

Application of colour in daily life and in Information Technology (IT):

Design, architecture, art, industrial products

Measured for CIE standard illuminant D65

colour order system: name and coordinates

RAL Design System (CIELAB):

LCH*, lightness, chroma, hue

Munsell Colour System:

VCH*, lightness (Value), Chroma, Hue

Natural Colour System (NCS):

ncu*: blackness, chroma, elementary hue text

For CIELAB: Definition of relative coordinates *lab with linear relation to *LAB****

CIELAB: ***LAB**** : lightness, red-green and yellow-blue chroma; ***LCH**** : lightness, chroma, hue

Definition of relative coordinates similar to coordinates of the colour order system NCS

lch*: relative lightness ***l****, relative chroma ***c****, relative hue ***h**** = $h_{ab}/360$ of CIELAB

tce*: triangle lightness ***t****, relative chroma ***c****, relative elementary hue ***e****

ncu*, ***icu****: relative blackness ***n**** or brillianthness ***i****, relative chroma ***c****, elementary hue text ***u****

Information technology of printers

Measured for CIE "other" illuminant D50

Device system name and coordinates:

Printer system (illuminant D50):

cmy, content of "cyan", "magenta", "yellow"

Display system (standard illuminant D65):

rgb/sRGB, content of "red", "green", "blue"

IT colour coordinates: undefined for users!

DIN 33872: Relation to colour order systems!