

## Colour management by a change of the *rgb* data within the colour workflow before the linearized output

See ISO-Ergonomics of human-systems interaction – Field assessment methods for electronic visual displays

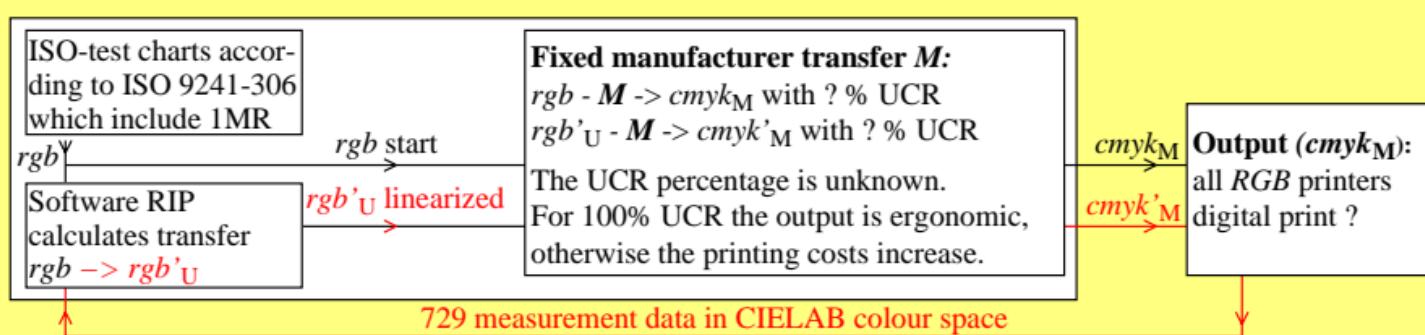
For ISO-test charts according to ISO 9241-306:2018 see: <http://standards.iso.org/iso/9241/306/ed-2/index.html>

The computer with an **Ergonomic Colour Processor (ECP) includes the 1MinusRelations (1MR)**. It is valid:

$$r=1-c, g=1-m, b=1-y. [1]. \text{ The output is equal for: } r=g=b=0,5 \text{ or } c=m=y=0,5 \text{ or } k=0,5 \text{ or } w=1-k=0,5. [2]$$

If the 1MR is active, then the output of the ISO-test chart shows **equal output** in each colour square of:

<http://standards.iso.org/iso/9241/306/ed-2/AE49/AE490-7N.PDF> and independent of the use of *rgb* or *cmyk*.



1) For an example see the printed english version of <http://standards.iso.org/iso/9241/306/ed-2/ES15.PDF>

This offset print includes the start and linearized output of many analog ISO-test charts of ISO 9241-306.

In a general case the Software Image Processor (RIP) transfers 16,7 (256x256x256–1) million *rgb* to *rgb'* data.

The appropriate fixed transfer  $M$  shall fill the CIELAB colour triangle:  $W - N -$  maximal colour –  $W$ .

For any maximal colour it is valid:  $k=0$ . One of the 3 values **cmy0** or **rgb** has the value 1 and one other the value 0.

For linearization methods see *Klaus Richter (2016), 1,4 MB, [http://farbe.li.tu-berlin.de/OUTLIN16\\_01.PDF](http://farbe.li.tu-berlin.de/OUTLIN16_01.PDF)*