

## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 38/360 = 0.105$

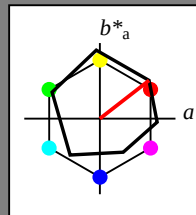
$lab^*tch$  and  $lab^*nch$

D50: hue O

LCH\*Ma: 48 82 38

olv\*Ma: 1.0 0.0 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 95.46 -39.49 4.69  
LAB\*LABa 95.46 0.0 0.0  
LAB\*TCa 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 76.12 -12.12 3.4  
LAB\*LABa 76.12 0.0 0.0  
LAB\*TCa 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 (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 56.78 0.13 2.11  
LAB\*LABa 56.78 0.0 0.0  
LAB\*TCa 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 (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 37.44 0.63 0.82  
LAB\*LABa 37.44 0.0 0.0  
LAB\*TCa 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 18.1 0.67 0.46  
LAB\*LABa 18.1 0.0 0.0  
LAB\*TCa 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

$n^* = 1.0$

relative Inform. Technology (IT)  
olv3\* 1.0 0.75 0.75 (1.0)  
cmyn3\* 0.0 0.25 0.25 (0.0)  
olv4\* 1.0 0.75 0.75 (1.0)  
cmyn4\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 83.58 16.26 12.63  
LAB\*LABa 83.58 16.26 12.63  
LAB\*TCa 97.5 20.59 37.84

relative CIELAB lab\*  
lab\*lab 1.0 0.846 0.197 0.153  
lab\*tch 0.875 0.25 0.105  
lab\*nch 0.0 0.25 0.105  
relative Natural Colour (NC)  
lab\*trj 0.846 0.24 0.071  
lab\*tce 0.875 0.25 0.046  
lab\*nce 0.0 0.25 0.119

relative Inform. Technology (IT)  
olv3\* 0.75 0.5 0.5 (1.0)  
cmyn3\* 0.25 0.5 0.5 (0.0)  
olv4\* 1.0 0.75 0.75 (1.0)  
cmyn4\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 64.24 16.29 15.25  
LAB\*LABa 64.24 16.29 15.25  
LAB\*TCa 62.5 20.59 37.84

relative CIELAB lab\*  
lab\*lab 0.596 0.197 0.153  
lab\*tch 0.625 0.25 0.105  
lab\*nch 0.25 0.25 0.105  
relative Natural Colour (NC)  
lab\*trj 0.596 0.24 0.071  
lab\*tce 0.625 0.25 0.046  
lab\*nce 0.25 0.25 0.119

relative Inform. Technology (IT)  
olv3\* 0.5 0.25 0.25 (1.0)  
cmyn3\* 0.5 0.75 0.75 (0.0)  
olv4\* 1.0 0.75 0.75 (1.0)  
cmyn4\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 44.4 16.56 13.96  
LAB\*LABa 44.4 16.56 13.96  
LAB\*TCa 37.5 20.59 37.84

relative CIELAB lab\*  
lab\*lab 0.346 0.197 0.153  
lab\*tch 0.375 0.25 0.105  
lab\*nch 0.25 0.25 0.105  
relative Natural Colour (NC)  
lab\*trj 0.346 0.24 0.071  
lab\*tce 0.375 0.25 0.046  
lab\*nce 0.25 0.25 0.119

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.0 (1.0)  
cmyn3\* 0.75 1.0 0.0 (0.0)  
olv4\* 1.0 0.75 0.75 (1.0)  
cmyn4\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 33.02 32.98 25.36  
LAB\*LABa 33.02 32.98 25.36  
LAB\*TCa 25.01 41.18 37.84

relative CIELAB lab\*  
lab\*lab 0.193 0.395 0.307  
lab\*tch 0.25 0.5 0.105  
lab\*nch 0.0 0.25 0.105  
relative Natural Colour (NC)  
lab\*trj 0.193 0.479 0.143  
lab\*tce 0.25 0.5 0.046  
lab\*nce 0.0 0.25 0.119

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 0.75 1.0 0.0 (0.0)  
olv4\* 1.0 0.75 0.75 (1.0)  
cmyn4\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 25.36 16.82 12.63  
LAB\*LABa 25.36 16.82 12.63  
LAB\*TCa 12.5 20.59 37.84

relative CIELAB lab\*  
lab\*lab 0.097 0.197 0.153  
lab\*tch 0.125 0.25 0.105  
lab\*nch 0.0 0.25 0.105  
relative Natural Colour (NC)  
lab\*trj 0.097 0.24 0.071  
lab\*tce 0.125 0.25 0.046  
lab\*nce 0.0 0.25 0.119

$n^* = 0.50$

## ORS18; adapted (a) CIELAB data

|                  | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|---------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94         | 65.05   | 50.54   | 82.38        | 38           |
| Y <sub>Ma</sub>  | 91.0          | -4.72   | 90.58   | 90.7         | 93           |
| L <sub>Ma</sub>  | 50.9          | -63.18  | 34.98   | 72.22        | 151          |
| C <sub>Ma</sub>  | 56.99         | -39.34  | -48.1   | 62.16        | 231          |
| V <sub>Ma</sub>  | 25.72         | 30.89   | -44.4   | 54.09        | 305          |
| M <sub>Ma</sub>  | 49.99         | 75.76   | -4.64   | 75.9         | 356          |
| N <sub>Ma</sub>  | 18.09         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.46         | 0.0     | 0.0     | 0.0          | 0            |
| RC <sub>IE</sub> | 41.88         | 61.66   | 30.69   | 68.88        | 26           |
| J <sub>CIE</sub> | 81.97         | 2.02    | 67.79   | 67.82        | 88           |
| G <sub>CIE</sub> | 51.62         | -41.32  | 9.74    | 42.46        | 167          |
| B <sub>CIE</sub> | 29.2          | -5.79   | -49.61  | 49.96        | 263          |

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

relative Inform. Technology (IT)  
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)  
standard and adapted CIELAB  
LAB\*LAB 71.7 32.45 28.38  
LAB\*LABa 71.7 32.45 28.38  
LAB\*TCa 75.0 41.18 37.84

relative CIELAB lab\*  
lab\*lab 0.693 0.395 0.307  
lab\*tch 0.75 0.5 0.105  
lab\*nch 0.0 0.5 0.105  
relative Natural Colour (NC)  
lab\*trj 0.693 0.479 0.143  
lab\*tce 0.75 0.5 0.046  
lab\*nce 0.0 0.5 0.119

relative Inform. Technology (IT)  
olv3\* 0.75 0.25 0.25 (1.0)  
cmyn3\* 0.25 0.75 0.75 (0.0)  
olv4\* 1.0 0.5 0.5 (1.0)  
cmyn4\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 52.36 32.72 27.09  
LAB\*LABa 52.36 32.72 27.09  
LAB\*TCa 50.0 41.18 37.84

relative CIELAB lab\*  
lab\*lab 0.443 0.395 0.307  
lab\*tch 0.5 0.5 0.105  
lab\*nch 0.0 0.5 0.105  
relative Natural Colour (NC)  
lab\*trj 0.443 0.479 0.143  
lab\*tce 0.5 0.5 0.046  
lab\*nce 0.0 0.5 0.119

relative Inform. Technology (IT)  
olv3\* 0.5 0.0 0.0 (1.0)  
cmyn3\* 0.5 1.0 0.0 (0.0)  
olv4\* 1.0 0.25 0.25 (1.0)  
cmyn4\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 40.48 49.14 38.93  
LAB\*LABa 40.48 49.14 38.93  
LAB\*TCa 37.51 61.78 37.84

relative CIELAB lab\*  
lab\*lab 0.289 0.592 0.46  
lab\*tch 0.375 0.75 0.105  
lab\*nch 0.0 0.25 0.105  
relative Natural Colour (NC)  
lab\*trj 0.289 0.719 0.214  
lab\*tce 0.375 0.75 0.046  
lab\*nce 0.0 0.25 0.119

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.0 (1.0)  
cmyn3\* 0.75 1.0 0.0 (0.0)  
olv4\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 33.02 32.98 25.36  
LAB\*LABa 33.02 32.98 25.36  
LAB\*TCa 25.01 41.18 37.84

relative CIELAB lab\*  
lab\*lab 0.193 0.395 0.307  
lab\*tch 0.25 0.5 0.105  
lab\*nch 0.0 0.25 0.105  
relative Natural Colour (NC)  
lab\*trj 0.193 0.479 0.143  
lab\*tce 0.25 0.5 0.046  
lab\*nce 0.0 0.25 0.119

$n^* = 0.25$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

$n^* = 1.25$

$n^* = 1.50$

$n^* = 1.75$

$n^* = 2.00$

$n^* = 2.25$

$n^* = 2.50$

$n^* = 2.75$

$n^* = 3.00$

$n^* = 3.25$

$n^* = 3.50$

$n^* = 3.75$

$n^* = 4.00$

$n^* = 4.25$

$n^* = 4.50$

$n^* = 4.75$

$n^* = 5.00$

$n^* = 5.25$

$n^* = 5.50$

$n^* = 5.75$

$n^* = 6.00$

$n^* = 6.25$

$n^* = 6.50$

$n^* = 6.75$

$n^* = 7.00$

$n^* = 7.25$

$n^* = 7.50$

$n^* = 7.75$

$n^* = 8.00$

$n^* = 8.25$

$n^* = 8.50$

$n^* = 8.75$

$n^* = 9.00$

$n^* = 9.25$

$n^* = 9.50$

$n^* = 9.75$

$n^* = 10.00$

$n^* = 10.25$

$n^* = 10.50$

$n^* = 10.75$

$n^* = 11.00$

$n^* = 11.25$

$n^* = 11.50$

$n^* = 11.75$

$n^* = 12.00$

$n^* = 12.25$

$n^* = 12.50$

$n^* = 12.75$

$n^* = 13.00$

$n^* = 13.25$

$n^* = 13.50$

$n^* = 13.75$

$n^* = 14.00$

$n^* = 14.25$

$n^* = 14.50$

$n^* = 14.75$

$n^* = 15.00$

$n^* = 15.25$

$n^* = 15.50$

$n^* = 15.75$

$n^* = 16.00$

$n^* = 16.25$

$n^* = 16.50$

$n^* = 16.75$

$n^* = 17.00$

$n^* = 17.25$

$n^* = 17.50$

$n^* = 17.75$

$n^* = 18.00$

$n^* = 18.25$

$n^* = 18.50$

$n^* = 18.75$

$n^* = 19.00$

$n^* = 19.25$

$n^* = 19.50$

$n^* = 19.75$

$n^* = 20.00$

$n^* = 20.25$

$n^* = 20.50$

$n^* = 20.75$

$n^* = 21.00$

$n^* = 21.25$

$n^* = 21.50$

$n^* = 21.75$

$n^* = 22.00$

$n^* = 22.25$

$n^* = 22.50$

$n^* = 22.75$

$n^* = 23.00$

$n^* = 23.25$

$n^* = 23.50$

$n^* = 23.75$

$n^* = 24.00$

$n^* = 24.25$

$n^* = 24.50$

$n^* = 24.75$

$n^* = 25.00$

$n^* = 25.25$

$n^* = 25.50$

$n^* = 25.75$

$n^* = 26.00$

$n^* = 26.25$

$n^* = 26.50$

$n^* = 26.75$

$n^* = 27.00$

$n^* = 27.25$

$n^* = 27.50$

### Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 93/360 = 0.258$

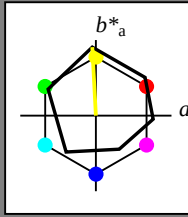
$lab^*tch$  and  $lab^*nch$

D50: hue Y

LCH\*Ma: 91 91 93

olv\*Ma: 1.0 1.0 0.0

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       | 65.05   | 50.54   | 82.38        | 38           |
| Y <sub>Ma</sub>  | 91.0        | -4.72   | 90.58   | 90.7         | 93           |
| L <sub>Ma</sub>  | 50.9        | -63.18  | 34.98   | 72.22        | 151          |
| C <sub>Ma</sub>  | 56.99       | -39.34  | -48.1   | 62.16        | 231          |
| V <sub>Ma</sub>  | 25.72       | 30.89   | -44.4   | 54.09        | 305          |
| M <sub>Ma</sub>  | 49.99       | 75.76   | -4.64   | 75.9         | 356          |
| N <sub>Ma</sub>  | 18.09       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.46       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 41.88       | 61.66   | 30.69   | 68.88        | 26           |
| J <sub>CIE</sub> | 81.97       | 2.02    | 67.79   | 67.82        | 88           |
| G <sub>CIE</sub> | 51.62       | -41.32  | 9.74    | 42.46        | 167          |
| B <sub>CIE</sub> | 29.2        | -5.79   | -49.61  | 49.96        | 263          |

$\% Regularity$

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

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 95.46 -0.39 4.69  
LAB\*LABa 95.46 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\*tr 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 76.12 -0.12 3.4  
LAB\*LABa 76.12 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\*tr 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 56.78 0.13 2.11  
LAB\*LABa 56.78 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\*tr 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 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.48 -0.37 0.82  
LAB\*LABa 37.48 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\*tr 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 18.1 0.0 0.0  
LAB\*LABa 18.1 0.0 0.0  
LAB\*TCHa 0.00 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\*tr 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 18.1 0.0 0.0  
LAB\*LABa 18.1 0.0 0.0  
LAB\*TCHa 0.00 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\*tr 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 94.34 -1.56 27.26  
LAB\*LABa 94.34 -1.17 22.64  
LAB\*TCHa 87.5 22.67 92.99

relative CIELAB lab\*  
lab\*lab 0.985 -0.012 0.25  
lab\*tch 0.875 0.25 0.258  
lab\*nch 0.0 0.25 0.258  
relative Natural Colour (NC)  
lab\*tr 0.985 -0.022 0.249  
lab\*tce 0.875 0.25 0.265  
lab\*nce 0.0 0.25 0.265

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 75.0 -1.17 22.64  
LAB\*LABa 75.0 -1.17 22.64  
LAB\*TCHa 62.5 22.68 92.99

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\*tr 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 56.78 -1.02 24.69  
LAB\*LABa 56.78 -1.17 22.64  
LAB\*TCHa 50.0 22.68 92.99

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\*tr 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 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.48 -0.37 0.82  
LAB\*LABa 37.48 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\*tr 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 18.1 0.0 0.0  
LAB\*LABa 18.1 0.0 0.0  
LAB\*TCHa 0.00 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\*tr 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 18.1 0.0 0.0  
LAB\*LABa 18.1 0.0 0.0  
LAB\*TCHa 0.00 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\*tr 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 93.22 -2.72 49.83  
LAB\*LABa 93.22 -2.36 45.28  
LAB\*TCHa 75.0 45.34 92.99

relative CIELAB lab\*  
lab\*lab 0.971 -0.025 0.499  
lab\*tch 0.75 0.5 0.258  
lab\*nch 0.0 0.5 0.258  
relative Natural Colour (NC)  
lab\*tr 0.971 -0.046 0.498  
lab\*tce 0.75 0.5 0.265  
lab\*nce 0.0 0.5 0.265

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 73.89 -2.46 48.55  
LAB\*LABa 73.89 -2.36 45.29  
LAB\*TCHa 50.0 45.35 92.99

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\*tr 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 56.78 -1.02 24.69  
LAB\*LABa 56.78 -1.17 22.64  
LAB\*TCHa 50.0 22.68 92.99

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\*tr 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 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.48 -0.37 0.82  
LAB\*LABa 37.48 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\*tr 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 18.1 0.0 0.0  
LAB\*LABa 18.1 0.0 0.0  
LAB\*TCHa 0.00 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\*tr 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 92.11 -3.89 72.4  
LAB\*LABa 92.11 -3.54 67.92  
LAB\*TCHa 62.5 68.02 92.99

relative CIELAB lab\*  
lab\*lab 0.957 -0.038 0.749  
lab\*tch 0.625 0.75 0.258  
lab\*nch 0.0 0.75 0.258  
relative Natural Colour (NC)  
lab\*tr 0.957 -0.069 0.747  
lab\*tce 0.625 0.75 0.265  
lab\*nce 0.0 0.75 0.265

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 73.89 -2.46 48.55  
LAB\*LABa 73.89 -2.36 45.29  
LAB\*TCHa 50.0 45.35 92.99

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\*tr 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 56.78 -1.02 24.69  
LAB\*LABa 56.78 -1.17 22.64  
LAB\*TCHa 50.0 22.68 92.99

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\*tr 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 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.48 -0.37 0.82  
LAB\*LABa 37.48 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\*tr 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 18.1 0.0 0.0  
LAB\*LABa 18.1 0.0 0.0  
LAB\*TCHa 0.00 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\*tr 0.0 0.0 0.0  
lab\*tce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

### Output: Colorimetric Television Luminous System TLS00

for hue  $h^* = lab^*h = 100/360 = 0.277$

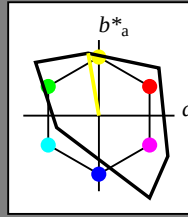
$lab^*tch$  and  $lab^*nch$

D50: hue Y

LCH\*Ma: 93 84 100

olv\*Ma: 1.0 1.0 0.0

triangle lightness  $t^*$



### TLS00; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 54.19       | 79.36   | 63.0    | 101.33       | 38           |
| Y <sub>Ma</sub>  | 93.44       | -14.18  | 82.59   | 83.8         | 100          |
| L <sub>Ma</sub>  | 82.82       | -83.73  | 70.41   | 109.41       | 140          |
| C <sub>Ma</sub>  | 85.22       | -55.9   | -15.78  | 58.1         | 196          |
| V <sub>Ma</sub>  | 25.61       | 67.05   | -108.87 | 127.87       | 302          |
| M <sub>Ma</sub>  | 58.76       | 91.18   | -53.69  | 105.82       | 330          |
| 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> | 41.88       | 62.0    | 31.82   | 69.69        | 27           |
| J <sub>CIE</sub> | 81.97       | 1.81    | 71.59   | 71.61        | 89           |
| G <sub>CIE</sub> | 51.62       | -41.11  | 11.52   | 42.7         | 164          |
| B <sub>CIE</sub> | 29.2        | -5.27   | -49.33  | 49.62        | 264          |

$\% Regularity$

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

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\*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\*tr 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\*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\*tr 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

### Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 151/360 = 0.42$

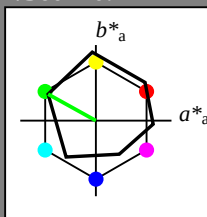
$lab^*tch$  and  $lab^*nch$

D50: hue L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0

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       | 65.05   | 50.54   | 82.38        | 38           |
| Y <sub>Ma</sub>  | 91.0        | -4.72   | 90.58   | 90.7         | 93           |
| L <sub>Ma</sub>  | 50.9        | -63.18  | 34.98   | 72.22        | 151          |
| C <sub>Ma</sub>  | 56.99       | -39.34  | -48.1   | 62.16        | 231          |
| V <sub>Ma</sub>  | 25.72       | 30.89   | -44.4   | 54.09        | 305          |
| M <sub>Ma</sub>  | 49.99       | 75.76   | -4.64   | 75.9         | 356          |
| N <sub>Ma</sub>  | 18.09       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.46       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 41.88       | 61.66   | 30.69   | 68.88        | 26           |
| J <sub>CIE</sub> | 81.97       | 2.02    | 67.79   | 67.82        | 88           |
| G <sub>CIE</sub> | 51.62       | -41.32  | 9.74    | 42.46        | 167          |
| B <sub>CIE</sub> | 29.2        | -5.79   | -49.61  | 49.96        | 263          |

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

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 95.46 -0.39 4.69  
LAB\*LAB 95.46 0.0 0.0  
LAB\*LAB 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 -  
relative Natural Colour (NC)  
lab\*trj 1.0 0.0 0.0  
lab\*tce 1.0 0.0 -  
lab\*nce 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 76.12 -0.12 3.4  
LAB\*LAB 76.12 0.0 0.0  
LAB\*LAB 75.00 0.01 -

relative CIELAB lab\*  
lab\*lab 0.75 0.0 0.0  
lab\*tch 0.75 0.0 -  
lab\*nch 0.0 0.0 -  
relative Natural Colour (NC)  
lab\*trj 0.75 0.0 0.0  
lab\*tce 0.75 0.0 -  
lab\*nce 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 56.78 0.13 2.11  
LAB\*LAB 56.78 0.0 0.0  
LAB\*LAB 50.00 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 -  
lab\*nch 0.0 0.0 -  
relative Natural Colour (NC)  
lab\*trj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*nce 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 37.44 -0.37 0.82  
LAB\*LAB 37.44 0.0 0.0  
LAB\*LAB 25.00 0.01 -

relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*tch 0.25 0.0 -  
lab\*nch 0.0 0.0 -  
relative Natural Colour (NC)  
lab\*trj 0.25 0.0 0.0  
lab\*tce 0.25 0.0 -  
lab\*nce 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 18.1 0.0 0.0  
LAB\*LAB 18.1 0.0 0.0  
LAB\*LAB 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 -  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

$n^* = 1.0$

relative Inform. Technology (IT)  
olv3\* 0.75 1.0 0.75 (1.0)  
cmyn3\* 0.25 0.0 0.25 (0.0)  
olv4\* 0.75 1.0 0.75 (1.0)  
cmyn4\* 0.25 0.0 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 84.32 -16.03 12.7  
LAB\*LAB 84.32 -15.78 8.74  
LAB\*LAB 87.5 18.05 15.103

relative CIELAB lab\*  
lab\*lab 0.856 -0.218 0.121  
lab\*tch 0.875 0.25 0.42  
lab\*nch 0.0 0.25 0.42  
relative Natural Colour (NC)  
lab\*trj 0.856 -0.237 0.077  
lab\*tce 0.875 0.25 0.45  
lab\*nce 0.0 0.25 0.798

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 0.75 1.0 0.75 (1.0)  
cmyn4\* 0.25 0.0 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 64.98 -15.76 11.41  
LAB\*LAB 64.98 -15.78 7.75  
LAB\*LAB 62.5 18.06 15.103

relative CIELAB lab\*  
lab\*lab 0.616 -0.218 0.121  
lab\*tch 0.625 0.25 0.42  
lab\*nch 0.0 0.25 0.42  
relative Natural Colour (NC)  
lab\*trj 0.616 -0.237 0.077  
lab\*tce 0.625 0.25 0.45  
lab\*nce 0.0 0.25 0.798

relative Inform. Technology (IT)  
olv3\* 0.25 0.5 0.25 (1.0)  
cmyn3\* 0.75 0.5 0.75 (0.0)  
olv4\* 0.75 1.0 0.75 (1.0)  
cmyn4\* 0.25 0.0 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 45.64 -15.5 10.12  
LAB\*LAB 45.64 -15.78 7.75  
LAB\*LAB 37.5 18.06 15.103

relative CIELAB lab\*  
lab\*lab 0.356 -0.218 0.121  
lab\*tch 0.375 0.25 0.42  
lab\*nch 0.0 0.25 0.42  
relative Natural Colour (NC)  
lab\*trj 0.356 -0.237 0.077  
lab\*tce 0.375 0.25 0.45  
lab\*nce 0.0 0.25 0.798

relative Inform. Technology (IT)  
olv3\* 0.0 0.5 0.0 (1.0)  
cmyn3\* 1.0 0.5 1.0 (0.0)  
olv4\* 0.5 1.0 0.5 (1.0)  
cmyn4\* 0.5 0.0 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 34.5 -31.18 19.41  
LAB\*LAB 34.5 -31.58 17.49  
LAB\*LAB 25.01 36.11 15.103

relative CIELAB lab\*  
lab\*lab 0.212 -0.436 0.242  
lab\*tch 0.25 0.5 0.42  
lab\*nch 0.0 0.5 0.42  
relative Natural Colour (NC)  
lab\*trj 0.212 -0.474 0.155  
lab\*tce 0.25 0.5 0.45  
lab\*nce 0.0 0.5 0.798

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 0.0 1.0 (0.0)  
olv4\* 0.0 1.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 0.0 0.0 0.0  
LAB\*LAB 0.0 0.0 0.0  
LAB\*LAB 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 -  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

relative Inform. Technology (IT)  
olv3\* 0.5 1.0 0.5 (1.0)  
cmyn3\* 0.5 0.0 0.5 (0.0)  
olv4\* 0.5 1.0 0.5 (1.0)  
cmyn4\* 0.5 0.0 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 73.18 -31.67 20.7  
LAB\*LAB 73.18 -31.58 17.49  
LAB\*LAB 70.0 36.1 15.103

relative CIELAB lab\*  
lab\*lab 0.712 -0.436 0.242  
lab\*tch 0.75 0.5 0.42  
lab\*nch 0.0 0.5 0.42  
relative Natural Colour (NC)  
lab\*trj 0.712 -0.474 0.155  
lab\*tce 0.75 0.5 0.45  
lab\*nce 0.0 0.5 0.798

relative Inform. Technology (IT)  
olv3\* 0.25 1.0 0.25 (1.0)  
cmyn3\* 0.75 0.25 0.75 (0.0)  
olv4\* 0.5 1.0 0.5 (1.0)  
cmyn4\* 0.5 0.0 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 62.04 -47.31 28.7  
LAB\*LAB 62.04 -47.37 26.23  
LAB\*LAB 62.5 54.16 15.103

relative CIELAB lab\*  
lab\*lab 0.568 -0.655 0.363  
lab\*tch 0.625 0.75 0.42  
lab\*nch 0.0 0.75 0.42  
relative Natural Colour (NC)  
lab\*trj 0.568 -0.712 0.232  
lab\*tce 0.625 0.75 0.45  
lab\*nce 0.0 0.75 0.798

relative Inform. Technology (IT)  
olv3\* 0.0 0.75 0.0 (1.0)  
cmyn3\* 1.0 0.0 1.0 (0.0)  
olv4\* 0.0 1.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 50.9 -62.95 36.7  
LAB\*LAB 50.9 -63.16 34.97  
LAB\*LAB 50.0 72.21 15.103

relative CIELAB lab\*  
lab\*lab 0.424 -0.874 0.484  
lab\*tch 0.5 1.0 0.42  
lab\*nch 0.0 1.0 0.42  
relative Natural Colour (NC)  
lab\*trj 0.424 -0.95 0.309  
lab\*tce 0.5 1.0 0.45  
lab\*nce 0.0 1.0 0.798

relative Inform. Technology (IT)  
olv3\* 0.0 0.5 0.0 (1.0)  
cmyn3\* 1.0 0.5 1.0 (0.0)  
olv4\* 0.0 0.5 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 42.7 -47.04 27.41  
LAB\*LAB 42.7 -47.37 26.23  
LAB\*LAB 37.51 54.16 15.103

relative CIELAB lab\*  
lab\*lab 0.318 -0.655 0.363  
lab\*tch 0.375 0.75 0.42  
lab\*nch 0.0 0.75 0.42  
relative Natural Colour (NC)  
lab\*trj 0.318 -0.712 0.232  
lab\*tce 0.375 0.75 0.45  
lab\*nce 0.0 0.75 0.798

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 0.0 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 0.0 0.0 0.0  
LAB\*LAB 0.0 0.0 0.0  
LAB\*LAB 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 -  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 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\* 0.5 0.5 0.5 (1.0)  
cmyn4\* 0.5 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 62.04 -47.31 28.7  
LAB\*LAB 62.04 -47.37 26.23  
LAB\*LAB 62.5 54.16 15.103

relative CIELAB lab\*  
lab\*lab 0.568 -0.655 0.363  
lab\*tch 0.625 0.75 0.42  
lab\*nch 0.0 0.75 0.42  
relative Natural Colour (NC)  
lab\*trj 0.568 -0.712 0.232  
lab\*tce 0.625 0.75 0.45  
lab\*nce 0.0 0.75 0.798

relative Inform. Technology (IT)  
olv3\* 0.25 0.75 0.25 (1.0)  
cmyn3\* 0.75 0.25 0.75 (0.0)  
olv4\* 0.5 0.75 0.5 (1.0)  
cmyn4\* 0.5 0.0 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 50.9 -62.95 36.7  
LAB\*LAB 50.9 -63.16 34.97  
LAB\*LAB 50.0 72.21 15.103

relative CIELAB lab\*  
lab\*lab 0.424 -0.874 0.484  
lab\*tch 0.5 1.0 0.42  
lab\*nch 0.0 1.0 0.42  
relative Natural Colour (NC)  
lab\*trj 0.424 -0.95 0.309  
lab\*tce 0.5 1.0 0.45  
lab\*nce 0.0 1.0 0.798

relative Inform. Technology (IT)  
olv3\* 0.0 0.25 0.0 (1.0)  
cmyn3\* 1.0 0.25 1.0 (0.0)  
olv4\* 0.0 0.25 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 42.7 -47.04 27.41  
LAB\*LAB 42.7 -47.37 26.23  
LAB\*LAB 37.51 54.16 15.103

relative CIELAB lab\*  
lab\*lab 0.318 -0.655 0.363  
lab\*tch 0.375 0.75 0.42  
lab\*nch 0.0 0.75 0.42  
relative Natural Colour (NC)  
lab\*trj 0.318 -0.712 0.232  
lab\*tce 0.375 0.75 0.45  
lab\*nce 0.0 0.75 0.798

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 0.0 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 0.0 0.0 0.0  
LAB\*LAB 0.0 0.0 0.0  
LAB\*LAB 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 -  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 0.0 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 0.0 0.0 0.0  
LAB\*LAB 0.0 0.0 0.0  
LAB\*LAB 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 -  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 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\* 0.5 0.5 0.5 (1.0)  
cmyn4\* 0.5 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 62.04 -47.31 28.7  
LAB\*LAB 62.04 -47.37 26.23  
LAB\*LAB 62.5 54.16 15.103

relative CIELAB lab\*  
lab\*lab 0.568 -0.655 0.363  
lab\*tch 0.625 0.75 0.42  
lab\*nch 0.0 0.75 0.42  
relative Natural Colour (NC)  
lab\*trj 0.568 -0.712 0.232  
lab\*tce 0.625 0.75 0.45  
lab\*nce 0.0 0.75 0.798

relative Inform. Technology (IT)  
olv3\* 0.25 0.75 0.25 (1.0)  
cmyn3\* 0.75 0.25 0.75 (0.0)  
olv4\* 0.5 0.75 0.5 (1.0)  
cmyn4\* 0.5 0.0 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 50.9 -62.95 36.7  
LAB\*LAB 50.9 -63.16 34.97  
LAB\*LAB 50.0 72.21 15.103

relative CIELAB lab\*  
lab\*lab 0.424 -0.874 0.484  
lab\*tch 0.5 1.0 0.42  
lab\*nch 0.0 1.0 0.42  
relative Natural Colour (NC)  
lab\*trj 0.424 -0.95 0.309  
lab\*tce 0.5 1.0 0.45  
lab\*nce 0.0 1.0 0.798

relative Inform. Technology (IT)  
olv3\* 0.0 0.25 0.0 (1.0)  
cmyn3\* 1.0 0.25 1.0 (0.0)  
olv4\* 0.0 0.25 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 42.7 -47.04 27.41  
LAB\*LAB 42.7 -47.37 26.23  
LAB\*LAB 37.51 54.16 15.103

relative CIELAB lab\*  
lab\*lab 0.318 -0.655 0.363  
lab\*tch 0.375 0.75 0.42  
lab\*nch 0.0 0.75 0.42  
relative Natural Colour (NC)  
lab\*trj 0.318 -0.712 0.232  
lab\*tce 0.375 0.75 0.45  
lab\*nce 0.0 0.75 0.798

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 0.0 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 0.0 0.0 0.0  
LAB\*LAB 0.0 0.0 0.0  
LAB\*LAB 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 -  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 0.0 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 0.0 0.0 0.0  
LAB\*LAB 0.0 0.0 0.0  
LAB\*LAB 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 -  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.0$

chromaticness  $c^*$

### Output: Colorimetric Television Luminous System TLS00

for hue  $h^* = lab^*h = 140/360 = 0.389$

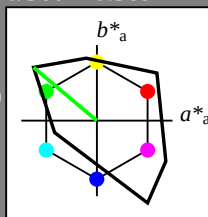
$lab^*tch$  and  $lab^*nch$

D50: hue L

LCH\*Ma: 83 109 140

olv\*Ma: 0.0 1.0 0.0

triangle lightness  $t^*$



### TLS00; adapted (a) CIELAB data

|                  | $L^*=L_a^*$ | $a_a^*$ | $b_a^*$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 54.19       | 79.36   | 63.0    | 101.33       | 38           |
| Y <sub>Ma</sub>  | 93.44       | -14.18  | 82.59   | 83.8         | 100          |
| L <sub>Ma</sub>  | 82.82       | -83.73  | 70.41   | 109.41       | 140          |
| C <sub>Ma</sub>  | 85.22       | -55.9   | -15.78  | 58.1         | 196          |
| V <sub>Ma</sub>  | 25.61       | 67.05   | -108.87 | 127.87       | 302          |
| M <sub>Ma</sub>  | 58.76       | 91.18   | -53.69  | 105.82       | 330          |
| 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> | 41.88       | 62.0    | 31.82   | 69.69        | 27           |
| J <sub>CIE</sub> | 81.97       | 1.81    | 71.59   | 71.61        | 89           |
| G <sub>CIE</sub> | 51.62       | -41.11  | 11.52   | 42.7         | 164          |
| B <sub>CIE</sub> | 29.2        | -5.27   | -49.33  | 49.62        | 264          |

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$ </

## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 231/360 = 0.641$

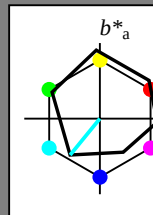
$lab^*tch$  and  $lab^*nch$

D50: hue C

LCH\*Ma: 57 62 231

olv\*Ma: 0.0 1.0 1.0

triangle lightness  $t^*$



$u^*_{rel} = 94$

### ORS18; adapted (a) CIELAB data

|                  | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|---------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94         | 65.05   | 50.54   | 82.38        | 38           |
| Y <sub>Ma</sub>  | 91.0          | -4.72   | 90.58   | 90.7         | 93           |
| L <sub>Ma</sub>  | 50.9          | -63.18  | 34.98   | 72.22        | 151          |
| C <sub>Ma</sub>  | 56.99         | -39.34  | -48.1   | 62.16        | 231          |
| V <sub>Ma</sub>  | 25.72         | 30.89   | -44.4   | 54.09        | 305          |
| M <sub>Ma</sub>  | 49.99         | 75.76   | -4.64   | 75.9         | 356          |
| N <sub>Ma</sub>  | 18.09         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.46         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 41.88         | 61.66   | 30.69   | 68.88        | 26           |
| J <sub>CIE</sub> | 81.97         | 2.02    | 67.79   | 67.82        | 88           |
| G <sub>CIE</sub> | 51.62         | -41.32  | 9.74    | 42.46        | 167          |
| B <sub>CIE</sub> | 29.2          | -5.79   | -49.61  | 49.96        | 263          |

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

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 95.46 -39.34 4.69  
LAB\*LAB 95.46 0.0 0.0  
LAB\*LAB 95.46 0.0 0.0  
LAB\*LAB 95.46 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\* 0.75 1.0 1.0 0.75  
cmyn4\* 0.25 0.0 0.0 0.25  
standard and adapted CIELAB  
LAB\*LAB 85.84 -10.09 -7.96  
LAB\*LAB 85.84 -9.82 -12.01  
LAB\*LAB 85.84 15.53 230.72

relative CIELAB lab\*  
lab\*lab 0.876 -0.157 -0.192  
lab\*tch 0.875 0.25 0.641  
lab\*nch 0.0 0.25 0.641  
relative Natural Colour (NC)  
lab\*trj 0.876 -0.125 -0.215  
lab\*tce 0.875 0.25 0.666  
lab\*nce 0.0 0.25 0.666

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 1.0 1.0 0.5  
cmyn4\* 0.5 0.0 0.0 0.5  
standard and adapted CIELAB  
LAB\*LAB 76.22 -19.8 -20.63  
LAB\*LAB 76.22 -19.66 -24.04  
LAB\*LAB 76.22 31.07 230.72

relative CIELAB lab\*  
lab\*lab 0.751 -0.315 -0.386  
lab\*tch 0.75 0.5 0.641  
lab\*nch 0.0 0.5 0.641  
relative Natural Colour (NC)  
lab\*trj 0.751 -0.252 -0.43  
lab\*tce 0.75 0.5 0.666  
lab\*nce 0.0 0.5 0.666

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 0.75  
cmyn4\* 0.0 0.0 0.0 0.25  
standard and adapted CIELAB  
LAB\*LAB 76.12 -0.12 3.4  
LAB\*LAB 76.12 0.0 0.0  
LAB\*LAB 76.12 0.0 0.0  
LAB\*LAB 76.12 0.0 0.0

relative CIELAB lab\*  
lab\*lab 0.75 0.5 0.5 (1.0)  
lab\*tch 0.75 0.5 0.5 (0.0)  
lab\*nch 0.0 0.5 0.5 (0.0)  
relative Natural Colour (NC)  
lab\*trj 0.75 0.5 0.5 (0.0)  
lab\*tce 0.75 0.5 0.5 (0.0)  
lab\*nce 0.0 0.5 0.5 (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\* 0.5 1.0 1.0 0.75  
cmyn4\* 0.5 0.0 0.0 0.25  
standard and adapted CIELAB  
LAB\*LAB 66.5 -9.83 -9.25  
LAB\*LAB 66.5 -9.83 -12.02  
LAB\*LAB 66.5 15.54 230.72

relative CIELAB lab\*  
lab\*lab 0.626 -0.125 -0.215  
lab\*tch 0.625 0.25 0.666  
lab\*nch 0.0 0.25 0.666  
relative Natural Colour (NC)  
lab\*trj 0.626 -0.125 -0.215  
lab\*tce 0.625 0.25 0.666  
lab\*nce 0.0 0.25 0.666

relative Inform. Technology (IT)  
olv3\* 0.0 0.75 0.75 (1.0)  
cmyn3\* 1.0 0.0 0.0 (0.0)  
olv4\* 0.0 1.0 1.0 0.5  
cmyn4\* 0.0 0.0 0.0 0.5  
standard and adapted CIELAB  
LAB\*LAB 56.88 -19.53 -21.92  
LAB\*LAB 56.88 -19.67 -24.05  
LAB\*LAB 56.88 31.07 230.72

relative CIELAB lab\*  
lab\*lab 0.503 -0.632 -0.773  
lab\*tch 0.5 0.5 0.641  
lab\*nch 0.0 0.5 0.641  
relative Natural Colour (NC)  
lab\*trj 0.503 -0.505 -0.861  
lab\*tce 0.5 0.5 0.666  
lab\*nce 0.0 0.5 0.666

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 0.25  
cmyn4\* 0.0 0.0 0.0 0.75  
standard and adapted CIELAB  
LAB\*LAB 56.78 0.13 2.11  
LAB\*LAB 56.78 0.0 0.0  
LAB\*LAB 56.78 0.0 0.0  
LAB\*LAB 56.78 0.0 0.0

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

relative Inform. Technology (IT)  
olv3\* 0.0 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 0.5 1.0 1.0 0.5  
cmyn4\* 0.5 0.0 0.0 0.5  
standard and adapted CIELAB  
LAB\*LAB 47.16 -9.36 -10.54  
LAB\*LAB 47.16 -9.83 -12.02  
LAB\*LAB 47.16 15.54 230.72

relative CIELAB lab\*  
lab\*lab 0.376 -0.376 -0.641  
lab\*tch 0.375 0.25 0.641  
lab\*nch 0.0 0.25 0.641  
relative Natural Colour (NC)  
lab\*trj 0.376 -0.376 -0.641  
lab\*tce 0.375 0.25 0.666  
lab\*nce 0.0 0.25 0.666

relative Inform. Technology (IT)  
olv3\* 0.0 0.25 0.25 (1.0)  
cmyn3\* 0.75 0.75 0.75 (0.0)  
olv4\* 0.25 1.0 1.0 0.25  
cmyn4\* 0.25 0.0 0.0 0.25  
standard and adapted CIELAB  
LAB\*LAB 37.51 -46.61 230.72

relative CIELAB lab\*  
lab\*lab 0.377 -0.474 -0.579  
lab\*tch 0.375 0.5 0.641  
lab\*nch 0.0 0.5 0.641  
relative Natural Colour (NC)  
lab\*trj 0.377 -0.474 -0.579  
lab\*tce 0.375 0.5 0.666  
lab\*nce 0.0 0.5 0.666

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 0.25  
cmyn4\* 0.0 0.0 0.0 0.75  
standard and adapted CIELAB  
LAB\*LAB 37.44 -0.37 0.62  
LAB\*LAB 37.44 0.0 0.0  
LAB\*LAB 37.44 0.0 0.0  
LAB\*LAB 37.44 0.0 0.0

relative CIELAB lab\*  
lab\*lab 0.25 0.25 0.25 (1.0)  
lab\*tch 0.25 0.25 0.25 (0.0)  
lab\*nch 0.0 0.25 0.25 (0.0)  
relative Natural Colour (NC)  
lab\*trj 0.25 0.25 0.25 (0.0)  
lab\*tce 0.25 0.25 0.25 (0.0)  
lab\*nce 0.0 0.25 0.25 (0.0)

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 0.75 0.75 (0.0)  
olv4\* 0.0 1.0 1.0 0.0  
cmyn4\* 0.0 0.0 0.0 0.75  
standard and adapted CIELAB  
LAB\*LAB 27.82 -9.29 11.82  
LAB\*LAB 27.82 -9.82 -12.01  
LAB\*LAB 27.82 15.53 230.72

relative CIELAB lab\*  
lab\*lab 0.126 -0.157 -0.192  
lab\*tch 0.125 0.25 0.641  
lab\*nch 0.0 0.25 0.641  
relative Natural Colour (NC)  
lab\*trj 0.126 -0.125 -0.215  
lab\*tce 0.125 0.25 0.666  
lab\*nce 0.0 0.25 0.666

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 1.0 1.0 0.0  
cmyn4\* 0.0 0.0 0.0 1.0  
standard and adapted CIELAB  
LAB\*LAB 18.1 0.0 0.0  
LAB\*LAB 18.1 0.0 0.0  
LAB\*LAB 18.1 0.0 0.0  
LAB\*LAB 18.1 0.0 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0 (1.0)  
lab\*tch 0.0 0.0 0.0 (0.0)  
lab\*nch 0.0 0.0 0.0 (0.0)  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0 (0.0)  
lab\*tce 0.0 0.0 0.0 (0.0)  
lab\*nce 0.0 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\* 0.0 1.0 1.0 0.0  
cmyn4\* 0.0 0.0 0.0 1.0  
standard and adapted CIELAB  
LAB\*LAB 18.1 0.0 0.0  
LAB\*LAB 18.1 0.0 0.0  
LAB\*LAB 18.1 0.0 0.0  
LAB\*LAB 18.1 0.0 0.0

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0 (1.0)  
lab\*tch 0.0 0.0 0.0 (0.0)  
lab\*nch 0.0 0.0 0.0 (0.0)  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0 (0.0)  
lab\*tce 0.0 0.0 0.0 (0.0)  
lab\*nce 0.0 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\* 0.0 1.0 1.0 0.0  
cmyn4\* 0.0 0.0 0.0 1.0  
standard and adapted CIELAB  
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 CIELAB lab\*  
lab\*lab 0.0 0.0 0.0 (1.0)  
lab\*tch 0.0 0.0 0.0 (0.0)  
lab\*nch 0.0 0.0 0.0 (0.0)  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0 (0.0)  
lab\*tce 0.0 0.0 0.0 (0.0)  
lab\*nce 0.0 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\* 0.0 1.0 1.0 0.0  
cmyn4\* 0.0 0.0 0.0 1.0  
standard and adapted CIELAB  
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 CIELAB lab\*  
lab\*lab 0.0 0.0 0.0 (1.0)  
lab\*tch 0.0 0.0 0.0 (0.0)  
lab\*nch 0.0 0.0 0.0 (0.0)  
relative Natural Colour (NC)  
lab\*trj 0.0 0.0 0.0 (0.0)  
lab\*tce 0.0 0.0 0.0 (0.0)  
lab\*nce 0.0 0.0 0.0 (0.0)

PE500-7, 5 step scales for constant CIELAB hue 231/360 = 0.641 (left)

5 step scales for constant CIELAB hue 196/360 = 0.544 (right)

BAM-test chart PE50; Colorimetric systems ORS18 & TLS00

D50: 2 coordinate data of 5 step colour scales for 10 hues

input: `olv* setrgbcolor`

output: `no change compared to input`



-See for similar files: <http://www.ps.bam.de/PE50/>  
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

BAM material: code=rh4ta

### Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 356/360 = 0.99$

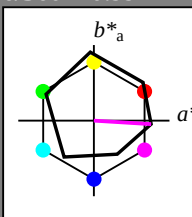
$lab^*tch$  and  $lab^*nch$

D50: hue M

LCH\*Ma: 50 76 356

olv\*Ma: 1.0 0.0 1.0

triangle lightness  $t^*$



% Gamut

$u^*_{rel} = 94$

### ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.05   | 50.54   | 82.38        | 38           |
| Y <sub>Ma</sub>  | 91.0        | -4.72   | 90.58   | 90.7         | 93           |
| L <sub>Ma</sub>  | 50.9        | -63.18  | 34.98   | 72.22        | 151          |
| C <sub>Ma</sub>  | 56.99       | -39.34  | -48.1   | 62.16        | 231          |
| V <sub>Ma</sub>  | 25.72       | 30.89   | -44.4   | 54.09        | 305          |
| M <sub>Ma</sub>  | 49.99       | 75.76   | -4.64   | 75.9         | 356          |
| N <sub>Ma</sub>  | 18.09       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.46       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 41.88       | 61.66   | 30.69   | 68.88        | 26           |
| J <sub>CIE</sub> | 81.97       | 2.02    | 67.79   | 67.82        | 88           |
| G <sub>CIE</sub> | 51.62       | -41.32  | 9.74    | 42.46        | 167          |
| B <sub>CIE</sub> | 29.2        | -5.79   | -49.61  | 49.96        | 263          |

% Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

relative Inform. Technology (IT)

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

| relative Inform. Technology (IT) |       |       |        |       |
|----------------------------------|-------|-------|--------|-------|
| olv3*                            | 0.75  | 0.25  | 0.75   | (1.0) |
| olv3*                            | 0.25  | 0.75  | 0.25   | (0.0) |
| olv4*                            | 1.0   | 0.1   | 1.0    | (1.0) |
| olv4*                            | 0.1   | 1.0   | 0.1    | (0.0) |
| olv5*                            | 0.0   | 0.0   | 0.0    | 0.25  |
| standard and adapted CIELAB      |       |       |        |       |
| LAB*LAB                          | 53.38 | 38.06 | -0.42  |       |
| LAB*LABa                         | 53.38 | 37.88 | -2.31  |       |
| LAB*LABb                         | 53.38 | 37.95 | 356.49 |       |
| relative CIELAB Lab*             |       |       |        |       |
| lab*lab                          | 0.456 | 0.499 | -0.03  |       |
| lab*tch                          | 0.5   | 0.5   | 0.99   |       |
| lab*nch                          | 0.25  | 0.5   | 0.99   |       |
| relative Natural Colour (NC)     |       |       |        |       |
| lab*tri                          | 0.456 | 0.464 | -0.186 |       |
| lab*tri                          | 0.456 | 0.464 | 0.939  |       |
| lab*nCE                          | 0.25  | 0.5   | 0.75   |       |

## Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 26/360 = 0.074$

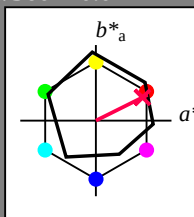
$lab^*tch$  and  $lab^*nch$

D50: hue R

LCH\*Ma: 49 76 26

olv\*Ma: 1.0 0.0 0.3

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       | 65.05   | 50.54   | 82.38        | 38           |
| Y <sub>Ma</sub>  | 91.0        | -4.72   | 90.58   | 90.7         | 93           |
| L <sub>Ma</sub>  | 50.9        | -63.18  | 34.98   | 72.22        | 151          |
| C <sub>Ma</sub>  | 56.99       | -39.34  | -48.1   | 62.16        | 231          |
| V <sub>Ma</sub>  | 25.72       | 30.89   | -44.4   | 54.09        | 305          |
| M <sub>Ma</sub>  | 49.99       | 75.76   | -4.64   | 75.9         | 356          |
| N <sub>Ma</sub>  | 18.09       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.46       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 41.88       | 61.66   | 30.69   | 68.88        | 26           |
| J <sub>CIE</sub> | 81.97       | 2.02    | 67.79   | 67.82        | 88           |
| G <sub>CIE</sub> | 51.62       | -41.32  | 9.74    | 42.46        | 167          |
| B <sub>CIE</sub> | 29.2        | -5.79   | -49.61  | 49.96        | 263          |

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

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 95.46 -39.34 4.69  
LAB\*LABa 95.46 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 76.12 -12.12 3.4  
LAB\*LABa 76.12 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 56.78 0.13 2.11  
LAB\*LABa 56.78 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 37.24 0.67 0.82  
LAB\*LABa 37.24 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 18.1 0.0 0.0  
LAB\*LABa 18.1 0.0 0.0  
LAB\*TCHa 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

$n^* = 1.0$

relative Inform. Technology (IT)  
olv3\* 1.0 0.75 0.825 (1.0)  
cmyn3\* 0.0 0.25 0.175 (0.0)  
olv4\* 1.0 0.75 0.825 (1.0)  
cmyn4\* 0.0 0.25 0.175 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 83.73 16.82 12.41  
LAB\*LABa 83.73 17.06 8.49  
LAB\*TCHa 97.5 19.06 20.46

relative CIELAB lab\*  
lab\*lab 0.848 0.224 0.111  
lab\*tch 0.875 0.25 0.073  
lab\*nch 0.0 0.25 0.073  
relative Natural Colour (NC)  
lab\*trj 0.848 0.25 0.0  
lab\*tce 0.875 0.25 0.0  
lab\*nce 0.0 0.25 0.073

relative Inform. Technology (IT)  
olv3\* 0.75 0.5 0.575 (1.0)  
cmyn3\* 0.25 0.5 0.575 (0.0)  
olv4\* 1.0 0.75 0.825 (1.0)  
cmyn4\* 0.0 0.25 0.175 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 64.39 17.1 11.12  
LAB\*LABa 64.39 17.07 8.5  
LAB\*TCHa 62.5 19.06 26.16

relative CIELAB lab\*  
lab\*lab 0.598 0.224 0.111  
lab\*tch 0.625 0.25 0.074  
lab\*nch 0.25 0.25 0.074  
relative Natural Colour (NC)  
lab\*trj 0.598 0.25 0.0  
lab\*tce 0.625 0.25 0.0  
lab\*nce 0.25 0.25 0.074

relative Inform. Technology (IT)  
olv3\* 0.5 0.25 0.325 (1.0)  
cmyn3\* 0.5 0.75 0.675 (0.0)  
olv4\* 1.0 0.75 0.825 (1.0)  
cmyn4\* 0.0 0.25 0.175 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 45.05 17.36 9.83  
LAB\*LABa 45.05 17.07 8.5  
LAB\*TCHa 37.5 19.06 26.16

relative CIELAB lab\*  
lab\*lab 0.348 0.224 0.111  
lab\*tch 0.375 0.25 0.074  
lab\*nch 0.25 0.25 0.074  
relative Natural Colour (NC)  
lab\*trj 0.348 0.25 0.0  
lab\*tce 0.375 0.25 0.0  
lab\*nce 0.25 0.25 0.074

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.15 (1.0)  
cmyn3\* 0.5 0.0 0.15 (0.0)  
olv4\* 1.0 0.75 0.825 (1.0)  
cmyn4\* 0.0 0.25 0.175 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 33.33 34.58 17.37  
LAB\*LABa 33.33 34.13 16.99  
LAB\*TCHa 25.01 38.12 26.47

relative CIELAB lab\*  
lab\*lab 0.197 0.447 0.223  
lab\*tch 0.25 0.5 0.074  
lab\*nch 0.0 0.5 0.074  
relative Natural Colour (NC)  
lab\*trj 0.197 0.5 0.0  
lab\*tce 0.25 0.5 0.074  
lab\*nce 0.0 0.5 0.074

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 0.75 1.0 0.925 (0.0)  
olv4\* 1.0 0.75 0.825 (1.0)  
cmyn4\* 0.0 0.25 0.175 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 25.71 17.62 8.54  
LAB\*LABa 25.71 17.06 8.5  
LAB\*TCHa 12.5 19.06 26.16

relative CIELAB lab\*  
lab\*lab 0.098 0.224 0.111  
lab\*tch 0.125 0.25 0.074  
lab\*nch 0.0 0.25 0.074  
relative Natural Colour (NC)  
lab\*trj 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.074

$n^* = 0.50$

relative Inform. Technology (IT)  
olv3\* 1.0 0.5 0.65 (1.0)  
cmyn3\* 0.0 0.5 0.65 (0.0)  
olv4\* 1.0 0.5 0.65 (1.0)  
cmyn4\* 0.0 0.5 0.65 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 72.0 34.05 20.12  
LAB\*LABa 72.0 34.13 16.99  
LAB\*TCHa 75.0 38.12 26.46

relative CIELAB lab\*  
lab\*lab 0.697 0.448 0.223  
lab\*tch 0.75 0.5 0.074  
lab\*nch 0.0 0.5 0.074  
relative Natural Colour (NC)  
lab\*trj 0.697 0.5 0.0  
lab\*tce 0.75 0.5 0.0  
lab\*nce 0.0 0.5 0.074

relative Inform. Technology (IT)  
olv3\* 0.75 0.25 0.4 (1.0)  
cmyn3\* 0.25 0.75 0.6 (0.0)  
olv4\* 1.0 0.5 0.65 (1.0)  
cmyn4\* 0.0 0.25 0.175 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 52.67 34.32 18.84  
LAB\*LABa 52.67 34.13 16.99  
LAB\*TCHa 50.0 38.12 26.46

relative CIELAB lab\*  
lab\*lab 0.447 0.448 0.223  
lab\*tch 0.5 0.5 0.074  
lab\*nch 0.0 0.5 0.074  
relative Natural Colour (NC)  
lab\*trj 0.447 0.5 0.0  
lab\*tce 0.5 0.5 0.074  
lab\*nce 0.0 0.5 0.074

relative Inform. Technology (IT)  
olv3\* 0.5 0.0 0.15 (1.0)  
cmyn3\* 0.5 0.0 0.15 (0.0)  
olv4\* 1.0 0.5 0.65 (1.0)  
cmyn4\* 0.0 0.25 0.175 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 40.34 51.55 26.55  
LAB\*LABa 40.34 51.19 25.48  
LAB\*TCHa 37.51 57.19 26.47

relative CIELAB lab\*  
lab\*lab 0.295 0.671 0.334  
lab\*tch 0.375 0.75 0.074  
lab\*nch 0.0 0.75 0.074  
relative Natural Colour (NC)  
lab\*trj 0.295 0.75 0.0  
lab\*tce 0.375 0.75 0.074  
lab\*nce 0.0 0.75 0.074

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.15 (1.0)  
cmyn3\* 0.75 0.0 0.15 (0.0)  
olv4\* 1.0 0.5 0.65 (1.0)  
cmyn4\* 0.0 0.25 0.175 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 25.71 17.62 8.54  
LAB\*LABa 25.71 17.06 8.5  
LAB\*TCHa 12.5 19.06 26.16

relative CIELAB lab\*  
lab\*lab 0.098 0.224 0.111  
lab\*tch 0.125 0.25 0.074  
lab\*nch 0.0 0.25 0.074  
relative Natural Colour (NC)  
lab\*trj 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.074

$n^* = 0.25$

relative Inform. Technology (IT)  
olv3\* 1.0 0.25 0.475 (1.0)  
cmyn3\* 0.0 0.25 0.475 (0.0)  
olv4\* 1.0 0.25 0.475 (1.0)  
cmyn4\* 0.0 0.25 0.475 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 60.28 51.28 27.84  
LAB\*LABa 60.28 51.19 25.48  
LAB\*TCHa 62.5 57.18 26.46

relative CIELAB lab\*  
lab\*lab 0.542 0.671 0.334  
lab\*tch 0.625 0.75 0.074  
lab\*nch 0.0 0.75 0.074  
relative Natural Colour (NC)  
lab\*trj 0.542 0.75 0.0  
lab\*tce 0.625 0.75 0.0  
lab\*nce 0.0 0.75 0.074

relative Inform. Technology (IT)  
olv3\* 0.75 0.0 0.225 (1.0)  
cmyn3\* 0.25 0.75 0.6 (0.0)  
olv4\* 1.0 0.5 0.65 (1.0)  
cmyn4\* 0.0 0.25 0.175 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 48.56 68.5 35.55  
LAB\*LABa 48.56 68.25 33.98  
LAB\*TCHa 50.0 76.24 26.47

relative CIELAB lab\*  
lab\*lab 0.384 0.895 0.446  
lab\*tch 0.5 1.0 0.074  
lab\*nch 0.0 1.0 0.074  
relative Natural Colour (NC)  
lab\*trj 0.384 1.0 0.0  
lab\*tce 0.5 1.0 0.074  
lab\*nce 0.0 1.0 0.074

relative Inform. Technology (IT)  
olv3\* 0.5 0.25 0.375 (1.0)  
cmyn3\* 0.25 0.75 0.6 (0.0)  
olv4\* 1.0 0.5 0.65 (1.0)  
cmyn4\* 0.0 0.25 0.175 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 40.34 51.55 26.55  
LAB\*LABa 40.34 51.19 25.48  
LAB\*TCHa 37.51 57.19 26.47

relative CIELAB lab\*  
lab\*lab 0.295 0.671 0.334  
lab\*tch 0.375 0.75 0.074  
lab\*nch 0.0 0.75 0.074  
relative Natural Colour (NC)  
lab\*trj 0.295 0.75 0.0  
lab\*tce 0.375 0.75 0.074  
lab\*nce 0.0 0.75 0.074

relative Inform. Technology (IT)  
olv3\* 0.25 0.0 0.15 (1.0)  
cmyn3\* 0.75 0.0 0.15 (0.0)  
olv4\* 1.0 0.5 0.65 (1.0)  
cmyn4\* 0.0 0.25 0.175 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 25.71 17.62 8.54  
LAB\*LABa 25.71 17.06 8.5  
LAB\*TCHa 12.5 19.06 26.16

relative CIELAB lab\*  
lab\*lab 0.098 0.224 0.111  
lab\*tch 0.125 0.25 0.074  
lab\*nch 0.0 0.25 0.074  
relative Natural Colour (NC)  
lab\*trj 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.074

$n^* = 0.00$

relative Inform. Technology (IT)  
olv3\* 1.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 0.0 0.0 (0.0)  
olv4\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 95.46 -39.34 4.69  
LAB\*LABa 95.46 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 0.0 0.0 (1.0)  
cmyn3\* 0.25 0.0 0.0 (0.0)  
olv4\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 76.12 -12.12 3.4  
LAB\*LABa 76.12 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 0.0 0.0 (1.0)  
cmyn3\* 0.5 0.0 0.0 (0.0)  
olv4\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.78 0.13 2.11  
LAB\*LABa 56.78 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 0.0 0.0 (1.0)  
cmyn3\* 0.75 0.0 0.0 (0.0)  
olv4\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.24 0.67 0.82  
LAB\*LABa 37.24 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

$n^* = 0.25$

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 61.46 20.38 10.46  
LAB\*LABa 61.46 20.38 10.46  
LAB\*TCHa 62.5 22.9 27.17

relative CIELAB lab\*  
lab\*lab 0.894 0.222 0.114  
lab\*tch 0.875 0.25 0.075  
lab\*nch 0.0 0.25 0.075  
relative Natural Colour (NC)  
lab\*trj 0.894 0.25 0.0  
lab\*tce 0.875 0.25 0.075  
lab\*nce 0.0 0.25 0.075

relative Inform. Technology (IT)  
olv3\* 0.75 0.25 0.341 (1.0)  
cmyn3\* 0.25 0.75 0.659 (0.0)  
olv4\* 1.0 0.5 0.591 (1.0)  
cmyn4\* 0.0 0.5 0.489 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 51.36 40.75 20.92  
LAB\*LABa 51.36 40.75 20.92  
LAB\*TCHa 50.0 45.81 27.17

relative CIELAB lab\*  
lab\*lab 0.538 0.445 0.228  
lab\*tch 0.5 0.5 0.075  
lab\*nch 0.0 0.5 0.075  
relative Natural Colour (NC)  
lab\*trj 0.538 0.5 0.0  
lab\*tce 0.5 0.5 0.075  
lab\*nce 0.0 0.5 0.075

relative Inform. Technology (IT)  
olv3\* 0.5 0.0 0.0 (1.0)  
cmyn3\* 0.5 0.75 0.705 (0.0)  
olv4\* 1.0 0.75 0.795 (1.0)  
cmyn4\* 0.0 0.25 0.205 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.61 38.18 10.46  
LAB\*LABa 37.61 38.18 10.46  
LAB\*TCHa 37.5 22.9 27.17

relative CIELAB lab\*  
lab\*lab 0.394 0.222 0.114  
lab\*tch 0.375 0.25 0.075  
lab\*nch 0.0 0.25 0.075  
relative Natural Colour (NC)  
lab\*trj 0.394 0.25 0.0  
lab\*tce 0.375 0.25 0.075  
lab\*nce 0.0 0.25 0.075

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 18.1 0.0 0.0  
LAB\*LABa 18.1 0.0 0.0  
LAB\*TCHa 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

$n^* = 1.0$

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 95.46 -39.34 4.69  
LAB\*LABa 95.46 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 0.75 0.795 (1.0)  
cmyn4\* 0.0 0.25 0.205 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 76.12 -12.12 3.4  
LAB\*LABa 76.12 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.

output: *no change compared to input*



### Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = lab^*h = 167/360 = 0.463$

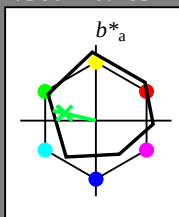
$lab^*tch$  and  $lab^*nch$

D50: hue G

LCH\*Ma: 52 59 167

olv\*Ma: 0.0 1.0 0.26

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     | 65.05   | 50.54   | 82.38        | 38           |
| Y <sub>Ma</sub>  | 91.0      | -4.72   | 90.58   | 90.7         | 93           |
| L <sub>Ma</sub>  | 50.9      | -63.18  | 34.98   | 72.22        | 151          |
| C <sub>Ma</sub>  | 56.99     | -39.34  | -48.1   | 62.16        | 231          |
| V <sub>Ma</sub>  | 25.72     | 30.89   | -44.4   | 54.09        | 305          |
| M <sub>Ma</sub>  | 49.99     | 75.76   | -4.64   | 75.9         | 356          |
| N <sub>Ma</sub>  | 18.09     | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.46     | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 41.88     | 61.66   | 30.69   | 68.88        | 26           |
| J <sub>CIE</sub> | 81.97     | 2.02    | 67.79   | 67.82        | 88           |
| G <sub>CIE</sub> | 51.62     | -41.32  | 9.74    | 42.46        | 167          |
| B <sub>CIE</sub> | 29.2      | -5.79   | -49.61  | 49.96        | 263          |

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

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 95.46 -39.34 4.69  
LAB\*LAB 95.46 0.0 0.0  
LAB\*LAB 99.99 0.0 0.0

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\*tr 1.0 0.0 0.0  
lab\*ce 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 76.12 -0.12 3.4  
LAB\*LAB 76.12 0.0 0.0  
LAB\*LAB 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\*tr 0.75 0.0 0.0  
lab\*ce 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 56.78 0.13 2.11  
LAB\*LAB 56.78 0.0 0.0  
LAB\*LAB 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\*tr 0.5 0.0 0.0  
lab\*ce 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 (1.0)  
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 37.44 -0.37 0.82  
LAB\*LAB 37.44 0.0 0.0  
LAB\*LAB 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\*tr 0.25 0.0 0.0  
lab\*ce 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 18.1 0.0 0.0  
LAB\*LAB 18.1 0.0 0.0  
LAB\*LAB 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\*tr 0.0 0.0 0.0  
lab\*ce 0.0 0.0 0.0  
lab\*nce 1.0 0.0 0.0

$n^* = 1.0$

relative Inform. Technology (IT)  
olv3\* 0.75 1.0 0.815 (1.0)  
cmyn3\* 0.25 0.0 0.185 (0.0)  
olv4\* 0.75 1.0 0.815 (1.0)  
cmyn4\* 0.25 0.0 0.185 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 84.71 -14.24 3.36  
LAB\*LAB 84.71 0.0 0.0  
LAB\*LAB 97.5 14.64 166.74

relative CIELAB lab\*  
lab\*lab 0.861 -0.242 0.057  
lab\*ch 0.875 0.25 0.463  
lab\*nch 0.0 0.25 0.463  
relative Natural Colour (NC)  
lab\*tr 0.861 -0.249 0.0  
lab\*ce 0.875 0.25 0.3  
lab\*nce 0.0 0.25 0.3

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (0.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 0.75 1.0 0.815 (0.75)  
cmyn4\* 0.25 0.0 0.185 (0.25)  
standard and adapted CIELAB  
LAB\*LAB 65.37 -14.23 6.05  
LAB\*LAB 65.37 0.0 0.0  
LAB\*LAB 62.5 14.64 166.73

relative CIELAB lab\*  
lab\*lab 0.611 -0.249 0.0  
lab\*ch 0.625 0.25 0.3  
lab\*nch 0.0 0.25 0.3  
relative Natural Colour (NC)  
lab\*tr 0.611 -0.249 0.0  
lab\*ce 0.625 0.25 0.3  
lab\*nce 0.0 0.25 0.3

relative Inform. Technology (IT)  
olv3\* 0.25 0.5 0.685 (1.0)  
cmyn3\* 0.75 0.5 0.685 (0.0)  
olv4\* 0.75 1.0 0.815 (0.5)  
cmyn4\* 0.25 0.0 0.185 (0.5)  
standard and adapted CIELAB  
LAB\*LAB 46.03 -13.96 4.76  
LAB\*LAB 46.03 -14.24 3.36  
LAB\*LAB 37.5 14.64 166.73

relative CIELAB lab\*  
lab\*lab 0.361 -0.242 0.057  
lab\*ch 0.375 0.25 0.463  
lab\*nch 0.0 0.25 0.463  
relative Natural Colour (NC)  
lab\*tr 0.361 -0.249 0.0  
lab\*ce 0.375 0.25 0.3  
lab\*nce 0.0 0.25 0.3

relative Inform. Technology (IT)  
olv3\* 0.0 0.5 0.865 (1.0)  
cmyn3\* 1.0 0.5 0.865 (0.0)  
olv4\* 0.75 1.0 0.815 (0.75)  
cmyn4\* 0.25 0.0 0.185 (0.75)  
standard and adapted CIELAB  
LAB\*LAB 35.29 -28.06 7.3  
LAB\*LAB 35.29 -28.49 6.72  
LAB\*LAB 25.01 29.28 166.72

relative CIELAB lab\*  
lab\*lab 0.222 -0.486 0.115  
lab\*ch 0.25 0.5 0.463  
lab\*nch 0.0 0.5 0.463  
relative Natural Colour (NC)  
lab\*tr 0.222 -0.499 0.0  
lab\*ce 0.25 0.5 0.3  
lab\*nce 0.0 0.5 0.3

relative Inform. Technology (IT)  
olv3\* 0.111 -0.242 0.057  
cmyn3\* 1.0 0.75 0.935 (1.0)  
olv4\* 0.75 1.0 0.815 (0.75)  
cmyn4\* 0.25 0.0 0.185 (0.75)  
standard and adapted CIELAB  
LAB\*LAB 26.69 -14.24 3.37  
LAB\*LAB 26.69 0.0 0.0  
LAB\*LAB 12.5 14.64 166.71

relative CIELAB lab\*  
lab\*lab 0.111 -0.242 0.057  
lab\*ch 0.125 0.25 0.463  
lab\*nch 0.0 0.25 0.463  
relative Natural Colour (NC)  
lab\*tr 0.111 -0.249 0.0  
lab\*ce 0.125 0.25 0.3  
lab\*nce 0.0 0.25 0.3

relative Inform. Technology (IT)  
olv3\* 0.5 1.0 0.63 (1.0)  
cmyn3\* 0.5 0.0 0.63 (0.0)  
olv4\* 0.5 1.0 0.63 (1.0)  
cmyn4\* 0.5 0.0 0.63 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 73.97 -28.49 9.98  
LAB\*LAB 73.97 -28.49 9.98  
LAB\*LAB 75.0 29.28 166.74

relative CIELAB lab\*  
lab\*lab 0.722 -0.486 0.115  
lab\*ch 0.75 0.5 0.463  
lab\*nch 0.0 0.5 0.463  
relative Natural Colour (NC)  
lab\*tr 0.722 -0.499 0.0  
lab\*ce 0.75 0.5 0.3  
lab\*nce 0.0 0.5 0.3

relative Inform. Technology (IT)  
olv3\* 0.25 1.0 0.444 (1.0)  
cmyn3\* 0.75 1.0 0.444 (0.0)  
olv4\* 0.25 1.0 0.444 (1.0)  
cmyn4\* 0.75 1.0 0.444 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 63.22 -42.69 12.63  
LAB\*LAB 63.22 -42.69 12.63  
LAB\*LAB 62.5 42.69 166.74

relative CIELAB lab\*  
lab\*lab 0.583 -0.729 0.172  
lab\*ch 0.625 0.75 0.463  
lab\*nch 0.0 0.75 0.463  
relative Natural Colour (NC)  
lab\*tr 0.583 -0.729 0.0  
lab\*ce 0.625 0.75 0.3  
lab\*nce 0.0 0.75 0.3

relative Inform. Technology (IT)  
olv3\* 0.0 0.75 0.194 (1.0)  
cmyn3\* 1.0 0.25 0.806 (0.0)  
olv4\* 0.25 1.0 0.444 (0.75)  
cmyn4\* 0.75 0.0 0.556 (0.25)  
standard and adapted CIELAB  
LAB\*LAB 43.89 -42.43 11.35  
LAB\*LAB 43.89 -42.43 11.35  
LAB\*LAB 37.51 43.93 166.73

relative CIELAB lab\*  
lab\*lab 0.333 -0.729 0.172  
lab\*ch 0.375 0.75 0.463  
lab\*nch 0.0 0.75 0.463  
relative Natural Colour (NC)  
lab\*tr 0.333 -0.729 0.0  
lab\*ce 0.375 0.75 0.3  
lab\*nce 0.0 0.75 0.3

relative Inform. Technology (IT)  
olv3\* 0.0 0.5 0.865 (1.0)  
cmyn3\* 1.0 0.5 0.865 (0.0)  
olv4\* 0.75 1.0 0.815 (0.75)  
cmyn4\* 0.25 0.0 0.185 (0.75)  
standard and adapted CIELAB  
LAB\*LAB 35.29 -28.06 7.3  
LAB\*LAB 35.29 -28.49 6.72  
LAB\*LAB 25.01 29.28 166.72

relative CIELAB lab\*  
lab\*lab 0.222 -0.486 0.115  
lab\*ch 0.25 0.5 0.463  
lab\*nch 0.0 0.5 0.463  
relative Natural Colour (NC)  
lab\*tr 0.222 -0.499 0.0  
lab\*ce 0.25 0.5 0.3  
lab\*nce 0.0 0.5 0.3

relative Inform. Technology (IT)  
olv3\* 0.111 -0.242 0.057  
cmyn3\* 1.0 0.75 0.935 (1.0)  
olv4\* 0.75 1.0 0.815 (0.75)  
cmyn4\* 0.25 0.0 0.185 (0.75)  
standard and adapted CIELAB  
LAB\*LAB 26.69 -14.24 3.37  
LAB\*LAB 26.69 0.0 0.0  
LAB\*LAB 12.5 14.64 166.71

relative CIELAB lab\*  
lab\*lab 0.111 -0.242 0.057  
lab\*ch 0.125 0.25 0.463  
lab\*nch 0.0 0.25 0.463  
relative Natural Colour (NC)  
lab\*tr 0.111 -0.249 0.0  
lab\*ce 0.125 0.25 0.3  
lab\*nce 0.0 0.25 0.3

relative Inform. Technology (IT)  
olv3\* 0.5 1.0 0.63 (1.0)  
cmyn3\* 0.5 0.0 0.63 (0.0)  
olv4\* 0.5 1.0 0.63 (1.0)  
cmyn4\* 0.5 0.0 0.63 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 73.97 -28.49 9.98  
LAB\*LAB 73.97 -28.49 9.98  
LAB\*LAB 75.0 29.28 166.74

relative CIELAB lab\*  
lab\*lab 0.722 -0.486 0.115  
lab\*ch 0.75 0.5 0.463  
lab\*nch 0.0 0.5 0.463  
relative Natural Colour (NC)  
lab\*tr 0.722 -0.499 0.0  
lab\*ce 0.75 0.5 0.3  
lab\*nce 0.0 0.5 0.3

relative Inform. Technology (IT)  
olv3\* 0.25 1.0 0.444 (1.0)  
cmyn3\* 0.75 1.0 0.444 (0.0)  
olv4\* 0.25 1.0 0.444 (1.0)  
cmyn4\* 0.75 1.0 0.444 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 63.22 -42.69 12.63  
LAB\*LAB 63.22 -42.69 12.63  
LAB\*LAB 62.5 42.69 166.74

relative CIELAB lab\*  
lab\*lab 0.583 -0.729 0.172  
lab\*ch 0.625 0.75 0.463  
lab\*nch 0.0 0.75 0.463  
relative Natural Colour (NC)  
lab\*tr 0.583 -0.729 0.0  
lab\*ce 0.625 0.75 0.3  
lab\*nce 0.0 0.75 0.3

relative Inform. Technology (IT)  
olv3\* 0.0 0.75 0.194 (1.0)  
cmyn3\* 1.0 0.25 0.806 (0.0)  
olv4\* 0.25 1.0 0.444 (0.75)  
cmyn4\* 0.75 0.0 0.556 (0.25)  
standard and adapted CIELAB  
LAB\*LAB 43.89 -42.43 11.35  
LAB\*LAB 43.89 -42.43 11.35  
LAB\*LAB 37.51 43.93 166.73

relative CIELAB lab\*  
lab\*lab 0.333 -0.729 0.172  
lab\*ch 0.375 0.75 0.463  
lab\*nch 0.0 0.75 0.463  
relative Natural Colour (NC)  
lab\*tr 0.333 -0.729 0.0  
lab\*ce 0.375 0.75 0.3  
lab\*nce 0.0 0.75 0.3

relative Inform. Technology (IT)  
olv3\* 0.0 0.5 0.865 (1.0)  
cmyn3\* 1.0 0.5 0.865 (0.0)  
olv4\* 0.75 1.0 0.815 (0.75)  
cmyn4\* 0.25 0.0 0.185 (0.75)  
standard and adapted CIELAB  
LAB\*LAB 35.29 -28.06 7.3  
LAB\*LAB 35.29 -28.49 6.72  
LAB\*LAB 25.01 29.28 166.72

relative CIELAB lab\*  
lab\*lab 0.222 -0.486 0.115  
lab\*ch 0.25 0.5 0.463  
lab\*nch 0.0 0.5 0.463  
relative Natural Colour (NC)  
lab\*tr 0.222 -0.499 0.0  
lab\*ce 0.25 0.5 0.3  
lab\*nce 0.0 0.5 0.3

relative Inform. Technology (IT)  
olv3\* 0.111 -0.242 0.057  
cmyn3\* 1.0 0.75 0.935 (1.0)  
olv4\* 0.75 1.0 0.815 (0.75)  
cmyn4\* 0.25 0.0 0.185 (0.75)  
standard and adapted CIELAB  
LAB\*LAB 26.69 -14.24 3.37  
LAB\*LAB 26.69 0.0 0.0  
LAB\*LAB 12.5 14.64 166.71

relative CIELAB lab\*  
lab\*lab 0.111 -0.242 0.057  
lab\*ch 0.125 0.25 0.463  
lab\*nch 0.0 0.25 0.463  
relative Natural Colour (NC)  
lab\*tr 0.111 -0.249 0.0  
lab\*ce 0.125 0.25 0.3  
lab\*nce 0.0 0.25 0.3

relative Inform. Technology (IT)  
olv3\* 0.5 1.0 0.63 (1.0)  
cmyn3\* 0.5 0.0 0.63 (0.0)  
olv4\* 0.5 1.0 0.63 (1.0)  
cmyn4\* 0.5 0.0 0.63 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 73.97 -28.49 9.98  
LAB\*LAB 73.97 -28.49 9.98  
LAB\*LAB 75.0 29.28 166.74

relative CIELAB lab\*  
lab\*lab 0.722 -0.486 0.115  
lab\*ch 0.75 0.5 0.463  
lab\*nch 0.0 0.5 0.463  
relative Natural Colour (NC)  
lab\*tr 0.722 -0.499 0.0  
lab\*ce 0.75 0.5 0.3  
lab\*nce 0.0 0.5 0.3

relative Inform. Technology (IT)  
olv3\* 0.25 1.0 0.444 (1.0)  
cmyn3\* 0.75 1.0 0.444 (0.0)  
olv4\* 0.25 1.0 0.444 (1.0)  
cmyn4\* 0.75 1.0 0.444 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 63.22 -42.69 12.63  
LAB\*LAB 63.22 -42.69 12.63  
LAB\*LAB 62.5 42.69 166.74

relative CIELAB lab\*  
lab\*lab 0.583 -0.729 0.172  
lab\*ch 0.625 0.75 0.463  
lab\*nch 0.0 0.75 0.463  
relative Natural Colour (NC)  
lab\*tr 0.583 -0.729 0.0  
lab\*ce 0.625 0.75 0.3  
lab\*nce 0.0 0.75 0.3

relative Inform. Technology (IT)  
olv3\* 0.0 0.75 0.194 (1.0)  
cmyn3\* 1.0 0.25 0.806 (0.0)  
olv4\* 0.25 1.0 0.444 (0.75)  
cmyn4\* 0.75 0.0 0.556 (0.25)  
standard and adapted CIELAB  
LAB\*LAB 43.89 -42.43 11.35  
LAB\*LAB 43.89 -42.43 11.35  
LAB\*LAB 37.51 43.93 166.73

relative CIELAB lab\*  
lab\*lab 0.333 -0.729 0.172  
lab\*ch 0.375 0.75 0.463  
lab\*nch 0.0 0.75 0.463  
relative Natural Colour (NC)  
lab\*tr 0.333 -0.729 0.0  
lab\*ce 0.375 0.75 0.3  
lab\*nce 0.0 0.75 0.3

relative Inform. Technology (IT)  
olv3\* 0.0 0.5 0.865 (1.0)  
cmyn3\* 1.0 0.5 0.865 (0.0)  
olv4\* 0.75 1.0 0.815 (0.75)  
cmyn4\* 0.25 0.0 0.185 (0.75)  
standard and adapted CIELAB  
LAB\*LAB 35.29 -28.06 7.3  
LAB\*LAB 35.29 -28.49 6.72  
LAB\*LAB 25.01 29.28 166.72

relative CIELAB lab\*  
lab\*lab 0.222 -0.486 0.115  
lab\*ch 0.25 0.5 0.463  
lab\*nch 0.0 0.5 0.463  
relative Natural Colour (NC)  
lab\*tr 0.222 -0.499 0.0  
lab\*ce 0.25 0.5 0.3  
lab\*nce 0.0 0.5 0.3

relative Inform. Technology (IT)  
olv3\* 0.111 -0.242 0.057  
cmyn3\* 1.0 0.75 0.935 (1.0)  
olv4\* 0.75 1.0 0.815 (0.75)  
cmyn4\* 0.25 0.0 0.185 (0.75)  
standard and adapted CIELAB  
LAB\*LAB 26.69 -14.24 3.37  
LAB\*LAB 26.69 0.0 0.0  
LAB\*LAB 12.5 14.64 166.71

relative CIELAB lab\*  
lab\*lab 0.111 -0.242 0.057  
lab\*ch 0.125 0.25 0.463  
lab\*nch 0.0 0.25 0.463  
relative Natural Colour (NC)  
lab\*tr 0.111 -0.249 0.0  
lab\*ce 0.125 0.25 0.3  
lab\*nce 0.0 0.25 0.3

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.0$

chromaticness  $c^*$

### Output: Colorimetric Television Luminous System TLS00

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

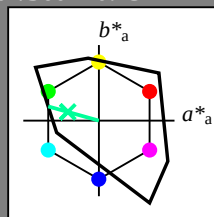
$lab^*tch$  and  $lab^*nch$

D50: hue G

LCH\*Ma: 84 70 164

olv\*Ma: 0.0 1.0 0.6

triangle lightness  $t^*$



### TLS00; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 54.19       | 79.36   | 63.0    | 101.33       | 38           |
| Y <sub>Ma</sub>  | 93.44       | -14.18  | 82.59   | 83.8         | 100          |
| L <sub>Ma</sub>  | 82.82       | -83.73  | 70.41   | 109.41       | 140          |
| C <sub>Ma</sub>  | 85.22       | -55.9   | -15.78  | 58.1         | 196          |
| V <sub>Ma</sub>  | 25.61       | 67.05   | -108.87 | 127.87       | 302          |
| M <sub>Ma</sub>  | 58.76       | 91.18   | -53.69  | 105.82       | 330          |
| 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> | 41.88       | 62.0    | 31.82   | 69.69        | 27           |
| J <sub>CIE</sub> | 81.97       | 1.81    | 71.59   | 71.61        | 89           |
| G <sub>CIE</sub> | 51.62       | -41.11  | 11.52   | 42.7         | 164          |
| B <sub>CIE</sub> | 29.2        | -5.27   | -49.33  | 49.62        | 264          |

