

Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: HE86_HRS16_96_D65_00%_O0 $l^*_{lab} = (L^* - L^*_N) / (L^*_W - L^*_N)$
 CIELAB hue angles:

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

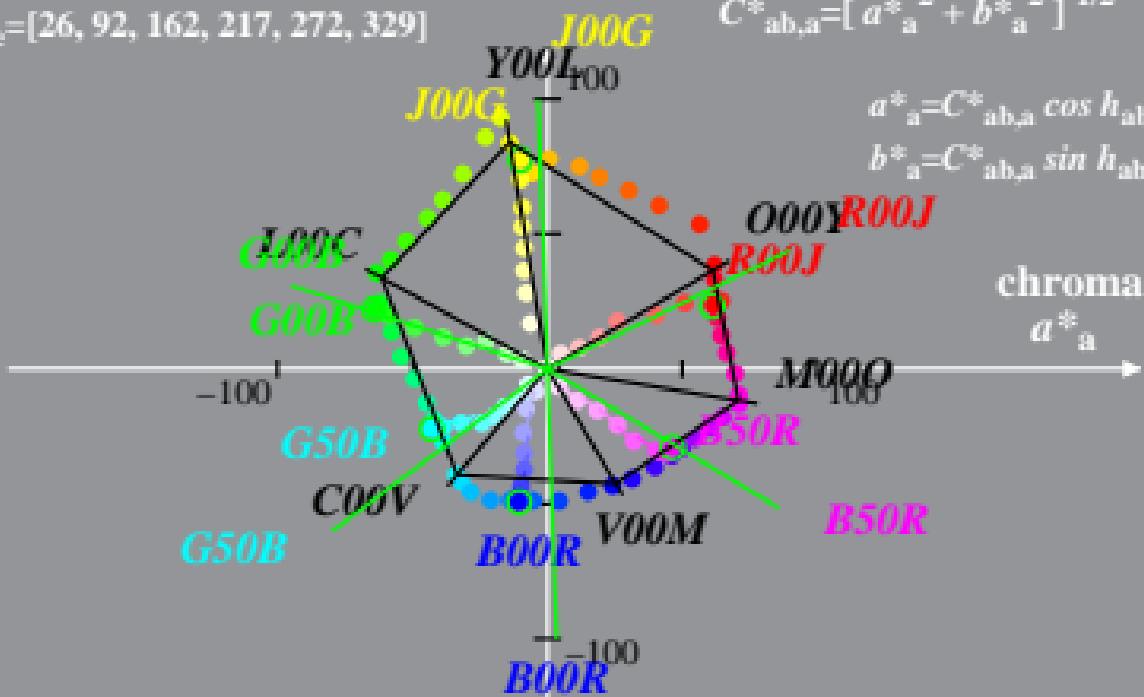
$$h_{ab,ex} = [26, 92, 162, 217, 272, 329]$$

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

$$a^*_{ab,a} = a^* - a^*_N - l^*_{lab} \cdot [a^*_W - a^*_N]$$

$$b^*_{ab,a} = b^* - b^*_N - l^*_{lab} \cdot [b^*_W - b^*_N]$$

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



Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: HE86_HRS16_96_D65_00%_O1 $l^*_{lab} = (L^* - L^*_N) / (L^*_W - L^*_N)$
 CIELAB hue angles:

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

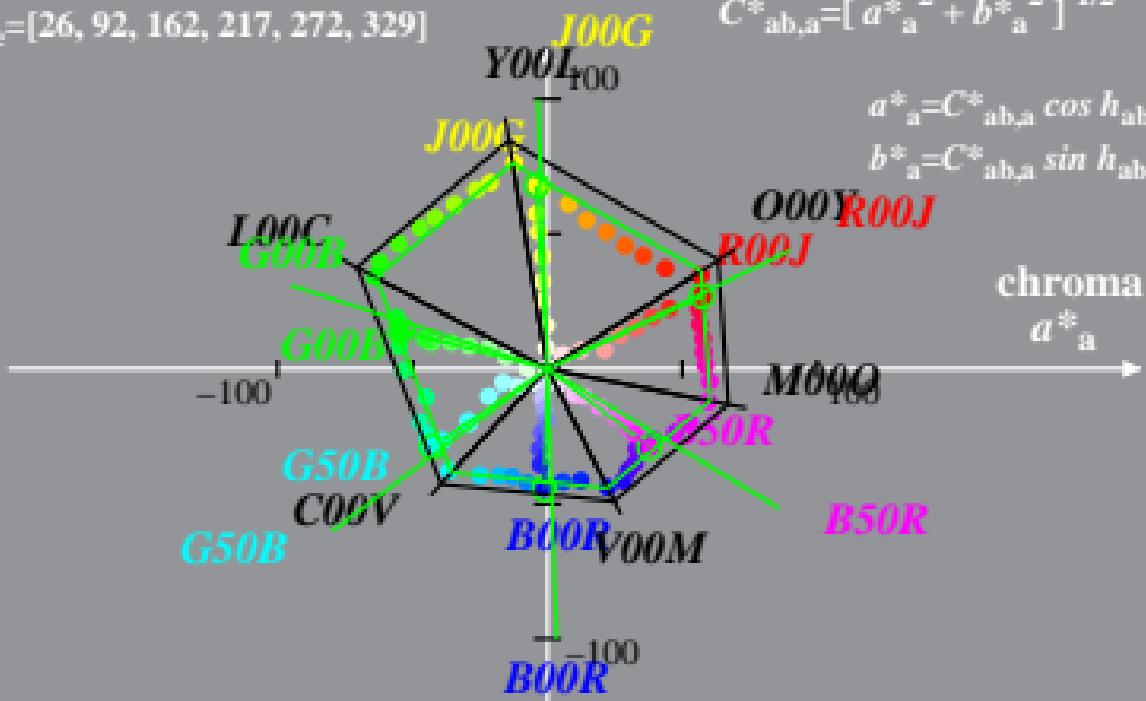
$$h_{ab,ex} = [26, 92, 162, 217, 272, 329]$$

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

$$a^*_{ab,a} = a^* - a^*_N - l^*_{lab} \cdot [a^*_W - a^*_N]$$

$$b^*_{ab,a} = b^* - b^*_N - l^*_{lab} \cdot [b^*_W - b^*_N]$$

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



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

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

chroma
 a^*_{ab}

Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: HE86_HRS16_96_D65_25%_O0 $l^*_{lab} = (L^* - L^*_N) / (L^*_W - L^*_N)$
 CIELAB hue angles:

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

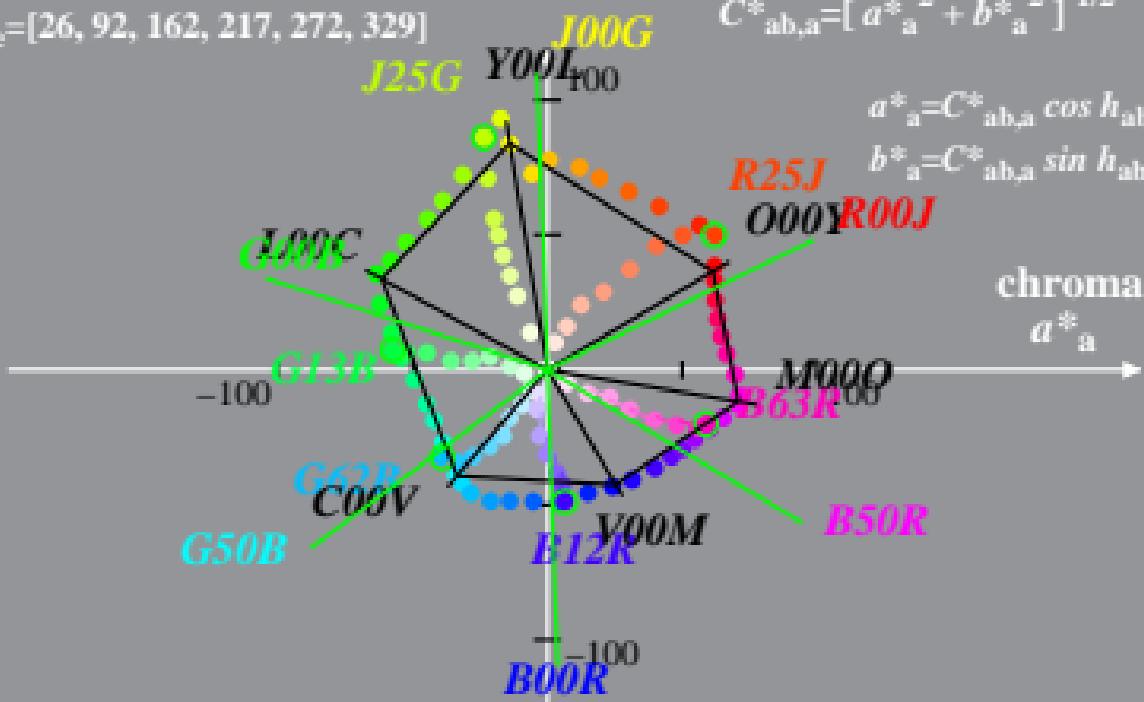
$$h_{ab,ex} = [42, 109, 175, 230, 286, 343]$$

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

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

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

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



Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: HE86_HRS16_96_D65_25%-O1 $l^*_{lab} = (L^* - L^*_N) / (L^*_W - L^*_N)$
 CIELAB hue angles:

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

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

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

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

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

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

J00G

Y00I_{t00}

J25G

**L00C
G00R**

-100

100

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

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

chroma
 a^*_{ab}

R25J000YR00J

M00Q

B50R

V00M

B00R

**G50B
C00V**

G13B

B12R

Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: HE86_HRS16_96_D65_50%_O0 $l^*_{lab} = (L^* - L^*_N) / (L^*_W - L^*_N)$
 CIELAB hue angles:

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

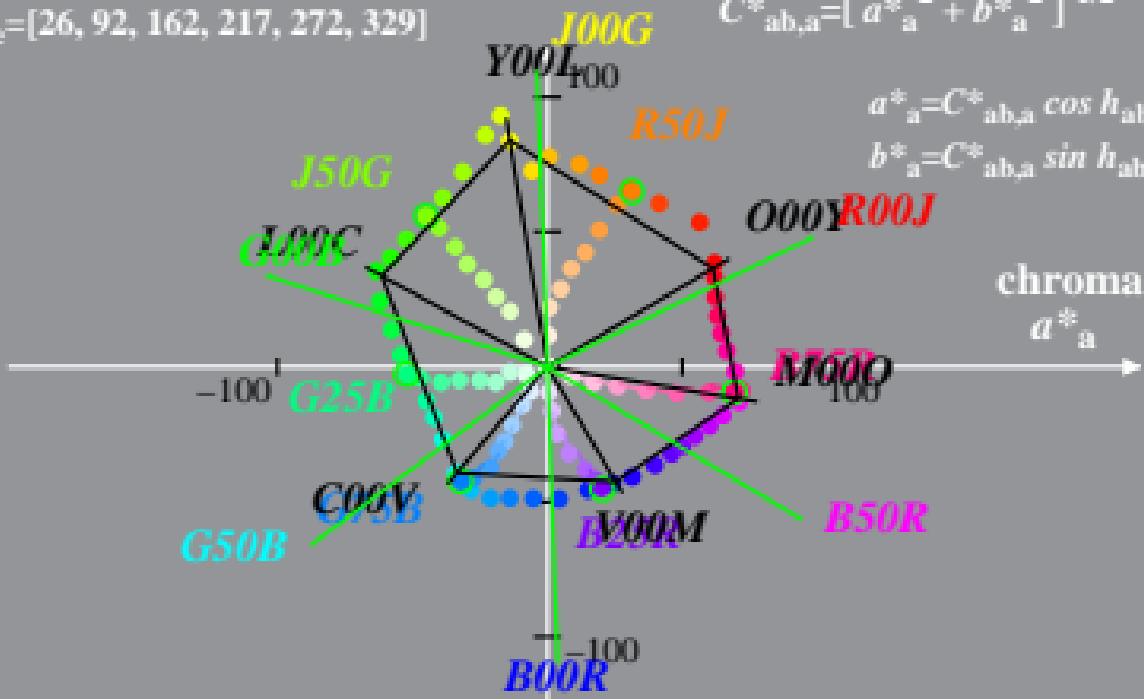
$$h_{ab,ex} = [59, 127, 189, 244, 300, 357]$$

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

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

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

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



Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: HE86_HRS16_96_D65_50%-O1 $l^*_{lab} = (L^* - L^*_N) / (L^*_W - L^*_N)$
 CIELAB hue angles:

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

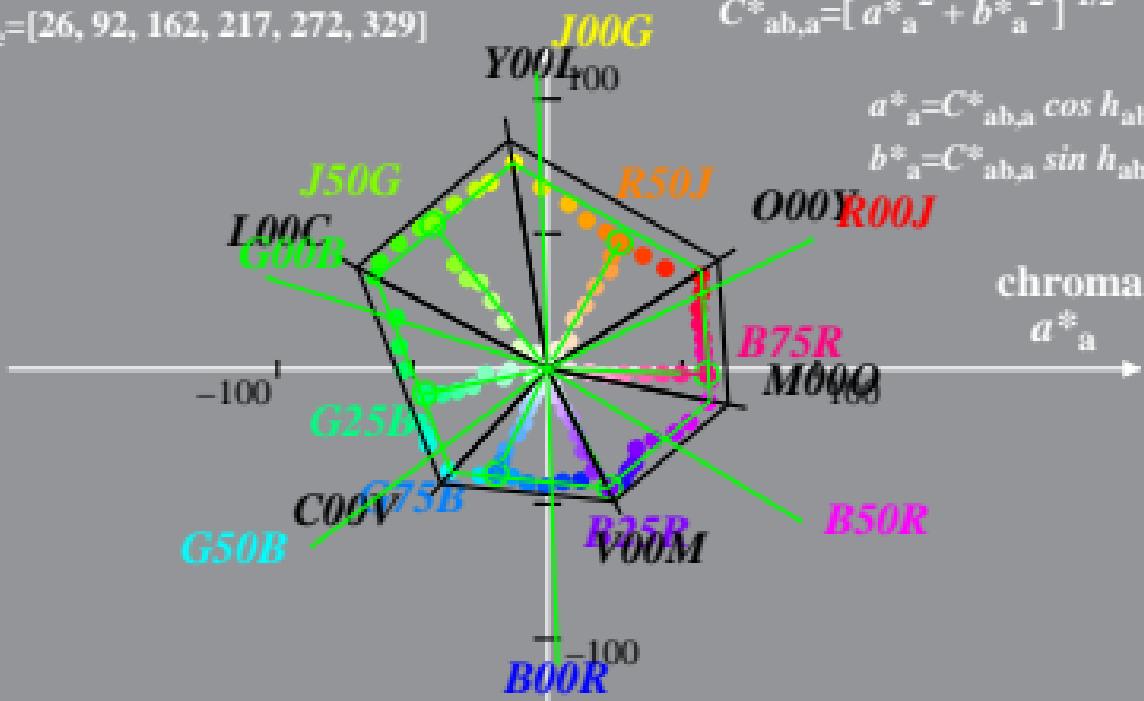
$$a^*_{ab} = a^* - a^*_N - l^*_{lab} [a^*_W - a^*_N]$$

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

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

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

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



Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
 System: HE86_HRS16_96_D65_75%_O0 $l^*_{lab} = (L^* - L^*_N) / (L^*_W - L^*_N)$
 CIELAB hue angles:

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

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

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

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

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

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

J00G

Y00L

R75J

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

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

O00YR00J

B88R

M00Q

chroma

a^*_{ab}

-100

G38B

C00V

G50B

-100

B00R

V00M

B50R

HE860-4A, 7; cf1=0.90; nt=0.01; nx=1.3

Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,a}, L^*$)
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$$h_{ab,d} = [32, 99, 151, 227, 296, 348]$$

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