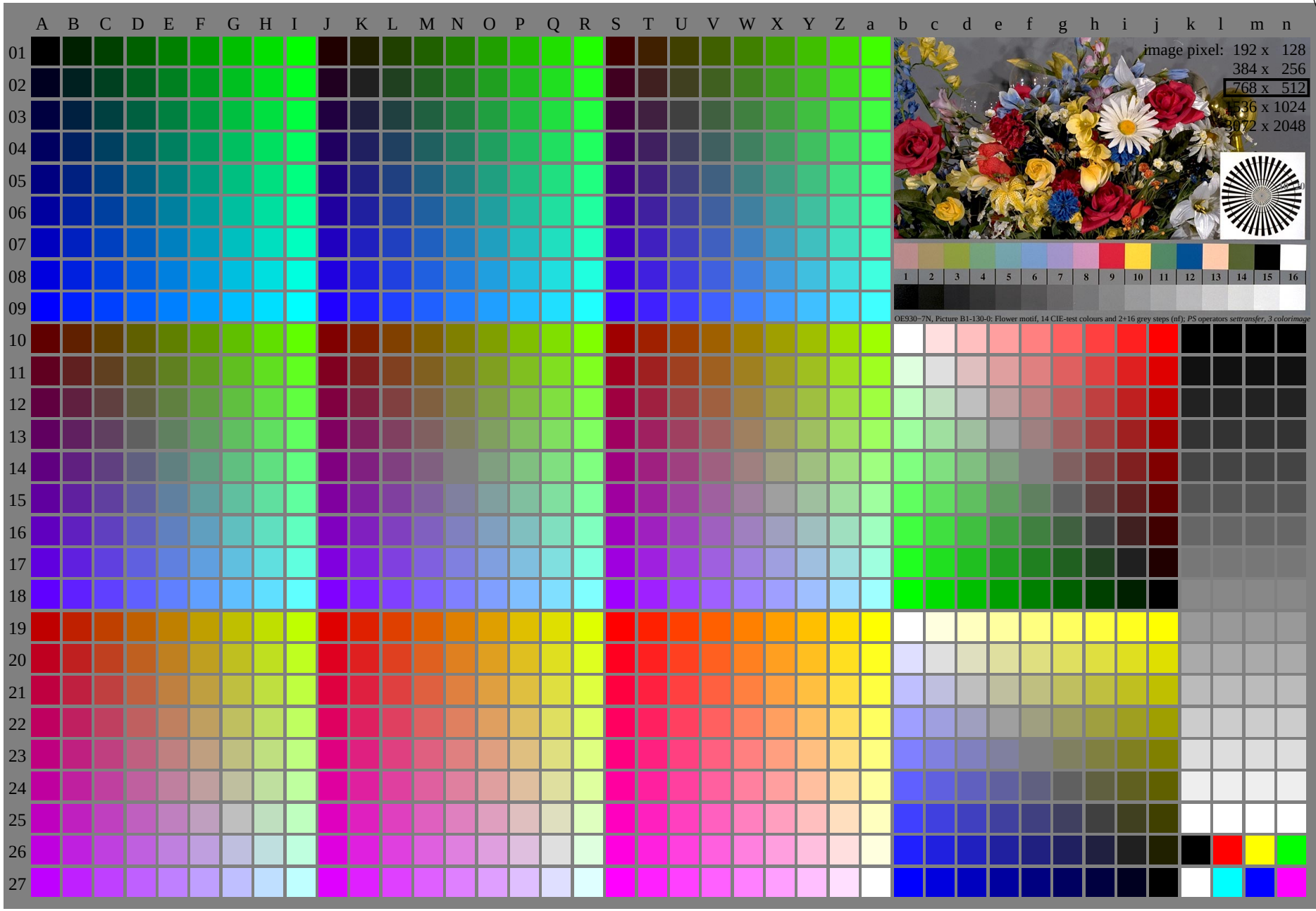


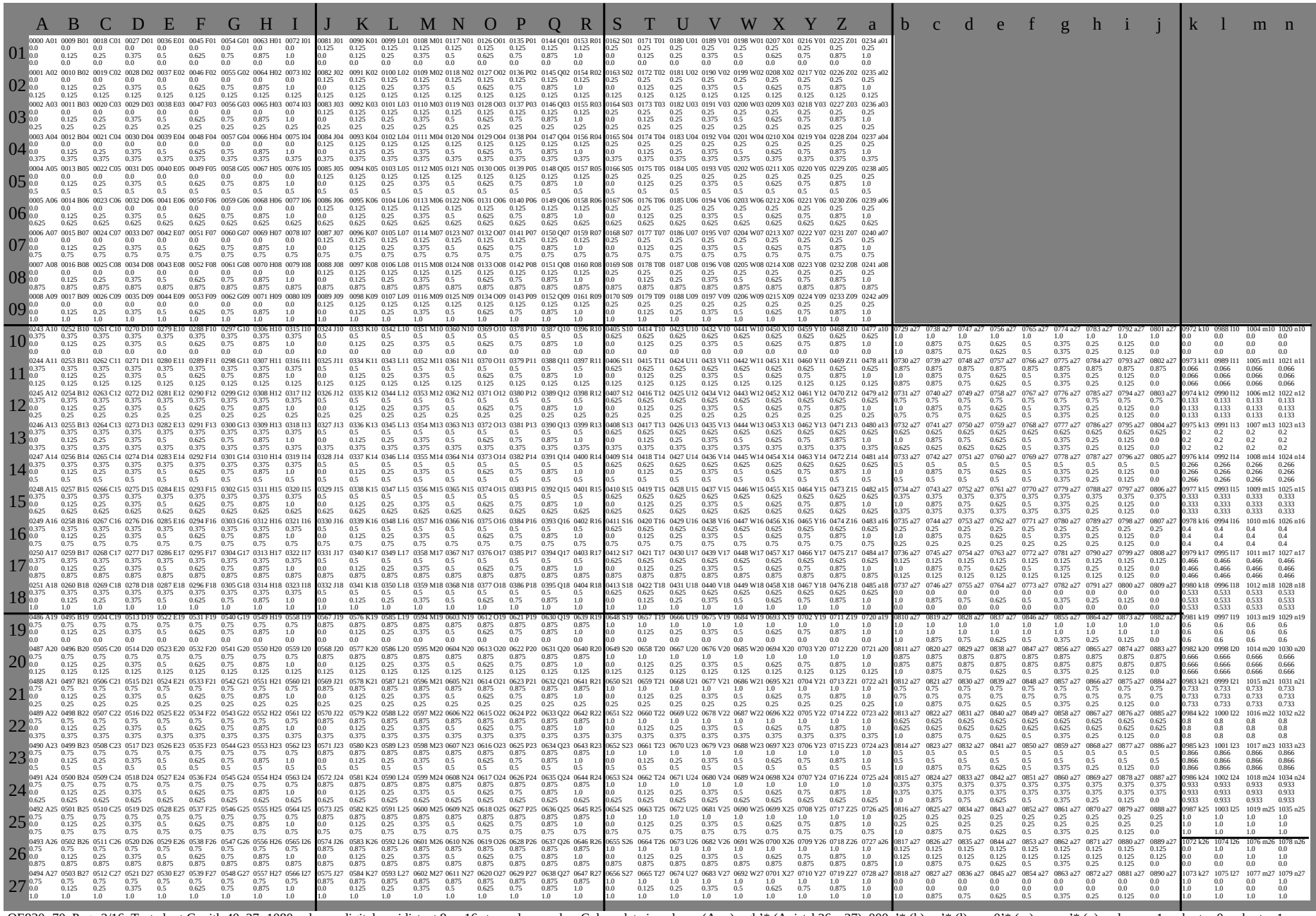
OE930−7N, Page 1/16, Test chart 2G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_n), colorm = 1, xchart = 0, pchart = 0

OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-0: g_P=1.0; g_N=1.0

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

TUB registration: 20110801-OE93/OE93L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems
TUB material: code=rha4ta



OE930−70, Page 2/16, Test chart G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_j + k26_n27), 000n'* (k), w'* (l), nnn0'* (m), www'* (n), colorm = 1, xchart = 0, pchart = 1

OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-1: g_P=1.0; g_N=1.0

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

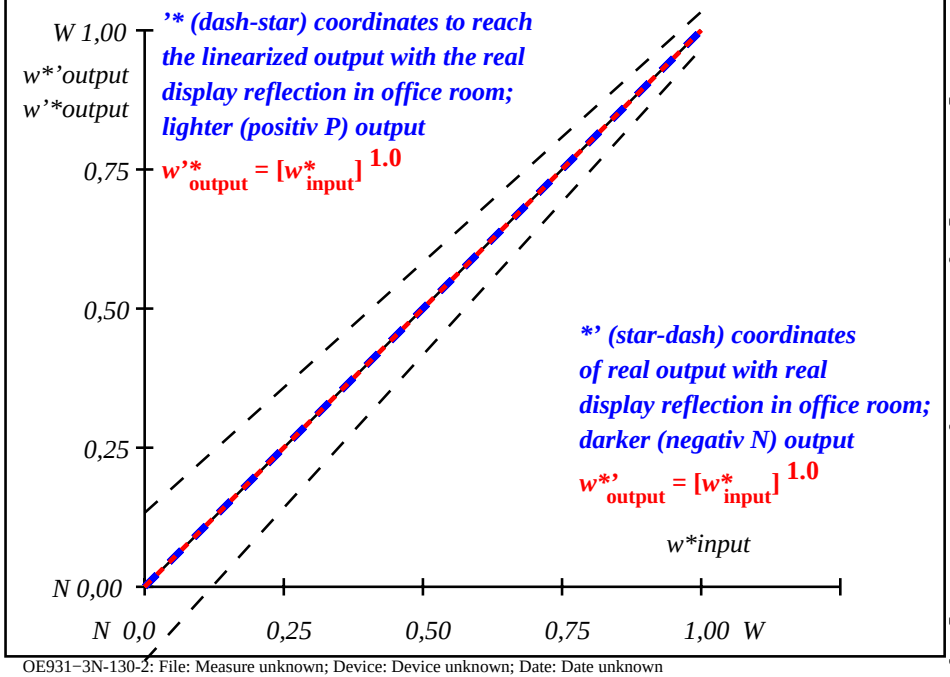
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **0.0**

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

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

OE930−3A-130-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-130-2



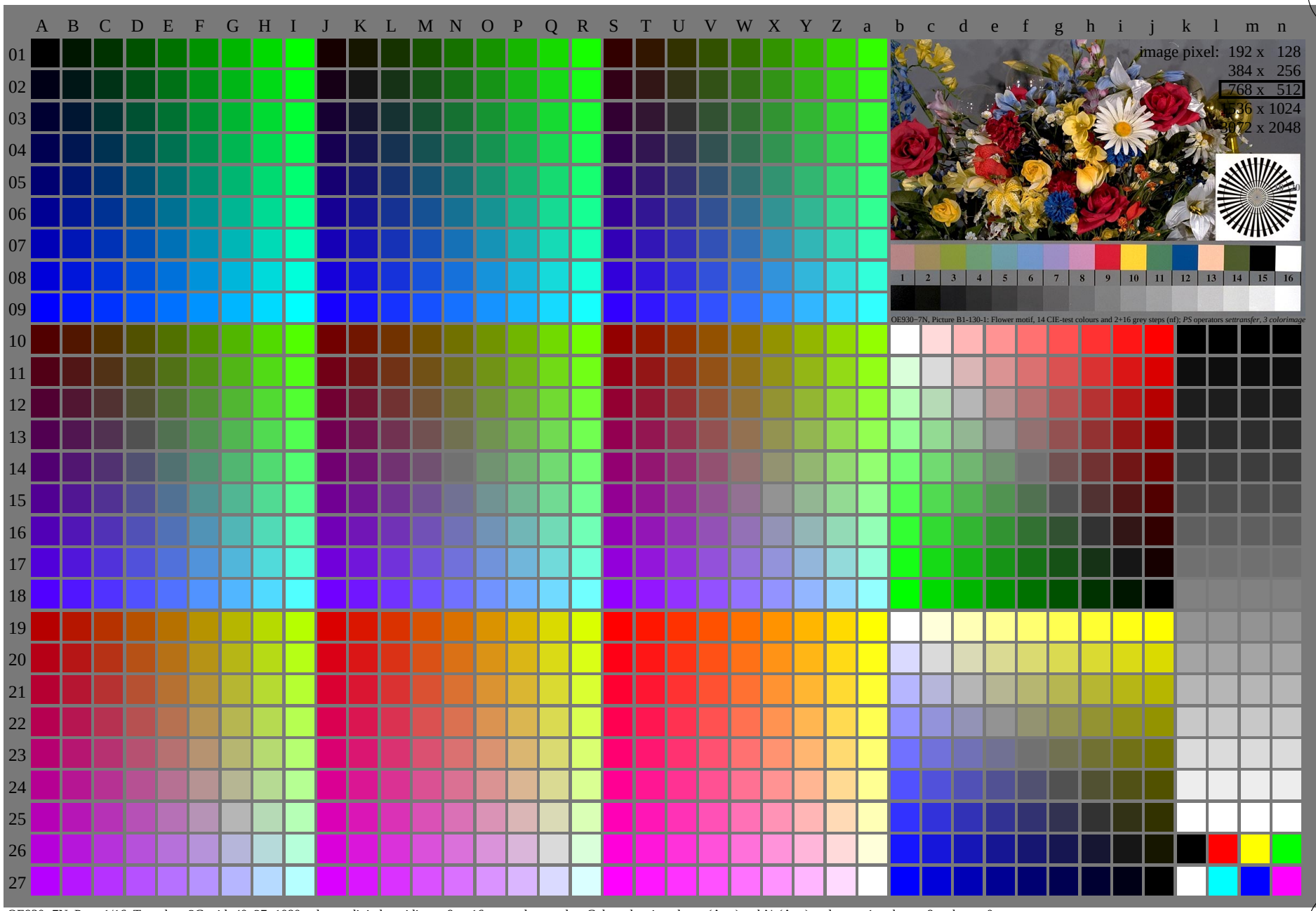
OE931−3N-130-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (absolute)	0.0/0.0	6.4/0.7	12.7/1.5	19.1/2.8	25.4/4.6	31.8/7.0	38.2/10.2	44.5/14.2	50.9/19.2	57.2/25.2	63.6/32.3	70.0/40.7	76.3/50.4	82.7/61.6	89.0/74.3	95.4/88.6
w* w* w* setrgb g_P=1.0																
No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^*=l^*_{CIELAB, r}$ (relative)																
$w^*_{intended}$	0,000	0,067	0,133	0,200	0,267	0,333	0,400	0,467	0,533	0,600	0,667	0,733	0,800	0,867	0,933	1,000
w^*_{out}	0.0	0.067	0.133	0.2	0.267	0.333	0.4	0.467	0.533	0.6	0.667	0.733	0.8	0.867	0.933	1.0

OE930−7N, Picture A7-130-2: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*

OE93: In-output relation according to ISO 9241-306; 1MR, DH
Viewing *Y* contrast Y_W:Y_N=88,9:0,31; Y_N range 0,0 to <0,46

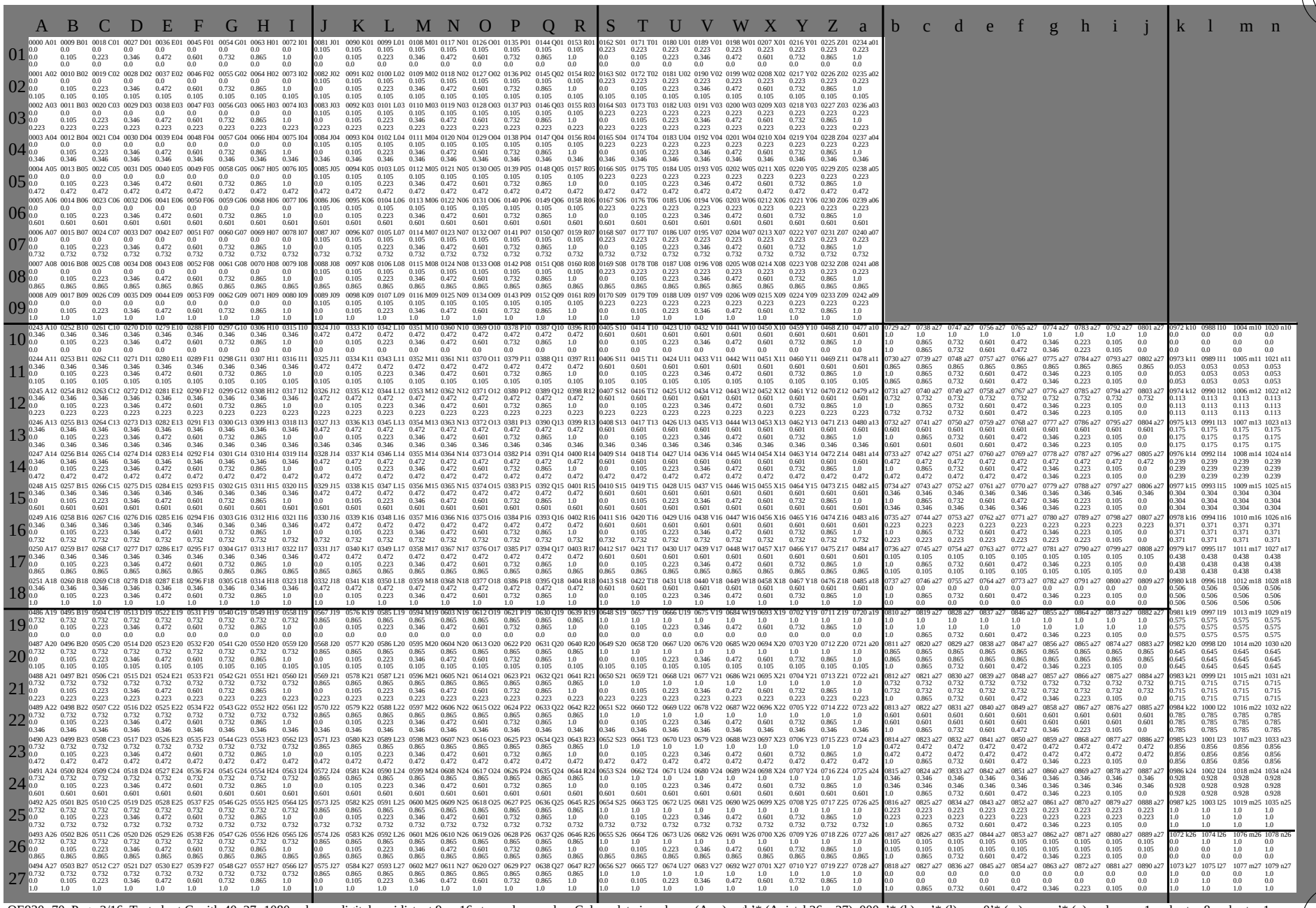
input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-2: g_P=1.0; g_N=1.0



OE930−7N, Page 1/16, Test chart 2G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_n), colorm = 1, xchart = 8, pchart = 0

OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-0: g_P=1.0; g_N=1.08



OE930−70, Page 2/16, Test chart G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_j + k26_n27), 000n'* (k), w'* (l), nnn0'* (m), www'* (n), colorm = 1, xchart = 8, pchart = 1

OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-1: g_P=1.0; g_N=1.08

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

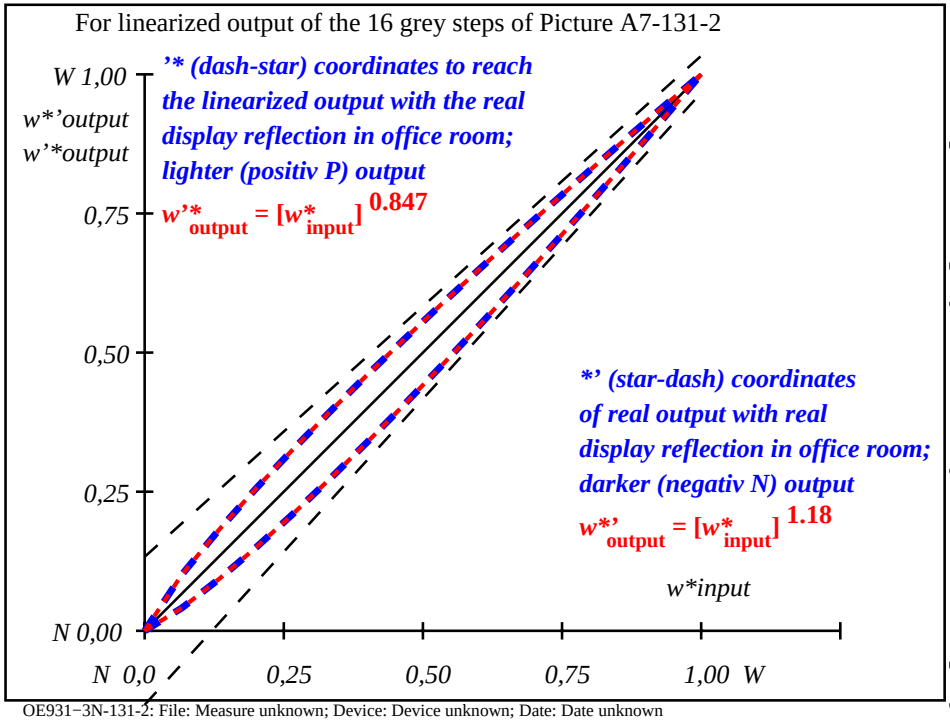
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **3.4**

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

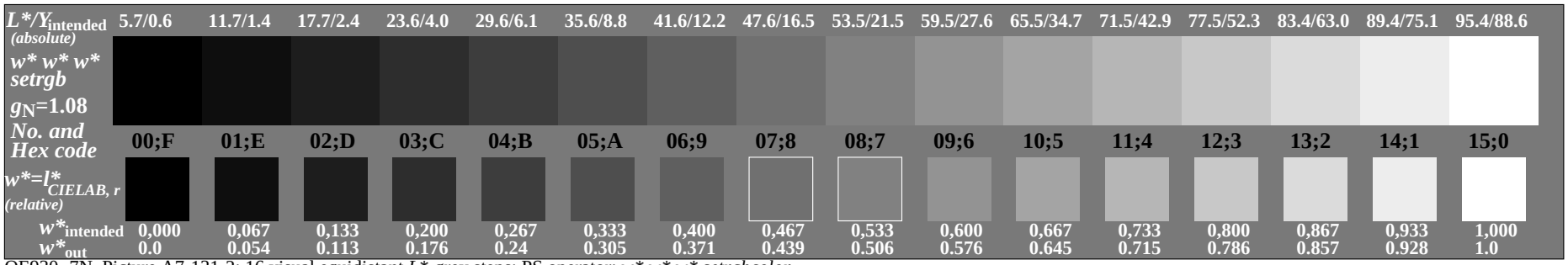
Mean colour reproduction index: $R^*_{ab,m}$ = **85**

OE930−3A-131-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-131-2



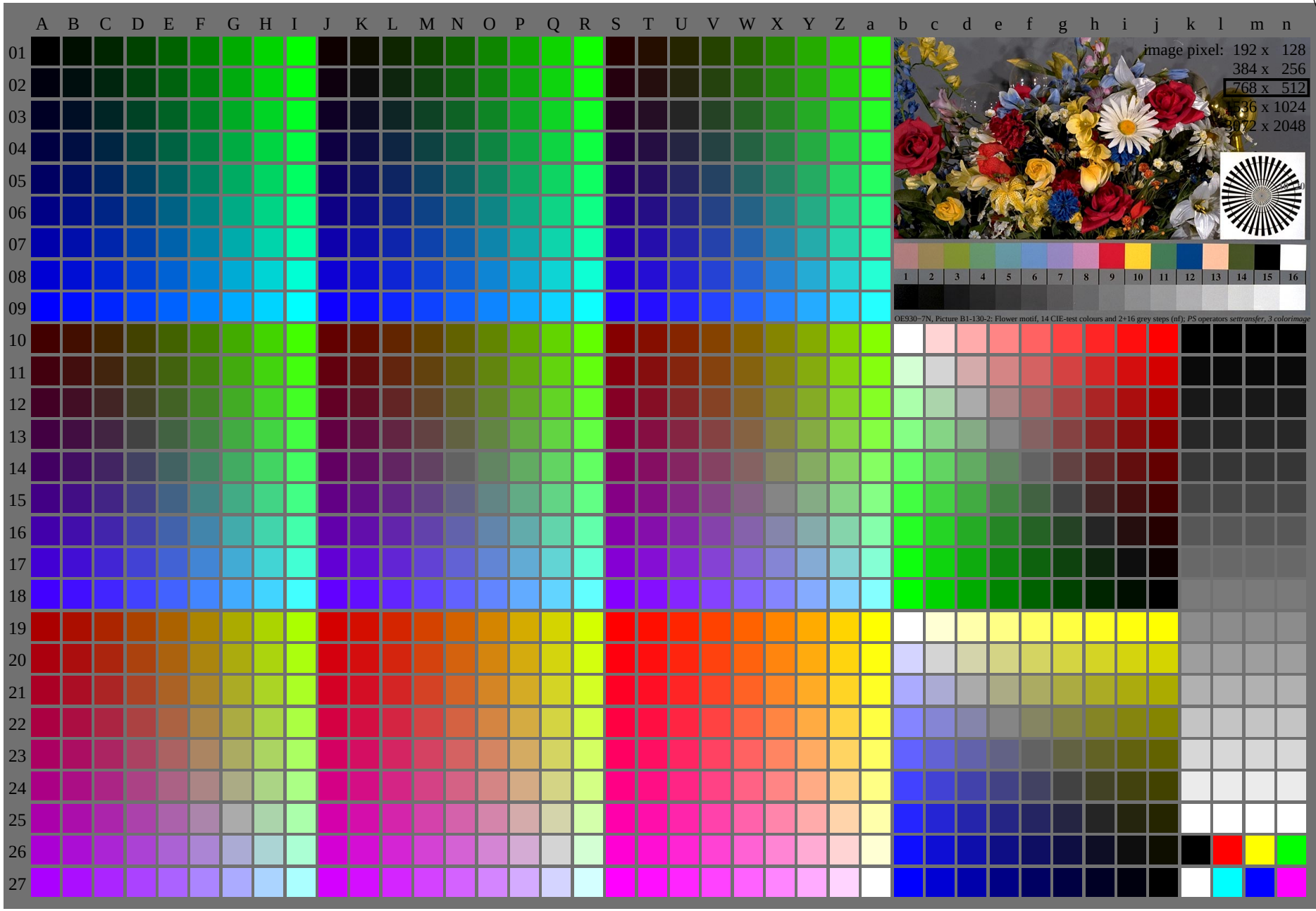
OE931−3N-131-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



OE930−7N, Picture A7-131-2: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*

OE93: In-output relation according to ISO 9241-306; 1MR, DH
Viewing *Y* contrast Y_W:Y_N=88,9:0,62; Y_N range 0,46 to <0,93

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-2: g_P=1.0; g_N=1.08



OE930−7N, Page 1/16, Test chart 2G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_n), colorm = 1, xchart = 16, pchart = 0

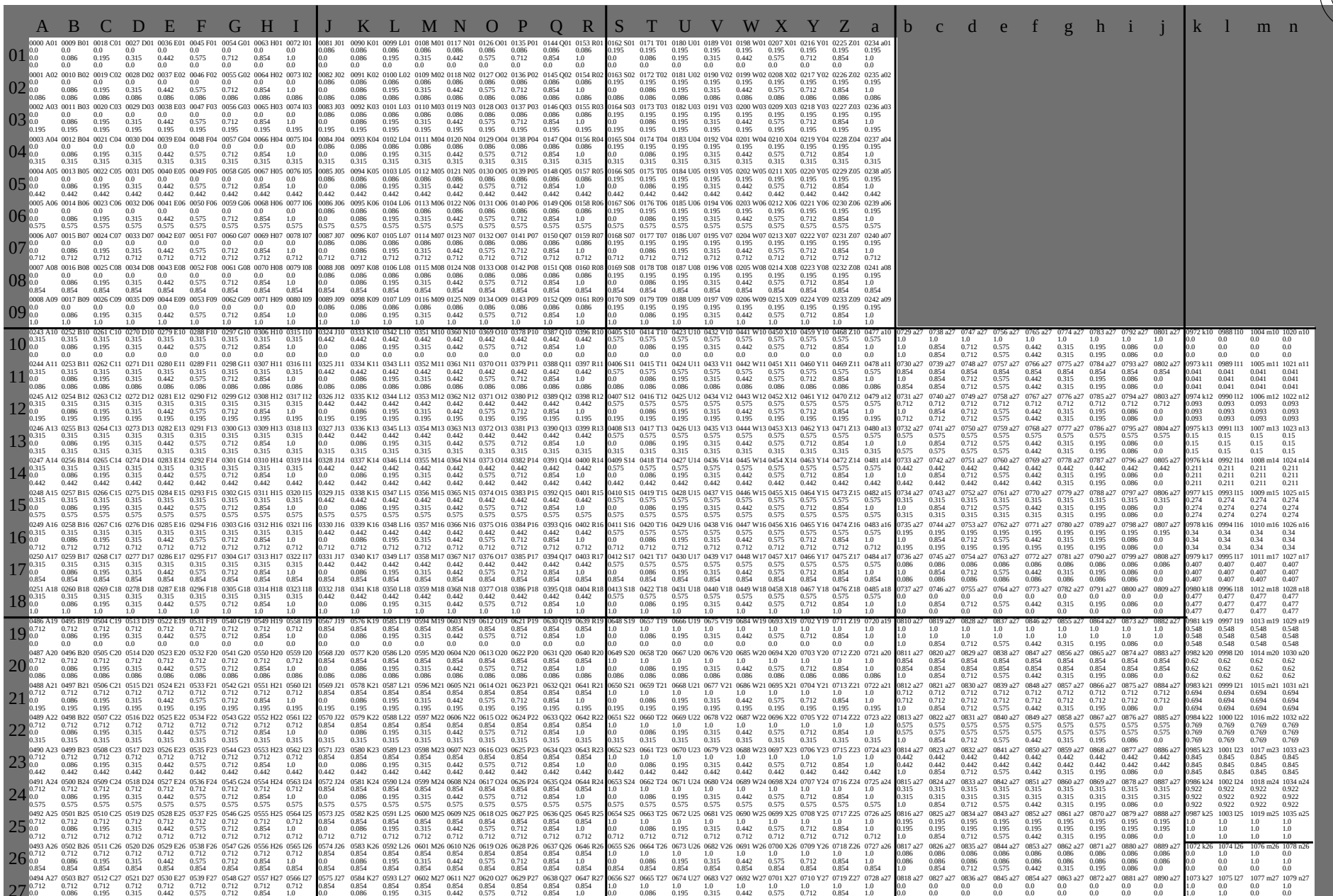
OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-0: g_P=1.0; g_N=1.17

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

TUB registration: 20110801-OE93/OE93L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems

TUB material: code=rha4ta



OE930−70, Page 2/16, Test chart G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_j + k26_n27), 000n'* (k), w'* (l), nnn0'* (m), www'* (n), colorm = 1, xchart = 16, pchart = 1

OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-1: g_P=1.0; g_N=1.17

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

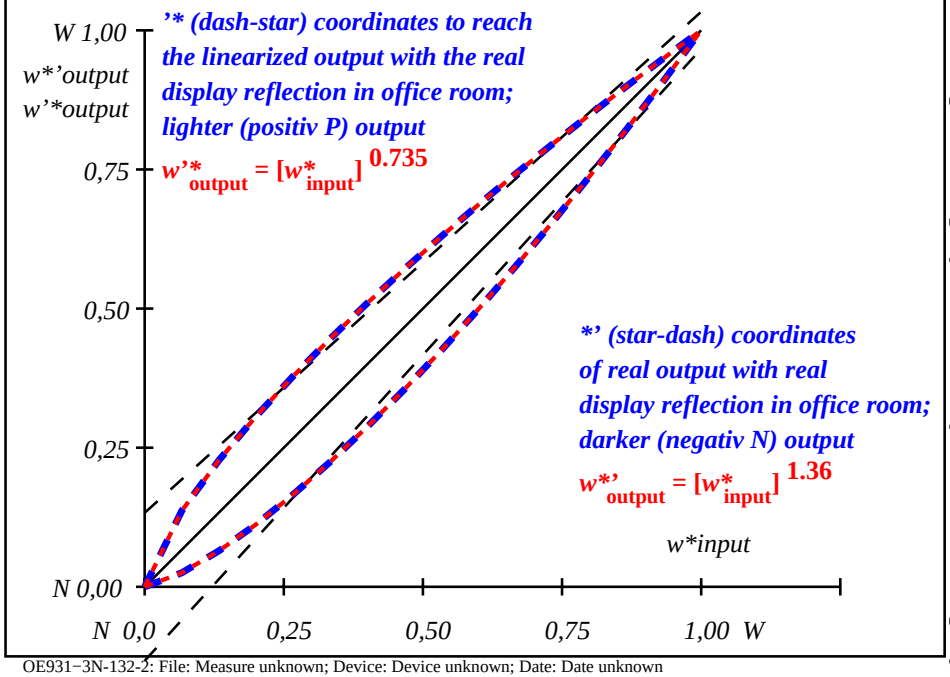
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **6.0**

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

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

OE930−3A-132-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-132-2



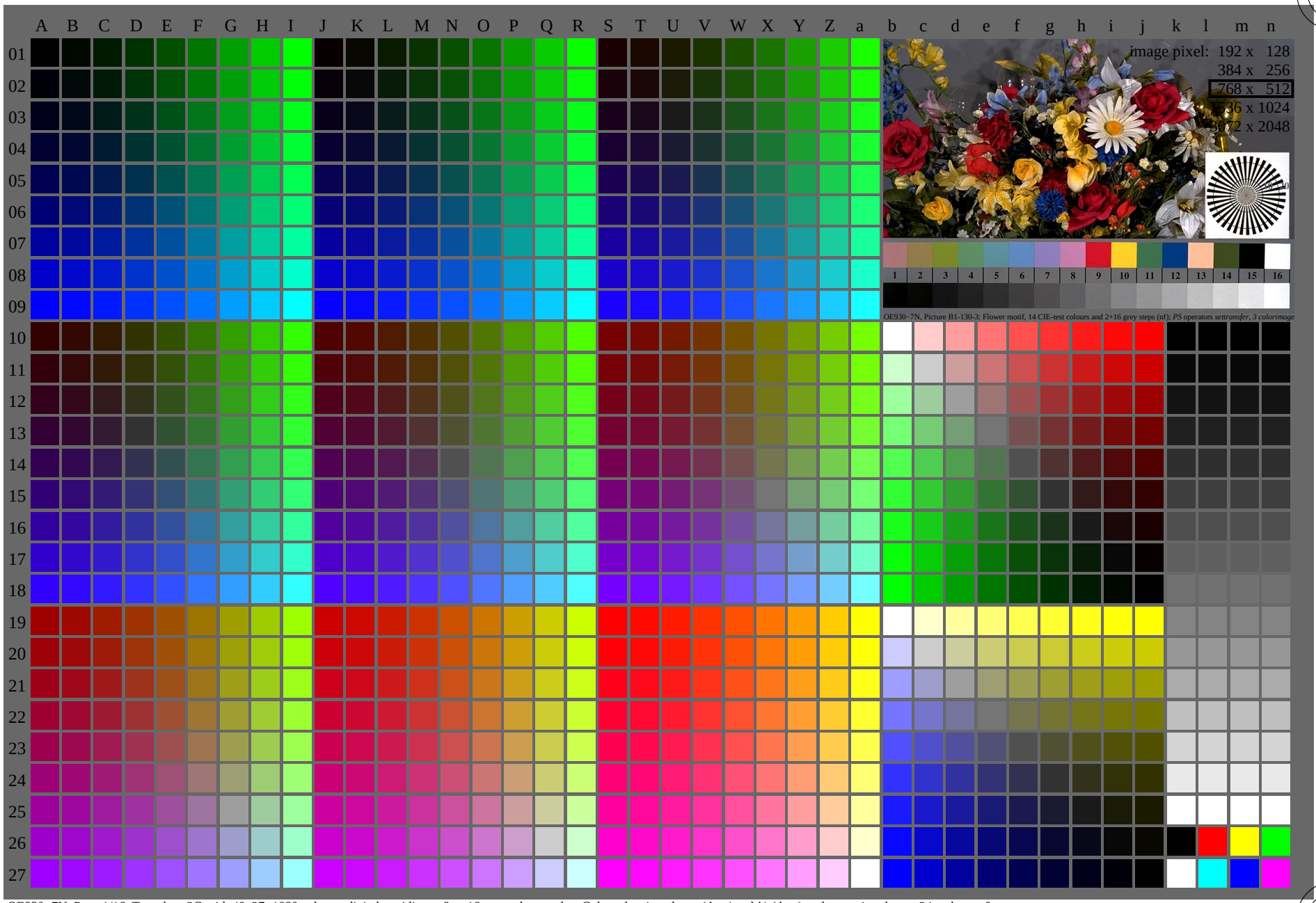
OE931−3N-132-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (absolute)	11.0/1.3	16.6/2.2	22.2/3.6	27.9/5.4	33.5/7.8	39.1/10.7	44.8/14.4	50.4/18.7	56.0/23.9	61.6/30.0	67.3/37.0	72.9/45.0	78.5/54.1	84.2/64.4	89.8/75.8	95.4/88.6
w* w* w* setrgb g_N=1.18																
No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^*=l^*_{CIELAB, r}$ (relative)																
$w^*_{intended}$	0,000	0,067	0,133	0,200	0,267	0,333	0,400	0,467	0,533	0,600	0,667	0,733	0,800	0,867	0,933	1,000
w^*_{out}	0.0	0.042	0.093	0.151	0.211	0.274	0.34	0.408	0.477	0.548	0.621	0.694	0.769	0.845	0.922	1.0

OE930−7N, Picture A7-132-2: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor*

OE93: In-output relation according to ISO 9241-306; 1MR, DH
Viewing *Y* contrast Y_W:Y_N=88,9:1,25; Y_N range 0,93 to <1,87

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-2: g_P=1.0; g_N=1.17



OE930−7N, Page 1/16, Test chart 2G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_n), colorm = 1, xchart = 24, pchart = 0

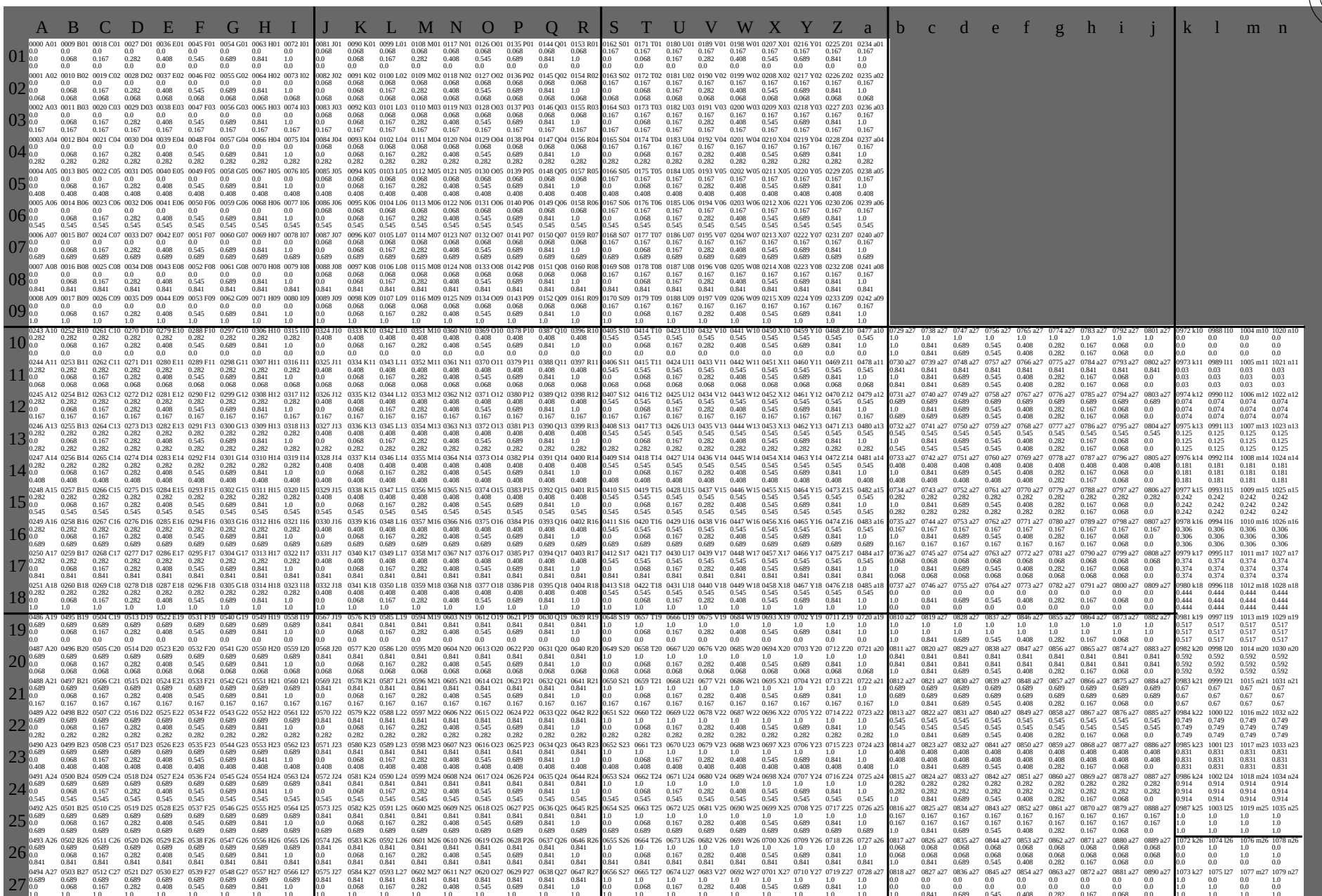
OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-0: g_P=1.0; g_N=1.29

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

TUB registration: 20110801-OE93/OE93L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems

TUB material: code=rha4ta



OE930−70, Page 2/16, Test chart G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_j + k26_n27), 000n'* (k), w'* (l), nnn0'* (m), www'* (n), colorm = 1, xchart = 24, pchart = 1

OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-1: g_P=1.0; g_N=1.29

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

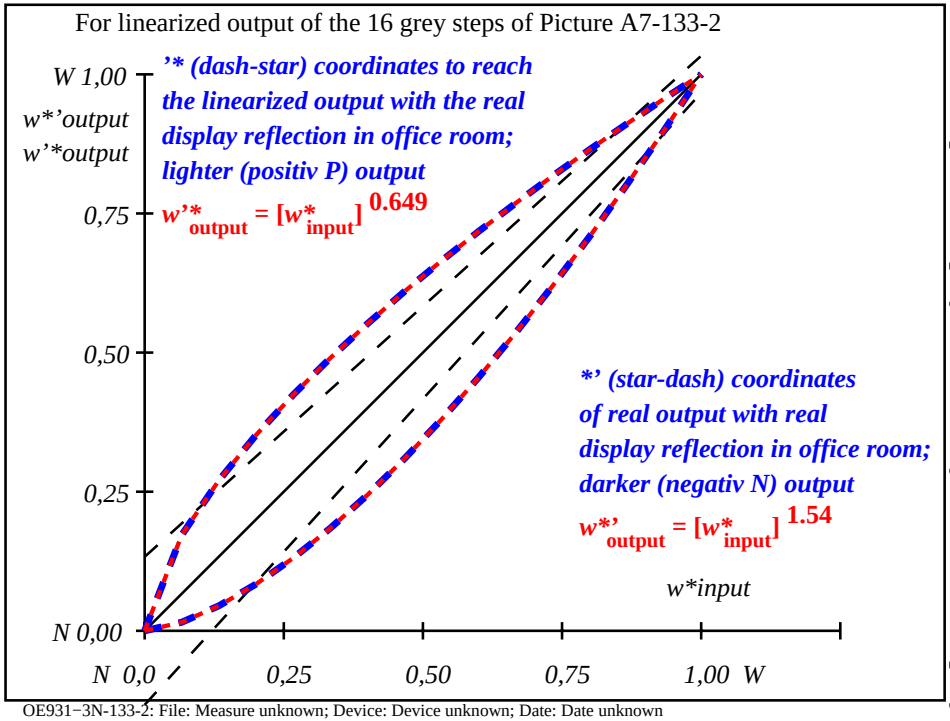
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **7.7**

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

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

OE930−3A-133-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-133-2



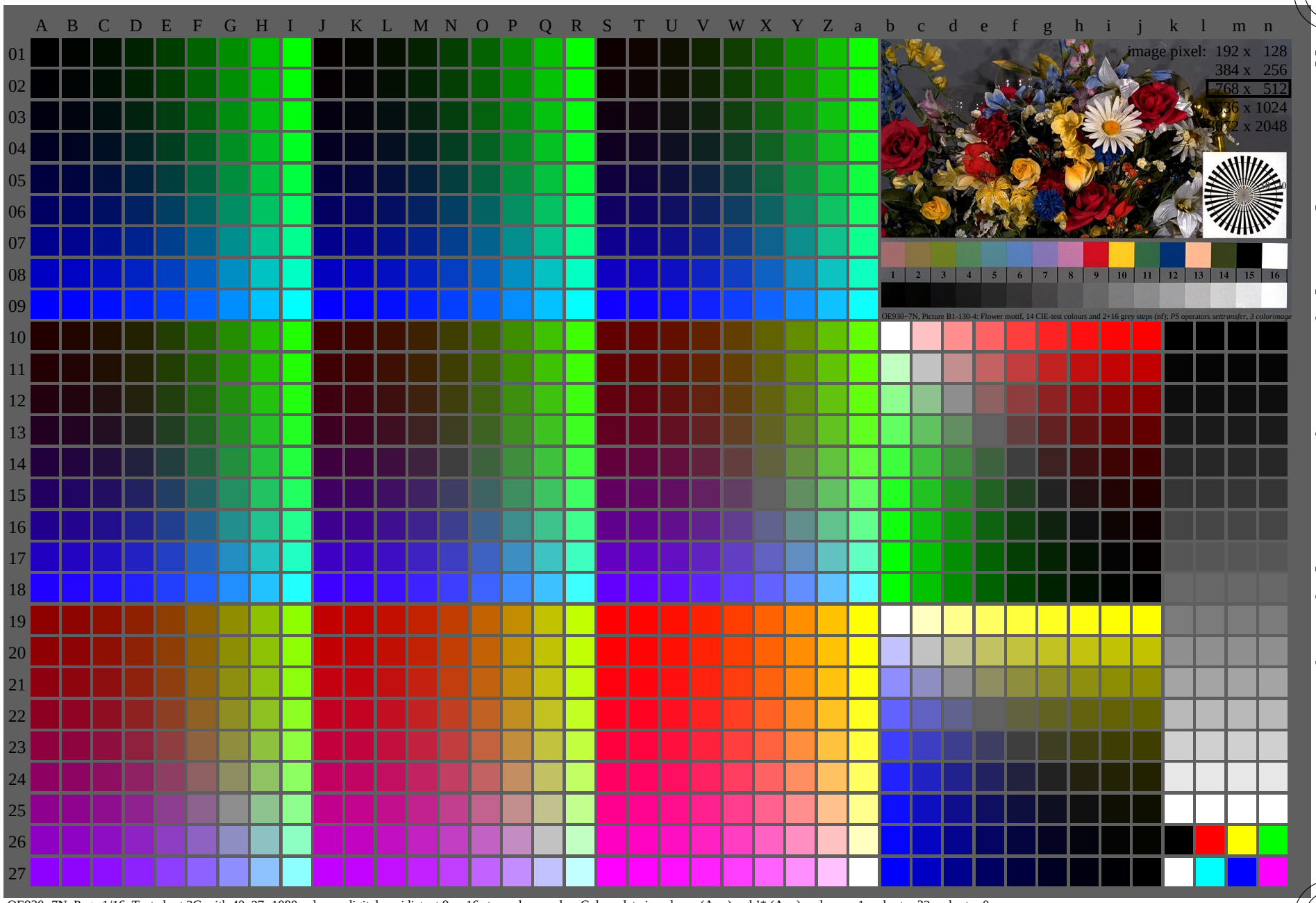
OE931−3N-133-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (absolute)	18.0/2.5	23.2/3.8	28.3/5.6	33.5/7.8	38.6/10.5	43.8/13.7	49.0/17.6	54.1/22.1	59.3/27.3	64.4/33.4	69.6/40.2	74.8/47.9	79.9/56.6	85.1/66.2	90.2/76.8	95.4/88.6
w* w* w* setrgb																
g_N=1.29																
No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^*=l^*_{CIELAB, r}$ (relative)																
$w^*_{intended}$	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	0.031	0.074	0.125	0.182	0.242	0.307	0.374	0.444	0.517	0.593	0.67	0.75	0.832	0.914	1.0

OE930−7N, Picture A7-133-2: 16 visual equidistant L^*-grey steps; PS operator: *w* w* w* setrgbcolor*

OE93: In-output relation according to ISO 9241-306; 1MR, DH
Viewing Y contrast Y_W:Y_N=88,9:2,5; Y_N range 1,87 to <3,75

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-2: g_P=1.0; g_N=1.29



OE930−7N, Page 1/16, Test chart 2G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_n), colorm = 1, xchart = 32, pchart = 0

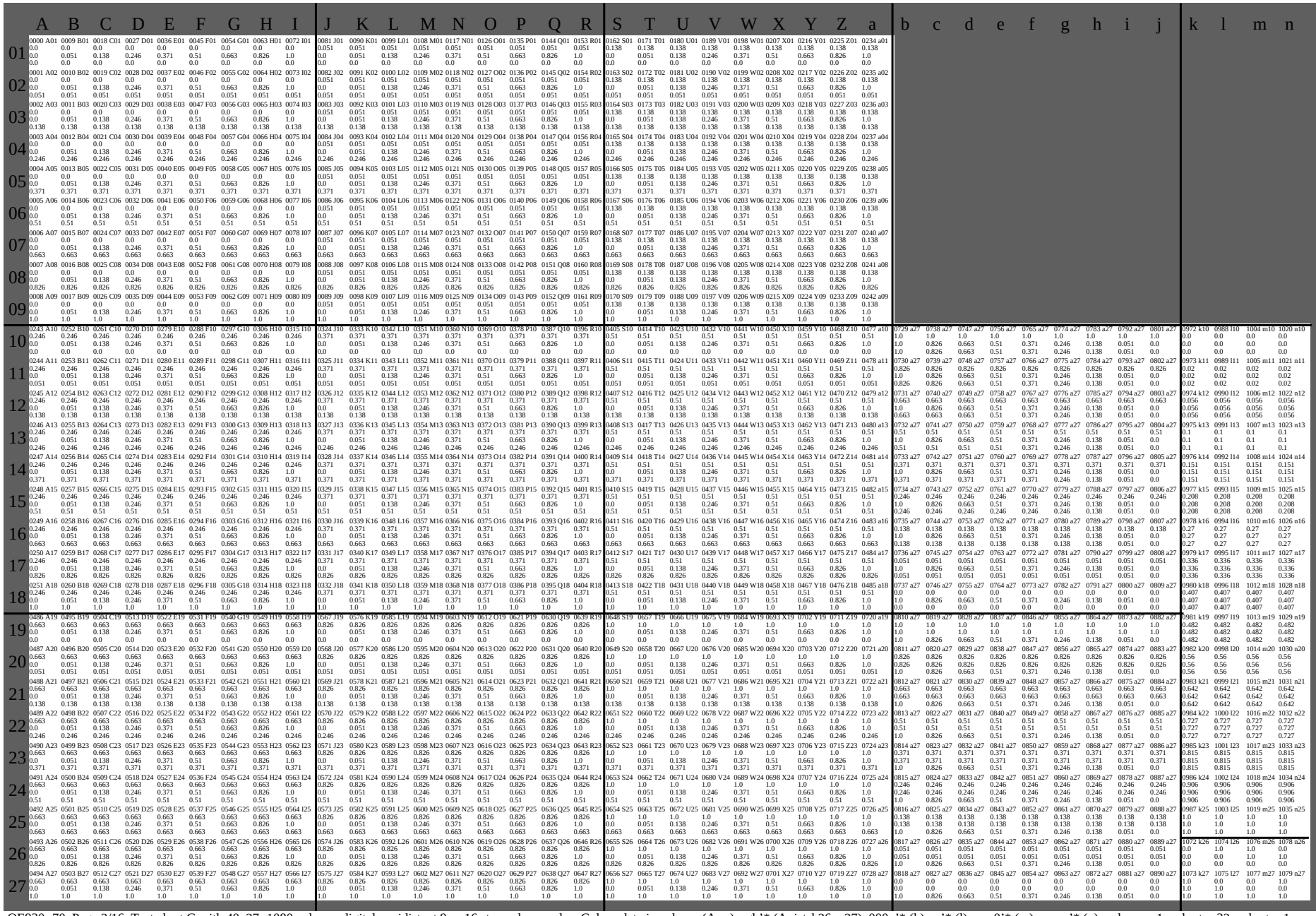
OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-0: g_P=1.0; g_N=1.42

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

TUB registration: 20110801-OE93/OE93L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems

TUB material: code=rha4ta



OE930−70, Page 2/16, Test chart G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_j + k26_n27), 000n'* (k), w'* (l), nnn0'* (m), www'* (n), colorm = 1, xchart = 32, pchart = 1

OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb* (−>*rgb*d)
output 130-1: g_P=1.0; g_N=1.42

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

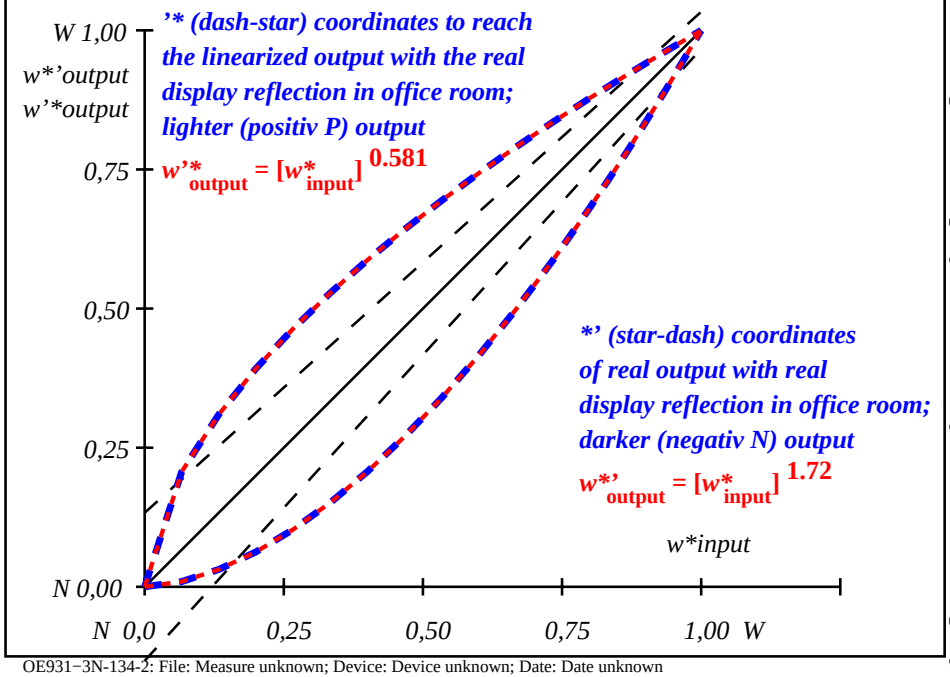
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **8.5**

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

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

OE930−3A-134-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-134-2



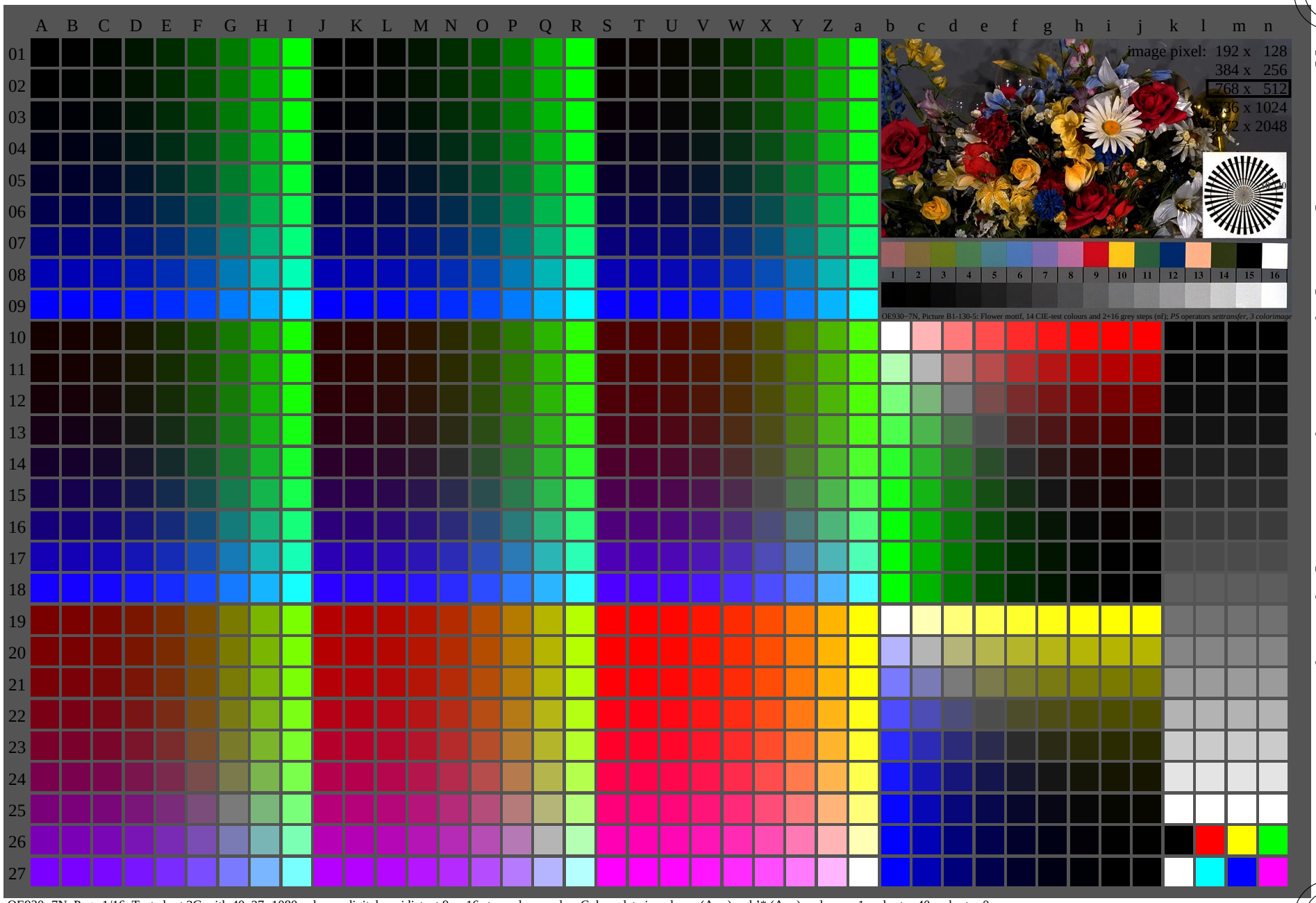
OE931−3N-134-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (absolute)	26.8/5.0	31.4/6.8	36.0/9.0	40.6/11.6	45.1/14.6	49.7/18.2	54.3/22.2	58.8/26.9	63.4/32.1	68.0/38.0	72.6/44.5	77.1/51.7	81.7/59.7	86.3/68.5	90.8/78.1	95.4/88.6
w* w* w* setrgb g_N=1.43																
No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^*=l^*_{CIELAB, r}$ (relative)																
$w^*_{intended}$	0,000	0,067	0,133	0,200	0,267	0,333	0,400	0,467	0,533	0,600	0,667	0,733	0,800	0,867	0,933	1,000
w^*_{out}	0.0	0.021	0.056	0.1	0.152	0.208	0.27	0.337	0.407	0.482	0.561	0.642	0.727	0.816	0.906	1.0

OE930−7N, Picture A7-134-2: 16 visual equidistant L^*-grey steps; PS operator: *w* w* w* setrgbcolor*

OE93: In-output relation according to ISO 9241-306; 1MR, DH
Viewing Y contrast Y_W:Y_N=88,9:5; Y_N range 3,75 to <7,5

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-2: g_P=1.0; g_N=1.42



OE930−7N, Page 1/16, Test chart 2G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_n), colorm = 1, xchart = 40, pchart = 0

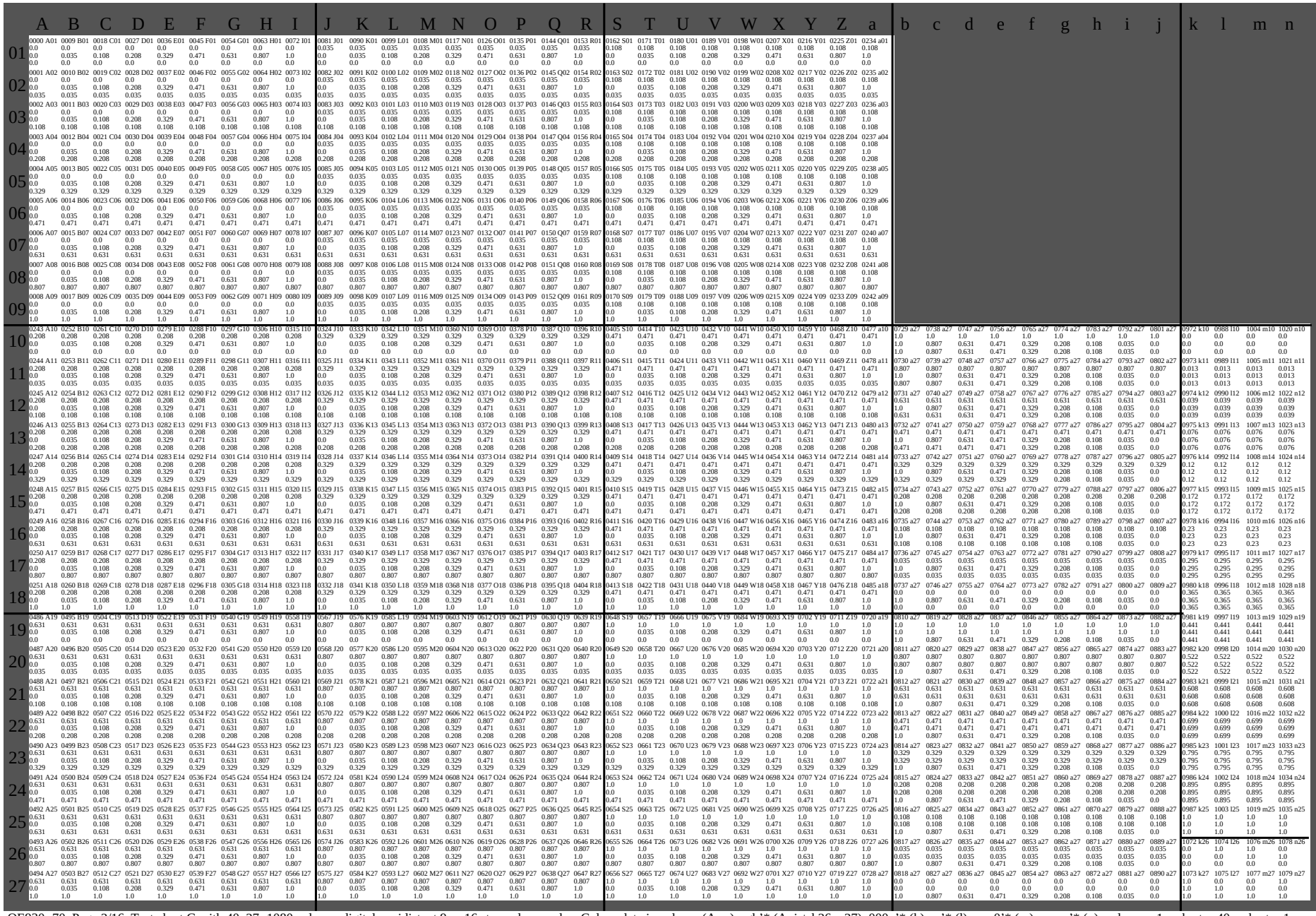
OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-0: g_P=1.0; g_N=1.6

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

TUB registration: 20110801-OE93/OE93L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems

TUB material: code=rha4ta



OE930−70, Page 2/16, Test chart G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_j + k26_n27), 000n'* (k), w'* (l), nnn0'* (m), www'* (n), colorm = 1, xchart = 40, pchart = 1

OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-1: g_P=1.0; g_N=1.6

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

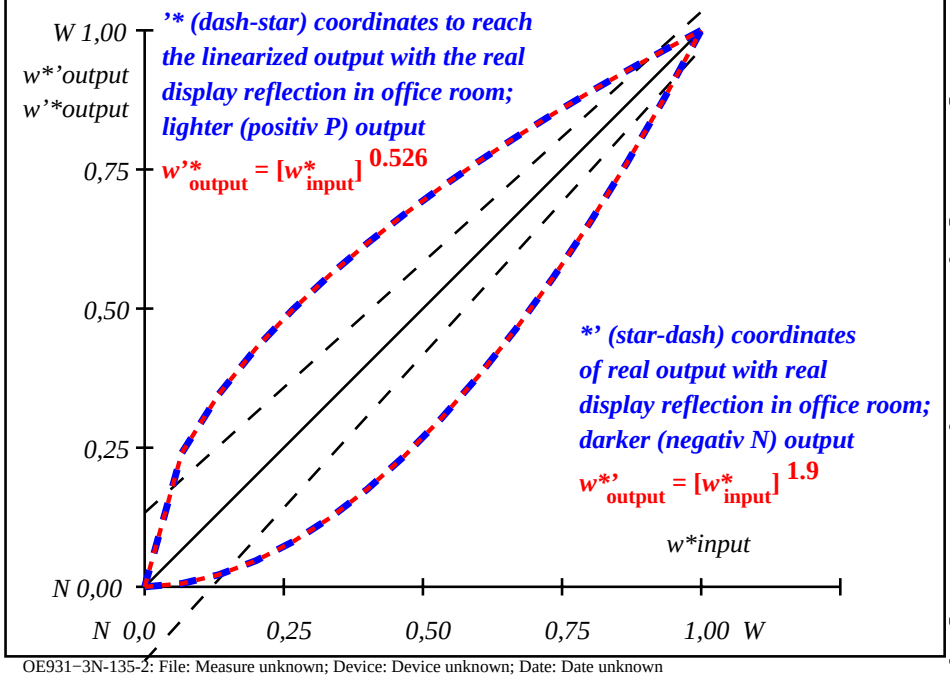
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **8.3**

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

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

OE930−3A-135-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-135-2



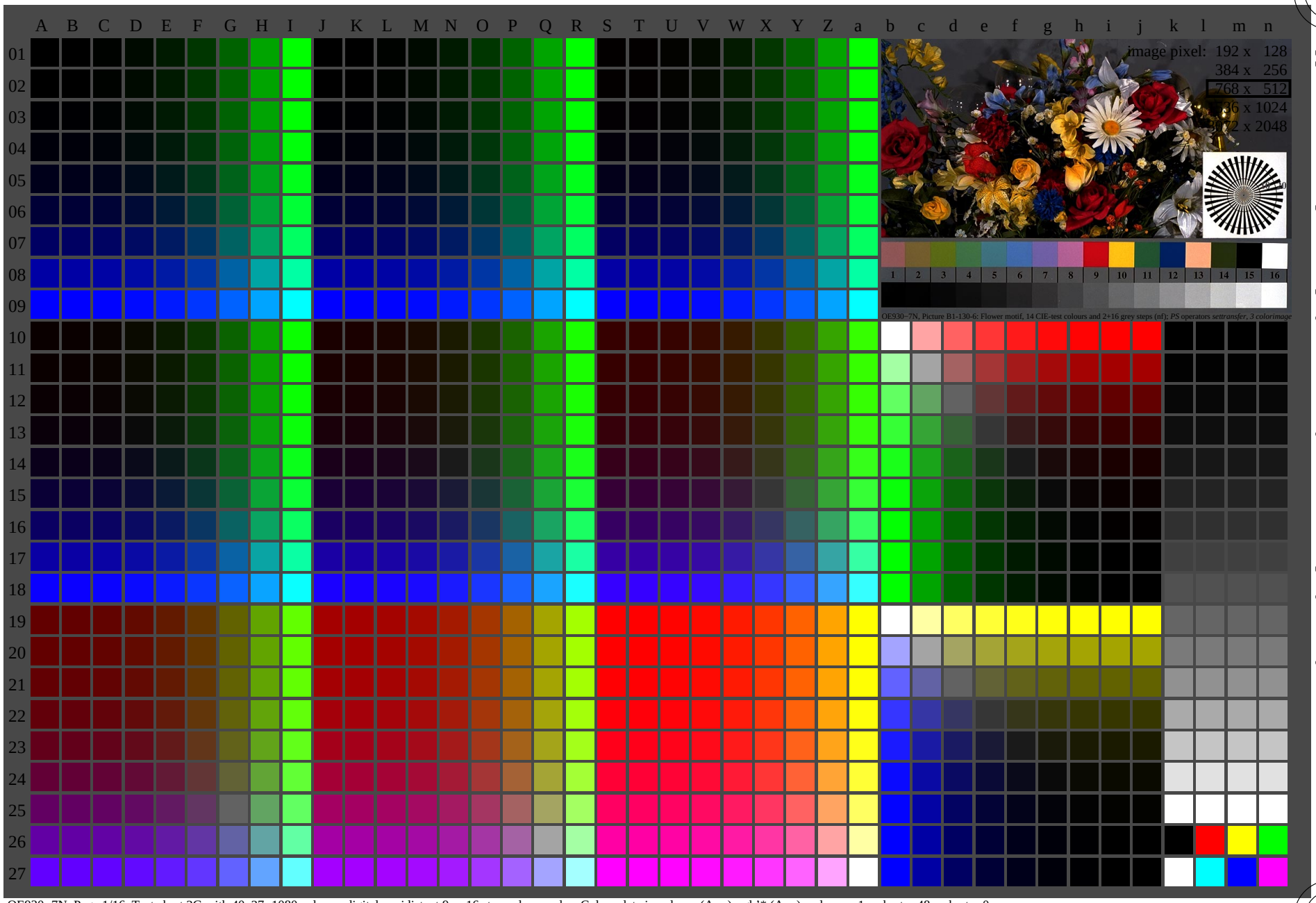
OE931−3N-135-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (absolute)	38.0/10.1	41.8/12.4	45.6/15.0	49.5/18.0	53.3/21.3	57.1/25.1	61.0/29.2	64.8/33.8	68.6/38.8	72.4/44.3	76.3/50.3	80.1/56.9	83.9/63.9	87.8/71.6	91.6/79.8	95.4/88.6
w* w* w* setrgb g_N=1.6																
No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^*=l^*_{CIELAB, r}$ (relative)																
$w^*_{intended}$	0,000	0,067	0,133	0,200	0,267	0,333	0,400	0,467	0,533	0,600	0,667	0,733	0,800	0,867	0,933	1,000
w^*_{out}	0.0	0.013	0.04	0.076	0.121	0.172	0.231	0.296	0.365	0.442	0.523	0.608	0.7	0.796	0.895	1.0

OE930−7N, Picture A7-135-2: 16 visual equidistant L^*-grey steps; PS operator: *w* w* w* setrgbcolor*

OE93: In-output relation according to ISO 9241-306; 1MR, DH
Viewing Y contrast Y_W:Y_N=88,9:10; Y_N range 7,5 to <15

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-2: g_P=1.0; g_N=1.6



OE930−7N, Page 1/16, Test chart 2G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_n), colorm = 1, xchart = 48, pchart = 0

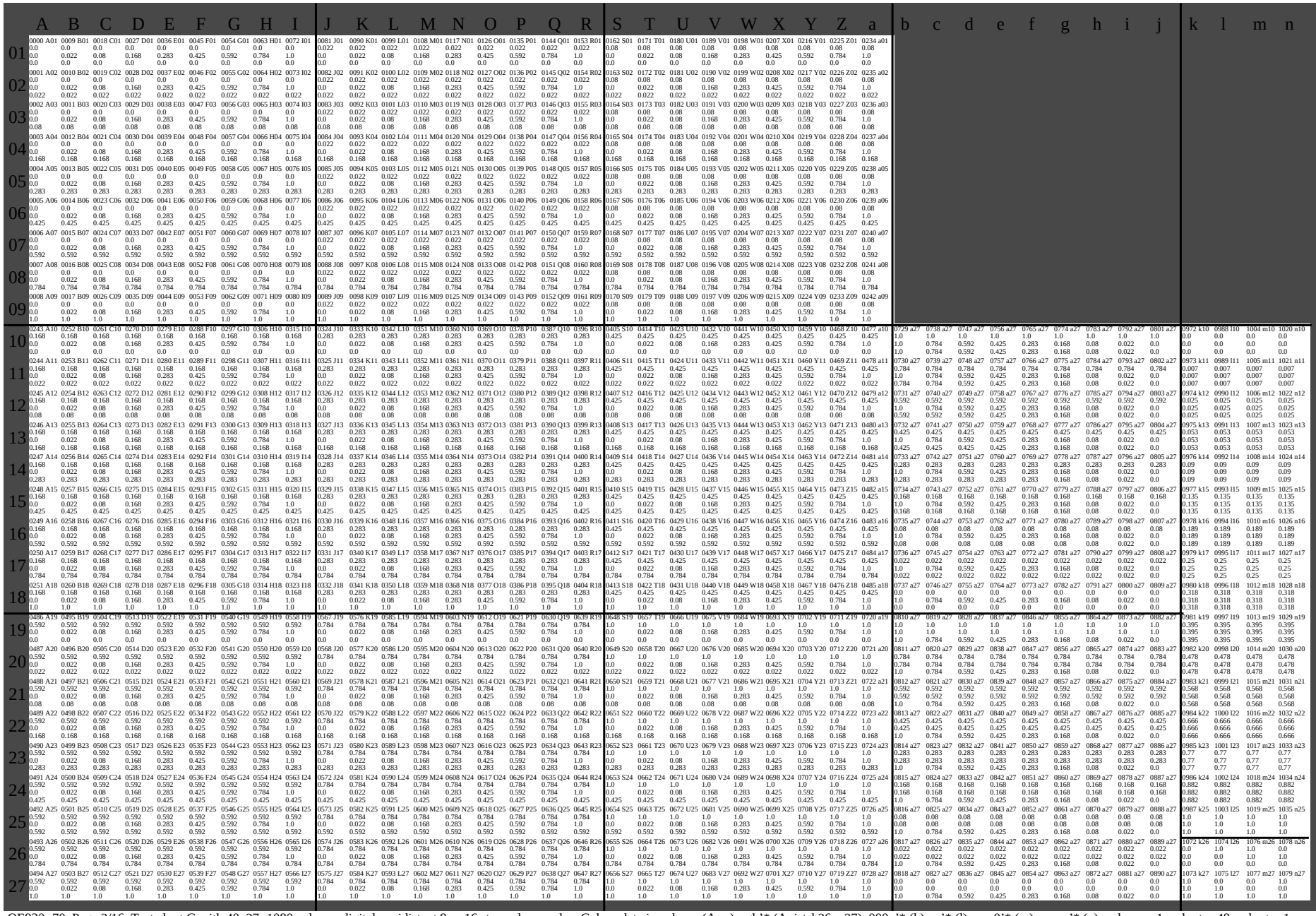
OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-0: g_P=1.0; g_N=1.81

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

TUB registration: 20110801-OE93/OE93L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems

TUB material: code=rha4ta



OE930−70, Page 2/16, Test chart G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_j + k26_n27), 000n'* (k), w'* (l), nnn0'* (m), www'* (n), colorm = 1, xchart = 48, pchart = 1

OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d/*
output 130-1: g_P=1.0; g_N=1.81

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

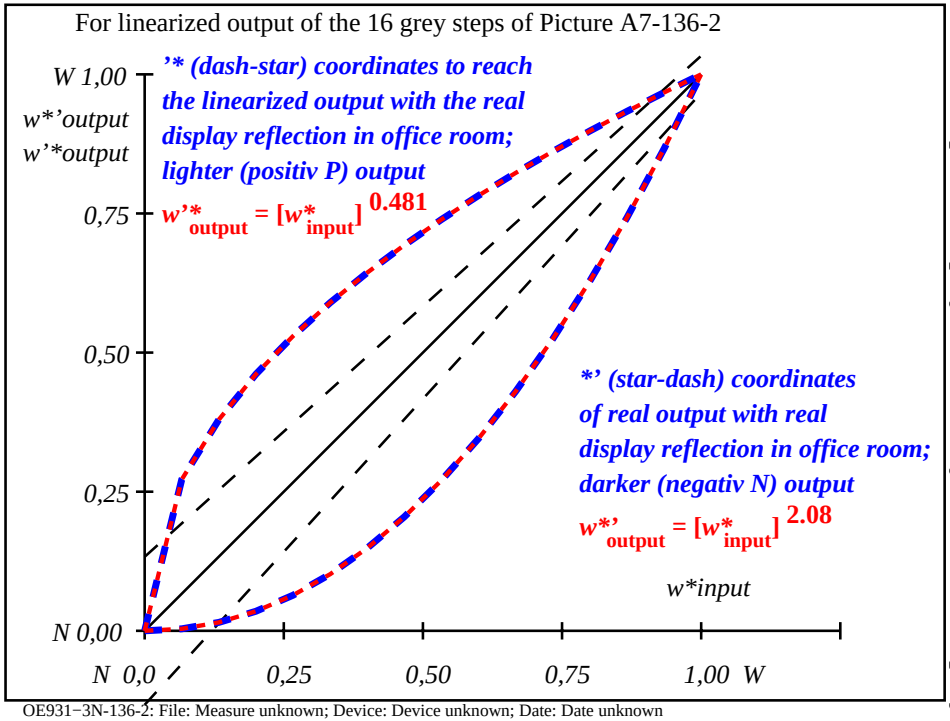
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 7.1

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

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

OE930−3A-136-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-136-2



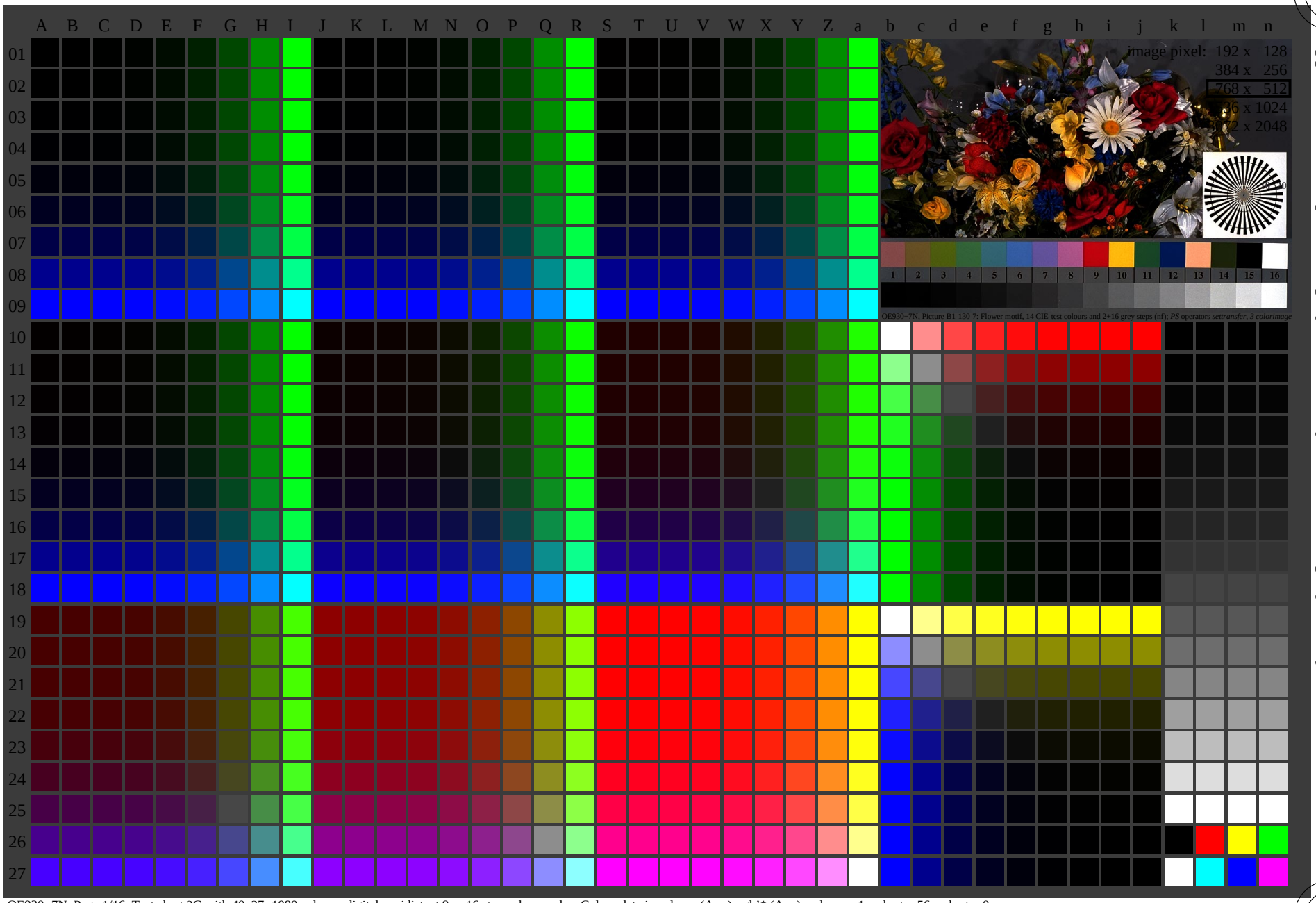
OE931−3N-136-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (absolute)	52.0/20.2	54.9/22.8	57.8/25.8	60.7/28.9	63.6/32.3	66.5/36.0	69.4/39.9	72.3/44.1	75.2/48.5	78.1/53.3	80.9/58.4	83.8/63.8	86.7/69.5	89.6/75.5	92.5/81.9	95.4/88.6
w* w* w* setrgb g_N=1.82																
No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^*=l^*_{CIELAB, r}$ (relative)																
$w^*_{intended}$	0,000	0,067	0,133	0,200	0,267	0,333	0,400	0,467	0,533	0,600	0,667	0,733	0,800	0,867	0,933	1,000
w^*_{out}	0.0	0.007	0.026	0.054	0.091	0.135	0.189	0.25	0.319	0.395	0.479	0.569	0.666	0.771	0.882	1.0

OE930−7N, Picture A7-136-2: 16 visual equidistant L^*-grey steps; PS operator: *w* w* w* setrgbcolor*

OE93: In-output relation according to ISO 9241-306; 1MR, DH
Viewing Y contrast Y_W:Y_N=88,9:20; Y_N range 15 to <30

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-2: g_P=1.0; g_N=1.81



OE930−7N, Page 1/16, Test chart 2G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_n), colorm = 1, xchart = 56, pchart = 0

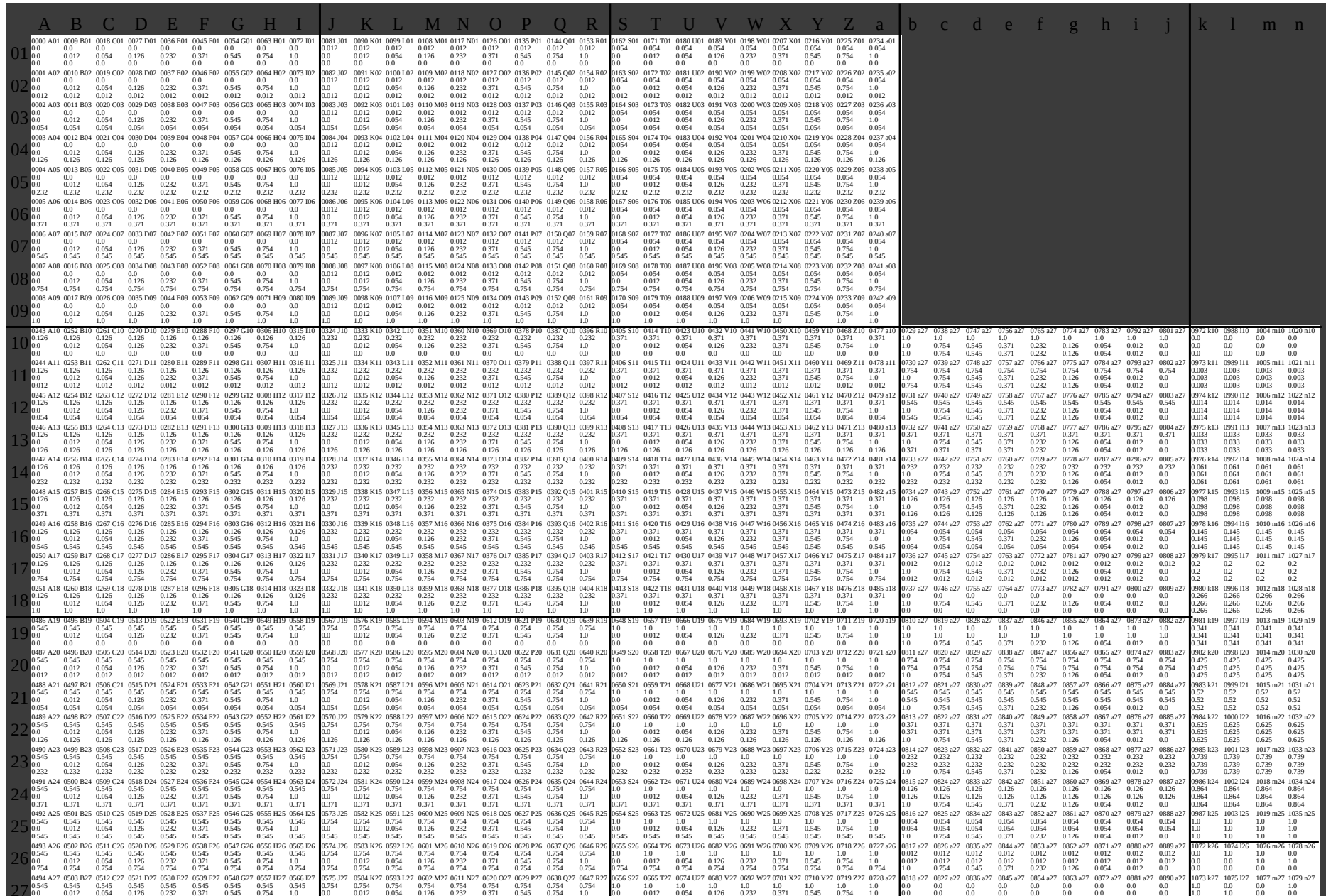
OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-0: g_P=1.0; g_N=2.1

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

TUB registration: 20110801-OE93/OE93L0NA.TXT /.PS
application for output of displays: monitor systems or data projector systems

TUB material: code=rha4ta



OE930−70, Page 2/16, Test chart G with 40x27=1080 colours; digital equidistant 9 or 16 step colour scales; Colour data in column (A−n): rgb'* (A_j + k26_n27), 000n'* (k), w'* (l), nnn0'* (m), www'* (n), colorm = 1, xchart = 56, pchart = 1

OE93: Test chart 2G with 40x27=1080 colours; 1MR, DH
Digital equidistant 9 or 16 step colour scales

input: *000n/w/cmy0/rgb (−>rgb*d/*
output 130-1: g_P=1.0; g_N=2.1

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

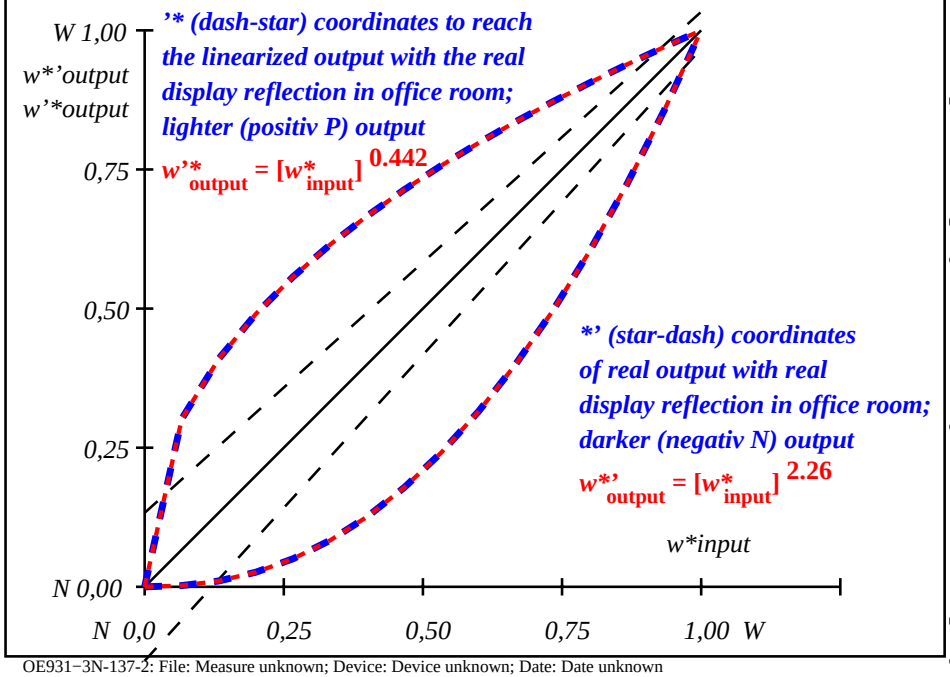
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = **4.6**

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

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

OE930−3A-137-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

For linearized output of the 16 grey steps of Picture A7-137-2



OE931−3N-137-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

$L^*/Y_{intended}$ (absolute)	69.7/40.3	71.4/42.8	73.1/45.4	74.8/48.0	76.6/50.8	78.3/53.7	80.0/56.6	81.7/59.7	83.4/62.9	85.1/66.3	86.8/69.7	88.6/73.2	90.3/76.9	92.0/80.7	93.7/84.6	95.4/88.6
w* w* w* setrgb																
g_N=2.11																
No. and Hex code	00;F	01;E	02;D	03;C	04;B	05;A	06;9	07;8	08;7	09;6	10;5	11;4	12;3	13;2	14;1	15;0
$w^*=l^*_{CIELAB, r}$ (relative)																
$w^*_{intended}$	0,000	0,067	0,133	0,200	0,267	0,333	0,400	0,467	0,533	0,600	0,667	0,733	0,800	0,867	0,933	1,000
w^*_{out}	0.0	0.003	0.014	0.034	0.062	0.099	0.145	0.201	0.266	0.341	0.426	0.52	0.625	0.74	0.864	1.0

OE930−7N, Picture A7-137-2: 16 visual equidistant L^*-grey steps; PS operator: *w* w* w* setrgbcolor*

OE93: In-output relation according to ISO 9241-306; 1MR, DH
Viewing Y contrast Y_W:Y_N=88,9:40; Y_N range 30 to <60

input: *000n/w/cmy0/rgb (−>rgb*d)*
output 130-2: g_P=1.0; g_N=2.1