

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

System: HE88\_FRS09\_92\_D65\_00%\_00

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

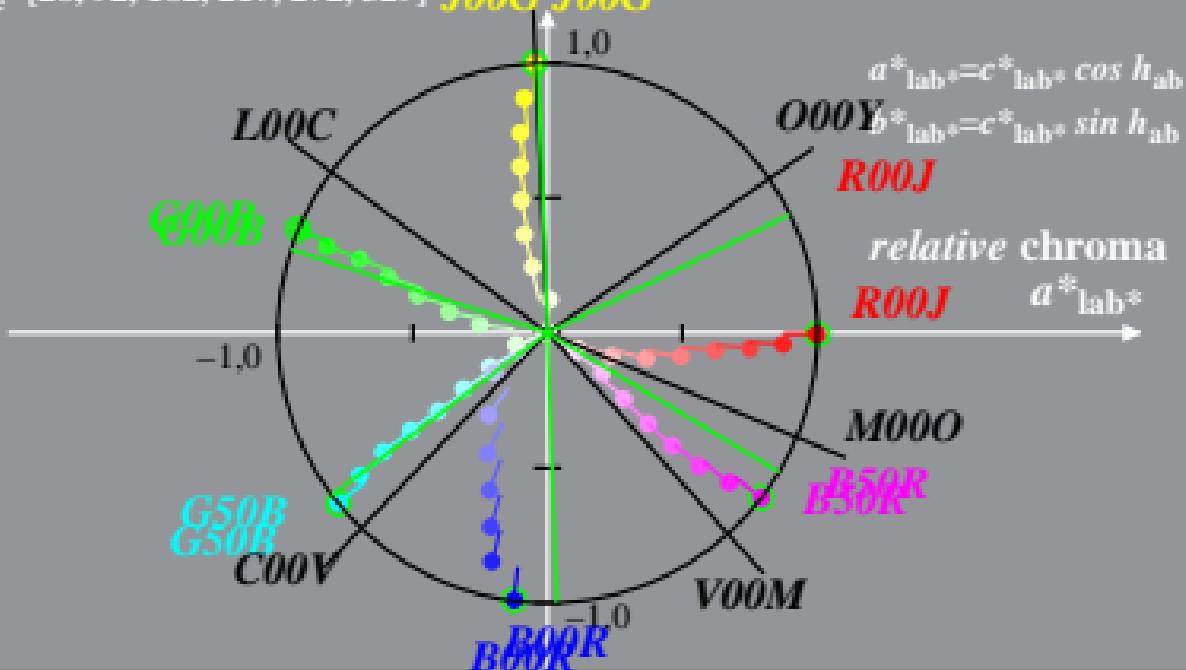
CIELAB hue angles:

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

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

$$h_{ab,ex} = [26, 92, 162, 217, 272, 329] \quad b^*_{lab*} \quad Y00L$$

$$h_{ab,e} = [26, 92, 162, 217, 272, 329] \quad J00G \quad J00G \quad M = \text{Maximum colour}$$



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

System: HE88\_FRS09\_92\_D65\_00%\_01

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

CIELAB hue angles:

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

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

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

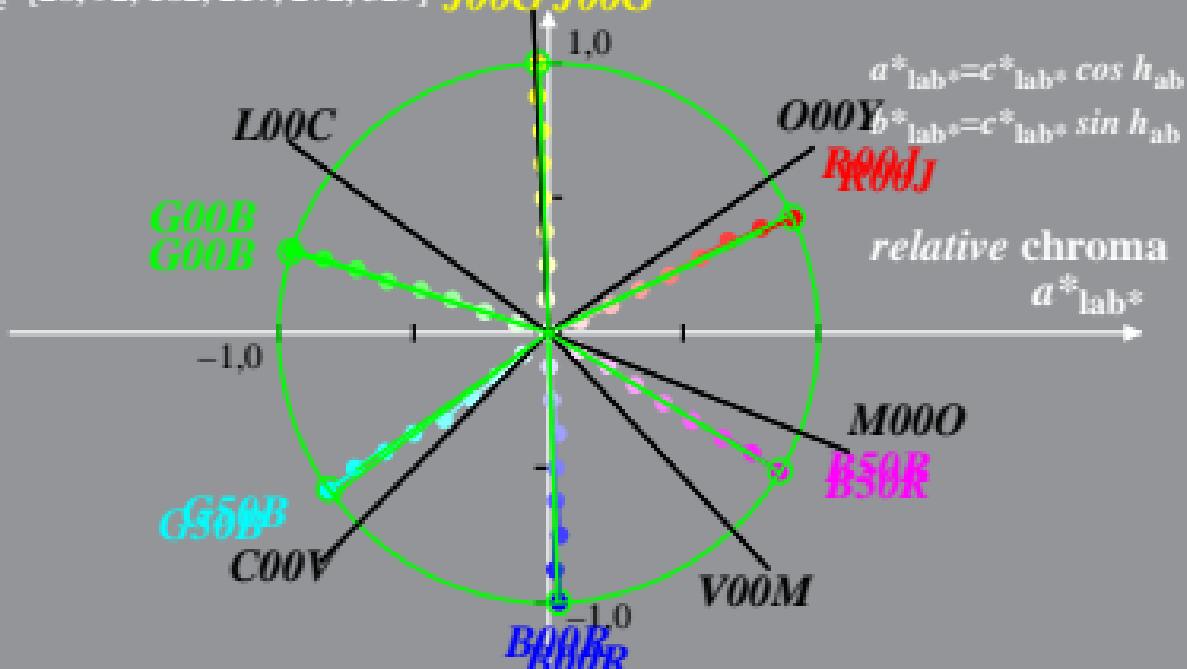
$$b^*_{lab*}$$

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

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

$$J00G \quad J00G$$

$M$ =Maximum colour



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

System: HE88\_FRS09\_92\_D65\_25%\_O0

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

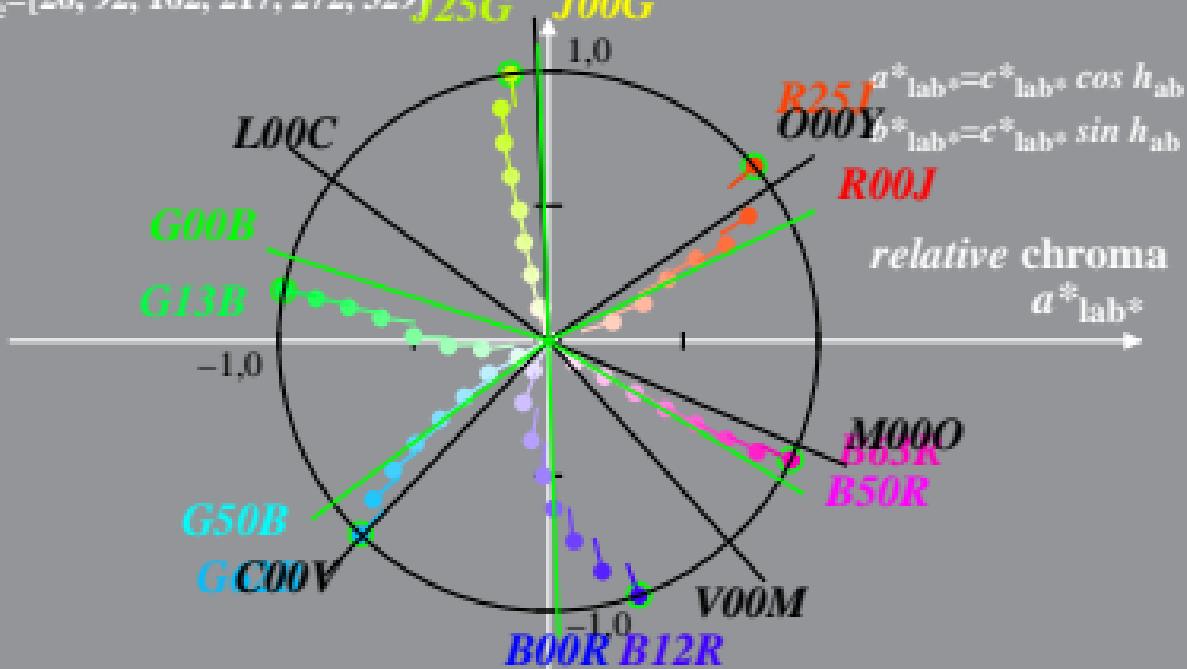
CIELAB hue angles:

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

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

$$h_{ab,ex} = [42, 109, 175, 230, 286, 343] \quad Y00L$$

$$h_{ab,e} = [26, 92, 162, 217, 272, 329] \quad J25G \quad J00G \quad M=\text{Maximum colour}$$



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

System: HE88\_FRS09\_92\_D65\_25%\_01

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

CIELAB hue angles:

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

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

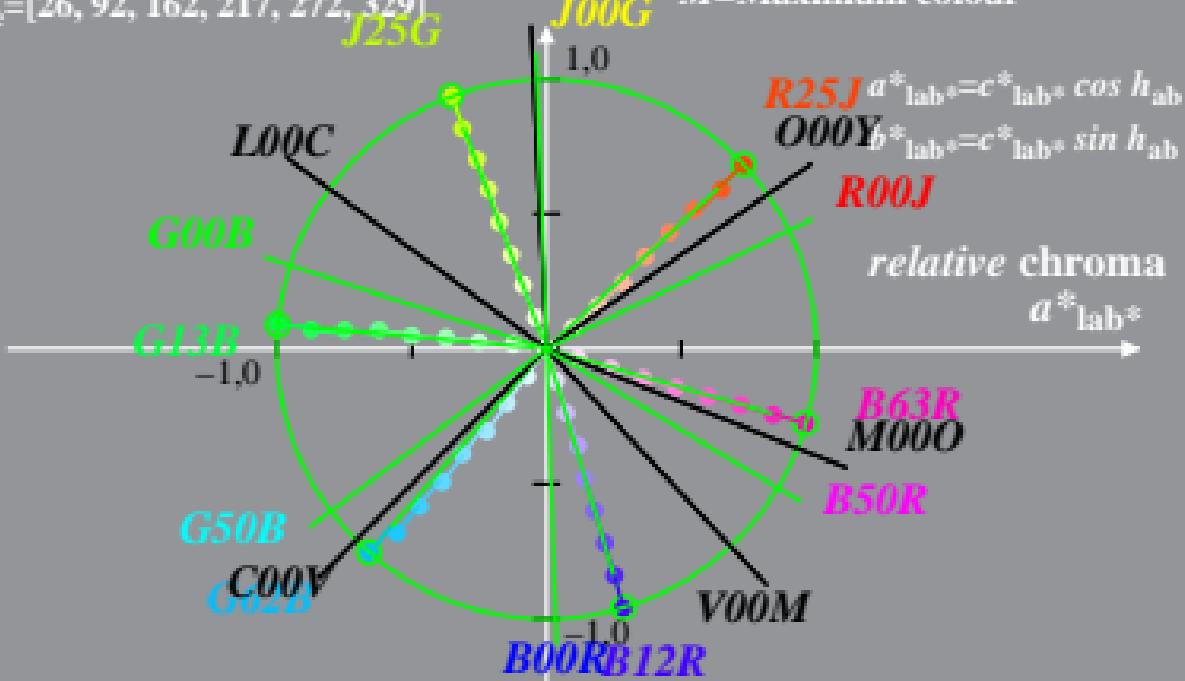
$$h_{ab,ex} = [42, 109, 175, 230, 286, 343] \quad Y00L$$

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

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

$M$ =Maximum colour

J25G      J00G



Linear relation adapted (a) CIELAB ( $C^*_{ab,a}$ ,  $L^*$ ) and relative CIELAB ( $c^*$ ,  $t^*$ )  
 System: HE88\_FRS09\_92\_D65\_50%\_O0       $I^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$   
 CIELAB hue angles:

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

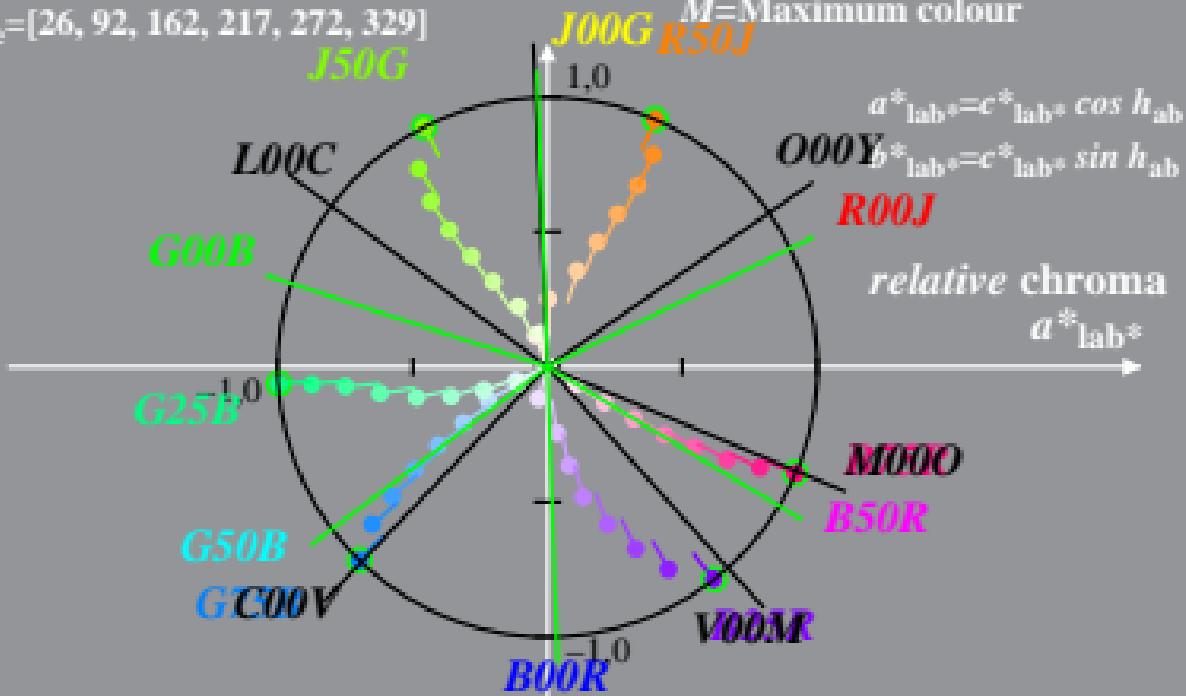
$$h_{ab,ex} = [59, 127, 189, 244, 300, 357] \quad Y00L$$

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

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

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

$M$ =Maximum colour



Linear relation adapted (a) CIELAB ( $C^*_{ab,a}$ ,  $L^*$ ) and relative CIELAB ( $c^*$ ,  $t^*$ )  
 System: HE88\_FRS09\_92\_D65\_50%\_O1       $I^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$   
 CIELAB hue angles:

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

$$h_{ab,ex} = [59, 127, 189, 244, 300, 357] \quad Y00L$$

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

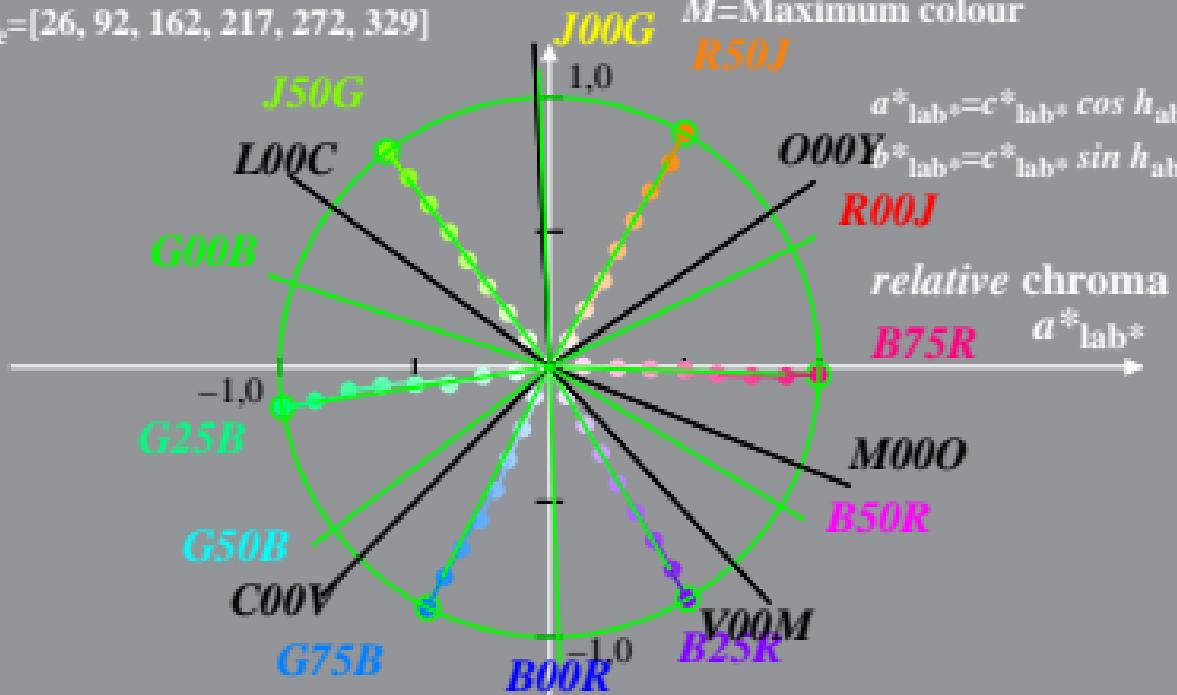
$$t^*_{lab*} = I^*_{lab*} - c^*_{lab*} [ I^*_M - 0,5 ]$$

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

$M$ =Maximum colour

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

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



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

System: HE88\_FRS09\_92\_D65\_75%\_00

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

CIELAB hue angles:

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

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

$$h_{ab,ex} = [75, 144, 203, 258, 314, 371]$$

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

$$c^*_{lab*}$$

$$C^*_{ab,a,M}$$

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

$$j00L$$

$$j75J$$

$$j00G$$

$$j00Y$$

$$M=Maximum\ colour$$

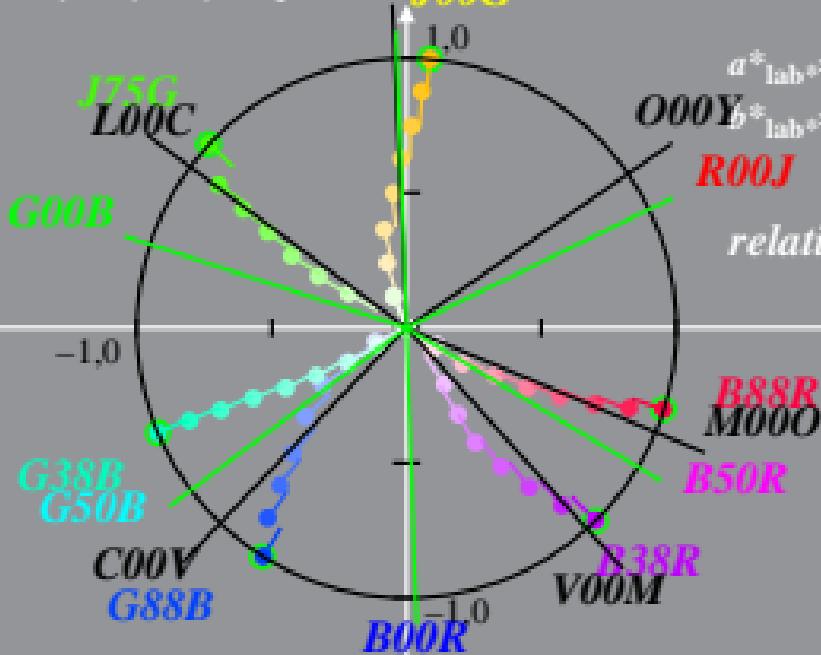
$$a^*_{lab*} = c^*_{lab*} \cos h_{ab}$$

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

$$R00J$$

relative chroma

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



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

System: HE88\_FRS09\_92\_D65\_75%\_01

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

CIELAB hue angles:

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

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

$$h_{ab,ex} = [75, 144, 203, 258, 314, 371] \quad Y00L$$

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

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

$M$ =Maximum colour

