

Adapted (a) CIELAB ( $C^*_{ab,a}$ ,  $L^*$ ) and relative CIELAB ( $c^*_{lab*}$ ,  $I^*_{lab*}$ )

System: HE81\_HRS27\_96\_D65\_00%\_O0       $I^*_{lab*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

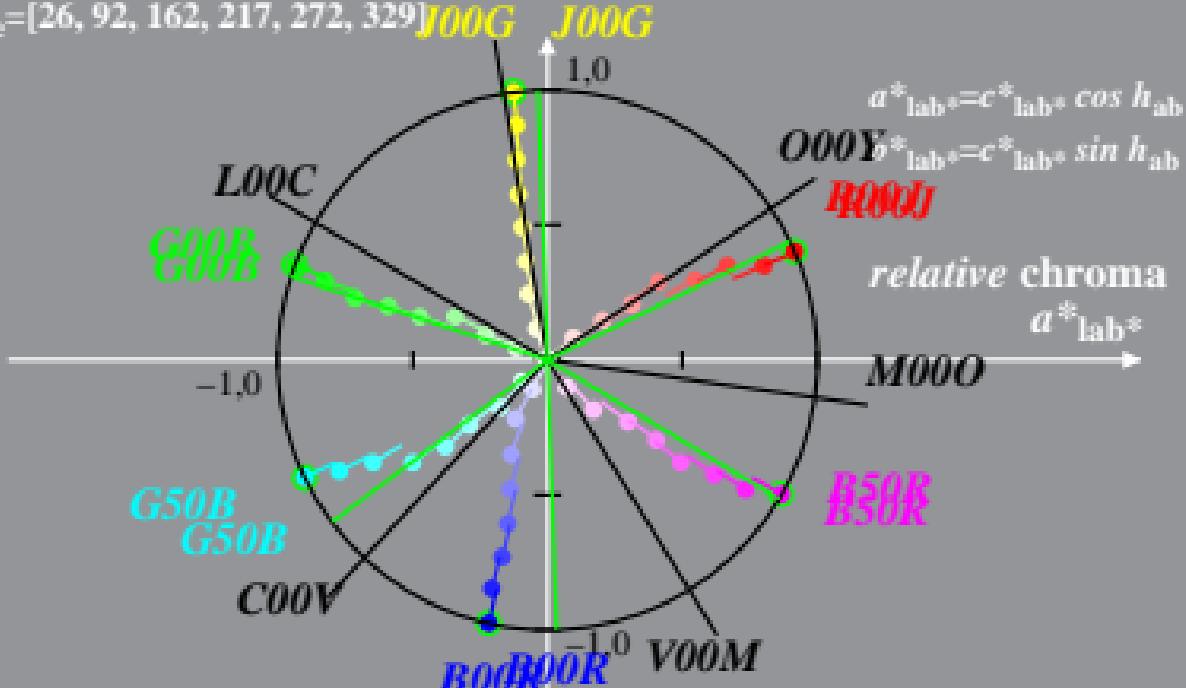
$h_{ab,d} = [33, 98, 150, 227, 301, 350]$

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

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

$b^*_{lab*}$      $M$ =Maximum colour

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



Adapted (a) CIELAB ( $C^*_{ab,a}$ ,  $L^*$ ) and relative CIELAB ( $c^*_{lab*}$ ,  $I^*_{lab*}$ )

System: HE81\_HRS27\_96\_D65\_00%\_O1

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

CIELAB hue angles:

$$h_{ab,d} = [33, 98, 150, 227, 301, 350]$$

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

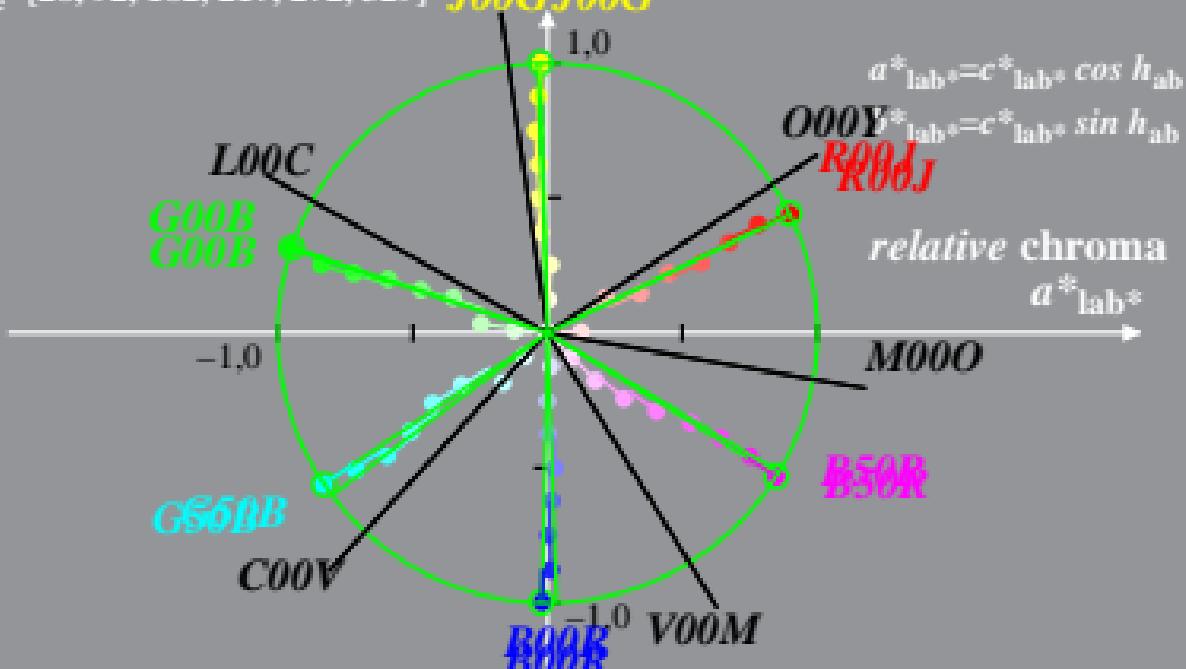
$$c^*_{lab*} = C^*_{ab,a} / C^*_{ab,a,M}$$

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

$Y00L$

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

**J00GJ00G**



Adapted (a) CIELAB ( $C^*_{ab,a}$ ,  $L^*$ ) and relative CIELAB ( $c^*_{lab*}$ ,  $I^*_{lab*}$ )

System: HE81\_HRS27\_96\_D65\_25%\_O0

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

CIELAB hue angles:

$$h_{ab,d} = [33, 98, 150, 227, 301, 350]$$

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

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

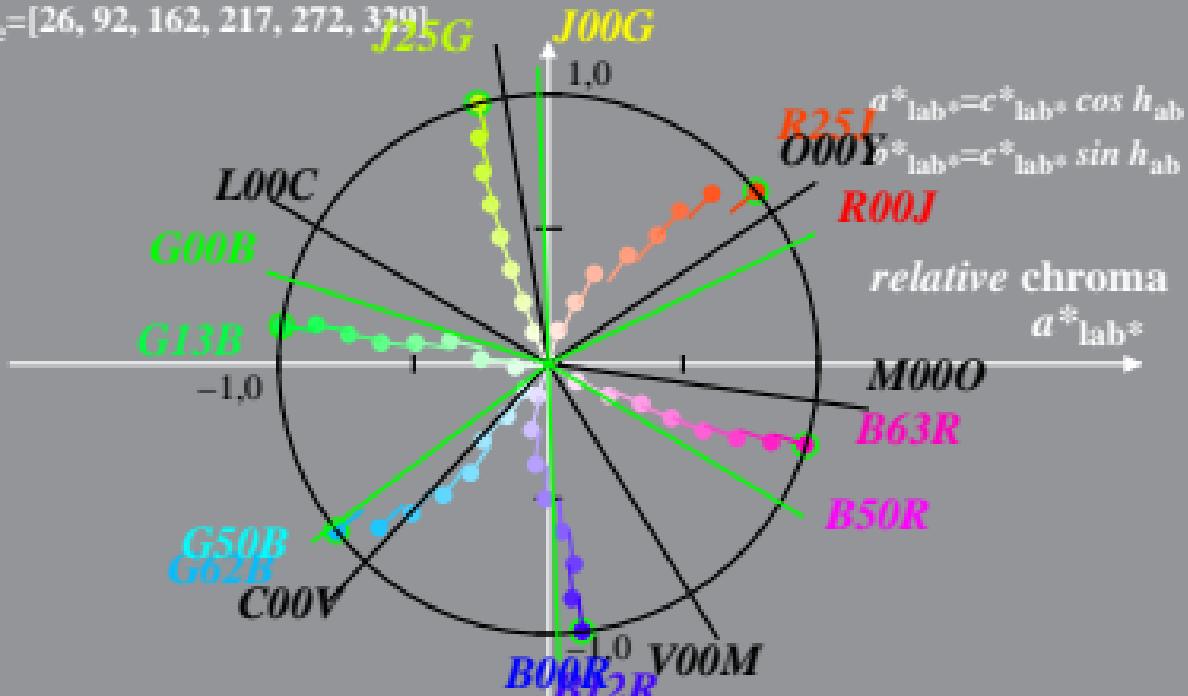
$$Y00L$$

$M$ =Maximum colour

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

$$J25G$$

$$J00G$$



Adapted (a) CIELAB ( $C^*_{ab,a}$ ,  $L^*$ ) and relative CIELAB ( $c^*_{lab*}$ ,  $I^*_{lab*}$ )

System: HE81\_HRS27\_96\_D65\_25%\_O1

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

CIELAB hue angles:

$$h_{ab,d} = [33, 98, 150, 227, 301, 350]$$

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

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

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

$M$ =Maximum colour

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

$J00G$

$J25G$

1,0

$L00C$

$G00B$

$G13B$

-1,0

$G50B$

$G00V$

$B00RB$

$Y00M$

$$R25J \quad a^*_{lab*} = c^*_{lab*} \cos h_{ab}$$

$$O00Y \quad b^*_{lab*} = c^*_{lab*} \sin h_{ab}$$

$R00J$

relative chroma

$a^*_{lab*}$

$M000$

$B63R$

$B50R$

Adapted (a) CIELAB ( $C^*_{ab,a}$ ,  $L^*$ ) and relative CIELAB ( $c^*_{lab*}$ ,  $I^*_{lab*}$ )

System: HE81\_HRS27\_96\_D65\_50%\_O0       $I^*_{lab*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

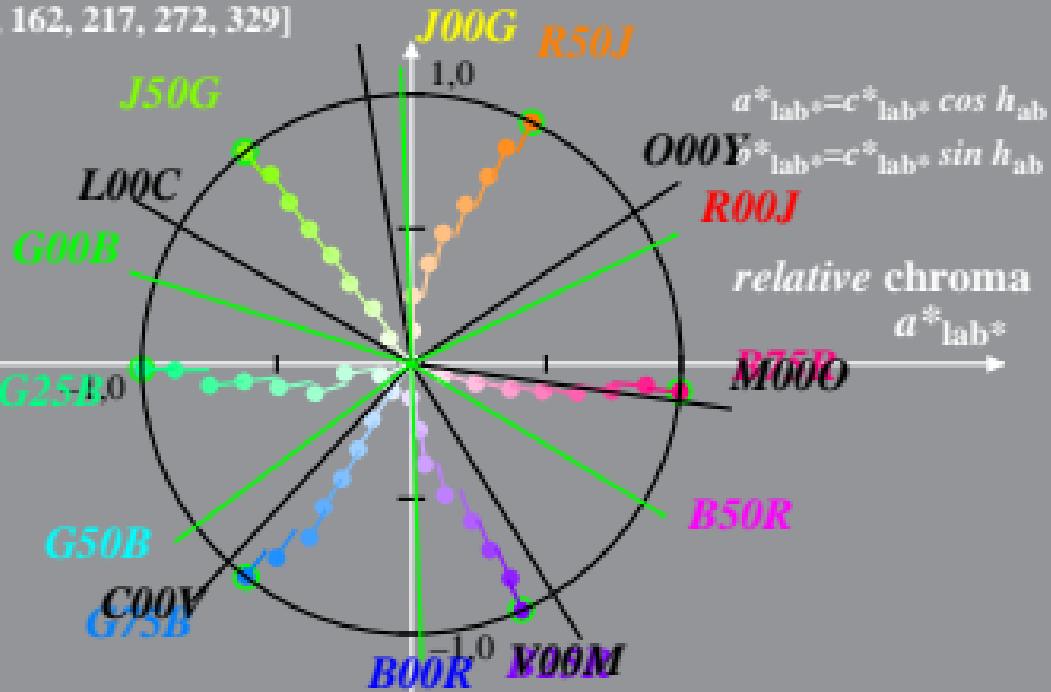
$$h_{ab,d} = [33, 98, 150, 227, 301, 350]$$

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

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

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

$M$ =Maximum colour



Adapted (a) CIELAB ( $C^*_{ab,a}$ ,  $L^*$ ) and relative CIELAB ( $c^*_{lab*}$ ,  $I^*_{lab*}$ )

System: HE81\_HRS27\_96\_D65\_50%\_O1

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

CIELAB hue angles:

$$h_{ab,d} = [33, 98, 150, 227, 301, 350]$$

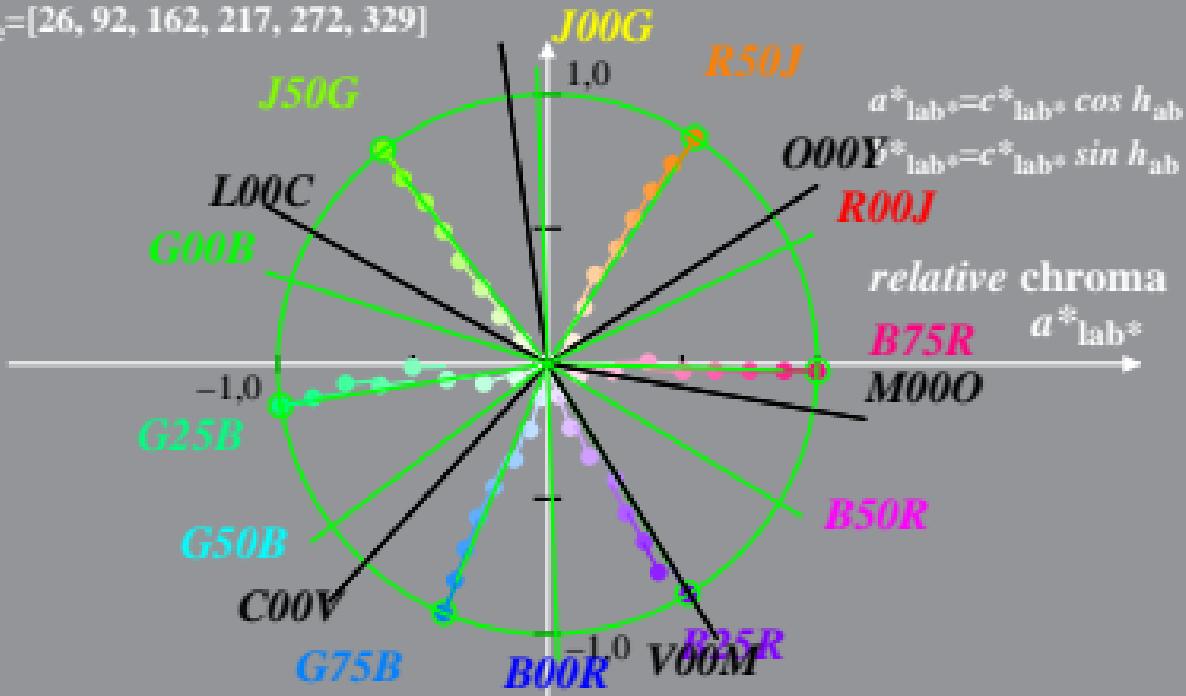
$$c^*_{lab*} = C^*_{ab,a} / C^*_{ab,a,M}$$

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

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

$M$ =Maximum colour

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



Adapted (a) CIELAB ( $C^*_{ab,a}$ ,  $L^*$ ) and relative CIELAB ( $c^*_{lab*}$ ,  $I^*_{lab*}$ )

System: HE81\_HRS27\_96\_D65\_75%\_O0  $I^*_{lab*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

$h_{ab,d} = [33, 98, 150, 227, 301, 350]$

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

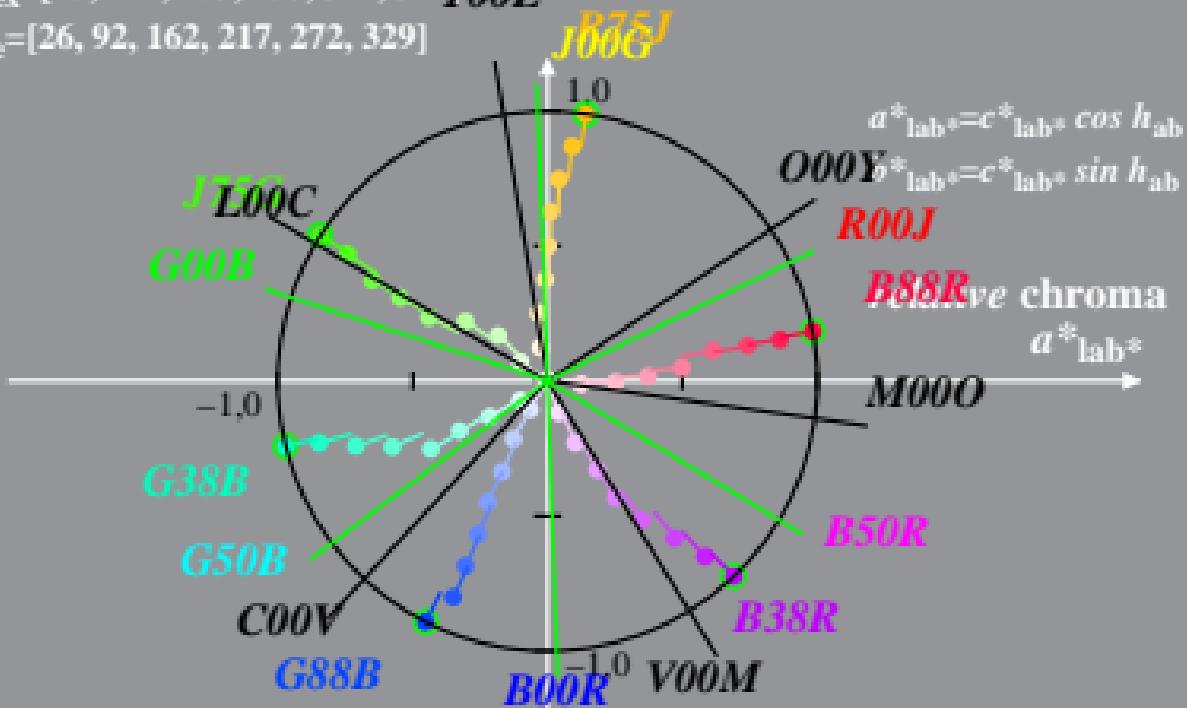
$h_{ab,ex} = [75, 144, 203, 258, 314, 371]$

$Y00L$

$b^*_{lab*}$  M=Maximum colour

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

$J00GJ$



Adapted (a) CIELAB ( $C^*_{ab,a}$ ,  $L^*$ ) and relative CIELAB ( $c^*_{lab*}$ ,  $I^*_{lab*}$ )

System: HE81\_HRS27\_96\_D65\_75%\_O1

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

CIELAB hue angles:

$$h_{ab,d} = [33, 98, 150, 227, 301, 350]$$

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

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

$b^*_{lab*}$  M=Maximum colour

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

