

Linear relation CIELAB ( $L^*$ ,  $a^*$ ,  $b^*$ ) and adapted (a) CIELAB ( $C_{ab,a}^*$ ,  $L^*$ )  
 System: SF44\_HRS16\_96\_D65\_00%\_G0

CIELAB hue angles:

$h_{ab,d}=[33, 100, 154, 227, 295, 347]$

$h_{ab,dx}=[30, 99, 151, 230, 301, 351]$

$$l^*=(L^* - L_N^*) / (L_W^* - L_N^*)$$

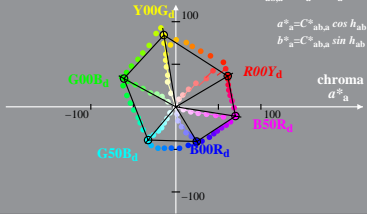
$$a_a^*=a^* - a_N^* - l^* [ a_W^* - a_N^* ]$$

$$b_a^*=b^* - b_N^* - l^* [ b_W^* - b_N^* ]$$

$$C_{ab,a}^*=[ a_a^{*2} + b_a^{*2} ]^{1/2}$$

$$a_a^*=C_{ab,a}^* \cos h_{ab}$$

$$b_a^*=C_{ab,a}^* \sin h_{ab}$$



Linear relation CIELAB ( $L^*$ ,  $a^*$ ,  $b^*$ ) and adapted (a) CIELAB ( $C_{ab,a}^*$ ,  $L^*$ )  
 System: SF44\_HRS16\_96\_D65\_00%\_G1

CIELAB hue angles:

$h_{ab,d}=[33, 100, 154, 227, 295, 347]$

$h_{ab,dx}=[33, 100, 154, 227, 295, 347]$

$b_{a}^*$

$$l^* = (L^* - L_N^*) / (L_W^* - L_N^*)$$

$$a_{a}^* = a^* - a_N^* - l^* [a_W^* - a_N^*]$$

$$b_{a}^* = b^* - b_N^* - l^* [b_W^* - b_N^*]$$

$$C_{ab,a}^* = [a_{a}^{*2} + b_{a}^{*2}]^{1/2}$$

$$a_{a}^* = C_{ab,a}^* \cos h_{ab}$$

$$b_{a}^* = C_{ab,a}^* \sin h_{ab}$$

