

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/fels.htm>
 technical information: <http://farbe.li.tu-berlin.de/A/33872E.htm>
 or <http://standards.iso.org/iso/9241/306/ed-2/index.html>

TUB registration: 20240301-fel7/fel710fa.txt /.ps
 application for evaluation and measurement of display or print output
 TUB material: code=rh4ta

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

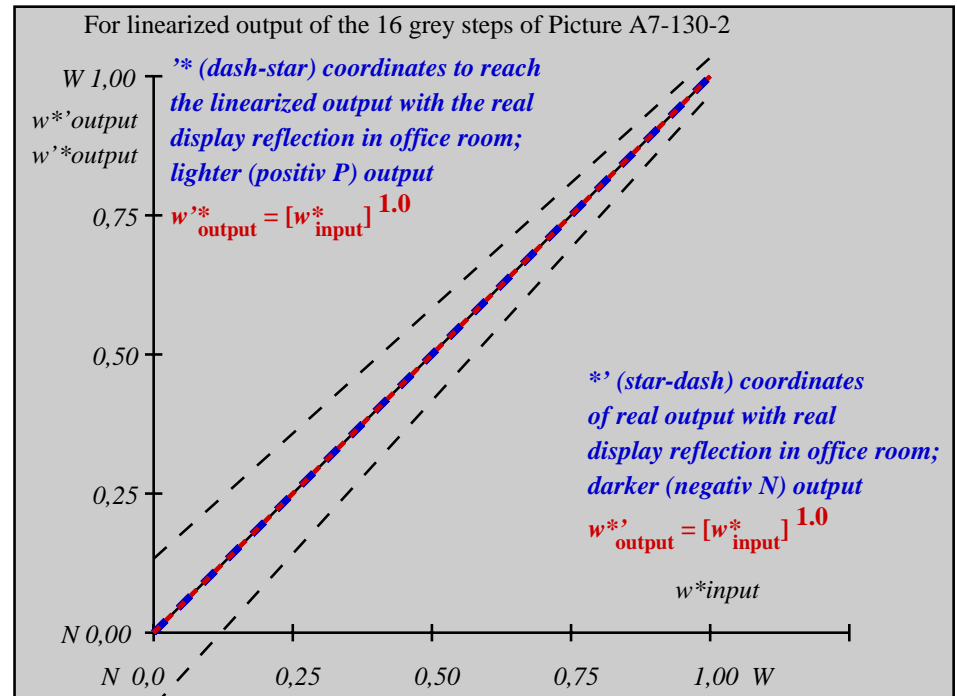
Start output S1
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

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

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

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

fel70-3N-130-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



fel71-3N-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 gp=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 |
| $w^* = l^*$ (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 |

fel70-7N-130-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^* setrgbcolor$

TUB-test chart fel7; fel7: In-output relation according to ISO 9241-306; 1MR, DH 000n/w/cmy0/rgb
 Viewing Y contrast $Y_W:Y_N=88,9:0,31$; Y_N range 0,0 to <0,46, D-HDR; $\gamma_R=0,8$ ->rgb*d, 130-2:

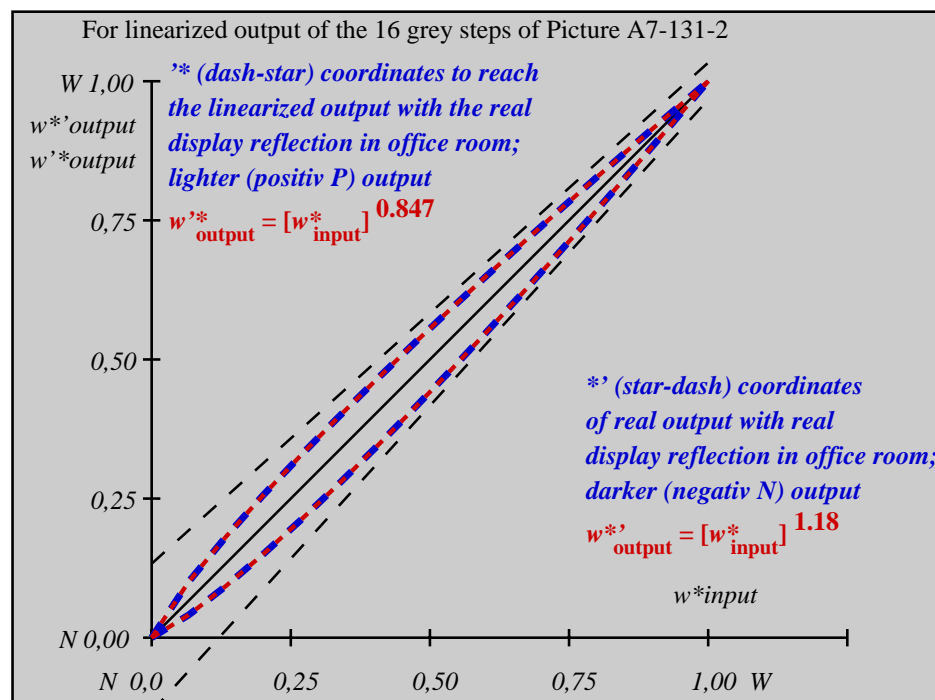
see similar files of the whole serie: <http://farbe.li.tu-berlin.de/fels.htm>
technical information: <http://farbe.li.tu-berlin.de/A/33872E.htm>
or <http://standards.iso.org/iso/9241/306/ed-2/index.html>

TUB registration: 20240301-fel7/fel710fa.txt /.ps
application for evaluation and measurement of display or print output
TUB material: code=rh4ta

| i | LAB*ref | l*out | LAB*out | LAB*out/c-ref | ΔE^* | Start output S1 |
|----|---------|-------|---------|---------------|--------------|--|
| 1 | 5.69 | 0.0 | 0.0 | 5.69 | 0.0 | Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G |
| 2 | 11.67 | 0.0 | 0.04 | 9.36 | 0.0 | |
| 3 | 17.65 | 0.0 | 0.09 | 14.01 | 0.0 | |
| 4 | 23.63 | 0.0 | 0.15 | 19.12 | 0.0 | |
| 5 | 29.62 | 0.0 | 0.21 | 24.55 | 0.0 | |
| 6 | 35.6 | 0.0 | 0.27 | 30.23 | 0.0 | |
| 7 | 41.58 | 0.0 | 0.34 | 36.12 | 0.0 | |
| 8 | 47.56 | 0.0 | 0.41 | 42.19 | 0.0 | |
| 9 | 53.54 | 0.0 | 0.48 | 48.42 | 0.0 | |
| 10 | 59.52 | 0.0 | 0.55 | 54.79 | 0.0 | |
| 11 | 65.5 | 0.0 | 0.62 | 61.29 | 0.0 | |
| 12 | 71.48 | 0.0 | 0.69 | 67.91 | 0.0 | |
| 13 | 77.47 | 0.0 | 0.77 | 74.64 | 0.0 | |
| 14 | 83.45 | 0.0 | 0.84 | 81.47 | 0.0 | |
| 15 | 89.43 | 0.0 | 0.92 | 88.4 | 0.0 | |
| 16 | 95.41 | 0.0 | 1.0 | 95.41 | 0.0 | |
| 17 | 5.69 | 0.0 | 0.0 | 5.69 | 0.0 | Mean lightness difference (16 steps) |
| 18 | 28.12 | 0.0 | 0.19 | 23.17 | 0.0 | $\Delta E^*_{CIELAB} = 3.4$ |
| 19 | 50.55 | 0.0 | 0.44 | 45.29 | 0.0 | |
| 20 | 72.98 | 0.0 | 0.71 | 69.58 | 0.0 | Mean lightness difference (5 steps) |
| 21 | 95.41 | 0.0 | 1.0 | 95.41 | 0.0 | $\Delta L^*_{CIELAB} = 2.7$ |

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

fel70-3N-131-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



fel71-3N-131-2: File: Measure unknown; Device: Device unknown; Date: Date unknown

| $L^*/Y^*_{intended}$ (absolute) | 5.7/0.6 | 11.7/1.4 | 17.7/2.4 | 23.6/4.0 | 29.6/6.1 | 35.6/8.8 | 41.6/12.2 | 47.6/16.5 | 53.5/21.5 | 59.5/27.6 | 65.5/34.7 | 71.5/42.9 | 77.5/52.3 | 83.4/63.0 | 89.4/75.1 | 95.4/88.6 |
|---------------------------------|---------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| w^*_{setrgb} | 00;F | 01;E | 02;D | 03;C | 04;B | 05;A | 06;9 | 07;8 | 08;7 | 09;6 | 10;5 | 11;4 | 12;3 | 13;2 | 14;1 | 15;0 |
| $w^*_{CIELAB,r}$ (relative) | 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 |
| $w^*_{intended}$ | 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 | 0,054 | 0,113 | 0,176 | 0,24 | 0,305 | 0,371 | 0,439 | 0,506 | 0,576 | 0,645 | 0,715 | 0,786 | 0,857 | 0,928 | 1,0 |

fel70-7N-131-2: 16 visual equidistant L^* -grey steps; PS operator: w^*_{setrgb}

<http://farbe.li.tu-berlin.de/fel7/fel710fa.txt> /.ps; only vector graphic VG;
 see separate images of this page: <http://farbe.li.tu-berlin.de/fel7/fel7.htm>

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/fels.htm>
 technical information: <http://farbe.li.tu-berlin.de/A/33872E.html>
 or <http://standards.iso.org/iso/9241/306/ed-2/index.html>

TUB registration: 20240301-fel7/fel710fa.txt /.ps
 application for evaluation and measurement of display or print output
 TUB material: code=rh4ta

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

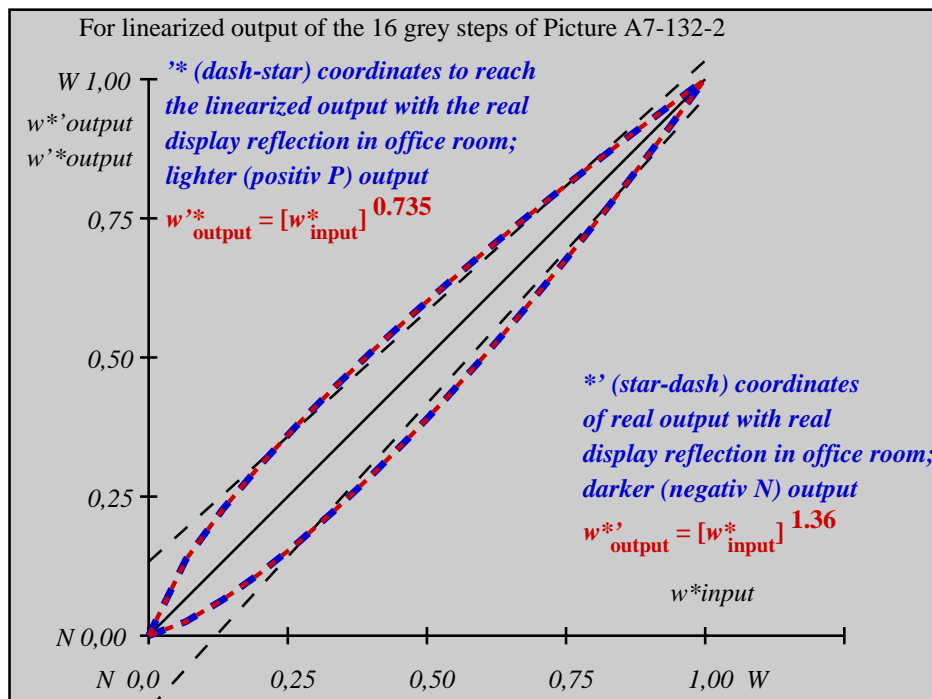
Start output S1
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

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

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

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

fel70-3N-132-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



fel71-3N-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 |

fel70-7N-132-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^*$ setrgbcolor

TUB-test chart fel7; fel7: In-output relation according to ISO 9241-306; 1MR, DH 000n/w/cmy0/rgb
 Viewing Y contrast $Y_W:Y_N=88,9:1,25$; Y_N range 0,93 to <1,87, D-HDR; $\gamma_R=0,8$ ->rgb*d, 130-2:

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/fels.htm>
 technical information: <http://farbe.li.tu-berlin.de/A/33872E.html>
 or <http://standards.iso.org/iso/9241/306/ed-2/index.html>

TUB registration: 20240301-fel7/fel710fa.txt /.ps
 application for evaluation and measurement of display or print output
 TUB material: code=rh4ta

| i | LAB*ref | l*out | LAB*out | LAB*out/c-ref | ΔE* | Start output S1 |
|----|---------|-------|---------|---------------|-----|-----------------|
| 1 | 18.01 | 0.0 | 0.0 | 18.01 | 0.0 | 0.0 |
| 2 | 23.17 | 0.0 | 0.02 | 19.2 | 0.0 | -3.95 |
| 3 | 28.33 | 0.0 | 0.04 | 21.49 | 0.0 | -6.83 |
| 4 | 33.49 | 0.0 | 0.08 | 24.5 | 0.0 | -8.98 |
| 5 | 38.65 | 0.0 | 0.13 | 28.12 | 0.0 | -10.52 |
| 6 | 43.81 | 0.0 | 0.18 | 32.26 | 0.0 | -11.53 |
| 7 | 48.97 | 0.0 | 0.24 | 36.89 | 0.0 | -12.07 |
| 8 | 54.13 | 0.0 | 0.31 | 41.94 | 0.0 | -12.18 |
| 9 | 59.29 | 0.0 | 0.38 | 47.41 | 0.0 | -11.87 |
| 10 | 64.45 | 0.0 | 0.46 | 53.25 | 0.0 | -11.19 |
| 11 | 69.61 | 0.0 | 0.54 | 59.46 | 0.0 | -10.14 |
| 12 | 74.77 | 0.0 | 0.62 | 66.02 | 0.0 | -8.74 |
| 13 | 79.93 | 0.0 | 0.71 | 72.9 | 0.0 | -7.02 |
| 14 | 85.09 | 0.0 | 0.8 | 80.1 | 0.0 | -4.98 |
| 15 | 90.25 | 0.0 | 0.9 | 87.61 | 0.0 | -2.63 |
| 16 | 95.41 | 0.0 | 1.0 | 95.41 | 0.0 | 0.0 |
| 17 | 18.01 | 0.0 | 0.0 | 18.01 | 0.0 | 0.0 |
| 18 | 37.36 | 0.0 | 0.12 | 27.16 | 0.0 | -10.19 |
| 19 | 56.71 | 0.0 | 0.34 | 44.63 | 0.0 | -12.07 |
| 20 | 76.06 | 0.0 | 0.64 | 67.71 | 0.0 | -8.34 |
| 21 | 95.41 | 0.0 | 1.0 | 95.41 | 0.0 | 0.0 |

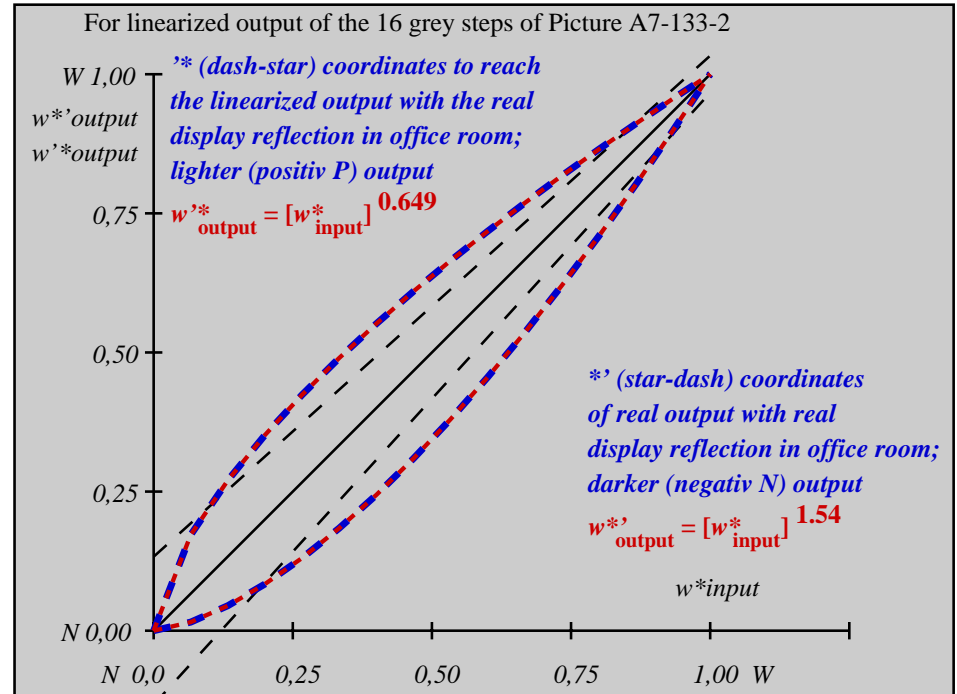
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

Mean lightness difference (16 steps) $\Delta E^*_{CIELAB} = 7.7$

Mean lightness difference (5 steps) $\Delta L^*_{CIELAB} = 6.1$

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

fel70-3N-133-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



fel71-3N-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 |

fel70-7N-133-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^*$ setrgbcolor

TUB-test chart fel7; fel7: In-output relation according to ISO 9241-306; 1MR, DH 000n/w/cmy0/rgb
 Viewing Y contrast $Y_W:Y_N=88,9:2,5$; Y_N range 1,87 to <3,75, D-HDR; $\gamma_R=0,8$ ->rgb*d, 130-2:

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/fels.htm>
technical information: <http://farbe.li.tu-berlin.de/A/33872E.html>
or <http://standards.iso.org/iso/9241/306/ed-2/index.html>

TUB registration: 20240301-fel7/fel710fa.txt /.ps
application for evaluation and measurement of display or print output
TUB material: code=rh4ta

| i | LAB*ref | l*out | LAB*out | LAB*out/c-ref | ΔE^* |
|----|---------|-------|---------|---------------|--------------|
| 1 | 26.85 | 0.0 | 0.0 | 26.85 | 0.0 |
| 2 | 31.42 | 0.0 | 0.01 | 27.5 | 0.0 |
| 3 | 35.99 | 0.0 | 0.03 | 28.99 | 0.0 |
| 4 | 40.56 | 0.0 | 0.06 | 31.15 | 0.0 |
| 5 | 45.13 | 0.0 | 0.1 | 33.91 | 0.0 |
| 6 | 49.7 | 0.0 | 0.15 | 37.21 | 0.0 |
| 7 | 54.27 | 0.0 | 0.21 | 41.03 | 0.0 |
| 8 | 58.84 | 0.0 | 0.27 | 45.33 | 0.0 |
| 9 | 63.41 | 0.0 | 0.34 | 50.1 | 0.0 |
| 10 | 67.99 | 0.0 | 0.42 | 55.33 | 0.0 |
| 11 | 72.56 | 0.0 | 0.5 | 60.98 | 0.0 |
| 12 | 77.13 | 0.0 | 0.59 | 67.06 | 0.0 |
| 13 | 81.7 | 0.0 | 0.68 | 73.56 | 0.0 |
| 14 | 86.27 | 0.0 | 0.78 | 80.45 | 0.0 |
| 15 | 90.84 | 0.0 | 0.89 | 87.74 | 0.0 |
| 16 | 95.41 | 0.0 | 1.0 | 95.41 | 0.0 |
| 17 | 26.85 | 0.0 | 0.0 | 26.85 | 0.0 |
| 18 | 43.99 | 0.0 | 0.09 | 33.17 | 0.0 |
| 19 | 61.13 | 0.0 | 0.3 | 47.66 | 0.0 |
| 20 | 78.27 | 0.0 | 0.61 | 68.65 | 0.0 |
| 21 | 95.41 | 0.0 | 1.0 | 95.41 | 0.0 |

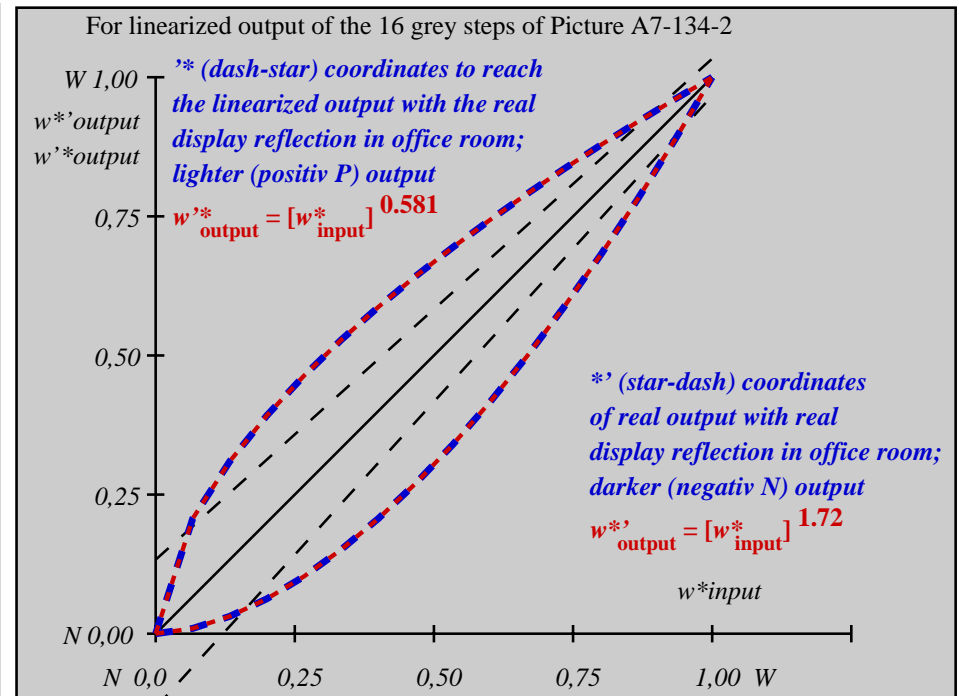
Start output S1
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

Mean lightness difference (16 steps)
 $\Delta E^*_{CIELAB} = 8.5$

Mean lightness difference (5 steps)
 $\Delta L^*_{CIELAB} = 6.8$

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

fel70-3N-134-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



fel71-3N-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 | 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) | 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 |
| $w^*_{intended}$ | 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 |

fel70-7N-134-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^*$ setrgbcolor

TUB-test chart fel7; fel7: In-output relation according to ISO 9241-306; 1MR, DH 000n/w/cmy0/rgb
Viewing Y contrast $Y_W:Y_N=88,9:5$; Y_N range 3,75 to <7,5, D-HDR; $\gamma_R=0,8$ ->rgb*d, 130-2:

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/fels.htm>
technical information: <http://farbe.li.tu-berlin.de/A/33872E.html>
or <http://standards.iso.org/iso/9241/306/ed-2/index.html>

TUB registration: 20240301-fel7/fel710fa.txt /.ps
application for evaluation and measurement of display or print output
TUB material: code=rh4ta

| i | LAB*ref | l*out | LAB*out | LAB*out/c-ref | ΔE^* |
|----|---------|-------|---------|---------------|--------------|
| 1 | 37.99 | 0.0 | 0.0 | 37.99 0.0 0.0 | 0.01 |
| 2 | 41.81 | 0.0 | 0.01 | 38.32 0.0 0.0 | 3.49 |
| 3 | 45.64 | 0.0 | 0.02 | 39.23 0.0 0.0 | 6.41 |
| 4 | 49.47 | 0.0 | 0.05 | 40.68 0.0 0.0 | 8.79 |
| 5 | 53.3 | 0.0 | 0.08 | 42.65 0.0 0.0 | 10.65 |
| 6 | 57.13 | 0.0 | 0.12 | 45.11 0.0 0.0 | 12.02 |
| 7 | 60.96 | 0.0 | 0.18 | 48.06 0.0 0.0 | 12.9 |
| 8 | 64.78 | 0.0 | 0.24 | 51.48 0.0 0.0 | 13.3 |
| 9 | 68.61 | 0.0 | 0.3 | 55.38 0.0 0.0 | 13.23 |
| 10 | 72.44 | 0.0 | 0.38 | 59.74 0.0 0.0 | 12.7 |
| 11 | 76.27 | 0.0 | 0.46 | 64.56 0.0 0.0 | 11.7 |
| 12 | 80.1 | 0.0 | 0.55 | 69.84 0.0 0.0 | 10.26 |
| 13 | 83.93 | 0.0 | 0.65 | 75.57 0.0 0.0 | 8.36 |
| 14 | 87.75 | 0.0 | 0.76 | 81.74 0.0 0.0 | 6.01 |
| 15 | 91.58 | 0.0 | 0.88 | 88.35 0.0 0.0 | 3.23 |
| 16 | 95.41 | 0.0 | 1.0 | 95.41 0.0 0.0 | 0.01 |
| 17 | 37.99 | 0.0 | 0.0 | 37.99 0.0 0.0 | 0.01 |
| 18 | 52.34 | 0.0 | 0.07 | 42.11 0.0 0.0 | 10.23 |
| 19 | 66.7 | 0.0 | 0.27 | 53.37 0.0 0.0 | 13.33 |
| 20 | 81.05 | 0.0 | 0.58 | 71.23 0.0 0.0 | 9.82 |
| 21 | 95.41 | 0.0 | 1.0 | 95.41 0.0 0.0 | 0.01 |

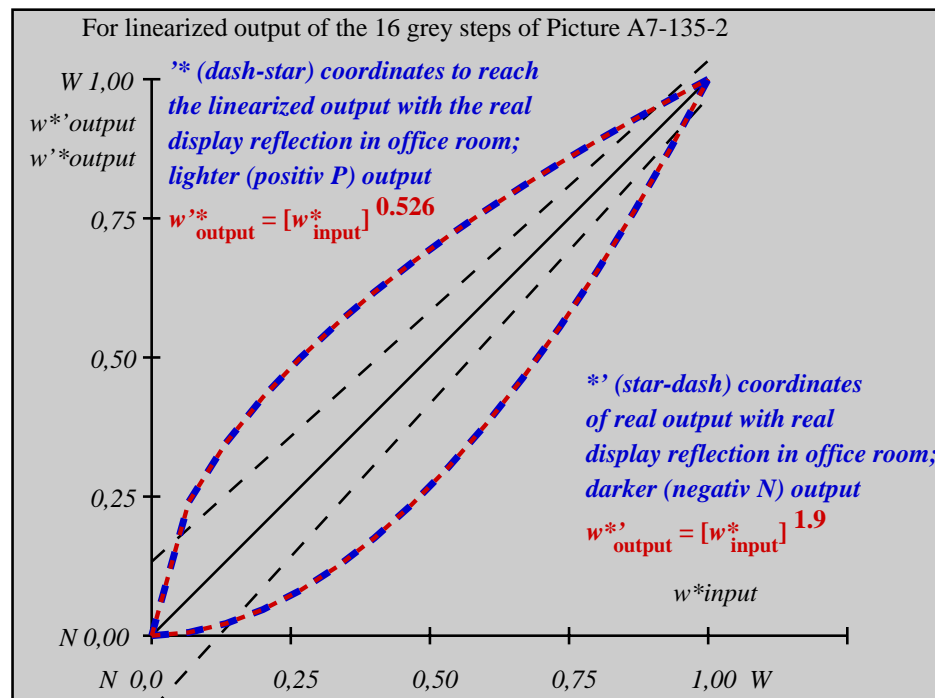
Start output S1
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

Mean lightness difference (16 steps)
 $\Delta E^*_{CIELAB} = 8.3$

Mean lightness difference (5 steps)
 $\Delta L^*_{CIELAB} = 6.7$

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

fel70-3N-135-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



fel71-3N-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^*_{setrgb} | [Visual representation of 16 grey steps] | | | | | | | | | | | | | | | |
| $g_N=1.6$ | [Visual representation of 16 grey steps] | | | | | | | | | | | | | | | |
| No. and Hex code | 00;F | 01;E | 02;D | 03;C | 04;B | 05;A | 06;9 | 07;8 | 08;7 | 09;6 | 10;5 | 11;4 | 12;3 | 13;2 | 14;1 | 15;0 |
| $w^*_{CIELAB,r}$ (relative) | [Visual representation of 16 grey steps] | | | | | | | | | | | | | | | |
| $w^*_{intended}$ | 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 |

fel70-7N-135-2: 16 visual equidistant L^* -grey steps; PS operator: $w^*_{setrgbcolor}$

TUB-test chart fel7; fel7: In-output relation according to ISO 9241-306; 1MR, DH 000n/w/cmy0/rgb
Viewing Y contrast $Y_W:Y_N=88,9:10$; Y_N range 7,5 to <15, D-HDR; $\gamma_R=0,8$ -> $rgb^*_d, 130-2$

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/fels.htm>
technical information: <http://farbe.li.tu-berlin.de/A/33872E.html>
or <http://standards.iso.org/iso/9241/306/ed-2/index.html>

TUB registration: 20240301-fel7/fel710fa.txt /.ps
application for evaluation and measurement of display or print output
TUB material: code=rh4ta

| i | LAB*ref | l*out | LAB*out | LAB*out/c-ref | ΔE^* |
|----|---------|-------|---------|---------------|--------------|
| 1 | 52.02 | 0.0 | 0.0 | 52.02 | 0.0 |
| 2 | 54.91 | 0.0 | 0.0 | 52.17 | 0.0 |
| 3 | 57.8 | 0.0 | 0.02 | 52.67 | 0.0 |
| 4 | 60.7 | 0.0 | 0.04 | 53.54 | 0.0 |
| 5 | 63.59 | 0.0 | 0.06 | 54.79 | 0.0 |
| 6 | 66.48 | 0.0 | 0.1 | 56.43 | 0.0 |
| 7 | 69.37 | 0.0 | 0.15 | 58.47 | 0.0 |
| 8 | 72.27 | 0.0 | 0.2 | 60.91 | 0.0 |
| 9 | 75.16 | 0.0 | 0.27 | 63.75 | 0.0 |
| 10 | 78.05 | 0.0 | 0.35 | 67.01 | 0.0 |
| 11 | 80.95 | 0.0 | 0.43 | 70.69 | 0.0 |
| 12 | 83.84 | 0.0 | 0.52 | 74.78 | 0.0 |
| 13 | 86.73 | 0.0 | 0.63 | 79.3 | 0.0 |
| 14 | 89.62 | 0.0 | 0.74 | 84.24 | 0.0 |
| 15 | 92.52 | 0.0 | 0.87 | 89.61 | 0.0 |
| 16 | 95.41 | 0.0 | 1.0 | 95.41 | 0.0 |
| 17 | 52.02 | 0.0 | 0.0 | 52.02 | 0.0 |
| 18 | 62.87 | 0.0 | 0.06 | 54.44 | 0.0 |
| 19 | 73.71 | 0.0 | 0.24 | 62.28 | 0.0 |
| 20 | 84.56 | 0.0 | 0.55 | 75.87 | 0.0 |
| 21 | 95.41 | 0.0 | 1.0 | 95.41 | 0.0 |

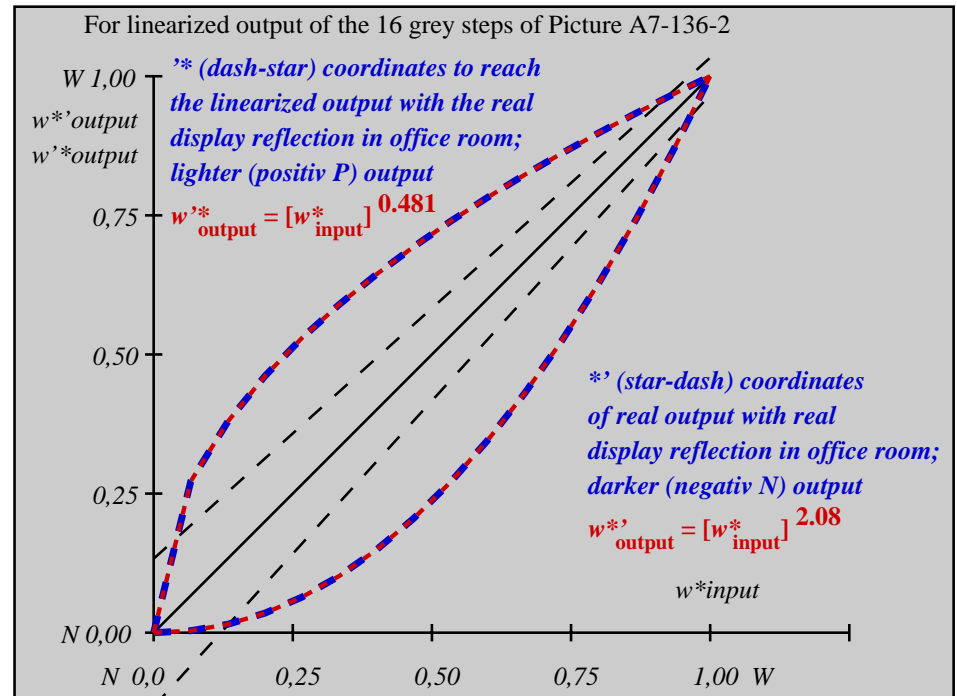
Start output S1
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

Mean lightness difference (16 steps)
 $\Delta E^*_{CIELAB} = 7.1$

Mean lightness difference (5 steps)
 $\Delta L^*_{CIELAB} = 5.7$

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

fel70-3N-136-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



fel71-3N-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^*_{setrgb} | 00;F | 01;E | 02;D | 03;C | 04;B | 05;A | 06;9 | 07;8 | 08;7 | 09;6 | 10;5 | 11;4 | 12;3 | 13;2 | 14;1 | 15;0 |
| $w^*_{CIELAB,r}$ (relative) | 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 |
| $w^*_{intended}$ | 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 |

fel70-7N-136-2: 16 visual equidistant L^* -grey steps; PS operator: w^*_{setrgb}

TUB-test chart fel7; fel7: In-output relation according to ISO 9241-306; 1MR, DH 000n/w/cmy0/rgb
Viewing Y contrast $Y_W:Y_N=88,9:20$; Y_N range 15 to <30, D-HDR; $\gamma_R=0,8$ ->rgb*_d, 130-2:

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/fels.htm>
 technical information: <http://farbe.li.tu-berlin.de/A/33872E.html>
 or <http://standards.iso.org/iso/9241/306/ed-2/index.html>

TUB registration: 20240301-fel7/fel710fa.txt /.ps
 application for evaluation and measurement of display or print output
 TUB material: code=rh4ta

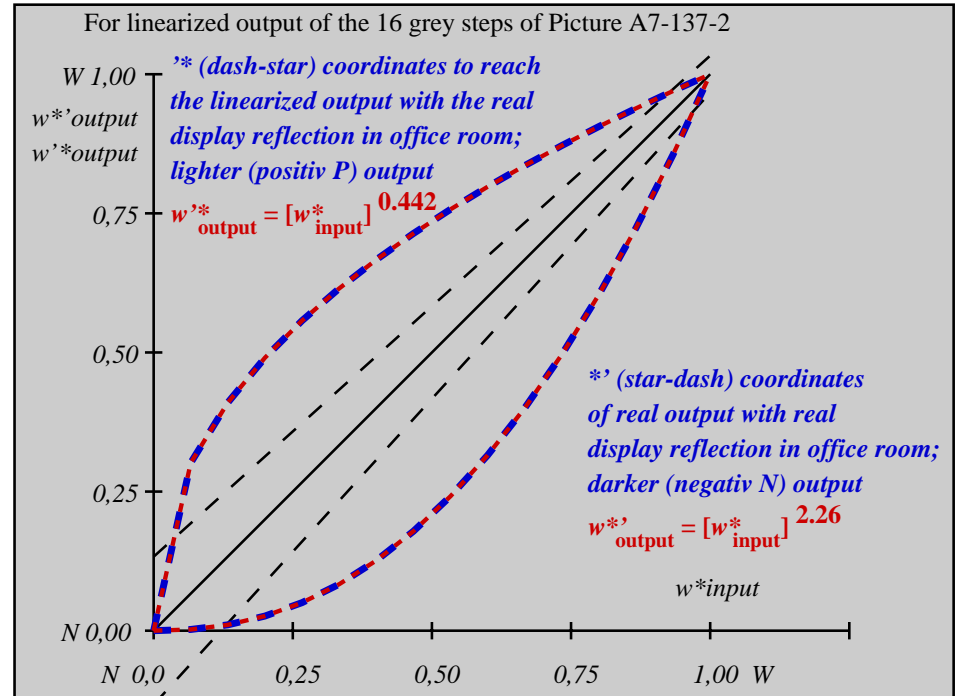
| i | LAB*ref | l*out | LAB*out | LAB*out/c-ref | ΔE^* | Start output S1 |
|----|---------|-------|---------|---------------|--------------|-----------------|
| 1 | 69.7 | 0.0 | 0.0 | 69.7 | 0.0 | 0.0 |
| 2 | 71.41 | 0.0 | 0.0 | 69.75 | 0.0 | -1.65 |
| 3 | 73.13 | 0.0 | 0.01 | 69.97 | 0.0 | -3.15 |
| 4 | 74.84 | 0.0 | 0.03 | 70.37 | 0.0 | -4.46 |
| 5 | 76.55 | 0.0 | 0.05 | 70.99 | 0.0 | -5.55 |
| 6 | 78.27 | 0.0 | 0.08 | 71.84 | 0.0 | -6.41 |
| 7 | 79.98 | 0.0 | 0.13 | 72.94 | 0.0 | -7.03 |
| 8 | 81.7 | 0.0 | 0.18 | 74.29 | 0.0 | -7.4 |
| 9 | 83.41 | 0.0 | 0.24 | 75.91 | 0.0 | -7.49 |
| 10 | 85.12 | 0.0 | 0.32 | 77.8 | 0.0 | -7.31 |
| 11 | 86.84 | 0.0 | 0.4 | 79.98 | 0.0 | -6.85 |
| 12 | 88.55 | 0.0 | 0.5 | 82.45 | 0.0 | -6.09 |
| 13 | 90.27 | 0.0 | 0.6 | 85.23 | 0.0 | -5.03 |
| 14 | 91.98 | 0.0 | 0.72 | 88.3 | 0.0 | -3.67 |
| 15 | 93.7 | 0.0 | 0.86 | 91.7 | 0.0 | -1.99 |
| 16 | 95.41 | 0.0 | 1.0 | 95.41 | 0.0 | 0.0 |
| 17 | 69.7 | 0.0 | 0.0 | 69.7 | 0.0 | 0.0 |
| 18 | 76.13 | 0.0 | 0.04 | 70.82 | 0.0 | -5.3 |
| 19 | 82.55 | 0.0 | 0.21 | 75.07 | 0.0 | -7.48 |
| 20 | 88.98 | 0.0 | 0.52 | 83.12 | 0.0 | -5.85 |
| 21 | 95.41 | 0.0 | 1.0 | 95.41 | 0.0 | 0.0 |

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

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

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

fel70-3N-137-2: File: Measure unknown; Device: Device unknown; Date: Date unknown



fel71-3N-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 |

fel70-7N-137-2: 16 visual equidistant L^* -grey steps; PS operator: $w^* w^* w^*$ setrgbcolor

TUB-test chart fel7; fel7: In-output relation according to ISO 9241-306; 1MR, DH 000n/w/cmy0/rgb
 Viewing Y contrast $Y_W:Y_N=88,9:40$; Y_N range 30 to <60, D-HDR; $\gamma_R=0,8$ ->rgb*d, 130-2: