

Linear relation CIELAB (L^* , a^* , b^*) and adapted (a) CIELAB ($C^*_{ab,a}$, L^*)
 Photo Reflective System: FRS06a

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

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

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

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

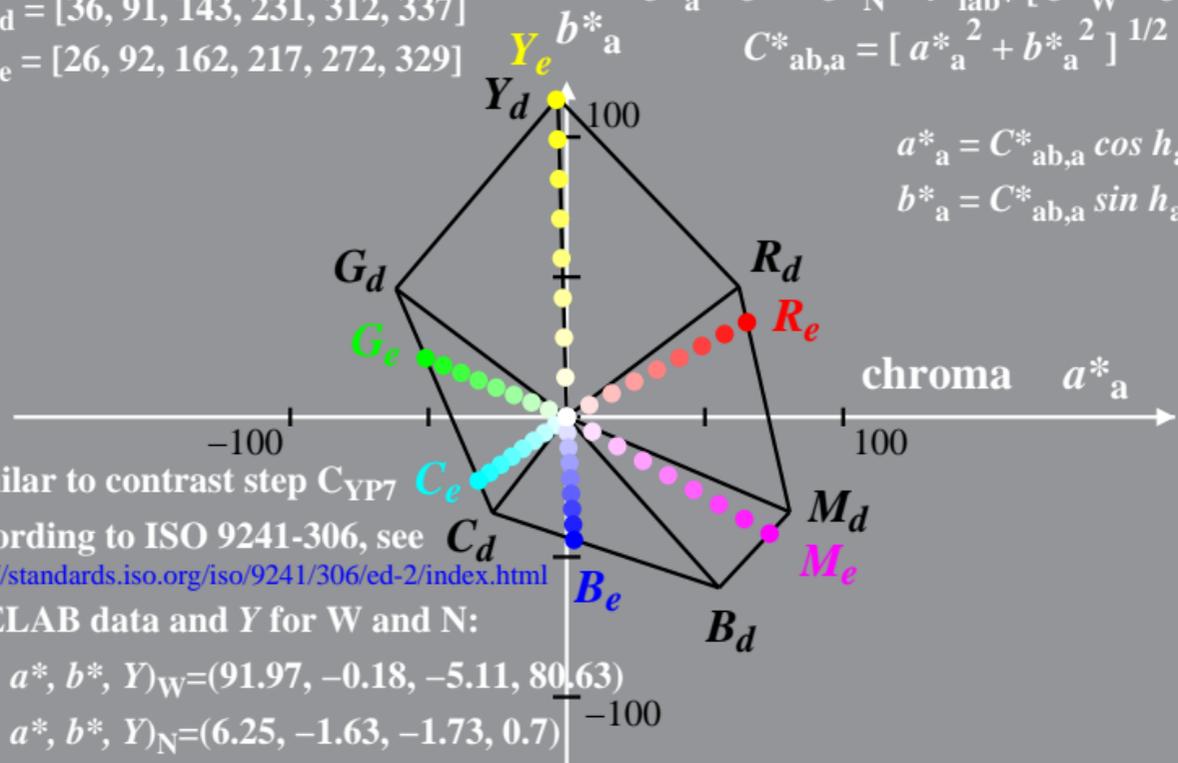
$$a^*_a = C^*_{ab,a} \cos h_{ab}$$

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

CIELAB hue angles *RYGCBM*:

$h_{ab,d} = [36, 91, 143, 231, 312, 337]$

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



Similar to contrast step C_{YP7}
 according to ISO 9241-306, see
<http://standards.iso.org/iso/9241/306/ed-2/index.html>

CIELAB data and Y for W and N :

$(L^*, a^*, b^*, Y)_W = (91.97, -0.18, -5.11, 80.63)$

$(L^*, a^*, b^*, Y)_N = (6.25, -1.63, -1.73, 0.7)$