

Linear relation CIELAB ( $L^*, a^*, b^*$ ) and adapted ( $a$ ) CIELAB ( $C^*_{ab,a}, L^*$ )  
 System: LE16\_sRGB display 0%\_Fadin

CIELAB hue angles:

$h_{ab,d} = [38, 96, 151, 236, 305, 354]$

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

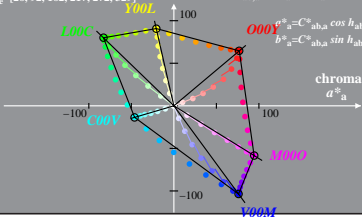
$$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$$

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

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

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

$$O00Y \begin{cases} a^*_{\tilde{a}} = C^*_{ab,a} \cos h_{ab} \\ b^*_{\tilde{a}} = C^*_{ab,a} \sin h_{ab} \end{cases}$$



Linear relation CIELAB ( $L^*, a^*, b^*$ ) and adapted (a) CIELAB ( $C^*_{ab,a}, L^*$ )  
 System: LE16\_sRGB display 0%\_Facit

CIELAB hue angles:

$h_{ab,d}=[38, 96, 151, 236, 305, 354]$

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

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

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

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

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

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

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

