

# Input: Colorimetric Offset Reflective System ORS18

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

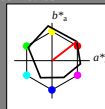
$lab^*ch$  and  $lab^*nh$

D65: hue O

LCH\*Ma: 48 83 38

olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



| ORS18; adapted (a) CIELAB data |        |        |              |              |  |
|--------------------------------|--------|--------|--------------|--------------|--|
| $L^*=L_a^*$                    | $a^*$  | $b^*$  | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| O <sub>M</sub> 47.94           | 65.39  | 50.52  | 82.63        | 38           |  |
| Y <sub>M</sub> 90.37           | -10.26 | 91.75  | 92.32        | 96           |  |
| L <sub>M</sub> 50.9            | -62.83 | 34.96  | 71.91        | 151          |  |
| C <sub>M</sub> 58.62           | -30.34 | -45.01 | 54.3         | 236          |  |
| V <sub>M</sub> 25.72           | 31.1   | -44.4  | 54.22        | 305          |  |
| M <sub>M</sub> 48.13           | 75.28  | -8.36  | 75.74        | 354          |  |
| N <sub>M</sub> 18.01           | 0.0    | 0.0    | 0.0          | 0            |  |
| W <sub>M</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          |  |

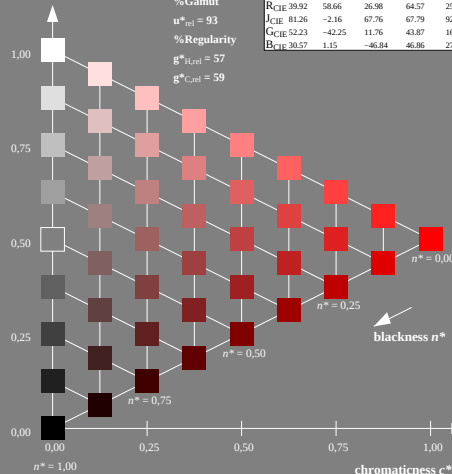
%Gamut

$u^*_{rel} = 93$

%Regularity

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

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



NE700-7, 9 step scales for constant CIELAB hue 38/360 = 0.105 (left)

BAM-test chart NE70; Colorimetric systems ORS18 & TLS00

D65: 9 and 16 step colour scales for 10 hues

# Output: Colorimetric Television Luminous System TLS00

for hue  $h^* = lab^*h = 40/360 = 0.111$

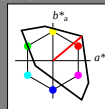
$lab^*ch$  and  $lab^*nh$

D65: hue O

LCH\*Ma: 51 100 40

olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



| TLS00; adapted (a) CIELAB data |        |         |              |              |  |
|--------------------------------|--------|---------|--------------|--------------|--|
| $L^*=L_a^*$                    | $a^*$  | $b^*$   | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| O <sub>M</sub> 50.5            | 76.92  | 64.55   | 100.42       | 40           |  |
| Y <sub>M</sub> 92.66           | -20.69 | 90.75   | 93.08        | 103          |  |
| L <sub>M</sub> 83.63           | -82.75 | 79.9    | 115.04       | 136          |  |
| C <sub>M</sub> 86.88           | -46.16 | -13.55  | 48.12        | 196          |  |
| V <sub>M</sub> 30.39           | 76.06  | -103.59 | 128.52       | 306          |  |
| M <sub>M</sub> 57.3            | 94.35  | -58.41  | 110.97       | 328          |  |
| N <sub>M</sub> 0.01            | 0.0    | 0.0     | 0.0          | 0            |  |
| W <sub>M</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          |  |

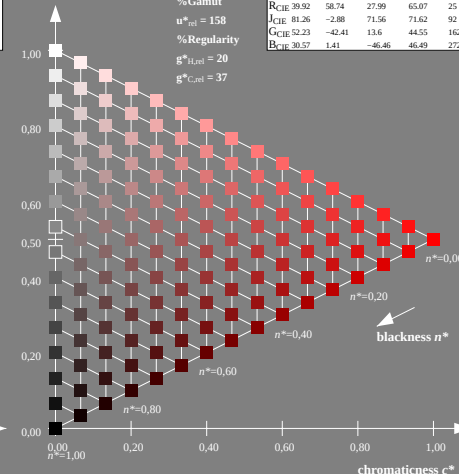
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$



16 step scales for constant CIELAB hue 40/360 = 0.111 (right)

input: olv\* setrgbcolor

output: no change compared to input