

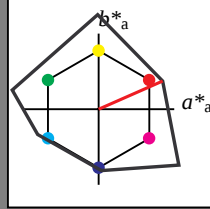
## Eingabe: Farbmétrisches Reflexions-System NCS11

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

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

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 | -   |

 $n^* = 1.0$ 

## 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 | 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)

|         |       |     |        |
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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 | 0.0 | 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  |

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

relative Buntheit  $c^*$

|      |      |      |      |
|------|------|------|------|
| 0.25 | 0.50 | 0.75 | 1.00 |
|------|------|------|------|

 $n^* = 0.50$ 

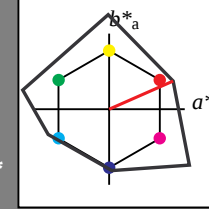
## Ausgabe: Farbmétrisches Reflexions-System NCS11

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

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

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 | -   |

 $n^* = 1.0$ 

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

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|----------|-------|-------|-------|
| LAB*LAB  | 71.27 | 42.34 | 18.63 |
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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)

|        |     |     |     |       |
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| olvi3* | 0.5 | 0.0 | 0.0 | (1.0) |
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| olvi4* | 1.0 | 0.5 | 0.5 | 0.5   |
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standard and adapted CIELAB

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| LAB*LAB  | 29.07 | 42.38 | 18.64 |
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relative Natural Colour (NC)

|         |       |     |        |
|---------|-------|-----|--------|
| lab*lrj | 0.214 | 0.5 | -0.011 |
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| lab*nce | 0.5   | 0.5 | 0.996  |

 $n^* = 0.00$ 

relative Inform. Technology (IT)

|        |     |     |     |       |
|--------|-----|-----|-----|-------|
| olvi3* | 1.0 | 0.0 | 0.0 | (1.0) |
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| olvi4* | 1.0 | 0.0 | 0.0 | 1.0   |
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|----------|-------|-------|-------|
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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* |     |     |     |       |

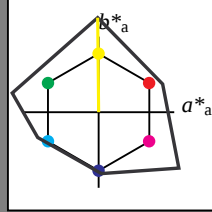
## Eingabe: Farbmétrisches Reflexions-System NCS11

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

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|        |     |     |     |       |
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| olvi4* | 1.0 | 1.0 | 1.0 | 1.0   |
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standard and adapted CIELAB

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|----------|-------|------|-------|
| LAB*LAB  | 95.41 | 0.0  | -0.01 |
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| 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

|          |       |      |     |
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| LAB*LAB  | 53.21 | 0.04 | 0.0 |
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| lab*lab | 0.5 | 0.0 | 0.0 |
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|         |     |     |     |
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relative CIELAB lab\*

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|---------|-----|-----|-----|
| lab*lrj | 0.0 | 0.0 | 0.0 |
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| lab*nce | 1.0 | 0.0 | -   |

 $n^* = 1.0$ 

## 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 | 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  | 0.243 |

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  | 0.243 |

 $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$ 

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   | 0.243 |

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

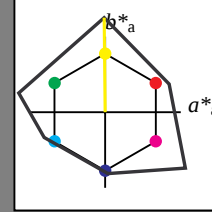
## Ausgabe: Farbmétrisches Reflexions-System NCS11

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

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

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* | 0.5 | 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  | 0.243 |

 $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$ 

## 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 | 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  | 0.243 |

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  | 0     |

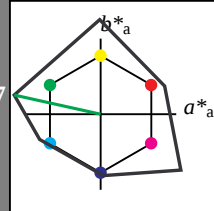
## Eingabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 167/360 = 0.465$  $lab^*ch$  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

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

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 | -   |

 $n^* = 1,0$ 

## 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* | 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*TCHa | 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*TCHa | 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 | 0.0 | 0.0 | (1.0) |
| cmyn3* | 1.0 | 0.0 | 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 | -   |

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

relative Buntheit  $c^*$

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

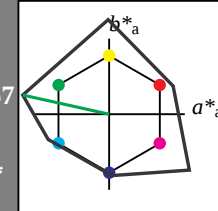
## Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 167/360 = 0.465$  $lab^*ch$  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

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

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 | 0.0 | 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 | -   |

 $n^* = 1,0$ 

## 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* | 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*TCHa | 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*TCHa | 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 | 0.0 | 0.0 | (1.0) |
| cmyn3* | 1.0 | 0.0 | 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 | -   |

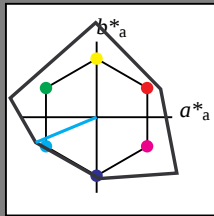
 $n^* = 0,00$ Schwarzheit  $n^*$ 

relative Buntheit  $c^*$

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

UG19-7, 3 stufige Reihen für konstanten CIELAB Buntton 167/360 = 0.465 (links

## 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 1.0Dreiecks-Helligkeit  $t^*$ 

%Umfang

 $u^*_{rel} = 149$ 

%Regularität

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

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 | -   |

 $n^* = 1,0$ 

## 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* | 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    | 0.563  |

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    | 0.563  |

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    | 0.563  |

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\*

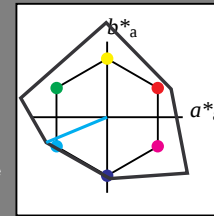
|         |     |     |     |
|---------|-----|-----|-----|
| lab*lab | 0.0 | 0.0 | 0.0 |
| lab*tch | 0.0 | 0.0 | -   |
| lab*nch | 1.0 | 0.0 | -   |

relative Natural Colour (NC)

|         |     |     |     |
|---------|-----|-----|-----|
| lab*lrj | 0.0 | 0.0 | 0.0 |
| lab*tce | 0.0 | 0.0 | -   |
| lab*nce | 1.0 | 0.0 | -   |

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

## Ausgabe: 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 1.0Dreiecks-Helligkeit  $t^*$ 

%Umfang

 $u^*_{rel} = 149$ 

%Regularität

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

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 | -   |

 $n^* = 1,0$ 

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    | 0.563  |

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    | 0.563  |

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    | 0.563  |

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 | -   |

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

UG190-7, 3 stufige Reihen für konstanten CIELAB Buntton 203/360 = 0.563 (links)

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

BAM-Prüfvorlage UG19; Farbmétrik-Systeme ORS18 & ORS18input:  $cmY0^* setcmykcolor$ D65: 2 Koordinaten-Daten von 3stufigen Farbreihen für 10 Bunttoninput:  $Startup (S) data dependend$

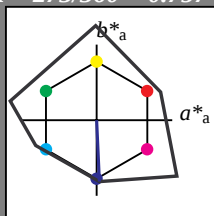
## Eingabe: Farbmétrisches Reflexions-System NCS11

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

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

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 | -   |

 $n^* = 1.0$ 

## 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* | 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*TCHa | 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   | 0.752  |

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*TCHa | 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   | 0.752  |

 $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$  $n^* = 0.50$ Schwarzheit  $n^*$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$ 

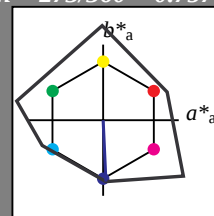
## Ausgabe: Farbmétrisches Reflexions-System NCS11

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

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

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 | -   |

 $n^* = 1.0$  $n^* = 1.0$  $n^* = 1.0$  $n^* = 1.0$  $n^* = 1.0$  $n^* = 1.0$  $n^* = 1.0$  $n^* = 1.0$  $n^* = 1.0$  $n^* = 1.0$  $n^* = 1.0$  $n^* = 1.0$ Schwarzheit  $n^*$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$  $n^* = 0.00$ 

## 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* | 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*TCHa | 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   | 0.752  |

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*TCHa | 25.01 | 40.63 | 272.57 |

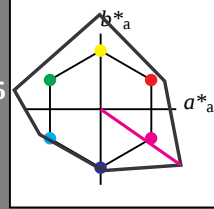
## Eingabe: Farbmatisches Reflexions-System NCS11

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

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

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 | -   |

 $n^* = 1,0$ 

## 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 | 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   | 0.867  |

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   | 0.867  |

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 | -   |

$n^* = 0,00$

Schwarzheit  $n^*$

relative Buntheit  $c^*$

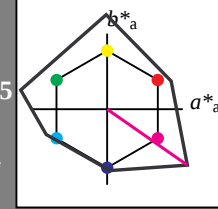
## Ausgabe: Farbmatisches Reflexions-System NCS11

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

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

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 | -   |

 $n^* = 1,0$ 

$n^* = 0,00$

Schwarzheit  $n^*$

relative Buntheit  $c^*$

UG190-7, 3 stufige Reihen für konstanten CIELAB Buntton 325/360 = 0.903 (links)

3 stufige Reihen für konstanten CIELAB Buntton 325/360 = 0.903 (rechts)

BAM-Prüfvorlage UG19; Farbmatrik-Systeme ORS18 & ORS18input:  $cmY0^* setcmykcolor$ 

D65: 2 Koordinaten-Daten von 3stufigen Farbreihen für 10 Bunttoninput: Startup (S) data dependend

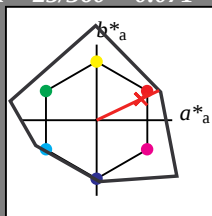
## Eingabe: Farbmétrisches Reflexions-System NCS11

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

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

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 | -   |

 $n^* = 1.0$ 

## 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 | 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*TCHa | 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 |

standard and adapted CIELAB

|          |       |       |       |
|----------|-------|-------|-------|
| LAB*LAB  | 48.21 | 82.61 | 39.36 |
| LAB*LABa | 48.21 | 82.57 | 39.35 |
| LAB*TCHa | 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 | 0.999 |

standard and adapted CIELAB

|          |       |       |       |
|----------|-------|-------|-------|
| LAB*LAB  | 29.6  | 41.35 | 19.69 |
| LAB*LABa | 29.6  | 41.29 | 19.67 |
| LAB*TCHa | 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 | 0.999 |

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*TCHa | 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 | 0.999 |

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

relative Buntheit  $c^*$

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

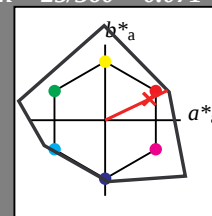
## Ausgabe: Farbmétrisches Reflexions-System NCS11

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

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

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 | -   |

 $n^* = 1.0$ 

## 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 | 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*TCHa | 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 |

standard and adapted CIELAB

|          |       |       |       |
|----------|-------|-------|-------|
| LAB*LAB  | 48.21 | 82.61 | 39.36 |
| LAB*LABa | 48.21 | 82.57 | 39.35 |
| LAB*TCHa | 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 | 0.999 |

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*TCHa | 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 | 0.999 |

relative Inform. Technology (IT)

|        |     |     |     |       |
|--------|-----|-----|-----|-------|
| olvi3* | 0.0 | 0.0 | 0.0 | (1.0) |
| cmyn3* | 1.0 |     |     |       |

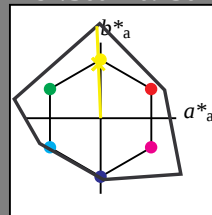
## Eingabe: Farbmétrisches Reflexions-System NCS11

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

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

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 | -   |

 $n^* = 1,0$ 

## 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* | 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 | 100g |

relative Buntheit  $c^*$

$n^* = 0,50$

$n^* = 0,00$

Schwarzheit  $n^*$ 

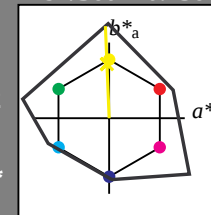
## Ausgabe: Farbmétrisches Reflexions-System NCS11

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

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

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 | -   |

 $n^* = 1,0$ 

relative Buntheit  $c^*$

$n^* = 0,50$

$n^* = 0,00$

Schwarzheit  $n^*$ 

UG19-7, 3 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.256 (links)

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

BAM-Prüfvorlage UG19; Farbmétrik-Systeme ORS18 & ORS18input:  $cmY0^* setcmykcolor$ 

D65: 2 Koordinaten-Daten von 3stufigen Farbreihen für 10 Bunttoninput: Startup (S) data dependend

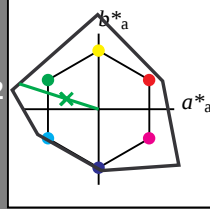
## Eingabe: Farbmétrisches Reflexions-System NCS11

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

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

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 | -   |

 $n^* = 1,0$ 

## 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* | 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    | 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 | 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* | 0.0 | 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 | -   |

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

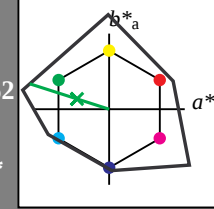
## Ausgabe: Farbmétrisches Reflexions-System NCS11

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

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

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* | 0.0 | 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* | 0.0 | 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* | 0.0 | 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* | 0.0 | 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 | -    |

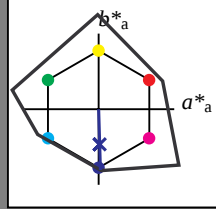
## Eingabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 272/360 = 0.755$  $lab^*ch$  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

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

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 | 11.01 | 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 | -   |

 $n^* = 1.0$ 

## 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* | 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*TCHa | 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 | 0.755  |

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*TCHa | 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 | 0.755  |

 $n^* = 0.50$ Schwarzheit  $n^*$ relative Buntheit  $c^*$ 

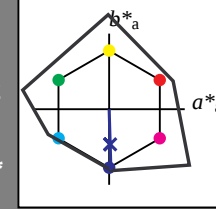
## Ausgabe: Farbmétrisches Reflexions-System NCS11

für Buntton  $h^* = lab^*h = 272/360 = 0.755$  $lab^*ch$  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

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

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 | 11.01 | 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 | -   |

 $n^* = 1.0$ Schwarzheit  $n^*$ relative Buntheit  $c^*$ 

UG19-7, 3 stufige Reihen für konstanten CIELAB Buntton 272/360 = 0.755 (links)

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

BAM-Prüfvorlage UG19; Farbmétrik-Systeme ORS18 & ORS18input:  $cmY0^* setcmykcolor$ 

D65: 2 Koordinaten-Daten von 3stufigen Farbreihen für 10 Bunttoninput: Startup (S) data dependend