

**This test chart is designed for a luminance test according to ISO 9241-306, and for the usual use of displays in offices:
If possible the luminance (brightness) of the white screen shall be adjusted visually to about 142 cd/m².**

The luminance of this upper white rectangle shall be covered by a white cardboard (no light goes thru) and shall be visually equal to the lower white display rectangle at the work place.

Remarks:

Usually this upper white cardboard looks more yellowish. Still try to adjust the luminance of this upper and the lower rectangle by minimizing the luminance contrast.

For any other viewing situation visual fatigue is reduced, if equal luminance is adjusted for the white cardboard and of the white display.

AE050-3, picture A1Wdd: PS operator: www.setrgbcolor

Use the display "luminance (brightness)" bottom of the display to equal the luminance of this lower and the upper white rectangle (covered with a white cardboard).

If possible, measure the luminance of this lower display white with a luminance meter. Is the value around 142 cd/m²?

If possible, measure the illuminance of this lower display white with a lux meter. Is the value around 500 lux?

If no measurement is possible, assume that the display luminance is 142 cd/m².

Remarks:

The luminance 142 cd/m² corresponds to a display illuminance of 500 lux by the usual reflection of 90% of the white cardboard.

The room illuminance 500 lux is assumed according to ISO 8995-1. In bright daylight the illuminance may be up to ten times higher.

AE050-5, picture A2Wdd: PS operator: www.setrgbcolor

L^*/Y_{input} (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	64.4/33.3	69.6/40.2	74.8/47.9	79.9/56.5	85.1/66.2	90.2/76.8	95.4/88.6
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
$W^*=I^*_{CIELAB, r}$ (relative)																
W^*_{input}	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

AE050-3, picture A3Wdd: Element C: 16 visual equidistant L^* -grey steps; PS operator: www.setrgbcolor

Test chart AE05(ISO 9241-306) & 3(ISO/IEC 15775)
visual test of display luminance and equality of four grey scales

input: *rgb/cmy0/000n/w set...*
output: *www_d setrgbcolor*