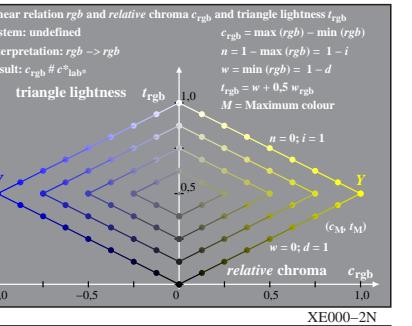
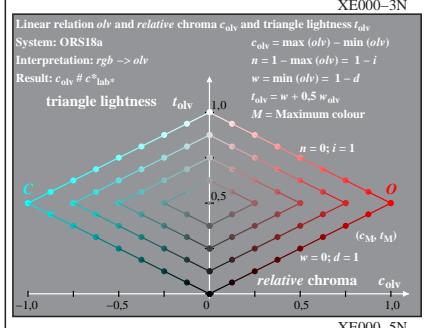


The figure shows a 3D plot of triangle lightness versus relative chroma (c_{chroma}) and c_{rgb} . The vertical axis represents triangle lightness, with values -1.0, 0.5, and 1.0 marked. The horizontal axes are relative chroma (c_{chroma}) from -1.0 to 1.0 and c_{rgb} from 0 to 1.0. A grid of colored lines represents the linear relation $t_{\text{rgb}} = w + \frac{1}{d} c_{\text{chroma}}$ for different values of n (0 to 1) and w (0 to $d = 1$). The lines are color-coded by n : red for $n=0$, green for $n=0.5$, and blue for $n=1$. The lines intersect at the point $(c_{\text{chroma}}, t_{\text{rgb}}) = (0, 0)$.



The diagram shows a circular color space with axes labeled a_{cie} (horizontal) and b_{cie} (vertical). The origin is at the center. The horizontal axis is labeled L (lightness) at its positive end. The vertical axis is labeled M (magenta) at its positive end. The left axis is labeled C (cyan) at its positive end. The bottom axis is labeled V (value) at its negative end. The right axis is labeled O (orange) at its positive end. A point P is located in the upper-right quadrant. A vector \vec{r} connects the origin to point P . A vector \vec{b}_{cie} also connects the origin to point P . The angle θ is the angle between the horizontal axis L and the vector \vec{r} .

near relation rgb and relative chroma c_{rgb} or chroma $a_{\text{rgb}}, b_{\text{rgb}}$

state: undefined

interpretation: $rgb \rightarrow rgb$

ELAB hue angles:

$= [30, 90, 150, 210, 270, 330]$

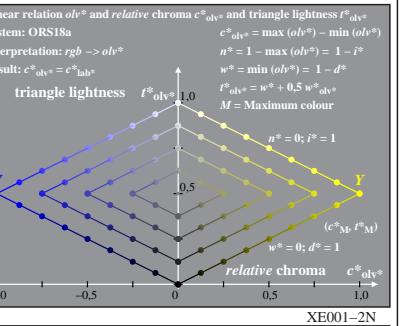
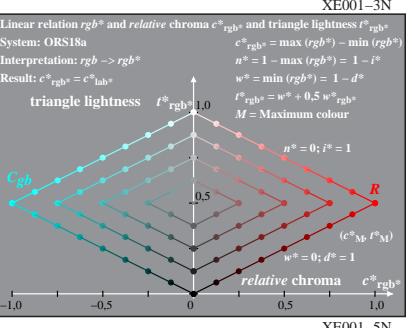
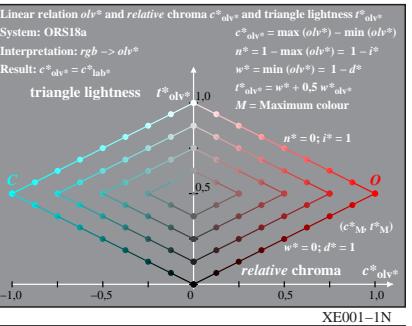
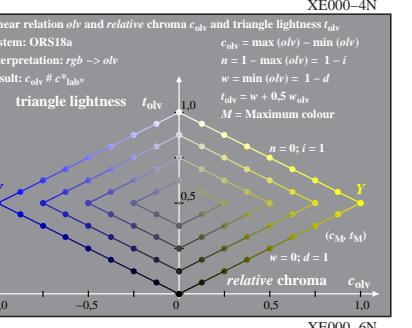
$c_{\text{rgb}} = \max(rgb) - \min(rgb)$

$n = 1 - \max(rgb) = 1 - i$

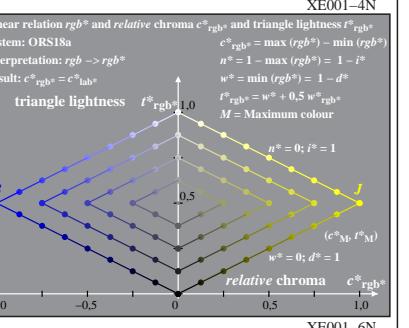
$w = \min(rgb) = 1 - d$

$a_{\text{rgb}} = c_{\text{rgb}} \cos ab$

$b_{\text{rgb}} = c_{\text{rgb}} \sin ab$



The diagram shows a circular color space with axes labeled $a^{*}_{olv^*}$ (horizontal) and $b^{*}_{olv^*}$ (vertical). The origin is at the center. A point Y is located in the upper-right quadrant. A vector L points from the origin to the left, representing lightness. A vector O points from the origin to the right, representing the positive direction of $a^{*}_{olv^*}$. A vector M points from the origin to the right, representing the positive direction of $b^{*}_{olv^*}$. A vector C points from the origin towards the bottom-left, representing chroma. A vector V points from the origin towards the bottom, representing hue. The diagram illustrates the conversion from olv^* to relative chroma coordinates.



near relation rgb^* and relative chroma $a^*_{rgb^*}$ or chroma $a^*_{rgb^*}, b^*_{rgb^*}$

item: ORS18a

interpretation: $rgb \rightarrow rbg^*$

ELAB hue angles:

$$= [26, 92, 162, 217, 272, 329] \quad J$$

$b^*_{rgb^*}$

$c^*_{rgb^*} = \max(rgb^*) - \min(rgb^*)$

$n^* = 1 - \max(rgb^*) = 1 - i^*$

$w^* = \min(rgb^*) = 1 - d^*$

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

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

relative chroma $a^*_{rgb^*}$

C_{gb}

B

M_w

$-1,0$

$1,0$

$-1,0$

$YECOOL SN$