

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.106$

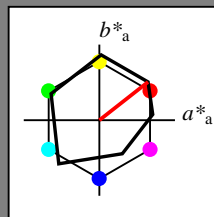
lab^*tch and lab^*nch

A: hue O

LCH*Ma: 48 82 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 64.42 | 50.58 | 81.9 | 38 |
| Y _{Ma} | 92.62 | 2.41 | 86.36 | 86.39 | 88 |
| L _{Ma} | 50.9 | -63.82 | 35.02 | 72.81 | 151 |
| C _{Ma} | 51.25 | -53.68 | -57.69 | 78.82 | 227 |
| V _{Ma} | 25.72 | 30.34 | -44.37 | 53.76 | 304 |
| M _{Ma} | 56.25 | 70.59 | 7.57 | 70.99 | 6 |
| N _{Ma} | 18.11 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.6 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 60.85 | 41.08 | 73.41 | 34 |
| J _{CIE} | 83.82 | 6.52 | 66.9 | 67.22 | 84 |
| G _{CIE} | 49.0 | -36.83 | 2.78 | 36.95 | 176 |
| B _{CIE} | 25.14 | -18.35 | -56.22 | 59.15 | 252 |

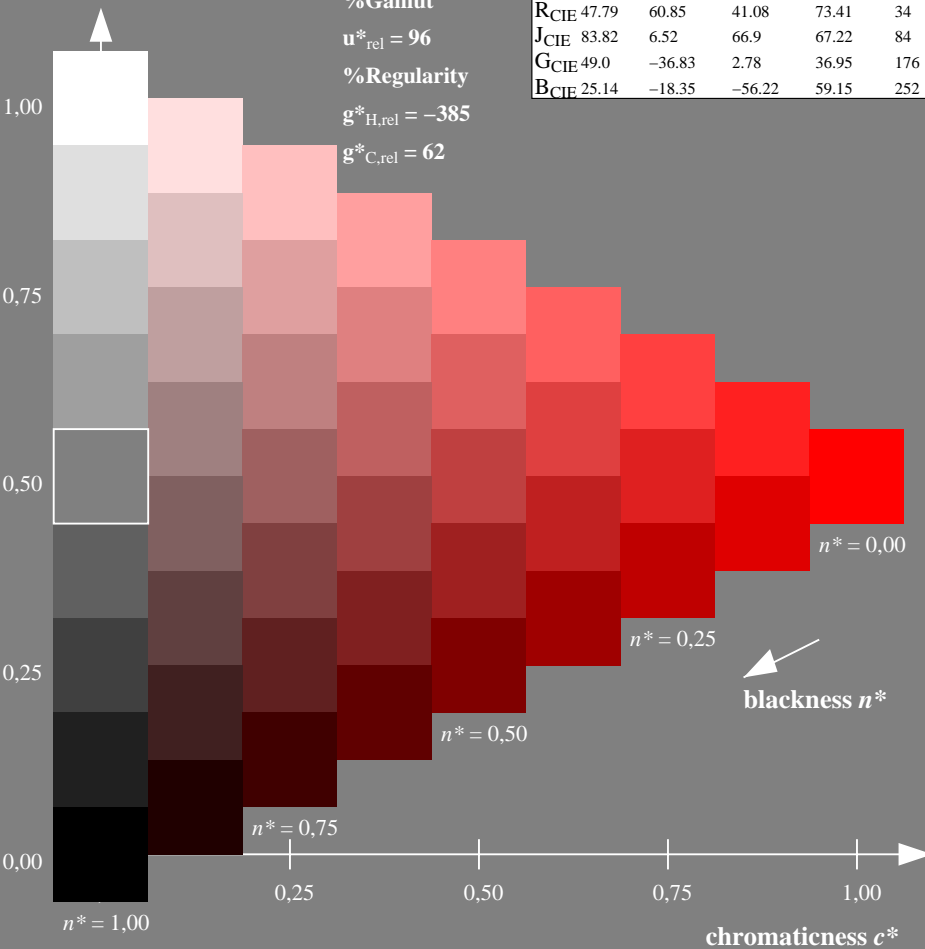
%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 35/360 = 0.097$

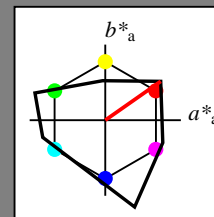
lab^*tch and lab^*nch

A: hue O

LCH*Ma: 66 90 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 65.56 | 73.34 | 51.39 | 89.55 | 35 |
| Y _{Ma} | 94.78 | -3.49 | 52.24 | 52.36 | 94 |
| L _{Ma} | 77.48 | -92.97 | 36.0 | 99.71 | 159 |
| C _{Ma} | 78.36 | -82.69 | -22.74 | 85.77 | 195 |
| V _{Ma} | 12.55 | 38.81 | -114.81 | 121.2 | 289 |
| M _{Ma} | 66.71 | 76.08 | -29.8 | 81.71 | 339 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 61.74 | 42.56 | 74.99 | 35 |
| J _{CIE} | 83.82 | 7.06 | 70.78 | 71.13 | 84 |
| G _{CIE} | 49.0 | -35.95 | 4.34 | 36.22 | 173 |
| B _{CIE} | 25.14 | -17.24 | -56.24 | 58.84 | 253 |

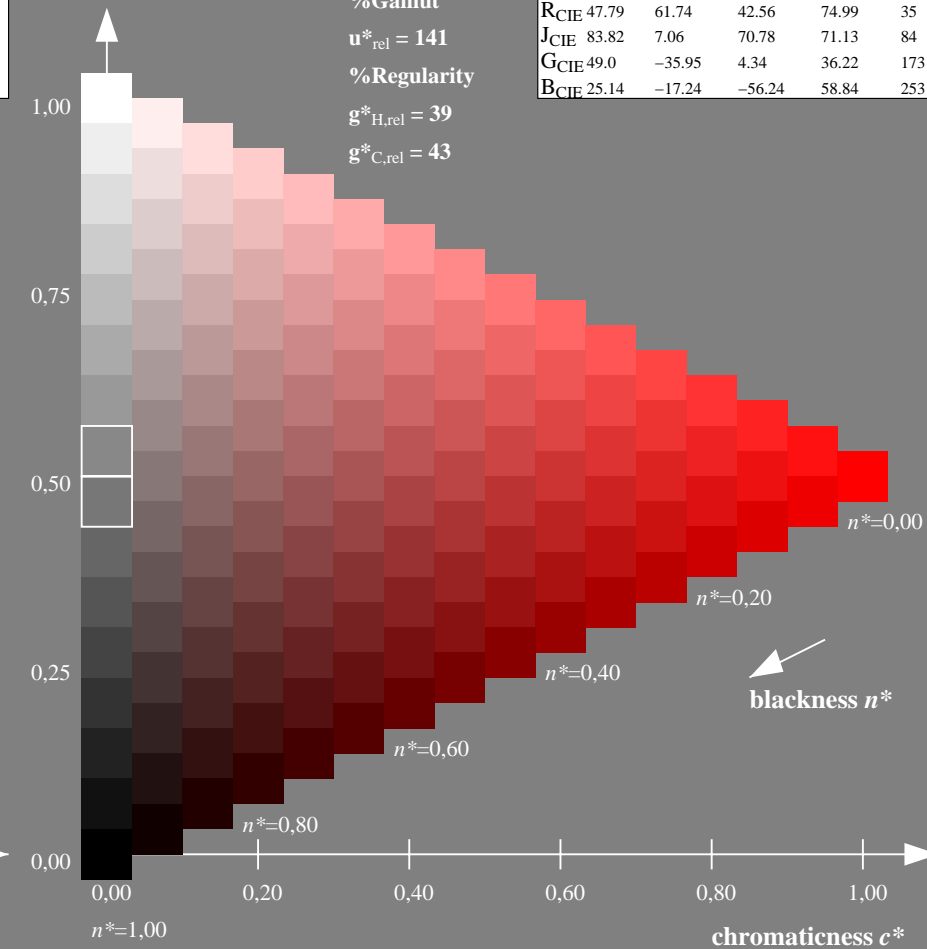
%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$



RE900-7, 9 step scales for constant CIELAB hue 38/360 = 0.106 (left)

16 step scales for constant CIELAB hue 35/360 = 0.097 (right)

BAM-test chart RE90; Colorimetric systems ORS18 & TLS00

A: 9 and 16 step colour scales for 10 hues

input: olv^* setrgbcolor

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 88/360 = 0.246$

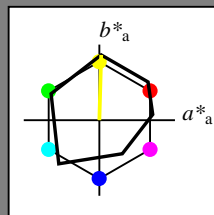
lab^*tch and lab^*nch

A: hue Y

LCH*Ma: 93 86 88

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 64.42 | 50.58 | 81.9 | 38 |
| Y _{Ma} | 92.62 | 2.41 | 86.36 | 86.39 | 88 |
| L _{Ma} | 50.9 | -63.82 | 35.02 | 72.81 | 151 |
| C _{Ma} | 51.25 | -53.68 | -57.69 | 78.82 | 227 |
| V _{Ma} | 25.72 | 30.34 | -44.37 | 53.76 | 304 |
| M _{Ma} | 56.25 | 70.59 | 7.57 | 70.99 | 6 |
| N _{Ma} | 18.11 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.6 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 60.85 | 41.08 | 73.41 | 34 |
| J _{CIE} | 83.82 | 6.52 | 66.9 | 67.22 | 84 |
| G _{CIE} | 49.0 | -36.83 | 2.78 | 36.95 | 176 |
| B _{CIE} | 25.14 | -18.35 | -56.22 | 59.15 | 252 |

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 94/360 = 0.261$

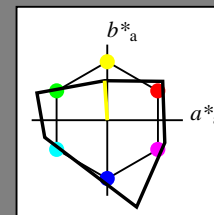
lab^*tch and lab^*nch

A: hue Y

LCH*Ma: 95 52 94

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

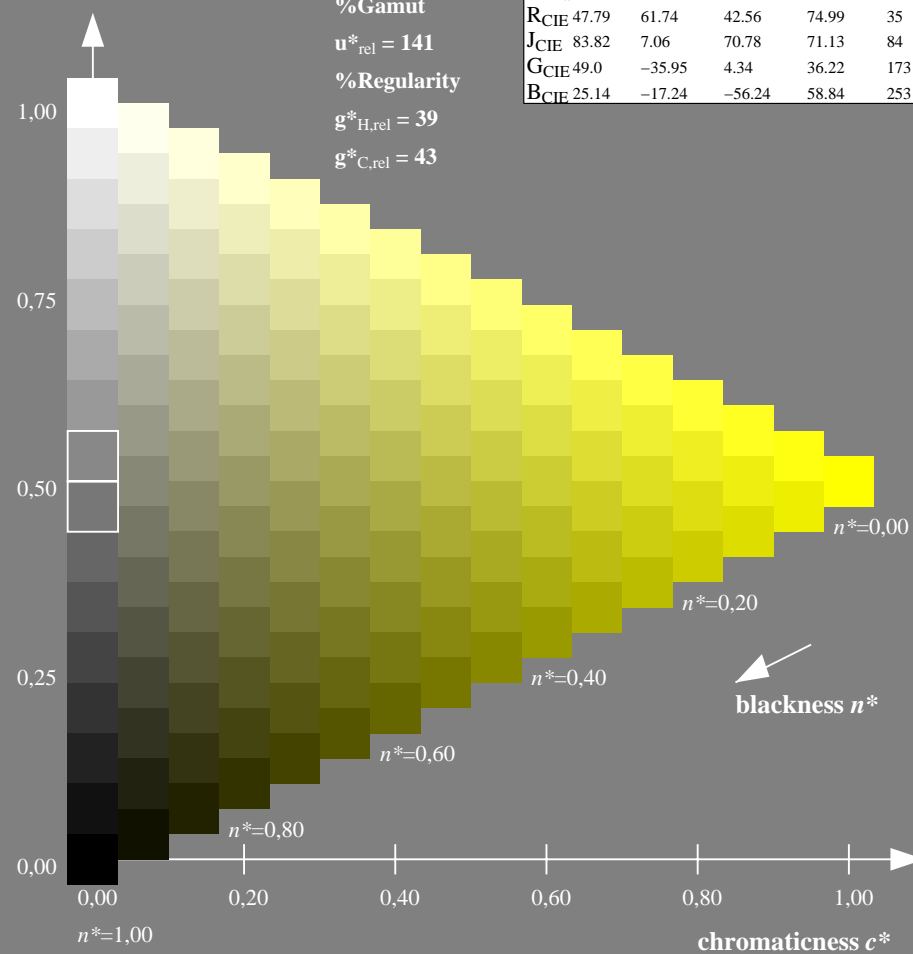
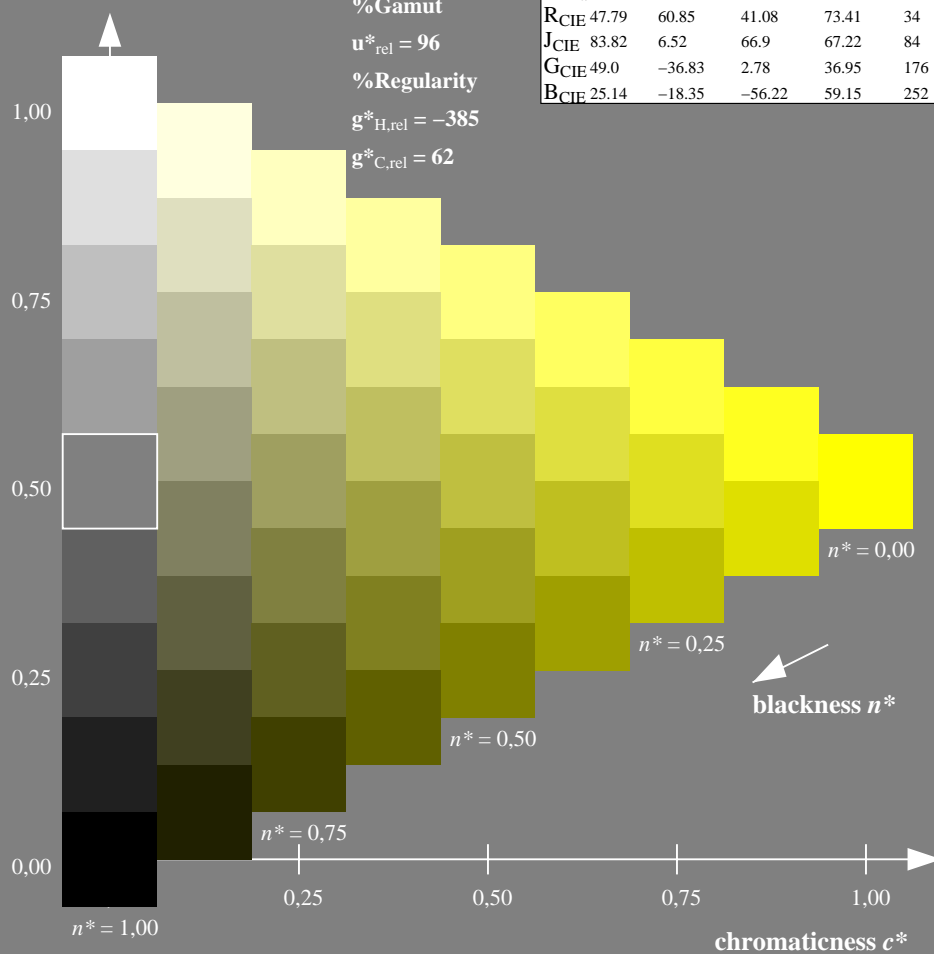
%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 65.56 | 73.34 | 51.39 | 89.55 | 35 |
| Y _{Ma} | 94.78 | -3.49 | 52.24 | 52.36 | 94 |
| L _{Ma} | 77.48 | -92.97 | 36.0 | 99.71 | 159 |
| C _{Ma} | 78.36 | -82.69 | -22.74 | 85.77 | 195 |
| V _{Ma} | 12.55 | 38.81 | -114.81 | 121.2 | 289 |
| M _{Ma} | 66.71 | 76.08 | -29.8 | 81.71 | 339 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 61.74 | 42.56 | 74.99 | 35 |
| J _{CIE} | 83.82 | 7.06 | 70.78 | 71.13 | 84 |
| G _{CIE} | 49.0 | -35.95 | 4.34 | 36.22 | 173 |
| B _{CIE} | 25.14 | -17.24 | -56.24 | 58.84 | 253 |



RE900-7, 9 step scales for constant CIELAB hue 88/360 = 0.246 (left)

16 step scales for constant CIELAB hue 94/360 = 0.261 (right)

BAM-test chart RE90; Colorimetric systems ORS18 & TLS00

A: 9 and 16 step colour scales for 10 hues

input: olv^* setrgbcolor

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.42$

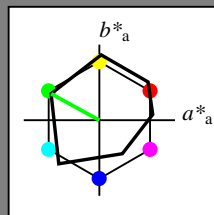
lab^*tch and lab^*nch

A: hue L

LCH*Ma: 51 73 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 64.42 | 50.58 | 81.9 | 38 |
| Y _{Ma} | 92.62 | 2.41 | 86.36 | 86.39 | 88 |
| L _{Ma} | 50.9 | -63.82 | 35.02 | 72.81 | 151 |
| C _{Ma} | 51.25 | -53.68 | -57.69 | 78.82 | 227 |
| V _{Ma} | 25.72 | 30.34 | -44.37 | 53.76 | 304 |
| M _{Ma} | 56.25 | 70.59 | 7.57 | 70.99 | 6 |
| N _{Ma} | 18.11 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.6 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 60.85 | 41.08 | 73.41 | 34 |
| J _{CIE} | 83.82 | 6.52 | 66.9 | 67.22 | 84 |
| G _{CIE} | 49.0 | -36.83 | 2.78 | 36.95 | 176 |
| B _{CIE} | 25.14 | -18.35 | -56.22 | 59.15 | 252 |

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 159/360 = 0.441$

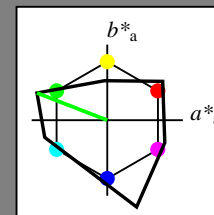
lab^*tch and lab^*nch

A: hue L

LCH*Ma: 77 100 159

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

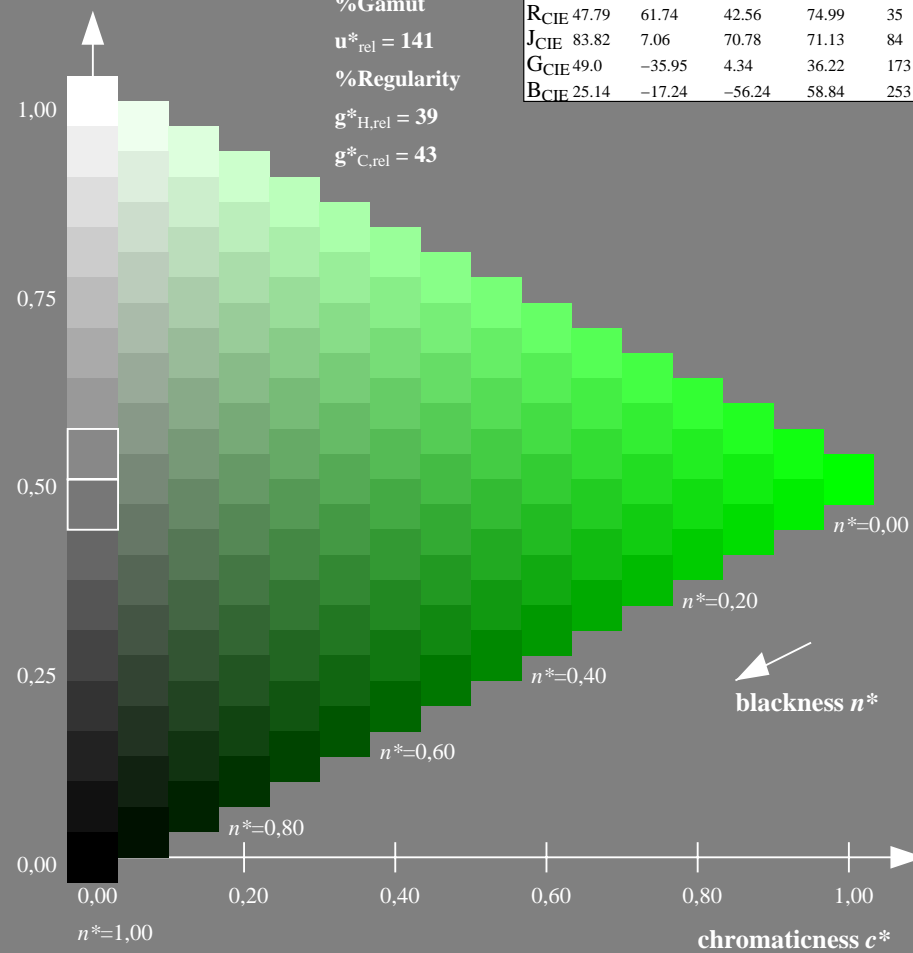
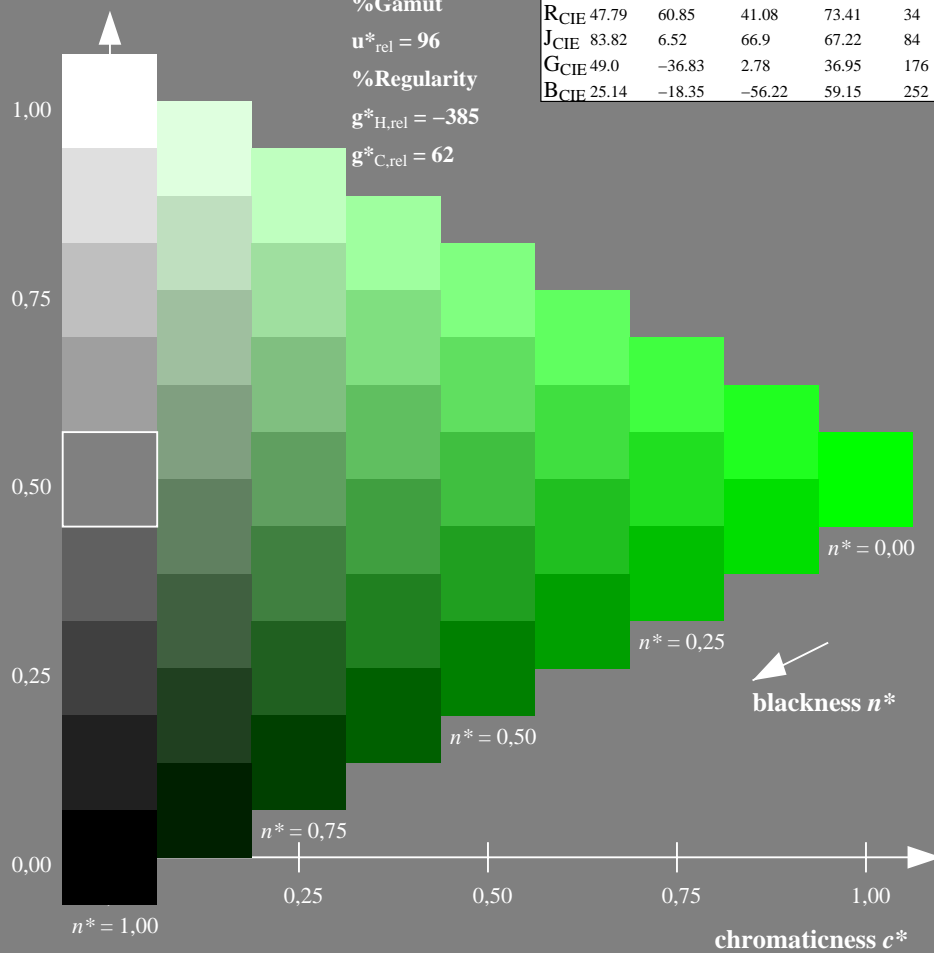
%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 65.56 | 73.34 | 51.39 | 89.55 | 35 |
| Y _{Ma} | 94.78 | -3.49 | 52.24 | 52.36 | 94 |
| L _{Ma} | 77.48 | -92.97 | 36.0 | 99.71 | 159 |
| C _{Ma} | 78.36 | -82.69 | -22.74 | 85.77 | 195 |
| V _{Ma} | 12.55 | 38.81 | -114.81 | 121.2 | 289 |
| M _{Ma} | 66.71 | 76.08 | -29.8 | 81.71 | 339 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 61.74 | 42.56 | 74.99 | 35 |
| J _{CIE} | 83.82 | 7.06 | 70.78 | 71.13 | 84 |
| G _{CIE} | 49.0 | -35.95 | 4.34 | 36.22 | 173 |
| B _{CIE} | 25.14 | -17.24 | -56.24 | 58.84 | 253 |



RE900-7, 9 step scales for constant CIELAB hue 151/360 = 0.42 (left)

16 step scales for constant CIELAB hue 159/360 = 0.441 (right)

BAM-test chart RE90; Colorimetric systems ORS18 & TLS00

A: 9 and 16 step colour scales for 10 hues

input: *olv* setrgbcolor*

output: *no change compared to input*

Input: Colorimetric Offset Reflective System ORS18

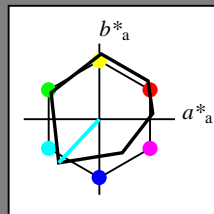
for hue $h^* = lab^*h = 227/360 = 0.631$

lab^*tch and lab^*nch

A: hue C

LCH*Ma: 51 79 227

olv*Ma: 0.0 1.0 1.0



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 64.42 | 50.58 | 81.9 | 38 |
| Y _{Ma} | 92.62 | 2.41 | 86.36 | 86.39 | 88 |
| L _{Ma} | 50.9 | -63.82 | 35.02 | 72.81 | 151 |
| C _{Ma} | 51.25 | -53.68 | -57.69 | 78.82 | 227 |
| V _{Ma} | 25.72 | 30.34 | -44.37 | 53.76 | 304 |
| M _{Ma} | 56.25 | 70.59 | 7.57 | 70.99 | 6 |
| N _{Ma} | 18.11 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.6 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 60.85 | 41.08 | 73.41 | 34 |
| J _{CIE} | 83.82 | 6.52 | 66.9 | 67.22 | 84 |
| G _{CIE} | 49.0 | -36.83 | 2.78 | 36.95 | 176 |
| B _{CIE} | 25.14 | -18.35 | -56.22 | 59.15 | 252 |

%Gamut

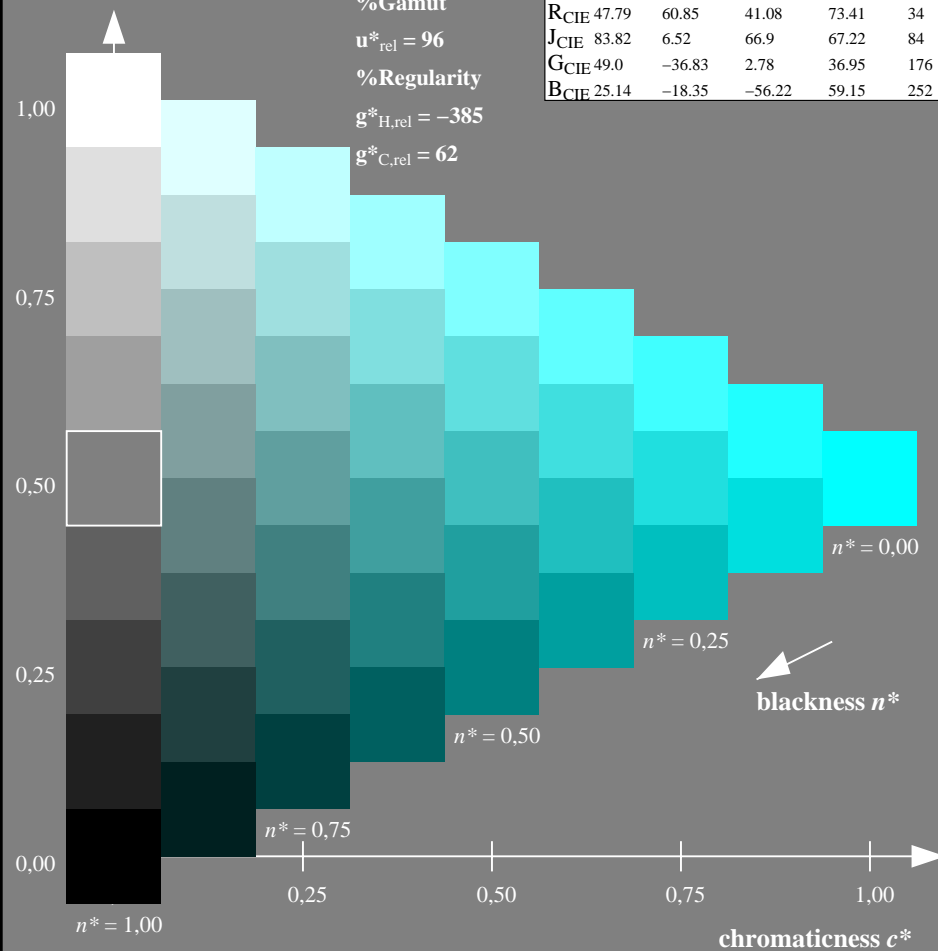
$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

triangle lightness t^*



Output: Colorimetric Television Luminous System TLS00

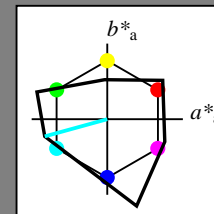
for hue $h^* = lab^*h = 195/360 = 0.543$

lab^*tch and lab^*nch

A: hue C

LCH*Ma: 78 86 195

olv*Ma: 0.0 1.0 1.0



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 65.56 | 73.34 | 51.39 | 89.55 | 35 |
| Y _{Ma} | 94.78 | -3.49 | 52.24 | 52.36 | 94 |
| L _{Ma} | 77.48 | -92.97 | 36.0 | 99.71 | 159 |
| C _{Ma} | 78.36 | -82.69 | -22.74 | 85.77 | 195 |
| V _{Ma} | 12.55 | 38.81 | -114.81 | 121.2 | 289 |
| M _{Ma} | 66.71 | 76.08 | -29.8 | 81.71 | 339 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 61.74 | 42.56 | 74.99 | 35 |
| J _{CIE} | 83.82 | 7.06 | 70.78 | 71.13 | 84 |
| G _{CIE} | 49.0 | -35.95 | 4.34 | 36.22 | 173 |
| B _{CIE} | 25.14 | -17.24 | -56.24 | 58.84 | 253 |

%Gamut

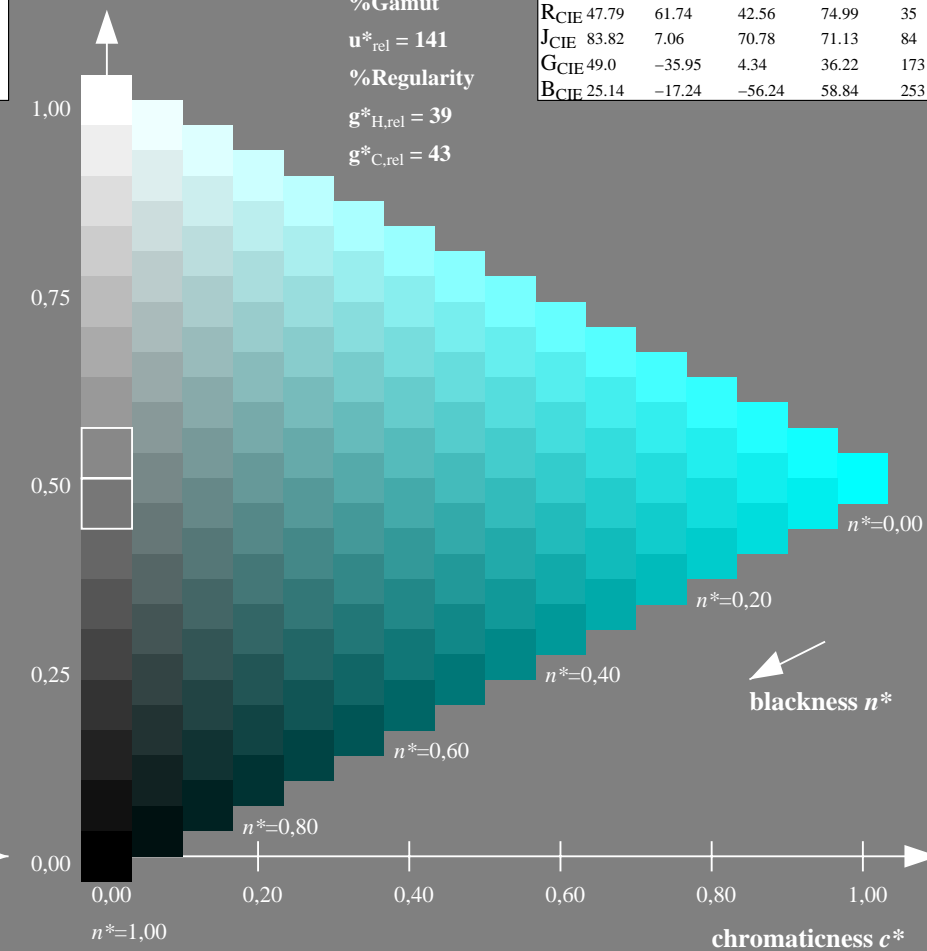
$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

triangle lightness t^*



RE900-7, 9 step scales for constant CIELAB hue 227/360 = 0.631 (left)

16 step scales for constant CIELAB hue 195/360 = 0.543 (right)

BAM-test chart RE90; Colorimetric systems ORS18 & TLS00

A: 9 and 16 step colour scales for 10 hues

input: olv^* setrgbcolor

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

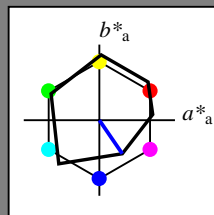
for hue $h^* = lab^*h = 304/360 = 0.845$

lab^*tch and lab^*nch

A: hue V

LCH*Ma: 26 54 304

olv*Ma: 0.0 0.0 1.0



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 64.42 | 50.58 | 81.9 | 38 |
| Y _{Ma} | 92.62 | 2.41 | 86.36 | 86.39 | 88 |
| L _{Ma} | 50.9 | -63.82 | 35.02 | 72.81 | 151 |
| C _{Ma} | 51.25 | -53.68 | -57.69 | 78.82 | 227 |
| V _{Ma} | 25.72 | 30.34 | -44.37 | 53.76 | 304 |
| M _{Ma} | 56.25 | 70.59 | 7.57 | 70.99 | 6 |
| N _{Ma} | 18.11 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.6 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 60.85 | 41.08 | 73.41 | 34 |
| J _{CIE} | 83.82 | 6.52 | 66.9 | 67.22 | 84 |
| G _{CIE} | 49.0 | -36.83 | 2.78 | 36.95 | 176 |
| B _{CIE} | 25.14 | -18.35 | -56.22 | 59.15 | 252 |

%Gamut

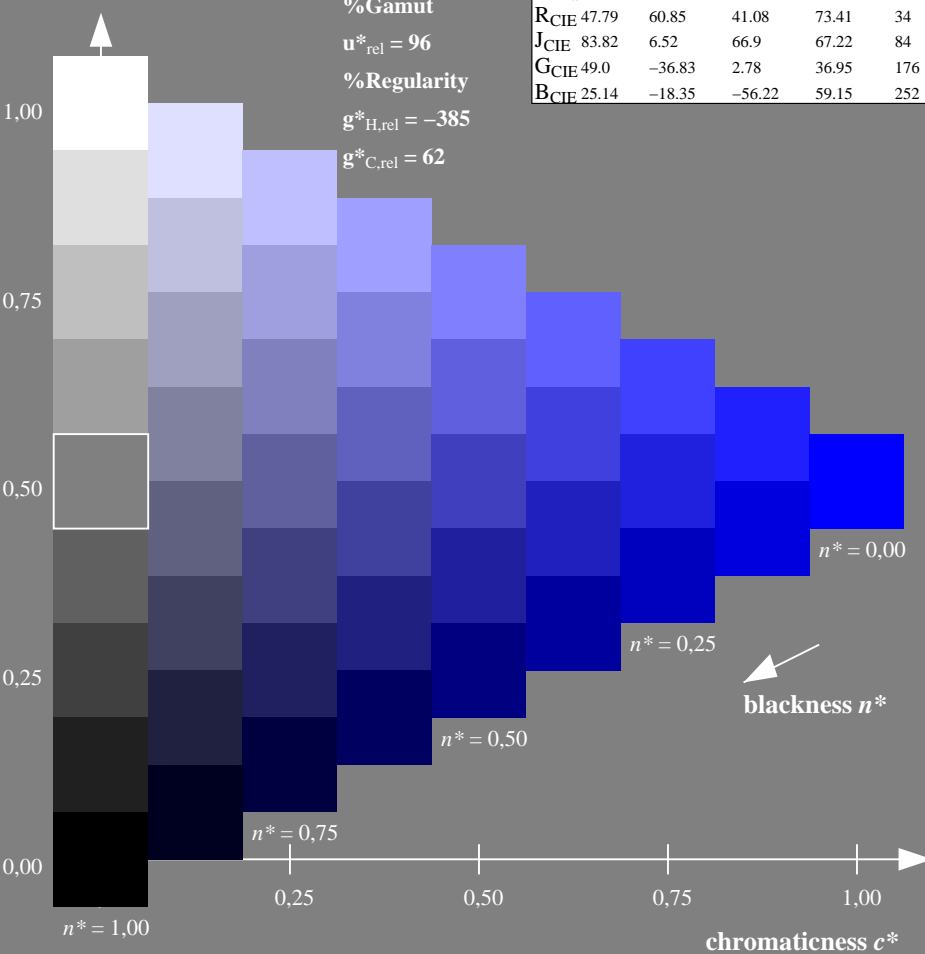
$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

triangle lightness t^*



Output: Colorimetric Television Luminous System TLS00

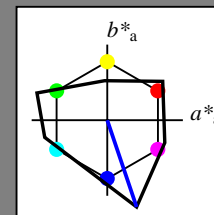
for hue $h^* = lab^*h = 289/360 = 0.802$

lab^*tch and lab^*nch

A: hue V

LCH*Ma: 13 121 289

olv*Ma: 0.0 0.0 1.0



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 65.56 | 73.34 | 51.39 | 89.55 | 35 |
| Y _{Ma} | 94.78 | -3.49 | 52.24 | 52.36 | 94 |
| L _{Ma} | 77.48 | -92.97 | 36.0 | 99.71 | 159 |
| C _{Ma} | 78.36 | -82.69 | -22.74 | 85.77 | 195 |
| V _{Ma} | 12.55 | 38.81 | -114.81 | 121.2 | 289 |
| M _{Ma} | 66.71 | 76.08 | -29.8 | 81.71 | 339 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 61.74 | 42.56 | 74.99 | 35 |
| J _{CIE} | 83.82 | 7.06 | 70.78 | 71.13 | 84 |
| G _{CIE} | 49.0 | -35.95 | 4.34 | 36.22 | 173 |
| B _{CIE} | 25.14 | -17.24 | -56.24 | 58.84 | 253 |

%Gamut

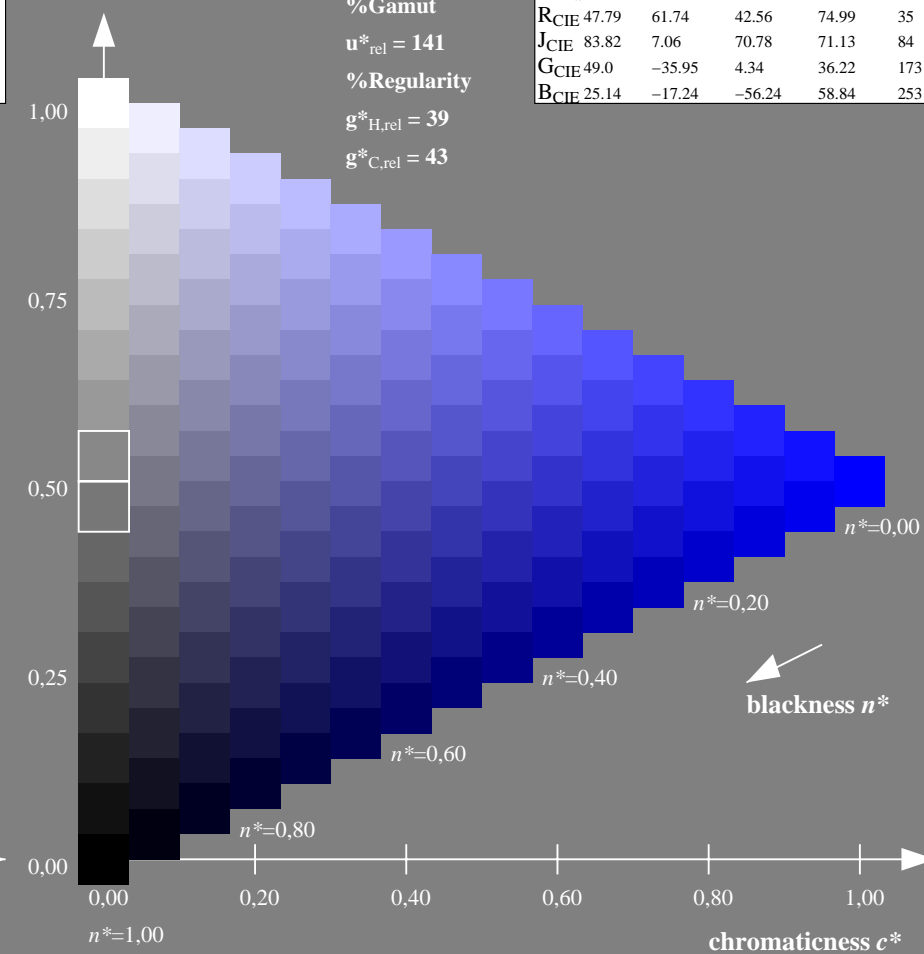
$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

triangle lightness t^*



RE900-7, 9 step scales for constant CIELAB hue 304/360 = 0.845 (left)

16 step scales for constant CIELAB hue 289/360 = 0.802 (right)

BAM-test chart RE90; Colorimetric systems ORS18 & TLS00

A: 9 and 16 step colour scales for 10 hues

input: olv^* setrgbcolor

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

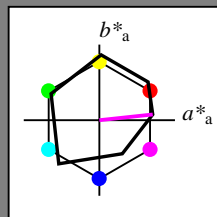
for hue $h^* = lab^*h = 6/360 = 0.017$

lab^*tch and lab^*nch

A: hue M

LCH*Ma: 56 71 6

olv*Ma: 1.0 0.0 1.0



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 64.42 | 50.58 | 81.9 | 38 |
| Y _{Ma} | 92.62 | 2.41 | 86.36 | 86.39 | 88 |
| L _{Ma} | 50.9 | -63.82 | 35.02 | 72.81 | 151 |
| C _{Ma} | 51.25 | -53.68 | -57.69 | 78.82 | 227 |
| V _{Ma} | 25.72 | 30.34 | -44.37 | 53.76 | 304 |
| M _{Ma} | 56.25 | 70.59 | 7.57 | 70.99 | 6 |
| N _{Ma} | 18.11 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.6 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 60.85 | 41.08 | 73.41 | 34 |
| J _{CIE} | 83.82 | 6.52 | 66.9 | 67.22 | 84 |
| G _{CIE} | 49.0 | -36.83 | 2.78 | 36.95 | 176 |
| B _{CIE} | 25.14 | -18.35 | -56.22 | 59.15 | 252 |

%Gamut

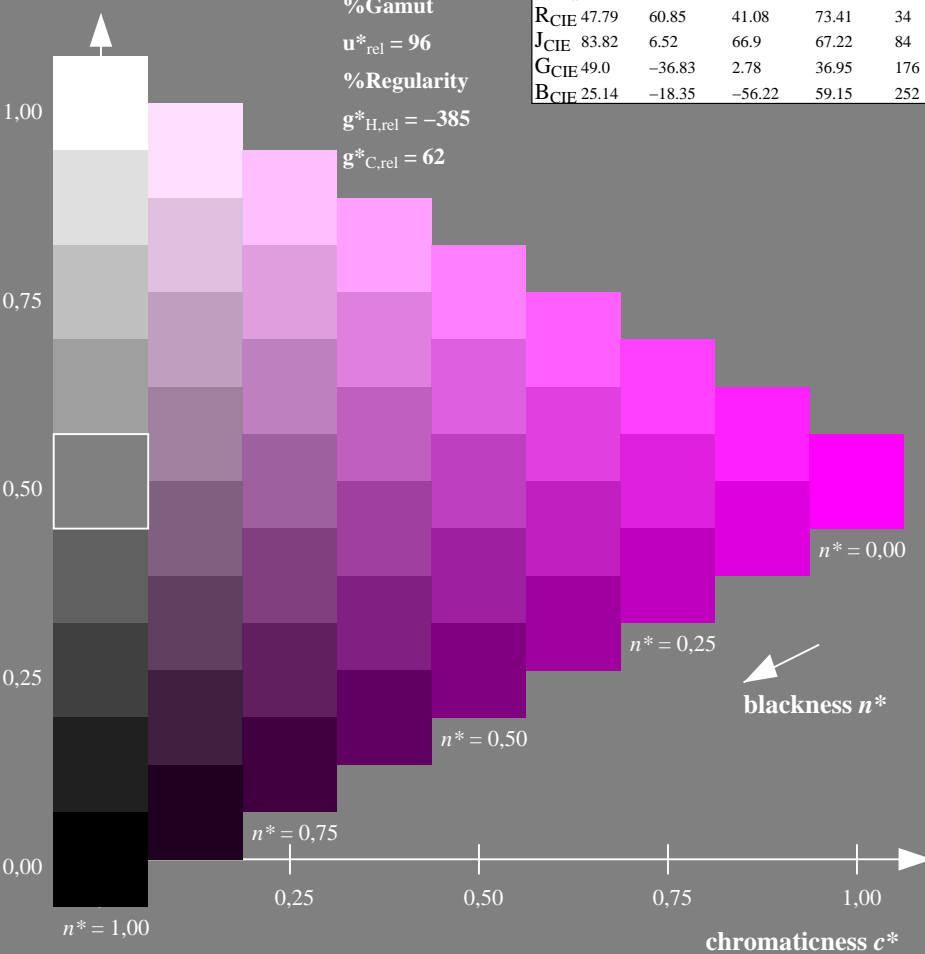
$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

triangle lightness t^*



Output: Colorimetric Television Luminous System TLS00

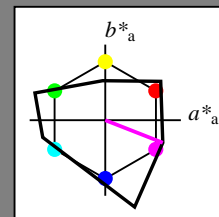
for hue $h^* = lab^*h = 339/360 = 0.941$

lab^*tch and lab^*nch

A: hue M

LCH*Ma: 67 82 339

olv*Ma: 1.0 0.0 1.0



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 65.56 | 73.34 | 51.39 | 89.55 | 35 |
| Y _{Ma} | 94.78 | -3.49 | 52.24 | 52.36 | 94 |
| L _{Ma} | 77.48 | -92.97 | 36.0 | 99.71 | 159 |
| C _{Ma} | 78.36 | -82.69 | -22.74 | 85.77 | 195 |
| V _{Ma} | 12.55 | 38.81 | -114.81 | 121.2 | 289 |
| M _{Ma} | 66.71 | 76.08 | -29.8 | 81.71 | 339 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 61.74 | 42.56 | 74.99 | 35 |
| J _{CIE} | 83.82 | 7.06 | 70.78 | 71.13 | 84 |
| G _{CIE} | 49.0 | -35.95 | 4.34 | 36.22 | 173 |
| B _{CIE} | 25.14 | -17.24 | -56.24 | 58.84 | 253 |

%Gamut

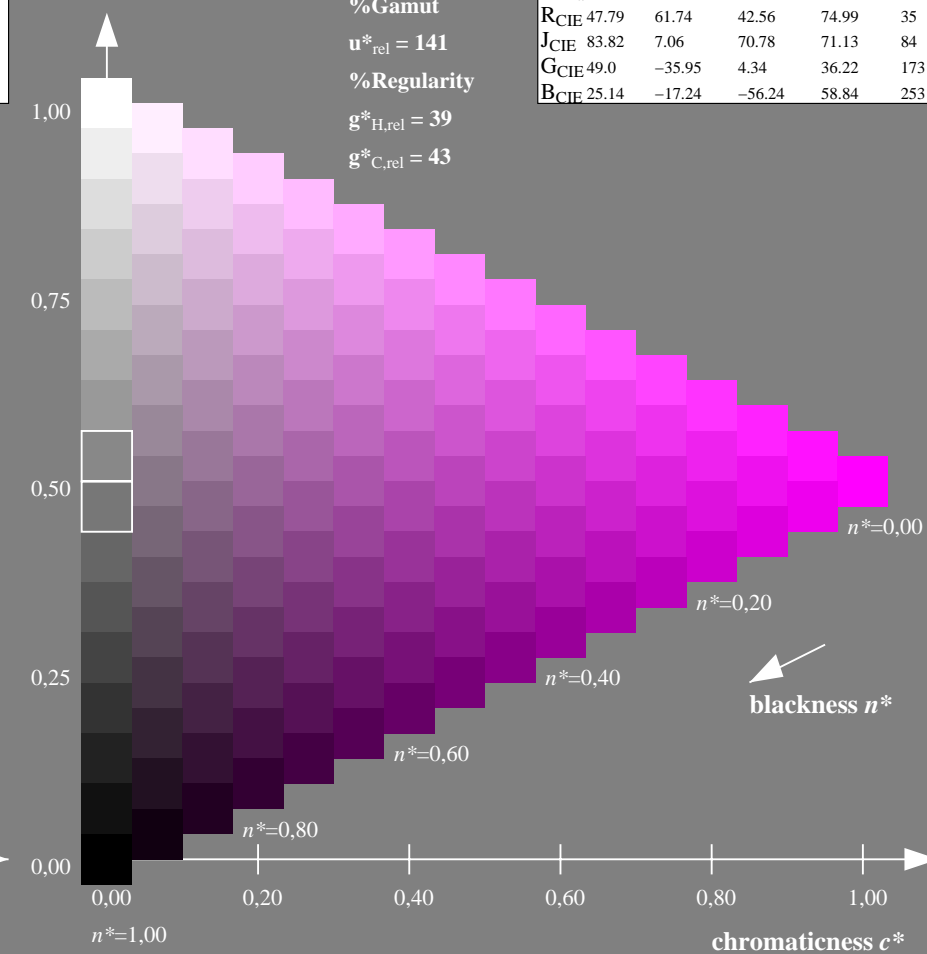
$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

triangle lightness t^*



RE900-7, 9 step scales for constant CIELAB hue 6/360 = 0.017 (left)

16 step scales for constant CIELAB hue 339/360 = 0.941 (right)

BAM-test chart RE90; Colorimetric systems ORS18 & TLS00

A: 9 and 16 step colour scales for 10 hues

input: olv^* setrgbcolor

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

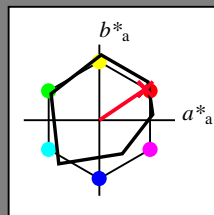
for hue $h^* = lab^*h = 34/360 = 0.095$

lab^*tch and lab^*nch

A: hue R

LCH*Ma: 49 79 34

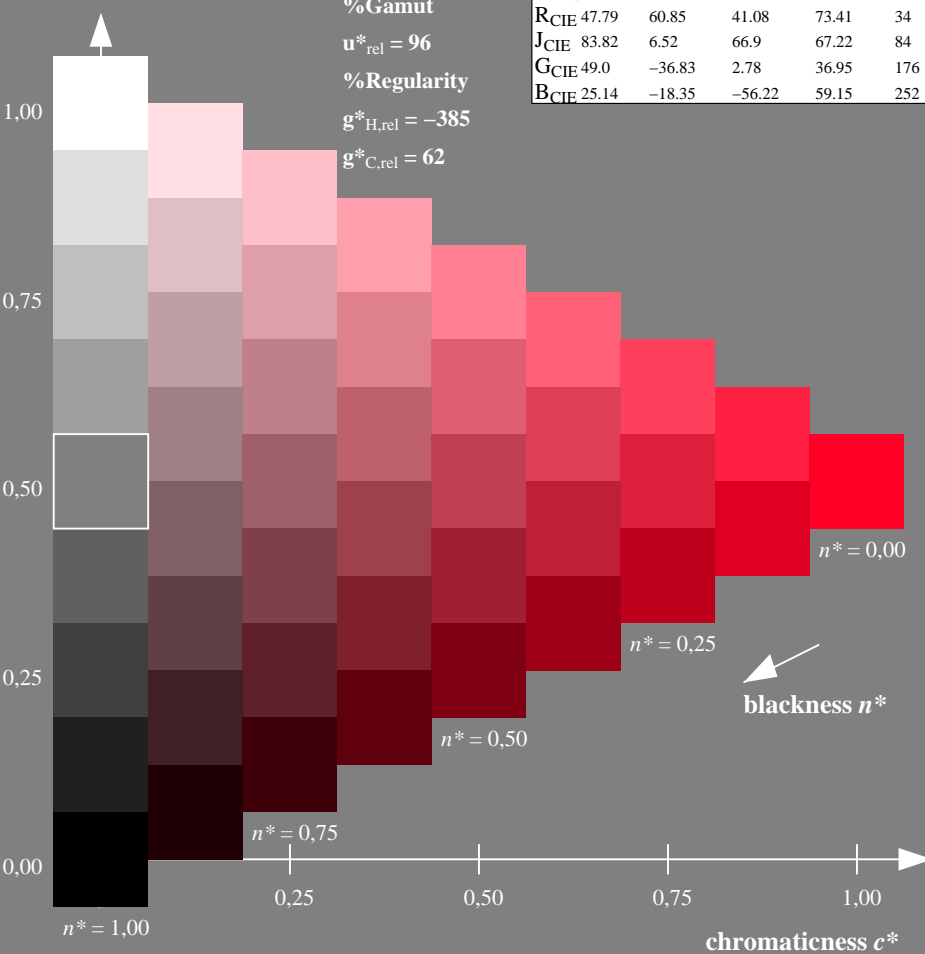
olv*Ma: 1.0 0.0 0.15



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 64.42 | 50.58 | 81.9 | 38 |
| Y _{Ma} | 92.62 | 2.41 | 86.36 | 86.39 | 88 |
| L _{Ma} | 50.9 | -63.82 | 35.02 | 72.81 | 151 |
| C _{Ma} | 51.25 | -53.68 | -57.69 | 78.82 | 227 |
| V _{Ma} | 25.72 | 30.34 | -44.37 | 53.76 | 304 |
| M _{Ma} | 56.25 | 70.59 | 7.57 | 70.99 | 6 |
| N _{Ma} | 18.11 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.6 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 60.85 | 41.08 | 73.41 | 34 |
| J _{CIE} | 83.82 | 6.52 | 66.9 | 67.22 | 84 |
| G _{CIE} | 49.0 | -36.83 | 2.78 | 36.95 | 176 |
| B _{CIE} | 25.14 | -18.35 | -56.22 | 59.15 | 252 |

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

Output: Colorimetric Television Luminous System TLS00

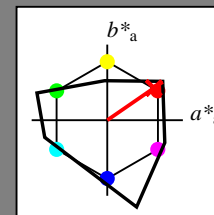
for hue $h^* = lab^*h = 35/360 = 0.096$

lab^*tch and lab^*nch

A: hue R

LCH*Ma: 66 89 35

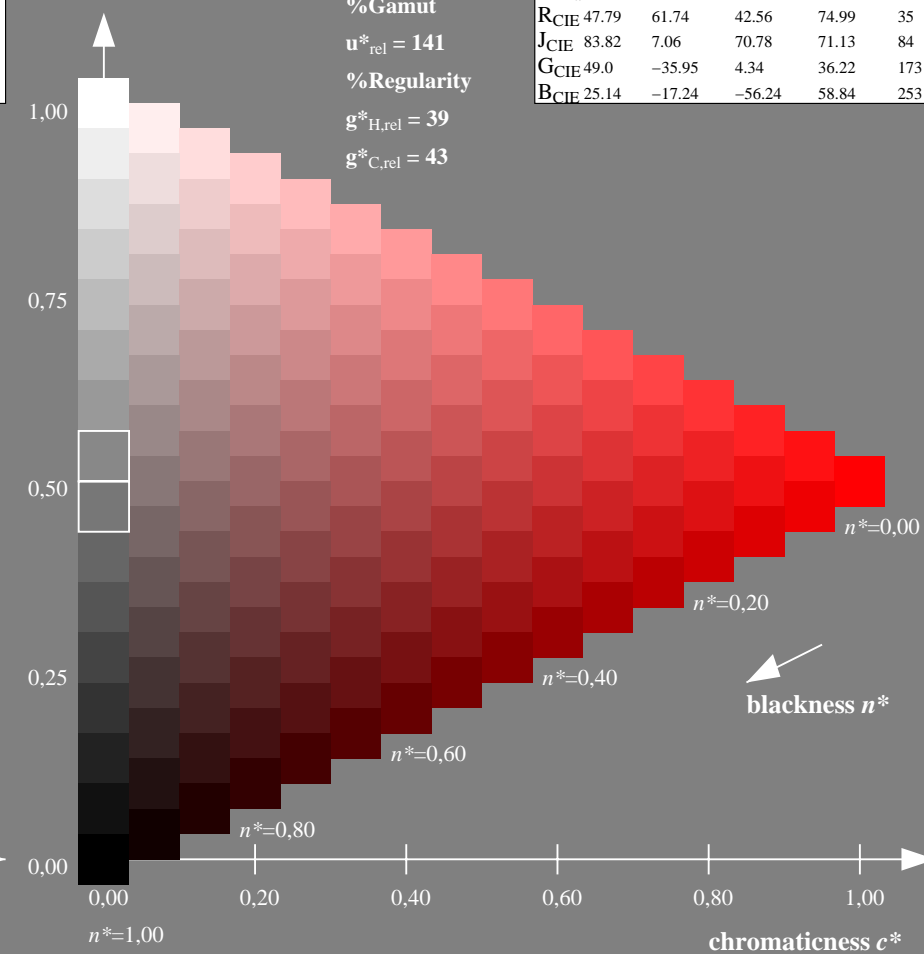
olv*Ma: 1.0 0.0 0.01



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 65.56 | 73.34 | 51.39 | 89.55 | 35 |
| Y _{Ma} | 94.78 | -3.49 | 52.24 | 52.36 | 94 |
| L _{Ma} | 77.48 | -92.97 | 36.0 | 99.71 | 159 |
| C _{Ma} | 78.36 | -82.69 | -22.74 | 85.77 | 195 |
| V _{Ma} | 12.55 | 38.81 | -114.81 | 121.2 | 289 |
| M _{Ma} | 66.71 | 76.08 | -29.8 | 81.71 | 339 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 61.74 | 42.56 | 74.99 | 35 |
| J _{CIE} | 83.82 | 7.06 | 70.78 | 71.13 | 84 |
| G _{CIE} | 49.0 | -35.95 | 4.34 | 36.22 | 173 |
| B _{CIE} | 25.14 | -17.24 | -56.24 | 58.84 | 253 |

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

RE900-7, 9 step scales for constant CIELAB hue 34/360 = 0.095 (left)

16 step scales for constant CIELAB hue 35/360 = 0.096 (right)

BAM-test chart RE90; Colorimetric systems ORS18 & TLS00

A: 9 and 16 step colour scales for 10 hues

input: olv^* setrgbcolor

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

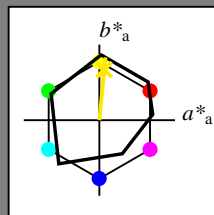
for hue $h^* = lab^*h = 84/360 = 0.235$

lab^*tch and lab^*nch

A: hue J

LCH*Ma: 89 83 84

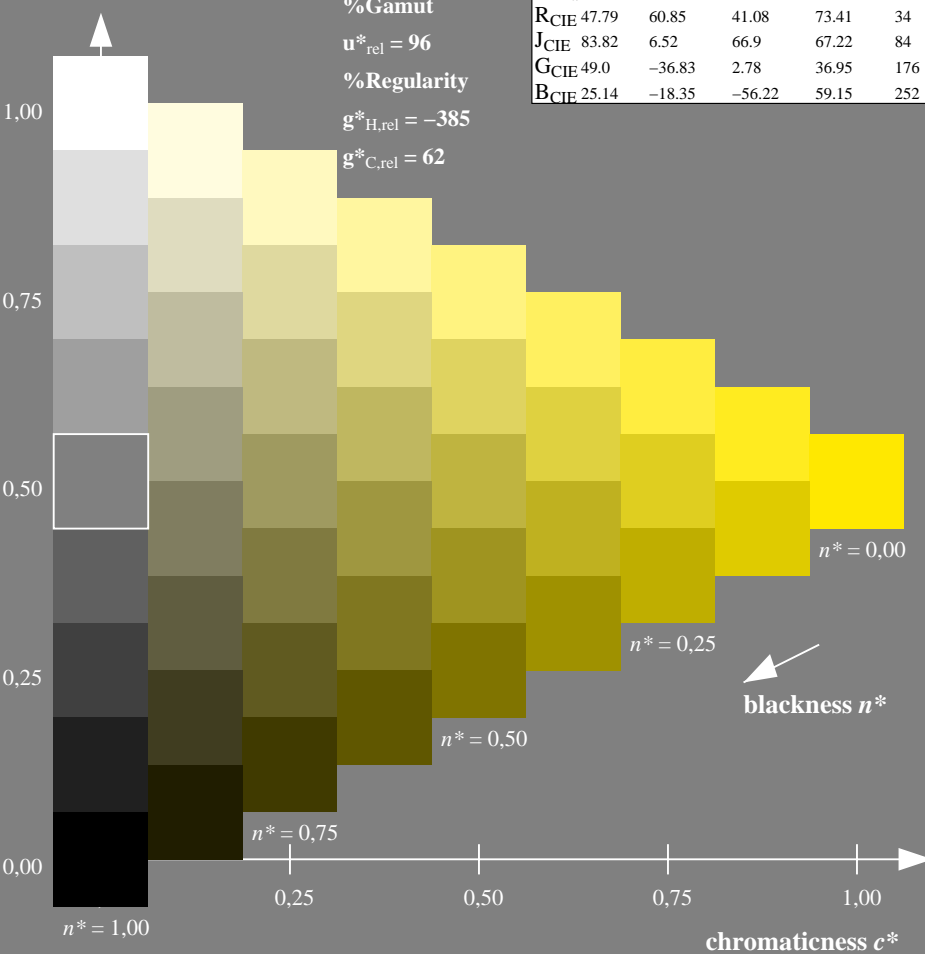
olv*Ma: 1.0 0.91 0.0



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 64.42 | 50.58 | 81.9 | 38 |
| Y _{Ma} | 92.62 | 2.41 | 86.36 | 86.39 | 88 |
| L _{Ma} | 50.9 | -63.82 | 35.02 | 72.81 | 151 |
| C _{Ma} | 51.25 | -53.68 | -57.69 | 78.82 | 227 |
| V _{Ma} | 25.72 | 30.34 | -44.37 | 53.76 | 304 |
| M _{Ma} | 56.25 | 70.59 | 7.57 | 70.99 | 6 |
| N _{Ma} | 18.11 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.6 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 60.85 | 41.08 | 73.41 | 34 |
| J _{CIE} | 83.82 | 6.52 | 66.9 | 67.22 | 84 |
| G _{CIE} | 49.0 | -36.83 | 2.78 | 36.95 | 176 |
| B _{CIE} | 25.14 | -18.35 | -56.22 | 59.15 | 252 |

triangle lightness t^*



%Gamut

$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

Output: Colorimetric Television Luminous System TLS00

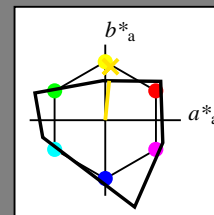
for hue $h^* = lab^*h = 84/360 = 0.234$

lab^*tch and lab^*nch

A: hue J

LCH*Ma: 91 52 84

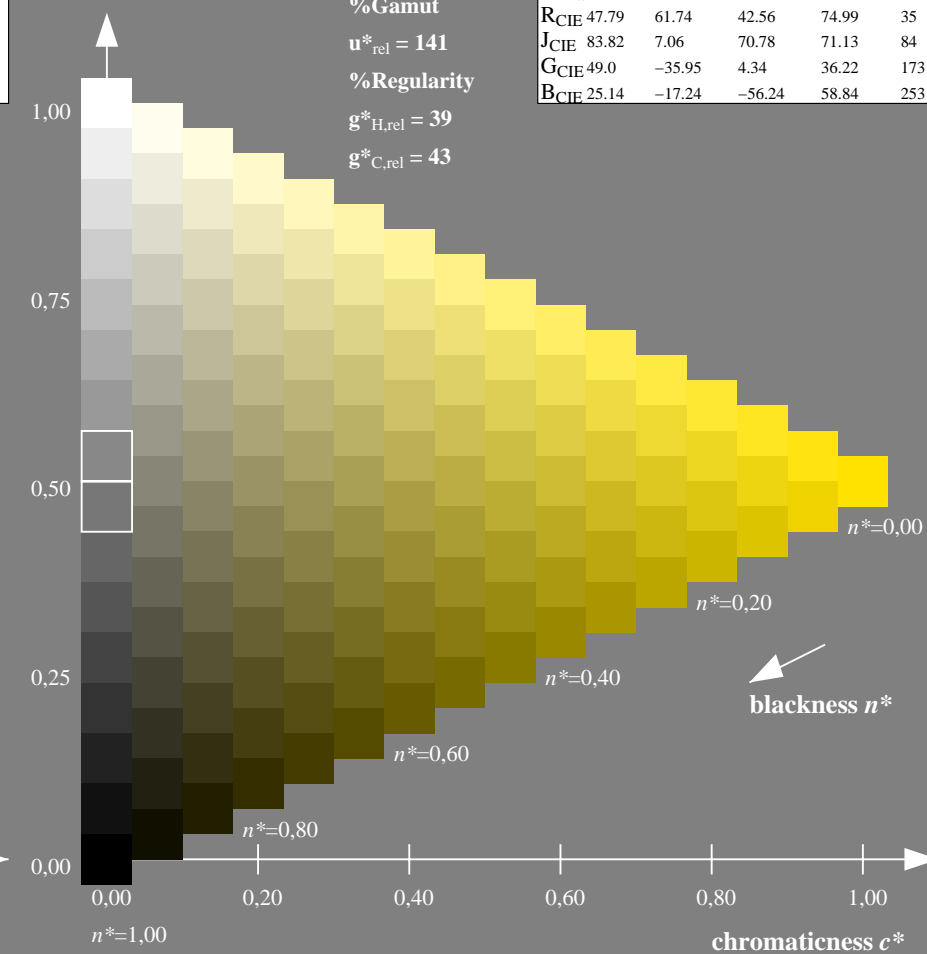
olv*Ma: 1.0 0.89 0.0



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 65.56 | 73.34 | 51.39 | 89.55 | 35 |
| Y _{Ma} | 94.78 | -3.49 | 52.24 | 52.36 | 94 |
| L _{Ma} | 77.48 | -92.97 | 36.0 | 99.71 | 159 |
| C _{Ma} | 78.36 | -82.69 | -22.74 | 85.77 | 195 |
| V _{Ma} | 12.55 | 38.81 | -114.81 | 121.2 | 289 |
| M _{Ma} | 66.71 | 76.08 | -29.8 | 81.71 | 339 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 61.74 | 42.56 | 74.99 | 35 |
| J _{CIE} | 83.82 | 7.06 | 70.78 | 71.13 | 84 |
| G _{CIE} | 49.0 | -35.95 | 4.34 | 36.22 | 173 |
| B _{CIE} | 25.14 | -17.24 | -56.24 | 58.84 | 253 |

triangle lightness t^*



%Gamut

$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

RE900-7, 9 step scales for constant CIELAB hue 84/360 = 0.235 (left)

16 step scales for constant CIELAB hue 84/360 = 0.234 (right)

BAM-test chart RE90; Colorimetric systems ORS18 & TLS00

A: 9 and 16 step colour scales for 10 hues

input: olv^* setrgbcolor

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

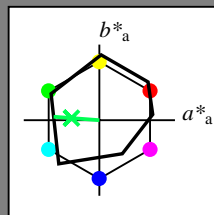
for hue $h^* = lab^*h = 176/360 = 0.488$

lab^*tch and lab^*nch

A: hue G

LCH*Ma: 51 61 176

olv*Ma: 0.0 1.0 0.33



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 64.42 | 50.58 | 81.9 | 38 |
| Y _{Ma} | 92.62 | 2.41 | 86.36 | 86.39 | 88 |
| L _{Ma} | 50.9 | -63.82 | 35.02 | 72.81 | 151 |
| C _{Ma} | 51.25 | -53.68 | -57.69 | 78.82 | 227 |
| V _{Ma} | 25.72 | 30.34 | -44.37 | 53.76 | 304 |
| M _{Ma} | 56.25 | 70.59 | 7.57 | 70.99 | 6 |
| N _{Ma} | 18.11 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.6 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 60.85 | 41.08 | 73.41 | 34 |
| J _{CIE} | 83.82 | 6.52 | 66.9 | 67.22 | 84 |
| G _{CIE} | 49.0 | -36.83 | 2.78 | 36.95 | 176 |
| B _{CIE} | 25.14 | -18.35 | -56.22 | 59.15 | 252 |

%Gamut

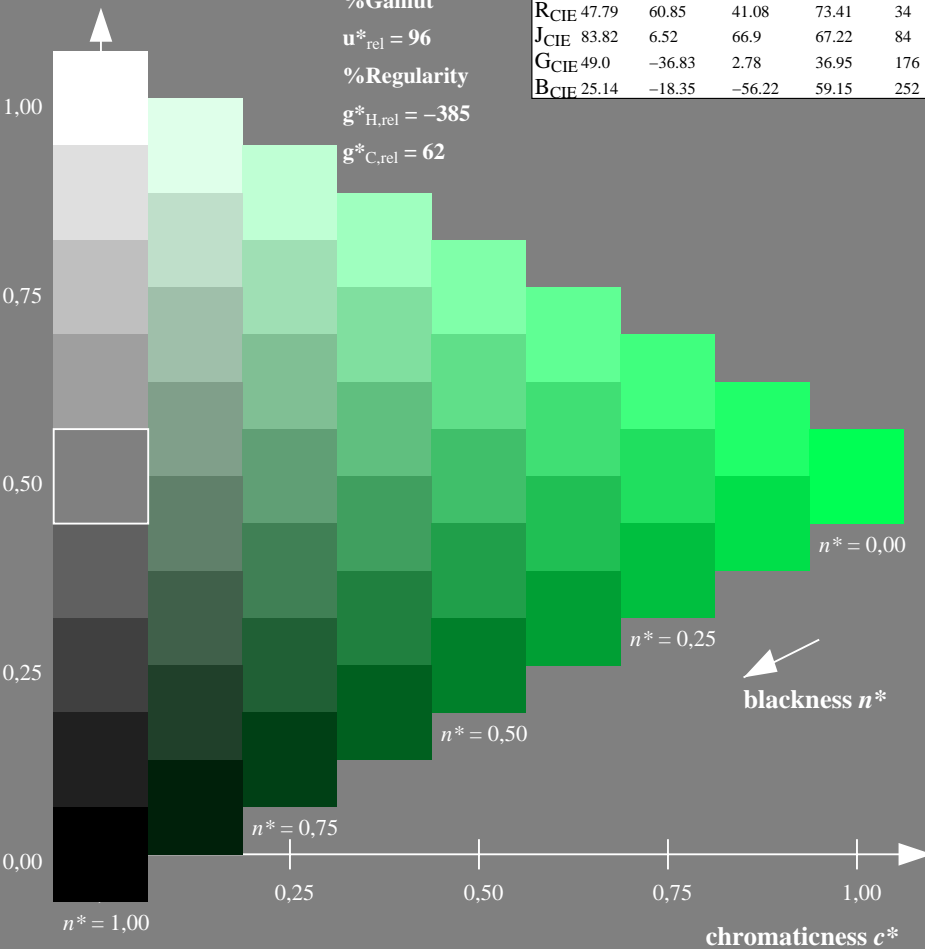
$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

triangle lightness t^*



Output: Colorimetric Television Luminous System TLS00

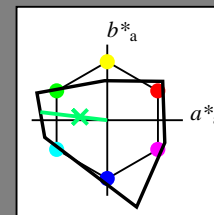
for hue $h^* = lab^*h = 173/360 = 0.481$

lab^*tch and lab^*nch

A: hue G

LCH*Ma: 78 89 173

olv*Ma: 0.0 1.0 0.43



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 65.56 | 73.34 | 51.39 | 89.55 | 35 |
| Y _{Ma} | 94.78 | -3.49 | 52.24 | 52.36 | 94 |
| L _{Ma} | 77.48 | -92.97 | 36.0 | 99.71 | 159 |
| C _{Ma} | 78.36 | -82.69 | -22.74 | 85.77 | 195 |
| V _{Ma} | 12.55 | 38.81 | -114.81 | 121.2 | 289 |
| M _{Ma} | 66.71 | 76.08 | -29.8 | 81.71 | 339 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 61.74 | 42.56 | 74.99 | 35 |
| J _{CIE} | 83.82 | 7.06 | 70.78 | 71.13 | 84 |
| G _{CIE} | 49.0 | -35.95 | 4.34 | 36.22 | 173 |
| B _{CIE} | 25.14 | -17.24 | -56.24 | 58.84 | 253 |

%Gamut

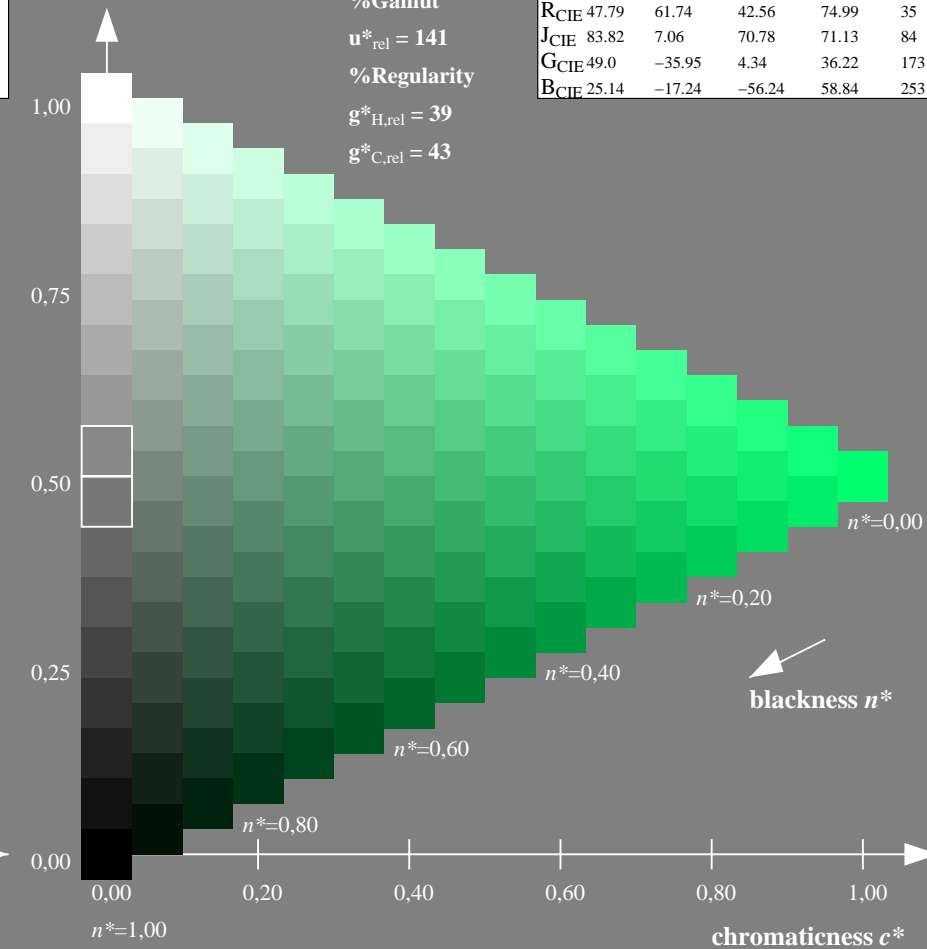
$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

triangle lightness t^*



RE900-7, 9 step scales for constant CIELAB hue 176/360 = 0.488 (left)

16 step scales for constant CIELAB hue 173/360 = 0.481 (right)

BAM-test chart RE90; Colorimetric systems ORS18 & TLS00

A: 9 and 16 step colour scales for 10 hues

input: *olv* setrgbcolor*

output: *no change compared to input*

Input: Colorimetric Offset Reflective System ORS18

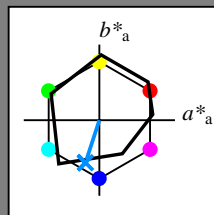
for hue $h^* = lab^*h = 252/360 = 0.7$

lab^*tch and lab^*nch

A: hue B

LCH*Ma: 40 55 252

olv*Ma: 0.0 0.56 1.0



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 64.42 | 50.58 | 81.9 | 38 |
| Y _{Ma} | 92.62 | 2.41 | 86.36 | 86.39 | 88 |
| L _{Ma} | 50.9 | -63.82 | 35.02 | 72.81 | 151 |
| C _{Ma} | 51.25 | -53.68 | -57.69 | 78.82 | 227 |
| V _{Ma} | 25.72 | 30.34 | -44.37 | 53.76 | 304 |
| M _{Ma} | 56.25 | 70.59 | 7.57 | 70.99 | 6 |
| N _{Ma} | 18.11 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.6 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 60.85 | 41.08 | 73.41 | 34 |
| J _{CIE} | 83.82 | 6.52 | 66.9 | 67.22 | 84 |
| G _{CIE} | 49.0 | -36.83 | 2.78 | 36.95 | 176 |
| B _{CIE} | 25.14 | -18.35 | -56.22 | 59.15 | 252 |

%Gamut

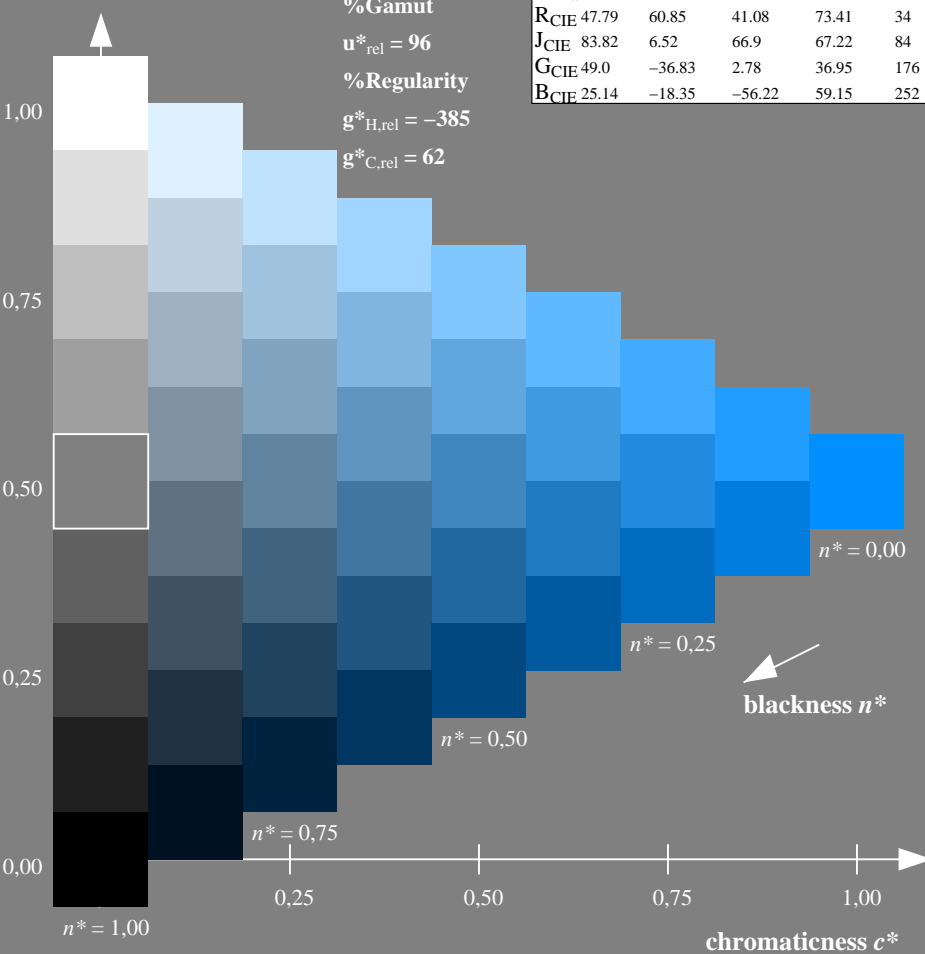
$u^*_{rel} = 96$

%Regularity

$g^*_{H,rel} = -385$

$g^*_{C,rel} = 62$

triangle lightness t^*



Output: Colorimetric Television Luminous System TLS00

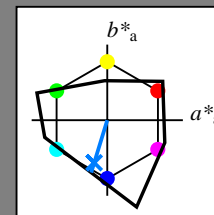
for hue $h^* = lab^*h = 253/360 = 0.703$

lab^*tch and lab^*nch

A: hue B

LCH*Ma: 45 72 253

olv*Ma: 0.0 0.49 1.0



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 65.56 | 73.34 | 51.39 | 89.55 | 35 |
| Y _{Ma} | 94.78 | -3.49 | 52.24 | 52.36 | 94 |
| L _{Ma} | 77.48 | -92.97 | 36.0 | 99.71 | 159 |
| C _{Ma} | 78.36 | -82.69 | -22.74 | 85.77 | 195 |
| V _{Ma} | 12.55 | 38.81 | -114.81 | 121.2 | 289 |
| M _{Ma} | 66.71 | 76.08 | -29.8 | 81.71 | 339 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 47.79 | 61.74 | 42.56 | 74.99 | 35 |
| J _{CIE} | 83.82 | 7.06 | 70.78 | 71.13 | 84 |
| G _{CIE} | 49.0 | -35.95 | 4.34 | 36.22 | 173 |
| B _{CIE} | 25.14 | -17.24 | -56.24 | 58.84 | 253 |

%Gamut

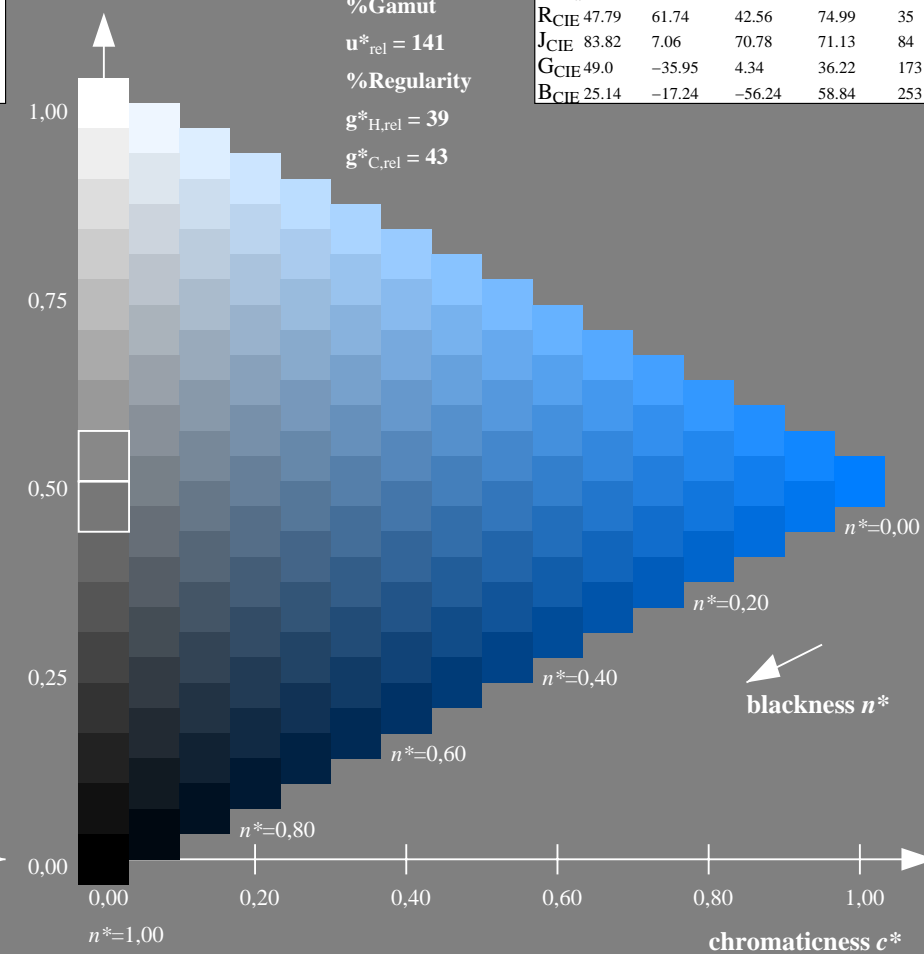
$u^*_{rel} = 141$

%Regularity

$g^*_{H,rel} = 39$

$g^*_{C,rel} = 43$

triangle lightness t^*



RE900-7, 9 step scales for constant CIELAB hue 252/360 = 0.7 (left)

16 step scales for constant CIELAB hue 253/360 = 0.703 (right)

BAM-test chart RE90; Colorimetric systems ORS18 & TLS00

A: 9 and 16 step colour scales for 10 hues

input: olv^* setrgbcolor

output: no change compared to input