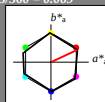


# Input: Colorimetric Natural Reflective System CNS18

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

D65: hue R  
LCH\*Ma: 57 77 25  
olv\*Ma: 1.0 0.0 0.0  
triangle lightness  $t^*$



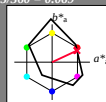
%Gamut  
 $u^*_{rel} = 100$   
%Regularity  
 $g^*_{H,rel} = 59$   
 $g^*_{C,rel} = 100$

| CNS18; adapted (a) CIELAB data |         |         |              |              |
|--------------------------------|---------|---------|--------------|--------------|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| RMa                            | 56.7    | 70.15   | 32.71        | 77.4         |
| YMa                            | 56.7    | -2.69   | 77.35        | 77.4         |
| GMa                            | 56.7    | -73.6   | 23.92        | 77.4         |
| BMa                            | 56.7    | -71.24  | -30.23       | 77.4         |
| G50BMa                         | 56.7    | 2.7     | -77.34       | 77.4         |
| B50BMa                         | 56.7    | 63.4    | -44.38       | 77.4         |
| NMa                            | 18.01   | 0.0     | 0.0          | 0.0          |
| WMa                            | 95.41   | 0.0     | 0.0          | 0.0          |
| RCIE                           | 39.92   | 58.74   | 27.99        | 65.07        |
| ICIE                           | 81.26   | -2.52   | 76.25        | 76.29        |
| GCIE                           | 52.23   | -42.41  | 13.6         | 44.55        |
| BCIE                           | 30.57   | 1.41    | -46.46       | 46.49        |

# Output: Colorimetric Printer Reflective System FRS06

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

D65: hue R  
LCH\*Ma: 53 73 25  
olv\*Ma: 1.0 0.0 0.2  
triangle lightness  $t^*$



%Gamut  
 $u^*_{rel} = 115$   
%Regularity  
 $g^*_{H,rel} = 28$   
 $g^*_{C,rel} = 38$

| FRS06; adapted (a) CIELAB data |         |         |              |              |
|--------------------------------|---------|---------|--------------|--------------|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| OMa                            | 32.57   | 62.32   | 46.49        | 77.75        |
| YMa                            | 82.73   | -3.16   | 113.99       | 114.03       |
| GMa                            | 39.43   | -61.79  | 45.84        | 76.95        |
| VMa                            | 47.86   | -26.79  | -34.24       | 43.49        |
| WMa                            | 10.16   | 55.12   | -61.03       | 82.24        |
| NMa                            | 34.5    | 80.68   | -33.92       | 87.52        |
| RCIE                           | 6.25    | 0.0     | 0.0          | 0.0          |
| WMa                            | 91.97   | 0.0     | 0.0          | 0.0          |
| RCIE                           | 39.92   | 59.8    | 31.05        | 67.38        |
| ICIE                           | 81.26   | -2.52   | 76.25        | 76.29        |
| GCIE                           | 52.23   | -41.56  | 17.14        | 44.96        |
| BCIE                           | 30.57   | 2.63    | -43.77       | 43.86        |

| relative Inform. Technology (IT) |       |       |       |       |
|----------------------------------|-------|-------|-------|-------|
| $olv3^*$                         | 1.0   | 1.0   | 1.0   | (1.0) |
| $cmyn3^*$                        | 0.0   | 0.0   | 0.0   | (0.0) |
| $olv4^*$                         | 1.0   | 1.0   | 1.0   | 1.0   |
| $cmyn4^*$                        | 0.0   | 0.0   | 0.0   | 0.0   |
| standard and adapted CIELAB      |       |       |       |       |
| LAB*LAB                          | 91.97 | -0.17 | -5.11 |       |
| LAB*Lab                          | 91.97 | 0.0   | 0.0   |       |
| LAB*TChe                         | 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   | -     |       |

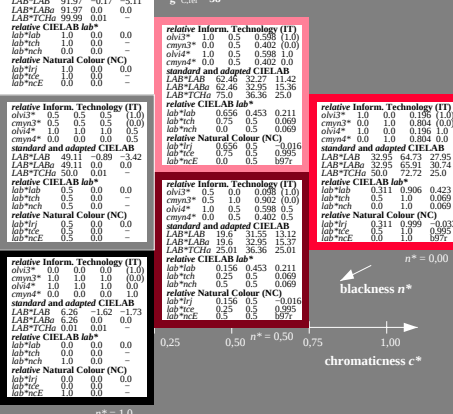
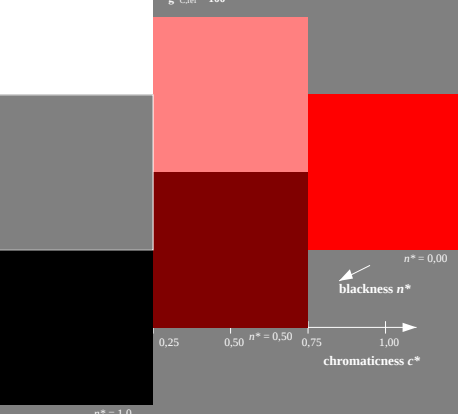
| relative Inform. Technology (IT) |       |       |        |       |
|----------------------------------|-------|-------|--------|-------|
| $olv3^*$                         | 1.0   | 0.5   | 0.598  | (1.0) |
| $cmyn3^*$                        | 0.0   | 0.5   | 0.402  | (0.0) |
| $olv4^*$                         | 1.0   | 0.5   | 0.598  | 1.0   |
| $cmyn4^*$                        | 0.0   | 0.5   | 0.402  | 0.0   |
| standard and adapted CIELAB      |       |       |        |       |
| LAB*LAB                          | 62.46 | 32.27 | 11.42  |       |
| LAB*Lab                          | 62.46 | 32.25 | 15.36  |       |
| LAB*TChe                         | 75.0  | 36.36 | 25.0   |       |
| relative CIELAB lab*             |       |       |        |       |
| $lab^*lab$                       | 0.656 | 0.453 | 0.211  |       |
| $lab^*tch$                       | 0.75  | 0.5   | 0.069  |       |
| $lab^*nch$                       | 0.9   | 0.5   | 0.069  |       |
| relative Natural Colour (NC)     |       |       |        |       |
| $lab^*trj$                       | 0.656 | 0.5   | -0.016 |       |
| $lab^*tce$                       | 0.75  | 0.5   | 0.995  |       |
| $lab^*nce$                       | 0.9   | 0.5   | 0.977  |       |

| relative Inform. Technology (IT) |       |       |        |       |
|----------------------------------|-------|-------|--------|-------|
| $olv3^*$                         | 1.0   | 0.0   | 0.196  | (1.0) |
| $cmyn3^*$                        | 0.0   | 1.0   | 0.804  | (0.0) |
| $olv4^*$                         | 1.0   | 0.0   | 0.196  | 1.0   |
| $cmyn4^*$                        | 0.0   | 1.0   | 0.804  | 0.0   |
| standard and adapted CIELAB      |       |       |        |       |
| LAB*LAB                          | 32.95 | 64.73 | 27.95  |       |
| LAB*Lab                          | 32.95 | 65.91 | 30.74  |       |
| LAB*TChe                         | 50.0  | 72.72 | 25.0   |       |
| relative CIELAB lab*             |       |       |        |       |
| $lab^*lab$                       | 0.311 | 0.906 | 0.423  |       |
| $lab^*tch$                       | 0.5   | 1.0   | 0.069  |       |
| $lab^*nch$                       | 0.0   | 1.0   | 0.069  |       |
| relative Natural Colour (NC)     |       |       |        |       |
| $lab^*trj$                       | 0.311 | 0.999 | -0.033 |       |
| $lab^*tce$                       | 0.5   | 1.0   | 0.995  |       |
| $lab^*nce$                       | 0.0   | 1.0   | 0.977  |       |

| 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                          | 6.26 | -1.62 | -1.73 |       |
| LAB*Lab                          | 6.26 | 0.0   | 0.0   |       |
| LAB*TChe                         | 0.01 | 0.01  | 0.0   |       |
| relative CIELAB lab*             |      |       |       |       |
| $lab^*lab$                       | 0.0  | 0.0   | 0.0   |       |
| $lab^*tch$                       | 0.0  | 0.0   | -     |       |
| $lab^*nch$                       | 1.0  | 1.0   | -     |       |
| 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   | 0.0   | 0.098  | (1.0) |
| $cmyn3^*$                        | 0.5   | 1.0   | 0.902  | (0.0) |
| $olv4^*$                         | 1.0   | 0.5   | 0.598  | 0.5   |
| $cmyn4^*$                        | 0.0   | 0.5   | 0.402  | 0.5   |
| standard and adapted CIELAB      |       |       |        |       |
| LAB*LAB                          | 19.6  | 31.55 | 13.12  |       |
| LAB*Lab                          | 19.6  | 32.95 | 15.37  |       |
| LAB*TChe                         | 25.01 | 36.36 | 25.01  |       |
| relative CIELAB lab*             |       |       |        |       |
| $lab^*lab$                       | 0.156 | 0.453 | 0.211  |       |
| $lab^*tch$                       | 0.25  | 0.5   | 0.069  |       |
| $lab^*nch$                       | 0.5   | 0.5   | 0.069  |       |
| relative Natural Colour (NC)     |       |       |        |       |
| $lab^*trj$                       | 0.156 | 0.5   | -0.016 |       |
| $lab^*tce$                       | 0.25  | 0.5   | 0.995  |       |
| $lab^*nce$                       | 0.5   | 0.5   | 0.977  |       |

| relative Inform. Technology (IT) |       |       |        |  |
|----------------------------------|-------|-------|--------|--|
| $olv3^*$                         | 0.311 | 0.906 | 0.423  |  |
| $cmyn3^*$                        | 0.5   | 1.0   | 0.069  |  |
| $olv4^*$                         | 0.0   | 1.0   | 0.069  |  |
| relative Natural Colour (NC)     |       |       |        |  |
| $lab^*trj$                       | 0.311 | 0.999 | -0.033 |  |
| $lab^*tce$                       | 0.5   | 1.0   | 0.995  |  |
| $lab^*nce$                       | 0.0   | 1.0   | 0.977  |  |



BAM-test chart VE30; Colorimetric systems CNS18 & FRS06  
D65: 3 step colour scales and coordinate data for 10 hues

input: olv\* setrgbcolor  
output: no change compared to input