

# Input: Colorimetric Television Luminous System TLS70

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

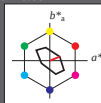
$lab^*ch$  and  $lab^*nch$

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

| $L^* = L^*_a$   | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|-----------------|---------|---------|--------------|--------------|
| $O_{Ma}$ 76.43  | 26.27   | 10.57   | 28.32        | 22           |
| $Y_{Ma}$ 93.93  | -10.76  | 34.63   | 36.27        | 107          |
| $L_{Ma}$ 89.32  | -35.8   | 27.64   | 45.24        | 142          |
| $C_{Ma}$ 90.93  | -21.95  | -7.07   | 23.07        | 198          |
| $V_{Ma}$ 72.1   | 15.76   | -35.63  | 38.97        | 294          |
| $M_{Ma}$ 78.5   | 37.52   | -25.23  | 45.22        | 326          |
| $N_{Ma}$ 69.7   | 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          |

# Output: Colorimetric Television Luminous System TLS00

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

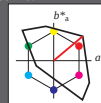
$lab^*ch$  and  $lab^*nch$

D65: hue O

LCH\*Ma: 51 100 40

olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



%Gamut

$u^*_{rel} = 158$

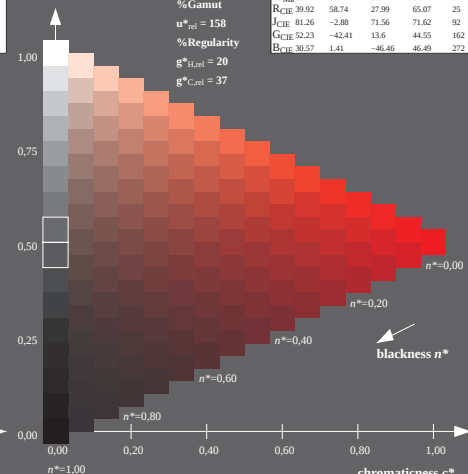
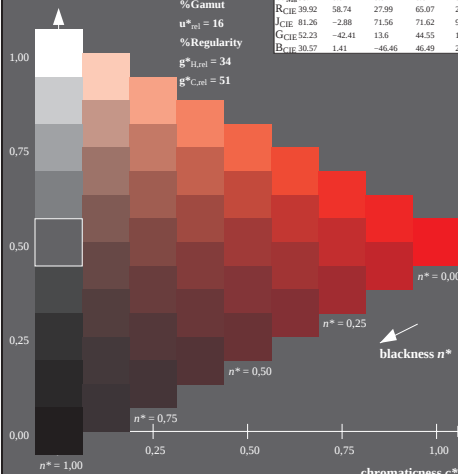
%Regularity

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

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

TLS00; adapted (a) CIELAB data

| $L^* = L^*_a$   | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|-----------------|---------|---------|--------------|--------------|
| $O_{Ma}$ 50.5   | 76.92   | 64.55   | 100.42       | 40           |
| $Y_{Ma}$ 92.66  | -20.69  | 90.75   | 93.08        | 103          |
| $L_{Ma}$ 83.63  | -82.75  | 79.9    | 115.04       | 136          |
| $C_{Ma}$ 86.88  | -46.16  | -13.55  | 48.12        | 196          |
| $V_{Ma}$ 30.39  | 76.06   | -103.59 | 128.52       | 306          |
| $M_{Ma}$ 57.3   | 94.35   | -58.41  | 110.97       | 328          |
| $N_{Ma}$ 0.01   | 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          |



OE980-7, 9 step scales for constant CIELAB hue 22/360 = 0.061 (left)

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

BAM-test chart OE98; Colorimetric systems TLS70 & TLS00  
D65: 9 and 16 step colour scales for 10 hues

input:  $cmy0^* \text{ setcmykcolor}$   
output:  $cmy0^* / 000n^* \text{ setcmykcolor}$