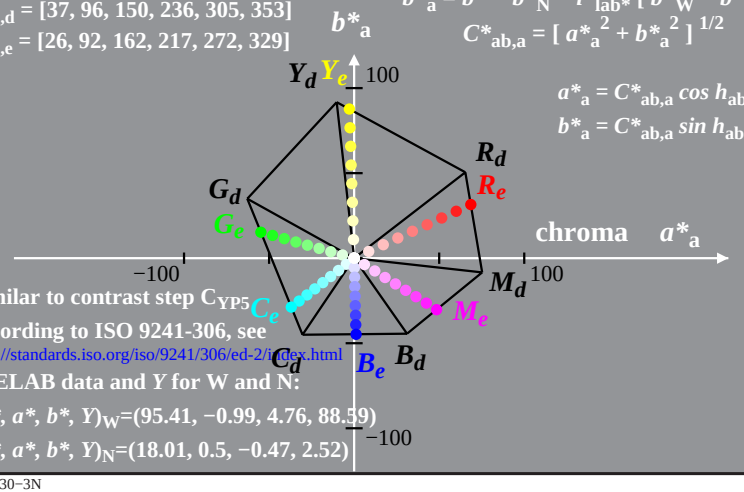
Linear relation CIELAB (L^*, a^*, b^*) and *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*)
Offset Reflective System: ORS18a

$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$
$a^*_a = a^* - a^*_N - l^*_{lab^*} [a^*_W - a^*_N]$
$b^*_a = b^* - b^*_N - l^*_{lab^*} [b^*_W - b^*_N]$
$C^*_{ab,a} = [a^{*2}_a + b^{*2}_a]^{1/2}$

CIELAB hue angles *RYGCBM*:
$h_{ab,d}$ = [37, 96, 150, 236, 305, 353]
$h_{ab,e}$ = [26, 92, 162, 217, 272, 329]

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



Similar to contrast step C_{YP5}
according to ISO 9241-306, see
http://standards.iso.org/iso/9241/306/ed-2/index.html
CIELAB data and *Y* for W and N:
$(L^*, a^*, b^*, Y)_W$=(95.41, −0.99, 4.76, 88.59)
$(L^*, a^*, b^*, Y)_N$=(18.01, 0.5, −0.47, 2.52)

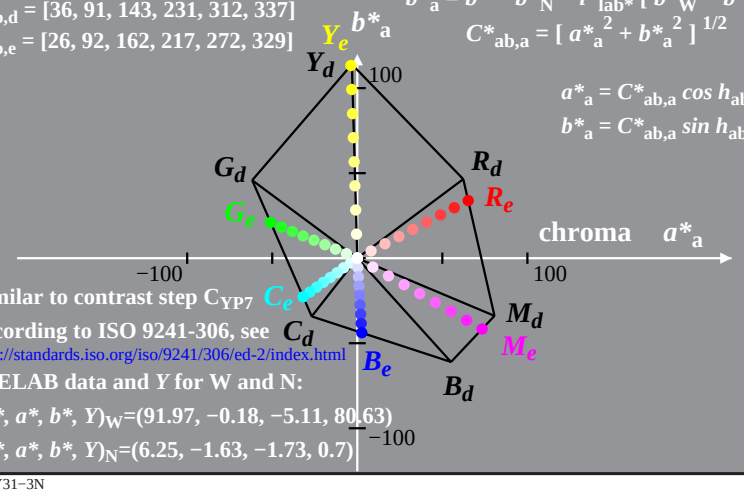
AEY30−3N

Linear relation CIELAB (L^*, a^*, b^*) and *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*)
Photo Reflective System: FRS06a

$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$
$a^*_a = a^* - a^*_N - l^*_{lab^*} [a^*_W - a^*_N]$
$b^*_a = b^* - b^*_N - l^*_{lab^*} [b^*_W - b^*_N]$
$C^*_{ab,a} = [a^{*2}_a + b^{*2}_a]^{1/2}$

CIELAB hue angles *RYGCBM*:
$h_{ab,d}$ = [36, 91, 143, 231, 312, 337]
$h_{ab,e}$ = [26, 92, 162, 217, 272, 329]

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



Similar to contrast step C_{YP7}
according to ISO 9241-306, see
http://standards.iso.org/iso/9241/306/ed-2/index.html
CIELAB data and *Y* for W and N:
$(L^*, a^*, b^*, Y)_W$=(91.97, −0.18, −5.11, 80.63)
$(L^*, a^*, b^*, Y)_N$=(6.25, −1.63, −1.73, 0.7)

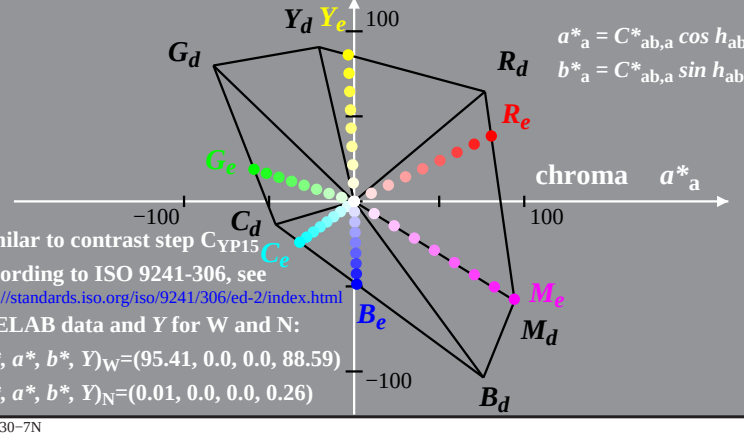
AEY31−3N

Linear relation CIELAB (L^*, a^*, b^*) and *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*)
Television Luminous System: TLS00a

$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$
$a^*_a = a^*$
$b^*_a = b^*$
$C^*_{ab,a} = [a^{*2}_a + b^{*2}_a]^{1/2}$

CIELAB hue angles *RYGCBM*:
$h_{ab,d}$ = [40, 102, 136, 196, 306, 328]
$h_{ab,e}$ = [26, 92, 162, 217, 272, 329]

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



Similar to contrast step C_{YP15}
according to ISO 9241-306, see
http://standards.iso.org/iso/9241/306/ed-2/index.html
CIELAB data and *Y* for W and N:
$(L^*, a^*, b^*, Y)_W$=(95.41, 0.0, 0.0, 88.59)
$(L^*, a^*, b^*, Y)_N$=(0.01, 0.0, 0.0, 0.26)

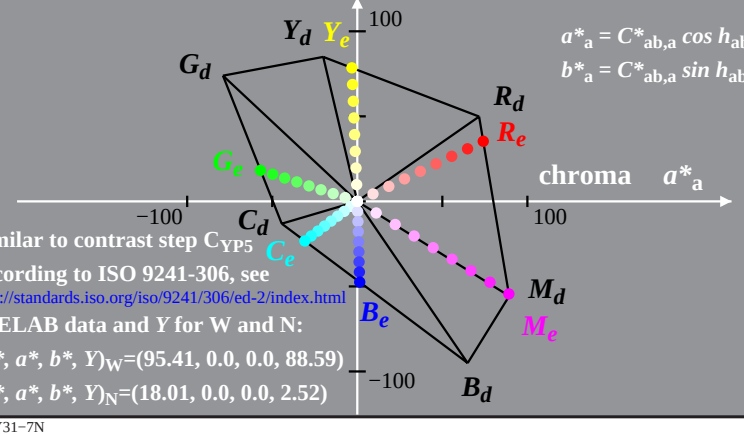
AEY30−7N

Linear relation CIELAB (L^*, a^*, b^*) and *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*)
Television Luminous System: TLS18a

$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$
$a^*_a = a^*$
$b^*_a = b^*$
$C^*_{ab,a} = [a^{*2}_a + b^{*2}_a]^{1/2}$

CIELAB hue angles *RYGCBM*:
$h_{ab,d}$ = [34, 103, 136, 196, 304, 328]
$h_{ab,e}$ = [26, 92, 162, 217, 272, 329]

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



Similar to contrast step C_{YP5}
according to ISO 9241-306, see
http://standards.iso.org/iso/9241/306/ed-2/index.html
CIELAB data and *Y* for W and N:
$(L^*, a^*, b^*, Y)_W$=(95.41, 0.0, 0.0, 88.59)
$(L^*, a^*, b^*, Y)_N$=(18.01, 0.0, 0.0, 2.52)

AEY31−7N