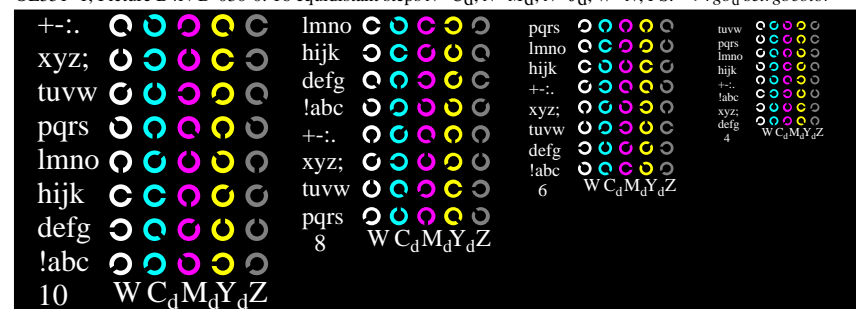
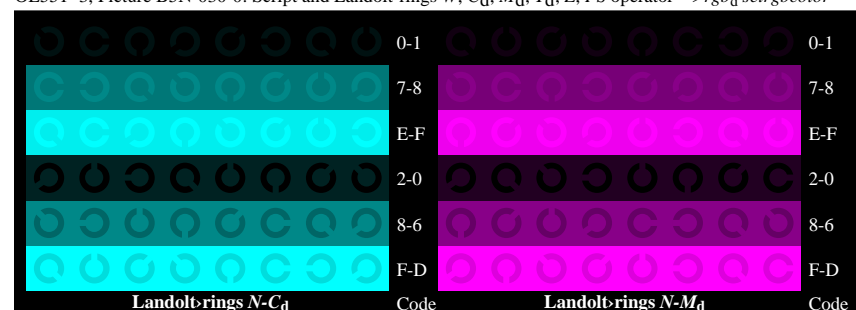


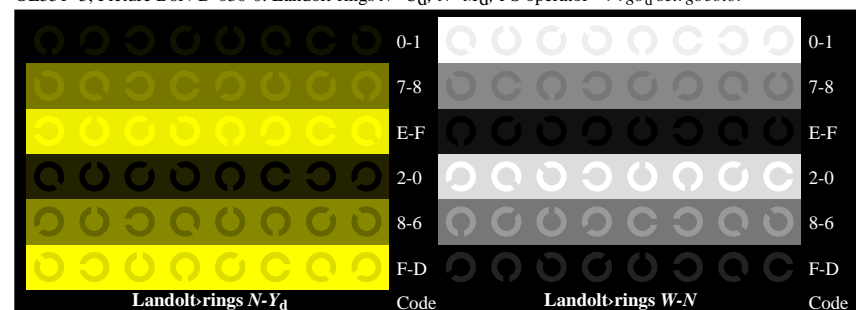
OE551-1, Picture B4N-D-030-0: 16 equidistant steps  $N-C_d$ ;  $N-M_d$ ;  $N-J_d$ ;  $W-N$ ;  $PS$ ;  $->rgb_d$  setrgbcolor



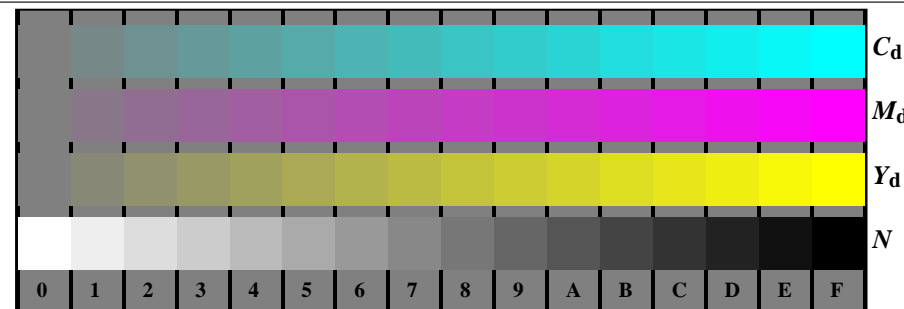
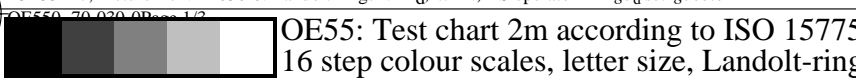
OE551-3, Picture B5N-030-0: Script and Landolt-rings  $W$ ;  $C_d$ ;  $M_d$ ;  $Y_d$ ;  $Z$ ;  $PS$  operator  $->rgb_d$  setrgbcolor



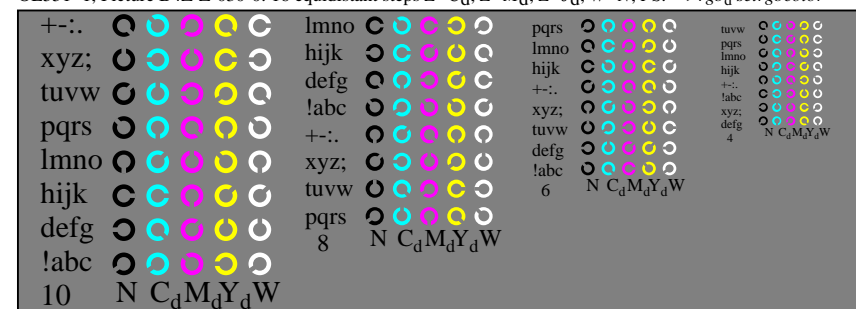
OE551-5, Picture B6N-D-030-0: Landolt-rings  $N-C_d$ ;  $N-M_d$ ;  $PS$  operator  $->rgb_d$  setrgbcolor



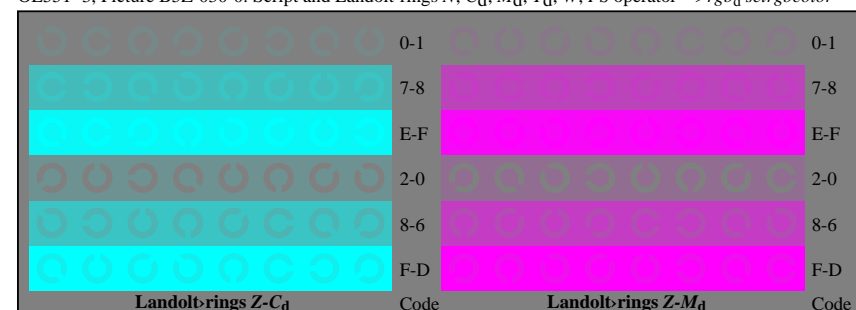
OE551-7, Picture B7N-D-030-0: Landolt-rings  $N-Y_d$ ;  $W-N$ ;  $PS$  operator  $->rgb_d$  setrgbcolor



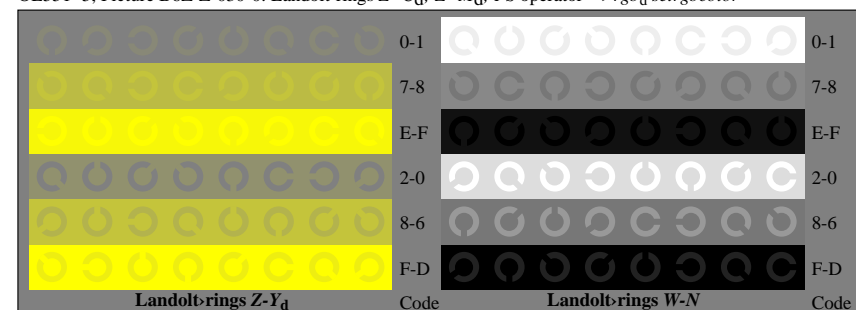
OE551-1, Picture B4Z-Z-030-0: 16 equidistant steps  $Z-C_d$ ;  $Z-M_d$ ;  $Z-J_d$ ;  $W-N$ ;  $PS$ ;  $->rgb_d$  setrgbcolor



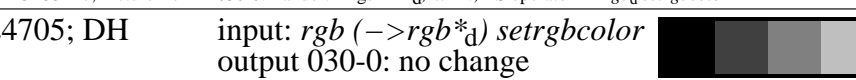
OE551-3, Picture B5Z-030-0: Script and Landolt-rings  $N$ ;  $C_d$ ;  $M_d$ ;  $Y_d$ ;  $W$ ;  $PS$  operator  $->rgb_d$  setrgbcolor



OE551-5, Picture B6Z-Z-030-0: Landolt-rings  $Z-C_d$ ;  $Z-M_d$ ;  $PS$  operator  $->rgb_d$  setrgbcolor



OE551-7, Picture B7Z-Z-030-0: Landolt-rings  $Z-Y_d$ ;  $W-N$ ;  $PS$  operator  $->rgb_d$  setrgbcolor



Test of 16 visually equally spaced steps of the colour rows  $N-C_d$ ,  $N-M_d$ ,  $N-Y_d$ , and  $W-N$  according to picture B4N-030-0

$N-C_d$ Black – Cyanblue:	Are all the 16 steps distinguishable?	<b>Yes/No</b>
	If No: How many steps can be distinguished? of the given 16 steps	..... Steps
$N-M_d$ Black – Magentared:	Are all the 16 steps distinguishable?	<b>Yes/No</b>
	If No: How many steps can be distinguished? of the given 16 steps	..... Steps
$N-Y_d$ Black – Yellow:	Are all the 16 steps distinguishable?	<b>Yes/No</b>
	If No: How many steps can be distinguished? of the given 16 steps	..... Steps
$W-N$ White – Black:	Are all the 16 steps distinguishable?	<b>Yes/No</b>
	If No: How many steps can be distinguished? of the given 16 steps	..... Steps

Test of characters and Landolt-rings in four sizes according to picture B5N-030-0

Is the recognition frequency > 50% for letters (17 from 32 at least) and for Landolt-rings (minimum 5 of 8)?

Relative size	Letters	Ring $N$	Ring $C_d$	Ring $M_d$	Ring $Y_d$
10	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
8	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
6	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
4	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

Test of recognition frequency of Landolt-rings  $N-C_d$ ,  $N-M_d$ ,  $N-Y_d$ , and  $W-N$  according to pictures B6N-030-0, and B7N-030-0

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

Colour row $N-C_d$ background – ring	Colour row $N-M_d$ background – ring	Colour row $N-Y_d$ background – ring	Colour row $W-N$ background – ring
0 – 1 Yes/No	0 – 1 Yes/No	0 – 1 Yes/No	0 – 1 Yes/No
7 – 8 Yes/No	7 – 8 Yes/No	7 – 8 Yes/No	7 – 8 Yes/No
E – F Yes/No	E – F Yes/No	E – F Yes/No	E – F Yes/No
2 – 0 Yes/No	2 – 0 Yes/No	2 – 0 Yes/No	2 – 0 Yes/No
8 – 6 Yes/No	8 – 6 Yes/No	8 – 6 Yes/No	8 – 6 Yes/No
F – D Yes/No	F – D Yes/No	F – D Yes/No	F – D Yes/No

Part 1

OE550–3N-030-1

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

**PDF-File:** http://130.149.60.45/farbmetrik/OE55/OE55L0NP.PDF **underline Yes/No**

**PS-File:** http://130.149.60.45/farbmetrik/OE55/OE55L0NA.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 OE55L0NP.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 OE55L0NA.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

OE550–7N-030-1

OE55: Form A for test chart 2m according to ISO 15775; DH  
16 step colour scales, letter size, Landolt-rings

Test of 16 visually equally spaced steps of the colour rows  $Z-C_d$ ,  $Z-M_d$ ,  $Z-Y_d$ , and  $W-N$  according to picture B4Z-030-0

$Z-C_d$ Grey – Cyanblue:	Are all the 16 steps distinguishable?	<b>Yes/No</b>
	If No: How many steps can be distinguished? of the given 16 steps	..... Steps
$Z-M_d$ Grey – Magentared:	Are all the 16 steps distinguishable?	<b>Yes/No</b>
	If No: How many steps can be distinguished? of the given 16 steps	..... Steps
$Z-Y_d$ Grey – Yellow:	Are all the 16 steps distinguishable?	<b>Yes/No</b>
	If No: How many steps can be distinguished? of the given 16 steps	..... Steps
$W-N$ White – Black:	Are all the 16 steps distinguishable?	<b>Yes/No</b>
	If No: How many steps can be distinguished? of the given 16 steps	..... Steps

Test of characters and Landolt-rings in four sizes according to picture B5Z-030-0

Is the recognition frequency > 50% for letters (17 from 32 at least) and for Landolt-rings (minimum 5 of 8)?

Relative size	Letters	Ring $N$	Ring $C_d$	Ring $M_d$	Ring $Y_d$
10	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
8	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
6	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
4	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

Test of recognition frequency of Landolt-rings  $Z-C_d$ ,  $Z-M_d$ ,  $Z-Y_d$ , and  $W-N$  according to pictures B6Z-030-0, and B7Z-030-0

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

Colour row $Z-C_d$ background – ring	Colour row $Z-M_d$ background – ring	Colour row $Z-Y_d$ background – ring	Colour row $W-N$ background – ring
0 – 1 Yes/No	0 – 1 Yes/No	0 – 1 Yes/No	0 – 1 Yes/No
7 – 8 Yes/No	7 – 8 Yes/No	7 – 8 Yes/No	7 – 8 Yes/No
E – F Yes/No	E – F Yes/No	E – F Yes/No	E – F Yes/No
2 – 0 Yes/No	2 – 0 Yes/No	2 – 0 Yes/No	2 – 0 Yes/No
8 – 6 Yes/No	8 – 6 Yes/No	8 – 6 Yes/No	8 – 6 Yes/No
F – D Yes/No	F – D Yes/No	F – D Yes/No	F – D Yes/No

Part 1

OE550–3N-030-1

### Documentation of assessor colour vision properties for visual assessment

The assessor has **normal** colour vision according to one test:

- either according to DIN 6160:1996 with Anomaloskop of Nagel
- or with test charts using colour points according to Ishihara
- or tested with, please specify: .....

**underline Yes/No**

**underline Yes/unknown**

**underline Yes/unknown**

**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/OE55/OE55F1P2.PDF

**underline Yes/No**

**PS file:** http://130.149.60.45/farbmetrik/OE55/OE55F1P2.PS

**underline Yes/No**

**Picture A7-030-2: 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/OE55/OE55F1P2.PDF

**picture A7-030-2**

**underline Yes/No**

**PS-File:** http://130.149.60.45/farbmetrik/OE55/OE55F1P2.PS

**picture A7-030-2**

**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

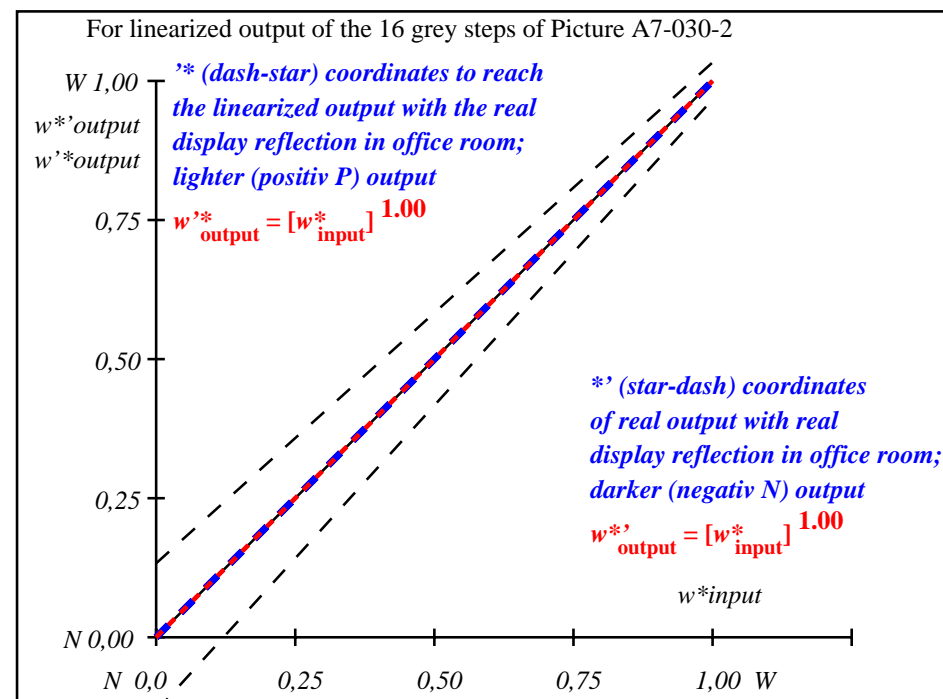
OE551–7N-030-1

input:  $rgb$  ( $\rightarrow rgb^*_d$ )  $setrgbcolor$   
output 030-1: no change

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

i	LAB*ref		L*out	LAB*out		LAB*out/c-ref		$\Delta E^*$	Start output S1
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	Specification according to
2	6.36	0.0	0.07	6.36	0.0	0.0	0.0	0.01	ISO/IEC 15775 Annex G
3	12.72	0.0	0.13	12.72	0.0	0.0	0.0	0.01	and DIN 33866-1 Annex G
4	19.08	0.0	0.2	19.08	0.0	0.0	0.0	0.01	
5	25.44	0.0	0.27	25.44	0.0	0.0	0.0	0.01	
6	31.8	0.0	0.33	31.8	0.0	0.0	0.0	0.01	
7	38.16	0.0	0.4	38.16	0.0	0.0	0.0	0.01	
8	44.52	0.0	0.47	44.52	0.0	0.0	0.0	0.01	
9	50.89	0.0	0.53	50.89	0.0	0.0	0.0	0.01	
10	57.25	0.0	0.6	57.25	0.0	0.0	0.0	0.01	
11	63.61	0.0	0.67	63.61	0.0	0.0	0.0	0.01	
12	69.97	0.0	0.73	69.97	0.0	0.0	0.0	0.01	
13	76.33	0.0	0.8	76.33	0.0	0.0	0.0	0.01	
14	82.69	0.0	0.87	82.69	0.0	0.0	0.0	0.01	
15	89.05	0.0	0.93	89.05	0.0	0.0	0.0	0.01	Mean lightness difference (16 steps)
16	95.41	0.0	1.0	95.41	0.0	0.0	0.0	0.01	$\Delta E^*_{\text{CIELAB}} = 0.0$
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	
18	23.85	0.0	0.25	23.85	0.0	0.0	0.0	0.01	
19	47.71	0.0	0.5	47.71	0.0	0.0	0.0	0.01	
20	71.56	0.0	0.75	71.56	0.0	0.0	0.0	0.01	Mean lightness difference (5 steps)
21	95.41	0.0	1.0	95.41	0.0	0.0	0.0	0.01	$\Delta L^*_{\text{CIELAB}} = 0.0$
Mean colour reproduction index: $R^*_{ab,m} = 100$									

OE550-3N-030-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE551-3N-030-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{\text{intended}}$ (absolute)	0.0/0.0	6.4/0.7	12.7/1.5	19.1/2.8	25.4/4.6	31.8/7.0	38.2/10.2	44.5/14.2	50.9/19.2	57.2/25.2	63.6/32.3	70.0/40.7	76.3/50.4	82.7/61.6	89.0/74.3	95.4/88.6
$w^* w^* w^*$ setrgb																
$g_p=1.00$ No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^*=L^*_{\text{CIELAB}, r}$ (relative)																
$w^*_{\text{intended}}$	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
$w^*_{\text{out}}$	0.0	0.067	0.133	0.2	0.267	0.333	0.4	0.467	0.533	0.6	0.667	0.733	0.8	0.867	0.933	1.0

OE550-7N, Picture A7-030-2: 16 visual equidistant  $L^*$ -grey steps; PS operator:  $w^* w^* w^*$  setrgbcolor

OE55: In-output relation according to ISO 9241-306; DH  
Viewing  $Y$  contrast  $Y_W:Y_N=88,9:0,31$ ;  $Y_N$  range 0,0 to <0,46

input:  $rgb (->rgb^*_d)$  setrgbcolor  
output 030-2: no change