

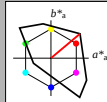
# Input: Colorimetric Television Luminous System TLS00

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

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

D65: hue O  
LCH\*Ma: 51 100 40  
olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



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

| 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          |
| CMa                            | 86.88         | -46.16  | -13.55  | 48.12        | 196          |
| VMa                            | 30.39         | 76.06   | -103.59 | 128.52       | 306          |
| MMa                            | 57.3          | 94.35   | -58.41  | 110.97       | 328          |
| NMa                            | 0.01          | 0.0     | 0.0     | 0.0          | 0            |
| WMa                            | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| RCIE                           | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| JCIE                           | 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          |

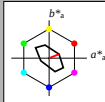
# Output: Colorimetric Television Luminous System TLS70

for hue  $h^* = lab^*h = 22/360 = 0.061$

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

D65: hue O  
LCH\*Ma: 76 28 22  
olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



%Gamut  
 $u^*_{rel} = 16$   
%Regularity  
 $g^*_{H,rel} = 34$   
 $g^*_{C,rel} = 51$

| TLS70; adapted (a) CIELAB data |               |         |         |              |              |
|--------------------------------|---------------|---------|---------|--------------|--------------|
|                                | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| OMa                            | 76.43         | 26.27   | 10.57   | 28.32        | 22           |
| YMa                            | 93.93         | -10.76  | 34.63   | 36.27        | 107          |
| LMa                            | 89.32         | -35.8   | 27.64   | 45.24        | 142          |
| CMa                            | 90.93         | -21.95  | -7.07   | 23.07        | 198          |
| VMa                            | 72.1          | 15.76   | -35.63  | 38.97        | 294          |
| MMa                            | 78.5          | 37.52   | -25.23  | 45.22        | 326          |
| NMa                            | 69.7          | 0.0     | 0.0     | 0.0          | 0            |
| WMa                            | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| RCIE                           | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| JCIE                           | 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          |

| relative Inform. Technology (IT) |       |     |     |       |  |
|----------------------------------|-------|-----|-----|-------|--|
| olvi3*                           | 1.0   | 1.0 | 1.0 | (1.0) |  |
| cmyn3*                           | 0.0   | 0.0 | 0.0 | (0.0) |  |
| olvi4*                           | 1.0   | 1.0 | 1.0 | 1.0   |  |
| cmyn4*                           | 0.0   | 0.0 | 0.0 | 0.0   |  |
| standard and adapted CIELAB      |       |     |     |       |  |
| LAB*LAB                          | 95.41 | 0.0 | 0.0 |       |  |
| LAB*LABa                         | 95.41 | 0.0 | 0.0 |       |  |
| LAB*TCHe                         | 99.99 | 0.0 | 0.0 |       |  |
| relative CIELAB lab*             |       |     |     |       |  |
| lab*lab                          | 1.0   | 0.0 | 0.0 |       |  |
| lab*tch                          | 1.0   | 0.0 | 0.0 |       |  |
| lab*nch                          | 0.0   | 0.0 | 0.0 |       |  |
| relative Natural Colour (NC)     |       |     |     |       |  |
| lab*lrj                          | 1.0   | 0.0 | 0.0 |       |  |
| lab*tce                          | 1.0   | 0.0 | 0.0 |       |  |
| lab*nce                          | 0.0   | 0.0 | 0.0 |       |  |

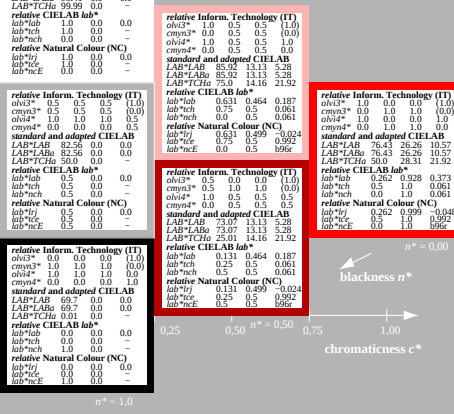
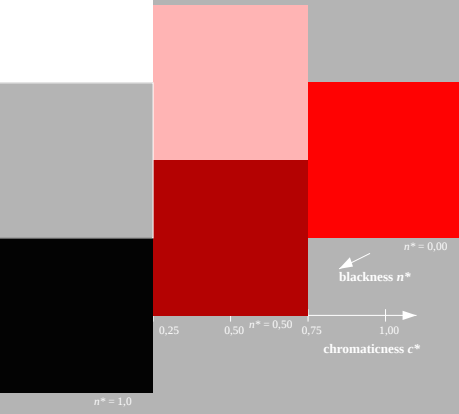
| relative Inform. Technology (IT) |       |       |        |       |  |
|----------------------------------|-------|-------|--------|-------|--|
| olvi3*                           | 1.0   | 0.5   | 0.5    | (1.0) |  |
| cmyn3*                           | 0.0   | 0.5   | 0.5    | (0.0) |  |
| olvi4*                           | 1.0   | 0.5   | 0.5    | 1.0   |  |
| cmyn4*                           | 0.0   | 0.5   | 0.5    | 0.0   |  |
| standard and adapted CIELAB      |       |       |        |       |  |
| LAB*LAB                          | 85.92 | 13.13 | 5.28   |       |  |
| LAB*LABa                         | 85.92 | 13.13 | 5.28   |       |  |
| LAB*TCHe                         | 75.0  | 14.16 | 21.92  |       |  |
| relative CIELAB lab*             |       |       |        |       |  |
| lab*lab                          | 0.631 | 0.464 | 0.187  |       |  |
| lab*tch                          | 0.75  | 0.5   | 0.061  |       |  |
| lab*nch                          | 0.0   | 0.5   | 0.061  |       |  |
| lab*lrj                          | 0.631 | 0.499 | -0.024 |       |  |
| lab*tce                          | 0.75  | 0.5   | 0.992  |       |  |
| lab*nce                          | 0.0   | 0.5   | 0.992  |       |  |

| relative Inform. Technology (IT) |       |       |        |       |  |
|----------------------------------|-------|-------|--------|-------|--|
| olvi3*                           | 1.0   | 0.0   | 0.0    | (1.0) |  |
| cmyn3*                           | 0.0   | 1.0   | 1.0    | (0.0) |  |
| olvi4*                           | 1.0   | 0.0   | 0.0    | 1.0   |  |
| cmyn4*                           | 0.0   | 1.0   | 1.0    | 0.0   |  |
| standard and adapted CIELAB      |       |       |        |       |  |
| LAB*LAB                          | 76.43 | 26.26 | 10.57  |       |  |
| LAB*LABa                         | 76.43 | 26.26 | 10.57  |       |  |
| LAB*TCHe                         | 50.0  | 28.31 | 21.92  |       |  |
| relative CIELAB lab*             |       |       |        |       |  |
| lab*lab                          | 0.262 | 0.928 | 0.373  |       |  |
| lab*tch                          | 0.5   | 1.0   | 0.061  |       |  |
| lab*nch                          | 0.0   | 1.0   | 0.061  |       |  |
| relative Natural Colour (NC)     |       |       |        |       |  |
| lab*lrj                          | 0.262 | 0.999 | -0.048 |       |  |
| lab*tce                          | 0.5   | 1.0   | 0.992  |       |  |
| lab*nce                          | 0.0   | 1.0   | 0.992  |       |  |

| relative Inform. Technology (IT) |       |     |     |       |  |
|----------------------------------|-------|-----|-----|-------|--|
| olvi3*                           | 0.5   | 0.5 | 0.5 | (1.0) |  |
| cmyn3*                           | 0.5   | 0.5 | 0.5 | (0.0) |  |
| olvi4*                           | 1.0   | 1.0 | 1.0 | 1.0   |  |
| cmyn4*                           | 0.0   | 0.0 | 0.0 | 0.0   |  |
| standard and adapted CIELAB      |       |     |     |       |  |
| LAB*LAB                          | 82.56 | 0.0 | 0.0 |       |  |
| LAB*LABa                         | 82.56 | 0.0 | 0.0 |       |  |
| LAB*TCHe                         | 50.0  | 0.0 | 0.0 |       |  |
| relative CIELAB lab*             |       |     |     |       |  |
| lab*lab                          | 0.5   | 0.0 | 0.0 |       |  |
| lab*tch                          | 0.5   | 0.0 | 0.0 |       |  |
| lab*nch                          | 0.5   | 0.0 | 0.0 |       |  |
| relative Natural Colour (NC)     |       |     |     |       |  |
| lab*lrj                          | 0.5   | 0.0 | 0.0 |       |  |
| lab*tce                          | 0.5   | 0.0 | 0.0 |       |  |
| lab*nce                          | 0.5   | 0.0 | 0.0 |       |  |

| relative Inform. Technology (IT) |       |       |        |       |  |
|----------------------------------|-------|-------|--------|-------|--|
| olvi3*                           | 0.5   | 0.0   | 0.0    | (1.0) |  |
| cmyn3*                           | 0.5   | 1.0   | 1.0    | (0.0) |  |
| olvi4*                           | 1.0   | 0.5   | 0.5    | 1.0   |  |
| cmyn4*                           | 0.0   | 0.5   | 0.5    | 0.0   |  |
| standard and adapted CIELAB      |       |       |        |       |  |
| LAB*LAB                          | 73.07 | 13.13 | 5.28   |       |  |
| LAB*LABa                         | 73.07 | 13.13 | 5.28   |       |  |
| LAB*TCHe                         | 50.0  | 14.16 | 21.92  |       |  |
| relative CIELAB lab*             |       |       |        |       |  |
| lab*lab                          | 0.131 | 0.464 | 0.187  |       |  |
| lab*tch                          | 0.25  | 0.5   | 0.061  |       |  |
| lab*nch                          | 0.0   | 0.5   | 0.061  |       |  |
| relative Natural Colour (NC)     |       |       |        |       |  |
| lab*lrj                          | 0.131 | 0.499 | -0.024 |       |  |
| lab*tce                          | 0.25  | 0.5   | 0.992  |       |  |
| lab*nce                          | 0.0   | 0.5   | 0.992  |       |  |

| relative Inform. Technology (IT) |      |     |     |       |  |
|----------------------------------|------|-----|-----|-------|--|
| olvi3*                           | 0.5  | 0.0 | 0.0 | (1.0) |  |
| cmyn3*                           | 0.5  | 1.0 | 1.0 | (0.0) |  |
| olvi4*                           | 1.0  | 0.5 | 0.5 | 1.0   |  |
| cmyn4*                           | 0.0  | 0.5 | 0.5 | 0.0   |  |
| standard and adapted CIELAB      |      |     |     |       |  |
| LAB*LAB                          | 69.7 | 0.0 | 0.0 |       |  |
| LAB*LABa                         | 69.7 | 0.0 | 0.0 |       |  |
| LAB*TCHe                         | 0.01 | 0.0 | 0.0 |       |  |
| relative CIELAB lab*             |      |     |     |       |  |
| lab*lab                          | 0.0  | 0.0 | 0.0 |       |  |
| lab*tch                          | 0.0  | 0.0 | 0.0 |       |  |
| lab*nch                          | 1.0  | 0.0 | 0.0 |       |  |
| relative Natural Colour (NC)     |      |     |     |       |  |
| lab*lrj                          | 0.0  | 0.0 | 0.0 |       |  |
| lab*tce                          | 0.0  | 0.0 | 0.0 |       |  |
| lab*nce                          | 1.0  | 0.0 | 0.0 |       |  |



NE030-7, 3 step scales for constant CIELAB hue 40/360 = 0.111 (left)

3 step scales for constant CIELAB hue 22/360 = 0.061 (right)

BAM-test chart NE03; Colorimetric systems TLS00 & TLS70  
D65: 3 step colour scales and coordinate data for 10 hues

input: olv\* setrgbcolor  
output: olv\* setrgbcolor / w\* setgray