

Eingabe: Farbmimetrisches Reflexions-System ORS18

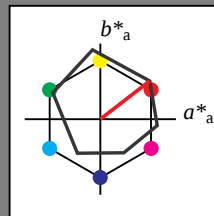
für Buntton  $h^* = lab^*h = 38/360 = 0.105$

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  $L^*$

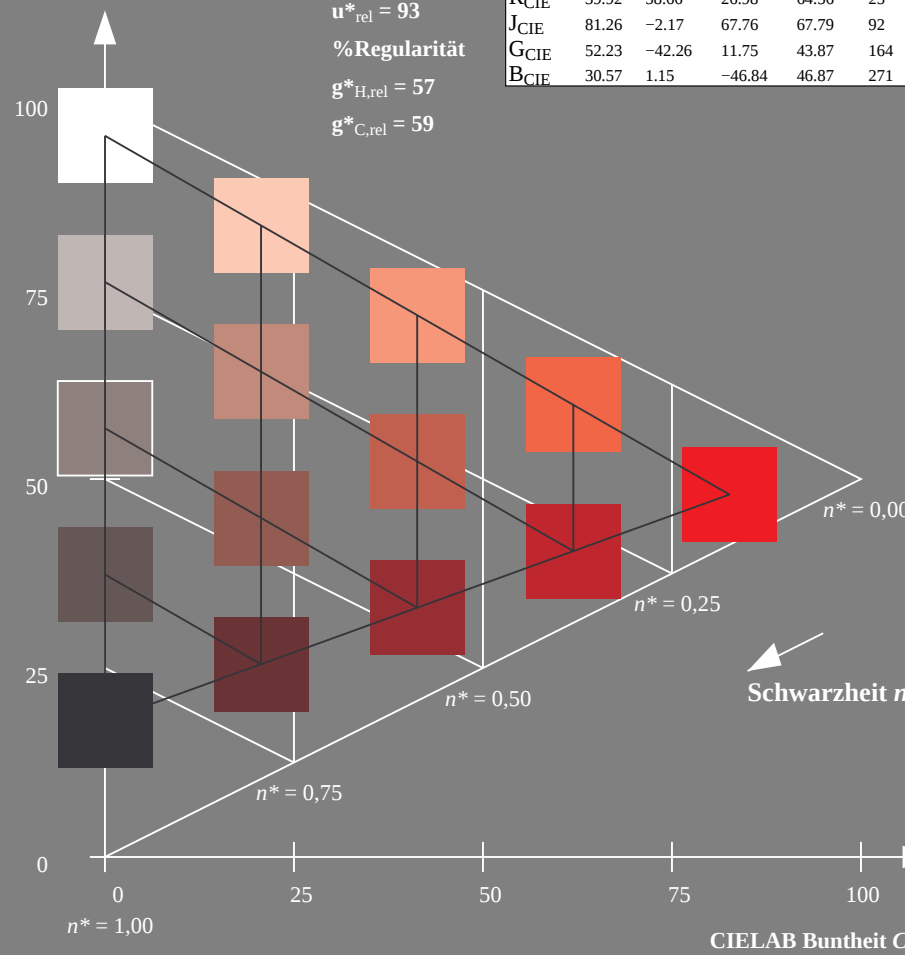
%Umfang

$u_{rel}^* = 93$

%Regularität

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

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



UG320-7, 5 stufige Reihen für konstanten CIELAB Buntton 38/360 = 0.105 (links)

Ausgabe: Farbmimetrisches Reflexions-System NRS11

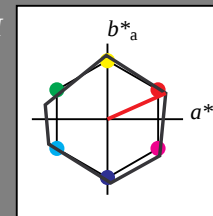
für Buntton  $h^* = lab^*h = 24/360 = 0.067$

LAB\*LCH, LAB\*NCH

D65: Buntton R

LCH\*Ma: 53 84 24

olv\*Ma: 1.0 0.0 0.0



NRS11; adaptierte CIELAB-Daten

|                    | $L^*=L_a^*$ | $a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 53.2        | 77.06   | 34.32   | 84.36        | 24           |
| J <sub>Ma</sub>    | 53.2        | -1.51   | 84.38   | 84.39        | 91           |
| G <sub>Ma</sub>    | 53.2        | -82.27  | 18.98   | 84.44        | 167          |
| G50B <sub>Ma</sub> | 53.2        | -77.72  | -32.98  | 84.44        | 203          |
| B <sub>Ma</sub>    | 53.2        | 4.37    | -84.28  | 84.41        | 273          |
| B50R <sub>Ma</sub> | 53.2        | 69.09   | -48.41  | 84.37        | 325          |
| N <sub>Ma</sub>    | 10.99       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.69   | 27.98   | 65.01        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.9    | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.45  | 13.59   | 44.59        | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.35    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

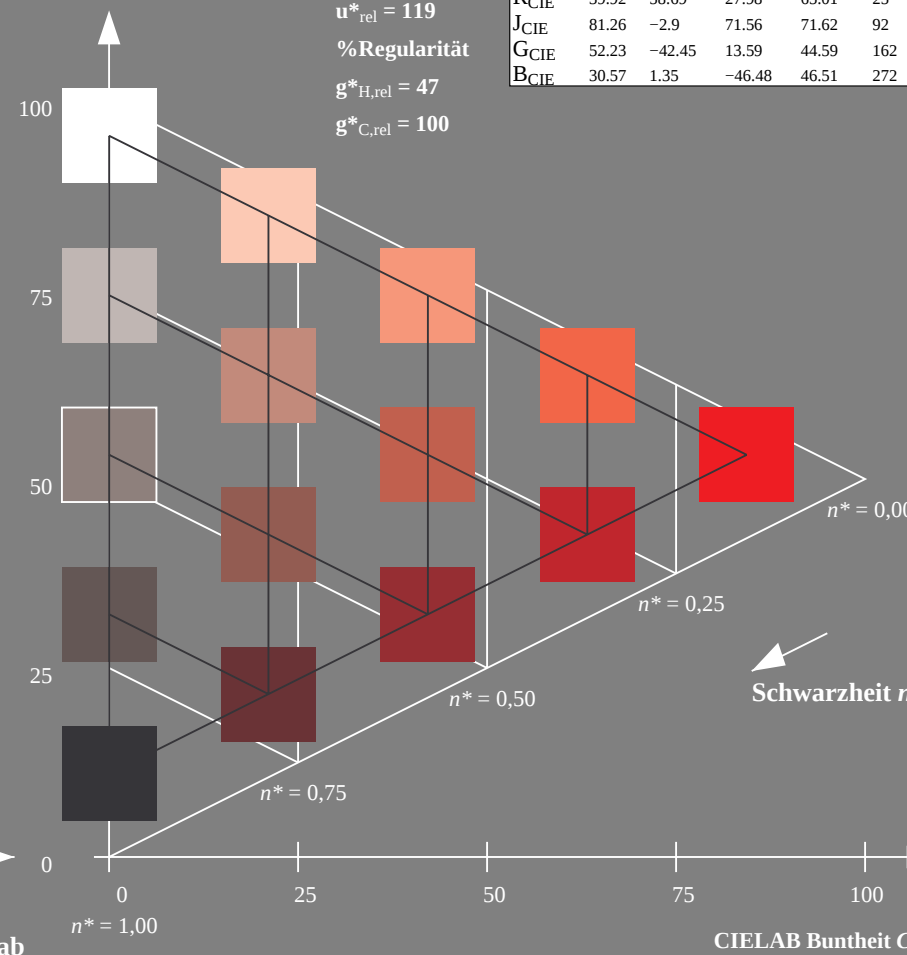
%Umfang

$u_{rel}^* = 119$

%Regularität

$g_{H,rel}^* = 47$

$g_{C,rel}^* = 100$



5 stufige Reihen für konstanten CIELAB Buntton 24/360 = 0.067 (rechts)

BAM-Prüfvorlage UG32; Farbmimetrische Systeme ORS18 & NRS11input: cmy0\* setcmykcolor

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttoninput: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System ORS18

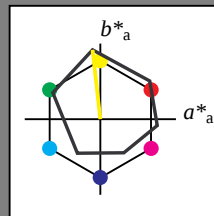
für Buntton  $h^* = lab^*h = 96/360 = 0.268$

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  $L^*$

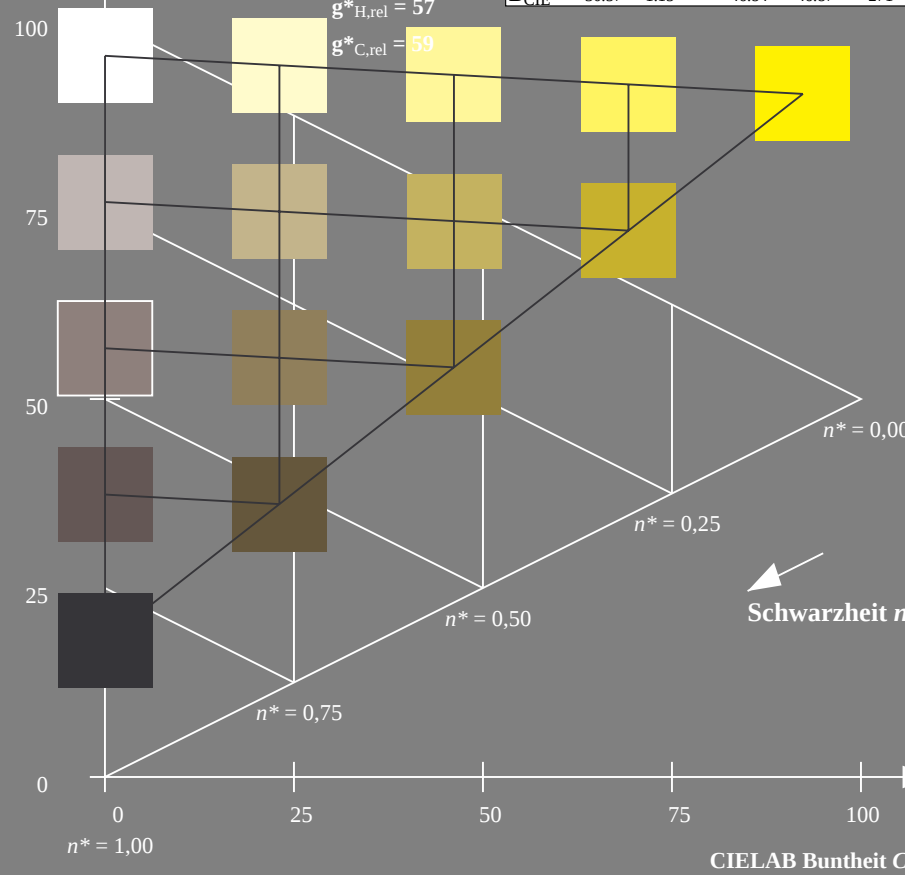
%Umfang

$u^*_{rel} = 93$

%Regularität

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

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



UG320-7, 5 stufige Reihen für konstanten CIELAB Buntton 96/360 = 0.268 (links)

Ausgabe: Farbmimetrisches Reflexions-System NRS11

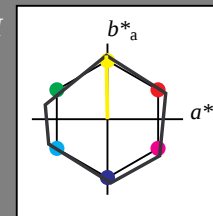
für Buntton  $h^* = lab^*h = 91/360 = 0.253$

LAB\*LCH, LAB\*NCH

D65: Buntton J

LCH\*Ma: 53 84 91

olv\*Ma: 1.0 1.0 0.0



NRS11; adaptierte CIELAB-Daten

|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 53.2        | 77.06   | 34.32   | 84.36        | 24           |
| J <sub>Ma</sub>    | 53.2        | -1.51   | 84.38   | 84.39        | 91           |
| G <sub>Ma</sub>    | 53.2        | -82.27  | 18.98   | 84.44        | 167          |
| G50B <sub>Ma</sub> | 53.2        | -77.72  | -32.98  | 84.44        | 203          |
| B <sub>Ma</sub>    | 53.2        | 4.37    | -84.28  | 84.41        | 273          |
| B50R <sub>Ma</sub> | 53.2        | 69.09   | -48.41  | 84.37        | 325          |
| N <sub>Ma</sub>    | 10.99       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.69   | 27.98   | 65.01        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.9    | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.45  | 13.59   | 44.59        | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.35    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

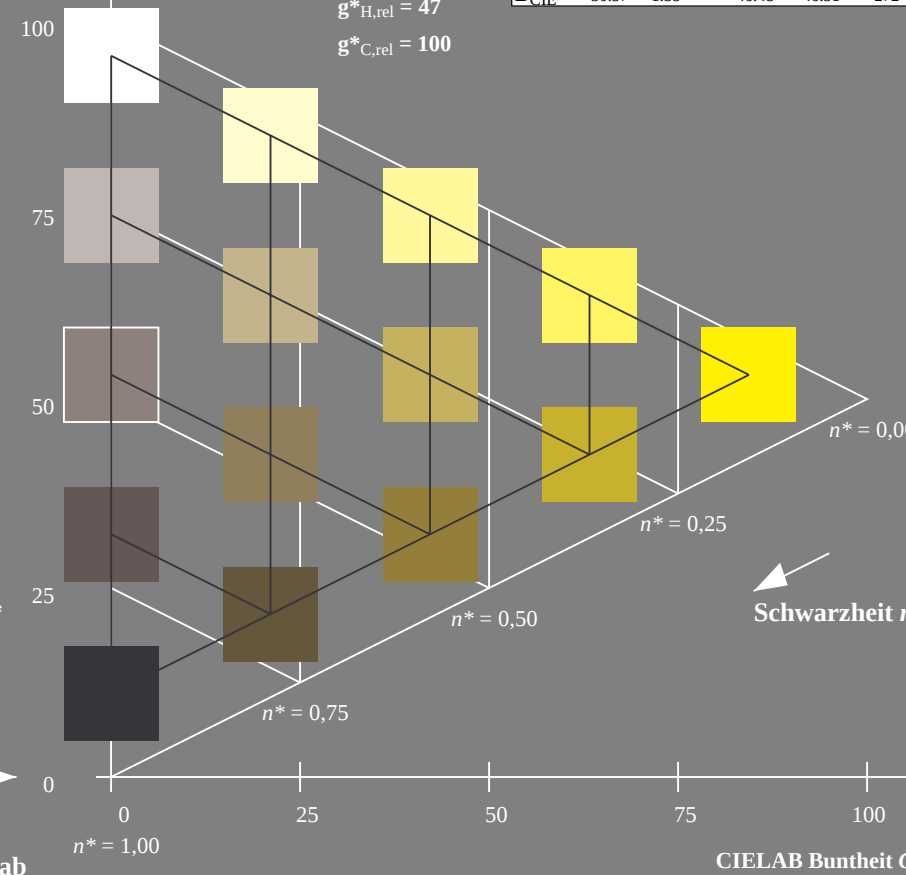
%Umfang

$u^*_{rel} = 119$

%Regularität

$g^*_{H,rel} = 47$

$g^*_{C,rel} = 100$



5 stufige Reihen für konstanten CIELAB Buntton 91/360 = 0.253 (rechts)

BAM-Prüfvorlage UG32; Farbmimetrische-Systeme ORS18 & NRS11input: cmy0\* setcmykcolor

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttoninput: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System ORS18

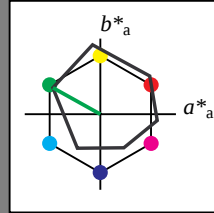
für Buntton  $h^* = lab^*h = 151/360 = 0.419$

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  $L^*$

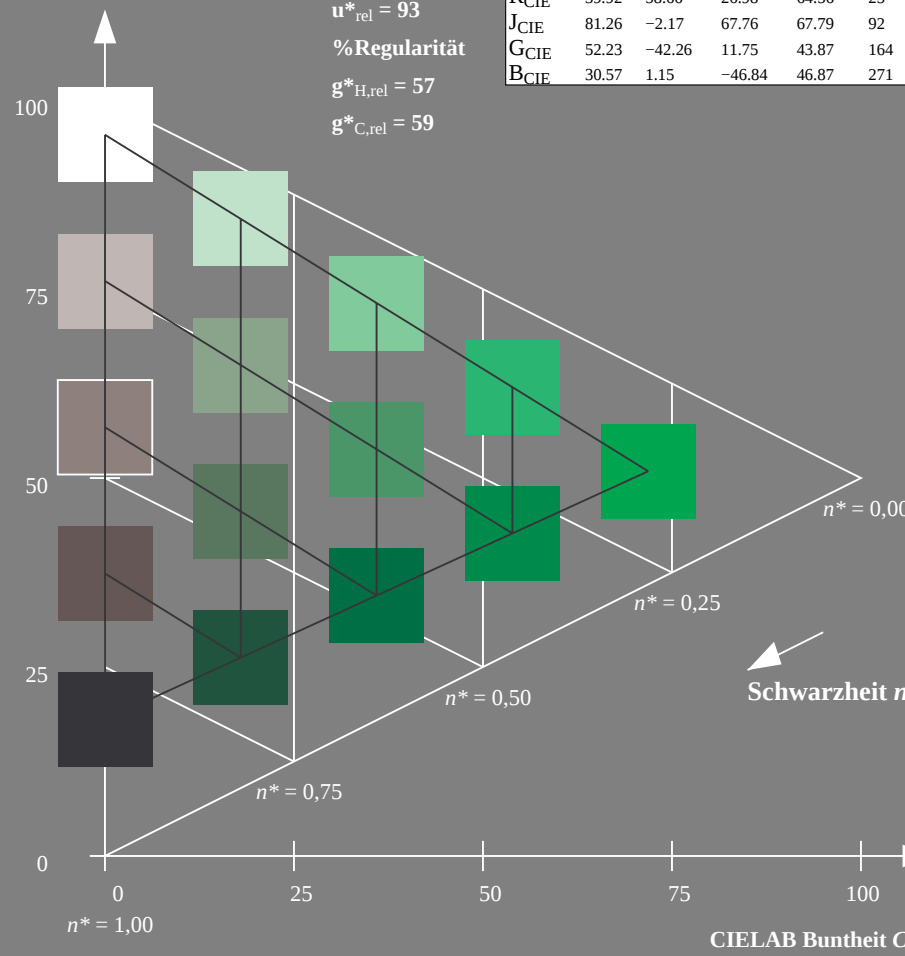
%Umfang

$u^*_{rel} = 93$

%Regularität

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

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



UG320-7, 5 stufige Reihen für konstanten CIELAB Buntton 151/360 = 0.419 (links)

Ausgabe: Farbmimetrisches Reflexions-System NRS11

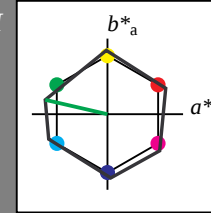
für Buntton  $h^* = lab^*h = 167/360 = 0.464$

LAB\*LCH, LAB\*NCH

D65: Buntton G

LCH\*Ma: 53 84 167

olv\*Ma: 0.0 1.0 0.0



NRS11; adaptierte CIELAB-Daten

|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 53.2        | 77.06   | 34.32   | 84.36        | 24           |
| J <sub>Ma</sub>    | 53.2        | -1.51   | 84.38   | 84.39        | 91           |
| G <sub>Ma</sub>    | 53.2        | -82.27  | 18.98   | 84.44        | 167          |
| G50B <sub>Ma</sub> | 53.2        | -77.72  | -32.98  | 84.44        | 203          |
| B <sub>Ma</sub>    | 53.2        | 4.37    | -84.28  | 84.41        | 273          |
| B50R <sub>Ma</sub> | 53.2        | 69.09   | -48.41  | 84.37        | 325          |
| N <sub>Ma</sub>    | 10.99       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.69   | 27.98   | 65.01        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.9    | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.45  | 13.59   | 44.59        | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.35    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

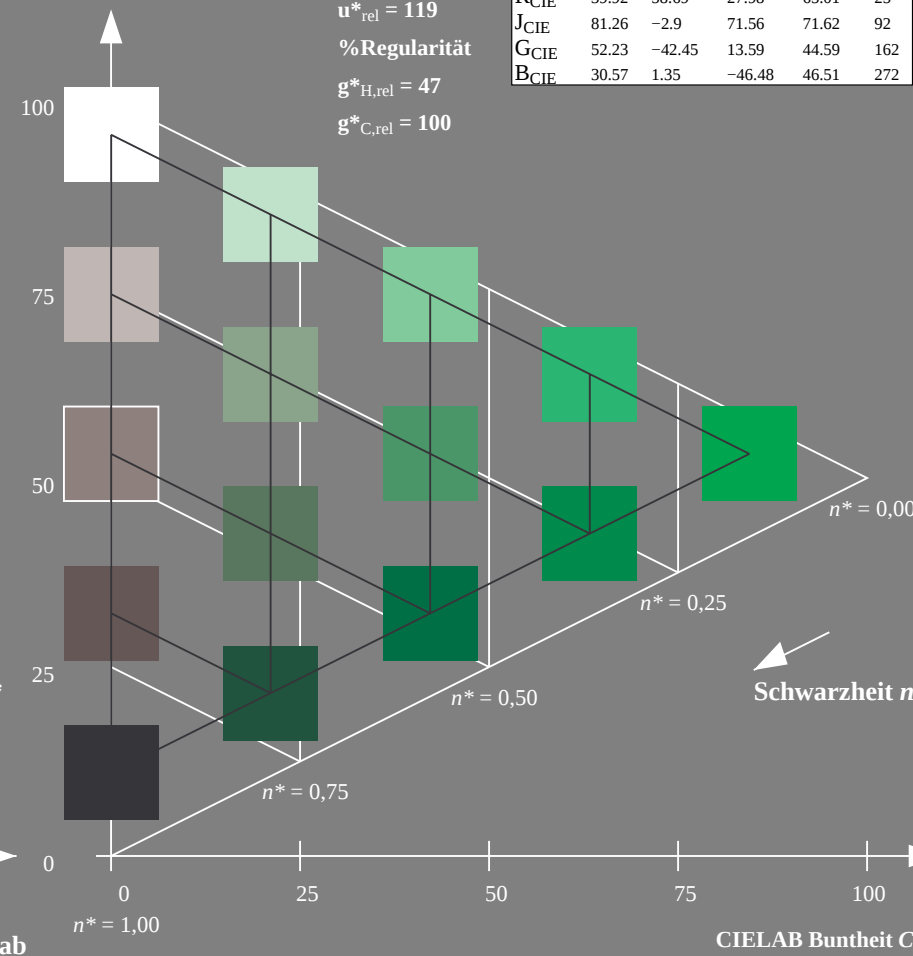
%Umfang

$u^*_{rel} = 119$

%Regularität

$g^*_{H,rel} = 47$

$g^*_{C,rel} = 100$



5 stufige Reihen für konstanten CIELAB Buntton 167/360 = 0.464 (rechts)

BAM-Prüfvorlage UG32; Farbmimetrische Systeme ORS18 & NRS11input: cmy0\* setcmykcolor

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttoninput: no change compared to input



Eingabe: Farbmimetrisches Reflexions-System ORS18

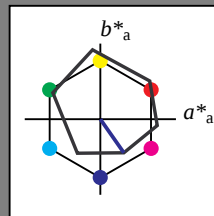
für Buntton  $h^* = lab^*h = 305/360 = 0.847$

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  $L^*$

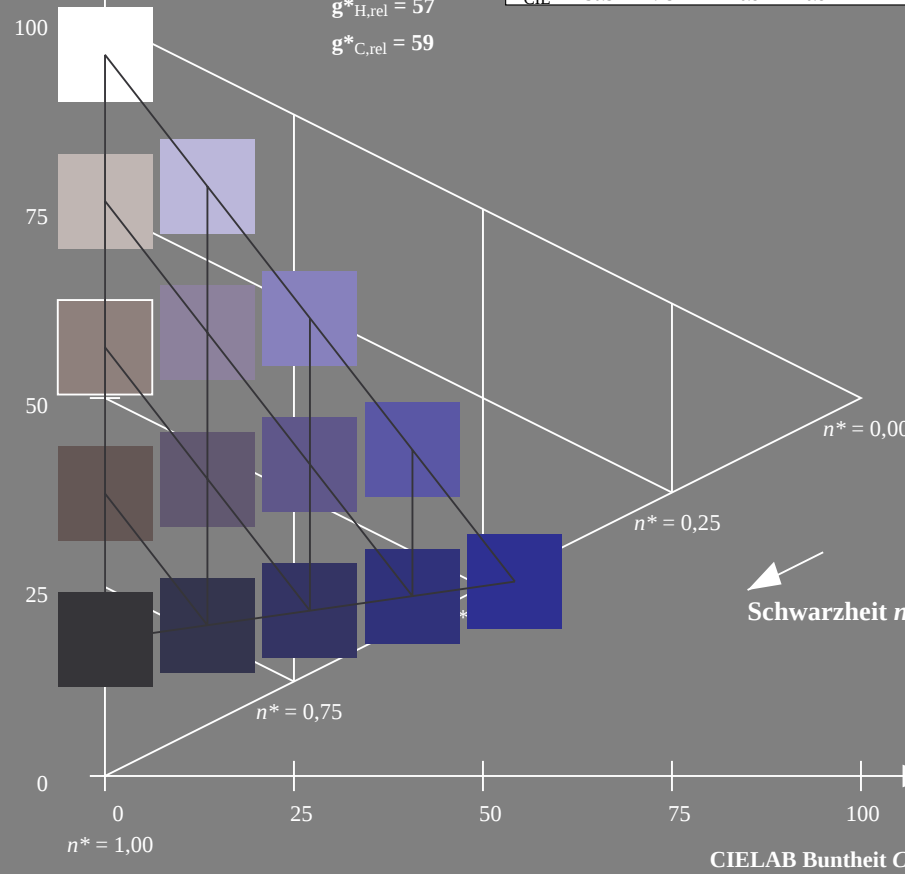
%Umfang

$u^*_{rel} = 93$

%Regularität

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

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



UG320-7, 5 stufige Reihen für konstanten CIELAB Buntton 305/360 = 0.847 (links)

Ausgabe: Farbmimetrisches Reflexions-System NRS11

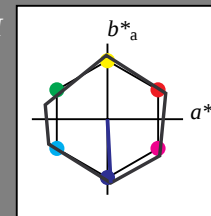
für Buntton  $h^* = lab^*h = 273/360 = 0.758$

LAB\*LCH, LAB\*NCH

D65: Buntton B

LCH\*Ma: 53 84 273

olv\*Ma: 0.0 0.0 1.0



NRS11; adaptierte CIELAB-Daten

|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 53.2        | 77.06   | 34.32   | 84.36        | 24           |
| J <sub>Ma</sub>    | 53.2        | -1.51   | 84.38   | 84.39        | 91           |
| G <sub>Ma</sub>    | 53.2        | -82.27  | 18.98   | 84.44        | 167          |
| G50B <sub>Ma</sub> | 53.2        | -77.72  | -32.98  | 84.44        | 203          |
| B <sub>Ma</sub>    | 53.2        | 4.37    | -84.28  | 84.41        | 273          |
| B50R <sub>Ma</sub> | 53.2        | 69.09   | -48.41  | 84.37        | 325          |
| N <sub>Ma</sub>    | 10.99       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.69   | 27.98   | 65.01        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.9    | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.45  | 13.59   | 44.59        | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.35    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

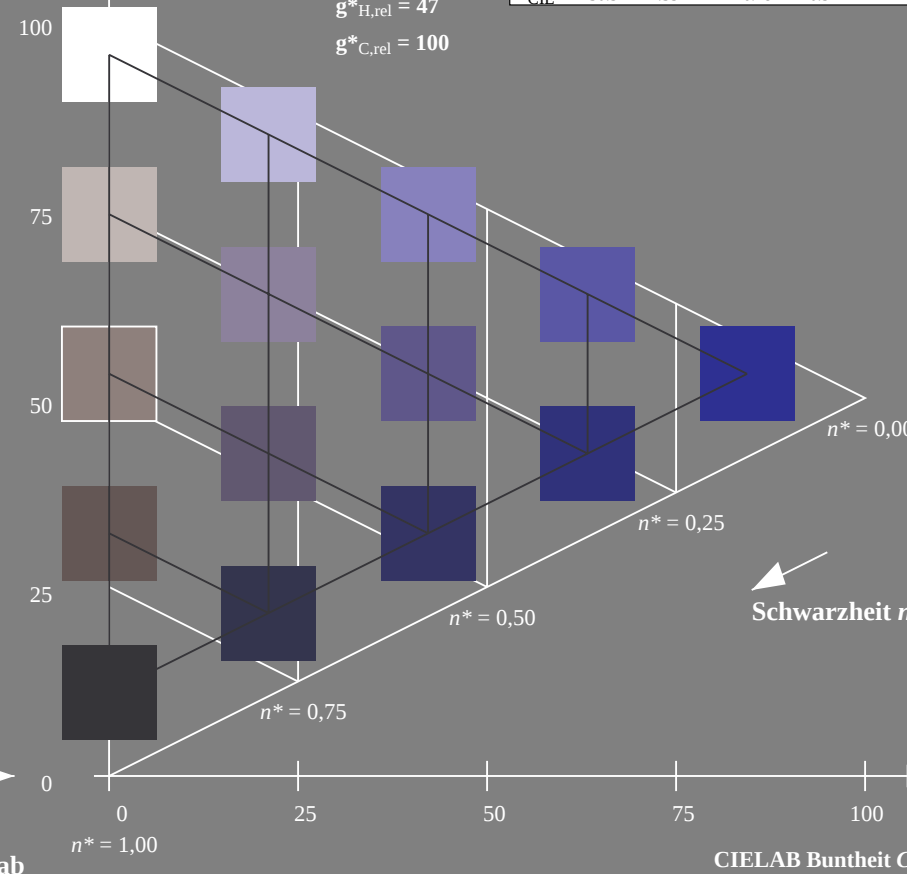
%Umfang

$u^*_{rel} = 119$

%Regularität

$g^*_{H,rel} = 47$

$g^*_{C,rel} = 100$



5 stufige Reihen für konstanten CIELAB Buntton 273/360 = 0.758 (rechts)

BAM-Prüfvorlage UG32; Farbmimetrische Systeme ORS18 & NRS11input: cmy0\* setcmykcolor

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttoninput: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System ORS18

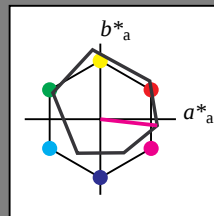
für Buntton  $h^* = lab^*h = 354/360 = 0.982$

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  $L^*$

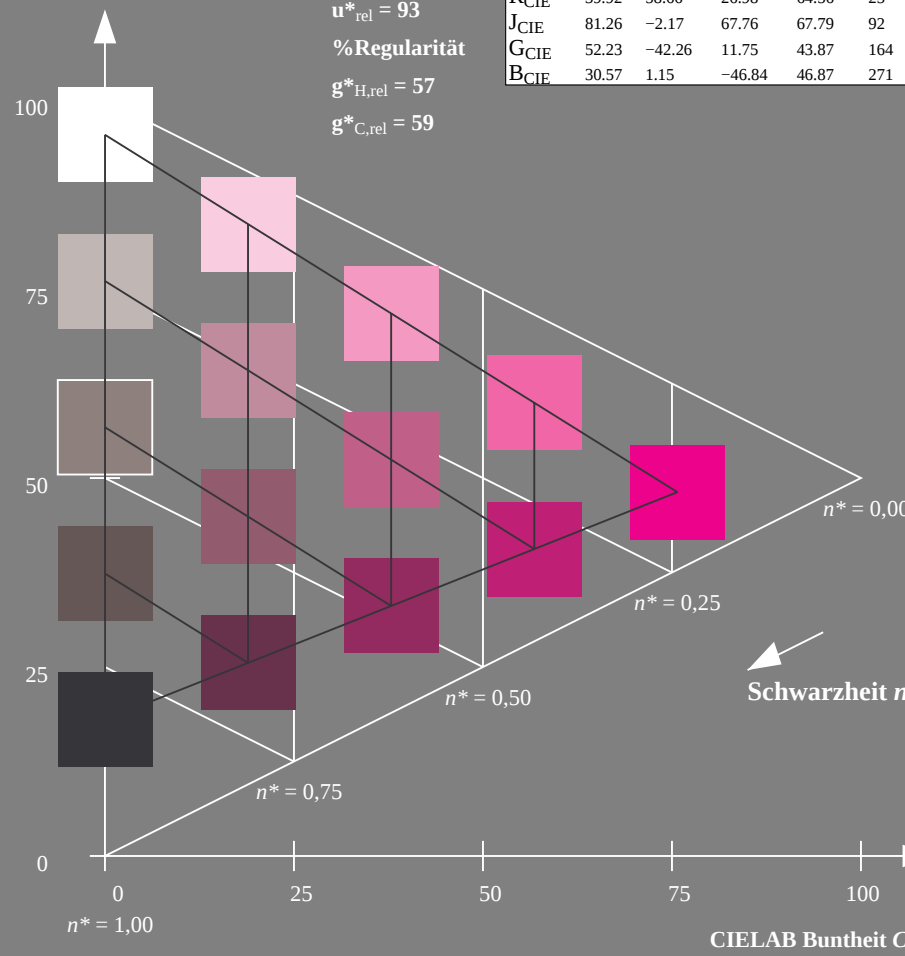
%Umfang

$u_{rel}^* = 93$

%Regularität

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

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



UG320-7, 5 stufige Reihen für konstanten CIELAB Buntton 354/360 = 0.982 (links)

Ausgabe: Farbmimetrisches Reflexions-System NRS11

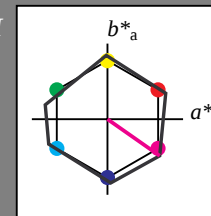
für Buntton  $h^* = lab^*h = 325/360 = 0.903$

LAB\*LCH, LAB\*NCH

D65: Buntton B50R

LCH\*Ma: 53 84 325

olv\*Ma: 1.0 0.0 1.0



NRS11; adaptierte CIELAB-Daten

|                    | $L^*=L_a^*$ | $a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 53.2        | 77.06   | 34.32   | 84.36        | 24           |
| J <sub>Ma</sub>    | 53.2        | -1.51   | 84.38   | 84.39        | 91           |
| G <sub>Ma</sub>    | 53.2        | -82.27  | 18.98   | 84.44        | 167          |
| G50B <sub>Ma</sub> | 53.2        | -77.72  | -32.98  | 84.44        | 203          |
| B <sub>Ma</sub>    | 53.2        | 4.37    | -84.28  | 84.41        | 273          |
| B50R <sub>Ma</sub> | 53.2        | 69.09   | -48.41  | 84.37        | 325          |
| N <sub>Ma</sub>    | 10.99       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.69   | 27.98   | 65.01        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.9    | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.45  | 13.59   | 44.59        | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.35    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

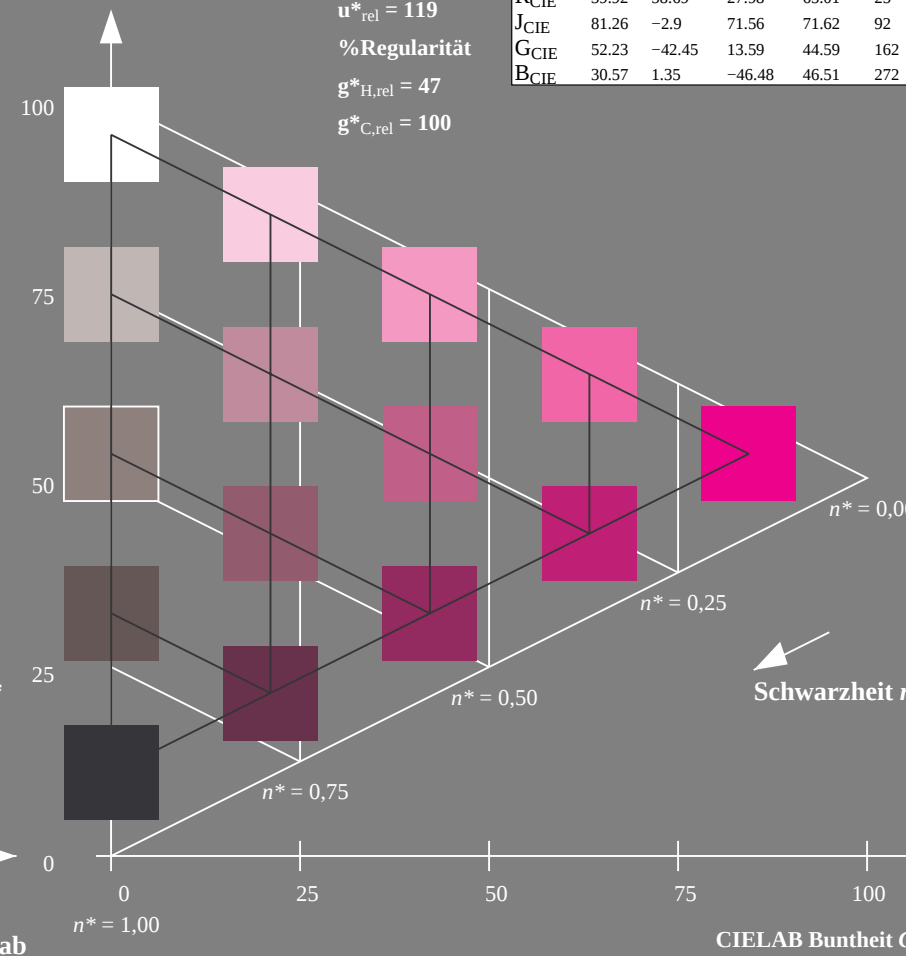
%Umfang

$u_{rel}^* = 119$

%Regularität

$g_{H,rel}^* = 47$

$g_{C,rel}^* = 100$



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

BAM-Prüfvorlage UG32; Farbmimetrische Systeme ORS18 & NRS11input:  $cmY0^* setcmykcolor$

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttoninput: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System ORS18

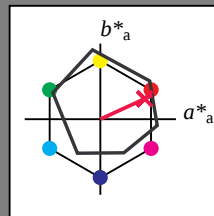
für Buntton  $h^* = lab^*h = 25/360 = 0.069$

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  $L^*$

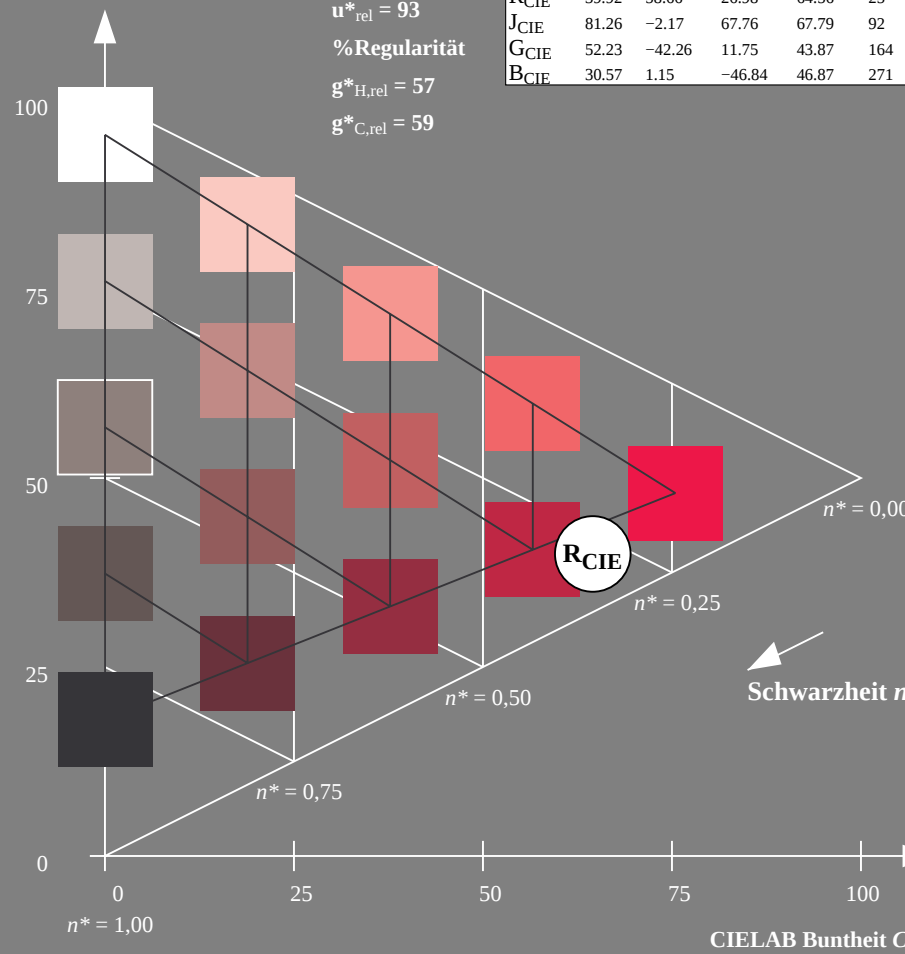
%Umfang

$u^*_{rel} = 93$

%Regularität

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

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



UG320-7, 5 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.069 (links)

Ausgabe: Farbmimetrisches Reflexions-System NRS11

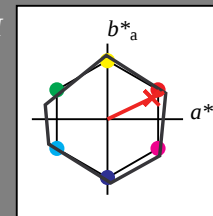
für Buntton  $h^* = lab^*h = 25/360 = 0.071$

LAB\*LCH, LAB\*NCH

D65: Buntton R

LCH\*Ma: 53 83 25

olv\*Ma: 1.0 0.03 0.0



NRS11; adaptierte CIELAB-Daten

|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 53.2        | 77.06   | 34.32   | 84.36        | 24           |
| J <sub>Ma</sub>    | 53.2        | -1.51   | 84.38   | 84.39        | 91           |
| G <sub>Ma</sub>    | 53.2        | -82.27  | 18.98   | 84.44        | 167          |
| G50B <sub>Ma</sub> | 53.2        | -77.72  | -32.98  | 84.44        | 203          |
| B <sub>Ma</sub>    | 53.2        | 4.37    | -84.28  | 84.41        | 273          |
| B50R <sub>Ma</sub> | 53.2        | 69.09   | -48.41  | 84.37        | 325          |
| N <sub>Ma</sub>    | 10.99       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.69   | 27.98   | 65.01        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.9    | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.45  | 13.59   | 44.59        | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.35    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

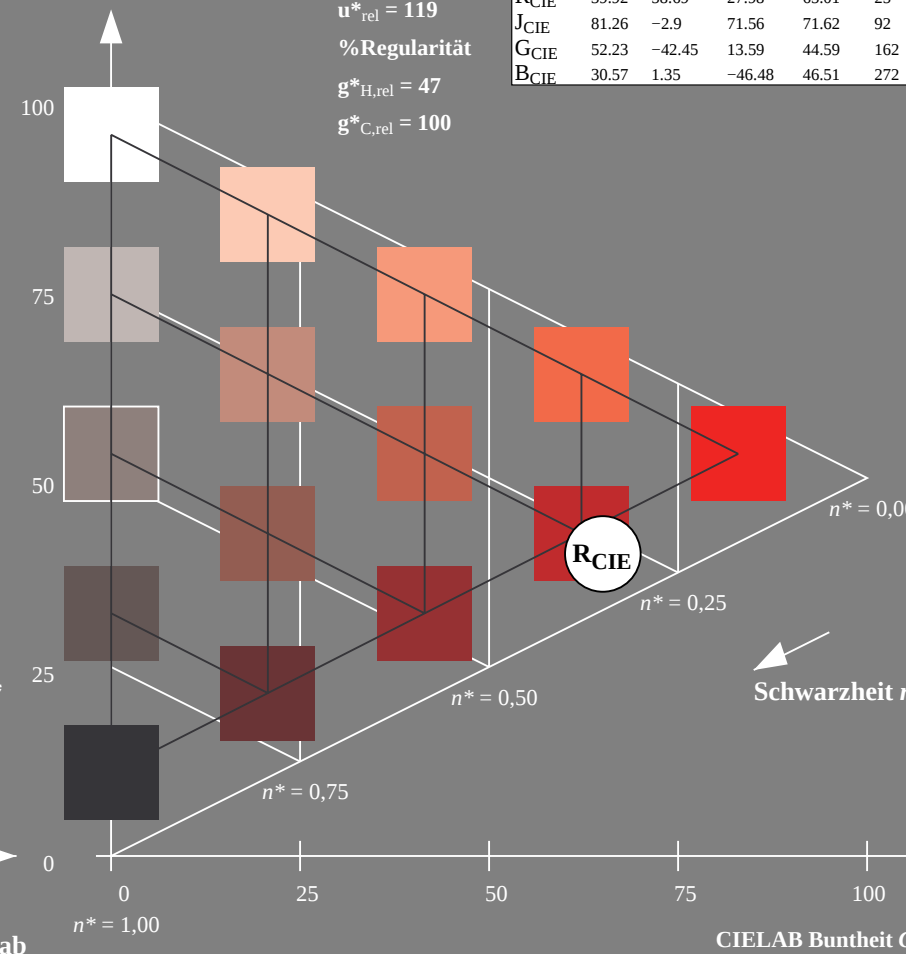
%Umfang

$u^*_{rel} = 119$

%Regularität

$g^*_{H,rel} = 47$

$g^*_{C,rel} = 100$



5 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.071 (rechts)

BAM-Prüfvorlage UG32; Farbmimetrische Systeme ORS18 & NRS11input: *cmY0\* setcmykcolor*

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

Eingabe: Farbmimetrisches Reflexions-System ORS18

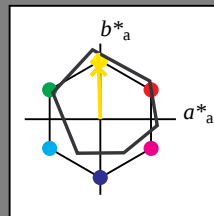
für Buntton  $h^* = lab^*h = 92/360 = 0.255$

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  $L^*$

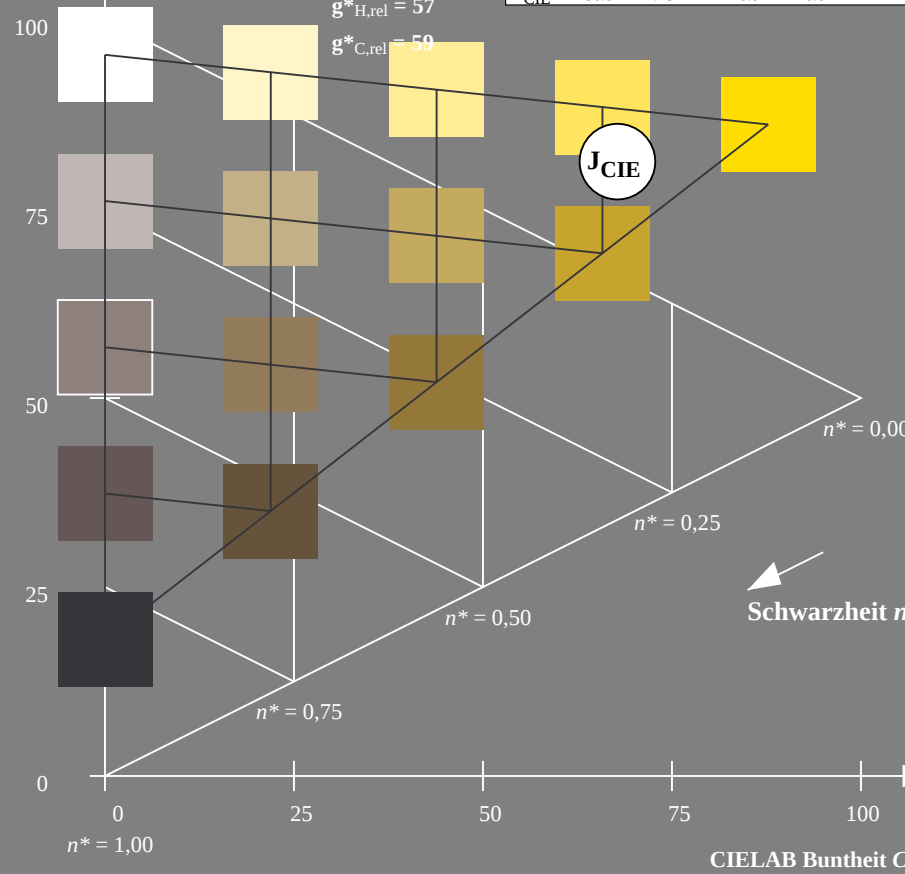
%Umfang

$u^*_{rel} = 93$

%Regularität

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

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



UG320-7, 5 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.255 (links)

Ausgabe: Farbmimetrisches Reflexions-System NRS11

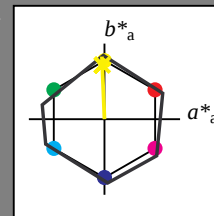
für Buntton  $h^* = lab^*h = 92/360 = 0.256$

LAB\*LCH, LAB\*NCH

D65: Buntton J

LCH\*Ma: 53 83 92

olv\*Ma: 0.98 1.0 0.0



NRS11; adaptierte CIELAB-Daten

|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 53.2        | 77.06   | 34.32   | 84.36        | 24           |
| J <sub>Ma</sub>    | 53.2        | -1.51   | 84.38   | 84.39        | 91           |
| G <sub>Ma</sub>    | 53.2        | -82.27  | 18.98   | 84.44        | 167          |
| G50B <sub>Ma</sub> | 53.2        | -77.72  | -32.98  | 84.44        | 203          |
| B <sub>Ma</sub>    | 53.2        | 4.37    | -84.28  | 84.41        | 273          |
| B50R <sub>Ma</sub> | 53.2        | 69.09   | -48.41  | 84.37        | 325          |
| N <sub>Ma</sub>    | 10.99       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.69   | 27.98   | 65.01        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.9    | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.45  | 13.59   | 44.59        | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.35    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

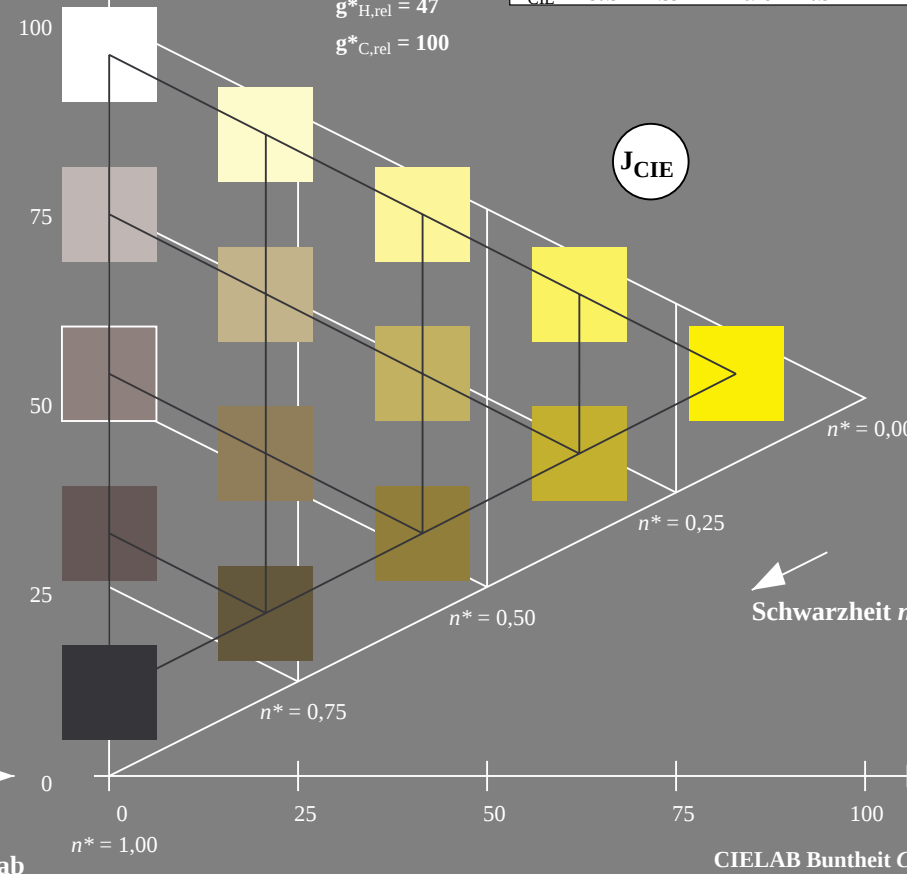
%Umfang

$u^*_{rel} = 119$

%Regularität

$g^*_{H,rel} = 47$

$g^*_{C,rel} = 100$



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

BAM-Prüfvorlage UG32; Farbmimetrische Systeme ORS18 & NRS11input: cmy0\* setcmykcolor

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttoninput: no change compared to input

Eingabe: Farbmimetrisches Reflexions-System ORS18

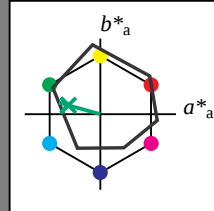
für Buntton  $h^* = lab^*h = 164/360 = 0.457$

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  $L^*$

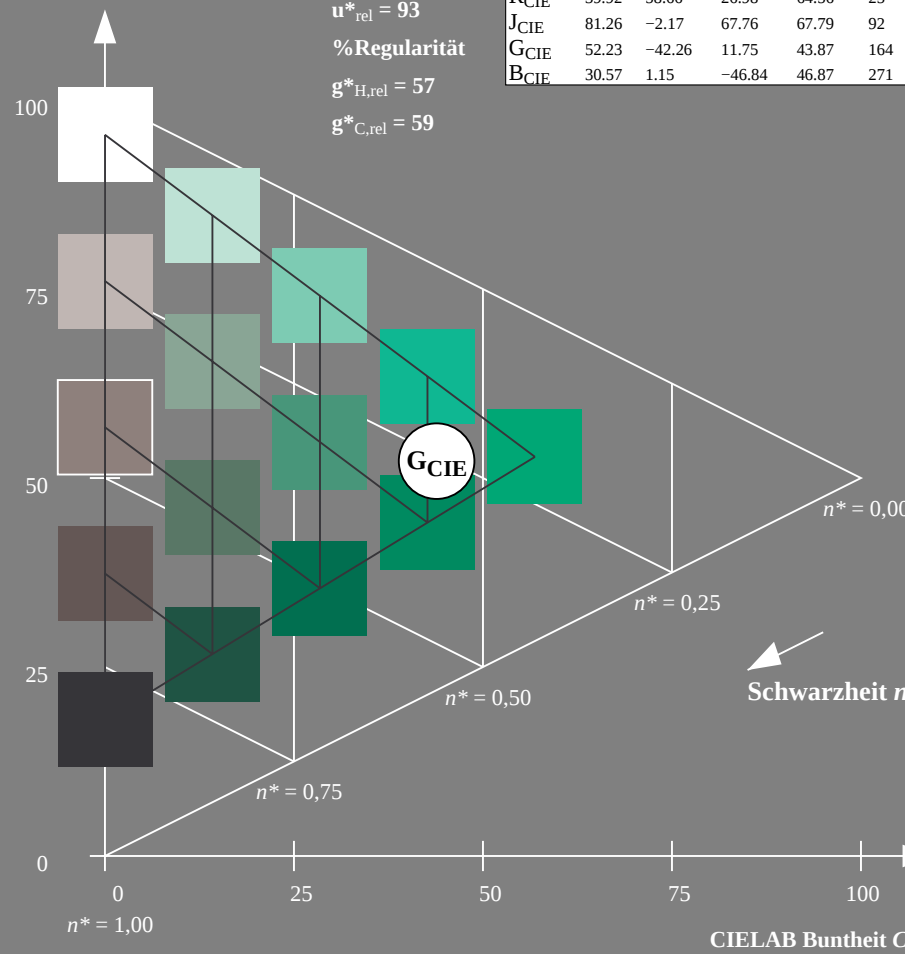
%Umfang

$u^*_{rel} = 93$

%Regularität

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

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



UG320-7, 5 stufige Reihen für konstanten CIELAB Buntton  $164/360 = 0.457$  (links)

Ausgabe: Farbmimetrisches Reflexions-System NRS11

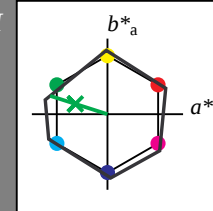
für Buntton  $h^* = lab^*h = 162/360 = 0.451$

LAB\*LCH, LAB\*NCH

D65: Buntton G

LCH\*Ma: 53 80 162

olv\*Ma: 0.08 1.0 0.0



NRS11; adaptierte CIELAB-Daten

|                    | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 53.2        | 77.06   | 34.32   | 84.36        | 24           |
| J <sub>Ma</sub>    | 53.2        | -1.51   | 84.38   | 84.39        | 91           |
| G <sub>Ma</sub>    | 53.2        | -82.27  | 18.98   | 84.44        | 167          |
| G50B <sub>Ma</sub> | 53.2        | -77.72  | -32.98  | 84.44        | 203          |
| B <sub>Ma</sub>    | 53.2        | 4.37    | -84.28  | 84.41        | 273          |
| B50R <sub>Ma</sub> | 53.2        | 69.09   | -48.41  | 84.37        | 325          |
| N <sub>Ma</sub>    | 10.99       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92       | 58.69   | 27.98   | 65.01        | 25           |
| J <sub>CIE</sub>   | 81.26       | -2.9    | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23       | -42.45  | 13.59   | 44.59        | 162          |
| B <sub>CIE</sub>   | 30.57       | 1.35    | -46.48  | 46.51        | 272          |

CIELAB-Helligkeit  $L^*$

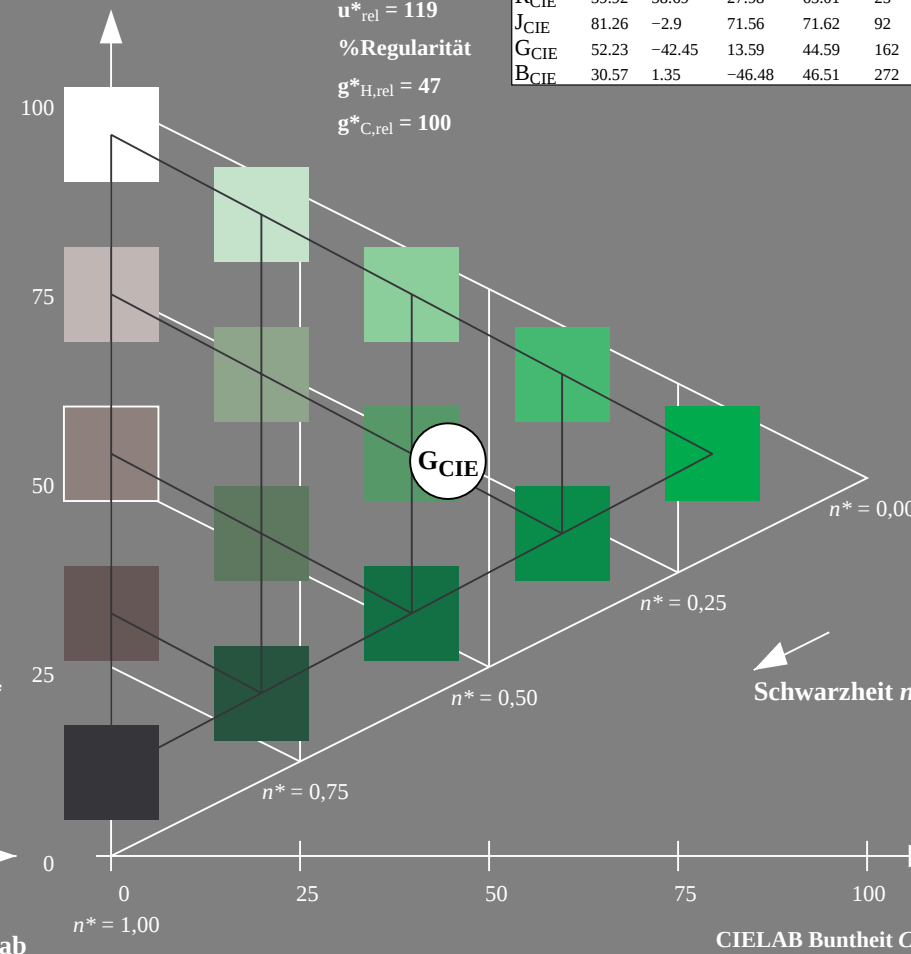
%Umfang

$u^*_{rel} = 119$

%Regularität

$g^*_{H,rel} = 47$

$g^*_{C,rel} = 100$



5 stufige Reihen für konstanten CIELAB Buntton  $162/360 = 0.451$  (rechts)

BAM-Prüfvorlage UG32; Farbmimetrische Systeme ORS18 & NRS11input: *cmY0\* setcmykcolor*

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

## Eingabe: Farbmétrisches Reflexions-System ORS18

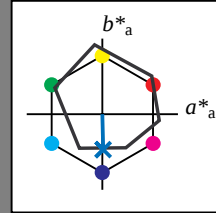
für Buntton  $h^* = lab^*h = 271/360 = 0.754$

*LAB\*LCH, LAB\*NCH*

## D65: Buntton B

LCH\*Ma: 42 45 271

olv\*Ma: 0.0 0.49 1.0



**ORS18; adaptierte CIELAB-Daten**

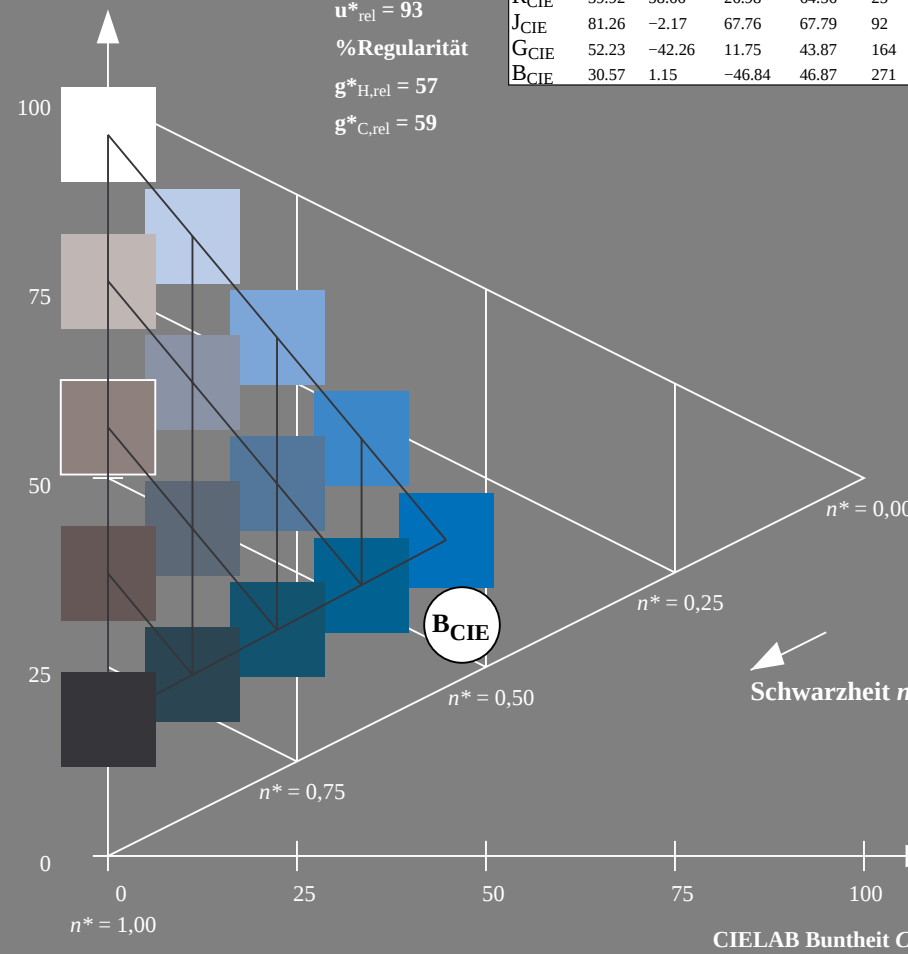
|                  | $L^*=L_a^* a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |     |
|------------------|-------------------|---------|--------------|--------------|-----|
| O <sub>Ma</sub>  | 47.94             | 65.37   | 50.52        | 82.62        | 38  |
| Y <sub>Ma</sub>  | 90.37             | -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>CIF</sub> | 30.57             | 1.15    | -46.84       | 46.87        | 271 |

### CIELAB-Helligkeit $L^*$

**%Umfang**

$$\mathbf{u}_{\text{rel}}^* = 93$$

### %Regularität

$$g^*_{H,rel} = 57$$
$$g^*_{C,rel} = 59$$


UG320-7, 5 stufige Reihen für konstanten CIELAB Buntton  $271/360 = 0.754$  (links)

**Ausgabe: Farbmétrisches Reflexions-System NRS11**

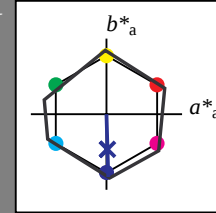
für Buntton  $h^* = lab^*h = 272/360 = 0.755$

*LAB\*LCH, LAB\*NCH*

### D65: Buntton B

LCH\*Ma: 53 83 272

olv\*Ma: 0.0 0.02 1.0



**NRS11; adaptierte CIELAB-Daten**

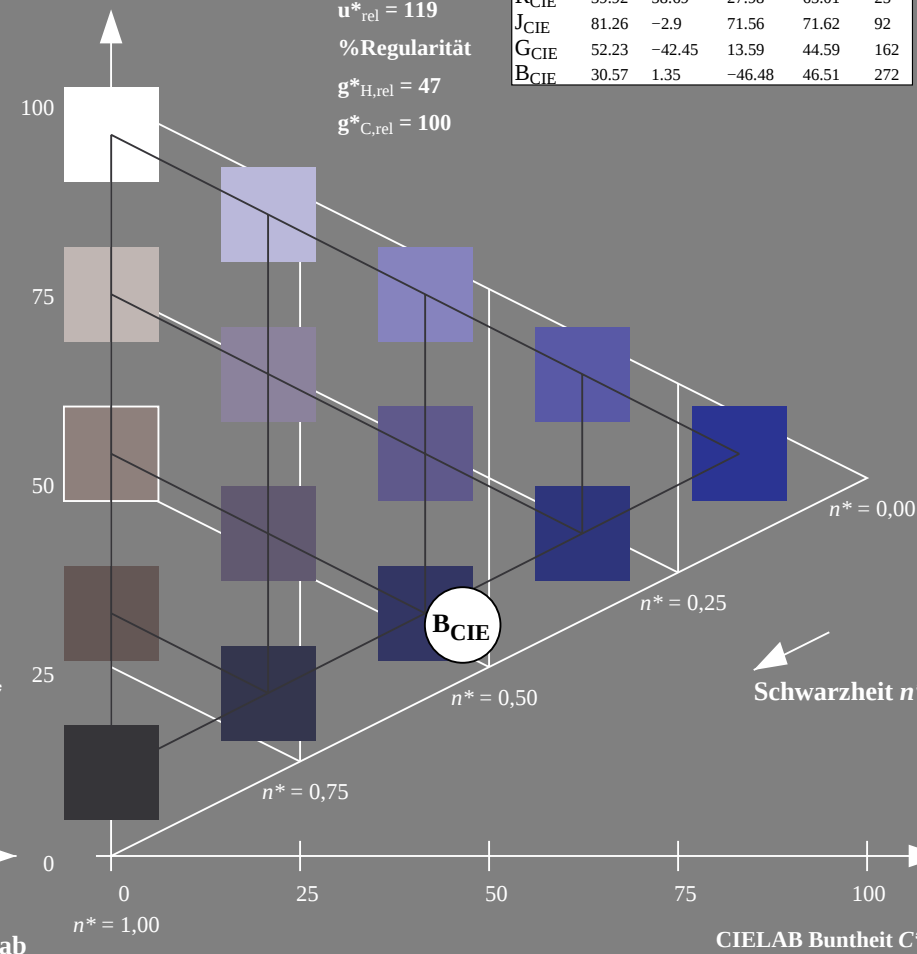
|                    | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|---------------|---------|---------|--------------|--------------|
| R <sub>Ma</sub>    | 53.2          | 77.06   | 34.32   | 84.36        | 24           |
| J <sub>Ma</sub>    | 53.2          | -1.51   | 84.38   | 84.39        | 91           |
| G <sub>Ma</sub>    | 53.2          | -82.27  | 18.98   | 84.44        | 167          |
| G50B <sub>Ma</sub> | 53.2          | -77.72  | -32.98  | 84.44        | 203          |
| B <sub>Ma</sub>    | 53.2          | 4.37    | -84.28  | 84.41        | 273          |
| B50R <sub>Ma</sub> | 53.2          | 69.09   | -48.41  | 84.37        | 325          |
| N <sub>Ma</sub>    | 10.99         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>    | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>   | 39.92         | 58.69   | 27.98   | 65.01        | 25           |
| J <sub>CIE</sub>   | 81.26         | -2.9    | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>   | 52.23         | -42.45  | 13.59   | 44.59        | 162          |
| B <sub>CIE</sub>   | 30.57         | 1.35    | -46.48  | 46.51        | 272          |

**CIELAB-Helligkeit  $L^*$**

**%Umfang**

$$\mathbf{u}_{\text{rel}}^* = 119$$

### %Regularität

$$g^*_{H,rel} = 47$$
$$g^*_{C,rel} = 100$$
5 stufige Reihen für konstanten CIELAB Buntton  $272/360 = 0.755$  (rechts)

BAM-Prüfvorlage UG32; Farbmeter-Systeme ORS18 & NRS11 input: *cmy0\* setcmykcolor*

D65: Koordinaten-Systeme von 5stufigen Farbreihen für 10 Bunttöne *Output: no change compared to input*

BAM-Registrierung: 20060101-UG32/10Q/Q32G09NP.PS./PDF BAM-Material: Code=rhata  
Anwendung für Beurteilung und Messung von Drucker- oder Monitorsystemen  
/UG32/ Form: 10/10 Serie: 1/1, Seite: 10 Seitenzahl: 10