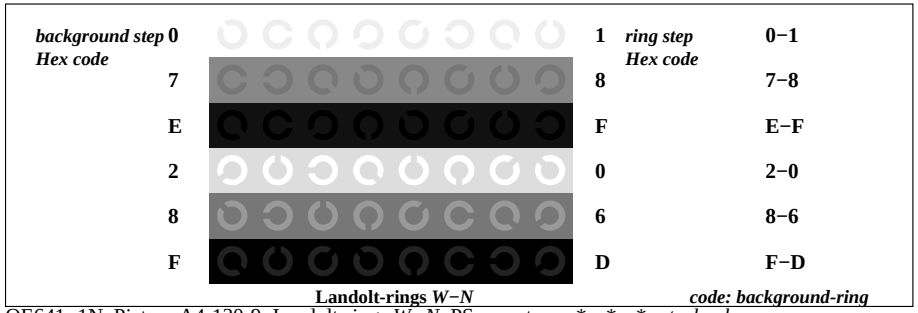
OE640−3N, Picture A1-130-9: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* w* w* setrgbcolor*



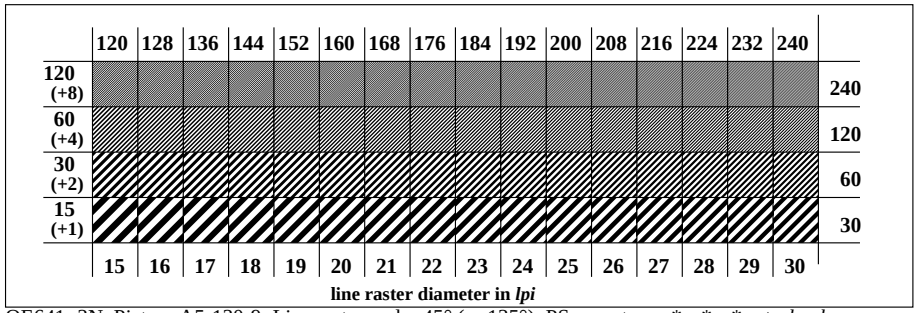
OE640−5N, Picture A2-130-9: 5 equidistant *L**-grey steps+*N0+W1*; PS operator: *w* w* w* setrgbcolor*



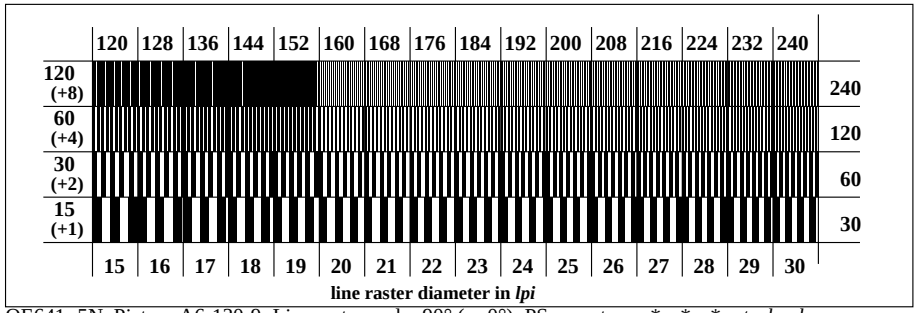
OE640−7N, Picture A3-130-9: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*



OE641−1N, Picture A4-130-9: Landolt-rings *W−N*; PS operator: *w* w* w* setrgbcolor*



OE641−3N, Picture A5-130-9: Line raster under 45° (or 135°); PS operator: *w* w* w* setrgbcolor*



OE641−5N, Picture A6-130-9: Line raster under 90° (or 0°); PS operator: *w* w* w* setrgbcolor*

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?
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?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-130-10

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 OE641−3N-130-10

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-130-10

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.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/OE64/OE64F1P2.PDF
picture A7-130-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-130-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-130-10

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

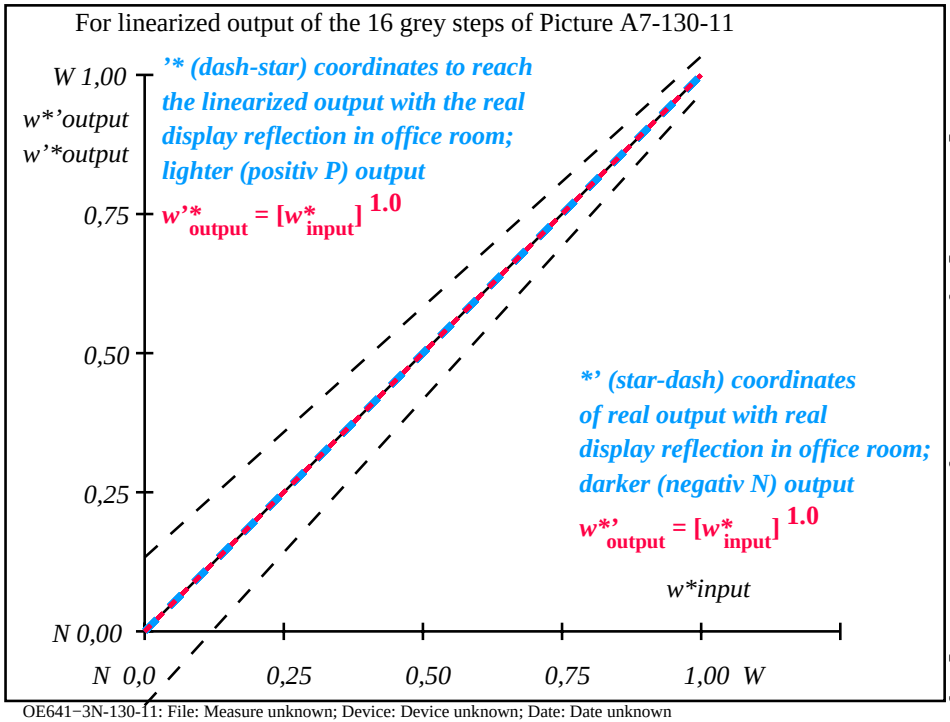
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 0.0

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 0.0

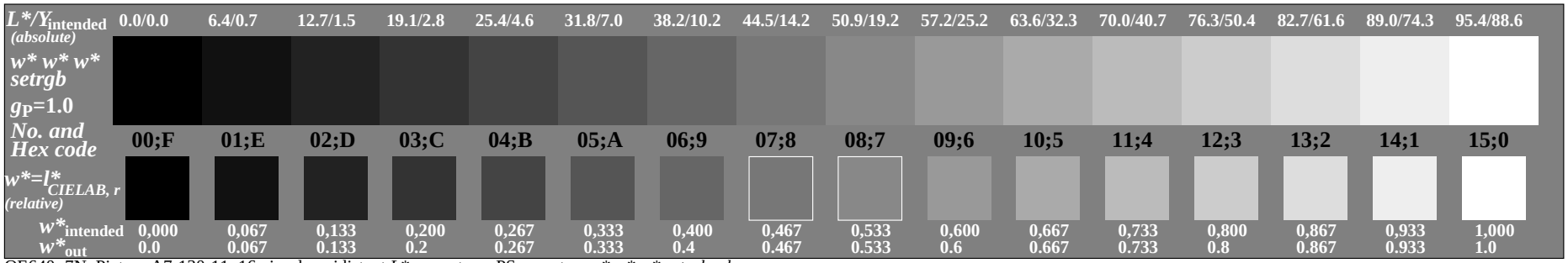
Mean colour reproduction index: $R^*_{ab,m}$ = 100

OE640−3N-130-11: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-130-11



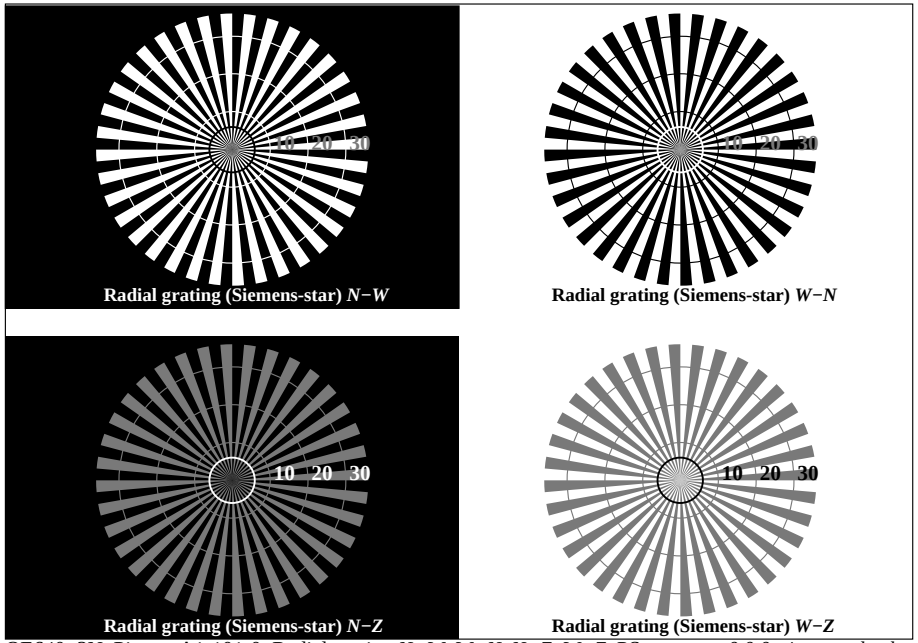
OE641−3N-130-11: File: Measure unknown; Device: Device unknown; Date: Date unknown



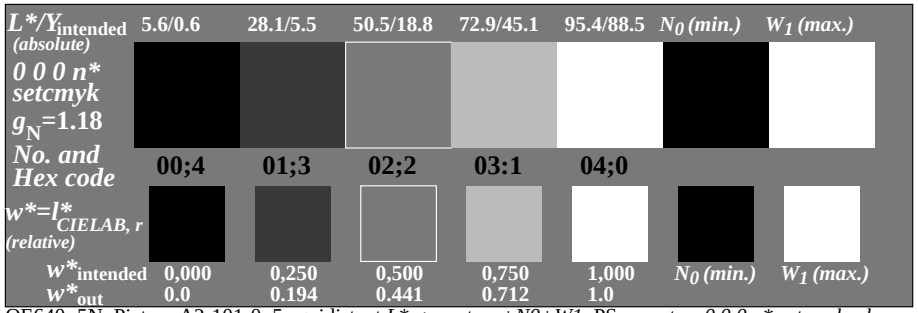
OE640−7N, Picture A7-130-11: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*

OE64: 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

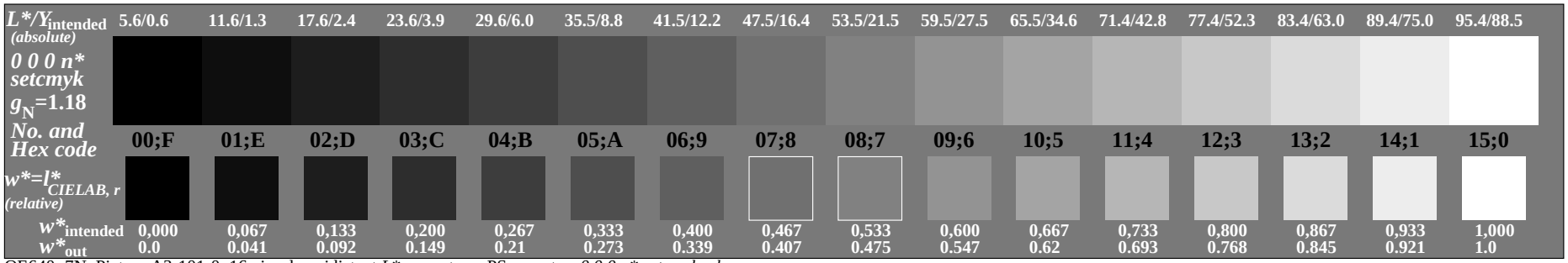
input: *all (−>rgb*de) setrgbcolor*
output 130-11: g_P=1.0; g_N=1.0



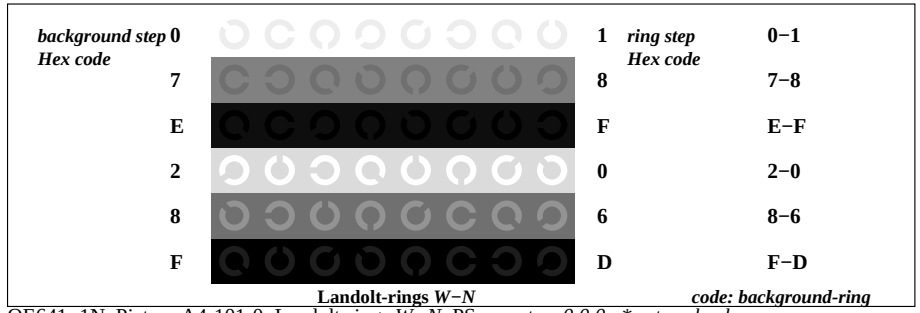
OE640−3N, Picture A1-101-0: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *0 0 0 n* setcmykcolor*



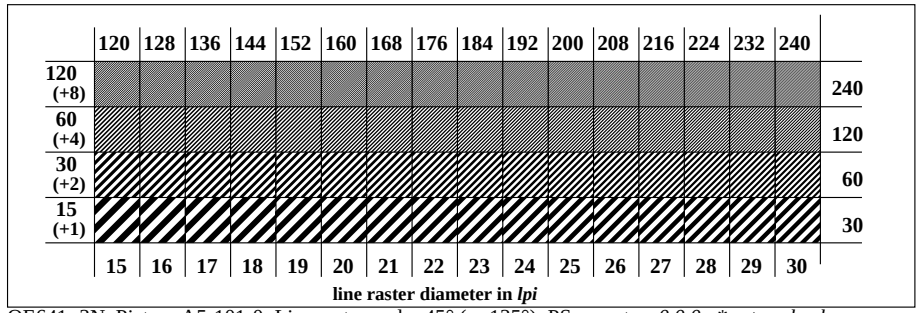
OE640−5N, Picture A2-101-0: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *0 0 0 n* setcmykcolor*



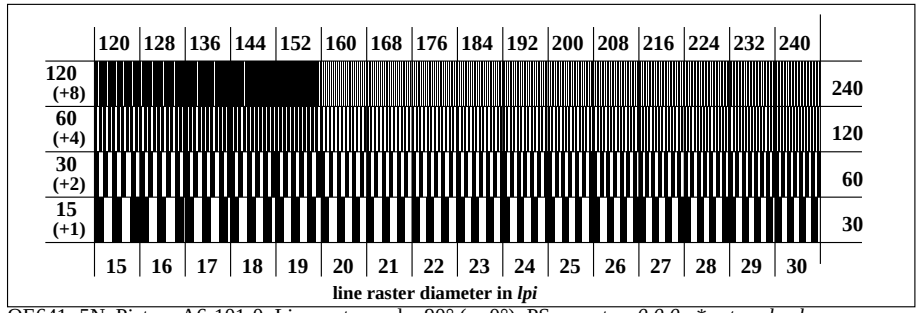
OE640−7N, Picture A3-101-0: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*



OE641−1N, Picture A4-101-0: Landolt-rings *W−N*; PS operator: *0 0 0 n* setcmykcolor*



OE641−3N, Picture A5-101-0: Line raster under 45° (or 135°); PS operator: *0 0 0 n* setcmykcolor*



OE641−5N, Picture A6-101-0: Line raster under 90° (or 0°); PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-0: g_P=1.0; g_N=1.08

Test for the best visual linearized output of Picture A7-101-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-101-0

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**-101-0
Are the 5 steps on the upper rows 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**-101-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-108-1

Test for the best visual linearized output of Picture A7-101-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-101-0
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 A5-101-0
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 A6-101-0
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 OE641−3N-101-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-101-1

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-101-2: **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/OE64/OE64F1P2.PDF
picture A7-101-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-101-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-101-1

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	5.69	0.0	0.0	0.0	5.69	0.0	0.0	0.0	0.0	0.0	0.01
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
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
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
21	95.41	0.0	0.0	1.0	95.41	0.0	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

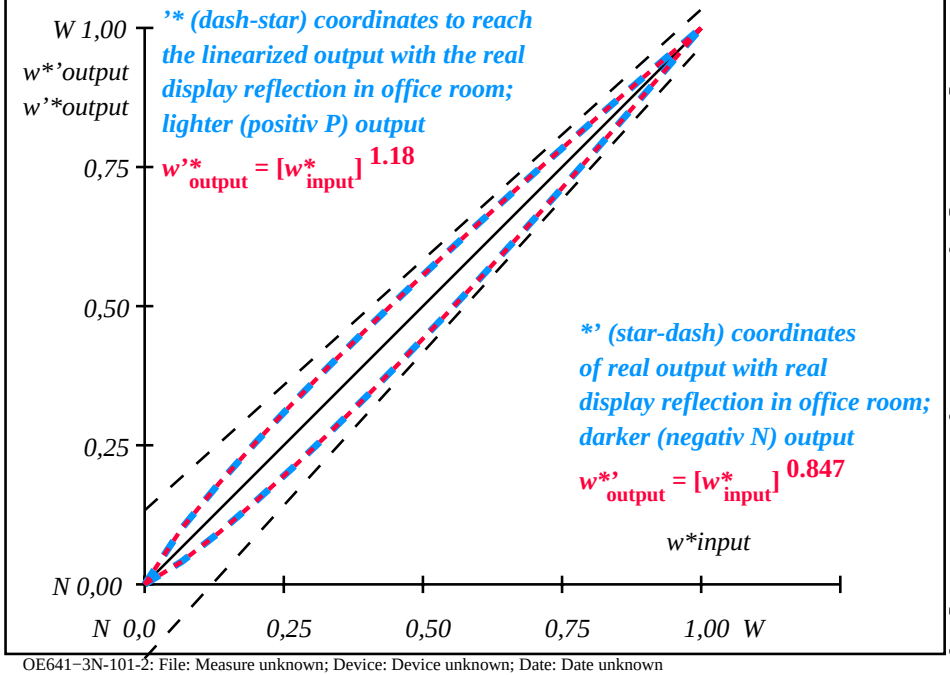
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **3.4**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **2.7**

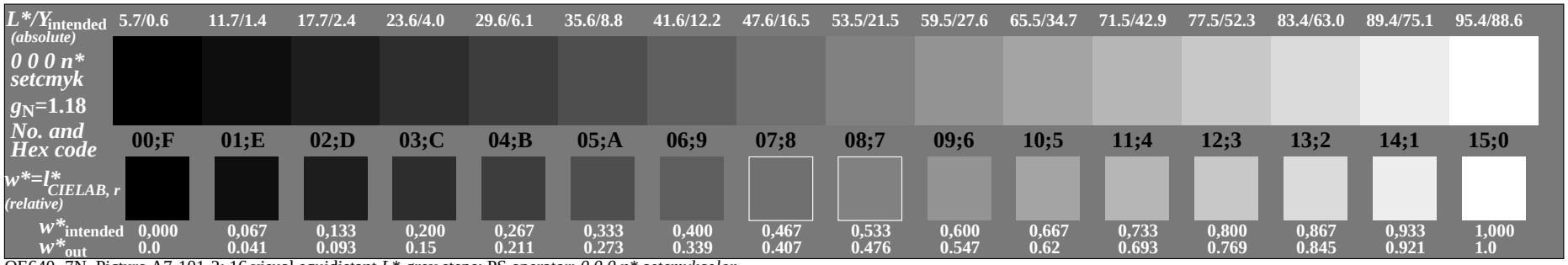
Mean colour reproduction index: $R^*_{ab,m}$ = **85**

OE640−3N-101-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-101-2



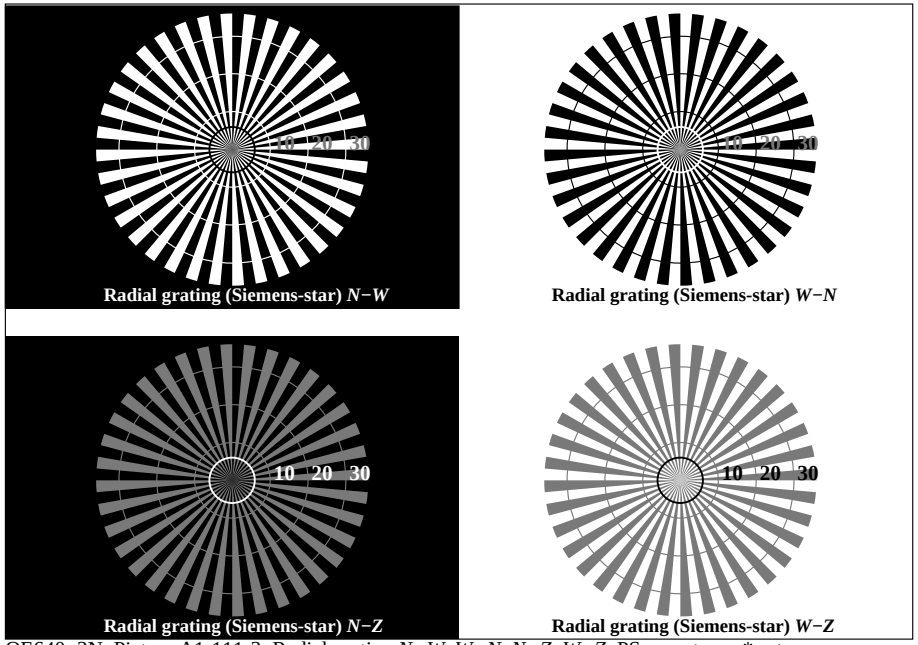
OE641−3N-101-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



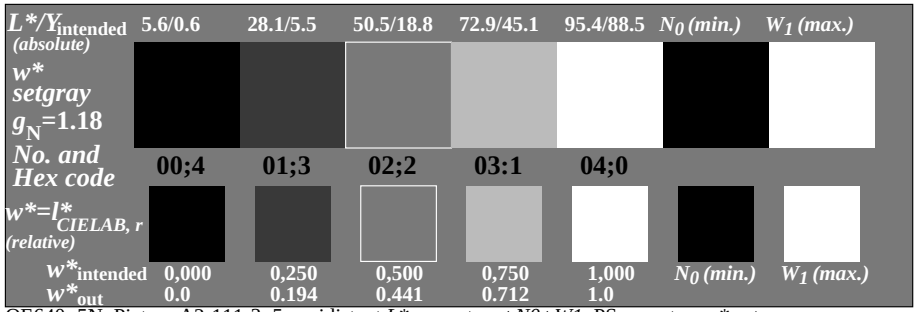
OE640−7N, Picture A7-101-2: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

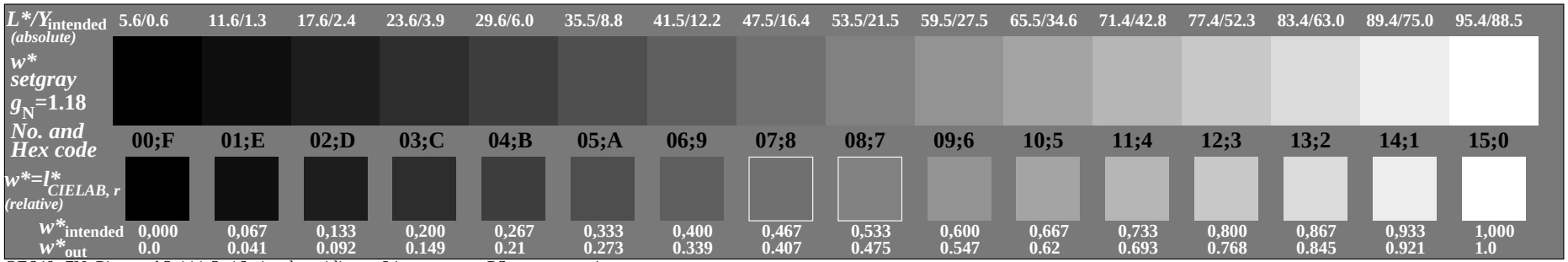
input: *all (−>rgb*de) setrgbcolor*
output 130-2: g_P=1.0; g_N=1.08



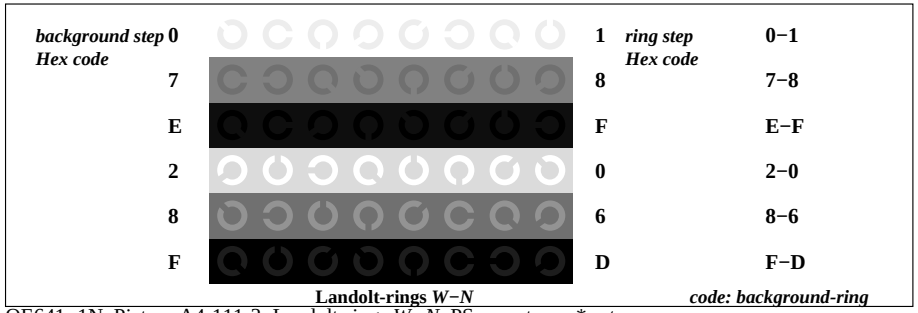
OE640−3N, Picture A1-111-3: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* setgray*



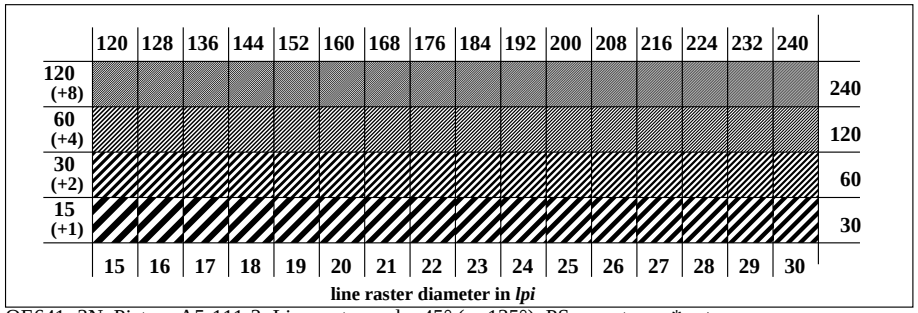
OE640−5N, Picture A2-111-3: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *w* setgray*



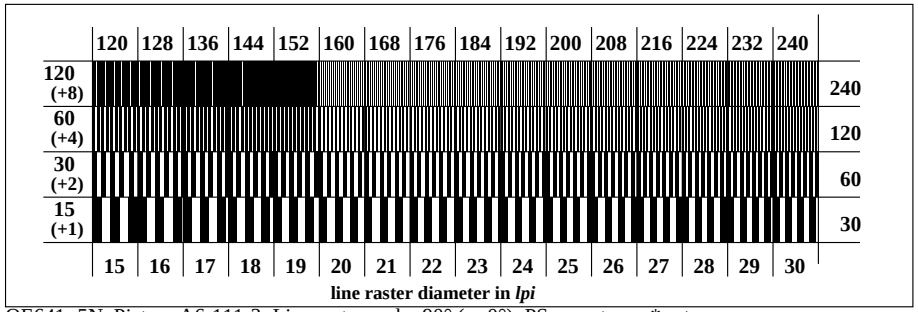
OE640−7N, Picture A3-111-3: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*



OE641−1N, Picture A4-111-3: Landolt-rings *W−N*; PS operator: *w* setgray*



OE641−3N, Picture A5-111-3: Line raster under 45° (or 135°); PS operator: *w* setgray*



OE641−5N, Picture A6-111-3: Line raster under 90° (or 0°); PS operator: *w* setgray*

Test for the best visual linearized output of Picture A7-111-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-111-0

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**-111-0
Are the 5 steps on the upper rows 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**-111-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-118-4

Test for the best visual linearized output of Picture A7-111-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N−W* according to picture A4-111-0
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 A5-111-0
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 A6-111-0
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 OE641−3N-111-4

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-111-4

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-111-2: **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/OE64/OE64F1P2.PDF
picture A7-111-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-111-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-111-4

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	5.69	0.0	0.0	0.0	5.69	0.0	0.0	0.0	0.0	0.0	0.01
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
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
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
21	95.41	0.0	0.0	1.0	95.41	0.0	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

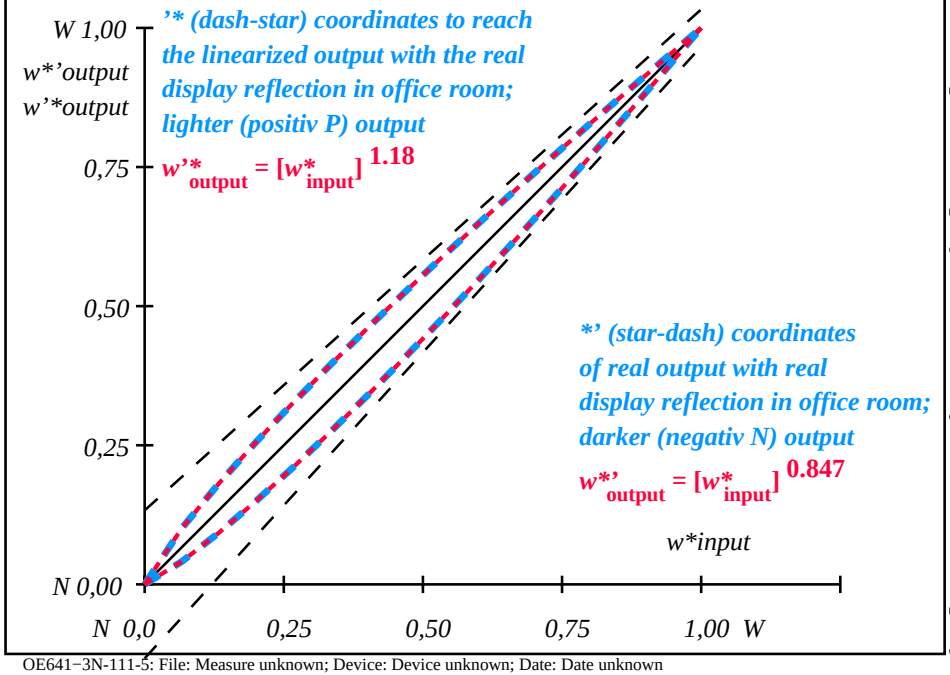
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **3.4**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **2.7**

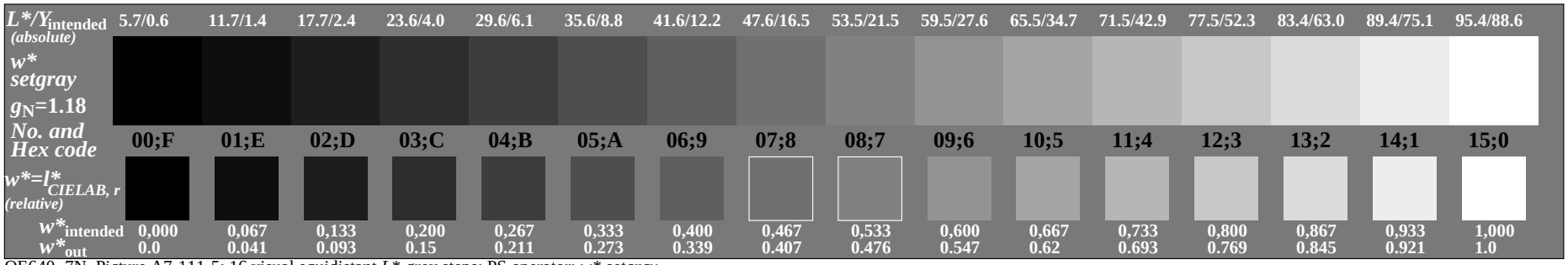
Mean colour reproduction index: $R^*_{ab,m}$ = **85**

OE640−3N-111-5: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-111-5



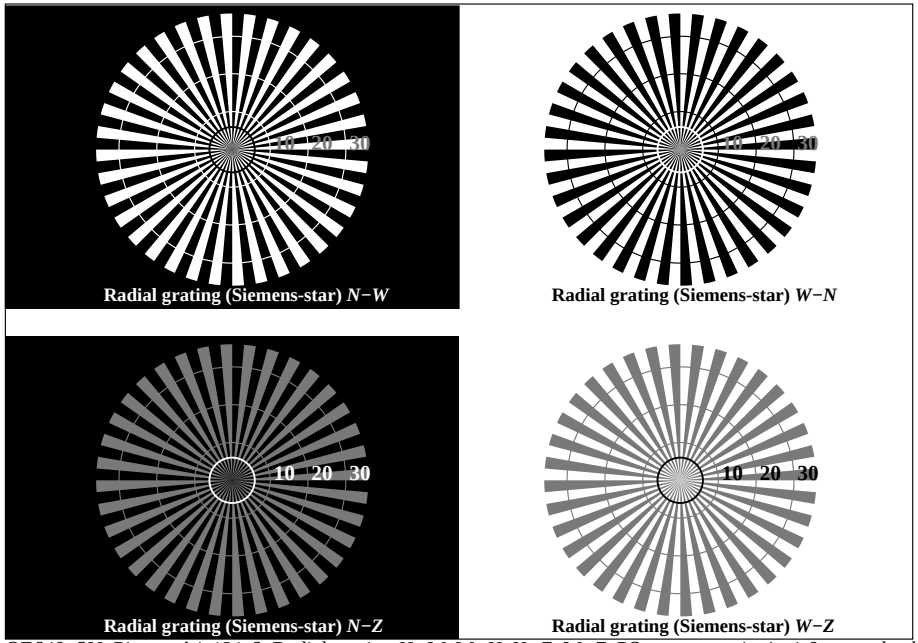
OE641−3N-111-5: File: Measure unknown; Device: Device unknown; Date: Date unknown



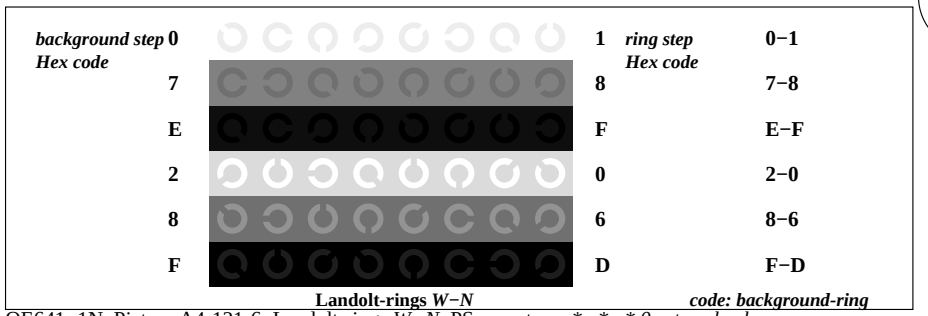
OE640−7N, Picture A7-111-5: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*

OE64: 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

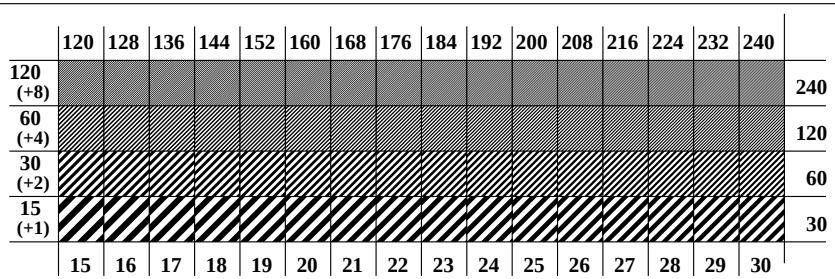
input: *all (−>rgb*de) setrgbcolor*
output 130-5: g_P=1.0; g_N=1.08



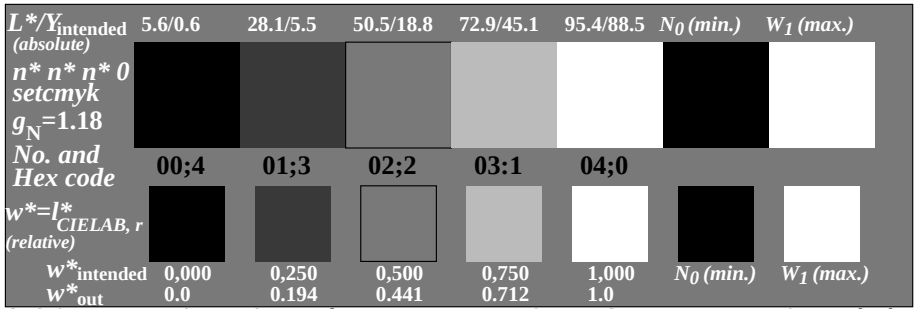
OE640−3N, Picture A1-121-6: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *n* n* n* 0 setcmykcolor*



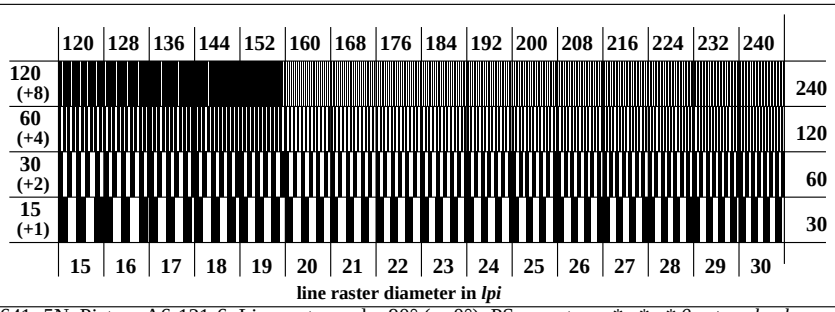
OE641−1N, Picture A4-121-6: Landolt-rings *W−N*; PS operator: *n* n* n* 0 setcmykcolor*



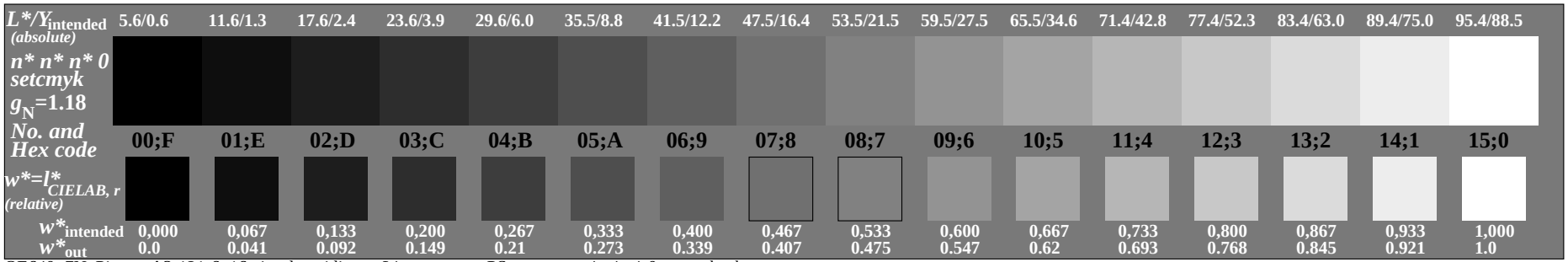
OE641−3N, Picture A5-121-6: Line raster under 45° (or 135°); PS operator: *n* n* n* 0 setcmykcolor*



OE640−5N, Picture A2-121-6: 5 equidistant *L**-grey steps+*N0+W1*; PS operator: *n* n* n* 0 setcmykcolor*



OE641−5N, Picture A6-121-6: Line raster under 90° (or 0°); PS operator: *n* n* n* 0 setcmykcolor*



OE640−7N, Picture A3-121-6: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-6: g_P=1.0; g_N=1.08

Test for the best visual linearized output of Picture A7-121-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-121-0

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**-121-0
Are the 5 steps on the upper rows 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**-121-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-128-7

Test for the best visual linearized output of Picture A7-121-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-121-0
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 A5-121-0
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 A6-121-0
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 OE641−3N-121-7

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-121-7

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-121-2: **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/OE64/OE64F1P2.PDF
picture A7-121-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-121-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-121-7

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	5.69	0.0	0.0	0.0	5.69	0.0	0.0	0.0	0.0	0.0	0.01
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
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
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
21	95.41	0.0	0.0	1.0	95.41	0.0	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

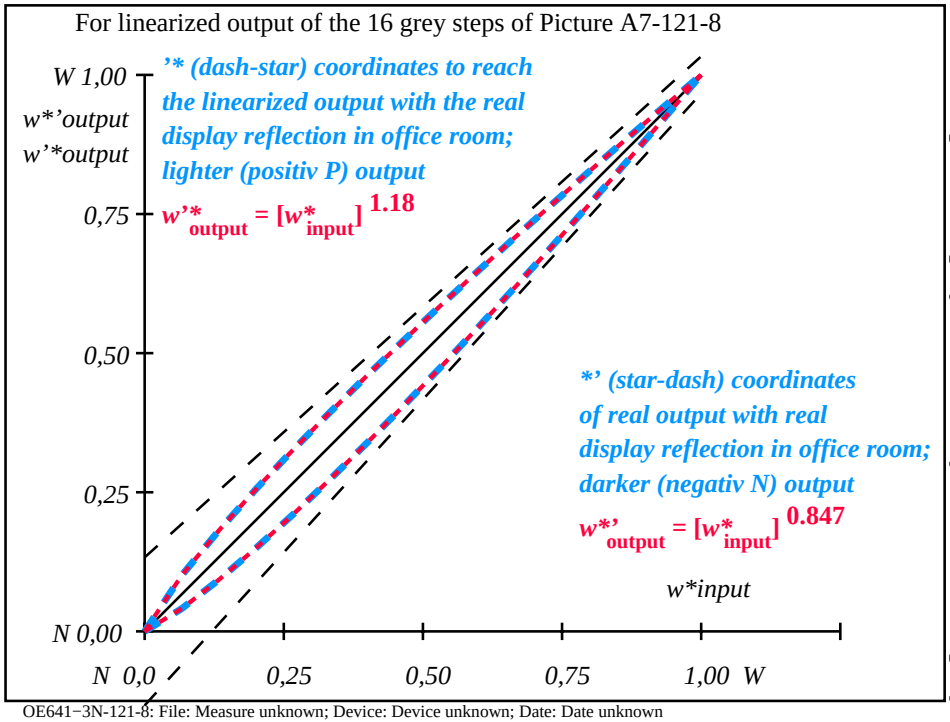
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **3.4**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **2.7**

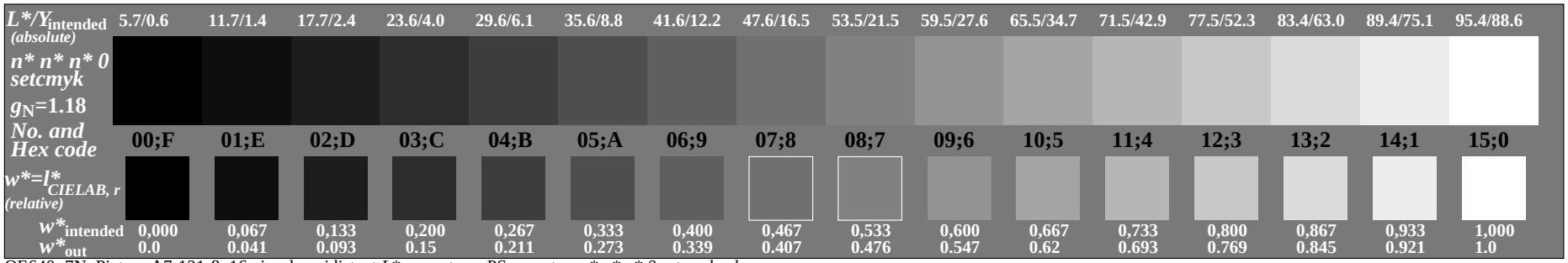
Mean colour reproduction index: $R^*_{ab,m}$ = **85**

OE640−3N-121-8: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-121-8



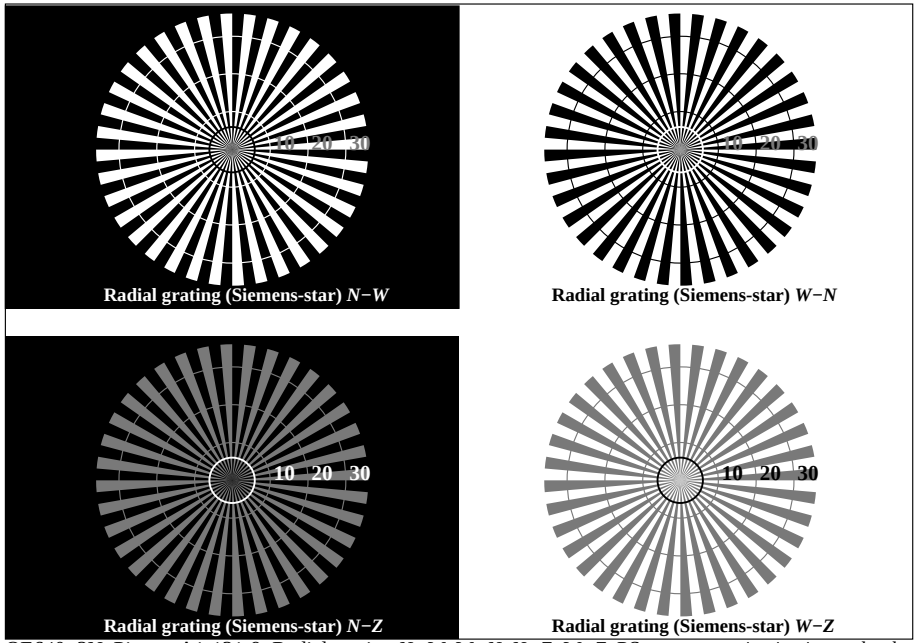
OE641−3N-121-8: File: Measure unknown; Device: Device unknown; Date: Date unknown



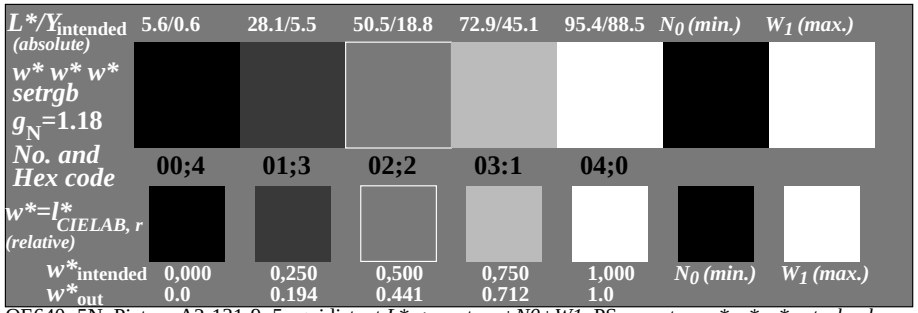
OE640−7N, Picture A7-121-8: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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

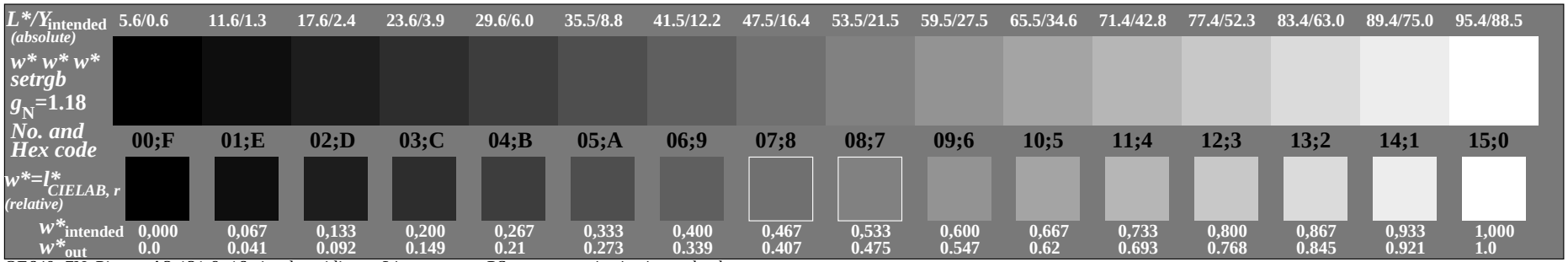
input: *all (−>rgb*de) setrgbcolor*
output 130-8: g_P=1.0; g_N=1.08



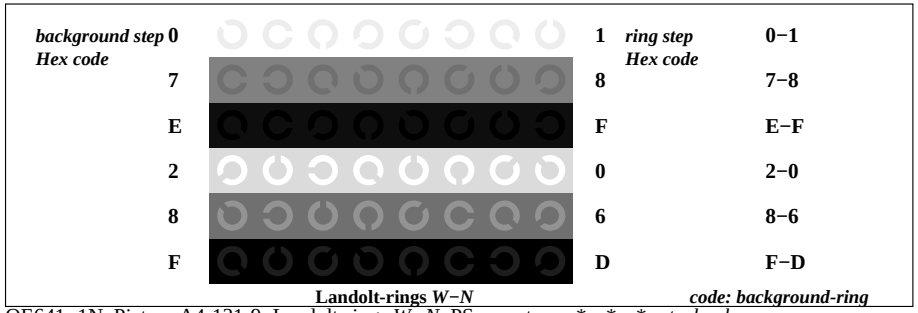
OE640−3N, Picture A1-131-9: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* w* w* setrgbcolor*



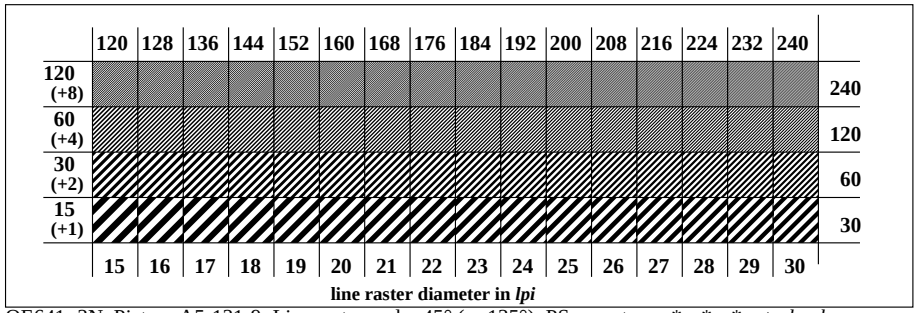
OE640−5N, Picture A2-131-9: 5 equidistant *L**-grey steps+*N0+W1*; PS operator: *w* w* w* setrgbcolor*



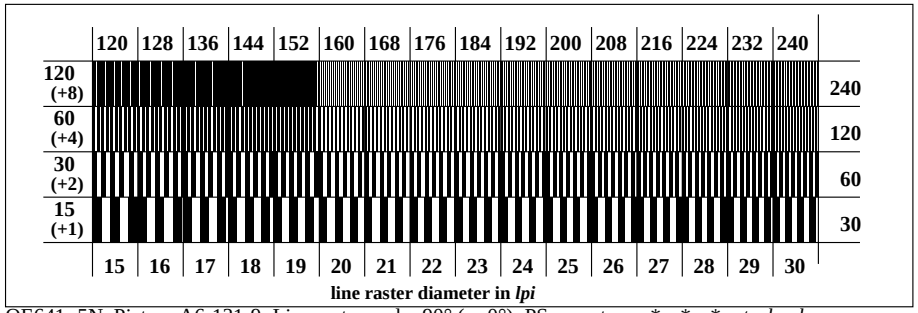
OE640−7N, Picture A3-131-9: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*



OE641−1N, Picture A4-131-9: Landolt-rings *W−N*; PS operator: *w* w* w* setrgbcolor*



OE641−3N, Picture A5-131-9: Line raster under 45° (or 135°); PS operator: *w* w* w* setrgbcolor*



OE641−5N, Picture A6-131-9: Line raster under 90° (or 0°); PS operator: *w* w* w* setrgbcolor*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-9: g_P=1.0; g_N=1.08

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?
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?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-138-10

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	
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 OE641−3N-131-10

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-131-10

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.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/OE64/OE64F1P2.PDF
picture A7-131-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-131-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-131-10

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	5.69	0.0	0.0	0.0	5.69	0.0	0.0	0.0	0.0	0.0	0.01
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
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
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
21	95.41	0.0	0.0	1.0	95.41	0.0	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

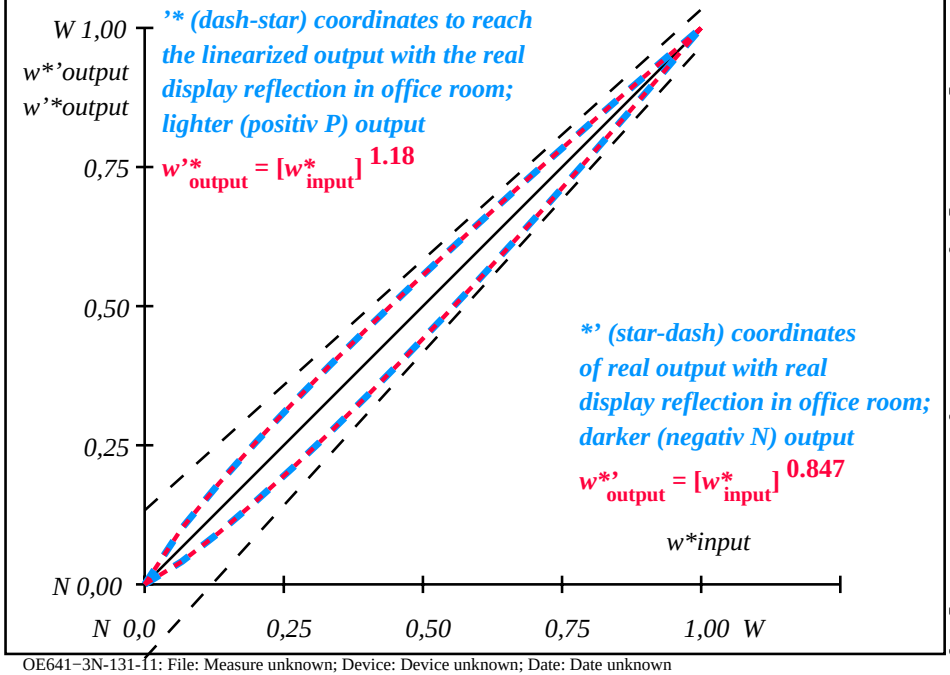
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **3.4**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **2.7**

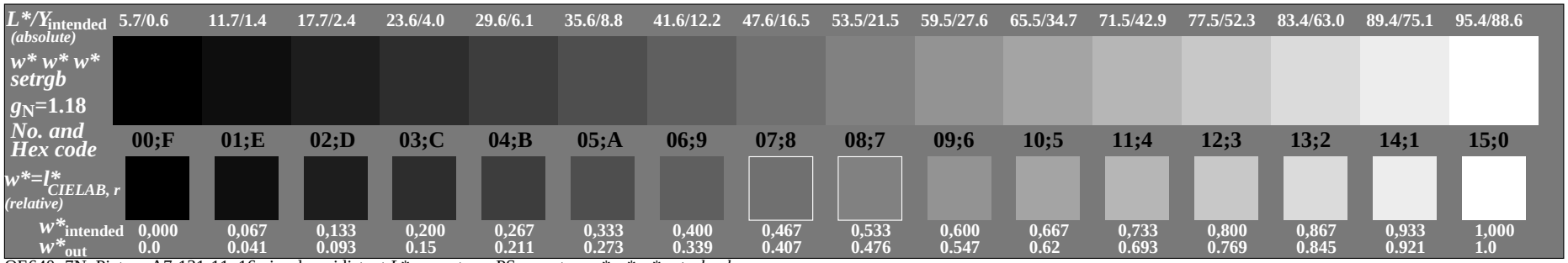
Mean colour reproduction index: $R^*_{ab,m}$ = **85**

OE640−3N-131-11: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-131-11



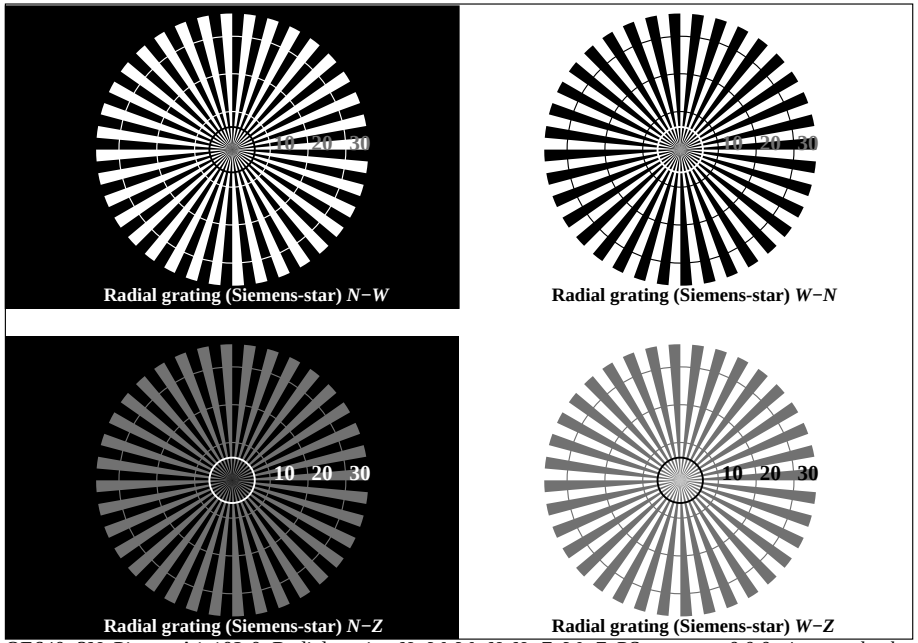
OE641−3N-131-11: File: Measure unknown; Device: Device unknown; Date: Date unknown



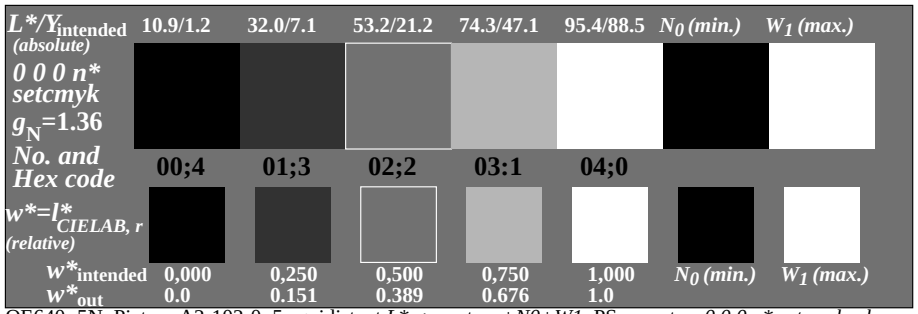
OE640−7N, Picture A7-131-11: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*

OE64: 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

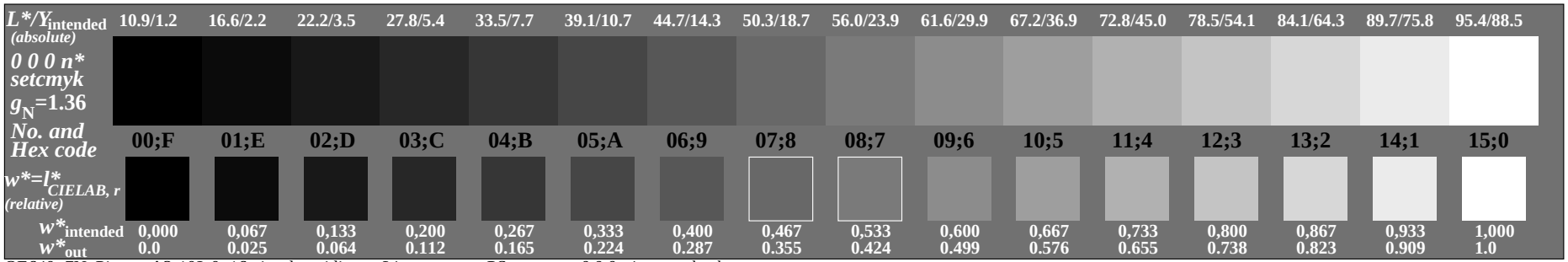
input: *all (−>rgb*de) setrgbcolor*
output 130-11: g_P=1.0; g_N=1.08



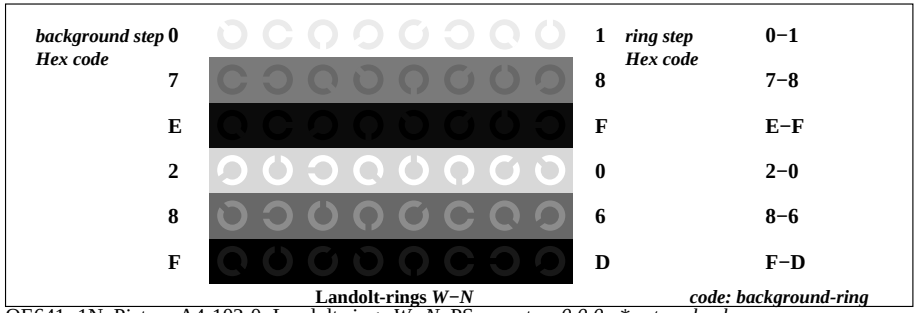
OE640−3N, Picture A1-102-0: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *0 0 0 n* setcmykcolor*



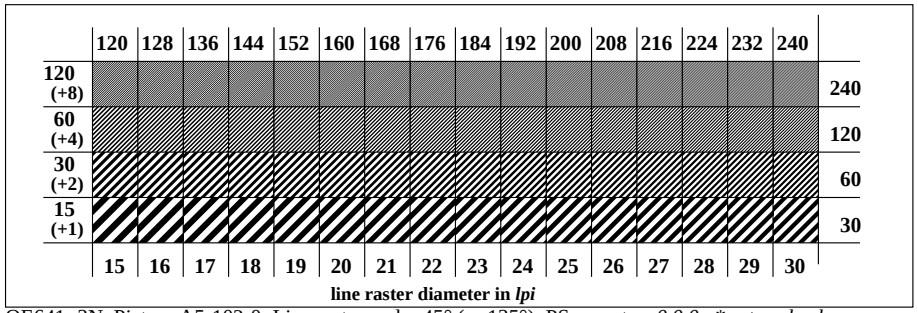
OE640−5N, Picture A2-102-0: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *0 0 0 n* setcmykcolor*



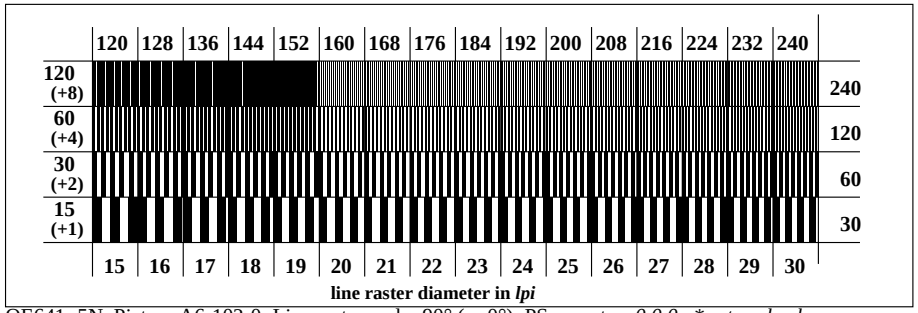
OE640−7N, Picture A3-102-0: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*



OE641−1N, Picture A4-102-0: Landolt-rings *W−N*; PS operator: *0 0 0 n* setcmykcolor*



OE641−3N, Picture A5-102-0: Line raster under 45° (or 135°); PS operator: *0 0 0 n* setcmykcolor*



OE641−5N, Picture A6-102-0: Line raster under 90° (or 0°); PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-0: g_P=1.0; g_N=1.17

Test for the best visual linearized output of Picture A7-102-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-102-0

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**-102-0
Are the 5 steps on the upper rows 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**-102-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1016-1

Test for the best visual linearized output of Picture A7-102-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-102-0
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 A5-102-0
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 A6-102-0
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 OE641−3N-102-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-102-1

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-102-2: **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/OE64/OE64F1P2.PDF
picture A7-102-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-102-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-102-1

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	10.99	0.0	0.0	0.0	10.99	0.0	0.0	0.0	0.0	0.0	0.01
2	16.62	0.0	0.0	0.03	13.12	0.0	0.0	-3.49	0.0	0.0	3.5
3	22.25	0.0	0.0	0.06	16.44	0.0	0.0	-5.8	0.0	0.0	5.81
4	27.88	0.0	0.0	0.11	20.45	0.0	0.0	-7.41	0.0	0.0	7.42
5	33.5	0.0	0.0	0.17	24.98	0.0	0.0	-8.51	0.0	0.0	8.52
6	39.13	0.0	0.0	0.22	29.94	0.0	0.0	-9.18	0.0	0.0	9.19
7	44.76	0.0	0.0	0.29	35.27	0.0	0.0	-9.48	0.0	0.0	9.49
8	50.39	0.0	0.0	0.35	40.93	0.0	0.0	-9.44	0.0	0.0	9.45
9	56.02	0.0	0.0	0.43	46.9	0.0	0.0	-9.11	0.0	0.0	9.12
10	61.64	0.0	0.0	0.5	53.13	0.0	0.0	-8.5	0.0	0.0	8.51
11	67.27	0.0	0.0	0.58	59.63	0.0	0.0	-7.63	0.0	0.0	7.64
12	72.9	0.0	0.0	0.66	66.36	0.0	0.0	-6.53	0.0	0.0	6.54
13	78.53	0.0	0.0	0.74	73.31	0.0	0.0	-5.2	0.0	0.0	5.21
14	84.15	0.0	0.0	0.82	80.48	0.0	0.0	-3.66	0.0	0.0	3.67
15	89.78	0.0	0.0	0.91	87.85	0.0	0.0	-1.92	0.0	0.0	1.93
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	10.99	0.0	0.0	0.0	10.99	0.0	0.0	0.0	0.0	0.0	0.01
18	32.1	0.0	0.0	0.15	23.81	0.0	0.0	-8.28	0.0	0.0	8.29
19	53.2	0.0	0.0	0.39	43.88	0.0	0.0	-9.31	0.0	0.0	9.32
20	74.31	0.0	0.0	0.68	68.08	0.0	0.0	-6.22	0.0	0.0	6.23
21	95.41	0.0	0.0	1.0	95.41	0.0	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

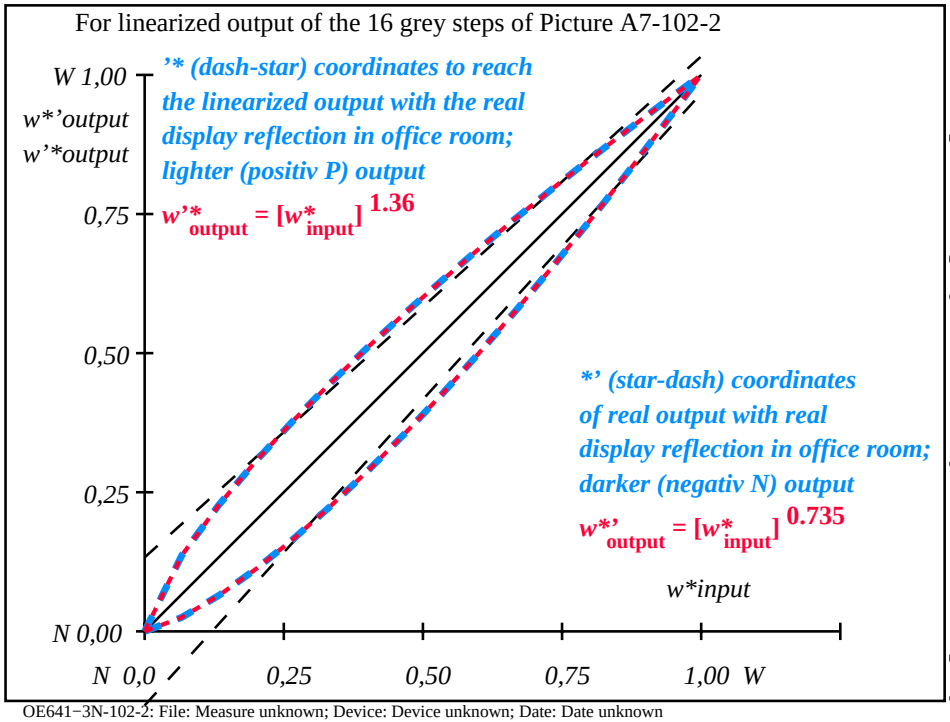
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **6.0**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **4.8**

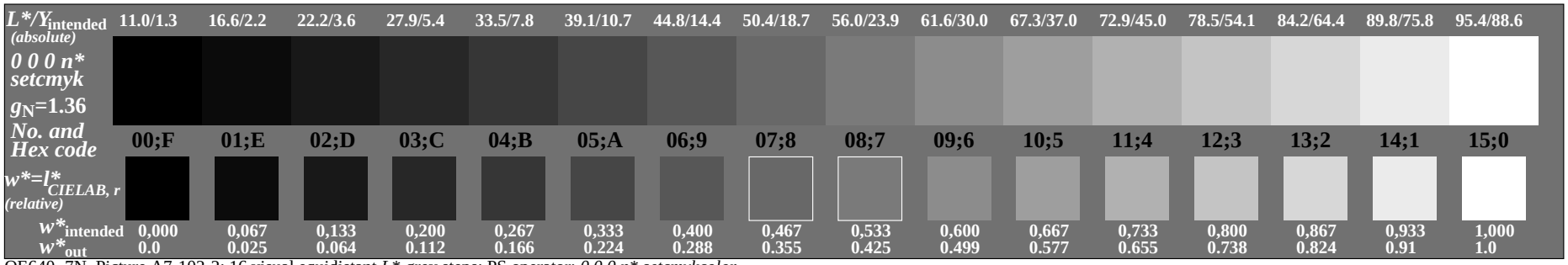
Mean colour reproduction index: $R^*_{ab,m}$ = **74**

OE640−3N-102-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-102-2



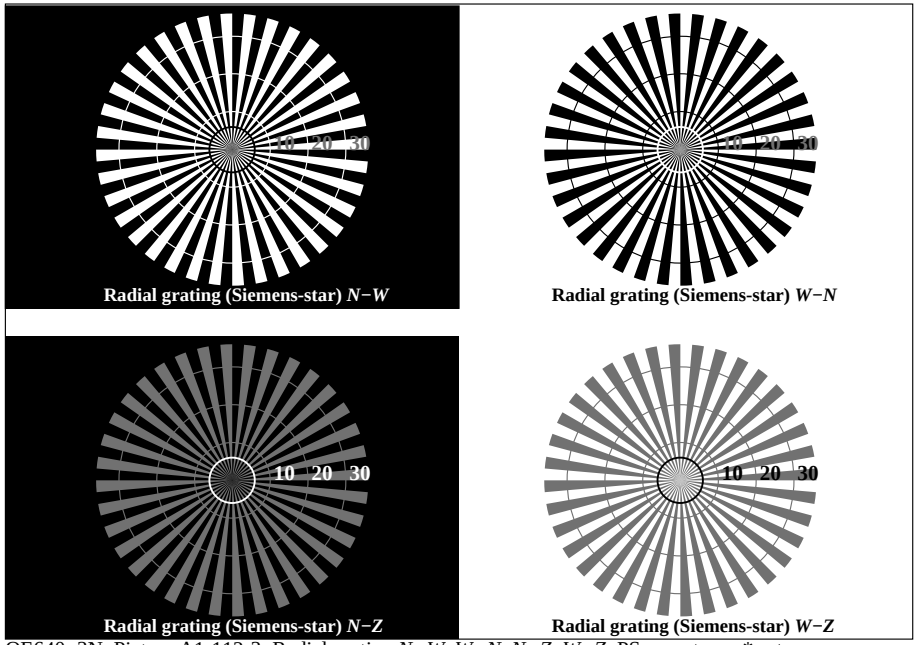
OE641−3N-102-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



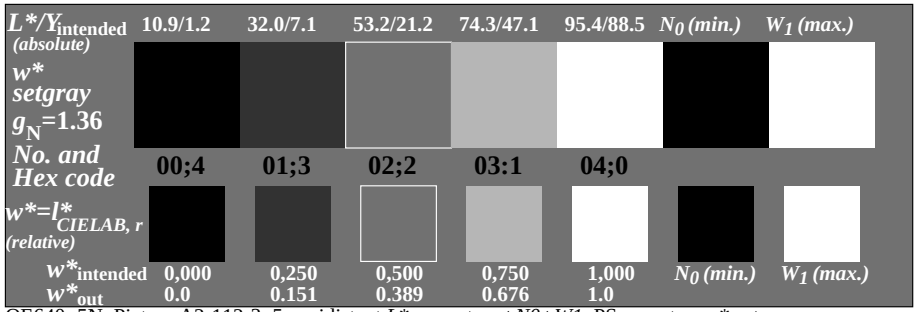
OE640−7N, Picture A7-102-2: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

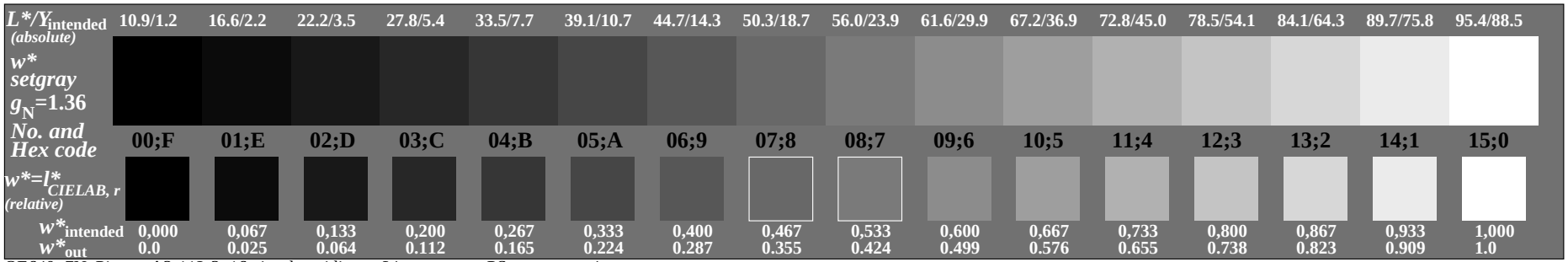
input: *all (−>rgb*de) setrgbcolor*
output 130-2: g_P=1.0; g_N=1.17



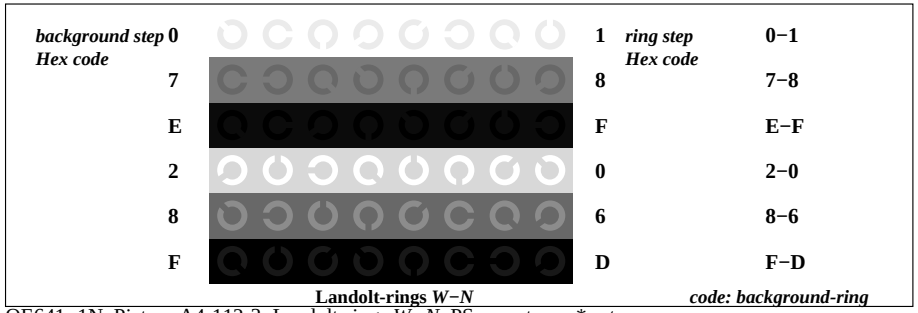
OE640−3N, Picture A1-112-3: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* setgray*



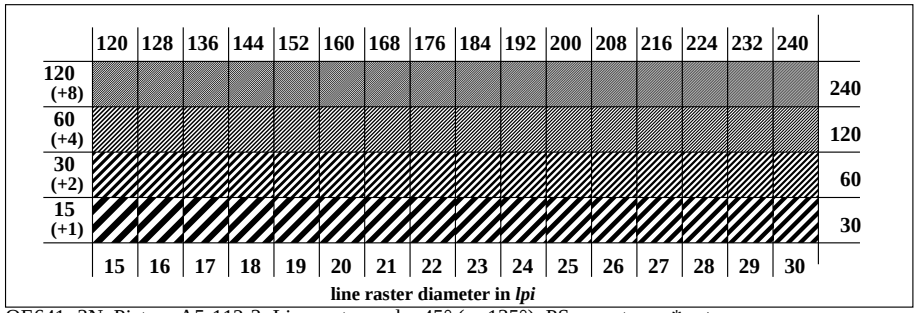
OE640−5N, Picture A2-112-3: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *w* setgray*



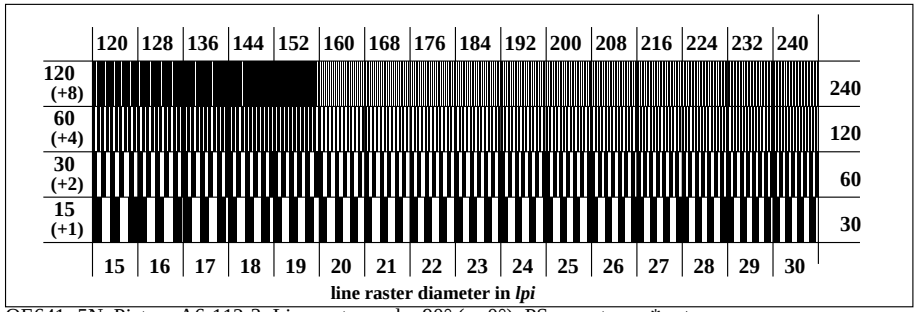
OE640−7N, Picture A3-112-3: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*



OE641−1N, Picture A4-112-3: Landolt-rings *W−N*; PS operator: *w* setgray*



OE641−3N, Picture A5-112-3: Line raster under 45° (or 135°); PS operator: *w* setgray*



OE641−5N, Picture A6-112-3: Line raster under 90° (or 0°); PS operator: *w* setgray*

Test for the best visual linearized output of Picture A7-112-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-112-0

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**-112-0
Are the 5 steps on the upper rows 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**-112-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1116-4

Test for the best visual linearized output of Picture A7-112-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-112-0
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 A5-112-0
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 A6-112-0
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 OE641−3N-112-4

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-112-4

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-112-2: **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/OE64/OE64F1P2.PDF
picture A7-112-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-112-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-112-4

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	10.99	0.0	0.0	0.0	10.99	0.0	0.0	0.0	0.0	0.0	0.01
2	16.62	0.0	0.0	0.03	13.12	0.0	0.0	-3.49	0.0	0.0	3.5
3	22.25	0.0	0.0	0.06	16.44	0.0	0.0	-5.8	0.0	0.0	5.81
4	27.88	0.0	0.0	0.11	20.45	0.0	0.0	-7.41	0.0	0.0	7.42
5	33.5	0.0	0.0	0.17	24.98	0.0	0.0	-8.51	0.0	0.0	8.52
6	39.13	0.0	0.0	0.22	29.94	0.0	0.0	-9.18	0.0	0.0	9.19
7	44.76	0.0	0.0	0.29	35.27	0.0	0.0	-9.48	0.0	0.0	9.49
8	50.39	0.0	0.0	0.35	40.93	0.0	0.0	-9.44	0.0	0.0	9.45
9	56.02	0.0	0.0	0.43	46.9	0.0	0.0	-9.11	0.0	0.0	9.12
10	61.64	0.0	0.0	0.5	53.13	0.0	0.0	-8.5	0.0	0.0	8.51
11	67.27	0.0	0.0	0.58	59.63	0.0	0.0	-7.63	0.0	0.0	7.64
12	72.9	0.0	0.0	0.66	66.36	0.0	0.0	-6.53	0.0	0.0	6.54
13	78.53	0.0	0.0	0.74	73.31	0.0	0.0	-5.2	0.0	0.0	5.21
14	84.15	0.0	0.0	0.82	80.48	0.0	0.0	-3.66	0.0	0.0	3.67
15	89.78	0.0	0.0	0.91	87.85	0.0	0.0	-1.92	0.0	0.0	1.93
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	10.99	0.0	0.0	0.0	10.99	0.0	0.0	0.0	0.0	0.0	0.01
18	32.1	0.0	0.0	0.15	23.81	0.0	0.0	-8.28	0.0	0.0	8.29
19	53.2	0.0	0.0	0.39	43.88	0.0	0.0	-9.31	0.0	0.0	9.32
20	74.31	0.0	0.0	0.68	68.08	0.0	0.0	-6.22	0.0	0.0	6.23
21	95.41	0.0	0.0	1.0	95.41	0.0	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

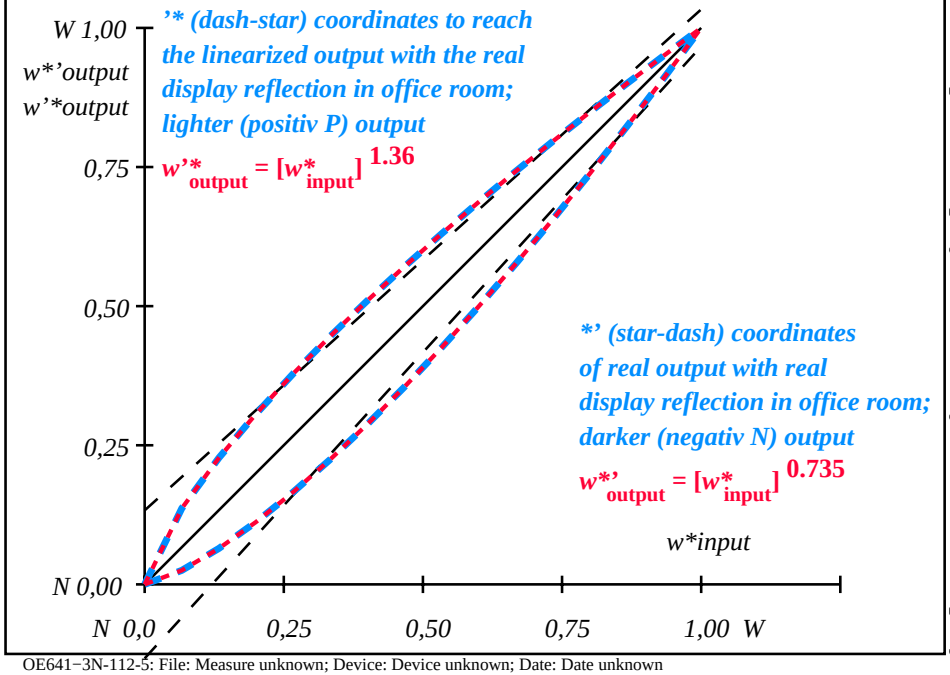
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 6.0

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 4.8

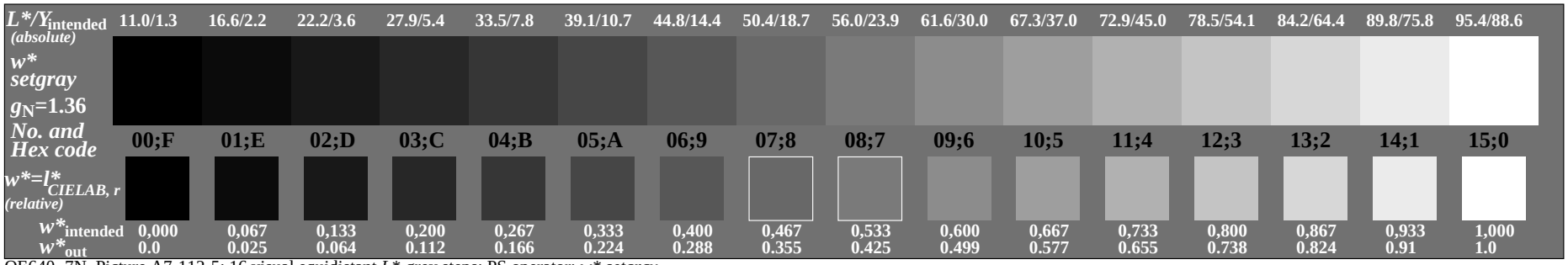
Mean colour reproduction index: $R^*_{ab,m}$ = 74

OE640−3N-112-5: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-112-5



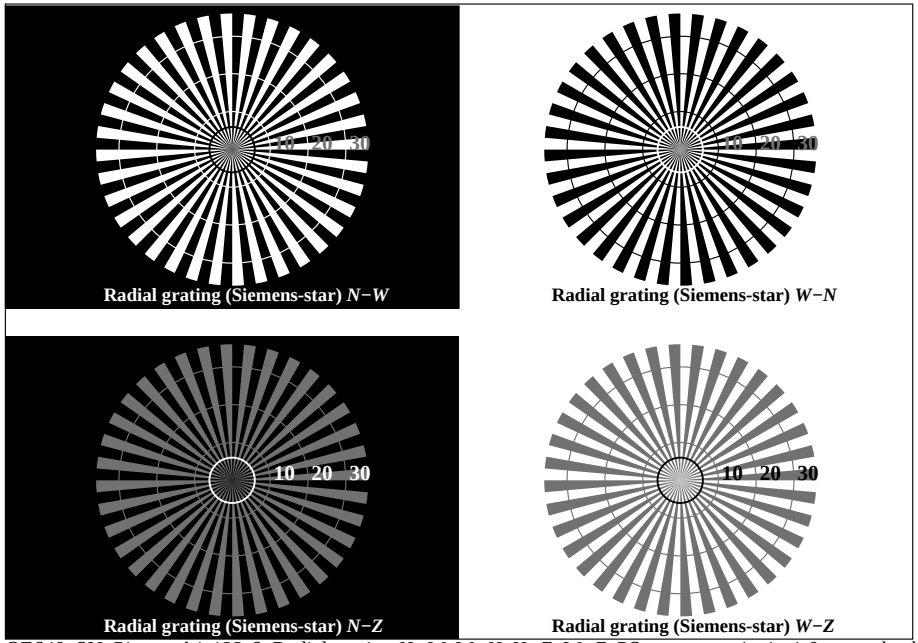
OE641−3N-112-5: File: Measure unknown; Device: Device unknown; Date: Date unknown



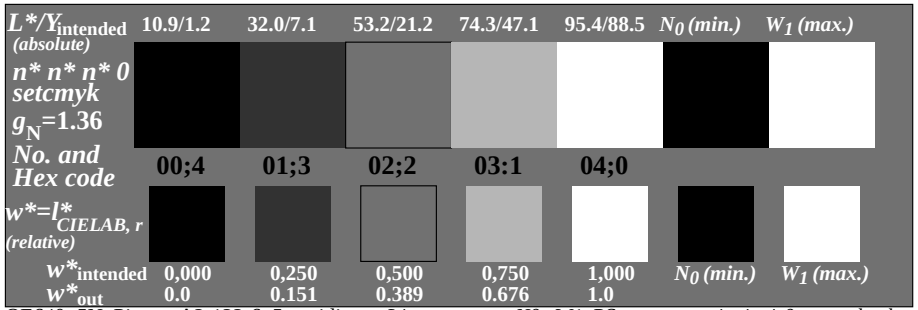
OE640−7N, Picture A7-112-5: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*

OE64: 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

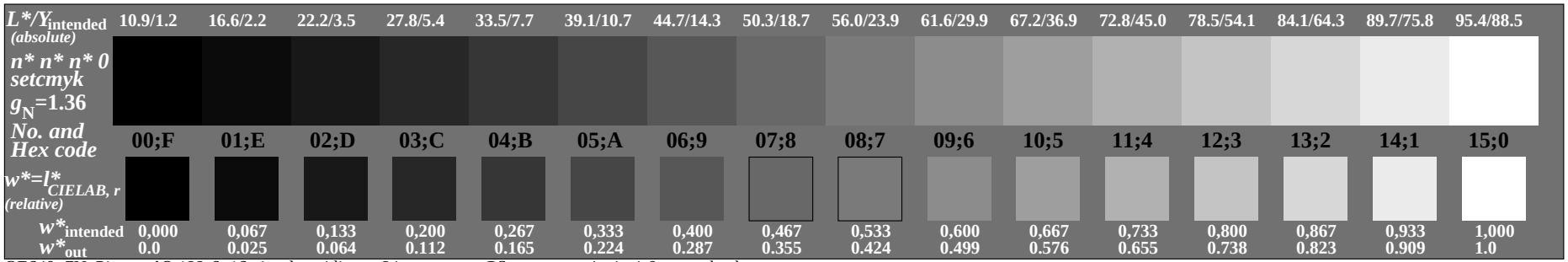
input: *all (−>rgb*de) setrgbcolor*
output 130-5: g_P=1.0; g_N=1.17



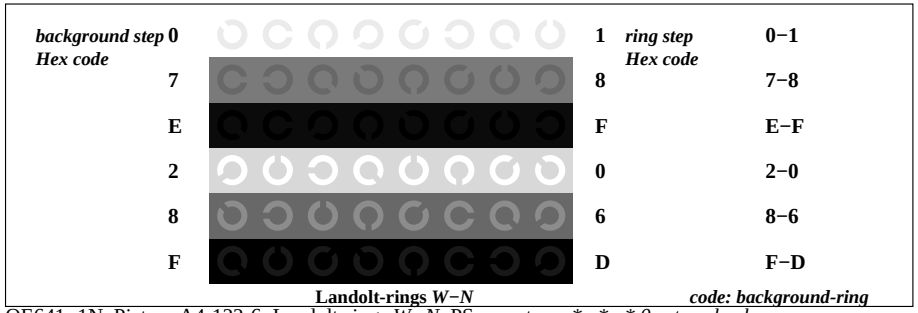
OE640−3N, Picture A1-122-6: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *n* n* n* 0 setcmykcolor*



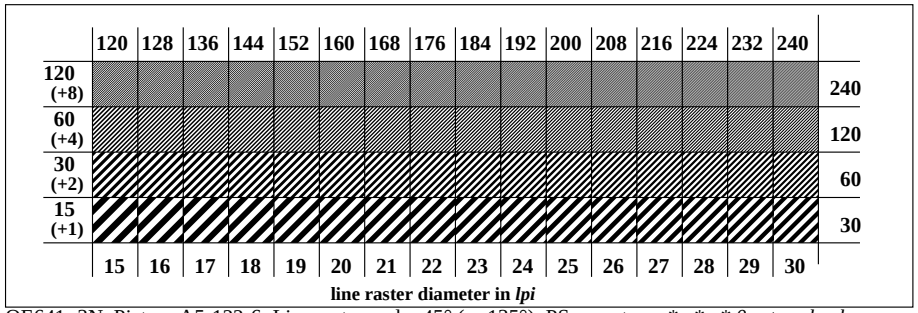
OE640−5N, Picture A2-122-6: 5 equidistant *L**-grey steps+*N0+W1*; PS operator: *n* n* n* 0 setcmykcolor*



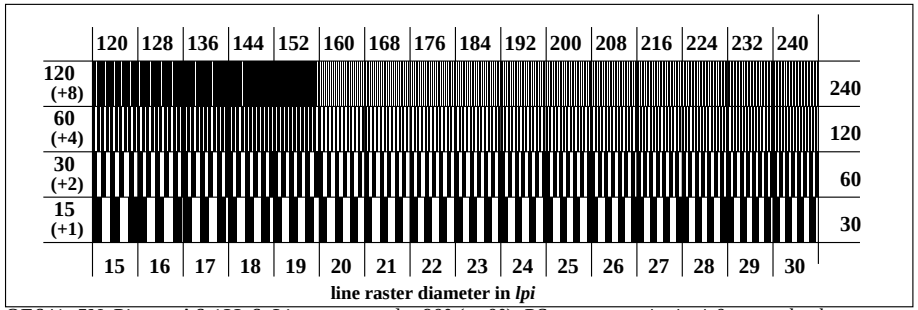
OE640−7N, Picture A3-122-6: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*



OE641−1N, Picture A4-122-6: Landolt-rings *W−N*; PS operator: *n* n* n* 0 setcmykcolor*



OE641−3N, Picture A5-122-6: Line raster under 45° (or 135°); PS operator: *n* n* n* 0 setcmykcolor*



OE641−5N, Picture A6-122-6: Line raster under 90° (or 0°); PS operator: *n* n* n* 0 setcmykcolor*

Test for the best visual linearized output of Picture A7-122-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-122-0

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**-122-0
Are the 5 steps on the upper rows 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**-122-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1216-7

Test for the best visual linearized output of Picture A7-122-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-122-0
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 A5-122-0
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 A6-122-0
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 OE641−3N-122-7

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-122-7

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-122-2: **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/OE64/OE64F1P2.PDF
picture A7-122-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-122-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-122-7

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	10.99	0.0	0.0	0.0	10.99	0.0	0.0	0.0	0.0	0.0	0.01
2	16.62	0.0	0.0	0.03	13.12	0.0	0.0	-3.49	0.0	0.0	3.5
3	22.25	0.0	0.0	0.06	16.44	0.0	0.0	-5.8	0.0	0.0	5.81
4	27.88	0.0	0.0	0.11	20.45	0.0	0.0	-7.41	0.0	0.0	7.42
5	33.5	0.0	0.0	0.17	24.98	0.0	0.0	-8.51	0.0	0.0	8.52
6	39.13	0.0	0.0	0.22	29.94	0.0	0.0	-9.18	0.0	0.0	9.19
7	44.76	0.0	0.0	0.29	35.27	0.0	0.0	-9.48	0.0	0.0	9.49
8	50.39	0.0	0.0	0.35	40.93	0.0	0.0	-9.44	0.0	0.0	9.45
9	56.02	0.0	0.0	0.43	46.9	0.0	0.0	-9.11	0.0	0.0	9.12
10	61.64	0.0	0.0	0.5	53.13	0.0	0.0	-8.5	0.0	0.0	8.51
11	67.27	0.0	0.0	0.58	59.63	0.0	0.0	-7.63	0.0	0.0	7.64
12	72.9	0.0	0.0	0.66	66.36	0.0	0.0	-6.53	0.0	0.0	6.54
13	78.53	0.0	0.0	0.74	73.31	0.0	0.0	-5.2	0.0	0.0	5.21
14	84.15	0.0	0.0	0.82	80.48	0.0	0.0	-3.66	0.0	0.0	3.67
15	89.78	0.0	0.0	0.91	87.85	0.0	0.0	-1.92	0.0	0.0	1.93
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	10.99	0.0	0.0	0.0	10.99	0.0	0.0	0.0	0.0	0.0	0.01
18	32.1	0.0	0.0	0.15	23.81	0.0	0.0	-8.28	0.0	0.0	8.29
19	53.2	0.0	0.0	0.39	43.88	0.0	0.0	-9.31	0.0	0.0	9.32
20	74.31	0.0	0.0	0.68	68.08	0.0	0.0	-6.22	0.0	0.0	6.23
21	95.41	0.0	0.0	1.0	95.41	0.0	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

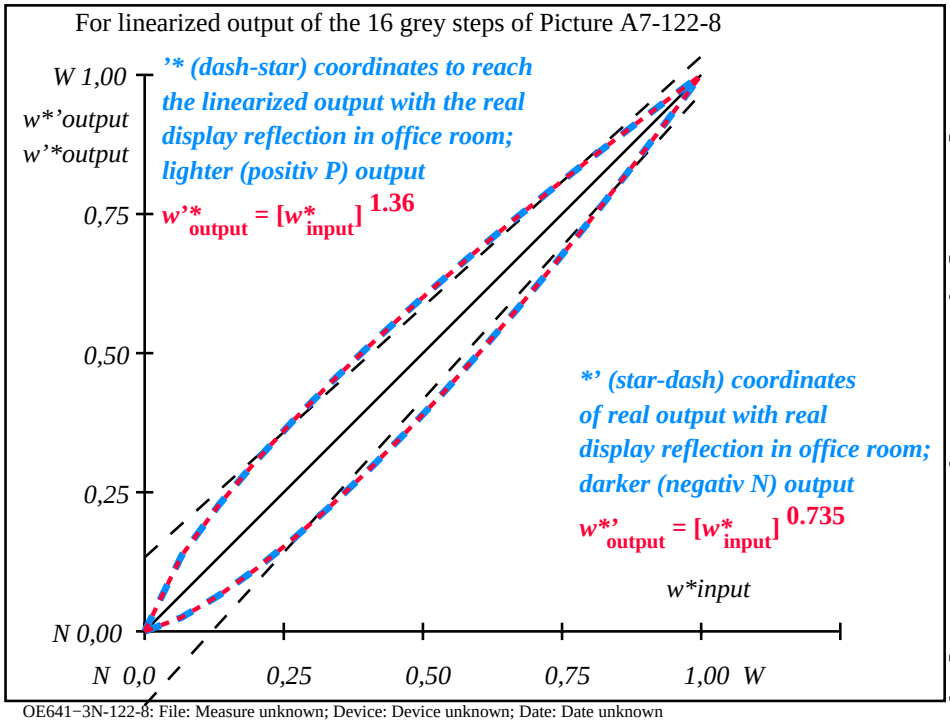
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **6.0**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **4.8**

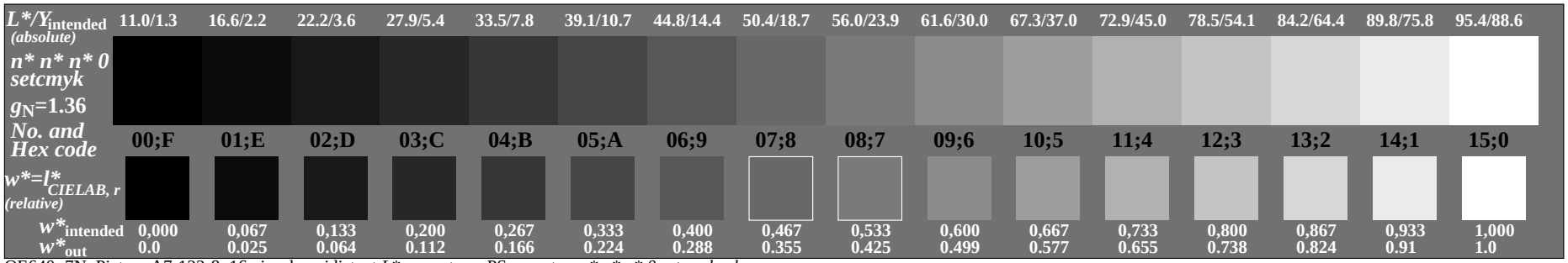
Mean colour reproduction index: $R^*_{ab,m}$ = **74**

OE640−3N-122-8: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-122-8



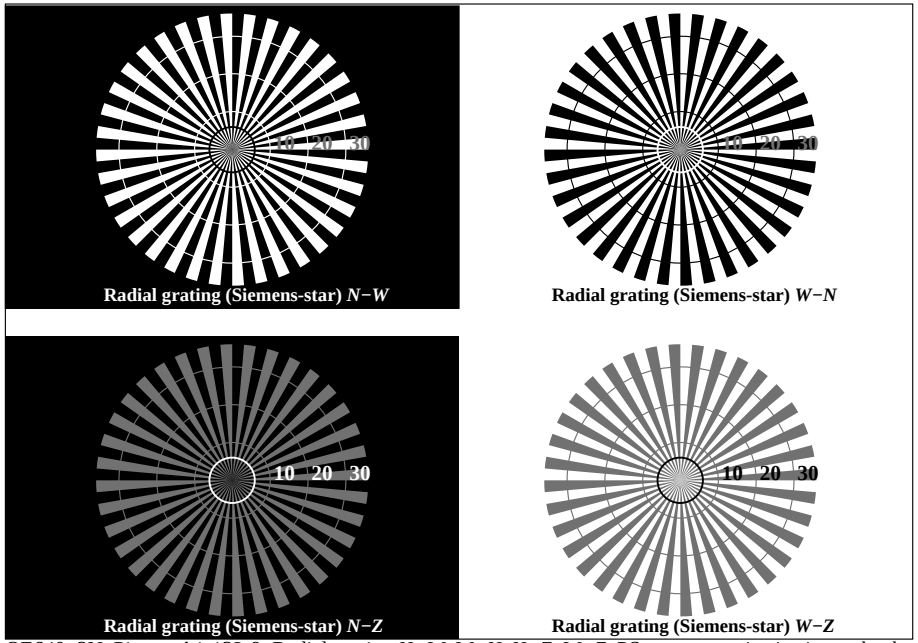
OE641−3N-122-8: File: Measure unknown; Device: Device unknown; Date: Date unknown



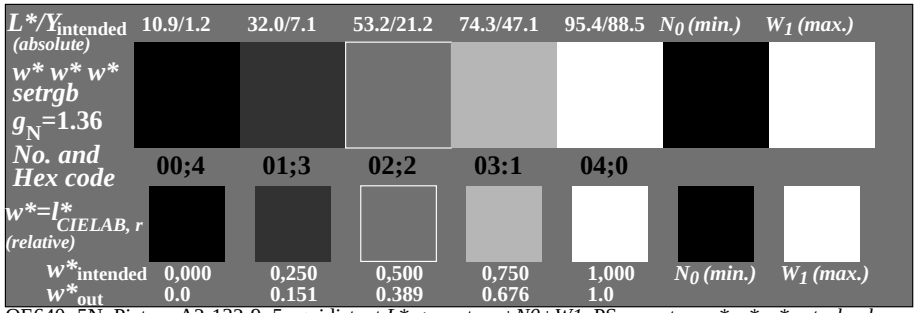
OE640−7N, Picture A7-122-8: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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

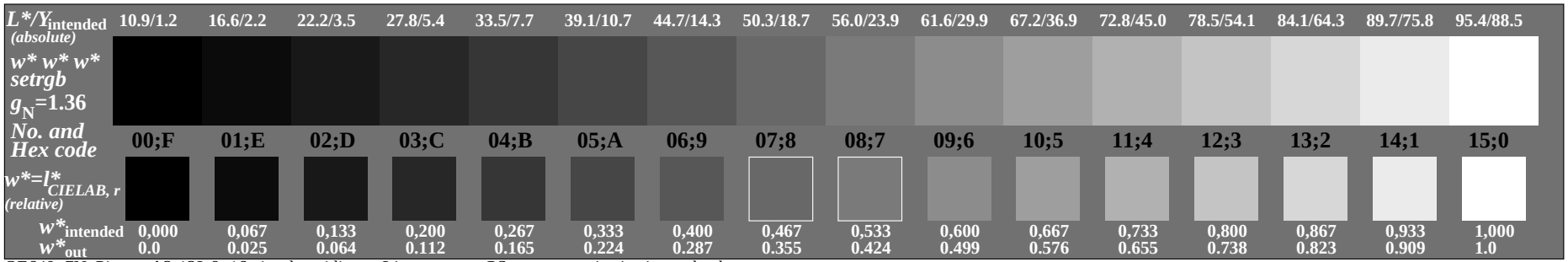
input: *all (−>rgb*de) setrgbcolor*
output 130-8: g_P=1.0; g_N=1.17



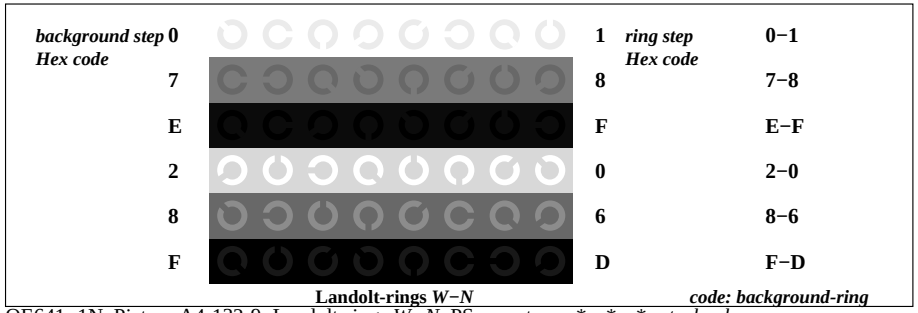
OE640−3N, Picture A1-132-9: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* w* w* setrgbcolor*



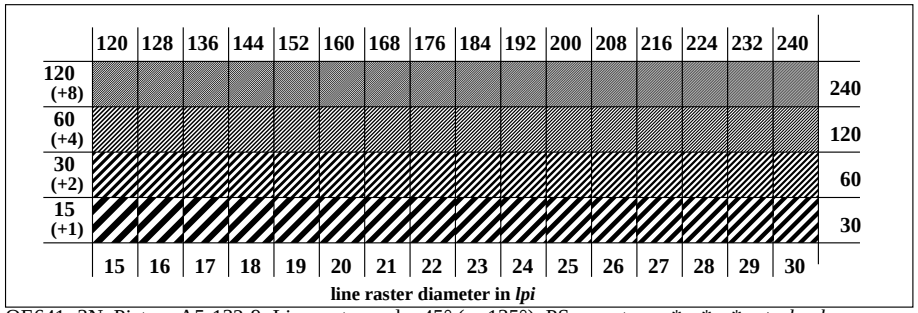
OE640−5N, Picture A2-132-9: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *w* w* w* setrgbcolor*



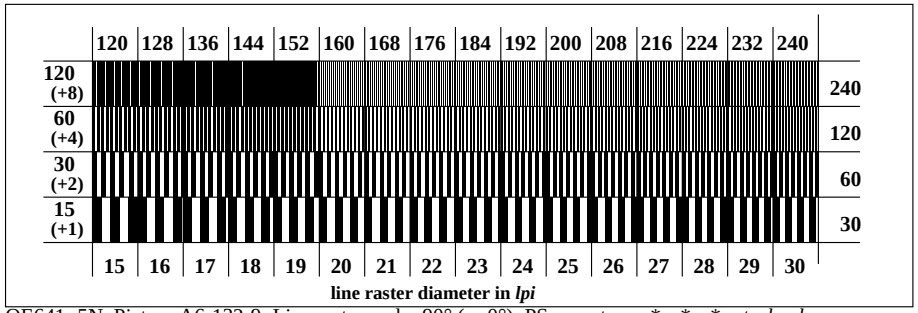
OE640−7N, Picture A3-132-9: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*



OE641−1N, Picture A4-132-9: Landolt-rings *W−N*; PS operator: *w* w* w* setrgbcolor*



OE641−3N, Picture A5-132-9: Line raster under 45° (or 135°); PS operator: *w* w* w* setrgbcolor*



OE641−5N, Picture A6-132-9: Line raster under 90° (or 0°); PS operator: *w* w* w* setrgbcolor*

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?
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?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1316-10

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 OE641−3N-132-10

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-132-10

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline 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 **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/OE64/OE64F1P2.PDF
picture A7-132-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-132-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-132-10

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	10.99	0.0	0.0	0.0	10.99	0.0	0.0	0.0	0.0	0.0	0.01
2	16.62	0.0	0.0	0.03	13.12	0.0	0.0	-3.49	0.0	0.0	3.5
3	22.25	0.0	0.0	0.06	16.44	0.0	0.0	-5.8	0.0	0.0	5.81
4	27.88	0.0	0.0	0.11	20.45	0.0	0.0	-7.41	0.0	0.0	7.42
5	33.5	0.0	0.0	0.17	24.98	0.0	0.0	-8.51	0.0	0.0	8.52
6	39.13	0.0	0.0	0.22	29.94	0.0	0.0	-9.18	0.0	0.0	9.19
7	44.76	0.0	0.0	0.29	35.27	0.0	0.0	-9.48	0.0	0.0	9.49
8	50.39	0.0	0.0	0.35	40.93	0.0	0.0	-9.44	0.0	0.0	9.45
9	56.02	0.0	0.0	0.43	46.9	0.0	0.0	-9.11	0.0	0.0	9.12
10	61.64	0.0	0.0	0.5	53.13	0.0	0.0	-8.5	0.0	0.0	8.51
11	67.27	0.0	0.0	0.58	59.63	0.0	0.0	-7.63	0.0	0.0	7.64
12	72.9	0.0	0.0	0.66	66.36	0.0	0.0	-6.53	0.0	0.0	6.54
13	78.53	0.0	0.0	0.74	73.31	0.0	0.0	-5.2	0.0	0.0	5.21
14	84.15	0.0	0.0	0.82	80.48	0.0	0.0	-3.66	0.0	0.0	3.67
15	89.78	0.0	0.0	0.91	87.85	0.0	0.0	-1.92	0.0	0.0	1.93
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	10.99	0.0	0.0	0.0	10.99	0.0	0.0	0.0	0.0	0.0	0.01
18	32.1	0.0	0.0	0.15	23.81	0.0	0.0	-8.28	0.0	0.0	8.29
19	53.2	0.0	0.0	0.39	43.88	0.0	0.0	-9.31	0.0	0.0	9.32
20	74.31	0.0	0.0	0.68	68.08	0.0	0.0	-6.22	0.0	0.0	6.23
21	95.41	0.0	0.0	1.0	95.41	0.0	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

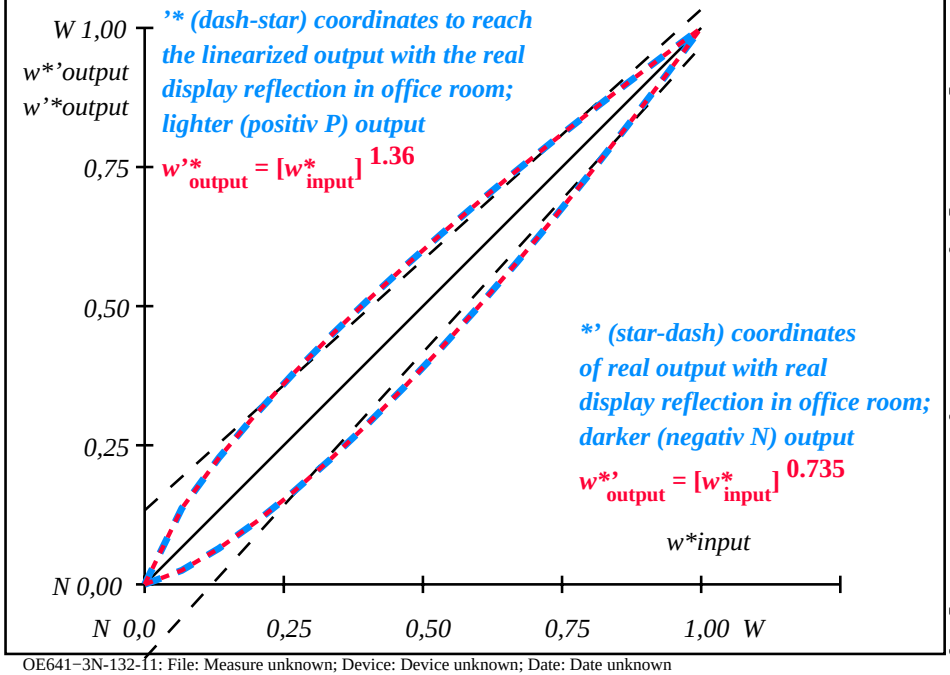
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 6.0

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 4.8

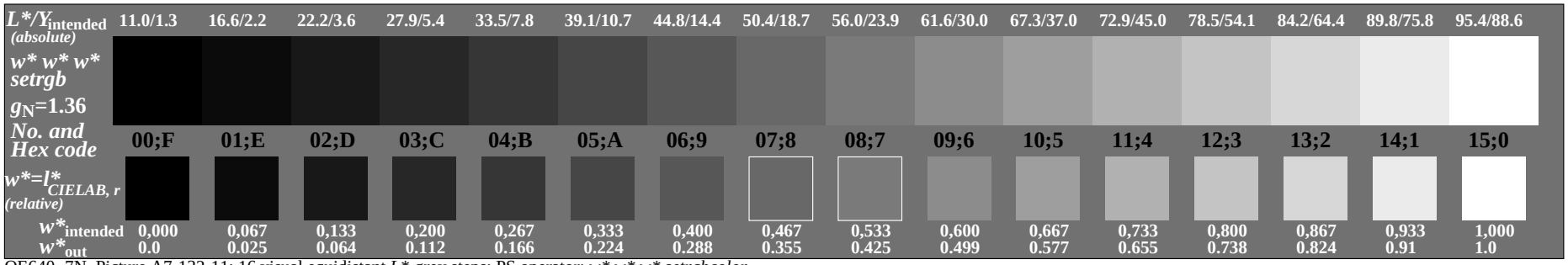
Mean colour reproduction index: $R^*_{ab,m}$ = 74

OE640−3N-132-11: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-132-11



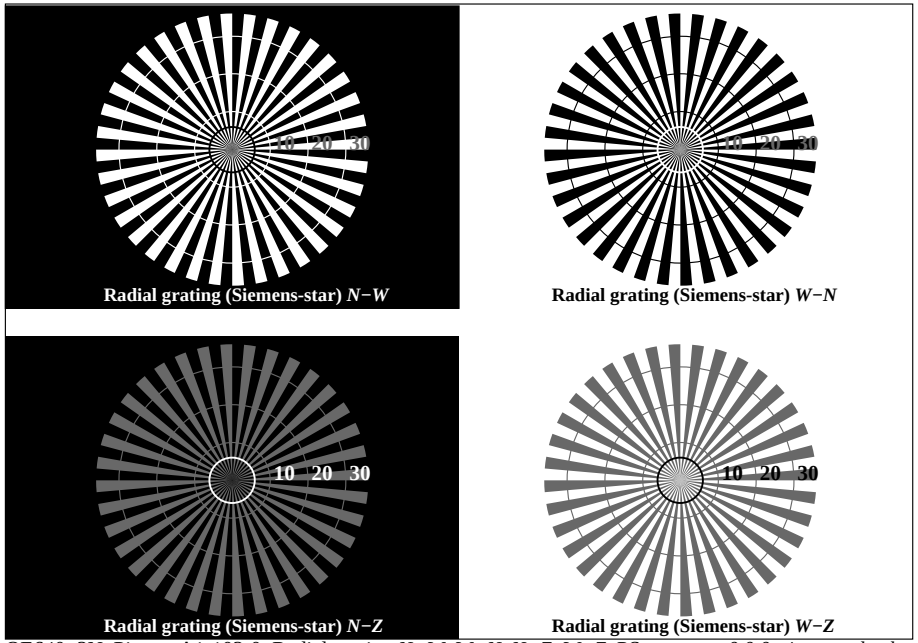
OE641−3N-132-11: File: Measure unknown; Device: Device unknown; Date: Date unknown



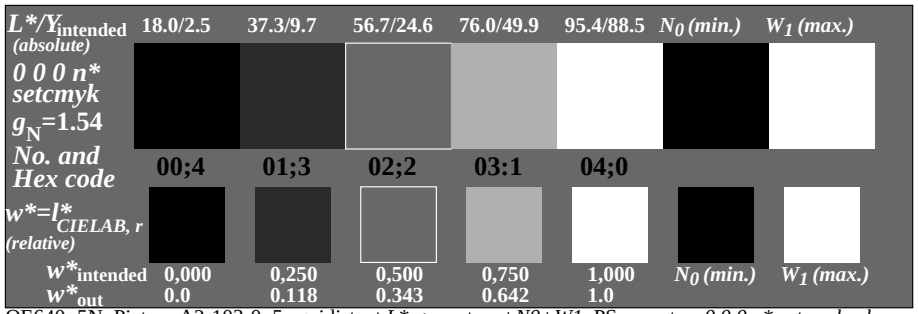
OE640−7N, Picture A7-132-11: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*

OE64: 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

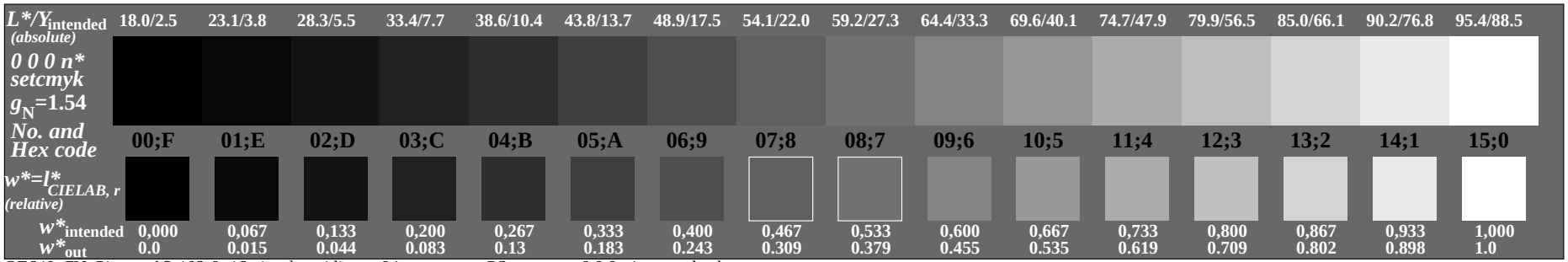
input: *all (−>rgb*de) setrgbcolor*
output 130-11: g_P=1.0; g_N=1.17



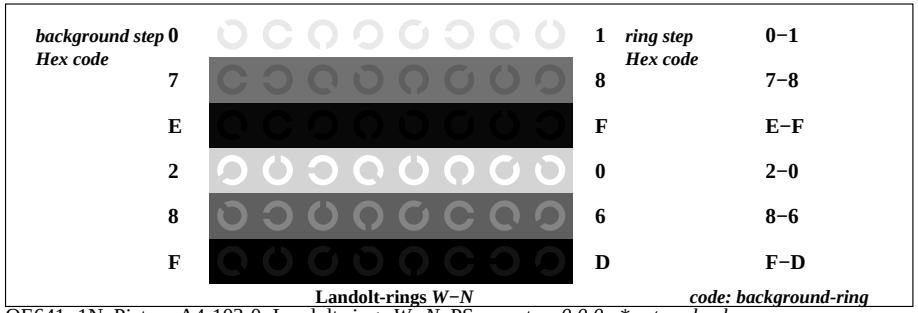
OE640−3N, Picture A1-103-0: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *0 0 0 n* setcmykcolor*



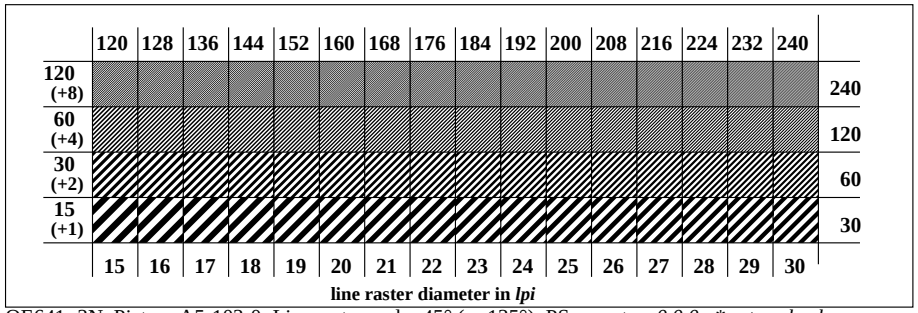
OE640−5N, Picture A2-103-0: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *0 0 0 n* setcmykcolor*



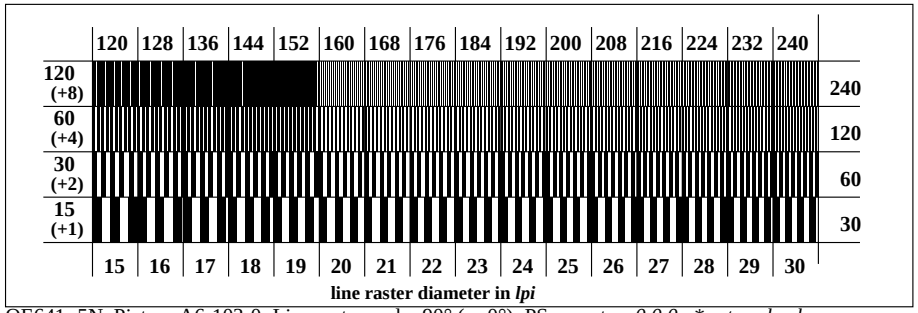
OE640−7N, Picture A3-103-0: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*



OE641−1N, Picture A4-103-0: Landolt-rings *W−N*; PS operator: *0 0 0 n* setcmykcolor*



OE641−3N, Picture A5-103-0: Line raster under 45° (or 135°); PS operator: *0 0 0 n* setcmykcolor*



OE641−5N, Picture A6-103-0: Line raster under 90° (or 0°); PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-0: g_P=1.0; g_N=1.29

Test for the best visual linearized output of Picture A7-103-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-103-0

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**-103-0
Are the 5 steps on the upper rows 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**-103-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1024-1

Test for the best visual linearized output of Picture A7-103-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N−W* according to picture A4-103-0
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 A5-103-0
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 A6-103-0
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 OE641−3N-103-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-103-1

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-103-2: **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/OE64/OE64F1P2.PDF
picture A7-103-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-103-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-103-1

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	18.01	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0.0	0.0	0.01
2	23.17	0.0	0.0	0.02	19.2	0.0	0.0	-3.95	0.0	0.0	3.96
3	28.33	0.0	0.0	0.04	21.49	0.0	0.0	-6.83	0.0	0.0	6.84
4	33.49	0.0	0.0	0.08	24.5	0.0	0.0	-8.98	0.0	0.0	8.99
5	38.65	0.0	0.0	0.13	28.12	0.0	0.0	-10.52	0.0	0.0	10.53
6	43.81	0.0	0.0	0.18	32.26	0.0	0.0	-11.53	0.0	0.0	11.54
7	48.97	0.0	0.0	0.24	36.89	0.0	0.0	-12.07	0.0	0.0	12.08
8	54.13	0.0	0.0	0.31	41.94	0.0	0.0	-12.18	0.0	0.0	12.19
9	59.29	0.0	0.0	0.38	47.41	0.0	0.0	-11.87	0.0	0.0	11.88
10	64.45	0.0	0.0	0.46	53.25	0.0	0.0	-11.19	0.0	0.0	11.2
11	69.61	0.0	0.0	0.54	59.46	0.0	0.0	-10.14	0.0	0.0	10.15
12	74.77	0.0	0.0	0.62	66.02	0.0	0.0	-8.74	0.0	0.0	8.75
13	79.93	0.0	0.0	0.71	72.9	0.0	0.0	-7.02	0.0	0.0	7.03
14	85.09	0.0	0.0	0.8	80.1	0.0	0.0	-4.98	0.0	0.0	4.99
15	90.25	0.0	0.0	0.9	87.61	0.0	0.0	-2.63	0.0	0.0	2.64
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	18.01	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0.0	0.0	0.01
18	37.36	0.0	0.0	0.12	27.16	0.0	0.0	-10.19	0.0	0.0	10.2
19	56.71	0.0	0.0	0.34	44.63	0.0	0.0	-12.07	0.0	0.0	12.08
20	76.06	0.0	0.0	0.64	67.71	0.0	0.0	-8.34	0.0	0.0	8.35
21	95.41	0.0	0.0	1.0	95.41	0.0	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

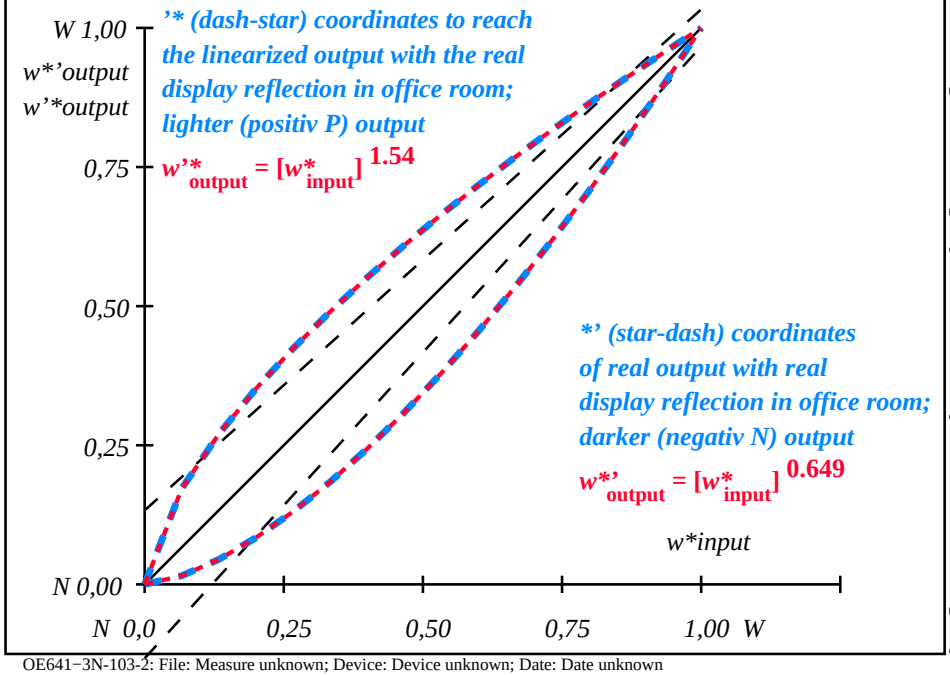
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **7.7**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **6.1**

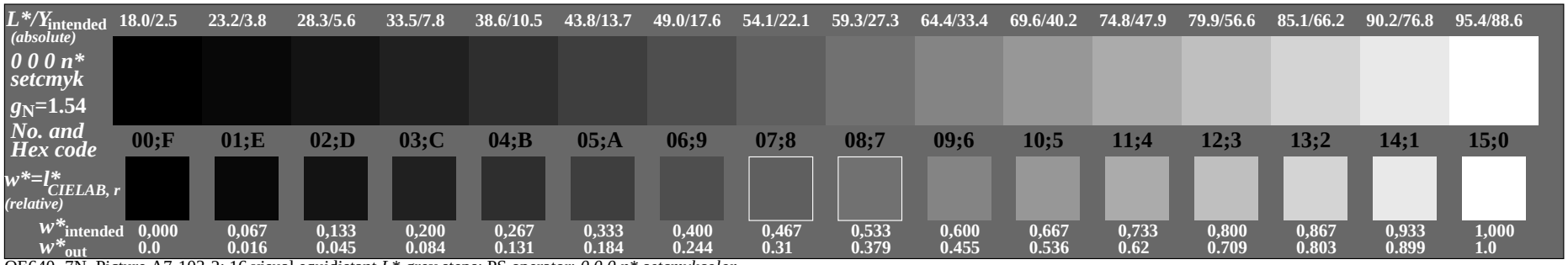
Mean colour reproduction index: $R^*_{ab,m}$ = **66**

OE640−3N-103-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-103-2



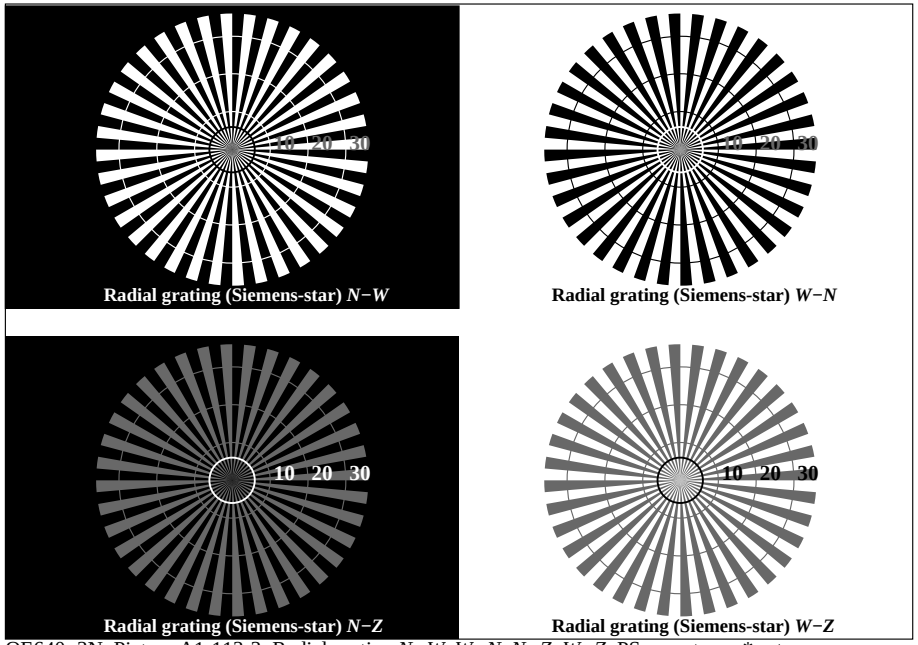
OE641−3N-103-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



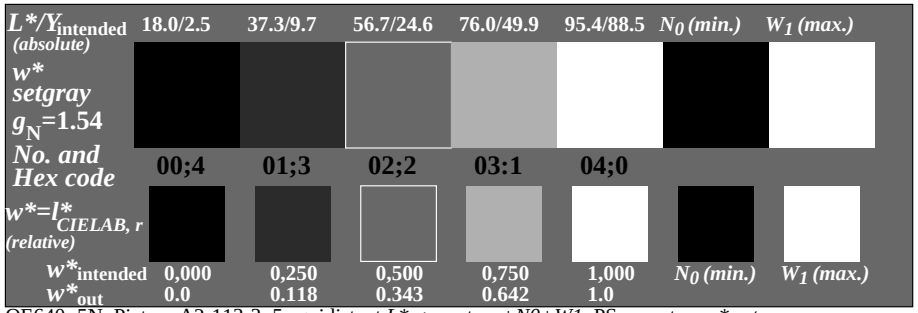
OE640−7N, Picture A7-103-2: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

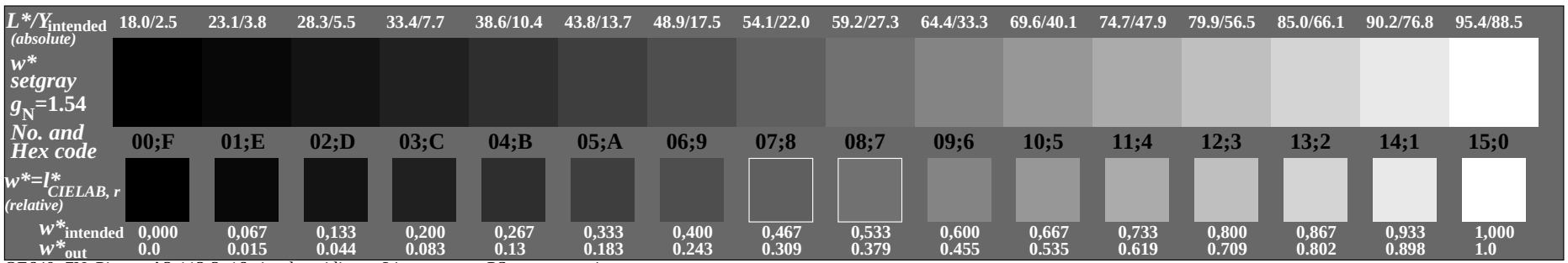
input: *all (−>rgb*de) setrgbcolor*
output 130-2: g_P=1.0; g_N=1.29



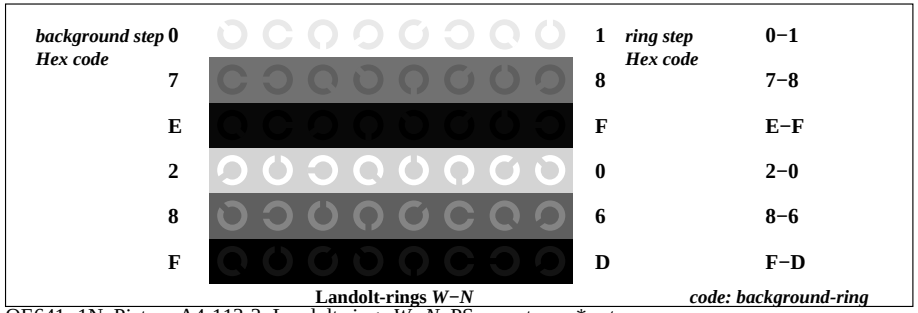
OE640−3N, Picture A1-113-3: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* setgray*



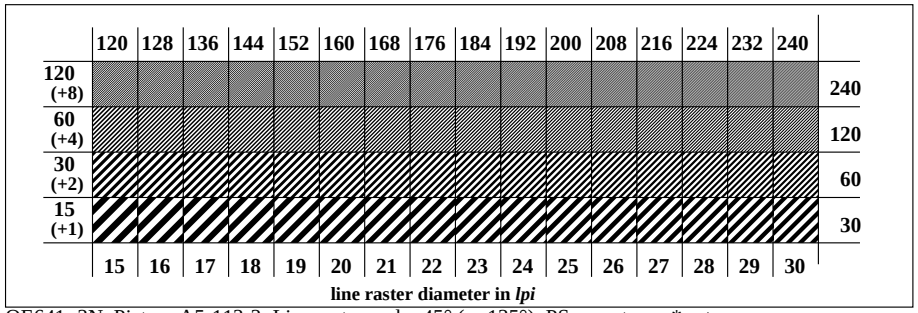
OE640−5N, Picture A2-113-3: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *w* setgray*



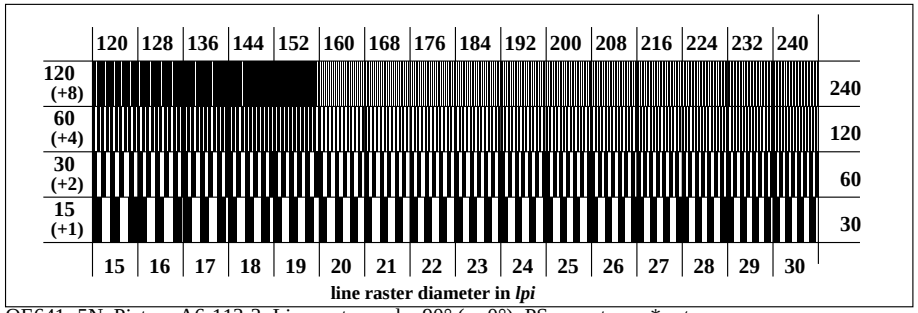
OE640−7N, Picture A3-113-3: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*



OE641−1N, Picture A4-113-3: Landolt-rings *W−N*; PS operator: *w* setgray*



OE641−3N, Picture A5-113-3: Line raster under 45° (or 135°); PS operator: *w* setgray*



OE641−5N, Picture A6-113-3: Line raster under 90° (or 0°); PS operator: *w* setgray*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-3: g_P=1.0; g_N=1.29

Test for the best visual linearized output of Picture A7-113-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-113-0

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**-113-0
Are the 5 steps on the upper rows 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**-113-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1124-4

Test for the best visual linearized output of Picture A7-113-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N−W* according to picture A4-113-0
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 A5-113-0
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 A6-113-0
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 OE641−3N-113-4

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-113-4

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-113-2: **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/OE64/OE64F1P2.PDF
picture A7-113-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-113-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-113-4

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	18.01	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0.0	0.0	0.01
2	23.17	0.0	0.0	0.02	19.2	0.0	0.0	-3.95	0.0	0.0	3.96
3	28.33	0.0	0.0	0.04	21.49	0.0	0.0	-6.83	0.0	0.0	6.84
4	33.49	0.0	0.0	0.08	24.5	0.0	0.0	-8.98	0.0	0.0	8.99
5	38.65	0.0	0.0	0.13	28.12	0.0	0.0	-10.52	0.0	0.0	10.53
6	43.81	0.0	0.0	0.18	32.26	0.0	0.0	-11.53	0.0	0.0	11.54
7	48.97	0.0	0.0	0.24	36.89	0.0	0.0	-12.07	0.0	0.0	12.08
8	54.13	0.0	0.0	0.31	41.94	0.0	0.0	-12.18	0.0	0.0	12.19
9	59.29	0.0	0.0	0.38	47.41	0.0	0.0	-11.87	0.0	0.0	11.88
10	64.45	0.0	0.0	0.46	53.25	0.0	0.0	-11.19	0.0	0.0	11.2
11	69.61	0.0	0.0	0.54	59.46	0.0	0.0	-10.14	0.0	0.0	10.15
12	74.77	0.0	0.0	0.62	66.02	0.0	0.0	-8.74	0.0	0.0	8.75
13	79.93	0.0	0.0	0.71	72.9	0.0	0.0	-7.02	0.0	0.0	7.03
14	85.09	0.0	0.0	0.8	80.1	0.0	0.0	-4.98	0.0	0.0	4.99
15	90.25	0.0	0.0	0.9	87.61	0.0	0.0	-2.63	0.0	0.0	2.64
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	18.01	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0.0	0.0	0.01
18	37.36	0.0	0.0	0.12	27.16	0.0	0.0	-10.19	0.0	0.0	10.2
19	56.71	0.0	0.0	0.34	44.63	0.0	0.0	-12.07	0.0	0.0	12.08
20	76.06	0.0	0.0	0.64	67.71	0.0	0.0	-8.34	0.0	0.0	8.35
21	95.41	0.0	0.0	1.0	95.41	0.0	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

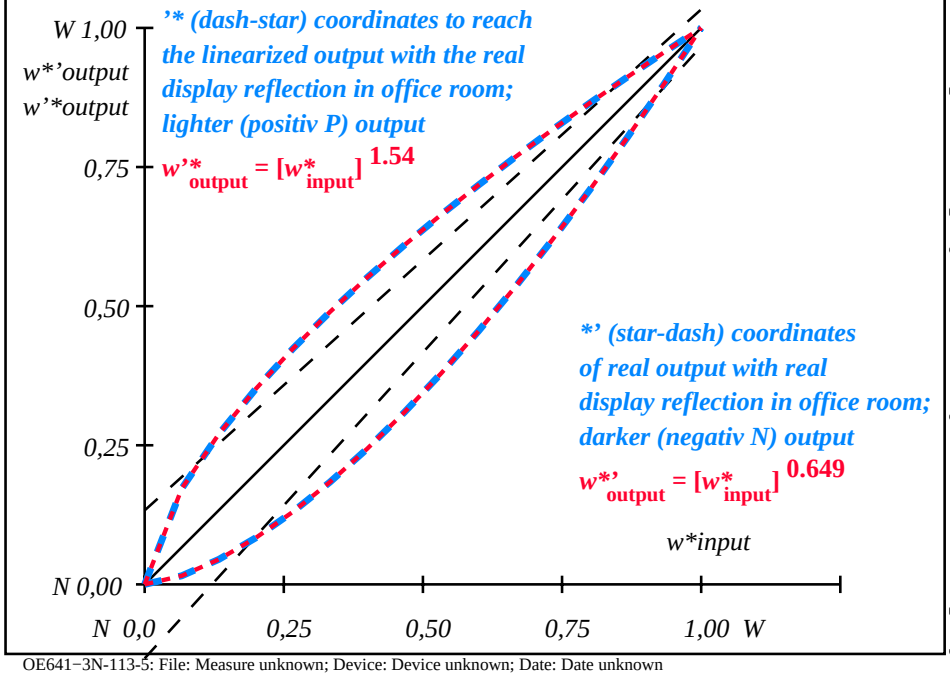
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **7.7**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **6.1**

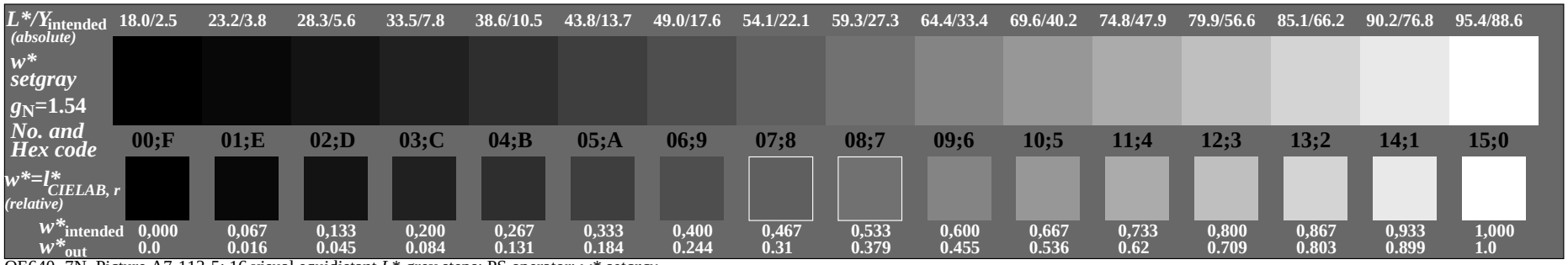
Mean colour reproduction index: $R^*_{ab,m}$ = **66**

OE640−3N-113-5: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-113-5



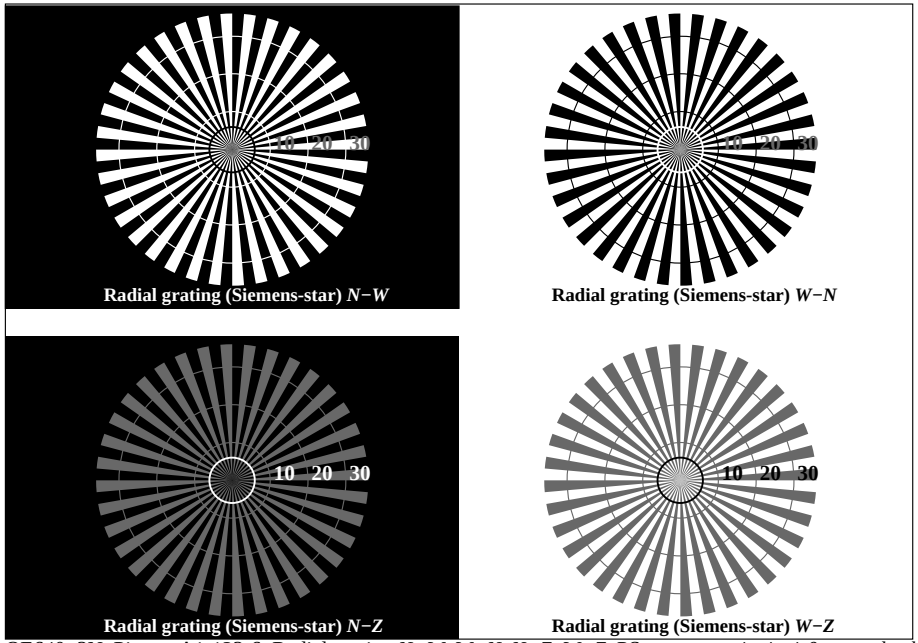
OE641−3N-113-5: File: Measure unknown; Device: Device unknown; Date: Date unknown



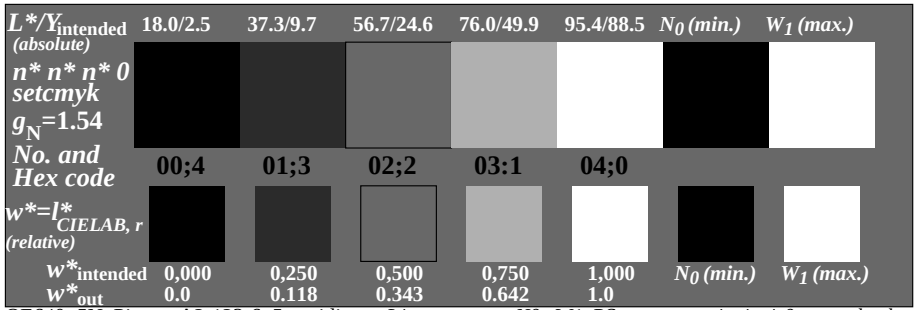
OE640−7N, Picture A7-113-5: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*

OE64: 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

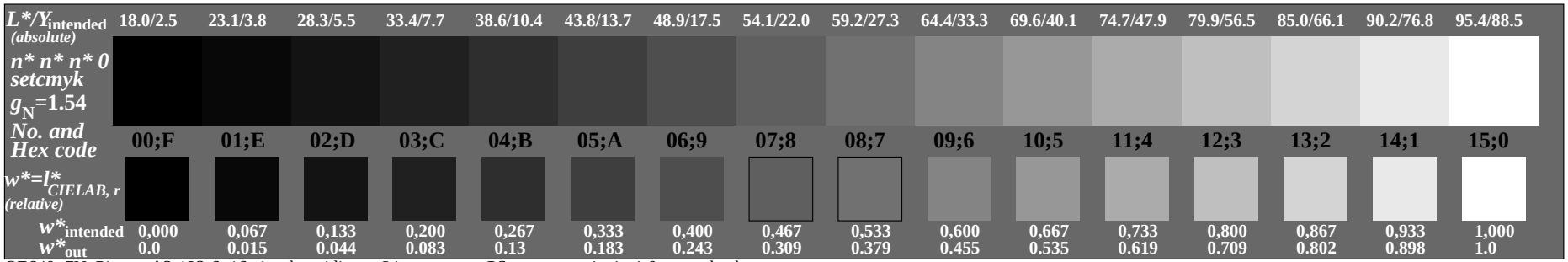
input: *all (−>rgb*de) setrgbcolor*
output 130-5: g_P=1.0; g_N=1.29



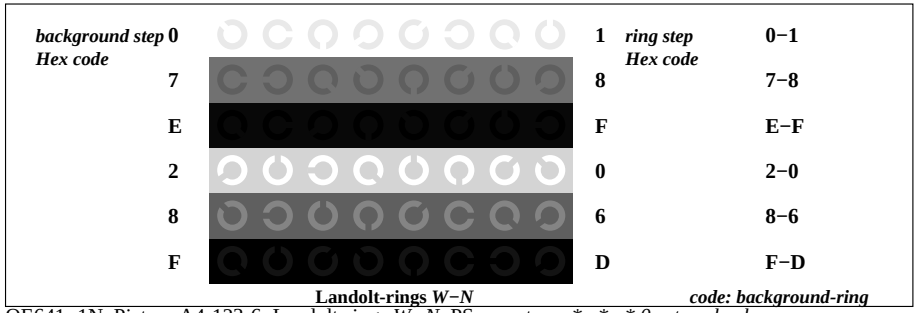
OE640−3N, Picture A1-123-6: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *n* n* n* 0 setcmykcolor*



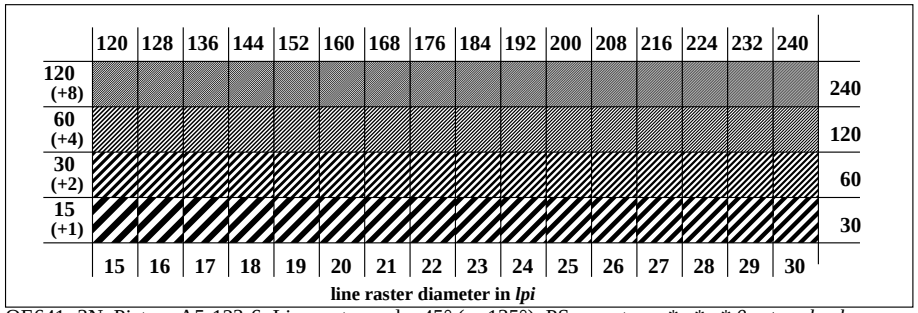
OE640−5N, Picture A2-123-6: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *n* n* n* 0 setcmykcolor*



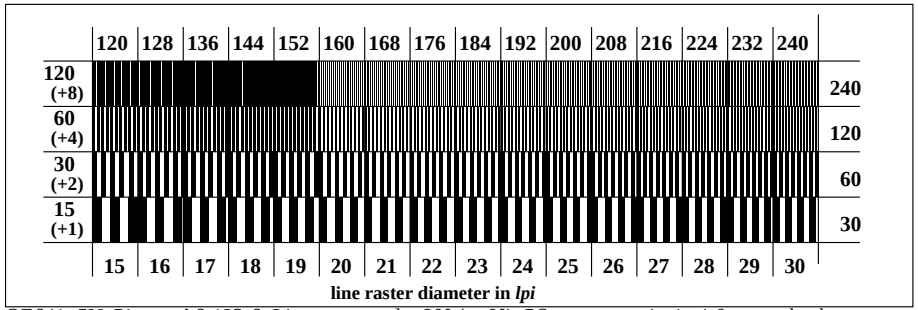
OE640−7N, Picture A3-123-6: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*



OE641−1N, Picture A4-123-6: Landolt-rings *W−N*; PS operator: *n* n* n* 0 setcmykcolor*



OE641−3N, Picture A5-123-6: Line raster under 45° (or 135°); PS operator: *n* n* n* 0 setcmykcolor*



OE641−5N, Picture A6-123-6: Line raster under 90° (or 0°); PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-6: g_P=1.0; g_N=1.29

Test for the best visual linearized output of Picture A7-123-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-123-0

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**-123-0
Are the 5 steps on the upper rows 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**-123-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1224-7

Test for the best visual linearized output of Picture A7-123-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-123-0
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 A5-123-0
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 A6-123-0
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 OE641−3N-123-7

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-123-7

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-123-2: **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/OE64/OE64F1P2.PDF
picture A7-123-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-123-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-123-7

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	18.01	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0.0	0.0	0.01
2	23.17	0.0	0.0	0.02	19.2	0.0	0.0	-3.95	0.0	0.0	3.96
3	28.33	0.0	0.0	0.04	21.49	0.0	0.0	-6.83	0.0	0.0	6.84
4	33.49	0.0	0.0	0.08	24.5	0.0	0.0	-8.98	0.0	0.0	8.99
5	38.65	0.0	0.0	0.13	28.12	0.0	0.0	-10.52	0.0	0.0	10.53
6	43.81	0.0	0.0	0.18	32.26	0.0	0.0	-11.53	0.0	0.0	11.54
7	48.97	0.0	0.0	0.24	36.89	0.0	0.0	-12.07	0.0	0.0	12.08
8	54.13	0.0	0.0	0.31	41.94	0.0	0.0	-12.18	0.0	0.0	12.19
9	59.29	0.0	0.0	0.38	47.41	0.0	0.0	-11.87	0.0	0.0	11.88
10	64.45	0.0	0.0	0.46	53.25	0.0	0.0	-11.19	0.0	0.0	11.2
11	69.61	0.0	0.0	0.54	59.46	0.0	0.0	-10.14	0.0	0.0	10.15
12	74.77	0.0	0.0	0.62	66.02	0.0	0.0	-8.74	0.0	0.0	8.75
13	79.93	0.0	0.0	0.71	72.9	0.0	0.0	-7.02	0.0	0.0	7.03
14	85.09	0.0	0.0	0.8	80.1	0.0	0.0	-4.98	0.0	0.0	4.99
15	90.25	0.0	0.0	0.9	87.61	0.0	0.0	-2.63	0.0	0.0	2.64
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	18.01	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0.0	0.0	0.01
18	37.36	0.0	0.0	0.12	27.16	0.0	0.0	-10.19	0.0	0.0	10.2
19	56.71	0.0	0.0	0.34	44.63	0.0	0.0	-12.07	0.0	0.0	12.08
20	76.06	0.0	0.0	0.64	67.71	0.0	0.0	-8.34	0.0	0.0	8.35
21	95.41	0.0	0.0	1.0	95.41	0.0	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

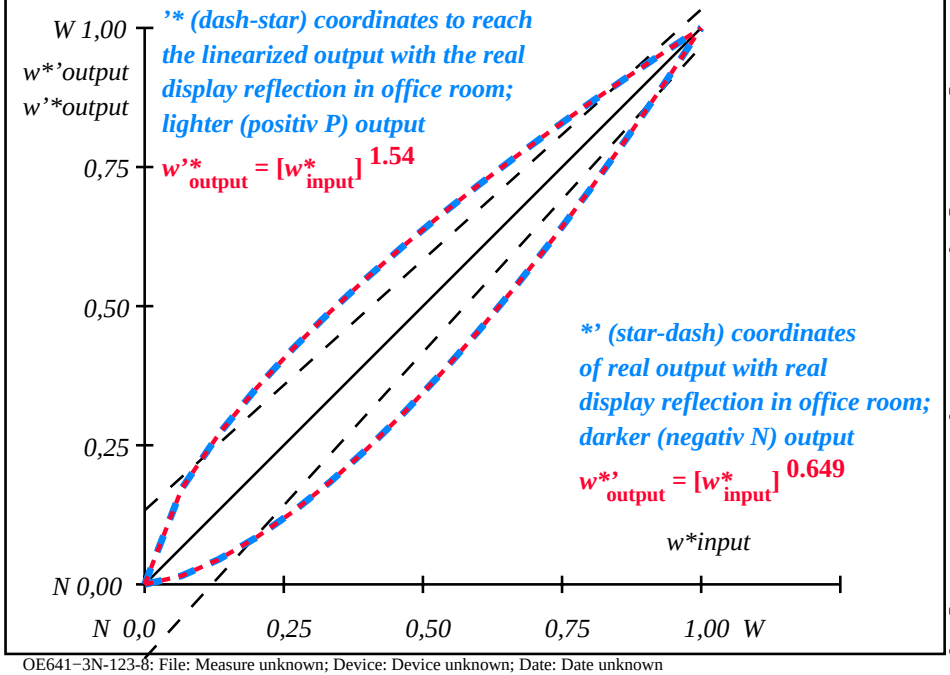
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **7.7**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **6.1**

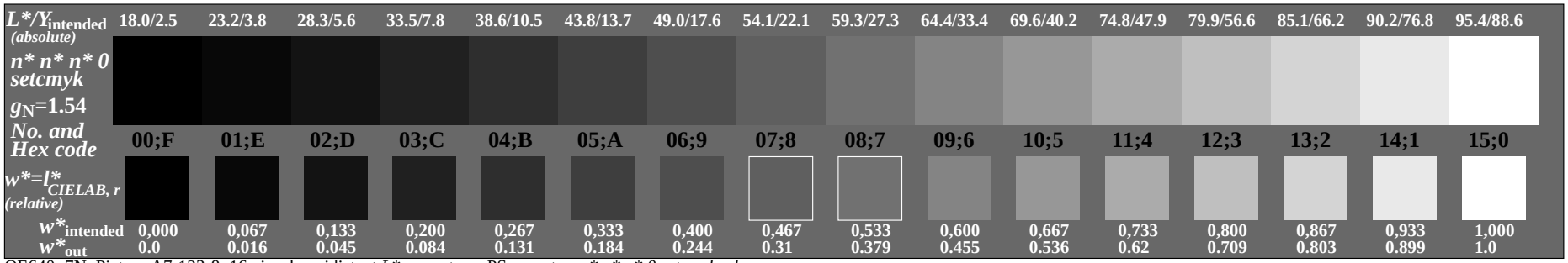
Mean colour reproduction index: $R^*_{ab,m}$ = **66**

OE640−3N-123-8: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-123-8



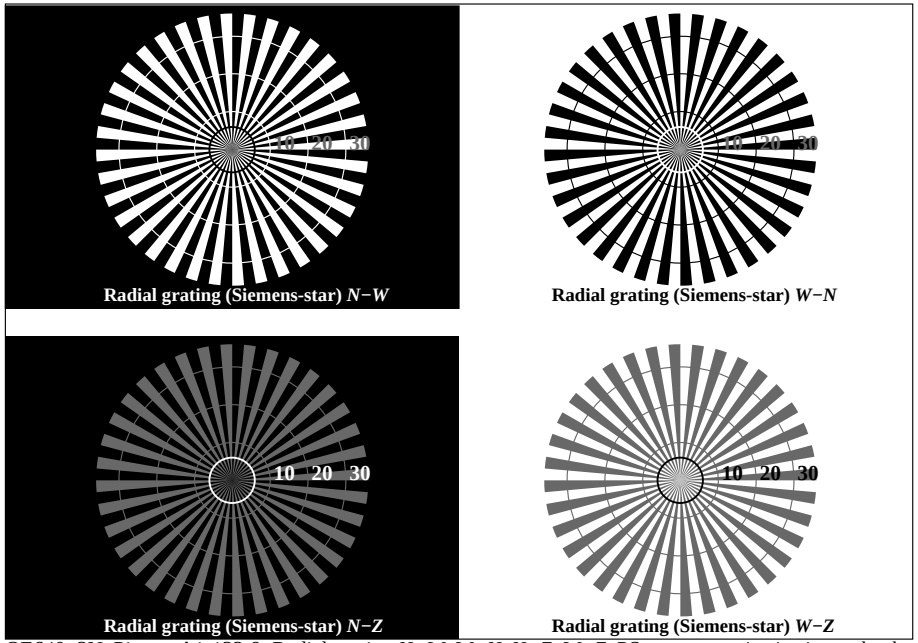
OE641−3N-123-8: File: Measure unknown; Device: Device unknown; Date: Date unknown



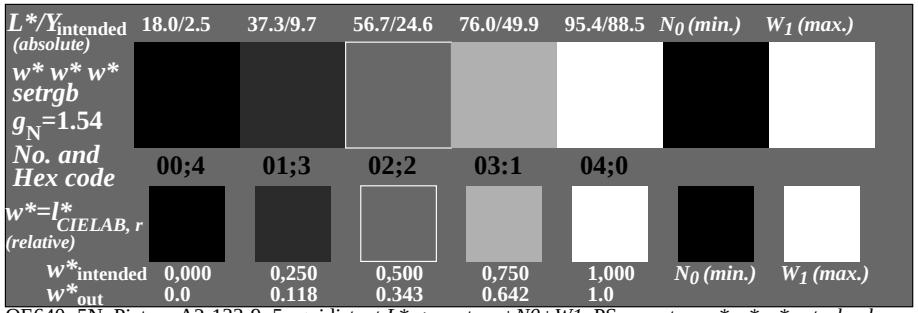
OE640−7N, Picture A7-123-8: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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

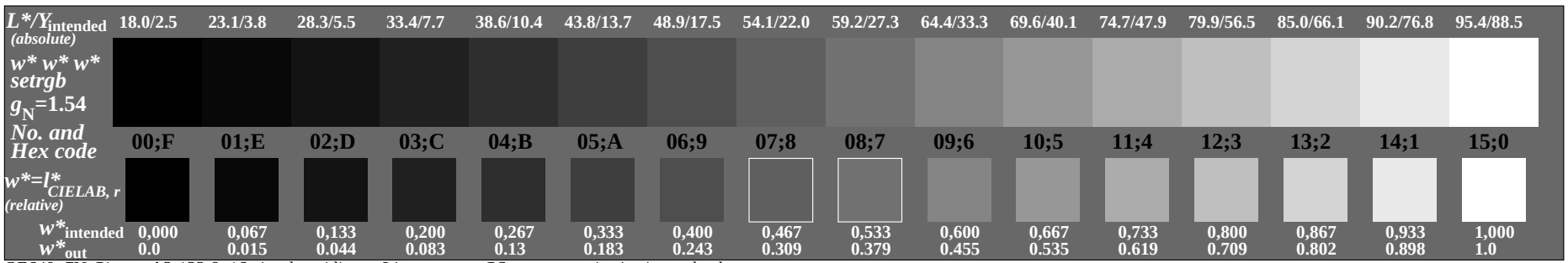
input: *all (−>rgb*de) setrgbcolor*
output 130-8: g_P=1.0; g_N=1.29



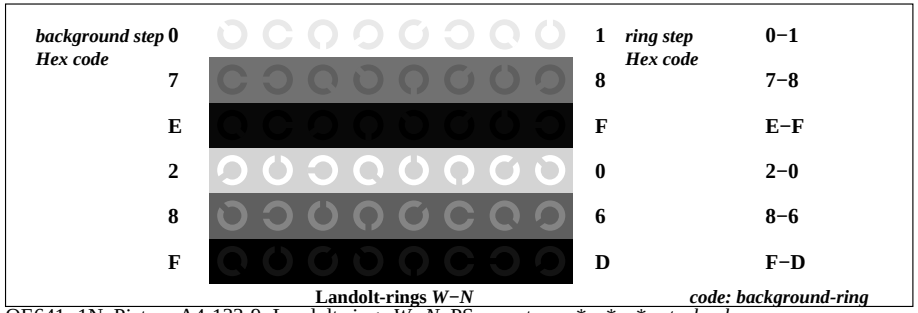
OE640−3N, Picture A1-133-9: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* w* w* setrgbcolor*



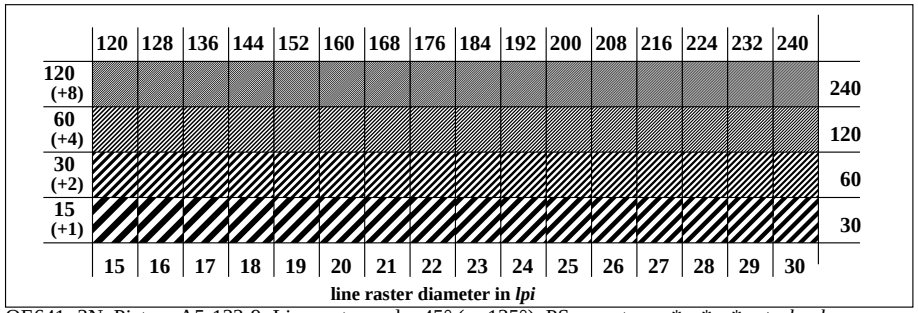
OE640−5N, Picture A2-133-9: 5 equidistant *L**-grey steps+*N0+W1*; PS operator: *w* w* w* setrgbcolor*



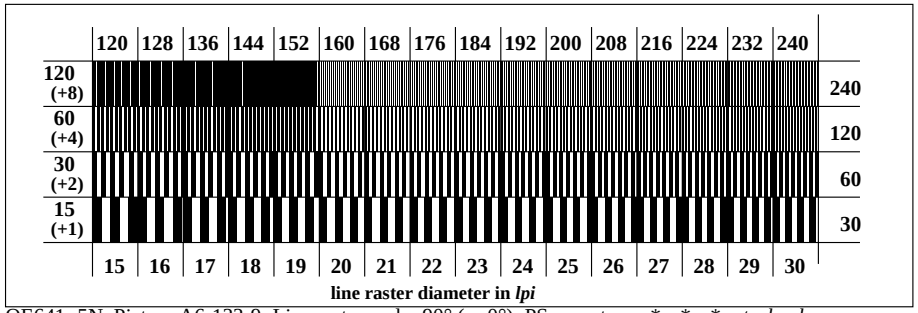
OE640−7N, Picture A3-133-9: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*



OE641−1N, Picture A4-133-9: Landolt-rings *W−N*; PS operator: *w* w* w* setrgbcolor*



OE641−3N, Picture A5-133-9: Line raster under 45° (or 135°); PS operator: *w* w* w* setrgbcolor*



OE641−5N, Picture A6-133-9: Line raster under 90° (or 0°); PS operator: *w* w* w* setrgbcolor*

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?
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?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1324-10

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 OE641−3N-133-10

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-133-10

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.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/OE64/OE64F1P2.PDF
picture A7-133-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-133-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-133-10

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	18.01	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0.0	0.0	0.01
2	23.17	0.0	0.0	0.02	19.2	0.0	0.0	-3.95	0.0	0.0	3.96
3	28.33	0.0	0.0	0.04	21.49	0.0	0.0	-6.83	0.0	0.0	6.84
4	33.49	0.0	0.0	0.08	24.5	0.0	0.0	-8.98	0.0	0.0	8.99
5	38.65	0.0	0.0	0.13	28.12	0.0	0.0	-10.52	0.0	0.0	10.53
6	43.81	0.0	0.0	0.18	32.26	0.0	0.0	-11.53	0.0	0.0	11.54
7	48.97	0.0	0.0	0.24	36.89	0.0	0.0	-12.07	0.0	0.0	12.08
8	54.13	0.0	0.0	0.31	41.94	0.0	0.0	-12.18	0.0	0.0	12.19
9	59.29	0.0	0.0	0.38	47.41	0.0	0.0	-11.87	0.0	0.0	11.88
10	64.45	0.0	0.0	0.46	53.25	0.0	0.0	-11.19	0.0	0.0	11.2
11	69.61	0.0	0.0	0.54	59.46	0.0	0.0	-10.14	0.0	0.0	10.15
12	74.77	0.0	0.0	0.62	66.02	0.0	0.0	-8.74	0.0	0.0	8.75
13	79.93	0.0	0.0	0.71	72.9	0.0	0.0	-7.02	0.0	0.0	7.03
14	85.09	0.0	0.0	0.8	80.1	0.0	0.0	-4.98	0.0	0.0	4.99
15	90.25	0.0	0.0	0.9	87.61	0.0	0.0	-2.63	0.0	0.0	2.64
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	18.01	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0.0	0.0	0.01
18	37.36	0.0	0.0	0.12	27.16	0.0	0.0	-10.19	0.0	0.0	10.2
19	56.71	0.0	0.0	0.34	44.63	0.0	0.0	-12.07	0.0	0.0	12.08
20	76.06	0.0	0.0	0.64	67.71	0.0	0.0	-8.34	0.0	0.0	8.35
21	95.41	0.0	0.0	1.0	95.41	0.0	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

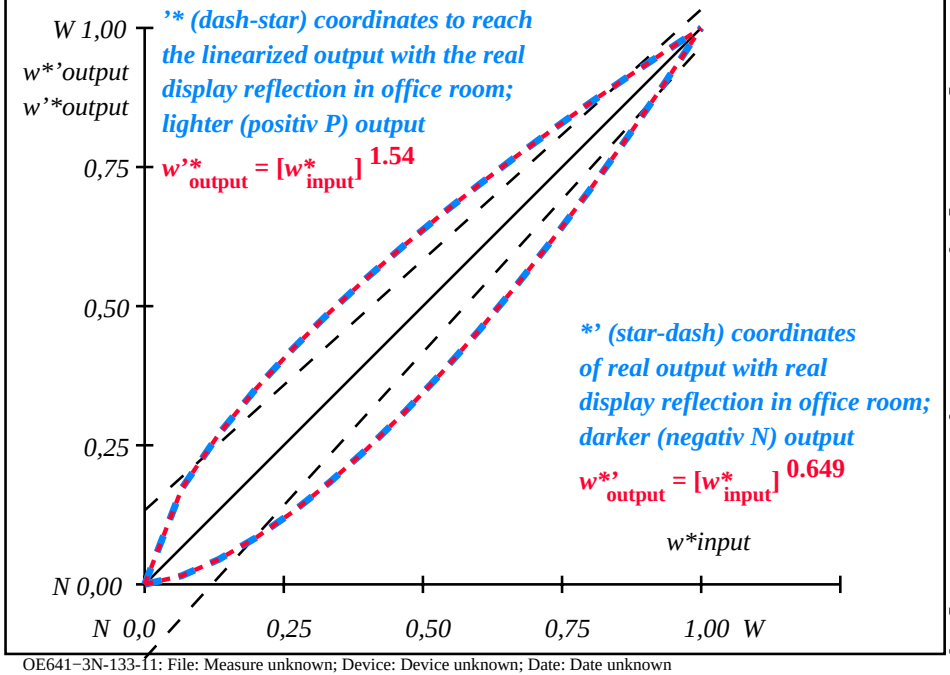
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 7.7

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 6.1

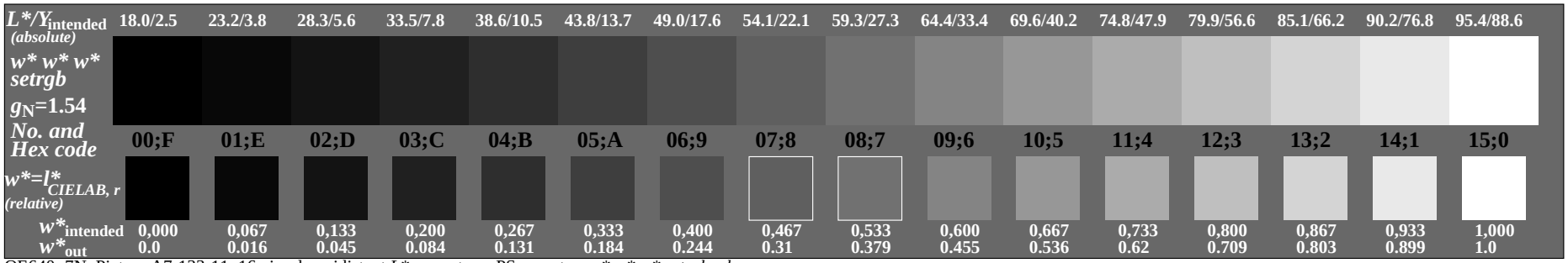
Mean colour reproduction index: $R^*_{ab,m}$ = 66

OE640−3N-133-11: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-133-11



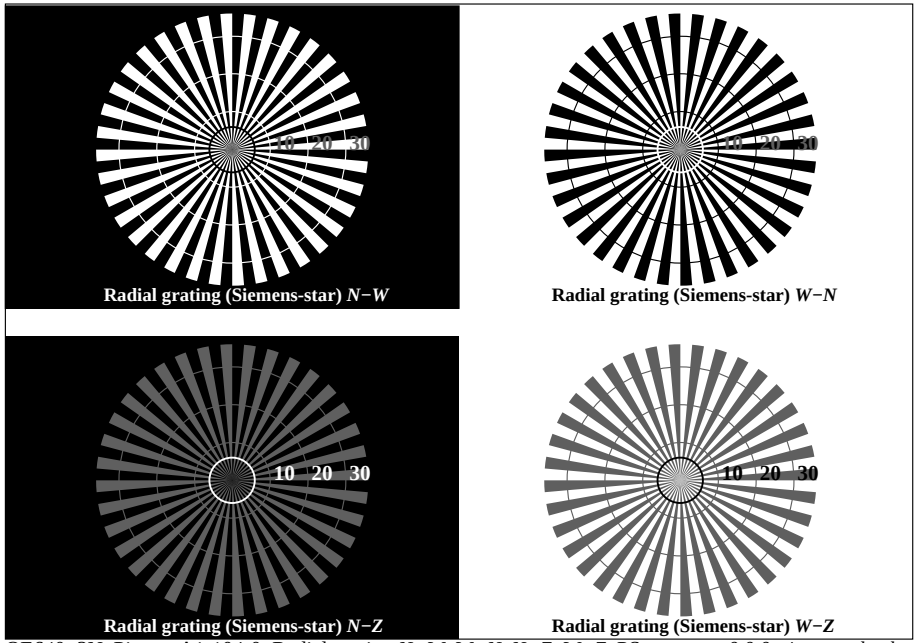
OE641−3N-133-11: File: Measure unknown; Device: Device unknown; Date: Date unknown



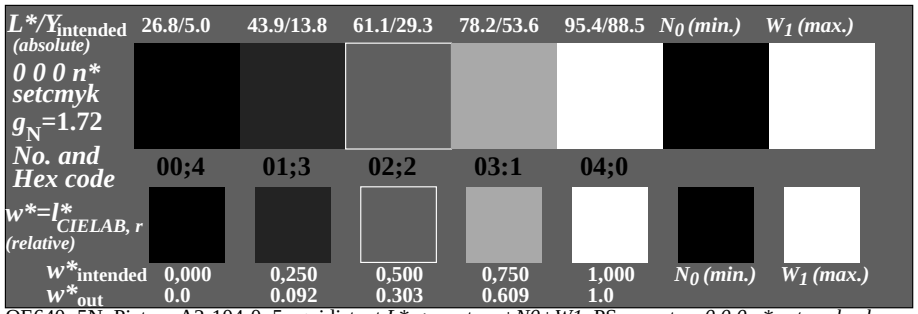
OE640−7N, Picture A7-133-11: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*

OE64: 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

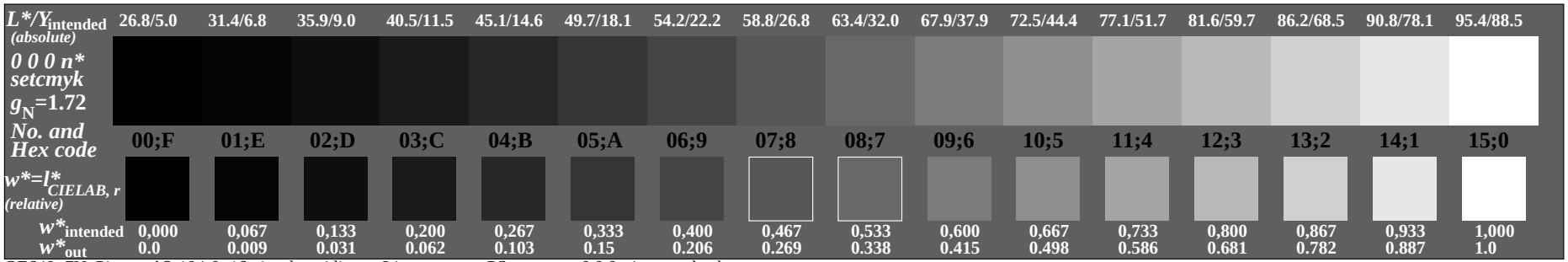
input: *all (−>rgb*de) setrgbcolor*
output 130-11: g_P=1.0; g_N=1.29



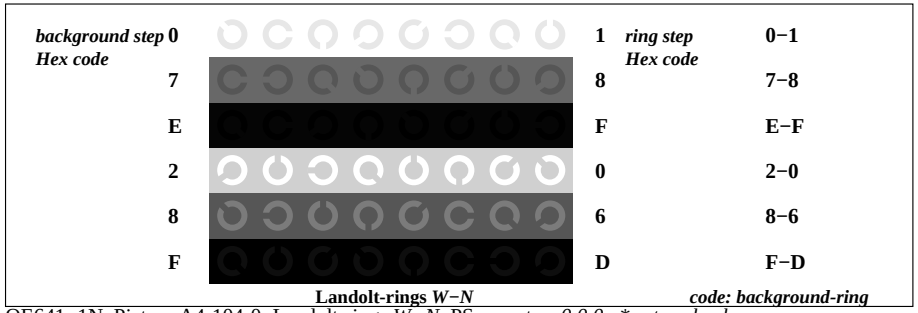
OE640−3N, Picture A1-104-0: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *0 0 0 n* setcmykcolor*



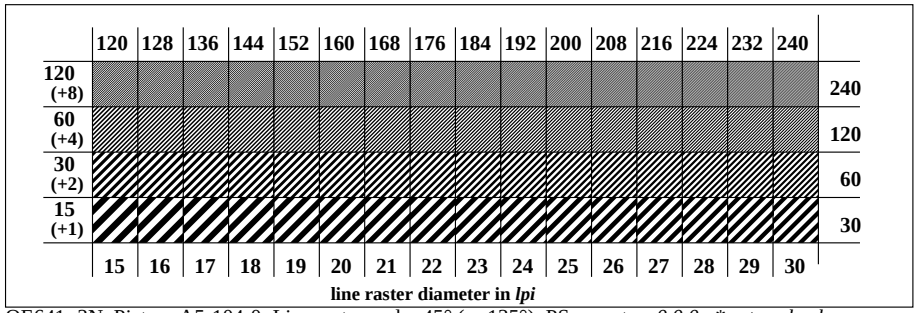
OE640−5N, Picture A2-104-0: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *0 0 0 n* setcmykcolor*



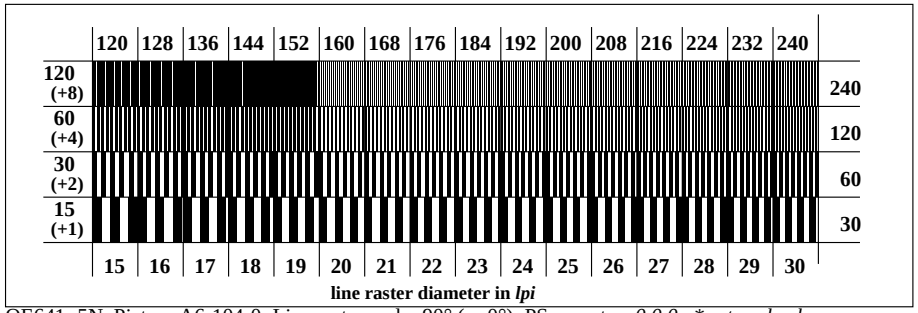
OE640−7N, Picture A3-104-0: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*



OE641−1N, Picture A4-104-0: Landolt-rings *W−N*; PS operator: *0 0 0 n* setcmykcolor*



OE641−3N, Picture A5-104-0: Line raster under 45° (or 135°); PS operator: *0 0 0 n* setcmykcolor*



OE641−5N, Picture A6-104-0: Line raster under 90° (or 0°); PS operator: *0 0 0 n* setcmykcolor*

OE64: 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: *all (−>rgb*de) setrgbcolor*
output 130-0: g_P=1.0; g_N=1.42

Test for the best visual linearized output of Picture A7-104-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-104-0

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**-104-0
Are the 5 steps on the upper rows 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**-104-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1032-1

Test for the best visual linearized output of Picture A7-104-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-104-0
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 A5-104-0
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 A6-104-0
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 OE641−3N-104-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-104-1

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-104-2: **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/OE64/OE64F1P2.PDF
picture A7-104-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-104-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-104-1

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	26.85	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0.0	0.0	0.01
2	31.42	0.0	0.0	0.01	27.5	0.0	0.0	-3.91	0.0	0.0	3.92
3	35.99	0.0	0.0	0.03	28.99	0.0	0.0	-6.99	0.0	0.0	7.0
4	40.56	0.0	0.0	0.06	31.15	0.0	0.0	-9.4	0.0	0.0	9.41
5	45.13	0.0	0.0	0.1	33.91	0.0	0.0	-11.21	0.0	0.0	11.22
6	49.7	0.0	0.0	0.15	37.21	0.0	0.0	-12.48	0.0	0.0	12.49
7	54.27	0.0	0.0	0.21	41.03	0.0	0.0	-13.24	0.0	0.0	13.25
8	58.84	0.0	0.0	0.27	45.33	0.0	0.0	-13.5	0.0	0.0	13.51
9	63.41	0.0	0.0	0.34	50.1	0.0	0.0	-13.3	0.0	0.0	13.31
10	67.99	0.0	0.0	0.42	55.33	0.0	0.0	-12.65	0.0	0.0	12.66
11	72.56	0.0	0.0	0.5	60.98	0.0	0.0	-11.56	0.0	0.0	11.57
12	77.13	0.0	0.0	0.59	67.06	0.0	0.0	-10.05	0.0	0.0	10.06
13	81.7	0.0	0.0	0.68	73.56	0.0	0.0	-8.13	0.0	0.0	8.14
14	86.27	0.0	0.0	0.78	80.45	0.0	0.0	-5.81	0.0	0.0	5.82
15	90.84	0.0	0.0	0.89	87.74	0.0	0.0	-3.09	0.0	0.0	3.1
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	26.85	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0.0	0.0	0.01
18	43.99	0.0	0.0	0.09	33.17	0.0	0.0	-10.81	0.0	0.0	10.82
19	61.13	0.0	0.0	0.3	47.66	0.0	0.0	-13.46	0.0	0.0	13.47
20	78.27	0.0	0.0	0.61	68.65	0.0	0.0	-9.61	0.0	0.0	9.62
21	95.41	0.0	0.0	1.0	95.41	0.0	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

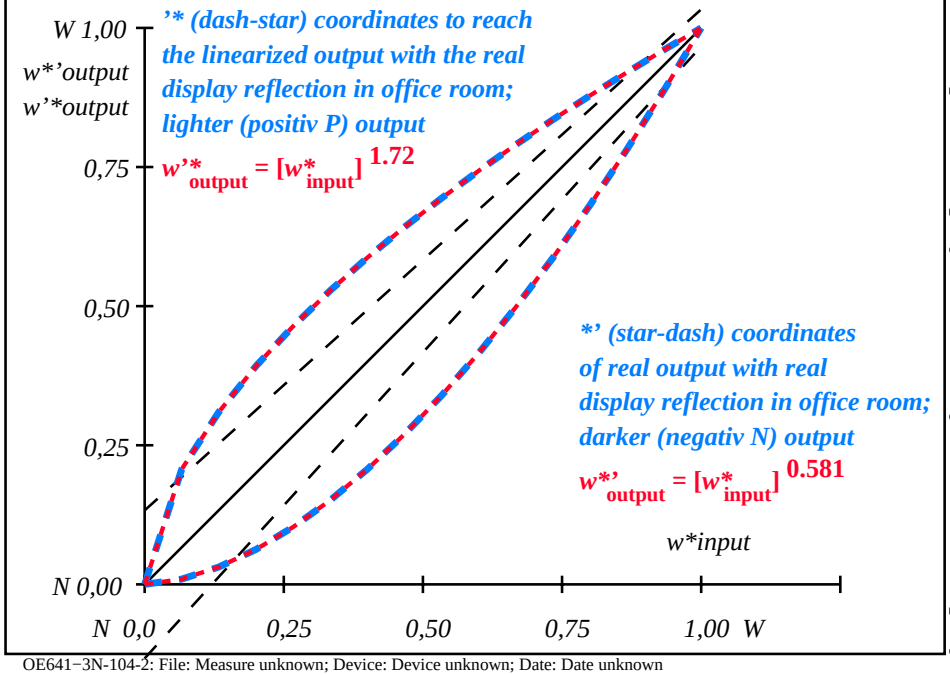
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 8.5

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 6.8

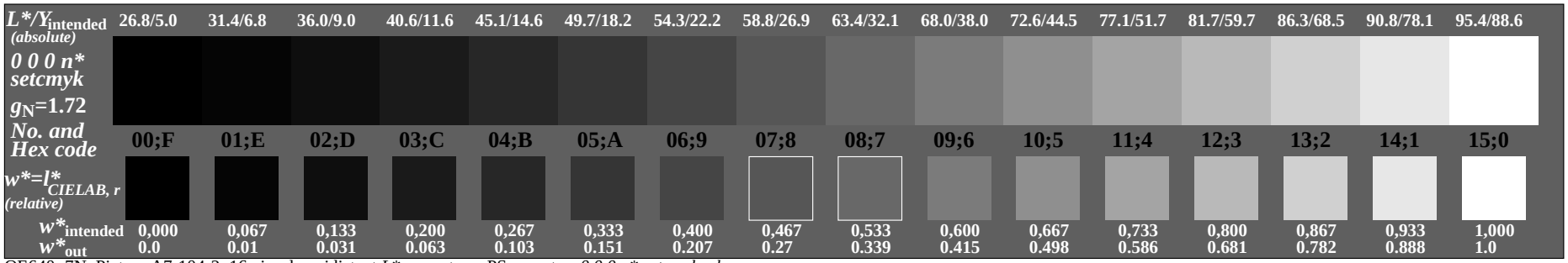
Mean colour reproduction index: $R^*_{ab,m}$ = 63

OE640−3N-104-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-104-2



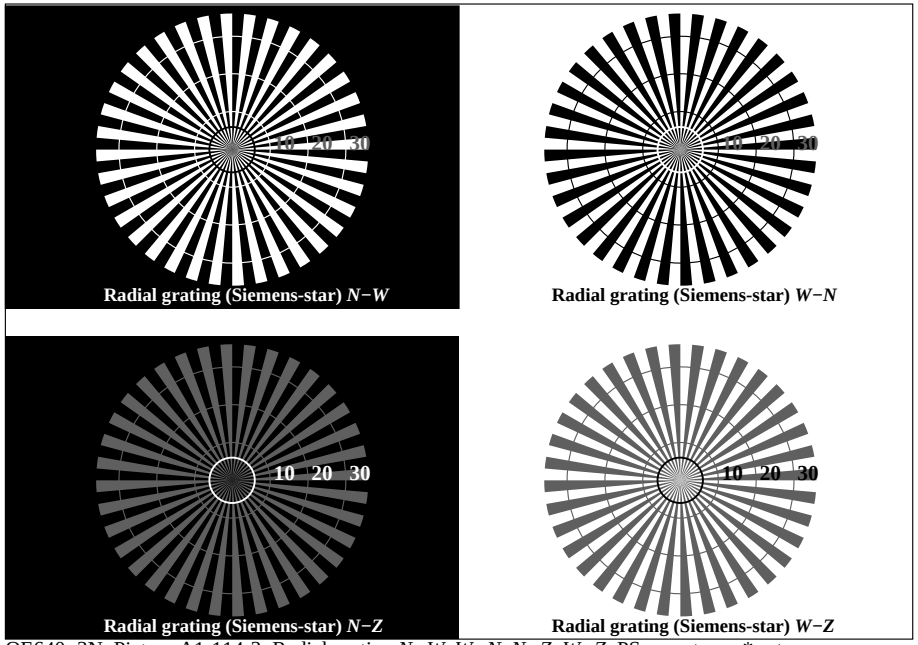
OE641−3N-104-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



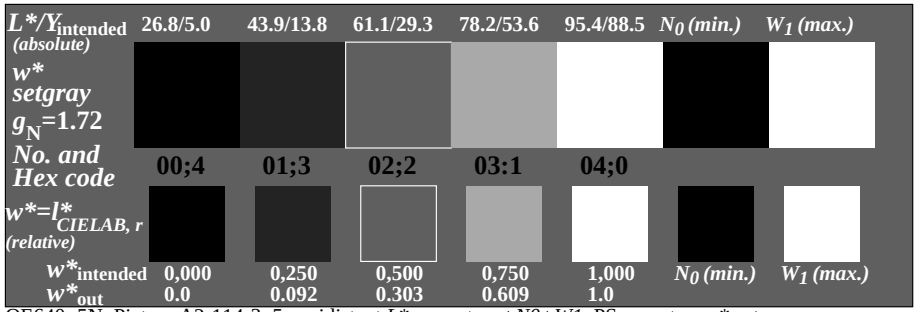
OE640−7N, Picture A7-104-2: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

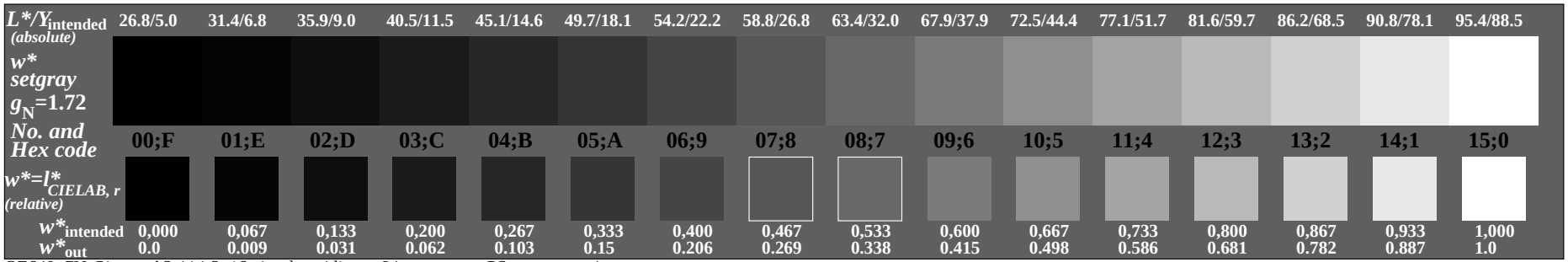
input: *all (−>rgb*de) setrgbcolor*
output 130-2: g_P=1.0; g_N=1.42



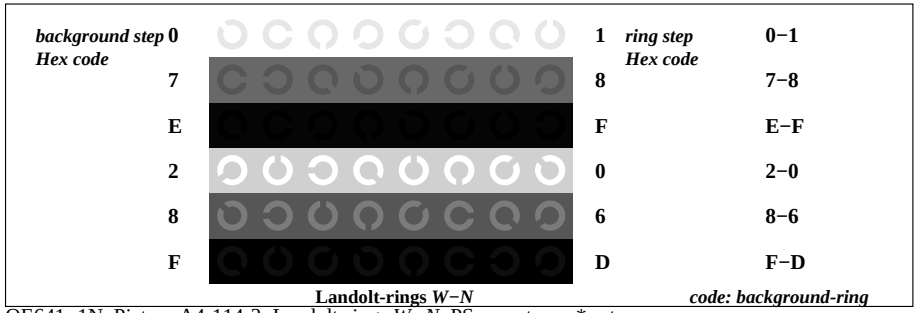
OE640−3N, Picture A1-114-3: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* setgray*



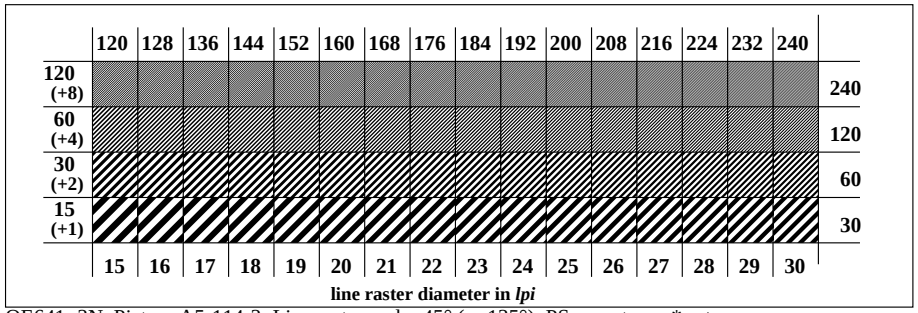
OE640−5N, Picture A2-114-3: 5 equidistant *L**-grey steps+*N0+W1*; PS operator: *w* setgray*



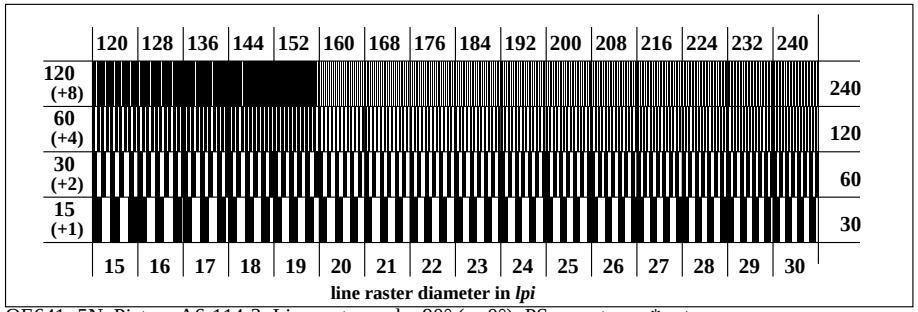
OE640−7N, Picture A3-114-3: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*



OE641−1N, Picture A4-114-3: Landolt-rings *W−N*; PS operator: *w* setgray*



OE641−3N, Picture A5-114-3: Line raster under 45° (or 135°); PS operator: *w* setgray*



OE641−5N, Picture A6-114-3: Line raster under 90° (or 0°); PS operator: *w* setgray*

OE64: 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: *all (−>rgb*de) setrgbcolor*
output 130-3: g_P=1.0; g_N=1.42

Test for the best visual linearized output of Picture A7-114-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-114-0

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**-114-0
Are the 5 steps on the upper rows 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**-114-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1132-4

Test for the best visual linearized output of Picture A7-114-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-114-0
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 A5-114-0
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 A6-114-0
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 OE641−3N-114-4

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-114-4

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-114-2: **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/OE64/OE64F1P2.PDF
picture A7-114-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-114-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-114-4

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	26.85	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0.0	0.0	0.01
2	31.42	0.0	0.0	0.01	27.5	0.0	0.0	-3.91	0.0	0.0	3.92
3	35.99	0.0	0.0	0.03	28.99	0.0	0.0	-6.99	0.0	0.0	7.0
4	40.56	0.0	0.0	0.06	31.15	0.0	0.0	-9.4	0.0	0.0	9.41
5	45.13	0.0	0.0	0.1	33.91	0.0	0.0	-11.21	0.0	0.0	11.22
6	49.7	0.0	0.0	0.15	37.21	0.0	0.0	-12.48	0.0	0.0	12.49
7	54.27	0.0	0.0	0.21	41.03	0.0	0.0	-13.24	0.0	0.0	13.25
8	58.84	0.0	0.0	0.27	45.33	0.0	0.0	-13.5	0.0	0.0	13.51
9	63.41	0.0	0.0	0.34	50.1	0.0	0.0	-13.3	0.0	0.0	13.31
10	67.99	0.0	0.0	0.42	55.33	0.0	0.0	-12.65	0.0	0.0	12.66
11	72.56	0.0	0.0	0.5	60.98	0.0	0.0	-11.56	0.0	0.0	11.57
12	77.13	0.0	0.0	0.59	67.06	0.0	0.0	-10.05	0.0	0.0	10.06
13	81.7	0.0	0.0	0.68	73.56	0.0	0.0	-8.13	0.0	0.0	8.14
14	86.27	0.0	0.0	0.78	80.45	0.0	0.0	-5.81	0.0	0.0	5.82
15	90.84	0.0	0.0	0.89	87.74	0.0	0.0	-3.09	0.0	0.0	3.1
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	26.85	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0.0	0.0	0.01
18	43.99	0.0	0.0	0.09	33.17	0.0	0.0	-10.81	0.0	0.0	10.82
19	61.13	0.0	0.0	0.3	47.66	0.0	0.0	-13.46	0.0	0.0	13.47
20	78.27	0.0	0.0	0.61	68.65	0.0	0.0	-9.61	0.0	0.0	9.62
21	95.41	0.0	0.0	1.0	95.41	0.0	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

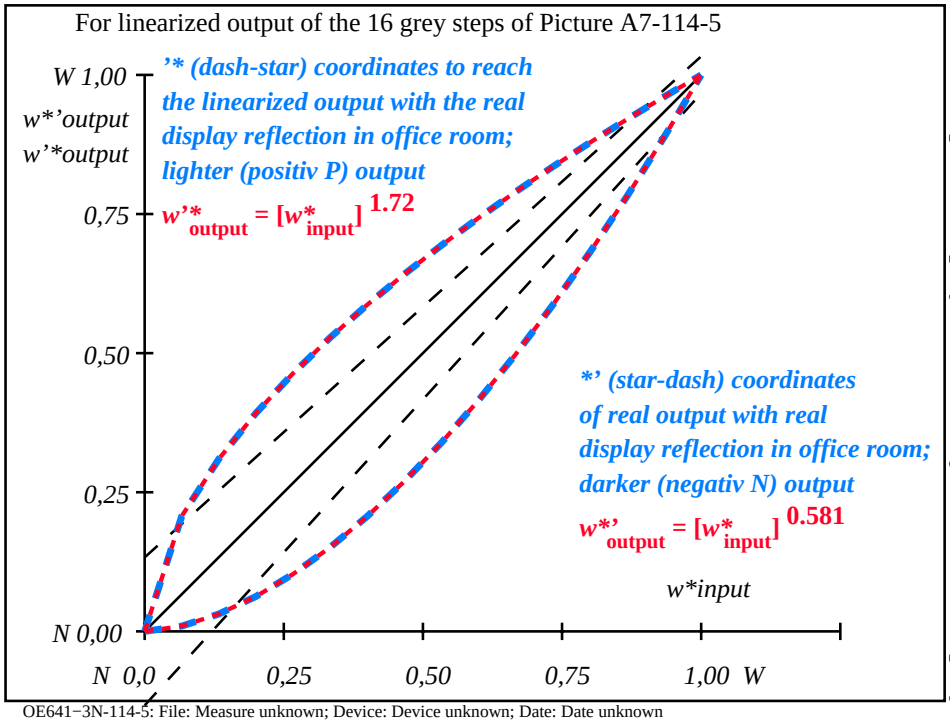
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 8.5

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 6.8

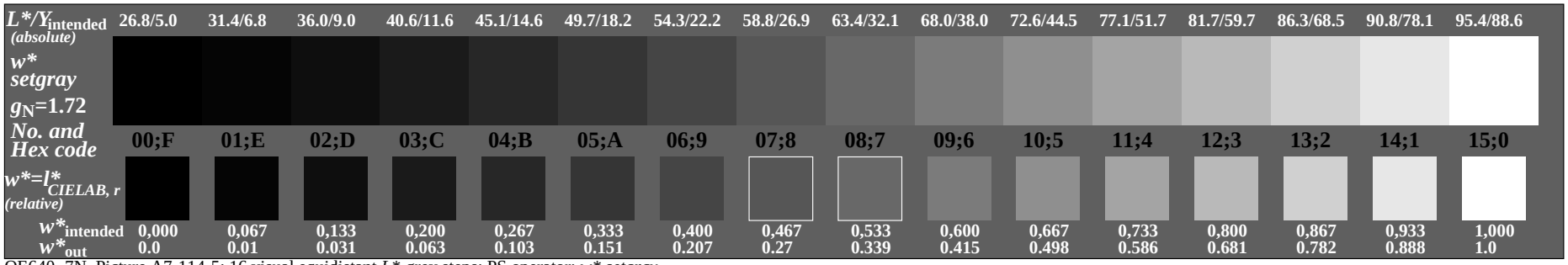
Mean colour reproduction index: $R^*_{ab,m}$ = 63

OE640−3N-114-5: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-114-5



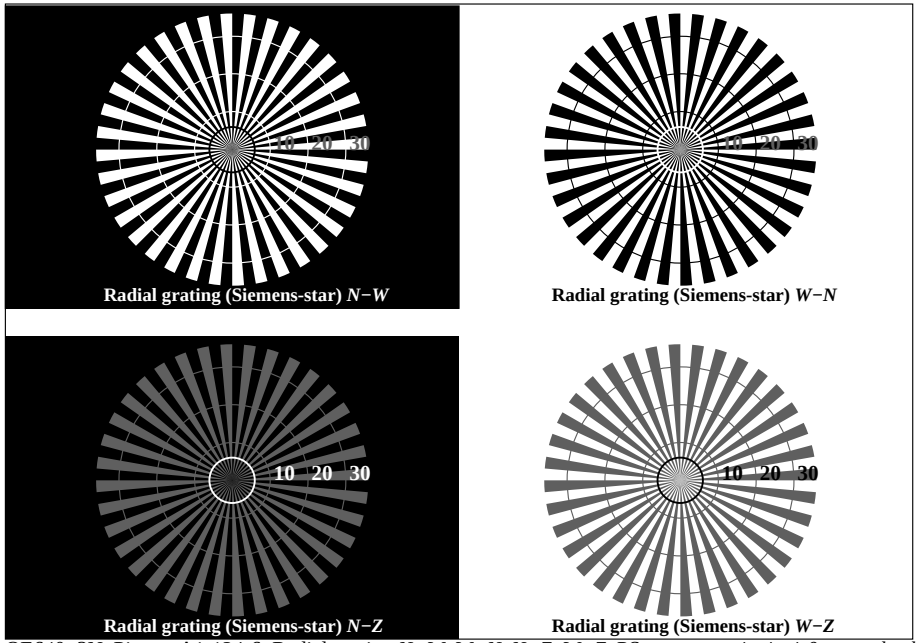
OE641−3N-114-5: File: Measure unknown; Device: Device unknown; Date: Date unknown



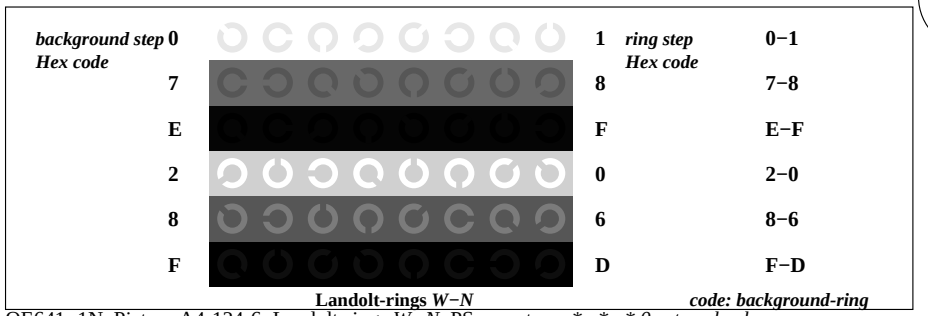
OE640−7N, Picture A7-114-5: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*

OE64: 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

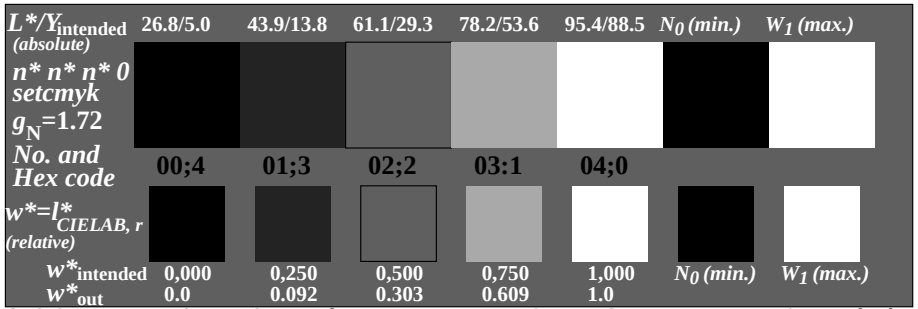
input: *all (−>rgb*de) setrgbcolor*
output 130-5: g_P=1.0; g_N=1.42



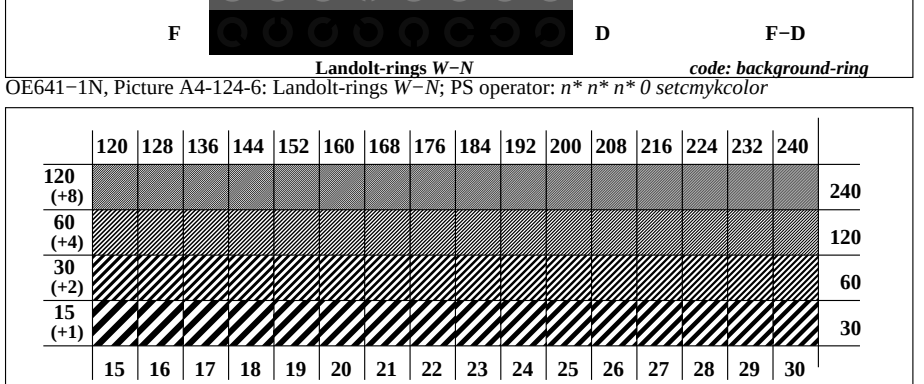
OE640−3N, Picture A1-124-6: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *n* n* n* 0 setcmykcolor*



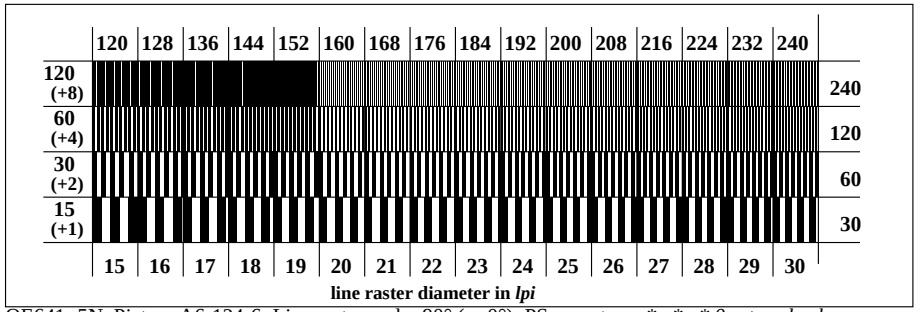
OE641−1N, Picture A4-124-6: Landolt-rings *W−N*; PS operator: *n* n* n* 0 setcmykcolor*



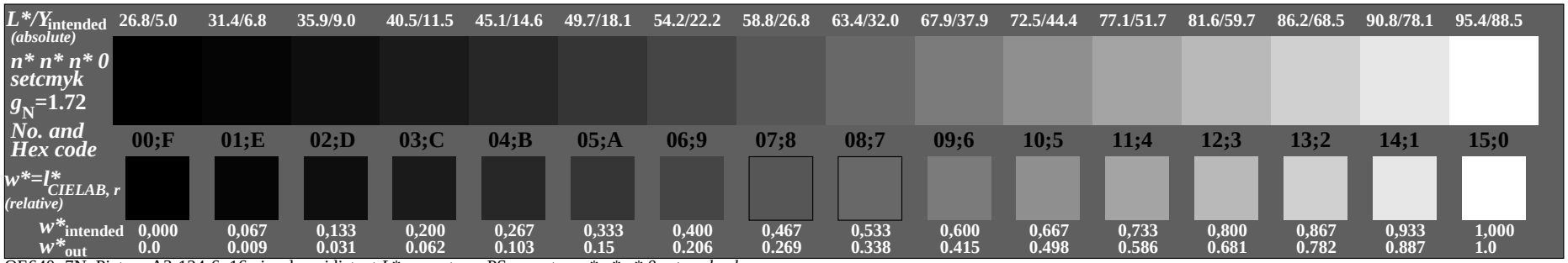
OE640−5N, Picture A2-124-6: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *n* n* n* 0 setcmykcolor*



OE641−3N, Picture A5-124-6: Line raster under 45° (or 135°); PS operator: *n* n* n* 0 setcmykcolor*



OE641−5N, Picture A6-124-6: Line raster under 90° (or 0°); PS operator: *n* n* n* 0 setcmykcolor*



OE640−7N, Picture A3-124-6: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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: *all (−>rgb*de) setrgbcolor*
output 130-6: g_P=1.0; g_N=1.42

Test for the best visual linearized output of Picture A7-124-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-124-0

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**-124-0
Are the 5 steps on the upper rows 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**-124-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1232-7

Test for the best visual linearized output of Picture A7-124-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-124-0
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 A5-124-0
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 A6-124-0
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 OE641−3N-124-7

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-124-7

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-124-2: **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/OE64/OE64F1P2.PDF
picture A7-124-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-124-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-124-7

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	26.85	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0.0	0.0	0.01
2	31.42	0.0	0.0	0.01	27.5	0.0	0.0	-3.91	0.0	0.0	3.92
3	35.99	0.0	0.0	0.03	28.99	0.0	0.0	-6.99	0.0	0.0	7.0
4	40.56	0.0	0.0	0.06	31.15	0.0	0.0	-9.4	0.0	0.0	9.41
5	45.13	0.0	0.0	0.1	33.91	0.0	0.0	-11.21	0.0	0.0	11.22
6	49.7	0.0	0.0	0.15	37.21	0.0	0.0	-12.48	0.0	0.0	12.49
7	54.27	0.0	0.0	0.21	41.03	0.0	0.0	-13.24	0.0	0.0	13.25
8	58.84	0.0	0.0	0.27	45.33	0.0	0.0	-13.5	0.0	0.0	13.51
9	63.41	0.0	0.0	0.34	50.1	0.0	0.0	-13.3	0.0	0.0	13.31
10	67.99	0.0	0.0	0.42	55.33	0.0	0.0	-12.65	0.0	0.0	12.66
11	72.56	0.0	0.0	0.5	60.98	0.0	0.0	-11.56	0.0	0.0	11.57
12	77.13	0.0	0.0	0.59	67.06	0.0	0.0	-10.05	0.0	0.0	10.06
13	81.7	0.0	0.0	0.68	73.56	0.0	0.0	-8.13	0.0	0.0	8.14
14	86.27	0.0	0.0	0.78	80.45	0.0	0.0	-5.81	0.0	0.0	5.82
15	90.84	0.0	0.0	0.89	87.74	0.0	0.0	-3.09	0.0	0.0	3.1
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	26.85	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0.0	0.0	0.01
18	43.99	0.0	0.0	0.09	33.17	0.0	0.0	-10.81	0.0	0.0	10.82
19	61.13	0.0	0.0	0.3	47.66	0.0	0.0	-13.46	0.0	0.0	13.47
20	78.27	0.0	0.0	0.61	68.65	0.0	0.0	-9.61	0.0	0.0	9.62
21	95.41	0.0	0.0	1.0	95.41	0.0	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

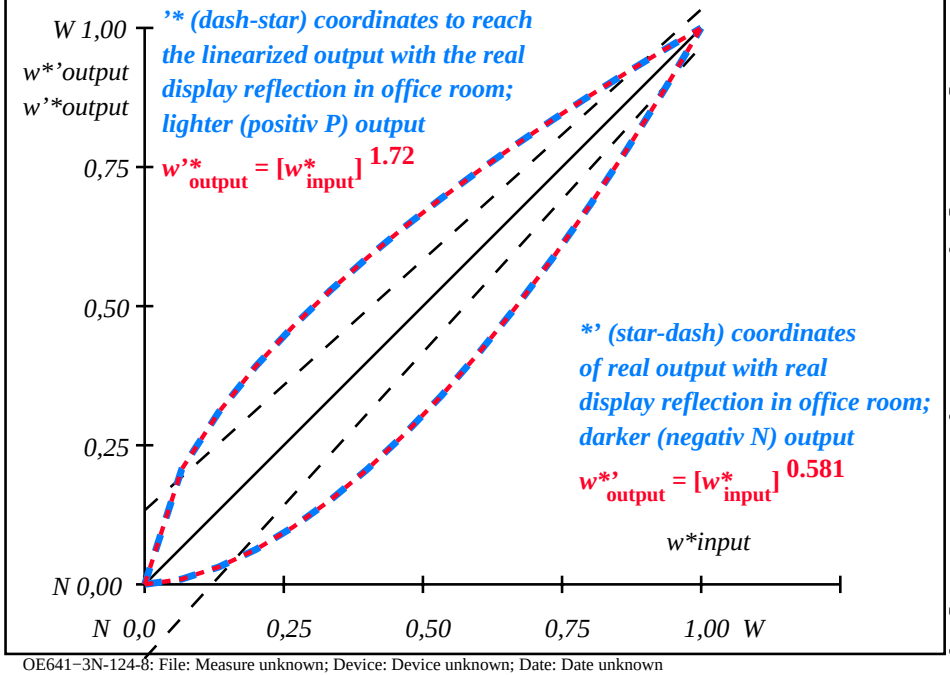
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 8.5

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 6.8

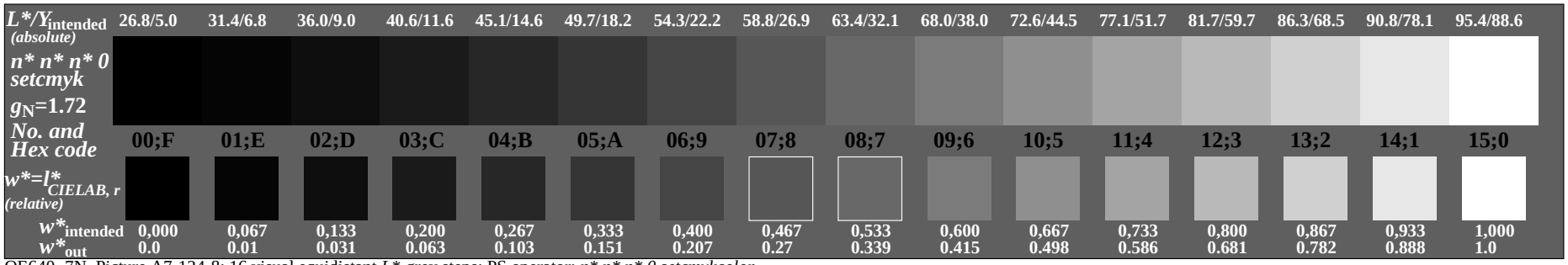
Mean colour reproduction index: $R^*_{ab,m}$ = 63

OE640−3N-124-8: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-124-8



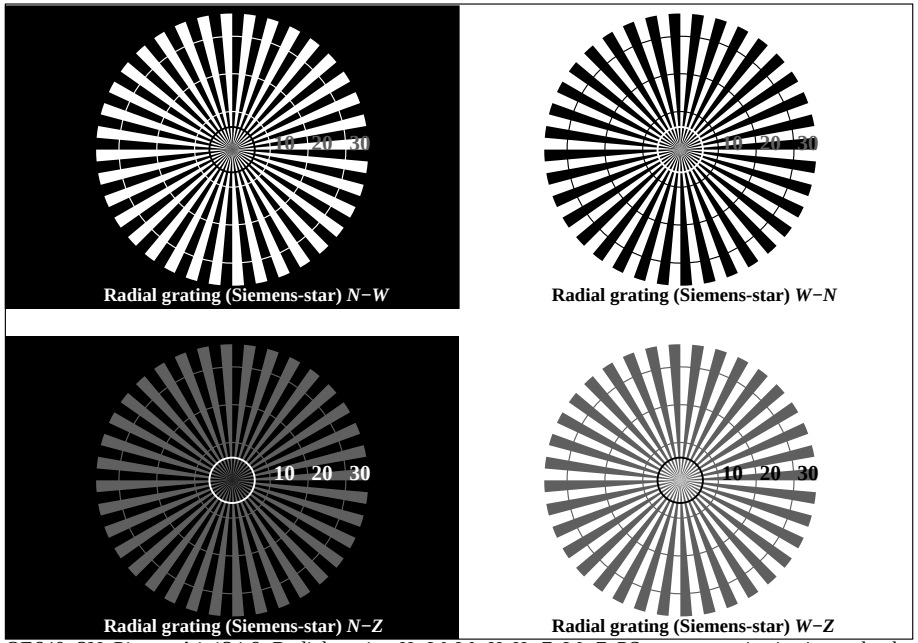
OE641−3N-124-8: File: Measure unknown; Device: Device unknown; Date: Date unknown



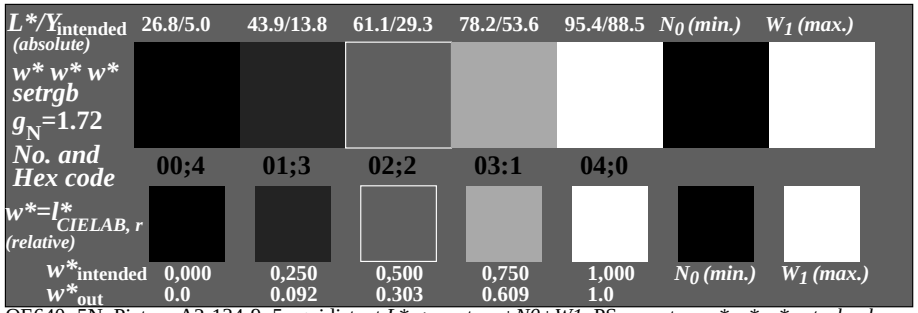
OE640−7N, Picture A7-124-8: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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

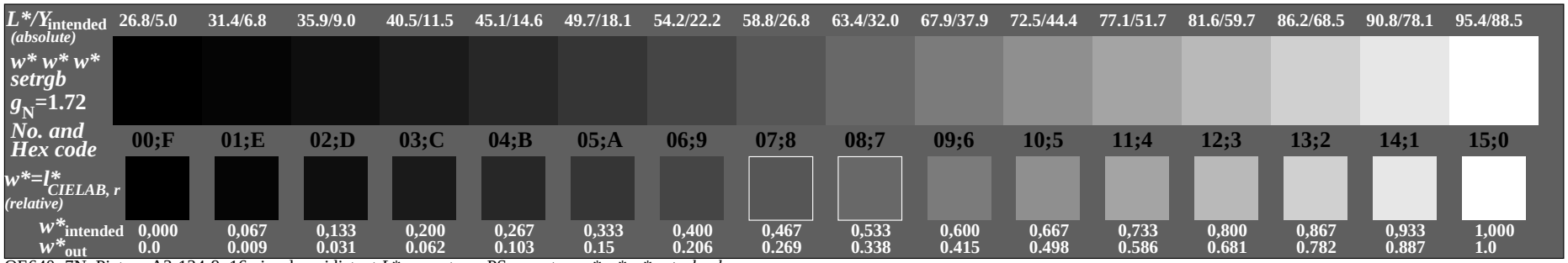
input: *all (−>rgb*de) setrgbcolor*
output 130-8: g_P=1.0; g_N=1.42



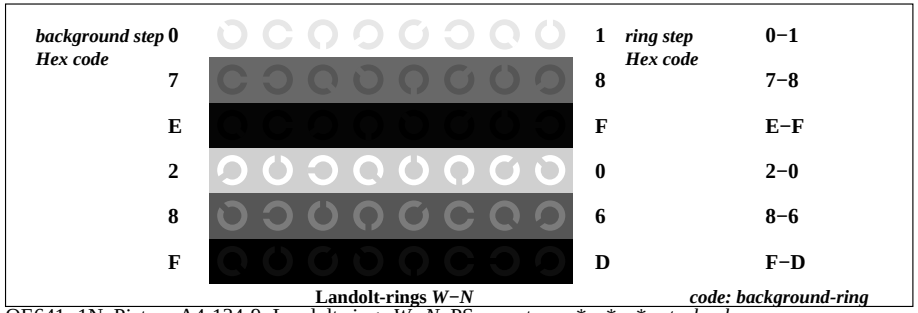
OE640−3N, Picture A1-134-9: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* w* w* setrgbcolor*



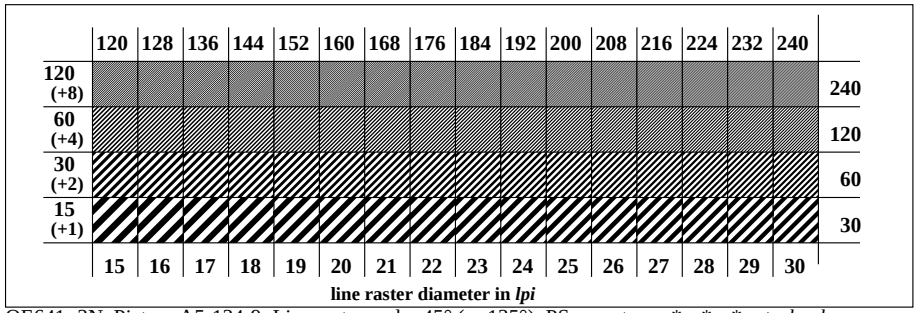
OE640−5N, Picture A2-134-9: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *w* w* w* setrgbcolor*



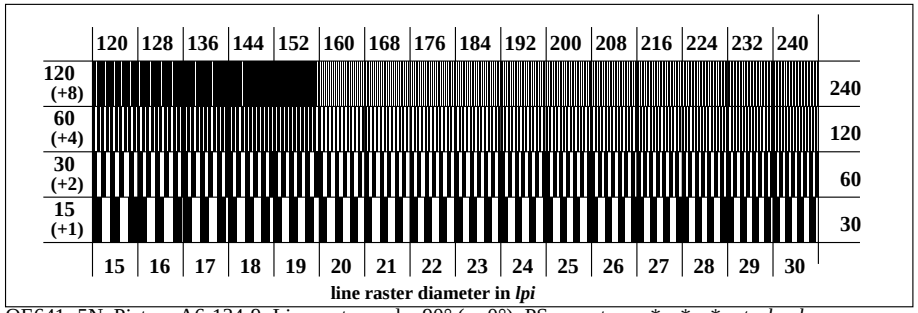
OE640−7N, Picture A3-134-9: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*



OE641−1N, Picture A4-134-9: Landolt-rings *W−N*; PS operator: *w* w* w* setrgbcolor*



OE641−3N, Picture A5-134-9: Line raster under 45° (or 135°); PS operator: *w* w* w* setrgbcolor*



OE641−5N, Picture A6-134-9: Line raster under 90° (or 0°); PS operator: *w* w* w* setrgbcolor*

OE64: 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: *all (−>rgb*de) setrgbcolor*
output 130-9: g_P=1.0; g_N=1.42

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?
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?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1332-10

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 OE641−3N-134-10

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-134-10

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.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/OE64/OE64F1P2.PDF
picture A7-134-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-134-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-134-10

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	26.85	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0.0	0.0	0.01
2	31.42	0.0	0.0	0.01	27.5	0.0	0.0	-3.91	0.0	0.0	3.92
3	35.99	0.0	0.0	0.03	28.99	0.0	0.0	-6.99	0.0	0.0	7.0
4	40.56	0.0	0.0	0.06	31.15	0.0	0.0	-9.4	0.0	0.0	9.41
5	45.13	0.0	0.0	0.1	33.91	0.0	0.0	-11.21	0.0	0.0	11.22
6	49.7	0.0	0.0	0.15	37.21	0.0	0.0	-12.48	0.0	0.0	12.49
7	54.27	0.0	0.0	0.21	41.03	0.0	0.0	-13.24	0.0	0.0	13.25
8	58.84	0.0	0.0	0.27	45.33	0.0	0.0	-13.5	0.0	0.0	13.51
9	63.41	0.0	0.0	0.34	50.1	0.0	0.0	-13.3	0.0	0.0	13.31
10	67.99	0.0	0.0	0.42	55.33	0.0	0.0	-12.65	0.0	0.0	12.66
11	72.56	0.0	0.0	0.5	60.98	0.0	0.0	-11.56	0.0	0.0	11.57
12	77.13	0.0	0.0	0.59	67.06	0.0	0.0	-10.05	0.0	0.0	10.06
13	81.7	0.0	0.0	0.68	73.56	0.0	0.0	-8.13	0.0	0.0	8.14
14	86.27	0.0	0.0	0.78	80.45	0.0	0.0	-5.81	0.0	0.0	5.82
15	90.84	0.0	0.0	0.89	87.74	0.0	0.0	-3.09	0.0	0.0	3.1
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	26.85	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0.0	0.0	0.01
18	43.99	0.0	0.0	0.09	33.17	0.0	0.0	-10.81	0.0	0.0	10.82
19	61.13	0.0	0.0	0.3	47.66	0.0	0.0	-13.46	0.0	0.0	13.47
20	78.27	0.0	0.0	0.61	68.65	0.0	0.0	-9.61	0.0	0.0	9.62
21	95.41	0.0	0.0	1.0	95.41	0.0	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

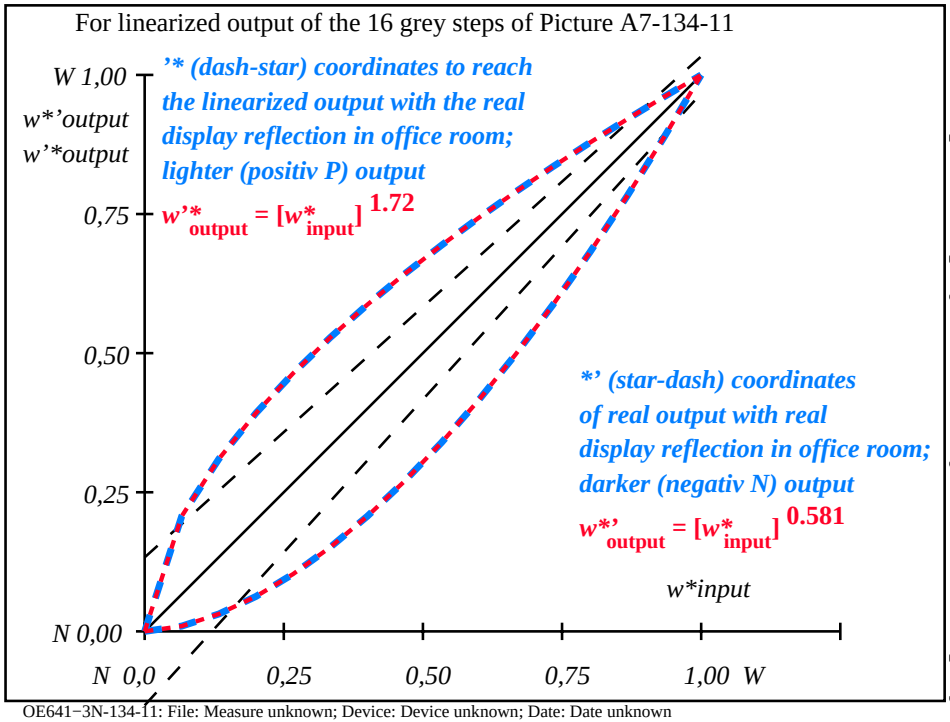
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 8.5

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 6.8

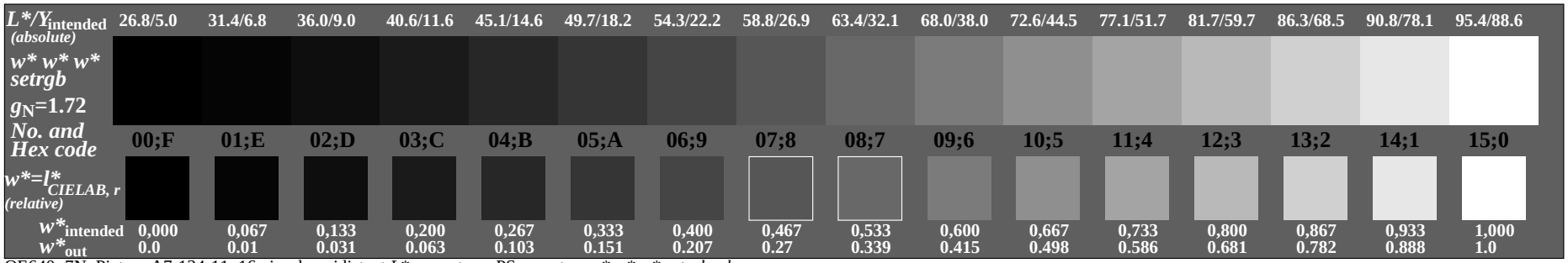
Mean colour reproduction index: $R^*_{ab,m}$ = 63

OE640−3N-134-11: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-134-11



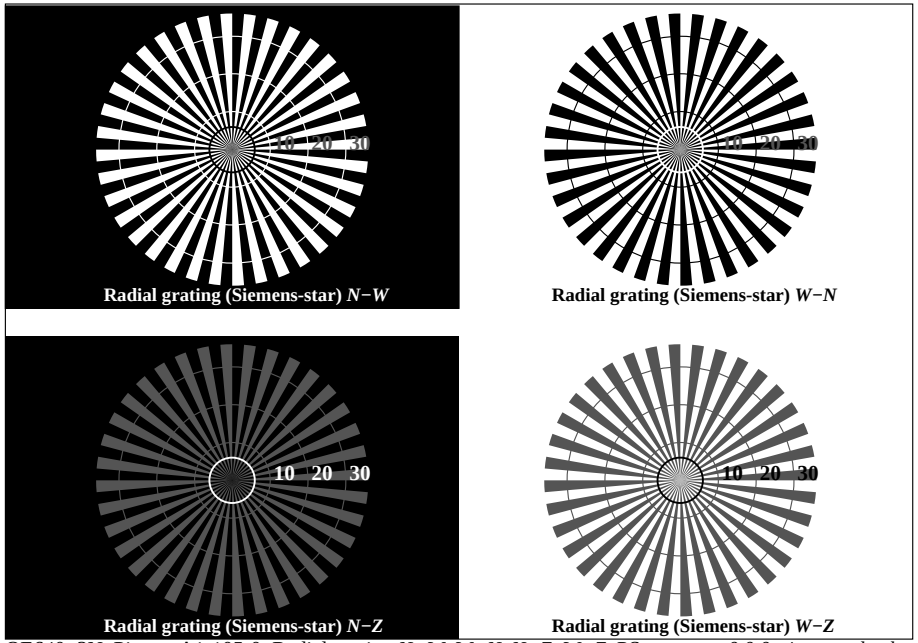
OE641−3N-134-11: File: Measure unknown; Device: Device unknown; Date: Date unknown



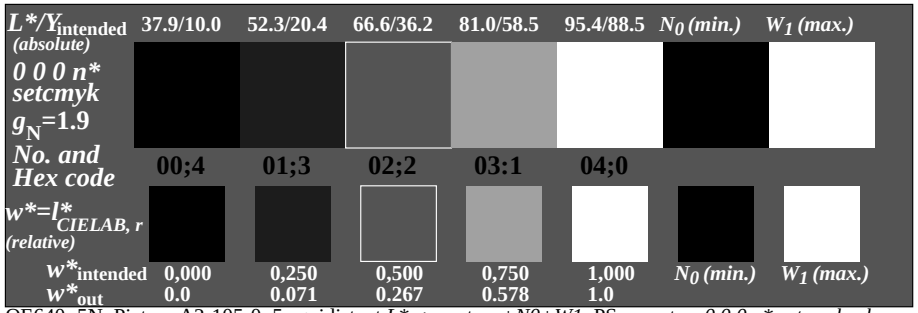
OE640−7N, Picture A7-134-11: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*

OE64: 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

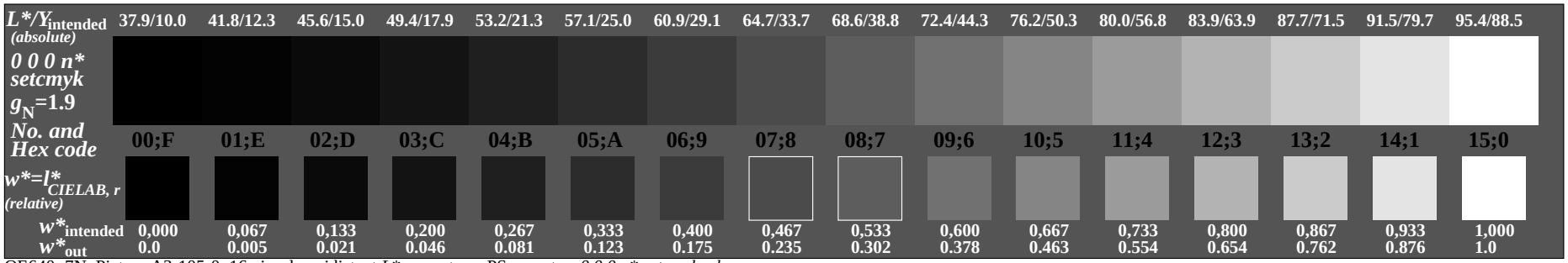
input: *all (−>rgb*de) setrgbcolor*
output 130-11: g_P=1.0; g_N=1.42



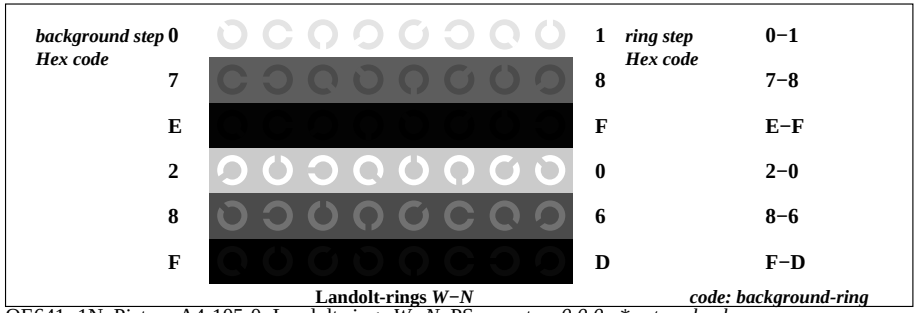
OE640−3N, Picture A1-105-0: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *0 0 0 n* setcmykcolor*



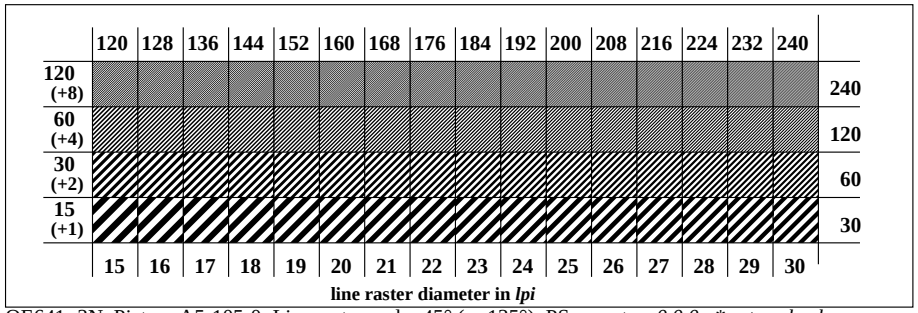
OE640−5N, Picture A2-105-0: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *0 0 0 n* setcmykcolor*



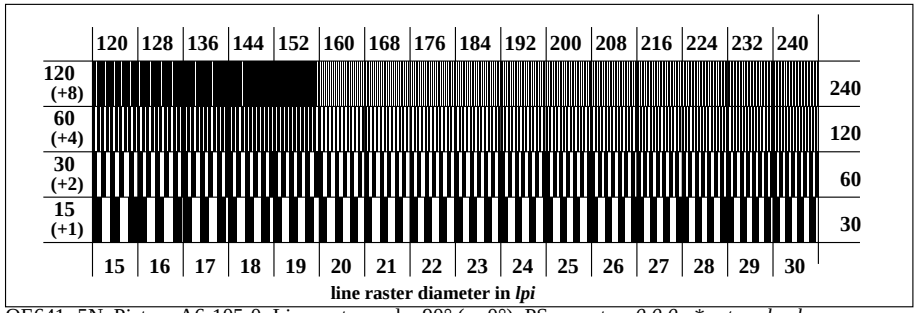
OE640−7N, Picture A3-105-0: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*



OE641−1N, Picture A4-105-0: Landolt-rings *W−N*; PS operator: *0 0 0 n* setcmykcolor*



OE641−3N, Picture A5-105-0: Line raster under 45° (or 135°); PS operator: *0 0 0 n* setcmykcolor*



OE641−5N, Picture A6-105-0: Line raster under 90° (or 0°); PS operator: *0 0 0 n* setcmykcolor*

OE64: 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: *all (−>rgb*de) setrgbcolor*
output 130-0: g_P=1.0; g_N=1.6

Test for the best visual linearized output of Picture A7-105-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-105-0

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**-105-0
Are the 5 steps on the upper rows 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**-105-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1040-1

Test for the best visual linearized output of Picture A7-105-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-105-0
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 A5-105-0
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 A6-105-0
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 OE641−3N-105-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-105-1

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-105-2: **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/OE64/OE64F1P2.PDF
picture A7-105-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-105-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-105-1

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	37.99	0.0	0.0	0.0	37.99	0.0	0.0	0.0	0.0	0.0	0.01
2	41.81	0.0	0.0	0.01	38.32	0.0	0.0	-3.48	0.0	0.0	3.49
3	45.64	0.0	0.0	0.02	39.23	0.0	0.0	-6.4	0.0	0.0	6.41
4	49.47	0.0	0.0	0.05	40.68	0.0	0.0	-8.78	0.0	0.0	8.79
5	53.3	0.0	0.0	0.08	42.65	0.0	0.0	-10.64	0.0	0.0	10.65
6	57.13	0.0	0.0	0.12	45.11	0.0	0.0	-12.01	0.0	0.0	12.02
7	60.96	0.0	0.0	0.18	48.06	0.0	0.0	-12.89	0.0	0.0	12.9
8	64.78	0.0	0.0	0.24	51.48	0.0	0.0	-13.29	0.0	0.0	13.3
9	68.61	0.0	0.0	0.3	55.38	0.0	0.0	-13.22	0.0	0.0	13.23
10	72.44	0.0	0.0	0.38	59.74	0.0	0.0	-12.69	0.0	0.0	12.7
11	76.27	0.0	0.0	0.46	64.56	0.0	0.0	-11.69	0.0	0.0	11.7
12	80.1	0.0	0.0	0.55	69.84	0.0	0.0	-10.25	0.0	0.0	10.26
13	83.93	0.0	0.0	0.65	75.57	0.0	0.0	-8.35	0.0	0.0	8.36
14	87.75	0.0	0.0	0.76	81.74	0.0	0.0	-6.0	0.0	0.0	6.01
15	91.58	0.0	0.0	0.88	88.35	0.0	0.0	-3.22	0.0	0.0	3.23
16	95.41	0.0	0.0	1.0	95.41	0.0	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	0.0	0.01
18	52.34	0.0	0.0	0.07	42.11	0.0	0.0	-10.22	0.0	0.0	10.23
19	66.7	0.0	0.0	0.27	53.37	0.0	0.0	-13.32	0.0	0.0	13.33
20	81.05	0.0	0.0	0.58	71.23	0.0	0.0	-9.81	0.0	0.0	9.82
21	95.41	0.0	0.0	1.0	95.41	0.0	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

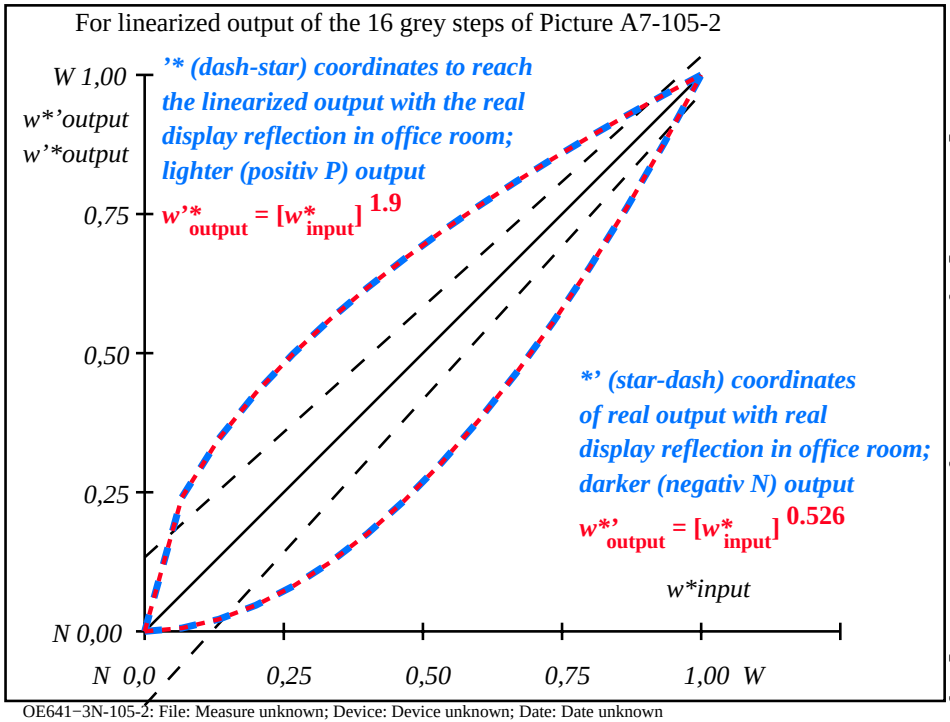
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 8.3

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 6.7

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

OE640−3N-105-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-105-2



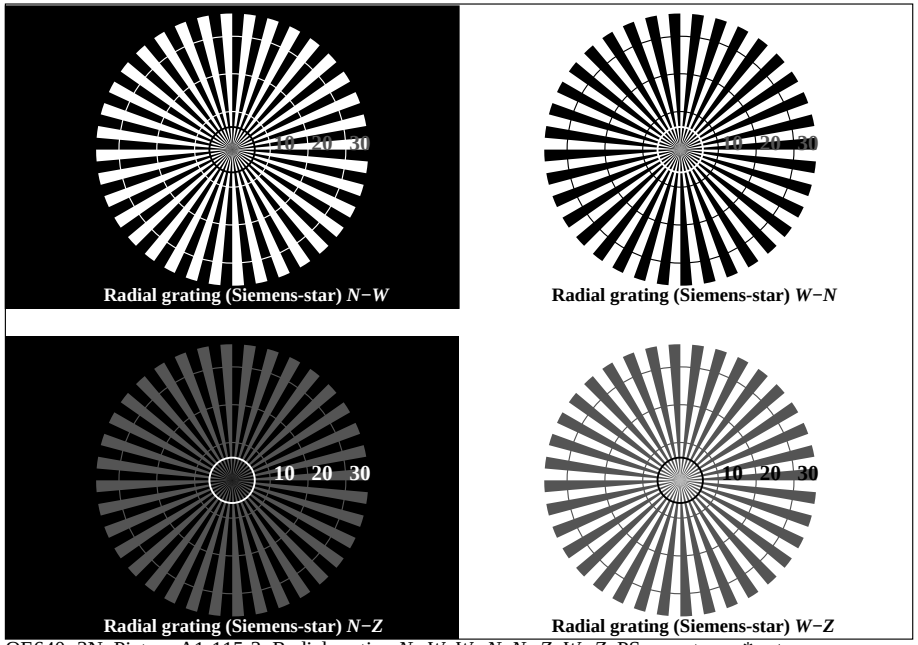
OE641−3N-105-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (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
0 0 0 n* setcmyk																
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
$w^*=l^*_{CIELAB, r}$ (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	0.006	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

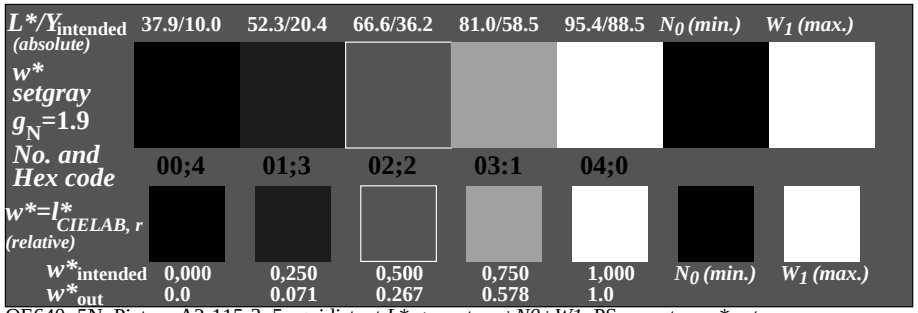
OE640−7N, Picture A7-105-2: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

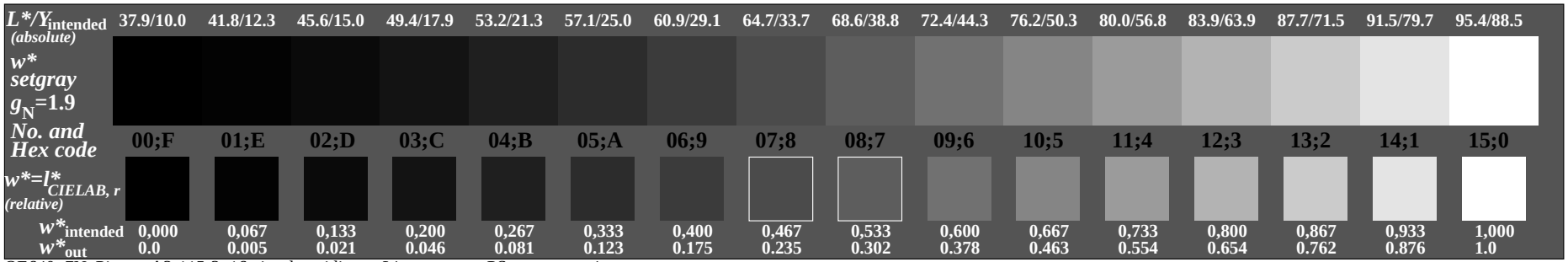
input: *all (−>rgb*de) setrgbcolor*
output 130-2: g_P=1.0; g_N=1.6



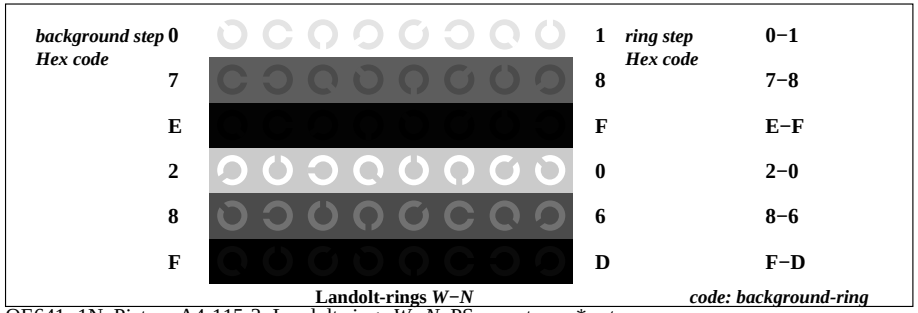
OE640−3N, Picture A1-115-3: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* setgray*



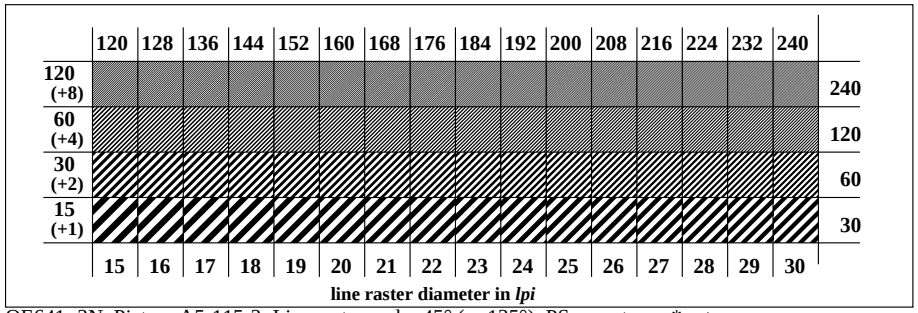
OE640−5N, Picture A2-115-3: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *w* setgray*



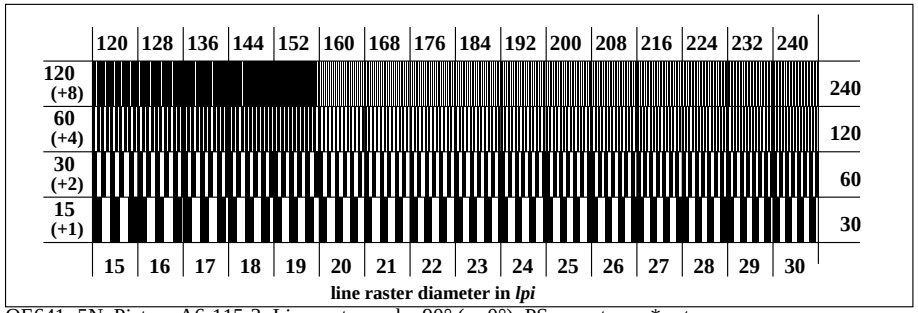
OE640−7N, Picture A3-115-3: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*



OE641−1N, Picture A4-115-3: Landolt-rings *W−N*; PS operator: *w* setgray*



OE641−3N, Picture A5-115-3: Line raster under 45° (or 135°); PS operator: *w* setgray*



OE641−5N, Picture A6-115-3: Line raster under 90° (or 0°); PS operator: *w* setgray*

OE64: 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: *all (−>rgb*de) setrgbcolor*
output 130-3: g_P=1.0; g_N=1.6

Test for the best visual linearized output of Picture A7-115-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-115-0

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**-115-0
Are the 5 steps on the upper rows 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**-115-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1140-4

Test for the best visual linearized output of Picture A7-115-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-115-0
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 A5-115-0
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 A6-115-0
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 OE641−3N-115-4

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-115-4

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-115-2: **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/OE64/OE64F1P2.PDF
picture A7-115-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-115-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-115-4

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	37.99	0.0	0.0	0.0	37.99	0.0	0.0	0.0	0.0	0.0	0.01
2	41.81	0.0	0.0	0.01	38.32	0.0	0.0	-3.48	0.0	0.0	3.49
3	45.64	0.0	0.0	0.02	39.23	0.0	0.0	-6.4	0.0	0.0	6.41
4	49.47	0.0	0.0	0.05	40.68	0.0	0.0	-8.78	0.0	0.0	8.79
5	53.3	0.0	0.0	0.08	42.65	0.0	0.0	-10.64	0.0	0.0	10.65
6	57.13	0.0	0.0	0.12	45.11	0.0	0.0	-12.01	0.0	0.0	12.02
7	60.96	0.0	0.0	0.18	48.06	0.0	0.0	-12.89	0.0	0.0	12.9
8	64.78	0.0	0.0	0.24	51.48	0.0	0.0	-13.29	0.0	0.0	13.3
9	68.61	0.0	0.0	0.3	55.38	0.0	0.0	-13.22	0.0	0.0	13.23
10	72.44	0.0	0.0	0.38	59.74	0.0	0.0	-12.69	0.0	0.0	12.7
11	76.27	0.0	0.0	0.46	64.56	0.0	0.0	-11.69	0.0	0.0	11.7
12	80.1	0.0	0.0	0.55	69.84	0.0	0.0	-10.25	0.0	0.0	10.26
13	83.93	0.0	0.0	0.65	75.57	0.0	0.0	-8.35	0.0	0.0	8.36
14	87.75	0.0	0.0	0.76	81.74	0.0	0.0	-6.0	0.0	0.0	6.01
15	91.58	0.0	0.0	0.88	88.35	0.0	0.0	-3.22	0.0	0.0	3.23
16	95.41	0.0	0.0	1.0	95.41	0.0	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	0.0	0.01
18	52.34	0.0	0.0	0.07	42.11	0.0	0.0	-10.22	0.0	0.0	10.23
19	66.7	0.0	0.0	0.27	53.37	0.0	0.0	-13.32	0.0	0.0	13.33
20	81.05	0.0	0.0	0.58	71.23	0.0	0.0	-9.81	0.0	0.0	9.82
21	95.41	0.0	0.0	1.0	95.41	0.0	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

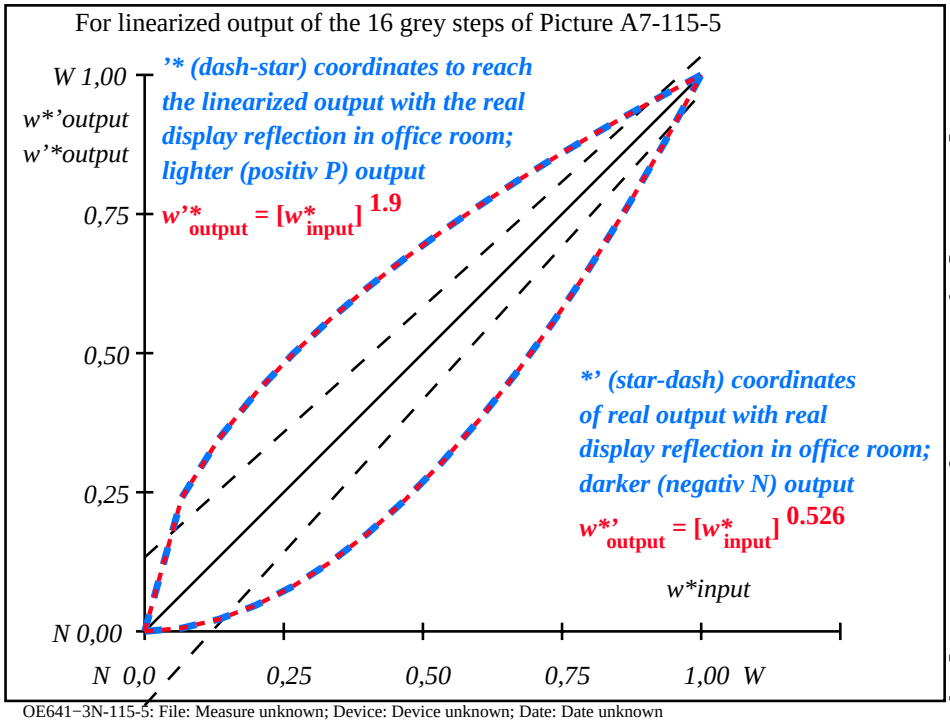
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 8.3

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 6.7

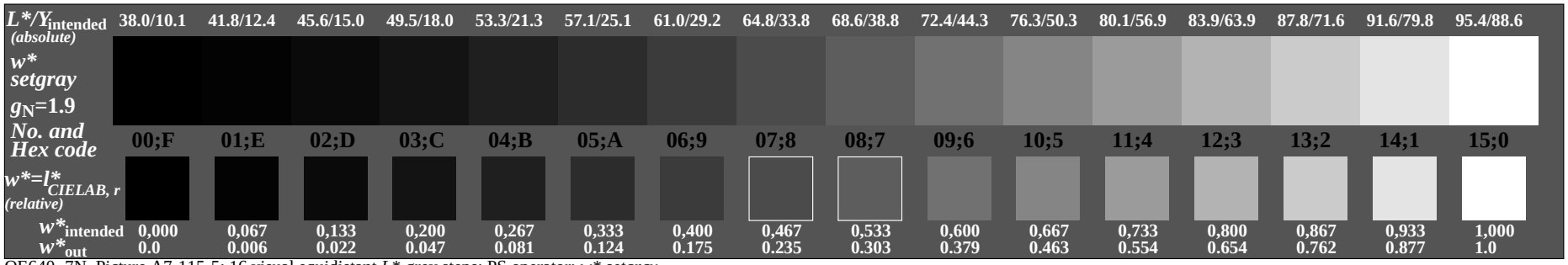
Mean colour reproduction index: $R^*_{ab,m}$ = 64

OE640−3N-115-5: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-115-5



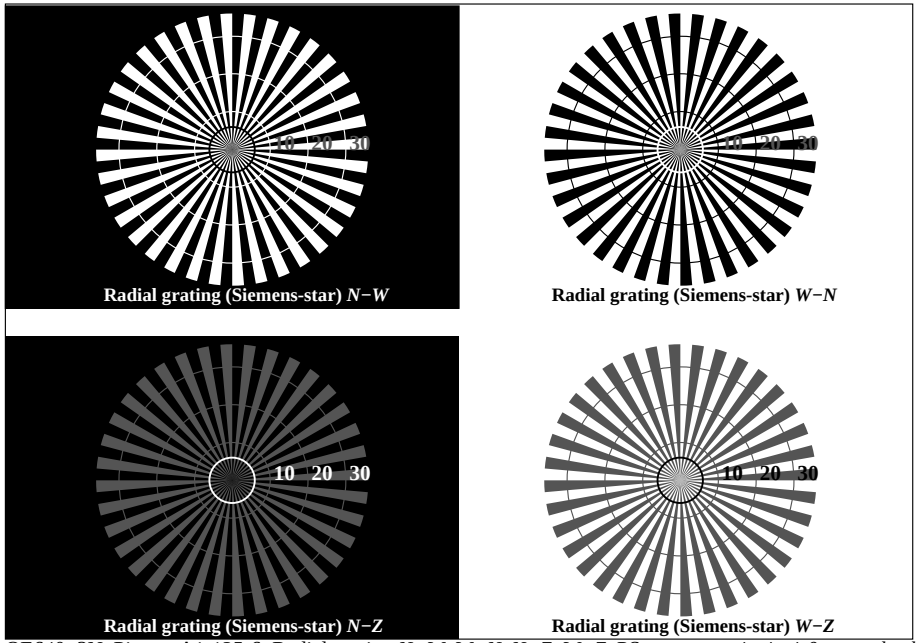
OE641−3N-115-5: File: Measure unknown; Device: Device unknown; Date: Date unknown



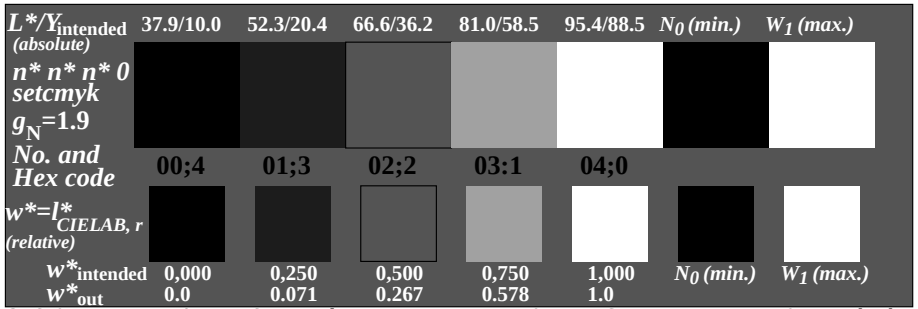
OE640−7N, Picture A7-115-5: 16 visual equidistant *L***-grey steps; PS operator: *w* setgray*

OE64: 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

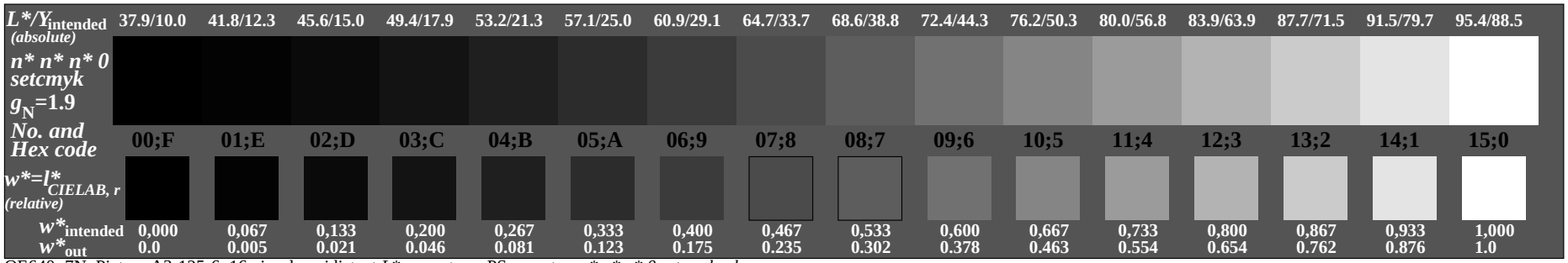
input: *all (−>rgb*de) setrgbcolor*
output 130-5: g_P=1.0; g_N=1.6



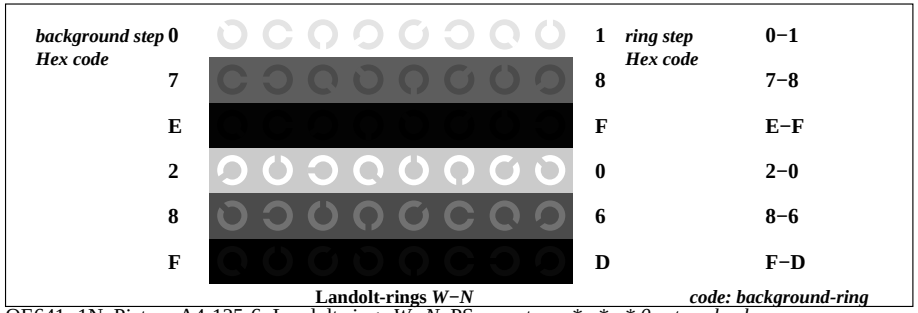
OE640−3N, Picture A1-125-6: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *n* n* n* 0 setcmykcolor*



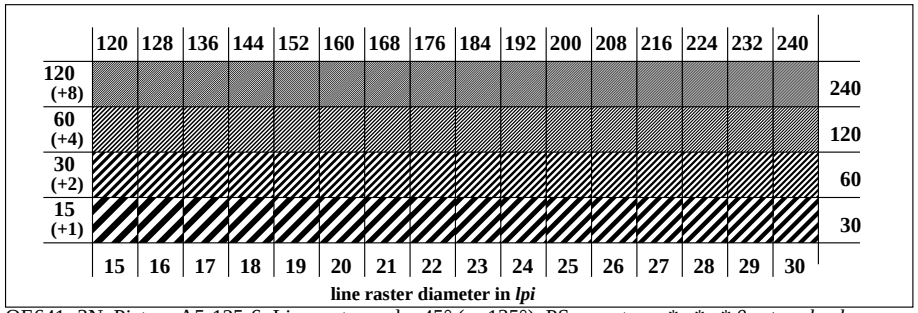
OE640−5N, Picture A2-125-6: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *n* n* n* 0 setcmykcolor*



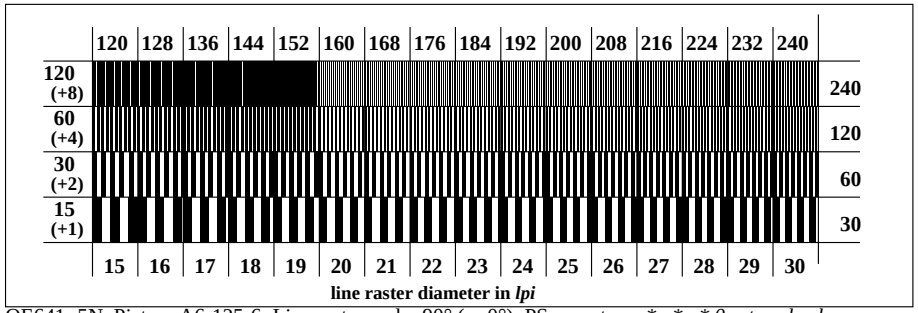
OE640−7N, Picture A3-125-6: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*



OE641−1N, Picture A4-125-6: Landolt-rings *W−N*; PS operator: *n* n* n* 0 setcmykcolor*



OE641−3N, Picture A5-125-6: Line raster under 45° (or 135°); PS operator: *n* n* n* 0 setcmykcolor*



OE641−5N, Picture A6-125-6: Line raster under 90° (or 0°); PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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: *all (−>rgb*de) setrgbcolor*
output 130-6: g_P=1.0; g_N=1.6

Test for the best visual linearized output of Picture A7-125-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-125-0

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**-125-0
Are the 5 steps on the upper rows 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**-125-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1240-7

Test for the best visual linearized output of Picture A7-125-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-125-0
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 A5-125-0
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 A6-125-0
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 OE641−3N-125-7

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-125-7

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-125-2: **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/OE64/OE64F1P2.PDF
picture A7-125-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-125-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-125-7

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	37.99	0.0	0.0	0.0	37.99	0.0	0.0	0.0	0.0	0.0	0.01
2	41.81	0.0	0.0	0.01	38.32	0.0	0.0	-3.48	0.0	0.0	3.49
3	45.64	0.0	0.0	0.02	39.23	0.0	0.0	-6.4	0.0	0.0	6.41
4	49.47	0.0	0.0	0.05	40.68	0.0	0.0	-8.78	0.0	0.0	8.79
5	53.3	0.0	0.0	0.08	42.65	0.0	0.0	-10.64	0.0	0.0	10.65
6	57.13	0.0	0.0	0.12	45.11	0.0	0.0	-12.01	0.0	0.0	12.02
7	60.96	0.0	0.0	0.18	48.06	0.0	0.0	-12.89	0.0	0.0	12.9
8	64.78	0.0	0.0	0.24	51.48	0.0	0.0	-13.29	0.0	0.0	13.3
9	68.61	0.0	0.0	0.3	55.38	0.0	0.0	-13.22	0.0	0.0	13.23
10	72.44	0.0	0.0	0.38	59.74	0.0	0.0	-12.69	0.0	0.0	12.7
11	76.27	0.0	0.0	0.46	64.56	0.0	0.0	-11.69	0.0	0.0	11.7
12	80.1	0.0	0.0	0.55	69.84	0.0	0.0	-10.25	0.0	0.0	10.26
13	83.93	0.0	0.0	0.65	75.57	0.0	0.0	-8.35	0.0	0.0	8.36
14	87.75	0.0	0.0	0.76	81.74	0.0	0.0	-6.0	0.0	0.0	6.01
15	91.58	0.0	0.0	0.88	88.35	0.0	0.0	-3.22	0.0	0.0	3.23
16	95.41	0.0	0.0	1.0	95.41	0.0	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	0.0	0.01
18	52.34	0.0	0.0	0.07	42.11	0.0	0.0	-10.22	0.0	0.0	10.23
19	66.7	0.0	0.0	0.27	53.37	0.0	0.0	-13.32	0.0	0.0	13.33
20	81.05	0.0	0.0	0.58	71.23	0.0	0.0	-9.81	0.0	0.0	9.82
21	95.41	0.0	0.0	1.0	95.41	0.0	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

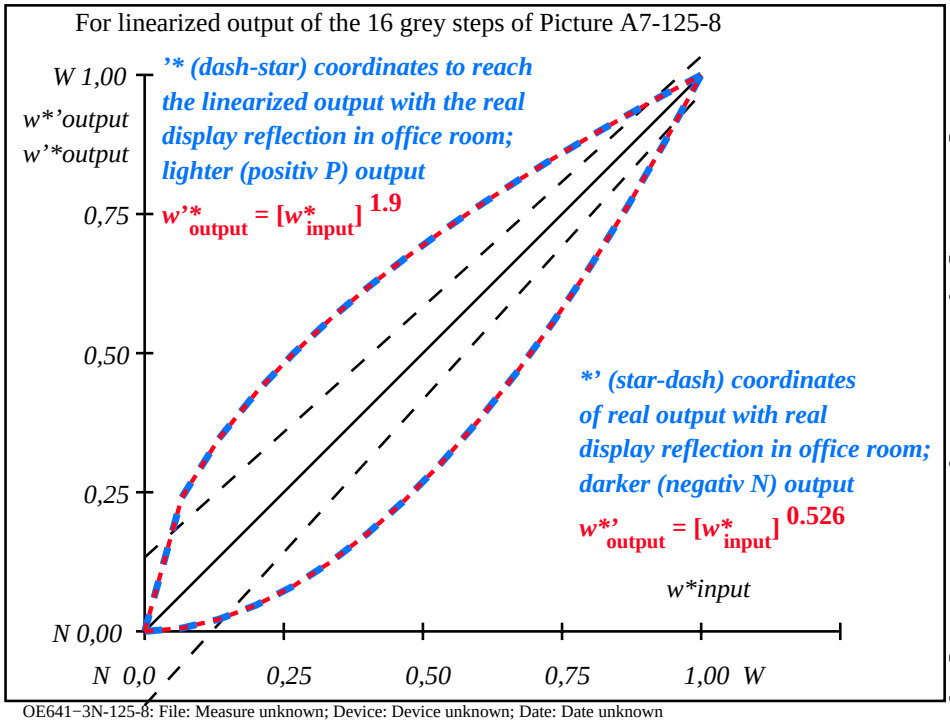
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 8.3

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 6.7

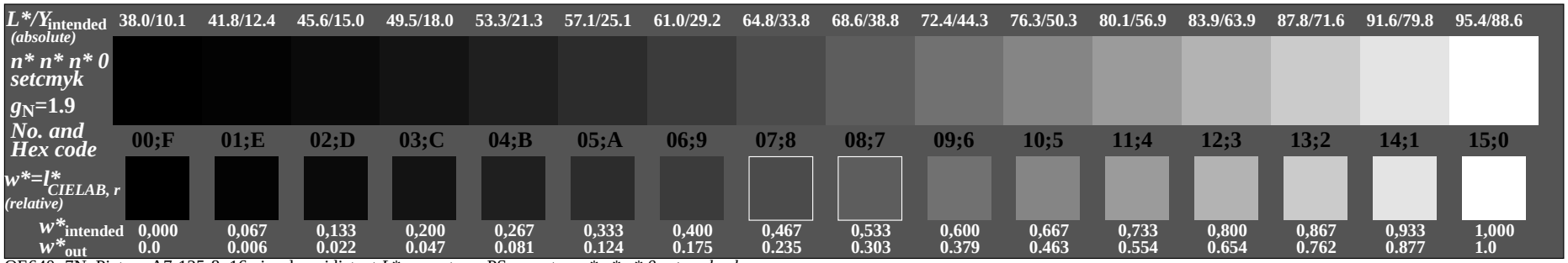
Mean colour reproduction index: $R^*_{ab,m}$ = 64

OE640−3N-125-8: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-125-8



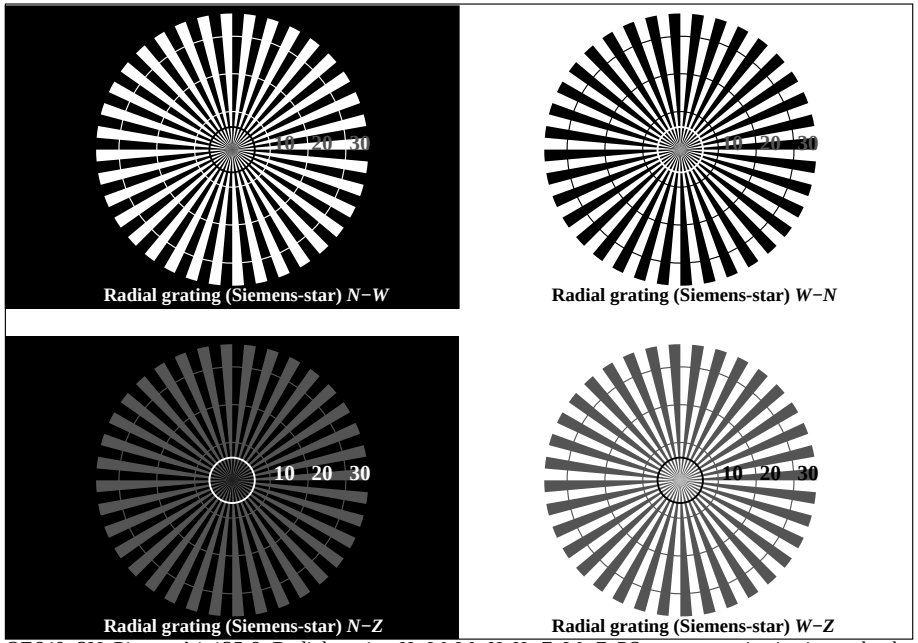
OE641−3N-125-8: File: Measure unknown; Device: Device unknown; Date: Date unknown



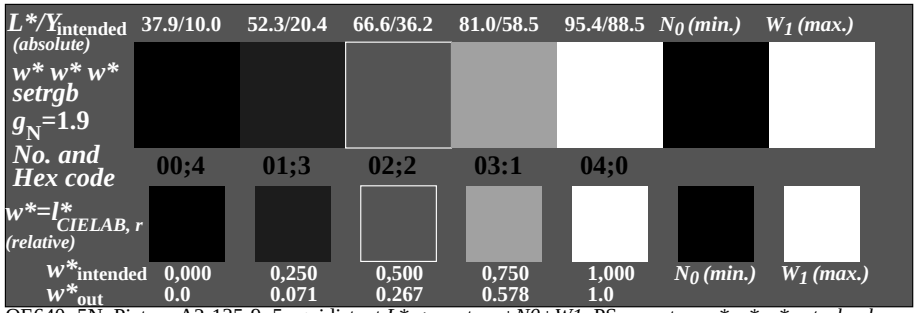
OE640−7N, Picture A7-125-8: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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

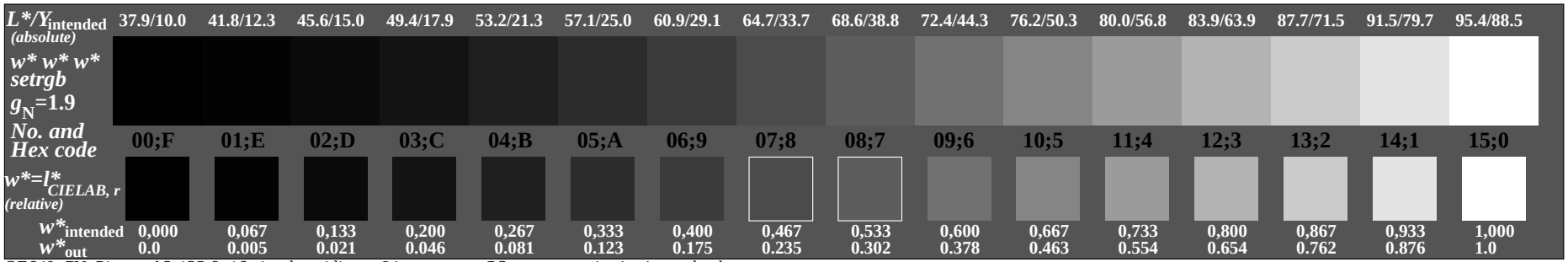
input: *all (−>rgb*de) setrgbcolor*
output 130-8: g_P=1.0; g_N=1.6



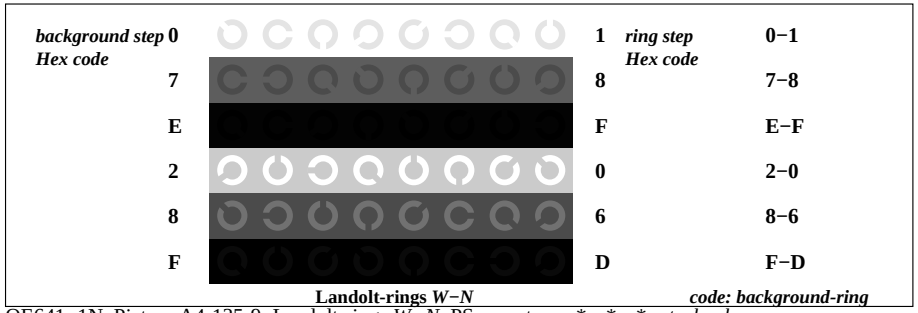
OE640−3N, Picture A1-135-9: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* w* w* setrgbcolor*



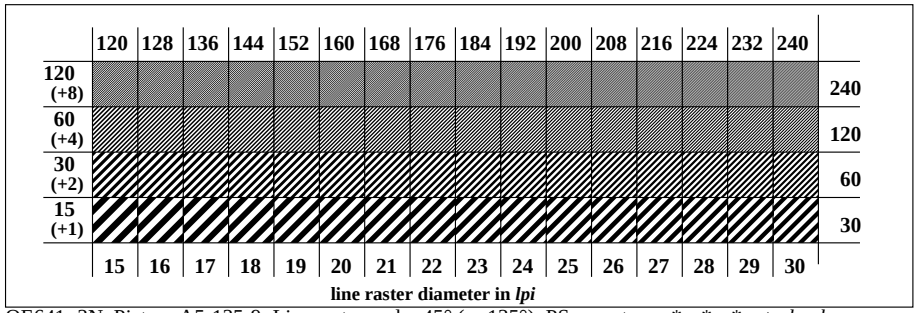
OE640−5N, Picture A2-135-9: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *w* w* w* setrgbcolor*



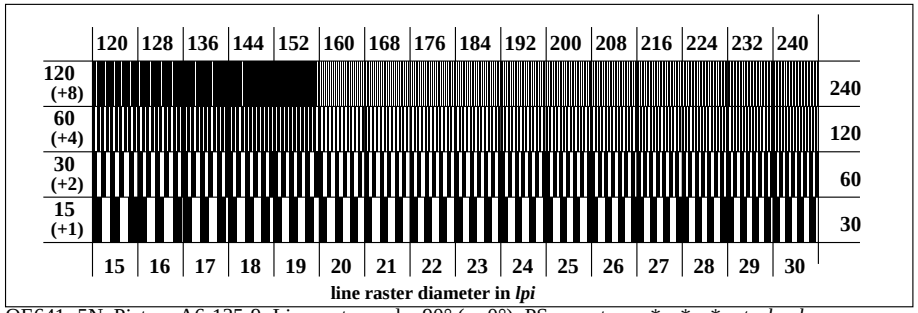
OE640−7N, Picture A3-135-9: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*



OE641−1N, Picture A4-135-9: Landolt-rings *W−N*; PS operator: *w* w* w* setrgbcolor*



OE641−3N, Picture A5-135-9: Line raster under 45° (or 135°); PS operator: *w* w* w* setrgbcolor*



OE641−5N, Picture A6-135-9: Line raster under 90° (or 0°); PS operator: *w* w* w* setrgbcolor*

OE64: 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: *all (−>rgb*de) setrgbcolor*
output 130-9: 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?
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?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1340-10

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 OE641−3N-135-10

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-135-10

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.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/OE64/OE64F1P2.PDF
picture A7-135-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-135-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-135-10

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	37.99	0.0	0.0	0.0	37.99	0.0	0.0	0.0	0.0	0.0	0.01
2	41.81	0.0	0.0	0.01	38.32	0.0	0.0	-3.48	0.0	0.0	3.49
3	45.64	0.0	0.0	0.02	39.23	0.0	0.0	-6.4	0.0	0.0	6.41
4	49.47	0.0	0.0	0.05	40.68	0.0	0.0	-8.78	0.0	0.0	8.79
5	53.3	0.0	0.0	0.08	42.65	0.0	0.0	-10.64	0.0	0.0	10.65
6	57.13	0.0	0.0	0.12	45.11	0.0	0.0	-12.01	0.0	0.0	12.02
7	60.96	0.0	0.0	0.18	48.06	0.0	0.0	-12.89	0.0	0.0	12.9
8	64.78	0.0	0.0	0.24	51.48	0.0	0.0	-13.29	0.0	0.0	13.3
9	68.61	0.0	0.0	0.3	55.38	0.0	0.0	-13.22	0.0	0.0	13.23
10	72.44	0.0	0.0	0.38	59.74	0.0	0.0	-12.69	0.0	0.0	12.7
11	76.27	0.0	0.0	0.46	64.56	0.0	0.0	-11.69	0.0	0.0	11.7
12	80.1	0.0	0.0	0.55	69.84	0.0	0.0	-10.25	0.0	0.0	10.26
13	83.93	0.0	0.0	0.65	75.57	0.0	0.0	-8.35	0.0	0.0	8.36
14	87.75	0.0	0.0	0.76	81.74	0.0	0.0	-6.0	0.0	0.0	6.01
15	91.58	0.0	0.0	0.88	88.35	0.0	0.0	-3.22	0.0	0.0	3.23
16	95.41	0.0	0.0	1.0	95.41	0.0	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	0.0	0.01
18	52.34	0.0	0.0	0.07	42.11	0.0	0.0	-10.22	0.0	0.0	10.23
19	66.7	0.0	0.0	0.27	53.37	0.0	0.0	-13.32	0.0	0.0	13.33
20	81.05	0.0	0.0	0.58	71.23	0.0	0.0	-9.81	0.0	0.0	9.82
21	95.41	0.0	0.0	1.0	95.41	0.0	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

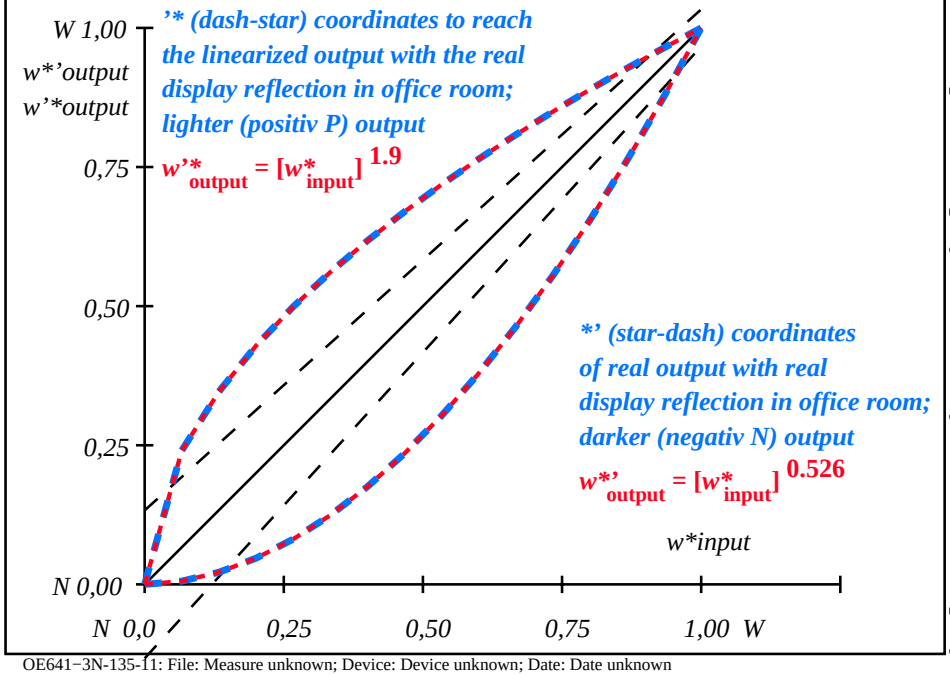
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 8.3

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 6.7

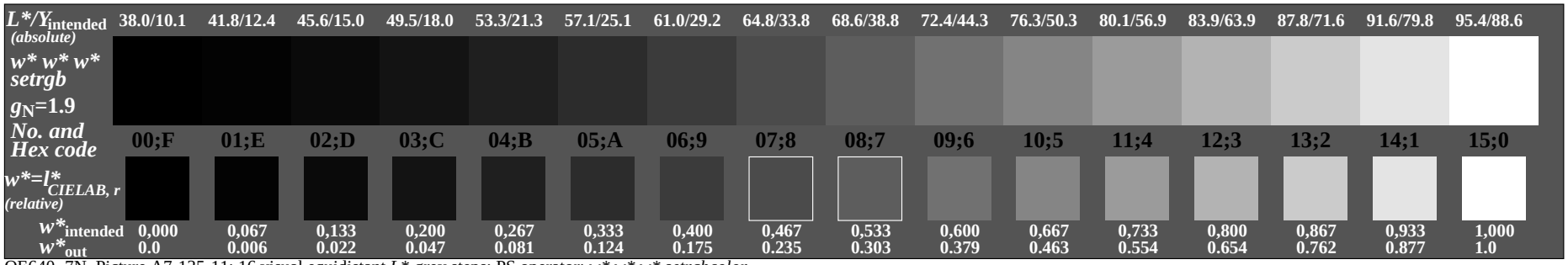
Mean colour reproduction index: $R^*_{ab,m}$ = 64

OE640−3N-135-11: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-135-11



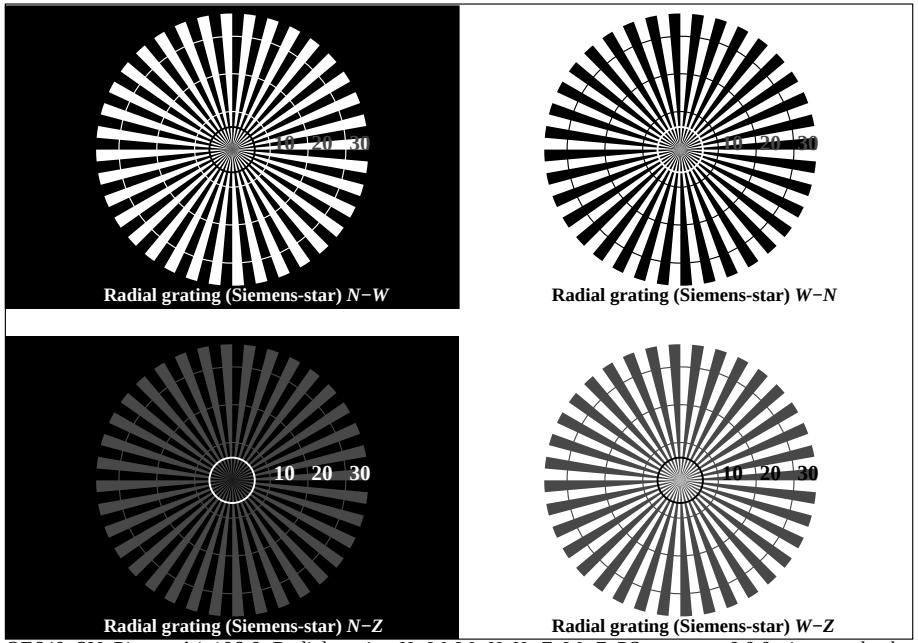
OE641−3N-135-11: File: Measure unknown; Device: Device unknown; Date: Date unknown



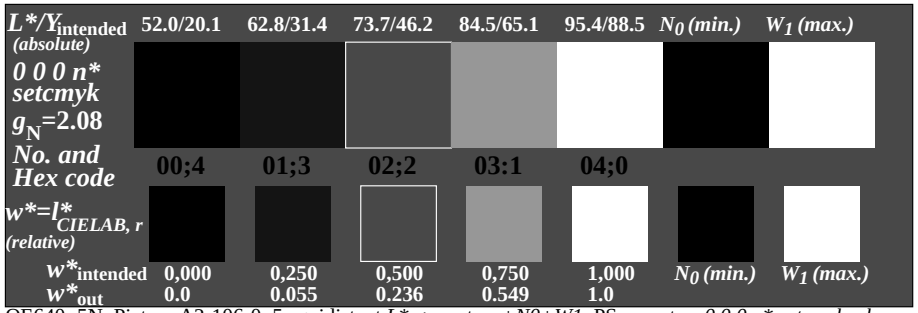
OE640−7N, Picture A7-135-11: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*

OE64: 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

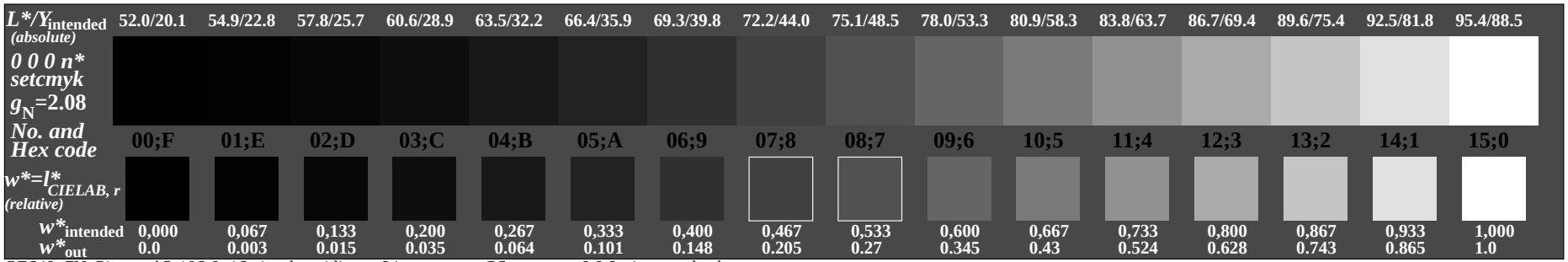
input: *all (−>rgb*de) setrgbcolor*
output 130-11: g_P=1.0; g_N=1.6



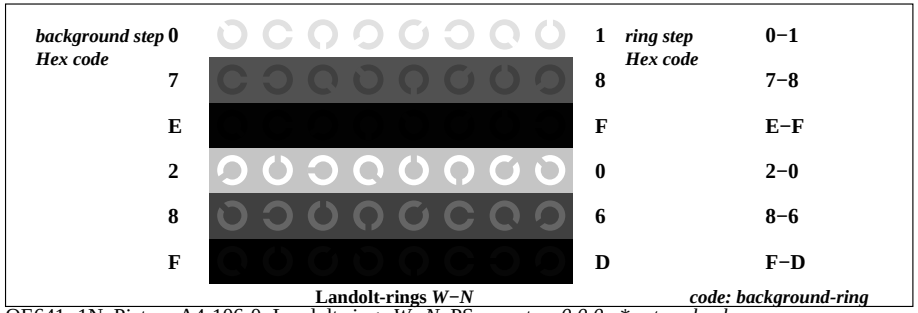
OE640−3N, Picture A1-106-0: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *0 0 0 n* setcmykcolor*



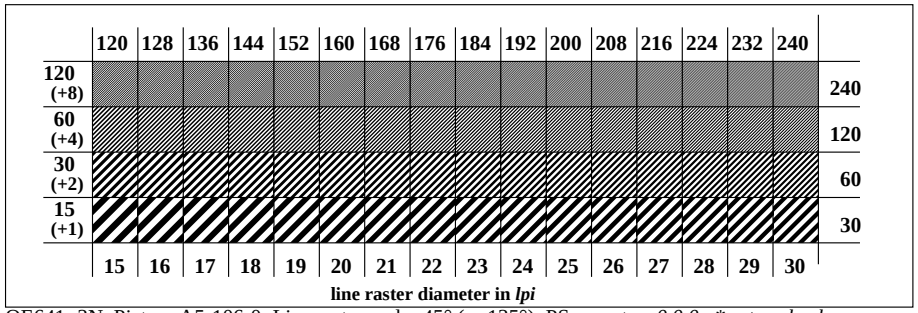
OE640−5N, Picture A2-106-0: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *0 0 0 n* setcmykcolor*



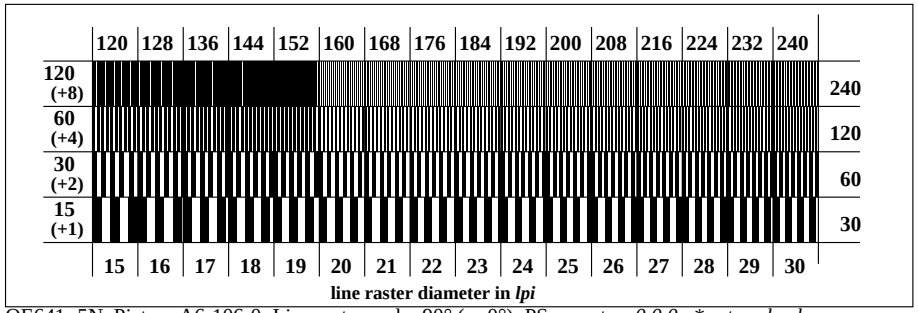
OE640−7N, Picture A3-106-0: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*



OE641−1N, Picture A4-106-0: Landolt-rings *W−N*; PS operator: *0 0 0 n* setcmykcolor*



OE641−3N, Picture A5-106-0: Line raster under 45° (or 135°); PS operator: *0 0 0 n* setcmykcolor*



OE641−5N, Picture A6-106-0: Line raster under 90° (or 0°); PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-0: g_P=1.0; g_N=1.81

Test for the best visual linearized output of Picture A7-106-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-106-0

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**-106-0
Are the 5 steps on the upper rows 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**-106-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1048-1

Test for the best visual linearized output of Picture A7-106-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-106-0
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 A5-106-0
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 A6-106-0
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 OE641−3N-106-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-106-1

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-106-2: **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/OE64/OE64F1P2.PDF
picture A7-106-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-106-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-106-1

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	52.02	0.0	0.0	0.0	52.02	0.0	0.0	0.0	0.0	0.0	0.01
2	54.91	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	0.02	52.67	0.0	0.0	-5.12	0.0	0.0	5.13
4	60.7	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	0.06	54.79	0.0	0.0	-8.79	0.0	0.0	8.8
6	66.48	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	0.15	58.47	0.0	0.0	-10.89	0.0	0.0	10.9
8	72.27	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	0.27	63.75	0.0	0.0	-11.4	0.0	0.0	11.41
10	78.05	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	0.43	70.69	0.0	0.0	-10.25	0.0	0.0	10.26
12	83.84	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	0.63	79.3	0.0	0.0	-7.42	0.0	0.0	7.43
14	89.62	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	0.87	89.61	0.0	0.0	-2.9	0.0	0.0	2.91
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	52.02	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	0.06	54.44	0.0	0.0	-8.41	0.0	0.0	8.42
19	73.71	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	0.55	75.87	0.0	0.0	-8.68	0.0	0.0	8.69
21	95.41	0.0	0.0	1.0	95.41	0.0	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

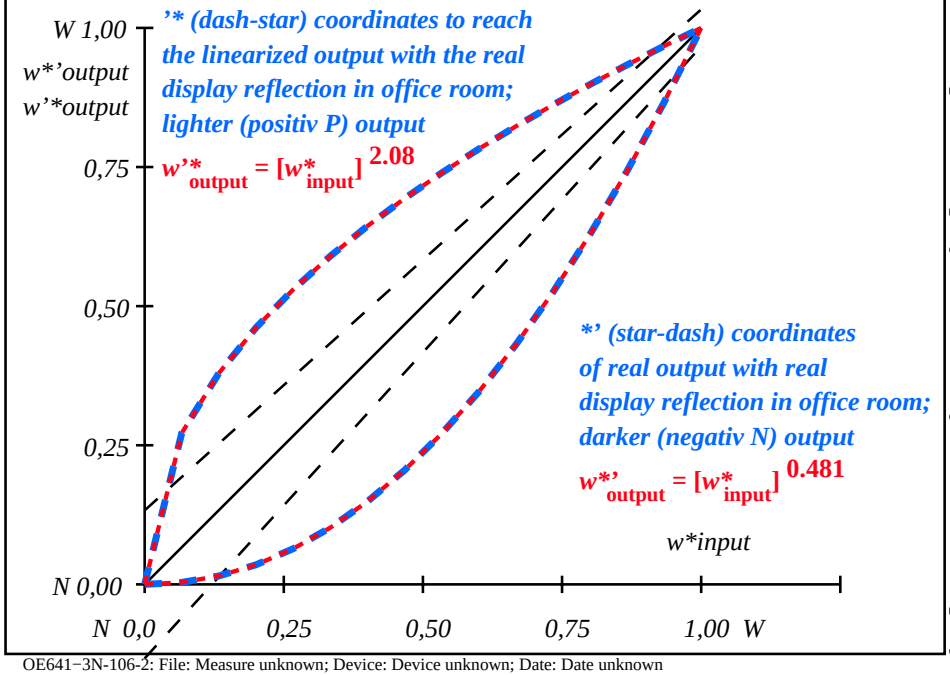
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **7.1**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **5.7**

Mean colour reproduction index: $R^*_{ab,m}$ = **69**

OE640−3N-106-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-106-2



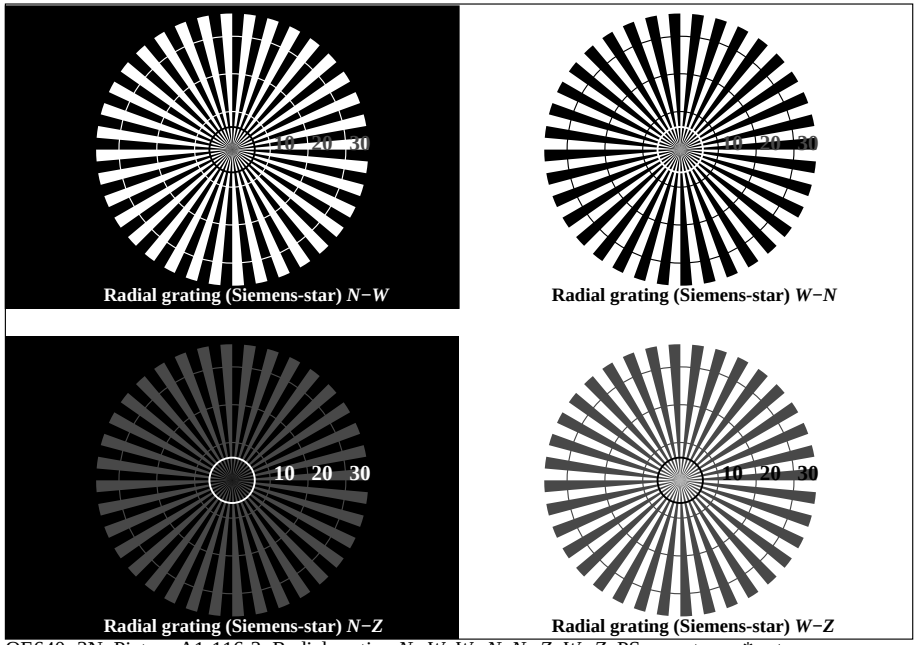
OE641−3N-106-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (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
0 0 0 n* setcmyk																
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
$w^*=l^*_{CIELAB, r}$ (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

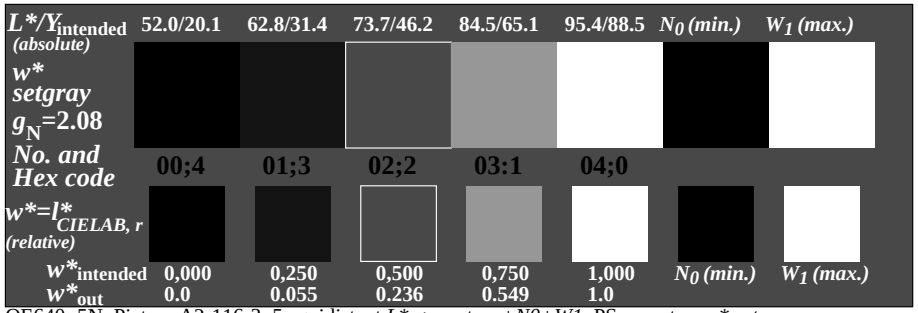
OE640−7N, Picture A7-106-2: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

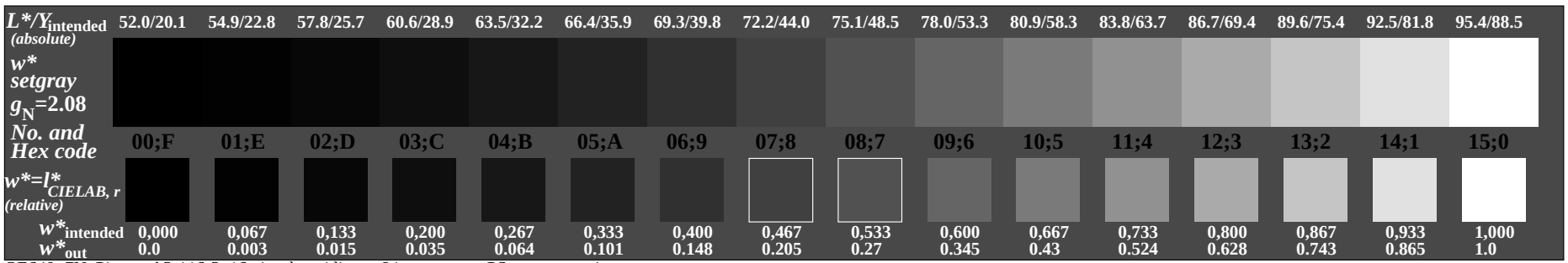
input: *all (−>rgb*$_{de}$) setrgbcolor*
output 130-2: g_P=1.0; g_N=1.81



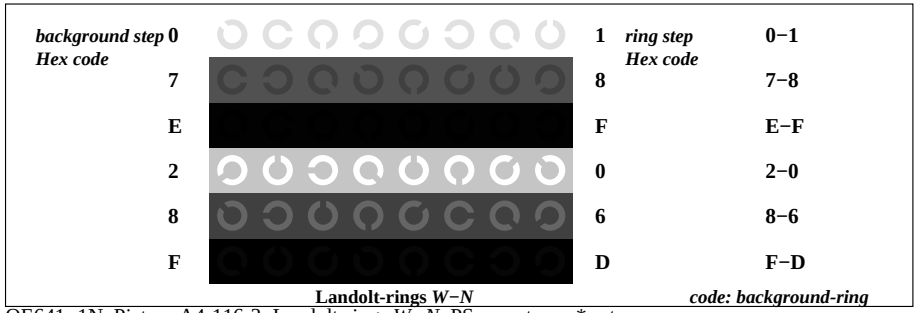
OE640−3N, Picture A1-116-3: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* setgray*



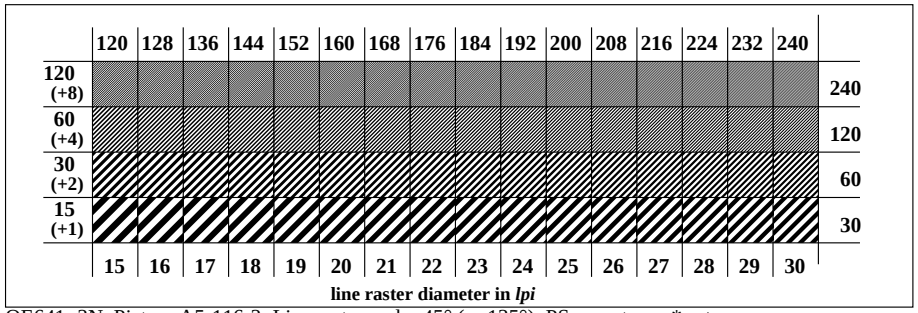
OE640−5N, Picture A2-116-3: 5 equidistant *L**-grey steps+*N0+W1*; PS operator: *w* setgray*



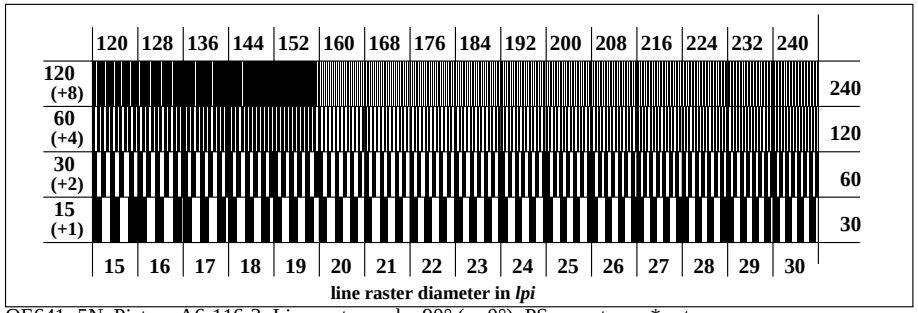
OE640−7N, Picture A3-116-3: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*



OE641−1N, Picture A4-116-3: Landolt-rings *W−N*; PS operator: *w* setgray*



OE641−3N, Picture A5-116-3: Line raster under 45° (or 135°); PS operator: *w* setgray*



OE641−5N, Picture A6-116-3: Line raster under 90° (or 0°); PS operator: *w* setgray*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-3: g_P=1.0; g_N=1.81

Test for the best visual linearized output of Picture A7-116-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-116-0

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**-116-0
Are the 5 steps on the upper rows 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**-116-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1148-4

Test for the best visual linearized output of Picture A7-116-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-116-0
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 A5-116-0
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 A6-116-0
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 OE641−3N-116-4

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-116-4

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-116-2: **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/OE64/OE64F1P2.PDF
picture A7-116-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-116-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-116-4

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	52.02	0.0	0.0	0.0	52.02	0.0	0.0	0.0	0.0	0.0	0.01
2	54.91	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	0.02	52.67	0.0	0.0	-5.12	0.0	0.0	5.13
4	60.7	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	0.06	54.79	0.0	0.0	-8.79	0.0	0.0	8.8
6	66.48	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	0.15	58.47	0.0	0.0	-10.89	0.0	0.0	10.9
8	72.27	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	0.27	63.75	0.0	0.0	-11.4	0.0	0.0	11.41
10	78.05	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	0.43	70.69	0.0	0.0	-10.25	0.0	0.0	10.26
12	83.84	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	0.63	79.3	0.0	0.0	-7.42	0.0	0.0	7.43
14	89.62	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	0.87	89.61	0.0	0.0	-2.9	0.0	0.0	2.91
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	52.02	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	0.06	54.44	0.0	0.0	-8.41	0.0	0.0	8.42
19	73.71	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	0.55	75.87	0.0	0.0	-8.68	0.0	0.0	8.69
21	95.41	0.0	0.0	1.0	95.41	0.0	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

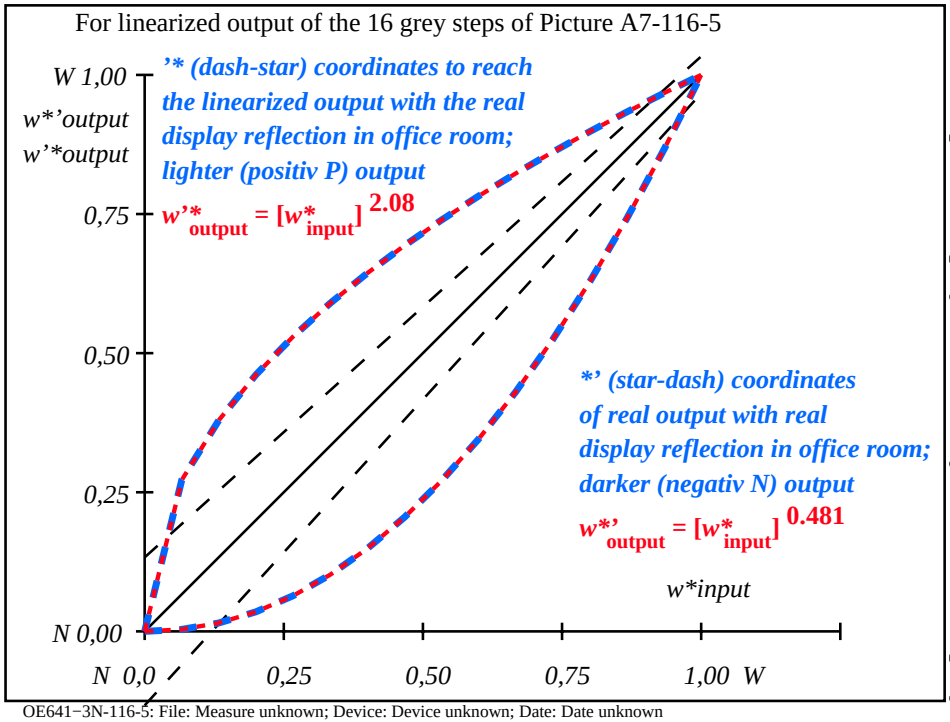
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **7.1**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **5.7**

Mean colour reproduction index: $R^*_{ab,m}$ = **69**

OE640−3N-116-5: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-116-5



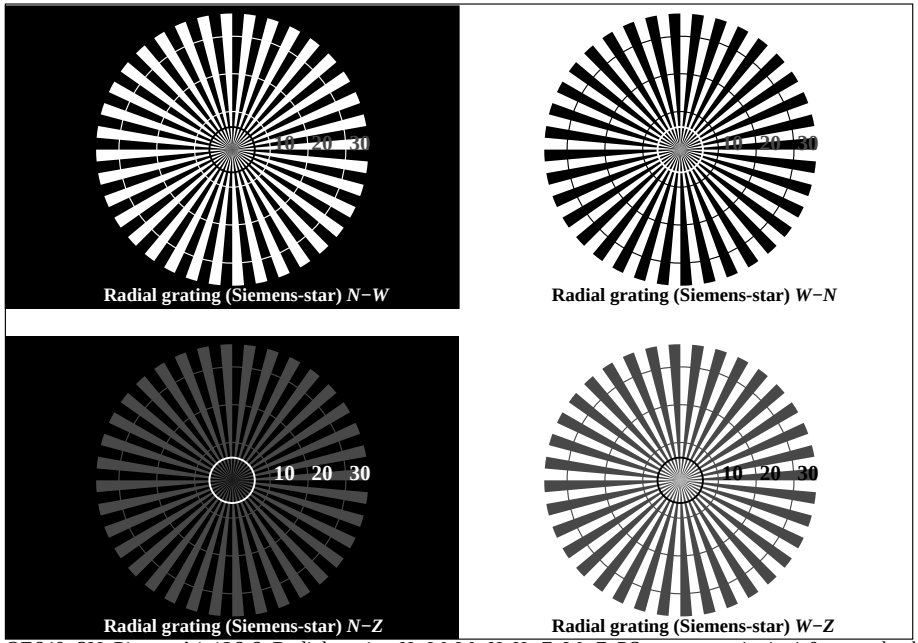
OE641−3N-116-5: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (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* setgray 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
$w^*=l^*_{CIELAB, r}$ (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

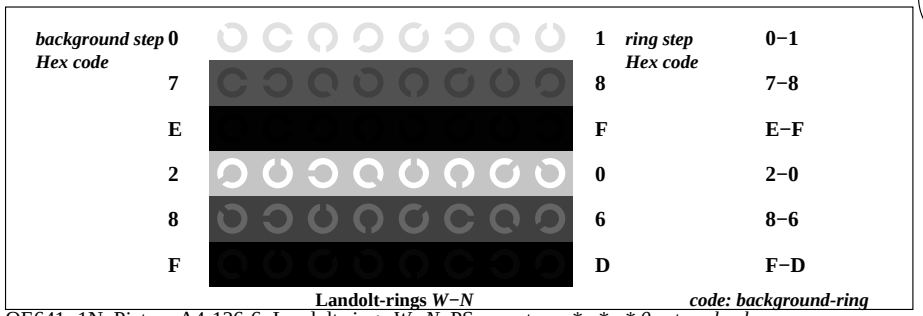
OE640−7N, Picture A7-116-5: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*

OE64: 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

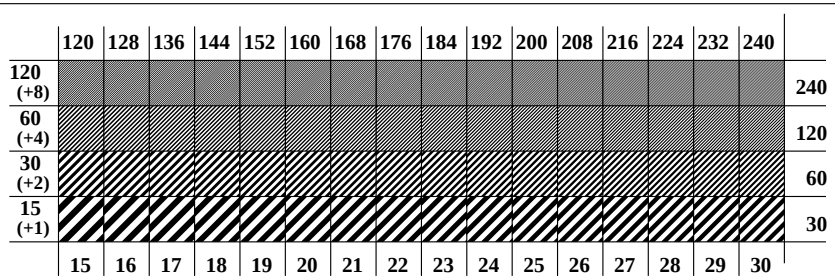
input: *all (−>rgb*de) setrgbcolor*
output 130-5: g_P=1.0; g_N=1.81



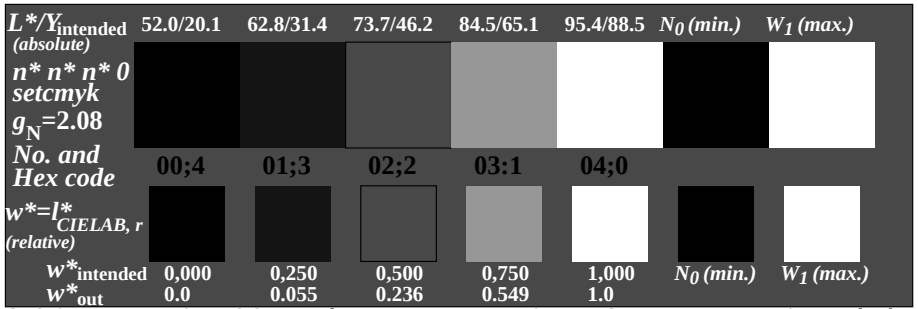
OE640−3N, Picture A1-126-6: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *n* n* n* 0 setcmykcolor*



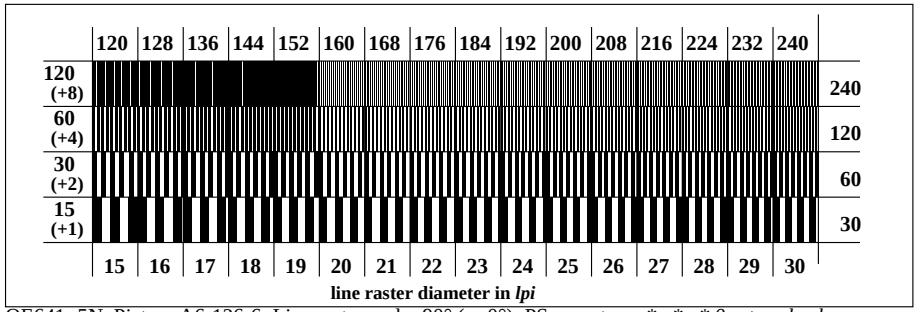
OE641−1N, Picture A4-126-6: Landolt-rings *W−N*; PS operator: *n* n* n* 0 setcmykcolor*



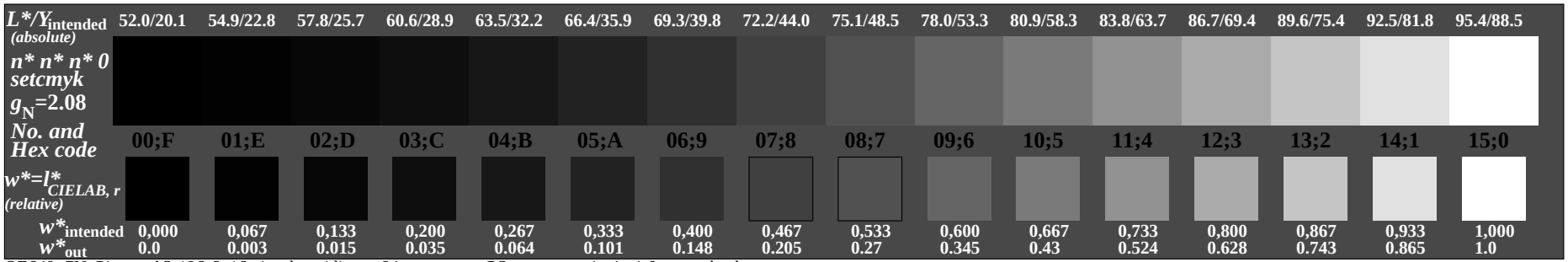
OE641−3N, Picture A5-126-6: Line raster under 45° (or 135°); PS operator: *n* n* n* 0 setcmykcolor*



OE640−5N, Picture A2-126-6: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *n* n* n* 0 setcmykcolor*



OE641−5N, Picture A6-126-6: Line raster under 90° (or 0°); PS operator: *n* n* n* 0 setcmykcolor*



OE640−7N, Picture A3-126-6: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-6: g_P=1.0; g_N=1.81

Test for the best visual linearized output of Picture A7-126-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-126-0

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**-126-0
Are the 5 steps on the upper rows 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**-126-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1248-7

Test for the best visual linearized output of Picture A7-126-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N−W* according to picture A4-126-0
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 A5-126-0
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 A6-126-0
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 OE641−3N-126-7

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-126-7

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-126-2: **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/OE64/OE64F1P2.PDF
picture A7-126-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-126-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-126-7

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	52.02	0.0	0.0	0.0	52.02	0.0	0.0	0.0	0.0	0.0	0.01
2	54.91	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	0.02	52.67	0.0	0.0	-5.12	0.0	0.0	5.13
4	60.7	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	0.06	54.79	0.0	0.0	-8.79	0.0	0.0	8.8
6	66.48	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	0.15	58.47	0.0	0.0	-10.89	0.0	0.0	10.9
8	72.27	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	0.27	63.75	0.0	0.0	-11.4	0.0	0.0	11.41
10	78.05	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	0.43	70.69	0.0	0.0	-10.25	0.0	0.0	10.26
12	83.84	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	0.63	79.3	0.0	0.0	-7.42	0.0	0.0	7.43
14	89.62	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	0.87	89.61	0.0	0.0	-2.9	0.0	0.0	2.91
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	52.02	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	0.06	54.44	0.0	0.0	-8.41	0.0	0.0	8.42
19	73.71	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	0.55	75.87	0.0	0.0	-8.68	0.0	0.0	8.69
21	95.41	0.0	0.0	1.0	95.41	0.0	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

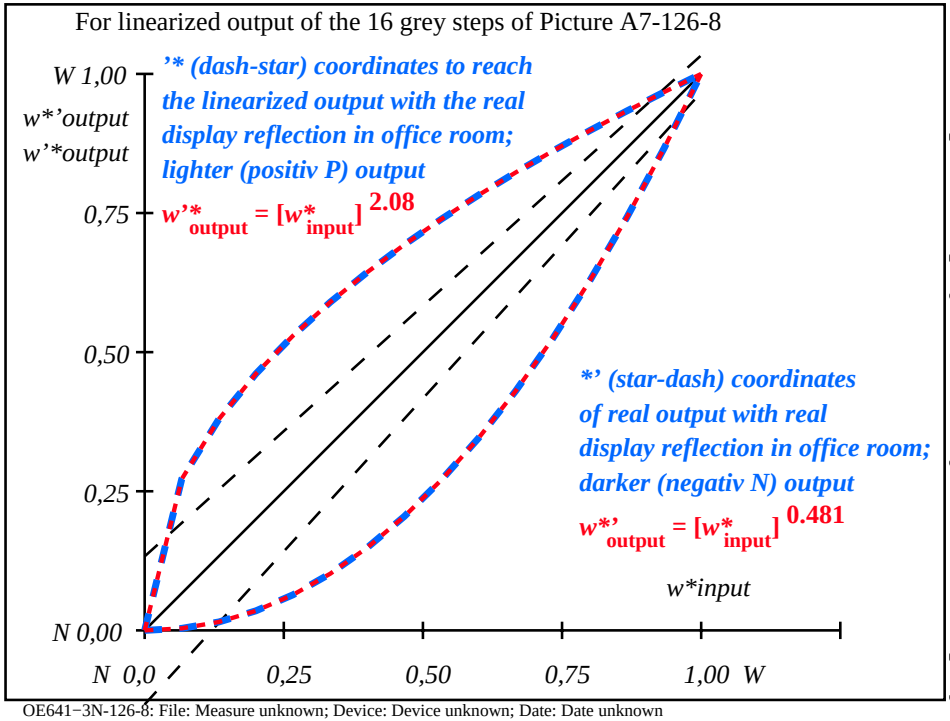
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **7.1**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **5.7**

Mean colour reproduction index: $R^*_{ab,m}$ = **69**

OE640−3N-126-8: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-126-8



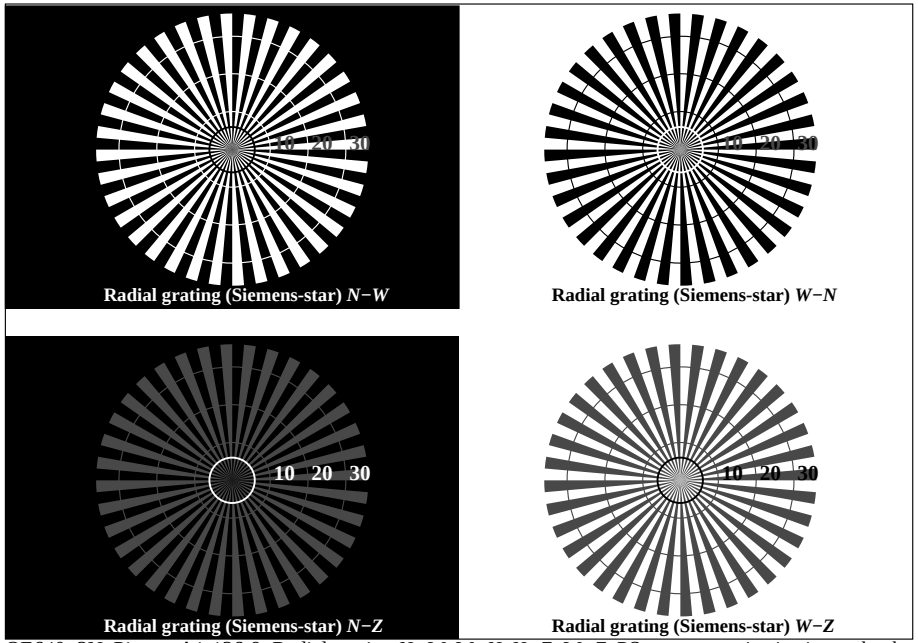
OE641−3N-126-8: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (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
n* n* n* 0 setcmyk																
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
$w^*=l^*_{CIELAB, r}$ (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

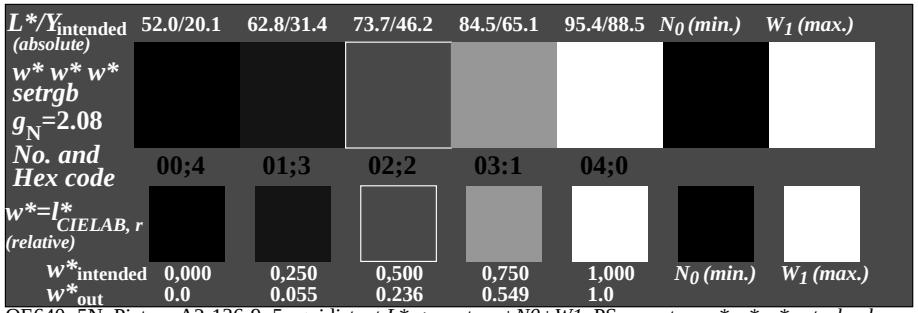
OE640−7N, Picture A7-126-8: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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

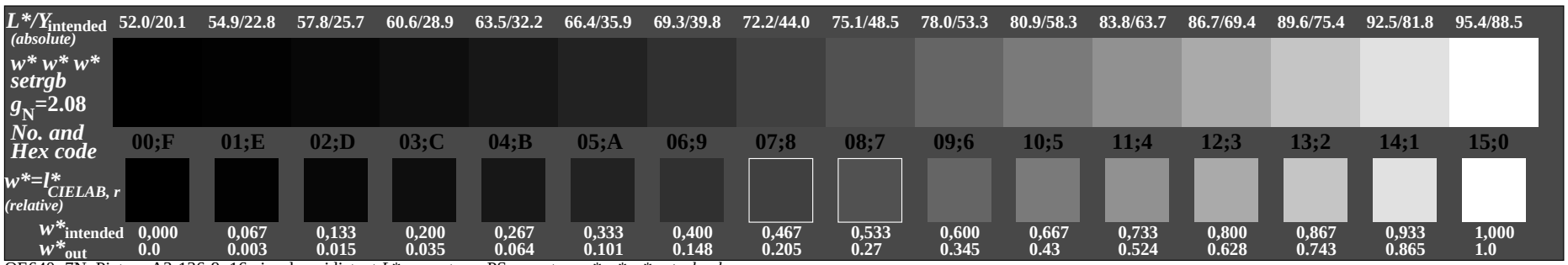
input: *all (−>rgb*de) setrgbcolor*
output 130-8: g_P=1.0; g_N=1.81



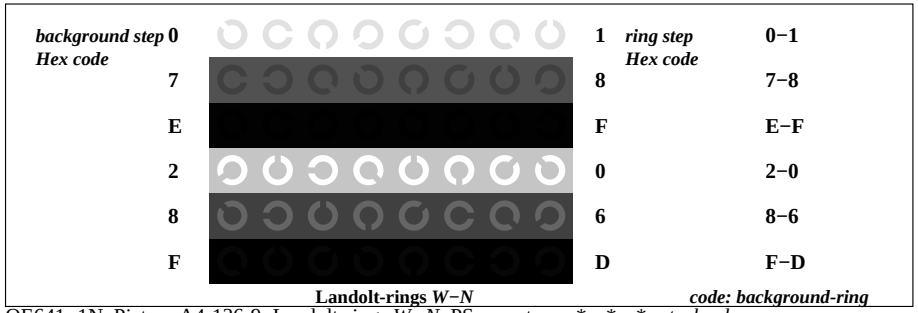
OE640−3N, Picture A1-136-9: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* w* w* setrgbcolor*



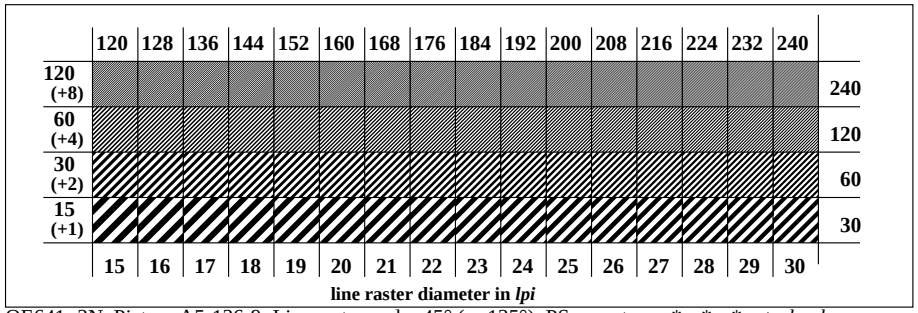
OE640−5N, Picture A2-136-9: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *w* w* w* setrgbcolor*



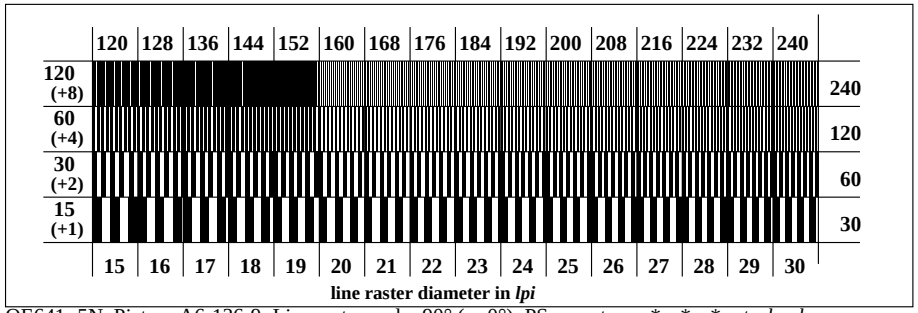
OE640−7N, Picture A3-136-9: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*



OE641−1N, Picture A4-136-9: Landolt-rings *W−N*; PS operator: *w* w* w* setrgbcolor*



OE641−3N, Picture A5-136-9: Line raster under 45° (or 135°); PS operator: *w* w* w* setrgbcolor*



OE641−5N, Picture A6-136-9: Line raster under 90° (or 0°); PS operator: *w* w* w* setrgbcolor*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-9: 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?
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?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1348-10

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 OE641−3N-136-10

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-136-10

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.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/OE64/OE64F1P2.PDF
picture A7-136-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-136-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-136-10

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	52.02	0.0	0.0	0.0	52.02	0.0	0.0	0.0	0.0	0.0	0.01
2	54.91	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	0.02	52.67	0.0	0.0	-5.12	0.0	0.0	5.13
4	60.7	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	0.06	54.79	0.0	0.0	-8.79	0.0	0.0	8.8
6	66.48	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	0.15	58.47	0.0	0.0	-10.89	0.0	0.0	10.9
8	72.27	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	0.27	63.75	0.0	0.0	-11.4	0.0	0.0	11.41
10	78.05	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	0.43	70.69	0.0	0.0	-10.25	0.0	0.0	10.26
12	83.84	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	0.63	79.3	0.0	0.0	-7.42	0.0	0.0	7.43
14	89.62	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	0.87	89.61	0.0	0.0	-2.9	0.0	0.0	2.91
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	52.02	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	0.06	54.44	0.0	0.0	-8.41	0.0	0.0	8.42
19	73.71	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	0.55	75.87	0.0	0.0	-8.68	0.0	0.0	8.69
21	95.41	0.0	0.0	1.0	95.41	0.0	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

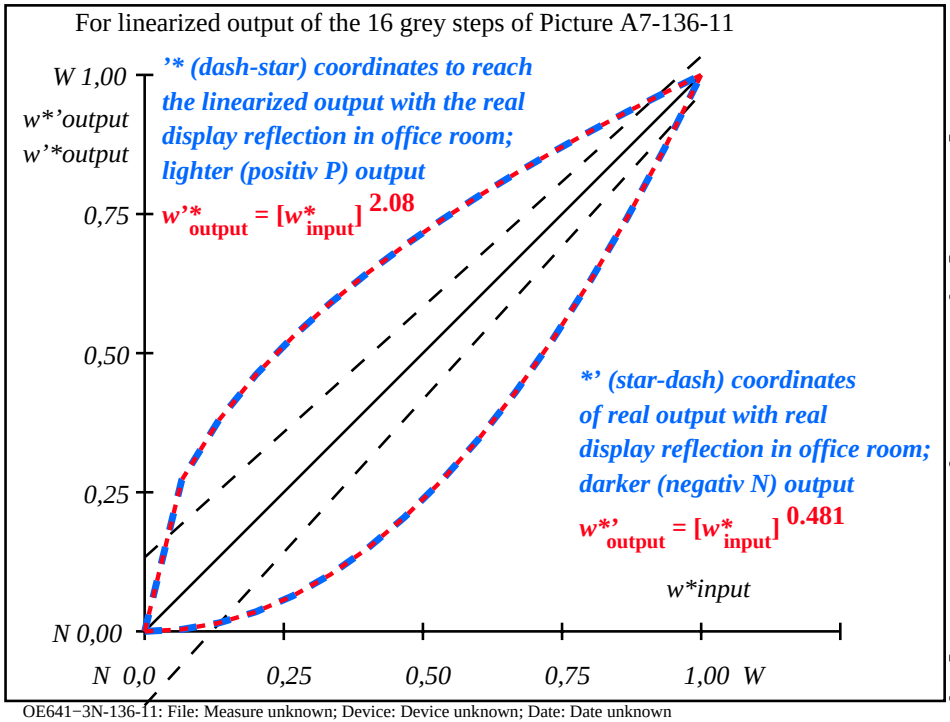
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **7.1**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **5.7**

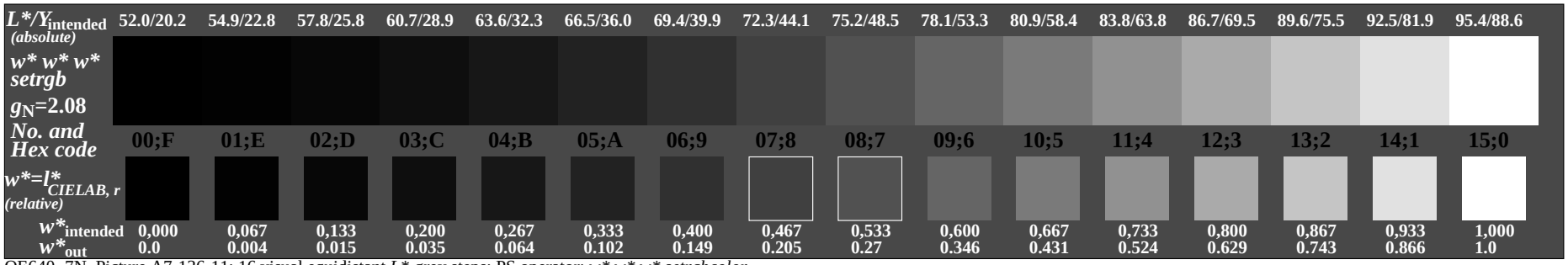
Mean colour reproduction index: $R^*_{ab,m}$ = **69**

OE640−3N-136-11: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-136-11



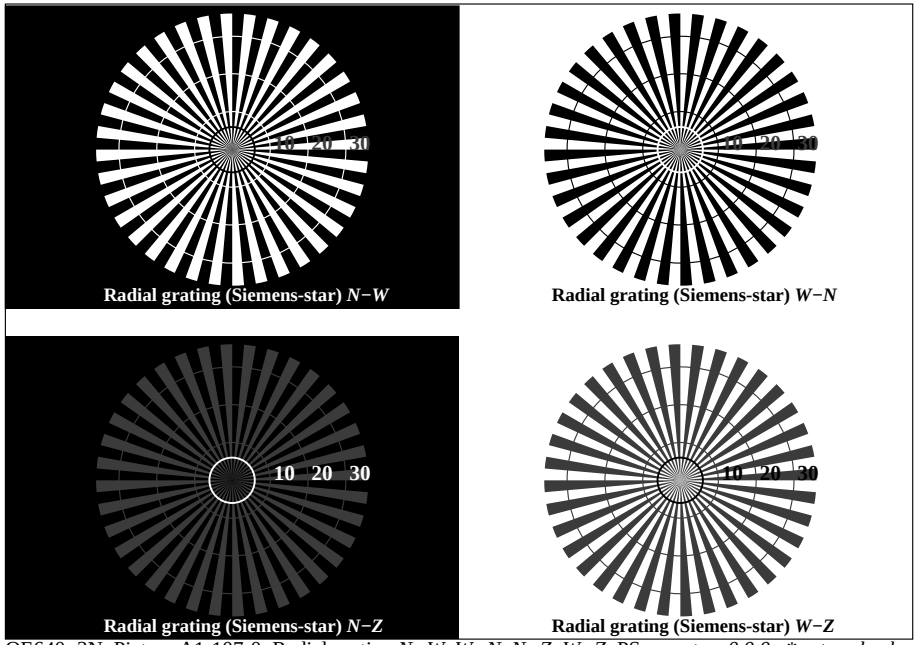
OE641−3N-136-11: File: Measure unknown; Device: Device unknown; Date: Date unknown



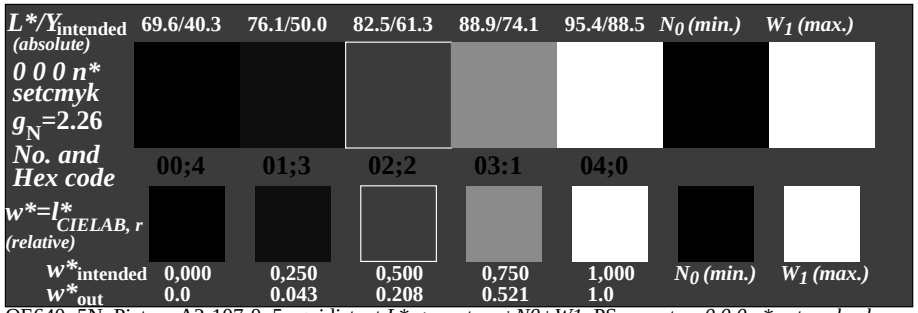
OE640−7N, Picture A7-136-11: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*

OE64: 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

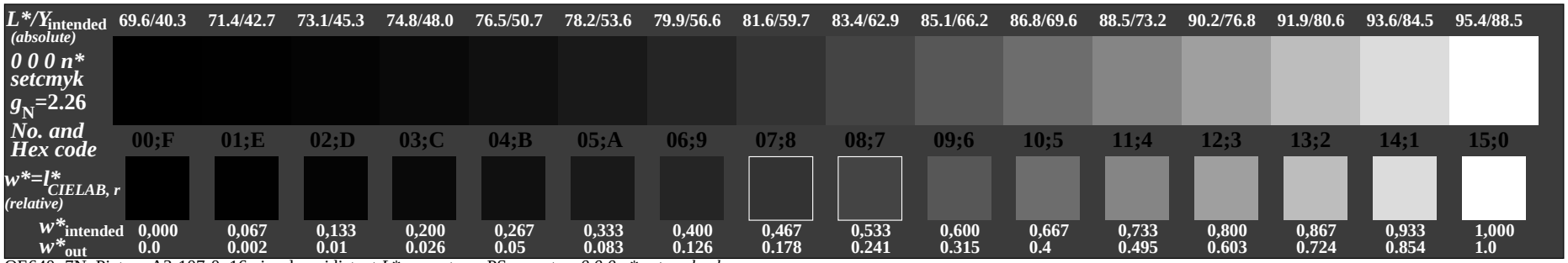
input: *all (−>rgb*de) setrgbcolor*
output 130-11: g_P=1.0; g_N=1.81



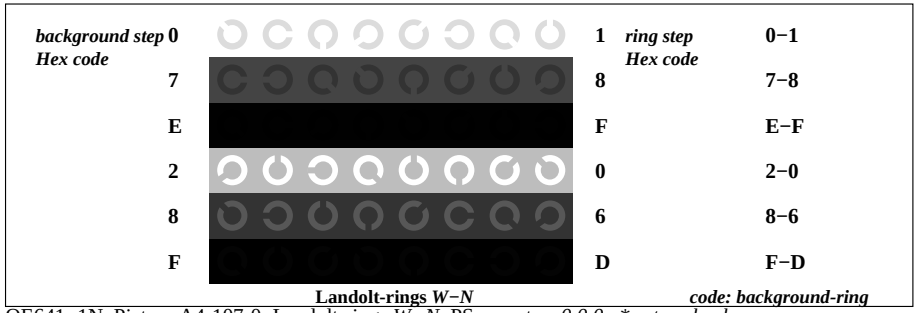
OE640−3N, Picture A1-107-0: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *0 0 0 n* setcmykcolor*



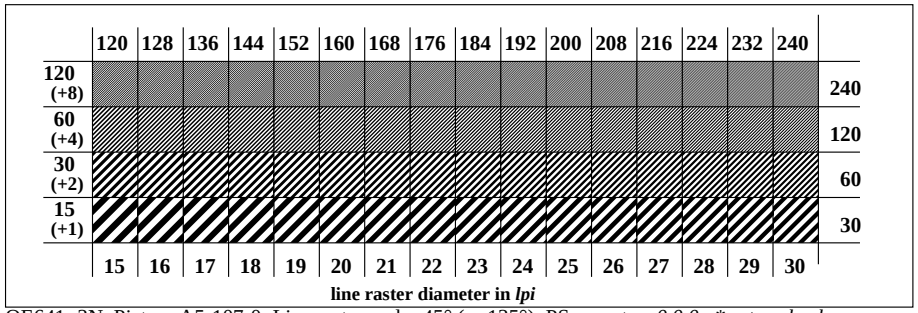
OE640−5N, Picture A2-107-0: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *0 0 0 n* setcmykcolor*



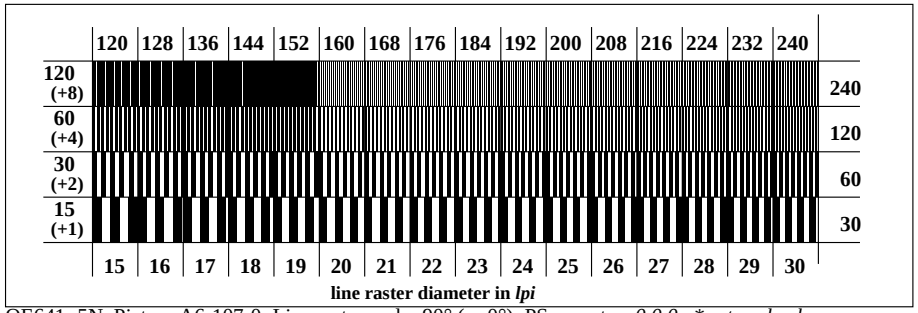
OE640−7N, Picture A3-107-0: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*



OE641−1N, Picture A4-107-0: Landolt-rings *W−N*; PS operator: *0 0 0 n* setcmykcolor*



OE641−3N, Picture A5-107-0: Line raster under 45° (or 135°); PS operator: *0 0 0 n* setcmykcolor*



OE641−5N, Picture A6-107-0: Line raster under 90° (or 0°); PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-0: g_P=1.0; g_N=2.1

Test for the best visual linearized output of Picture A7-107-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-107-0

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**-107-0
Are the 5 steps on the upper rows 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**-107-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1056-1

Test for the best visual linearized output of Picture A7-107-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-107-0
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 A5-107-0
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 A6-107-0
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 OE641−3N-107-1

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-107-1

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-107-2: **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/OE64/OE64F1P2.PDF
picture A7-107-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-107-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-107-1

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	69.7	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.0	0.01
2	71.41	0.0	0.0	0.0	69.75	0.0	0.0	-1.65	0.0	0.0	1.66
3	73.13	0.0	0.0	0.01	69.97	0.0	0.0	-3.15	0.0	0.0	3.16
4	74.84	0.0	0.0	0.03	70.37	0.0	0.0	-4.46	0.0	0.0	4.47
5	76.55	0.0	0.0	0.05	70.99	0.0	0.0	-5.55	0.0	0.0	5.56
6	78.27	0.0	0.0	0.08	71.84	0.0	0.0	-6.41	0.0	0.0	6.42
7	79.98	0.0	0.0	0.13	72.94	0.0	0.0	-7.03	0.0	0.0	7.04
8	81.7	0.0	0.0	0.18	74.29	0.0	0.0	-7.4	0.0	0.0	7.41
9	83.41	0.0	0.0	0.24	75.91	0.0	0.0	-7.49	0.0	0.0	7.5
10	85.12	0.0	0.0	0.32	77.8	0.0	0.0	-7.31	0.0	0.0	7.32
11	86.84	0.0	0.0	0.4	79.98	0.0	0.0	-6.85	0.0	0.0	6.86
12	88.55	0.0	0.0	0.5	82.45	0.0	0.0	-6.09	0.0	0.0	6.1
13	90.27	0.0	0.0	0.6	85.23	0.0	0.0	-5.03	0.0	0.0	5.04
14	91.98	0.0	0.0	0.72	88.3	0.0	0.0	-3.67	0.0	0.0	3.68
15	93.7	0.0	0.0	0.86	91.7	0.0	0.0	-1.99	0.0	0.0	2.0
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	69.7	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.0	0.01
18	76.13	0.0	0.0	0.04	70.82	0.0	0.0	-5.3	0.0	0.0	5.31
19	82.55	0.0	0.0	0.21	75.07	0.0	0.0	-7.48	0.0	0.0	7.49
20	88.98	0.0	0.0	0.52	83.12	0.0	0.0	-5.85	0.0	0.0	5.86
21	95.41	0.0	0.0	1.0	95.41	0.0	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

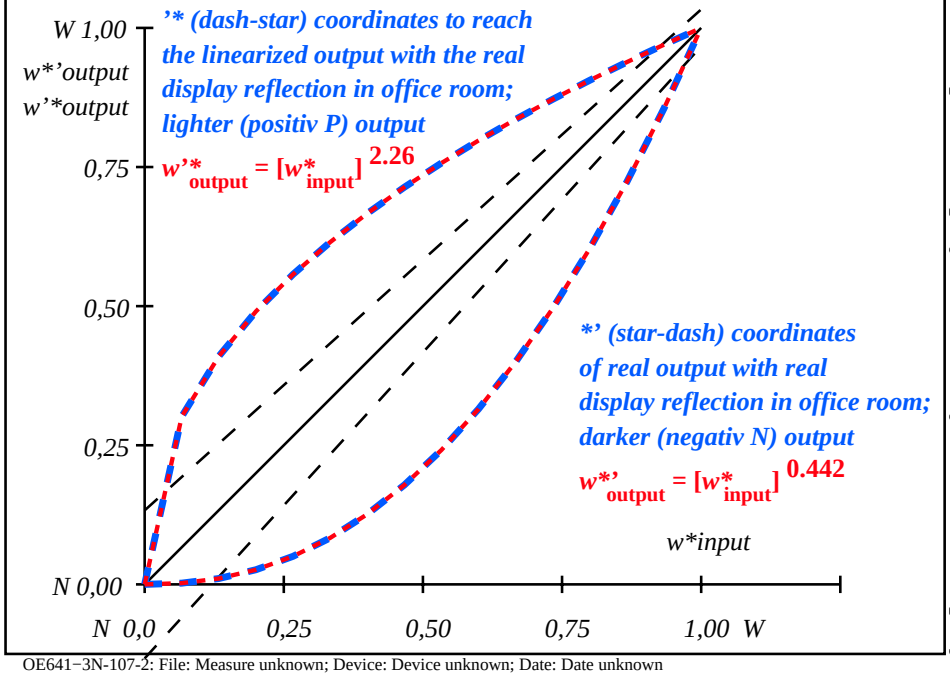
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **4.6**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **3.7**

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

OE640−3N-107-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-107-2



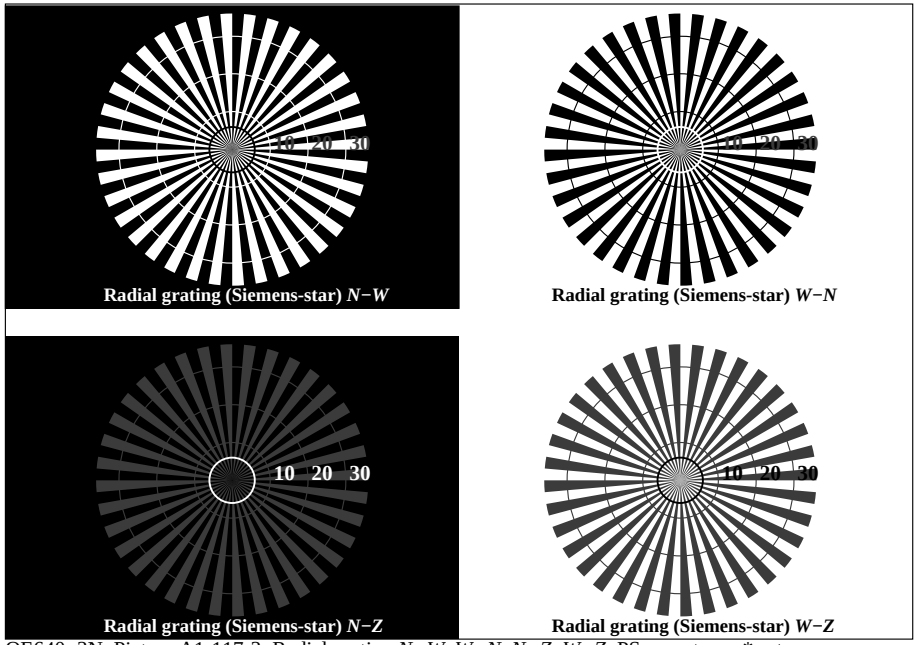
OE641−3N-107-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (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
0 0 0 n* setcmyk																
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
$w^*=l^*_{CIELAB, r}$ (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

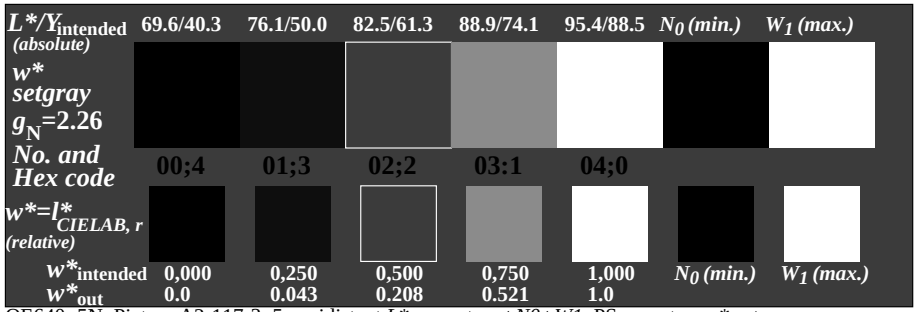
OE640−7N, Picture A7-107-2: 16 visual equidistant *L**-grey steps; PS operator: *0 0 0 n* setcmykcolor*

OE64: 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

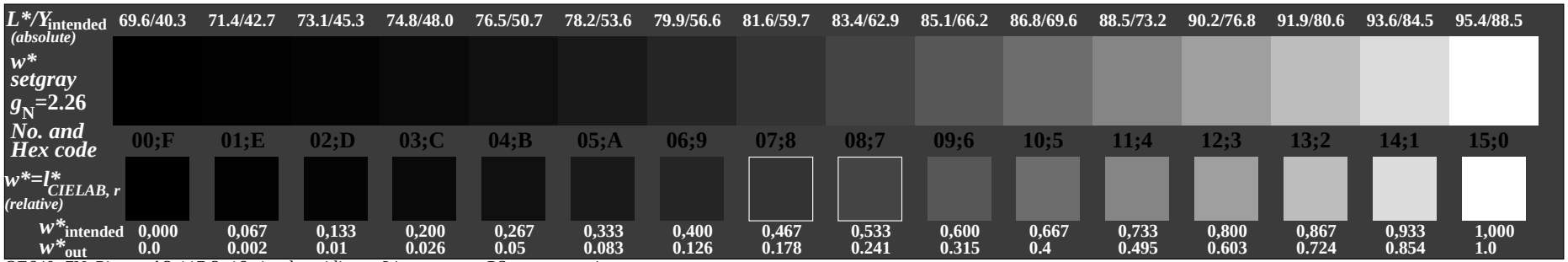
input: *all (−>rgb*de) setrgbcolor*
output 130-2: g_P=1.0; g_N=2.1



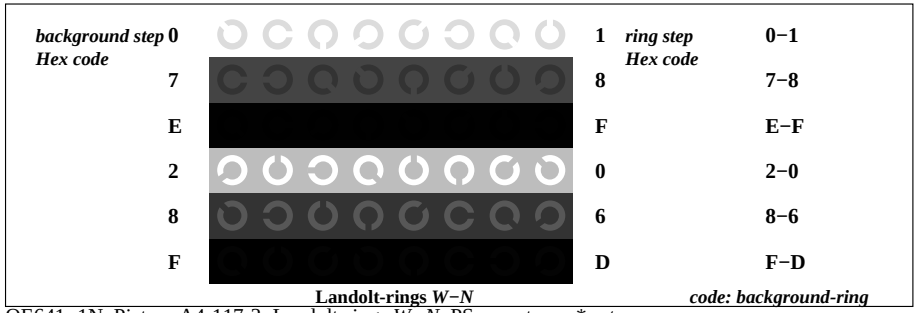
OE640−3N, Picture A1-117-3: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* setgray*



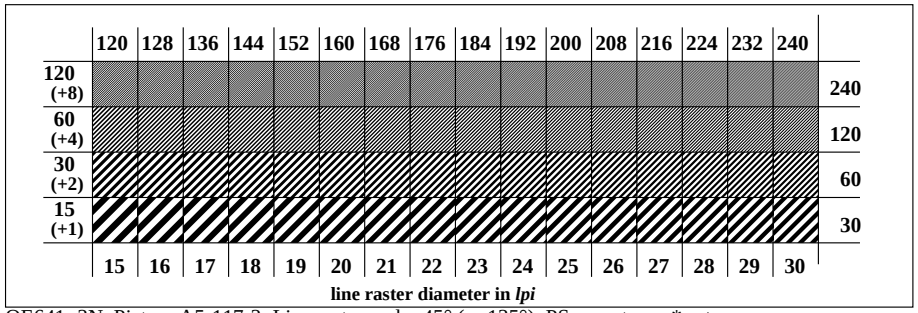
OE640−5N, Picture A2-117-3: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *w* setgray*



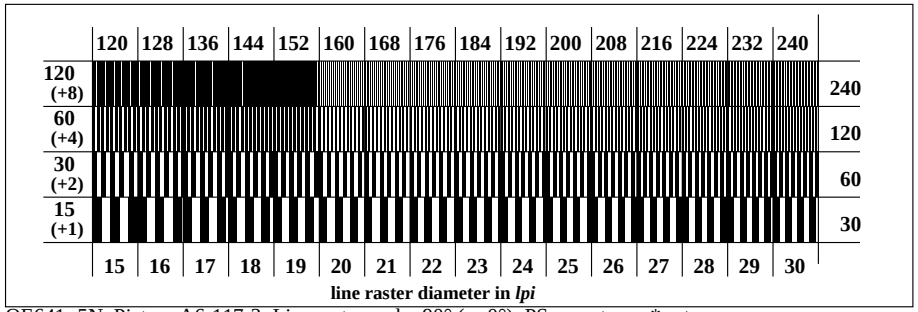
OE640−7N, Picture A3-117-3: 16 visual equidistant *L**-grey steps; PS operator: *w* setgray*



OE641−1N, Picture A4-117-3: Landolt-rings *W−N*; PS operator: *w* setgray*



OE641−3N, Picture A5-117-3: Line raster under 45° (or 135°); PS operator: *w* setgray*



OE641−5N, Picture A6-117-3: Line raster under 90° (or 0°); PS operator: *w* setgray*

OE64: 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

input: *all (−>rgb*de) setrgbcolor*
output 130-3: g_P=1.0; g_N=2.1

Test for the best visual linearized output of Picture A7-117-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-117-0

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**-117-0
Are the 5 steps on the upper rows 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**-117-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1156-4

Test for the best visual linearized output of Picture A7-117-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-117-0
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 A5-117-0
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 A6-117-0
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 OE641−3N-117-4

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-117-4

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-117-2: **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/OE64/OE64F1P2.PDF
picture A7-117-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-117-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-117-4

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	69.7	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.0	0.01
2	71.41	0.0	0.0	0.0	69.75	0.0	0.0	-1.65	0.0	0.0	1.66
3	73.13	0.0	0.0	0.01	69.97	0.0	0.0	-3.15	0.0	0.0	3.16
4	74.84	0.0	0.0	0.03	70.37	0.0	0.0	-4.46	0.0	0.0	4.47
5	76.55	0.0	0.0	0.05	70.99	0.0	0.0	-5.55	0.0	0.0	5.56
6	78.27	0.0	0.0	0.08	71.84	0.0	0.0	-6.41	0.0	0.0	6.42
7	79.98	0.0	0.0	0.13	72.94	0.0	0.0	-7.03	0.0	0.0	7.04
8	81.7	0.0	0.0	0.18	74.29	0.0	0.0	-7.4	0.0	0.0	7.41
9	83.41	0.0	0.0	0.24	75.91	0.0	0.0	-7.49	0.0	0.0	7.5
10	85.12	0.0	0.0	0.32	77.8	0.0	0.0	-7.31	0.0	0.0	7.32
11	86.84	0.0	0.0	0.4	79.98	0.0	0.0	-6.85	0.0	0.0	6.86
12	88.55	0.0	0.0	0.5	82.45	0.0	0.0	-6.09	0.0	0.0	6.1
13	90.27	0.0	0.0	0.6	85.23	0.0	0.0	-5.03	0.0	0.0	5.04
14	91.98	0.0	0.0	0.72	88.3	0.0	0.0	-3.67	0.0	0.0	3.68
15	93.7	0.0	0.0	0.86	91.7	0.0	0.0	-1.99	0.0	0.0	2.0
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	69.7	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.0	0.01
18	76.13	0.0	0.0	0.04	70.82	0.0	0.0	-5.3	0.0	0.0	5.31
19	82.55	0.0	0.0	0.21	75.07	0.0	0.0	-7.48	0.0	0.0	7.49
20	88.98	0.0	0.0	0.52	83.12	0.0	0.0	-5.85	0.0	0.0	5.86
21	95.41	0.0	0.0	1.0	95.41	0.0	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

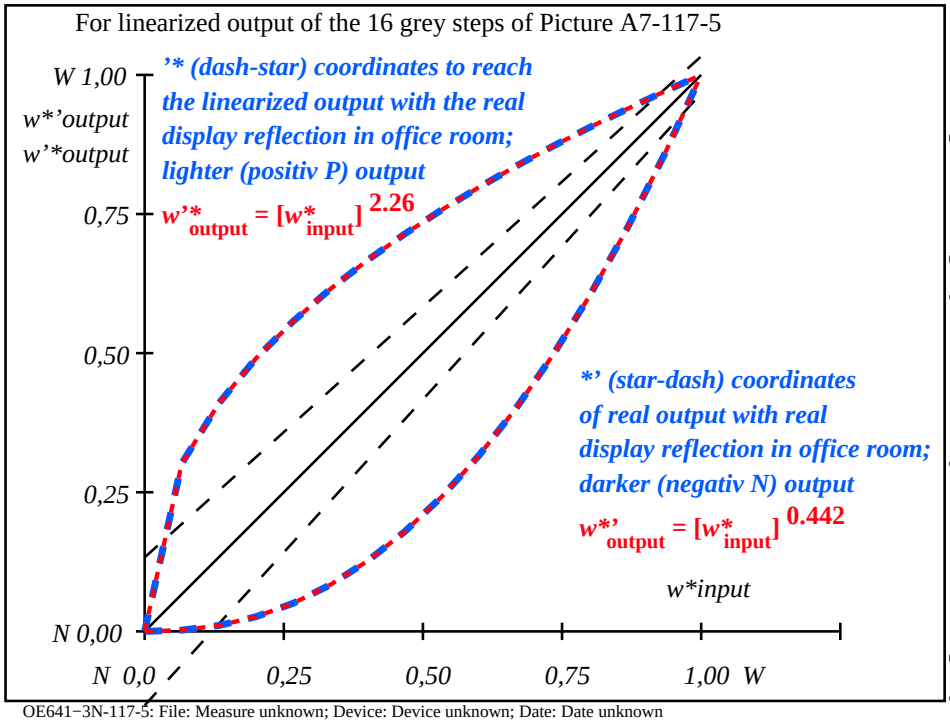
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 4.6

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 3.7

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

OE640−3N-117-5: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-117-5



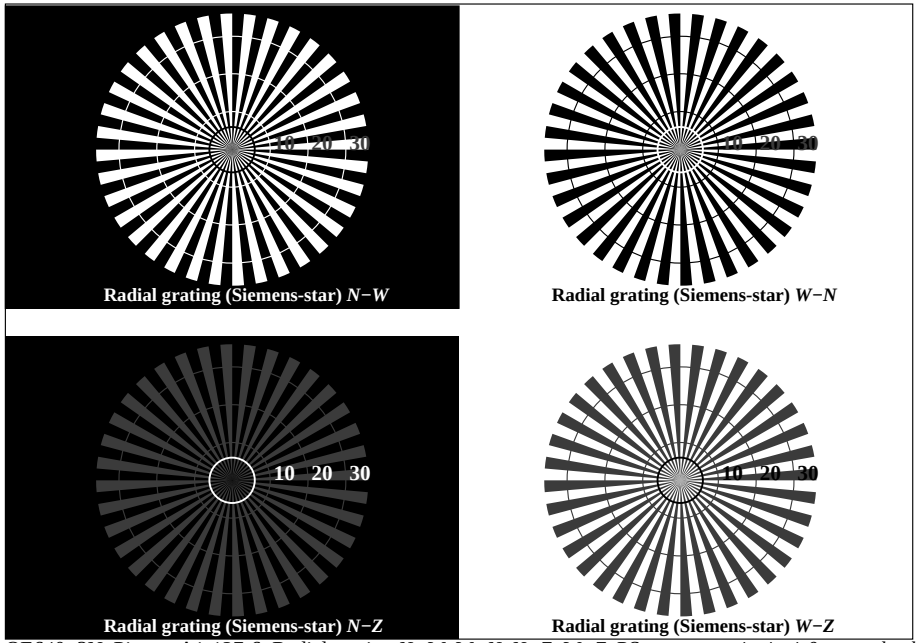
OE641−3N-117-5: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (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* setgray 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
$w^*=l^*_{CIELAB, r}$ (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

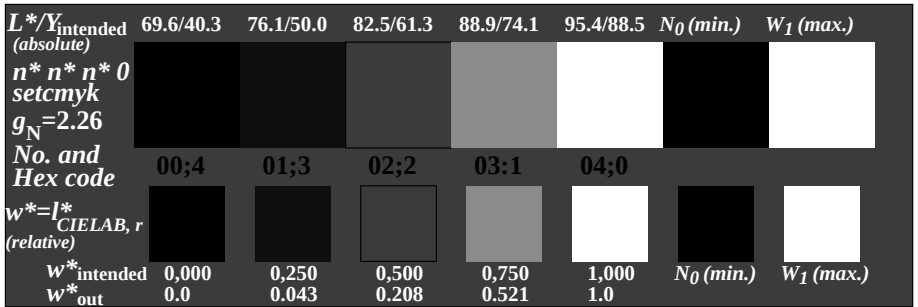
OE640−7N, Picture A7-117-5: 16 visual equidistant L^*-grey steps; PS operator: *w* setgray*

OE64: 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

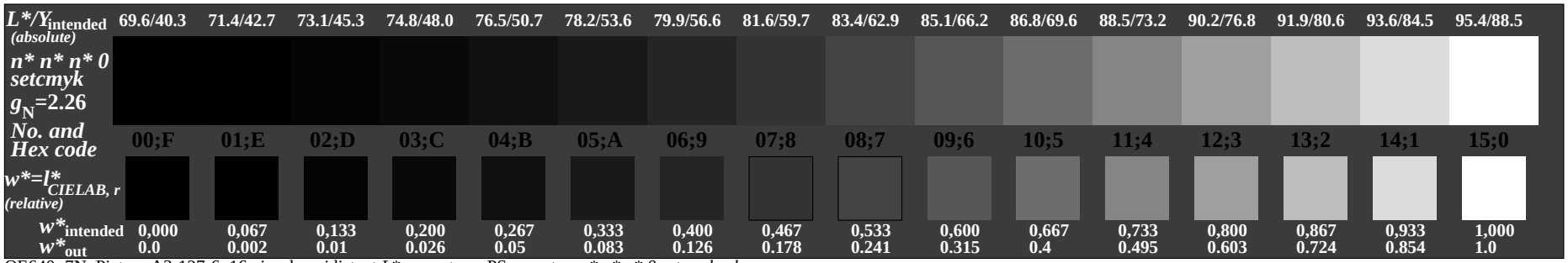
input: *all (−>rgb*de) setrgbcolor*
output 130-5: g_P=1.0; g_N=2.1



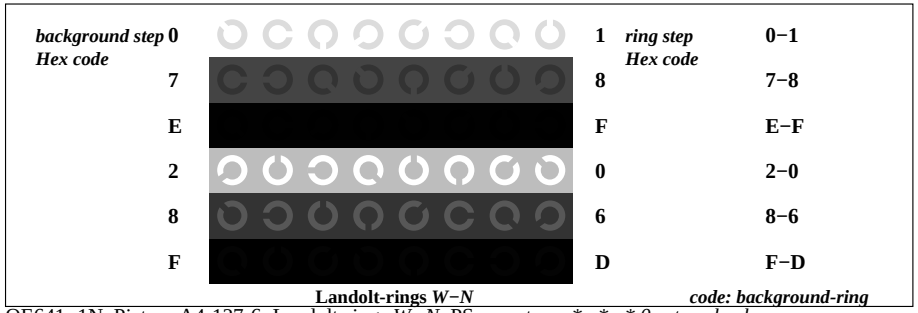
OE640−3N, Picture A1-127-6: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *n* n* n* 0 setcmykcolor*



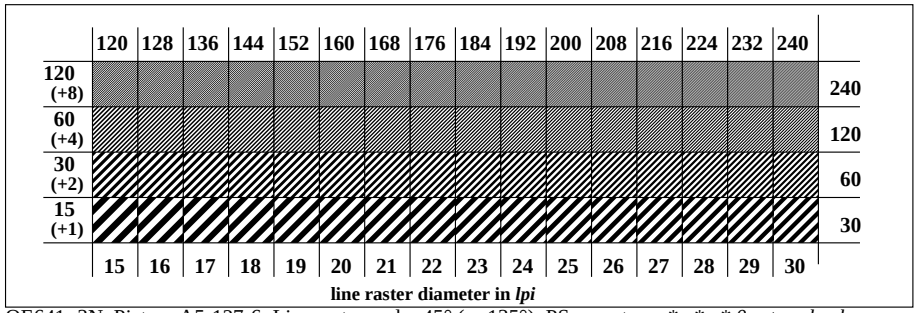
OE640−5N, Picture A2-127-6: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *n* n* n* 0 setcmykcolor*



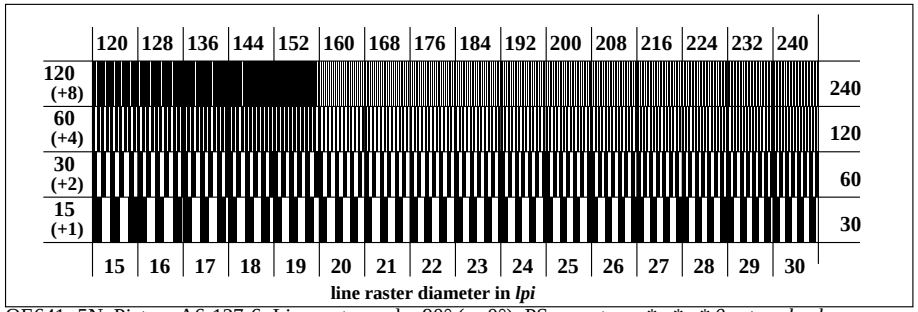
OE640−7N, Picture A3-127-6: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*



OE641−1N, Picture A4-127-6: Landolt-rings *W−N*; PS operator: *n* n* n* 0 setcmykcolor*



OE641−3N, Picture A5-127-6: Line raster under 45° (or 135°); PS operator: *n* n* n* 0 setcmykcolor*



OE641−5N, Picture A6-127-6: Line raster under 90° (or 0°); PS operator: *n* n* n* 0 setcmykcolor*

Test for the best visual linearized output of Picture A7-127-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )
Test of the radial grating according to picture A1-127-0

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**-127-0
Are the 5 steps on the upper rows 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**-127-0
Are the 16 steps on the upper rows distinguishable? **Yes/No**
If No: How many steps can be distinguished?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1256-7

Test for the best visual linearized output of Picture A7-127-0 **Yes/No**
Output test with the computer display ( ) or the external display ( )

Test of the *Landolt*-rings *N*−*W* according to picture A4-127-0
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 A5-127-0
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 A6-127-0
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 OE641−3N-127-7

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-127-7

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS **underline Yes/No**
Picture A7-127-2: **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/OE64/OE64F1P2.PDF
picture A7-127-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-127-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-127-7

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	69.7	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.0	0.01
2	71.41	0.0	0.0	0.0	69.75	0.0	0.0	-1.65	0.0	0.0	1.66
3	73.13	0.0	0.0	0.01	69.97	0.0	0.0	-3.15	0.0	0.0	3.16
4	74.84	0.0	0.0	0.03	70.37	0.0	0.0	-4.46	0.0	0.0	4.47
5	76.55	0.0	0.0	0.05	70.99	0.0	0.0	-5.55	0.0	0.0	5.56
6	78.27	0.0	0.0	0.08	71.84	0.0	0.0	-6.41	0.0	0.0	6.42
7	79.98	0.0	0.0	0.13	72.94	0.0	0.0	-7.03	0.0	0.0	7.04
8	81.7	0.0	0.0	0.18	74.29	0.0	0.0	-7.4	0.0	0.0	7.41
9	83.41	0.0	0.0	0.24	75.91	0.0	0.0	-7.49	0.0	0.0	7.5
10	85.12	0.0	0.0	0.32	77.8	0.0	0.0	-7.31	0.0	0.0	7.32
11	86.84	0.0	0.0	0.4	79.98	0.0	0.0	-6.85	0.0	0.0	6.86
12	88.55	0.0	0.0	0.5	82.45	0.0	0.0	-6.09	0.0	0.0	6.1
13	90.27	0.0	0.0	0.6	85.23	0.0	0.0	-5.03	0.0	0.0	5.04
14	91.98	0.0	0.0	0.72	88.3	0.0	0.0	-3.67	0.0	0.0	3.68
15	93.7	0.0	0.0	0.86	91.7	0.0	0.0	-1.99	0.0	0.0	2.0
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	69.7	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.0	0.01
18	76.13	0.0	0.0	0.04	70.82	0.0	0.0	-5.3	0.0	0.0	5.31
19	82.55	0.0	0.0	0.21	75.07	0.0	0.0	-7.48	0.0	0.0	7.49
20	88.98	0.0	0.0	0.52	83.12	0.0	0.0	-5.85	0.0	0.0	5.86
21	95.41	0.0	0.0	1.0	95.41	0.0	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

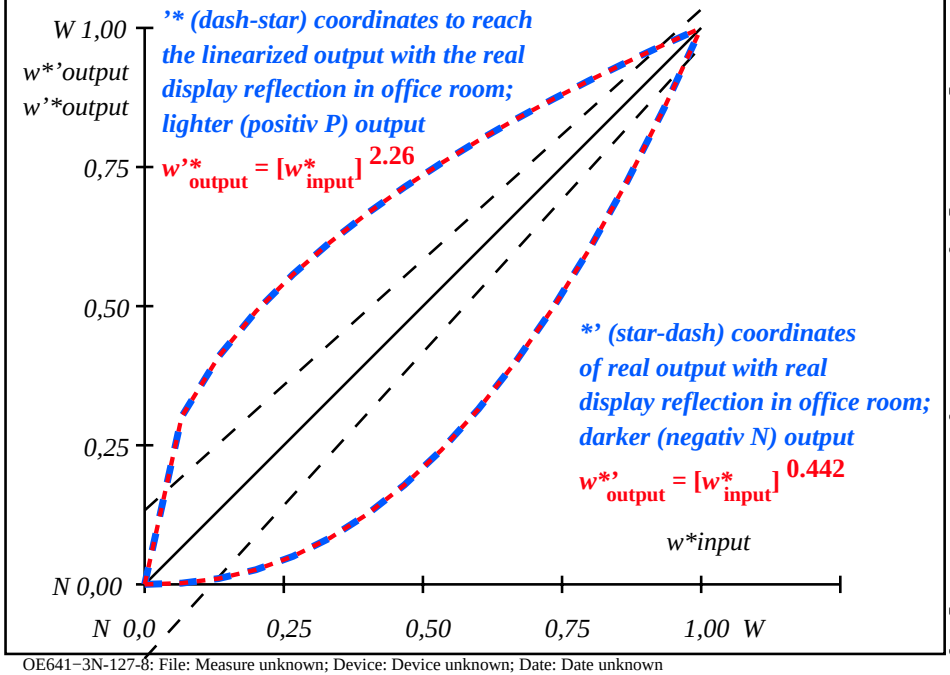
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **4.6**

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = **3.7**

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

OE640−3N-127-8: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-127-8



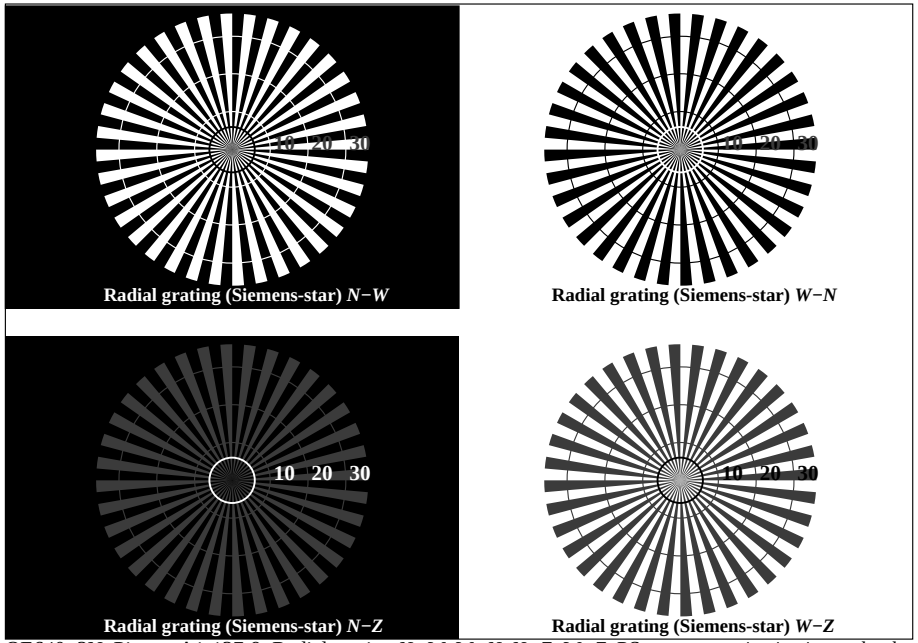
OE641−3N-127-8: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (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
n* n* n* 0 setcmyk																
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
$w^*=l^*_{CIELAB, r}$ (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

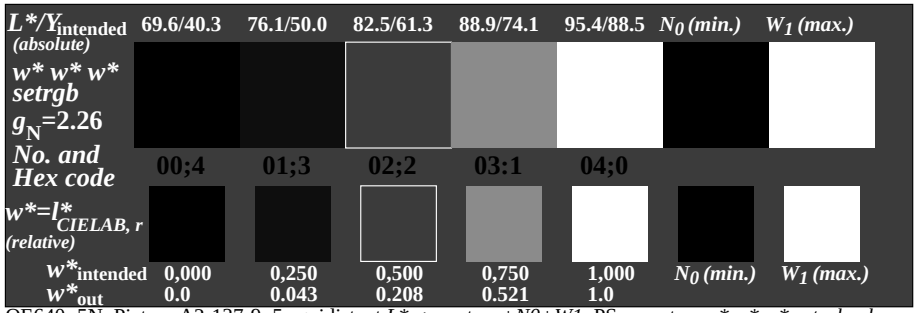
OE640−7N, Picture A7-127-8: 16 visual equidistant *L**-grey steps; PS operator: *n* n* n* 0 setcmykcolor*

OE64: 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

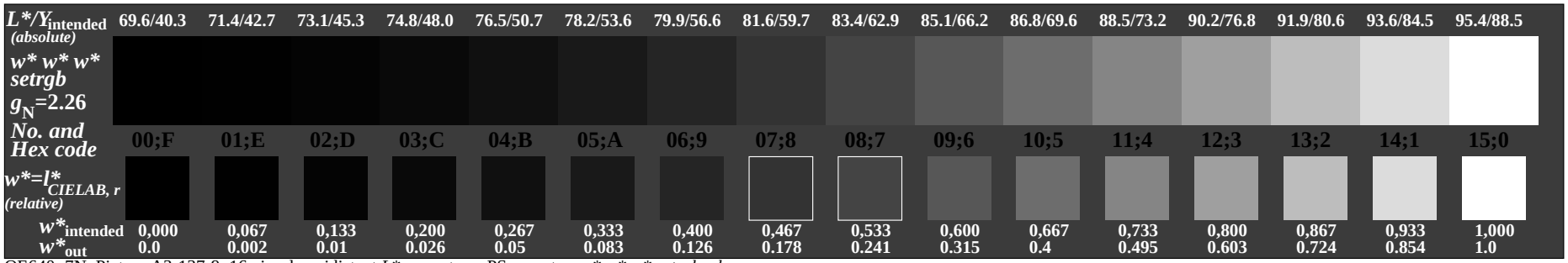
input: *all (−>rgb*de) setrgbcolor*
output 130-8: g_P=1.0; g_N=2.1



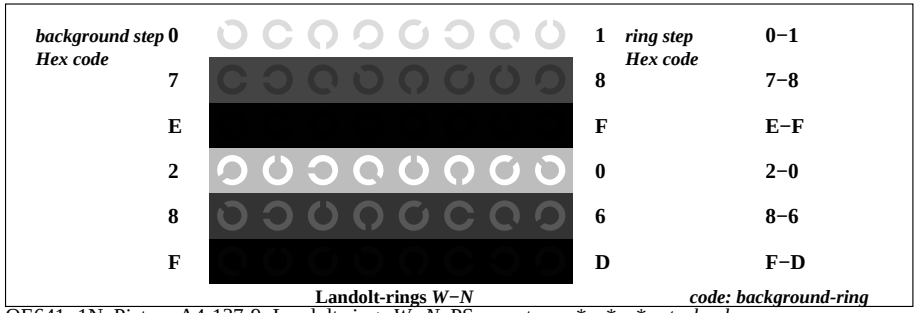
OE640−3N, Picture A1-137-9: Radial grating *N−W, W−N, N−Z, W−Z*; PS operator: *w* w* w* setrgbcolor*



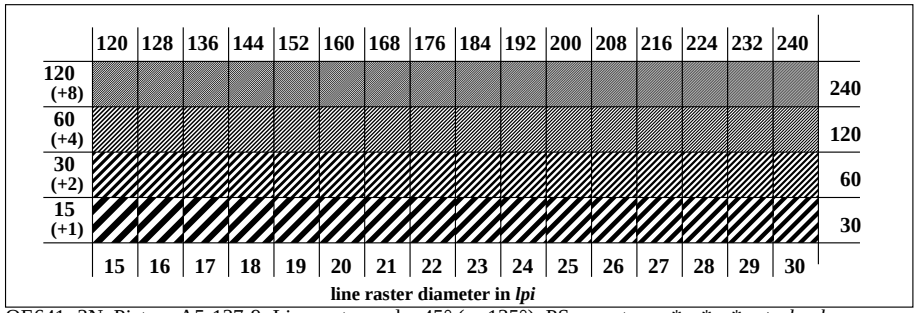
OE640−5N, Picture A2-137-9: 5 equidistant *L**-grey steps+*N0*+*W1*; PS operator: *w* w* w* setrgbcolor*



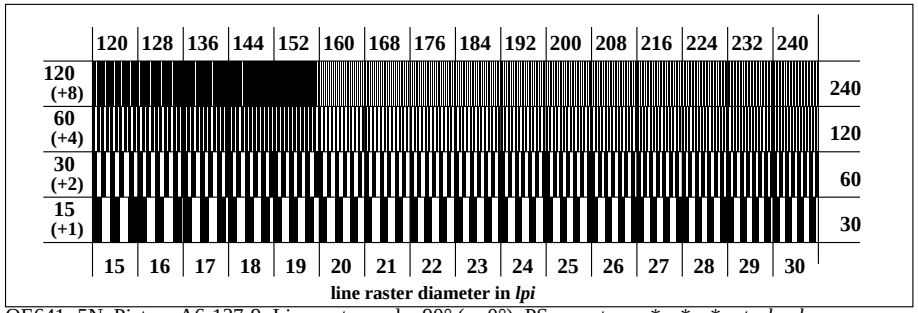
OE640−7N, Picture A3-137-9: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*



OE641−1N, Picture A4-137-9: Landolt-rings *W−N*; PS operator: *w* w* w* setrgbcolor*



OE641−3N, Picture A5-137-9: Line raster under 45° (or 135°); PS operator: *w* w* w* setrgbcolor*



OE641−5N, Picture A6-137-9: Line raster under 90° (or 0°); PS operator: *w* w* w* setrgbcolor*

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?
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?
of the given 16 steps: **.... Steps**

Part 1 OE640−3N-1356-10

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 OE641−3N-137-10

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

PDF-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NP.PDF **underline Yes/No**

PS-File: http://130.149.60.45/farbmetrik/OE64/OE64L0NA.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 OE64L0NP.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 OE64L0NA.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 OE640−7N-137-10

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/OE64/OE64F1P2.PDF **underline Yes/No**
PS file: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.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/OE64/OE64F1P2.PDF
picture A7-137-2 **underline Yes/No**
PS-File: http://130.149.60.45/farbmetrik/OE64/OE64F1P2.PS
picture A7-137-2 **or underline Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline Yes/No**
If No, please give other parameters: .....
Colorimetric specification 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 OE641−7N-137-10

i	LAB*ref			l*out	LAB*out			LAB*out/c−ref			ΔE*
1	69.7	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.0	0.01
2	71.41	0.0	0.0	0.0	69.75	0.0	0.0	-1.65	0.0	0.0	1.66
3	73.13	0.0	0.0	0.01	69.97	0.0	0.0	-3.15	0.0	0.0	3.16
4	74.84	0.0	0.0	0.03	70.37	0.0	0.0	-4.46	0.0	0.0	4.47
5	76.55	0.0	0.0	0.05	70.99	0.0	0.0	-5.55	0.0	0.0	5.56
6	78.27	0.0	0.0	0.08	71.84	0.0	0.0	-6.41	0.0	0.0	6.42
7	79.98	0.0	0.0	0.13	72.94	0.0	0.0	-7.03	0.0	0.0	7.04
8	81.7	0.0	0.0	0.18	74.29	0.0	0.0	-7.4	0.0	0.0	7.41
9	83.41	0.0	0.0	0.24	75.91	0.0	0.0	-7.49	0.0	0.0	7.5
10	85.12	0.0	0.0	0.32	77.8	0.0	0.0	-7.31	0.0	0.0	7.32
11	86.84	0.0	0.0	0.4	79.98	0.0	0.0	-6.85	0.0	0.0	6.86
12	88.55	0.0	0.0	0.5	82.45	0.0	0.0	-6.09	0.0	0.0	6.1
13	90.27	0.0	0.0	0.6	85.23	0.0	0.0	-5.03	0.0	0.0	5.04
14	91.98	0.0	0.0	0.72	88.3	0.0	0.0	-3.67	0.0	0.0	3.68
15	93.7	0.0	0.0	0.86	91.7	0.0	0.0	-1.99	0.0	0.0	2.0
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01
17	69.7	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.0	0.01
18	76.13	0.0	0.0	0.04	70.82	0.0	0.0	-5.3	0.0	0.0	5.31
19	82.55	0.0	0.0	0.21	75.07	0.0	0.0	-7.48	0.0	0.0	7.49
20	88.98	0.0	0.0	0.52	83.12	0.0	0.0	-5.85	0.0	0.0	5.86
21	95.41	0.0	0.0	1.0	95.41	0.0	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

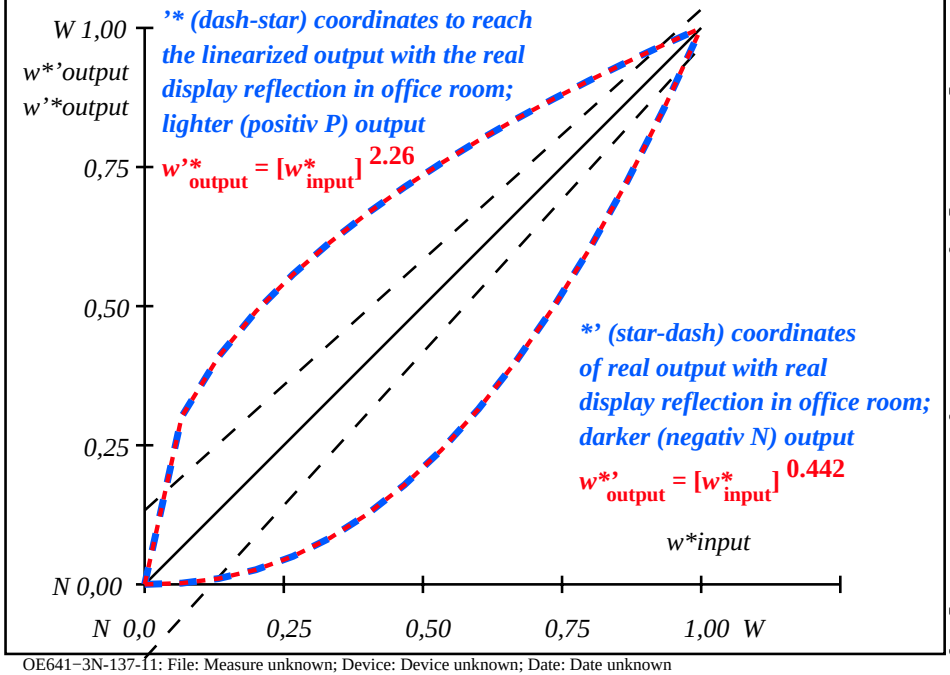
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 4.6

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 3.7

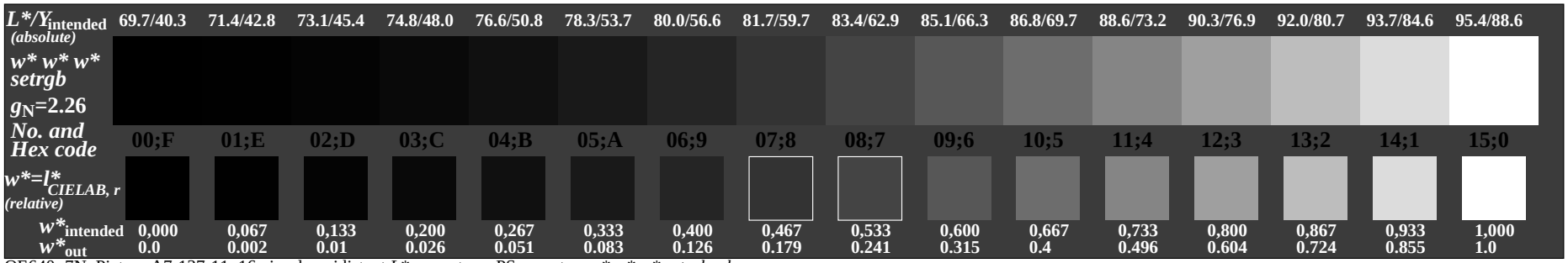
Mean colour reproduction index: $R^*_{ab,m}$ = 80

OE640−3N-137-11: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-137-11



OE641−3N-137-11: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE640−7N, Picture A7-137-11: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*

OE64: 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: *all (−>rgb*de) setrgbcolor*
output 130-11: g_P=1.0; g_N=2.1