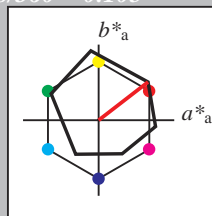


Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$
 lab^*tch and lab^*nch

D65: hue O
 LCH*Ma: 48 83 38
 olv*Ma: 1.0 0.0 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

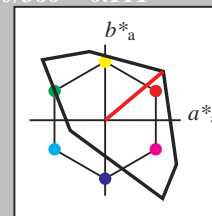
| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 47.94 | 65.39 | 50.52 | 82.63 | 38 |
| YMa | 90.37 | -10.26 | 91.75 | 92.32 | 96 |
| LMa | 50.9 | -62.83 | 34.96 | 71.91 | 151 |
| CMa | 58.62 | -30.34 | -45.01 | 54.3 | 236 |
| VMa | 25.72 | 31.1 | -44.4 | 54.22 | 305 |
| MMa | 48.13 | 75.28 | -8.36 | 75.74 | 354 |
| NMa | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.66 | 26.98 | 64.57 | 25 |
| JCIE | 81.26 | -2.16 | 67.76 | 67.79 | 92 |
| GCIE | 52.23 | -42.25 | 11.76 | 43.87 | 164 |
| BCIE | 30.57 | 1.15 | -46.84 | 46.86 | 271 |

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 40/360 = 0.111$
 lab^*tch and lab^*nch

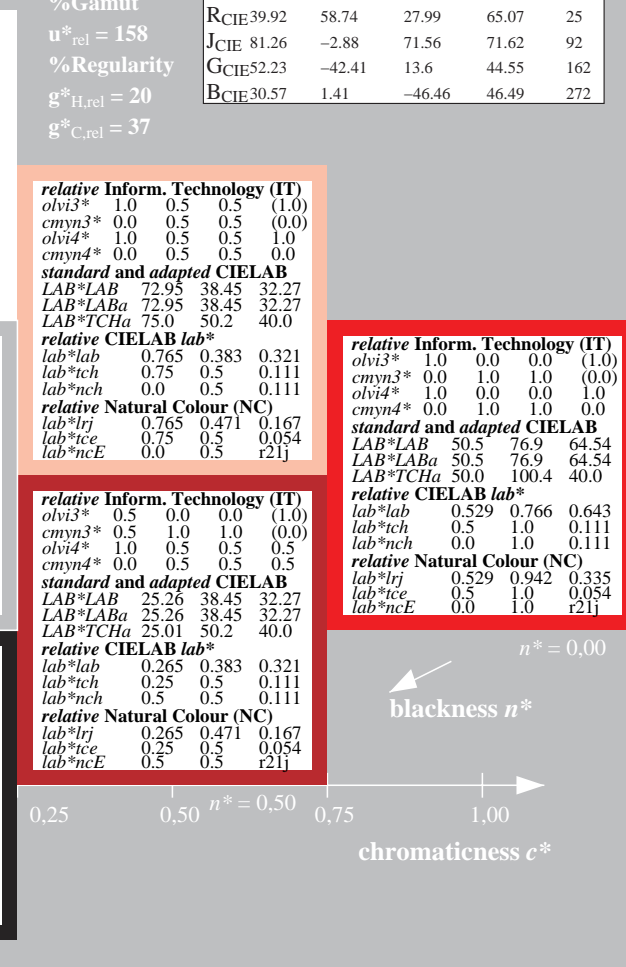
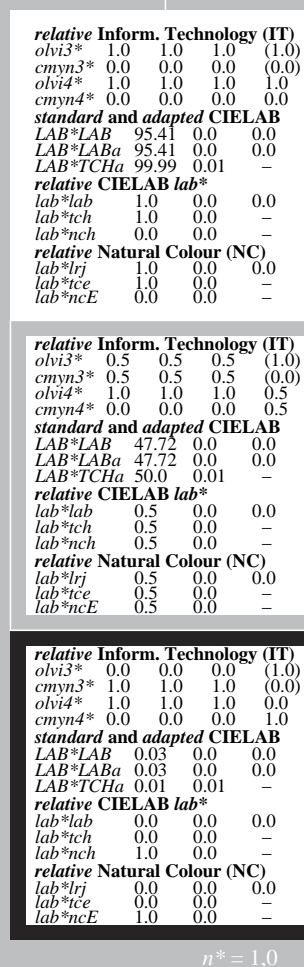
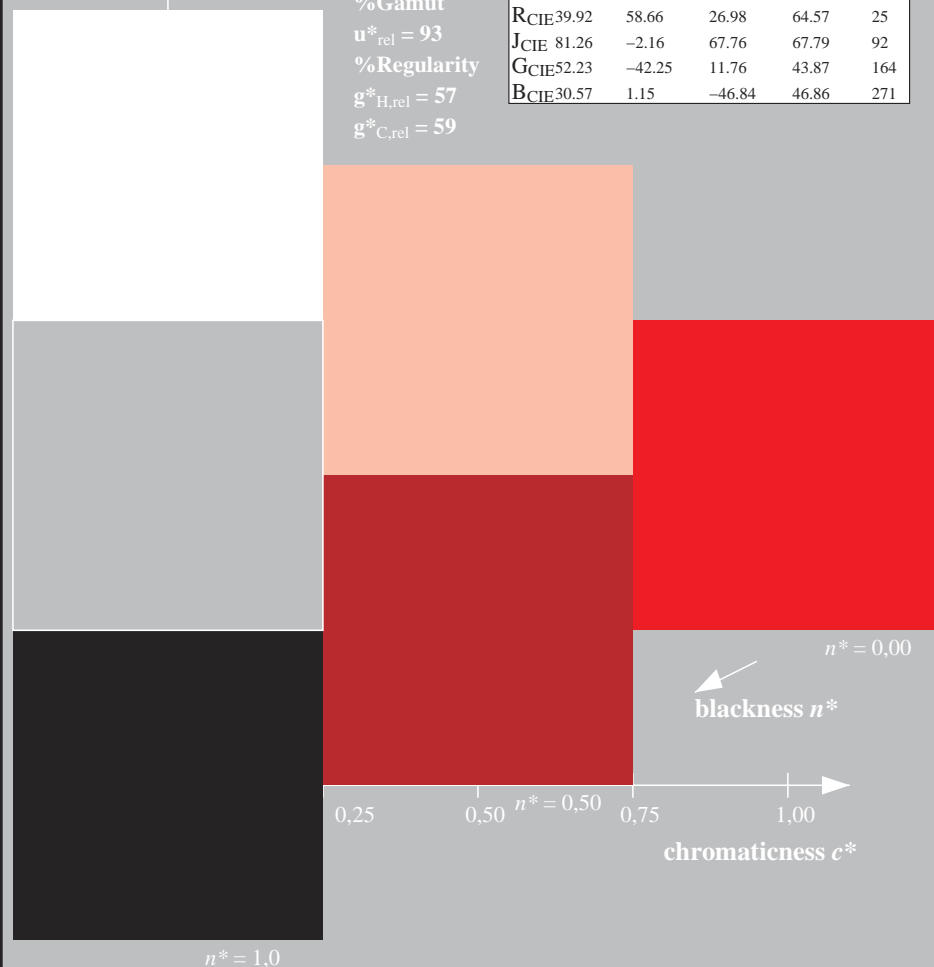
D65: hue O
 LCH*Ma: 51 100 40
 olv*Ma: 1.0 0.0 0.0
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 50.5 | 76.92 | 64.55 | 100.42 | 40 |
| YMa | 92.66 | -20.69 | 90.75 | 93.08 | 103 |
| LMa | 83.63 | -82.75 | 79.9 | 115.04 | 136 |
| CMa | 86.88 | -46.16 | -13.55 | 48.12 | 196 |
| VMa | 30.39 | 76.06 | -103.59 | 128.52 | 306 |
| MMa | 57.3 | 94.35 | -58.41 | 110.97 | 328 |
| NMa | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.74 | 27.99 | 65.07 | 25 |
| JCIE | 81.26 | -2.88 | 71.56 | 71.62 | 92 |
| GCIE | 52.23 | -42.41 | 13.6 | 44.55 | 162 |
| BCIE | 30.57 | 1.41 | -46.46 | 46.49 | 272 |

%Gamut
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$



OE00-7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left)

3 step scales for constant CIELAB hue 40/360 = 0.111 (right)

BAM-test chart OE00; Colorimetric systems ORS18 & TLS00
 D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^*_{setcmYkcolor}$
 output: $cmY0^*/000n^*_{setcmYkcolor}$

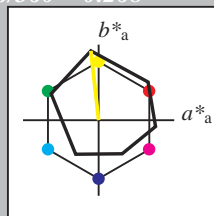
See for similar files: <http://www.ps.bam.de/OE00/>
 Technical information: <http://www.ps.bam.de> Version 2.1, io=0.0, CIELAB

BAM registration: 20060101-OE00/10Q/Q00E00FP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 /OE00/ Form 1/10, Serie: 1/1, Page: 1 Page count: 1

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
 lab^*tch and lab^*nch

D65: hue Y
 LCH*Ma: 90 92 96
 olv*Ma: 1.0 1.0 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

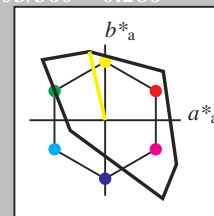
| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 47.94 | 65.39 | 50.52 | 82.63 | 38 |
| YMa | 90.37 | -10.26 | 91.75 | 92.32 | 96 |
| LMa | 50.9 | -62.83 | 34.96 | 71.91 | 151 |
| CMa | 58.62 | -30.34 | -45.01 | 54.3 | 236 |
| VMa | 25.72 | 31.1 | -44.4 | 54.22 | 305 |
| MMa | 48.13 | 75.28 | -8.36 | 75.74 | 354 |
| NMa | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.66 | 26.98 | 64.57 | 25 |
| JCIE | 81.26 | -2.16 | 67.76 | 67.79 | 92 |
| GCIE | 52.23 | -42.25 | 11.76 | 43.87 | 164 |
| BCIE | 30.57 | 1.15 | -46.84 | 46.86 | 271 |

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 103/360 = 0.286$
 lab^*tch and lab^*nch

D65: hue Y
 LCH*Ma: 93 93 103
 olv*Ma: 1.0 1.0 0.0
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 50.5 | 76.92 | 64.55 | 100.42 | 40 |
| YMa | 92.66 | -20.69 | 90.75 | 93.08 | 103 |
| LMa | 83.63 | -82.75 | 79.9 | 115.04 | 136 |
| CMa | 86.88 | -46.16 | -13.55 | 48.12 | 196 |
| VMa | 30.39 | 76.06 | -103.59 | 128.52 | 306 |
| MMa | 57.3 | 94.35 | -58.41 | 110.97 | 328 |
| NMa | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.74 | 27.99 | 65.07 | 25 |
| JCIE | 81.26 | -2.88 | 71.56 | 71.62 | 92 |
| GCIE | 52.23 | -42.41 | 13.6 | 44.55 | 162 |
| BCIE | 30.57 | 1.41 | -46.46 | 46.49 | 272 |

%Gamut
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 95.41 \ 0.0 \ 0.0$
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 1.0 \ 0.0 \ 0.0$
 $lab^*tch = 1.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 1.0 \ 0.0 \ 0.0$
 $lab^*tce = 1.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 47.72 \ 0.0 \ 0.0$
 $LAB^*LABa = 47.72 \ 0.0 \ 0.0$
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.5 \ 0.0 \ 0.0$
 $lab^*tch = 0.5 \ 0.0 \ -$
 $lab^*nch = 0.5 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ 0.0 \ 0.0$
 $lab^*tce = 0.5 \ 0.0 \ -$
 $lab^*nce = 0.5 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.0 \ 0.0 \ 0.0 \ (1.0)$
 $cmyn3^* = 1.0 \ 1.0 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 1.0$

standard and adapted CIELAB
 $LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*LABa = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCHa = 0.01 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 1.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 1.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 1.0 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 0.5 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 0.5 \ 1.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.5 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 94.03 \ -10.34 \ 45.37$
 $LAB^*LABa = 94.03 \ -10.34 \ 45.37$
 $LAB^*TCHa = 75.0 \ 46.53 \ 102.85$

relative CIELAB lab*
 $lab^*lab = 0.985 \ -0.11 \ 0.487$
 $lab^*tch = 0.75 \ 0.5 \ 0.286$
 $lab^*nch = 0.0 \ 0.5 \ 0.286$

relative Natural Colour (NC)
 $lab^*lrj = 0.985 \ -0.116 \ 0.486$
 $lab^*tce = 0.75 \ 0.5 \ 0.288$
 $lab^*nce = 0.0 \ 0.5 \ j15g$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.5 \ 0.0 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.5 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 0.5 \ 0.5$
 $cmyn4^* = 0.0 \ 0.0 \ 0.5 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 46.34 \ -10.34 \ 45.37$
 $LAB^*LABa = 46.34 \ -10.34 \ 45.37$
 $LAB^*TCHa = 25.01 \ 46.53 \ 102.85$

relative CIELAB lab*
 $lab^*lab = 0.486 \ -0.11 \ 0.487$
 $lab^*tch = 0.25 \ 0.5 \ 0.286$
 $lab^*nch = 0.5 \ 0.5 \ 0.286$

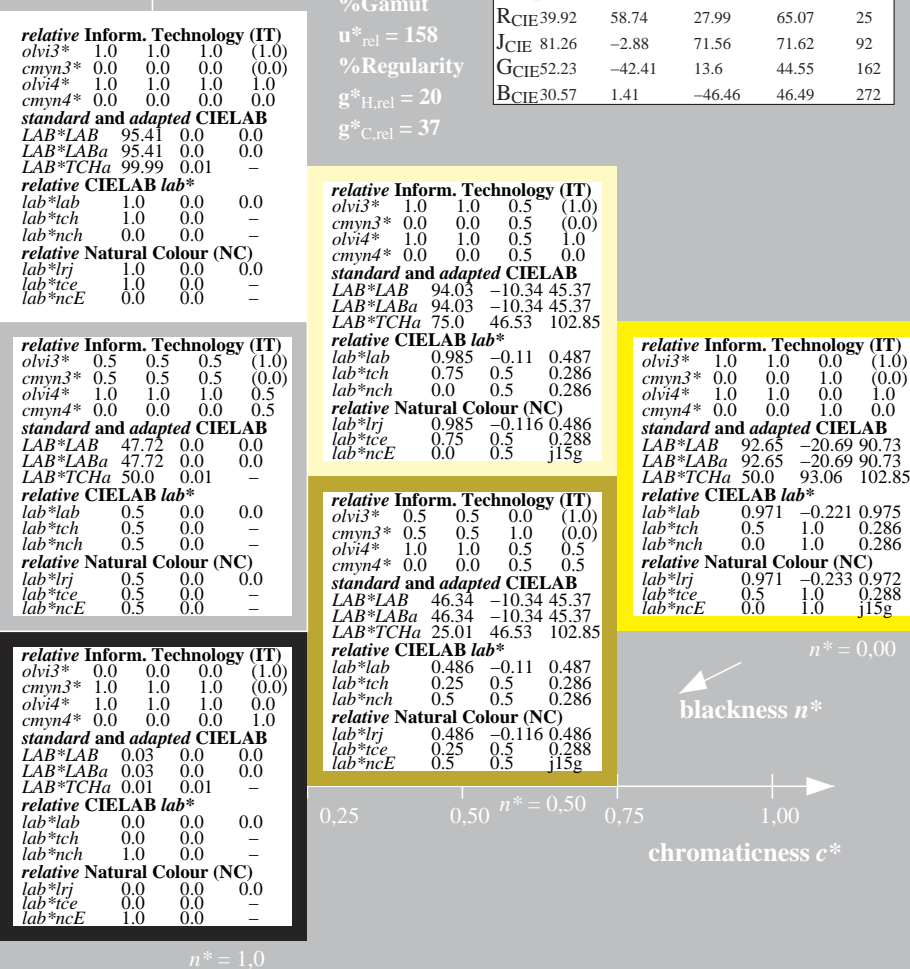
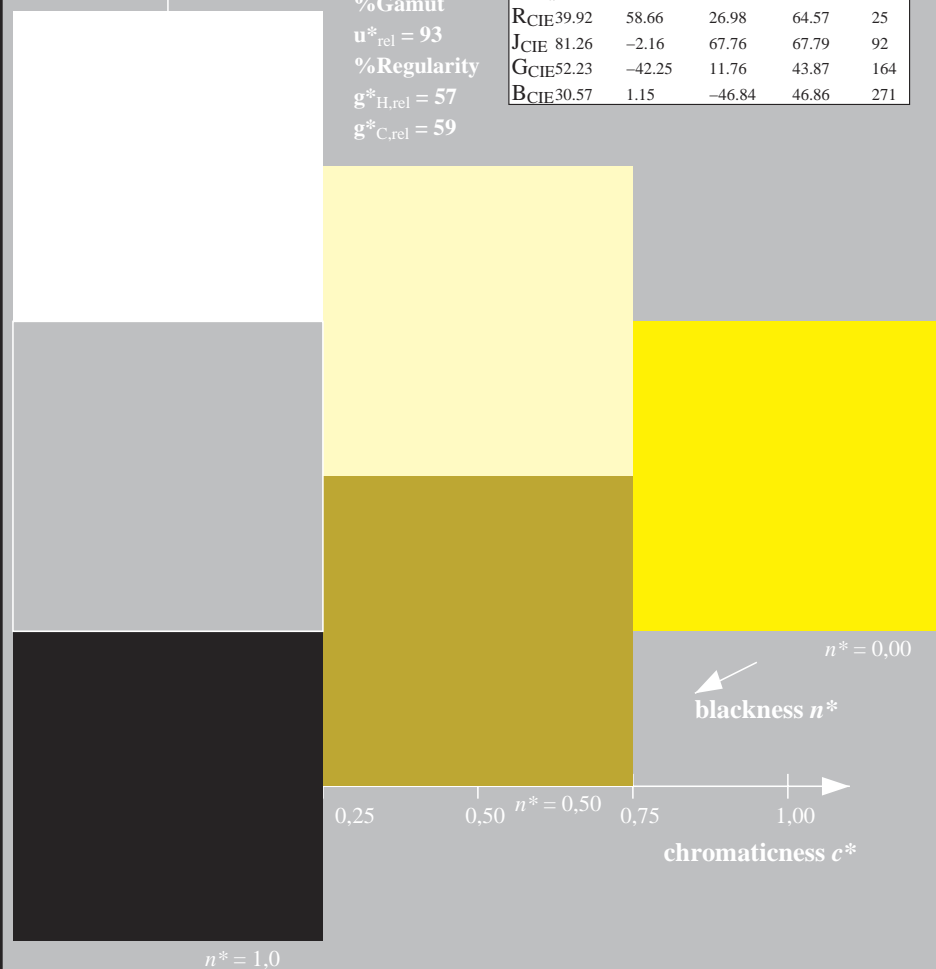
relative Natural Colour (NC)
 $lab^*lrj = 0.486 \ -0.116 \ 0.486$
 $lab^*tce = 0.25 \ 0.5 \ 0.288$
 $lab^*nce = 0.5 \ 0.5 \ j15g$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 1.0 \ 0.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 0.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.0 \ 1.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 92.65 \ -20.69 \ 90.73$
 $LAB^*LABa = 92.65 \ -20.69 \ 90.73$
 $LAB^*TCHa = 50.0 \ 93.06 \ 102.85$

relative CIELAB lab*
 $lab^*lab = 0.971 \ -0.221 \ 0.975$
 $lab^*tch = 0.5 \ 1.0 \ 0.286$
 $lab^*nch = 0.0 \ 1.0 \ 0.286$

relative Natural Colour (NC)
 $lab^*lrj = 0.971 \ -0.233 \ 0.972$
 $lab^*tce = 0.5 \ 1.0 \ 0.288$
 $lab^*nce = 0.0 \ 1.0 \ j15g$



OE00-7, 3 step scales for constant CIELAB hue 96/360 = 0.268 (left)

3 step scales for constant CIELAB hue 103/360 = 0.286 (right)

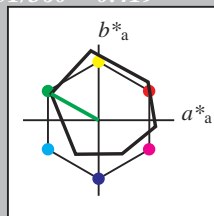
BAM-test chart OE00; Colorimetric systems ORS18 & TLS00
 D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^* \ setcmykcolor$
 output: $cmY0^* / 000n^* \ setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$
 lab^*tch and lab^*nch

D65: hue L
 LCH*Ma: 51 72 151
 olv*Ma: 0.0 1.0 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

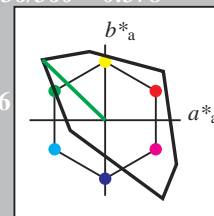
| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 65.39 | 50.52 | 82.63 | 38 |
| Y _{Ma} | 90.37 | -10.26 | 91.75 | 92.32 | 96 |
| L _{Ma} | 50.9 | -62.83 | 34.96 | 71.91 | 151 |
| C _{Ma} | 58.62 | -30.34 | -45.01 | 54.3 | 236 |
| V _{Ma} | 25.72 | 31.1 | -44.4 | 54.22 | 305 |
| M _{Ma} | 48.13 | 75.28 | -8.36 | 75.74 | 354 |
| N _{Ma} | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 39.92 | 58.66 | 26.98 | 64.57 | 25 |
| J _{CIE} | 81.26 | -2.16 | 67.76 | 67.79 | 92 |
| G _{CIE} | 52.23 | -42.25 | 11.76 | 43.87 | 164 |
| B _{CIE} | 30.57 | 1.15 | -46.84 | 46.86 | 271 |

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 136/360 = 0.378$
 lab^*tch and lab^*nch

D65: hue L
 LCH*Ma: 84 115 136
 olv*Ma: 0.0 1.0 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} | 50.5 | 76.92 | 64.55 | 100.42 | 40 |
| Y _{Ma} | 92.66 | -20.69 | 90.75 | 93.08 | 103 |
| L _{Ma} | 83.63 | -82.75 | 79.9 | 115.04 | 136 |
| C _{Ma} | 86.88 | -46.16 | -13.55 | 48.12 | 196 |
| V _{Ma} | 30.39 | 76.06 | -103.59 | 128.52 | 306 |
| M _{Ma} | 57.3 | 94.35 | -58.41 | 110.97 | 328 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 39.92 | 58.74 | 27.99 | 65.07 | 25 |
| J _{CIE} | 81.26 | -2.88 | 71.56 | 71.62 | 92 |
| G _{CIE} | 52.23 | -42.41 | 13.6 | 44.55 | 162 |
| B _{CIE} | 30.57 | 1.41 | -46.46 | 46.49 | 272 |

%Gamut
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-----|-------|
| olvi3* | 1.0 | 1.0 | 1.0 | (1.0) |
| cmyn3* | 0.0 | 0.0 | 0.0 | (0.0) |
| olvi4* | 1.0 | 1.0 | 1.0 | 1.0 |
| cmyn4* | 0.0 | 0.0 | 0.0 | 0.0 |

standard and adapted CIELAB

| | | | |
|----------|-------|------|-----|
| LAB*LAB | 95.41 | 0.0 | 0.0 |
| LAB*LABa | 95.41 | 0.0 | 0.0 |
| LAB*TCHa | 99.99 | 0.01 | - |

relative CIELAB lab*

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

relative Natural Colour (NC)

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

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-----|-------|
| olvi3* | 0.5 | 1.0 | 0.5 | (1.0) |
| cmyn3* | 0.5 | 0.0 | 0.5 | (0.0) |
| olvi4* | 0.5 | 1.0 | 0.5 | 1.0 |
| cmyn4* | 0.5 | 0.0 | 0.5 | 0.0 |

standard and adapted CIELAB

| | | | |
|----------|-------|--------|--------|
| LAB*LAB | 89.51 | -41.36 | 39.94 |
| LAB*LABa | 89.51 | -41.36 | 39.94 |
| LAB*TCHa | 75.0 | 57.51 | 136.01 |

relative CIELAB lab*

| | | | |
|---------|-------|--------|-------|
| lab*lab | 0.938 | -0.359 | 0.347 |
| lab*tch | 0.75 | 0.5 | 0.378 |
| lab*nch | 0.0 | 0.5 | 0.378 |

relative Natural Colour (NC)

| | | | |
|---------|-------|--------|-------|
| lab*lrj | 0.938 | -0.415 | 0.278 |
| lab*tce | 0.75 | 0.5 | 0.406 |
| lab*nce | 0.0 | 0.5 | 0.62g |

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-----|-------|
| olvi3* | 0.5 | 0.5 | 0.5 | (1.0) |
| cmyn3* | 0.5 | 0.5 | 0.5 | (0.0) |
| olvi4* | 1.0 | 1.0 | 1.0 | 0.5 |
| cmyn4* | 0.0 | 0.0 | 0.0 | 0.5 |

standard and adapted CIELAB

| | | | |
|----------|-------|------|-----|
| LAB*LAB | 47.72 | 0.0 | 0.0 |
| LAB*LABa | 47.72 | 0.0 | 0.0 |
| LAB*TCHa | 50.0 | 0.01 | - |

relative CIELAB lab*

| | | | |
|---------|-----|-----|-----|
| lab*lab | 0.5 | 0.0 | 0.0 |
| lab*tch | 0.5 | 0.0 | - |
| lab*nch | 0.5 | 0.0 | - |

relative Natural Colour (NC)

| | | | |
|---------|-----|-----|-----|
| lab*lrj | 0.5 | 0.0 | 0.0 |
| lab*tce | 0.5 | 0.0 | - |
| lab*nce | 0.5 | 0.0 | - |

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-----|-------|
| olvi3* | 0.0 | 0.5 | 0.0 | (1.0) |
| cmyn3* | 1.0 | 0.5 | 1.0 | (0.0) |
| olvi4* | 0.5 | 1.0 | 0.5 | 0.5 |
| cmyn4* | 0.5 | 0.0 | 0.5 | 0.5 |

standard and adapted CIELAB

| | | | |
|----------|-------|--------|--------|
| LAB*LAB | 41.82 | -41.36 | 39.94 |
| LAB*LABa | 41.82 | -41.36 | 39.94 |
| LAB*TCHa | 25.01 | 57.51 | 136.01 |

relative CIELAB lab*

| | | | |
|---------|-------|--------|-------|
| lab*lab | 0.438 | -0.359 | 0.347 |
| lab*tch | 0.25 | 0.5 | 0.378 |
| lab*nch | 0.5 | 0.5 | 0.378 |

relative Natural Colour (NC)

| | | | |
|---------|-------|--------|-------|
| lab*lrj | 0.438 | -0.415 | 0.278 |
| lab*tce | 0.25 | 0.5 | 0.406 |
| lab*nce | 0.5 | 0.5 | 0.62g |

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-----|-------|
| olvi3* | 0.0 | 1.0 | 0.0 | (1.0) |
| cmyn3* | 1.0 | 0.0 | 1.0 | (0.0) |
| olvi4* | 0.0 | 1.0 | 0.0 | 1.0 |
| cmyn4* | 1.0 | 0.0 | 1.0 | 0.0 |

standard and adapted CIELAB

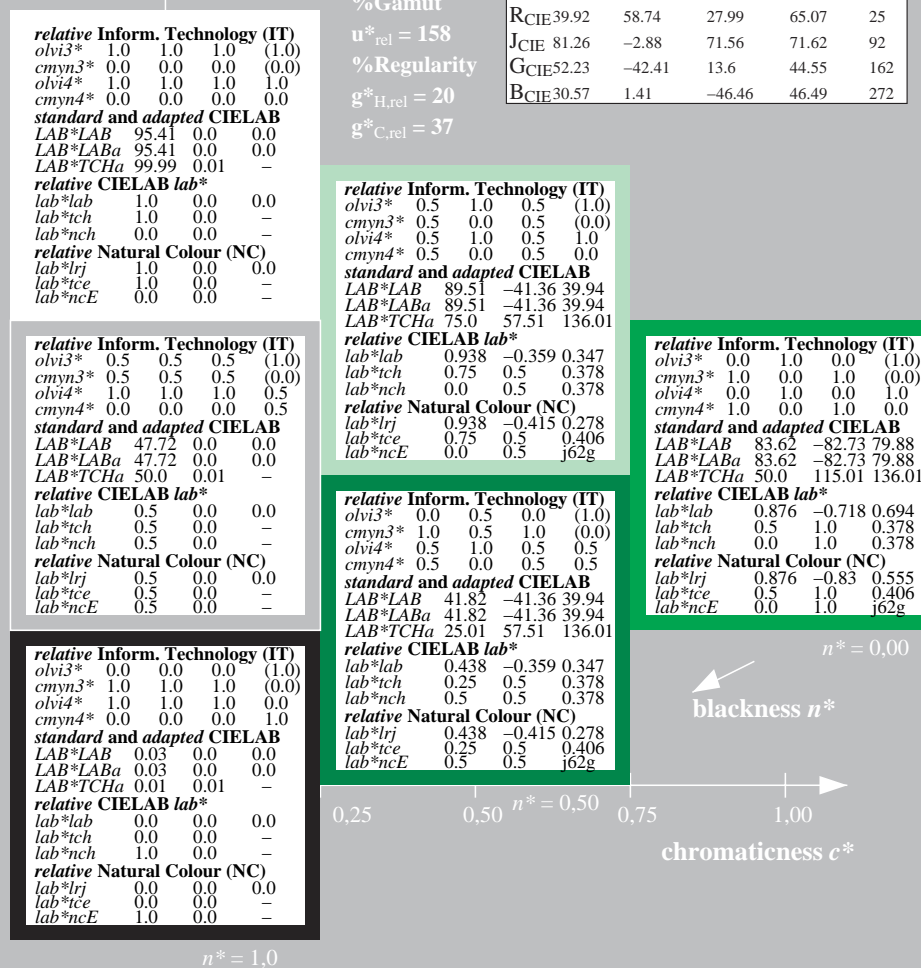
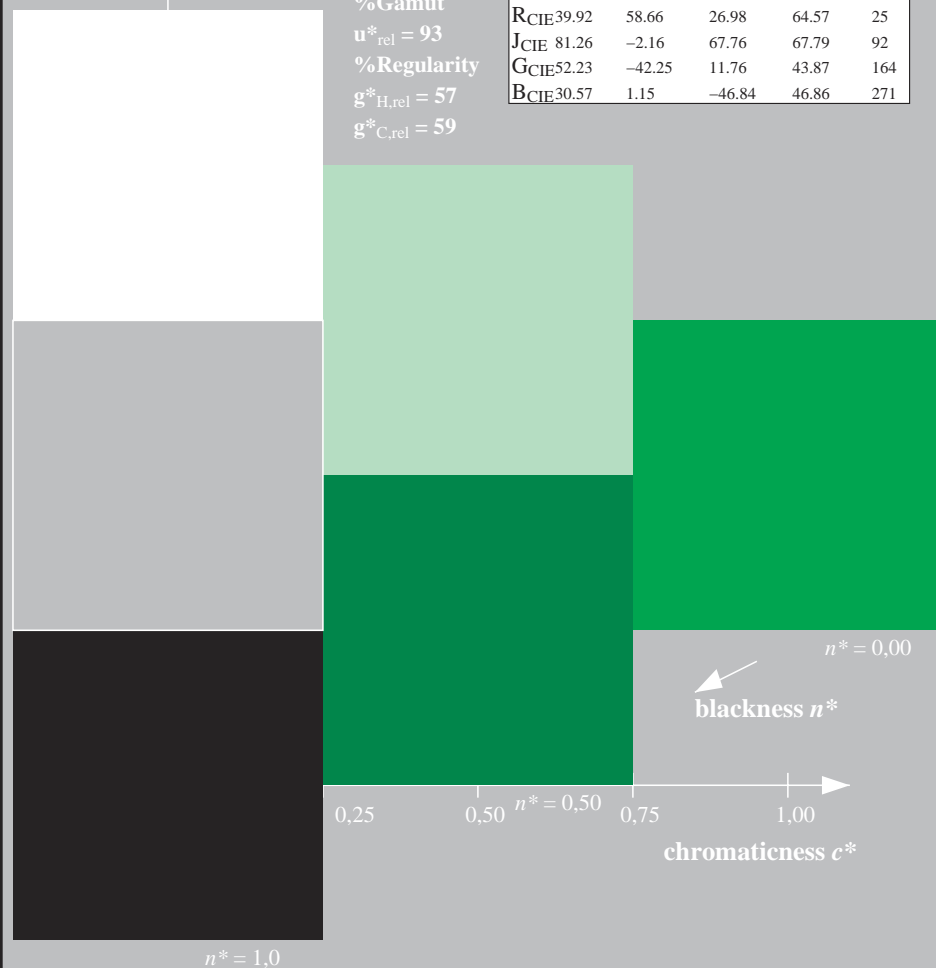
| | | | |
|----------|-------|--------|--------|
| LAB*LAB | 83.62 | -82.73 | 79.88 |
| LAB*LABa | 83.62 | -82.73 | 79.88 |
| LAB*TCHa | 50.0 | 115.01 | 136.01 |

relative CIELAB lab*

| | | | |
|---------|-------|--------|-------|
| lab*lab | 0.876 | -0.718 | 0.694 |
| lab*tch | 0.5 | 1.0 | 0.378 |
| lab*nch | 0.0 | 1.0 | 0.378 |

relative Natural Colour (NC)

| | | | |
|---------|-------|-------|-------|
| lab*lrj | 0.876 | -0.83 | 0.555 |
| lab*tce | 0.5 | 1.0 | 0.406 |
| lab*nce | 0.0 | 1.0 | 0.62g |



OE000-7, 3 step scales for constant CIELAB hue 151/360 = 0.419 (left)

3 step scales for constant CIELAB hue 136/360 = 0.378 (right)

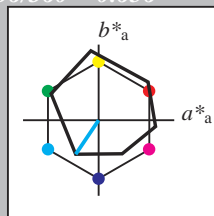
BAM-test chart OE00; Colorimetric systems ORS18 & TLS00
 D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^*_{setcmYkcolor}$
 output: $cmY0^*/000n^*_{setcmYkcolor}$

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$
 lab^*tch and lab^*nch

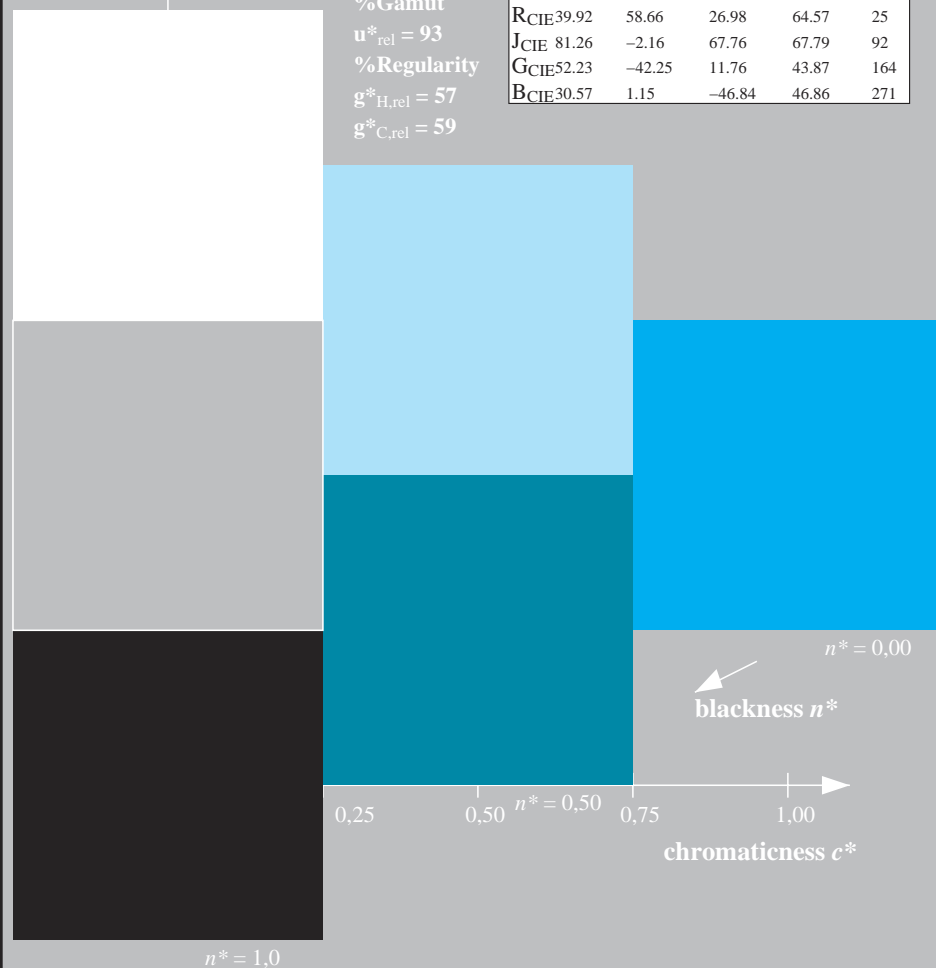
D65: hue C
 LCH*Ma: 59 54 236
 olv*Ma: 0.0 1.0 1.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 47.94 | 65.39 | 50.52 | 82.63 | 38 |
| YMa | 90.37 | -10.26 | 91.75 | 92.32 | 96 |
| LMa | 50.9 | -62.83 | 34.96 | 71.91 | 151 |
| CMa | 58.62 | -30.34 | -45.01 | 54.3 | 236 |
| VMa | 25.72 | 31.1 | -44.4 | 54.22 | 305 |
| MMa | 48.13 | 75.28 | -8.36 | 75.74 | 354 |
| NMa | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.66 | 26.98 | 64.57 | 25 |
| JCIE | 81.26 | -2.16 | 67.76 | 67.79 | 92 |
| GCIE | 52.23 | -42.25 | 11.76 | 43.87 | 164 |
| BCIE | 30.57 | 1.15 | -46.84 | 46.86 | 271 |

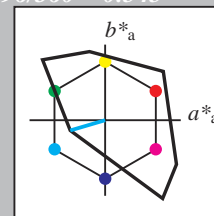
%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 196/360 = 0.545$
 lab^*tch and lab^*nch

D65: hue C
 LCH*Ma: 87 48 196
 olv*Ma: 0.0 1.0 1.0
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 50.5 | 76.92 | 64.55 | 100.42 | 40 |
| YMa | 92.66 | -20.69 | 90.75 | 93.08 | 103 |
| LMa | 83.63 | -82.75 | 79.9 | 115.04 | 136 |
| CMa | 86.88 | -46.16 | -13.55 | 48.12 | 196 |
| VMa | 30.39 | 76.06 | -103.59 | 128.52 | 306 |
| MMa | 57.3 | 94.35 | -58.41 | 110.97 | 328 |
| NMa | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.74 | 27.99 | 65.07 | 25 |
| JCIE | 81.26 | -2.88 | 71.56 | 71.62 | 92 |
| GCIE | 52.23 | -42.41 | 13.6 | 44.55 | 162 |
| BCIE | 30.57 | 1.41 | -46.46 | 46.49 | 272 |

%Gamut
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 95.41 \ 0.0 \ 0.0$
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 1.0 \ 0.0 \ 0.0$
 $lab^*tch = 1.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 1.0 \ 0.0 \ 0.0$
 $lab^*tce = 1.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 47.72 \ 0.0 \ 0.0$
 $LAB^*LABa = 47.72 \ 0.0 \ 0.0$
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.5 \ 0.0 \ 0.0$
 $lab^*tch = 0.5 \ 0.0 \ -$
 $lab^*nch = 0.5 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ 0.0 \ 0.0$
 $lab^*tce = 0.5 \ 0.0 \ -$
 $lab^*nce = 0.5 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.0 \ 0.0 \ 0.0 \ (1.0)$
 $cmyn3^* = 1.0 \ 1.0 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 1.0$

standard and adapted CIELAB
 $LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*LABa = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCHa = 0.01 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 1.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 1.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.0 \ 0.0 \ (0.0)$
 $olvi4^* = 0.5 \ 1.0 \ 1.0 \ 1.0$
 $cmyn4^* = 0.5 \ 0.0 \ 0.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 91.14 \ -23.07 \ -6.77$
 $LAB^*LABa = 91.14 \ -23.07 \ -6.77$
 $LAB^*TCHa = 75.0 \ 24.06 \ 196.37$

relative CIELAB lab*
 $lab^*lab = 0.955 \ -0.479 \ -0.14$
 $lab^*tch = 0.75 \ 0.5 \ 0.545$
 $lab^*nch = 0.0 \ 0.5 \ 0.545$

relative Natural Colour (NC)
 $lab^*lrj = 0.955 \ -0.44 \ -0.234$
 $lab^*tce = 0.75 \ 0.5 \ 0.578$
 $lab^*nce = 0.0 \ 0.5 \ g31b$

relative Inform. Technology (IT)
 $olvi3^* = 0.0 \ 0.5 \ 0.5 \ (1.0)$
 $cmyn3^* = 1.0 \ 0.5 \ 0.5 \ (0.0)$
 $olvi4^* = 0.5 \ 1.0 \ 1.0 \ 0.5$
 $cmyn4^* = 0.5 \ 0.0 \ 0.0 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 43.45 \ -23.07 \ -6.77$
 $LAB^*LABa = 43.45 \ -23.07 \ -6.77$
 $LAB^*TCHa = 25.01 \ 24.06 \ 196.37$

relative CIELAB lab*
 $lab^*lab = 0.455 \ -0.479 \ -0.14$
 $lab^*tch = 0.25 \ 0.5 \ 0.545$
 $lab^*nch = 0.5 \ 0.5 \ 0.545$

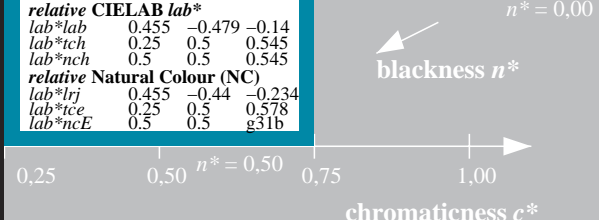
relative Natural Colour (NC)
 $lab^*lrj = 0.455 \ -0.44 \ -0.234$
 $lab^*tce = 0.25 \ 0.5 \ 0.578$
 $lab^*nce = 0.5 \ 0.5 \ g31b$

relative Inform. Technology (IT)
 $olvi3^* = 0.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 1.0 \ 0.0 \ 0.0 \ (0.0)$
 $olvi4^* = 0.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn4^* = 1.0 \ 0.0 \ 0.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 86.87 \ -46.15 \ -13.55$
 $LAB^*LABa = 86.87 \ -46.15 \ -13.55$
 $LAB^*TCHa = 50.0 \ 48.11 \ 196.37$

relative CIELAB lab*
 $lab^*lab = 0.911 \ -0.958 \ -0.281$
 $lab^*tch = 0.5 \ 1.0 \ 0.545$
 $lab^*nch = 0.0 \ 1.0 \ 0.545$

relative Natural Colour (NC)
 $lab^*lrj = 0.911 \ -0.881 \ -0.469$
 $lab^*tce = 0.5 \ 1.0 \ 0.578$
 $lab^*nce = 0.0 \ 1.0 \ g31b$



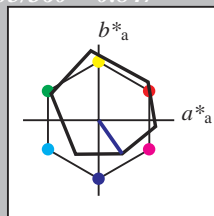
3 step scales for constant CIELAB hue 196/360 = 0.545 (right)

OE000-7, 3 step scales for constant CIELAB hue 236/360 = 0.656 (left)

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$
 lab^*tch and lab^*nch

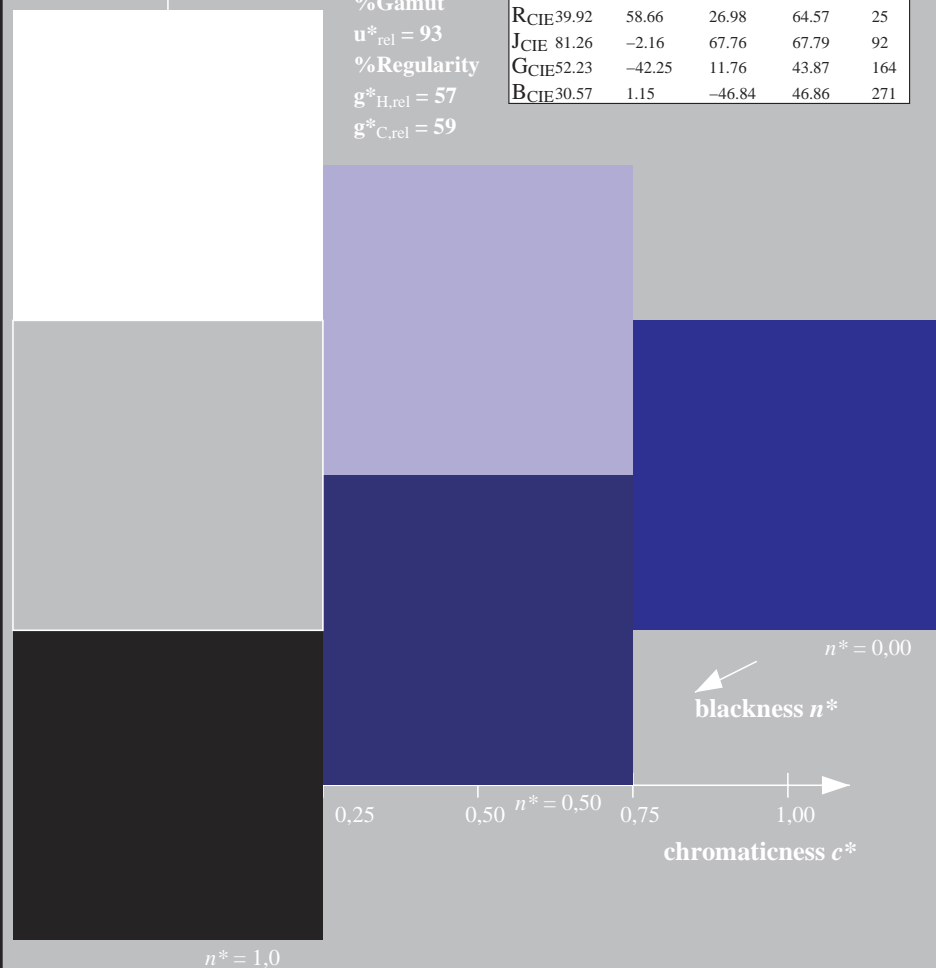
D65: hue V
 LCH*Ma: 26 54 305
 olv*Ma: 0.0 0.0 1.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 47.94 | 65.39 | 50.52 | 82.63 | 38 |
| Y _{Ma} | 90.37 | -10.26 | 91.75 | 92.32 | 96 |
| L _{Ma} | 50.9 | -62.83 | 34.96 | 71.91 | 151 |
| C _{Ma} | 58.62 | -30.34 | -45.01 | 54.3 | 236 |
| V _{Ma} | 25.72 | 31.1 | -44.4 | 54.22 | 305 |
| M _{Ma} | 48.13 | 75.28 | -8.36 | 75.74 | 354 |
| N _{Ma} | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 39.92 | 58.66 | 26.98 | 64.57 | 25 |
| J _{CIE} | 81.26 | -2.16 | 67.76 | 67.79 | 92 |
| G _{CIE} | 52.23 | -42.25 | 11.76 | 43.87 | 164 |
| B _{CIE} | 30.57 | 1.15 | -46.84 | 46.86 | 271 |

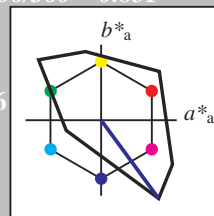
%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$
 lab^*tch and lab^*nch

D65: hue V
 LCH*Ma: 30 129 306
 olv*Ma: 0.0 0.0 1.0
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O _{Ma} | 50.5 | 76.92 | 64.55 | 100.42 | 40 |
| Y _{Ma} | 92.66 | -20.69 | 90.75 | 93.08 | 103 |
| L _{Ma} | 83.63 | -82.75 | 79.9 | 115.04 | 136 |
| C _{Ma} | 86.88 | -46.16 | -13.55 | 48.12 | 196 |
| V _{Ma} | 30.39 | 76.06 | -103.59 | 128.52 | 306 |
| M _{Ma} | 57.3 | 94.35 | -58.41 | 110.97 | 328 |
| N _{Ma} | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| W _{Ma} | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| R _{CIE} | 39.92 | 58.74 | 27.99 | 65.07 | 25 |
| J _{CIE} | 81.26 | -2.88 | 71.56 | 71.62 | 92 |
| G _{CIE} | 52.23 | -42.41 | 13.6 | 44.55 | 162 |
| B _{CIE} | 30.57 | 1.41 | -46.46 | 46.49 | 272 |

%Gamut
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 95.41 \ 0.0 \ 0.0$
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 1.0 \ 0.0 \ 0.0$
 $lab^*tch = 1.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 1.0 \ 0.0 \ 0.0$
 $lab^*tce = 1.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 47.72 \ 0.0 \ 0.0$
 $LAB^*LABa = 47.72 \ 0.0 \ 0.0$
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.5 \ 0.0 \ 0.0$
 $lab^*tch = 0.5 \ 0.0 \ -$
 $lab^*nch = 0.5 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ 0.0 \ 0.0$
 $lab^*tce = 0.5 \ 0.0 \ -$
 $lab^*nce = 0.5 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.0 \ 0.0 \ 0.0 \ (1.0)$
 $cmyn3^* = 1.0 \ 1.0 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 1.0$

standard and adapted CIELAB
 $LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*LABa = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCHa = 0.01 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 1.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 1.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.5 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.5 \ 0.0 \ (0.0)$
 $olvi4^* = 0.5 \ 0.5 \ 1.0 \ 1.0$
 $cmyn4^* = 0.5 \ 0.5 \ 0.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 62.9 \ 38.02 \ -51.78$
 $LAB^*LABa = 62.9 \ 38.02 \ -51.78$
 $LAB^*TCHa = 75.0 \ 64.25 \ 306.29$

relative CIELAB lab*
 $lab^*lab = 0.659 \ 0.296 \ -0.402$
 $lab^*tch = 0.75 \ 0.5 \ 0.851$
 $lab^*nch = 0.0 \ 0.5 \ 0.851$

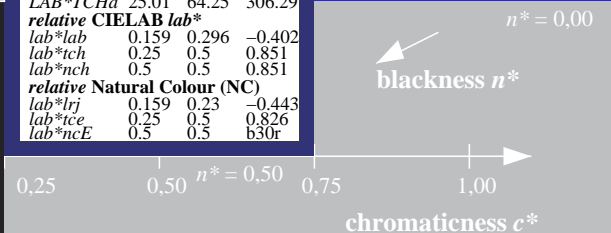
relative Natural Colour (NC)
 $lab^*lrj = 0.659 \ 0.23 \ -0.443$
 $lab^*tce = 0.75 \ 0.5 \ 0.826$
 $lab^*nce = 0.0 \ 0.5 \ b30r$

relative Inform. Technology (IT)
 $olvi3^* = 0.0 \ 0.0 \ 0.5 \ (1.0)$
 $cmyn3^* = 1.0 \ 1.0 \ 0.5 \ (0.0)$
 $olvi4^* = 0.5 \ 0.5 \ 1.0 \ 0.5$
 $cmyn4^* = 0.5 \ 0.5 \ 0.0 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 15.21 \ 38.02 \ -51.78$
 $LAB^*LABa = 15.21 \ 38.02 \ -51.78$
 $LAB^*TCHa = 25.01 \ 64.25 \ 306.29$

relative CIELAB lab*
 $lab^*lab = 0.159 \ 0.296 \ -0.402$
 $lab^*tch = 0.25 \ 0.5 \ 0.851$
 $lab^*nch = 0.5 \ 0.5 \ 0.851$

relative Natural Colour (NC)
 $lab^*lrj = 0.159 \ 0.23 \ -0.443$
 $lab^*tce = 0.25 \ 0.5 \ 0.826$
 $lab^*nce = 0.5 \ 0.5 \ b30r$



OE000-7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)

3 step scales for constant CIELAB hue 306/360 = 0.851 (right)

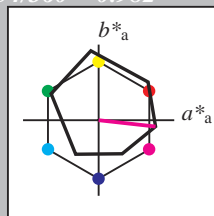
BAM-test chart OE00; Colorimetric systems ORS18 & TLS00
 D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^* \ setcmykcolor$
 output: $cmY0^* / 000n^* \ setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$
 lab^*tch and lab^*nch

D65: hue M
 LCH*Ma: 48 76 354
 olv*Ma: 1.0 0.0 1.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

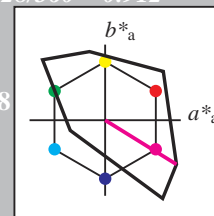
| $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|-------------|---------|---------|--------------|--------------|
| OMa 47.94 | 65.39 | 50.52 | 82.63 | 38 |
| YMa 90.37 | -10.26 | 91.75 | 92.32 | 96 |
| LMa 50.9 | -62.83 | 34.96 | 71.91 | 151 |
| CMa 58.62 | -30.34 | -45.01 | 54.3 | 236 |
| VMa 25.72 | 31.1 | -44.4 | 54.22 | 305 |
| MMa 48.13 | 75.28 | -8.36 | 75.74 | 354 |
| NMa 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE 39.92 | 58.66 | 26.98 | 64.57 | 25 |
| JCIE 81.26 | -2.16 | 67.76 | 67.79 | 92 |
| GCIE 52.23 | -42.25 | 11.76 | 43.87 | 164 |
| BCIE 30.57 | 1.15 | -46.84 | 46.86 | 271 |

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 328/360 = 0.912$
 lab^*tch and lab^*nch

D65: hue M
 LCH*Ma: 57 111 328
 olv*Ma: 1.0 0.0 1.0
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

| $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|-------------|---------|---------|--------------|--------------|
| OMa 50.5 | 76.92 | 64.55 | 100.42 | 40 |
| YMa 92.66 | -20.69 | 90.75 | 93.08 | 103 |
| LMa 83.63 | -82.75 | 79.9 | 115.04 | 136 |
| CMa 86.88 | -46.16 | -13.55 | 48.12 | 196 |
| VMa 30.39 | 76.06 | -103.59 | 128.52 | 306 |
| MMa 57.3 | 94.35 | -58.41 | 110.97 | 328 |
| NMa 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE 39.92 | 58.74 | 27.99 | 65.07 | 25 |
| JCIE 81.26 | -2.88 | 71.56 | 71.62 | 92 |
| GCIE 52.23 | -42.41 | 13.6 | 44.55 | 162 |
| BCIE 30.57 | 1.41 | -46.46 | 46.49 | 272 |

%Gamut
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 95.41 \ 0.0 \ 0.0$
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 1.0 \ 0.0 \ 0.0$
 $lab^*tch = 1.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 1.0 \ 0.0 \ 0.0$
 $lab^*tce = 1.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 47.72 \ 0.0 \ 0.0$
 $LAB^*LABa = 47.72 \ 0.0 \ 0.0$
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.5 \ 0.0 \ 0.0$
 $lab^*tch = 0.5 \ 0.0 \ -$
 $lab^*nch = 0.5 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ 0.0 \ 0.0$
 $lab^*tce = 0.5 \ 0.0 \ -$
 $lab^*nce = 0.5 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.0 \ 0.0 \ 0.0 \ (1.0)$
 $cmyn3^* = 1.0 \ 1.0 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 1.0$

standard and adapted CIELAB
 $LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*LABa = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCHa = 0.01 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 1.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 1.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 0.5 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.5 \ 0.0 \ (0.0)$
 $olvi4^* = 1.0 \ 0.5 \ 1.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.5 \ 0.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 76.35 \ 47.17 \ -29.19$
 $LAB^*LABa = 76.35 \ 47.17 \ -29.19$
 $LAB^*TCHa = 75.0 \ 55.47 \ 328.23$

relative CIELAB lab*
 $lab^*lab = 0.8 \ 0.425 \ -0.262$
 $lab^*tch = 0.75 \ 0.5 \ 0.912$
 $lab^*nch = 0.0 \ 0.5 \ 0.912$

relative Natural Colour (NC)
 $lab^*lrj = 0.8 \ 0.352 \ -0.354$
 $lab^*tce = 0.75 \ 0.5 \ 0.874$
 $lab^*nce = 0.0 \ 0.5 \ b49r$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.0 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.5 \ 1.0 \ 0.5 \ (0.0)$
 $olvi4^* = 1.0 \ 0.5 \ 1.0 \ 0.5$
 $cmyn4^* = 0.0 \ 0.5 \ 0.0 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 28.66 \ 47.17 \ -29.19$
 $LAB^*LABa = 28.66 \ 47.17 \ -29.19$
 $LAB^*TCHa = 25.01 \ 55.47 \ 328.23$

relative CIELAB lab*
 $lab^*lab = 0.3 \ 0.425 \ -0.262$
 $lab^*tch = 0.25 \ 0.5 \ 0.912$
 $lab^*nch = 0.5 \ 0.5 \ 0.912$

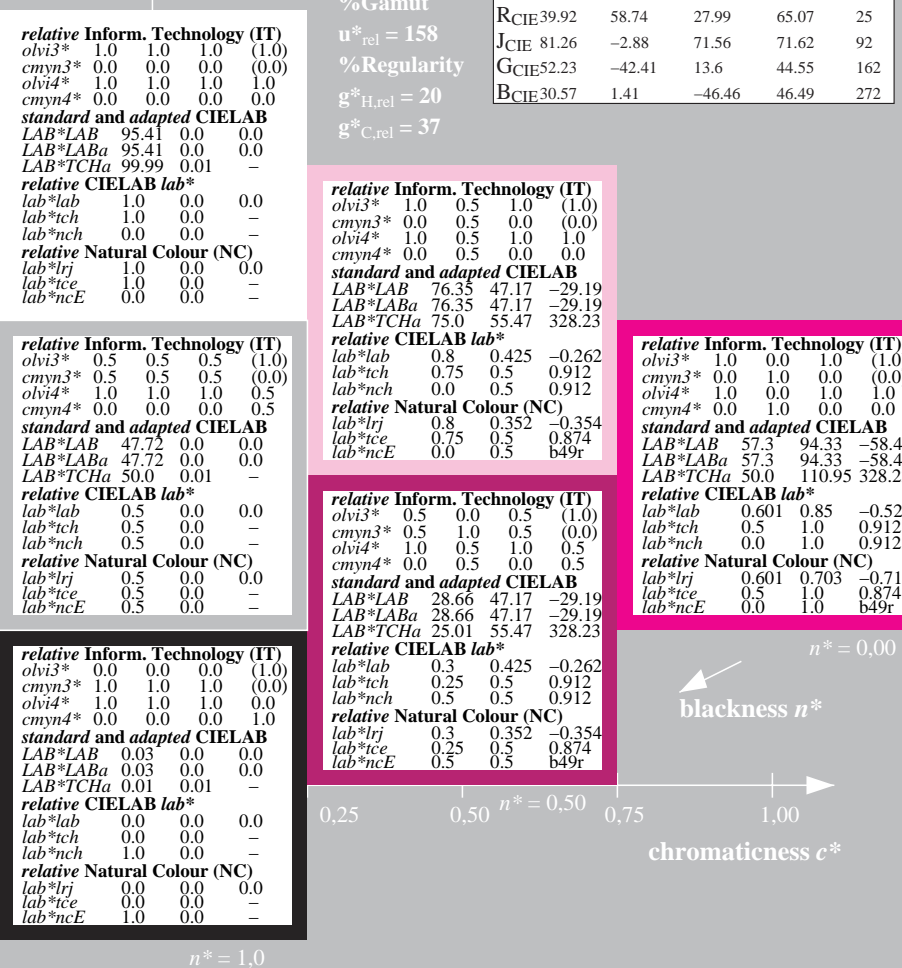
relative Natural Colour (NC)
 $lab^*lrj = 0.3 \ 0.352 \ -0.354$
 $lab^*tce = 0.25 \ 0.5 \ 0.874$
 $lab^*nce = 0.5 \ 0.5 \ b49r$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 0.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 1.0 \ 0.0 \ (0.0)$
 $olvi4^* = 1.0 \ 0.0 \ 1.0 \ 1.0$
 $cmyn4^* = 0.0 \ 1.0 \ 0.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 57.3 \ 94.33 \ -58.4$
 $LAB^*LABa = 57.3 \ 94.33 \ -58.4$
 $LAB^*TCHa = 50.0 \ 110.95 \ 328.23$

relative CIELAB lab*
 $lab^*lab = 0.601 \ 0.85 \ -0.525$
 $lab^*tch = 0.5 \ 1.0 \ 0.912$
 $lab^*nch = 0.0 \ 1.0 \ 0.912$

relative Natural Colour (NC)
 $lab^*lrj = 0.601 \ 0.703 \ -0.71$
 $lab^*tce = 0.5 \ 1.0 \ 0.874$
 $lab^*nce = 0.0 \ 1.0 \ b49r$



OE000-7, 3 step scales for constant CIELAB hue 354/360 = 0.982 (left)

3 step scales for constant CIELAB hue 328/360 = 0.912 (right)

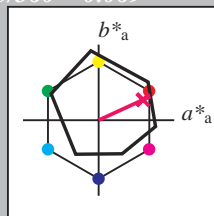
BAM-test chart OE00; Colorimetric systems ORS18 & TLS00
 D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^* \ setcmykcolor$
 output: $cmY0^* / 000n^* \ setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$
 lab^*tch and lab^*nch

D65: hue R
 LCH*Ma: 48 75 25
 olv*Ma: 1.0 0.0 0.32
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

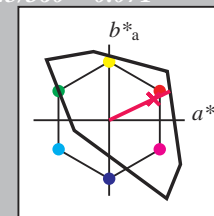
| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 47.94 | 65.39 | 50.52 | 82.63 | 38 |
| YMa | 90.37 | -10.26 | 91.75 | 92.32 | 96 |
| LMa | 50.9 | -62.83 | 34.96 | 71.91 | 151 |
| CMa | 58.62 | -30.34 | -45.01 | 54.3 | 236 |
| VMa | 25.72 | 31.1 | -44.4 | 54.22 | 305 |
| MMa | 48.13 | 75.28 | -8.36 | 75.74 | 354 |
| NMa | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.66 | 26.98 | 64.57 | 25 |
| JCIE | 81.26 | -2.16 | 67.76 | 67.79 | 92 |
| GCIE | 52.23 | -42.25 | 11.76 | 43.87 | 164 |
| BCIE | 30.57 | 1.15 | -46.84 | 46.86 | 271 |

%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 25/360 = 0.071$
 lab^*tch and lab^*nch

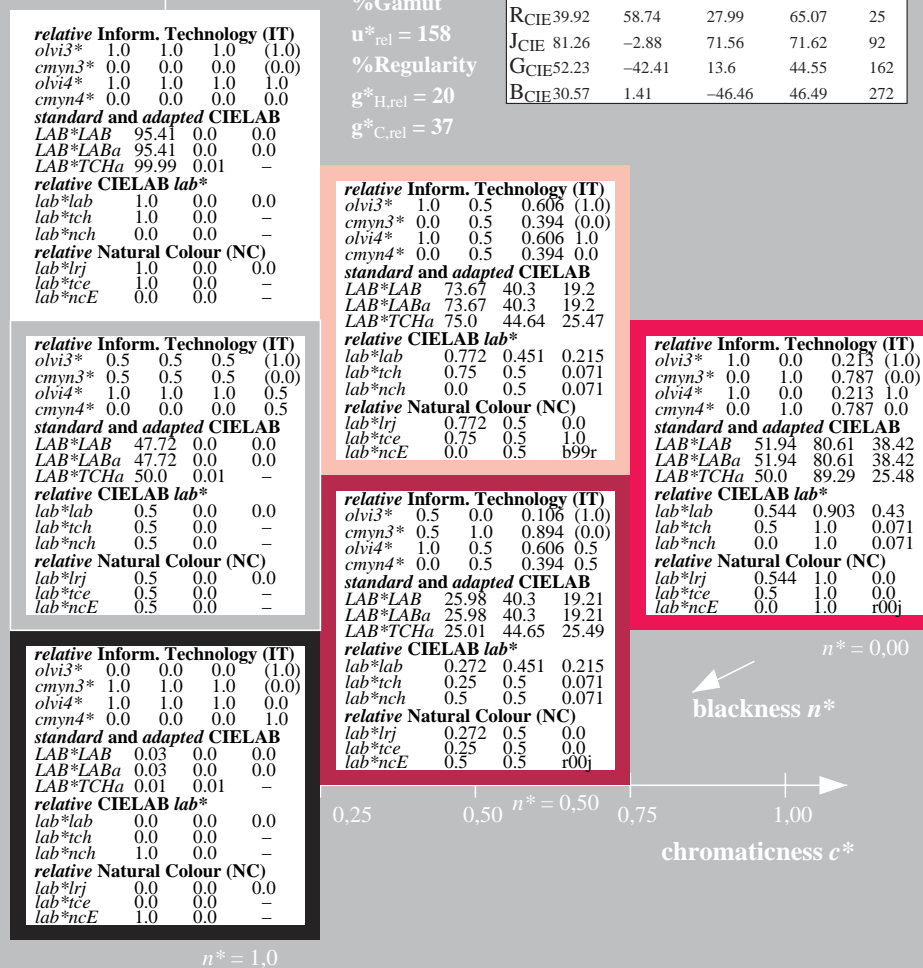
D65: hue R
 LCH*Ma: 52 89 25
 olv*Ma: 1.0 0.0 0.21
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 50.5 | 76.92 | 64.55 | 100.42 | 40 |
| YMa | 92.66 | -20.69 | 90.75 | 93.08 | 103 |
| LMa | 83.63 | -82.75 | 79.9 | 115.04 | 136 |
| CMa | 86.88 | -46.16 | -13.55 | 48.12 | 196 |
| VMa | 30.39 | 76.06 | -103.59 | 128.52 | 306 |
| MMa | 57.3 | 94.35 | -58.41 | 110.97 | 328 |
| NMa | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.74 | 27.99 | 65.07 | 25 |
| JCIE | 81.26 | -2.88 | 71.56 | 71.62 | 92 |
| GCIE | 52.23 | -42.41 | 13.6 | 44.55 | 162 |
| BCIE | 30.57 | 1.41 | -46.46 | 46.49 | 272 |

%Gamut
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$



relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 95.41 \ 0.0 \ 0.0$
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 1.0 \ 0.0 \ 0.0$
 $lab^*tch = 1.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 1.0 \ 0.0 \ 0.0$
 $lab^*tce = 1.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 47.72 \ 0.0 \ 0.0$
 $LAB^*LABa = 47.72 \ 0.0 \ 0.0$
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.5 \ 0.0 \ 0.0$
 $lab^*tch = 0.5 \ 0.0 \ -$
 $lab^*nch = 0.5 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ 0.0 \ 0.0$
 $lab^*tce = 0.5 \ 0.0 \ -$
 $lab^*nce = 0.5 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.0 \ 0.0 \ 0.0 \ (1.0)$
 $cmyn3^* = 1.0 \ 1.0 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 1.0$

standard and adapted CIELAB
 $LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*LABa = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCHa = 0.01 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 1.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 1.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 0.5 \ 0.606 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.5 \ 0.394 \ (0.0)$
 $olvi4^* = 1.0 \ 0.5 \ 0.606 \ 1.0$
 $cmyn4^* = 0.0 \ 0.5 \ 0.394 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 73.67 \ 40.3 \ 19.2$
 $LAB^*LABa = 73.67 \ 40.3 \ 19.2$
 $LAB^*TCHa = 75.0 \ 44.64 \ 25.47$

relative CIELAB lab*
 $lab^*lab = 0.772 \ 0.451 \ 0.215$
 $lab^*tch = 0.75 \ 0.5 \ 0.071$
 $lab^*nch = 0.0 \ 0.5 \ 0.071$

relative Natural Colour (NC)
 $lab^*lrj = 0.772 \ 0.5 \ 0.0$
 $lab^*tce = 0.75 \ 0.5 \ 1.0$
 $lab^*nce = 0.0 \ 0.5 \ b99r$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.0 \ 0.106 \ (1.0)$
 $cmyn3^* = 0.5 \ 1.0 \ 0.894 \ (0.0)$
 $olvi4^* = 1.0 \ 0.5 \ 0.606 \ 0.5$
 $cmyn4^* = 0.0 \ 0.5 \ 0.394 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 25.98 \ 40.3 \ 19.21$
 $LAB^*LABa = 25.98 \ 40.3 \ 19.21$
 $LAB^*TCHa = 25.01 \ 44.65 \ 25.49$

relative CIELAB lab*
 $lab^*lab = 0.272 \ 0.451 \ 0.215$
 $lab^*tch = 0.25 \ 0.5 \ 0.071$
 $lab^*nch = 0.5 \ 0.5 \ 0.071$

relative Natural Colour (NC)
 $lab^*lrj = 0.272 \ 0.5 \ 0.0$
 $lab^*tce = 0.25 \ 0.5 \ 0.0$
 $lab^*nce = 0.5 \ 0.5 \ r00j$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 0.0 \ 0.213 \ (1.0)$
 $cmyn3^* = 0.0 \ 1.0 \ 0.787 \ (0.0)$
 $olvi4^* = 1.0 \ 0.0 \ 0.213 \ 1.0$
 $cmyn4^* = 0.0 \ 1.0 \ 0.787 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 51.94 \ 80.61 \ 38.42$
 $LAB^*LABa = 51.94 \ 80.61 \ 38.42$
 $LAB^*TCHa = 50.0 \ 89.29 \ 25.48$

relative CIELAB lab*
 $lab^*lab = 0.544 \ 0.903 \ 0.43$
 $lab^*tch = 0.5 \ 1.0 \ 0.071$
 $lab^*nch = 0.0 \ 1.0 \ 0.071$

relative Natural Colour (NC)
 $lab^*lrj = 0.544 \ 1.0 \ 0.0$
 $lab^*tce = 0.5 \ 1.0 \ 0.0$
 $lab^*nce = 0.0 \ 1.0 \ r00j$

See for similar files: <http://www.ps.bam.de/OE00/>
 Technical information: <http://www.ps.bam.de>
 Version 2.1, io=0.0, CIELAB

BAM registration: 20060101-OE00/10Q/Q00E06FP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 /OE00/ Form: 7/10, Serie: 1/1, Page: 7 Page count: 7

OE00-7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)

3 step scales for constant CIELAB hue 25/360 = 0.071 (right)

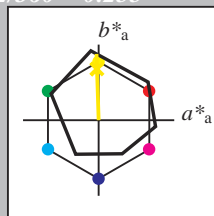
BAM-test chart OE00; Colorimetric systems ORS18 & TLS00
 D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^* \ setcmykcolor$
 output: $cmY0^* / 000n^* \ setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$
 lab^*tch and lab^*nch

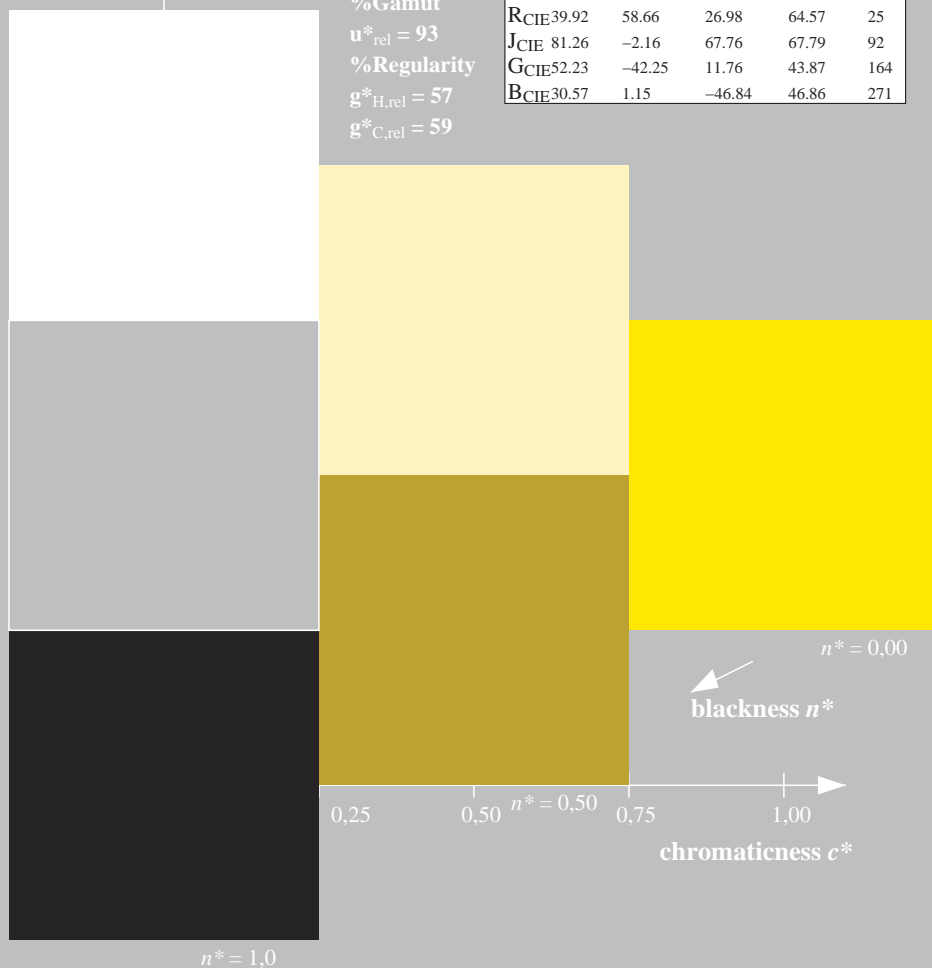
D65: hue J
 LCH*Ma: 86 88 92
 olv*Ma: 1.0 0.9 0.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 47.94 | 65.39 | 50.52 | 82.63 | 38 |
| YMa | 90.37 | -10.26 | 91.75 | 92.32 | 96 |
| LMa | 50.9 | -62.83 | 34.96 | 71.91 | 151 |
| CMa | 58.62 | -30.34 | -45.01 | 54.3 | 236 |
| VMa | 25.72 | 31.1 | -44.4 | 54.22 | 305 |
| MMa | 48.13 | 75.28 | -8.36 | 75.74 | 354 |
| NMa | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.66 | 26.98 | 64.57 | 25 |
| JCIE | 81.26 | -2.16 | 67.76 | 67.79 | 92 |
| GCIE | 52.23 | -42.25 | 11.76 | 43.87 | 164 |
| BCIE | 30.57 | 1.15 | -46.84 | 46.86 | 271 |

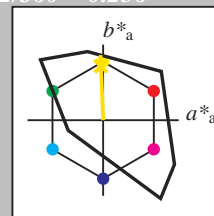
%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 92/360 = 0.256$
 lab^*tch and lab^*nch

D65: hue J
 LCH*Ma: 85 86 92
 olv*Ma: 1.0 0.82 0.0
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 50.5 | 76.92 | 64.55 | 100.42 | 40 |
| YMa | 92.66 | -20.69 | 90.75 | 93.08 | 103 |
| LMa | 83.63 | -82.75 | 79.9 | 115.04 | 136 |
| CMa | 86.88 | -46.16 | -13.55 | 48.12 | 196 |
| VMa | 30.39 | 76.06 | -103.59 | 128.52 | 306 |
| MMa | 57.3 | 94.35 | -58.41 | 110.97 | 328 |
| NMa | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.74 | 27.99 | 65.07 | 25 |
| JCIE | 81.26 | -2.88 | 71.56 | 71.62 | 92 |
| GCIE | 52.23 | -42.41 | 13.6 | 44.55 | 162 |
| BCIE | 30.57 | 1.41 | -46.46 | 46.49 | 272 |

%Gamut
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.0 \ 0.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 95.41 \ 0.0 \ 0.0$
 $LAB^*LABa = 95.41 \ 0.0 \ 0.0$
 $LAB^*TCHa = 99.99 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 1.0 \ 0.0 \ 0.0$
 $lab^*tch = 1.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 1.0 \ 0.0 \ 0.0$
 $lab^*tce = 1.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 47.72 \ 0.0 \ 0.0$
 $LAB^*LABa = 47.72 \ 0.0 \ 0.0$
 $LAB^*TCHa = 50.0 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.5 \ 0.0 \ 0.0$
 $lab^*tch = 0.5 \ 0.0 \ -$
 $lab^*nch = 0.5 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ 0.0 \ 0.0$
 $lab^*tce = 0.5 \ 0.0 \ -$
 $lab^*nce = 0.5 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 0.0 \ 0.0 \ 0.0 \ (1.0)$
 $cmyn3^* = 1.0 \ 1.0 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 1.0 \ 1.0 \ 0.0$
 $cmyn4^* = 0.0 \ 0.0 \ 0.0 \ 1.0$

standard and adapted CIELAB
 $LAB^*LAB = 0.03 \ 0.0 \ 0.0$
 $LAB^*LABa = 0.03 \ 0.0 \ 0.0$
 $LAB^*TCHa = 0.01 \ 0.01 \ -$

relative CIELAB lab*
 $lab^*lab = 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ -$
 $lab^*nch = 1.0 \ 0.0 \ -$

relative Natural Colour (NC)
 $lab^*lrj = 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ -$
 $lab^*nce = 1.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 0.912 \ 0.5 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.088 \ 0.5 \ (0.0)$
 $olvi4^* = 1.0 \ 0.912 \ 0.5 \ 1.0$
 $cmyn4^* = 0.0 \ 0.088 \ 0.5 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 90.31 \ -1.74 \ 43.06$
 $LAB^*LABa = 90.31 \ -1.74 \ 43.06$
 $LAB^*TCHa = 75.0 \ 43.09 \ 92.32$

relative CIELAB lab*
 $lab^*lab = 0.947 \ -0.019 \ 0.499$
 $lab^*tch = 0.75 \ 0.5 \ 0.256$
 $lab^*nch = 0.0 \ 0.5 \ 0.256$

relative Natural Colour (NC)
 $lab^*lrj = 0.947 \ 0.0 \ 0.5$
 $lab^*tce = 0.75 \ 0.5 \ 0.25$
 $lab^*nce = 0.0 \ 0.5 \ j00g$

relative Inform. Technology (IT)
 $olvi3^* = 0.5 \ 0.412 \ 0.0 \ (1.0)$
 $cmyn3^* = 0.5 \ 0.588 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 0.912 \ 0.5 \ 0.5$
 $cmyn4^* = 0.0 \ 0.088 \ 0.5 \ 0.5$

standard and adapted CIELAB
 $LAB^*LAB = 42.62 \ -1.73 \ 43.05$
 $LAB^*LABa = 42.62 \ -1.73 \ 43.05$
 $LAB^*TCHa = 25.01 \ 43.09 \ 92.31$

relative CIELAB lab*
 $lab^*lab = 0.447 \ -0.019 \ 0.499$
 $lab^*tch = 0.25 \ 0.5 \ 0.256$
 $lab^*nch = 0.5 \ 0.5 \ 0.256$

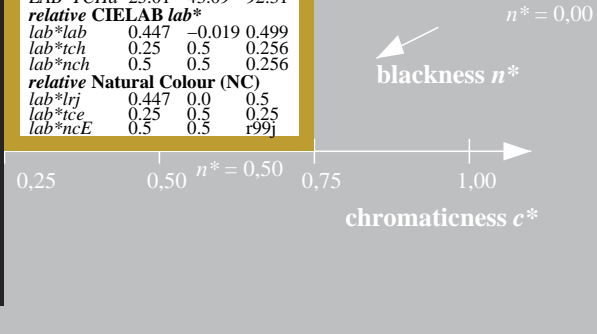
relative Natural Colour (NC)
 $lab^*lrj = 0.447 \ 0.0 \ 0.5$
 $lab^*tce = 0.25 \ 0.5 \ 0.25$
 $lab^*nce = 0.5 \ 0.5 \ j99j$

relative Inform. Technology (IT)
 $olvi3^* = 1.0 \ 0.824 \ 0.0 \ (1.0)$
 $cmyn3^* = 0.0 \ 0.176 \ 1.0 \ (0.0)$
 $olvi4^* = 1.0 \ 0.824 \ 0.0 \ 1.0$
 $cmyn4^* = 0.0 \ 0.176 \ 1.0 \ 0.0$

standard and adapted CIELAB
 $LAB^*LAB = 85.22 \ -3.47 \ 86.11$
 $LAB^*LABa = 85.22 \ -3.47 \ 86.11$
 $LAB^*TCHa = 50.0 \ 86.18 \ 92.32$

relative CIELAB lab*
 $lab^*lab = 0.893 \ -0.039 \ 0.999$
 $lab^*tch = 0.5 \ 1.0 \ 0.256$
 $lab^*nch = 0.0 \ 1.0 \ 0.256$

relative Natural Colour (NC)
 $lab^*lrj = 0.893 \ 0.0 \ 1.0$
 $lab^*tce = 0.5 \ 1.0 \ 0.25$
 $lab^*nce = 0.0 \ 1.0 \ j00g$



OE00-7, 3 step scales for constant CIELAB hue 92/360 = 0.255 (left)

3 step scales for constant CIELAB hue 92/360 = 0.256 (right)

BAM-test chart OE00; Colorimetric systems ORS18 & TLS00
 D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^* \ setcmykcolor$
 output: $cmY0^* / 000n^* \ setcmykcolor$

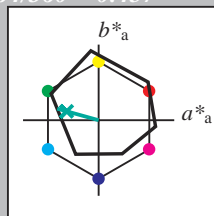
See for similar files: <http://www.ps.bam.de/OE00/>
 Technical information: <http://www.ps.bam.de>
 Version 2.1, io=0.0, CIELAB

BAM registration: 20060101-OE00/10Q/Q00E07FP.PS/.PDF BAM material: code=rh4ta
 application for evaluation and measurement of printer or monitor systems
 /OE00/ Form: 8/10, Serie: 1/1, Page: 8 Page count: 8

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$
 lab^*tch and lab^*nch

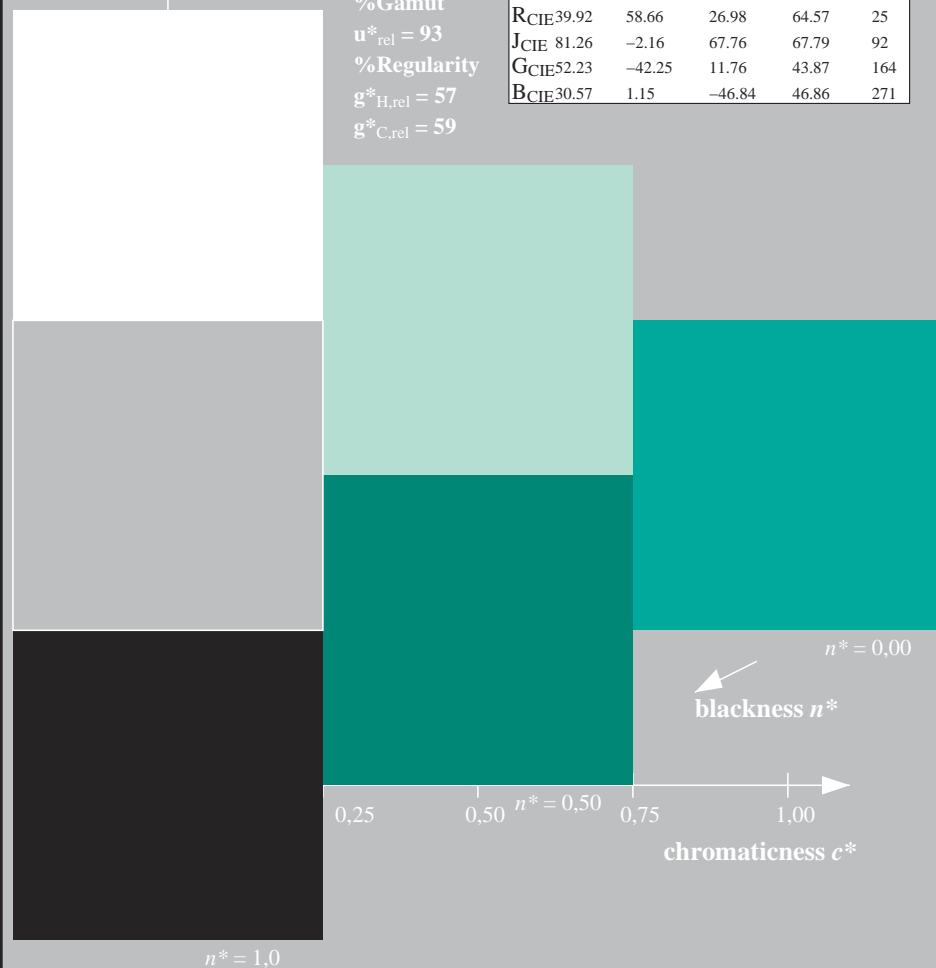
D65: hue G
 LCH*Ma: 53 57 164
 olv*Ma: 0.0 1.0 0.25
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 47.94 | 65.39 | 50.52 | 82.63 | 38 |
| YMa | 90.37 | -10.26 | 91.75 | 92.32 | 96 |
| LMa | 50.9 | -62.83 | 34.96 | 71.91 | 151 |
| CMa | 58.62 | -30.34 | -45.01 | 54.3 | 236 |
| VMa | 25.72 | 31.1 | -44.4 | 54.22 | 305 |
| MMa | 48.13 | 75.28 | -8.36 | 75.74 | 354 |
| NMa | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.66 | 26.98 | 64.57 | 25 |
| JCIE | 81.26 | -2.16 | 67.76 | 67.79 | 92 |
| GCIE | 52.23 | -42.25 | 11.76 | 43.87 | 164 |
| BCIE | 30.57 | 1.15 | -46.84 | 46.86 | 271 |

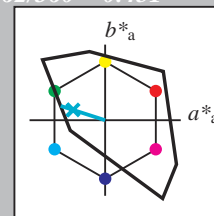
%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 162/360 = 0.451$
 lab^*tch and lab^*nch

D65: hue G
 LCH*Ma: 86 62 162
 olv*Ma: 0.0 1.0 0.65
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 50.5 | 76.92 | 64.55 | 100.42 | 40 |
| YMa | 92.66 | -20.69 | 90.75 | 93.08 | 103 |
| LMa | 83.63 | -82.75 | 79.9 | 115.04 | 136 |
| CMa | 86.88 | -46.16 | -13.55 | 48.12 | 196 |
| VMa | 30.39 | 76.06 | -103.59 | 128.52 | 306 |
| MMa | 57.3 | 94.35 | -58.41 | 110.97 | 328 |
| NMa | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.74 | 27.99 | 65.07 | 25 |
| JCIE | 81.26 | -2.88 | 71.56 | 71.62 | 92 |
| GCIE | 52.23 | -42.41 | 13.6 | 44.55 | 162 |
| BCIE | 30.57 | 1.41 | -46.46 | 46.49 | 272 |

%Gamut
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-----|-------|
| olvi3* | 1.0 | 1.0 | 1.0 | (1.0) |
| cmyn3* | 0.0 | 0.0 | 0.0 | (0.0) |
| olvi4* | 1.0 | 1.0 | 1.0 | 1.0 |
| cmyn4* | 0.0 | 0.0 | 0.0 | 0.0 |

standard and adapted CIELAB

| | | | |
|----------|-------|------|-----|
| LAB*LAB | 95.41 | 0.0 | 0.0 |
| LAB*LABa | 95.41 | 0.0 | 0.0 |
| LAB*TCHa | 99.99 | 0.01 | - |

relative CIELAB lab*

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

relative Natural Colour (NC)

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

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-------|-------|
| olvi3* | 0.5 | 1.0 | 0.826 | (1.0) |
| cmyn3* | 0.5 | 0.0 | 0.174 | (0.0) |
| olvi4* | 0.5 | 1.0 | 0.827 | 1.0 |
| cmyn4* | 0.5 | 0.0 | 0.173 | 0.0 |

standard and adapted CIELAB

| | | | |
|----------|-------|--------|--------|
| LAB*LAB | 90.57 | -29.42 | 9.43 |
| LAB*LABa | 90.57 | -29.42 | 9.43 |
| LAB*TCHa | 75.0 | 30.9 | 162.23 |

relative CIELAB lab*

| | | | |
|---------|-------|--------|-------|
| lab*lab | 0.949 | -0.475 | 0.153 |
| lab*tch | 0.75 | 0.5 | 0.451 |
| lab*nch | 0.0 | 0.5 | 0.451 |

relative Natural Colour (NC)

| | | | |
|---------|-------|--------|------|
| lab*lrj | 0.949 | -0.499 | 0.0 |
| lab*tce | 0.75 | 0.5 | 0.5 |
| lab*nce | 0.0 | 0.5 | g00b |

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-----|-------|
| olvi3* | 0.5 | 0.5 | 0.5 | (1.0) |
| cmyn3* | 0.5 | 0.5 | 0.5 | (0.0) |
| olvi4* | 1.0 | 1.0 | 1.0 | 0.5 |
| cmyn4* | 0.0 | 0.0 | 0.0 | 0.5 |

standard and adapted CIELAB

| | | | |
|----------|-------|------|-----|
| LAB*LAB | 47.72 | 0.0 | 0.0 |
| LAB*LABa | 47.72 | 0.0 | 0.0 |
| LAB*TCHa | 50.0 | 0.01 | - |

relative CIELAB lab*

| | | | |
|---------|-----|-----|-----|
| lab*lab | 0.5 | 0.0 | 0.0 |
| lab*tch | 0.5 | 0.0 | - |
| lab*nch | 0.5 | 0.0 | - |

relative Natural Colour (NC)

| | | | |
|---------|-----|-----|-----|
| lab*lrj | 0.5 | 0.0 | 0.0 |
| lab*tce | 0.5 | 0.0 | - |
| lab*nce | 0.5 | 0.0 | - |

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-------|-------|
| olvi3* | 0.0 | 0.5 | 0.326 | (1.0) |
| cmyn3* | 1.0 | 0.5 | 0.674 | (0.0) |
| olvi4* | 0.5 | 1.0 | 0.826 | 0.5 |
| cmyn4* | 0.5 | 0.0 | 0.174 | 0.5 |

standard and adapted CIELAB

| | | | |
|----------|-------|--------|--------|
| LAB*LAB | 42.88 | -29.42 | 9.44 |
| LAB*LABa | 42.88 | -29.42 | 9.44 |
| LAB*TCHa | 25.01 | 30.91 | 162.22 |

relative CIELAB lab*

| | | | |
|---------|-------|--------|-------|
| lab*lab | 0.449 | -0.475 | 0.153 |
| lab*tch | 0.25 | 0.5 | 0.451 |
| lab*nch | 0.5 | 0.5 | 0.451 |

relative Natural Colour (NC)

| | | | |
|---------|-------|--------|------|
| lab*lrj | 0.449 | -0.499 | 0.0 |
| lab*tce | 0.25 | 0.5 | 0.5 |
| lab*nce | 0.5 | 0.5 | g99g |

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-------|-------|
| olvi3* | 0.0 | 1.0 | 0.653 | (1.0) |
| cmyn3* | 1.0 | 0.0 | 0.347 | (0.0) |
| olvi4* | 0.0 | 1.0 | 0.653 | 1.0 |
| cmyn4* | 1.0 | 0.0 | 0.347 | 0.0 |

standard and adapted CIELAB

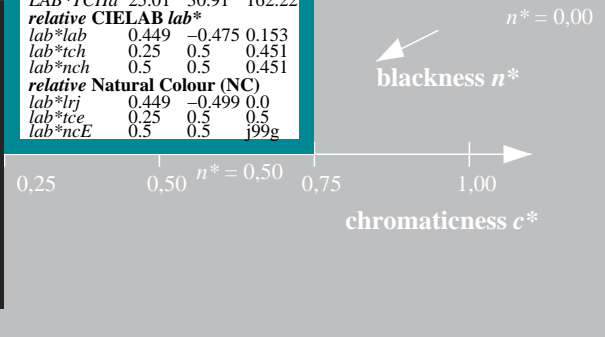
| | | | |
|----------|-------|--------|--------|
| LAB*LAB | 85.74 | -58.84 | 18.87 |
| LAB*LABa | 85.74 | -58.84 | 18.87 |
| LAB*TCHa | 50.0 | 61.8 | 162.23 |

relative CIELAB lab*

| | | | |
|---------|-------|--------|-------|
| lab*lab | 0.899 | -0.951 | 0.305 |
| lab*tch | 0.5 | 1.0 | 0.451 |
| lab*nch | 0.0 | 1.0 | 0.451 |

relative Natural Colour (NC)

| | | | |
|---------|-------|--------|------|
| lab*lrj | 0.899 | -0.999 | 0.0 |
| lab*tce | 0.5 | 1.0 | 0.5 |
| lab*nce | 0.0 | 1.0 | g00b |



OE00-7, 3 step scales for constant CIELAB hue 164/360 = 0.457 (left)

3 step scales for constant CIELAB hue 162/360 = 0.451 (right)

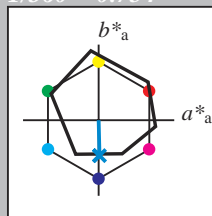
BAM-test chart OE00; Colorimetric systems ORS18 & TLS00
 D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^*_{setcmYkcolor}$
 output: $cmY0^*/000n^*_{setcmYkcolor}$

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$
 lab^*tch and lab^*nch

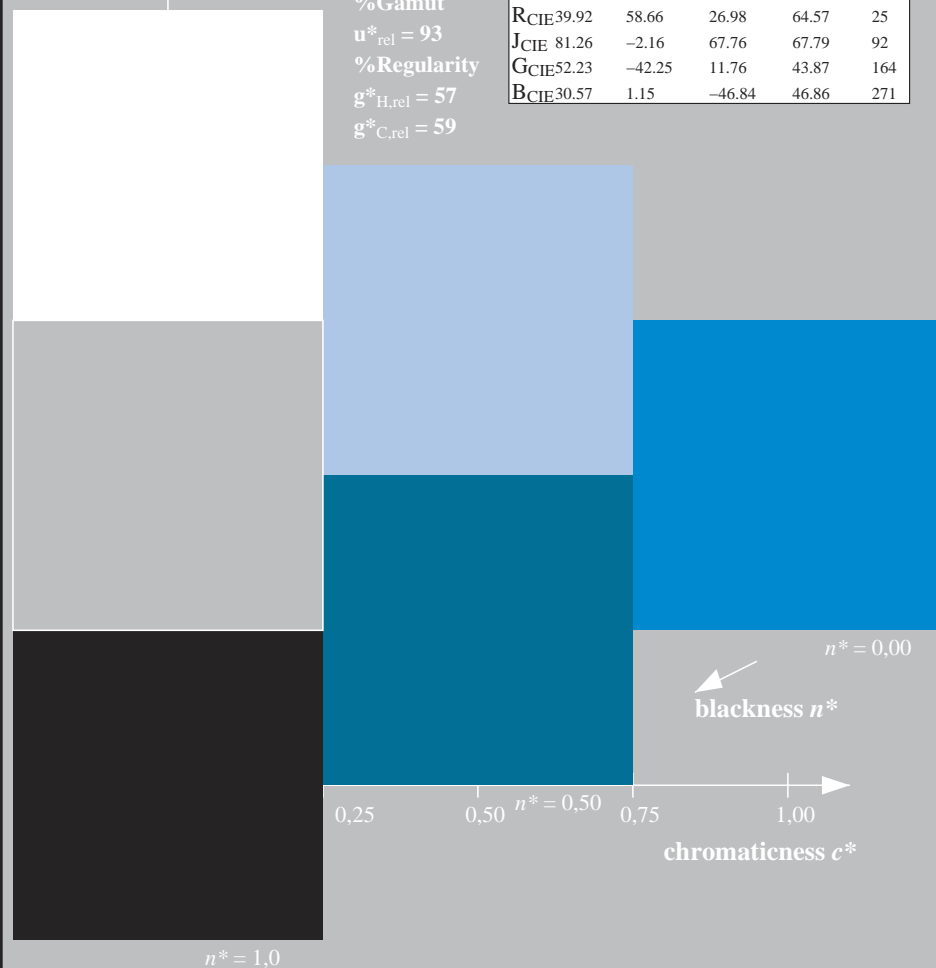
D65: hue B
 LCH*Ma: 42 45 271
 olv*Ma: 0.0 0.49 1.0
 triangle lightness t^*



ORS18; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 47.94 | 65.39 | 50.52 | 82.63 | 38 |
| YMa | 90.37 | -10.26 | 91.75 | 92.32 | 96 |
| LMa | 50.9 | -62.83 | 34.96 | 71.91 | 151 |
| CMa | 58.62 | -30.34 | -45.01 | 54.3 | 236 |
| VMa | 25.72 | 31.1 | -44.4 | 54.22 | 305 |
| MMa | 48.13 | 75.28 | -8.36 | 75.74 | 354 |
| NMa | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.66 | 26.98 | 64.57 | 25 |
| JCIE | 81.26 | -2.16 | 67.76 | 67.79 | 92 |
| GCIE | 52.23 | -42.25 | 11.76 | 43.87 | 164 |
| BCIE | 30.57 | 1.15 | -46.84 | 46.86 | 271 |

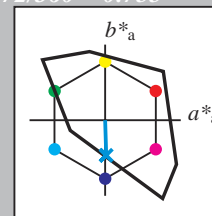
%Gamut
 $u^*_{rel} = 93$
 %Regularity
 $g^*_{H,rel} = 57$
 $g^*_{C,rel} = 59$



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 272/360 = 0.755$
 lab^*tch and lab^*nch

D65: hue B
 LCH*Ma: 65 49 272
 olv*Ma: 0.0 0.61 1.0
 triangle lightness t^*



TLS00; adapted (a) CIELAB data

| | $L^*=L^*_a$ | a^*_a | b^*_a | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| OMa | 50.5 | 76.92 | 64.55 | 100.42 | 40 |
| YMa | 92.66 | -20.69 | 90.75 | 93.08 | 103 |
| LMa | 83.63 | -82.75 | 79.9 | 115.04 | 136 |
| CMa | 86.88 | -46.16 | -13.55 | 48.12 | 196 |
| VMa | 30.39 | 76.06 | -103.59 | 128.52 | 306 |
| MMa | 57.3 | 94.35 | -58.41 | 110.97 | 328 |
| NMa | 0.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.74 | 27.99 | 65.07 | 25 |
| JCIE | 81.26 | -2.88 | 71.56 | 71.62 | 92 |
| GCIE | 52.23 | -42.41 | 13.6 | 44.55 | 162 |
| BCIE | 30.57 | 1.41 | -46.46 | 46.49 | 272 |

%Gamut
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-----|-------|
| olvi3* | 1.0 | 1.0 | 1.0 | (1.0) |
| cmyn3* | 0.0 | 0.0 | 0.0 | (0.0) |
| olvi4* | 1.0 | 1.0 | 1.0 | 1.0 |
| cmyn4* | 0.0 | 0.0 | 0.0 | 0.0 |

standard and adapted CIELAB

| | | | |
|----------|-------|------|-----|
| LAB*LAB | 95.41 | 0.0 | 0.0 |
| LAB*LABa | 95.41 | 0.0 | 0.0 |
| LAB*TCHa | 99.99 | 0.01 | - |

relative CIELAB lab*

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

relative Natural Colour (NC)

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

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-------|-----|-------|
| olvi3* | 0.5 | 0.805 | 1.0 | (1.0) |
| cmyn3* | 0.5 | 0.195 | 0.0 | (0.0) |
| olvi4* | 0.5 | 0.805 | 1.0 | 1.0 |
| cmyn4* | 0.5 | 0.195 | 0.0 | 0.0 |

standard and adapted CIELAB

| | | | |
|----------|-------|-------|--------|
| LAB*LAB | 80.13 | 0.73 | -24.31 |
| LAB*LABa | 80.13 | 0.73 | -24.31 |
| LAB*TCHa | 75.0 | 24.33 | 271.72 |

relative CIELAB lab*

| | | | |
|---------|------|-------|--------|
| lab*lab | 0.84 | 0.015 | -0.499 |
| lab*tch | 0.75 | 0.5 | 0.755 |
| lab*nch | 0.0 | 0.5 | 0.755 |

relative Natural Colour (NC)

| | | | |
|---------|------|-----|--------|
| lab*lrj | 0.84 | 0.0 | -0.499 |
| lab*tce | 0.75 | 0.5 | 0.75 |
| lab*nce | 0.0 | 0.5 | g99b |

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-----|-----|-------|
| olvi3* | 0.5 | 0.5 | 0.5 | (1.0) |
| cmyn3* | 0.5 | 0.5 | 0.5 | (0.0) |
| olvi4* | 1.0 | 1.0 | 1.0 | 0.5 |
| cmyn4* | 0.0 | 0.0 | 0.0 | 0.5 |

standard and adapted CIELAB

| | | | |
|----------|-------|------|-----|
| LAB*LAB | 47.72 | 0.0 | 0.0 |
| LAB*LABa | 47.72 | 0.0 | 0.0 |
| LAB*TCHa | 50.0 | 0.01 | - |

relative CIELAB lab*

| | | | |
|---------|-----|-----|-----|
| lab*lab | 0.5 | 0.0 | 0.0 |
| lab*tch | 0.5 | 0.0 | - |
| lab*nch | 0.5 | 0.0 | - |

relative Natural Colour (NC)

| | | | |
|---------|-----|-----|-----|
| lab*lrj | 0.5 | 0.0 | 0.0 |
| lab*tce | 0.5 | 0.0 | - |
| lab*nce | 0.5 | 0.0 | - |

relative Inform. Technology (IT)

| | | | | |
|--------|-----|-------|-----|-------|
| olvi3* | 0.0 | 0.305 | 0.5 | (1.0) |
| cmyn3* | 1.0 | 0.695 | 0.5 | (0.0) |
| olvi4* | 0.5 | 0.805 | 1.0 | 0.5 |
| cmyn4* | 0.5 | 0.195 | 0.0 | 0.5 |

standard and adapted CIELAB

| | | | |
|----------|-------|-------|--------|
| LAB*LAB | 32.44 | 0.74 | -24.32 |
| LAB*LABa | 32.44 | 0.74 | -24.32 |
| LAB*TCHa | 25.01 | 24.34 | 271.75 |

relative CIELAB lab*

| | | | |
|---------|------|-------|--------|
| lab*lab | 0.34 | 0.015 | -0.499 |
| lab*tch | 0.25 | 0.5 | 0.755 |
| lab*nch | 0.5 | 0.5 | 0.755 |

relative Natural Colour (NC)

| | | | |
|---------|------|-----|--------|
| lab*lrj | 0.34 | 0.0 | -0.499 |
| lab*tce | 0.25 | 0.5 | 0.75 |
| lab*nce | 0.5 | 0.5 | b00r |

relative Inform. Technology (IT)

| | | | | |
|--------|-----|------|-----|-------|
| olvi3* | 0.0 | 0.61 | 1.0 | (1.0) |
| cmyn3* | 1.0 | 0.39 | 0.0 | (0.0) |
| olvi4* | 0.0 | 0.61 | 1.0 | 1.0 |
| cmyn4* | 1.0 | 0.39 | 0.0 | 0.0 |

standard and adapted CIELAB

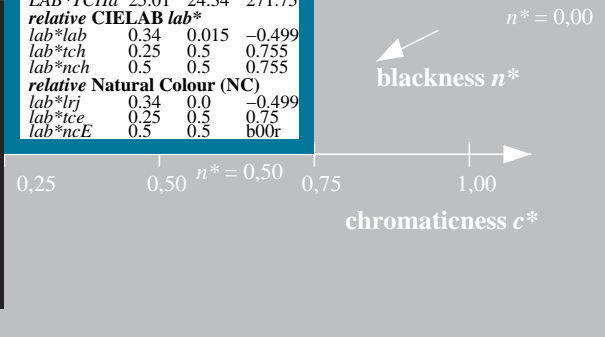
| | | | |
|----------|-------|-------|--------|
| LAB*LAB | 64.86 | 1.47 | -48.64 |
| LAB*LABa | 64.86 | 1.47 | -48.64 |
| LAB*TCHa | 50.0 | 48.67 | 271.74 |

relative CIELAB lab*

| | | | |
|---------|------|------|--------|
| lab*lab | 0.68 | 0.03 | -0.998 |
| lab*tch | 0.5 | 1.0 | 0.755 |
| lab*nch | 0.0 | 1.0 | 0.755 |

relative Natural Colour (NC)

| | | | |
|---------|------|-----|--------|
| lab*lrj | 0.68 | 0.0 | -0.999 |
| lab*tce | 0.5 | 1.0 | 0.75 |
| lab*nce | 0.0 | 1.0 | g99b |



OE000-7, 3 step scales for constant CIELAB hue 271/360 = 0.754 (left)

3 step scales for constant CIELAB hue 272/360 = 0.755 (right)

BAM-test chart OE00; Colorimetric systems ORS18 & TLS00
 D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^*_{setcmYkcolor}$
 output: $cmY0^*/000n^*_{setcmYkcolor}$