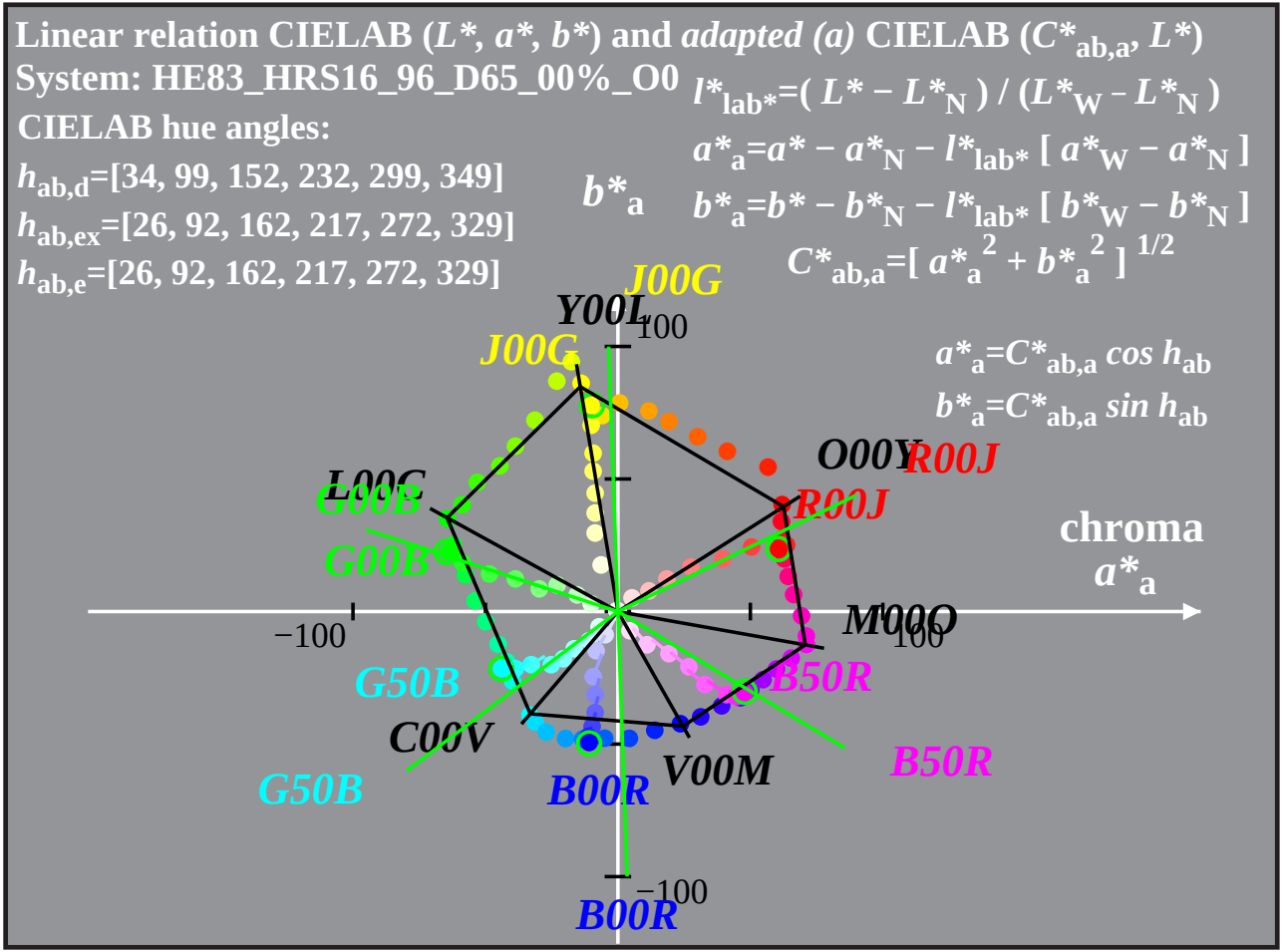
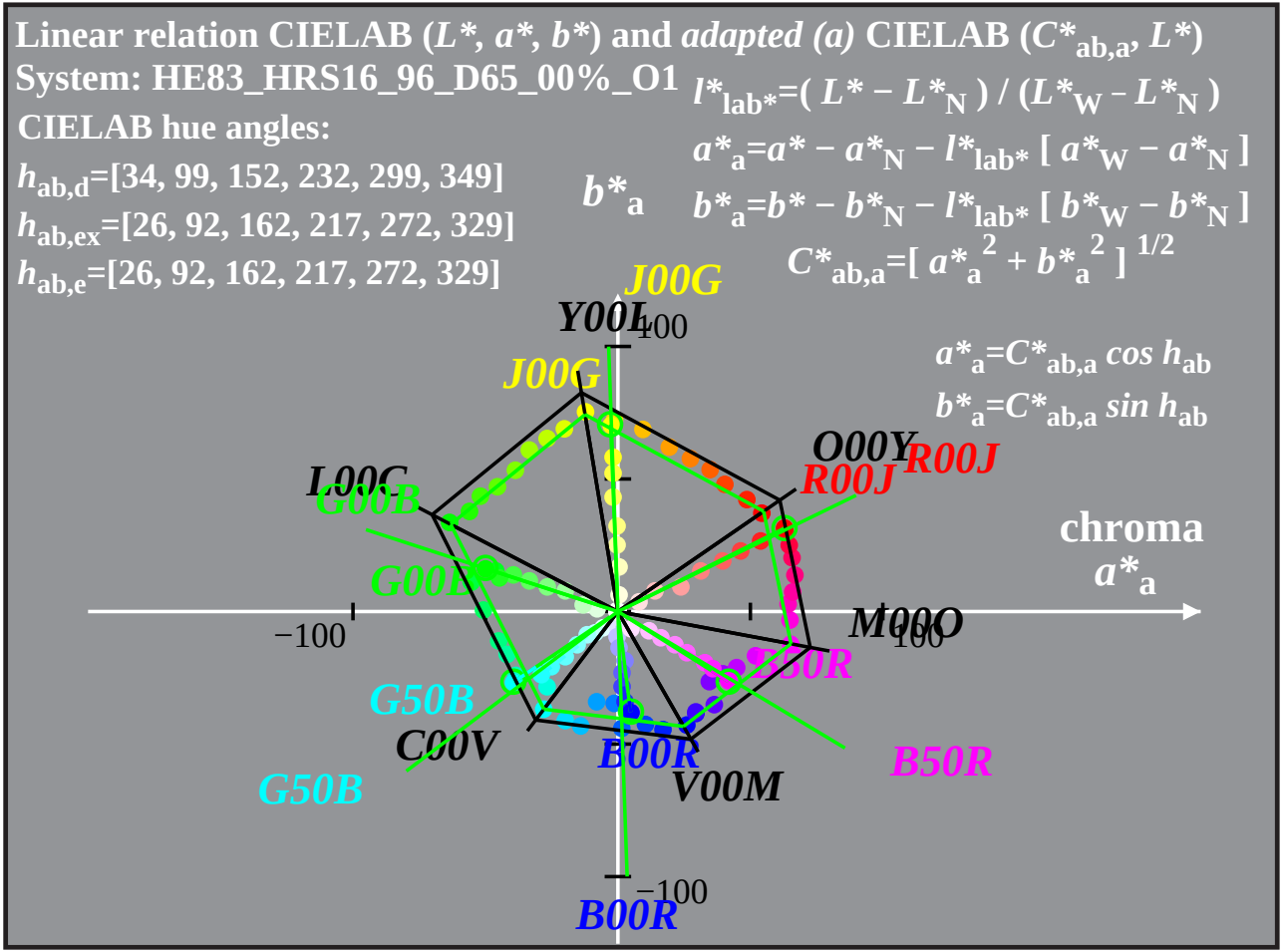
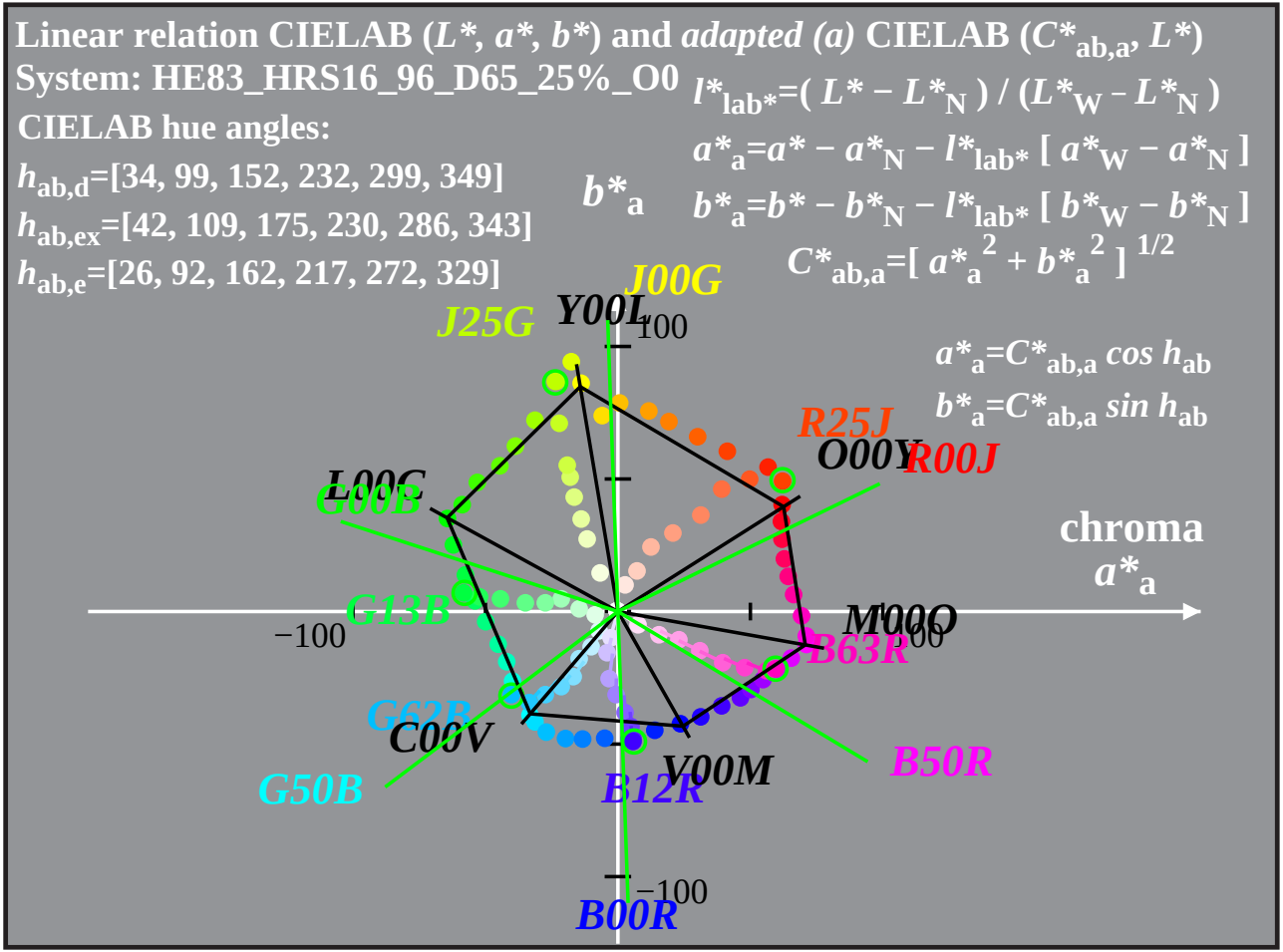


HE830−4A, 1; cf1=0.90; nt=0.18; nx=1.0



HE830−4A, 2; cf1=0.90; nt=0.18; nx=1.0



HE830−4A, 3; cf1=0.90; nt=0.18; nx=1.0

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

System: HE83_HRS16_96_D65_25%_O1

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

$a^*_a=a^* - a^*_N - l^*_{lab^*} [a^*_W - a^*_N]$

$b^*_a=b^* - b^*_N - l^*_{lab^*} [b^*_W - b^*_N]$

$C^*_{ab,a}=[a^{*2}_a + b^{*2}_a]^{1/2}$

CIELAB hue angles:

$h_{ab,d}$=[34, 99, 152, 232, 299, 349]

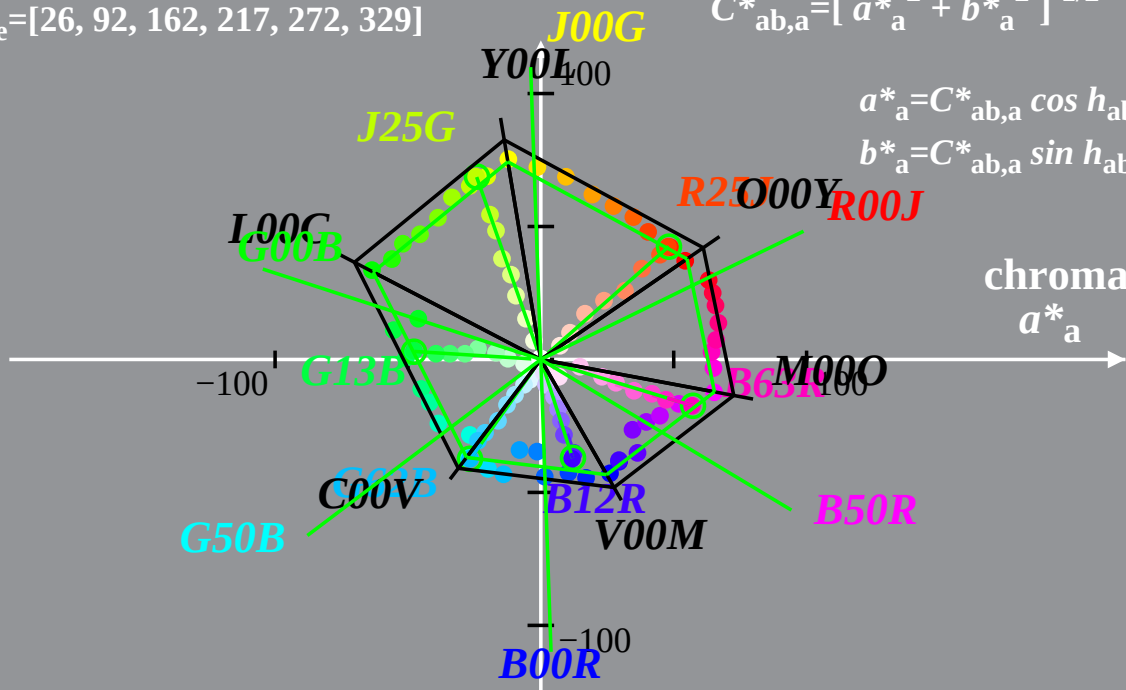
$h_{ab,ex}$=[42, 109, 175, 230, 286, 343]

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

b^*_a

$a^*_a=C^*_{ab,a} \cos h_{ab}$

$b^*_a=C^*_{ab,a} \sin h_{ab}$



HE830−4A, 4; cf1=0.90; nt=0.18; nx=1.0

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

System: HE83_HRS16_96_D65_50%_O0

CIELAB hue angles:

$h_{ab,d}$=[34, 99, 152, 232, 299, 349]

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

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

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

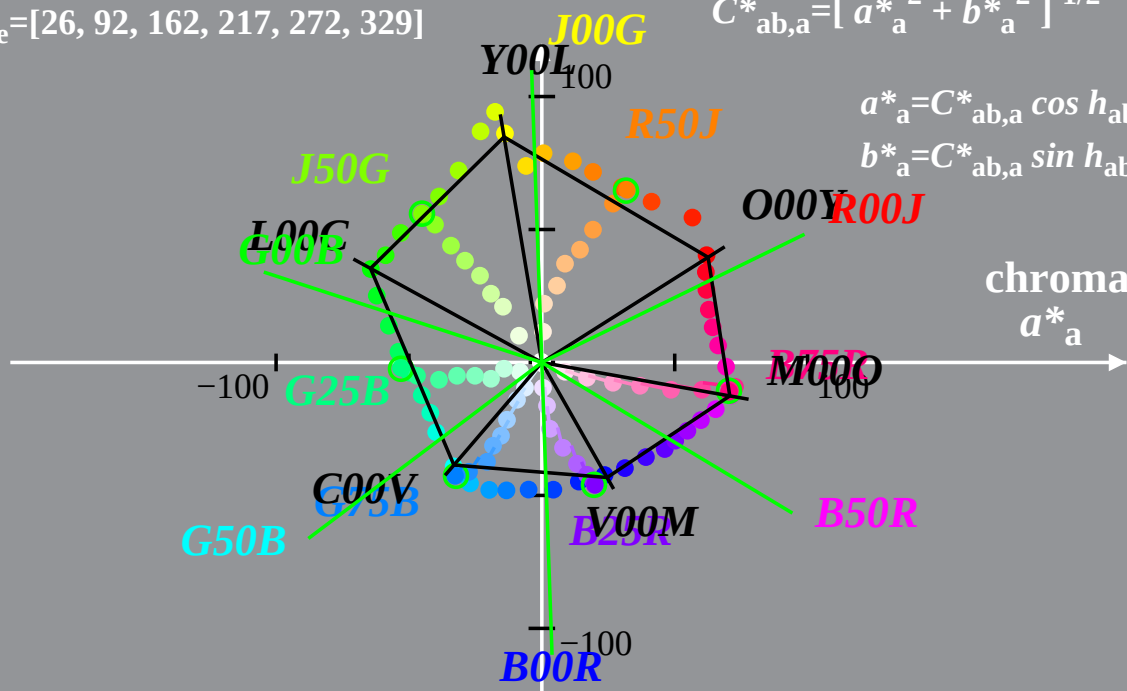
$a^*_a=a^* - a^*_N - l^*_{lab^*} [a^*_W - a^*_N]$

$b^*_a=b^* - b^*_N - l^*_{lab^*} [b^*_W - b^*_N]$

$C^*_{ab,a}=[a^{*2}_a + b^{*2}_a]^{1/2}$

$a^*_a=C^*_{ab,a} \cos h_{ab}$

$b^*_a=C^*_{ab,a} \sin h_{ab}$



HE830−4A, 5; cf1=0.90; nt=0.18; nx=1.0

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

System: HE83_HRS16_96_D65_50%_O1

CIELAB hue angles:

$h_{ab,d}$=[34, 99, 152, 232, 299, 349]

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

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

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

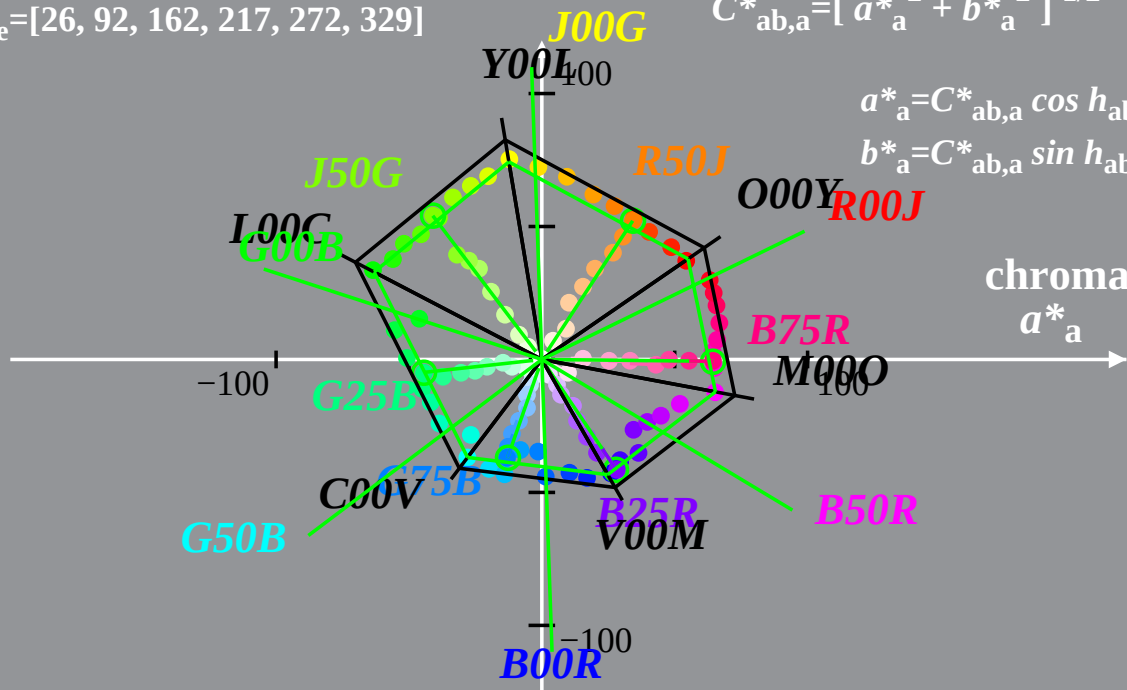
$$a^*_a=a^* - a^*_N - l^*_{lab^*} [a^*_W - a^*_N]$$

$$b^*_a=b^* - b^*_N - l^*_{lab^*} [b^*_W - b^*_N]$$

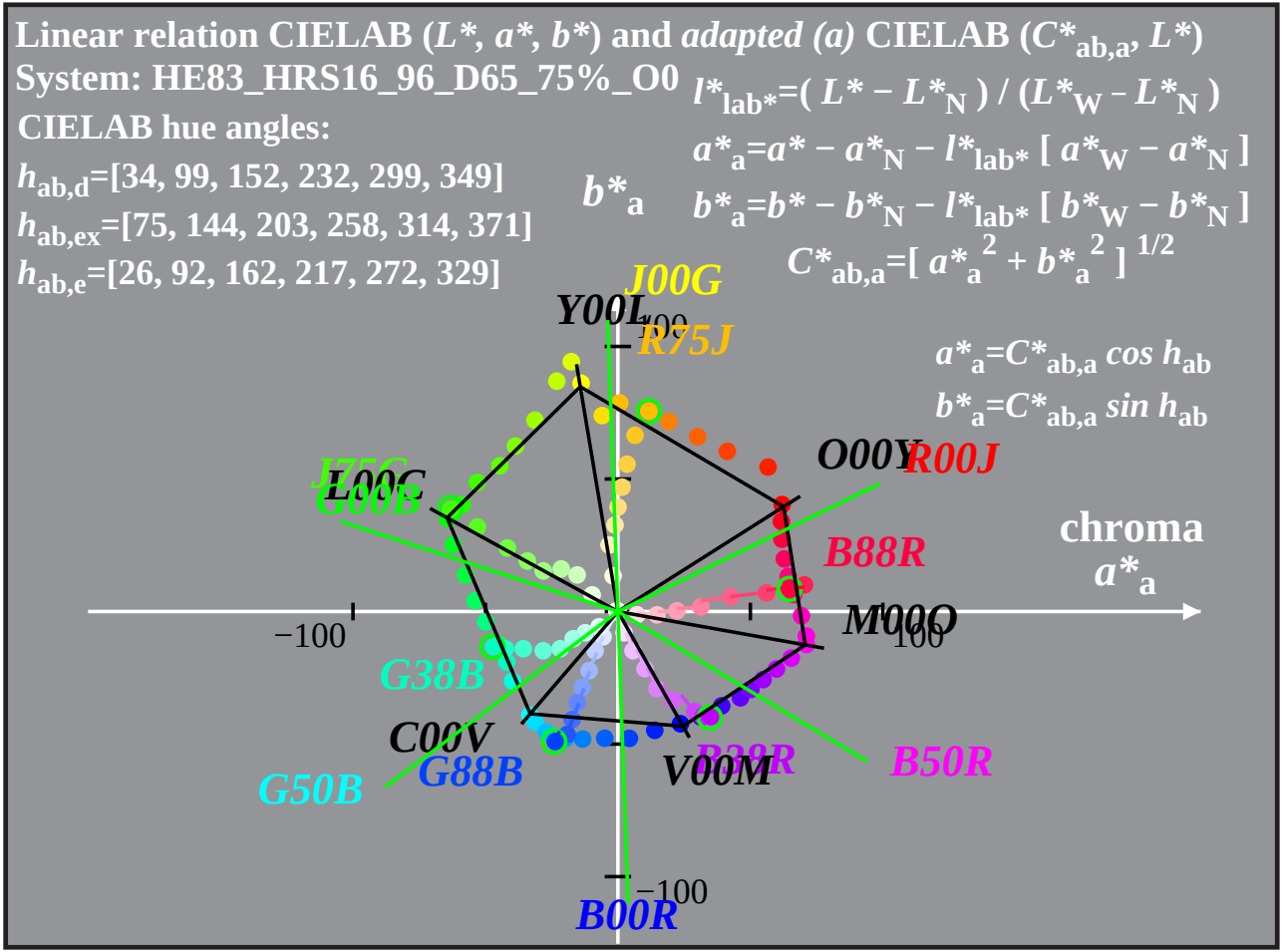
$$C^*_{ab,a}=[a^{*2}_a + b^{*2}_a]^{1/2}$$

$$a^*_a=C^*_{ab,a} \cos h_{ab}$$

$$b^*_a=C^*_{ab,a} \sin h_{ab}$$



HE830−4A, 6; cf1=0.90; nt=0.18; nx=1.0



HE830−4A, 7; cf1=0.90; nt=0.18; nx=1.0

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

System: HE83_HRS16_96_D65_75%_O1

CIELAB hue angles:

$h_{ab,d}$=[34, 99, 152, 232, 299, 349]

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

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

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

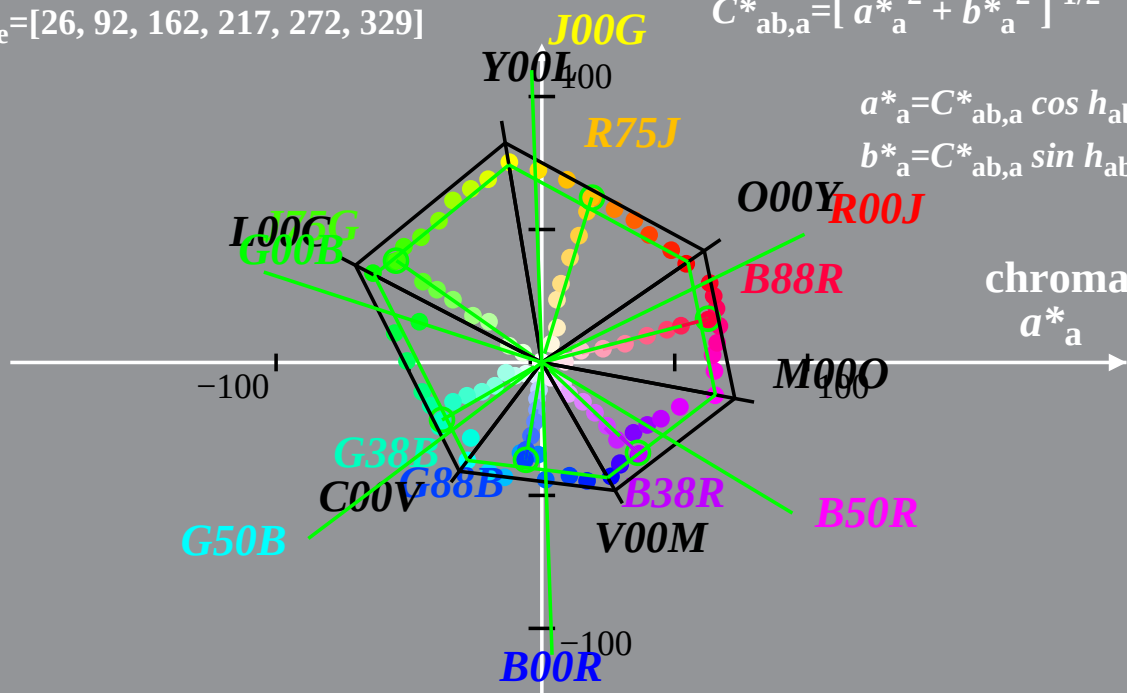
$a^*_a=a^* - a^*_N - l^*_{lab^*} [a^*_W - a^*_N]$

$b^*_a=b^* - b^*_N - l^*_{lab^*} [b^*_W - b^*_N]$

$C^*_{ab,a}=[a^{*2}_a + b^{*2}_a]^{1/2}$

$a^*_a=C^*_{ab,a} \cos h_{ab}$

$b^*_a=C^*_{ab,a} \sin h_{ab}$



HE830−4A, 8; cf1=0.90; nt=0.18; nx=1.0