

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

System: GE88_FRS09_92_D65_00%_00

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$t^*_{lab} = l^*_{lab} - c^*_{lab} [l^*_M - 0,5]$$

CIELAB hue angles:

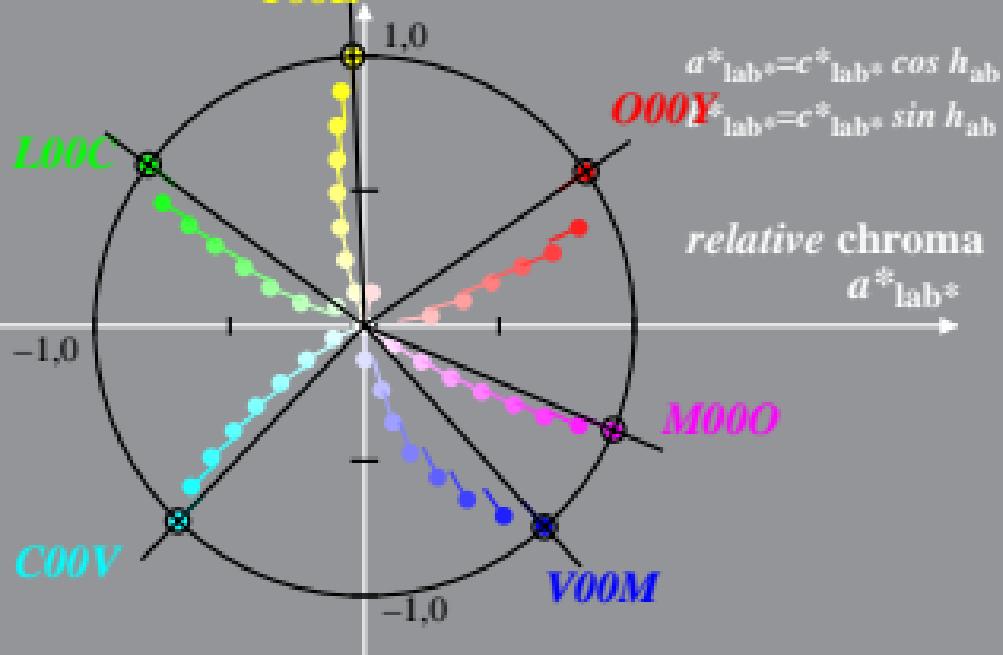
$$h_{ab,d} = [34, 92, 143, 225, 313, 338]$$

$$b^*_{lab}$$

$$c^*_{lab} = C^*_{ab,a} / C^*_{ab,a,M}$$

$$h_{ab,dx} = [38, 96, 151, 236, 305, 354]$$

M =Maximum colour



$$a^*_{lab} = c^*_{lab} \cos h_{ab}$$

$$O00Y_{lab} = c^*_{lab} \sin h_{ab}$$

relative chroma

$$a^*_{lab}$$

Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE88_FRS09_92_D65_00%_01 $I^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

$$h_{ab,d} = [34, 92, 143, 225, 313, 338]$$

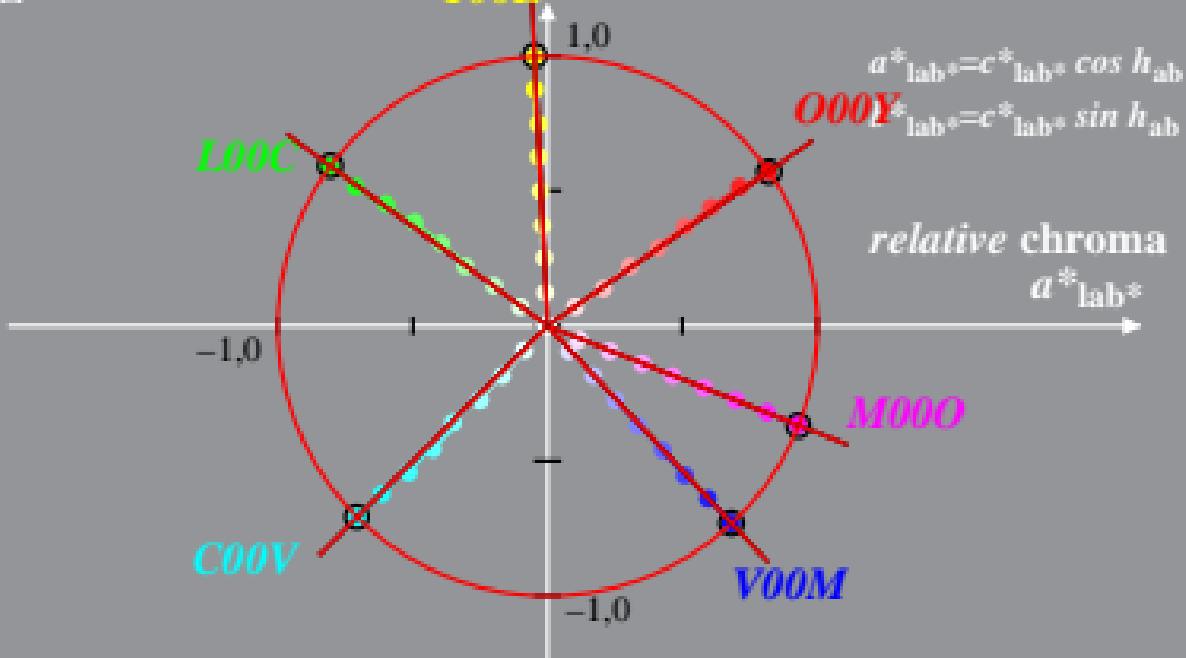
$$h_{ab,dx} = [38, 96, 151, 236, 305, 354] \text{ Y00L}$$

$$b^*_{lab^*}$$

$$t^*_{lab^*} = I^*_{lab^*} - c^*_{lab^*} [I^*_M - 0,5]$$

$$c^*_{lab^*} = C^*_{ab,a} / C^*_{ab,a,M}$$

M =Maximum colour



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE88_FRS09_92_D65_25%_O0

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$t^*_{lab^*} = l^*_{lab^*} - c^*_{lab^*} [l^*_M - 0,5]$$

CIELAB hue angles:

$$h_{ab,d} = [34, 92, 143, 225, 313, 338]$$

$$b^*_{lab^*}$$

$$c^*_{lab^*} = C^*_{ab,a} / C^*_{ab,a,M}$$

M =Maximum colour

$Y25Y00L$

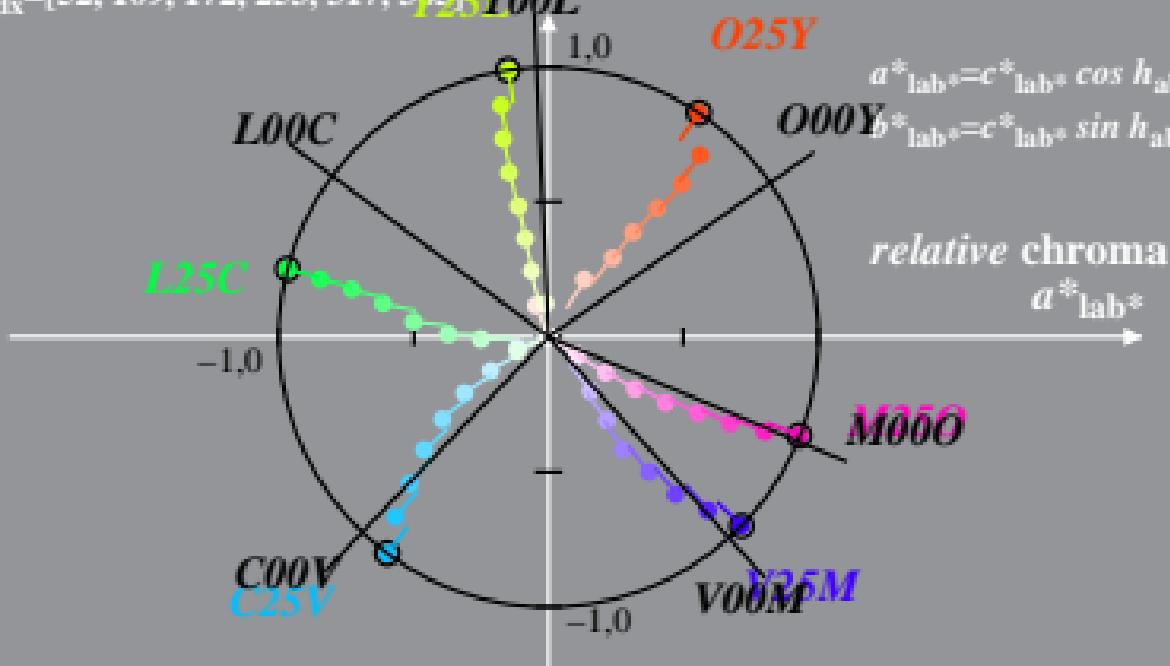
$O25Y$

$$a^*_{lab^*} = c^*_{lab^*} \cos h_{ab}$$

$$b^*_{lab^*} = c^*_{lab^*} \sin h_{ab}$$

relative chroma

$$a^*_{lab^*}$$



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE88_FRS09_92_D65_25%_O1 $I^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

$$h_{ab,d} = [34, 92, 143, 225, 313, 338]$$

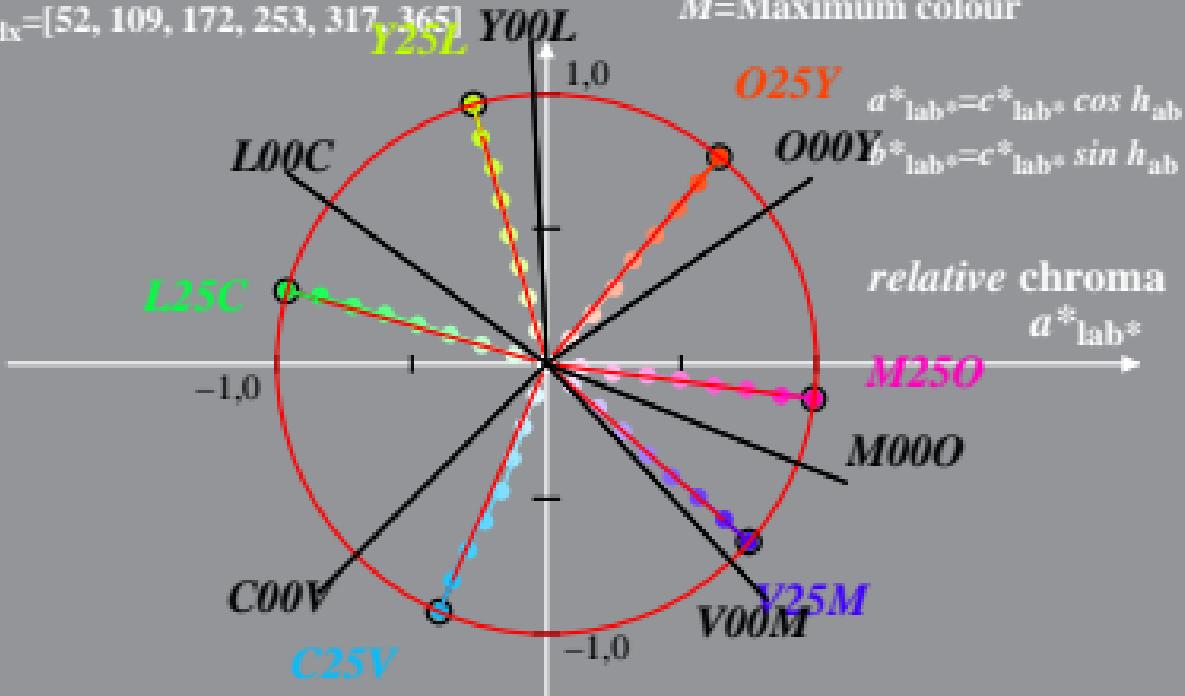
$$h_{ab,dx} = [52, 109, 172, 253, 317, 365]$$

$$b^*_{lab^*}$$

$$t^*_{lab^*} = I^*_{lab^*} - c^*_{lab^*} [I^*_M - 0,5]$$

$$c^*_{lab^*} = C^*_{ab,a} / C^*_{ab,a,M}$$

M =Maximum colour



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE88_FRS09_92_D65_50%_O0

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$t^*_{lab^*} = l^*_{lab^*} - c^*_{lab^*} [l^*_M - 0,5]$$

CIELAB hue angles:

$$h_{ab,d} = [34, 92, 143, 225, 313, 338]$$

$$h_{ab,dx} = [67, 123, 193, 270, 329, 376] \quad Y00L \quad O50Y = \text{Maximum colour}$$

$$b^*_{lab^*} \quad c^*_{lab^*} = C^*_{ab,a} / C^*_{ab,a,M}$$

Y50L

Y00L

O50Y

L00C

O00Y

M50O

M00O

L50C

$a^*_{lab^*}$

C00V

C50V

V50M

V00M

relative chroma

$a^*_{lab^*}$

M50O

M00O

Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE88_FRS09_92_D65_50%_O1 $I^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

$$h_{ab,d} = [34, 92, 143, 225, 313, 338]$$

$$h_{ab,dx} = [67, 123, 193, 270, 329, 376]$$

$$b^*_{lab^*}$$

$$t^*_{lab^*} = I^*_{lab^*} - c^*_{lab^*} [I^*_M - 0,5]$$

$$c^*_{lab^*} = C^*_{ab,a} / C^*_{ab,a,M}$$

M =Maximum colour

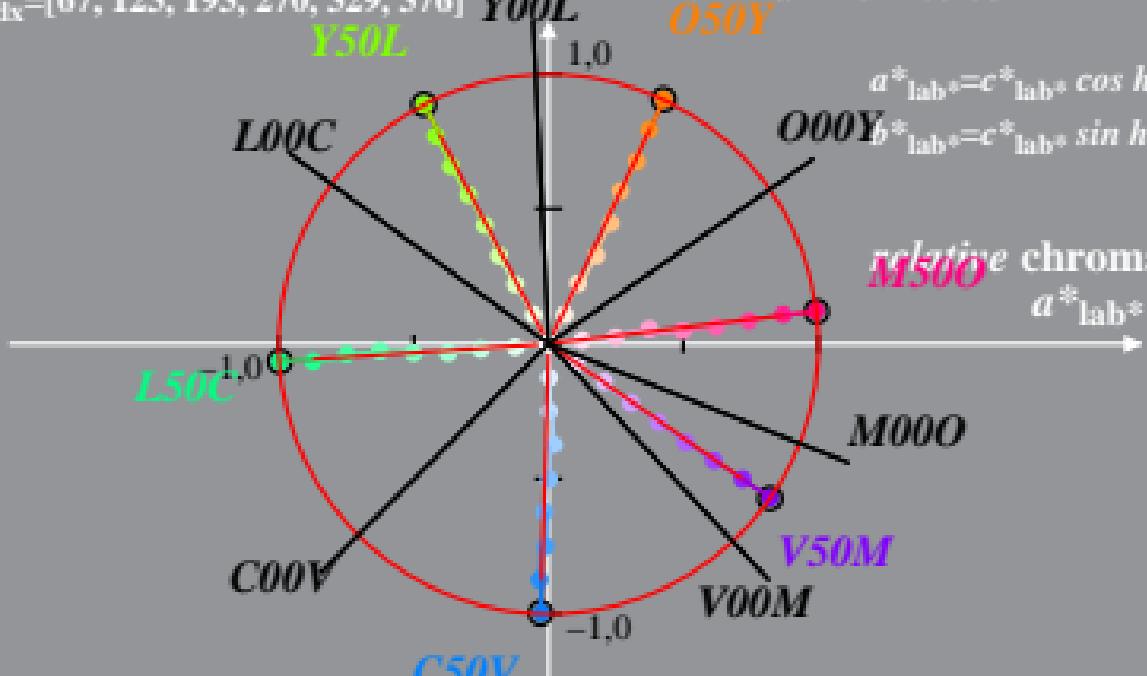
$O50Y$

$$a^*_{lab^*} = c^*_{lab^*} \cos h_{ab}$$

$$b^*_{lab^*} = c^*_{lab^*} \sin h_{ab}$$

$M500$ native chroma

$$a^*_{lab^*}$$



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE88_FRS09_92_D65_75%_O0

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

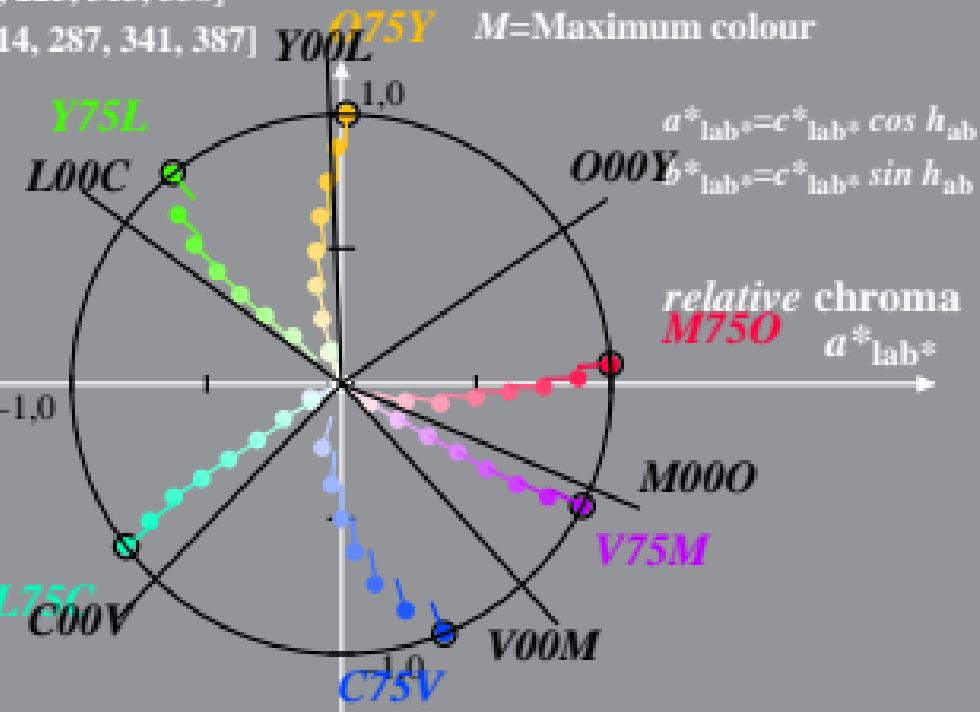
$$t^*_{lab*} = l^*_{lab*} - c^*_{lab*} [l^*_M - 0,5]$$

CIELAB hue angles:

$$h_{ab,d} = [34, 92, 143, 225, 313, 338]$$

$$h_{ab,dx} = [81, 137, 214, 287, 341, 387] \quad Y75Y \quad M=\text{Maximum colour}$$

$$b^*_{lab*} \quad c^*_{lab*} = C^*_{ab,a} / C^*_{ab,a,M}$$



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE88_FRS09_92_D65_75%_01

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$t^*_{lab^*} = l^*_{lab^*} - c^*_{lab^*} [l^*_M - 0,5]$$

CIELAB hue angles:

$$h_{ab,d} = [34, 92, 143, 225, 313, 338]$$

$$b^*_{lab^*} \quad c^*_{lab^*} = C^*_{ab,a} / C^*_{ab,a,M}$$

$$h_{ab,dx} = [81, 137, 214, 287, 341, 387] \quad Y00L \quad O75Y \quad M=Maximum\ colour$$

