



## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 96/360 = 0.268$

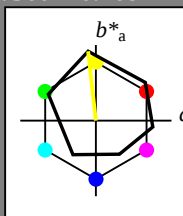
$lab^*tch$  and  $lab^*nch$

D65: hue Y

LCH\*Ma: 90 92 96

olv\*Ma: 1.0 1.0 0.0

triangle lightness  $t^*$



## ORS18; adapted (a) CIELAB data

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

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

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 -0.98 47.5  
LAB\*LABa 95.41 0.0 0.0  
LAB\*LABb 99.99 0.01 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\*trj 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)  
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 76.06 -0.61 3.44  
LAB\*LABa 76.06 0.0 0.0  
LAB\*LABb 75.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.75 0.0 0.0  
lab\*tch 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\*tce 0.75 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (0.0)  
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 56.71 -0.24 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*LABb 50.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 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\*tce 0.5 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (0.0)  
cmyn3\* 0.75 0.75 0.75 (1.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.03 0.63  
LAB\*LABa 37.36 0.0 0.0  
LAB\*LABb 25.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*tch 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\*tce 0.25 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 18.02 0.03 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 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 18.02 0.03 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

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 94.14 -3.52 27.6  
LAB\*LABa 94.14 -2.56 22.93  
LAB\*LABb 97.5 23.07 96.38

relative CIELAB lab\*  
lab\*lab 0.984 -0.027 0.248  
lab\*tch 0.875 0.25 0.268  
lab\*nch 0.0 0.25 0.268  
relative Natural Colour (NC)  
lab\*trj 0.984 -0.024 0.249  
lab\*tce 0.875 0.25 0.268  
lab\*nce 0.0 0.25 0.268

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 74.8 -3.15 26.3  
LAB\*LABa 74.8 -2.56 22.94  
LAB\*LABb 62.5 23.08 96.38

relative CIELAB lab\*  
lab\*lab 0.734 -0.024 0.249  
lab\*tch 0.625 0.25 0.268  
lab\*nch 0.0 0.25 0.268  
relative Natural Colour (NC)  
lab\*trj 0.734 -0.024 0.249  
lab\*tce 0.625 0.25 0.268  
lab\*nce 0.0 0.25 0.268

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (0.0)  
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 55.45 -2.78 5.0  
LAB\*LABa 55.45 -2.56 22.94  
LAB\*LABb 37.5 23.08 96.38

relative CIELAB lab\*  
lab\*lab 0.484 -0.082 0.248  
lab\*tch 0.375 0.25 0.268  
lab\*nch 0.0 0.25 0.268  
relative Natural Colour (NC)  
lab\*trj 0.484 -0.024 0.249  
lab\*tce 0.375 0.25 0.268  
lab\*nce 0.0 0.25 0.268

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (0.0)  
cmyn3\* 0.75 0.75 0.75 (1.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 36.14 -2.56 22.94  
LAB\*LABa 36.14 -2.56 22.93  
LAB\*LABb 12.5 23.07 96.38

relative CIELAB lab\*  
lab\*lab 0.234 -0.027 0.248  
lab\*tch 0.125 0.25 0.268  
lab\*nch 0.0 0.25 0.268  
relative Natural Colour (NC)  
lab\*trj 0.234 -0.024 0.249  
lab\*tce 0.125 0.25 0.268  
lab\*nce 0.0 0.25 0.268

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 18.02 0.03 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 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 18.02 0.03 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

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 92.88 -6.06 50.46  
LAB\*LABa 92.88 -5.12 45.87  
LAB\*LABb 97.5 23.07 96.38

relative CIELAB lab\*  
lab\*lab 0.967 -0.055 0.497  
lab\*tch 0.75 0.0 0.268  
lab\*nch 0.0 0.0 0.268  
relative Natural Colour (NC)  
lab\*trj 0.967 -0.048 0.497  
lab\*tce 0.75 0.0 0.268  
lab\*nce 0.0 0.0 0.268

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 73.54 -5.12 45.88  
LAB\*LABa 73.54 -5.12 45.88  
LAB\*LABb 50.0 46.16 96.38

relative CIELAB lab\*  
lab\*lab 0.717 -0.055 0.497  
lab\*tch 0.625 0.25 0.268  
lab\*nch 0.0 0.25 0.268  
relative Natural Colour (NC)  
lab\*trj 0.717 -0.048 0.498  
lab\*tce 0.625 0.25 0.268  
lab\*nce 0.0 0.25 0.268

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (0.0)  
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 55.45 -2.78 5.0  
LAB\*LABa 55.45 -2.56 22.94  
LAB\*LABb 37.5 23.08 96.38

relative CIELAB lab\*  
lab\*lab 0.484 -0.082 0.248  
lab\*tch 0.375 0.25 0.268  
lab\*nch 0.0 0.25 0.268  
relative Natural Colour (NC)  
lab\*trj 0.484 -0.024 0.249  
lab\*tce 0.375 0.25 0.268  
lab\*nce 0.0 0.25 0.268

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (0.0)  
cmyn3\* 0.75 0.75 0.75 (1.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 36.14 -2.56 22.94  
LAB\*LABa 36.14 -2.56 22.93  
LAB\*LABb 12.5 23.07 96.38

relative CIELAB lab\*  
lab\*lab 0.234 -0.027 0.248  
lab\*tch 0.125 0.25 0.268  
lab\*nch 0.0 0.25 0.268  
relative Natural Colour (NC)  
lab\*trj 0.234 -0.024 0.249  
lab\*tce 0.125 0.25 0.268  
lab\*nce 0.0 0.25 0.268

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 18.02 0.03 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 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 18.02 0.03 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

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 91.62 -8.61 73.31  
LAB\*LABa 91.62 -6.9 68.8  
LAB\*LABb 97.5 23.07 96.38

relative CIELAB lab\*  
lab\*lab 0.951 -0.082 0.745  
lab\*tch 0.625 0.25 0.268  
lab\*nch 0.0 0.25 0.268  
relative Natural Colour (NC)  
lab\*trj 0.951 -0.073 0.746  
lab\*tce 0.625 0.25 0.268  
lab\*nce 0.0 0.25 0.268

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 90.36 -10.15 96.15  
LAB\*LABa 90.36 -10.15 96.15  
LAB\*LABb 50.0 92.3 96.38

relative CIELAB lab\*  
lab\*lab 0.933 -0.11 0.994  
lab\*tch 0.5 0.0 0.268  
lab\*nch 0.0 0.0 0.268  
relative Natural Colour (NC)  
lab\*trj 0.933 -0.097 0.995  
lab\*tce 0.5 0.0 0.268  
lab\*nce 0.0 0.0 0.268

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (0.0)  
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 47.72 0.0 0.0  
LAB\*LABa 47.72 0.0 0.0  
LAB\*LABb 50.0 92.3 96.38

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 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\*tce 0.5 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (0.0)  
cmyn3\* 0.75 0.75 0.75 (1.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.03 0.63  
LAB\*LABa 37.36 0.0 0.0  
LAB\*LABb 25.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*tch 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\*tce 0.25 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 18.02 0.03 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 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 18.02 0.03 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

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 91.62 -8.61 73.31  
LAB\*LABa 91.62 -6.9 68.8  
LAB\*LABb 97.5 23.07 96.38

relative CIELAB lab\*  
lab\*lab 0.951 -0.082 0.745  
lab\*tch 0.625 0.25 0.268  
lab\*nch 0.0 0.25 0.268  
relative Natural Colour (NC)  
lab\*trj 0.951 -0.073 0.746  
lab\*tce 0.625 0.25 0.268  
lab\*nce 0.0 0.25 0.268

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 90.36 -10.15 96.15  
LAB\*LABa 90.36 -10.15 96.15  
LAB\*LABb 50.0 92.3 96.38

relative CIELAB lab\*  
lab\*lab 0.933 -0.11 0.994  
lab\*tch 0.5 0.0 0.268  
lab\*nch 0.0 0.0 0.268  
relative Natural Colour (NC)  
lab\*trj 0.933 -0.097 0.995  
lab\*tce 0.5 0.0 0.268  
lab\*nce 0.0 0.0 0.268

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (0.0)  
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 47.72 0.0 0.0  
LAB\*LABa 47.72 0.0 0.0  
LAB\*LABb 50.0 92.3 96.38

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 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\*tce 0.5 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (0.0)  
cmyn3\* 0.75 0.75 0.75 (1.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.03 0.63  
LAB\*LABa 37.36 0.0 0.0  
LAB\*LABb 25.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*tch 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\*tce 0.25 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 18.02 0.03 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

relative





## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 305/360 = 0.847$

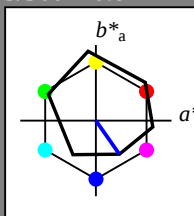
$lab^*tch$  and  $lab^*nch$

D65: hue V

LCH\*Ma: 26 54 305

olv\*Ma: 0.0 0.0 1.0

triangle lightness  $t^*$



%Gamut

$u^*_{rel} = 93$

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 -0.98 47.5  
LAB\*LABa 95.41 0.0 0.0  
LAB\*LABb 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\*trj 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)  
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 76.06 -0.61 34.4  
LAB\*LABa 76.06 0.0 0.0  
LAB\*LABb 75.00 0.01 -

relative CIELAB lab\*  
lab\*lab 0.75 0.0 0.0  
lab\*tch 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\*tce 0.75 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (0.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 1.0 1.0 1.0 (0.5)  
cmyn4\* 0.0 0.0 0.0 (0.5)  
standard and adapted CIELAB  
LAB\*LAB 56.71 -0.24 21.4  
LAB\*LABa 56.71 0.0 0.0  
LAB\*LABb 50.00 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 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\*tce 0.5 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (0.0)  
cmyn3\* 0.75 0.75 0.75 (0.0)  
olv4\* 1.0 1.0 1.0 (0.25)  
cmyn4\* 0.0 0.0 0.0 (0.75)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.38 0.63  
LAB\*LABa 37.36 0.0 0.0  
LAB\*LABb 25.00 0.01 -

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*tch 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\*tce 0.25 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 18.02 0.03 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 -

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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

$n^* = 1.0$

## 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          |

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 155$

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 0.5 0.5 0.5 (1.0)  
cmyn4\* 0.5 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 60.56 15.23 -19.79  
LAB\*LABa 60.56 15.23 -19.79  
LAB\*LABb 77.99 7.77 -11.09  
LAB\*LABc 87.5 30.50

relative CIELAB lab\*  
lab\*lab 0.5 0.287 -0.408  
lab\*tch 0.5 0.287 -0.408  
lab\*nch 0.0 0.5 0.847  
relative Natural Colour (NC)  
lab\*trj 0.5 0.287 -0.408  
lab\*tce 0.5 0.287 -0.408  
lab\*nce 0.0 0.5 0.847

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (1.0)  
cmyn3\* 0.75 0.75 0.75 (0.0)  
olv4\* 0.5 0.5 0.5 (0.75)  
cmyn4\* 0.5 0.5 0.5 (0.25)  
standard and adapted CIELAB  
LAB\*LAB 41.22 15.55 -22.2  
LAB\*LABa 41.22 15.55 -22.2  
LAB\*LABb 50.00 27.1 305.0

relative CIELAB lab\*  
lab\*lab 0.25 0.287 -0.409  
lab\*tch 0.25 0.287 -0.409  
lab\*nch 0.0 0.5 0.847  
relative Natural Colour (NC)  
lab\*trj 0.25 0.287 -0.409  
lab\*tce 0.25 0.287 -0.409  
lab\*nce 0.0 0.5 0.847

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 0.5 0.5 0.5 (0.0)  
cmyn4\* 0.5 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 21.87 15.57 -22.2  
LAB\*LABa 21.87 15.57 -22.2  
LAB\*LABb 25.01 27.1 305.0

relative CIELAB lab\*  
lab\*lab 0.0 0.287 -0.408  
lab\*tch 0.0 0.287 -0.408  
lab\*nch 0.0 0.5 0.847  
relative Natural Colour (NC)  
lab\*trj 0.0 0.287 -0.408  
lab\*tce 0.0 0.287 -0.408  
lab\*nce 0.0 0.5 0.847

$n^* = 0.50$

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (1.0)  
cmyn3\* 0.75 0.75 0.75 (0.0)  
olv4\* 0.25 0.25 0.25 (1.0)  
cmyn4\* 0.75 0.75 0.75 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 43.14 23.34 -32.07  
LAB\*LABa 43.14 23.34 -32.07  
LAB\*LABb 62.5 40.66 305.0

relative CIELAB lab\*  
lab\*lab 0.25 0.43 -0.613  
lab\*tch 0.25 0.43 -0.613  
lab\*nch 0.0 0.75 0.847  
relative Natural Colour (NC)  
lab\*trj 0.25 0.43 -0.613  
lab\*tce 0.25 0.43 -0.613  
lab\*nce 0.0 0.75 0.847

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 0.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 25.73 31.44 -44.34  
LAB\*LABa 25.73 31.44 -44.34  
LAB\*LABb 50.0 54.21 305.0

relative CIELAB lab\*  
lab\*lab 0.0 0.573 -0.818  
lab\*tch 0.0 0.573 -0.818  
lab\*nch 0.0 1.0 0.847  
relative Natural Colour (NC)  
lab\*trj 0.0 0.573 -0.818  
lab\*tce 0.0 0.573 -0.818  
lab\*nce 0.0 1.0 0.847

$n^* = 0.00$

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 0.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 15.87 15.57 -22.2  
LAB\*LABa 15.87 15.57 -22.2  
LAB\*LABb 25.01 27.1 305.0

relative CIELAB lab\*  
lab\*lab 0.0 0.287 -0.408  
lab\*tch 0.0 0.287 -0.408  
lab\*nch 0.0 0.5 0.847  
relative Natural Colour (NC)  
lab\*trj 0.0 0.287 -0.408  
lab\*tce 0.0 0.287 -0.408  
lab\*nce 0.0 0.5 0.847

$n^* = 0.25$

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 0.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 0.03 0.0 0.0  
LAB\*LABa 0.03 0.0 0.0  
LAB\*LABb 0.01 0.01 -

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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

chromaticness  $c^*$

## Output: Colorimetric Television Luminous System TLS00

for hue  $h^* = lab^*h = 306/360 = 0.851$

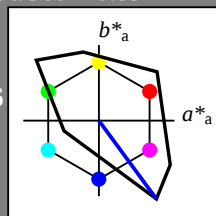
$lab^*tch$  and  $lab^*nch$

D65: hue V

LCH\*Ma: 30 129 306

olv\*Ma: 0.0 0.0 1.0

triangle lightness  $t^*$



%Gamut

$u^*_{rel} = 158$

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\*LABa 95.41 0.0 0.0  
LAB\*LABb 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\*trj 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)  
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 71.57 0.0 0.0  
LAB\*LABa 71.57 0.0 0.0  
LAB\*LABb 75.00 0.01 -

relative CIELAB lab\*  
lab\*lab 0.75 0.0 0.0  
lab\*tch 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\*tce 0.75 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (0.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 1.0 1.0 1.0 (0.5)  
cmyn4\* 0.0 0.0 0.0 (0.5)  
standard and adapted CIELAB  
LAB\*LAB 55.31 19.01 -25.89  
LAB\*LABa 55.31 19.01 -25.89  
LAB\*LABb 50.0 54.21 305.0

relative CIELAB lab\*  
lab\*lab 0.5 0.25 0.0  
lab\*tch 0.5 0.25 0.0  
lab\*nch 0.0 0.5 0.851  
relative Natural Colour (NC)  
lab\*trj 0.5 0.25 0.0  
lab\*tce 0.5 0.25 0.0  
lab\*nce 0.0 0.5 0.851

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (1.0)  
cmyn3\* 0.75 0.75 0.75 (0.0)  
olv4\* 0.5 0.5 0.5 (0.75)  
cmyn4\* 0.5 0.5 0.5 (0.25)  
standard and adapted CIELAB  
LAB\*LAB 41.22 15.55 -22.2  
LAB\*LABa 41.22 15.55 -22.2  
LAB\*LABb 50.0 54.21 305.0

relative CIELAB lab\*  
lab\*lab 0.25 0.287 -0.408  
lab\*tch 0.25 0.287 -0.408  
lab\*nch 0.0 0.5 0.851  
relative Natural Colour (NC)  
lab\*trj 0.25 0.287 -0.408  
lab\*tce 0.25 0.287 -0.408  
lab\*nce 0.0 0.5 0.851

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 0.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 23.8 23.32 -32.07  
LAB\*LABa 23.8 23.32 -32.07  
LAB\*LABb 50.0 54.21 305.0

relative CIELAB lab\*  
lab\*lab 0.0 0.573 -0.818  
lab\*tch 0.0 0.573 -0.818  
lab\*nch 0.0 1.0 0.851  
relative Natural Colour (NC)  
lab\*trj 0.0 0.573 -0.818  
lab\*tce 0.0 0.573 -0.818  
lab\*nce 0.0 1.0 0.851

$n^* = 1.0$

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 0.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 0.03 0.0 0.0  
LAB\*LABa 0.03 0.0 0.0  
LAB\*LABb 0.01 0.01 -

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\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

chromaticness  $c^*$

## TLS00; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 50.5        | 76.92   | 64.55   | 100.42       | 40           |
| Y <sub>Ma</sub>  | 92.66       | -20.69  | 90.75   | 93.08        | 103          |
| L <sub>Ma</sub>  | 83.63       | -82.75  | 79.9    | 115.04       | 136          |
| C <sub>Ma</sub>  | 86.88       | -46.16  | -13.55  | 48.12        | 196          |
| V <sub>Ma</sub>  | 30.39       | 76.06   | -103.59 | 128.52       | 306          |
| M <sub>Ma</sub>  | 57.3        | 94.35   | -58.41  | 110.97       | 328          |
| N <sub>Ma</sub>  | 0.01        | 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          |

%Regularity

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

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

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 0.5 0.5 0.5 (1.0)  
cmyn4\* 0.5 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 62.9 38.02 -51.78  
LAB\*LABa 62.9 38.02 -51.78  
LAB\*LABb 75.0 64.25 306.29

relative CIELAB lab\*  
lab\*lab 0.659 0.296 -0.402  
lab\*tch 0.659 0.296 -0.402  
lab\*nch 0.0 0.5 0.851  
relative Natural Colour (NC)  
lab\*trj 0.659 0.296 -0.402  
lab\*tce 0.659 0.296 -0.402  
lab\*nce 0.0 0.5 0.851

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (1.0)  
cmyn3\* 0.75 0.75 0.75 (0.0)  
olv4\* 0.5 0.5 0.5 (0.75)  
cmyn4\* 0.5 0.5 0.5 (0.25)  
standard and adapted CIELAB  
LAB\*LAB 39.05 38.03 -51.79  
LAB\*LABa 39.05 38.03 -51.79  
LAB\*LABb 50.0 64.26 306.29

relative CIELAB lab\*  
lab\*lab 0.489 0.444 -0.603  
lab\*tch 0.489 0.444 -0.603  
lab\*nch 0.0 0.5 0.851  
relative Natural Colour (NC)  
lab\*trj 0.489 0.444 -0.603  
lab\*tce 0.489 0.444 -0.603  
lab\*nce 0.0 0.5 0.851

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 0.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 22.8 23.32 -32.07  
LAB\*LABa 22.8 23.32 -32.07  
LAB\*LABb 50.0 54.21 306.29

relative CIELAB lab\*  
lab\*lab 0.239 0.444 -0.603  
lab\*tch 0.239 0.444 -0.603  
lab\*nch 0.0 0.5 0.851  
relative Natural Colour (NC)  
lab\*trj 0.239 0.444 -0.603  
lab\*tce 0.239 0.444 -0.603  
lab\*nce 0.0 0.5 0.851

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 0.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 0.03 0.0 0.0  
LAB\*LABa 0.03 0.0 0.0  
LAB\*LABb 0.01 0.01 -

relative CIELAB lab\*  
lab\*lab 0.0 0.239 0.444 -0.603  
lab\*tch 0.0 0.239 0.444 -0.603  
lab\*nch 0.0 0.5 0.851  
relative Natural Colour (NC)  
lab\*trj 0.0 0.239 0.444 -0.603  
lab\*tce 0.0 0.239 0.444 -0.603  
lab\*nce 0.0 0.5 0.851

chromaticness  $c^*$

chromaticness  $c^*$

NE500-7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

BAM-test chart NE50; Colorimetric systems ORS18 & TLS00

D65: 2 coordinate data of 5 step colour scales for 10 hues

input: `olv* setrgbcolor`

output: *no change compared to input*



## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 25/360 = 0.069$

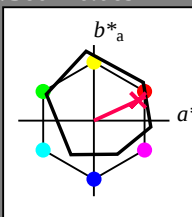
$lab^*tch$  and  $lab^*nch$

D65: hue R

LCH\*Ma: 48 75 25

olv\*Ma: 1.0 0.0 0.32

triangle lightness  $t^*$



### 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          |

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

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 -0.98 47.5  
LAB\*LABa 95.41 0.0 0.0  
LAB\*TCHa 99.99 0.01 -

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\*trj 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)  
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 76.06 -0.61 3.44  
LAB\*LABa 76.06 0.0 0.0  
LAB\*TCHa 75.00 0.01 -

relative CIELAB lab\*  
lab\*lab 0.75 0.0 0.0  
lab\*tch 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\*tce 0.75 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (0.0)  
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 56.71 -0.24 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.00 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 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\*tce 0.5 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (0.0)  
cmyn3\* 0.75 0.75 0.75 (1.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.03 0.63  
LAB\*LABa 37.36 0.0 0.0  
LAB\*TCHa 25.00 0.01 -

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*tch 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\*tce 0.25 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 18.02 0.03 0.47  
LAB\*LABa 18.02 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 0.0  
lab\*nch 1.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 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 18.02 0.03 0.47  
LAB\*LABa 18.02 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 0.0  
lab\*nch 1.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 1.0 0.75 0.831 (1.0)  
cmyn3\* 0.0 0.25 0.169 (0.0)  
olv4\* 1.0 0.75 0.831 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 83.55 16.38 11.84  
LAB\*LABa 83.55 17.14 7.88  
LAB\*TCHa 87.5 18.86 24.7

relative CIELAB lab\*  
lab\*lab 0.847 0.227 0.104  
lab\*tch 0.875 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*trj 0.847 0.25 0.0  
lab\*tce 0.875 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olv3\* 0.75 0.5 0.581 (1.0)  
cmyn3\* 0.25 0.5 0.419 (0.0)  
olv4\* 1.0 0.75 0.831 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 64.21 16.75 10.54  
LAB\*LABa 64.21 17.14 7.88  
LAB\*TCHa 62.5 18.87 24.7

relative CIELAB lab\*  
lab\*lab 0.597 0.227 0.104  
lab\*tch 0.625 0.25 0.069  
lab\*nch 0.25 0.25 0.069  
relative Natural Colour (NC)  
lab\*trj 0.597 0.25 0.0  
lab\*tce 0.625 0.25 0.0  
lab\*nce 0.25 0.25 0.069

relative Inform. Technology (IT)  
olv3\* 0.5 0.25 0.669 (1.0)  
cmyn3\* 0.5 0.75 0.669 (0.0)  
olv4\* 1.0 0.75 0.831 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 44.86 11.93 9.23  
LAB\*LABa 44.86 12.51 7.88  
LAB\*TCHa 37.5 18.87 24.7

relative CIELAB lab\*  
lab\*lab 0.347 0.227 0.104  
lab\*tch 0.375 0.25 0.069  
lab\*nch 0.25 0.25 0.069  
relative Natural Colour (NC)  
lab\*trj 0.347 0.25 0.0  
lab\*tce 0.375 0.25 0.0  
lab\*nce 0.25 0.25 0.069

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.169 (0.0)  
cmyn3\* 0.5 0.0 0.839 (0.0)  
olv4\* 1.0 0.75 0.831 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 33.01 34.49 16.37  
LAB\*LABa 33.01 34.49 16.37  
LAB\*TCHa 25.01 37.73 24.7

relative CIELAB lab\*  
lab\*lab 0.194 0.454 0.209  
lab\*tch 0.25 0.5 0.069  
lab\*nch 0.25 0.5 0.069  
relative Natural Colour (NC)  
lab\*trj 0.194 0.5 0.0  
lab\*tce 0.25 0.5 0.069  
lab\*nce 0.25 0.5 0.069

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.169 (0.0)  
cmyn3\* 0.75 0.0 0.919 (0.0)  
olv4\* 1.0 0.75 0.831 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 25.51 17.49 7.92  
LAB\*LABa 25.51 17.14 7.88  
LAB\*TCHa 12.5 18.86 24.7

relative CIELAB lab\*  
lab\*lab 0.097 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.25 0.25 0.069  
relative Natural Colour (NC)  
lab\*trj 0.097 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.25 0.25 0.069

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 18.02 0.03 0.47  
LAB\*LABa 18.02 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 0.0  
lab\*nch 1.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 1.0 0.5 0.661 (1.0)  
cmyn3\* 0.0 0.5 0.339 (0.0)  
olv4\* 1.0 0.5 0.661 (1.0)  
cmyn4\* 0.0 0.5 0.339 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 71.7 33.75 18.92  
LAB\*LABa 71.7 34.28 15.76  
LAB\*TCHa 75.0 37.73 24.7

relative CIELAB lab\*  
lab\*lab 0.694 0.454 0.209  
lab\*tch 0.75 0.5 0.069  
lab\*nch 0.0 0.5 0.069  
relative Natural Colour (NC)  
lab\*trj 0.694 0.5 0.0  
lab\*tce 0.75 0.5 0.0  
lab\*nce 0.0 0.5 0.069

relative Inform. Technology (IT)  
olv3\* 0.75 0.25 0.419 (1.0)  
cmyn3\* 0.25 0.75 0.589 (0.0)  
olv4\* 1.0 0.5 0.661 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 52.36 34.29 15.77  
LAB\*LABa 52.36 34.29 15.77  
LAB\*TCHa 50.0 37.73 24.7

relative CIELAB lab\*  
lab\*lab 0.444 0.454 0.209  
lab\*tch 0.5 0.5 0.069  
lab\*nch 0.25 0.5 0.069  
relative Natural Colour (NC)  
lab\*trj 0.444 0.5 0.0  
lab\*tce 0.5 0.5 0.069  
lab\*nce 0.25 0.5 0.069

relative Inform. Technology (IT)  
olv3\* 0.5 0.25 0.669 (1.0)  
cmyn3\* 0.25 0.75 0.669 (0.0)  
olv4\* 1.0 0.5 0.661 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 40.51 51.49 24.71  
LAB\*LABa 40.51 51.42 23.65  
LAB\*TCHa 37.5 56.6 24.7

relative CIELAB lab\*  
lab\*lab 0.291 0.681 0.313  
lab\*tch 0.375 0.75 0.069  
lab\*nch 0.25 0.75 0.069  
relative Natural Colour (NC)  
lab\*trj 0.291 0.75 0.0  
lab\*tce 0.375 0.75 0.069  
lab\*nce 0.25 0.75 0.069

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.169 (0.0)  
cmyn3\* 0.5 0.0 0.839 (0.0)  
olv4\* 1.0 0.75 0.831 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 33.01 34.49 16.37  
LAB\*LABa 33.01 34.49 16.37  
LAB\*TCHa 25.01 37.73 24.7

relative CIELAB lab\*  
lab\*lab 0.194 0.454 0.209  
lab\*tch 0.25 0.5 0.069  
lab\*nch 0.25 0.5 0.069  
relative Natural Colour (NC)  
lab\*trj 0.194 0.5 0.0  
lab\*tce 0.25 0.5 0.069  
lab\*nce 0.25 0.5 0.069

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.169 (0.0)  
cmyn3\* 0.75 0.0 0.919 (0.0)  
olv4\* 1.0 0.75 0.831 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 25.51 17.49 7.92  
LAB\*LABa 25.51 17.14 7.88  
LAB\*TCHa 12.5 18.86 24.7

relative CIELAB lab\*  
lab\*lab 0.097 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.25 0.25 0.069  
relative Natural Colour (NC)  
lab\*trj 0.097 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.25 0.25 0.069

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 18.02 0.03 0.47  
LAB\*LABa 18.02 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 0.0  
lab\*nch 1.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 1.0 0.25 0.492 (1.0)  
cmyn3\* 0.0 0.25 0.508 (0.0)  
olv4\* 1.0 0.25 0.492 (1.0)  
cmyn4\* 0.0 0.25 0.508 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 59.85 51.12 26.01  
LAB\*LABa 59.85 42.23 6.65  
LAB\*TCHa 62.5 56.6 24.7

relative CIELAB lab\*  
lab\*lab 0.681 0.313 0.313  
lab\*tch 0.625 0.75 0.069  
lab\*nch 0.0 0.75 0.069  
relative Natural Colour (NC)  
lab\*trj 0.681 0.313 0.313  
lab\*tce 0.625 0.75 0.069  
lab\*nce 0.0 0.75 0.069

relative Inform. Technology (IT)  
olv3\* 0.75 0.0 0.169 (0.0)  
cmyn3\* 0.25 0.75 0.669 (0.0)  
olv4\* 1.0 0.25 0.492 (1.0)  
cmyn4\* 0.0 0.25 0.508 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 48.0 68.48 33.09  
LAB\*LABa 48.0 68.56 31.53  
LAB\*TCHa 50.0 75.47 24.7

relative CIELAB lab\*  
lab\*lab 0.388 0.908 0.418  
lab\*tch 0.5 1.0 0.069  
lab\*nch 0.0 1.0 0.069  
relative Natural Colour (NC)  
lab\*trj 0.388 1.0 0.0  
lab\*tce 0.5 1.0 0.069  
lab\*nce 0.0 1.0 0.069

relative Inform. Technology (IT)  
olv3\* 0.5 0.25 0.669 (1.0)  
cmyn3\* 0.25 0.75 0.669 (0.0)  
olv4\* 1.0 0.25 0.492 (1.0)  
cmyn4\* 0.0 0.25 0.508 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 40.51 51.49 24.71  
LAB\*LABa 40.51 51.42 23.65  
LAB\*TCHa 37.5 56.6 24.7

relative CIELAB lab\*  
lab\*lab 0.291 0.681 0.313  
lab\*tch 0.375 0.75 0.069  
lab\*nch 0.25 0.75 0.069  
relative Natural Colour (NC)  
lab\*trj 0.291 0.75 0.0  
lab\*tce 0.375 0.75 0.069  
lab\*nce 0.25 0.75 0.069

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.169 (0.0)  
cmyn3\* 0.5 0.0 0.839 (0.0)  
olv4\* 1.0 0.75 0.831 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 33.01 34.49 16.37  
LAB\*LABa 33.01 34.49 16.37  
LAB\*TCHa 25.01 37.73 24.7

relative CIELAB lab\*  
lab\*lab 0.194 0.454 0.209  
lab\*tch 0.25 0.5 0.069  
lab\*nch 0.25 0.5 0.069  
relative Natural Colour (NC)  
lab\*trj 0.194 0.5 0.0  
lab\*tce 0.25 0.5 0.069  
lab\*nce 0.25 0.5 0.069

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.169 (0.0)  
cmyn3\* 0.75 0.0 0.919 (0.0)  
olv4\* 1.0 0.75 0.831 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 25.51 17.49 7.92  
LAB\*LABa 25.51 17.14 7.88  
LAB\*TCHa 12.5 18.86 24.7

relative CIELAB lab\*  
lab\*lab 0.097 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.25 0.25 0.069  
relative Natural Colour (NC)  
lab\*trj 0.097 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.25 0.25 0.069

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 18.02 0.03 0.47  
LAB\*LABa 18.02 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 0.0  
lab\*nch 1.0 0.0 0.0  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 1.0 0.25 0.492 (1.0)  
cmyn3\* 0.0 0.25 0.508 (0.0)  
olv4\* 1.0 0.25 0.492 (1.0)  
cmyn4\* 0.0 0.25 0.508 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 59.85 51.12 26.01  
LAB\*LABa 59.85 42.23 6.65  
LAB\*TCHa 62.5 56.6 24.7

relative CIELAB lab\*  
lab\*lab 0.681 0.313 0.313  
lab\*tch 0.625 0.75 0.069  
lab\*nch 0.0 0.75 0.069  
relative Natural Colour (NC)  
lab\*trj 0.681 0.313 0.313  
lab\*tce 0.625 0.75 0.069  
lab\*nce 0.0 0.75 0.069

relative Inform. Technology (IT)  
olv3\* 0.75 0.0 0.169 (0.0)  
cmyn3\* 0.25 0.75 0.669 (0.0)  
olv4\* 1.0 0.25 0.492 (1.0)  
cmyn4\* 0.0 0.25 0.508 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 48.0 68.48 33.09  
LAB\*LABa 48.0 68.56 31.53  
LAB\*TCHa 50.0 75.47 24.7

relative CIELAB lab\*  
lab\*lab 0.388 0.908 0.418  
lab\*tch 0.5 1.0 0.069  
lab\*nch 0.0 1.0 0.069  
relative Natural Colour (NC)  
lab\*trj 0.388 1.0 0.0  
lab\*tce 0.5 1.0 0.069  
lab\*nce 0.0 1.0 0.069

relative Inform. Technology (IT)  
olv3\* 0.5 0.25 0.669 (1.0)  
cmyn3\* 0.25 0.75 0.669 (0.0)  
olv4\* 1.0 0.25 0.492 (1.0)  
cmyn4\* 0.0 0.25 0.508 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 40.51 51.49 24.71  
LAB\*LABa 40.51 51.42 23.65  
LAB\*TCHa 37.5 56.6 24.7

relative CIELAB lab\*  
lab\*lab 0.291 0.681 0.313  
lab\*tch 0.375 0.75 0.069  
lab\*nch 0.25 0.75 0.069  
relative Natural Colour (NC)  
lab\*trj 0.291 0.75 0.0  
lab\*tce 0.375 0.75 0.069  
lab\*nce 0.25 0.75 0.069

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.169 (0.0)  
cmyn3\* 0.5 0.0 0.839 (0.0)  
olv4\* 1.0 0.75 0.831 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 33.01 34.49 16.37  
LAB\*LABa 33.01 34.49 16.37  
LAB\*TCHa 25.01 37.73 24.7

relative CIELAB lab\*  
lab\*lab 0.194 0.454 0.209  
lab\*tch 0.25 0.5 0.069  
lab\*nch 0.25 0.5 0.069  
relative Natural Colour (NC)  
lab\*trj 0.194 0.5 0.0  
lab\*tce 0.25 0.5 0.069  
lab\*nce 0.25 0.5 0.069

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.169 (0.0)  
cmyn3\* 0.75 0.0 0.919 (0.0)  
olv4\* 1.0 0.75 0.831 (1.0)  
cmyn4\* 0.0 0.25 0.169 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 25.51 17.49 7.92

### Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 92/360 = 0.255$

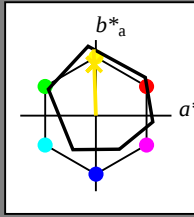
$lab^*tch$  and  $lab^*nch$

D65: hue J

LCH\*Ma: 86 88 92

olv\*Ma: 1.0 0.9 0.0

triangle lightness  $t^*$



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 -0.98 4.75  
LAB\*LABa 95.41 0.0 0.0  
LAB\*LABb 99.99 0.01 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\*trj 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)  
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 76.06 -0.61 3.44  
LAB\*LABa 76.06 0.0 0.0  
LAB\*LABb 75.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.97 -0.007 0.25  
lab\*tch 0.875 0.25 0.255  
lab\*nch 0.0 0.25 0.255  
relative Natural Colour (NC)  
lab\*trj 0.97 0.0 0.25  
lab\*tce 0.875 0.25 0.255  
lab\*nce 0.0 0.25 0.255

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 56.71 -0.24 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*LABb 50.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.75 0.001 0.25  
lab\*tch 0.625 0.25 0.255  
lab\*nch 0.0 0.25 0.255  
relative Natural Colour (NC)  
lab\*trj 0.75 0.0 0.25  
lab\*tce 0.625 0.25 0.255  
lab\*nce 0.0 0.25 0.255

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (0.0)  
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 56.71 -0.24 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*LABb 50.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 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\*tce 0.5 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (0.0)  
cmyn3\* 0.75 0.75 0.75 (1.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.63 0.83  
LAB\*LABa 37.36 0.0 0.0  
LAB\*LABb 25.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.47 -0.007 0.25  
lab\*tch 0.375 0.25 0.255  
lab\*nch 0.0 0.25 0.255  
relative Natural Colour (NC)  
lab\*trj 0.47 0.0 0.25  
lab\*tce 0.375 0.25 0.255  
lab\*nce 0.0 0.25 0.255

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (0.0)  
cmyn3\* 0.75 0.75 0.75 (1.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.63 0.83  
LAB\*LABa 37.36 0.0 0.0  
LAB\*LABb 25.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*tch 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\*tce 0.25 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.22 -0.007 0.25  
lab\*tch 0.125 0.25 0.255  
lab\*nch 0.0 0.25 0.255  
relative Natural Colour (NC)  
lab\*trj 0.22 0.0 0.25  
lab\*tce 0.125 0.25 0.255  
lab\*nce 0.0 0.25 0.255

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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 0.0 0.0 0.0  
lab\*nce 0.0 0.0 0.0

### 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          |

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)  
olv3\* 1.0 0.951 0.5 (1.0)  
cmyn3\* 0.0 0.049 0.5 (0.0)  
olv4\* 1.0 0.951 0.5 (1.0)  
cmyn4\* 0.0 0.049 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 90.8 -2.3 48.29  
LAB\*LABa 90.8 -1.4 43.84  
LAB\*LABb 87.5 21.93 91.85

relative CIELAB lab\*  
lab\*lab 0.94 -0.015 0.5  
lab\*tch 0.75 0.5 0.255  
lab\*nch 0.0 0.5 0.255  
relative Natural Colour (NC)  
lab\*trj 0.94 0.0 0.5  
lab\*tce 0.75 0.5 0.255  
lab\*nce 0.0 0.5 0.255

relative Inform. Technology (IT)  
olv3\* 0.75 0.701 0.25 (1.0)  
cmyn3\* 0.25 0.299 0.75 (0.0)  
olv4\* 1.0 0.951 0.5 (1.0)  
cmyn4\* 0.0 0.049 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 71.45 -1.92 46.98  
LAB\*LABa 71.45 -1.4 43.84  
LAB\*LABb 50.0 43.87 91.84

relative CIELAB lab\*  
lab\*lab 0.911 -0.023 0.75  
lab\*tch 0.625 0.75 0.255  
lab\*nch 0.0 0.75 0.255  
relative Natural Colour (NC)  
lab\*trj 0.911 0.0 0.75  
lab\*tce 0.625 0.75 0.255  
lab\*nce 0.0 0.75 0.255

relative Inform. Technology (IT)  
olv3\* 0.5 0.451 0.0 (1.0)  
cmyn3\* 0.5 0.549 1.0 (0.0)  
olv4\* 1.0 0.951 0.5 (1.0)  
cmyn4\* 0.0 0.049 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 52.1 -1.39 43.85  
LAB\*LABa 52.1 -1.39 43.85  
LAB\*LABb 25.01 43.86 91.84

relative CIELAB lab\*  
lab\*lab 0.661 -0.023 0.75  
lab\*tch 0.375 0.75 0.255  
lab\*nch 0.0 0.75 0.255  
relative Natural Colour (NC)  
lab\*trj 0.661 0.0 0.75  
lab\*tce 0.375 0.75 0.255  
lab\*nce 0.0 0.75 0.255

relative Inform. Technology (IT)  
olv3\* 0.25 0.324 1.0 (0.0)  
cmyn3\* 0.25 0.676 0.0 (1.0)  
olv4\* 1.0 0.951 0.5 (1.0)  
cmyn4\* 0.0 0.049 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 28.0 -1.45 43.85  
LAB\*LABa 28.0 -1.45 43.85  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.44 -0.015 0.5  
lab\*tch 0.25 0.5 0.255  
lab\*nch 0.0 0.5 0.255  
relative Natural Colour (NC)  
lab\*trj 0.44 0.0 0.5  
lab\*tce 0.25 0.5 0.255  
lab\*nce 0.0 0.5 0.255

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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 0.0 0.0 0.0  
lab\*nce 0.0 0.0 0.0

### Output: Colorimetric Television Luminous System TLS00

for hue  $h^* = lab^*h = 92/360 = 0.256$

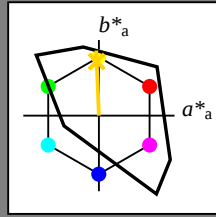
$lab^*tch$  and  $lab^*nch$

D65: hue J

LCH\*Ma: 85 86 92

olv\*Ma: 1.0 0.82 0.0

triangle lightness  $t^*$



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\*LABa 95.41 0.0 0.0  
LAB\*LABb 99.99 0.01 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\*trj 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)  
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 71.57 0.0 0.0  
LAB\*LABa 71.57 0.0 0.0  
LAB\*LABb 75.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.75 0.0 0.0  
lab\*tch 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\*tce 0.75 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (0.0)  
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 56.71 -0.24 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*LABb 50.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 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\*tce 0.5 0.0 0.0  
lab\*nce 0.0 0.0 0.0

relative Inform. Technology (IT)  
olv3\* 0.25 0.25 0.25 (0.0)  
cmyn3\* 0.75 0.75 0.75 (1.0)  
olv4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.63 0.83  
LAB\*LABa 37.36 0.0 0.0  
LAB\*LABb 25.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*tch 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\*tce 0.25 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 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 18.02 0.0 0.47  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 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\*tce 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)

## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 164/360 = 0.457$

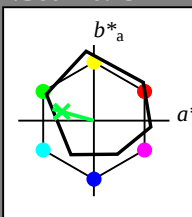
$lab^*tch$  and  $lab^*nch$

D65: hue G

LCH\*Ma: 53 57 164

olv\*Ma: 0.0 1.0 0.25

triangle lightness  $t^*$



## 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          |

## %Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)

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

relative Inform. Technology (IT)

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

relative Inform. Technology (IT)

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

relative Inform. Technology (IT)</

**lab\*tch and lab\*nch**

**olv\*Ma: 0.0 0.49 1.0**

%Gamut

$$L^* = L_a^* \quad a_a^* \quad b_a^* \quad C_{ab,a}^* \quad h_{ab}^*$$

### %Regularity

$$g^*_{H,rel} = 57$$
$$g^*_{C,rel} = 59$$

urement

at of pri

| Inform. Technology (IT) |      |     |       |
|-------------------------|------|-----|-------|
| 0.0                     | 0.61 | 1.0 | (1.0) |
| 1.0                     | 0.39 | 0.0 | (0.0) |
| 0.0                     | 0.61 | 1.0 | 1.0   |
| 1.0                     | 0.39 | 0.0 | 0.0   |

*t* and adapted CIELAB

|    |       |      |        |
|----|-------|------|--------|
| Ba | 64.86 | 1.47 | -48.64 |
| Bb | 64.86 | 1.47 | -48.64 |

|                     |      |       |        |
|---------------------|------|-------|--------|
| Ha                  | 50.0 | 48.67 | 271.74 |
| CIE Lab*            |      |       |        |
|                     | 0.68 | 0.03  | -0.998 |
|                     | 0.5  | 1.0   | 0.755  |
|                     | 0.0  | 1.0   | 0.755  |
| Natural Colour (NC) |      |       |        |
|                     | 0.68 | 0.0   | -0.999 |
|                     | 0.5  | 1.0   | 0.75   |
|                     | 0.0  | 1.0   | 0.996  |

Form: 10/10.Se  
r system  
 $\eta^* = 0,00$

ess  $n^*$

Page: 10

1,00

```
& TLS00    input: olv* setrgbcolor
```

```
input: olv* setrgbcolor
```

output: *no change compared to input*

BAM material: code=rha4ta