

### Eingabe: Farbmetrisches Fernseh-Licht-System TLS18

für Buntton  $h^* = lab^*h = 35/360 = 0.097$

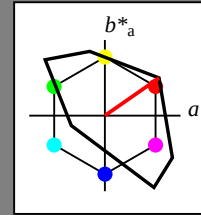
$lab^*ch$  und  $lab^*nch$

D65: Buntton O

LCH\*Ma: 53 87 35

olv\*Ma: 1.0 0.0 0.0

Dreiecks-Helligkeit  $t^*$



### TLS18; adaptierte CIELAB-Daten

|                  | $L^*=L_a$ | $a^*$  | $b^*$  | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-----------|--------|--------|--------------|--------------|
| 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          |

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

relative Inform. Technology (IT)

|         |     |     |     |       |
|---------|-----|-----|-----|-------|
| olv3*   | 1.0 | 1.0 | 1.0 | (1.0) |
| olv4*   | 0.0 | 0.0 | 0.0 | (0.0) |
| olv5*   | 0.0 | 0.0 | 0.0 | (0.0) |
| olv6*   | 0.0 | 0.0 | 0.0 | (0.0) |
| olv7*   | 0.0 | 0.0 | 0.0 | (0.0) |
| olv8*   | 0.0 | 0.0 | 0.0 | (0.0) |
| olv9*   | 0.0 | 0.0 | 0.0 | (0.0) |
| olv10*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv11*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv12*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv13*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv14*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv15*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv16*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv17*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv18*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv19*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv20*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv21*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv22*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv23*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv24*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv25*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv26*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv27*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv28*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv29*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv30*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv31*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv32*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv33*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv34*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv35*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv36*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv37*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv38*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv39*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv40*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv41*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv42*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv43*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv44*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv45*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv46*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv47*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv48*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv49*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv50*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv51*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv52*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv53*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv54*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv55*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv56*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv57*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv58*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv59*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv60*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv61*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv62*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv63*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv64*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv65*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv66*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv67*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv68*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv69*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv70*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv71*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv72*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv73*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv74*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv75*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv76*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv77*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv78*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv79*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv80*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv81*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv82*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv83*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv84*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv85*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv86*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv87*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv88*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv89*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv90*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv91*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv92*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv93*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv94*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv95*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv96*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv97*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv98*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv99*  | 0.0 | 0.0 | 0.0 | (0.0) |
| olv100* | 0.0 | 0.0 | 0.0 | (0.0) |

relative Inform. Technology (IT)

|         |      |      |      |       |
|---------|------|------|------|-------|
| olv3*   | 0.75 | 0.75 | 0.75 | (1.0) |
| olv4*   | 0.25 | 0.25 | 0.25 | (0.0) |
| olv5*   | 0.0  | 0.0  | 0.0  | (0.0) |
| olv6*   | 0.0  | 0.0  | 0.0  | (0.0) |
| olv7*   | 0.0  | 0.0  | 0.0  | (0.0) |
| olv8*   | 0.0  | 0.0  | 0.0  | (0.0) |
| olv9*   | 0.0  | 0.0  | 0.0  | (0.0) |
| olv10*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv11*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv12*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv13*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv14*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv15*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv16*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv17*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv18*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv19*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv20*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv21*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv22*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv23*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv24*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv25*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv26*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv27*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv28*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv29*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv30*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv31*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv32*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv33*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv34*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv35*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv36*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv37*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv38*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv39*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv40*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv41*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv42*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv43*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv44*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv45*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv46*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv47*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv48*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv49*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv50*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv51*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv52*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv53*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv54*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv55*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv56*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv57*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv58*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv59*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv60*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv61*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv62*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv63*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv64*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv65*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv66*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv67*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv68*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv69*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv70*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv71*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv72*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv73*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv74*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv75*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv76*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv77*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv78*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv79*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv80*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv81*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv82*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv83*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv84*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv85*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv86*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv87*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv88*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv89*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv90*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv91*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv92*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv93*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv94*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv95*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv96*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv97*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv98*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv99*  | 0.0  | 0.0  | 0.0  | (0.0) |
| olv100* | 0.0  | 0.0  | 0.0  | (0.0) |

|                                         |       |       |       |       |
|-----------------------------------------|-------|-------|-------|-------|
| <b>relative Inform. Technology (IT)</b> |       |       |       |       |
| olv3*                                   | 1.0   | 0.5   | 0.5   | (1.0) |
| cmyn3*                                  | 0.0   | 0.5   | 0.5   | (0.0) |
| olv4*                                   | 1.0   | 0.5   | 0.5   | 1.0   |
| cmyn4*                                  | 0.0   | 0.5   | 0.5   | 0.0   |
| <b>standard and adapted CIELAB</b>      |       |       |       |       |
| LAB*LAB                                 | 74.08 | 35.81 | 24.45 |       |
| LAB*LABa                                | 74.08 | 35.81 | 24.45 |       |
| LAB*TCHa                                | 75.0  | 43.63 | 34.81 |       |
| <b>relative CIELAB lab*</b>             |       |       |       |       |
| lab*lab                                 | 0.724 | 0.41  | 0.29  |       |
| lab*tcch                                | 0.75  | 0.5   | 0.05  |       |
| lab*nch                                 | 0.0   | 0.5   | 0.05  |       |
| <b>relative Natural Colour (NC)</b>     |       |       |       |       |
| lab*lrj                                 | 0.724 | 0.488 | 0.10  |       |
| lab*tcce                                | 0.75  |       | 0.03  |       |
| lab*nce                                 | 0.0   | 0.5   | 0.14  |       |

## Eingabe: Farbmetrisches Fernseh-Licht-System TLS18

für Buntton  $h^* = lab^*h = 103/360 = 0.287$

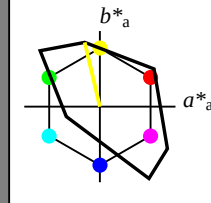
$lab^*ch$  und  $lab^*nch$

D65: Buntton Y

LCH\*Ma: 93 87 103

olv\*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit  $t^*$



relative Inform. Technology (IT)  
olv3\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)  
olv4\* 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\*LAB 95.41 0.0 0.0  
LAB\*TCRa 99.99 0.01

relative CIELAB lab\*  
lab\*lab 1.0 0.0 0.0  
lab\*ch 1.0 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 1.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.75 0.75 0.75 (1.0)  
cmyn3\* 0.25 0.25 0.25 (0.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 76.07 0.0 0.0  
LAB\*LAB 76.07 0.0 0.0  
LAB\*TCRa 75.00 0.01

relative CIELAB lab\*  
lab\*lab 0.75 0.0 0.0  
lab\*ch 0.75 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.75 0.0 0.0  
lab\*nce 0.75 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LAB 56.72 0.0 0.0  
LAB\*TCRa 50.00 0.01

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*ch 0.5 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (1.0)  
cmyn3\* 0.75 0.75 0.75 (0.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.37 0.0 0.0  
LAB\*LAB 37.37 0.0 0.0  
LAB\*TCRa 25.00 0.01

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*ch 0.25 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.25 0.0 0.0  
lab\*nce 0.25 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.03 0.0 0.0  
LAB\*LAB 18.03 0.0 0.0  
LAB\*TCRa 0.01 0.01

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*ch 0.0 0.0 0.0  
lab\*nch 1.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.03 0.0 0.0  
LAB\*LAB 18.03 0.0 0.0  
LAB\*TCRa 0.01 0.01

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*ch 0.0 0.0 0.0  
lab\*nch 1.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*nce 0.0 0.0 0.0

## TLS18; adaptierte CIELAB-Daten

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| 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          |

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Umfang

$u^*_{rel} = 118$

%Umfang

$u^*_{rel} = 118$

%Umfang

$u^*_{rel} = 118$

%Umfang

$u^*_{rel} = 118$

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$u^*_{rel} = 118$

%Umfang

$u^*_{rel} = 118$

%Umfang

$u^*_{rel} = 118$

%Umfang

$u^*_{rel} = 118$

## Ausgabe: Farbmetrisches Fernseh-Licht-System TLS18

für Buntton  $h^* = lab^*h = 103/360 = 0.287$

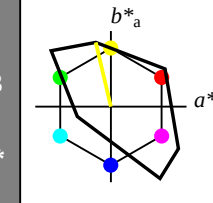
$lab^*ch$  und  $lab^*nch$

D65: Buntton Y

LCH\*Ma: 93 87 103

olv\*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit  $t^*$



relative Inform. Technology (IT)  
olv3\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)  
olv4\* 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\*LAB 95.41 0.0 0.0  
LAB\*TCRa 99.99 0.01

relative CIELAB lab\*  
lab\*lab 1.0 0.0 0.0  
lab\*ch 1.0 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 1.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.75 0.75 0.75 (1.0)  
cmyn3\* 0.25 0.25 0.25 (0.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 76.07 0.0 0.0  
LAB\*LAB 76.07 0.0 0.0  
LAB\*TCRa 75.00 0.01

relative CIELAB lab\*  
lab\*lab 0.75 0.0 0.0  
lab\*ch 0.75 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.75 0.0 0.0  
lab\*nce 0.75 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LAB 56.72 0.0 0.0  
LAB\*TCRa 50.00 0.01

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*ch 0.5 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (1.0)  
cmyn3\* 0.75 0.75 0.75 (0.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.37 0.0 0.0  
LAB\*LAB 37.37 0.0 0.0  
LAB\*TCRa 25.00 0.01

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*ch 0.25 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.25 0.0 0.0  
lab\*nce 0.25 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.03 0.0 0.0  
LAB\*LAB 18.03 0.0 0.0  
LAB\*TCRa 0.01 0.01

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*ch 0.0 0.0 0.0  
lab\*nch 1.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.03 0.0 0.0  
LAB\*LAB 18.03 0.0 0.0  
LAB\*TCRa 0.01 0.01

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*ch 0.0 0.0 0.0  
lab\*nch 1.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*nce 0.0 0.0 0.0

## TLS18; adaptierte CIELAB-Daten

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| 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          |

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Umfang

$u^*_{rel} = 118$

%Umfang

$u^*_{rel} = 118$

%Umfang

$u^*_{rel} = 118$

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$u^*_{rel} = 118$

%Umfang

$u^*_{rel} = 118$

NG590-7, 5 stufige Reihen für konstanten CIELAB Buntton 103/360 = 0.287 (links)

5 stufige Reihen für konstanten CIELAB Buntton 103/360 = 0.287 (rechts)

BAM-Prüfvorlage NG59; Farbmetrik-Systeme TLS18 & TLS18 input: olv\* setrgbcolor

D65: 2 Koordinatendaten; 5stufige Farbreihen für 10 Bunttöne

output: no change compared to input

## Seitenblung 3

# Eingabe: Farbmetrisches Fernseh-Licht-System TLS18

für Buntton  $h^* = lab^*h = 196/360 = 0.546$

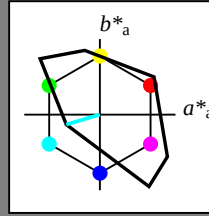
$lab^*ch$  und  $lab^*nch$

D65: Buntton C

LCH\*Ma: 87 46 196

olv\*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit  $t^*$



## TLS18; adaptierte CIELAB-Daten

|                  | $L^*=L_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-----------|---------|---------|--------------|--------------|
| 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            |
| RC <sub>IE</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          |

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

relative Inform. Technology (IT)

olv3\* 0.0 0.0 0.0 (1.0)

olv4\* 0.0 0.0 0.0 (1.0)

olv5\* 0.0 0.0 0.0 (1.0)

olv6\* 0.0 0.0 0.0 (1.0)

olv7\* 0.0 0.0 0.0 (1.0)

olv8\* 0.0 0.0 0.0 (1.0)

olv9\* 0.0 0.0 0.0 (1.0)

olv10\* 0.0 0.0 0.0 (1.0)

olv11\* 0.0 0.0 0.0 (1.0)

olv12\* 0.0 0.0 0.0 (1.0)

olv13\* 0.0 0.0 0.0 (1.0)

olv14\* 0.0 0.0 0.0 (1.0)

olv15\* 0.0 0.0 0.0 (1.0)

olv16\* 0.0 0.0 0.0 (1.0)

olv17\* 0.0 0.0 0.0 (1.0)

olv18\* 0.0 0.0 0.0 (1.0)

olv19\* 0.0 0.0 0.0 (1.0)

olv20\* 0.0 0.0 0.0 (1.0)

olv21\* 0.0 0.0 0.0 (1.0)

olv22\* 0.0 0.0 0.0 (1.0)

olv23\* 0.0 0.0 0.0 (1.0)

olv24\* 0.0 0.0 0.0 (1.0)

olv25\* 0.0 0.0 0.0 (1.0)

olv26\* 0.0 0.0 0.0 (1.0)

olv27\* 0.0 0.0 0.0 (1.0)

olv28\* 0.0 0.0 0.0 (1.0)

olv29\* 0.0 0.0 0.0 (1.0)

olv30\* 0.0 0.0 0.0 (1.0)

olv31\* 0.0 0.0 0.0 (1.0)

olv32\* 0.0 0.0 0.0 (1.0)

olv33\* 0.0 0.0 0.0 (1.0)

olv34\* 0.0 0.0 0.0 (1.0)

olv35\* 0.0 0.0 0.0 (1.0)

olv36\* 0.0 0.0 0.0 (1.0)

olv37\* 0.0 0.0 0.0 (1.0)

olv38\* 0.0 0.0 0.0 (1.0)

olv39\* 0.0 0.0 0.0 (1.0)

olv40\* 0.0 0.0 0.0 (1.0)

olv41\* 0.0 0.0 0.0 (1.0)

olv42\* 0.0 0.0 0.0 (1.0)

olv43\* 0.0 0.0 0.0 (1.0)

olv44\* 0.0 0.0 0.0 (1.0)

olv45\* 0.0 0.0 0.0 (1.0)

olv46\* 0.0 0.0 0.0 (1.0)

olv47\* 0.0 0.0 0.0 (1.0)

olv48\* 0.0 0.0 0.0 (1.0)

olv49\* 0.0 0.0 0.0 (1.0)

olv50\* 0.0 0.0 0.0 (1.0)

olv51\* 0.0 0.0 0.0 (1.0)

olv52\* 0.0 0.0 0.0 (1.0)

olv53\* 0.0 0.0 0.0 (1.0)

olv54\* 0.0 0.0 0.0 (1.0)

olv55\* 0.0 0.0 0.0 (1.0)

olv56\* 0.0 0.0 0.0 (1.0)

olv57\* 0.0 0.0 0.0 (1.0)

olv58\* 0.0 0.0 0.0 (1.0)

olv59\* 0.0 0.0 0.0 (1.0)

olv60\* 0.0 0.0 0.0 (1.0)

olv61\* 0.0 0.0 0.0 (1.0)

olv62\* 0.0 0.0 0.0 (1.0)

olv63\* 0.0 0.0 0.0 (1.0)

olv64\* 0.0 0.0 0.0 (1.0)

olv65\* 0.0 0.0 0.0 (1.0)

olv66\* 0.0 0.0 0.0 (1.0)

olv67\* 0.0 0.0 0.0 (1.0)

olv68\* 0.0 0.0 0.0 (1.0)

olv69\* 0.0 0.0 0.0 (1.0)

olv70\* 0.0 0.0 0.0 (1.0)

olv71\* 0.0 0.0 0.0 (1.0)

olv72\* 0.0 0.0 0.0 (1.0)

olv73\* 0.0 0.0 0.0 (1.0)

olv74\* 0.0 0.0 0.0 (1.0)

olv75\* 0.0 0.0 0.0 (1.0)

olv76\* 0.0 0.0 0.0 (1.0)

olv77\* 0.0 0.0 0.0 (1.0)

olv78\* 0.0 0.0 0.0 (1.0)

olv79\* 0.0 0.0 0.0 (1.0)

olv80\* 0.0 0.0 0.0 (1.0)

olv81\* 0.0 0.0 0.0 (1.0)

olv82\* 0.0 0.0 0.0 (1.0)

olv83\* 0.0 0.0 0.0 (1.0)

olv84\* 0.0 0.0 0.0 (1.0)

olv85\* 0.0 0.0 0.0 (1.0)

olv86\* 0.0 0.0 0.0 (1.0)

olv87\* 0.0 0.0 0.0 (1.0)

olv88\* 0.0 0.0 0.0 (1.0)

olv89\* 0.0 0.0 0.0 (1.0)

olv90\* 0.0 0.0 0.0 (1.0)

olv91\* 0.0 0.0 0.0 (1.0)

olv92\* 0.0 0.0 0.0 (1.0)

olv93\* 0.0 0.0 0.0 (1.0)

olv94\* 0.0 0.0 0.0 (1.0)

olv95\* 0.0 0.0 0.0 (1.0)

olv96\* 0.0 0.0 0.0 (1.0)

olv97\* 0.0 0.0 0.0 (1.0)

olv98\* 0.0 0.0 0.0 (1.0)

olv99\* 0.0 0.0 0.0 (1.0)

olv100\* 0.0 0.0 0.0 (1.0)

olv101\* 0.0 0.0 0.0 (1.0)

olv102\* 0.0 0.0 0.0 (1.0)

olv103\* 0.0 0.0 0.0 (1.0)

olv104\* 0.0 0.0 0.0 (1.0)

olv105\* 0.0 0.0 0.0 (1.0)

olv106\* 0.0 0.0 0.0 (1.0)

olv107\* 0.0 0.0 0.0 (1.0)

olv108\* 0.0 0.0 0.0 (1.0)

olv109\* 0.0 0.0 0.0 (1.0)

olv110\* 0.0 0.0 0.0 (1.0)

olv111\* 0.0 0.0 0.0 (1.0)

olv112\* 0.0 0.0 0.0 (1.0)

olv113\* 0.0 0.0 0.0 (1.0)

olv114\* 0.0 0.0 0.0 (1.0)

olv115\* 0.0 0.0 0.0 (1.0)

olv116\* 0.0 0.0 0.0 (1.0)

olv117\* 0.0 0.0 0.0 (1.0)

olv118\* 0.0 0.0 0.0 (1.0)

olv119\* 0.0 0.0 0.0 (1.0)

olv120\* 0.0 0.0 0.0 (1.0)

olv121\* 0.0 0.0 0.0 (1.0)

olv122\* 0.0 0.0 0.0 (1.0)

olv123\* 0.0 0.0 0.0 (1.0)

olv124\* 0.0 0.0 0.0 (1.0)

olv125\* 0.0 0.0 0.0 (1.0)

olv126\* 0.0 0.0 0.0 (1.0)

olv127\* 0.0 0.0 0.0 (1.0)

olv128\* 0.0 0.0 0.0 (1.0)

olv129\* 0.0 0.0 0.0 (1.0)

olv130\* 0.0 0.0 0.0 (1.0)

olv131\* 0.0 0.0 0.0 (1.0)

olv132\* 0.0 0.0 0.0 (1.0)

olv133\* 0.0 0.0 0.0 (1.0)

olv134\* 0.0 0.0 0.0 (1.0)

olv135\* 0.0 0.0 0.0 (1.0)

olv136\* 0.0 0.0 0.0 (1.0)

olv137\* 0.0 0.0 0.0 (1.0)

olv138\* 0.0 0.0 0.0 (1.0)

olv139\* 0.0 0.0 0.0 (1.0)

olv140\* 0.0 0.0 0.0 (1.0)

olv141\* 0.0 0.0 0.0 (1.0)

olv142\* 0.0 0.0 0.0 (1.0)

olv143\* 0.0 0.0 0.0 (1.0)

olv144\* 0.0 0.0 0.0 (1.0)

olv145\* 0.0 0.0 0.0 (1.0)

olv146\* 0.0 0.0 0.0 (1.0)

olv147\* 0.0 0.0 0.0 (1.0)

olv148\* 0.0 0.0 0.0 (1.0)

olv149\* 0.0 0.0 0.0 (1.0)

olv150\* 0.0 0.0 0.0 (1.0)

olv151\* 0.0 0.0 0.0 (1.0)

olv152\* 0.0 0.0 0.0 (1.0)

olv153\* 0.0 0.0 0.0 (1.0)

olv154\* 0.0 0.0 0.0 (1.0)

olv155\* 0.0 0.0 0.0 (1.0)

olv156\* 0.0 0.0 0.0 (1.0)

olv157\* 0.0 0.0 0.0 (1.0)

olv158\* 0.0 0.0 0.0 (1.0)

olv159\* 0.0 0.0 0.0 (1.0)

olv160\* 0.0 0.0 0.0 (1.0)

olv161\* 0.0 0.0 0.0 (1.0)

olv162\* 0.0 0.0 0.0 (1.0)

olv163\* 0.0 0.0 0.0 (1.0)

olv164\* 0.0 0.0 0.0 (1.0)

olv165\* 0.0 0.0 0.0 (1.0)

olv166\* 0.0 0.0 0.0 (1.0)

olv167\* 0.0 0.0 0.0 (1.0)

olv168\* 0.0 0.0 0.0 (1.0)

olv169\* 0.0 0.0 0.0 (1.0)

olv170\* 0.0 0.0 0.0 (1.0)

olv171\* 0.0 0.0 0.0 (1.0)

olv172\* 0.0 0.0 0.0 (1.0)

olv173\* 0.0 0.0 0.0 (1.0)

olv174\* 0.0 0.0 0.0 (1.0)

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olv176\* 0.0 0.0 0.0 (1.0)

olv177\* 0.0 0.0 0.0 (1.0)

olv178\* 0.0 0.0 0.0 (1.0)

olv179\* 0.0 0.0 0.0 (1.0)

olv180\* 0.0 0.0 0.0 (1.0)

olv181\* 0.0 0.0 0.0 (1.0)

olv182\* 0.0 0.0 0.0 (1.0)

olv183\* 0.0 0.0 0.0 (1.0)

olv184\* 0.0 0.0 0.0 (1.0)

olv185\* 0.0 0.0 0.0 (1.0)

olv186\* 0.0 0.0 0.0 (1.0)

olv187\* 0.0 0.0 0.0 (1.0)

olv188\* 0.0 0.0 0.0 (1.0)

olv189\* 0.0 0.0 0.0 (1.0)

olv190\* 0.0 0.0 0.0 (1.0)

olv191\* 0.0 0.0 0.0 (1.0)

olv192\* 0.0 0.0 0.0 (1.0)

olv193\* 0.0 0.0 0.0 (1.0)

olv194\* 0.0 0.0 0.0 (1.0)

olv195\* 0.0 0.0 0.0 (1.0)

olv196\* 0.0 0.0 0.0 (1.0)

olv197\* 0.0 0.0 0.0 (1.0)

olv198\* 0.0 0.0 0.0 (1.0)

olv199\* 0.0 0.0 0.0 (1.0)



### Eingabe: Farbmetrisches Fernseh-Licht-System TLS18

für Buntton  $h^* = lab^*h = 304/360 = 0.845$

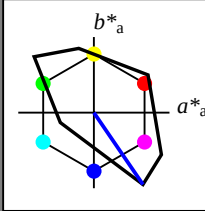
$lab^*ch$  und  $lab^*nch$

D65: Buntton V

LCH\*Ma: 35 115 304

olv\*Ma: 0.0 0.0 1.0

Dreiecks-Helligkeit  $t^*$



$u^*_{rel} = 118$

%Umfang

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

### TLS18; adaptierte CIELAB-Daten

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| 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          |

### %Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

### Ausgabe: Farbmetrisches Fernseh-Licht-System TLS18

für Buntton  $h^* = lab^*h = 304/360 = 0.845$

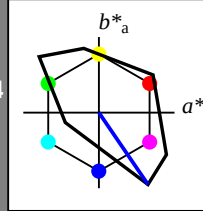
$lab^*ch$  und  $lab^*nch$

D65: Buntton V

LCH\*Ma: 35 115 304

olv\*Ma: 0.0 0.0 1.0

Dreiecks-Helligkeit  $t^*$



$u^*_{rel} = 118$

%Umfang

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

### TLS18; adaptierte CIELAB-Daten

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| 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          |

### %Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

NG590-7, 5 stufige Reihen für konstanten CIELAB Buntton 304/360 = 0.845 (links)

5 stufige Reihen für konstanten CIELAB Buntton 304/360 = 0.845 (rechts)

BAM-Prüfvorlage NG59; Farbmetrik-Systeme TLS18 & TLS18 input:  $olv^*setrgbcolor$

D65: 2 Koordinatendaten; 5stufige Farbreihen für 10 Buntton output: *no change compared to input*

### Eingabe: Farbmetrisches Fernseh-Licht-System TLS18

für Buntton  $h^* = lab^*h = 328/360 = 0.911$

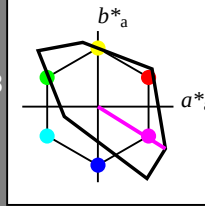
$lab^*ch$  und  $lab^*nch$

D65: Buntton M

LCH\*Ma: 59 105 328

olv\*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 118$

relative Inform. Technology (IT)  
olv3\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)  
olv4\* 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\*Lab 95.41 0.0 0.0  
LAB\*TCa 99.99 0.01

relative CIELAB lab\*  
lab\*lab 1.0 0.0 0.0  
lab\*ch 1.0 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 1.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 76.07 0.0 0.0  
LAB\*Lab 76.07 0.0 0.0  
LAB\*TCa 75.00 0.01

relative CIELAB lab\*  
lab\*lab 0.75 0.0 0.0  
lab\*ch 0.75 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.75 0.0 0.0  
lab\*nce 0.75 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*Lab 56.72 0.0 0.0  
LAB\*TCa 50.00 0.01

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*ch 0.5 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 37.58 0.0 0.0  
LAB\*Lab 37.58 0.0 0.0  
LAB\*TCa 25.00 0.01

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*ch 0.25 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.25 0.0 0.0  
lab\*nce 0.25 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 18.03 0.0 0.0  
LAB\*Lab 18.03 0.0 0.0  
LAB\*TCa 0.01 0.01

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*ch 0.0 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 1.0 1.0 1.0 (0.0)  
cmyn4\* 0.0 0.0 0.0 (1.0)  
standard and adapted CIELAB  
LAB\*LAB 18.03 0.0 0.0  
LAB\*Lab 18.03 0.0 0.0  
LAB\*TCa 0.01 0.01

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*ch 0.0 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*nce 0.0 0.0 0.0

### TLS18; adaptierte CIELAB-Daten

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| 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            |
| RC <sub>IE</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          |

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

relative Inform. Technology (IT)  
olv3\* 1.0 0.5 1.0 (1.0)  
cmyn3\* 0.0 0.5 0.0 (0.0)  
olv4\* 1.0 0.5 1.0 (1.0)  
cmyn4\* 0.0 0.5 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 77.21 44.66 -27.82  
LAB\*Lab 77.21 44.66 -27.82  
LAB\*TCa 75.0 52.62 328.06

relative CIELAB lab\*  
lab\*lab 0.765 0.424 -0.263  
lab\*ch 0.765 0.424 -0.263  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.765 0.424 -0.263  
lab\*nce 0.765 0.424 -0.263

standard and adapted CIELAB  
LAB\*LAB 68.11 66.99 -41.74  
LAB\*Lab 68.11 66.99 -41.74  
LAB\*TCa 62.5 78.94 328.06

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*ch 0.5 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 59.01 89.31 -55.66  
LAB\*Lab 59.01 89.31 -55.66  
LAB\*TCa 50.0 105.24 328.06

relative CIELAB lab\*  
lab\*lab 0.3 0.0 0.0  
lab\*ch 0.3 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.3 0.0 0.0  
lab\*nce 0.3 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 37.51 78.94 328.06

relative CIELAB lab\*  
lab\*lab 0.397 0.636 -0.396  
lab\*ch 0.397 0.636 -0.396  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.397 0.636 -0.396  
lab\*nce 0.397 0.636 -0.396

standard and adapted CIELAB  
LAB\*LAB 38.51 44.66 -27.82  
LAB\*Lab 38.51 44.66 -27.82  
LAB\*TCa 25.01 52.62 328.06

relative CIELAB lab\*  
lab\*lab 0.265 0.424 -0.263  
lab\*ch 0.265 0.424 -0.263  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.265 0.424 -0.263  
lab\*nce 0.265 0.424 -0.263

relative Inform. Technology (IT)  
olv3\* 1.0 0.5 1.0 (1.0)  
cmyn3\* 0.0 0.5 0.0 (0.0)  
olv4\* 1.0 0.5 1.0 (1.0)  
cmyn4\* 0.0 0.5 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 68.11 66.99 -41.74  
LAB\*Lab 68.11 66.99 -41.74  
LAB\*TCa 62.5 78.94 328.06

relative CIELAB lab\*  
lab\*lab 0.647 0.636 -0.396  
lab\*ch 0.647 0.636 -0.396  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.647 0.636 -0.396  
lab\*nce 0.647 0.636 -0.396

standard and adapted CIELAB  
LAB\*LAB 59.01 89.31 -55.66  
LAB\*Lab 59.01 89.31 -55.66  
LAB\*TCa 50.0 105.24 328.06

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*ch 0.5 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 37.51 78.94 328.06

relative CIELAB lab\*  
lab\*lab 0.397 0.636 -0.396  
lab\*ch 0.397 0.636 -0.396  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.397 0.636 -0.396  
lab\*nce 0.397 0.636 -0.396

standard and adapted CIELAB  
LAB\*LAB 38.51 44.66 -27.82  
LAB\*Lab 38.51 44.66 -27.82  
LAB\*TCa 25.01 52.62 328.06

relative CIELAB lab\*  
lab\*lab 0.265 0.424 -0.263  
lab\*ch 0.265 0.424 -0.263  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.265 0.424 -0.263  
lab\*nce 0.265 0.424 -0.263

standard and adapted CIELAB  
LAB\*LAB 37.51 78.94 328.06

relative CIELAB lab\*  
lab\*lab 0.397 0.636 -0.396  
lab\*ch 0.397 0.636 -0.396  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.397 0.636 -0.396  
lab\*nce 0.397 0.636 -0.396

$n^* = 0.00$

$n^* = 0.25$

Schwarzheit  $n^*$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

relative Buntheit  $c^*$

$n^* = 1.0$

### Ausgabe: Farbmetrisches Fernseh-Licht-System TLS18

für Buntton  $h^* = lab^*h = 328/360 = 0.911$

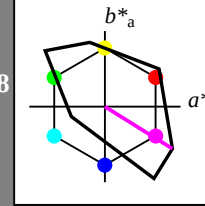
$lab^*ch$  und  $lab^*nch$

D65: Buntton M

LCH\*Ma: 59 105 328

olv\*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 118$

relative Inform. Technology (IT)  
olv3\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)  
olv4\* 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\*Lab 95.41 0.0 0.0  
LAB\*TCa 99.99 0.01

relative CIELAB lab\*  
lab\*lab 1.0 0.0 0.0  
lab\*ch 1.0 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 1.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 76.07 0.0 0.0  
LAB\*Lab 76.07 0.0 0.0  
LAB\*TCa 75.00 0.01

relative CIELAB lab\*  
lab\*lab 0.75 0.0 0.0  
lab\*ch 0.75 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.75 0.0 0.0  
lab\*nce 0.75 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*Lab 56.72 0.0 0.0  
LAB\*TCa 50.00 0.01

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*ch 0.5 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 37.58 0.0 0.0  
LAB\*Lab 37.58 0.0 0.0  
LAB\*TCa 25.00 0.01

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*ch 0.25 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.25 0.0 0.0  
lab\*nce 0.25 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 18.03 0.0 0.0  
LAB\*Lab 18.03 0.0 0.0  
LAB\*TCa 0.01 0.01

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*ch 0.0 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 1.0 1.0 1.0 (0.0)  
cmyn4\* 0.0 0.0 0.0 (1.0)  
standard and adapted CIELAB  
LAB\*LAB 18.03 0.0 0.0  
LAB\*Lab 18.03 0.0 0.0  
LAB\*TCa 0.01 0.01

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*ch 0.0 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*nce 0.0 0.0 0.0

### TLS18; adaptierte CIELAB-Daten

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| 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            |
| RC <sub>IE</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          |

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

relative Inform. Technology (IT)  
olv3\* 1.0 0.5 1.0 (1.0)  
cmyn3\* 0.0 0.5 0.0 (0.0)  
olv4\* 1.0 0.5 1.0 (1.0)  
cmyn4\* 0.0 0.5 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 77.21 44.66 -27.82  
LAB\*Lab 77.21 44.66 -27.82  
LAB\*TCa 75.0 52.62 328.06

relative CIELAB lab\*  
lab\*lab 0.765 0.424 -0.263  
lab\*ch 0.765 0.424 -0.263  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.765 0.424 -0.263  
lab\*nce 0.765 0.424 -0.263

standard and adapted CIELAB  
LAB\*LAB 68.11 66.99 -41.74  
LAB\*Lab 68.11 66.99 -41.74  
LAB\*TCa 62.5 78.94 328.06

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*ch 0.5 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 59.01 89.31 -55.66  
LAB\*Lab 59.01 89.31 -55.66  
LAB\*TCa 50.0 105.24 328.06

relative CIELAB lab\*  
lab\*lab 0.3 0.0 0.0  
lab\*ch 0.3 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.3 0.0 0.0  
lab\*nce 0.3 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 37.51 78.94 328.06

relative CIELAB lab\*  
lab\*lab 0.397 0.636 -0.396  
lab\*ch 0.397 0.636 -0.396  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.397 0.636 -0.396  
lab\*nce 0.397 0.636 -0.396

standard and adapted CIELAB  
LAB\*LAB 38.51 44.66 -27.82  
LAB\*Lab 38.51 44.66 -27.82  
LAB\*TCa 25.01 52.62 328.06

relative CIELAB lab\*  
lab\*lab 0.265 0.424 -0.263  
lab\*ch 0.265 0.424 -0.263  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.265 0.424 -0.263  
lab\*nce 0.265 0.424 -0.263

relative Inform. Technology (IT)  
olv3\* 1.0 0.5 1.0 (1.0)  
cmyn3\* 0.0 0.5 0.0 (0.0)  
olv4\* 1.0 0.5 1.0 (1.0)  
cmyn4\* 0.0 0.5 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 77.21 44.66 -27.82  
LAB\*Lab 77.21 44.66 -27.82  
LAB\*TCa 75.0 52.62 328.06

relative CIELAB lab\*  
lab\*lab 0.647 0.636 -0.396  
lab\*ch 0.647 0.636 -0.396  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.647 0.636 -0.396  
lab\*nce 0.647 0.636 -0.396

standard and adapted CIELAB  
LAB\*LAB 59.01 89.31 -55.66  
LAB\*Lab 59.01 89.31 -55.66  
LAB\*TCa 50.0 105.24 328.06

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*ch 0.5 0.0 0.0  
lab\*nch 0.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 37.51 78.94 328.06

relative CIELAB lab\*  
lab\*lab 0.397 0.636 -0.396  
lab\*ch 0.397 0.636 -0.396  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.397 0.636 -0.396  
lab\*nce 0.397 0.636 -0.396

standard and adapted CIELAB  
LAB\*LAB 38.51 44.66 -27.82  
LAB\*Lab 38.51 44.66 -27.82  
LAB\*TCa 25.01 52.62 328.06

relative CIELAB lab\*  
lab\*lab 0.265 0.424 -0.263  
lab\*ch 0.265 0.424 -0.263  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.265 0.424 -0.263  
lab\*nce 0.265 0.424 -0.263

standard and adapted CIELAB  
LAB\*LAB 37.51 78.94 328.06

relative CIELAB lab\*  
lab\*lab 0.397 0.636 -0.396  
lab\*ch 0.397 0.636 -0.396  
lab\*nch 0.0 0.5 0.911  
relative Natural Colour (NC)  
lab\*trj 0.397 0.636 -0.396  
lab\*nce 0.397 0.636 -0.396

$n^* = 0.00$

$n^* = 0.25$

Schwarzheit  $n^*$

$n^* = 0.50$

$n^* = 0.75$

## M

## M

Siehe ähnliche Dateien: <http://www.ps.bam.de/NG59/>  
Technische Information: <http://www.ps.bam.de> Version 2.1, io=1,1

BAM-Registrierung: 20060101-NC59/10Q/Q59G06NP.PS, PDF BAM-Material: Code=rh4ta  
Anwendung für Beurteilung und Messung von Drucker- oder Monitorsystemen

/NG59/ Form: 7/10, Serie: 1/1, Seite: 7 Seitzung 7

Seitenzahl 7

NG590-7, 5 stufige Reihen für konstanten CIELAB Buntton  $25/360 = 0.071$  (links)

5 stufige Reihen für konstanten CIELAB Buntton  $25/360 = 0.071$  (rechts)

BAM-Prüfvorlage NG59; Farbmatrik-Systeme TLS18 & TLS18 input: *olv\* setrgbcolor*

D65: 2 Koordinatendaten; 5stufige Farbreihen für 10 Bunttöne

output: no change compared to input

A diagram showing a 4-strand DNA structure. The top strand is black, the second is green, the third is black, and the bottom is blue. The green strand is labeled 'L' and the blue strand is labeled 'V'.



## lab\*tch und lab\*nch

## Dreiecks-Helligkeit $t^*$



$n^* = 1,0$

| lab + nCE | 0.75 | 0.25 | 99g |
|-----------|------|------|-----|
|           | 0,25 |      |     |

$$n^* = 0,50$$

|         |       |
|---------|-------|
| 75      | 0.451 |
| ur (NC) |       |
| 0.749   | 0.0   |

 BAM-Prüfvorlage NG59; Farbmeter

*lab\*tch* und *lab\*nch*

### Dreiecks-Helligkeit $t$



|                              |       |      |     |
|------------------------------|-------|------|-----|
| LAB*LABa                     | 18.03 | 0.0  | 0.0 |
| LAB*TCHa                     | 0.01  | 0.01 | –   |
| relative CIELAB lab*         |       |      |     |
| lab*lab                      | 0.0   | 0.0  | 0.0 |
| lab*tch                      | 0.0   | 0.0  | –   |
| lab*nch                      | 1.0   | 0.0  | –   |
| relative Natural Colour (NC) |       |      |     |
| lab*lrj                      | 0.0   | 0.0  | 0.0 |
| lab*tce                      | 0.0   | 0.0  | –   |

| relative Inform. Technology (I) |       |       |      |
|---------------------------------|-------|-------|------|
| olvi3*                          | 0.0   | 0.25  | 0.16 |
| cmyn3*                          | 1.0   | 0.75  | 0.84 |
| olvi4*                          | 0.75  | 1.0   | 0.91 |
| cmyn4*                          | 0.25  | 0.0   | 0.09 |
| standard and adapted CIELAB     |       |       |      |
| LAB*LAB                         | 35.01 | -14.2 | 4.5  |

|                                        |       |        |       |
|----------------------------------------|-------|--------|-------|
| LAB <sup>a</sup> LAB <sup>b</sup>      | 52.01 | -26.42 | 9.16  |
| LAB <sup>a</sup> TCHa                  | 25.01 | 29.86  | 16.16 |
| <b>relative CIELAB lab<sup>*</sup></b> |       |        |       |
| lab <sup>*</sup> lab                   | 0.439 | -0.475 | 0.191 |
| lab <sup>*</sup> tch                   | 0.25  | 0.5    | 0.2   |
| lab <sup>*</sup> nch                   | 0.5   | 0.5    | 0.5   |
| <b>relative Natural Colour (NC)</b>    |       |        |       |
| lab <sup>*</sup> lrj                   | 0.439 | -0.499 | 0.191 |
| lab <sup>*</sup> tce                   | 0.25  | 0.5    | 0.2   |
| lab <sup>*</sup> ncF                   | 0.5   | 0.5    | 0.5   |

|                                     |       |        |   |
|-------------------------------------|-------|--------|---|
| <i>lab*lab</i>                      | 0.659 | -0.713 | 0 |
| <i>lab*tch</i>                      | 0.375 | 0.75   | 0 |
| <i>lab*nch</i>                      | 0.25  | 0.75   | 0 |
| <b>relative Natural Colour (NC)</b> |       |        |   |
| <i>lab*lrj</i>                      | 0.659 | -0.749 | 0 |
| <i>lab*tce</i>                      | 0.375 | 0.75   | 0 |
| <i>lab*nce</i>                      | 0.25  | 0.75   | 0 |

|         |       |
|---------|-------|
| 75      | 0.451 |
| ur (NC) |       |
| 0.749   | 0.0   |

```
3 & TLS18 input: olv* setrgbcolor
```

D65: 2 Koordinatendaten; 5stufige Farbreihen für 10 Bunttöne      output: *no change com*

|  |   |   |
|--|---|---|
|  | L | V |
|--|---|---|

### Eingabe: Farbmetrisches Fernseh-Licht-System TLS18

für Buntton  $h^* = lab^*h = 272/360 = 0.755$

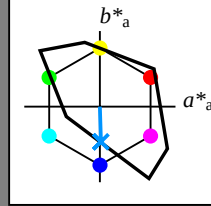
$lab^*ch$  und  $lab^*nch$

D65: Buntton B

LCH\*Ma: 65 48 272

olv\*Ma: 0.0 0.58 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 118$

relative Inform. Technology (IT)

|         |       |     |     |       |
|---------|-------|-----|-----|-------|
| olv3*   | 1.0   | 1.0 | 1.0 | (1.0) |
| olv3*   | 0.0   | 0.0 | 0.0 | (0.0) |
| olv4*   | 1.0   | 1.0 | 1.0 | (1.0) |
| olv4*   | 0.0   | 0.0 | 0.0 | (0.0) |
| olv4*   | 0.0   | 0.0 | 0.0 | (0.0) |
| olv4*   | 0.0   | 0.0 | 0.0 | (0.0) |
| LAB*LAB | 95.41 | 0.0 | 0.0 |       |
| LAB*LAB | 95.41 | 0.0 | 0.0 |       |
| LAB*LAB | 95.41 | 0.0 | 0.0 |       |
| LAB*LAB | 95.41 | 0.0 | 0.0 |       |

standard and adapted CIELAB

|         |     |     |     |  |
|---------|-----|-----|-----|--|
| lab*lab | 1.0 | 0.0 | 0.0 |  |
| lab*lab | 0.0 | 1.0 | 0.0 |  |
| lab*lab | 0.0 | 0.0 | 1.0 |  |
| lab*lab | 0.0 | 0.0 | 0.0 |  |
| lab*lab | 0.0 | 0.0 | 0.0 |  |
| lab*lab | 0.0 | 0.0 | 0.0 |  |
| lab*lab | 0.0 | 0.0 | 0.0 |  |
| lab*lab | 0.0 | 0.0 | 0.0 |  |
| lab*lab | 0.0 | 0.0 | 0.0 |  |

relative Inform. Technology (IT)

|         |       |      |      |       |
|---------|-------|------|------|-------|
| olv3*   | 0.75  | 0.75 | 0.75 | (1.0) |
| olv3*   | 0.25  | 0.25 | 0.25 | (0.0) |
| olv4*   | 1.0   | 1.0  | 1.0  | (1.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| LAB*LAB | 76.07 | 0.0  | 0.0  |       |
| LAB*LAB | 76.07 | 0.0  | 0.0  |       |
| LAB*LAB | 76.07 | 0.0  | 0.0  |       |
| LAB*LAB | 76.07 | 0.0  | 0.0  |       |

standard and adapted CIELAB

|         |      |      |      |  |
|---------|------|------|------|--|
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |

relative Inform. Technology (IT)

|         |       |      |      |       |
|---------|-------|------|------|-------|
| olv3*   | 0.75  | 0.75 | 0.75 | (1.0) |
| olv3*   | 0.25  | 0.25 | 0.25 | (0.0) |
| olv4*   | 1.0   | 1.0  | 1.0  | (1.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| LAB*LAB | 56.72 | 0.0  | 0.0  |       |
| LAB*LAB | 56.72 | 0.0  | 0.0  |       |
| LAB*LAB | 56.72 | 0.0  | 0.0  |       |
| LAB*LAB | 56.72 | 0.0  | 0.0  |       |

standard and adapted CIELAB

|         |      |      |      |  |
|---------|------|------|------|--|
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |

relative Inform. Technology (IT)

|         |       |      |      |       |
|---------|-------|------|------|-------|
| olv3*   | 0.75  | 0.75 | 0.75 | (1.0) |
| olv3*   | 0.25  | 0.25 | 0.25 | (0.0) |
| olv4*   | 1.0   | 1.0  | 1.0  | (1.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| LAB*LAB | 37.37 | 0.0  | 0.0  |       |
| LAB*LAB | 37.37 | 0.0  | 0.0  |       |
| LAB*LAB | 37.37 | 0.0  | 0.0  |       |
| LAB*LAB | 37.37 | 0.0  | 0.0  |       |

standard and adapted CIELAB

|         |      |      |      |  |
|---------|------|------|------|--|
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |

relative Inform. Technology (IT)

|         |       |      |      |       |
|---------|-------|------|------|-------|
| olv3*   | 0.75  | 0.75 | 0.75 | (1.0) |
| olv3*   | 0.25  | 0.25 | 0.25 | (0.0) |
| olv4*   | 1.0   | 1.0  | 1.0  | (1.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| LAB*LAB | 18.03 | 0.0  | 0.0  |       |
| LAB*LAB | 18.03 | 0.0  | 0.0  |       |
| LAB*LAB | 18.03 | 0.0  | 0.0  |       |
| LAB*LAB | 18.03 | 0.0  | 0.0  |       |

standard and adapted CIELAB

|         |      |      |      |  |
|---------|------|------|------|--|
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |
| lab*lab | 0.25 | 0.25 | 0.25 |  |
| lab*lab | 0.75 | 0.75 | 0.75 |  |

relative Inform. Technology (IT)

|         |      |      |      |       |
|---------|------|------|------|-------|
| olv3*   | 0.75 | 0.75 | 0.75 | (1.0) |
| olv3*   | 0.25 | 0.25 | 0.25 | (0.0) |
| olv4*   | 1.0  | 1.0  | 1.0  | (1.0) |
| olv4*   | 0.0  | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0  | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0  | 0.0  | 0.0  | (0.0) |
| LAB*LAB | 0.01 | 0.01 | 0.01 |       |
| LAB*LAB | 0.01 | 0.01 | 0.01 |       |
| LAB*LAB | 0.01 | 0.01 | 0.01 |       |
| LAB*LAB | 0.01 | 0.01 | 0.01 |       |

### TLS18; adaptierte CIELAB-Daten

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| 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            |
| RC <sub>IE</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          |

%Regularität

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

relative Inform. Technology (IT)

|         |       |      |        |       |
|---------|-------|------|--------|-------|
| olv3*   | 0.75  | 0.75 | 0.75   | (1.0) |
| olv3*   | 0.25  | 0.25 | 0.25   | (0.0) |
| olv4*   | 1.0   | 1.0  | 1.0    | (1.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| LAB*LAB | 80.44 | 0.71 | -23.73 |       |
| LAB*LAB | 80.44 | 0.71 | -23.73 |       |
| LAB*LAB | 80.44 | 0.71 | -23.73 |       |
| LAB*LAB | 80.44 | 0.71 | -23.73 |       |

standard and adapted CIELAB

|         |       |       |        |  |
|---------|-------|-------|--------|--|
| lab*lab | 0.807 | 0.015 | -0.499 |  |
| lab*lab | 0.75  | 0.5   | 0.755  |  |
| lab*lab | 0.75  | 0.5   | 0.755  |  |
| lab*lab | 0.75  | 0.5   | 0.755  |  |
| lab*lab | 0.75  | 0.5   | 0.755  |  |
| lab*lab | 0.75  | 0.5   | 0.755  |  |
| lab*lab | 0.75  | 0.5   | 0.755  |  |
| lab*lab | 0.75  | 0.5   | 0.755  |  |
| lab*lab | 0.75  | 0.5   | 0.755  |  |

relative Inform. Technology (IT)

|         |       |      |        |       |
|---------|-------|------|--------|-------|
| olv3*   | 0.75  | 0.75 | 0.75   | (1.0) |
| olv3*   | 0.25  | 0.25 | 0.25   | (0.0) |
| olv4*   | 1.0   | 1.0  | 1.0    | (1.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| LAB*LAB | 61.09 | 0.72 | -23.74 |       |
| LAB*LAB | 61.09 | 0.72 | -23.74 |       |
| LAB*LAB | 61.09 | 0.72 | -23.74 |       |
| LAB*LAB | 61.09 | 0.72 | -23.74 |       |

standard and adapted CIELAB

|         |        |      |        |  |
|---------|--------|------|--------|--|
| lab*lab | 0.6109 | 0.72 | -23.74 |  |
| lab*lab | 0.6109 | 0.72 | -23.74 |  |
| lab*lab | 0.6109 | 0.72 | -23.74 |  |
| lab*lab | 0.6109 | 0.72 | -23.74 |  |
| lab*lab | 0.6109 | 0.72 | -23.74 |  |
| lab*lab | 0.6109 | 0.72 | -23.74 |  |
| lab*lab | 0.6109 | 0.72 | -23.74 |  |
| lab*lab | 0.6109 | 0.72 | -23.74 |  |
| lab*lab | 0.6109 | 0.72 | -23.74 |  |

relative Inform. Technology (IT)

|         |       |      |        |       |
|---------|-------|------|--------|-------|
| olv3*   | 0.75  | 0.75 | 0.75   | (1.0) |
| olv3*   | 0.25  | 0.25 | 0.25   | (0.0) |
| olv4*   | 1.0   | 1.0  | 1.0    | (1.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| LAB*LAB | 41.74 | 0.72 | -23.74 |       |
| LAB*LAB | 41.74 | 0.72 | -23.74 |       |
| LAB*LAB | 41.74 | 0.72 | -23.74 |       |
| LAB*LAB | 41.74 | 0.72 | -23.74 |       |

standard and adapted CIELAB

|         |        |      |        |  |
|---------|--------|------|--------|--|
| lab*lab | 0.4174 | 0.72 | -23.74 |  |
| lab*lab | 0.4174 | 0.72 | -23.74 |  |
| lab*lab | 0.4174 | 0.72 | -23.74 |  |
| lab*lab | 0.4174 | 0.72 | -23.74 |  |
| lab*lab | 0.4174 | 0.72 | -23.74 |  |
| lab*lab | 0.4174 | 0.72 | -23.74 |  |
| lab*lab | 0.4174 | 0.72 | -23.74 |  |
| lab*lab | 0.4174 | 0.72 | -23.74 |  |
| lab*lab | 0.4174 | 0.72 | -23.74 |  |

relative Inform. Technology (IT)

|         |       |      |        |       |
|---------|-------|------|--------|-------|
| olv3*   | 0.75  | 0.75 | 0.75   | (1.0) |
| olv3*   | 0.25  | 0.25 | 0.25   | (0.0) |
| olv4*   | 1.0   | 1.0  | 1.0    | (1.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0    | (0.0) |
| LAB*LAB | 29.86 | 0.36 | -11.86 |       |
| LAB*LAB | 29.86 | 0.36 | -11.86 |       |
| LAB*LAB | 29.86 | 0.36 | -11.86 |       |
| LAB*LAB | 29.86 | 0.36 | -11.86 |       |

standard and adapted CIELAB

|         |       |       |        |  |
|---------|-------|-------|--------|--|
| lab*lab | 0.153 | 0.008 | -0.249 |  |
| lab*lab | 0.125 | 0.25  | 0.755  |  |
| lab*lab | 0.125 | 0.25  | 0.755  |  |
| lab*lab | 0.125 | 0.25  | 0.755  |  |
| lab*lab | 0.125 | 0.25  | 0.755  |  |
| lab*lab | 0.125 | 0.25  | 0.755  |  |
| lab*lab | 0.125 | 0.25  | 0.755  |  |
| lab*lab | 0.125 | 0.25  | 0.755  |  |
| lab*lab | 0.125 | 0.25  | 0.755  |  |

relative Inform. Technology (IT)

|         |       |      |      |       |
|---------|-------|------|------|-------|
| olv3*   | 0.75  | 0.75 | 0.75 | (1.0) |
| olv3*   | 0.25  | 0.25 | 0.25 | (0.0) |
| olv4*   | 1.0   | 1.0  | 1.0  | (1.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0  | (0.0) |
| LAB*LAB | 18.03 | 0.0  | 0.0  |       |
| LAB*LAB | 18.03 | 0.0  | 0.0  |       |
| LAB*LAB | 18.03 | 0.0  | 0.0  |       |
| LAB*LAB | 18.03 | 0.0  | 0.0  |       |

relative Inform. Technology (IT)

|         |       |      |       |       |
|---------|-------|------|-------|-------|
| olv3*   | 0.75  | 0.75 | 0.75  | (1.0) |
| olv3*   | 0.25  | 0.25 | 0.25  | (0.0) |
| olv4*   | 1.0   | 1.0  | 1.0   | (1.0) |
| olv4*   | 0.0   | 0.0  | 0.0   | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0   | (0.0) |
| olv4*   | 0.0   | 0.0  | 0.0   | (0.0) |
| LAB*LAB | 72.95 | 1.07 | -35.6 |       |
| LAB*LAB | 72.95 | 1.07 | -35.6 |       |
| LAB*LAB | 72.95 | 1.07 | -35.6 |       |
| LAB*LAB | 72.95 | 1.07 | -35.6 |       |

standard and adapted CIELAB

|         |        |      |       |  |
|---------|--------|------|-------|--|
| lab*lab | 0.7295 | 1.07 | -35.6 |  |
| lab*lab | 0.7295 | 1.07 | -35.6 |  |
| lab*lab | 0.7295 | 1.07 | -35.6 |  |
| lab*lab | 0.7295 | 1.07 | -35.6 |  |
| lab*lab | 0.7295 | 1.07 | -35.6 |  |
| lab*lab | 0.7295 | 1.07 | -35.6 |  |
| lab*lab | 0.7295 | 1.07 | -35.6 |  |
| lab*lab | 0.7295 | 1.07 | -35.6 |  |
| lab*lab | 0.7295 | 1.07 | -35.6 |  |

relative Inform. Technology (IT)

|         |      |       |       |       |
|---------|------|-------|-------|-------|
| olv3*   | 0.75 | 0.75  | 0.75  | (1.0) |
| olv3*   | 0.25 | 0.25  | 0.25  | (0.0) |
| olv4*   | 1.0  | 1.0   | 1.0   | (1.0) |
| olv4*   | 0.0  | 0.0   | 0.0   | (0.0) |
| olv4*   | 0.0  | 0.0   | 0.0   | (0.0) |
| olv4*   | 0.0  | 0.0   | 0.0   | (0.0) |
| LAB*LAB | 62.5 | 35.63 | 27.73 |       |
| LAB*LAB | 62.5 | 35.63 | 27.73 |       |
| LAB*LAB | 62.5 | 35.63 | 27.73 |       |
| LAB*LAB | 62.5 | 35.63 | 27.73 |       |