

Linear relation CIELAB ( $L^*, a^*, b^*$ ) and adapted (a) CIELAB ( $C^*_{ab,a}, L^*$ )  
 System: LE17\_sRGB display 0%\_Fadin     $l^*_{lab} = (L^* - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

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

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

$$b^*_{ab}$$

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

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

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

*Y00L*

*L00C*

*C00V*

*O00Y*

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

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

chroma

*a*  
*a<sup>\*</sup>*  
*a<sub>ab</sub>*

*M00O*

*V00M*

Linear relation CIELAB ( $L^*, a^*, b^*$ ) and adapted (a) CIELAB ( $C^*_{ab,a}, L^*$ )  
 System: LE17\_sRGB display 0%\_Fadit

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

CIELAB hue angles:

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

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

$$\begin{aligned} b^*_{ab} &= b^* - b^*_N - l^*_{lab} \cdot [b^*_W - b^*_N] \\ C^*_{ab,a} &= [a^*_{ab}^2 + b^*_{ab}^2]^{1/2} \end{aligned}$$

