

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

System: GE99_FRS09_92_D65_00%_G0

CIELAB hue angles:

$h_{ab,d}=[35, 92, 143, 224, 313, 338]$

$h_{ab,dx}=[34, 92, 143, 226, 311, 337]$

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

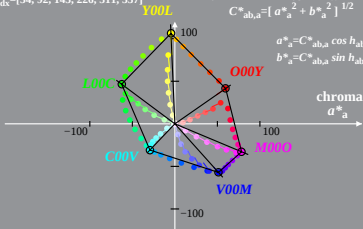
$$a^*_a=a^*-a^*_N-I^*_{lab^*}[a^*_W-a^*_N]$$

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

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

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

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



GE990-4A, 1; cf1=0.70; nt=0.18; nx=1.0

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

System: GE99_FRS09_92_D65_00%_G1

CIELAB hue angles:

$h_{ab,d}=[35, 92, 143, 224, 313, 338]$

$h_{ab,dx}=[35, 92, 143, 224, 313, 338]$

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

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

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

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

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

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

