

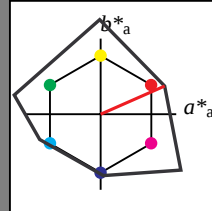
## Eingabe: Farbmétrisches Reflexions-System NCS11

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          |

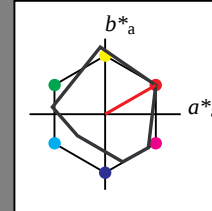
## Ausgabe: Farbmétrisches Reflexions-System MRS18

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          |

| 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 | -0.97 | 4.75 |       |
| 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*                           | 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                          | 72.52 | 32.93 | 22.4  |       |
| LAB*LABa                         | 72.52 | 33.47 | 19.18 |       |
| LAB*TCa                          | 75.0  | 38.58 | 29.82 |       |
| relative CIELAB lab*             |       |       |       |       |
| lab*lab                          | 0.704 | 0.434 | 0.249 |       |
| lab*tch                          | 0.75  | 0.5   | 0.083 |       |
| lab*nch                          | 0.0   | 0.5   | 0.083 |       |
| relative Natural Colour (NC)     |       |       |       |       |
| lab*lrj                          | 0.704 | 0.496 | 0.06  |       |
| lab*tce                          | 0.75  | 0.5   | 0.019 |       |
| lab*nce                          | 0.0   | 0.5   | r07]  |       |

| 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                          | 33.82 | 33.67 | 19.79 |       |
| LAB*LABa                         | 33.82 | 33.47 | 19.18 |       |
| LAB*TCa                          | 25.01 | 38.58 | 29.82 |       |
| relative CIELAB lab*             |       |       |       |       |
| lab*lab                          | 0.204 | 0.434 | 0.249 |       |
| lab*tch                          | 0.25  | 0.5   | 0.083 |       |
| lab*nch                          | 0.5   | 0.5   | 0.083 |       |
| relative Natural Colour (NC)     |       |       |       |       |
| lab*lrj                          | 0.204 | 0.496 | 0.06  |       |
| lab*tce                          | 0.25  | 0.5   | 0.019 |       |
| lab*nce                          | 0.5   | 0.5   | r07]  |       |

| 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                          | 49.63 | 66.84 | 40.03 |       |
| LAB*LABa                         | 49.63 | 66.95 | 38.36 |       |
| LAB*TCa                          | 50.0  | 77.16 | 29.82 |       |
| relative CIELAB lab*             |       |       |       |       |
| lab*lab                          | 0.409 | 0.867 | 0.497 |       |
| lab*tch                          | 0.5   | 1.0   | 0.083 |       |
| lab*nch                          | 0.0   | 1.0   | 0.083 |       |
| relative Natural Colour (NC)     |       |       |       |       |
| lab*lrj                          | 0.409 | 0.993 | 0.119 |       |
| lab*tce                          | 0.5   | 1.0   | 0.019 |       |
| lab*nce                          | 0.0   | 1.0   | r07]  |       |

$n^* = 0.00$   
Schwarzheit  $n^*$

0,25 0,50  $n^* = 0.50$  0,75 1,00  
relative Buntheit  $c^*$

 $n^* = 1.0$ 

$n^* = 1.0$   
Schwarzheit  $n^*$

0,25 0,50  $n^* = 0.50$  0,75 1,00  
relative Buntheit  $c^*$

3 stufige Reihen für konstanten CIELAB Buntton 30/360 = 0.083 (rechts)

UG080-7, 3 stufige Reihen für konstanten CIELAB Buntton 24/360 = 0.066 (links)

BAM-Prüfvorlage UG08; Farbmétrik-Systeme ORS18 & ORS18input:  $cmY0^* setcmykcolor$ D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *Startup (S) data depend*

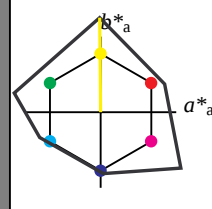
## Eingabe: Farbmétrisches Reflexions-System NCS11

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          |

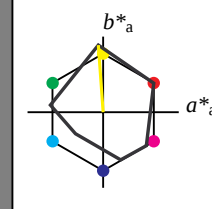
## Ausgabe: Farbmétrisches Reflexions-System MRS18

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          |

| 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                          | 95.41 | -0.97 | 4.75 |       |
| 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*                           | 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                          | 93.05 | -4.11  | 48.97 |       |
| LAB*LABa                         | 93.05 | -3.17  | 44.37 |       |
| LAB*TCHa                         | 75.0  | 44.48  | 94.1  |       |
| relative CIELAB lab*             |       |        |       |       |
| lab*lab                          | 0.969 | -0.035 | 0.499 |       |
| lab*tch                          | 0.75  | 0.5    | 0.261 |       |
| lab*nch                          | 0.0   | 0.5    | 0.261 |       |
| relative Natural Colour (NC)     |       |        |       |       |
| lab*lrj                          | 0.969 | -0.023 | 0.499 |       |
| lab*tce                          | 0.75  | 0.5    | 0.258 |       |
| lab*nce                          | 0.0   | 0.5    | j03g  |       |

| 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                          | 54.35 | -3.37  | 46.36 |       |
| LAB*LABa                         | 54.35 | -3.17  | 44.37 |       |
| LAB*TCHa                         | 25.01 | 44.48  | 94.1  |       |
| relative CIELAB lab*             |       |        |       |       |
| lab*lab                          | 0.47  | -0.035 | 0.499 |       |
| lab*tch                          | 0.25  | 0.5    | 0.261 |       |
| lab*nch                          | 0.5   | 0.5    | 0.261 |       |
| relative Natural Colour (NC)     |       |        |       |       |
| lab*lrj                          | 0.47  | -0.023 | 0.499 |       |
| lab*tce                          | 0.25  | 0.5    | 0.258 |       |
| lab*nce                          | 0.5   | 0.5    | j03g  |       |

| 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                          | 90.69 | -7.25  | 93.17 |       |
| LAB*LABa                         | 90.69 | -6.36  | 88.73 |       |
| LAB*TCHa                         | 50.0  | 88.96  | 94.1  |       |
| relative CIELAB lab*             |       |        |       |       |
| lab*lab                          | 0.939 | -0.071 | 0.997 |       |
| lab*tch                          | 0.5   | 1.0    | 0.261 |       |
| lab*nch                          | 0.0   | 1.0    | 0.261 |       |
| relative Natural Colour (NC)     |       |        |       |       |
| lab*lrj                          | 0.939 | -0.048 | 0.999 |       |
| lab*tce                          | 0.5   | 1.0    | 0.258 |       |
| lab*nce                          | 0.0   | 1.0    | j03g  |       |

$n^* = 0,00$

Schwarzheit  $n^*$

0,25 0,50  $n^* = 0,50$  0,75 1,00

relative Buntheit  $c^*$

 $n^* = 1,0$ 

$n^* = 0,00$

Schwarzheit  $n^*$

0,25 0,50  $n^* = 0,50$  0,75 1,00

relative Buntheit  $c^*$

 $n^* = 1,0$ 

UG080-7, 3 stufige Reihen für konstanten CIELAB Buntton 91/360 = 0.252 (links)

3 stufige Reihen für konstanten CIELAB Buntton 94/360 = 0.261 (rechts)

BAM-Prüfvorlage UG08; Farbmétrik-Systeme ORS18 & ORS18input:  $cmv0^* setcmykcolor$ D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *Startup (S) data depend*

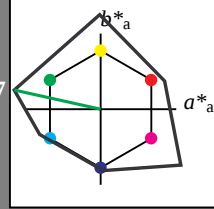
## Eingabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 167/360 = 0.465$  $lab^*tch$  und  $lab^*nch$ 

D65: Buntton G

LCH\*Ma: 63 117 167

olv\*Ma: 0.0 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          |

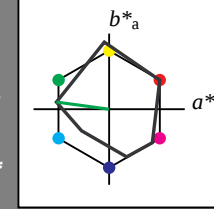
## Ausgabe: Farbmétrisches Reflexions-System MRS18

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

D65: Buntton G

LCH\*Ma: 52 70 172

olv\*Ma: 0.0 1.0 0.0

Dreiecks-Helligkeit  $t^*$ 

%Umfang

 $u^*_{rel} = 91$ 

%Regularität

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

## MRS18; adaptierte CIELAB-Daten

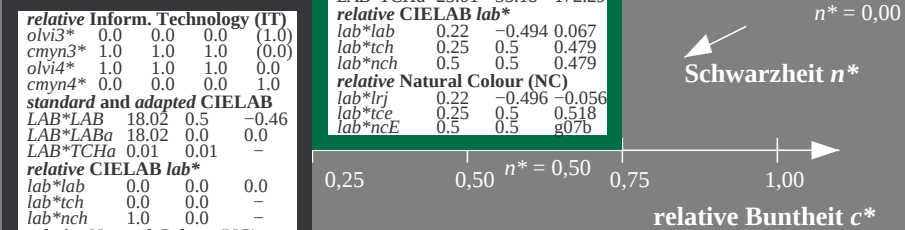
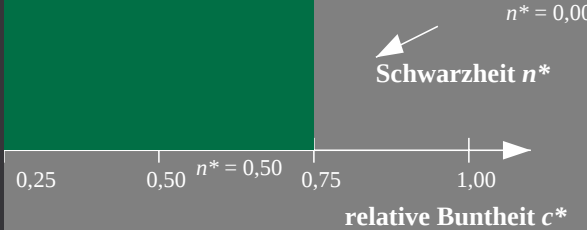
|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| RMa    | 49.63       | 66.96   | 38.37   | 77.18        | 30           |
| JMa    | 90.7        | -6.36   | 88.75   | 88.98        | 94           |
| 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          |

| 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 | -0.97 | 4.75 |       |
| 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   | 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                          | 73.75 | -35.42 | 8.02   |       |
| LAB*LABa                         | 73.75 | -34.85 | 4.72   |       |
| LAB*TCa                          | 75.0  | 35.18  | 172.29 |       |
| relative CIELAB lab*             |       |        |        |       |
| lab*lab                          | 0.72  | -0.494 | 0.067  |       |
| lab*tch                          | 0.75  | 0.5    | 0.479  |       |
| lab*nch                          | 0.0   | 0.5    | 0.479  |       |
| relative Natural Colour (NC)     |       |        |        |       |
| lab*lrj                          | 0.72  | -0.496 | -0.056 |       |
| lab*tce                          | 0.75  | 0.5    | 0.518  |       |
| lab*nce                          | 0.0   | 0.5    | g07b   |       |

| 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                          | 35.06 | -34.67 | 5.41   |       |
| LAB*LABa                         | 35.06 | -34.85 | 4.72   |       |
| LAB*TCa                          | 25.01 | 35.18  | 172.29 |       |
| relative CIELAB lab*             |       |        |        |       |
| lab*lab                          | 0.22  | -0.494 | 0.067  |       |
| lab*tch                          | 0.25  | 0.5    | 0.479  |       |
| lab*nch                          | 0.5   | 0.5    | 0.479  |       |
| relative Natural Colour (NC)     |       |        |        |       |
| lab*lrj                          | 0.22  | -0.496 | -0.056 |       |
| lab*tce                          | 0.25  | 0.5    | 0.518  |       |
| lab*nce                          | 0.5   | 0.5    | g07b   |       |

| 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                          | 52.11 | -69.86 | 11.28  |       |
| LAB*LABa                         | 52.11 | -69.71 | 9.44   |       |
| LAB*TCa                          | 50.0  | 70.36  | 172.29 |       |
| relative CIELAB lab*             |       |        |        |       |
| lab*lab                          | 0.441 | -0.99  | 0.134  |       |
| lab*tch                          | 0.5   | 1.0    | 0.479  |       |
| lab*nch                          | 0.0   | 1.0    | 0.479  |       |
| relative Natural Colour (NC)     |       |        |        |       |
| lab*lrj                          | 0.441 | -0.992 | -0.114 |       |
| lab*tce                          | 0.5   | 1.0    | 0.518  |       |
| lab*nce                          | 0.0   | 1.0    | g07b   |       |



UG080-7, 3 stufige Reihen für konstanten CIELAB Buntton 167/360 = 0.465 (links)

3 stufige Reihen für konstanten CIELAB Buntton 172/360 = 0.479 (rechts)

BAM-Prüfvorlage UG08; Farbmétrik-Systeme ORS18 & ORS18input:  $cmv0^* setcmykcolor$ D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *Startup (S) data depend*

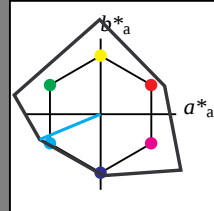
## Eingabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 203/360 = 0.563$  $lab^*ch$  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          |
| 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          |

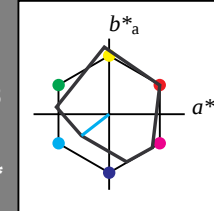
## Ausgabe: Farbmétrisches Reflexions-System MRS18

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

| 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 | -0.97 | 4.75 |       |
| 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   | 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                          | 70.21 | -18.77 | -11.17 |       |
| LAB*LABa                         | 70.21 | -18.27 | -14.23 |       |
| LAB*TCHa                         | 75.0  | 23.17  | 217.91 |       |
| relative CIELAB lab*             |       |        |        |       |
| lab*lab                          | 0.674 | -0.393 | -0.306 |       |
| lab*tch                          | 0.75  | 0.5    | 0.605  |       |
| lab*nch                          | 0.0   | 0.5    | 0.605  |       |
| relative Natural Colour (NC)     |       |        |        |       |
| lab*lrj                          | 0.674 | -0.353 | -0.352 |       |
| lab*tce                          | 0.75  | 0.5    | 0.625  |       |
| lab*nce                          | 0.0   | 0.5    | g49b   |       |

| 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                          | 31.52 | -18.03 | -13.78 |       |
| LAB*LABa                         | 31.52 | -18.27 | -14.23 |       |
| LAB*TCHa                         | 25.01 | 23.17  | 217.91 |       |
| relative CIELAB lab*             |       |        |        |       |
| lab*lab                          | 0.175 | -0.393 | -0.306 |       |
| lab*tch                          | 0.25  | 0.5    | 0.605  |       |
| lab*nch                          | 0.5   | 0.5    | 0.605  |       |
| relative Natural Colour (NC)     |       |        |        |       |
| lab*lrj                          | 0.175 | -0.353 | -0.352 |       |
| lab*tce                          | 0.25  | 0.5    | 0.625  |       |
| lab*nce                          | 0.5   | 0.5    | g49b   |       |

| 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                          | 45.03 | -36.57 | -27.11 |       |
| LAB*LABa                         | 45.03 | -36.56 | -28.47 |       |
| LAB*TCHa                         | 50.0  | 46.35  | 217.91 |       |
| relative CIELAB lab*             |       |        |        |       |
| lab*lab                          | 0.349 | -0.788 | -0.613 |       |
| lab*tch                          | 0.5   | 1.0    | 0.605  |       |
| lab*nch                          | 0.0   | 1.0    | 0.605  |       |
| relative Natural Colour (NC)     |       |        |        |       |
| lab*lrj                          | 0.349 | -0.706 | -0.706 |       |
| lab*tce                          | 0.5   | 1.0    | 0.625  |       |
| lab*nce                          | 0.0   | 1.0    | g49b   |       |

relative Buntheit  $c^*$

0,25 0,50  $n^* = 0,50$  0,75 1,00

Schwarzheit  $n^*$  $n^* = 0,00$  $n^* = 1,0$ 

| 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                          | 18.02 | 0.5  | -0.46 |       |
| LAB*LABa                         | 18.02 | 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 Buntheit  $c^*$

0,25 0,50  $n^* = 0,50$  0,75 1,00

Schwarzheit  $n^*$  $n^* = 0,00$ 

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

UG080-7, 3 stufige Reihen für konstanten CIELAB Buntton 203/360 = 0.563 (links)

BAM-Prüfvorlage UG08; Farbmétrik-Systeme ORS18 & ORS18input:  $cmv0^* setcmykcolor$ D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *Startup (S) data depend*

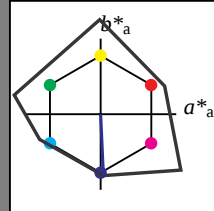
## Eingabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = \text{lab}^*h = 273/360 = 0.757$  $\text{lab}^*ch$  und  $\text{lab}^*nch$ 

D65: Buntton B

LCH\*Ma: 49 81 273

olv\*Ma: 0.0 0.0 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          |

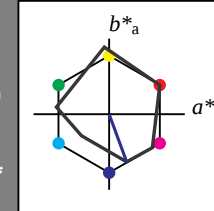
## Ausgabe: Farbmétrisches Reflexions-System MRS18

für Buntton  $h^* = \text{lab}^*h = 290/360 = 0.806$  $\text{lab}^*ch$  und  $\text{lab}^*nch$ 

D65: Buntton B

LCH\*Ma: 37 67 290

olv\*Ma: 0.0 0.0 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          |

| 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 | -0.97 | 4.75 |       |
| 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   | 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                          | 66.03 | 11.17 | -28.74 |       |
| LAB*LABa                         | 66.03 | 11.59 | -31.51 |       |
| LAB*TBa                          | 75.0  | 33.59 | 290.19 |       |
| relative CIELAB lab*             |       |       |        |       |
| lab*lab                          | 0.62  | 0.173 | -0.468 |       |
| lab*tch                          | 0.75  | 0.5   | 0.806  |       |
| lab*nch                          | 0.0   | 0.5   | 0.806  |       |
| relative Natural Colour (NC)     |       |       |        |       |
| lab*lrj                          | 0.62  | 0.129 | -0.482 |       |
| lab*tce                          | 0.75  | 0.5   | 0.791  |       |
| lab*nce                          | 0.0   | 0.5   | 0.806  |       |

| 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                          | 27.34 | 11.92 | -31.35 |       |
| LAB*LABa                         | 27.34 | 11.59 | -31.51 |       |
| LAB*TBa                          | 25.01 | 33.59 | 290.19 |       |
| relative CIELAB lab*             |       |       |        |       |
| lab*lab                          | 0.12  | 0.173 | -0.468 |       |
| lab*tch                          | 0.25  | 0.5   | 0.806  |       |
| lab*nch                          | 0.5   | 0.5   | 0.806  |       |
| relative Natural Colour (NC)     |       |       |        |       |
| lab*lrj                          | 0.12  | 0.129 | -0.482 |       |
| lab*tce                          | 0.25  | 0.5   | 0.791  |       |
| lab*nce                          | 0.5   | 0.5   | 0.806  |       |

| 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                          | 36.65 | 23.33 | -62.24 |       |
| LAB*LABa                         | 36.65 | 23.18 | -63.03 |       |
| LAB*TBa                          | 50.0  | 67.17 | 290.19 |       |
| relative CIELAB lab*             |       |       |        |       |
| lab*lab                          | 0.241 | 0.345 | -0.937 |       |
| lab*tch                          | 0.5   | 1.0   | 0.806  |       |
| lab*nch                          | 0.0   | 1.0   | 0.806  |       |
| relative Natural Colour (NC)     |       |       |        |       |
| lab*lrj                          | 0.241 | 0.257 | -0.965 |       |
| lab*tce                          | 0.5   | 1.0   | 0.791  |       |
| lab*nce                          | 0.0   | 1.0   | 0.806  |       |

Schwarzheit  $n^*$ relative Buntheit  $c^*$ Schwarzheit  $n^*$ relative Buntheit  $c^*$ 

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

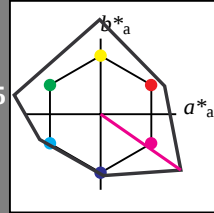
UG080-7, 3 stufige Reihen für konstanten CIELAB Buntton 273/360 = 0.757 (links)

BAM-Prüfvorlage UG08; Farbmétrik-Systeme ORS18 & ORS18input:  $\text{cmy}0^* \text{ setcmykcolor}$ D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *Startup (S) data depend*

## Eingabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 325/360 = 0.903$  $lab^*ch$  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

 $g^*_{H,rel} = 46$  $g^*_{C,rel} = 65$ 

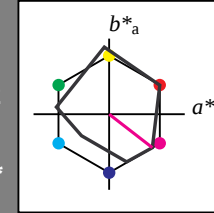
## NCS11; adaptierte CIELAB-Daten

|        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| 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          |

## Ausgabe: Farbmétrisches Reflexions-System MRS18

für Buntton  $h^* = lab^*h = 322/360 = 0.895$  $lab^*ch$  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          |

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 -0.97 4.75  
 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 56.71 -0.23 2.14  
 LAB\*LABa 56.71 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 18.02 0.5 -0.46  
 LAB\*LABa 18.02 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 65.17 28.18 -19.4  
 LAB\*LABa 65.17 28.58 -22.12  
 LAB\*TCHa 75.0 36.15 322.25

relative CIELAB lab\*  
 lab\*lab 0.609 0.395 -0.305  
 lab\*tch 0.75 0.5 0.895  
 lab\*nch 0.0 0.5 0.895

relative Natural Colour (NC)  
 lab\*lrj 0.609 0.324 -0.38  
 lab\*tce 0.75 0.5 0.862  
 lab\*nce 0.0 0.5 b44r

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 26.48 28.92 -22.01  
 LAB\*LABa 26.48 28.58 -22.12  
 LAB\*TCHa 25.01 36.15 322.25

relative CIELAB lab\*  
 lab\*lab 0.109 0.395 -0.305  
 lab\*tch 0.25 0.5 0.895  
 lab\*nch 0.5 0.5 0.895

relative Natural Colour (NC)  
 lab\*lrj 0.109 0.324 -0.38  
 lab\*tce 0.25 0.5 0.862  
 lab\*nce 0.5 0.5 b44r

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 34.95 57.34 -43.57  
 LAB\*LABa 34.95 57.16 -44.25  
 LAB\*TCHa 50.0 72.29 322.25

relative CIELAB lab\*  
 lab\*lab 0.219 0.791 -0.611  
 lab\*tch 0.5 1.0 0.895  
 lab\*nch 0.0 1.0 0.895

relative Natural Colour (NC)  
 lab\*lrj 0.219 0.648 -0.76  
 lab\*tce 0.5 1.0 0.862  
 lab\*nce 0.0 1.0 b44r

0,25 0,50  $n^* = 0,50$  0,75 1,00  
 relative Buntheit  $c^*$

Schwarzheit  $n^*$  $n^* = 0,00$  $n^* = 1,0$ 

0,25 0,50  $n^* = 0,50$  0,75 1,00  
 relative Buntheit  $c^*$

Schwarzheit  $n^*$  $n^* = 0,00$ 

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

UG080-7, 3 stufige Reihen für konstanten CIELAB Buntton 325/360 = 0.903 (links)

BAM-Prüfvorlage UG08; Farbmétrik-Systeme ORS18 & ORS18input:  $cmY0^* setcmykcolor$ D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *Startup (S) data depend*

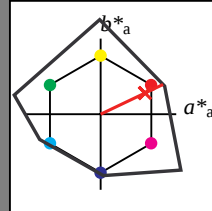
## Eingabe: Farbmétrisches Reflexions-System NCS11

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          |

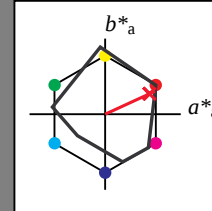
## Ausgabe: Farbmétrisches Reflexions-System MRS18

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          |

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 | -0.97 | 4.75 |
| 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  | 56.71 | -0.23 | 2.14 |
| LAB*LABa | 56.71 | 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  | 18.02 | 0.5  | -0.46 |
| LAB*LABa | 18.02 | 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 | 0.5 | 0.548 | (1.0) |
| cmyn3* | 0.0 | 0.5 | 0.452 | (0.0) |
| olvi4* | 1.0 | 0.5 | 0.549 | 1.0   |
| cmyn4* | 0.0 | 0.5 | 0.451 | 0.0   |

standard and adapted CIELAB

|          |      |       |       |
|----------|------|-------|-------|
| LAB*LAB  | 71.8 | 32.47 | 18.34 |
| LAB*LABa | 71.8 | 33.0  | 15.17 |
| LAB*TCa  | 75.0 | 36.32 | 24.7  |

relative CIELAB lab\*

|         |       |       |       |
|---------|-------|-------|-------|
| lab*lab | 0.695 | 0.454 | 0.209 |
| lab*tch | 0.75  | 0.5   | 0.069 |
| lab*nch | 0.0   | 0.5   | 0.069 |

relative Natural Colour (NC)

|         |       |     |       |
|---------|-------|-----|-------|
| lab*lrj | 0.695 | 0.5 | 0.0   |
| lab*tce | 0.75  | 0.5 | 1.0   |
| lab*nce | 0.0   | 0.5 | 0.99r |

relative Inform. Technology (IT)

|        |     |     |       |       |
|--------|-----|-----|-------|-------|
| olvi3* | 0.5 | 0.0 | 0.048 | (1.0) |
| cmyn3* | 0.5 | 1.0 | 0.952 | (0.0) |
| olvi4* | 1.0 | 0.5 | 0.548 | 0.5   |
| cmyn4* | 0.0 | 0.5 | 0.452 | 0.5   |

standard and adapted CIELAB

|          |       |       |       |
|----------|-------|-------|-------|
| LAB*LAB  | 33.11 | 33.21 | 15.74 |
| LAB*LABa | 33.11 | 33.0  | 15.18 |
| LAB*TCa  | 25.01 | 36.33 | 24.71 |

relative CIELAB lab\*

|         |       |       |       |
|---------|-------|-------|-------|
| lab*lab | 0.195 | 0.454 | 0.209 |
| lab*tch | 0.25  | 0.5   | 0.069 |
| lab*nch | 0.5   | 0.5   | 0.069 |

relative Natural Colour (NC)

|         |       |     |       |
|---------|-------|-----|-------|
| lab*lrj | 0.195 | 0.5 | 0.0   |
| lab*tce | 0.25  | 0.5 | 0.0   |
| lab*nce | 0.5   | 0.5 | 0.00j |

relative Inform. Technology (IT)

|        |     |     |       |       |
|--------|-----|-----|-------|-------|
| olvi3* | 1.0 | 0.0 | 0.097 | (1.0) |
| cmyn3* | 0.0 | 1.0 | 0.903 | (0.0) |
| olvi4* | 1.0 | 0.0 | 0.097 | 1.0   |
| cmyn4* | 0.0 | 1.0 | 0.903 | 0.0   |

standard and adapted CIELAB

|          |       |       |       |
|----------|-------|-------|-------|
| LAB*LAB  | 48.21 | 65.92 | 31.93 |
| LAB*LABa | 48.21 | 66.0  | 30.36 |
| LAB*TCa  | 50.0  | 72.65 | 24.7  |

relative CIELAB lab\*

|         |      |       |       |
|---------|------|-------|-------|
| lab*lab | 0.39 | 0.908 | 0.418 |
| lab*tch | 0.5  | 1.0   | 0.069 |
| lab*nch | 0.0  | 1.0   | 0.069 |

relative Natural Colour (NC)

|         |      |     |       |
|---------|------|-----|-------|
| lab*lrj | 0.39 | 1.0 | 0.0   |
| lab*tce | 0.5  | 1.0 | 0.0   |
| lab*nce | 0.0  | 1.0 | 0.00j |

relative Buntheit  $c^*$

0,25 0,50  $n^* = 0,50$  0,75 1,00

Schwarzheit  $n^*$  $n^* = 0,00$  $n^* = 1,0$ 

relative Buntheit  $c^*$

0,25 0,50  $n^* = 0,50$  0,75 1,00

Schwarzheit  $n^*$  $n^* = 0,00$ 

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

UG080-7, 3 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.071 (links)

BAM-Prüfvorlage UG08; Farbmétrik-Systeme ORS18 & ORS18input:  $cmY0^* setcmykcolor$ D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *Startup (S) data depend*

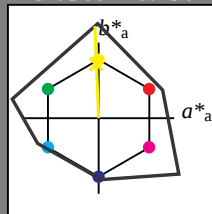
## Eingabe: Farbmétrisches Reflexions-System NCS11

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          |

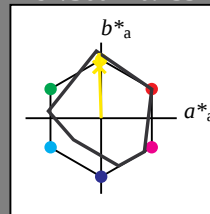
## Ausgabe: Farbmétrisches Reflexions-System MRS18

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          |

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 | -0.97 | 4.75 |
| 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* | 1.0 | 0.976 | 0.5 | (1.0) |
| cmyn3* | 0.0 | 0.024 | 0.5 | (0.0) |
| olvi4* | 1.0 | 0.976 | 0.5 | 1.0   |
| cmyn4* | 0.0 | 0.024 | 0.5 | 0.0   |

standard and adapted CIELAB

|          |       |       |       |
|----------|-------|-------|-------|
| LAB*LAB  | 92.04 | -2.3  | 47.67 |
| LAB*LABa | 92.04 | -1.39 | 43.14 |
| LAB*TCa  | 75.0  | 43.16 | 91.85 |

relative CIELAB lab\*

|         |       |        |       |
|---------|-------|--------|-------|
| lab*lab | 0.957 | -0.015 | 0.5   |
| lab*tch | 0.75  | 0.5    | 0.255 |
| lab*nch | 0.0   | 0.5    | 0.255 |

relative Natural Colour (NC)

|         |       |     |      |
|---------|-------|-----|------|
| lab*lrj | 0.957 | 0.0 | 0.5  |
| lab*tce | 0.75  | 0.5 | 0.25 |
| lab*nce | 0.0   | 0.5 | j00g |

relative Inform. Technology (IT)

|        |     |       |     |       |
|--------|-----|-------|-----|-------|
| olvi3* | 0.5 | 0.476 | 0.0 | (1.0) |
| cmyn3* | 0.5 | 0.524 | 1.0 | (0.0) |
| olvi4* | 1.0 | 0.976 | 0.5 | 0.5   |
| cmyn4* | 0.0 | 0.024 | 0.5 | 0.5   |

standard and adapted CIELAB

|          |       |       |       |
|----------|-------|-------|-------|
| LAB*LAB  | 53.35 | -1.55 | 45.05 |
| LAB*LABa | 53.35 | -1.38 | 43.13 |
| LAB*TCa  | 25.01 | 43.16 | 91.84 |

relative CIELAB lab\*

|         |       |        |       |
|---------|-------|--------|-------|
| lab*lab | 0.457 | -0.015 | 0.5   |
| lab*tch | 0.25  | 0.5    | 0.255 |
| lab*nch | 0.5   | 0.5    | 0.255 |

relative Natural Colour (NC)

|         |       |     |      |
|---------|-------|-----|------|
| lab*lrj | 0.457 | 0.0 | 0.5  |
| lab*tce | 0.25  | 0.5 | 0.25 |
| lab*nce | 0.5   | 0.5 | j99j |

relative Buntheit  $c^*$

0,25 0,50 0,75 1,00

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

Schwarzheit  $n^*$ 

relative Buntheit  $c^*$

0,25 0,50 0,75 1,00

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

Schwarzheit  $n^*$ 

UG080-7, 3 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.256 (links)

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

BAM-Prüfvorlage UG08; Farbmétrik-Systeme ORS18 & ORS18input:  $cmY0^* setcmykcolor$ D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *Startup (S) data depend*

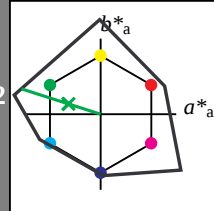
## Eingabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 162/360 = 0.451$  $lab^*ch$  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          |

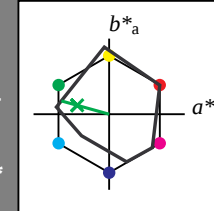
## Ausgabe: Farbmétrisches Reflexions-System MRS18

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

| 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 | -0.97 | 4.75 |       |  |
| LAB*LABa                         | 95.41 | 0.0   | 0.0  |       |  |
| LAB*TCa                          | 99.99 | 0.01  | -    |       |  |

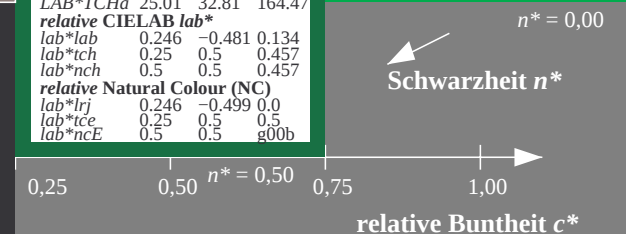
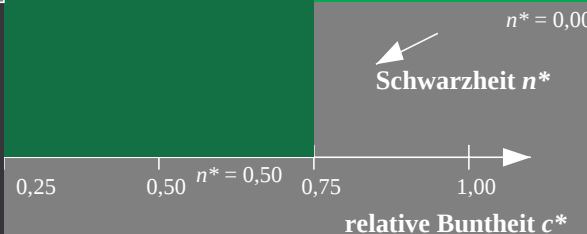
| relative CIELAB lab*         |     |     |     |  |  |
|------------------------------|-----|-----|-----|--|--|
| lab*lab                      | 1.0 | 0.0 | 0.0 |  |  |
| lab*tch                      | 1.0 | 0.0 | -   |  |  |
| lab*nch                      | 0.0 | 0.0 | -   |  |  |
| relative Natural 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*                           | 0.551 | 1.0   | 0.5    | (1.0) |  |
| cmyn3*                           | 0.449 | 0.0   | 0.5    | (0.0) |  |
| olvi4*                           | 0.551 | 1.0   | 0.5    | 1.0   |  |
| cmyn4*                           | 0.449 | 0.0   | 0.5    | 0.0   |  |
| standard and adapted CIELAB      |       |       |        |       |  |
| LAB*LAB                          | 75.74 | -32.2 | 12.22  |       |  |
| LAB*LABa                         | 75.74 | -31.6 | 8.79   |       |  |
| LAB*TCa                          | 75.0  | 32.81 | 164.46 |       |  |

| relative CIELAB lab*         |       |        |       |  |  |
|------------------------------|-------|--------|-------|--|--|
| lab*lab                      | 0.746 | -0.481 | 0.134 |  |  |
| lab*tch                      | 0.75  | 0.5    | 0.457 |  |  |
| lab*nch                      | 0.0   | 0.5    | 0.457 |  |  |
| relative Natural Colour (NC) |       |        |       |  |  |
| lab*lrj                      | 0.746 | -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*                           | 0.103 | 1.0    | 0.0    | (1.0) |  |
| cmyn3*                           | 0.897 | 0.0    | 1.0    | (0.0) |  |
| olvi4*                           | 0.103 | 1.0    | 0.0    | 1.0   |  |
| cmyn4*                           | 0.897 | 0.0    | 1.0    | 0.0   |  |
| standard and adapted CIELAB      |       |        |        |       |  |
| LAB*LAB                          | 56.07 | -63.44 | 19.68  |       |  |
| LAB*LABa                         | 56.07 | -63.21 | 17.58  |       |  |
| LAB*TCa                          | 50.0  | 65.62  | 164.46 |       |  |

| relative CIELAB lab*         |       |        |       |  |  |
|------------------------------|-------|--------|-------|--|--|
| lab*lab                      | 0.492 | -0.962 | 0.268 |  |  |
| lab*tch                      | 0.5   | 1.0    | 0.457 |  |  |
| lab*nch                      | 0.0   | 1.0    | 0.457 |  |  |
| relative Natural Colour (NC) |       |        |       |  |  |
| lab*lrj                      | 0.492 | -0.999 | 0.0   |  |  |
| lab*tce                      | 0.5   | 1.0    | 0.5   |  |  |
| lab*nce                      | 0.0   | 1.0    | g00b  |  |  |



| 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 adapted CIELAB      |       |      |       |       |  |
| LAB*LAB                          | 18.02 | 0.5  | -0.46 |       |  |
| LAB*LABa                         | 18.02 | 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  | -     |       |  |

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

UG080-7, 3 stufige Reihen für konstanten CIELAB Buntton 162/360 = 0.451 (links)

BAM-Prüfvorlage UG08; Farbmétrik-Systeme ORS18 & ORS18input:  $cmY0^* setcmykcolor$ D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *Startup (S) data depend*

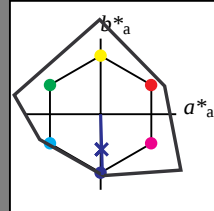
## Eingabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 272/360 = 0.755$  $lab^*tch$  und  $lab^*nch$ 

D65: Buntton B

LCH\*Ma: 49 80 272

olv\*Ma: 0.0 0.02 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          |

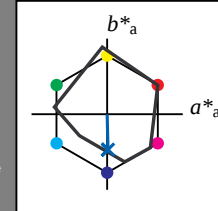
## Ausgabe: Farbmétrisches Reflexions-System MRS18

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

D65: Buntton B

LCH\*Ma: 40 50 271

olv\*Ma: 0.0 0.37 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          |

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 -0.97 4.75  
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 56.71 -0.23 2.14  
LAB\*LABa 56.71 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 18.02 0.5 -0.46  
LAB\*LABa 18.02 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 0.684 1.0 (1.0)  
cmyn3\* 0.5 0.316 0.0 (0.0)  
olvi4\* 0.5 0.684 1.0 1.0  
cmyn4\* 0.5 0.316 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 67.57 0.17 -22.28  
LAB\*LABa 67.57 0.61 -25.16  
LAB\*TCa 75.0 25.18 271.4

relative CIELAB lab\*  
lab\*lab 0.64 0.012 -0.499  
lab\*tch 0.75 0.5 0.754  
lab\*nch 0.0 0.5 0.754

relative Natural Colour (NC)  
lab\*lrj 0.64 0.0 -0.499  
lab\*tce 0.75 0.5 0.75  
lab\*nce 0.0 0.5 g99b

relative Inform. Technology (IT)  
olvi3\* 0.0 0.184 0.5 (1.0)  
cmyn3\* 1.0 0.816 0.5 (0.0)  
olvi4\* 0.5 0.684 1.0 0.5  
cmyn4\* 0.5 0.316 0.0 0.5

standard and adapted CIELAB  
LAB\*LAB 28.87 0.92 -24.9  
LAB\*LABa 28.87 0.62 -25.16  
LAB\*TCa 25.01 25.18 271.41

relative CIELAB lab\*  
lab\*lab 0.14 0.012 -0.499  
lab\*tch 0.25 0.5 0.754  
lab\*nch 0.5 0.5 0.754

relative Natural Colour (NC)  
lab\*lrj 0.14 0.0 -0.499  
lab\*tce 0.25 0.5 0.75  
lab\*nce 0.5 0.5 b00r

relative Inform. Technology (IT)  
olvi3\* 0.0 0.367 1.0 (1.0)  
cmyn3\* 1.0 0.633 0.0 (0.0)  
olvi4\* 0.0 0.367 1.0 1.0  
cmyn4\* 1.0 0.633 0.0 0.0

standard and adapted CIELAB  
LAB\*LAB 39.73 1.32 -49.33  
LAB\*LABa 39.73 1.23 -50.34  
LAB\*TCa 50.0 50.36 271.41

relative CIELAB lab\*  
lab\*lab 0.281 0.025 -0.998  
lab\*tch 0.5 1.0 0.754  
lab\*nch 0.0 1.0 0.754

relative Natural Colour (NC)  
lab\*lrj 0.281 0.0 -0.999  
lab\*tce 0.5 1.0 0.75  
lab\*nce 0.0 1.0 b00r

Siehe ähnliche Dateien: <http://www.ps.bam.de/UG08/>  
Technische Information: <http://www.ps.bam.de> Version 2.1, io=0.0?BAM-Registrierung: 20060101-UG08/10S/S08G09SP.PS/.PDF BAM-Material: Code=rha4ta  
Anwendung für Beurteilung und Messung von Drucker- oder Monitorssystemen  
/UG08/ Form: 10/105 Serie: 1/1, Seite: 10  
Satzanzahlung 10

UG080-7, 3 stufige Reihen für konstanten CIELAB Buntton 272/360 = 0.755 (links)

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

BAM-Prüfvorlage UG08; Farbmétrik-Systeme ORS18 & ORS18input: *cmly0\* setcmykcolor*D65: 3stufige Farbreihen und Koordinaten-Daten für 10 Bunttöneoutput: *Startup (S) data dependend*