

Linear relation CIELAB (L^* , a^* , b^*) and adapted (a) CIELAB ($C^*_{ab,a}$, L^*)

System: HE91_HRS27_96_D65_00%_O0 $l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

$h_{ab,d} = [33, 98, 150, 227, 301, 350]$

$h_{ab,ex} = [26, 92, 162, 217, 272, 329]$

$h_{ab,e} = [26, 92, 162, 217, 272, 329]$

$$a^*_{a} = a^* - a^*_N - l^*_{lab^*} [a^*_W - a^*_N]$$

$$b^*_{a} = b^* - b^*_N - l^*_{lab^*} [b^*_W - b^*_N]$$

$$C^*_{ab,a} = [a^*_{a^2} + b^*_{a^2}]^{1/2}$$

$$a^*_{a} = C^*_{ab,a} \cos h_{ab}$$

$$b^*_{a} = C^*_{ab,a} \sin h_{ab}$$



HE910-4A, 1; cfl=0.95; nt=0.18; nx=1.0

Linear relation CIELAB (L^* , a^* , b^*) and adapted (a) CIELAB ($C^*_{ab,a}$, L^*)
 System: HE91_HRS27_96_D65_00%_O1

CIELAB hue angles:

$h_{ab,d}=[33, 98, 150, 227, 301, 350]$

$h_{ab,ex}=[26, 92, 162, 217, 272, 329]$

$h_{ab,e}=[26, 92, 162, 217, 272, 329]$

$$l^*_{lab^*}=(L^* - L^*_N) / (L^*_W - L^*_N)$$

$$a^*_{a}=a^* - a^*_N - l^*_{lab^*} [a^*_W - a^*_N]$$

$$b^*_{a}=b^* - b^*_N - l^*_{lab^*} [b^*_W - b^*_N]$$

$$C^*_{ab,a}=[a^*_a{}^2 + b^*_a{}^2]^{1/2}$$

$$a^*_a=C^*_{ab,a} \cos h_{ab}$$

$$b^*_a=C^*_{ab,a} \sin h_{ab}$$

