

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

System: HE86\_HRS16\_96\_D65\_00%\_O0  $I^*_{lab*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

$h_{ab,d} = [32, 99, 151, 227, 296, 348]$

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

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

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

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

$J00G$

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

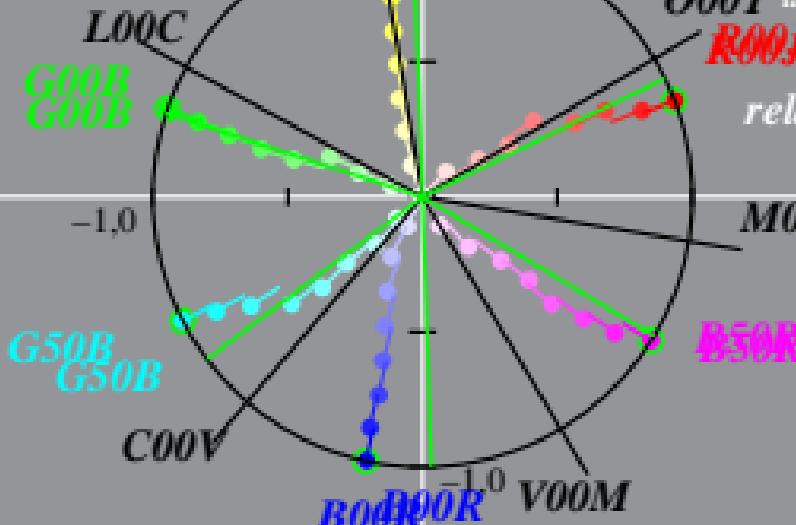
$$Y^*_{lab*} = c^*_{lab*} \sin h_{ab}$$

$R00J$

relative chroma

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

$M000$



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

System: HE86\_HRS16\_96\_D65\_00%\_O1

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

CIELAB hue angles:

$$h_{ab,d} = [32, 99, 151, 227, 296, 348]$$

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

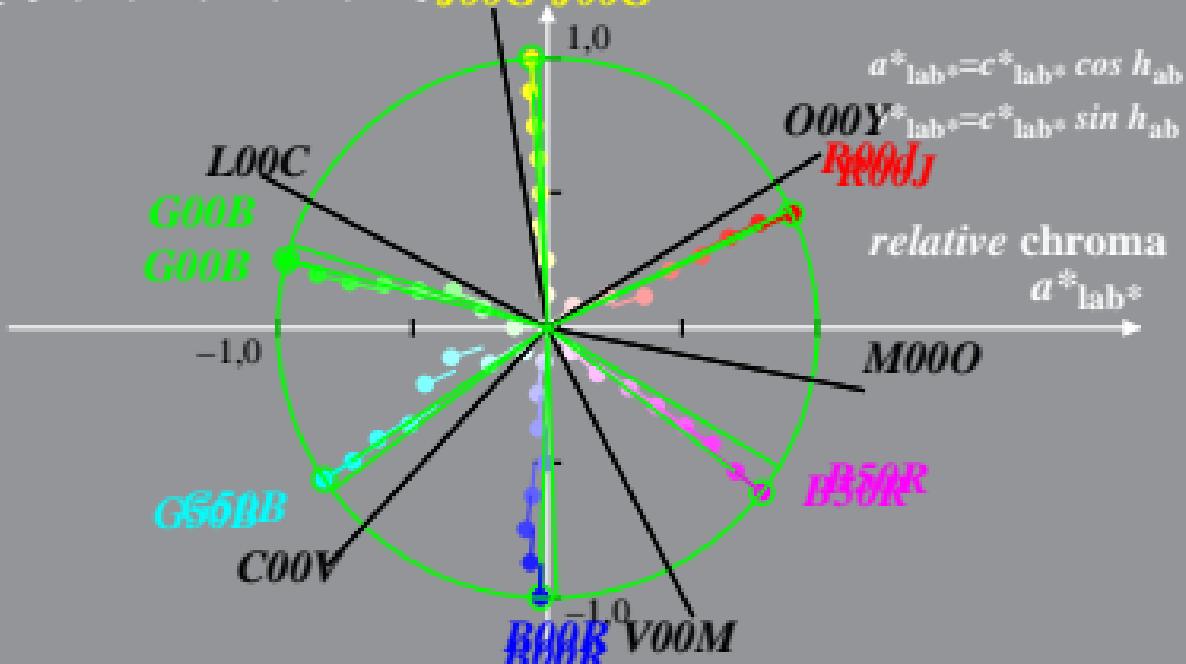
$$c^*_{lab*} = C^*_{ab,a} / C^*_{ab,a,M}$$

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

$$Y00L$$

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

$$J00G \quad J00G$$



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

System: HE86\_HRS16\_96\_D65\_25%\_O0  $I^*_{lab*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

$$h_{ab,d} = [32, 99, 151, 227, 296, 348]$$

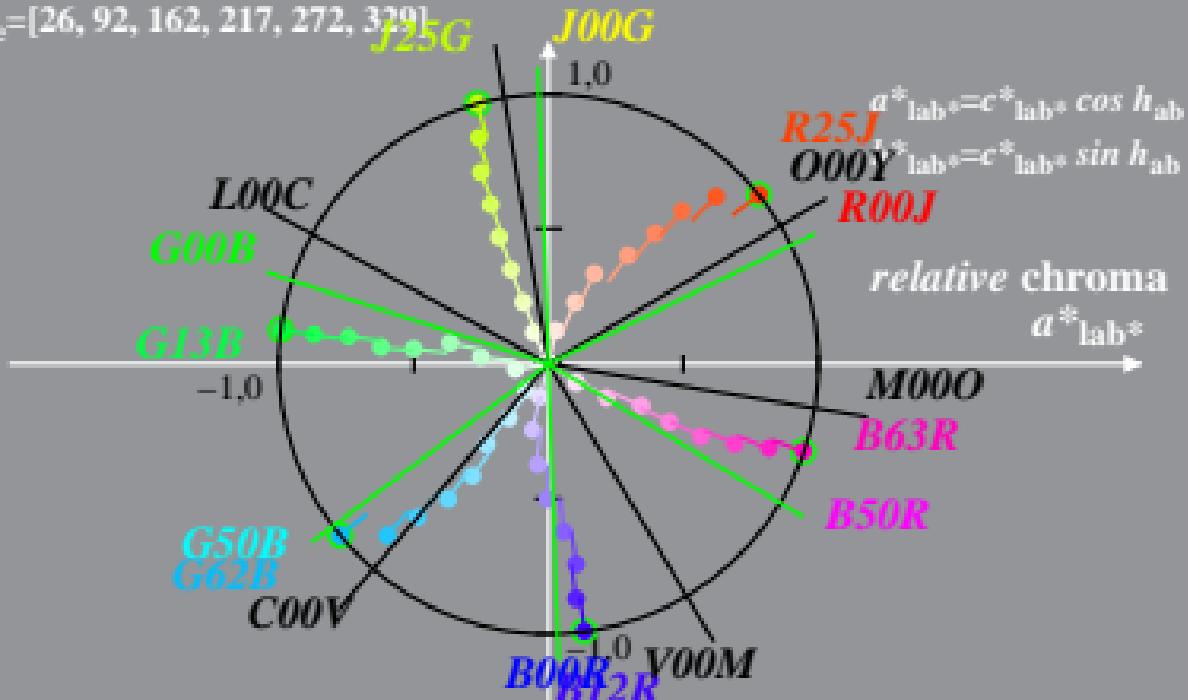
$$c^*_{lab*} = C^*_{ab,a} / C^*_{ab,a,M}$$

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

$Y00L$

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

$J25G$   $J00G$



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

System: HE86\_HRS16\_96\_D65\_25%\_O1

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

CIELAB hue angles:

$$h_{ab,d} = [32, 99, 151, 227, 296, 348]$$

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

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

$Y00L$

$M$ =Maximum colour

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

$J25G$

$J00G$

$L00C$

$G00B$

$G13B$

$4,0$

$G50B$

$G00V$

$1,0$

$-1,0$

$R25J$

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

$O00Y$

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

$R00J$

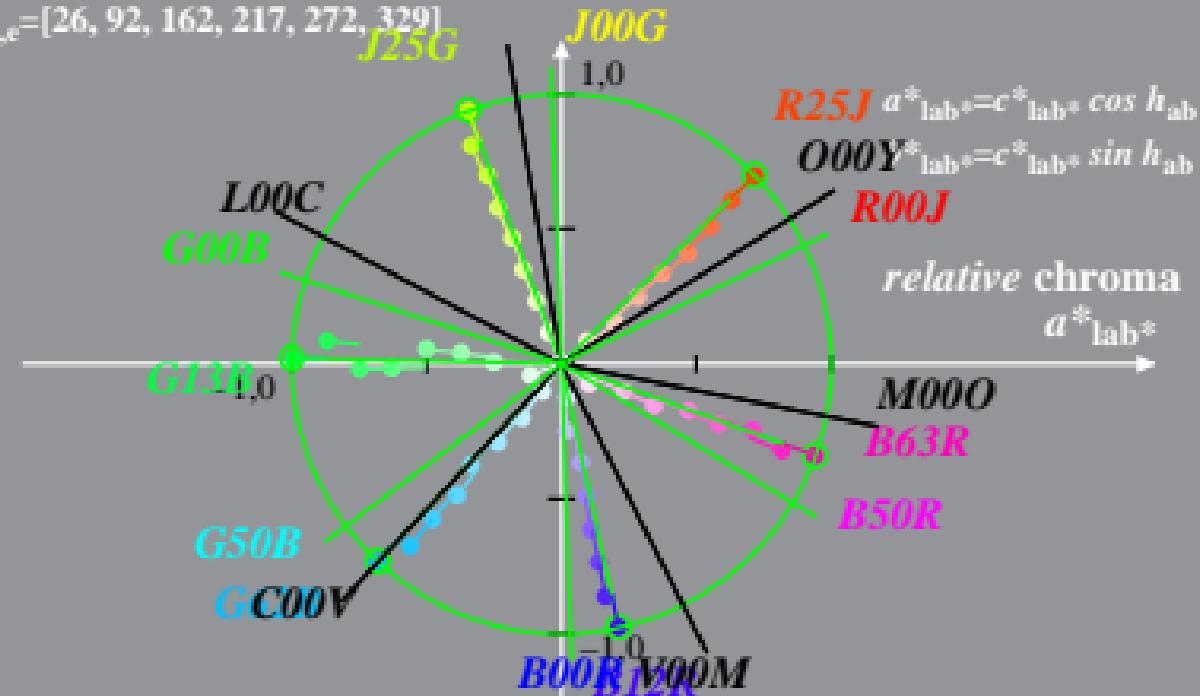
relative chroma

$a^*_{lab*}$

$M00O$

$B63R$

$B50R$



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

System: HE86\_HRS16\_96\_D65\_50%\_O0  $I^*_{lab*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

$$h_{ab,d} = [32, 99, 151, 227, 296, 348]$$

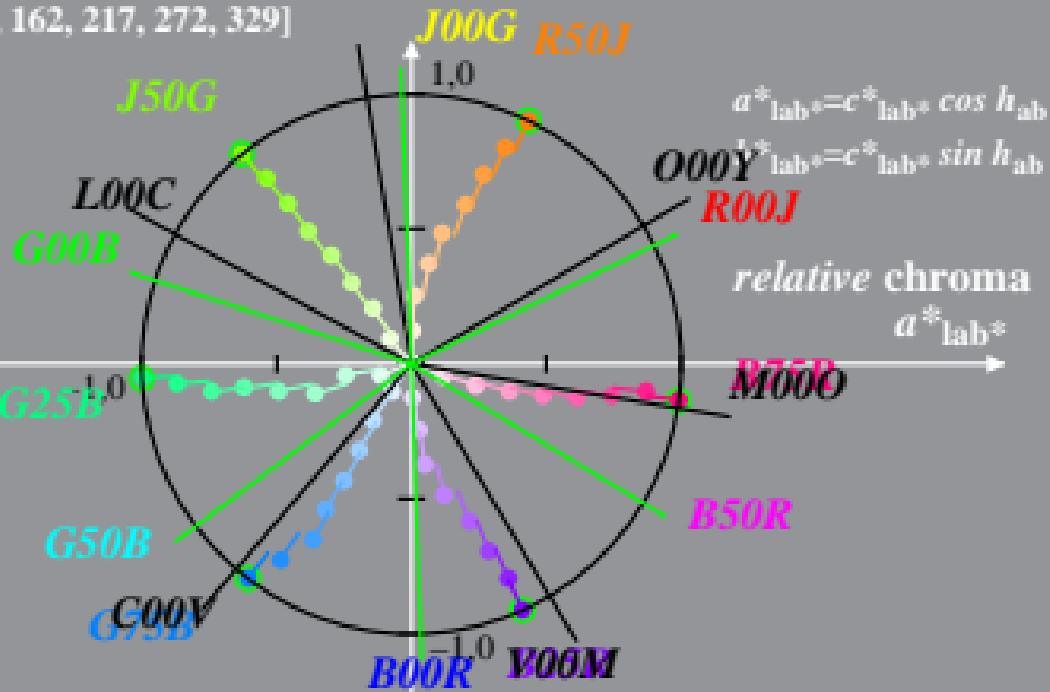
$$c^*_{lab*} = C^*_{ab,a} / C^*_{ab,a,M}$$

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

$$Y00L$$

$M$ =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: HE86\_HRS16\_96\_D65\_50%\_O1

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

CIELAB hue angles:

$$h_{ab,d} = [32, 99, 151, 227, 296, 348]$$

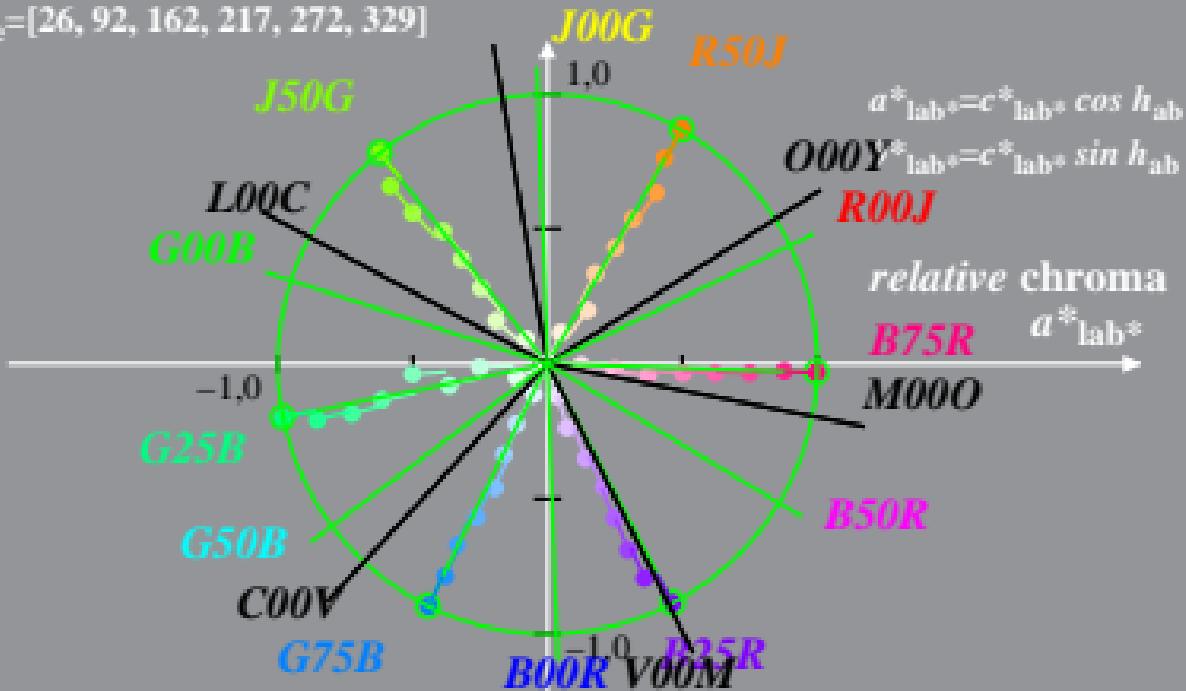
$$c^*_{lab*} = C^*_{ab,a} / C^*_{ab,a,M}$$

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

$$Y00L$$

$M$ =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: HE86\_HRS16\_96\_D65\_75%\_O0       $I^*_{lab*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

CIELAB hue angles:

$h_{ab,d} = [32, 99, 151, 227, 296, 348]$

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

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

$b^*_{lab*}$

$M = \text{Maximum colour}$

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

$Y00L$

$J^*_{00GJ}$

$J^*_{L00C}$

$G00B$

$G38B$

$G50B$

$C00V$

$G88B$

$B00R$

$V00M$

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

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

$R00J$

$B38R$

itive chroma

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

$M00O$

$B50R$

$V00M$

$B38R$

$V00M$

$B50R$

$V00M$



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

System: HE86\_HRS16\_96\_D65\_75%\_O1

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

CIELAB hue angles:

$$h_{ab,d} = [32, 99, 151, 227, 296, 348]$$

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

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

$Y00L$

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

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

