

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

System: GE89_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:

$$h_{ab,d} = [35, 92, 143, 224, 313, 338]$$

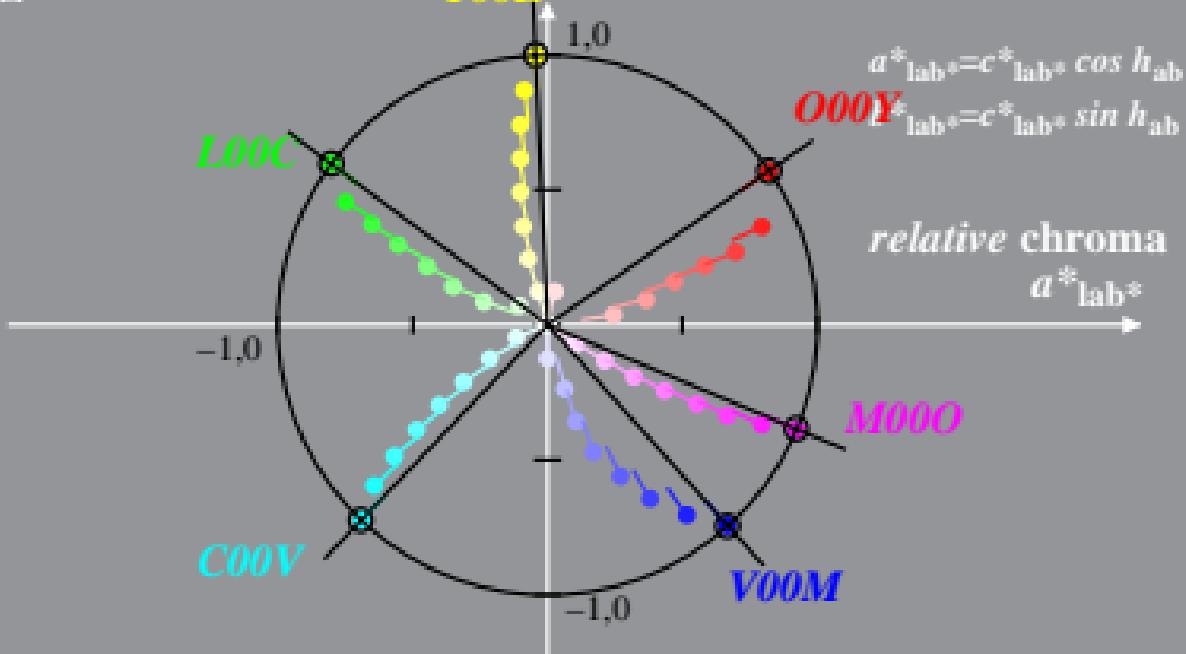
$$b^*_{lab}$$

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

M =Maximum colour

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

Y00L



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE89_FRS09_92_D65_00%_01

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

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

CIELAB hue angles:

$$h_{ab,d} = [35, 92, 143, 224, 313, 338]$$

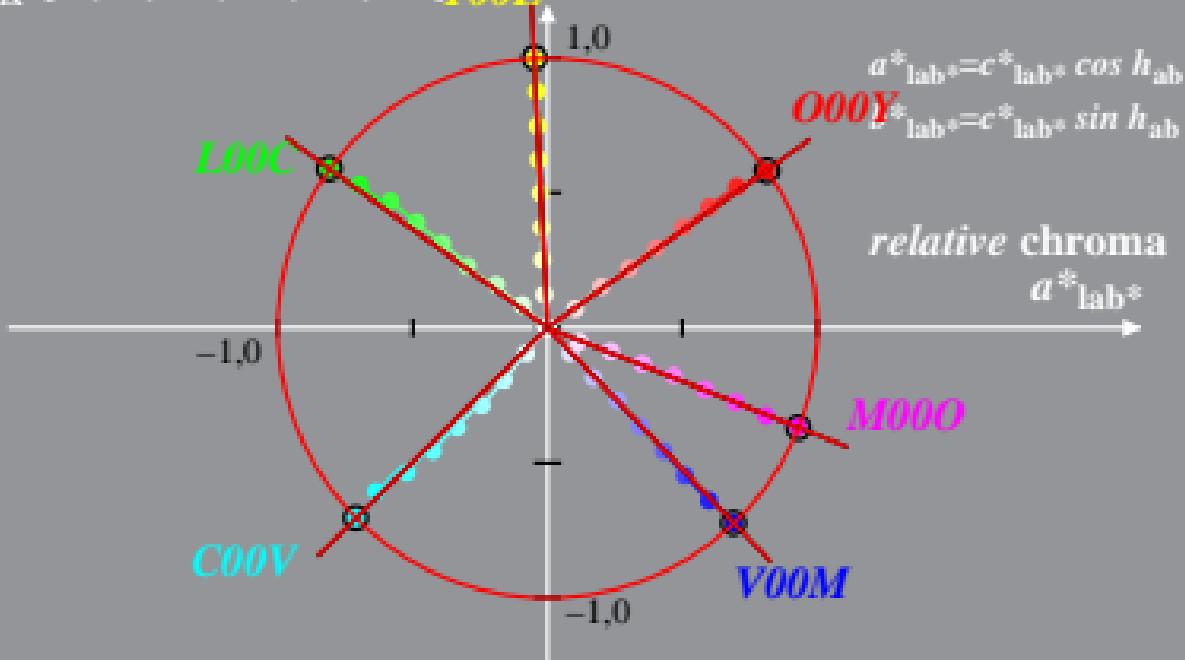
$$b^*_{lab^*}$$

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

M =Maximum colour

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

Y00L



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE89_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:

$$h_{ab,d} = [35, 92, 143, 224, 313, 338]$$

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

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

M =Maximum colour

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

$$Y25Y00L$$

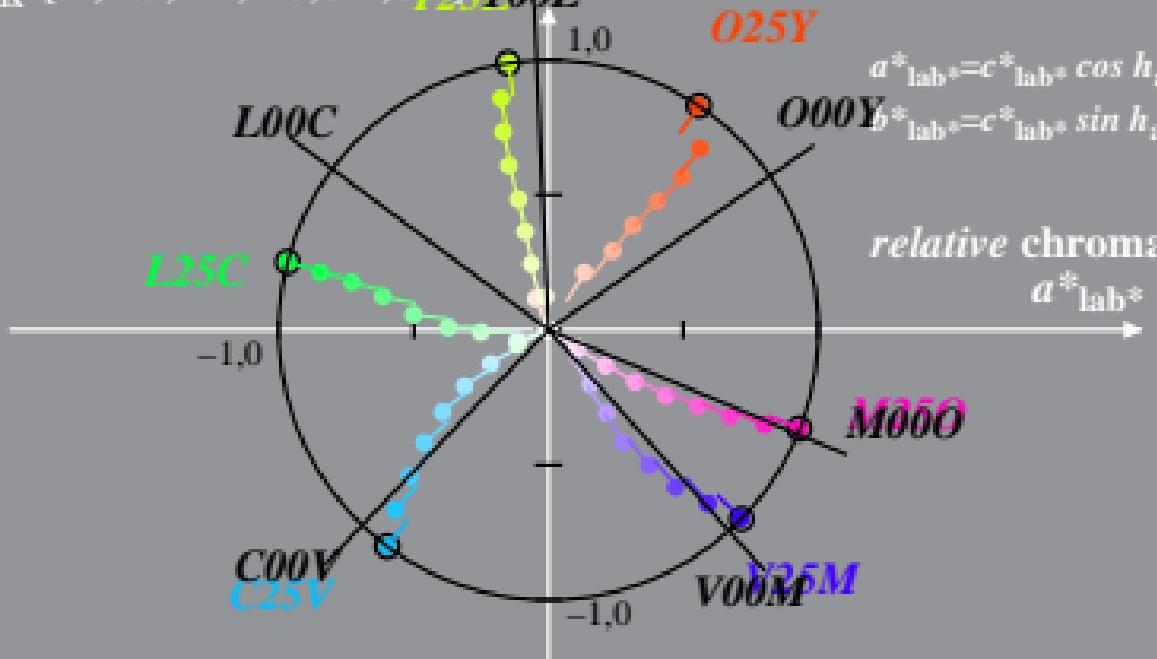
$$O25Y$$

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

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

relative chroma

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



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE89_FRS09_92_D65_25%_O1 $I^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

$$h_{ab,d} = [35, 92, 143, 224, 313, 338]$$

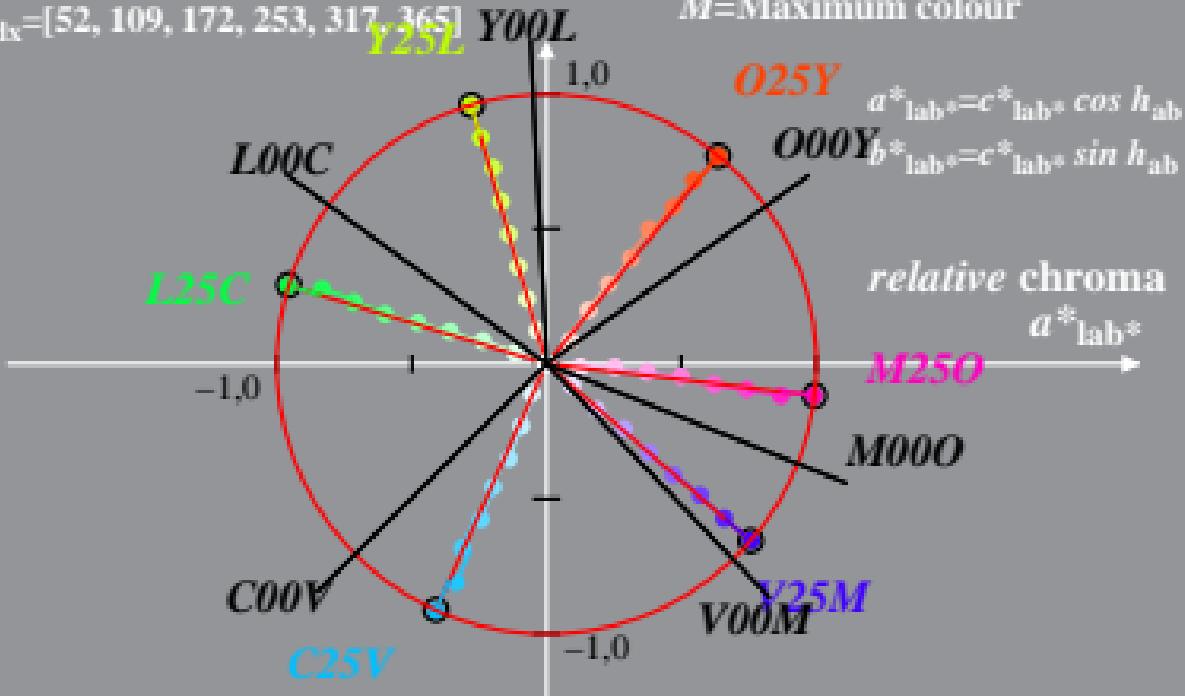
$$h_{ab,dx} = [52, 109, 172, 253, 317, 365]$$

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

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

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

M =Maximum colour



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE89_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:

$$h_{ab,d} = [35, 92, 143, 224, 313, 338]$$

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

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

YS0L

Y00L

O50Y

M50O

M00O

V50M

V00M

C50V

C00V

L50C

L00C

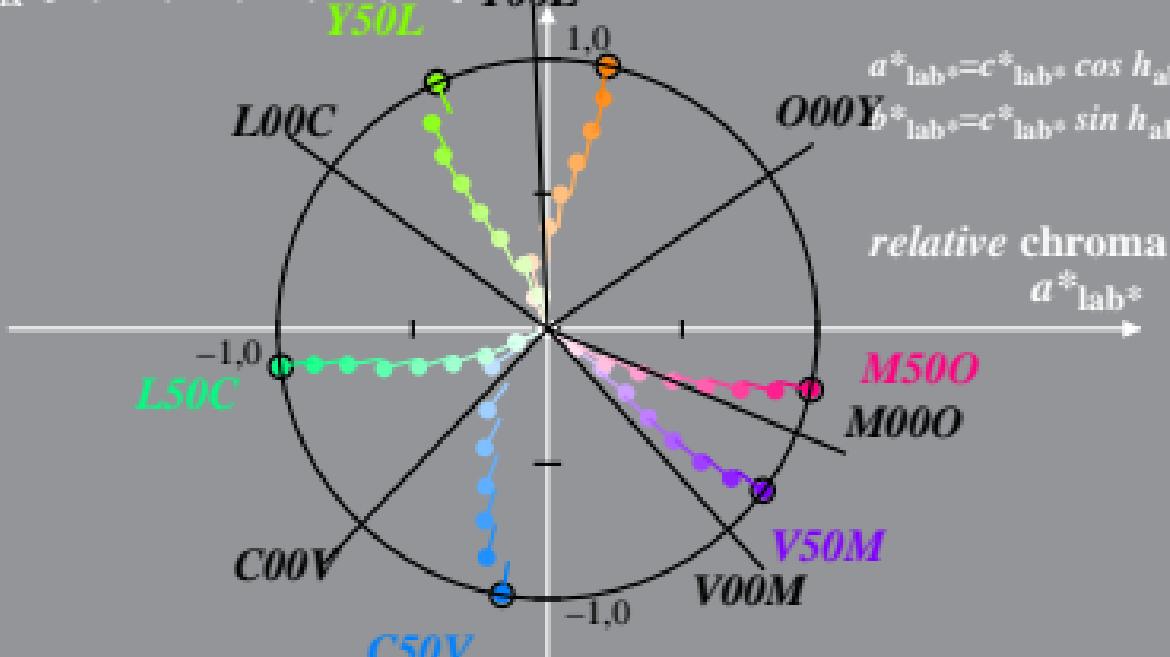
YS0L

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

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

relative chroma

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



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE89_FRS09_92_D65_50%_O1 $I^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

$$h_{ab,d} = [35, 92, 143, 224, 313, 338]$$

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

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

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

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

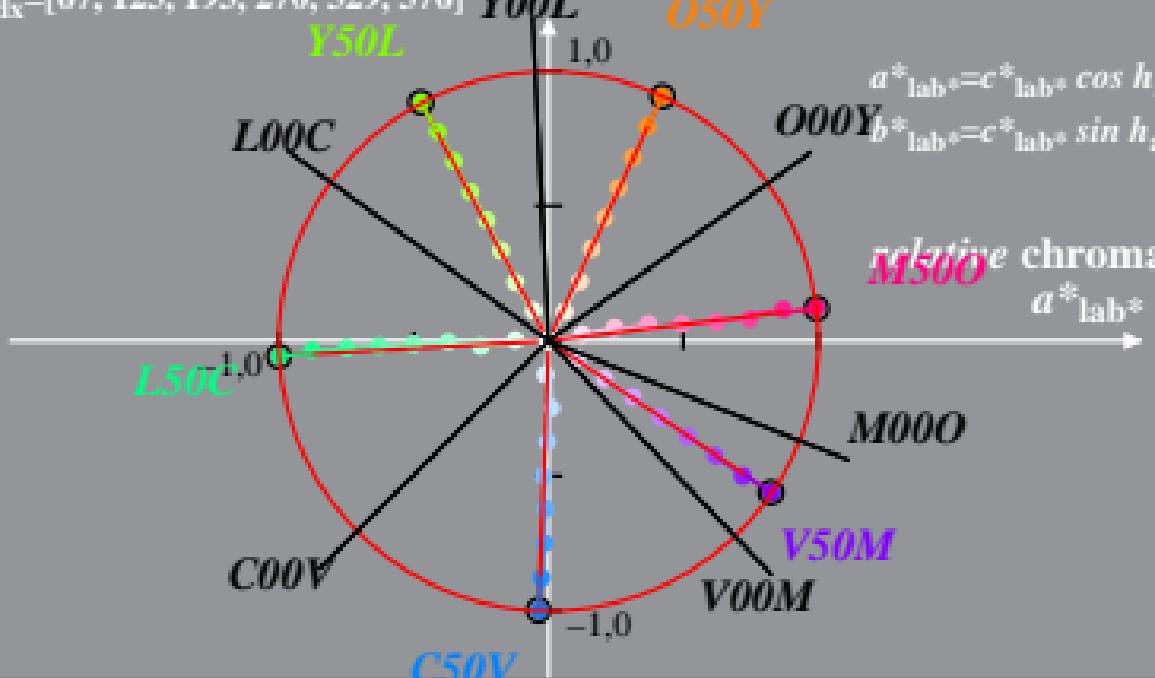
M =Maximum colour

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

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

M_{500} native chroma

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



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE89_FRS09_92_D65_75%_O0

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

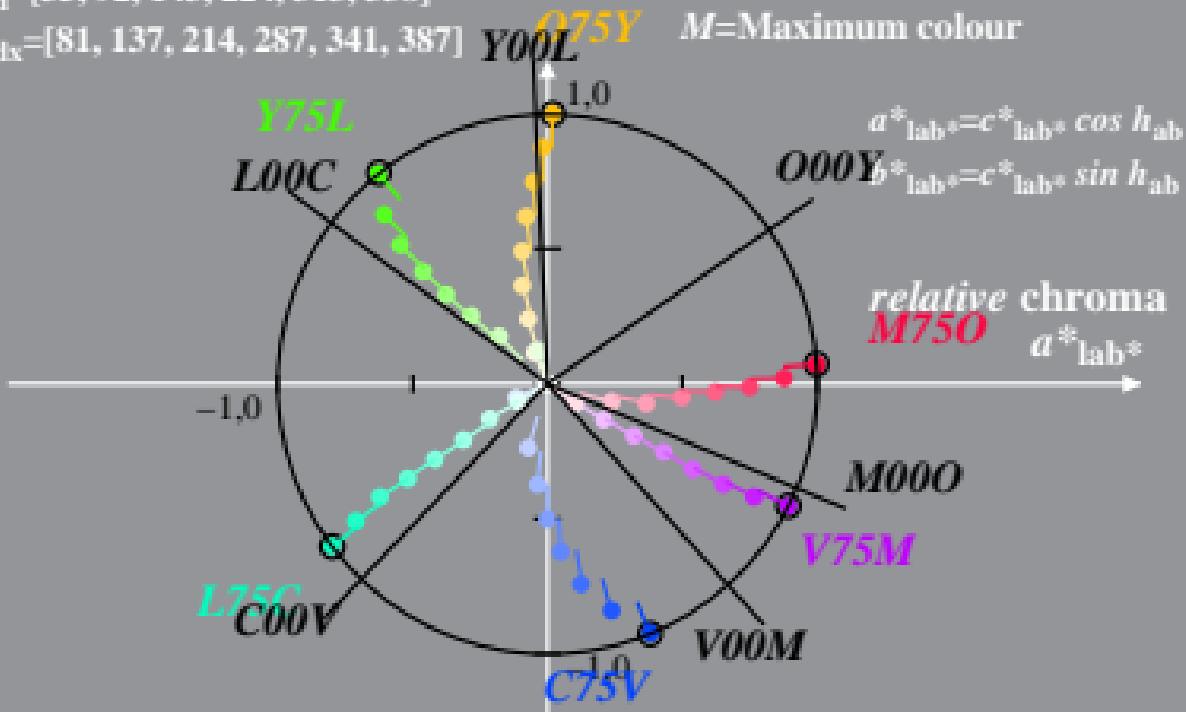
$$t^*_{lab*} = l^*_{lab*} - c^*_{lab*} [l^*_M - 0,5]$$

CIELAB hue angles:

$$h_{ab,d} = [35, 92, 143, 224, 313, 338]$$

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

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



Linear relation adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: GE89_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:

$$h_{ab,d} = [35, 92, 143, 224, 313, 338]$$

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

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

