

Linear relation *adapted* (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: HE89_FRS09_92_D65_00%_O0

CIELAB hue angles:

$h_{ab,d}=[35, 92, 143, 224, 313, 338]$

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

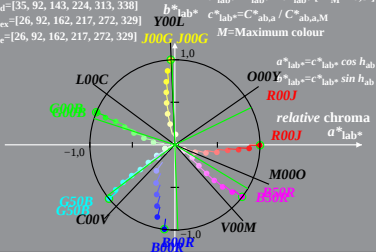
$h_{ab,e}=[26, 92, 162, 217, 272, 329]$

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$t^*_{lab^*} = l^*_{lab^*} - c^*_{lab^*} [l^*_M - 0,5]$$

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

M=Maximum colour



Linear relation *adapted* (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , l^*)
 System: HE89_FRS09_92_D65_00%_O1

CIELAB hue angles:

$h_{ab,d}=[35, 92, 143, 224, 313, 338]$

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

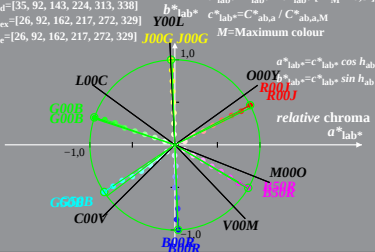
$h_{ab,e}=[26, 92, 162, 217, 272, 329]$

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$t^*_{lab^*} = l^*_{lab^*} - c^*_{lab^*} [l^*_M - 0,5]$$

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

M=Maximum colour



Linear relation *adapted* (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: HE89_FRS09_92_D65_25%_O0

CIELAB hue angles:

$h_{ab,d}=[35, 92, 143, 224, 313, 338]$

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

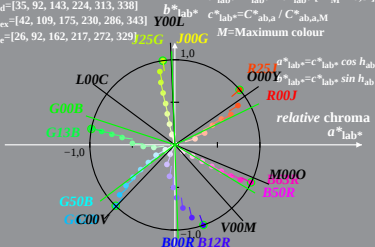
$h_{ab,e}=[26, 92, 162, 217, 272, 329]$

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$t^*_{lab^*} = l^*_{lab^*} - c^*_{lab^*} [l^*_M - 0,5]$$

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

M=Maximum colour



Linear relation *adapted* (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: HE89_FRS09_92_D65_25%_O1

CIELAB hue angles:

$h_{ab,d}=[35, 92, 143, 224, 313, 338]$

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

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

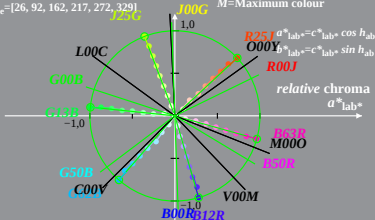
b^*_{lab}
 Y00L

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$t^*_{lab} = l^*_{lab} - c^*_{lab} [l^*_M - 0,5]$$

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

M=Maximum colour



Linear relation *adapted* (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: HE89_FRS09_92_D65_50%_O0

CIELAB hue angles:

$h_{ab,d}=[35, 92, 143, 224, 313, 338]$

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

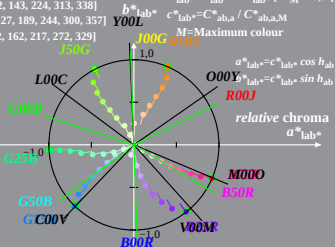
$h_{ab,e}=[26, 92, 162, 217, 272, 329]$

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$t^*_{lab^*} = l^*_{lab^*} - c^*_{lab^*} [l^*_M - 0,5]$$

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

M=Maximum colour



Linear relation *adapted* (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: HE89_FRS09_92_D65_50%_O1

CIELAB hue angles:

$h_{ab,d}=[35, 92, 143, 224, 313, 338]$

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

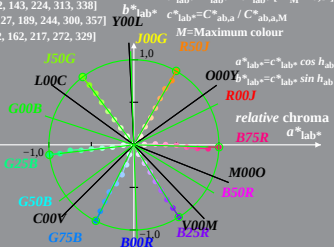
$h_{ab,e}=[26, 92, 162, 217, 272, 329]$

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$t^*_{lab^*} = l^*_{lab^*} - c^*_{lab^*} [l^*_M - 0,5]$$

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

M=Maximum colour



Linear relation *adapted* (a) CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB (c^* , t^*)
 System: HE89_FRS09_92_D65_75%_O0 $t^*_{(a)} = (L^*_{(a)} - L^*_{(b)}) / (L^*_{(a)} - L^*_{(c)})$

CIELAB hue angles:

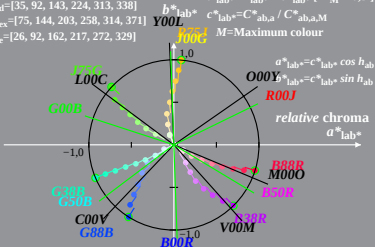
$$h_{\text{gh,d}}=[35, 92, 143, 224, 313, 338]$$
$$h_{\text{sh,ex}}=[75, 144, 203, 258, 314, 371]$$
$$h_{shc}=[26, 92, 162, 217, 272, 329]$$

$$I^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$I_{\text{ab}}^* = I_{\text{ab}}^* - c_{\text{ab}}^* [I_M^* - 0,5]$$

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

M = Maximum colour



HE891-4A. 7: cf1=0.70; nt=0.18; nx=1.0

Linear relation *adapted* (a) CIELAB ($C^*_{ab,a}$, L^*) and relative CIELAB (c^* , t^*)
 System: HE89_FRS09_92_D65_75%_O1

CIELAB hue angles:

$h_{ab,d}=[35, 92, 143, 224, 313, 338]$

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

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

$$l^*_M = (L^*_M - L^*_N) / (L^*_W - L^*_N)$$

$$t^*_{lab^*} = l^*_{lab^*} - c^*_{lab^*} [l^*_M - 0,5]$$

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

M =Maximum colour

