

# Input and Output: Laser Reflective System LRS18a

Data for any device (d) or  
elementary (e) colour:

$HIC^*$

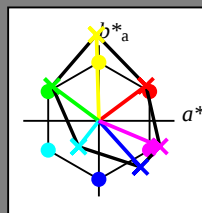
hue text for the colours

of this page:

$H^*_e = R00Y_-, R25Y_-, ..., B75R_-$

## ORS20a; adapted (a) CIELAB data

| $H^*_e$       | $L^*=L^*_a a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------------|-------------------|---------|--------------|--------------|
| R00Y_100_100_ | 48.4              | 66.1    | 40.2         | 77.3         |
| R25Y_100_100_ | 56.8              | 48.0    | 50.5         | 69.6         |
| R50Y_100_100_ | 68.6              | 25.0    | 63.9         | 68.6         |
| R75Y_100_100_ | 80.6              | 4.8     | 77.2         | 77.3         |
| Y00G_100_100_ | 90.2              | -9.6    | 88.2         | 88.7         |
| Y25G_100_100_ | 83.2              | -18.4   | 79.9         | 81.9         |
| Y50G_100_100_ | 73.3              | -31.7   | 62.7         | 70.2         |
| Y75G_100_100_ | 62.0              | -49.7   | 43.2         | 65.8         |
| G00B_100_100_ | 55.8              | -65.2   | 33.8         | 73.4         |
| G25B_100_100_ | 59.3              | -50.3   | -9.0         | 51.0         |
| G50B_100_100_ | 63.0              | -30.5   | -42.0        | 51.9         |
| G75B_100_100_ | 45.7              | -5.7    | -44.6        | 44.9         |
| B00R_100_100_ | 27.5              | 25.9    | -47.3        | 53.9         |
| B25R_100_100_ | 38.3              | 52.6    | -28.5        | 59.8         |
| B50R_100_100_ | 49.5              | 73.5    | -9.0         | 74.0         |
| B75R_100_100_ | 48.9              | 69.3    | 12.9         | 70.4         |



% Gamut

$u^*_{rel} = 114$

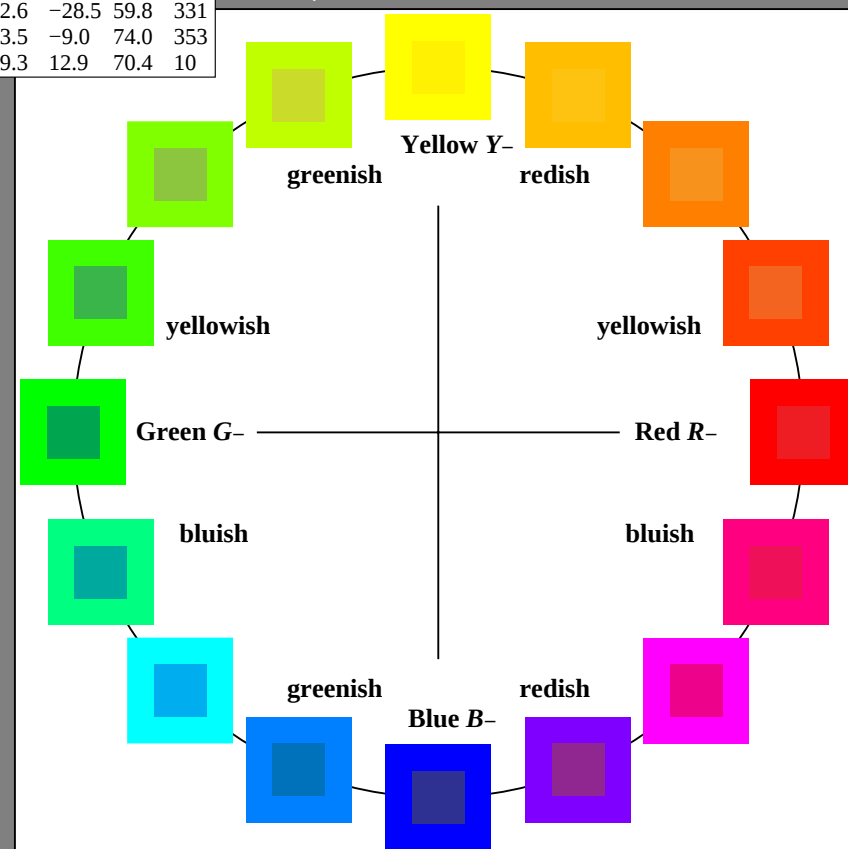
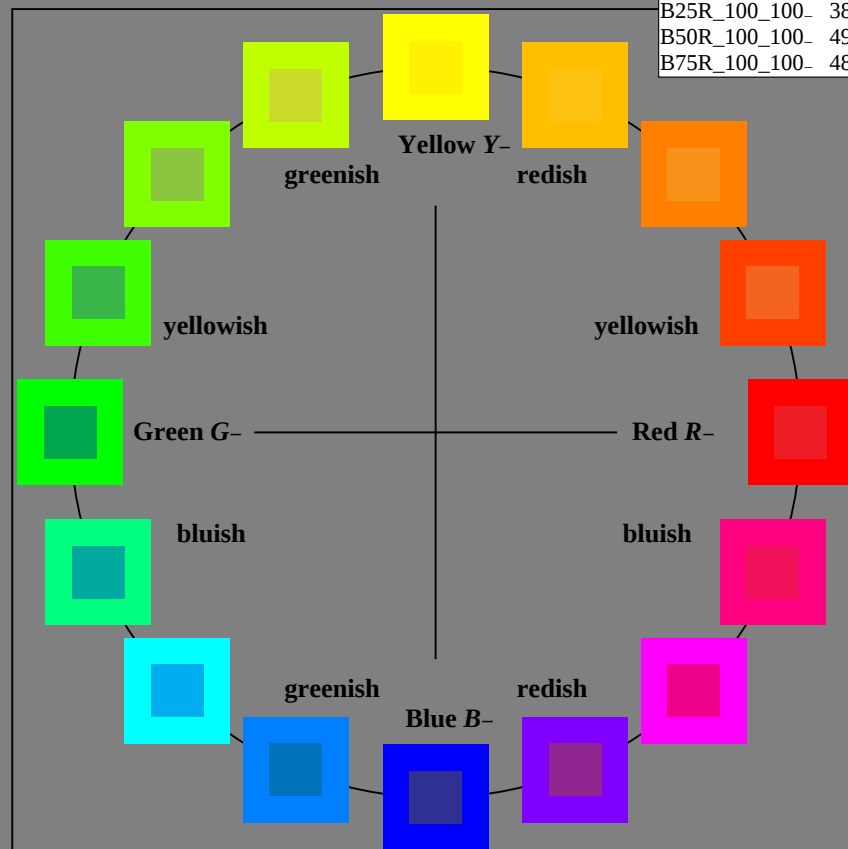
% Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

## LRS18a; adapted (a) CIELAB data

| name    | $L^*=L^*_a a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------|-------------------|---------|--------------|--------------|
| R_-,Ma  | 32.5              | 62.3    | 46.4         | 77.7         |
| Y_-,Ma  | 82.7              | -3.1    | 113.9        | 114.0        |
| G_-,Ma  | 39.4              | -61.8   | 45.8         | 76.9         |
| C_-,Ma  | 47.8              | -26.8   | -34.2        | 43.4         |
| B_-,Ma  | 10.1              | 55.1    | -61.0        | 82.2         |
| M_-,Ma  | 34.5              | 80.6    | -33.9        | 87.5         |
| N_-,Ma  | 6.2               | 0.0     | 0.0          | 0.0          |
| W_-,Ma  | 91.9              | 0.0     | 0.0          | 0.0          |
| R_-,CIE | 39.9              | 58.7    | 27.9         | 65.0         |
| Y_-,CIE | 81.2              | -2.8    | 71.5         | 71.6         |
| G_-,CIE | 52.2              | -42.4   | 13.6         | 44.5         |
| B_-,CIE | 30.5              | 1.4     | -46.4        | 46.4         |



RE820-7N\_RGB 1-103030-L0

TUB-test chart RE82; 16 step hue circle,  $cf=1$   
Test chart according to DIN 33872

input:  $rgb/cmyk \rightarrow rgb/cmyk$   
output: no change

# Input and Output: Laser Reflective System LRS18a

Data for any device (d) or  
elementary (e) colour:

$HIC^*_d$

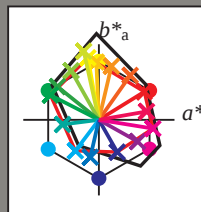
hue text for the colours

of this page:

$H^*_d = R00Y_d, R25Y_d, \dots, B75R_d$

## LRS18a; adapted (a) CIELAB data

| $H^*_d$        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|----------------|-------------|---------|---------|--------------|--------------|
| R00Y_100_100_d | 47.0        | 60.1    | 37.1    | 70.6         | 31           |
| R25Y_100_100_d | 59.3        | 41.4    | 58.7    | 71.9         | 54           |
| R50Y_100_100_d | 72.6        | 16.6    | 70.9    | 72.8         | 76           |
| R75Y_100_100_d | 84.3        | -3.3    | 76.4    | 76.5         | 92           |
| Y00G_100_100_d | 91.3        | -14.5   | 82.1    | 83.4         | 100          |
| Y25G_100_100_d | 91.1        | -20.0   | 90.8    | 92.9         | 102          |
| Y50G_100_100_d | 74.8        | -36.6   | 64.9    | 74.5         | 119          |
| Y75G_100_100_d | 61.6        | -54.7   | 43.8    | 70.1         | 141          |
| G00B_100_100_d | 55.7        | -64.0   | 32.6    | 71.8         | 152          |
| G25B_100_100_d | 57.5        | -47.9   | -6.0    | 48.3         | 187          |
| G50B_100_100_d | 53.0        | -31.0   | -40.9   | 51.4         | 232          |
| G75B_100_100_d | 46.1        | -11.3   | -49.4   | 50.6         | 257          |
| B00R_100_100_d | 32.3        | 24.2    | -42.5   | 48.9         | 299          |
| B25R_100_100_d | 35.9        | 51.1    | -28.6   | 58.6         | 330          |
| B50R_100_100_d | 47.1        | 71.4    | -11.5   | 72.3         | 350          |
| B75R_100_100_d | 45.9        | 63.0    | 11.0    | 64.0         | 9            |



% Gamut

$u^*_{rel} = 114$

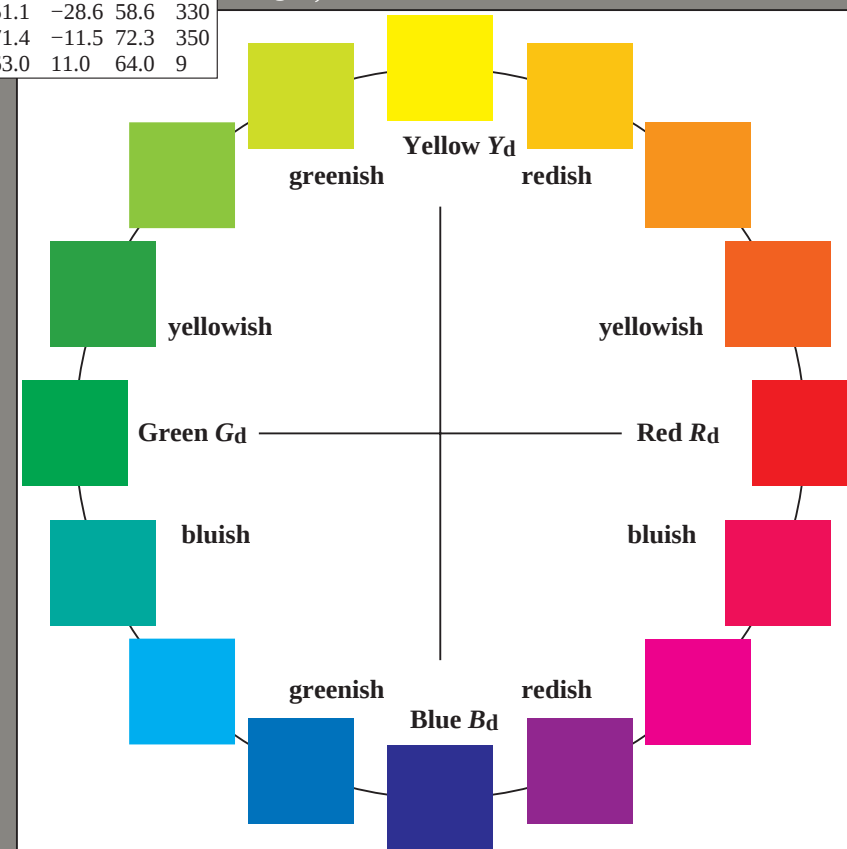
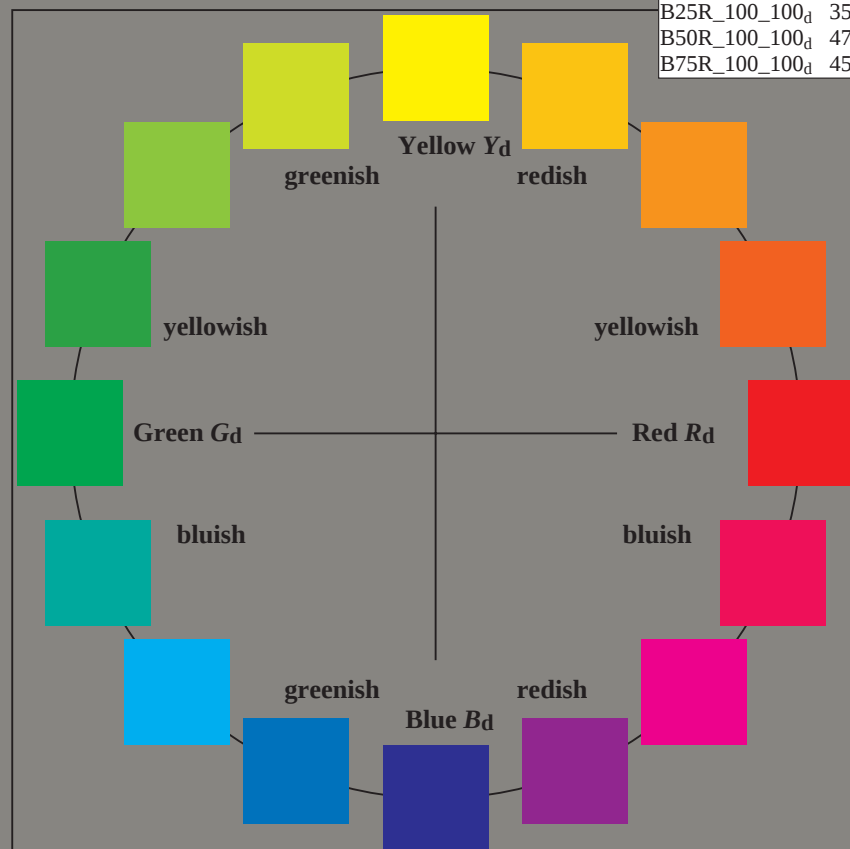
% Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

## LRS18a; adapted (a) CIELAB data

| name                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------------------|-------------|---------|---------|--------------|--------------|
| R <sub>d, Ma</sub>  | 47.0        | 60.1    | 37.1    | 70.6         | 31           |
| Y <sub>d, Ma</sub>  | 91.3        | -14.5   | 82.1    | 83.4         | 100          |
| G <sub>d, Ma</sub>  | 55.7        | -64.0   | 32.6    | 71.8         | 152          |
| C <sub>d, Ma</sub>  | 53.0        | -31.0   | -40.9   | 51.4         | 232          |
| B <sub>d, Ma</sub>  | 32.3        | 24.2    | -42.5   | 48.9         | 299          |
| M <sub>d, Ma</sub>  | 47.1        | 71.4    | -11.5   | 72.3         | 350          |
| N <sub>d, Ma</sub>  | 14.7        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>d, Ma</sub>  | 96.3        | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>d, CIE</sub> | 39.9        | 58.7    | 27.9    | 65.0         | 25           |
| Y <sub>d, CIE</sub> | 81.2        | -2.8    | 71.5    | 71.6         | 92           |
| G <sub>d, CIE</sub> | 52.2        | -42.4   | 13.6    | 44.5         | 162          |
| B <sub>d, CIE</sub> | 30.5        | 1.4     | -46.4   | 46.4         | 271          |



RE820-72

1-103130-L0

TUB-test chart RE82; 16 step hue circle,  $cf=1$   
Test chart according to DIN 33872, 3D=1,  $de=0$ ,  $cmk^*$

input:  $rgb/cmyk \rightarrow rgb_{dd}$

output: 3D-linearization to  $cmk^*_{dd}$

# Input and Output: Laser Reflective System LRS18a

Data for any device (d) or  
elementary (e) colour:

$HIC^*$

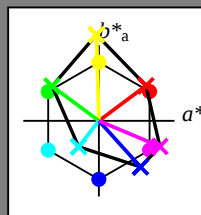
hue text for the colours

of this page:

$H^*_e = R00Y_e, R25Y_e, \dots, B75R_e$

## ORS20a; adapted (a) CIELAB data

| $H^*_e$       | $L^*=L^*_a a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------------|-------------------|---------|--------------|--------------|
| R00Y_100_100_ | 48.4              | 66.1    | 40.2         | 77.3         |
| R25Y_100_100_ | 56.8              | 48.0    | 50.5         | 69.6         |
| R50Y_100_100_ | 68.6              | 25.0    | 63.9         | 68.6         |
| R75Y_100_100_ | 80.6              | 4.8     | 77.2         | 77.3         |
| Y00G_100_100_ | 90.2              | -9.6    | 88.2         | 88.7         |
| Y25G_100_100_ | 83.2              | -18.4   | 79.9         | 81.9         |
| Y50G_100_100_ | 73.3              | -31.7   | 62.7         | 70.2         |
| Y75G_100_100_ | 62.0              | -49.7   | 43.2         | 65.8         |
| G00B_100_100_ | 55.8              | -65.2   | 33.8         | 73.4         |
| G25B_100_100_ | 59.3              | -50.3   | -9.0         | 51.0         |
| G50B_100_100_ | 63.0              | -30.5   | -42.0        | 51.9         |
| G75B_100_100_ | 45.7              | -5.7    | -44.6        | 44.9         |
| B00R_100_100_ | 27.5              | 25.9    | -47.3        | 53.9         |
| B25R_100_100_ | 38.3              | 52.6    | -28.5        | 59.8         |
| B50R_100_100_ | 49.5              | 73.5    | -9.0         | 74.0         |
| B75R_100_100_ | 48.9              | 69.3    | 12.9         | 70.4         |



% Gamut

$u^*_{rel} = 114$

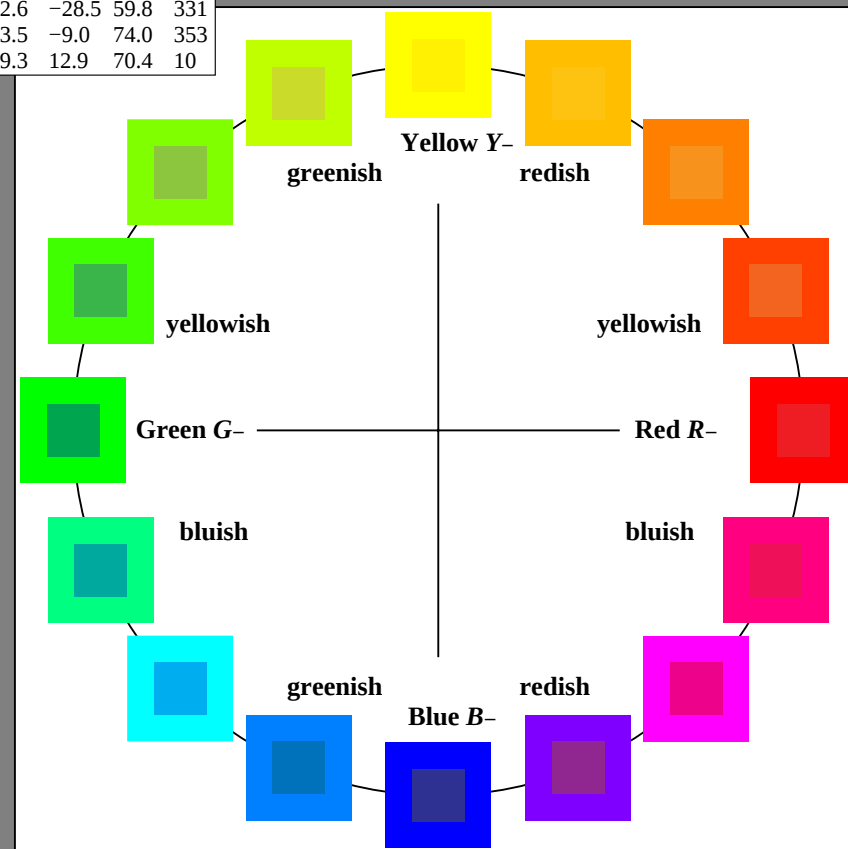
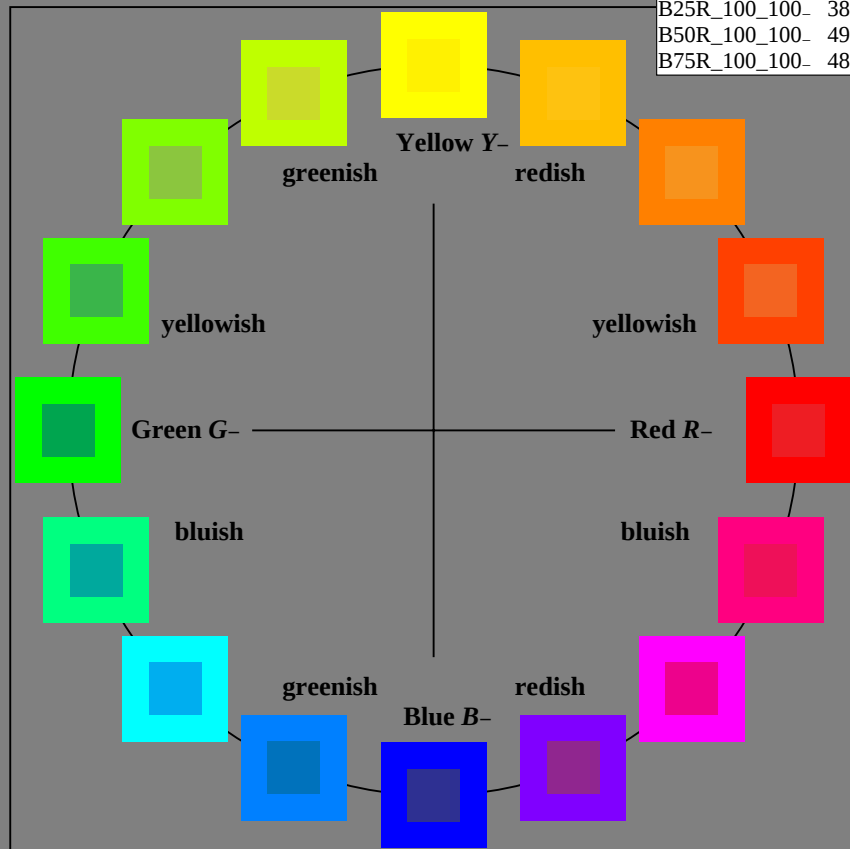
% Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

## LRS18a; adapted (a) CIELAB data

| name    | $L^*=L^*_a a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------|-------------------|---------|--------------|--------------|
| R_.,Ma  | 32.5              | 62.3    | 46.4         | 77.7         |
| Y_.,Ma  | 82.7              | -3.1    | 113.9        | 114.0        |
| G_.,Ma  | 39.4              | -61.8   | 45.8         | 76.9         |
| C_.,Ma  | 47.8              | -26.8   | -34.2        | 43.4         |
| B_.,Ma  | 10.1              | 55.1    | -61.0        | 82.2         |
| M_.,Ma  | 34.5              | 80.6    | -33.9        | 87.5         |
| N_.,Ma  | 6.2               | 0.0     | 0.0          | 0.0          |
| W_.,Ma  | 91.9              | 0.0     | 0.0          | 0.0          |
| R_.,CIE | 39.9              | 58.7    | 27.9         | 65.0         |
| Y_.,CIE | 81.2              | -2.8    | 71.5         | 71.6         |
| G_.,CIE | 52.2              | -42.4   | 13.6         | 44.5         |
| B_.,CIE | 30.5              | 1.4     | -46.4        | 46.4         |



RE82-7N\_RGB 1-113030-L0

TUB-test chart RE82; 16 step hue circle,  $cf=1$   
Test chart according to DIN 33872

input:  $rgb/cmyk \rightarrow rgb/cmyk$   
output: no change

# Input and Output: Laser Reflective System LRS18a

Data for any device (d) or elementary (e) colour:

$$HIC_e^*$$

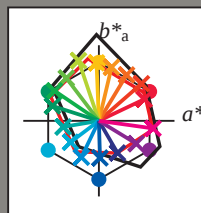
hue text for the colours

of this page:

$$H_e^* = R00Y_e, R25Y_e, \dots, B75R_e$$

## LRS18a; adapted (a) CIELAB data

| $H_e^*$        | $L^*=L_a^* a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|----------------|-------------------|---------|--------------|--------------|
| R00Y_100_100_e | 46.3              | 60.0    | 28.5         | 66.4         |
| R25Y_100_100_e | 51.3              | 56.3    | 49.1         | 74.7         |
| R50Y_100_100_e | 61.8              | 36.6    | 60.7         | 70.9         |
| R75Y_100_100_e | 72.5              | 16.7    | 70.9         | 72.8         |
| Y00G_100_100_e | 84.1              | -3.0    | 76.7         | 92           |
| Y25G_100_100_e | 84.5              | -26.8   | 79.7         | 84.1         |
| Y50G_100_100_e | 69.6              | -42.9   | 56.4         | 70.9         |
| Y75G_100_100_e | 59.2              | -58.5   | 39.6         | 70.7         |
| G00B_100_100_e | 55.2              | -61.3   | 19.6         | 64.4         |
| G25B_100_100_e | 57.5              | -47.1   | -7.9         | 47.8         |
| G50B_100_100_e | 56.1              | -37.4   | -28.1        | 46.8         |
| G75B_100_100_e | 52.0              | -23.1   | -48.1        | 53.4         |
| B00R_100_100_e | 38.0              | 1.4     | -49.0        | 49.1         |
| B25R_100_100_e | 32.3              | 24.6    | -42.4        | 49.0         |
| B50R_100_100_e | 34.7              | 49.3    | -30.1        | 57.8         |
| B75R_100_100_e | 46.8              | 71.6    | -9.9         | 72.3         |



% Gamut

$u^*_{rel} = 114$

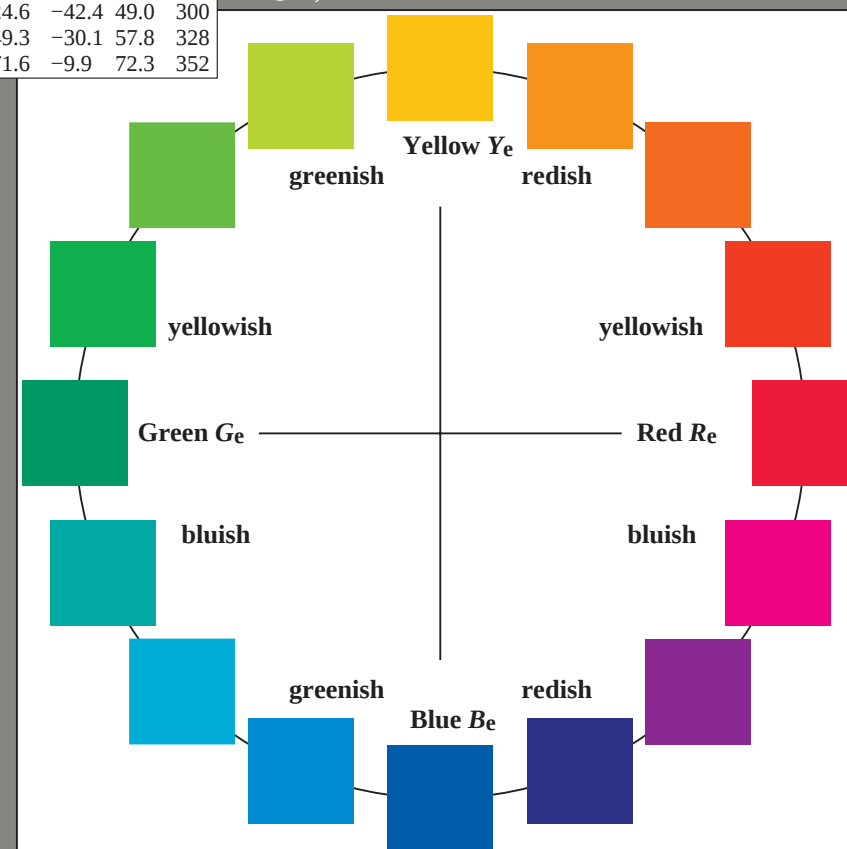
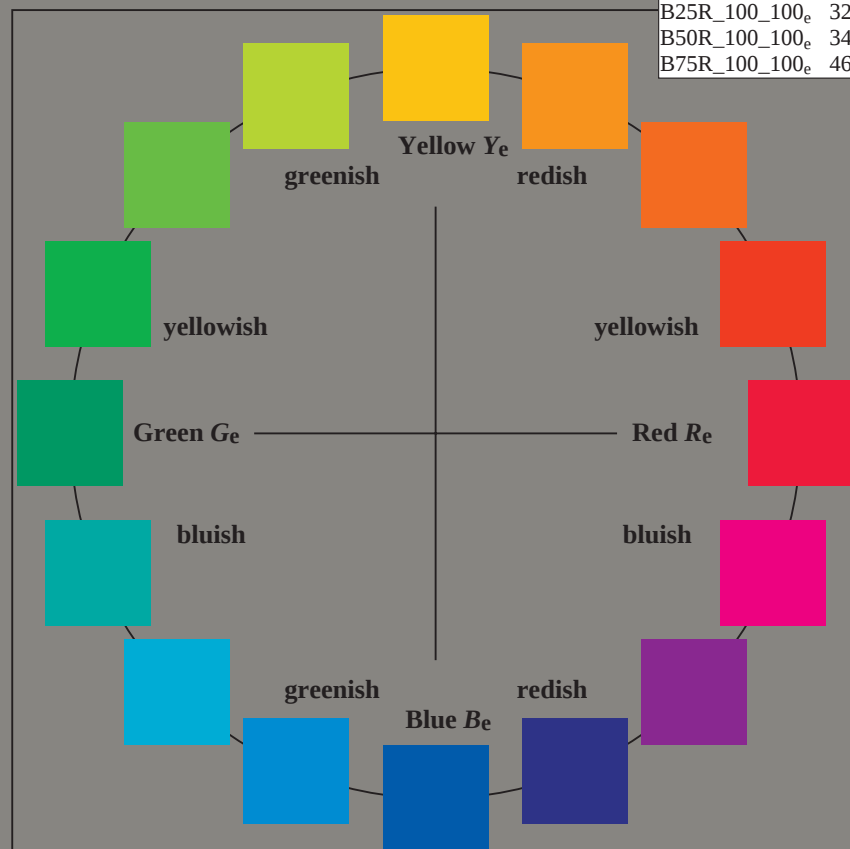
% Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

## LRS18a; adapted (a) CIELAB data

| name                | $L^*=L_a^* a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|---------------------|-------------------|---------|--------------|--------------|
| R <sub>e</sub> ,Ma  | 46.3              | 60.0    | 28.5         | 66.4         |
| Y <sub>e</sub> ,Ma  | 84.1              | -3.0    | 76.7         | 92           |
| G <sub>e</sub> ,Ma  | 55.2              | -61.3   | 19.6         | 64.4         |
| C <sub>e</sub> ,Ma  | 56.1              | -37.4   | -28.1        | 46.8         |
| B <sub>e</sub> ,Ma  | 38.0              | 1.4     | -49.0        | 49.1         |
| M <sub>e</sub> ,Ma  | 34.7              | 49.3    | -30.1        | 57.8         |
| N <sub>e</sub> ,Ma  | 14.7              | 0.0     | 0.0          | 0            |
| W <sub>e</sub> ,Ma  | 96.3              | 0.0     | 0.0          | 0            |
| R <sub>e</sub> ,CIE | 39.9              | 58.7    | 27.9         | 65.0         |
| Y <sub>e</sub> ,CIE | 81.2              | -2.8    | 71.5         | 71.6         |
| G <sub>e</sub> ,CIE | 52.2              | -42.4   | 13.6         | 44.5         |
| B <sub>e</sub> ,CIE | 30.5              | 1.4     | -46.4        | 46.4         |



RE820-73

1-113130-L0

TUB-test chart RE82; 16 step hue circle,  $cf=1$   
Test chart according to DIN 33872, 3D=1,  $de=1$ ,  $cmYk^*$

input:  $rgb/cmyk \rightarrow rgb_{de}$   
output: 3D-linearization to  $cmYk^*_{de}$