

Linear relation CIELAB (L^* , a^* , b^*) and adapted (a) CIELAB ($C^*_{ab,a}$, L^*)
System: ORS18a

CIELAB hue angles:

$h_{ab,d} = [37, 96, 150, 236, 305, 353]$

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

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

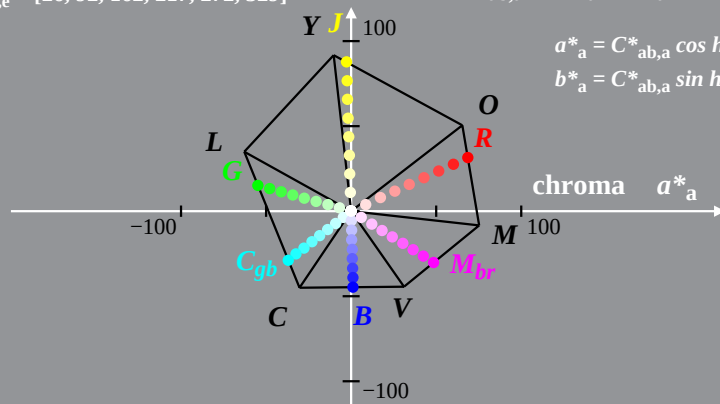
$$a^*_a = a^* - a^*_N - l^*_{lab*} [a^*_W - a^*_N]$$

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

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

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

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



JE450-3N

Linear relation CIELAB (L^* , a^* , b^*) and adapted (a) CIELAB ($C^*_{ab,a}$, L^*)
System: PRS06a

CIELAB hue angles:

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

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

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

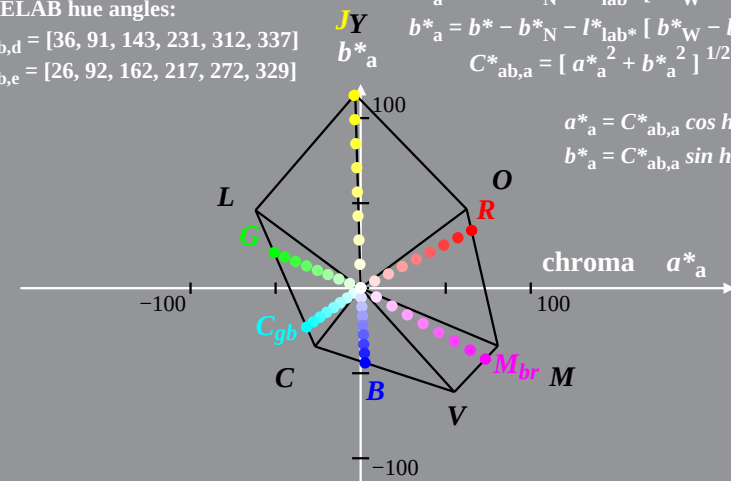
$$a^*_a = a^* - a^*_N - l^*_{lab*} [a^*_W - a^*_N]$$

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

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

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

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



JE451-3N

Linear relation CIELAB (L^* , a^* , b^*) and adapted (a) CIELAB ($C^*_{ab,a}$, L^*)
System: TLS00

CIELAB hue angles:

$h_{ab,d} = [40, 102, 136, 196, 306, 328]$

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

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

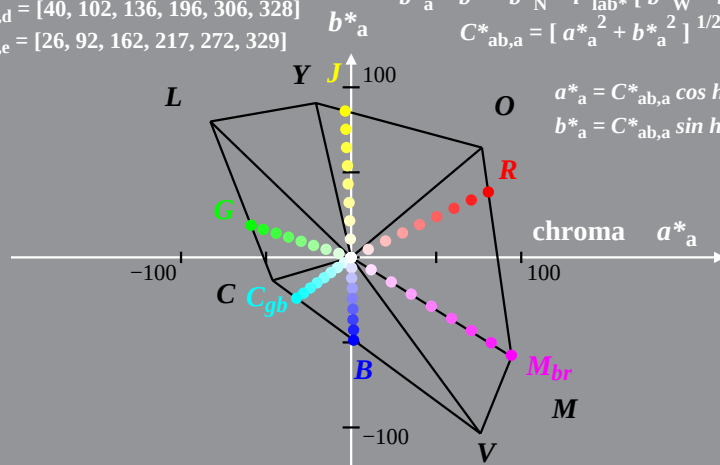
$$a^*_a = a^* - a^*_N - l^*_{lab*} [a^*_W - a^*_N]$$

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

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

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

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



JE450-7N

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

CIELAB hue angles:

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

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

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

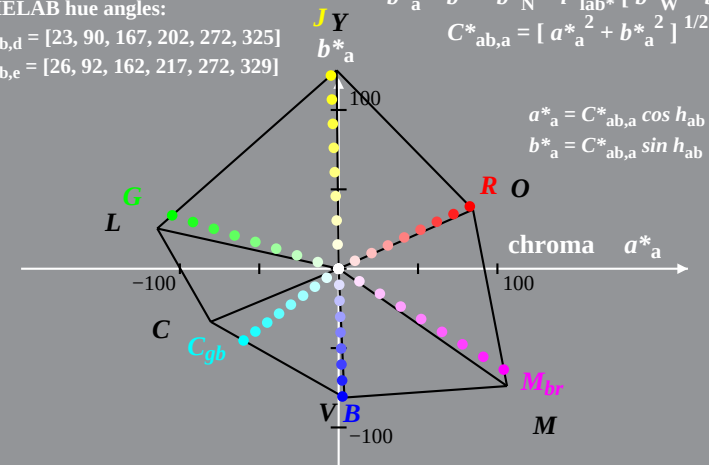
$$a^*_a = a^* - a^*_N - l^*_{lab*} [a^*_W - a^*_N]$$

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

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

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

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



JE451-7N

TUB-test chart JE45; Image reproduction of elementary hues input: *rgb setrgbcolor*

4 systems and CIE elementary hues in CIELAB diagram (a^* , b^*) output: no change compared to input