Adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB ($c^*_{lab^*}$, $l^*_{lab^*}$)
System: ORS18

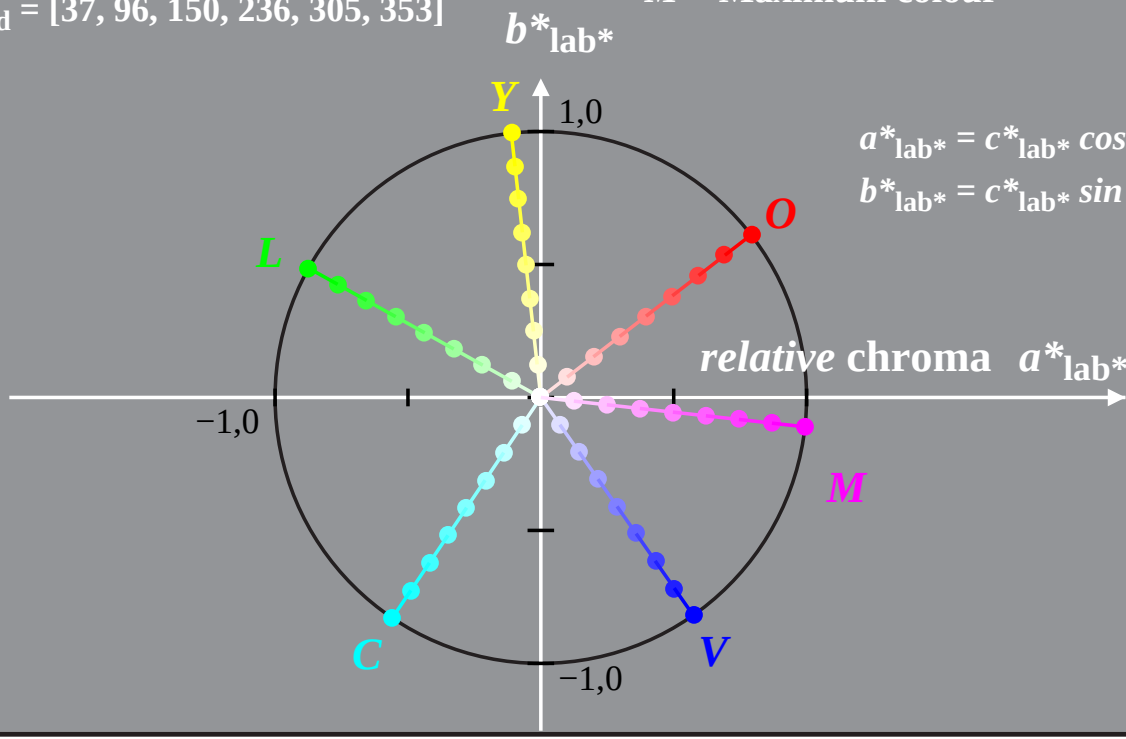
$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

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

M = Maximum colour

CIELAB hue angles:

$h_{ab,d}$ = [37, 96, 150, 236, 305, 353]



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

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

Adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB ($c^*_{lab^*}$, $l^*_{lab^*}$)
System: TLS00

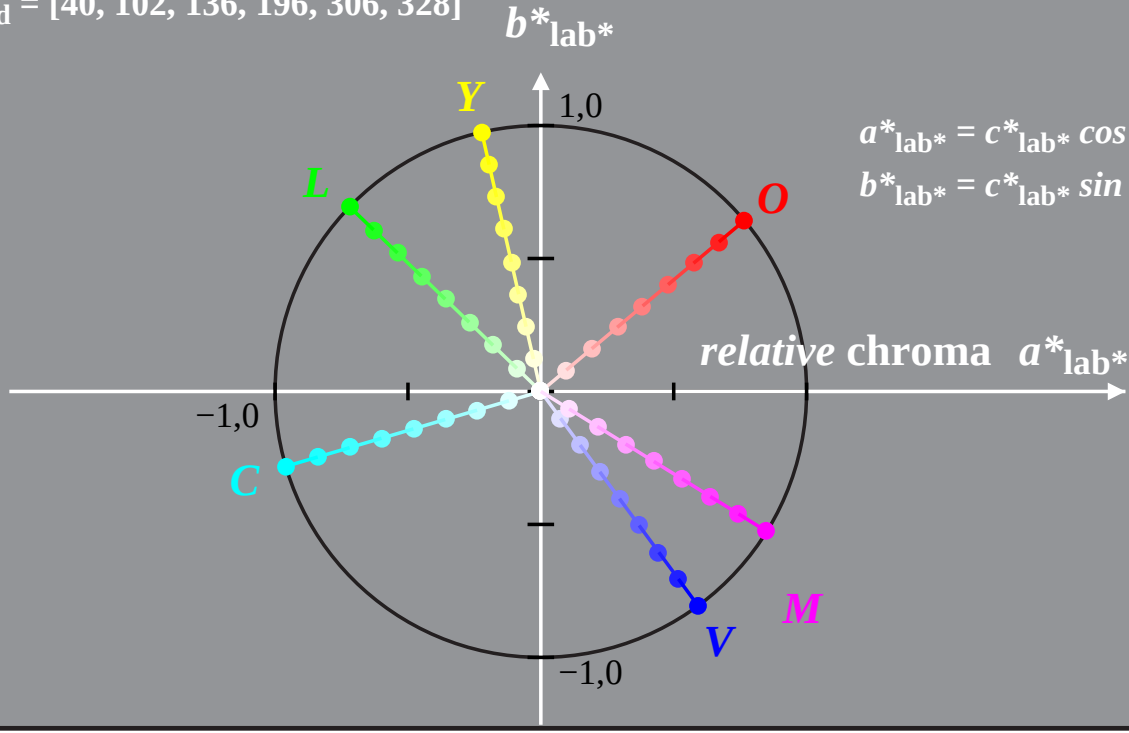
$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

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

M = Maximum colour

CIELAB hue angles:

$h_{ab,d}$ = [40, 102, 136, 196, 306, 328]



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

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

Adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB ($c^*_{lab^*}$, $l^*_{lab^*}$)
System: FRS06

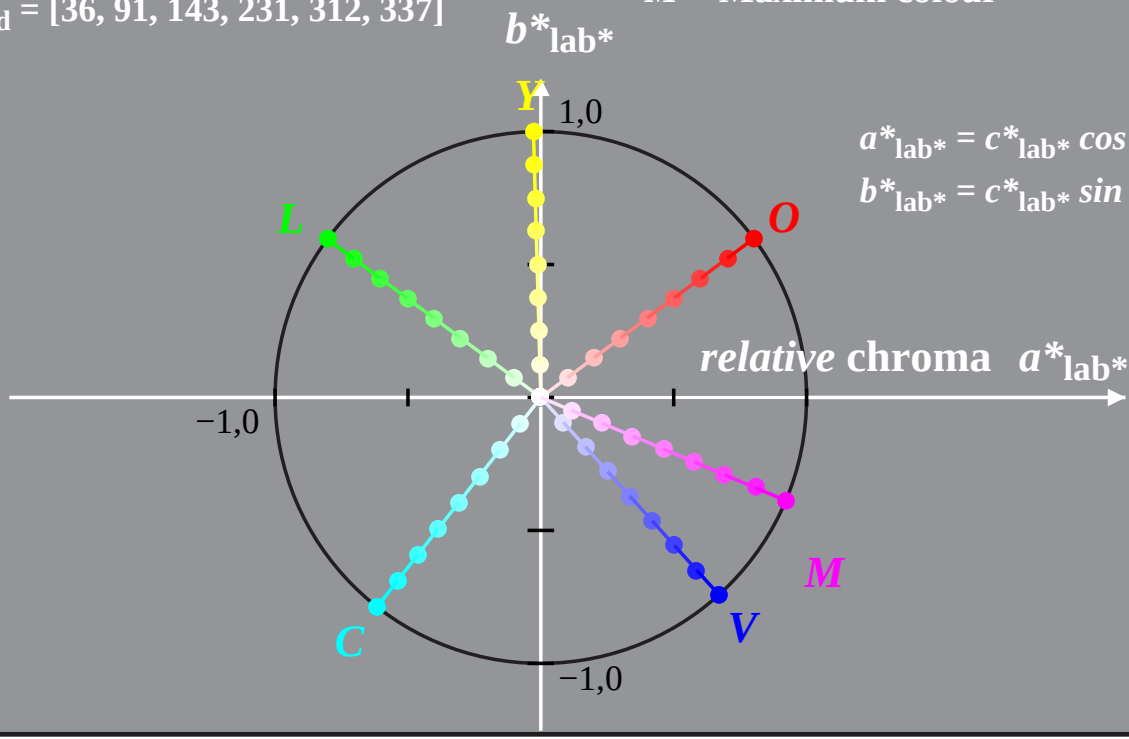
$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

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

M = Maximum colour

CIELAB hue angles:

$h_{ab,d}$ = [36, 91, 143, 231, 312, 337]



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

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

Adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB ($c^*_{lab^*}$, $l^*_{lab^*}$)
System: TSL18

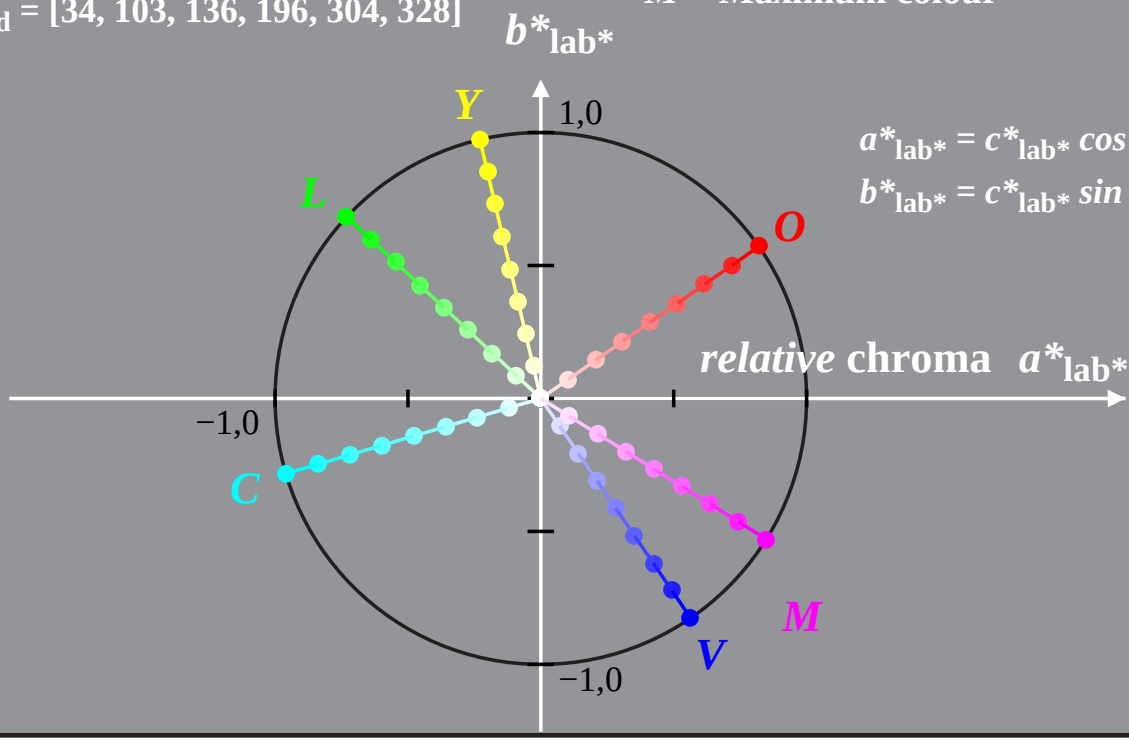
$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

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

M = Maximum colour

CIELAB hue angles:

$h_{ab,d}$ = [34, 103, 136, 196, 304, 328]



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

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

Adapted (a) **CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB ($c^*_{lab^*}$, $l^*_{lab^*}$)**
System: NLS00

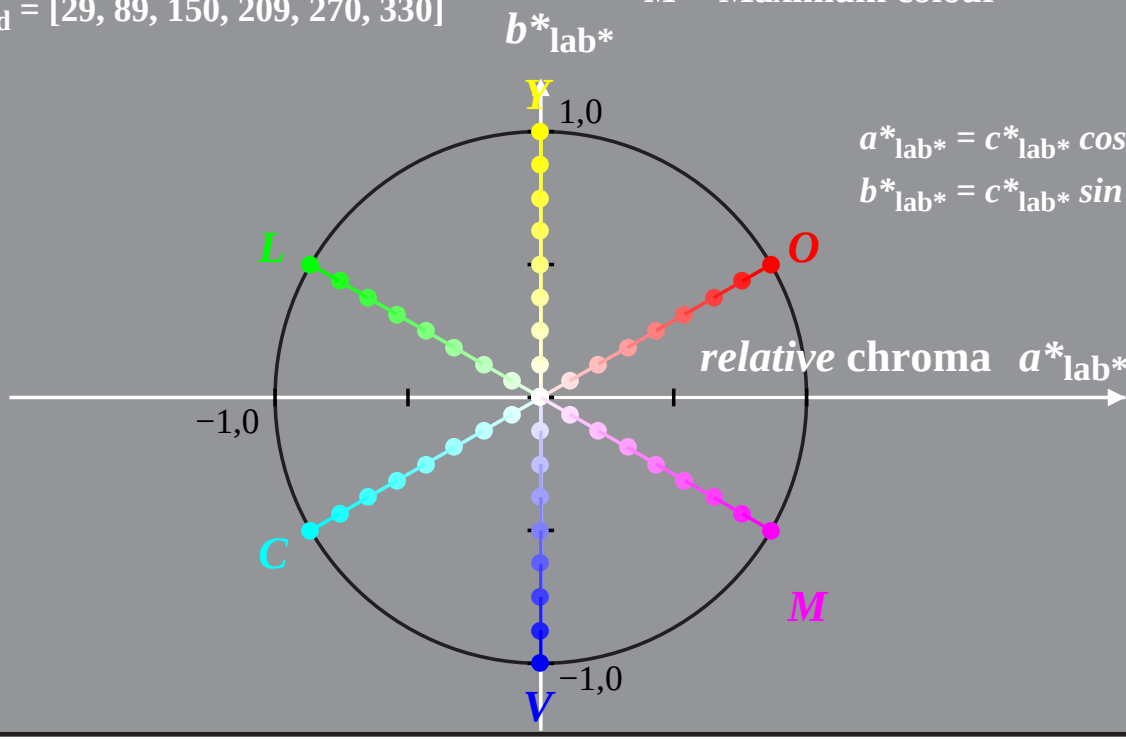
$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

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

M = Maximum colour

CIELAB hue angles:

$h_{ab,d}$ = [29, 89, 150, 209, 270, 330]



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

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

Adapted (a) **CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB ($c^*_{lab^*}$, $l^*_{lab^*}$)**
System: NLS18

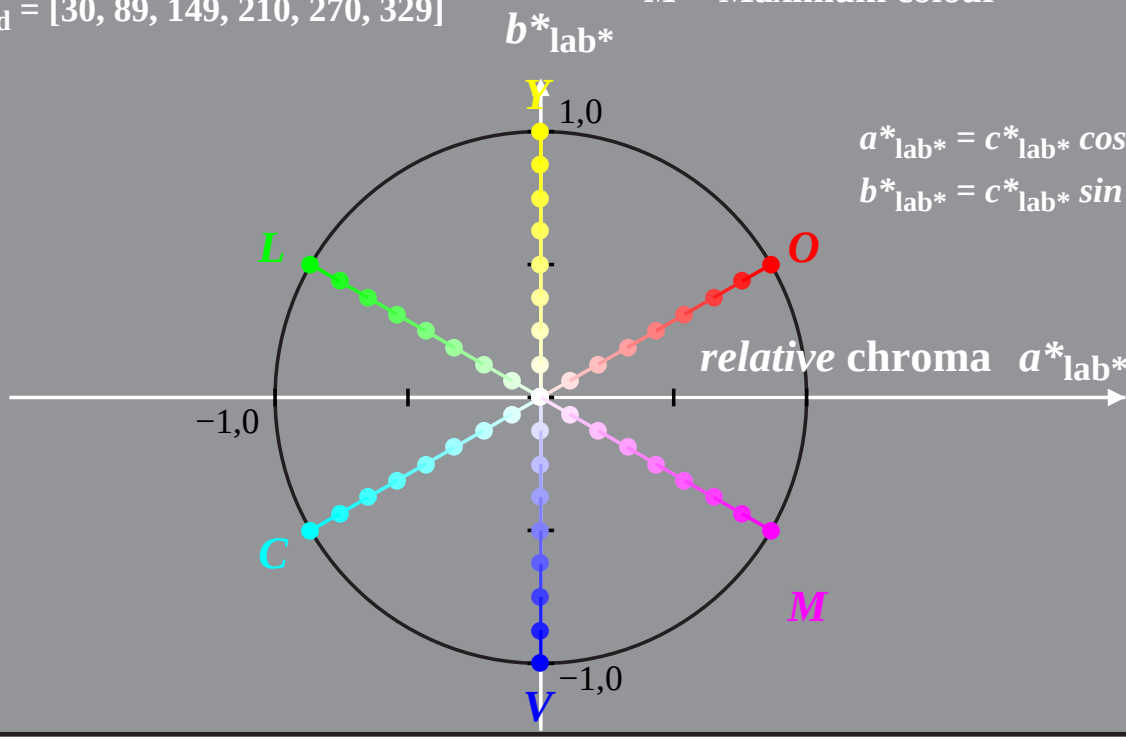
$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

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

M = Maximum colour

CIELAB hue angles:

$h_{ab,d}$ = [30, 89, 149, 210, 270, 329]



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

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

Adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB ($c^*_{lab^*}$, $l^*_{lab^*}$)
System: NRS11

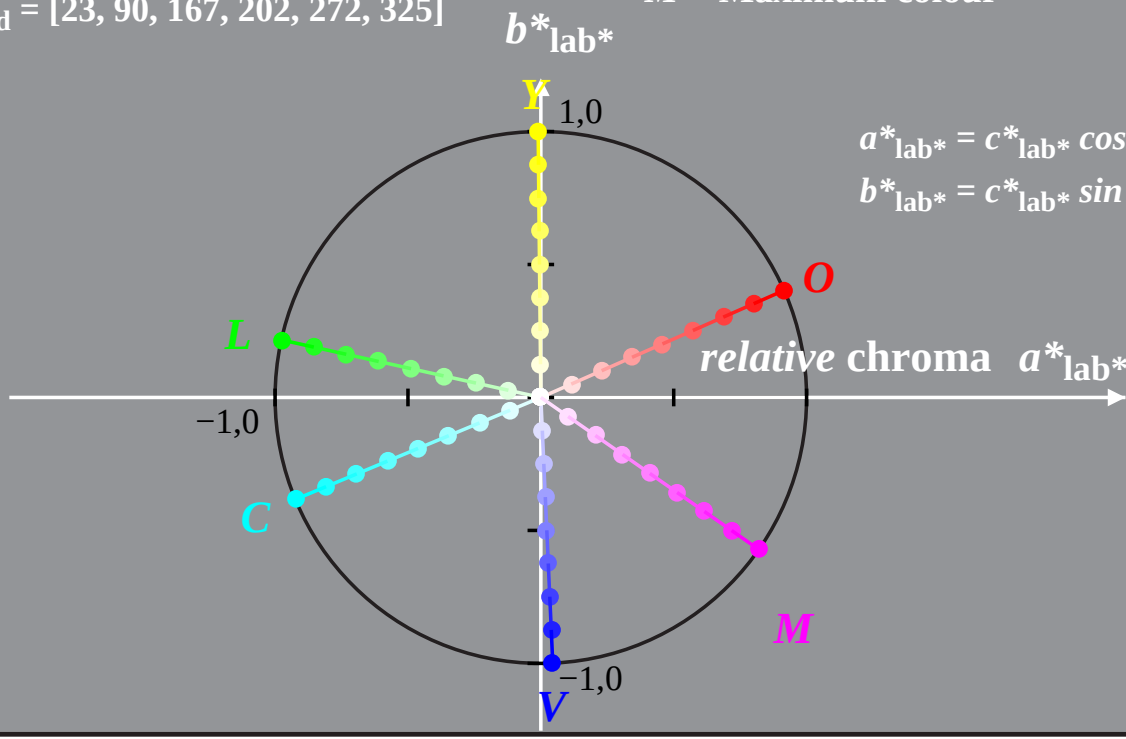
$l^*_{lab^*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

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

M = Maximum colour

CIELAB hue angles:

$h_{ab,d}$ = [23, 90, 167, 202, 272, 325]



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

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

Adapted (a) CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB (c^*_{lab*}, l^*_{lab*})
System: TLS70

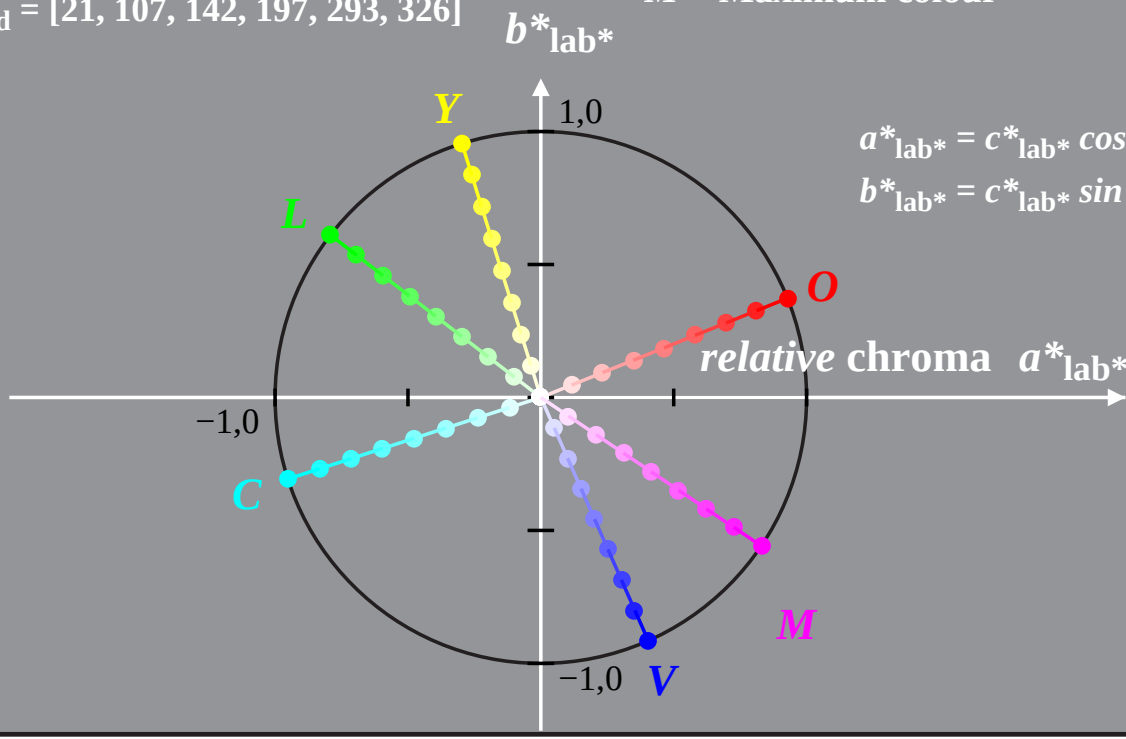
$l^*_{lab*} = (L^* - L^*_N) / (L^*_W - L^*_N)$

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

M = Maximum colour

CIELAB hue angles:

$h_{ab,d}$ = [21, 107, 142, 197, 293, 326]



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

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