

Two Methods for Colour Comparison

User needs of professionals and others:

Absolute (professionals) und relative colorimetric reproduction

Absolute CIELAB data

h_{ab} hue
 C^*_{ab} chroma
 L^* lightness

Visual comparison
softcopy – hardcopy

Test of agreement
with test files

Relative CIELAB data

h_{ab} hue
 c^* relative chroma
 n^* relative blackness

Test of visual
equal relative spacing
of either softcopy
or hardcopy

Test of equal spacing
with test files

Advantages and disadvantages:

Advantage:

Colorimetric reproduction of hue, chroma, lightness

Disadvantage:

Colour spaces of TV and Print show differences, often important colour **areas are clipped**

Advantage:

Colorimetric reproduction of hue, *relative* chroma and *relative* lightness

Colour spaces of TV and Print show differences, No colour areas **are clipped**

Disadvantage:

Tolerable small changes of chroma and lightness