

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

System: HE98_FRS09_92_D65_00%_O0

CIELAB hue angles:

$h_{ab,d}=[34, 92, 143, 225, 313, 338]$

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

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

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

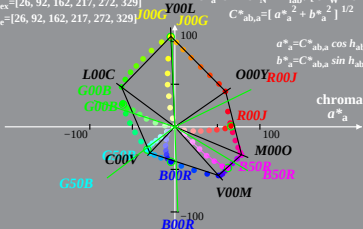
$$a^*_a=a^*-a^*_N-I^*_{lab*}[a^*_W-a^*_N]$$

$$b^*_a=b^*-b^*_N-I^*_{lab*}[b^*_W-b^*_N]$$

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

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

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



Linear relation CIELAB (L^* , a^* , b^*) and adapted (a) CIELAB ($C^*_{ab,a}$, L^*)
 System: HE98_FRS09_92_D65_00%_O1

CIELAB hue angles:

$h_{ab,d}=[34, 92, 143, 225, 313, 338]$

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

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

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

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

$$b^*_a=b^*-b^*_N-I^*_{lab*}[b^*_W-b^*_N]$$

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

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

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

