

Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.071$

data for any colour:

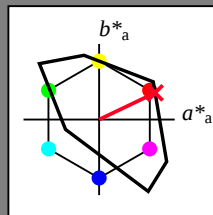
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = r00j$   $d^* = m85o$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 54 74 35

$LAB^*LCH^*_{Ma}$ : 54 82 25

$lab^*rgb^*_{Ma}$ : 1.0 0.0 0.0

$lab^*olv^*_{Ma}$ : 1.0 0.0 0.14

triangle lightness  $t^*$

% Gamut

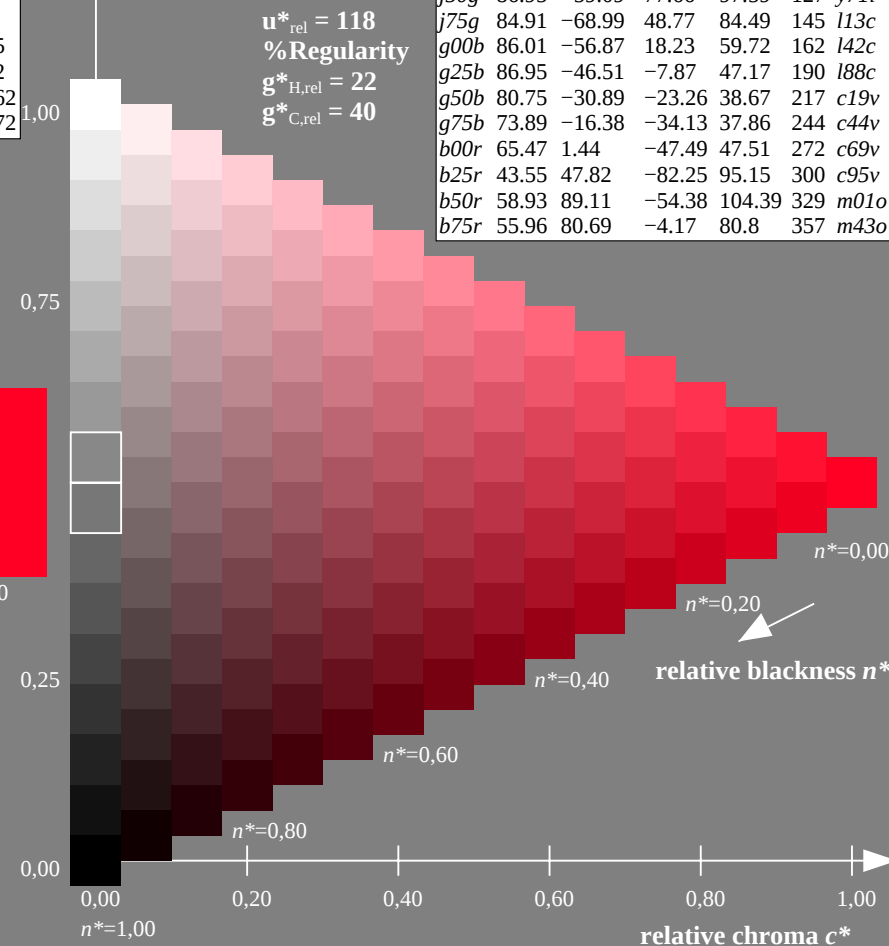
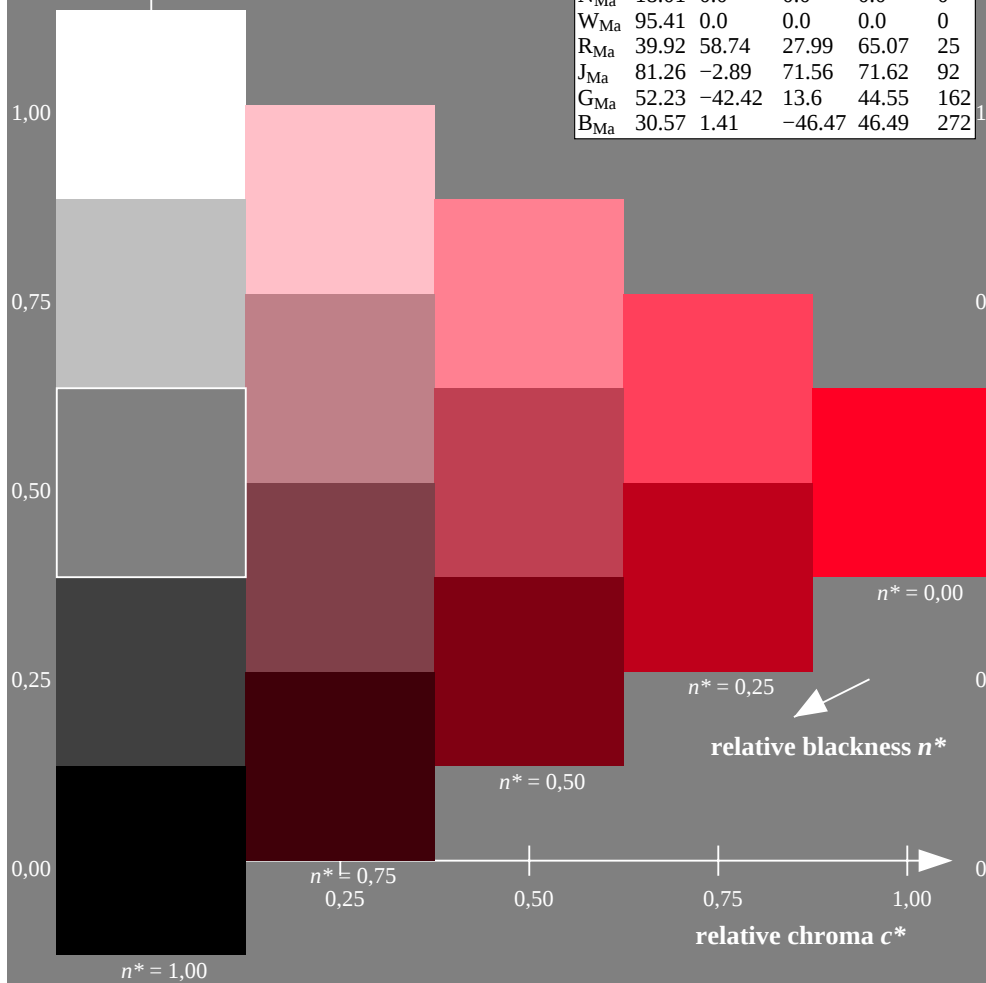
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



IE580-7N

Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.117$

data for any colour:

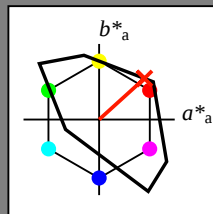
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = r25j$   $d^* = o11y$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 58 60 54

$LAB^*LCH^*_{Ma}$ : 58 81 42

$lab^*rgb^*_{Ma}$ : 1.0 0.25 0.0

$lab^*olv^*_{Ma}$ : 1.0 0.11 0.0

triangle lightness  $t^*$

% Gamut

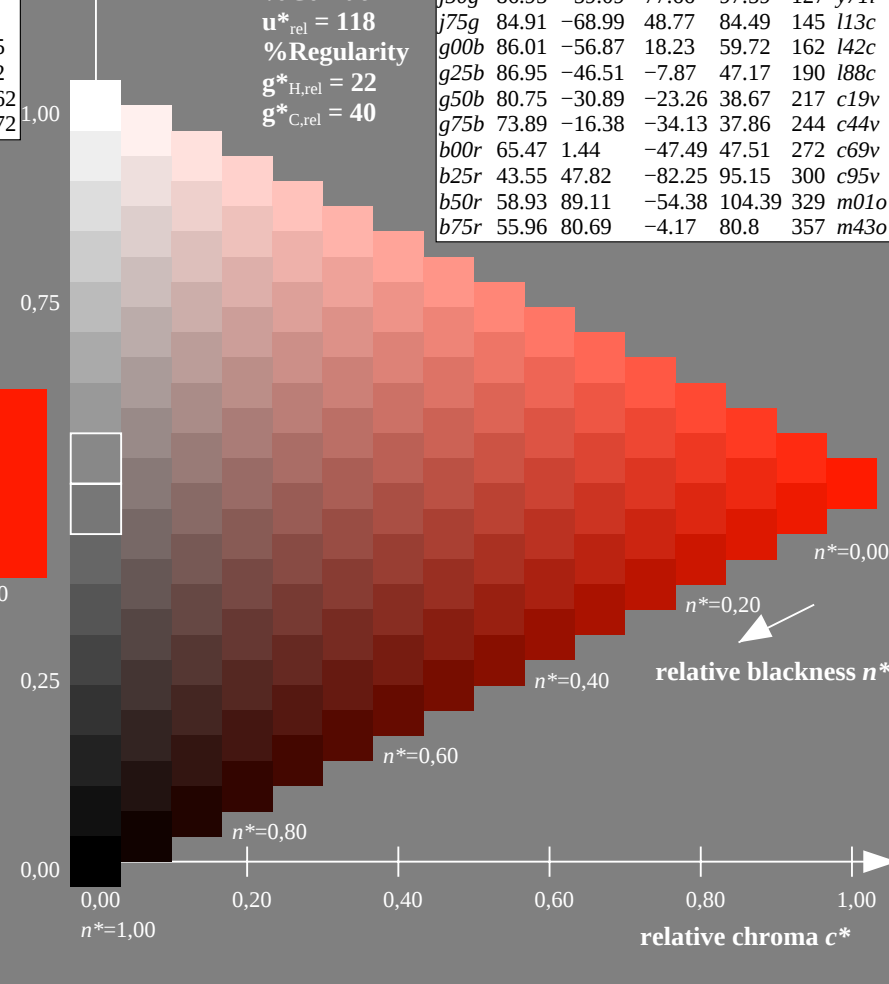
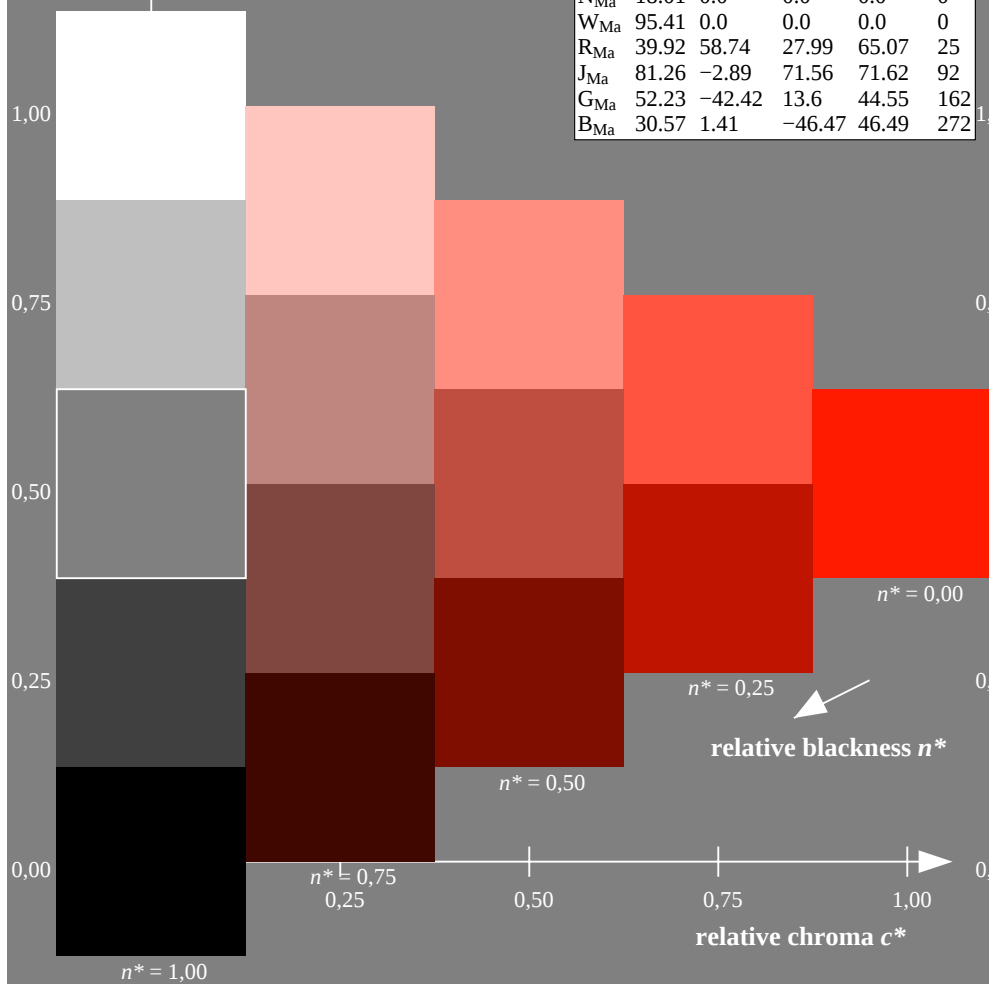
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.164$

data for any colour:

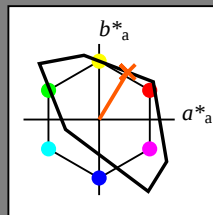
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = r50j$   $d^* = o35y$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 67 38 63

$LAB^*LCH^*_{Ma}$ : 67 73 58

$lab^*rgb^*_{Ma}$ : 1.0 0.5 0.0

$lab^*olv^*_{Ma}$ : 1.0 0.35 0.0

triangle lightness  $t^*$

% Gamut

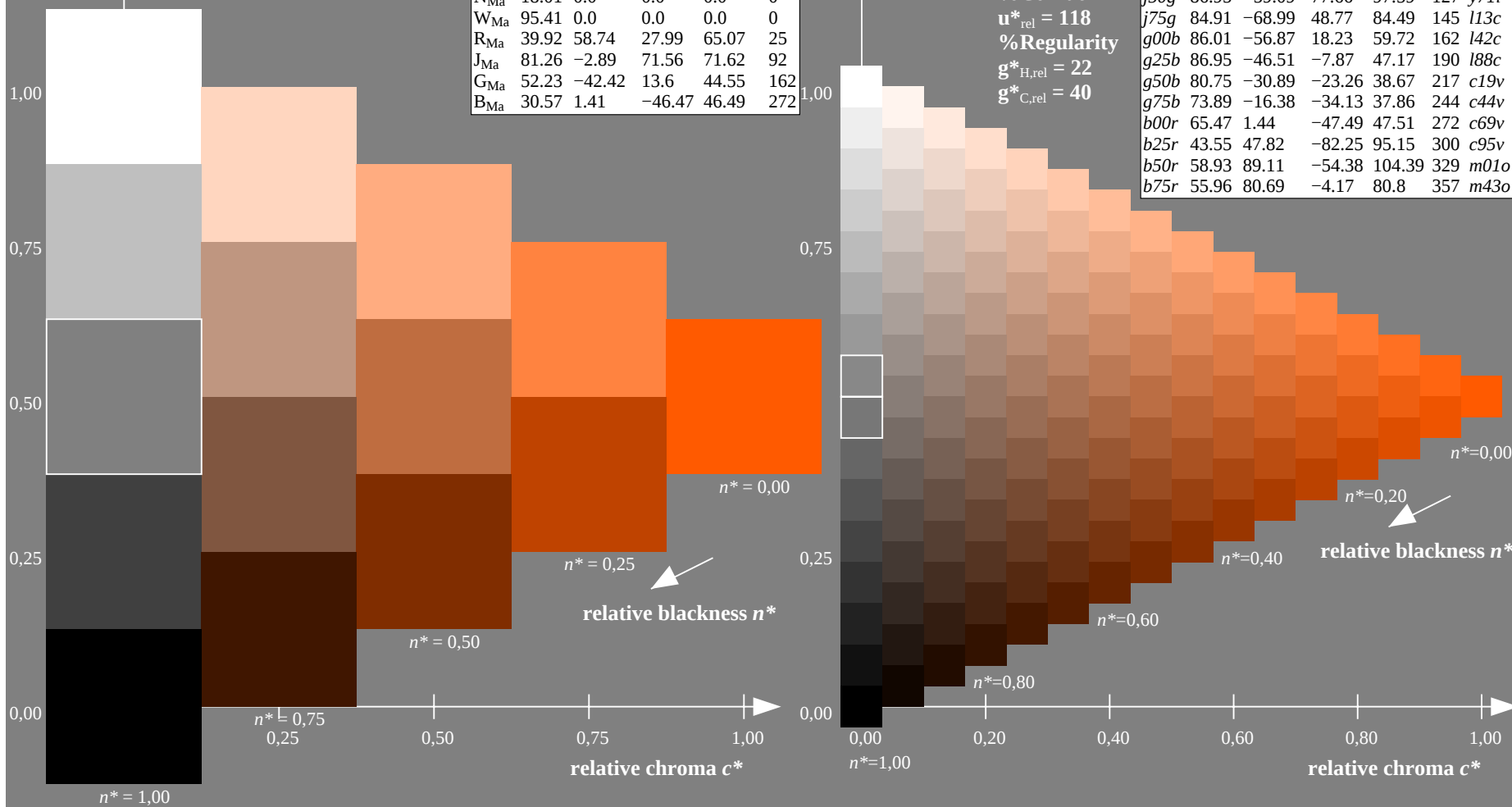
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.21$

data for any colour:

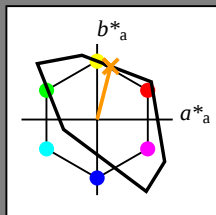
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = r75j$   $d^* = o59y$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 76 18 70

$LAB^*LCH^*_{Ma}$ : 76 73 75

$lab^*rgb^*_{Ma}$ : 1.0 0.75 0.0

$lab^*olv^*_{Ma}$ : 1.0 0.6 0.0

triangle lightness  $t^*$

% Gamut

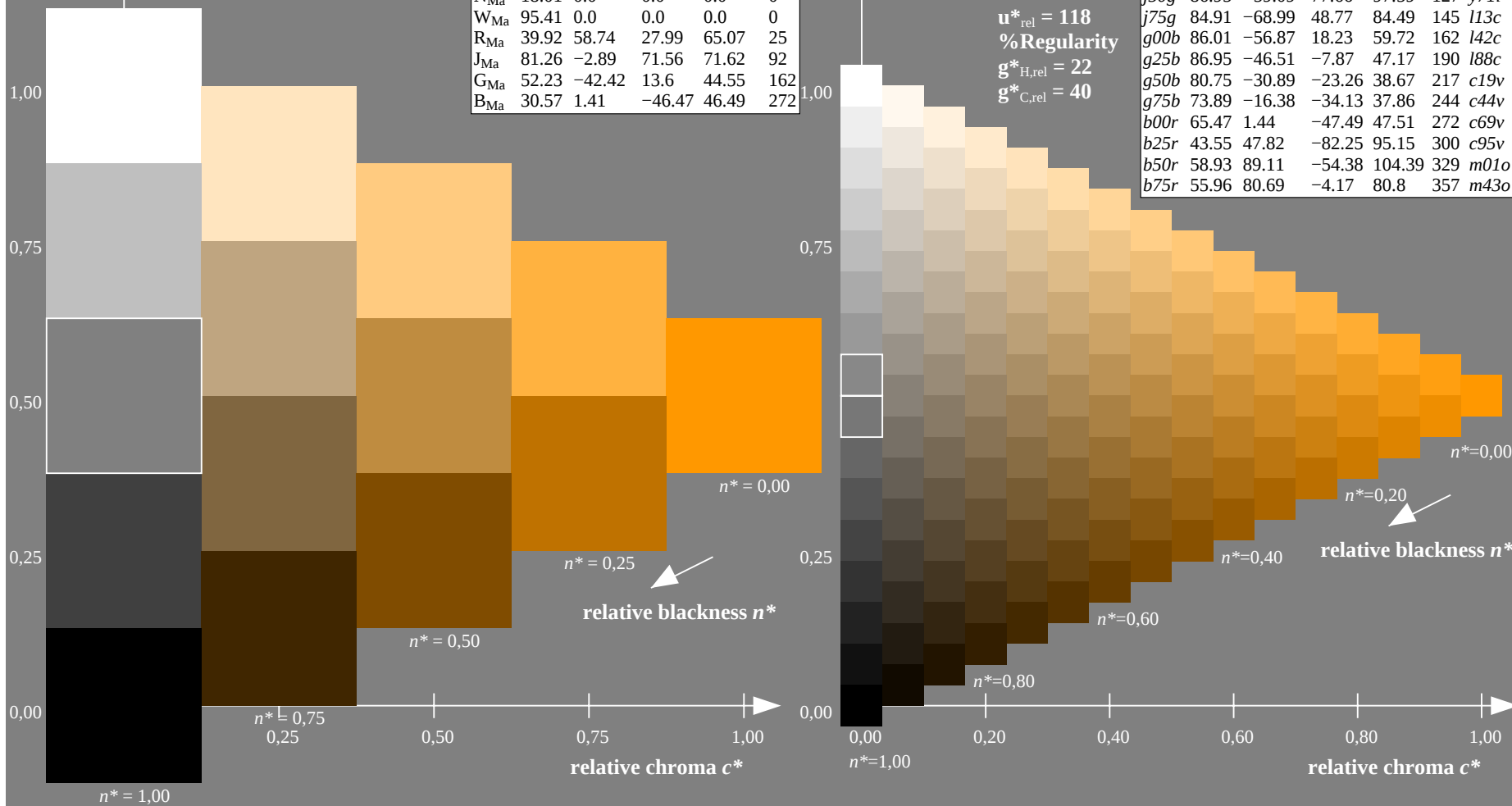
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.256$

data for any colour:

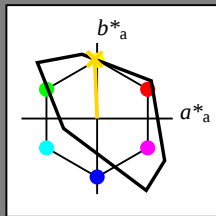
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = j00g$   $d^* = o83y$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 85 -3 79

$LAB^*LCH^*_{Ma}$ : 85 79 92

$lab^*rgb^*_{Ma}$ : 1.0 1.0 0.0

$lab^*olv^*_{Ma}$ : 1.0 0.84 0.0

triangle lightness  $t^*$

% Gamut

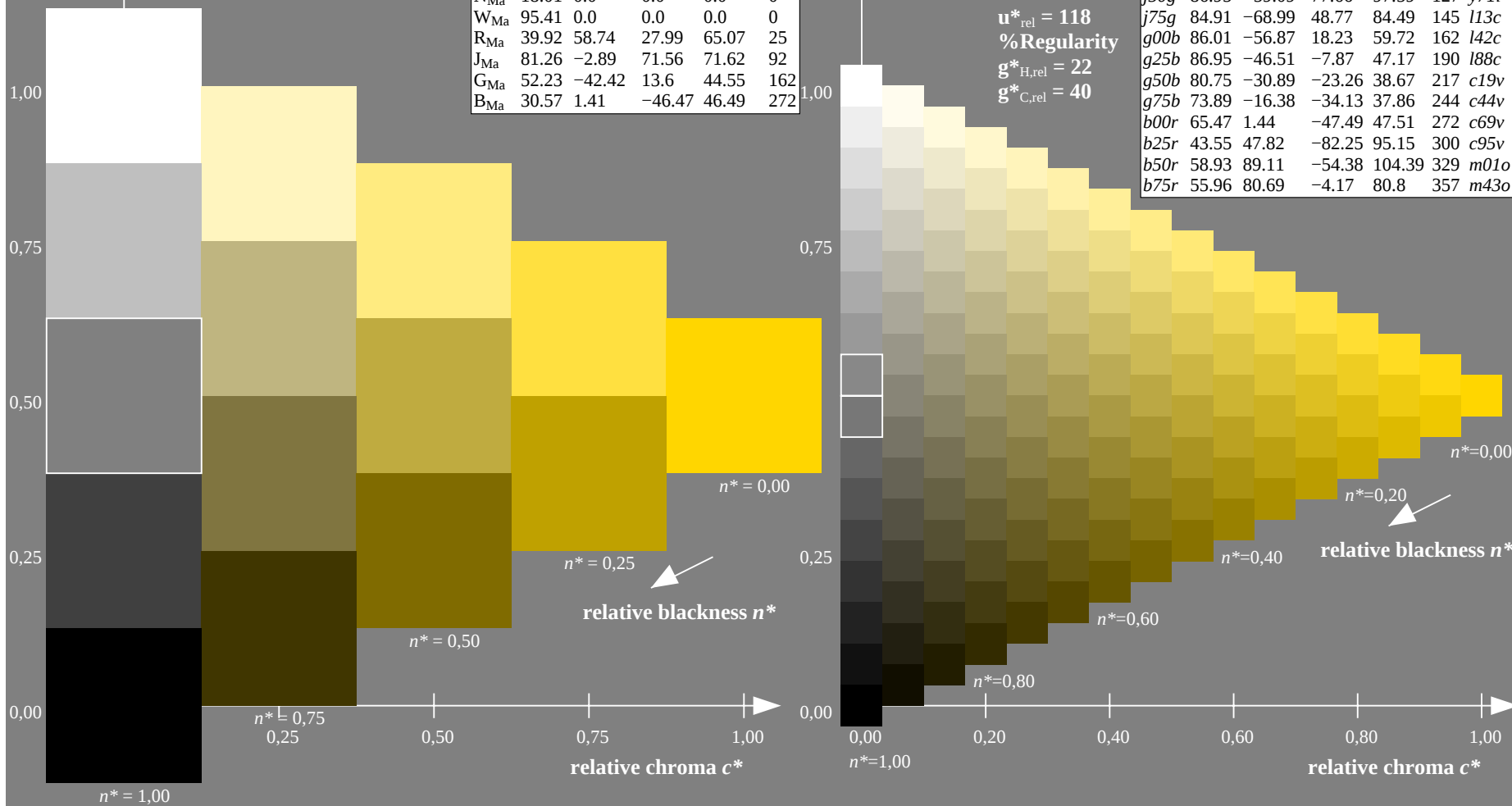
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.305$

data for any colour:

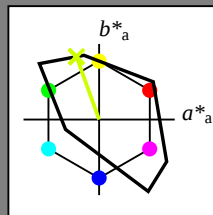
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = j25g$   $d^* = y19l$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 91 -30 83

$LAB^*LCH^*_{Ma}$ : 91 88 109

$lab^*rgb^*_{Ma}$ : 0.75 1.0 0.0

$lab^*olv^*_{Ma}$ : 0.81 1.0 0.0

triangle lightness  $t^*$

% Gamut

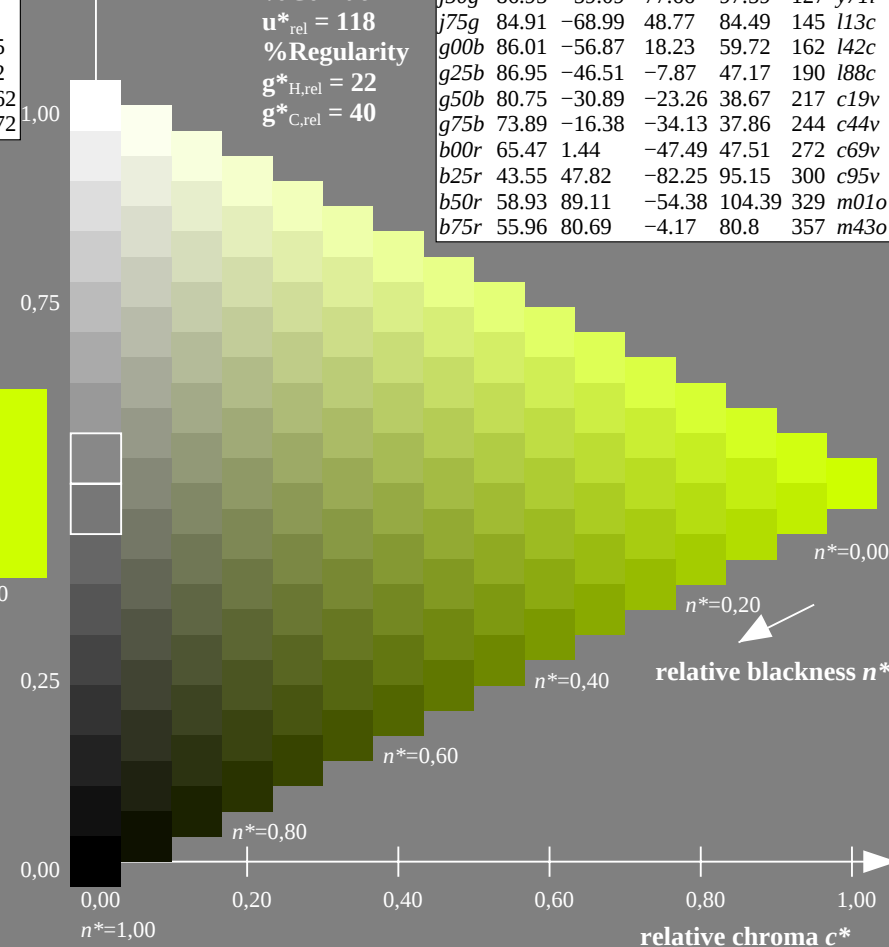
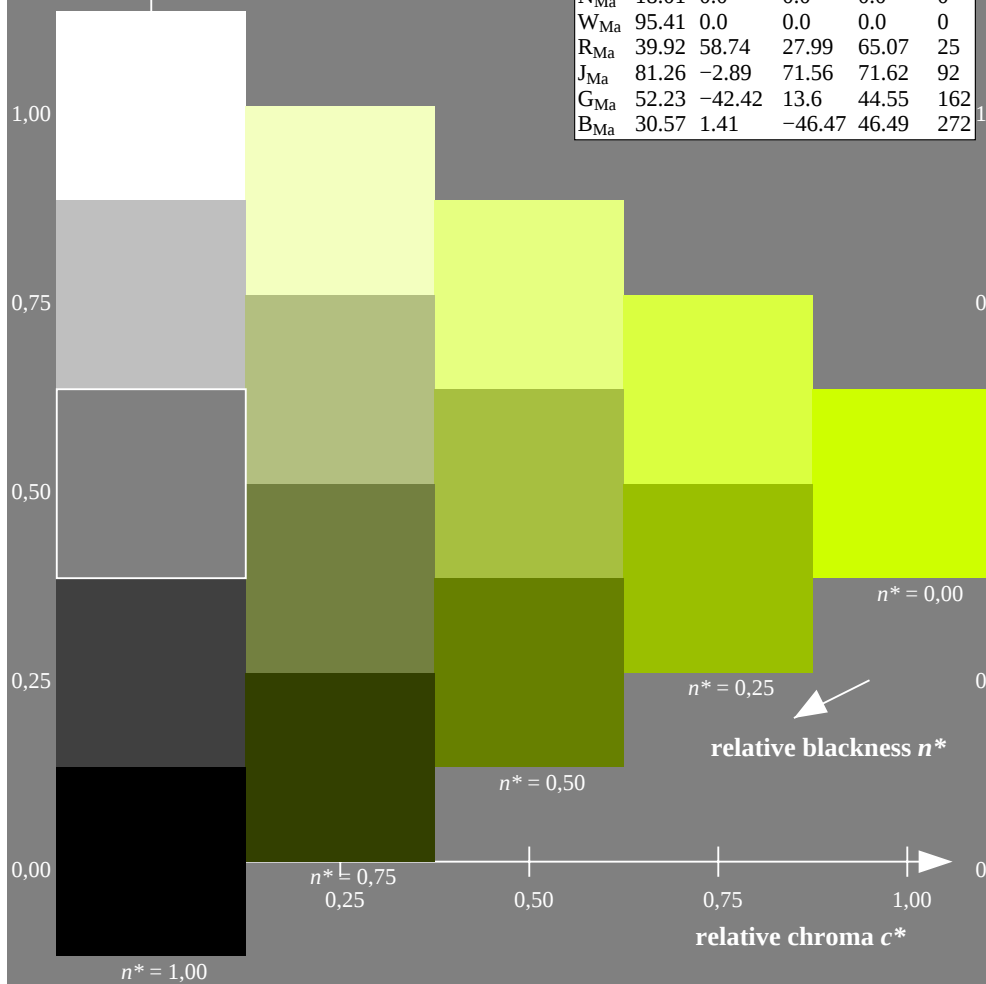
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.354$

data for any colour:

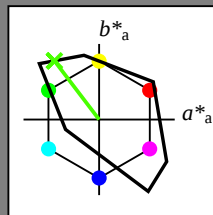
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = j50g$   $d^* = y71l$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 87 -59 78

$LAB^*LCH^*_{Ma}$ : 87 98 127

$lab^*rgb^*_{Ma}$ : 0.5 1.0 0.0

$lab^*olv^*_{Ma}$ : 0.29 1.0 0.0

triangle lightness  $t^*$

% Gamut

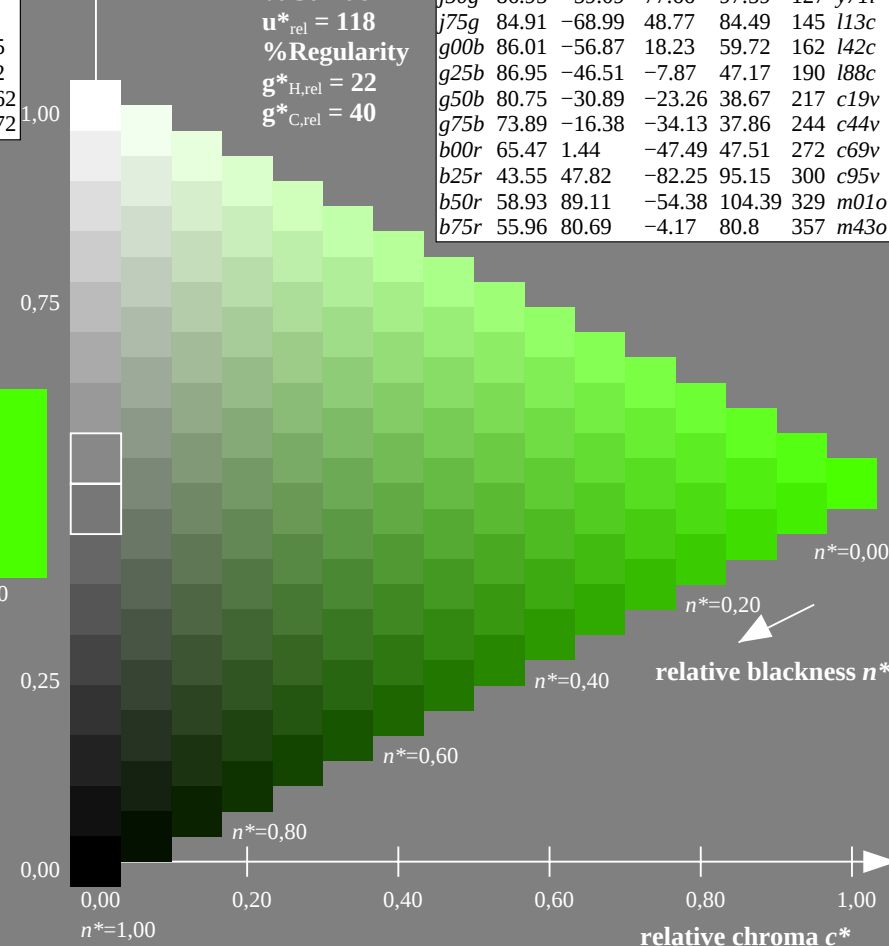
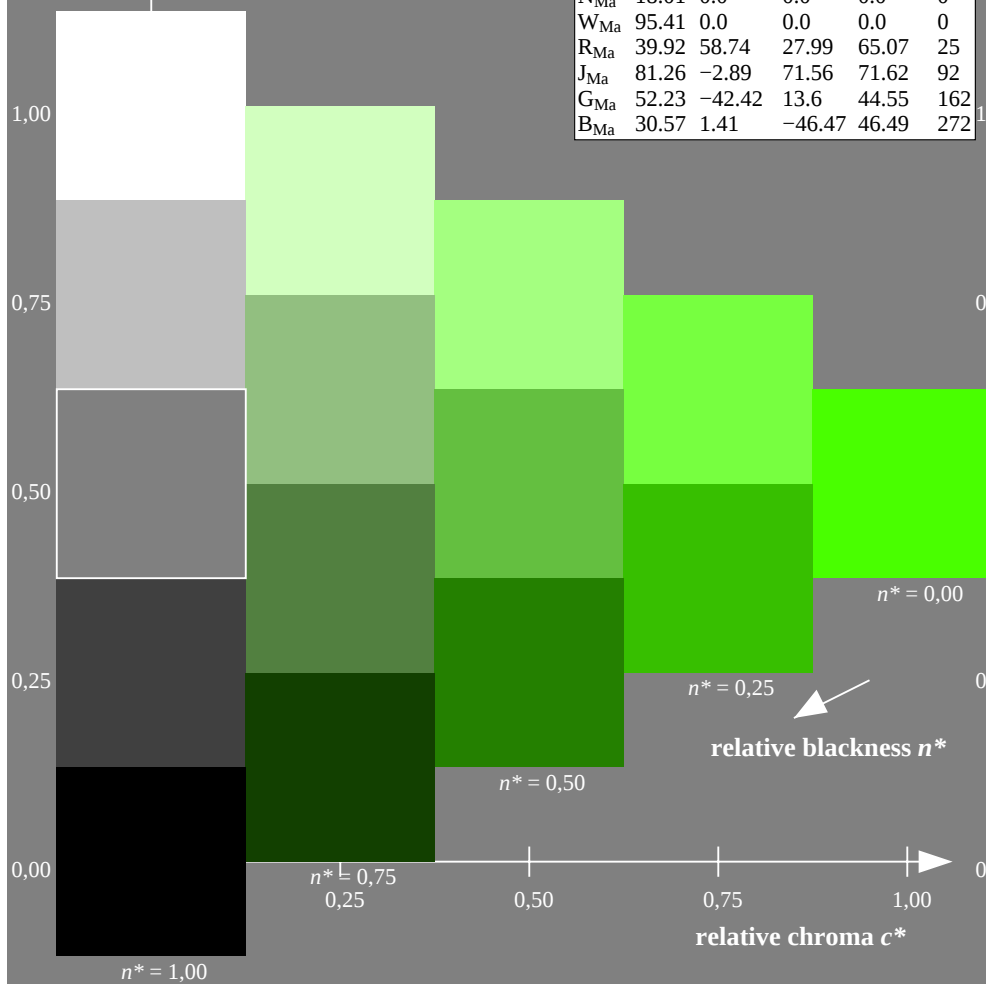
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.402$

data for any colour:

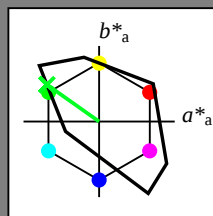
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = j75g$   $d^* = l13c$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 85 -69 49

$LAB^*LCH^*_{Ma}$ : 85 84 144

$lab^*rgb^*_{Ma}$ : 0.25 1.0 0.0

$lab^*olv^*_{Ma}$ : 0.0 1.0 0.13

triangle lightness  $t^*$

% Gamut

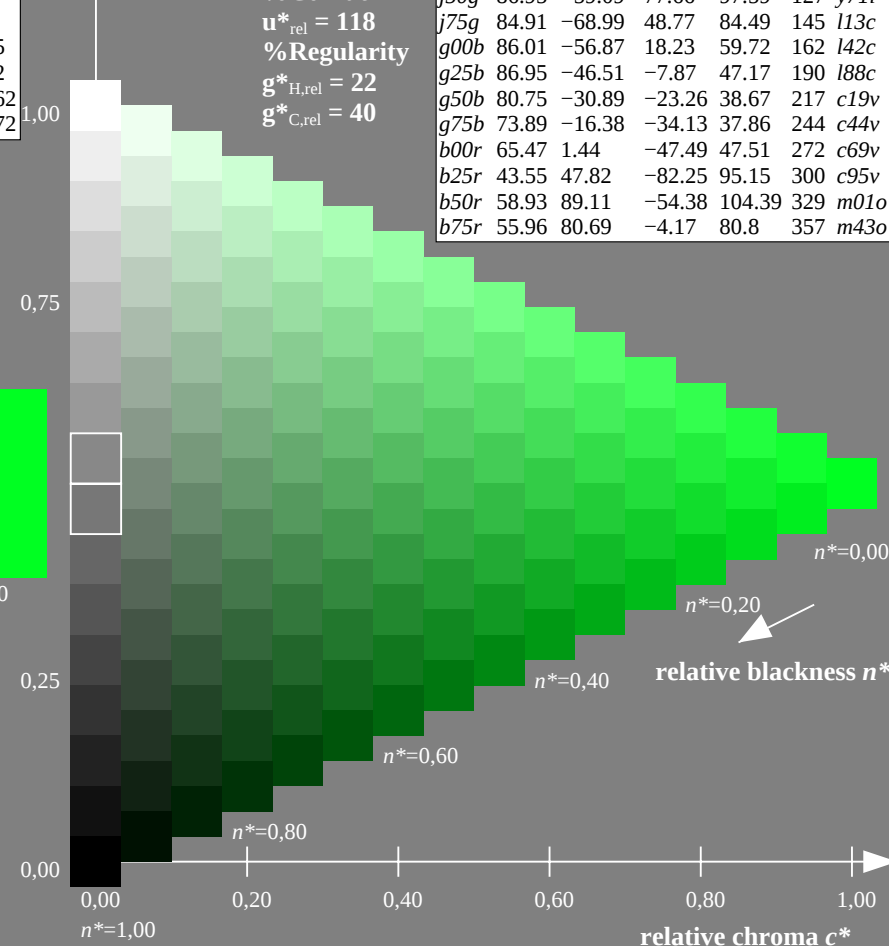
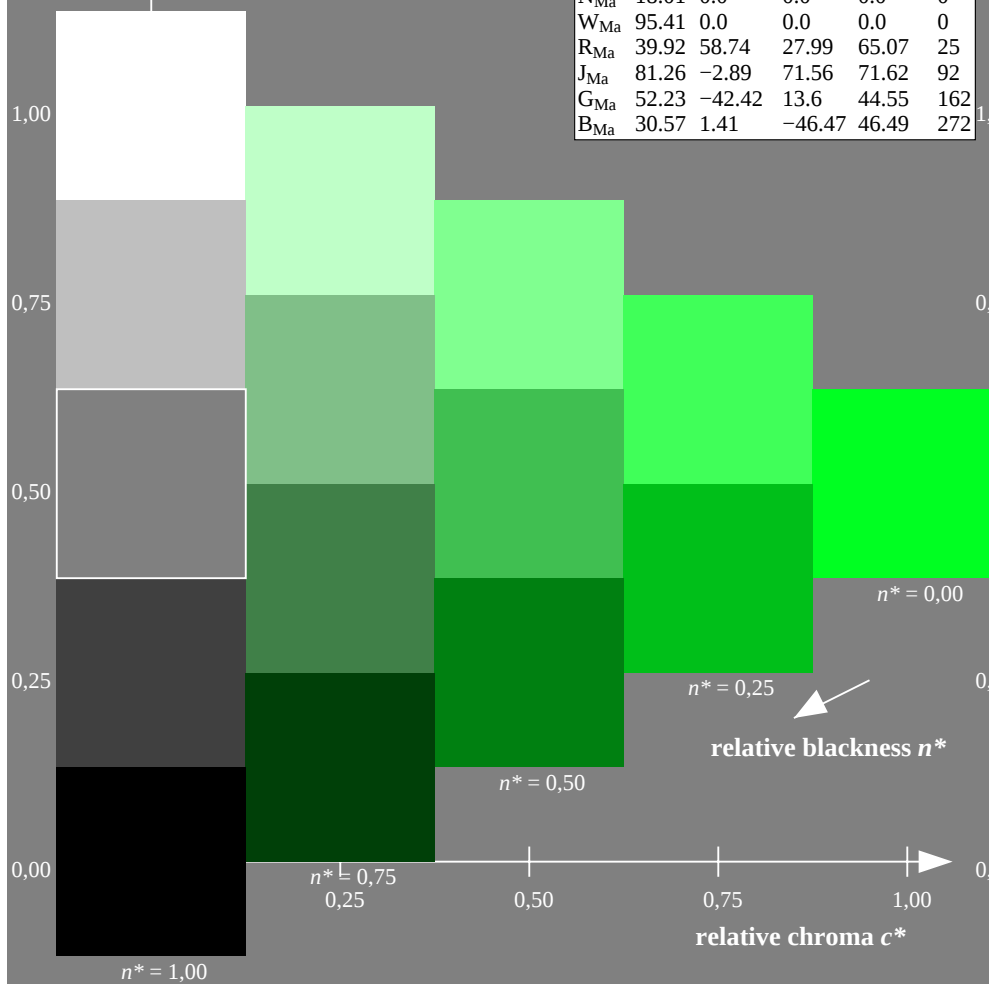
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



IE580-7N

Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.451$

data for any colour:

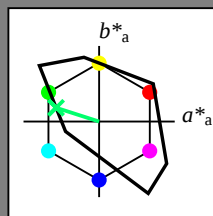
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = g00b$   $d^* = l42c$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 86 -57 18

$LAB^*LCH^*_{Ma}$ : 86 60 162

$lab^*rgb^*_{Ma}$ : 0.0 1.0 0.0

$lab^*olv^*_{Ma}$ : 0.0 1.0 0.43

triangle lightness  $t^*$

% Gamut

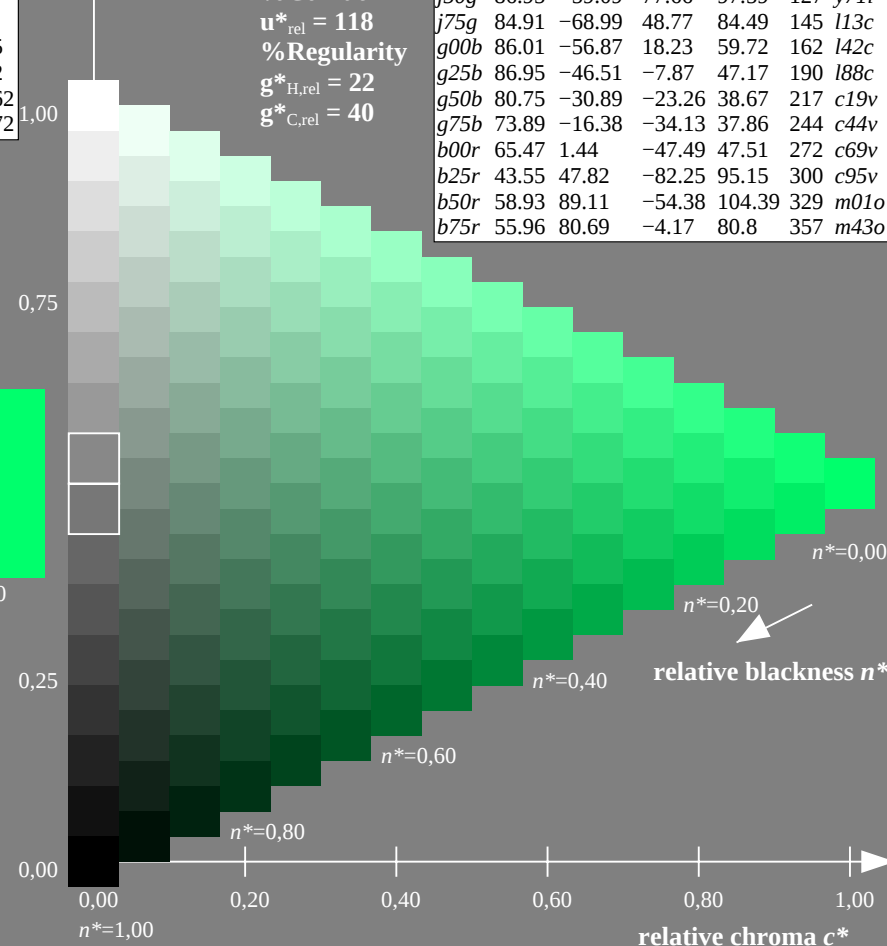
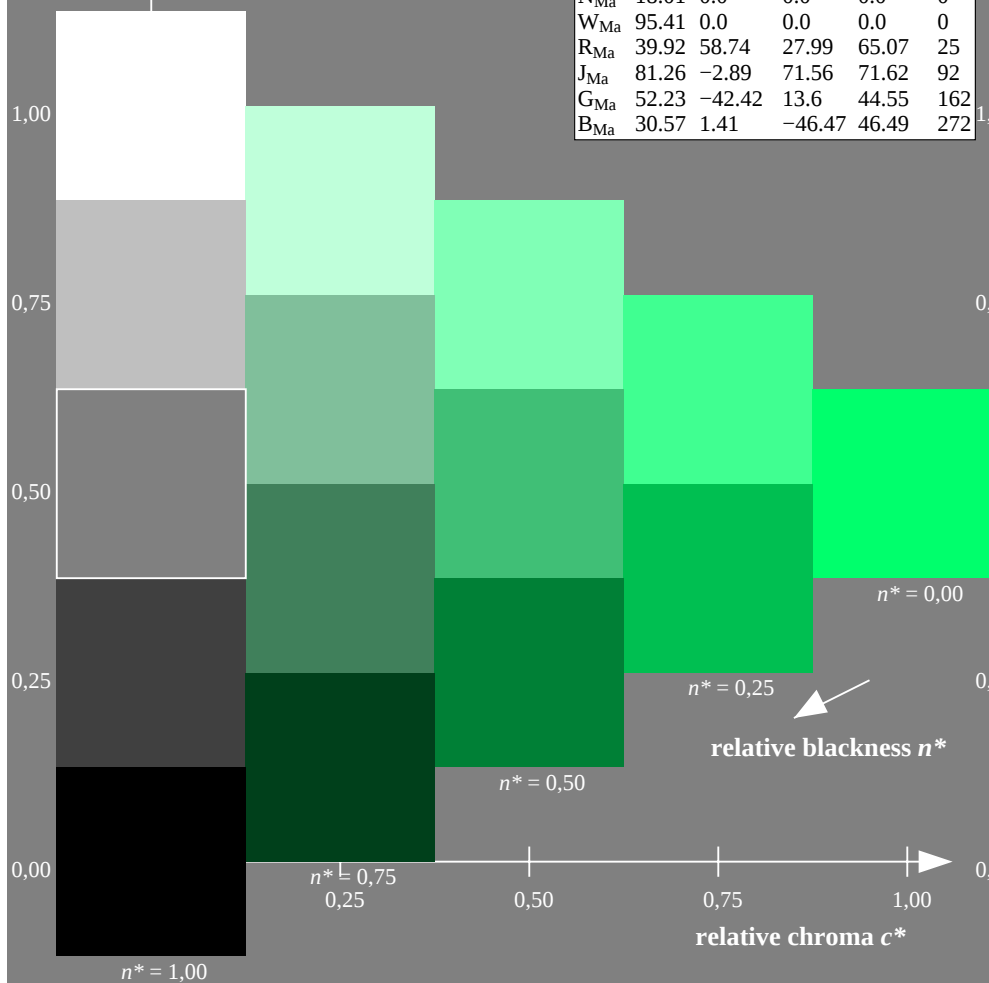
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



IE580-7N

Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.527$

data for any colour:

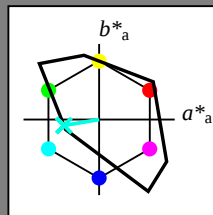
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = g25b$   $d^* = l88c$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 87 -47 -8

$LAB^*LCH^*_{Ma}$ : 87 47 189

$lab^*rgb^*_{Ma}$ : 0.0 1.0 0.5

$lab^*olv^*_{Ma}$ : 0.0 1.0 0.88

triangle lightness  $t^*$

% Gamut

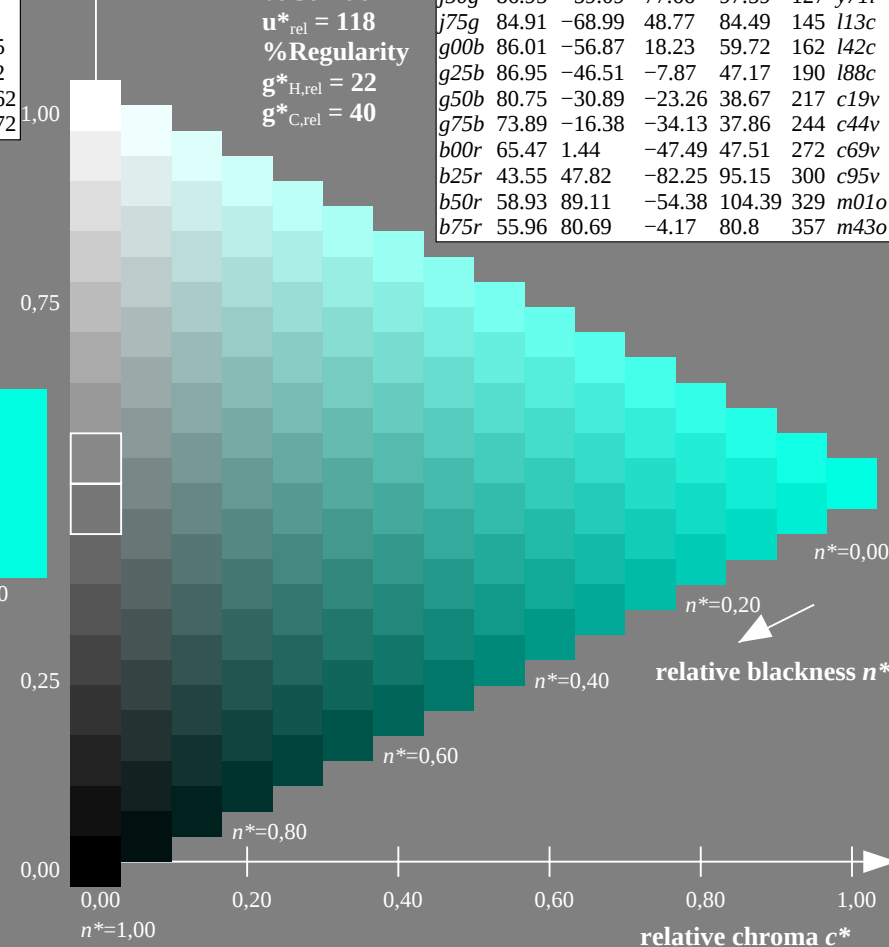
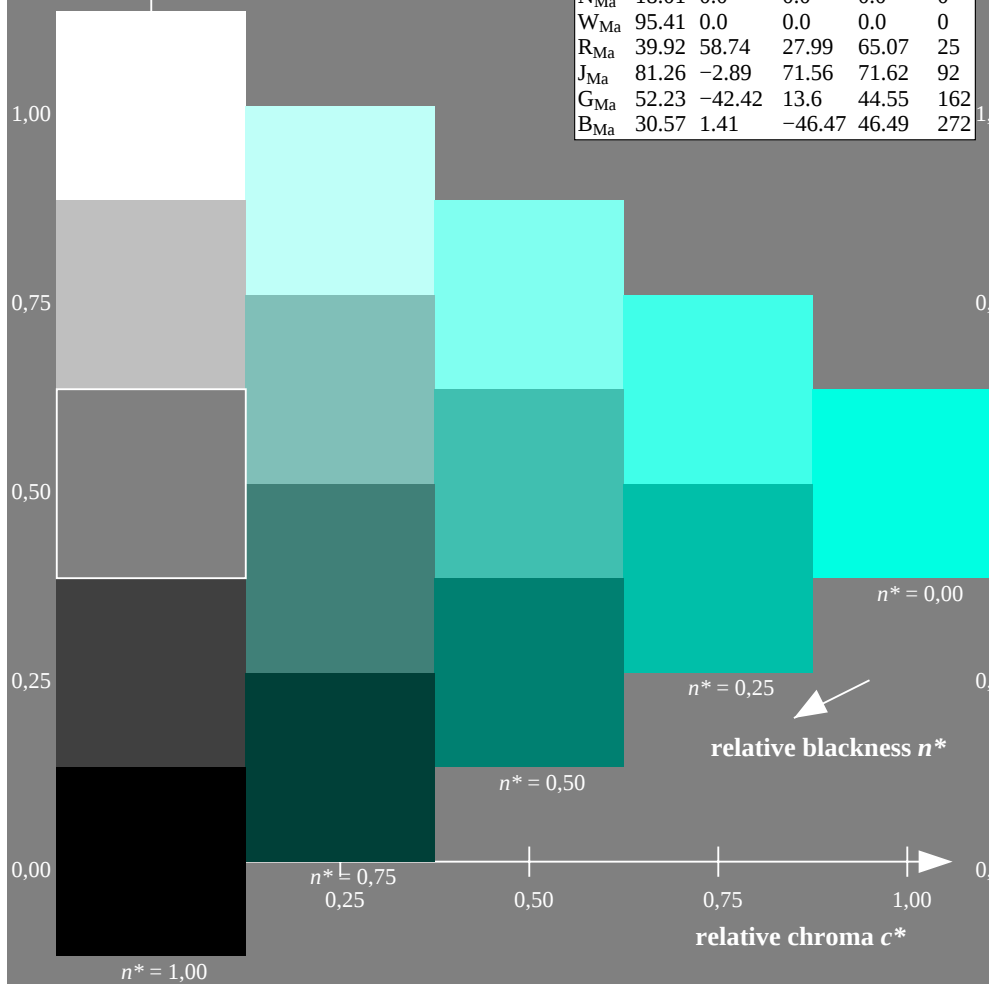
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.603$

data for any colour:

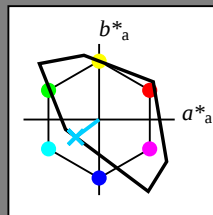
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = g50b$   $d^* = c19v$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 81 -31 -23

$LAB^*LCH^*_{Ma}$ : 81 39 216

$lab^*rgb^*_{Ma}$ : 0.0 1.0 1.0

$lab^*olv^*_{Ma}$ : 0.0 0.81 1.0

triangle lightness  $t^*$

% Gamut

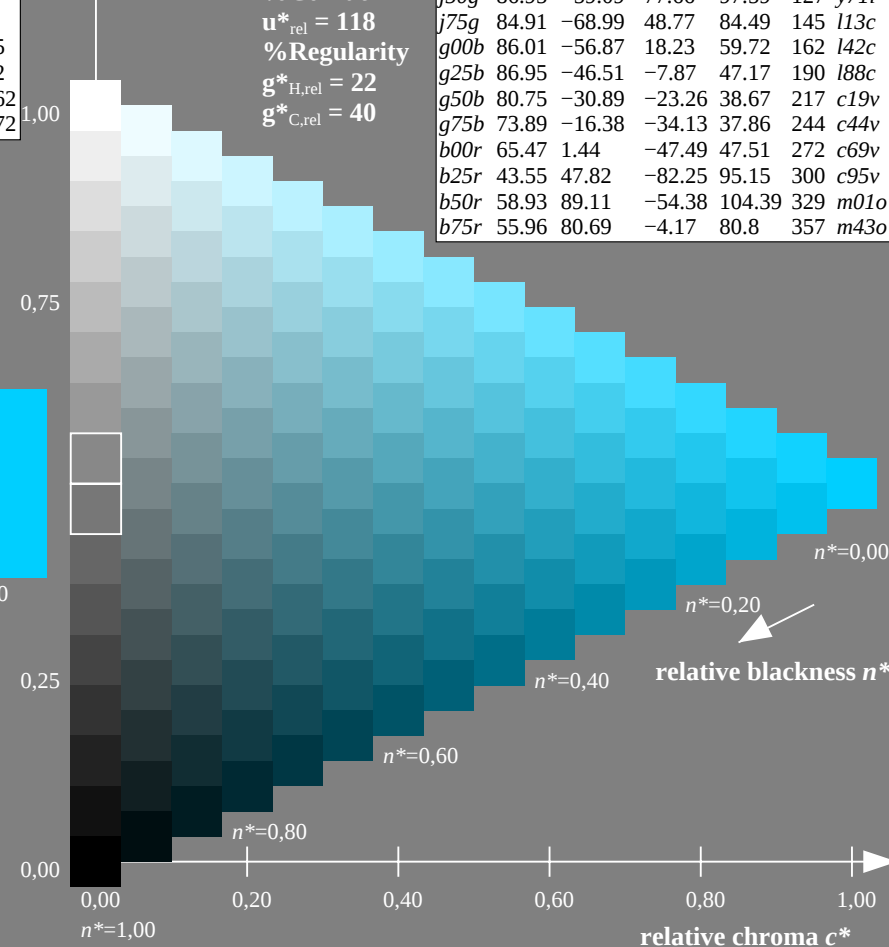
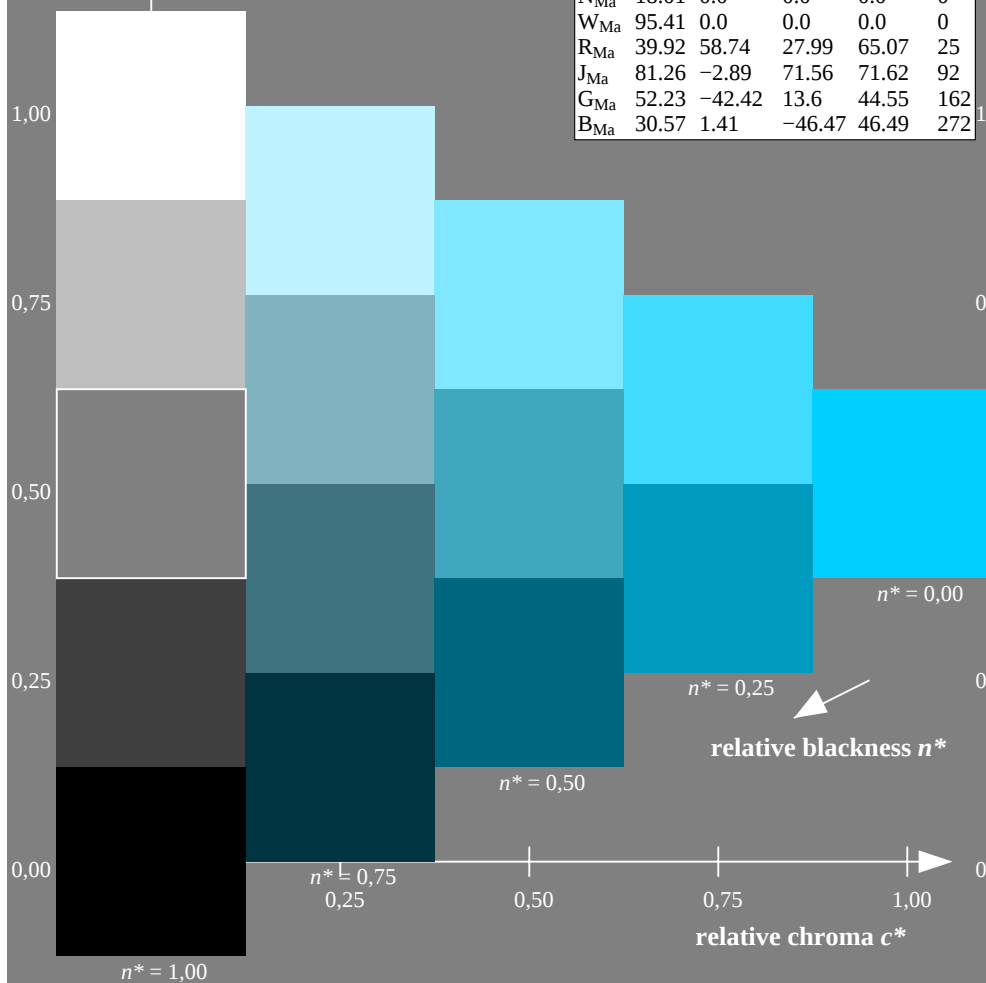
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.679$

data for any colour:

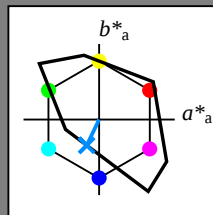
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = g75b$   $d^* = c44v$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 74 -16 -34

$LAB^*LCH^*_{Ma}$ : 74 38 244

$lab^*rgb^*_{Ma}$ : 0.0 0.5 1.0

$lab^*olv^*_{Ma}$ : 0.0 0.56 1.0

triangle lightness  $t^*$

% Gamut

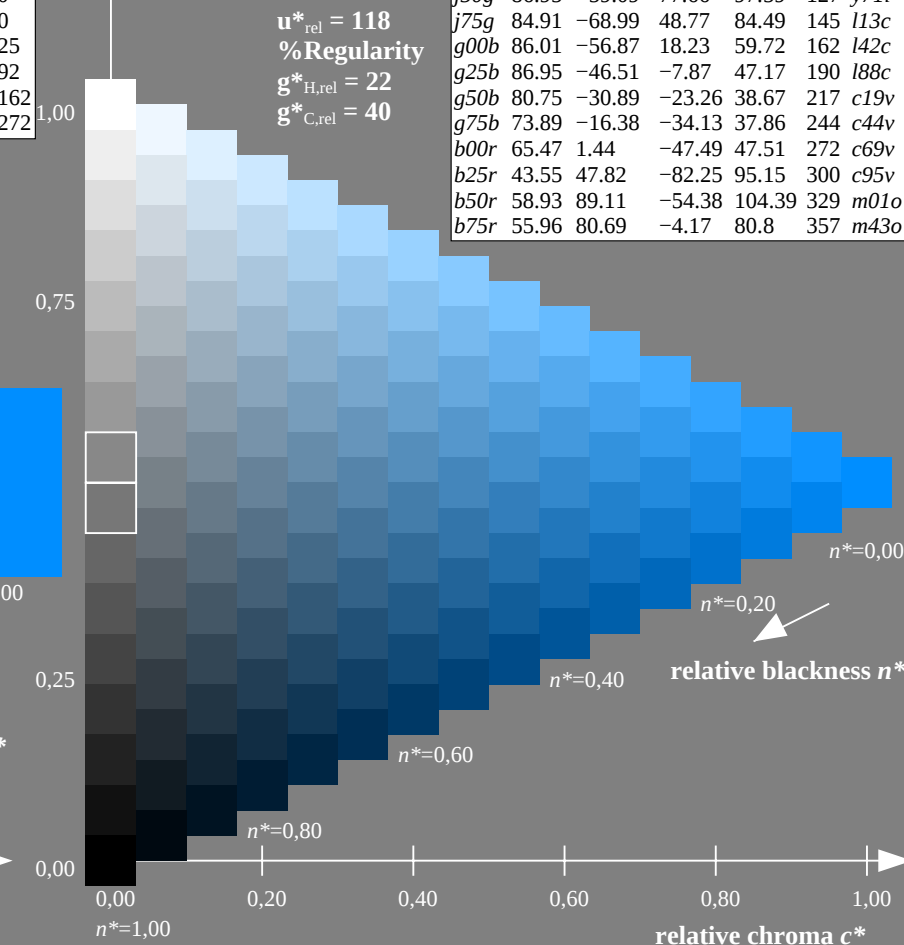
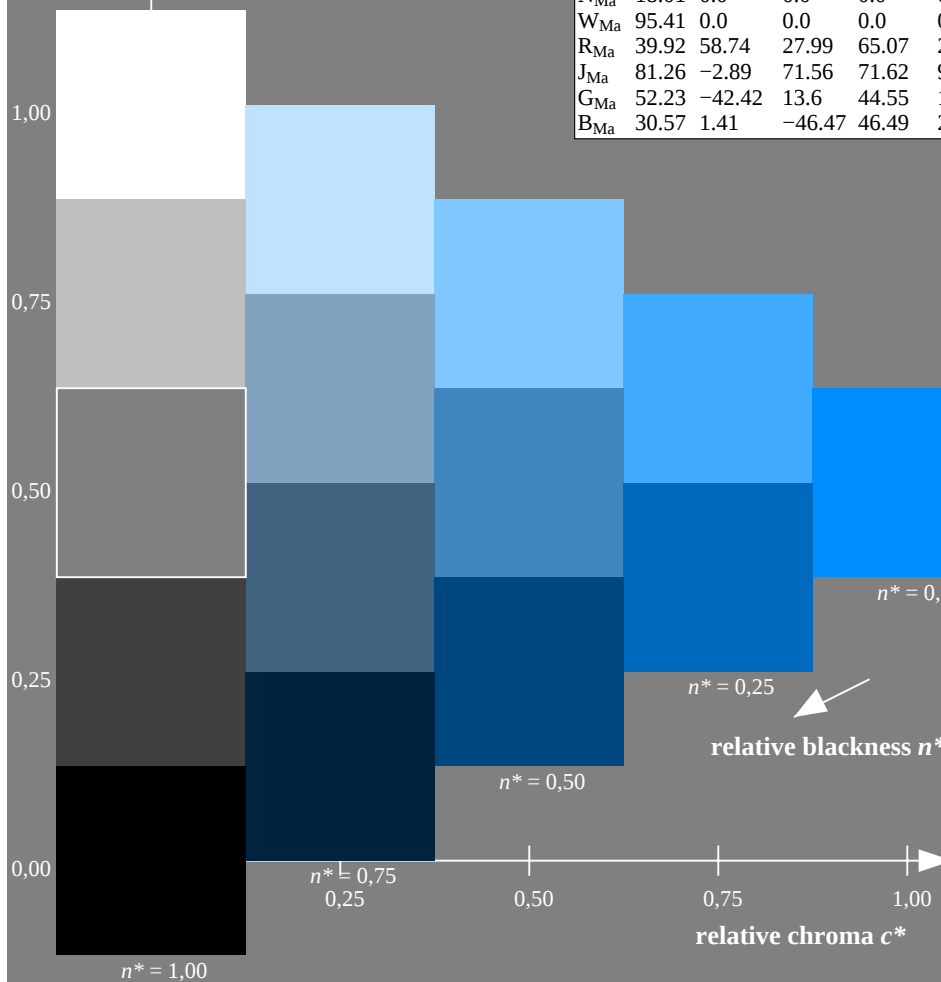
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.755$

data for any colour:

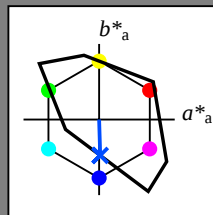
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = b00r$   $d^* = c69v$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 65 1 -47

$LAB^*LCH^*_{Ma}$ : 65 48 271

$lab^*rgb^*_{Ma}$ : 0.0 0.0 1.0

$lab^*olv^*_{Ma}$ : 0.0 0.3 1.0

triangle lightness  $t^*$

% Gamut

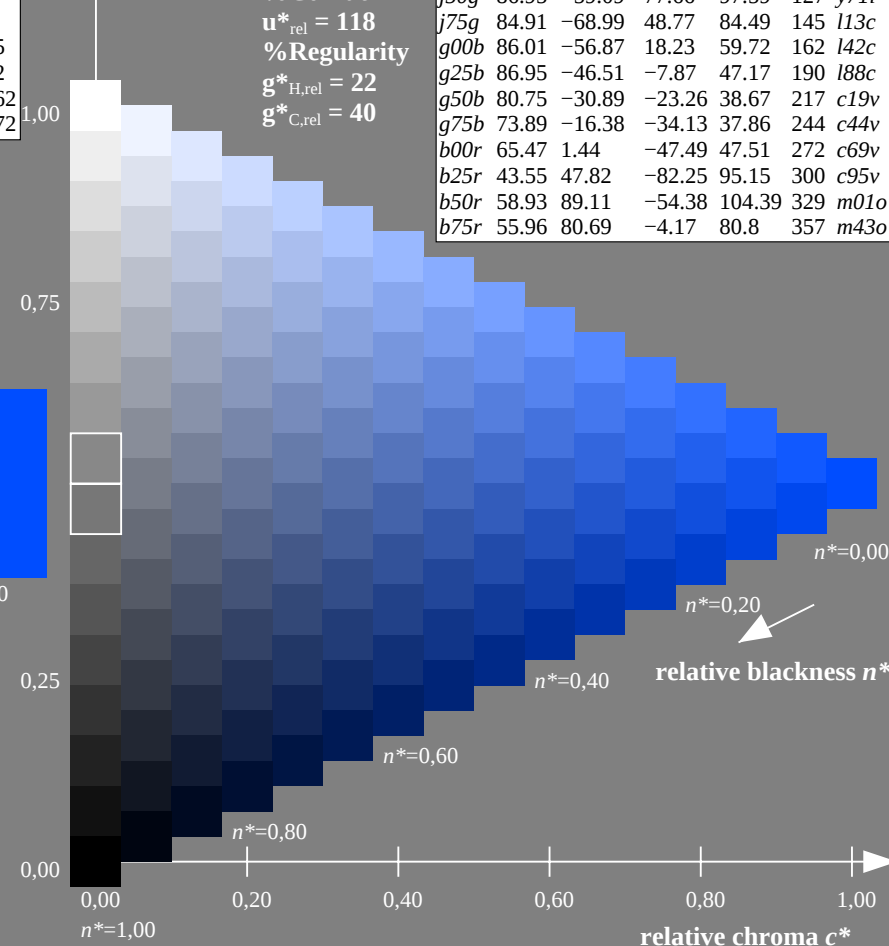
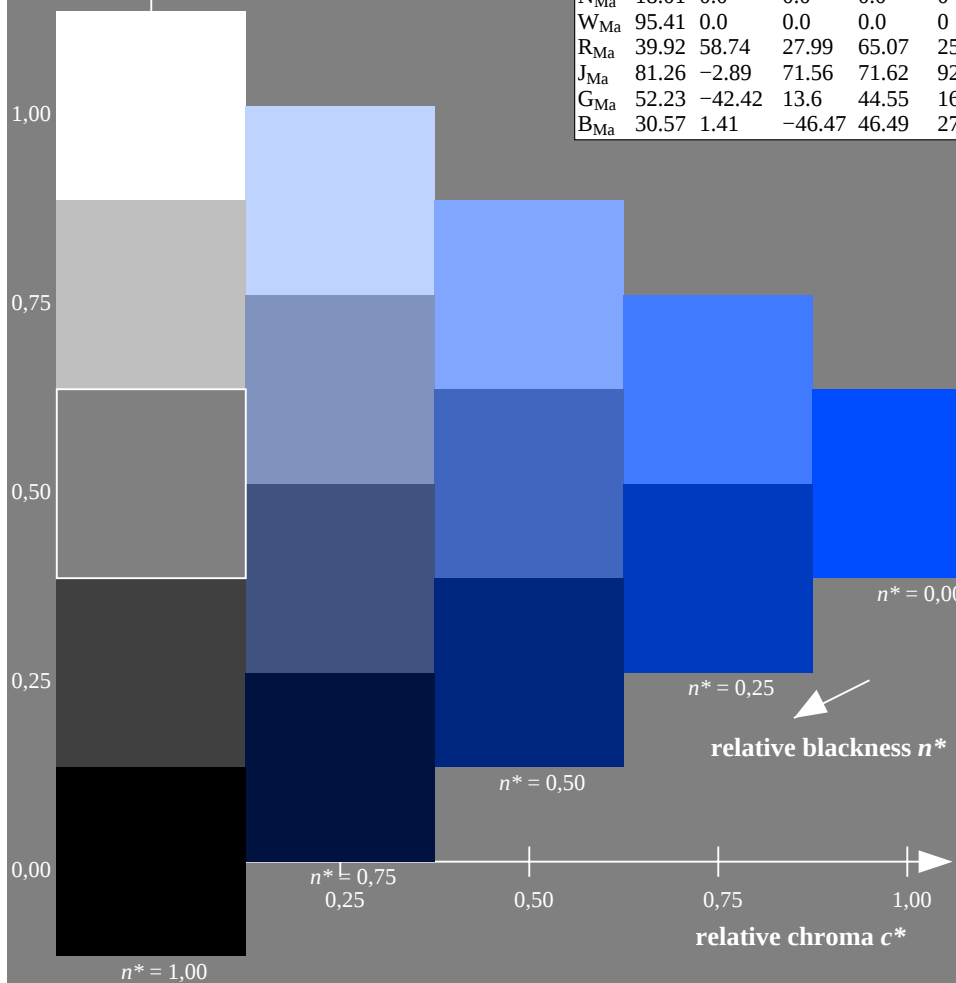
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



IE580-7N

Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.834$

data for any colour:

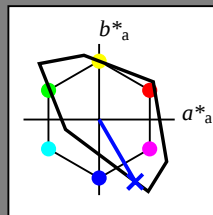
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = b25r$   $d^* = c95v$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 44 48 -82

$LAB^*LCH^*_{Ma}$ : 44 95 300

$lab^*rgb^*_{Ma}$ : 0.5 0.0 1.0

$lab^*olv^*_{Ma}$ : 0.0 0.04 1.0

triangle lightness  $t^*$

% Gamut

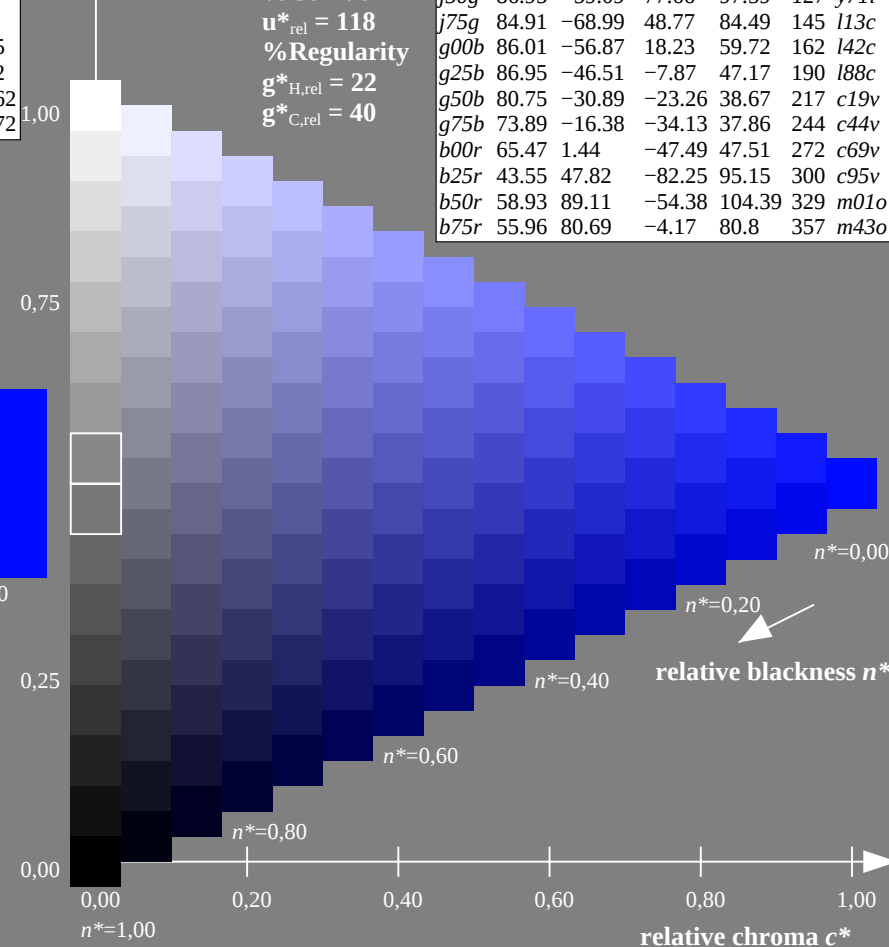
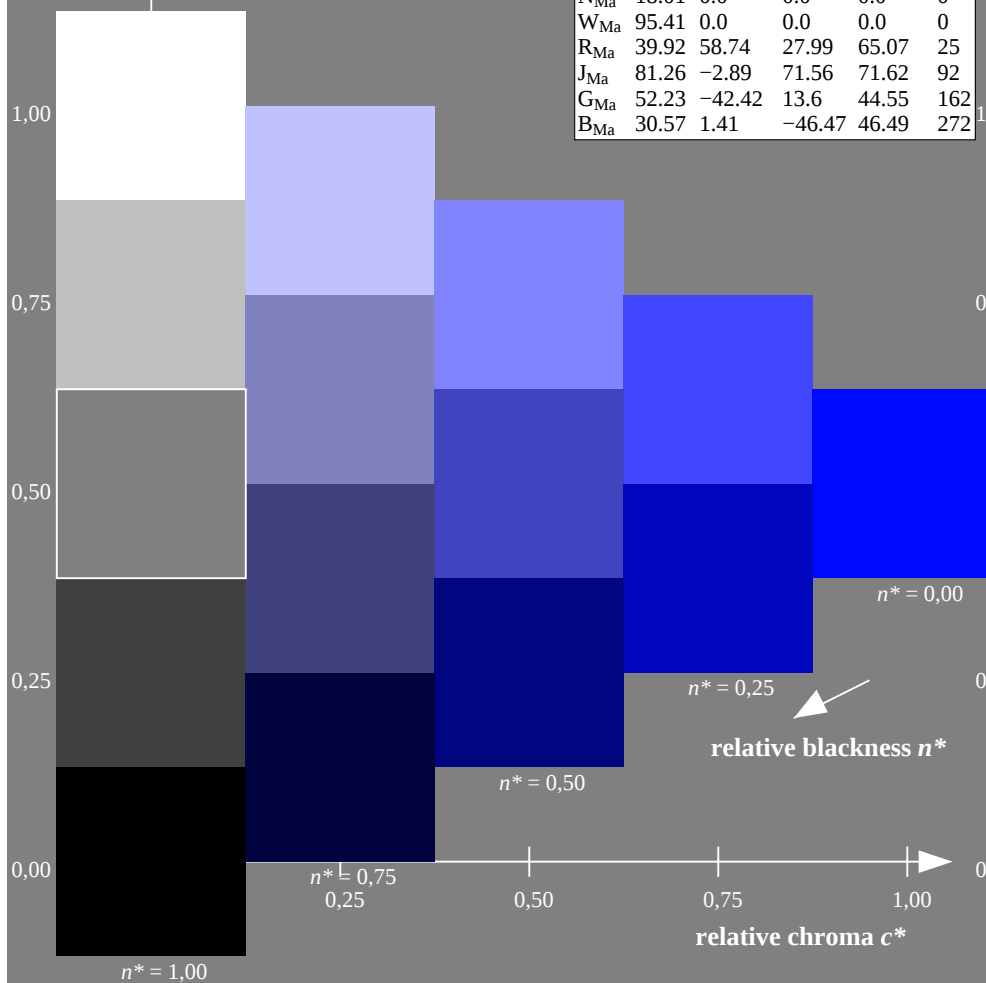
$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |



Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.913$

data for any colour:

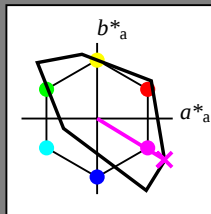
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = b50r$   $d^* = m01o$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 59 89 -54

$LAB^*LCH^*_{Ma}$ : 59 104 328

$lab^*rgb^*_{Ma}$ : 1.0 0.0 1.0

$lab^*olv^*_{Ma}$ : 1.0 0.0 0.99

triangle lightness  $t^*$

% Gamut

$u^*_{rel} = 118$

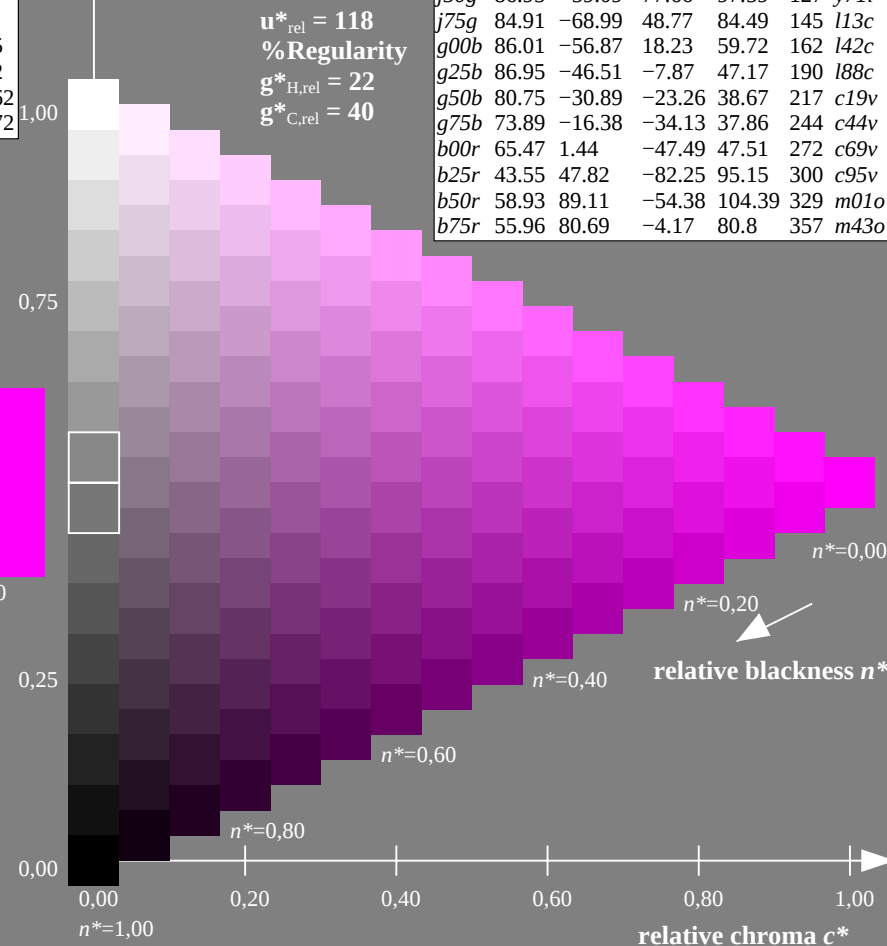
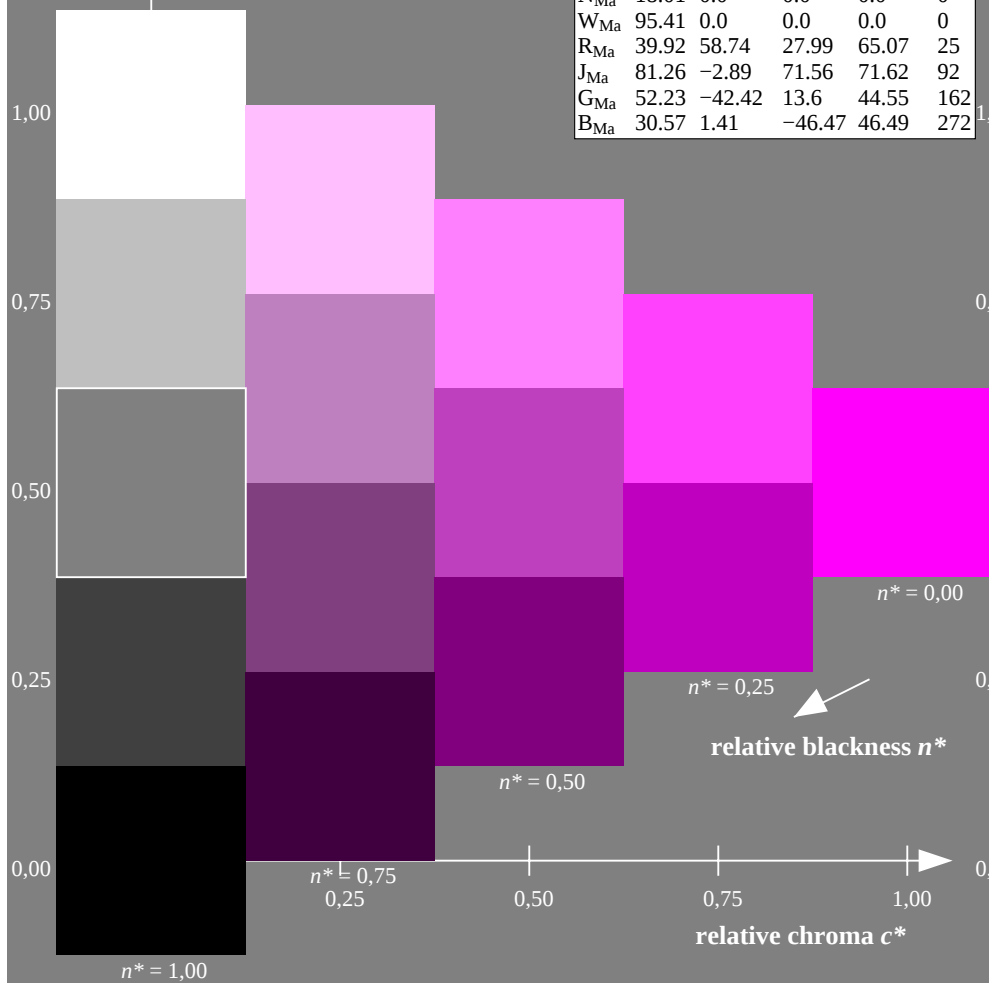
% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

TLS18a; adapted (a) CIELAB data

| $u^*$ | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ | $d^*$ |
|-------|---------|---------|---------|--------------|--------------|-------|
| r00j  | 53.62   | 74.08   | 35.3    | 82.06        | 25           | m85o  |
| r25j  | 57.85   | 59.96   | 54.35   | 80.93        | 42           | o11y  |
| r50j  | 67.48   | 37.89   | 62.8    | 73.34        | 59           | o35y  |
| r75j  | 76.12   | 18.07   | 70.39   | 72.67        | 76           | o59y  |
| j00g  | 85.39   | -3.17   | 78.52   | 78.58        | 92           | o83y  |
| j25g  | 91.28   | -29.91  | 83.12   | 88.34        | 110          | y19l  |
| j50g  | 86.95   | -59.09  | 77.66   | 97.59        | 127          | y71l  |
| j75g  | 84.91   | -68.99  | 48.77   | 84.49        | 145          | l13c  |
| g00b  | 86.01   | -56.87  | 18.23   | 59.72        | 162          | l42c  |
| g25b  | 86.95   | -46.51  | -7.87   | 47.17        | 190          | l88c  |
| g50b  | 80.75   | -30.89  | -23.26  | 38.67        | 217          | c19v  |
| g75b  | 73.89   | -16.38  | -34.13  | 37.86        | 244          | c44v  |
| b00r  | 65.47   | 1.44    | -47.49  | 47.51        | 272          | c69v  |
| b25r  | 43.55   | 47.82   | -82.25  | 95.15        | 300          | c95v  |
| b50r  | 58.93   | 89.11   | -54.38  | 104.39       | 329          | m01o  |
| b75r  | 55.96   | 80.69   | -4.17   | 80.8         | 357          | m43o  |



Input and output: Colorimetric Television Luminous System TLS18a for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.992$

data for any colour:

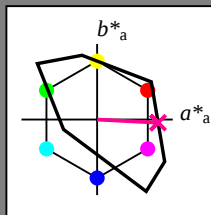
$lab^*tch^*$  and  $lab^*ncu^*$

elementary and device

hue text:

$u^* = b75r$   $d^* = m43o$

triangle lightness  $t^*$



| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| Name                            | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                 | 52.76   | 71.63   | 49.88   | 87.29        | 35           |
| Y <sub>Ma</sub>                 | 92.74   | -20.03  | 84.97   | 87.3         | 103          |
| L <sub>Ma</sub>                 | 84.0    | -78.99  | 73.94   | 108.2        | 137          |
| C <sub>Ma</sub>                 | 87.14   | -44.42  | -13.12  | 46.32        | 196          |
| V <sub>Ma</sub>                 | 35.47   | 64.92   | -95.07  | 115.12       | 304          |
| M <sub>Ma</sub>                 | 59.01   | 89.33   | -55.68  | 105.26       | 328          |
| 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>Ma</sub>                 | 39.92   | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>Ma</sub>                 | 81.26   | -2.89   | 71.56   | 71.62        | 92           |
| G <sub>Ma</sub>                 | 52.23   | -42.42  | 13.6    | 44.55        | 162          |
| B <sub>Ma</sub>                 | 30.57   | 1.41    | -46.47  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 56 81 -4

$LAB^*LCH^*_{Ma}$ : 56 81 357

$lab^*rgb^*_{Ma}$ : 1.0 0.0 0.5

$lab^*olv^*_{Ma}$ : 1.0 0.0 0.57

triangle lightness  $t^*$

% Gamut

$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

| TLS18a; adapted (a) CIELAB data |         |         |         |              |              |
|---------------------------------|---------|---------|---------|--------------|--------------|
| $u^*$                           | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                            | 53.62   | 74.08   | 35.3    | 82.06        | 25           |
| r25j                            | 57.85   | 59.96   | 54.35   | 80.93        | 42           |
| r50j                            | 67.48   | 37.89   | 62.8    | 73.34        | 59           |
| r75j                            | 76.12   | 18.07   | 70.39   | 72.67        | 76           |
| j00g                            | 85.39   | -3.17   | 78.52   | 78.58        | 92           |
| j25g                            | 91.28   | -29.91  | 83.12   | 88.34        | 110          |
| j50g                            | 86.95   | -59.09  | 77.66   | 97.59        | 127          |
| j75g                            | 84.91   | -68.99  | 48.77   | 84.49        | 145          |
| g00b                            | 86.01   | -56.87  | 18.23   | 59.72        | 162          |
| g25b                            | 86.95   | -46.51  | -7.87   | 47.17        | 190          |
| g50b                            | 80.75   | -30.89  | -23.26  | 38.67        | 217          |
| g75b                            | 73.89   | -16.38  | -34.13  | 37.86        | 244          |
| b00r                            | 65.47   | 1.44    | -47.49  | 47.51        | 272          |
| b25r                            | 43.55   | 47.82   | -82.25  | 95.15        | 300          |
| b50r                            | 58.93   | 89.11   | -54.38  | 104.39       | 329          |
| b75r                            | 55.96   | 80.69   | -4.17   | 80.8         | 357          |

