

# Input: Colorimetric Television Luminous System TLS18

for hue  $h^* = lab^*h = 35/360 = 0.097$

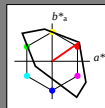
$lab^*tch$  and  $lab^*nch$

D65: hue O

LCH\*Ma: 53 87 35

olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



%Gamut  
 $u^*_{rel} = 118$   
%Regularity  
 $g^*_{H,rel} = 22$   
 $g^*_{C,rel} = 40$

| TLS18; adapted (a) CIELAB data |         |         |              |              |  |
|--------------------------------|---------|---------|--------------|--------------|--|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| O <sub>Ma</sub> 52.76          | 71.63   | 49.88   | 87.29        | 35           |  |
| Y <sub>Ma</sub> 92.74          | -20.02  | 84.97   | 87.3         | 103          |  |
| L <sub>Ma</sub> 84.0           | -78.98  | 73.94   | 108.2        | 137          |  |
| C <sub>Ma</sub> 87.14          | -44.41  | -13.11  | 46.32        | 196          |  |
| V <sub>Ma</sub> 35.47          | 64.92   | -95.06  | 115.12       | 304          |  |
| M <sub>Ma</sub> 59.01          | 89.33   | -55.67  | 105.26       | 328          |  |
| 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          |  |

# Output: Colorimetric Offset Reflective System ORS18

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

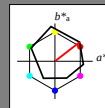
$lab^*tch$  and  $lab^*nch$

D65: hue O

LCH\*Ma: 48 83 38

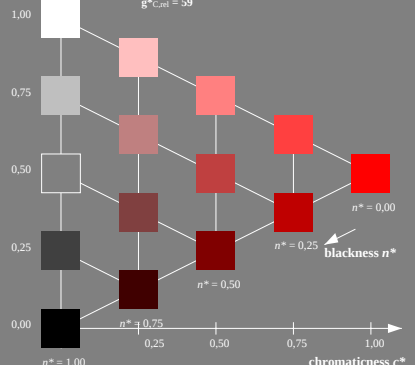
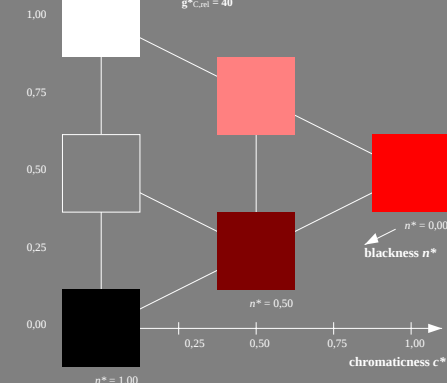
olv\*Ma: 1.0 0.0 0.0

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          |  |



NE660-7, 3 step scales for constant CIELAB hue 35/360 = 0.097 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

BAM-test chart NE66; Colorimetric systems TLS18 & ORS18

D65: 3 and 5 step colour scales for 10 hues

input: olv\* setrgbcolor

output: no change compared to input