

# Input: Colorimetric Natural Reflective System CNS18

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

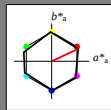
$lab^*tch$  and  $lab^*nch$

D65: hue R

LCH\*Ma: 57 77 25

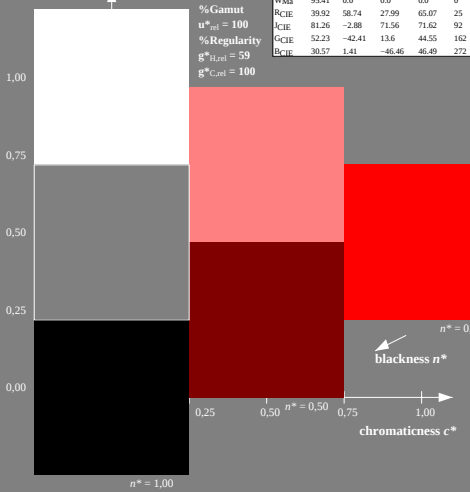
olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



| CNS18; adapted (a) CIELAB data |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| RMa                            | 56.7        | 70.15   | 32.71   | 77.4         | 25           |
| YMa                            | 56.7        | -2.69   | 77.35   | 77.4         | 92           |
| GMa                            | 56.7        | -73.6   | 23.92   | 77.4         | 162          |
| G50RMa                         | 56.7        | -71.24  | -30.23  | 77.4         | 203          |
| BMa                            | 56.7        | 2.7     | -77.34  | 77.4         | 272          |
| B50RMa                         | 56.7        | 63.4    | -44.38  | 77.4         | 325          |
| NMa                            | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| NMa                            | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE                           | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| ICIE                           | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| GCIE                           | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| BCIE                           | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

%Gamut  
 $u^*_{rel} = 100$   
%Regularity  
 $g^*_{H,rel} = 59$   
 $g^*_{C,rel} = 100$



# Output: Colorimetric Television Luminous System TLS00

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

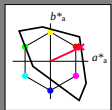
$lab^*tch$  and  $lab^*nch$

D65: hue O

LCH\*Ma: 52 89 25

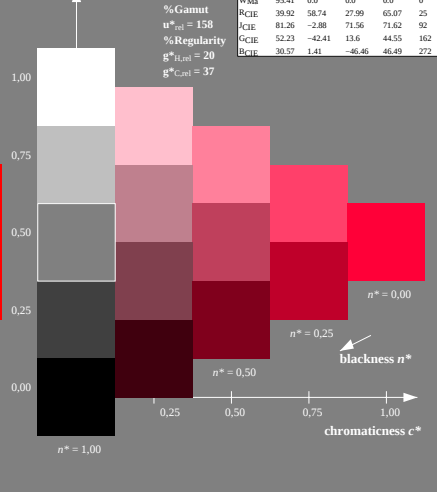
olv\*Ma: 1.0 0.0 0.22

triangle lightness  $t^*$



| TLS00; adapted (a) CIELAB data |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| OMa                            | 50.5        | 76.92   | 64.55   | 100.42       | 40           |
| YMa                            | 92.66       | -20.69  | 90.75   | 93.08        | 103          |
| LMa                            | 83.63       | -82.75  | 79.9    | 115.04       | 136          |
| VMa                            | 86.88       | -46.16  | -13.55  | 48.12        | 196          |
| VMa                            | 30.39       | 76.06   | -103.59 | 128.52       | 306          |
| NMa                            | 57.3        | 94.35   | -58.41  | 110.97       | 328          |
| NMa                            | 0.01        | 0.0     | 0.0     | 0.0          | 0            |
| NMa                            | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE                           | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| ICIE                           | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| GCIE                           | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| BCIE                           | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

%Gamut  
 $u^*_{rel} = 158$   
%Regularity  
 $g^*_{H,rel} = 20$   
 $g^*_{C,rel} = 37$



VE580-7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

BAM-test chart VE58; Colorimetric systems CNS18 & TLS00

input: olv\* setrgbcolor

D65: 3 and 5 step colour scales for 10 hues

output: no change compared to input