

# Input: Colorimetric Television Luminous System TLS18a

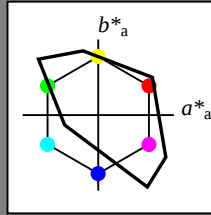
with *rgb* data of the  
four elementary hues

1 0 0 = Red *R*

1 1 0 = Yellow *J*

0 1 0 = Green *G*

0 0 1 = Blue *B*



| TLS18a; adapted (a) CIELAB data |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
|                                 | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| $O_{Ma}$                        | 52.76       | 71.63   | 49.88   | 87.29        | 35           |
| $Y_{Ma}$                        | 92.74       | -20.02  | 84.97   | 87.3         | 103          |
| $L_{Ma}$                        | 84.0        | -78.98  | 73.94   | 108.2        | 137          |
| $C_{Ma}$                        | 87.14       | -44.41  | -13.11  | 46.32        | 196          |
| $V_{Ma}$                        | 35.47       | 64.92   | -95.06  | 115.12       | 304          |
| $M_{Ma}$                        | 59.01       | 89.33   | -55.67  | 105.26       | 328          |
| $N_{Ma}$                        | 18.01       | 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          |

# Output: Colorimetric Television Luminous System TLS18a

with hue number

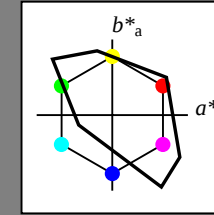
$n = 00$  to 19

00 = Red *R*

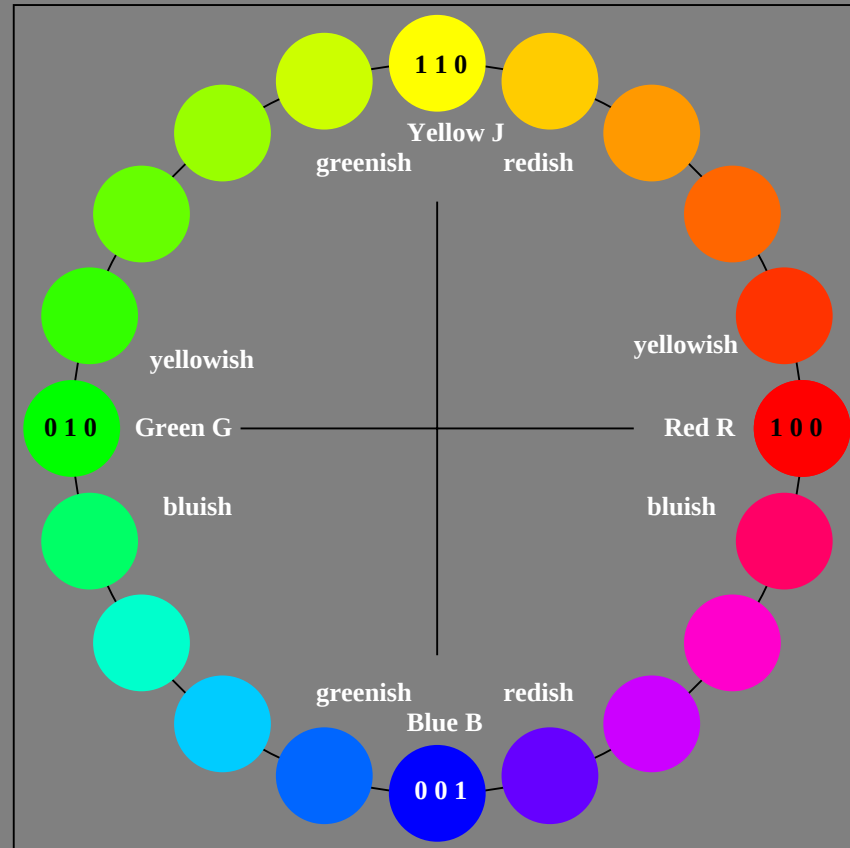
05 = Yellow *J*

10 = Green *G*

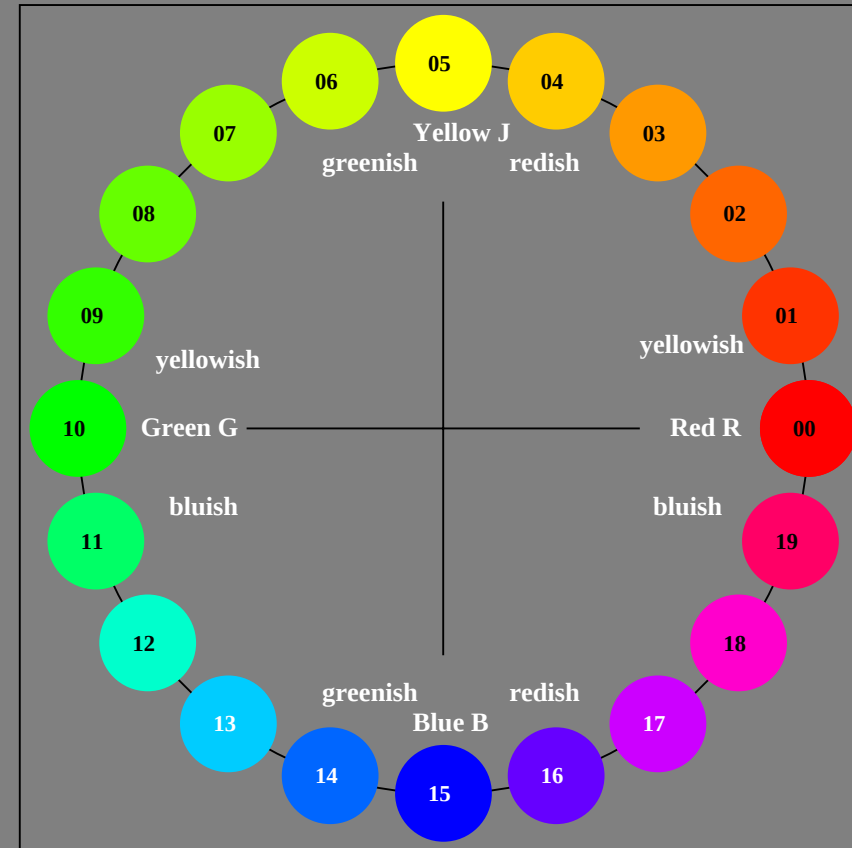
15 = Blue *B*



| TLS18a; adapted (a) CIELAB data |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
|                                 | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| $O_{Ma}$                        | 52.76       | 71.63   | 49.88   | 87.29        | 35           |
| $Y_{Ma}$                        | 92.74       | -20.02  | 84.97   | 87.3         | 103          |
| $L_{Ma}$                        | 84.0        | -78.98  | 73.94   | 108.2        | 137          |
| $C_{Ma}$                        | 87.14       | -44.41  | -13.11  | 46.32        | 196          |
| $V_{Ma}$                        | 35.47       | 64.92   | -95.06  | 115.12       | 304          |
| $M_{Ma}$                        | 59.01       | 89.33   | -55.67  | 105.26       | 328          |
| $N_{Ma}$                        | 18.01       | 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          |



IE450-7N, 20 step hue circle with elementary colours *R*, *J*, *G*, *B* (left)



20 step hue circle with elementary colours *R*, *J*, *G*, *B* (right)