

Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: B_IRS10_Z46N_N0

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

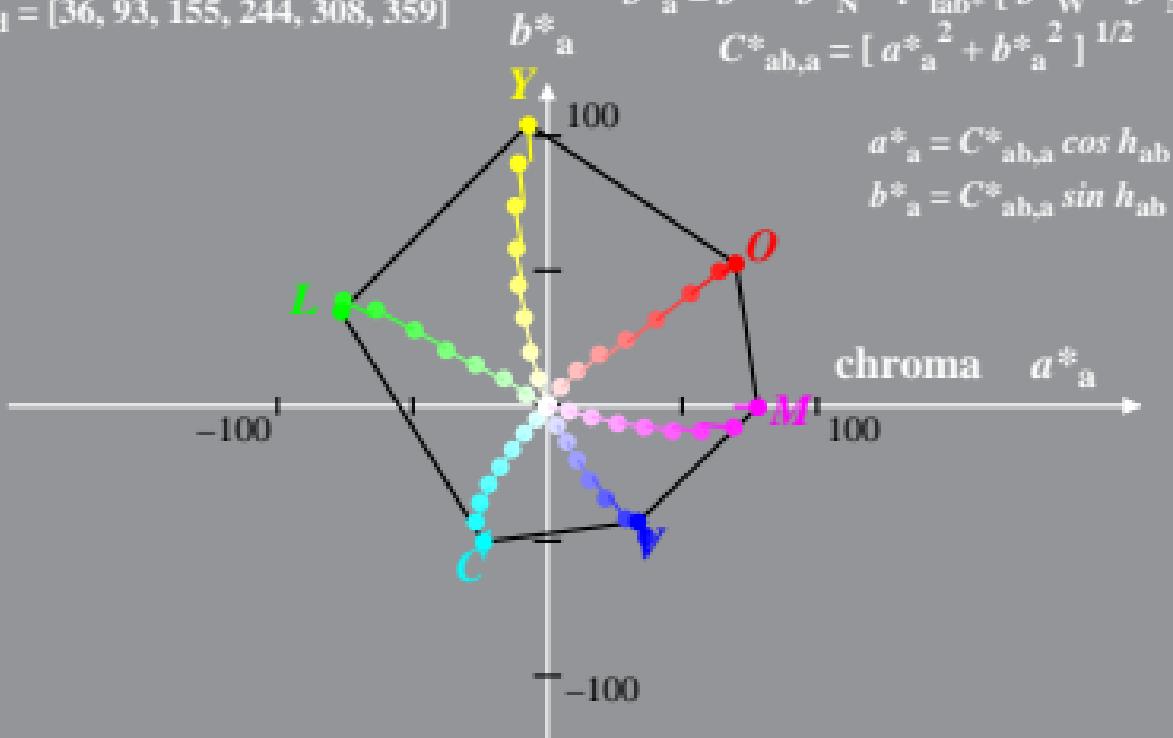
$$a^*_{ab} = a^* - a^*_N - l^*_{lab*} [a^*_W - a^*_N]$$

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

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

CIELAB hue angles:

$$h_{ab,d} = [36, 93, 155, 244, 308, 359]$$



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

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

Linear relation CIELAB (L^* , a^* , b^*) and adapted (a) CIELAB ($C^*_{ab,a}$, L^*)
 System: B_IRS14_Z47N_N4

CIELAB hue angles:

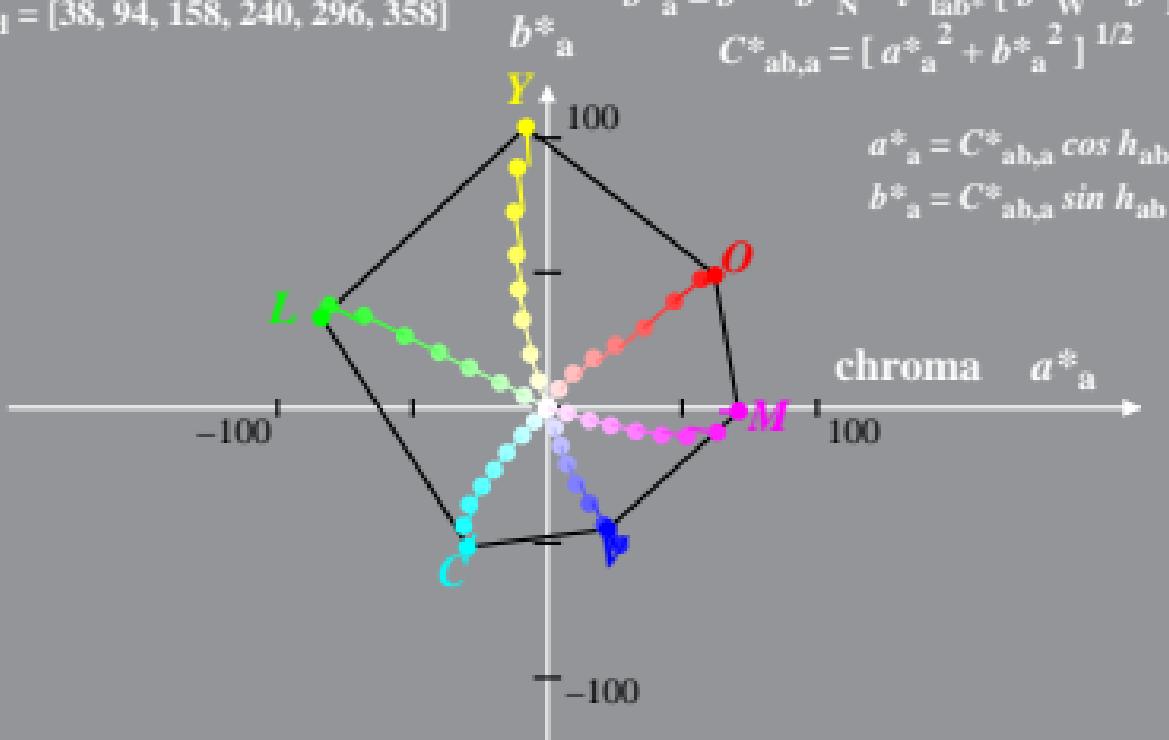
$$h_{ab,d} = [38, 94, 158, 240, 296, 358]$$

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

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

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

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



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

System: B_IRS25_Z48N_NS_VT092

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

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

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

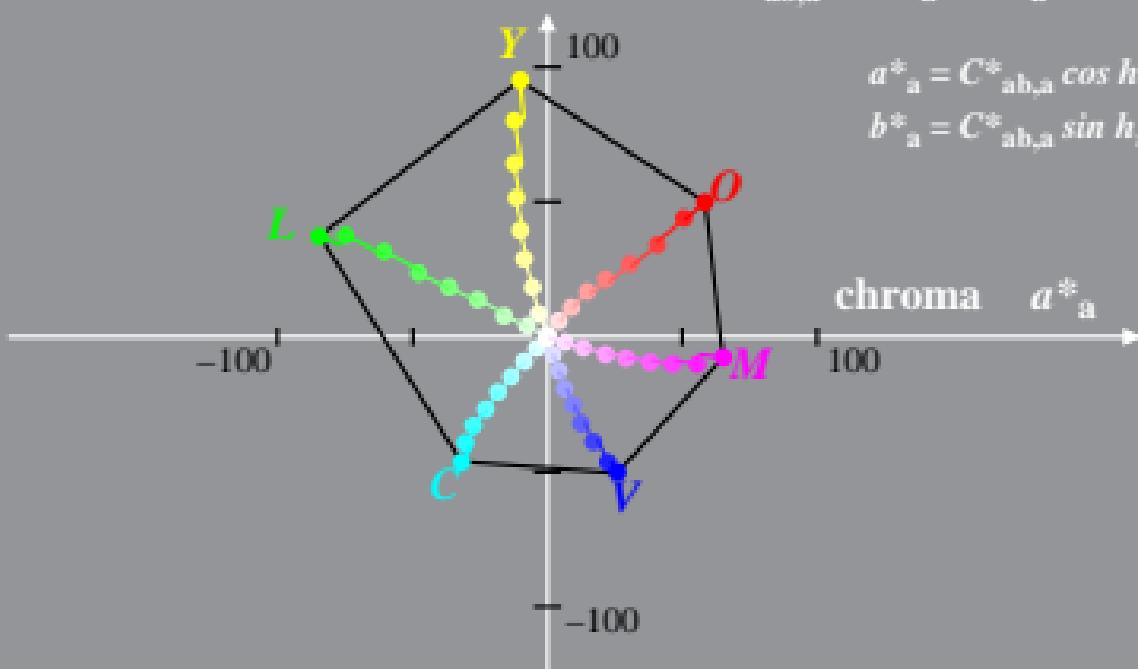
$$C^*_{ab,a} = [a^*_{ab}^2 + b^*_{ab}^2]^{1/2}$$

CIELAB hue angles:

$$h_{ab,d} = [40, 96, 156, 235, 297, 353]$$

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

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



Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C_{ab,a}^*, L^*$)
 System: B_IRS14_Z48N_NS_VT100 $I_{ab,a}^* = (I^* - I_{\infty}^*) / (I_{\infty}^* - I_{\infty}^*)$

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

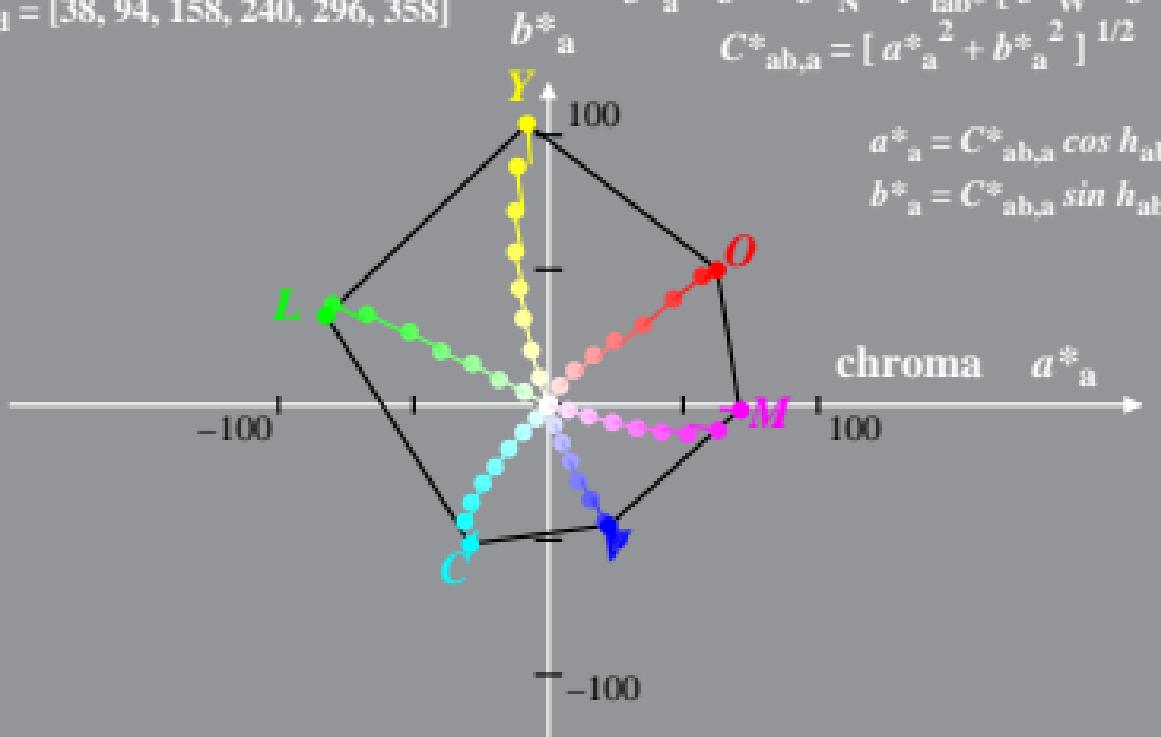
$$a_{\text{a}}^* = a^* - a_N^* - l_{\text{lab}}^* [a_W^* - a_N^*]$$

$$b^*_{-z} = b^* - b^*_{\infty} - I^*_{\text{absorb}} [b^*_{\text{W}} - b^*_{\infty}]$$

$$C^*_{\text{sh},3} = [a^*_{\text{sh},3} + b^*_{\text{sh},3}]^{1/2}$$

CIELAB hue angles:

$$h_{\text{shd}} = [38, 94, 158, 240, 296, 358]$$



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

System: B_IRS23_Z48F_N5_VT092

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

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

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

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

CIELAB hue angles:

$$h_{ab,d} = [40, 95, 158, 237, 296, 357]$$

