

Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: JE29_sRGB display 0%_G0

CIELAB hue angles:

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

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

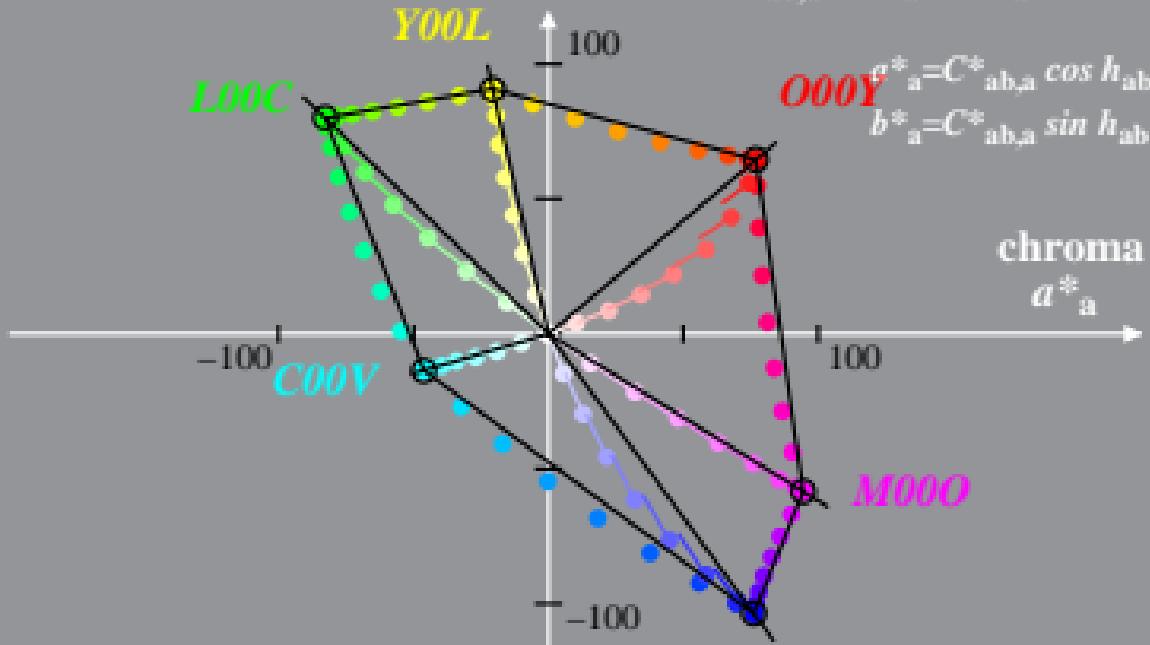
$$l^*_{lab*} = (L^* - L^*_N) / (L^*_W - L^*_N)$$

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

$$b^*_{ab*}$$

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

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



Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: JE29_sRGB display 0,6%_G0

CIELAB hue angles:

$$h_{ab,d} = [38, 102, 136, 196, 305, 328]$$

$$h_{ab,dx} = [38, 102, 136, 196, 305, 328]$$

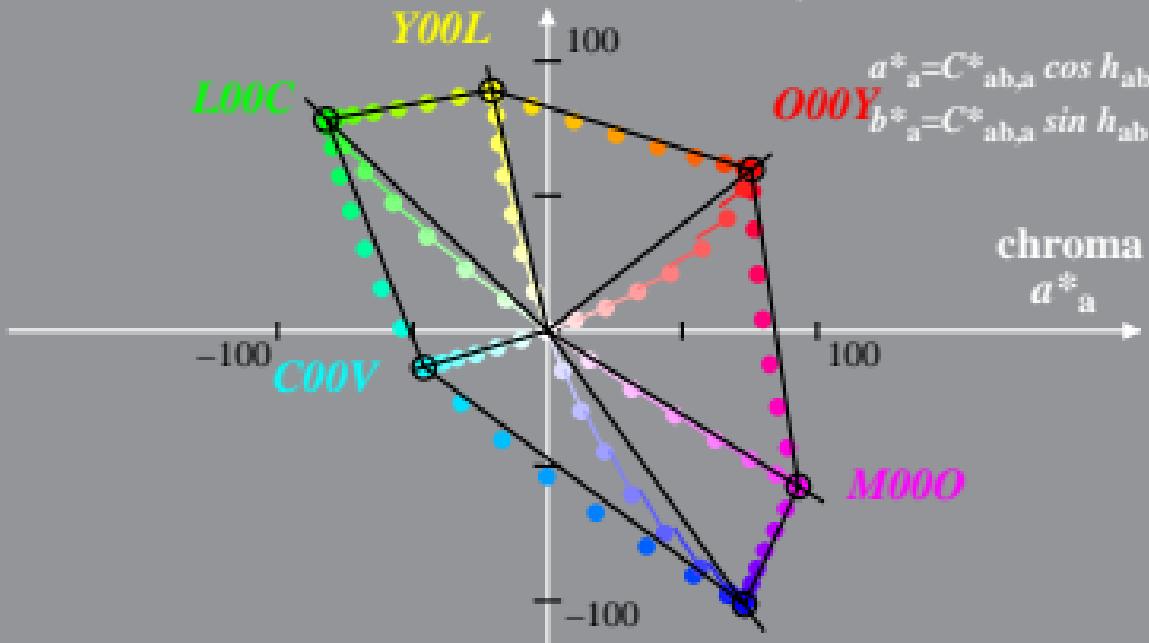
$$l^*_{lab} = (L^* - L^*_N) / (L^*_W - L^*_N)$$

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

$$b^*_{ab}$$

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

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



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

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

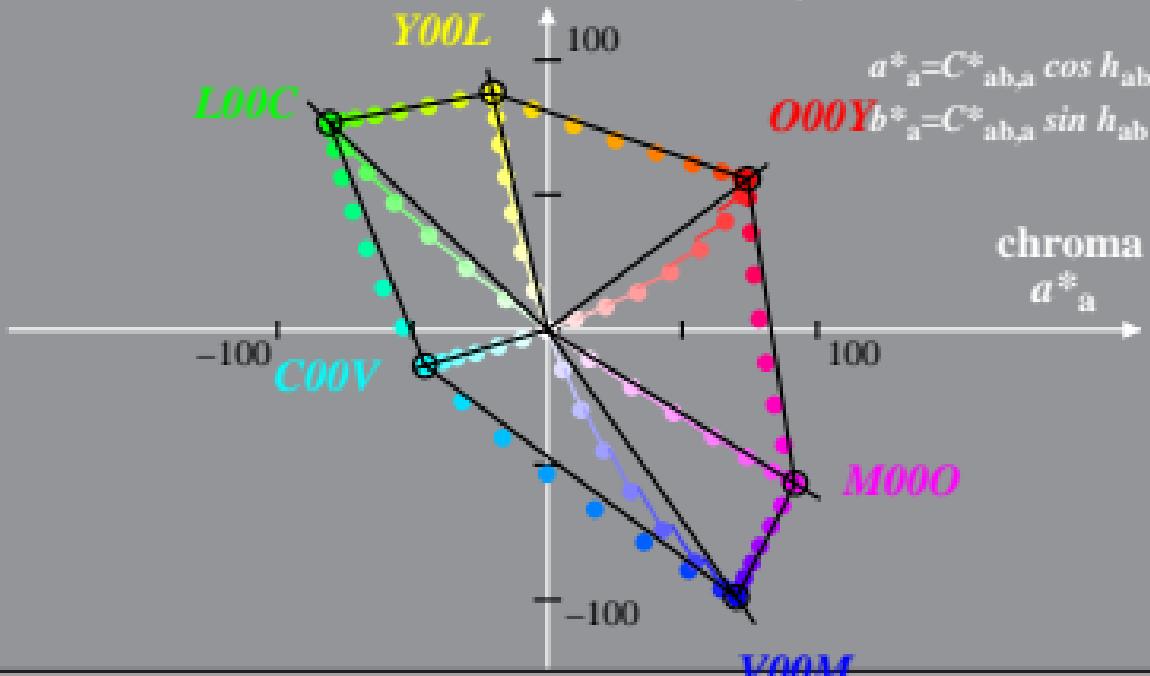
chroma
 a^*_{ab}

Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: JE29_sRGB display 1,3%_G0

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

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

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

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


Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: JE29_sRGB display 2,5%_G0

CIELAB hue angles:

$$h_{ab,d} = [34, 103, 136, 196, 304, 328]$$

$$h_{ab,dx} = [34, 103, 136, 196, 304, 328]$$

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

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

$$b^*_{ab}$$

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

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



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

System: JE29_sRGB display 5%_G0

$$l^*_{lab} = (L^* - L^*_{N}) / (L^*_{W} - L^*_{N})$$

CIELAB hue angles:

$$h_{ab,d} = [31, 103, 137, 196, 302, 327]$$

$$h_{ab,dx} = [31, 103, 137, 196, 302, 327]$$

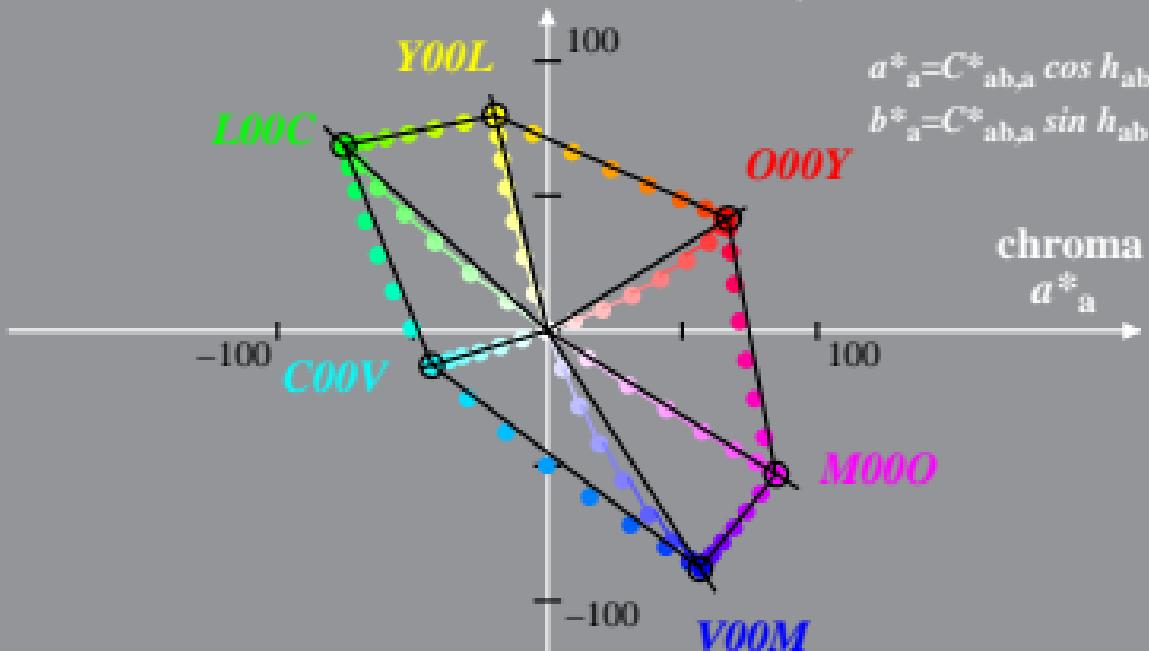
$$b^*_{ab}$$

$$a^*_{ab} = a^* - a^*_{N} - l^*_{lab} \cdot [a^*_{W} - a^*_{N}]$$

$$b^*_{ab}$$

$$b^*_{ab} = b^* - b^*_{N} - l^*_{lab} \cdot [b^*_{W} - b^*_{N}]$$

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



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

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

chroma
 a^*_{ab}

Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: JE29_sRGB display 10%_G0

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

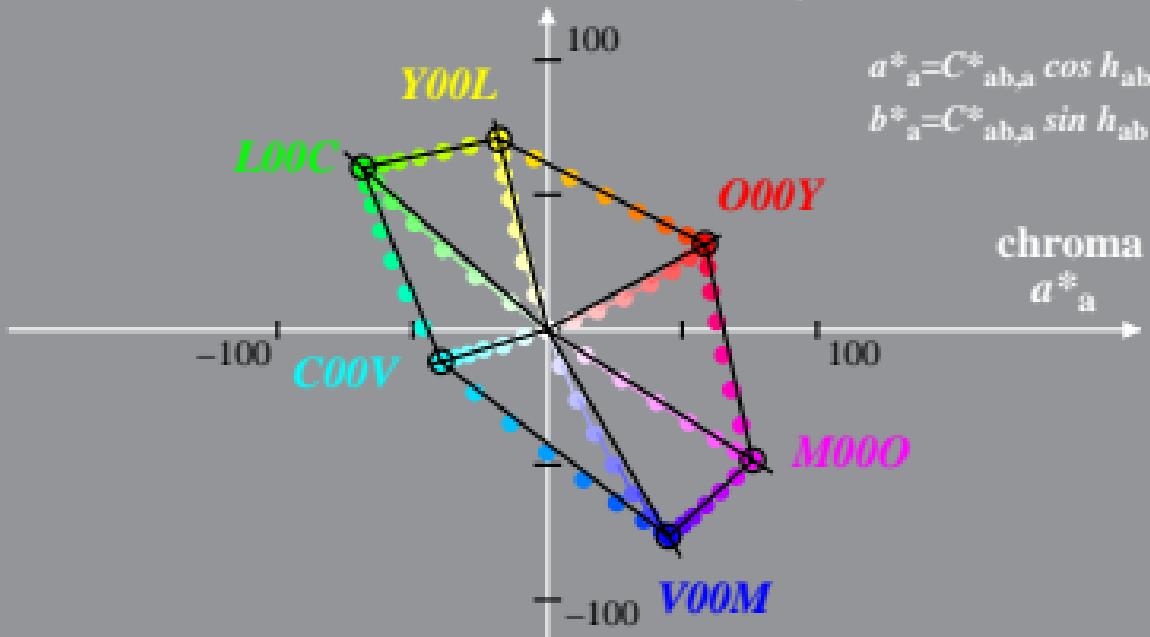
CIELAB hue angles:

$a^*_{ab,d} = [28, 104, 138, 196, 300, 327]$ $b^*_{ab,d} = [28, 104, 138, 196, 300, 327]$

$a^*_{ab,dx} = [28, 104, 138, 196, 300, 327]$ $b^*_{ab,dx} = [28, 104, 138, 196, 300, 327]$

$a^*_{ab,a} = a^* - a^*_{ab,d}$ $b^*_{ab,a} = b^* - b^*_{ab,d}$

$C^*_{ab,a} = \sqrt{a^*_{ab,a}^2 + b^*_{ab,a}^2}$



Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: JE29_sRGB display 20%_G0

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

CIELAB hue angles:

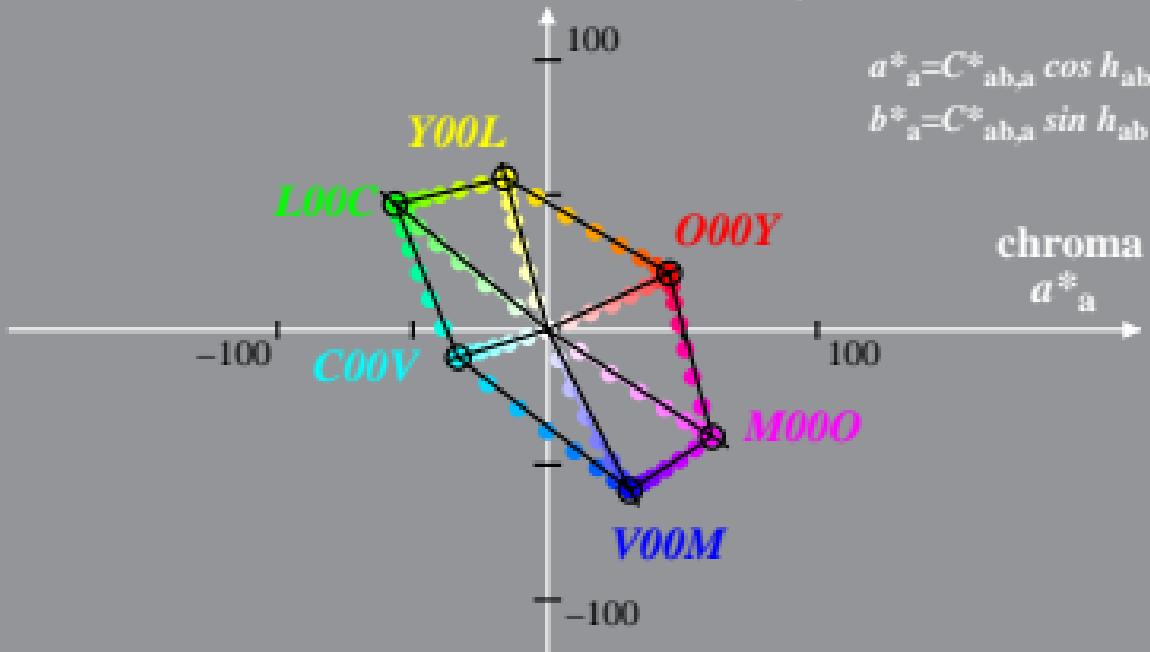
$a^*_{ab,d} = [24, 105, 140, 197, 297, 327]$ $b^*_{ab,d} = [24, 105, 140, 197, 297, 327]$

$a^*_{ab,dx} = [24, 105, 140, 197, 297, 327]$ $b^*_{ab,dx} = [24, 105, 140, 197, 297, 327]$

$a^*_{ab,a} = a^* - a^*_{N} - I^*_{lab} \cdot [a^*_{W} - a^*_{N}]$

$b^*_{ab,a} = b^* - b^*_{N} - I^*_{lab} \cdot [b^*_{W} - b^*_{N}]$

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



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

System: JE29_sRGB display 40%_G0

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

CIELAB hue angles:

$$h_{ab,d} = [21, 107, 142, 197, 293, 326]$$

$$b^*_{ab}$$

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

$$h_{ab,dx} = [21, 107, 142, 197, 293, 326]$$

$$b^*_{ab}$$

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

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

