

Output – Input – Output: A loop for relative colour fidelity with the visual rgb^* and LCh^* CIELAB data

For the ISO-test file with 729 colours, see http://standards.iso.org/iso/9241/306/ed-2/AE49/AE49F0PX_CY8_1.PDF
Use the OLM16 method for output linearization, see http://farbe.li.tu-berlin.de/OUTLIN16_01.PDF.

Then there are linear relations between rgb^* and LCh^* . Use reference test chart with 729 CIELAB colours
Colour scanners or cameras produce 729 rgb data.

Ergonomic and colorimetric goals as option

Improved standardization

Interdisciplinary standards shall replace isolated standards to realize the properties of the ISO-colour loop. The output shall be equal for $rgb^*/cm yk^*$ data according to the 1-Minus-Relation (1MR) and continuous.

Display output with $rgb^*/cm yk^*$ data

For different display reflections at work places a relative gamma slider and/or gamma profiles shall produce an ergonomic output for the whole display.

Print output with $rgb^*/cm yk^*$ data

For different paper contrast at work places with the display or printer driver different relative gamma shall produce an ergonomic output. Any printer shall have a $cm yk^*$ -input channel as an option to produce an ergonomic output.

A general ergonomic solution instead of the gamma transfer is the transfer of 16,7 million $rgb^*/cm yk^*$ to $rgb^*/cm yk^*$ data.

or buy one, or use PG4311L of *Colour and Colour Vision*, see <http://standards.iso.org/iso/9241/306/ed-2/ES15.PDF>

Use reference test chart with 729 CIELAB colours
Colour scanners or cameras produce 729 rgb data.

Transfer the 729 rgb data to the 729 rgb^* data.

After the linearized input the 729 colour data rgb^* may be used again for the linearized output.

