



ed to input

www.ps.bam.de/UE55/10L/L55E02NP.PS/.PDF; start output  
N: No Output Linearization (OL) data in File (F), Startup (S) or Device (D)

## Input: Colorimetric Reflective System MRS18

for hue  $h^* = lab^*h = 172/360 = 0.479$

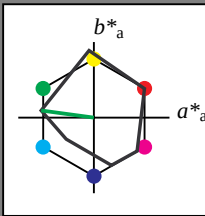
$lab^*tch$  and  $lab^*nch$

D65: hue G

LCH\*Ma: 52 70 172

rgb\*Ma: 0.0 1.0 0.0

triangle lightness  $t^*$



$u^*_{rel} = 91$

relative Inform. Technology (IT)  
olvi3\* 1.0 1.0 1.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 95.41 -0.97 4.75  
LAB\*LAB 95.41 0.0 0.0  
LAB\*TCa 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)  
olvi3\* 0.75 0.75 0.75 (1.0)  
olvi3\* 0.25 0.25 0.25 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 76.06 -0.6 3.44  
LAB\*LAB 76.06 0.0 0.0  
LAB\*TCa 75.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.86 -0.247 0.034  
lab\*tch 0.875 0.25 0.479  
lab\*nch 0.0 0.25 0.479  
relative Natural Colour (NC)  
lab\*trj 0.86 -0.247 -0.028  
lab\*tce 0.875 0.25 0.518  
lab\*nce 0.0 0.25 0.518

relative Inform. Technology (IT)  
olvi3\* 0.5 0.5 0.5 (1.0)  
olvi3\* 0.5 0.5 0.5 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LAB 56.71 0.0 0.0  
LAB\*TCa 50.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.61 -0.247 -0.028  
lab\*tch 0.625 0.25 0.518  
lab\*nch 0.0 0.25 0.518  
relative Natural Colour (NC)  
lab\*trj 0.61 -0.247 -0.028  
lab\*tce 0.625 0.25 0.518  
lab\*nce 0.0 0.25 0.518

relative Inform. Technology (IT)  
olvi3\* 0.25 0.25 0.25 (1.0)  
olvi3\* 0.25 0.25 0.25 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.13 0.83  
LAB\*LAB 37.36 0.0 0.0  
LAB\*TCa 25.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.36 -0.247 -0.028  
lab\*tch 0.375 0.25 0.479  
lab\*nch 0.0 0.25 0.479  
relative Natural Colour (NC)  
lab\*trj 0.36 -0.247 -0.028  
lab\*tce 0.375 0.25 0.479  
lab\*nce 0.0 0.25 0.479

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.11 -0.247 0.034  
lab\*tch 0.125 0.25 0.479  
lab\*nch 0.0 0.25 0.479  
relative Natural Colour (NC)  
lab\*trj 0.11 -0.247 0.034  
lab\*tce 0.125 0.25 0.479  
lab\*nce 0.0 0.25 0.479

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 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)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 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)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 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)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 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)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 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

UE55-7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

BAM-test chart UE55; Colorimetric systems MRS18 & ORS18

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

## Output: Colorimetric Reflective System ORS18

for hue  $h^* = lab^*h = 151/360 = 0.419$

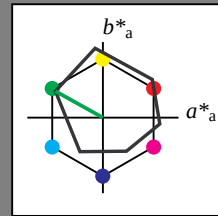
$lab^*tch$  and  $lab^*nch$

D65: hue L

LCH\*Ma: 51 72 151

rgb\*Ma: 0.0 1.0 0.0

triangle lightness  $t^*$



$u^*_{rel} = 93$

relative Inform. Technology (IT)  
olvi3\* 1.0 1.0 1.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 95.41 -0.97 4.75  
LAB\*LAB 95.41 0.0 0.0  
LAB\*TCa 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)  
olvi3\* 0.75 0.75 0.75 (1.0)  
olvi3\* 0.25 0.25 0.25 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 76.06 -0.6 3.44  
LAB\*LAB 76.06 0.0 0.0  
LAB\*TCa 75.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.86 -0.247 0.034  
lab\*tch 0.875 0.25 0.479  
lab\*nch 0.0 0.25 0.479  
relative Natural Colour (NC)  
lab\*trj 0.86 -0.247 -0.028  
lab\*tce 0.875 0.25 0.518  
lab\*nce 0.0 0.25 0.518

relative Inform. Technology (IT)  
olvi3\* 0.5 0.5 0.5 (1.0)  
olvi3\* 0.5 0.5 0.5 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LAB 56.71 0.0 0.0  
LAB\*TCa 50.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.61 -0.247 -0.028  
lab\*tch 0.625 0.25 0.518  
lab\*nch 0.0 0.25 0.518  
relative Natural Colour (NC)  
lab\*trj 0.61 -0.247 -0.028  
lab\*tce 0.625 0.25 0.518  
lab\*nce 0.0 0.25 0.518

relative Inform. Technology (IT)  
olvi3\* 0.25 0.25 0.25 (1.0)  
olvi3\* 0.25 0.25 0.25 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.13 0.83  
LAB\*LAB 37.36 0.0 0.0  
LAB\*TCa 25.00 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.36 -0.247 -0.028  
lab\*tch 0.375 0.25 0.479  
lab\*nch 0.0 0.25 0.479  
relative Natural Colour (NC)  
lab\*trj 0.36 -0.247 -0.028  
lab\*tce 0.375 0.25 0.479  
lab\*nce 0.0 0.25 0.479

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.11 -0.247 0.034  
lab\*tch 0.125 0.25 0.479  
lab\*nch 0.0 0.25 0.479  
relative Natural Colour (NC)  
lab\*trj 0.11 -0.247 0.034  
lab\*tce 0.125 0.25 0.479  
lab\*nce 0.0 0.25 0.479

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 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)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 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)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 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)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 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)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCa 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

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

input:  $cmY0^* setcmykcolor$

output: no change compared to input

## ORS18; adapted (a) CIELAB data

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

|      |       |        |        |       |     |
|------|-------|--------|--------|-------|-----|
| OMa  | 47.94 | 65.37  | 50.52  | 82.62 | 38  |
| YMa  | 90.37 | -10.27 | 91.77  | 92.34 | 96  |
| LMa  | 50.9  | -62.79 | 34.95  | 71.87 | 151 |
| CMa  | 58.62 | -30.35 | -45.01 | 54.3  | 236 |
| VMa  | 25.71 | 31.11  | -44.42 | 54.24 | 305 |
| NMa  | 18.01 | 0.0    | 0.0    | 0.0   | 0   |
| WMa  | 95.41 | 0.0    | 0.0    | 0.0   | 0   |
| RCIE | 39.92 | 58.66  | 26.98  | 64.56 | 25  |
| JCIE | 81.26 | -2.17  | 67.76  | 67.79 | 92  |
| GCIE | 52.23 | -42.26 | 11.75  | 43.87 | 164 |
| BCIE | 30.57 | 1.15   | -46.84 | 46.87 | 271 |

%Regularity

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

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

relative Inform. Technology (IT)  
olvi3\* 0.5 0.5 0.5 (1.0)  
olvi3\* 0.5 0.5 0.5 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 73.15 -31.94 20.73  
LAB\*LAB 73.15 -31.94 20.73  
LAB\*TCa 75.00 35.93 150.91

relative CIELAB lab\*  
lab\*lab 0.712 -0.436 0.243  
lab\*tch 0.712 0.25 0.419  
lab\*nch 0.0 0.25 0.419  
relative Natural Colour (NC)  
lab\*trj 0.712 -0.436 0.243  
lab\*tce 0.712 0.25 0.453  
lab\*nce 0.0 0.25 0.453

relative Inform. Technology (IT)  
olvi3\* 0.25 0.25 0.25 (1.0)  
olvi3\* 0.25 0.25 0.25 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 53.8 -31.97 19.42  
LAB\*LAB 53.8 -31.97 19.42  
LAB\*TCa 50.00 35.94 150.91

relative CIELAB lab\*  
lab\*lab 0.569 -0.436 0.243  
lab\*tch 0.569 0.25 0.419  
lab\*nch 0.0 0.25 0.419  
relative Natural Colour (NC)  
lab\*trj 0.569 -0.436 0.243  
lab\*tce 0.569 0.25 0.453  
lab\*nce 0.0 0.25 0.453

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 34.46 -18.11 17.47  
LAB\*LAB 34.46 -18.11 17.47  
LAB\*TCa 37.51 35.93 150.91

relative CIELAB lab\*  
lab\*lab 0.319 -0.436 0.243  
lab\*tch 0.319 0.25 0.419  
lab\*nch 0.0 0.25 0.419  
relative Natural Colour (NC)  
lab\*trj 0.319 -0.436 0.243  
lab\*tce 0.319 0.25 0.453  
lab\*nce 0.0 0.25 0.453

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.





Version 2.1, io=0,0

## Input: Colorimetric Reflective System MRS18

for hue  $h^* = lab^*h = 322/360 = 0.895$

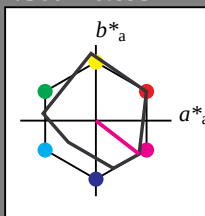
$lab^*tch$  and  $lab^*nch$

D65: hue B50R

LCH\*Ma: 35 72 322

rgb\*Ma: 1.0 0.0 1.0

triangle lightness  $t^*$



### MRS18; adapted (a) CIELAB data

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| RMa    | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| JMa    | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
| GMa    | 52.11       | -69.73  | 9.44    | 70.37        | 172          |
| G50BMa | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| BMa    | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50RMa | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| NMa    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| WMa    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE   | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| JCIE   | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| GCIE   | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| BCIE   | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)

|         |       |       |      |       |
|---------|-------|-------|------|-------|
| olvi3*  | 1.0   | 1.0   | 1.0  | (1.0) |
| olvi3*  | 0.0   | 0.0   | 0.0  | (0.0) |
| olvi4*  | 1.0   | 1.0   | 1.0  | (1.0) |
| olvi4*  | 0.0   | 0.0   | 0.0  | (0.0) |
| olvi4*  | 0.0   | 0.0   | 0.0  | (0.0) |
| olvi4*  | 0.0   | 0.0   | 0.0  | (0.0) |
| LAB*Lab | 95.41 | -0.97 | 4.75 |       |
| LAB*Lab | 95.41 | 0.0   | 0.0  |       |
| LAB*Lab | 95.41 | 0.0   | 0.0  |       |
| LAB*Lab | 95.41 | 0.0   | 0.0  |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

relative Inform. Technology (IT)

|         |       |       |        |       |
|---------|-------|-------|--------|-------|
| olvi3*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi3*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 1.0   | 0.75  | 1.0    | (1.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| olvi4*  | 0.0   | 0.25  | 0.0    | (0.0) |
| LAB*Lab | 80.29 | 13.6  | -7.31  |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |
| LAB*Lab | 80.29 | 14.29 | -11.05 |       |

|                                     |       |       |        |
|-------------------------------------|-------|-------|--------|
| lab*lab                             | 0.555 | 0.198 | -0.152 |
| lab*tch                             | 0.625 | 0.25  | 0.895  |
| lab*ncb                             | 0.25  | 0.25  | 0.895  |
| <b>relative Natural Colour (NC)</b> |       |       |        |
| lab*lrj                             | 0.555 | 0.162 | -0.189 |
| lab*tce                             | 0.625 | 0.25  | 0.862  |
| lab*ncE                             | 0.25  | 0.25  | b44r   |

**relative Inform. Technology (IT)**

## Input: Colorimetric Reflective System MRS18

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

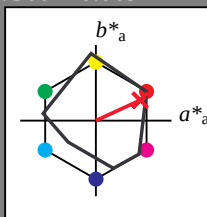
$lab^*tch$  and  $lab^*nch$

D65: hue R

LCH\*Ma: 48 73 25

rgb\*Ma: 1.0 0.0 0.1

triangle lightness  $t^*$



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)  
olvi3\* 1.0 1.0 1.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 95.41 -0.97 4.75  
LAB\*LAB 95.41 0.0 0.0  
LAB\*TCRa 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\*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)  
olvi3\* 0.75 0.75 0.75 (1.0)  
olvi3\* 0.25 0.25 0.25 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 76.06 -0.6 3.44  
LAB\*LAB 76.06 0.0 0.0  
LAB\*TCRa 75.0 0.01 0.0

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\*tr 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)  
olvi3\* 0.75 0.75 0.75 (1.0)  
olvi3\* 0.25 0.25 0.25 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LAB 56.71 0.0 0.0  
LAB\*TCRa 50.0 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.598 0.227 0.104  
lab\*tch 0.625 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.598 0.25 0.0  
lab\*tce 0.625 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.5 0.5 0.5 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.13 0.63  
LAB\*LAB 37.36 0.0 0.0  
LAB\*TCRa 25.0 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.348 0.227 0.104  
lab\*tch 0.375 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.348 0.25 0.0  
lab\*tce 0.375 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.25 0.25 0.25 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.46  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCRa 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.194 0.227 0.104  
lab\*tch 0.225 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.194 0.25 0.0  
lab\*tce 0.225 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 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\*TCRa 0.0 0.0 0.0

relative CIELAB lab\*  
lab\*lab 0.098 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 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\*TCRa 0.0 0.0 0.0

relative CIELAB lab\*  
lab\*lab 0.098 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 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\*TCRa 0.0 0.0 0.0

relative CIELAB lab\*  
lab\*lab 0.098 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 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\*TCRa 0.0 0.0 0.0

relative CIELAB lab\*  
lab\*lab 0.098 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 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\*TCRa 0.0 0.0 0.0

relative CIELAB lab\*  
lab\*lab 0.098 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.069

## MRS18; adapted (a) CIELAB data

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| RMa    | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| JMa    | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
| GMa    | 52.11       | -69.73  | 9.44    | 70.37        | 172          |
| G50BMa | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| BMa    | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50RMa | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| NMa    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| WMa    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE   | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| JCIE   | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| GCIE   | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| BCIE   | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

% Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)  
olvi3\* 1.0 0.5 0.548 (1.0)  
olvi3\* 0.0 0.5 0.548 (0.0)  
olvi4\* 1.0 0.5 0.548 (1.0)  
olvi4\* 0.0 0.5 0.548 (0.0)  
olvi5\* 1.0 0.5 0.548 (1.0)  
olvi5\* 0.0 0.5 0.548 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 71.8 32.47 18.34  
LAB\*LAB 71.8 33.0 15.17  
LAB\*TCRa 75.0 36.32 24.7

relative CIELAB lab\*  
lab\*lab 0.695 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\*tr 0.695 0.5 0.0  
lab\*tce 0.75 0.5 0.0  
lab\*nce 0.0 0.5 0.069

relative Inform. Technology (IT)  
olvi3\* 1.0 0.5 0.548 (1.0)  
olvi3\* 0.0 0.5 0.548 (0.0)  
olvi4\* 1.0 0.5 0.548 (1.0)  
olvi4\* 0.0 0.5 0.548 (0.0)  
olvi5\* 1.0 0.5 0.548 (1.0)  
olvi5\* 0.0 0.5 0.548 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 60.0 49.2 25.13  
LAB\*LAB 60.0 49.5 22.76  
LAB\*TCRa 62.5 54.49 24.7

relative CIELAB lab\*  
lab\*lab 0.542 0.681 0.313  
lab\*tch 0.625 0.75 0.069  
lab\*nch 0.0 0.75 0.069  
relative Natural Colour (NC)  
lab\*tr 0.542 0.75 0.0  
lab\*tce 0.625 0.75 0.0  
lab\*nce 0.0 0.75 0.069

relative Inform. Technology (IT)  
olvi3\* 1.0 0.0 0.097 (1.0)  
olvi3\* 0.0 0.0 0.097 (0.0)  
olvi4\* 1.0 0.0 0.097 (1.0)  
olvi4\* 0.0 0.0 0.097 (0.0)  
olvi5\* 1.0 0.0 0.097 (1.0)  
olvi5\* 0.0 0.0 0.097 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 48.21 65.92 31.93  
LAB\*LAB 48.21 66.0 30.36  
LAB\*TCRa 50.0 72.65 24.7

relative CIELAB lab\*  
lab\*lab 0.39 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\*tr 0.39 1.0 0.0  
lab\*tce 0.5 1.0 0.0  
lab\*nce 0.0 1.0 0.069

relative Inform. Technology (IT)  
olvi3\* 0.75 0.75 0.75 (1.0)  
olvi3\* 0.25 0.25 0.25 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 1.0 1.0 (1.0)  
olvi5\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 48.21 65.92 31.93  
LAB\*LAB 48.21 66.0 30.36  
LAB\*TCRa 50.0 72.65 24.7

relative CIELAB lab\*  
lab\*lab 0.39 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\*tr 0.39 1.0 0.0  
lab\*tce 0.5 1.0 0.0  
lab\*nce 0.0 1.0 0.069

relative Inform. Technology (IT)  
olvi3\* 0.5 0.5 0.5 (1.0)  
olvi3\* 0.0 0.5 0.5 (0.0)  
olvi4\* 1.0 0.5 0.5 (1.0)  
olvi4\* 0.0 0.5 0.5 (0.0)  
olvi5\* 1.0 0.5 0.5 (1.0)  
olvi5\* 0.0 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 48.21 65.92 31.93  
LAB\*LAB 48.21 66.0 30.36  
LAB\*TCRa 50.0 72.65 24.7

relative CIELAB lab\*  
lab\*lab 0.39 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\*tr 0.39 1.0 0.0  
lab\*tce 0.5 1.0 0.0  
lab\*nce 0.0 1.0 0.069

relative Inform. Technology (IT)  
olvi3\* 0.75 0.75 0.75 (1.0)  
olvi3\* 0.25 0.25 0.25 (0.0)  
olvi4\* 1.0 0.75 0.774 (1.0)  
olvi4\* 0.0 0.75 0.774 (0.0)  
olvi5\* 1.0 0.75 0.774 (1.0)  
olvi5\* 0.0 0.75 0.774 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 64.26 16.12 10.25  
LAB\*LAB 64.26 16.5 7.59  
LAB\*TCRa 62.5 18.16 24.7

relative CIELAB lab\*  
lab\*lab 0.598 0.227 0.104  
lab\*tch 0.625 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.598 0.25 0.0  
lab\*tce 0.625 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.75 0.75 0.75 (1.0)  
olvi3\* 0.25 0.25 0.25 (0.0)  
olvi4\* 1.0 0.75 0.774 (1.0)  
olvi4\* 0.0 0.75 0.774 (0.0)  
olvi5\* 1.0 0.75 0.774 (1.0)  
olvi5\* 0.0 0.75 0.774 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 44.51 16.49 8.94  
LAB\*LAB 44.51 16.5 7.59  
LAB\*TCRa 37.5 18.16 24.7

relative CIELAB lab\*  
lab\*lab 0.348 0.227 0.104  
lab\*tch 0.375 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.348 0.25 0.0  
lab\*tce 0.375 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.5 0.5 0.5 (1.0)  
olvi3\* 0.0 0.5 0.5 (0.0)  
olvi4\* 1.0 0.5 0.5 (1.0)  
olvi4\* 0.0 0.5 0.5 (0.0)  
olvi5\* 1.0 0.5 0.5 (1.0)  
olvi5\* 0.0 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 37.36 -0.13 0.63  
LAB\*LAB 37.36 0.0 0.0  
LAB\*TCRa 25.0 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.194 0.227 0.104  
lab\*tch 0.225 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.194 0.25 0.0  
lab\*tce 0.225 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.25 0.25 0.25 (1.0)  
olvi3\* 0.0 0.25 0.25 (0.0)  
olvi4\* 1.0 0.25 0.25 (1.0)  
olvi4\* 0.0 0.25 0.25 (0.0)  
olvi5\* 1.0 0.25 0.25 (1.0)  
olvi5\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.46  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCRa 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.098 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.5 0.5 0.5 (1.0)  
olvi3\* 0.0 0.5 0.5 (0.0)  
olvi4\* 1.0 0.5 0.5 (1.0)  
olvi4\* 0.0 0.5 0.5 (0.0)  
olvi5\* 1.0 0.5 0.5 (1.0)  
olvi5\* 0.0 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 31.11 32.21 15.74  
LAB\*LAB 31.11 33.0 15.18  
LAB\*TCRa 25.01 36.33 24.7

relative CIELAB lab\*  
lab\*lab 0.293 0.681 0.313  
lab\*tch 0.375 0.75 0.069  
lab\*nch 0.0 0.75 0.069  
relative Natural Colour (NC)  
lab\*tr 0.293 0.75 0.0  
lab\*tce 0.375 0.75 0.0  
lab\*nce 0.0 0.75 0.069

relative Inform. Technology (IT)  
olvi3\* 0.25 0.25 0.25 (1.0)  
olvi3\* 0.0 0.25 0.25 (0.0)  
olvi4\* 1.0 0.25 0.25 (1.0)  
olvi4\* 0.0 0.25 0.25 (0.0)  
olvi5\* 1.0 0.25 0.25 (1.0)  
olvi5\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.46  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCRa 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.098 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.25 0.25 0.25 (1.0)  
olvi3\* 0.0 0.25 0.25 (0.0)  
olvi4\* 1.0 0.25 0.25 (1.0)  
olvi4\* 0.0 0.25 0.25 (0.0)  
olvi5\* 1.0 0.25 0.25 (1.0)  
olvi5\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 0.0 0.0 0.0  
LAB\*LAB 0.0 0.0 0.0  
LAB\*TCRa 0.0 0.0 0.0

relative CIELAB lab\*  
lab\*lab 0.098 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
olvi3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 0.0 0.0 (1.0)  
olvi4\* 0.0 0.0 0.0 (0.0)  
olvi5\* 1.0 0.0 0.0 (1.0)  
olvi5\* 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\*TCRa 0.0 0.0 0.0

relative CIELAB lab\*  
lab\*lab 0.098 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.5 0.5 0.5 (1.0)  
olvi3\* 0.0 0.5 0.5 (0.0)  
olvi4\* 1.0 0.5 0.5 (1.0)  
olvi4\* 0.0 0.5 0.5 (0.0)  
olvi5\* 1.0 0.5 0.5 (1.0)  
olvi5\* 0.0 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 31.11 32.21 15.74  
LAB\*LAB 31.11 33.0 15.18  
LAB\*TCRa 25.01 36.33 24.7

relative CIELAB lab\*  
lab\*lab 0.293 0.681 0.313  
lab\*tch 0.375 0.75 0.069  
lab\*nch 0.0 0.75 0.069  
relative Natural Colour (NC)  
lab\*tr 0.293 0.75 0.0  
lab\*tce 0.375 0.75 0.0  
lab\*nce 0.0 0.75 0.069

relative Inform. Technology (IT)  
olvi3\* 0.25 0.25 0.25 (1.0)  
olvi3\* 0.0 0.25 0.25 (0.0)  
olvi4\* 1.0 0.25 0.25 (1.0)  
olvi4\* 0.0 0.25 0.25 (0.0)  
olvi5\* 1.0 0.25 0.25 (1.0)  
olvi5\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.0 0.46  
LAB\*LAB 18.02 0.0 0.0  
LAB\*TCRa 0.01 0.01 0.0

relative CIELAB lab\*  
lab\*lab 0.098 0.227 0.104  
lab\*tch 0.125 0.25 0.069  
lab\*nch 0.0 0.25 0.069  
relative Natural Colour (NC)  
lab\*tr 0.098 0.25 0.0  
lab\*tce 0.125 0.25 0.0  
lab\*nce 0.0 0.25 0.069

relative Inform. Technology (IT)  
olvi3\* 0.25 0.25 0.25 (1.0)  
olvi3\* 0.0 0.25 0.25 (0.0)  
olvi4\* 1.0 0.25 0.25 (1.0)  
olvi4\* 0.0 0.25 0.25 (0.0)  
olvi5\* 1.0 0.25 0.25 (1.0)  
olvi5\* 0.0 0.25 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 0.0 0.0 0.0  
LAB\*LAB 0.0 0.0 0.0  
LAB\*TCRa 0.0 0.0 0.0

## Input: Colorimetric Reflective System MRS18

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

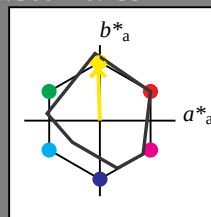
$lab^*tch$  and  $lab^*nch$

D65: hue J

LCH\*Ma: 89 86 92

rgb\*Ma: 1.0 0.95 0.0

triangle lightness  $t^*$



### MRS18; adapted (a) CIELAB data

|        | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|---------------|---------|---------|--------------|--------------|
| RMa    | 49.63         | 66.96   | 38.37   | 77.18        | 30           |
| JMa    | 90.7          | -6.36   | 88.75   | 88.98        | 94           |
| GMa    | 52.11         | -69.73  | 9.44    | 70.37        | 172          |
| G50BMa | 45.03         | -36.57  | -28.47  | 46.36        | 218          |
| BMa    | 36.65         | 23.19   | -63.05  | 67.18        | 290          |
| B50RMa | 34.94         | 57.17   | -44.26  | 72.31        | 322          |
| NMa    | 18.01         | 0.0     | 0.0     | 0.0          | 0            |
| WMa    | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| RCIE   | 39.92         | 58.66   | 26.98   | 64.56        | 25           |
| JCIE   | 81.26         | -2.17   | 67.76   | 67.79        | 92           |
| GCIE   | 52.23         | -42.26  | 11.75   | 43.87        | 164          |
| BCIE   | 30.57         | 1.15    | -46.84  | 46.87        | 271          |

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)  
olvi3\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 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 -0.97 4.75  
LAB\*LABa 95.41 0.0 0.0  
LAB\*TCHa 99.99 0.01

relative Inform. Technology (IT)  
olvi3\* 1.0 0.988 0.75 (1.0)  
cmyn3\* 0.0 0.012 0.25 (0.0)  
olvi4\* 1.0 0.988 0.75 (1.0)  
cmyn4\* 0.0 0.012 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 93.72 -1.64 26.21  
LAB\*LABa 93.72 -0.69 21.57  
LAB\*TCHa 97.5 21.58 91.86

relative Inform. Technology (IT)  
olvi3\* 1.0 0.976 0.5 (1.0)  
cmyn3\* 0.0 0.037 0.5 (0.0)  
olvi4\* 1.0 0.976 0.5 (1.0)  
cmyn4\* 0.0 0.037 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 92.04 -2.3 47.67  
LAB\*LABa 92.04 -1.39 43.14  
LAB\*TCHa 75.0 43.16 91.85

relative Inform. Technology (IT)  
olvi3\* 1.0 0.963 0.25 (1.0)  
cmyn3\* 0.0 0.087 0.25 (0.0)  
olvi4\* 1.0 0.963 0.25 (1.0)  
cmyn4\* 0.0 0.087 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 90.36 -2.96 69.13  
LAB\*LABa 90.36 -2.08 64.71  
LAB\*TCHa 62.5 64.74 91.85

relative Inform. Technology (IT)  
olvi3\* 1.0 0.951 0.0 (1.0)  
cmyn3\* 0.0 0.049 1.0 (0.0)  
olvi4\* 1.0 0.951 0.0 (1.0)  
cmyn4\* 0.0 0.049 1.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 88.68 -3.62 90.58  
LAB\*LABa 88.68 -2.77 86.27  
LAB\*TCHa 50.0 86.32 91.85

relative Inform. Technology (IT)  
olvi3\* 0.5 0.5 0.5 (0.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olvi4\* 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 -0.23 21.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.0 0.01

relative Inform. Technology (IT)  
olvi3\* 0.5 0.475 0.25 (1.0)  
cmyn3\* 0.5 0.475 0.25 (1.0)  
olvi4\* 1.0 0.975 0.75 (0.0)  
cmyn4\* 0.0 0.025 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 54.4 -0.89 23.92  
LAB\*LABa 54.4 -0.7 21.93  
LAB\*TCHa 37.5 21.94 91.84

relative Inform. Technology (IT)  
olvi3\* 0.5 0.451 0.0 (1.0)  
cmyn3\* 0.5 0.451 0.0 (1.0)  
olvi4\* 1.0 0.975 0.75 (0.0)  
cmyn4\* 0.0 0.049 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 52.1 -1.4 43.85  
LAB\*LABa 52.1 -1.4 43.85  
LAB\*TCHa 50.0 43.87 91.84

relative Inform. Technology (IT)  
olvi3\* 0.5 0.428 0.0 (1.0)  
cmyn3\* 0.5 0.428 0.0 (1.0)  
olvi4\* 1.0 0.975 0.75 (0.0)  
cmyn4\* 0.0 0.049 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 50.0 -0.07 0.25  
LAB\*LABa 50.0 -0.07 0.25  
LAB\*TCHa 50.0 43.87 91.84

relative Inform. Technology (IT)  
olvi3\* 0.5 0.405 0.0 (1.0)  
cmyn3\* 0.5 0.405 0.0 (1.0)  
olvi4\* 1.0 0.975 0.75 (0.0)  
cmyn4\* 0.0 0.049 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 48.0 -0.07 0.25  
LAB\*LABa 48.0 -0.07 0.25  
LAB\*TCHa 50.0 43.87 91.84

relative Inform. Technology (IT)  
olvi3\* 0.25 0.25 0.25 (1.0)  
cmyn3\* 0.75 0.75 0.75 (0.0)  
olvi4\* 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 -0.13 0.83  
LAB\*LABa 37.36 0.0 0.0  
LAB\*TCHa 25.0 0.01

relative Inform. Technology (IT)  
olvi3\* 0.25 0.238 0.1 (1.0)  
cmyn3\* 0.75 0.762 0.1 (0.0)  
olvi4\* 1.0 0.988 0.75 (1.0)  
cmyn4\* 0.0 0.012 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 35.68 -0.52 22.29  
LAB\*LABa 35.68 -0.68 21.56  
LAB\*TCHa 12.5 21.57 91.84

relative Inform. Technology (IT)  
olvi3\* 0.25 0.228 -0.007 0.25  
cmyn3\* 0.75 0.775 0.1 (0.0)  
olvi4\* 1.0 0.988 0.75 (1.0)  
cmyn4\* 0.0 0.012 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 33.92 -0.52 22.29  
LAB\*LABa 33.92 -0.68 21.56  
LAB\*TCHa 12.5 21.57 91.84

relative Inform. Technology (IT)  
olvi3\* 0.25 0.215 0.0 (1.0)  
cmyn3\* 0.75 0.785 0.1 (0.0)  
olvi4\* 1.0 0.988 0.75 (1.0)  
cmyn4\* 0.0 0.012 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 32.15 -0.52 22.29  
LAB\*LABa 32.15 -0.68 21.56  
LAB\*TCHa 12.5 21.57 91.84

relative Inform. Technology (IT)  
olvi3\* 0.25 0.202 0.0 (1.0)  
cmyn3\* 0.75 0.798 0.1 (0.0)  
olvi4\* 1.0 0.988 0.75 (1.0)  
cmyn4\* 0.0 0.012 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 30.38 -0.52 22.29  
LAB\*LABa 30.38 -0.68 21.56  
LAB\*TCHa 12.5 21.57 91.84

relative Inform. Technology (IT)  
olvi3\* 0.25 0.189 0.0 (1.0)  
cmyn3\* 0.75 0.809 0.1 (0.0)  
olvi4\* 1.0 0.988 0.75 (1.0)  
cmyn4\* 0.0 0.012 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 28.61 -0.52 22.29  
LAB\*LABa 28.61 -0.68 21.56  
LAB\*TCHa 12.5 21.57 91.84

relative Inform. Technology (IT)  
olvi3\* 0.25 0.176 0.0 (1.0)  
cmyn3\* 0.75 0.819 0.1 (0.0)  
olvi4\* 1.0 0.988 0.75 (1.0)  
cmyn4\* 0.0 0.012 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 26.84 -0.52 22.29  
LAB\*LABa 26.84 -0.68 21.56  
LAB\*TCHa 12.5 21.57 91.84

relative Inform. Technology (IT)  
olvi3\* 0.25 0.163 0.0 (1.0)  
cmyn3\* 0.75 0.829 0.1 (0.0)  
olvi4\* 1.0 0.988 0.75 (1.0)  
cmyn4\* 0.0 0.012 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 25.07 -0.52 22.29  
LAB\*LABa 25.07 -0.68 21.56  
LAB\*TCHa 12.5 21.57 91.84

relative Inform. Technology (IT)  
olvi3\* 0.25 0.150 0.0 (1.0)  
cmyn3\* 0.75 0.839 0.1 (0.0)  
olvi4\* 1.0 0.988 0.75 (1.0)  
cmyn4\* 0.0 0.012 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 23.30 -0.52 22.29  
LAB\*LABa 23.30 -0.68 21.56  
LAB\*TCHa 12.5 21.57 91.84

relative Inform. Technology (IT)  
olvi3\* 0.25 0.137 0.0 (1.0)  
cmyn3\* 0.75 0.849 0.1 (0.0)  
olvi4\* 1.0 0.988 0.75 (1.0)  
cmyn4\* 0.0 0.012 0.25 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 21.53 -0.52 22.29  
LAB\*LABa 21.53 -0.68 21.56  
LAB\*TCHa 12.5 21.57 91.84

UE55-7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

BAM-test chart UE55; Colorimetric systems MRS18 & ORS18

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

input:  $cmv0^* setcmykcolor$

output: no change compared to input



### Input: Colorimetric Reflective System MRS18

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

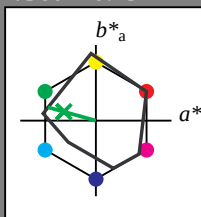
$lab^*tch$  and  $lab^*nch$

D65: hue G

LCH\*Ma: 56 66 164

rgb\*Ma: 0.1 1.0 0.0

triangle lightness  $t^*$



### MRS18; adapted (a) CIELAB data

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| RMa    | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| JMa    | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
| GMa    | 52.11       | -69.73  | 9.44    | 70.37        | 172          |
| G50BMa | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| BMa    | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50RMa | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| NMa    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| WMa    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE   | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| JCIE   | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| GCIE   | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| BCIE   | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)  
olvi3\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
LAB\*LAB 95.41 -0.97 4.75  
LAB\*LABa 95.41 0.0 0.0  
LAB\*TCHa 99.99 0.01 0.0

relative Inform. Technology (IT)  
olvi3\* 0.776 1.0 0.75 (1.0)  
cmyn3\* 0.224 0.0 0.25 (0.0)  
olvi4\* 0.776 1.0 0.75 (1.0)  
cmyn4\* 0.224 0.0 0.25 (0.0)  
LAB\*LAB 85.57 -16.58 8.49  
LAB\*LABa 85.57 -15.79 4.44  
LAB\*TCHa 87.5 16.4 164.46

relative Inform. Technology (IT)  
olvi3\* 0.551 1.0 0.5 (1.0)  
cmyn3\* 0.449 0.0 0.5 (0.0)  
olvi4\* 0.551 1.0 0.5 (1.0)  
cmyn4\* 0.449 0.0 0.5 (0.0)  
LAB\*LAB 75.74 -32.2 12.22  
LAB\*LABa 75.74 -31.6 8.79  
LAB\*TCHa 75.0 32.81 164.46

relative Inform. Technology (IT)  
olvi3\* 0.327 1.0 0.25 (1.0)  
cmyn3\* 0.673 0.0 0.25 (0.0)  
olvi4\* 0.327 1.0 0.25 (1.0)  
cmyn4\* 0.673 0.0 0.25 (0.0)  
LAB\*LAB 65.9 -47.82 15.96  
LAB\*LABa 65.9 -47.41 13.19  
LAB\*TCHa 62.5 49.22 164.46

relative Inform. Technology (IT)  
olvi3\* 0.103 1.0 0.0 (1.0)  
cmyn3\* 0.897 0.0 1.0 (0.0)  
olvi4\* 0.103 1.0 0.0 (1.0)  
cmyn4\* 0.897 0.0 1.0 (0.0)  
LAB\*LAB 56.07 -63.44 19.68  
LAB\*LABa 56.07 -63.21 17.58  
LAB\*TCHa 50.0 65.62 164.46

relative Inform. Technology (IT)  
olvi3\* 0.077 0.75 0.0 (1.0)  
cmyn3\* 0.923 0.25 1.0 (0.0)  
olvi4\* 0.077 0.75 0.0 (1.0)  
cmyn4\* 0.923 0.25 1.0 (0.0)  
LAB\*LAB 56.07 -63.44 19.68  
LAB\*LABa 56.07 -63.21 17.58  
LAB\*TCHa 50.0 65.62 164.46

relative Inform. Technology (IT)  
olvi3\* 0.051 0.5 0.0 (1.0)  
cmyn3\* 0.949 0.5 1.0 (0.0)  
olvi4\* 0.051 0.5 0.0 (1.0)  
cmyn4\* 0.949 0.5 1.0 (0.0)  
LAB\*LAB 56.07 -63.44 19.68  
LAB\*LABa 56.07 -63.21 17.58  
LAB\*TCHa 50.0 65.62 164.46

relative Inform. Technology (IT)  
olvi3\* 0.025 0.25 0.0 (1.0)  
cmyn3\* 0.974 0.75 1.0 (0.0)  
olvi4\* 0.025 0.25 0.0 (1.0)  
cmyn4\* 0.974 0.75 1.0 (0.0)  
LAB\*LAB 56.07 -63.44 19.68  
LAB\*LABa 56.07 -63.21 17.58  
LAB\*TCHa 50.0 65.62 164.46

relative Inform. Technology (IT)  
olvi3\* 0.008 0.0 0.0 (1.0)  
cmyn3\* 0.992 0.0 0.0 (0.0)  
olvi4\* 0.008 0.0 0.0 (1.0)  
cmyn4\* 0.992 0.0 0.0 (0.0)  
LAB\*LAB 56.07 -63.44 19.68  
LAB\*LABa 56.07 -63.21 17.58  
LAB\*TCHa 50.0 65.62 164.46

relative Inform. Technology (IT)  
olvi3\* 0.001 0.0 0.0 (1.0)  
cmyn3\* 0.999 0.0 0.0 (0.0)  
olvi4\* 0.001 0.0 0.0 (1.0)  
cmyn4\* 0.999 0.0 0.0 (0.0)  
LAB\*LAB 56.07 -63.44 19.68  
LAB\*LABa 56.07 -63.21 17.58  
LAB\*TCHa 50.0 65.62 164.46

relative Inform. Technology (IT)  
olvi3\* 0.25 0.25 0.25 (1.0)  
cmyn3\* 0.75 0.75 0.75 (0.0)  
olvi4\* 1.0 1.0 1.0 (0.25)  
cmyn4\* 0.0 0.0 0.0 (0.75)  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)  
olvi3\* 0.625 0.25 0.0 (1.0)  
cmyn3\* 0.375 0.75 0.0 (0.0)  
olvi4\* 0.625 0.25 0.0 (1.0)  
cmyn4\* 0.375 0.75 0.0 (0.0)  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)  
olvi3\* 0.375 0.0 0.0 (1.0)  
cmyn3\* 0.625 0.0 0.0 (0.0)  
olvi4\* 0.375 0.0 0.0 (1.0)  
cmyn4\* 0.625 0.0 0.0 (0.0)  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)  
olvi3\* 0.125 0.0 0.0 (1.0)  
cmyn3\* 0.875 0.0 0.0 (0.0)  
olvi4\* 0.125 0.0 0.0 (1.0)  
cmyn4\* 0.875 0.0 0.0 (0.0)  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)  
olvi3\* 0.062 0.0 0.0 (1.0)  
cmyn3\* 0.938 0.0 0.0 (0.0)  
olvi4\* 0.062 0.0 0.0 (1.0)  
cmyn4\* 0.938 0.0 0.0 (0.0)  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)  
olvi3\* 0.031 0.0 0.0 (1.0)  
cmyn3\* 0.969 0.0 0.0 (0.0)  
olvi4\* 0.031 0.0 0.0 (1.0)  
cmyn4\* 0.969 0.0 0.0 (0.0)  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)  
olvi3\* 0.015 0.0 0.0 (1.0)  
cmyn3\* 0.984 0.0 0.0 (0.0)  
olvi4\* 0.015 0.0 0.0 (1.0)  
cmyn4\* 0.984 0.0 0.0 (0.0)  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)  
olvi3\* 0.007 0.0 0.0 (1.0)  
cmyn3\* 0.993 0.0 0.0 (0.0)  
olvi4\* 0.007 0.0 0.0 (1.0)  
cmyn4\* 0.993 0.0 0.0 (0.0)  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)  
olvi3\* 0.003 0.0 0.0 (1.0)  
cmyn3\* 0.997 0.0 0.0 (0.0)  
olvi4\* 0.003 0.0 0.0 (1.0)  
cmyn4\* 0.997 0.0 0.0 (0.0)  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.0 0.01 0.0

relative Inform. Technology (IT)  
olvi3\* 0.001 0.0 0.0 (1.0)  
cmyn3\* 0.999 0.0 0.0 (0.0)  
olvi4\* 0.001 0.0 0.0 (1.0)  
cmyn4\* 0.999 0.0 0.0 (0.0)  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*TCHa 50.0 0.01 0.0

UE55-7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

BAM-test chart UE55; Colorimetric systems MRS18 & ORS18

input:  $cmY0^* set cmykcolor$

output: no change compared to input

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

1

output: *no change compared to input*