

**Eingabe: Farbmétrisches Reflexions-System MRS18**

für Buntton  $h^* = lab^*h = 30/360 = 0.083$

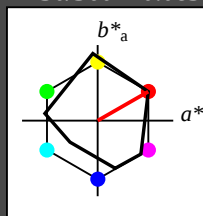
## lab\*tch und lab\*nch

## D65: Buntton R

LCH\*Ma: 50 77 30

```
rgb*Ma: 1.0 0.0 0.0
```

## Dreiecks-Helligkeit

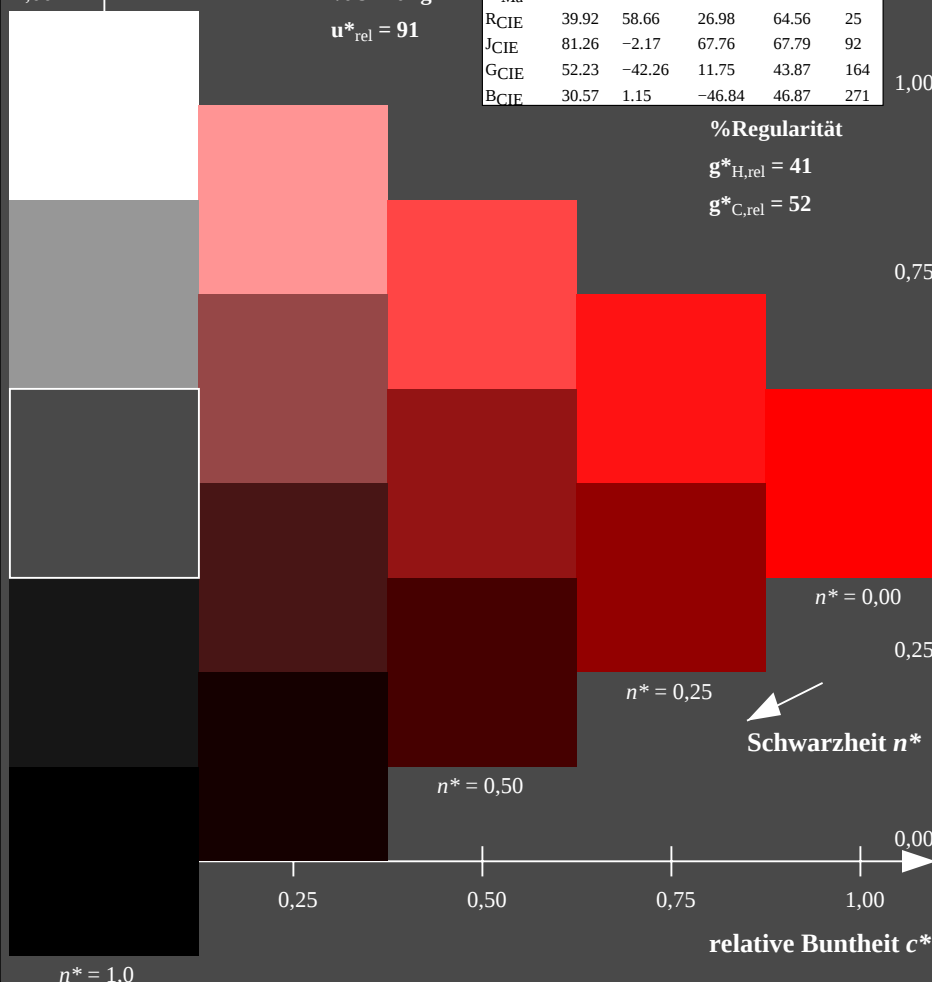


**%Umfang**

$$\mathbf{u}_{\text{rel}}^* = 91$$

| MRS18; adaptierte CIELAB-Daten |               |         |         |              |              |
|--------------------------------|---------------|---------|---------|--------------|--------------|
|                                | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63         | 66.96   | 38.37   | 77.18        | 30           |
| J <sub>Ma</sub>                | 90.7          | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11         | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03         | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65         | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94         | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>               | 39.92         | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub>               | 81.26         | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub>               | 52.23         | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub>               | 30.57         | 1.15    | -46.84  | 46.87        | 271          |

### %Regularität

$$g^*_{H,rel} = 41$$
$$g^*_{C,rel} = 52$$


TG440-7, 5 stufige Reihen für konstanten CIELAB Buntton 30/360 = 0.083 (links)

BAM-Prüfvorlage TG44; Farbmatrik-Systeme MRS18 & MRS18input: *olv\* setrgbcolor*

D65: 5stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *olv\* setrgbcolor / w\* setgray*

**Ausgabe: Farbmétrisches Reflexions-System MRS18**

für Buntton  $h^* = lab^*h = 30/360 = 0.083$

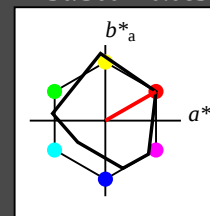
**lab\*tch und lab\*nch**

### D65: Buntton R

**LCH\*Ma: 50 77 30**

rgb\*Ma: 1.0 0.0 0.0

## Dreiecks-Helligkeit

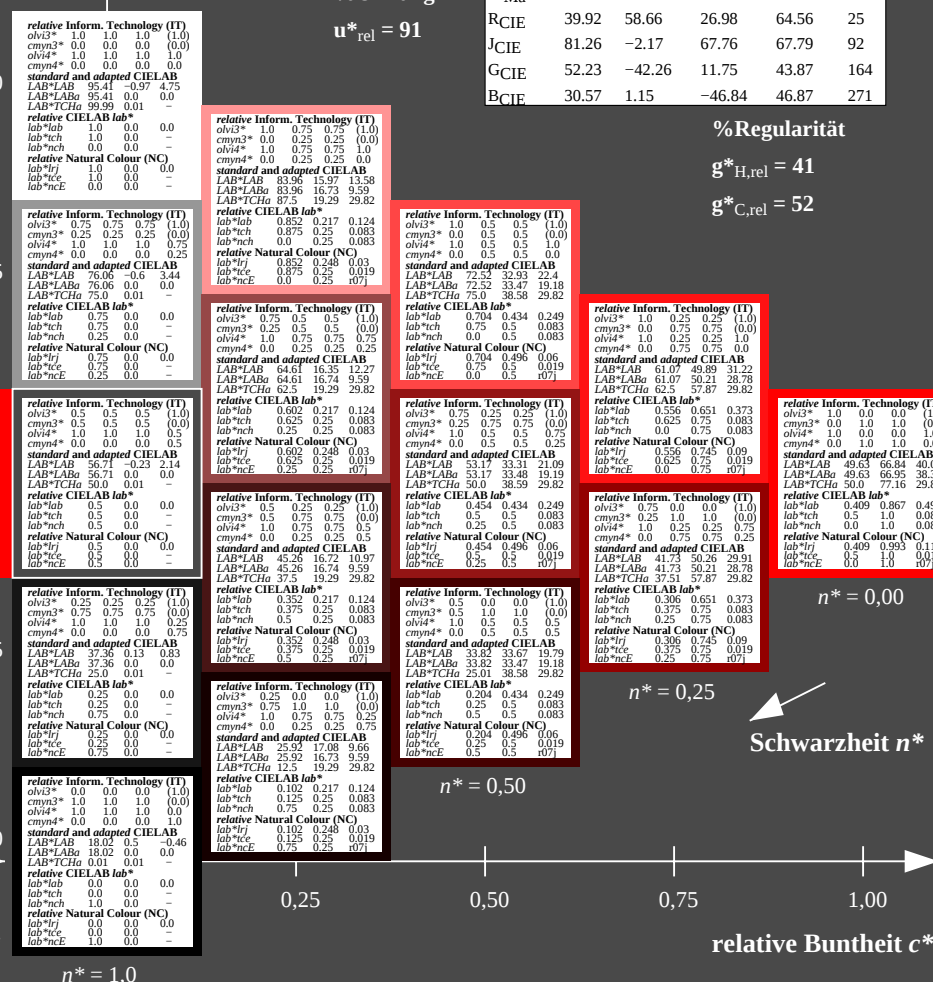
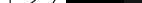


%Umfang

$$\mathbf{u}_{\text{rel}}^* = 91$$

| MRS18; adaptierte CIELAB-Daten |               |         |         |              |              |
|--------------------------------|---------------|---------|---------|--------------|--------------|
|                                | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63         | 66.96   | 38.37   | 77.18        | 30           |
| J <sub>Ma</sub>                | 90.7          | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11         | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03         | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65         | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94         | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>               | 39.92         | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub>               | 81.26         | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub>               | 52.23         | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub>               | 30.57         | 1.15    | -46.84  | 46.87        | 271          |

### %Regularität

$$g^*_{H,rel} = 41$$
$$g^*_{C,rel} = 52$$
5 stufige Reihen für konstanten CIELAB Buntton  $30/360 = 0.083$  (rechts)

BAM-Prüfvorlage TG44; Farbmétrik-Systeme MRS18 & MRS18input: *olv\* setrgbcolor*

D65: 5stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *olv\* setrgbcolor / w\* setgray*

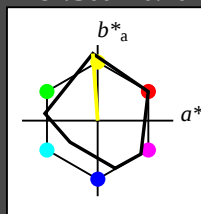
Eingabe: Farbmatisches Reflexions-System MRS18

für Buntton  $h^* = lab^*h = 94/360 = 0.261$

$lab^*tch$  und  $lab^*nch$

D65: Buntton J  
LCH\*Ma: 91 89 94  
rgb\*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit



1,00

%Umfang

$u^*_{rel} = 91$

0,75

0,50

0,25

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

MRS18; adaptierte CIELAB-Daten

|                    | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|---------------|---------|---------|--------------|--------------|
| 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          |
| G50B <sub>Ma</sub> | 45.03         | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>    | 36.65         | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub> | 34.94         | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>    | 18.01         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 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          |

%Regularität

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

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

1,00

0,75

0,50

0,25

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

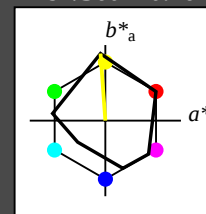
Ausgabe: Farbmatisches Reflexions-System MRS18

für Buntton  $h^* = lab^*h = 94/360 = 0.261$

$lab^*tch$  und  $lab^*nch$

D65: Buntton J  
LCH\*Ma: 91 89 94  
rgb\*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit



1,00

%Umfang

$u^*_{rel} = 91$

0,75

0,50

0,25

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

MRS18; adaptierte CIELAB-Daten

|                    | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|---------------|---------|---------|--------------|--------------|
| 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          |
| G50B <sub>Ma</sub> | 45.03         | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>    | 36.65         | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub> | 34.94         | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>    | 18.01         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 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          |

%Regularität

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

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

1,00

0,75

0,50

0,25

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

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 adopted CIELAB  
LAB\*LAB 95.41 -0.97 4.75  
LAB\*LABa 95.41 0.0 0.0  
LAB\*LABb 95.41 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 1.0 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)  
cmyn3\* 0.25 0.25 0.25 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adopted CIELAB  
LAB\*LAB 76.06 -0.6 3.44  
LAB\*LABa 76.06 0.0 0.0  
LAB\*LABb 76.06 0.0 0.0  
relative CIELAB lab\*  
lab\*lab 0.75 0.0 0.0  
lab\*tch 0.75 0.0 0.0  
lab\*nch 0.75 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 0.25 0.0 0.0

relative Inform. Technology (IT)  
olvi3\* 0.5 0.5 0.5 (1.0)  
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 adopted CIELAB  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 0.0 0.0  
LAB\*LABb 56.71 0.0 0.0  
relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 0.0  
lab\*nch 0.5 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 0.25 0.0 0.0

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 adopted CIELAB  
LAB\*LAB 37.36 0.13 0.83  
LAB\*LABa 37.36 0.0 0.0  
LAB\*LABb 37.36 0.0 0.0  
relative CIELAB lab\*  
lab\*lab 0.25 0.0 0.0  
lab\*tch 0.25 0.0 0.0  
lab\*nch 0.25 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 0.25 0.0 0.0

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adopted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 18.02 0.0 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)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adopted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 18.02 0.0 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)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adopted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 18.02 0.0 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)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adopted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 18.02 0.0 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)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adopted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 18.02 0.0 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)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adopted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 18.02 0.0 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)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olvi4\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adopted CIELAB  
LAB\*LAB 18.02 0.0 0.0  
LAB\*LABa 18.02 0.0 0.0  
LAB\*LABb 18.02 0.0 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\* 1.0 1.0 0.75 (1.0)  
cmyn3\* 0.0 0.0 0.25 (0.0)  
olvi4\* 1.0 1.0 0.75 (1.0)  
cmyn4\* 0.0 0.0 0.25 (0.0)  
standard and adopted CIELAB  
LAB\*LAB 94.22 -2.54 26.86  
LAB\*LABa 94.22 -1.58 22.18  
LAB\*LABb 94.22 -1.58 22.18  
relative CIELAB lab\*  
lab\*lab 1.0 0.0 0.0  
lab\*tch 1.0 0.0 0.0  
lab\*nch 1.0 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 0.5 (1.0)  
cmyn3\* 0.25 0.25 0.5 (0.0)  
olvi4\* 1.0 1.0 0.75 (1.0)  
cmyn4\* 0.0 0.0 0.5 (0.0)  
standard and adopted CIELAB  
LAB\*LAB 74.88 -2.17 25.56  
LAB\*LABa 74.88 -1.58 22.18  
LAB\*LABb 7

Eingabe: Farbmatisches Reflexions-System MRS18

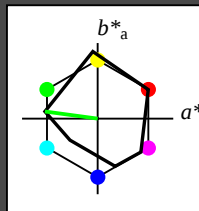
für Buntton  $h^* = lab^*h = 172/360 = 0.479$

$lab^*tch$  und  $lab^*nch$

D65: Buntton G  
LCH\*Ma: 52 70 172  
rgb\*Ma: 0.0 1.0 0.0

Dreiecks-Helligkeit

1,00



%Umfang

$u^*_{rel} = 91$

| MRS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| J <sub>Ma</sub>                | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11       | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 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          |

%Regularität

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

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

1,00

| relative Inform. Technology (IT) |       |       |      |        |      |
|----------------------------------|-------|-------|------|--------|------|
| olvi3*                           | 1.0   | 1.0   | 1.0  | 1.0    | 1.0  |
| cmyn3*                           | 0.0   | 0.0   | 0.0  | 0.0    | 0.0  |
| olvi4*                           | 1.0   | 1.0   | 1.0  | 1.0    | 1.0  |
| cmyn4*                           | 0.0   | 0.0   | 0.0  | 0.0    | 0.0  |
| standard and adapted CIELAB      |       |       |      |        |      |
| LAB*LAB                          | 95.41 | -0.97 | 4.75 | -34.85 | 4.72 |
| LAB*LAB                          | 95.41 | 0.0   | 0.0  | 0.0    | 0.0  |
| LAB*TCh                          | 98.99 | 0.01  | 0.0  | 0.0    | 0.0  |
| relative CIELAB lab*             |       |       |      |        |      |
| lab*lab                          | 1.0   | 0.0   | 0.0  | 0.0    | 0.0  |
| lab*tch                          | 1.0   | 0.0   | 0.0  | 0.0    | 0.0  |
| lab*nch                          | 0.0   | 0.0   | 0.0  | 0.0    | 0.0  |
| lab*trj                          | 1.0   | 0.0   | 0.0  | 0.0    | 0.0  |
| lab*tce                          | 1.0   | 0.0   | 0.0  | 0.0    | 0.0  |
| lab*nce                          | 0.0   | 0.0   | 0.0  | 0.0    | 0.0  |

| relative Inform. Technology (IT) |       |      |      |        |      |
|----------------------------------|-------|------|------|--------|------|
| olvi3*                           | 0.75  | 0.75 | 0.75 | 0.75   | 0.75 |
| cmyn3*                           | 0.25  | 0.25 | 0.25 | 0.25   | 0.25 |
| olvi4*                           | 1.0   | 1.0  | 1.0  | 1.0    | 1.0  |
| cmyn4*                           | 0.0   | 0.0  | 0.0  | 0.0    | 0.0  |
| standard and adapted CIELAB      |       |      |      |        |      |
| LAB*LAB                          | 76.06 | -0.6 | 3.44 | -34.85 | 4.72 |
| LAB*LAB                          | 76.06 | 0.0  | 0.0  | 0.0    | 0.0  |
| LAB*TCh                          | 75.0  | 0.01 | 0.0  | 0.0    | 0.0  |
| relative CIELAB lab*             |       |      |      |        |      |
| lab*lab                          | 0.75  | 0.0  | 0.0  | 0.0    | 0.0  |
| lab*tch                          | 0.75  | 0.0  | 0.0  | 0.0    | 0.0  |
| lab*nch                          | 0.25  | 0.0  | 0.0  | 0.0    | 0.0  |
| lab*trj                          | 0.75  | 0.0  | 0.0  | 0.0    | 0.0  |
| lab*tce                          | 0.75  | 0.0  | 0.0  | 0.0    | 0.0  |
| lab*nce                          | 0.25  | 0.0  | 0.0  | 0.0    | 0.0  |

| relative Inform. Technology (IT) |       |       |      |        |      |
|----------------------------------|-------|-------|------|--------|------|
| olvi3*                           | 0.5   | 0.5   | 0.5  | 0.5    | 0.5  |
| cmyn3*                           | 0.5   | 0.5   | 0.5  | 0.5    | 0.5  |
| olvi4*                           | 1.0   | 1.0   | 1.0  | 1.0    | 1.0  |
| cmyn4*                           | 0.0   | 0.0   | 0.0  | 0.0    | 0.0  |
| standard and adapted CIELAB      |       |       |      |        |      |
| LAB*LAB                          | 56.71 | -0.23 | 2.14 | -34.85 | 4.72 |
| LAB*LAB                          | 56.71 | 0.0   | 0.0  | 0.0    | 0.0  |
| LAB*TCh                          | 50.0  | 0.01  | 0.0  | 0.0    | 0.0  |
| relative CIELAB lab*             |       |       |      |        |      |
| lab*lab                          | 0.5   | 0.0   | 0.0  | 0.0    | 0.0  |
| lab*tch                          | 0.5   | 0.0   | 0.0  | 0.0    | 0.0  |
| lab*nch                          | 0.5   | 0.0   | 0.0  | 0.0    | 0.0  |
| lab*trj                          | 0.5   | 0.0   | 0.0  | 0.0    | 0.0  |
| lab*tce                          | 0.5   | 0.0   | 0.0  | 0.0    | 0.0  |
| lab*nce                          | 0.5   | 0.0   | 0.0  | 0.0    | 0.0  |

| relative Inform. Technology (IT) |       |      |      |        |      |
|----------------------------------|-------|------|------|--------|------|
| olvi3*                           | 0.25  | 0.25 | 0.25 | 0.25   | 0.25 |
| cmyn3*                           | 0.75  | 0.75 | 0.75 | 0.75   | 0.75 |
| olvi4*                           | 1.0   | 1.0  | 1.0  | 1.0    | 1.0  |
| cmyn4*                           | 0.0   | 0.0  | 0.0  | 0.0    | 0.0  |
| standard and adapted CIELAB      |       |      |      |        |      |
| LAB*LAB                          | 37.36 | 0.13 | 0.83 | -34.85 | 4.72 |
| LAB*LAB                          | 37.36 | 0.0  | 0.0  | 0.0    | 0.0  |
| LAB*TCh                          | 25.0  | 0.01 | 0.0  | 0.0    | 0.0  |
| relative CIELAB lab*             |       |      |      |        |      |
| lab*lab                          | 0.25  | 0.0  | 0.0  | 0.0    | 0.0  |
| lab*tch                          | 0.25  | 0.0  | 0.0  | 0.0    | 0.0  |
| lab*nch                          | 0.75  | 0.0  | 0.0  | 0.0    | 0.0  |
| lab*trj                          | 0.25  | 0.0  | 0.0  | 0.0    | 0.0  |
| lab*tce                          | 0.25  | 0.0  | 0.0  | 0.0    | 0.0  |
| lab*nce                          | 0.75  | 0.0  | 0.0  | 0.0    | 0.0  |

| relative Inform. Technology (IT) |       |     |       |        |      |
|----------------------------------|-------|-----|-------|--------|------|
| olvi3*                           | 0.0   | 0.0 | 0.0   | 0.0    | 0.0  |
| cmyn3*                           | 1.0   | 1.0 | 1.0   | 1.0    | 1.0  |
| olvi4*                           | 1.0   | 1.0 | 1.0   | 1.0    | 1.0  |
| cmyn4*                           | 0.0   | 0.0 | 0.0   | 0.0    | 0.0  |
| standard and adapted CIELAB      |       |     |       |        |      |
| LAB*LAB                          | 18.02 | 0.5 | -0.46 | -34.85 | 4.72 |
| LAB*LAB                          | 18.02 | 0.0 | 0.0   | 0.0    | 0.0  |
| LAB*TCh                          | 0.01  | 0.0 | 0.0   | 0.0    | 0.0  |
| relative CIELAB lab*             |       |     |       |        |      |
| lab*lab                          | 0.0   | 0.0 | 0.0   | 0.0    | 0.0  |
| lab*tch                          | 0.0   | 0.0 | 0.0   | 0.0    | 0.0  |
| lab*nch                          | 1.0   | 0.0 | 0.0   | 0.0    | 0.0  |
| lab*trj                          | 0.0   | 0.0 | 0.0   | 0.0    | 0.0  |
| lab*tce                          | 0.0   | 0.0 | 0.0   | 0.0    | 0.0  |
| lab*nce                          | 1.0   | 0.0 | 0.0   | 0.0    | 0.0  |

| relative Inform. Technology (IT) |      |     |     |     |     |
|----------------------------------|------|-----|-----|-----|-----|
| olvi3*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| cmyn3*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| olvi4*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| cmyn4*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| standard and adapted CIELAB      |      |     |     |     |     |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*TCh                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| relative CIELAB lab*             |      |     |     |     |     |
| lab*lab                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tch                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nch                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*trj                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tce                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nce                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |

| relative Inform. Technology (IT) |      |     |     |     |     |
|----------------------------------|------|-----|-----|-----|-----|
| olvi3*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| cmyn3*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| olvi4*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| cmyn4*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| standard and adapted CIELAB      |      |     |     |     |     |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*TCh                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| relative CIELAB lab*             |      |     |     |     |     |
| lab*lab                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tch                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nch                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*trj                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tce                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nce                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |

| relative Inform. Technology (IT) |      |     |     |     |     |
|----------------------------------|------|-----|-----|-----|-----|
| olvi3*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| cmyn3*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| olvi4*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| cmyn4*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| standard and adapted CIELAB      |      |     |     |     |     |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*TCh                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| relative CIELAB lab*             |      |     |     |     |     |
| lab*lab                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tch                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nch                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*trj                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tce                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nce                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |

| relative Inform. Technology (IT) |      |     |     |     |     |
|----------------------------------|------|-----|-----|-----|-----|
| olvi3*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| cmyn3*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| olvi4*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| cmyn4*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| standard and adapted CIELAB      |      |     |     |     |     |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*TCh                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| relative CIELAB lab*             |      |     |     |     |     |
| lab*lab                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tch                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nch                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*trj                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tce                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nce                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |

| relative Inform. Technology (IT) |      |     |     |     |     |
|----------------------------------|------|-----|-----|-----|-----|
| olvi3*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| cmyn3*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| olvi4*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| cmyn4*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| standard and adapted CIELAB      |      |     |     |     |     |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*TCh                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| relative CIELAB lab*             |      |     |     |     |     |
| lab*lab                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tch                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nch                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*trj                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tce                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nce                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |

| relative Inform. Technology (IT) |      |     |     |     |     |
|----------------------------------|------|-----|-----|-----|-----|
| olvi3*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| cmyn3*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| olvi4*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| cmyn4*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| standard and adapted CIELAB      |      |     |     |     |     |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*TCh                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| relative CIELAB lab*             |      |     |     |     |     |
| lab*lab                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tch                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nch                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*trj                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tce                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nce                          | 1.0  | 0.0 | 0.0 | 0.0 | 0.0 |

| relative Inform. Technology (IT) |      |     |     |     |     |
|----------------------------------|------|-----|-----|-----|-----|
| olvi3*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| cmyn3*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| olvi4*                           | 1.0  | 1.0 | 1.0 | 1.0 | 1.0 |
| cmyn4*                           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| standard and adapted CIELAB      |      |     |     |     |     |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*LAB                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| LAB*TCh                          | 0.01 | 0.0 | 0.0 | 0.0 | 0.0 |
| relative CIELAB lab*             |      |     |     |     |     |
| lab*lab                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*tch                          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 |
| lab*nch                          | 1.0  |     |     |     |     |

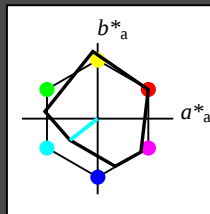
Eingabe: Farbmatisches Reflexions-System MRS18

für Buntton  $h^* = lab^*h = 218/360 = 0.605$

$lab^*tch$  und  $lab^*nch$

D65: Buntton G50B  
LCH\*Ma: 45 46 218  
rgb\*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit



| MRS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| J <sub>Ma</sub>                | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11       | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 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          |

%Regularität

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

relative Buntheit  $c^*$

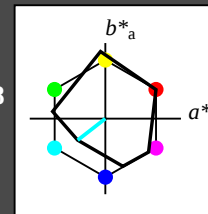
Ausgabe: Farbmatisches Reflexions-System MRS18

für Buntton  $h^* = lab^*h = 218/360 = 0.605$

$lab^*tch$  und  $lab^*nch$

D65: Buntton G50B  
LCH\*Ma: 45 46 218  
rgb\*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit



| MRS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| J <sub>Ma</sub>                | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11       | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 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          |

%Regularität

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

relative Buntheit  $c^*$

TG44-7, 5 stufige Reihen für konstanten CIELAB Buntton 218/360 = 0.605 (links)

5 stufige Reihen für konstanten CIELAB Buntton 218/360 = 0.605 (rechts)

BAM-Prüfvorlage TG44; Farbmatrik-Systeme MRS18 & MRS18

D65: 5stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne

input:  $olv^* setrgbcolor$  output:  $olv^* setrgbcolor / w^* setgray$

**Eingabe: Farbmétrisches Reflexions-System MRS18**

für Buntton  $h^* = lab^*h = 290/360 = 0.806$

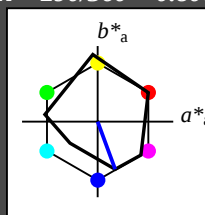
**lab\*tch und lab\*nch**

## D65: Buntton B

**LCH\*Ma: 37 67 290**

**rgb\*Ma: 0.0 0.0 1.0**

## Dreiecks-Helligkeit

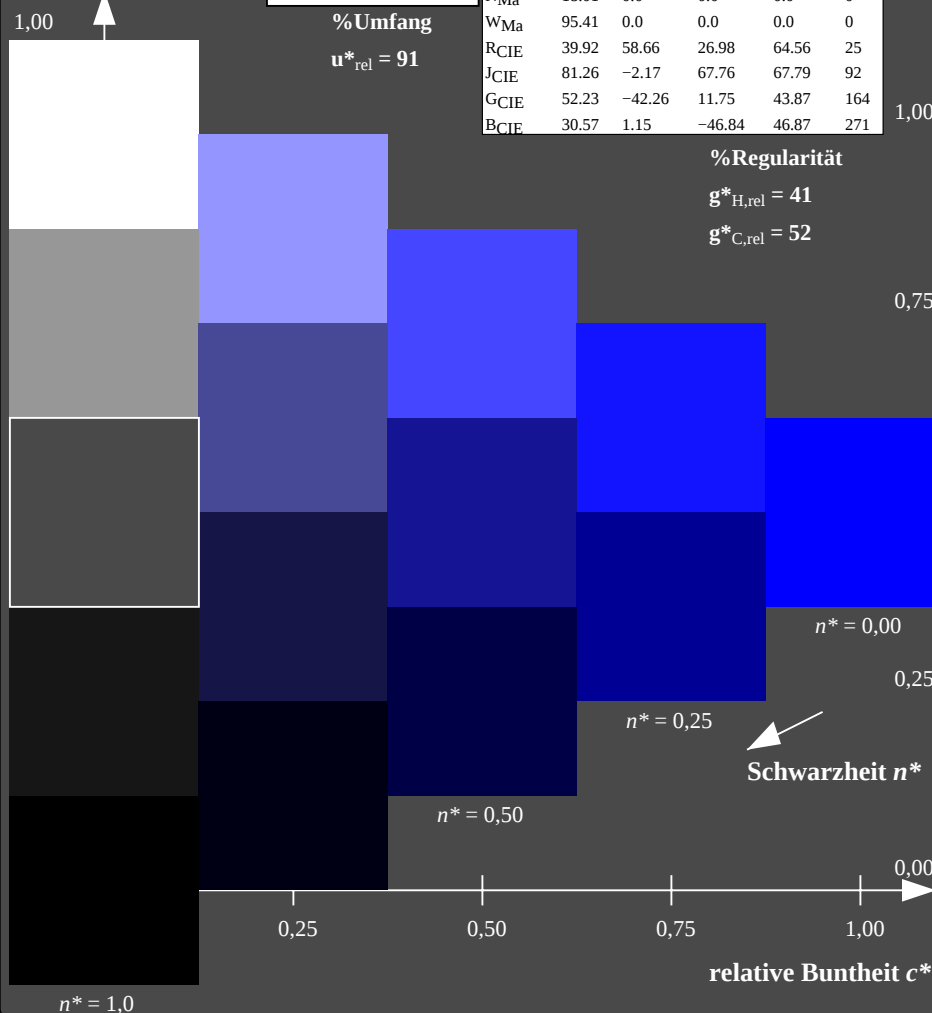


**%Umfang**

$$\mathbf{u}_{\text{rel}}^* = 91$$

| MRS18; adaptierte CIELAB-Daten |               |         |         |              |              |
|--------------------------------|---------------|---------|---------|--------------|--------------|
|                                | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63         | 66.96   | 38.37   | 77.18        | 30.1         |
| J <sub>Ma</sub>                | 90.7          | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11         | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03         | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65         | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94         | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>               | 39.92         | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub>               | 81.26         | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub>               | 52.23         | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub>               | 30.57         | 1.15    | -46.84  | 46.87        | 271          |

### %Regularität

$$g^*_{H_{rel}} = 41$$
$$g^*_{C,rel} = 52$$


TG440-7, 5 stufige Reihen für konstanten CIELAB Buntton  $290/360 = 0.806$  (links)

BAM-Prüfvorlage TG44; Farbmatrik-Systeme MRS18 & MRS18input: *olv\* setrgbcolor*

D65: 5stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: `olv* setrgbcolor / w* setgray`

**Ausgabe: Farbmétrisches Reflexions-System MRS18**

für Buntton  $h^* = lab^*h = 290/360 = 0.806$

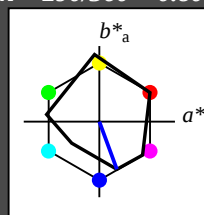
**lab\*tch und lab\*nch**

### D65: Buntton B

**LCH\*Ma: 37 67 290**

**rgb\*Ma: 0.0 0.0 1.0**

## Dreiecks-Helligkeit

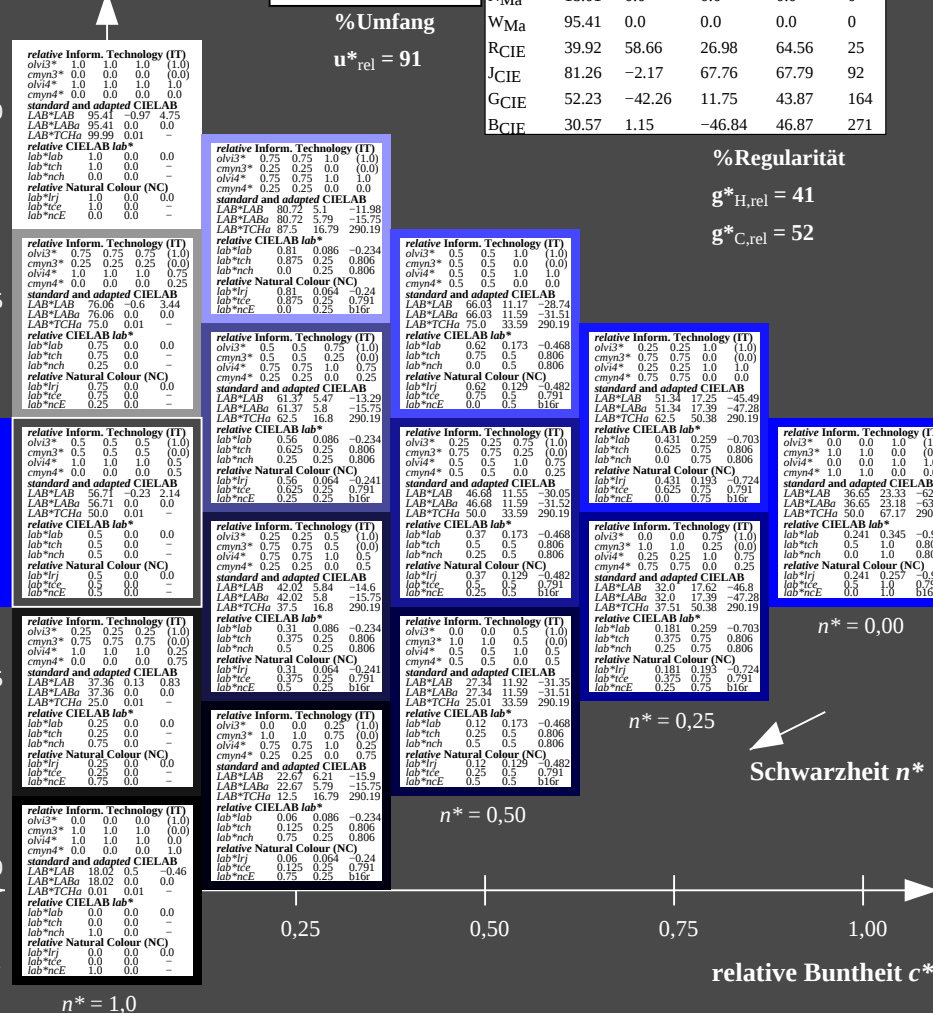


%Umfang

$$\mathbf{u}_{\text{rel}}^* = 91$$

| MRS18; adaptierte CIELAB-Daten |               |         |         |              |              |
|--------------------------------|---------------|---------|---------|--------------|--------------|
|                                | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63         | 66.96   | 38.37   | 77.18        | 30           |
| J <sub>Ma</sub>                | 90.7          | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11         | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03         | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65         | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94         | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>               | 39.92         | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub>               | 81.26         | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub>               | 52.23         | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub>               | 30.57         | 1.15    | -46.84  | 46.87        | 271          |

### %Regularität

$$g^*_{H\text{ rel}} = 41$$
$$g^*_{C,rel} = 52$$


5 stufige Reihen für konstanten CIELAB Buntton 290/360 = 0.806 (rechts)

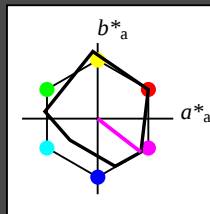
```
8 & MRS18input: olv* setrgbcolor
```

10 Bunttöneoutput: *olv\* setrgbcolor / w\* setgray*

Eingabe: Farbmatisches Reflexions-System MRS18  
für Buntton  $h^* = lab^*h = 322/360 = 0.895$   
 $lab^*tch$  und  $lab^*nch$

D65: Buntton B50R  
LCH\*Ma: 35 72 322  
rgb\*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit



| MRS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| J <sub>Ma</sub>                | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11       | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 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          |

%Regularität

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

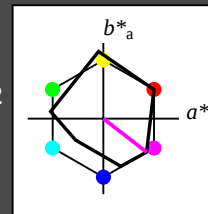
$n^* = 0,50$

relative Buntheit  $c^*$

Ausgabe: Farbmatisches Reflexions-System MRS18  
für Buntton  $h^* = lab^*h = 322/360 = 0.895$   
 $lab^*tch$  und  $lab^*nch$

D65: Buntton B50R  
LCH\*Ma: 35 72 322  
rgb\*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit



| MRS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| J <sub>Ma</sub>                | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11       | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 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          |

%Regularität

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

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

1,00

0,75

0,50

0,25

0,00

0,25

0,50

0,75

1,00

relative Buntheit  $c^*$

$n^* = 1,0$

5 stufige Reihen für konstanten CIELAB Buntton 322/360 = 0.895 (rechts)

BAM-Prüfvorlage TG44; Farbmatrik-Systeme MRS18 & MRS18  
D65: 5stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne  
input: `olv* setrgbcolor`  
output: `olv* setrgbcolor / w* setgray`

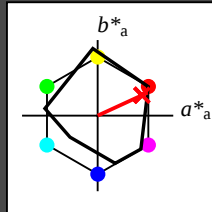
### Eingabe: Farbmatisches Reflexions-System MRS18

für Buntton  $h^* = lab^*h = 25/360 = 0.069$

$lab^*tch$  und  $lab^*nch$

D65: Buntton R  
LCH\*Ma: 48 73 25  
rgb\*Ma: 1.0 0.0 0.1

Dreiecks-Helligkeit



| MRS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| J <sub>Ma</sub>                | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11       | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 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          |

%Regularität

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

Schwarzheit  $n^*$

relative Buntheit  $c^*$

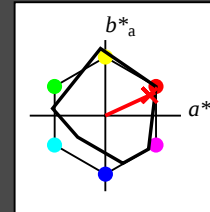
### Ausgabe: Farbmatisches Reflexions-System MRS18

für Buntton  $h^* = lab^*h = 25/360 = 0.069$

$lab^*tch$  und  $lab^*nch$

D65: Buntton R  
LCH\*Ma: 48 73 25  
rgb\*Ma: 1.0 0.0 0.1

Dreiecks-Helligkeit



| MRS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| J <sub>Ma</sub>                | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11       | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 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          |

%Regularität

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

Schwarzheit  $n^*$

$n^* = 0,50$

relative Buntheit  $c^*$

TG44-7, 5 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.069 (links)

5 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.069 (rechts)

BAM-Prüfvorlage TG44; Farbmatrik-Systeme MRS18 & MRS18input:  $olv^* setrgbcolor$

D65: 5stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput:  $olv^* setrgbcolor / w^* setgray$

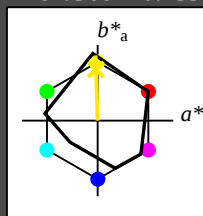
## Eingabe: Farbmatisches Reflexions-System MRS18

für Buntton  $h^* = lab^*h = 92/360 = 0.255$

$lab^*tch$  und  $lab^*nch$

D65: Buntton J  
LCH\*Ma: 89 86 92  
rgb\*Ma: 1.0 0.95 0.0

Dreiecks-Helligkeit



| MRS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| 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          |
| G50B <sub>Ma</sub>             | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 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          |

%Regularität

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

relative Buntheit  $c^*$

TG44-7, 5 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.255 (links)

BAM-Prüfvorlage TG44; Farbmatrik-Systeme MRS18 & MRS18

D65: 5stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne

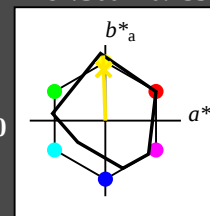
## Ausgabe: Farbmatisches Reflexions-System MRS18

für Buntton  $h^* = lab^*h = 92/360 = 0.255$

$lab^*tch$  und  $lab^*nch$

D65: Buntton J  
LCH\*Ma: 89 86 92  
rgb\*Ma: 1.0 0.95 0.0

Dreiecks-Helligkeit



| MRS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| 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          |
| G50B <sub>Ma</sub>             | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 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          |

%Regularität

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

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

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

relative Buntheit  $c^*$

5 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.255 (rechts)

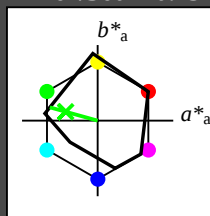
**Eingabe: Farbmétrisches Reflexions-System MRS18**

für Buntton  $h^* = lab^*h = 164/360 = 0.457$

## lab\*tch und lab\*nch

D65: Buntton G  
LCH\*Ma: 56 66 164  
rgb\*Ma: 0.1 1.0 0.0

## Dreiecks-Helligkeit

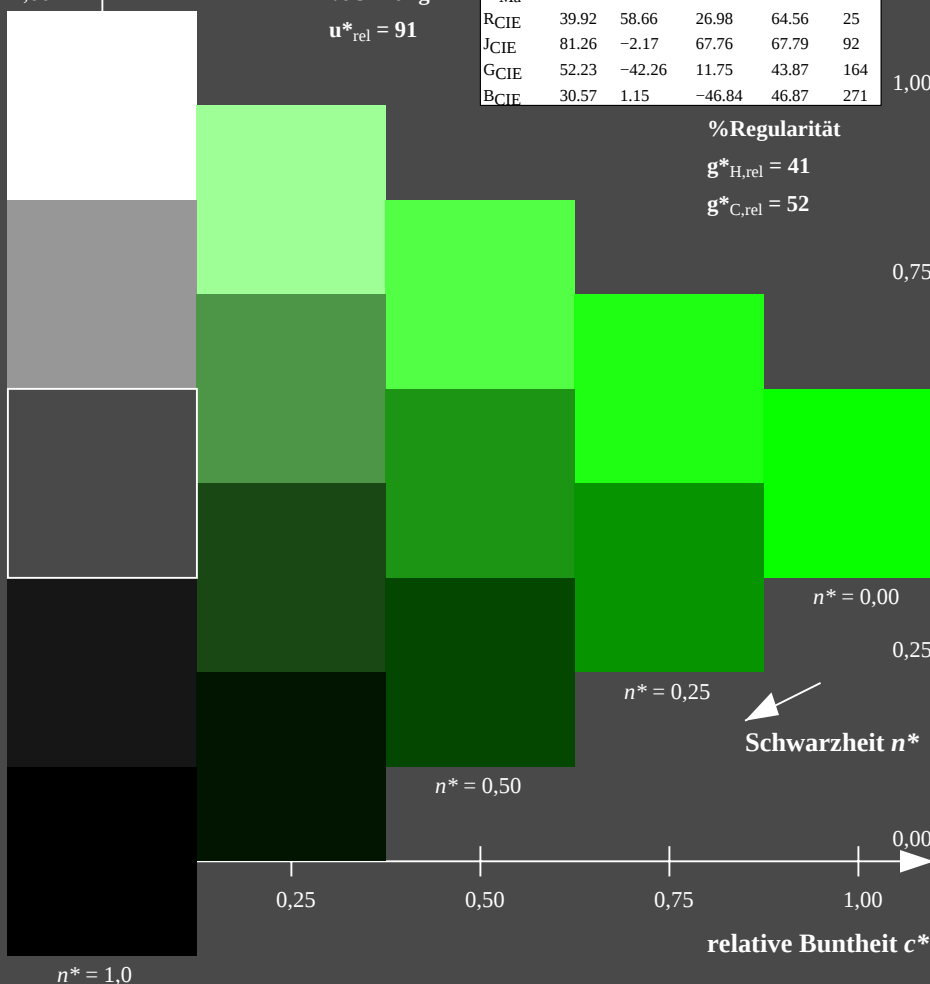


**%Umfang**

$$\mathbf{u}_{\text{rel}}^* = 91$$

| MRS18; adaptierte CIELAB-Daten |               |         |         |              |              |
|--------------------------------|---------------|---------|---------|--------------|--------------|
|                                | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                | 49.63         | 66.96   | 38.37   | 77.18        | 30.1         |
| J <sub>Ma</sub>                | 90.7          | -6.36   | 88.75   | 88.98        | 94           |
| G <sub>Ma</sub>                | 52.11         | -69.73  | 9.44    | 70.37        | 172          |
| G50B <sub>Ma</sub>             | 45.03         | -36.57  | -28.47  | 46.36        | 218          |
| B <sub>Ma</sub>                | 36.65         | 23.19   | -63.05  | 67.18        | 290          |
| B50R <sub>Ma</sub>             | 34.94         | 57.17   | -44.26  | 72.31        | 322          |
| N <sub>Ma</sub>                | 18.01         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>               | 39.92         | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub>               | 81.26         | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub>               | 52.23         | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub>               | 30.57         | 1.15    | -46.84  | 46.87        | 271          |

### %Regularität

$$g^*_{H_{rel}} = 41$$
$$g^*_{C,rel} = 52$$


TG440-7, 5 stufige Reihen für konstanten CIELAB Buntton  $164/360 = 0.457$  (links)

BAM-Prüfvorlage TG44; Farbmatrik-Systeme MRS18 & MRS18input: `olv* setrgbcolor`

D65: 5stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *olv\* setrgbcolor / w\* setgray*

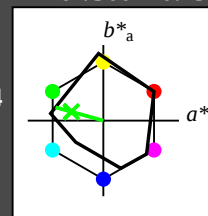
**Ausgabe: Farbmétrisches Reflexions-System MRS18**

für Buntton  $h^* = lab^*h = 164/360 = 0.457$

**lab\*tch und lab\*nch**

D65: Buntton G  
LCH\*Ma: 56 66 164  
rgb\*Ma: 0.1 1.0 0.0

## Dreiecks-Helligkeit

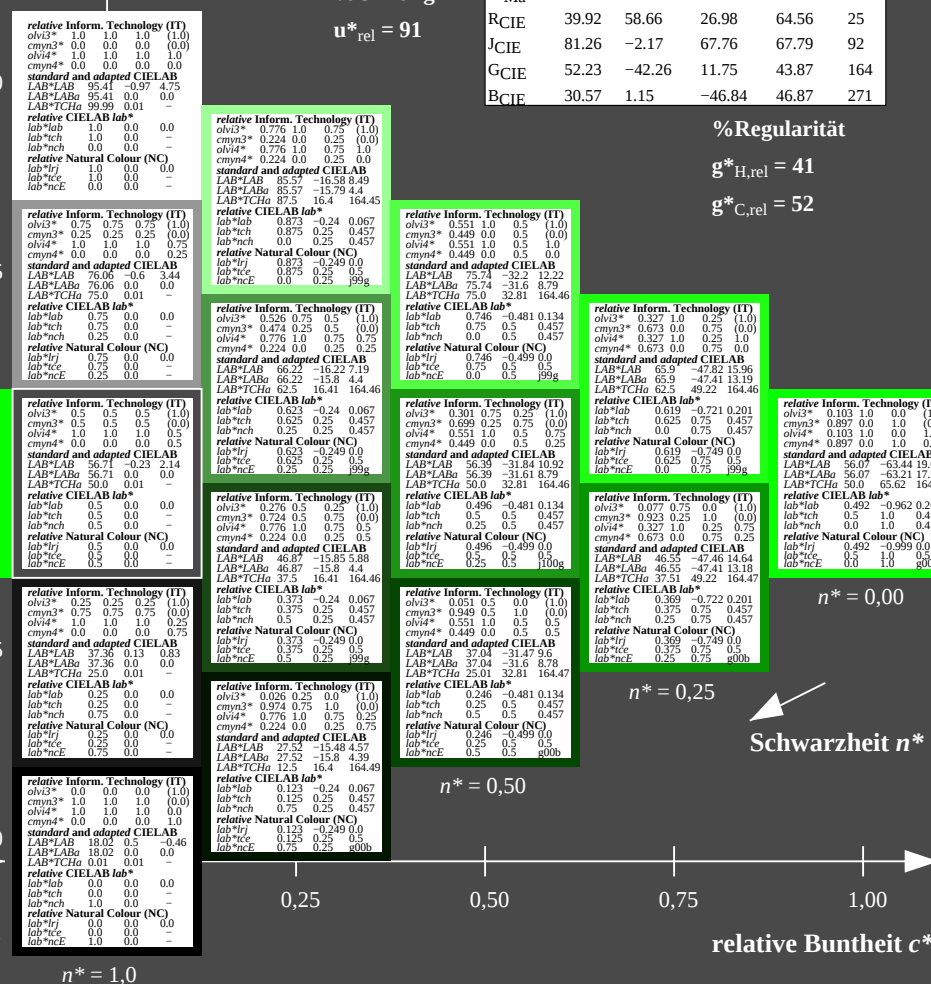


%Umfang

$$\mathbf{u}_{\text{rel}}^* = 91$$

| MRS18; adaptierte CIELAB-Daten |         |         |         |              |            |
|--------------------------------|---------|---------|---------|--------------|------------|
|                                | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab}$ |
| R <sub>Ma</sub>                | 49.63   | 66.96   | 38.37   | 77.18        | 30         |
| J <sub>Ma</sub>                | 90.7    | -6.36   | 88.75   | 88.98        | 94         |
| G <sub>Ma</sub>                | 52.11   | -69.73  | 9.44    | 70.37        | 172        |
| G50B <sub>Ma</sub>             | 45.03   | -36.57  | -28.47  | 46.36        | 218        |
| B <sub>Ma</sub>                | 36.65   | 23.19   | -63.05  | 67.18        | 290        |
| B50R <sub>Ma</sub>             | 34.94   | 57.17   | -44.26  | 72.31        | 322        |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0     | 0.0          | 0          |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0     | 0.0          | 0          |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98   | 64.56        | 25         |
| J <sub>CIE</sub>               | 81.26   | -2.17   | 67.76   | 67.79        | 92         |
| G <sub>CIE</sub>               | 52.23   | -42.26  | 11.75   | 43.87        | 164        |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84  | 46.87        | 271        |

### %Regularität

$$g^*_{H\text{rel}} = 41$$
$$g^*_{C,rel} = 52$$


5 stufige Reihen für konstanten CIELAB Buntton 164/360 = 0.457 (rechts)

RS18 & MRS18input: *olv\* setrgbcolor*

für 10 Bunttöneoutput: `olv* setrgbcolor / w* setgray`

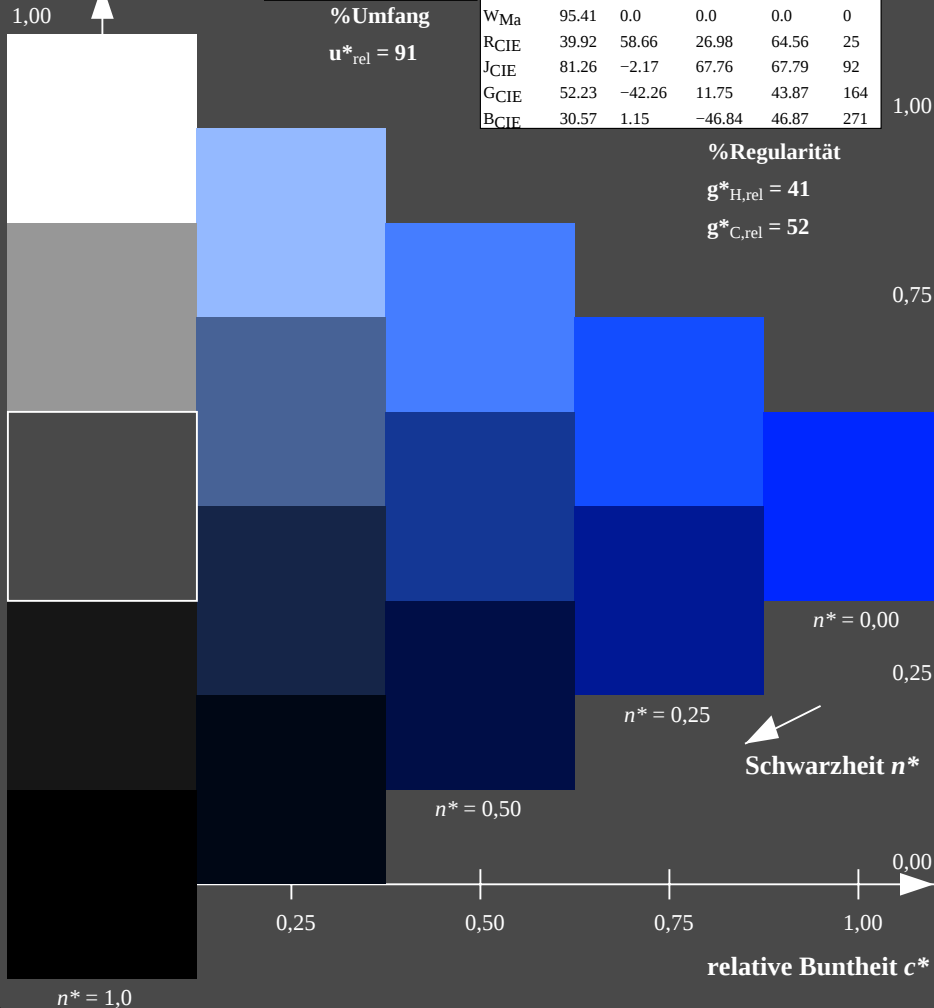
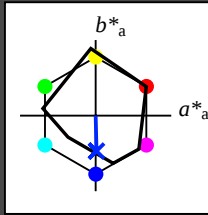
### Eingabe: Farbmatisches Reflexions-System MRS18

für Buntton  $h^* = lab^*h = 271/360 = 0.754$

$lab^*tch$  und  $lab^*nch$

D65: Buntton B  
LCH\*Ma: 40 50 271  
rgb\*Ma: 0.0 0.37 1.0

Dreiecks-Helligkeit



TG440-7, 5 stufige Reihen für konstanten CIELAB Buntton 271/360 = 0.754 (links)

BAM-Prüfvorlage TG44; Farbmatrik-Systeme MRS18 & MRS18

D65: 5stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne

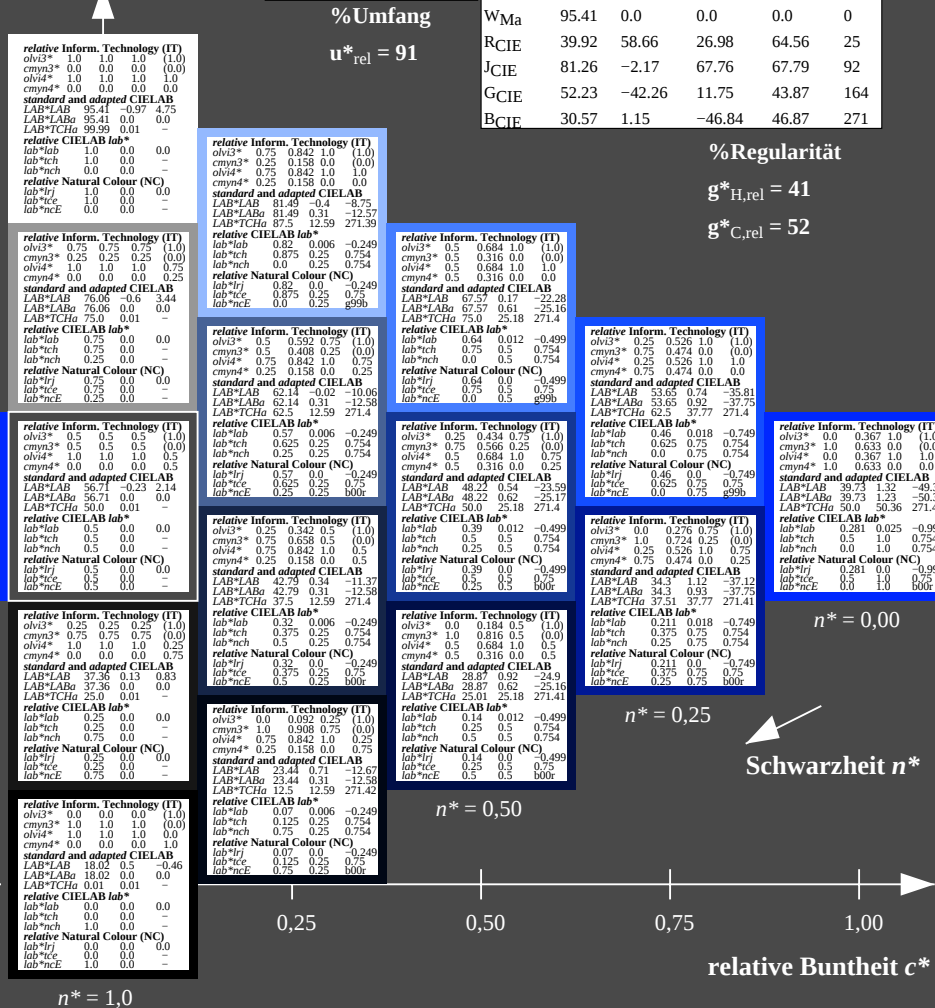
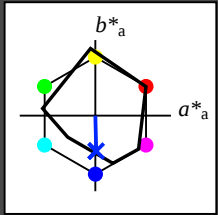
### Ausgabe: Farbmatisches Reflexions-System MRS18

für Buntton  $h^* = lab^*h = 271/360 = 0.754$

$lab^*tch$  und  $lab^*nch$

D65: Buntton B  
LCH\*Ma: 40 50 271  
rgb\*Ma: 0.0 0.37 1.0

Dreiecks-Helligkeit



5 stufige Reihen für konstanten CIELAB Buntton 271/360 = 0.754 (rechts)

BAM-Material: Code=rhatha

input: olv\* setrgbcolor

output: olv\* setrgbcolor / w\* setgray