

Linear relation CIELAB (L^* , a^* , b^*) and adapted (a) CIELAB ($C^*_{ab,a}$, L^*)
System: ORS18

CIELAB hue angles:

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

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

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

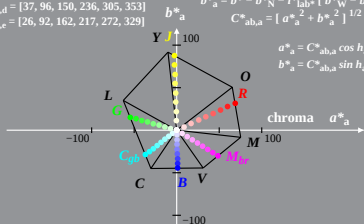
$$a^*_a = a^* - a^*_N - L^*_{lab*} [a^*_W - a^*_N]$$

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

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

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

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



De680-3N

Linear relation CIELAB (L^* , a^* , b^*) and adapted (a) CIELAB ($C^*_{ab,a}$, L^*)
System: MRS18

CIELAB hue angles:

$h_{ab,d} = [30, 94, 170, 216, 289, 322]$

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

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

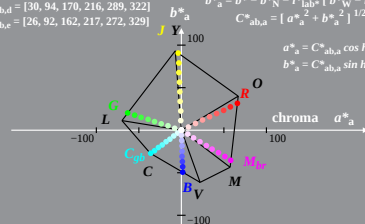
$$a^*_a = a^* - a^*_N - L^*_{lab*} [a^*_W - a^*_N]$$

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

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

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

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



De681-3N

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

CIELAB hue angles:

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

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

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

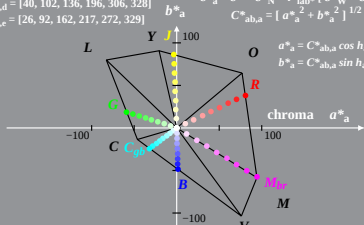
$$a^*_a = a^* - a^*_N - L^*_{lab*} [a^*_W - a^*_N]$$

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

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

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

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



De680-7N

Linear relation CIELAB (L^* , a^* , b^*) and adapted (a) CIELAB ($C^*_{ab,a}$, L^*)
System: NRS18_b00r

CIELAB hue angles:

$h_{ab,d} = [26, 89, 166, 192, 251, 325]$

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

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

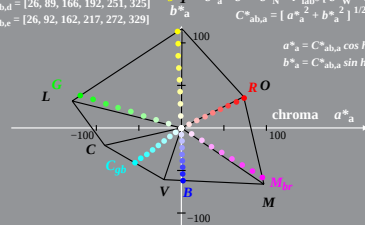
$$a^*_a = a^* - a^*_N - L^*_{lab*} [a^*_W - a^*_N]$$

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

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

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

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



De681-7N

BAM-test chart De68; Colour image reproduction
4 system and CIE elementary hues in CIE diagram (a^* , b^*)

input: rgb ($\rightarrow$ olv^*) $setrgbcolor$
output: no change compared to input