

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

System: ORS18a

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

Result: $c^*_{rgb^*} = c^*_{lab^*}; l^*_{rgb^*} = l^*_{lab^*} \quad n^* = 1 - \max (rgb^*) = 1 - i^*$

CIELAB hue angles: $b^*_{rgb^*} \quad w^* = \min (rgb^*) = 1 - d^*$

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

J

1,0

-1,0

-1,0

1,0

1,0

-1,0

-1,0

1,0

1,0

-1,0

-1,0

1,0

1,0

-1,0

-1,0

1,0

1,0

-1,0

-1,0

$$l^*_{rgb^*} = w^* + 0,5 c^*_{rgb^*}$$

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

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

R

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

1,0

-1,0

G

C_{gb}

M_{br}

B