

Eingabe: Farbmimetrisches Reflexions-System MRS18a

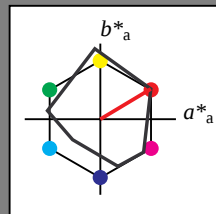
für Buntton  $h^* = lab^*h = 31/360 = 0.086$

LAB\*LCH, LAB\*NCH

D65: Buntton R

LCH\*Ma: 50 78 31

olv\*Ma: 1.0 0.0 0.0



| MRS18a; adaptierte CIELAB-Daten |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
|                                 | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                 | 49.63       | 66.8    | 40.02   | 77.87        | 31           |
| J <sub>Ma</sub>                 | 90.7        | -7.27   | 93.19   | 93.48        | 94           |
| G <sub>Ma</sub>                 | 52.11       | -69.93  | 11.26   | 70.85        | 171          |
| G50B <sub>Ma</sub>              | 45.03       | -36.65  | -27.13  | 45.61        | 217          |
| B <sub>Ma</sub>                 | 36.65       | 23.26   | -62.27  | 66.49        | 290          |
| B50R <sub>Ma</sub>              | 34.94       | 57.27   | -43.6   | 71.99        | 323          |
| N <sub>Ma</sub>                 | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                 | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                | 39.92       | 58.67   | 27.97   | 64.99        | 25           |
| J <sub>CIE</sub>                | 81.26       | -2.91   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                | 52.23       | -42.47  | 13.58   | 44.6         | 162          |
| B <sub>CIE</sub>                | 30.57       | 1.33    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

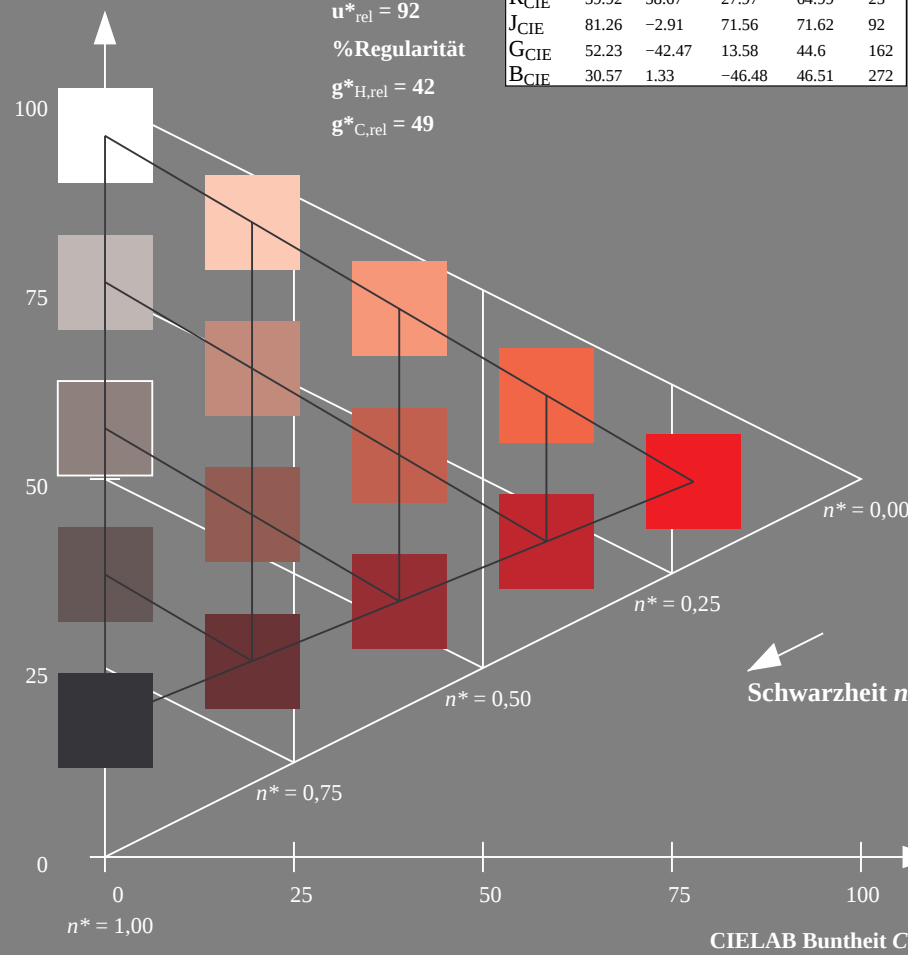
%Umfang

$u^*_{rel} = 92$

%Regularität

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$



UG360-7, 5 stufige Reihen für konstanten CIELAB Buntton 31/360 = 0.086 (links)

Ausgabe: Farbmimetrisches Reflexions-System ORS18

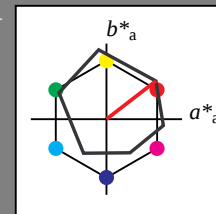
für Buntton  $h^* = lab^*h = 38/360 = 0.105$

LAB\*LCH, LAB\*NCH

D65: Buntton O

LCH\*Ma: 48 83 38

olv\*Ma: 1.0 0.0 0.0



| ORS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                | 47.94       | 65.37   | 50.52   | 82.62        | 38           |
| Y <sub>Ma</sub>                | 90.37       | -10.27  | 91.77   | 92.34        | 96           |
| L <sub>Ma</sub>                | 50.9        | -62.79  | 34.95   | 71.87        | 151          |
| C <sub>Ma</sub>                | 58.62       | -30.35  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>                | 25.71       | 31.11   | -44.42  | 54.24        | 305          |
| M <sub>Ma</sub>                | 48.13       | 75.27   | -8.35   | 75.73        | 354          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>               | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub>               | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub>               | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub>               | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

CIELAB-Helligkeit  $L^*$

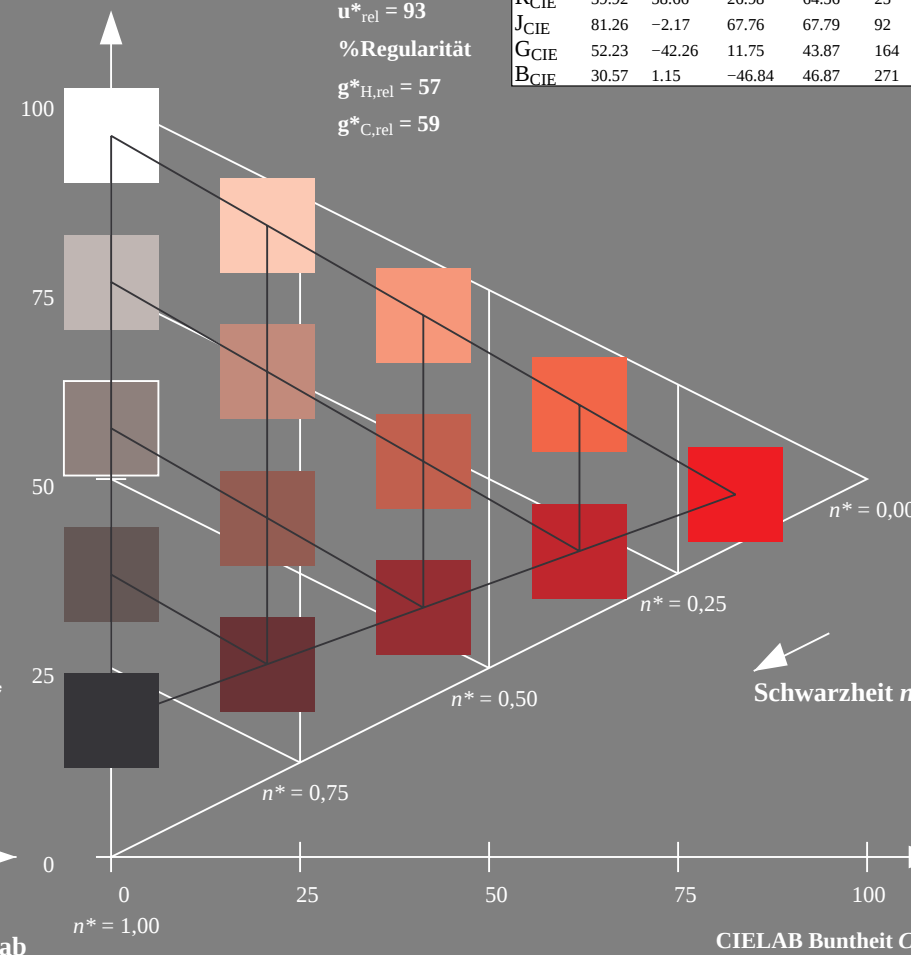
%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 stufige Reihen für konstanten CIELAB Buntton 38/360 = 0.105 (rechts)

BAM-Prüfvorlage UG36; Farbmimetrische Systeme MRS18a & ORS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Buntton

Input:  $cmY^* setcmykcolor$   
Output: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System MRS18a

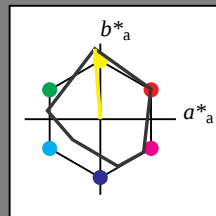
für Buntton  $h^* = lab^*h = 94/360 = 0.262$

LAB\*LCH, LAB\*NCH

D65: Buntton J

LCH\*Ma: 91 93 94

olv\*Ma: 1.0 1.0 0.0



MRS18a; adaptierte CIELAB-Daten

|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 49.63       | 66.8    | 40.02   | 77.87        | 31           |
| J <sub>Ma</sub>    | 90.7        | -7.27   | 93.19   | 93.48        | 94           |
| G <sub>Ma</sub>    | 52.11       | -69.93  | 11.26   | 70.85        | 171          |
| G50B <sub>Ma</sub> | 45.03       | -36.65  | -27.13  | 45.61        | 217          |
| B <sub>Ma</sub>    | 36.65       | 23.26   | -62.27  | 66.49        | 290          |
| B50R <sub>Ma</sub> | 34.94       | 57.27   | -43.6   | 71.99        | 323          |
| N <sub>Ma</sub>    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.67   | 27.97   | 64.99        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.91   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.47  | 13.58   | 44.6         | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.33    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

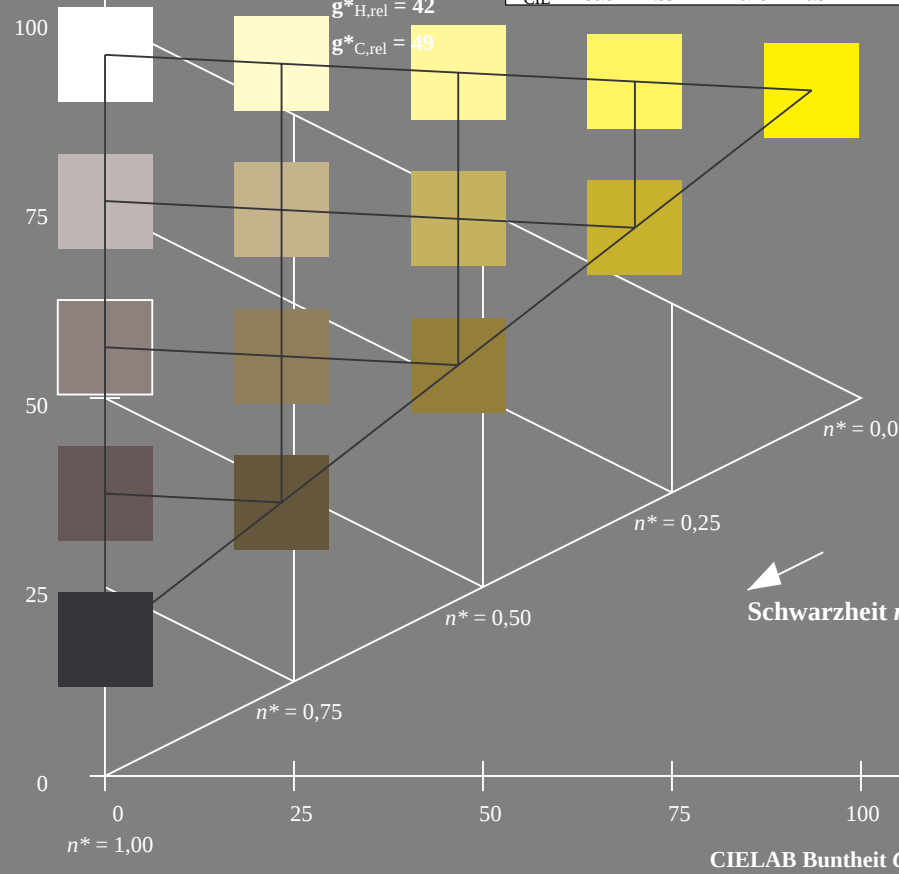
%Umfang

$u^*_{rel} = 92$

%Regularität

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$



UG360-7, 5 stufige Reihen für konstanten CIELAB Buntton 94/360 = 0.262 (links)

Ausgabe: Farbmimetrisches Reflexions-System ORS18

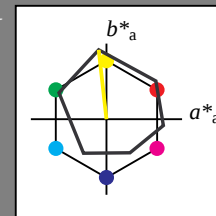
für Buntton  $h^* = lab^*h = 96/360 = 0.268$

LAB\*LCH, LAB\*NCH

D65: Buntton Y

LCH\*Ma: 90 92 96

olv\*Ma: 1.0 1.0 0.0



ORS18; adaptierte CIELAB-Daten

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.37   | 50.52   | 82.62        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.27  | 91.77   | 92.34        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.79  | 34.95   | 71.87        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.35  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.71       | 31.11   | -44.42  | 54.24        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.27   | -8.35   | 75.73        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

CIELAB-Helligkeit  $L^*$

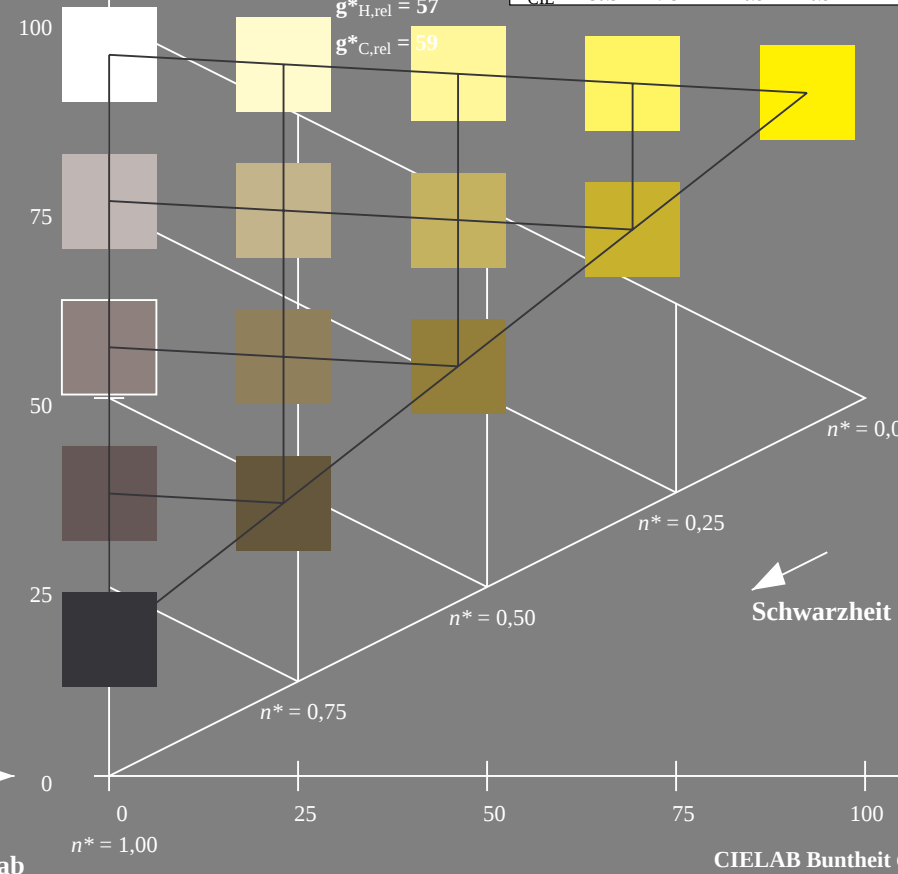
%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 stufige Reihen für konstanten CIELAB Buntton 96/360 = 0.268 (rechts)

BAM-Prüfvorlage UG36; Farbmimetrische-Systeme MRS18a & ORS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttoninput:  $cmY^0 * setcmykcolor$   
input: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System MRS18a

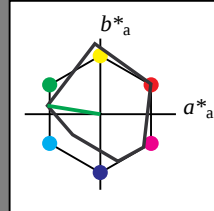
für Buntton  $h^* = lab^*h = 171/360 = 0.475$

LAB\*LCH, LAB\*NCH

D65: Buntton G

LCH\*Ma: 52 71 171

olv\*Ma: 0.0 1.0 0.0



MRS18a; adaptierte CIELAB-Daten

|                    | $L^*=L_a^*$ | $a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 49.63       | 66.8    | 40.02   | 77.87        | 31           |
| J <sub>Ma</sub>    | 90.7        | -7.27   | 93.19   | 93.48        | 94           |
| G <sub>Ma</sub>    | 52.11       | -69.93  | 11.26   | 70.85        | 171          |
| G50B <sub>Ma</sub> | 45.03       | -36.65  | -27.13  | 45.61        | 217          |
| B <sub>Ma</sub>    | 36.65       | 23.26   | -62.27  | 66.49        | 290          |
| B50R <sub>Ma</sub> | 34.94       | 57.27   | -43.6   | 71.99        | 323          |
| N <sub>Ma</sub>    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.67   | 27.97   | 64.99        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.91   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.47  | 13.58   | 44.6         | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.33    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

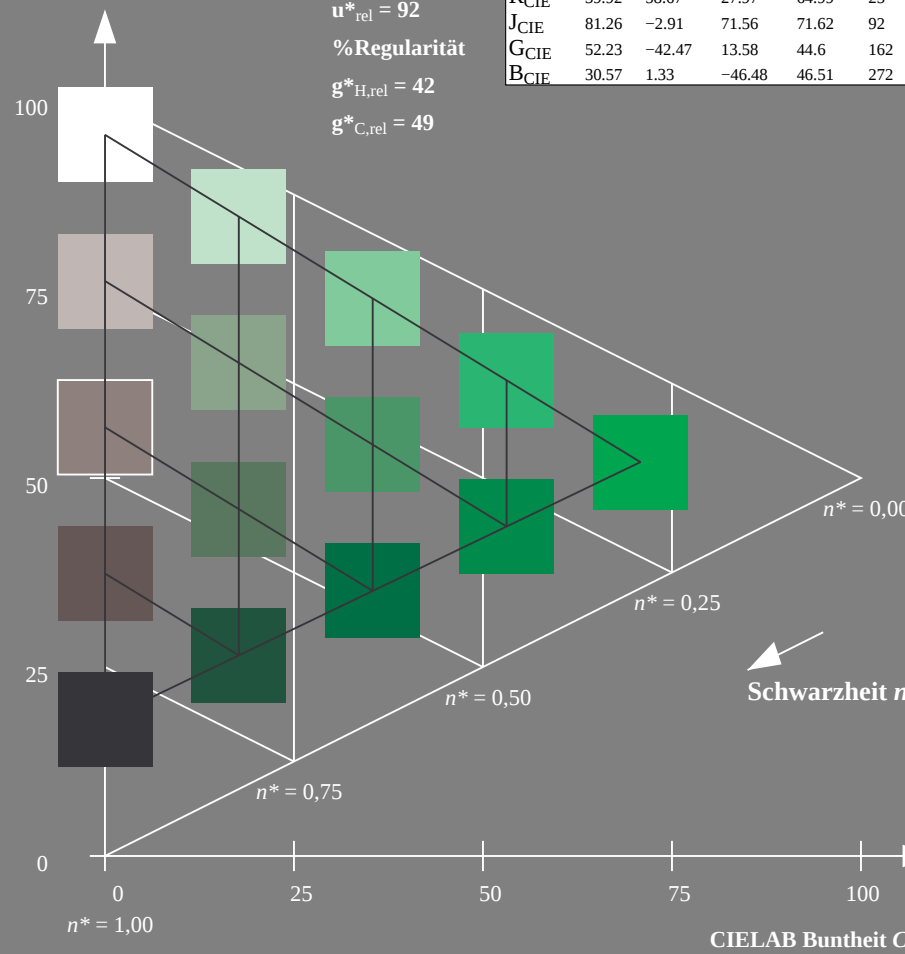
%Umfang

$u_{rel}^* = 92$

%Regularität

$g_{H,rel}^* = 42$

$g_{C,rel}^* = 49$



UG360-7, 5 stufige Reihen für konstanten CIELAB Buntton  $171/360 = 0.475$  (links)

Ausgabe: Farbmimetrisches Reflexions-System ORS18

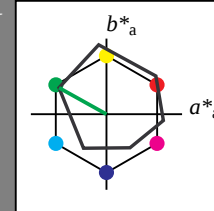
für Buntton  $h^* = lab^*h = 151/360 = 0.419$

LAB\*LCH, LAB\*NCH

D65: Buntton L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0



ORS18; adaptierte CIELAB-Daten

|                  | $L^*=L_a^*$ | $a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.37   | 50.52   | 82.62        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.27  | 91.77   | 92.34        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.79  | 34.95   | 71.87        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.35  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.71       | 31.11   | -44.42  | 54.24        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.27   | -8.35   | 75.73        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

CIELAB-Helligkeit  $L^*$

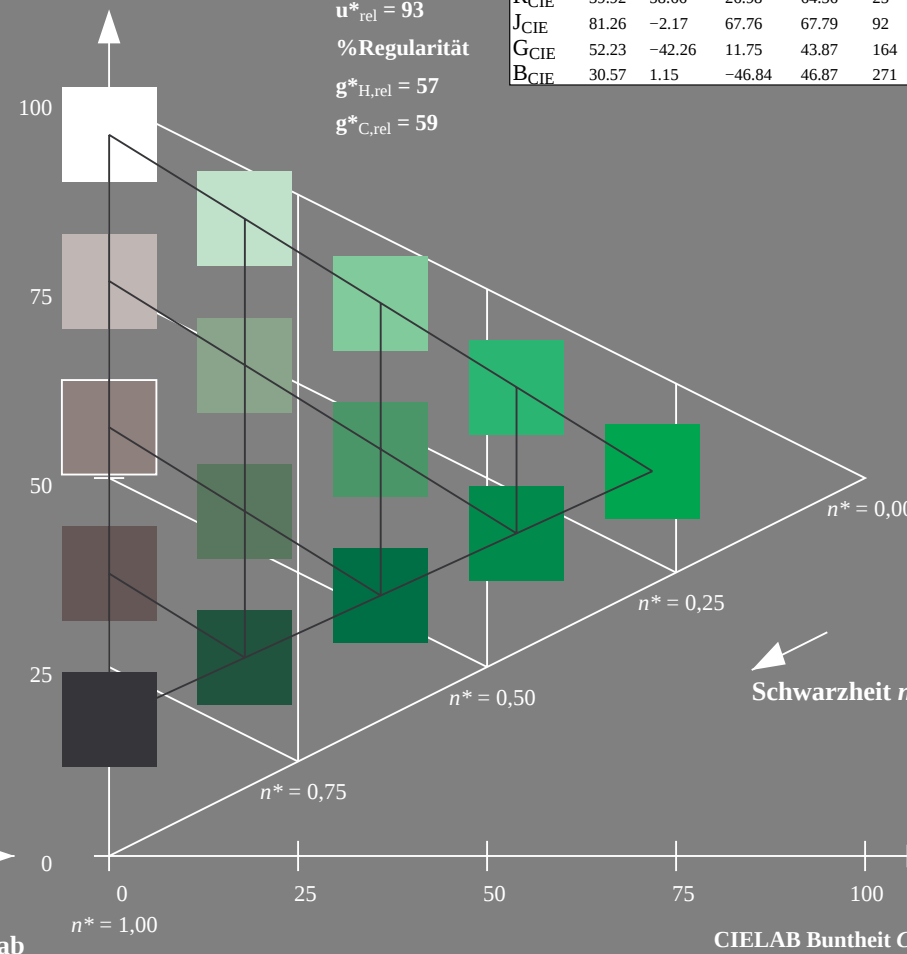
%Umfang

$u_{rel}^* = 93$

%Regularität

$g_{H,rel}^* = 57$

$g_{C,rel}^* = 59$



5 stufige Reihen für konstanten CIELAB Buntton  $151/360 = 0.419$  (rechts)

BAM-Prüfvorlage UG36; Farbmimetrische-Systeme MRS18a & ORS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Buntton

Input:  $cmY^* setcmykcolor$

Output: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System MRS18a

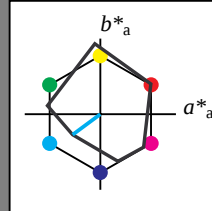
für Buntton  $h^* = lab^*h = 217/360 = 0.601$

LAB\*LCH, LAB\*NCH

D65: Buntton G50B

LCH\*Ma: 45 46 217

olv\*Ma: 0.0 1.0 1.0



MRS18a; adaptierte CIELAB-Daten

|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 49.63       | 66.8    | 40.02   | 77.87        | 31           |
| J <sub>Ma</sub>    | 90.7        | -7.27   | 93.19   | 93.48        | 94           |
| G <sub>Ma</sub>    | 52.11       | -69.93  | 11.26   | 70.85        | 171          |
| G50B <sub>Ma</sub> | 45.03       | -36.65  | -27.13  | 45.61        | 217          |
| B <sub>Ma</sub>    | 36.65       | 23.26   | -62.27  | 66.49        | 290          |
| B50R <sub>Ma</sub> | 34.94       | 57.27   | -43.6   | 71.99        | 323          |
| N <sub>Ma</sub>    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.67   | 27.97   | 64.99        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.91   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.47  | 13.58   | 44.6         | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.33    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

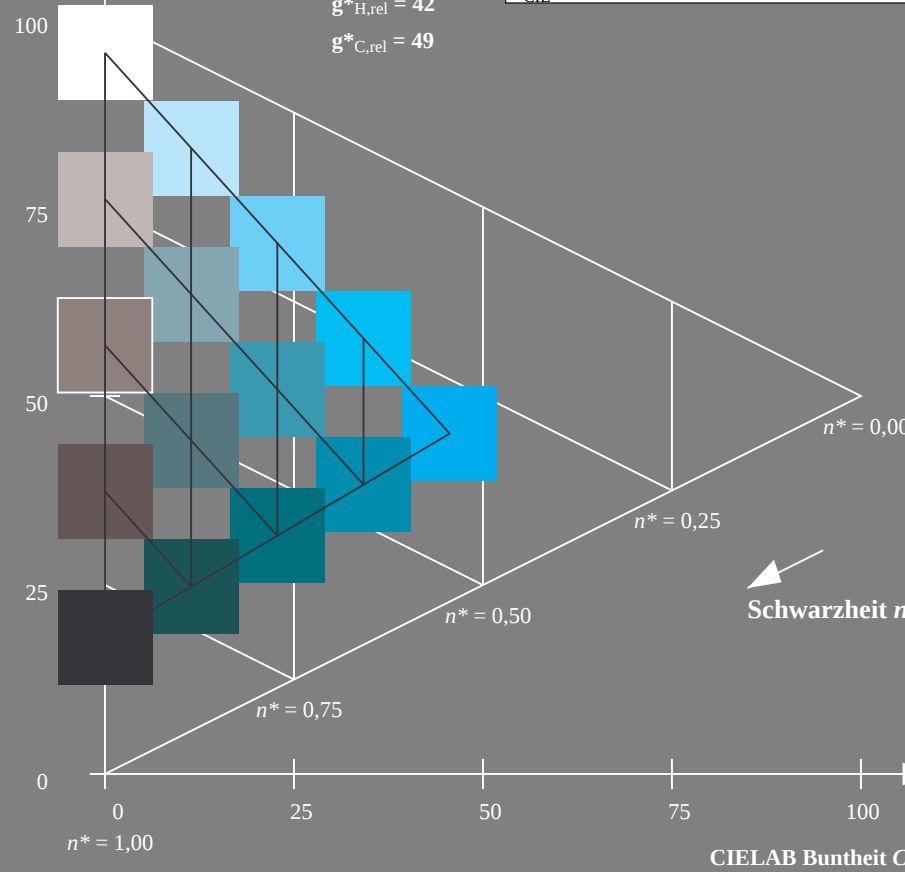
%Umfang

$u^*_{rel} = 92$

%Regularität

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$



UG360-7, 5 stufige Reihen für konstanten CIELAB Buntton 217/360 = 0.601 (links)

Ausgabe: Farbmimetrisches Reflexions-System ORS18

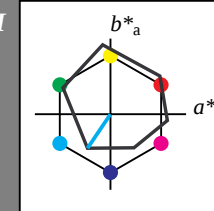
für Buntton  $h^* = lab^*h = 236/360 = 0.656$

LAB\*LCH, LAB\*NCH

D65: Buntton C

LCH\*Ma: 59 54 236

olv\*Ma: 0.0 1.0 1.0



ORS18; adaptierte CIELAB-Daten

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.37   | 50.52   | 82.62        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.27  | 91.77   | 92.34        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.79  | 34.95   | 71.87        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.35  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.71       | 31.11   | -44.42  | 54.24        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.27   | -8.35   | 75.73        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

CIELAB-Helligkeit  $L^*$

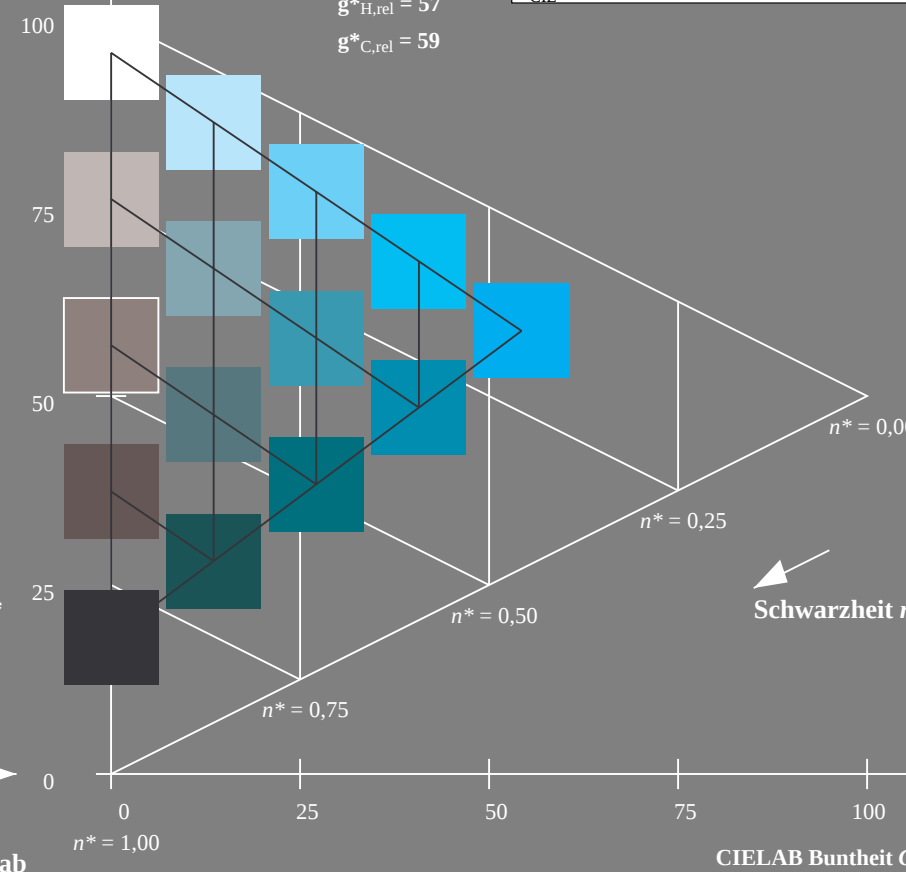
%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 stufige Reihen für konstanten CIELAB Buntton 236/360 = 0.656 (rechts)

BAM-Prüfvorlage UG36; Farbmimetrische-Systeme MRS18a & ORS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Buntton

Input:  $cmY^* setcmykcolor$

Output: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System MRS18a

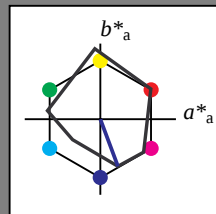
für Buntton  $h^* = lab^*h = 290/360 = 0.807$

LAB\*LCH, LAB\*NCH

D65: Buntton B

LCH\*Ma: 37 66 290

olv\*Ma: 0.0 0.0 1.0



MRS18a; adaptierte CIELAB-Daten

|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 49.63       | 66.8    | 40.02   | 77.87        | 31           |
| J <sub>Ma</sub>    | 90.7        | -7.27   | 93.19   | 93.48        | 94           |
| G <sub>Ma</sub>    | 52.11       | -69.93  | 11.26   | 70.85        | 171          |
| G50B <sub>Ma</sub> | 45.03       | -36.65  | -27.13  | 45.61        | 217          |
| B <sub>Ma</sub>    | 36.65       | 23.26   | -62.27  | 66.49        | 290          |
| B50R <sub>Ma</sub> | 34.94       | 57.27   | -43.6   | 71.99        | 323          |
| N <sub>Ma</sub>    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.67   | 27.97   | 64.99        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.91   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.47  | 13.58   | 44.6         | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.33    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

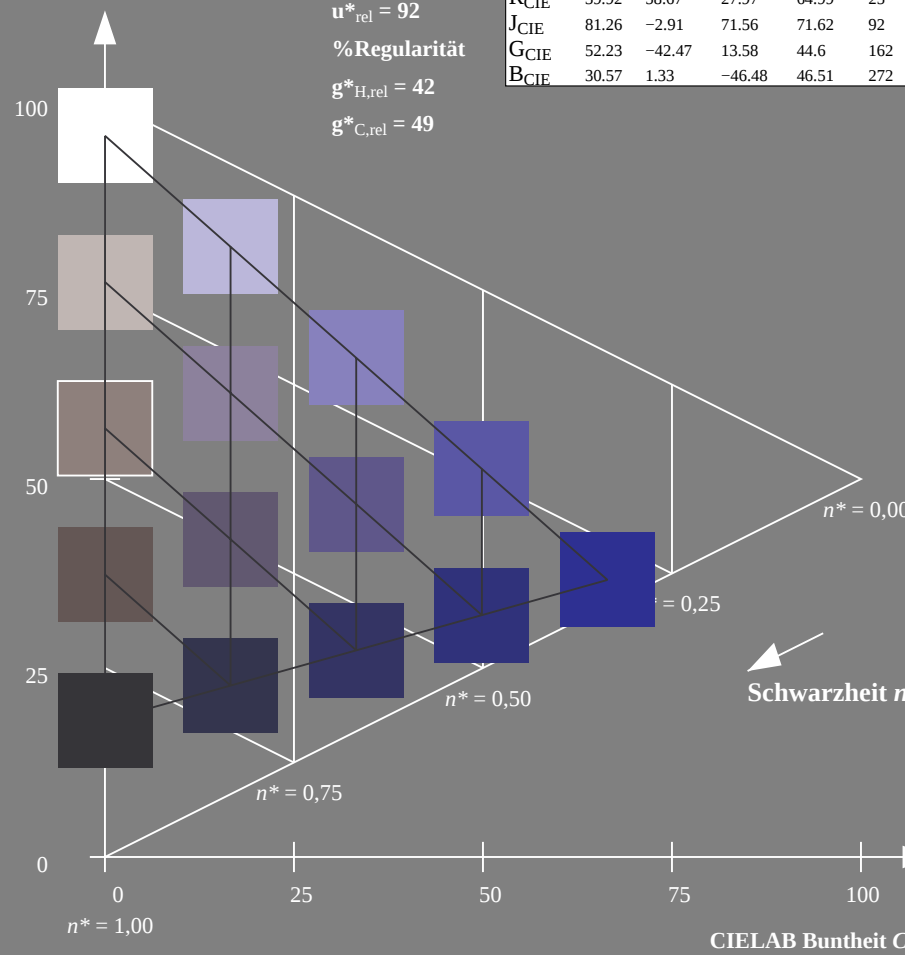
%Umfang

$u^*_{rel} = 92$

%Regularität

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$



UG360-7, 5 stufige Reihen für konstanten CIELAB Buntton 290/360 = 0.807 (links)

Ausgabe: Farbmimetrisches Reflexions-System ORS18

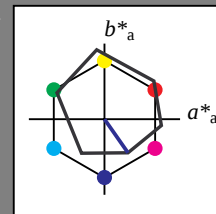
für Buntton  $h^* = lab^*h = 305/360 = 0.847$

LAB\*LCH, LAB\*NCH

D65: Buntton V

LCH\*Ma: 26 54 305

olv\*Ma: 0.0 0.0 1.0



ORS18; adaptierte CIELAB-Daten

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.37   | 50.52   | 82.62        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.27  | 91.77   | 92.34        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.79  | 34.95   | 71.87        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.35  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.71       | 31.11   | -44.42  | 54.24        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.27   | -8.35   | 75.73        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

CIELAB-Helligkeit  $L^*$

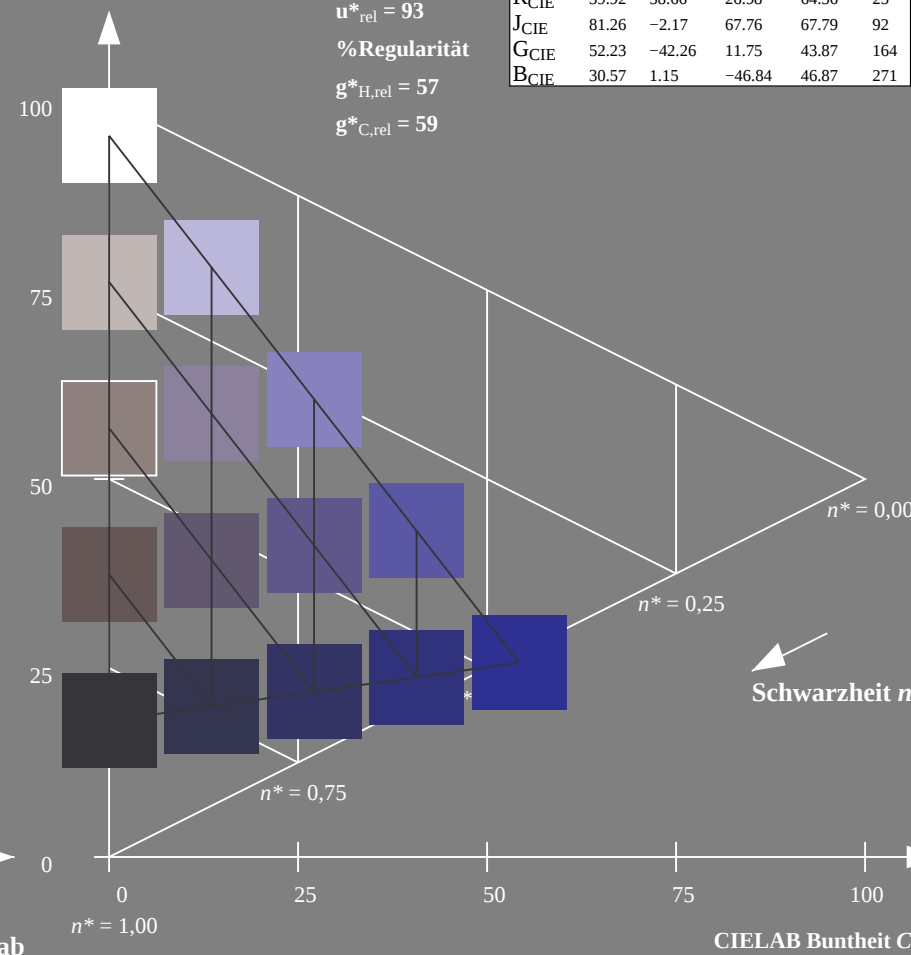
%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 stufige Reihen für konstanten CIELAB Buntton 305/360 = 0.847 (rechts)

BAM-Prüfvorlage UG36; Farbmimetrische-Systeme MRS18a & ORS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen

Input:  $cmY^0$  set  $cmY^0$  color

Output: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System MRS18a

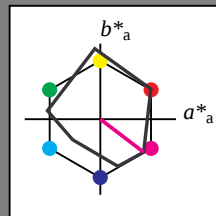
für Buntton  $h^* = lab^*h = 323/360 = 0.896$

LAB\*LCH, LAB\*NCH

D65: Buntton B50R

LCH\*Ma: 35 72 323

olv\*Ma: 1.0 0.0 1.0



| MRS18a; adaptierte CIELAB-Daten |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
|                                 | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                 | 49.63       | 66.8    | 40.02   | 77.87        | 31           |
| J <sub>Ma</sub>                 | 90.7        | -7.27   | 93.19   | 93.48        | 94           |
| G <sub>Ma</sub>                 | 52.11       | -69.93  | 11.26   | 70.85        | 171          |
| G50B <sub>Ma</sub>              | 45.03       | -36.65  | -27.13  | 45.61        | 217          |
| B <sub>Ma</sub>                 | 36.65       | 23.26   | -62.27  | 66.49        | 290          |
| B50R <sub>Ma</sub>              | 34.94       | 57.27   | -43.6   | 71.99        | 323          |
| N <sub>Ma</sub>                 | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                 | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                | 39.92       | 58.67   | 27.97   | 64.99        | 25           |
| J <sub>CIE</sub>                | 81.26       | -2.91   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                | 52.23       | -42.47  | 13.58   | 44.6         | 162          |
| B <sub>CIE</sub>                | 30.57       | 1.33    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

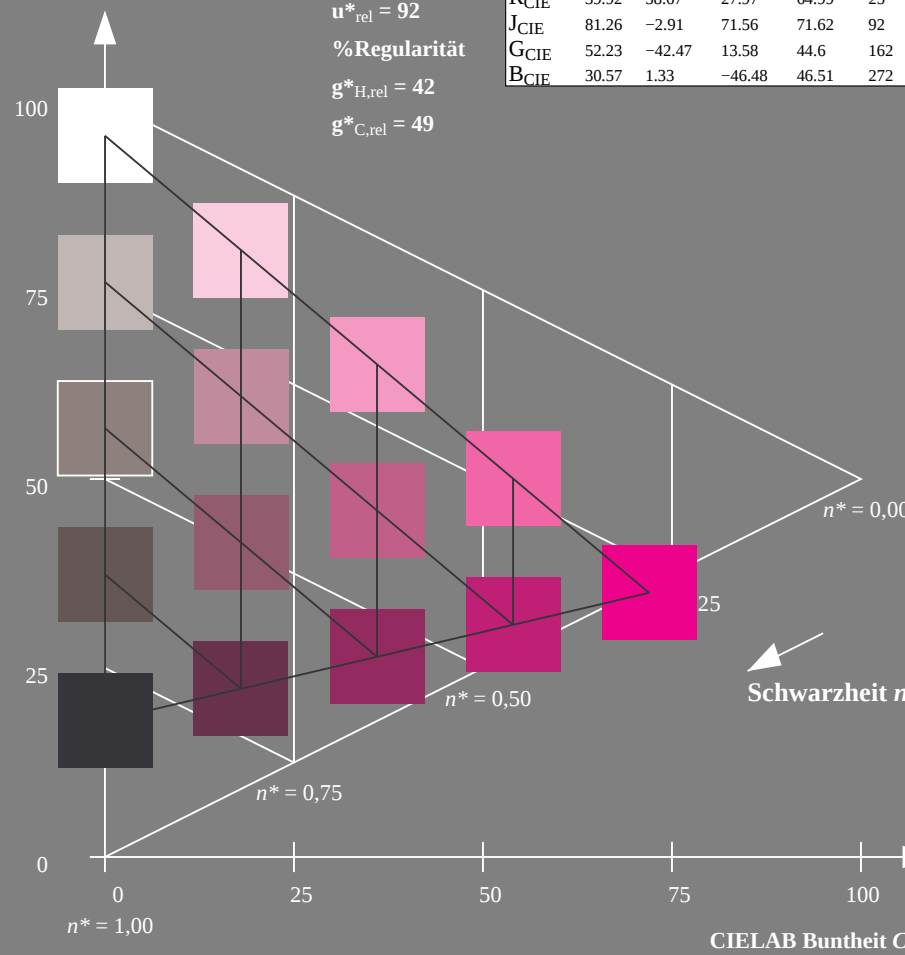
%Umfang

$u^*_{rel} = 92$

%Regularität

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$



UG360-7, 5 stufige Reihen für konstanten CIELAB Buntton 323/360 = 0.896 (links)

Ausgabe: Farbmimetrisches Reflexions-System ORS18

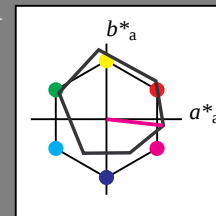
für Buntton  $h^* = lab^*h = 354/360 = 0.982$

LAB\*LCH, LAB\*NCH

D65: Buntton M

LCH\*Ma: 48 76 354

olv\*Ma: 1.0 0.0 1.0



| ORS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                | 47.94       | 65.37   | 50.52   | 82.62        | 38           |
| Y <sub>Ma</sub>                | 90.37       | -10.27  | 91.77   | 92.34        | 96           |
| L <sub>Ma</sub>                | 50.9        | -62.79  | 34.95   | 71.87        | 151          |
| C <sub>Ma</sub>                | 58.62       | -30.35  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>                | 25.71       | 31.11   | -44.42  | 54.24        | 305          |
| M <sub>Ma</sub>                | 48.13       | 75.27   | -8.35   | 75.73        | 354          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>               | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub>               | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub>               | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub>               | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

CIELAB-Helligkeit  $L^*$

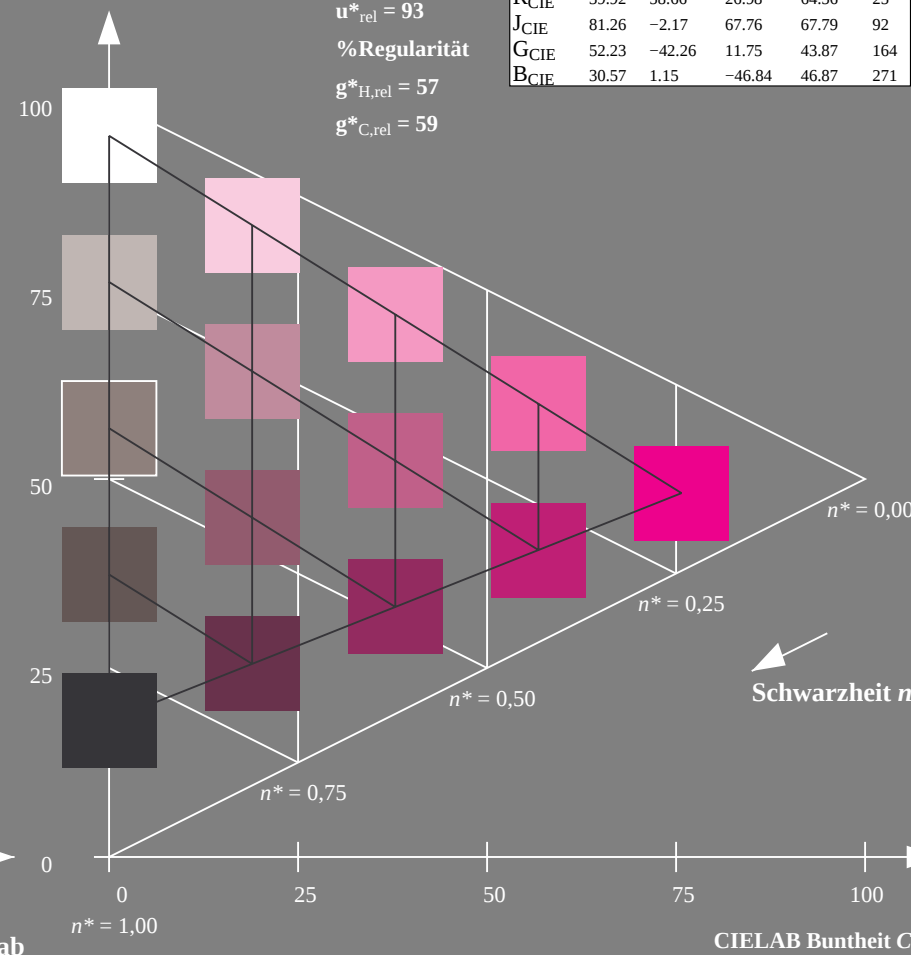
%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



5 stufige Reihen für konstanten CIELAB Buntton 354/360 = 0.982 (rechts)

BAM-Prüfvorlage UG36; Farbmimetrische-Systeme MRS18a & ORS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Buntton

Input: cmy0\* setcmykcolor

Output: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System MRS18a

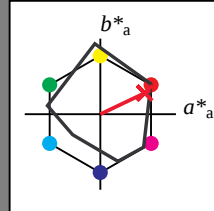
für Buntton  $h^* = lab^*h = 25/360 = 0.071$

LAB\*LCH, LAB\*NCH

D65: Buntton R

LCH\*Ma: 48 73 25

olv\*Ma: 1.0 0.0 0.1



| MRS18a; adaptierte CIELAB-Daten |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
|                                 | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>Ma</sub>                 | 49.63       | 66.8    | 40.02   | 77.87        | 31           |
| J <sub>Ma</sub>                 | 90.7        | -7.27   | 93.19   | 93.48        | 94           |
| G <sub>Ma</sub>                 | 52.11       | -69.93  | 11.26   | 70.85        | 171          |
| G50B <sub>Ma</sub>              | 45.03       | -36.65  | -27.13  | 45.61        | 217          |
| B <sub>Ma</sub>                 | 36.65       | 23.26   | -62.27  | 66.49        | 290          |
| B50R <sub>Ma</sub>              | 34.94       | 57.27   | -43.6   | 71.99        | 323          |
| N <sub>Ma</sub>                 | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                 | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                | 39.92       | 58.67   | 27.97   | 64.99        | 25           |
| J <sub>CIE</sub>                | 81.26       | -2.91   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                | 52.23       | -42.47  | 13.58   | 44.6         | 162          |
| B <sub>CIE</sub>                | 30.57       | 1.33    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

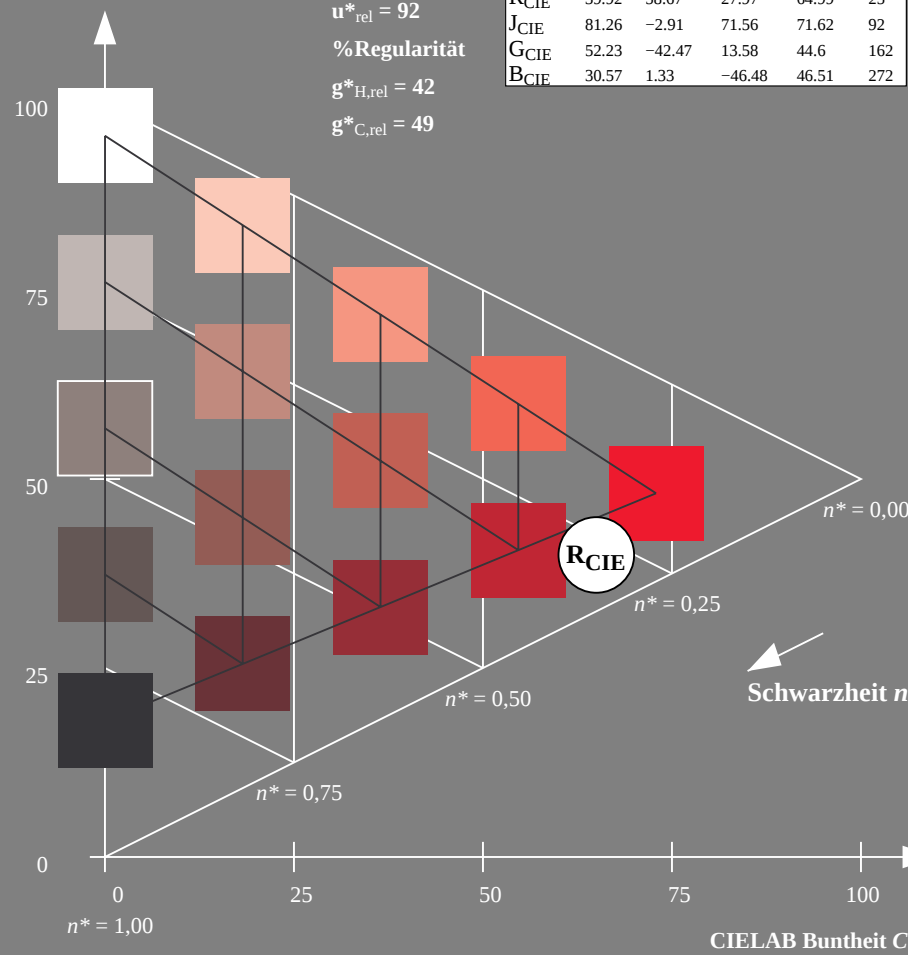
%Umfang

$u^*_{rel} = 92$

%Regularität

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$



UG360-7, 5 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.071 (links)

Ausgabe: Farbmimetrisches Reflexions-System ORS18

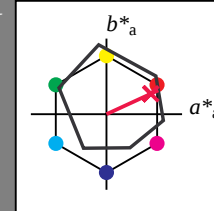
für Buntton  $h^* = lab^*h = 25/360 = 0.069$

LAB\*LCH, LAB\*NCH

D65: Buntton R

LCH\*Ma: 48 75 25

olv\*Ma: 1.0 0.0 0.32



| ORS18; adaptierte CIELAB-Daten |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                | 47.94       | 65.37   | 50.52   | 82.62        | 38           |
| Y <sub>Ma</sub>                | 90.37       | -10.27  | 91.77   | 92.34        | 96           |
| L <sub>Ma</sub>                | 50.9        | -62.79  | 34.95   | 71.87        | 151          |
| C <sub>Ma</sub>                | 58.62       | -30.35  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>                | 25.71       | 31.11   | -44.42  | 54.24        | 305          |
| M <sub>Ma</sub>                | 48.13       | 75.27   | -8.35   | 75.73        | 354          |
| N <sub>Ma</sub>                | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>               | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub>               | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub>               | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub>               | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

CIELAB-Helligkeit  $L^*$

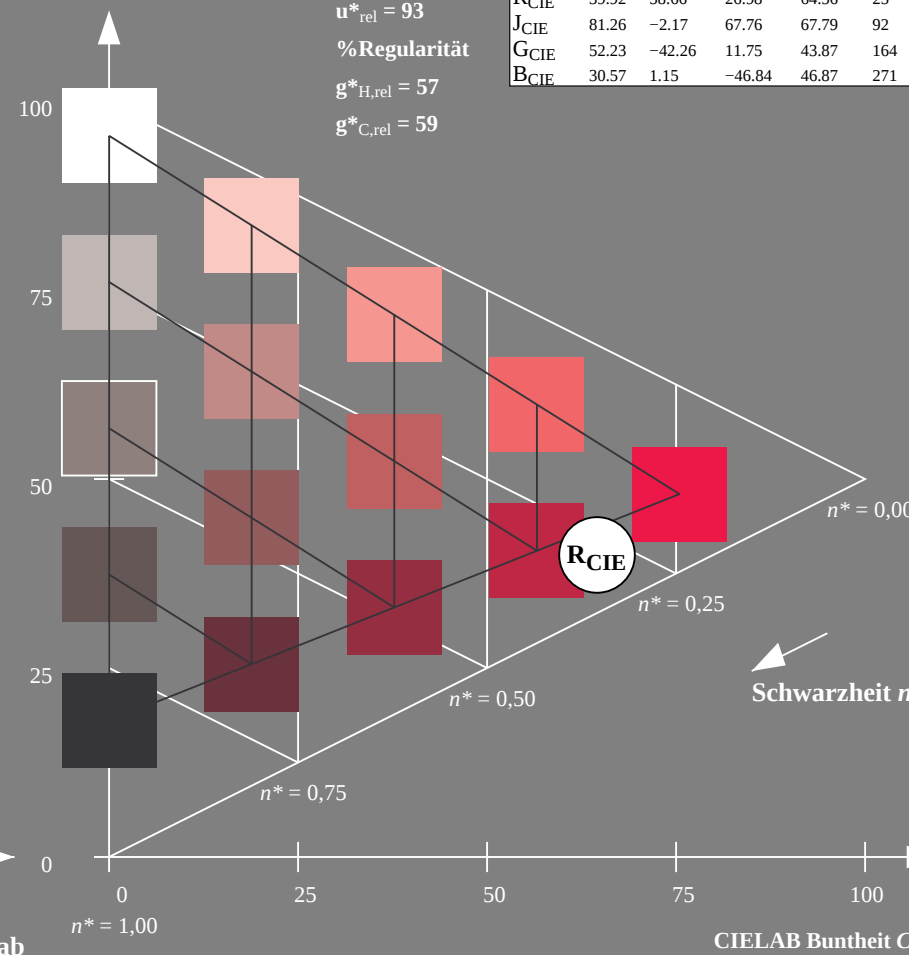
%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



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

BAM-Prüfvorlage UG36; Farbmimetrische Systeme MRS18a & ORS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen

Input:  $cmY^0 * setcmykcolor$

Output: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System MRS18a

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

LAB\*LCH, LAB\*NCH

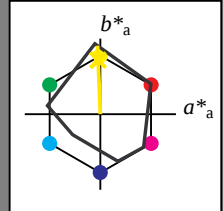
D65: Buntton J

LCH\*Ma: 89 91 92

olv\*Ma: 1.0 0.95 0.0

MRS18a; adaptierte CIELAB-Daten

|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 49.63       | 66.8    | 40.02   | 77.87        | 31           |
| J <sub>Ma</sub>    | 90.7        | -7.27   | 93.19   | 93.48        | 94           |
| G <sub>Ma</sub>    | 52.11       | -69.93  | 11.26   | 70.85        | 171          |
| G50B <sub>Ma</sub> | 45.03       | -36.65  | -27.13  | 45.61        | 217          |
| B <sub>Ma</sub>    | 36.65       | 23.26   | -62.27  | 66.49        | 290          |
| B50R <sub>Ma</sub> | 34.94       | 57.27   | -43.6   | 71.99        | 323          |
| N <sub>Ma</sub>    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.67   | 27.97   | 64.99        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.91   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.47  | 13.58   | 44.6         | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.33    | -46.48  | 46.51        | 272          |



CIELAB-Helligkeit  $L^*$

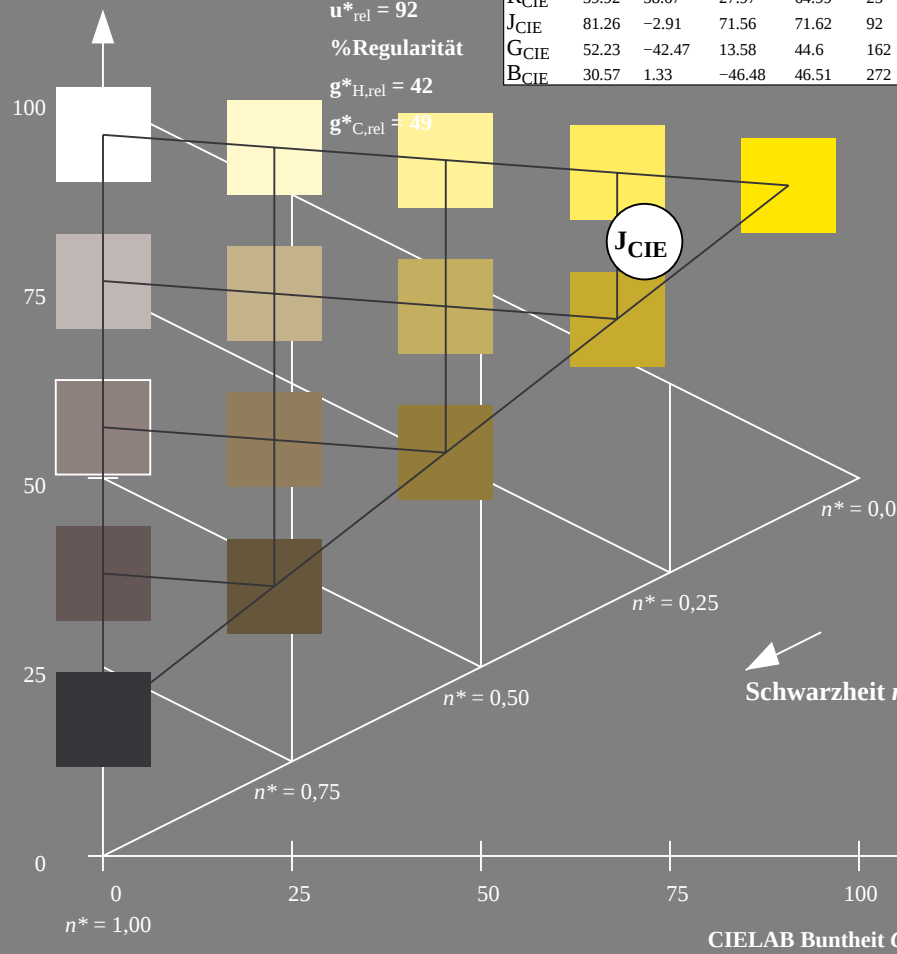
%Umfang

$u^*_{rel} = 92$

%Regularität

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$



UG360-7, 5 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.256 (links)

Ausgabe: Farbmimetrisches Reflexions-System ORS18

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

LAB\*LCH, LAB\*NCH

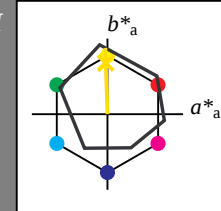
D65: Buntton J

LCH\*Ma: 86 88 92

olv\*Ma: 1.0 0.9 0.0

ORS18; adaptierte CIELAB-Daten

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.37   | 50.52   | 82.62        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.27  | 91.77   | 92.34        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.79  | 34.95   | 71.87        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.35  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.71       | 31.11   | -44.42  | 54.24        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.27   | -8.35   | 75.73        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.87        | 271          |



CIELAB-Helligkeit  $L^*$

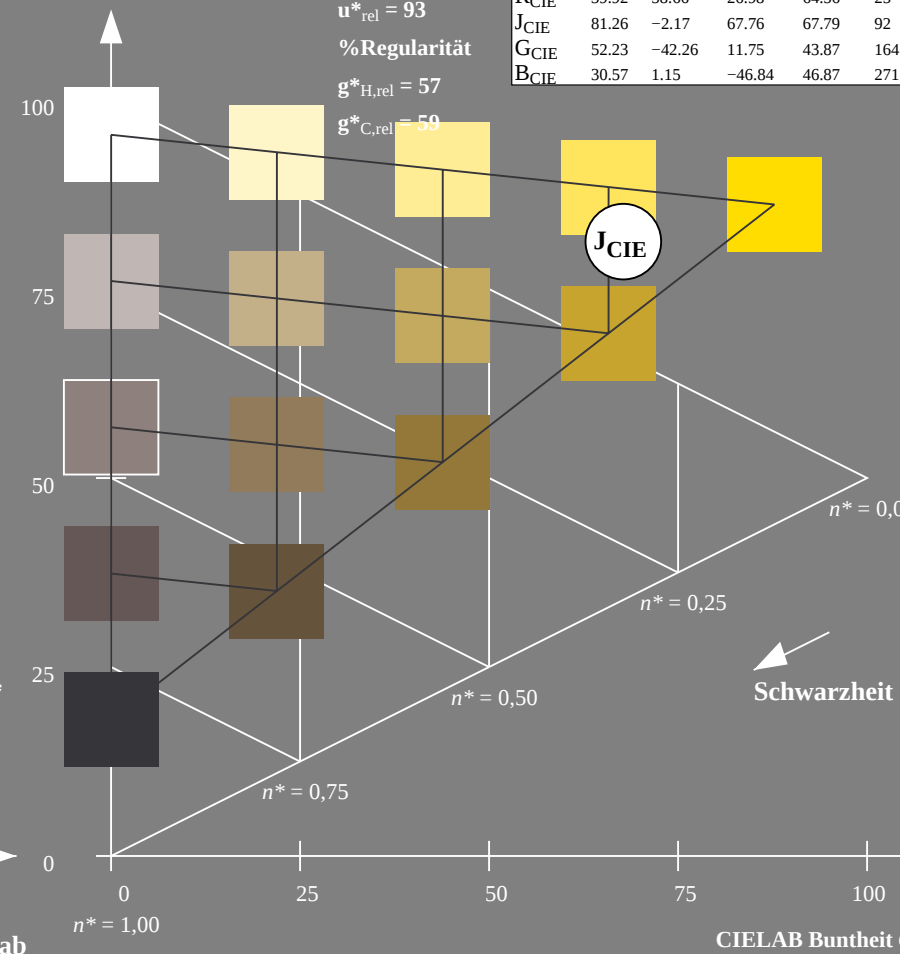
%Umfang

$u^*_{rel} = 93$

%Regularität

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



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

BAM-Prüfvorlage UG36; Farbmimetrische-Systeme MRS18a & ORS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttoninput:  $cmY0^* setcmykcolor$   
input: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System MRS18a

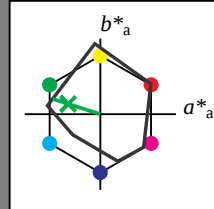
für Buntton  $h^* = lab^*h = 162/360 = 0.451$

LAB\*LCH, LAB\*NCH

D65: Buntton G

LCH\*Ma: 56 66 162

olv\*Ma: 0.11 1.0 0.0



MRS18a; adaptierte CIELAB-Daten

|                    | $L^*=L_a^*$ | $a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 49.63       | 66.8    | 40.02   | 77.87        | 31           |
| J <sub>Ma</sub>    | 90.7        | -7.27   | 93.19   | 93.48        | 94           |
| G <sub>Ma</sub>    | 52.11       | -69.93  | 11.26   | 70.85        | 171          |
| G50B <sub>Ma</sub> | 45.03       | -36.65  | -27.13  | 45.61        | 217          |
| B <sub>Ma</sub>    | 36.65       | 23.26   | -62.27  | 66.49        | 290          |
| B50R <sub>Ma</sub> | 34.94       | 57.27   | -43.6   | 71.99        | 323          |
| N <sub>Ma</sub>    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.67   | 27.97   | 64.99        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.91   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.47  | 13.58   | 44.6         | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.33    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

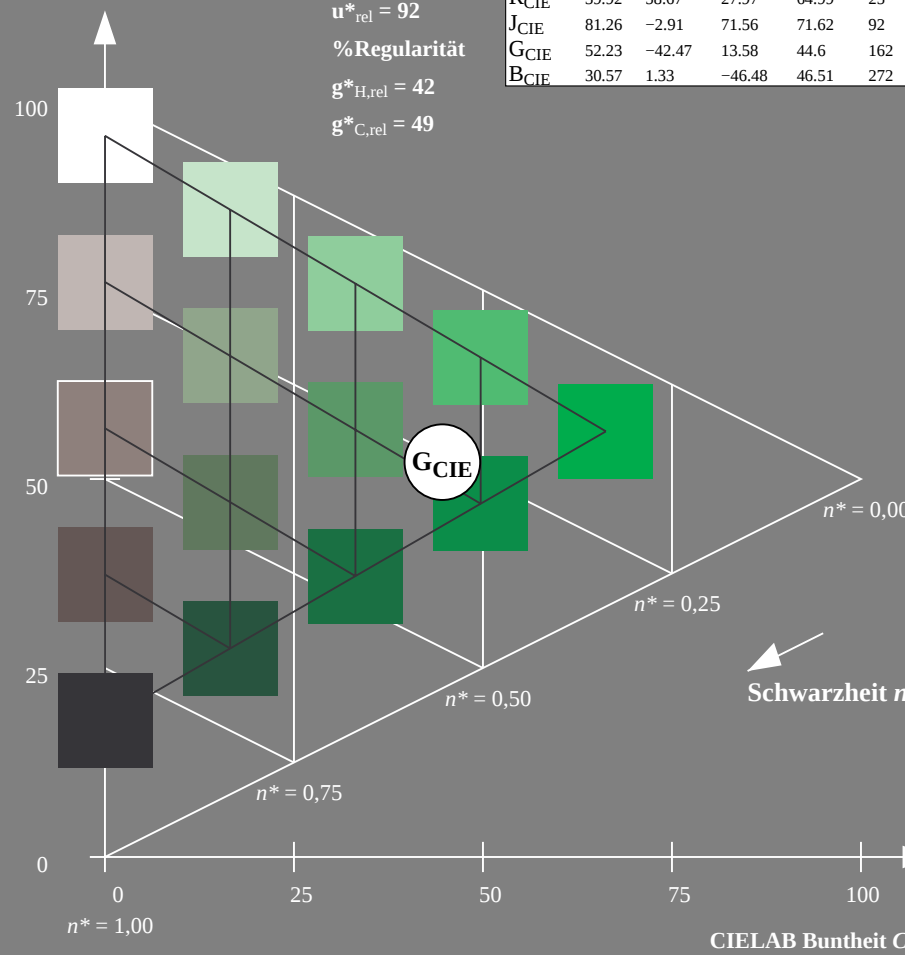
%Umfang

$u_{rel}^* = 92$

%Regularität

$g_{H,rel}^* = 42$

$g_{C,rel}^* = 49$



UG360-7, 5 stufige Reihen für konstanten CIELAB Buntton 162/360 = 0.451 (links)

Ausgabe: Farbmimetrisches Reflexions-System ORS18

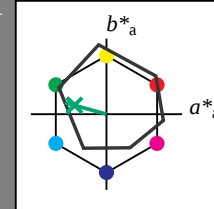
für Buntton  $h^* = lab^*h = 164/360 = 0.457$

LAB\*LCH, LAB\*NCH

D65: Buntton G

LCH\*Ma: 53 57 164

olv\*Ma: 0.0 1.0 0.25



ORS18; adaptierte CIELAB-Daten

|                  | $L^*=L_a^*$ | $a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.37   | 50.52   | 82.62        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.27  | 91.77   | 92.34        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.79  | 34.95   | 71.87        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.35  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.71       | 31.11   | -44.42  | 54.24        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.27   | -8.35   | 75.73        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

CIELAB-Helligkeit  $L^*$

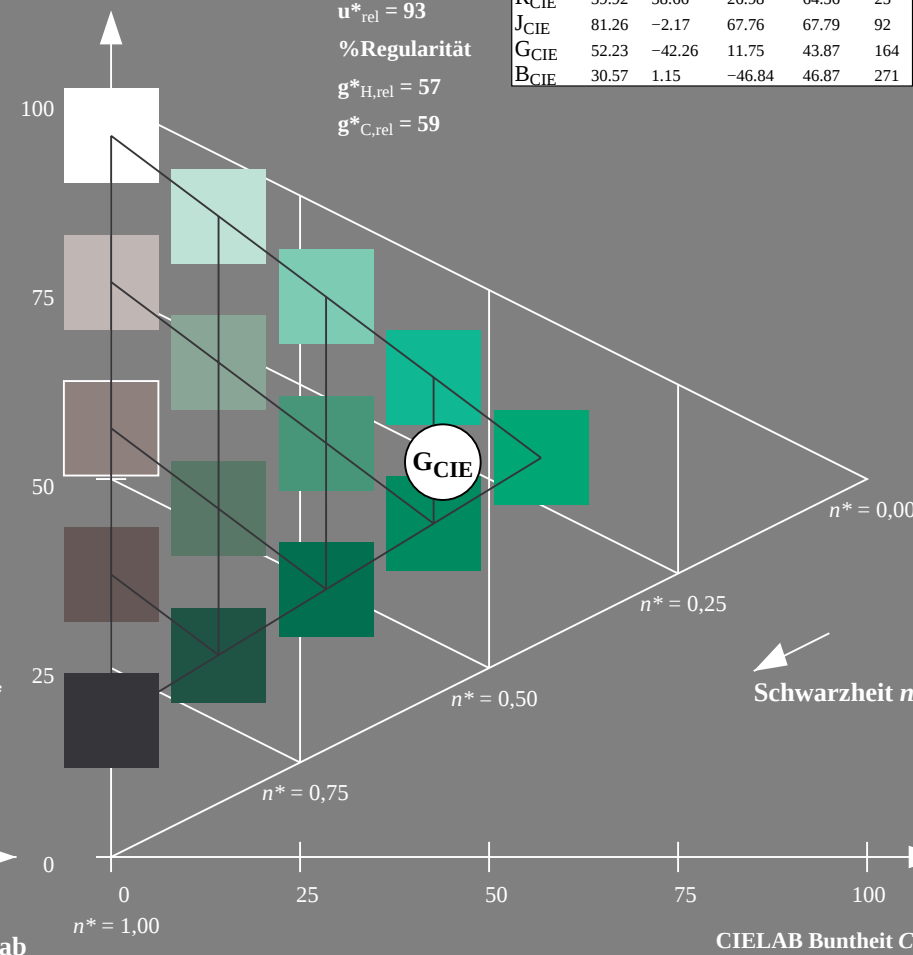
%Umfang

$u_{rel}^* = 93$

%Regularität

$g_{H,rel}^* = 57$

$g_{C,rel}^* = 59$



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

BAM-Prüfvorlage UG36; Farbmimetrische-Systeme MRS18a & ORS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Buntton

Input:  $cmY^0$  set  $cmY^0$  color

Output: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System MRS18a

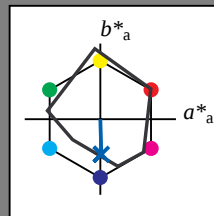
für Buntton  $h^* = lab^*h = 272/360 = 0.755$

LAB\*LCH, LAB\*NCH

D65: Buntton B

LCH\*Ma: 40 49 272

olv\*Ma: 0.0 0.36 1.0



MRS18a; adaptierte CIELAB-Daten

|                    | $L^*=L_a^*$ | $a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 49.63       | 66.8    | 40.02   | 77.87        | 31           |
| J <sub>Ma</sub>    | 90.7        | -7.27   | 93.19   | 93.48        | 94           |
| G <sub>Ma</sub>    | 52.11       | -69.93  | 11.26   | 70.85        | 171          |
| G50B <sub>Ma</sub> | 45.03       | -36.65  | -27.13  | 45.61        | 217          |
| B <sub>Ma</sub>    | 36.65       | 23.26   | -62.27  | 66.49        | 290          |
| B50R <sub>Ma</sub> | 34.94       | 57.27   | -43.6   | 71.99        | 323          |
| N <sub>Ma</sub>    | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.67   | 27.97   | 64.99        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.91   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.47  | 13.58   | 44.6         | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.33    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

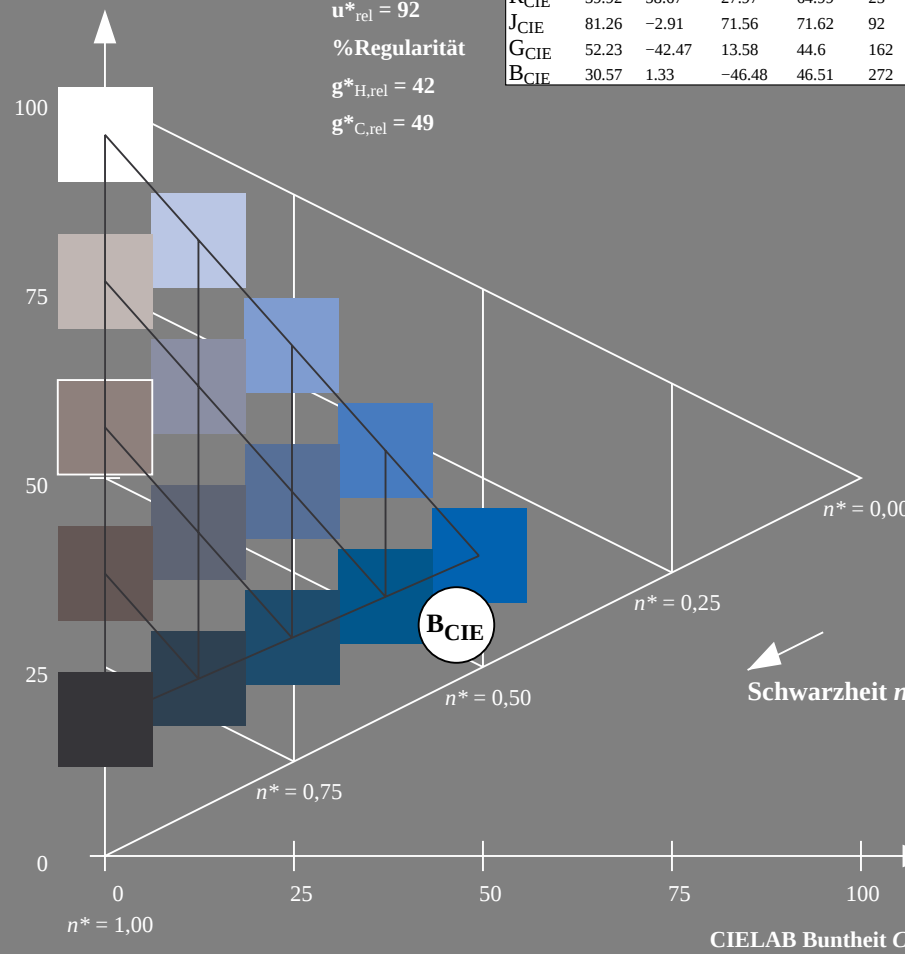
%Umfang

$u_{rel}^* = 92$

%Regularität

$g_{H,rel}^* = 42$

$g_{C,rel}^* = 49$



UG360-7, 5 stufige Reihen für konstanten CIELAB Buntton  $272/360 = 0.755$  (links)

Ausgabe: Farbmimetrisches Reflexions-System ORS18

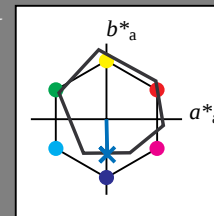
für Buntton  $h^* = lab^*h = 271/360 = 0.754$

LAB\*LCH, LAB\*NCH

D65: Buntton B

LCH\*Ma: 42 45 271

olv\*Ma: 0.0 0.49 1.0



ORS18; adaptierte CIELAB-Daten

|                  | $L^*=L_a^*$ | $a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.37   | 50.52   | 82.62        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.27  | 91.77   | 92.34        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.79  | 34.95   | 71.87        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.35  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.71       | 31.11   | -44.42  | 54.24        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.27   | -8.35   | 75.73        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.56        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.17   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.26  | 11.75   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.87        | 271          |

CIELAB-Helligkeit  $L^*$

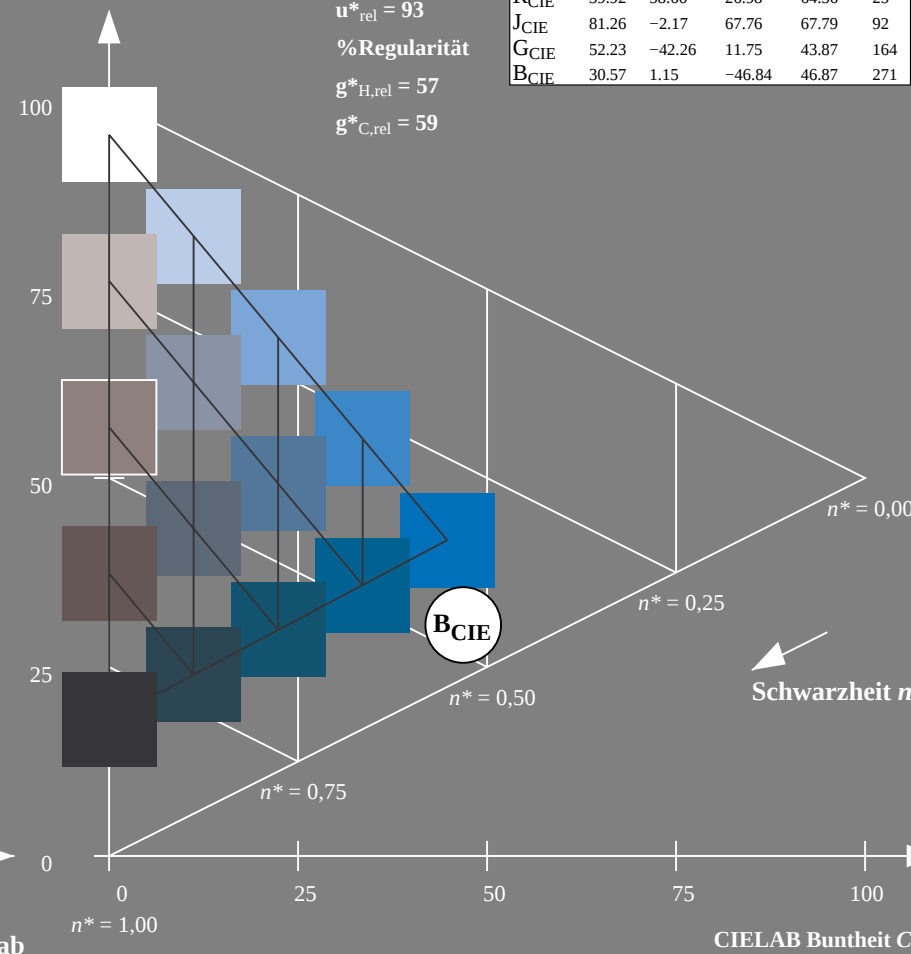
%Umfang

$u_{rel}^* = 93$

%Regularität

$g_{H,rel}^* = 57$

$g_{C,rel}^* = 59$



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

BAM-Prüfvorlage UG36; Farbmimetrische-Systeme MRS18a & ORS18

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttonen

Input:  $cmY^0$  set  $cmY^0$  color

Output: no change compared to input