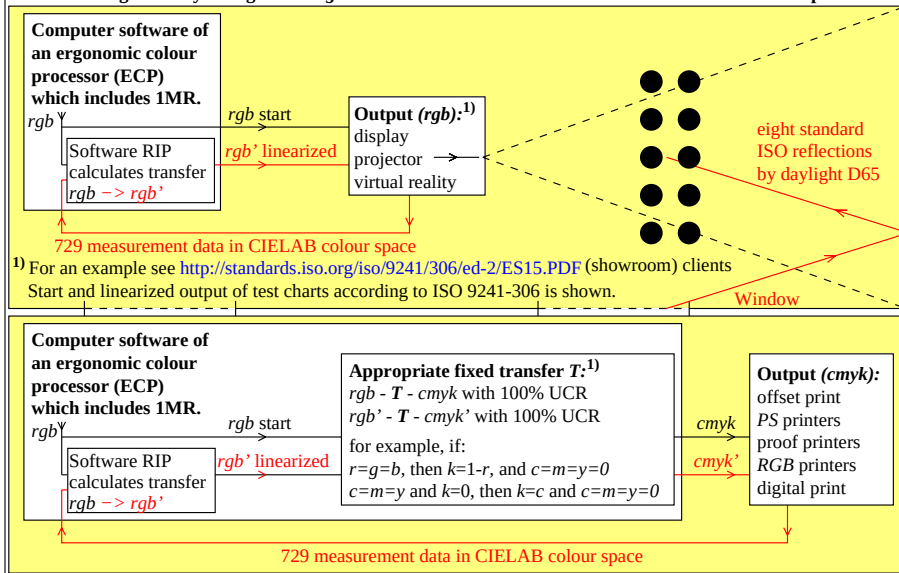


Colour management by change of the *rgb* data within the colour workflow before the linearized output

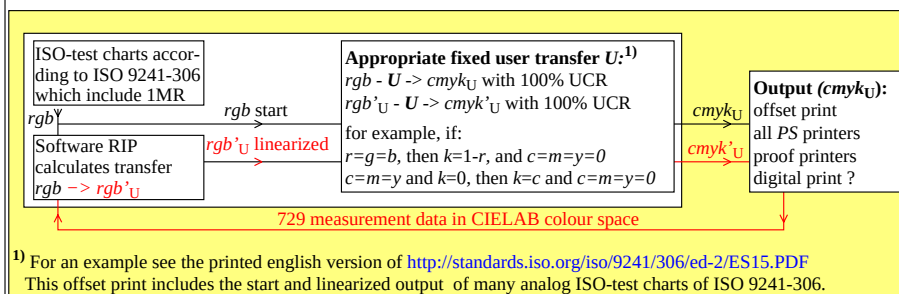


AEY90-3N

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]. The output is equal for: $r=g=b=0,5$ or $c=m=y=0,5$ or $k=0,5$ 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*.



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

The appropriate fixed transfer *U* shall fill the CIELAB colour triangle: $W - N - \text{maximal colour} - W$.
For any maximal colour it is valid: $k=0$. One of the 3 values ***cmyk*0** 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

AEY90-7N

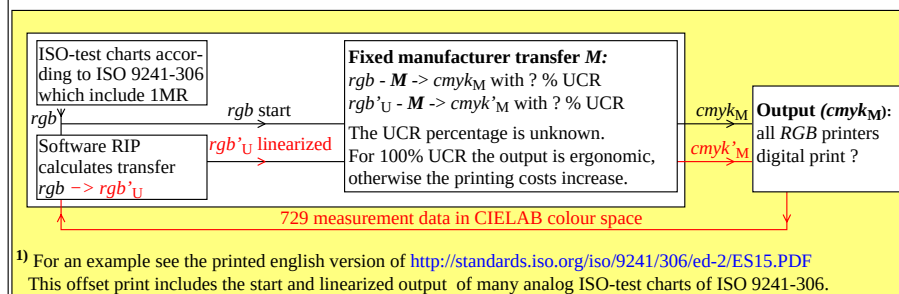
TUB-test chart AEY9; Input – output relations, steering of the ergonomic output on *rgb* displays and in *cmyk* print

input: *w/rgb/cmyk* → *rgb*
output: no change

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]. The output is equal for: $r=g=b=0,5$ or $c=m=y=0,5$ or $k=0,5$ 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*.



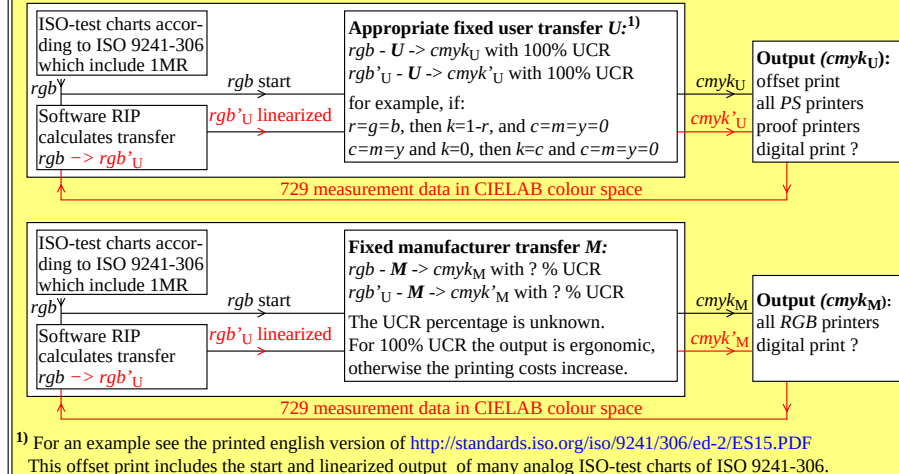
In a general case the Software Image Processor (RIP) transfers 16,7 (256x256x256-1) million *rgb* to *rgb** data.

The appropriate fixed transfer *M* shall fill the CIELAB colour triangle: $W - N - \text{maximal colour} - W$.
For any maximal colour it is valid: $k=0$. One of the 3 values ***cmyk*0** 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

AEY91-3N

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>



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

AEY91-7N