

User friendly colorimetric colour notation icu^* or ice^* and linear relation to the relative rgb^* colour data

i^* relative brillianthness

c^* relative chroma

u^* elementary (unique) hue text

e^* elementary hue number

E^* elementary hue angle

$i^* = 1$

$c^* = 0$

White W

5 steps

$i^* = 0,75$

5 steps

Black N

$i^* = 0$

$c^* = 0$

relative chroma c^*

$c^* = 0,50$

Chromatic

$i^* = 1$

$c^* = 1$

example for colour notation:

$icu^* = 0,75 \ 0,50 \ R25J$

or

$ice^* = 0,75 \ 0,50 \ 0,0625 (=0,25/4)$

relative opponent (r_r^*, j_r^*) chroma

$u_r^* J = J00G \ \Delta J_r^*$

$e_r^* J = 0,25$

$u_r^* G = G00B$

$e_r^* G = 0,50$

$u_r^* B = B00R$

$e_r^* B = 0,75$

$u_r^* = R25J$

$e_r^* = 0,0625$

relative trichromatic CIELAB (a_r^*, b_r^*) chroma

$rgb_r^* J = 1 \ 1 \ 0$

$h_{ab,J} = 92 \text{ degree}$

$rgb_r^* X = 1 \ 0,25 \ 0$

$h_{ab,X} = 42 \text{ degree}$

$= (25 + 0,25 * 67) \text{ degree}$

$rgb_r^* G = 0 \ 1 \ 0$

$h_{ab,G} = 162 \text{ degree}$

$rgb_r^* R = 1 \ 0 \ 0$

$h_{ab,R} = 25 \text{ degree}$

colour F: a_r^*

$rgb_r^* = 0,75 \ 0,375 \ 0,25$

$i^* = r^* = 0,75$

$c^* = r^* - b^* = 0,50$

$rgb_r^* B = 0 \ 0 \ 1; \ h_{ab,B} = 272 \text{ degree}$