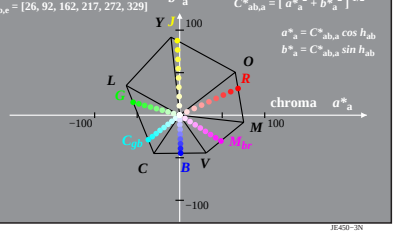
**Linear relation CIELAB ($L^*$, $a^*$, $b^*$) and *adapted (a)* CIELAB ($C^*_{ab,a}$, $L^*$)**
**System: ORS18a**

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

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

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



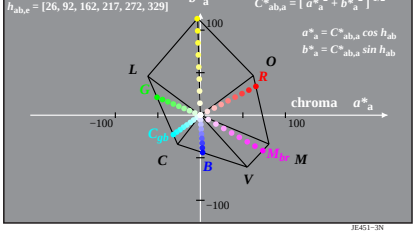

JE450−3N

**Linear relation CIELAB ($L^*$, $a^*$, $b^*$) and *adapted (a)* CIELAB ($C^*_{ab,a}$, $L^*$)**
**System: PRS06a**

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

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

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



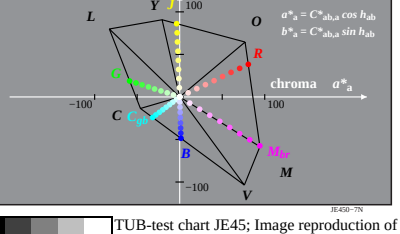

JE451−3N

**Linear relation CIELAB ($L^*$, $a^*$, $b^*$) and *adapted (a)* CIELAB ($C^*_{ab,a}$, $L^*$)**
**System: TLS00**

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

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

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



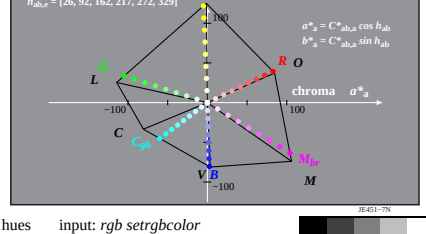

JE450−7N

**Linear relation CIELAB ($L^*$, $a^*$, $b^*$) and *adapted (a)* CIELAB ($C^*_{ab,a}$, $L^*$)**
**System: NRS11a**

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

**CIELAB hue angles:**
$h_{ab,d}$ = [23, 90, 167, 202, 272, 325]
$h_{ab,e}$ = [26, 92, 162, 217, 272, 329]

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




JE451−7N