

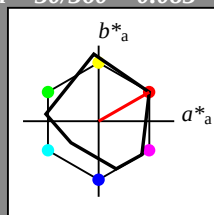
### Eingabe: Farbmétrisches Reflexions-System MRS18

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

$lab^*ch$  und  $lab^*nch$

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

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

### 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          |
| G50BMa | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| BMa    | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50RMa | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| NMa    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| WMa    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE   | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| JCIE   | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| GCIE   | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| BCIE   | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

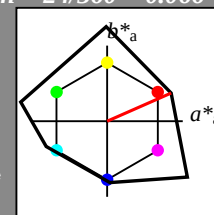
### Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 24/360 = 0.066$

$lab^*ch$  und  $lab^*nch$

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

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 149$

%Regularität

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

### NCS11; adaptierte CIELAB-Daten

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| 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            |
| WMa    | 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\*LABa 95.41 0.0 0.0  
LAB\*TCHa 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\*lrj 1.0 0.0 0.0  
lab\*tce 1.0 0.0 -  
lab\*nce 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 0.5  
cmyn4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 53.21 0.04 0.0  
LAB\*LABa 53.21 0.0 0.0  
LAB\*TCHa 50.0 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 -  
lab\*nch 0.5 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*nce 0.5 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 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
LAB\*LAB 11.01 0.07 0.01  
LAB\*LABa 11.01 0.0 0.0  
LAB\*TCHa 0.01 0.01 -

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 0.0 0.0 -  
lab\*nch 1.0 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 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\*LABa 71.27 42.31 18.62  
LAB\*TCHa 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

relative Natural Colour (NC)  
lab\*lrj 0.714 0.5 -0.011  
lab\*tce 0.75 0.5 0.996  
lab\*nce 0.0 0.5 0.996

relative Inform. Technology (IT)  
olvi3\* 0.5 0.0 0.0 (1.0)  
cmyn3\* 0.5 1.0 1.0 (0.0)  
olvi4\* 1.0 0.5 0.5 0.5  
cmyn4\* 0.0 0.5 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 29.07 42.38 18.64  
LAB\*LABa 29.07 42.31 18.62  
LAB\*TCHa 25.01 46.23 23.75

relative CIELAB lab\*  
lab\*lab 0.214 0.458 0.201  
lab\*tch 0.25 0.5 0.066  
lab\*nch 0.5 0.5 0.066

relative Natural Colour (NC)  
lab\*lrj 0.214 0.5 -0.011  
lab\*tce 0.25 0.5 0.996  
lab\*nce 0.5 0.5 0.996

relative Inform. Technology (IT)  
olvi3\* 1.0 0.0 0.0 (1.0)  
cmyn3\* 0.0 1.0 1.0 (0.0)  
olvi4\* 1.0 0.0 0.0 1.0  
cmyn4\* 0.0 1.0 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 47.15 84.68 37.26  
LAB\*LABa 47.15 84.63 37.24  
LAB\*TCHa 50.0 92.46 23.75

relative CIELAB lab\*  
lab\*lab 0.428 0.915 0.403  
lab\*tch 0.5 1.0 0.066  
lab\*nch 0.0 1.0 0.066

relative Natural Colour (NC)  
lab\*lrj 0.428 1.0 -0.023  
lab\*tce 0.5 1.0 0.996  
lab\*nce 0.0 1.0 0.996

Siehe ähnliche Dateien: <http://www.ps.bam.de/UG03/>  
Technische Information: <http://www.ps.bam.de> Version 2.1, io=0,1, CIEXYZ

BAM-Registrierung: 20060101-UG03/10L/L03G00FP.PS/.PDF BAM-Material: Code=rha4ta  
Anwendung für Beurteilung und Messung von Drucker- oder Monitorsystemen, Yr=2.5, XYZ  
/UG03/ Form: 1/10, Serie: 1/1, Seite: 1  
Seitenhang 1

UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 30/360 = 0.083 (links)

3 stufige Reihen für konstanten CIELAB Buntton 24/360 = 0.066 (rechts)

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11

D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne  
input: `cmv0* setcmvcolor`  
output: `olv* setrgbcolor / w* setgray`

### Eingabe: Farbmétrisches Reflexions-System MRS18

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

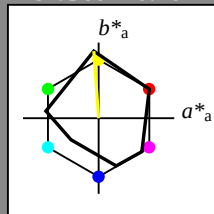
$lab^*ch$  und  $lab^*nch$

D65: Buntton J

LCH\*Ma: 91 89 94

olv\*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

### 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          |
| G50BMa | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| BMa    | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50RMa | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| NMa    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| WMa    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE   | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| JCIE   | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| GCIE   | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| BCIE   | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

### Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 91/360 = 0.252$

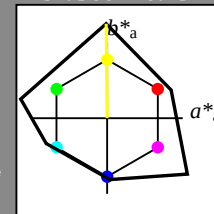
$lab^*ch$  und  $lab^*nch$

D65: Buntton J

LCH\*Ma: 91 125 91

olv\*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 149$

%Regularität

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

### NCS11; adaptierte CIELAB-Daten

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| 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            |
| WMa    | 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**  
 $LAB^*LAB = 95.41 \ 0.0 \ -0.01$   
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

**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)**  
 $lab^*lrj = 1.0 \ 0.0 \ 0.0$   
 $lab^*tce = 1.0 \ 0.0 \ -$   
 $lab^*nce = 0.0 \ 0.0 \ -$

**relative Inform. Technology (IT)**  
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$   
**standard and adapted CIELAB**  
 $LAB^*LAB = 53.21 \ 0.04 \ 0.0$   
 $LAB^*LABa = 53.21 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

**relative CIELAB lab\***  
 $lab^*lab = 0.5 \ 0.0 \ 0.0$   
 $lab^*tch = 0.5 \ 0.0 \ -$   
 $lab^*nch = 0.5 \ 0.0 \ -$   
**relative Natural Colour (NC)**  
 $lab^*lrj = 0.5 \ 0.0 \ 0.0$   
 $lab^*tce = 0.5 \ 0.0 \ -$   
 $lab^*nce = 0.5 \ 0.0 \ -$

**relative Inform. Technology (IT)**  
 $olvi3^* = 0.0 \ 0.0 \ 0.0 \ (1.0)$   
 $cmyn3^* = 1.0 \ 1.0 \ 1.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 1.0$   
**standard and adapted CIELAB**  
 $LAB^*LAB = 11.01 \ 0.07 \ 0.01$   
 $LAB^*LABa = 11.01 \ 0.0 \ 0.0$   
 $LAB^*TCHa = 0.01 \ 0.01 \ -$

**relative CIELAB lab\***  
 $lab^*lab = 0.0 \ 0.0 \ 0.0$   
 $lab^*tch = 0.0 \ 0.0 \ -$   
 $lab^*nch = 1.0 \ 0.0 \ -$   
**relative Natural Colour (NC)**  
 $lab^*lrj = 0.0 \ 0.0 \ 0.0$   
 $lab^*tce = 0.0 \ 0.0 \ -$   
 $lab^*nce = 1.0 \ 0.0 \ -$

**relative Inform. Technology (IT)**  
 $olvi3^* = 1.0 \ 1.0 \ 0.5 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.0 \ 0.5 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 0.5 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.5 \ 0.0$   
**standard and adapted CIELAB**  
 $LAB^*LAB = 93.38 \ -0.62 \ 62.5$   
 $LAB^*LABa = 93.38 \ -0.63 \ 62.5$   
 $LAB^*TCHa = 75.0 \ 62.5 \ 90.59$

**relative CIELAB lab\***  
 $lab^*lab = 0.976 \ -0.004 \ 0.5$   
 $lab^*tch = 0.75 \ 0.5 \ 0.252$   
 $lab^*nch = 0.0 \ 0.5 \ 0.252$   
**relative Natural Colour (NC)**  
 $lab^*lrj = 0.976 \ 0.02 \ 0.499$   
 $lab^*tce = 0.75 \ 0.5 \ 0.243$   
 $lab^*nce = 0.0 \ 0.5 \ r97j$

**relative Inform. Technology (IT)**  
 $olvi3^* = 0.5 \ 0.5 \ 0.0 \ (1.0)$   
 $cmyn3^* = 0.5 \ 0.5 \ 1.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 0.5 \ 0.5$   
 $cmyn4^* = 0.0 \ 0.0 \ 0.5 \ 0.5$   
**standard and adapted CIELAB**  
 $LAB^*LAB = 51.18 \ -0.59 \ 62.51$   
 $LAB^*LABa = 51.18 \ -0.63 \ 62.5$   
 $LAB^*TCHa = 25.01 \ 62.5 \ 90.59$

**relative CIELAB lab\***  
 $lab^*lab = 0.476 \ -0.004 \ 0.5$   
 $lab^*tch = 0.25 \ 0.5 \ 0.252$   
 $lab^*nch = 0.5 \ 0.5 \ 0.252$   
**relative Natural Colour (NC)**  
 $lab^*lrj = 0.476 \ 0.02 \ 0.499$   
 $lab^*tce = 0.25 \ 0.5 \ 0.243$   
 $lab^*nce = 0.5 \ 0.5 \ r97j$

**relative Inform. Technology (IT)**  
 $olvi3^* = 1.0 \ 1.0 \ 0.0 \ (1.0)$   
 $cmyn3^* = 0.0 \ 0.0 \ 1.0 \ (0.0)$   
 $olvi4^* = 1.0 \ 1.0 \ 0.0 \ 1.0$   
 $cmyn4^* = 0.0 \ 0.0 \ 1.0 \ 0.0$   
**standard and adapted CIELAB**  
 $LAB^*LAB = 91.36 \ -1.26 \ 125.0$   
 $LAB^*LABa = 91.36 \ -1.27 \ 125.0$   
 $LAB^*TCHa = 50.0 \ 125.01 \ 90.59$

**relative CIELAB lab\***  
 $lab^*lab = 0.952 \ -0.009 \ 1.0$   
 $lab^*tch = 0.5 \ 1.0 \ 0.252$   
 $lab^*nch = 0.0 \ 1.0 \ 0.252$   
**relative Natural Colour (NC)**  
 $lab^*lrj = 0.952 \ 0.041 \ 0.999$   
 $lab^*tce = 0.5 \ 1.0 \ 0.243$   
 $lab^*nce = 0.0 \ 1.0 \ r97j$

relative Buntheit  $c^*$

$n^* = 1,0$

Schwarzheit  $n^*$

$n^* = 0,00$

$n^* = 1,0$

relative Buntheit  $c^*$

$n^* = 1,0$

Schwarzheit  $n^*$

$n^* = 0,00$

UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 94/360 = 0.261 (links)

3 stufige Reihen für konstanten CIELAB Buntton 91/360 = 0.252 (rechts)

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11

D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne

input:  $cmv0^* \ setcmykcolor$

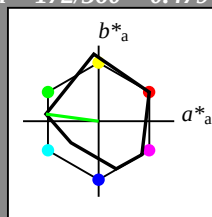
output:  $olv^* \ setrgbcolor / w^* \ setgray$

### Eingabe: Farbmétrisches Reflexions-System MRS18

für Buntton  $h^* = \text{lab}^*h = 172/360 = 0.479$   
 $\text{lab}^*ch$  und  $\text{lab}^*nch$

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

Dreiecks-Helligkeit  $t^*$



%Umfang

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

%Regularität

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

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

### MRS18; adaptierte CIELAB-Daten

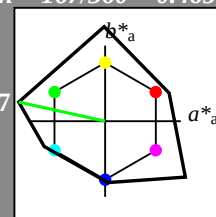
|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| RMa    | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| JMa    | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
|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

### Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = \text{lab}^*h = 167/360 = 0.465$   
 $\text{lab}^*ch$  und  $\text{lab}^*nch$

D65: Buntton G  
LCH\*Ma: 63 117 167  
olv\*Ma: 0.0 1.0 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{\text{rel}} = 149$

%Regularität

$g^*_{H,\text{rel}} = 46$

$g^*_{C,\text{rel}} = 65$

### NCS11; adaptierte CIELAB-Daten

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| 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            |
| WMa    | 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\*LABa 95.41 0.0 0.0  
LAB\*TCa 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\*lrj 1.0 0.0 0.0  
lab\*tce 1.0 0.0 -  
lab\*nce 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 0.5  
cmyn4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 53.21 0.04 0.0  
LAB\*LABa 53.21 0.0 0.0  
LAB\*TCa 50.0 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 -  
lab\*nch 0.5 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*nce 0.5 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 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
LAB\*LAB 11.01 0.07 0.01  
LAB\*LABa 11.01 0.0 0.0  
LAB\*TCa 0.01 0.01 -

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 0.0 0.0 -  
lab\*nch 1.0 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

relative Inform. Technology (IT)  
olvi3\* 0.5 1.0 0.5 (1.0)  
cmyn3\* 0.5 0.0 0.5 (0.0)  
olvi4\* 0.5 1.0 0.5 1.0  
cmyn4\* 0.5 0.0 0.5 0.0

standard and adapted CIELAB  
LAB\*LAB 79.24 -57.1 12.67  
LAB\*LABa 79.24 -57.12 12.67  
LAB\*TCa 75.0 58.52 167.5

relative CIELAB lab\*  
lab\*lab 0.808 -0.487 0.108  
lab\*tch 0.75 0.5 0.465  
lab\*nch 0.0 0.5 0.465

relative Natural Colour (NC)  
lab\*lrj 0.808 -0.497 -0.037  
lab\*tce 0.75 0.5 0.512  
lab\*nce 0.0 0.5 g04b

relative Inform. Technology (IT)  
olvi3\* 0.0 0.5 0.0 (1.0)  
cmyn3\* 1.0 0.5 1.0 (0.0)  
olvi4\* 0.5 1.0 0.5 0.5  
cmyn4\* 0.5 0.0 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 37.04 -57.07 12.69  
LAB\*LABa 37.04 -57.12 12.67  
LAB\*TCa 25.01 58.52 167.5

relative CIELAB lab\*  
lab\*lab 0.309 -0.487 0.108  
lab\*tch 0.25 0.5 0.465  
lab\*nch 0.5 0.5 0.465

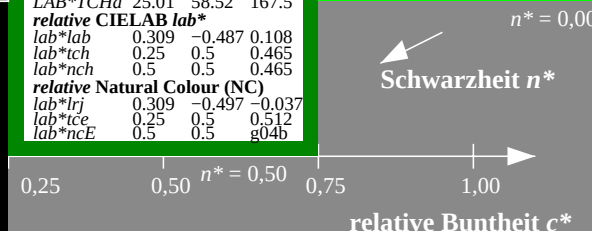
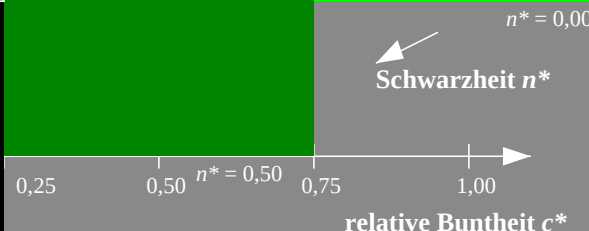
relative Natural Colour (NC)  
lab\*lrj 0.309 -0.497 -0.037  
lab\*tce 0.25 0.5 0.512  
lab\*nce 0.5 0.5 g04b

relative Inform. Technology (IT)  
olvi3\* 0.0 1.0 0.0 (1.0)  
cmyn3\* 1.0 0.0 1.0 (0.0)  
olvi4\* 0.0 1.0 0.0 1.0  
cmyn4\* 1.0 0.0 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 63.07 -114.225.35  
LAB\*LABa 63.07 -114.225.34  
LAB\*TCa 50.0 117.04 167.5

relative CIELAB lab\*  
lab\*lab 0.617 -0.975 0.216  
lab\*tch 0.5 1.0 0.465  
lab\*nch 0.0 1.0 0.465

relative Natural Colour (NC)  
lab\*lrj 0.617 -0.996 -0.074  
lab\*tce 0.5 1.0 0.512  
lab\*nce 0.0 1.0 g04b



UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 172/360 = 0.479 (links)

3 stufige Reihen für konstanten CIELAB Buntton 167/360 = 0.465 (rechts)

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11

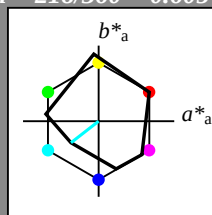
D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne  
input: `cmv0* setcmvcolor`  
output: `olv* setrgbcolor / w* setgray`

### Eingabe: Farbmétrisches 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  
olv\*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

### MRS18; adaptierte CIELAB-Daten

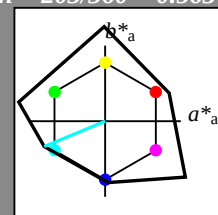
|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| RMa                | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| JMa                | 90.7        | -6.36   | 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          |

### Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 203/360 = 0.563$   
 $lab^*tch$  und  $lab^*nch$

D65: Buntton G50B  
LCH\*Ma: 59 87 203  
olv\*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 149$

%Regularität

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

### NCS11; adaptierte CIELAB-Daten

|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| 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          |
| G50B <sub>Ma</sub> | 59.47       | -80.6   | -33.45  | 87.28        | 203          |
| B <sub>Ma</sub>    | 49.01       | 3.65    | -81.19  | 81.28        | 273          |
| B50R <sub>Ma</sub> | 44.06       | 106.09  | -73.93  | 129.32       | 325          |
| N <sub>Ma</sub>    | 10.99       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 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\*LABa 95.41 0.0 0.0  
LAB\*TCHa 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\*lrj 1.0 0.0 0.0  
lab\*tce 1.0 0.0 -  
lab\*nce 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 0.5  
cmyn4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 53.21 0.04 0.0  
LAB\*LABa 53.21 0.0 0.0  
LAB\*TCHa 50.0 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 -  
lab\*nch 0.5 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*nce 0.5 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 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
LAB\*LAB 11.01 0.07 0.01  
LAB\*LABa 11.01 0.0 0.0  
LAB\*TCHa 0.01 0.01 -

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 0.0 0.0 -  
lab\*nch 1.0 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

relative Inform. Technology (IT)  
olvi3\* 0.5 1.0 1.0 (1.0)  
cmyn3\* 0.5 0.0 0.0 (0.0)  
olvi4\* 0.5 1.0 1.0 1.0  
cmyn4\* 0.5 0.0 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 77.43 -40.26 -16.71  
LAB\*LABa 77.43 -40.29 -16.72  
LAB\*TCHa 75.0 43.63 202.54

relative CIELAB lab\*  
lab\*lab 0.787 -0.461 -0.191  
lab\*tch 0.75 0.5 0.563  
lab\*nch 0.0 0.5 0.563

relative Natural Colour (NC)  
lab\*lrj 0.787 -0.418 -0.272  
lab\*tce 0.75 0.5 0.592  
lab\*nce 0.0 0.5 g36b

relative Inform. Technology (IT)  
olvi3\* 0.0 0.5 0.5 (1.0)  
cmyn3\* 1.0 0.5 0.5 (0.0)  
olvi4\* 0.5 1.0 1.0 0.5  
cmyn4\* 0.5 0.0 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 35.23 -40.23 -16.7  
LAB\*LABa 35.23 -40.29 -16.72  
LAB\*TCHa 25.01 43.63 202.54

relative CIELAB lab\*  
lab\*lab 0.287 -0.461 -0.191  
lab\*tch 0.25 0.5 0.563  
lab\*nch 0.5 0.5 0.563

relative Natural Colour (NC)  
lab\*lrj 0.287 -0.418 -0.272  
lab\*tce 0.25 0.5 0.592  
lab\*nce 0.5 0.5 g36b

relative Inform. Technology (IT)  
olvi3\* 0.0 1.0 1.0 (1.0)  
cmyn3\* 1.0 0.0 0.0 (0.0)  
olvi4\* 0.0 1.0 1.0 1.0  
cmyn4\* 1.0 0.0 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 59.47 -80.55 -33.44  
LAB\*LABa 59.47 -80.59 -33.44  
LAB\*TCHa 50.0 87.26 202.54

relative CIELAB lab\*  
lab\*lab 0.574 -0.922 -0.382  
lab\*tch 0.5 1.0 0.563  
lab\*nch 0.0 1.0 0.563

relative Natural Colour (NC)  
lab\*lrj 0.574 -0.836 -0.546  
lab\*tce 0.5 1.0 0.592  
lab\*nce 0.0 1.0 g36b

Siehe ähnliche Dateien: <http://www.ps.bam.de/UG03/>  
Technische Information: <http://www.ps.bam.de> Version 2.1, io=0,1, CIEXYZ

BAM-Registrierung: 20060101-UG03/10L/L03G03FP.PS/.PDF BAM-Material: Code=rha4ta  
Anwendung für Beurteilung und Messung von Drucker- oder Monitorsystemen, Yr=2.5, XYZ  
/UG03/ Form: 4/10, Serie: 1/1, Seite: 4 Seitenhang 4

UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 218/360 = 0.605 (links)

3 stufige Reihen für konstanten CIELAB Buntton 203/360 = 0.563 (rechts)

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11input: `cmv0* setcmvcolor`

D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: `olv* setrgbcolor / w* setgray`

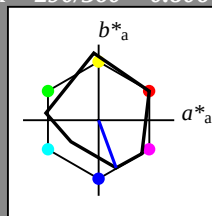


### Eingabe: Farbmétrisches Reflexions-System MRS18

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

D65: Buntton B  
LCH\*Ma: 37 67 290  
olv\*Ma: 0.0 0.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

### MRS18; adaptierte CIELAB-Daten

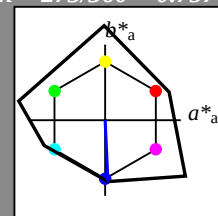
|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| RMa    | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| JMa    | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
|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

### Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 273/360 = 0.757$   
 $lab^*ch$  und  $lab^*nch$

D65: Buntton B  
LCH\*Ma: 49 81 273  
olv\*Ma: 0.0 0.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 149$

%Regularität

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

### NCS11; adaptierte CIELAB-Daten

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| 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            |
| WMa    | 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\*LABa 95.41 0.0 0.0  
LAB\*TCa 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\*lrj 1.0 0.0 0.0  
lab\*tce 1.0 0.0 -  
lab\*nce 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 0.5  
cmyn4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 53.21 0.04 0.0  
LAB\*LABa 53.21 0.0 0.0  
LAB\*TCa 50.0 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 -  
lab\*nch 0.5 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*nce 0.5 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 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
LAB\*LAB 11.01 0.07 0.01  
LAB\*LABa 11.01 0.0 0.0  
LAB\*TCa 0.01 0.01 -

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 0.0 0.0 -  
lab\*nch 1.0 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

relative Inform. Technology (IT)  
olvi3\* 0.5 0.5 1.0 (1.0)  
cmyn3\* 0.5 0.5 0.0 (0.0)  
olvi4\* 0.5 0.5 1.0 1.0  
cmyn4\* 0.5 0.5 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 72.21 1.85 -40.58  
LAB\*LABa 72.21 1.82 -40.58  
LAB\*TCa 75.0 40.63 272.57

relative CIELAB lab\*  
lab\*lab 0.725 0.022 -0.498  
lab\*tch 0.75 0.5 0.757  
lab\*nch 0.0 0.5 0.757

relative Natural Colour (NC)  
lab\*lrj 0.725 0.006 -0.499  
lab\*tce 0.75 0.5 0.752  
lab\*nce 0.0 0.5 0.00r

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.5 (1.0)  
cmyn3\* 1.0 1.0 0.5 (0.0)  
olvi4\* 0.5 0.5 1.0 0.5  
cmyn4\* 0.5 0.5 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 30.01 1.89 -40.56  
LAB\*LABa 30.01 1.82 -40.58  
LAB\*TCa 25.01 40.63 272.57

relative CIELAB lab\*  
lab\*lab 0.225 0.022 -0.498  
lab\*tch 0.25 0.5 0.757  
lab\*nch 0.5 0.5 0.757

relative Natural Colour (NC)  
lab\*lrj 0.225 0.006 -0.499  
lab\*tce 0.25 0.5 0.752  
lab\*nce 0.5 0.5 0.00r

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 1.0 (1.0)  
cmyn3\* 1.0 1.0 0.0 (0.0)  
olvi4\* 0.0 0.0 1.0 1.0  
cmyn4\* 1.0 1.0 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 49.02 3.7 -81.16  
LAB\*LABa 49.02 3.65 -81.18  
LAB\*TCa 50.0 81.27 272.57

relative CIELAB lab\*  
lab\*lab 0.45 0.045 -0.998  
lab\*tch 0.5 1.0 0.757  
lab\*nch 0.0 1.0 0.757

relative Natural Colour (NC)  
lab\*lrj 0.45 0.013 -0.999  
lab\*tce 0.5 1.0 0.752  
lab\*nce 0.0 1.0 0.00r

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.5 (1.0)  
cmyn3\* 1.0 1.0 0.5 (0.0)  
olvi4\* 0.5 0.5 1.0 0.5  
cmyn4\* 0.5 0.5 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 30.01 1.89 -40.56  
LAB\*LABa 30.01 1.82 -40.58  
LAB\*TCa 25.01 40.63 272.57

relative CIELAB lab\*  
lab\*lab 0.225 0.022 -0.498  
lab\*tch 0.25 0.5 0.757  
lab\*nch 0.5 0.5 0.757

relative Natural Colour (NC)  
lab\*lrj 0.225 0.006 -0.499  
lab\*tce 0.25 0.5 0.752  
lab\*nce 0.5 0.5 0.00r

relative Inform. Technology (IT)  
olvi3\* 0.0 0.0 0.5 (1.0)  
cmyn3\* 1.0 1.0 0.5 (0.0)  
olvi4\* 0.5 0.5 1.0 0.5  
cmyn4\* 0.5 0.5 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 30.01 1.89 -40.56  
LAB\*LABa 30.01 1.82 -40.58  
LAB\*TCa 25.01 40.63 272.57

relative CIELAB lab\*  
lab\*lab 0.225 0.022 -0.498  
lab\*tch 0.25 0.5 0.757  
lab\*nch 0.5 0.5 0.757

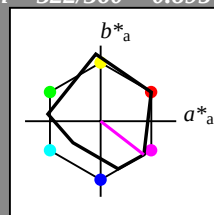
relative Natural Colour (NC)  
lab\*lrj 0.225 0.006 -0.499  
lab\*tce 0.25 0.5 0.752  
lab\*nce 0.5 0.5 0.00r

### Eingabe: Farbmétrisches 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  
olv\*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

### MRS18; adaptierte CIELAB-Daten

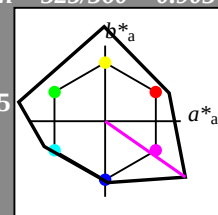
|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| RMa    | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| JMa    | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
|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

### Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 325/360 = 0.903$   
 $lab^*tch$  und  $lab^*nch$

D65: Buntton B50R  
LCH\*Ma: 44 129 325  
olv\*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 149$

%Regularität

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

### NCS11; adaptierte CIELAB-Daten

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| 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            |
| WMa    | 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\*LABa 95.41 0.0 0.0  
LAB\*TCHa 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\*lrj 1.0 0.0 0.0  
lab\*tce 1.0 0.0 -  
lab\*nce 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 0.5  
cmyn4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 53.21 0.04 0.0  
LAB\*LABa 53.21 0.0 0.0  
LAB\*TCHa 50.0 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 -  
lab\*nch 0.5 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*nce 0.5 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 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
LAB\*LAB 11.01 0.07 0.01  
LAB\*LABa 11.01 0.0 0.0  
LAB\*TCHa 0.01 0.01 -

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 0.0 0.0 -  
lab\*nch 1.0 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

relative Inform. Technology (IT)  
olvi3\* 1.0 0.5 1.0 (1.0)  
cmyn3\* 0.0 0.5 0.0 (0.0)  
olvi4\* 1.0 0.5 1.0 1.0  
cmyn4\* 0.0 0.5 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 69.73 53.06 -36.95  
LAB\*LABa 69.73 53.03 -36.95  
LAB\*TCHa 75.0 64.65 325.12

relative CIELAB lab\*  
lab\*lab 0.696 0.41 -0.285  
lab\*tch 0.75 0.5 0.903  
lab\*nch 0.0 0.5 0.903

relative Natural Colour (NC)  
lab\*lrj 0.696 0.336 -0.369  
lab\*tce 0.75 0.5 0.867  
lab\*nce 0.0 0.5 b46r

relative Inform. Technology (IT)  
olvi3\* 0.5 0.0 0.5 (1.0)  
cmyn3\* 0.5 1.0 0.5 (0.0)  
olvi4\* 1.0 0.5 1.0 0.5  
cmyn4\* 0.0 0.5 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 27.53 53.1 -36.94  
LAB\*LABa 27.53 53.03 -36.95  
LAB\*TCHa 25.01 64.65 325.12

relative CIELAB lab\*  
lab\*lab 0.196 0.41 -0.285  
lab\*tch 0.25 0.5 0.903  
lab\*nch 0.5 0.5 0.903

relative Natural Colour (NC)  
lab\*lrj 0.196 0.336 -0.369  
lab\*tce 0.25 0.5 0.867  
lab\*nce 0.5 0.5 b46r

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 44.06 106.12 -73.91  
LAB\*LABa 44.06 106.07 -73.92  
LAB\*TCHa 50.0 129.29 325.12

relative CIELAB lab\*  
lab\*lab 0.392 0.82 -0.571  
lab\*tch 0.5 1.0 0.903  
lab\*nch 0.0 1.0 0.903

relative Natural Colour (NC)  
lab\*lrj 0.392 0.673 -0.739  
lab\*tce 0.5 1.0 0.867  
lab\*nce 0.0 1.0 b46r

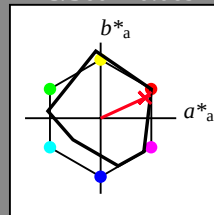
### Eingabe: Farbmétrisches Reflexions-System MRS18

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

$lab^*ch$  und  $lab^*nch$

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

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

### 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          |
| G50BMa | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| BMa    | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50RMa | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| NMa    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| WMa    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE   | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| JCIE   | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| GCIE   | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| BCIE   | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

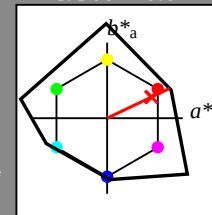
### Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 25/360 = 0.071$

$lab^*ch$  und  $lab^*nch$

D65: Buntton R  
LCH\*Ma: 48 91 25  
olv\*Ma: 1.0 0.02 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 149$

%Regularität

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

### NCS11; adaptierte CIELAB-Daten

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| 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            |
| WMa    | 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\*LABa 95.41 0.0 0.0  
LAB\*TCa 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\*lrj 1.0 0.0 0.0  
lab\*tce 1.0 0.0 -  
lab\*nce 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 0.5  
cmyn4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 53.21 0.04 0.0  
LAB\*LABa 53.21 0.0 0.0  
LAB\*TCa 50.0 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 -  
lab\*nch 0.5 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*nce 0.5 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 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
LAB\*LAB 11.01 0.07 0.01  
LAB\*LABa 11.01 0.0 0.0  
LAB\*TCa 0.01 0.01 -

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 0.0 0.0 -  
lab\*nch 1.0 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

relative Inform. Technology (IT)  
olvi3\* 1.0 0.512 0.5 (1.0)  
cmyn3\* 0.0 0.488 0.5 (0.0)  
olvi4\* 1.0 0.512 0.5 1.0  
cmyn4\* 0.0 0.488 0.5 0.0

standard and adapted CIELAB  
LAB\*LAB 71.81 41.31 19.68  
LAB\*LABa 71.81 41.28 19.68  
LAB\*TCa 75.0 45.73 25.49

relative CIELAB lab\*  
lab\*lab 0.72 0.451 0.215  
lab\*tch 0.75 0.5 0.071  
lab\*nch 0.0 0.5 0.071

relative Natural Colour (NC)  
lab\*lrj 0.72 0.5 0.0  
lab\*tce 0.75 0.5 0.0  
lab\*nce 0.0 0.5 0.071

relative Inform. Technology (IT)  
olvi3\* 0.5 0.012 0.0 (1.0)  
cmyn3\* 0.5 0.988 1.0 (0.0)  
olvi4\* 1.0 0.512 0.5 0.5  
cmyn4\* 0.0 0.488 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 29.6 41.35 19.69  
LAB\*LABa 29.6 41.29 19.67  
LAB\*TCa 25.01 45.73 25.47

relative CIELAB lab\*  
lab\*lab 0.22 0.451 0.215  
lab\*tch 0.25 0.5 0.071  
lab\*nch 0.5 0.5 0.071

relative Natural Colour (NC)  
lab\*lrj 0.22 0.5 0.0  
lab\*tce 0.25 0.5 1.0  
lab\*nce 0.5 0.5 0.071

relative Inform. Technology (IT)  
olvi3\* 1.0 0.024 0.0 (1.0)  
cmyn3\* 0.0 0.976 1.0 (0.0)  
olvi4\* 1.0 0.024 0.0 1.0  
cmyn4\* 0.0 0.976 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 48.21 82.61 39.36  
LAB\*LABa 48.21 82.57 39.35  
LAB\*TCa 50.0 91.46 25.48

relative CIELAB lab\*  
lab\*lab 0.441 0.903 0.43  
lab\*tch 0.5 1.0 0.071  
lab\*nch 0.0 1.0 0.071

relative Natural Colour (NC)  
lab\*lrj 0.441 1.0 0.0  
lab\*tce 0.5 1.0 1.0  
lab\*nce 0.0 1.0 0.071

relative Inform. Technology (IT)  
olvi3\* 0.5 0.012 0.0 (1.0)  
cmyn3\* 0.5 0.988 1.0 (0.0)  
olvi4\* 1.0 0.512 0.5 0.5  
cmyn4\* 0.0 0.488 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 29.6 41.35 19.69  
LAB\*LABa 29.6 41.29 19.67  
LAB\*TCa 25.01 45.73 25.47

relative CIELAB lab\*  
lab\*lab 0.22 0.451 0.215  
lab\*tch 0.25 0.5 0.071  
lab\*nch 0.5 0.5 0.071

relative Natural Colour (NC)  
lab\*lrj 0.22 0.5 0.0  
lab\*tce 0.25 0.5 1.0  
lab\*nce 0.5 0.5 0.071

relative Inform. Technology (IT)  
olvi3\* 1.0 0.024 0.0 (1.0)  
cmyn3\* 0.0 0.976 1.0 (0.0)  
olvi4\* 1.0 0.024 0.0 1.0  
cmyn4\* 0.0 0.976 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 48.21 82.61 39.36  
LAB\*LABa 48.21 82.57 39.35  
LAB\*TCa 50.0 91.46 25.48

relative CIELAB lab\*  
lab\*lab 0.441 0.903 0.43  
lab\*tch 0.5 1.0 0.071  
lab\*nch 0.0 1.0 0.071

relative Natural Colour (NC)  
lab\*lrj 0.441 1.0 0.0  
lab\*tce 0.5 1.0 1.0  
lab\*nce 0.0 1.0 0.071

relative Inform. Technology (IT)  
olvi3\* 0.5 0.012 0.0 (1.0)  
cmyn3\* 0.5 0.988 1.0 (0.0)  
olvi4\* 1.0 0.512 0.5 0.5  
cmyn4\* 0.0 0.488 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 29.6 41.35 19.69  
LAB\*LABa 29.6 41.29 19.67  
LAB\*TCa 25.01 45.73 25.47

relative CIELAB lab\*  
lab\*lab 0.22 0.451 0.215  
lab\*tch 0.25 0.5 0.071  
lab\*nch 0.5 0.5 0.071

relative Natural Colour (NC)  
lab\*lrj 0.22 0.5 0.0  
lab\*tce 0.25 0.5 1.0  
lab\*nce 0.5 0.5 0.071

relative Inform. Technology (IT)  
olvi3\* 1.0 0.024 0.0 (1.0)  
cmyn3\* 0.0 0.976 1.0 (0.0)  
olvi4\* 1.0 0.024 0.0 1.0  
cmyn4\* 0.0 0.976 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 48.21 82.61 39.36  
LAB\*LABa 48.21 82.57 39.35  
LAB\*TCa 50.0 91.46 25.48

relative CIELAB lab\*  
lab\*lab 0.441 0.903 0.43  
lab\*tch 0.5 1.0 0.071  
lab\*nch 0.0 1.0 0.071

relative Natural Colour (NC)  
lab\*lrj 0.441 1.0 0.0  
lab\*tce 0.5 1.0 1.0  
lab\*nce 0.0 1.0 0.071

relative Inform. Technology (IT)  
olvi3\* 0.5 0.012 0.0 (1.0)  
cmyn3\* 0.5 0.988 1.0 (0.0)  
olvi4\* 1.0 0.512 0.5 0.5  
cmyn4\* 0.0 0.488 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 29.6 41.35 19.69  
LAB\*LABa 29.6 41.29 19.67  
LAB\*TCa 25.01 45.73 25.47

relative CIELAB lab\*  
lab\*lab 0.22 0.451 0.215  
lab\*tch 0.25 0.5 0.071  
lab\*nch 0.5 0.5 0.071

relative Natural Colour (NC)  
lab\*lrj 0.22 0.5 0.0  
lab\*tce 0.25 0.5 1.0  
lab\*nce 0.5 0.5 0.071

relative Inform. Technology (IT)  
olvi3\* 1.0 0.024 0.0 (1.0)  
cmyn3\* 0.0 0.976 1.0 (0.0)  
olvi4\* 1.0 0.024 0.0 1.0  
cmyn4\* 0.0 0.976 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 48.21 82.61 39.36  
LAB\*LABa 48.21 82.57 39.35  
LAB\*TCa 50.0 91.46 25.48

relative CIELAB lab\*  
lab\*lab 0.441 0.903 0.43  
lab\*tch 0.5 1.0 0.071  
lab\*nch 0.0 1.0 0.071

relative Natural Colour (NC)  
lab\*lrj 0.441 1.0 0.0  
lab\*tce 0.5 1.0 1.0  
lab\*nce 0.0 1.0 0.071

relative Inform. Technology (IT)  
olvi3\* 0.5 0.012 0.0 (1.0)  
cmyn3\* 0.5 0.988 1.0 (0.0)  
olvi4\* 1.0 0.512 0.5 0.5  
cmyn4\* 0.0 0.488 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 29.6 41.35 19.69  
LAB\*LABa 29.6 41.29 19.67  
LAB\*TCa 25.01 45.73 25.47

relative CIELAB lab\*  
lab\*lab 0.22 0.451 0.215  
lab\*tch 0.25 0.5 0.071  
lab\*nch 0.5 0.5 0.071

relative Natural Colour (NC)  
lab\*lrj 0.22 0.5 0.0  
lab\*tce 0.25 0.5 1.0  
lab\*nce 0.5 0.5 0.071

relative Inform. Technology (IT)  
olvi3\* 1.0 0.024 0.0 (1.0)  
cmyn3\* 0.0 0.976 1.0 (0.0)  
olvi4\* 1.0 0.024 0.0 1.0  
cmyn4\* 0.0 0.976 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 48.21 82.61 39.36  
LAB\*LABa 48.21 82.57 39.35  
LAB\*TCa 50.0 91.46 25.48

relative CIELAB lab\*  
lab\*lab 0.441 0.903 0.43  
lab\*tch 0.5 1.0 0.071  
lab\*nch 0.0 1.0 0.071

relative Natural Colour (NC)  
lab\*lrj 0.441 1.0 0.0  
lab\*tce 0.5 1.0 1.0  
lab\*nce 0.0 1.0 0.071

relative Inform. Technology (IT)  
olvi3\* 0.5 0.012 0.0 (1.0)  
cmyn3\* 0.5 0.988 1.0 (0.0)  
olvi4\* 1.0 0.512 0.5 0.5  
cmyn4\* 0.0 0.488 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 29.6 41.35 19.69  
LAB\*LABa 29.6 41.29 19.67  
LAB\*TCa 25.01 45.73 25.47

relative CIELAB lab\*  
lab\*lab 0.22 0.451 0.215  
lab\*tch 0.25 0.5 0.071  
lab\*nch 0.5 0.5 0.071

relative Natural Colour (NC)  
lab\*lrj 0.22 0.5 0.0  
lab\*tce 0.25 0.5 1.0  
lab\*nce 0.5 0.5 0.071

relative Inform. Technology (IT)  
olvi3\* 1.0 0.024 0.0 (1.0)  
cmyn3\* 0.0 0.976 1.0 (0.0)  
olvi4\* 1.0 0.024 0.0 1.0  
cmyn4\* 0.0 0.976 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 48.21 82.61 39.36  
LAB\*LABa 48.21 82.57 39.35  
LAB\*TCa 50.0 91.46 25.48

relative CIELAB lab\*  
lab\*lab 0.441 0.903 0.43  
lab\*tch 0.5 1.0 0.071  
lab\*nch 0.0 1.0 0.071

relative Natural Colour (NC)  
lab\*lrj 0.441 1.0 0.0  
lab\*tce 0.5 1.0 1.0  
lab\*nce 0.0 1.0 0.071

relative Inform. Technology (IT)  
olvi3\* 0.5 0.012 0.0 (1.0)  
cmyn3\* 0.5 0.988 1.0 (0.0)  
olvi4\* 1.0 0.512 0.5 0.5  
cmyn4\* 0.0 0.488 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 29.6 41.35 19.69  
LAB\*LABa 29.6 41.29 19.67  
LAB\*TCa 25.01 45.73 25.47

relative CIELAB lab\*  
lab\*lab 0.22 0.451 0.215  
lab\*tch 0.25 0.5 0.071  
lab\*nch 0.5 0.5 0.071

relative Natural Colour (NC)  
lab\*lrj 0.22 0.5 0.0  
lab\*tce 0.25 0.5 1.0  
lab\*nce 0.5 0.5 0.071

relative Inform. Technology (IT)  
olvi3\* 1.0 0.024 0.0 (1.0)  
cmyn3\* 0.0 0.976 1.0 (0.0)  
olvi4\* 1.0 0.024 0.0 1.0  
cmyn4\* 0.0 0.976 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 48.21 82.61 39.36  
LAB\*LABa 48.21 82.57 39.35  
LAB\*TCa 50.0 91.46 25.48

relative CIELAB lab\*  
lab\*lab 0.441 0.903 0.43  
lab\*tch 0.5 1.0 0.071  
lab\*nch 0.0 1.0 0.071

relative Natural Colour (NC)  
lab\*lrj 0.441 1.0 0.0  
lab\*tce 0.5 1.0 1.0  
lab\*nce 0.0 1.0 0.071

relative Inform. Technology (IT)  
olvi3\* 0.5 0.012 0.0 (1.0)  
cmyn3\* 0.5 0.988 1.0 (0.0)  
olvi4\* 1.0 0.512 0.5 0.5  
cmyn4\* 0.0 0.488 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 29.6 41.35 19.69  
LAB\*LABa 29.6 41.29 19.67  
LAB\*TCa 25.01 45.73 25.47

relative CIELAB lab\*  
lab\*lab 0.22 0.451 0.215  
lab\*tch 0.25 0.5 0.071  
lab\*nch 0.5 0.5 0.071

relative Natural Colour (NC)  
lab\*lrj 0.22 0.5 0.0  
lab\*tce 0.25 0.5 1.0  
lab\*nce 0.5 0.5 0.071

relative Inform. Technology (IT)  
olvi3\* 1.0 0.024 0.0 (1.0)  
cmyn3\* 0.0 0.976 1.0 (0.0)  
olvi4\* 1.0 0.024 0.0 1.0  
cmyn4\* 0.0 0.976 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 48.21 82.61 39.36  
LAB\*LABa 48.21 82.57 39.35  
LAB\*TCa 50.0 91.46 25.48

relative CIELAB lab\*  
lab\*lab 0.441 0.903 0.43  
lab\*tch 0.5 1.0 0.071  
lab\*nch 0.0 1.0 0.071

relative Natural Colour (NC)  
lab\*lrj 0.441 1.0 0.0  
lab\*tce 0.5 1.0 1.0  
lab\*nce 0.0 1.0 0.071

relative Inform. Technology (IT)  
olvi3\* 0.5 0.012 0.0 (1.0)  
cmyn3\* 0.5 0.988 1.0 (0.0)  
olvi4\* 1.0 0.512 0.5 0.5  
cmyn4\* 0.0 0.488 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 29.6 41.35 19.69  
LAB\*LABa 29.6 41.29 19.67  
LAB\*TCa 25.01 45.73 25.47

relative CIELAB lab\*  
lab\*lab 0.22 0.451 0.215  
lab\*tch 0.25 0.5 0.071  
lab\*nch 0.5 0.5 0.071

relative Natural Colour (NC)  
lab\*lrj 0.22 0.5 0.0  
lab\*tce 0.25 0.5 1.0  
lab\*nce 0.5 0.5 0.071

relative Inform. Technology (IT)  
olvi3\* 1.0 0.024 0.0 (1.0)  
cmyn3\* 0.0 0.976 1.0 (0.0)  
olvi4\* 1.0 0.024 0.0 1.0  
cmyn4\* 0.0 0.976 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 48.21 82.61 39.36  
LAB\*LABa 48.21 82.57 39.35  
LAB\*TCa 50.0 91.46 25.48

### Eingabe: Farbmétrisches Reflexions-System MRS18

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

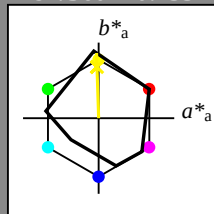
$lab^*ch$  und  $lab^*nch$

D65: Buntton J

LCH\*Ma: 89 86 92

olv\*Ma: 1.0 0.95 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

### 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          |
| G50BMa | 45.03       | -36.57  | -28.47  | 46.36        | 218          |
| BMa    | 36.65       | 23.19   | -63.05  | 67.18        | 290          |
| B50RMa | 34.94       | 57.17   | -44.26  | 72.31        | 322          |
| NMa    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| WMa    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE   | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| JCIE   | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| GCIE   | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| BCIE   | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

### Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 92/360 = 0.256$

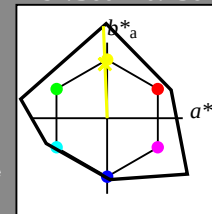
$lab^*ch$  und  $lab^*nch$

D65: Buntton J

LCH\*Ma: 90 122 92

olv\*Ma: 0.97 1.0 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 149$

%Regularität

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

### NCS11; adaptierte CIELAB-Daten

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| 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            |
| WMa    | 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\*LABa 95.41 0.0 0.0  
LAB\*TCHa 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\*lrj 1.0 0.0 0.0  
lab\*tce 1.0 0.0 -  
lab\*nce 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 0.5  
cmyn4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 53.21 0.04 0.0  
LAB\*LABa 53.21 0.0 0.0  
LAB\*TCHa 50.0 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 -  
lab\*nch 0.5 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*nce 0.5 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 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
LAB\*LAB 11.01 0.07 0.01  
LAB\*LABa 11.01 0.0 0.0  
LAB\*TCHa 0.01 0.01 -

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 0.0 0.0 -  
lab\*nch 1.0 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

relative Inform. Technology (IT)  
olvi3\* 0.984 1.0 0.5 (1.0)  
cmyn3\* 0.016 0.0 0.5 (0.0)  
olvi4\* 0.984 1.0 0.5 1.0  
cmyn4\* 0.016 0.0 0.5 0.0

standard and adapted CIELAB  
LAB\*LAB 92.92 -2.44 60.89  
LAB\*LABa 92.92 -2.46 60.89  
LAB\*TCHa 75.0 60.94 92.32

relative CIELAB lab\*  
lab\*lab 0.971 -0.019 0.499  
lab\*tch 0.75 0.5 0.256  
lab\*nch 0.0 0.5 0.256

relative Natural Colour (NC)  
lab\*lrj 0.971 0.0 0.5  
lab\*tce 0.75 0.5 0.25  
lab\*nce 0.0 0.5 r99j

relative Inform. Technology (IT)  
olvi3\* 0.484 0.5 0.0 (1.0)  
cmyn3\* 0.516 0.5 1.0 (0.0)  
olvi4\* 0.984 1.0 0.5 0.5  
cmyn4\* 0.016 0.0 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 50.72 -2.42 60.89  
LAB\*LABa 50.72 -2.47 60.88  
LAB\*TCHa 25.01 60.93 92.33

relative CIELAB lab\*  
lab\*lab 0.471 -0.019 0.499  
lab\*tch 0.25 0.5 0.256  
lab\*nch 0.5 0.5 0.256

relative Natural Colour (NC)  
lab\*lrj 0.471 0.0 0.5  
lab\*tce 0.25 0.5 0.25  
lab\*nce 0.5 0.5 r00g

relative Inform. Technology (IT)  
olvi3\* 0.967 1.0 0.0 (1.0)  
cmyn3\* 0.033 0.0 1.0 (0.0)  
olvi4\* 0.968 1.0 0.0 1.0  
cmyn4\* 0.032 0.0 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 90.45 -4.92 121.77  
LAB\*LABa 90.45 -4.93 121.77  
LAB\*TCHa 50.0 121.87 92.32

relative CIELAB lab\*  
lab\*lab 0.941 -0.04 0.999  
lab\*tch 0.5 1.0 0.256  
lab\*nch 0.0 1.0 0.256

relative Natural Colour (NC)  
lab\*lrj 0.941 0.0 1.0  
lab\*tce 0.5 1.0 0.25  
lab\*nce 0.0 1.0 r99j

Siehe ähnliche Dateien: <http://www.ps.bam.de/UG03/>  
Technische Information: <http://www.ps.bam.de> Version 2.1, io=0,1, CIEXYZ

BAM-Registrierung: 20060101-UG03/10L/L03G07FP.PS/.PDF BAM-Material: Code=rha4ta  
Anwendung für Beurteilung und Messung von Drucker- oder Monitorsystemen, Yr=2.5, XYZ  
/UG03/ Form: 8/10, Serie: 1/1, Seite: 8  
Seite 8

UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.255 (links)

3 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.256 (rechts)

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11

D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöne  
input: `cmv0* setcmvcolor`  
output: `olv* setrgbcolor / w* setgray`

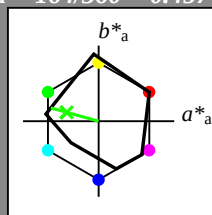


### Eingabe: Farbmétrisches Reflexions-System MRS18

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

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

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 91$

%Regularität

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

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

### MRS18; adaptierte CIELAB-Daten

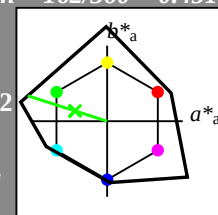
|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| RMa    | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| JMa    | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
|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

### Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 162/360 = 0.451$   
 $lab^*tch$  und  $lab^*nch$

D65: Buntton G  
LCH\*Ma: 65 110 162  
olv\*Ma: 0.08 1.0 0.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{rel} = 149$

%Regularität

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

### NCS11; adaptierte CIELAB-Daten

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| 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            |
| WMa    | 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\*LABa 95.41 0.0 0.0  
LAB\*TCHa 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\*lrj 1.0 0.0 0.0  
lab\*tce 1.0 0.0 -  
lab\*nce 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 0.5  
cmyn4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 53.21 0.04 0.0  
LAB\*LABa 53.21 0.0 0.0  
LAB\*TCHa 50.0 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 -  
lab\*nch 0.5 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*nce 0.5 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 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
LAB\*LAB 11.01 0.07 0.01  
LAB\*LABa 11.01 0.0 0.0  
LAB\*TCHa 0.01 0.01 -

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 0.0 0.0 -  
lab\*nch 1.0 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

relative Inform. Technology (IT)  
olvi3\* 0.541 1.0 0.5 (1.0)  
cmyn3\* 0.459 0.0 0.5 (0.0)  
olvi4\* 0.541 1.0 0.5 1.0  
cmyn4\* 0.459 0.0 0.5 0.0

standard and adapted CIELAB  
LAB\*LAB 80.4 -52.43 16.79  
LAB\*LABa 80.4 -52.45 16.79  
LAB\*TCHa 75.0 55.08 162.25

relative CIELAB lab\*  
lab\*lab 0.822 -0.475 0.152  
lab\*tch 0.75 0.5 0.451  
lab\*nch 0.0 0.5 0.451

relative Natural Colour (NC)  
lab\*lrj 0.822 -0.499 0.0  
lab\*tce 0.75 0.5 0.5  
lab\*nce 0.0 0.5 0.99g

relative Inform. Technology (IT)  
olvi3\* 0.041 0.5 0.0 (1.0)  
cmyn3\* 0.959 0.5 1.0 (0.0)  
olvi4\* 0.541 1.0 0.5 0.5  
cmyn4\* 0.459 0.0 0.5 0.5

standard and adapted CIELAB  
LAB\*LAB 38.2 -52.41 16.8  
LAB\*LABa 38.2 -52.46 16.78  
LAB\*TCHa 25.01 55.09 162.27

relative CIELAB lab\*  
lab\*lab 0.322 -0.475 0.152  
lab\*tch 0.25 0.5 0.451  
lab\*nch 0.5 0.5 0.451

relative Natural Colour (NC)  
lab\*lrj 0.322 -0.499 0.0  
lab\*tce 0.25 0.5 0.5  
lab\*nce 0.5 0.5 0.900b

relative Inform. Technology (IT)  
olvi3\* 0.083 1.0 0.0 (1.0)  
cmyn3\* 0.917 0.0 1.0 (0.0)  
olvi4\* 0.083 1.0 0.0 1.0  
cmyn4\* 0.917 0.0 1.0 0.0

standard and adapted CIELAB  
LAB\*LAB 65.41 -104.893.58  
LAB\*LABa 65.41 -104.923.57  
LAB\*TCHa 50.0 110.17 162.26

relative CIELAB lab\*  
lab\*lab 0.645 -0.951 0.305  
lab\*tch 0.5 1.0 0.451  
lab\*nch 0.0 1.0 0.451

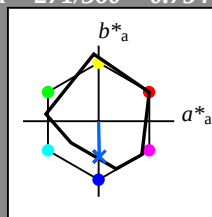
relative Natural Colour (NC)  
lab\*lrj 0.645 -0.999 0.0  
lab\*tce 0.5 1.0 0.5  
lab\*nce 0.0 1.0 0.900b

### Eingabe: Farbmétrisches Reflexions-System MRS18

für Buntton  $h^* = \text{lab}^*h = 271/360 = 0.754$   
 $\text{lab}^*ch$  und  $\text{lab}^*nch$

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

Dreiecks-Helligkeit  $t^*$



%Umfang

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

%Regularität

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

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

### MRS18; adaptierte CIELAB-Daten

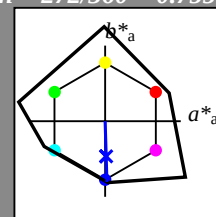
|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| RMa    | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| JMa    | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
|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

### Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = \text{lab}^*h = 272/360 = 0.755$   
 $\text{lab}^*ch$  und  $\text{lab}^*nch$

D65: Buntton B  
LCH\*Ma: 49 80 272  
olv\*Ma: 0.0 0.02 1.0

Dreiecks-Helligkeit  $t^*$



%Umfang

$u^*_{\text{rel}} = 149$

%Regularität

$g^*_{H,\text{rel}} = 46$

$g^*_{C,\text{rel}} = 65$

### NCS11; adaptierte CIELAB-Daten

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| 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            |
| WMa    | 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\*LABa 95.41 0.0 0.0  
LAB\*TBa 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\*lrj 1.0 0.0 0.0  
lab\*tce 1.0 0.0 -  
lab\*nce 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 0.5  
cmyn4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 53.21 0.04 0.0  
LAB\*LABa 53.21 0.0 0.0  
LAB\*TBa 50.0 0.01 -

relative CIELAB lab\*  
lab\*lab 0.5 0.0 0.0  
lab\*tch 0.5 0.0 -  
lab\*nch 0.5 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*nce 0.5 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 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
LAB\*LAB 11.01 0.07 0.01  
LAB\*LABa 11.01 0.0 0.0  
LAB\*TBa 0.01 0.01 -

relative CIELAB lab\*  
lab\*lab 0.0 0.0 0.0  
lab\*tch 0.0 0.0 -  
lab\*nch 1.0 0.0 -

relative Natural Colour (NC)  
lab\*lrj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*nce 1.0 0.0 -

relative Inform. Technology (IT)  
olvi3\* 0.5 0.508 1.0 (1.0)  
cmyn3\* 0.5 0.492 0.0 (0.0)  
olvi4\* 0.5 0.508 1.0 1.0  
cmyn4\* 0.5 0.492 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 72.29 1.2 -40.21  
LAB\*LABa 72.29 1.17 -40.21  
LAB\*TBa 75.0 40.24 271.66

relative CIELAB lab\*  
lab\*lab 0.726 0.014 -0.499  
lab\*tch 0.75 0.5 0.755  
lab\*nch 0.0 0.5 0.755

relative Natural Colour (NC)  
lab\*lrj 0.726 0.0 -0.499  
lab\*tce 0.75 0.5 0.75  
lab\*nce 0.0 0.5 0.99b

relative Inform. Technology (IT)  
olvi3\* 0.0 0.008 0.5 (1.0)  
cmyn3\* 1.0 0.992 0.5 (0.0)  
olvi4\* 0.5 0.508 1.0 0.5  
cmyn4\* 0.5 0.492 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 30.09 1.24 -40.2  
LAB\*LABa 30.09 1.18 -40.21  
LAB\*TBa 25.01 40.24 271.67

relative CIELAB lab\*  
lab\*lab 0.226 0.015 -0.499  
lab\*tch 0.25 0.5 0.755  
lab\*nch 0.5 0.5 0.755

relative Natural Colour (NC)  
lab\*lrj 0.226 0.0 -0.499  
lab\*tce 0.25 0.5 0.75  
lab\*nce 0.5 0.5 0.99b

relative Inform. Technology (IT)  
olvi3\* 0.0 0.016 1.0 (1.0)  
cmyn3\* 1.0 0.984 0.0 (0.0)  
olvi4\* 0.0 0.016 1.0 1.0  
cmyn4\* 1.0 0.984 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 49.18 2.39 -80.42  
LAB\*LABa 49.18 2.34 -80.43  
LAB\*TBa 50.0 80.48 271.67

relative CIELAB lab\*  
lab\*lab 0.452 0.029 -0.998  
lab\*tch 0.5 1.0 0.755  
lab\*nch 0.0 1.0 0.755

relative Natural Colour (NC)  
lab\*lrj 0.452 0.0 -0.999  
lab\*tce 0.5 1.0 0.75  
lab\*nce 0.0 1.0 0.99b

Siehe ähnliche Dateien: <http://www.ps.bam.de/UG03/>  
Technische Information: <http://www.ps.bam.de> Version 2.1, io=0,1, CIEXYZ

BAM-Registrierung: 20060101-UG03/10L/L03G09FP.PS/.PDF BAM-Material: Code=rha4ta  
Anwendung für Beurteilung und Messung von Drucker- oder Monitorsystemen, Yr=2.5, XYZ  
/UG03/ Form: 10/05 Serie: 1/1, Seite: 10 Seitenanzahl: 10

UG030-7, 3 stufige Reihen für konstanten CIELAB Buntton 271/360 = 0.754 (links)

3 stufige Reihen für konstanten CIELAB Buntton 272/360 = 0.755 (rechts)

BAM-Prüfvorlage UG03; Farbmétrik-Systeme MRS18 & NCS11input: `cmv0* setcmvcolor`

D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: `olv* setrgbcolor / w* setgray`