

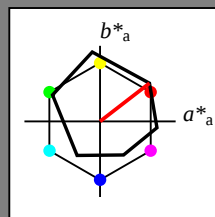
Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 38/360 = 0.105$  $lab^*ich$  and  $lab^*nch$ 

D65: hue O

LCH\*Ma: 48 83 38

olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$ 

%Gamut

 $u^*_{rel} = 93$ 

%Regularity

 $g^*_{H,rel} = 57$  $g^*_{C,rel} = 59$ 

ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

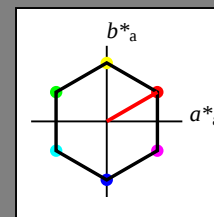
Output: Colorimetric Standard Reflective System SRS18

for hue  $h^* = lab^*h = 30/360 = 0.083$  $lab^*ich$  and  $lab^*nch$ 

D65: hue O

LCH\*Ma: 57 77 30

olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$ 

%Gamut

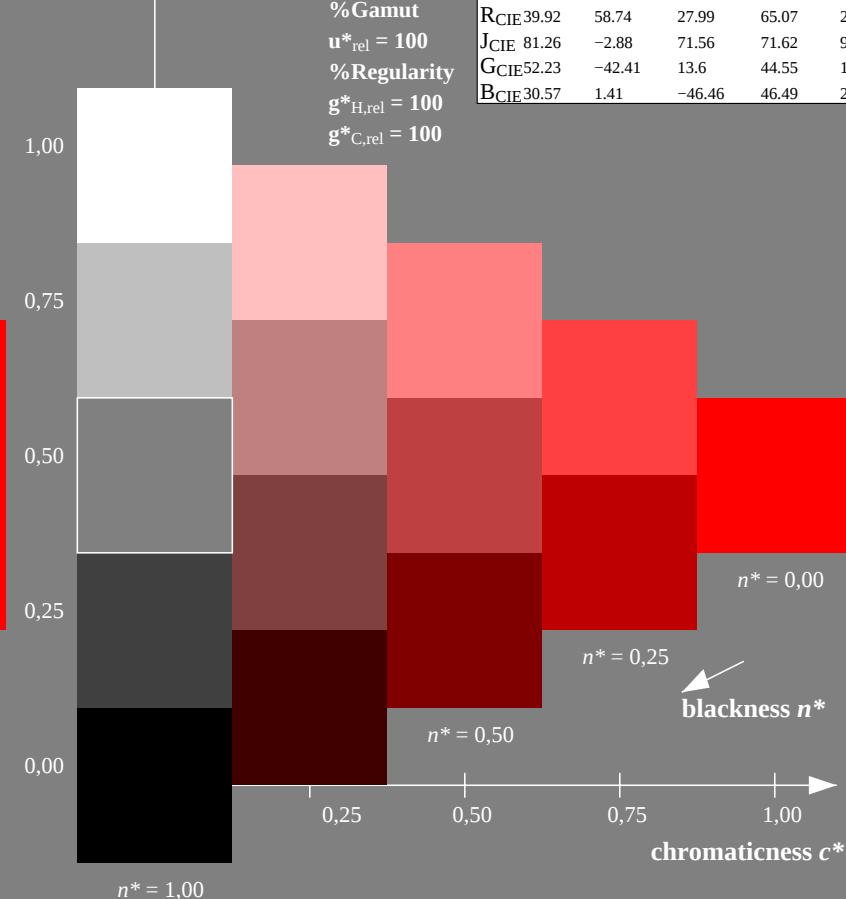
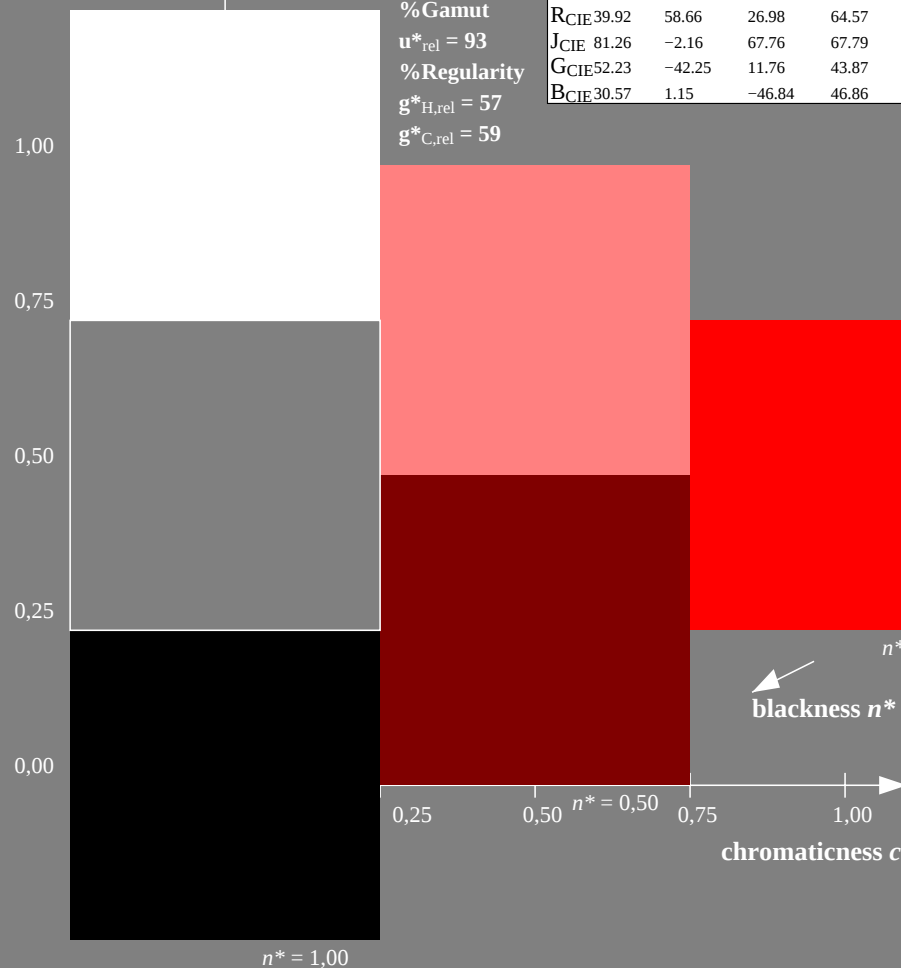
 $u^*_{rel} = 100$ 

%Regularity

 $g^*_{H,rel} = 100$  $g^*_{C,rel} = 100$ 

SRS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 56.71       | 67.03   | 38.7    | 77.4         | 30           |
| Y <sub>Ma</sub>  | 56.71       | 0.0     | 77.4    | 77.4         | 90           |
| L <sub>Ma</sub>  | 56.71       | -67.02  | 38.7    | 77.4         | 150          |
| C <sub>Ma</sub>  | 56.71       | -67.02  | -38.69  | 77.4         | 210          |
| V <sub>Ma</sub>  | 56.71       | 0.0     | -77.39  | 77.4         | 270          |
| M <sub>Ma</sub>  | 56.71       | 67.03   | -38.69  | 77.4         | 330          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub> | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



NE820-7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

BAM-test chart NE82; Colorimetric systems ORS18 &amp; ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv\* setrgbcolor

output: Startup (S) data depend

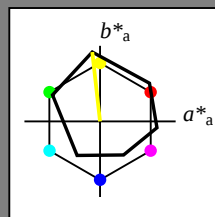
## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 96/360 = 0.268$  $lab^*ich$  and  $lab^*nch$ 

D65: hue Y

LCH\*Ma: 90 92 96

olv\*Ma: 1.0 1.0 0.0

triangle lightness  $t^*$ 

%Gamut

 $u^*_{rel} = 93$ 

%Regularity

 $g^*_{H,rel} = 57$  $g^*_{C,rel} = 59$ 

## ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

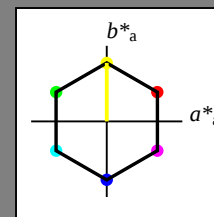
## Output: Colorimetric Standard Reflective System SRS18

for hue  $h^* = lab^*h = 90/360 = 0.25$  $lab^*ich$  and  $lab^*nch$ 

D65: hue Y

LCH\*Ma: 57 77 90

olv\*Ma: 1.0 1.0 0.0

triangle lightness  $t^*$ 

%Gamut

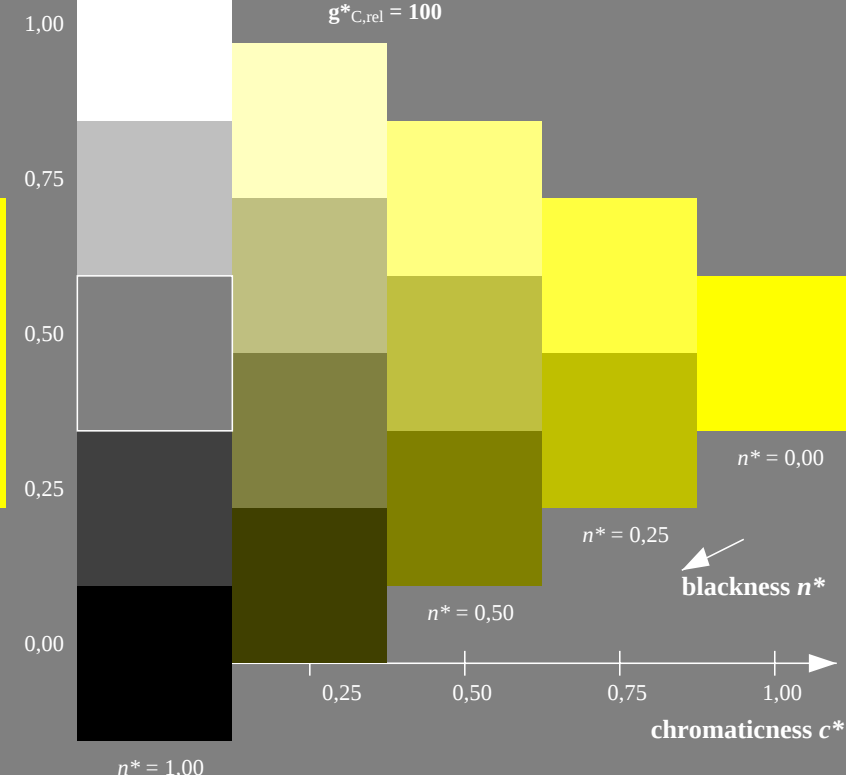
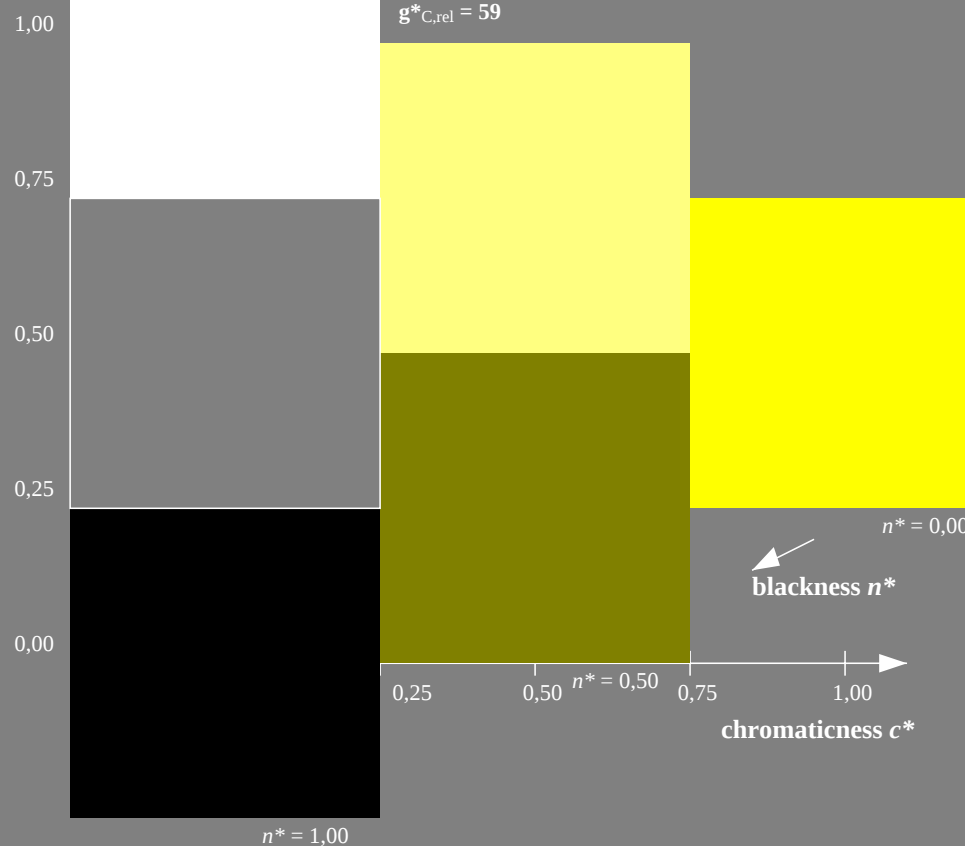
 $u^*_{rel} = 100$ 

%Regularity

 $g^*_{H,rel} = 100$  $g^*_{C,rel} = 100$ 

## SRS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 56.71       | 67.03   | 38.7    | 77.4         | 30           |
| Y <sub>Ma</sub>  | 56.71       | 0.0     | 77.4    | 77.4         | 90           |
| L <sub>Ma</sub>  | 56.71       | -67.02  | 38.7    | 77.4         | 150          |
| C <sub>Ma</sub>  | 56.71       | -67.02  | -38.69  | 77.4         | 210          |
| V <sub>Ma</sub>  | 56.71       | 0.0     | -77.39  | 77.4         | 270          |
| M <sub>Ma</sub>  | 56.71       | 67.03   | -38.69  | 77.4         | 330          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub> | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



NE820-7, 3 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 90/360 = 0.25 (right)

BAM-test chart NE82; Colorimetric systems ORS18 &amp; ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv\* setrgbcolor

output: Startup (S) data dependend

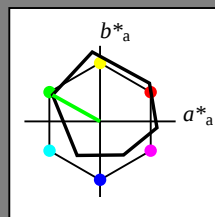
## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 151/360 = 0.419$  $lab^*ich$  and  $lab^*nch$ 

D65: hue L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0

triangle lightness  $t^*$ 

% Gamut  
 $u^*_{rel} = 93$   
% Regularity  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

## ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

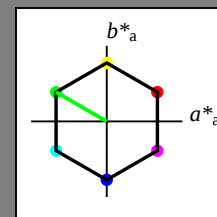
## Output: Colorimetric Standard Reflective System SRS18

for hue  $h^* = lab^*h = 150/360 = 0.417$  $lab^*ich$  and  $lab^*nch$ 

D65: hue L

LCH\*Ma: 57 77 150

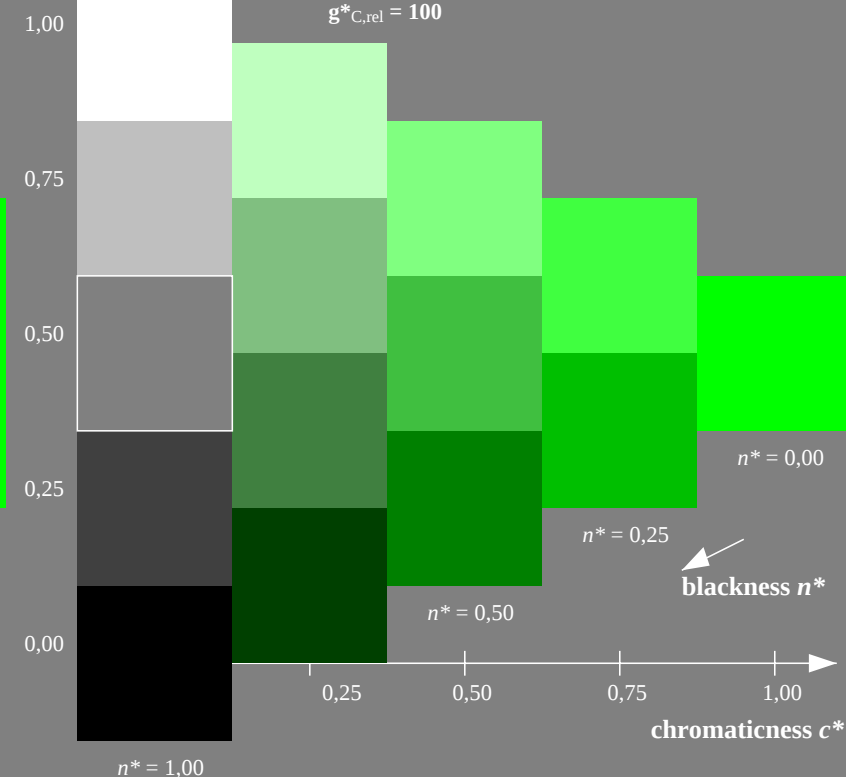
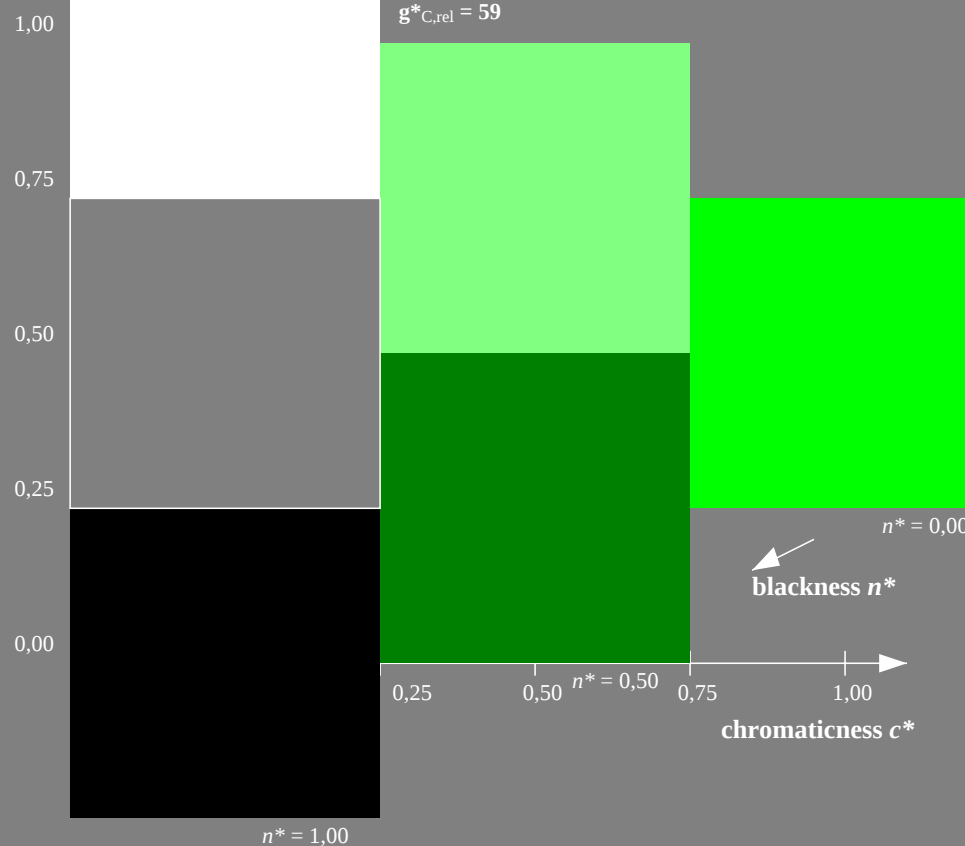
olv\*Ma: 0.0 1.0 0.0

triangle lightness  $t^*$ 

% Gamut  
 $u^*_{rel} = 100$   
% Regularity  
 $g^*_{H,rel} = 100$   
 $g^*_{C,rel} = 100$

## SRS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 56.71       | 67.03   | 38.7    | 77.4         | 30           |
| Y <sub>Ma</sub>  | 56.71       | 0.0     | 77.4    | 77.4         | 90           |
| L <sub>Ma</sub>  | 56.71       | -67.02  | 38.7    | 77.4         | 150          |
| C <sub>Ma</sub>  | 56.71       | -67.02  | -38.69  | 77.4         | 210          |
| V <sub>Ma</sub>  | 56.71       | 0.0     | -77.39  | 77.4         | 270          |
| M <sub>Ma</sub>  | 56.71       | 67.03   | -38.69  | 77.4         | 330          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub> | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



NE820-7, 3 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 150/360 = 0.417 (right)

BAM-test chart NE82; Colorimetric systems ORS18 &amp; ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv\* setrgbcolor

output: Startup (S) data dependend

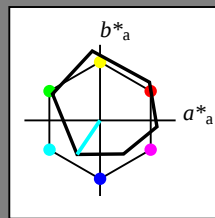
## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 236/360 = 0.656$  $lab^*ich$  and  $lab^*nch$ 

D65: hue C

LCH\*Ma: 59 54 236

olv\*Ma: 0.0 1.0 1.0

triangle lightness  $t^*$ 

%Gamut  
 $u^*_{rel} = 93$   
%Regularity  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

## ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

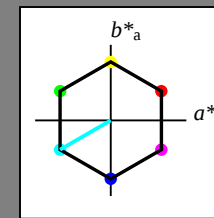
## Output: Colorimetric Standard Reflective System SRS18

for hue  $h^* = lab^*h = 210/360 = 0.583$  $lab^*ich$  and  $lab^*nch$ 

D65: hue C

LCH\*Ma: 57 77 210

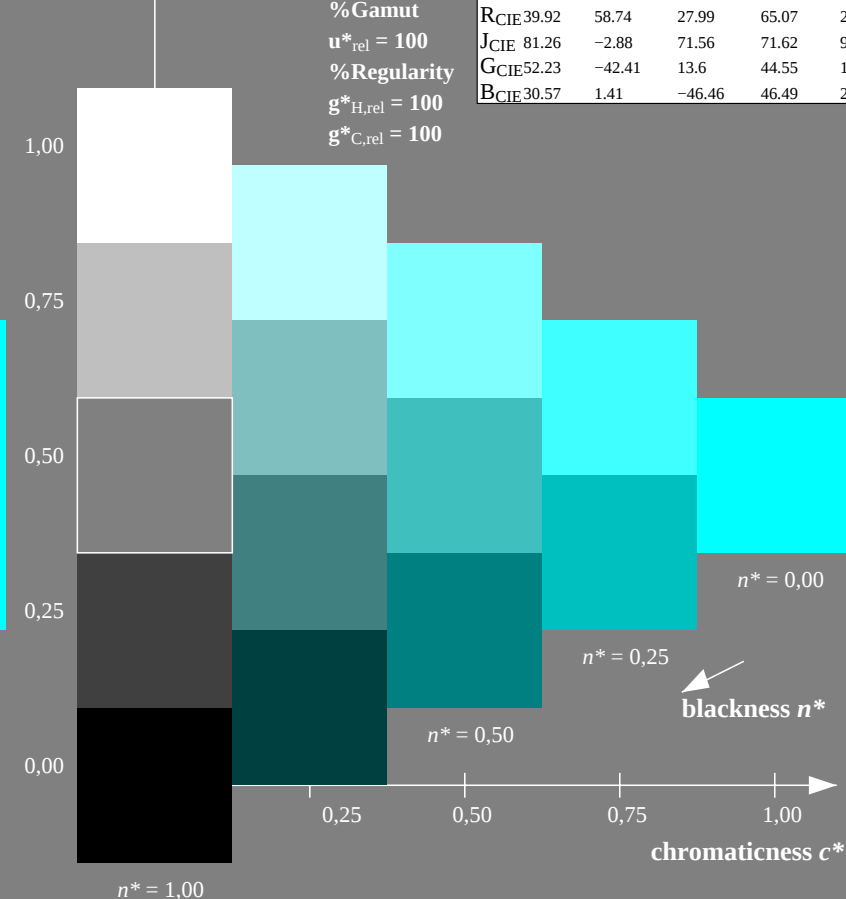
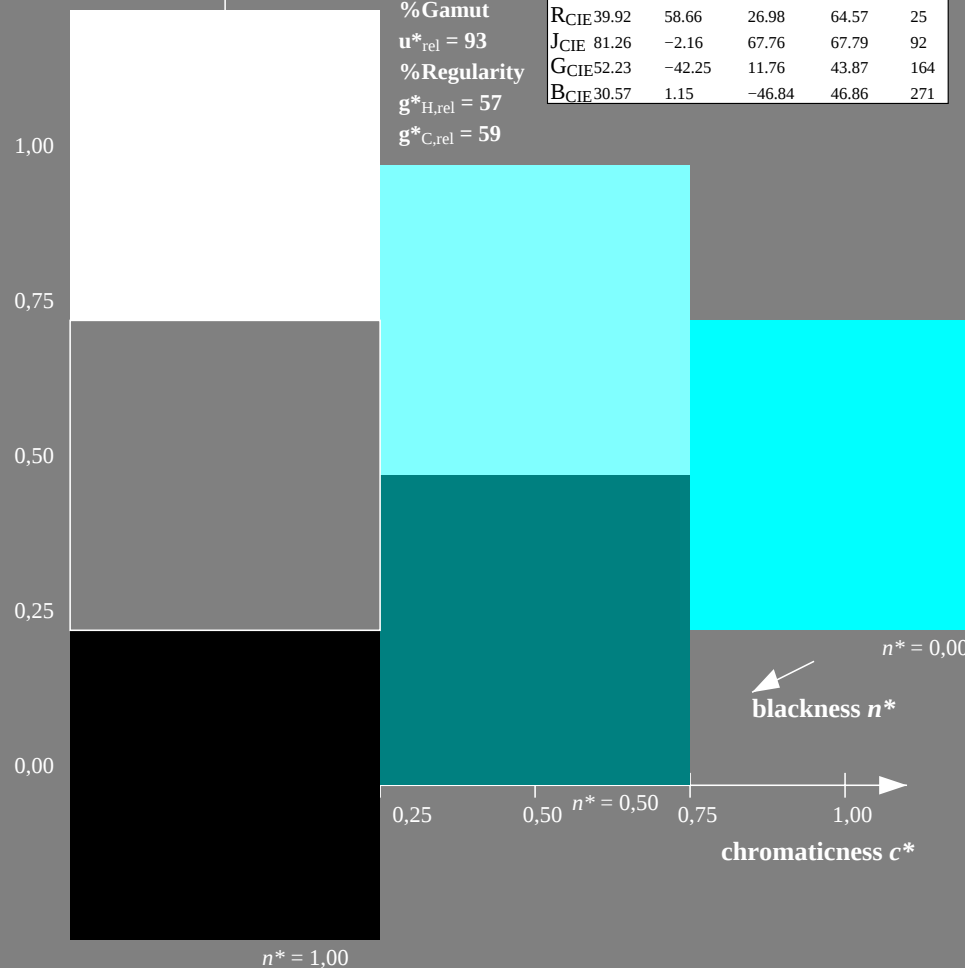
olv\*Ma: 0.0 1.0 1.0

triangle lightness  $t^*$ 

%Gamut  
 $u^*_{rel} = 100$   
%Regularity  
 $g^*_{H,rel} = 100$   
 $g^*_{C,rel} = 100$

## SRS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 56.71       | 67.03   | 38.7    | 77.4         | 30           |
| Y <sub>Ma</sub>  | 56.71       | 0.0     | 77.4    | 77.4         | 90           |
| L <sub>Ma</sub>  | 56.71       | -67.02  | 38.7    | 77.4         | 150          |
| C <sub>Ma</sub>  | 56.71       | -67.02  | -38.69  | 77.4         | 210          |
| V <sub>Ma</sub>  | 56.71       | 0.0     | -77.39  | 77.4         | 270          |
| M <sub>Ma</sub>  | 56.71       | 67.03   | -38.69  | 77.4         | 330          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub> | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



NE820-7, 3 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 210/360 = 0.583 (right)

BAM-test chart NE82; Colorimetric systems ORS18 &amp; ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv\* setrgbcolor

output: Startup (S) data dependend

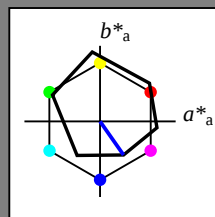
## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = \text{lab}^*h = 305/360 = 0.847$  $\text{lab}^*ich$  and  $\text{lab}^*nch$ 

D65: hue V

LCH\*Ma: 26 54 305

olv\*Ma: 0.0 0.0 1.0

triangle lightness  $t^*$ 

%Gamut

 $u^*_{\text{rel}} = 93$ 

%Regularity

 $g^*_{H,\text{rel}} = 57$  $g^*_{C,\text{rel}} = 59$ 

## ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

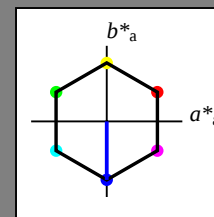
## Output: Colorimetric Standard Reflective System SRS18

for hue  $h^* = \text{lab}^*h = 270/360 = 0.75$  $\text{lab}^*ich$  and  $\text{lab}^*nch$ 

D65: hue V

LCH\*Ma: 57 77 270

olv\*Ma: 0.0 0.0 1.0

triangle lightness  $t^*$ 

%Gamut

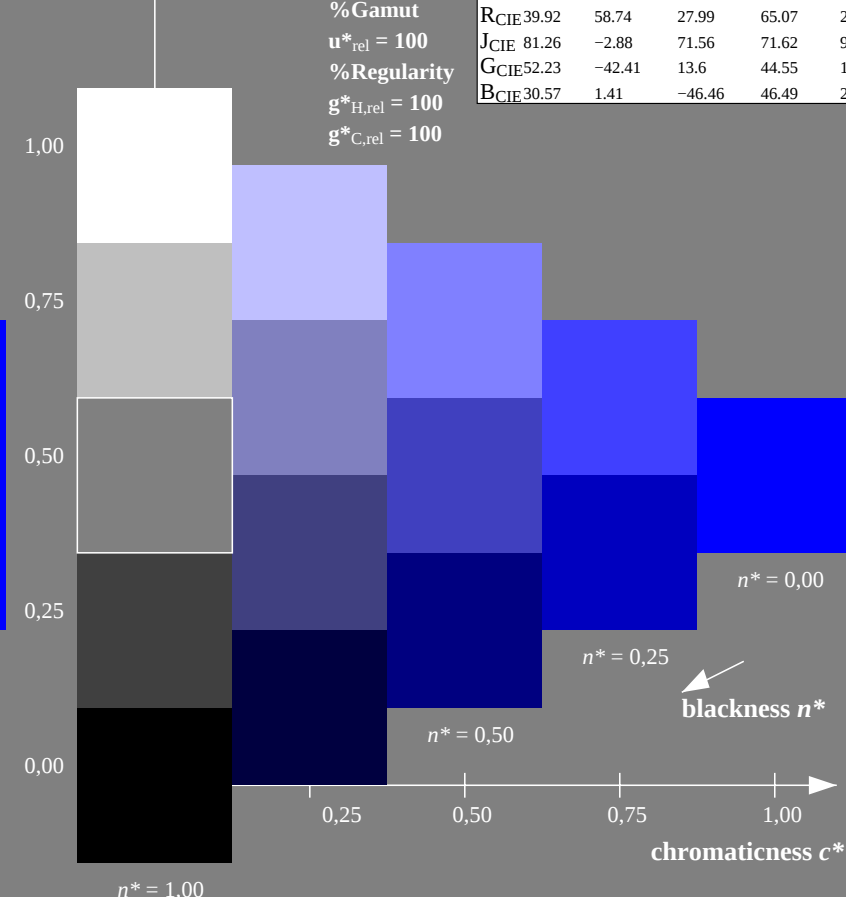
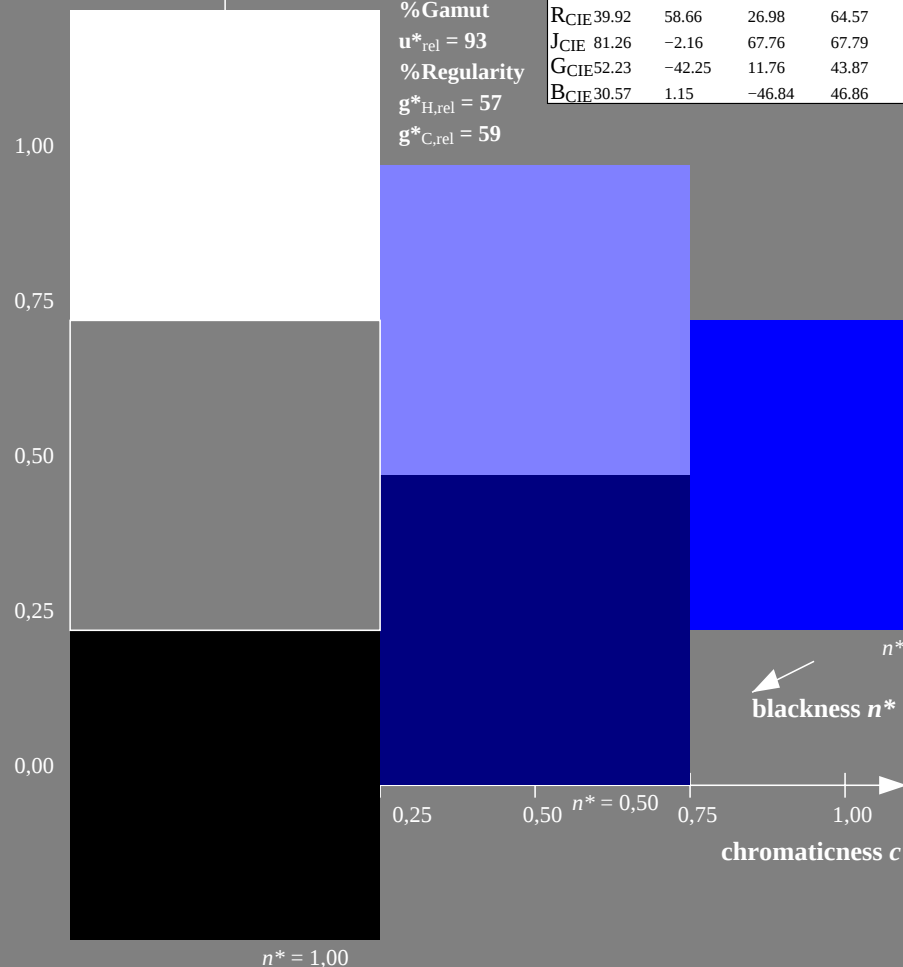
 $u^*_{\text{rel}} = 100$ 

%Regularity

 $g^*_{H,\text{rel}} = 100$  $g^*_{C,\text{rel}} = 100$ 

## SRS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 56.71       | 67.03   | 38.7    | 77.4         | 30           |
| Y <sub>Ma</sub>  | 56.71       | 0.0     | 77.4    | 77.4         | 90           |
| L <sub>Ma</sub>  | 56.71       | -67.02  | 38.7    | 77.4         | 150          |
| C <sub>Ma</sub>  | 56.71       | -67.02  | -38.69  | 77.4         | 210          |
| V <sub>Ma</sub>  | 56.71       | 0.0     | -77.39  | 77.4         | 270          |
| M <sub>Ma</sub>  | 56.71       | 67.03   | -38.69  | 77.4         | 330          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub> | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



NE820-7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 270/360 = 0.75 (right)

BAM-test chart NE82; Colorimetric systems ORS18 &amp; ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv\* setrgbcolor

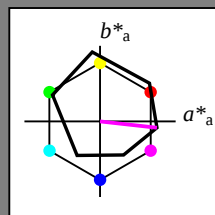
output: Startup (S) data dependend

## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 354/360 = 0.982$  $lab^*ich$  and  $lab^*nch$ 

D65: hue M

LCH\*Ma: 48 76 354

ol $v^*$ Ma: 1.0 0.0 1.0triangle lightness  $t^*$ 

%Gamut

 $u^*_{rel} = 93$ 

%Regularity

 $g^*_{H,rel} = 57$  $g^*_{C,rel} = 59$ 

## ORS18; adapted (a) CIELAB data

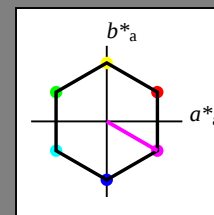
|            | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------|-------------|---------|---------|--------------|--------------|
| O $_{Ma}$  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y $_{Ma}$  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L $_{Ma}$  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C $_{Ma}$  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V $_{Ma}$  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M $_{Ma}$  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N $_{Ma}$  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W $_{Ma}$  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R $_{CIE}$ | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J $_{CIE}$ | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G $_{CIE}$ | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B $_{CIE}$ | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

## Output: Colorimetric Standard Reflective System SRS18

for hue  $h^* = lab^*h = 330/360 = 0.917$  $lab^*ich$  and  $lab^*nch$ 

D65: hue M

LCH\*Ma: 57 77 330

ol $v^*$ Ma: 1.0 0.0 1.0triangle lightness  $t^*$ 

%Gamut

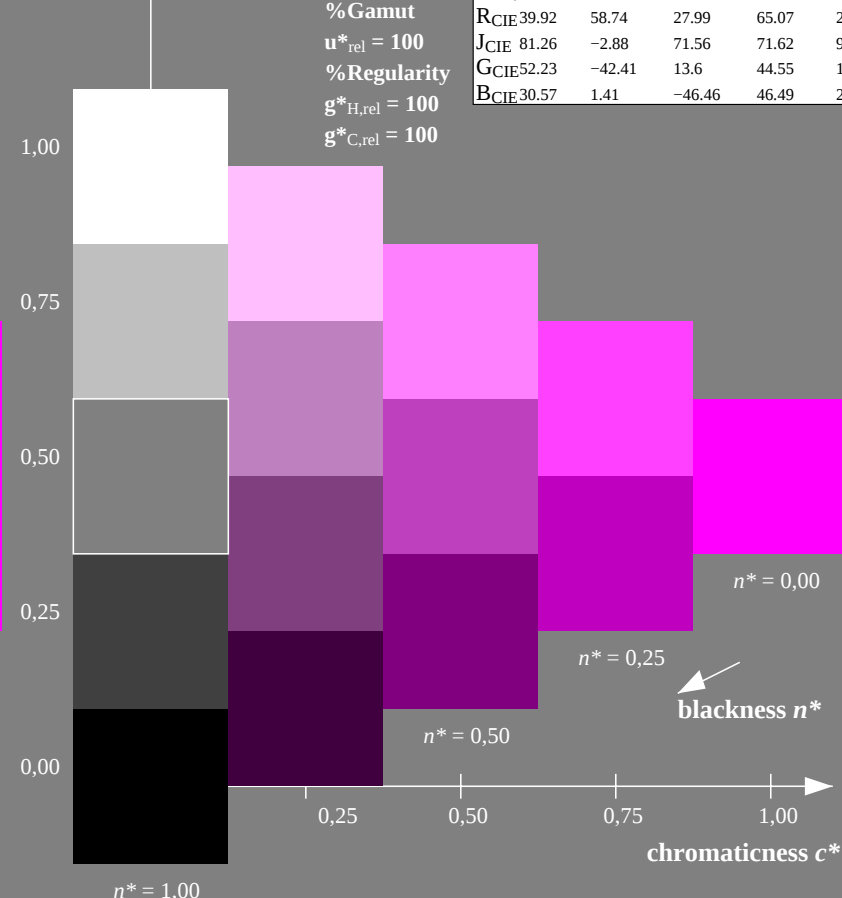
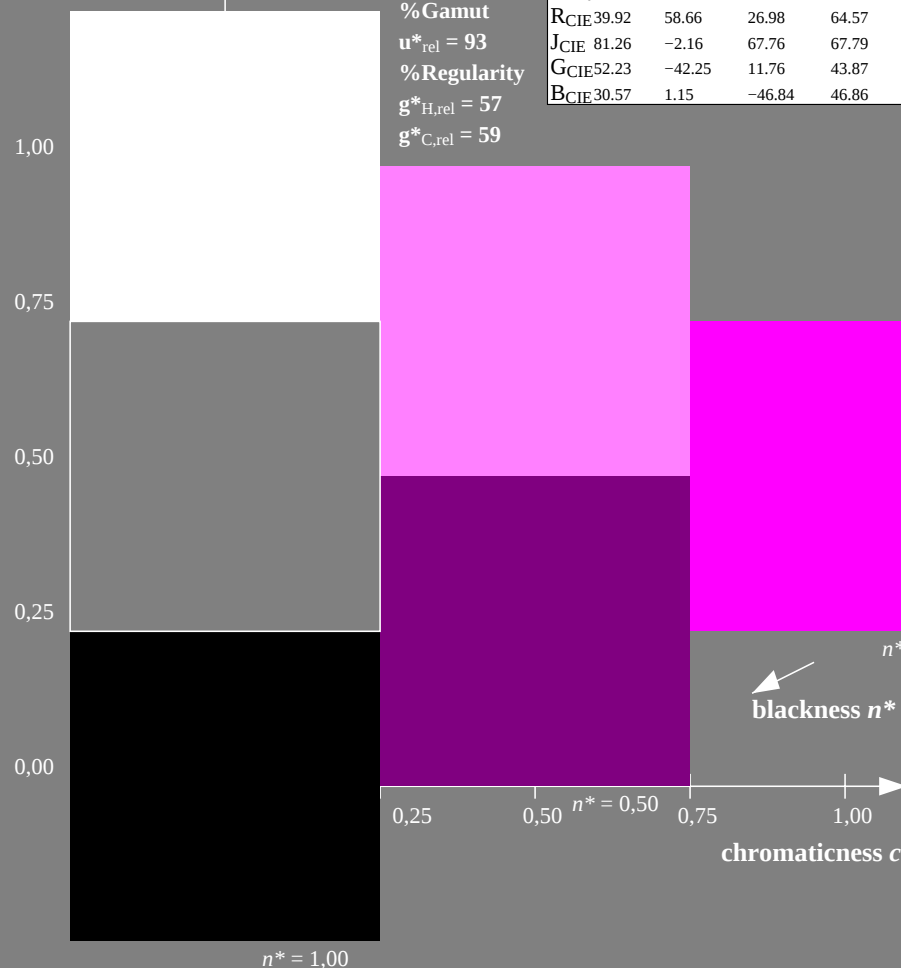
 $u^*_{rel} = 100$ 

%Regularity

 $g^*_{H,rel} = 100$  $g^*_{C,rel} = 100$ 

## SRS18; adapted (a) CIELAB data

|            | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------|-------------|---------|---------|--------------|--------------|
| O $_{Ma}$  | 56.71       | 67.03   | 38.7    | 77.4         | 30           |
| Y $_{Ma}$  | 56.71       | 0.0     | 77.4    | 77.4         | 90           |
| L $_{Ma}$  | 56.71       | -67.02  | 38.7    | 77.4         | 150          |
| C $_{Ma}$  | 56.71       | -67.02  | -38.69  | 77.4         | 210          |
| V $_{Ma}$  | 56.71       | 0.0     | -77.39  | 77.4         | 270          |
| M $_{Ma}$  | 56.71       | 67.03   | -38.69  | 77.4         | 330          |
| N $_{Ma}$  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W $_{Ma}$  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R $_{CIE}$ | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J $_{CIE}$ | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G $_{CIE}$ | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B $_{CIE}$ | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



NE820-7, 3 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 330/360 = 0.917 (right)

BAM-test chart NE82; Colorimetric systems ORS18 &amp; ORS18

D65: 3 and 5 step colour scales for 10 hues

input: ol $v^*$  setrgbcolor

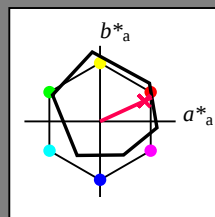
output: Startup (S) data dependend

## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 25/360 = 0.069$  $lab^*ich$  and  $lab^*nch$ 

D65: hue R

LCH\*Ma: 48 75 25

ol $v^*$ Ma: 1.0 0.0 0.32triangle lightness  $t^*$ 

%Gamut  
 $u^*_{rel} = 93$   
%Regularity  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

## ORS18; adapted (a) CIELAB data

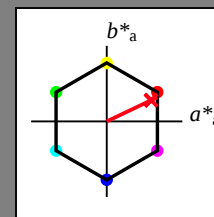
|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

## Output: Colorimetric Standard Reflective System SRS18

for hue  $h^* = lab^*h = 25/360 = 0.071$  $lab^*ich$  and  $lab^*nch$ 

D65: hue R

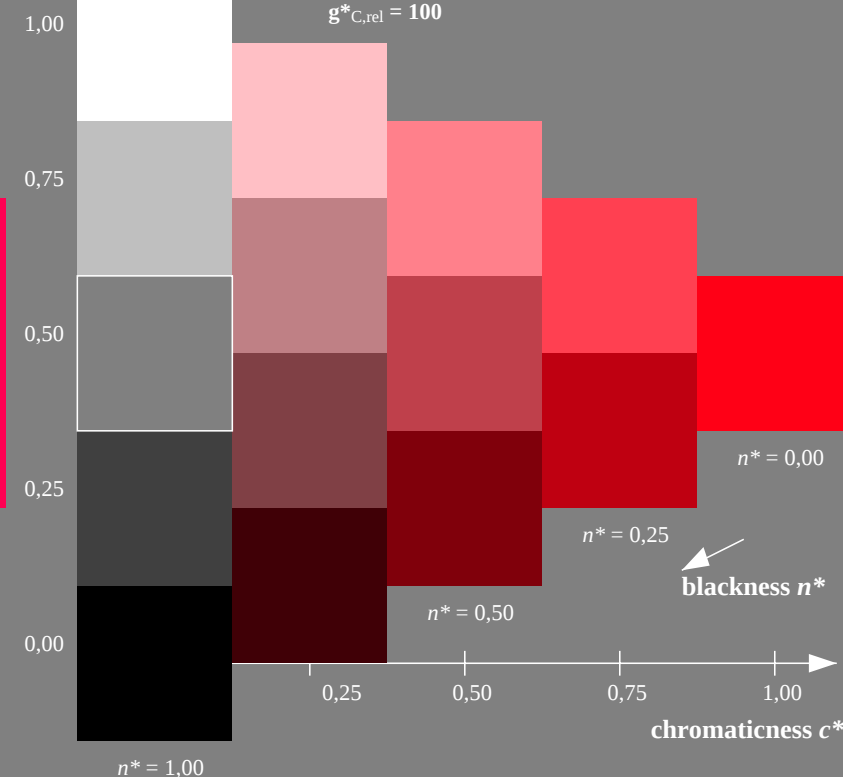
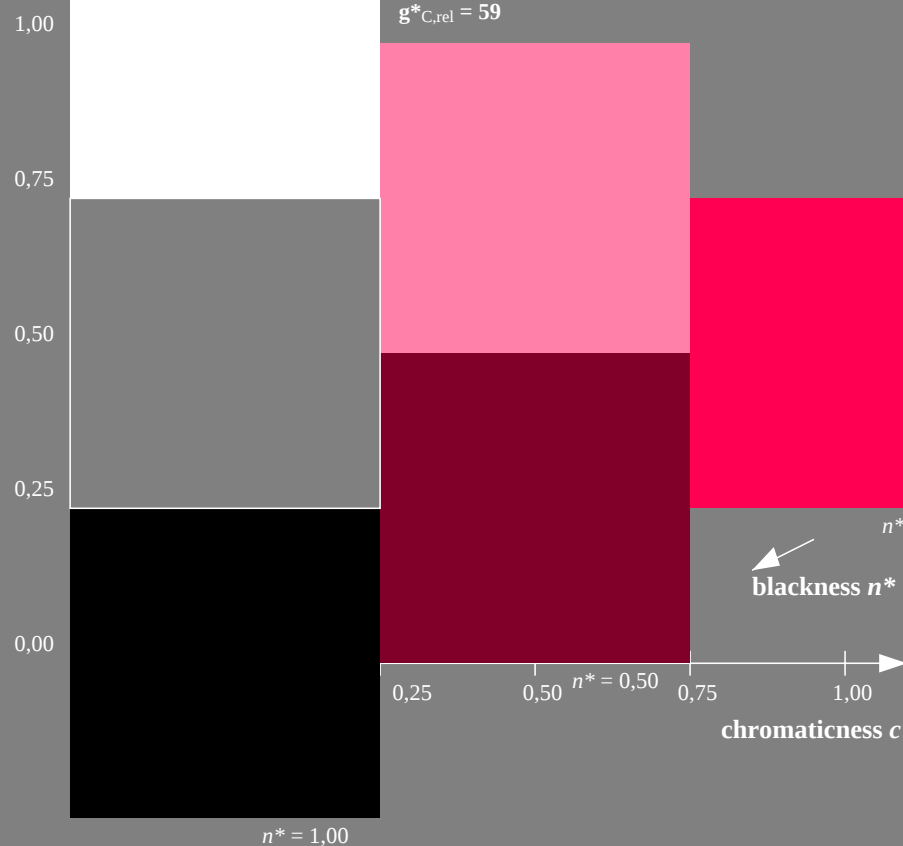
LCH\*Ma: 57 74 25

ol $v^*$ Ma: 1.0 0.0 0.09triangle lightness  $t^*$ 

%Gamut  
 $u^*_{rel} = 100$   
%Regularity  
 $g^*_{H,rel} = 100$   
 $g^*_{C,rel} = 100$

## SRS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 56.71       | 67.03   | 38.7    | 77.4         | 30           |
| Y <sub>Ma</sub>  | 56.71       | 0.0     | 77.4    | 77.4         | 90           |
| L <sub>Ma</sub>  | 56.71       | -67.02  | 38.7    | 77.4         | 150          |
| C <sub>Ma</sub>  | 56.71       | -67.02  | -38.69  | 77.4         | 210          |
| V <sub>Ma</sub>  | 56.71       | 0.0     | -77.39  | 77.4         | 270          |
| M <sub>Ma</sub>  | 56.71       | 67.03   | -38.69  | 77.4         | 330          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub> | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



NE820-7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

BAM-test chart NE82; Colorimetric systems ORS18 &amp; ORS18

D65: 3 and 5 step colour scales for 10 hues

input: ol $v^*$  setrgbcolor

output: Startup (S) data dependend

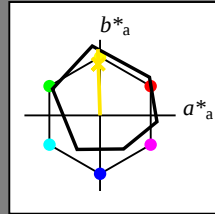
## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 92/360 = 0.255$  $lab^*ich$  and  $lab^*nch$ 

D65: hue J

LCH\*Ma: 86 88 92

olv\*Ma: 1.0 0.9 0.0

triangle lightness  $t^*$ 

%Gamut

 $u^*_{rel} = 93$ 

%Regularity

 $g^*_{H,rel} = 57$  $g^*_{C,rel} = 59$ 

## ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

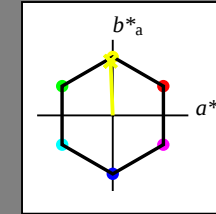
## Output: Colorimetric Standard Reflective System SRS18

for hue  $h^* = lab^*h = 92/360 = 0.256$  $lab^*ich$  and  $lab^*nch$ 

D65: hue J

LCH\*Ma: 57 76 92

olv\*Ma: 0.95 1.0 0.0

triangle lightness  $t^*$ 

%Gamut

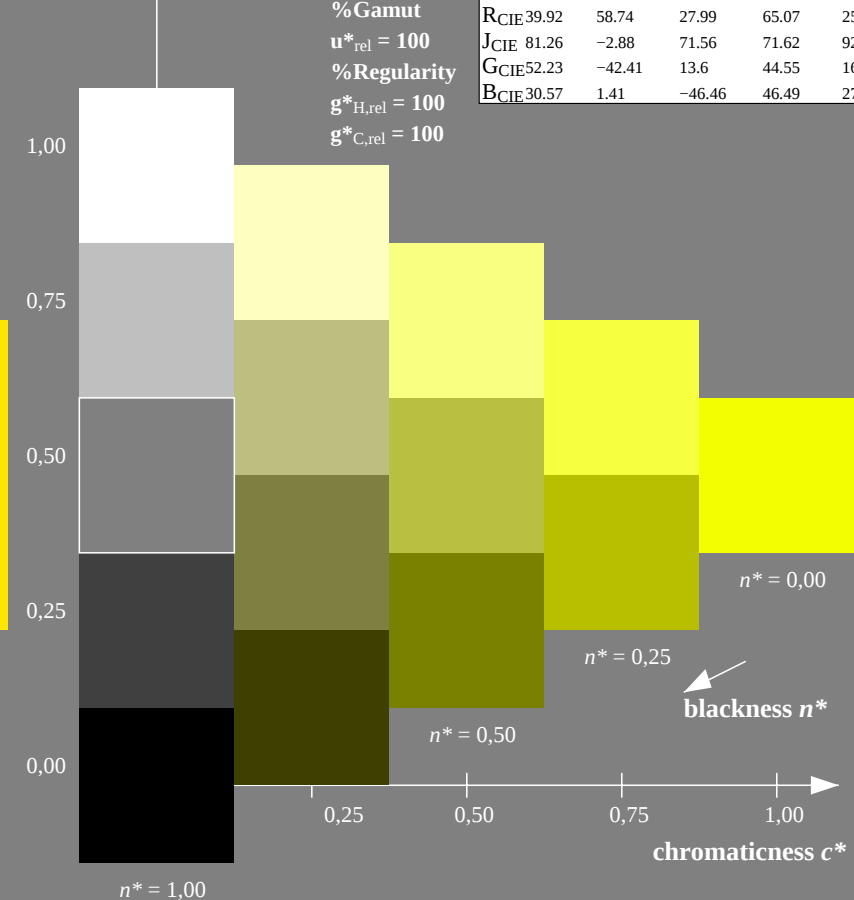
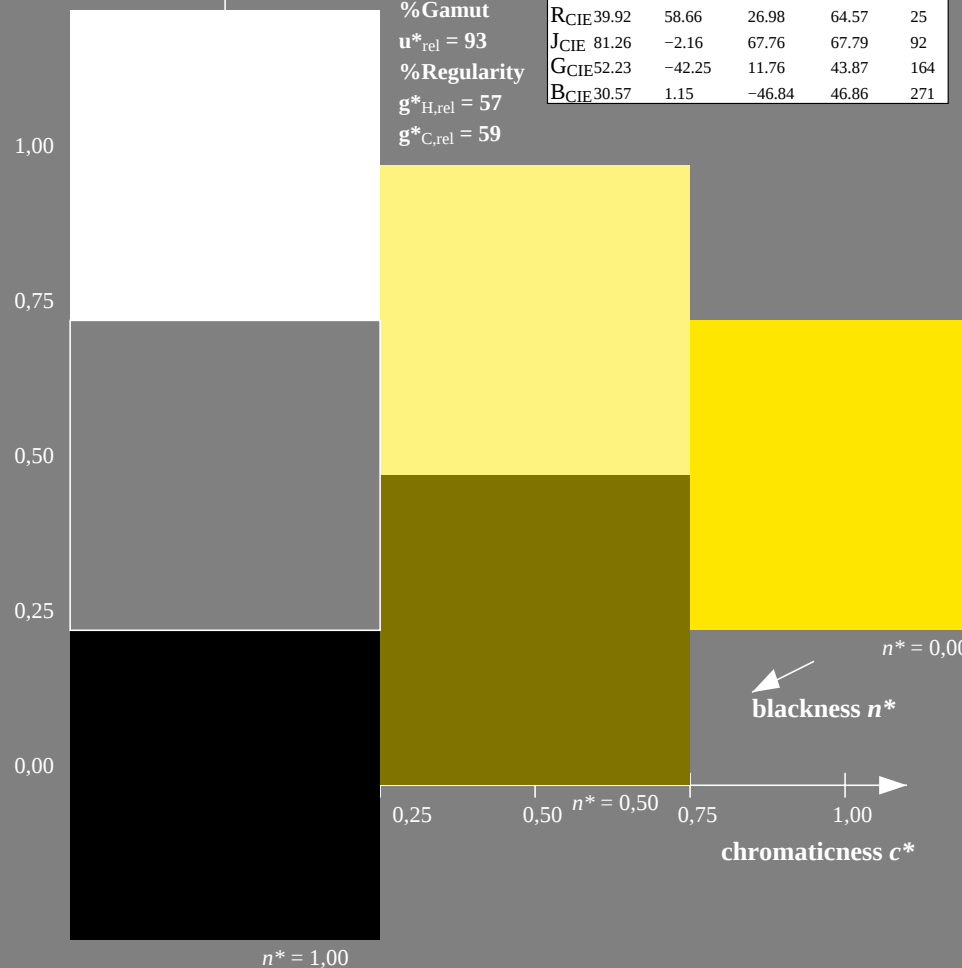
 $u^*_{rel} = 100$ 

%Regularity

 $g^*_{H,rel} = 100$  $g^*_{C,rel} = 100$ 

## SRS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 56.71       | 67.03   | 38.7    | 77.4         | 30           |
| Y <sub>Ma</sub>  | 56.71       | 0.0     | 77.4    | 77.4         | 90           |
| L <sub>Ma</sub>  | 56.71       | -67.02  | 38.7    | 77.4         | 150          |
| C <sub>Ma</sub>  | 56.71       | -67.02  | -38.69  | 77.4         | 210          |
| V <sub>Ma</sub>  | 56.71       | 0.0     | -77.39  | 77.4         | 270          |
| M <sub>Ma</sub>  | 56.71       | 67.03   | -38.69  | 77.4         | 330          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub> | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



NE820-7, 3 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

BAM-test chart NE82; Colorimetric systems ORS18 &amp; ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv\* setrgbcolor

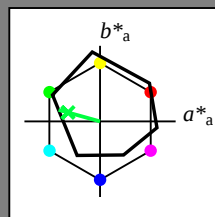
output: Startup (S) data dependend

## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 164/360 = 0.457$  $lab^*ich$  and  $lab^*nch$ 

D65: hue G

LCH\*Ma: 53 57 164

ol $v^*$ Ma: 0.0 1.0 0.25triangle lightness  $t^*$ 

%Gamut

 $u^*_{rel} = 93$ 

%Regularity

 $g^*_{H,rel} = 57$  $g^*_{C,rel} = 59$ 

## ORS18; adapted (a) CIELAB data

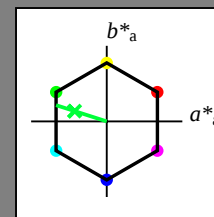
|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

## Output: Colorimetric Standard Reflective System SRS18

for hue  $h^* = lab^*h = 162/360 = 0.451$  $lab^*ich$  and  $lab^*nch$ 

D65: hue G

LCH\*Ma: 57 70 162

ol $v^*$ Ma: 0.0 1.0 0.22triangle lightness  $t^*$ 

%Gamut

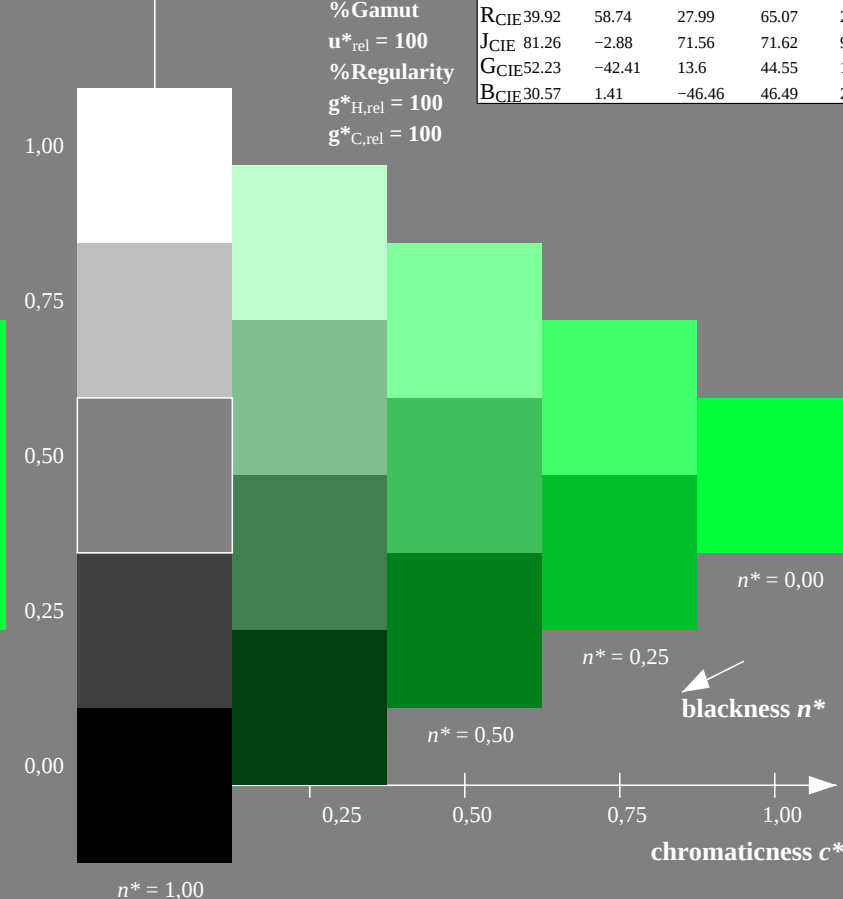
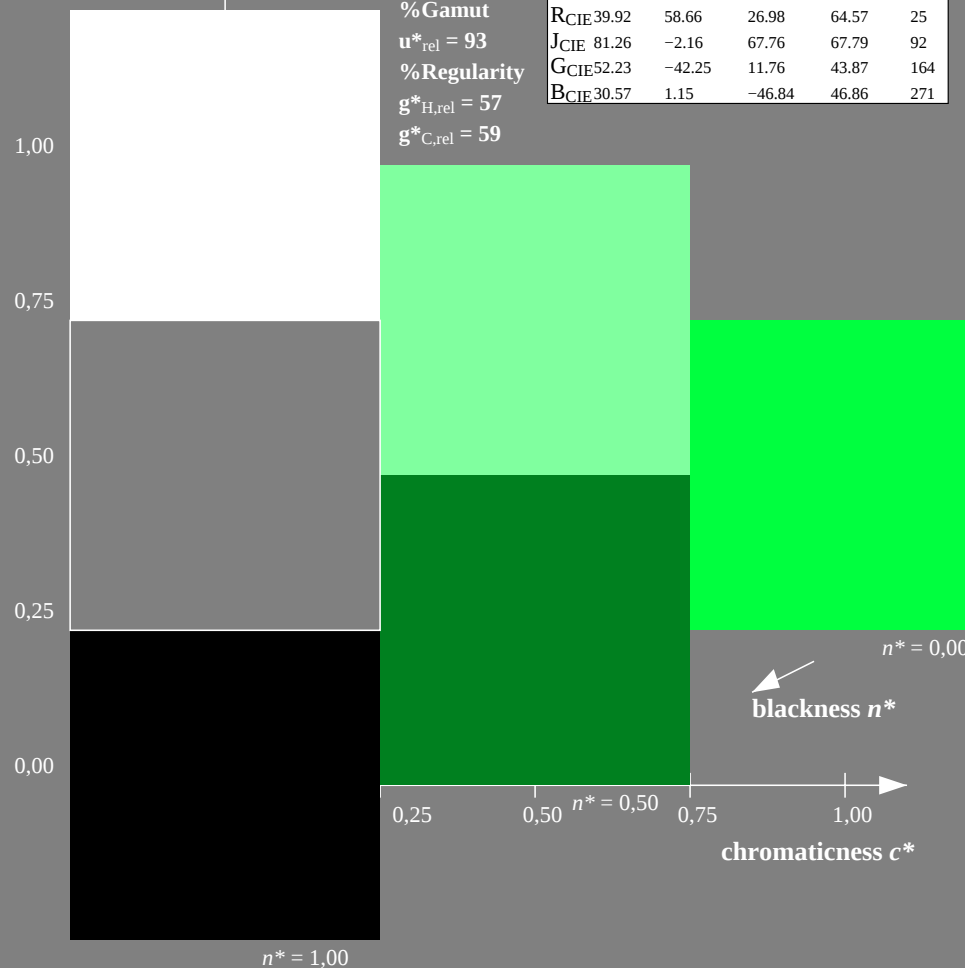
 $u^*_{rel} = 100$ 

%Regularity

 $g^*_{H,rel} = 100$  $g^*_{C,rel} = 100$ 

## SRS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 56.71       | 67.03   | 38.7    | 77.4         | 30           |
| Y <sub>Ma</sub>  | 56.71       | 0.0     | 77.4    | 77.4         | 90           |
| L <sub>Ma</sub>  | 56.71       | -67.02  | 38.7    | 77.4         | 150          |
| C <sub>Ma</sub>  | 56.71       | -67.02  | -38.69  | 77.4         | 210          |
| V <sub>Ma</sub>  | 56.71       | 0.0     | -77.39  | 77.4         | 270          |
| M <sub>Ma</sub>  | 56.71       | 67.03   | -38.69  | 77.4         | 330          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub> | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



NE820-7, 3 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

BAM-test chart NE82; Colorimetric systems ORS18 &amp; ORS18

D65: 3 and 5 step colour scales for 10 hues

input: ol $v^*$  setrgbcolor

output: Startup (S) data dependend

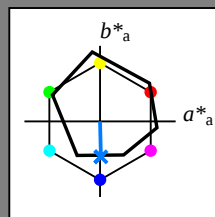
## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 271/360 = 0.754$  $lab^*ich$  and  $lab^*nch$ 

D65: hue B

LCH\*Ma: 42 45 271

olv\*Ma: 0.0 0.49 1.0

triangle lightness  $t^*$ 

%Gamut

 $u^*_{rel} = 93$ 

%Regularity

 $g^*_{H,rel} = 57$  $g^*_{C,rel} = 59$ 

## ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

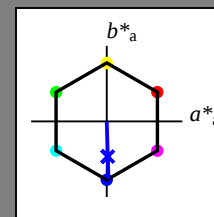
## Output: Colorimetric Standard Reflective System SRS18

for hue  $h^* = lab^*h = 272/360 = 0.755$  $lab^*ich$  and  $lab^*nch$ 

D65: hue B

LCH\*Ma: 57 76 272

olv\*Ma: 0.03 0.0 1.0

triangle lightness  $t^*$ 

%Gamut

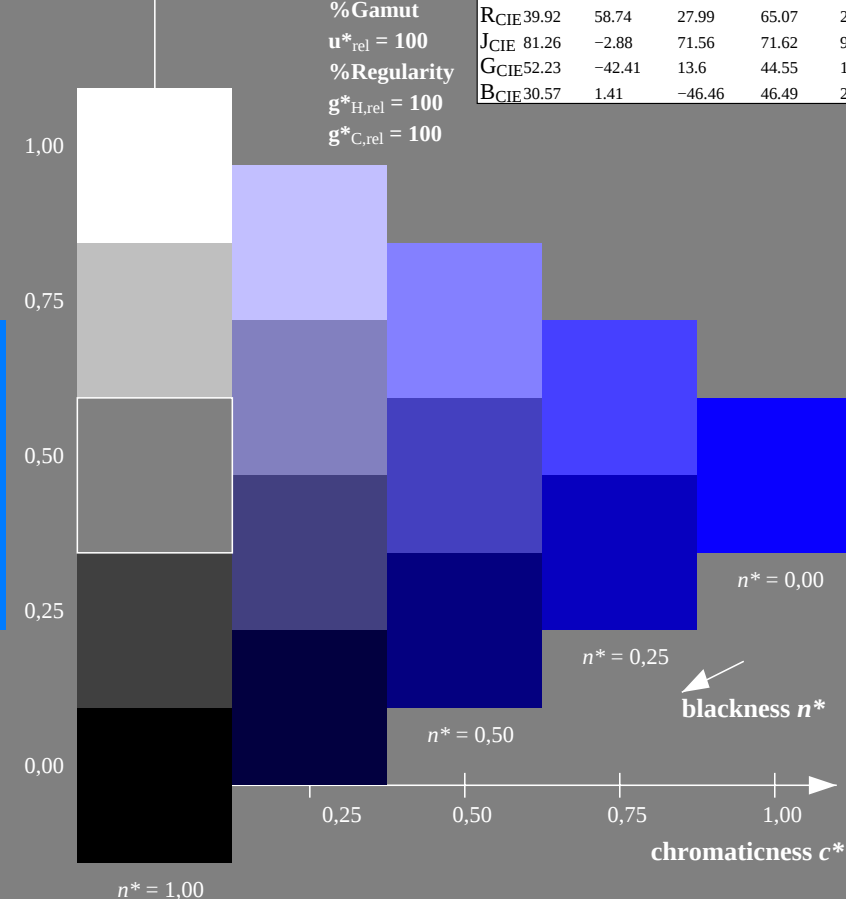
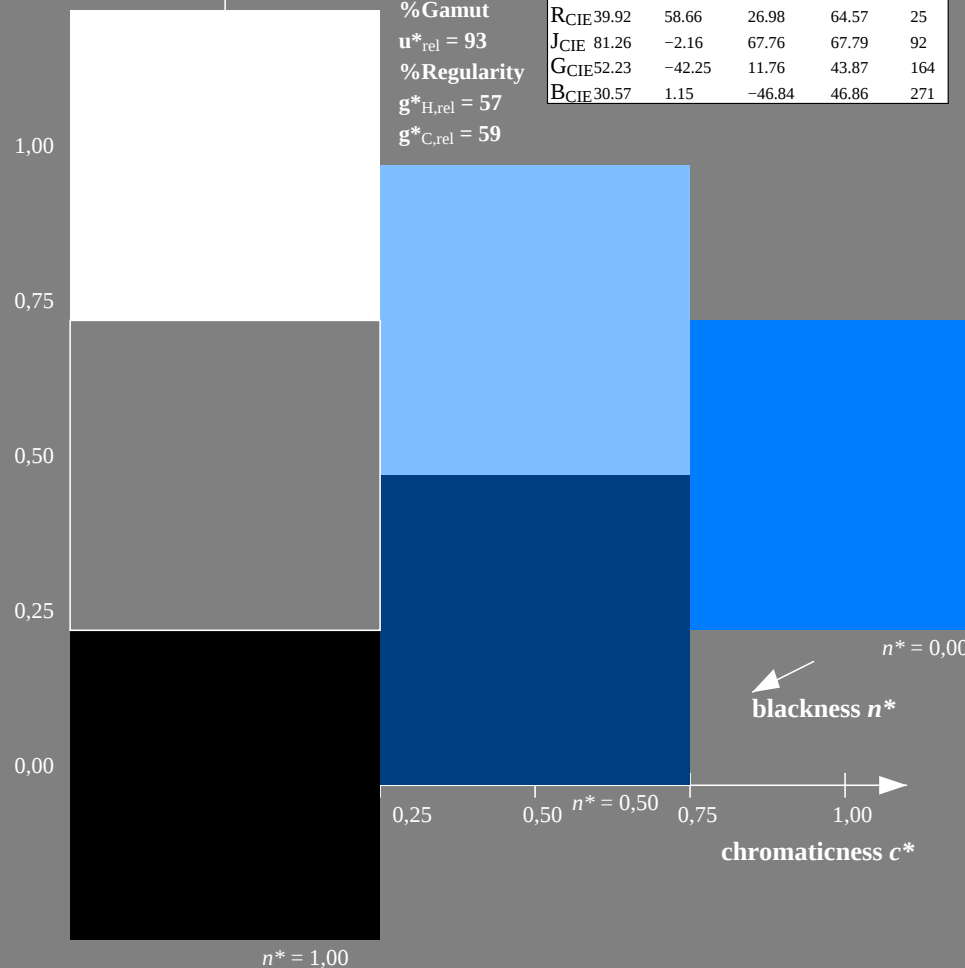
 $u^*_{rel} = 100$ 

%Regularity

 $g^*_{H,rel} = 100$  $g^*_{C,rel} = 100$ 

## SRS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 56.71       | 67.03   | 38.7    | 77.4         | 30           |
| Y <sub>Ma</sub>  | 56.71       | 0.0     | 77.4    | 77.4         | 90           |
| L <sub>Ma</sub>  | 56.71       | -67.02  | 38.7    | 77.4         | 150          |
| C <sub>Ma</sub>  | 56.71       | -67.02  | -38.69  | 77.4         | 210          |
| V <sub>Ma</sub>  | 56.71       | 0.0     | -77.39  | 77.4         | 270          |
| M <sub>Ma</sub>  | 56.71       | 67.03   | -38.69  | 77.4         | 330          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub> | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



NE820-7, 3 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

BAM-test chart NE82; Colorimetric systems ORS18 &amp; ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv\* setrgbcolor

output: Startup (S) data dependend