

Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: NRS11a

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

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

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

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

CIELAB hue angles:

$$h_{ab,d} = [23, 90, 167, 202, 272, 325]$$

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

