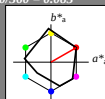


# Input: Colorimetric Reflective System MRS18

for hue  $h^* = lab^*h = 30/360 = 0.083$   
 $lab^*tch$  and  $lab^*nch$

D65: hue R  
LCH\*Ma: 50 77 30  
olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



%Gamut  
 $u^*_{rel} = 91$   
%Regularity  
 $g^*_{H,rel} = 41$   
 $g^*_{C,rel} = 52$

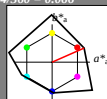
| MRS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| RMa                            | 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   |
| NMa                            | 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 |

# Output: Colorimetric Reflective System NCS11

for hue  $h^* = lab^*h = 24/360 = 0.066$   
 $lab^*tch$  and  $lab^*nch$

D65: hue R  
LCH\*Ma: 47 92 24  
olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



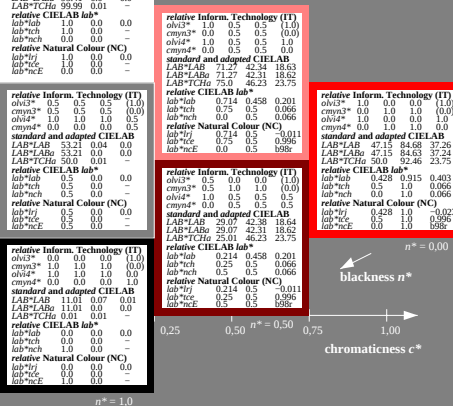
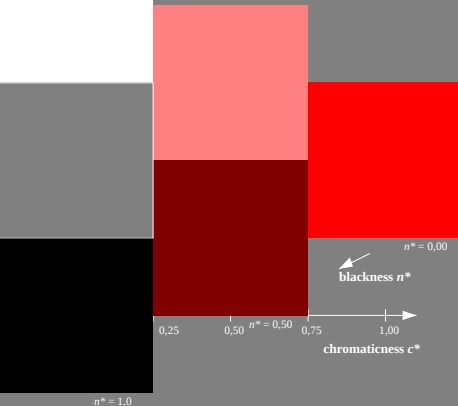
%Gamut  
 $u^*_{rel} = 149$   
%Regularity  
 $g^*_{H,rel} = 46$   
 $g^*_{C,rel} = 65$

| NCS11; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| RMa                            | 47.15   | 84.64   | 37.25        | 92.48        | 24  |
| JMa                            | 91.37   | -1.27   | 125.03       | 125.03       | 91  |
| GMa                            | 63.07   | -114.28 | 25.35        | 117.06       | 167 |
| G50BMa                         | 59.47   | -80.6   | -33.45       | 87.28        | 203 |
| BMa                            | 49.01   | 3.65    | -81.19       | 81.28        | 273 |
| B50RMa                         | 44.06   | 106.09  | -73.93       | 129.32       | 325 |
| NMa                            | 10.99   | 0.0     | 0.0          | 0.0          | 0   |
| NMa                            | 95.41   | 0.0     | 0.0          | 0.0          | 0   |
| RCIE                           | 39.92   | 58.69   | 27.98        | 65.01        | 25  |
| JCIE                           | 81.26   | -2.9    | 71.56        | 71.62        | 92  |
| GCIE                           | 52.23   | -42.45  | 13.59        | 44.59        | 162 |
| BCIE                           | 30.57   | 1.35    | -46.48       | 46.51        | 272 |

| 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 | 0.0  | -0.01 |       |  |
| $LAB^*Lab$                       | 95.41 | 0.0  | 0.0   |       |  |
| $LAB^*TCh$                       | 99.99 | 0.01 | -     |       |  |
| relative CIELAB lab*             |       |      |       |       |  |
| $lab^*lab$                       | 1.0   | 0.0  | 0.0   |       |  |
| $lab^*tch$                       | 1.0   | 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) |       |       |        |       |  |
|----------------------------------|-------|-------|--------|-------|--|
| $olvi3^*$                        | 1.0   | 0.5   | 0.5    | (1.0) |  |
| $cmyn3^*$                        | 0.0   | 0.5   | 0.5    | (0.0) |  |
| $olvi4^*$                        | 1.0   | 0.5   | 0.5    | 1.0   |  |
| $cmyn4^*$                        | 0.0   | 0.5   | 0.5    | 0.0   |  |
| standard and adapted CIELAB      |       |       |        |       |  |
| $LAB^*LAB$                       | 71.27 | 42.34 | 18.63  |       |  |
| $LAB^*Lab$                       | 71.27 | 42.31 | 18.62  |       |  |
| $LAB^*TCh$                       | 75.0  | 46.23 | 23.75  |       |  |
| relative CIELAB lab*             |       |       |        |       |  |
| $lab^*lab$                       | 0.714 | 0.458 | 0.201  |       |  |
| $lab^*tch$                       | 0.75  | 0.5   | 0.066  |       |  |
| $lab^*nch$                       | 0.0   | 0.5   | 0.066  |       |  |
| $lab^*trj$                       | 0.714 | 0.5   | -0.011 |       |  |
| $lab^*tce$                       | 0.75  | 0.5   | 0.996  |       |  |
| $lab^*nce$                       | 0.0   | 0.5   | 0.998  |       |  |

| relative Inform. Technology (IT) |       |       |        |       |  |
|----------------------------------|-------|-------|--------|-------|--|
| $olvi3^*$                        | 1.0   | 0.0   | 1.0    | (1.0) |  |
| $cmyn3^*$                        | 0.0   | 1.0   | 0.0    | (0.0) |  |
| $olvi4^*$                        | 1.0   | 0.0   | 1.0    | 1.0   |  |
| $cmyn4^*$                        | 0.0   | 1.0   | 0.0    | 0.0   |  |
| standard and adapted CIELAB      |       |       |        |       |  |
| $LAB^*LAB$                       | 47.15 | 84.68 | 37.26  |       |  |
| $LAB^*Lab$                       | 47.15 | 84.63 | 37.24  |       |  |
| $LAB^*TCh$                       | 50.0  | 92.46 | 23.75  |       |  |
| relative CIELAB lab*             |       |       |        |       |  |
| $lab^*lab$                       | 0.428 | 0.915 | 0.403  |       |  |
| $lab^*tch$                       | 0.428 | 1.0   | 0.066  |       |  |
| $lab^*nch$                       | 0.0   | 1.0   | 0.066  |       |  |
| relative Natural Colour (NC)     |       |       |        |       |  |
| $lab^*trj$                       | 0.428 | 1.0   | -0.023 |       |  |
| $lab^*tce$                       | 0.5   | 1.0   | 0.996  |       |  |
| $lab^*nce$                       | 0.0   | 1.0   | 0.998  |       |  |



0.030-7, 3 step scales for constant CIELAB hue 30/360 = 0.083 (left)

3 step scales for constant CIELAB hue 24/360 = 0.066 (right)

BAM-test chart TE03; Colorimetric systems MRS18 and NCS11a input: olv\* setrgcolor  
D65: 3 step colour scales and coordinate data for 10 hues

output: no change compared to input