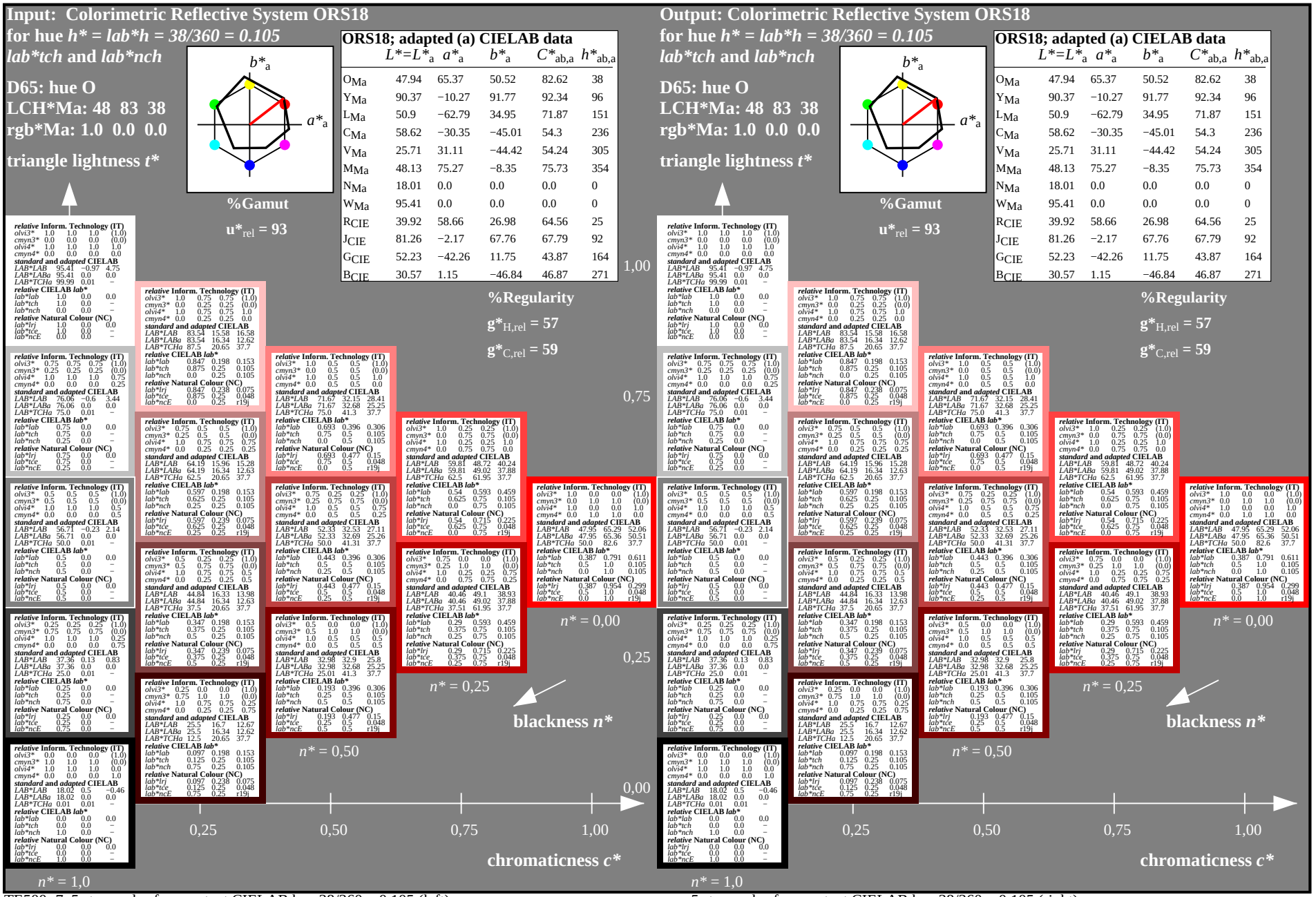
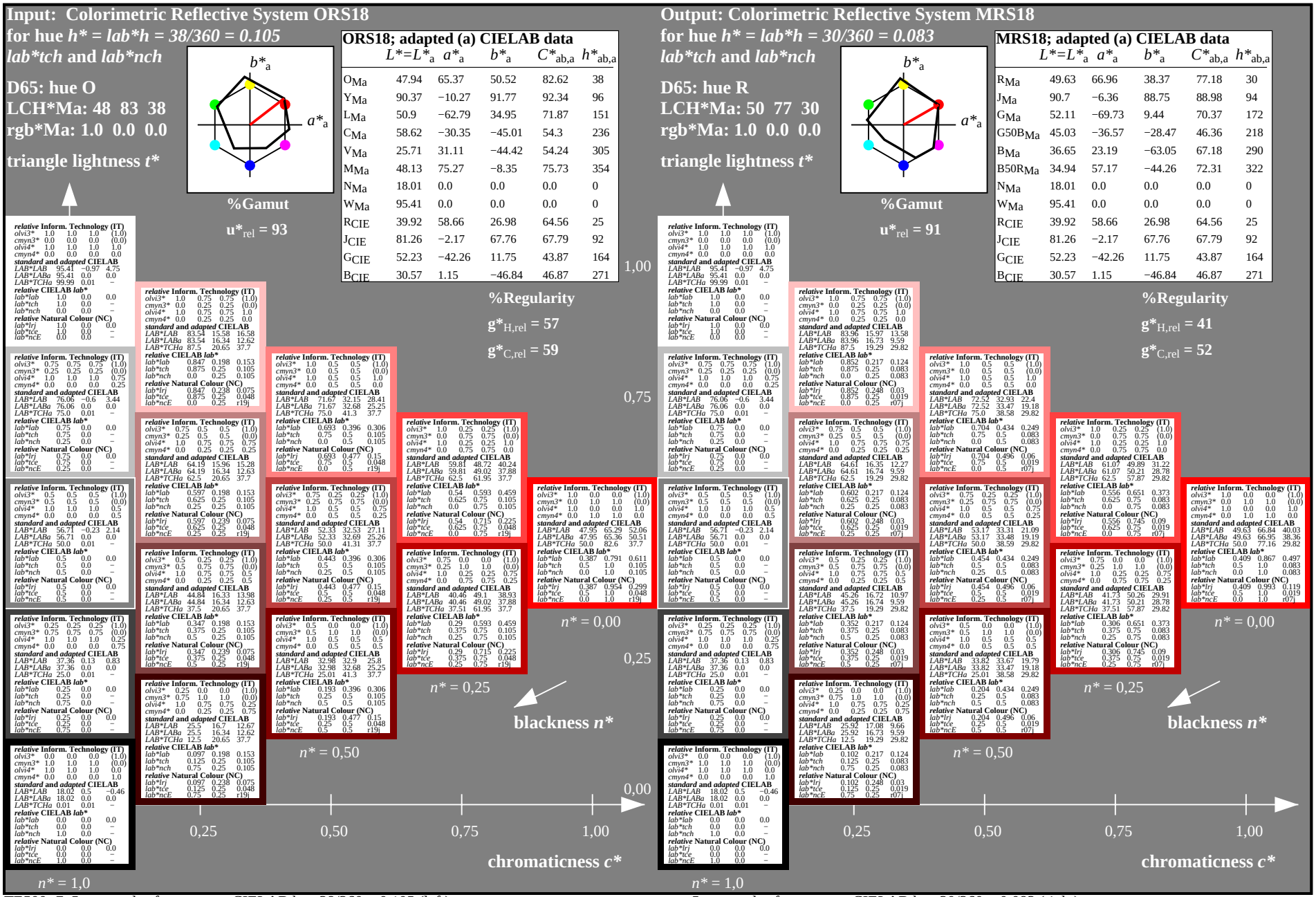


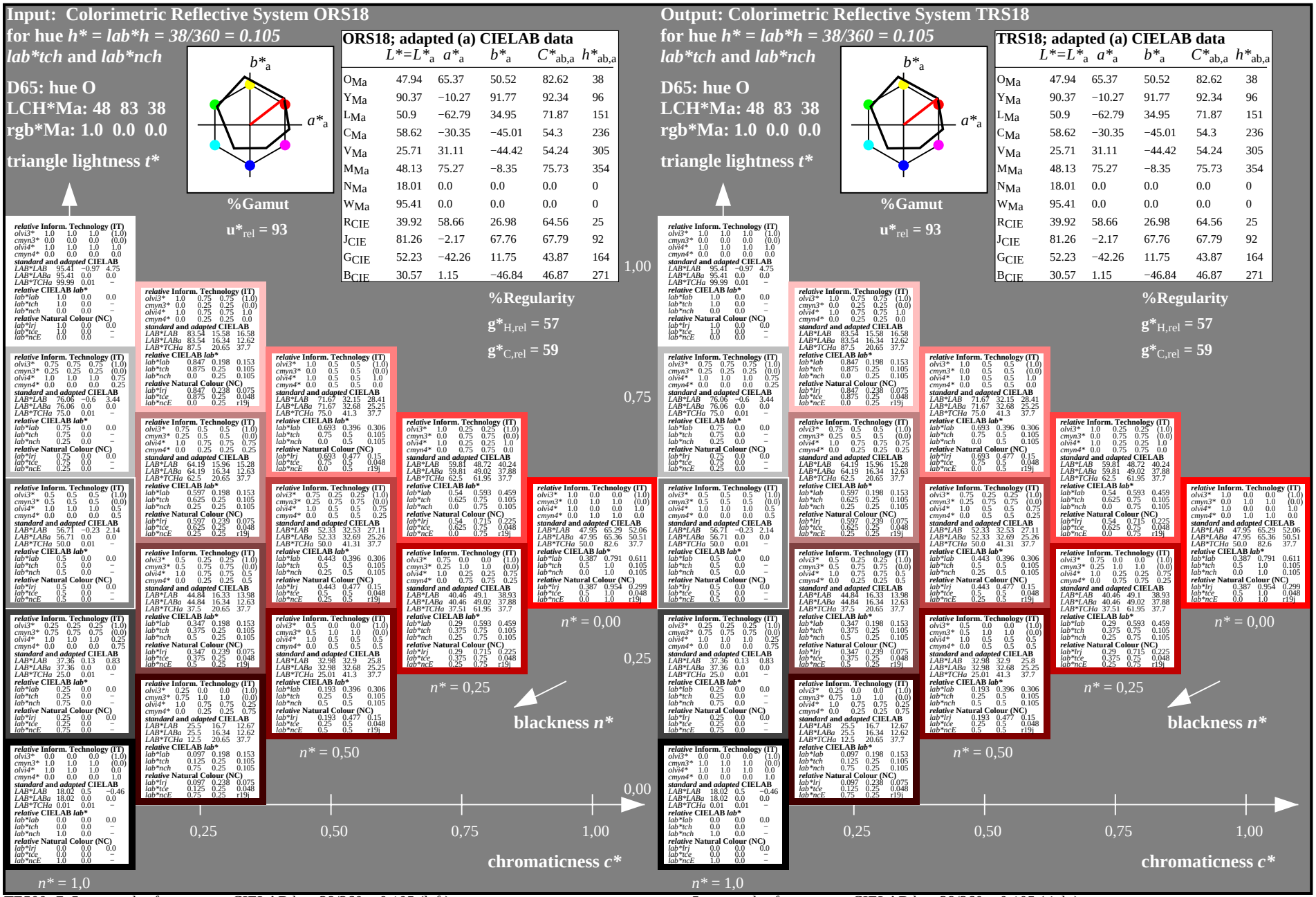

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



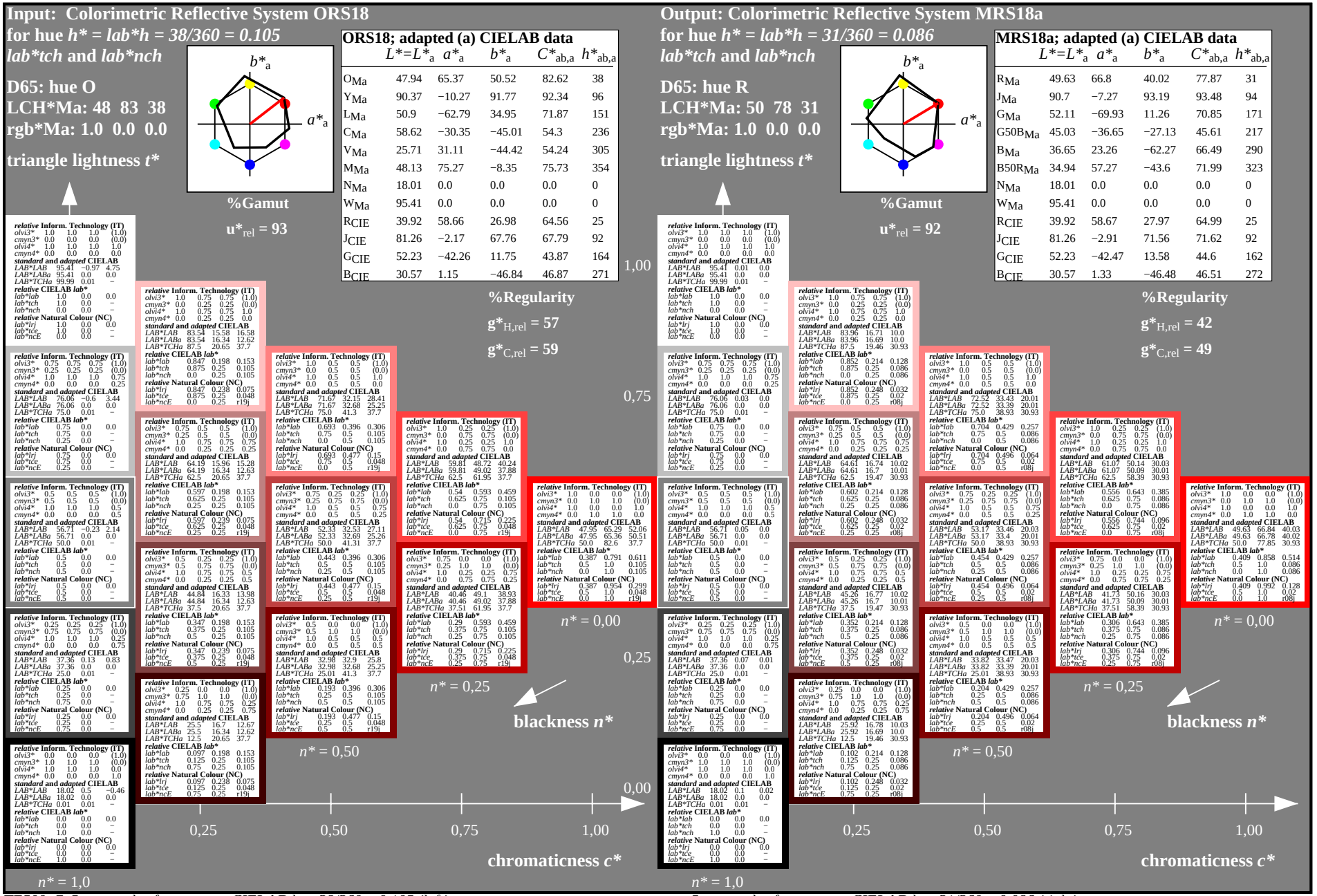

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)



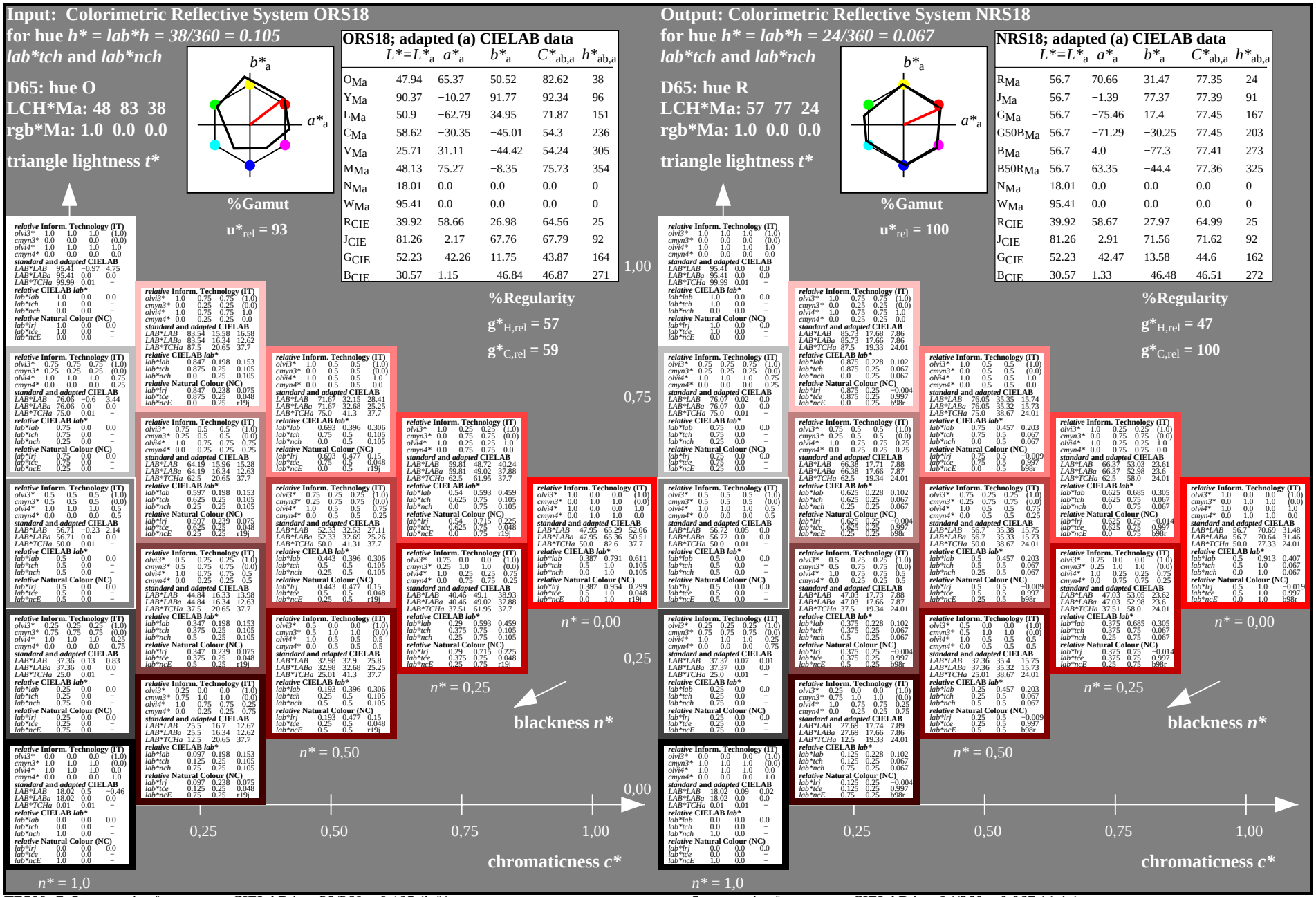

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



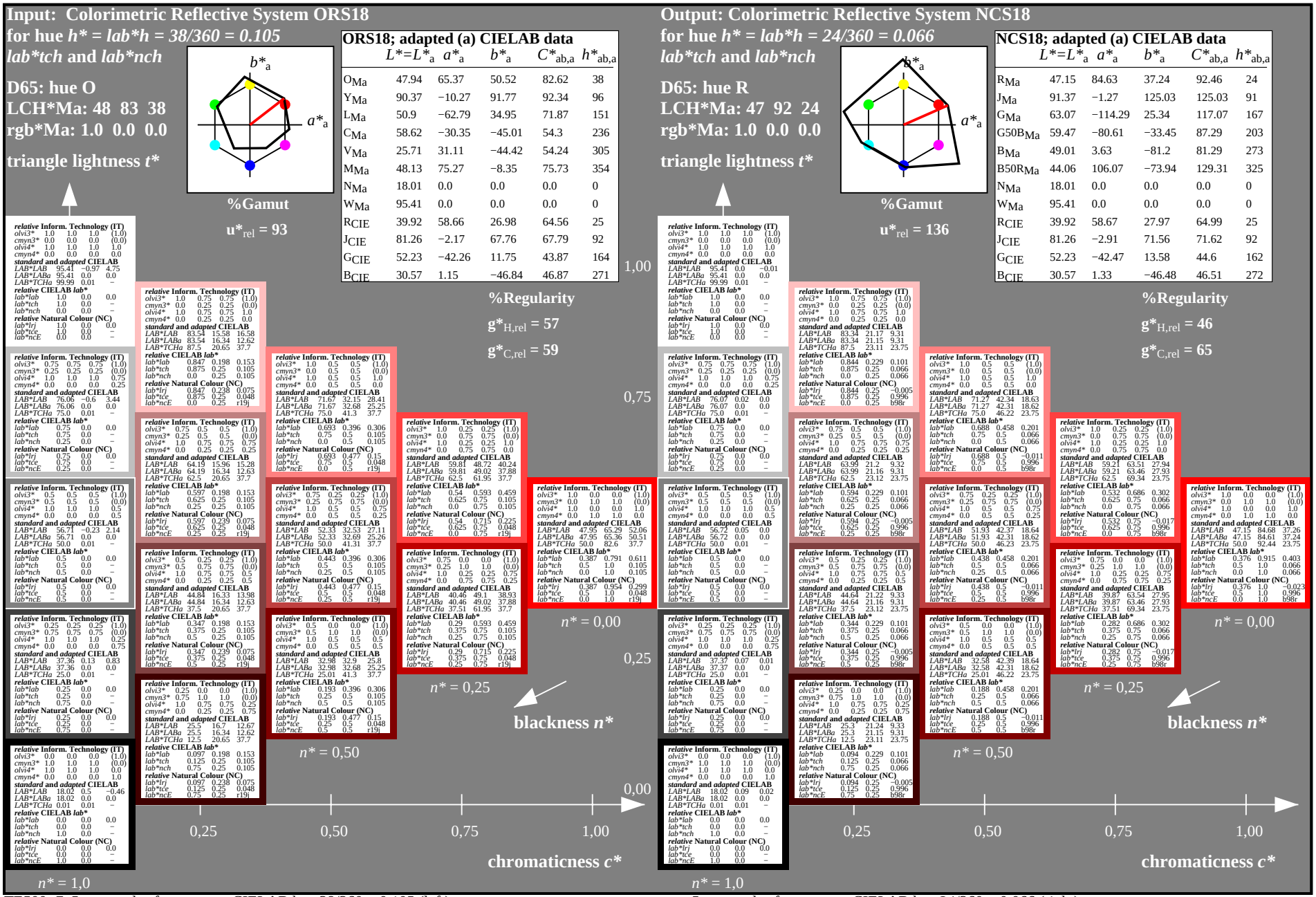

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 31/360 = 0.086 (right)



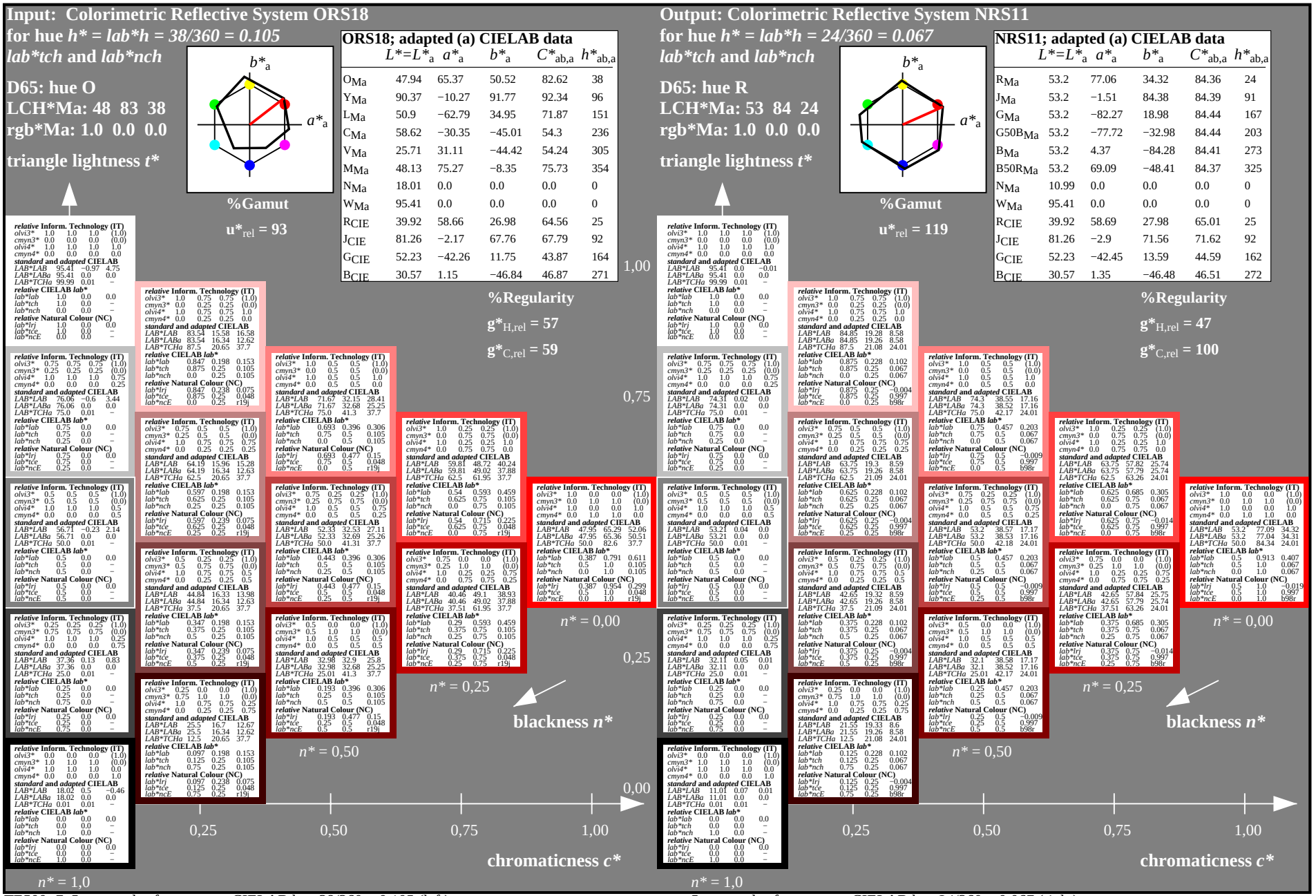

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



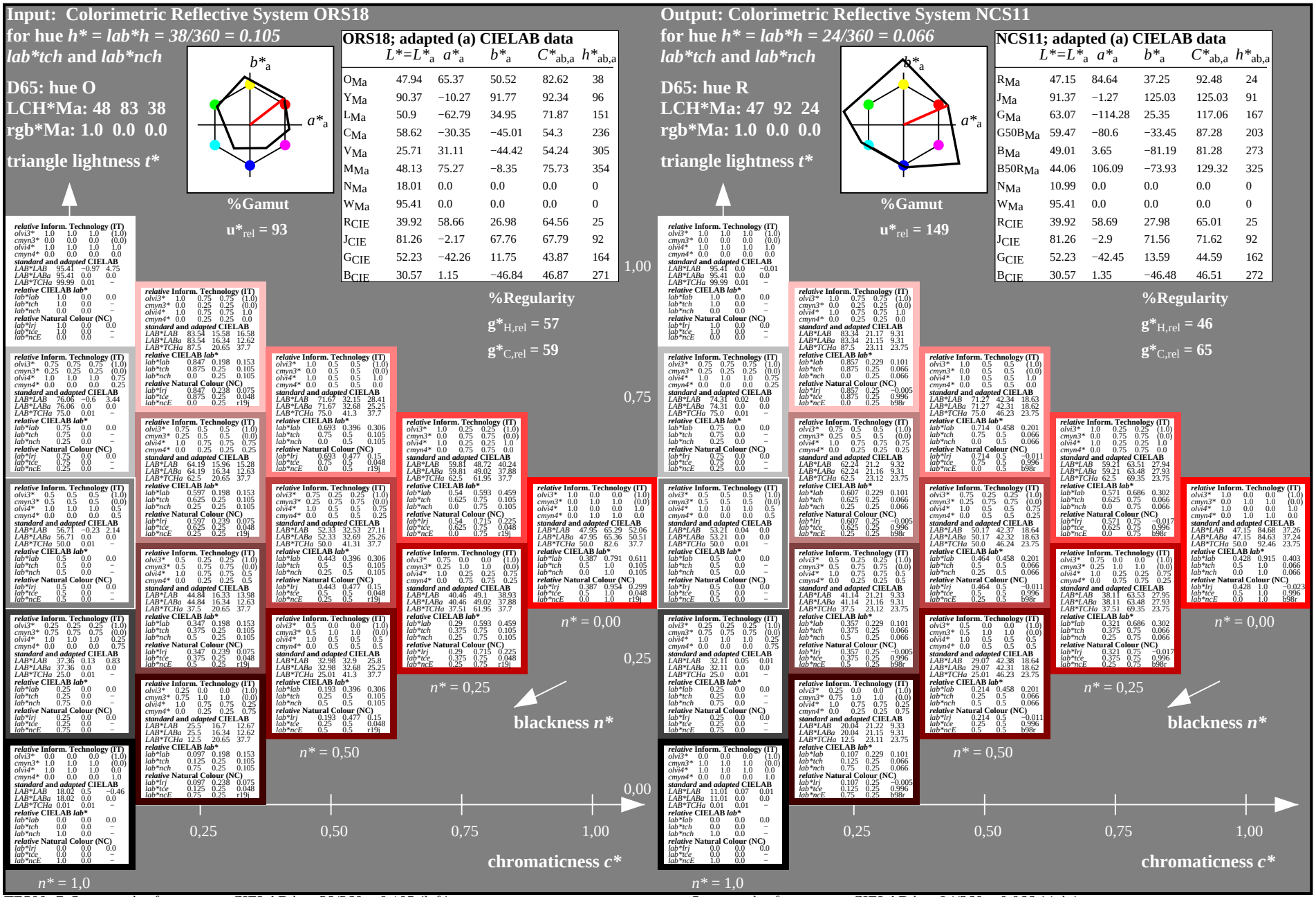

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)



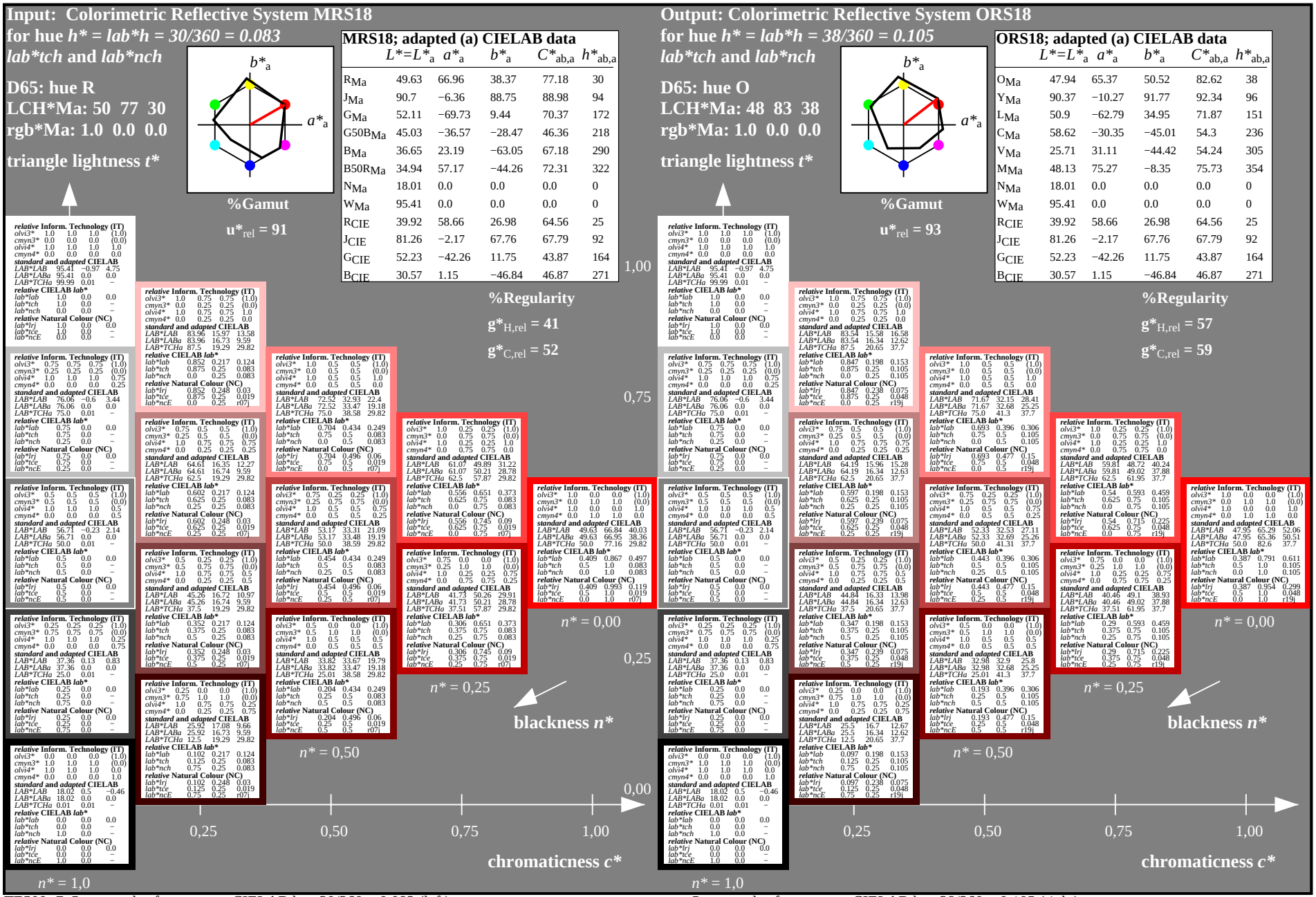

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



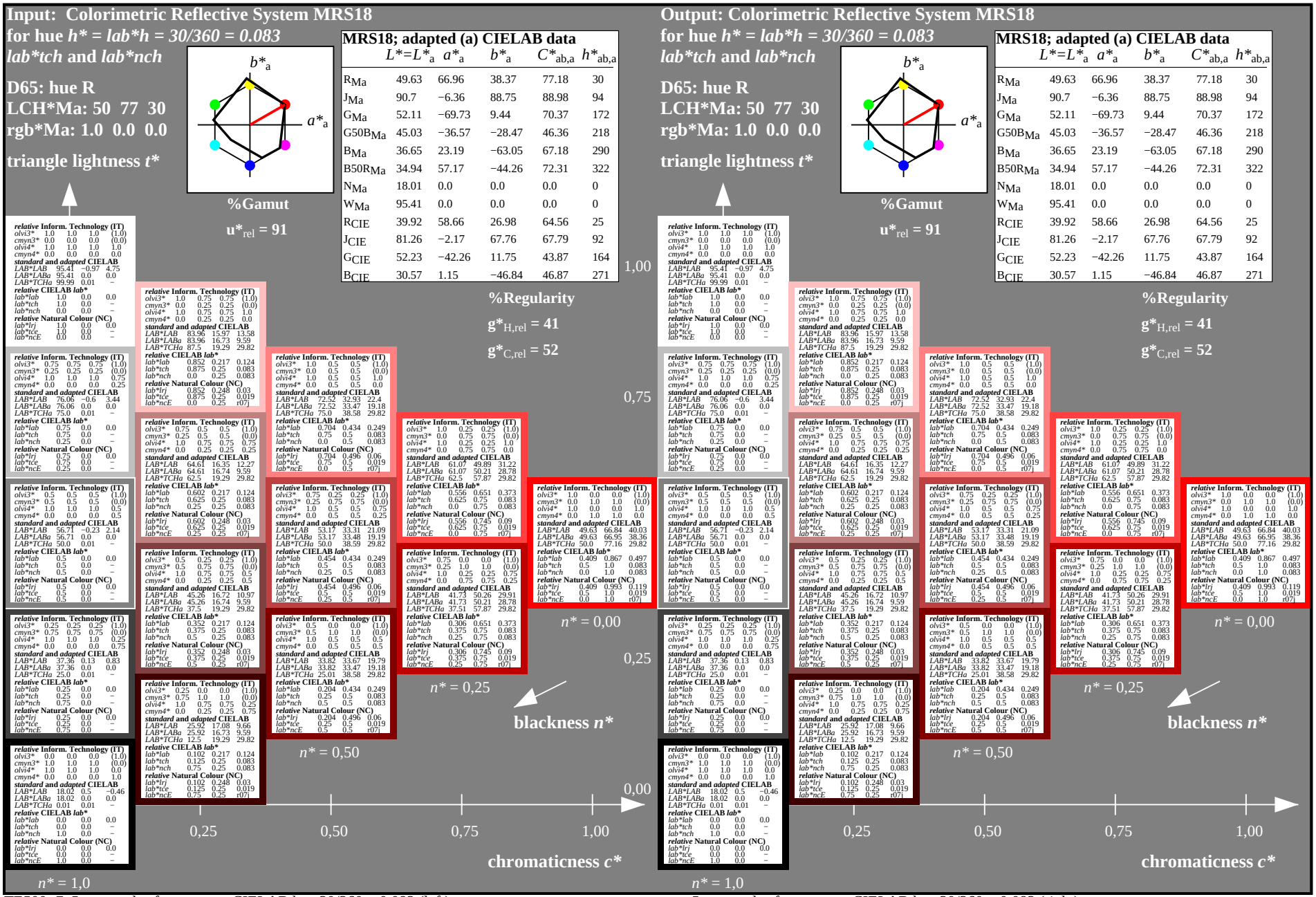

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)



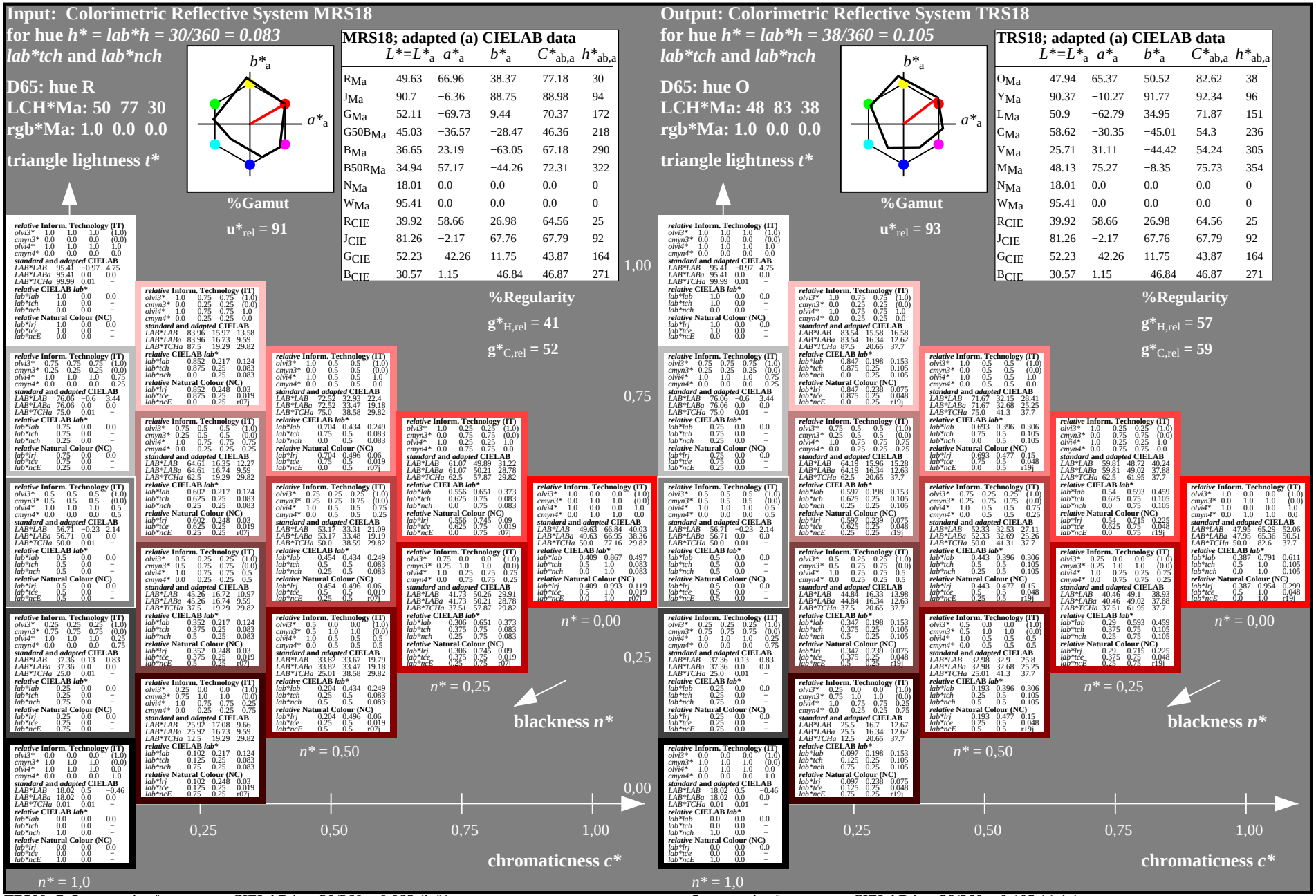

TE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



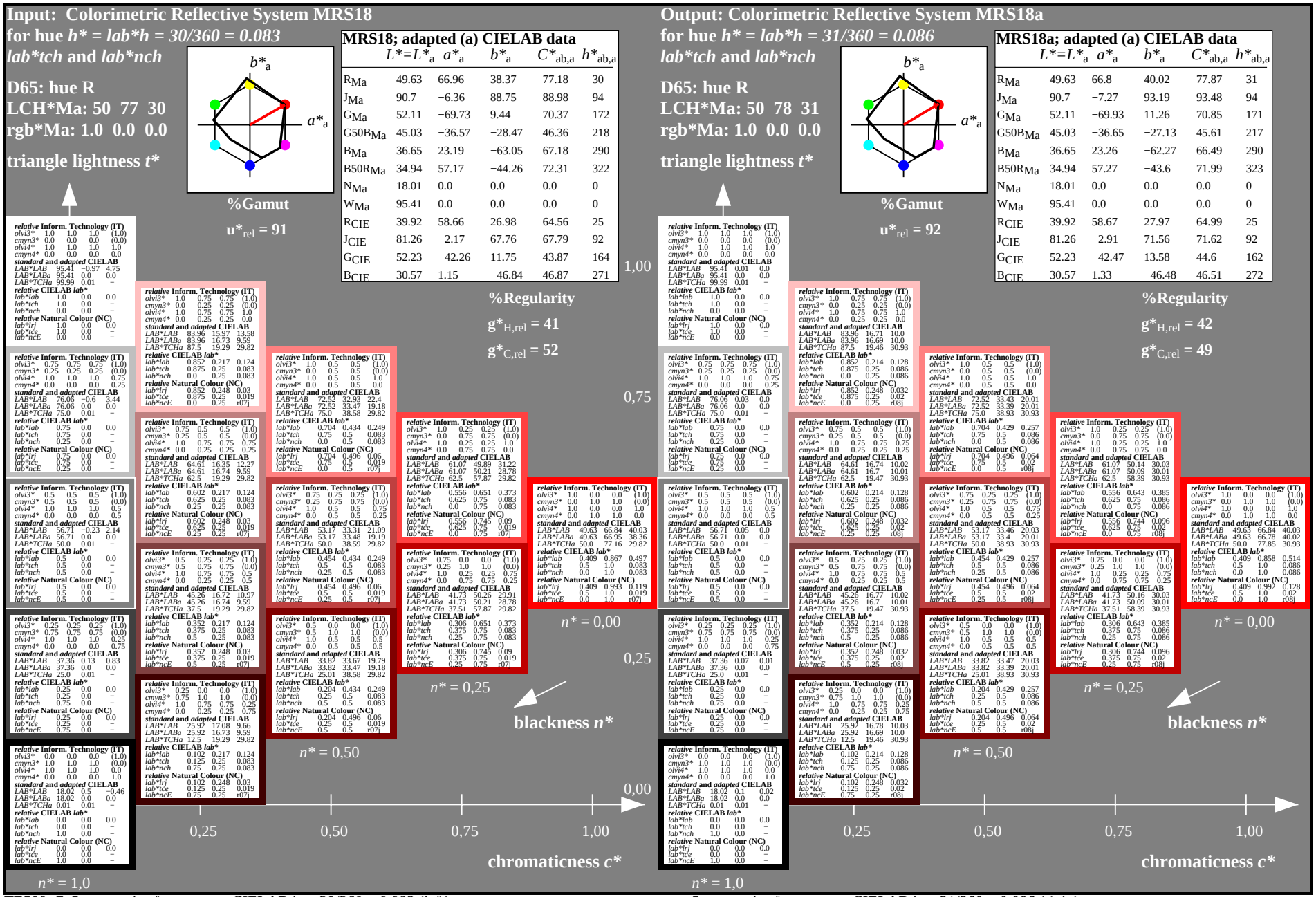

TE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)



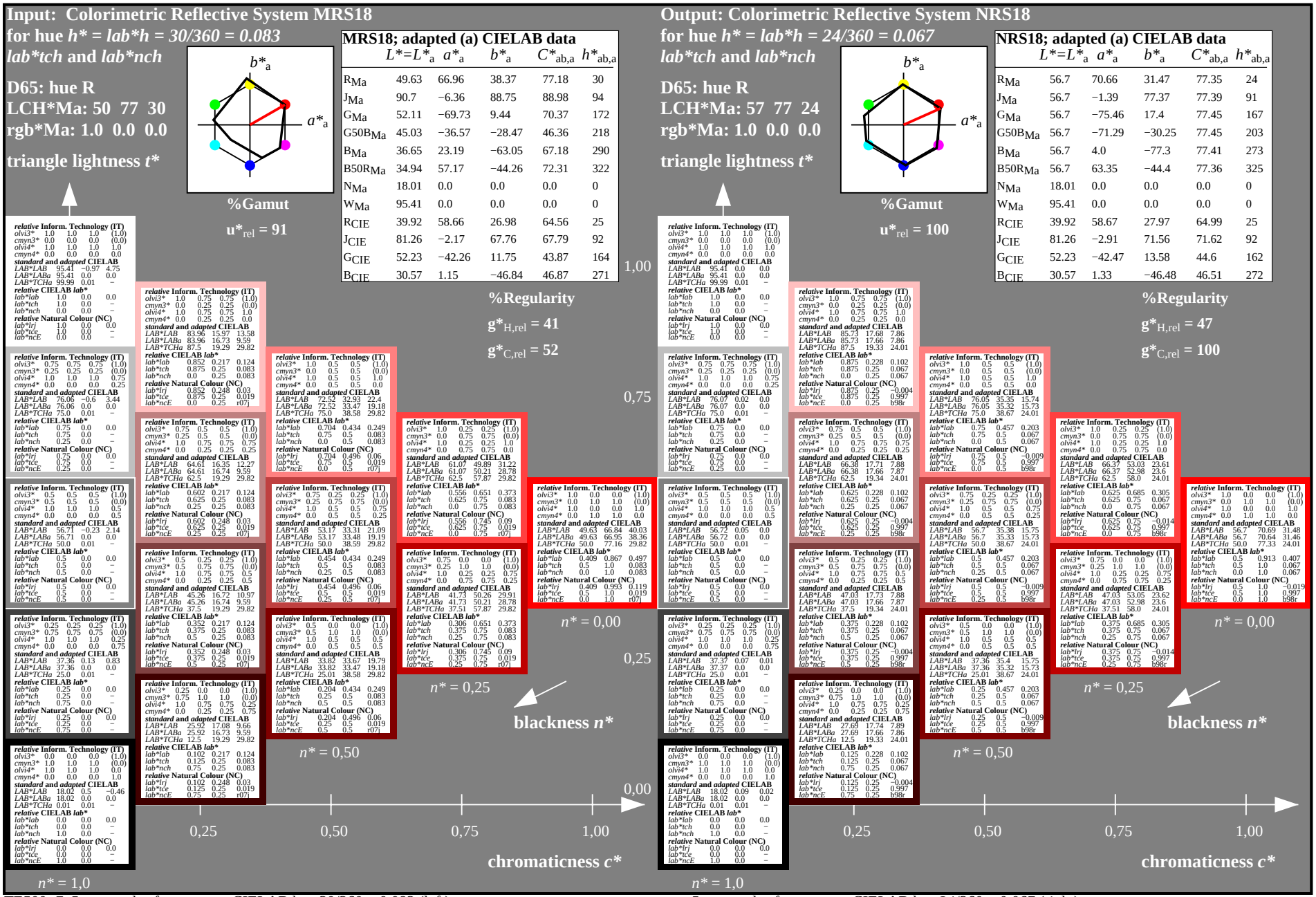

TE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



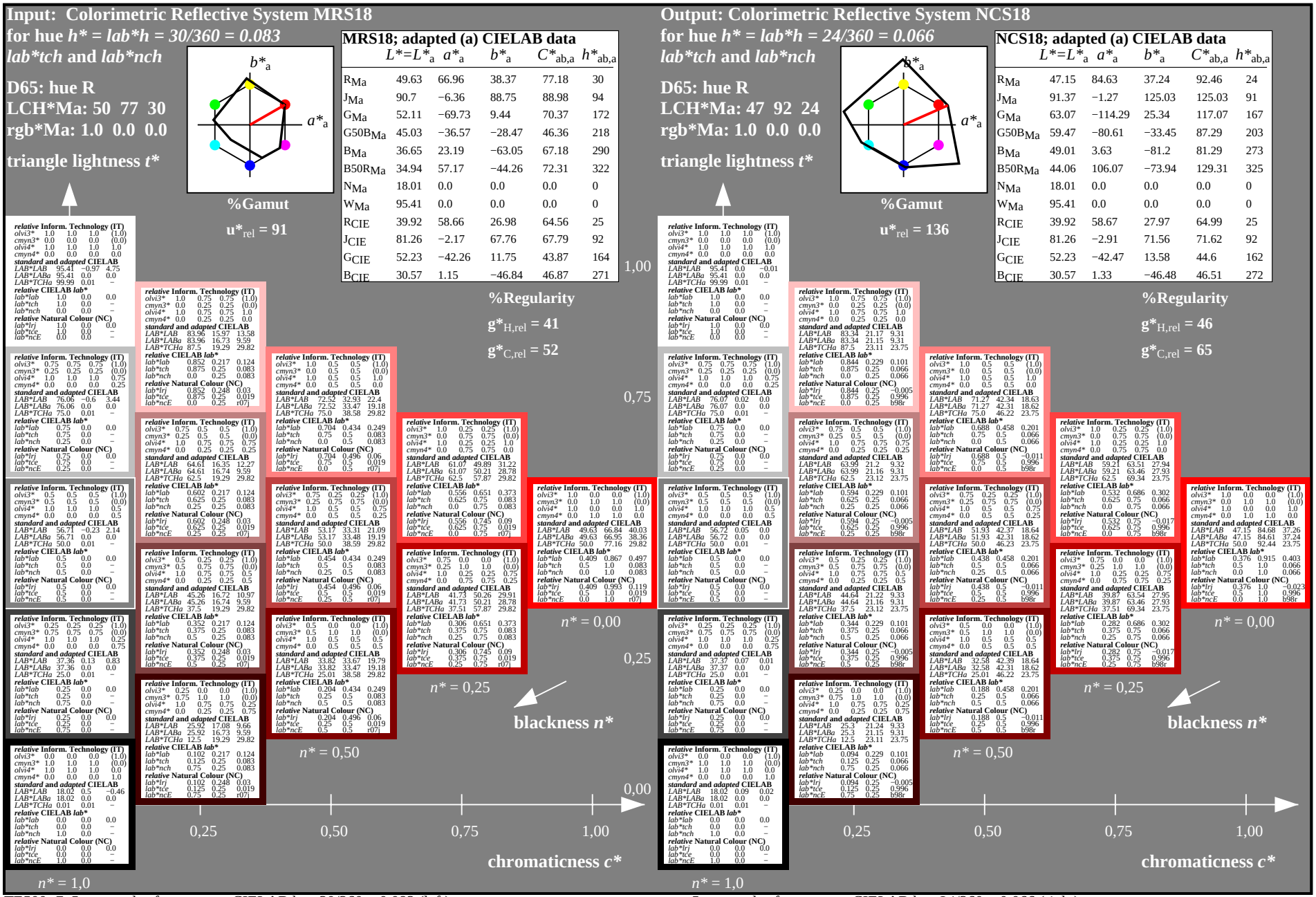

TE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

5 step scales for constant CIELAB hue 31/360 = 0.086 (right)



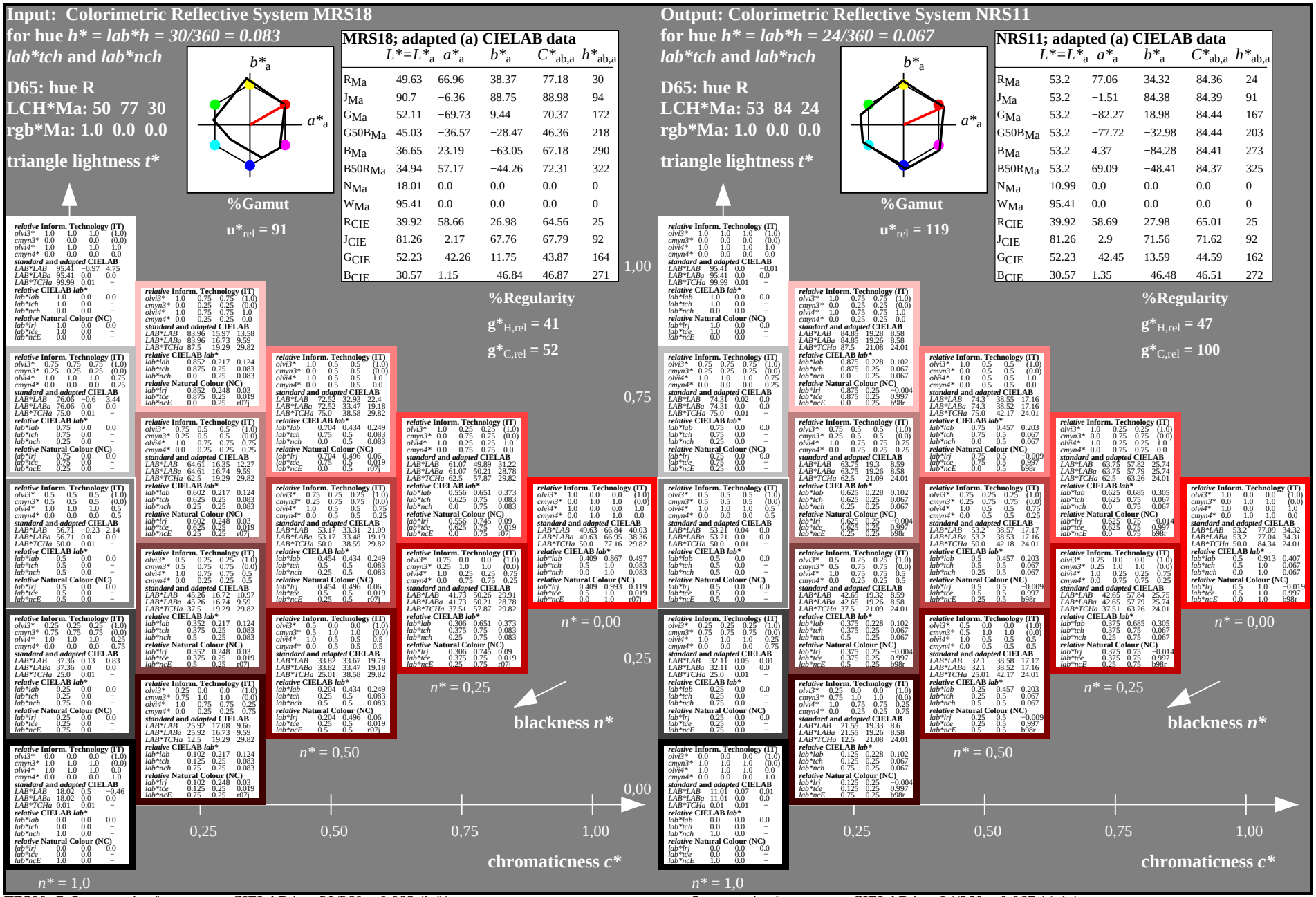

TE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



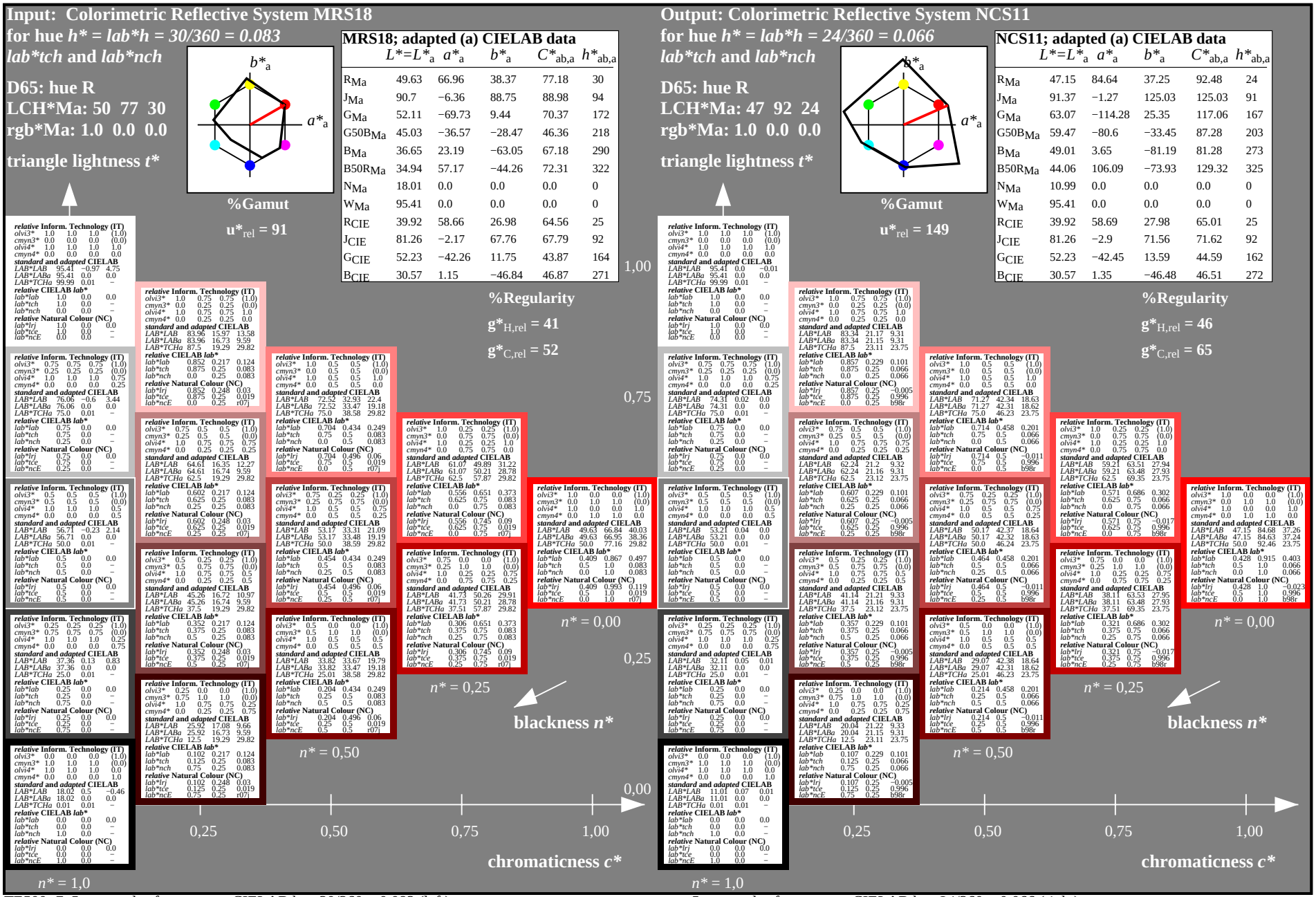

TE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)



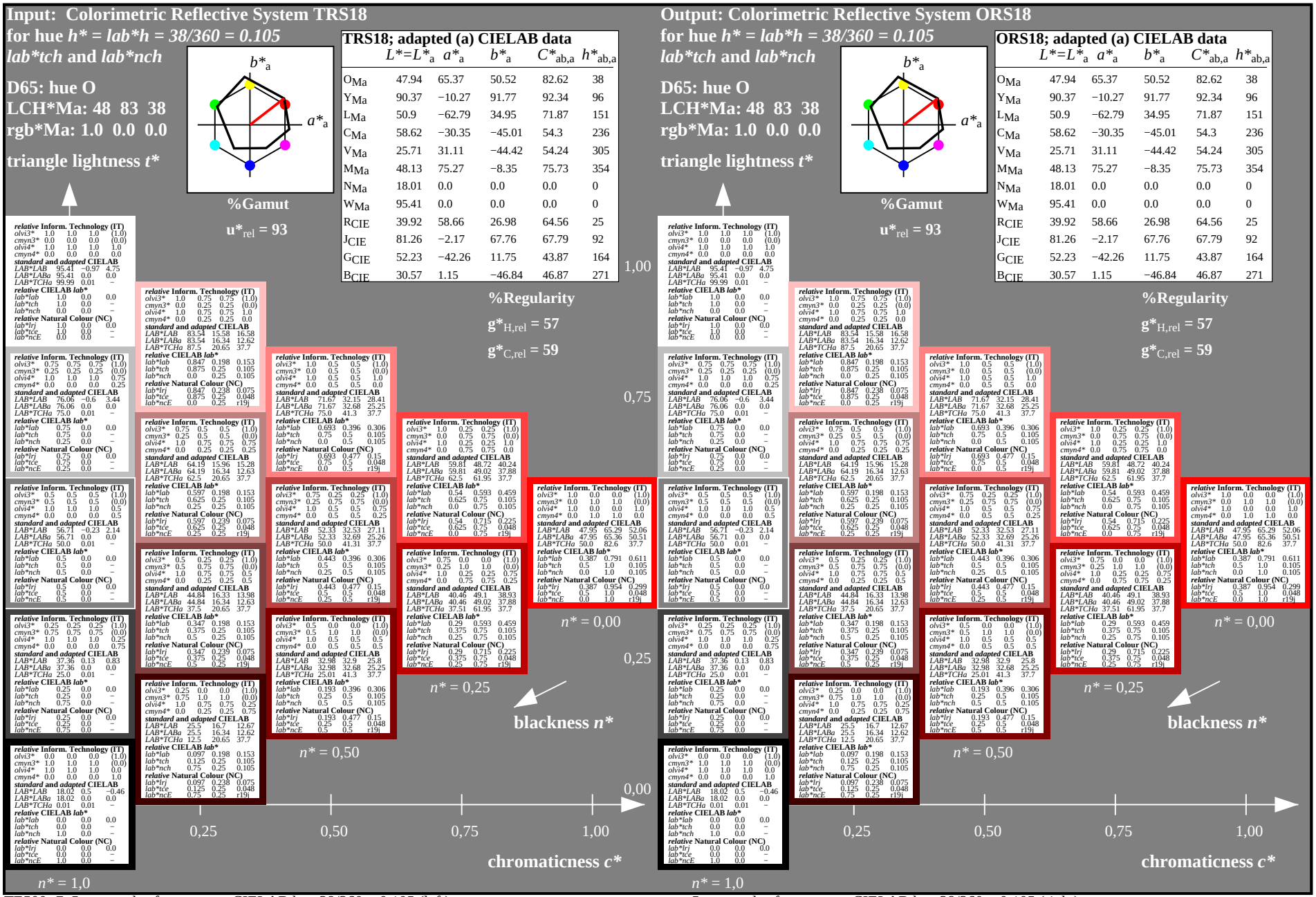

TE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



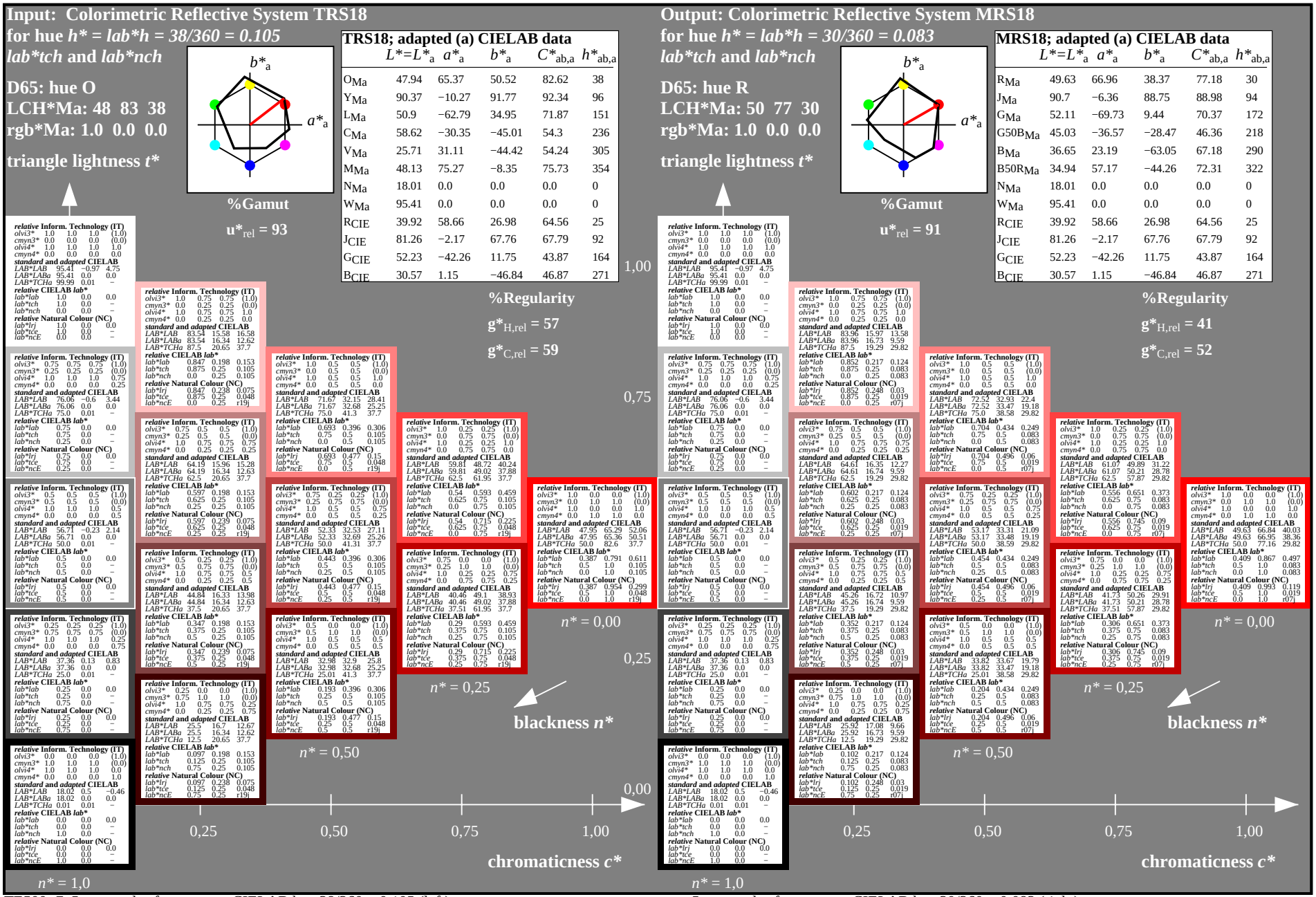

TE500−7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)



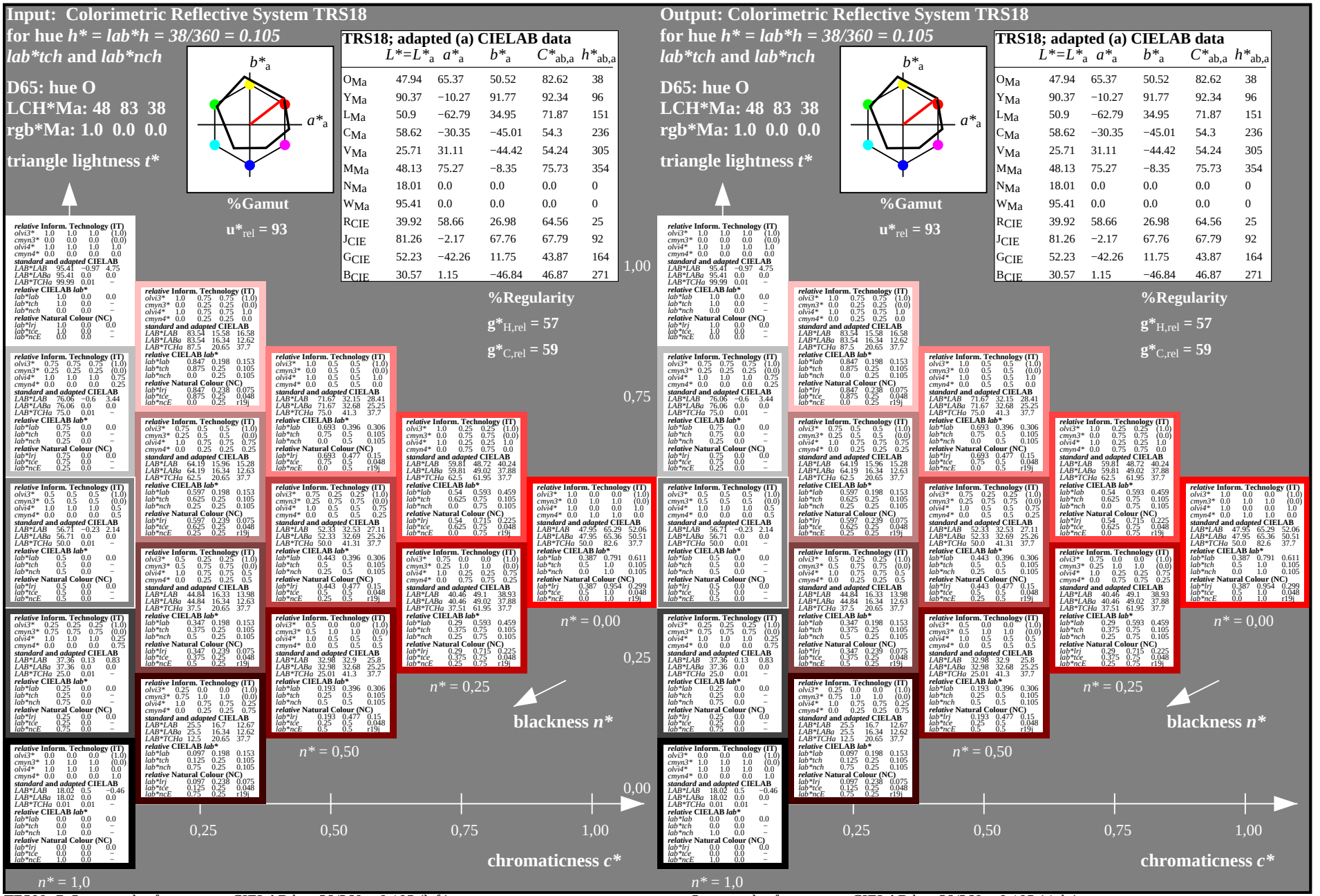

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



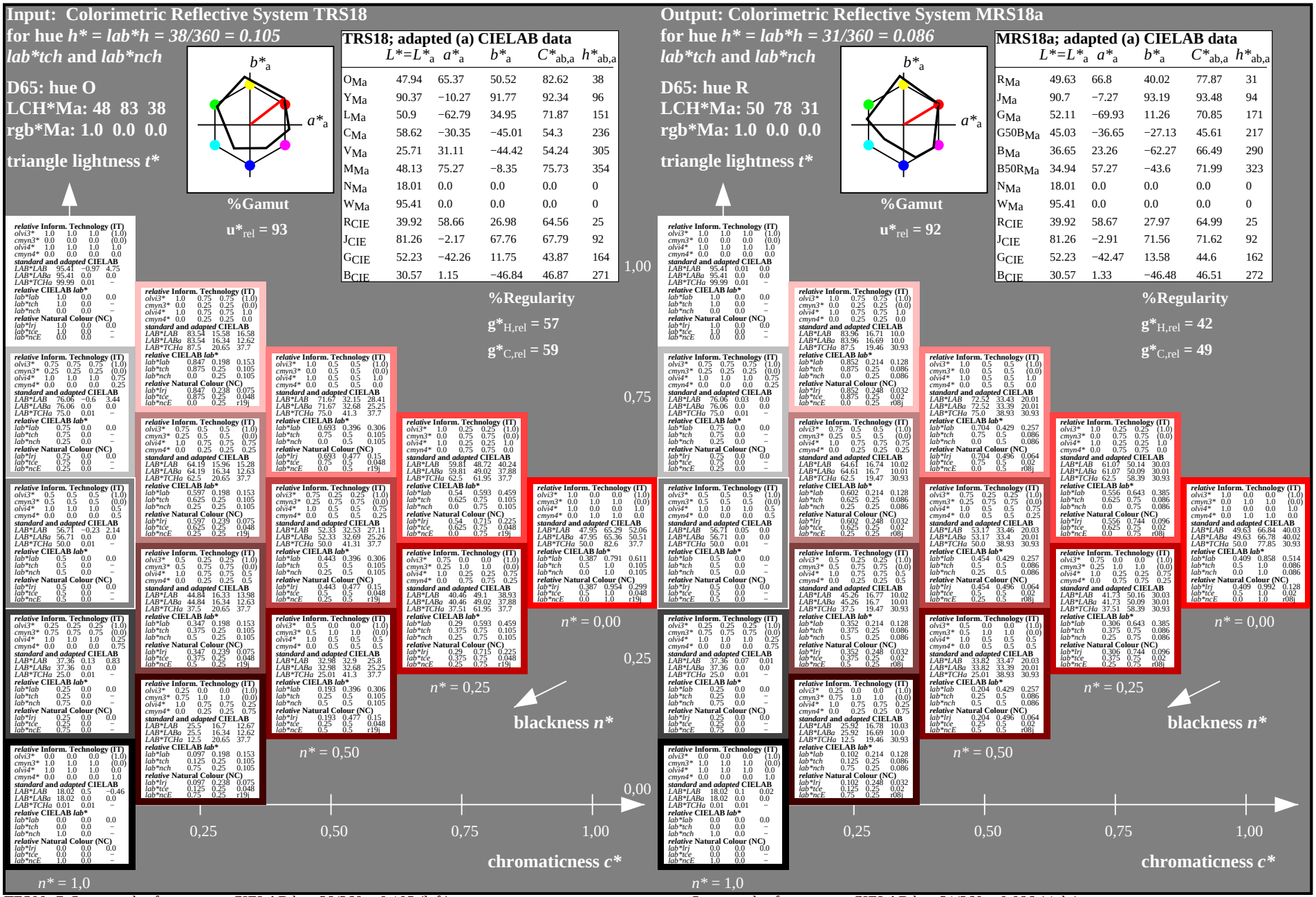

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)



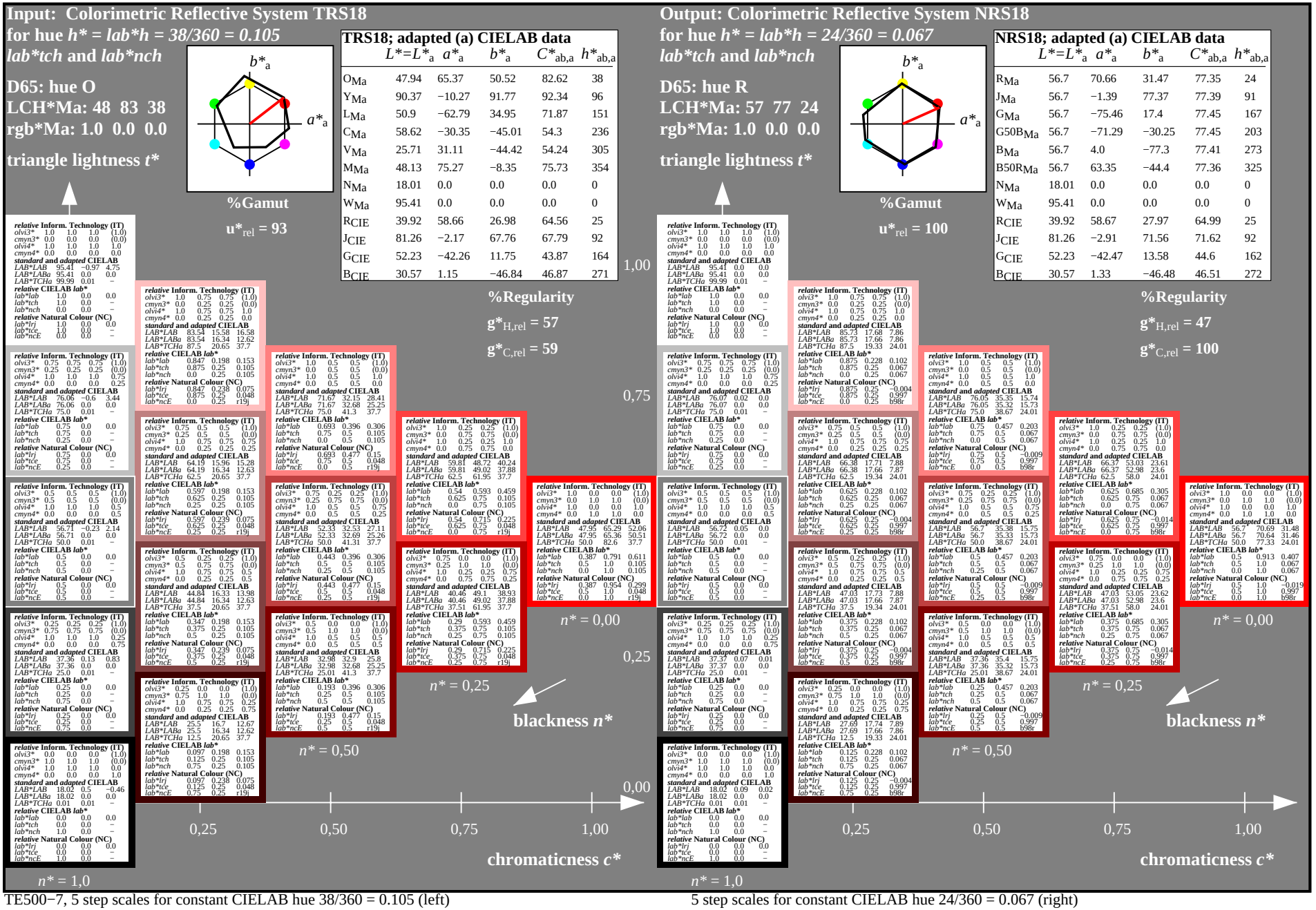

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



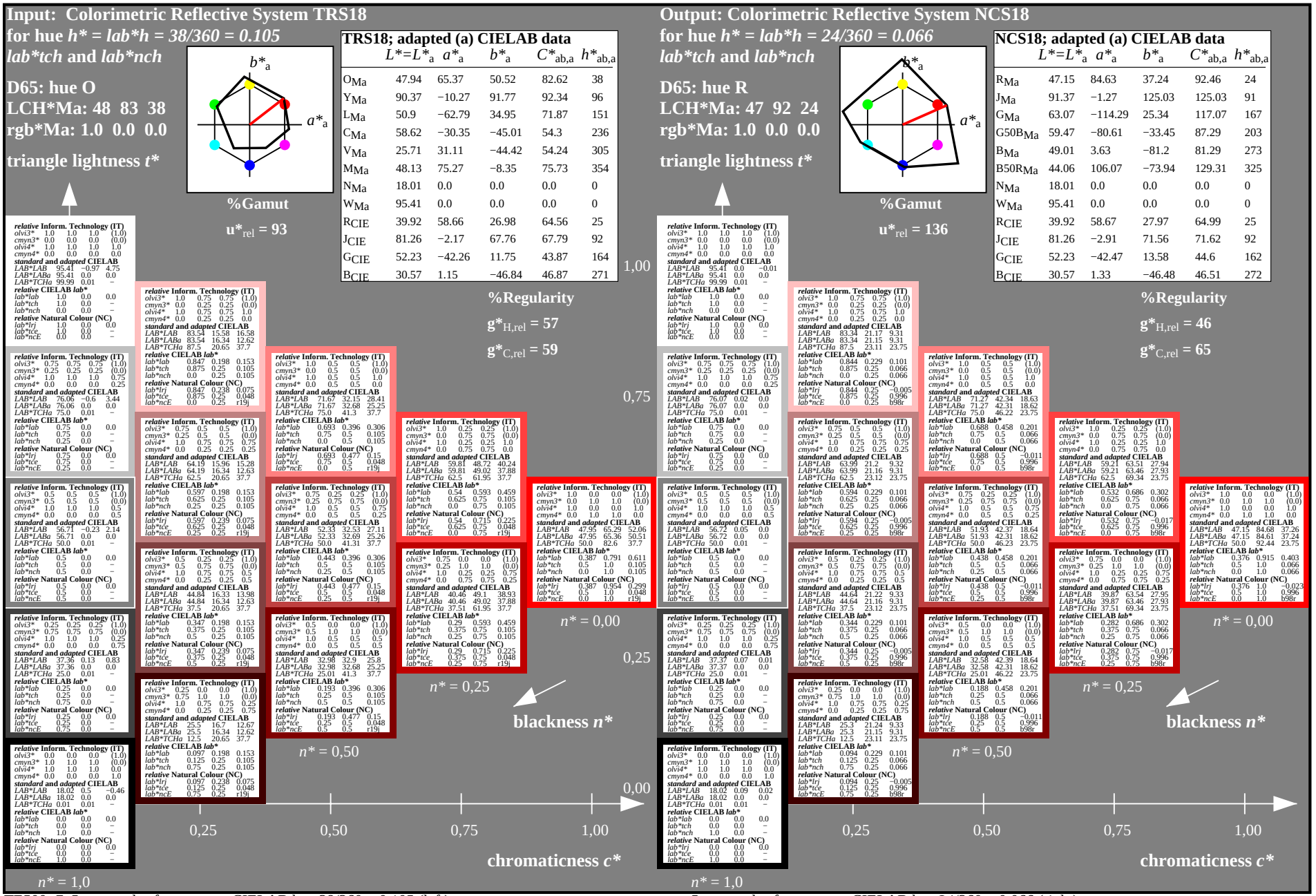

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 31/360 = 0.086 (right)



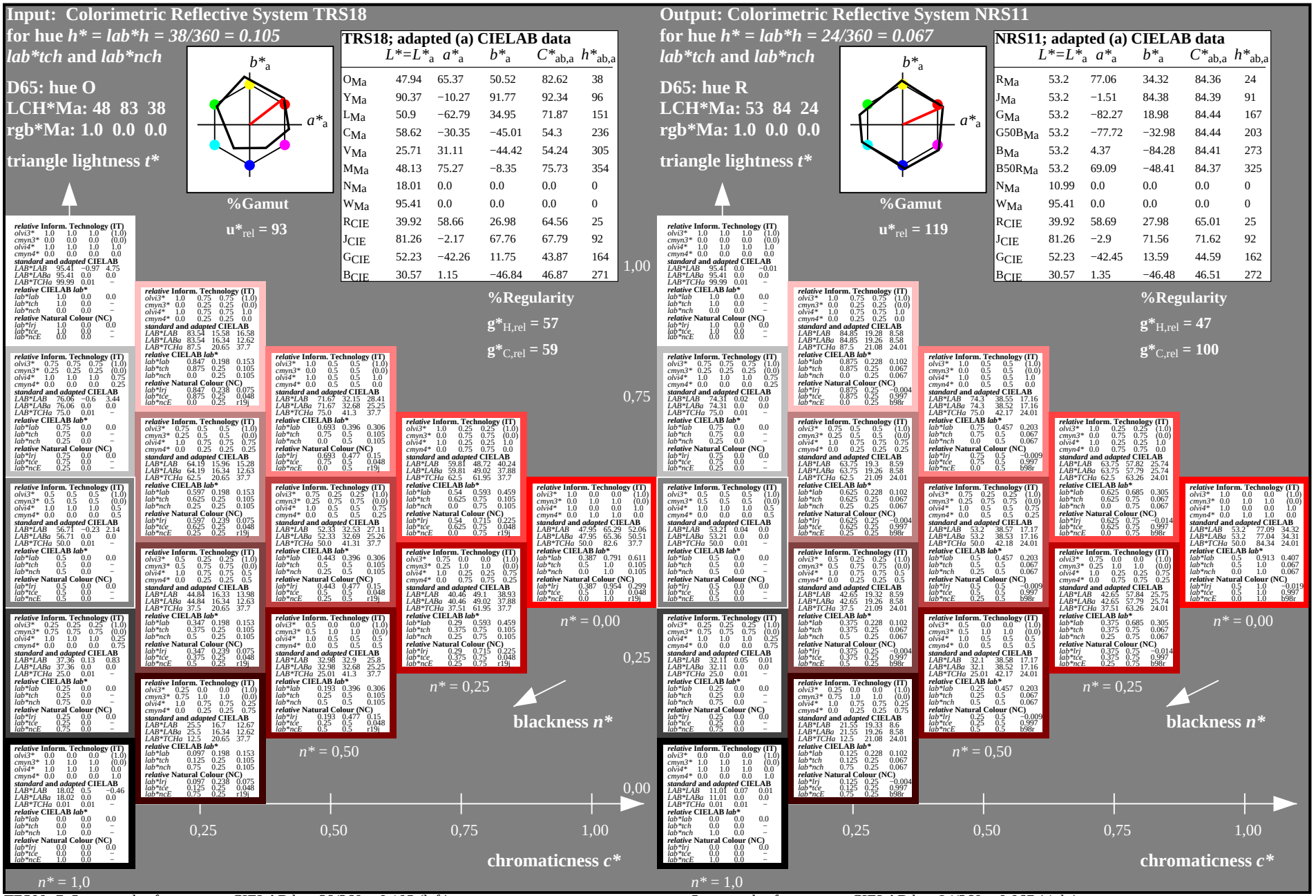

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



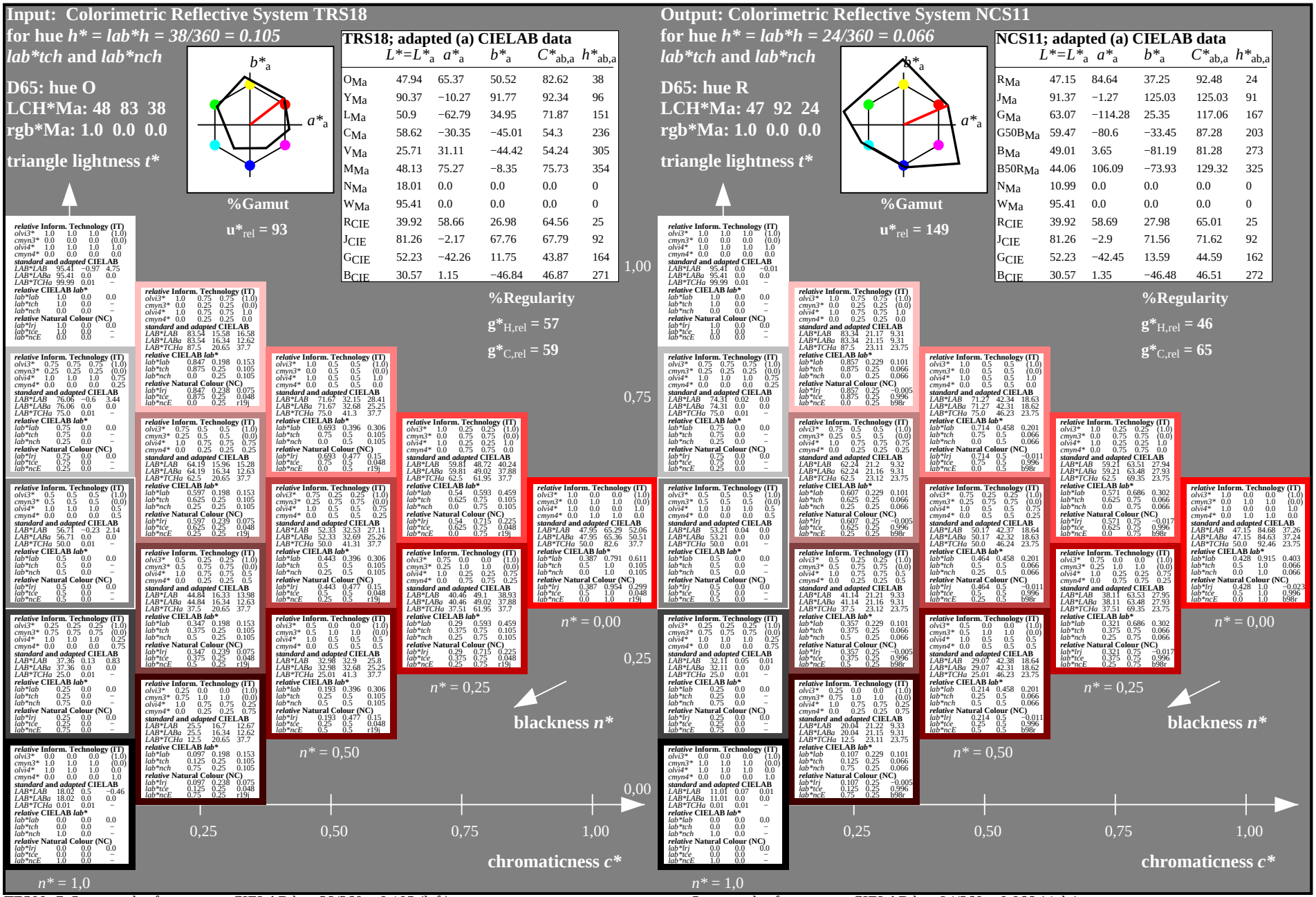

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)




TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



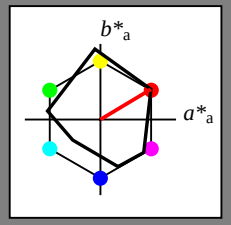

TE500−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 31/360 = 0.086**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 50 78 31**
**rgb*Ma: 1.0 0.0 0.0**

**triangle lightness *t****




%Gamut

u*rel = 92

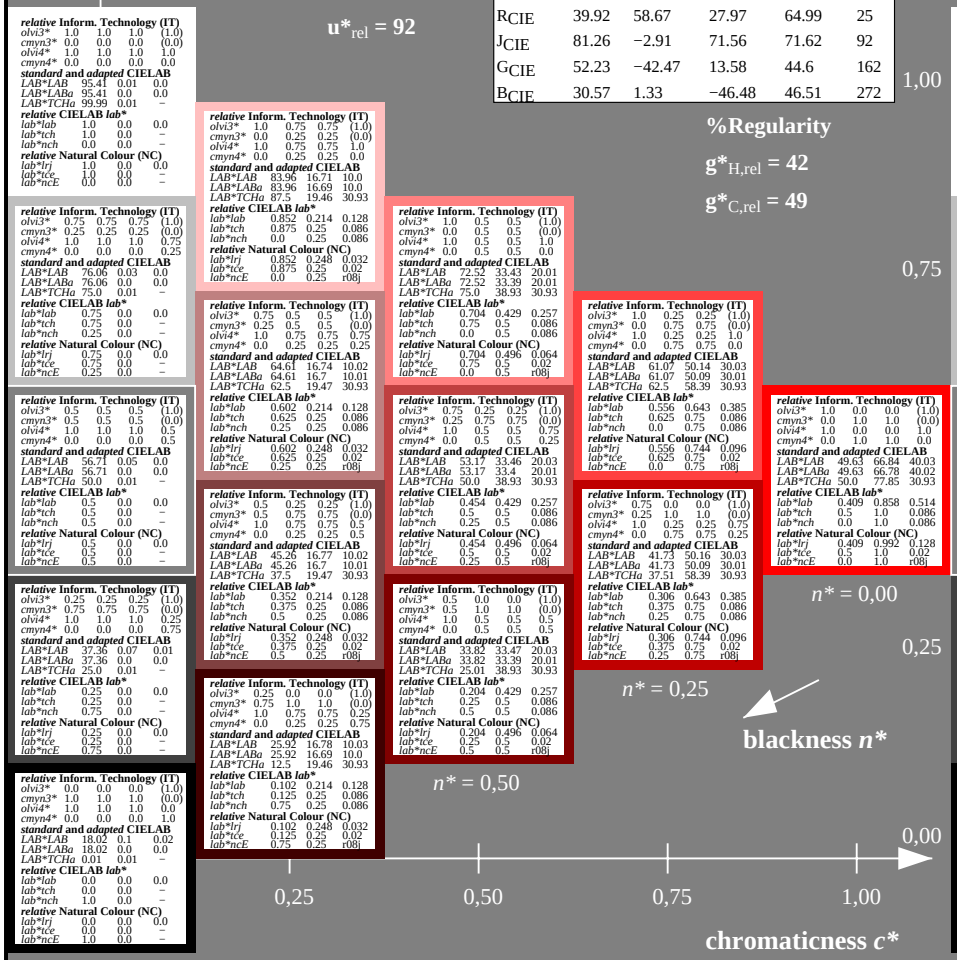
**MRS18a; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

%Regularity

g*H,rel = 42

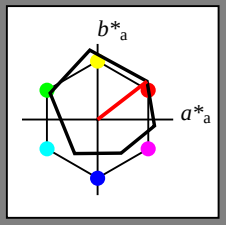
g*C,rel = 49




**Output: Colorimetric 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**
**rgb*Ma: 1.0 0.0 0.0**

**triangle lightness *t****




%Gamut

u*rel = 93

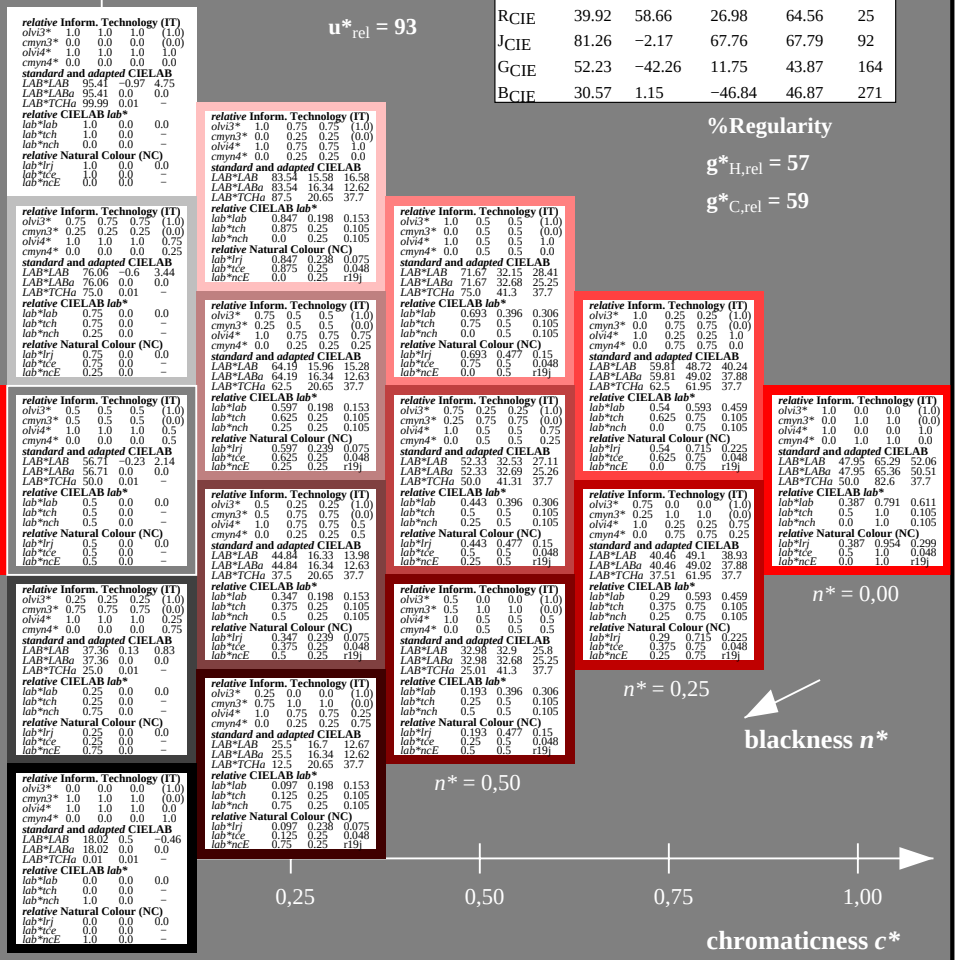
**ORS18; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

%Regularity

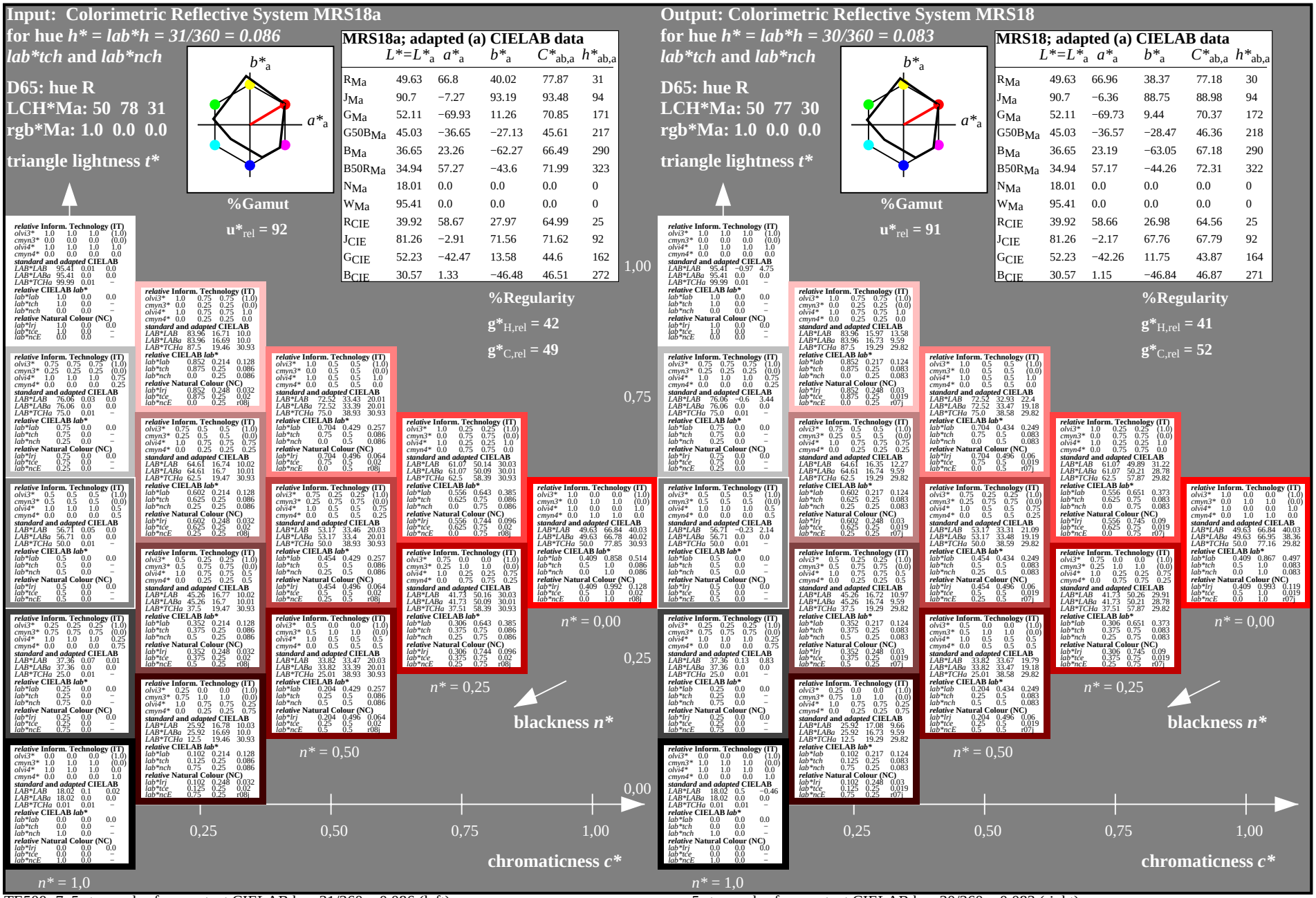
g*H,rel = 57

g*C,rel = 59



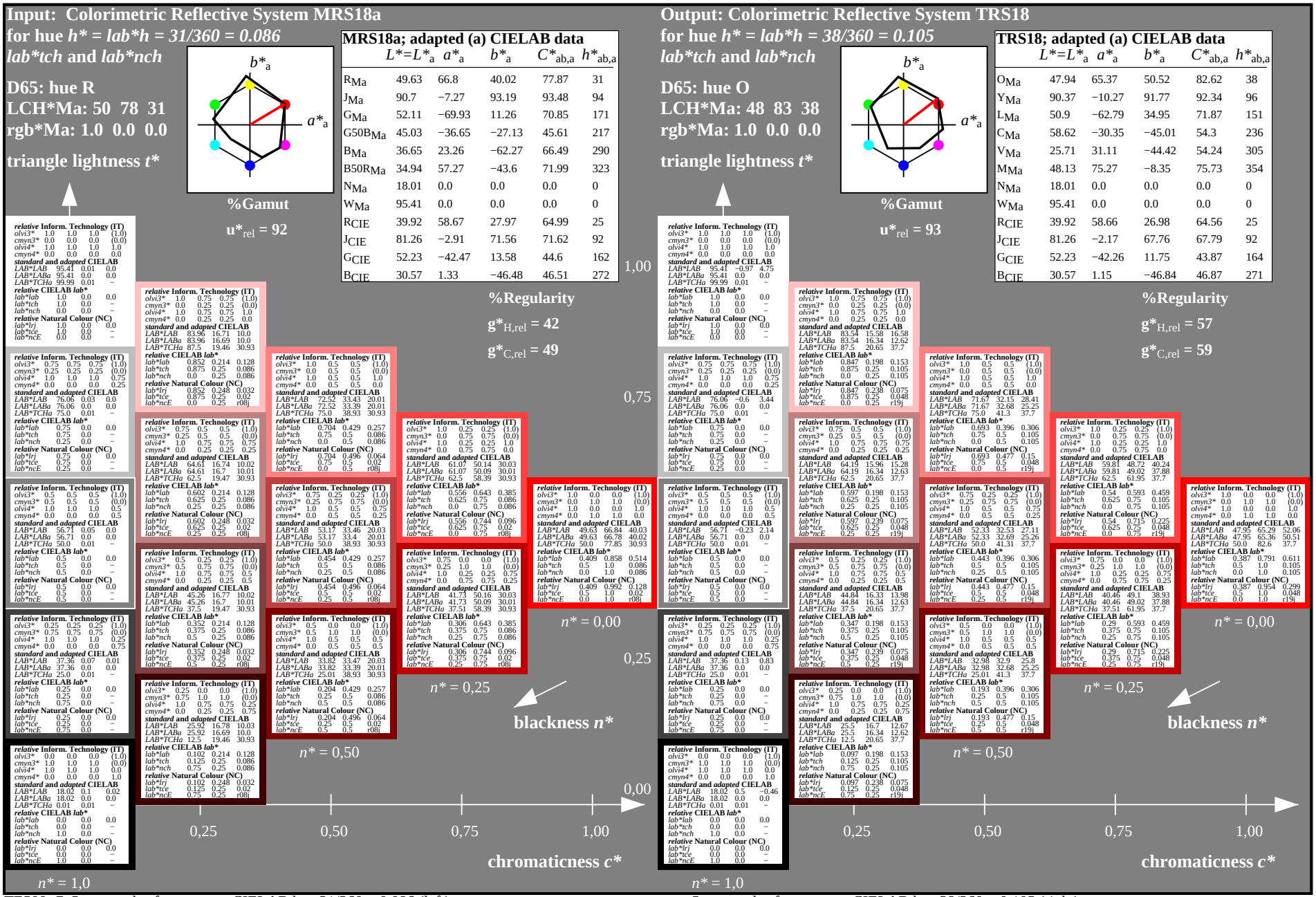

TE500−7, 5 step scales for constant CIELAB hue 31/360 = 0.086 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)




TE500−7, 5 step scales for constant CIELAB hue 31/360 = 0.086 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)



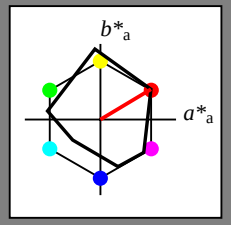

TE500−7, 5 step scales for constant CIELAB hue 31/360 = 0.086 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 31/360 = 0.086**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 50 78 31**
**rgb*Ma: 1.0 0.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

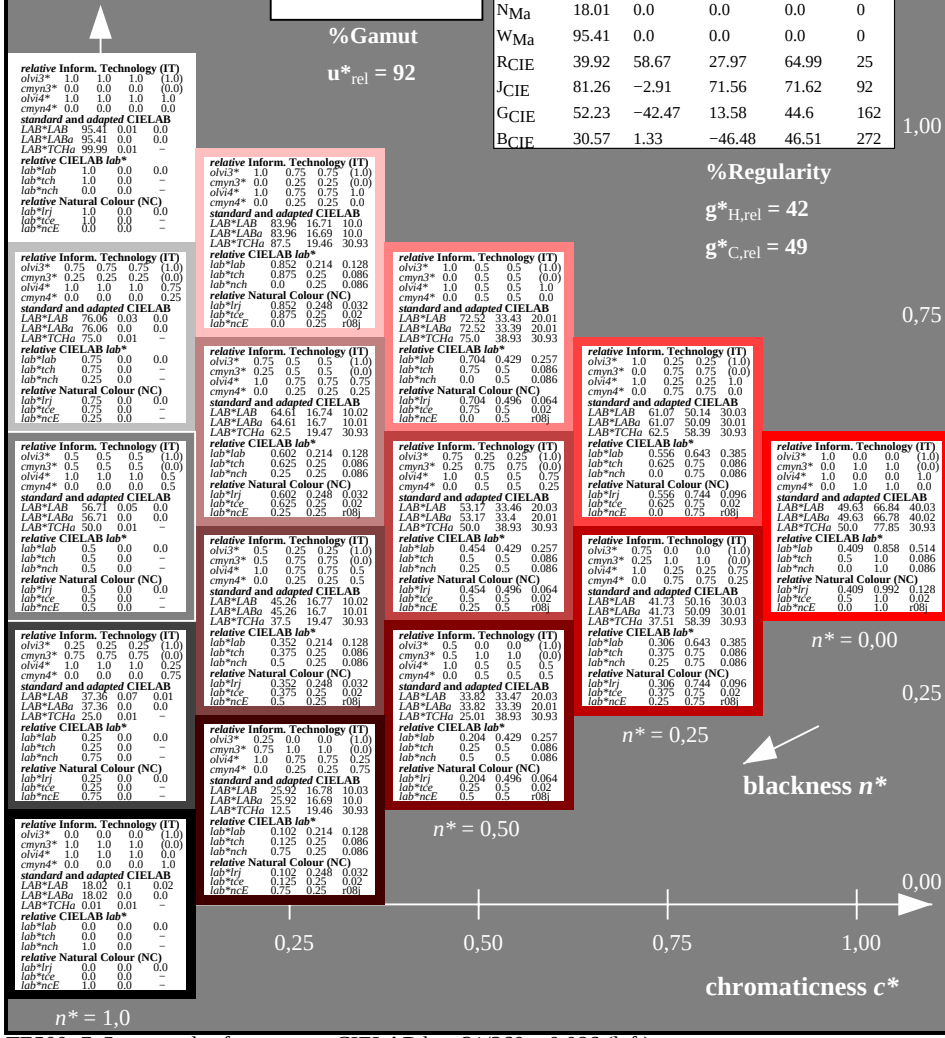
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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

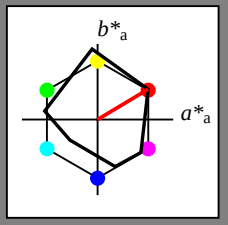



TE500−7, 5 step scales for constant CIELAB hue 31/360 = 0.086 (left)

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 31/360 = 0.086**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 50 78 31**
**rgb*Ma: 1.0 0.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

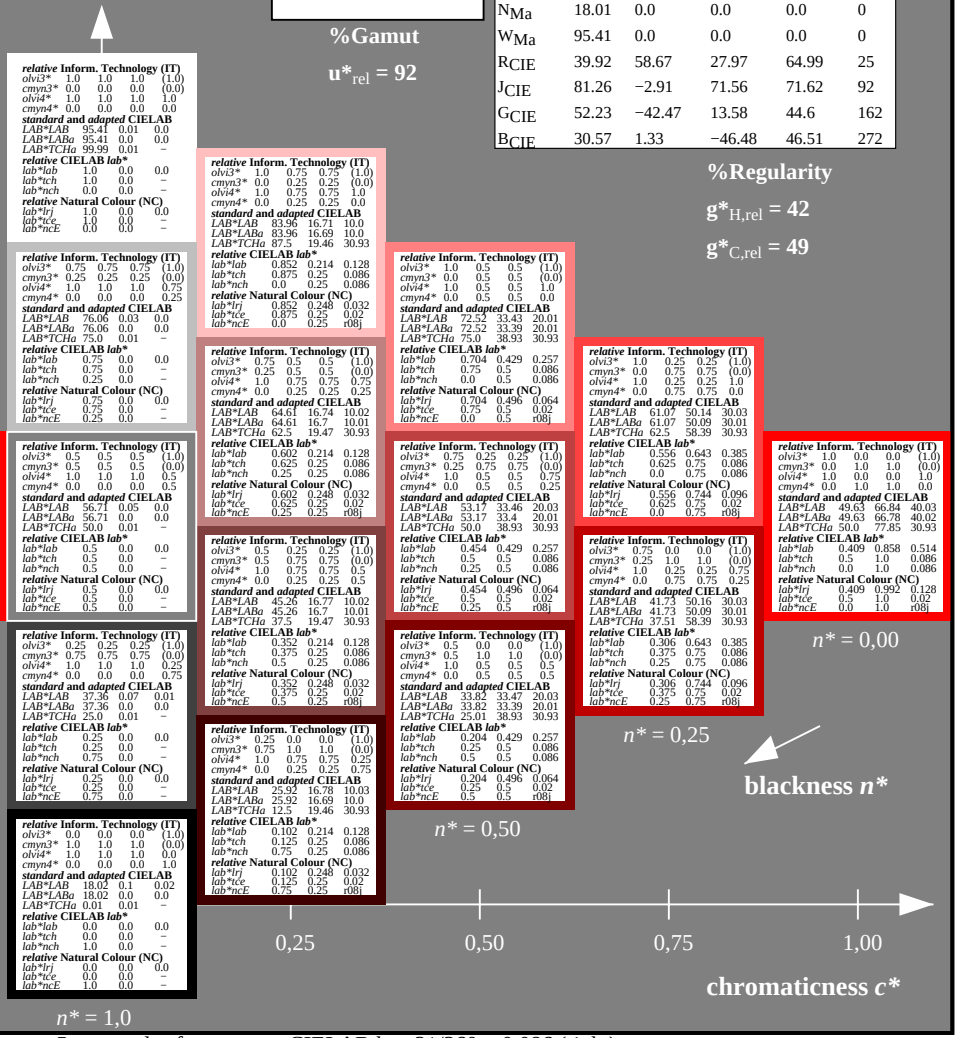
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

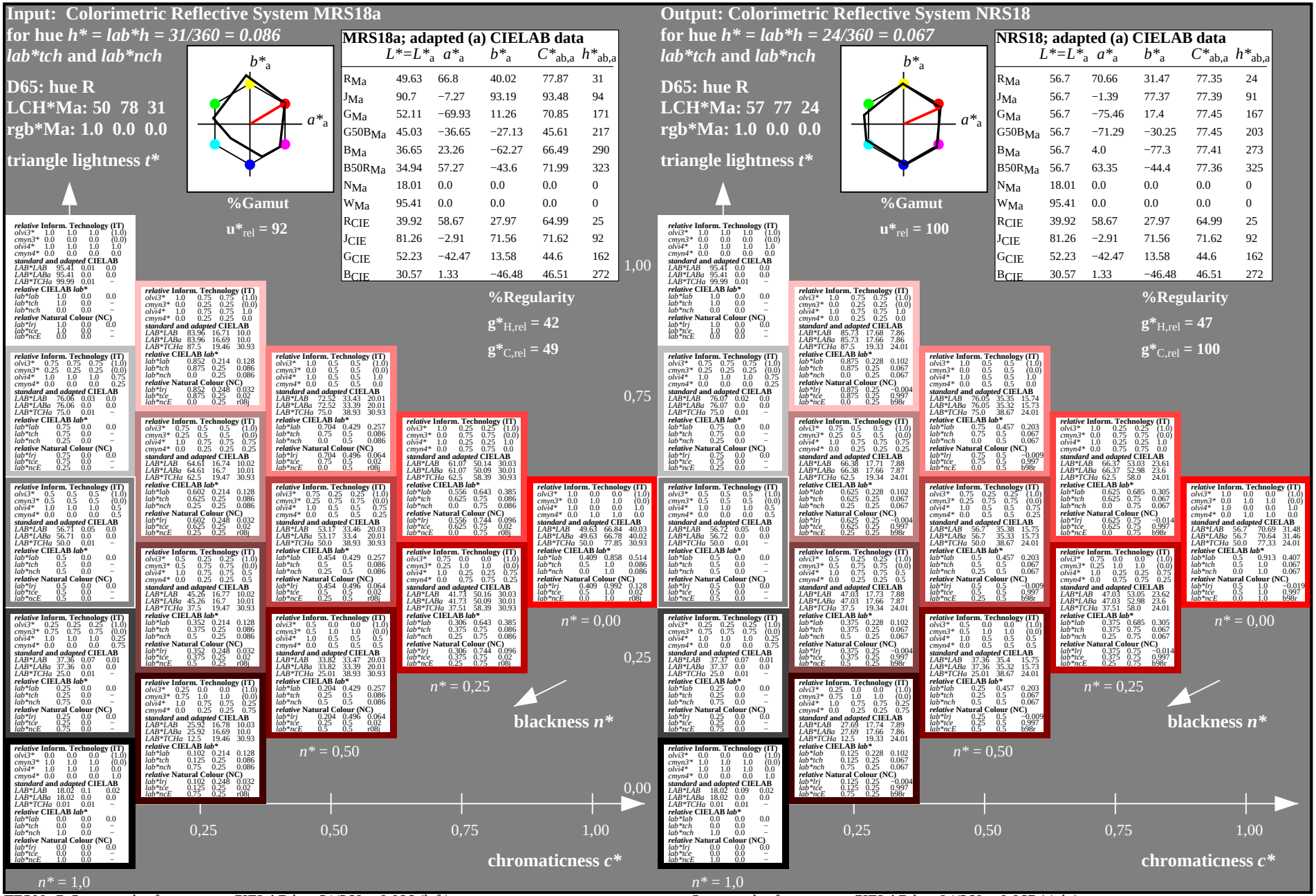
**%Regularity**

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

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

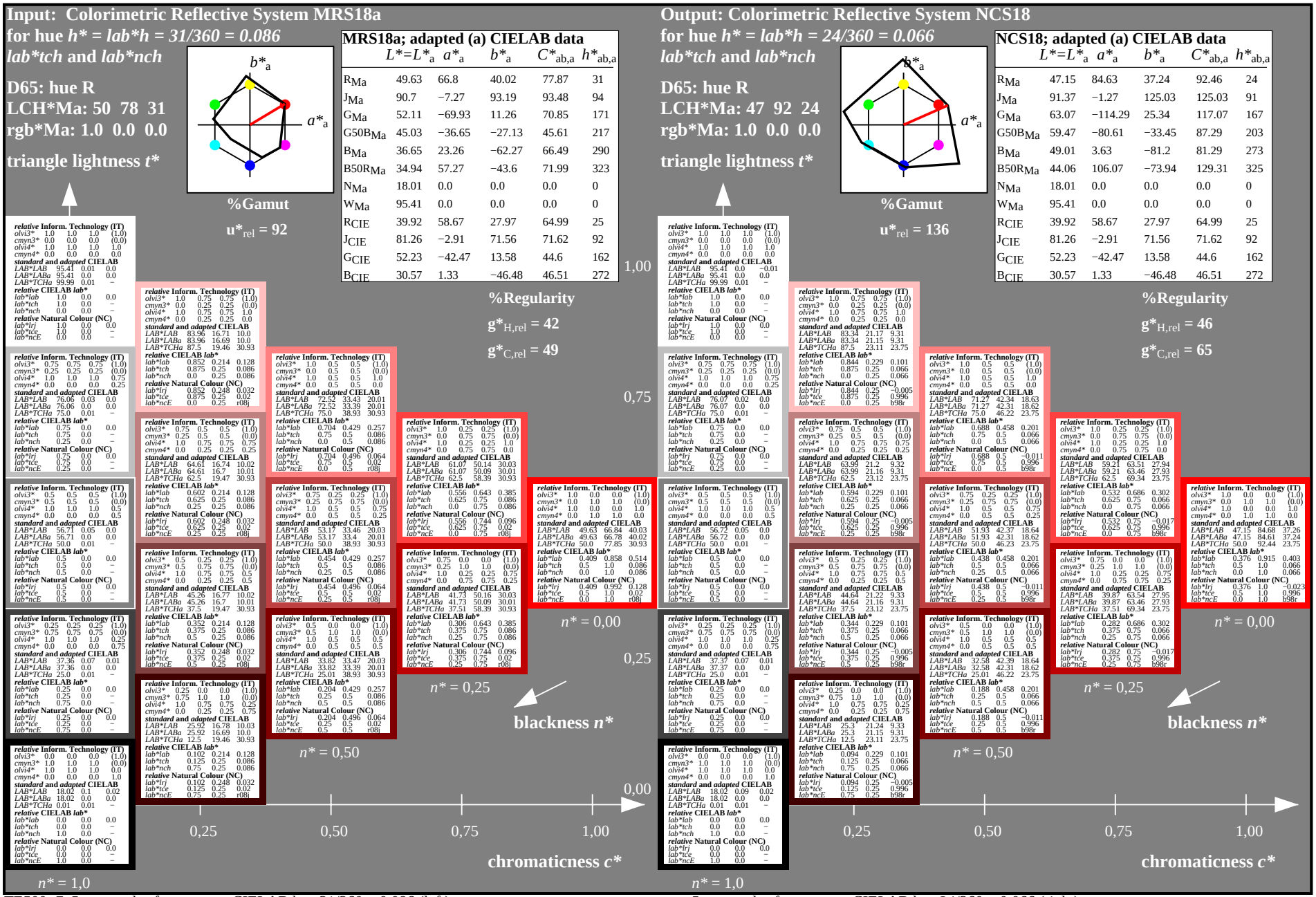



5 step scales for constant CIELAB hue 31/360 = 0.086 (right)



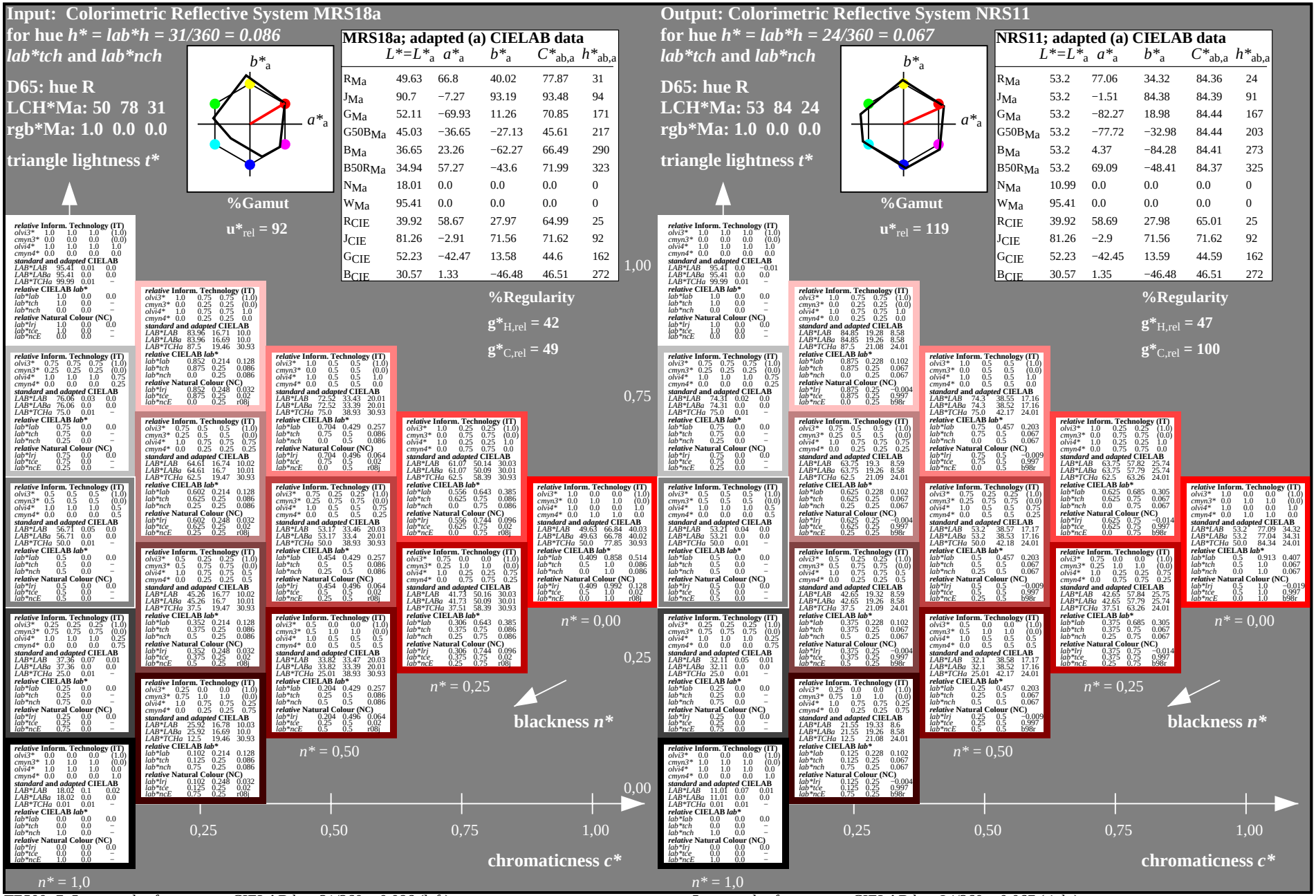

TE500−7, 5 step scales for constant CIELAB hue 31/360 = 0.086 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



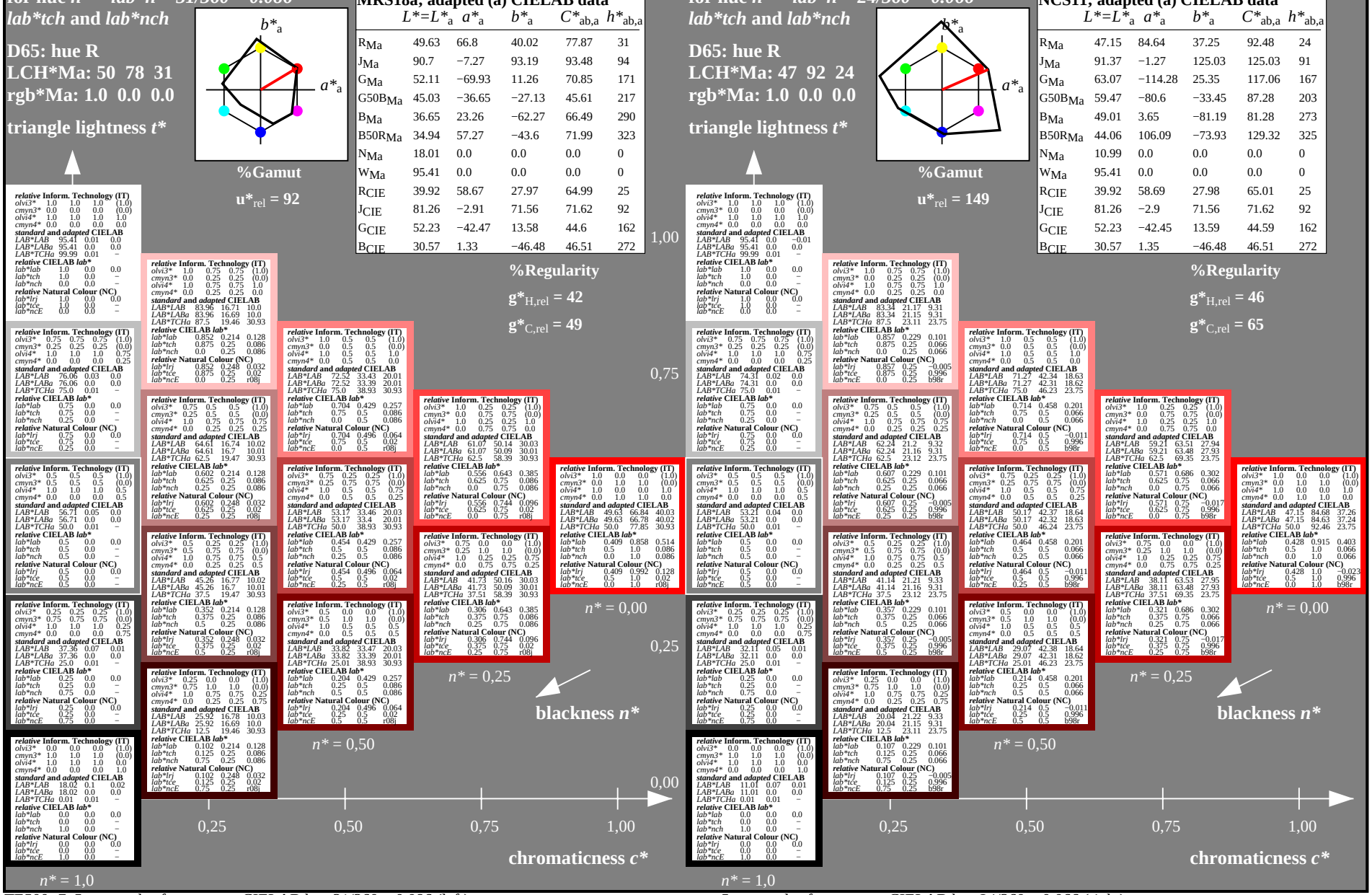

TE500−7, 5 step scales for constant CIELAB hue 31/360 = 0.086 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)



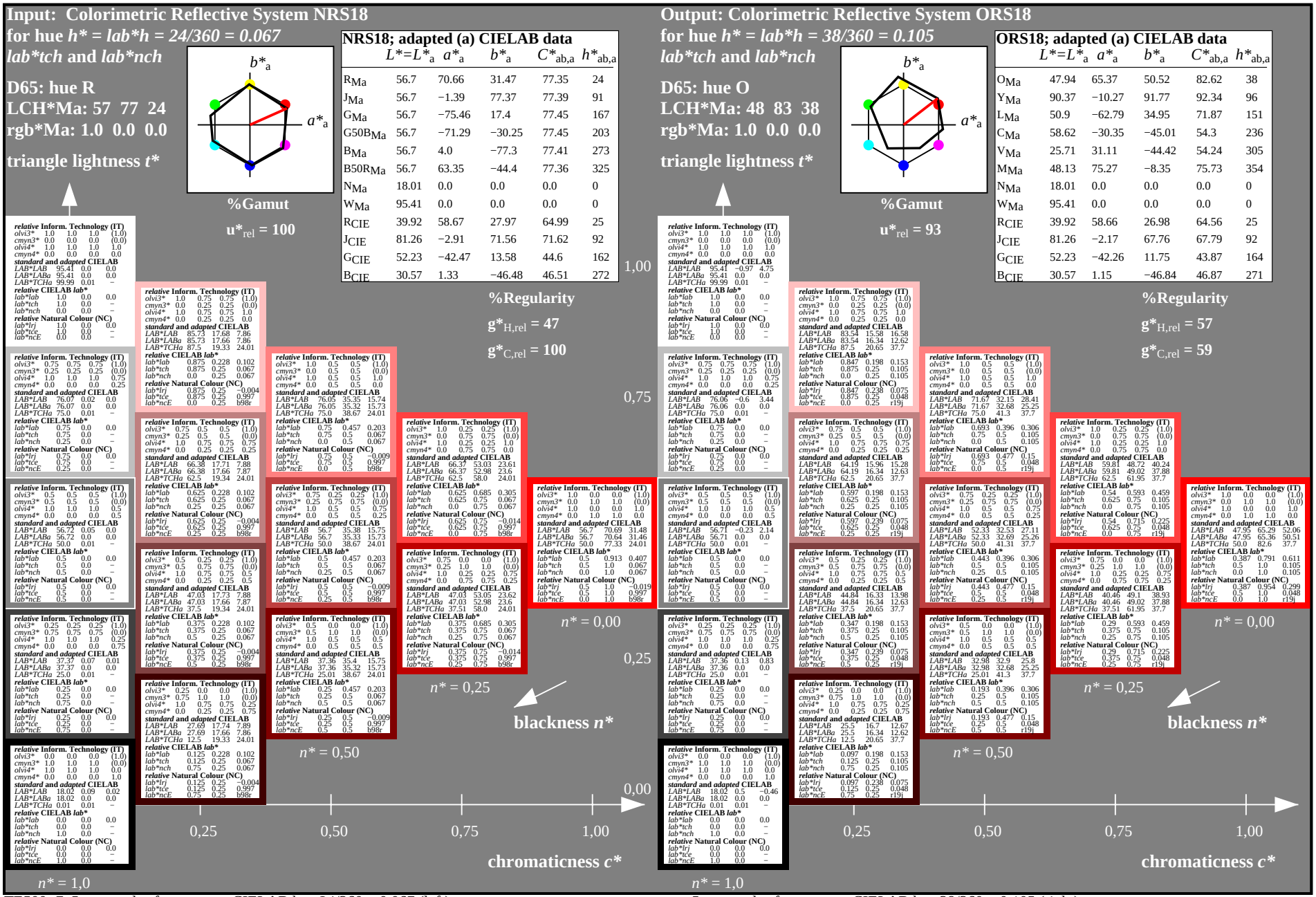

TE500−7, 5 step scales for constant CIELAB hue 31/360 = 0.086 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



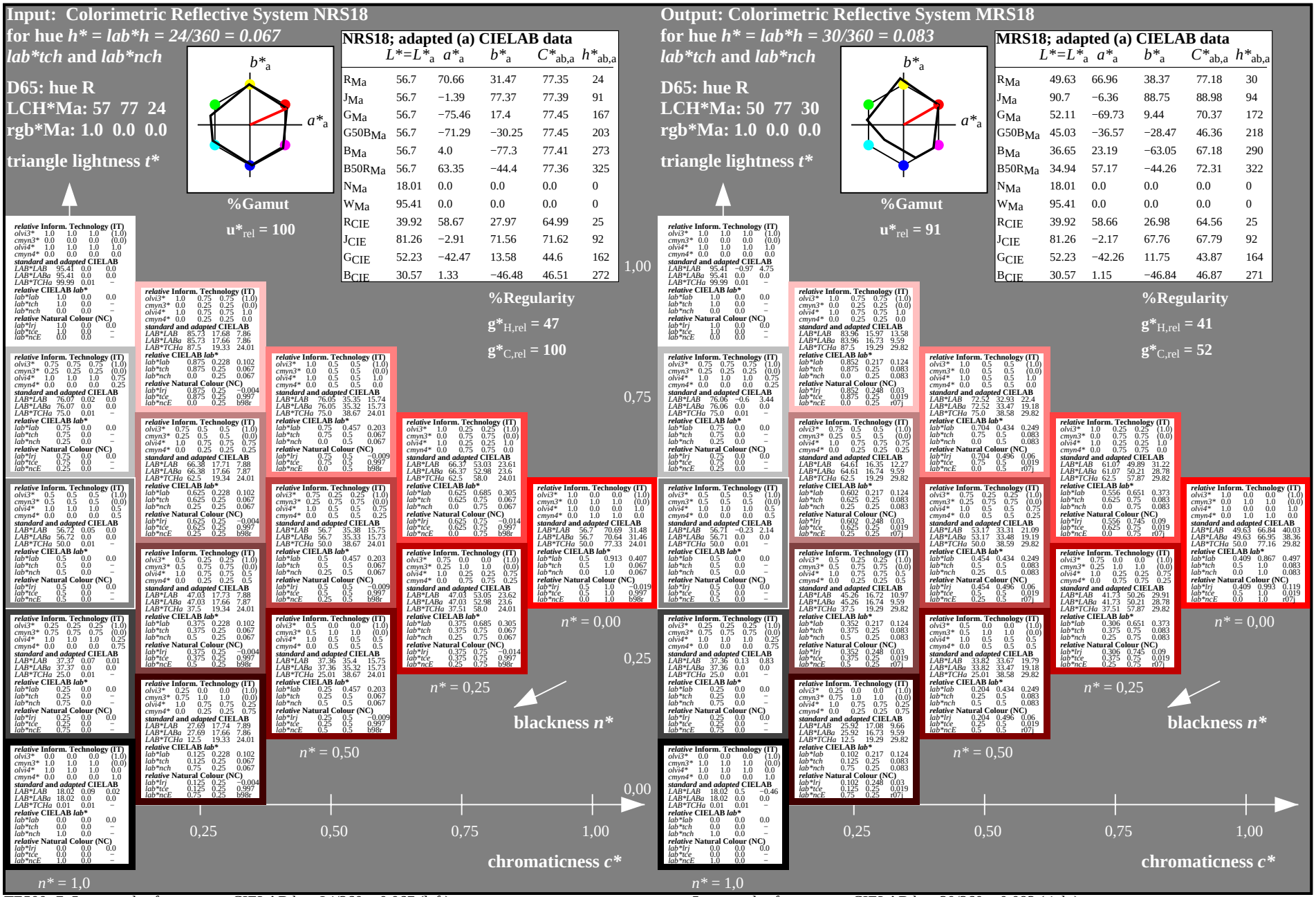

TE500−7, 5 step scales for constant CIELAB hue 31/360 = 0.086 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)




TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)




**NRS18; adapted (a) CIELAB data**

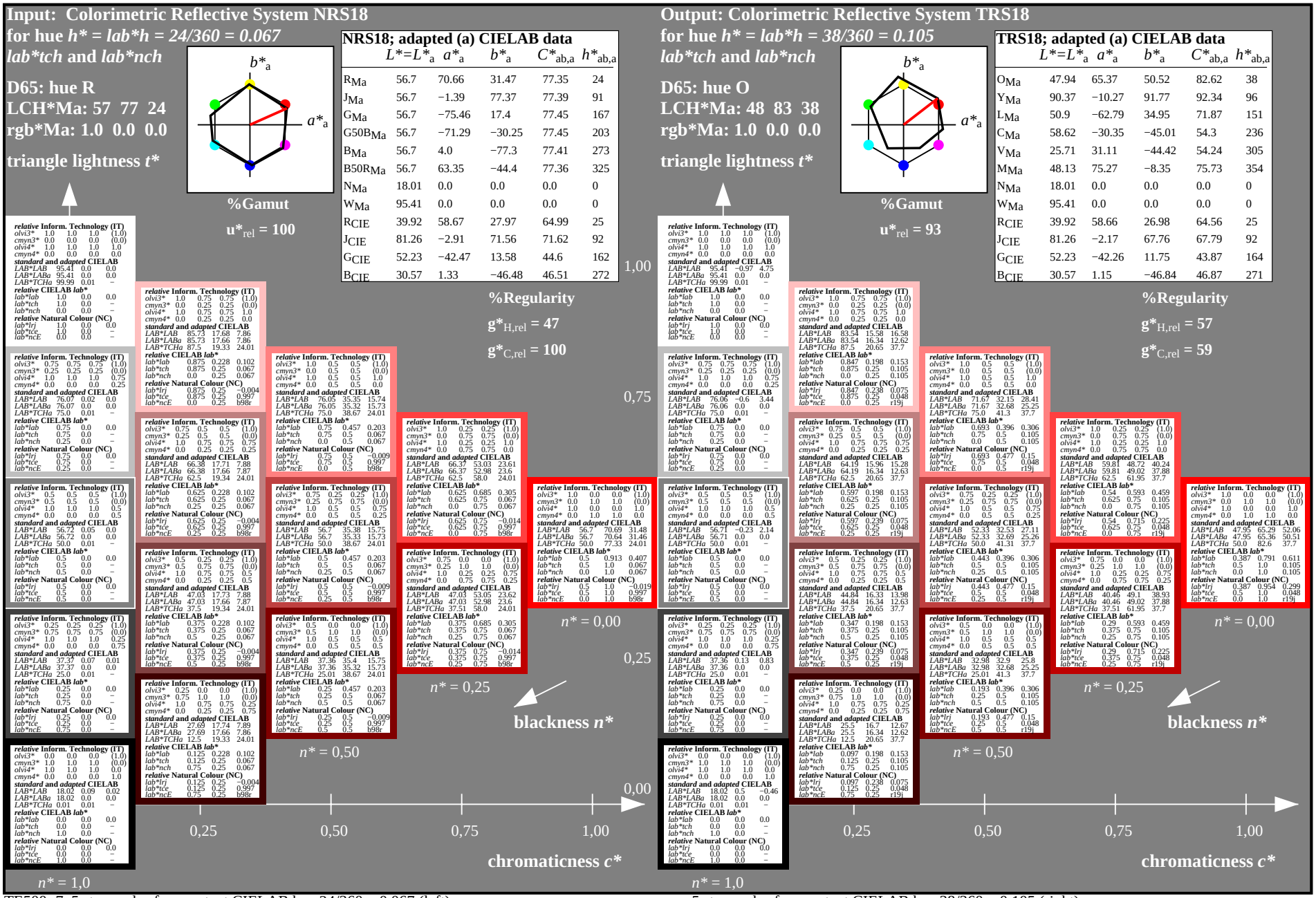
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

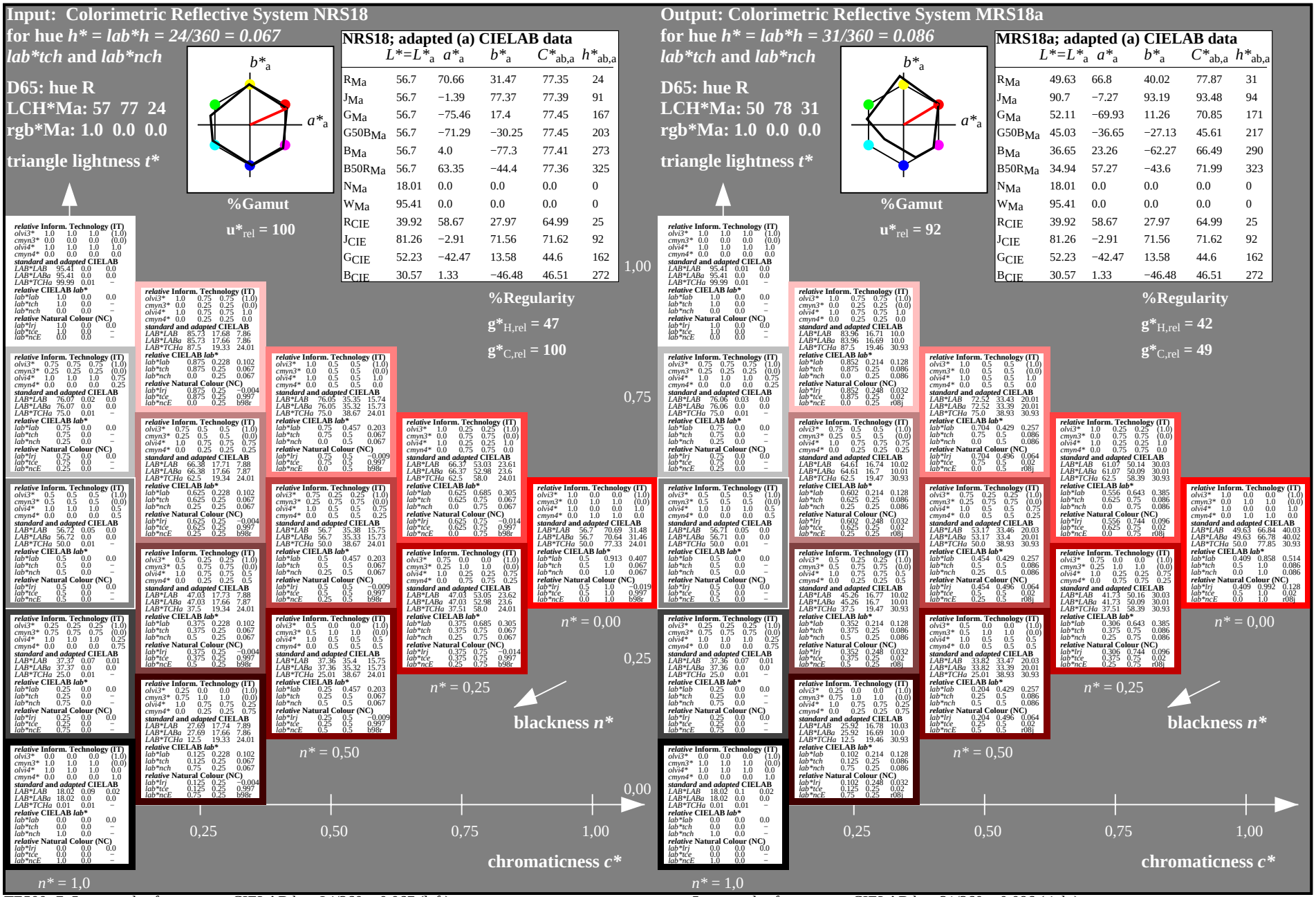
TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)



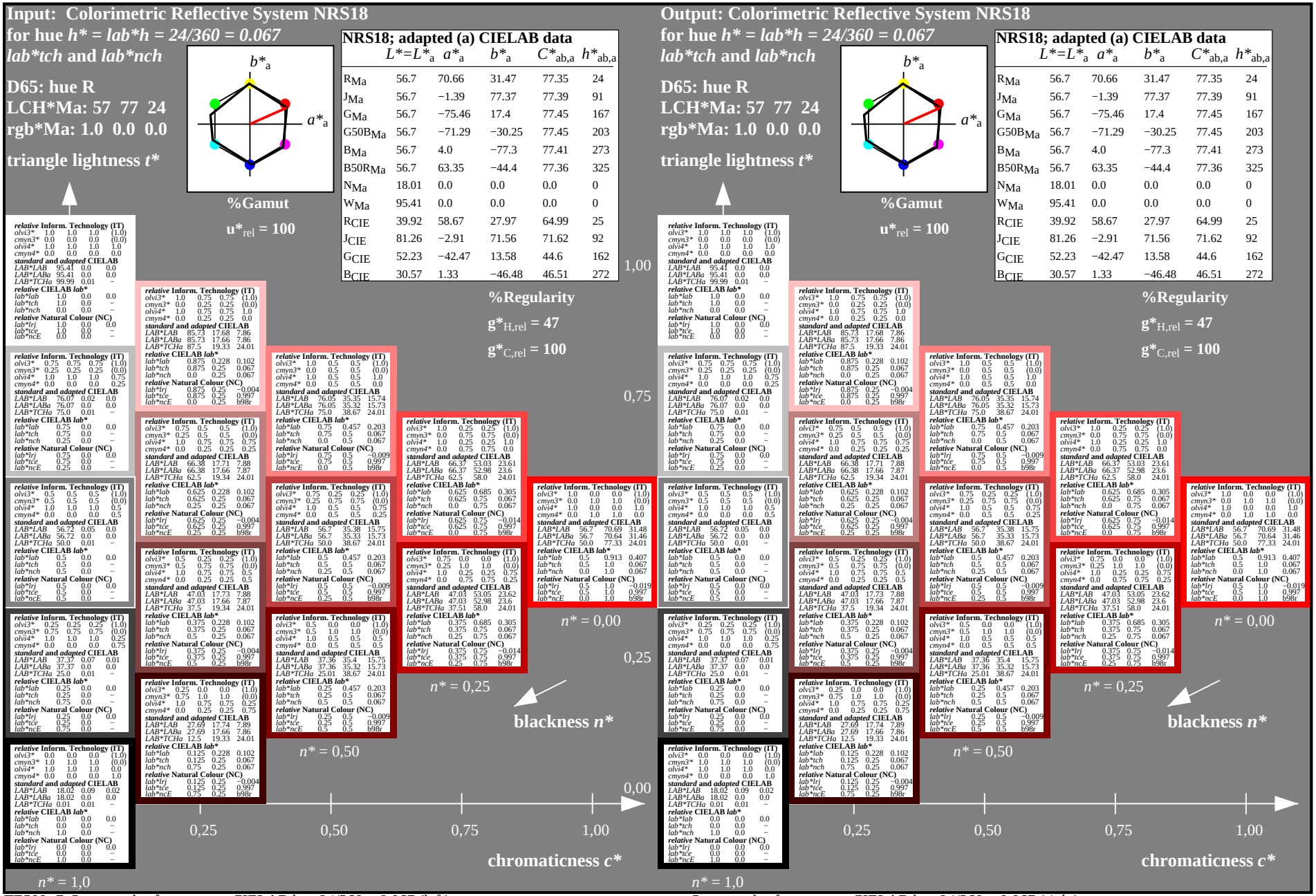

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



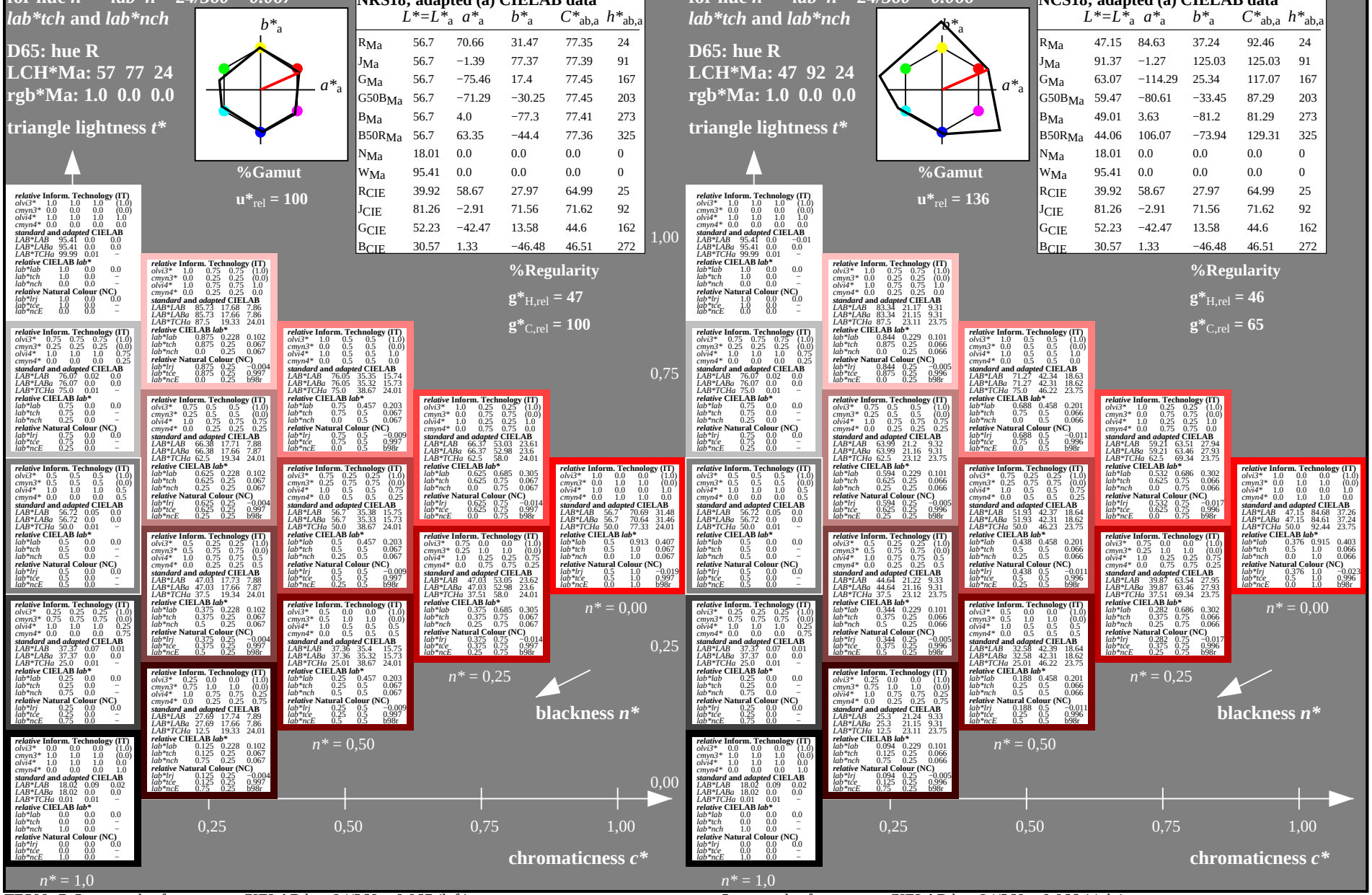

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 31/360 = 0.086 (right)



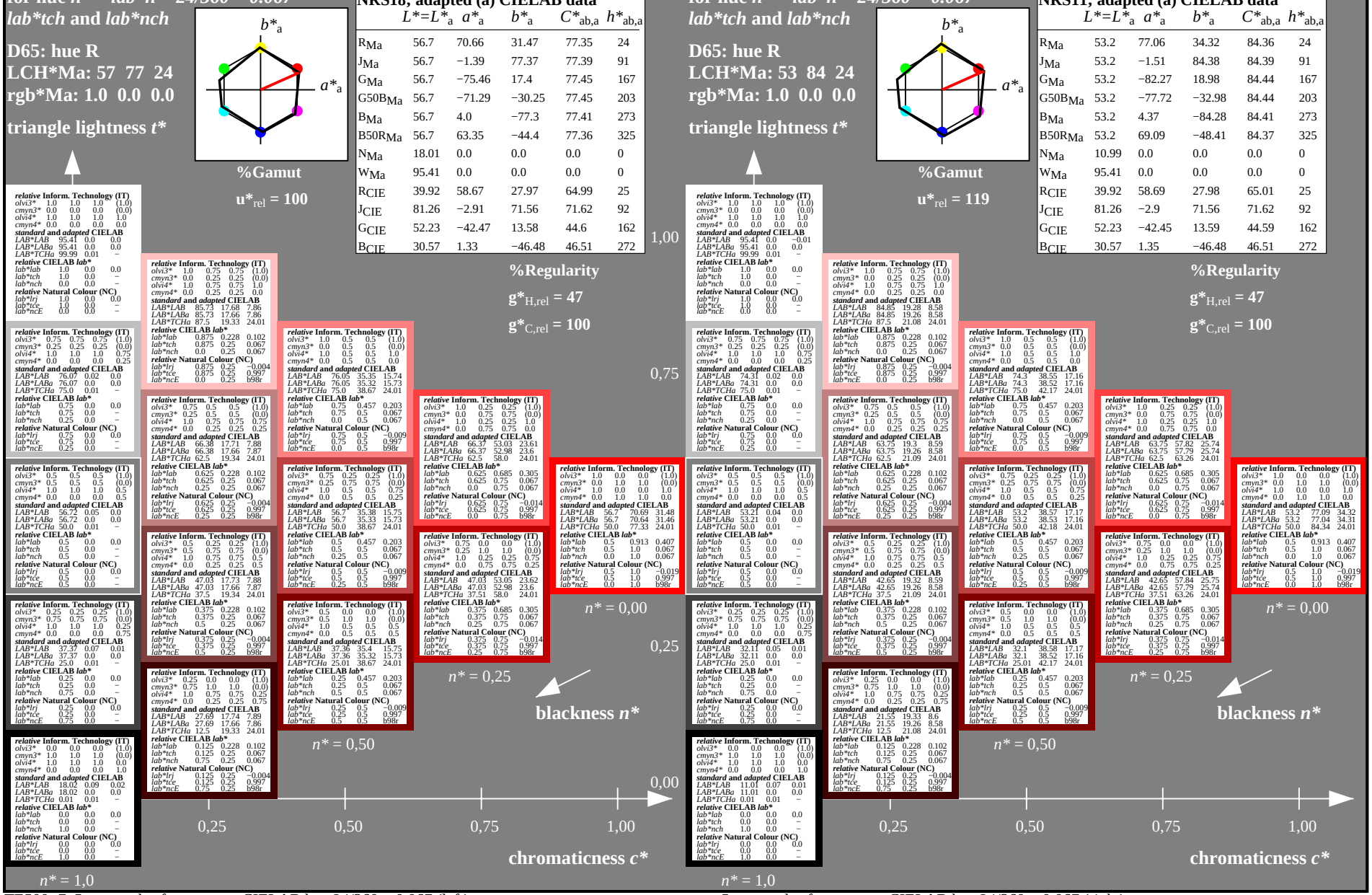

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



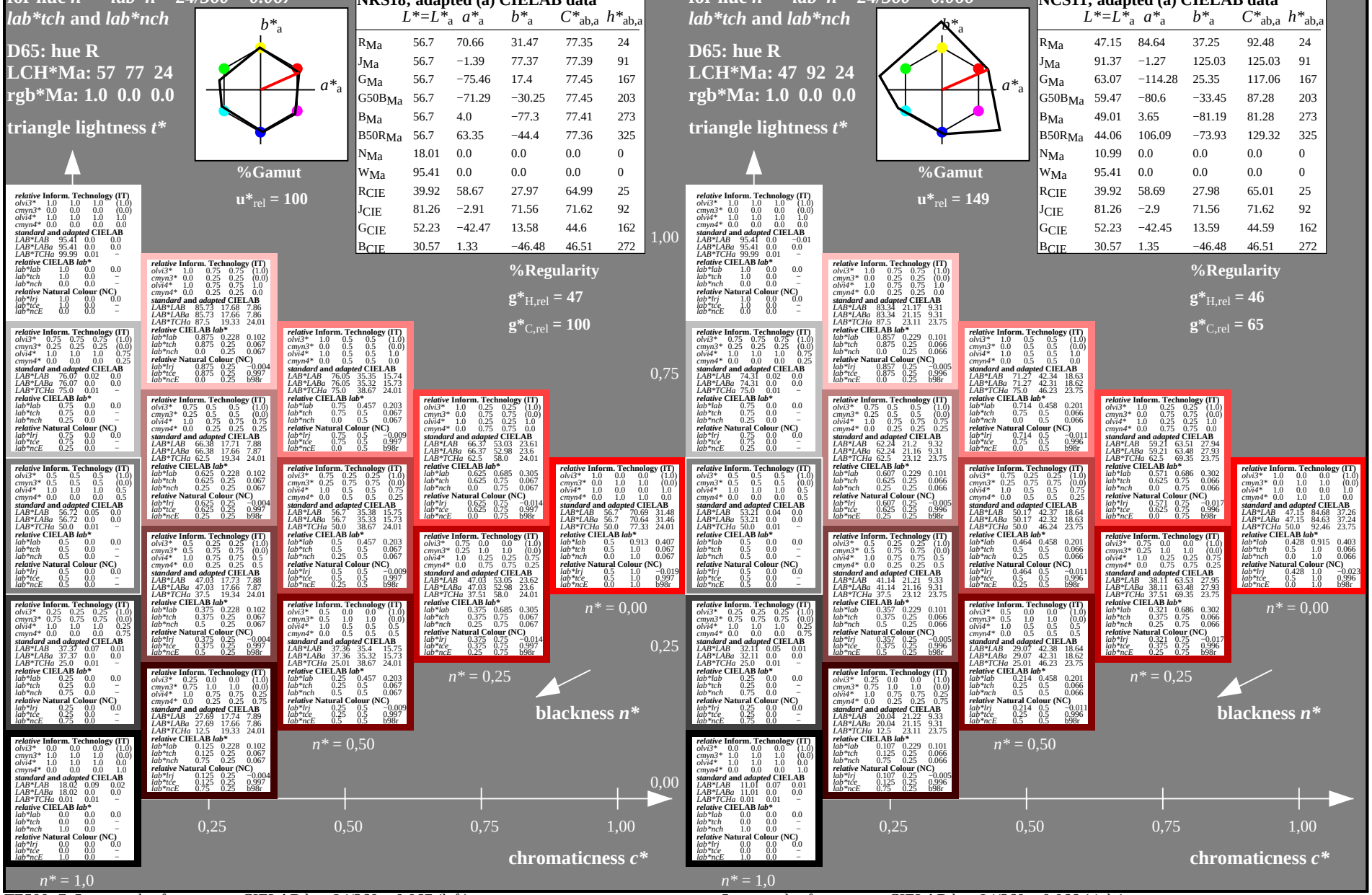

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)



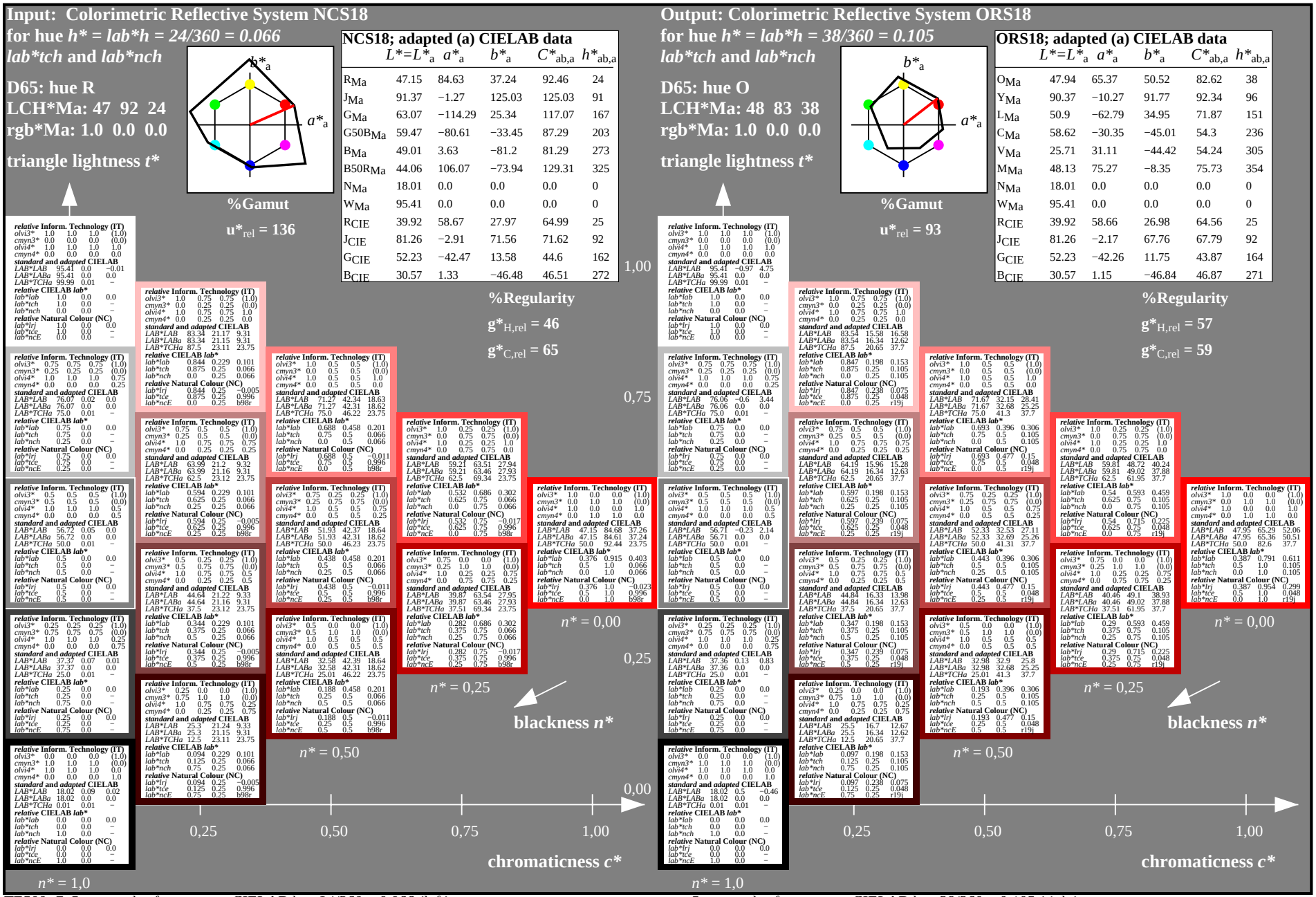

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)




TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)




**NCS18; adapted (a) CIELAB data**

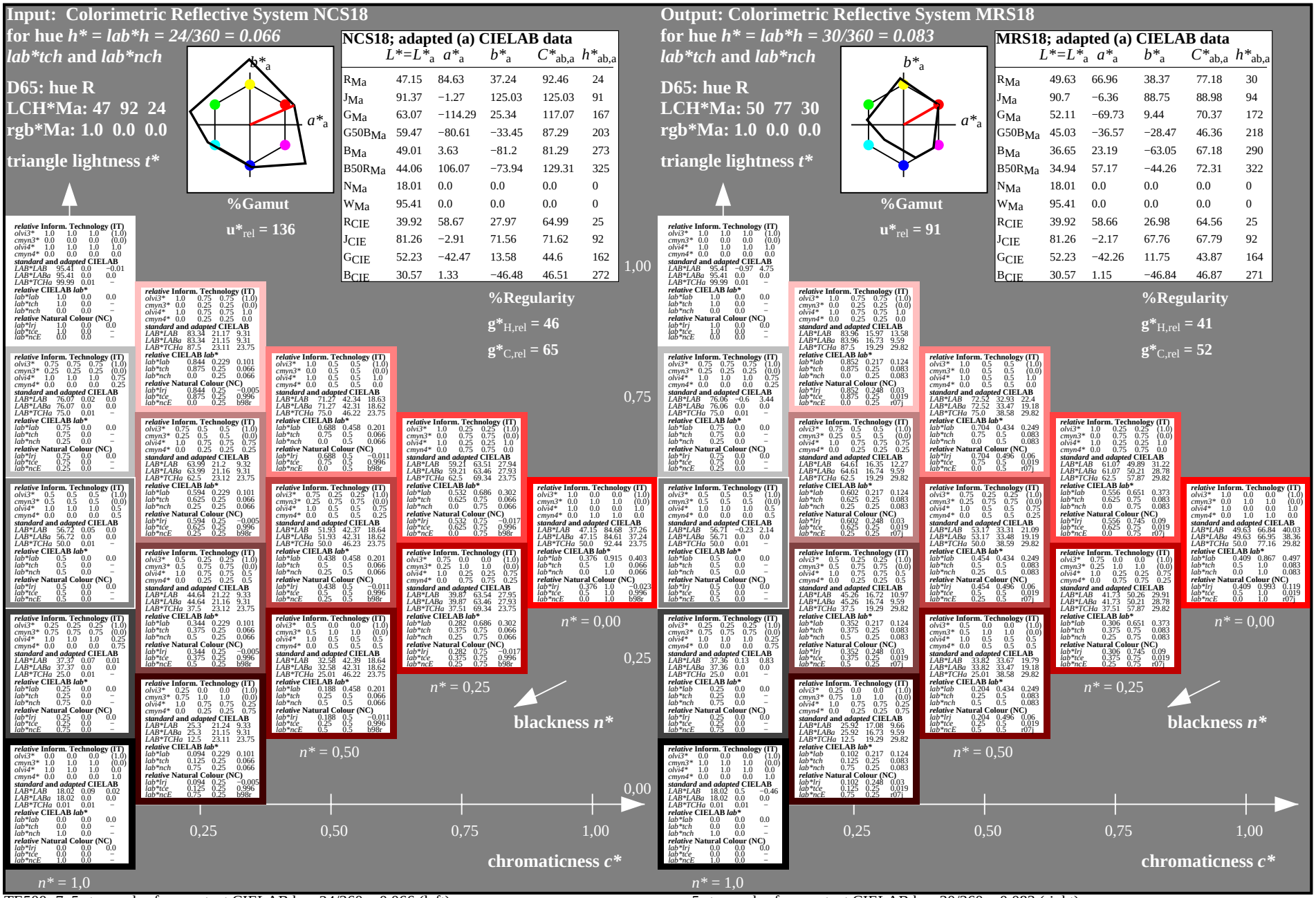
| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| RMa | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| JMa | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| GMa | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| G50BMa | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| BMa | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| B50RMa | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| NMa | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| WMa | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| RCIE | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| JCIE | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| GCIE | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| BCIE | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**ORS18; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| OMa | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| YMa | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| LMa | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| CMa | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| VMa | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| MMa | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| JCIE | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| GCIE | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| BCIE | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

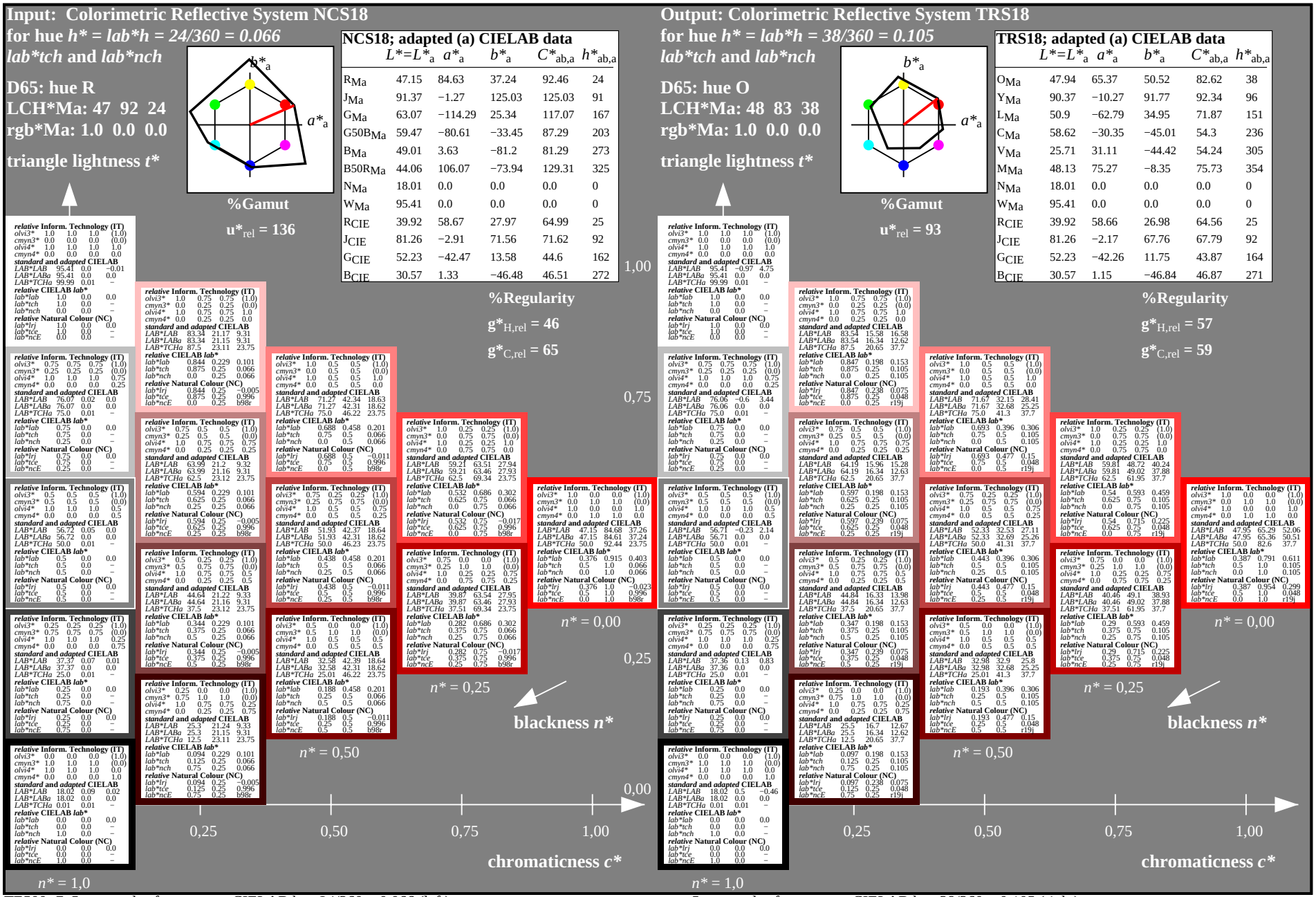
TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



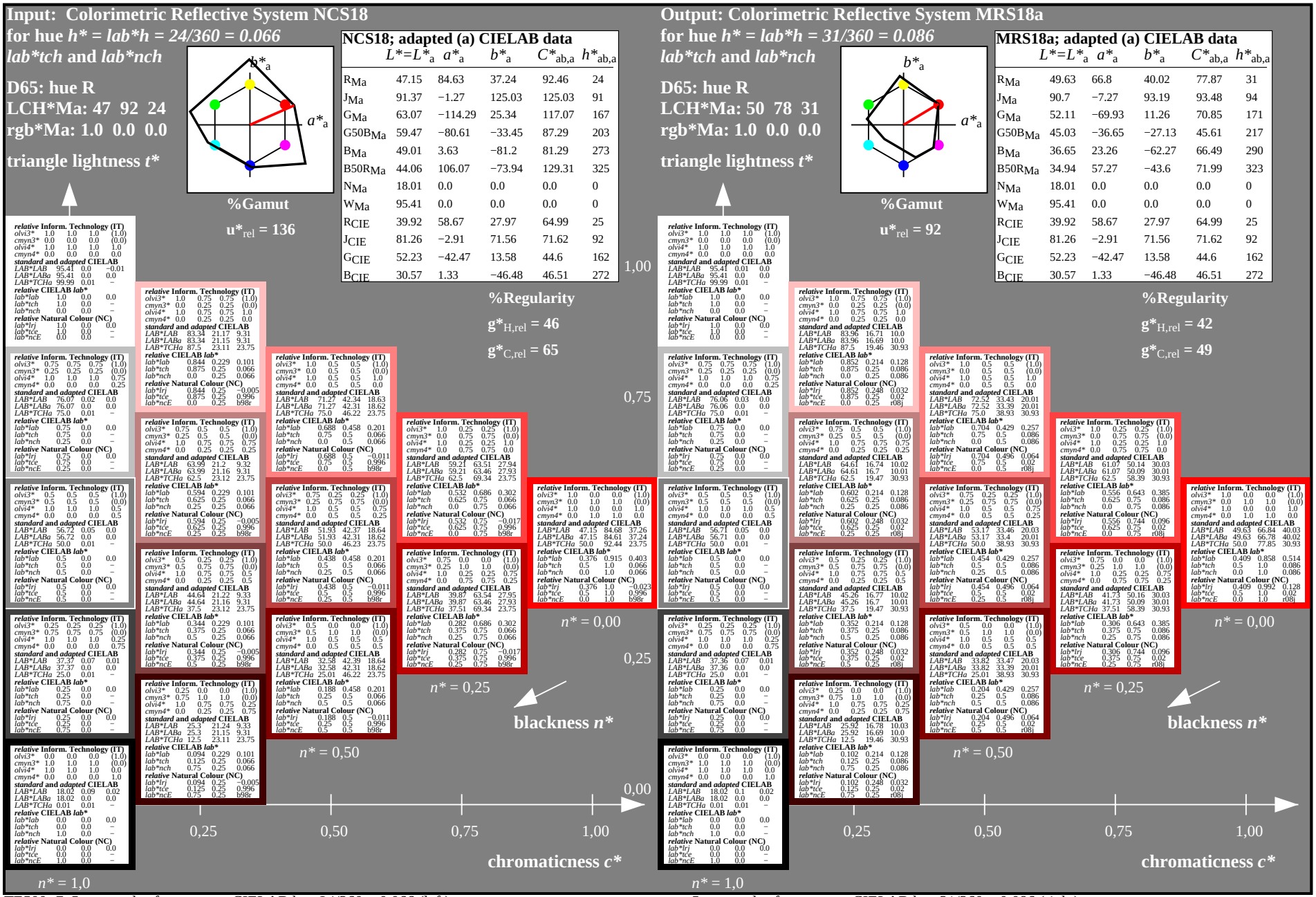

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)



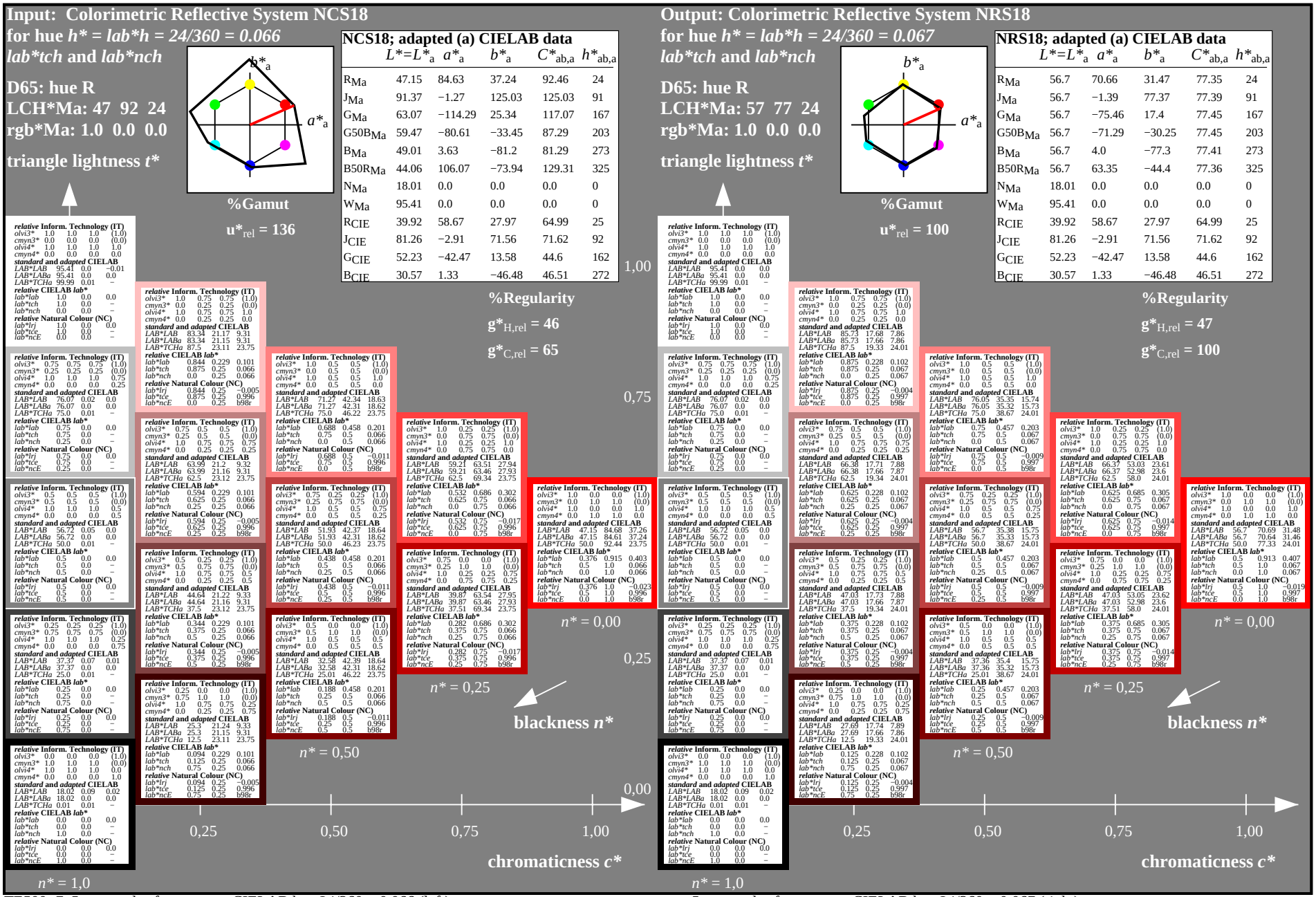

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



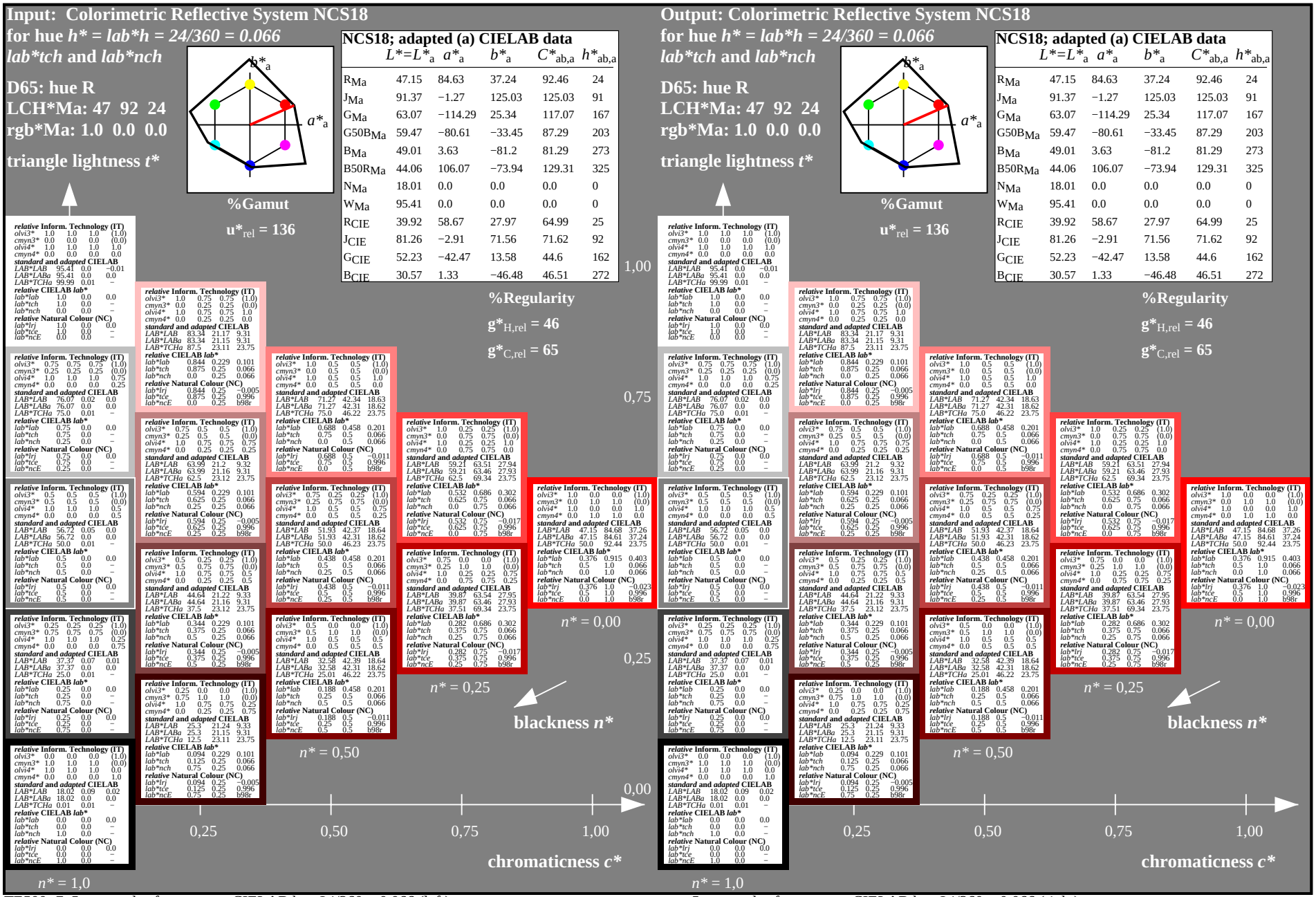

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 31/360 = 0.086 (right)




TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)

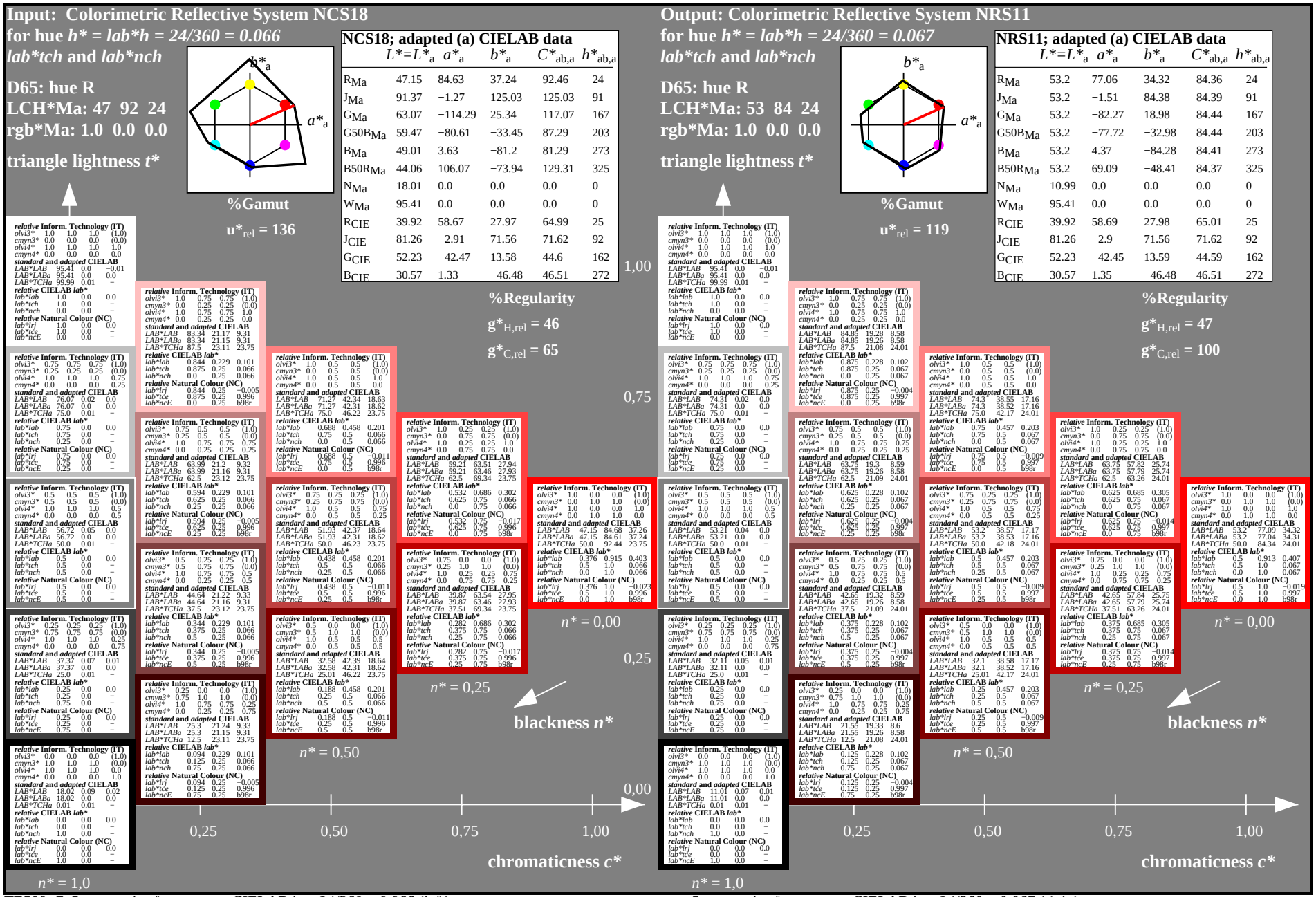



**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)




**NCS18; adapted (a) CIELAB data**

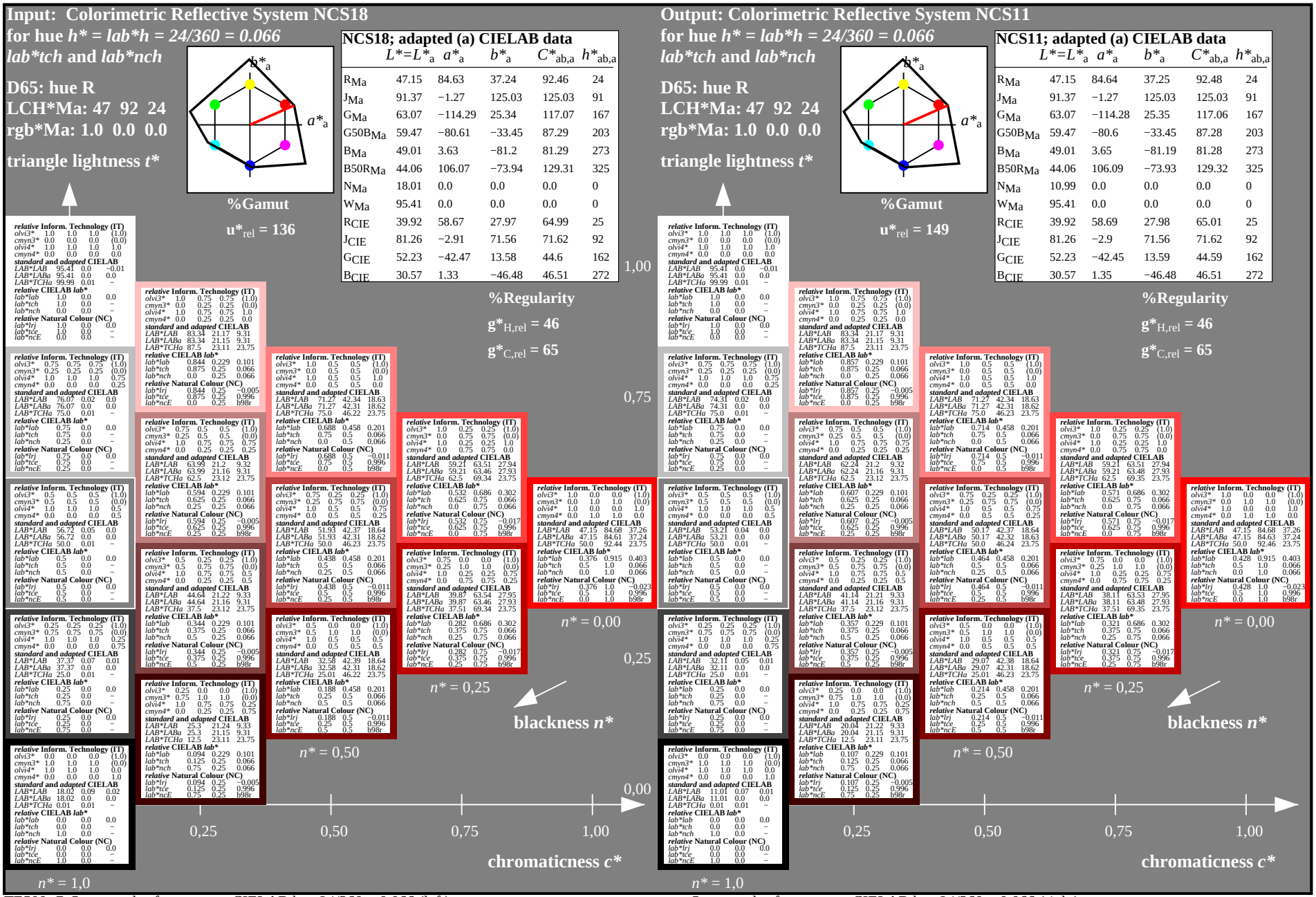
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)




**NCS18; adapted (a) CIELAB data**

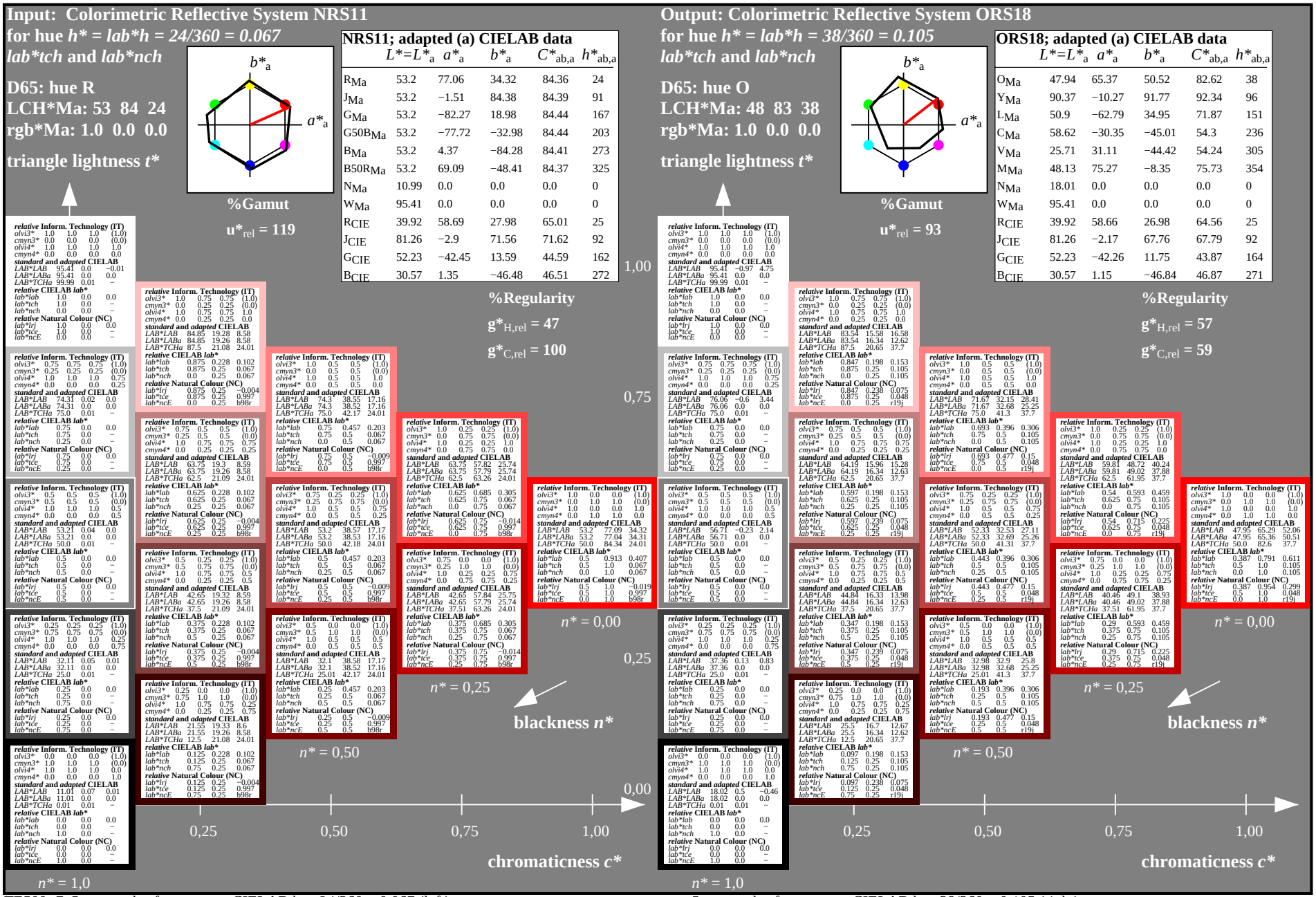
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

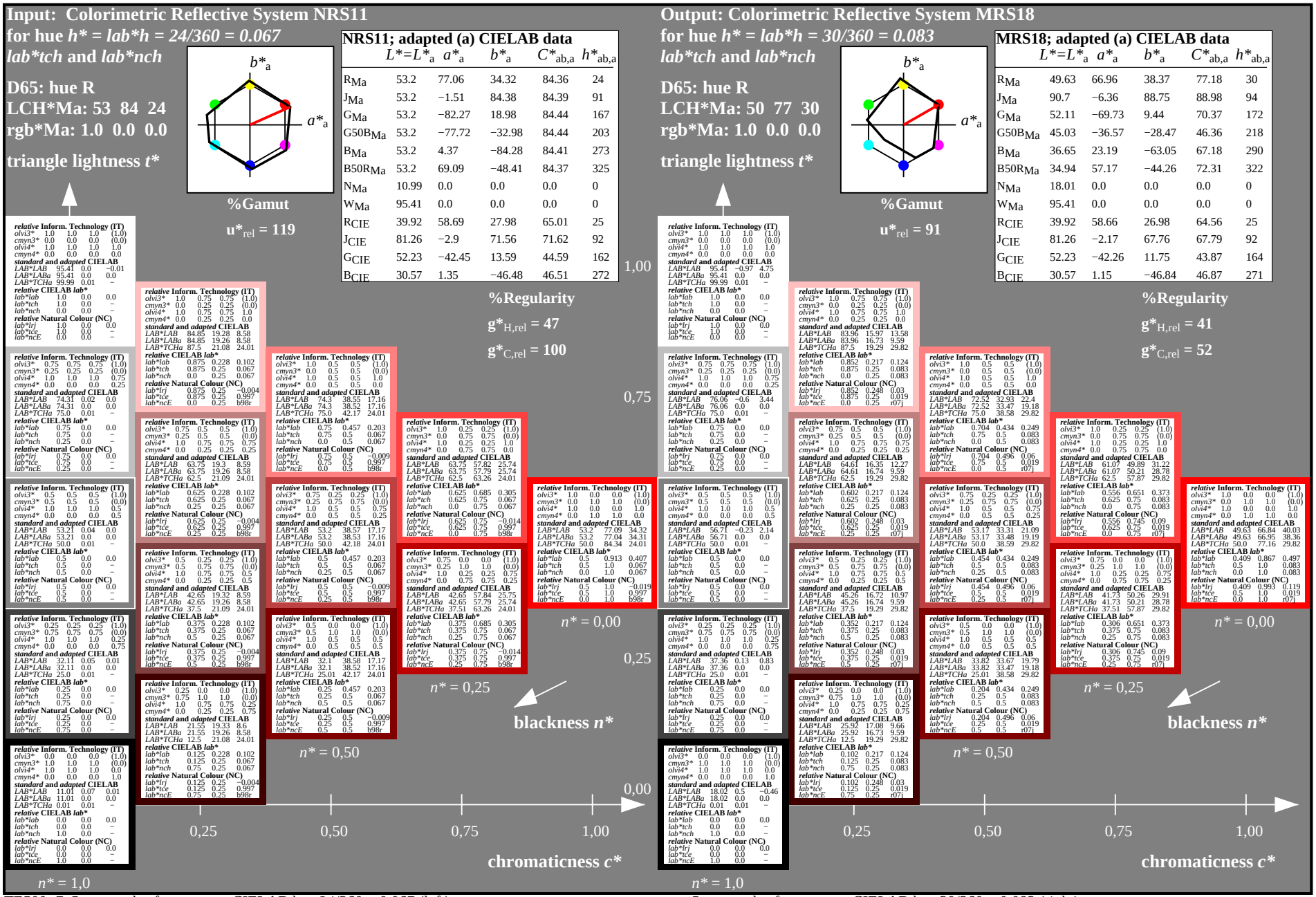
TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)



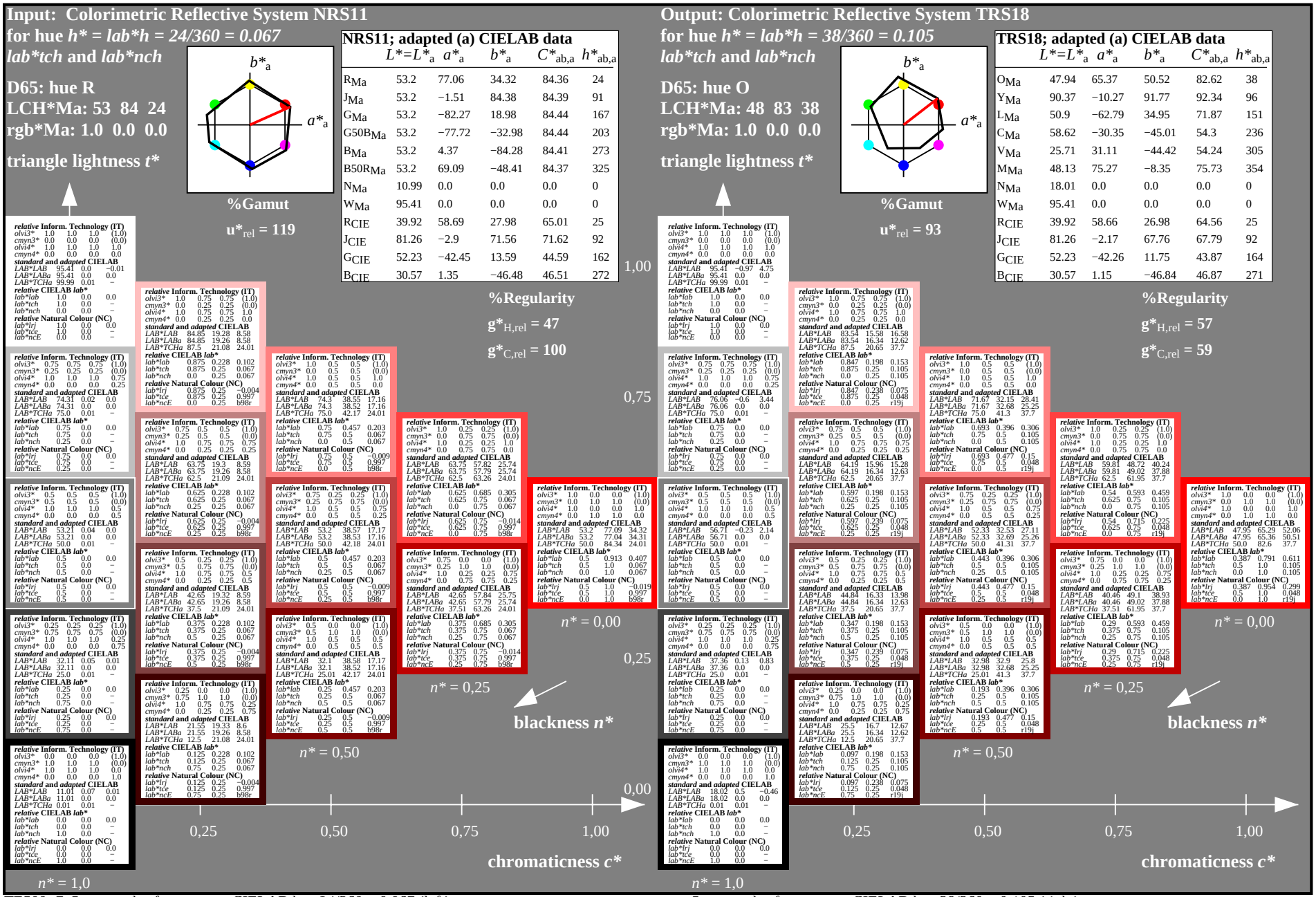

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



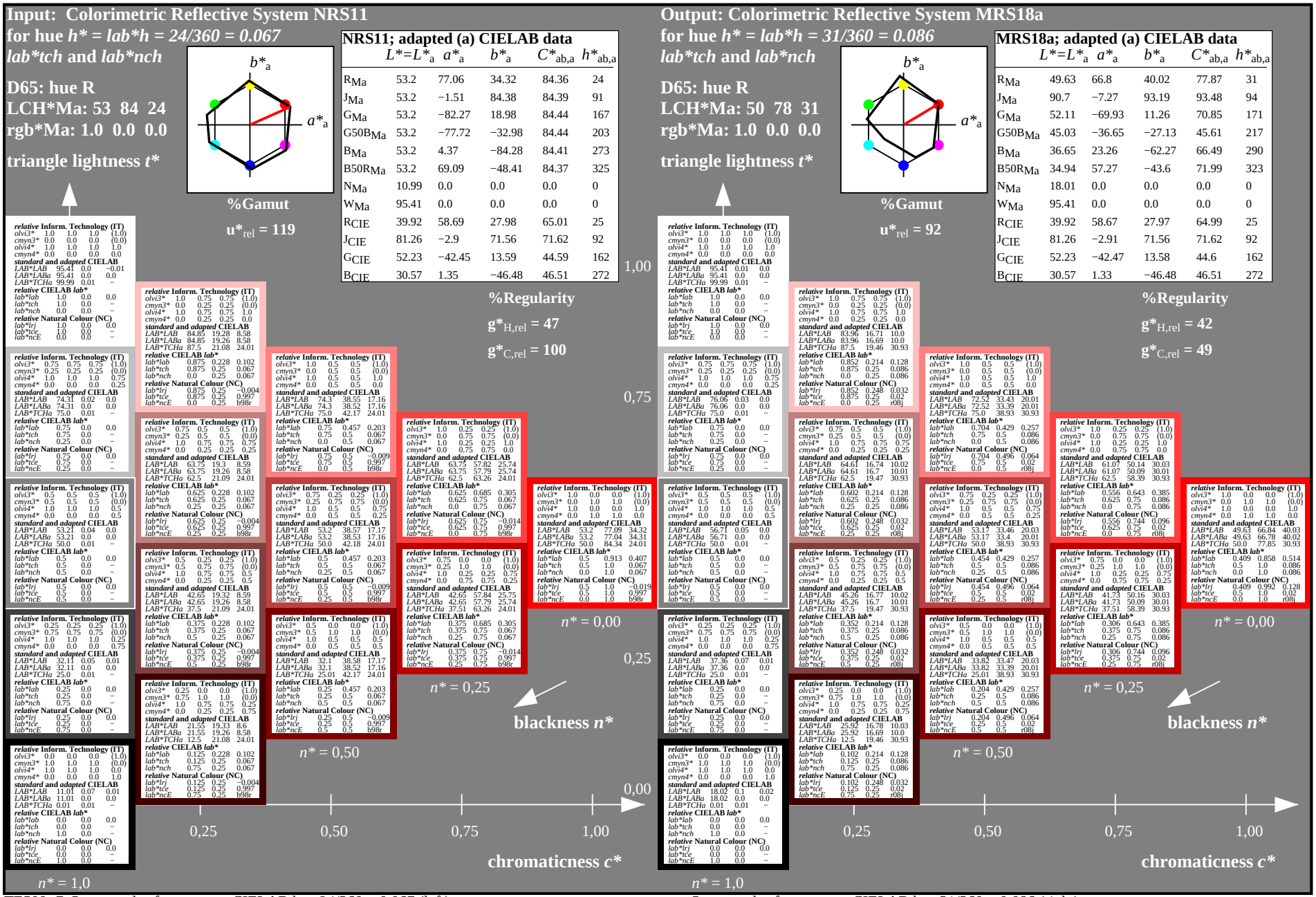

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)



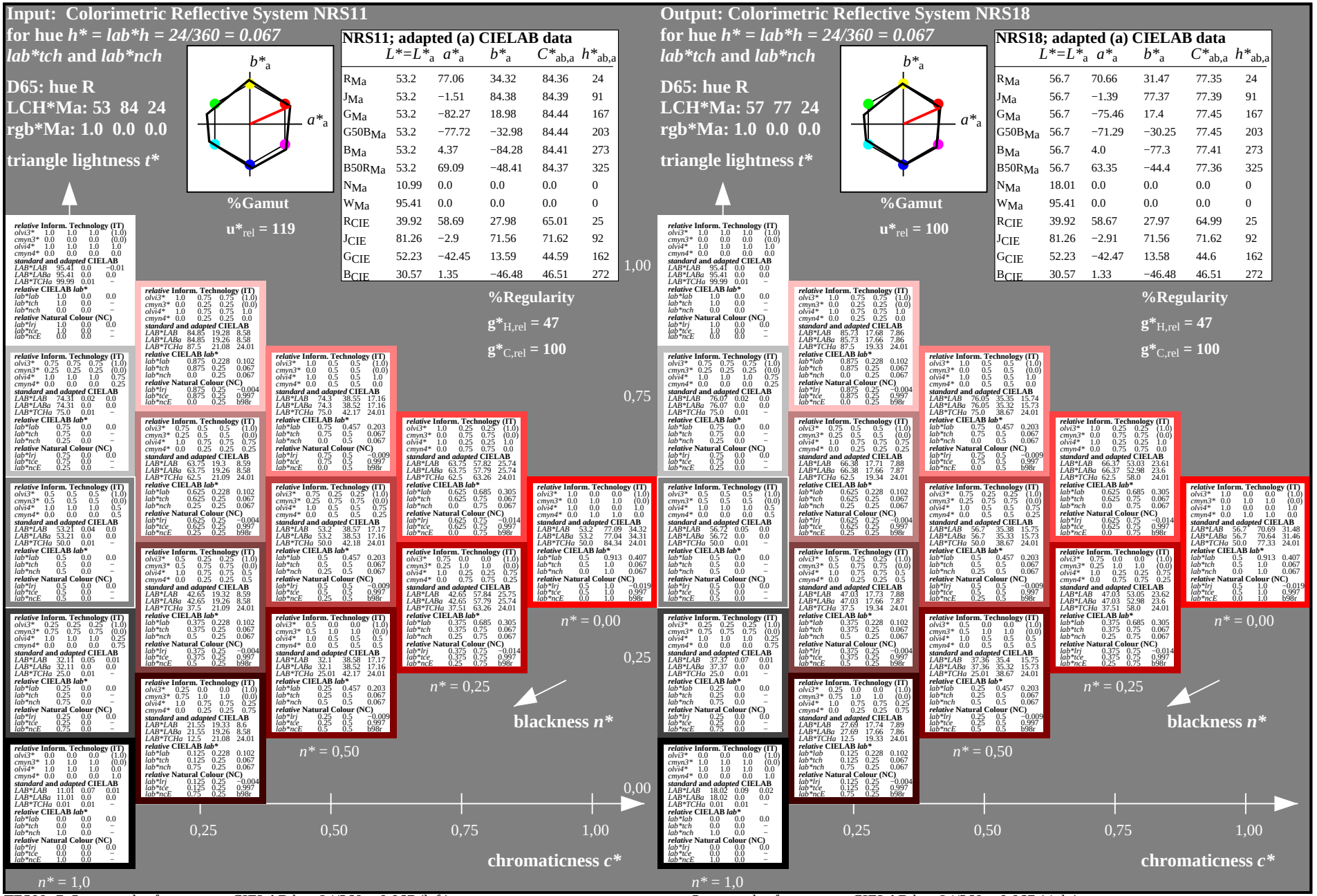

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



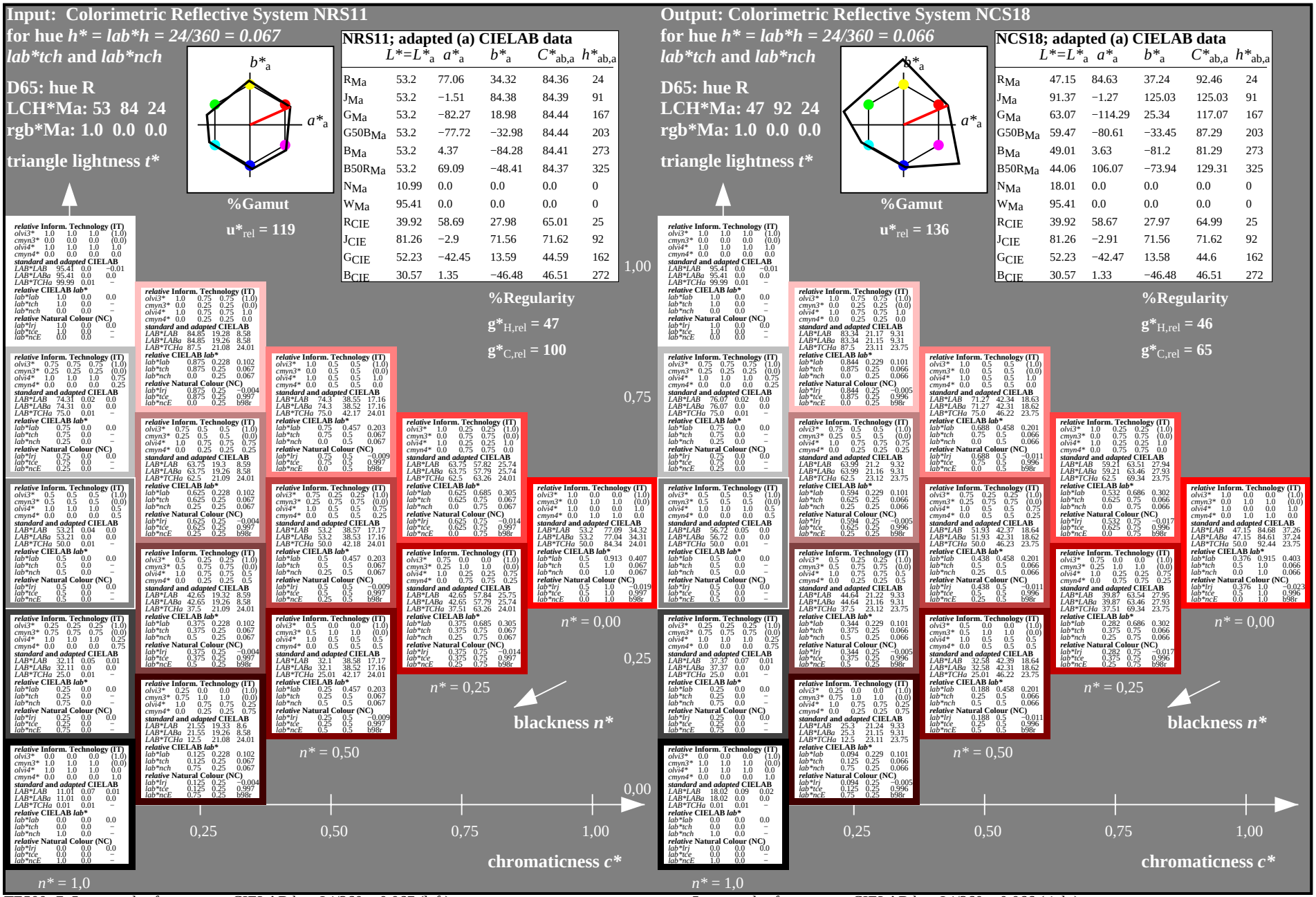

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 31/360 = 0.086 (right)



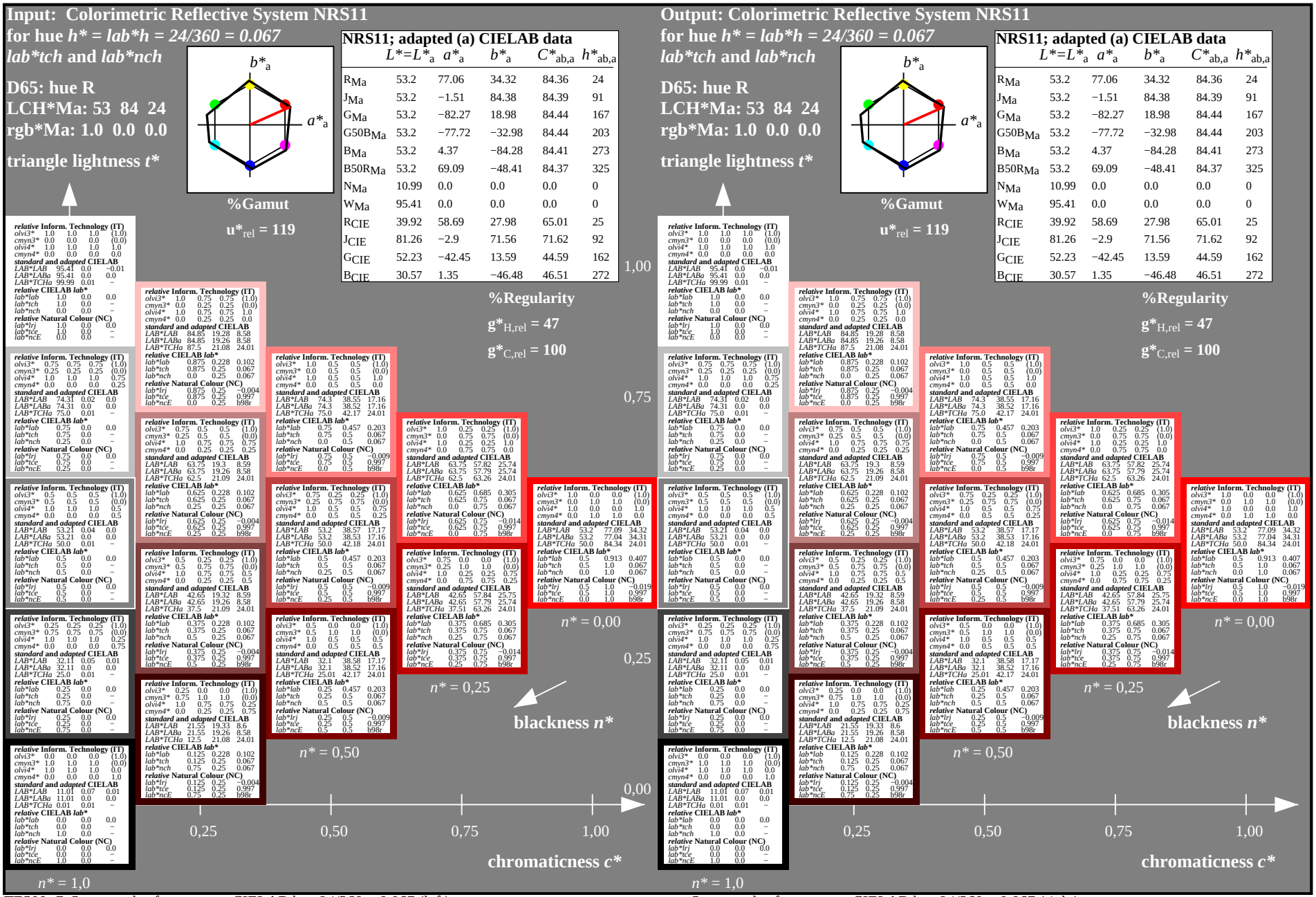

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



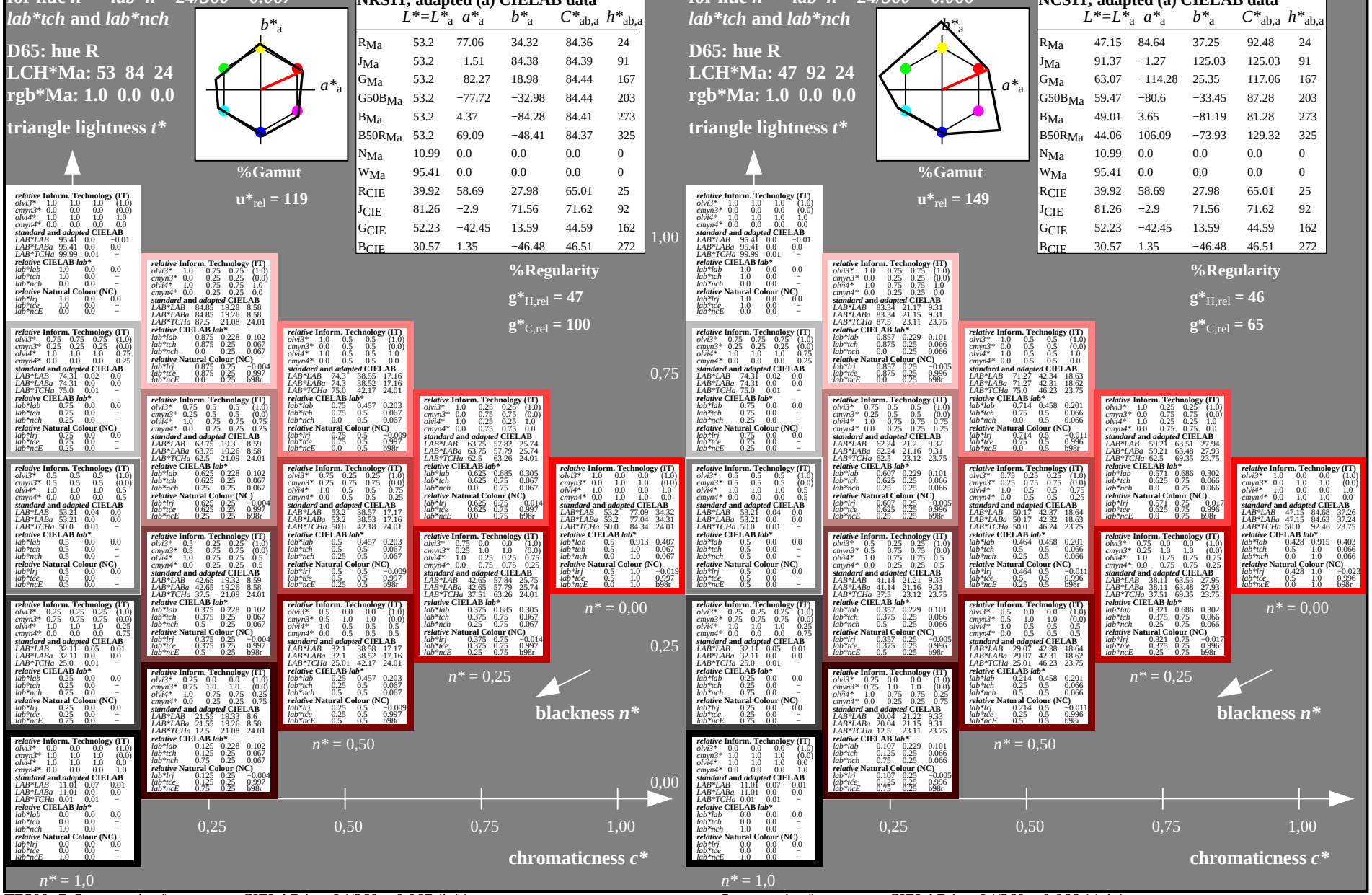

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)



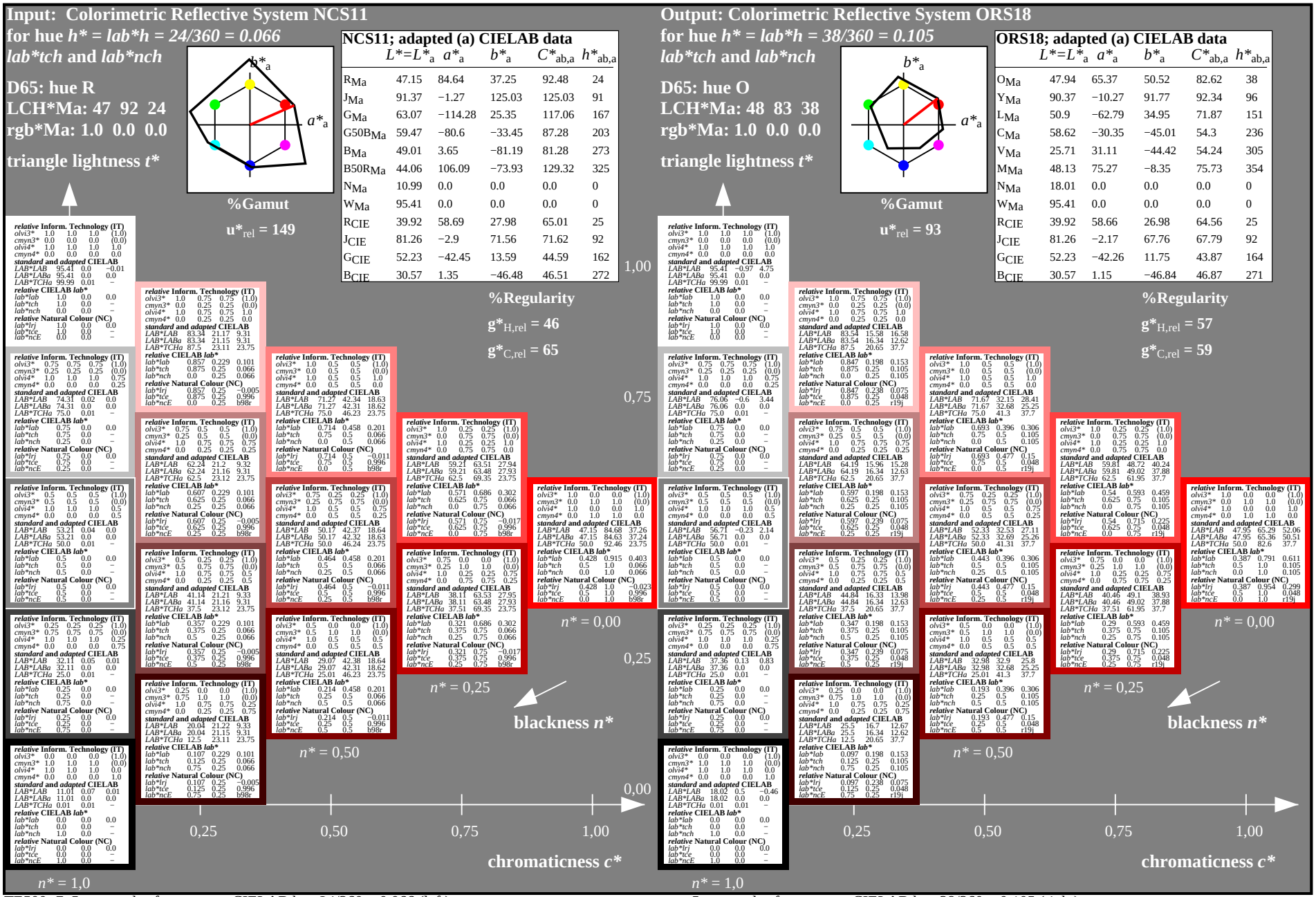

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



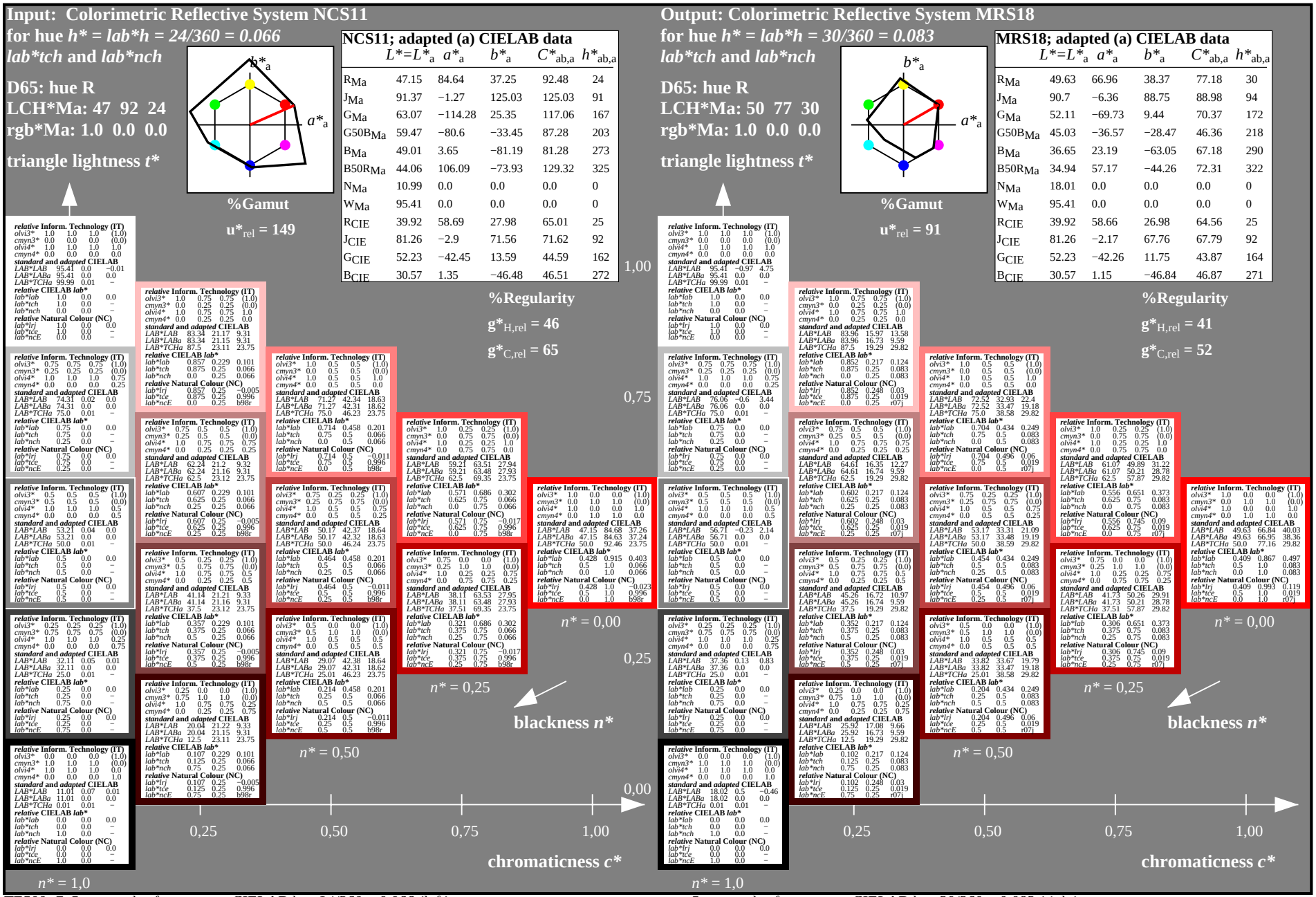

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.067 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)




TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)




**NCS11; adapted (a) CIELAB data**

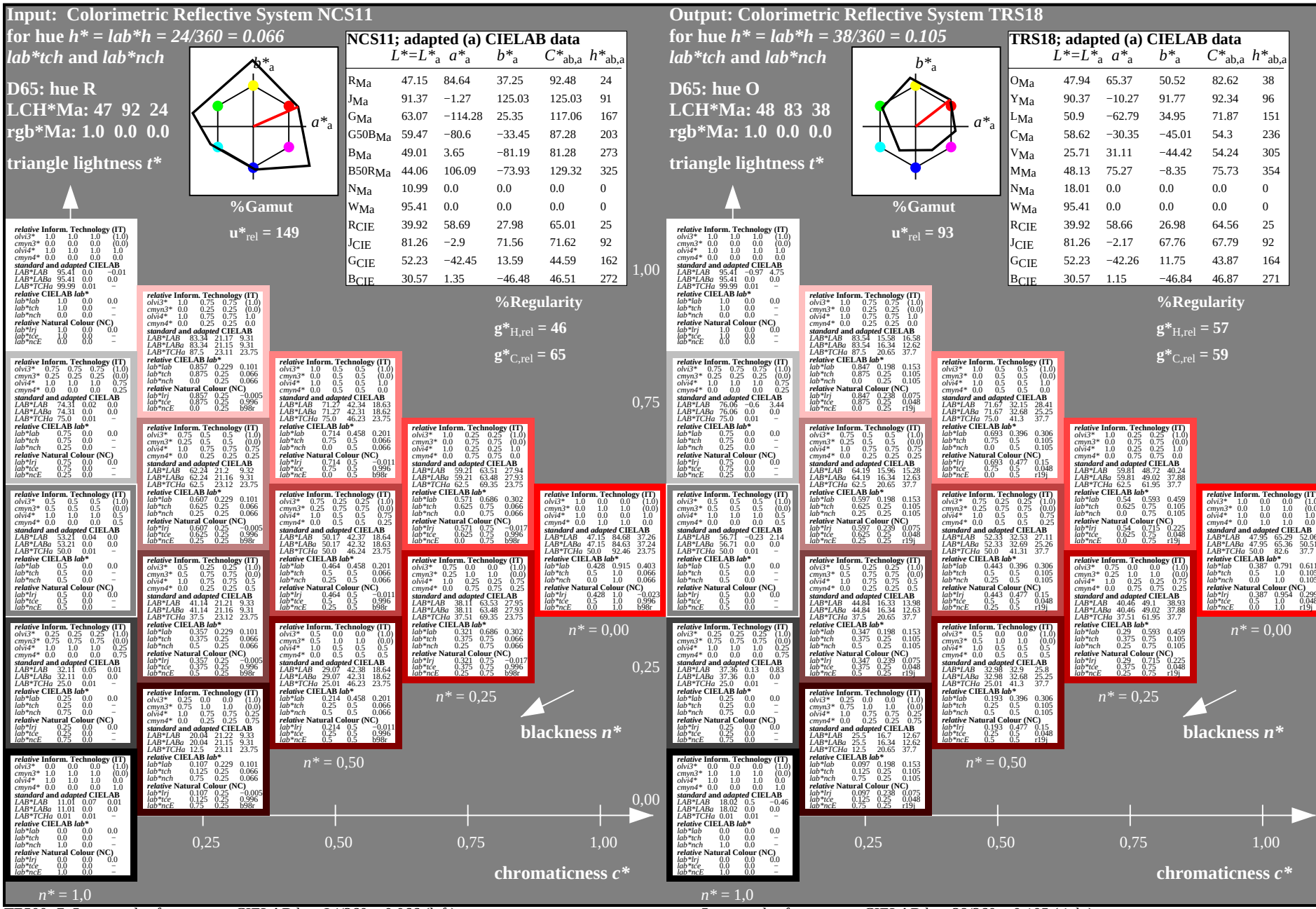
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

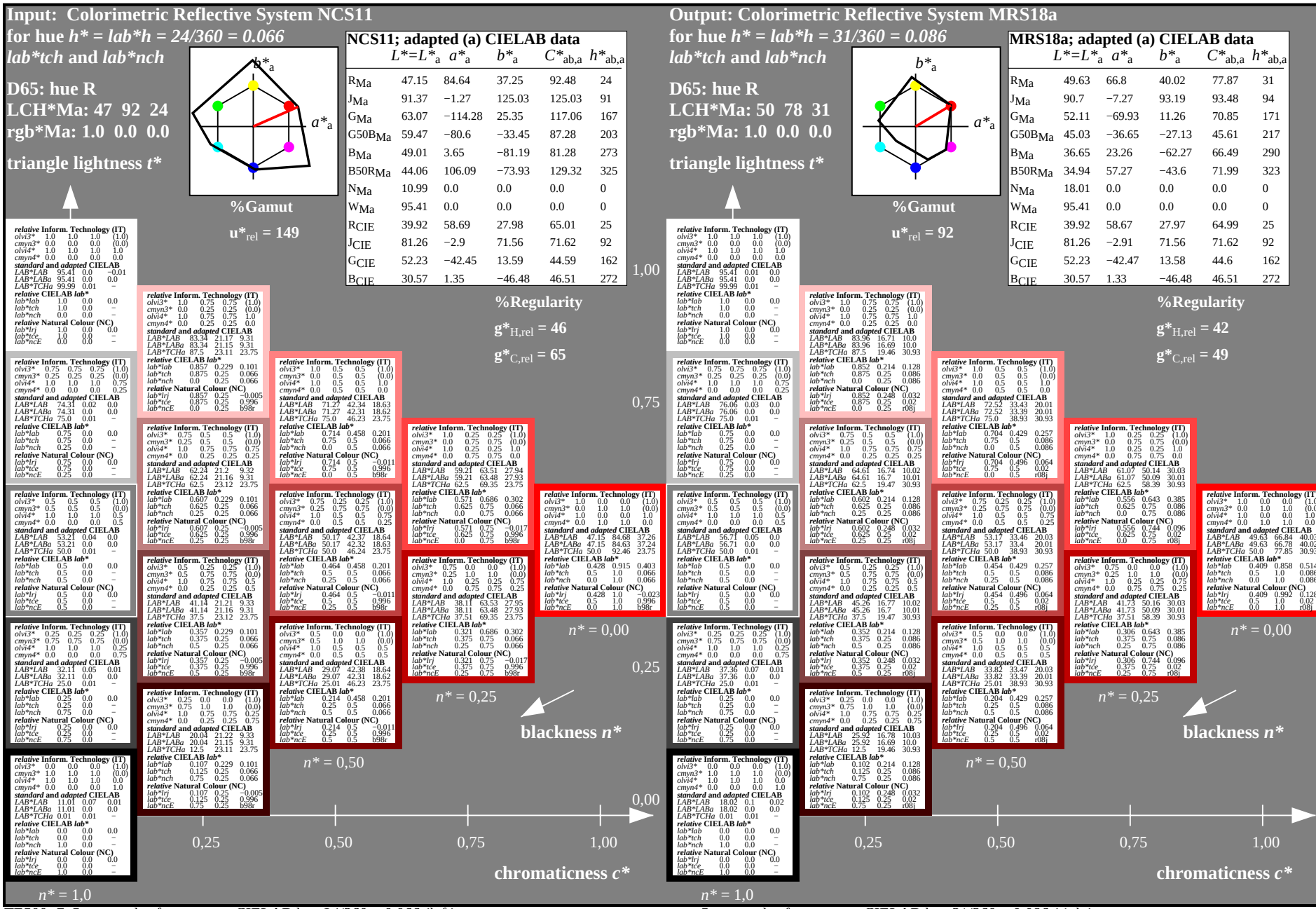
TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 30/360 = 0.083 (right)



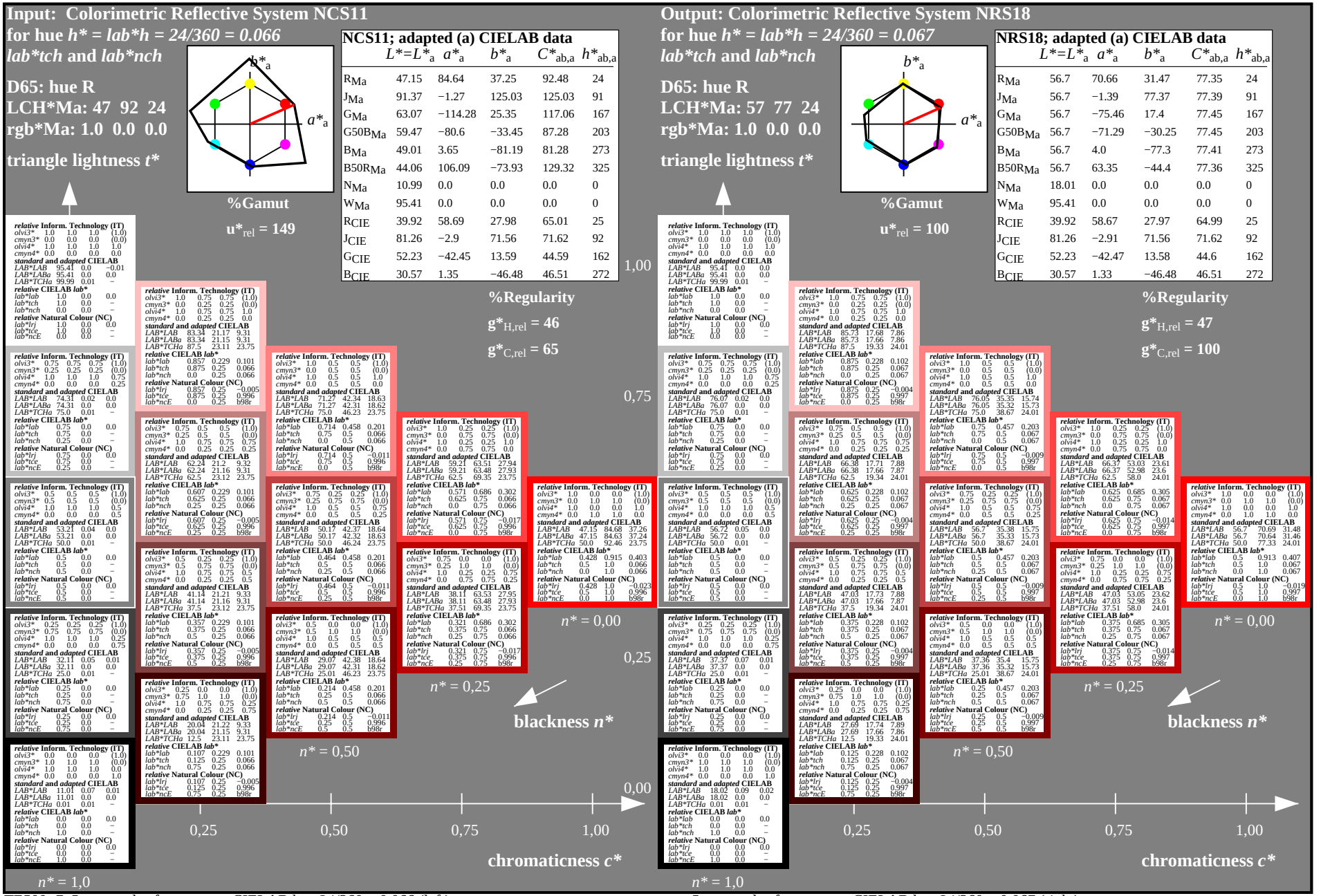

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 38/360 = 0.105 (right)



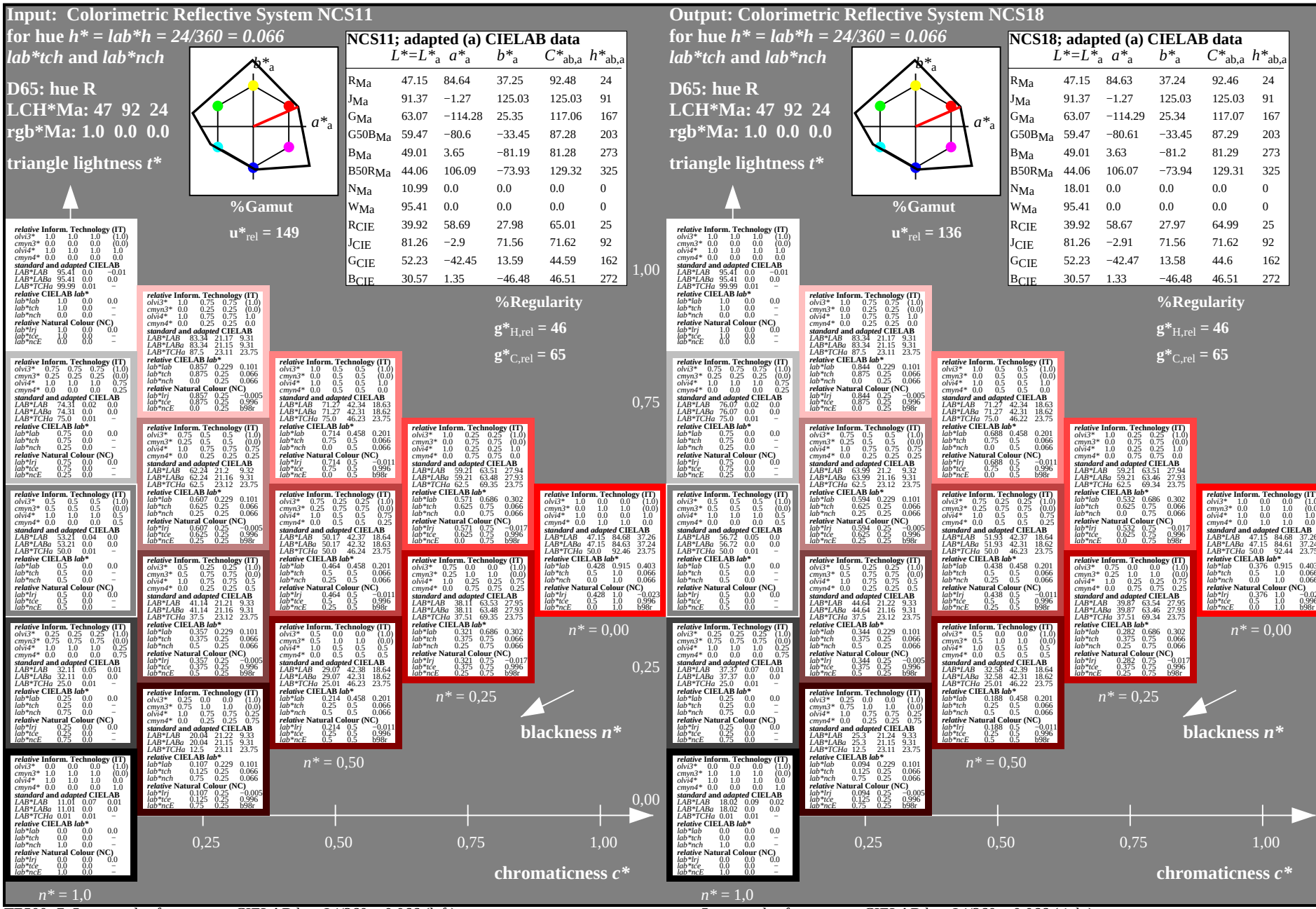

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 31/360 = 0.086 (right)




TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)




**NCS11; adapted (a) CIELAB data**

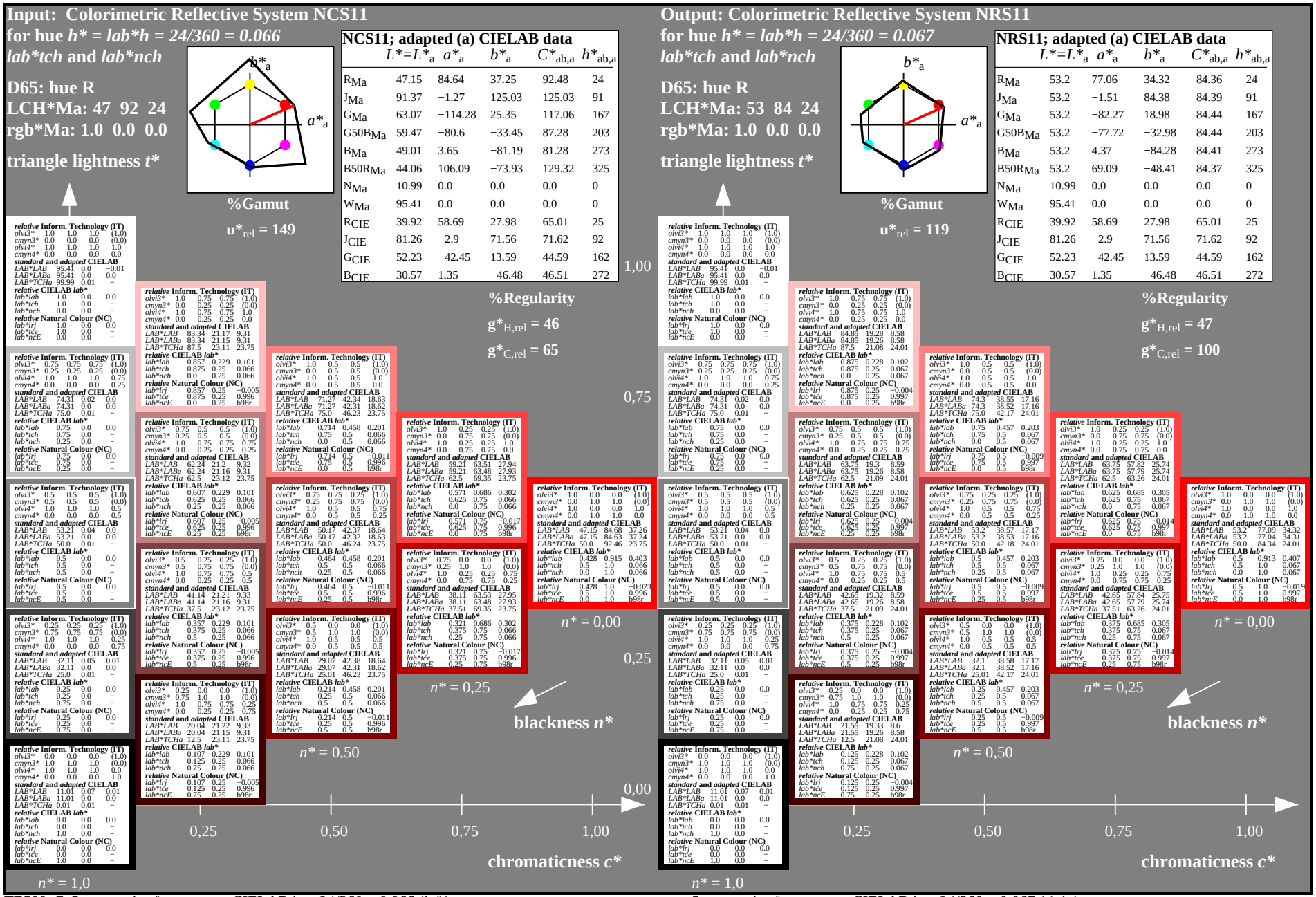
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)




**NCS11; adapted (a) CIELAB data**

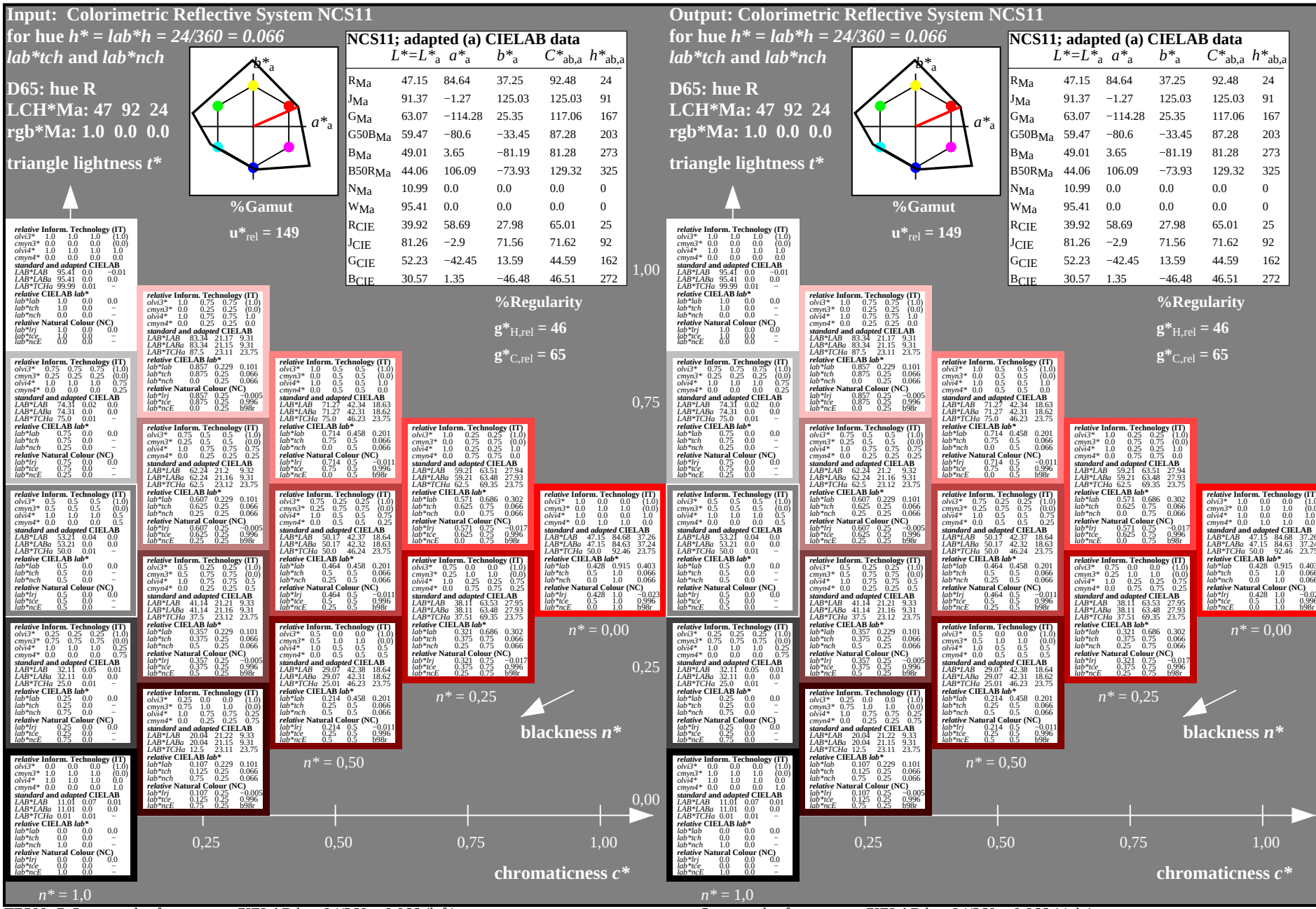
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

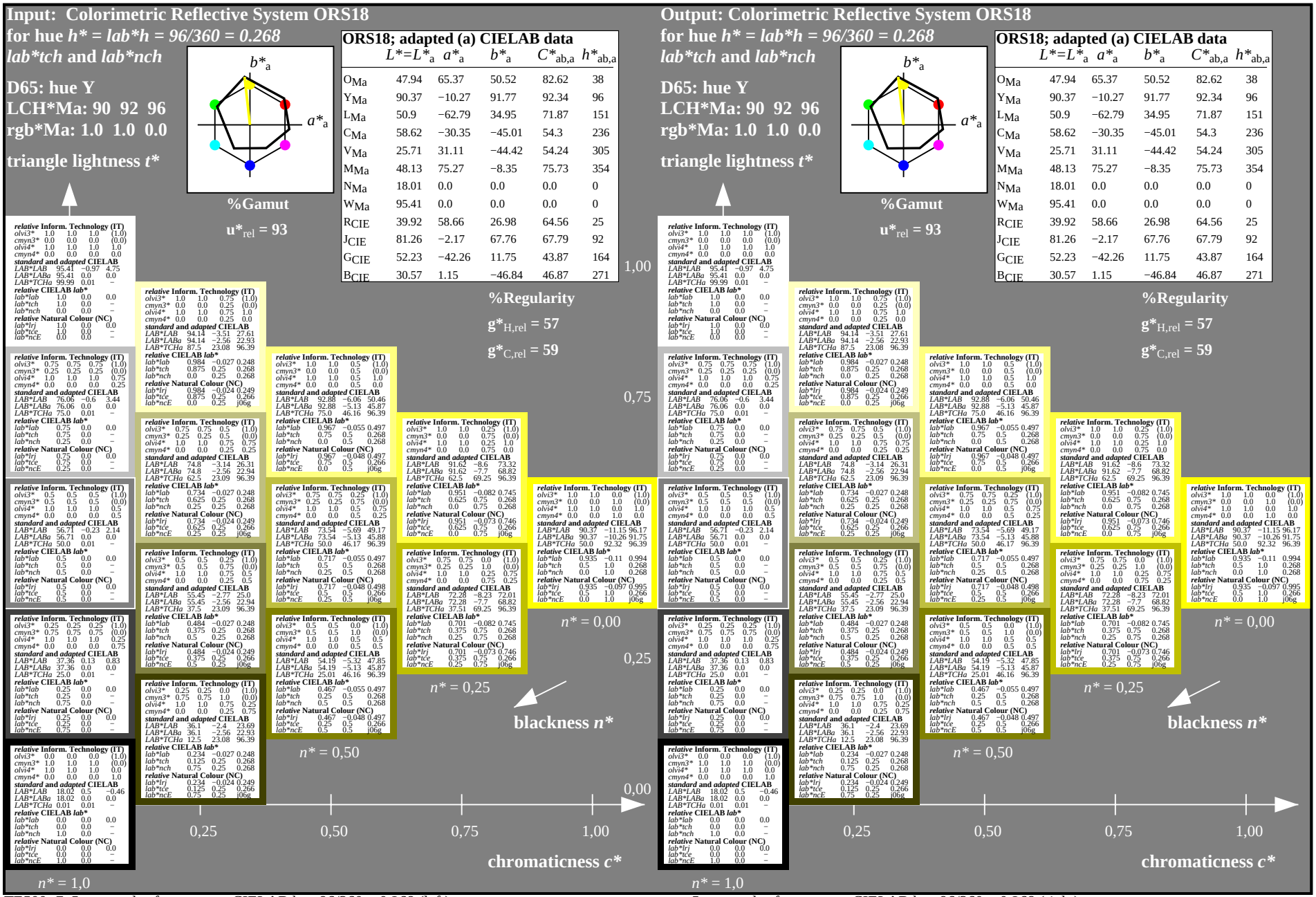
TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)



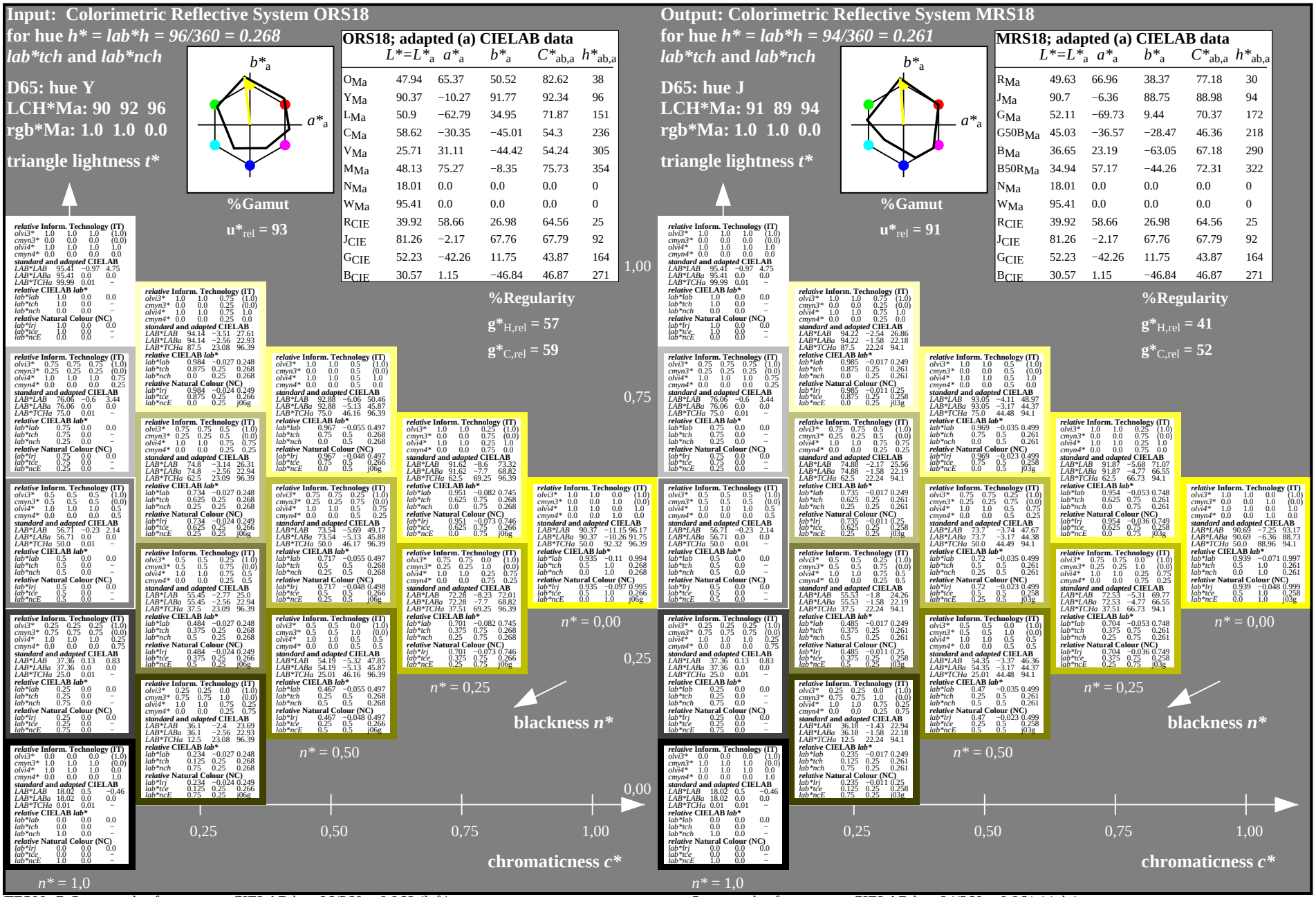

TE500−7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)



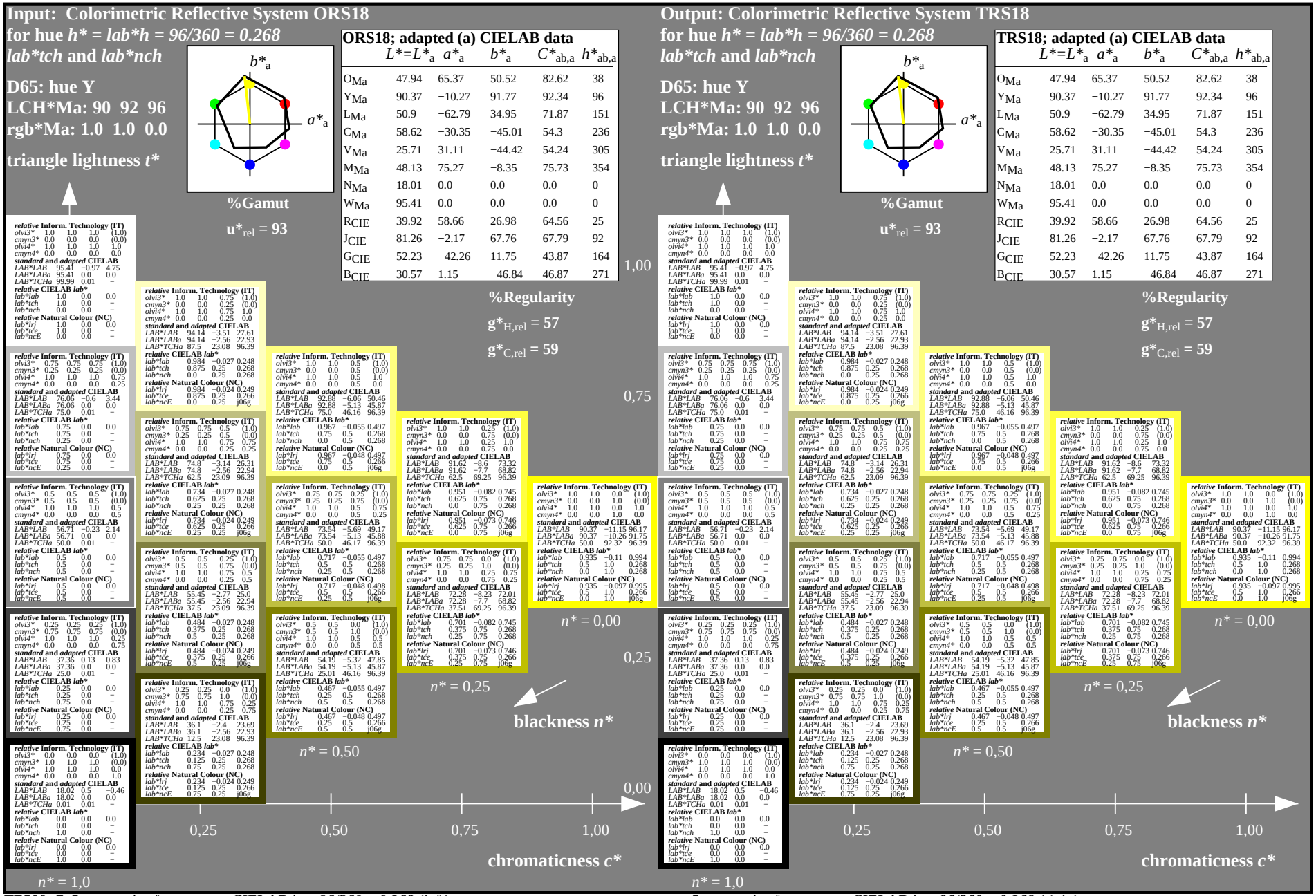

TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)



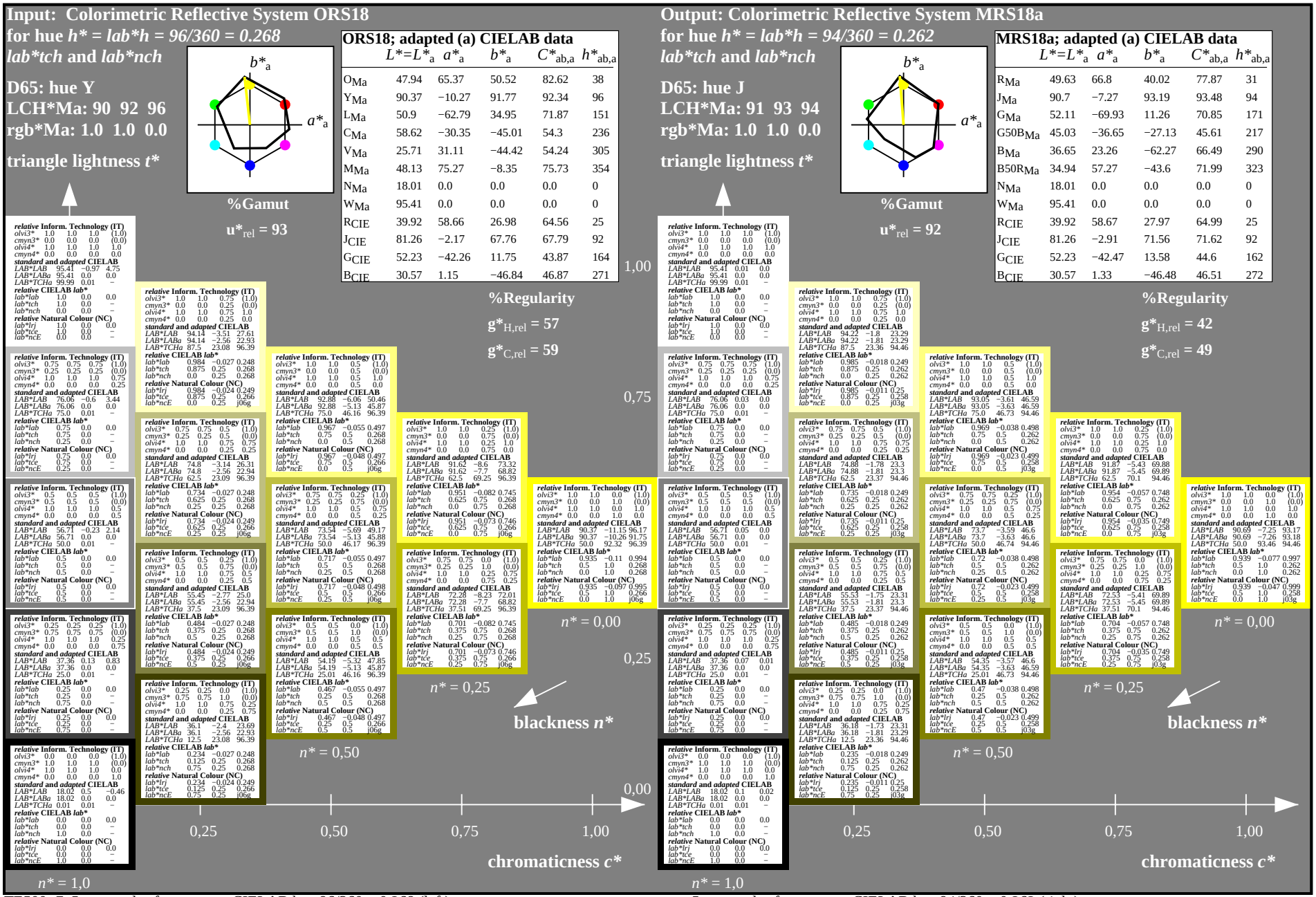

TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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



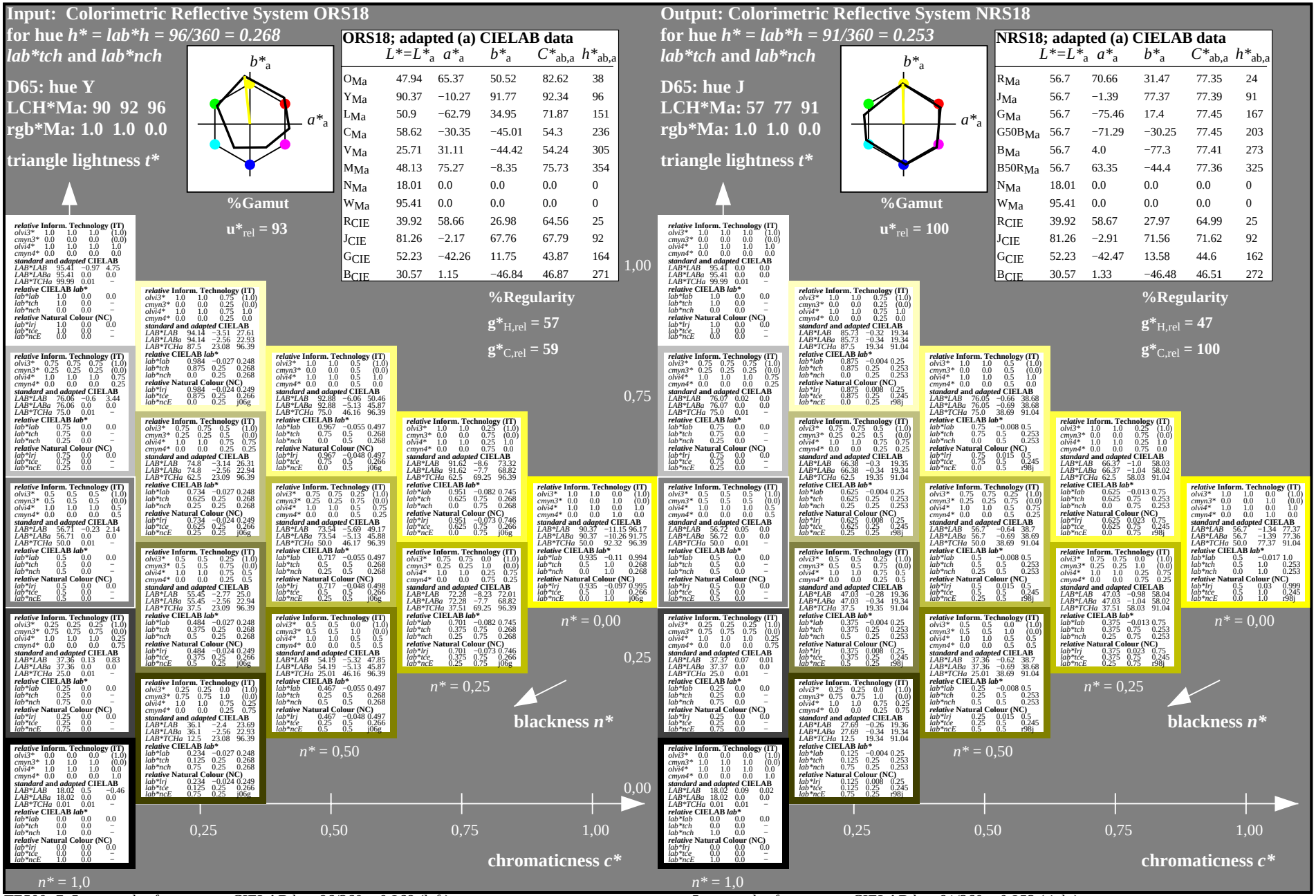

TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)



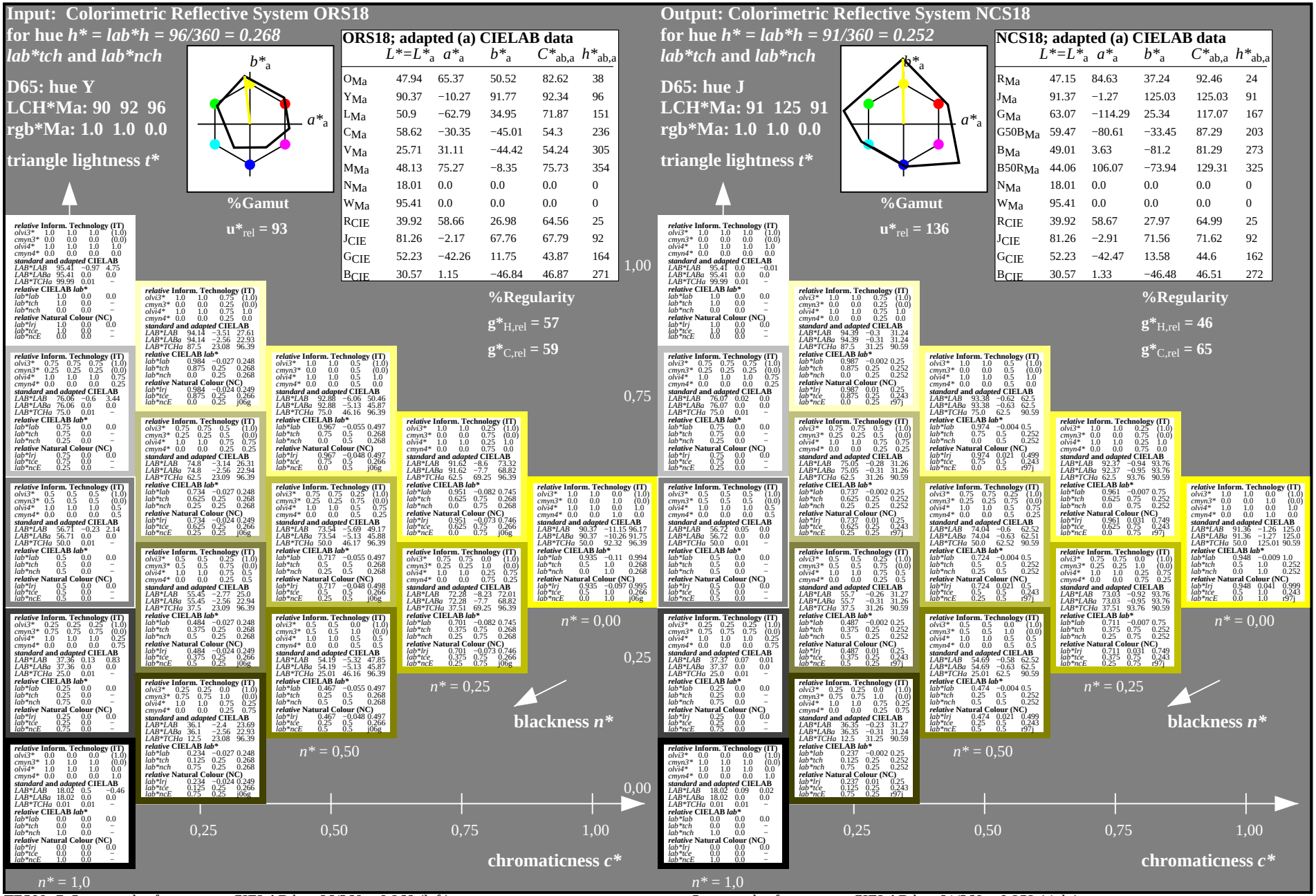

TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 94/360 = 0.262 (right)



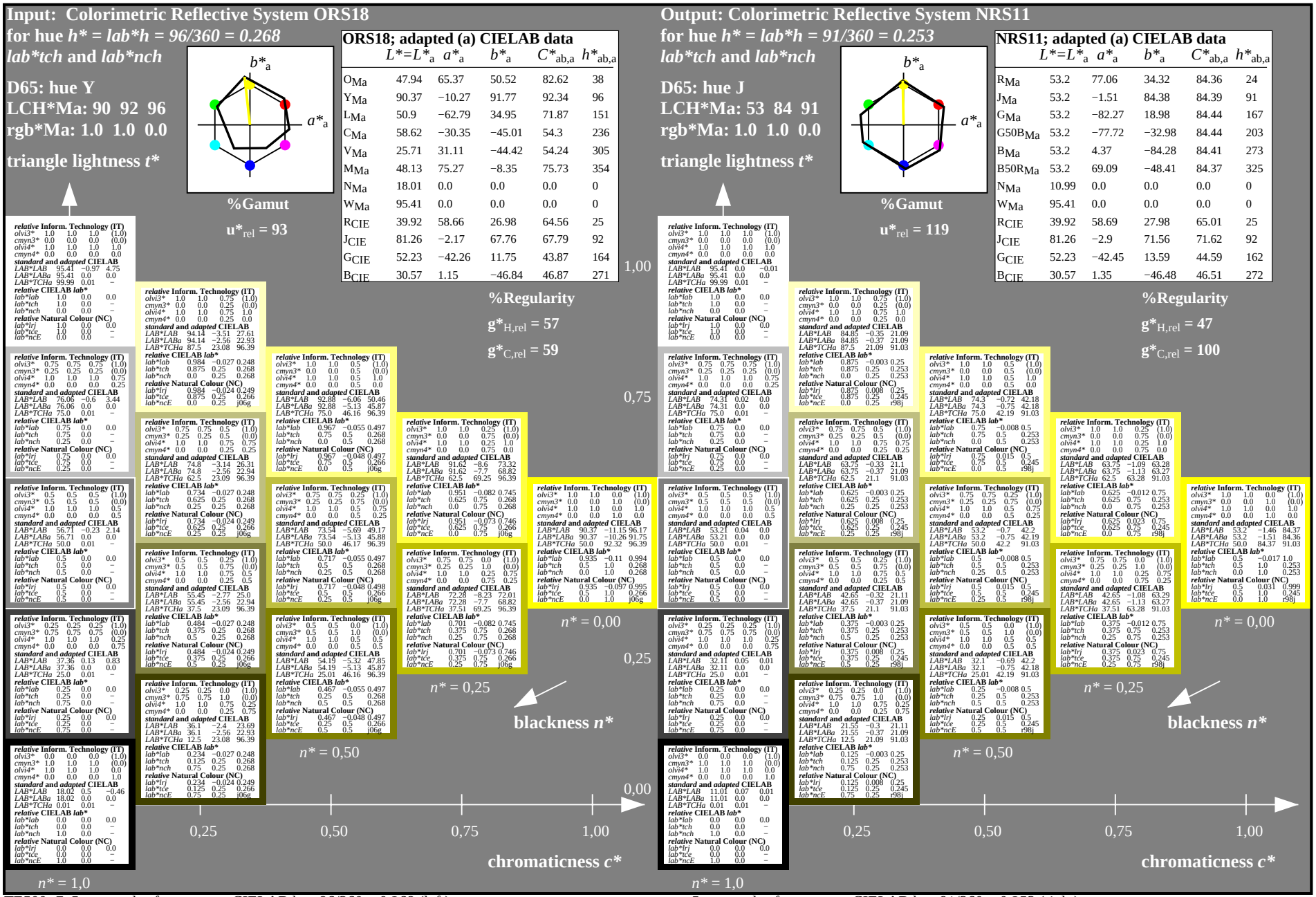

TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)




TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)



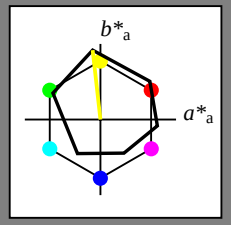

TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)

**Input: Colorimetric 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**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

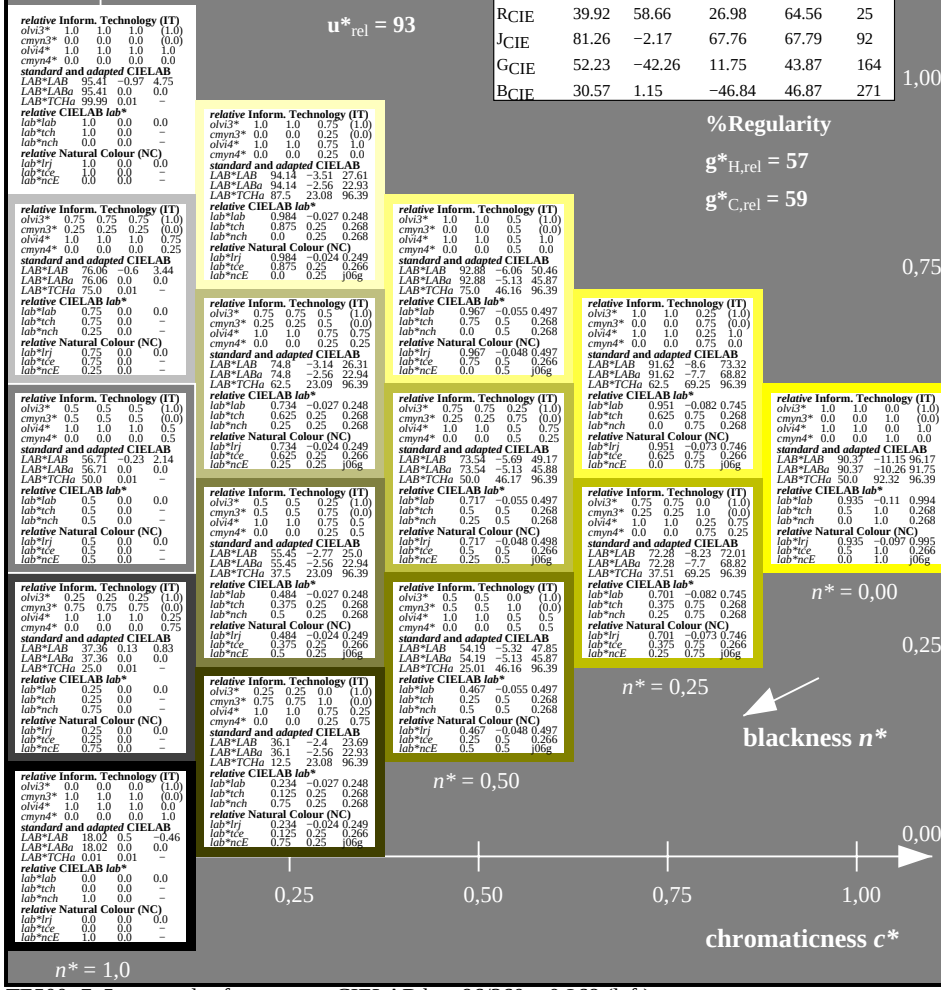
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

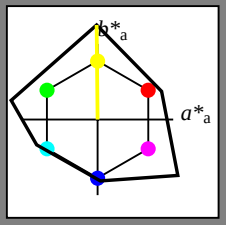
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

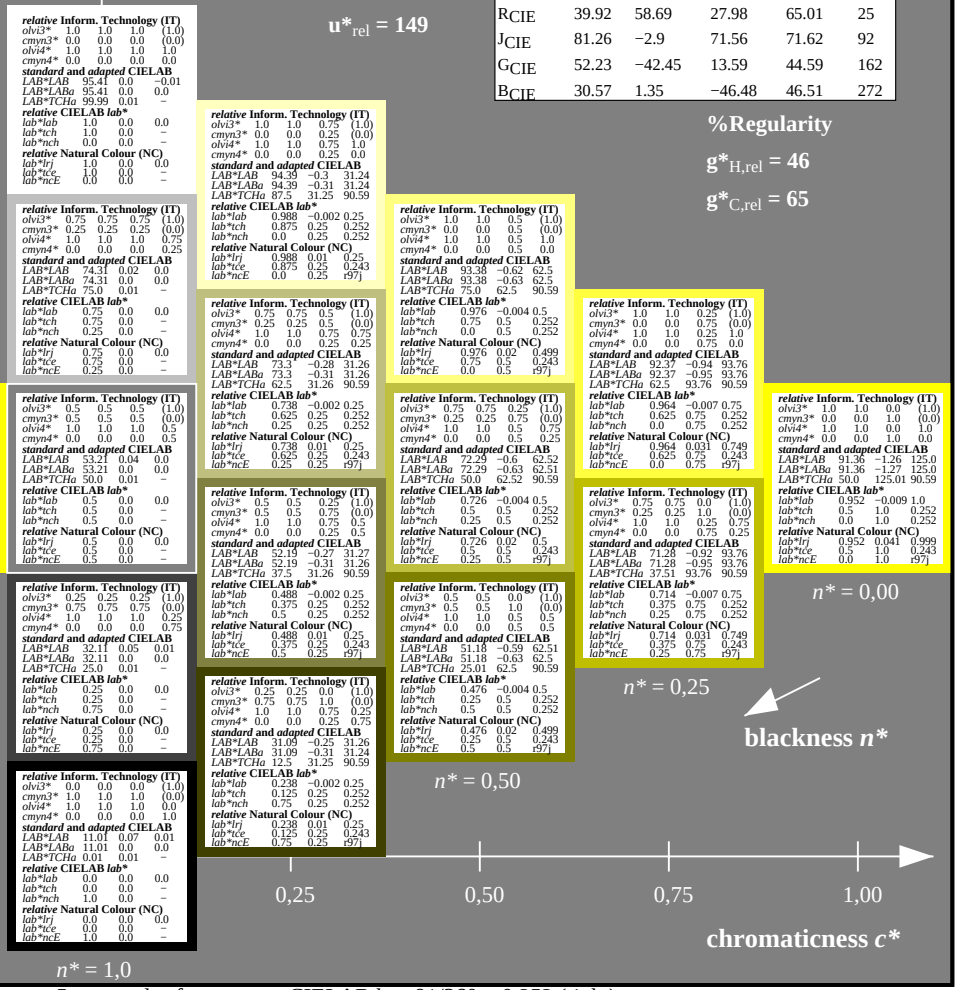
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

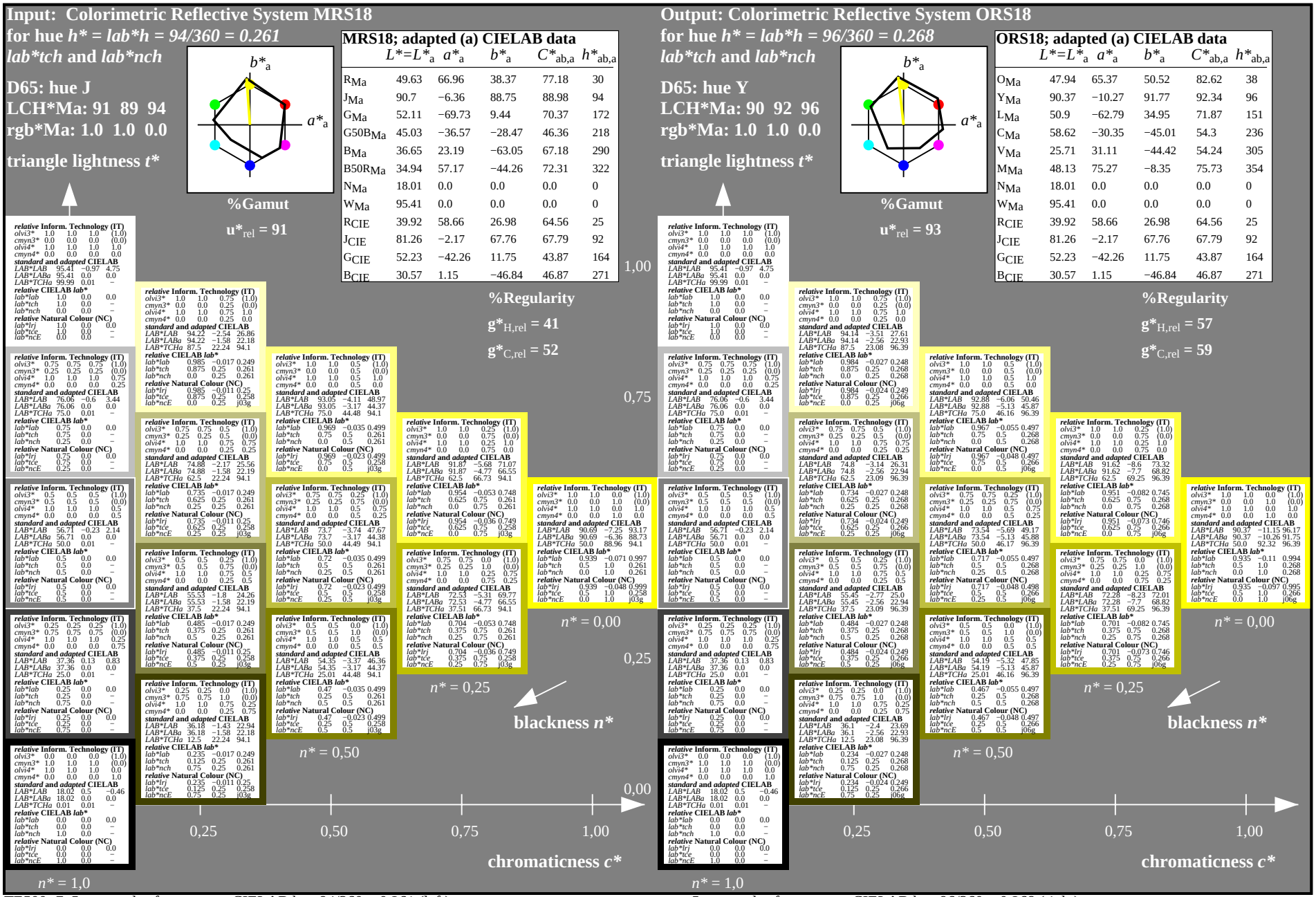
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)




**MRS18; adapted (a) CIELAB data**

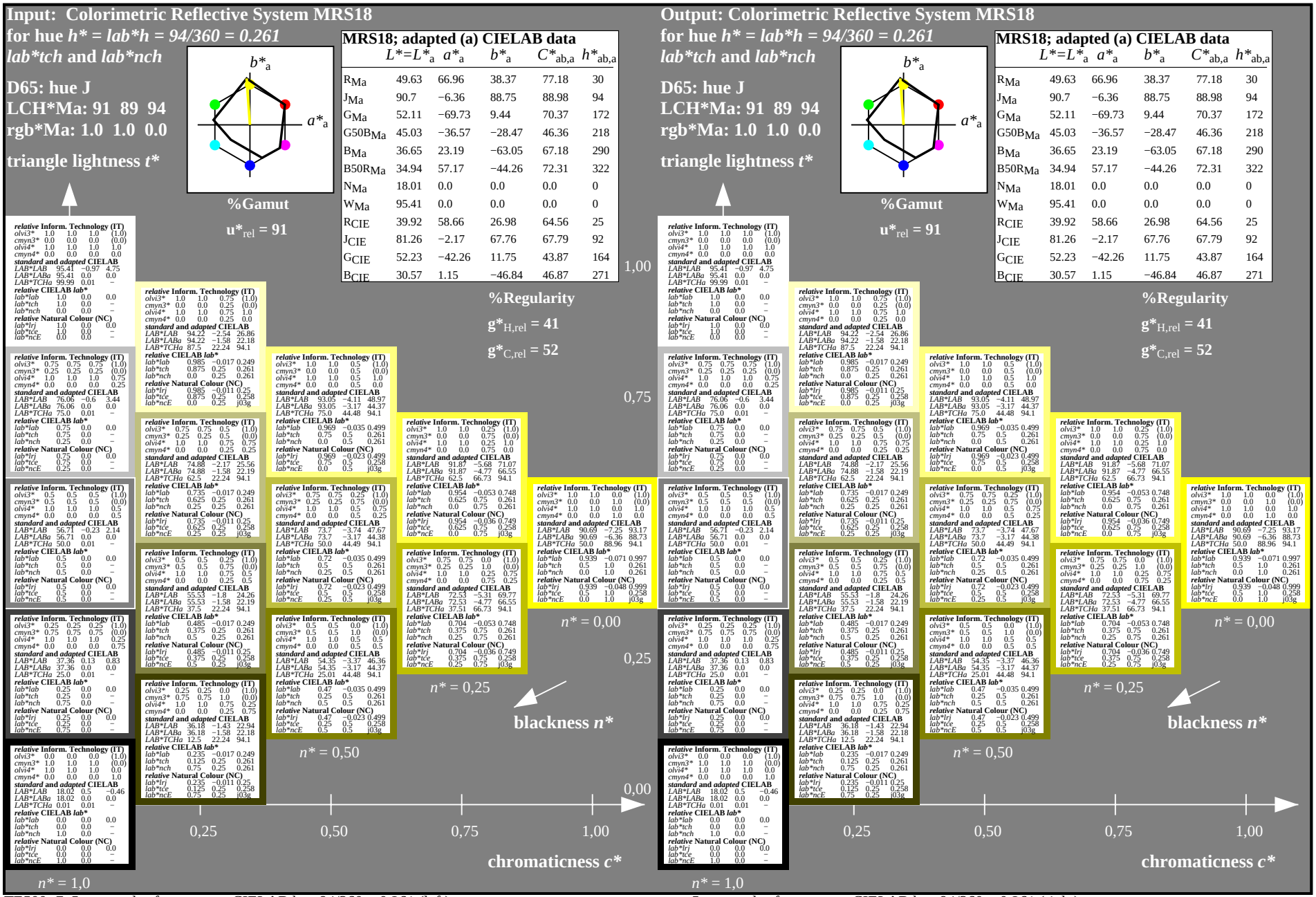
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

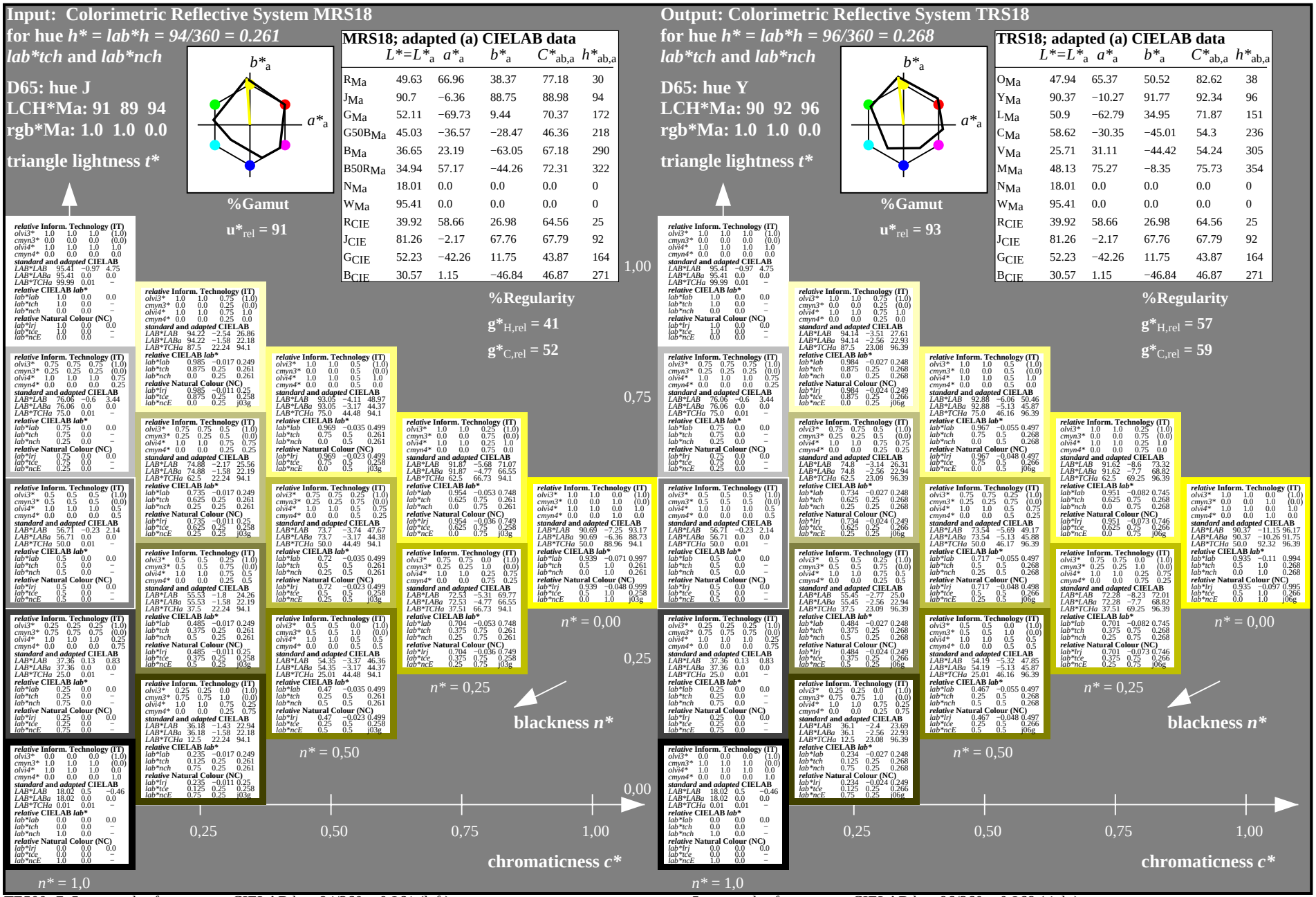
TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.261 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)




TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.261 (left)

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




**MRS18; adapted (a) CIELAB data**

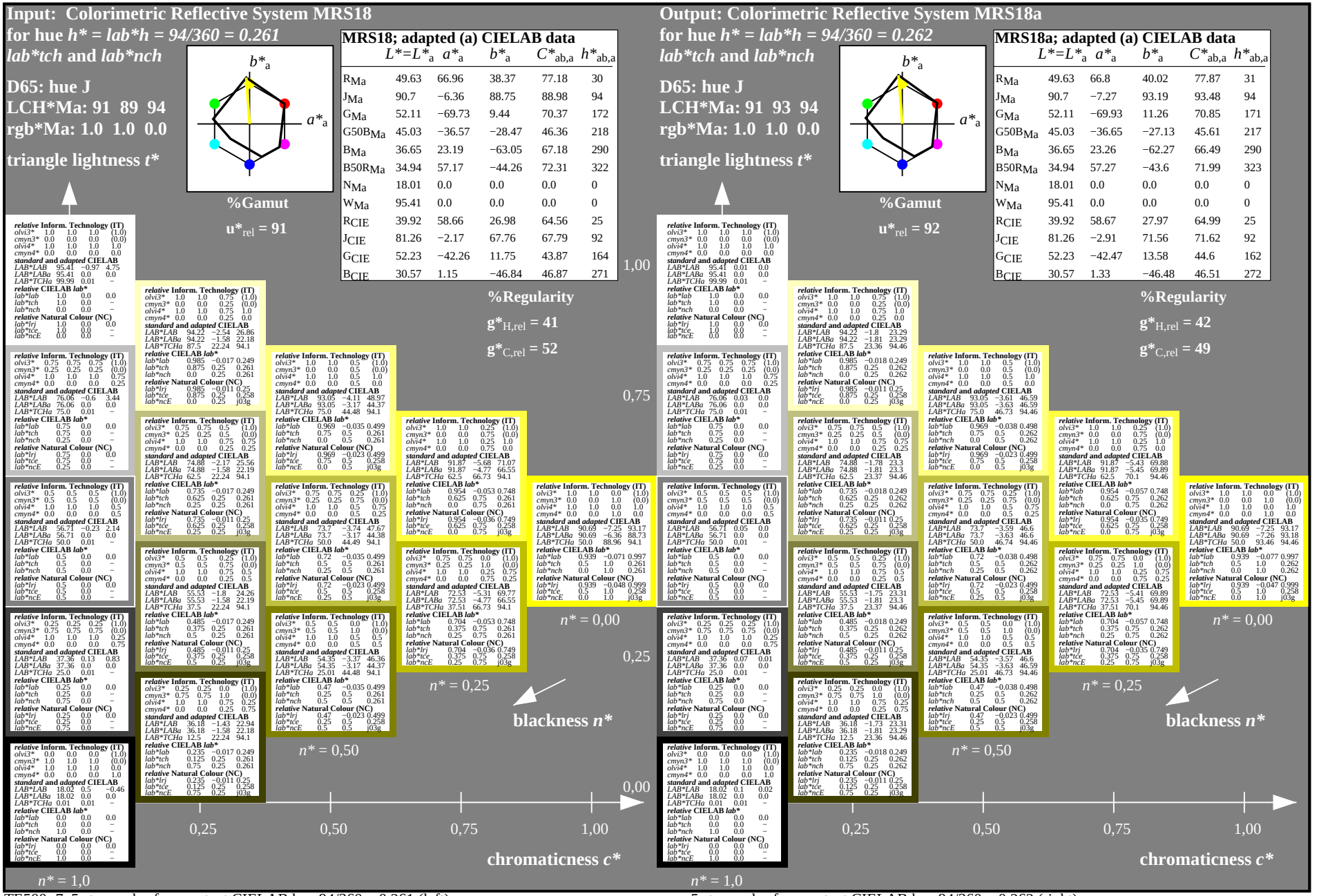
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

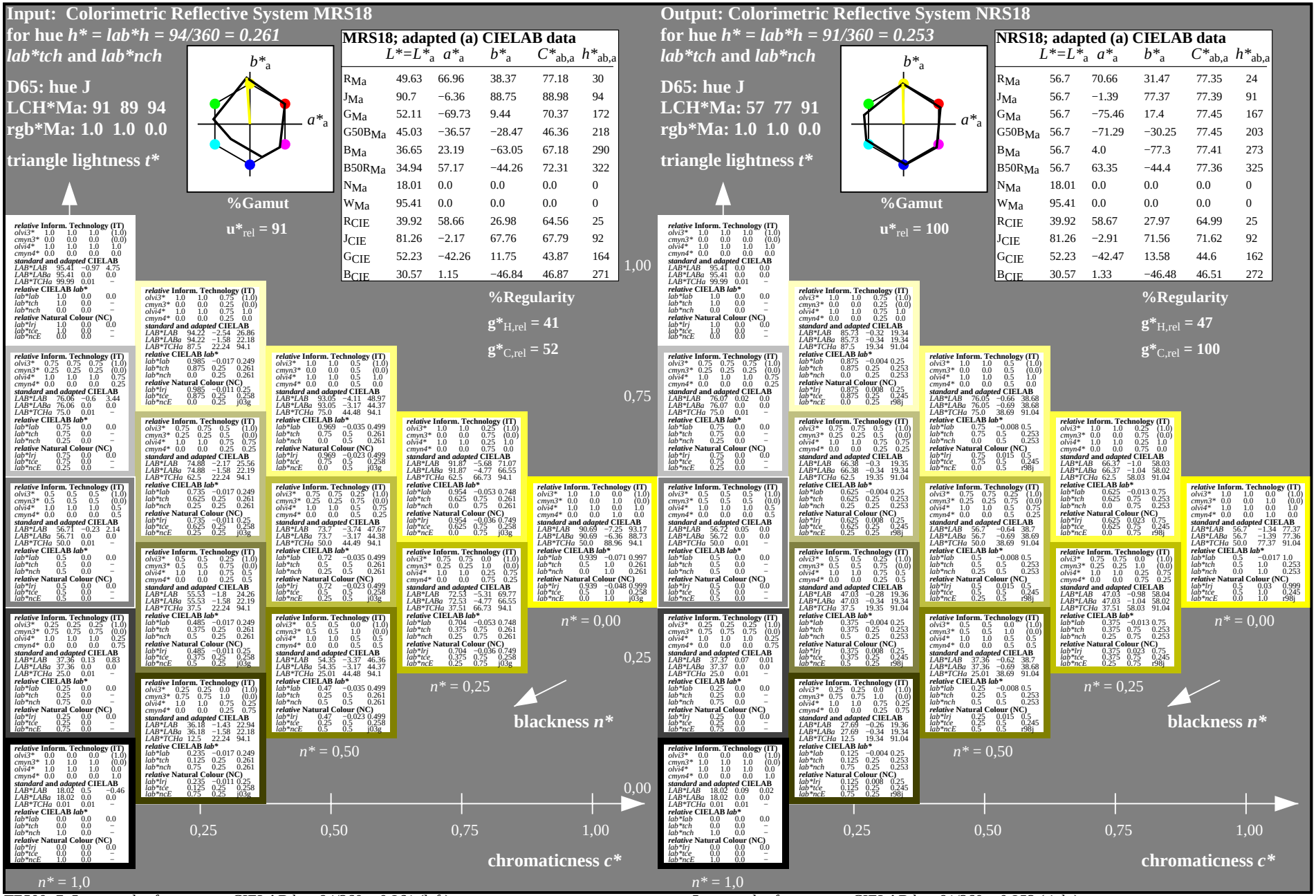
TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.261 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)




TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.261 (left)

5 step scales for constant CIELAB hue 94/360 = 0.262 (right)



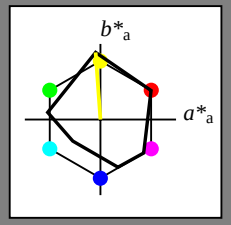

TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.261 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 94/360 = 0.261**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 89 94**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

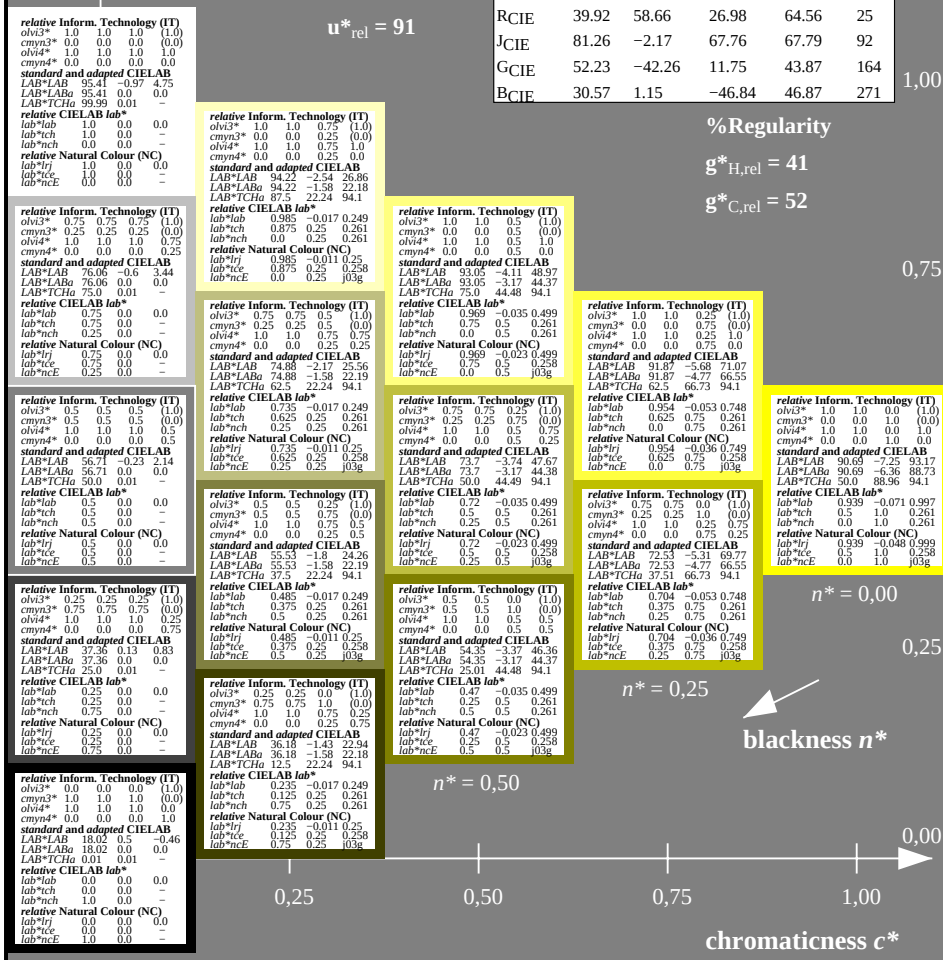
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

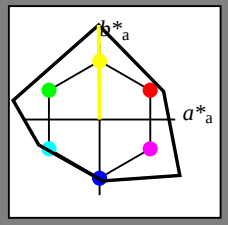
**g*$_{C,rel}$ = 52**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

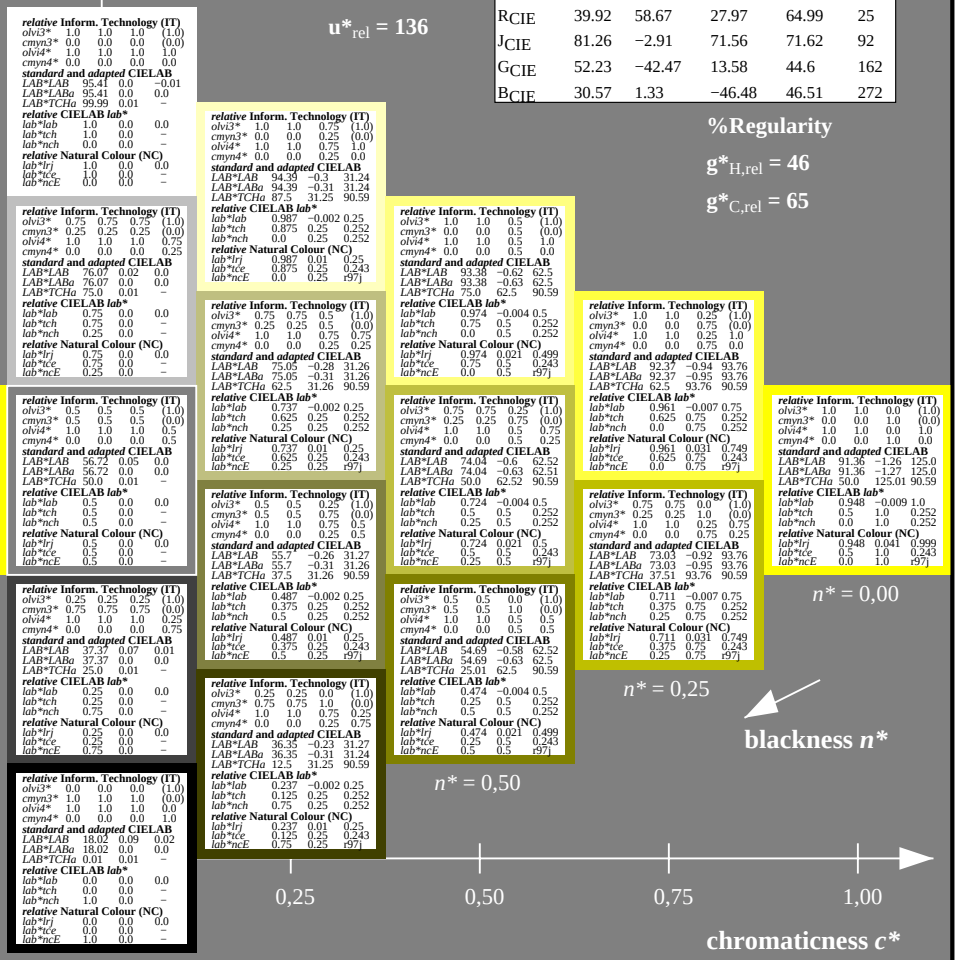
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

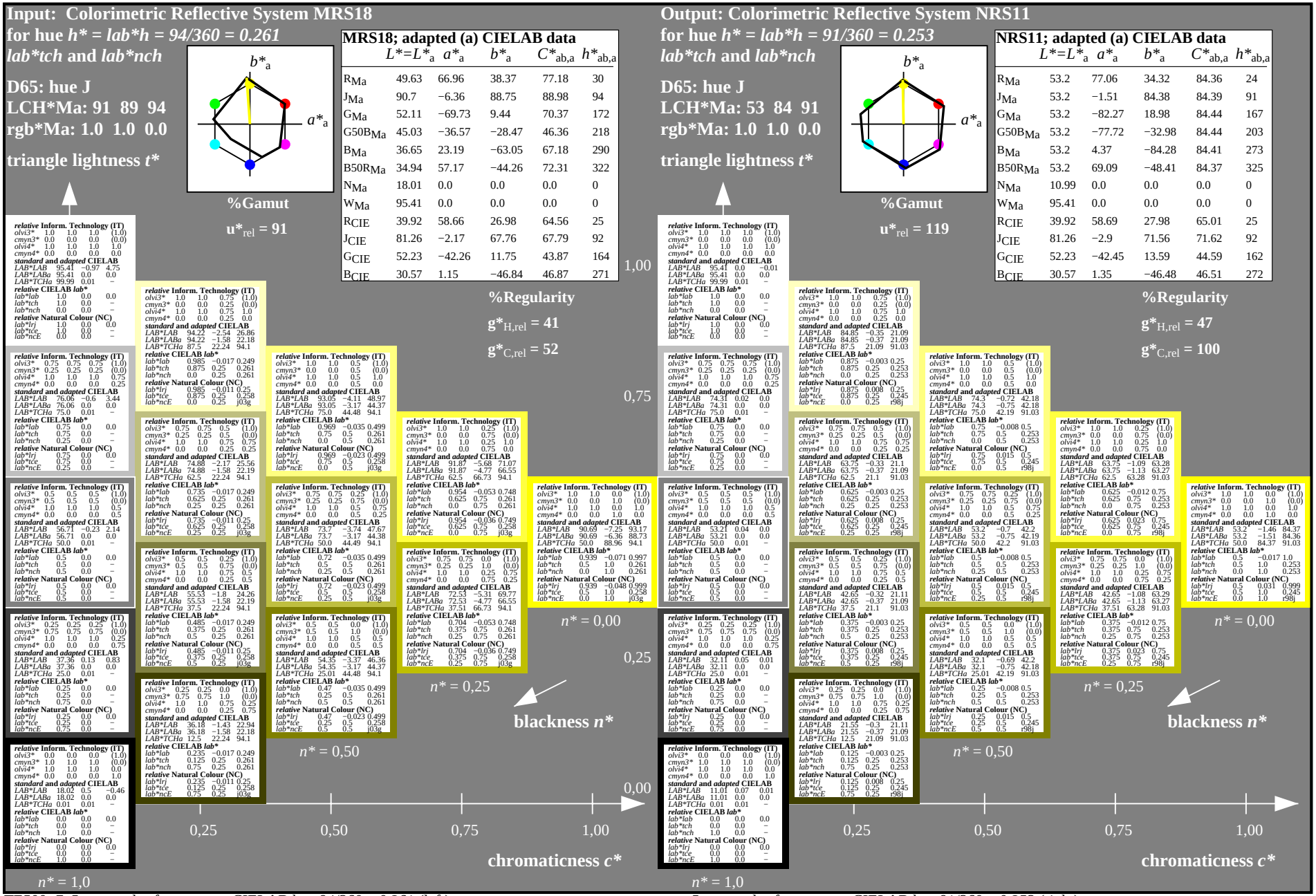
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.261 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)



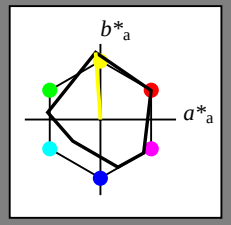

TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.261 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 94/360 = 0.261**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 89 94**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

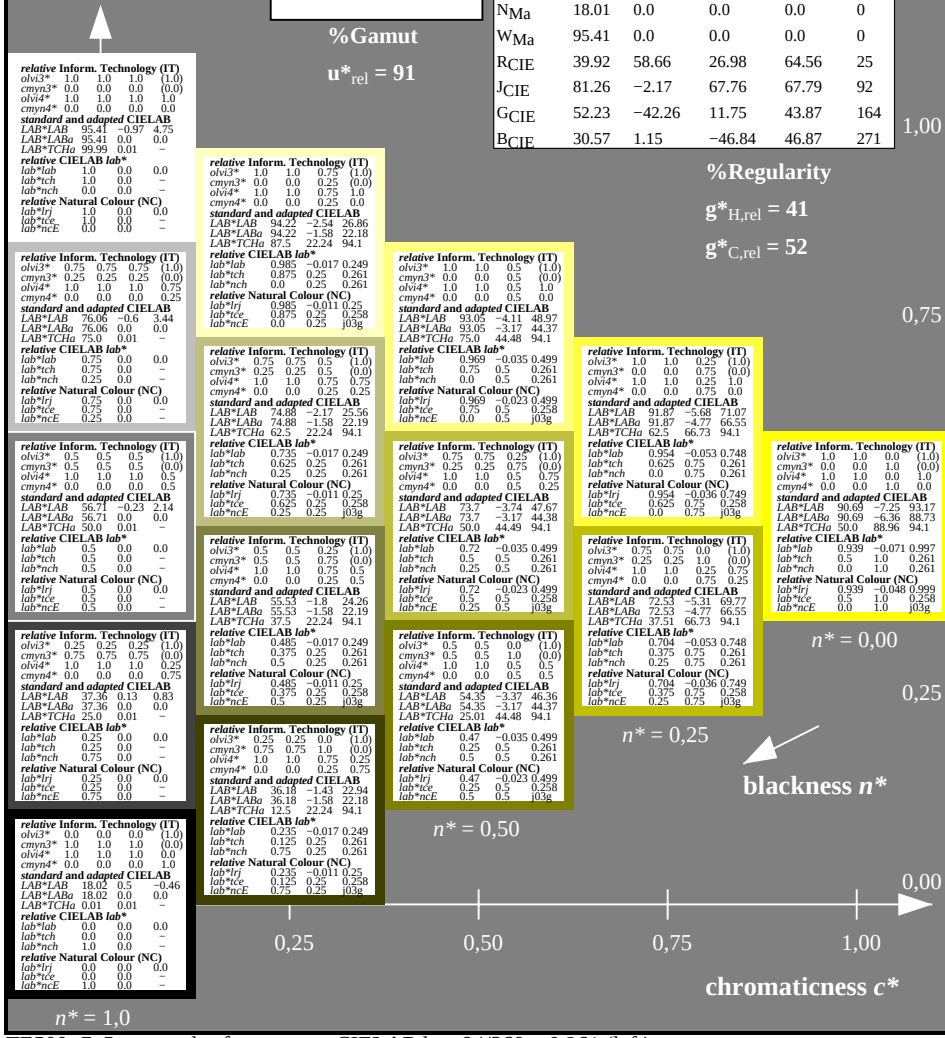
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

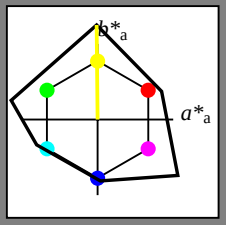
**g*$_{C,rel}$ = 52**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

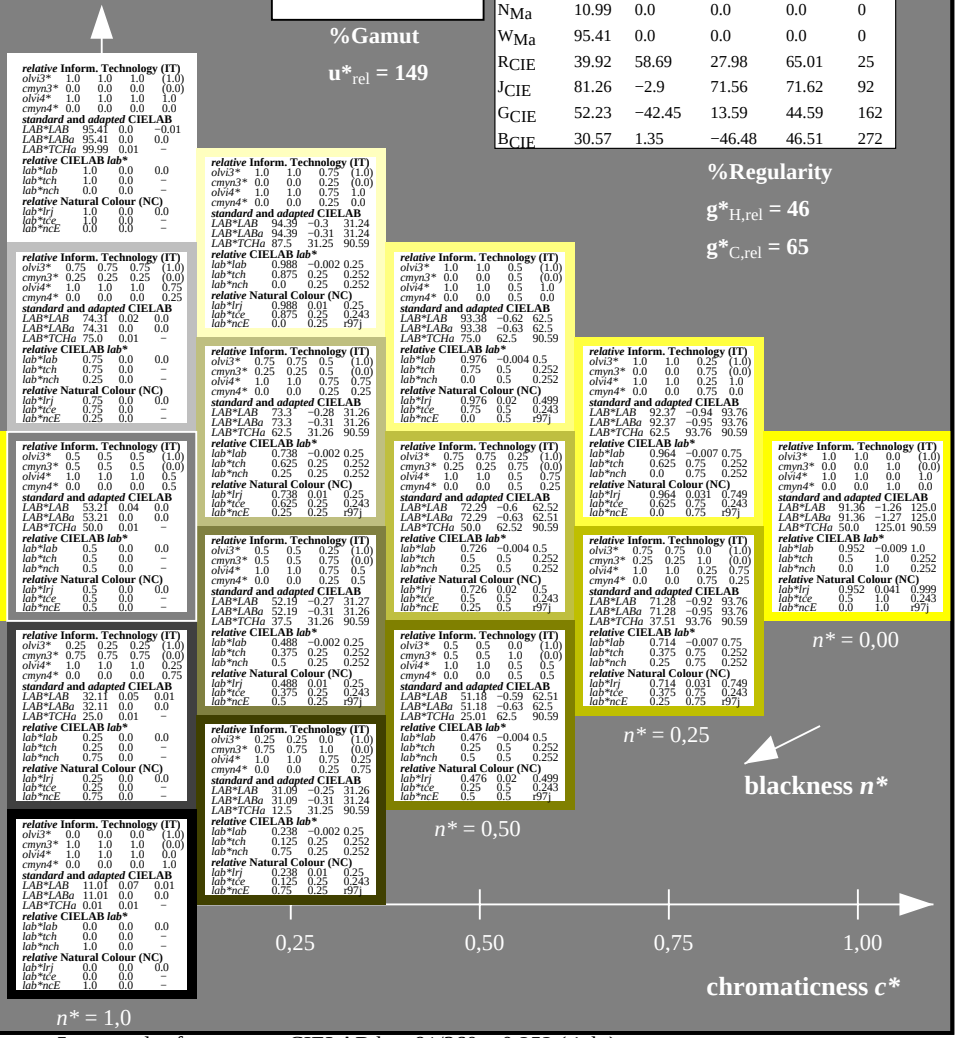
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

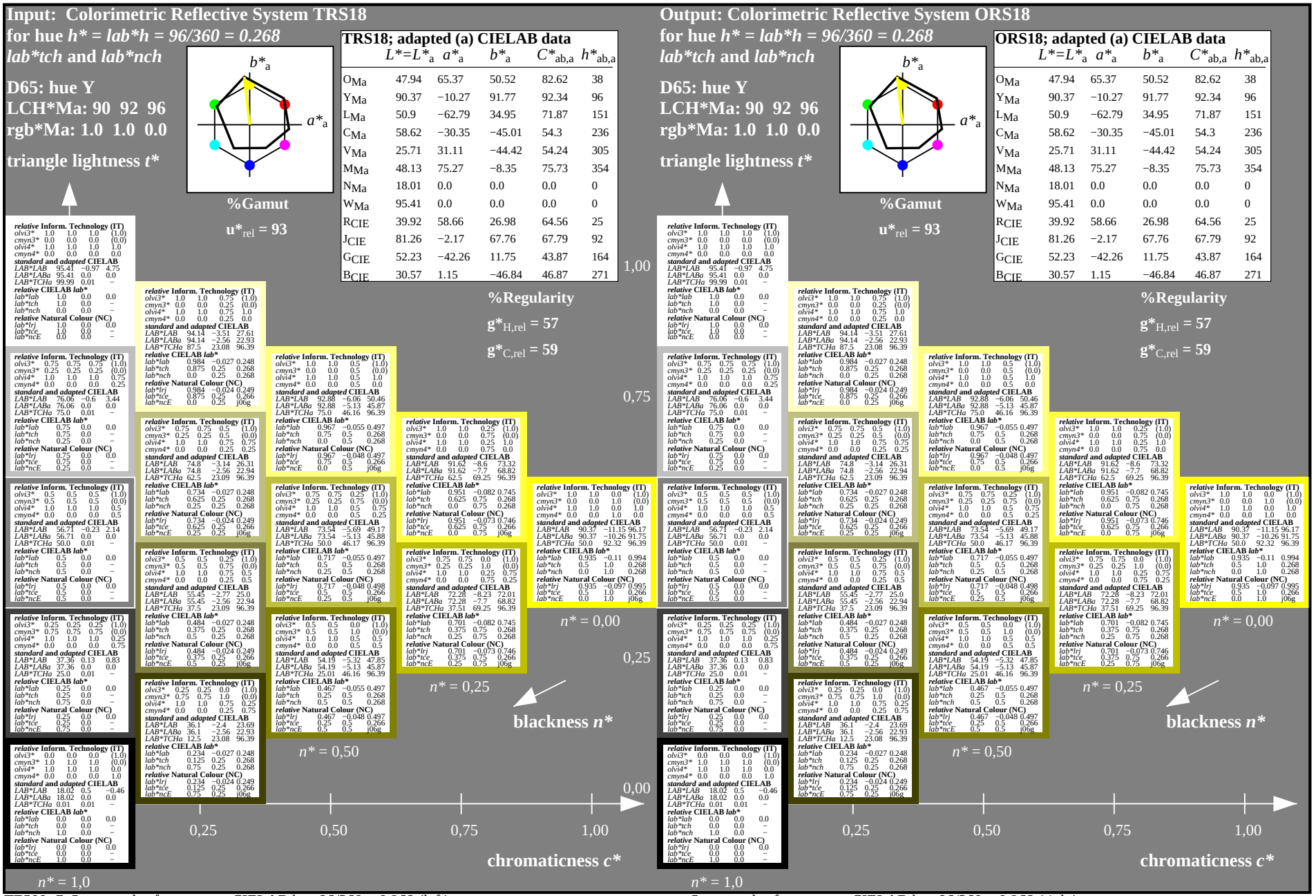
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



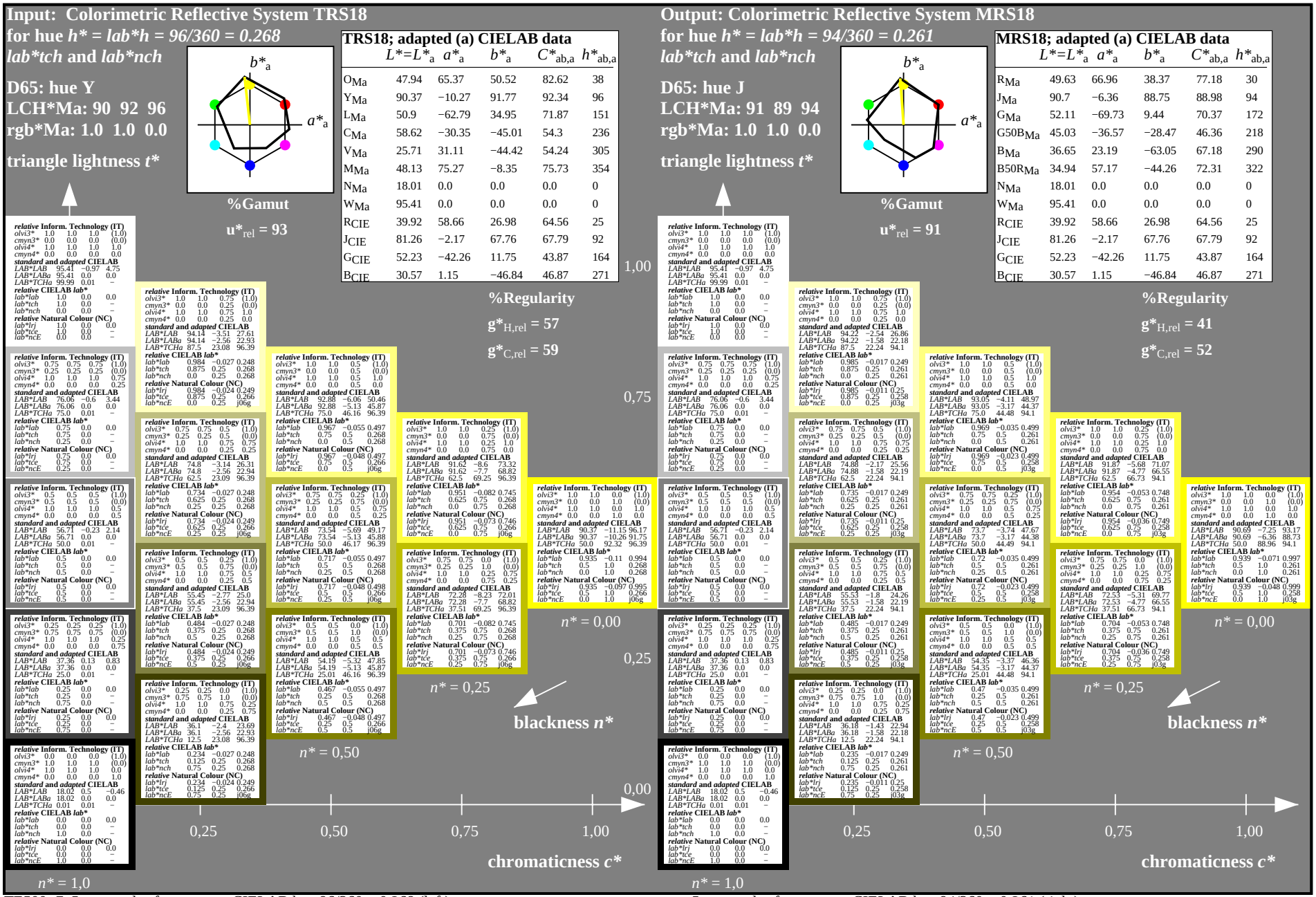

TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.261 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)




TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)



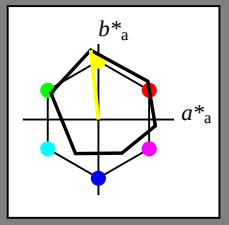

TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 96/360 = 0.268**
***lab*tch* and *lab*nch***

**D65: hue Y**
**LCH*Ma: 90 92 96**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

1,00

**%Regularity**

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

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

0,75

0,25

0,00

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

**blackness *n****

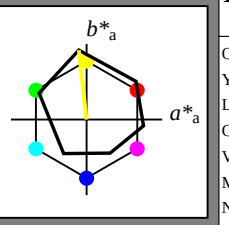
0,25 0,50 0,75 1,00

**chromaticness *c****

**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 96/360 = 0.268**
***lab*tch* and *lab*nch***

**D65: hue Y**
**LCH*Ma: 90 92 96**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

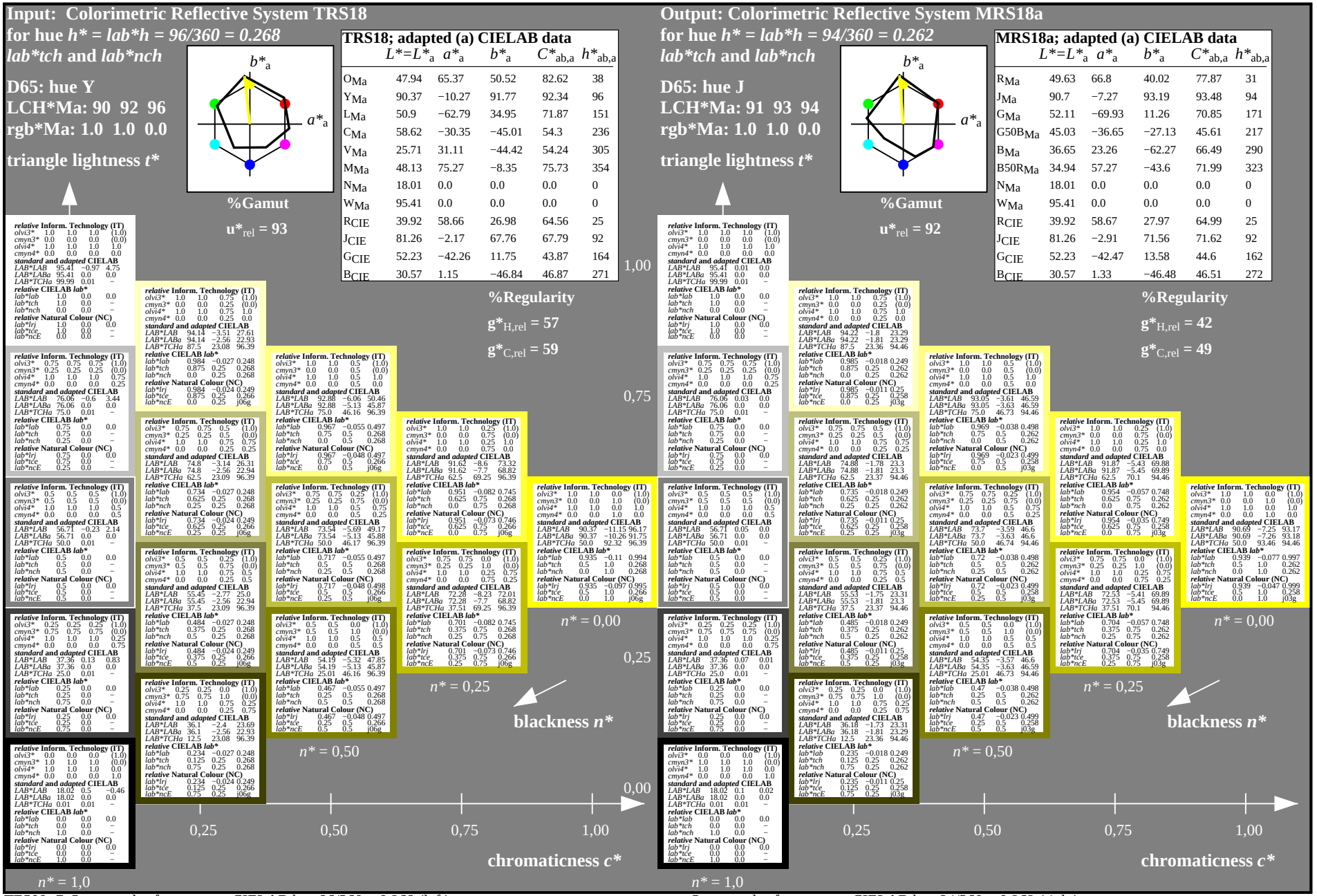
**blackness *n****

0,25 0,50 0,75 1,00

**chromaticness *c****

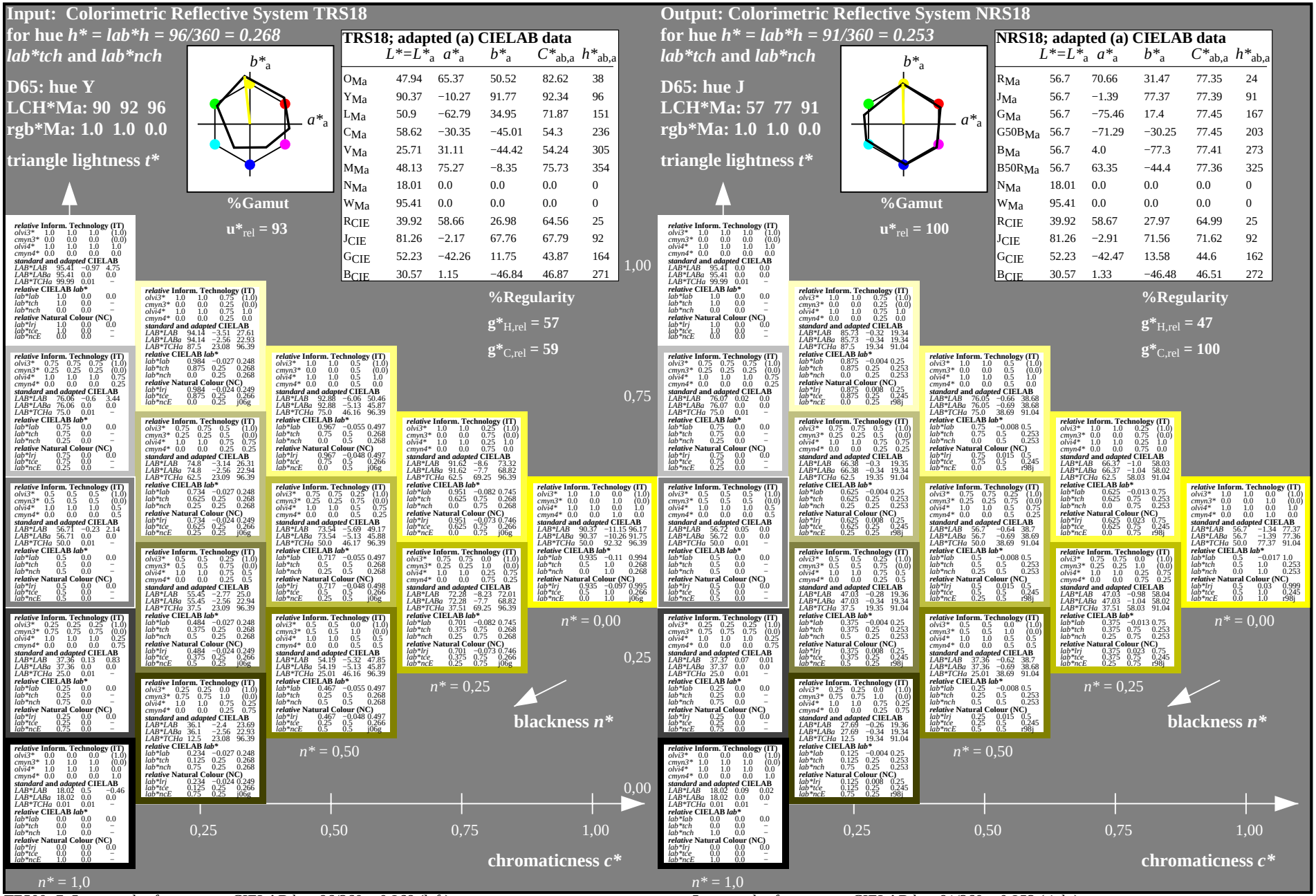
TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)



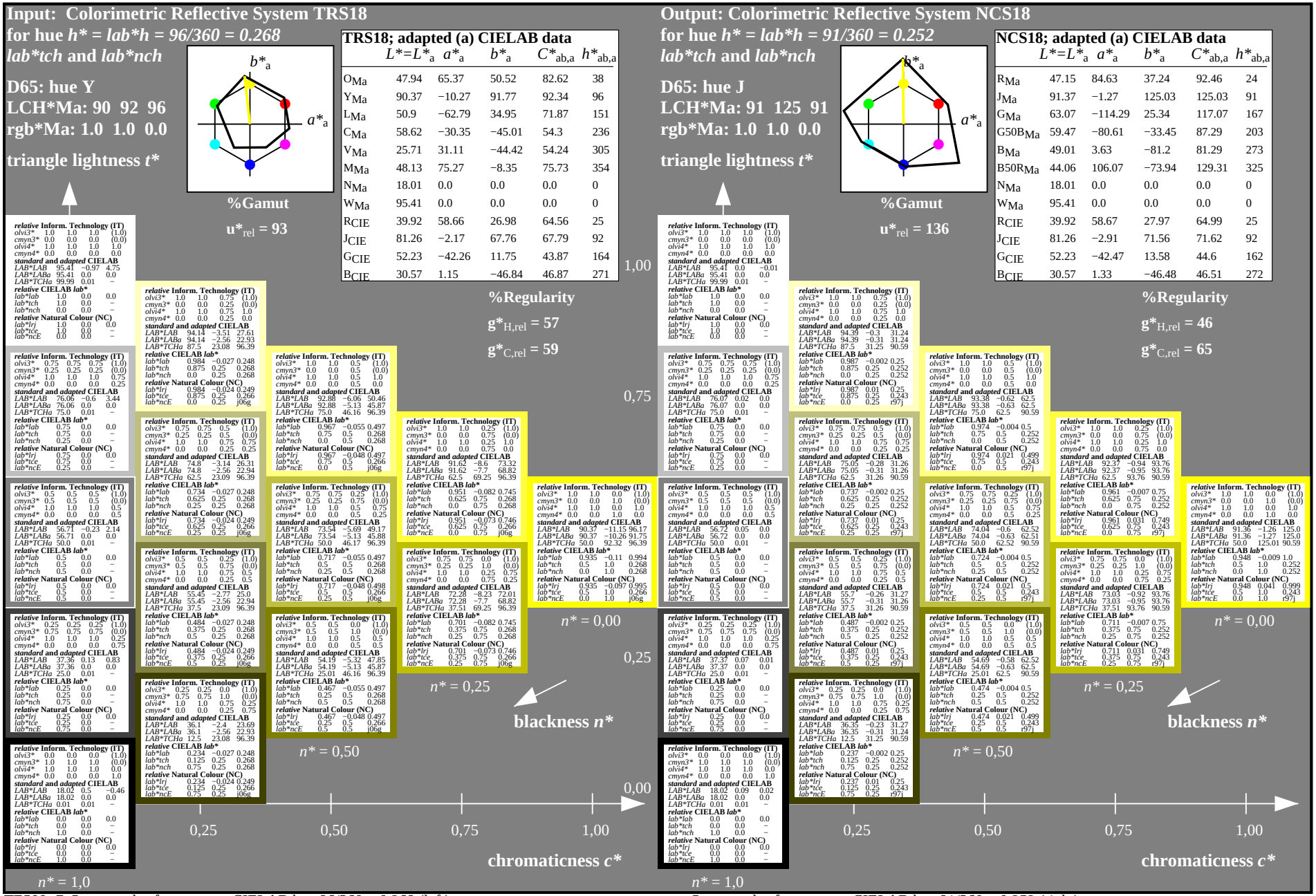

TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 94/360 = 0.262 (right)



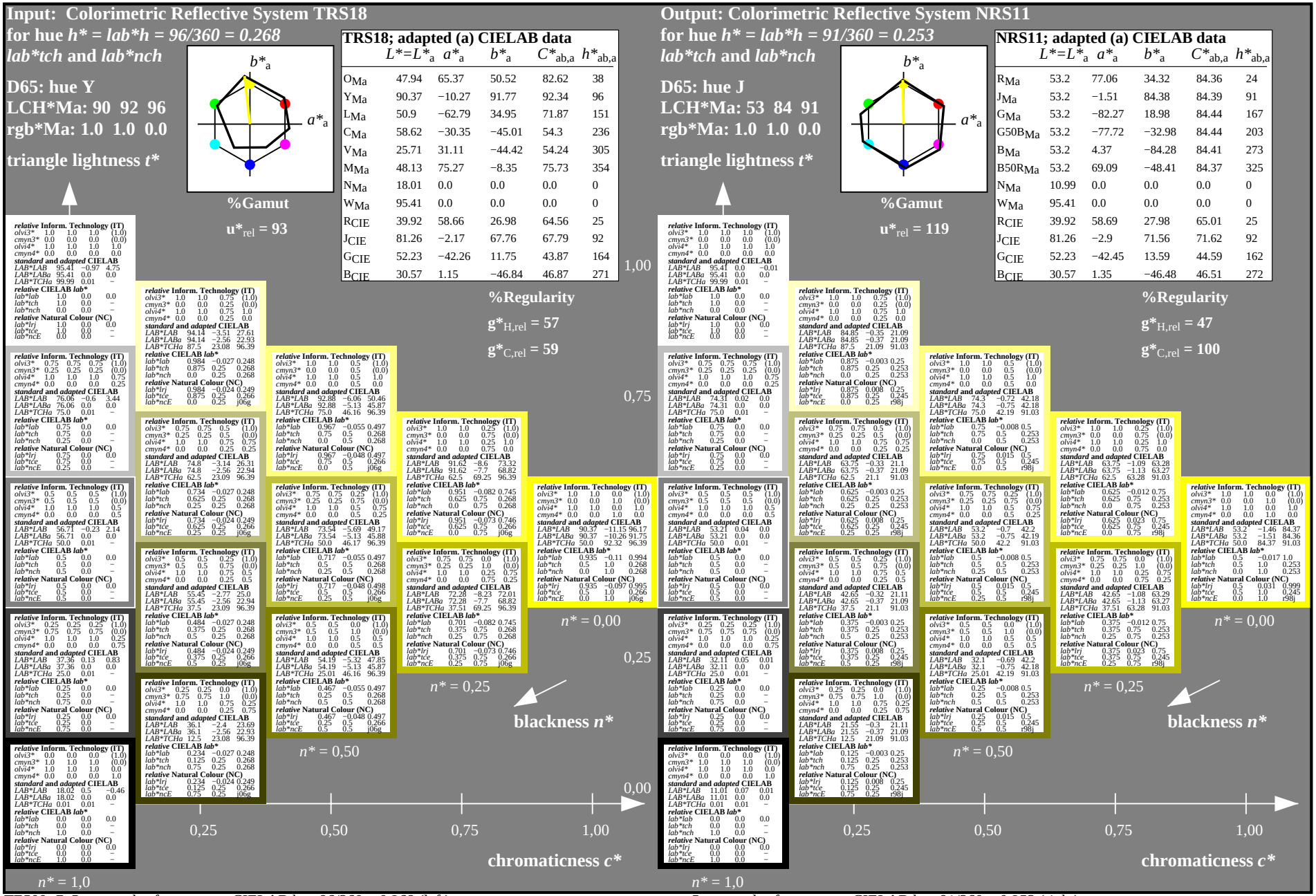

TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)




TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)



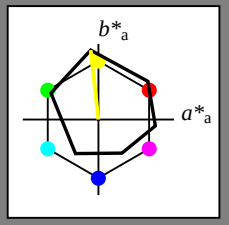

TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 96/360 = 0.268**
***lab*tch* and *lab*nch***

**D65: hue Y**
**LCH*Ma: 90 92 96**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

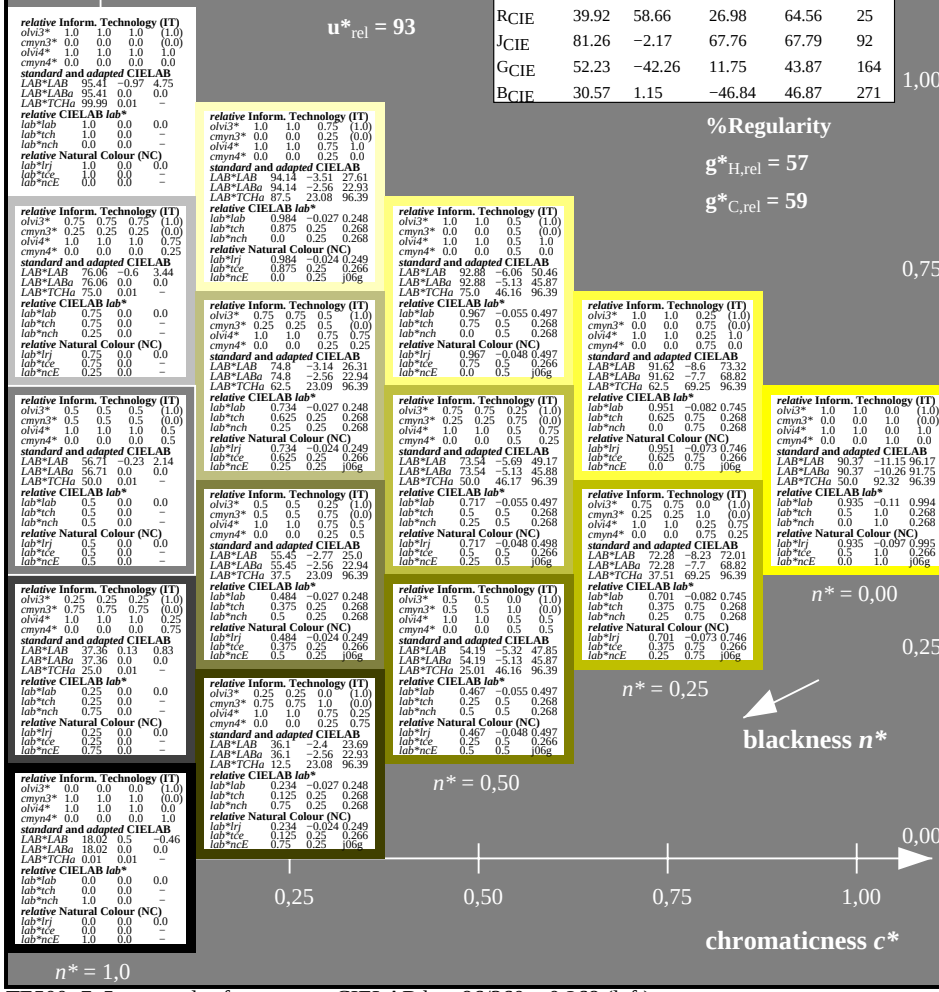
**TRS18; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

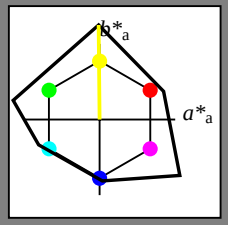
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

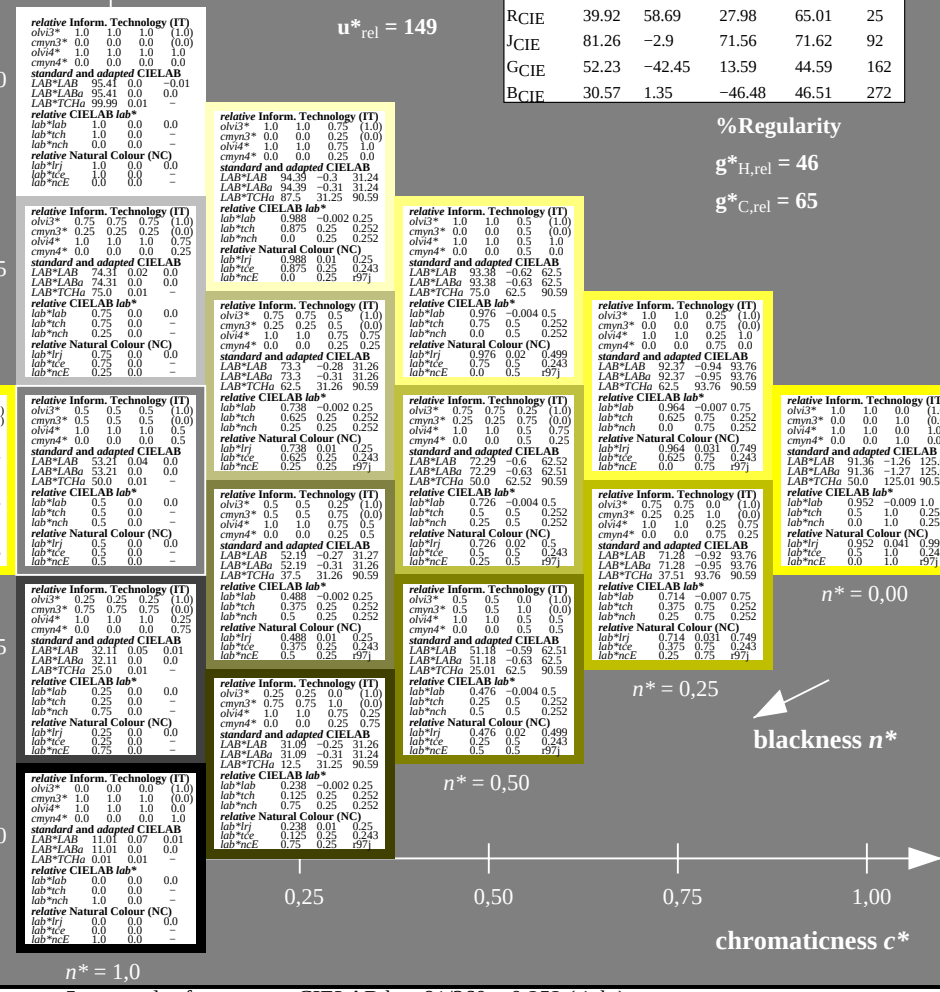
**NCS11; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

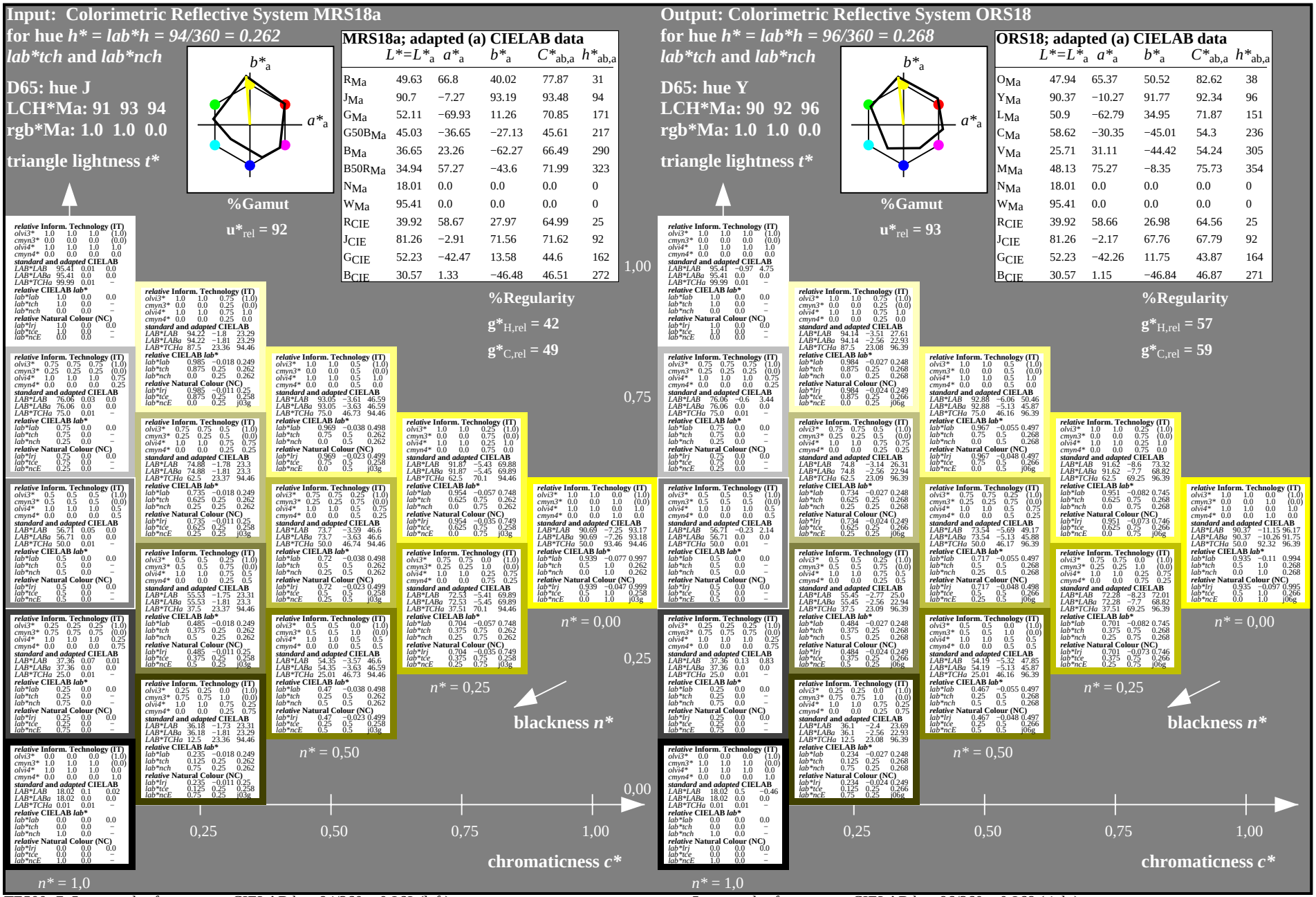
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)



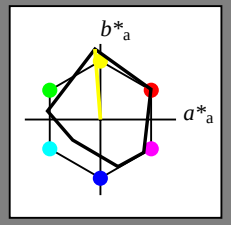

TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.262 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 94/360 = 0.262**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 93 94**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

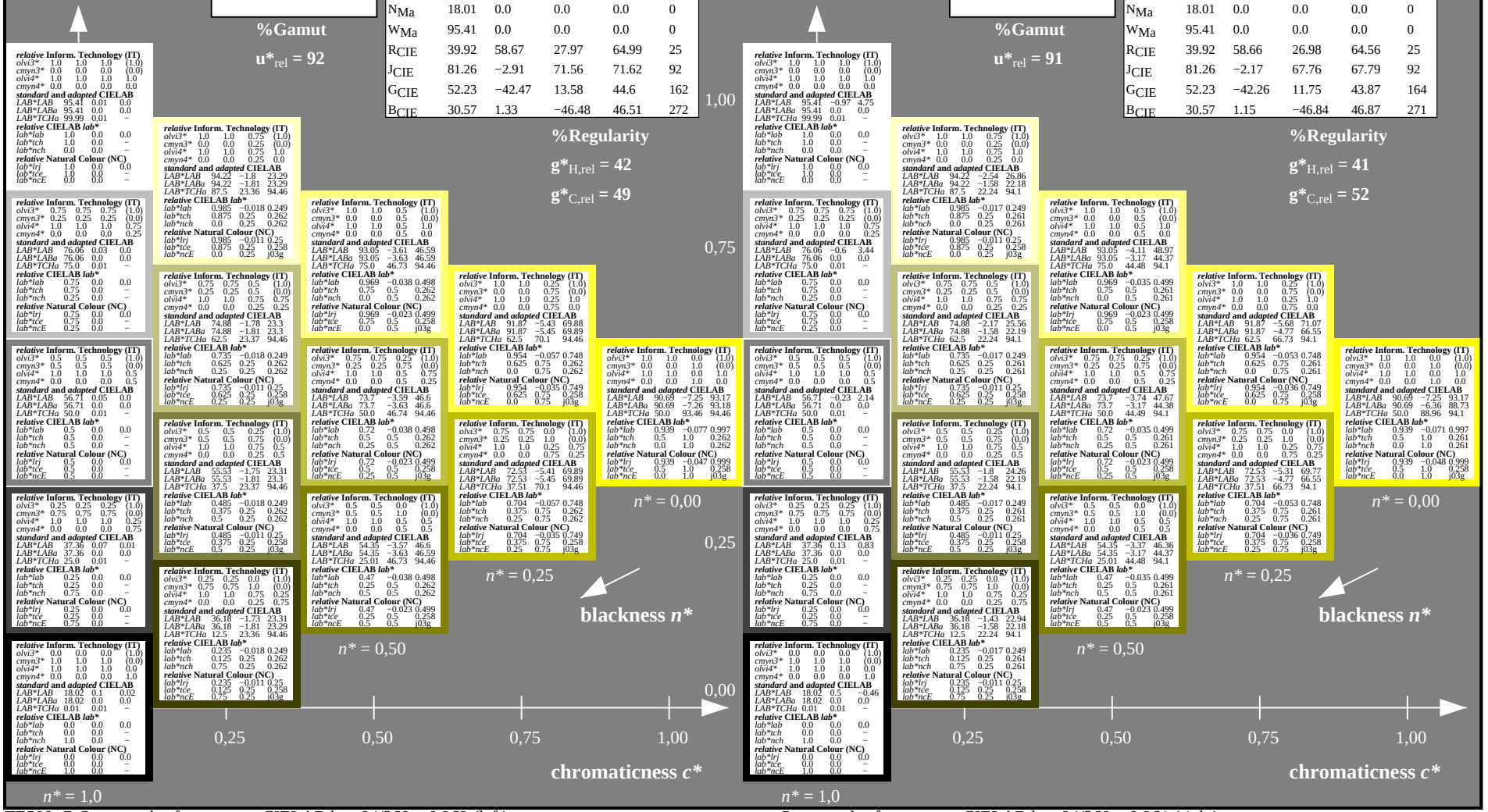
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

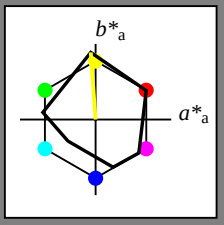
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 94/360 = 0.261**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 89 94**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

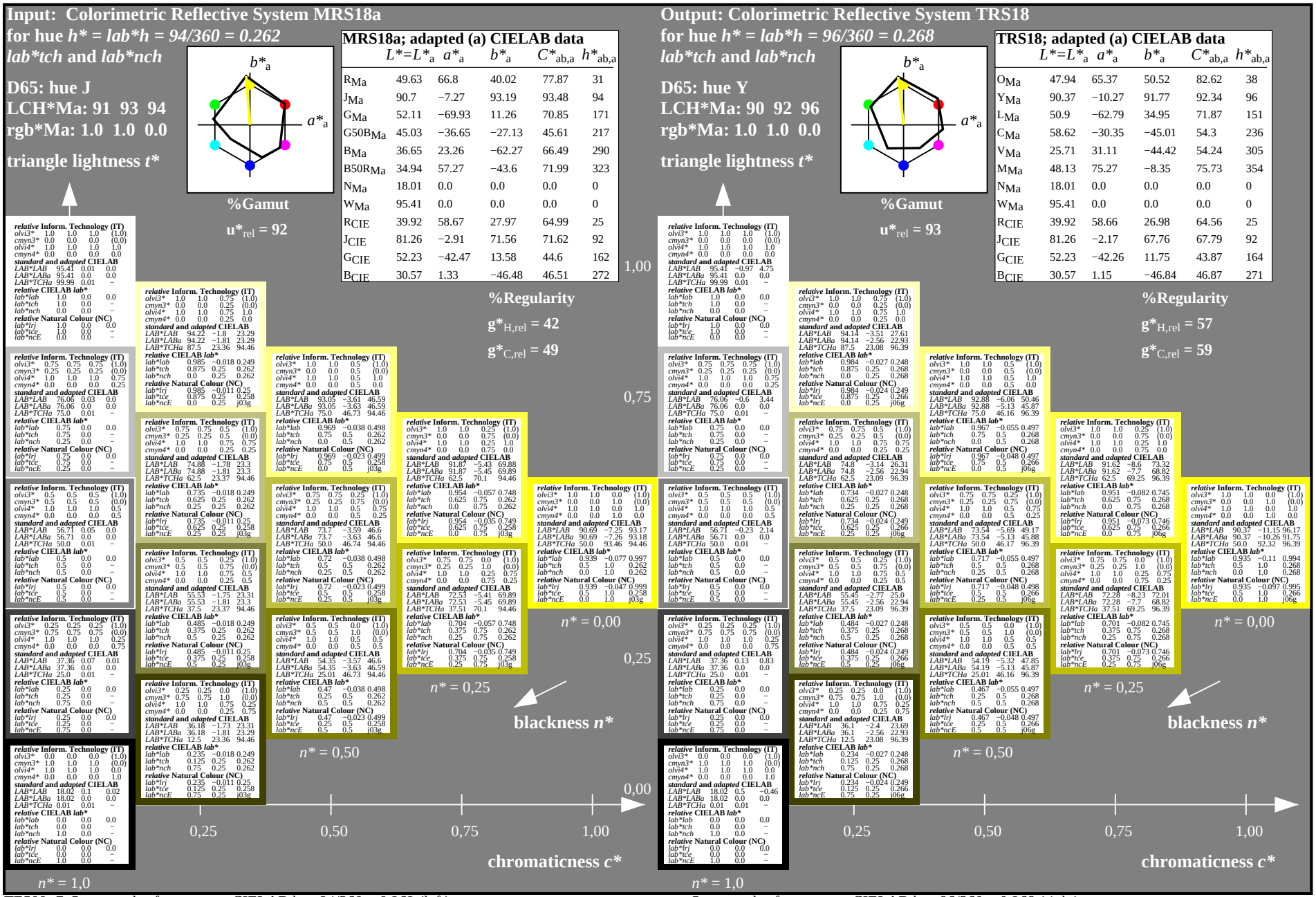
**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

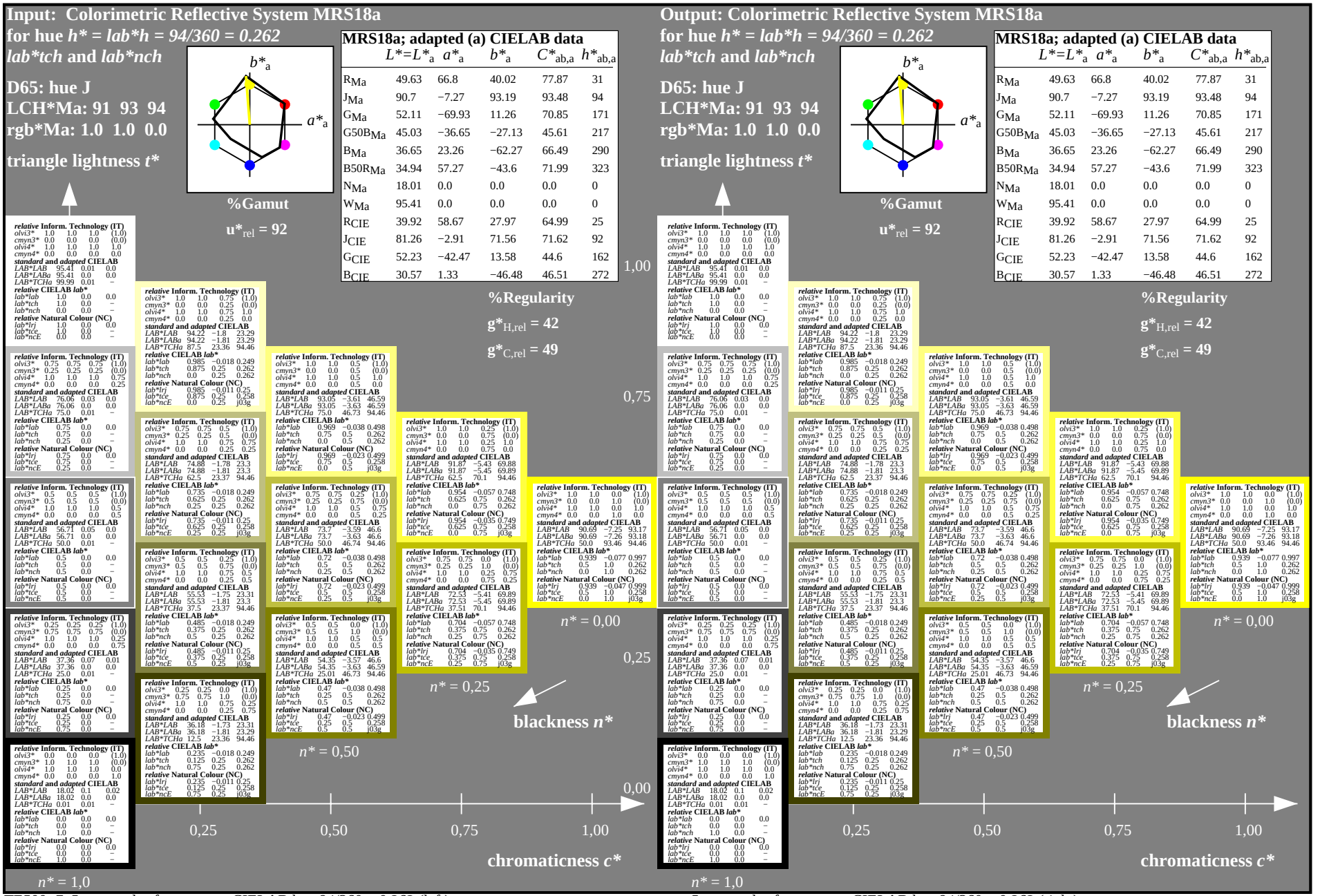
TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.262 (left)

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



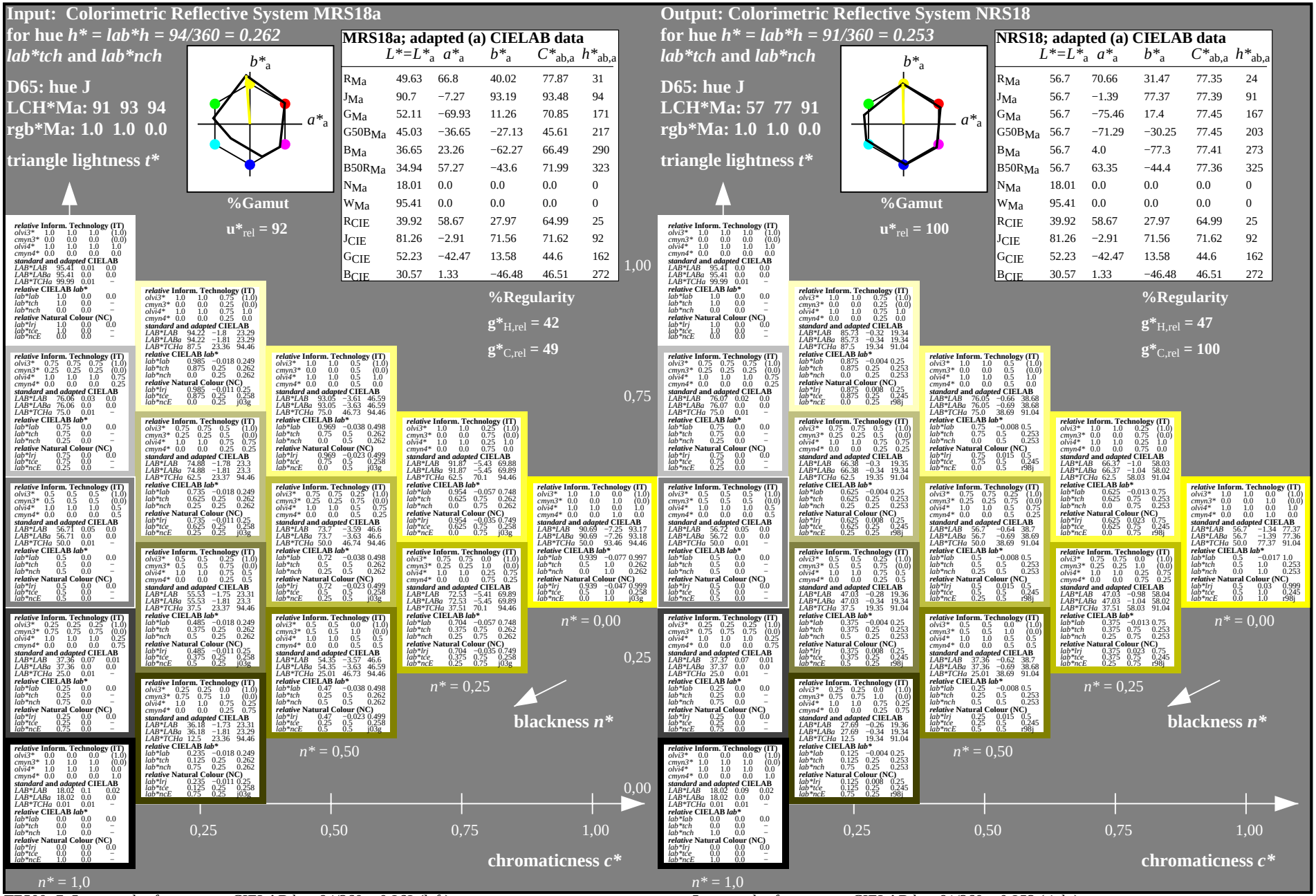

TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.262 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)




TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.262 (left)

5 step scales for constant CIELAB hue 94/360 = 0.262 (right)



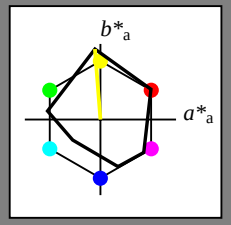

TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.262 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 94/360 = 0.262**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 93 94**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

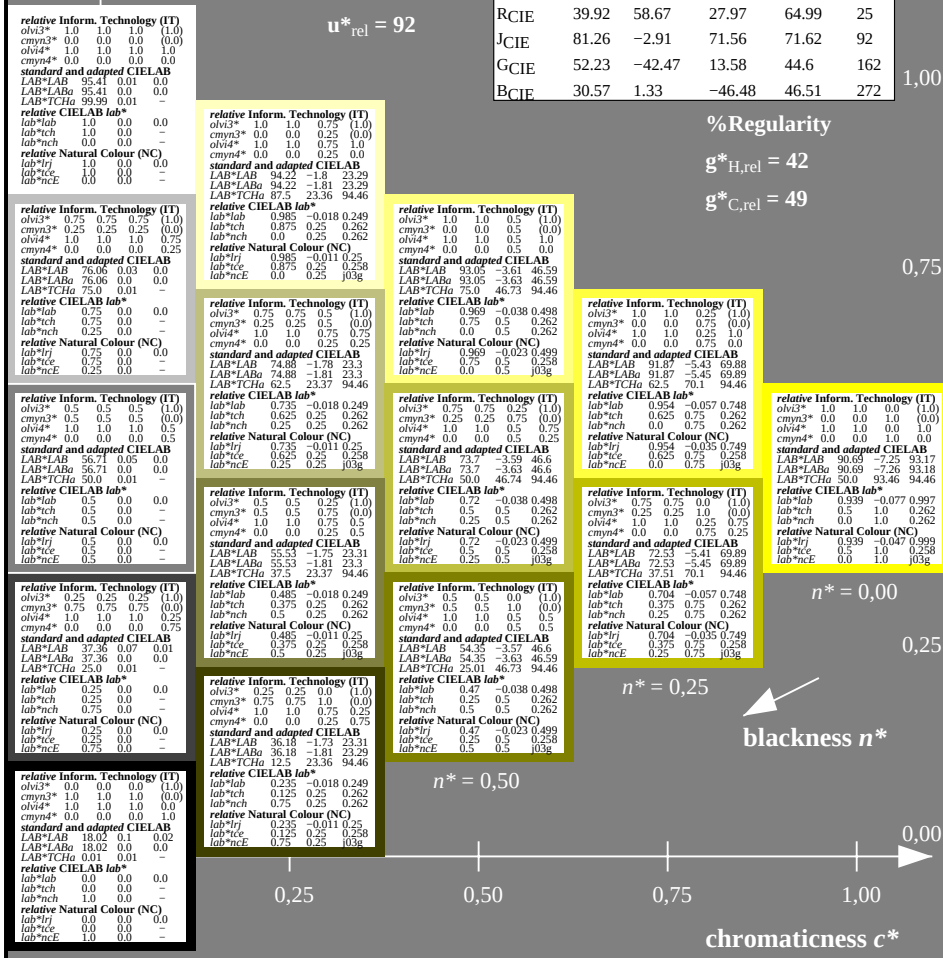
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

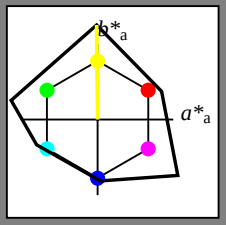
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

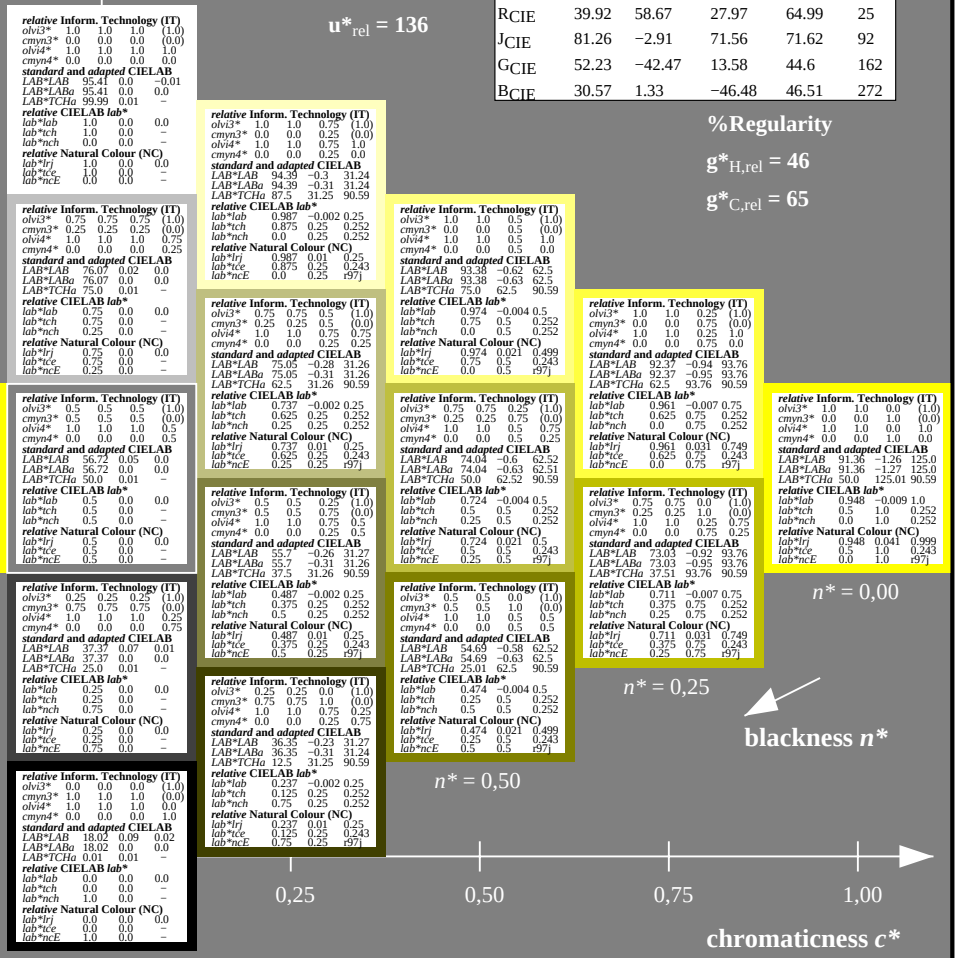
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

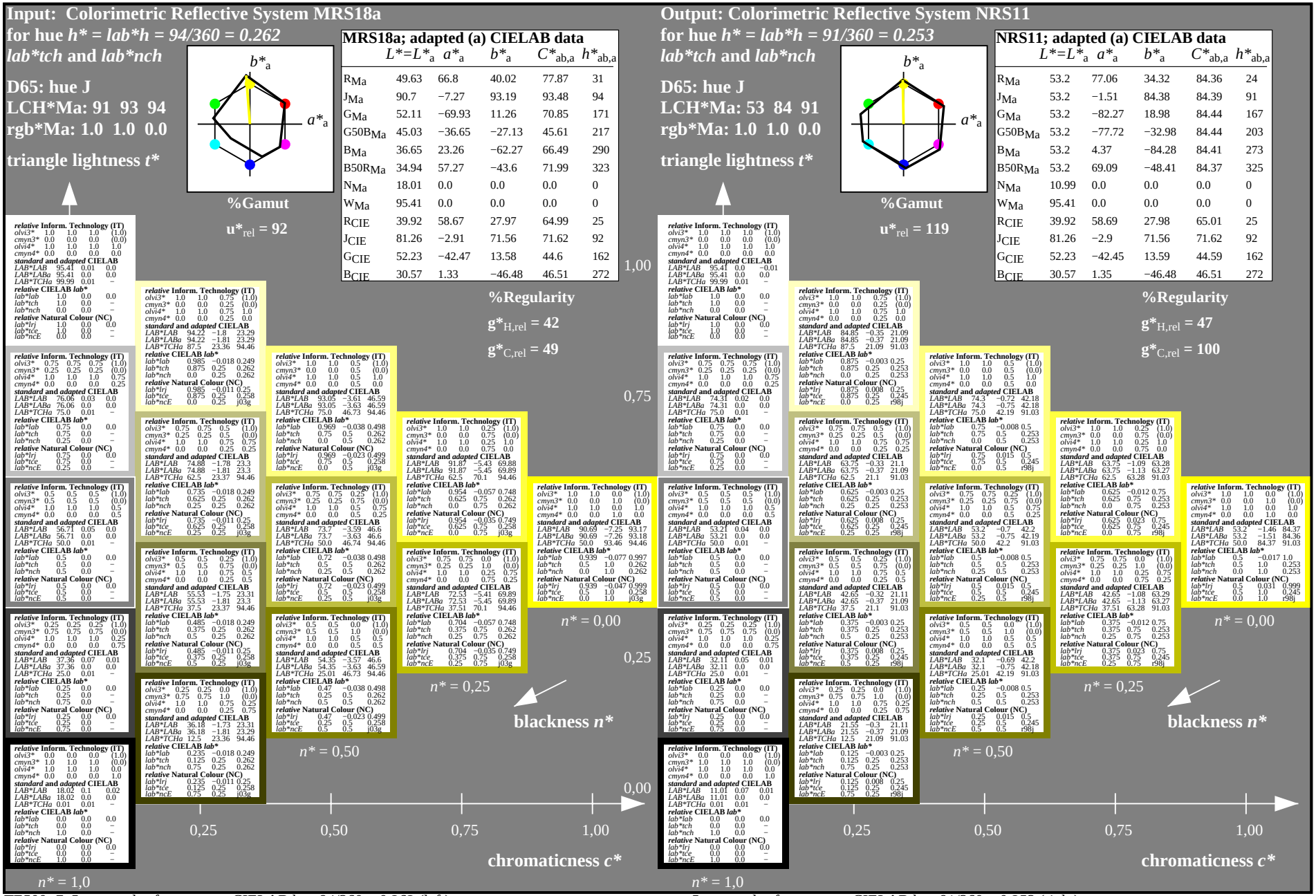
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



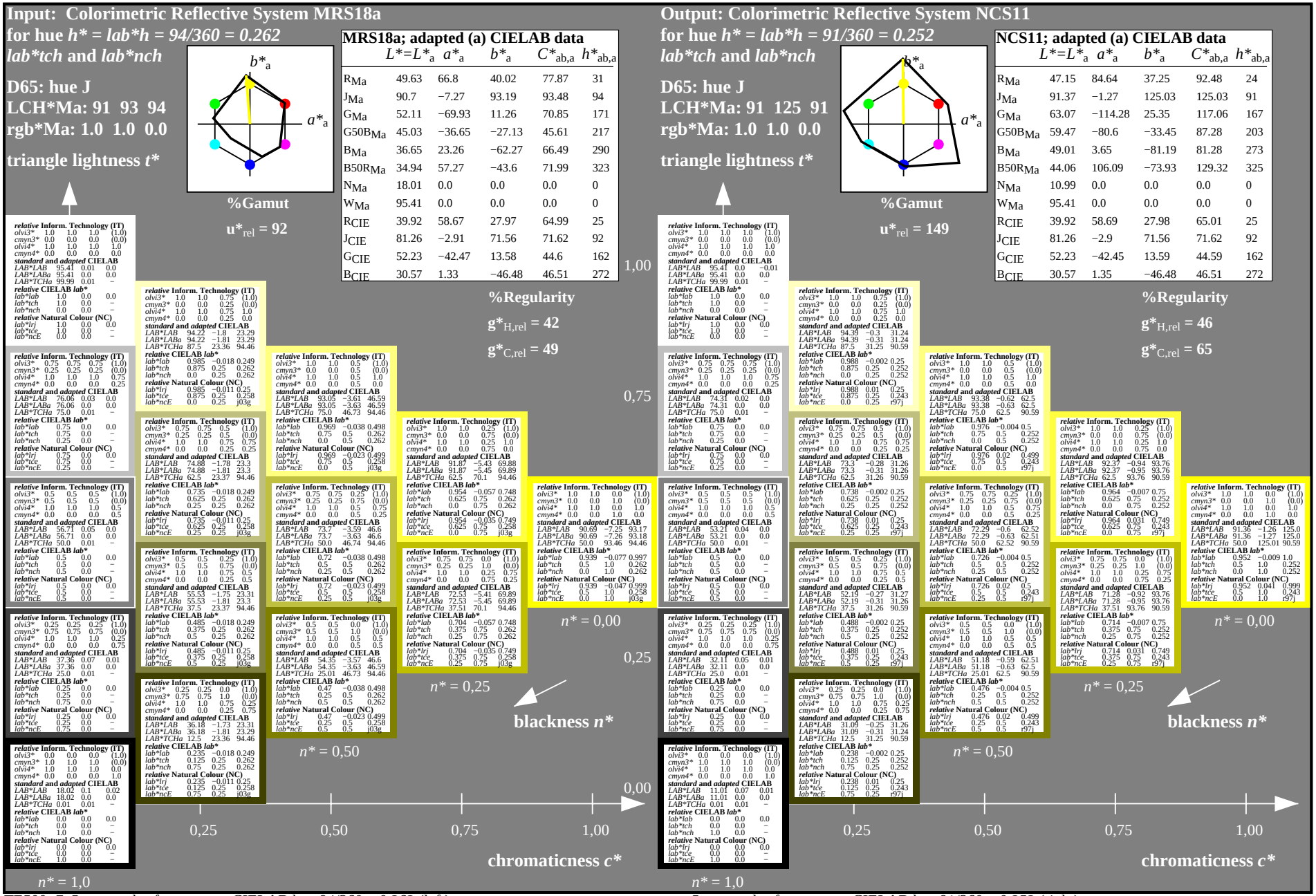

TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.262 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)



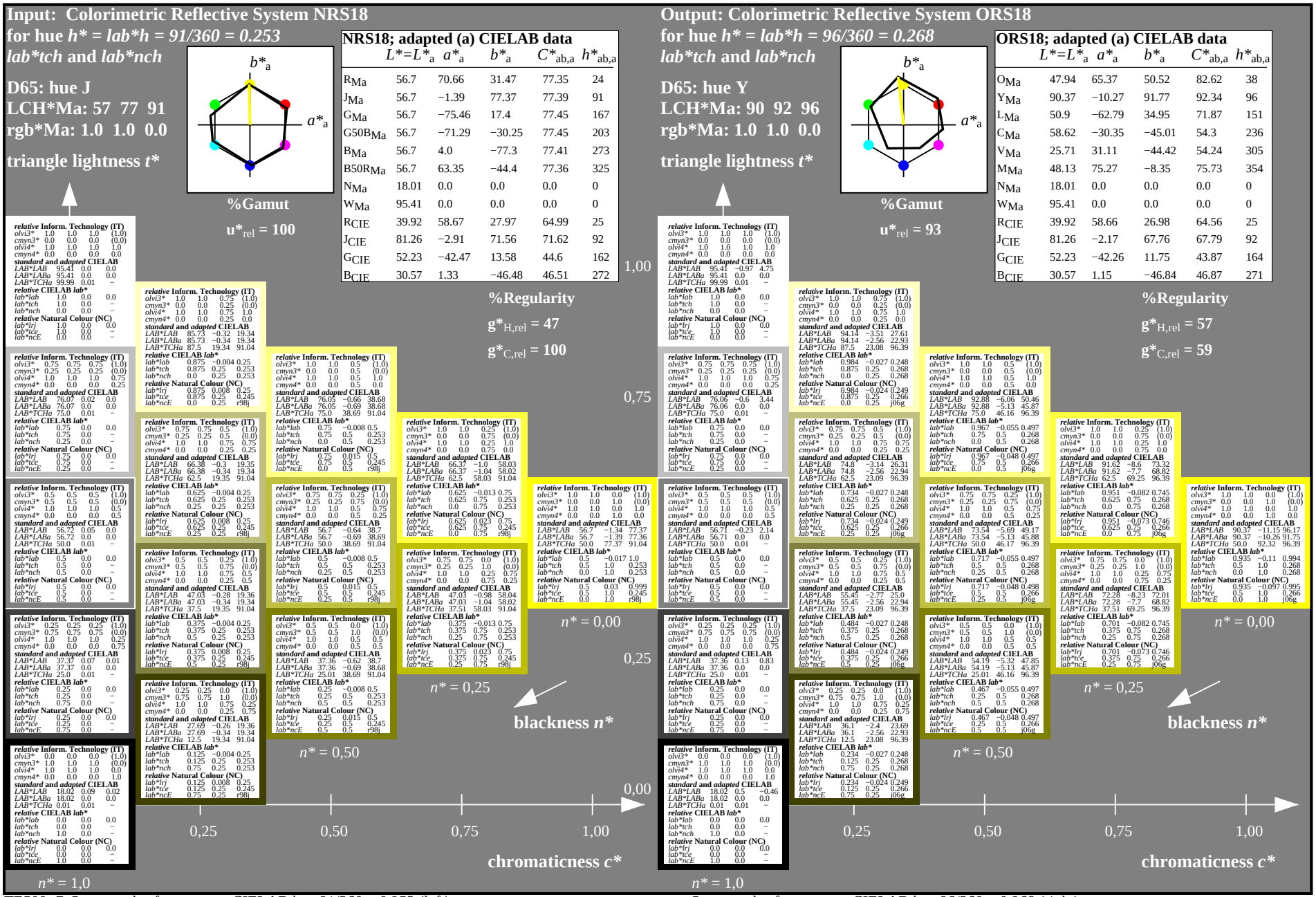

TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.262 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)




TE500−7, 5 step scales for constant CIELAB hue 94/360 = 0.262 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)




**NRS18; adapted (a) CIELAB data**

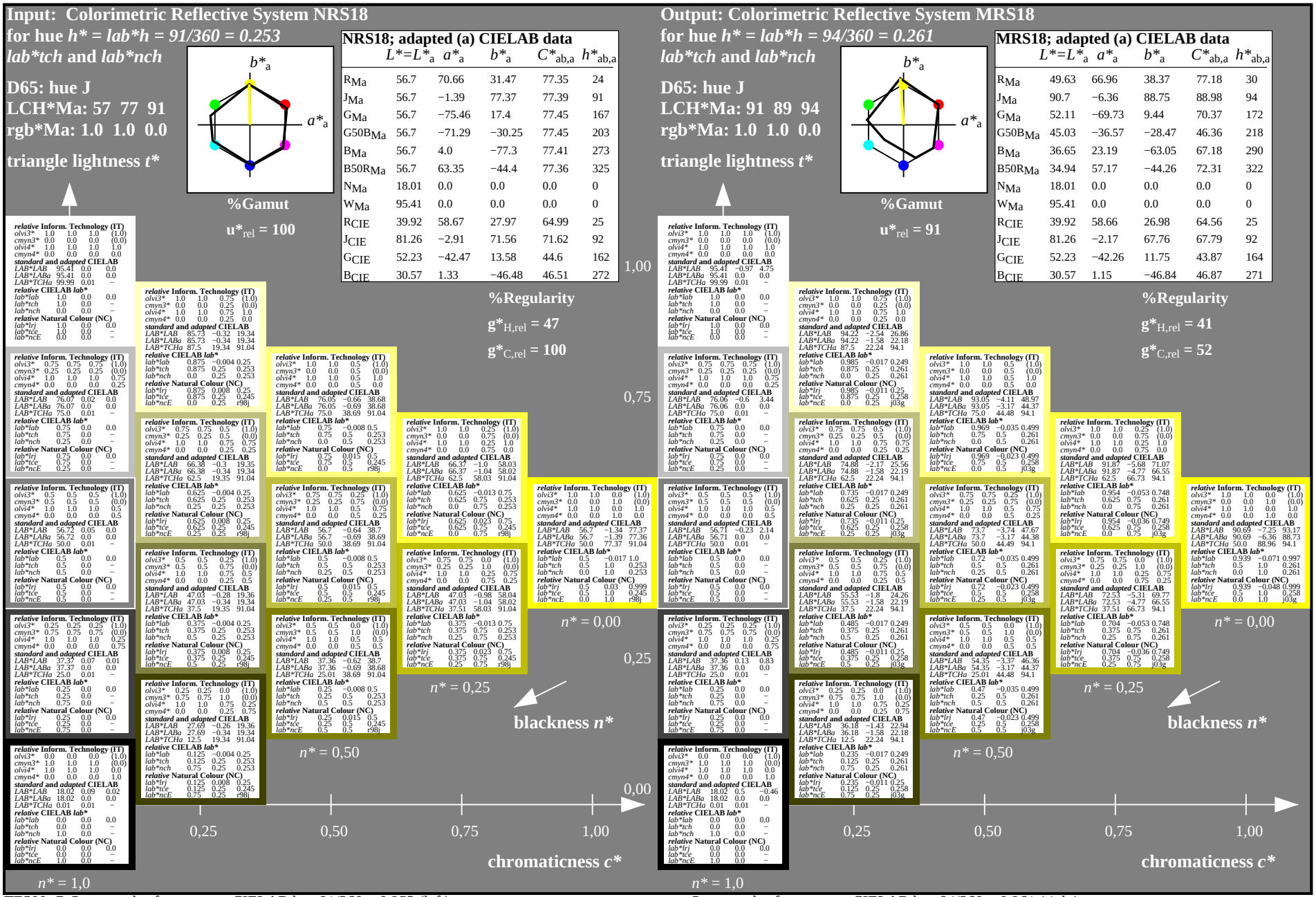
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

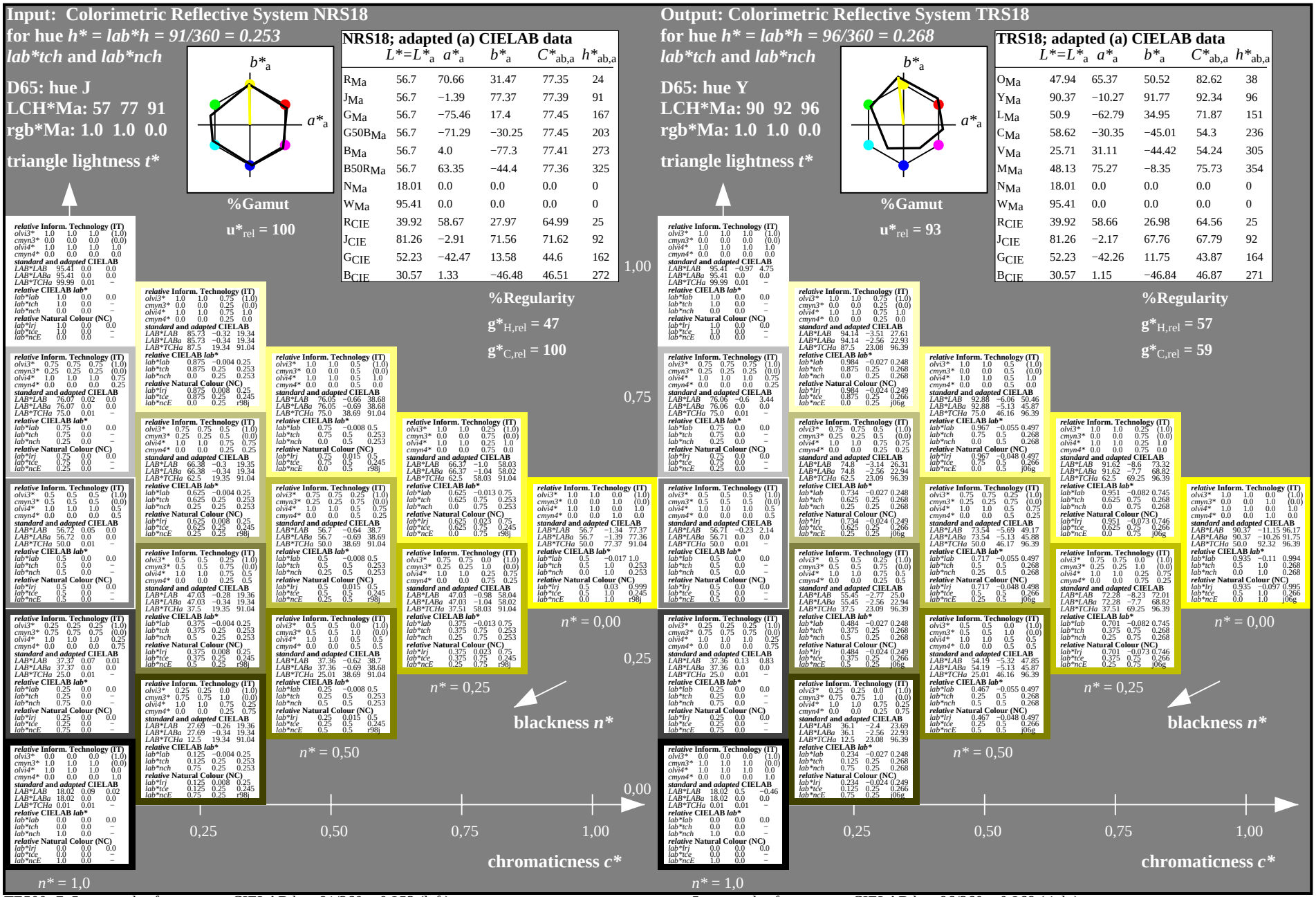
TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)



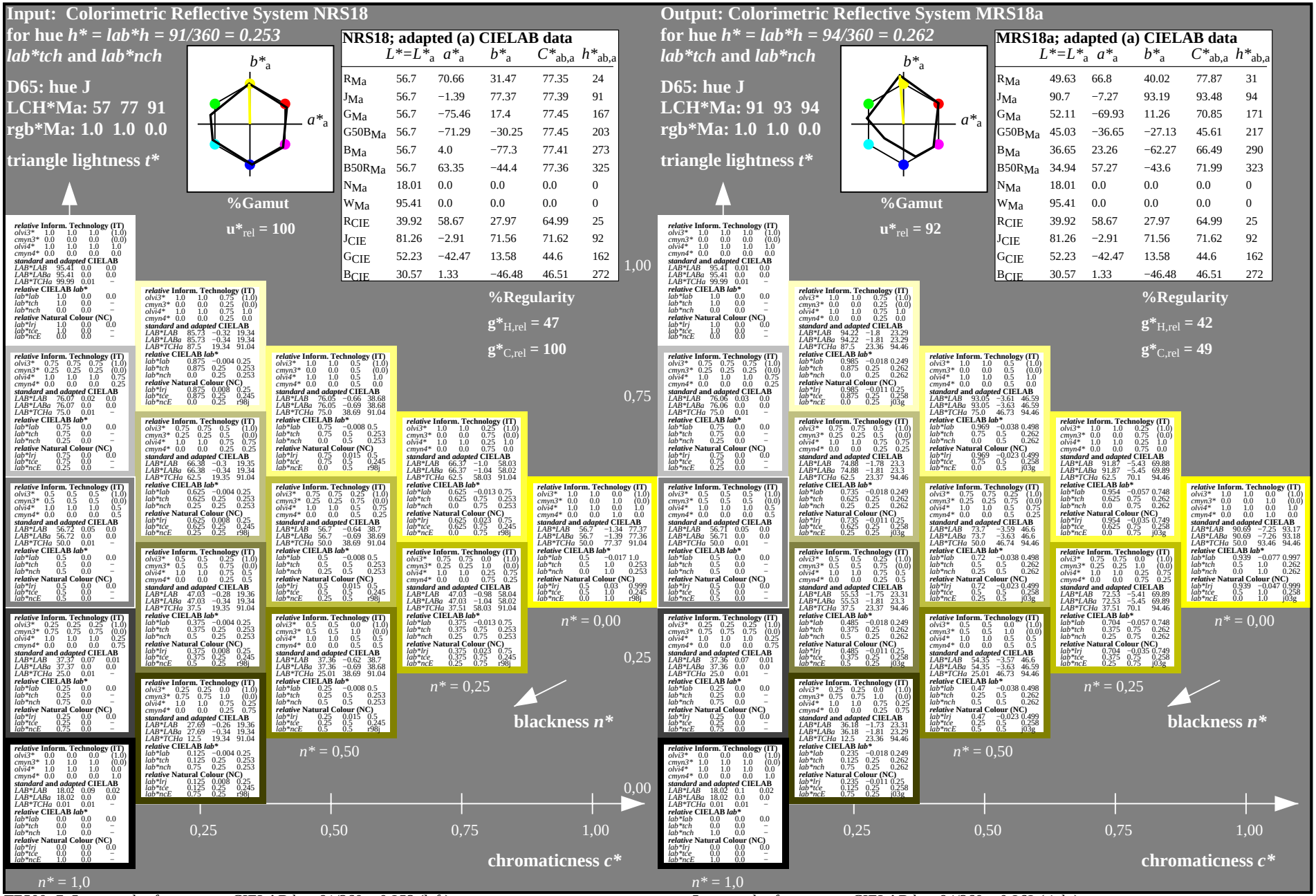

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

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



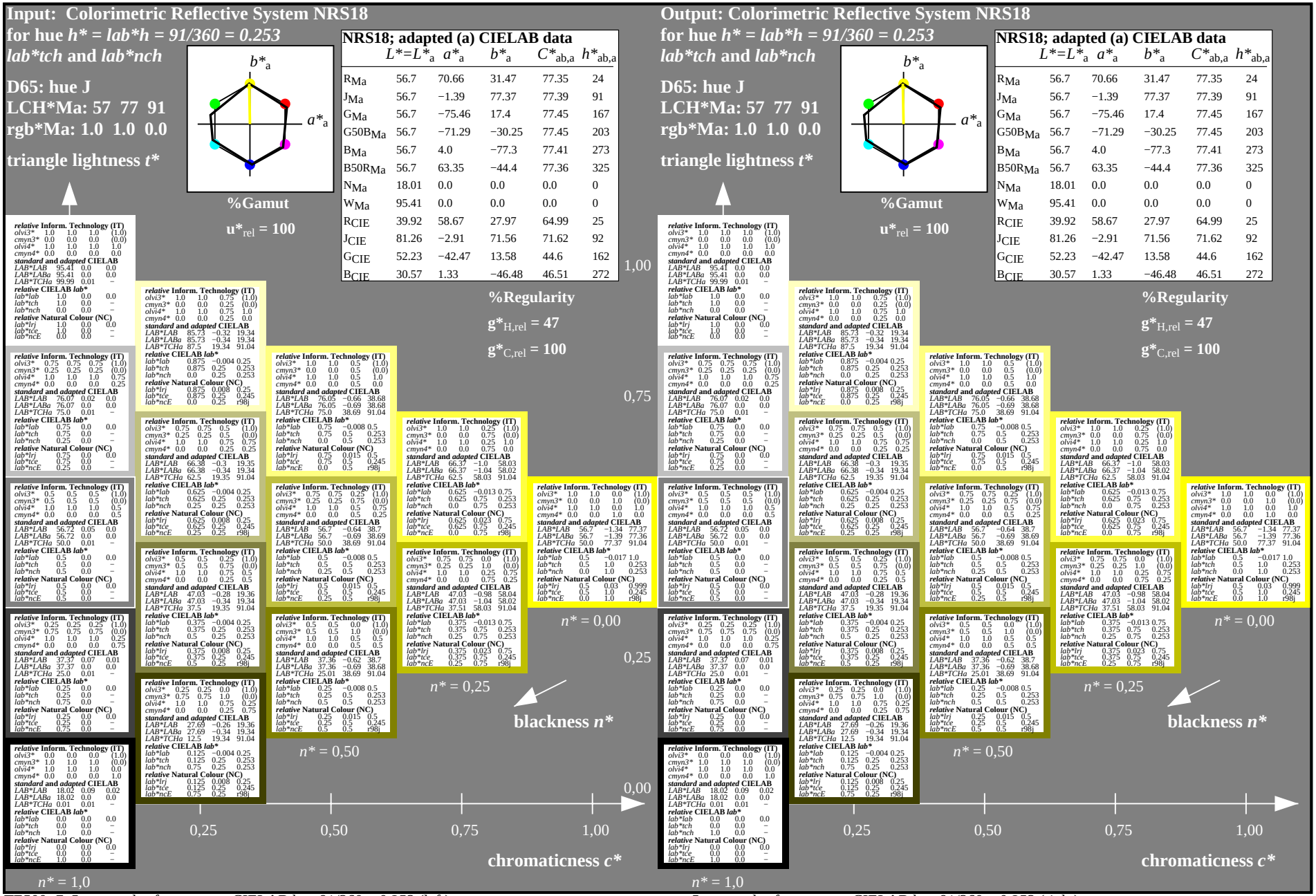

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)




TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 94/360 = 0.262 (right)



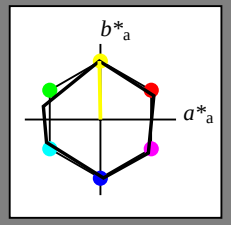

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 91/360 = 0.253**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 57 77 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

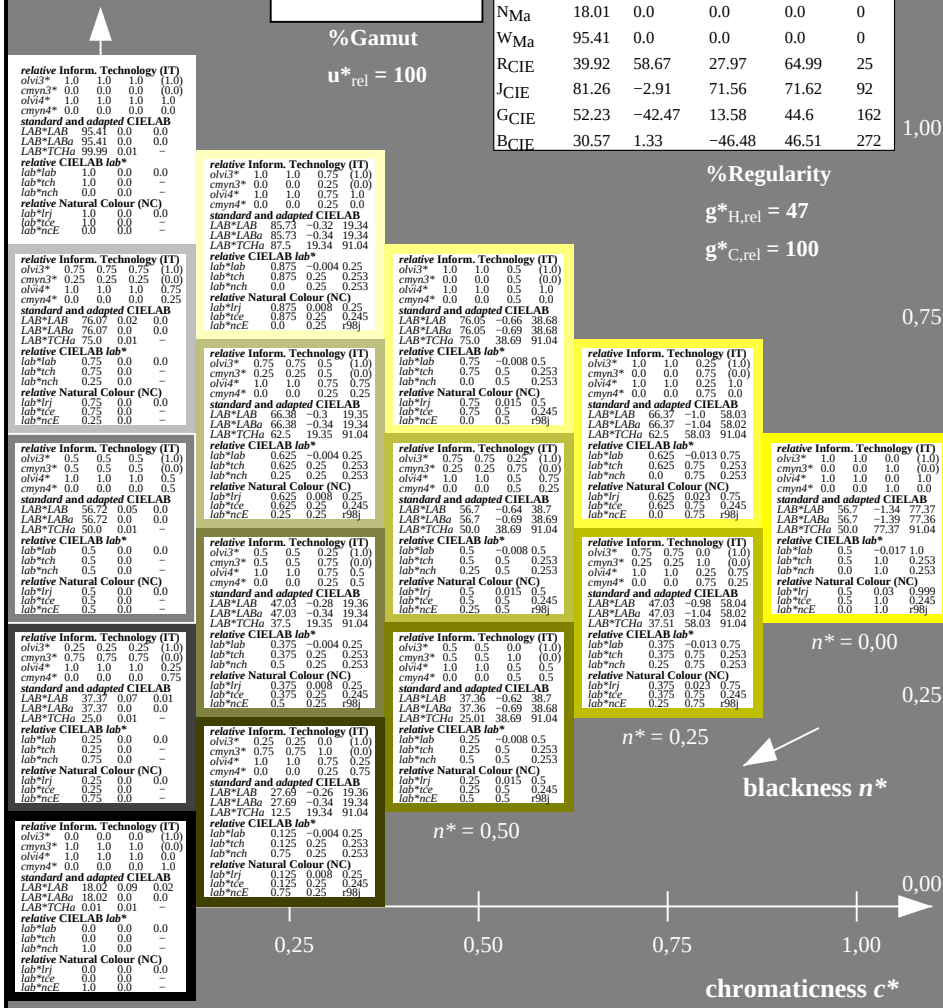
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

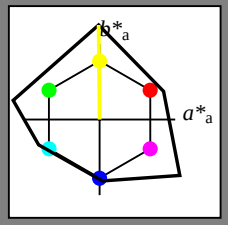
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

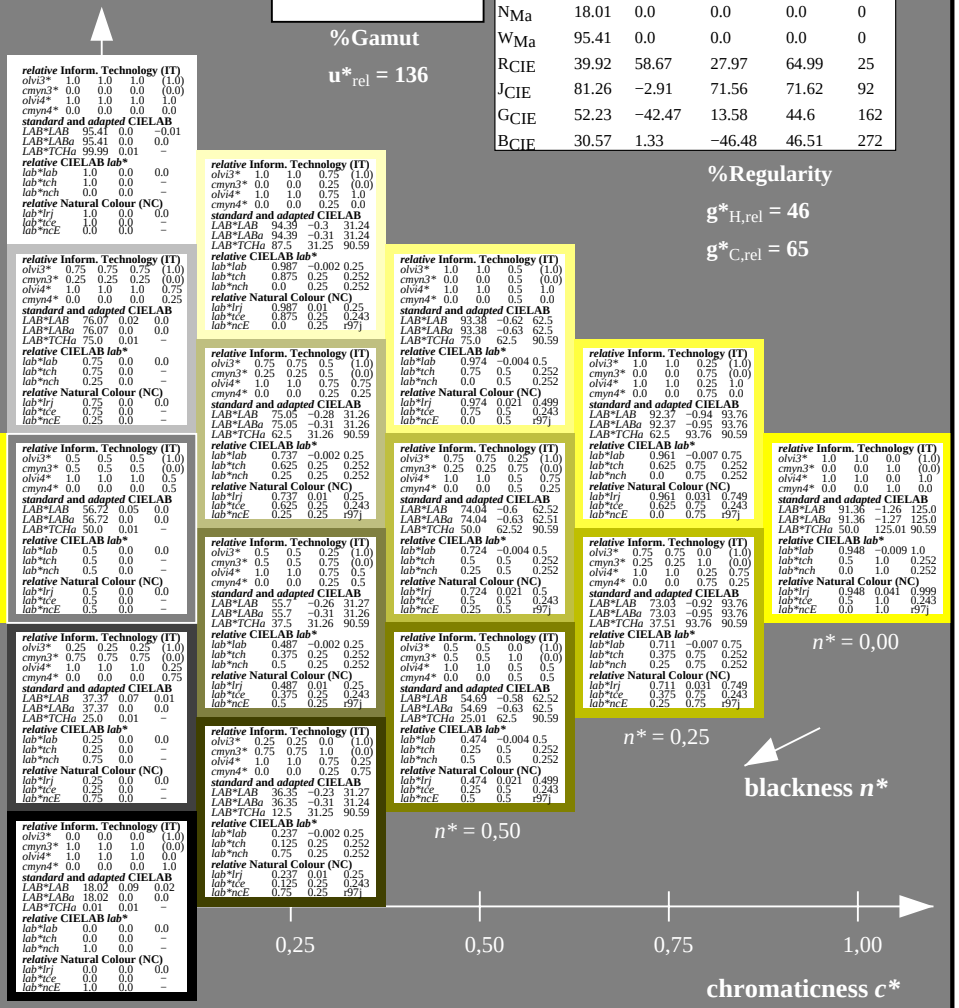
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

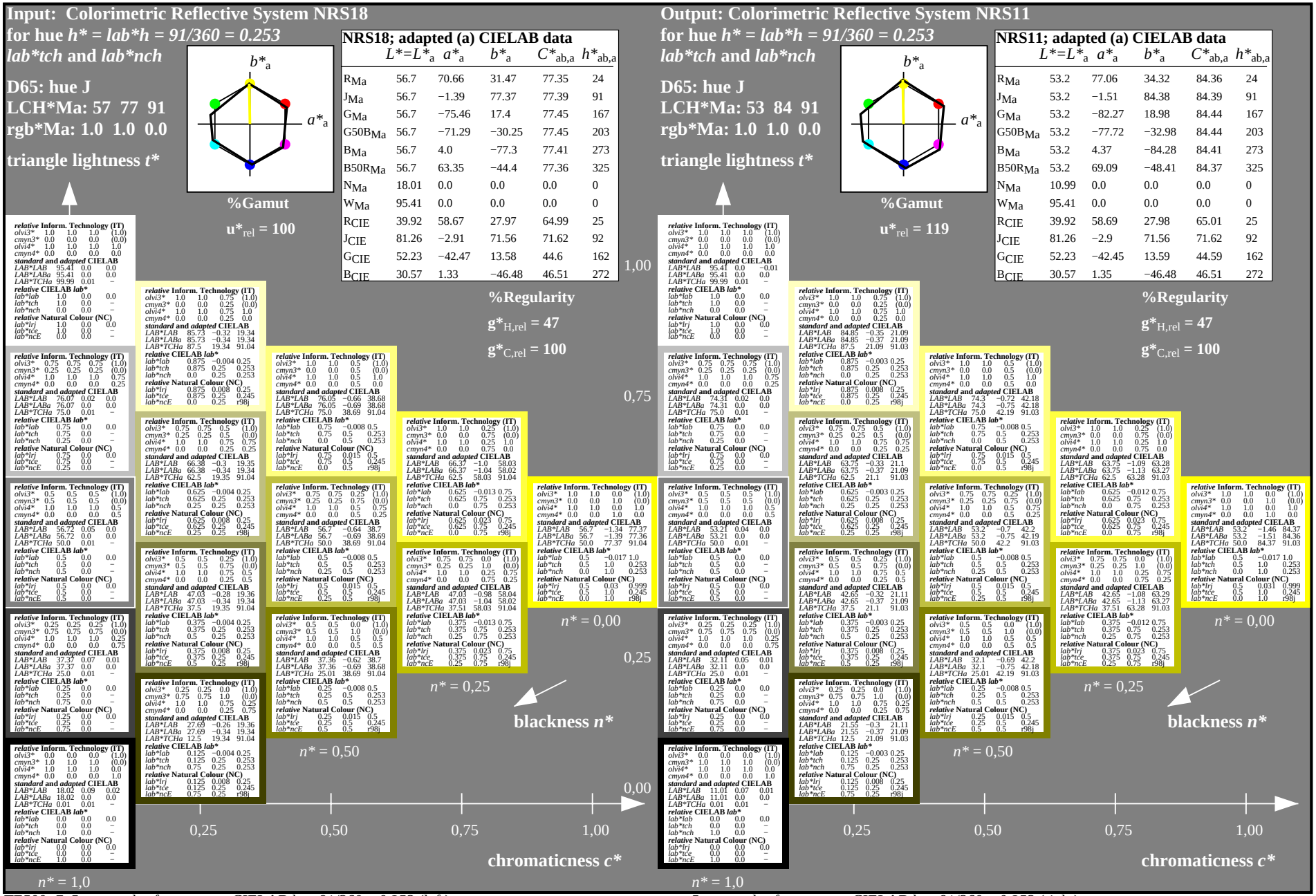
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



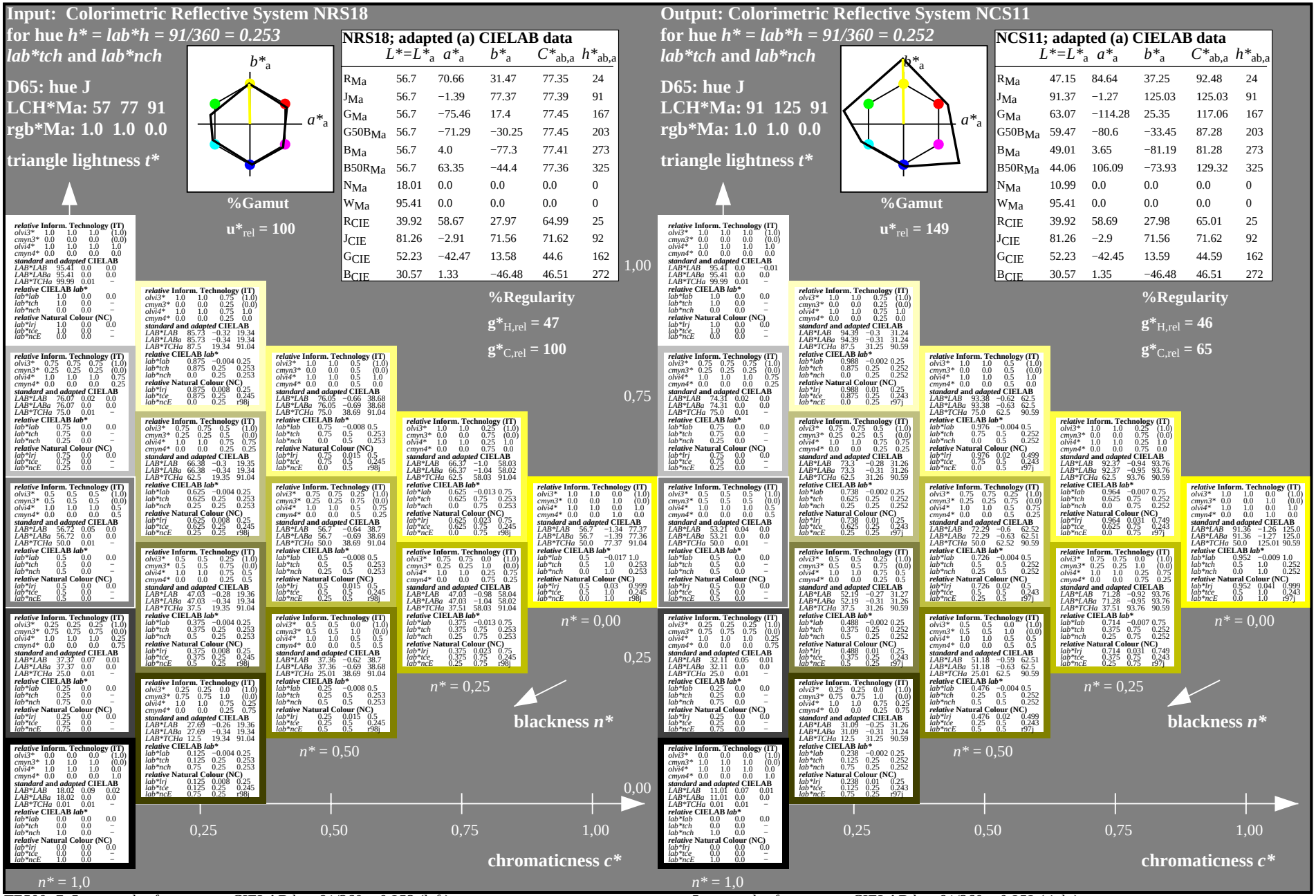

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)



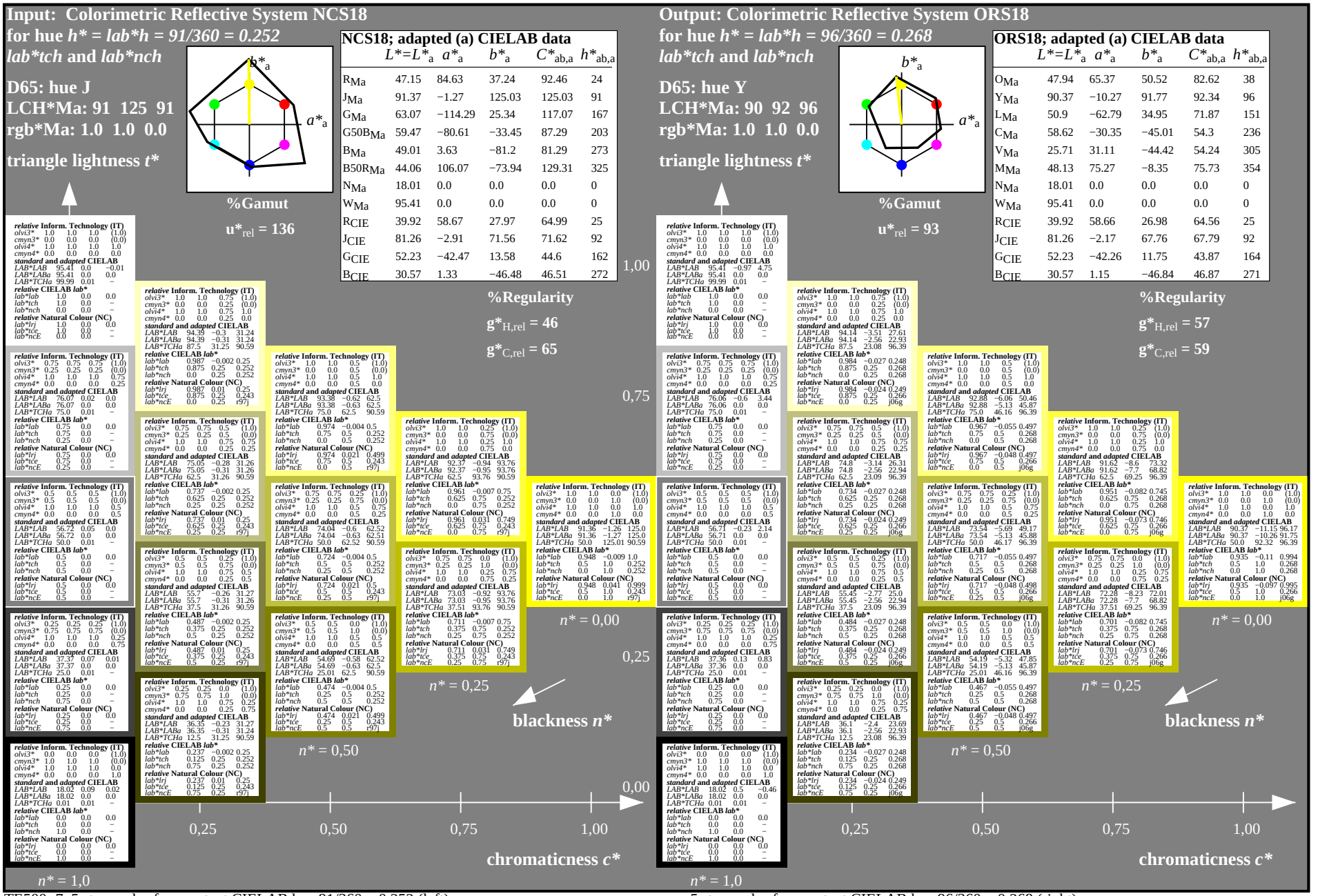

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)




TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)




**NCS18; adapted (a) CIELAB data**

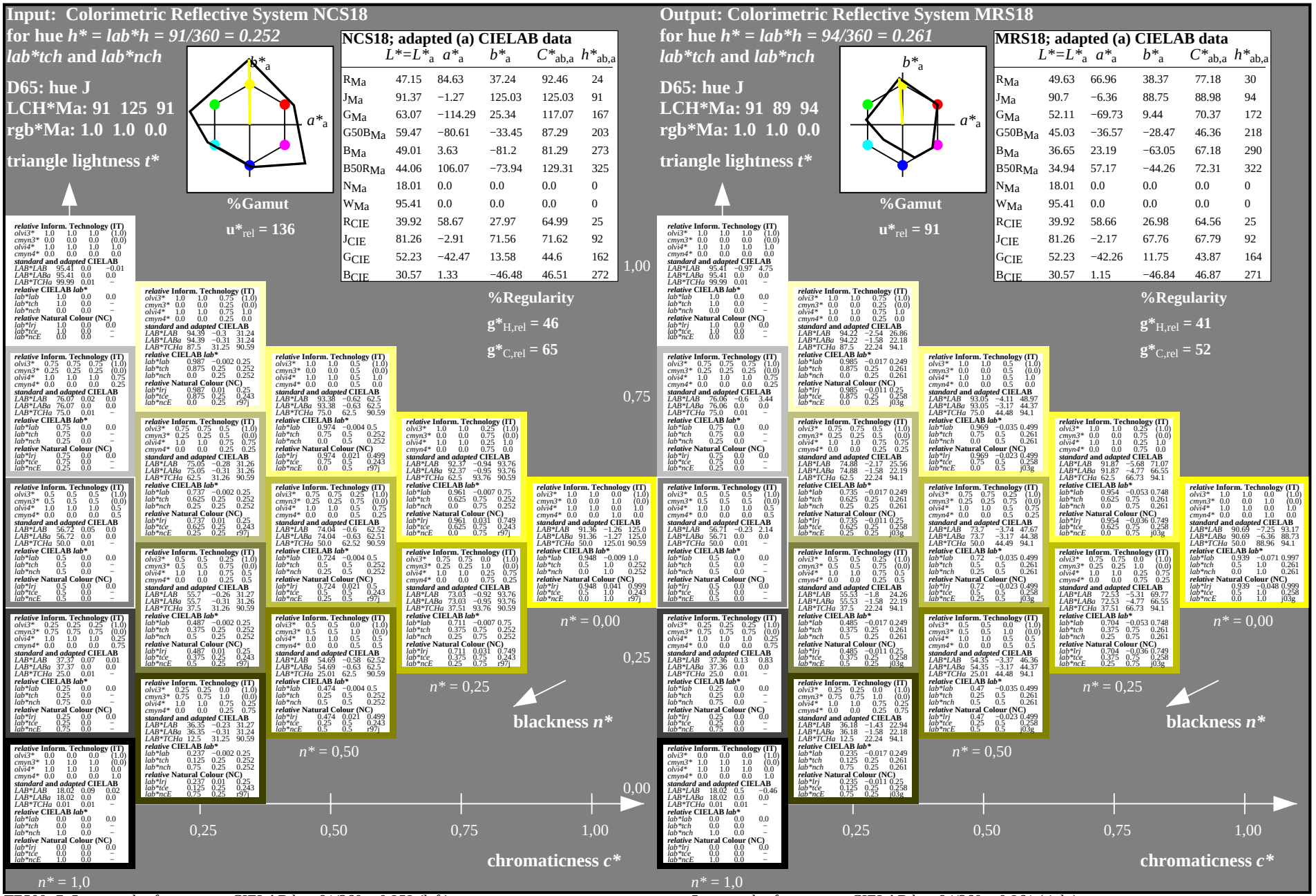
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

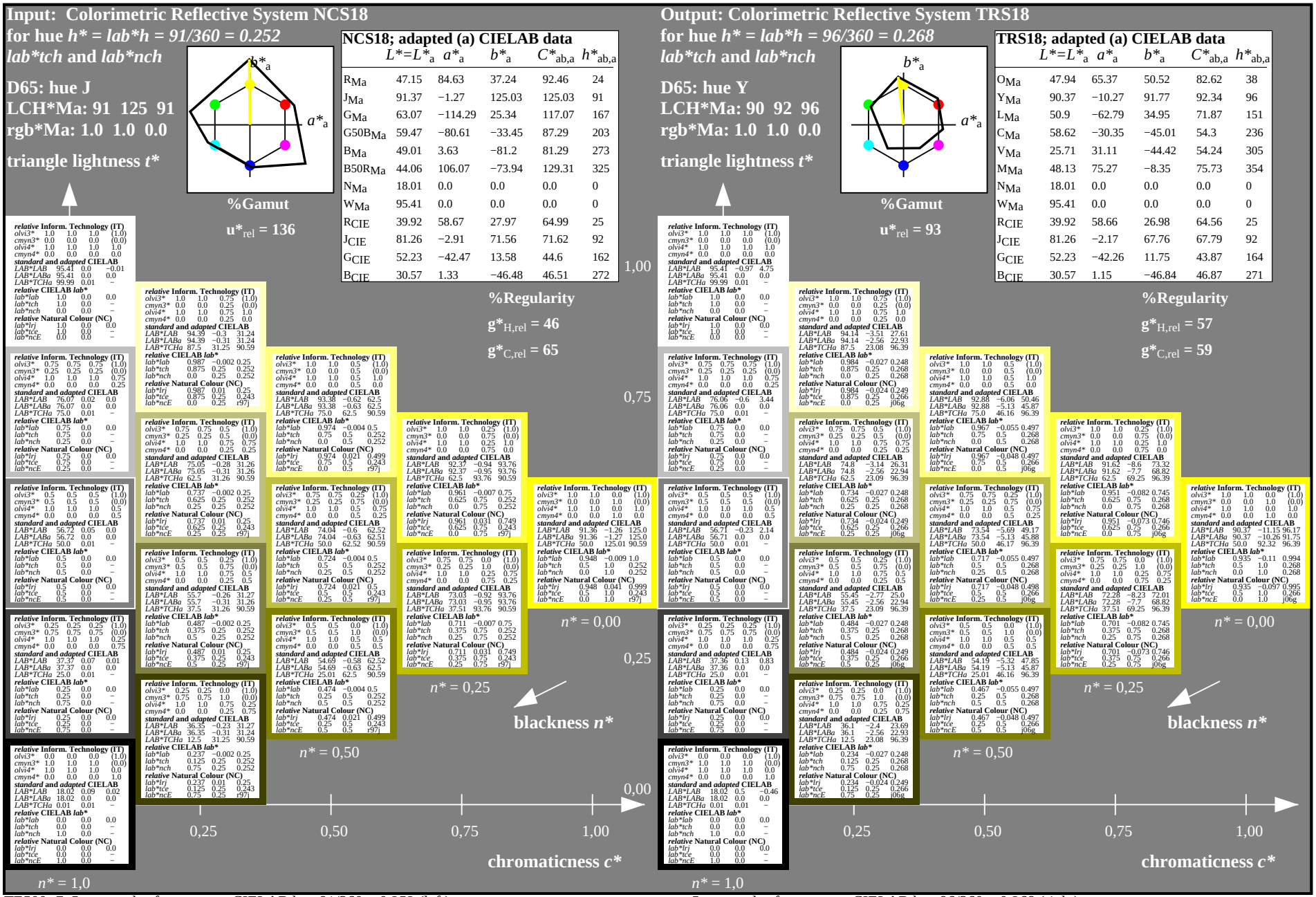
TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)




TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

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



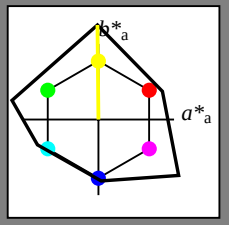

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

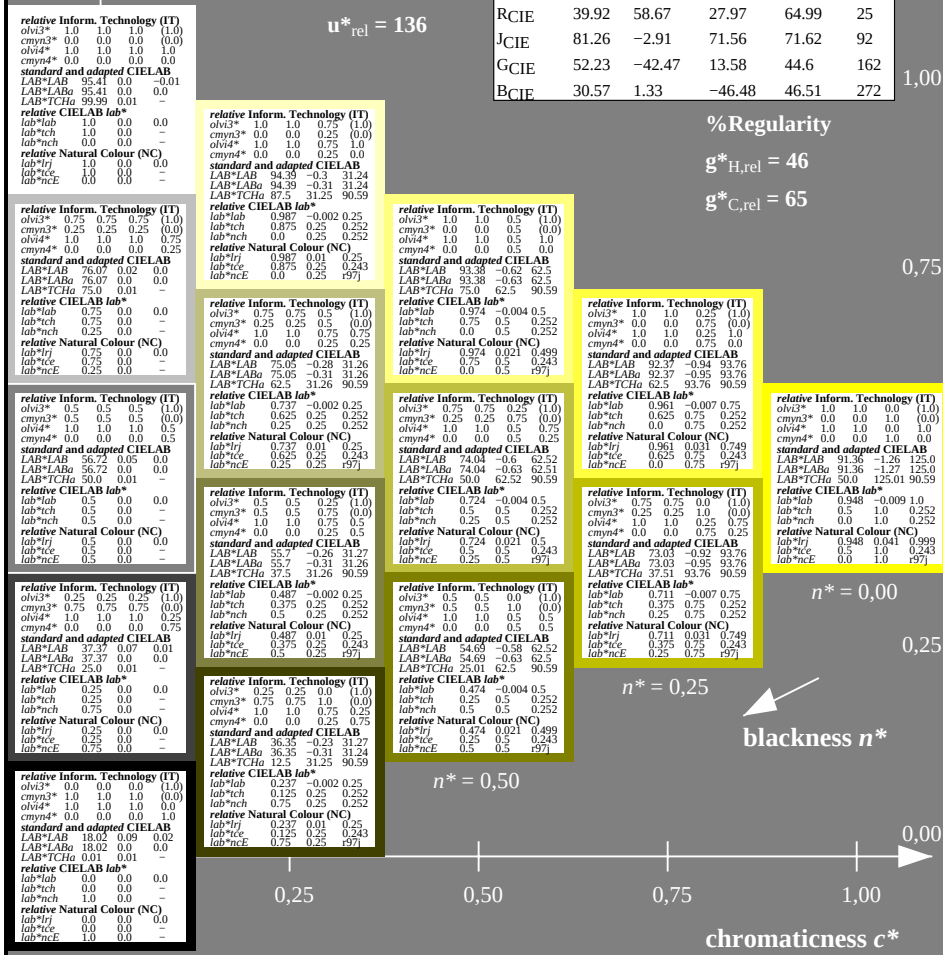
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

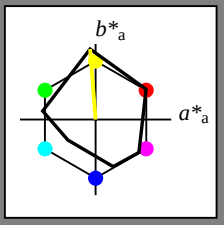
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 94/360 = 0.262**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 93 94**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

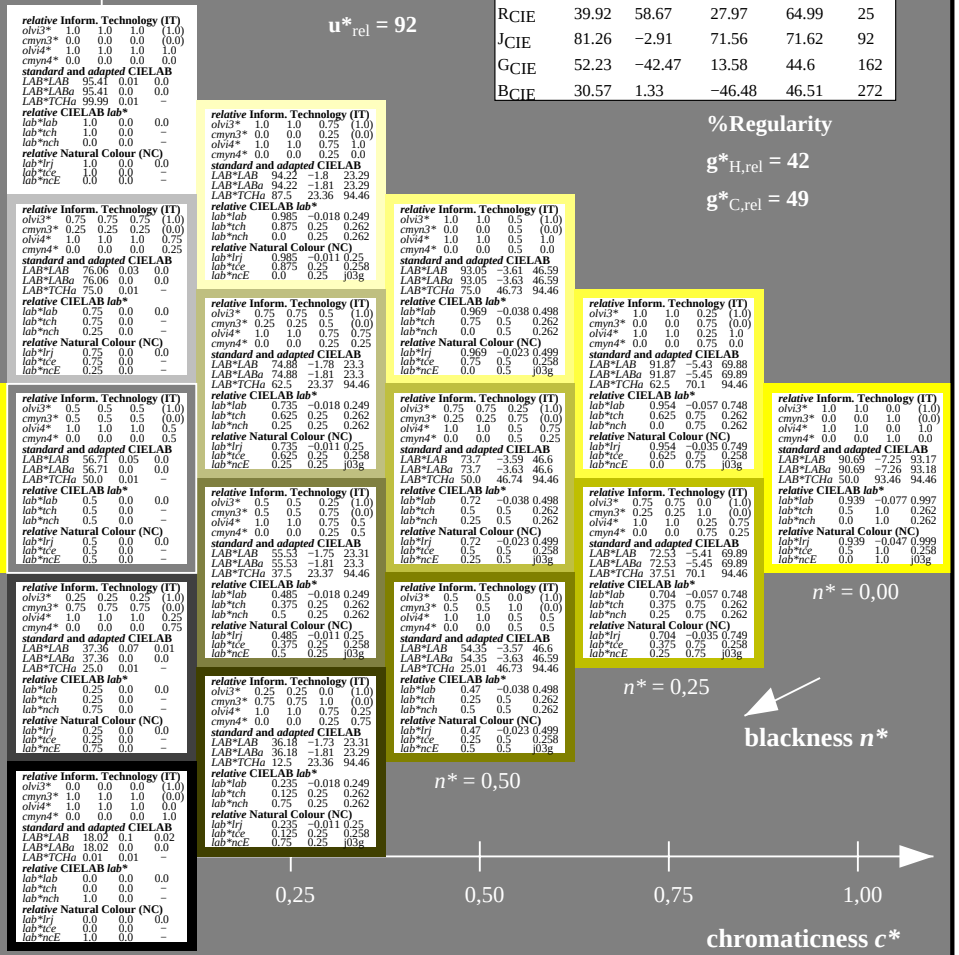
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



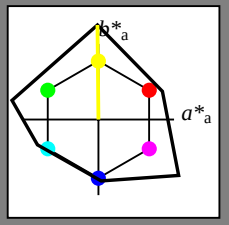

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 94/360 = 0.262 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

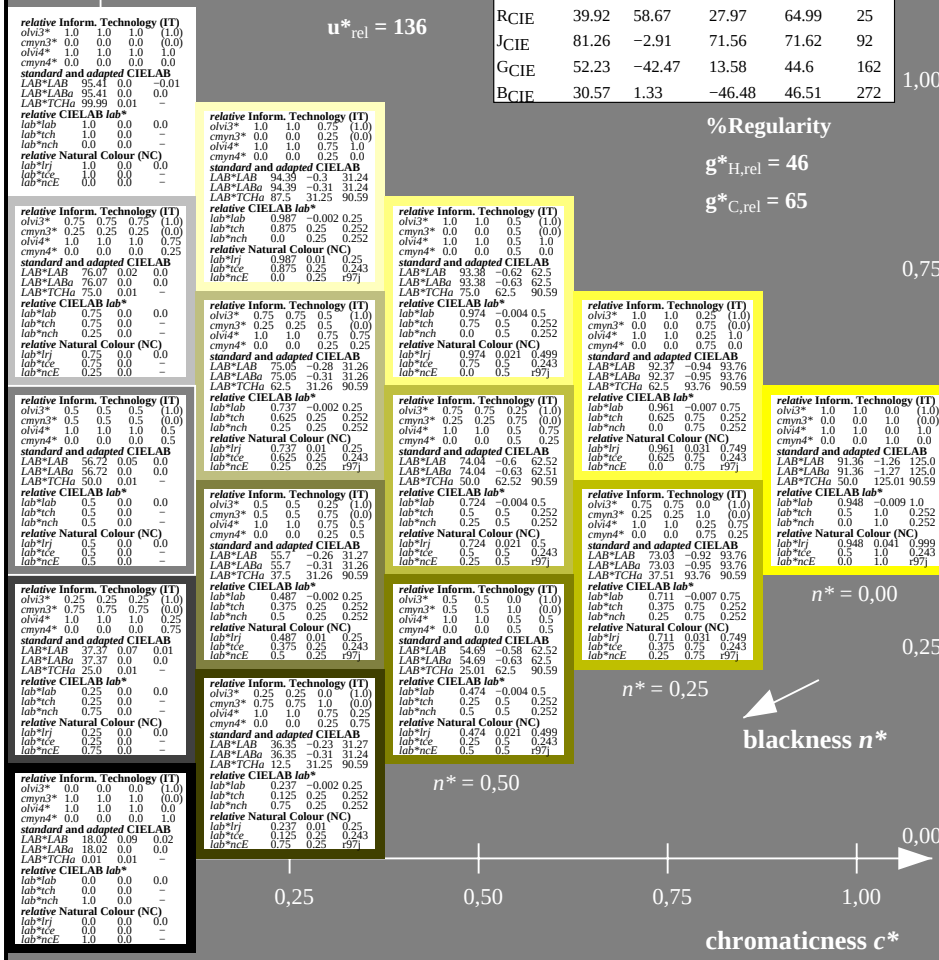
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

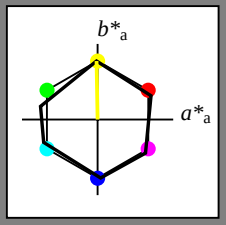
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 91/360 = 0.253**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 57 77 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

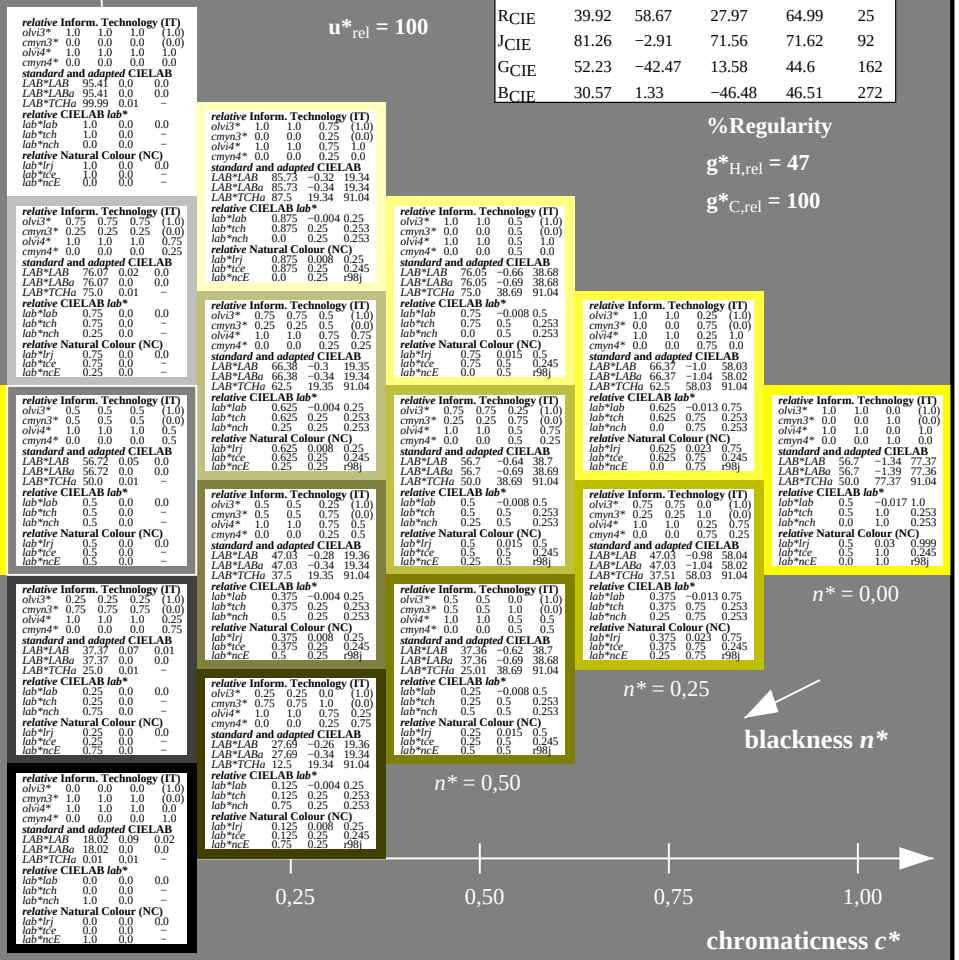
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

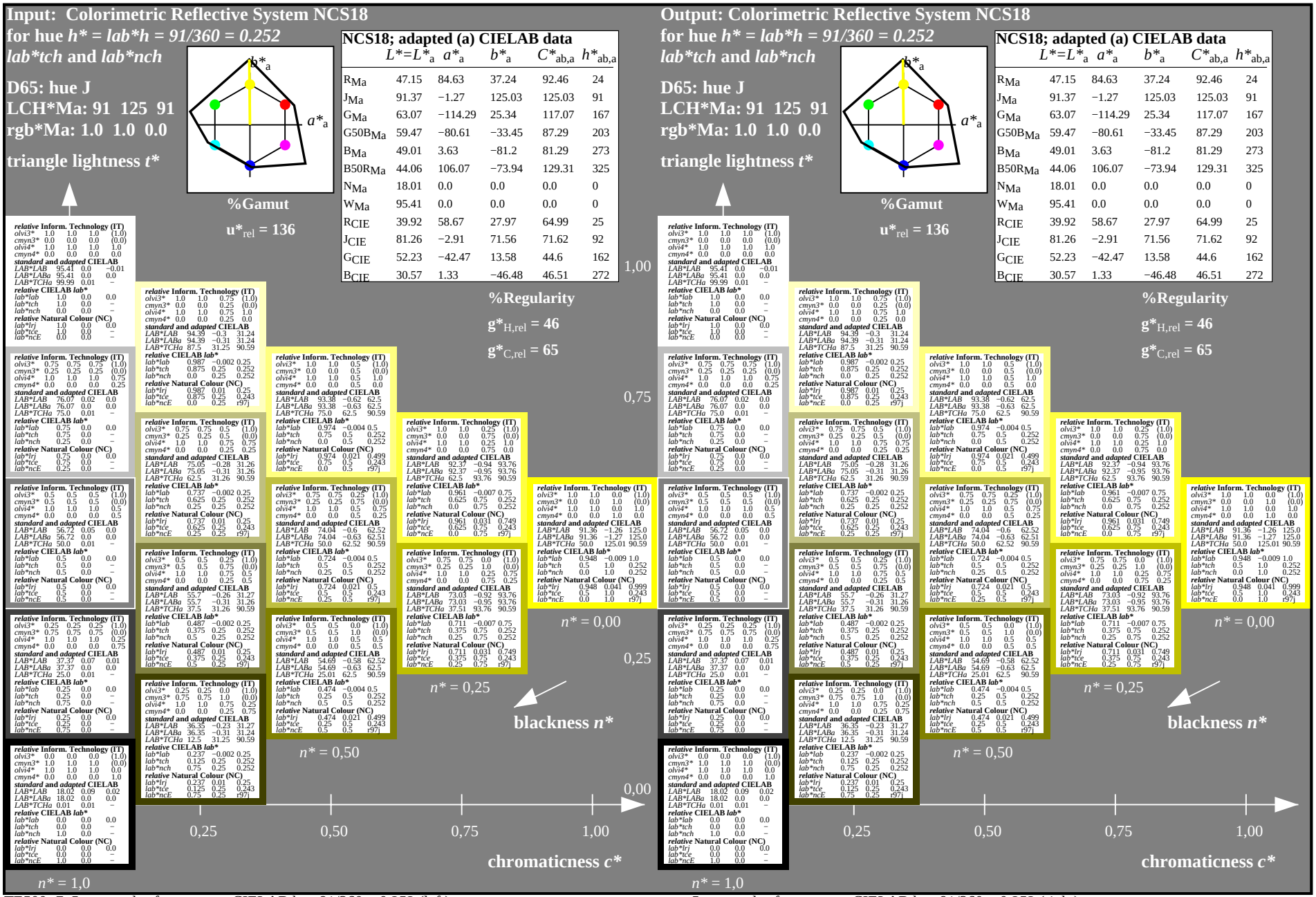
**g*$_{H,rel}$ = 47**

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




TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)




**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

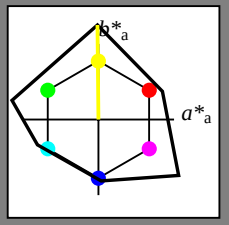
5 step scales for constant CIELAB hue 91/360 = 0.252 (right)

## Input: Colorimetric Reflective System NCS18

**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

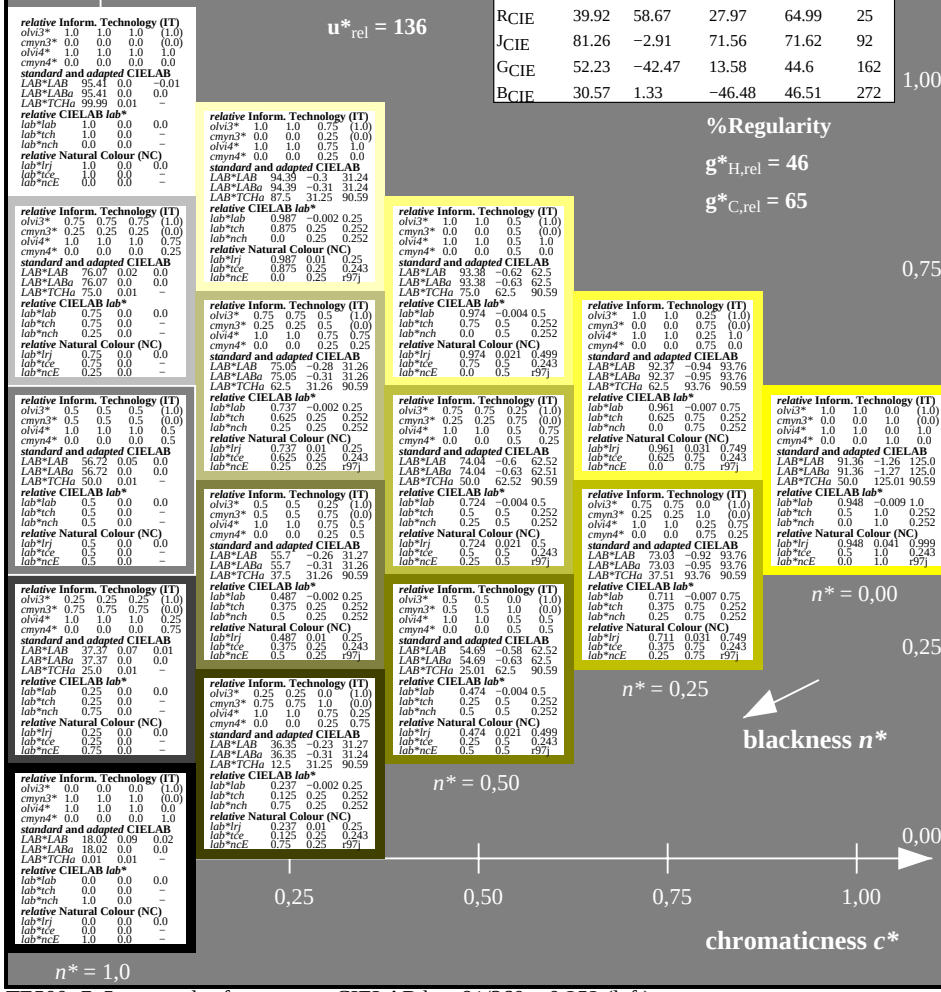
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



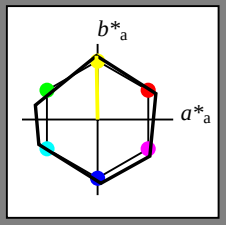

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

## Output: Colorimetric Reflective System NRS11

**for hue *h** = *lab*h* = 91/360 = 0.253**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 53 84 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

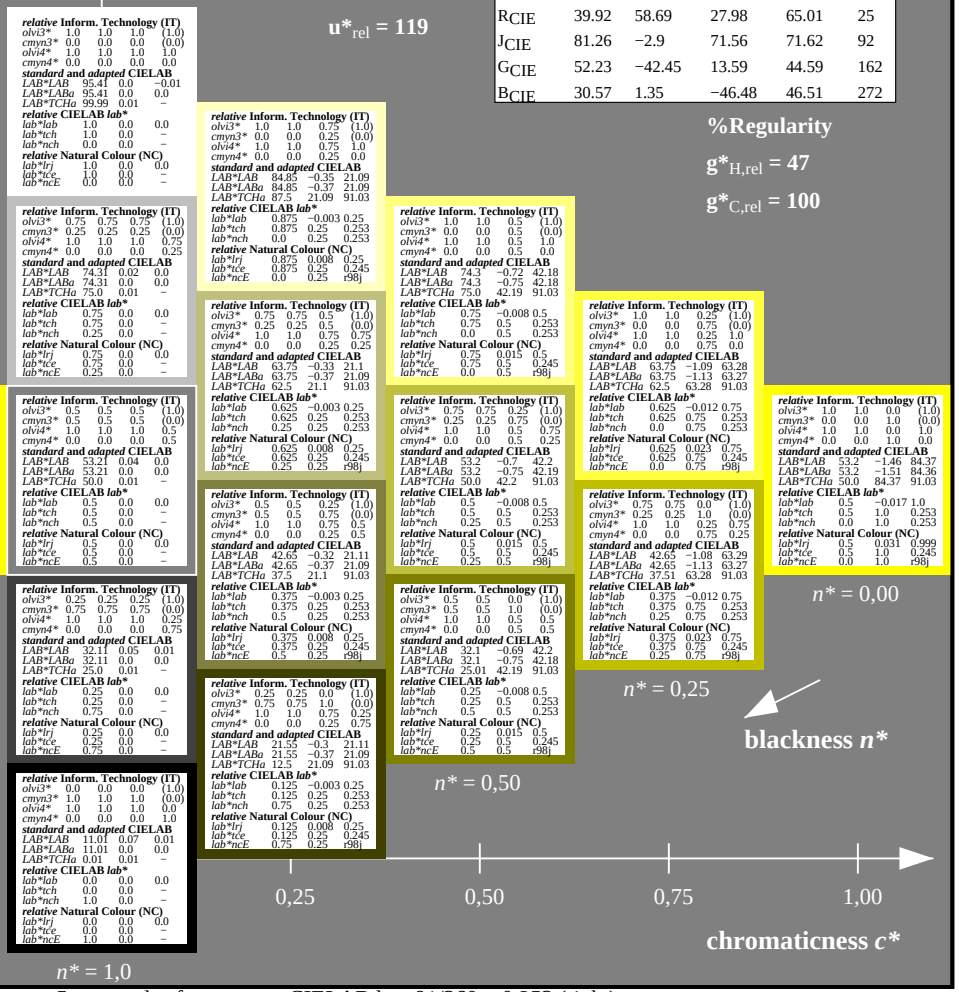
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

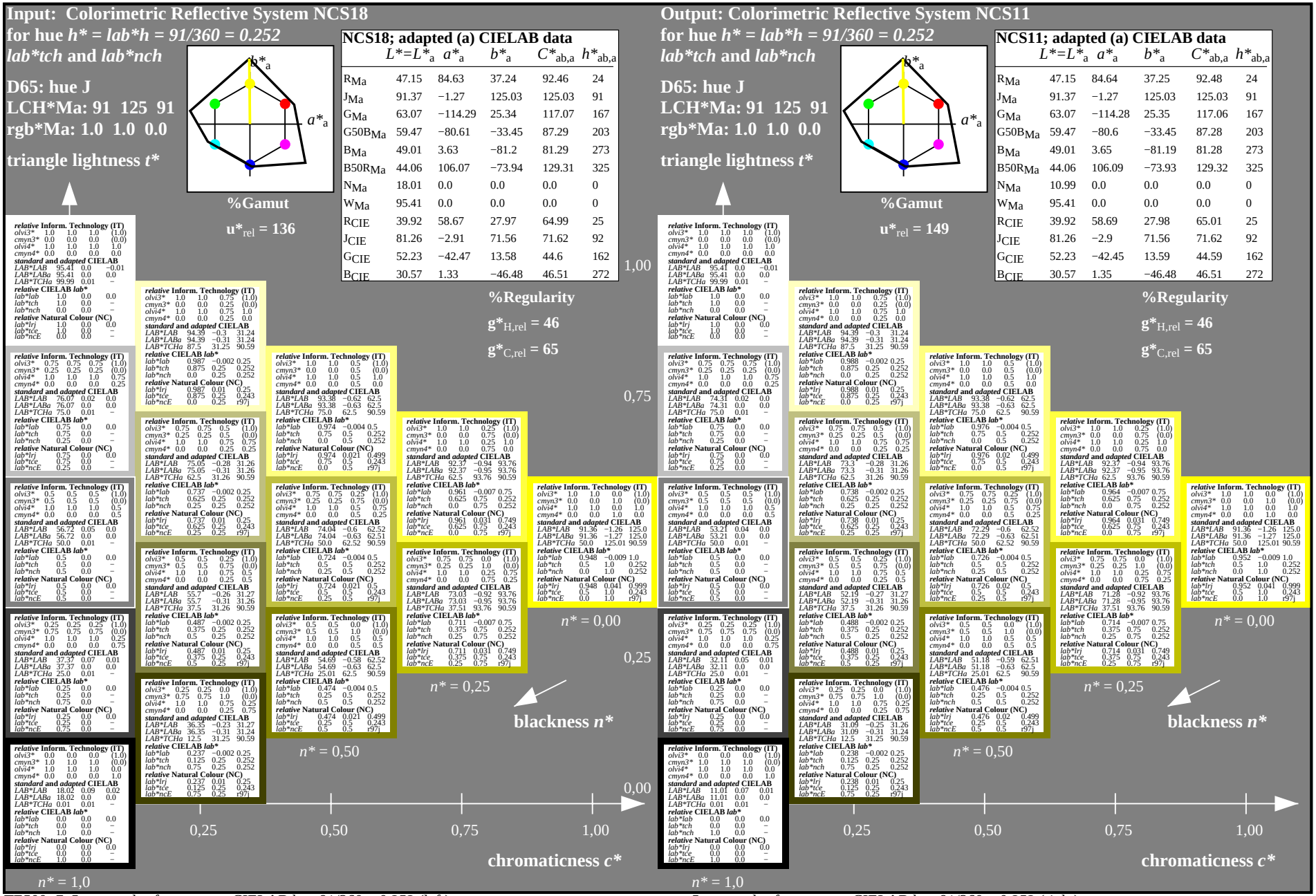
**%Regularity**

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

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




5 step scales for constant CIELAB hue 91/360 = 0.253 (right)




**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

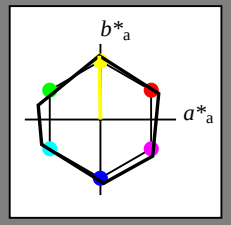
TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 91/360 = 0.253**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 53 84 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

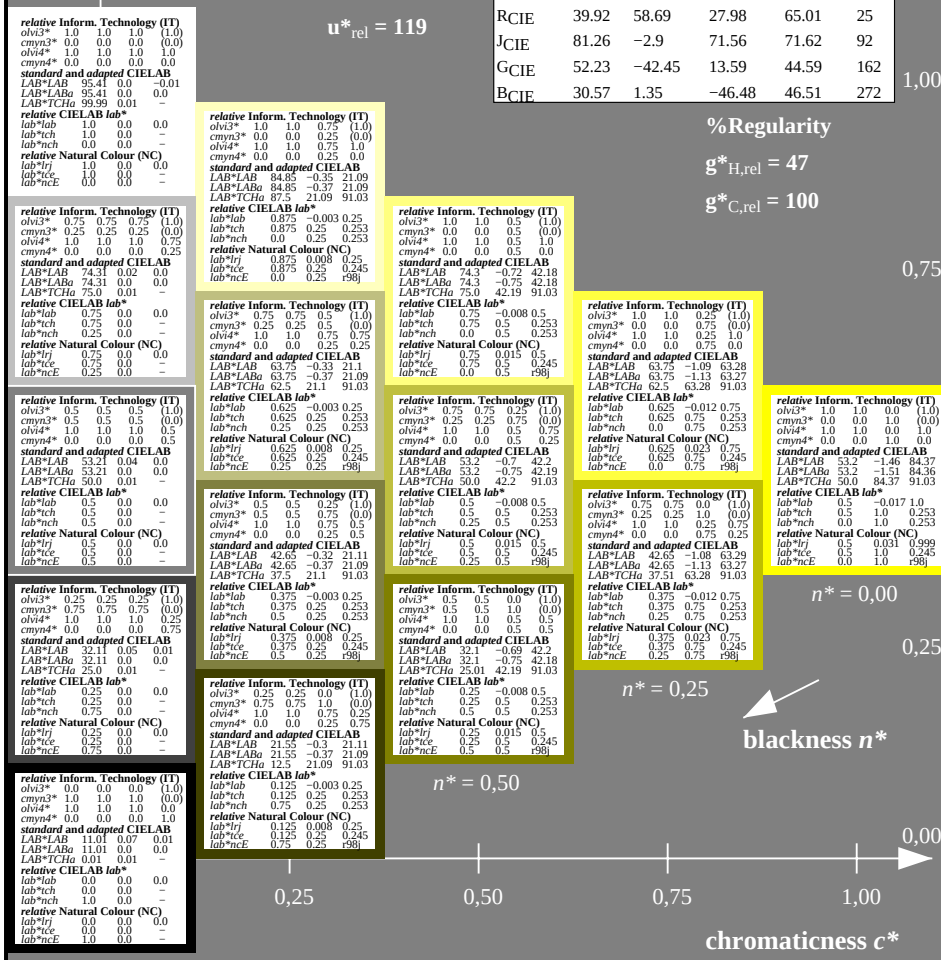
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

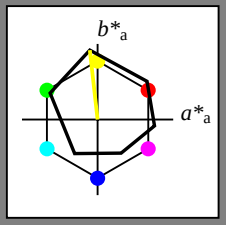
**g*$_{C,rel}$ = 100**




**Output: Colorimetric 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**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

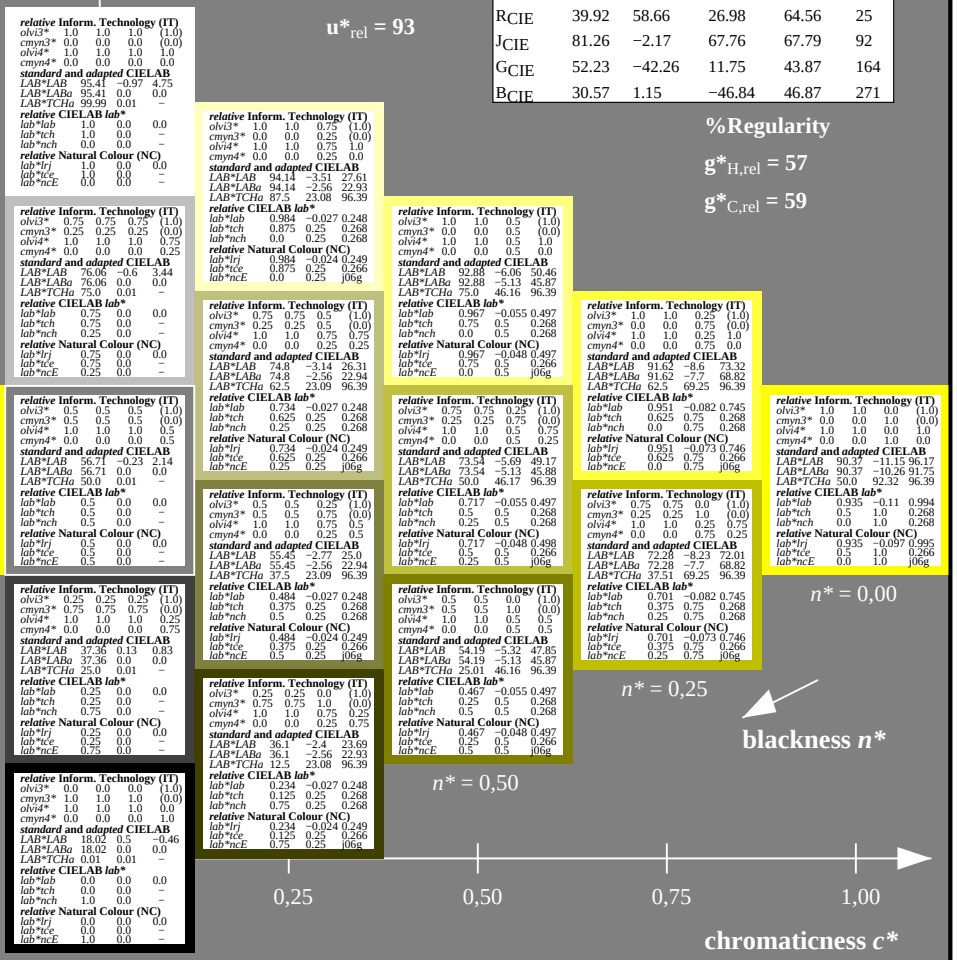
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

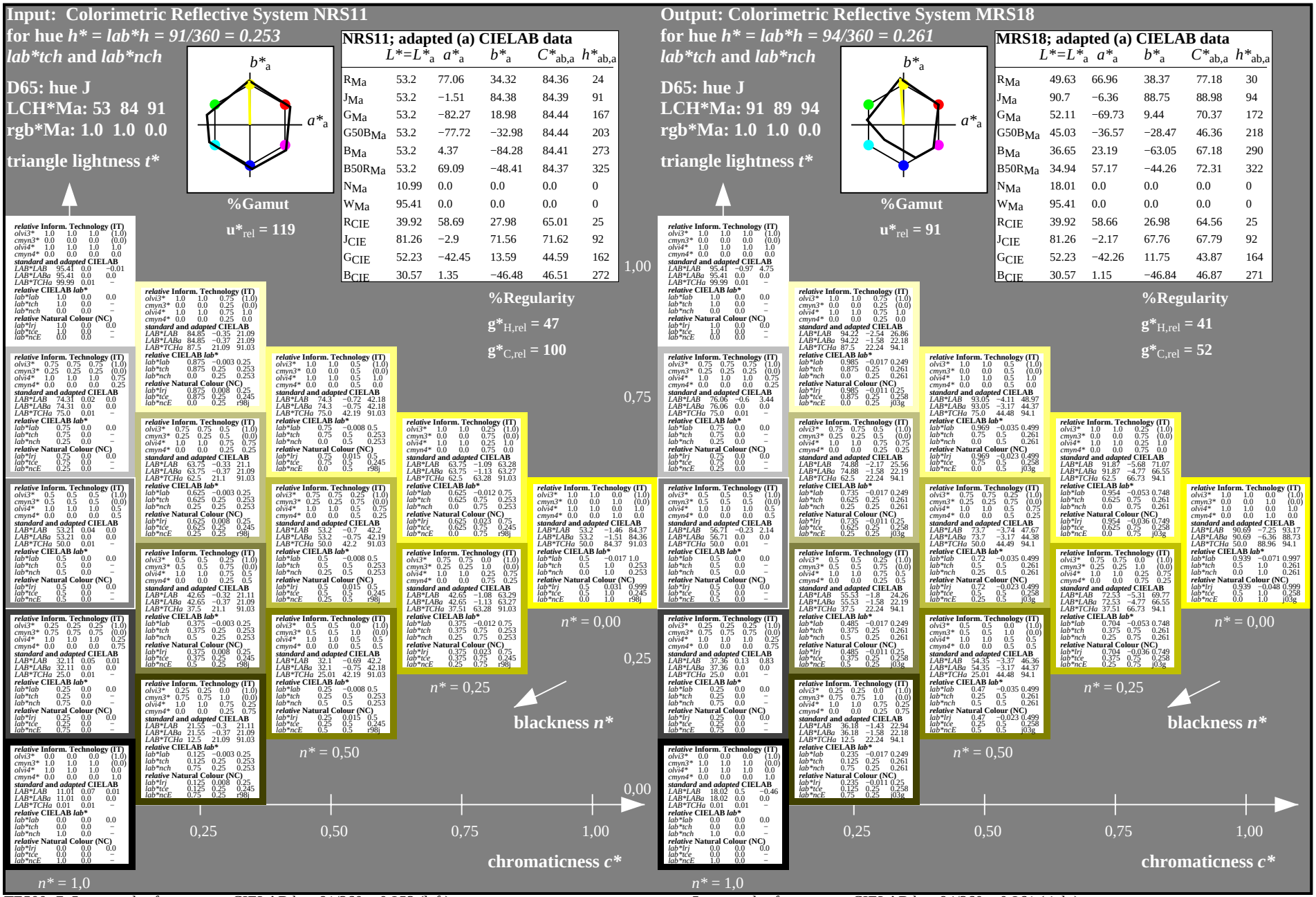
**g*$_{H,rel}$ = 57**

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




TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)



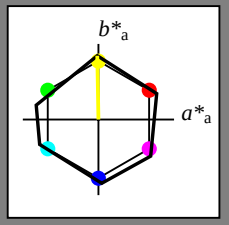

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

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

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 91/360 = 0.253**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 53 84 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

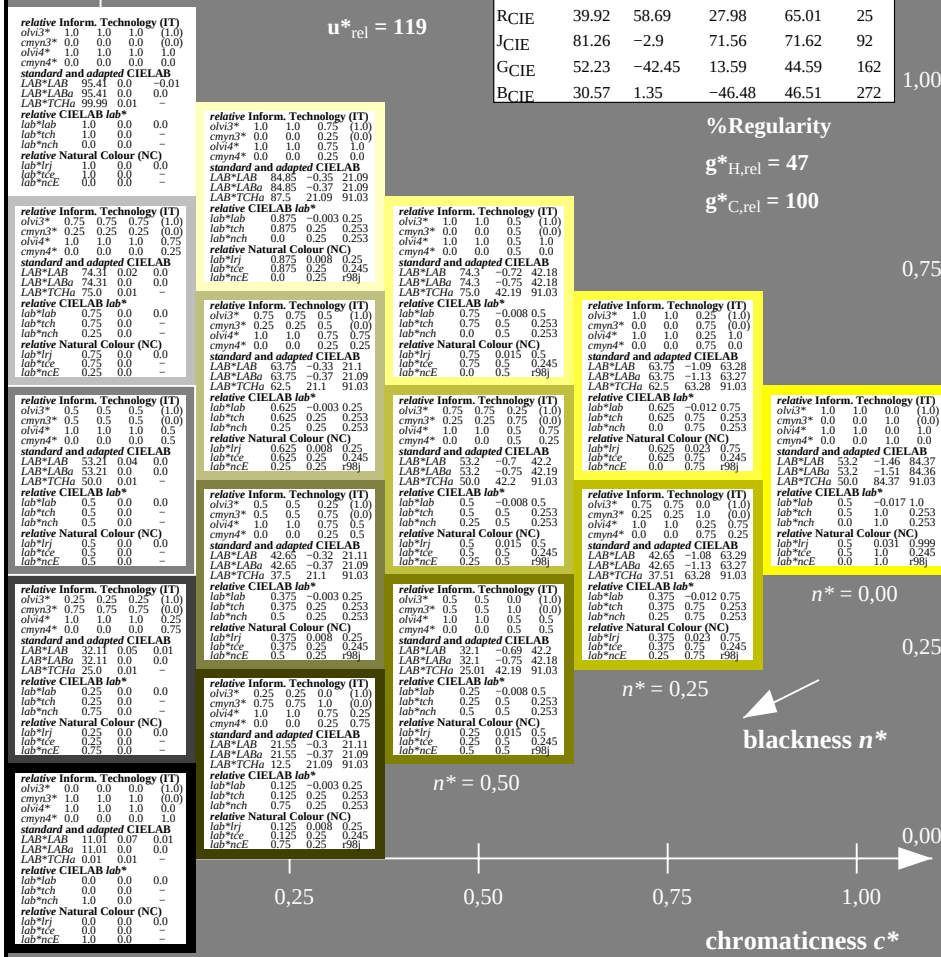
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

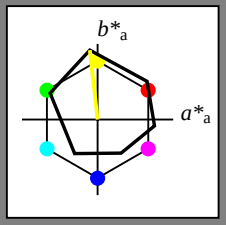
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 96/360 = 0.268**
***lab*tch* and *lab*nch***

**D65: hue Y**
**LCH*Ma: 90 92 96**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

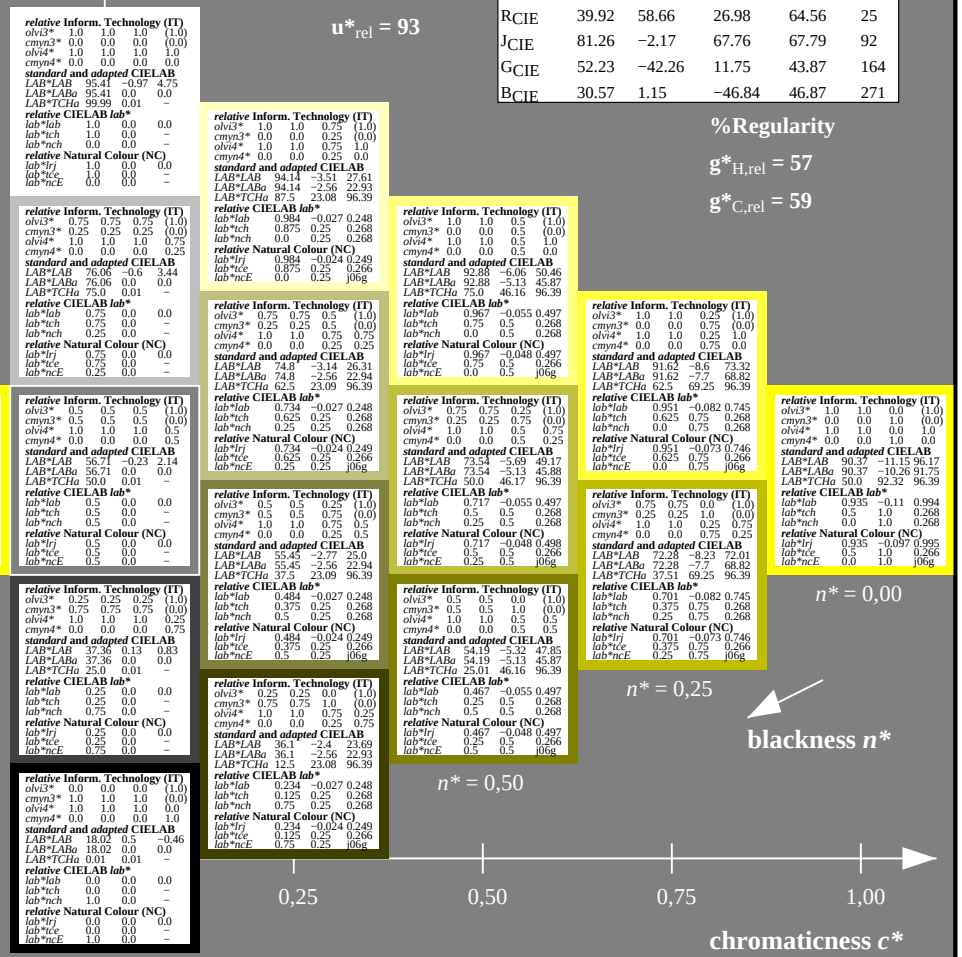
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



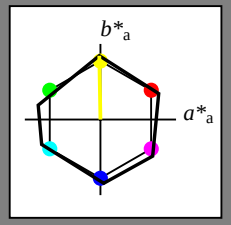

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 91/360 = 0.253**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 53 84 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

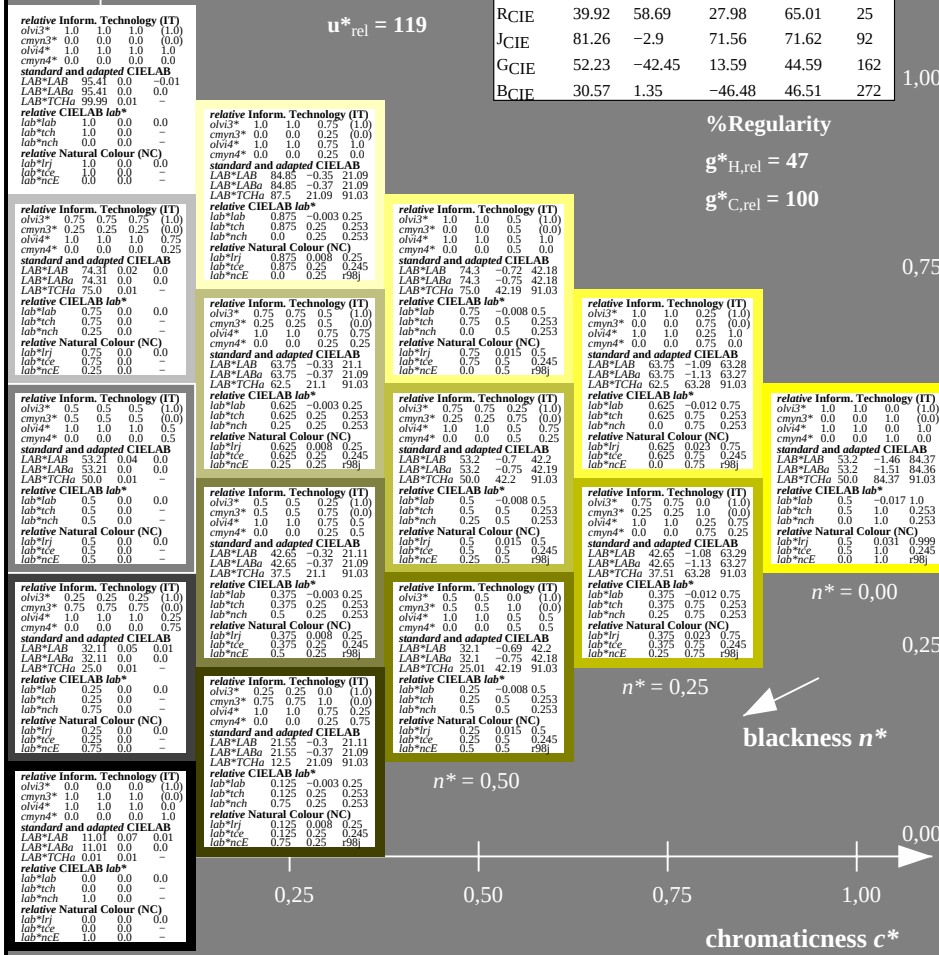
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

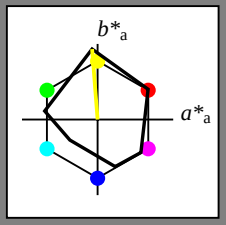
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 94/360 = 0.262**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 93 94**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

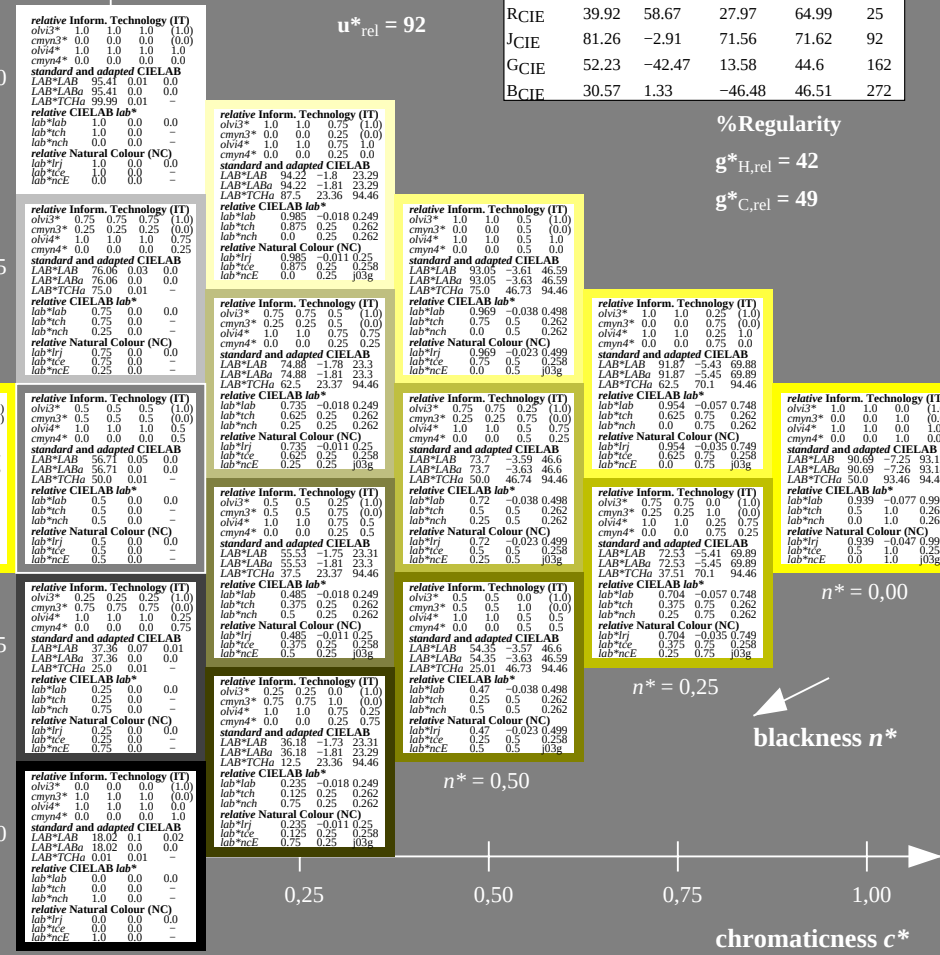
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

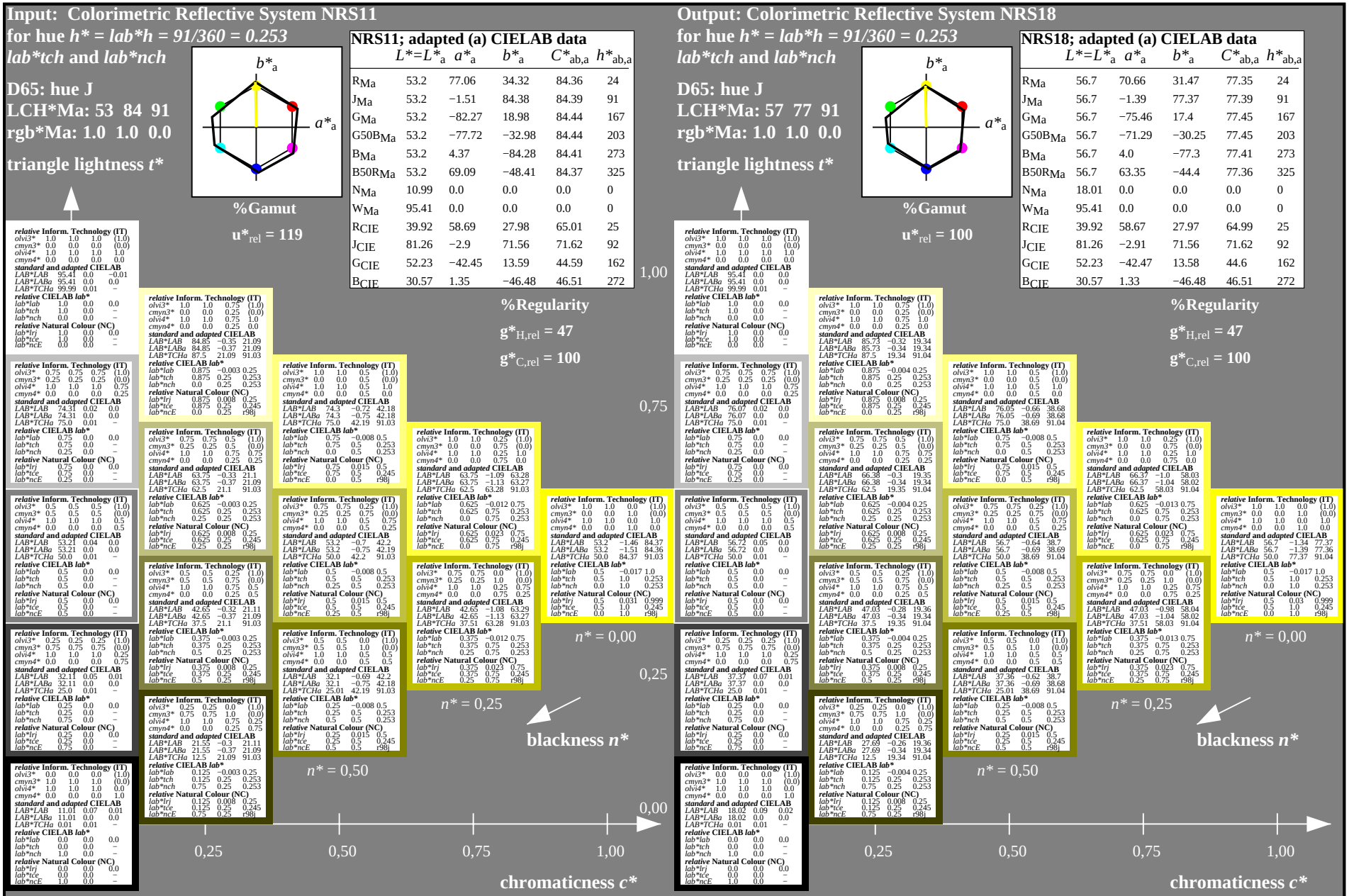
**g*$_{H,rel}$ = 42**

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




TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 94/360 = 0.262 (right)



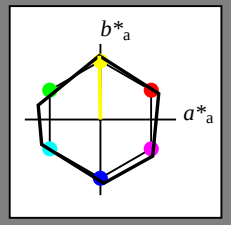

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 91/360 = 0.253**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 53 84 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

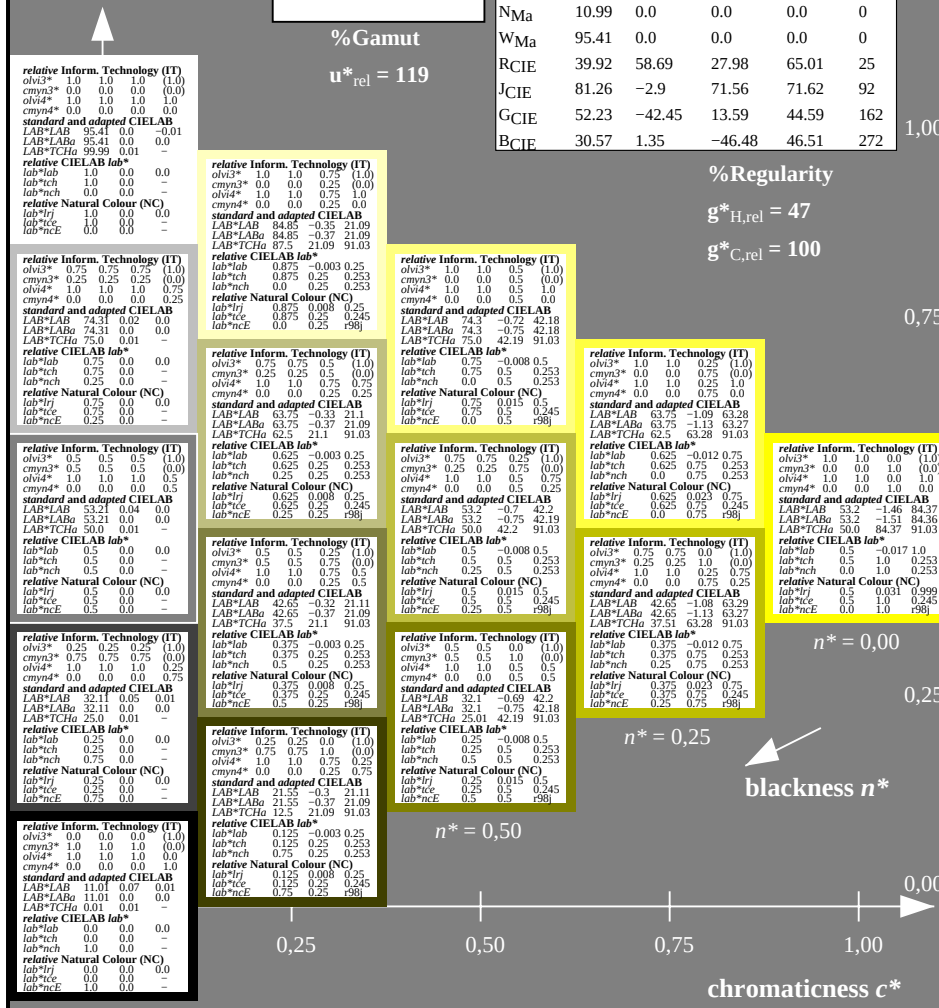
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

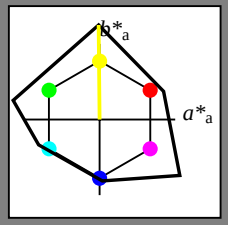
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

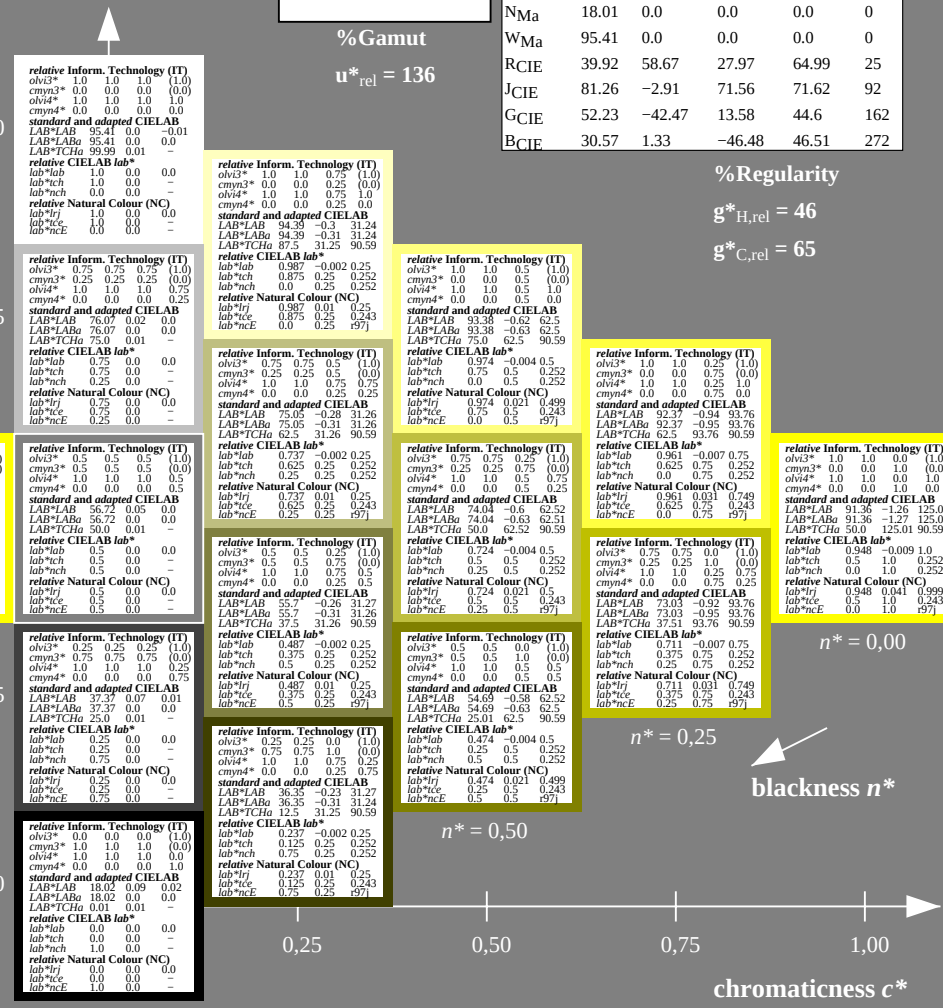
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

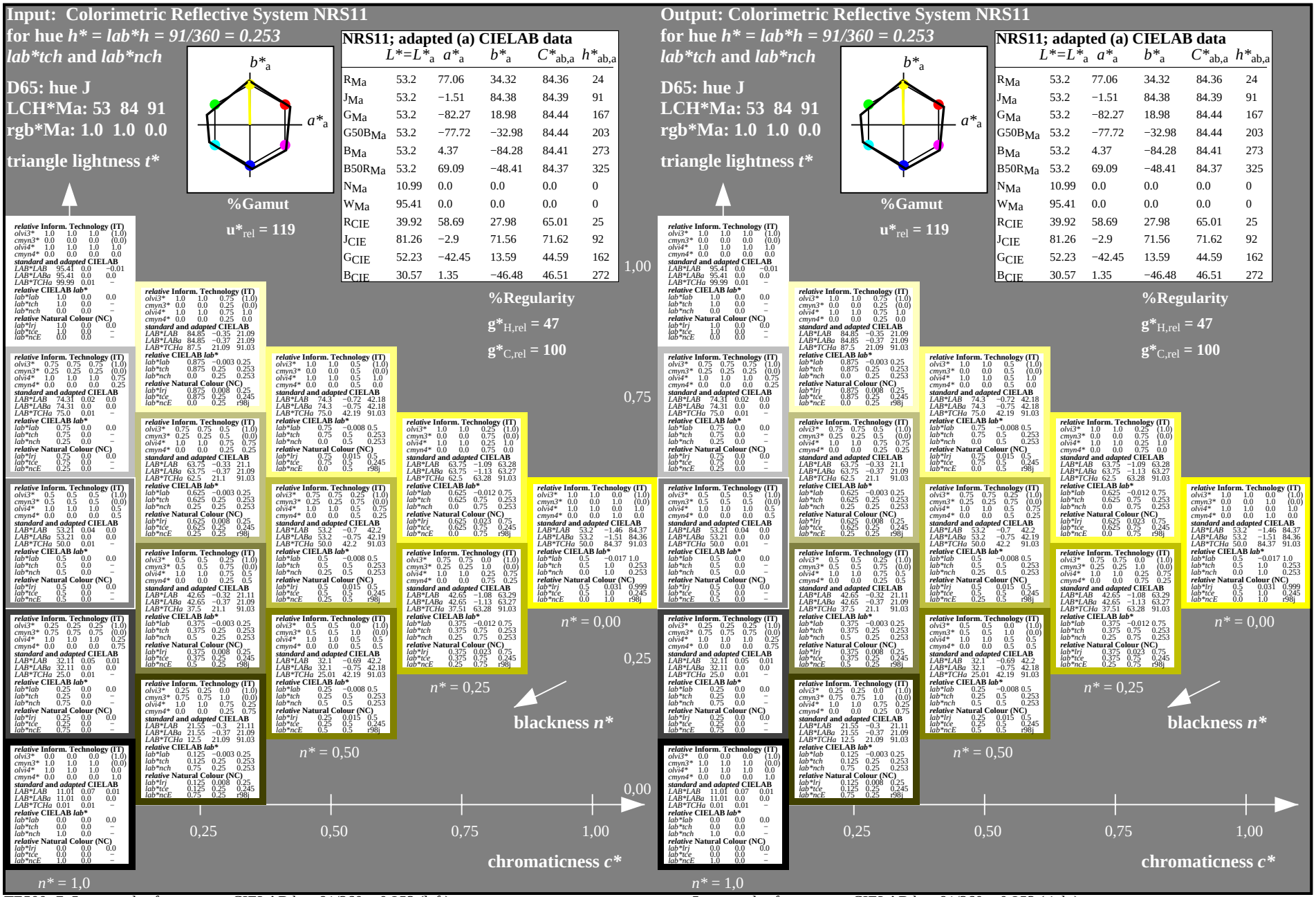
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



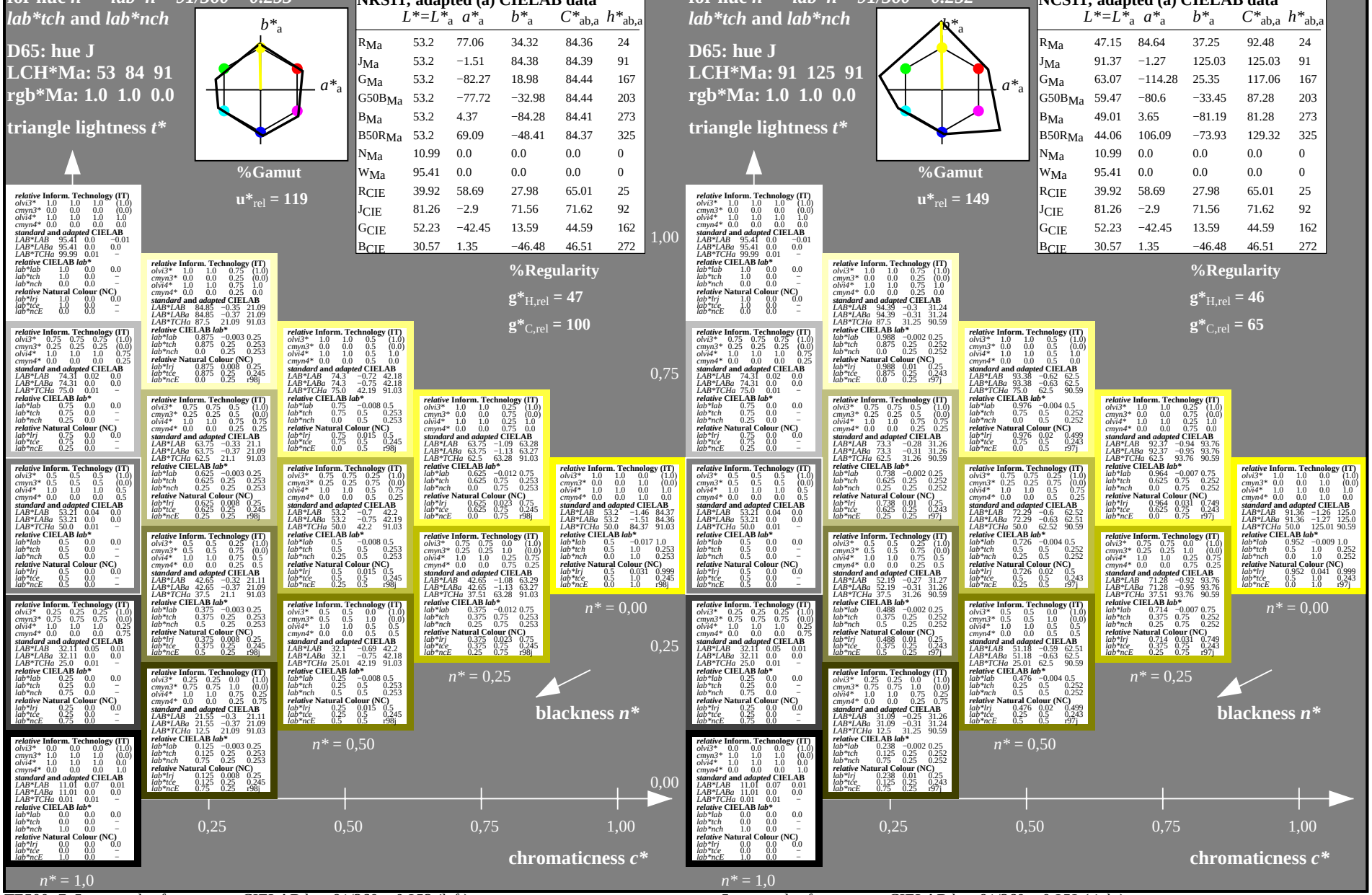

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)



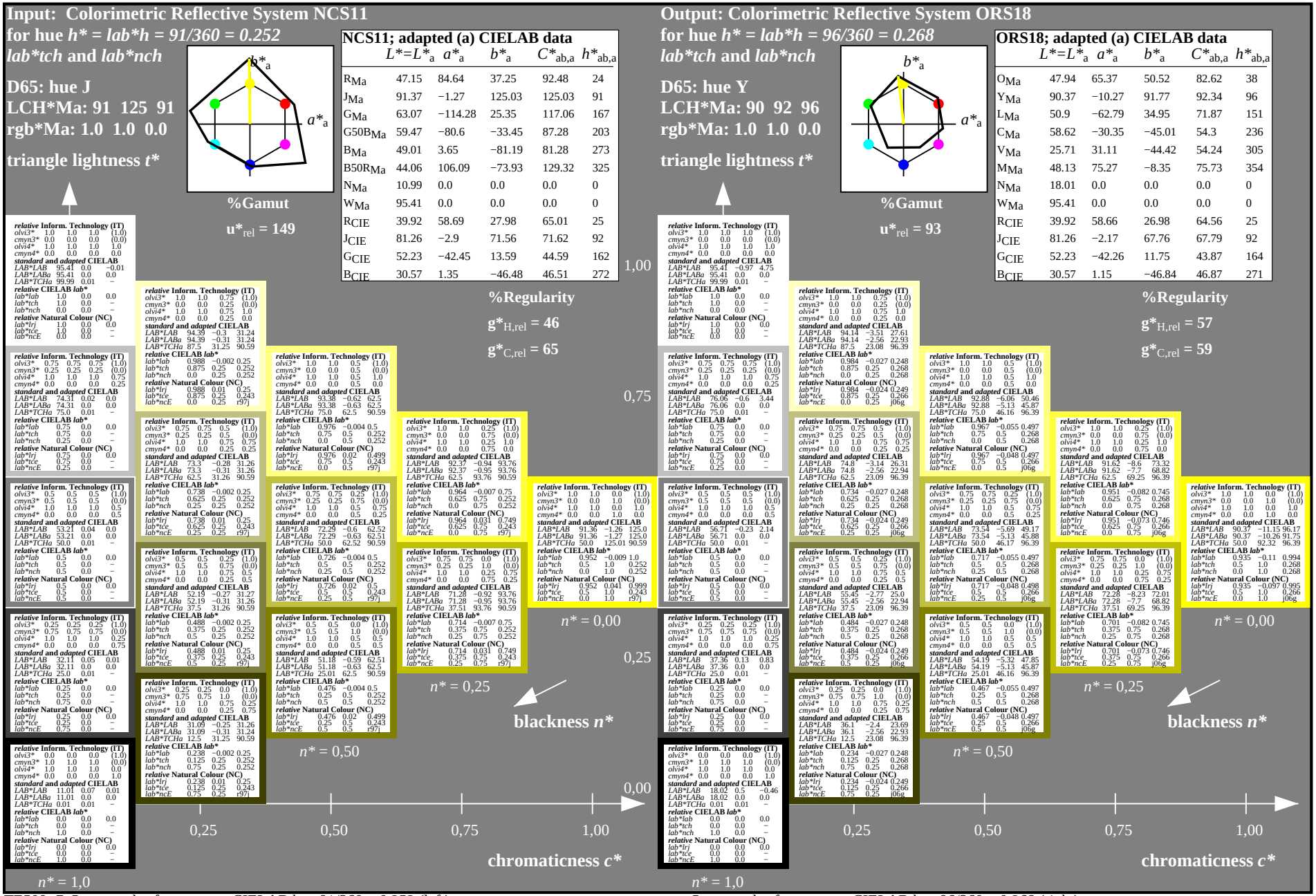

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)



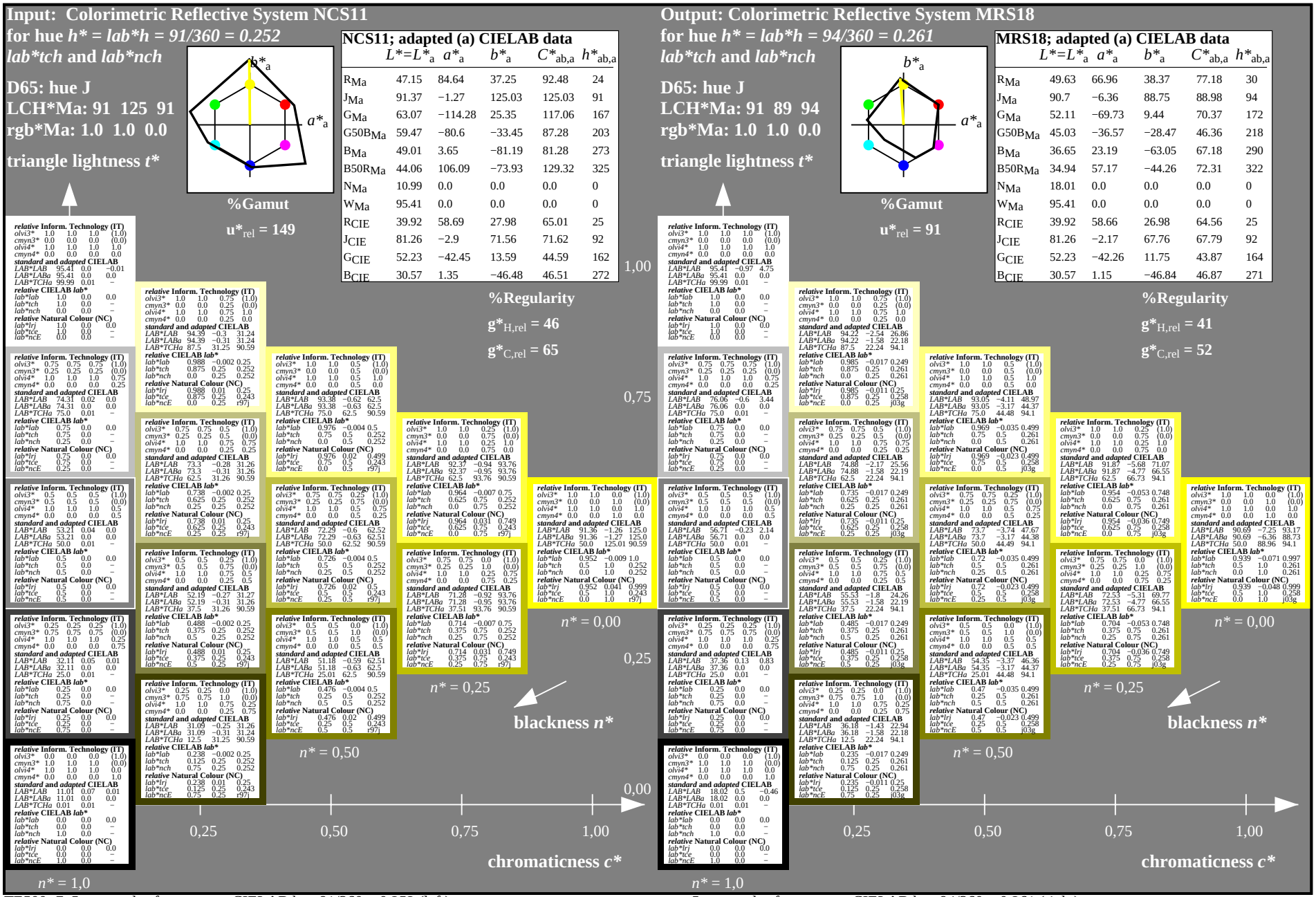

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)




TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)



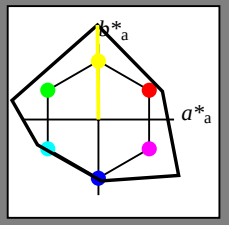

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

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

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

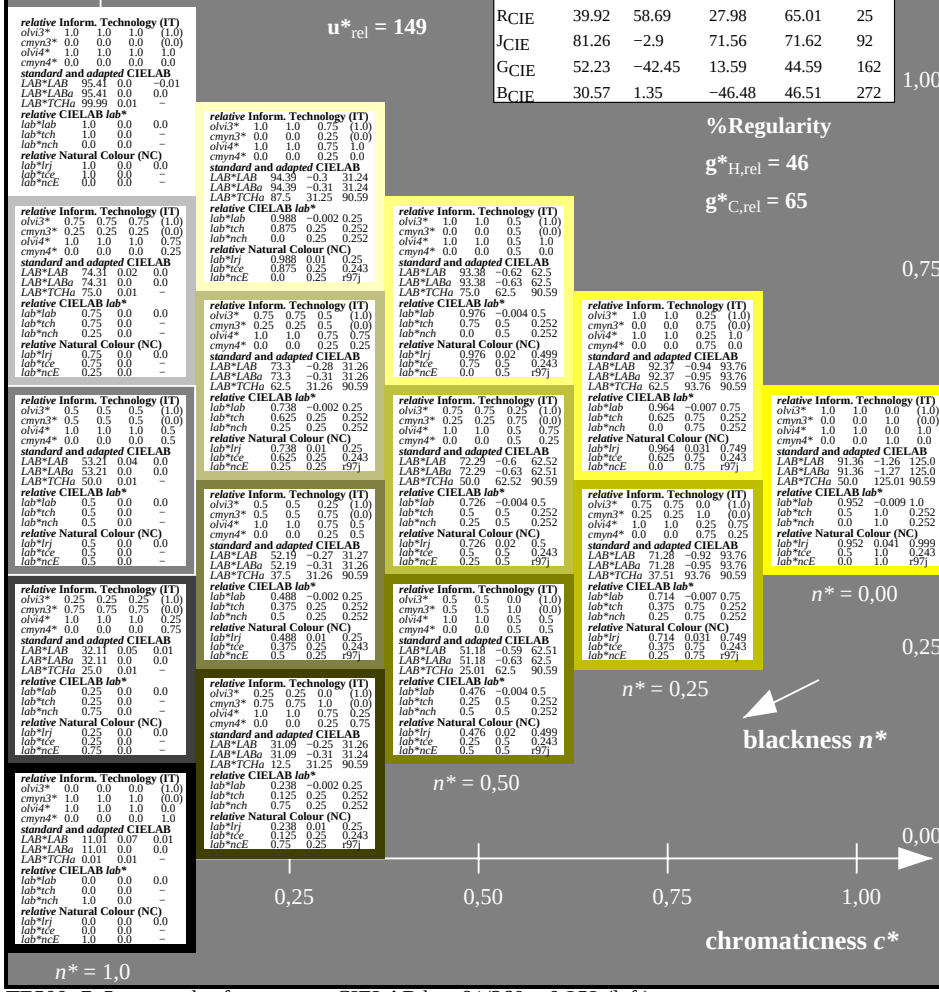
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

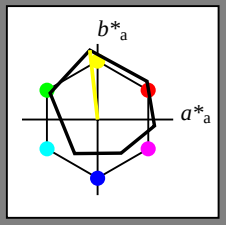
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 96/360 = 0.268**
***lab*tch* and *lab*nch***

**D65: hue Y**
**LCH*Ma: 90 92 96**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

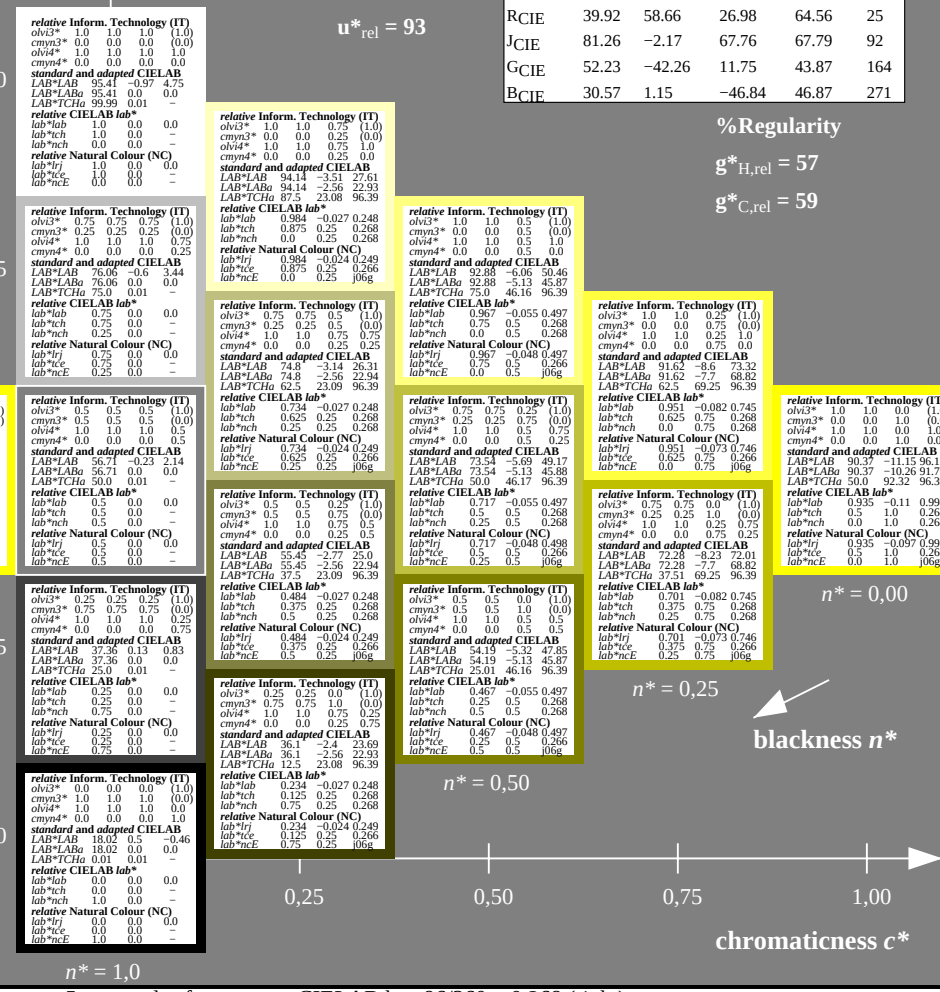
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

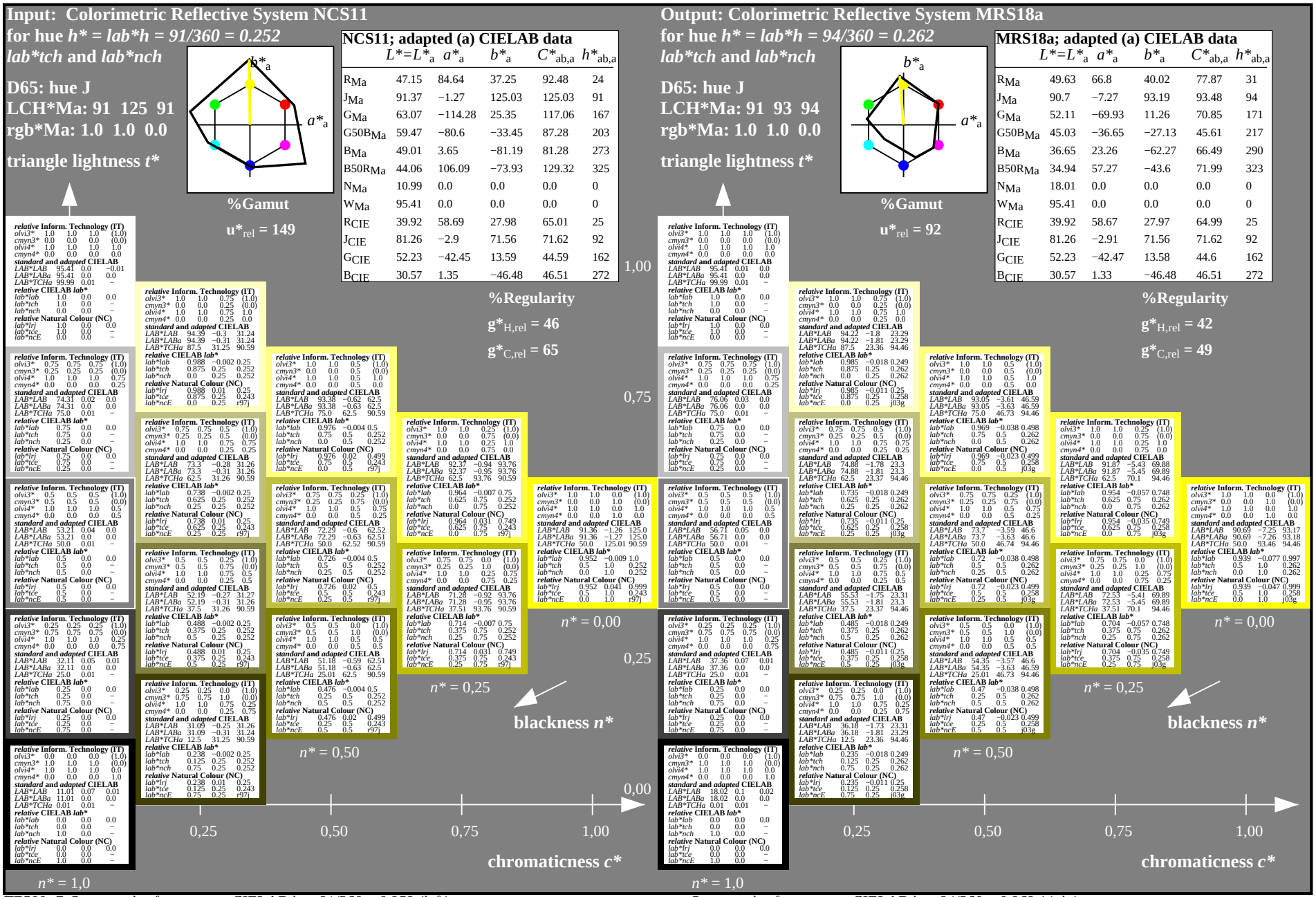
**g*$_{H,rel}$ = 57**

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



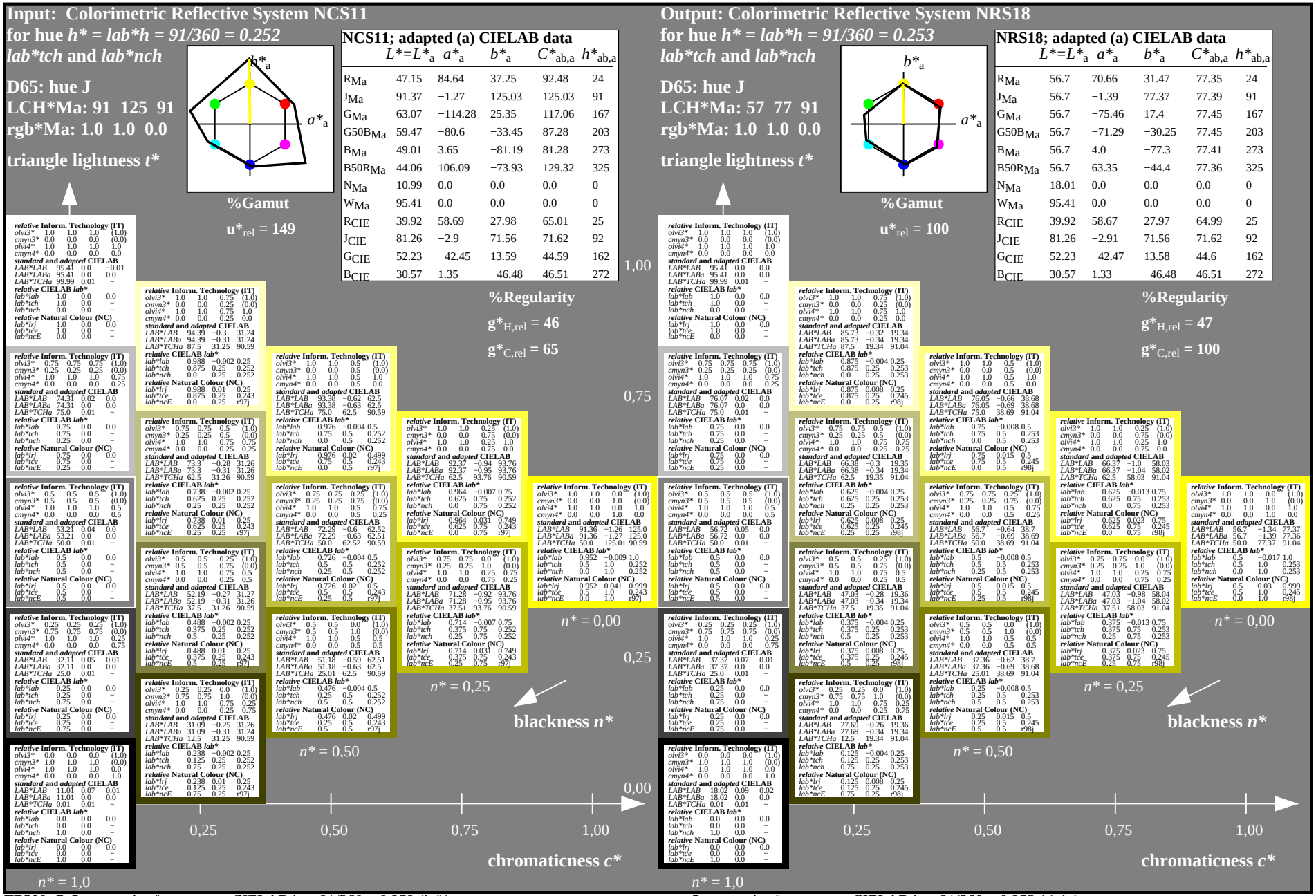

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)




TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 94/360 = 0.262 (right)



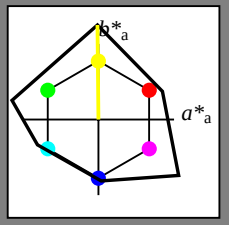

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

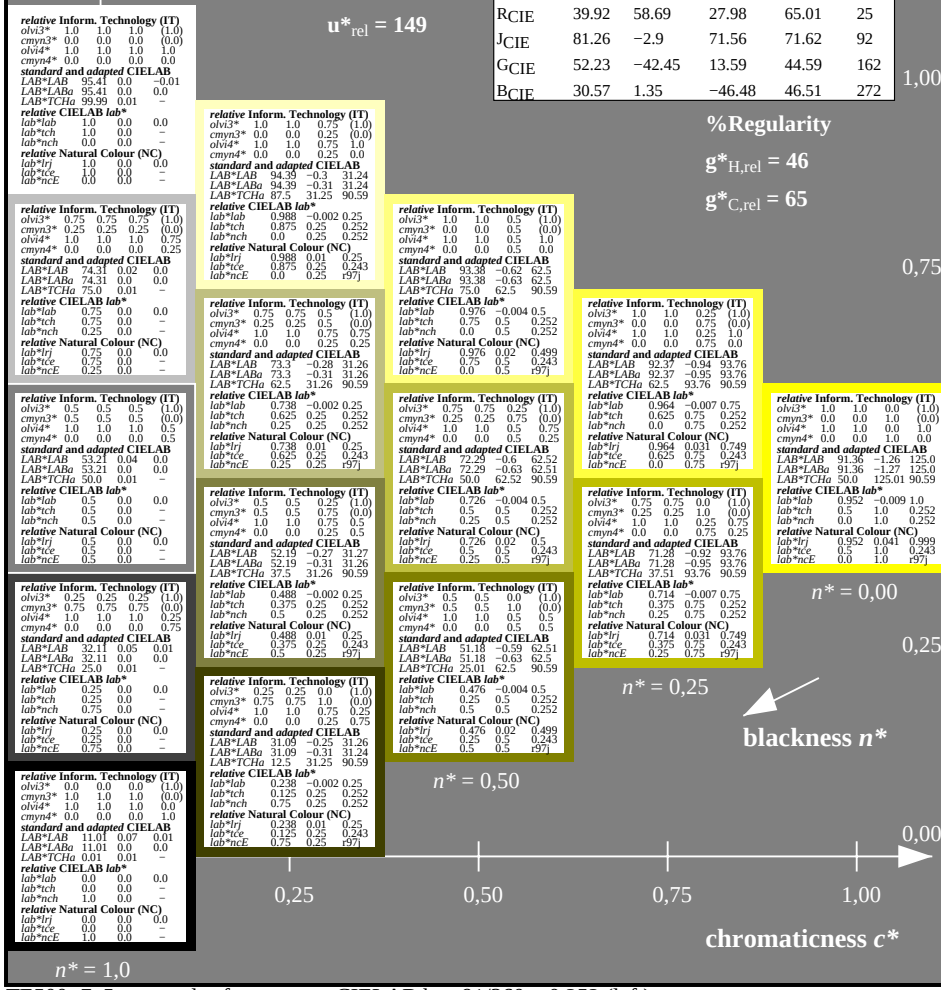
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

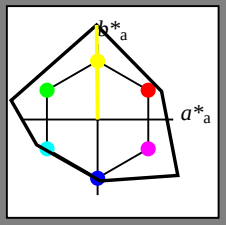
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

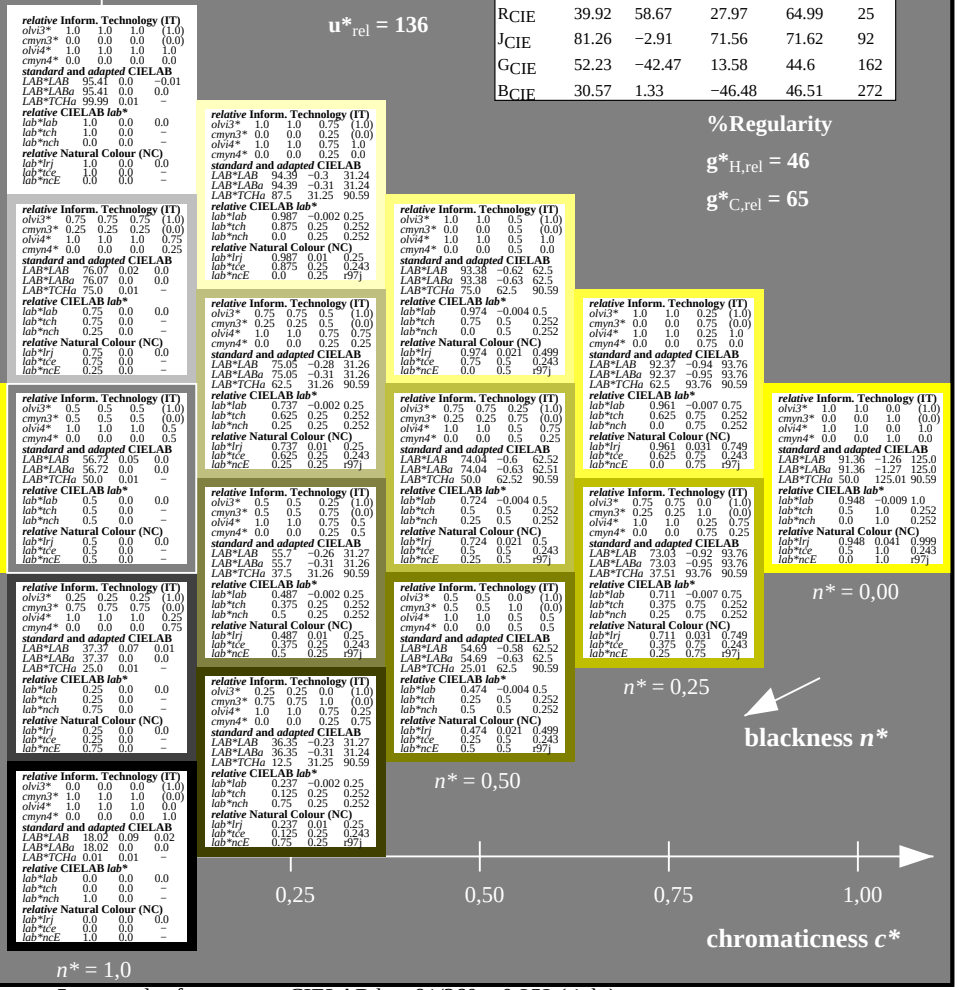
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



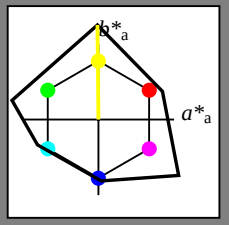

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 91/360 = 0.252**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 91 125 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

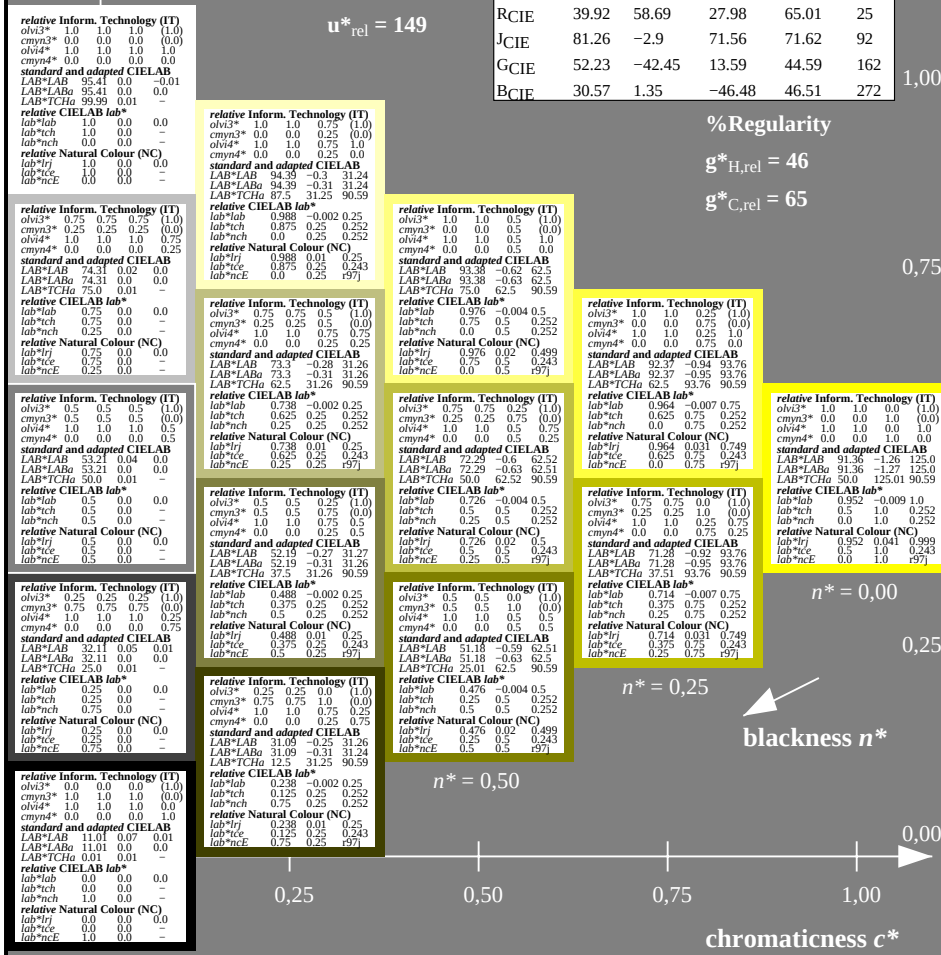
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

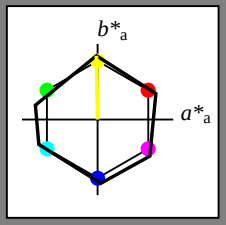
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 91/360 = 0.253**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 53 84 91**
**rgb*Ma: 1.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

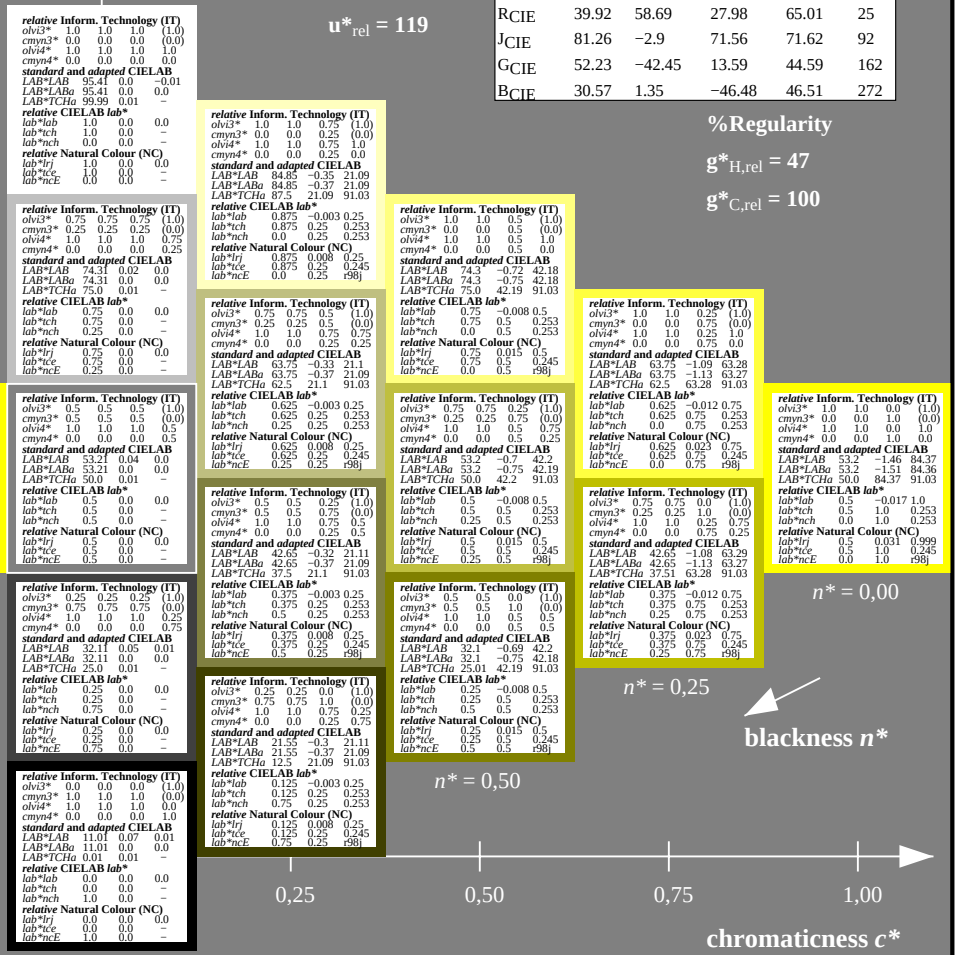
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

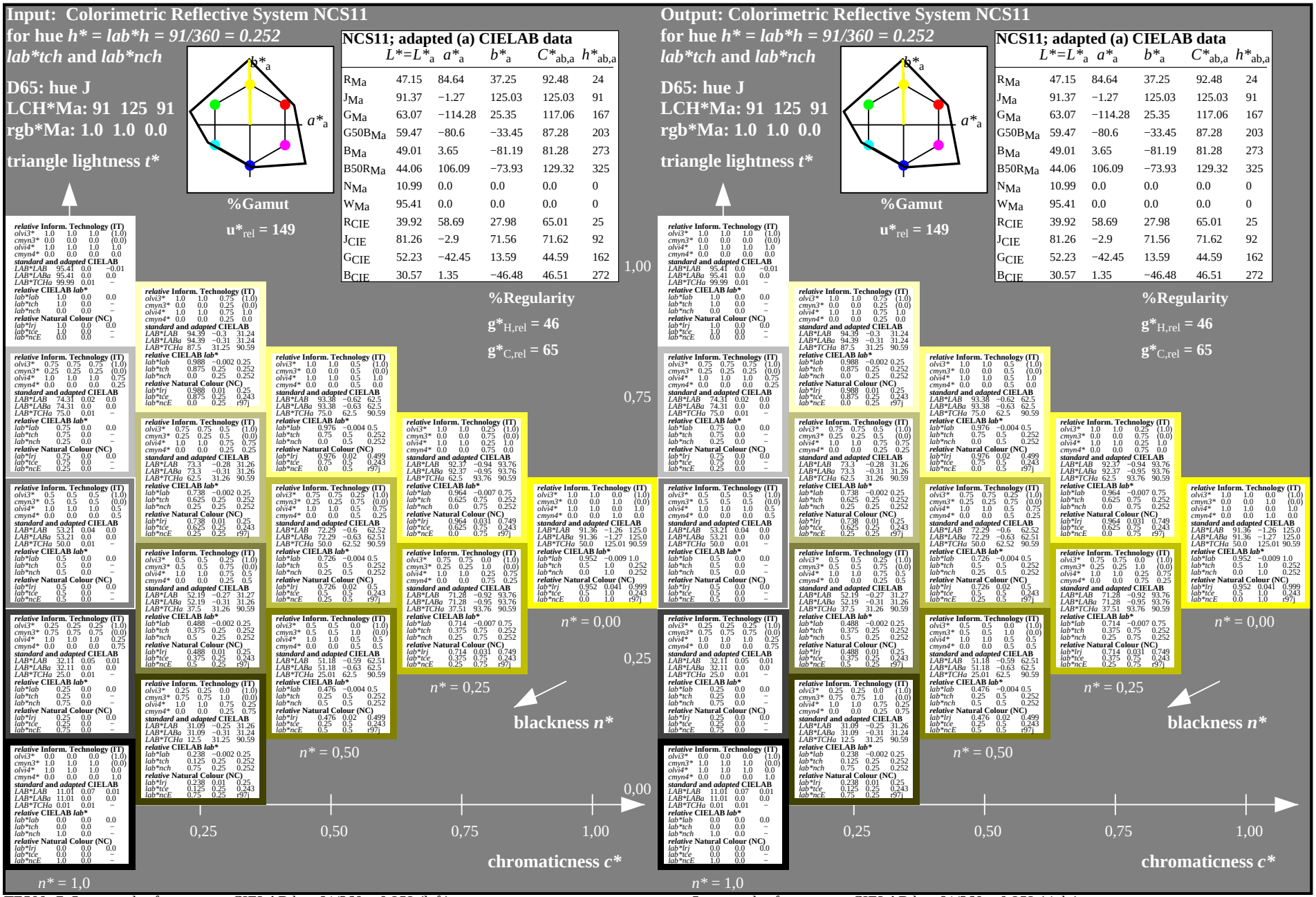
**g*$_{H,rel}$ = 47**

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




TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 91/360 = 0.253 (right)

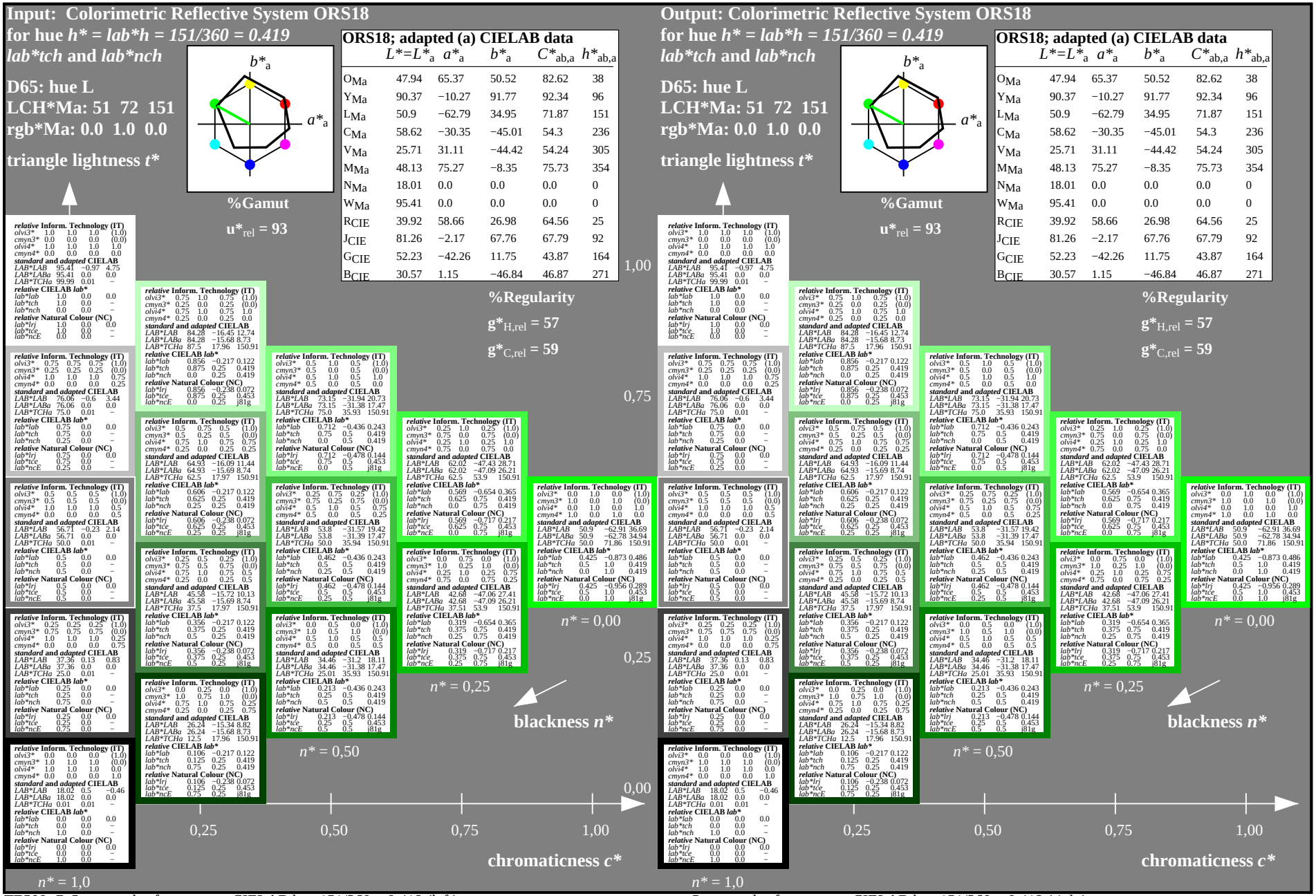



**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)



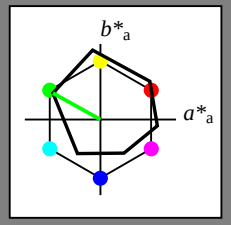

TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

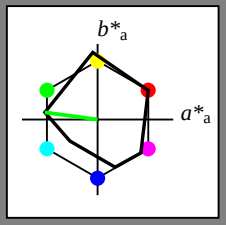
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 172/360 = 0.479**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 70 172**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

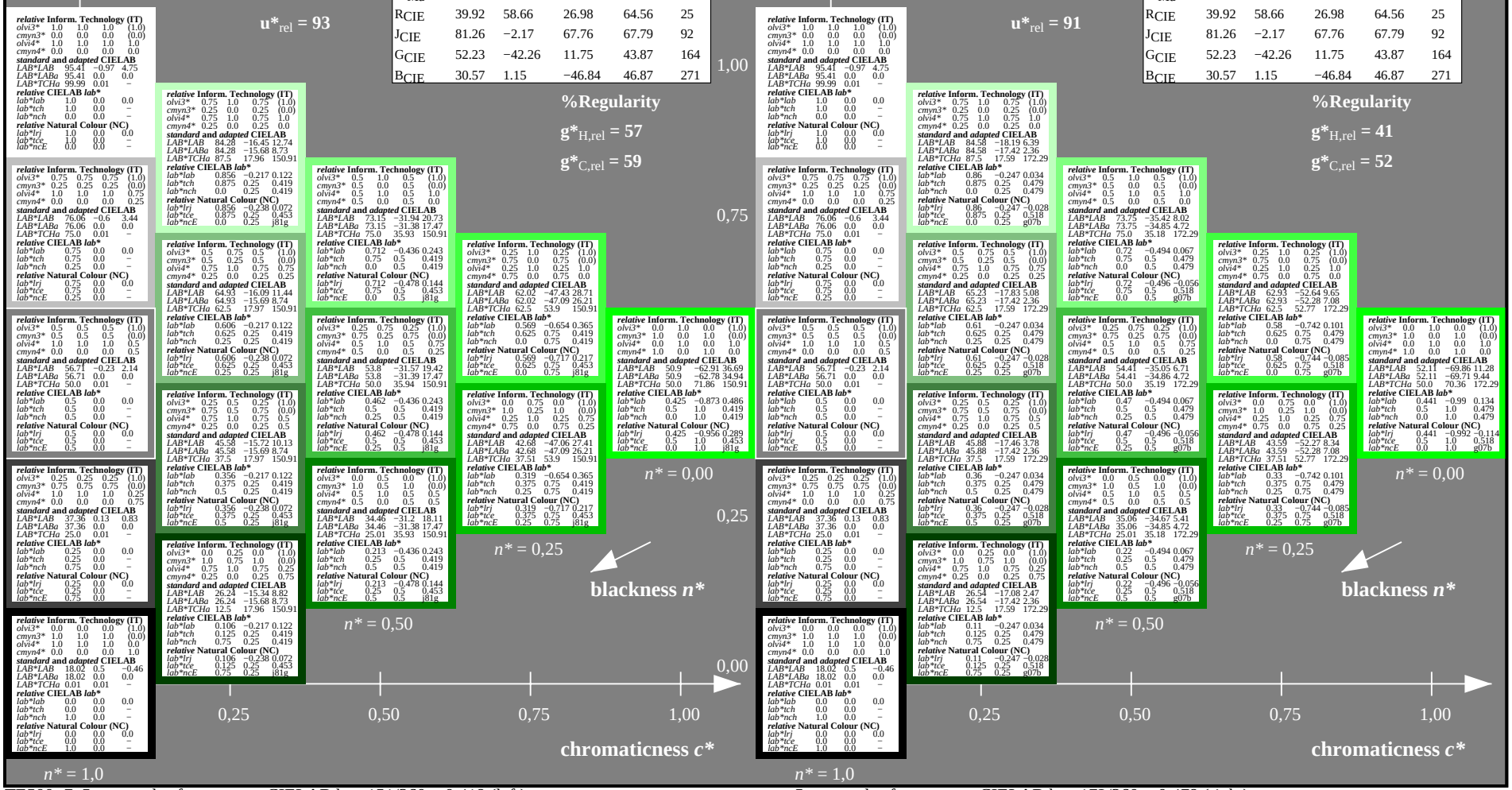
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**



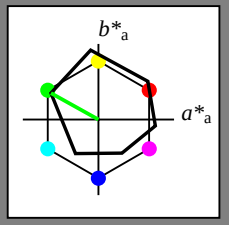

TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 172/360 = 0.479 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

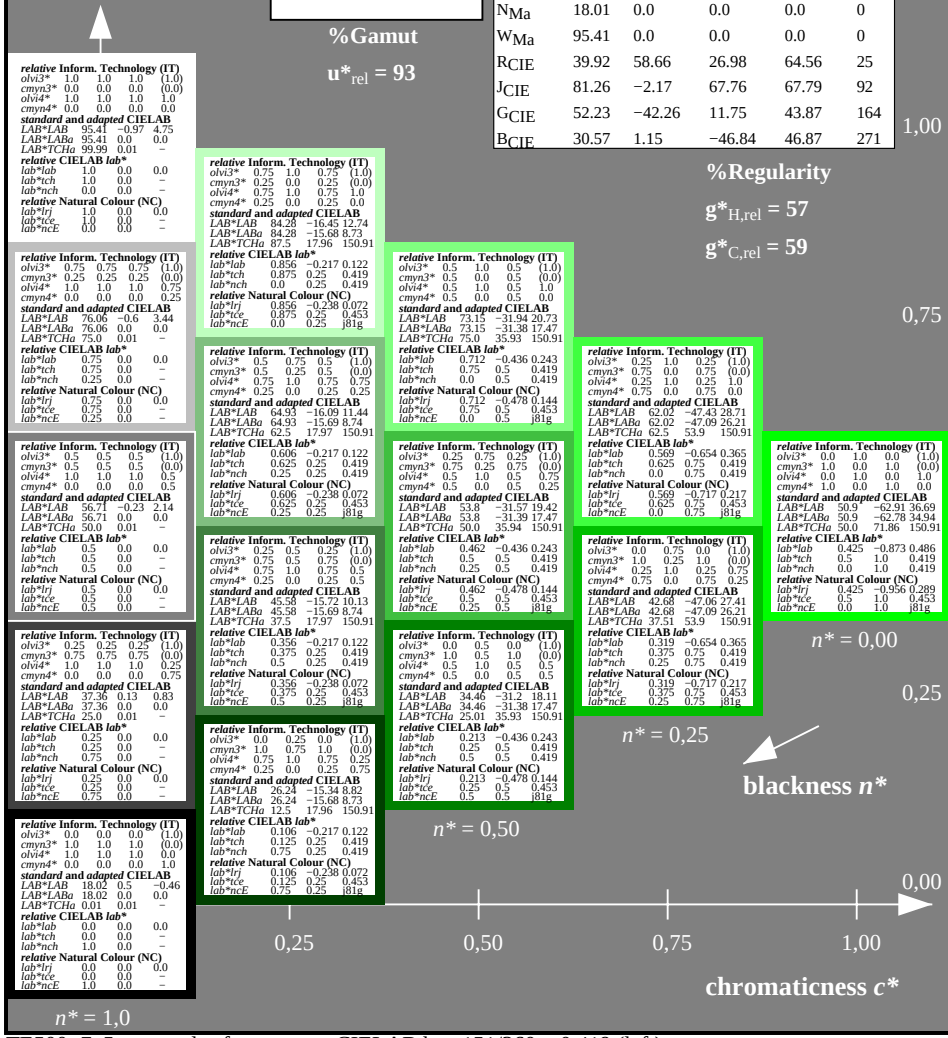
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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

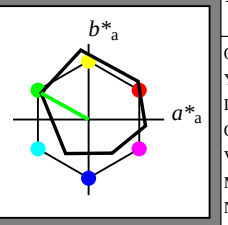



TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 151/360 = 0.419**
***lab*tch* and *lab*nch***

**D65: hue L**
**LCH*Ma: 51 72 151**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

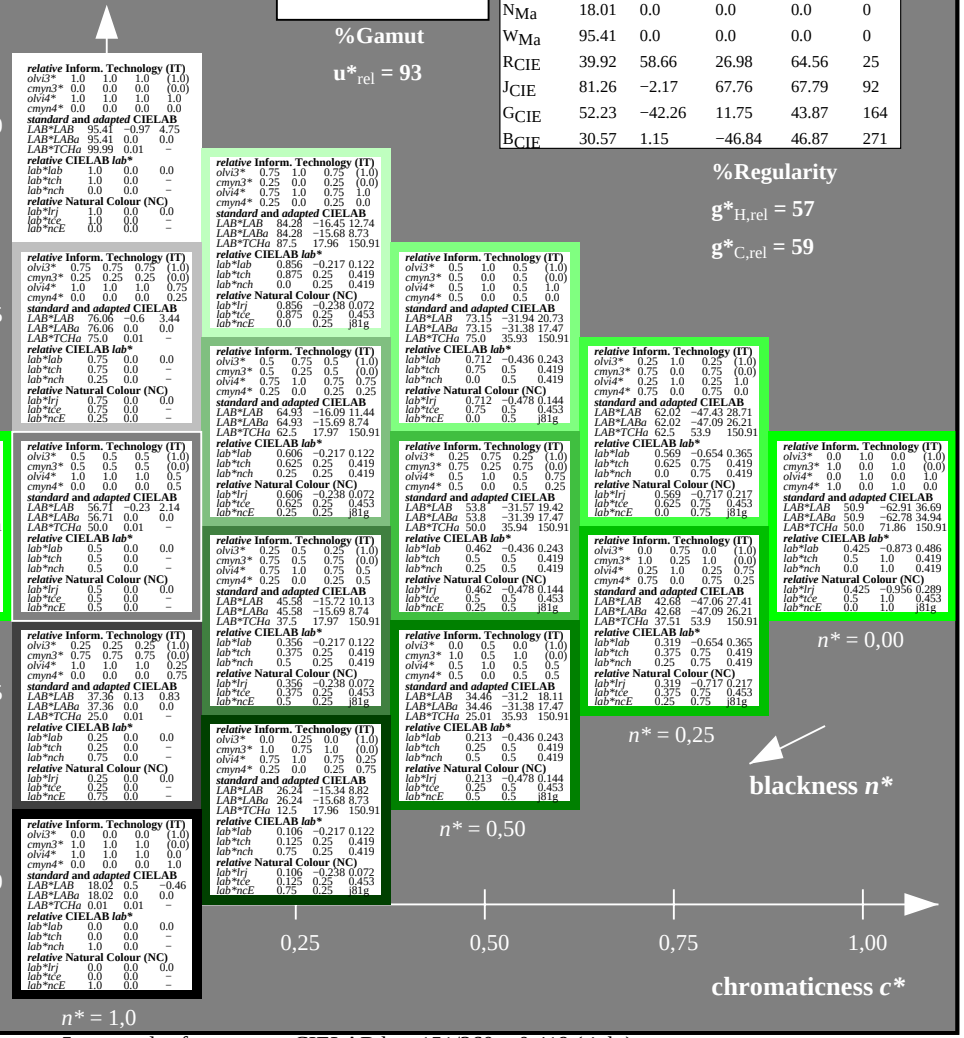
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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

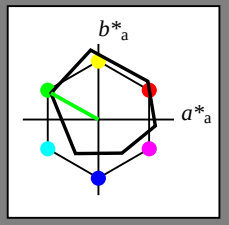



5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

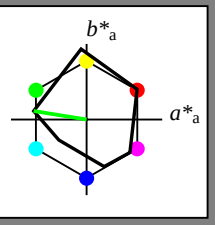
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 171/360 = 0.475**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 71 171**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

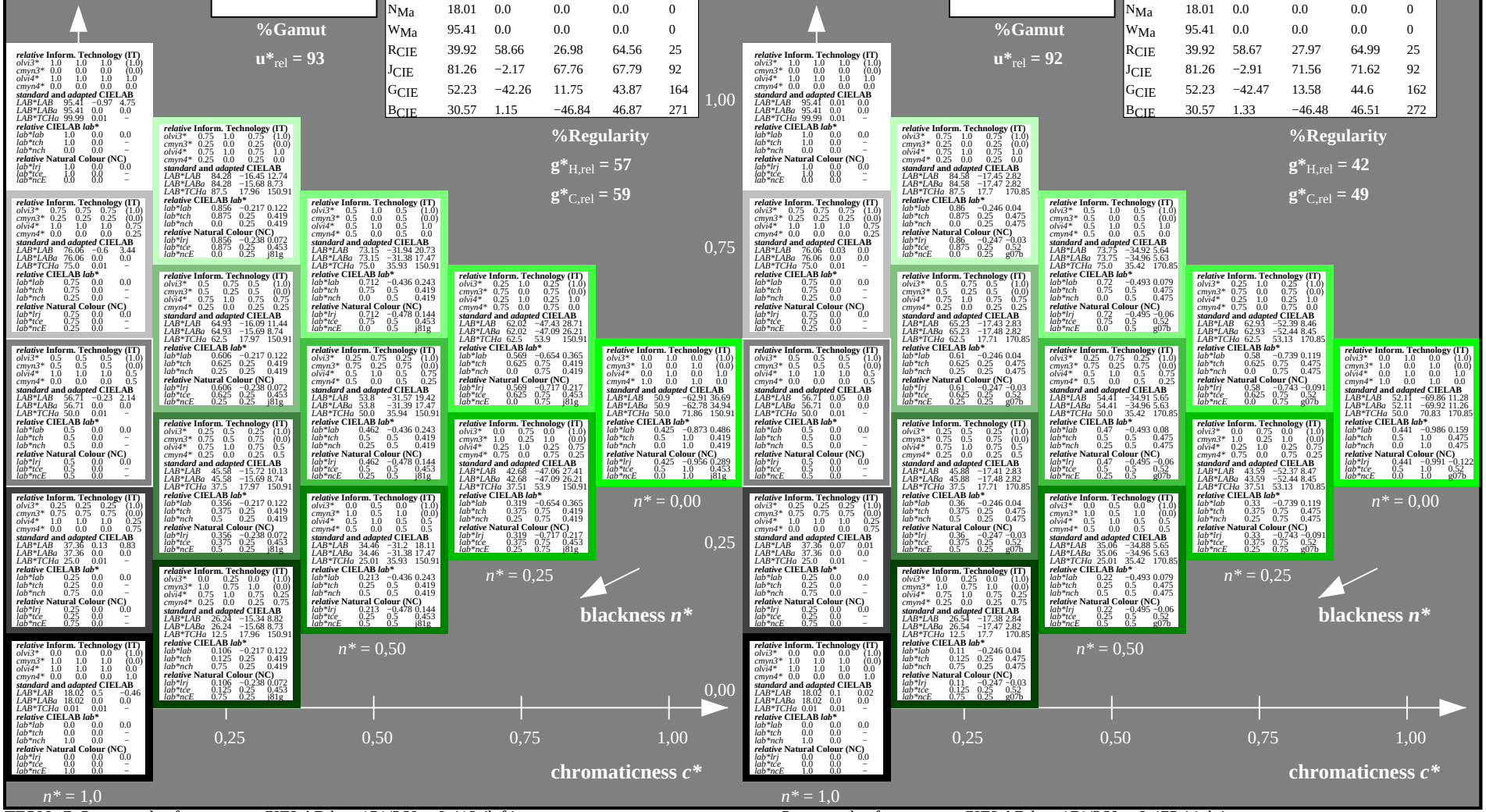
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

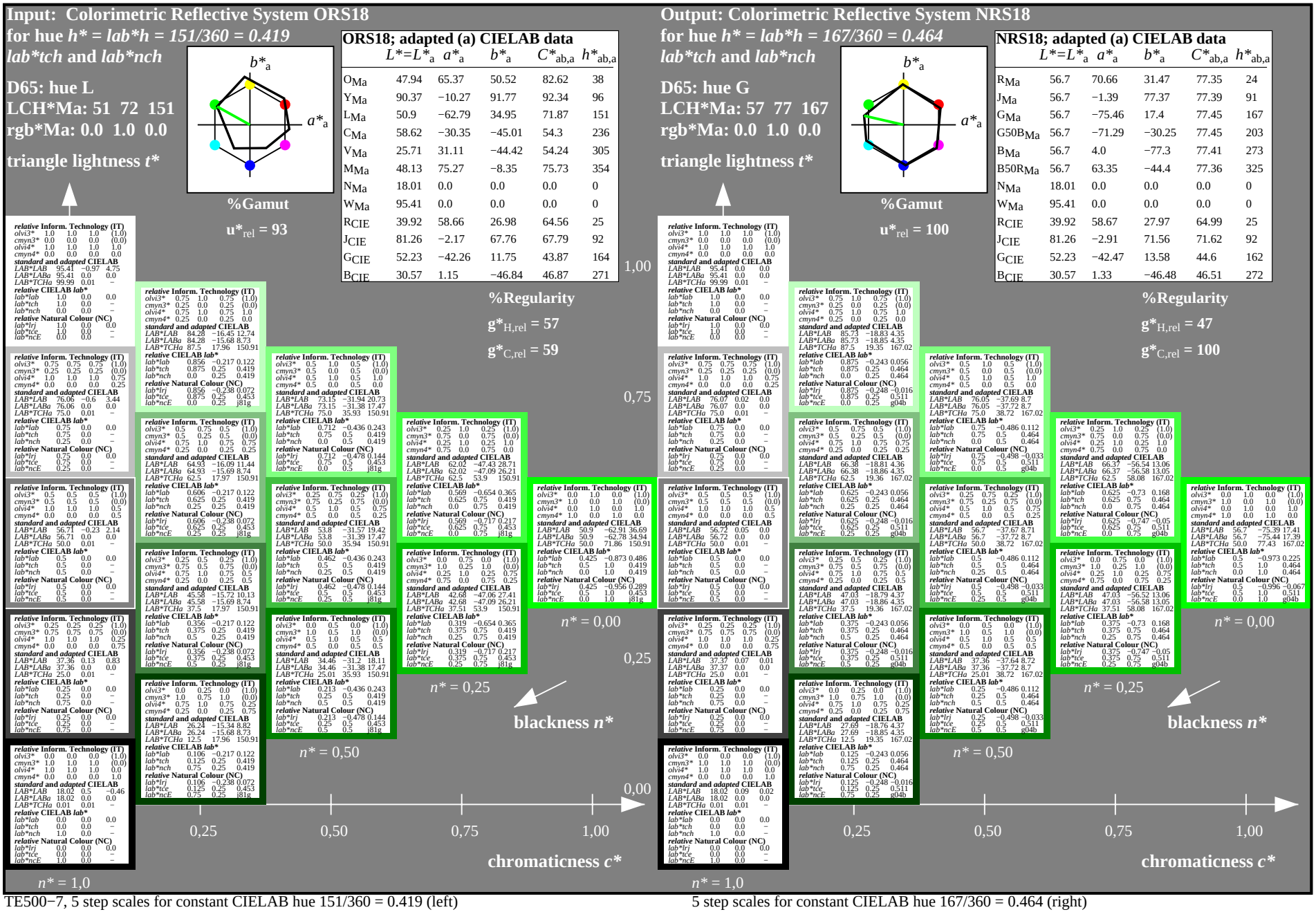
**g*$_{H,rel}$ = 42**

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




TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 171/360 = 0.475 (right)



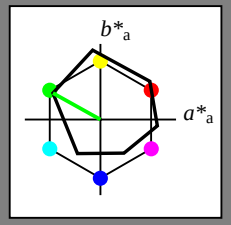

TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

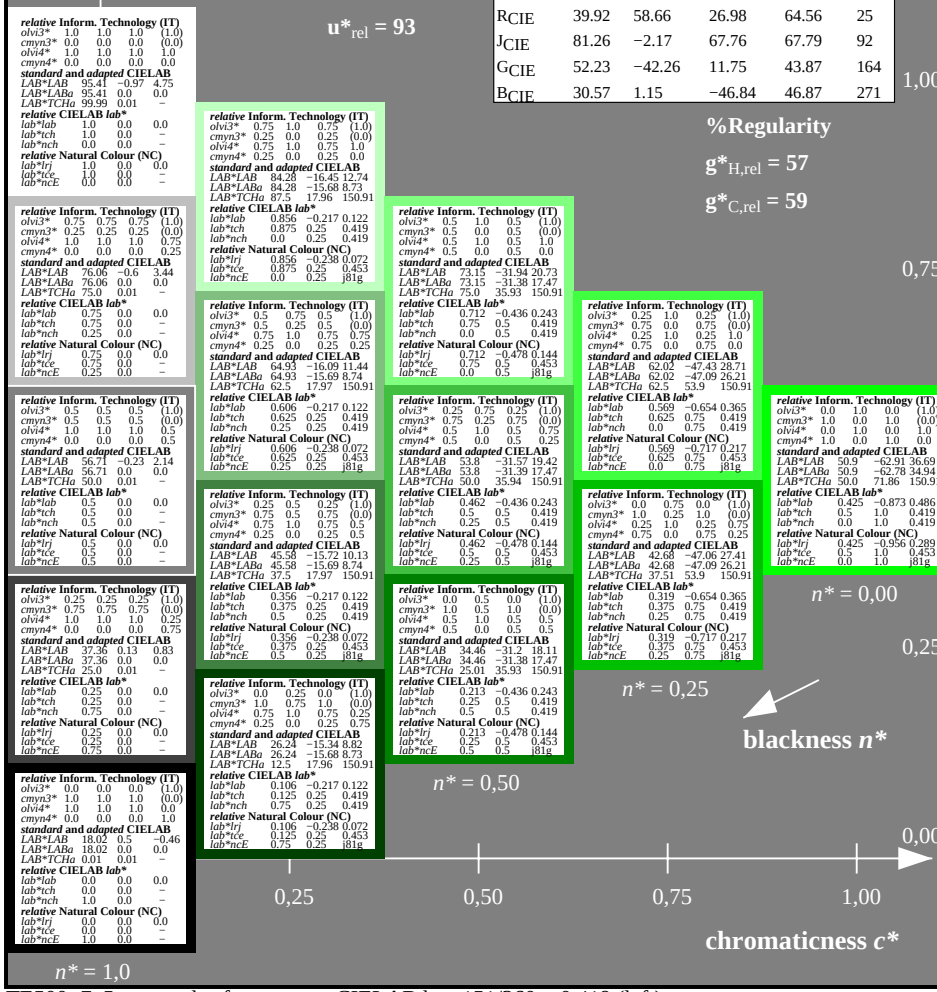
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

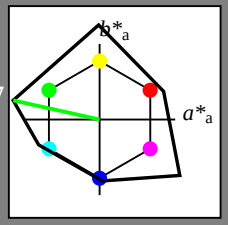
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

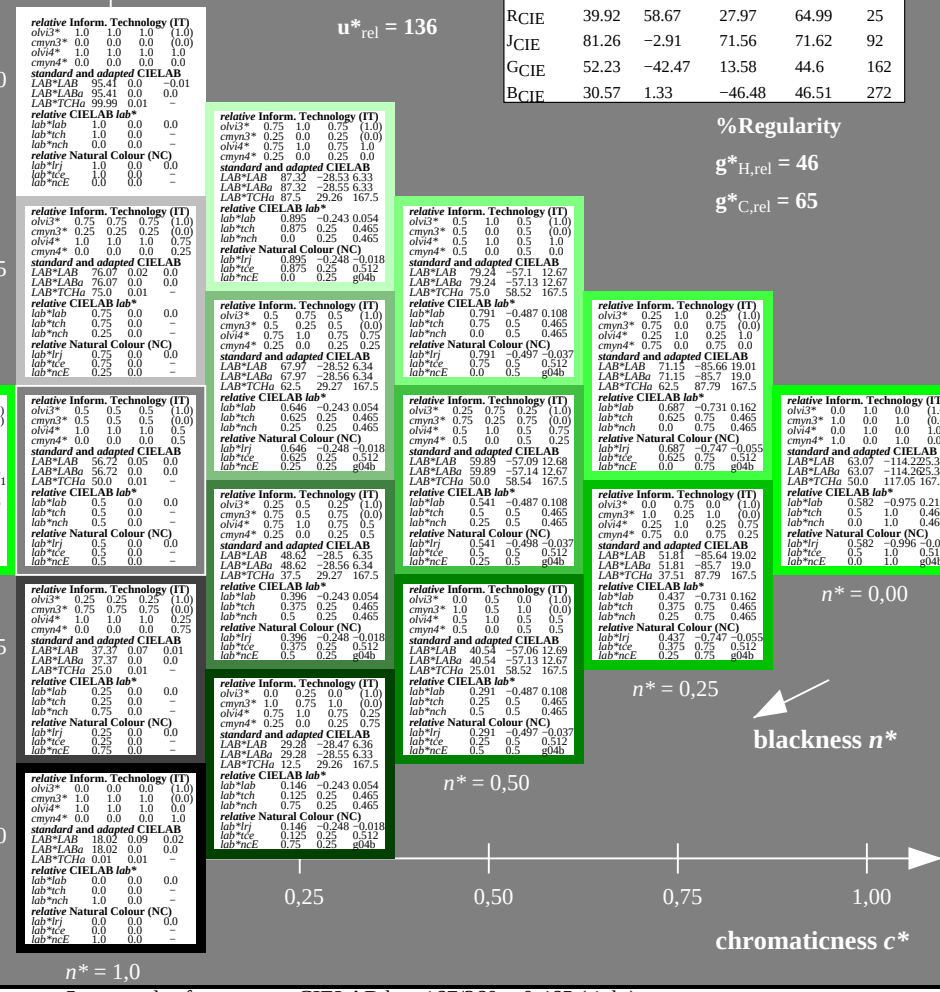
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

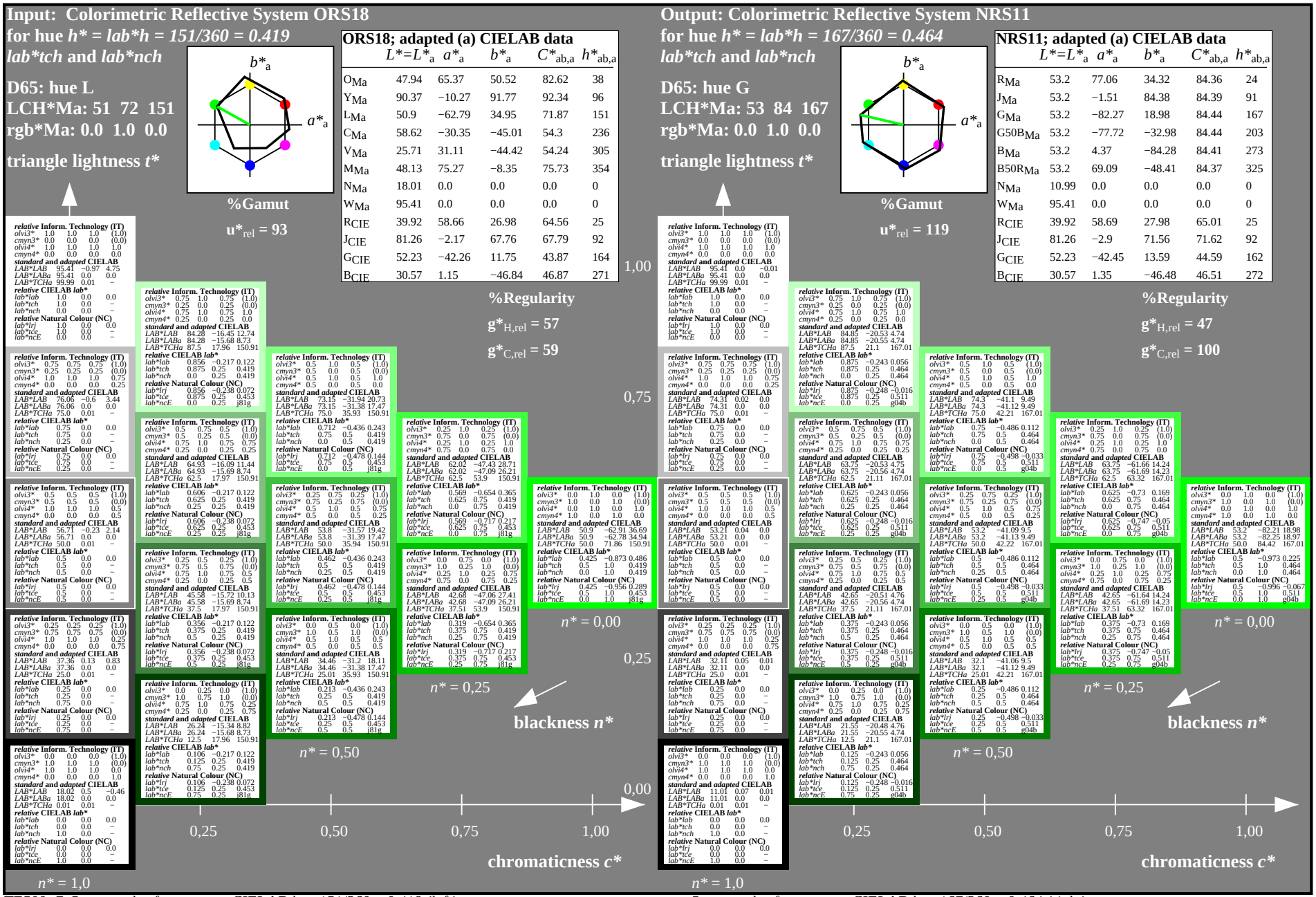
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)




**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

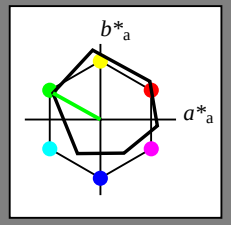
TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

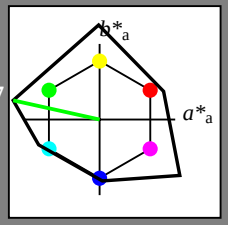
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

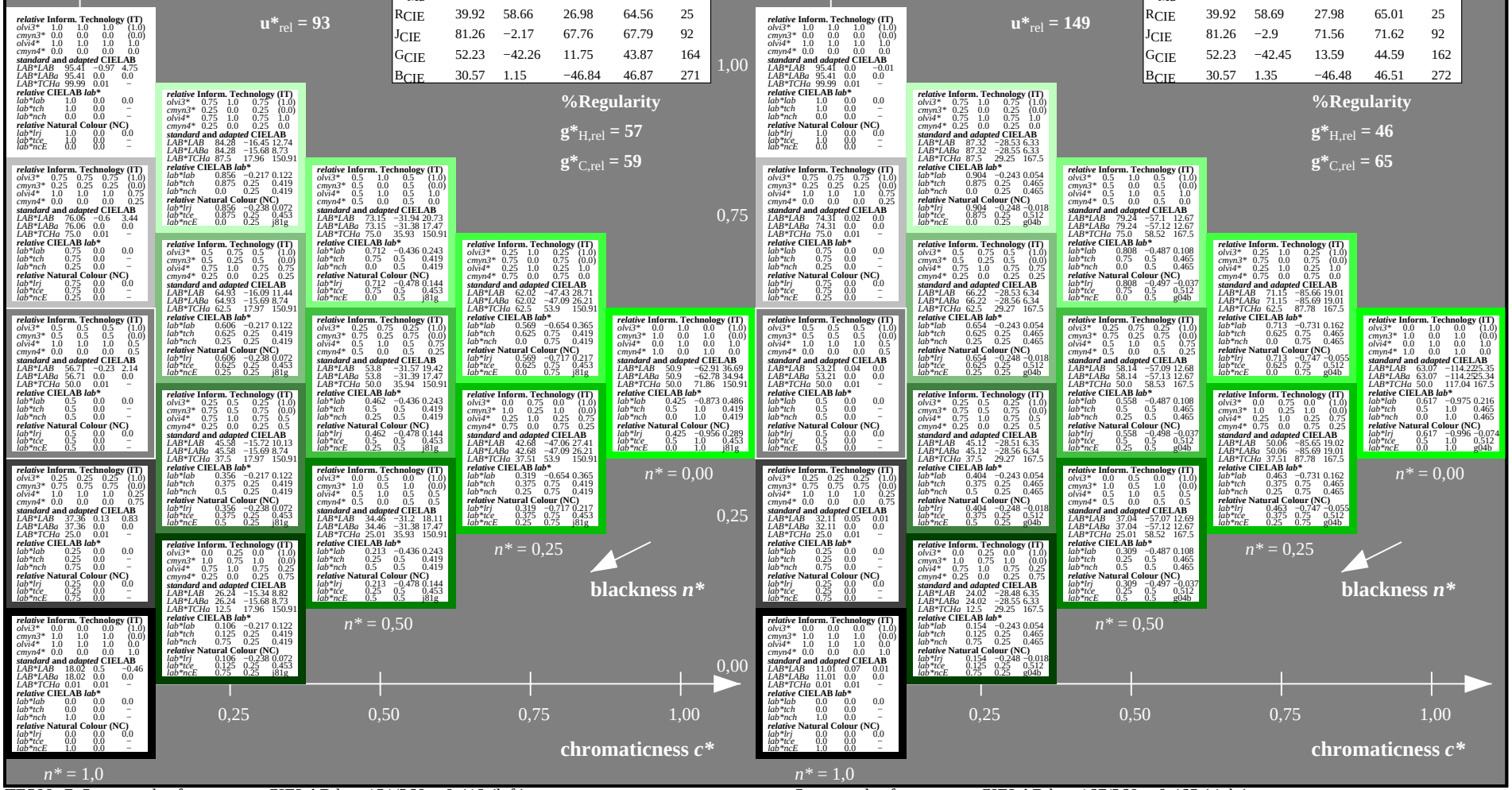
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



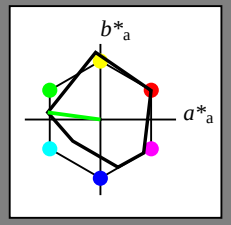

TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 172/360 = 0.479**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 70 172**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

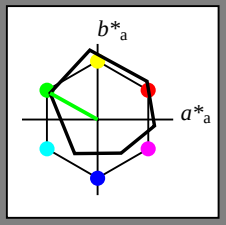
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

**Output: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

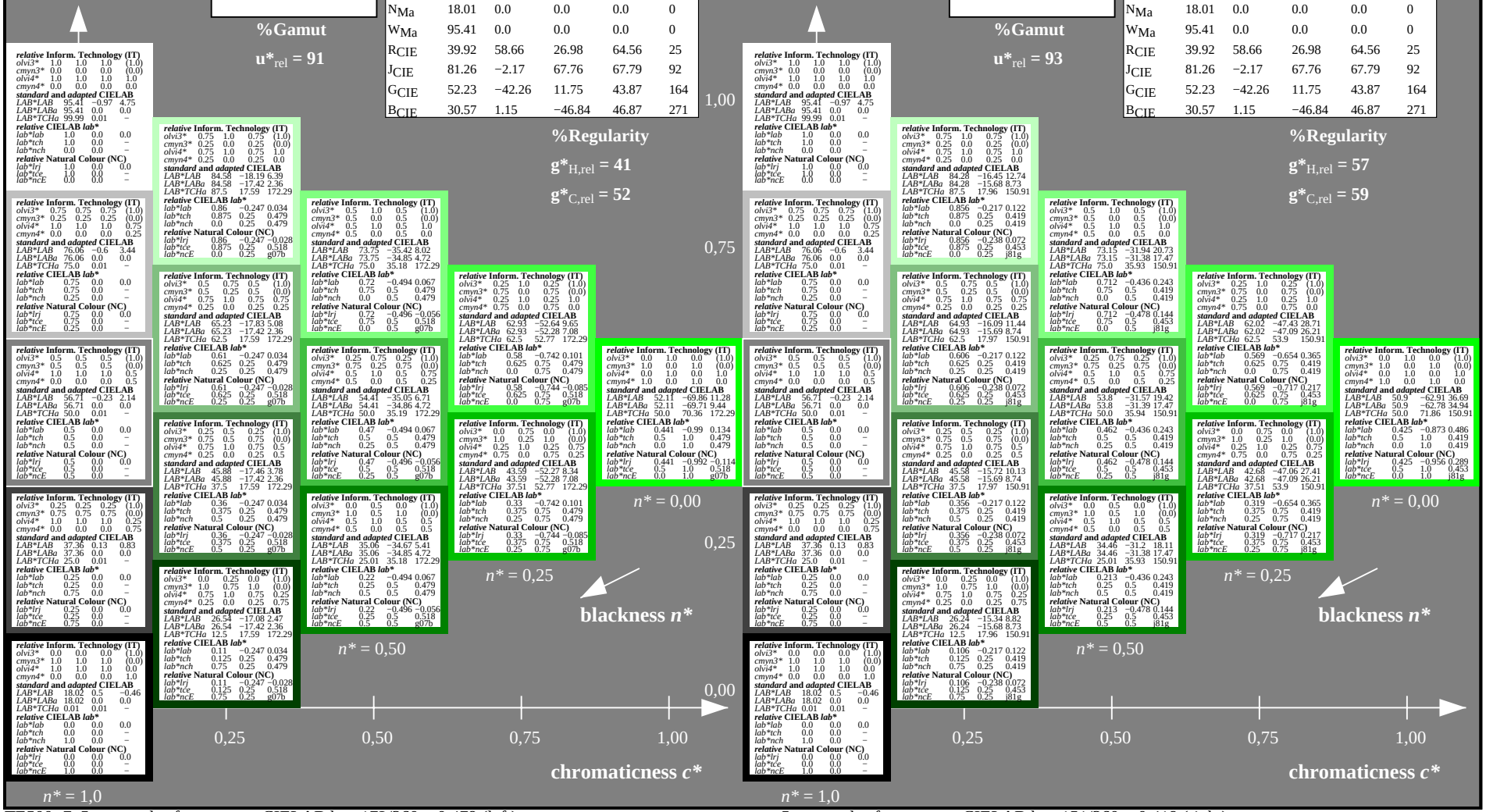
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



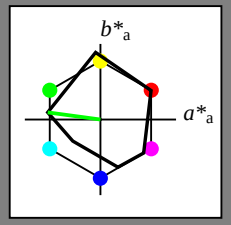

TE500−7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 172/360 = 0.479**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 70 172**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

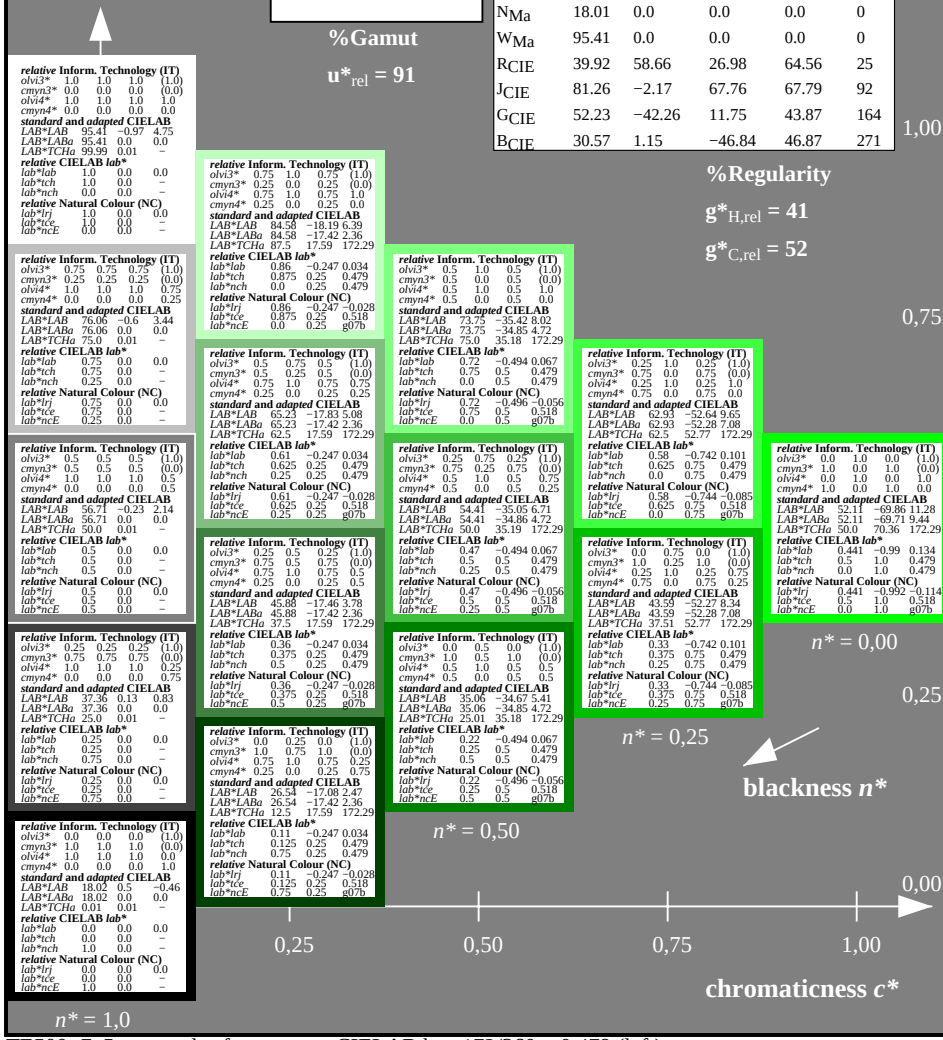
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

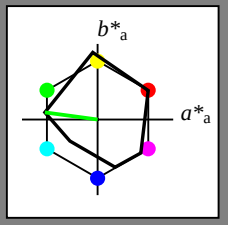



TE500−7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 172/360 = 0.479**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 70 172**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

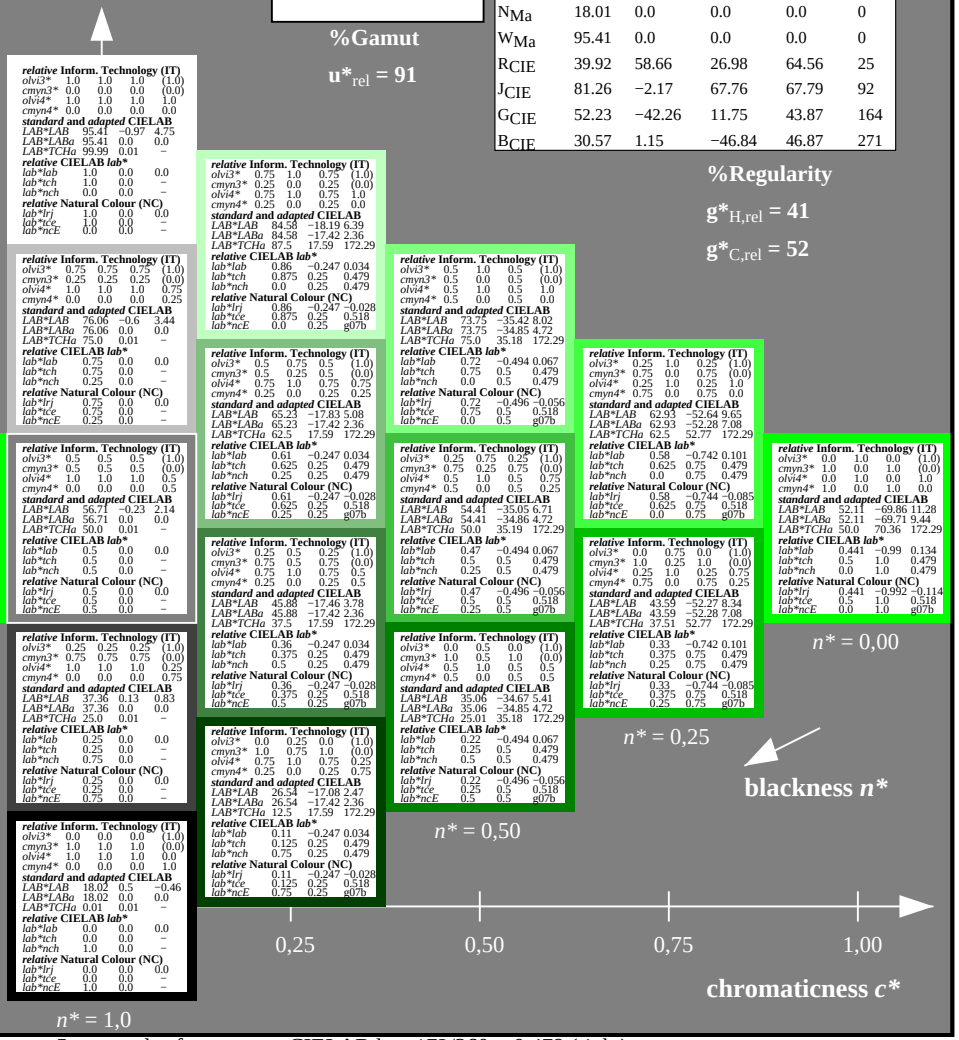
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

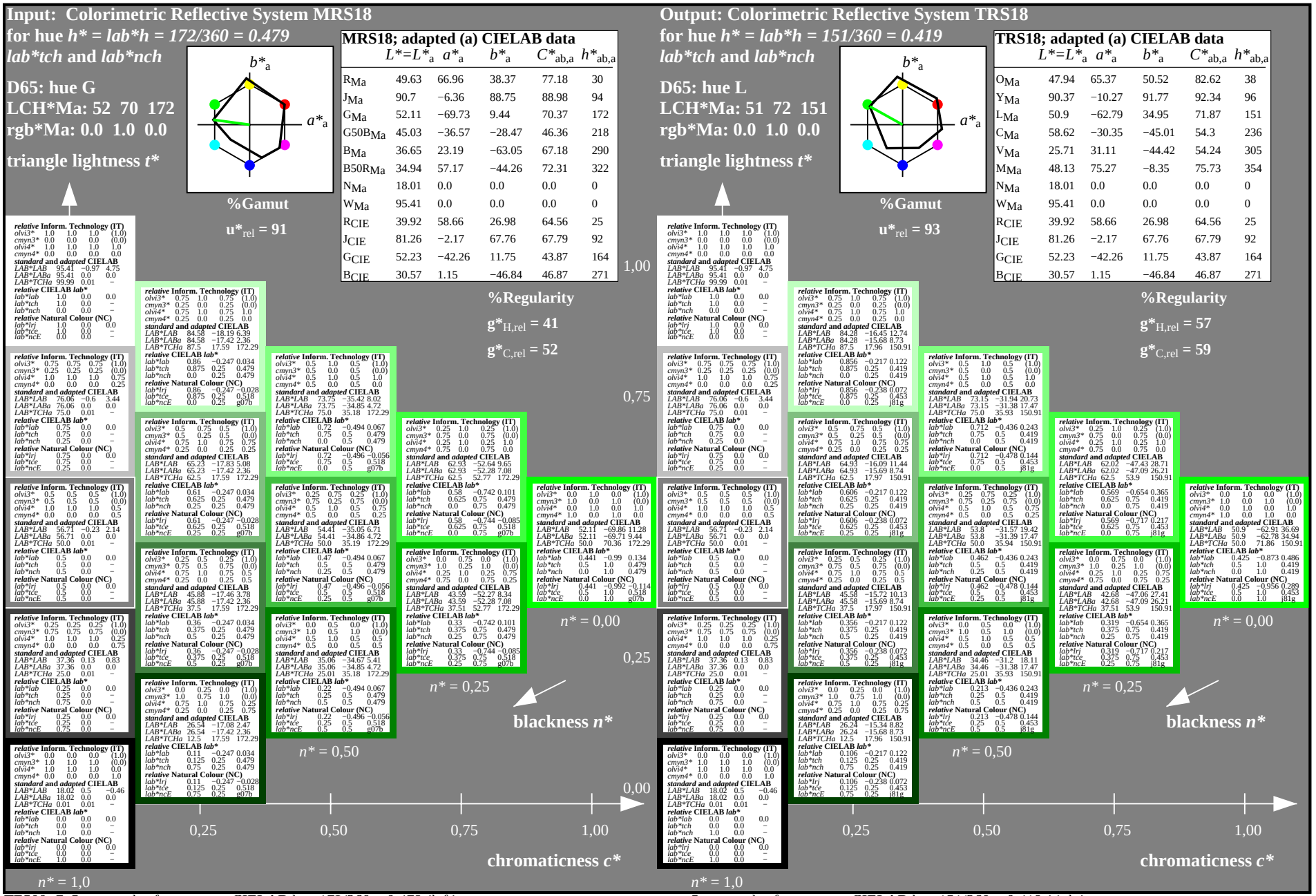
**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**




5 step scales for constant CIELAB hue 172/360 = 0.479 (right)



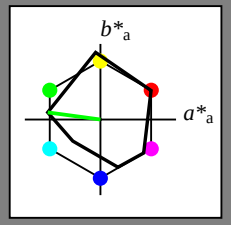

TE500−7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 172/360 = 0.479**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 70 172**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

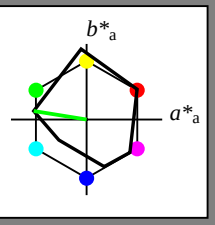
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 171/360 = 0.475**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 71 171**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

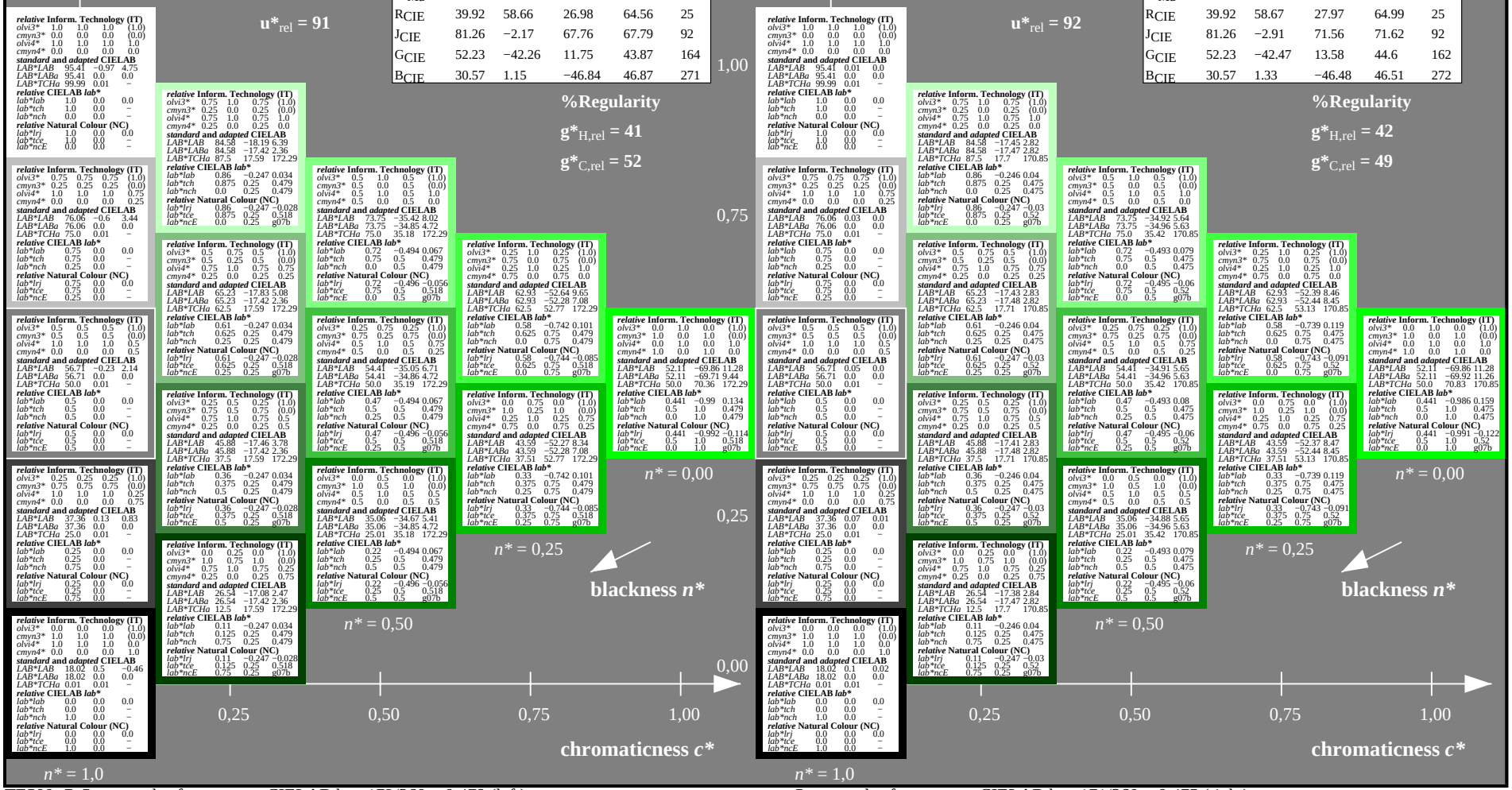
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

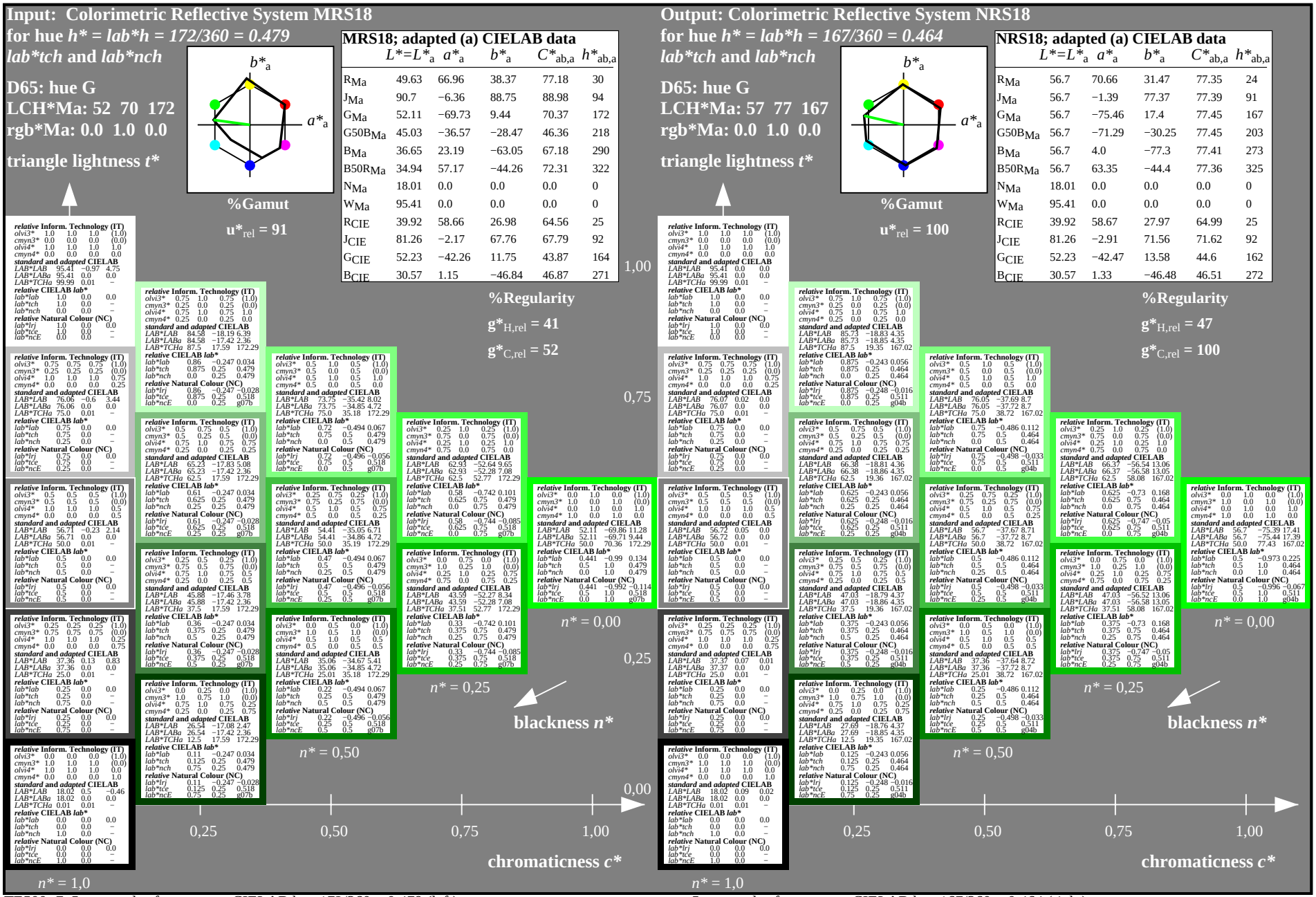
**g*$_{H,rel}$ = 42**

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




TE500−7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

5 step scales for constant CIELAB hue 171/360 = 0.475 (right)



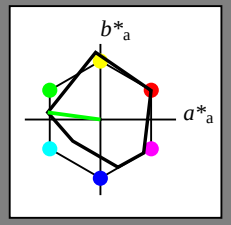

TE500−7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 172/360 = 0.479**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 70 172**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

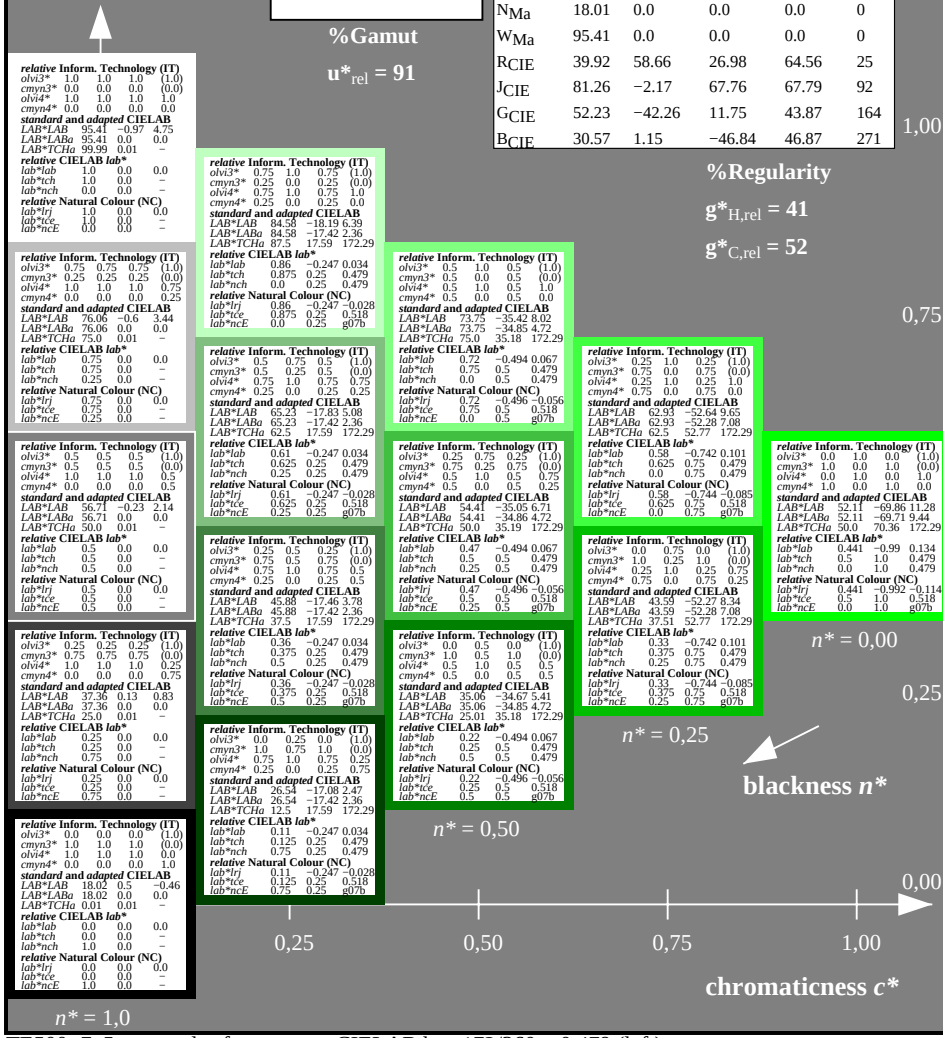
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

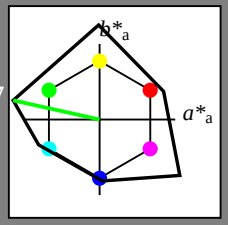
**g*$_{C,rel}$ = 52**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

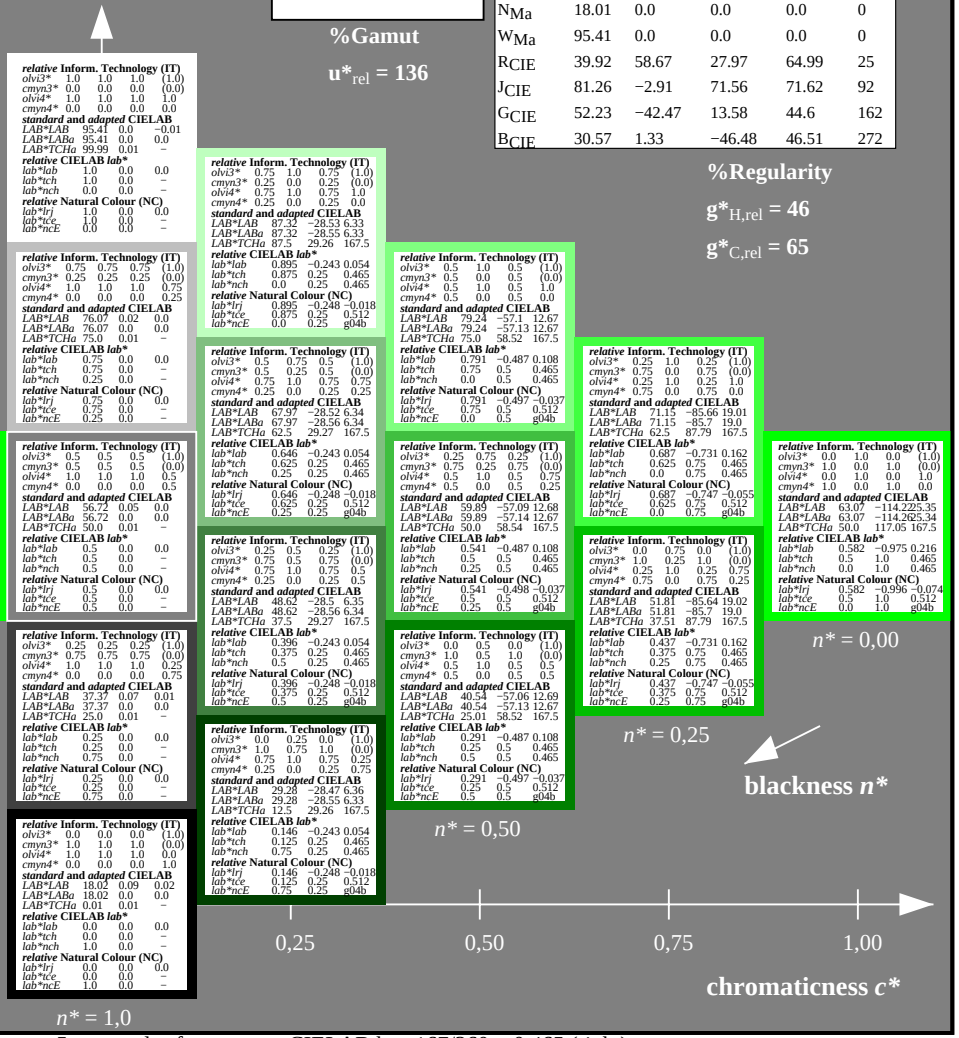
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

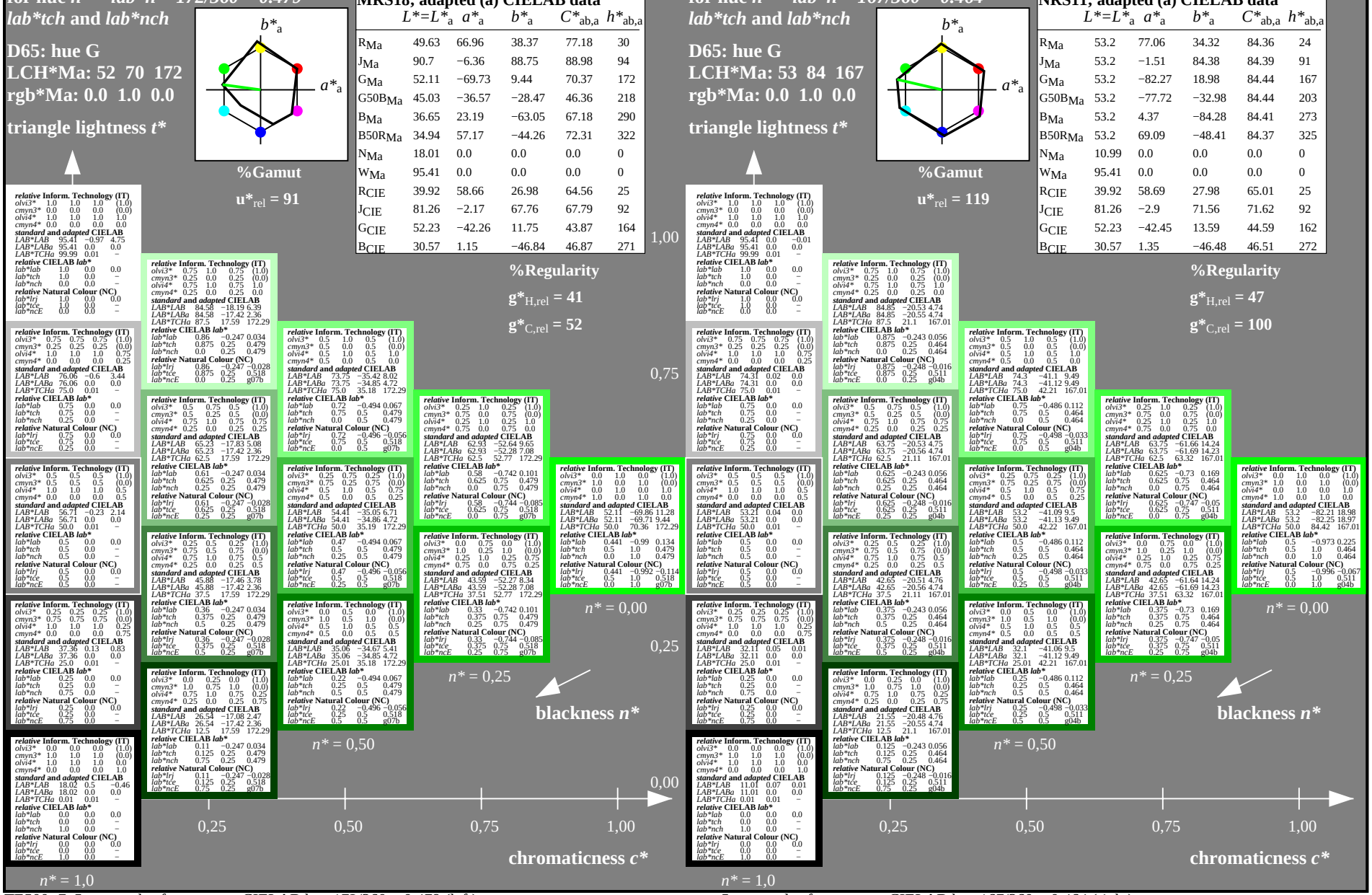
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



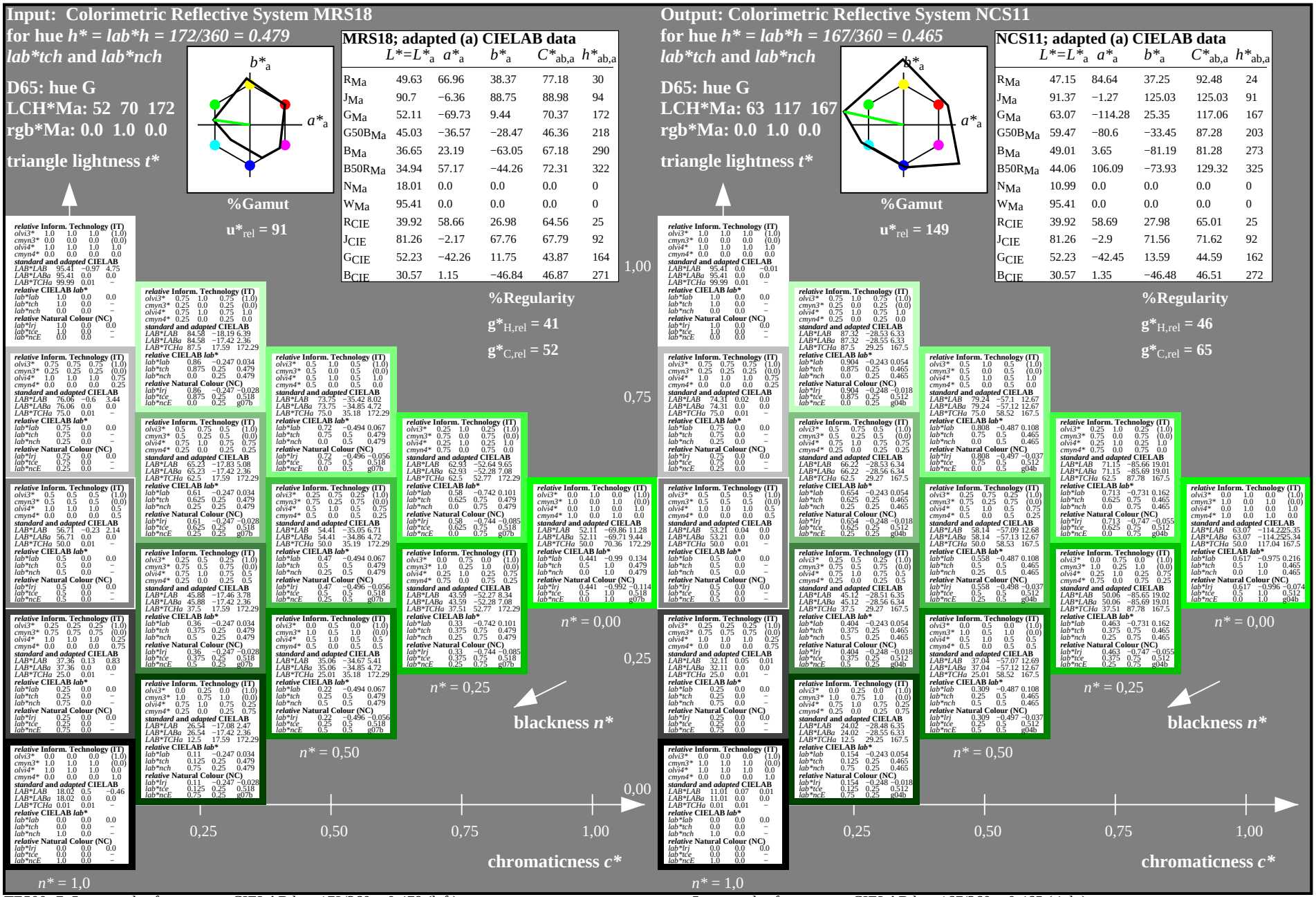

TE500−7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)



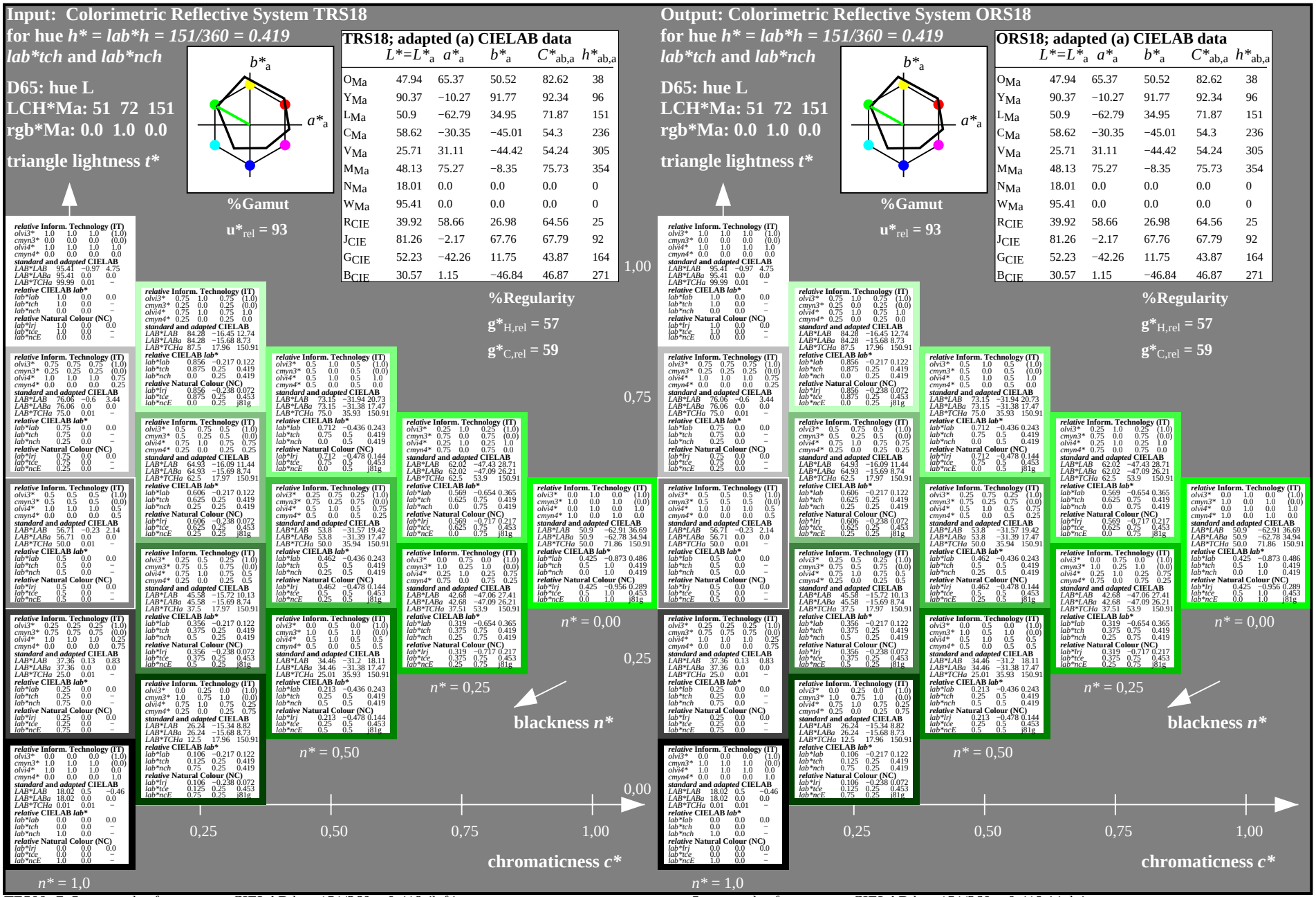

TE500−7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)




TE500−7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)




**TRS18; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| OMa | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| YMa | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| LMa | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| CMa | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| VMa | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| MMa | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| JCIE | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| GCIE | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| BCIE | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**ORS18; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| OMa | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| YMa | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| LMa | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| CMa | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| VMa | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| MMa | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| JCIE | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| GCIE | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| BCIE | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

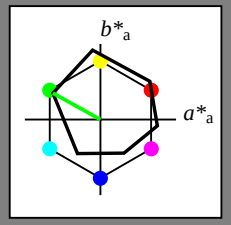
TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 151/360 = 0.419**
***lab*tch* and *lab*nch***

**D65: hue L**
**LCH*Ma: 51 72 151**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

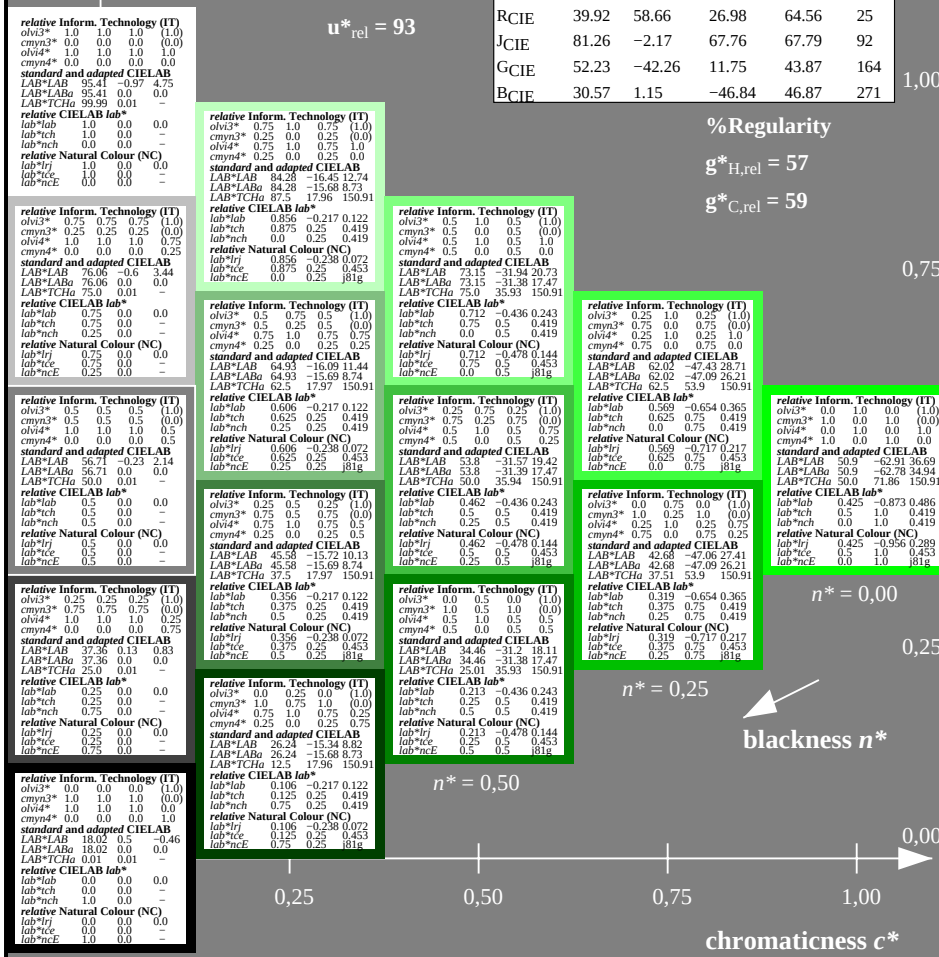
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

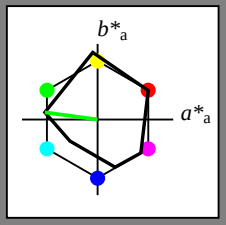
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 172/360 = 0.479**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 70 172**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

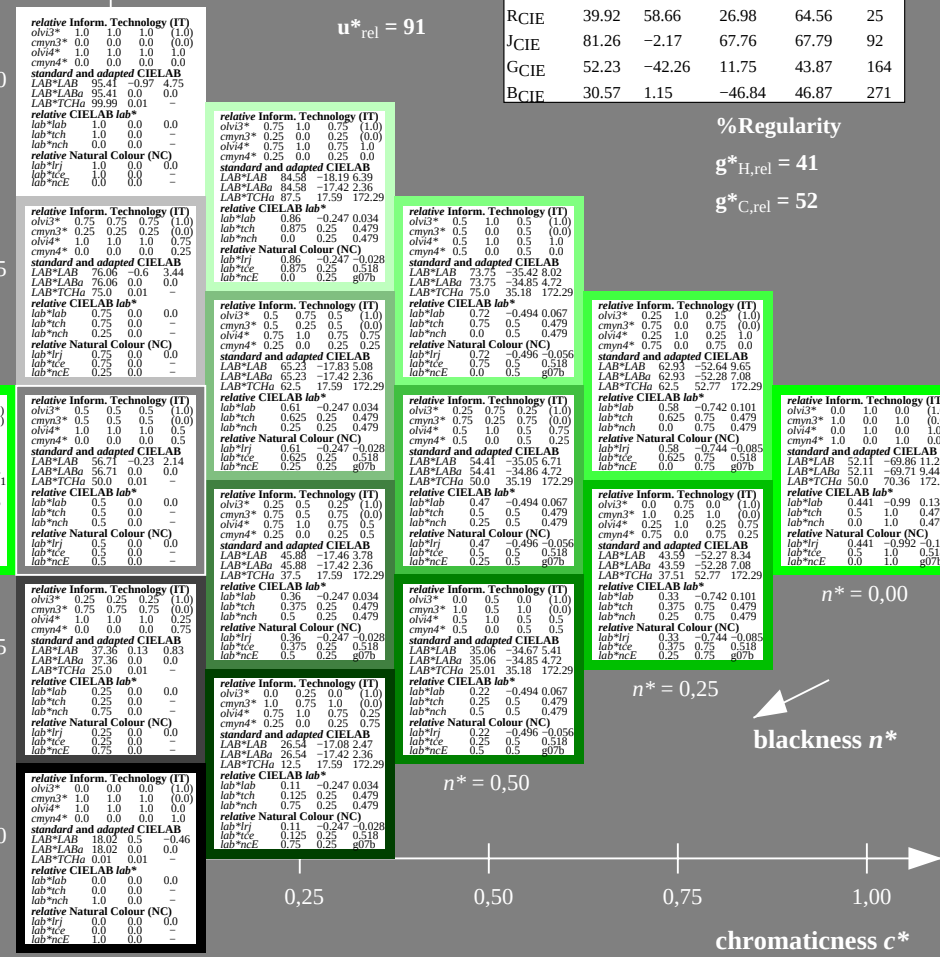
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**



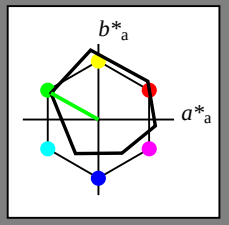

TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 172/360 = 0.479 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 151/360 = 0.419**
***lab*tch* and *lab*nch***

**D65: hue L**
**LCH*Ma: 51 72 151**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

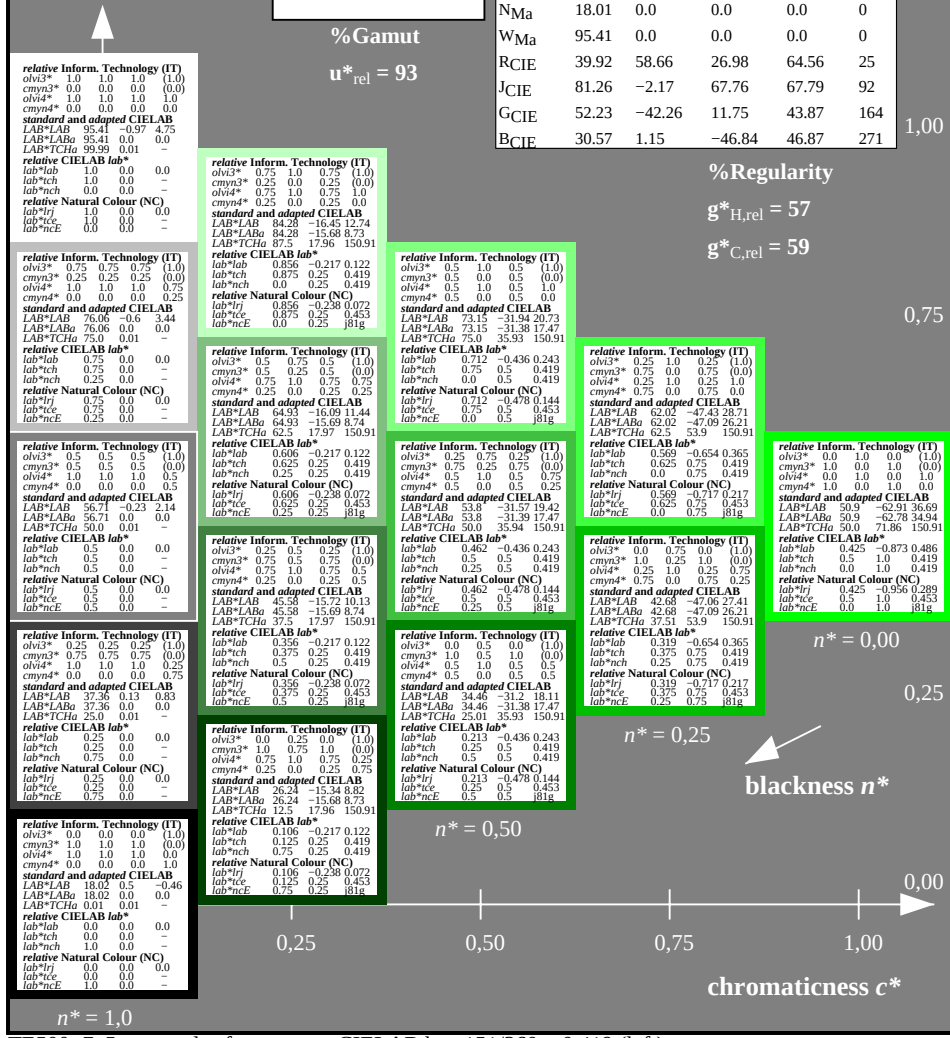
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

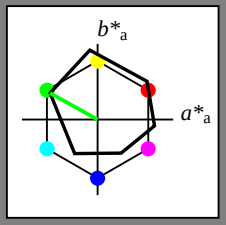
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 151/360 = 0.419**
***lab*tch* and *lab*nch***

**D65: hue L**
**LCH*Ma: 51 72 151**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

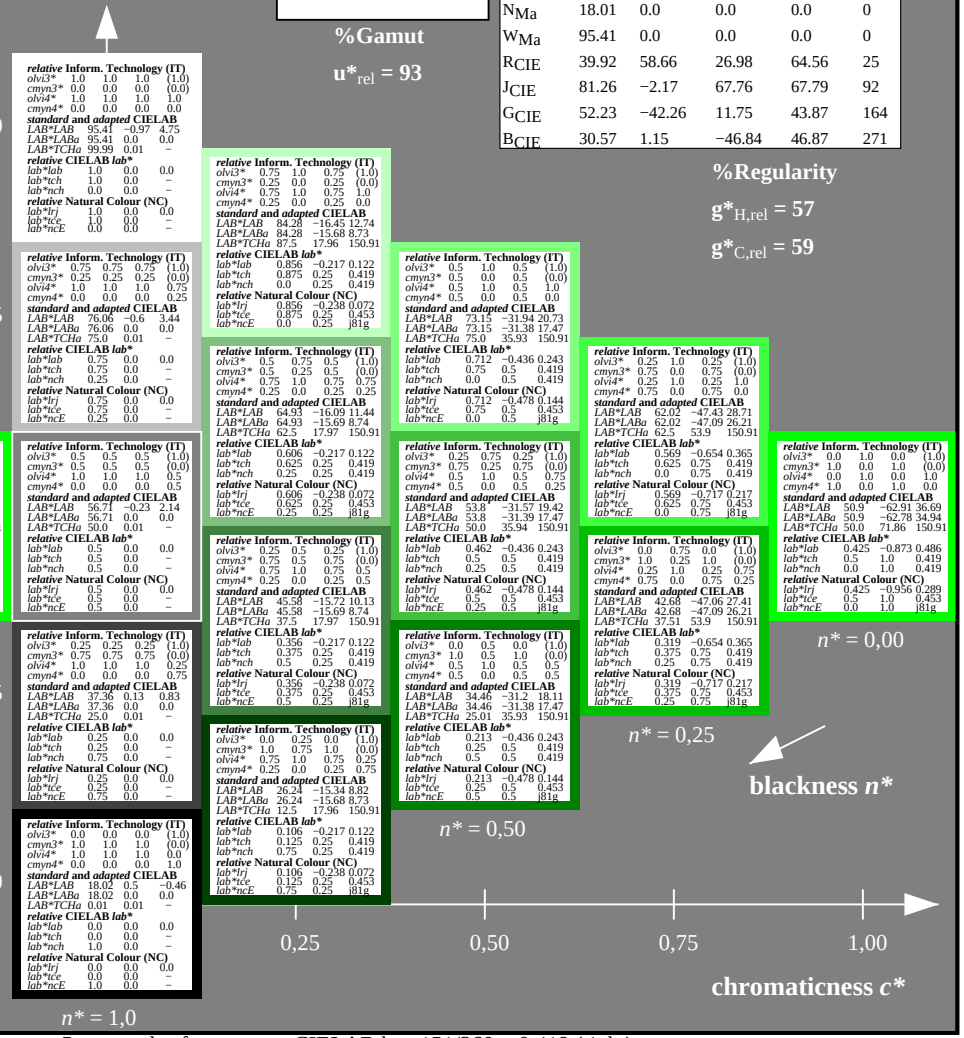
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



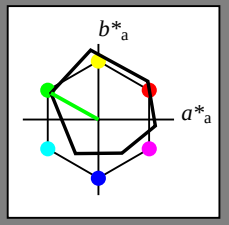

TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 151/360 = 0.419**
***lab*tch* and *lab*nch***

**D65: hue L**
**LCH*Ma: 51 72 151**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

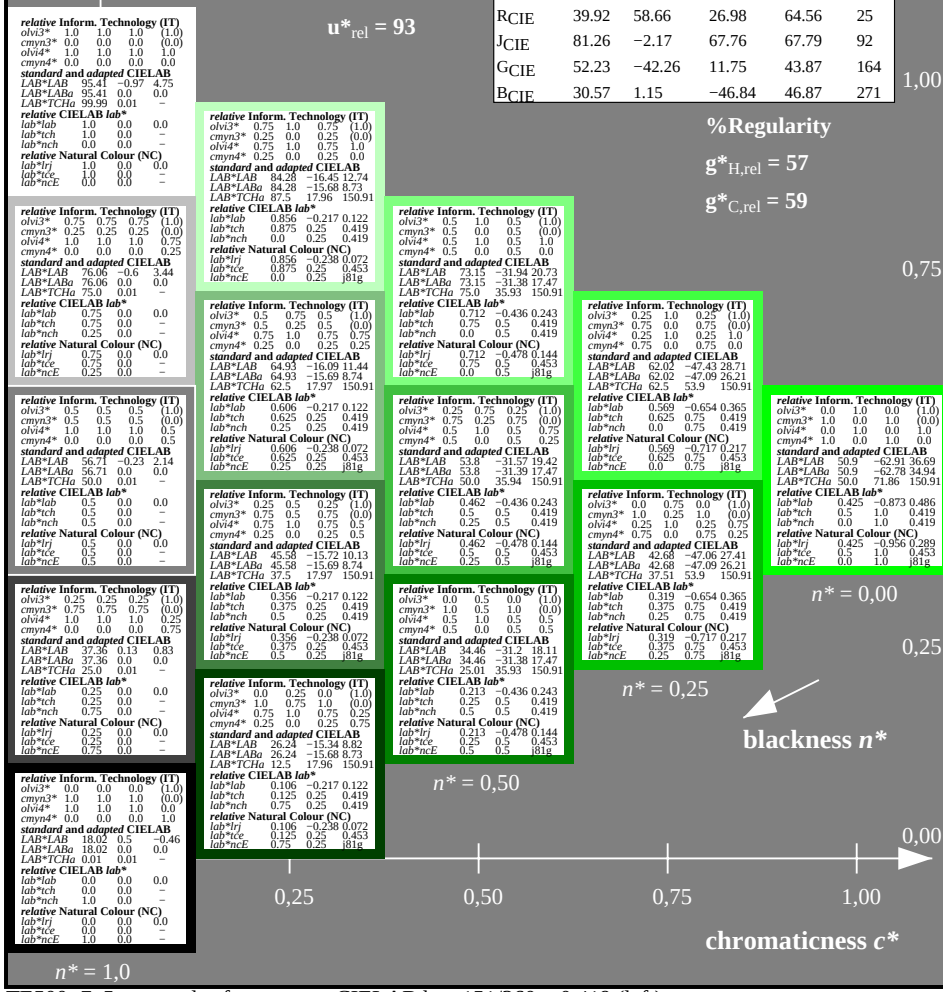
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

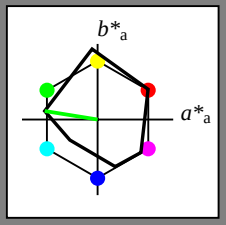
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 171/360 = 0.475**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 71 171**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

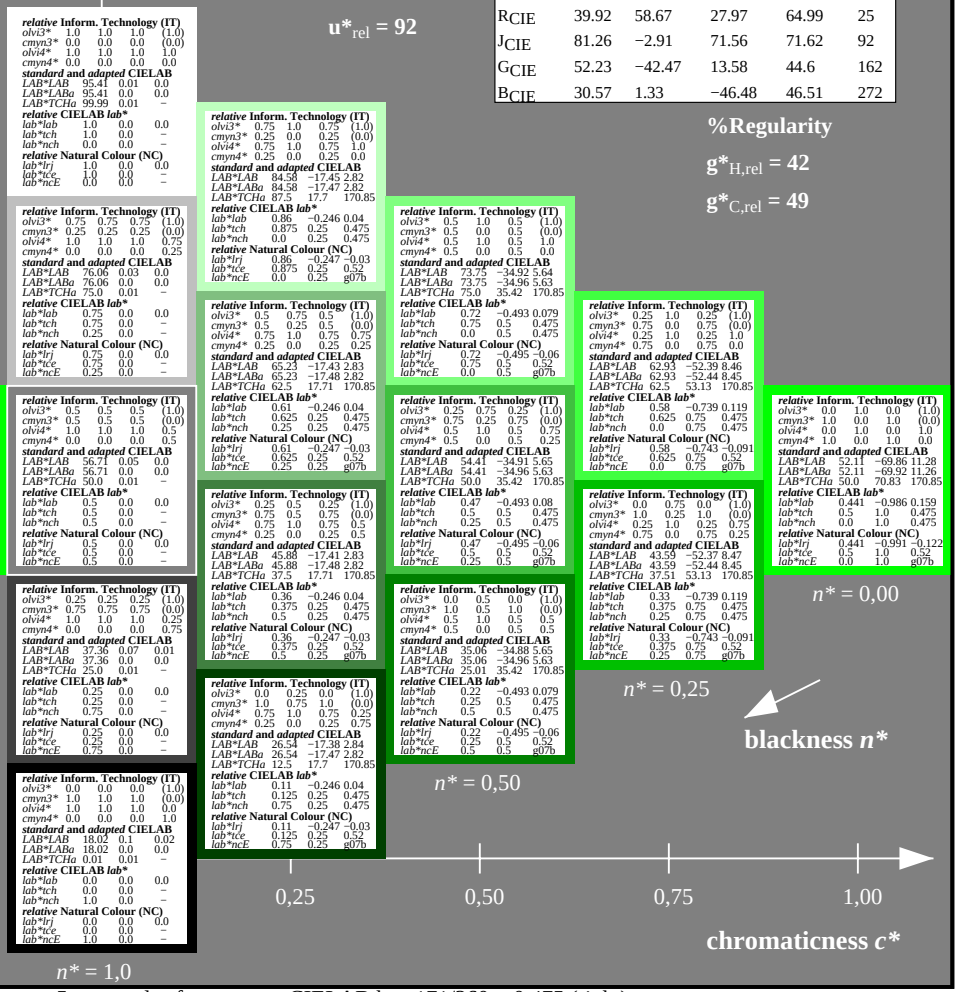
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



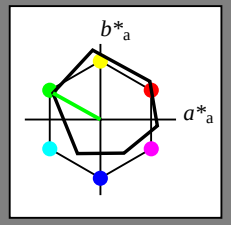

TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 171/360 = 0.475 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 151/360 = 0.419**
***lab*tch* and *lab*nch***

**D65: hue L**
**LCH*Ma: 51 72 151**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

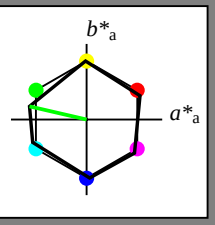
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 57 77 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

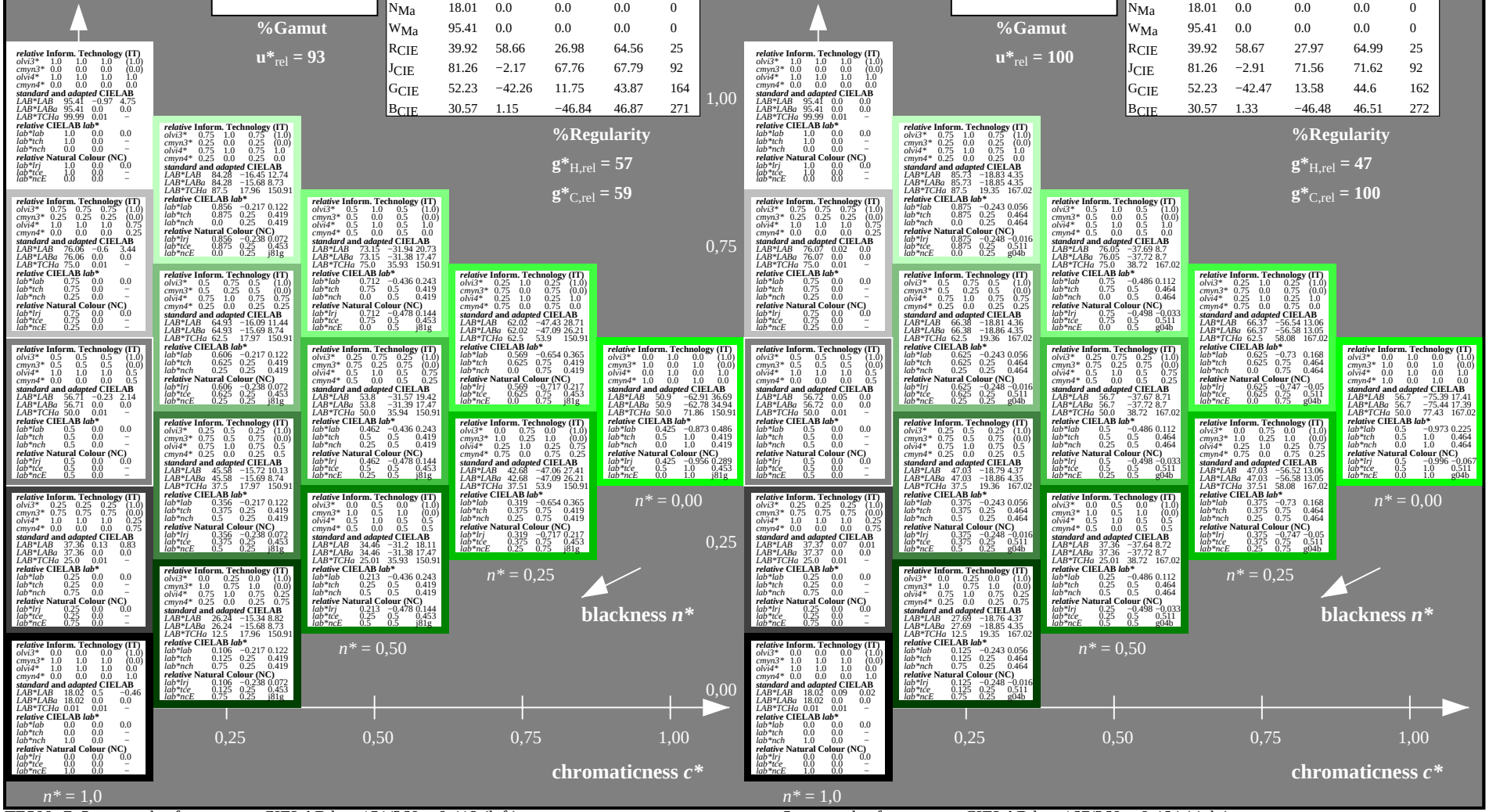
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



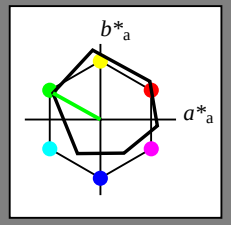

TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 151/360 = 0.419**
***lab*tch* and *lab*nch***

**D65: hue L**
**LCH*Ma: 51 72 151**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

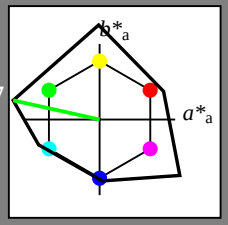
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

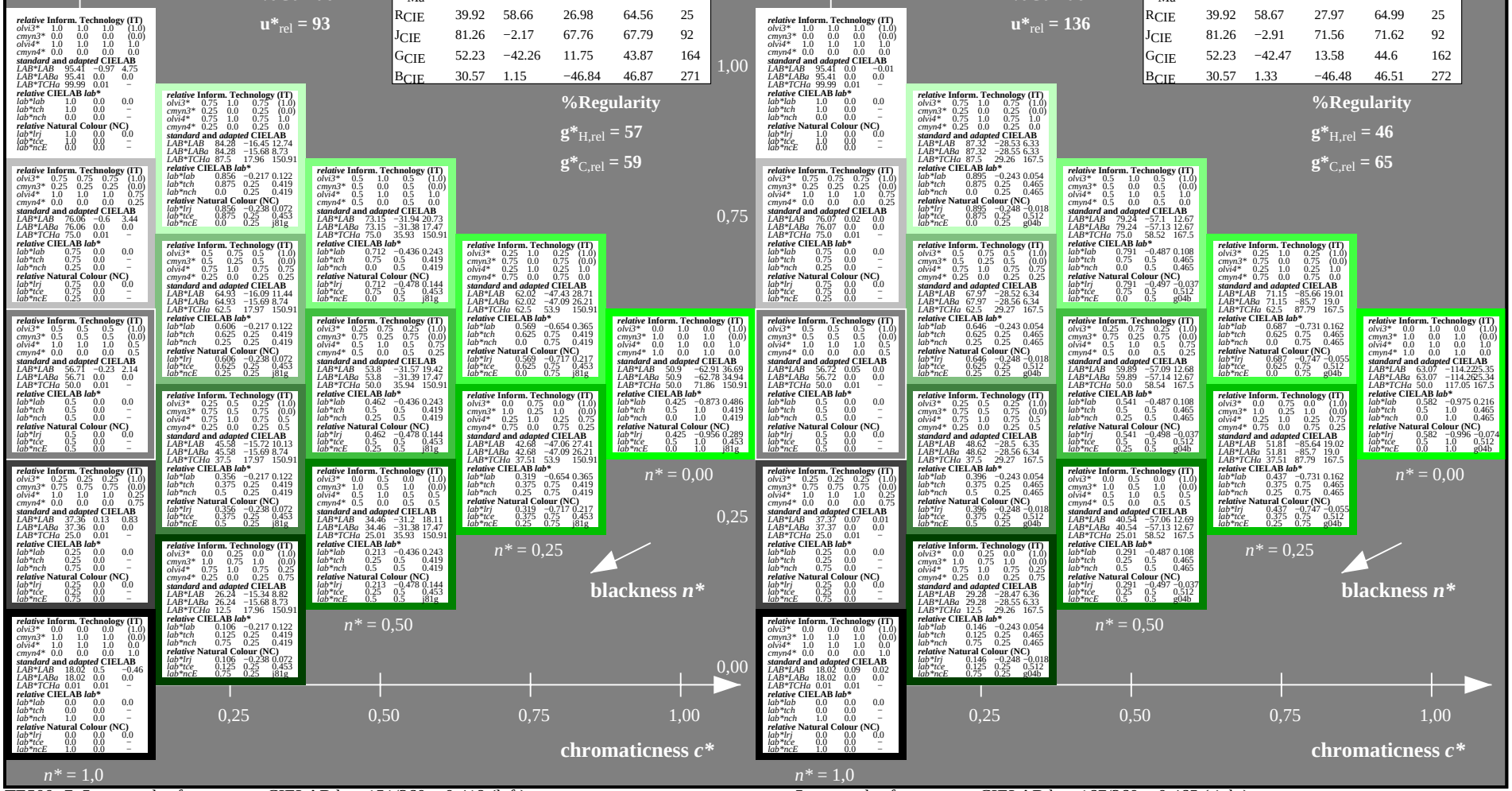
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



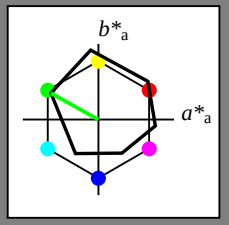

TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 151/360 = 0.419**
***lab*tch* and *lab*nch***

**D65: hue L**
**LCH*Ma: 51 72 151**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

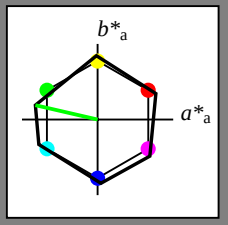
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 84 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

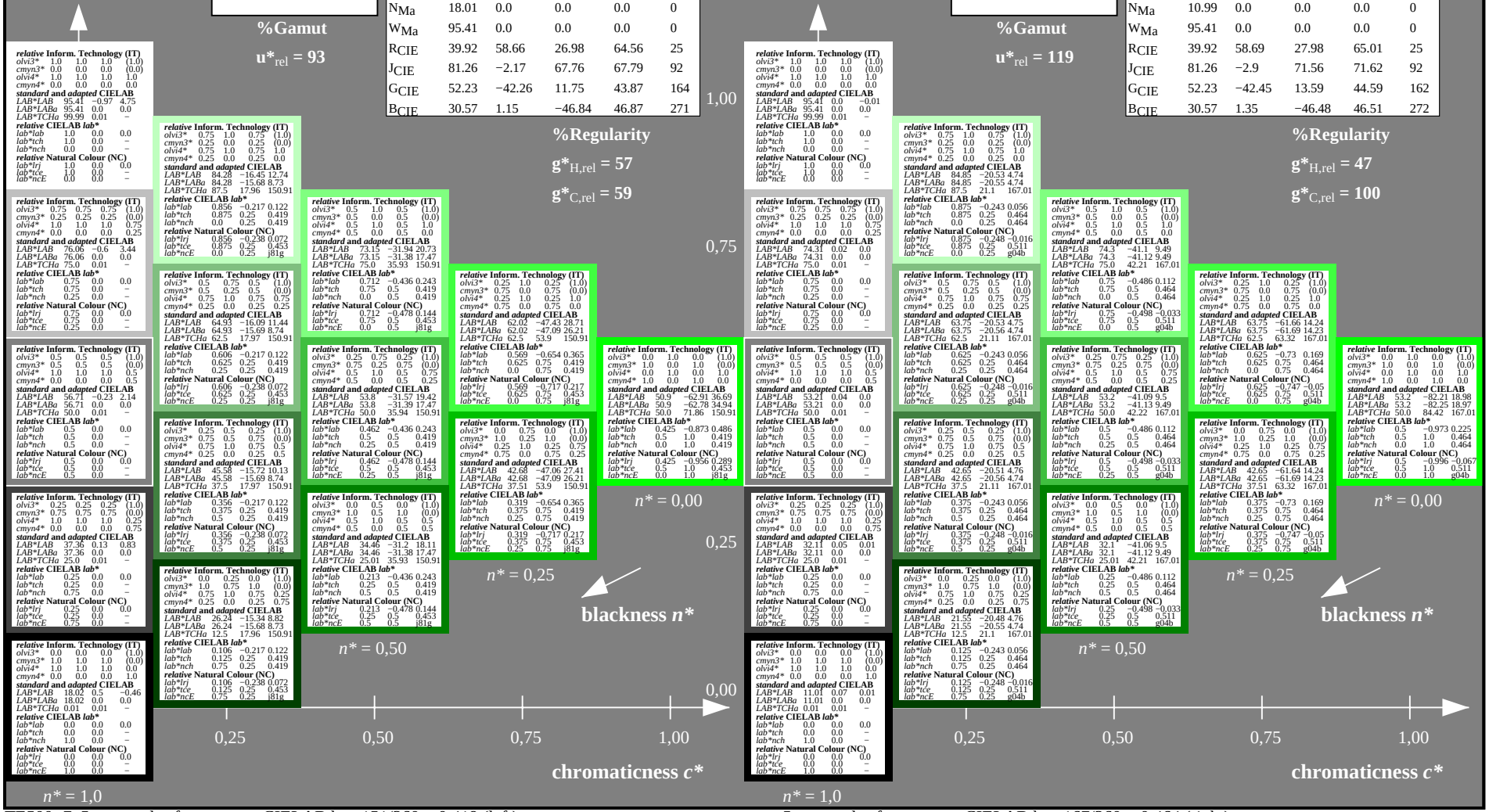
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



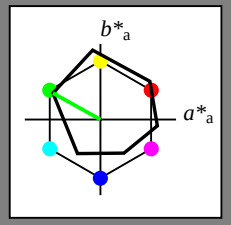

TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 151/360 = 0.419**
***lab*tch* and *lab*nch***

**D65: hue L**
**LCH*Ma: 51 72 151**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

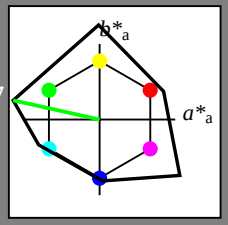
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

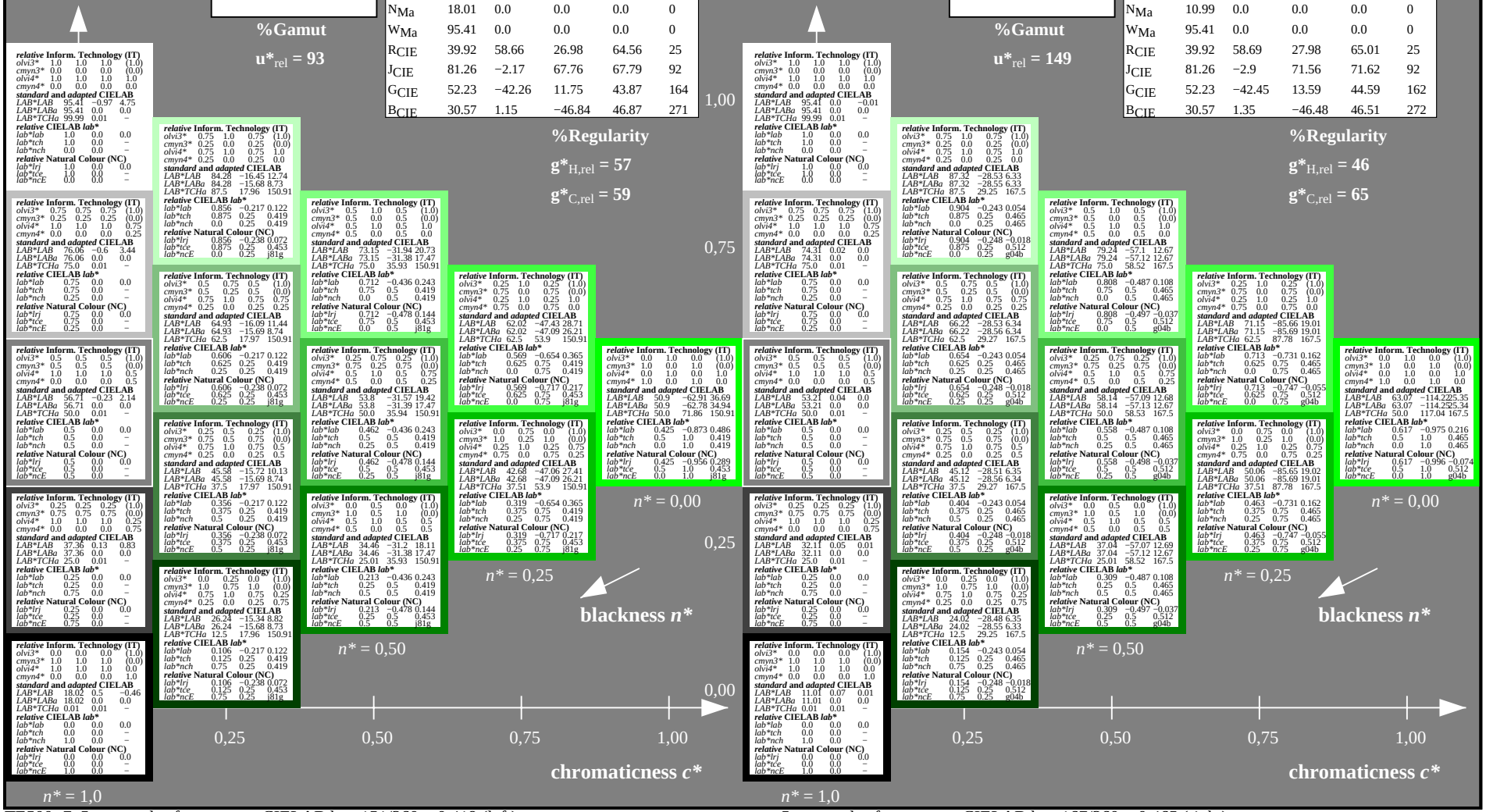
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

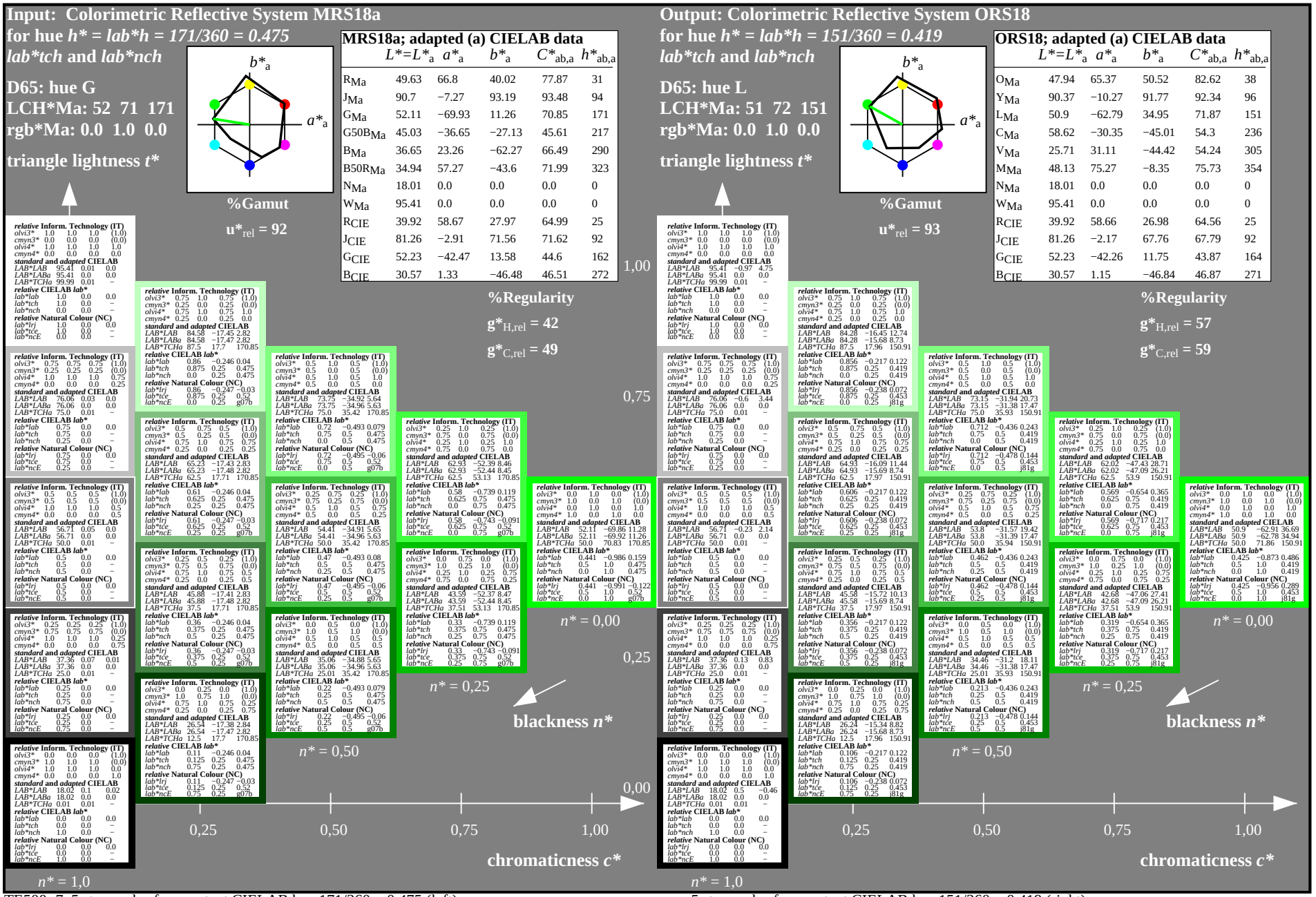
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



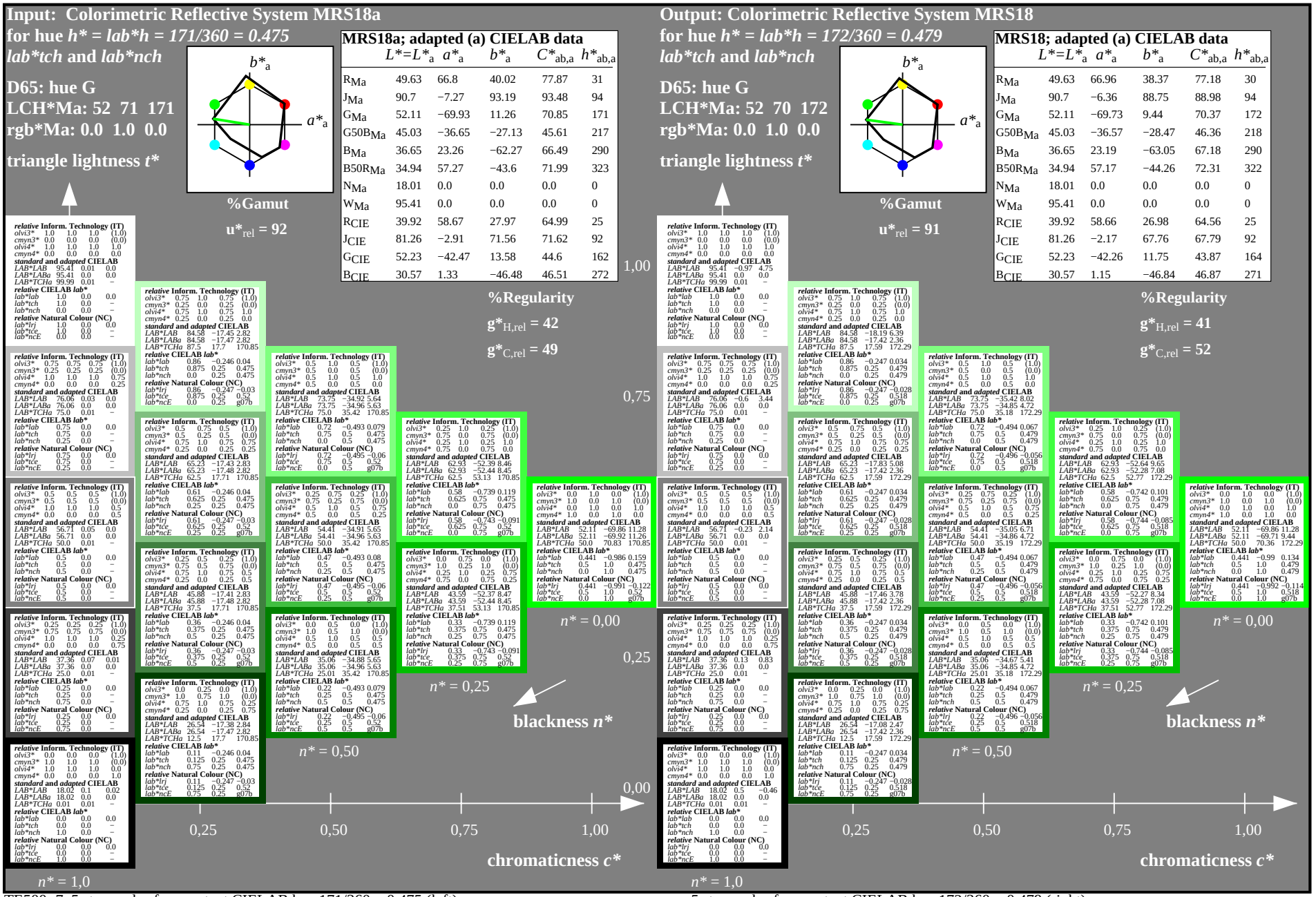

TE500−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)




TE500−7, 5 step scales for constant CIELAB hue 171/360 = 0.475 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)



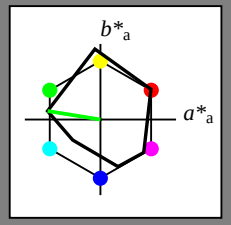

TE500−7, 5 step scales for constant CIELAB hue 171/360 = 0.475 (left)

5 step scales for constant CIELAB hue 172/360 = 0.479 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 171/360 = 0.475**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 71 171**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

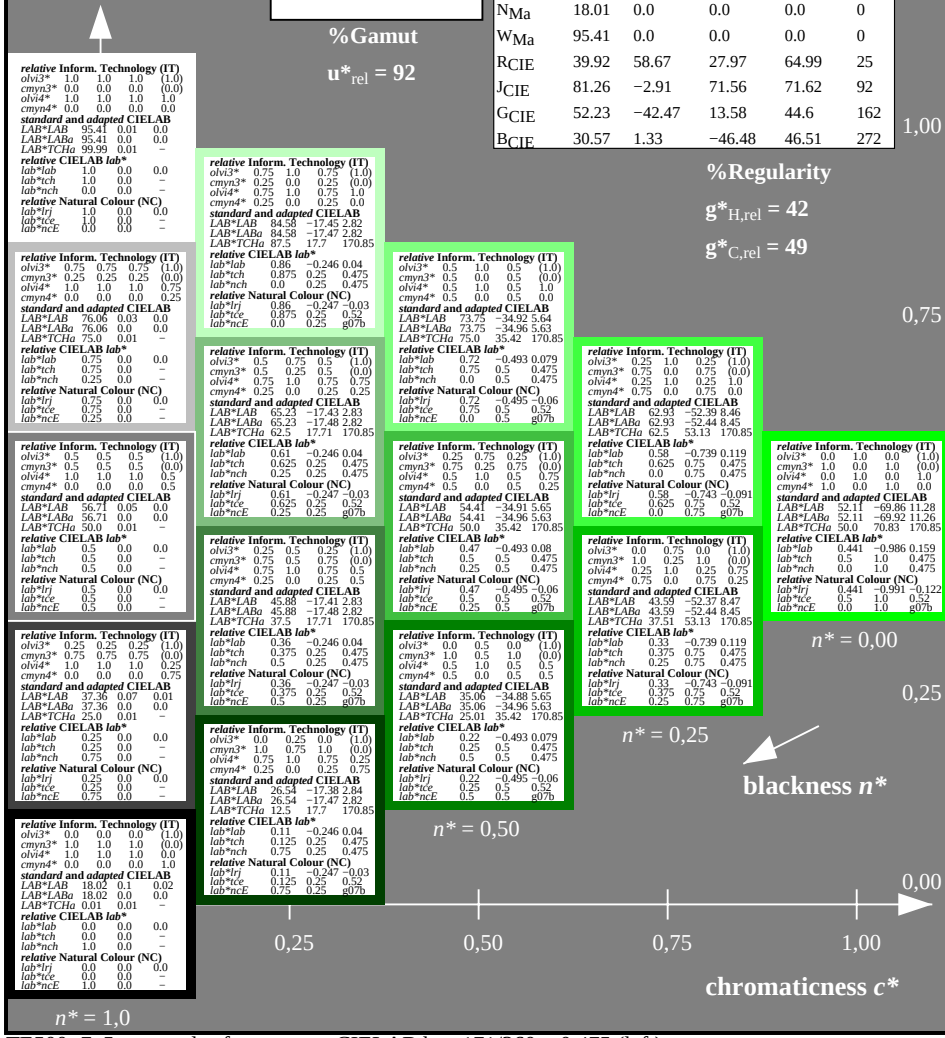
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

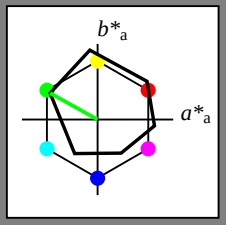
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 151/360 = 0.419**
***lab*tch* and *lab*nch***

**D65: hue L**
**LCH*Ma: 51 72 151**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

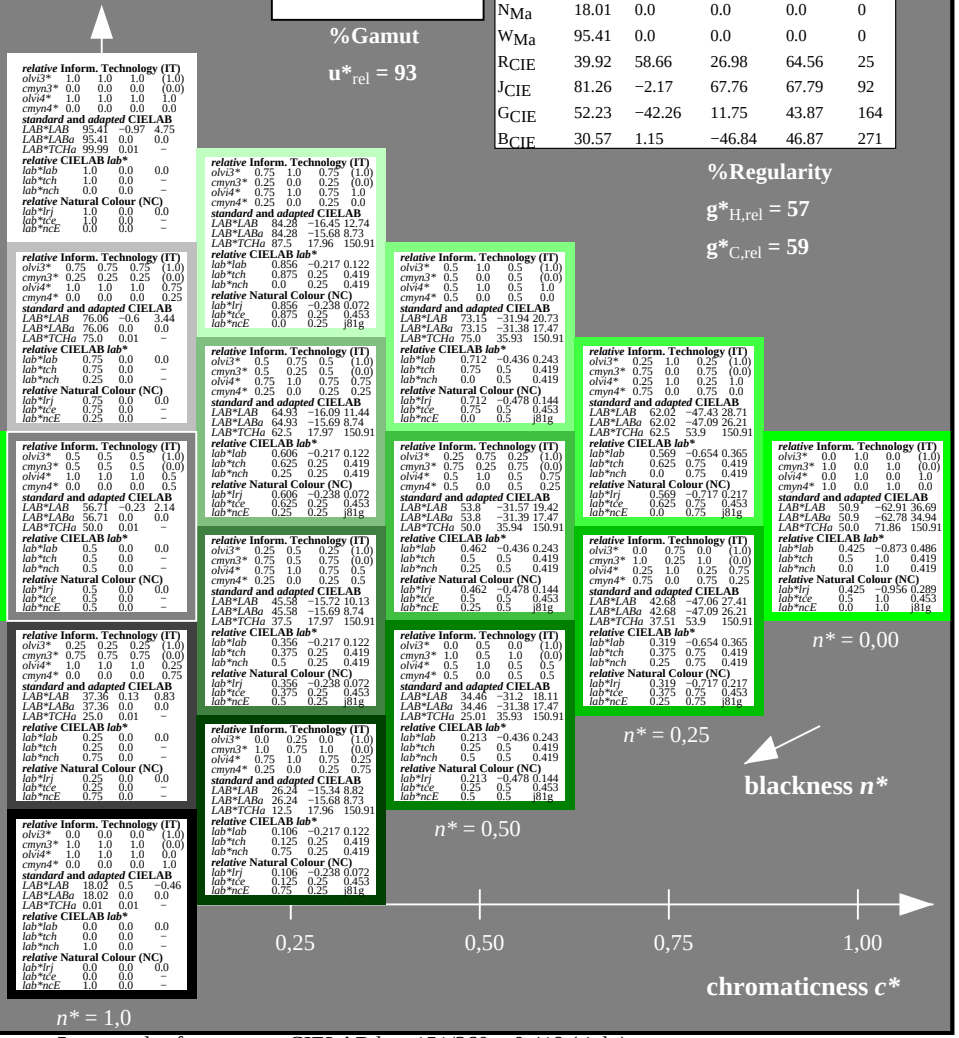
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

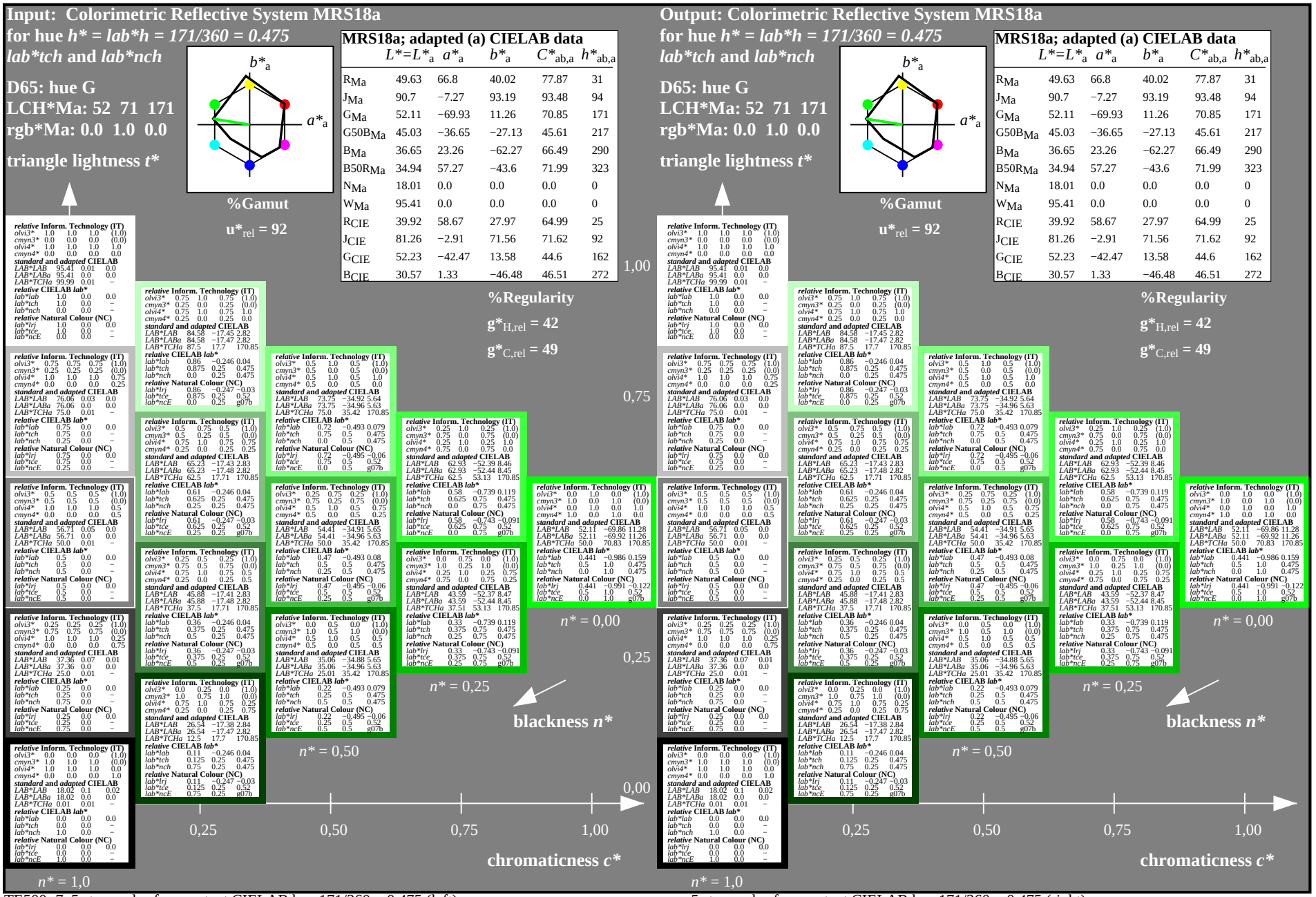
**g*$_{H,rel}$ = 57**

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



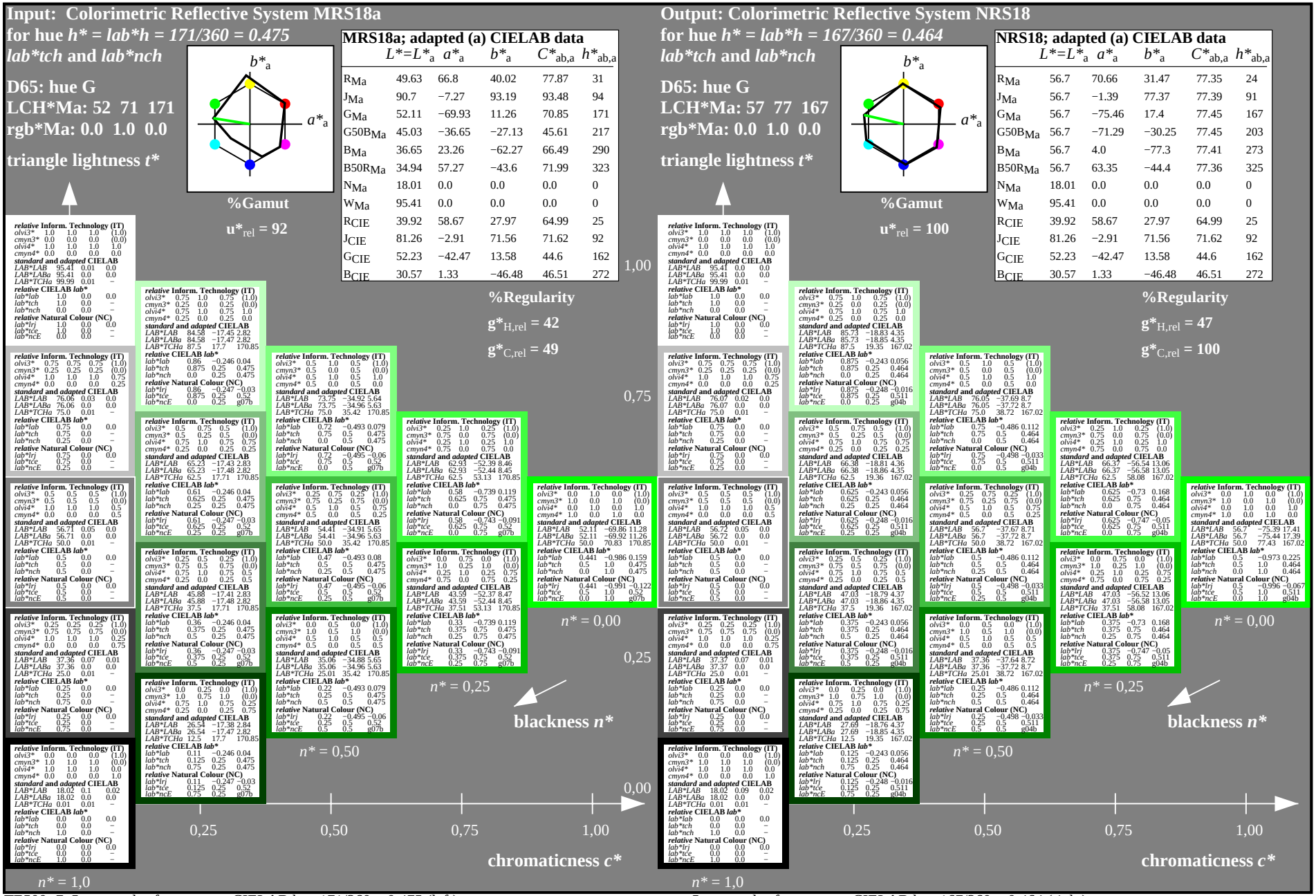

TE500−7, 5 step scales for constant CIELAB hue 171/360 = 0.475 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)




TE500−7, 5 step scales for constant CIELAB hue 171/360 = 0.475 (left)

5 step scales for constant CIELAB hue 171/360 = 0.475 (right)



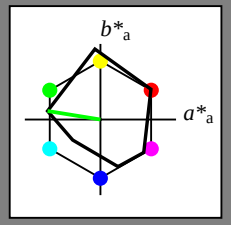

TE500−7, 5 step scales for constant CIELAB hue 171/360 = 0.475 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 171/360 = 0.475**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 71 171**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

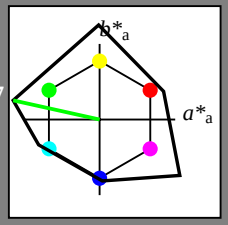
**g*$_{H,rel}$ = 42**

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

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

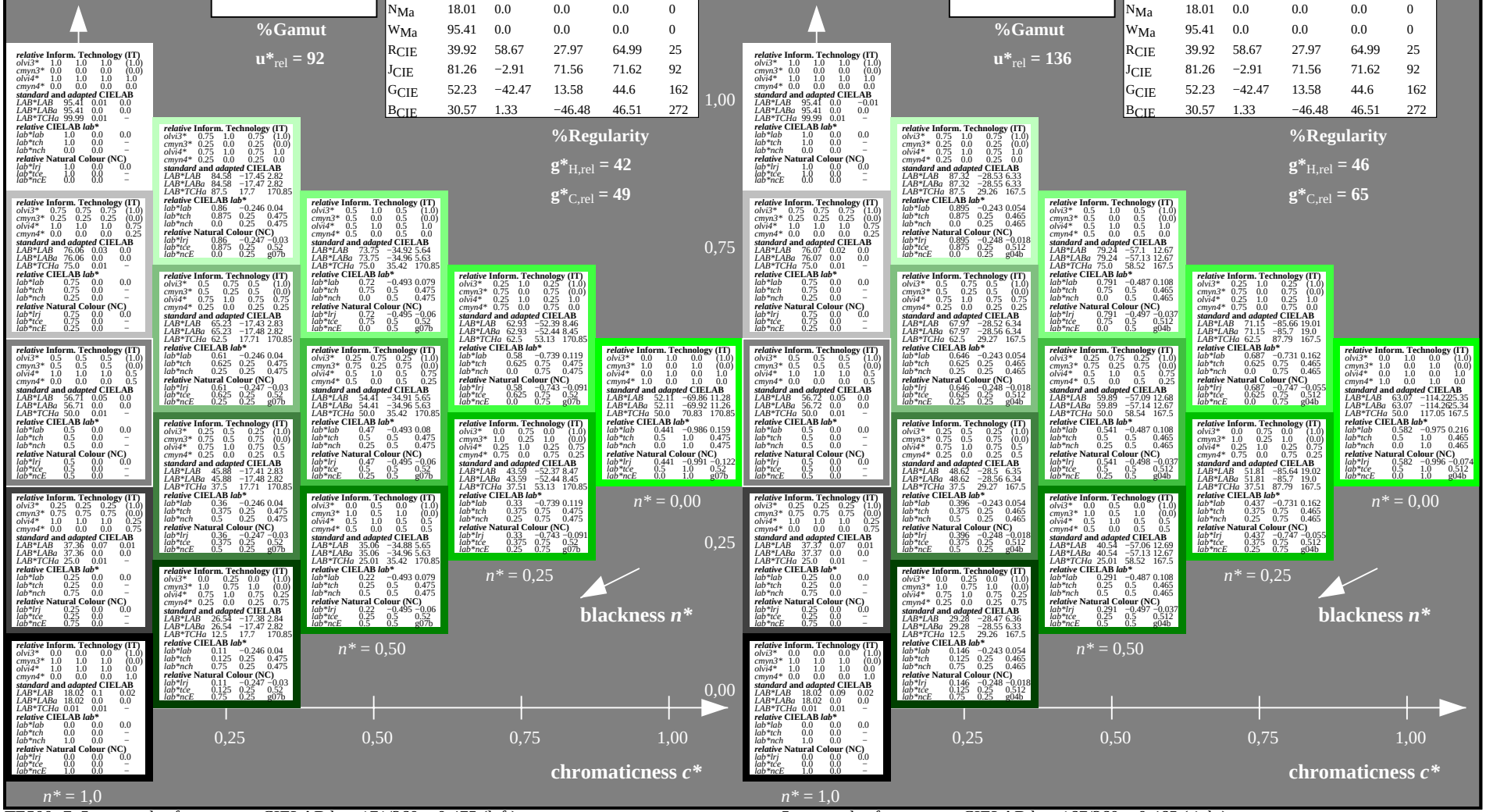
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

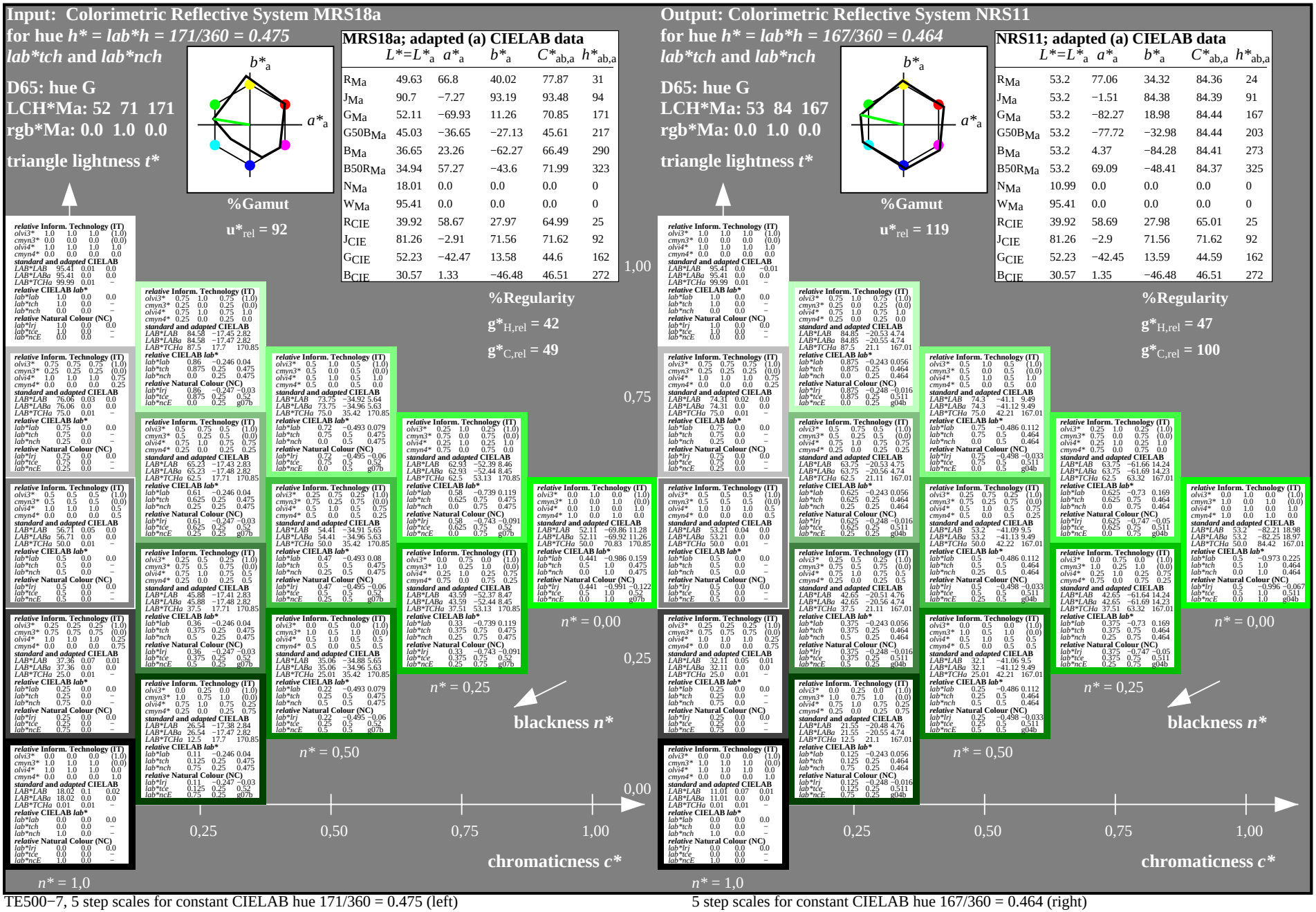
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 171/360 = 0.475 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)



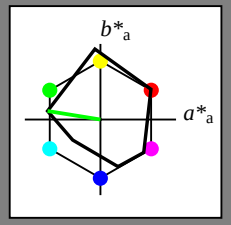

TE500−7, 5 step scales for constant CIELAB hue 171/360 = 0.475 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 171/360 = 0.475**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 71 171**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

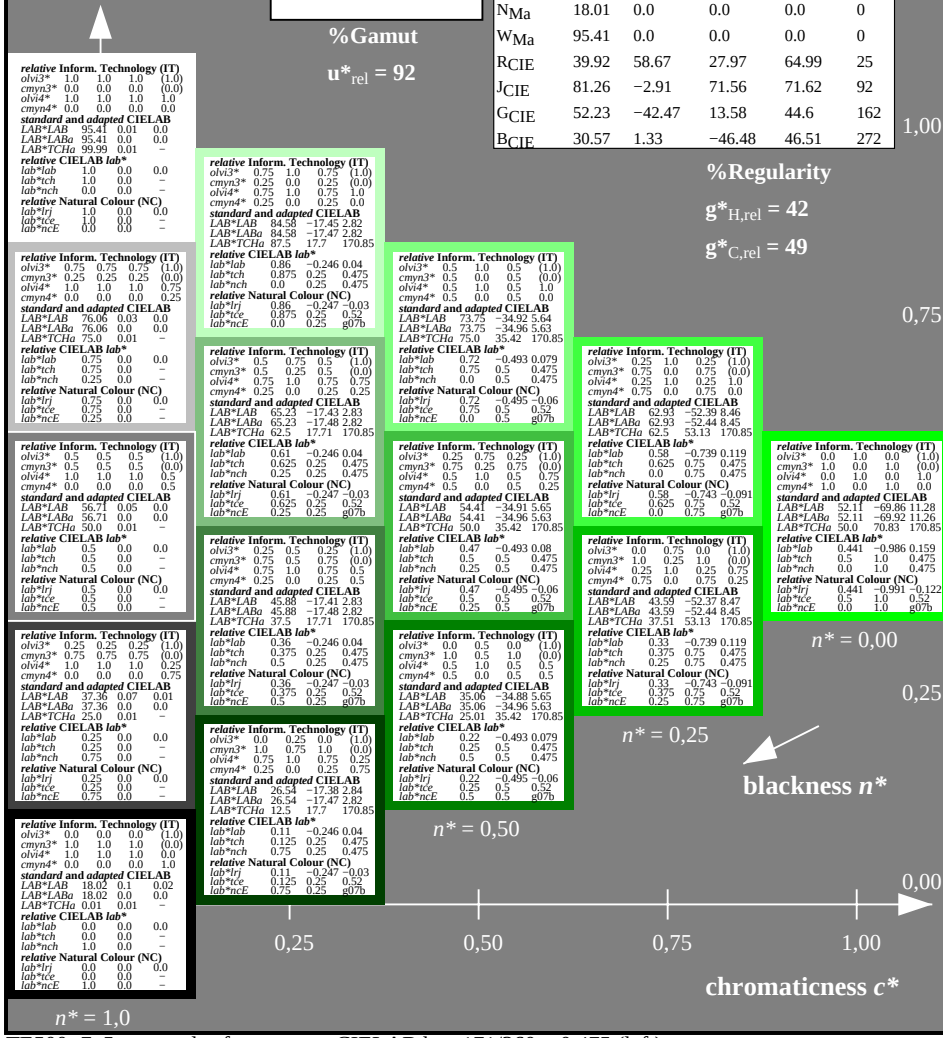
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

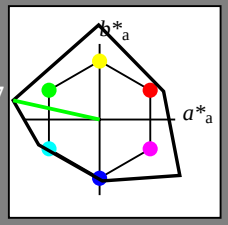
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

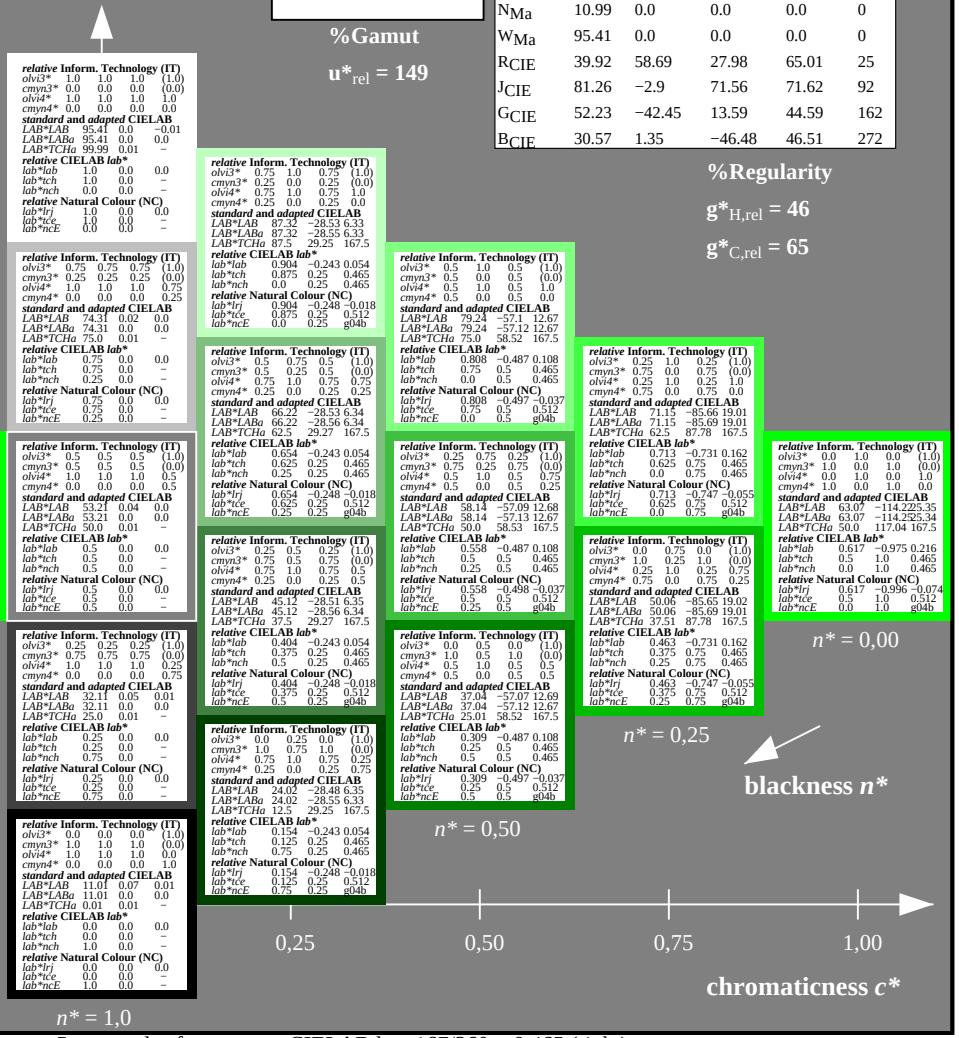
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

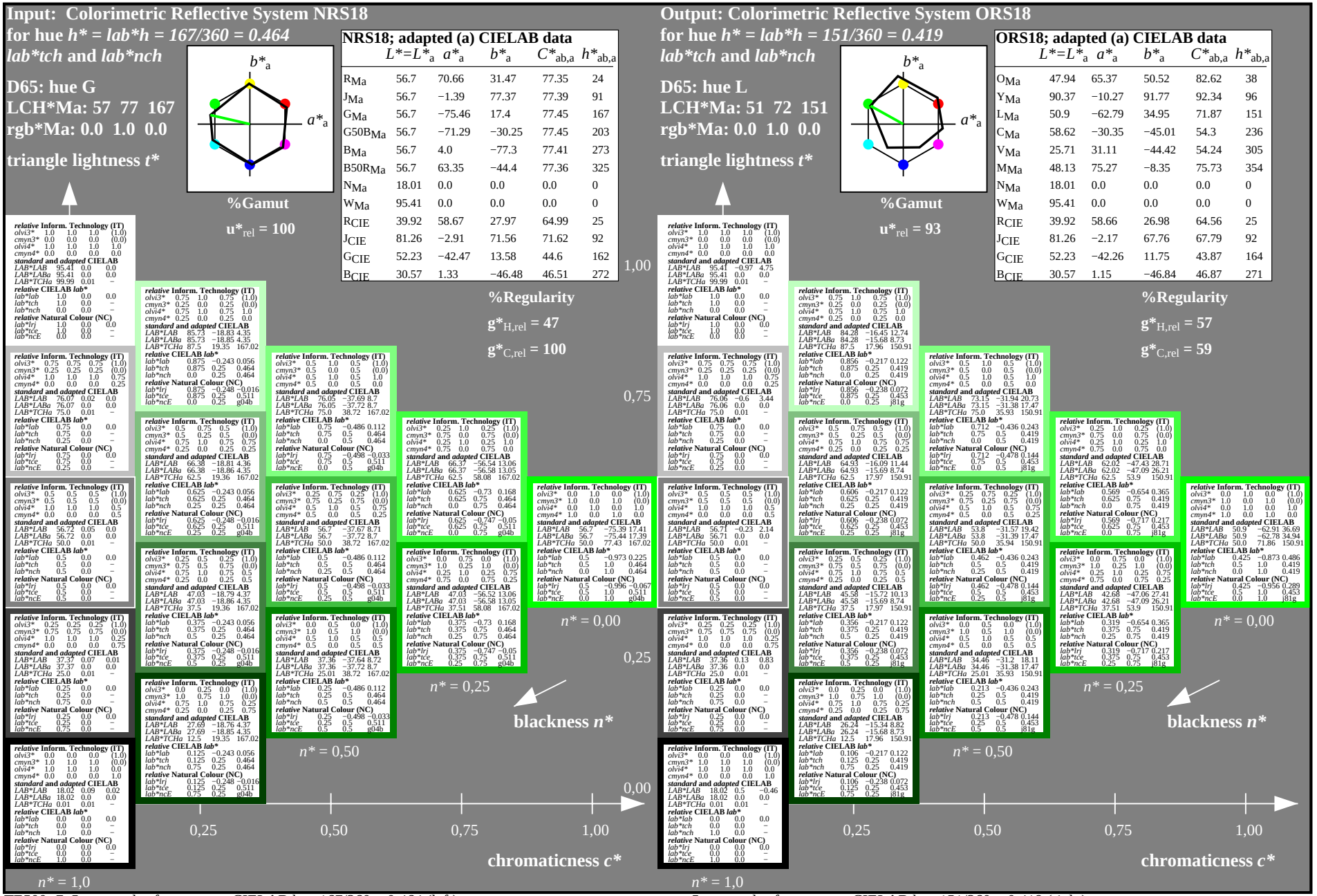
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 171/360 = 0.475 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)



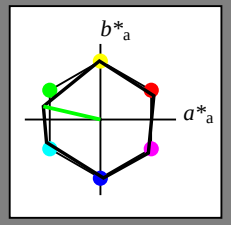

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 57 77 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

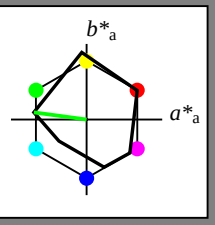
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 172/360 = 0.479**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 70 172**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

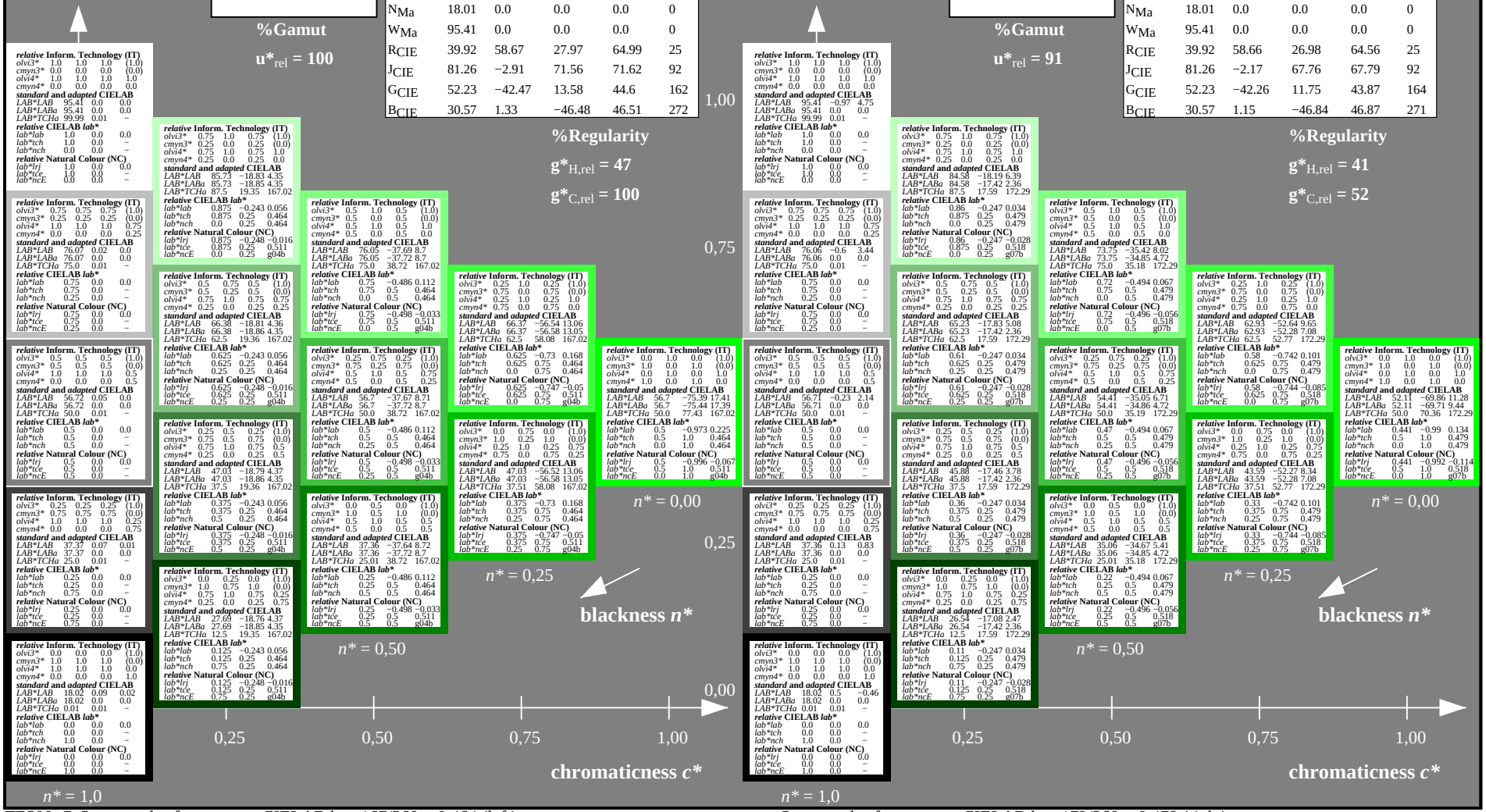
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

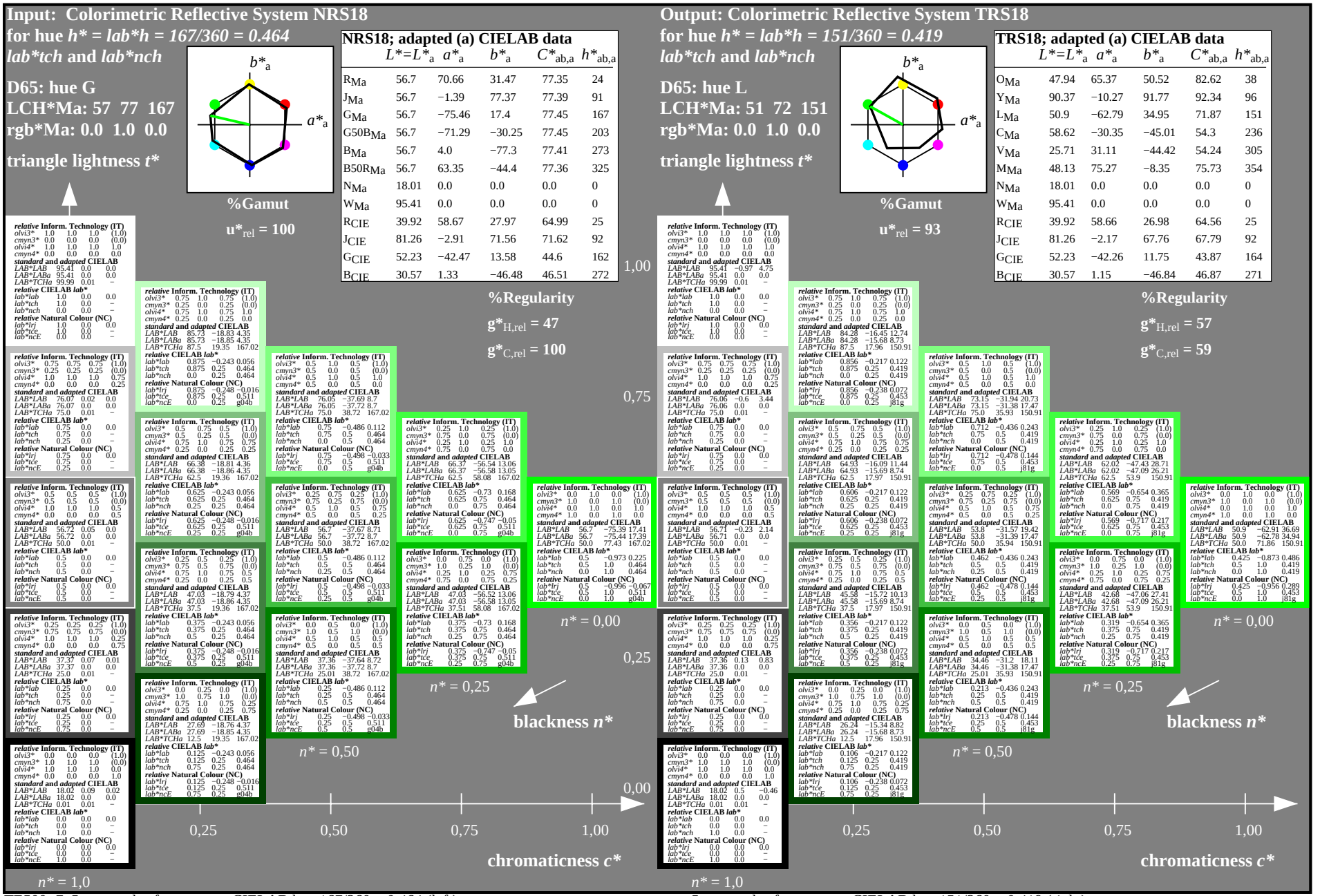
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**




TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 172/360 = 0.479 (right)



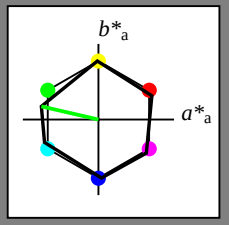

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 57 77 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

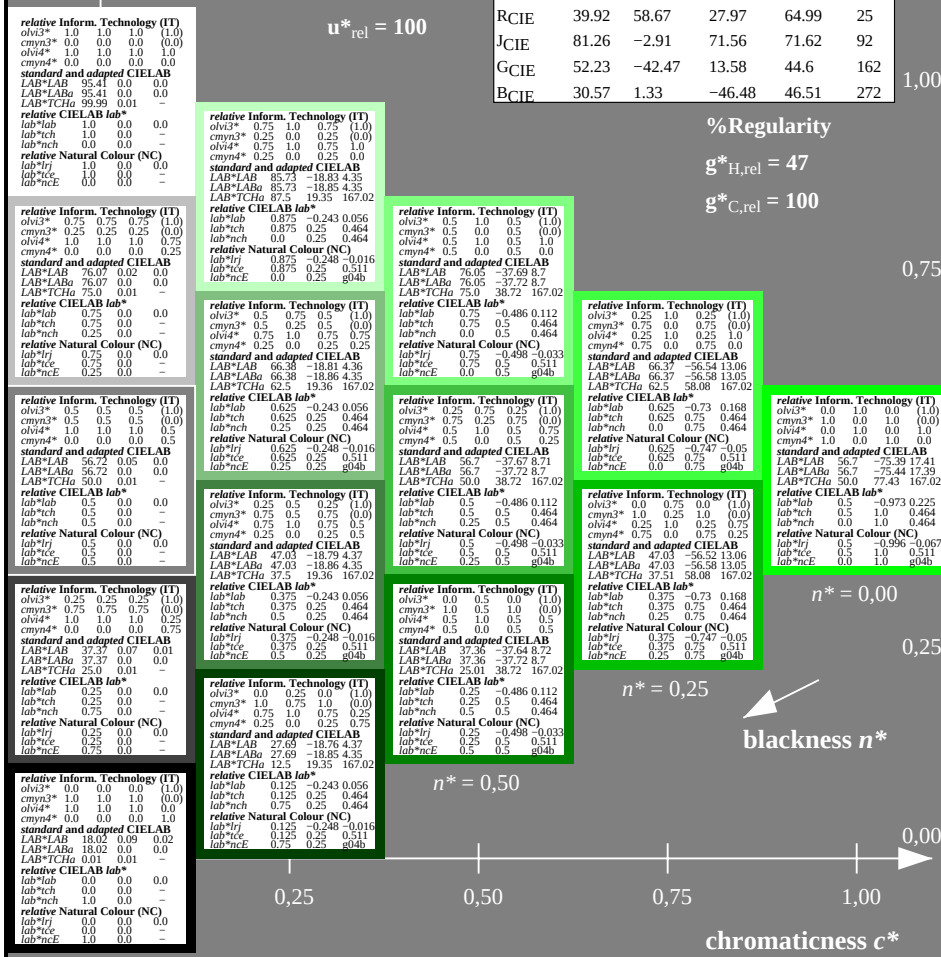
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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

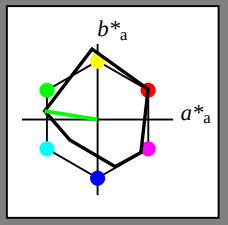



TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 171/360 = 0.475**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 71 171**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

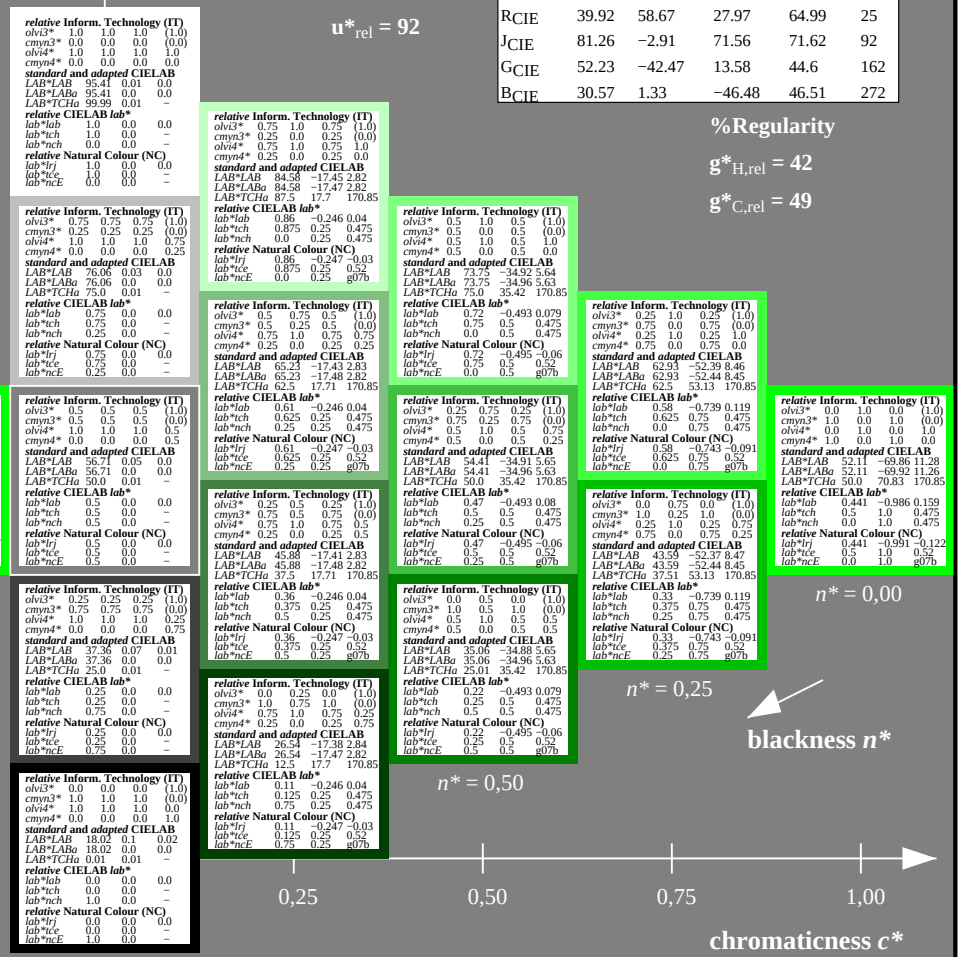
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

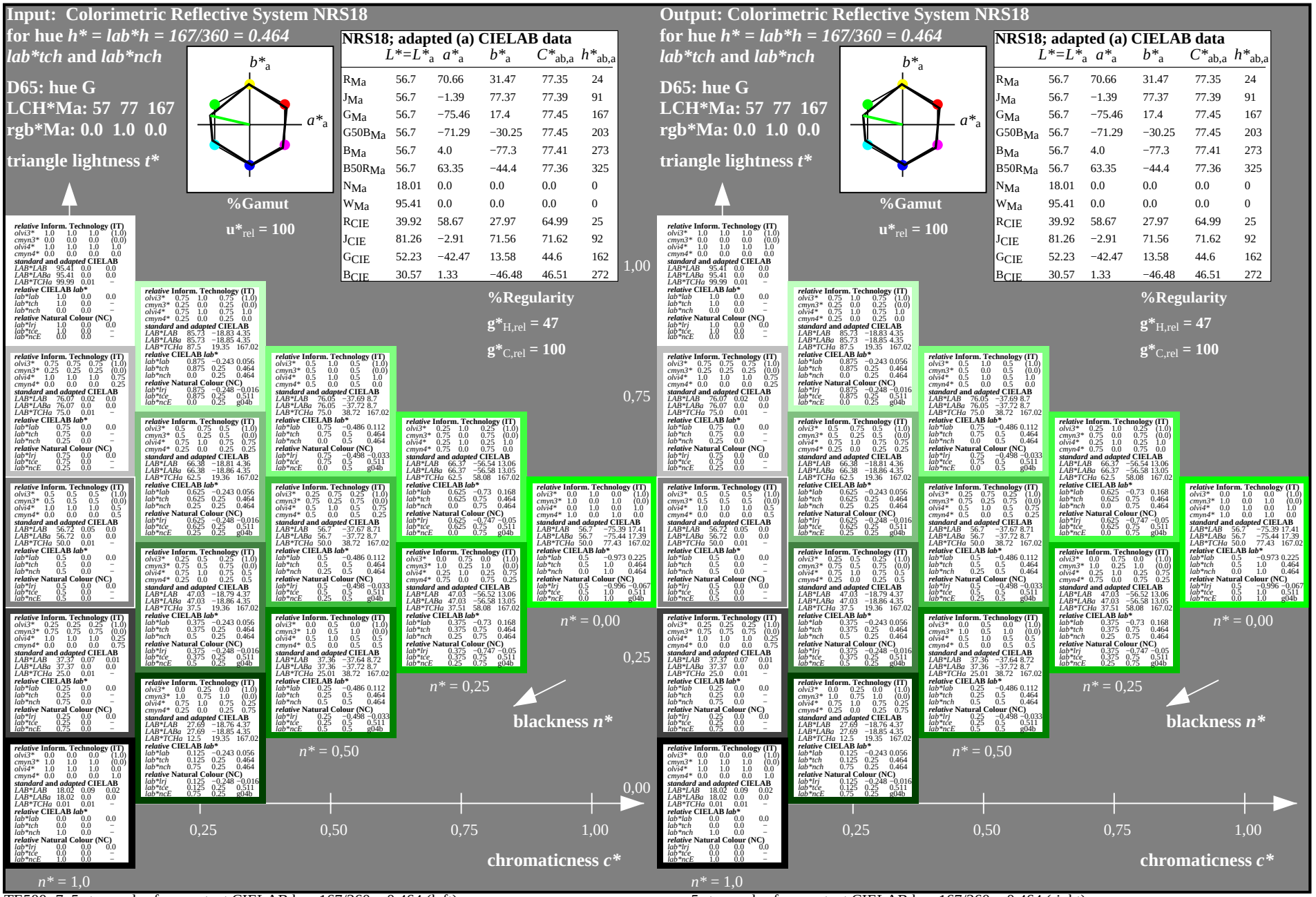
**%Regularity**

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

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




5 step scales for constant CIELAB hue 171/360 = 0.475 (right)



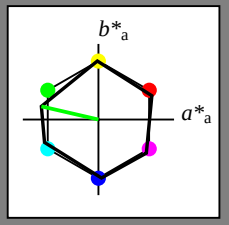

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 57 77 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

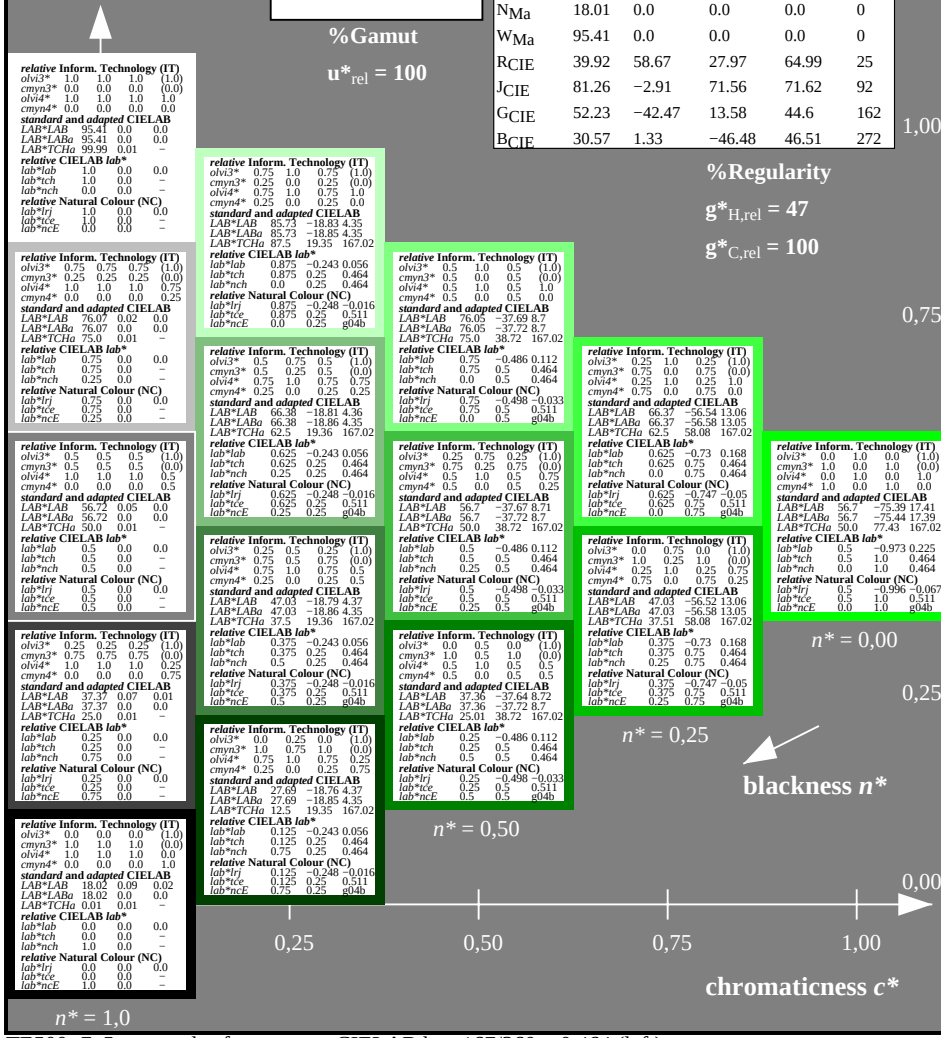
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

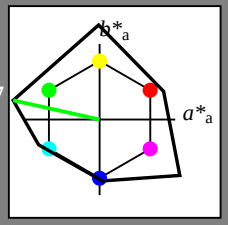
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

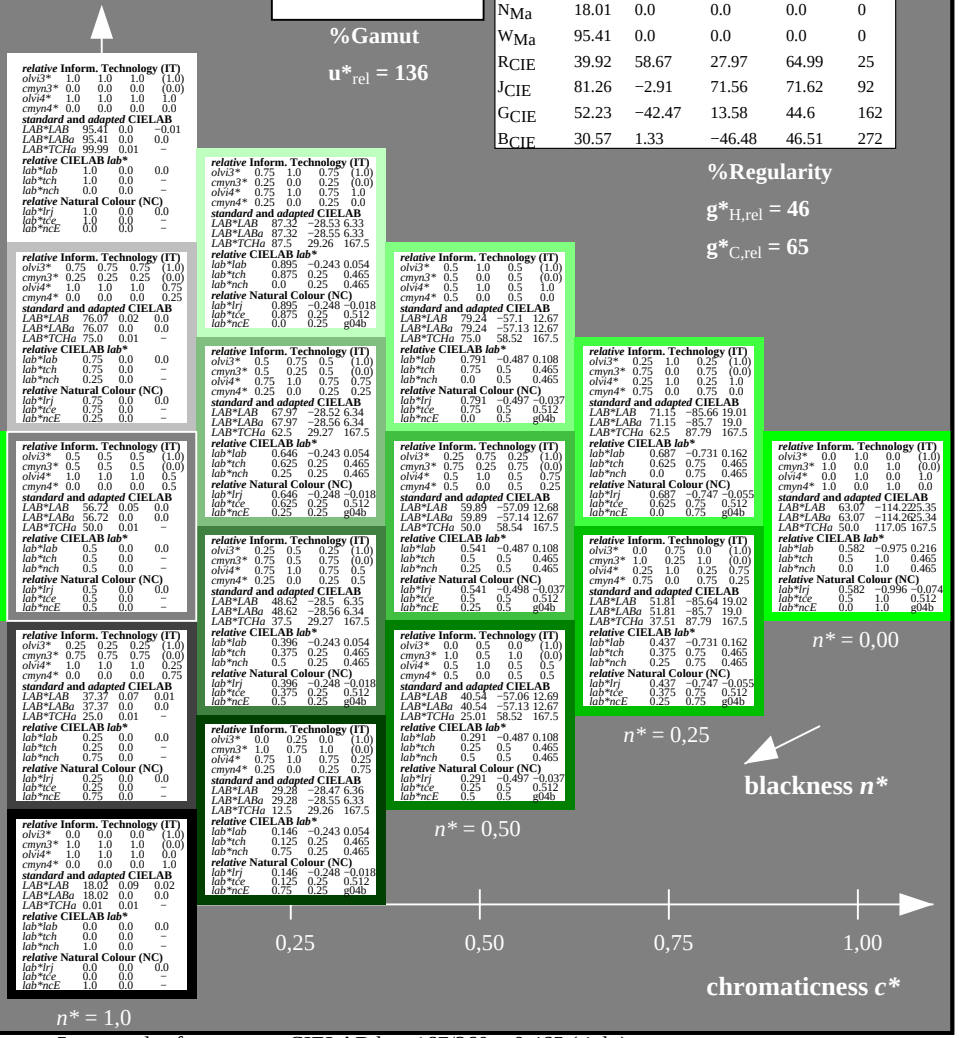
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

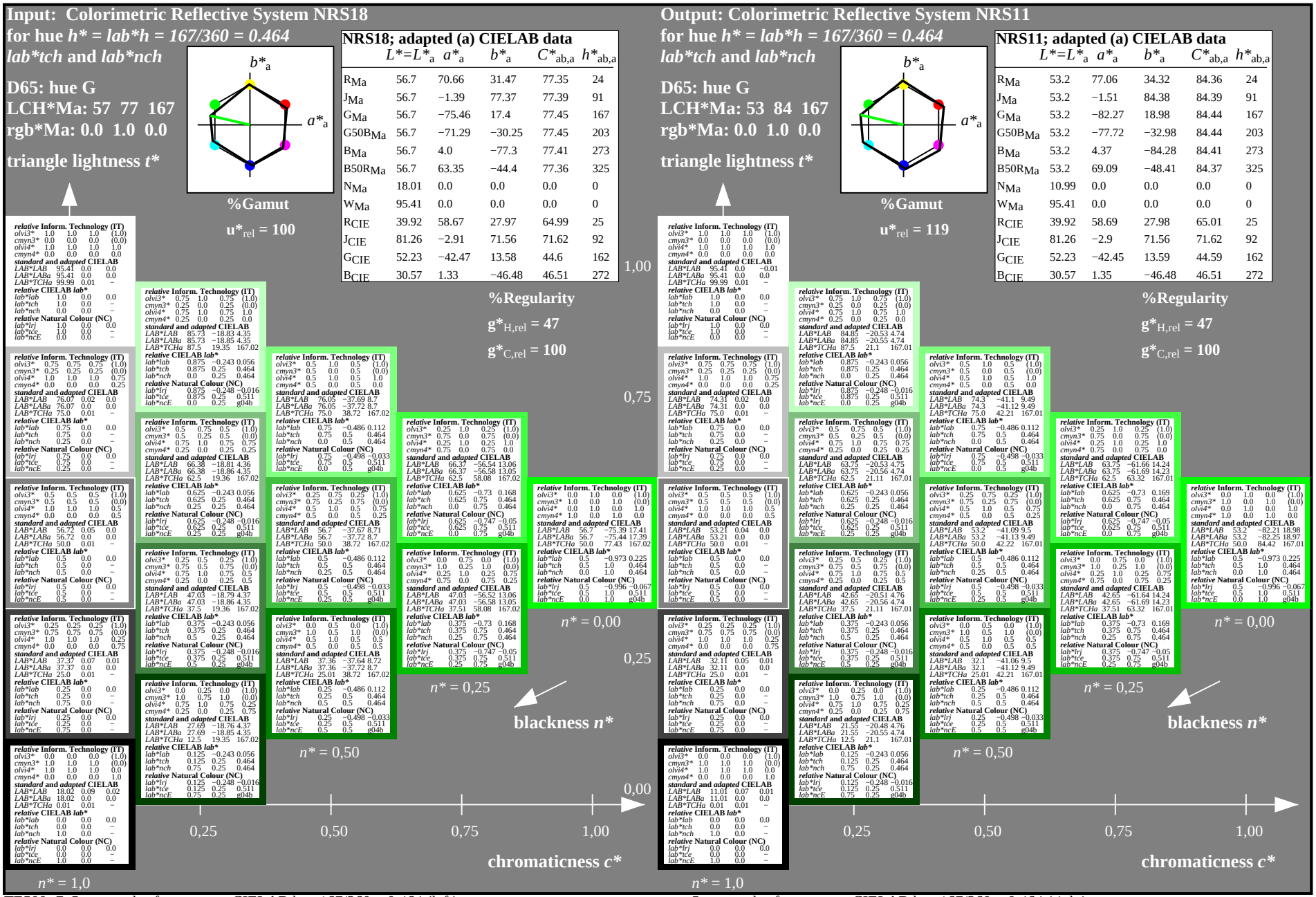
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



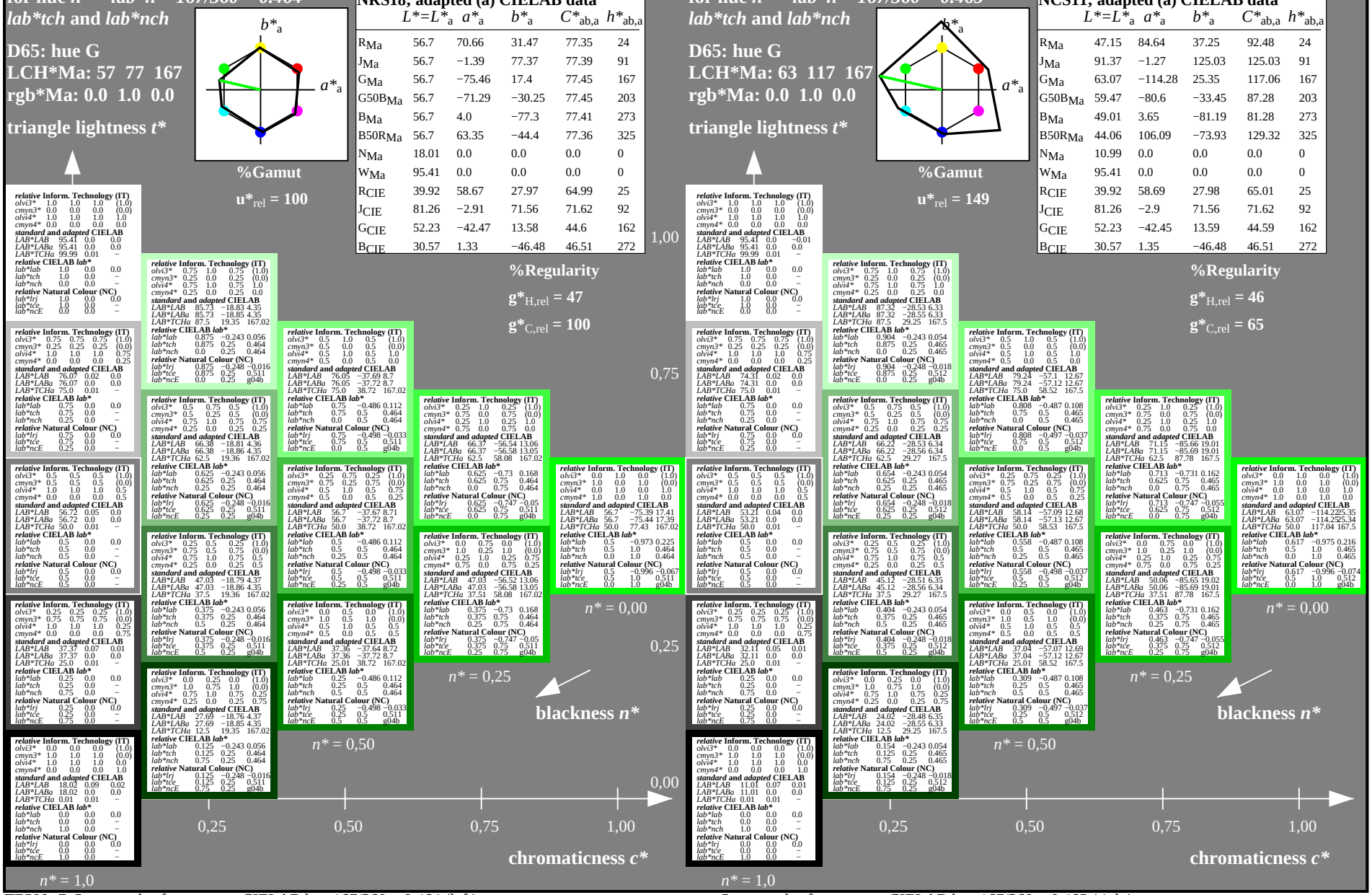

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)



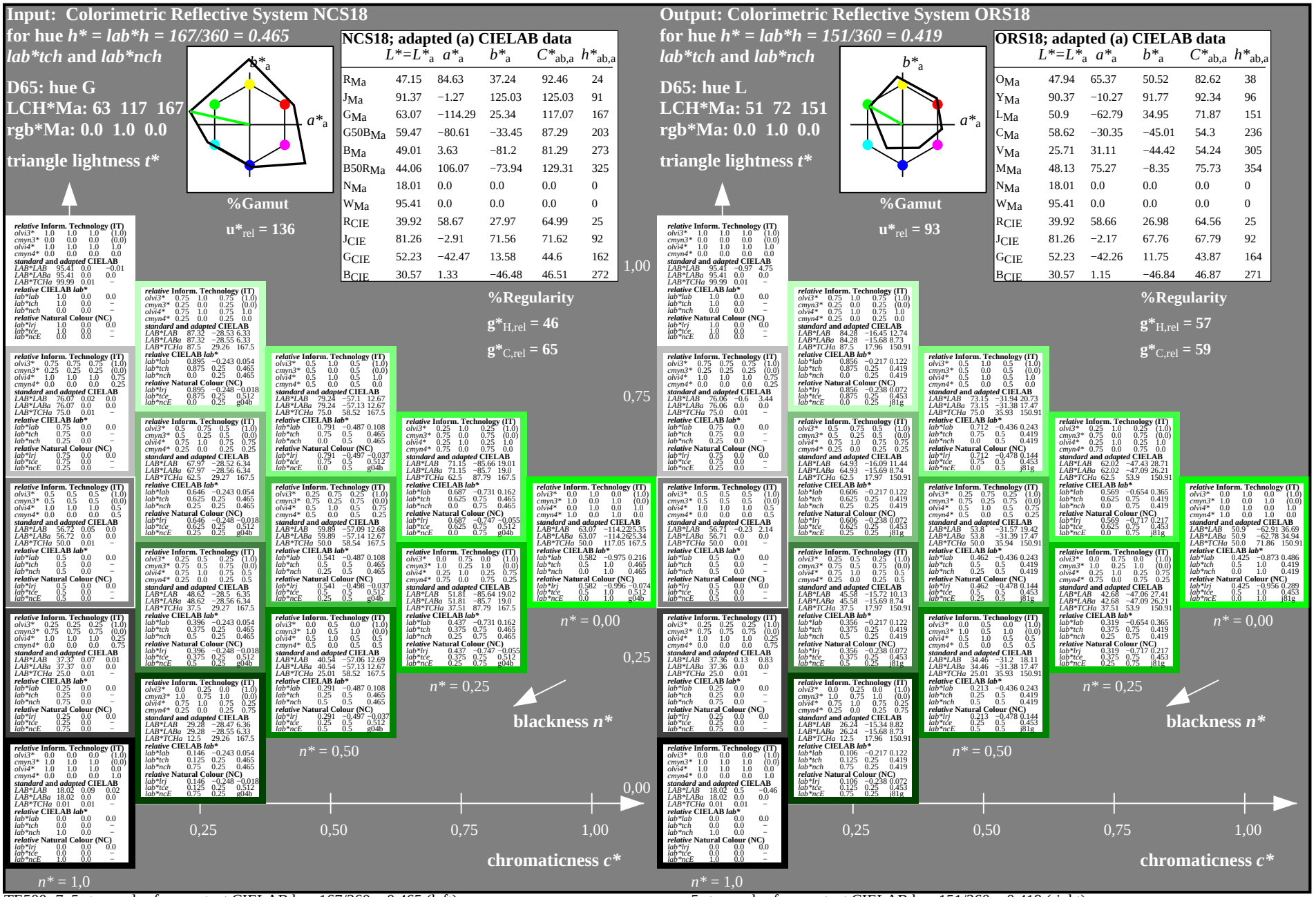

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)



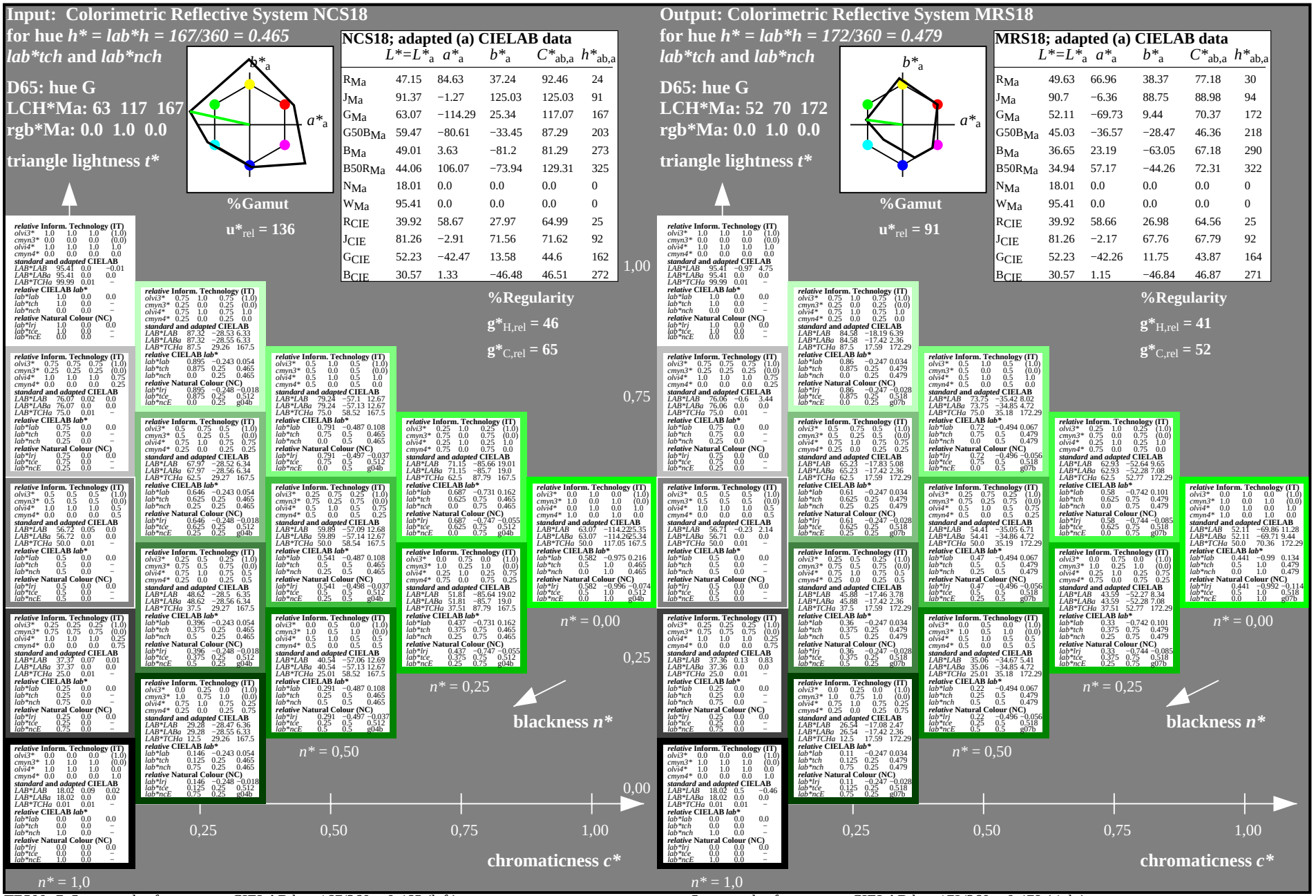

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)




TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)



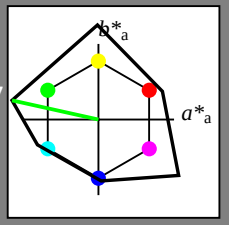

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 172/360 = 0.479 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

1,00

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

0,75

0,25

0,00

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

**blackness *n****

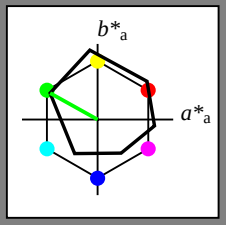
0,25 0,50 0,75 1,00

**chromaticness *c****

**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 151/360 = 0.419**
***lab*tch* and *lab*nch***

**D65: hue L**
**LCH*Ma: 51 72 151**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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

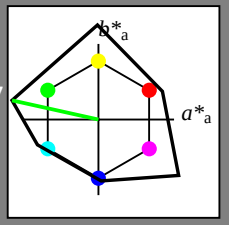
TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

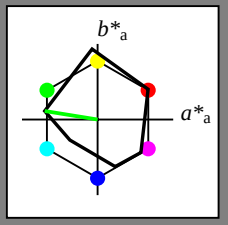
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 171/360 = 0.475**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 71 171**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

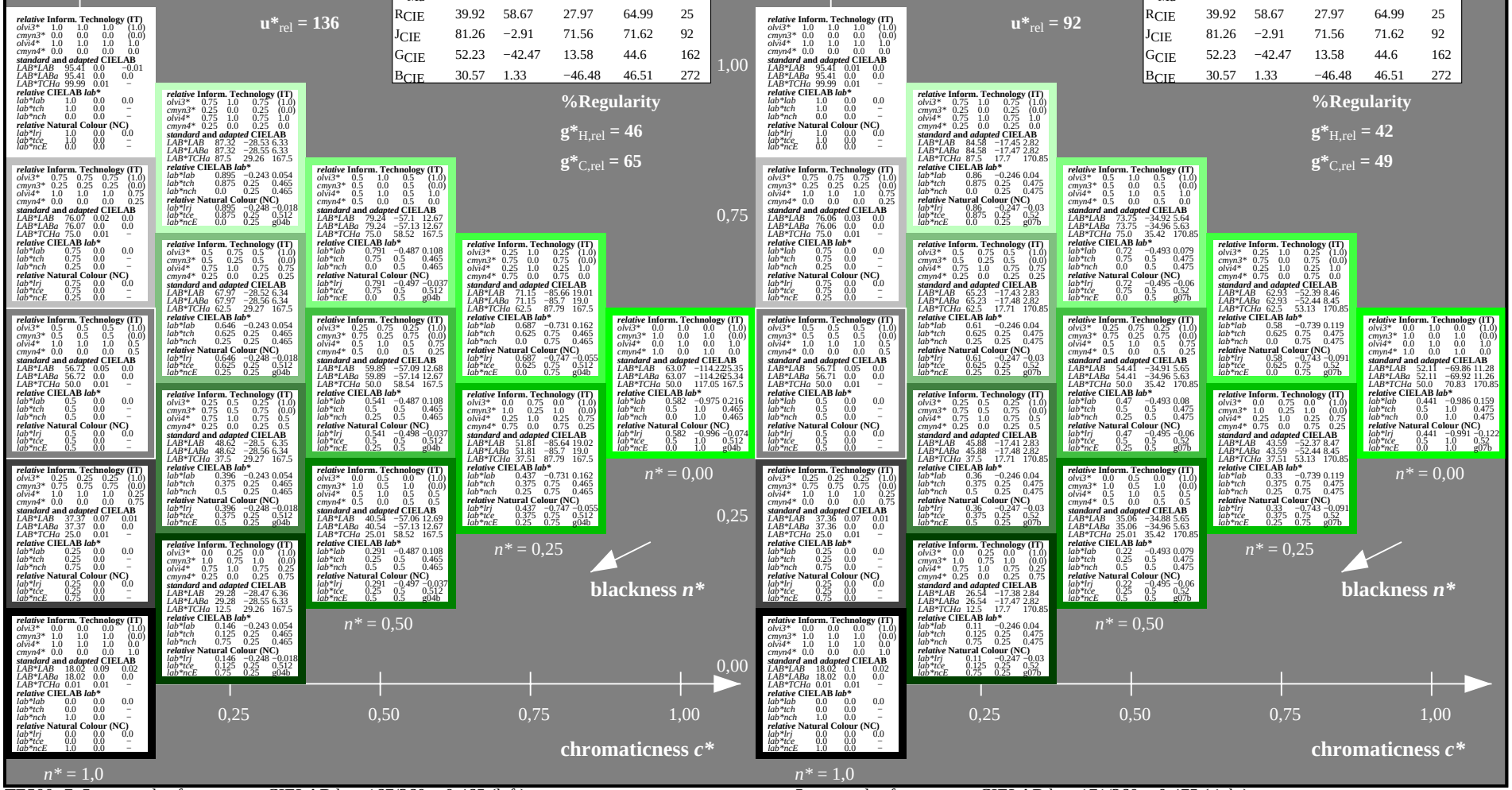
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



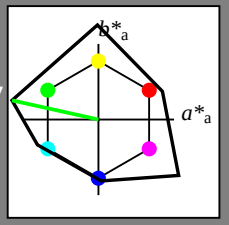

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 171/360 = 0.475 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

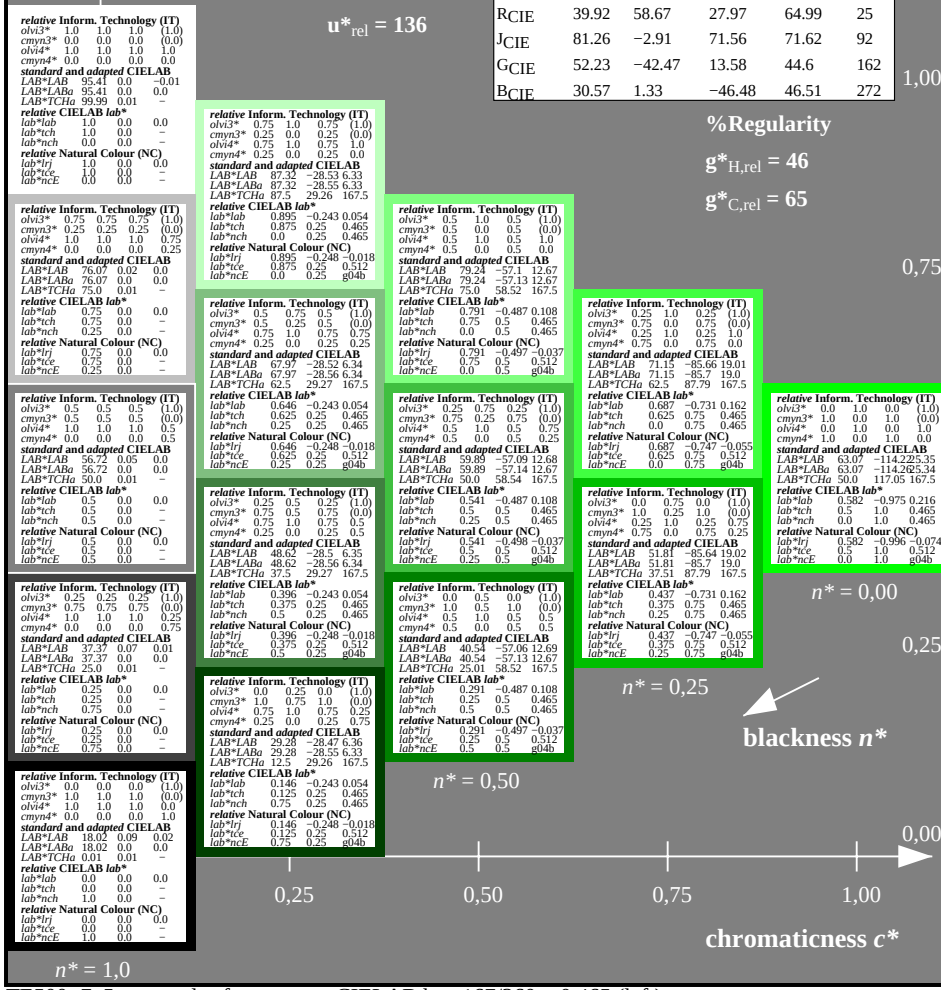
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

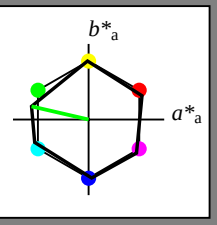
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 57 77 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

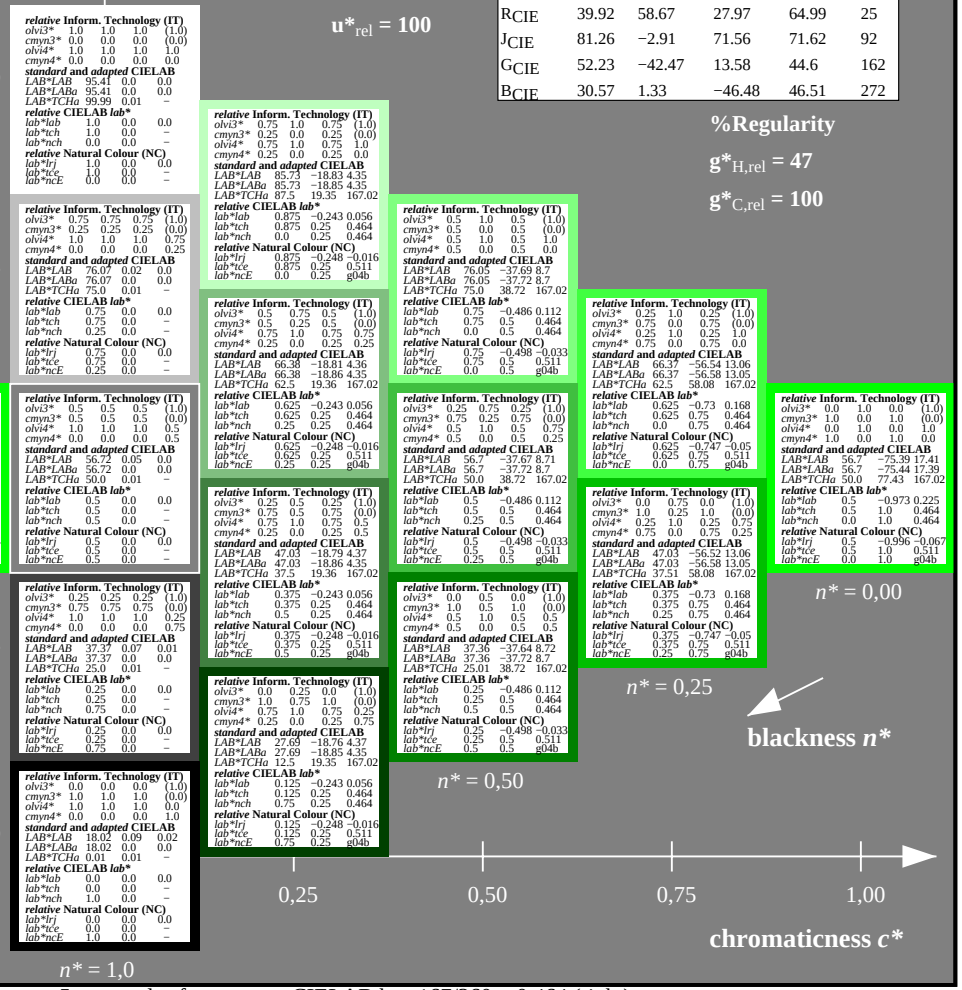
**NRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

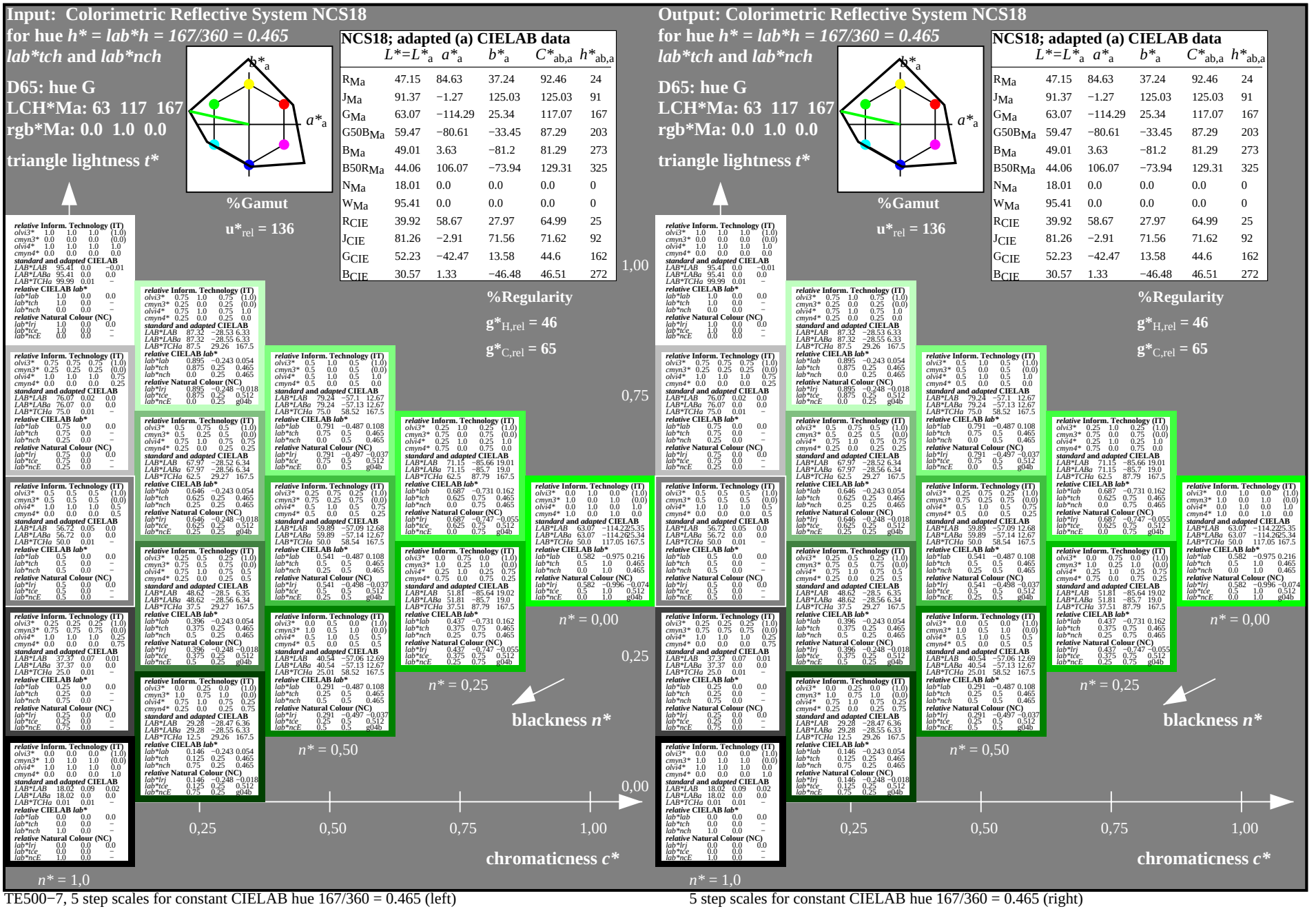
**g*$_{H,rel}$ = 47**

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




TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)



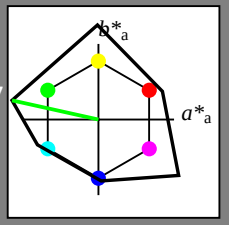

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

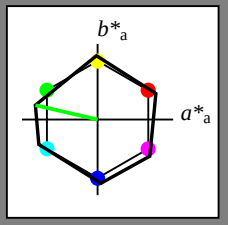
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 84 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

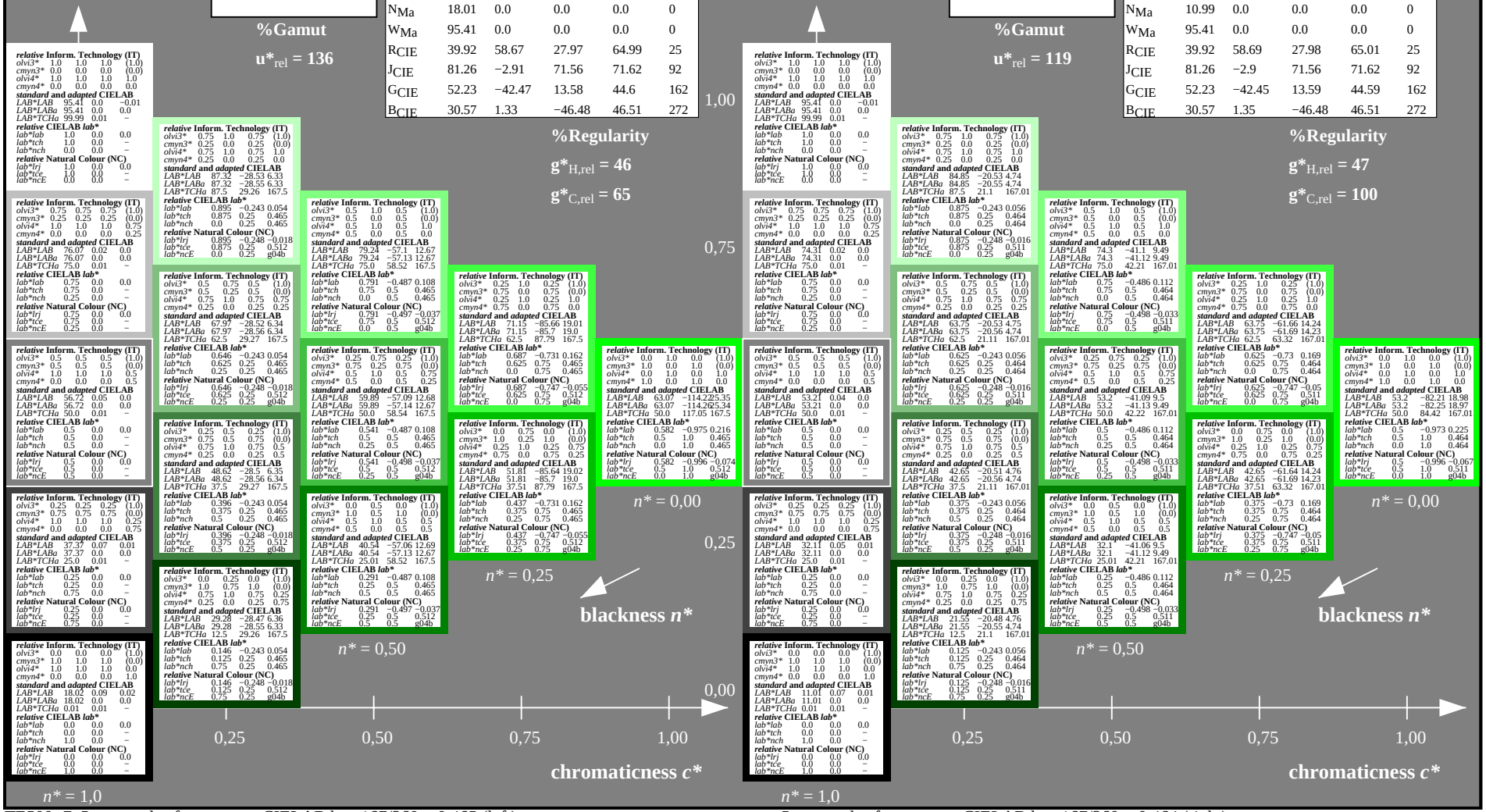
**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

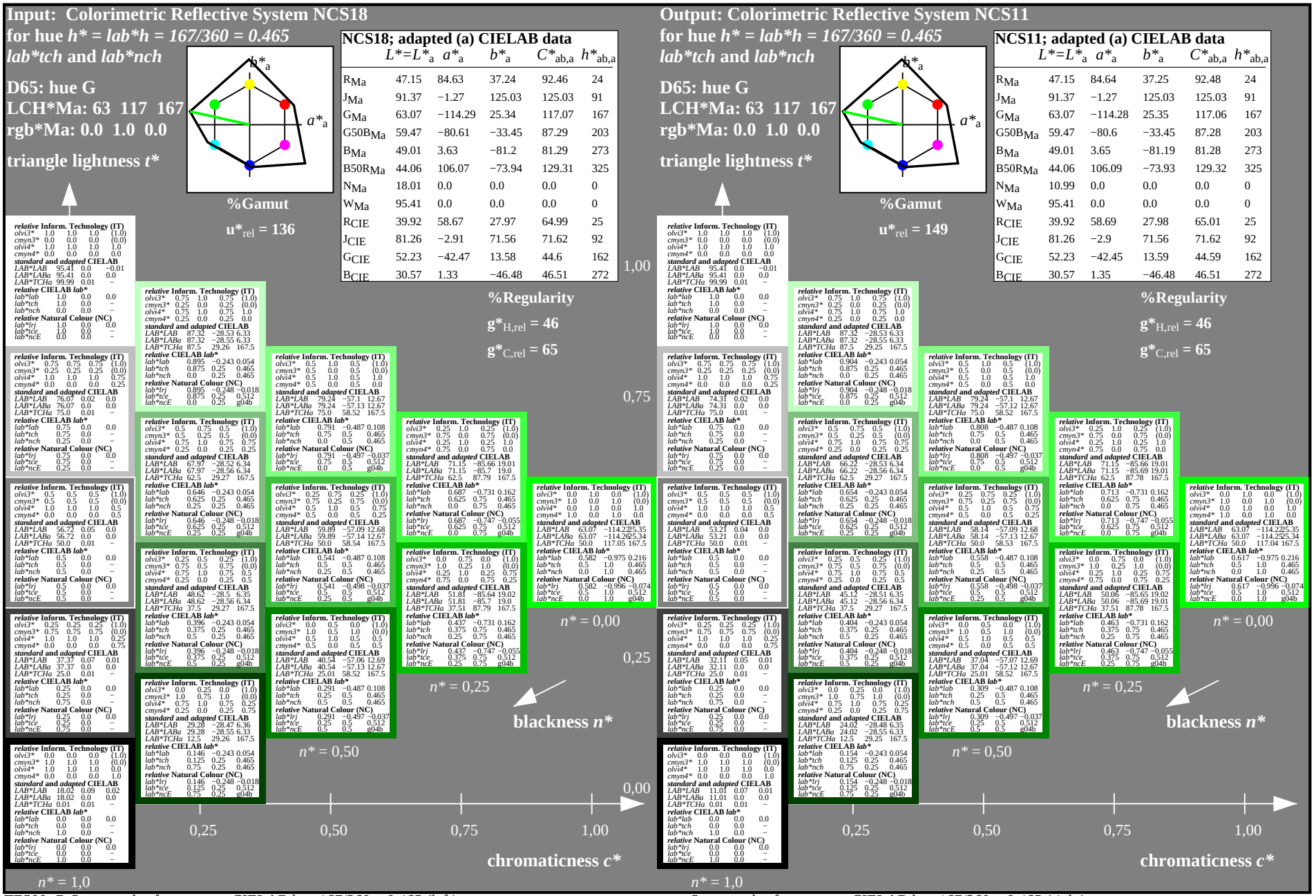
**g*$_{H,rel}$ = 47**

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



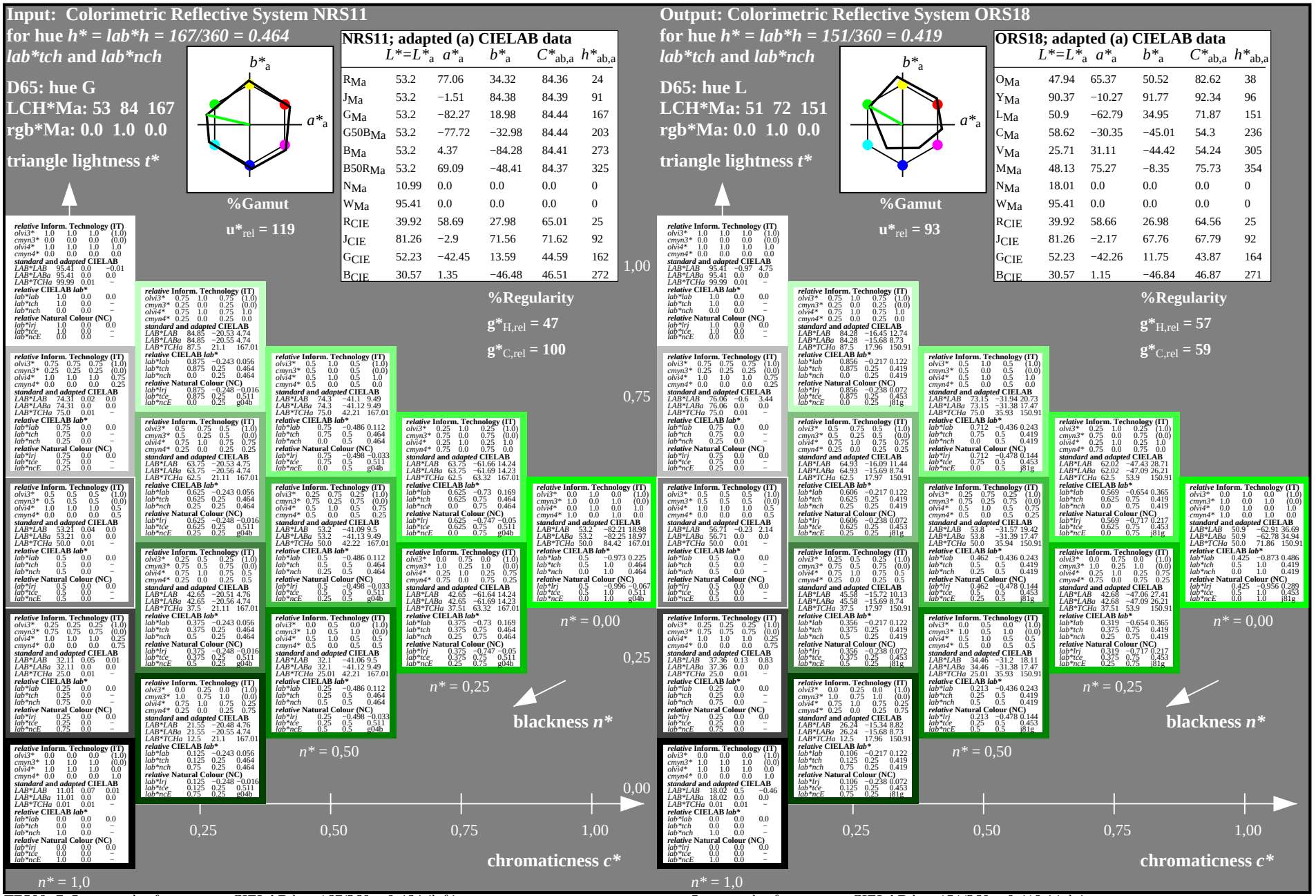

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)




TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)



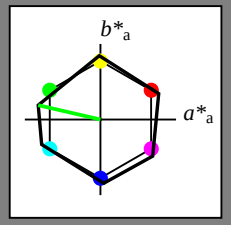

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 84 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

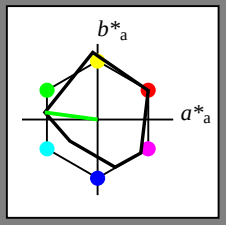
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 172/360 = 0.479**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 70 172**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

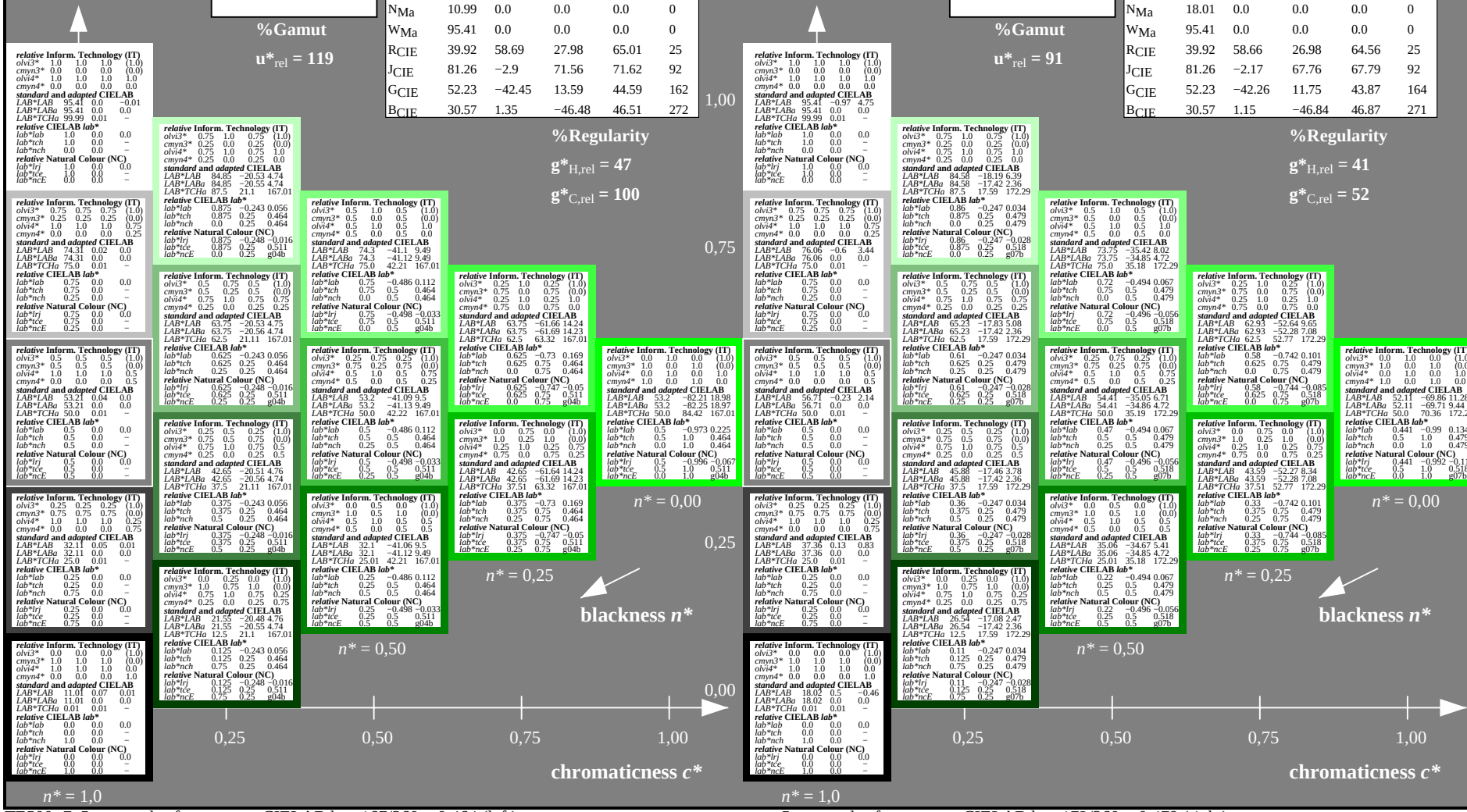
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**




TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

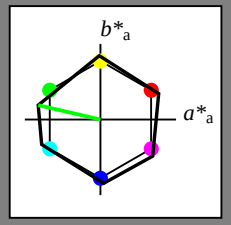
5 step scales for constant CIELAB hue 172/360 = 0.479 (right)

## Input: Colorimetric Reflective System NRS11

for hue *h* = lab*h = 167/360 = 0.464*
*lab*tch* and *lab*nch*

D65: hue G
LCH*Ma: 53 84 167
rgb*Ma: 0.0 1.0 0.0

triangle lightness *t**




%Gamut

u*rel = 119

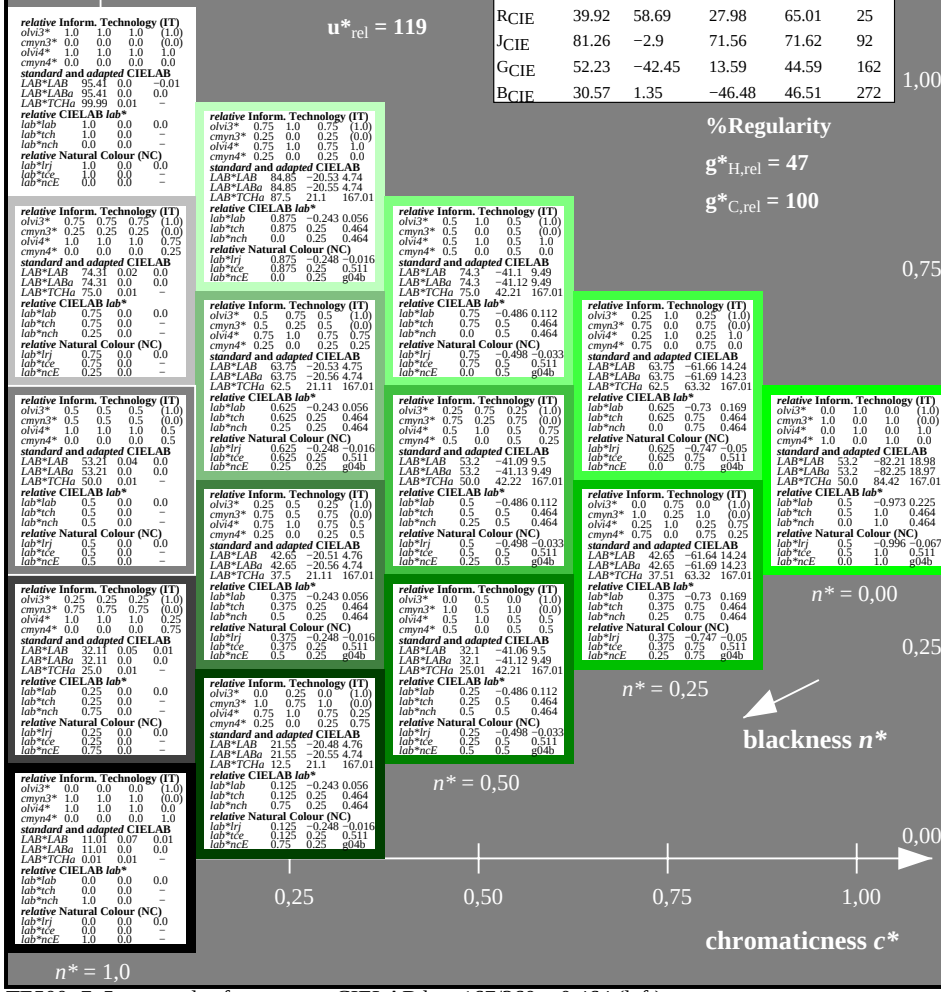
**NRS11; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

%Regularity

g*H,rel = 47

g*C,rel = 100

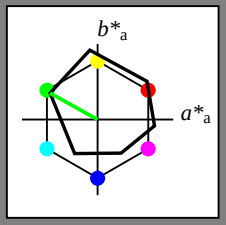



## Output: Colorimetric Reflective System TRS18

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

D65: hue L
LCH*Ma: 51 72 151
rgb*Ma: 0.0 1.0 0.0

triangle lightness *t**




%Gamut

u*rel = 93

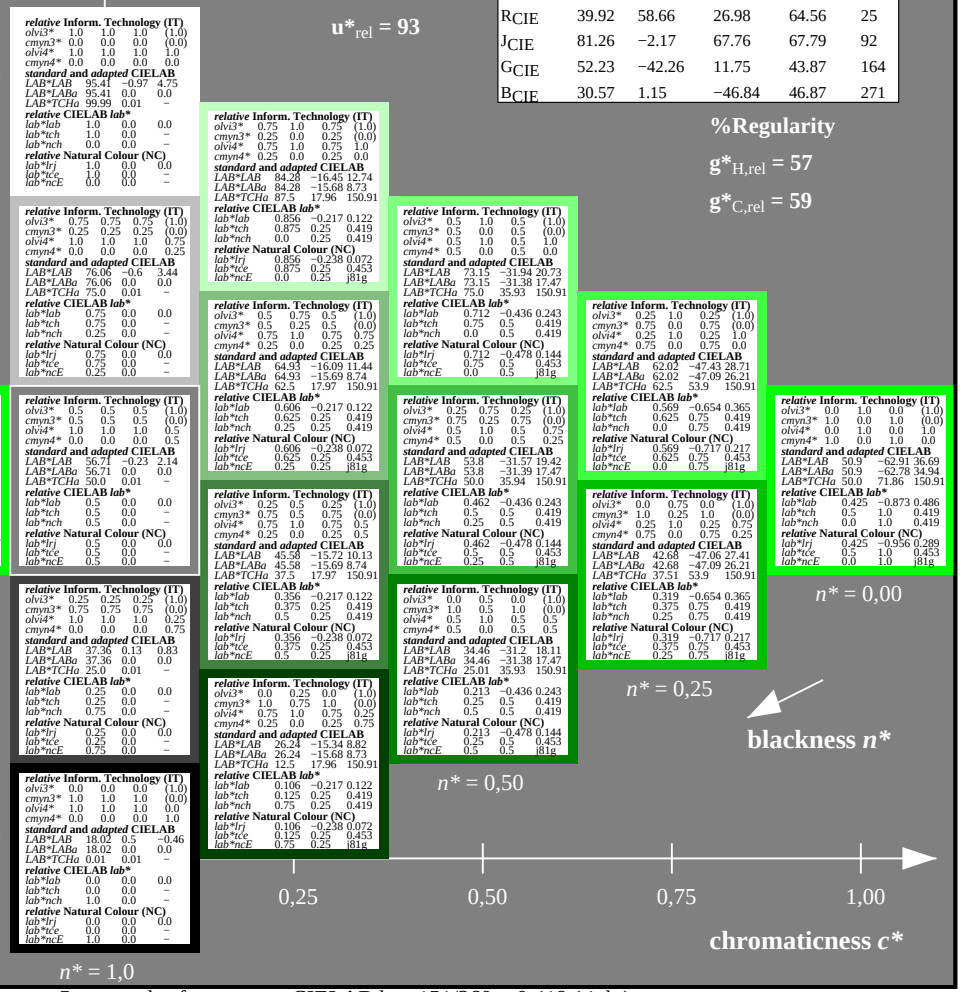
**TRS18; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

%Regularity

g*H,rel = 57

g*C,rel = 59



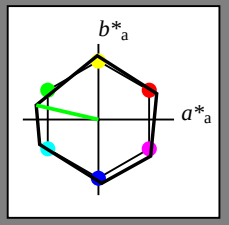

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 84 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

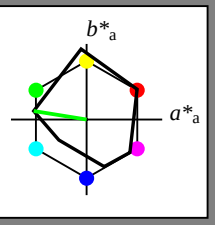
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 171/360 = 0.475**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 71 171**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

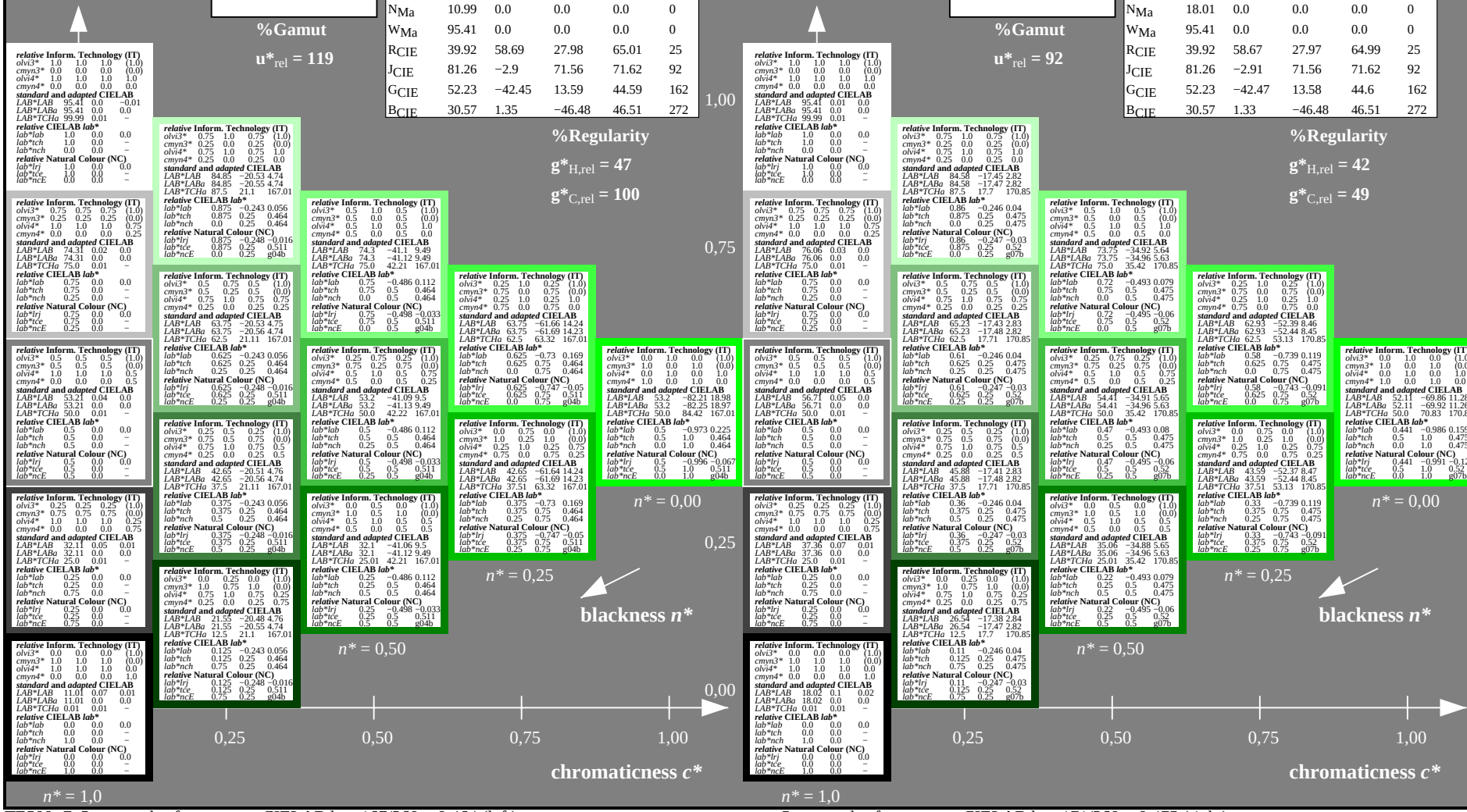
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

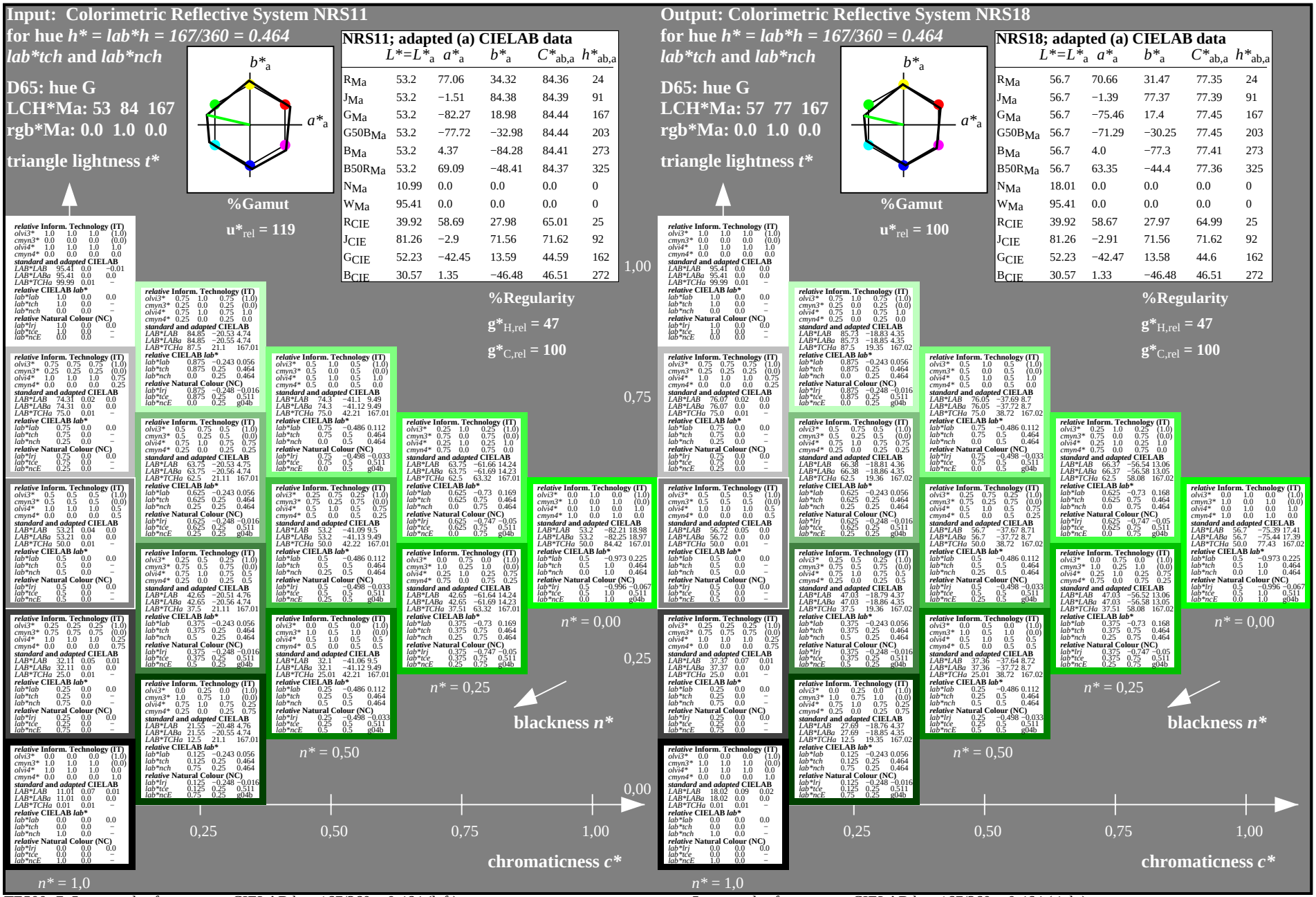
**g*$_{H,rel}$ = 42**

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




TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 171/360 = 0.475 (right)



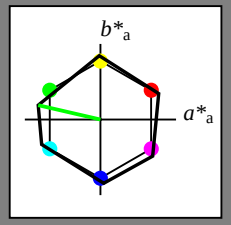

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 84 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

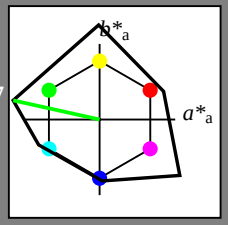
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

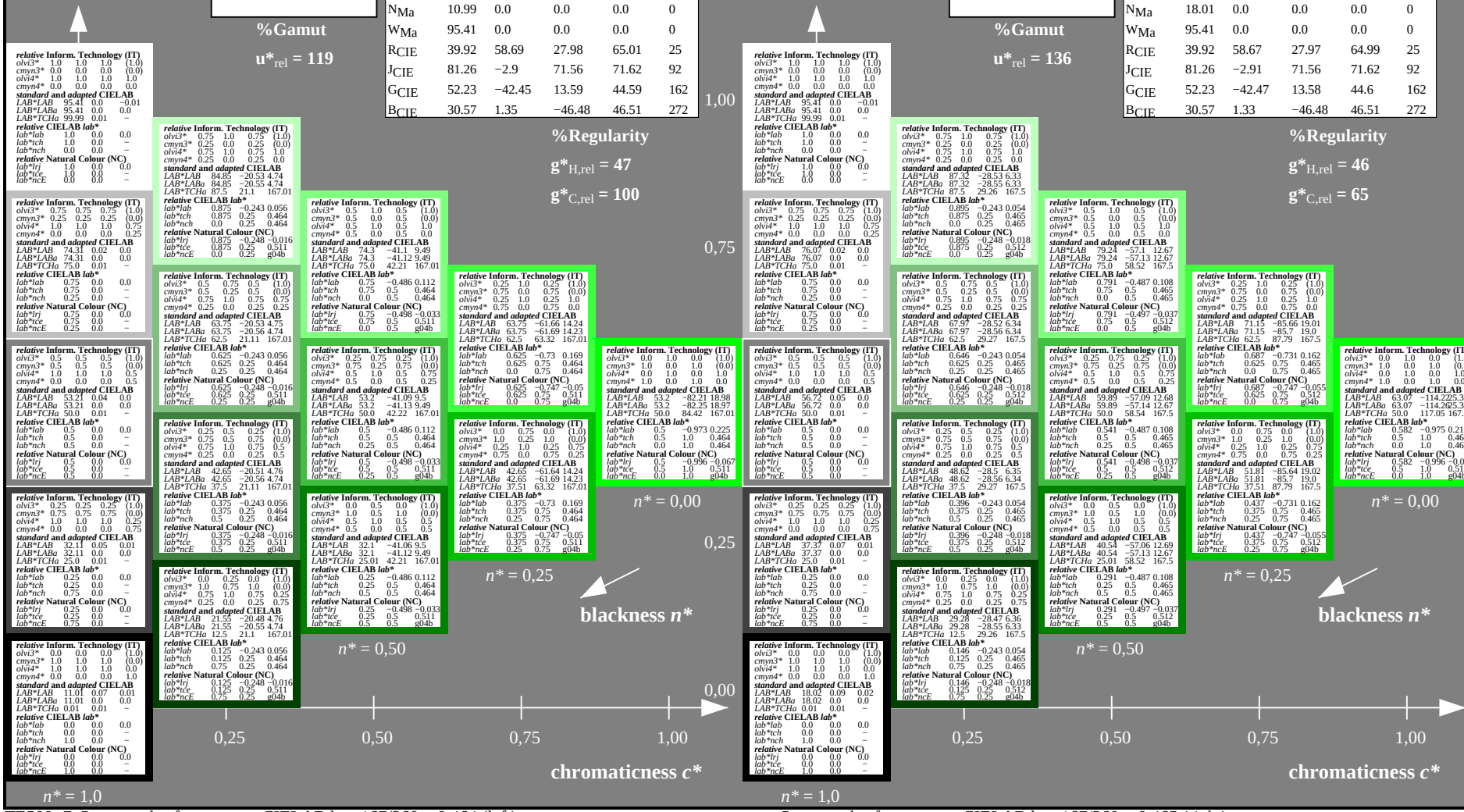
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



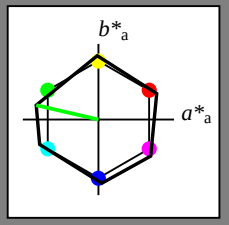

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 84 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

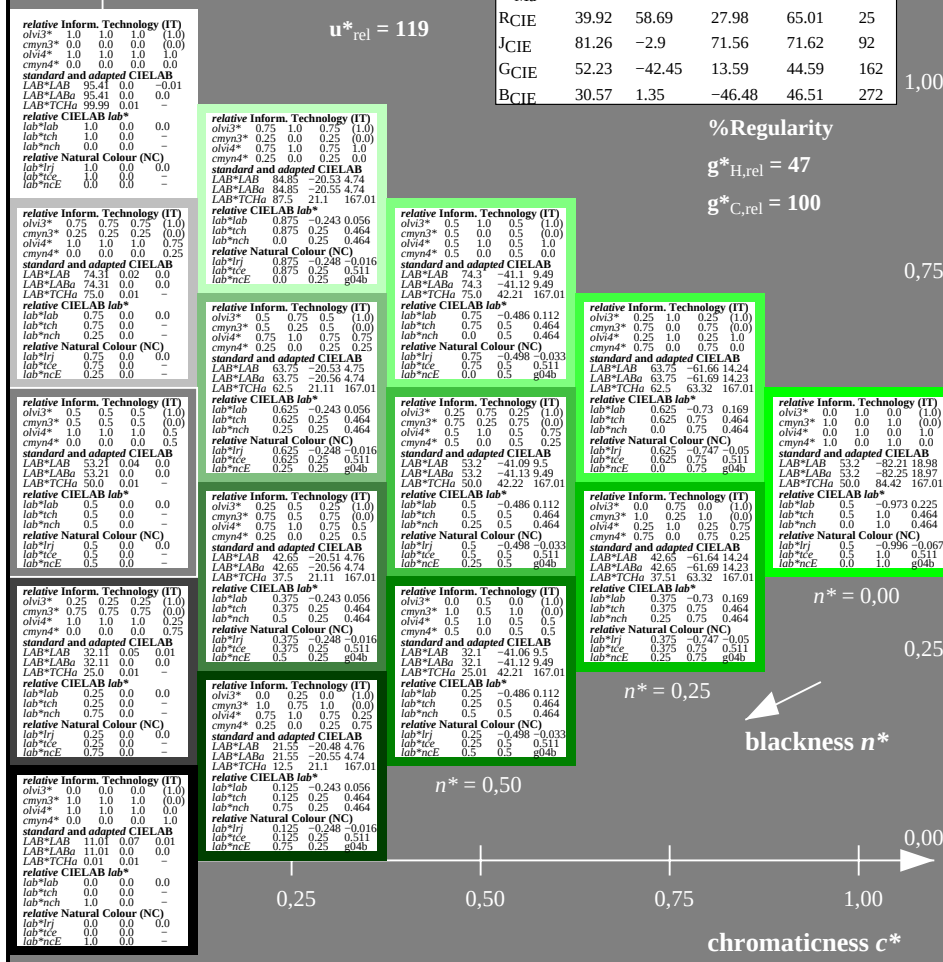
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

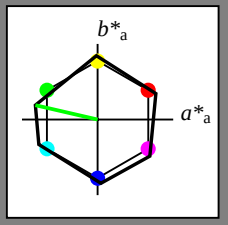
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 84 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

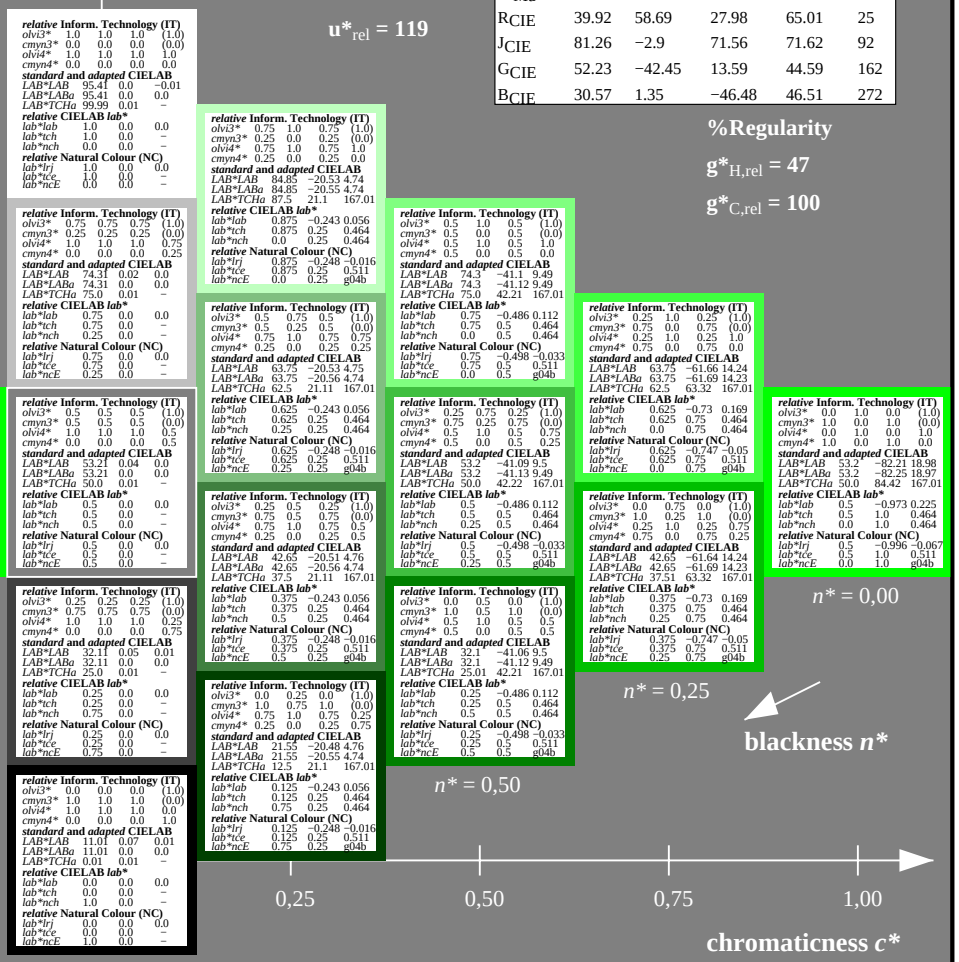
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



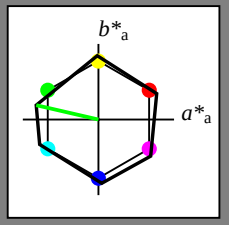

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 84 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

**NRS11; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

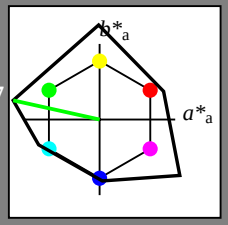
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

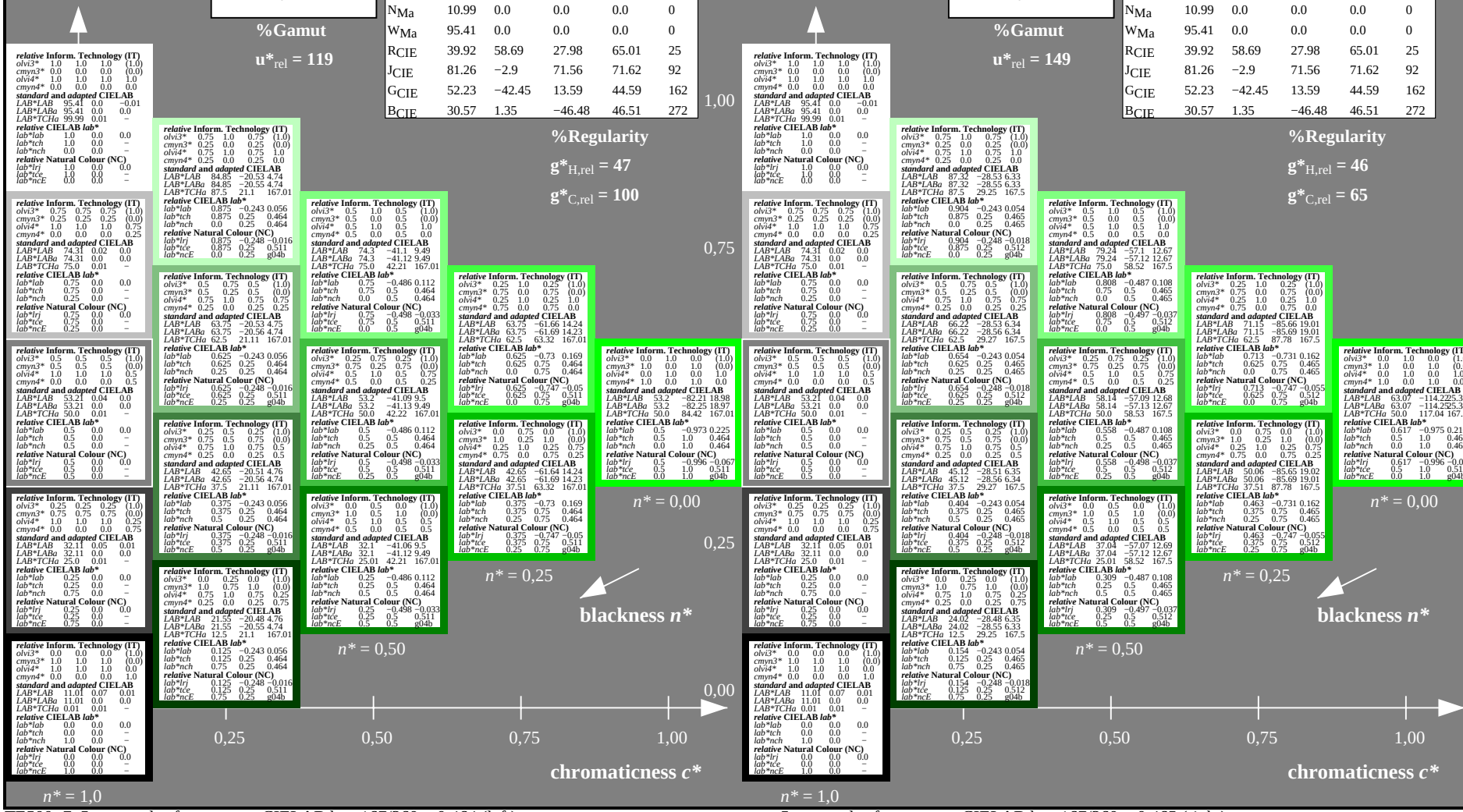
**NCS11; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



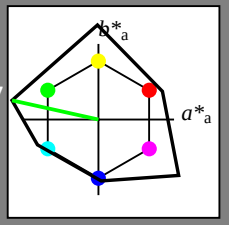

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.464 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

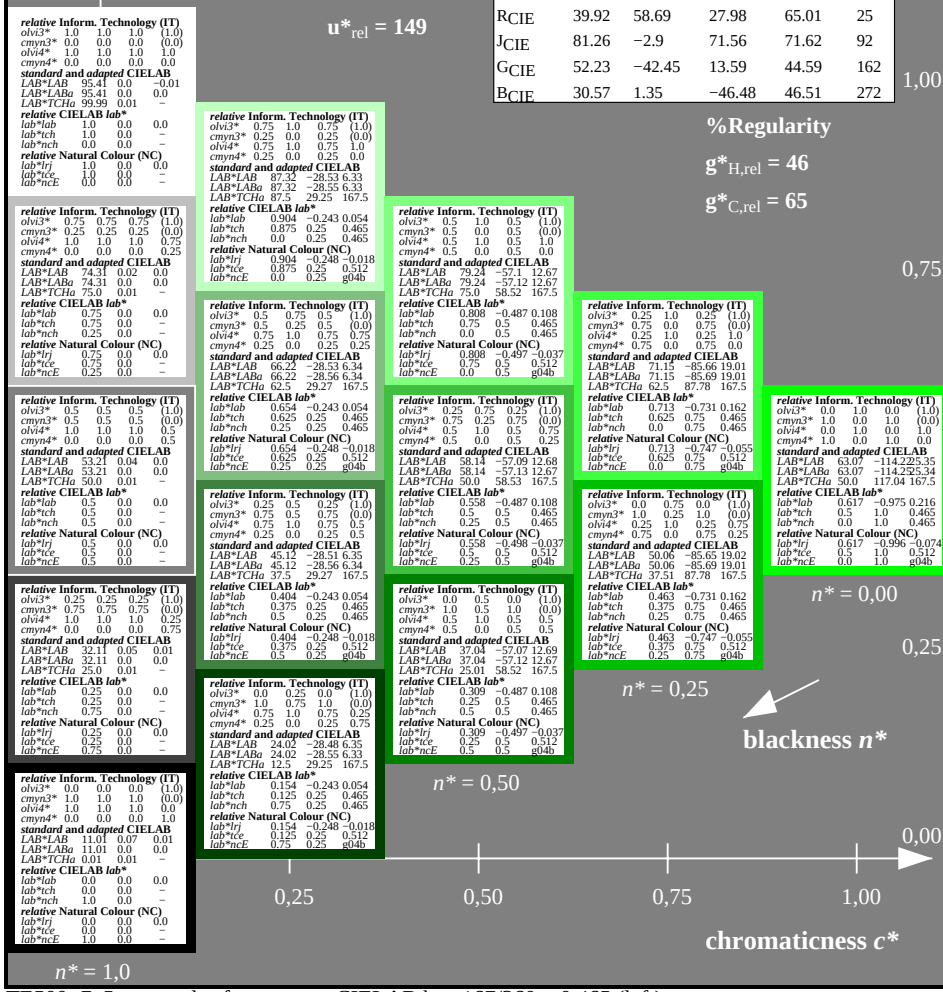
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

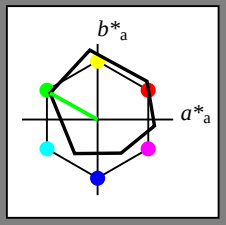
**g*$_{C,rel}$ = 65**




**Output: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

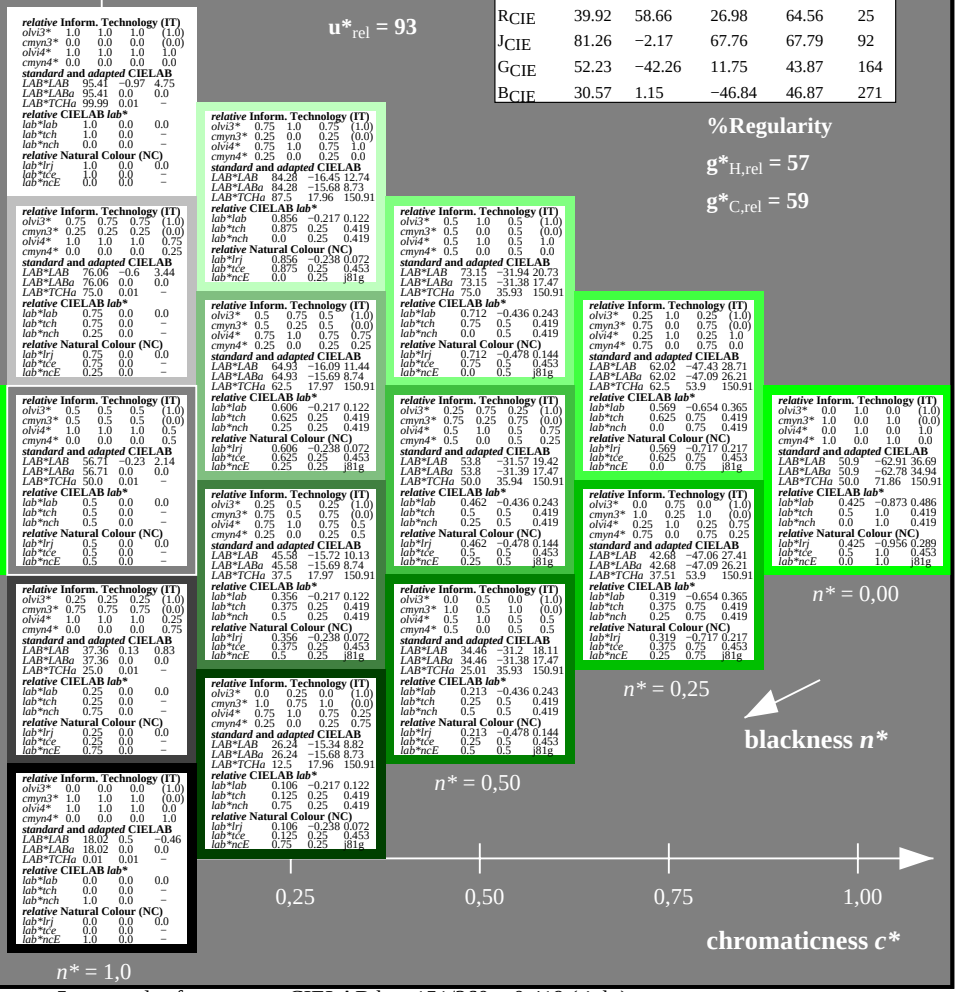
**ORS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



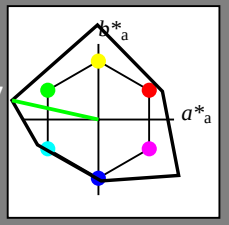

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

**NCS11; adapted (a) CIELAB data**

| | *L*=L** | *a** | *b** | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

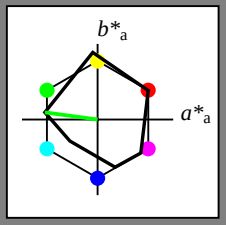
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 172/360 = 0.479**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 70 172**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

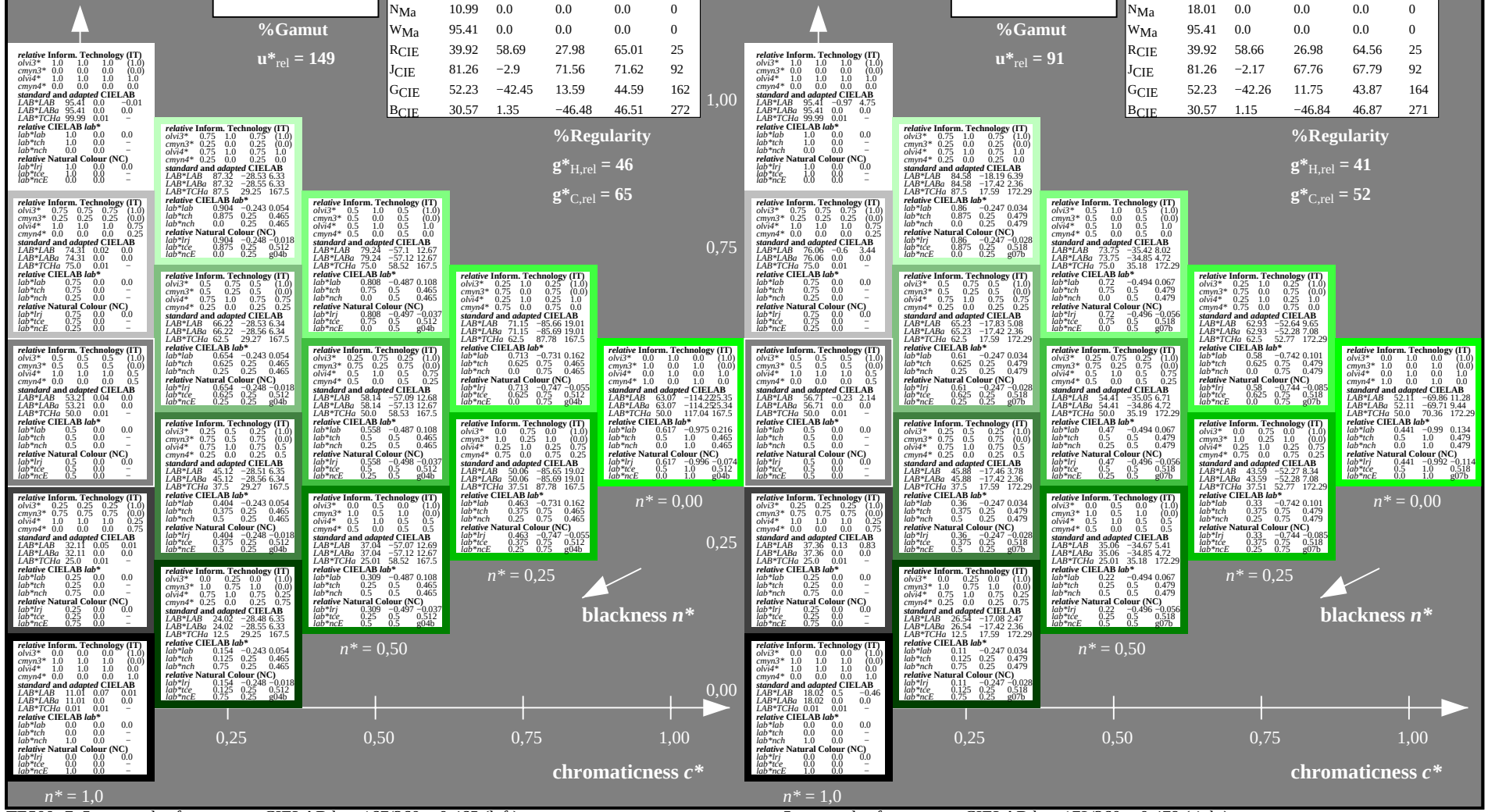
**MRS18; adapted (a) CIELAB data**

| | *L*=L** | *a** | *b** | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

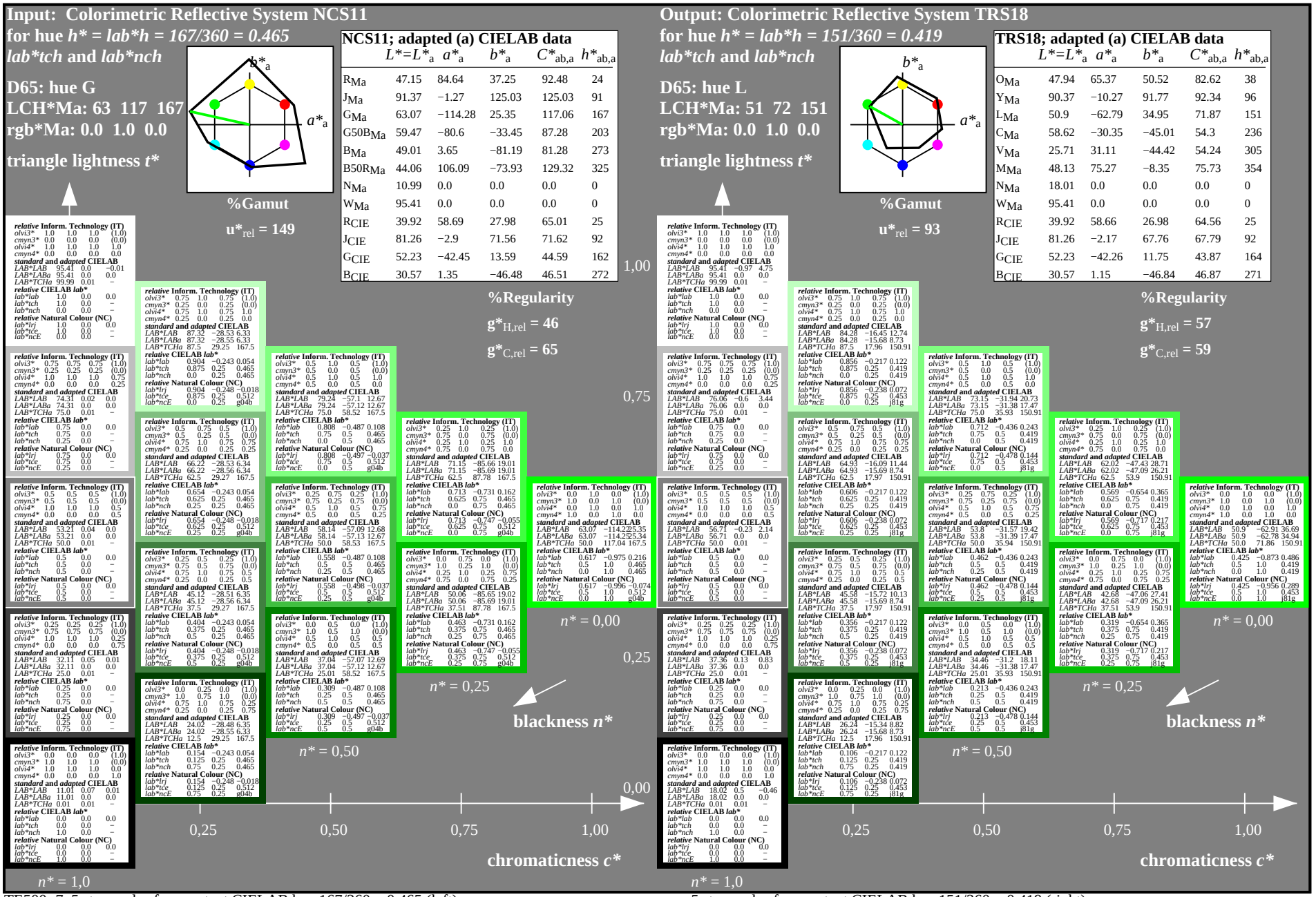
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**




TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 172/360 = 0.479 (right)



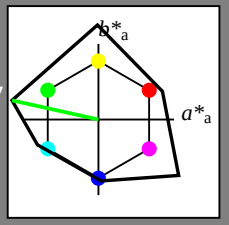

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

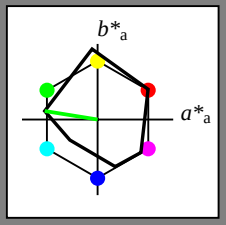
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 171/360 = 0.475**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 52 71 171**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

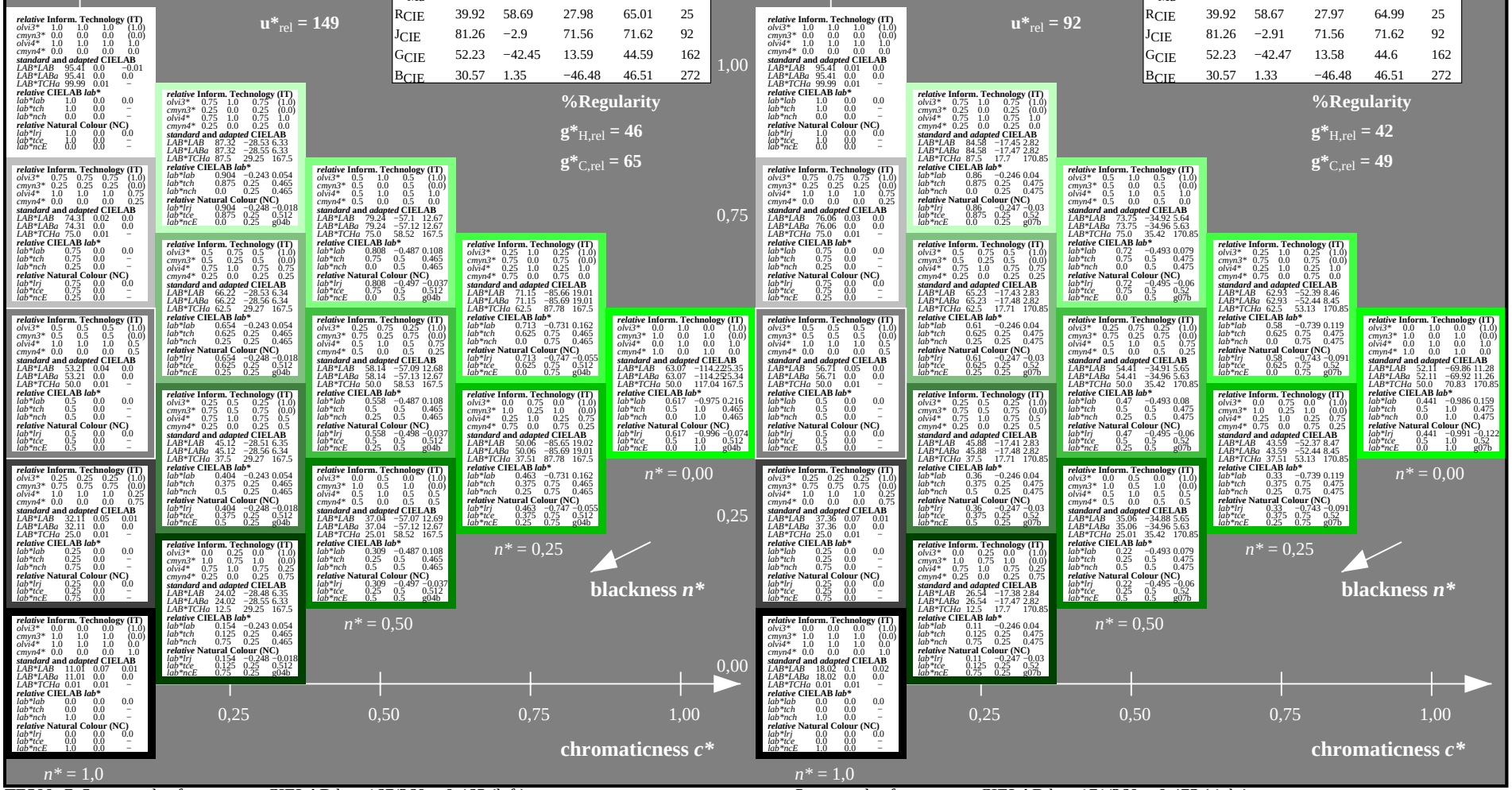
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



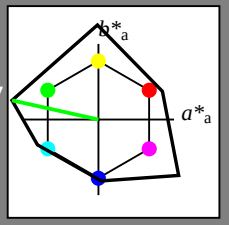

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 171/360 = 0.475 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

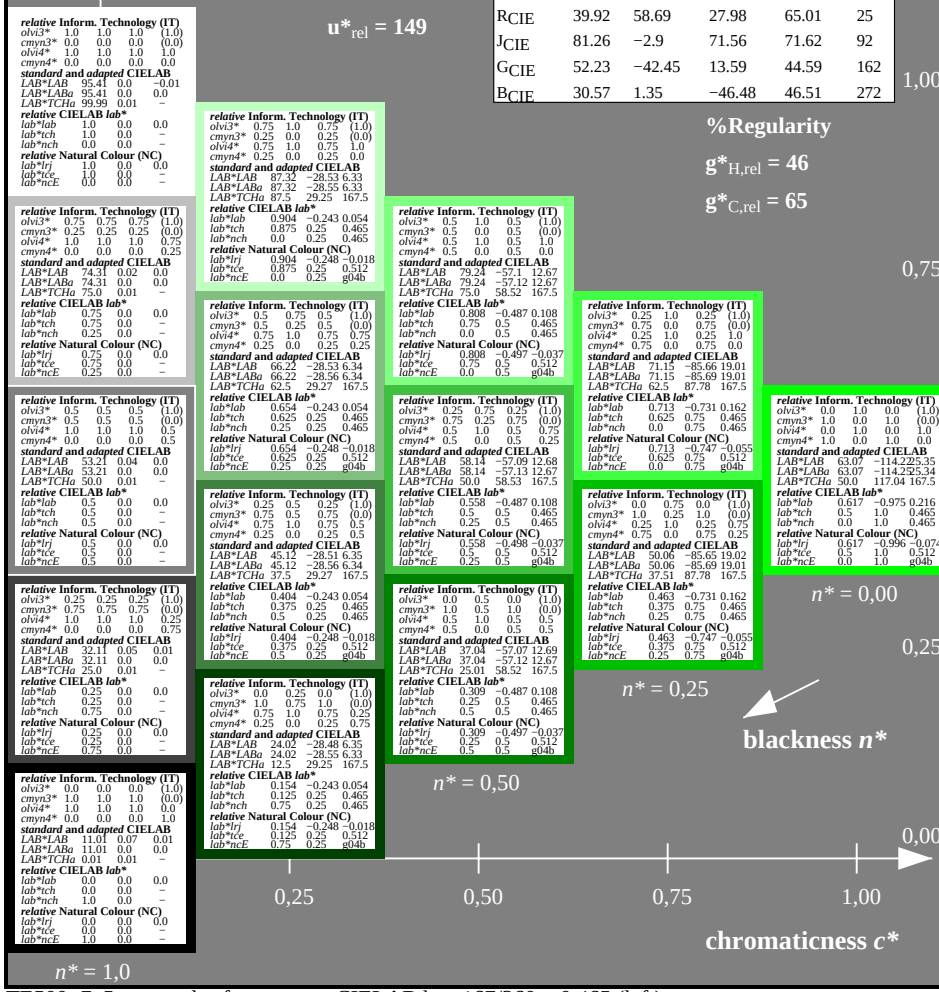
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

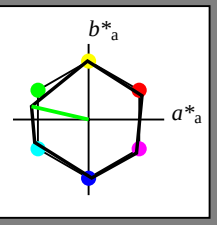
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 57 77 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

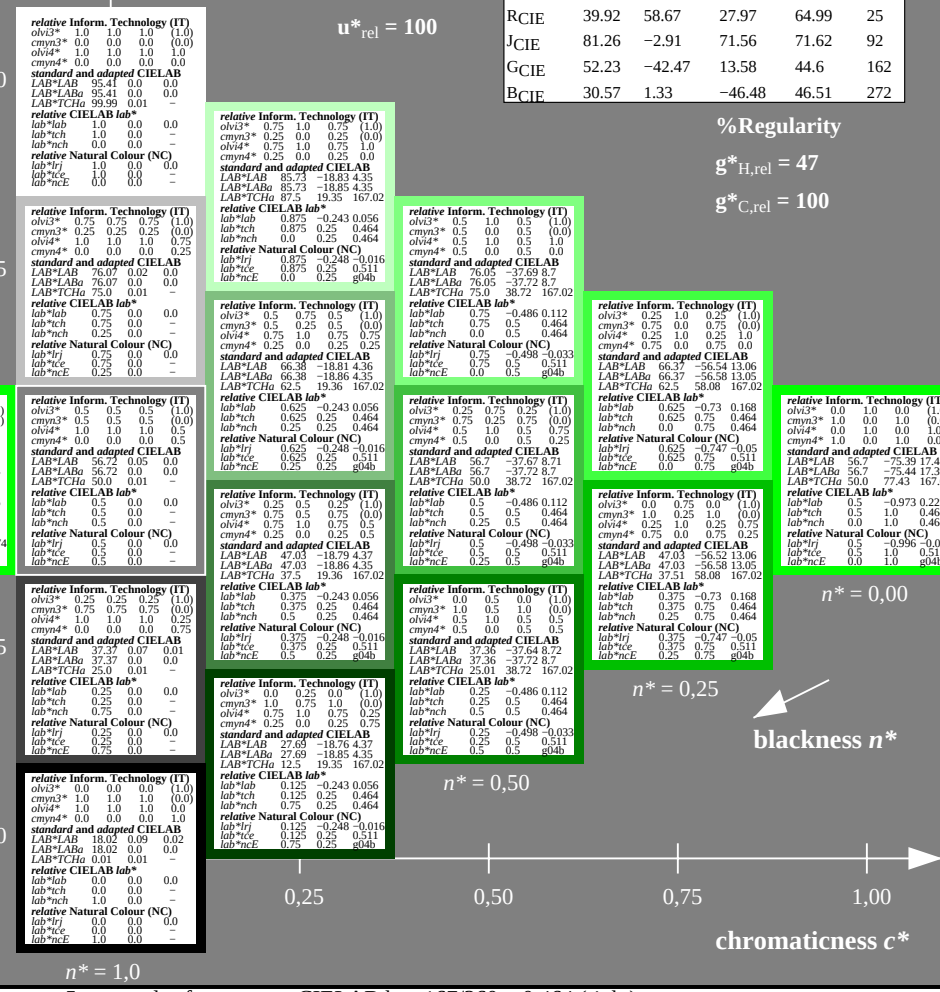
**NRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

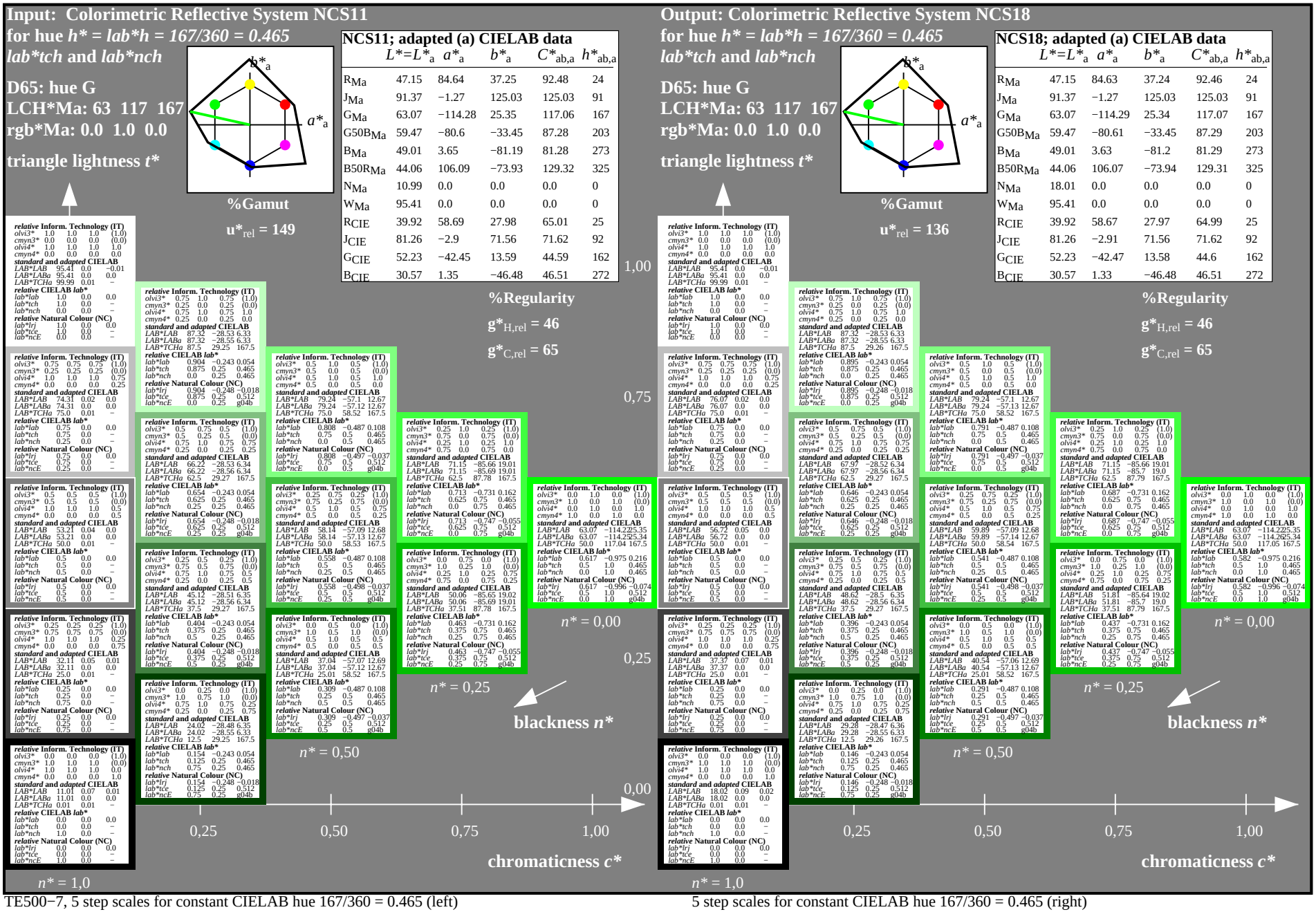
**g*$_{H,rel}$ = 47**

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




TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)




**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

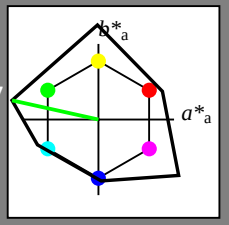
TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

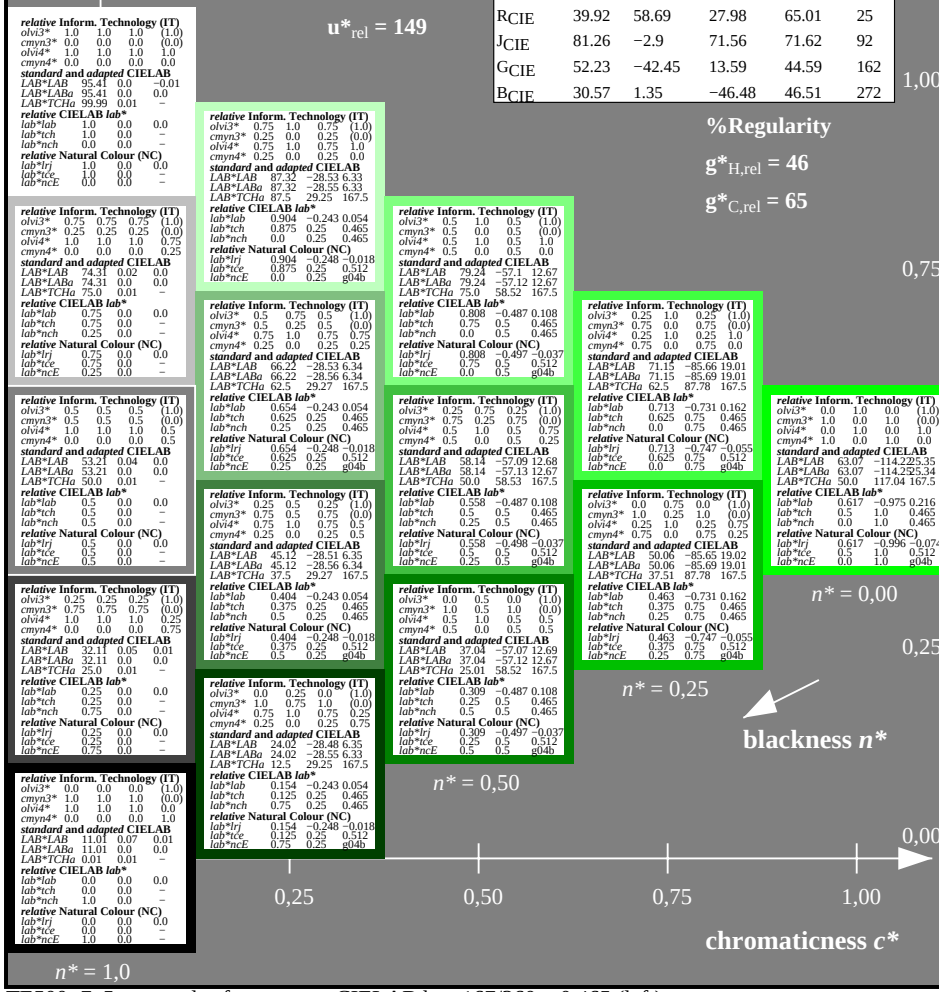
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

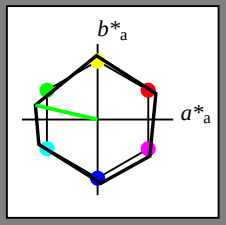
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 167/360 = 0.464**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 84 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

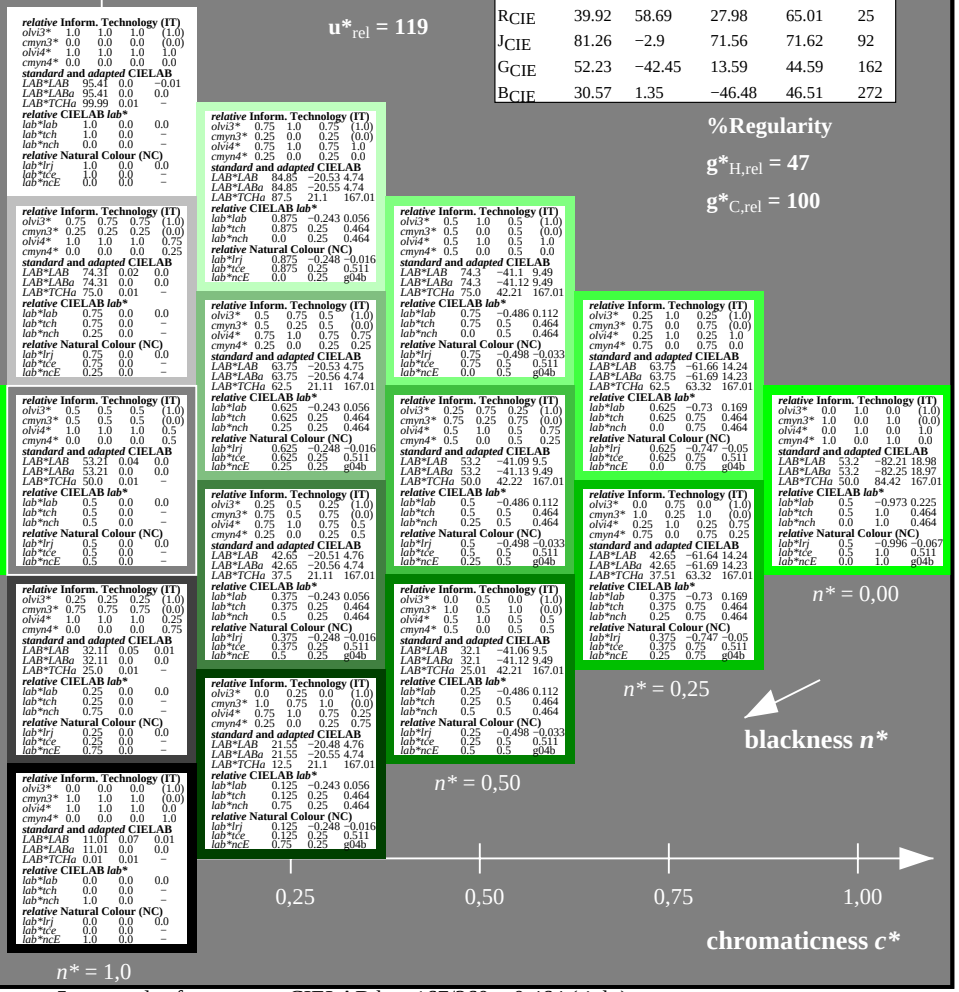
**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



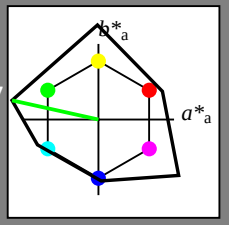

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 167/360 = 0.464 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

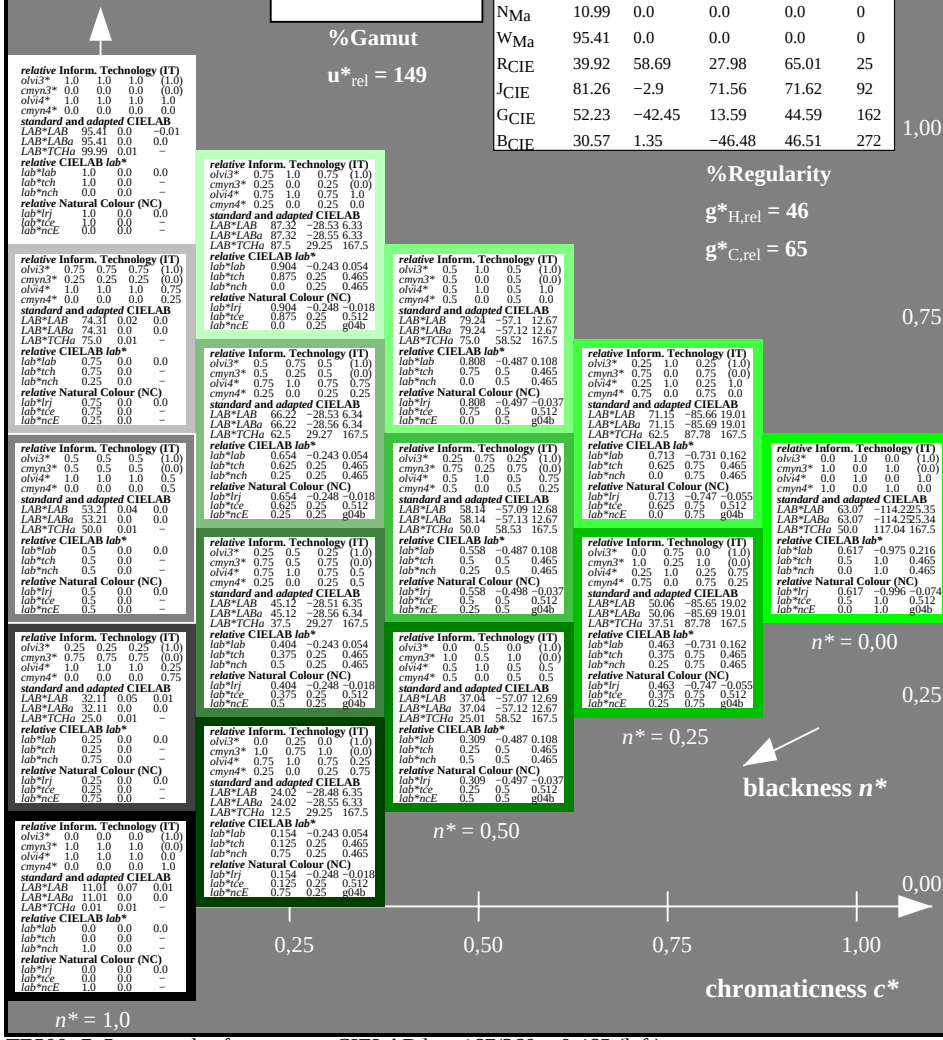
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

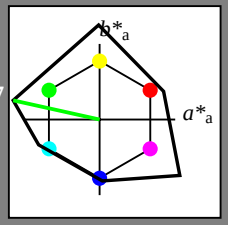
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 167/360 = 0.465**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 63 117 167**
**rgb*Ma: 0.0 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

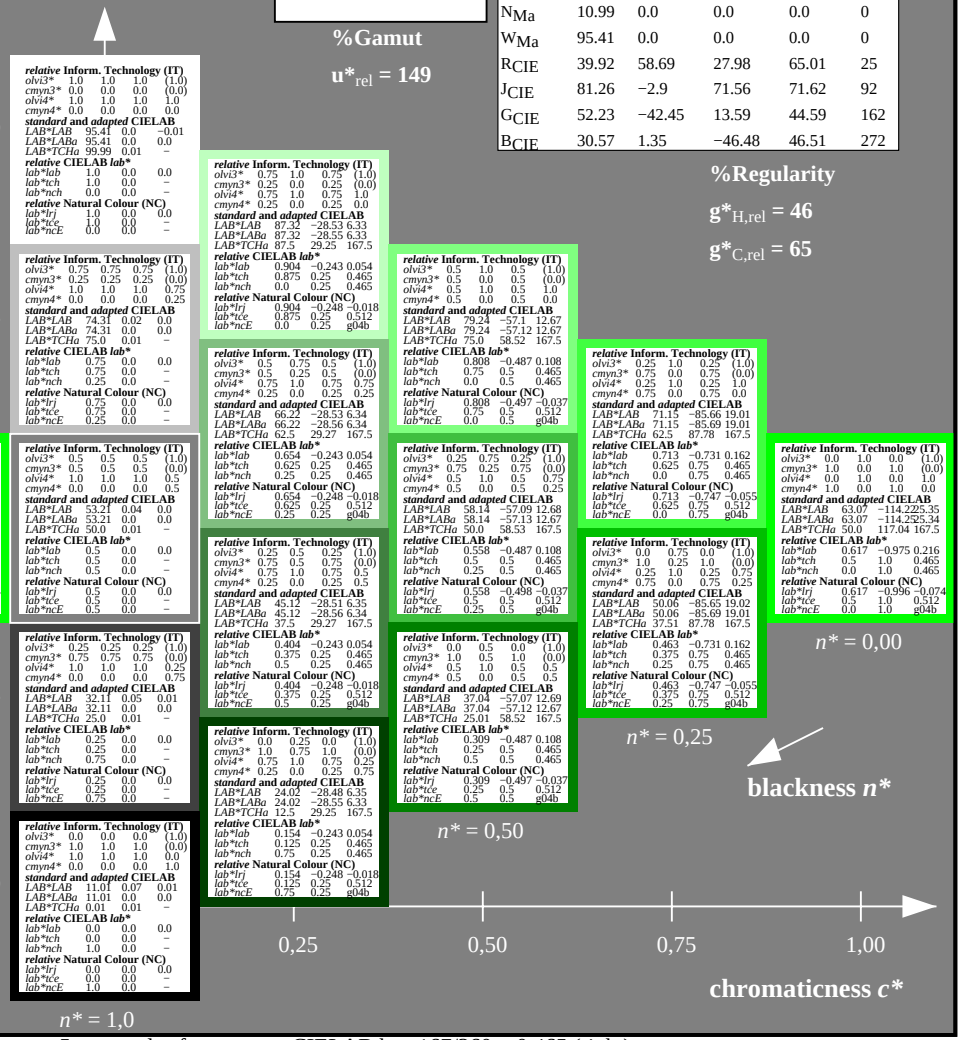
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



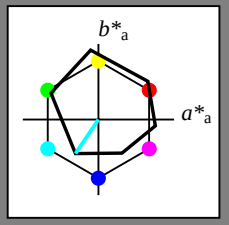

TE500−7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

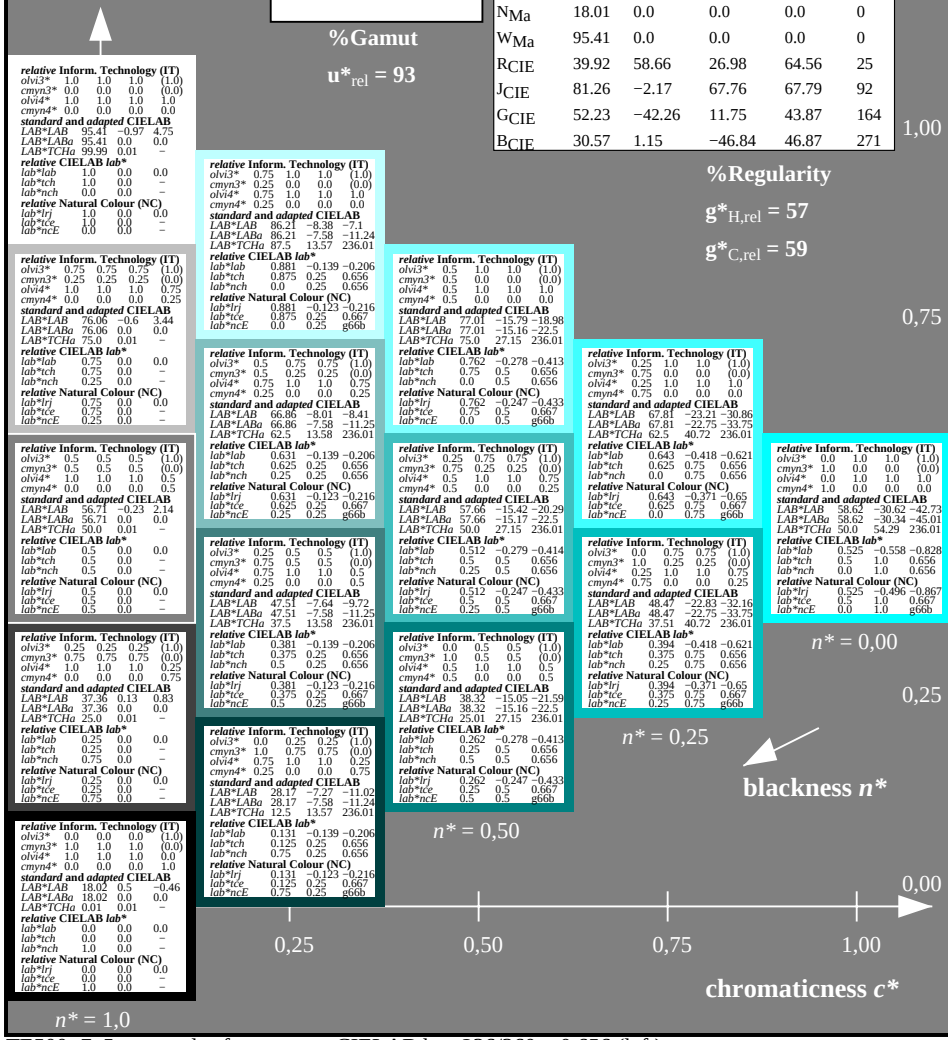
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

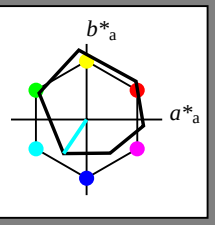
**g*$_{C,rel}$ = 59**




**Output: Colorimetric 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**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

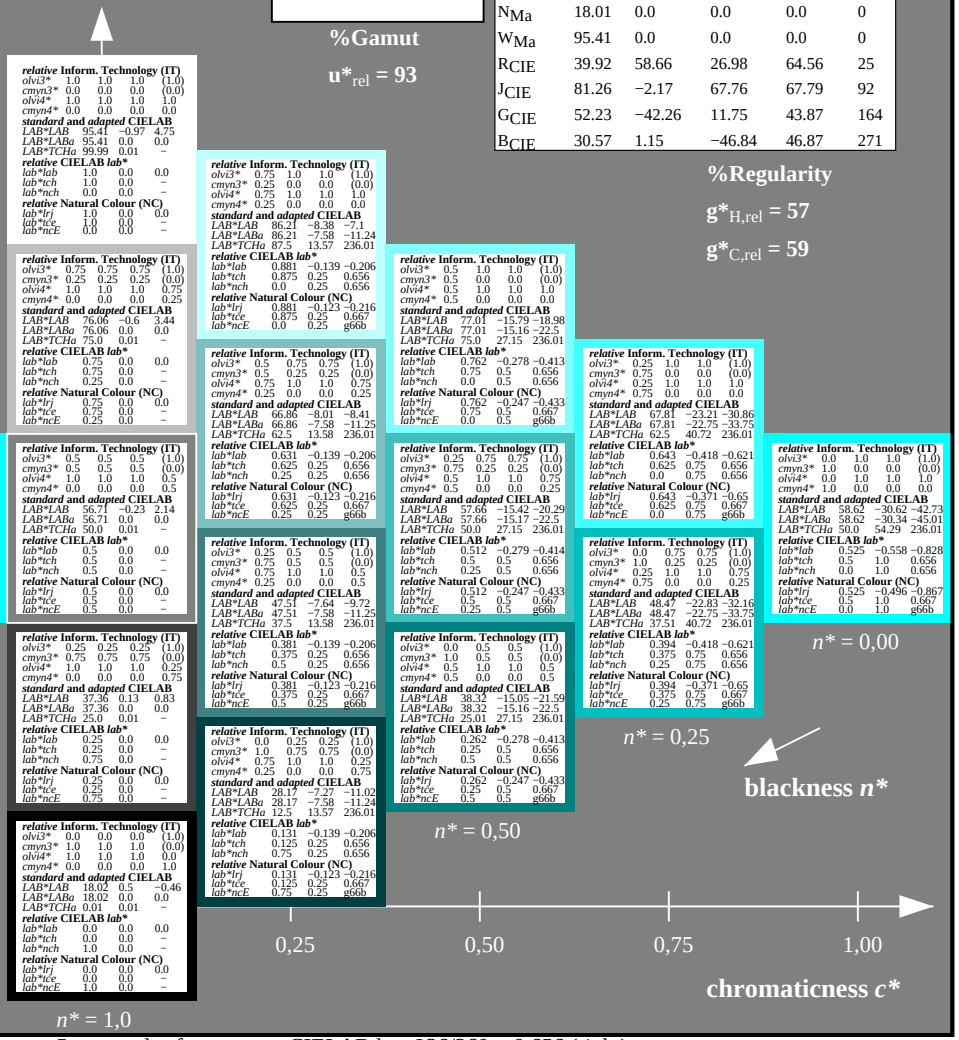
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

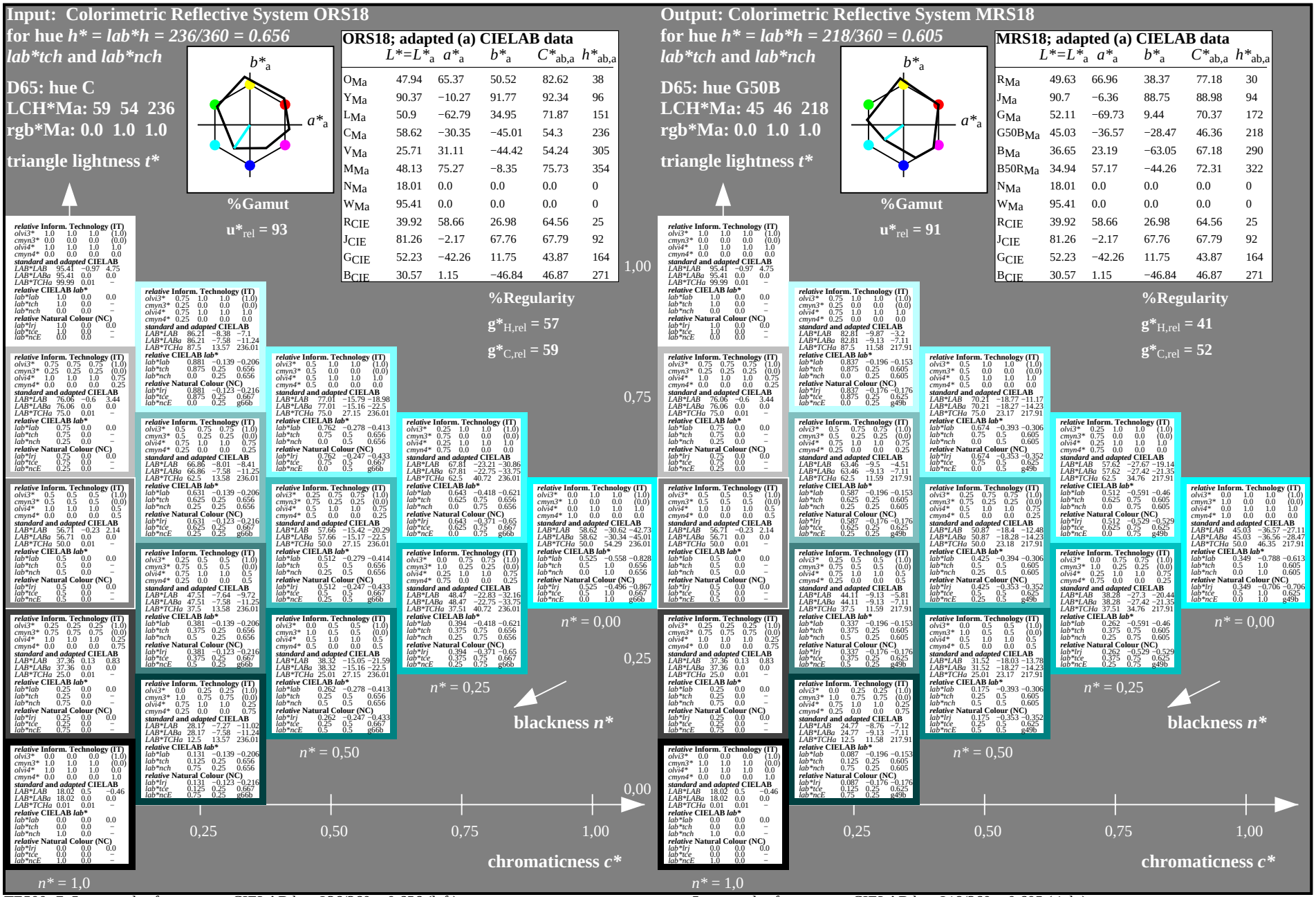
**g*$_{H,rel}$ = 57**

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




TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)



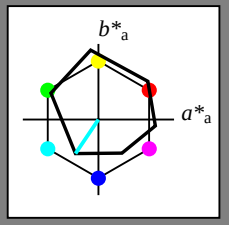

TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 218/360 = 0.605 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

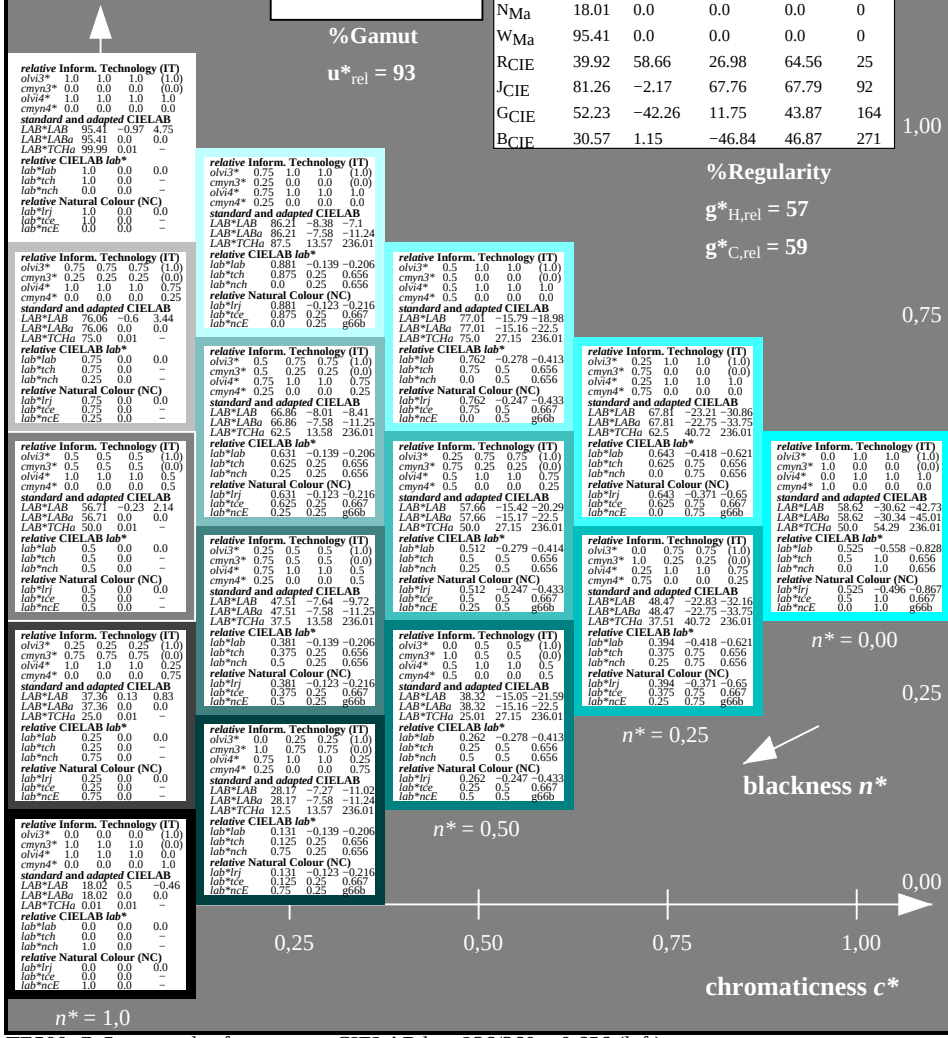
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

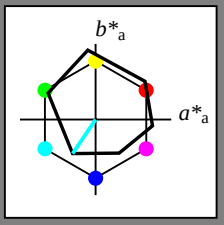
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 236/360 = 0.656**
***lab*tch* and *lab*nch***

**D65: hue C**
**LCH*Ma: 59 54 236**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

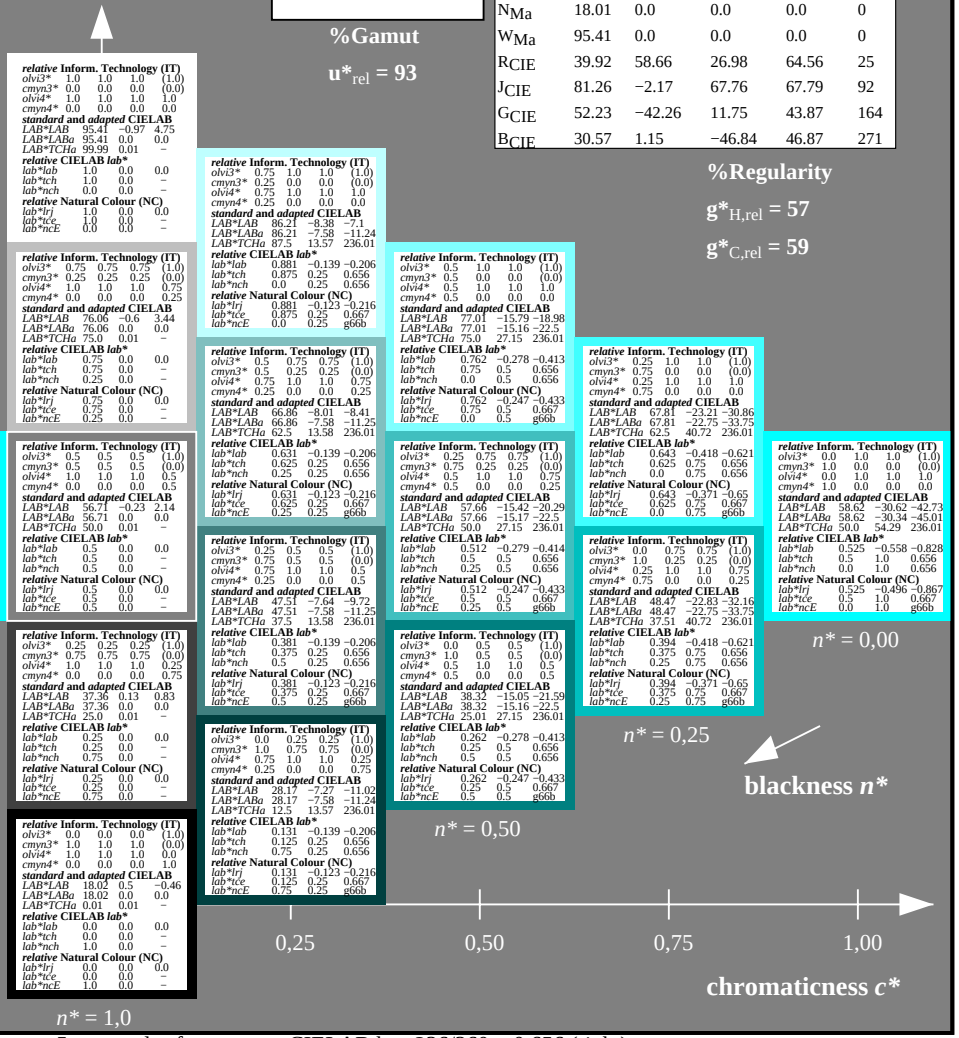
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

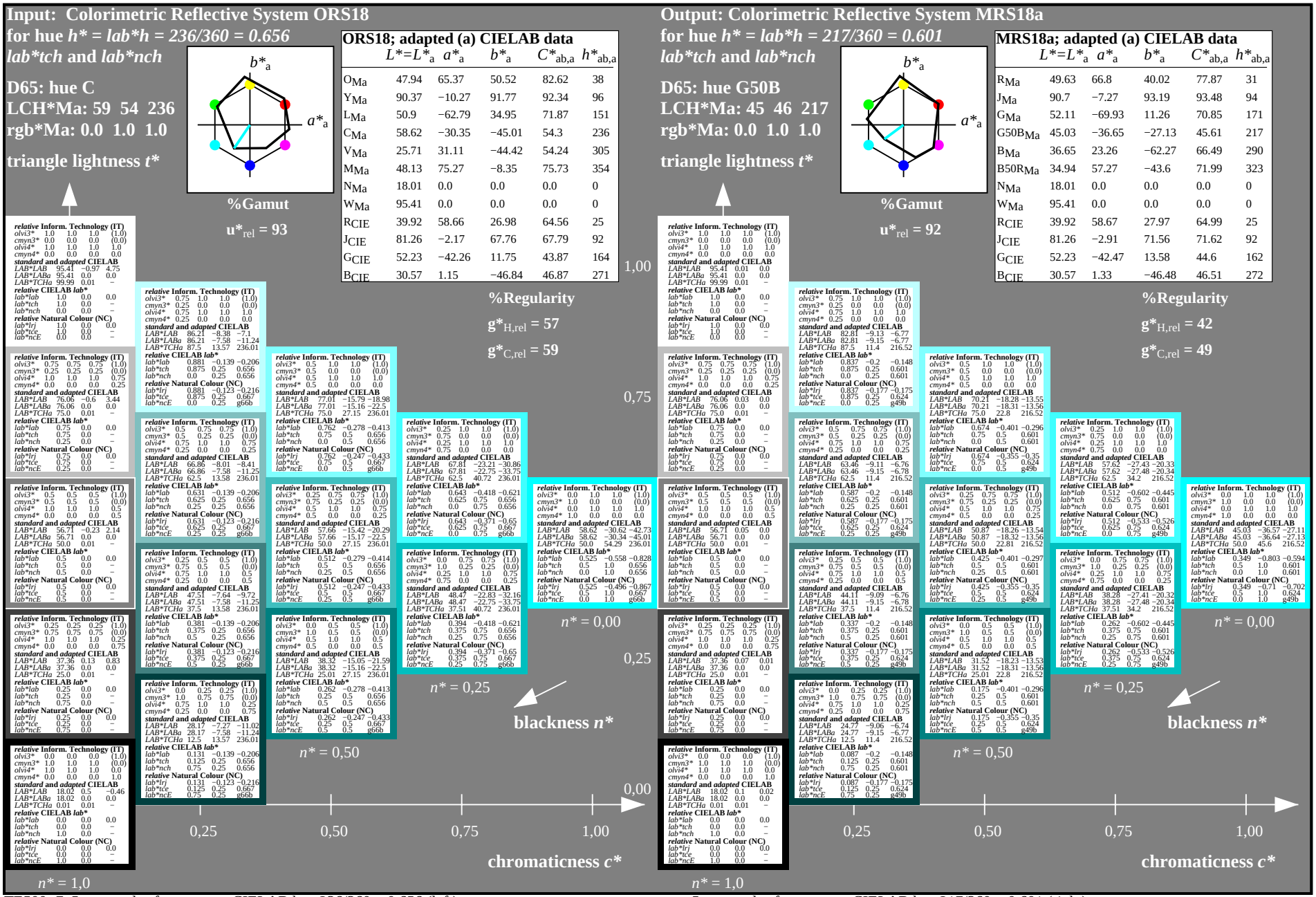
**g*$_{H,rel}$ = 57**

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




TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)



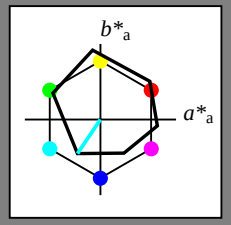

TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 217/360 = 0.601 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

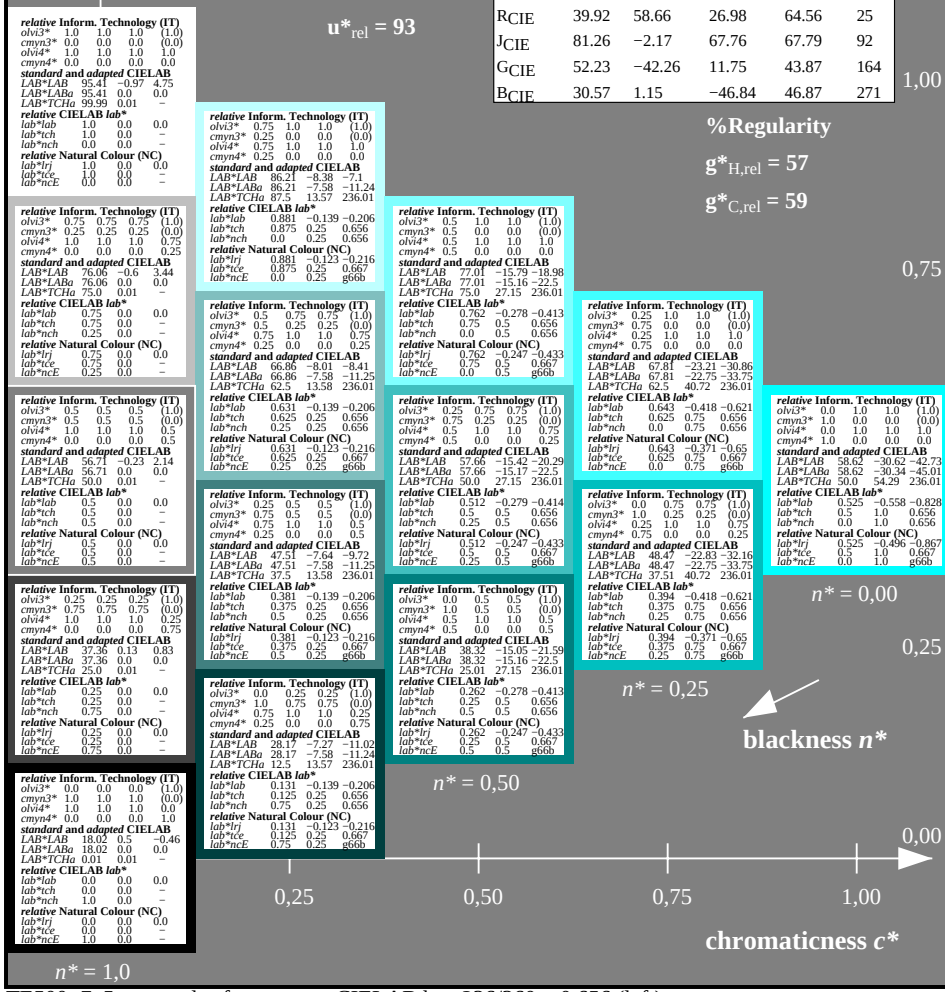
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

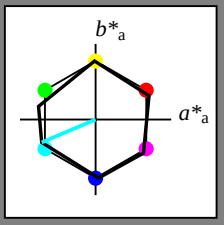
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 57 77 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

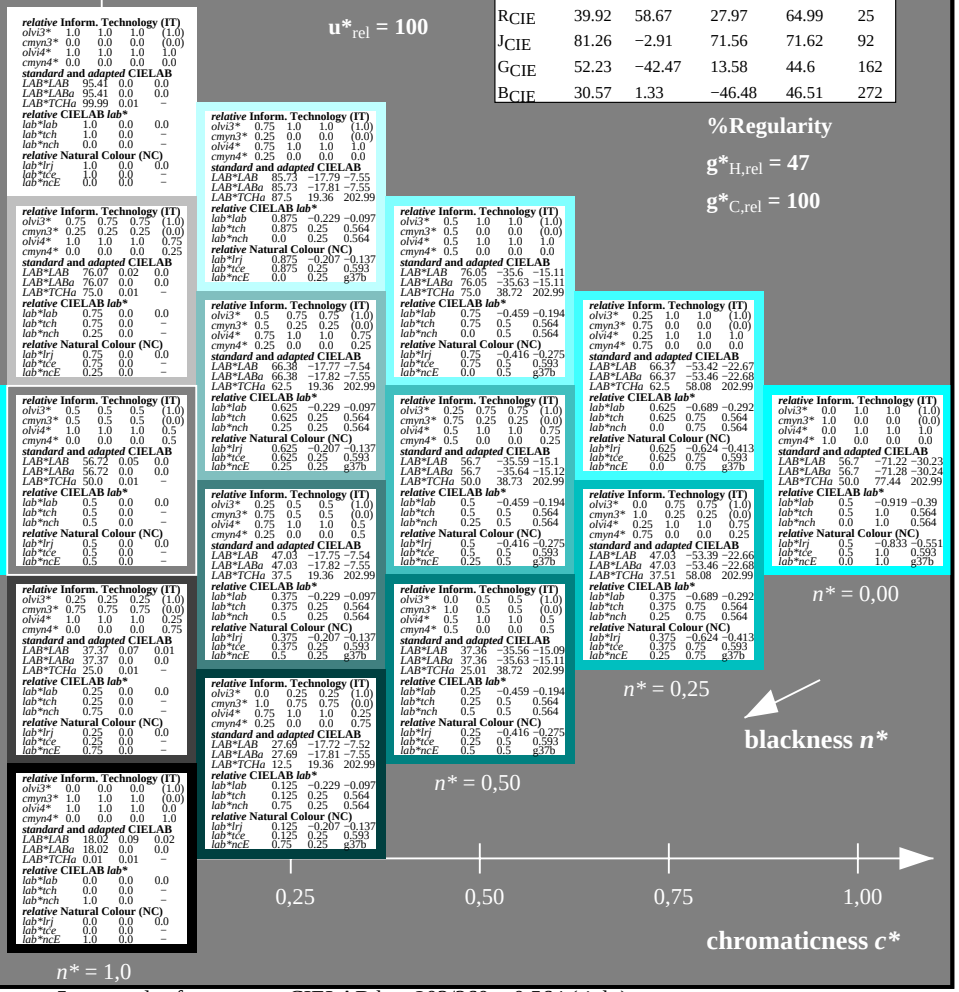
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

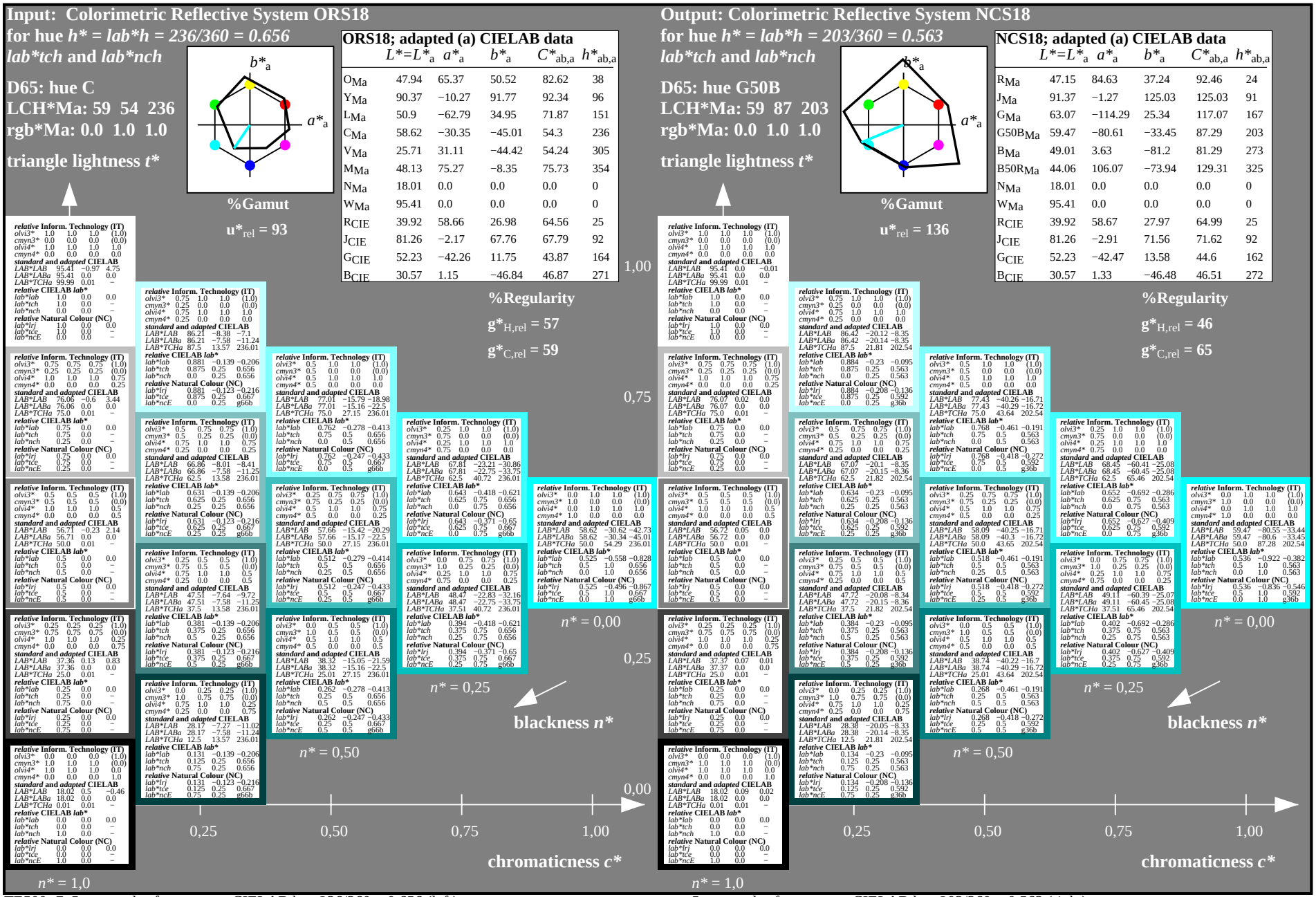
**g*$_{H,rel}$ = 47**

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



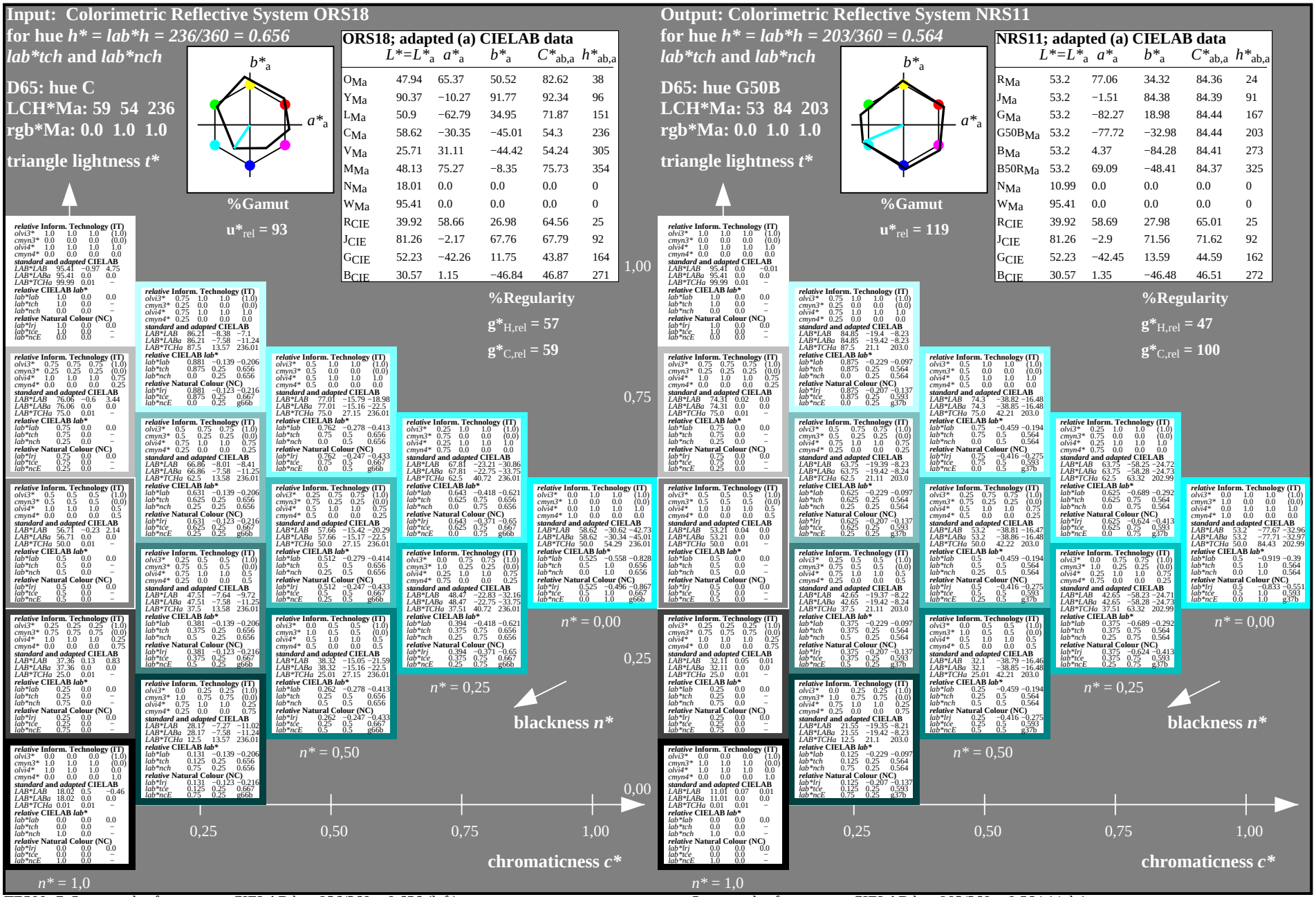

TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)




TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)



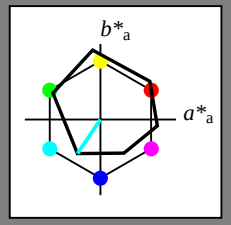

TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

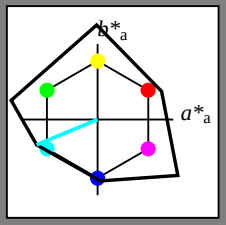
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

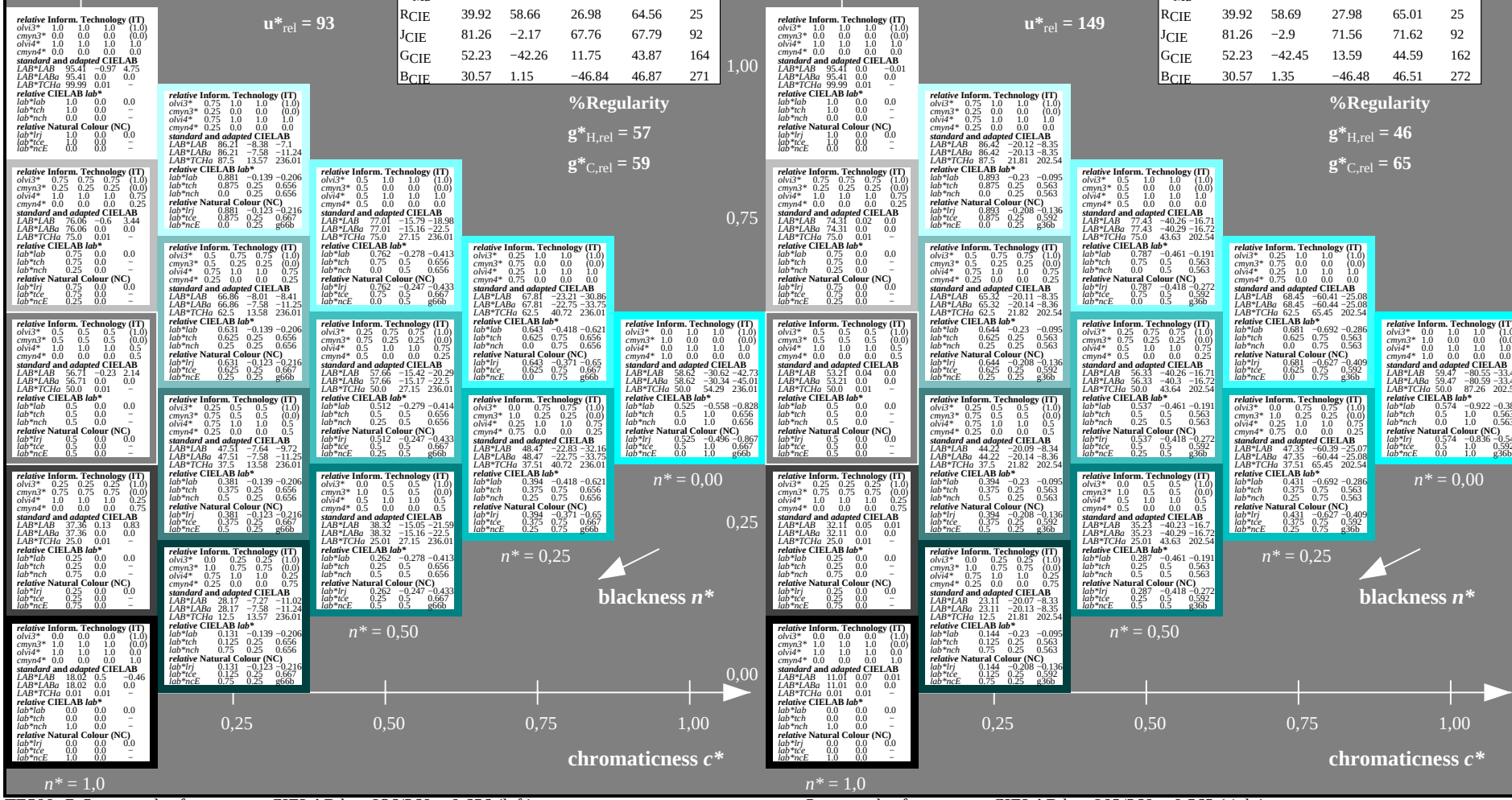
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

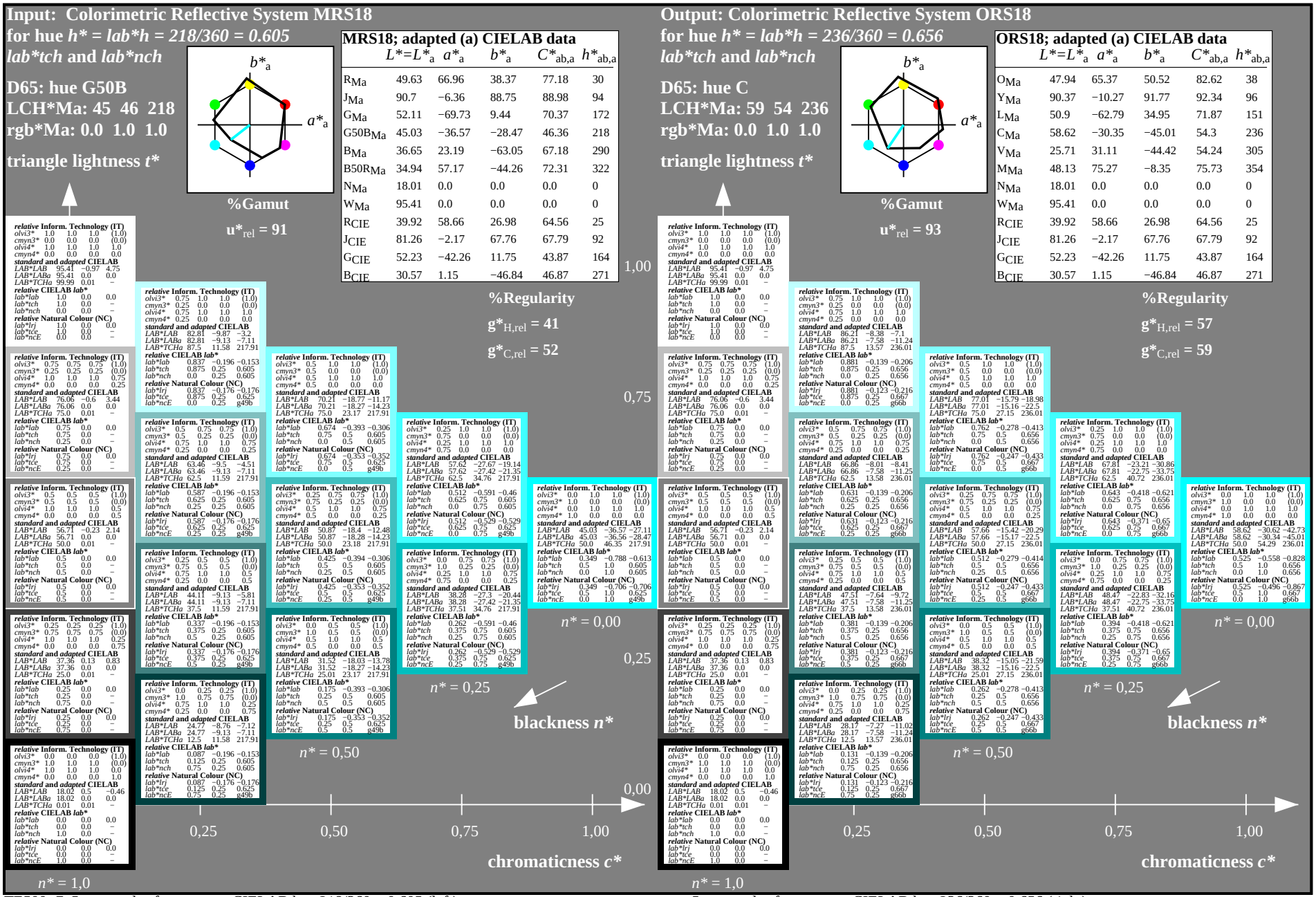
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



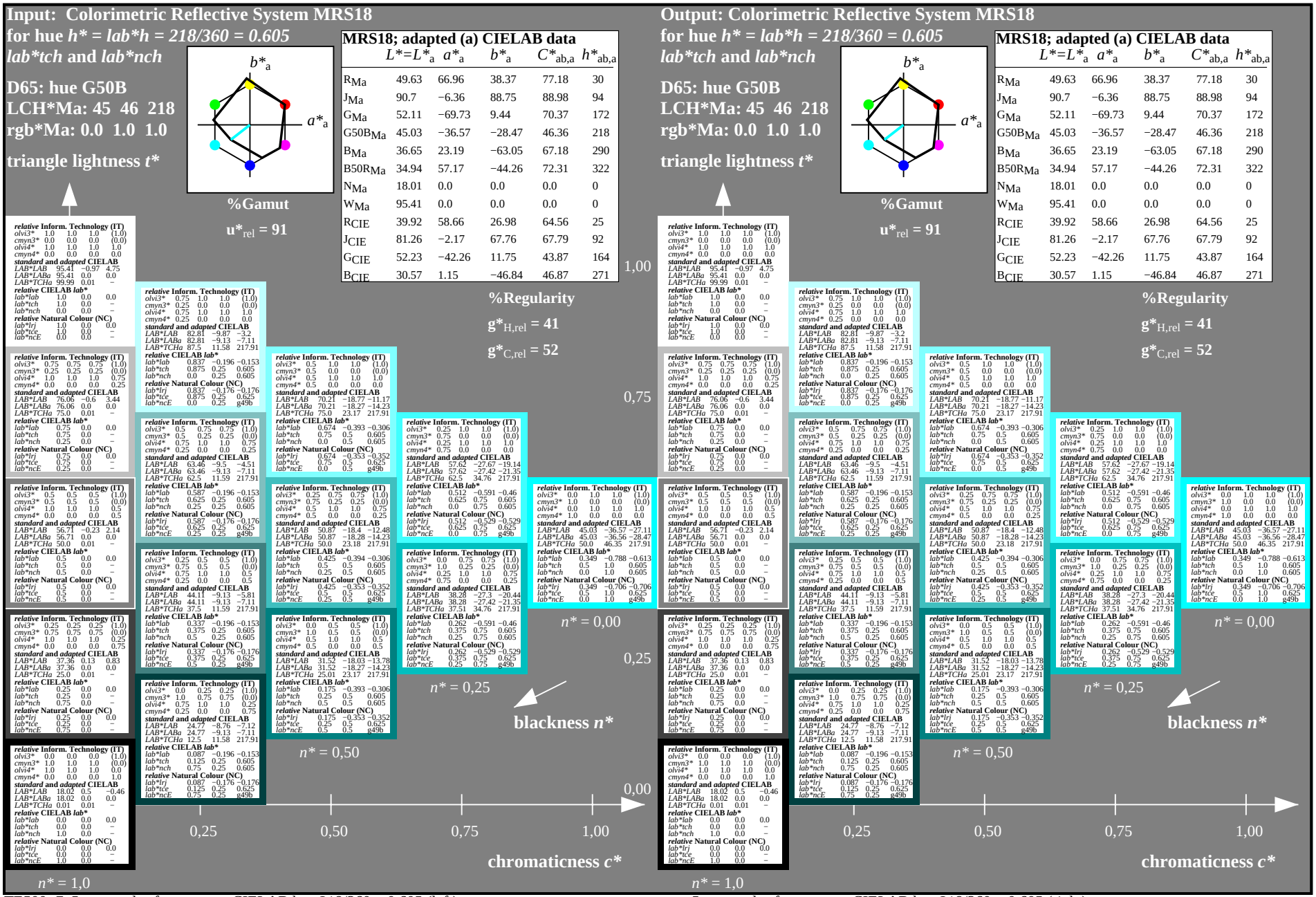

TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)




TE500−7, 5 step scales for constant CIELAB hue 218/360 = 0.605 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)



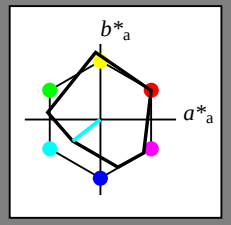

TE500−7, 5 step scales for constant CIELAB hue 218/360 = 0.605 (left)

5 step scales for constant CIELAB hue 218/360 = 0.605 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 218/360 = 0.605**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 218**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




%Gamut

$u^*_{rel}$ = 91

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

1,00

%Regularity

$g^*_{H,rel}$ = 41

$g^*_{C,rel}$ = 52

0,75

0,25

0,00

$n^*$ = 0,00

$n^*$ = 0,25

$n^*$ = 0,50

$n^*$ = 1,0

blackness $n^*$

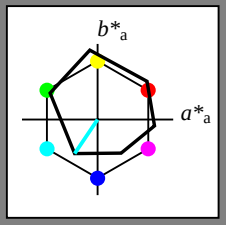
0,25 0,50 0,75 1,00

chromaticness $c^*$

**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 236/360 = 0.656**
***lab*tch* and *lab*nch***

**D65: hue C**
**LCH*Ma: 59 54 236**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




%Gamut

$u^*_{rel}$ = 93

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

%Regularity

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

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

$n^*$ = 0,00

$n^*$ = 0,25

$n^*$ = 0,50

$n^*$ = 1,0

blackness $n^*$

0,25 0,50 0,75 1,00

chromaticness $c^*$

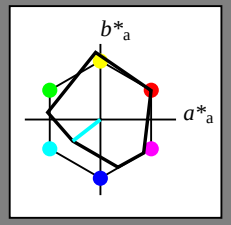
TE500−7, 5 step scales for constant CIELAB hue 218/360 = 0.605 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 218/360 = 0.605**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 218**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

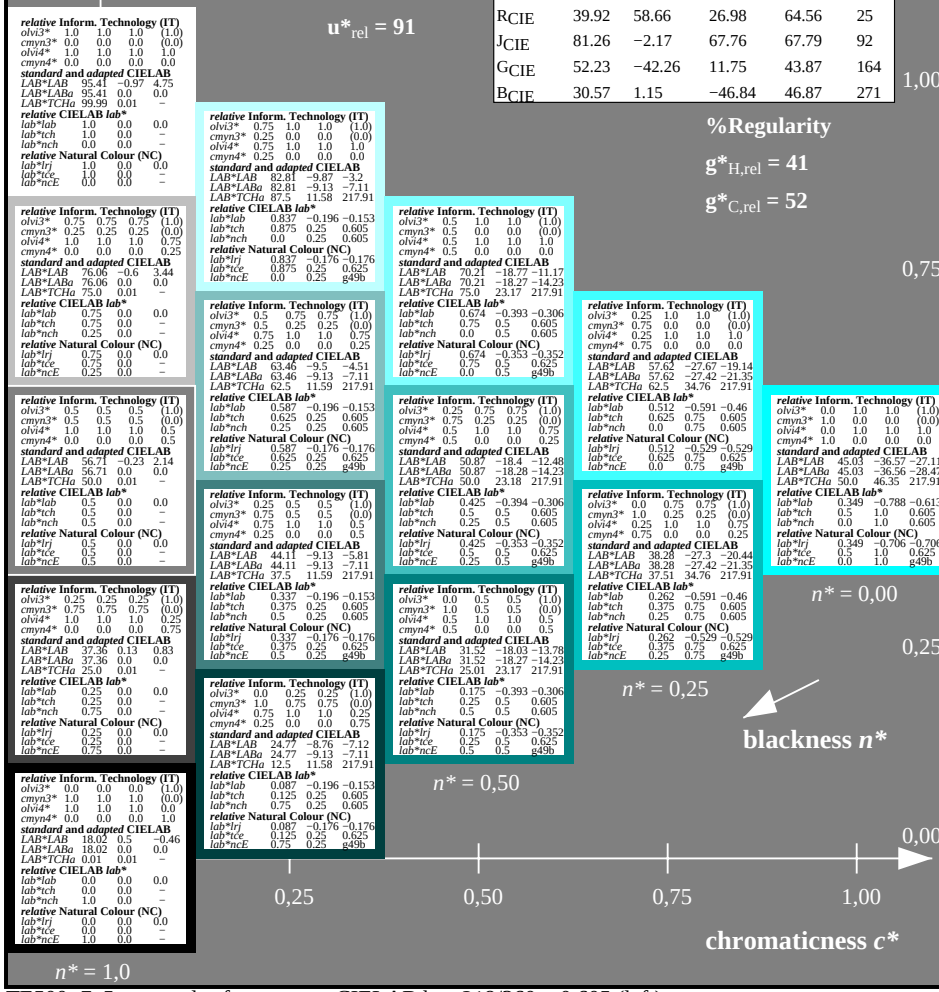
**MRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

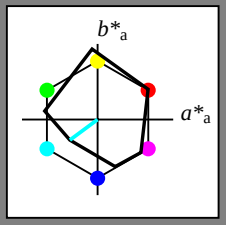
**g*$_{C,rel}$ = 52**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 217/360 = 0.601**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 217**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

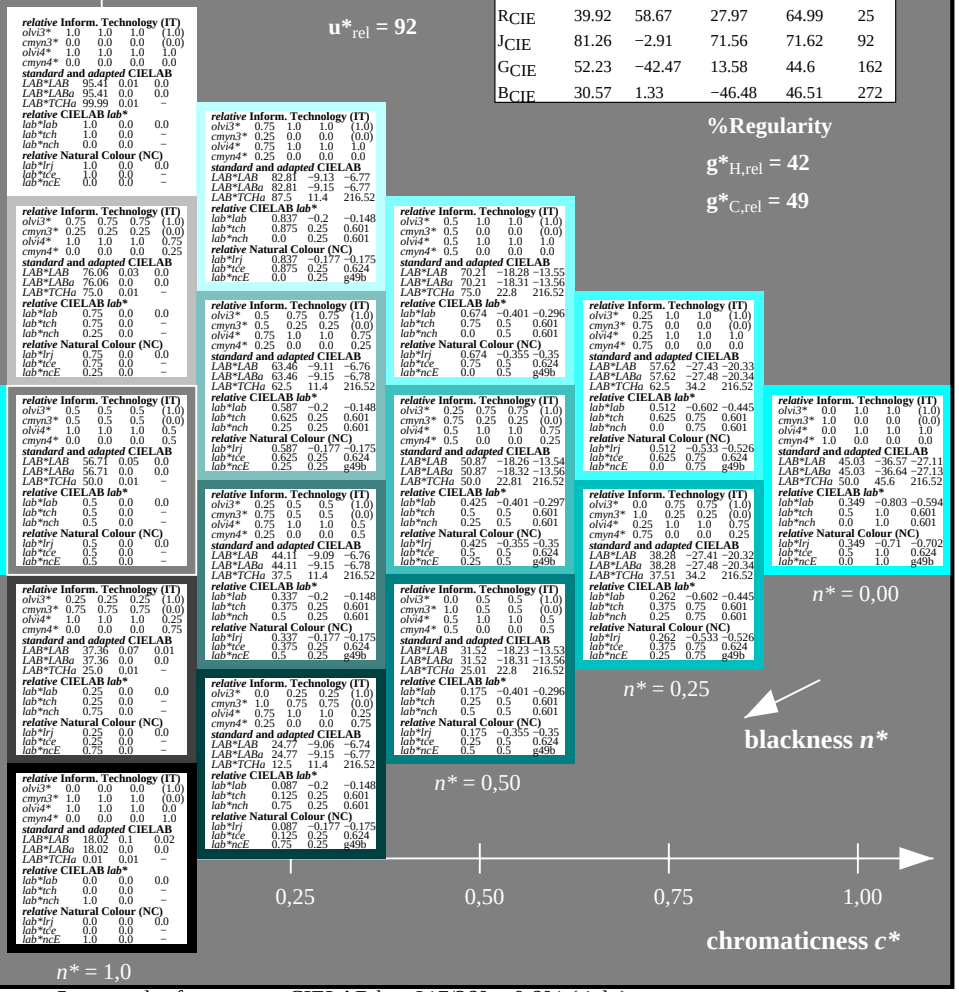
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



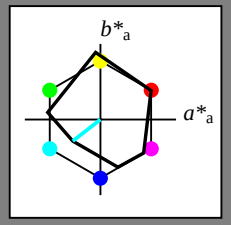

TE500−7, 5 step scales for constant CIELAB hue 218/360 = 0.605 (left)

5 step scales for constant CIELAB hue 217/360 = 0.601 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 218/360 = 0.605**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 218**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

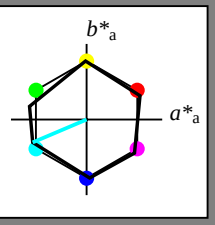
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 57 77 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

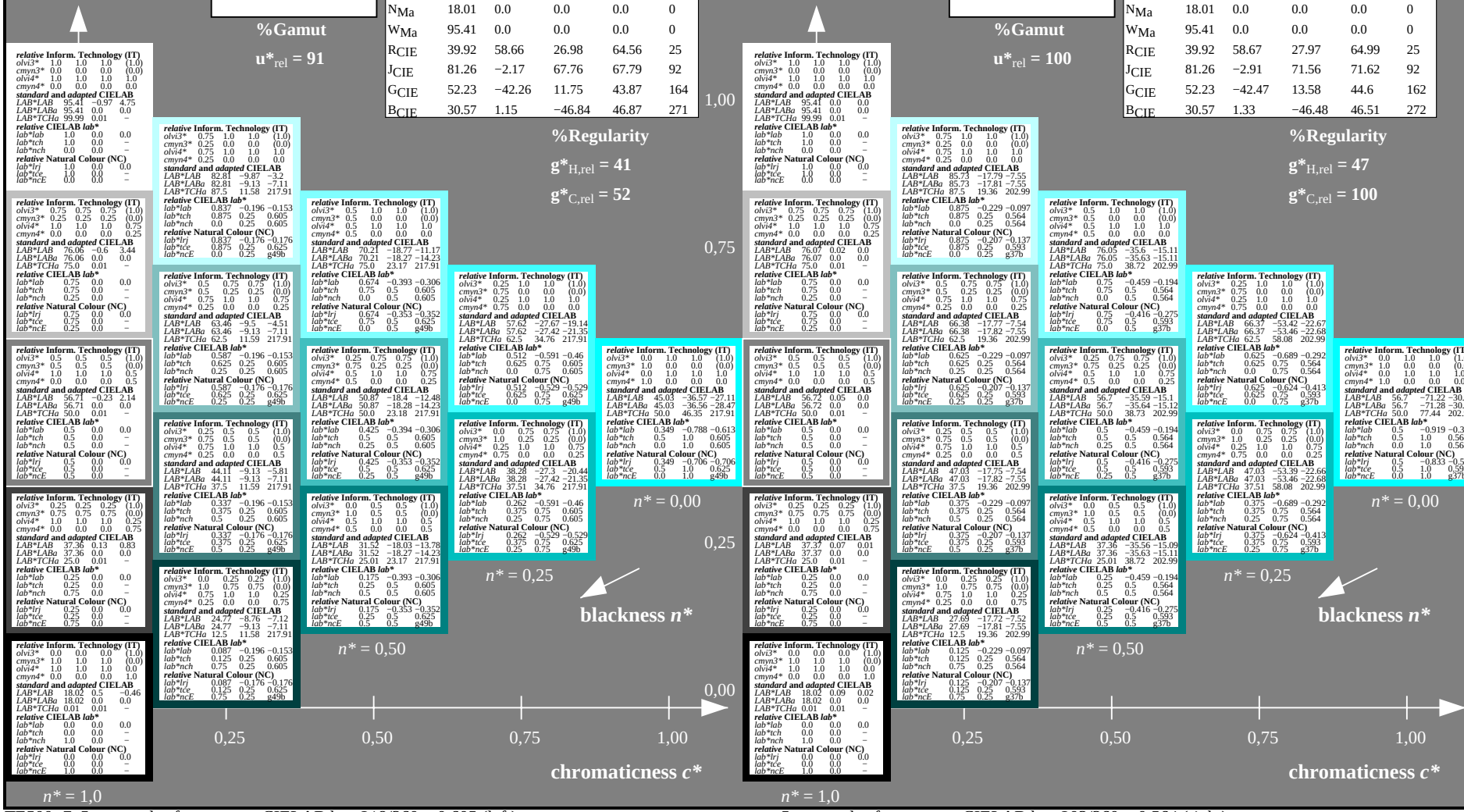
**NRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



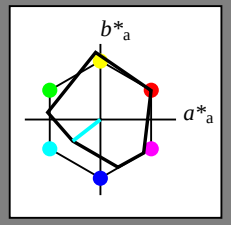

TE500−7, 5 step scales for constant CIELAB hue 218/360 = 0.605 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 218/360 = 0.605**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 218**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

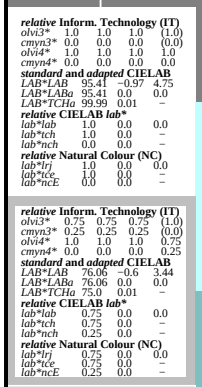
**MRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

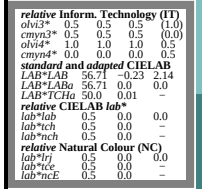
**g*$_{H,rel}$ = 41**

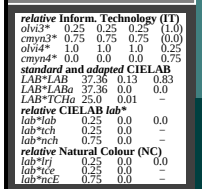
**g*$_{C,rel}$ = 52**

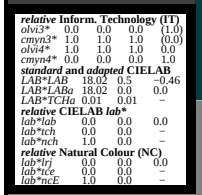


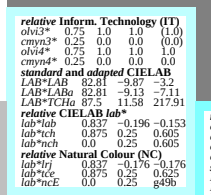


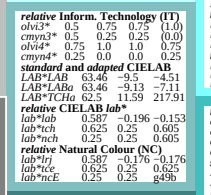


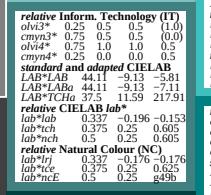


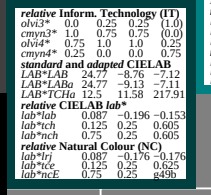



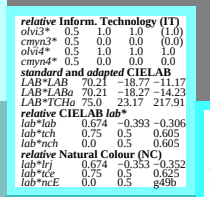



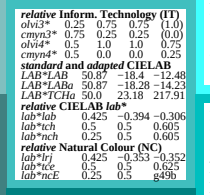



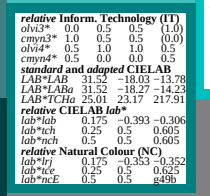



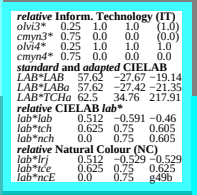



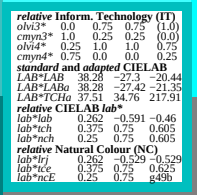



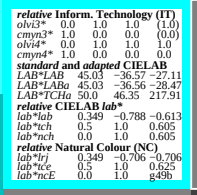




**chromaticness *c****

**blackness *n****

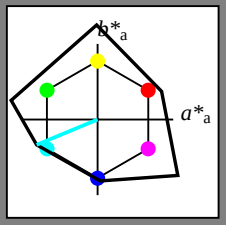
*n** = 0,00
*n** = 0,25
*n** = 0,50
*n** = 1,0

0,00 0,25 0,50 0,75 1,00

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

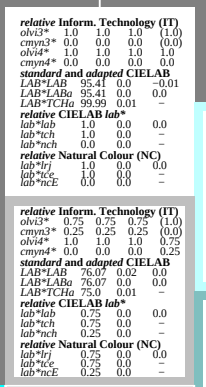
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

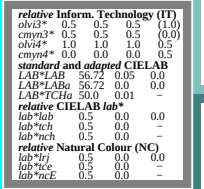
**g*$_{H,rel}$ = 46**

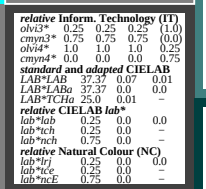
**g*$_{C,rel}$ = 65**

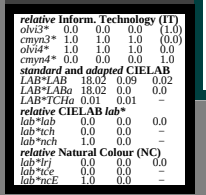


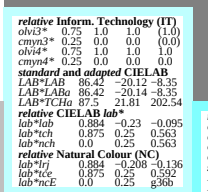


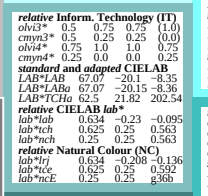


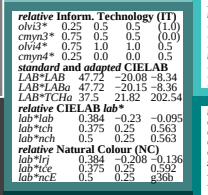


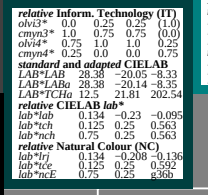



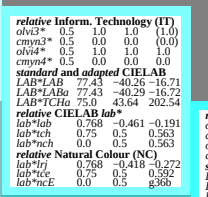



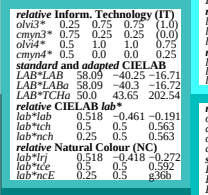



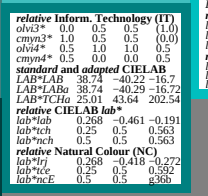



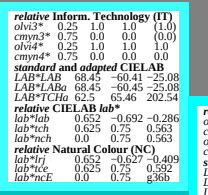



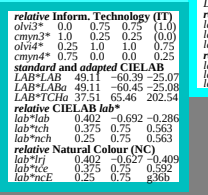



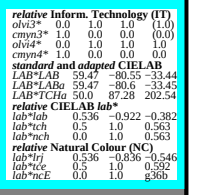




**chromaticness *c****

**blackness *n****

*n** = 0,00
*n** = 0,25
*n** = 0,50
*n** = 1,0

0,00 0,25 0,50 0,75 1,00

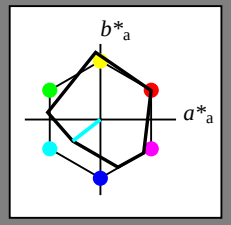
TE500−7, 5 step scales for constant CIELAB hue 218/360 = 0.605 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 218/360 = 0.605**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 218**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

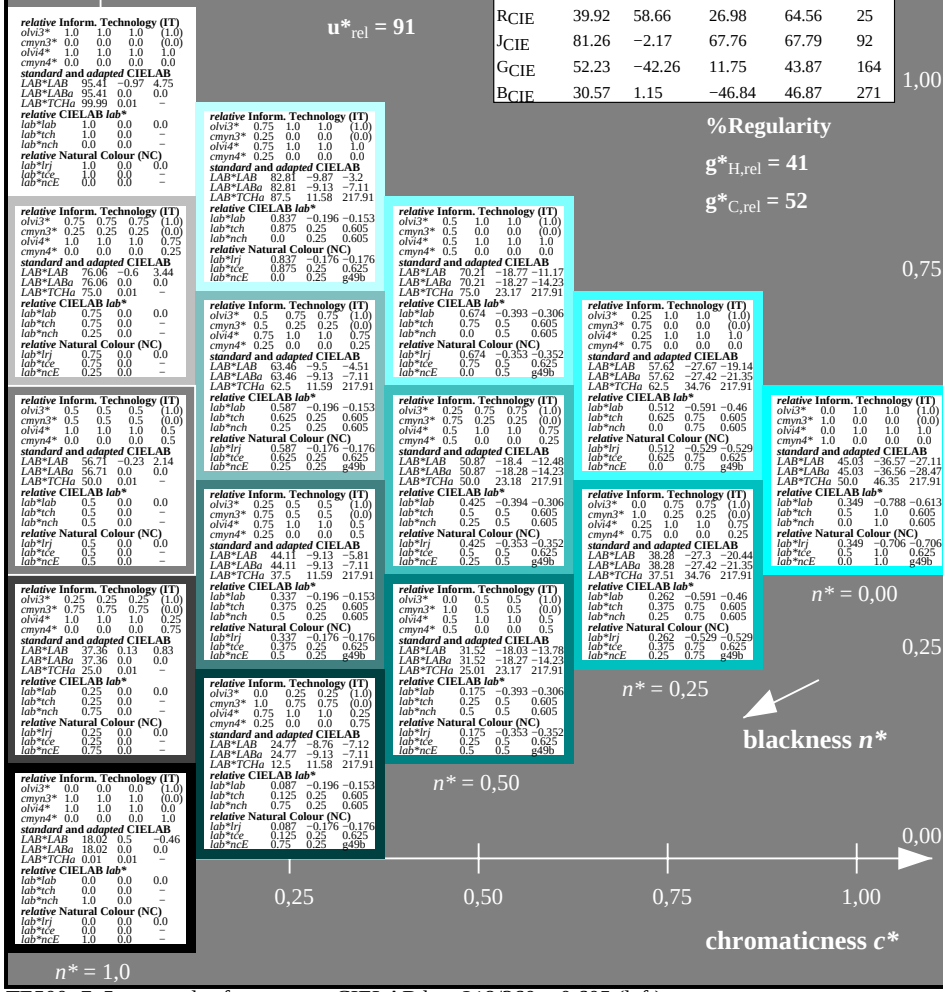
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

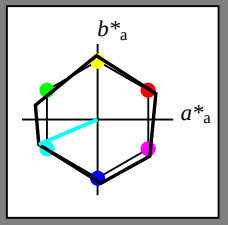
**g*$_{C,rel}$ = 52**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 53 84 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

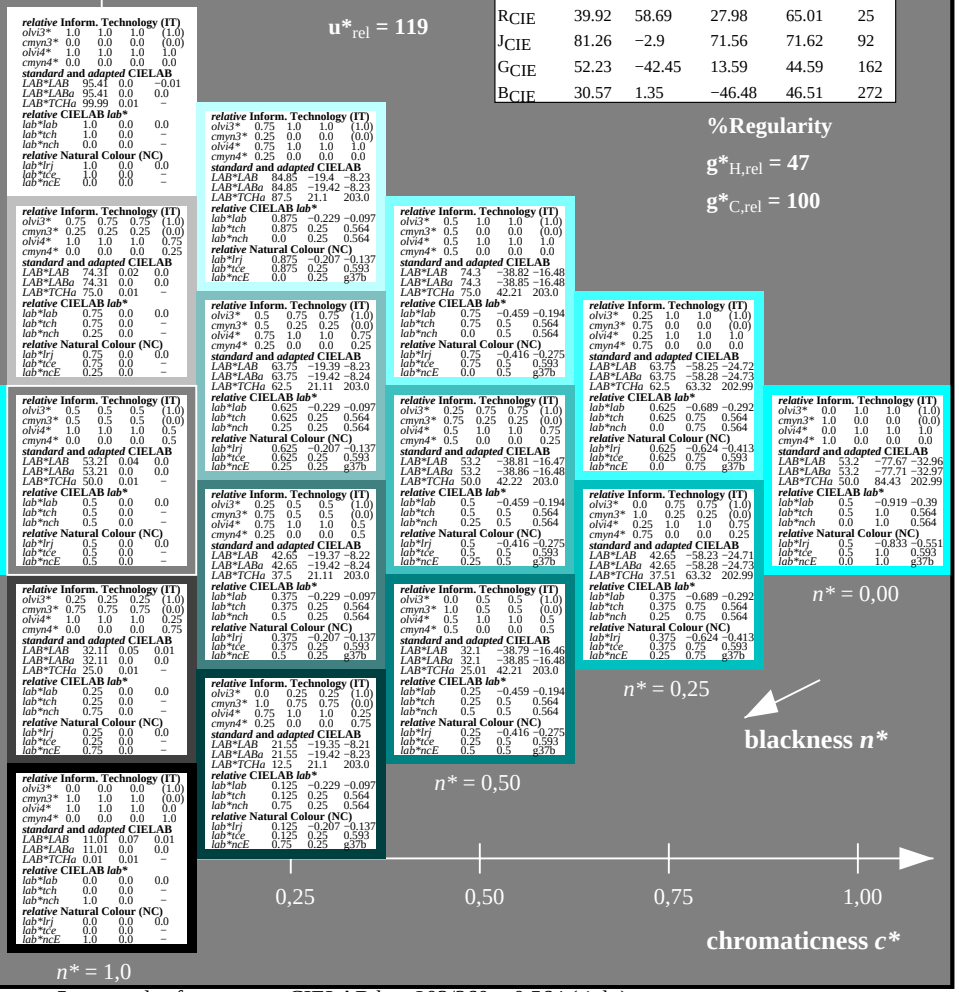
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

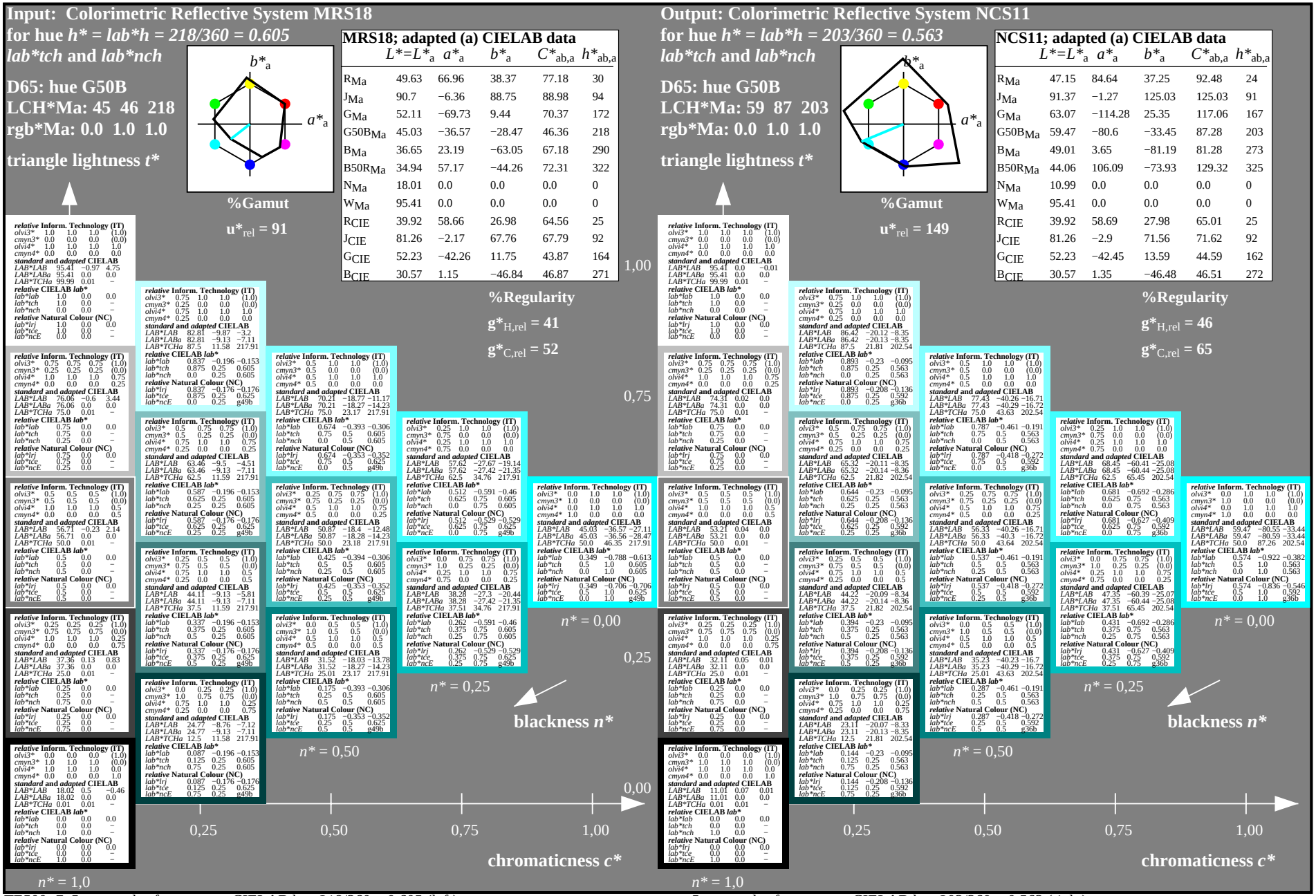
**g*$_{H,rel}$ = 47**

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



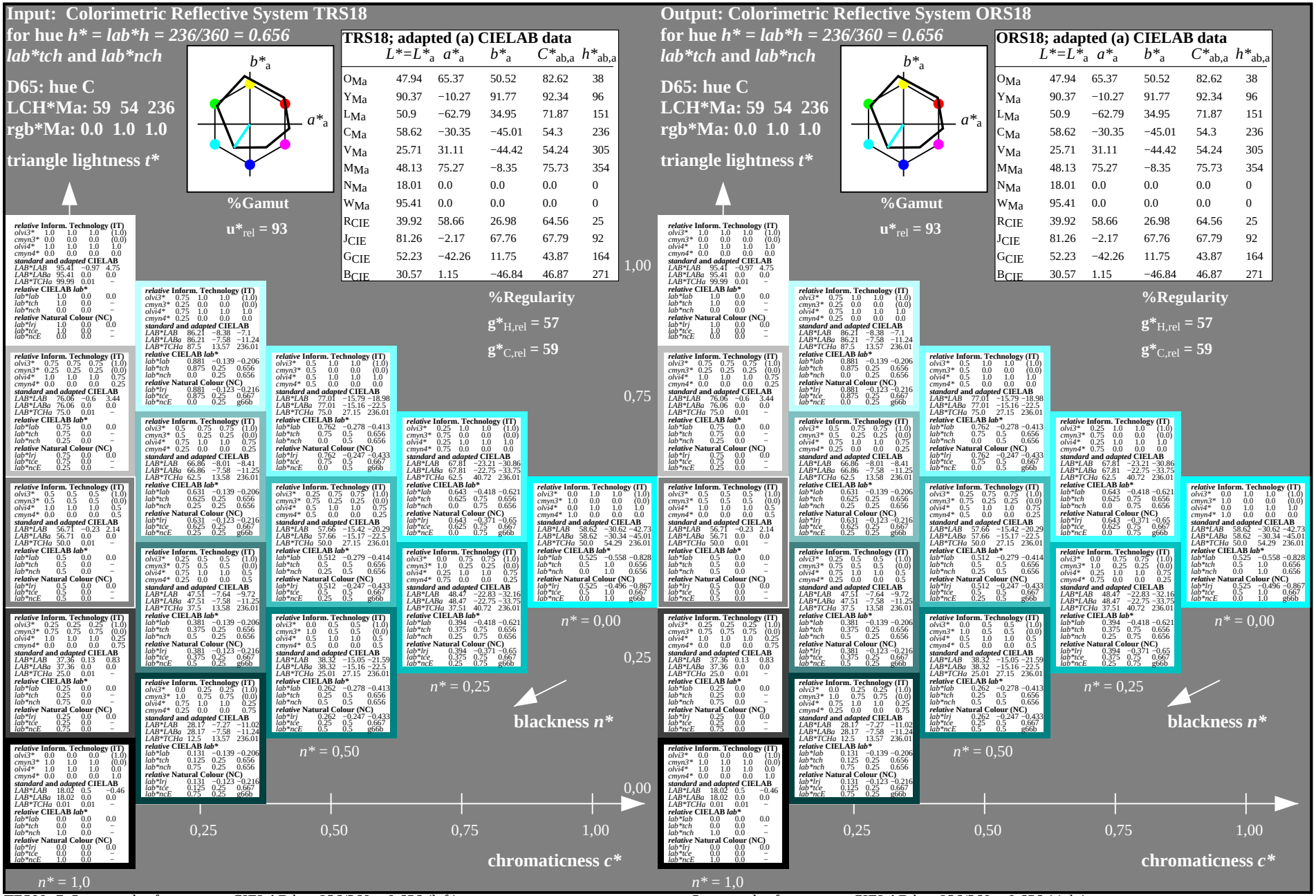

TE500−7, 5 step scales for constant CIELAB hue 218/360 = 0.605 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)



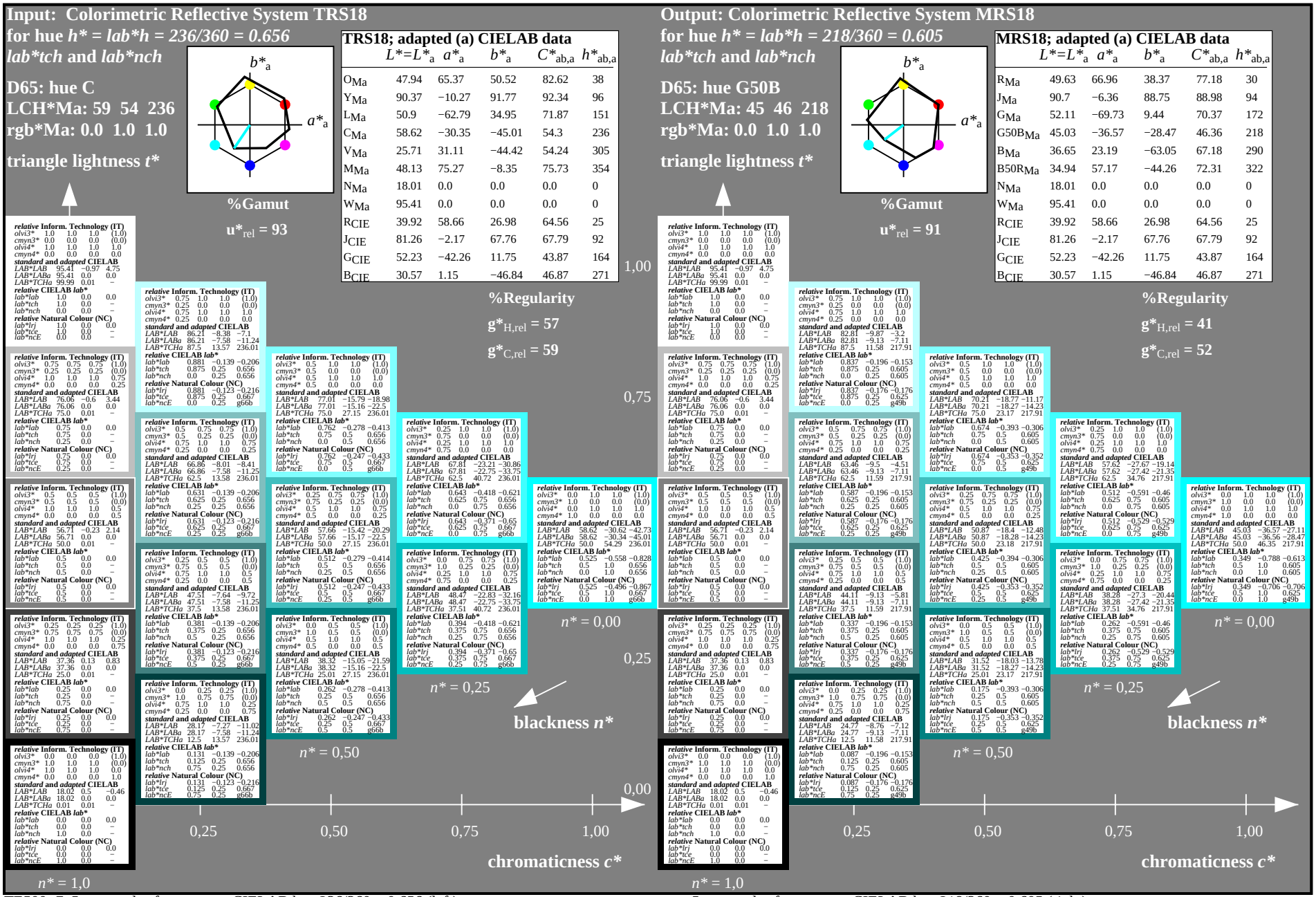

TE500−7, 5 step scales for constant CIELAB hue 218/360 = 0.605 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)



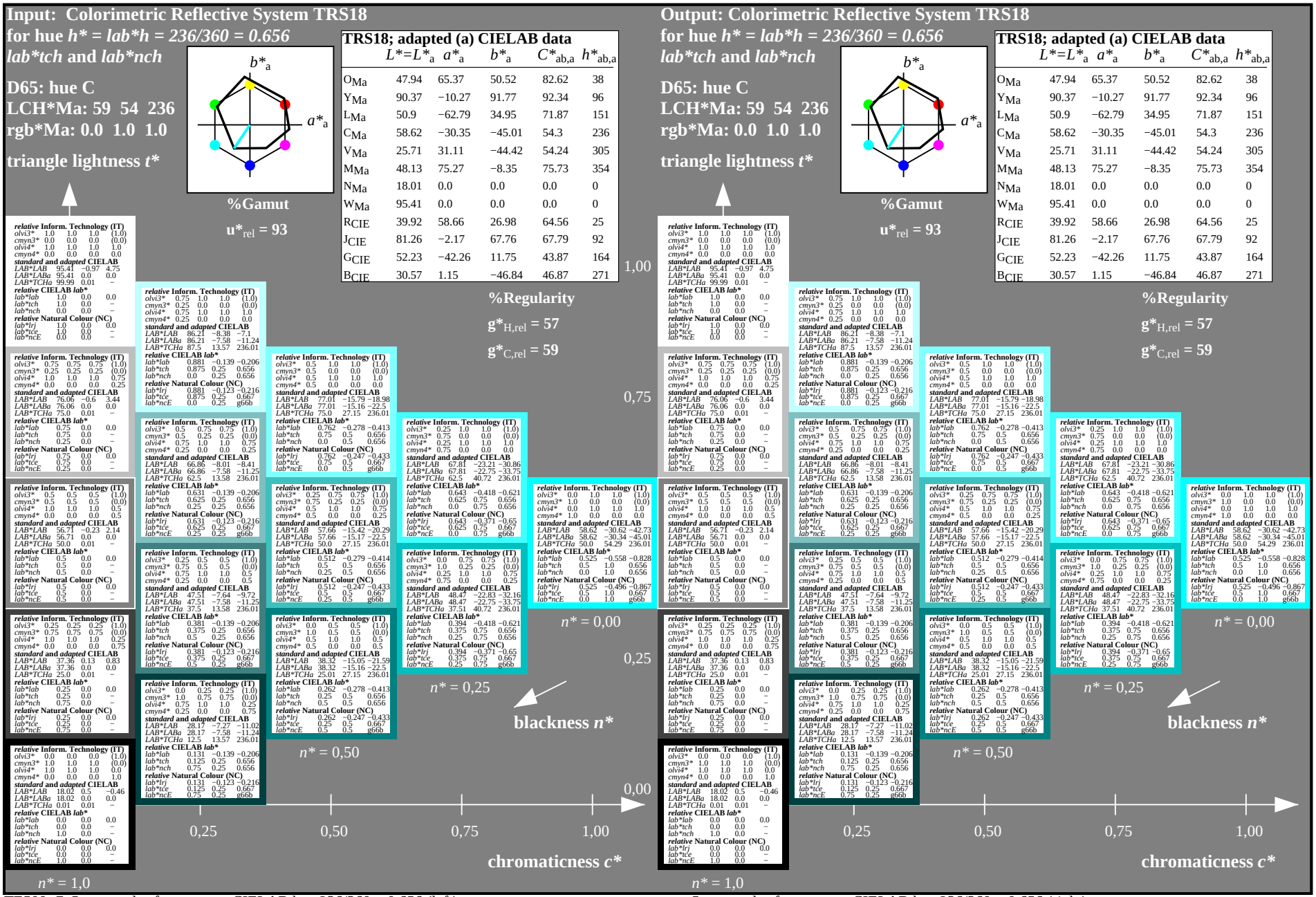

TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)




TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 218/360 = 0.605 (right)



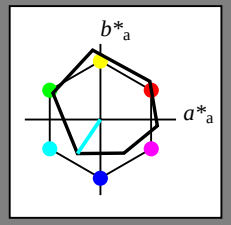

TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 236/360 = 0.656**
***lab*tch* and *lab*nch***

**D65: hue C**
**LCH*Ma: 59 54 236**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

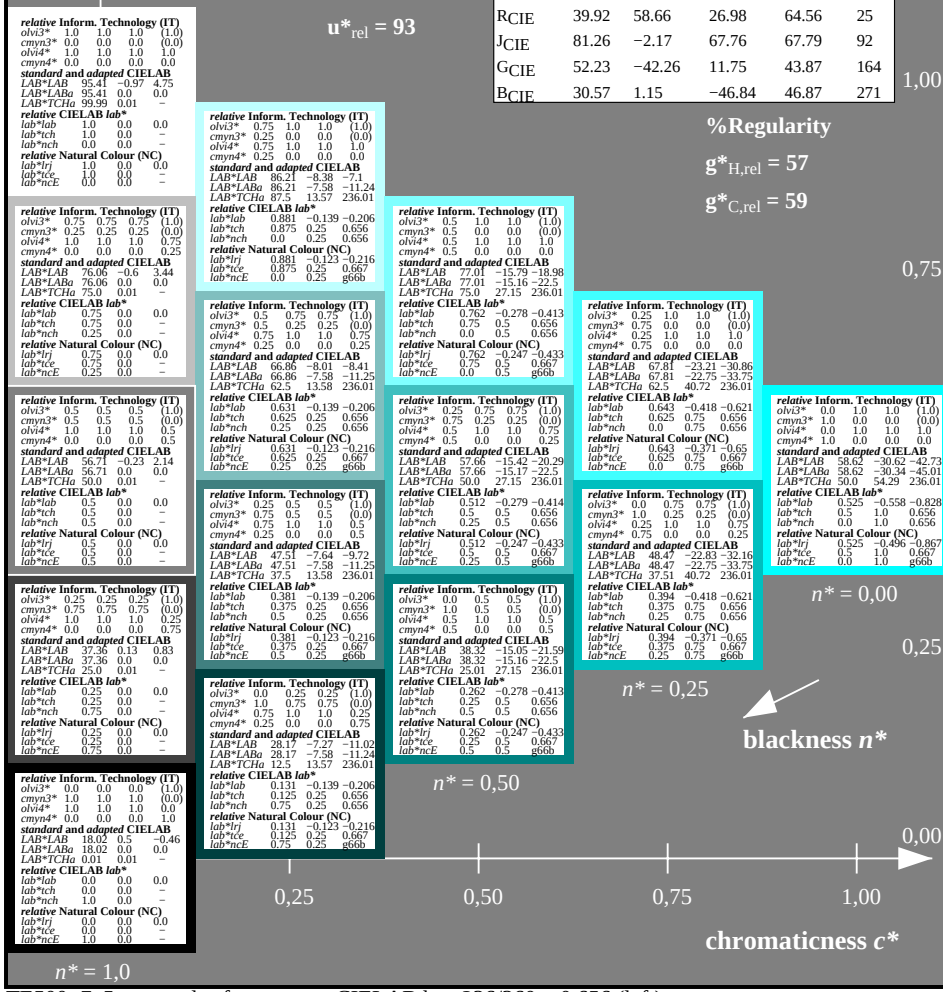
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

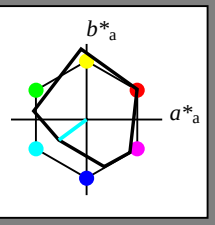
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 217/360 = 0.601**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 217**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

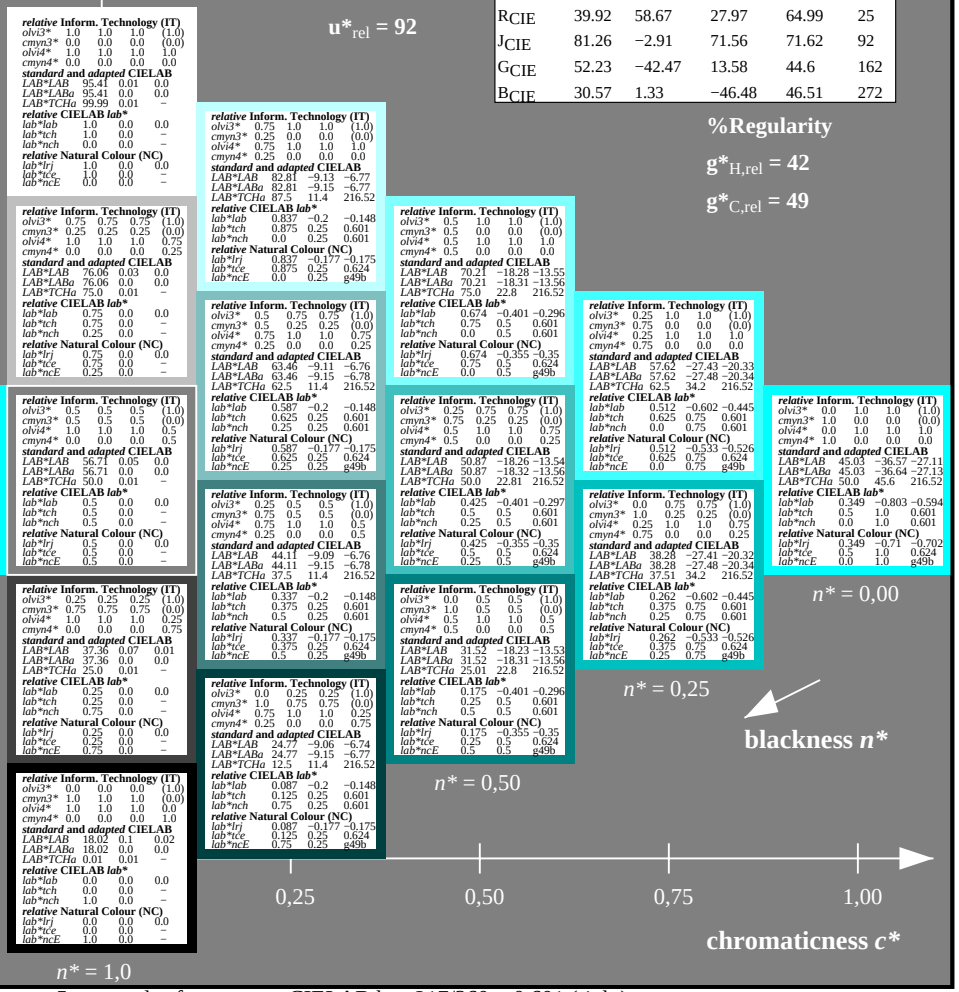
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

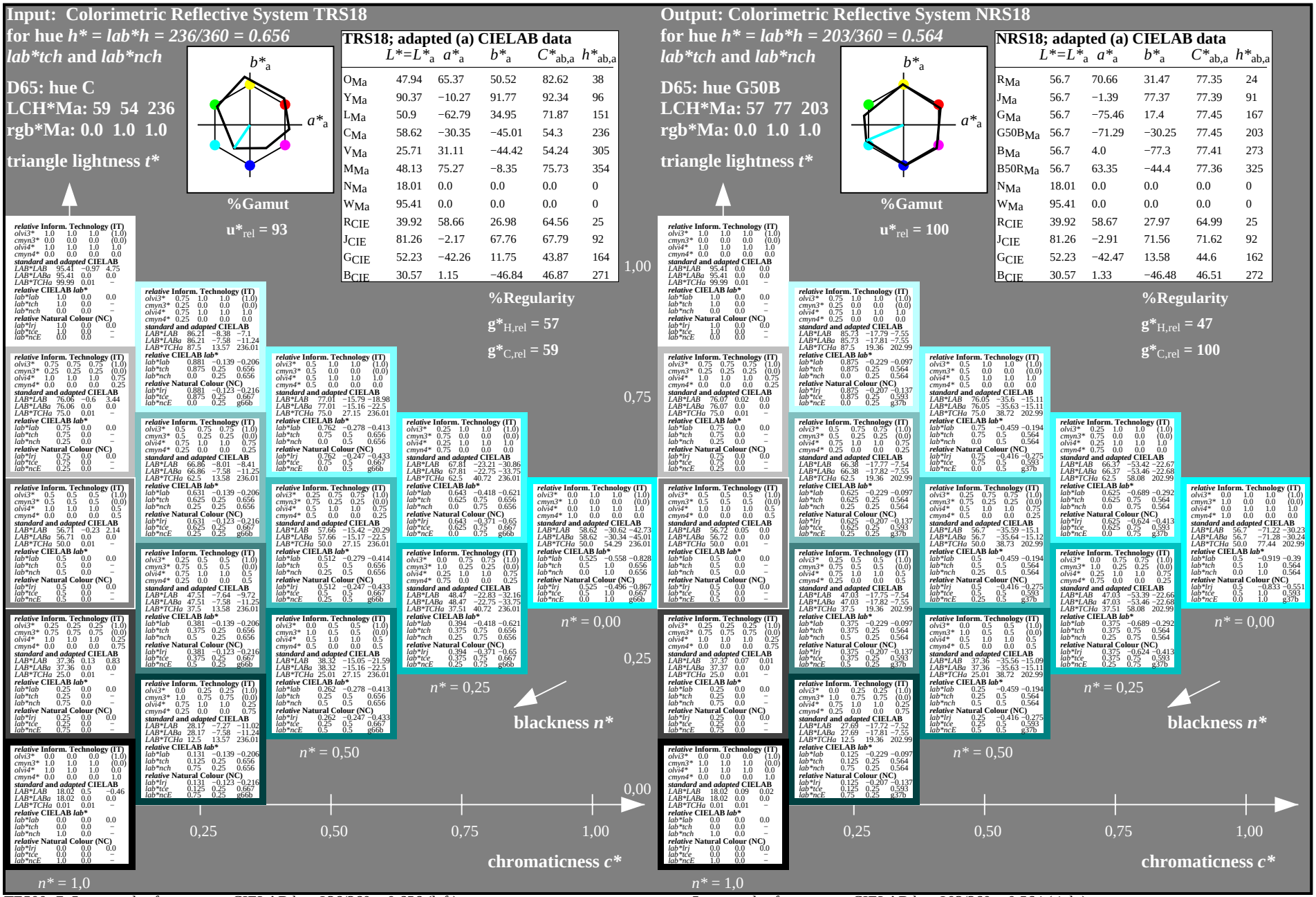
**g*$_{H,rel}$ = 42**

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




TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 217/360 = 0.601 (right)



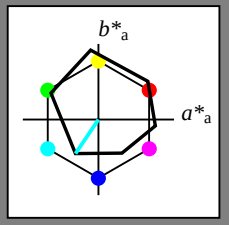

TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 236/360 = 0.656**
***lab*tch* and *lab*nch***

**D65: hue C**
**LCH*Ma: 59 54 236**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

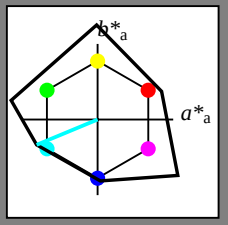
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

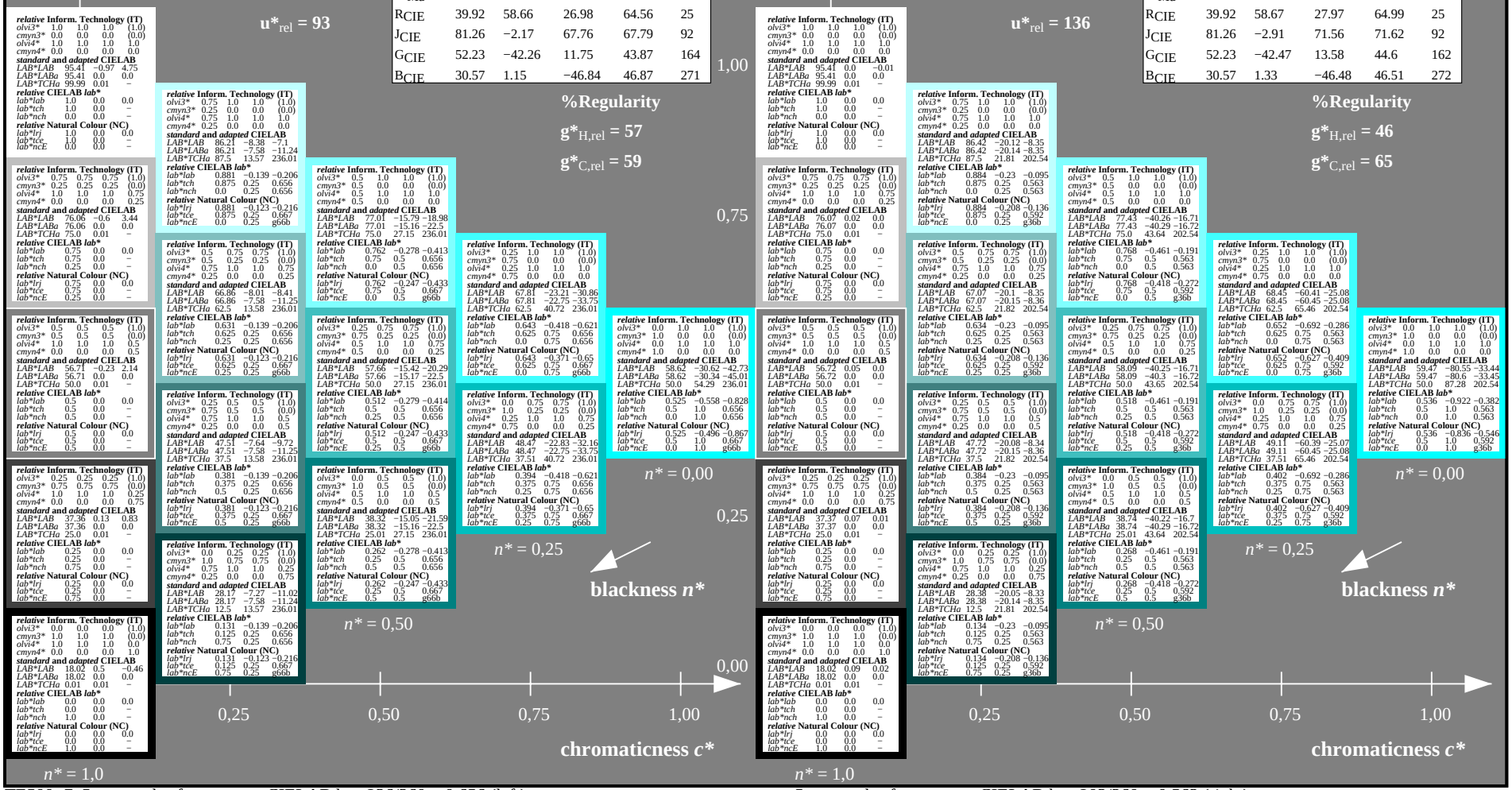
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

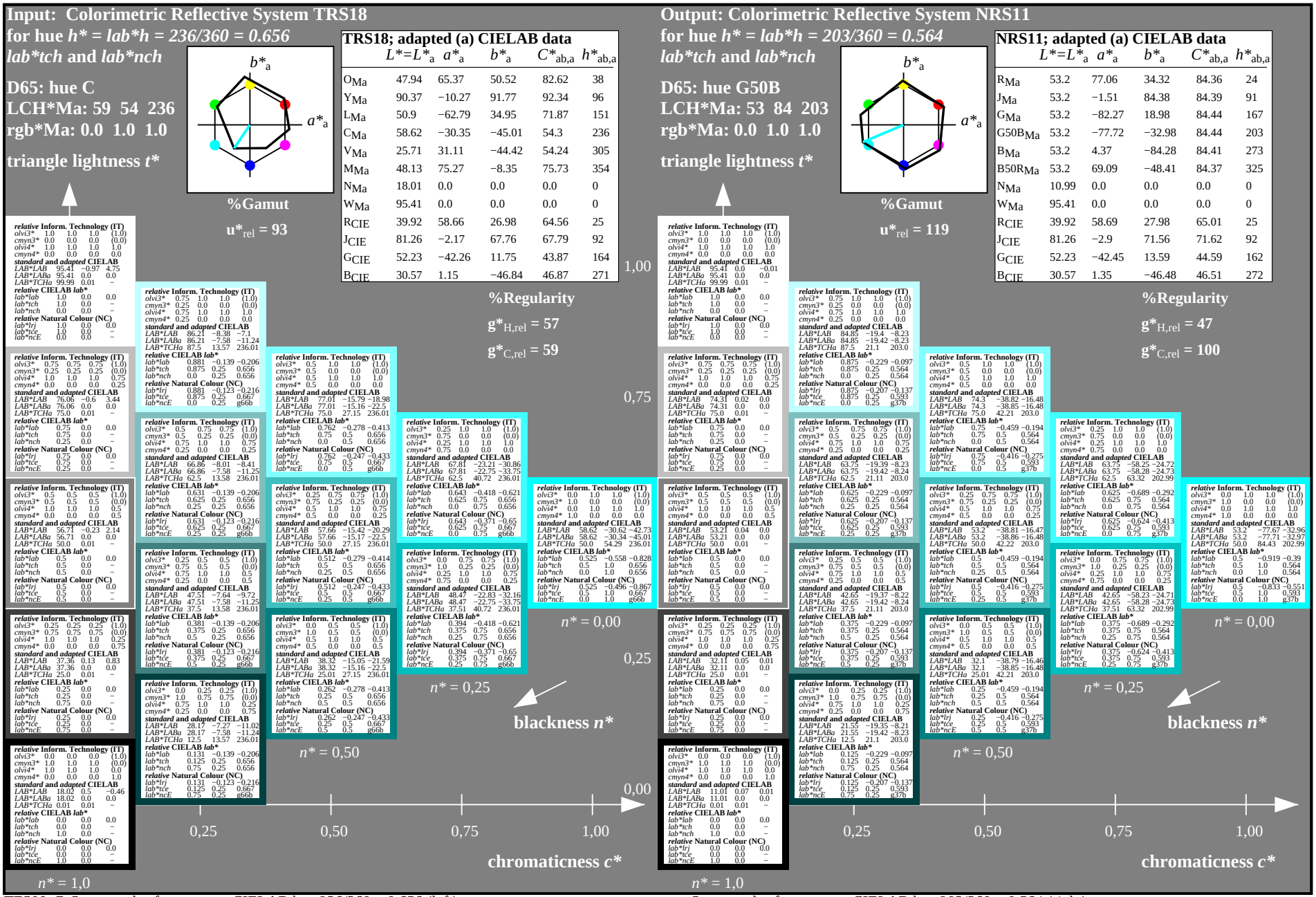
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)



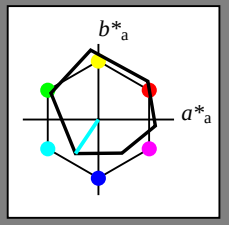

TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 236/360 = 0.656**
***lab*tch* and *lab*nch***

**D65: hue C**
**LCH*Ma: 59 54 236**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

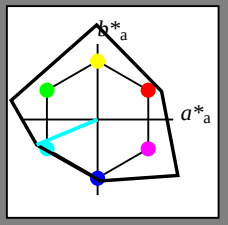
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

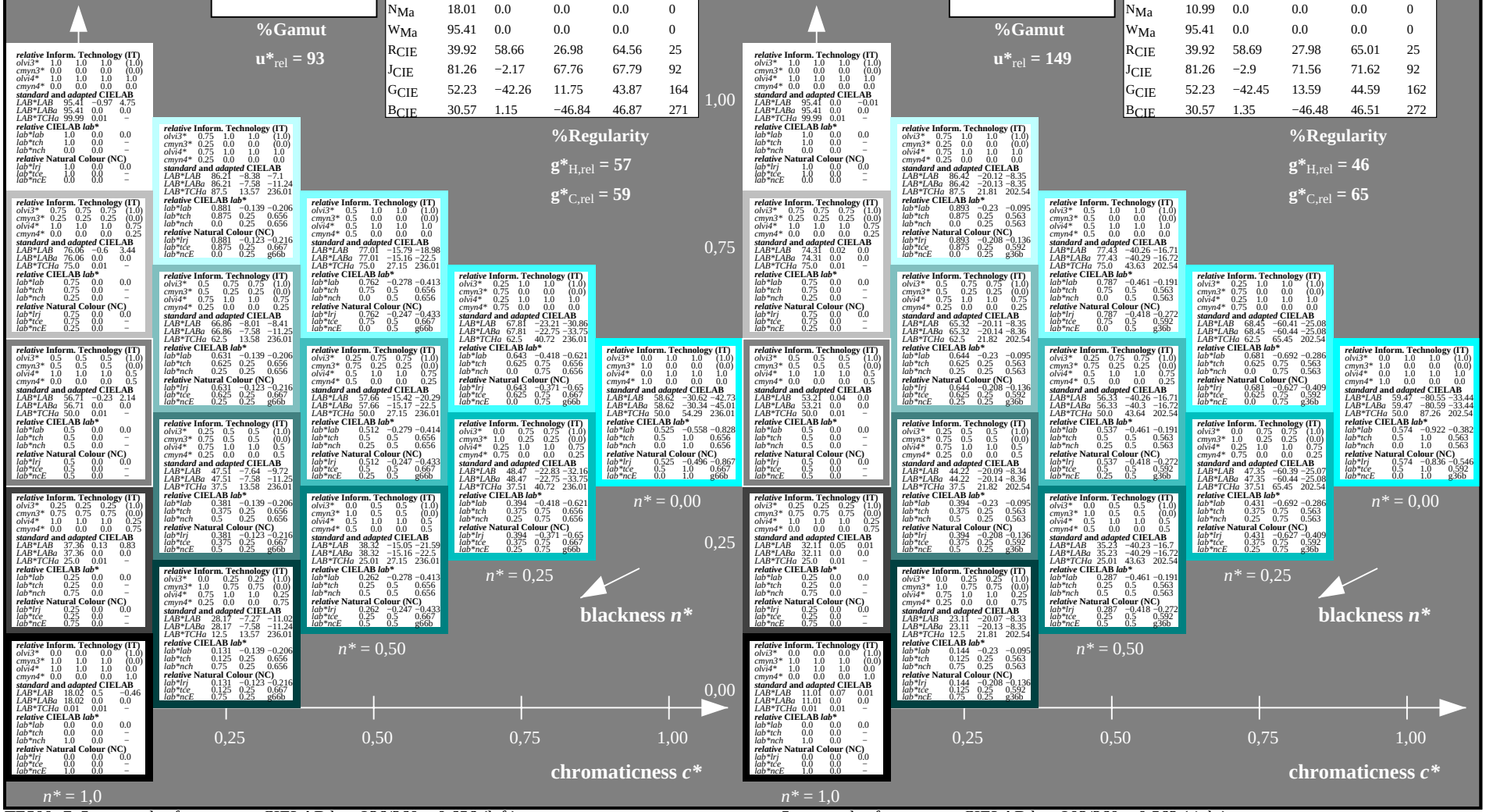
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

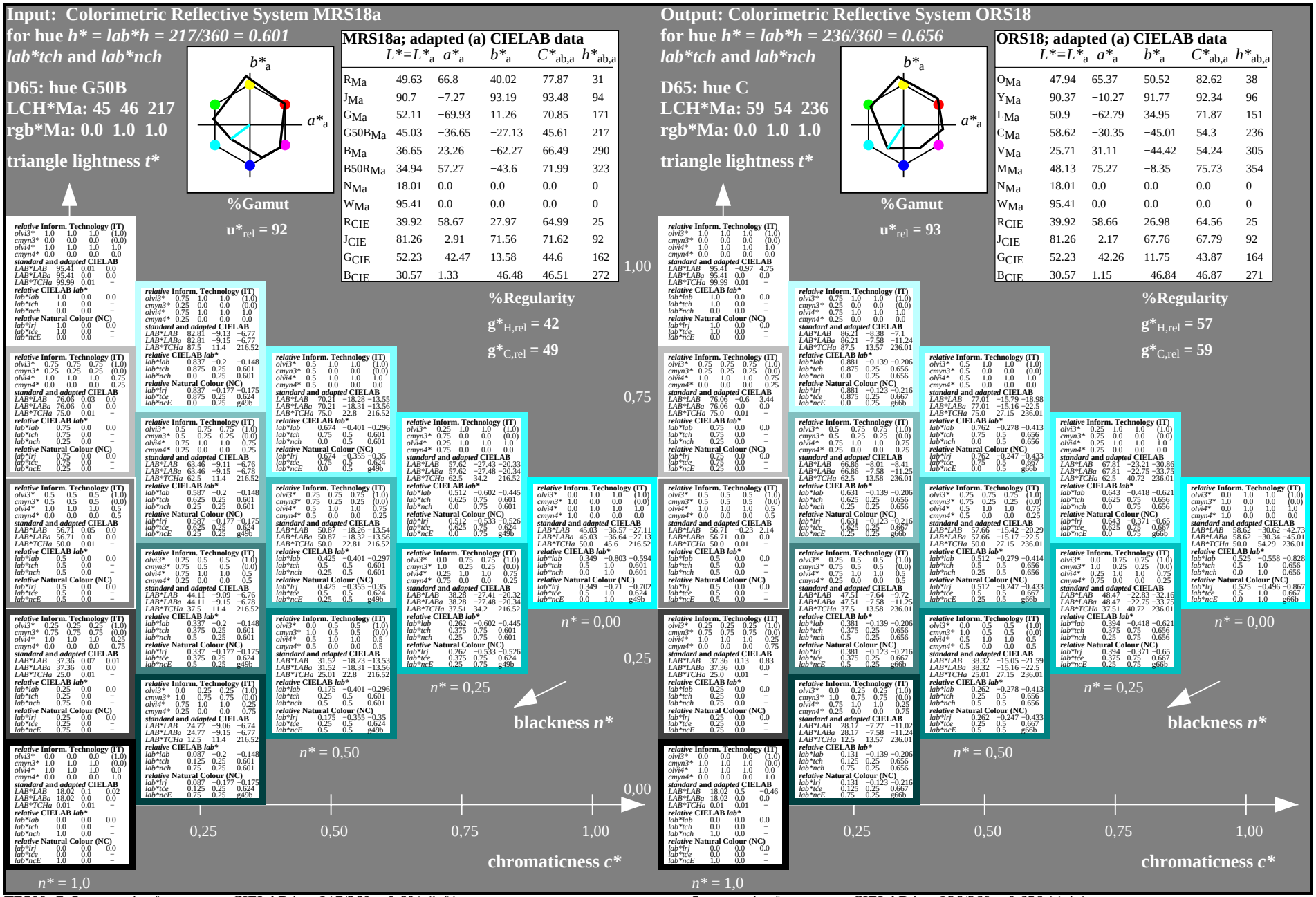
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



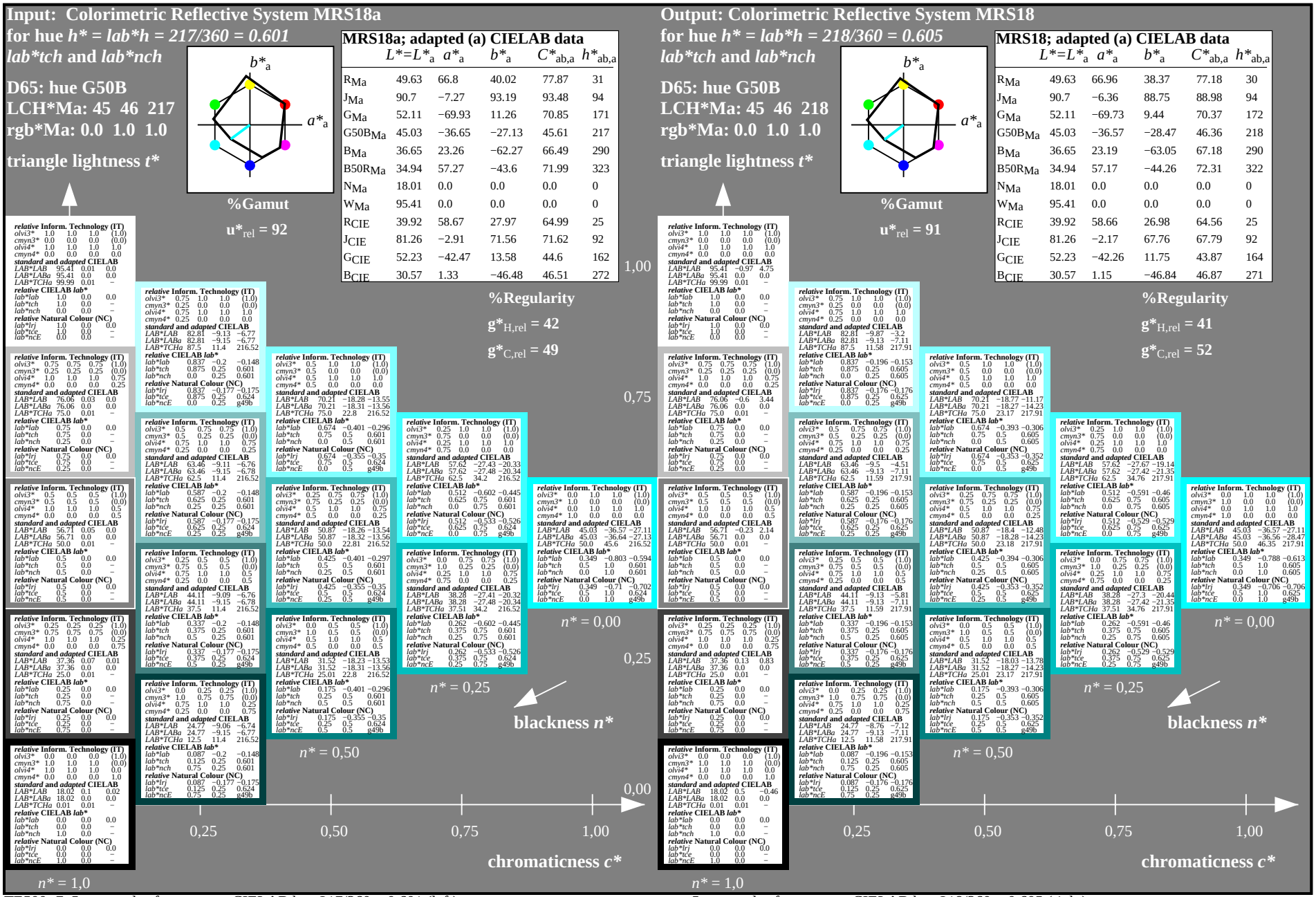

TE500−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)



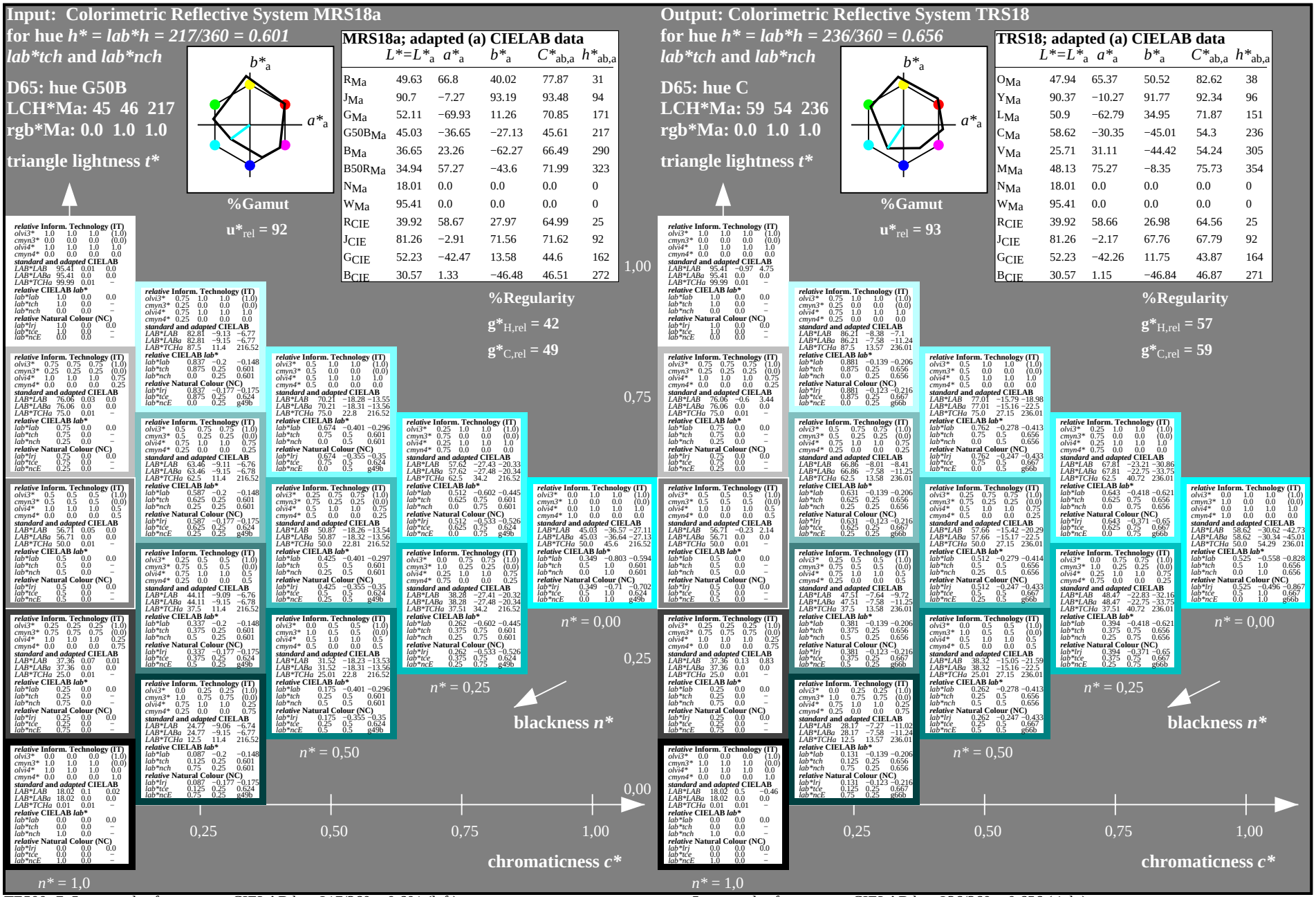

TE500−7, 5 step scales for constant CIELAB hue 217/360 = 0.601 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)




TE500−7, 5 step scales for constant CIELAB hue 217/360 = 0.601 (left)

5 step scales for constant CIELAB hue 218/360 = 0.605 (right)



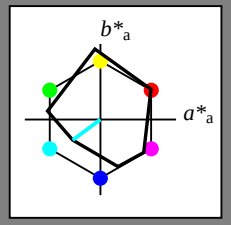

TE500−7, 5 step scales for constant CIELAB hue 217/360 = 0.601 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 217/360 = 0.601**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 217**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

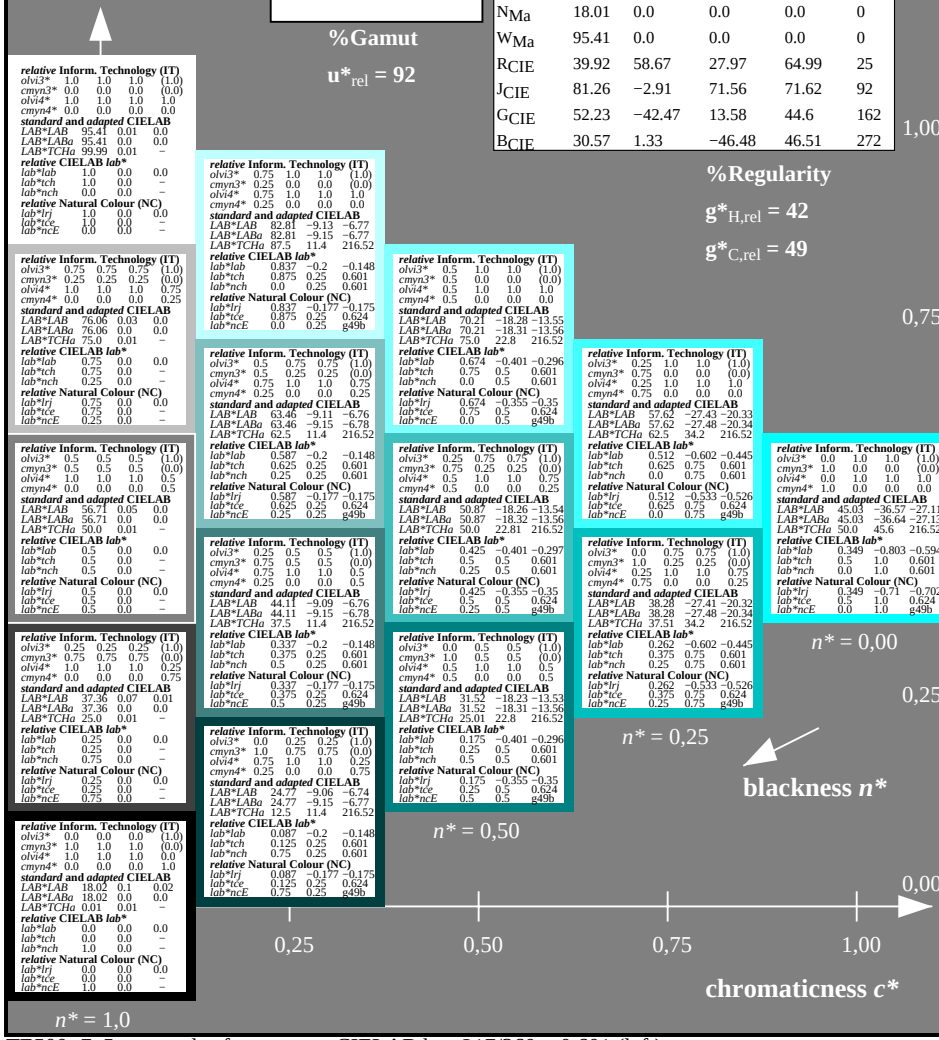
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

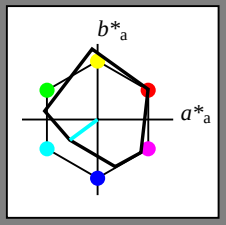
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 217/360 = 0.601**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 217**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

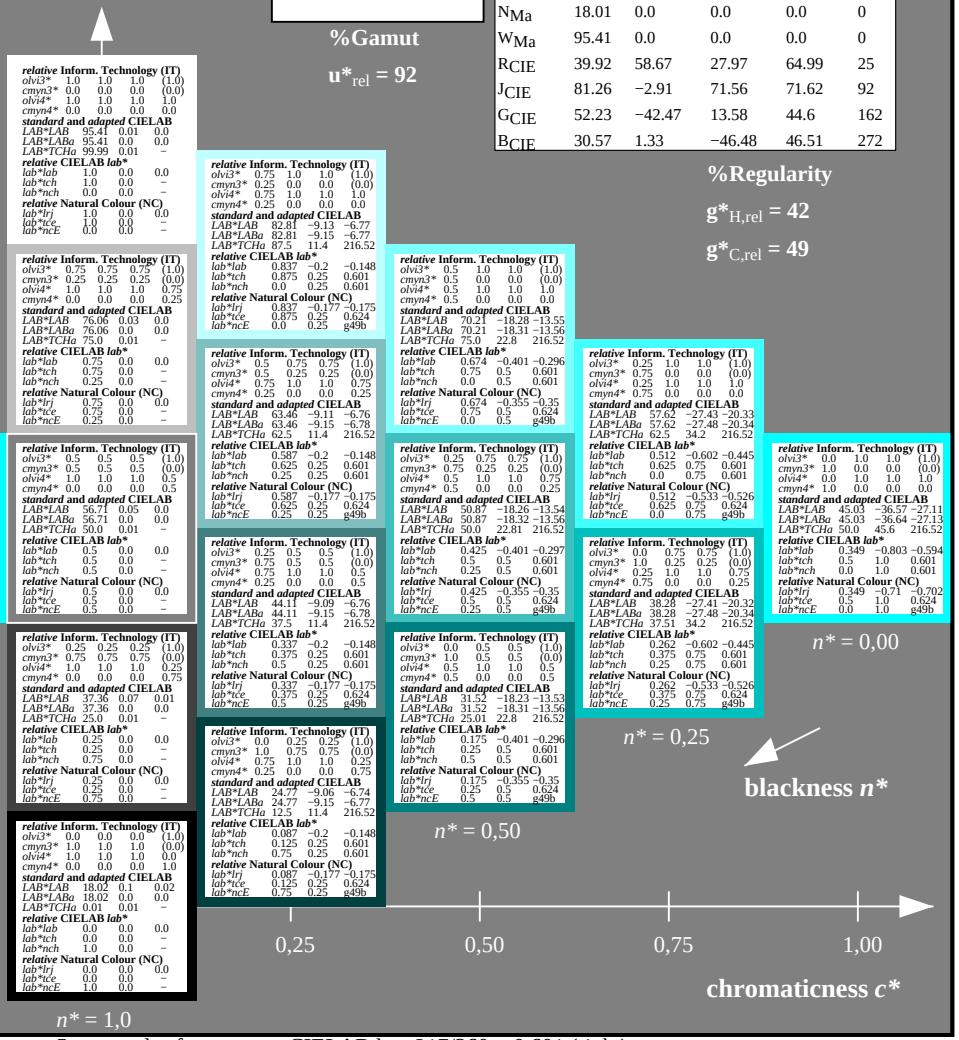
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



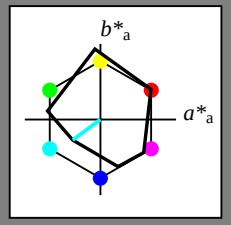

TE500−7, 5 step scales for constant CIELAB hue 217/360 = 0.601 (left)

5 step scales for constant CIELAB hue 217/360 = 0.601 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 217/360 = 0.601**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 217**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

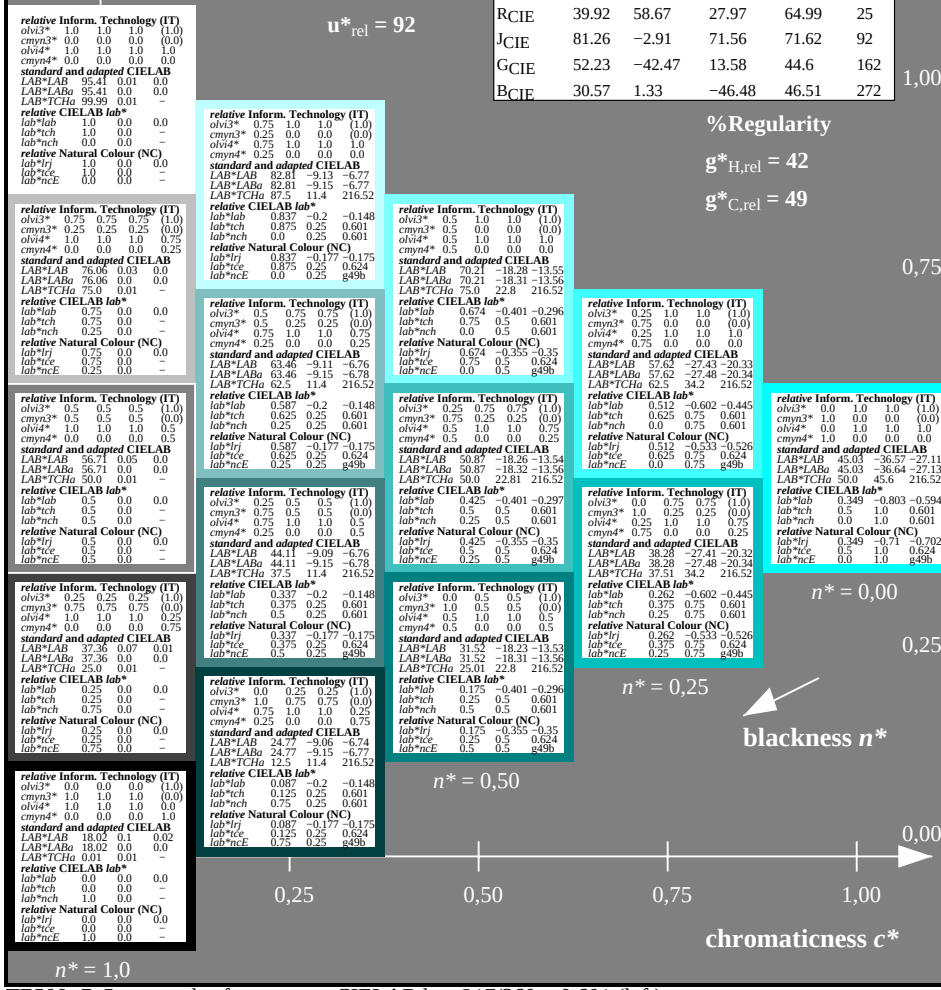
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

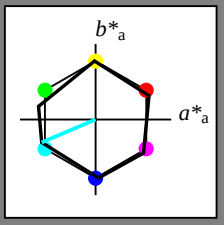
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 57 77 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

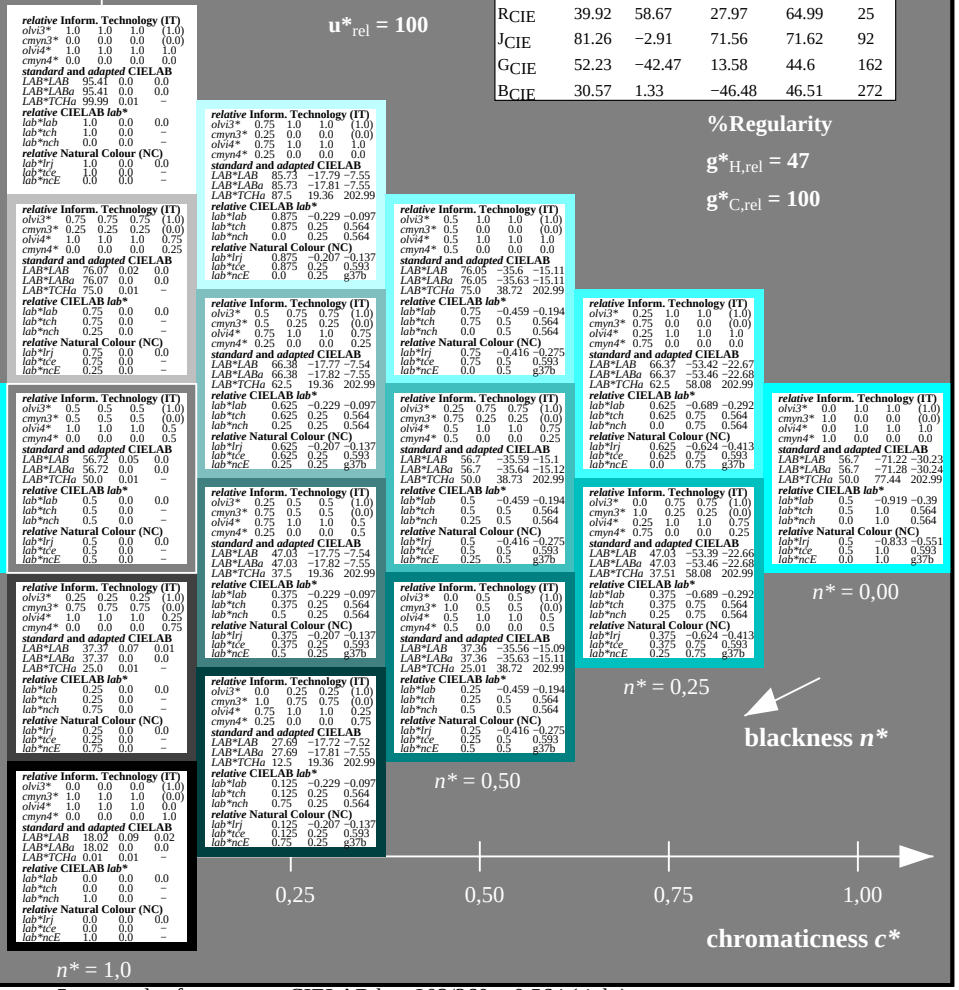
**NRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



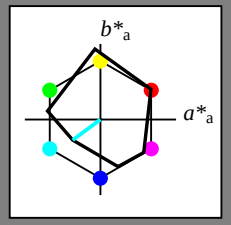

TE500−7, 5 step scales for constant CIELAB hue 217/360 = 0.601 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 217/360 = 0.601**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 217**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

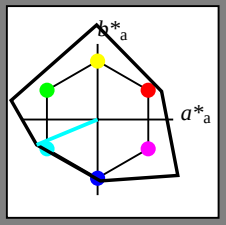
**g*$_{H,rel}$ = 42**

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

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

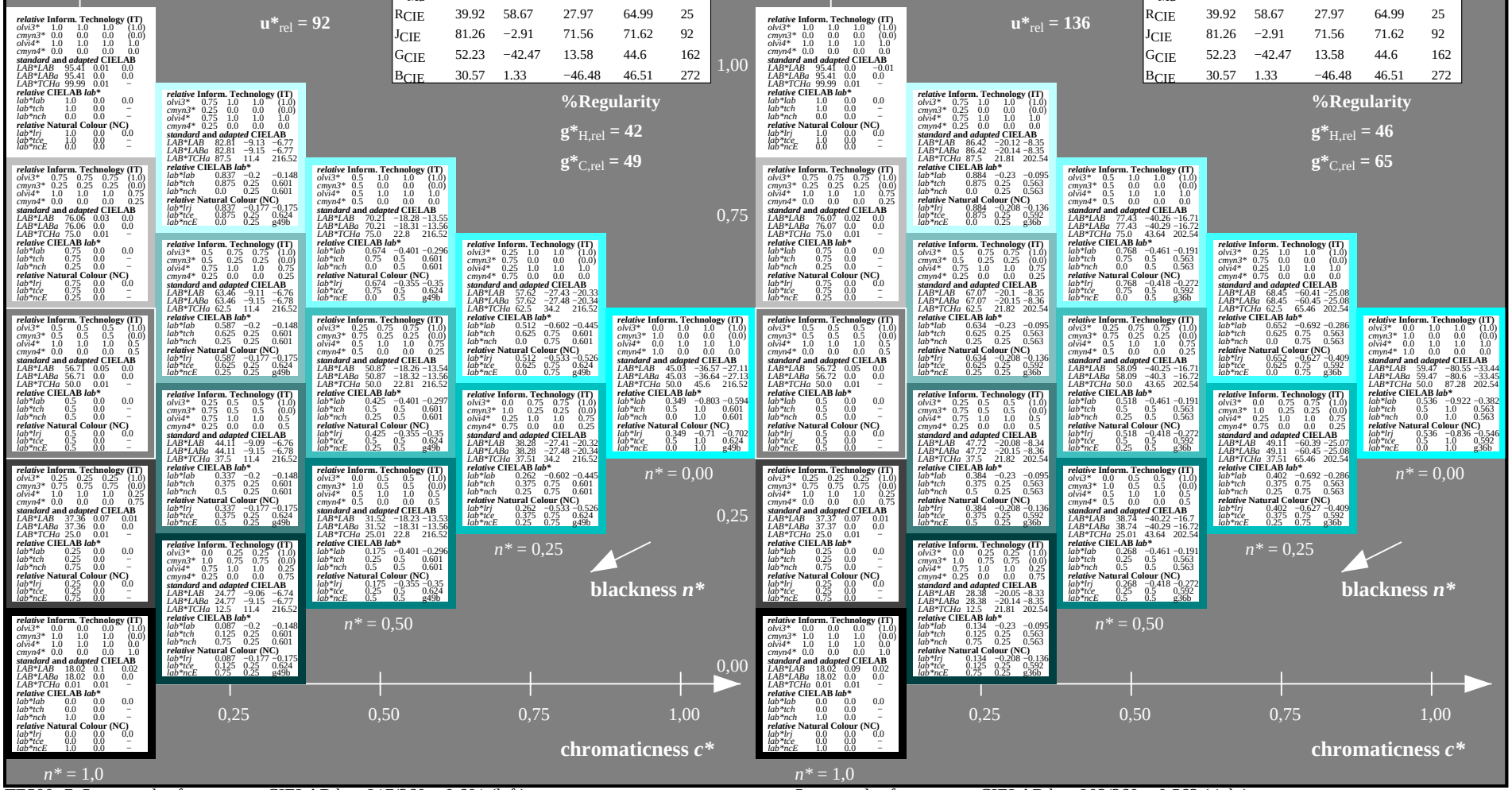
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

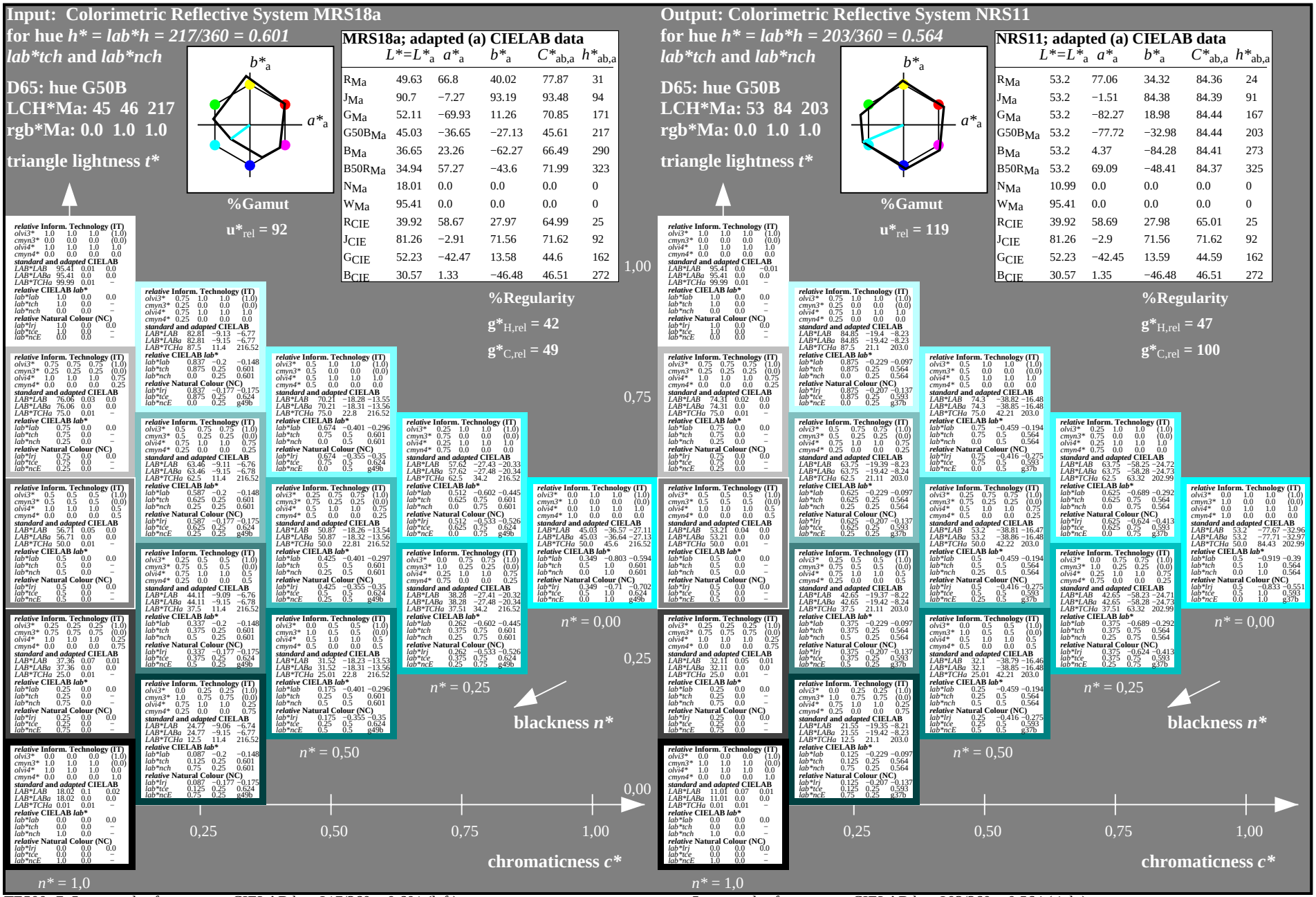
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 217/360 = 0.601 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)



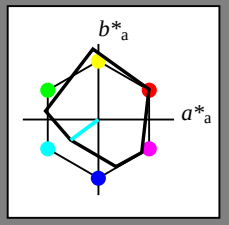

TE500−7, 5 step scales for constant CIELAB hue 217/360 = 0.601 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 217/360 = 0.601**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 217**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

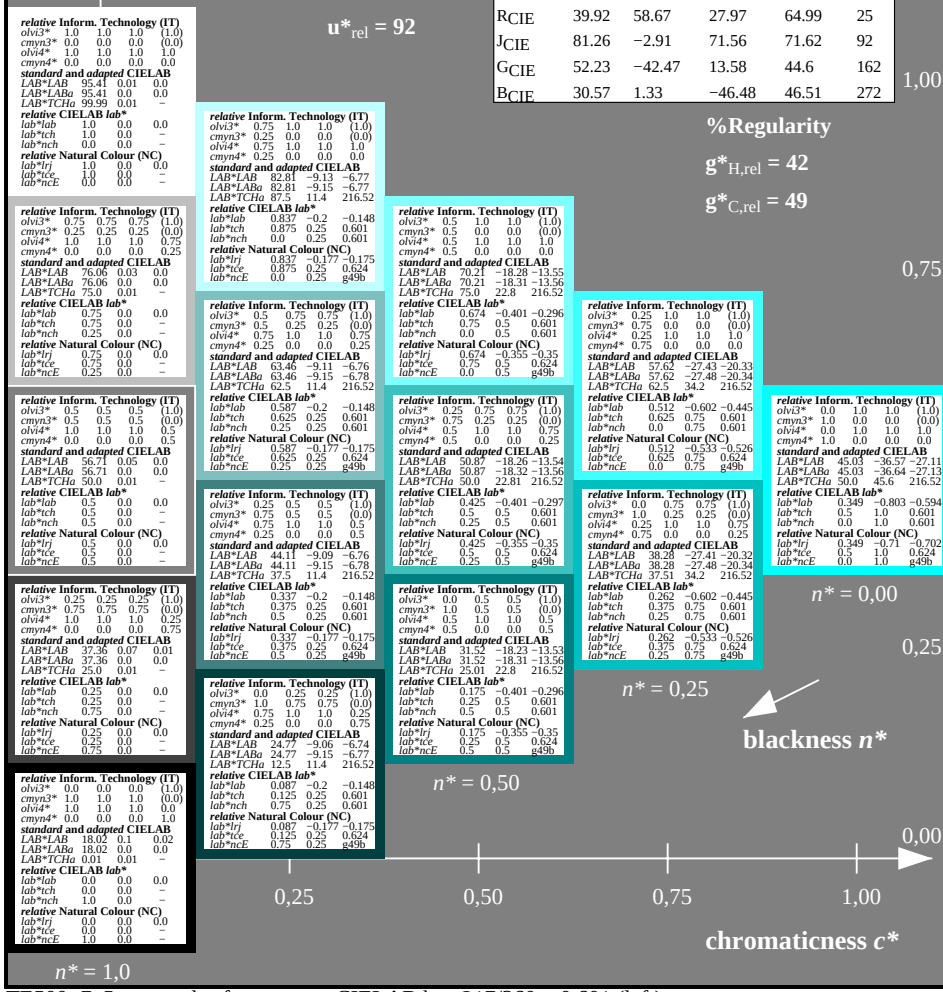
**MRS18a; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

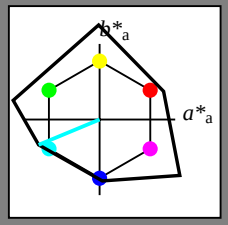
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

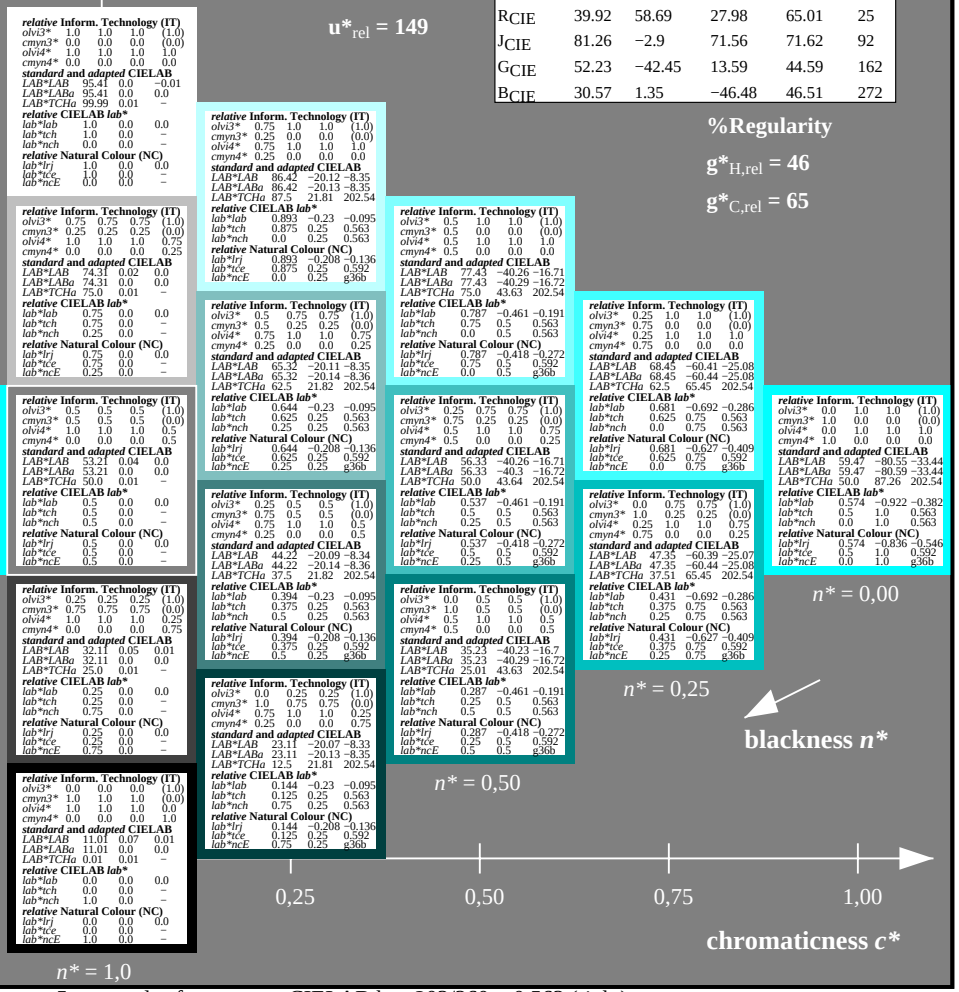
**NCS11; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



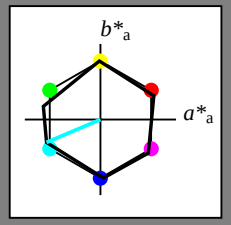

TE500−7, 5 step scales for constant CIELAB hue 217/360 = 0.601 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 57 77 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

**NRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

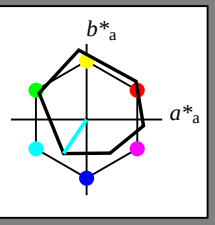
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric 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**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

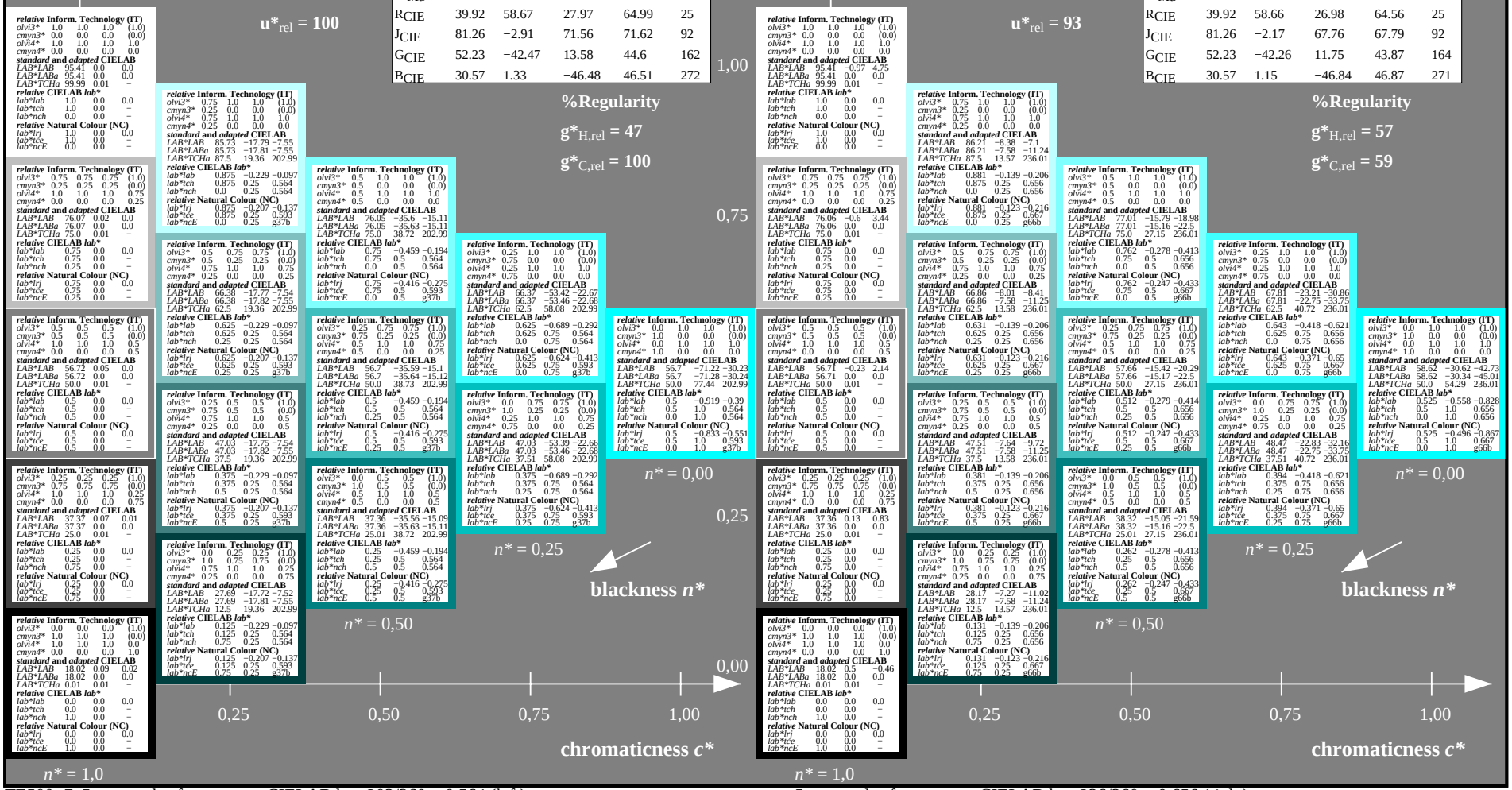
**ORS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

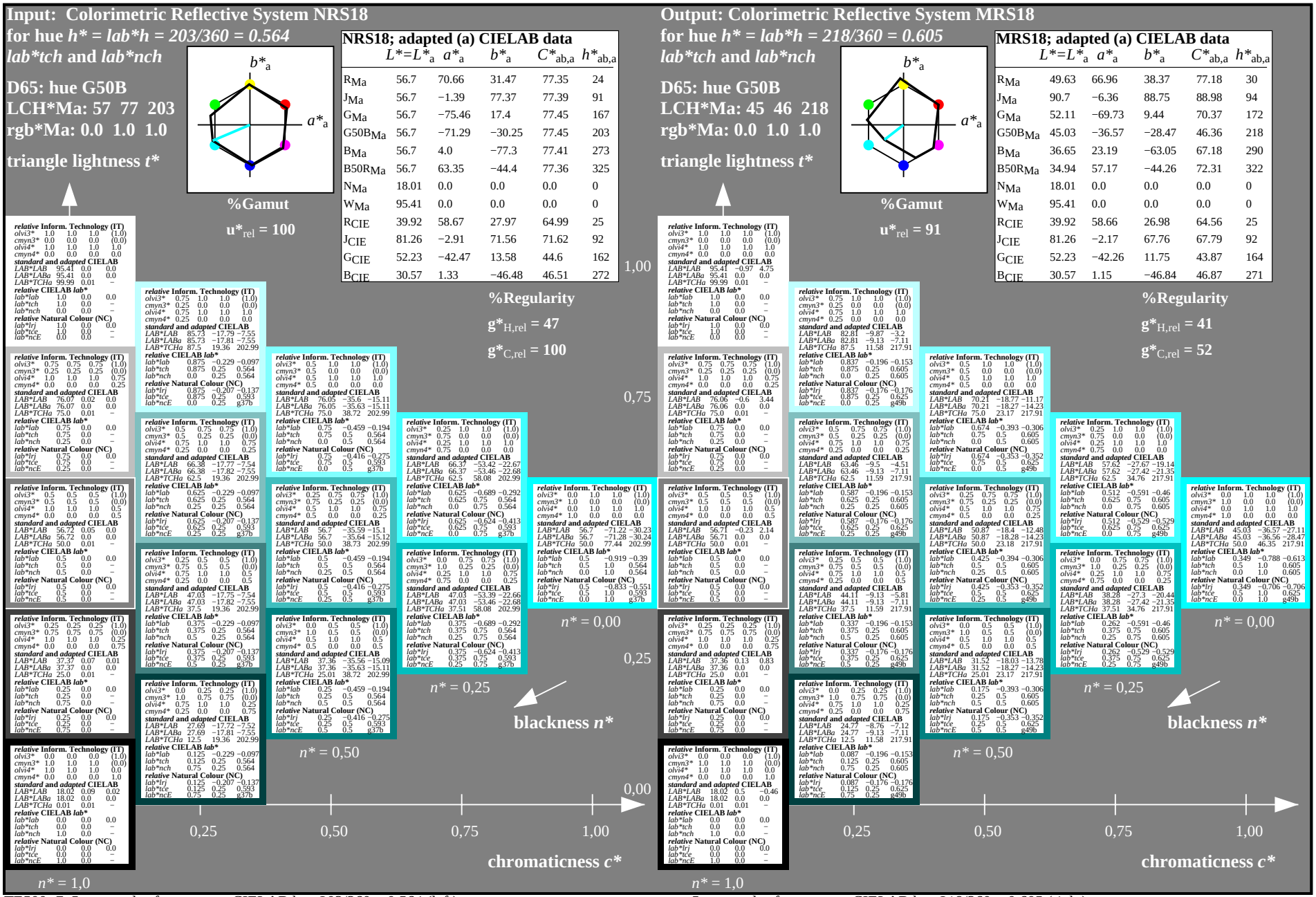
**g*$_{H,rel}$ = 57**

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



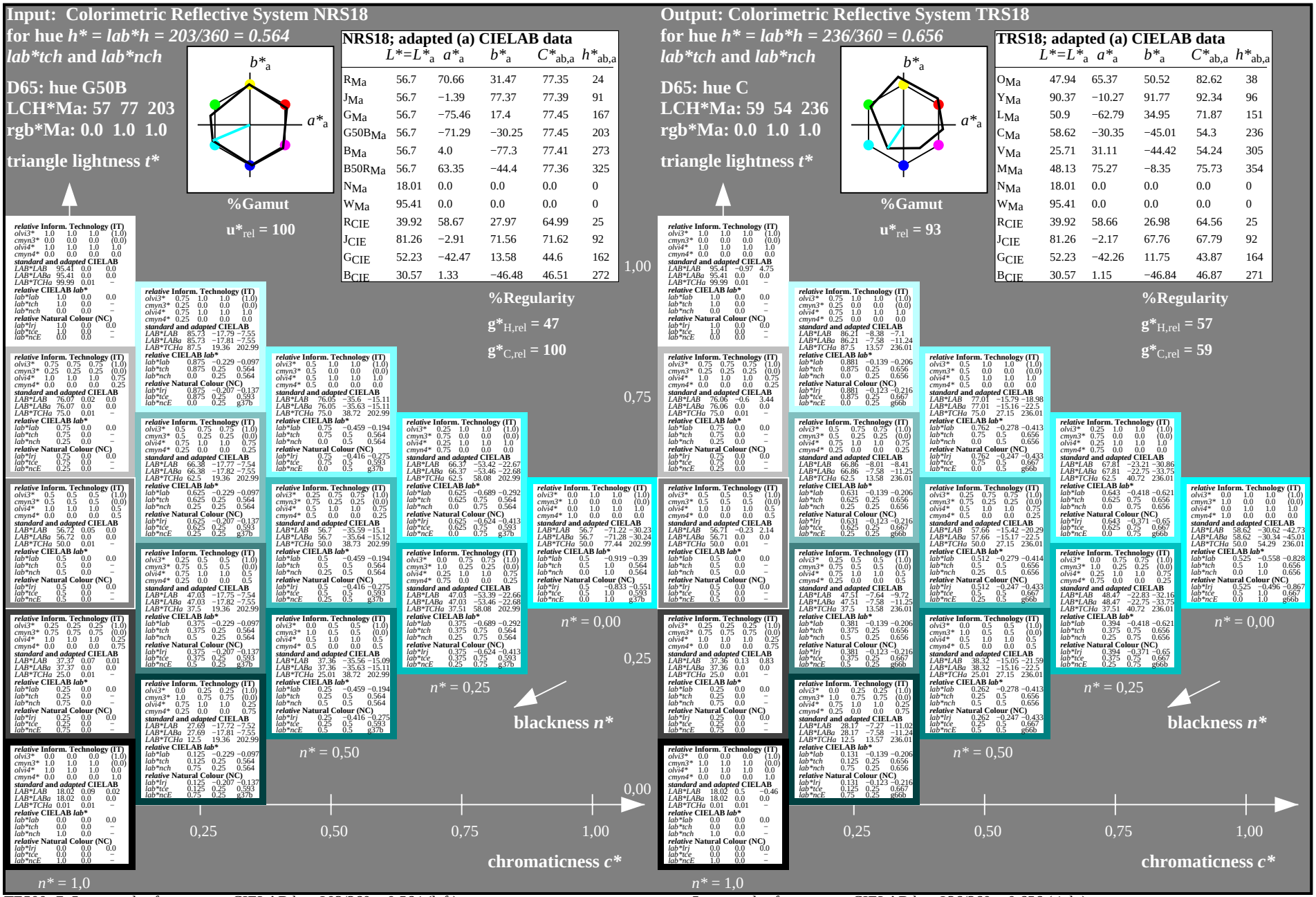

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)



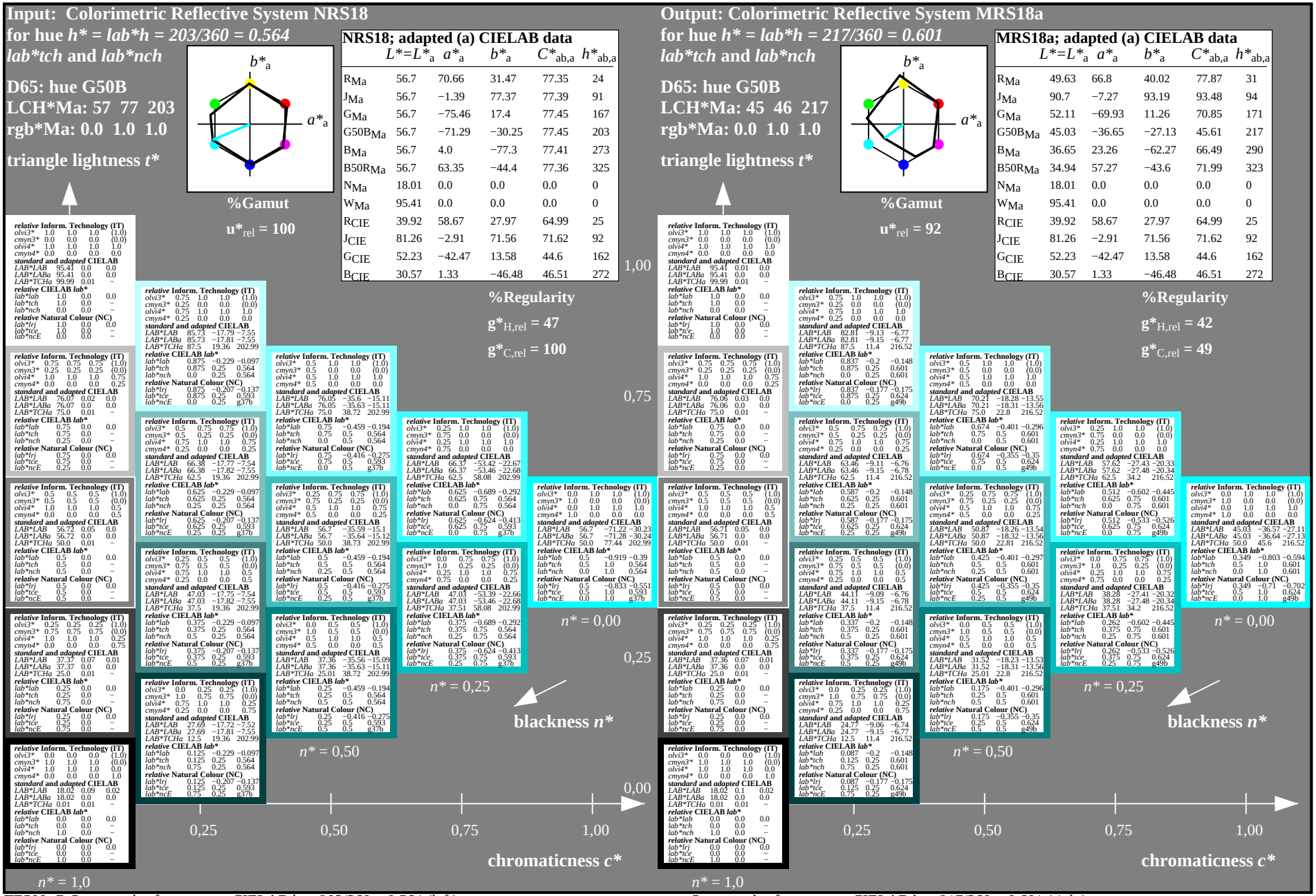

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 218/360 = 0.605 (right)



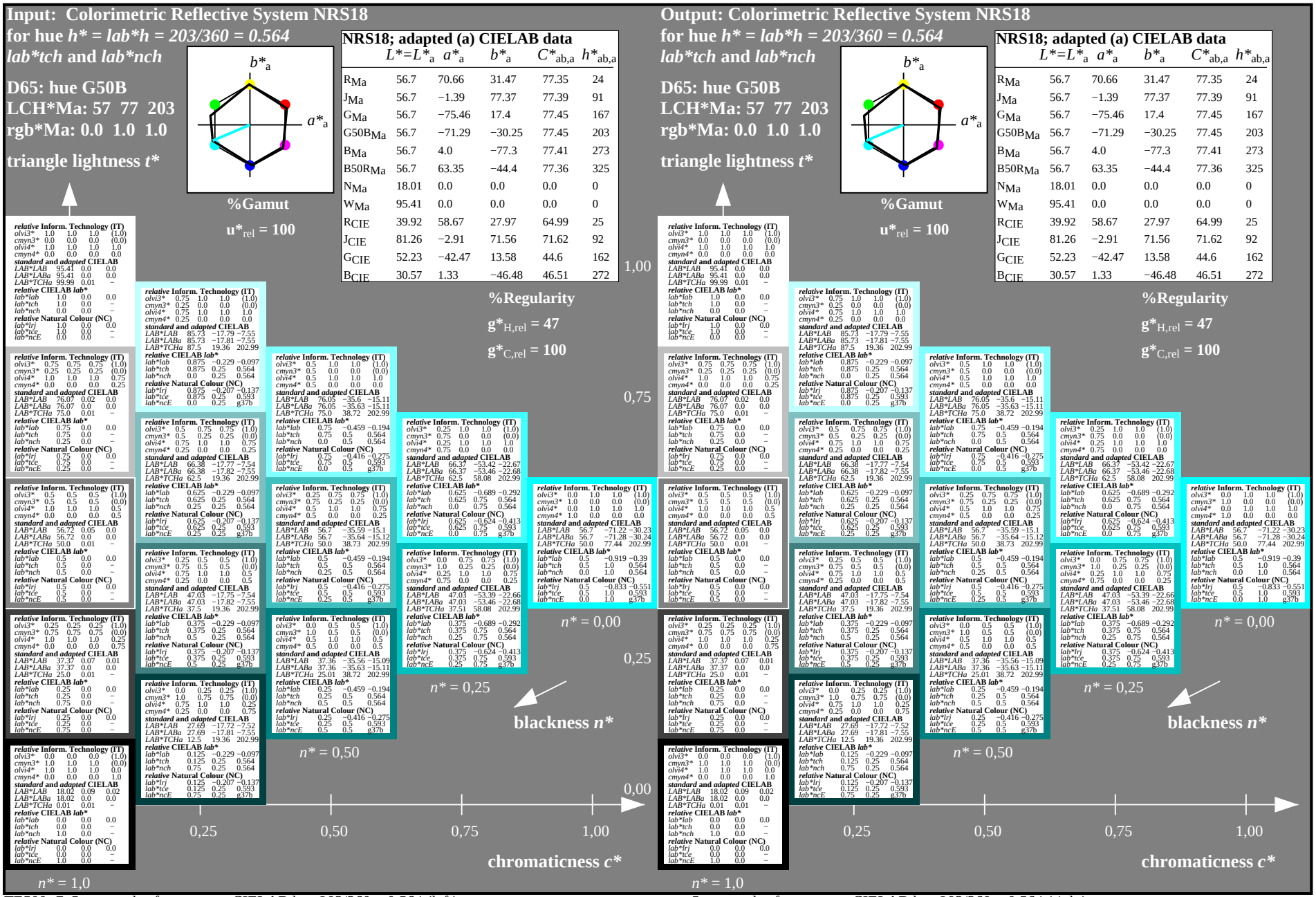

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)




TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 217/360 = 0.601 (right)



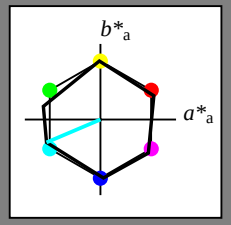

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 57 77 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

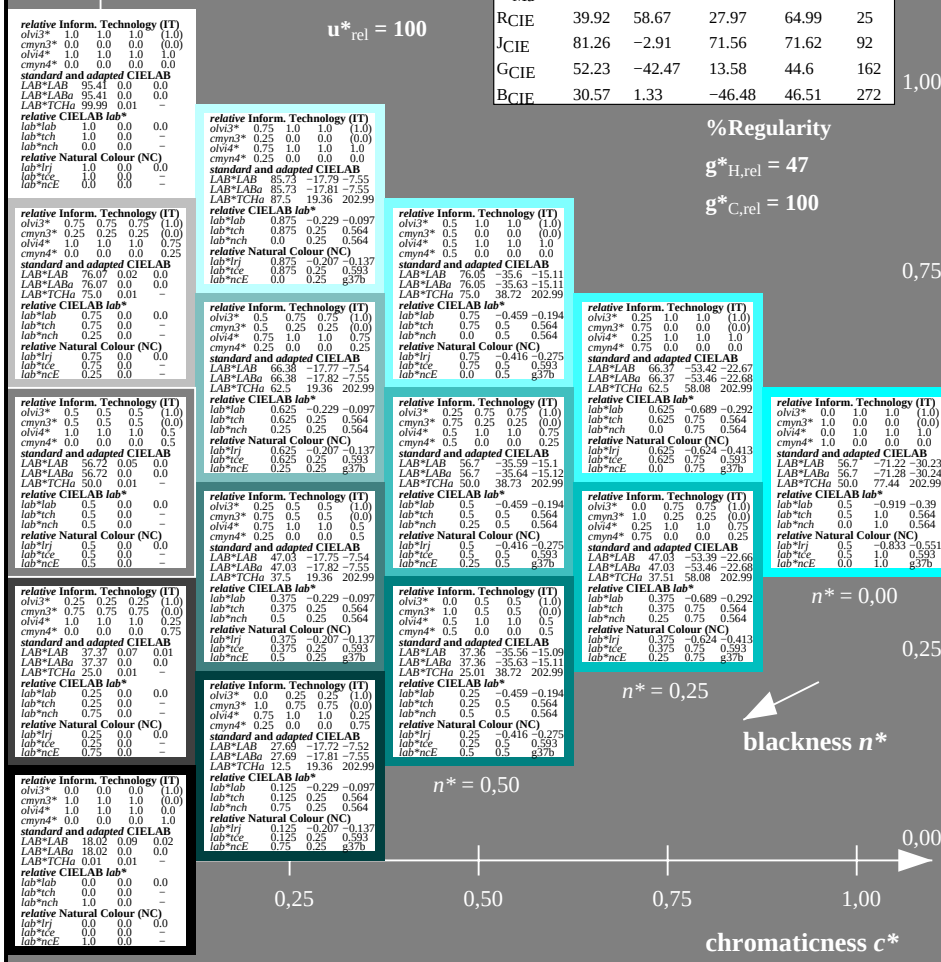
**NRS18; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

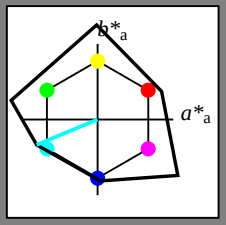
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

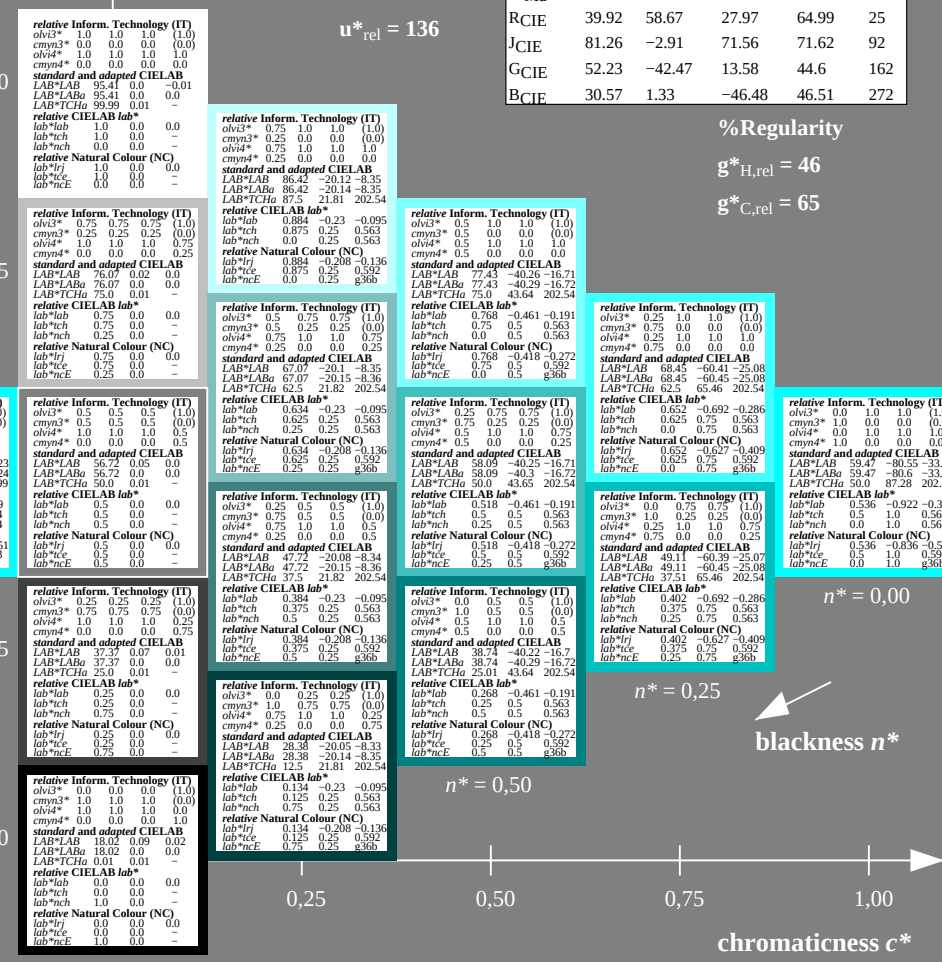
**NCS18; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



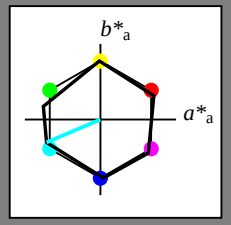

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 57 77 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

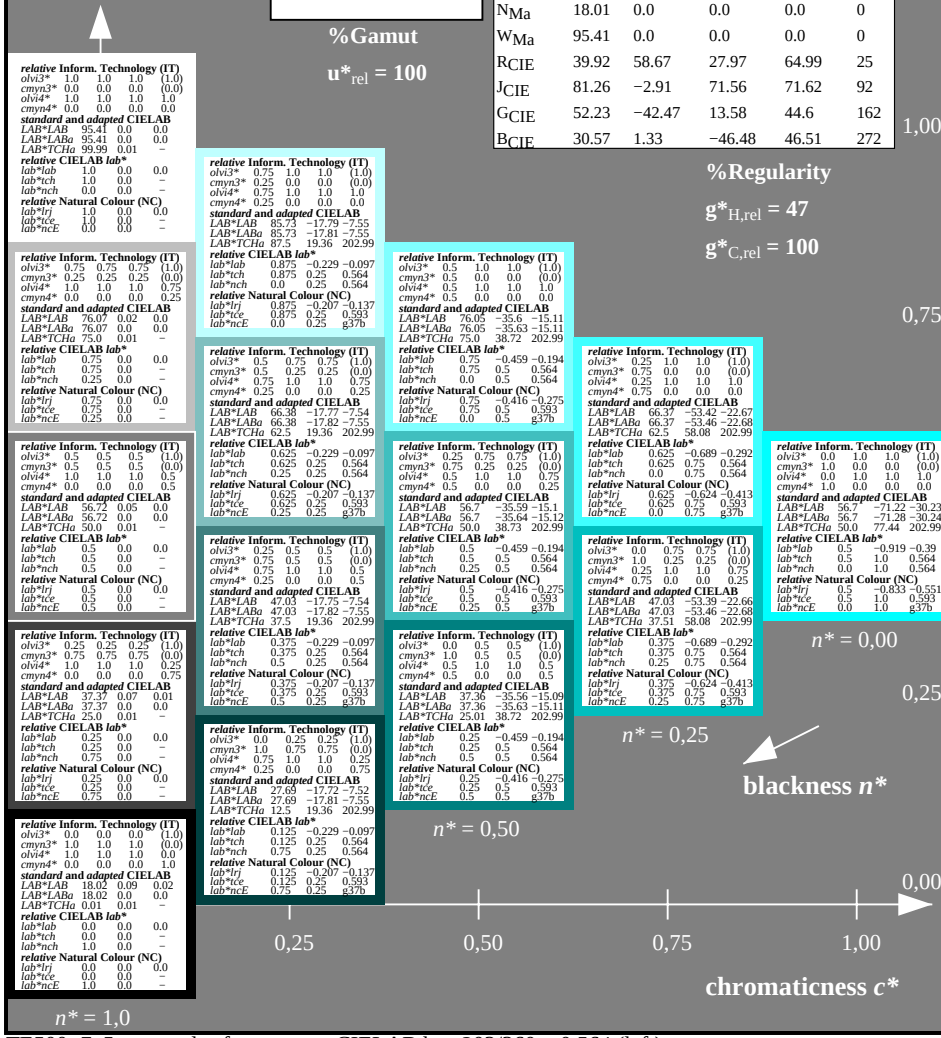
**NRS18; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

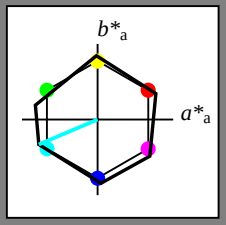
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 53 84 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

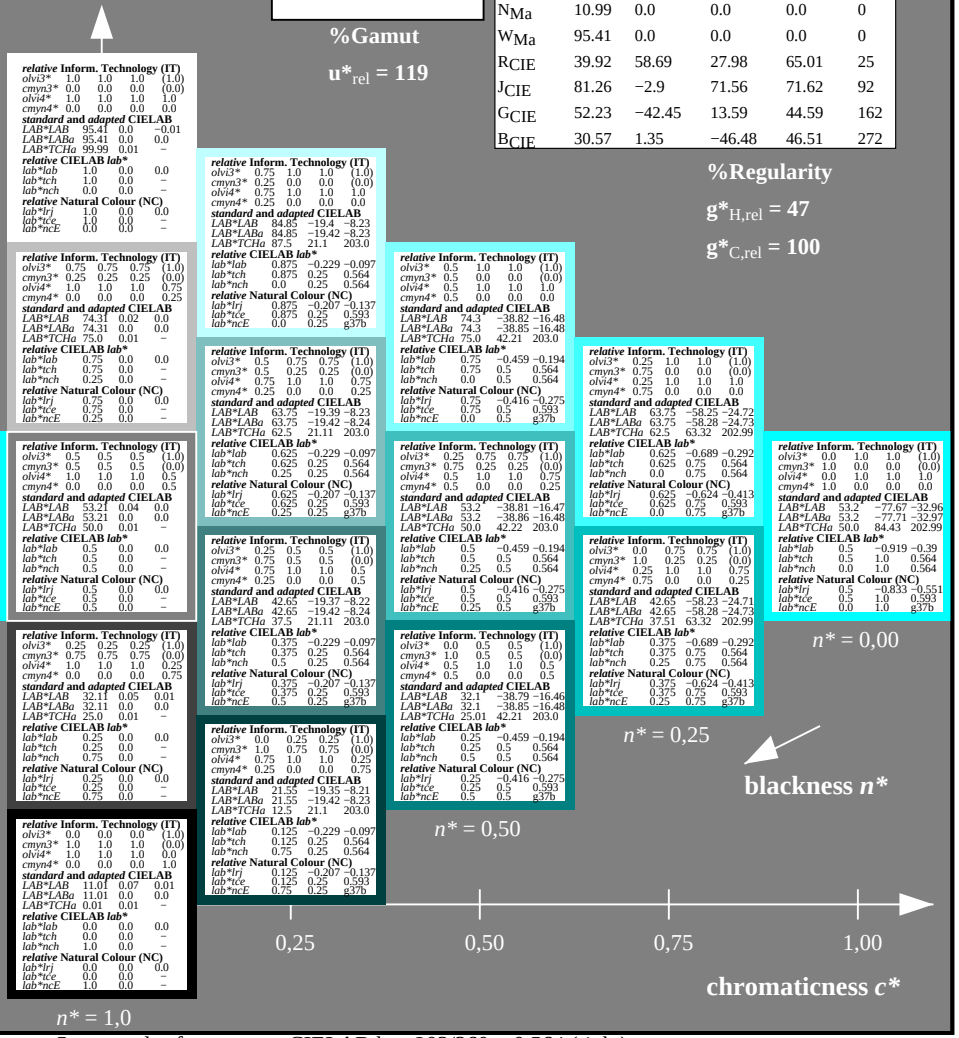
**NRS11; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



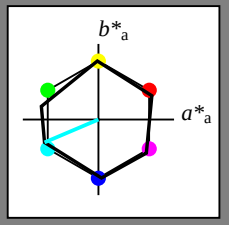

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 57 77 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

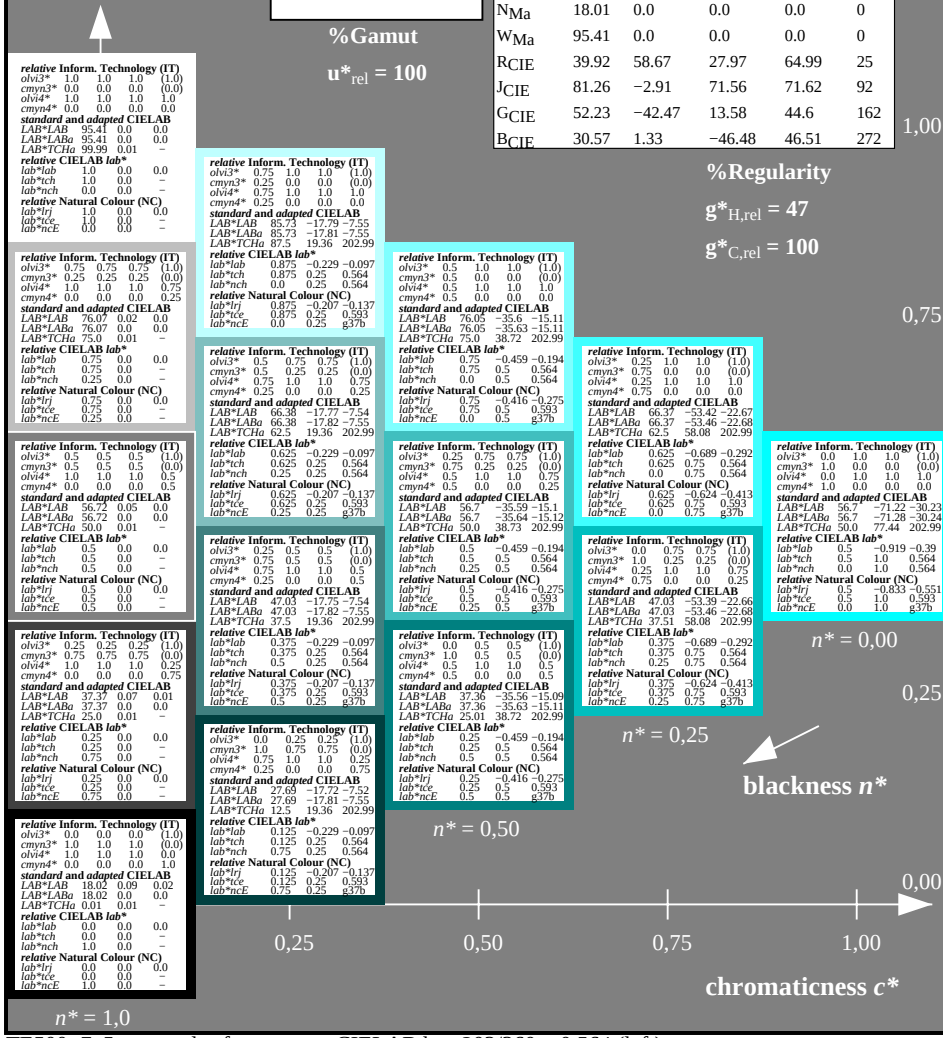
**NRS18; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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

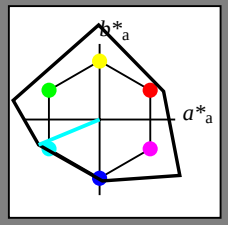



TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

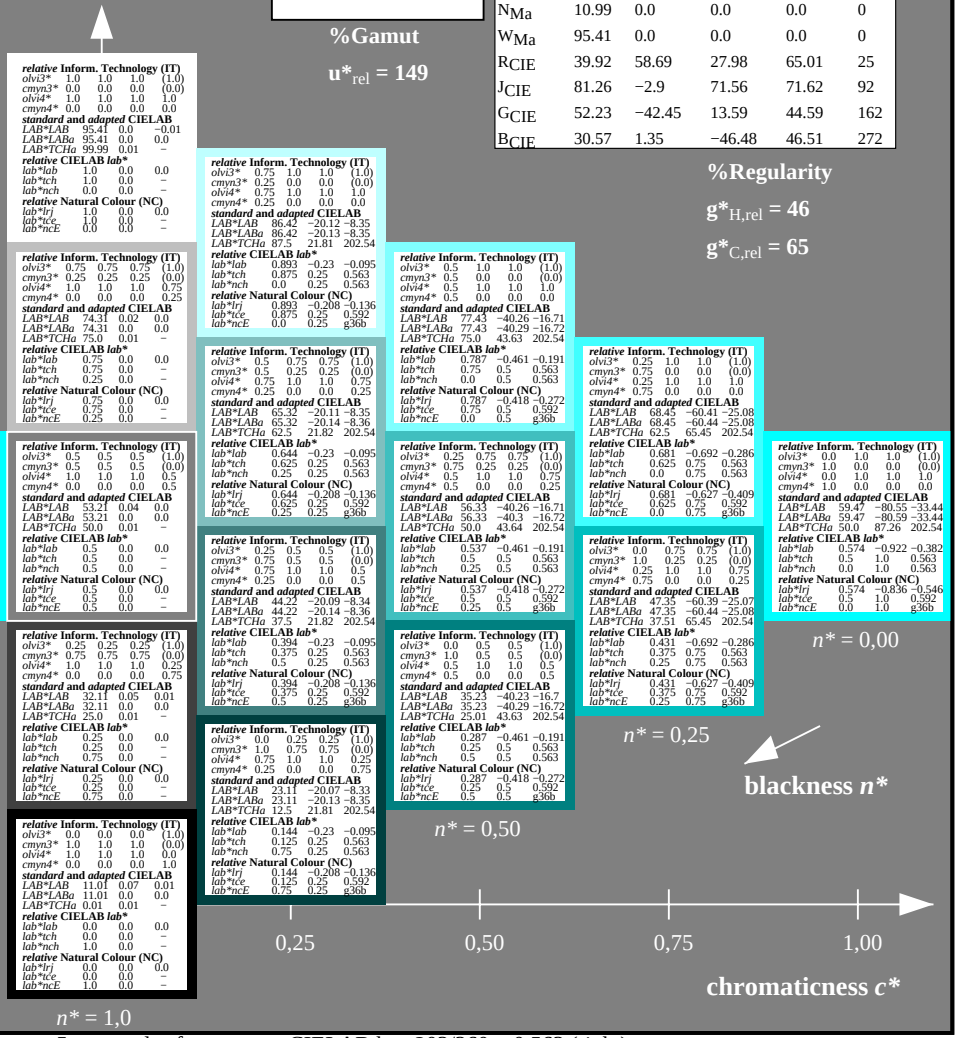
**NCS11; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

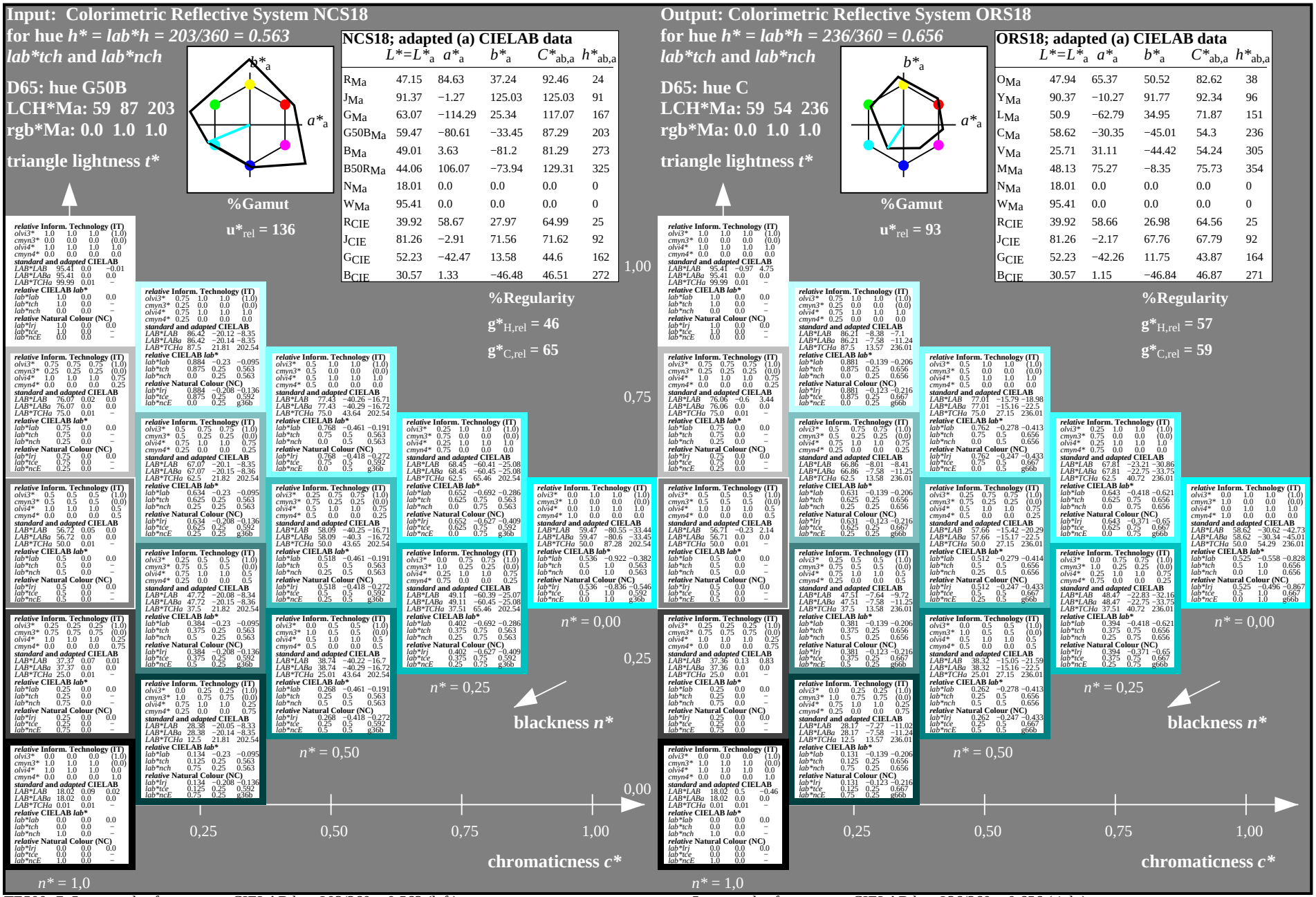
**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




5 step scales for constant CIELAB hue 203/360 = 0.563 (right)




**NCS18; adapted (a) CIELAB data**

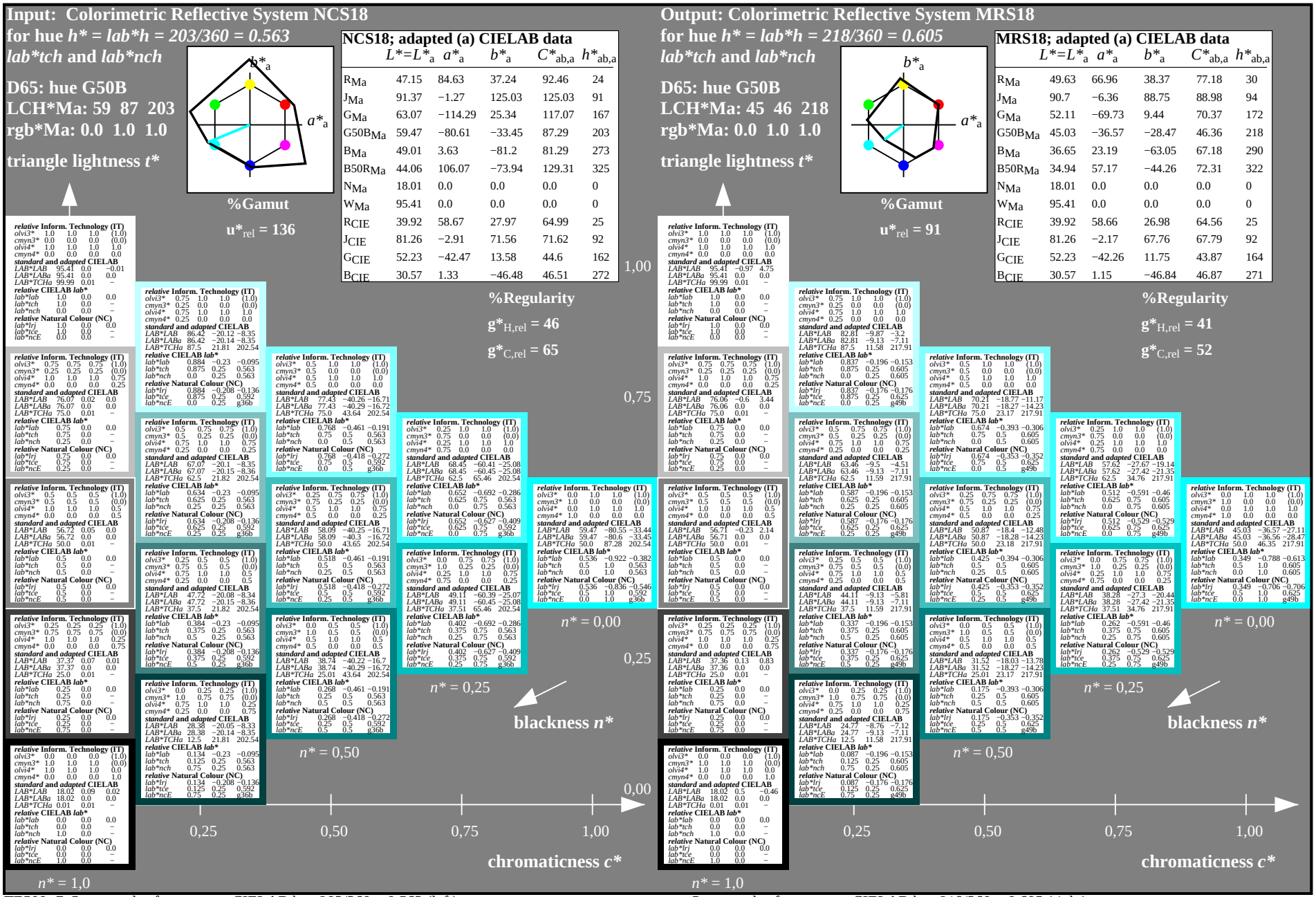
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

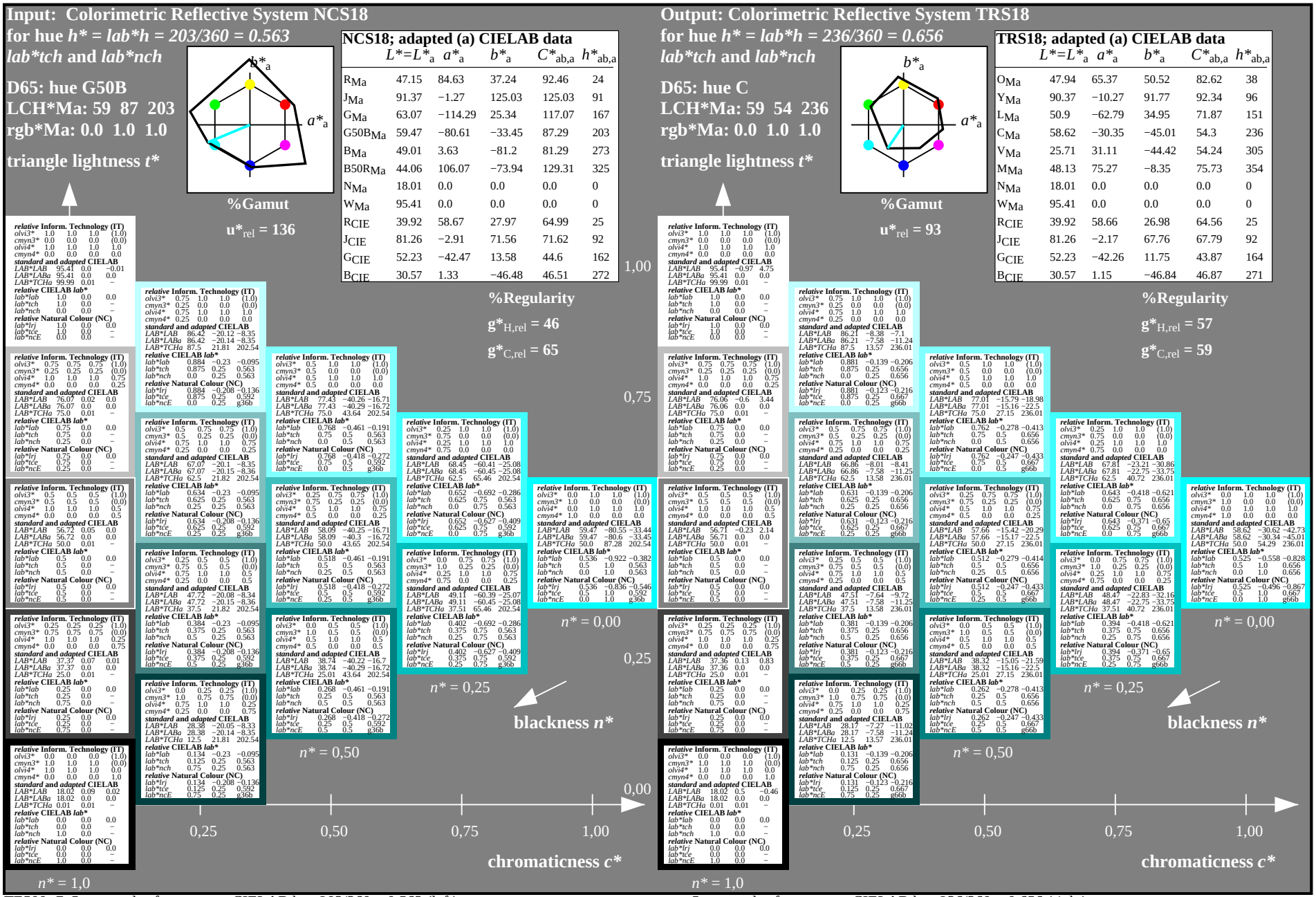
TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)




TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 218/360 = 0.605 (right)




**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

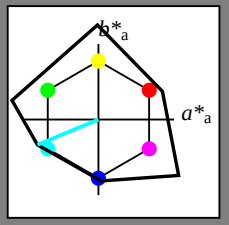
TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

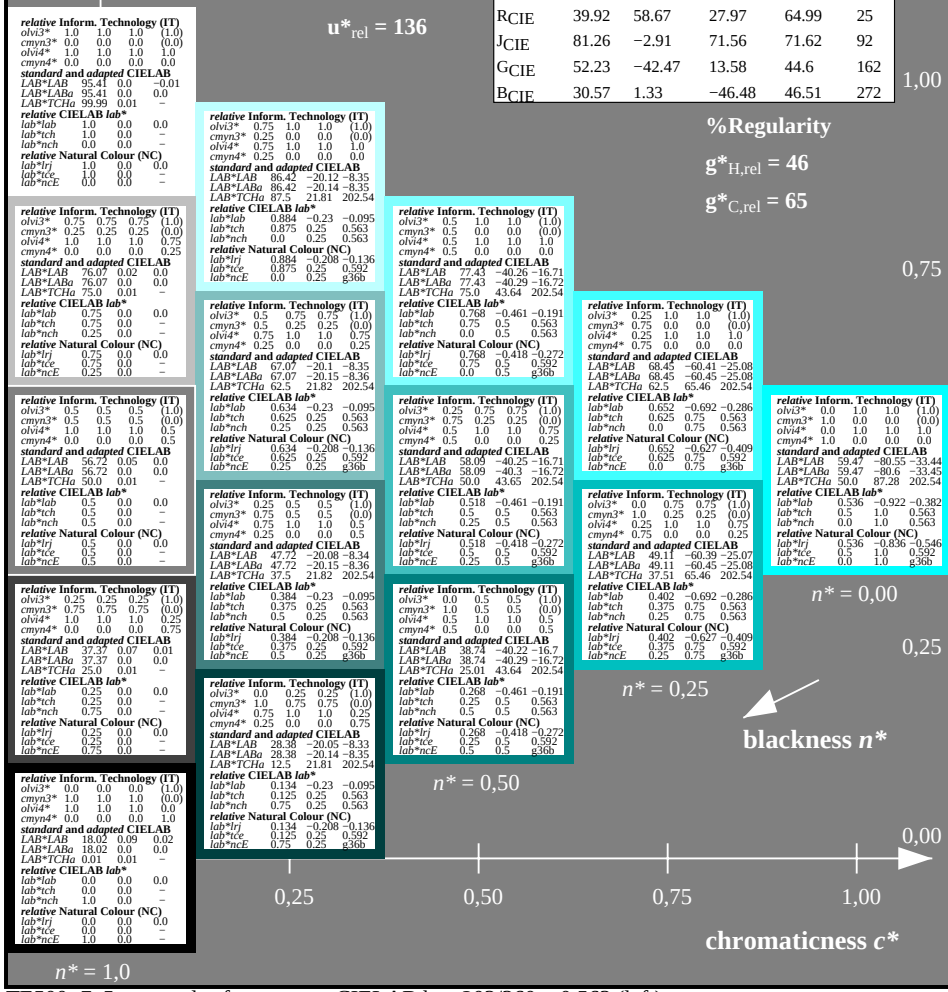
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

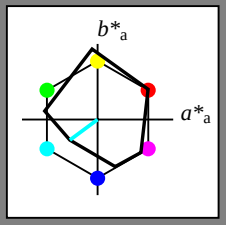
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 217/360 = 0.601**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 217**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

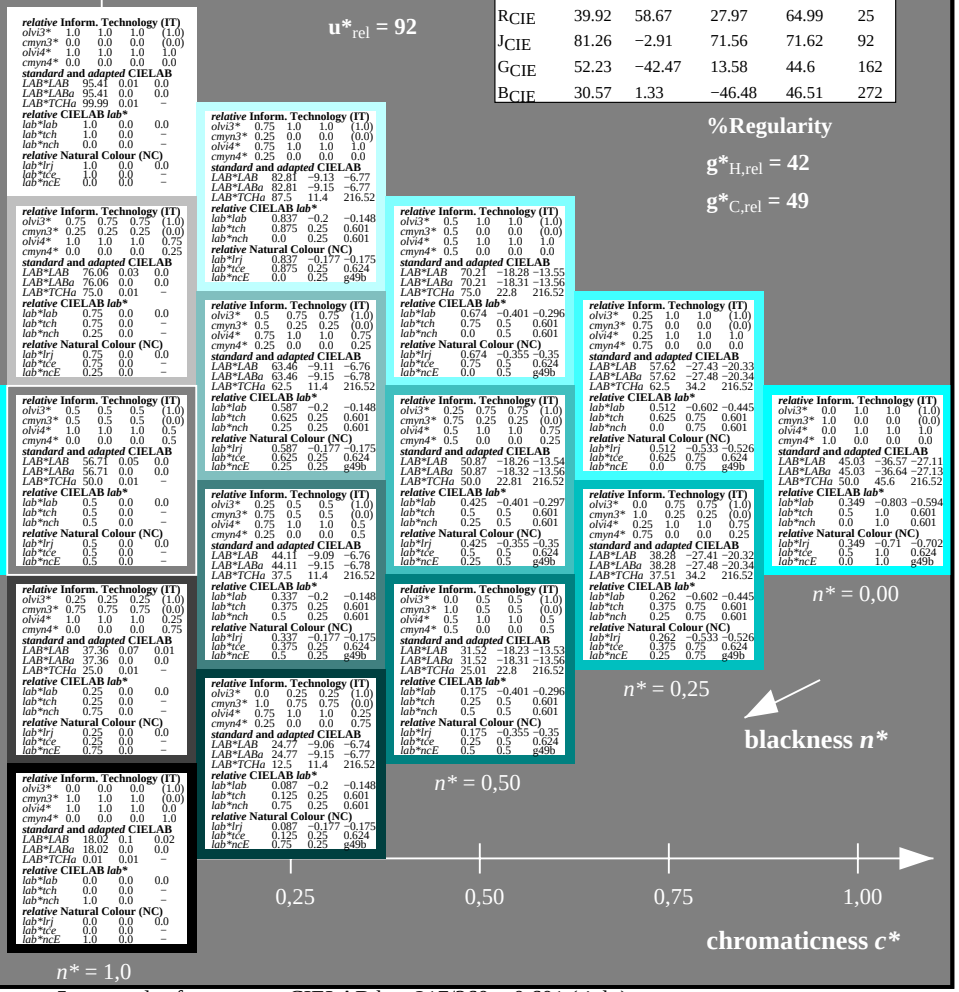
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



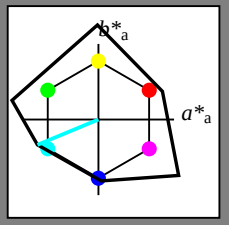

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 217/360 = 0.601 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

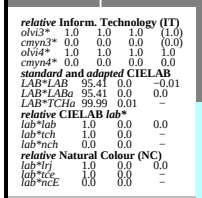
**NCS18; adapted (a) CIELAB data**

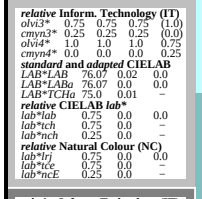
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

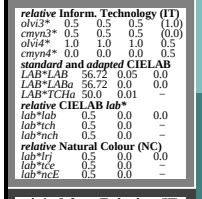
**%Regularity**

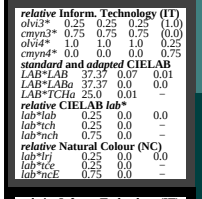
**g*$_{H,rel}$ = 46**

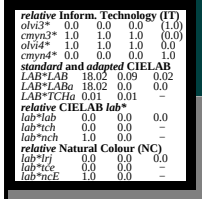
**g*$_{C,rel}$ = 65**

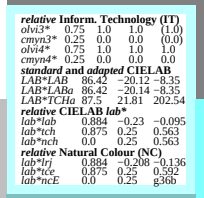


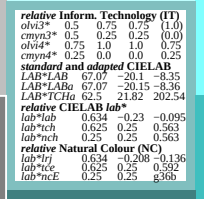



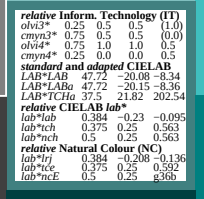



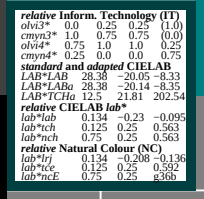



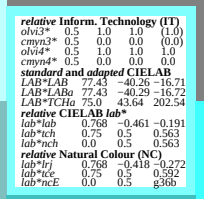



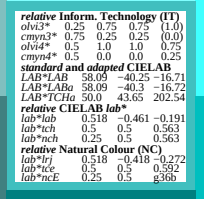



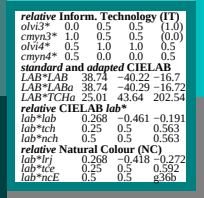



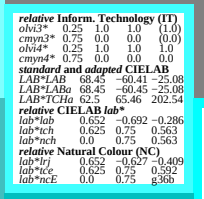



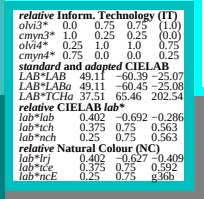



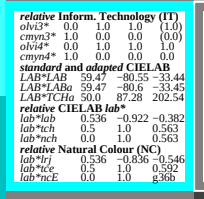



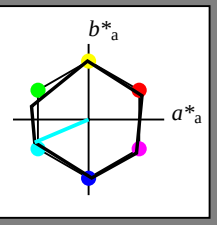




1,00
0,75
0,25
0,00
*n** = 0,00
*n** = 0,25
*n** = 0,50
*n** = 1,0
**blackness *n***
0,25 0,50 0,75 1,00
**chromaticness *c***

**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 57 77 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

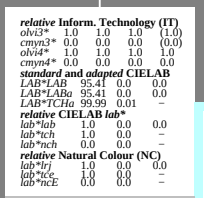
**NRS18; adapted (a) CIELAB data**

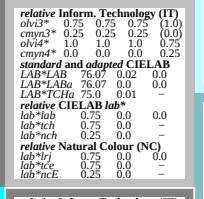
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

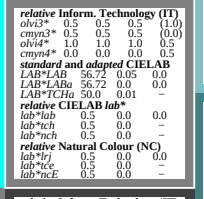
**%Regularity**

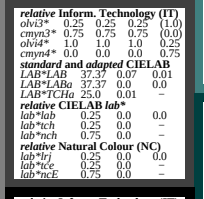
**g*$_{H,rel}$ = 47**

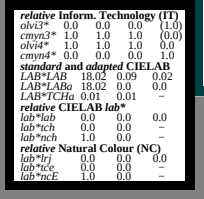
**g*$_{C,rel}$ = 100**

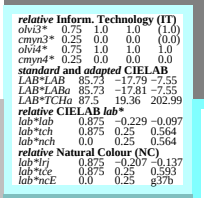


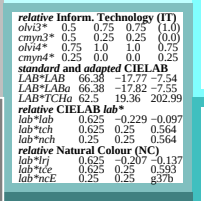



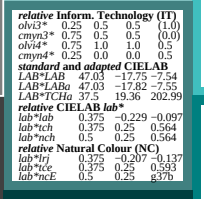



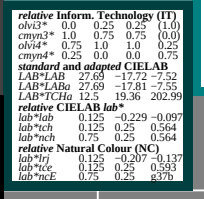



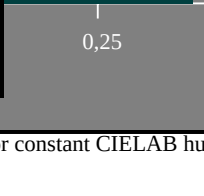



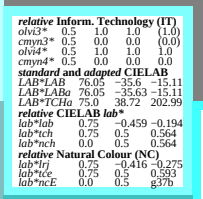



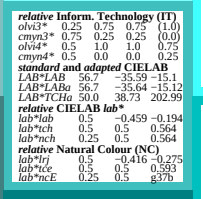



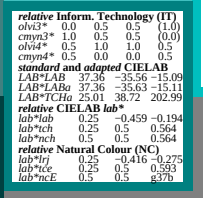



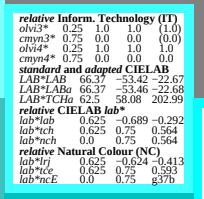



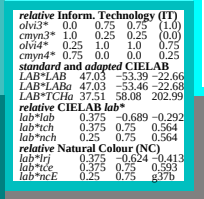



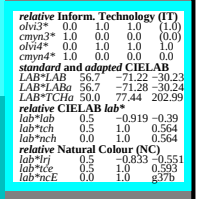




1,00
0,75
0,25
0,00
*n** = 0,00
*n** = 0,25
*n** = 0,50
*n** = 1,0
**blackness *n***
0,25 0,50 0,75 1,00
**chromaticness *c***

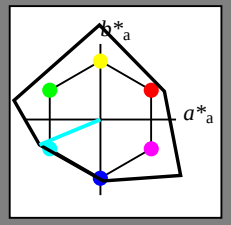
TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

1,00
0,75
0,25
0,00

*n** = 0,00
*n** = 0,25
*n** = 0,50
*n** = 1,0

**blackness *n****

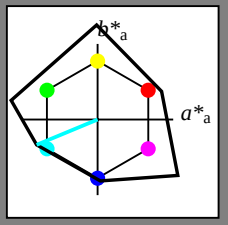
0,25 0,50 0,75 1,00

**chromaticness *c****

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

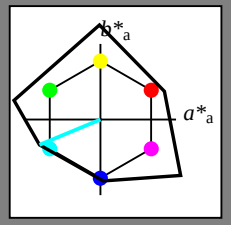
TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

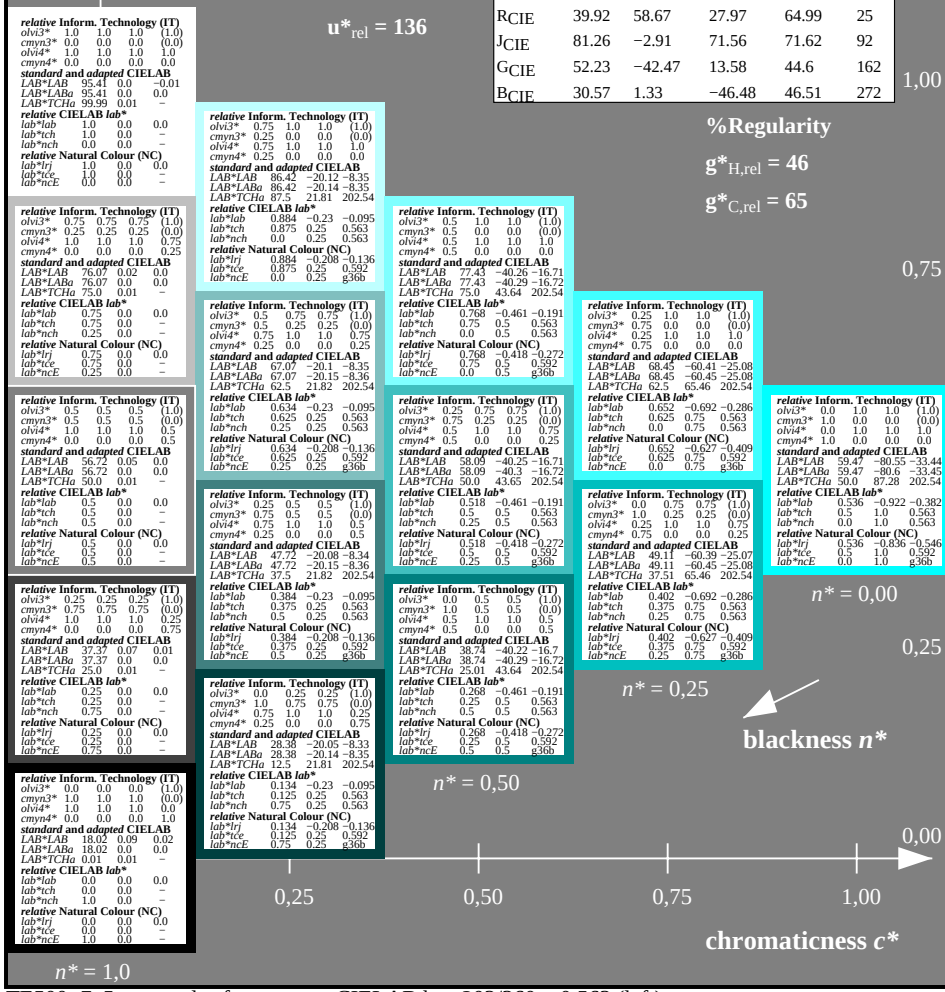
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

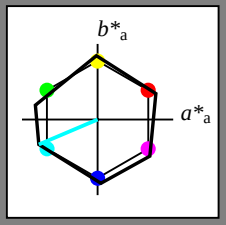
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 53 84 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

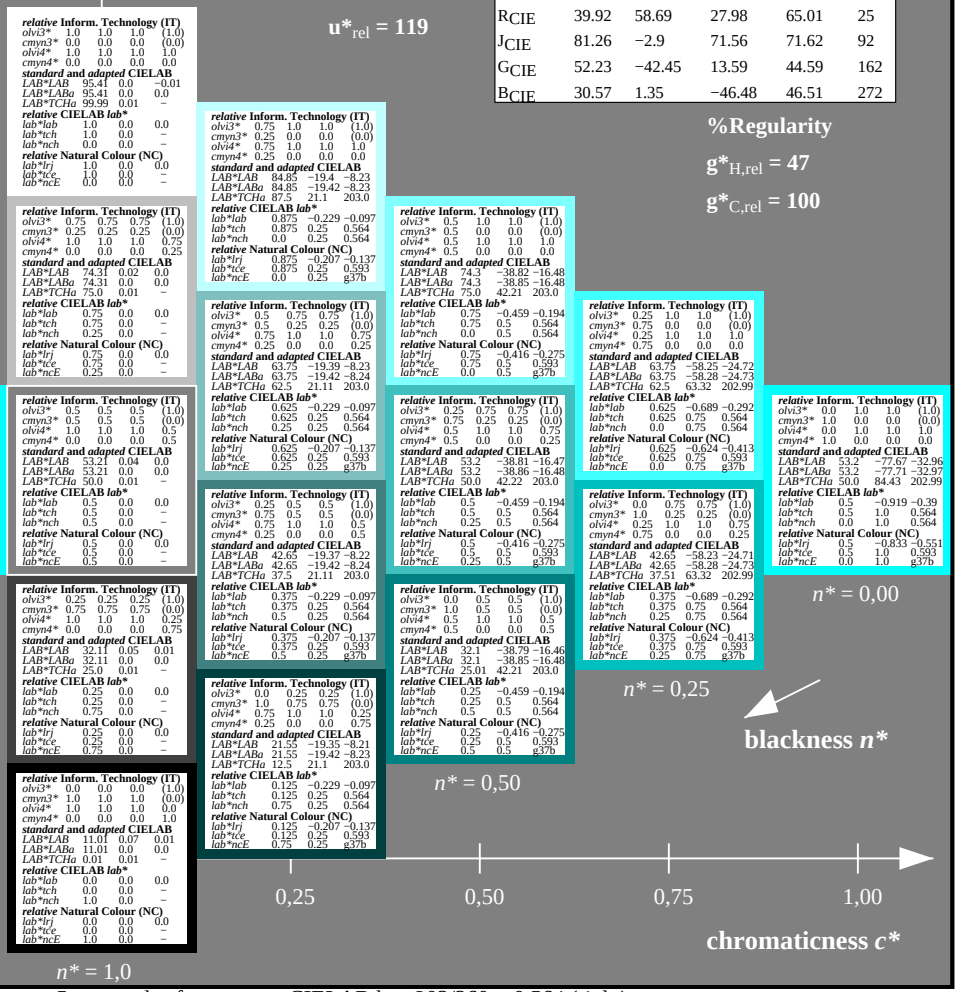
**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



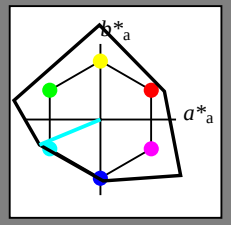

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

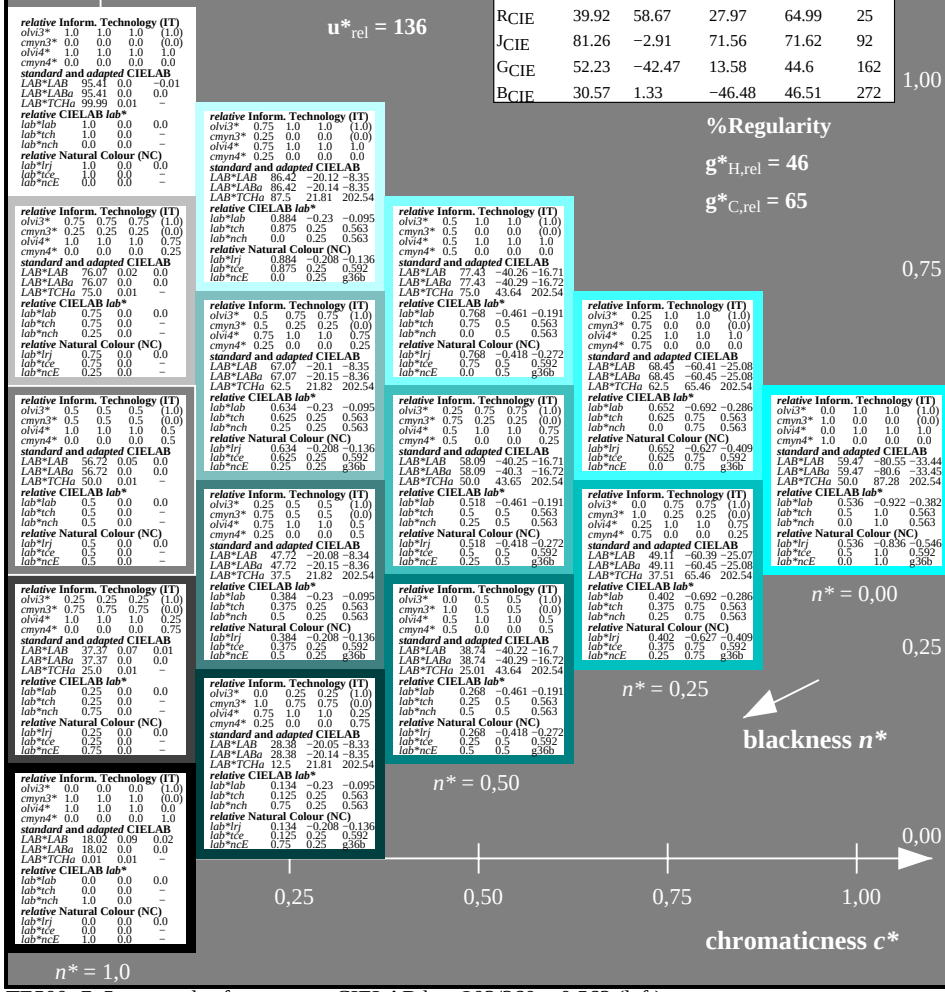
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

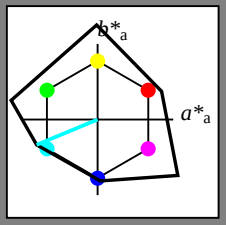
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

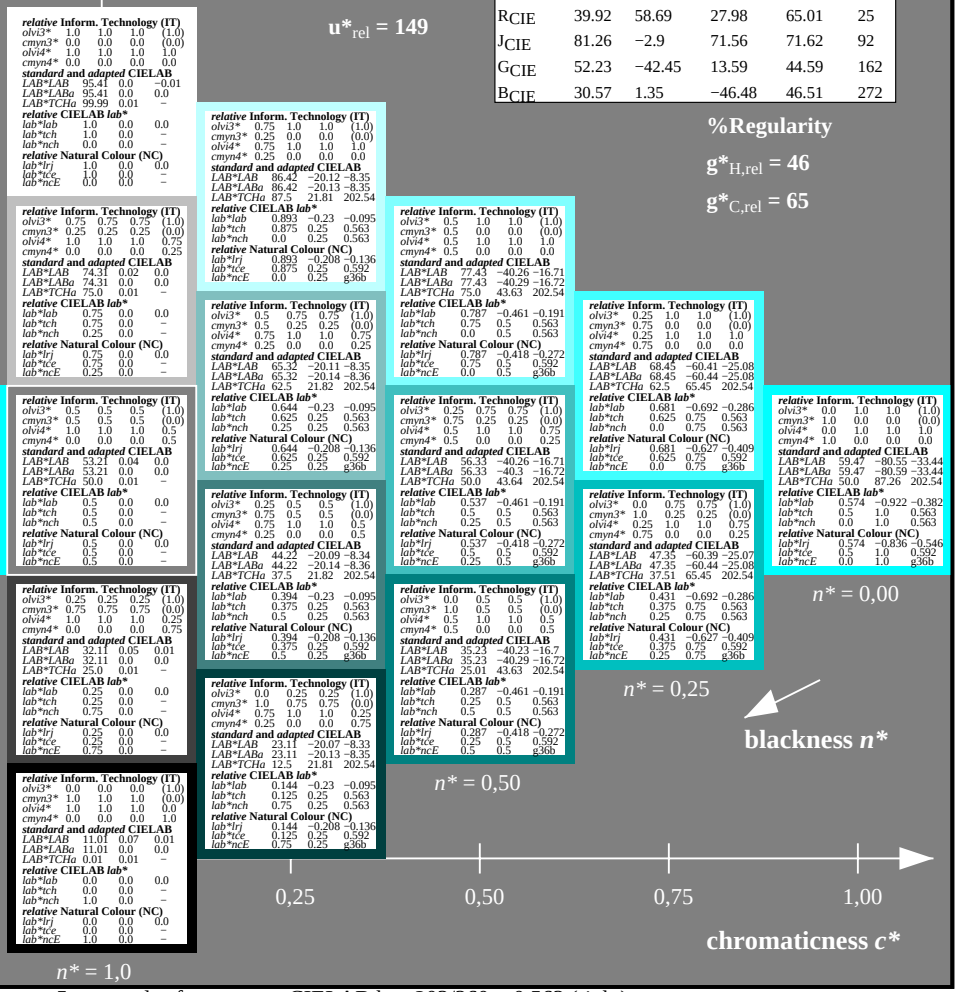
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



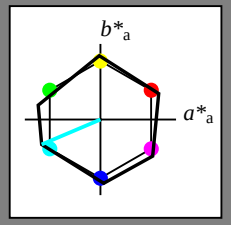

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 53 84 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

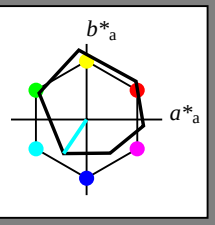
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric 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**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

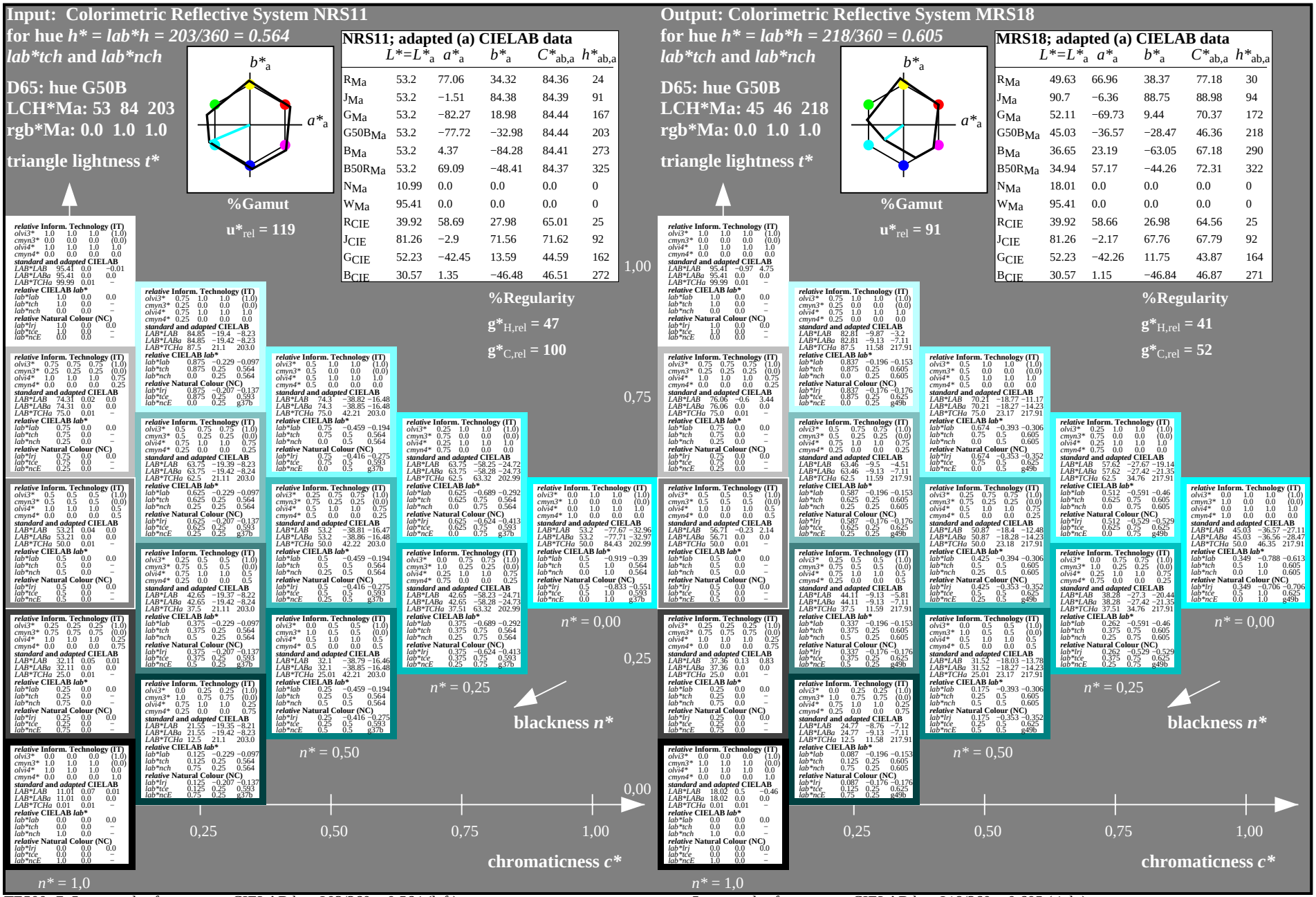
**g*$_{H,rel}$ = 57**

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

1,00
0,75
0,25
0,00
*n** = 0,00
*n** = 0,25
*n** = 0,50
*n** = 1,0
**blackness *n***
0,25
0,50
0,75
1,00
**chromaticness *c***

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)



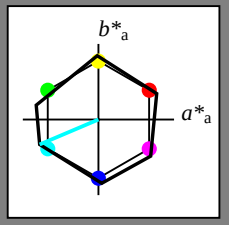

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 218/360 = 0.605 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 53 84 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

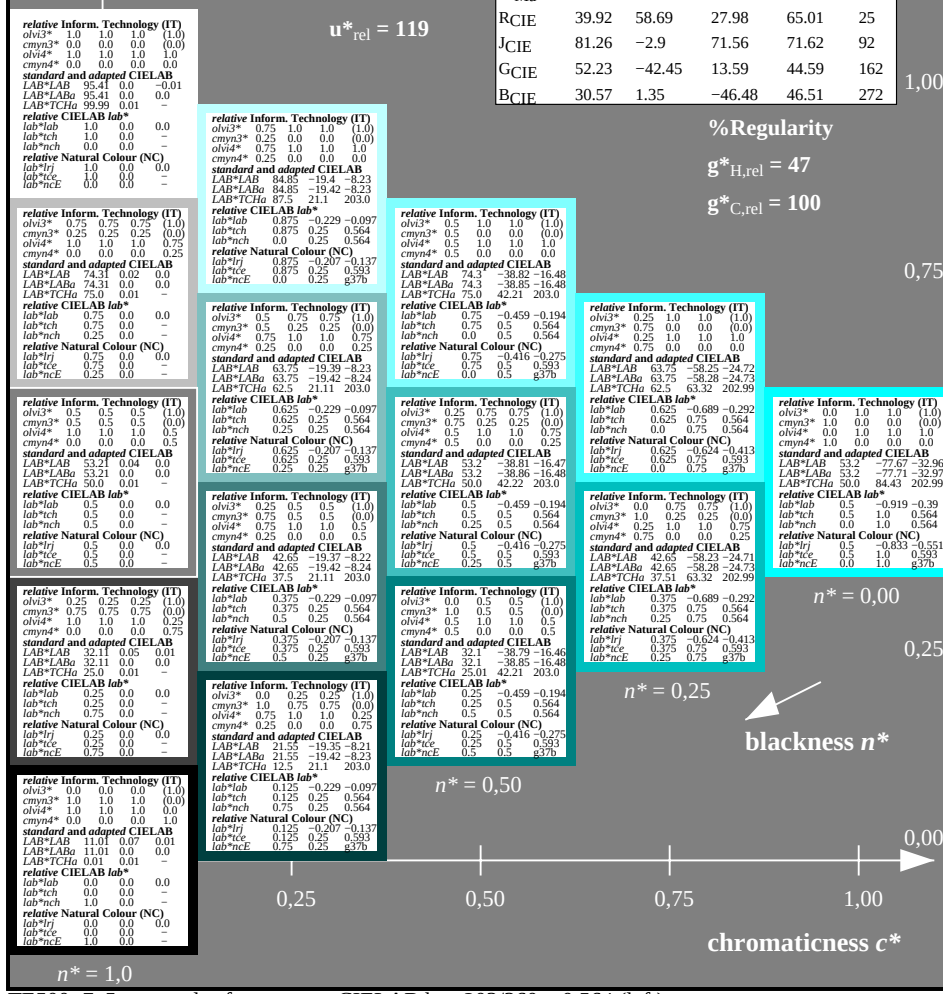
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

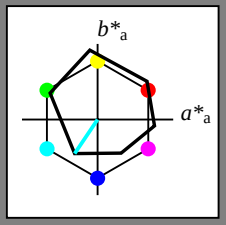
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 236/360 = 0.656**
***lab*tch* and *lab*nch***

**D65: hue C**
**LCH*Ma: 59 54 236**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

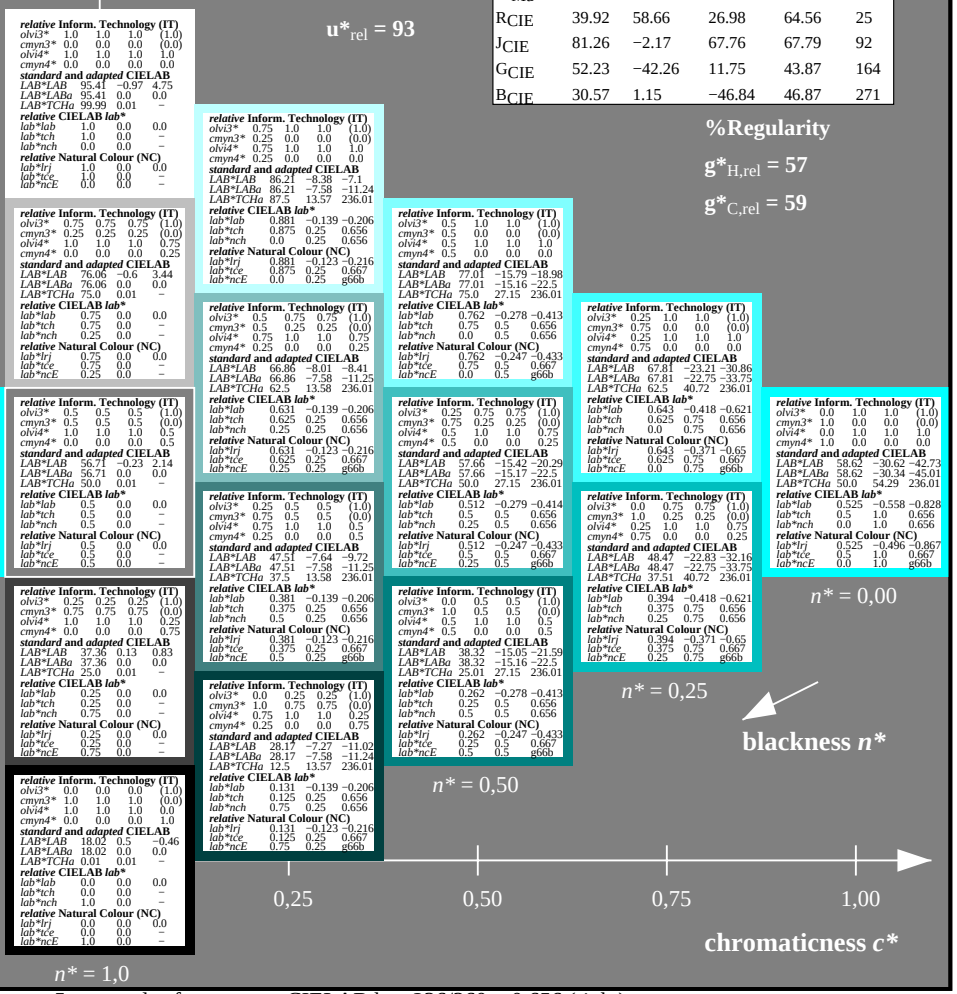
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



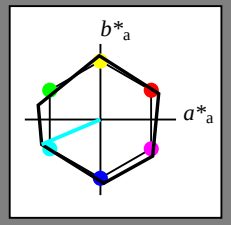

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 53 84 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

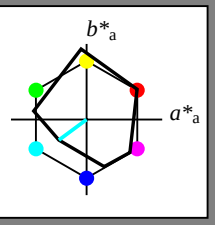
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 217/360 = 0.601**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 217**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

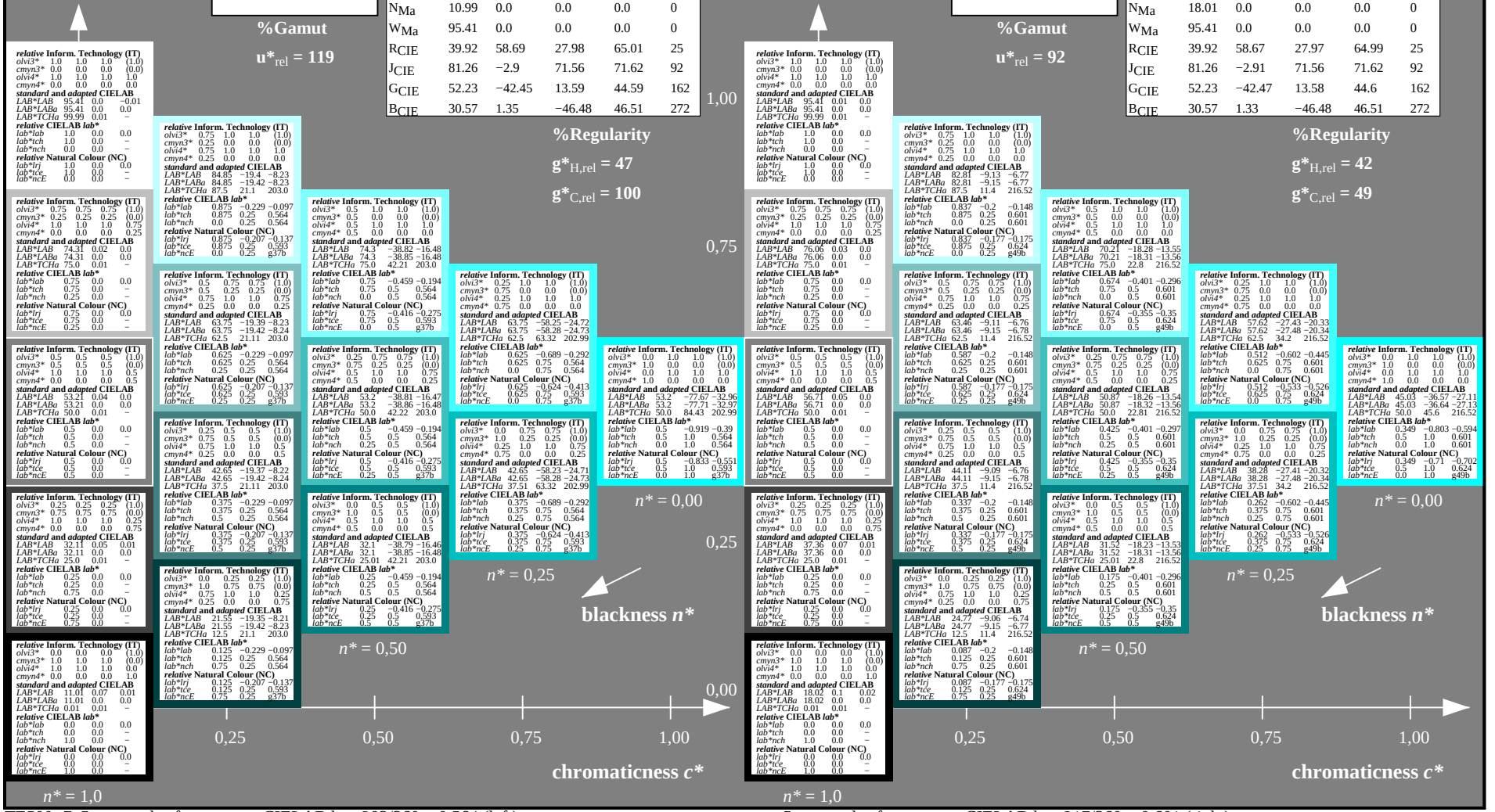
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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




TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

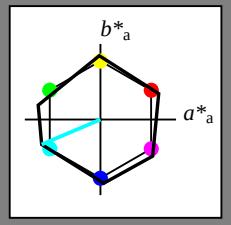
5 step scales for constant CIELAB hue 217/360 = 0.601 (right)

## Input: Colorimetric Reflective System NRS11

for hue *h* = lab*h = 203/360 = 0.564*
*lab*tch* and *lab*nch*

D65: hue G50B
LCH*Ma: 53 84 203
rgb*Ma: 0.0 1.0 1.0

triangle lightness *t**




%Gamut

u*rel = 119

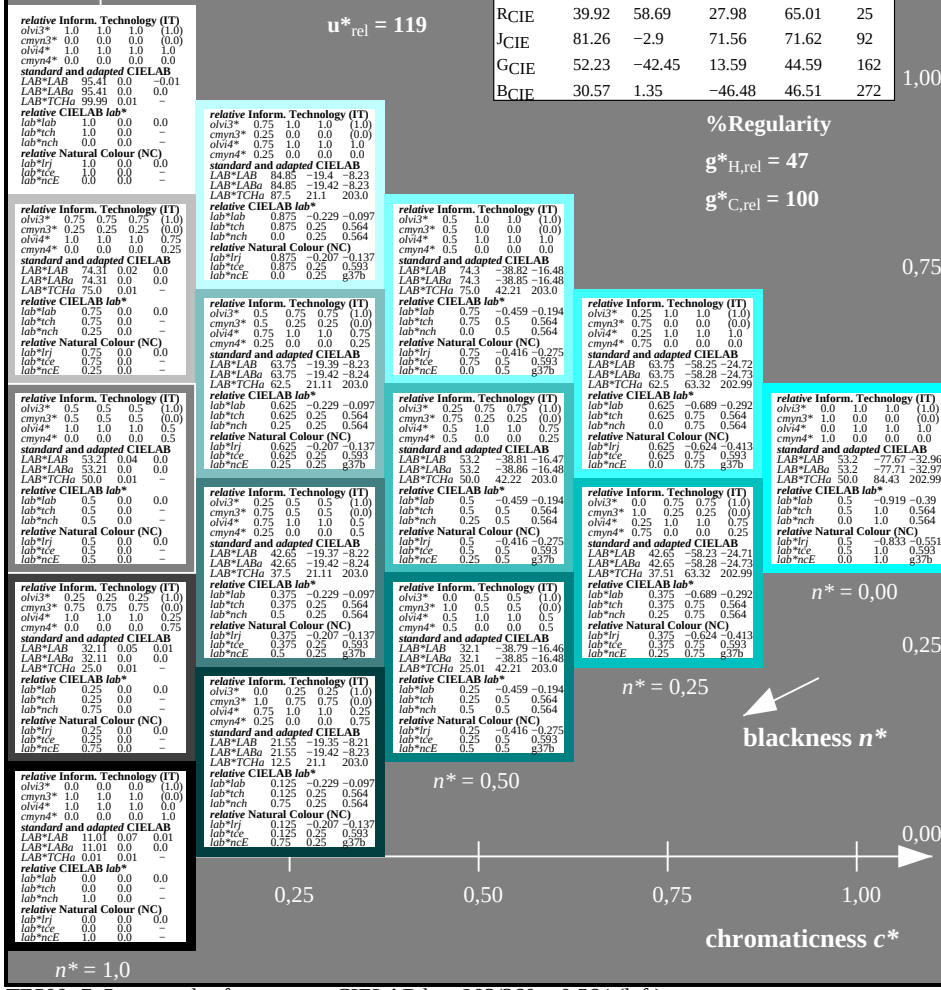
**NRS11; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

%Regularity

g*H,rel = 47

g*C,rel = 100

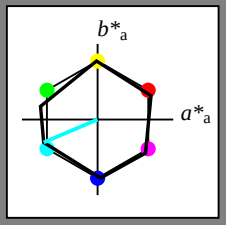



## Output: Colorimetric Reflective System NRS18

for hue *h* = lab*h = 203/360 = 0.564*
*lab*tch* and *lab*nch*

D65: hue G50B
LCH*Ma: 57 77 203
rgb*Ma: 0.0 1.0 1.0

triangle lightness *t**




%Gamut

u*rel = 100

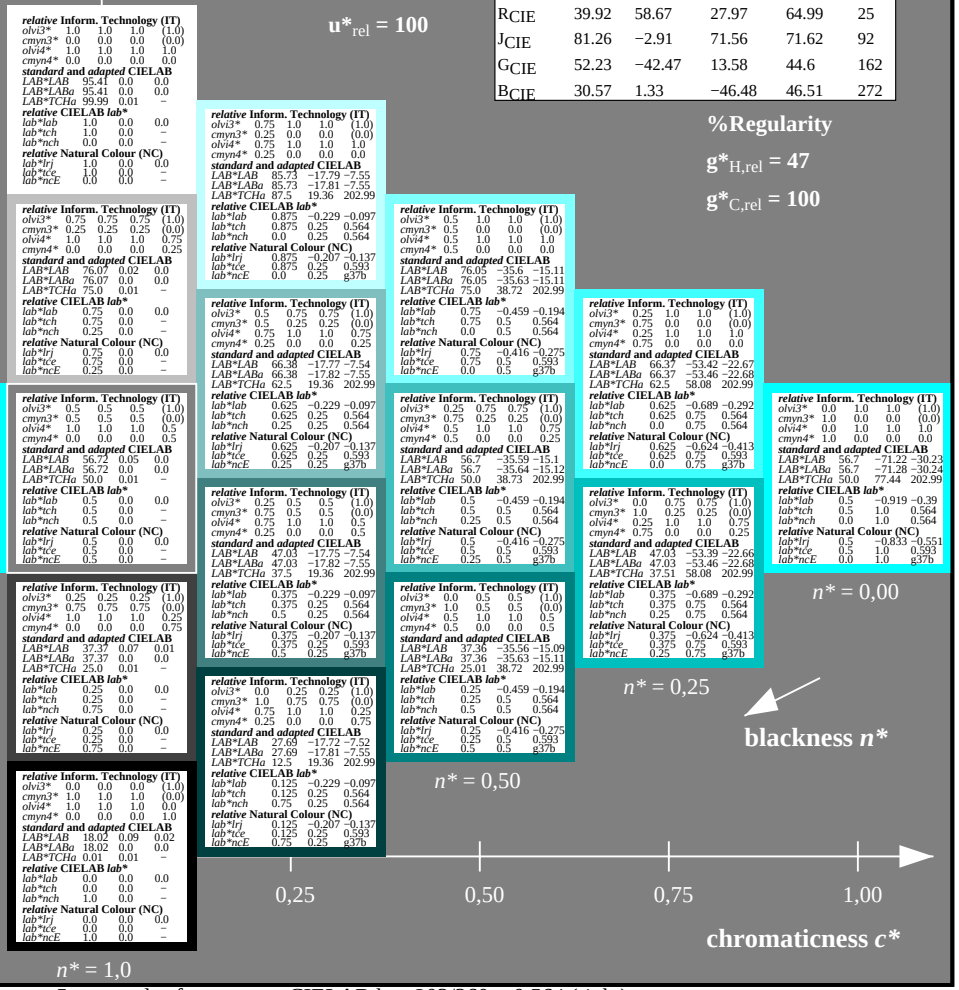
**NRS18; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

%Regularity

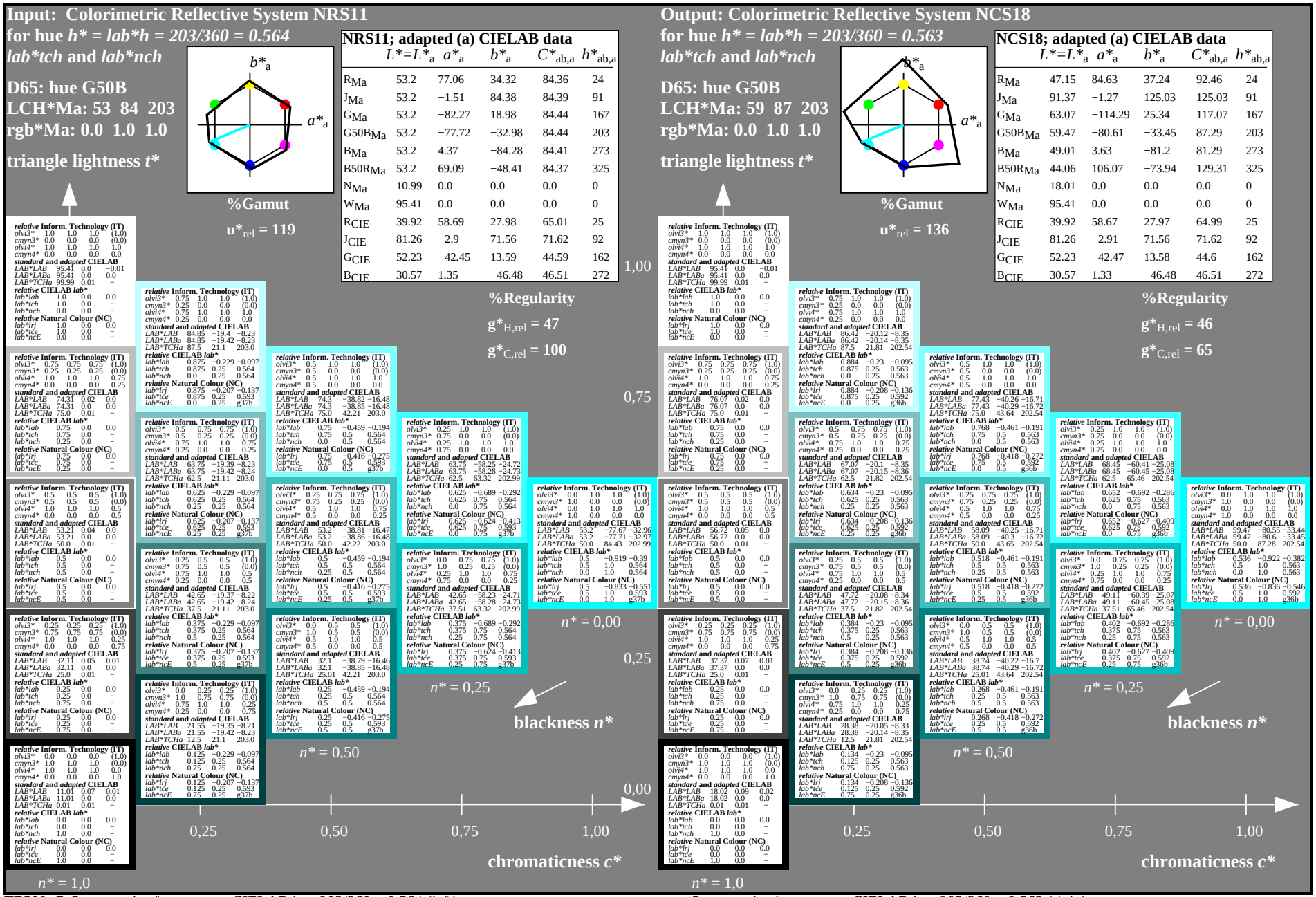
g*H,rel = 47

g*C,rel = 100




TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)



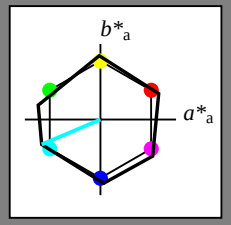

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 53 84 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

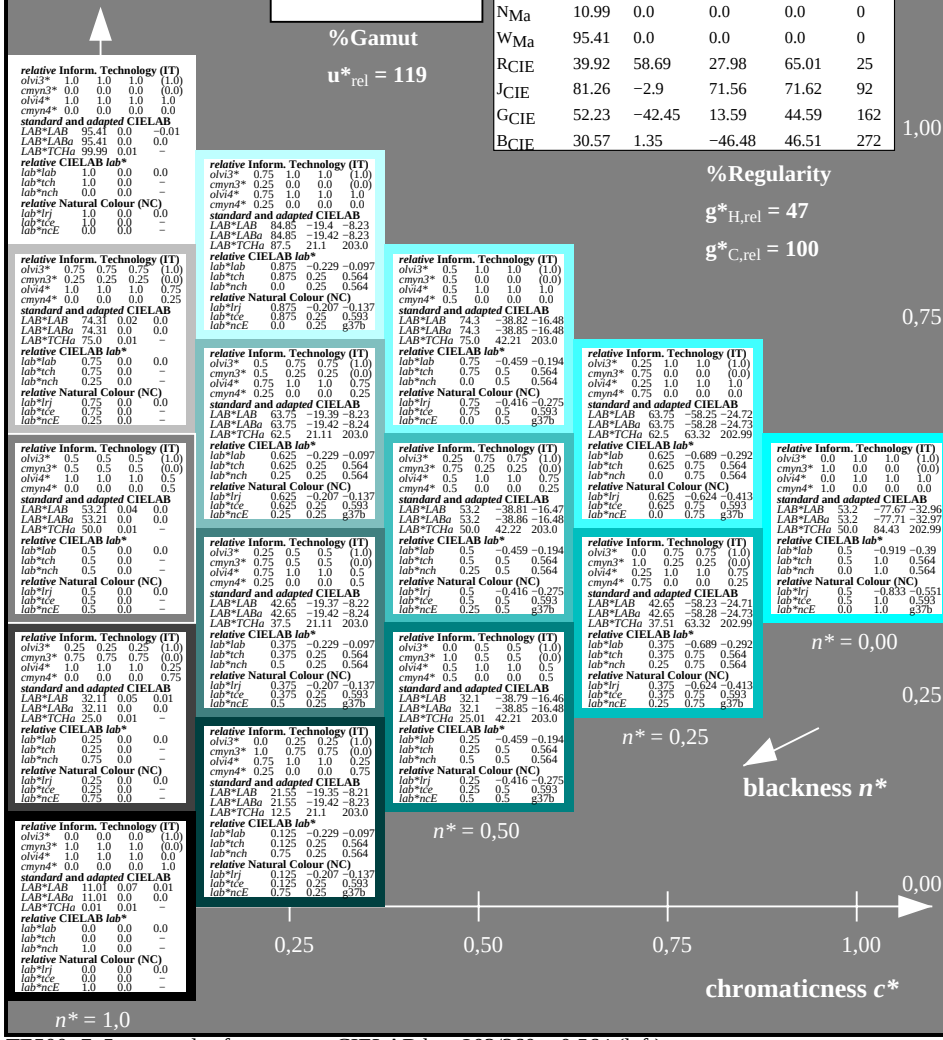
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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

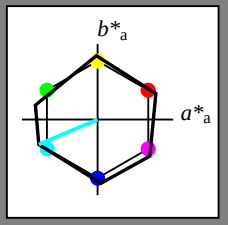



TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 53 84 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

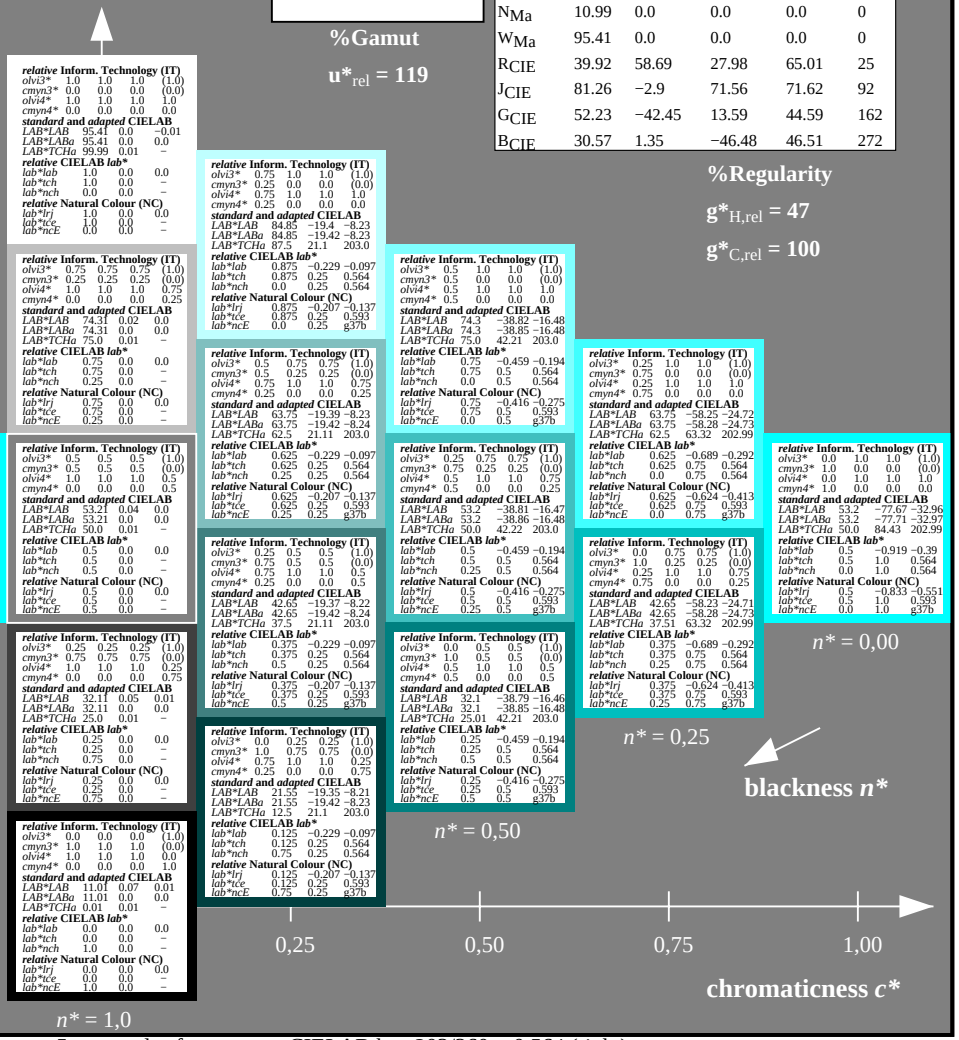
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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

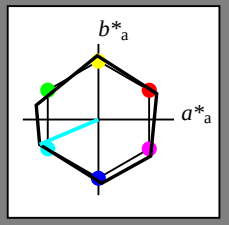



5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 53 84 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

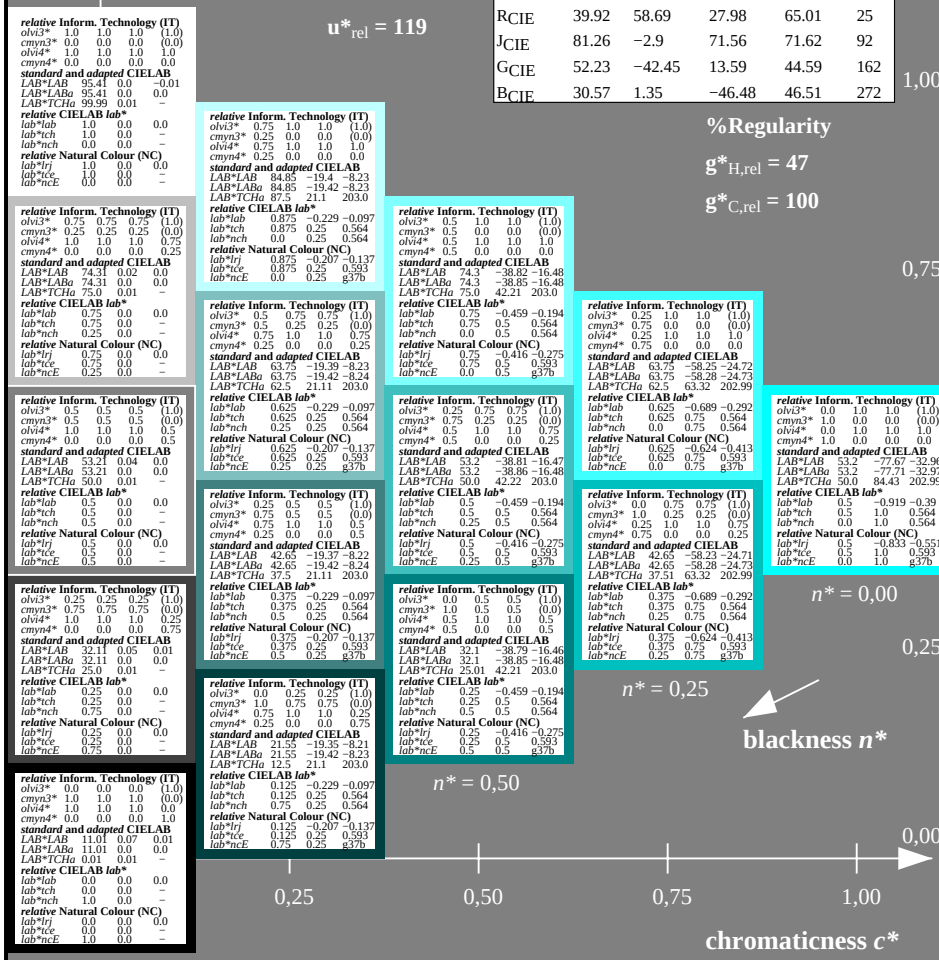
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

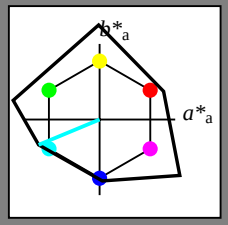
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

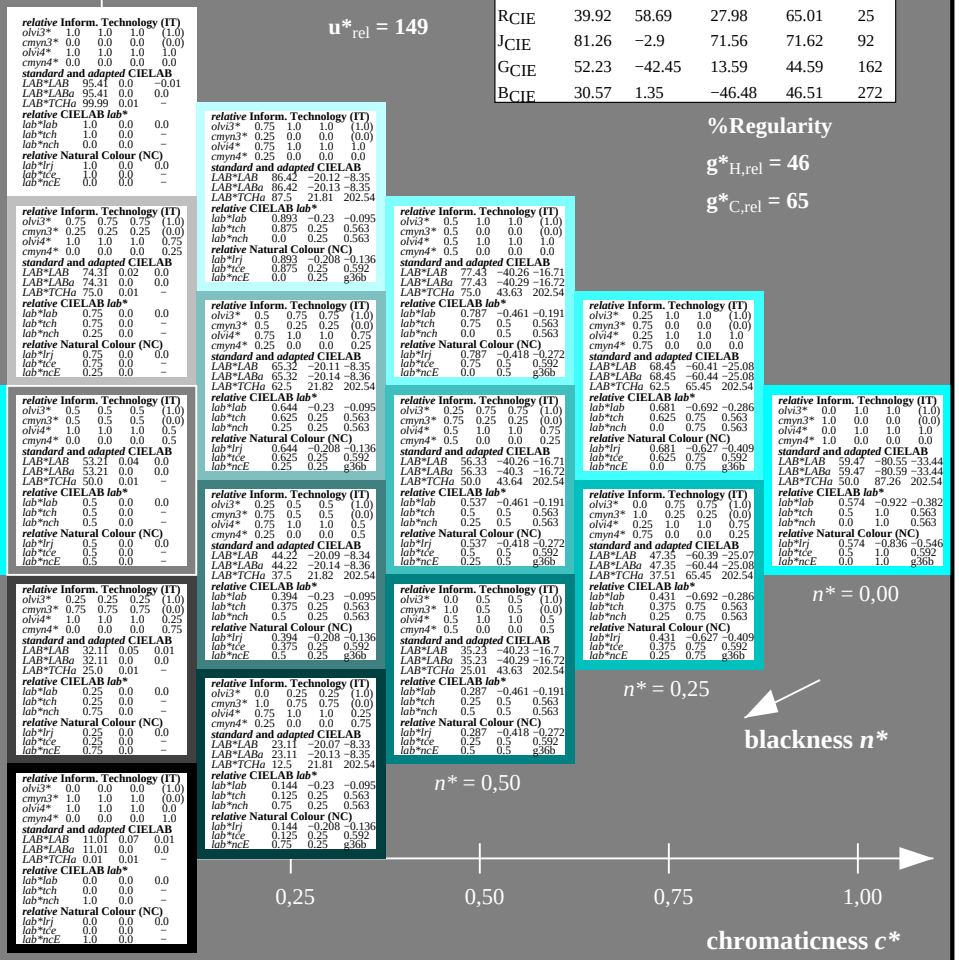
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



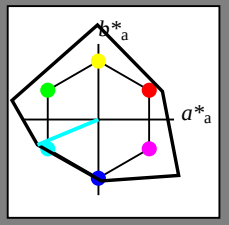

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.564 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

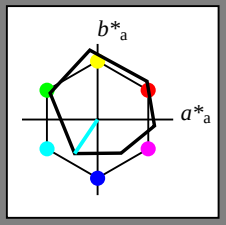
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

**Output: Colorimetric 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**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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

1,00
0,75
0,25
0,00
*n** = 0,00
*n** = 0,25
*n** = 0,50
*n** = 1,0
**blackness *n***
0,25
0,50
0,75
1,00
**chromaticness *c***

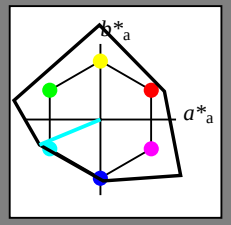
TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

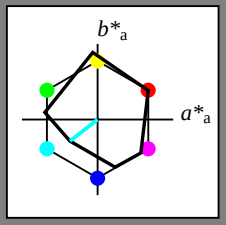
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 218/360 = 0.605**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 45 46 218**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

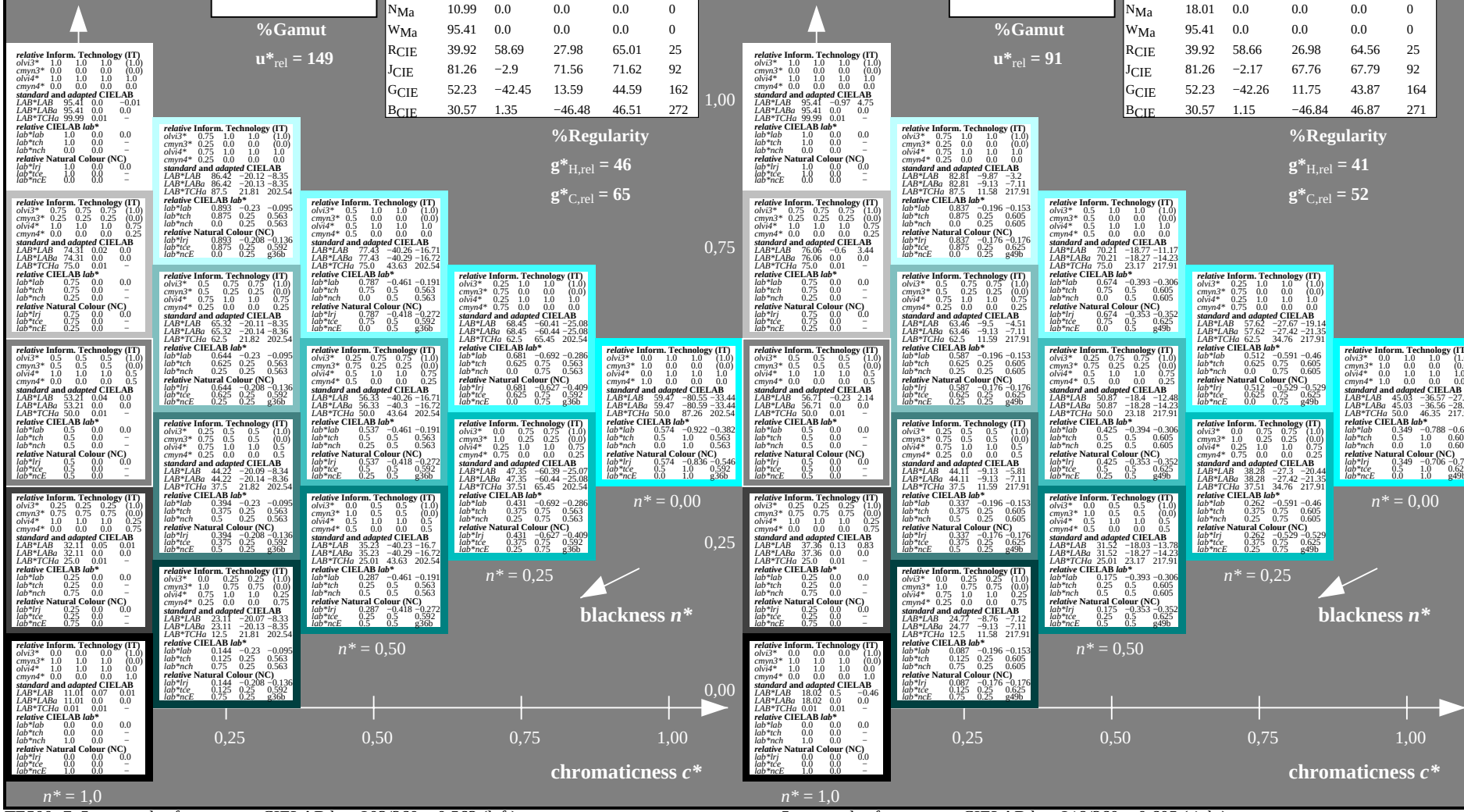
**MRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**



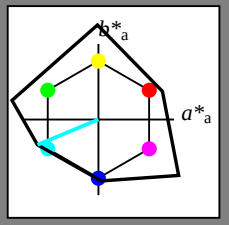

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 218/360 = 0.605 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

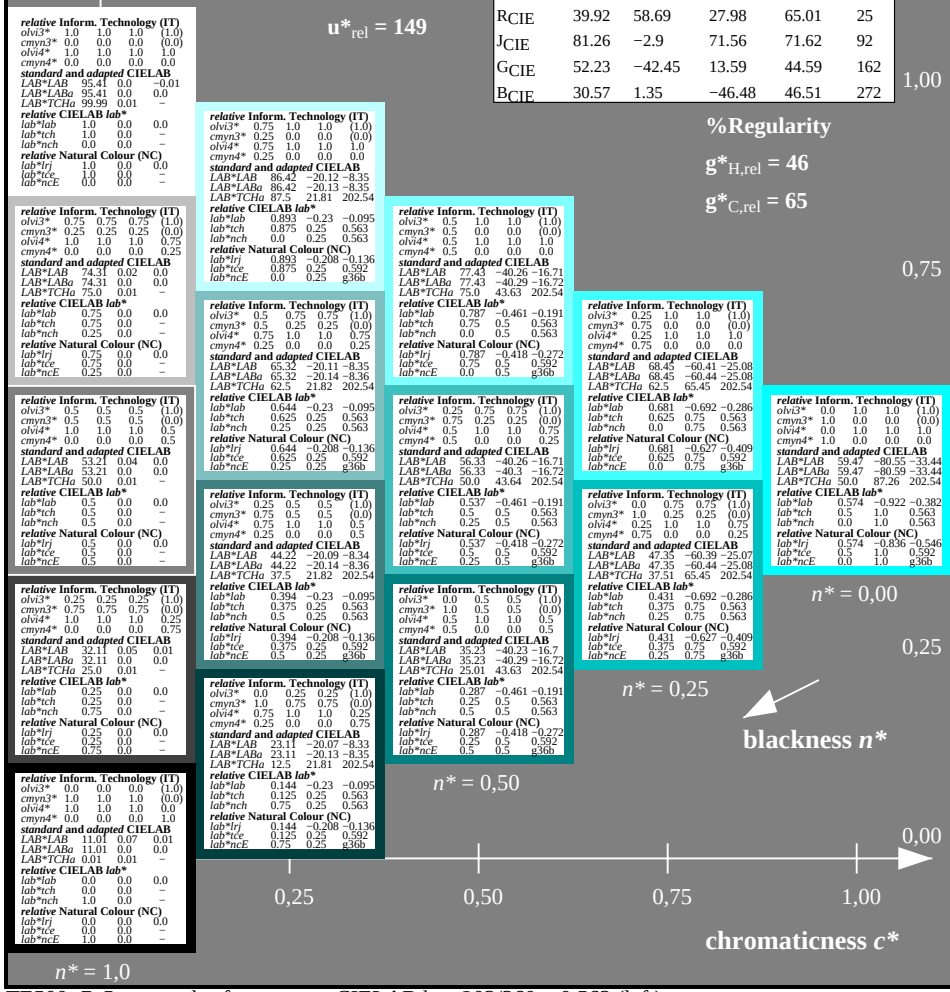
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

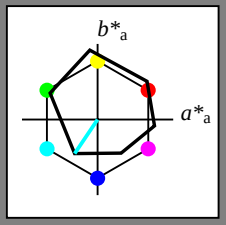
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 236/360 = 0.656**
***lab*tch* and *lab*nch***

**D65: hue C**
**LCH*Ma: 59 54 236**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

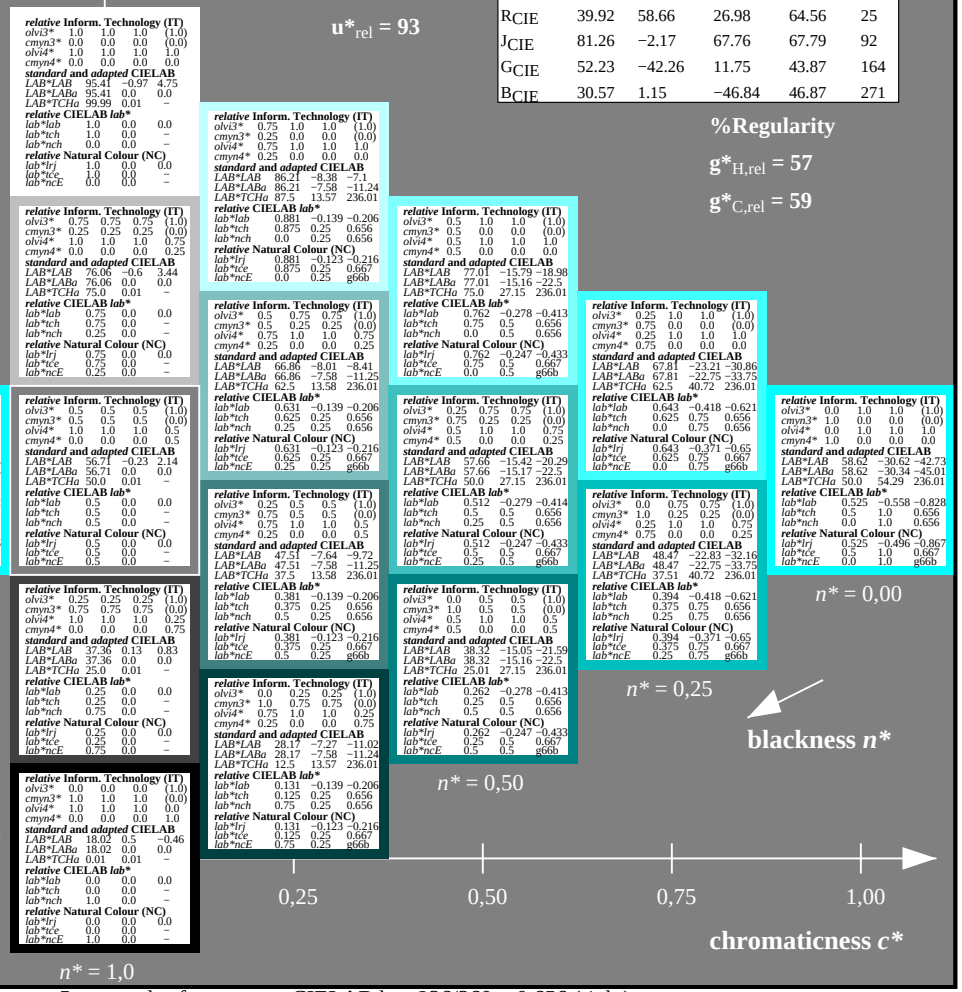
**TRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

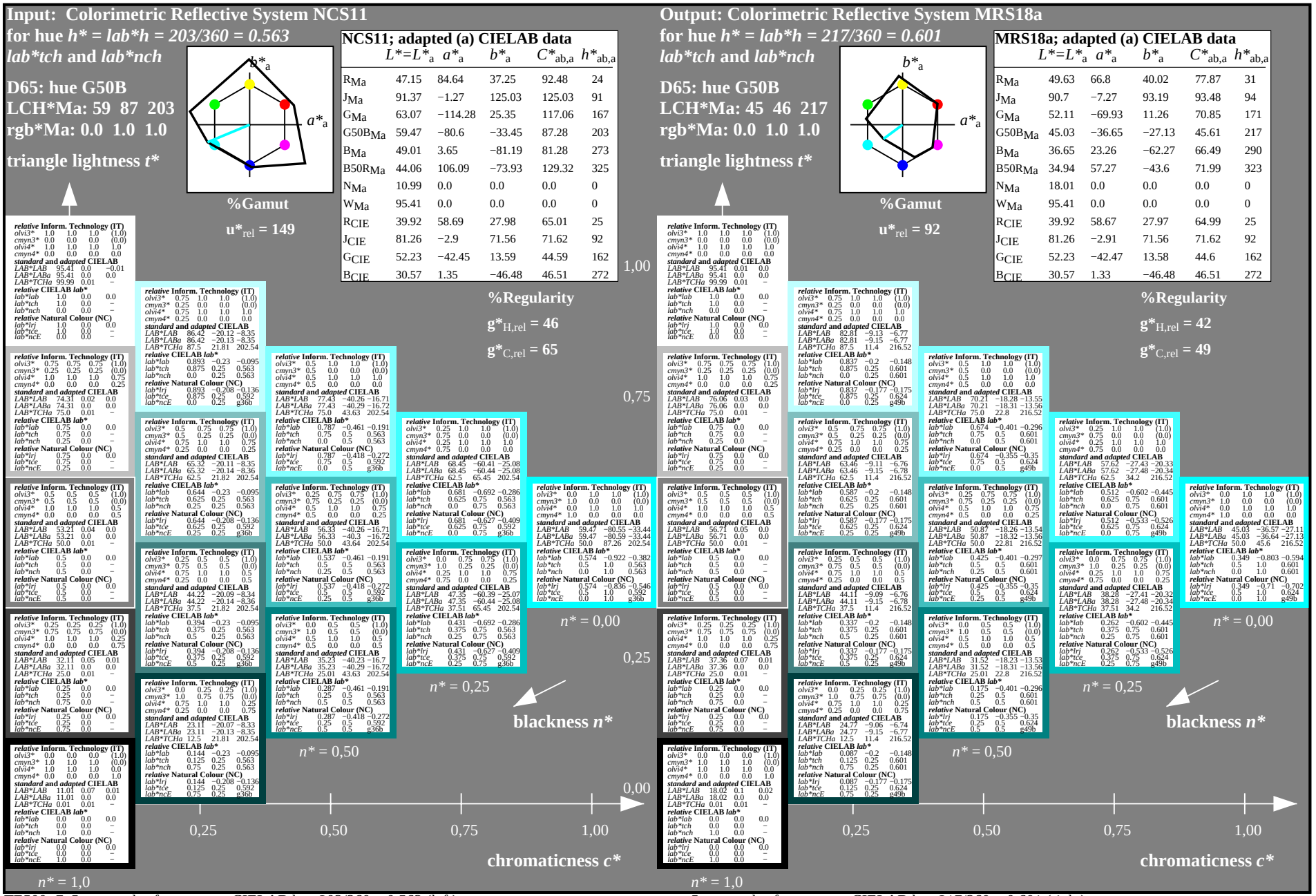
**g*$_{H,rel}$ = 57**

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



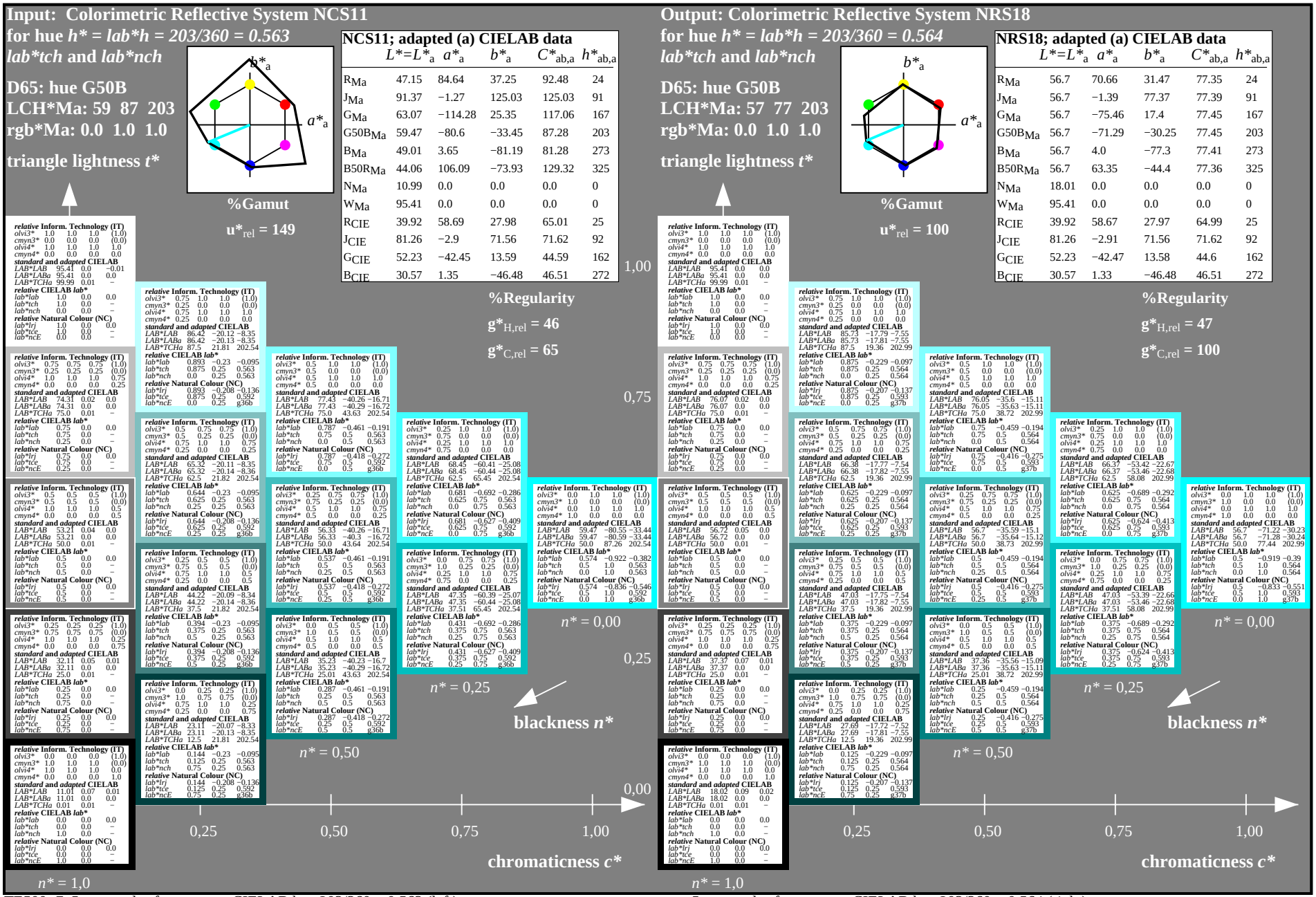

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)




TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 217/360 = 0.601 (right)



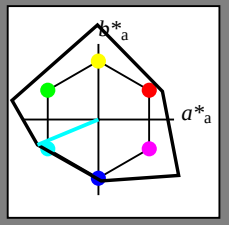

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

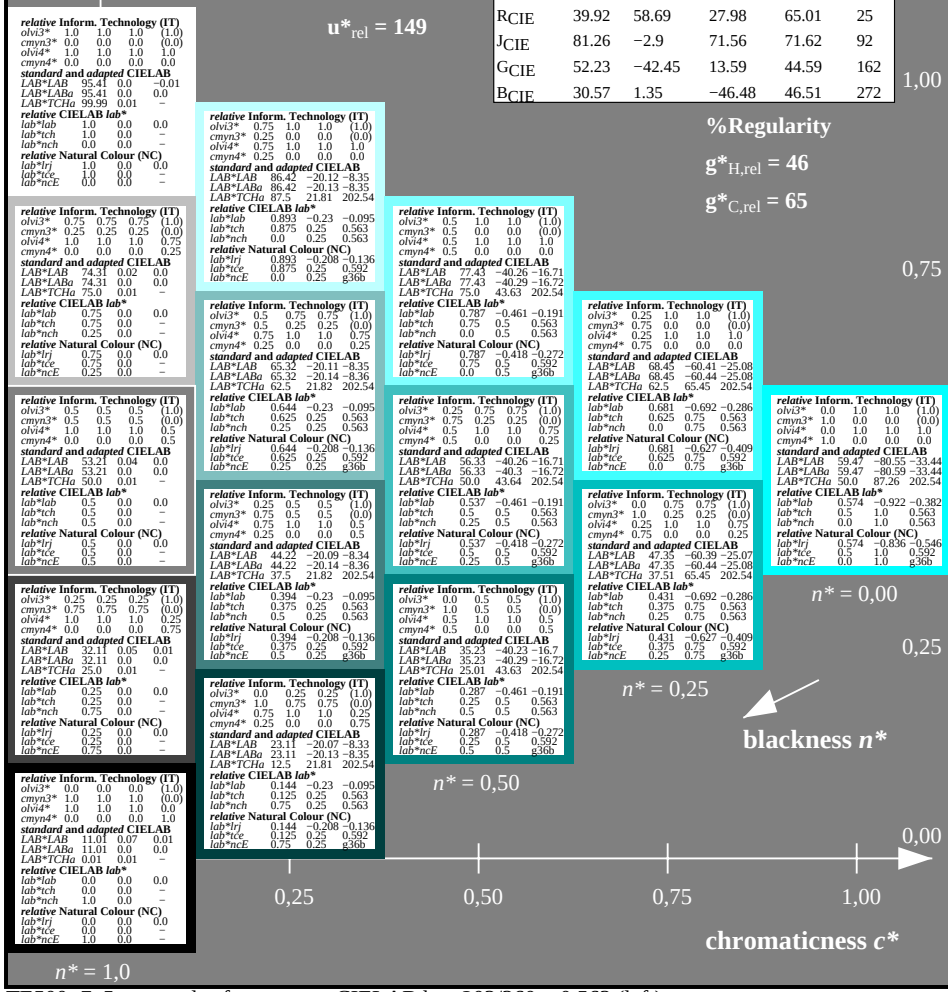
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

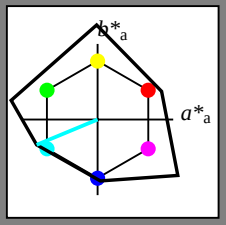
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

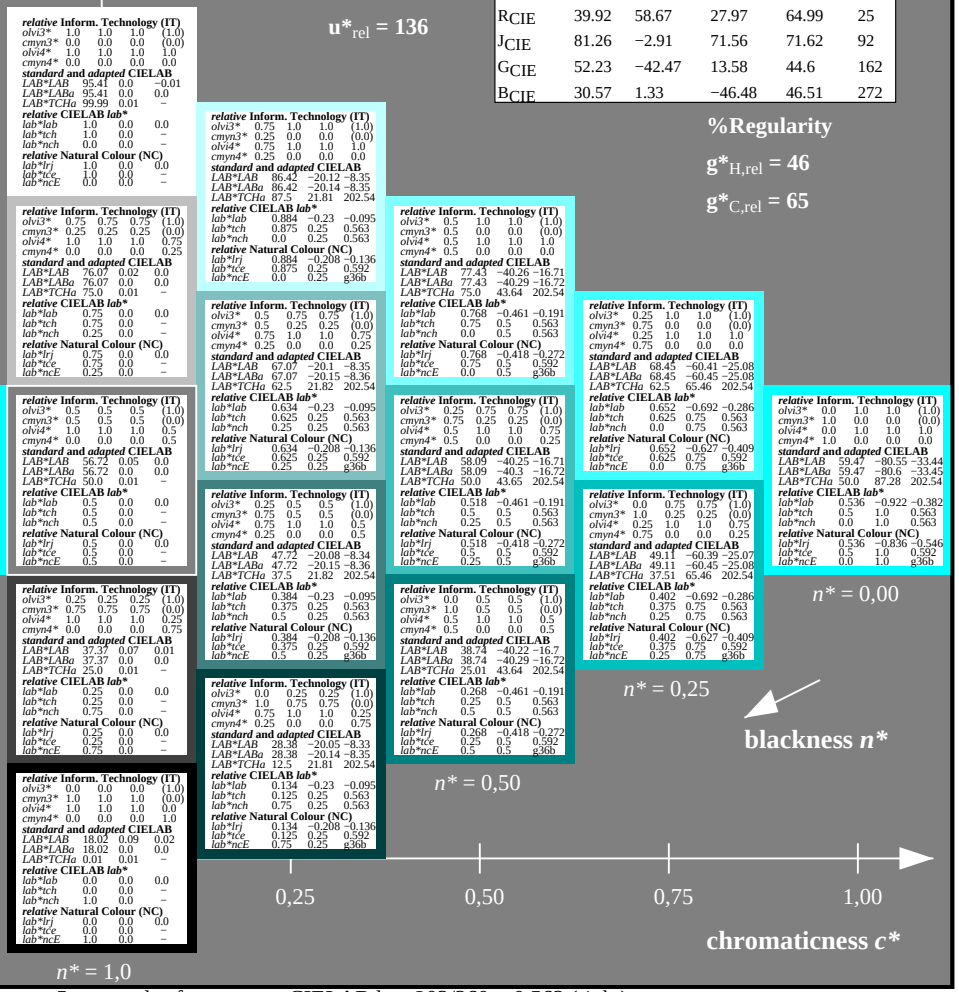
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



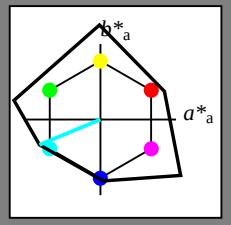

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

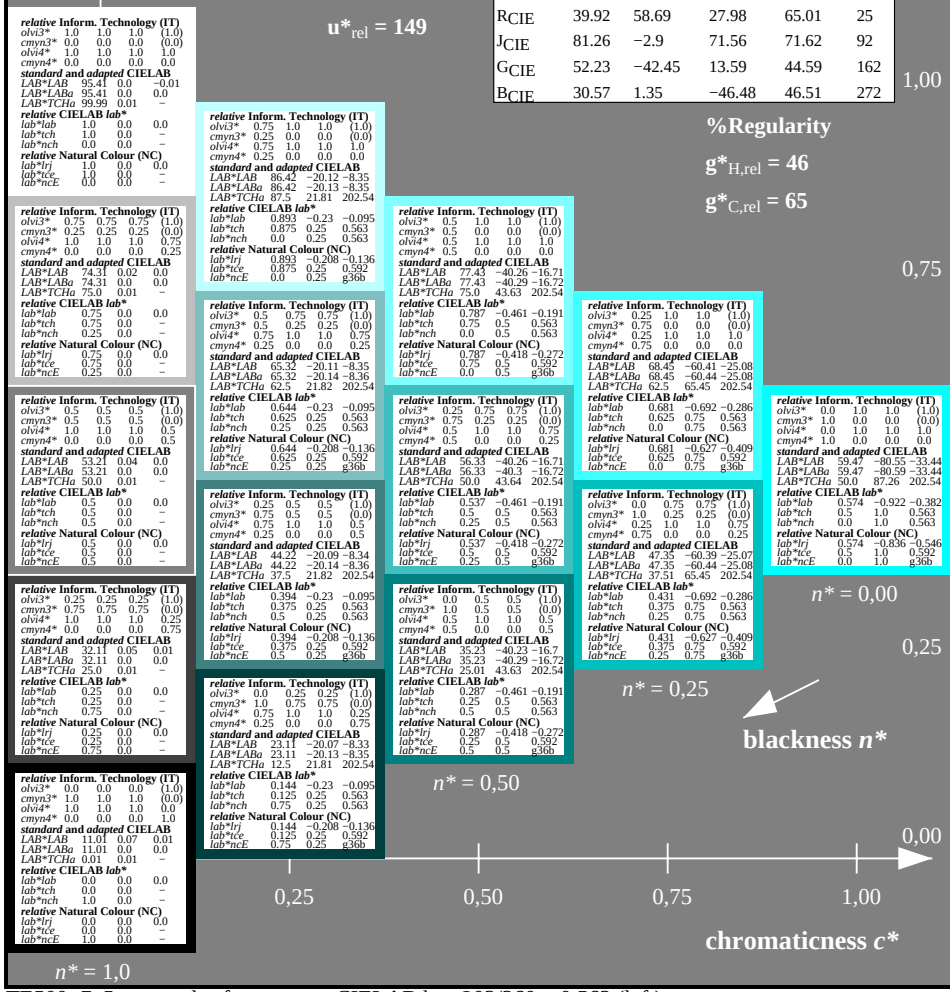
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

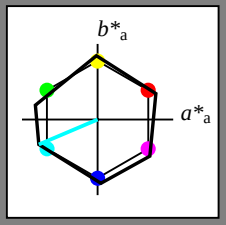
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 203/360 = 0.564**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 53 84 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

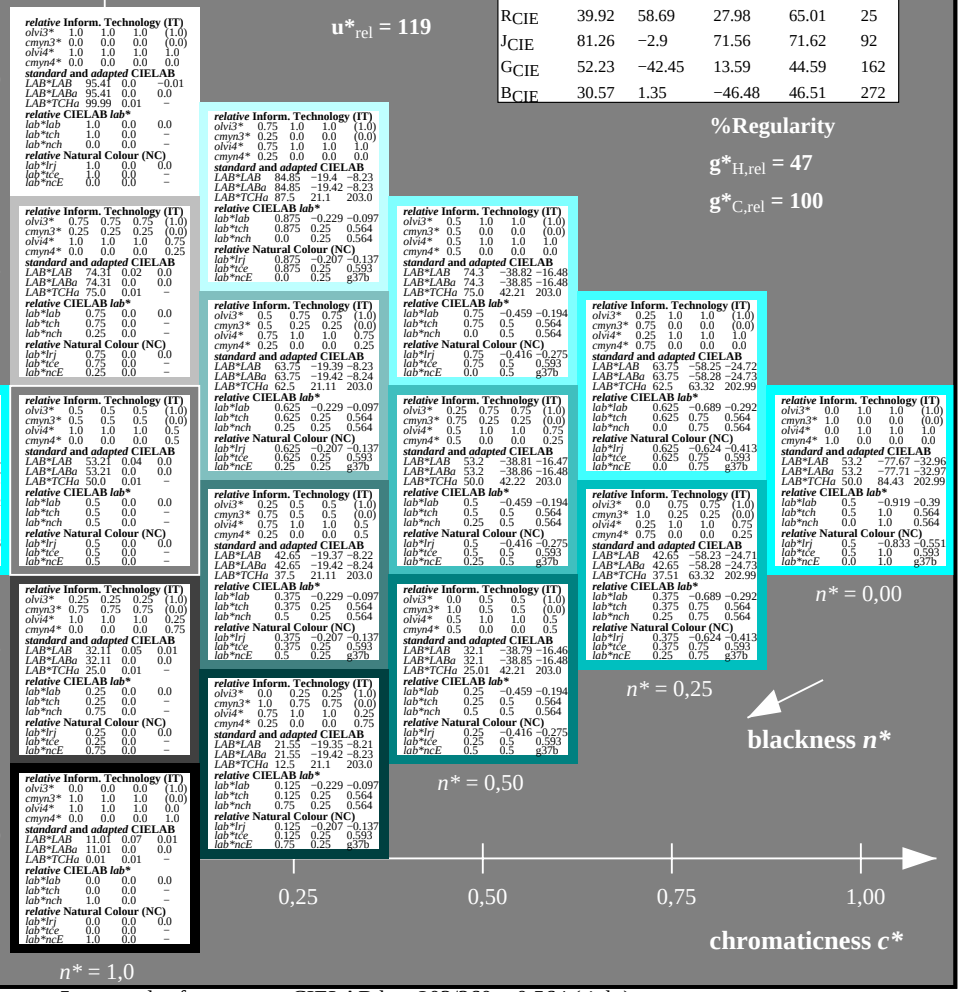
**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



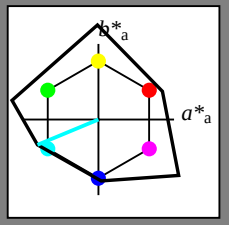

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 203/360 = 0.564 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

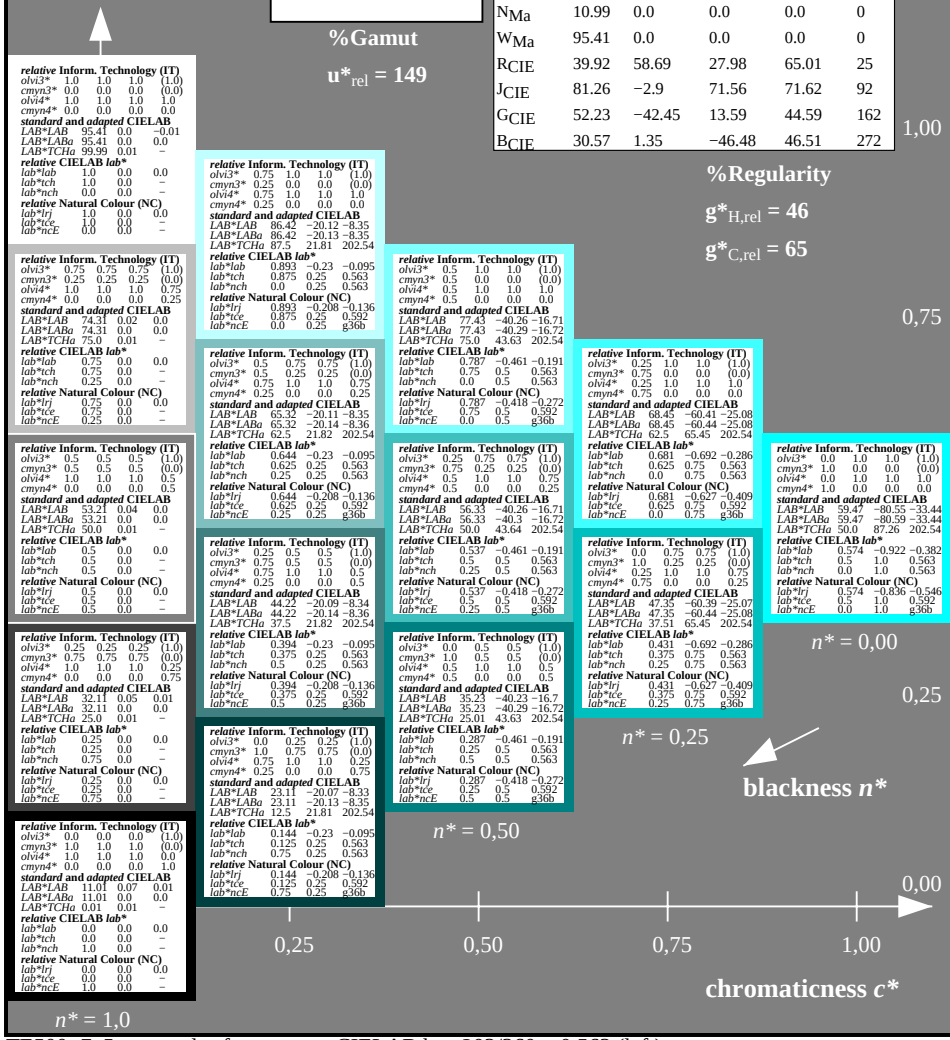
**NCS11; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

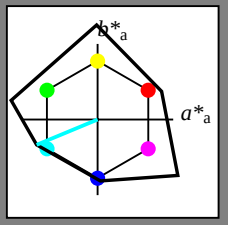
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 203/360 = 0.563**
***lab*tch* and *lab*nch***

**D65: hue G50B**
**LCH*Ma: 59 87 203**
**rgb*Ma: 0.0 1.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

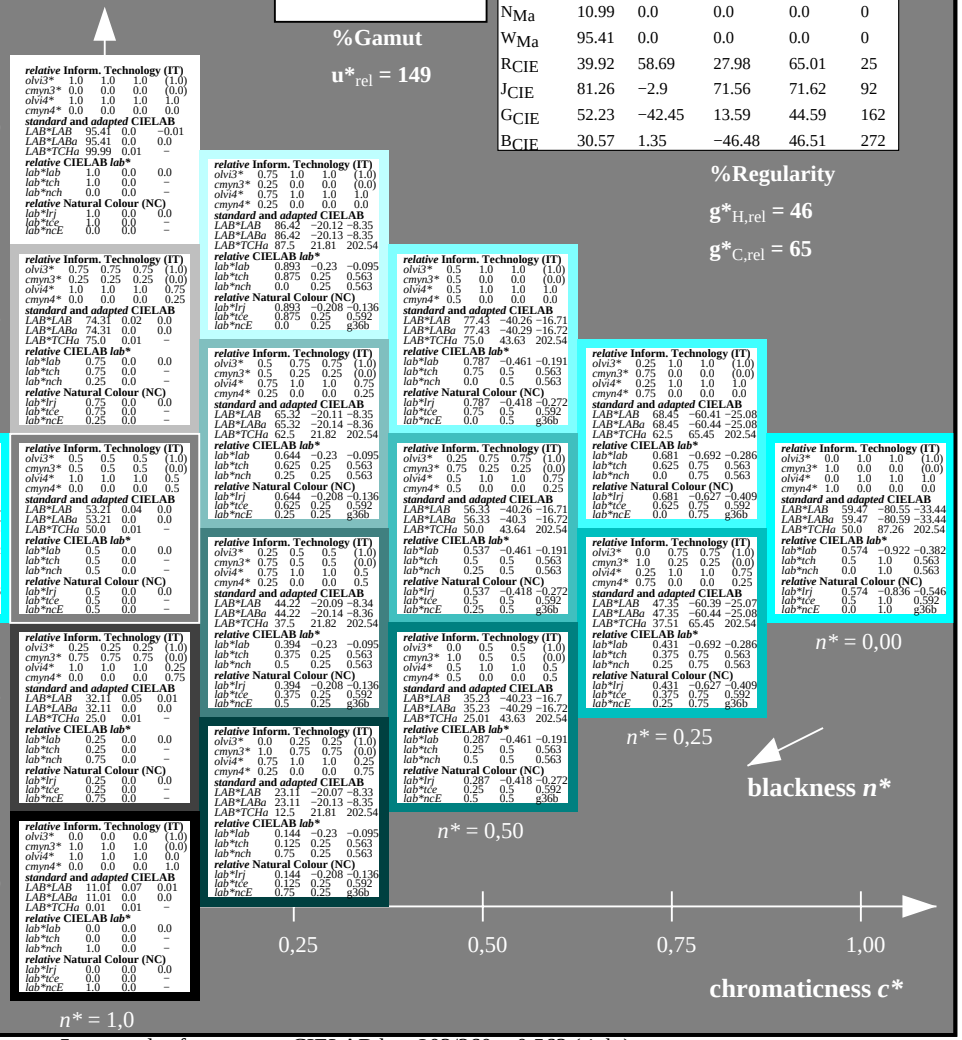
**NCS11; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



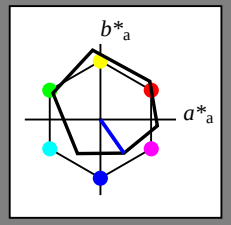

TE500−7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

1,00

**%Regularity**

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

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

0,75

0,25

0,00

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

**blackness *n****

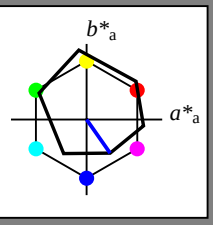
0,25 0,50 0,75 1,00

**chromaticness *c****

**Output: Colorimetric 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**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

**blackness *n****

0,25 0,50 0,75 1,00

**chromaticness *c****

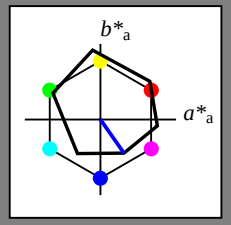
TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

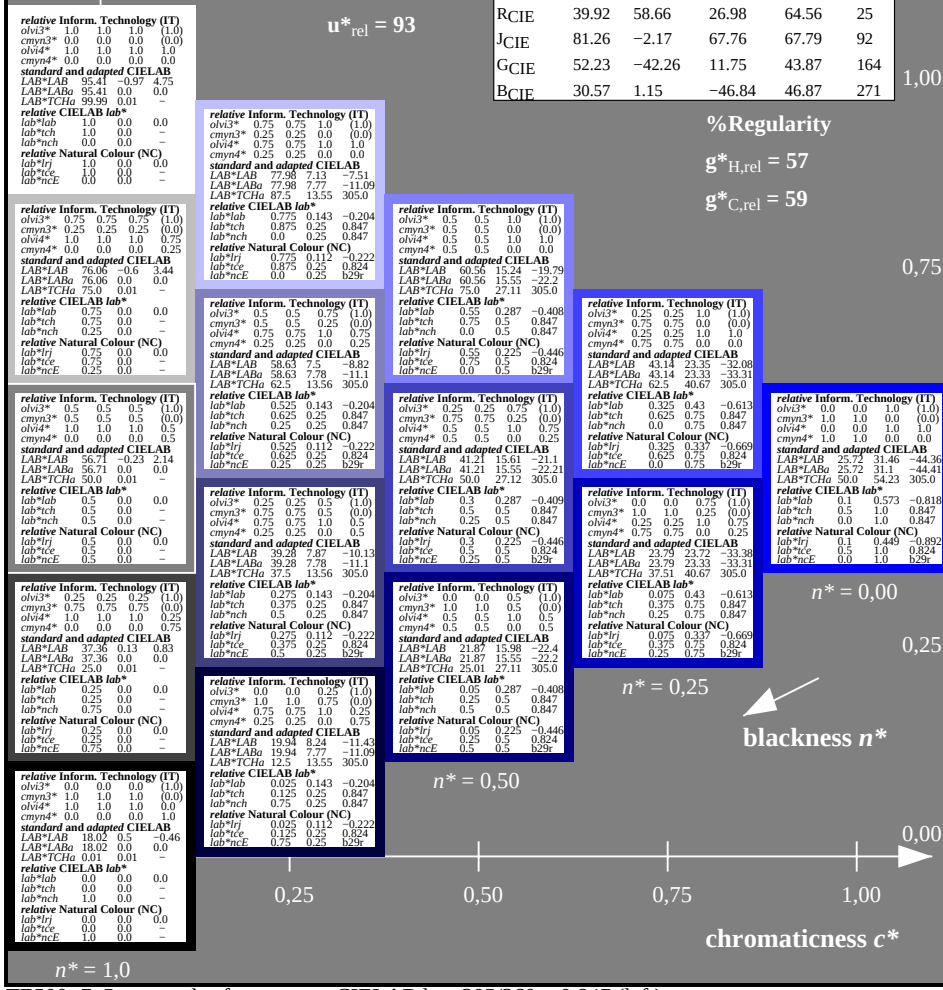
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

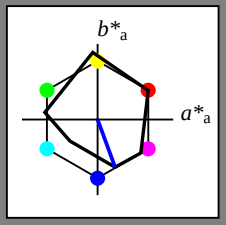
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 290/360 = 0.806**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 37 67 290**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

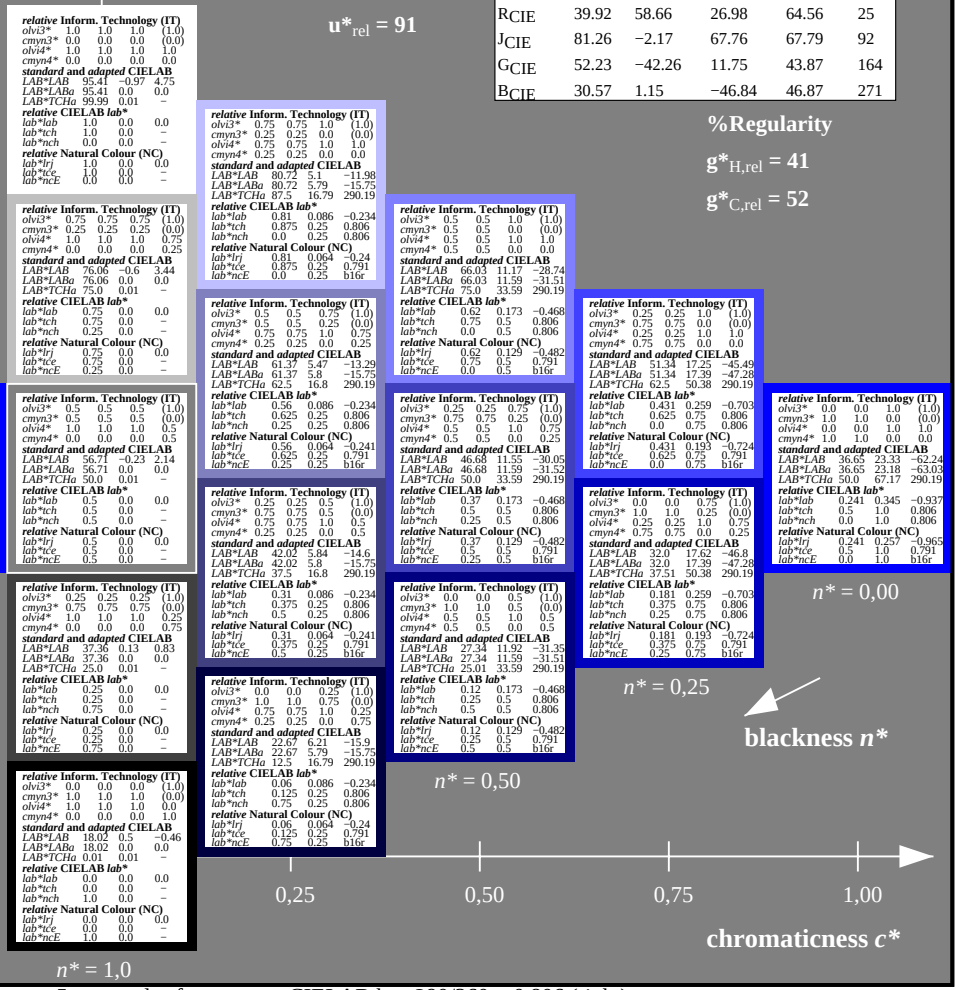
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

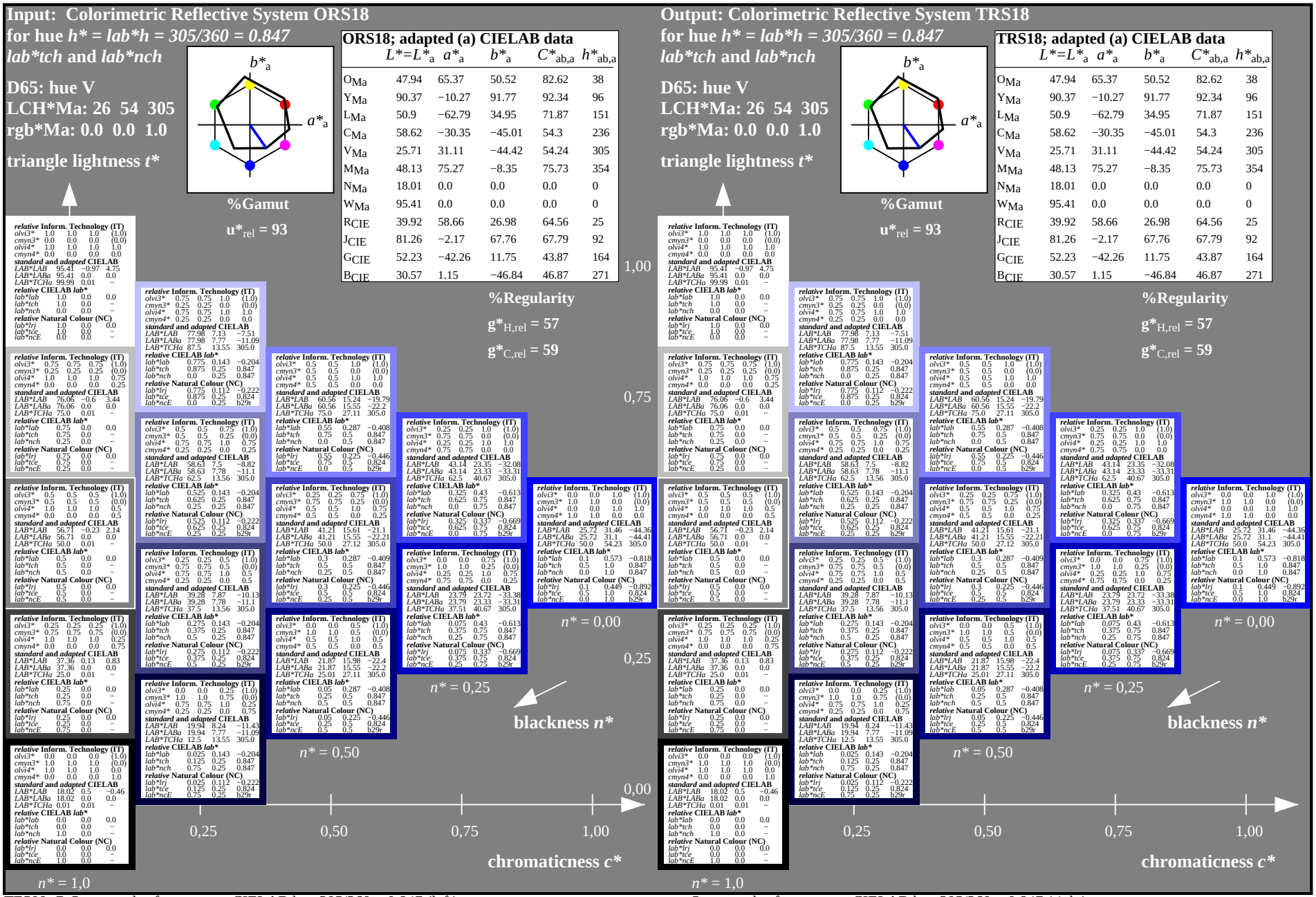
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**



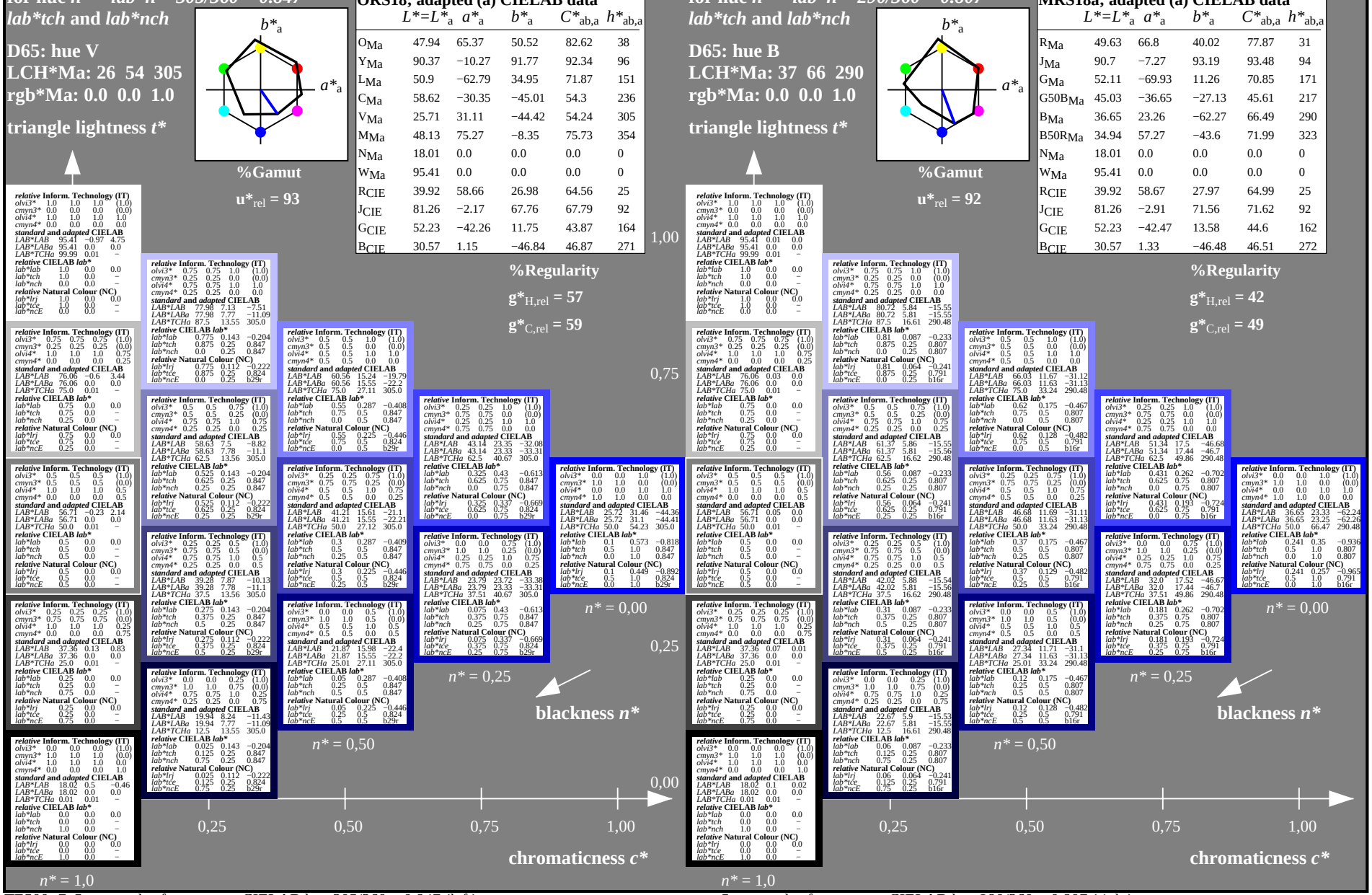

TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 290/360 = 0.806 (right)



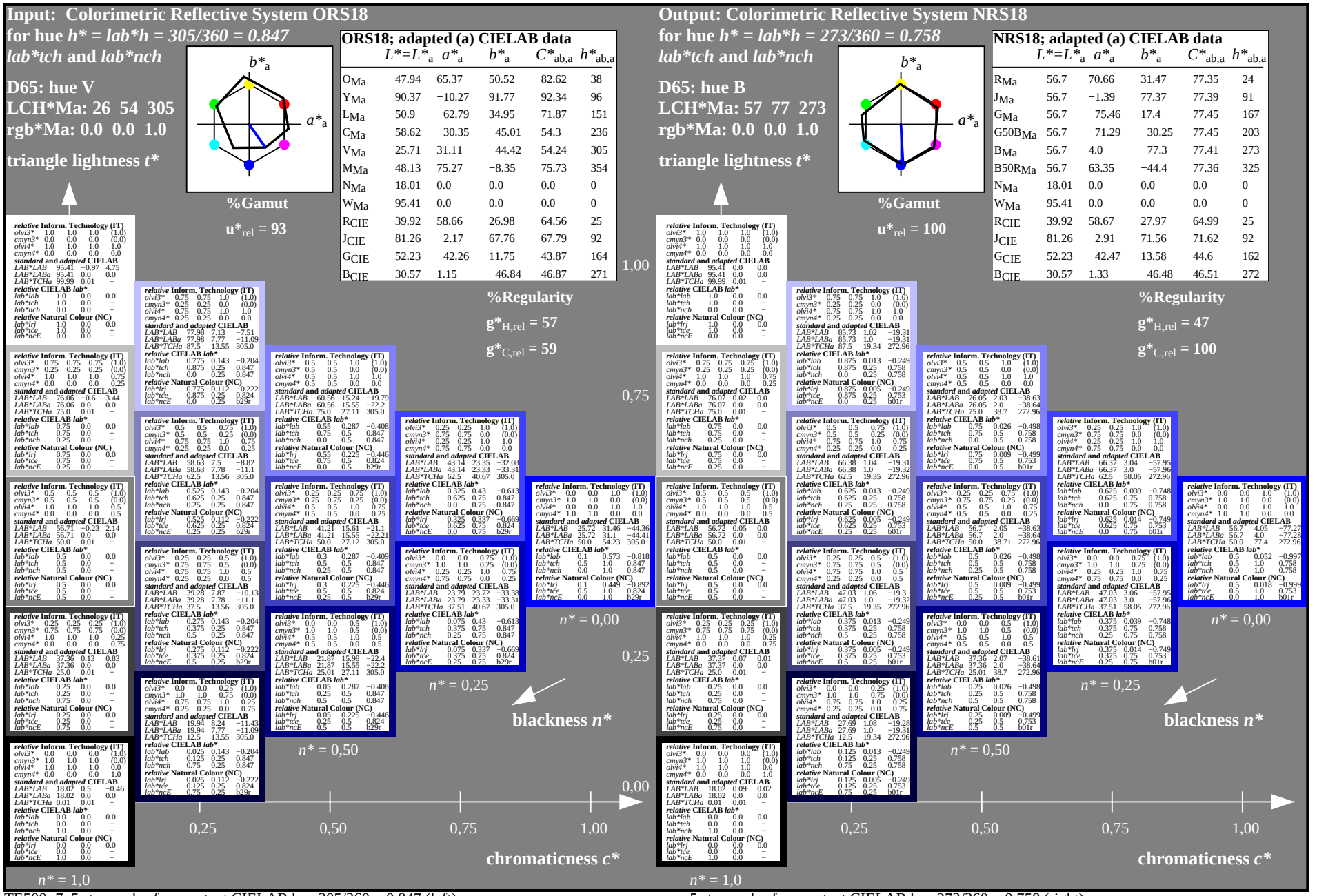

TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)



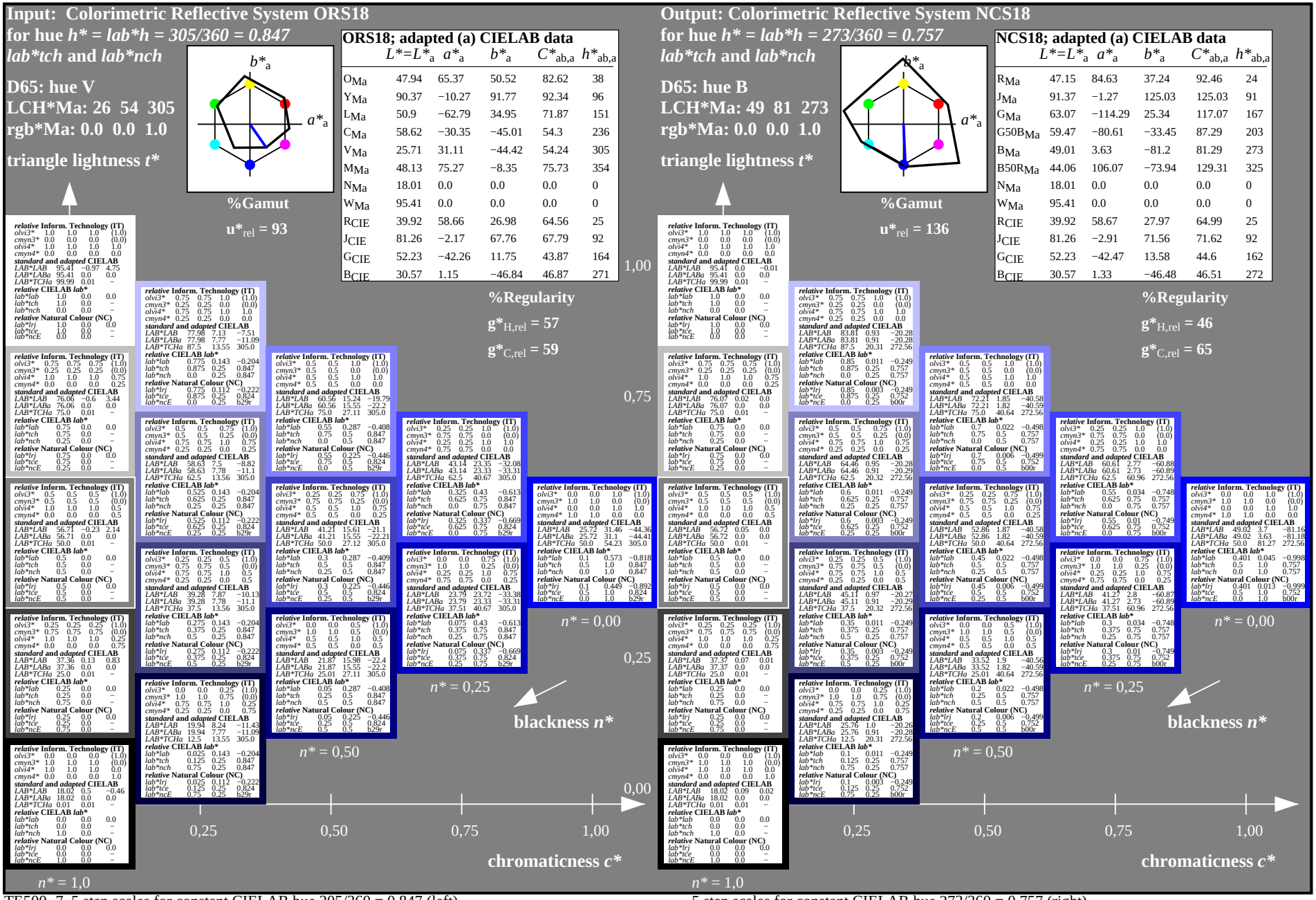

TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 290/360 = 0.807 (right)



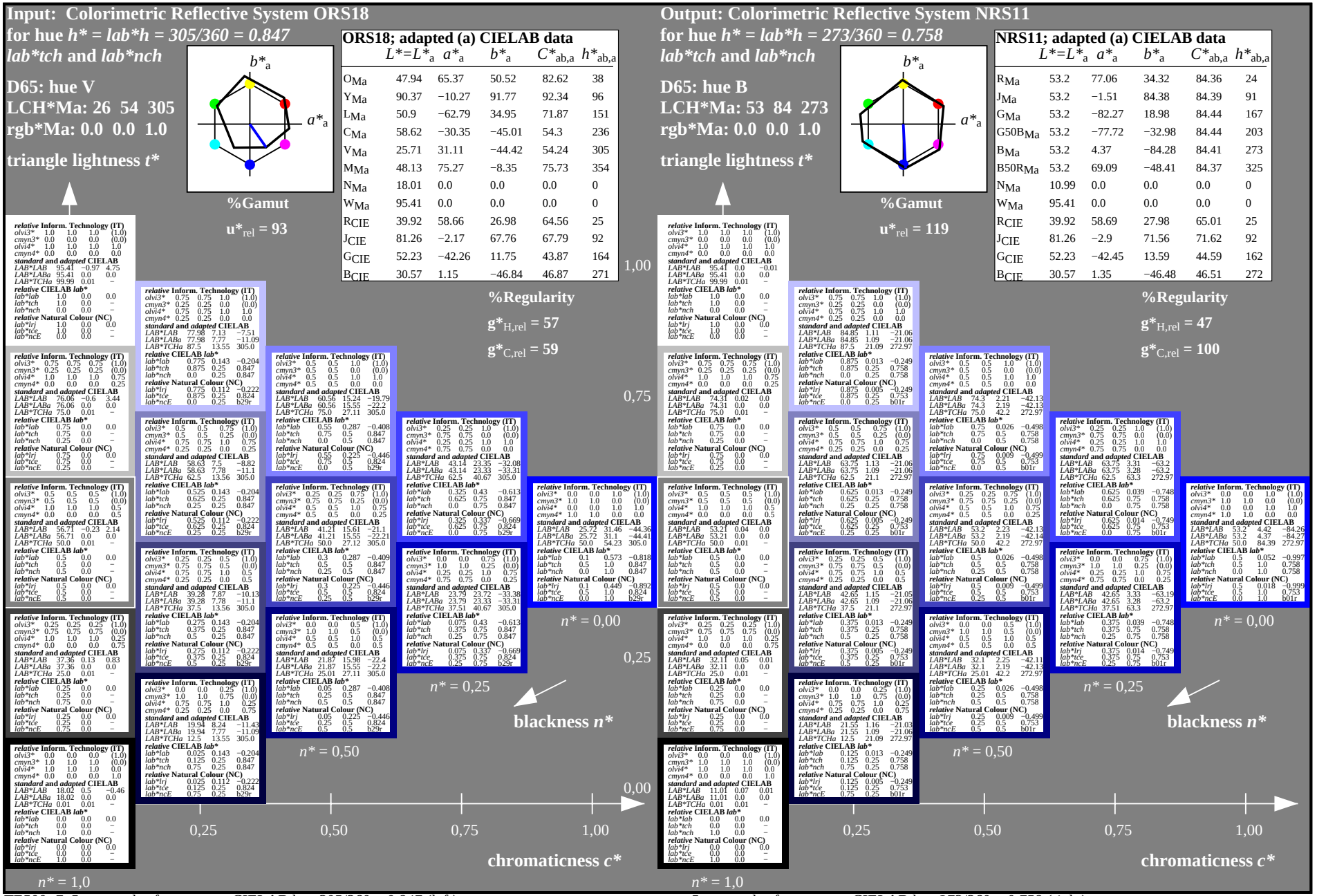

TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)




TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)



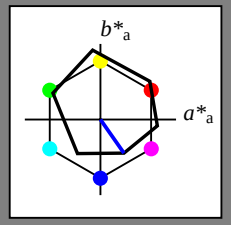

TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

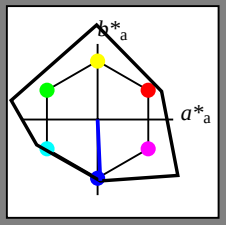
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

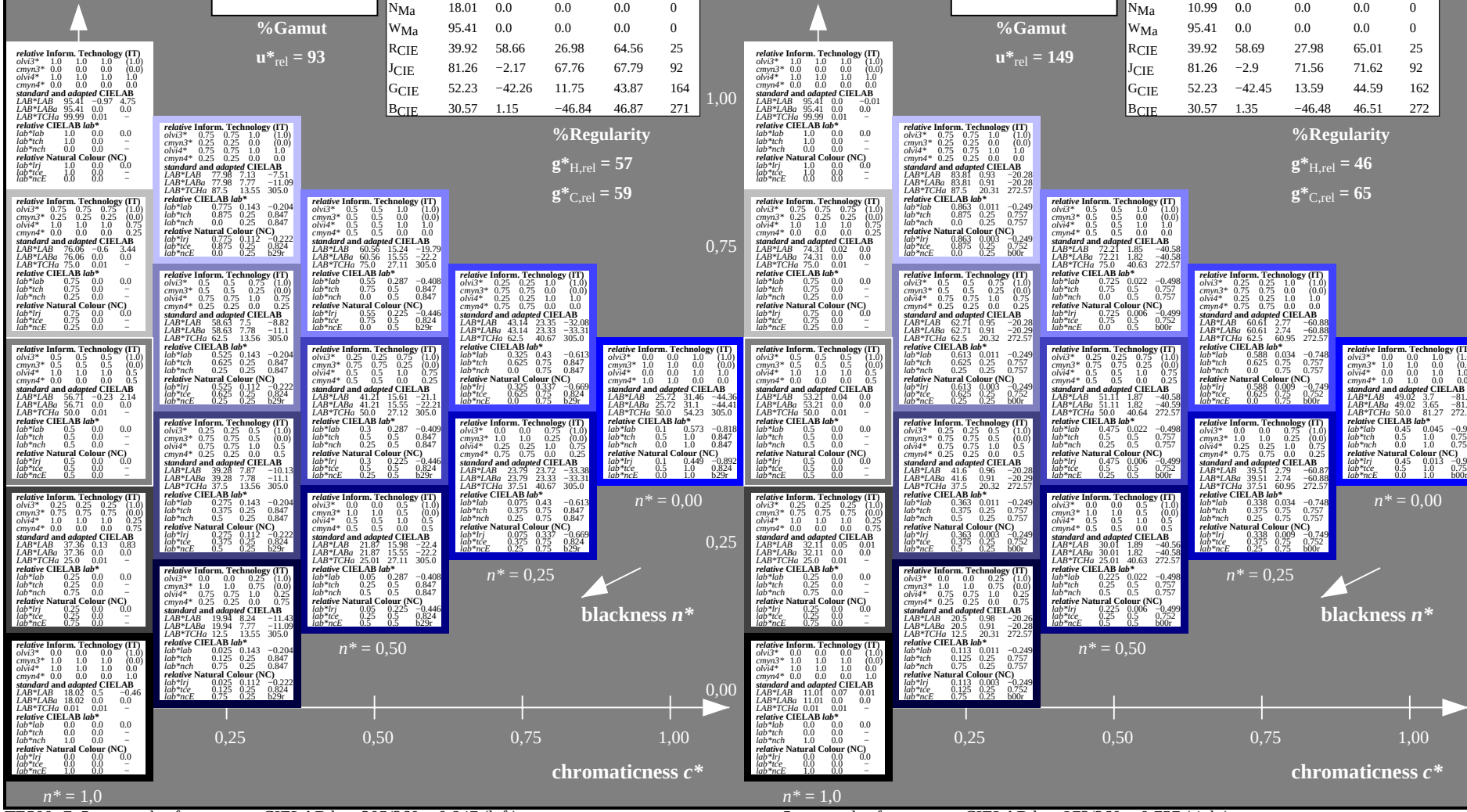
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

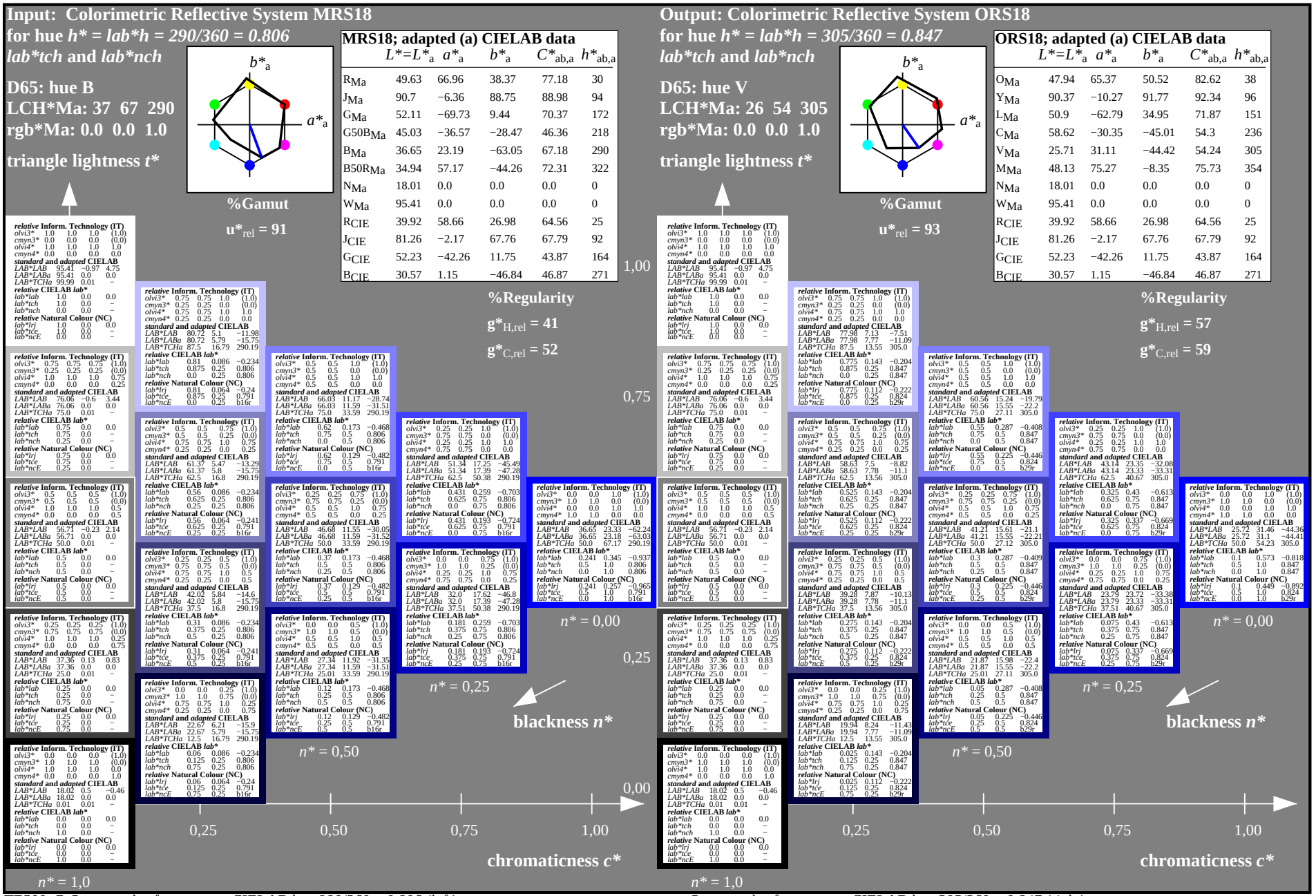
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)



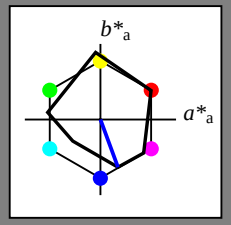

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 290/360 = 0.806**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 37 67 290**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

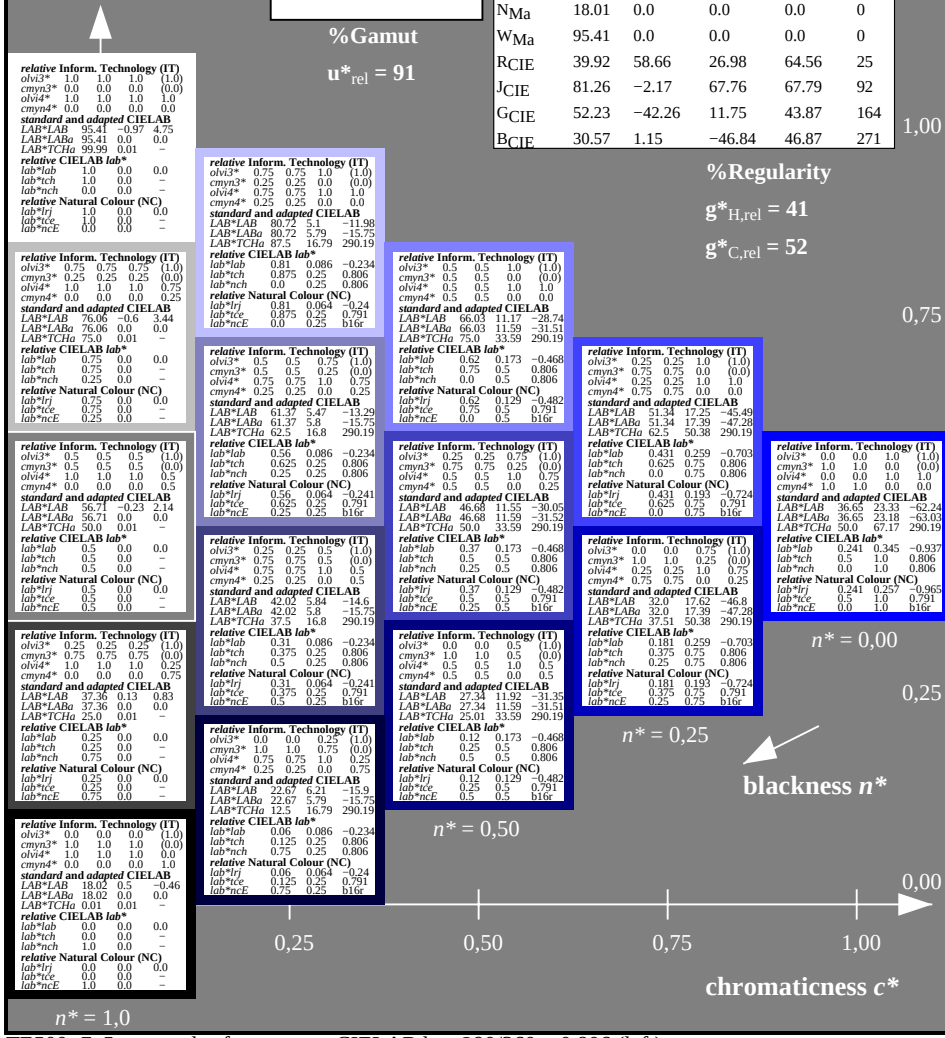
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

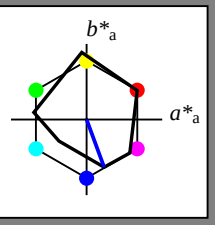
**g*$_{C,rel}$ = 52**




**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 290/360 = 0.806**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 37 67 290**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

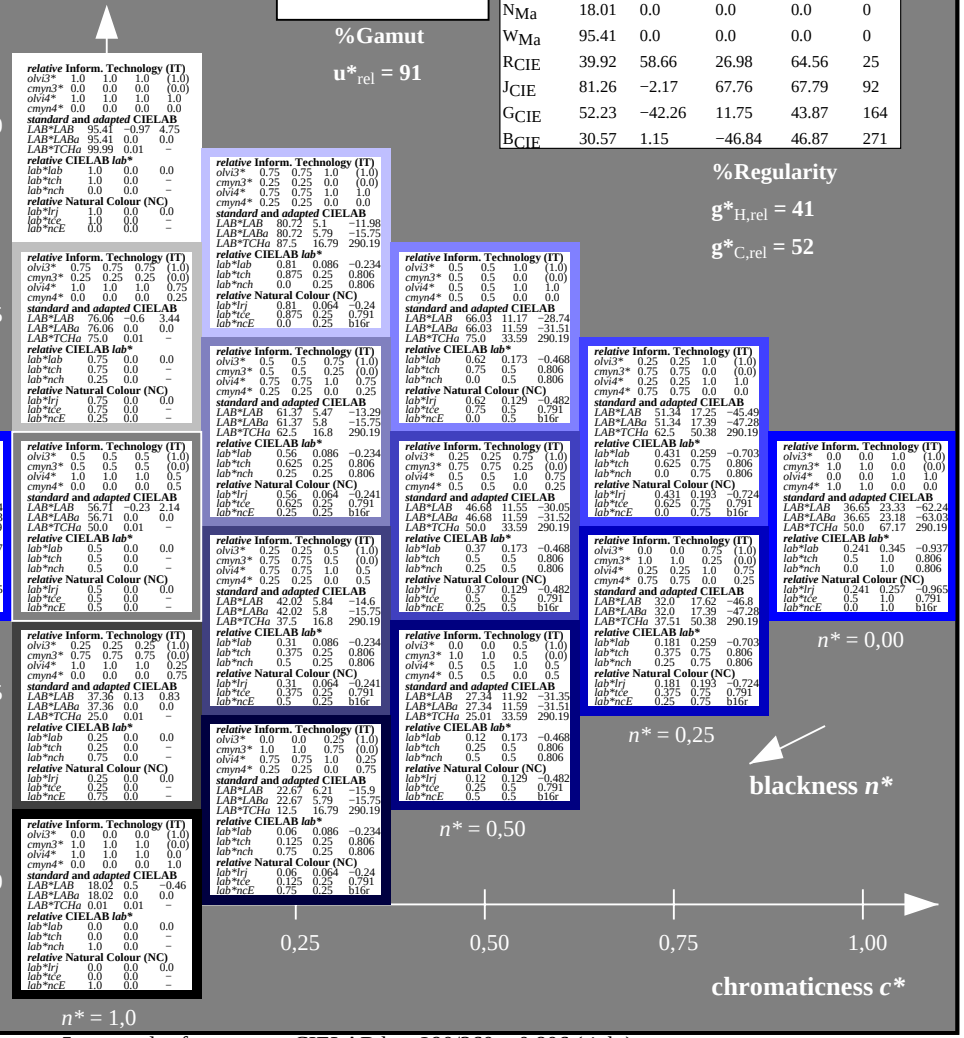
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**



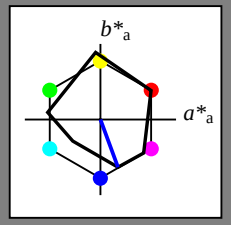

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

5 step scales for constant CIELAB hue 290/360 = 0.806 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 290/360 = 0.806**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 37 67 290**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

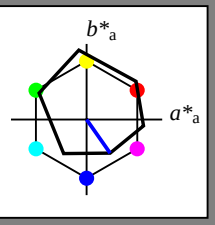
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 305/360 = 0.847**
***lab*tch* and *lab*nch***

**D65: hue V**
**LCH*Ma: 26 54 305**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

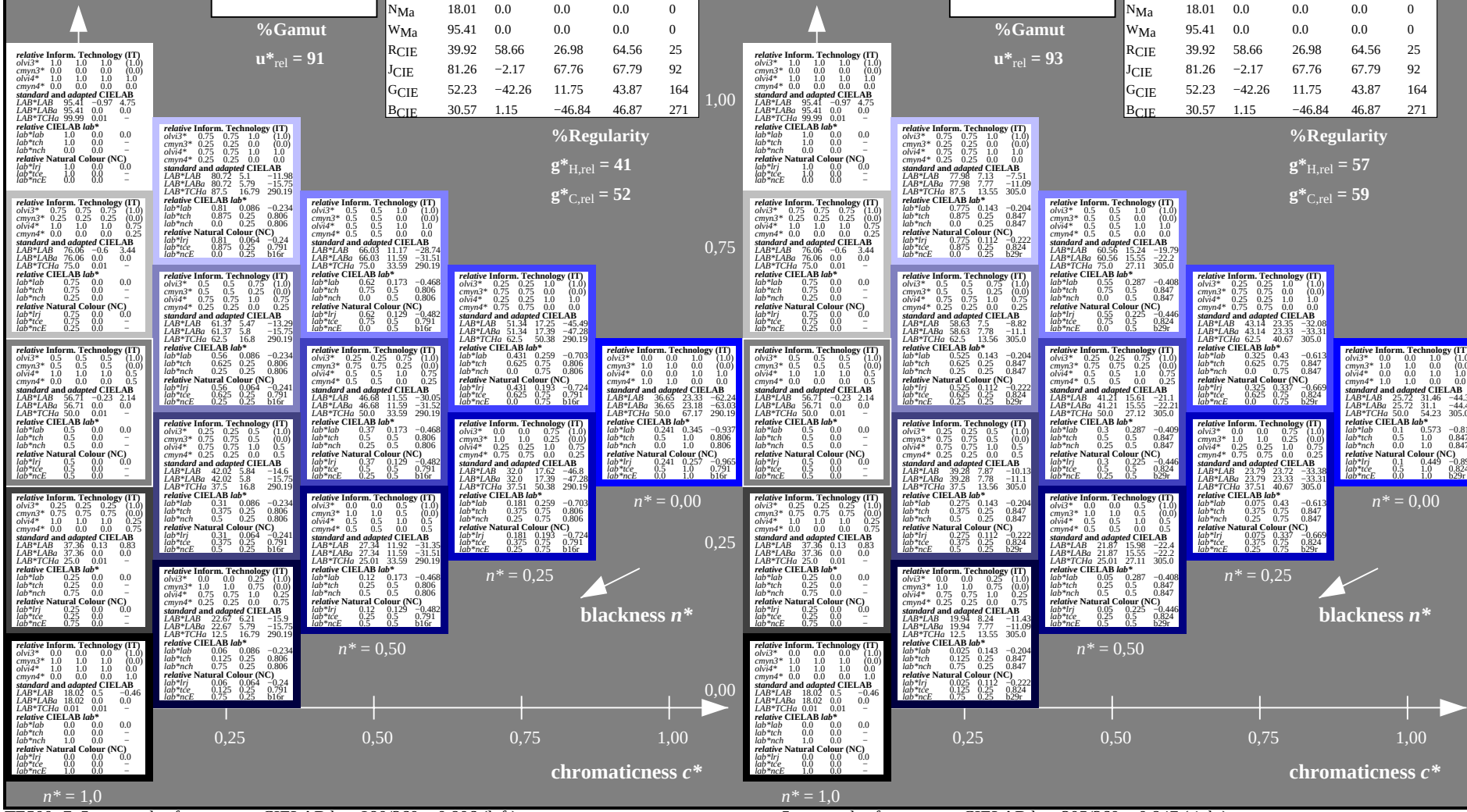
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



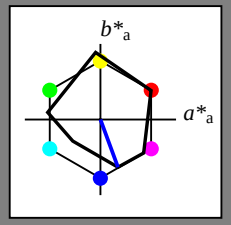

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 290/360 = 0.806**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 37 67 290**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

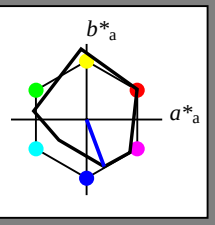
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 290/360 = 0.807**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 37 66 290**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

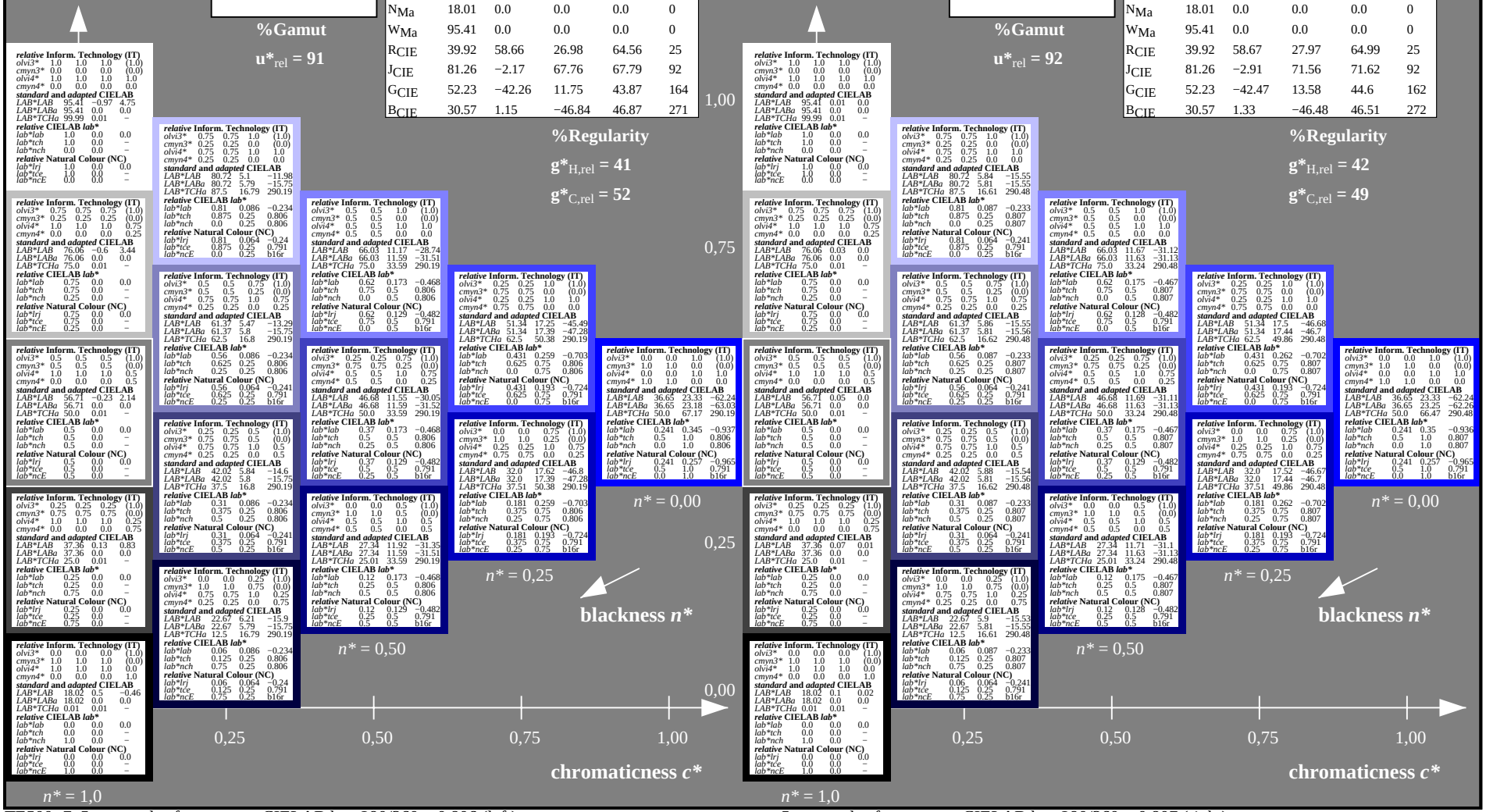
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



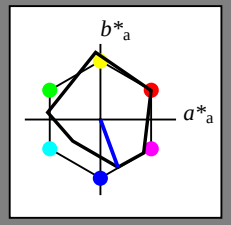

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

5 step scales for constant CIELAB hue 290/360 = 0.807 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 290/360 = 0.806**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 37 67 290**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

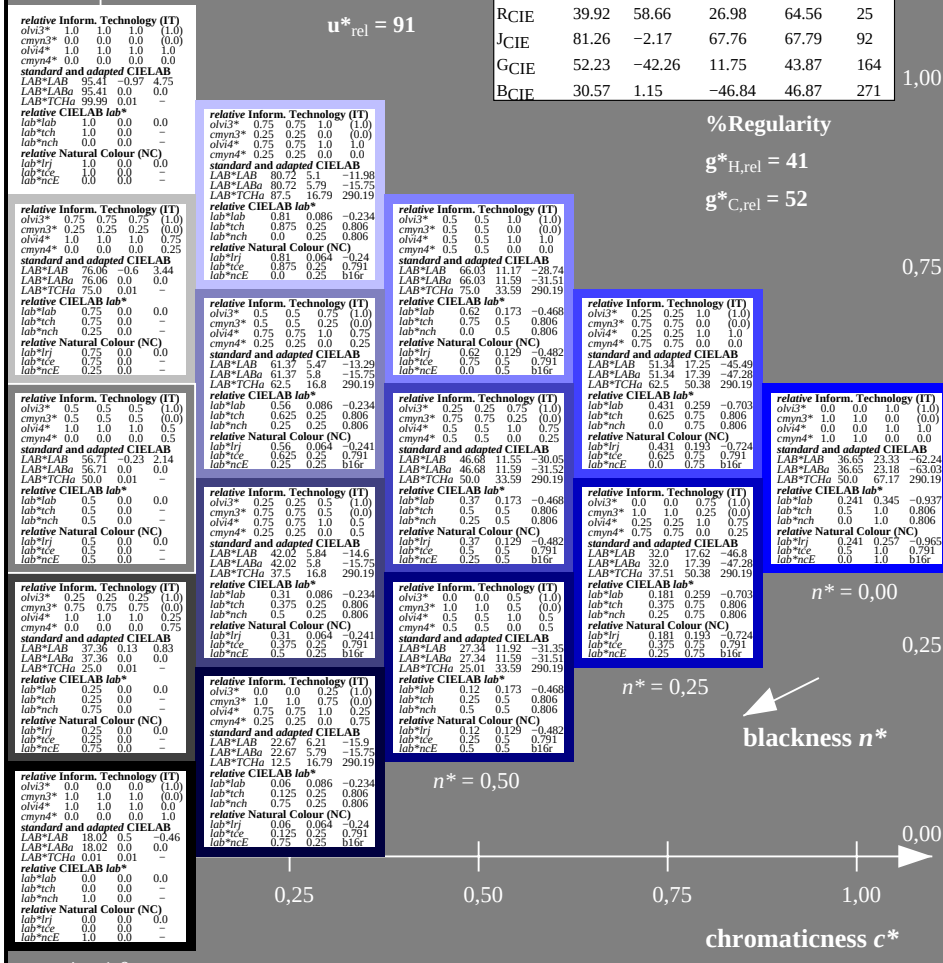
1,00

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

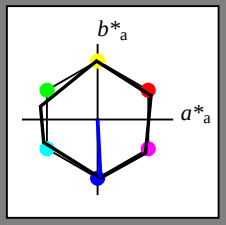
0,75




**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 273/360 = 0.758**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 57 77 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

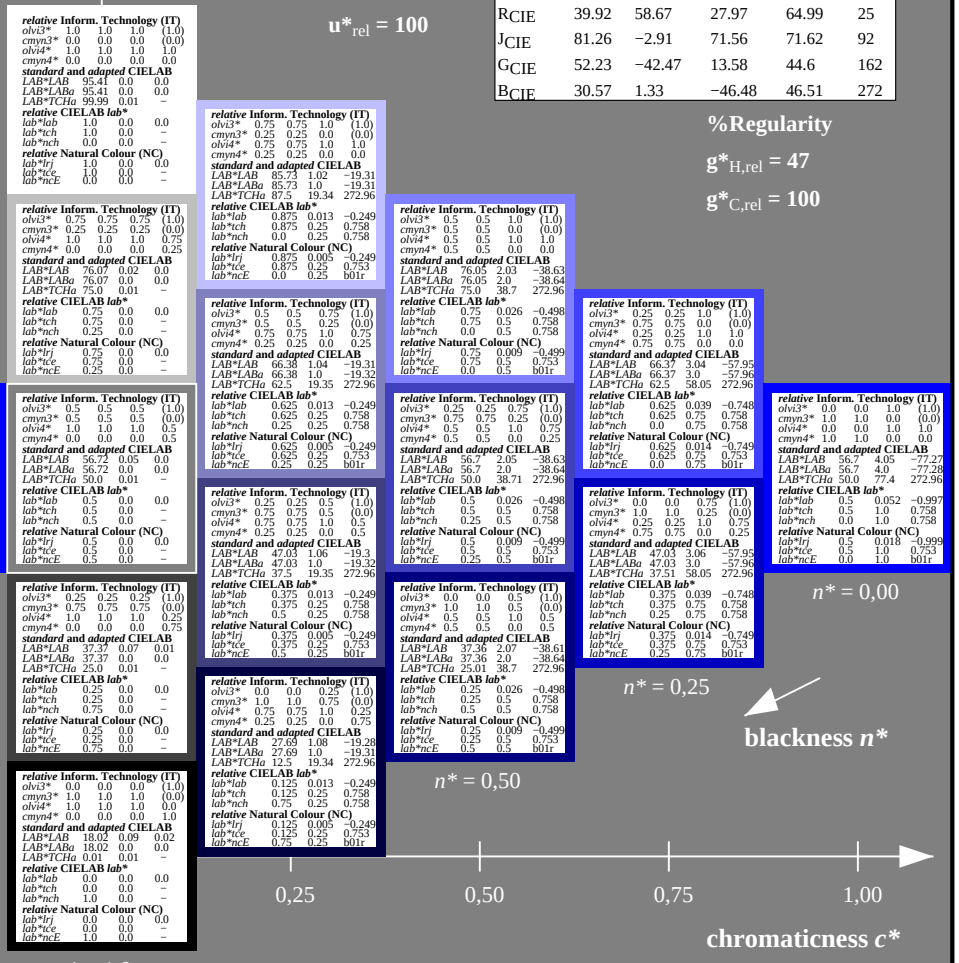
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

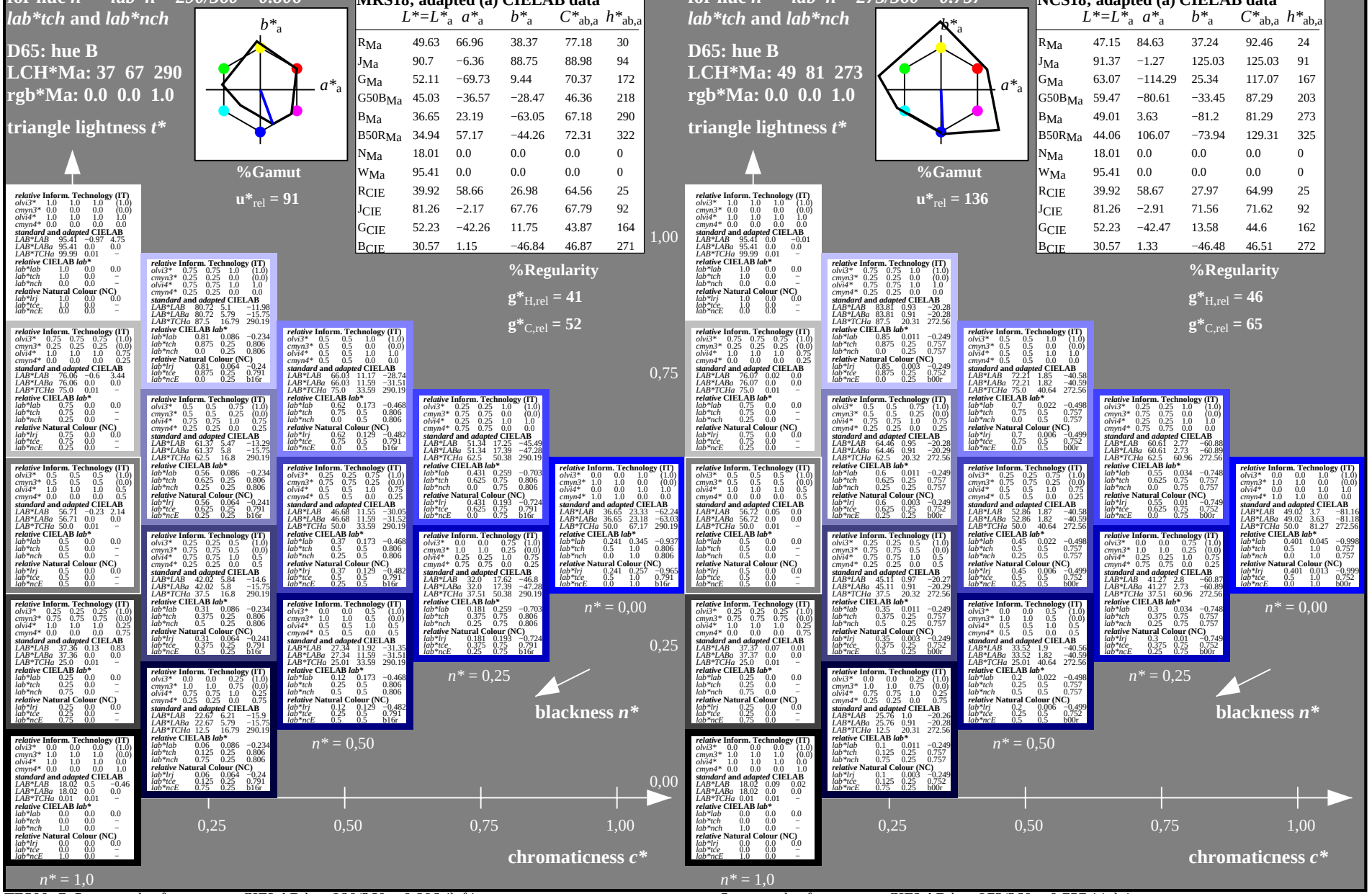
**g*$_{H,rel}$ = 47**

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



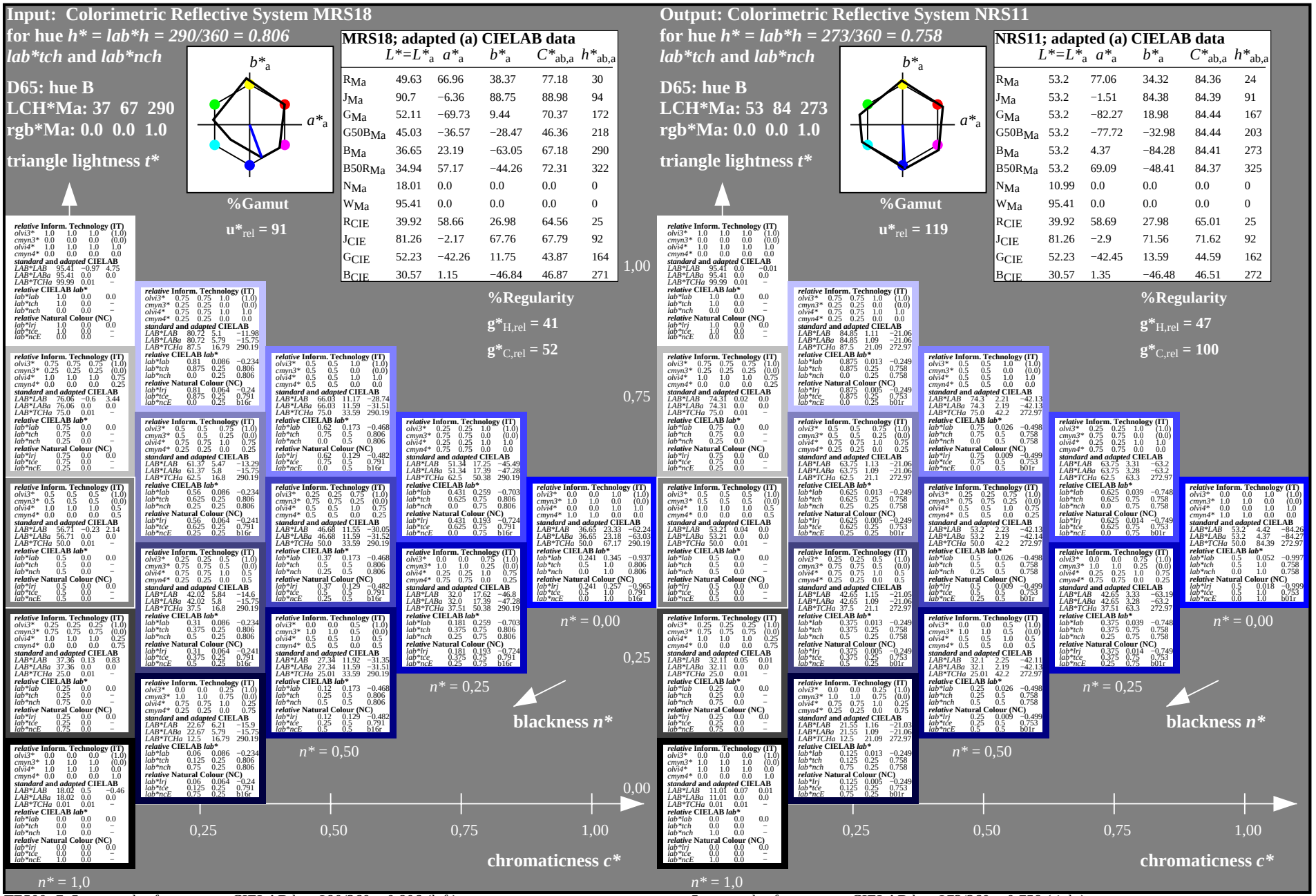

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)



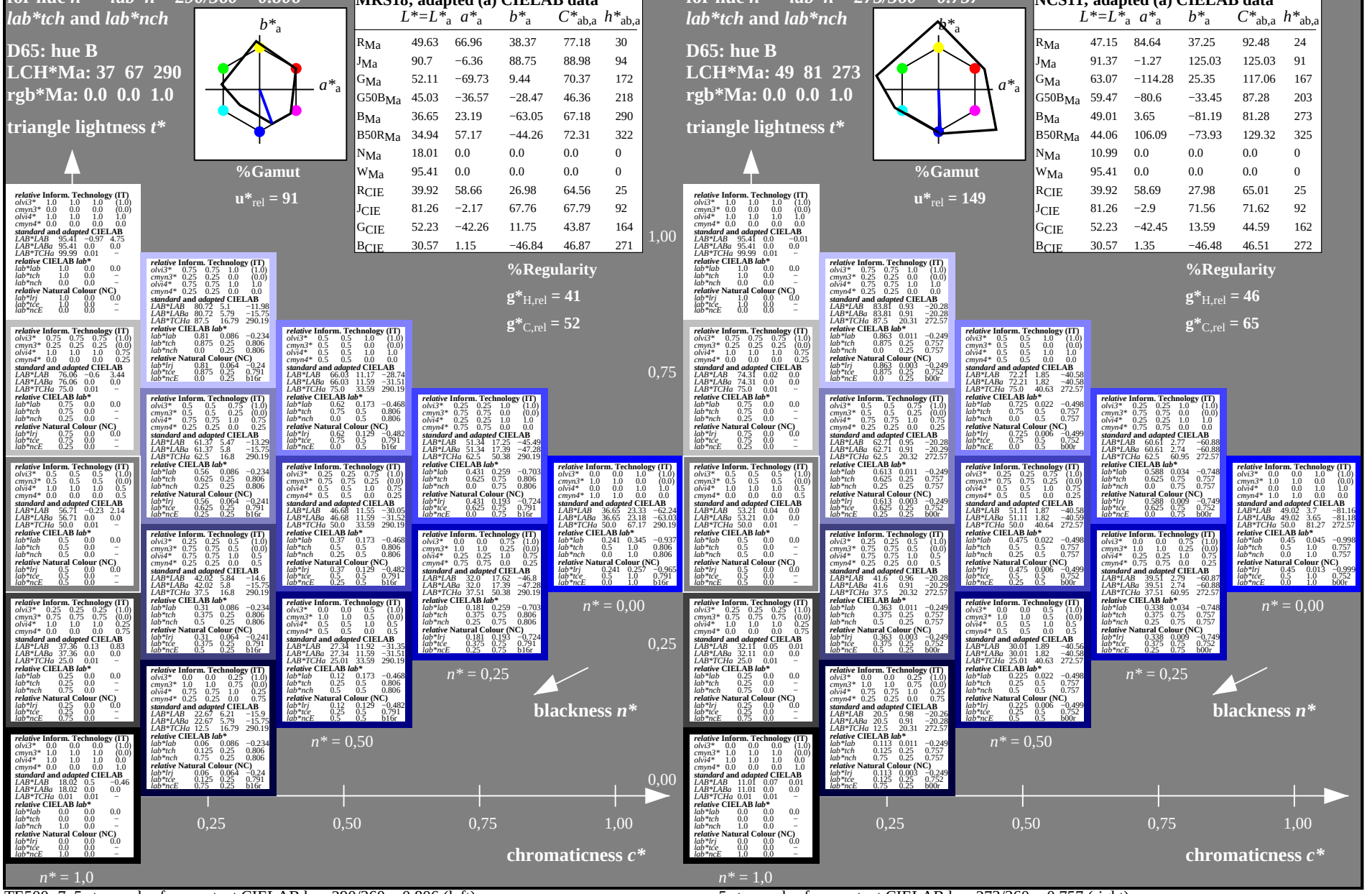

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)



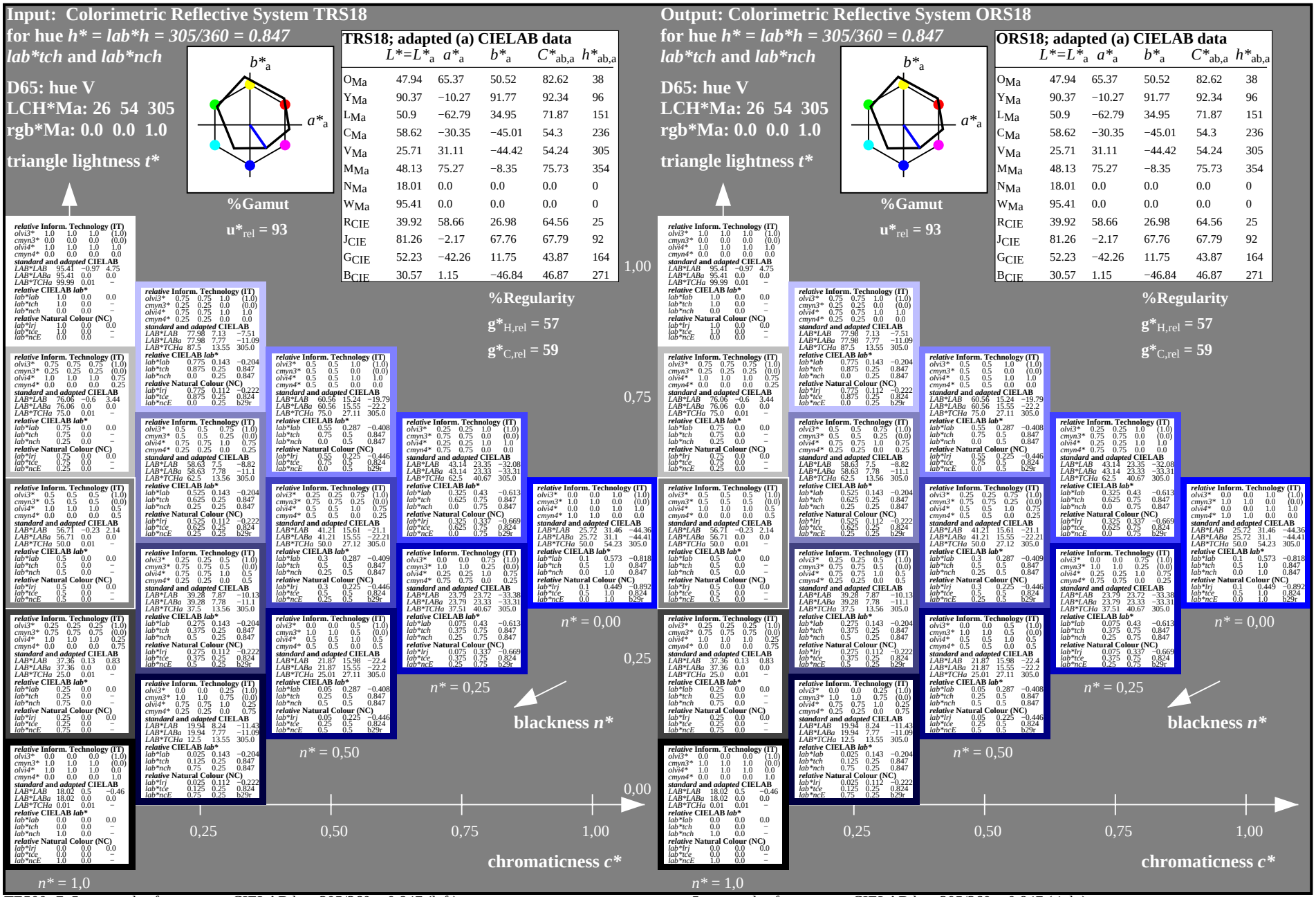

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)



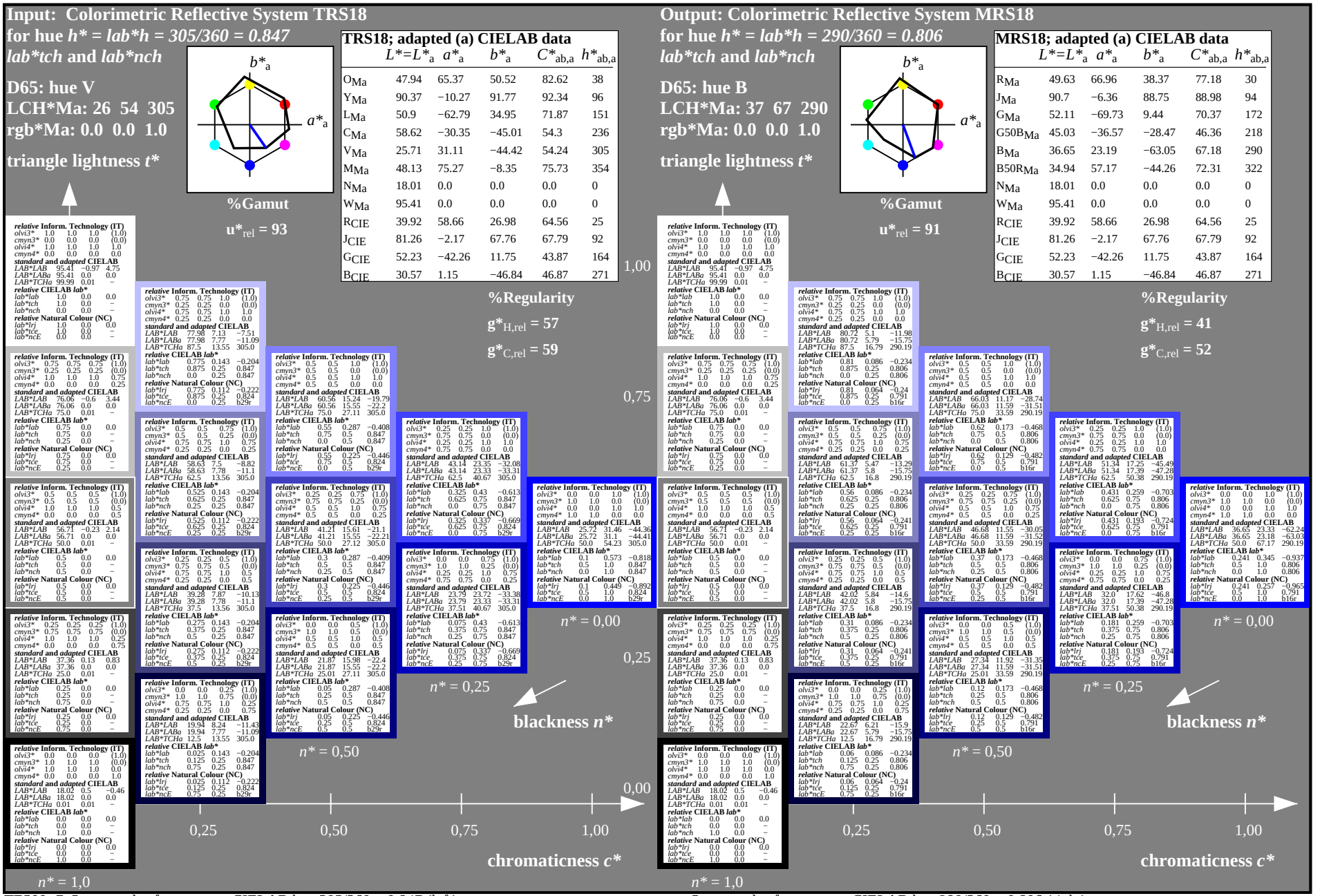

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)




TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)



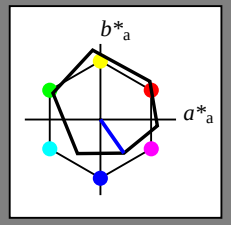

TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 290/360 = 0.806 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 305/360 = 0.847**
***lab*tch* and *lab*nch***

**D65: hue V**
**LCH*Ma: 26 54 305**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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

1,00
0,75
0,25
0,00

*n** = 0,00
*n** = 0,25
*n** = 0,50
*n** = 1,0

**blackness *n****

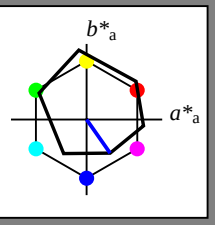
0,25 0,50 0,75 1,00

**chromaticness *c****

**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 305/360 = 0.847**
***lab*tch* and *lab*nch***

**D65: hue V**
**LCH*Ma: 26 54 305**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

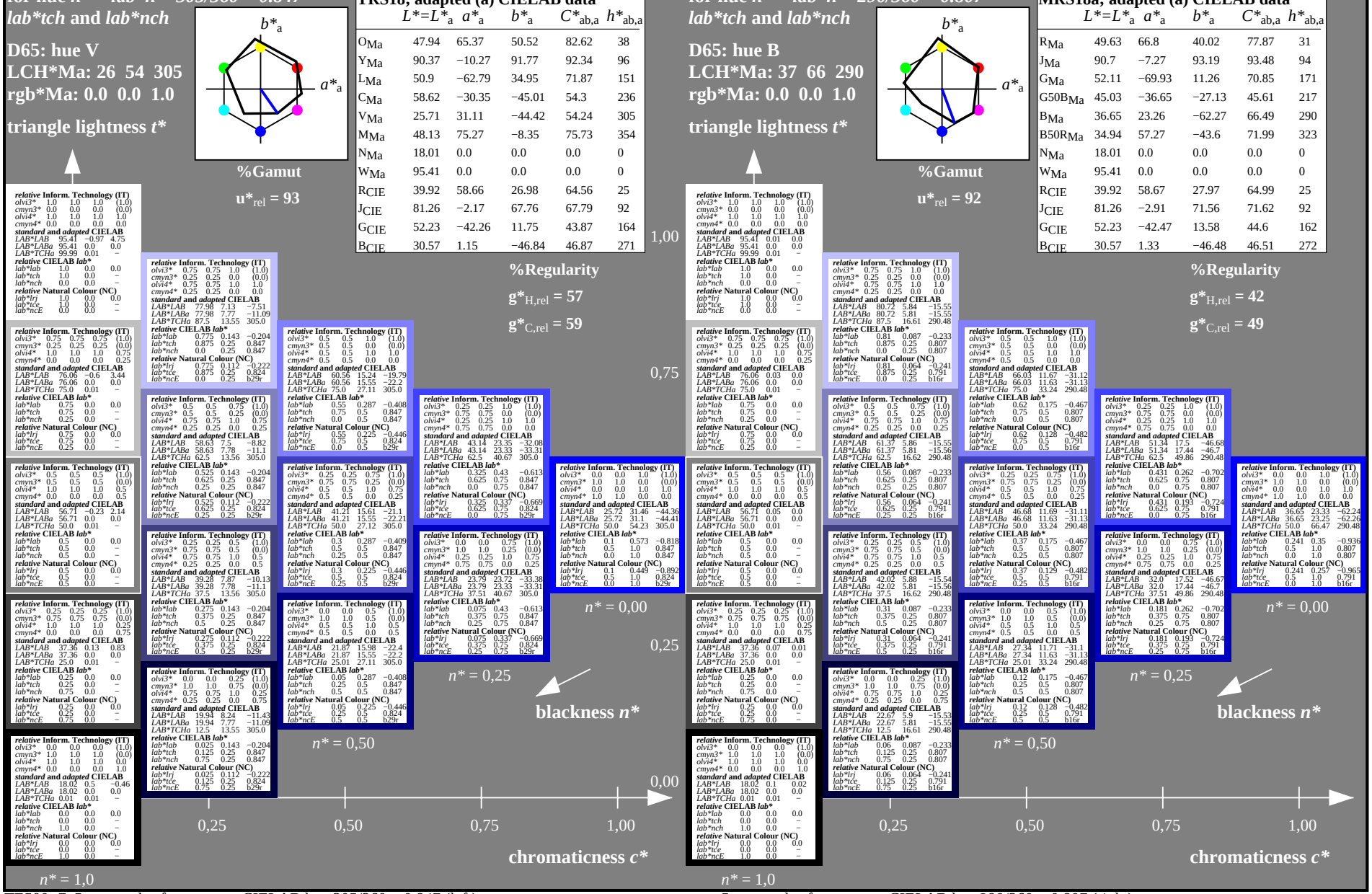
**%Regularity**

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

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

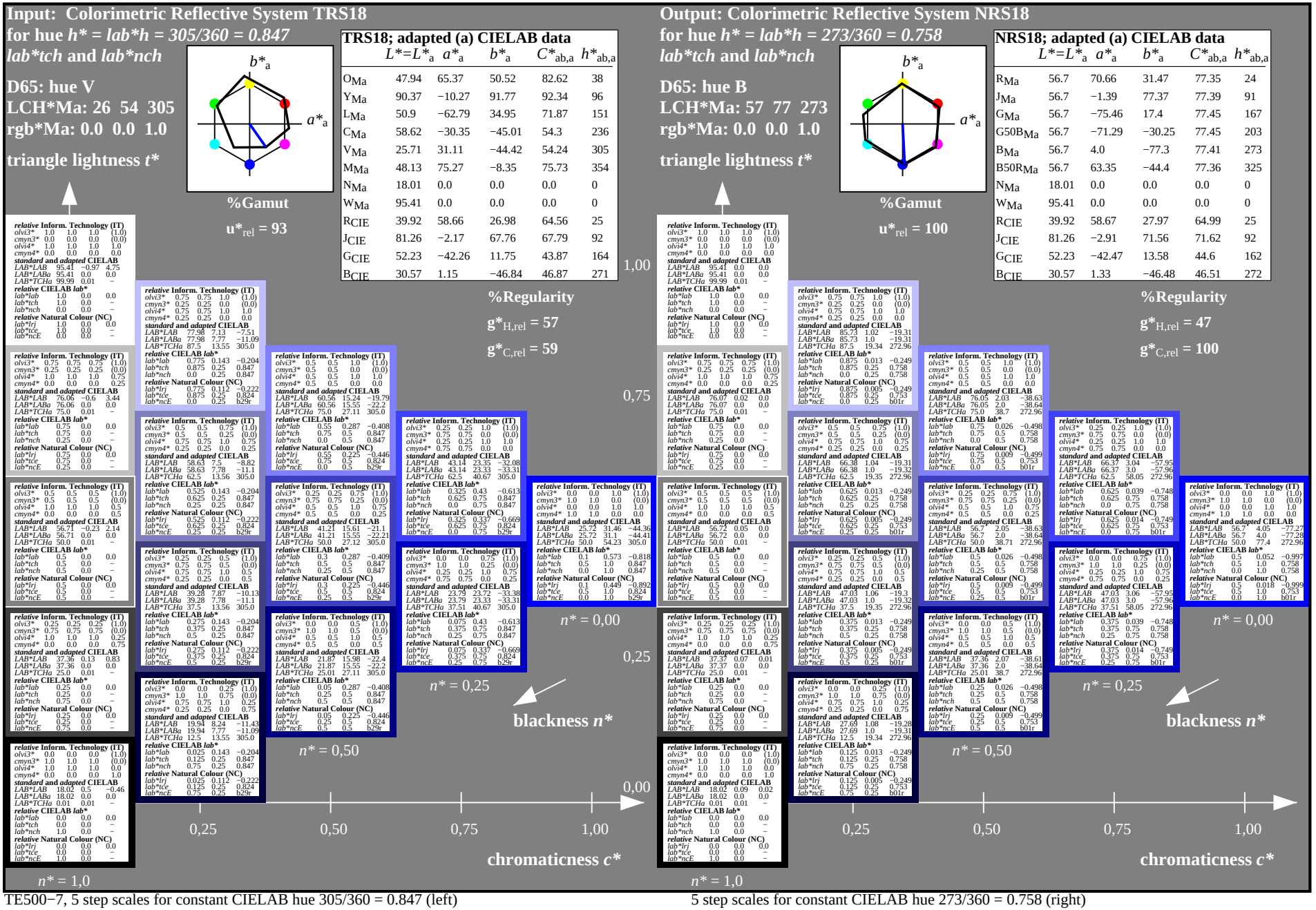
TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)




TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 290/360 = 0.807 (right)



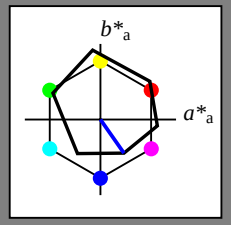

TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 305/360 = 0.847**
***lab*tch* and *lab*nch***

**D65: hue V**
**LCH*Ma: 26 54 305**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

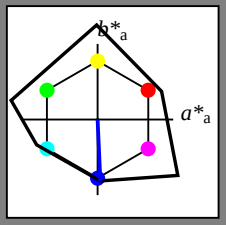
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

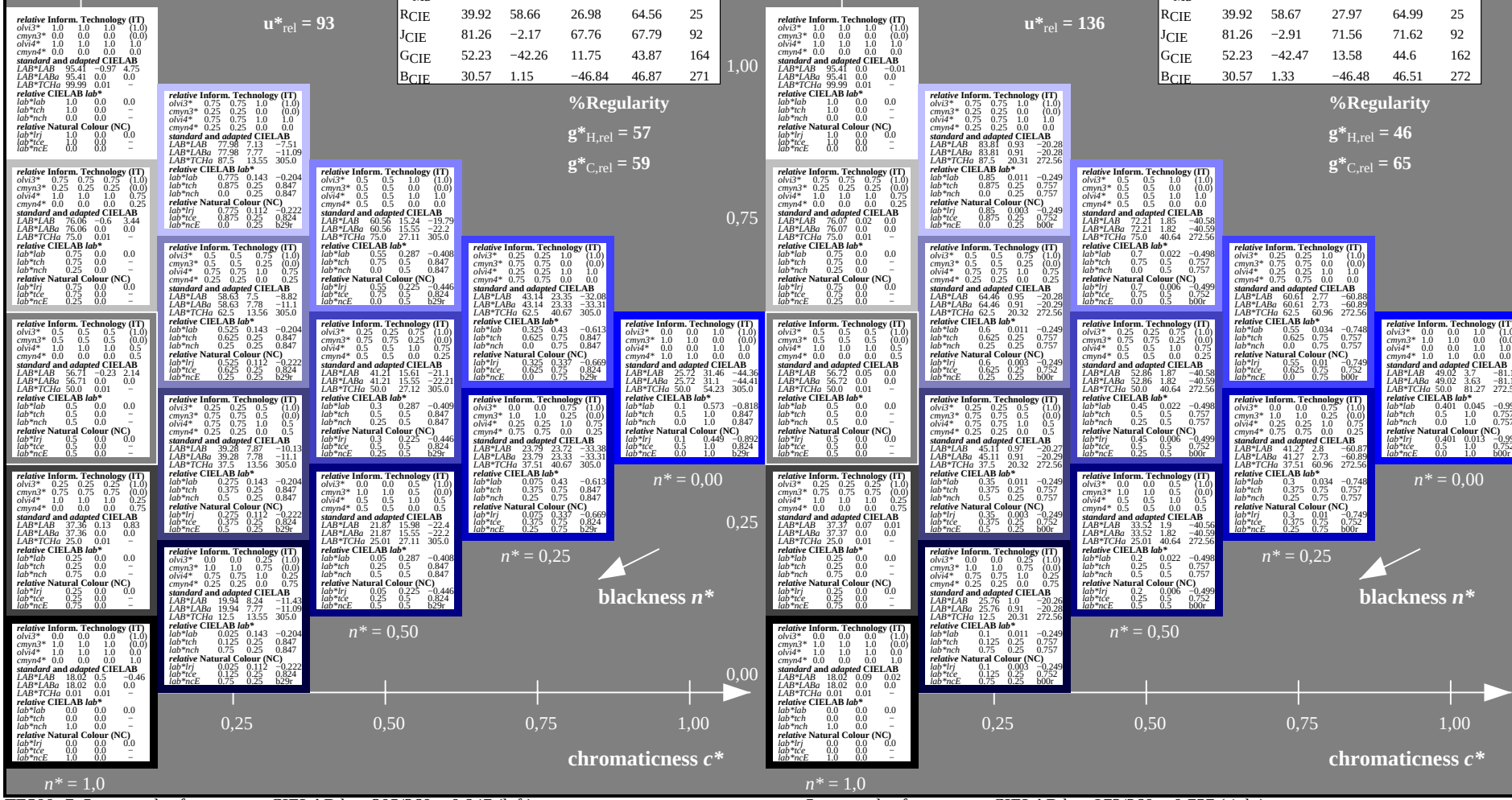
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



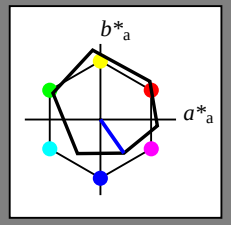

TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 305/360 = 0.847**
***lab*tch* and *lab*nch***

**D65: hue V**
**LCH*Ma: 26 54 305**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

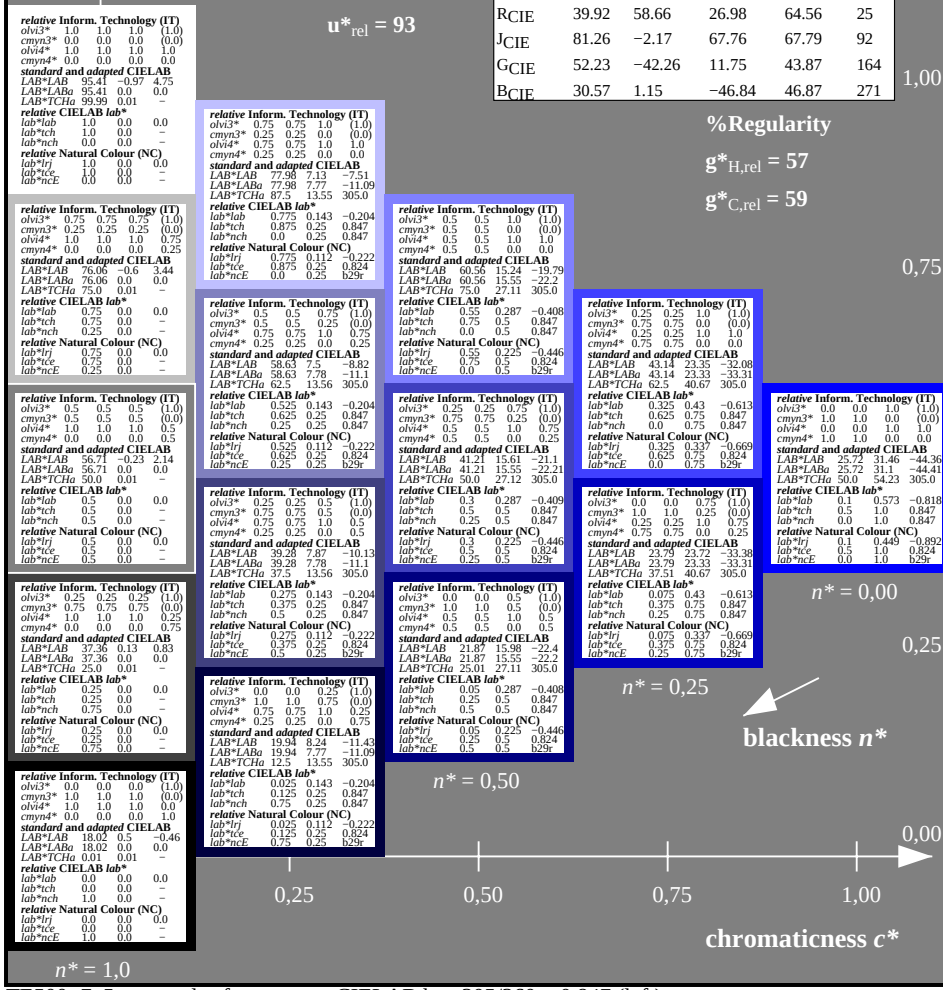
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

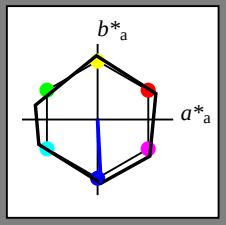
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 273/360 = 0.758**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 53 84 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

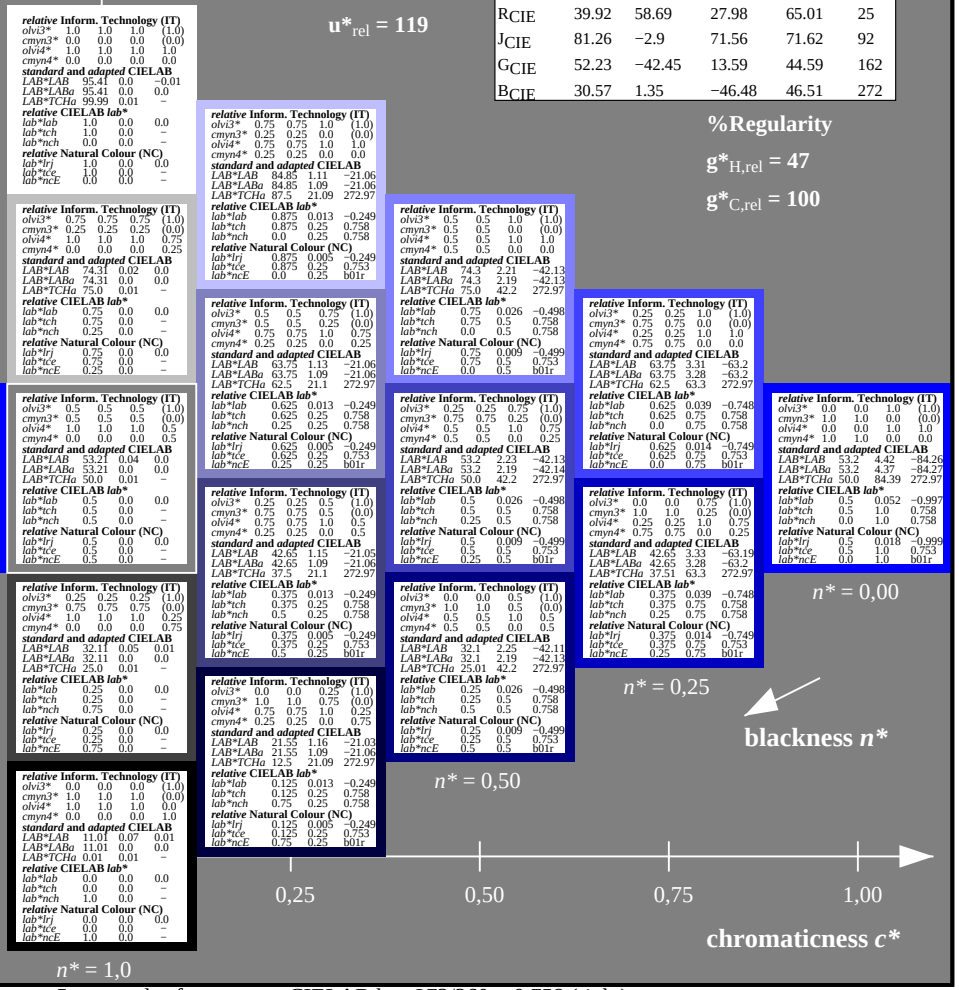
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



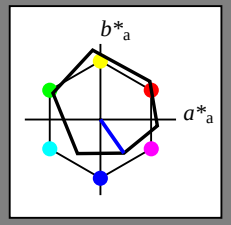

TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 305/360 = 0.847**
***lab*tch* and *lab*nch***

**D65: hue V**
**LCH*Ma: 26 54 305**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

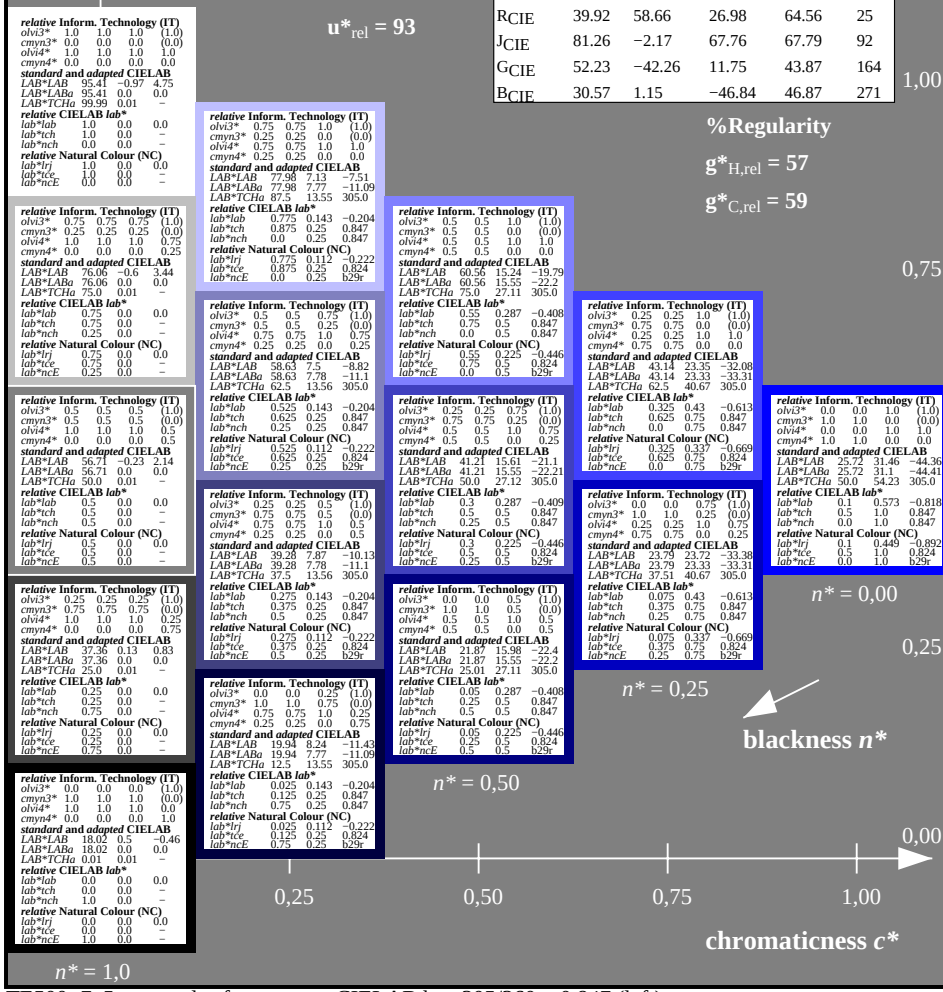
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

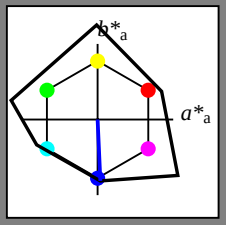
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

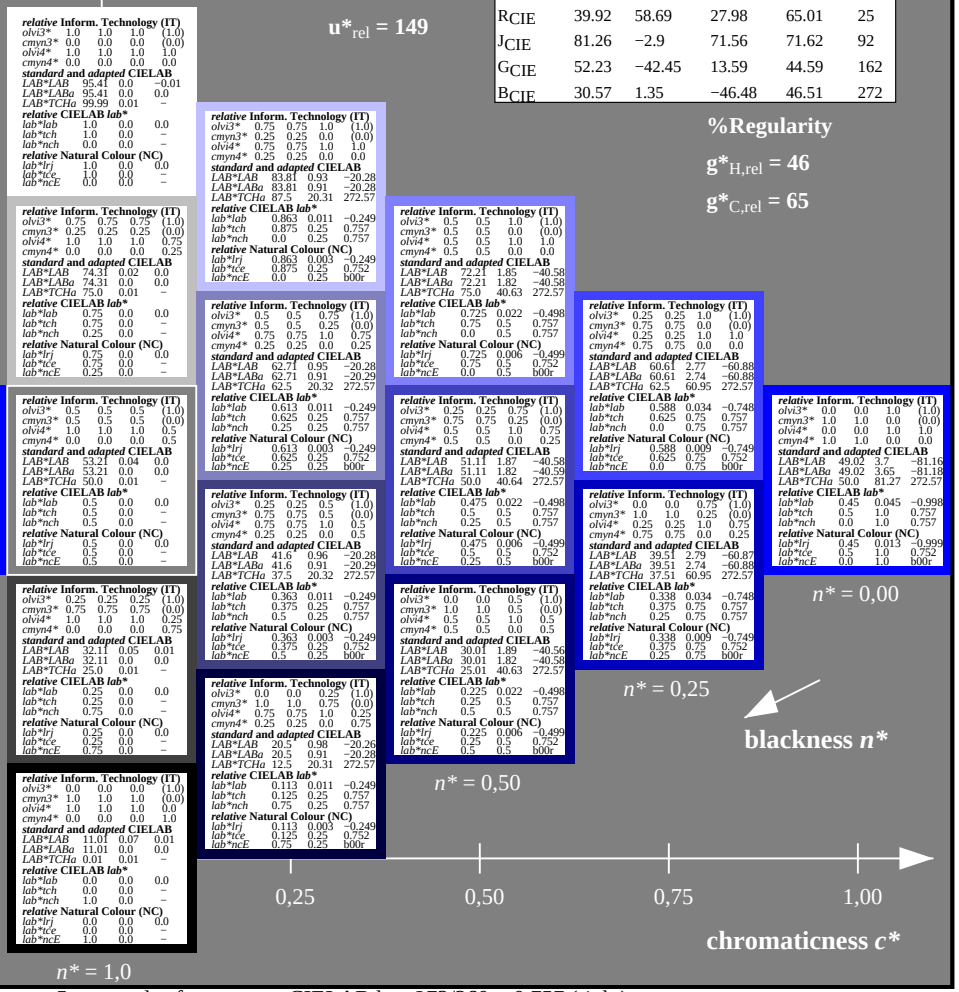
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

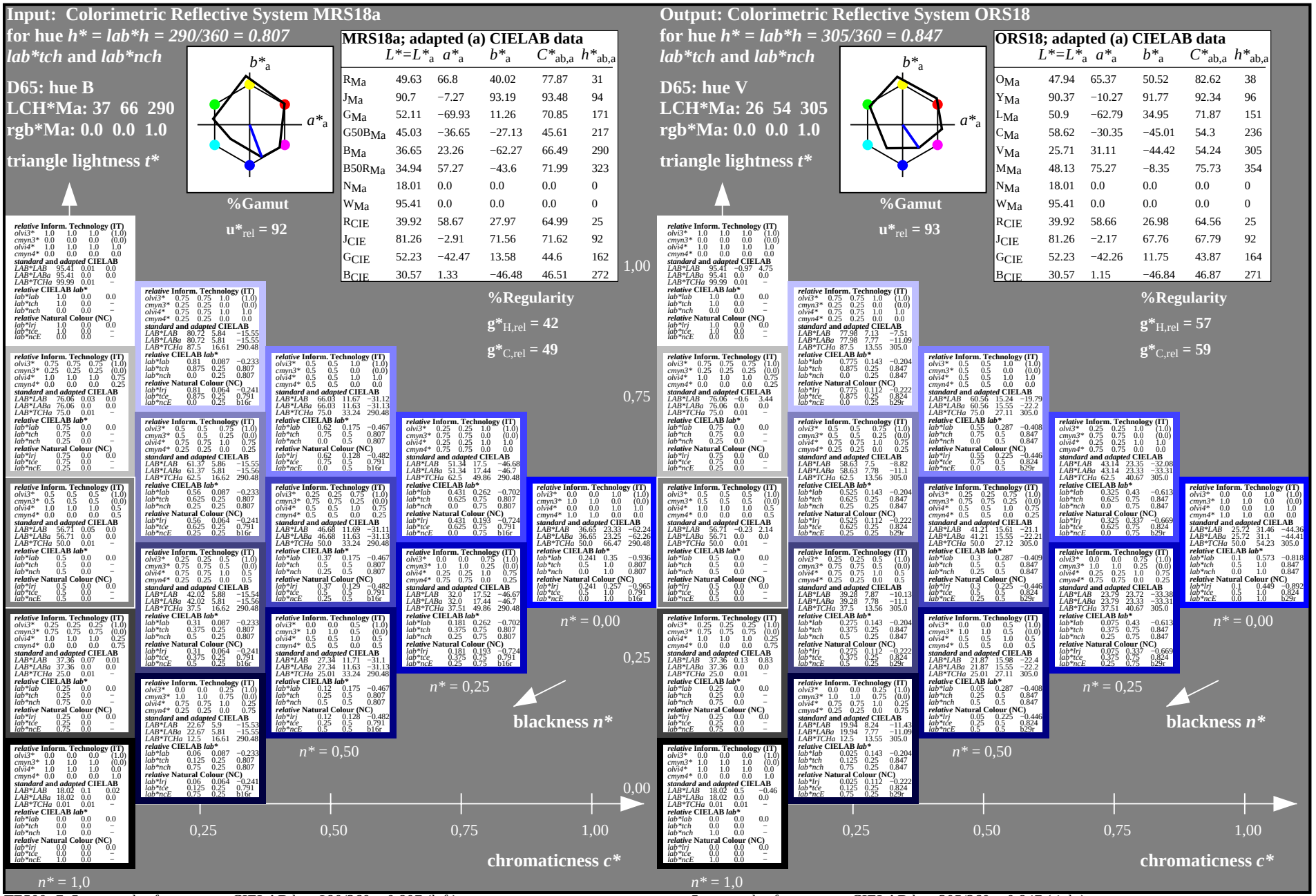
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



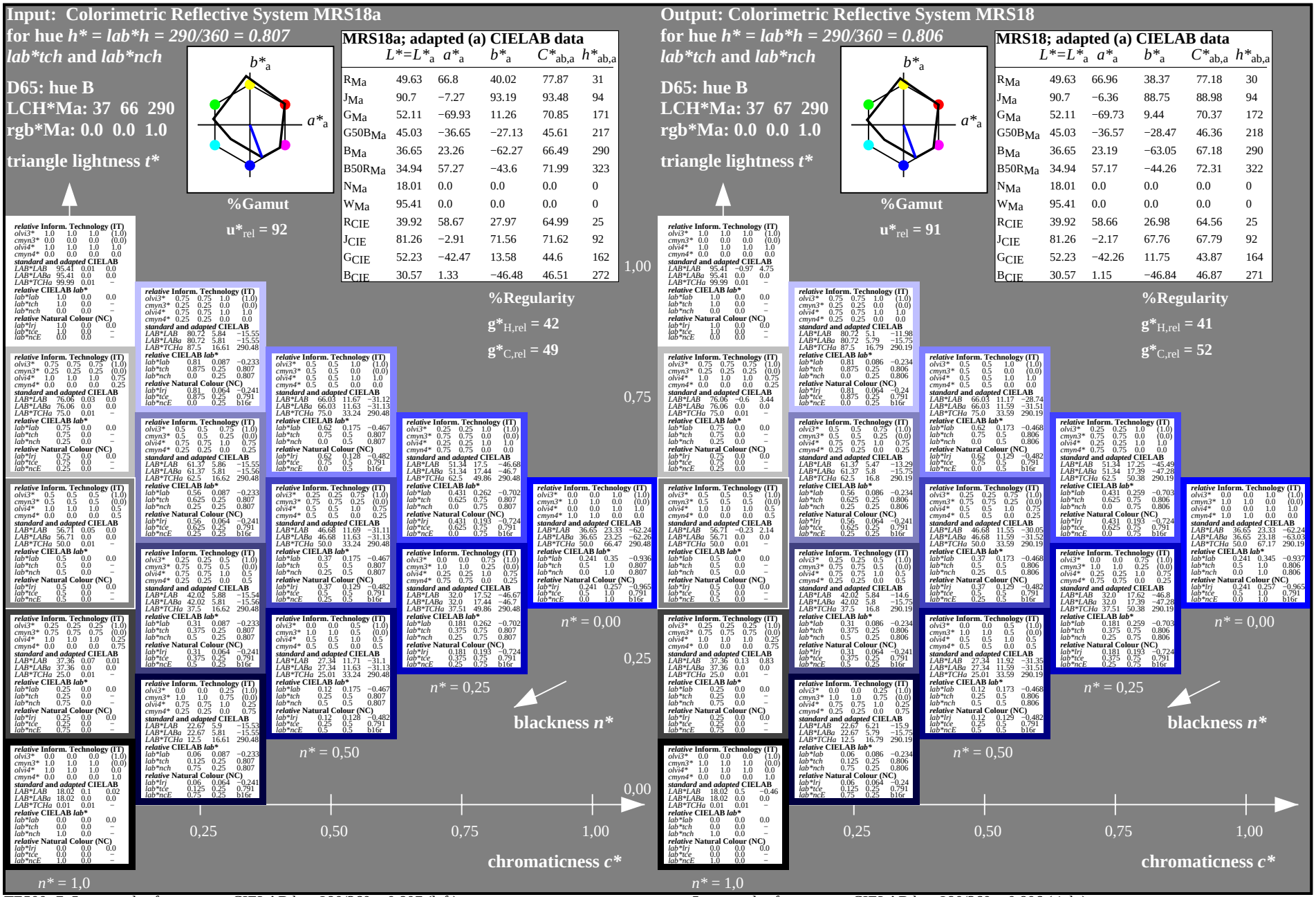

TE500−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)



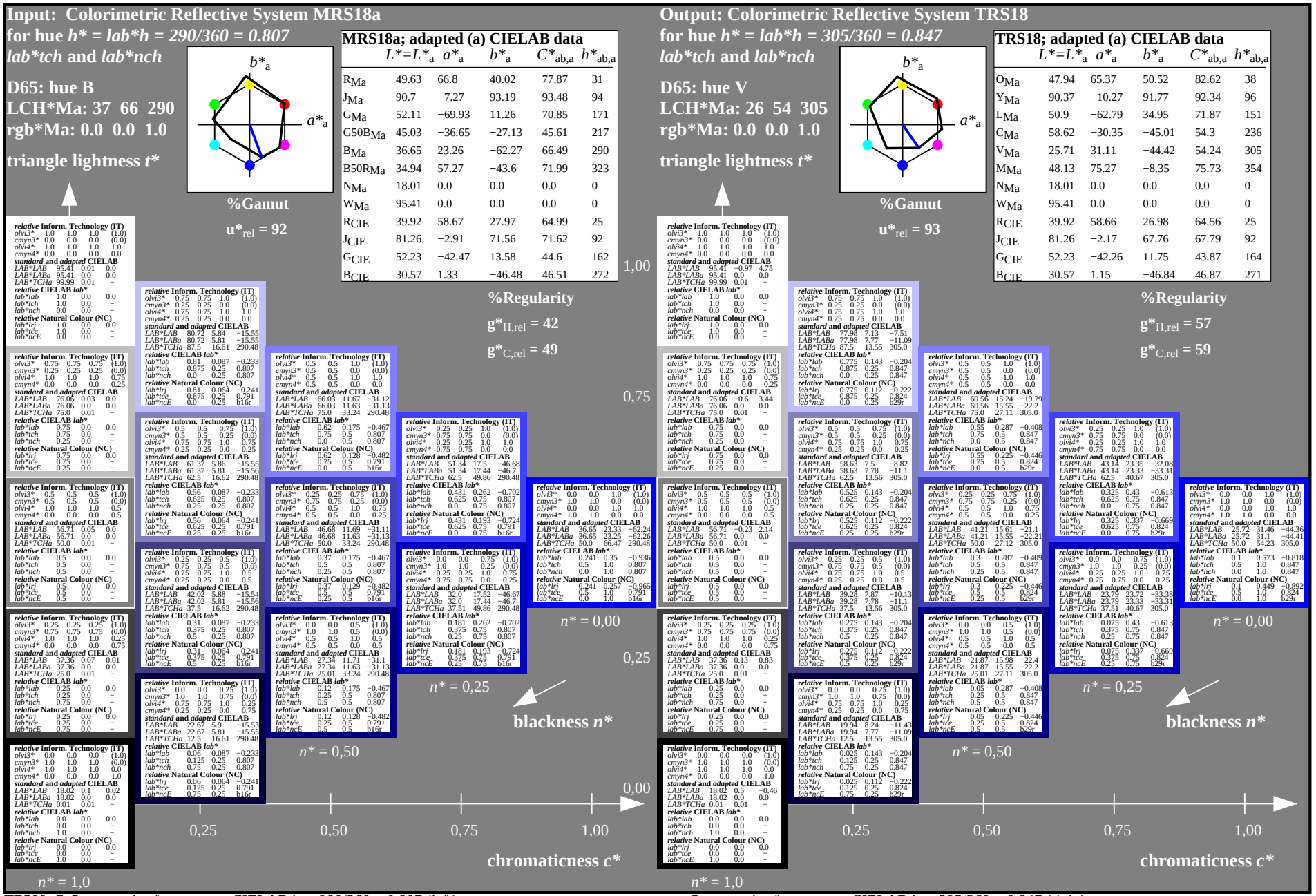

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.807 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)



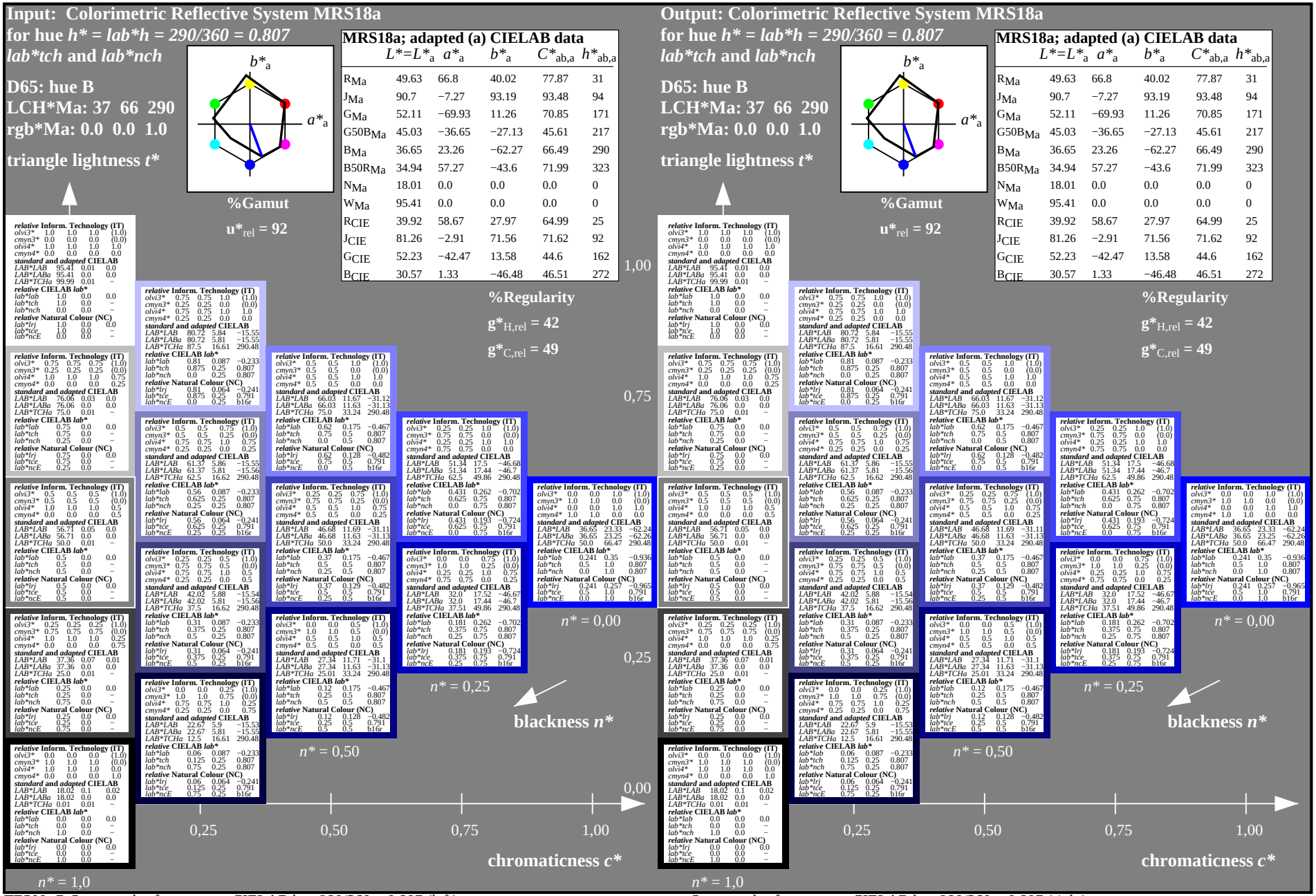

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.807 (left)

5 step scales for constant CIELAB hue 290/360 = 0.806 (right)



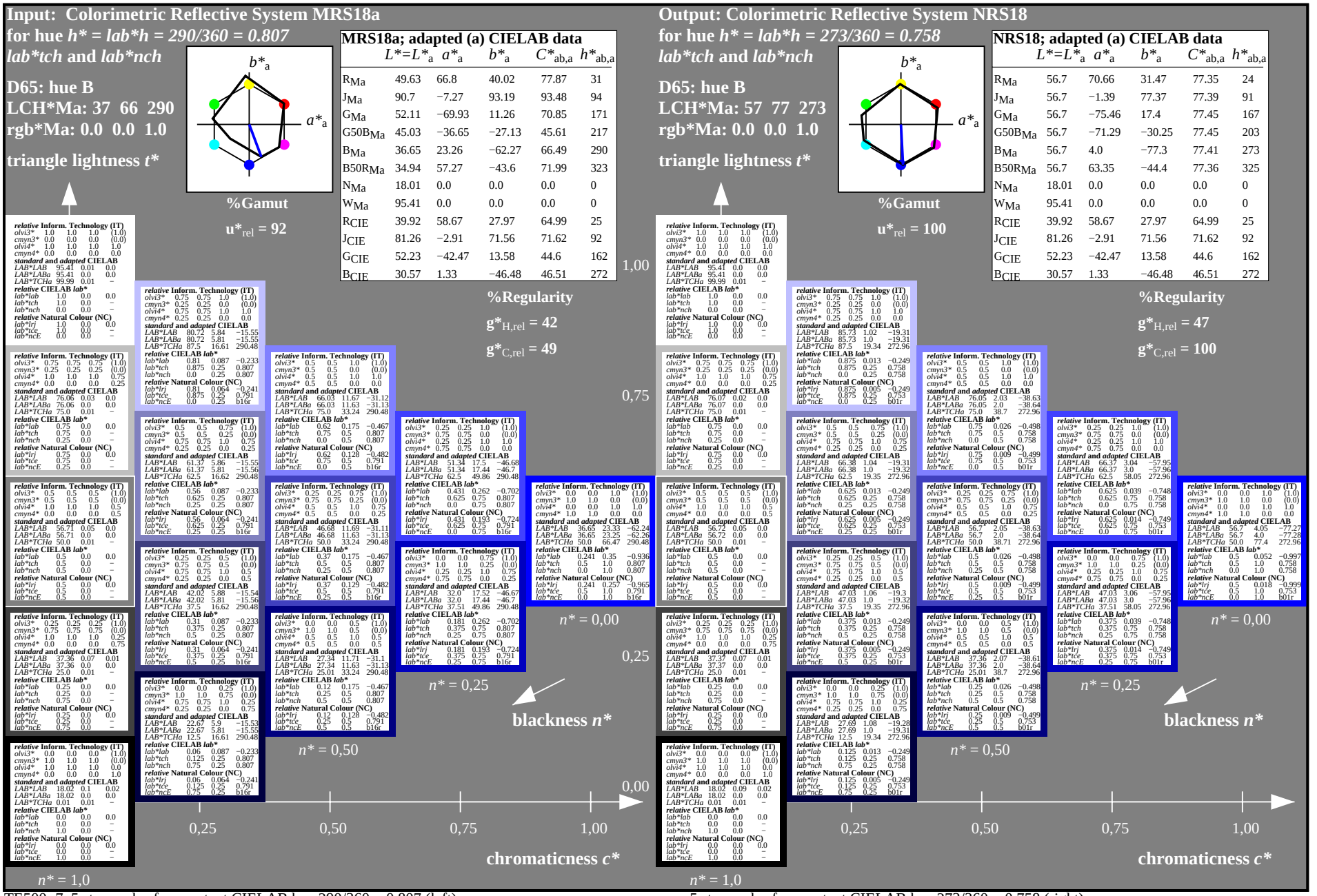

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.807 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)



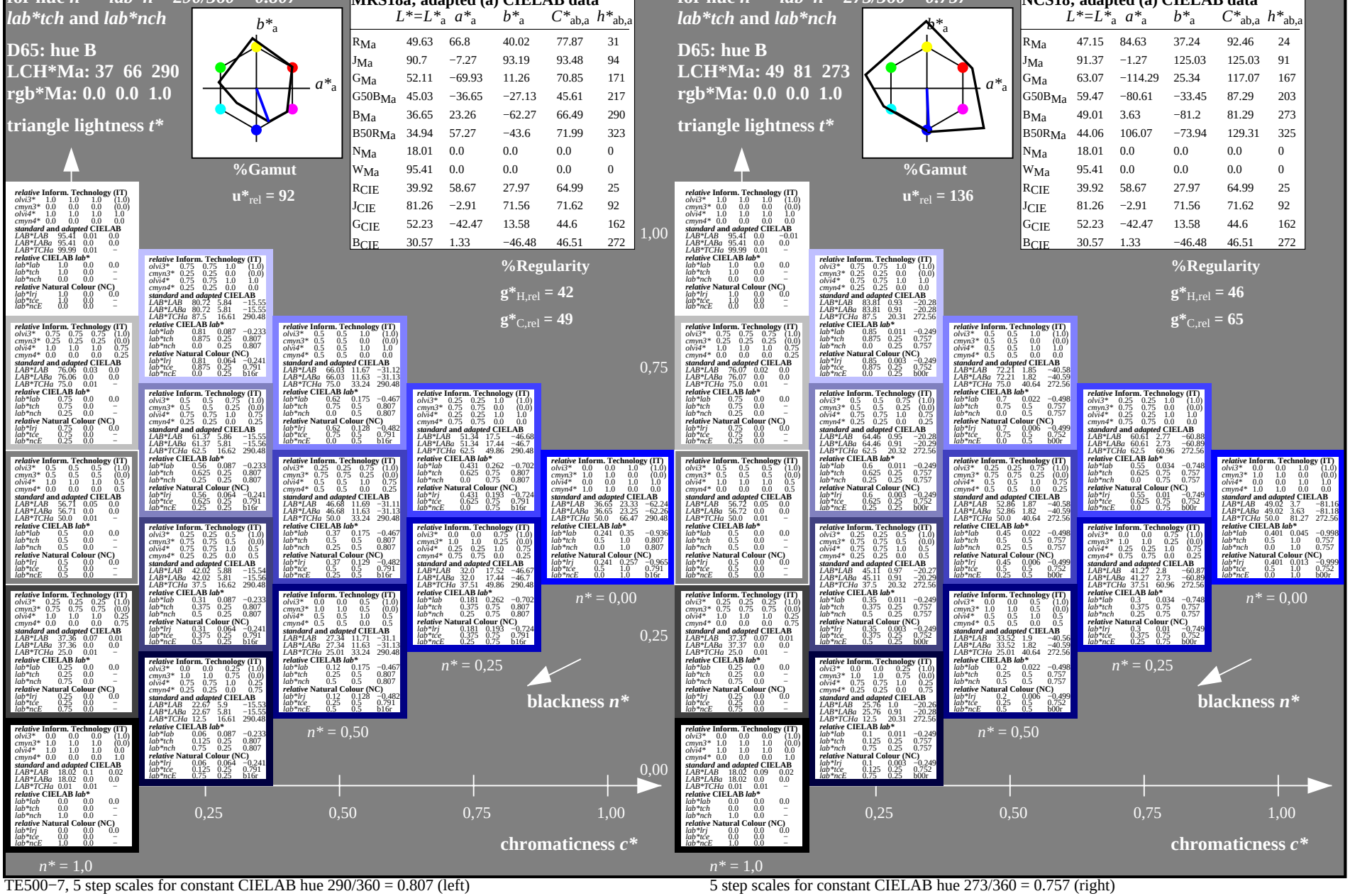

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.807 (left)

5 step scales for constant CIELAB hue 290/360 = 0.807 (right)



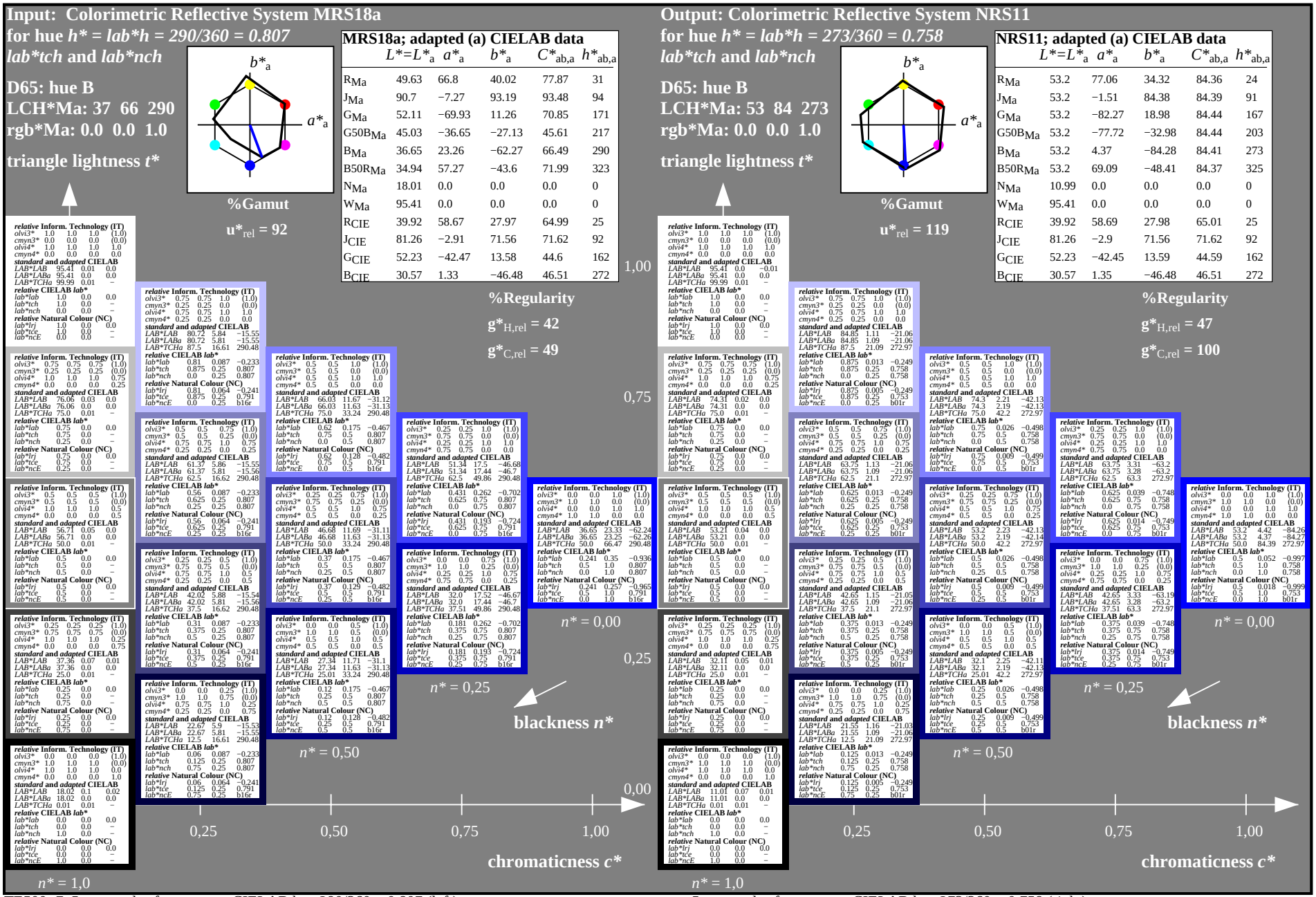

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.807 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)




TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.807 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)



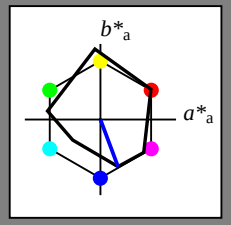

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.807 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 290/360 = 0.807**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 37 66 290**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

**MRS18a; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

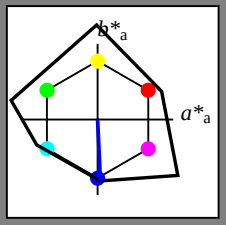
**g*$_{H,rel}$ = 42**

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

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

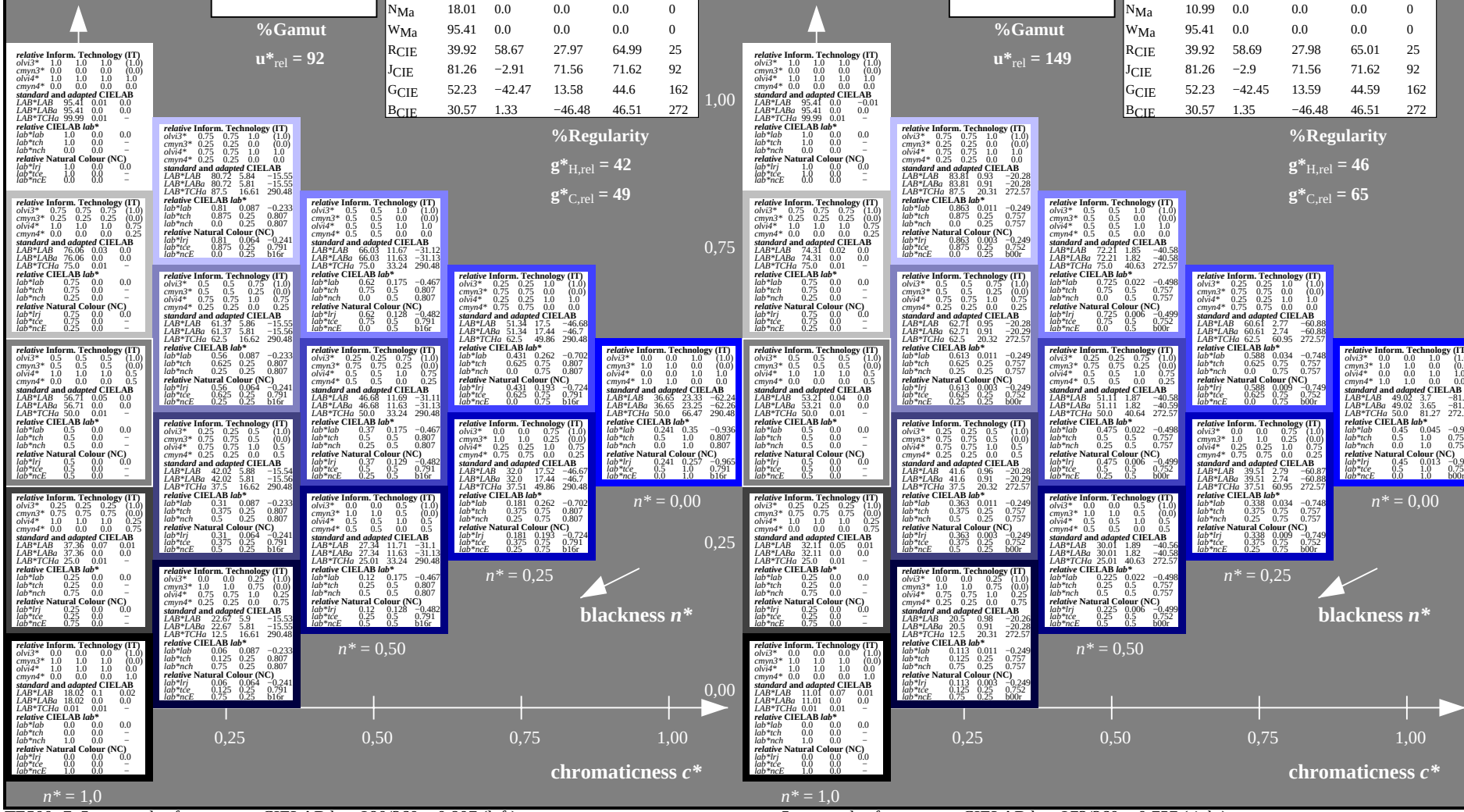
**NCS11; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

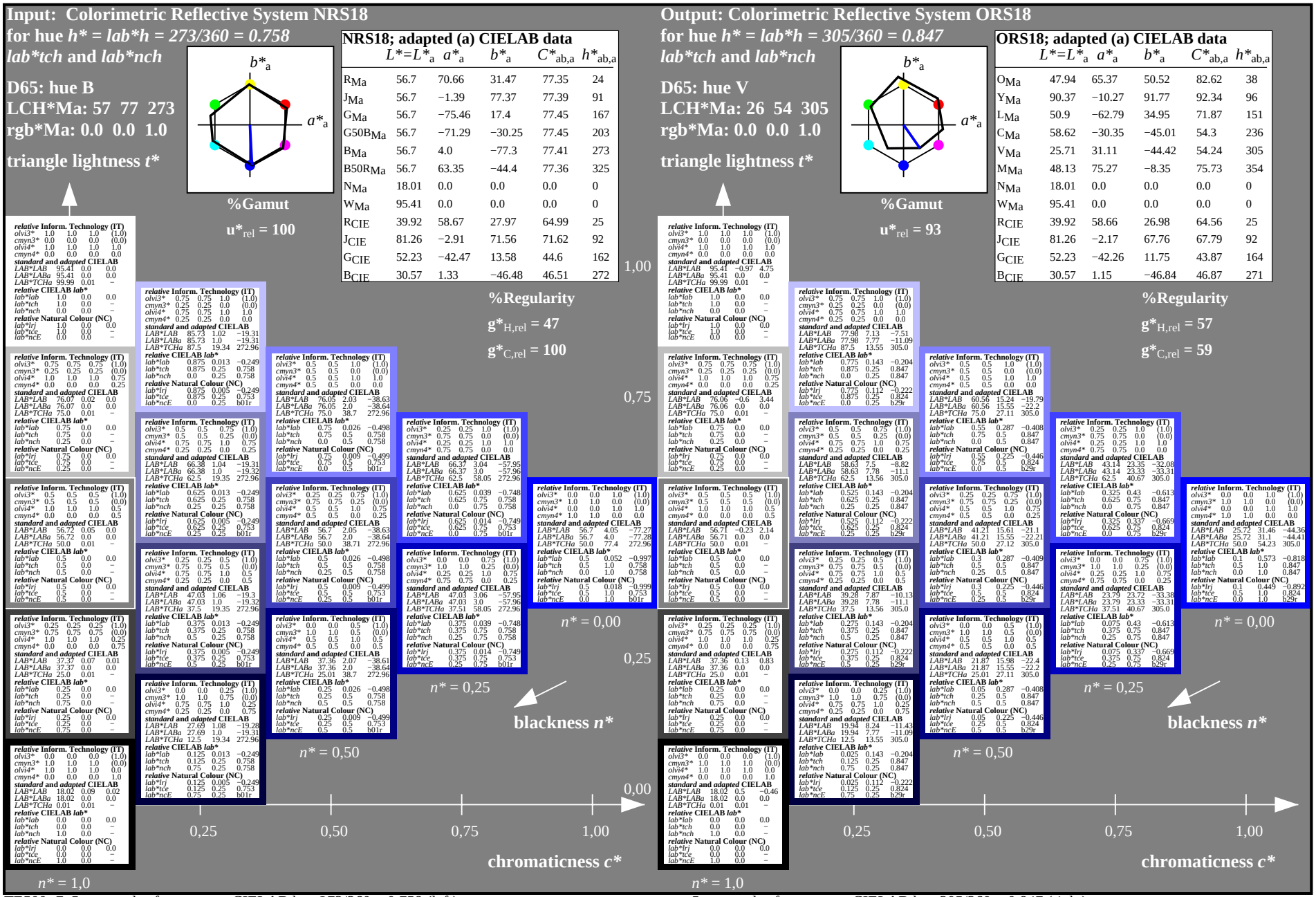
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



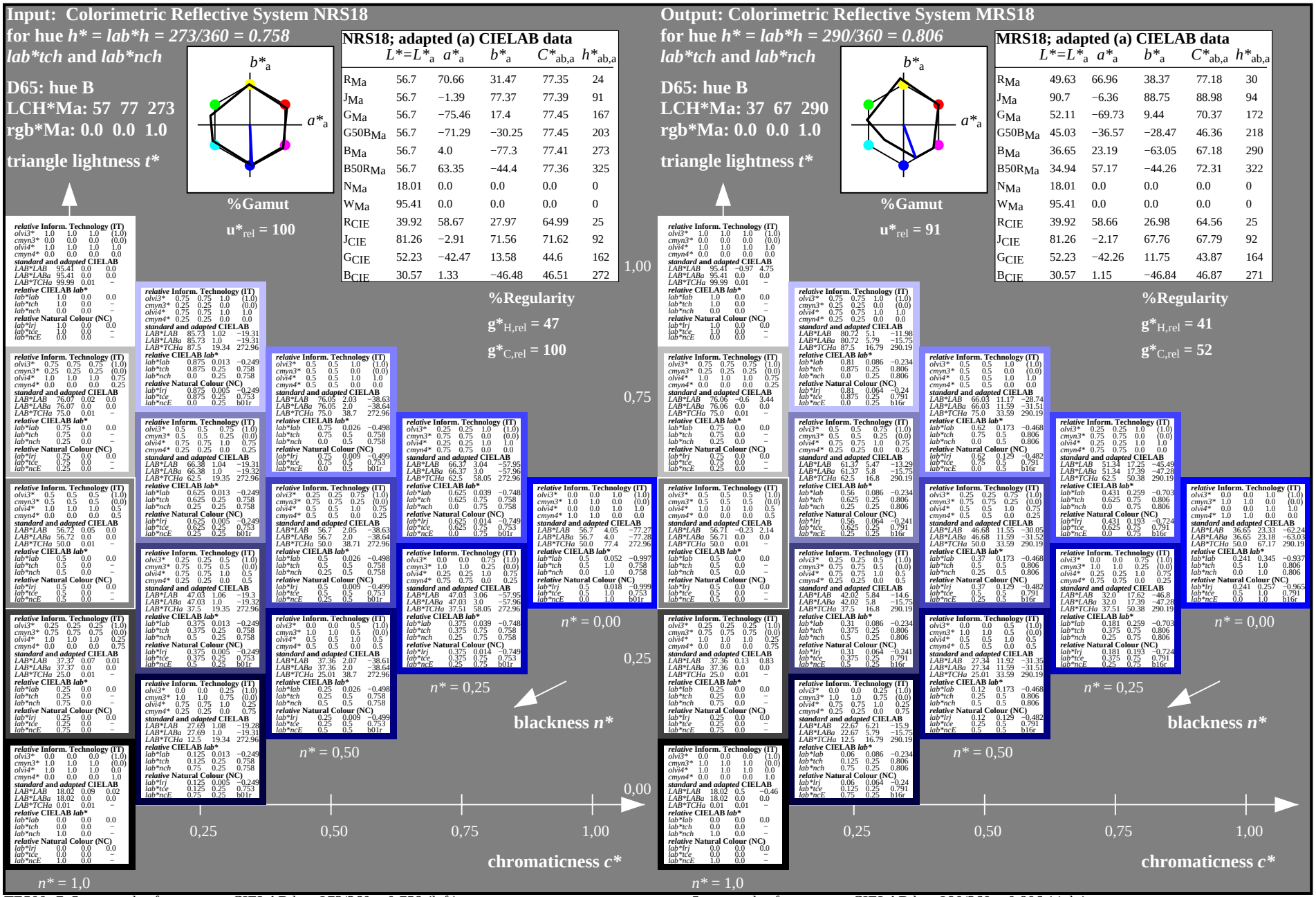

TE500−7, 5 step scales for constant CIELAB hue 290/360 = 0.807 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)




TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)



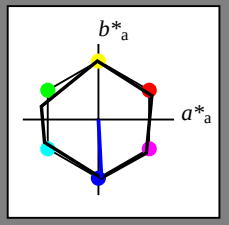

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 290/360 = 0.806 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 273/360 = 0.758**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 57 77 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

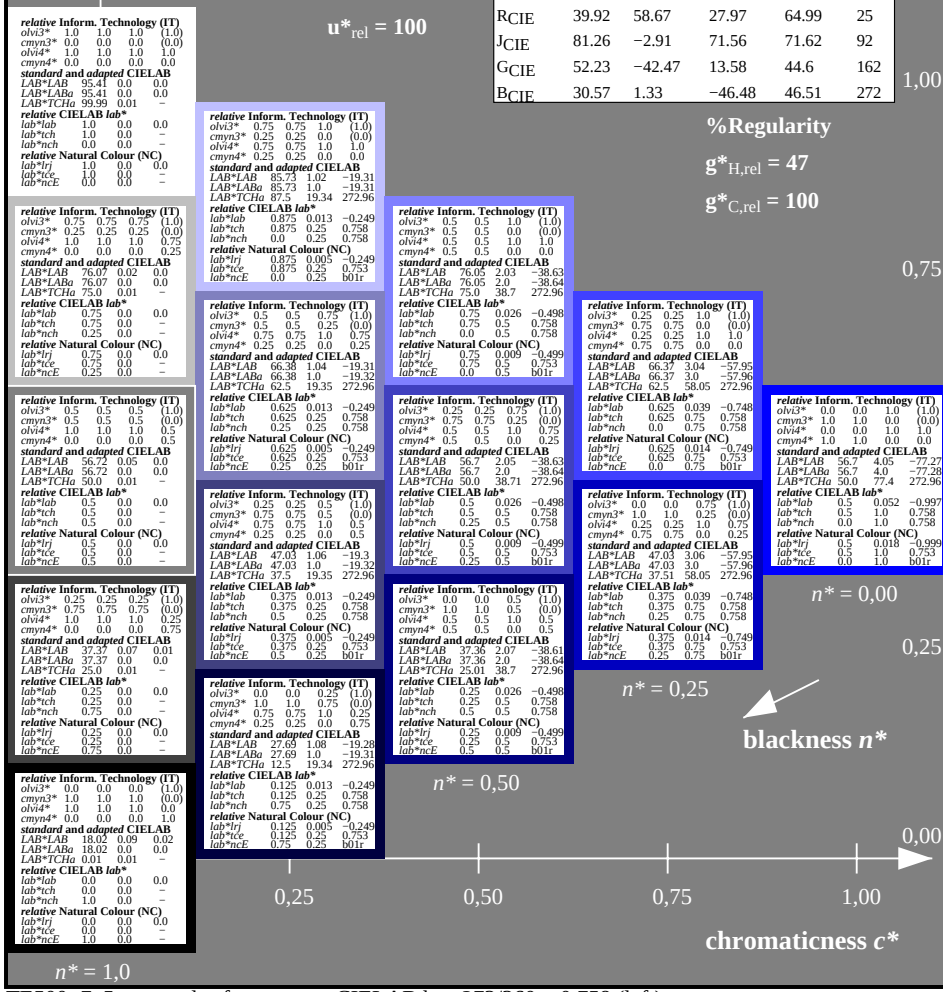
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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

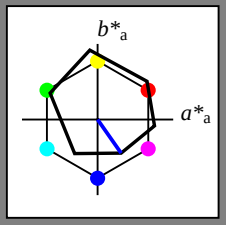



TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 305/360 = 0.847**
***lab*tch* and *lab*nch***

**D65: hue V**
**LCH*Ma: 26 54 305**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

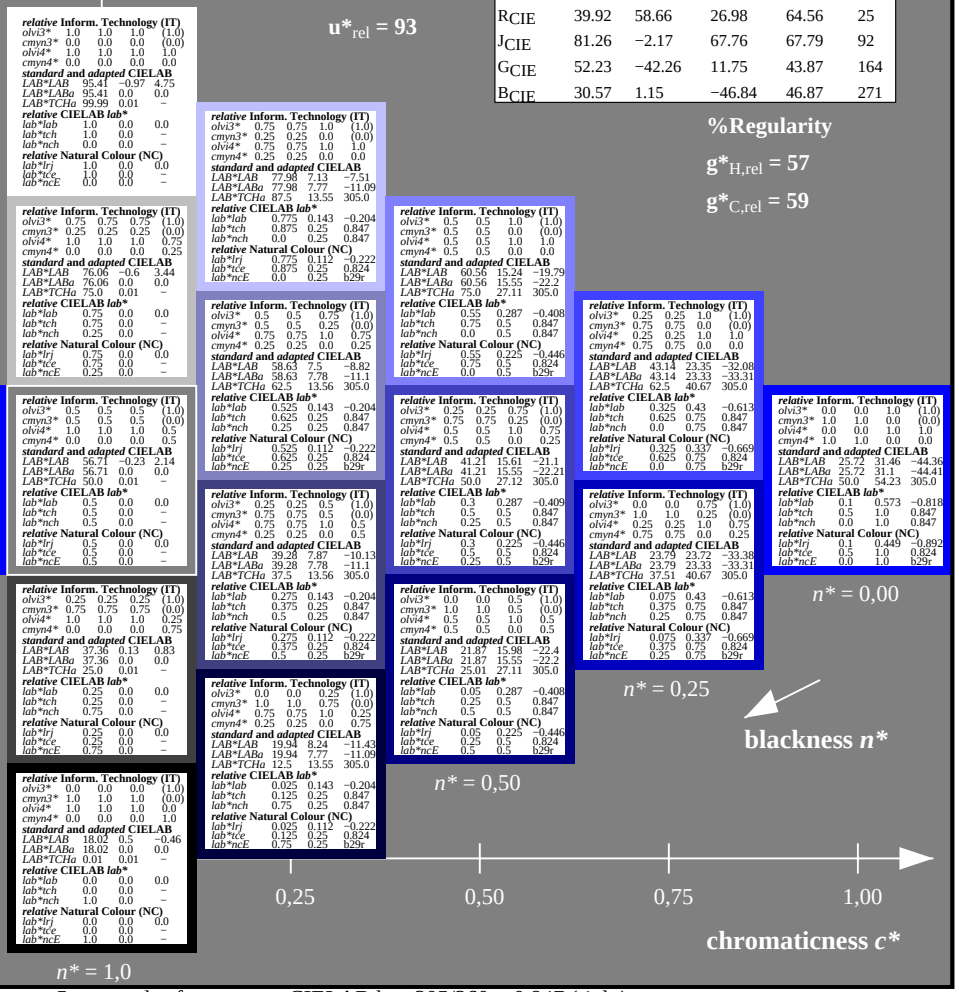
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

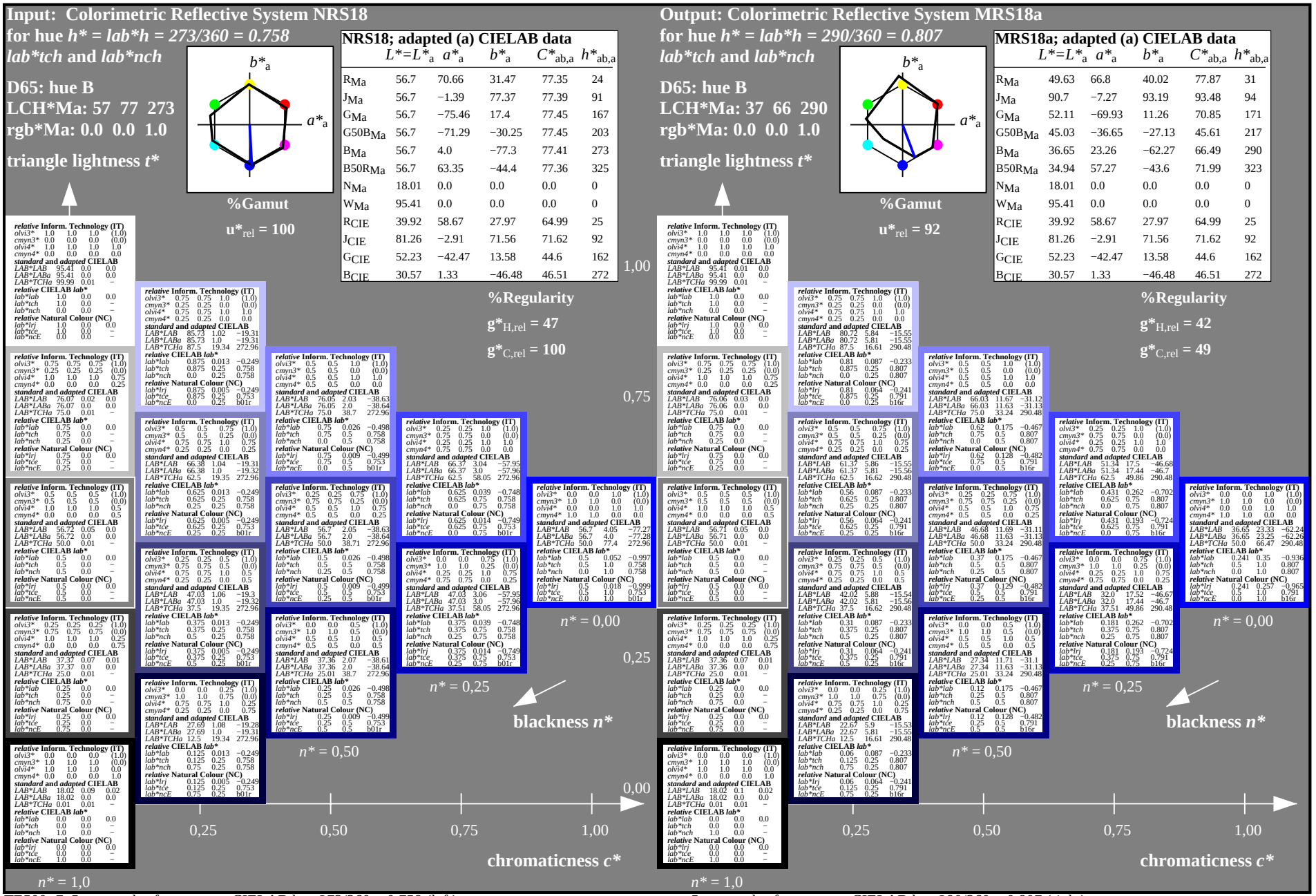
**%Regularity**

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

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




5 step scales for constant CIELAB hue 305/360 = 0.847 (right)




**NRS18; adapted (a) CIELAB data**

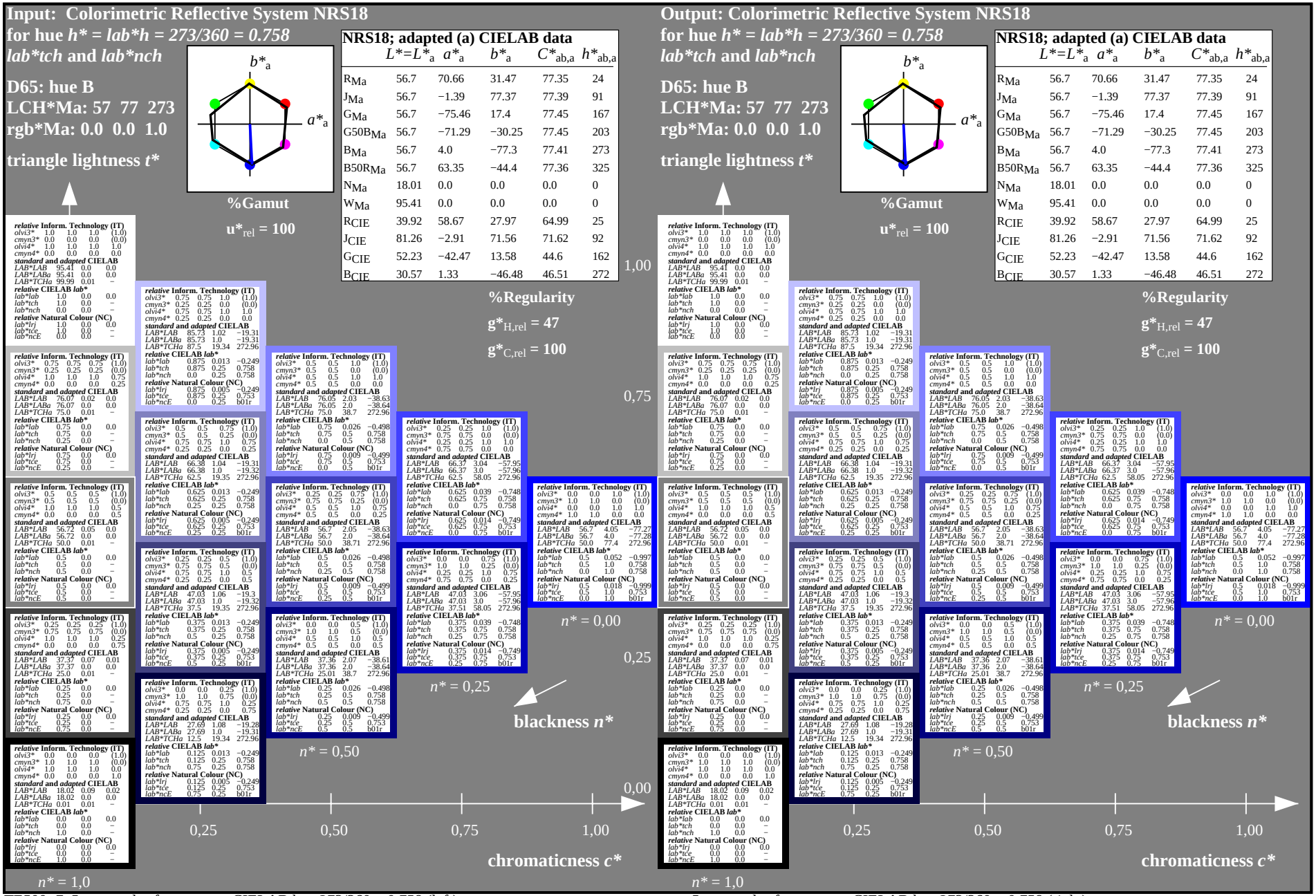
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 290/360 = 0.807 (right)



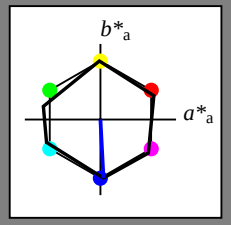

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 273/360 = 0.758**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 57 77 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

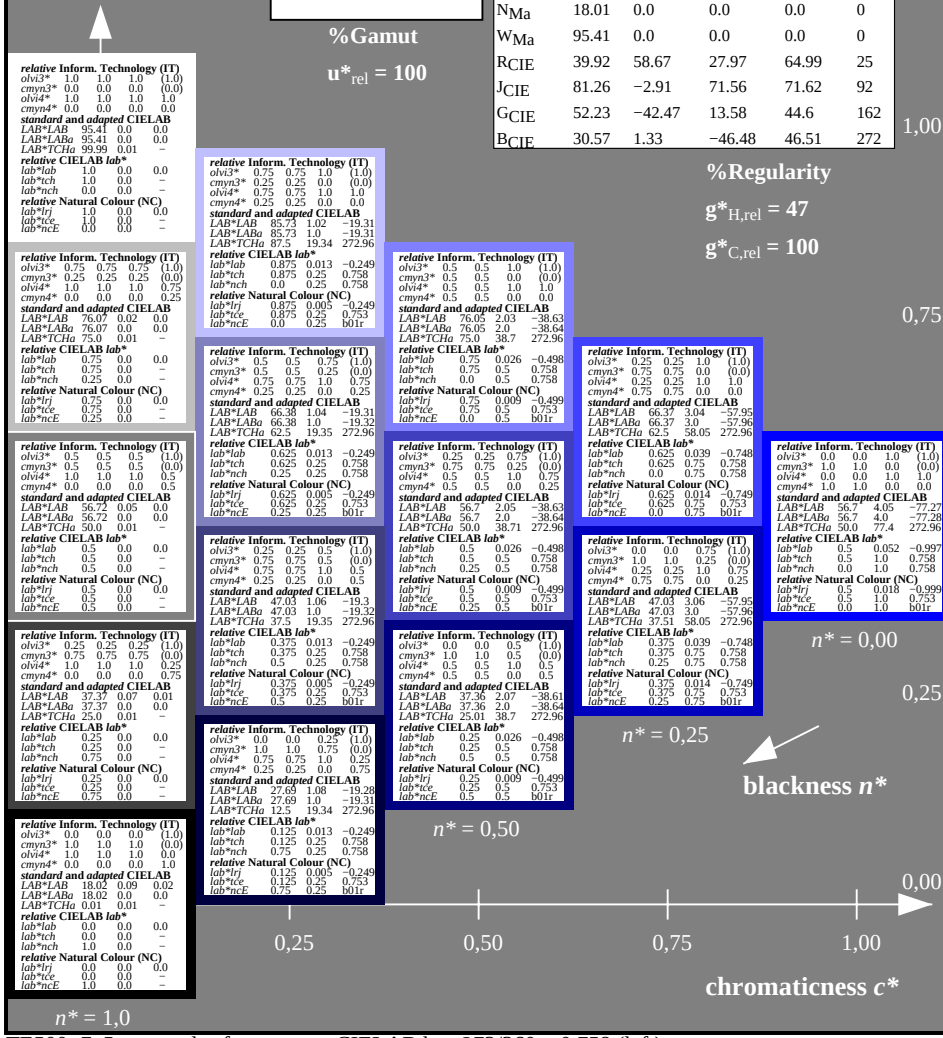
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

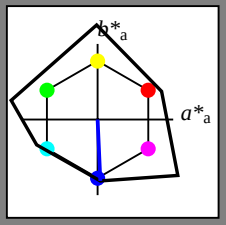
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

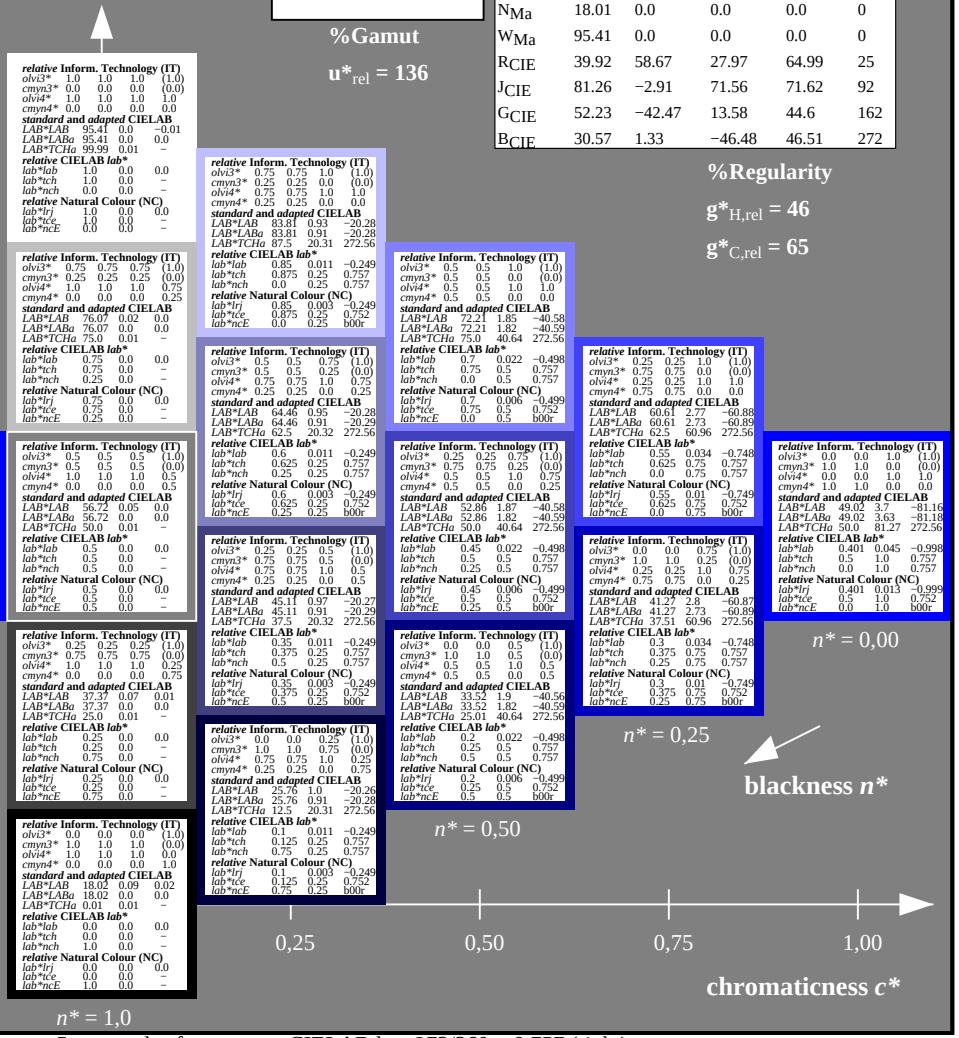
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

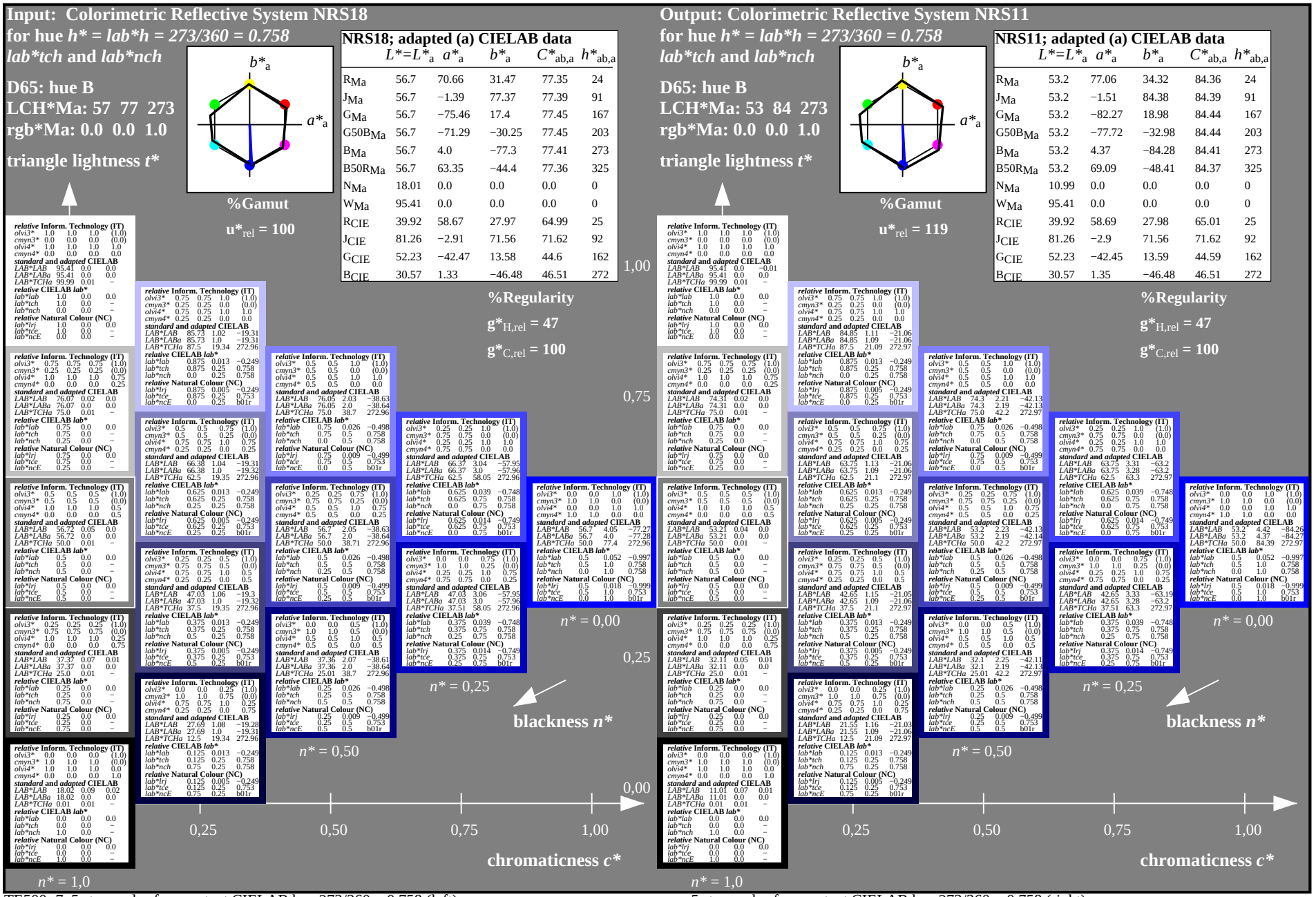
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)



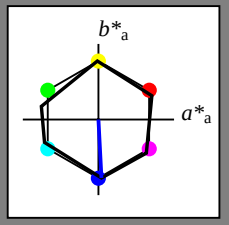

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 273/360 = 0.758**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 57 77 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

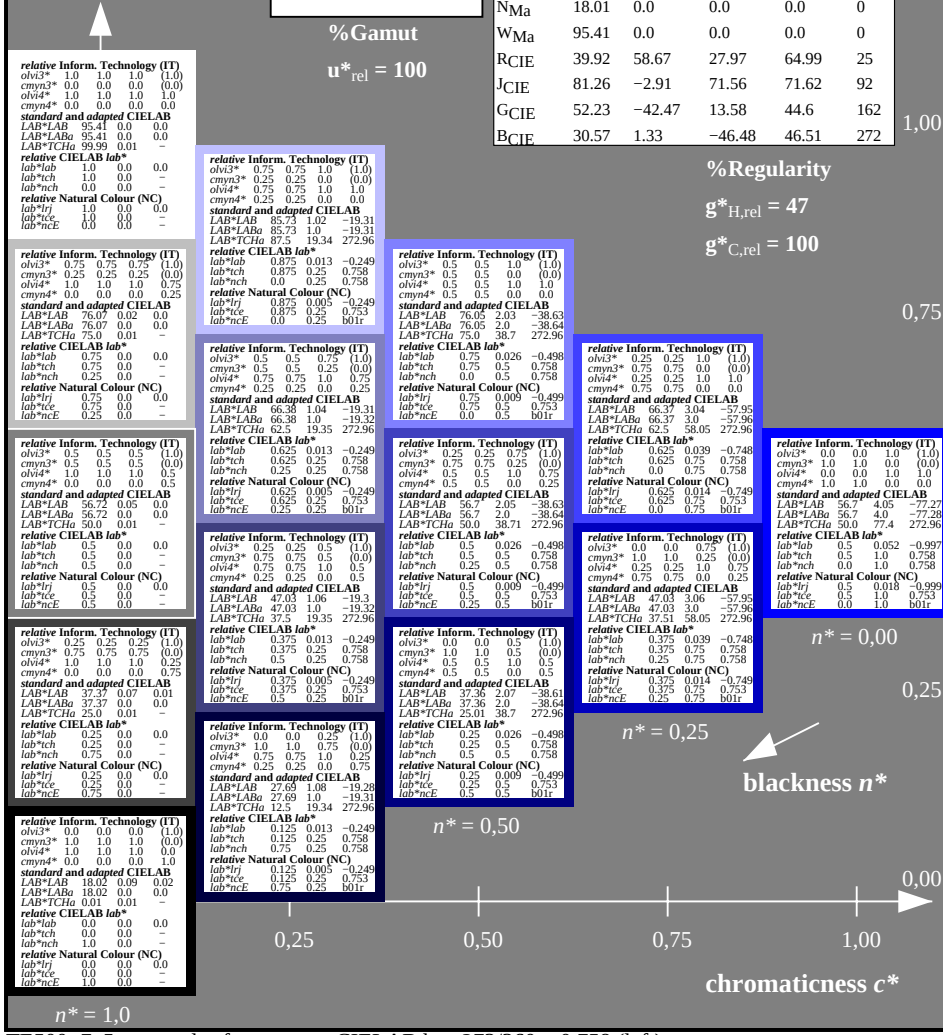
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

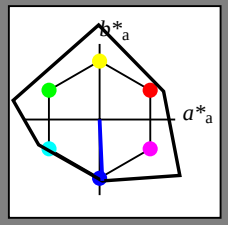
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

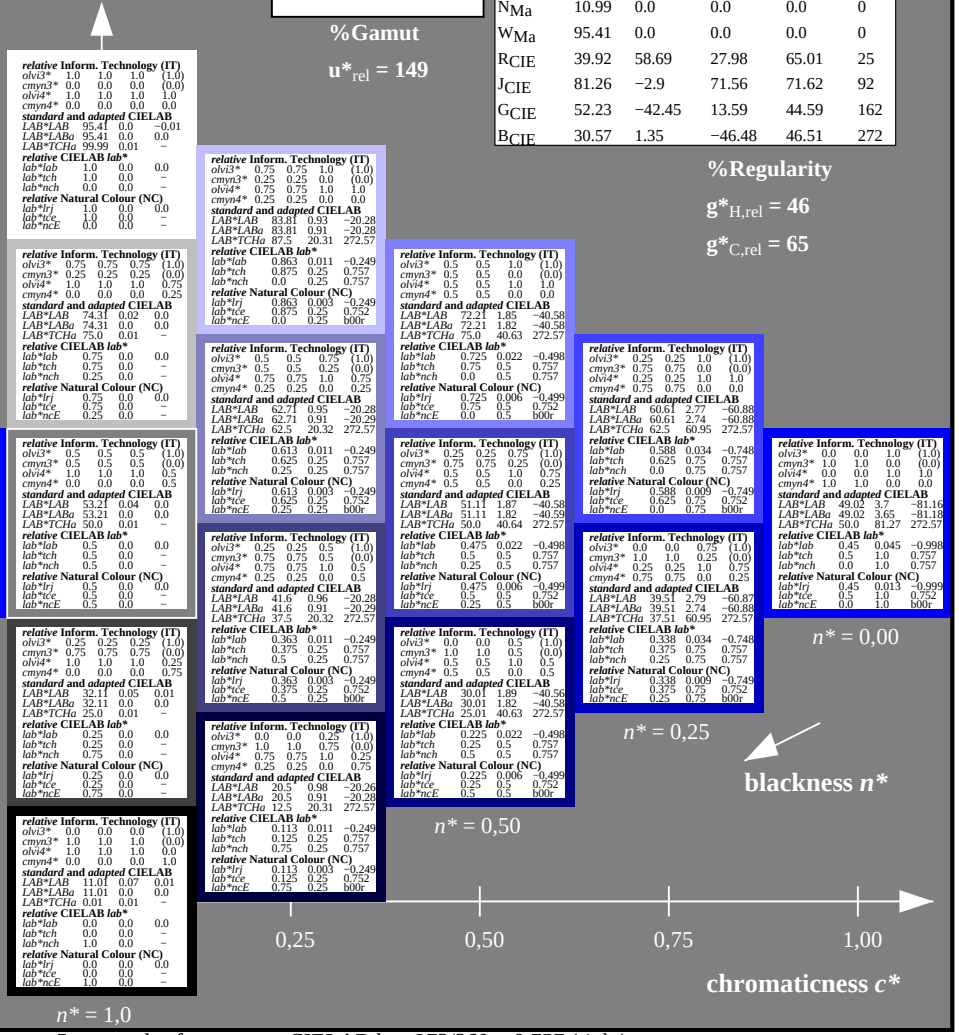
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



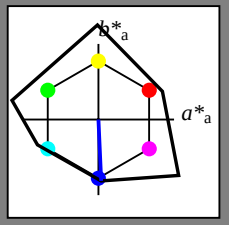

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**$u^*_{rel}$ = 136**

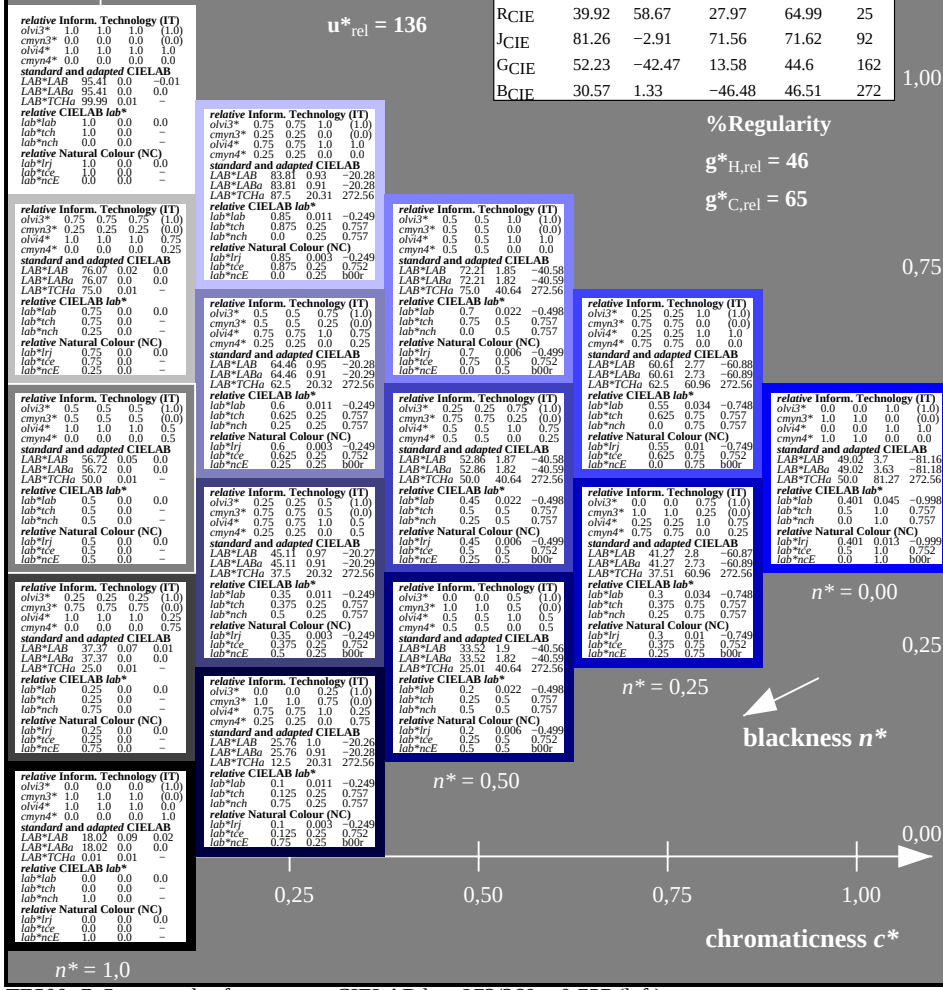
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**$g^*_{H,rel}$ = 46**

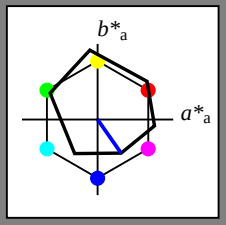
**$g^*_{C,rel}$ = 65**




**Output: Colorimetric 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**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**$u^*_{rel}$ = 93**

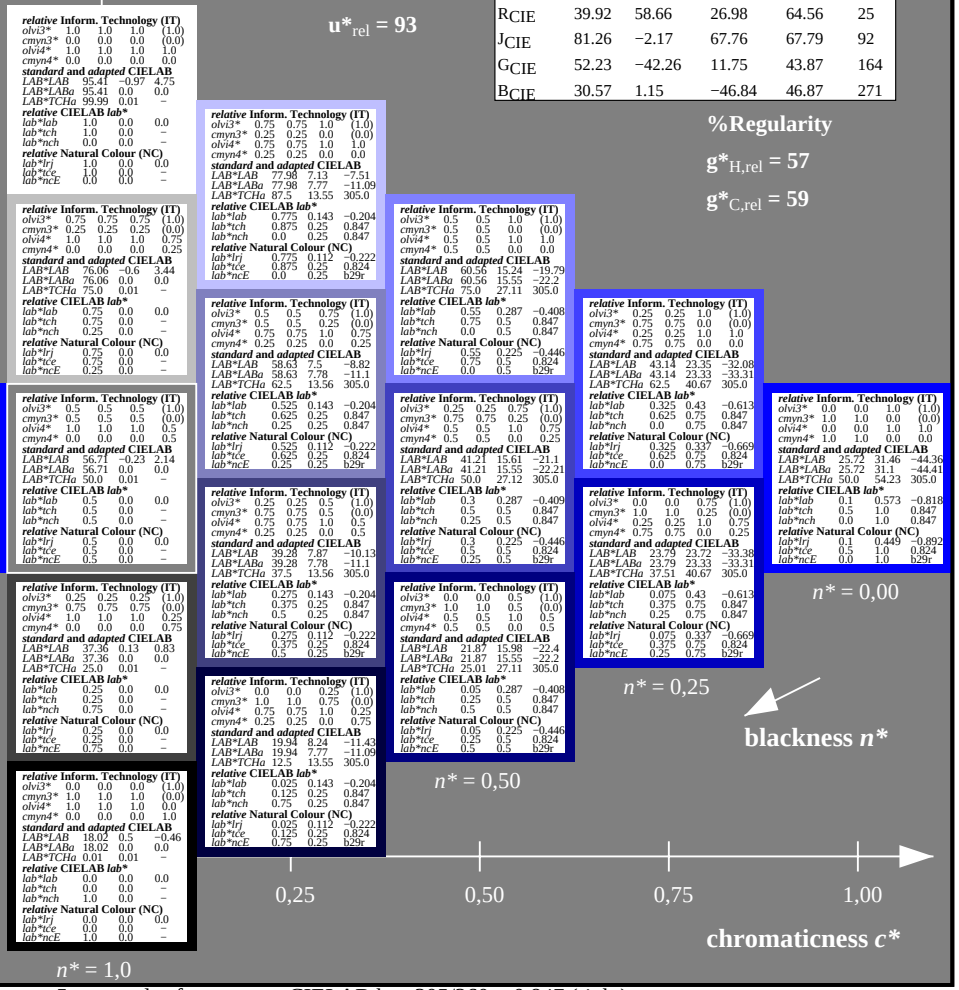
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



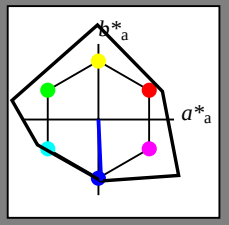

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

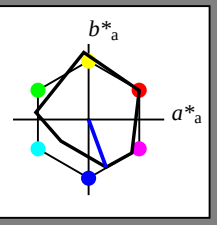
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 290/360 = 0.806**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 37 67 290**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

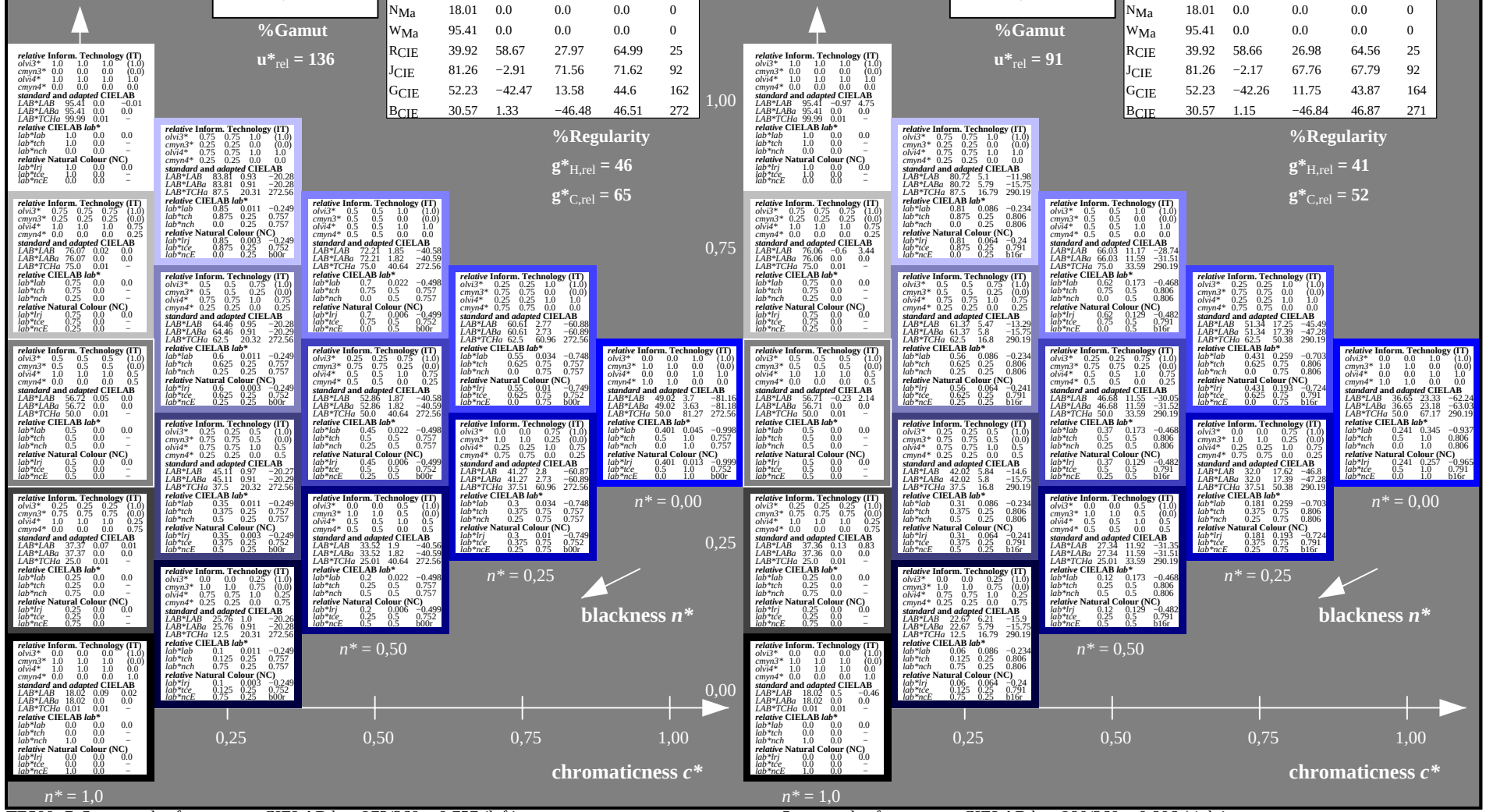
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

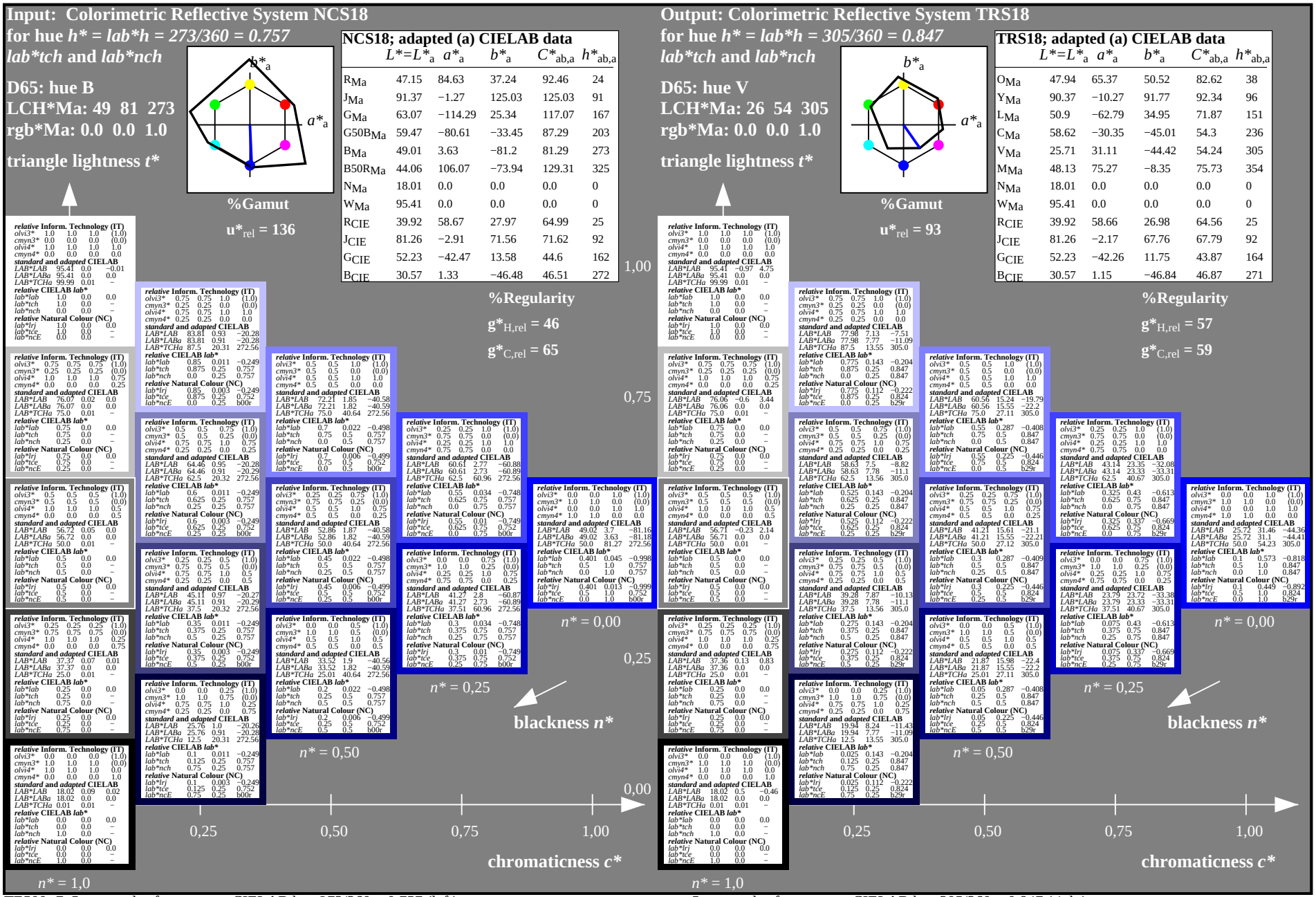
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**




TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 290/360 = 0.806 (right)



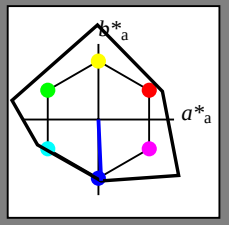

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

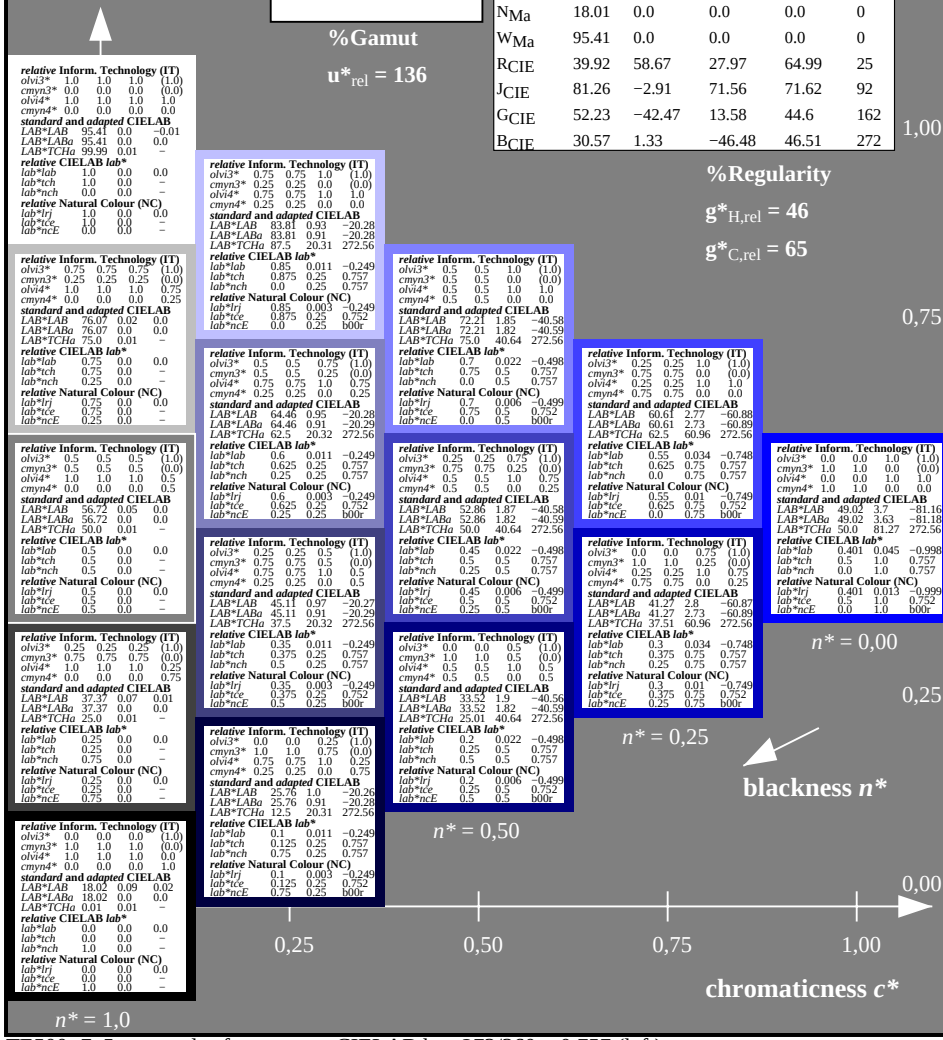
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

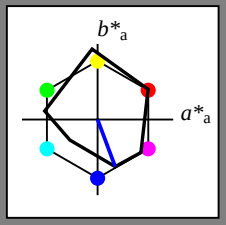
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 290/360 = 0.807**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 37 66 290**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

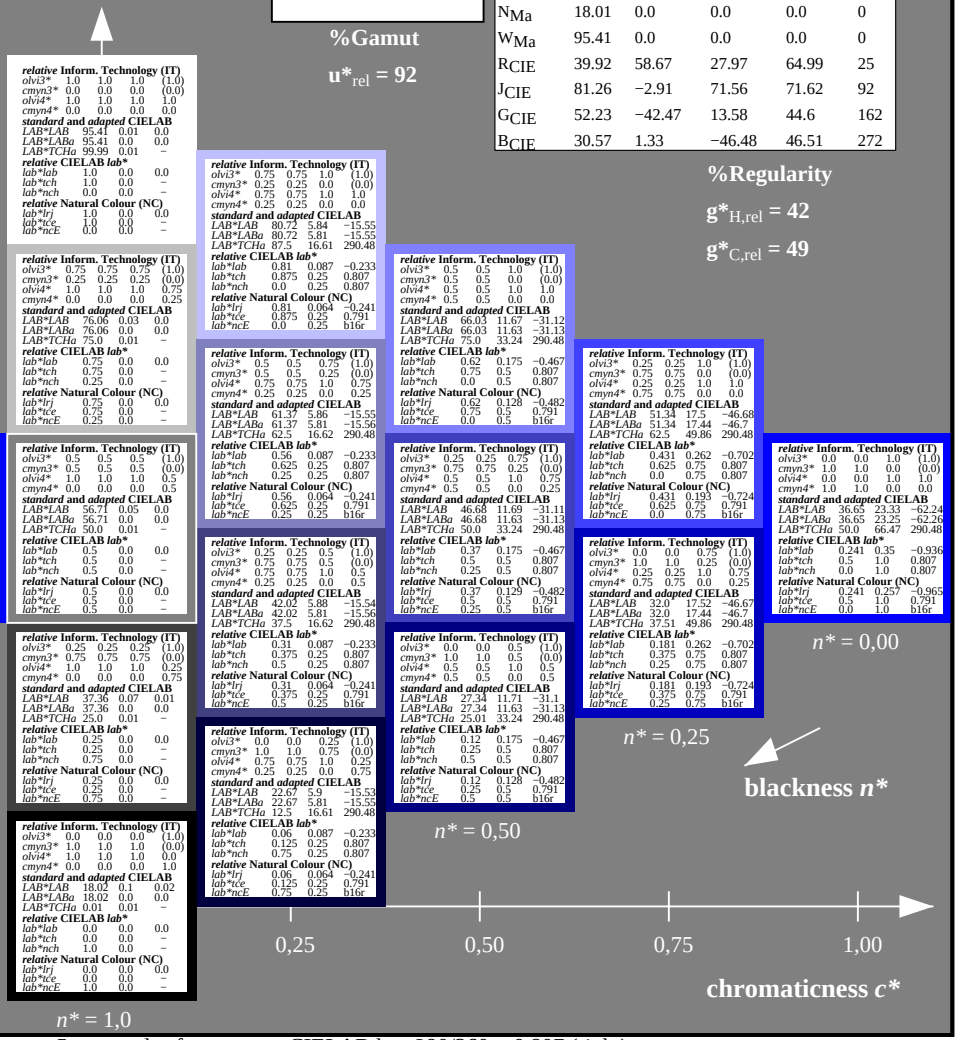
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



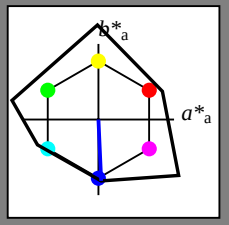

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 290/360 = 0.807 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

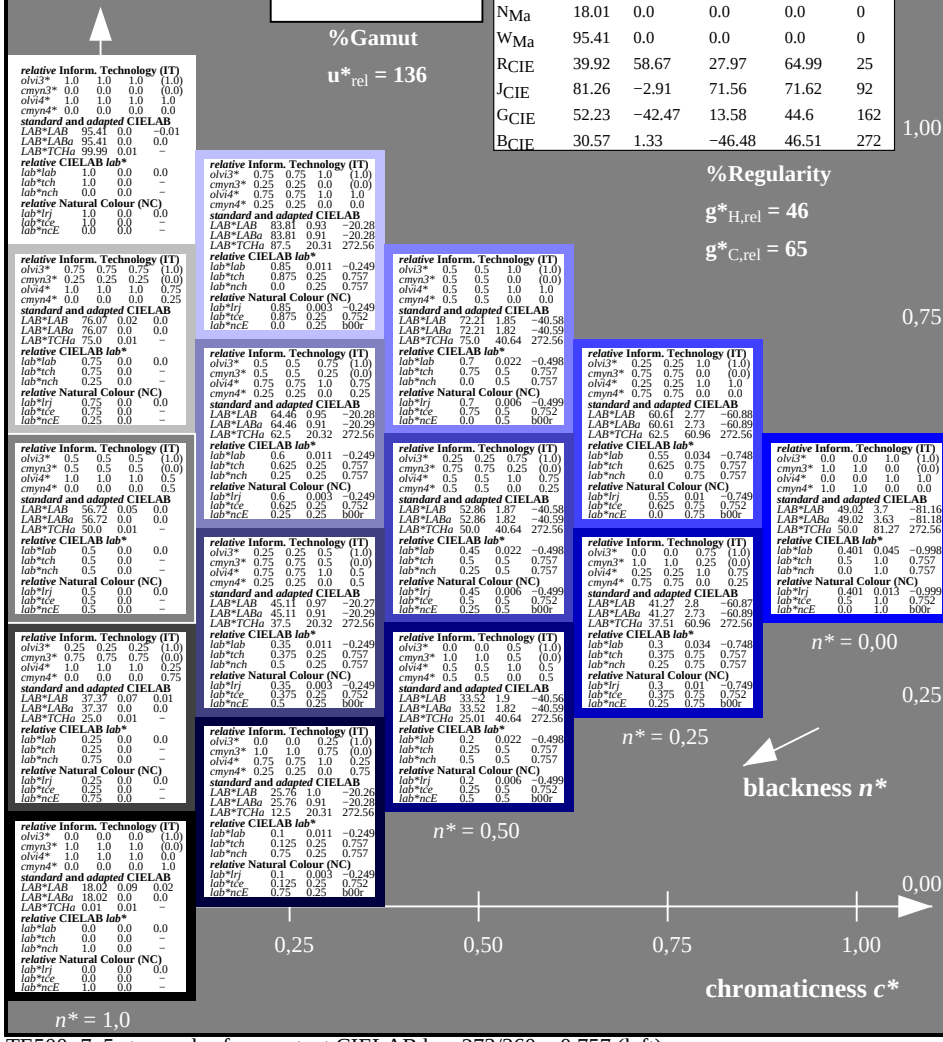
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

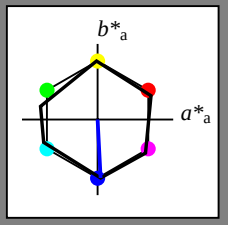



TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 273/360 = 0.758**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 57 77 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

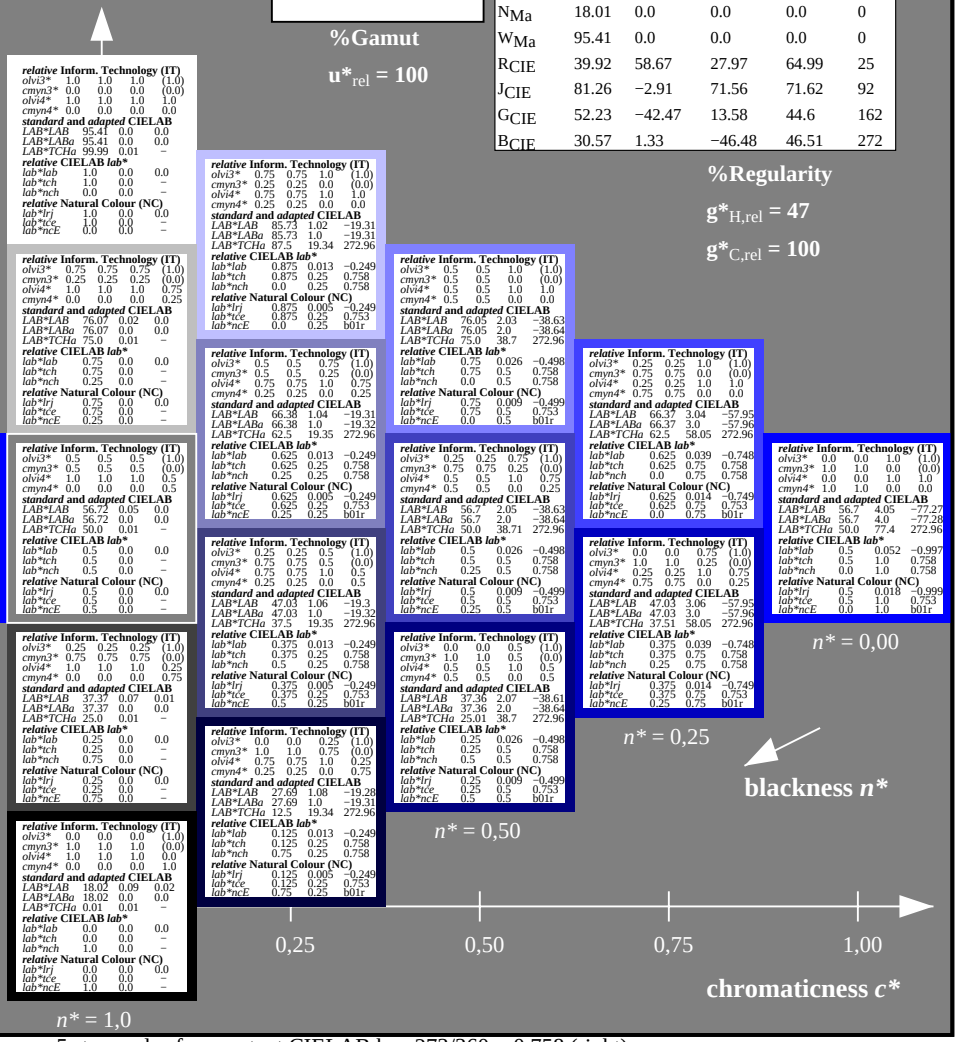
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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

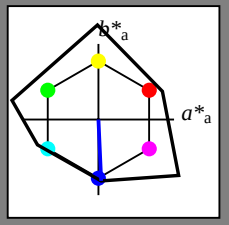



5 step scales for constant CIELAB hue 273/360 = 0.758 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

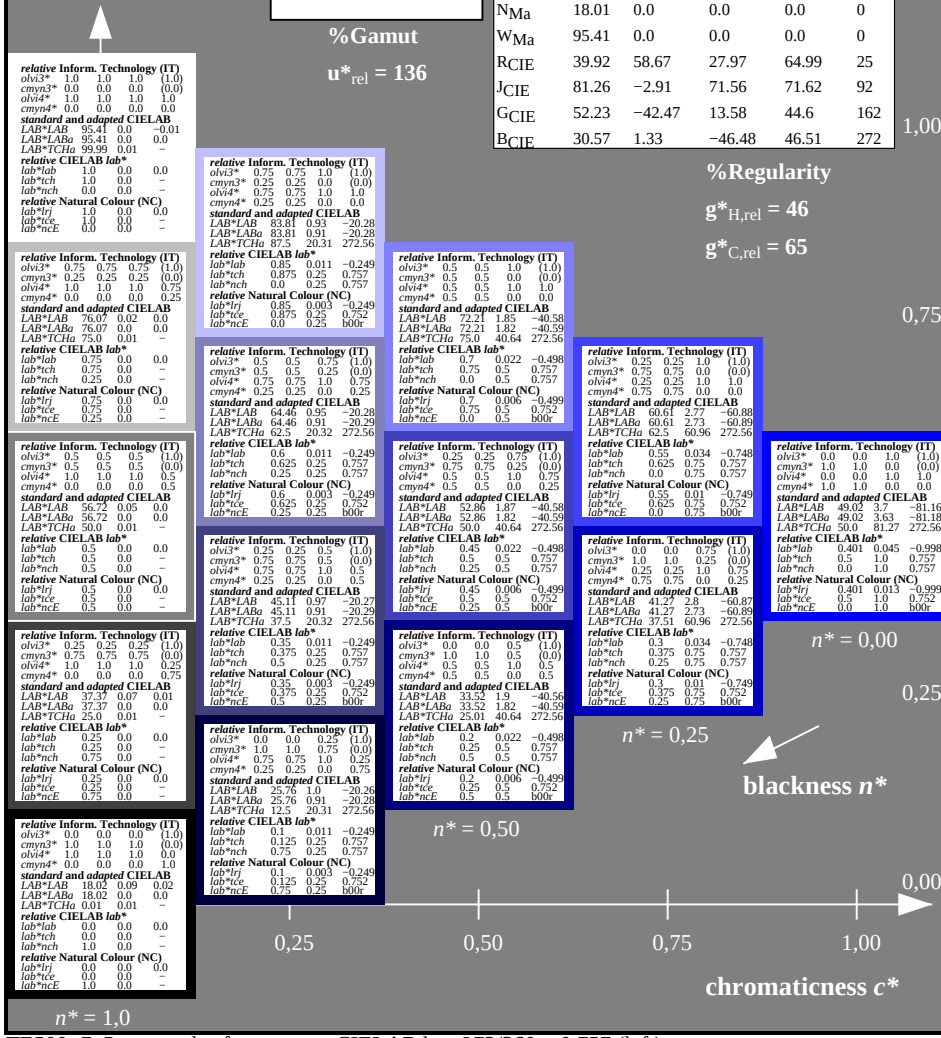
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

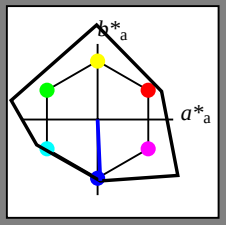
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

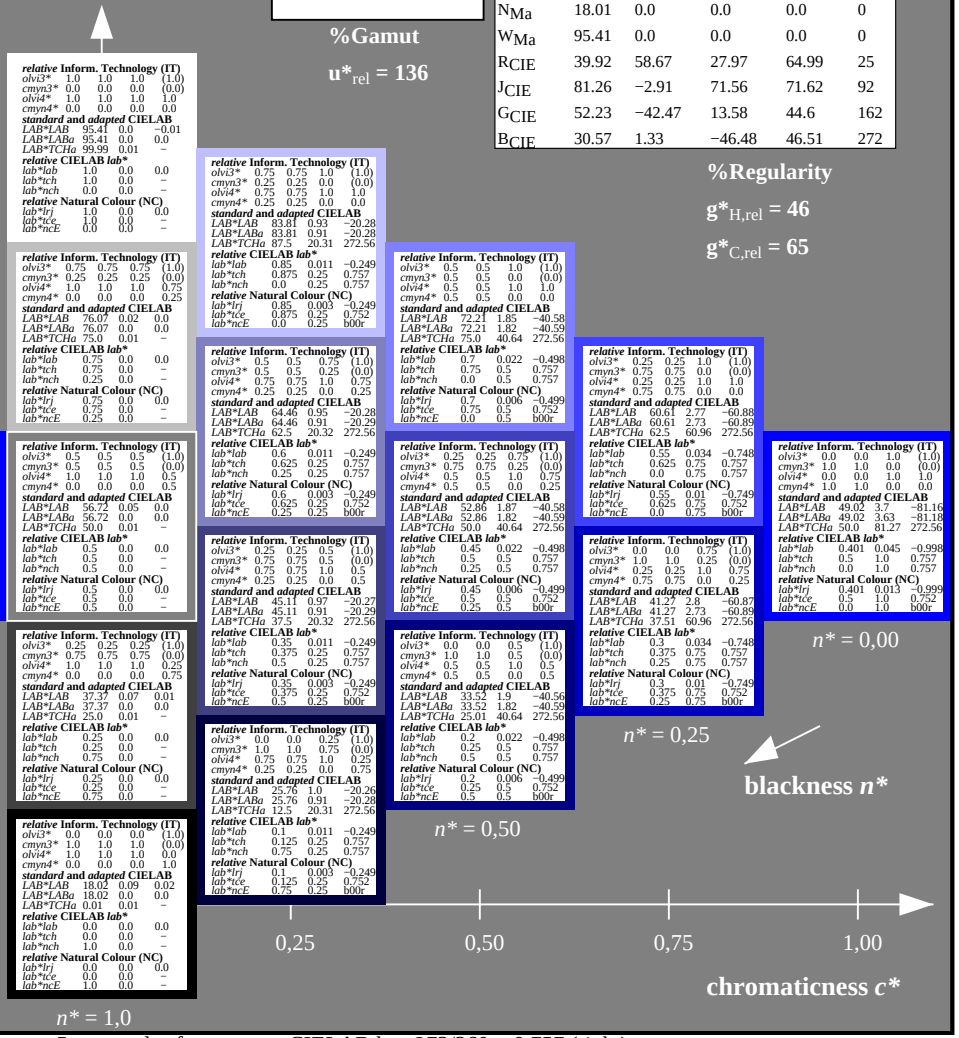
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

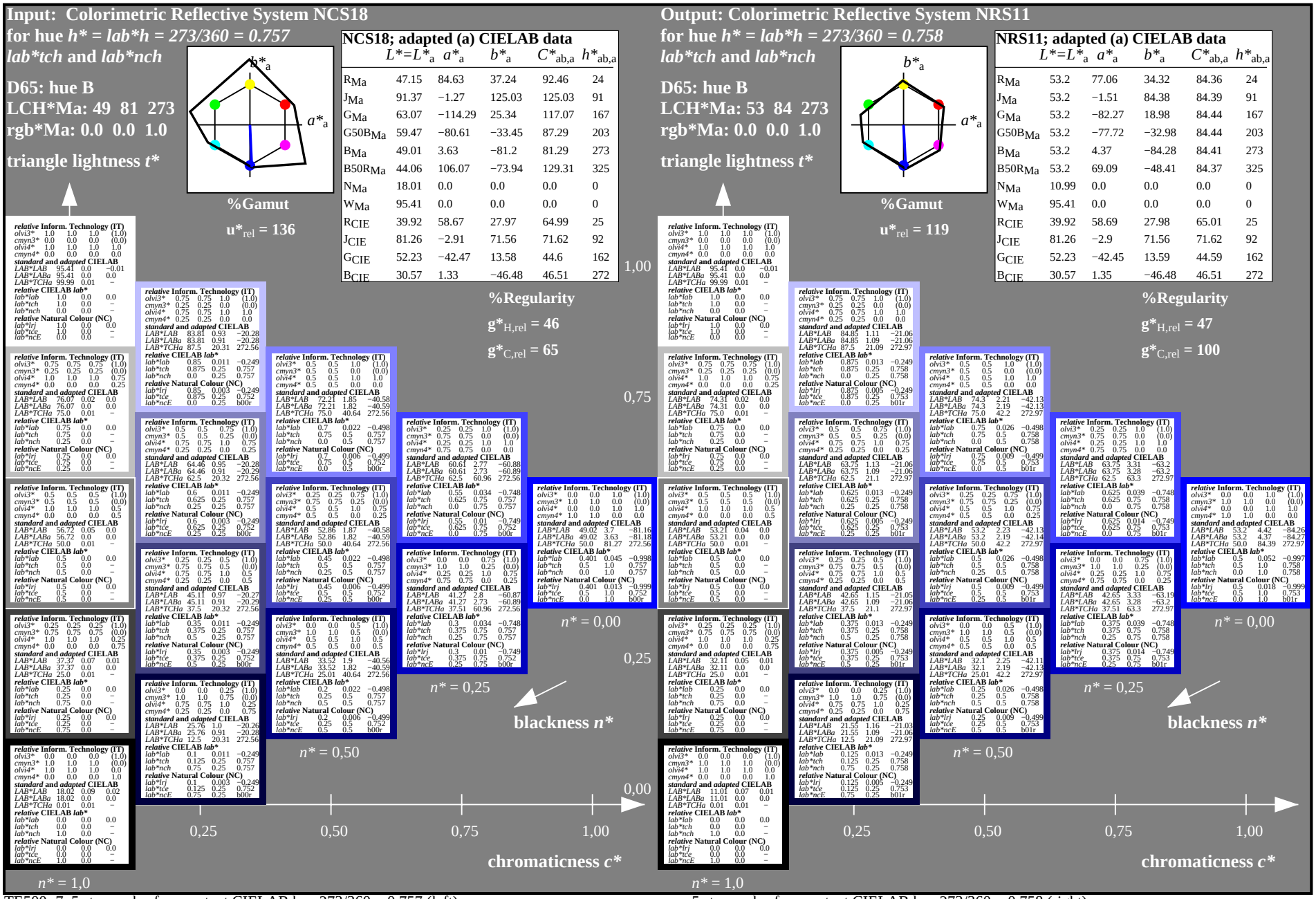
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



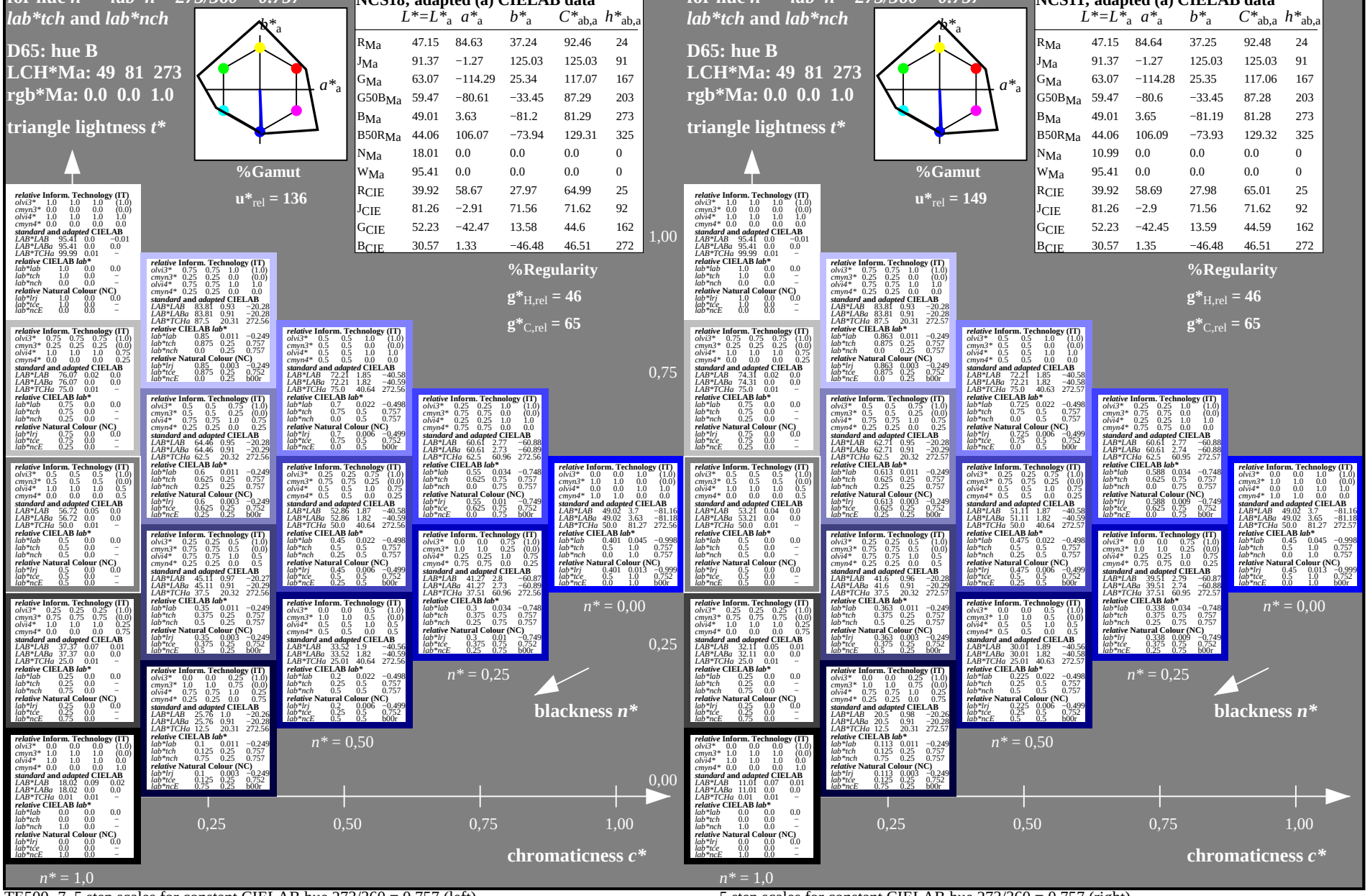

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)



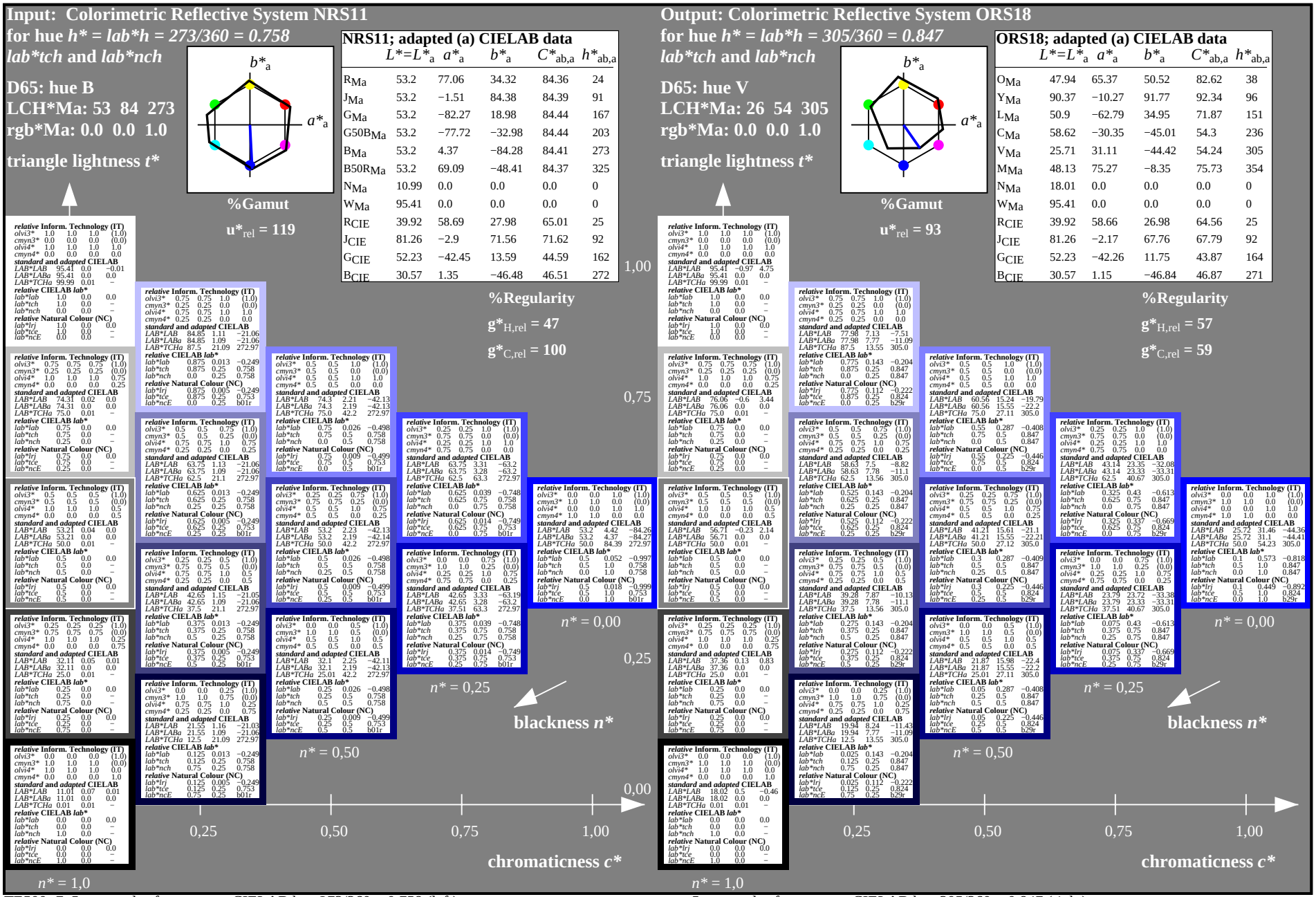

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)



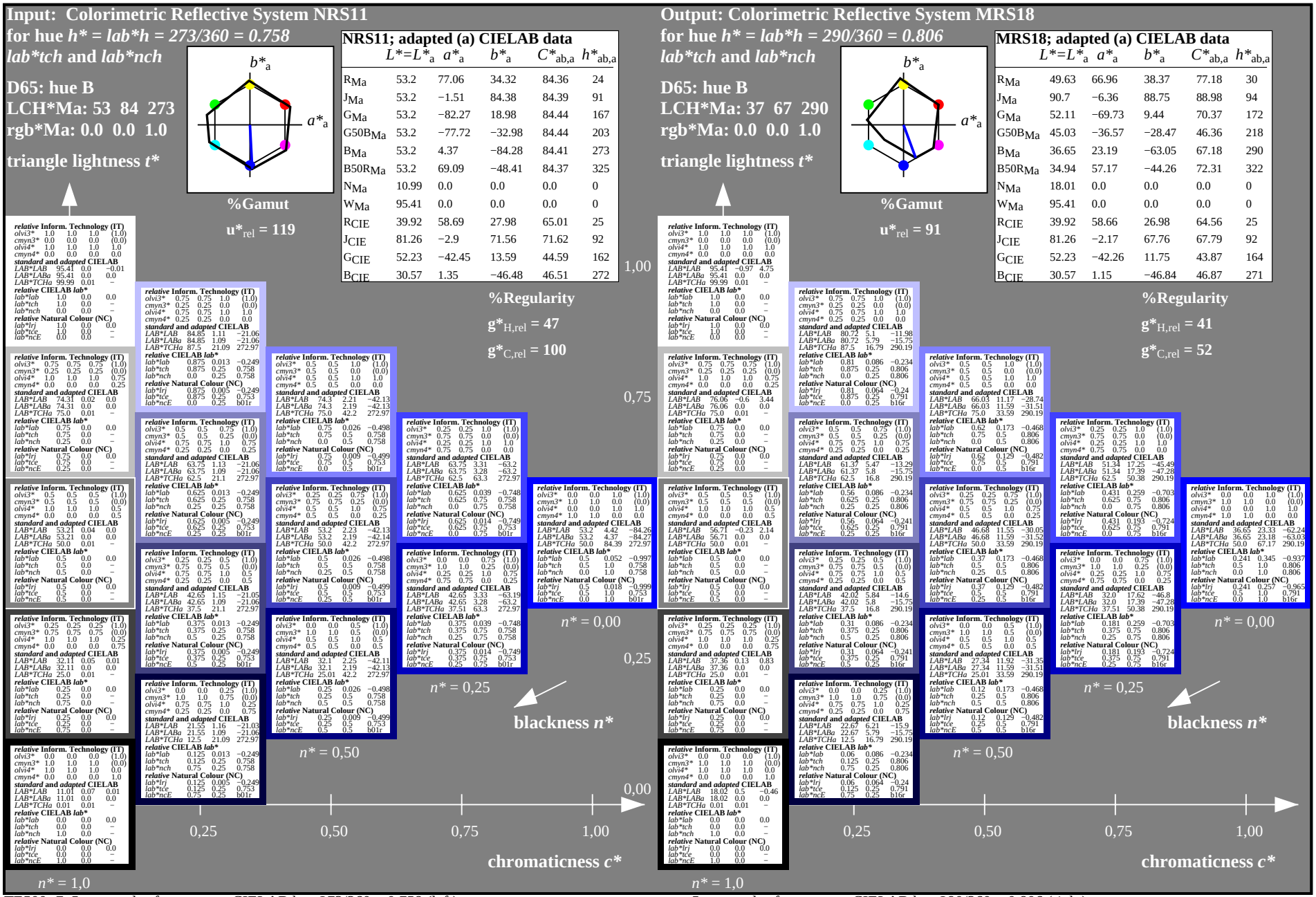

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)



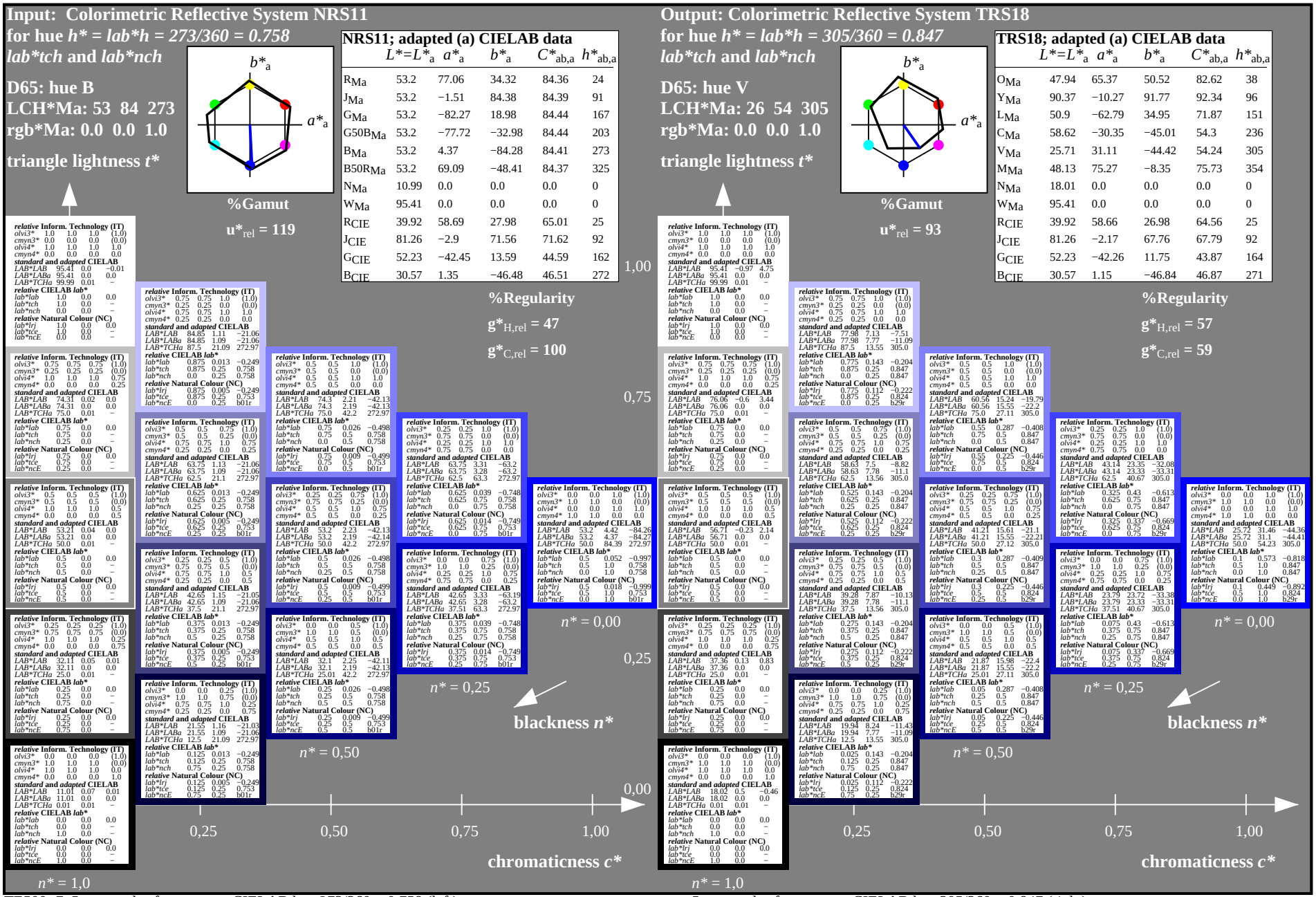

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)



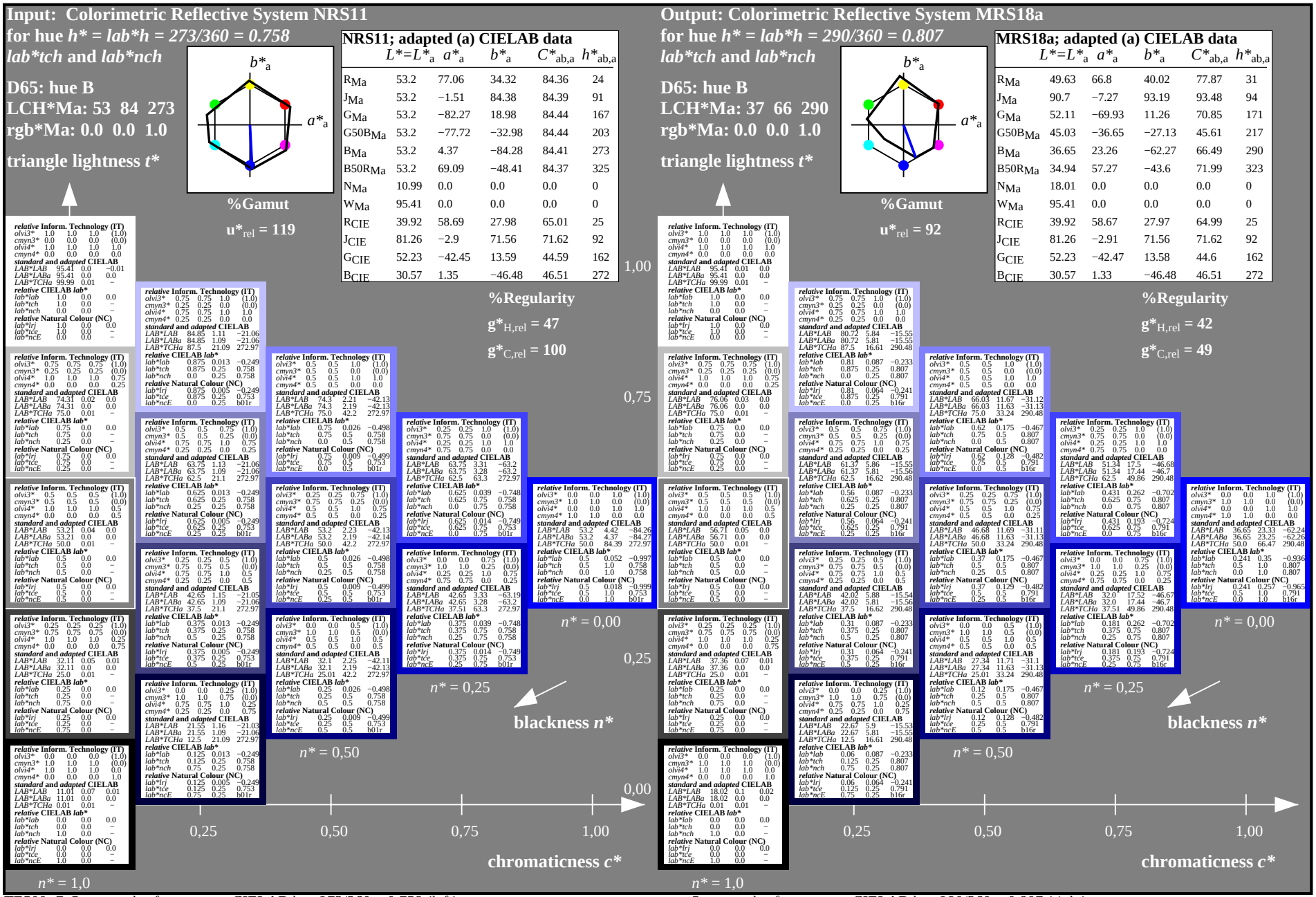

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 290/360 = 0.806 (right)




TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)




TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

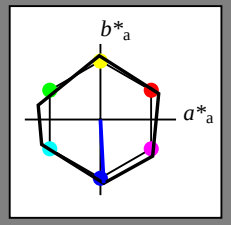
5 step scales for constant CIELAB hue 290/360 = 0.807 (right)

## Input: Colorimetric Reflective System NRS11

for hue *h* = lab*h = 273/360 = 0.758*
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 53 84 273
rgb*Ma: 0.0 0.0 1.0

triangle lightness *t**




%Gamut

u*rel = 119

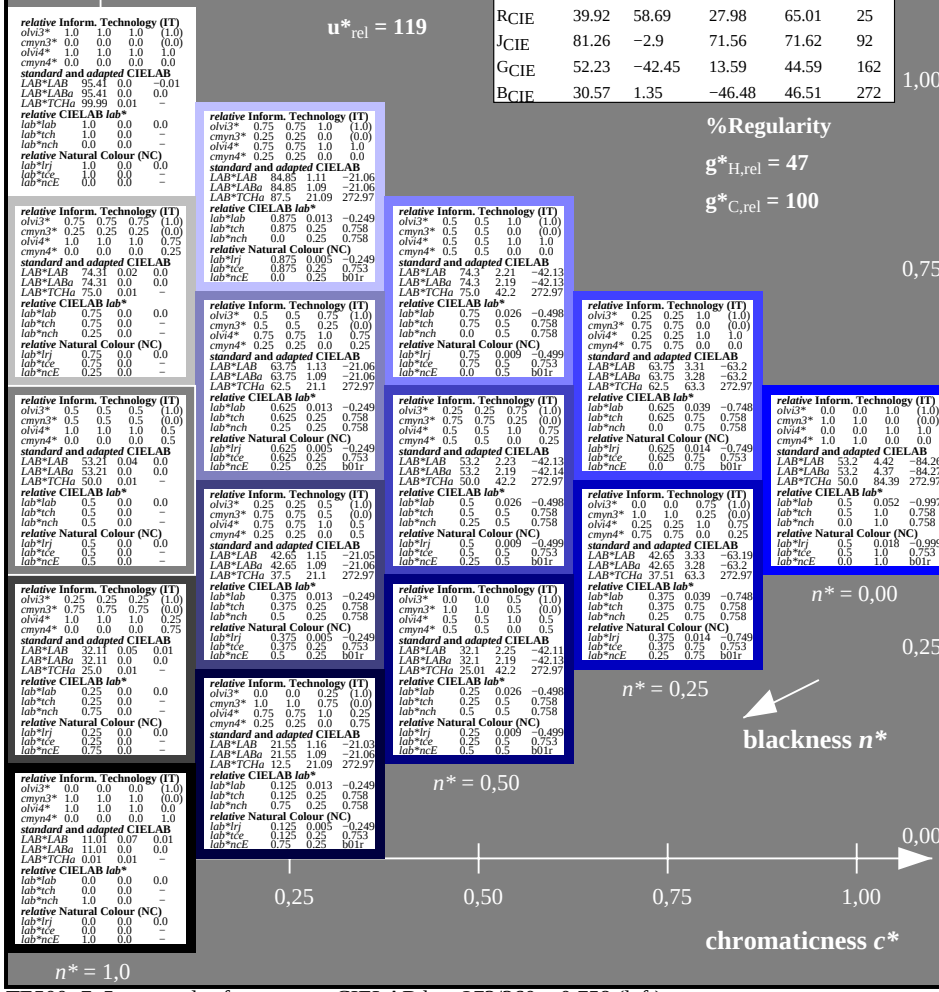
**NRS11; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

%Regularity

g*H,rel = 47

g*C,rel = 100

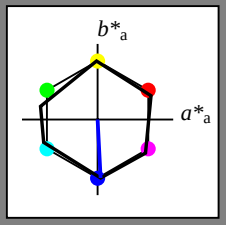



## Output: Colorimetric Reflective System NRS18

for hue *h* = lab*h = 273/360 = 0.758*
*lab*tch* and *lab*nch*

D65: hue B
LCH*Ma: 57 77 273
rgb*Ma: 0.0 0.0 1.0

triangle lightness *t**




%Gamut

u*rel = 100

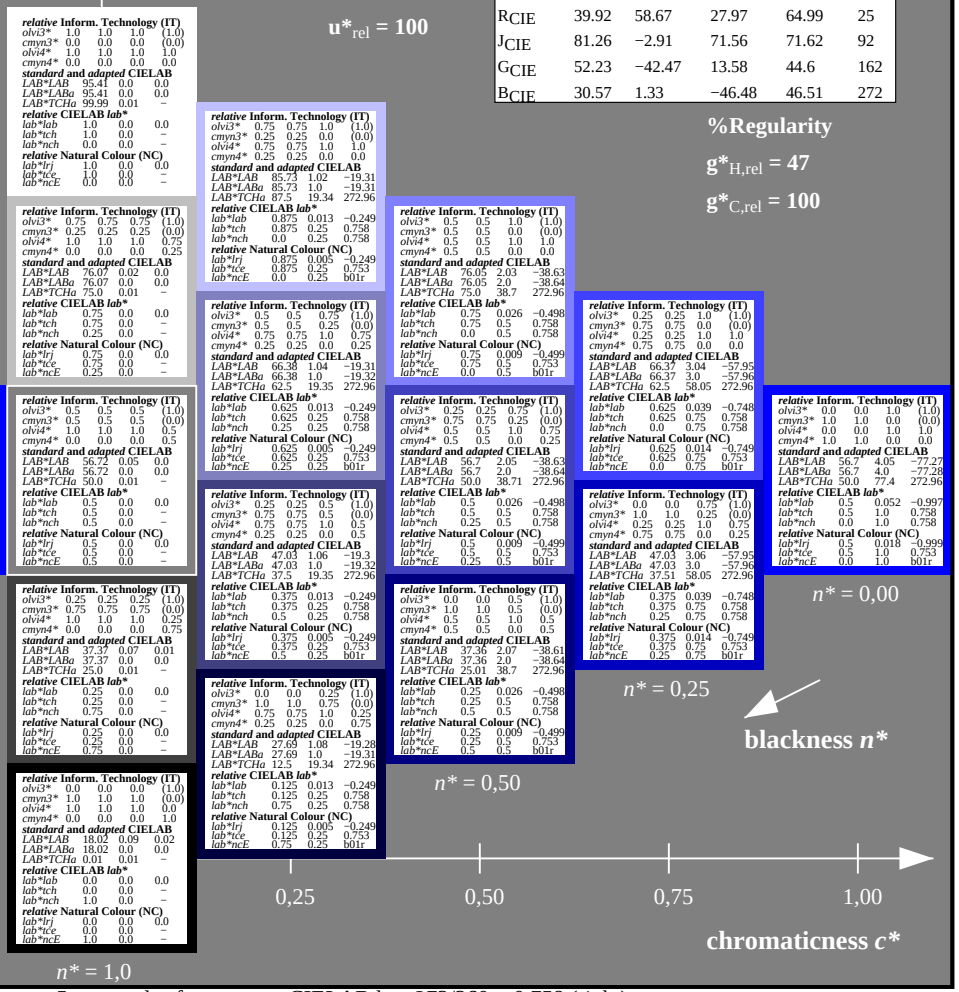
**NRS18; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

%Regularity

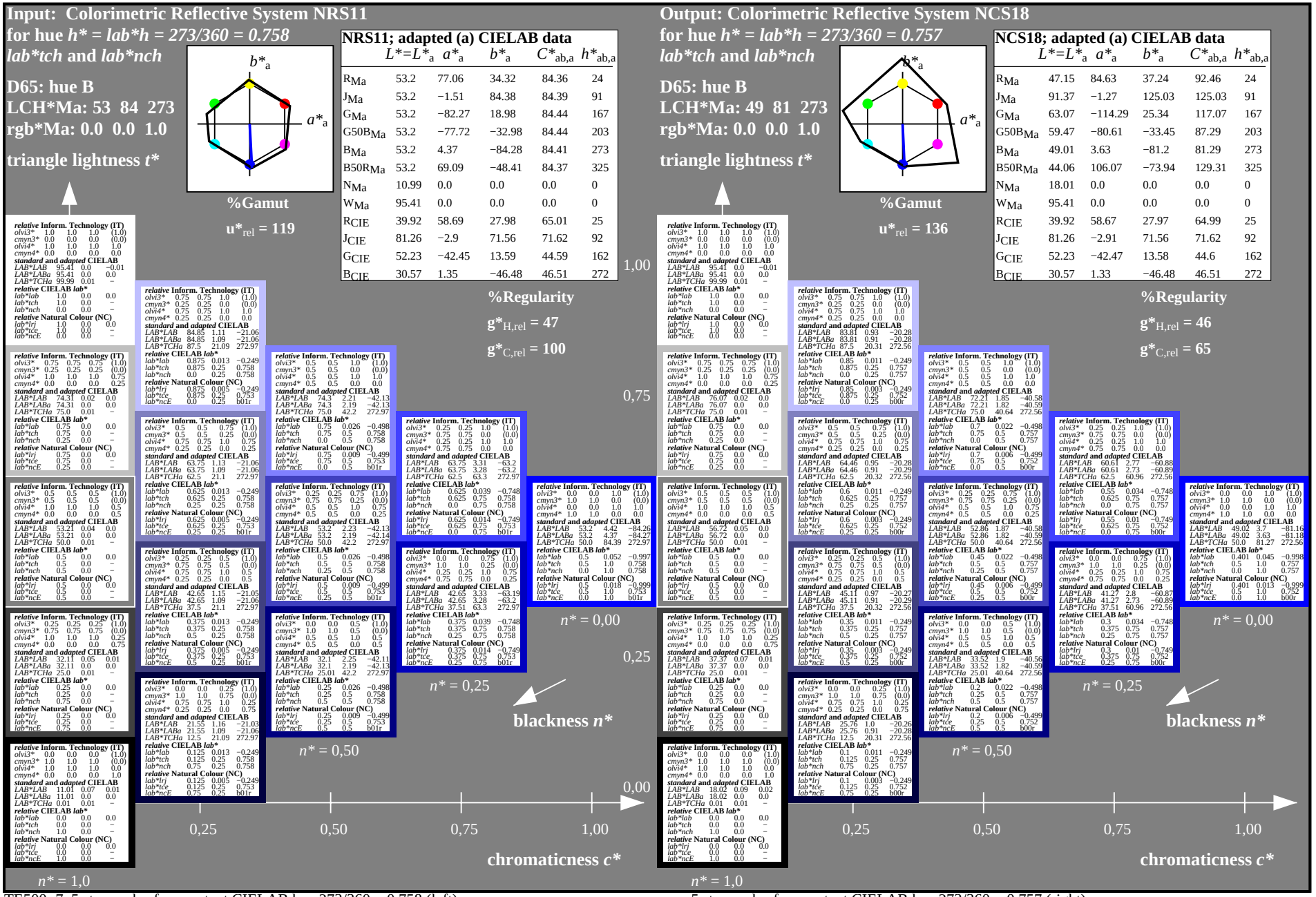
g*H,rel = 47

g*C,rel = 100



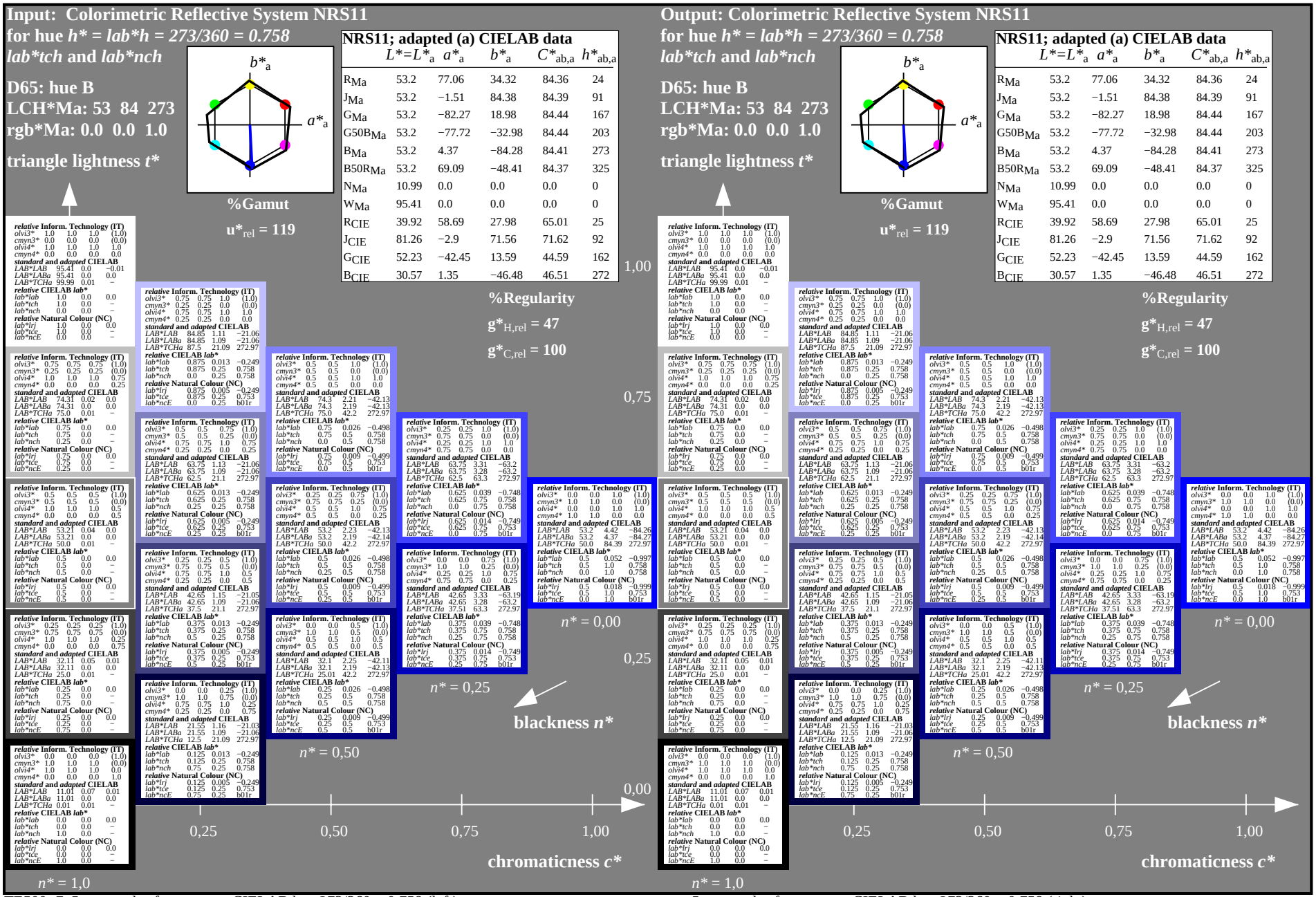

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)



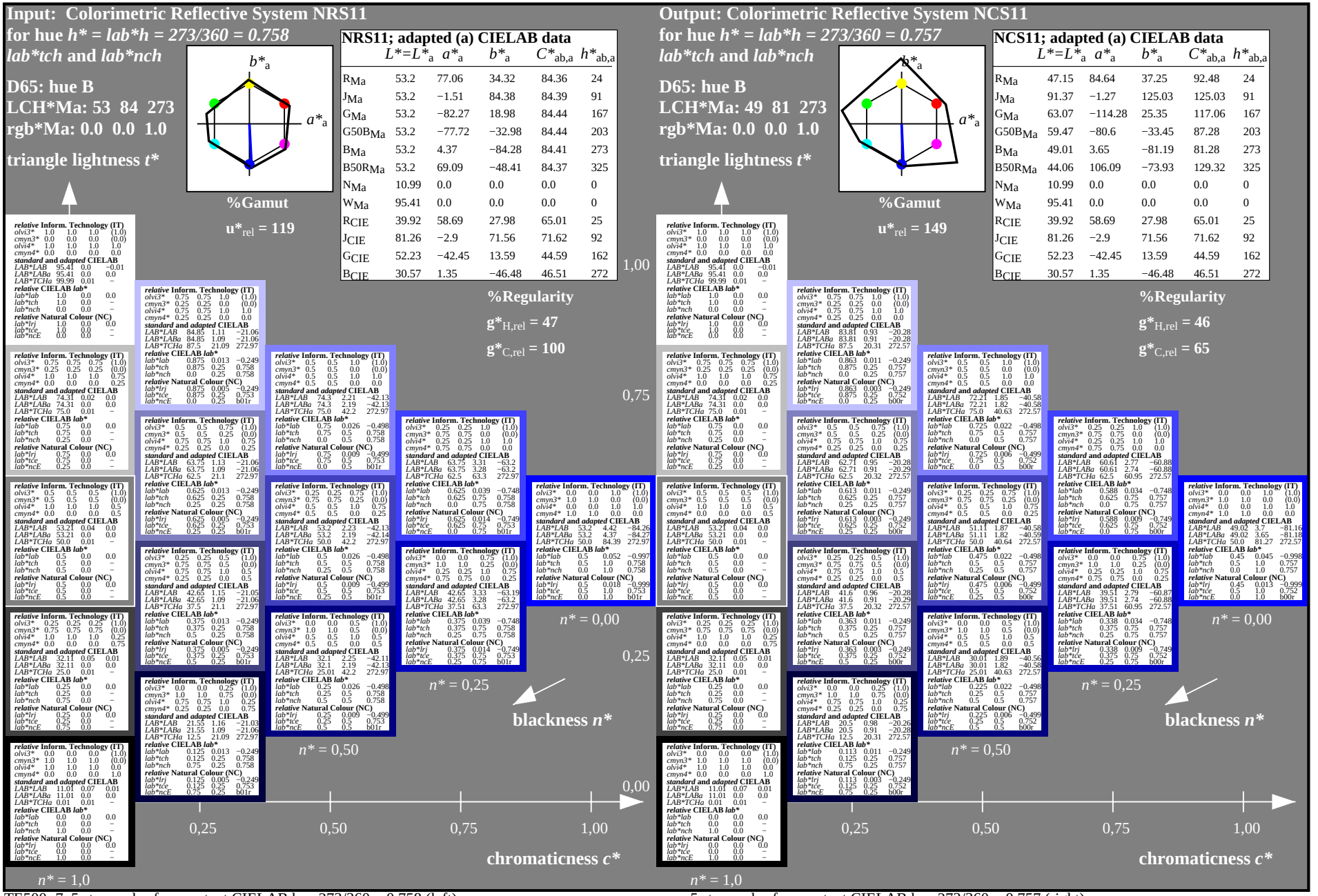

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)



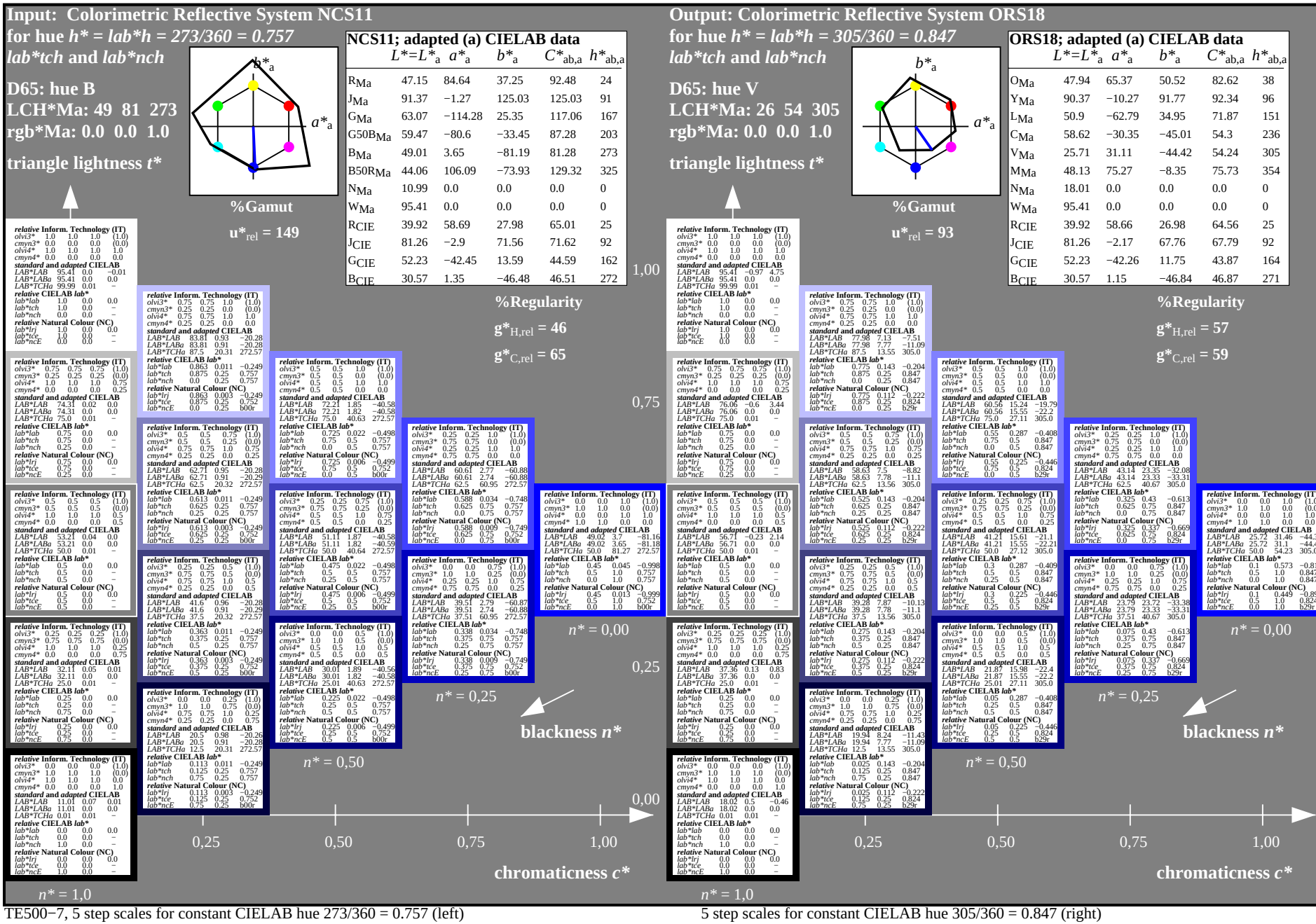

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)



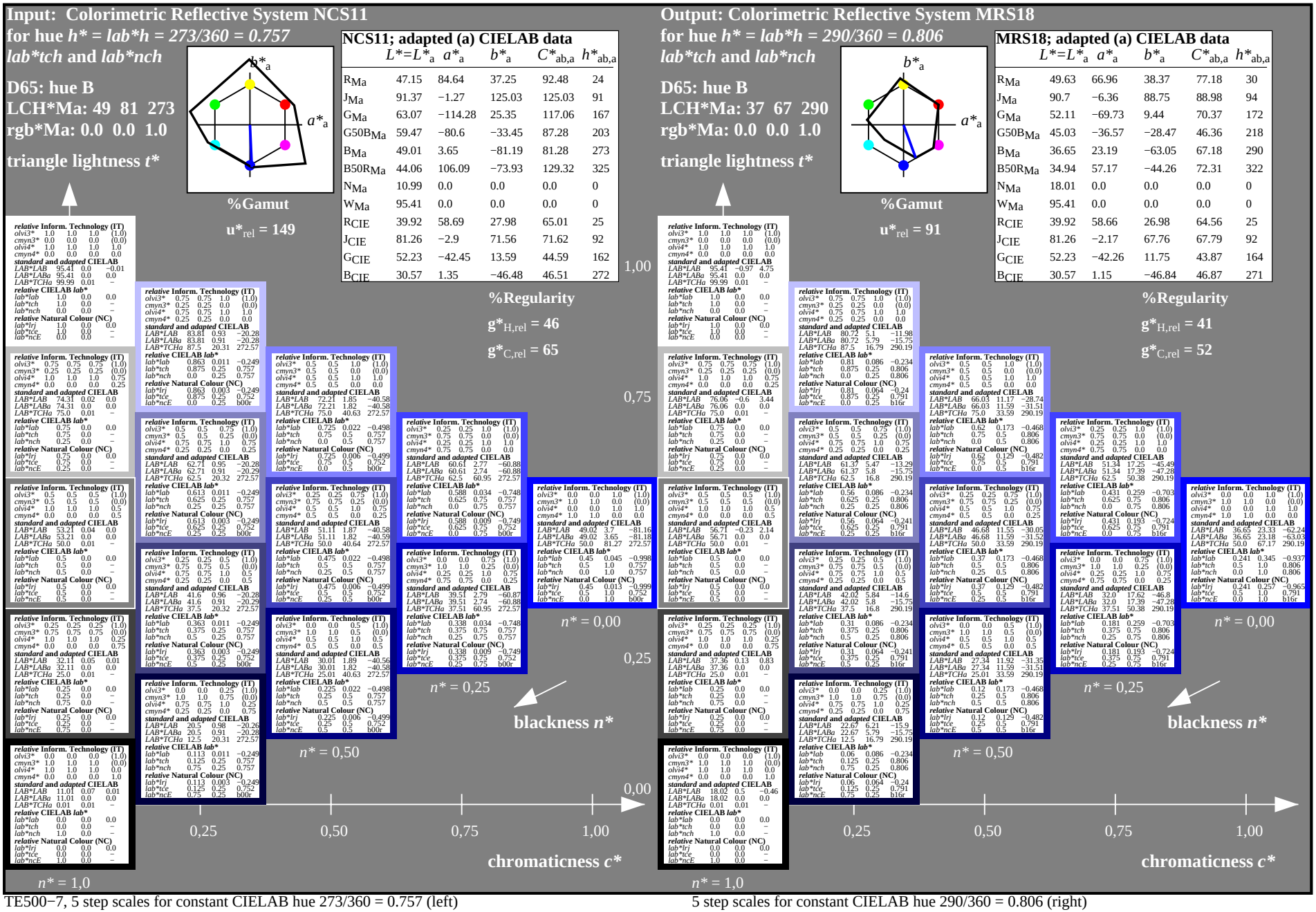

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)




TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)



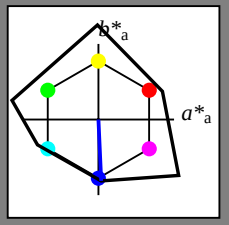

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 290/360 = 0.806 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

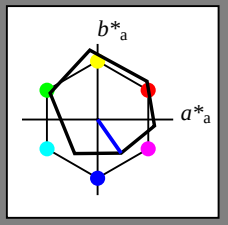
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 305/360 = 0.847**
***lab*tch* and *lab*nch***

**D65: hue V**
**LCH*Ma: 26 54 305**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

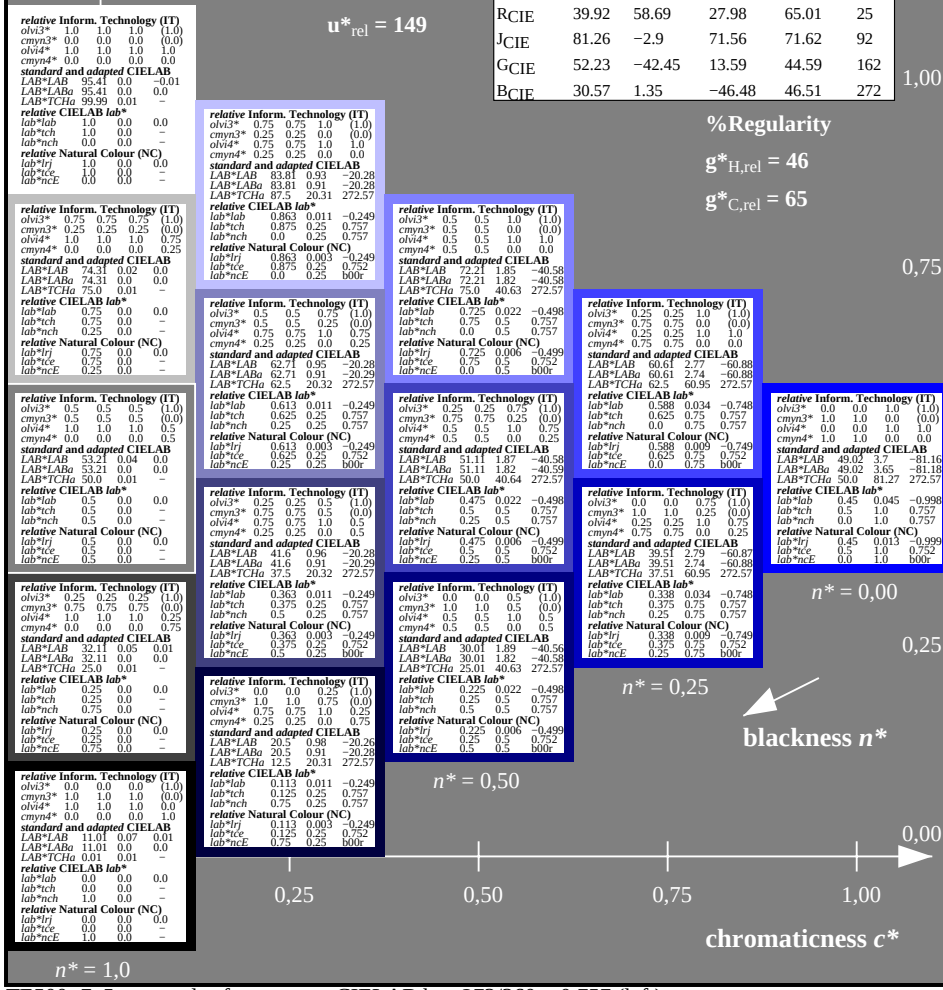
**TRS18; adapted (a) CIELAB data**

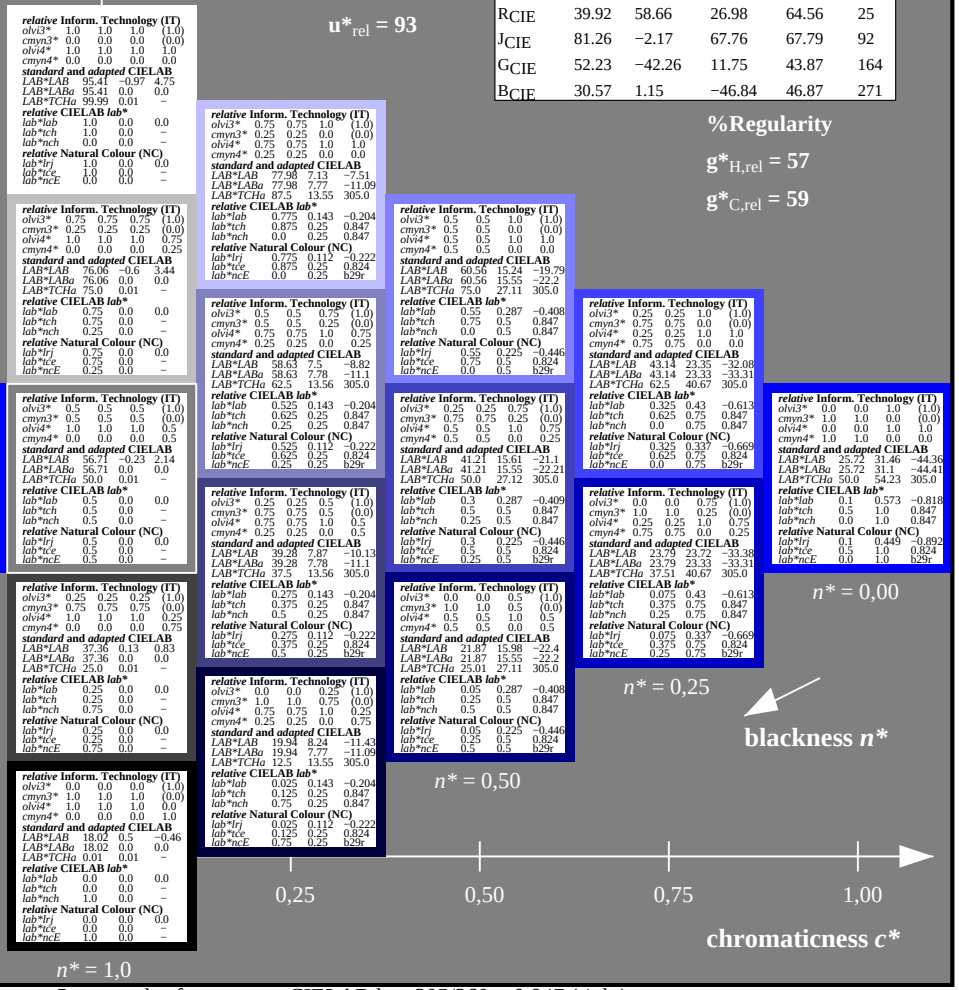
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



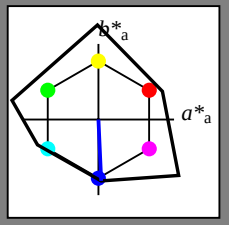

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

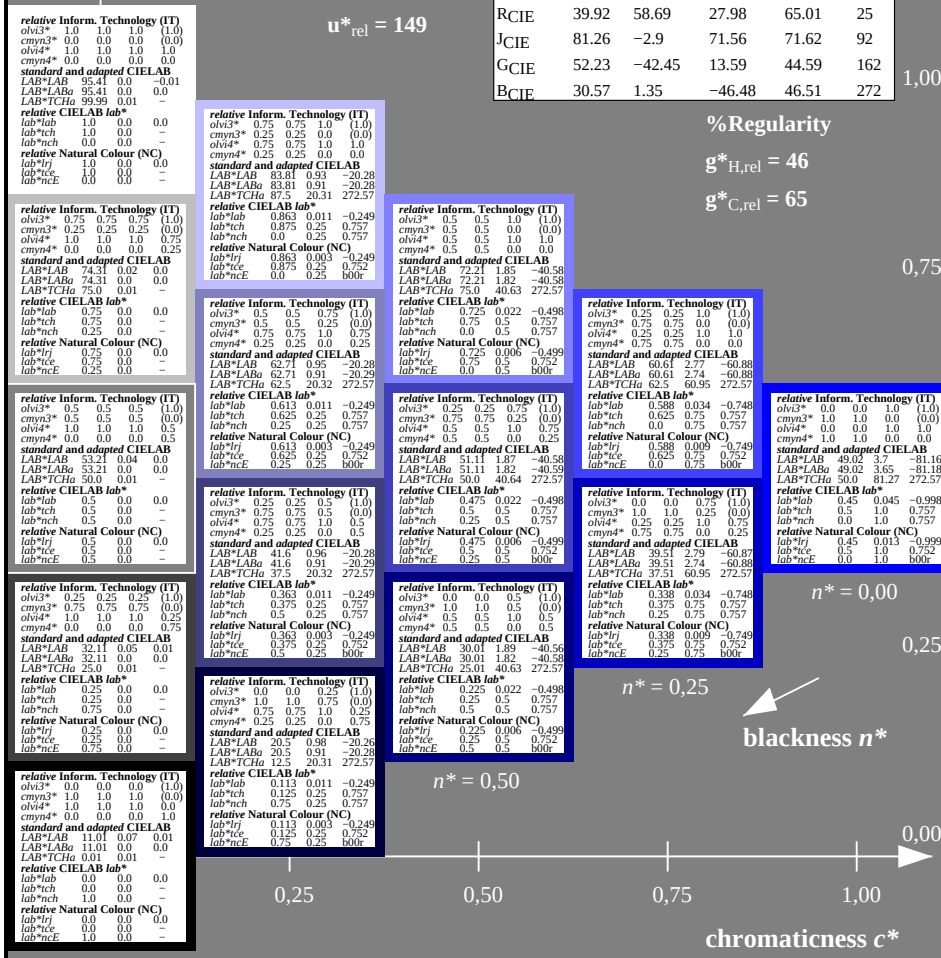
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

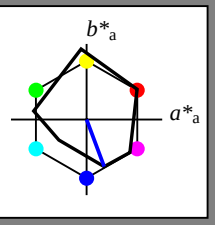
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 290/360 = 0.807**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 37 66 290**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

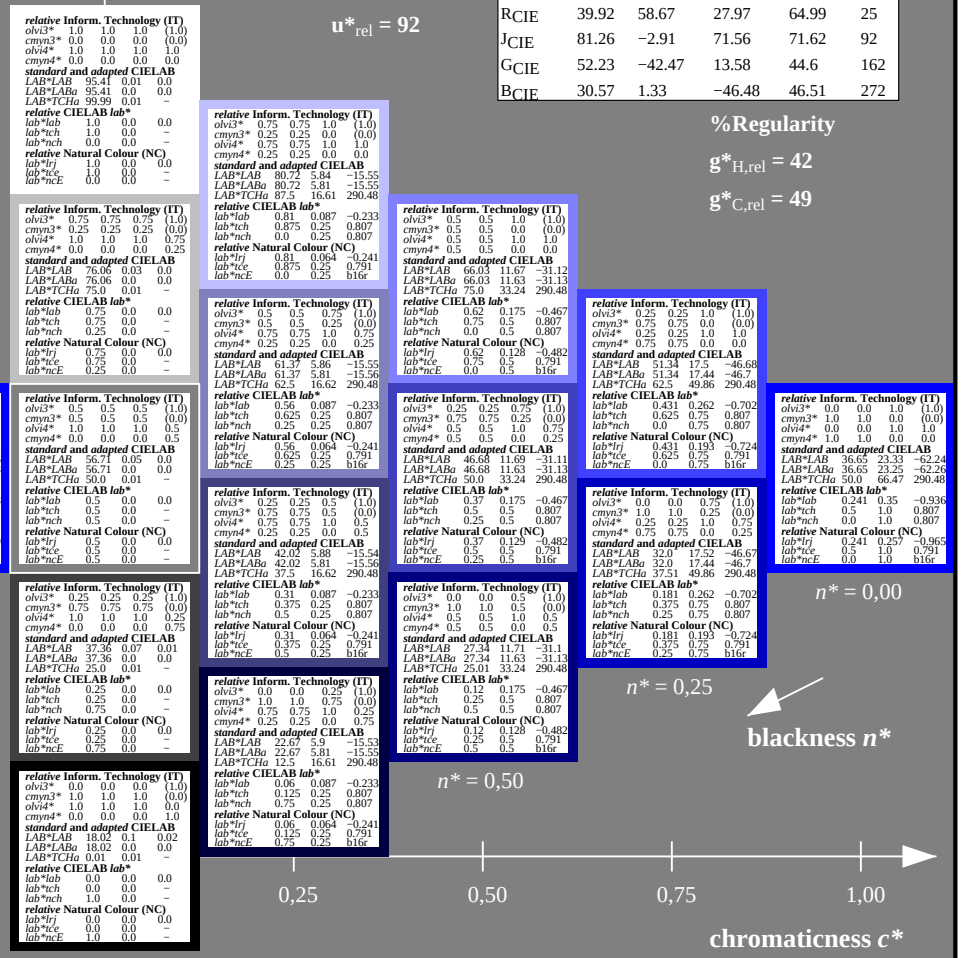
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

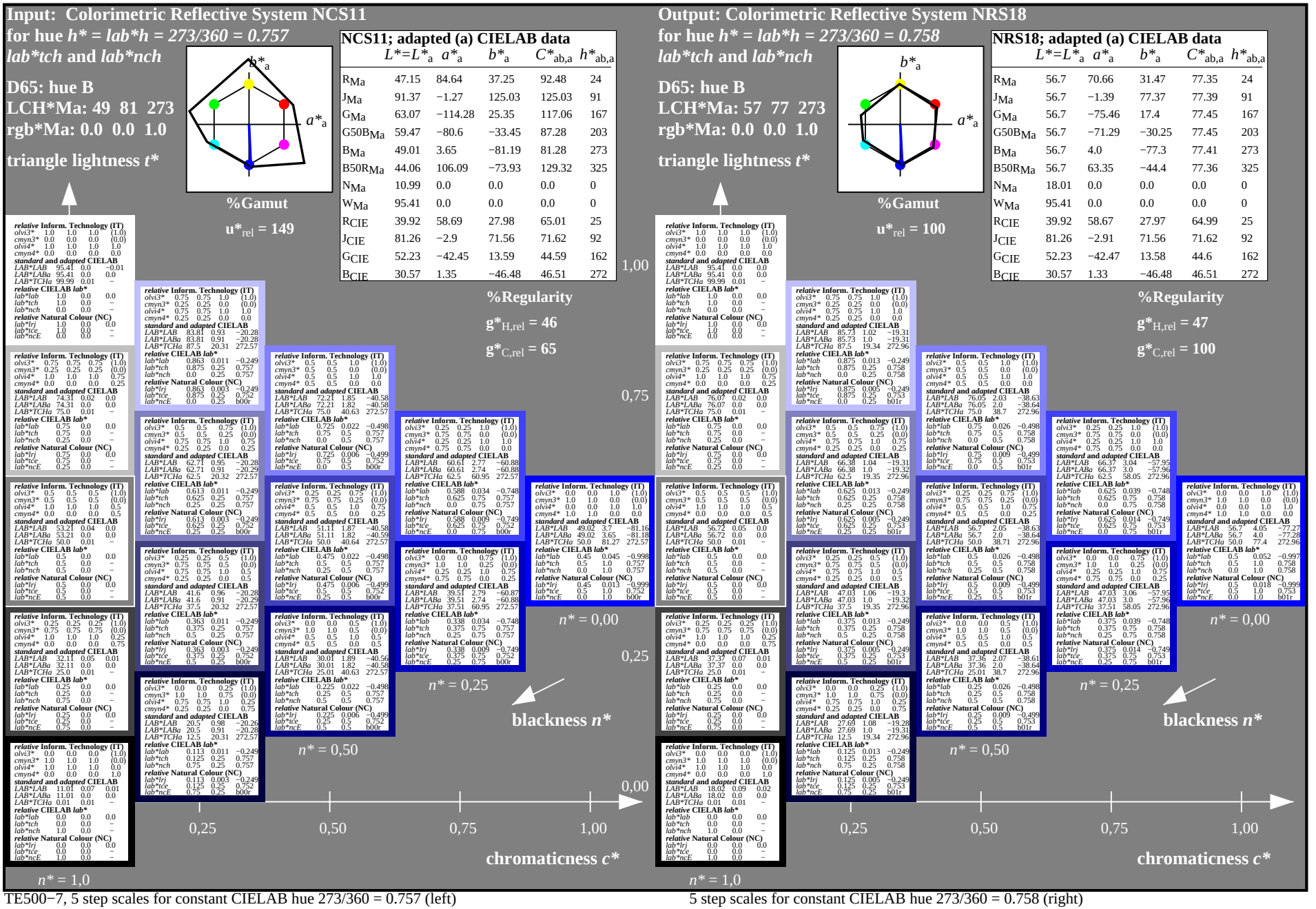
**g*$_{H,rel}$ = 42**

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



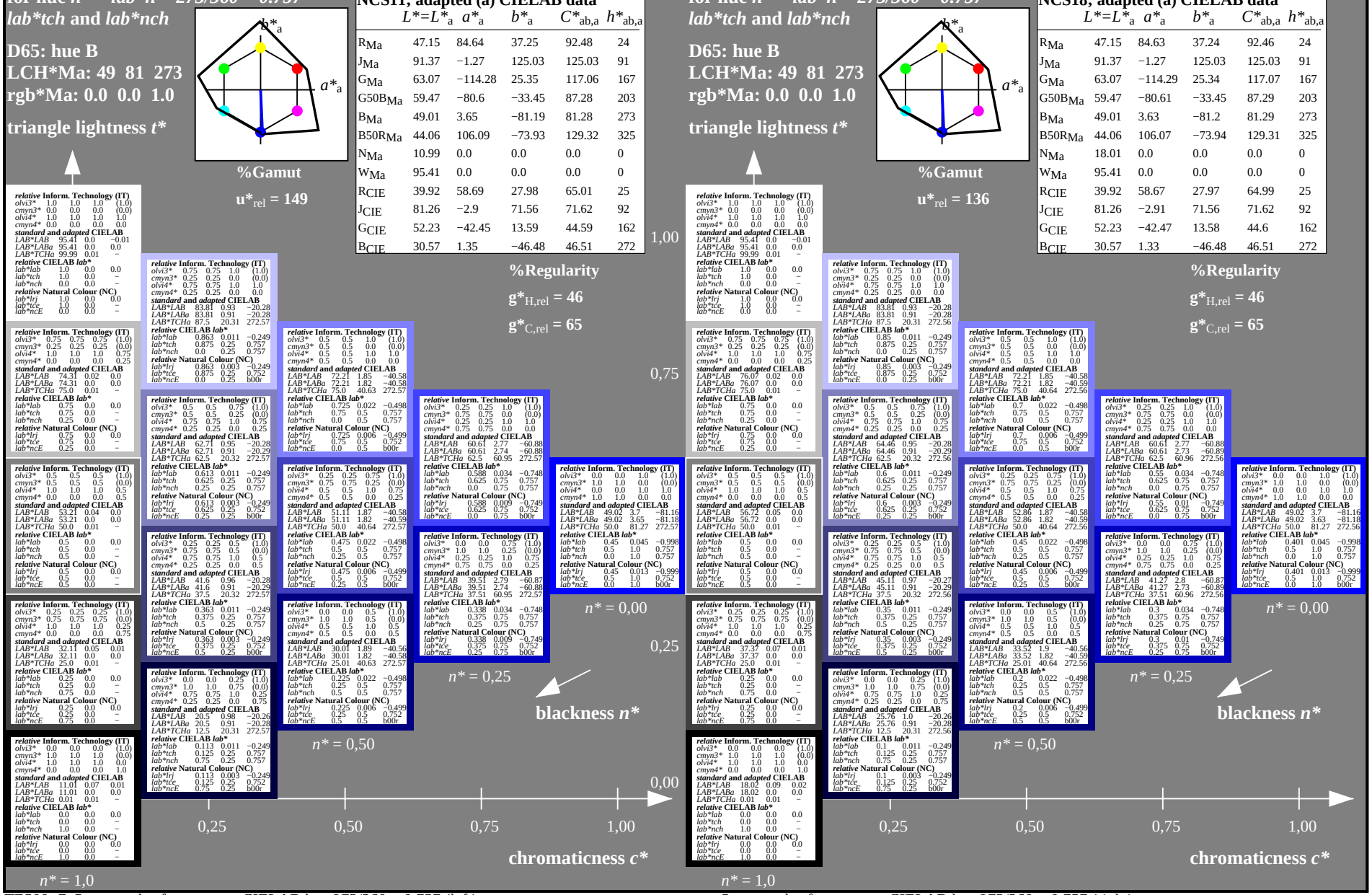

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 290/360 = 0.807 (right)




TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)



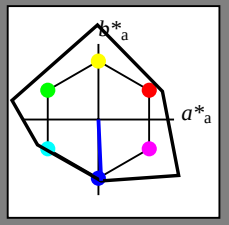

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

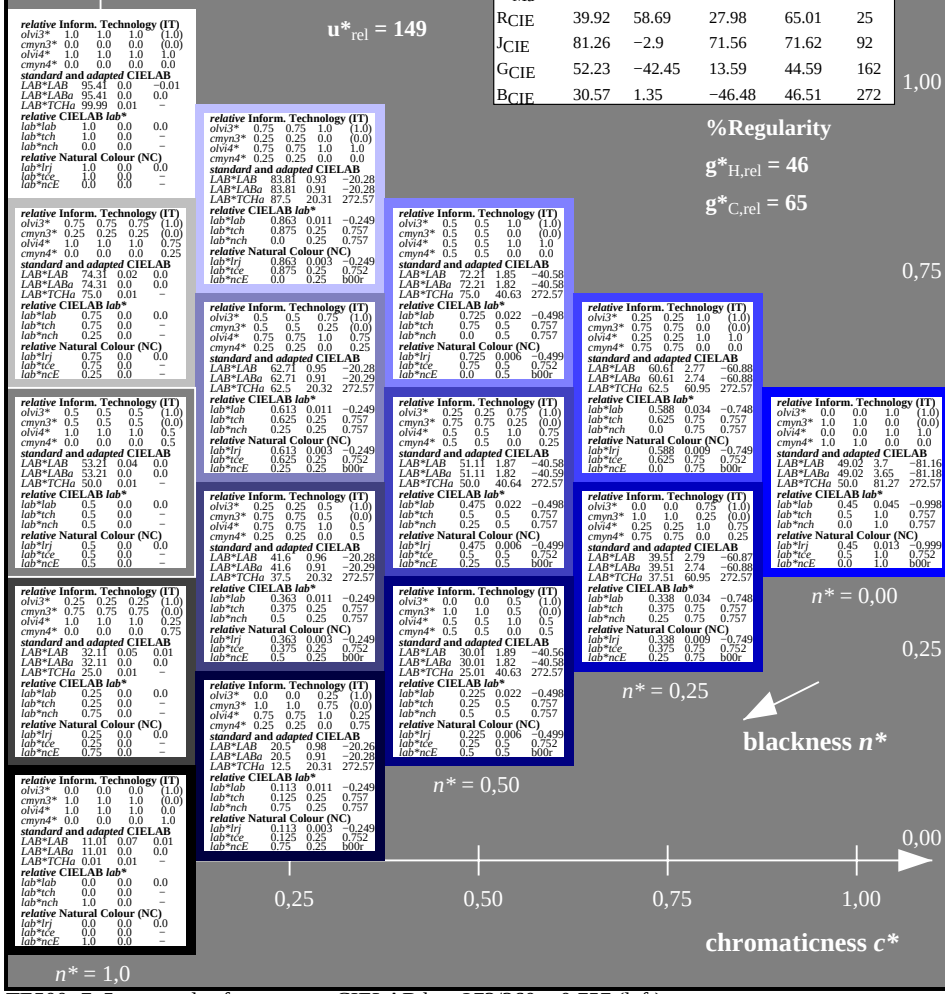
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

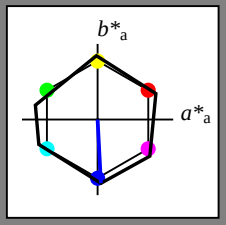
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 273/360 = 0.758**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 53 84 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

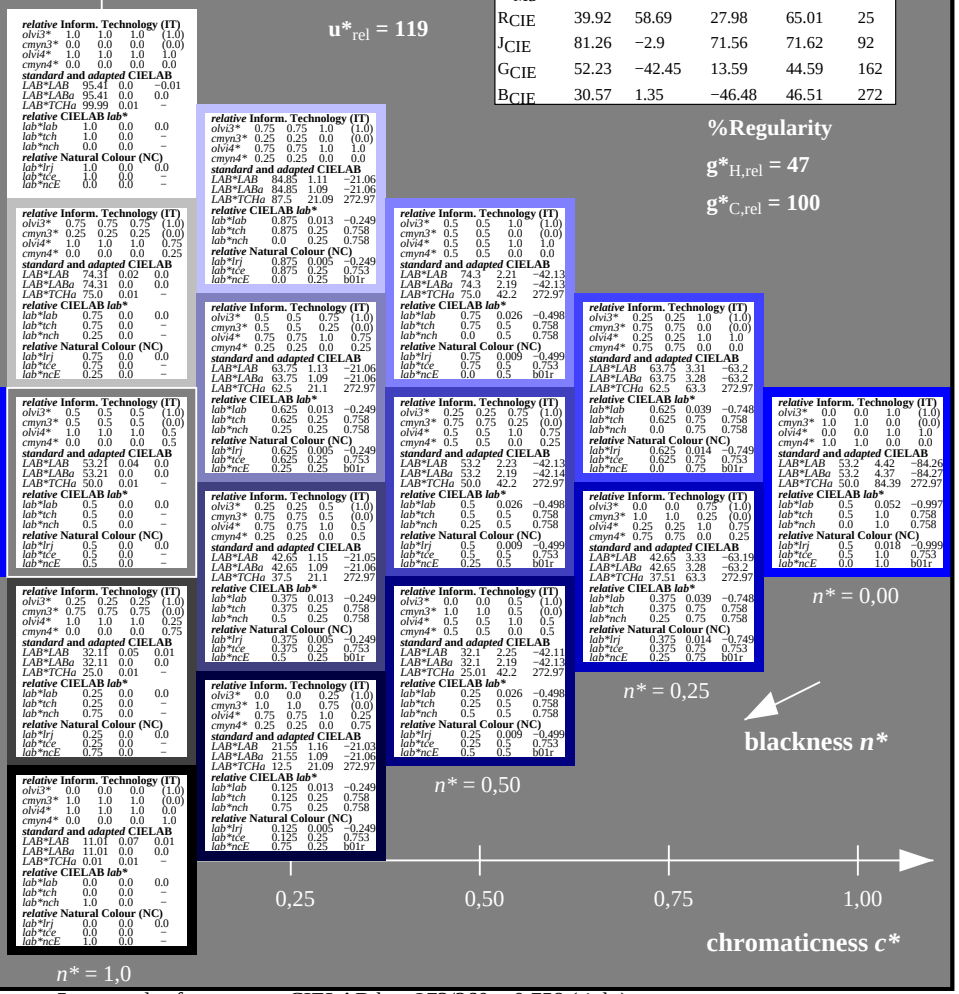
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



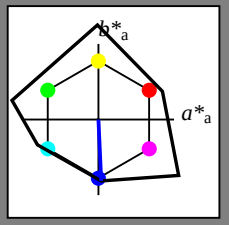

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 273/360 = 0.758 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

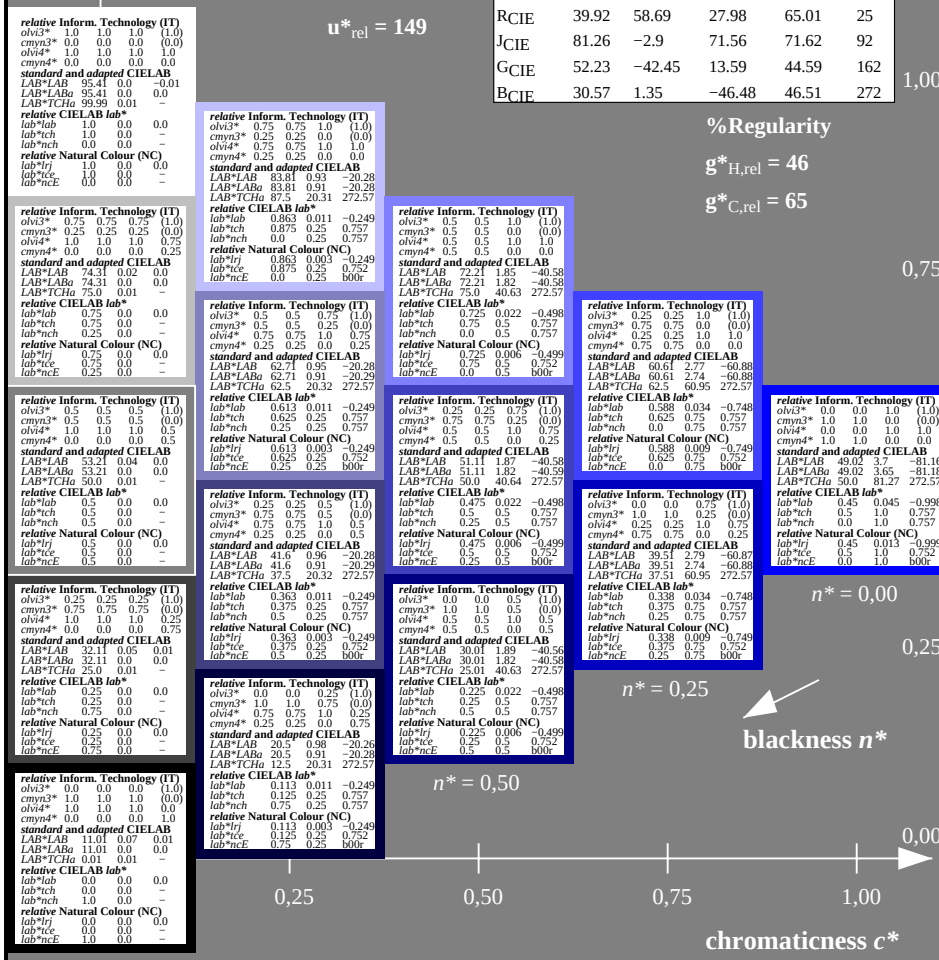
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

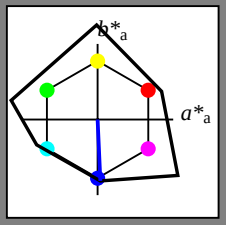
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 273/360 = 0.757**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 81 273**
**rgb*Ma: 0.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

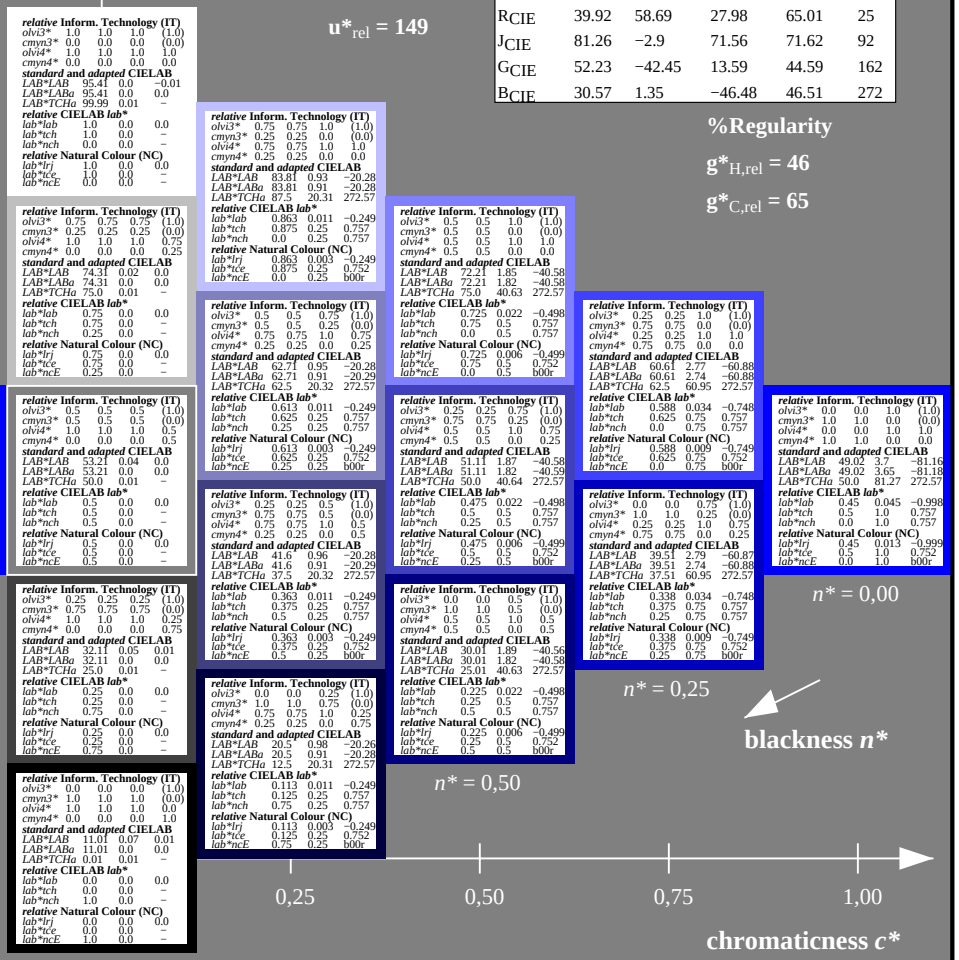
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

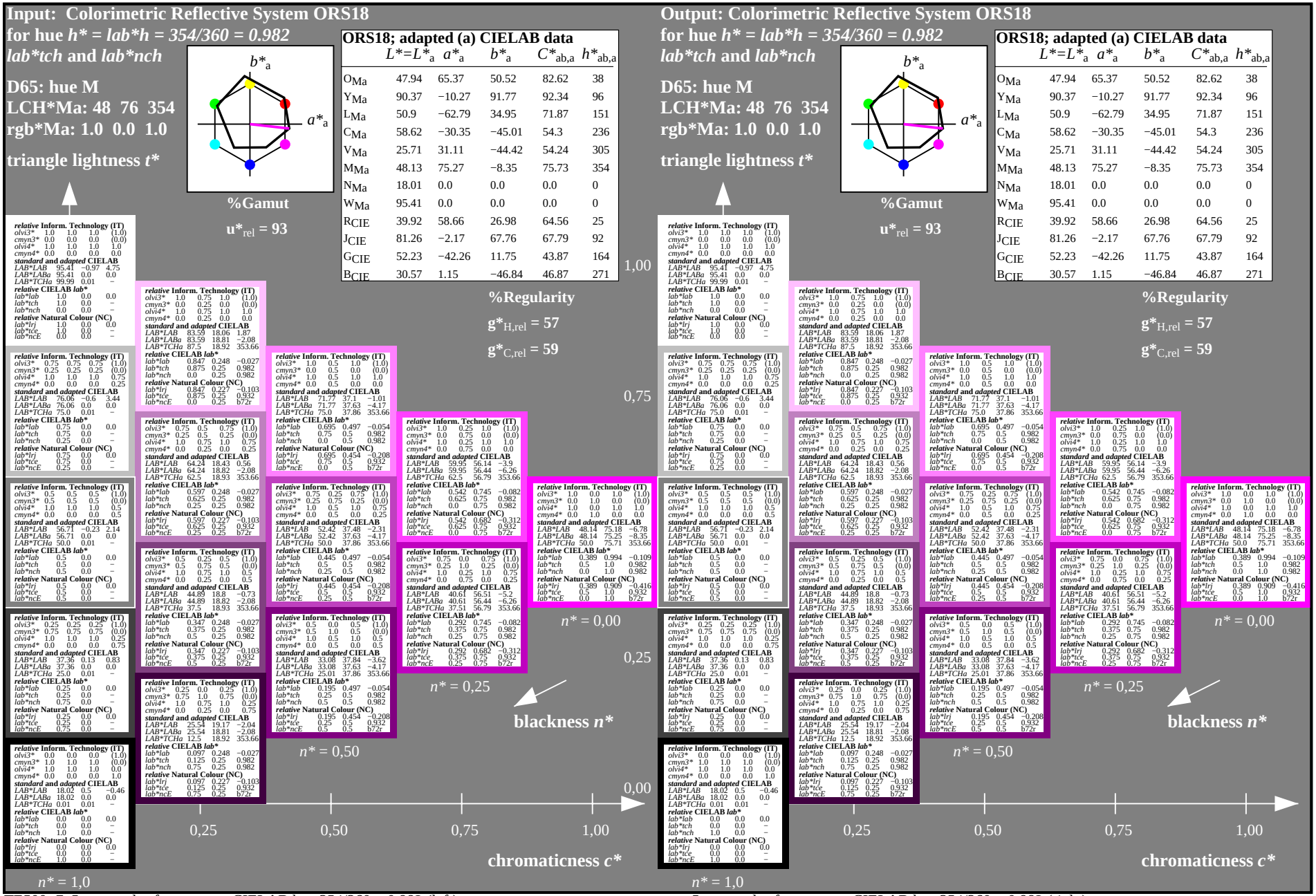
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



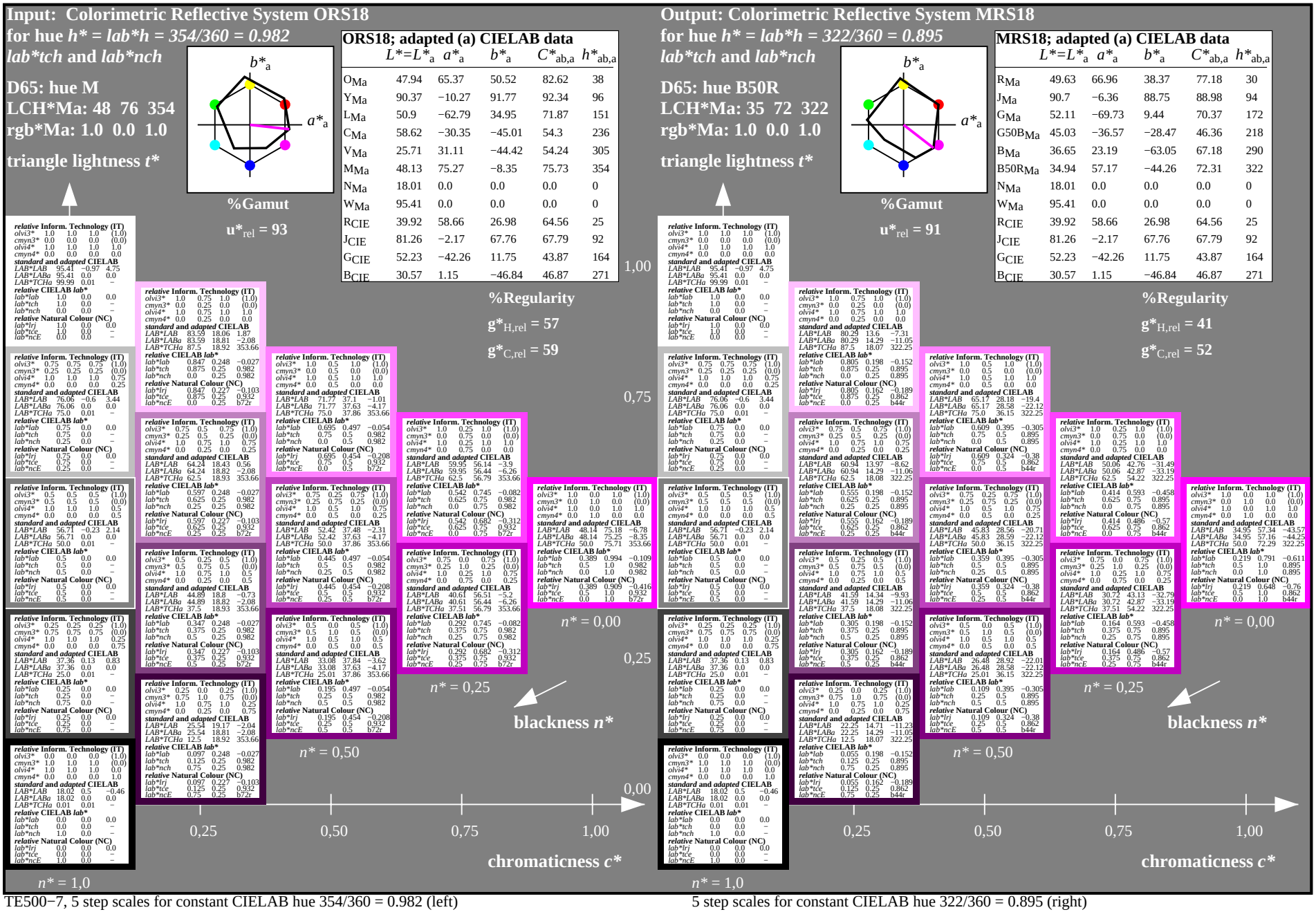

TE500−7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)




TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)




**ORS18; adapted (a) CIELAB data**

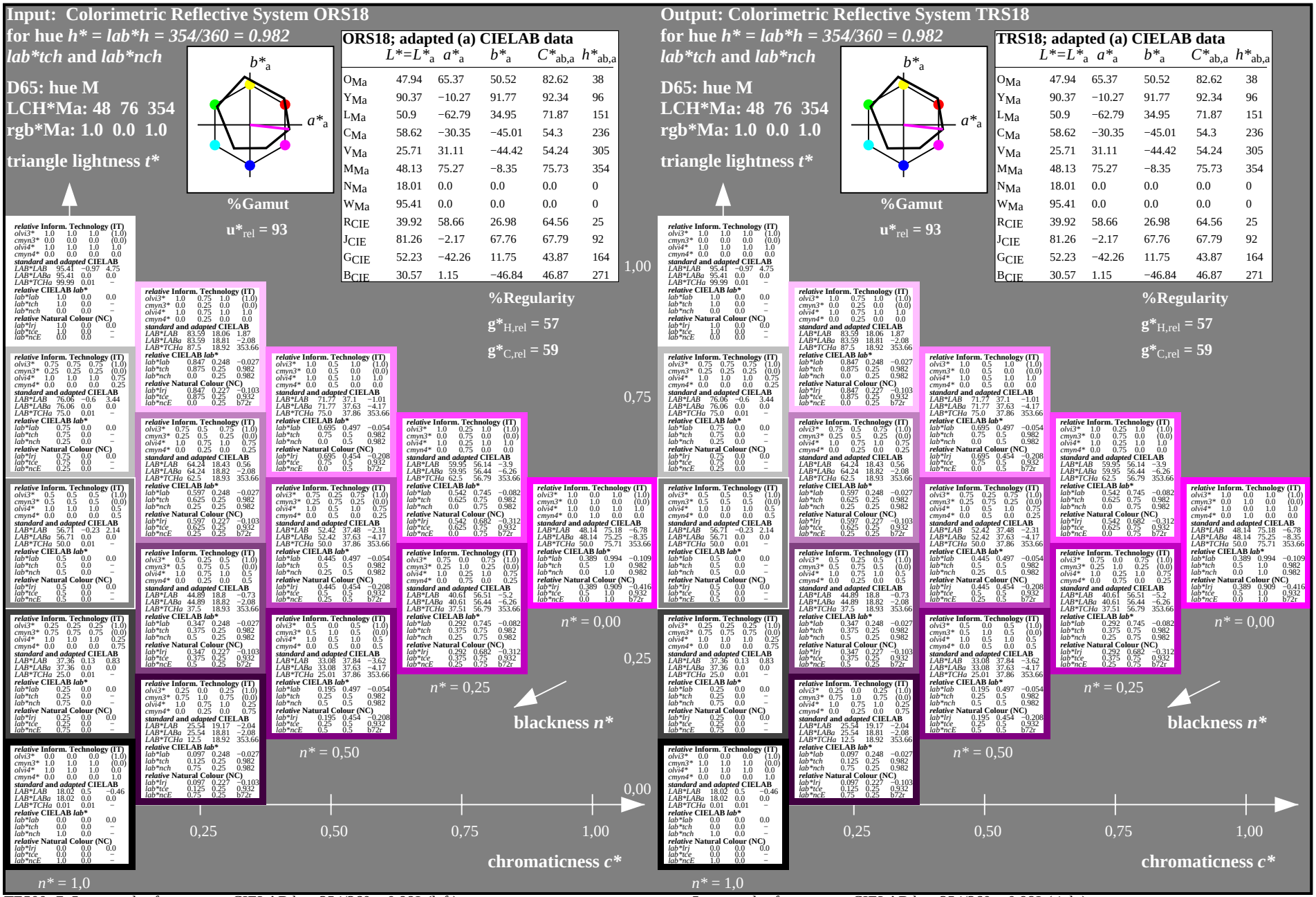
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

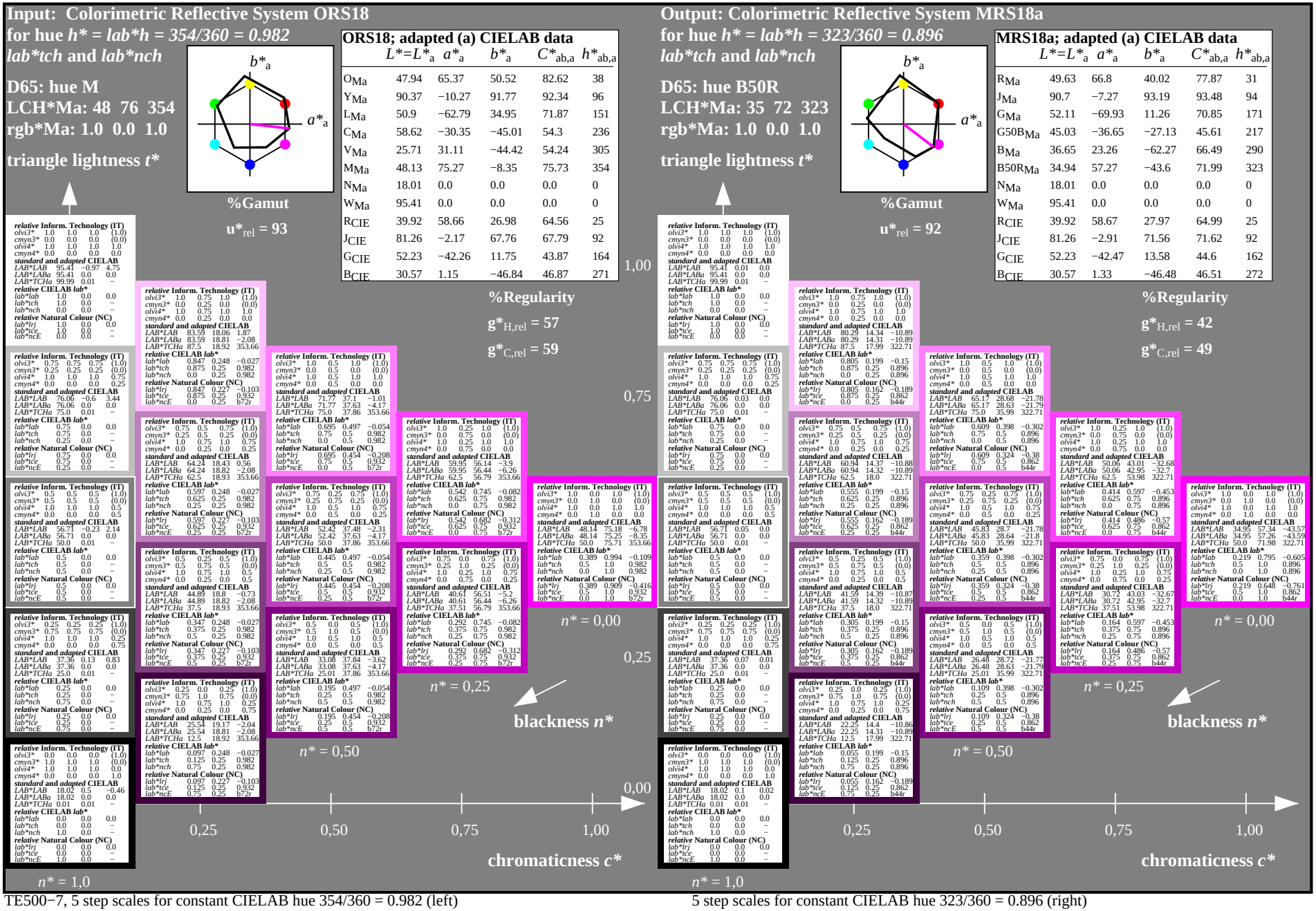
TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 322/360 = 0.895 (right)




TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)



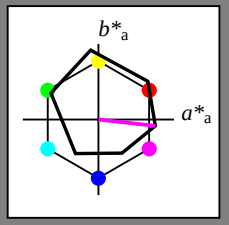

TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 323/360 = 0.896 (right)

**Input: Colorimetric 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**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

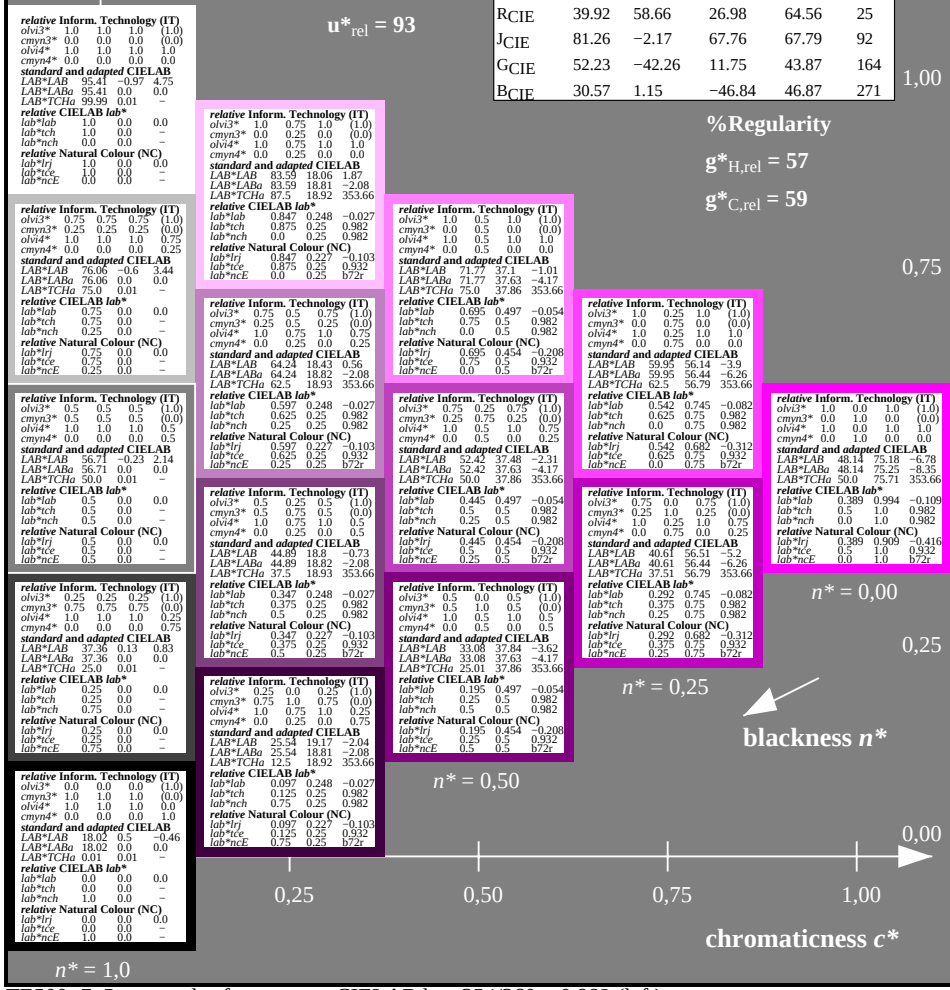
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

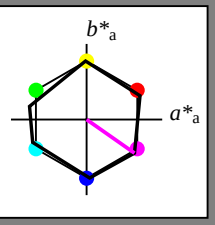
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 57 77 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

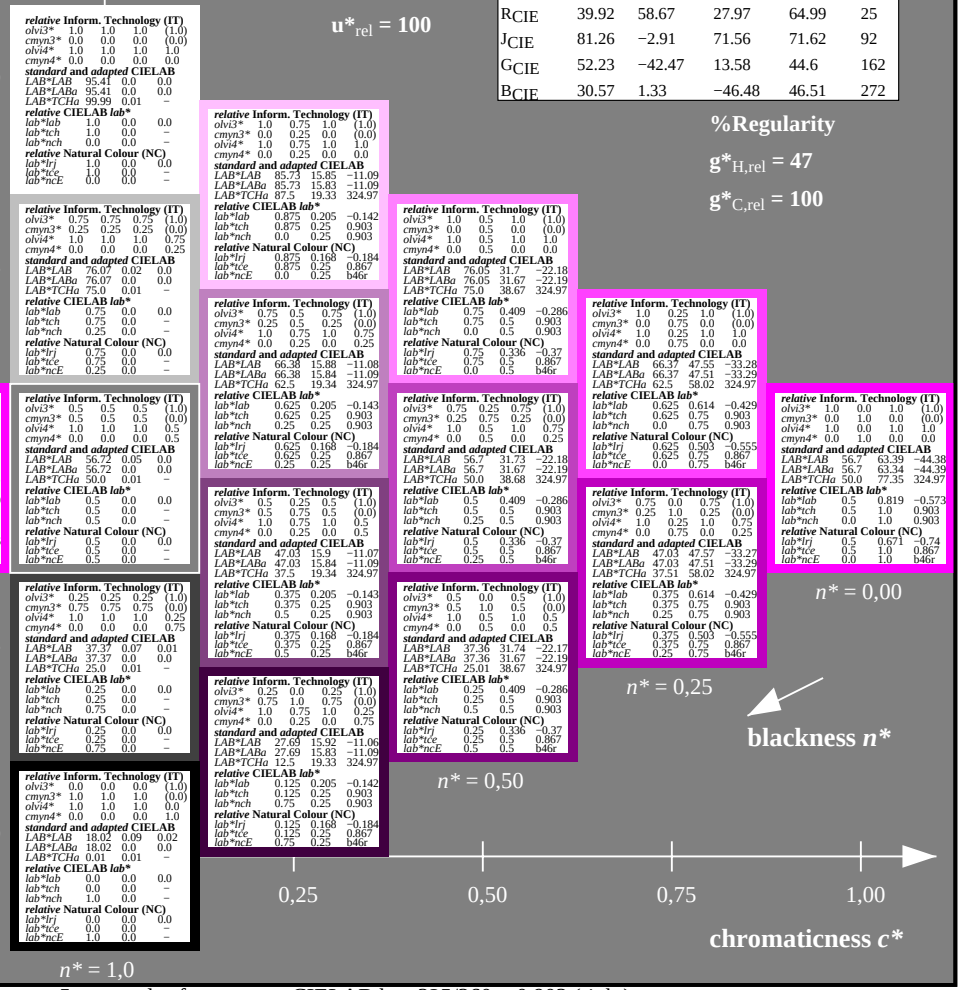
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

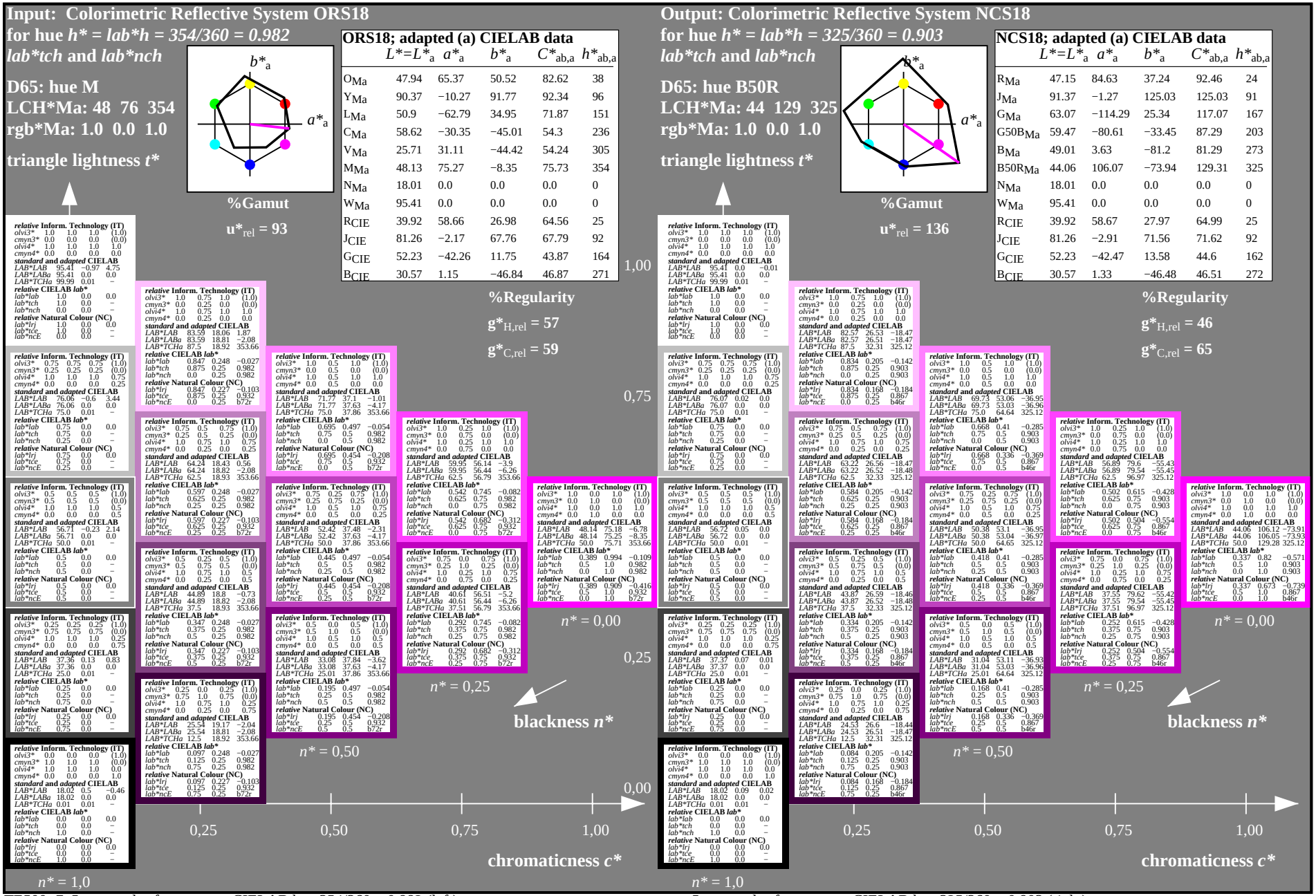
**g*$_{H,rel}$ = 47**

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




TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)




**ORS18; adapted (a) CIELAB data**

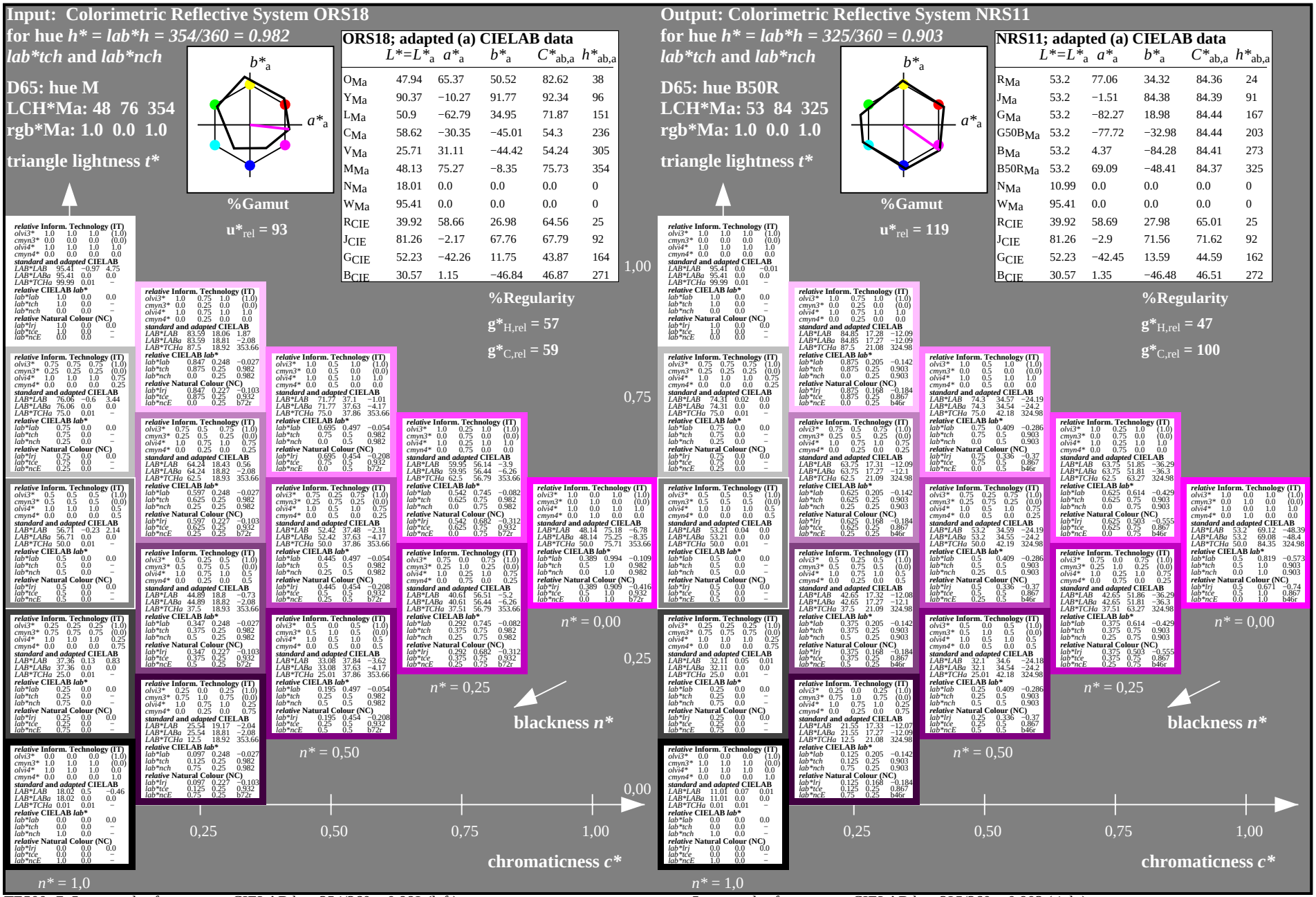
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

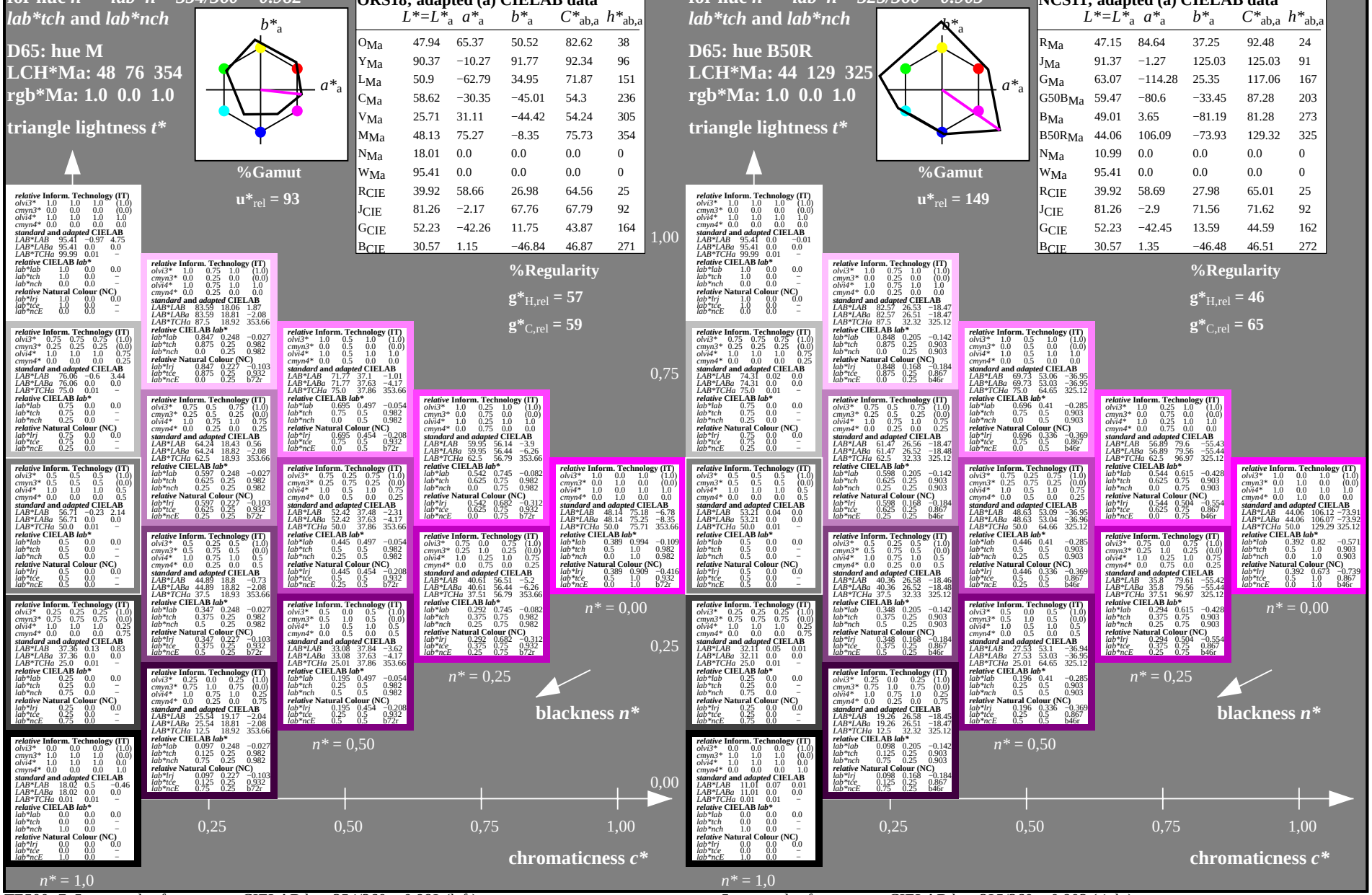
TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)




TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)




**ORS18; adapted (a) CIELAB data**

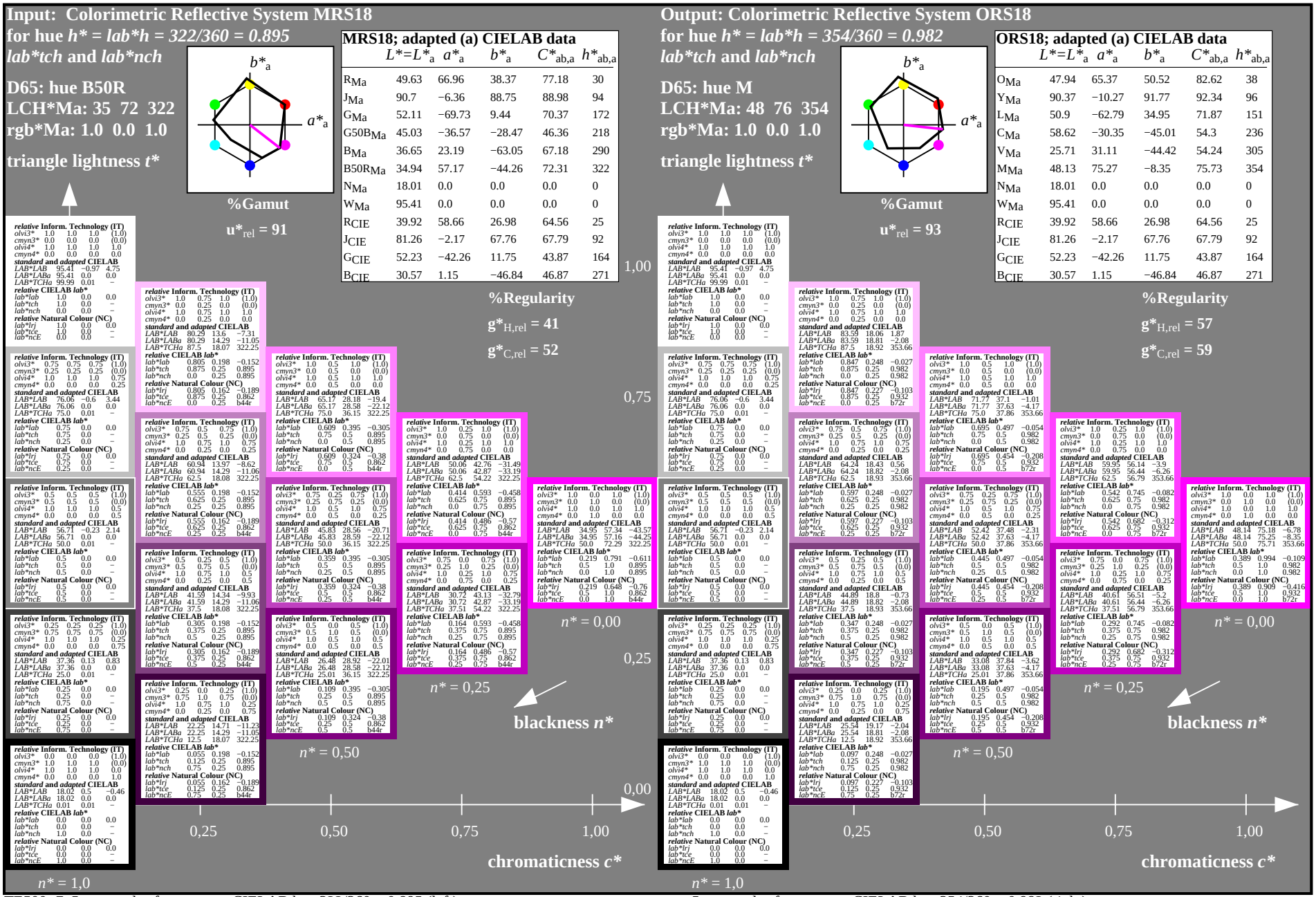
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



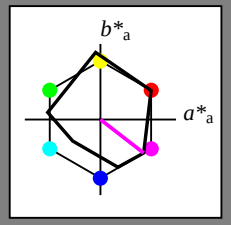

TE500−7, 5 step scales for constant CIELAB hue 322/360 = 0.895 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 322/360 = 0.895**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 35 72 322**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

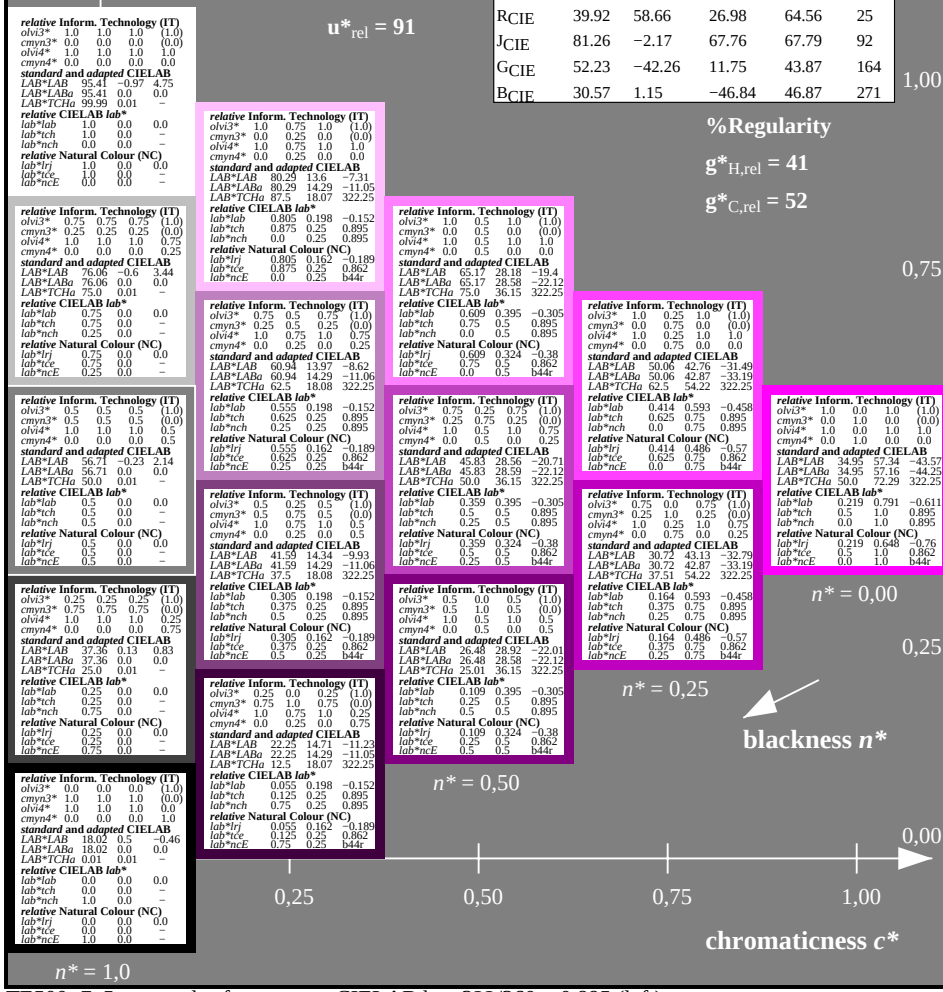
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

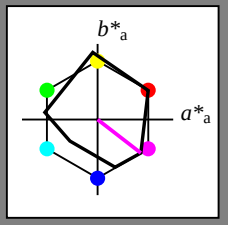
**g*$_{C,rel}$ = 52**




**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 322/360 = 0.895**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 35 72 322**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

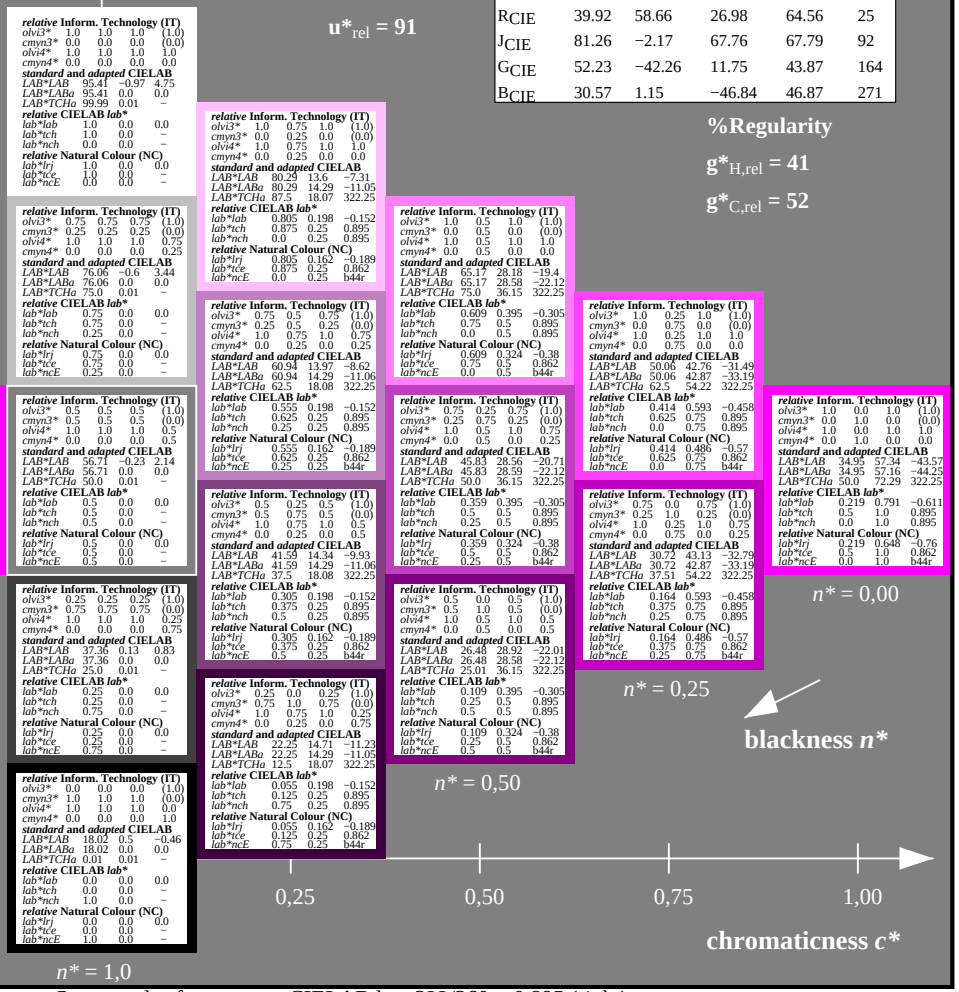
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**



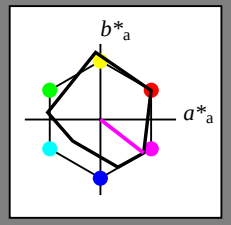

TE500−7, 5 step scales for constant CIELAB hue 322/360 = 0.895 (left)

5 step scales for constant CIELAB hue 322/360 = 0.895 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 322/360 = 0.895**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 35 72 322**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

1,00

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

0,75

0,25

0,00

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

**blackness *n****

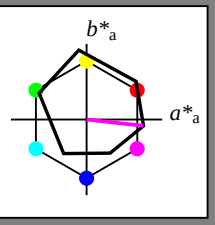
0,25 0,50 0,75 1,00

**chromaticness *c****

**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 354/360 = 0.982**
***lab*tch* and *lab*nch***

**D65: hue M**
**LCH*Ma: 48 76 354**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

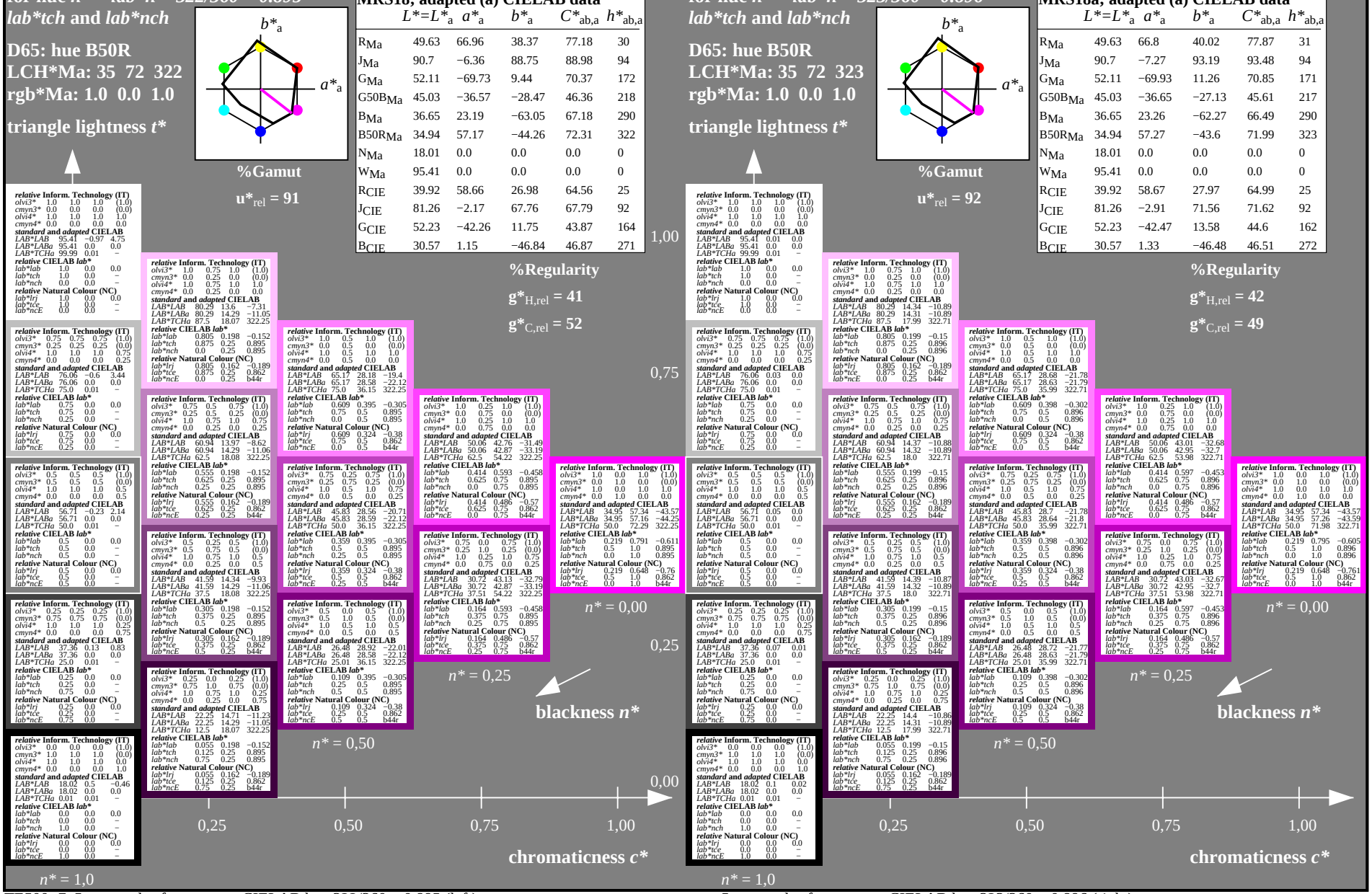
**blackness *n****

0,25 0,50 0,75 1,00

**chromaticness *c****

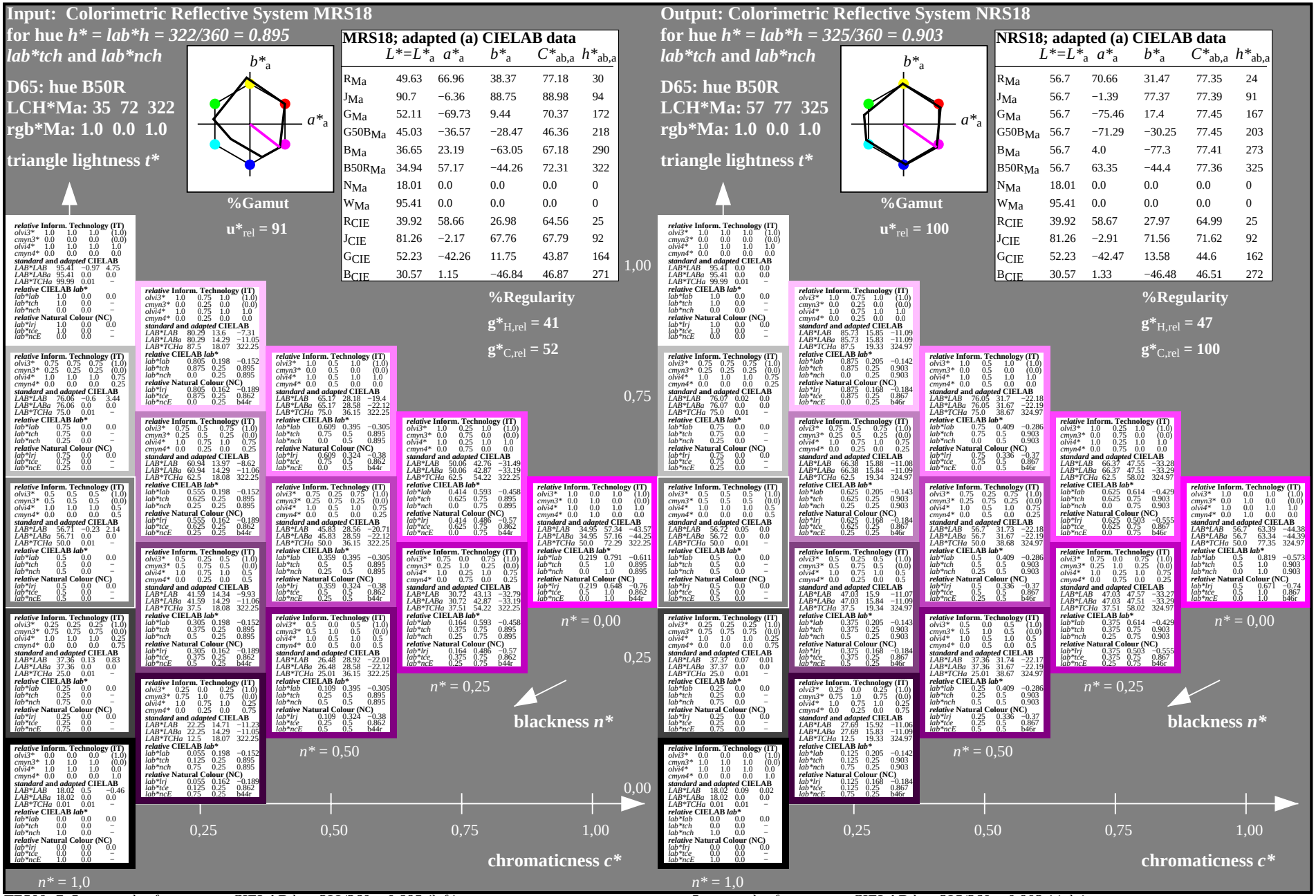
TE500−7, 5 step scales for constant CIELAB hue 322/360 = 0.895 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)



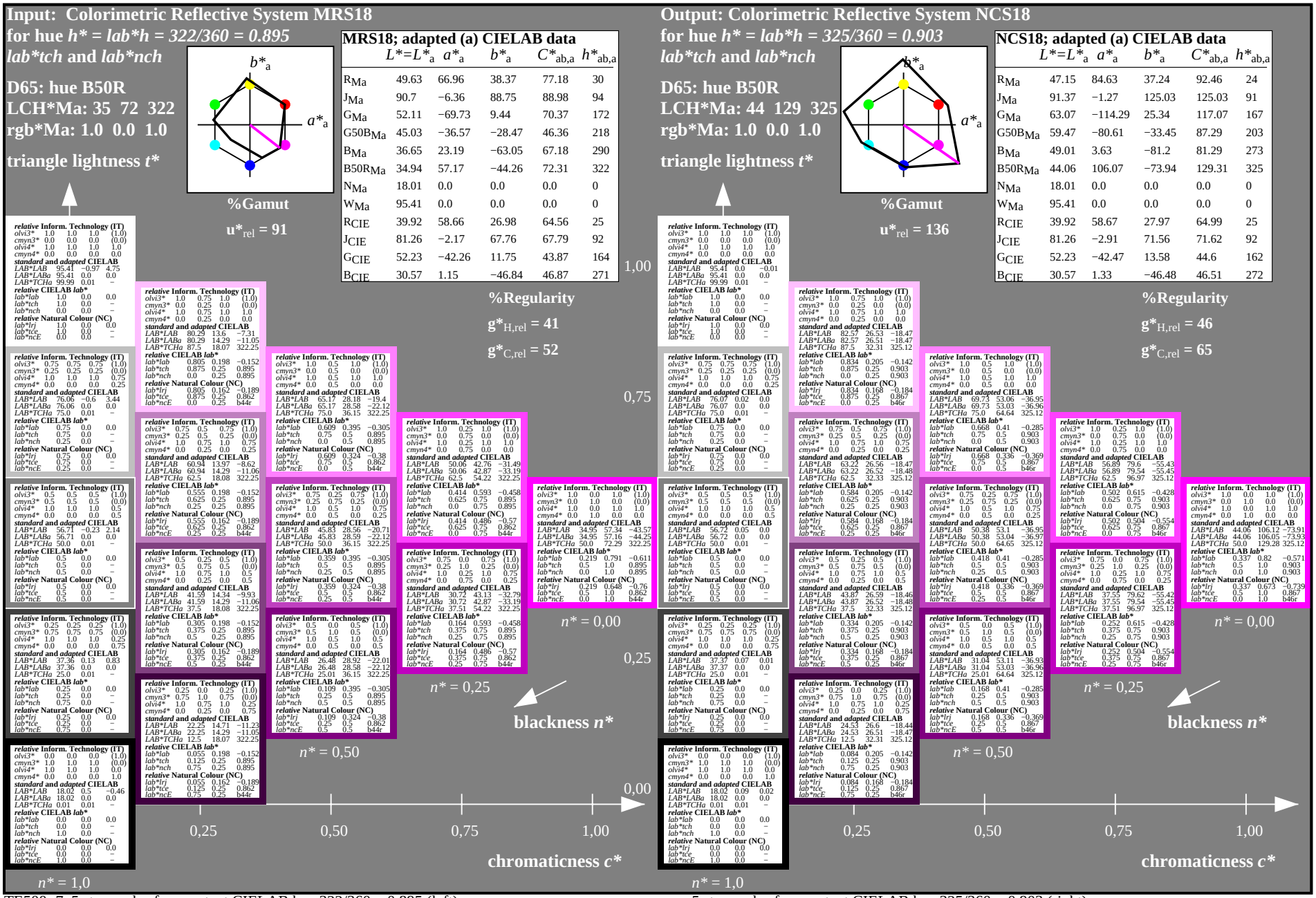

TE500−7, 5 step scales for constant CIELAB hue 322/360 = 0.895 (left)

5 step scales for constant CIELAB hue 323/360 = 0.896 (right)



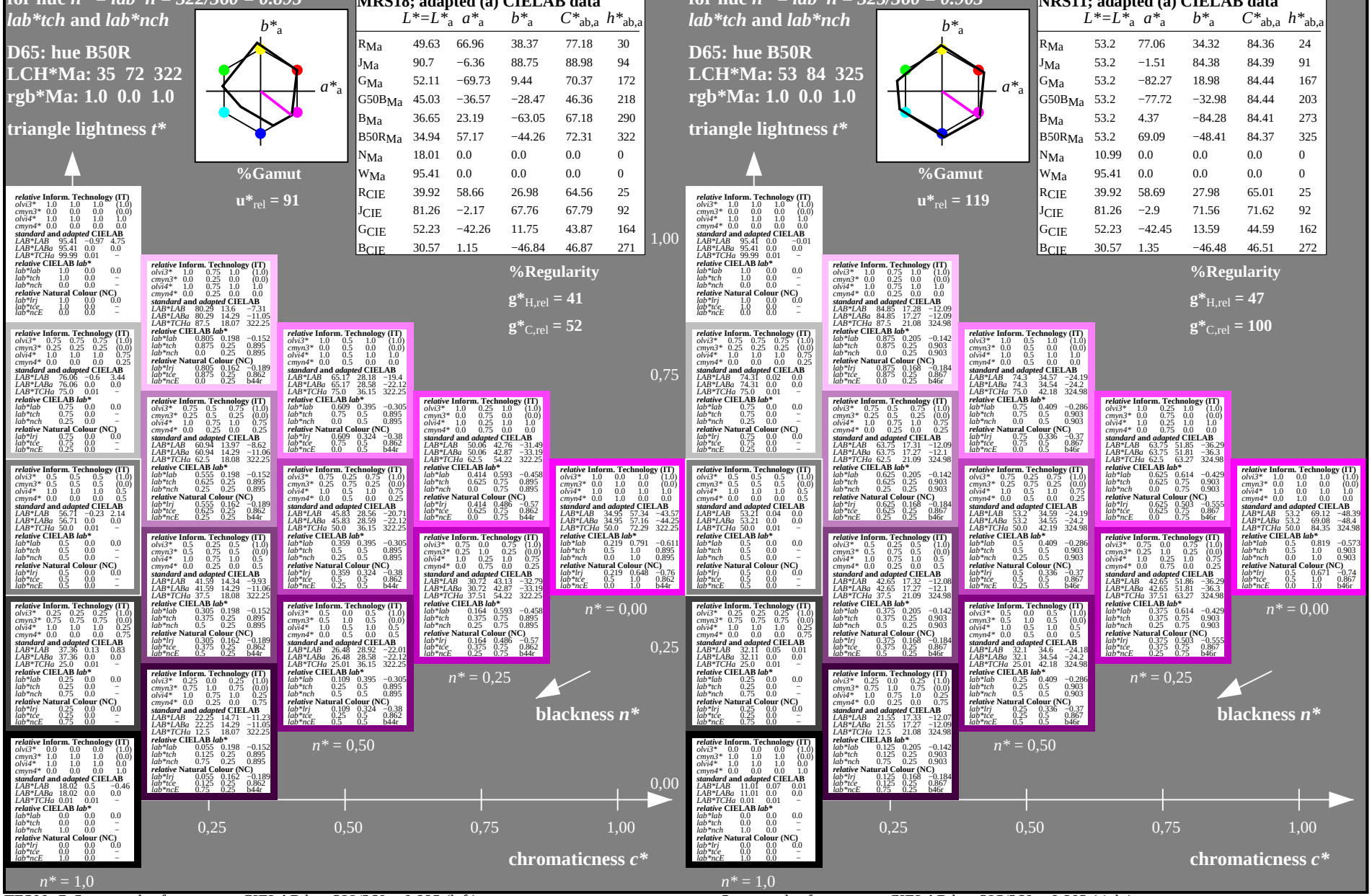

TE500−7, 5 step scales for constant CIELAB hue 322/360 = 0.895 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



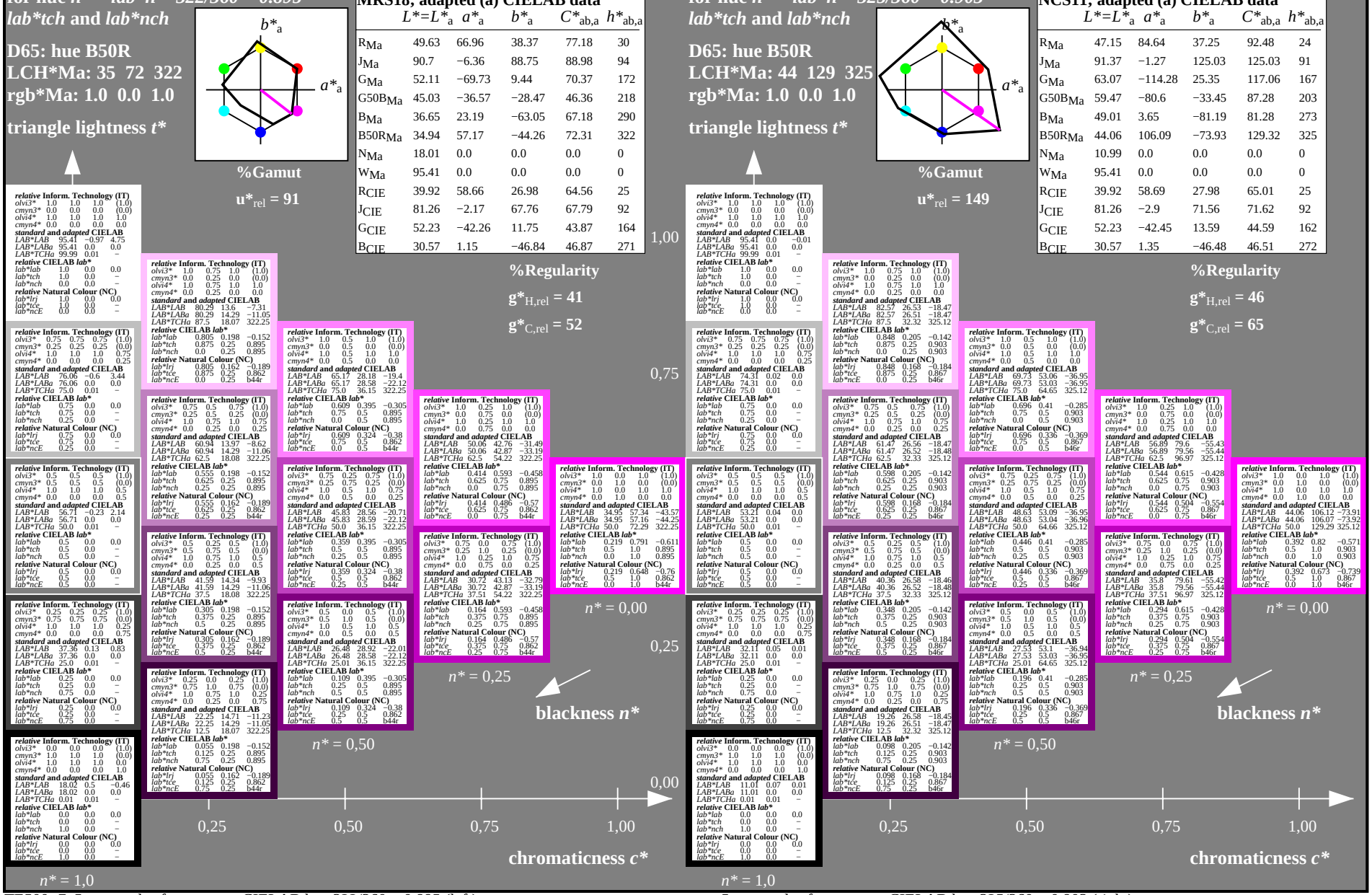

TE500−7, 5 step scales for constant CIELAB hue 322/360 = 0.895 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



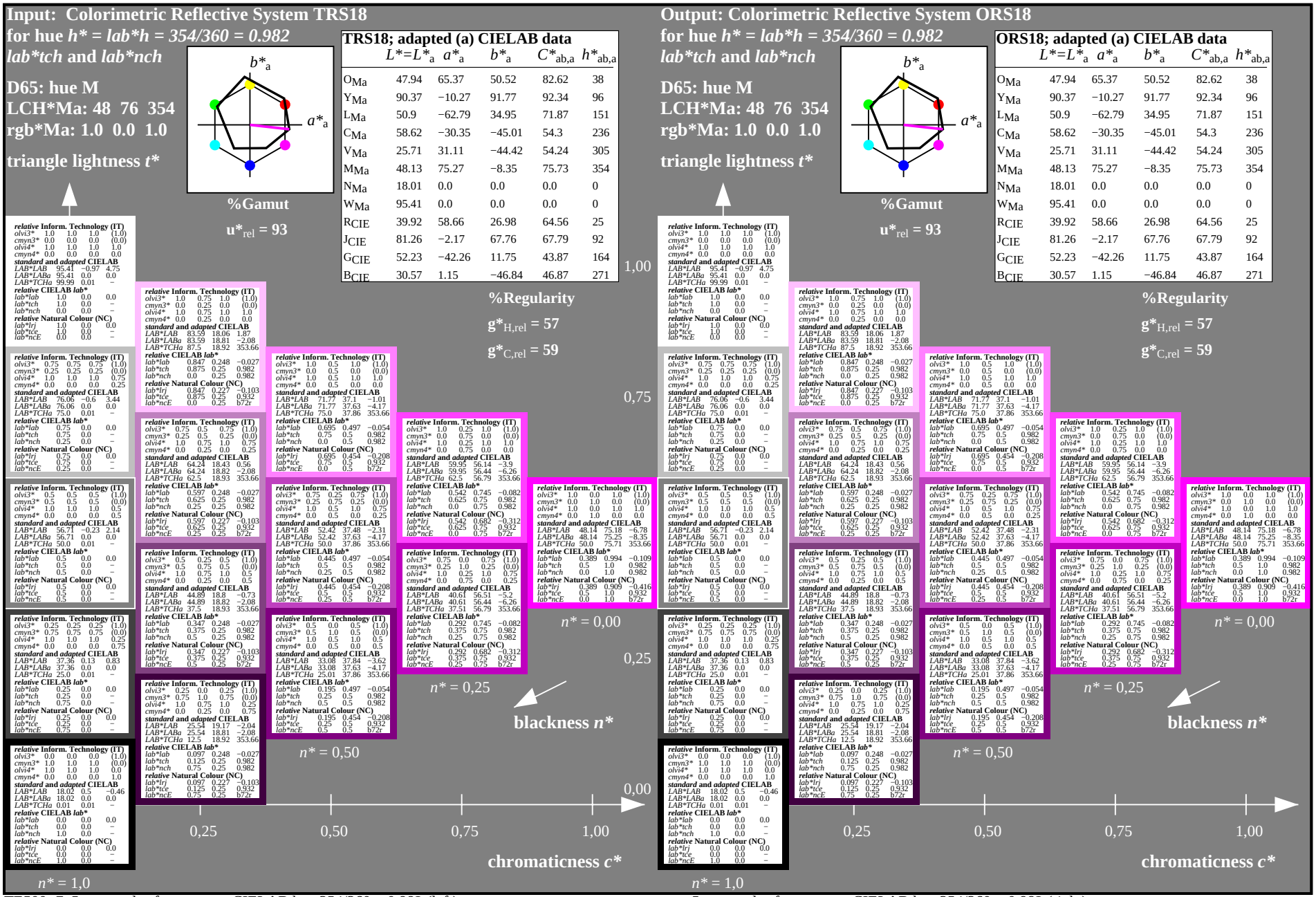

TE500−7, 5 step scales for constant CIELAB hue 322/360 = 0.895 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



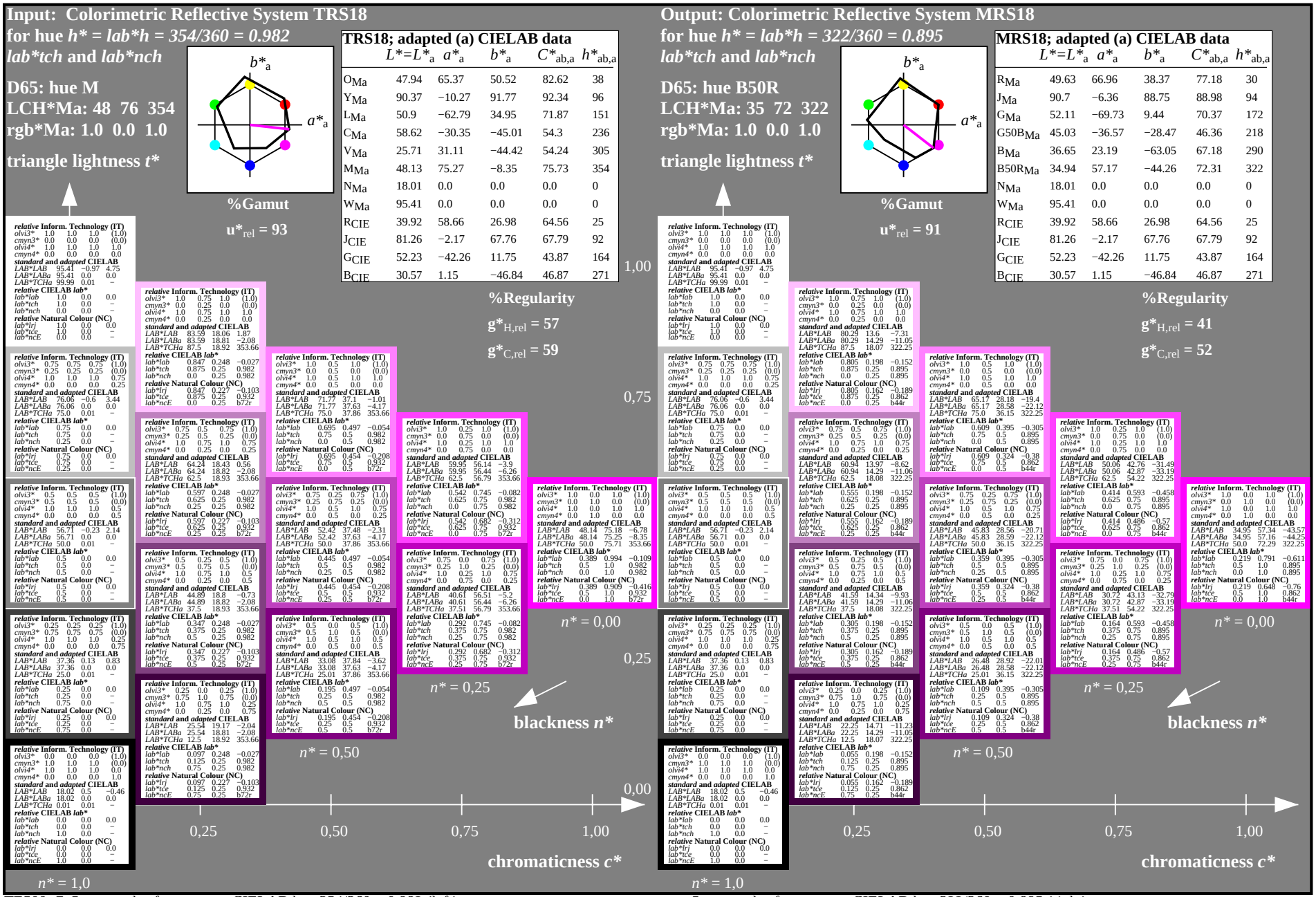

TE500−7, 5 step scales for constant CIELAB hue 322/360 = 0.895 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



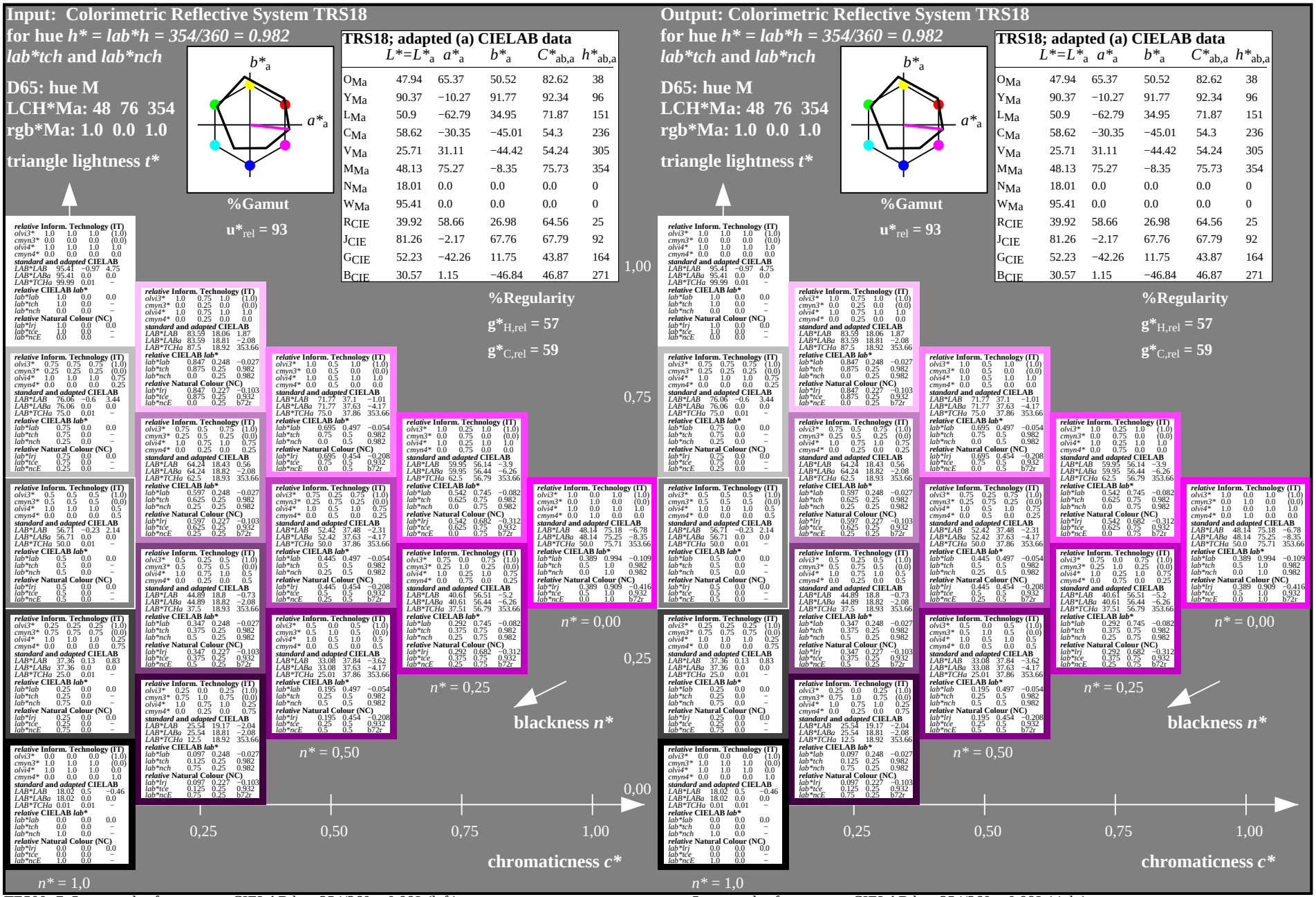

TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)



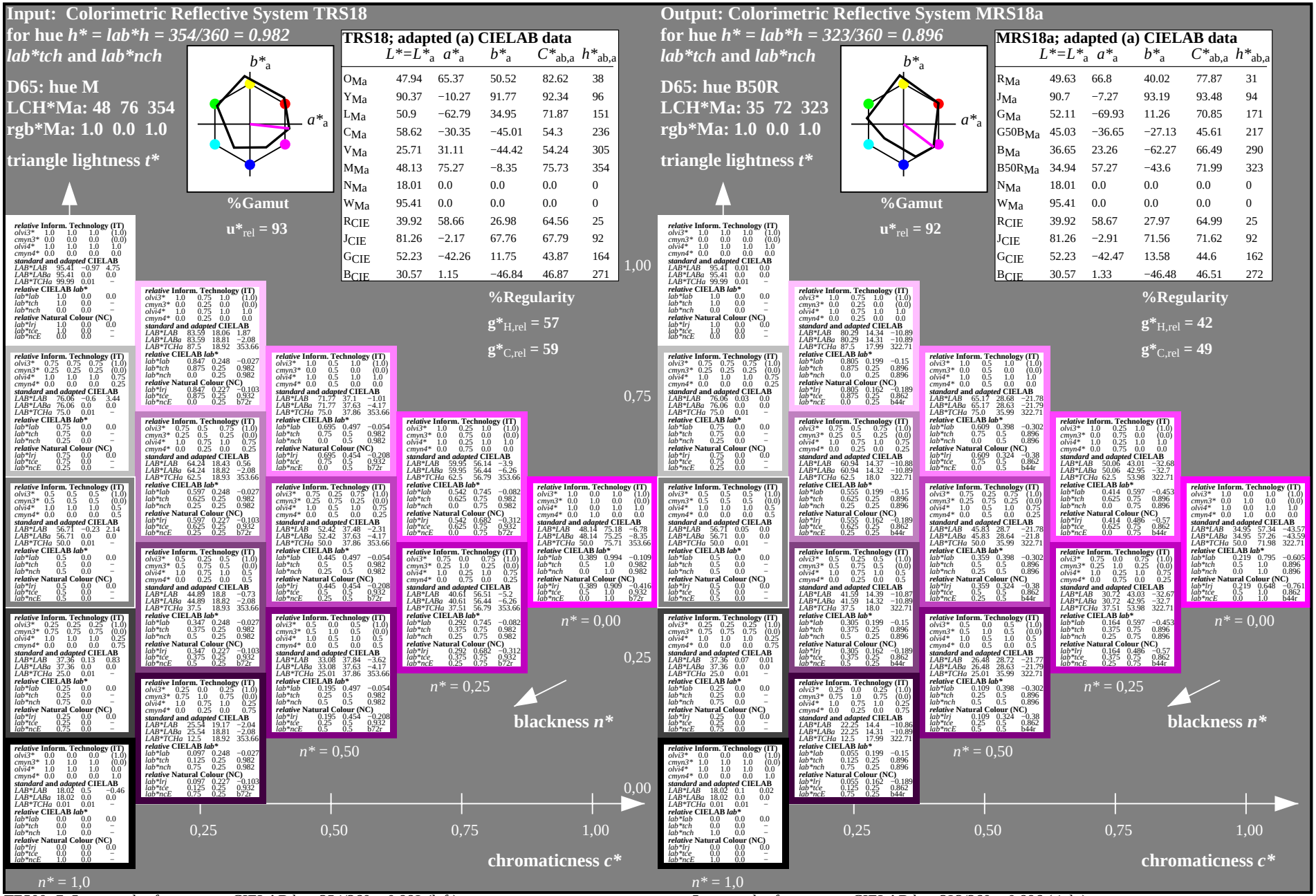

TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 322/360 = 0.895 (right)



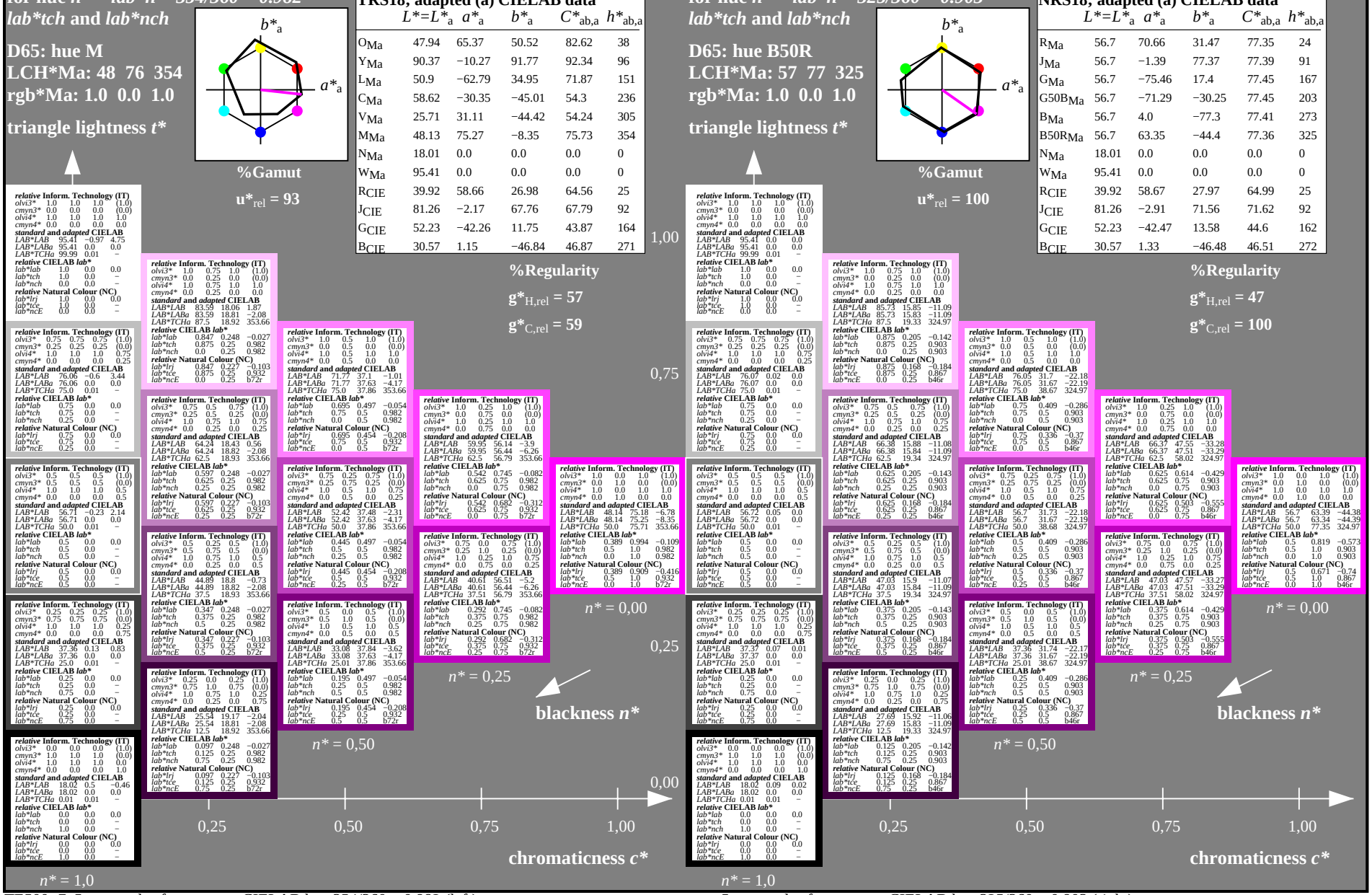

TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)




TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 323/360 = 0.896 (right)



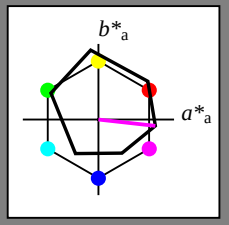

TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 354/360 = 0.982**
***lab*tch* and *lab*nch***

**D65: hue M**
**LCH*Ma: 48 76 354**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

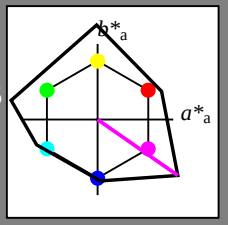
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

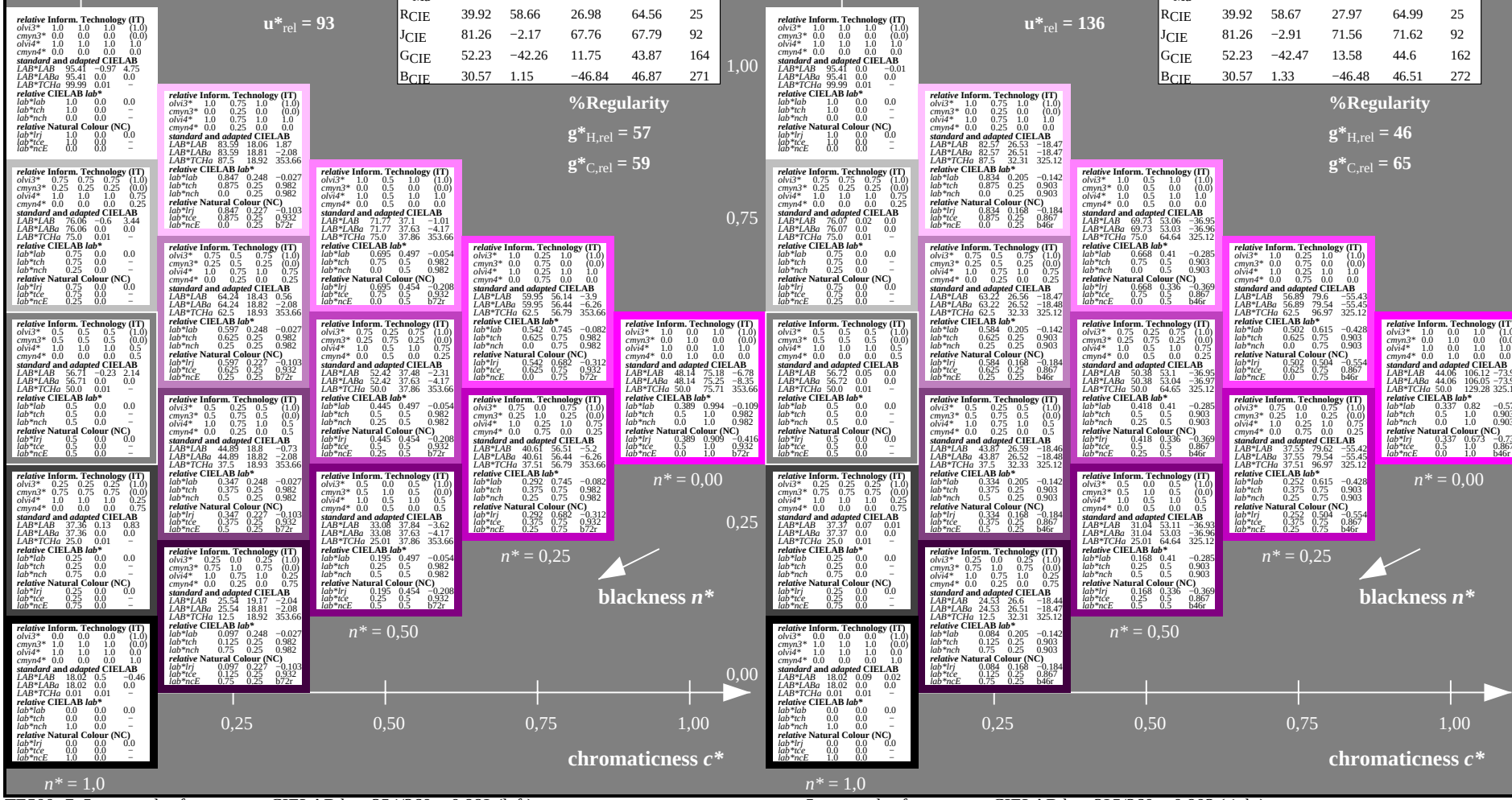
**NCS18; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

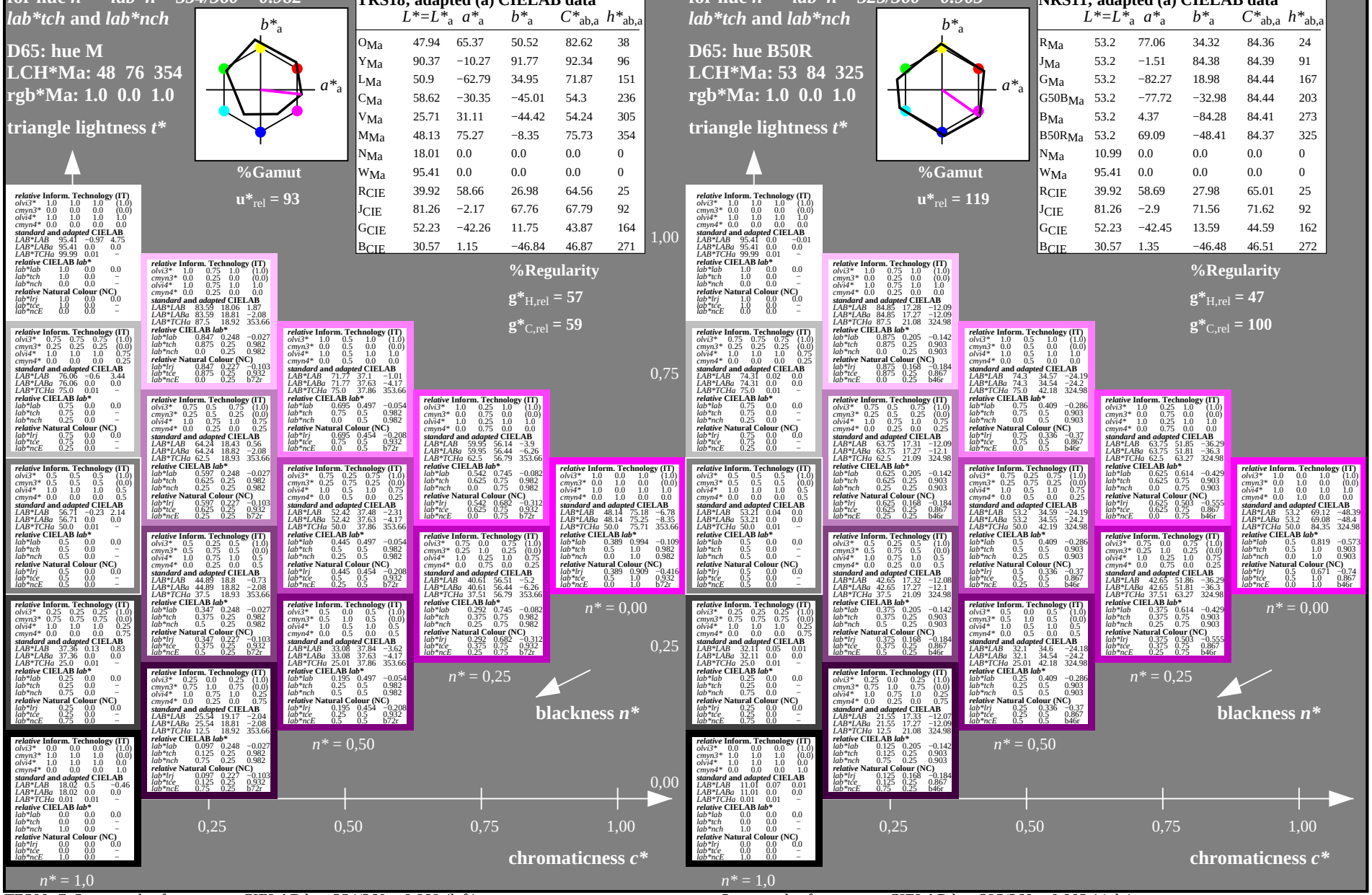
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



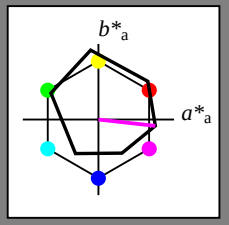

TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 354/360 = 0.982**
***lab*tch* and *lab*nch***

**D65: hue M**
**LCH*Ma: 48 76 354**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

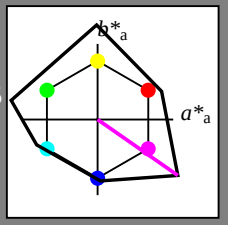
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

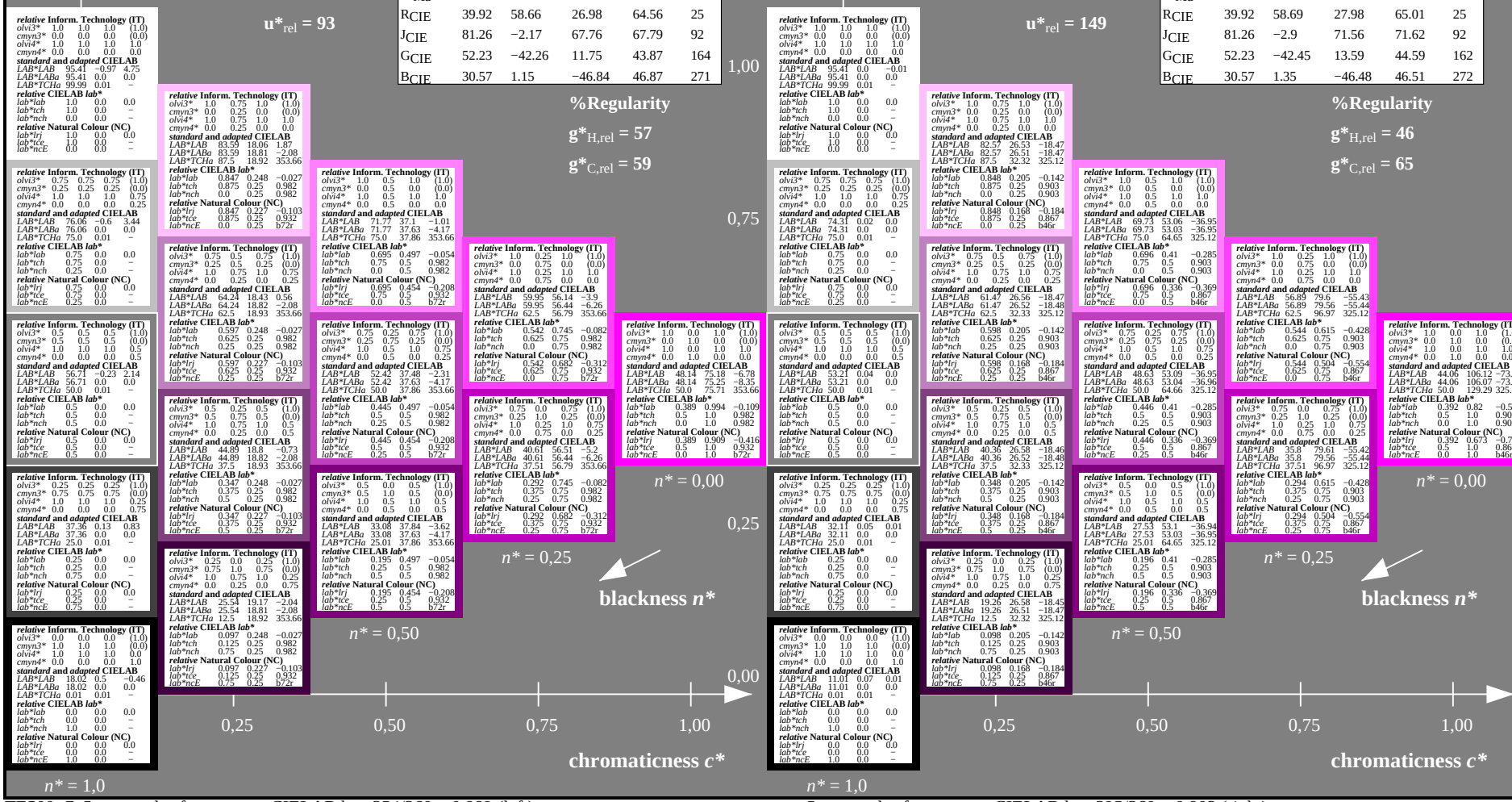
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

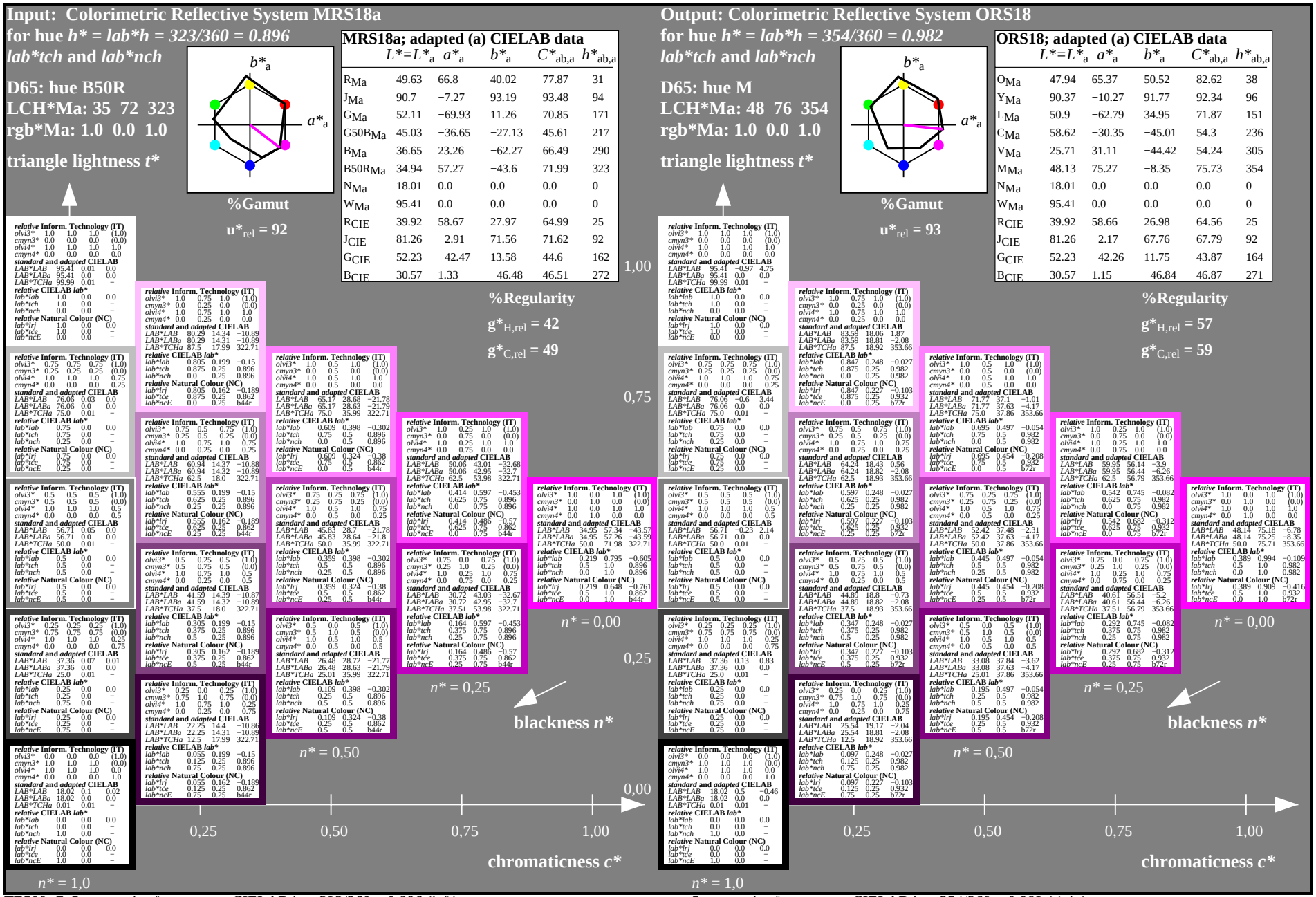
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



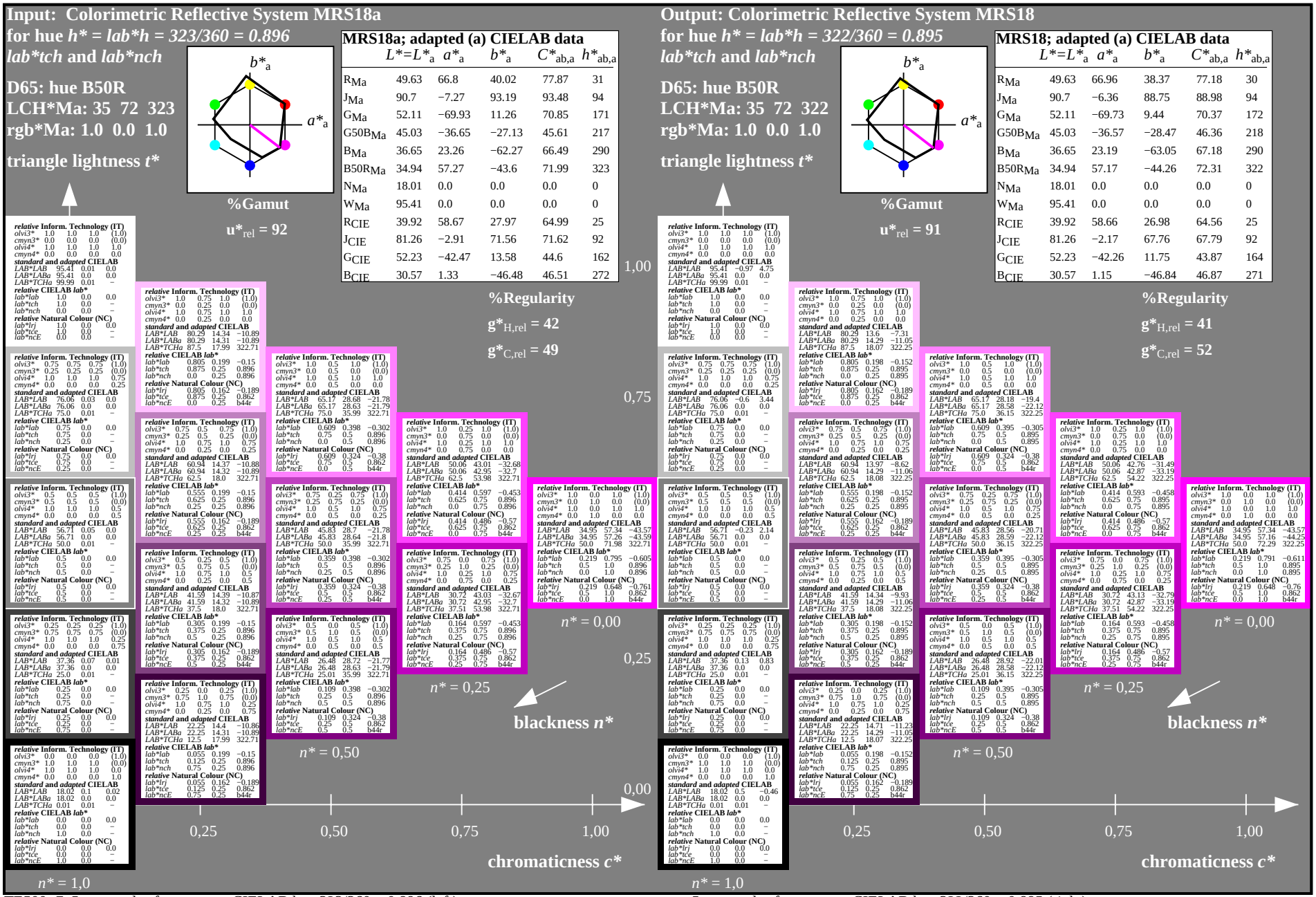

TE500−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



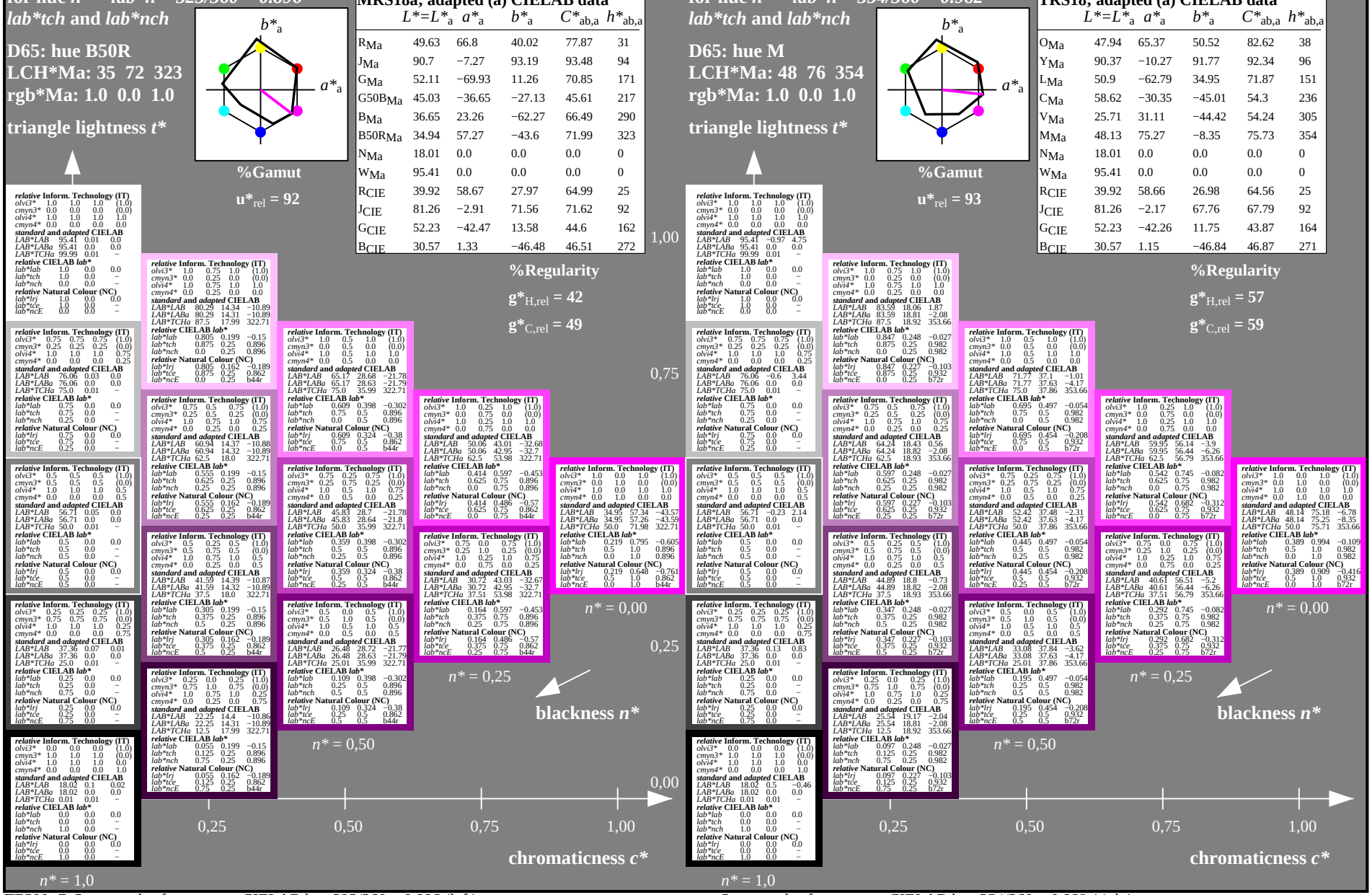

TE500−7, 5 step scales for constant CIELAB hue 323/360 = 0.896 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)




TE500−7, 5 step scales for constant CIELAB hue 323/360 = 0.896 (left)

5 step scales for constant CIELAB hue 322/360 = 0.895 (right)



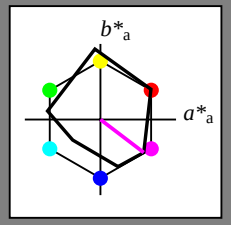

TE500−7, 5 step scales for constant CIELAB hue 323/360 = 0.896 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 323/360 = 0.896**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 35 72 323**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

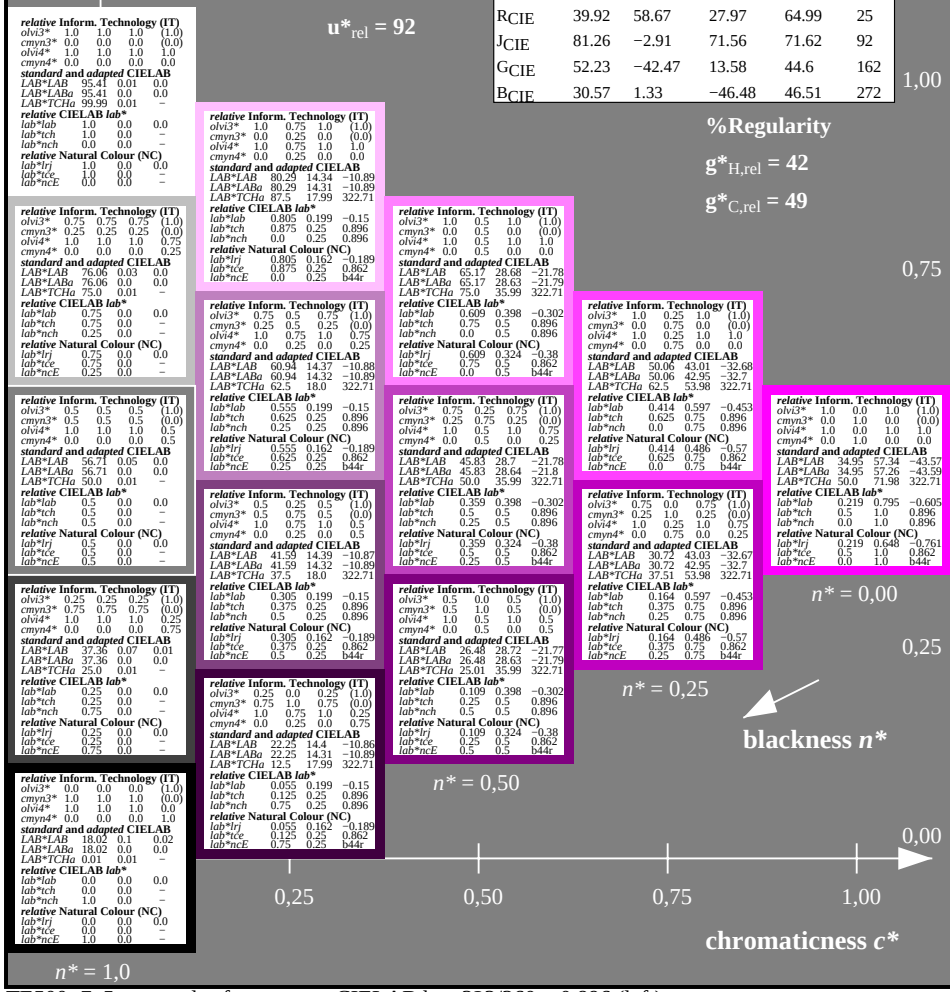
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

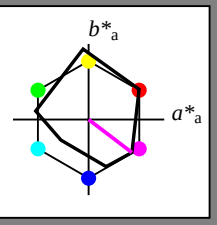
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 323/360 = 0.896**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 35 72 323**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

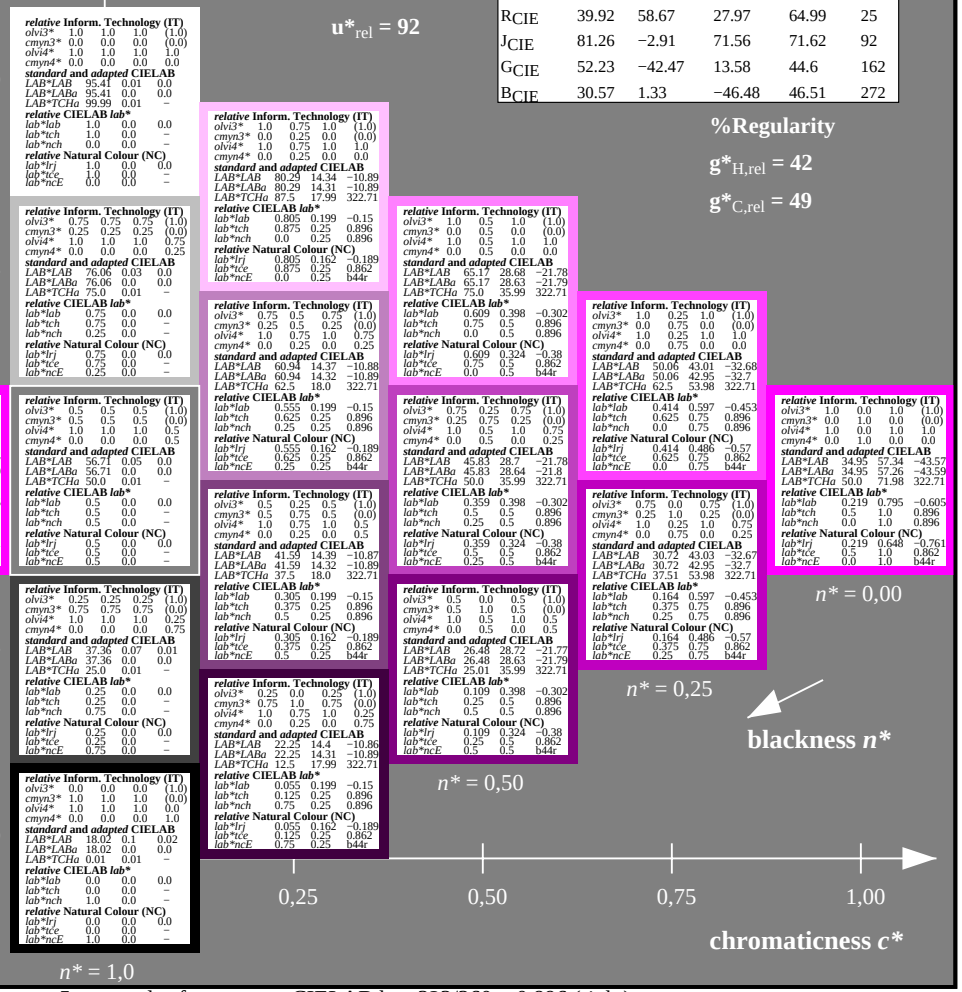
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

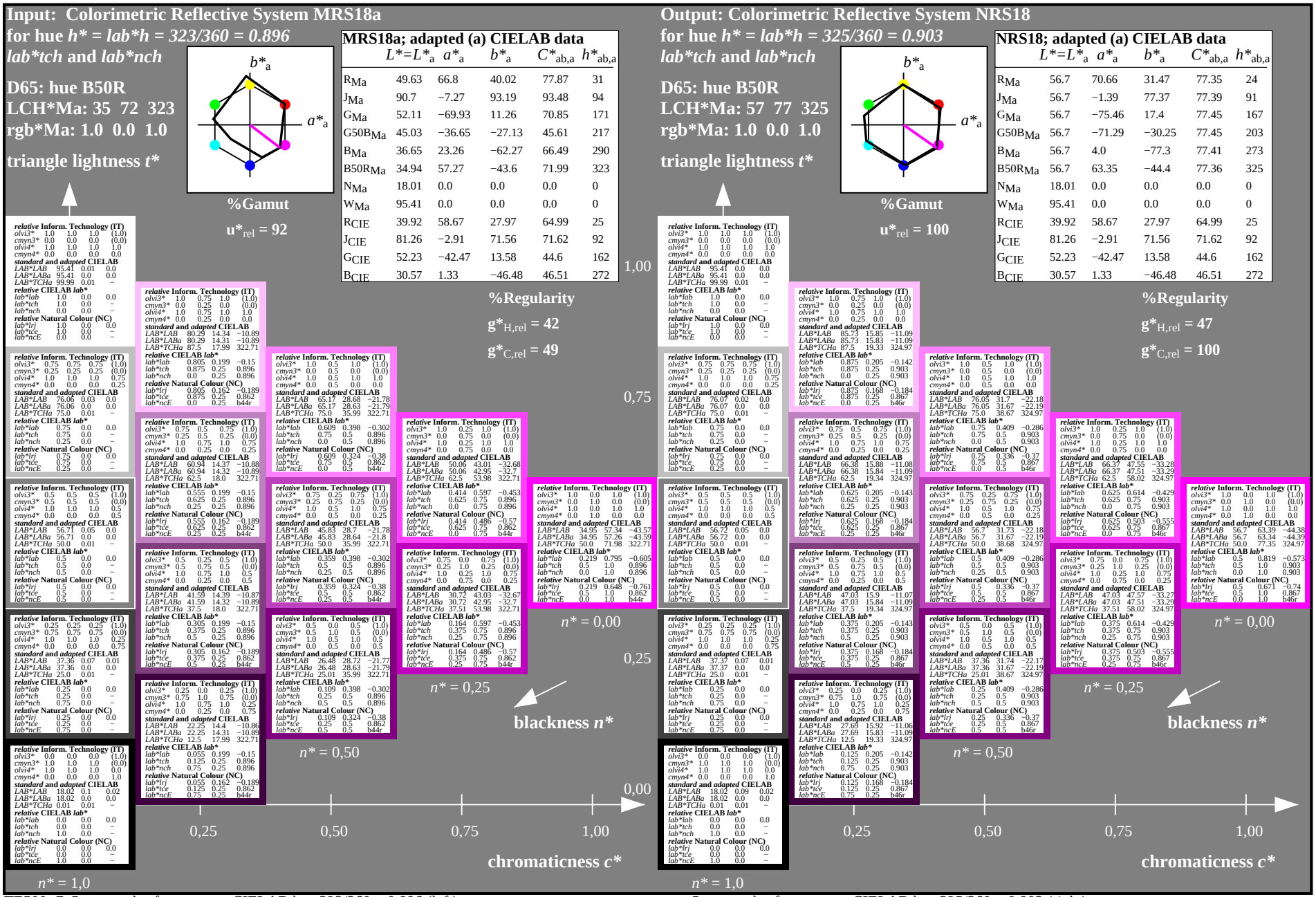
**g*$_{H,rel}$ = 42**

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




TE500−7, 5 step scales for constant CIELAB hue 323/360 = 0.896 (left)

5 step scales for constant CIELAB hue 323/360 = 0.896 (right)



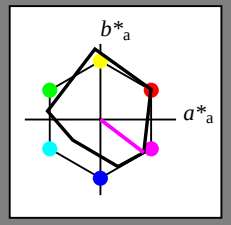

TE500−7, 5 step scales for constant CIELAB hue 323/360 = 0.896 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 323/360 = 0.896**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 35 72 323**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

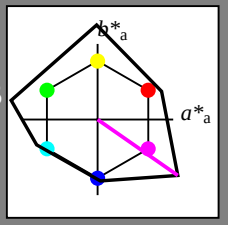
**g*$_{H,rel}$ = 42**

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

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

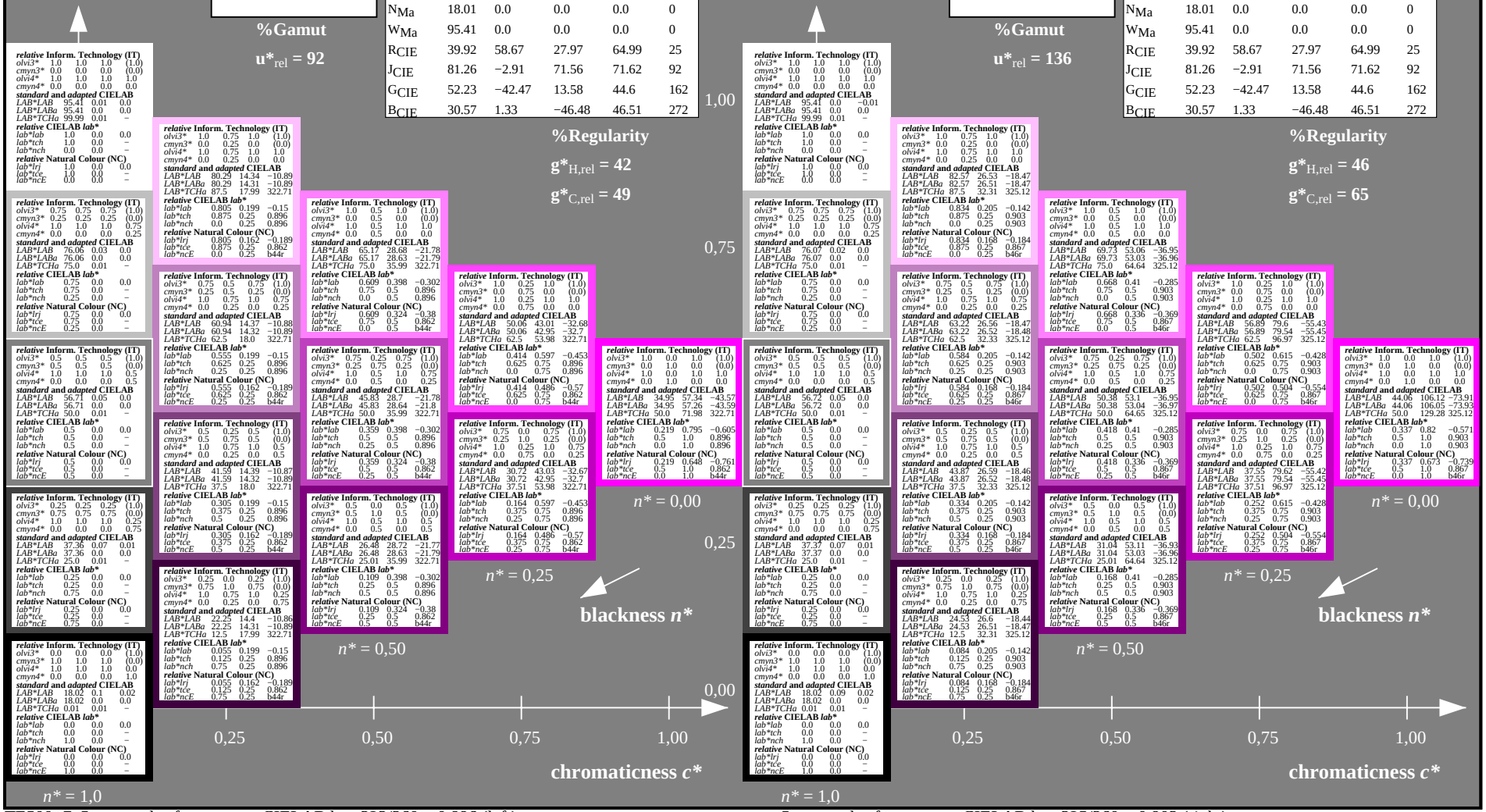
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

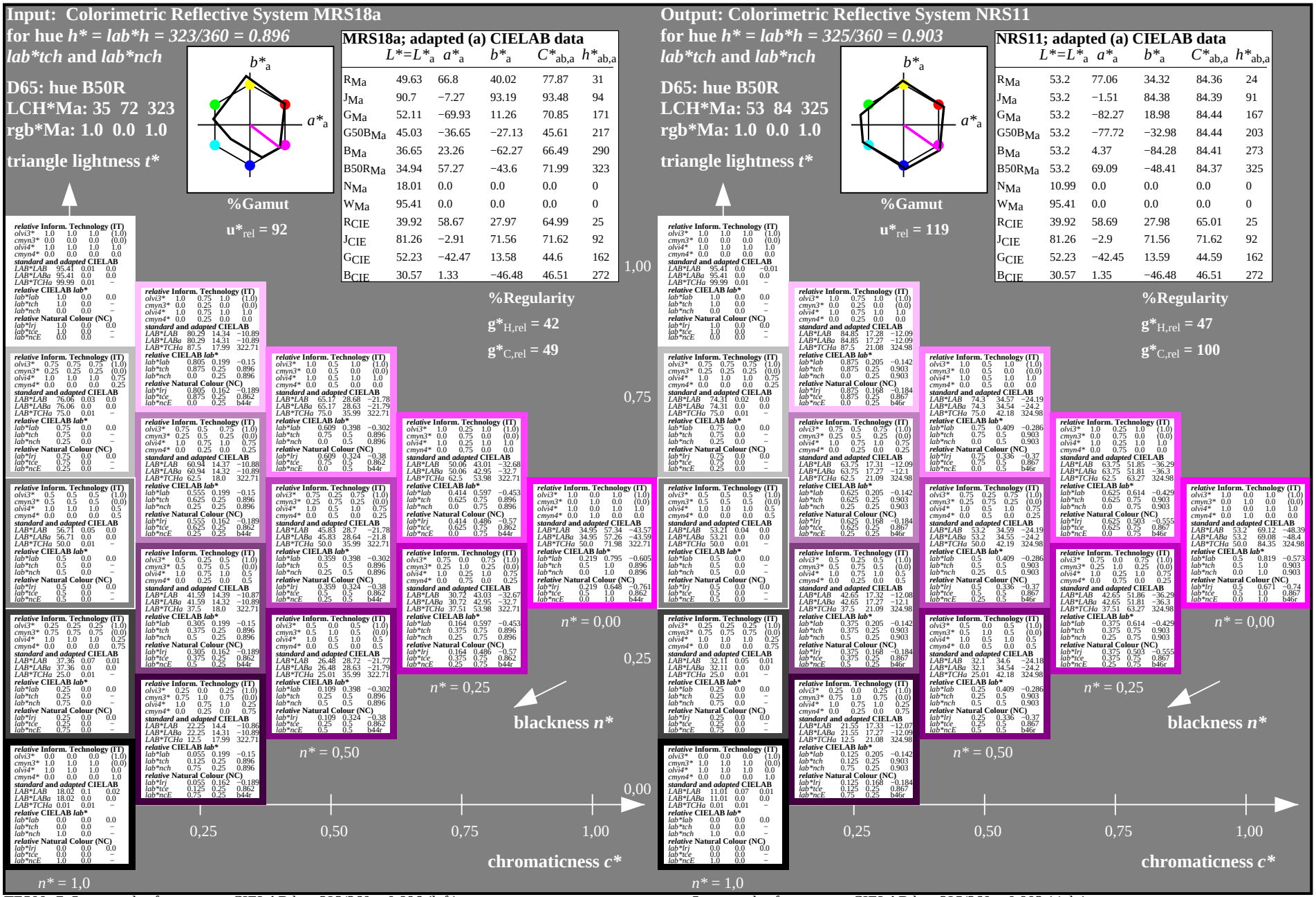
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 323/360 = 0.896 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



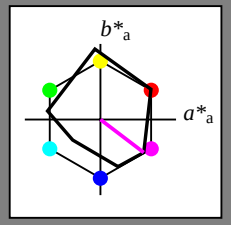

TE500−7, 5 step scales for constant CIELAB hue 323/360 = 0.896 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 323/360 = 0.896**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 35 72 323**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

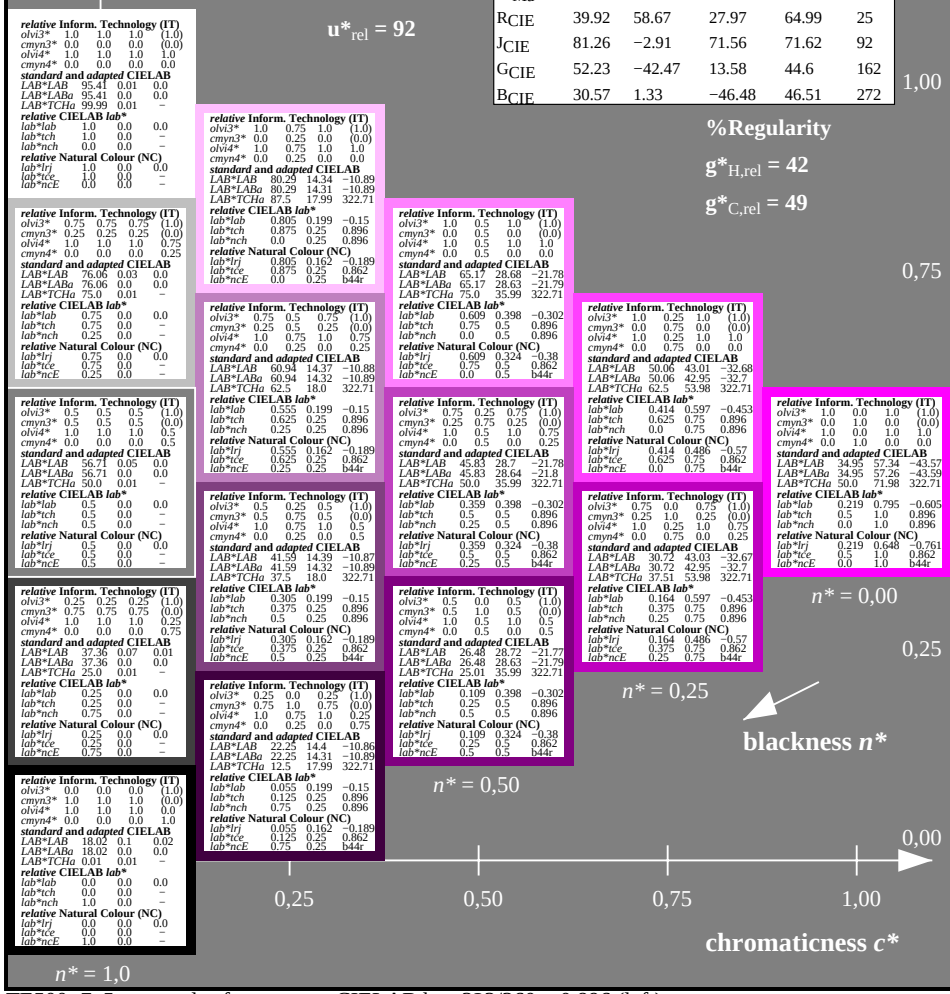
**MRS18a; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

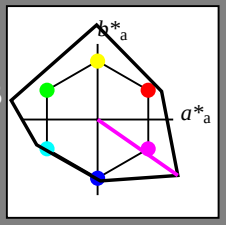
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

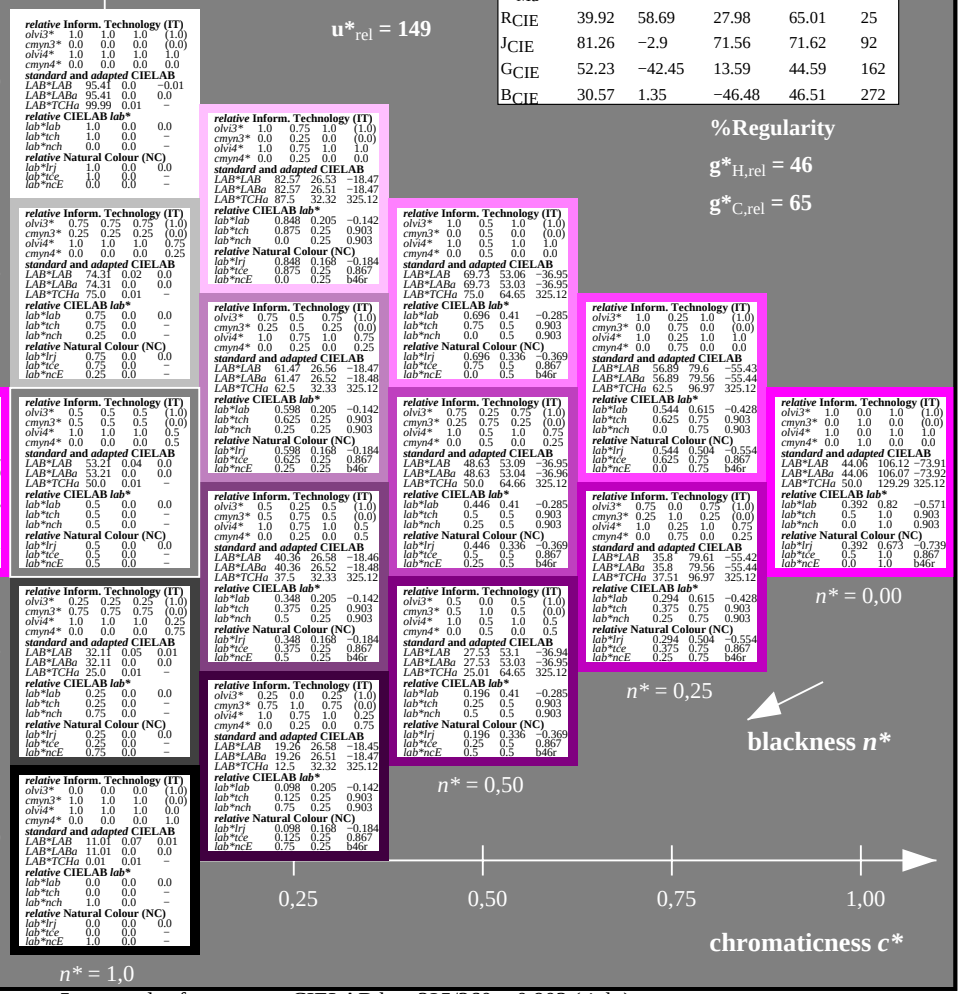
**NCS11; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

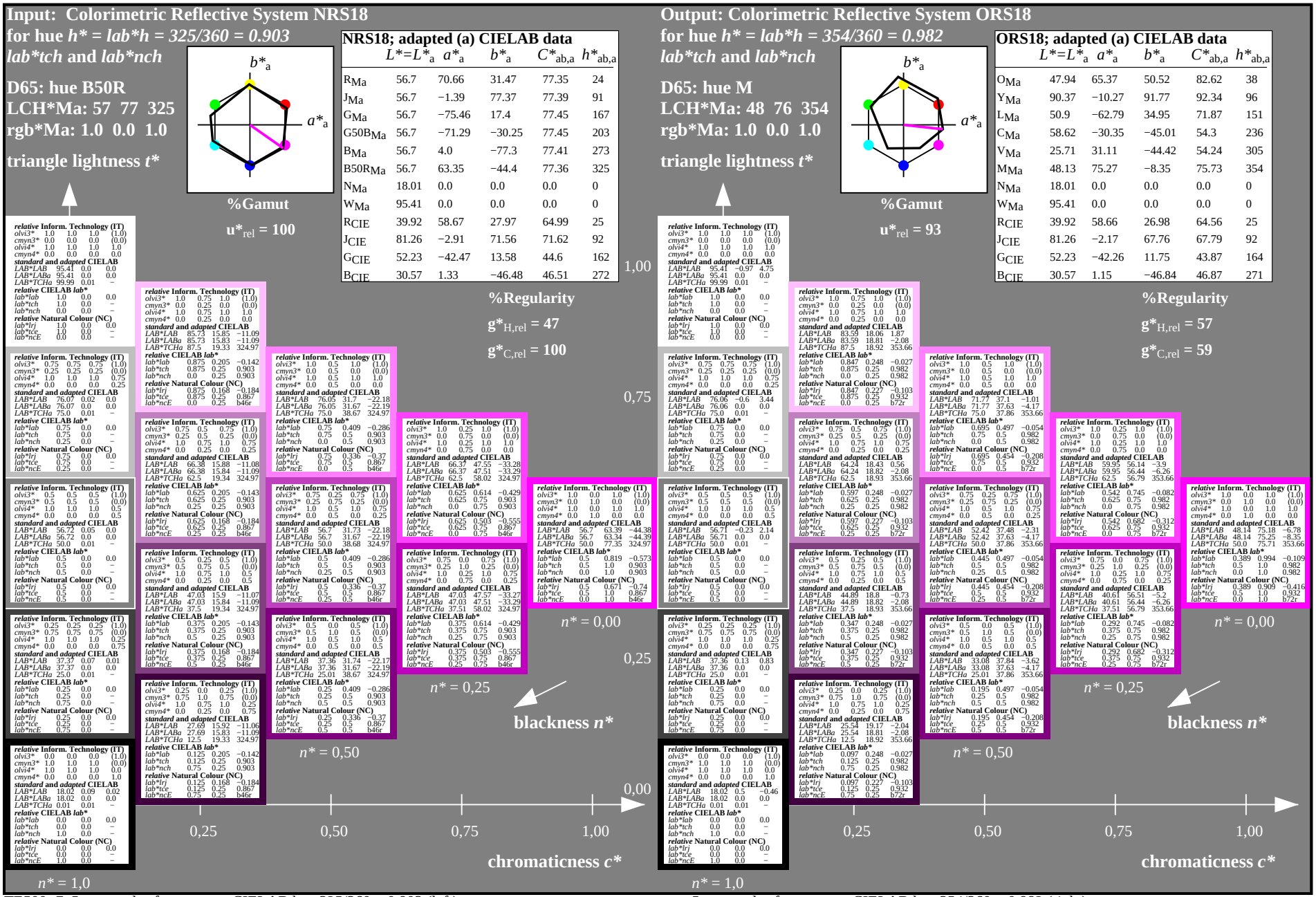
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



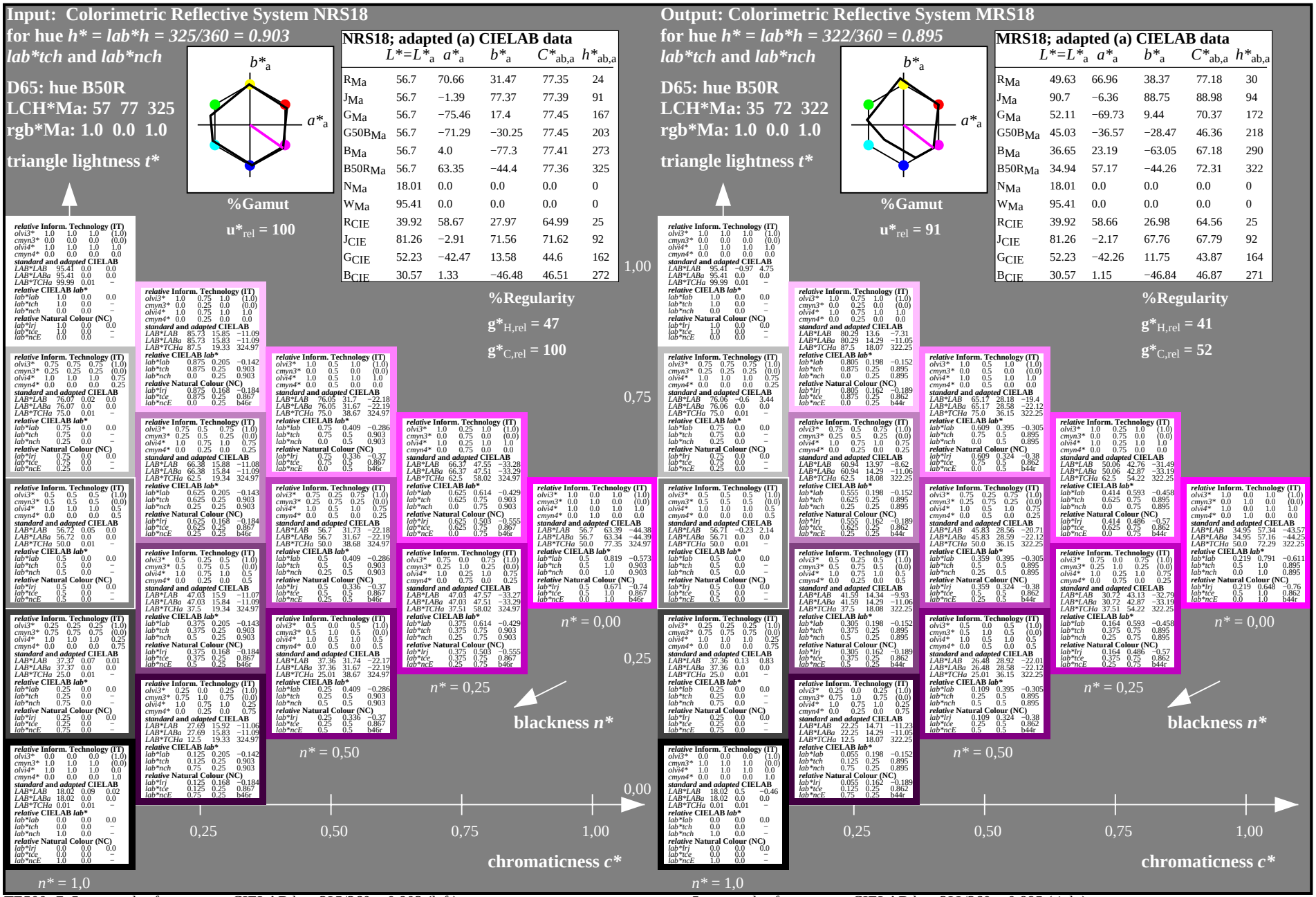

TE500−7, 5 step scales for constant CIELAB hue 323/360 = 0.896 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



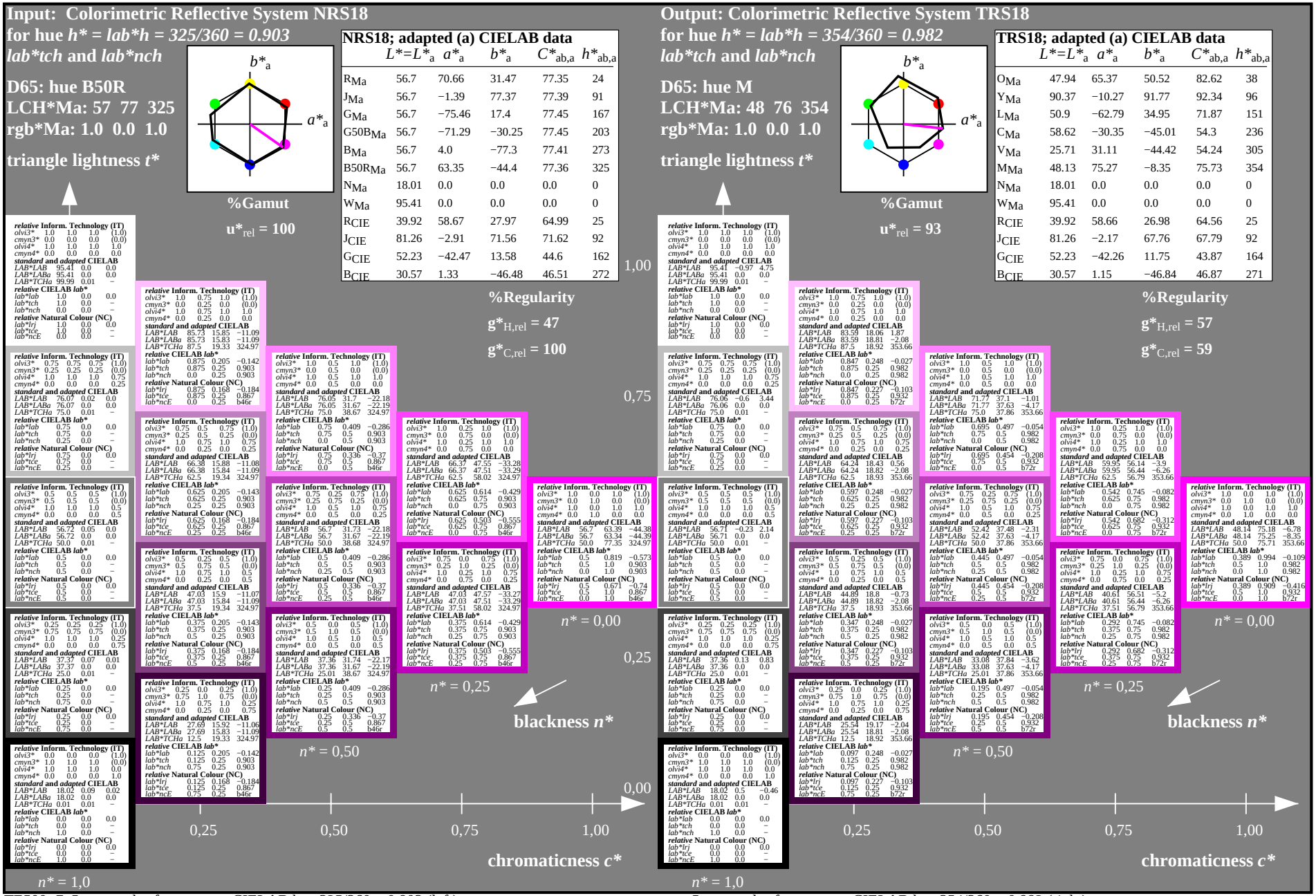

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)




TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 322/360 = 0.895 (right)



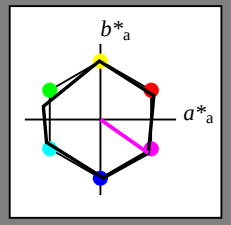

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 57 77 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

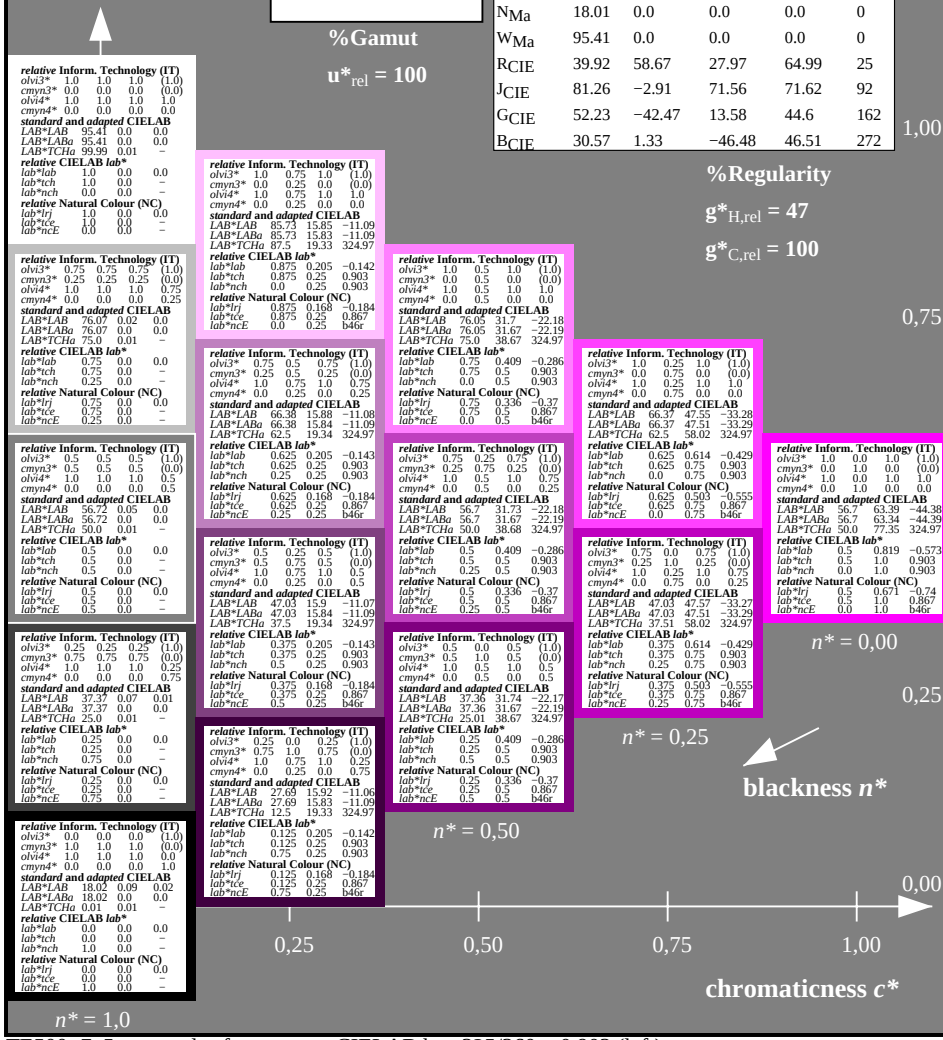
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

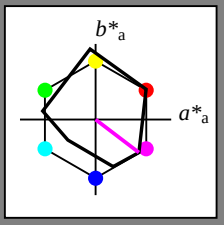
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 323/360 = 0.896**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 35 72 323**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

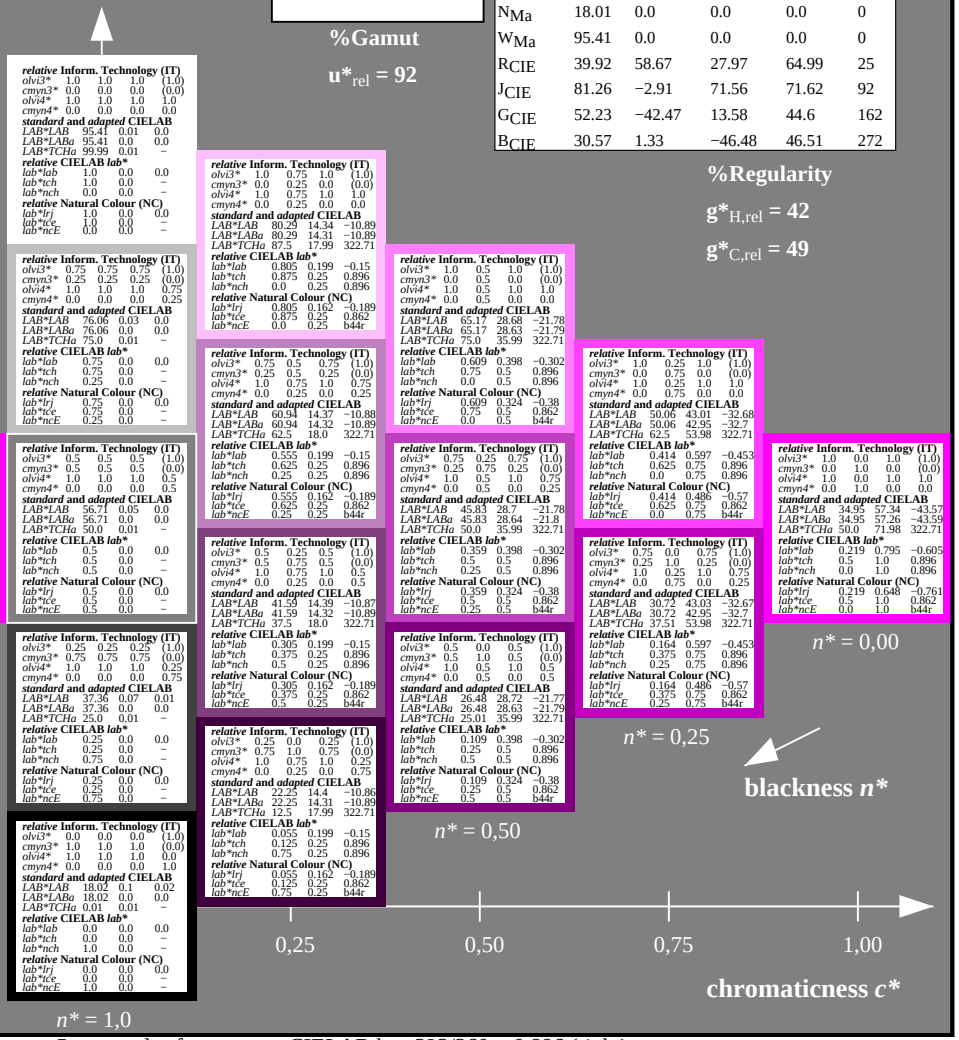
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



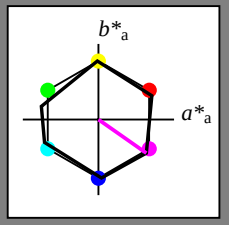

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 323/360 = 0.896 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 57 77 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

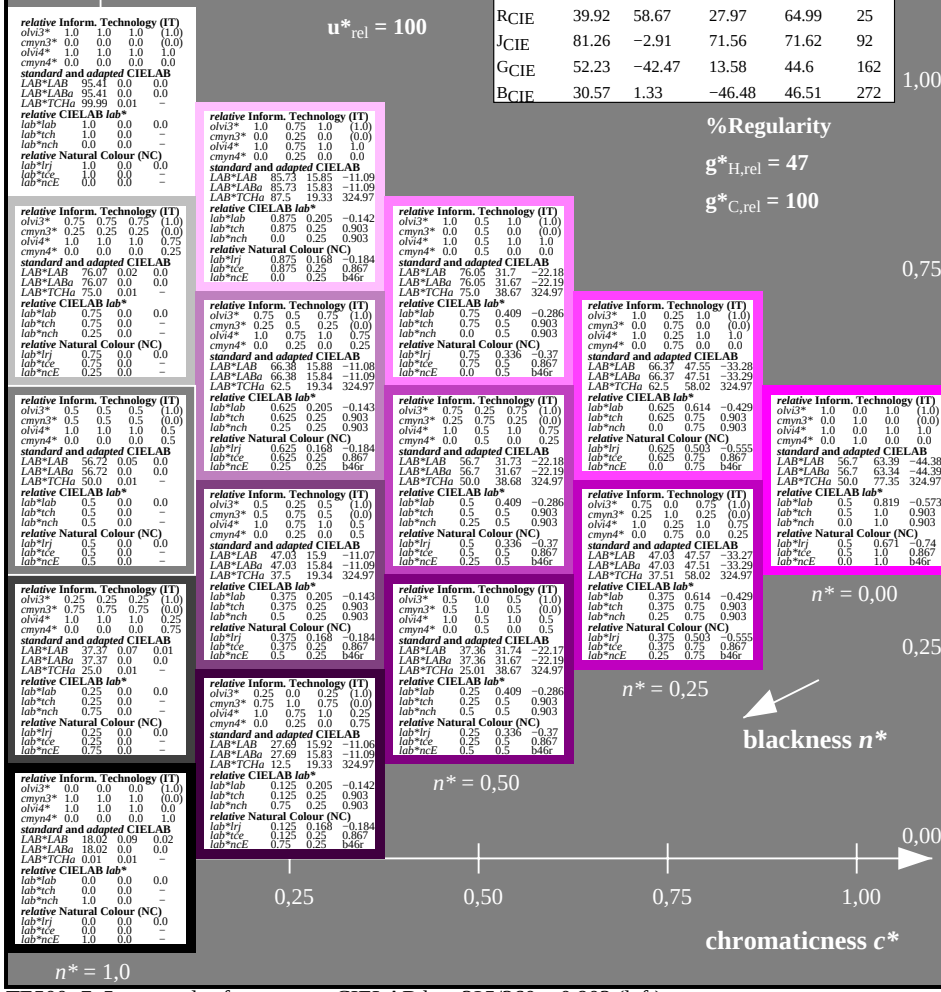
**NRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

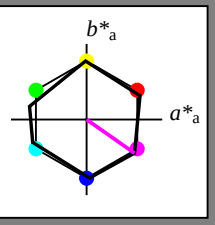
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 57 77 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

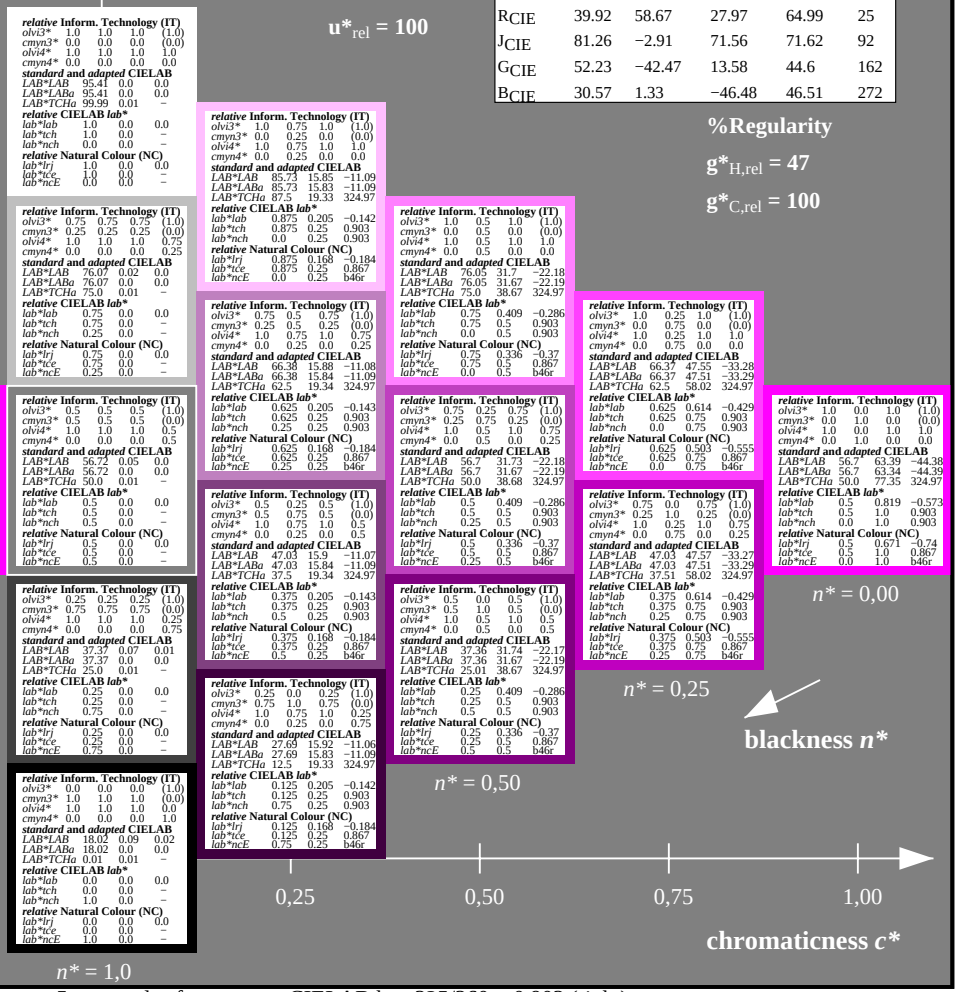
**NRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

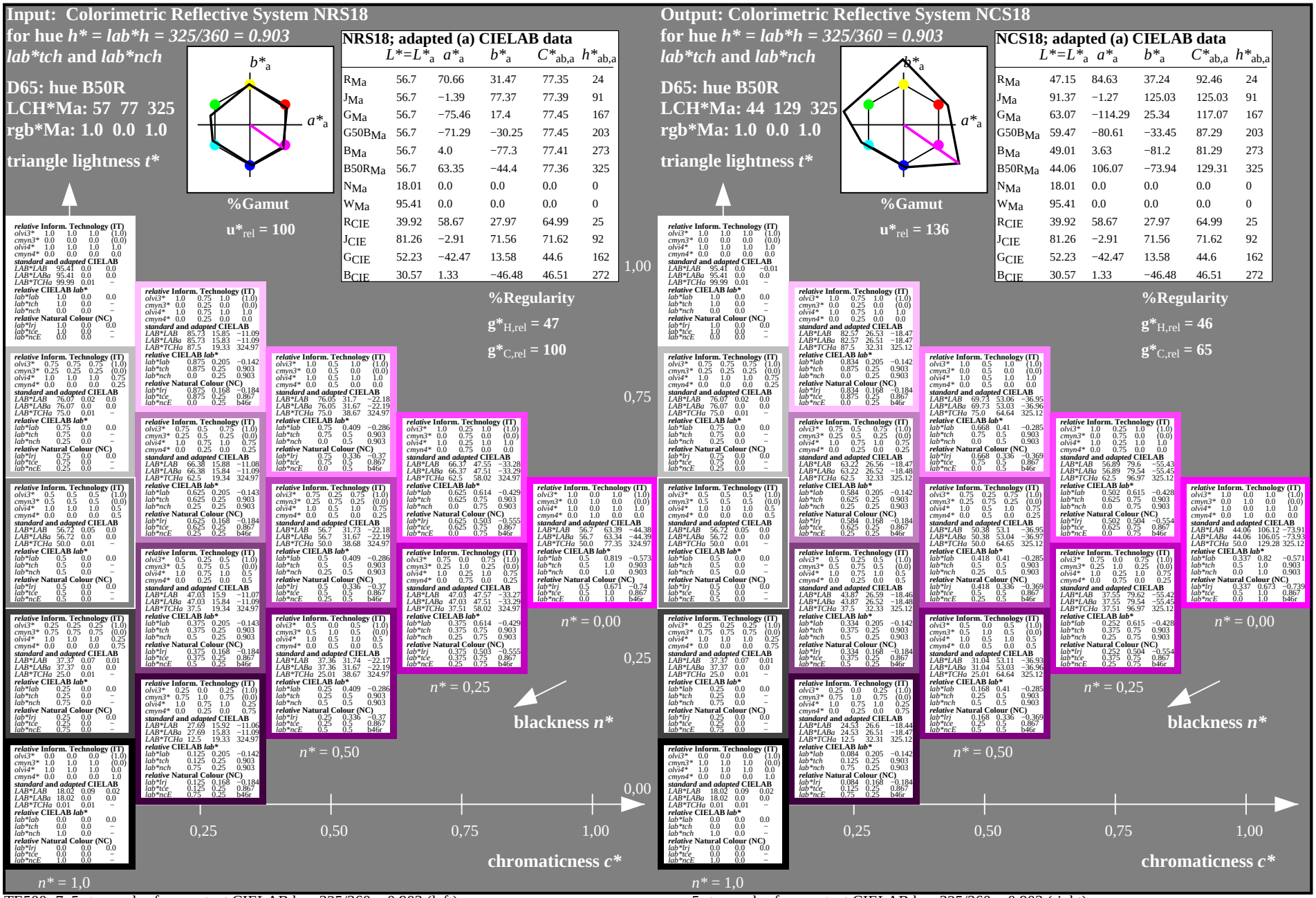
**g*$_{H,rel}$ = 47**

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




TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



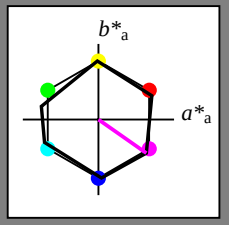

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 57 77 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

**NRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

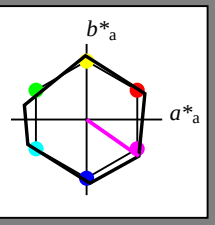
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 53 84 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

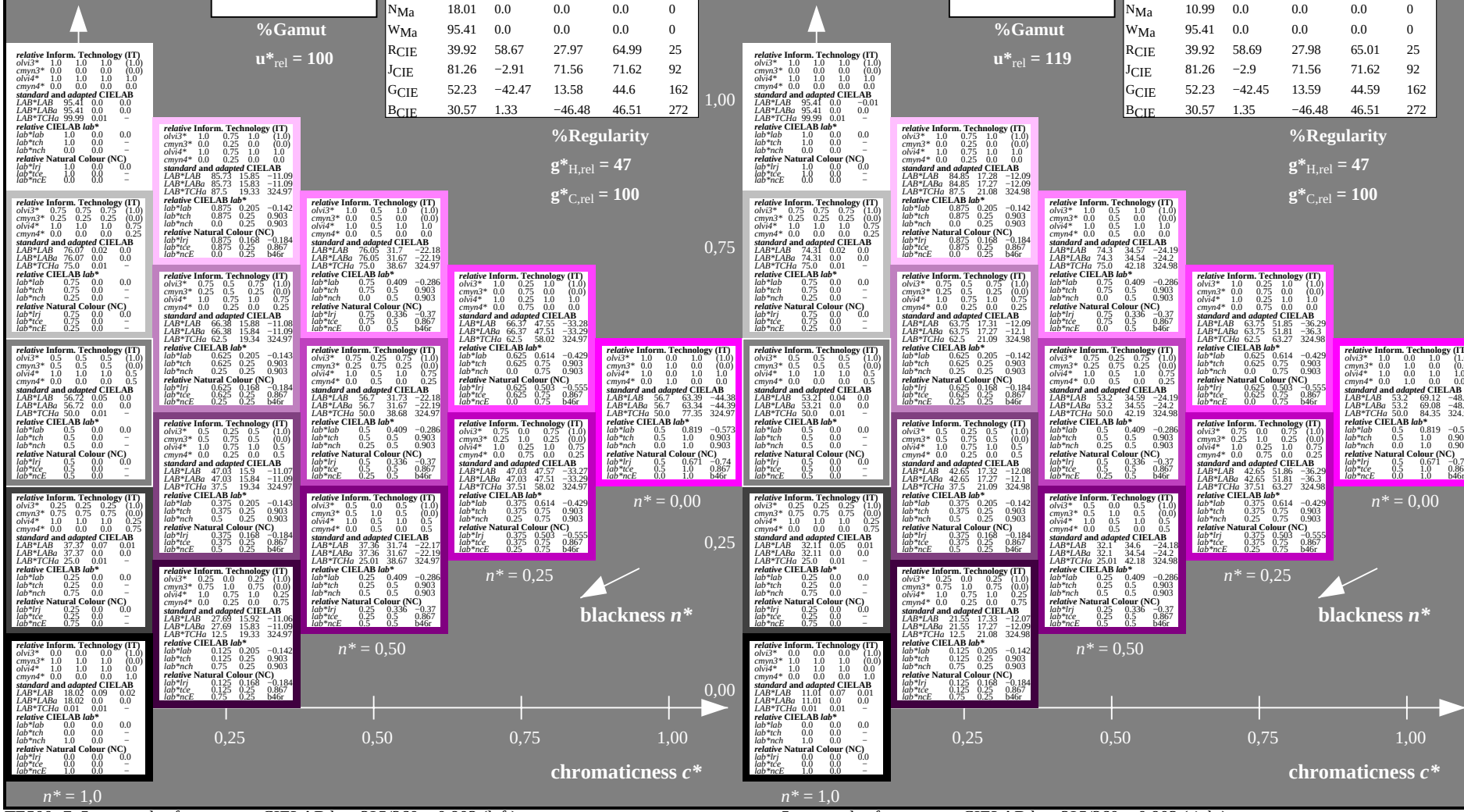
**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



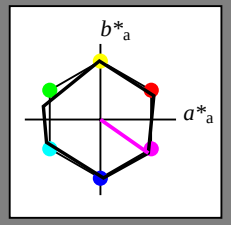

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 57 77 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

**NRS18; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

1,00

**%Regularity**

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

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

0,75

0,25

0,00

*n* = 0,00*

*n* = 0,25*

*n* = 0,50*

*n* = 1,0*

**blackness *n****

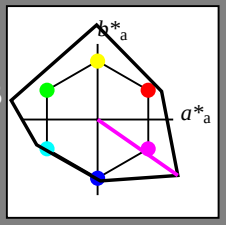
0,25 0,50 0,75 1,00

**chromaticness *c****

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

**NCS11; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

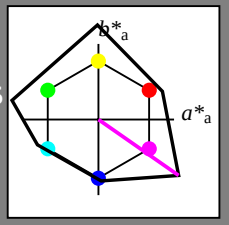
TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

**NCS18; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

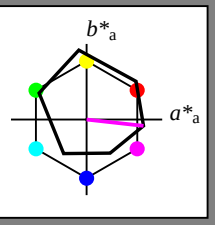
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

**Output: Colorimetric 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**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

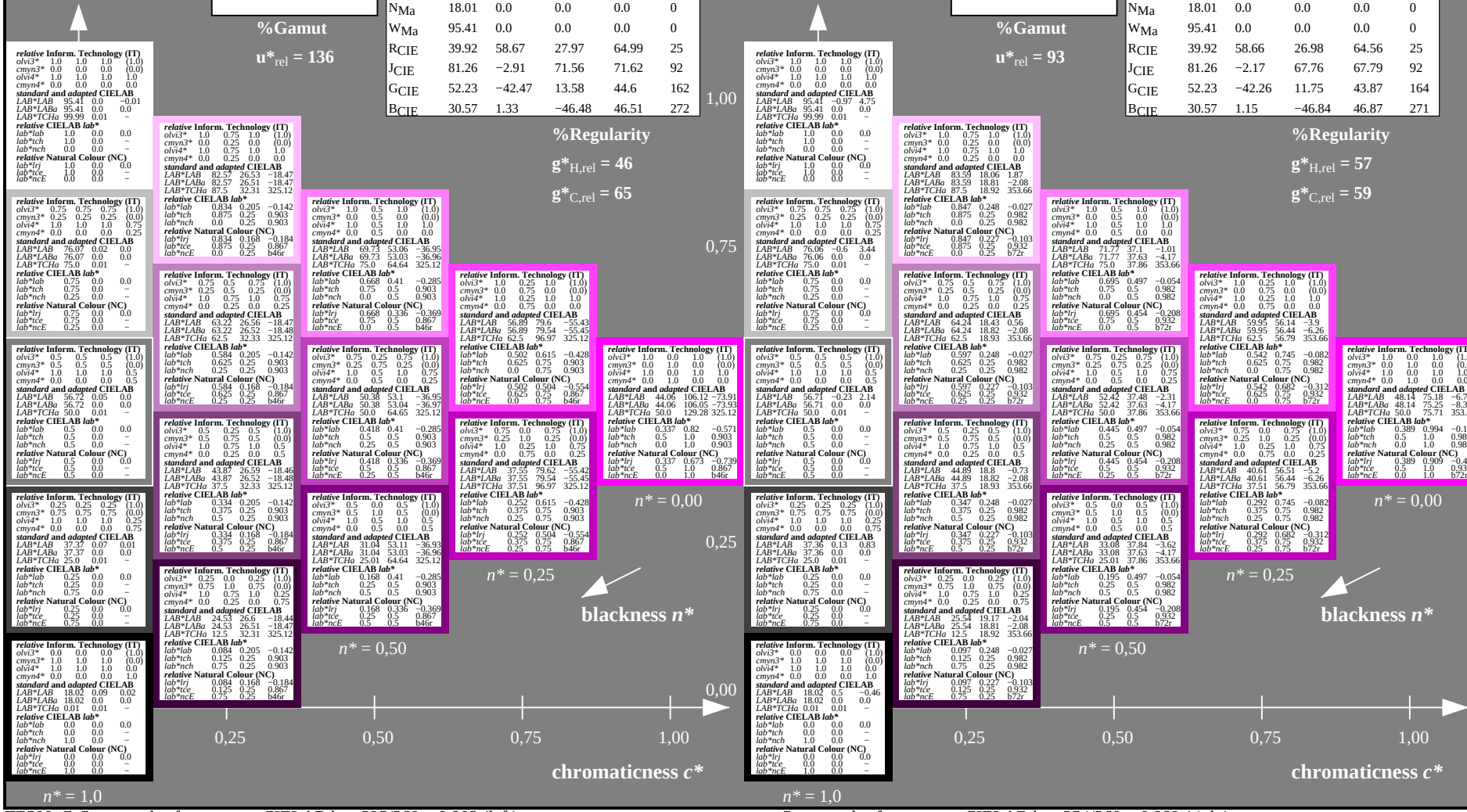
**ORS18; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

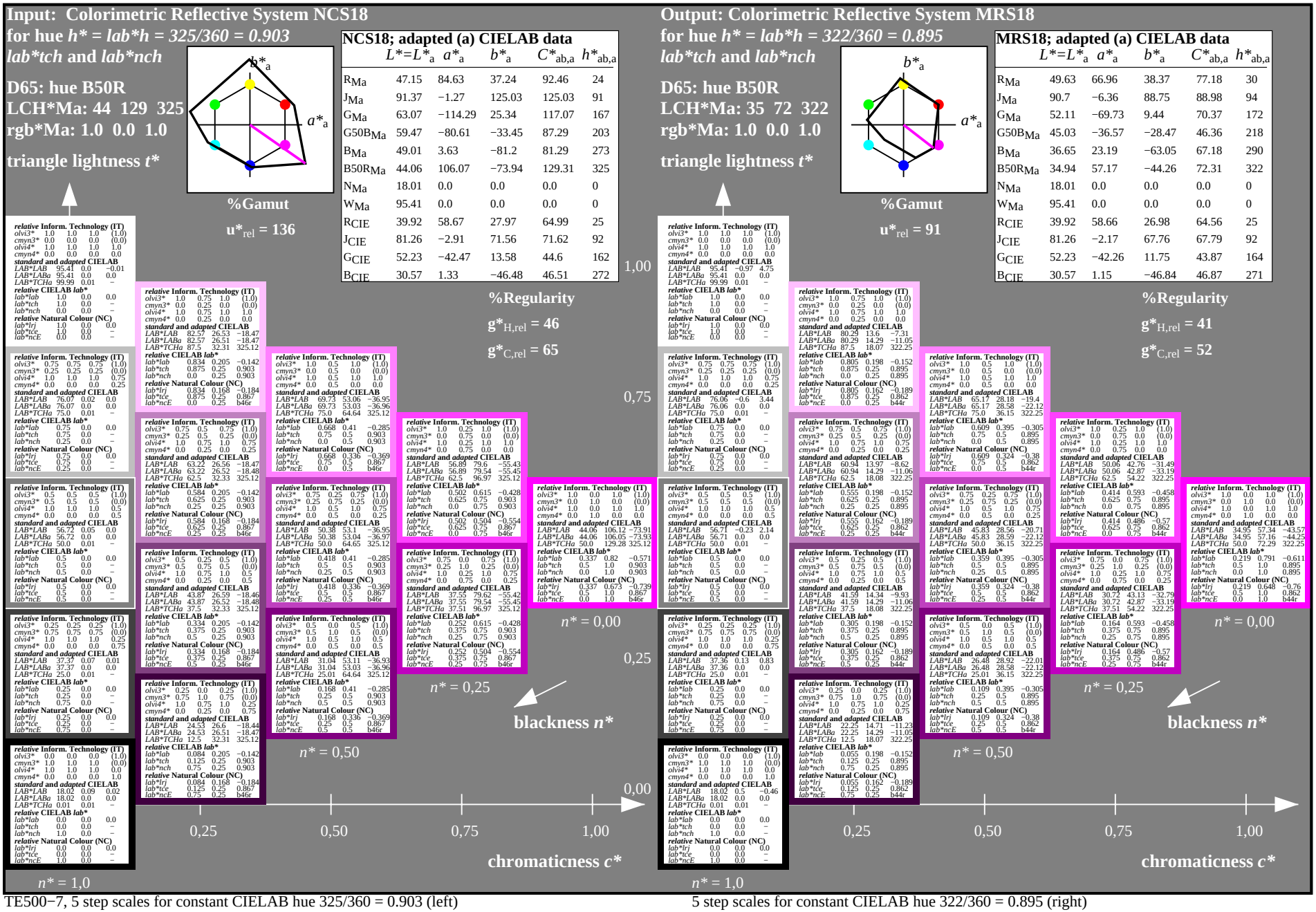
**g*$_{H,rel}$ = 57**

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




TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)




TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

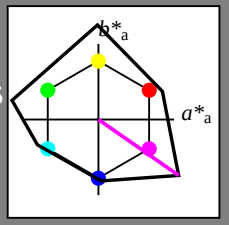
5 step scales for constant CIELAB hue 322/360 = 0.895 (right)

## Input: Colorimetric Reflective System NCS18

**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

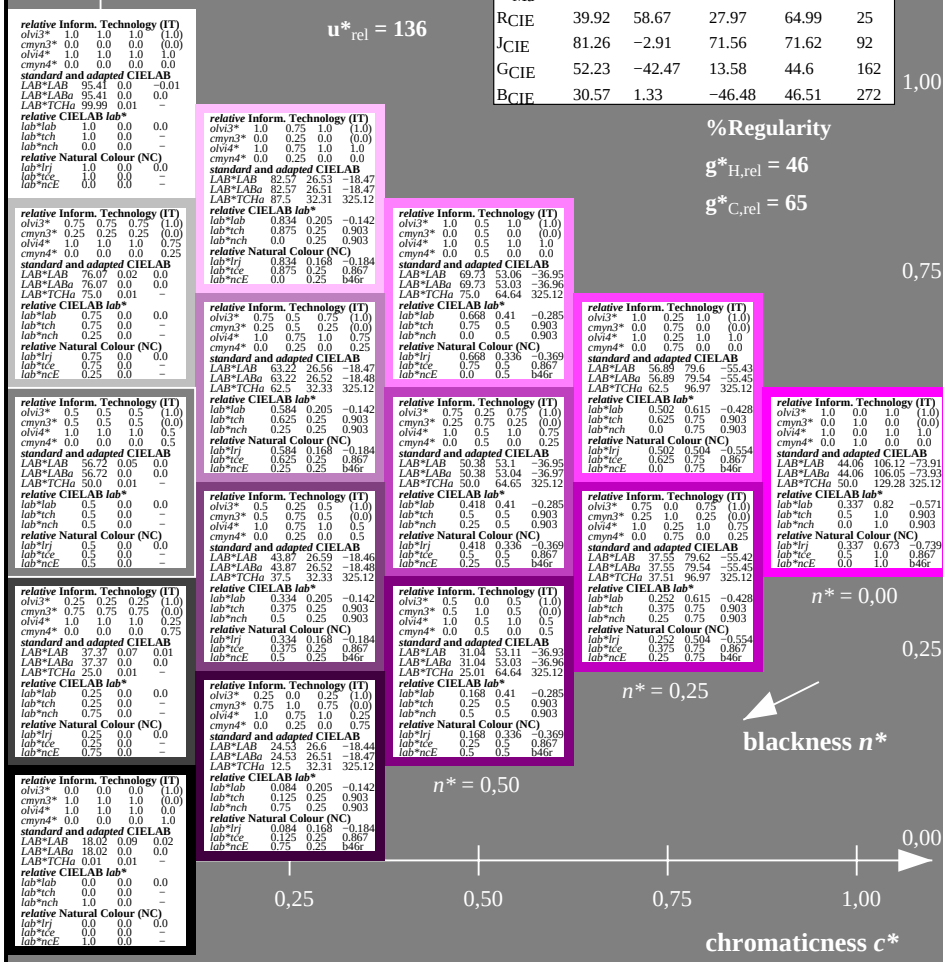
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

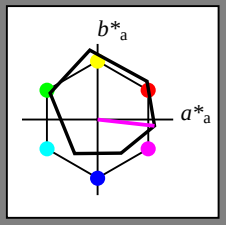



## Output: Colorimetric Reflective System TRS18

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

**D65: hue M**
**LCH*Ma: 48 76 354**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

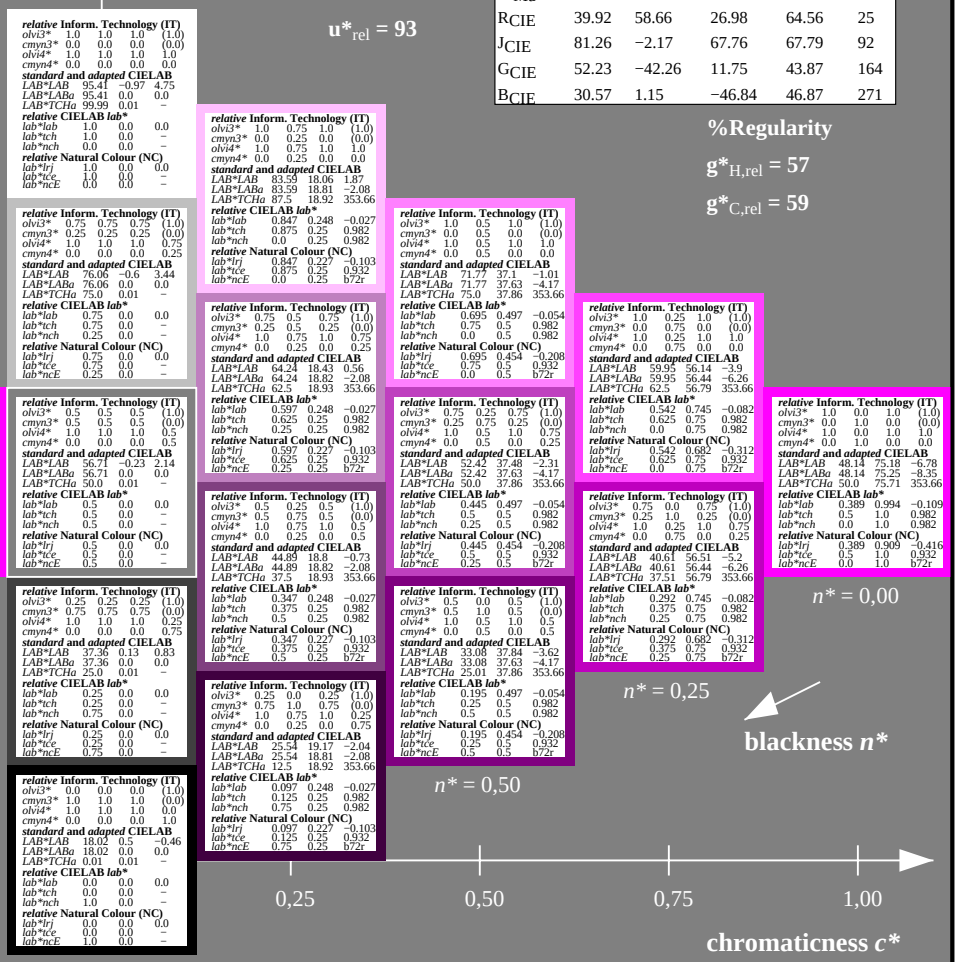
**TRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



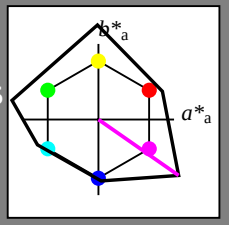

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

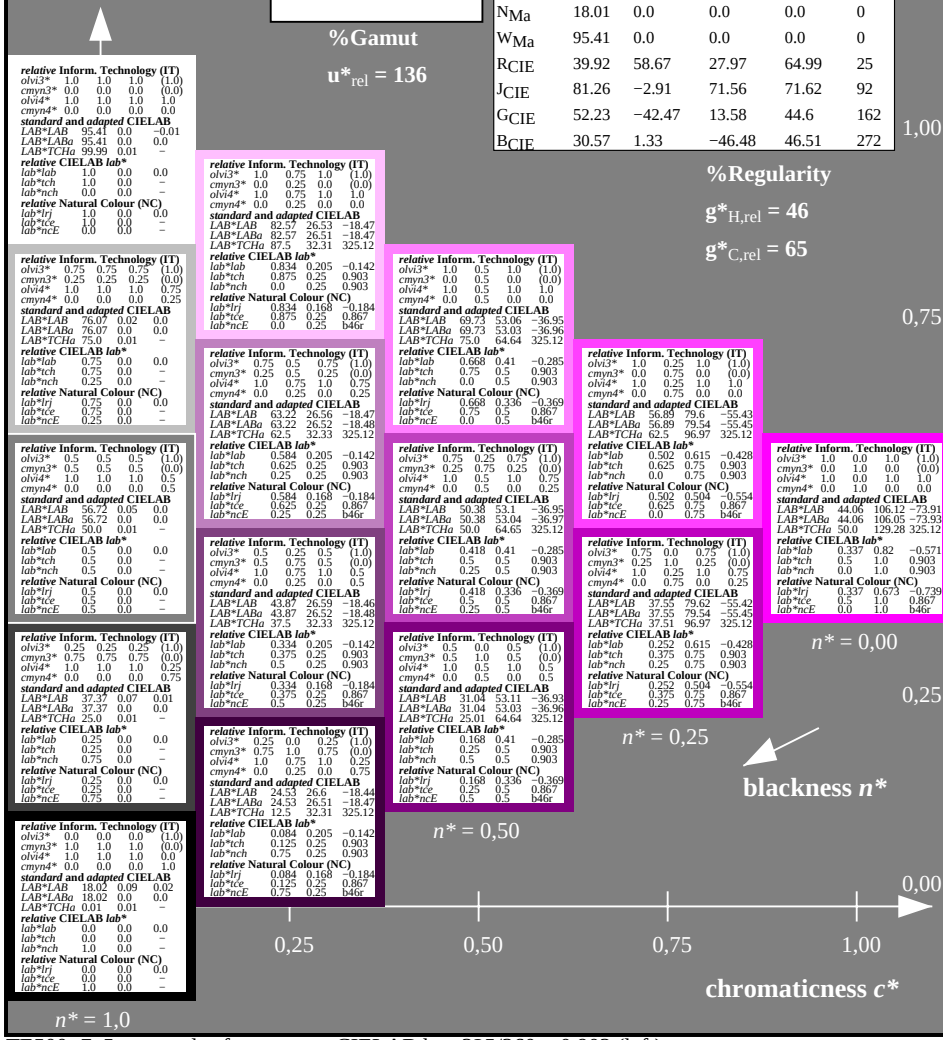
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

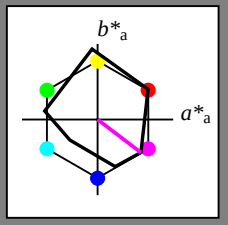
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 323/360 = 0.896**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 35 72 323**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

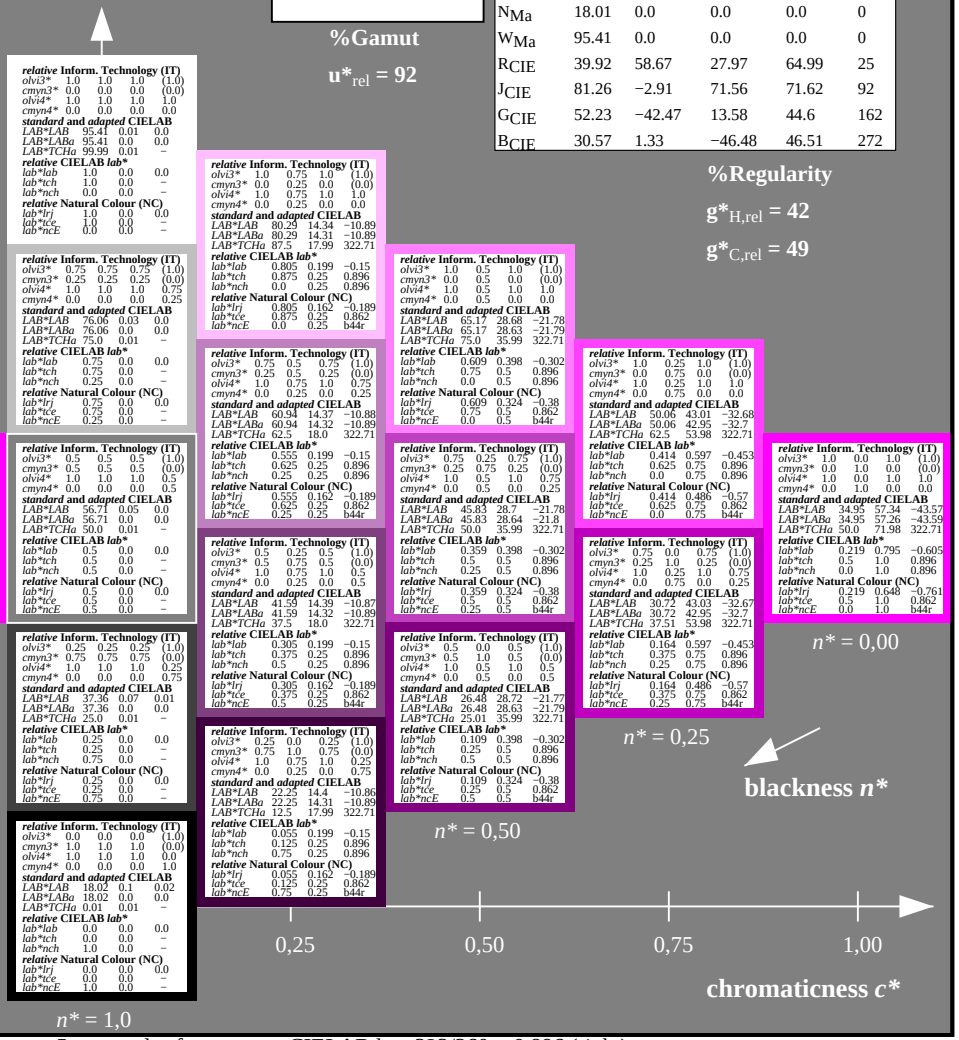
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



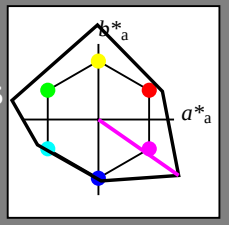

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 323/360 = 0.896 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

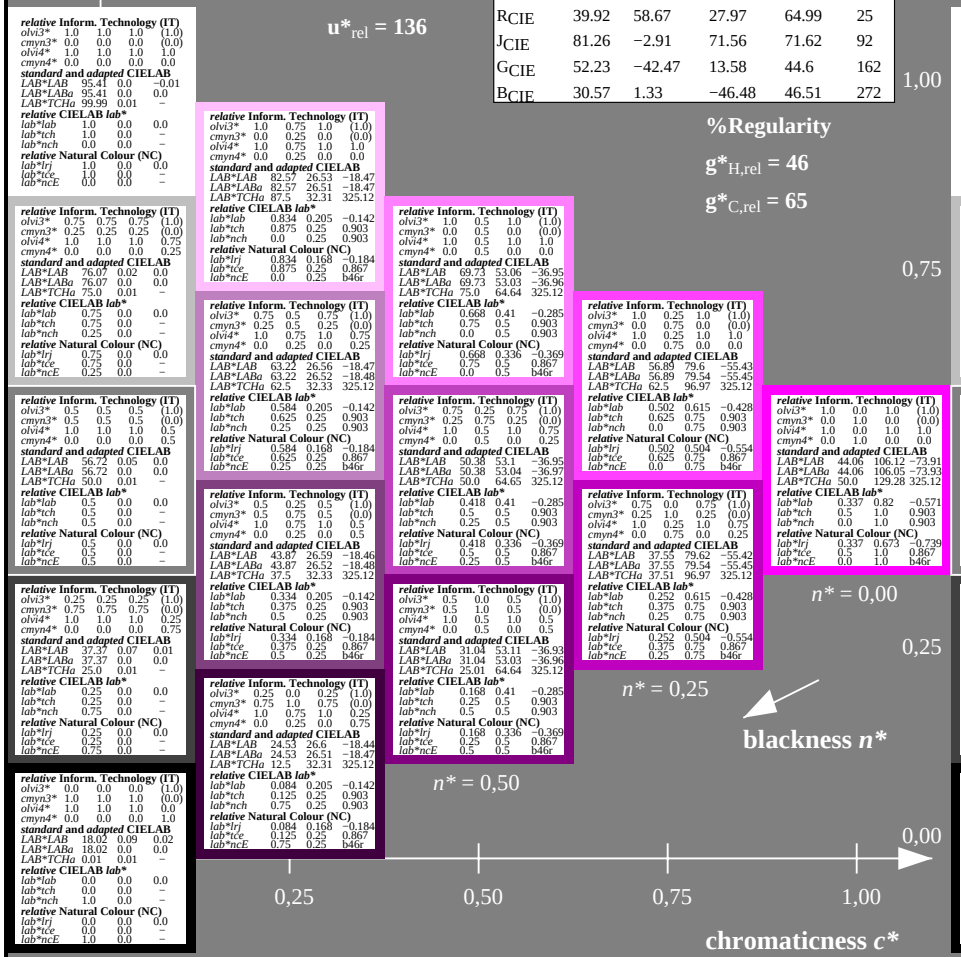
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

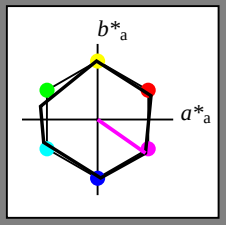
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 57 77 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

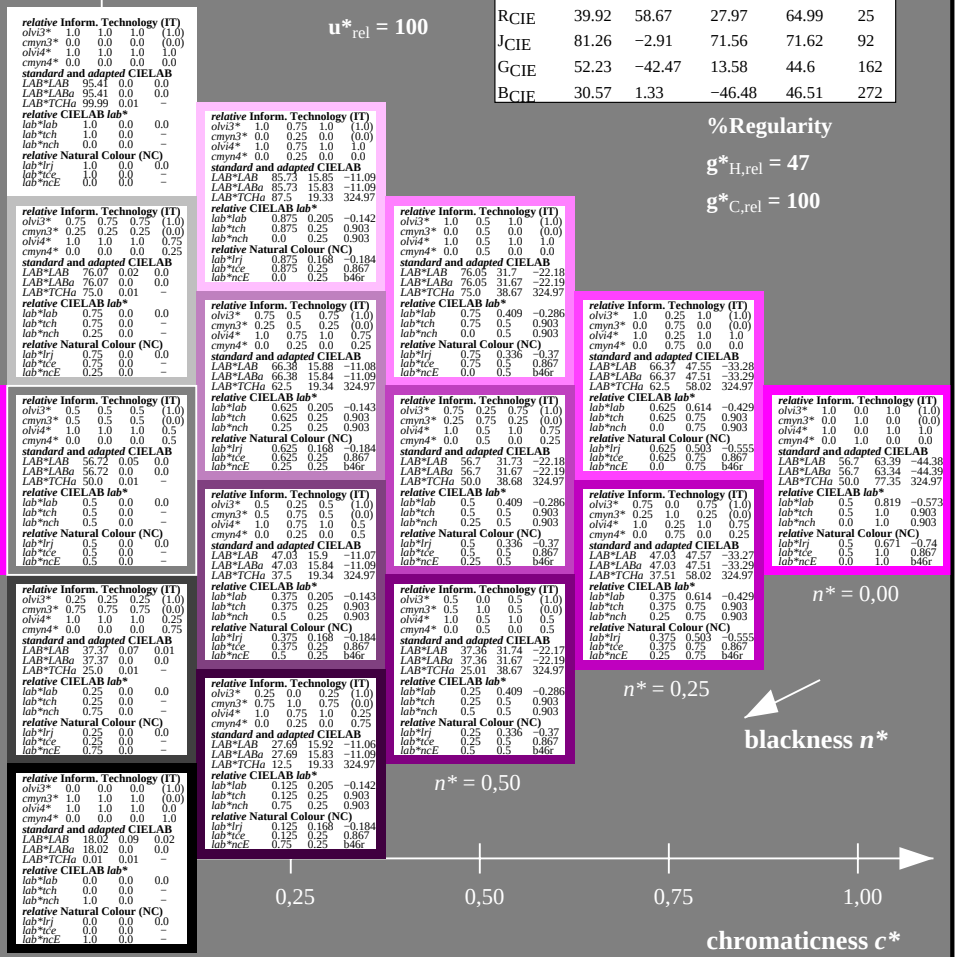
**NRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

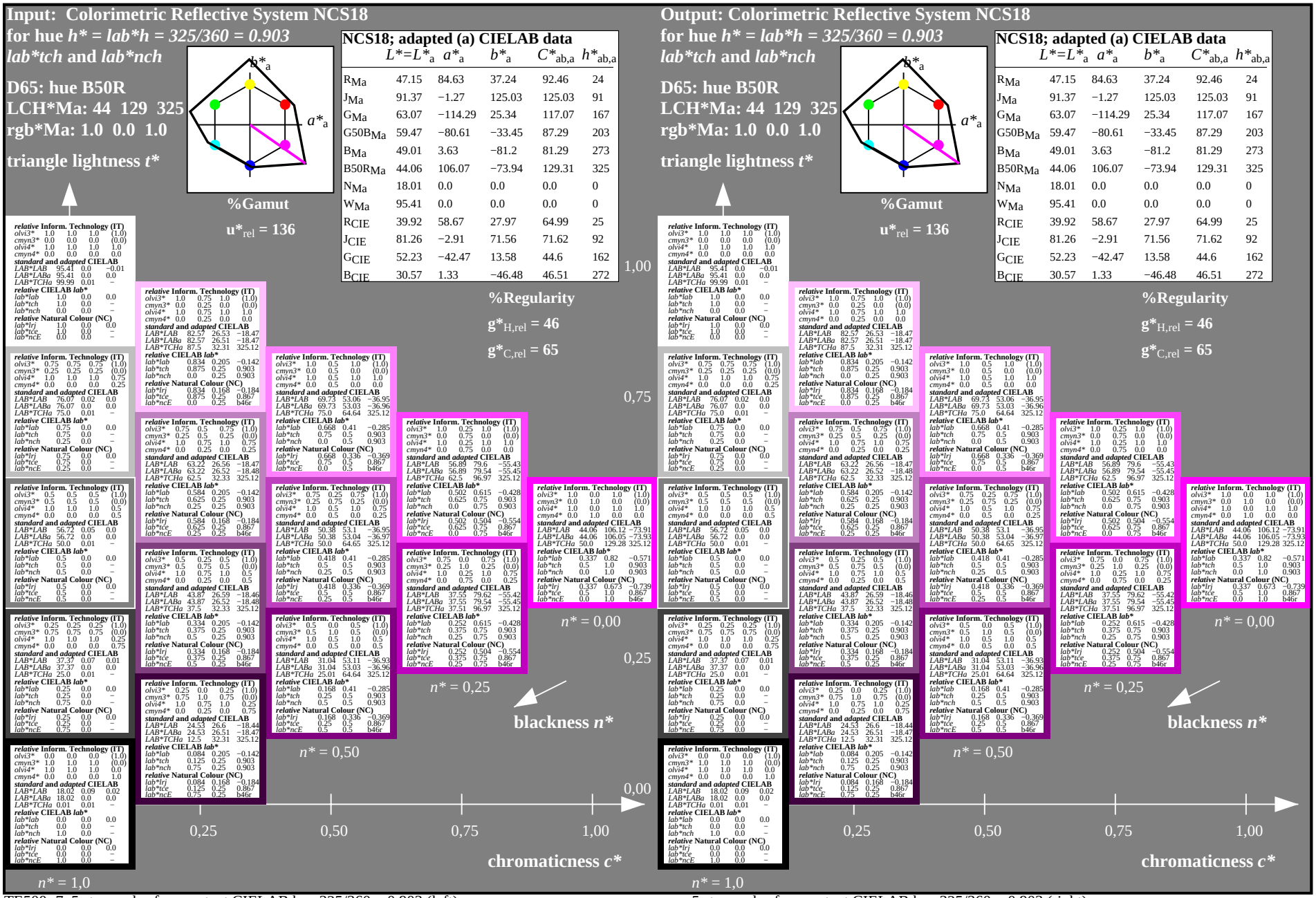
**g*$_{H,rel}$ = 47**

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




TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



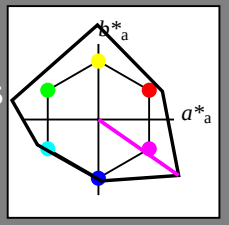

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

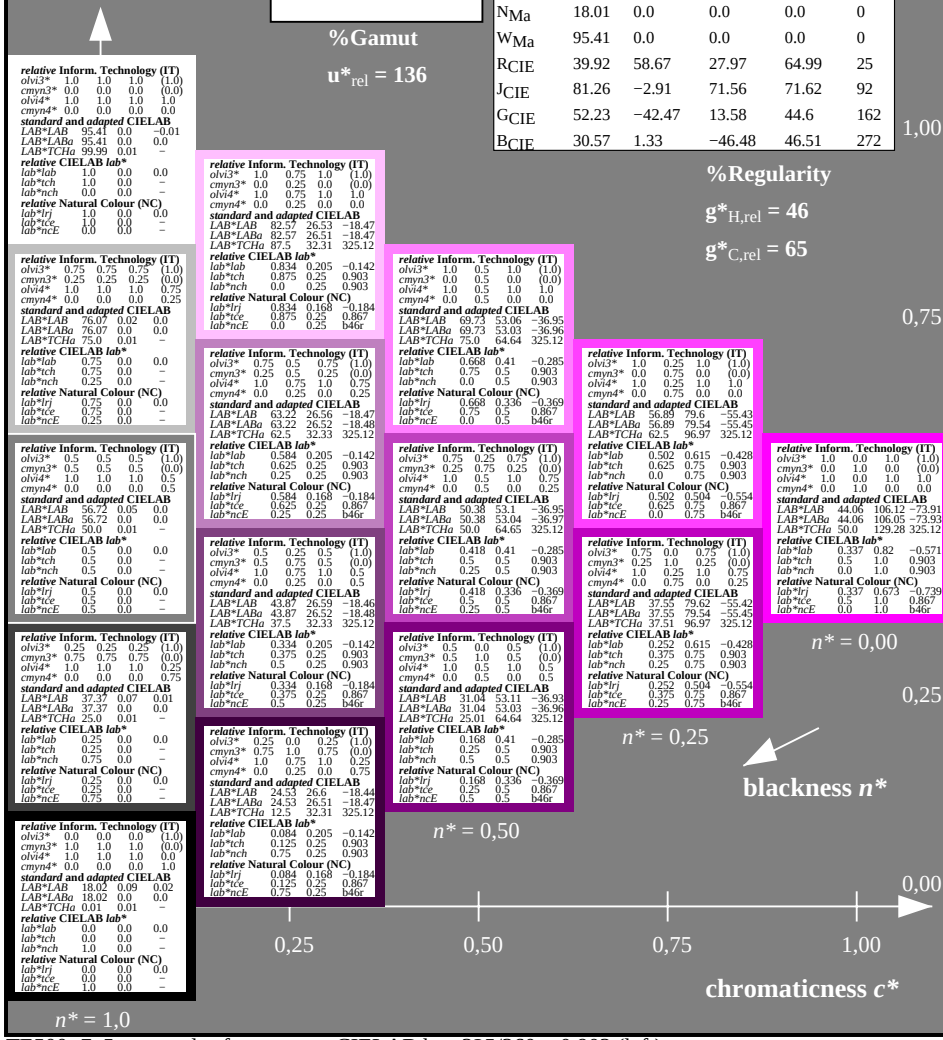
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

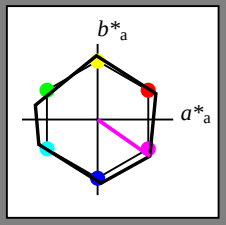
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 53 84 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

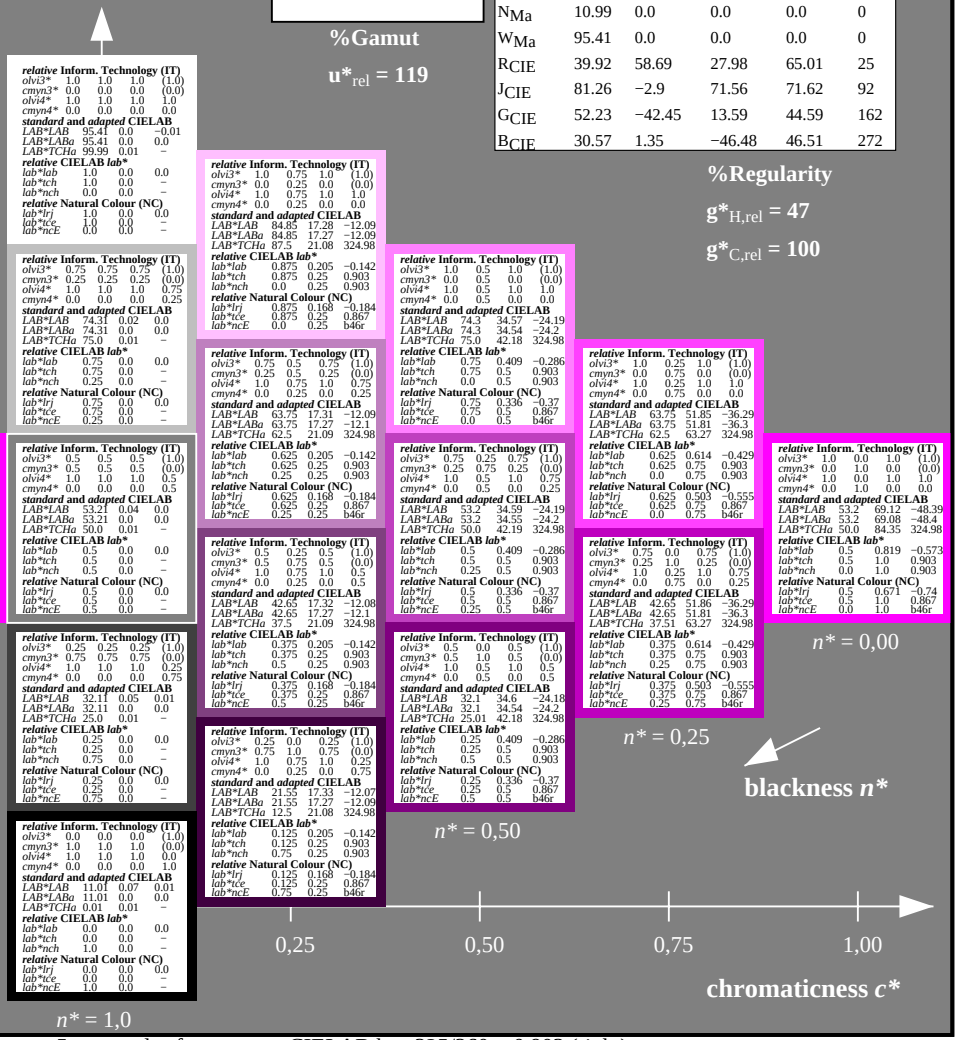
**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



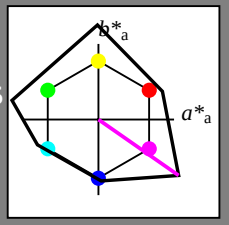

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

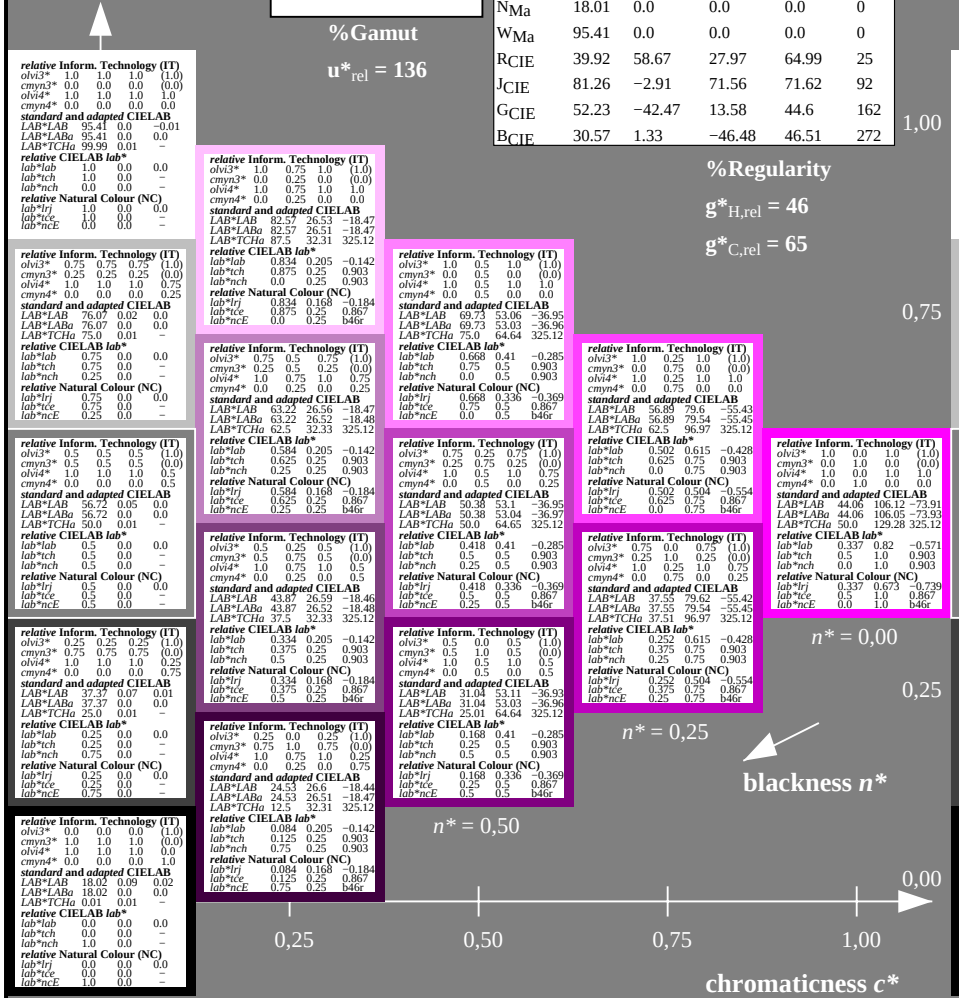
**NCS18; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

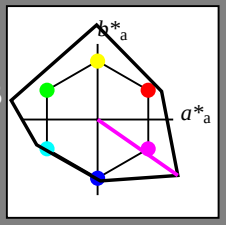
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

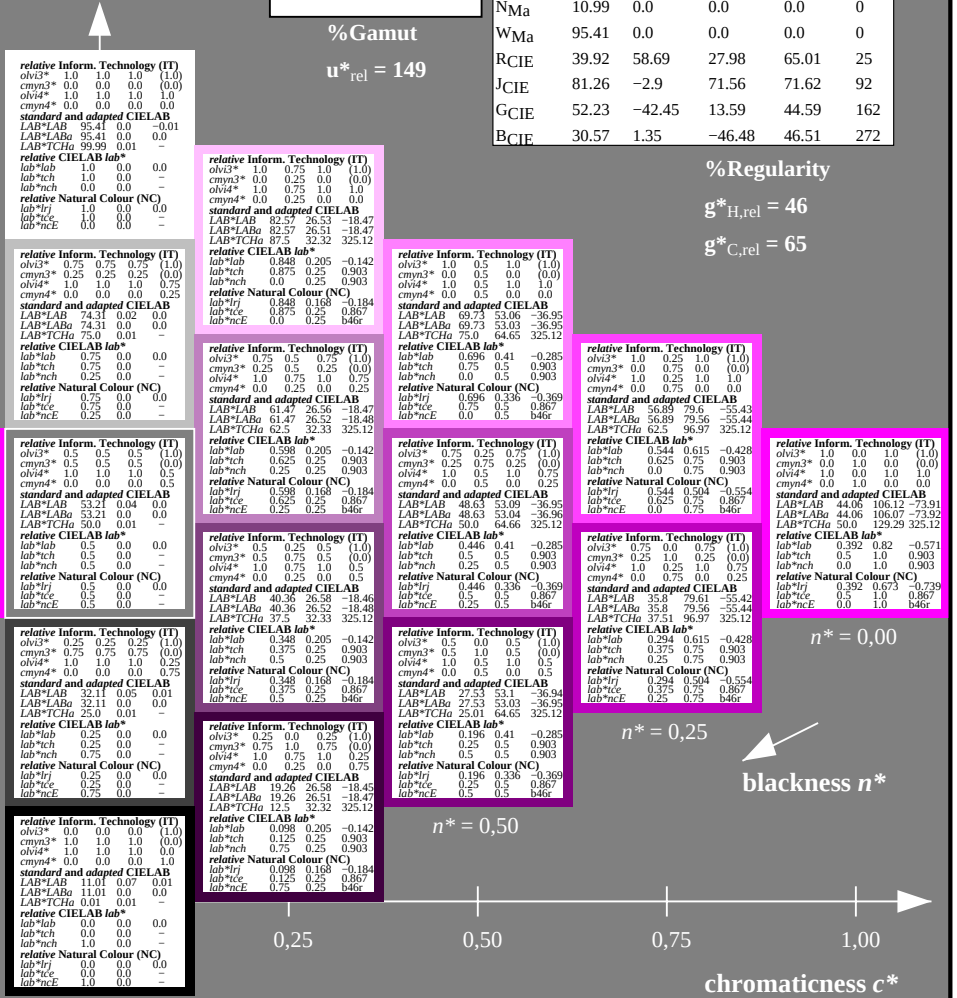
**NCS11; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



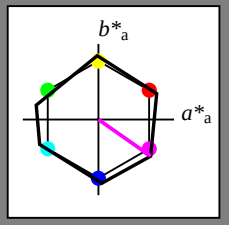

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 53 84 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

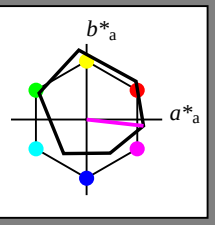
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric 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**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

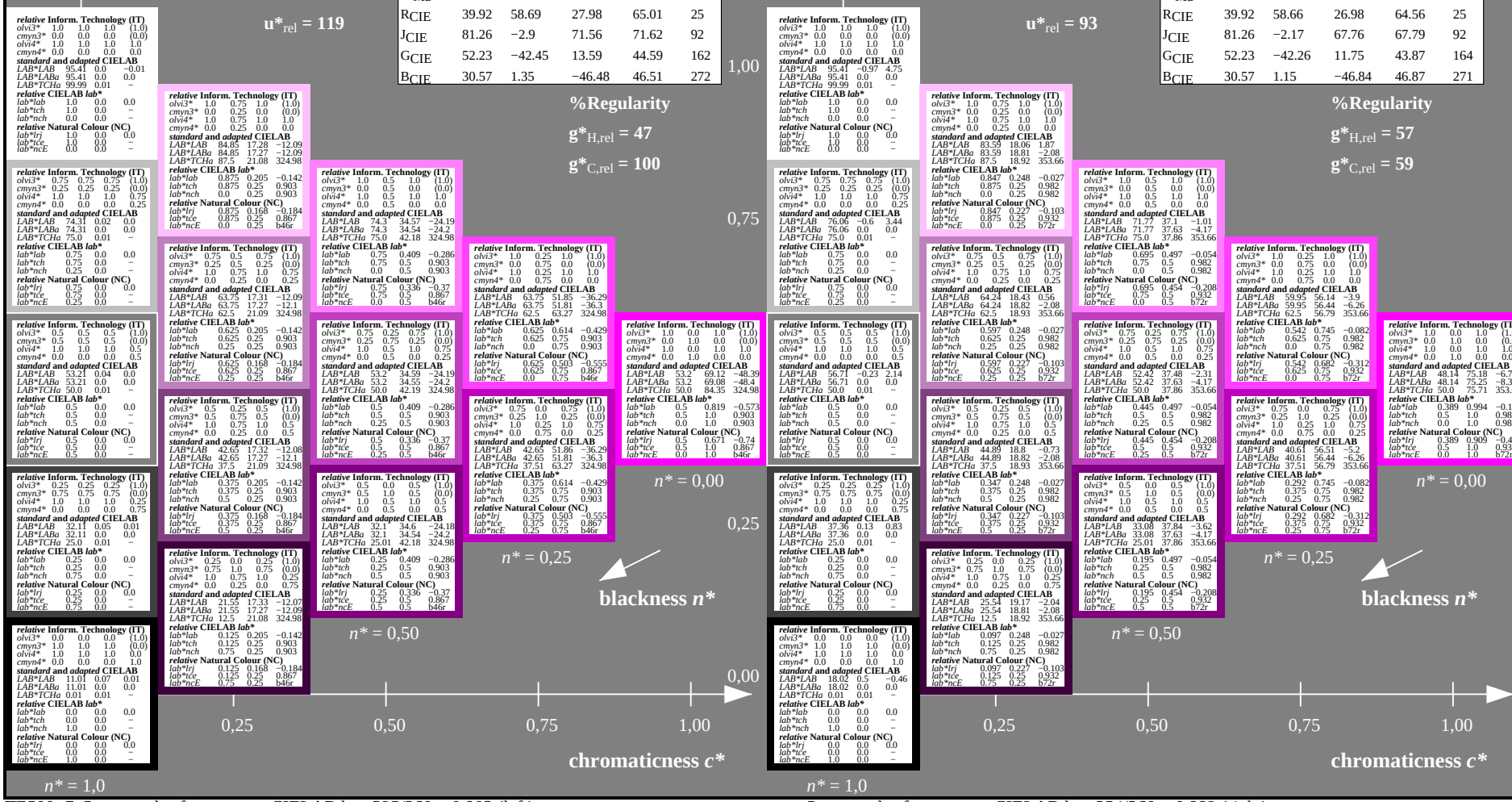
**ORS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

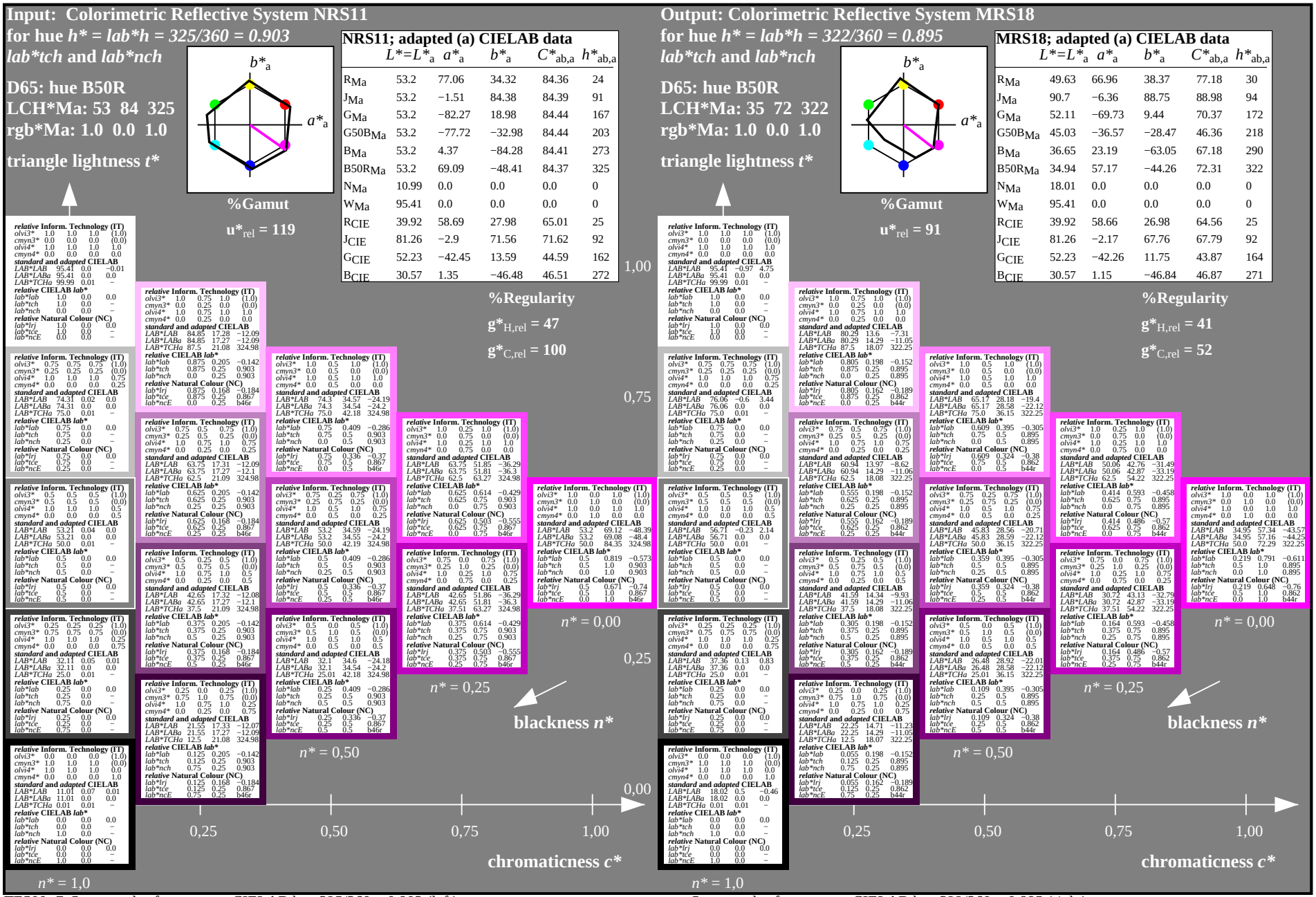
**g*$_{H,rel}$ = 57**

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



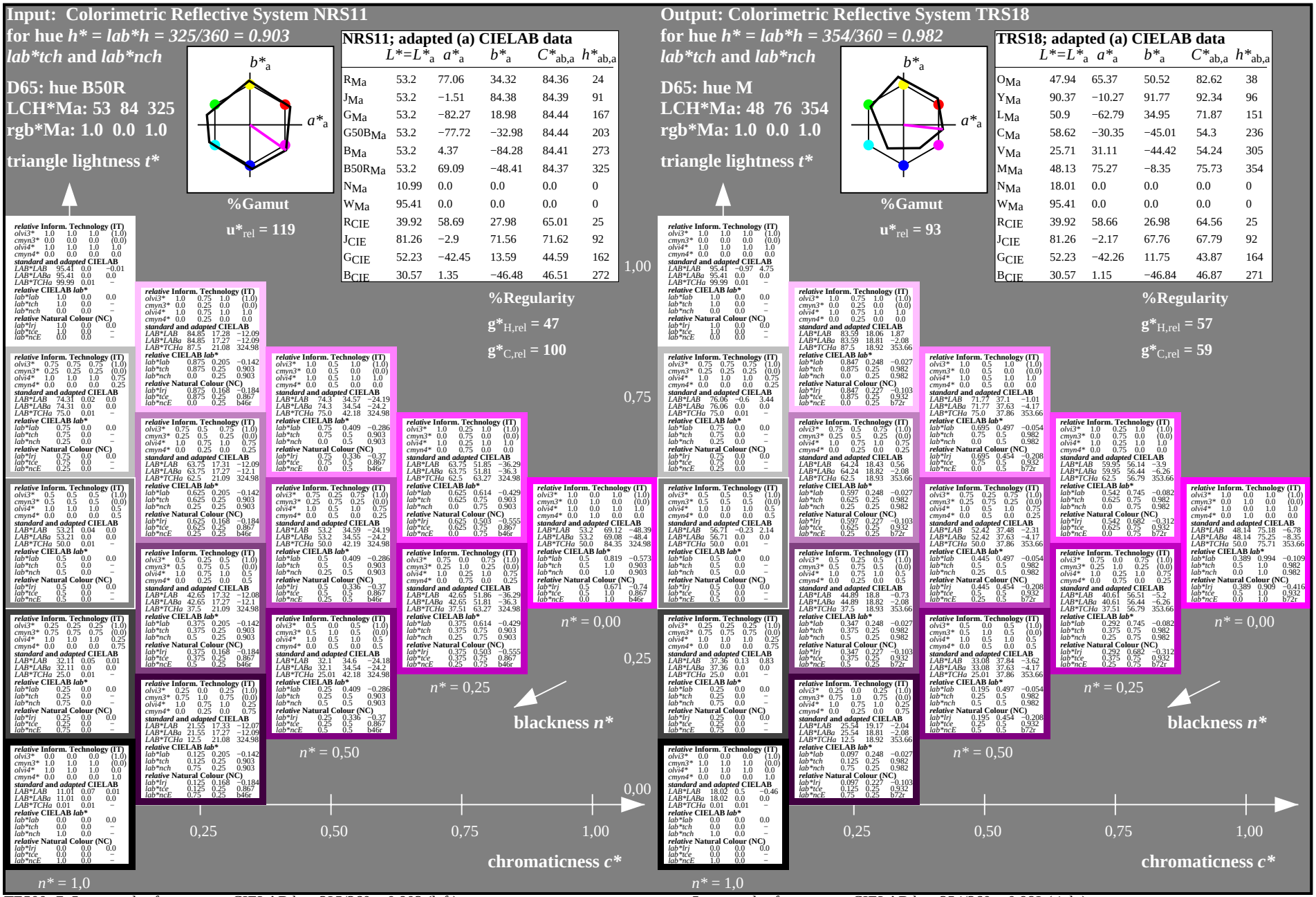

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)




TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 322/360 = 0.895 (right)



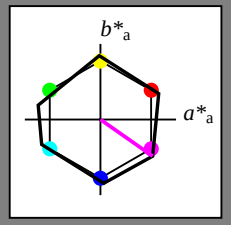

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 53 84 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

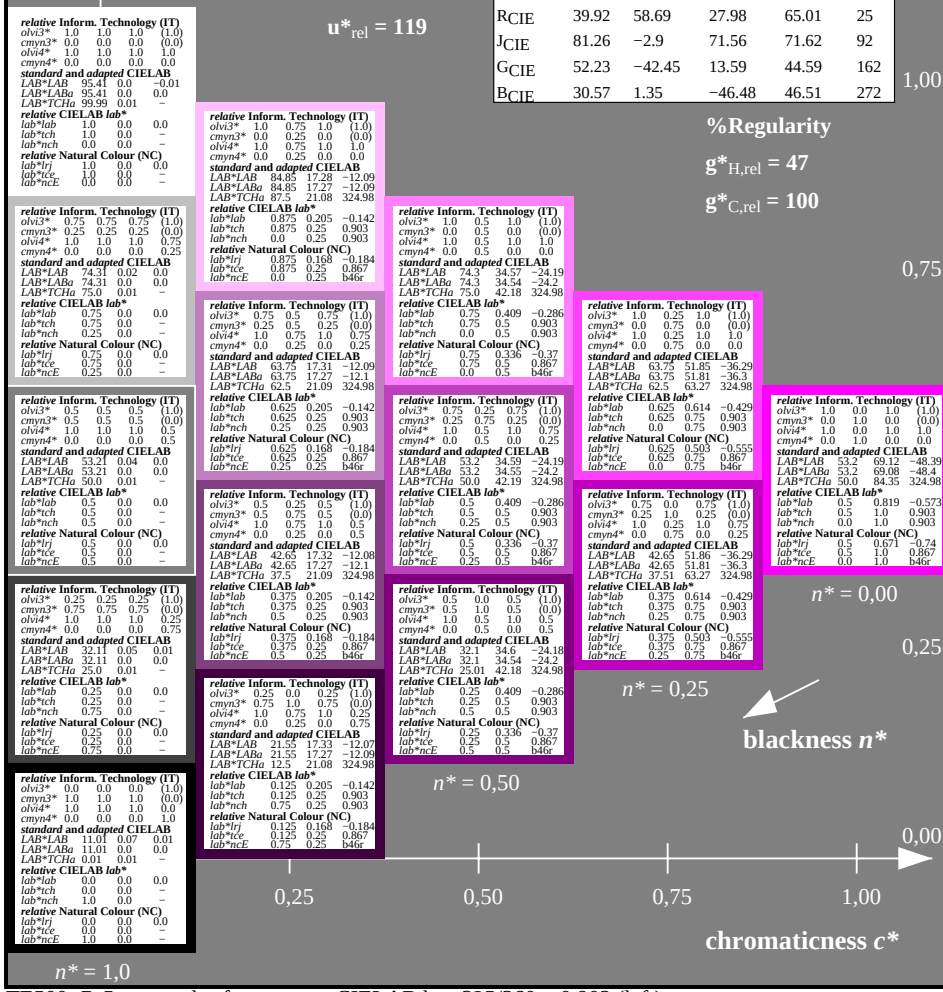
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

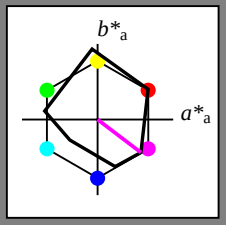
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 323/360 = 0.896**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 35 72 323**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

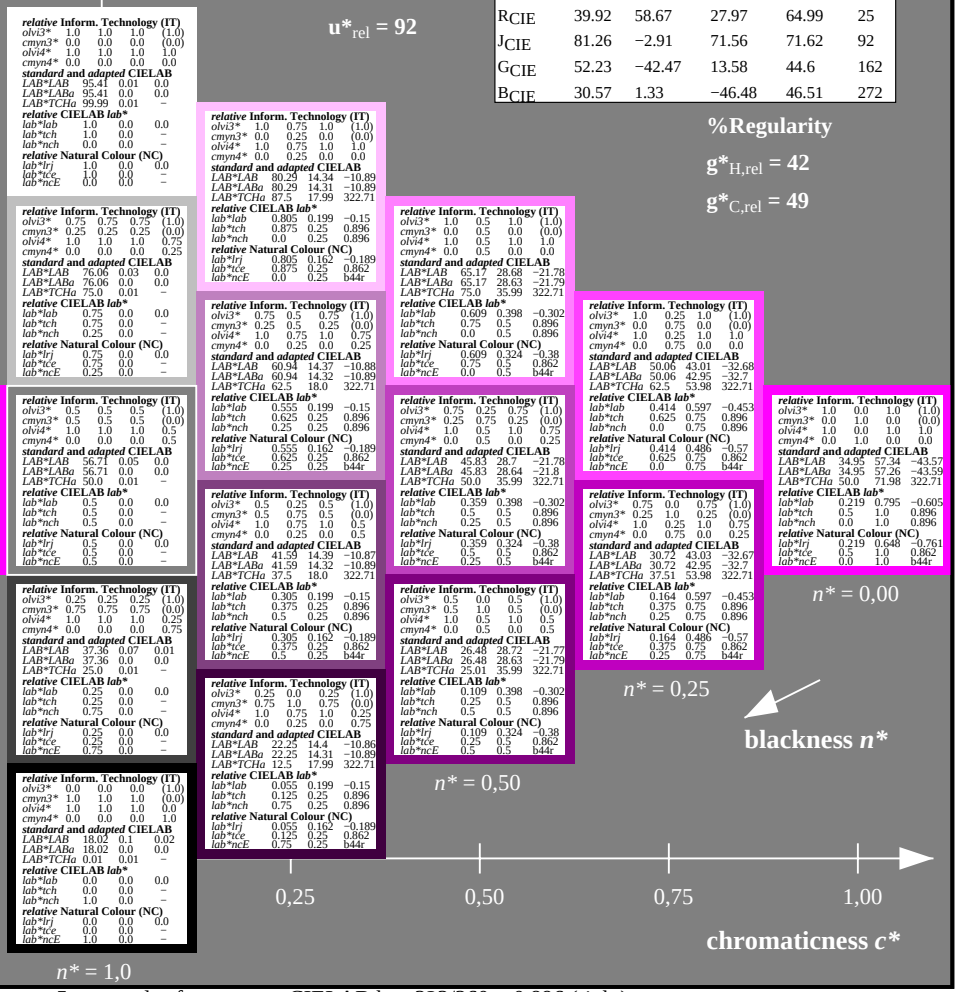
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

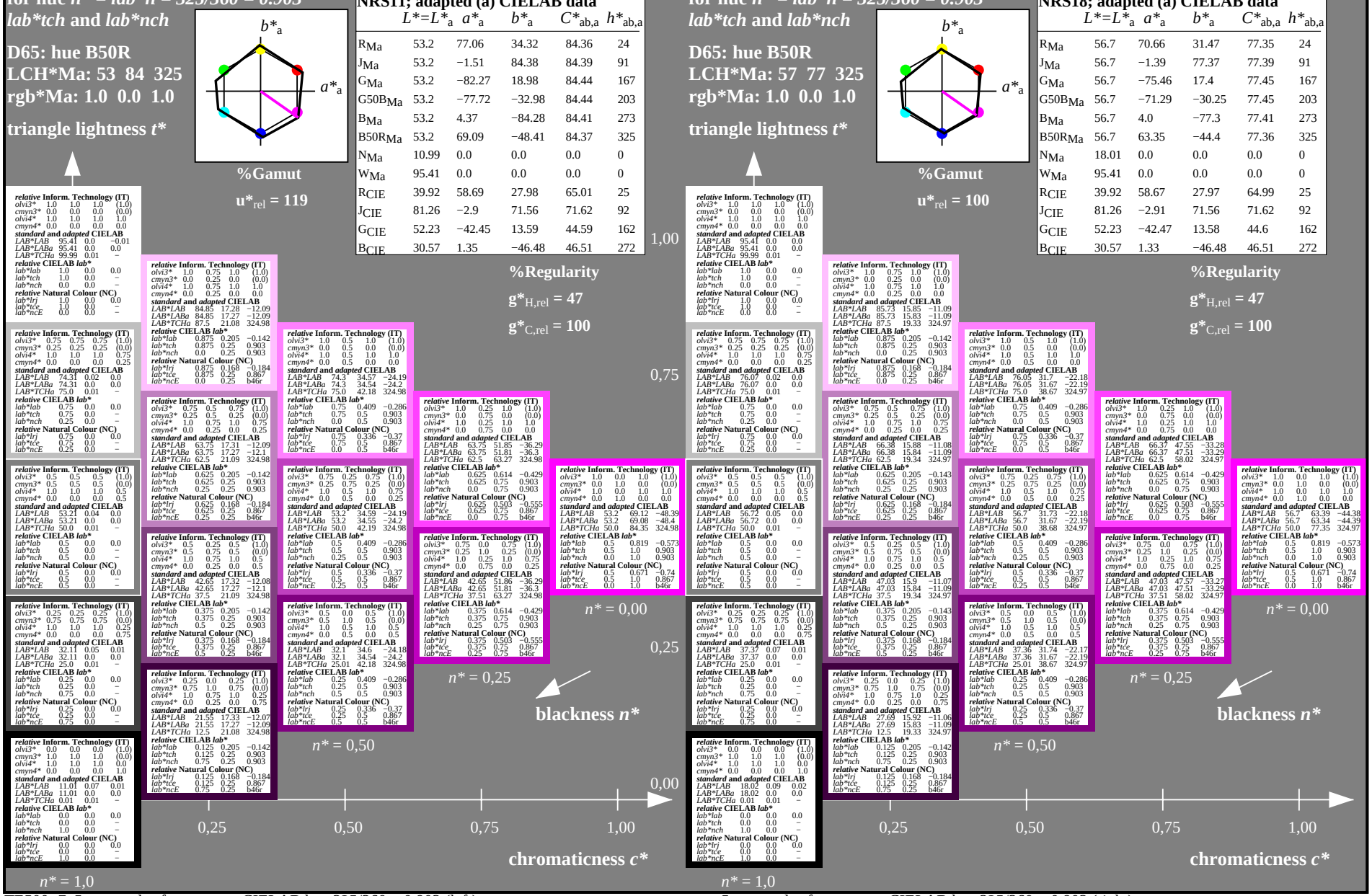
**g*$_{H,rel}$ = 42**

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




TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 323/360 = 0.896 (right)



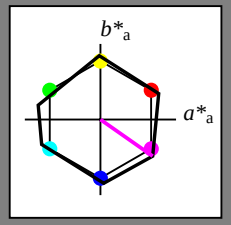

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 53 84 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

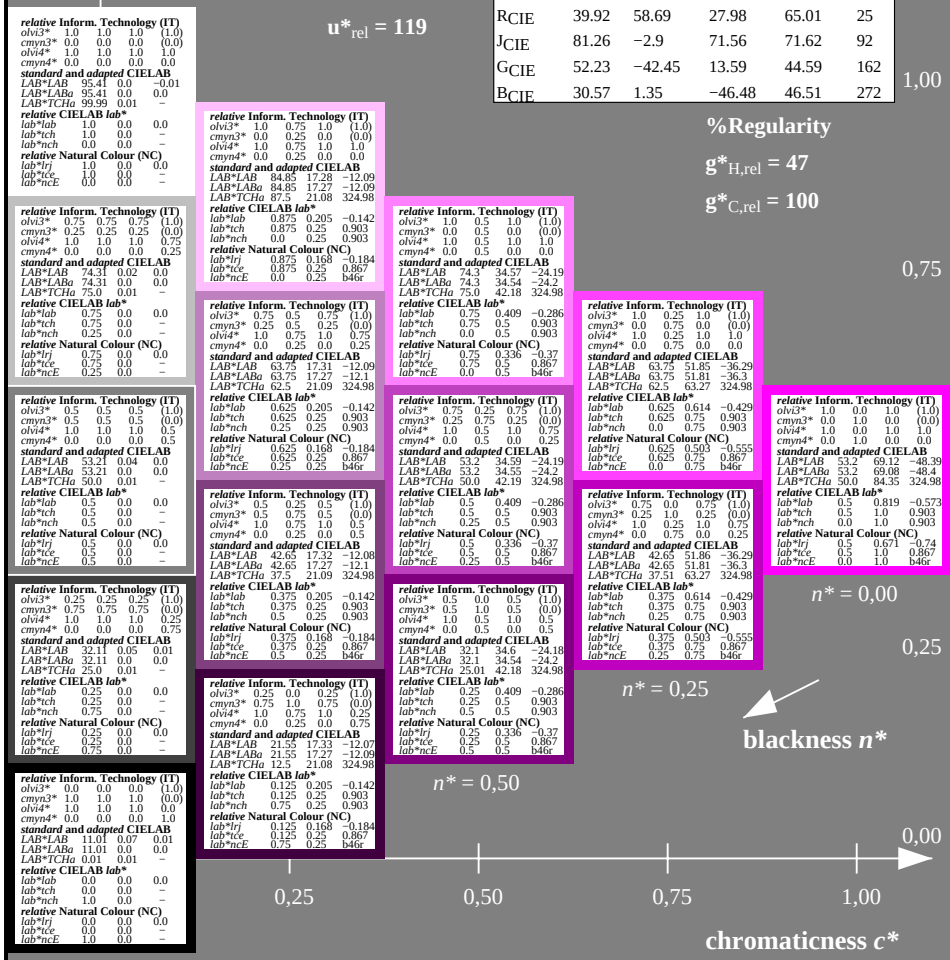
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

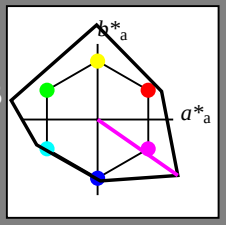
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

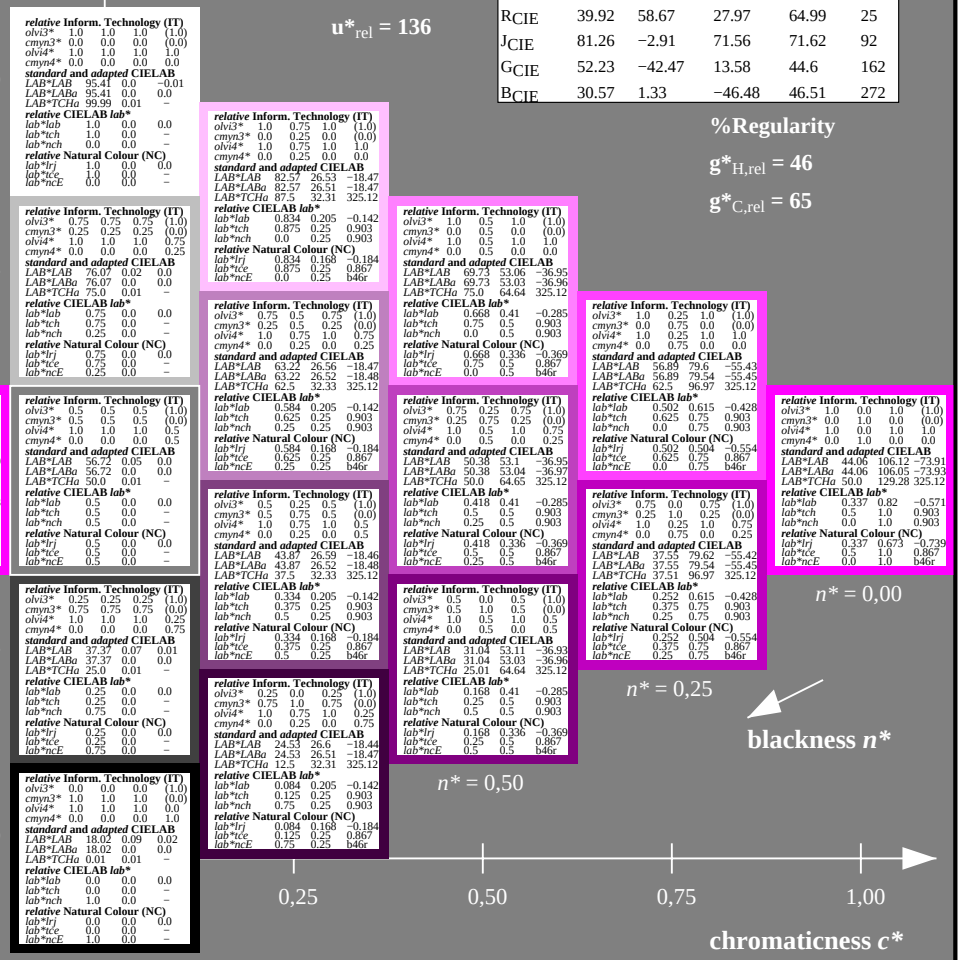
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

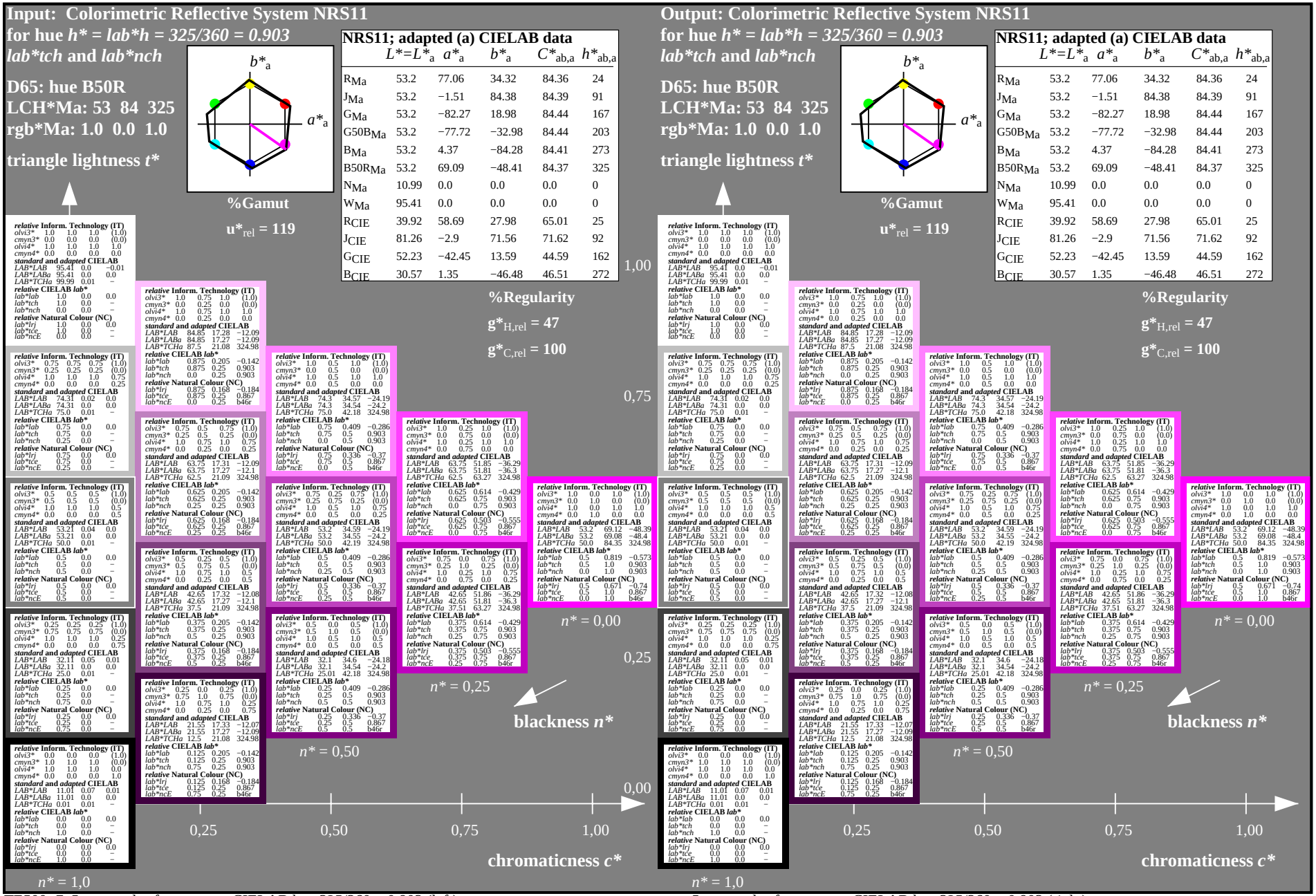
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



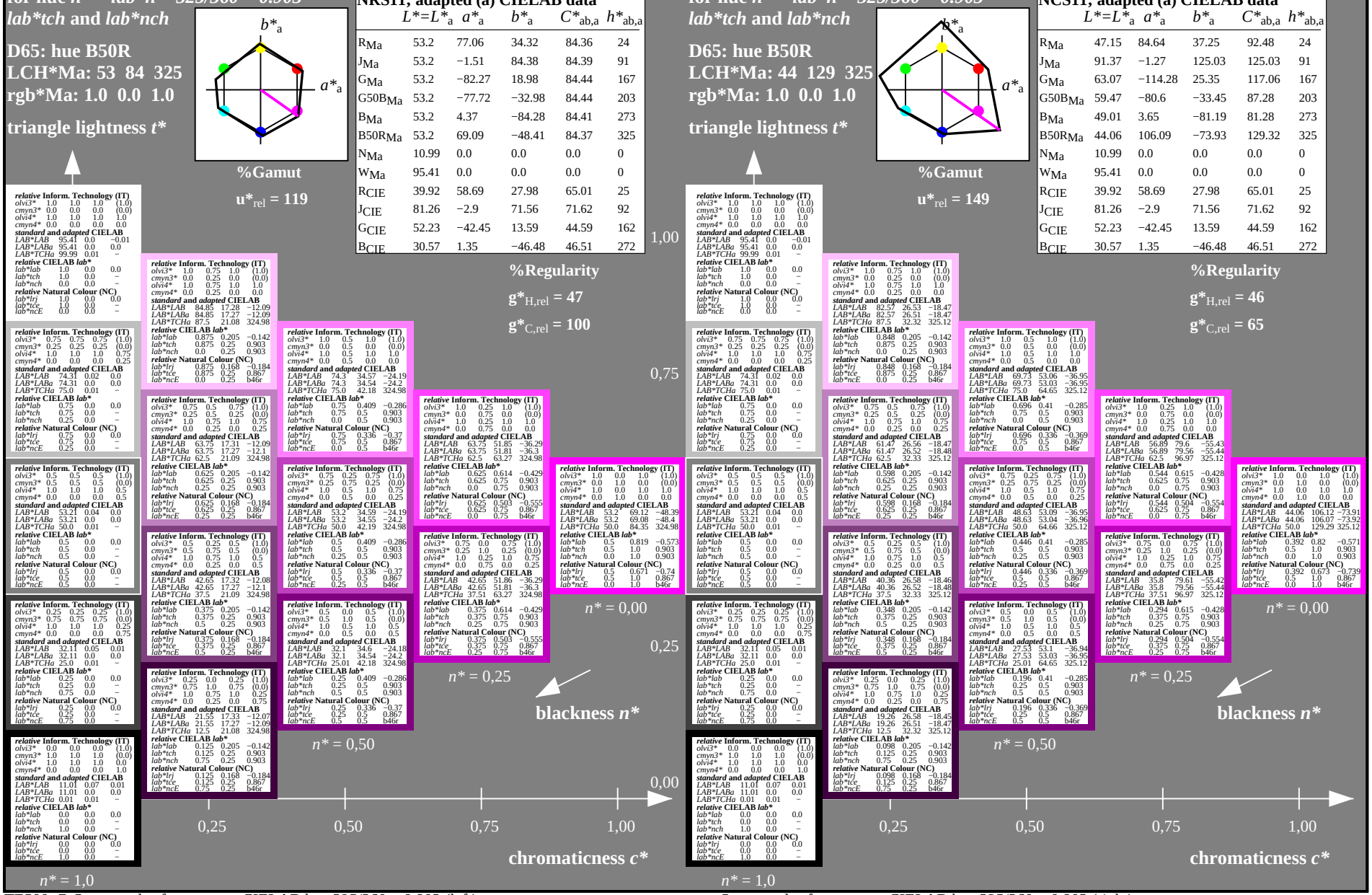

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



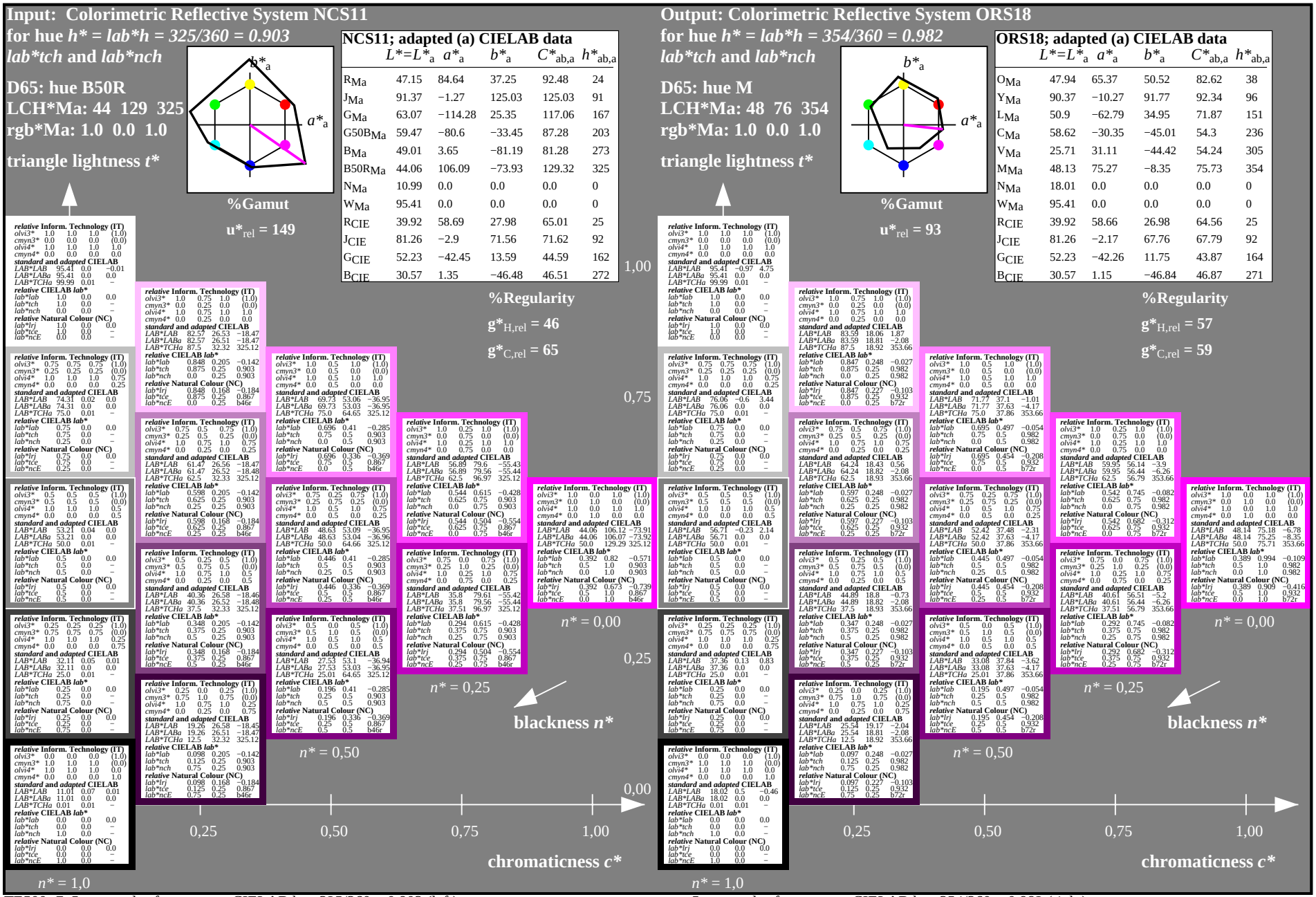

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



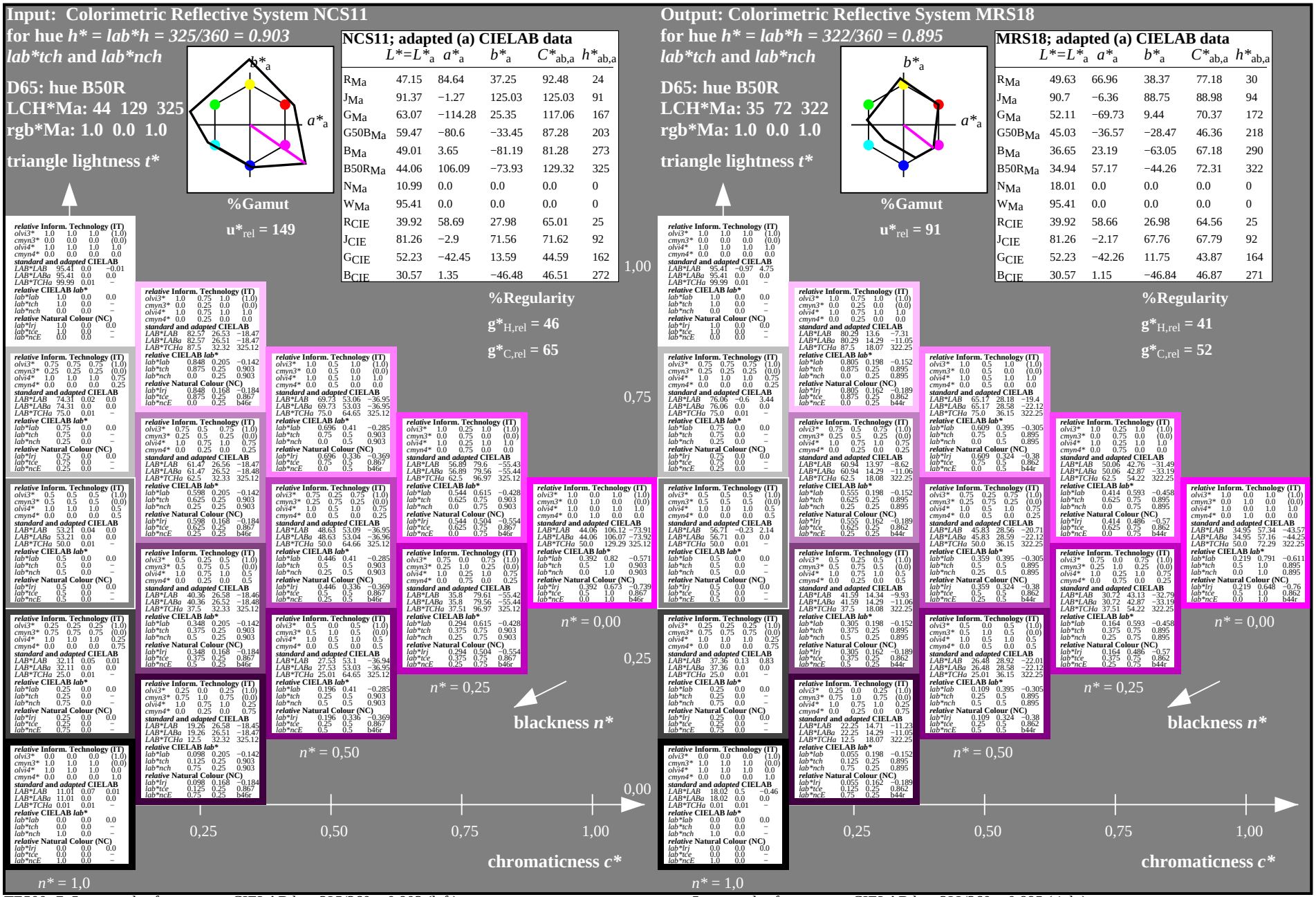

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)




TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)



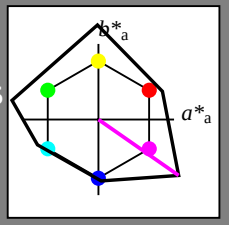

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 322/360 = 0.895 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

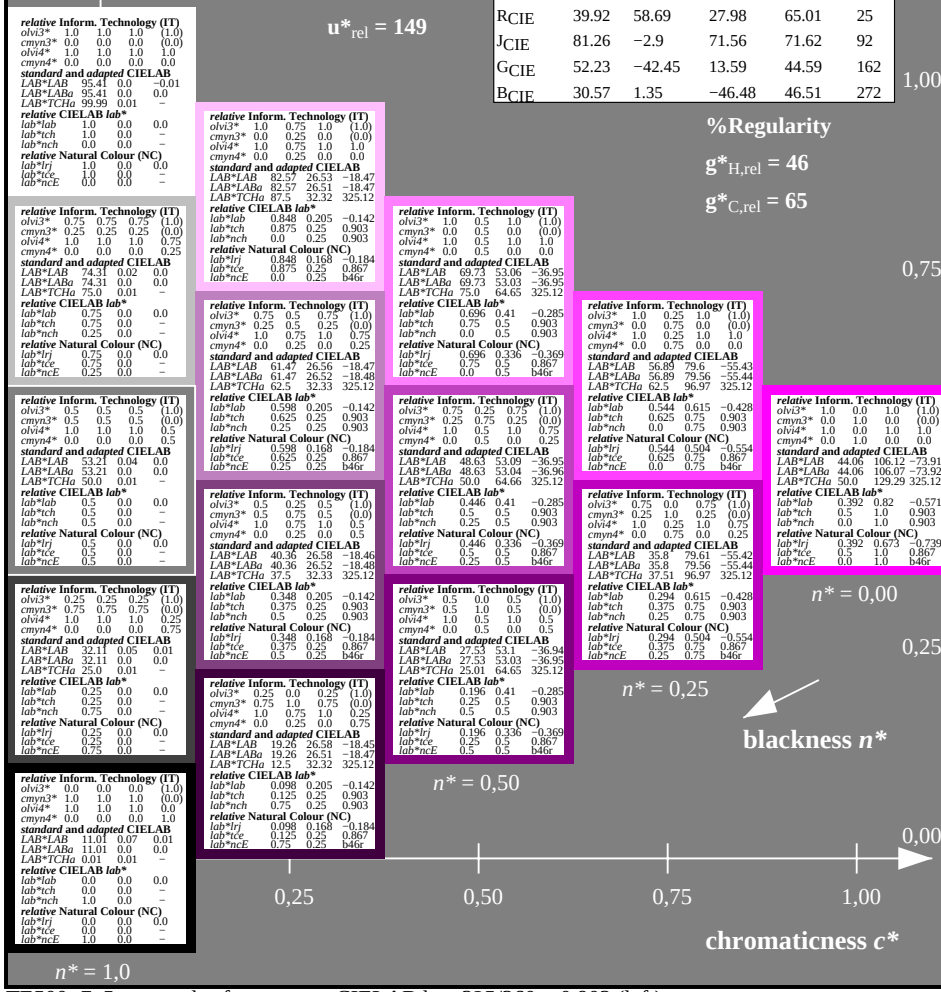
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

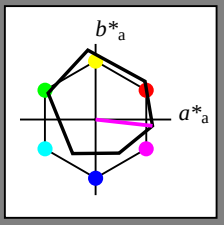
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 354/360 = 0.982**
***lab*tch* and *lab*nch***

**D65: hue M**
**LCH*Ma: 48 76 354**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

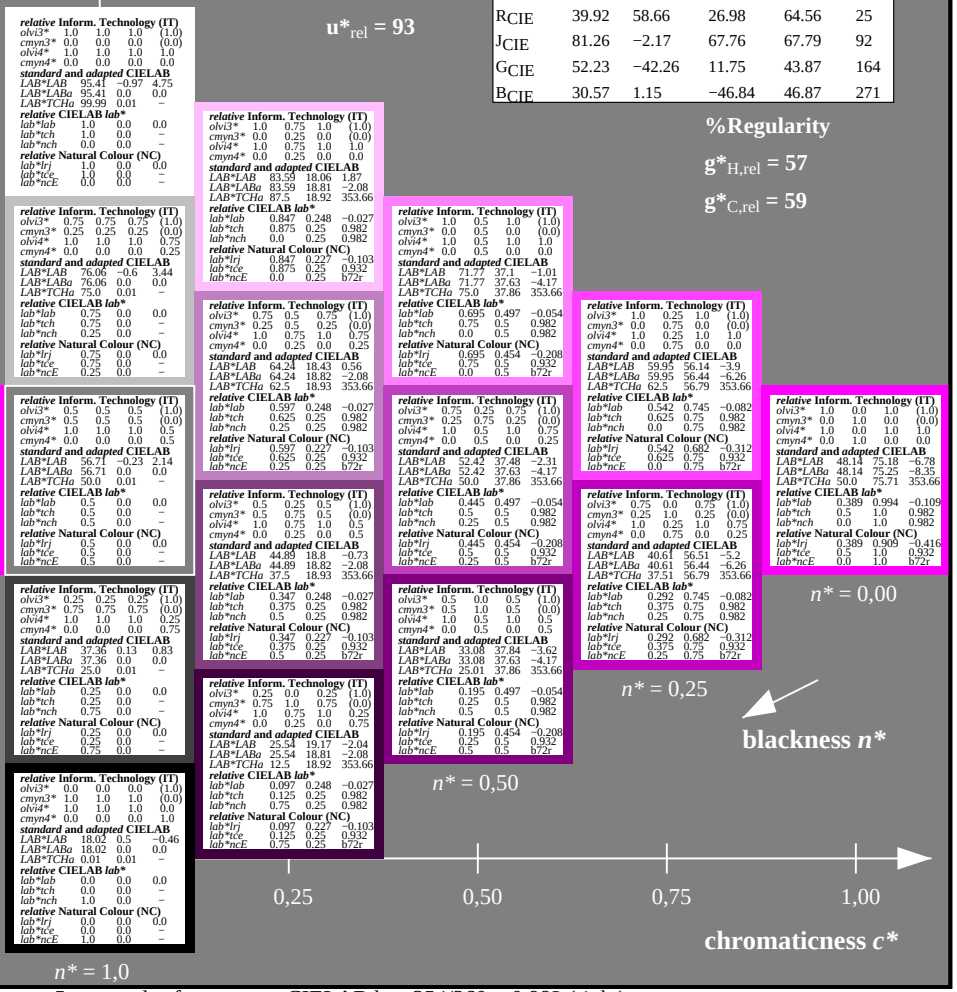
**TRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



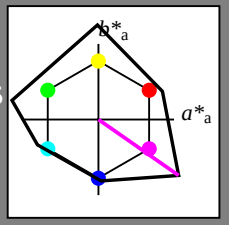

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

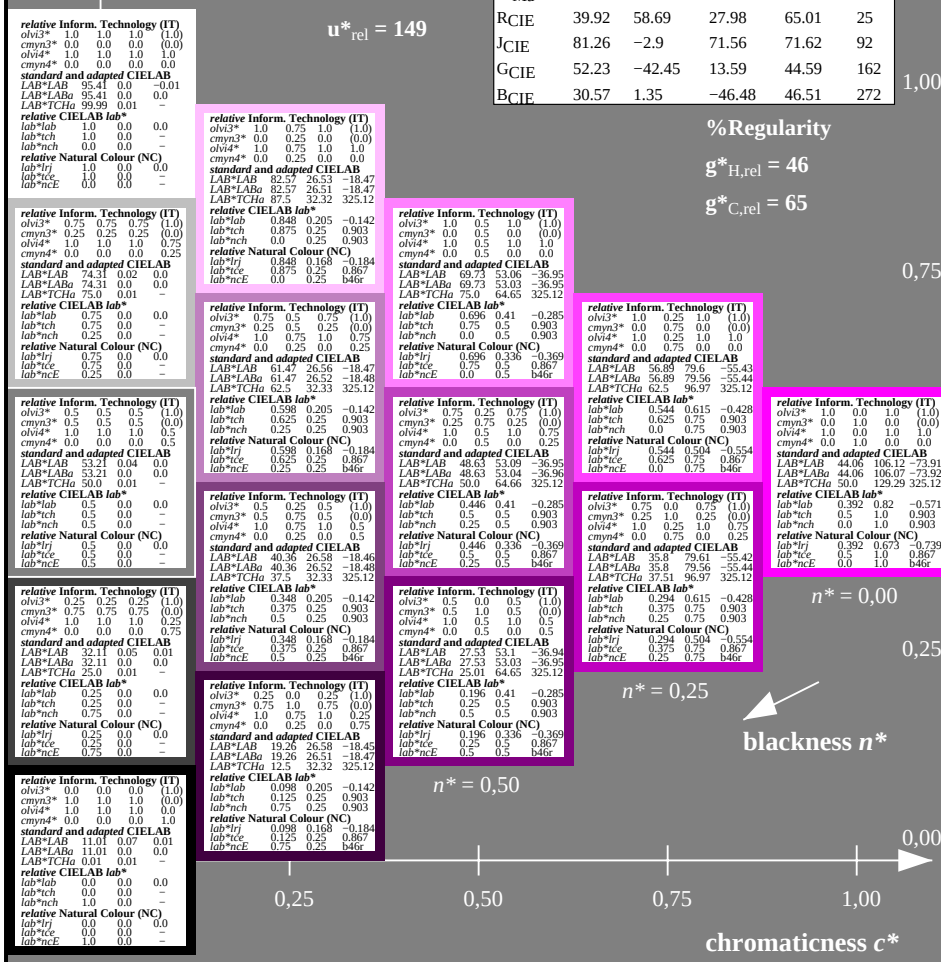
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

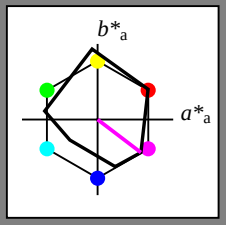
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 323/360 = 0.896**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 35 72 323**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

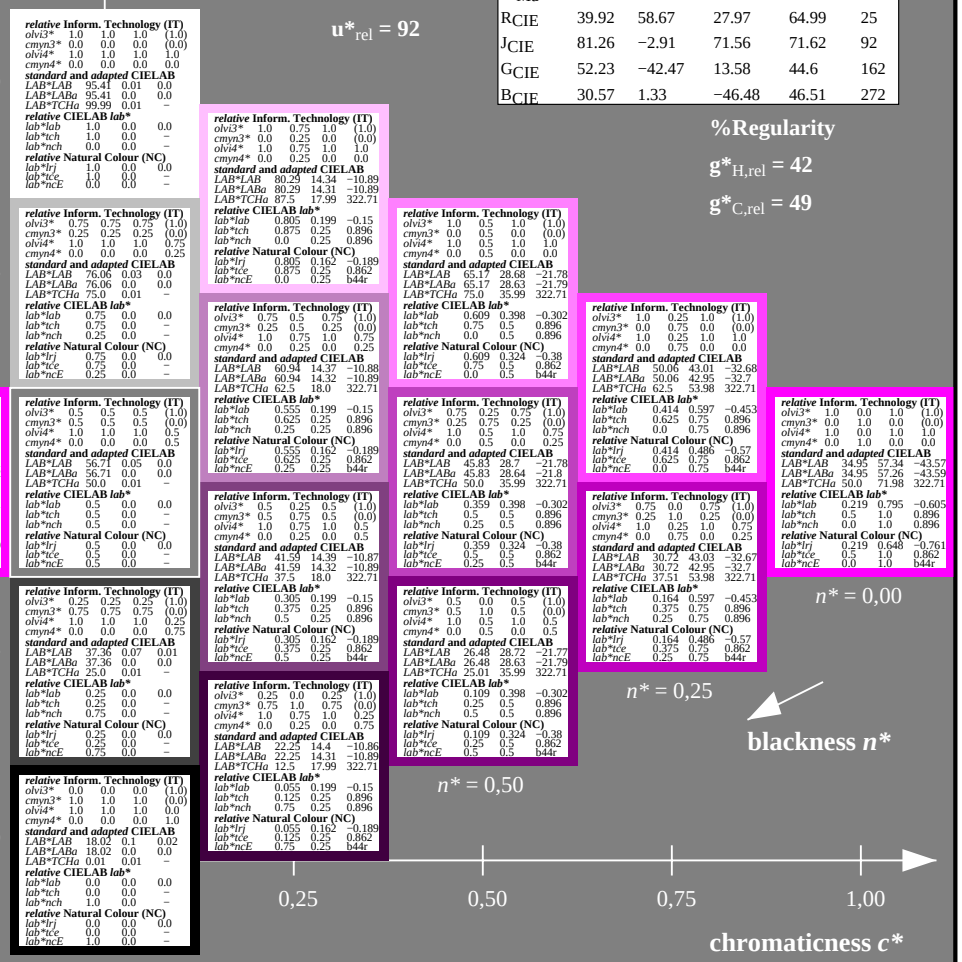
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

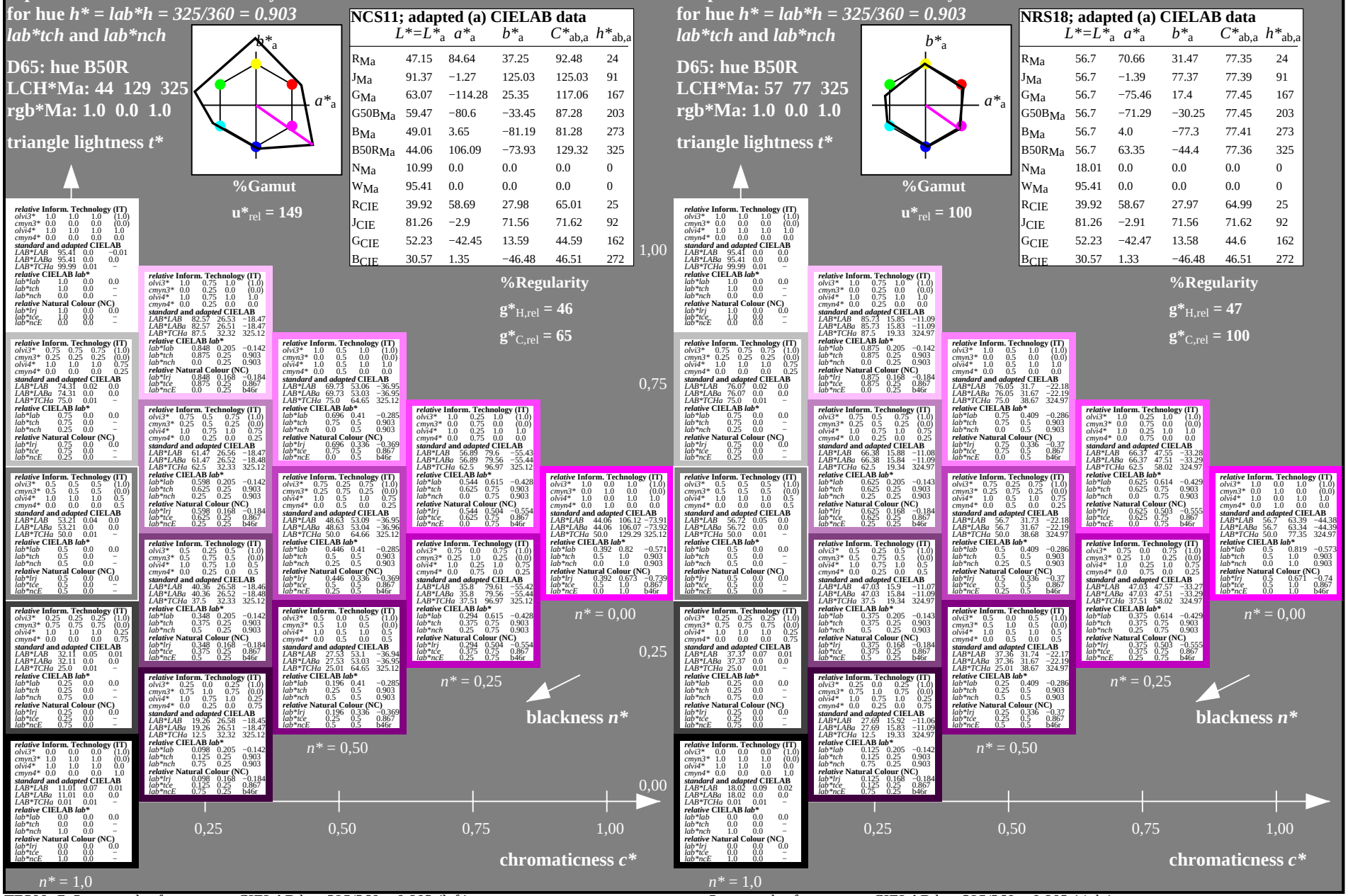
**g*$_{H,rel}$ = 42**

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



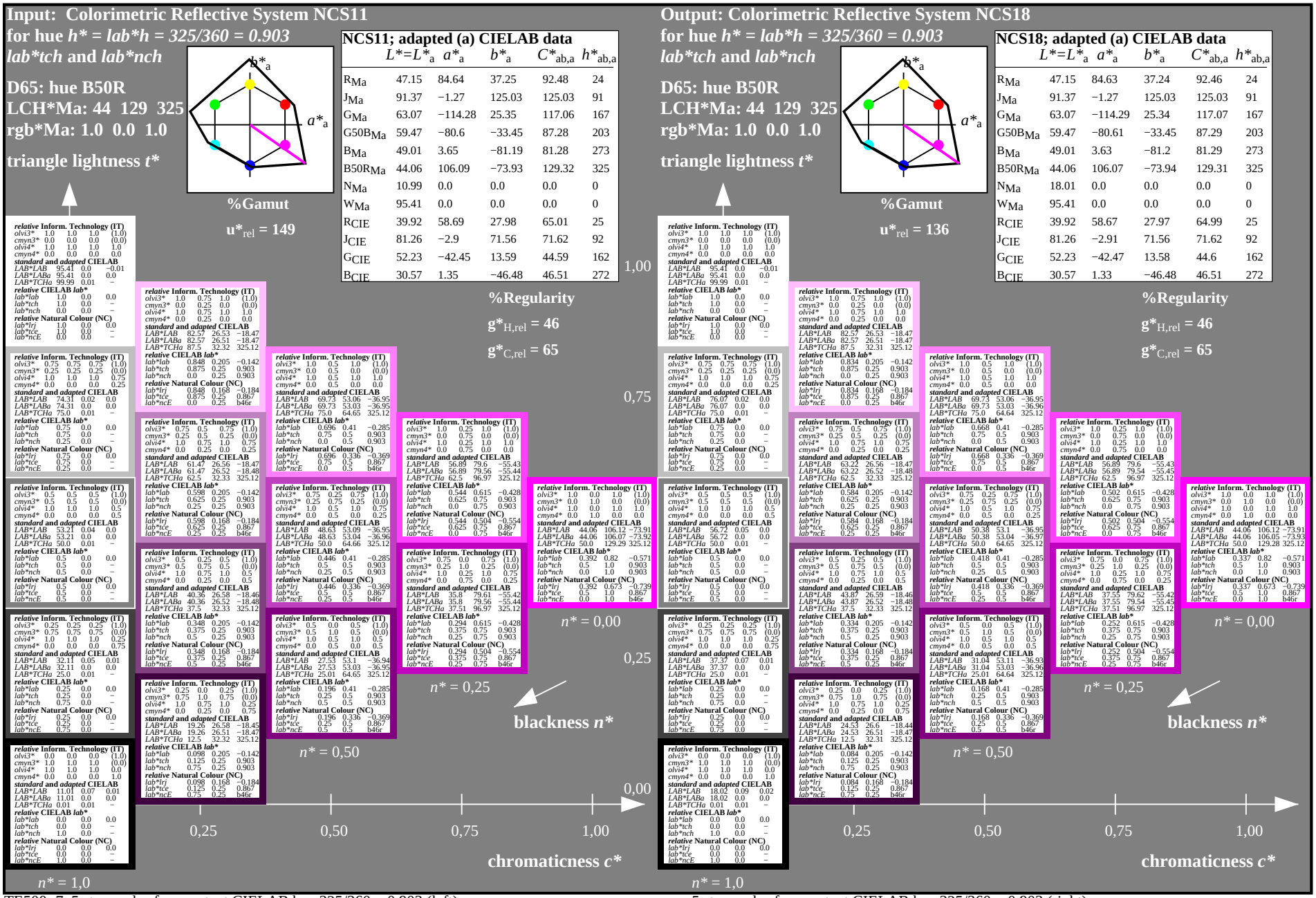

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 323/360 = 0.896 (right)



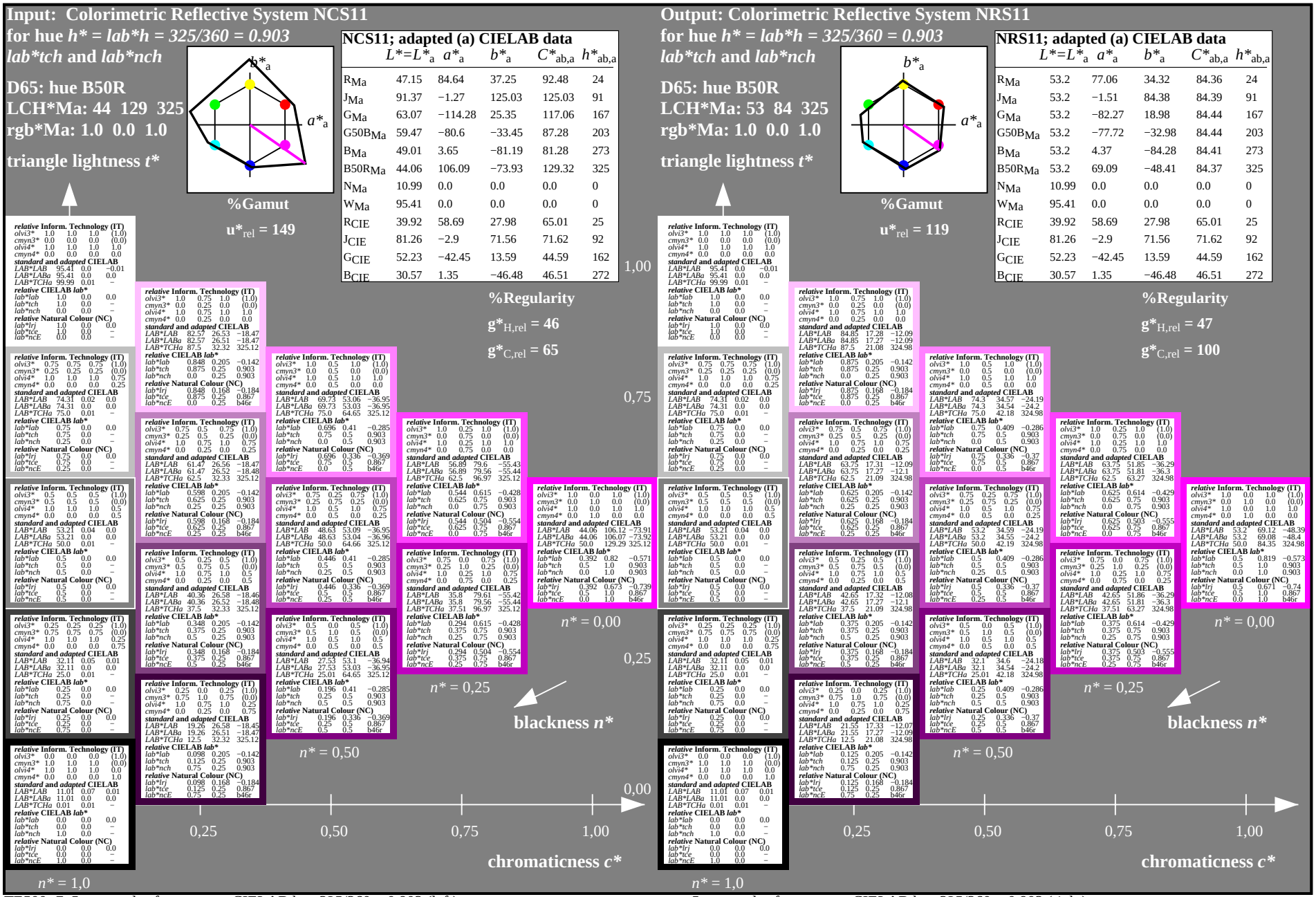

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)




TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



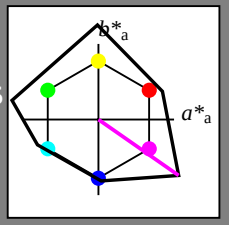

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

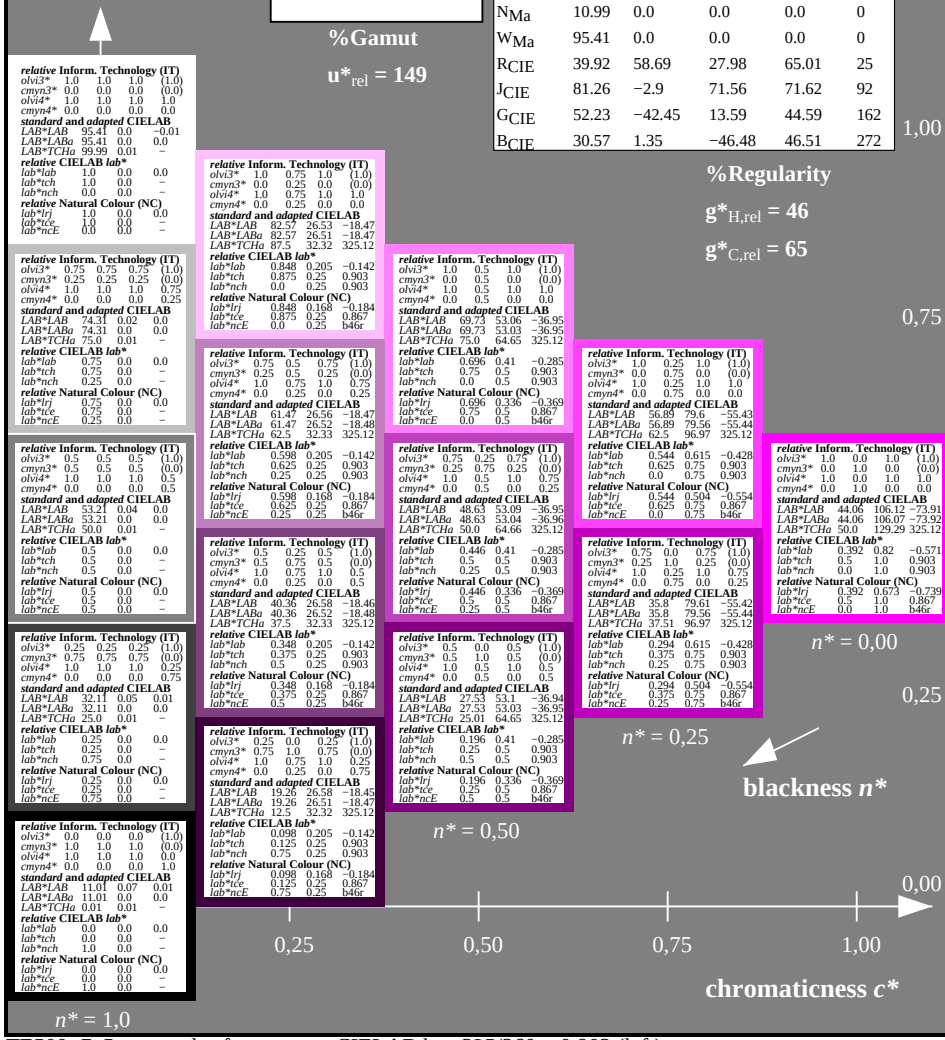
**NCS11; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

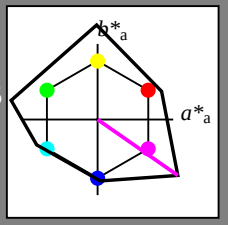
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 325/360 = 0.903**
***lab*tch* and *lab*nch***

**D65: hue B50R**
**LCH*Ma: 44 129 325**
**rgb*Ma: 1.0 0.0 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

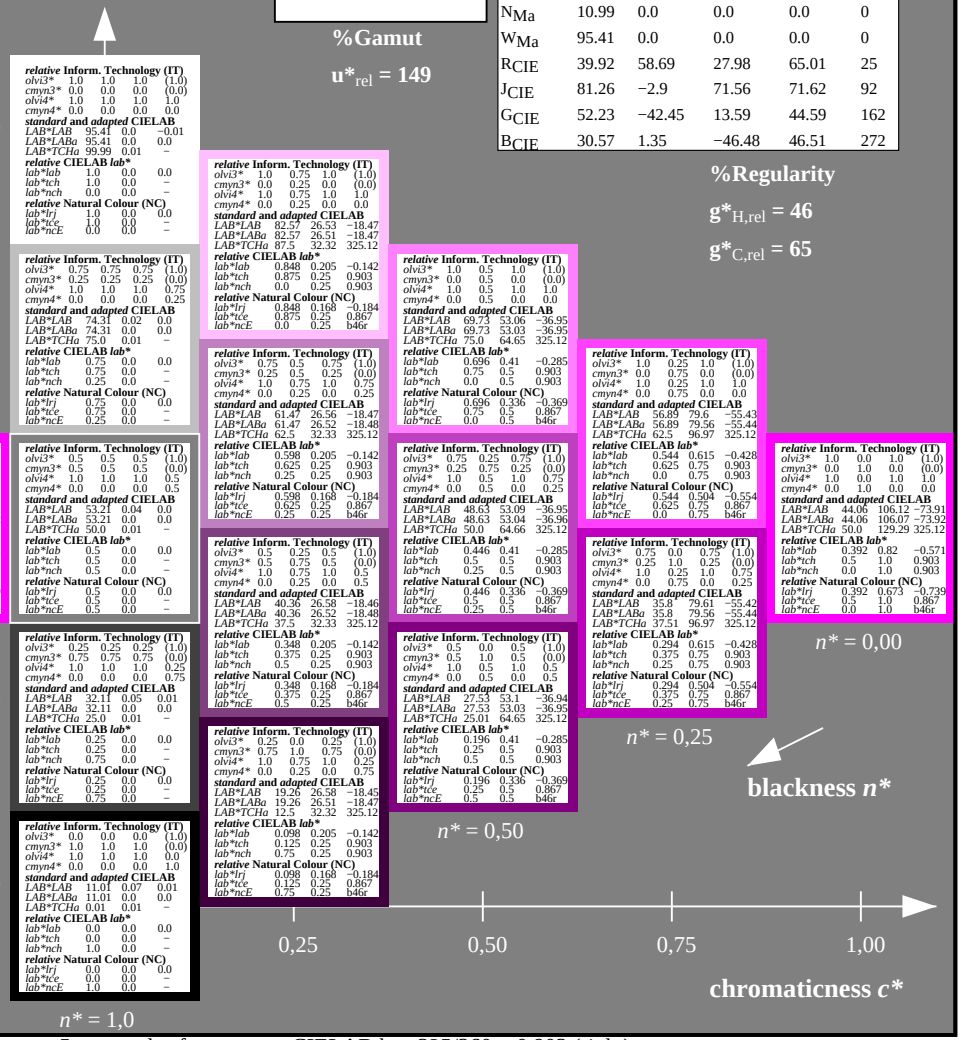
**NCS11; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

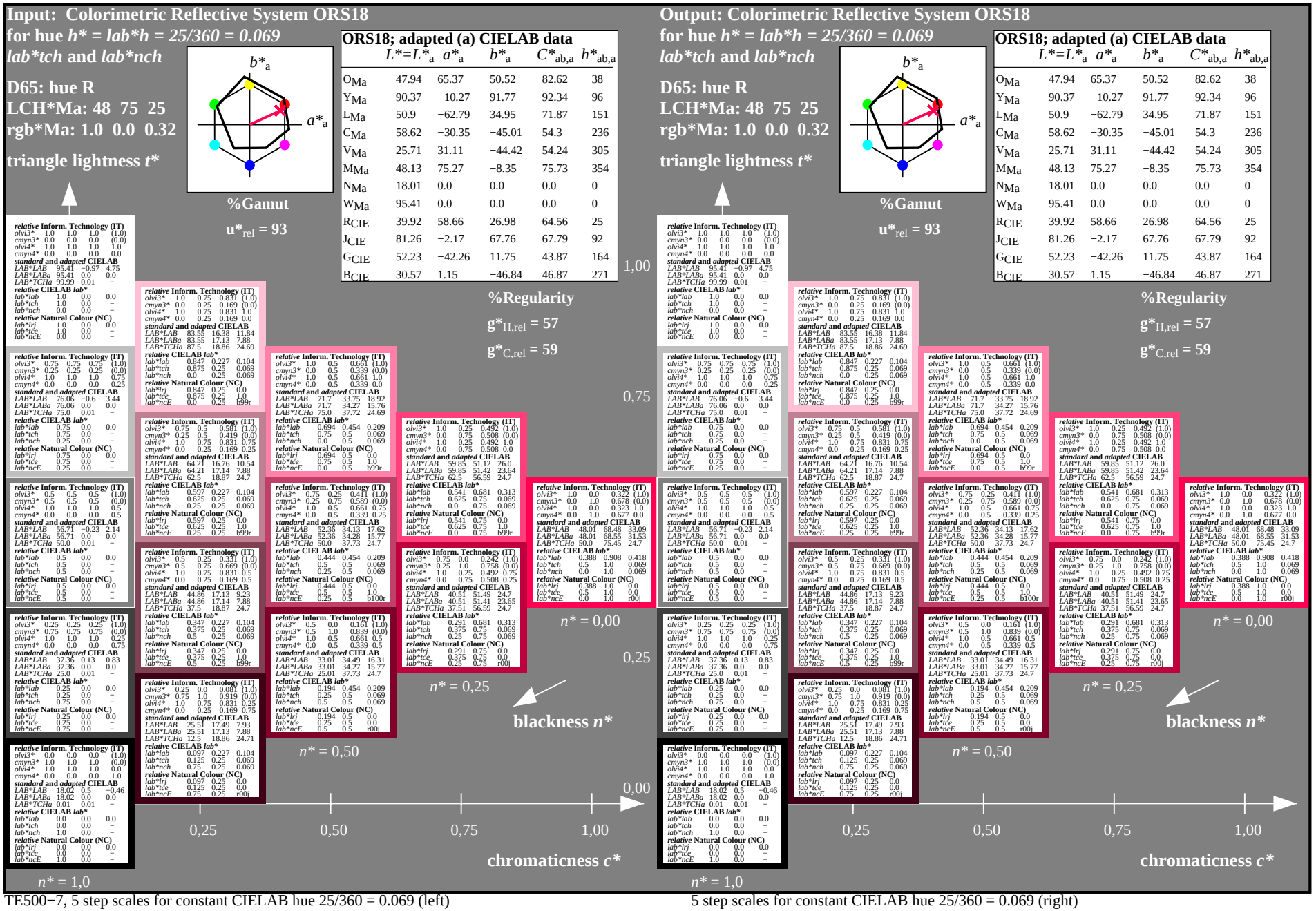
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



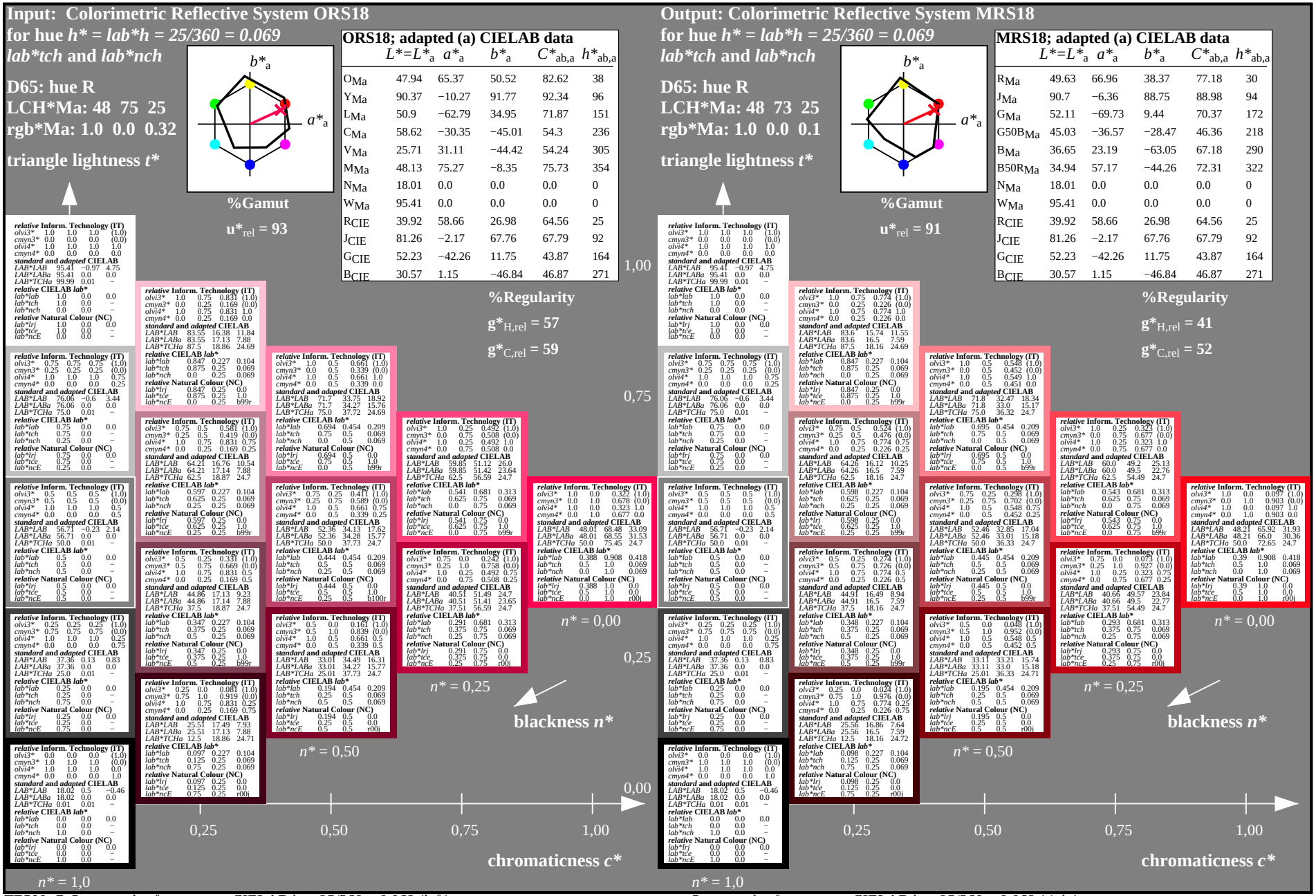

TE500−7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

5 step scales for constant CIELAB hue 325/360 = 0.903 (right)



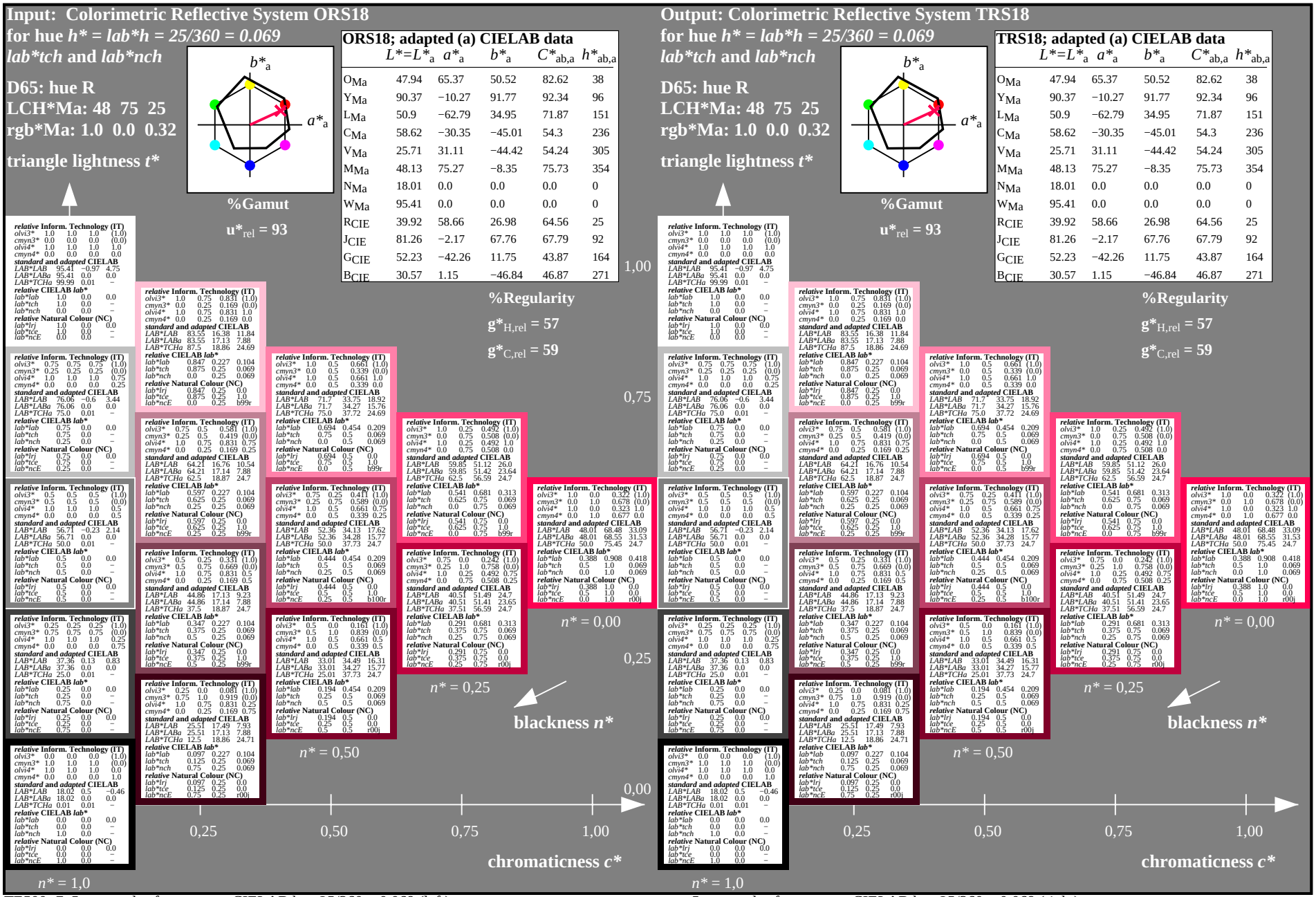

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



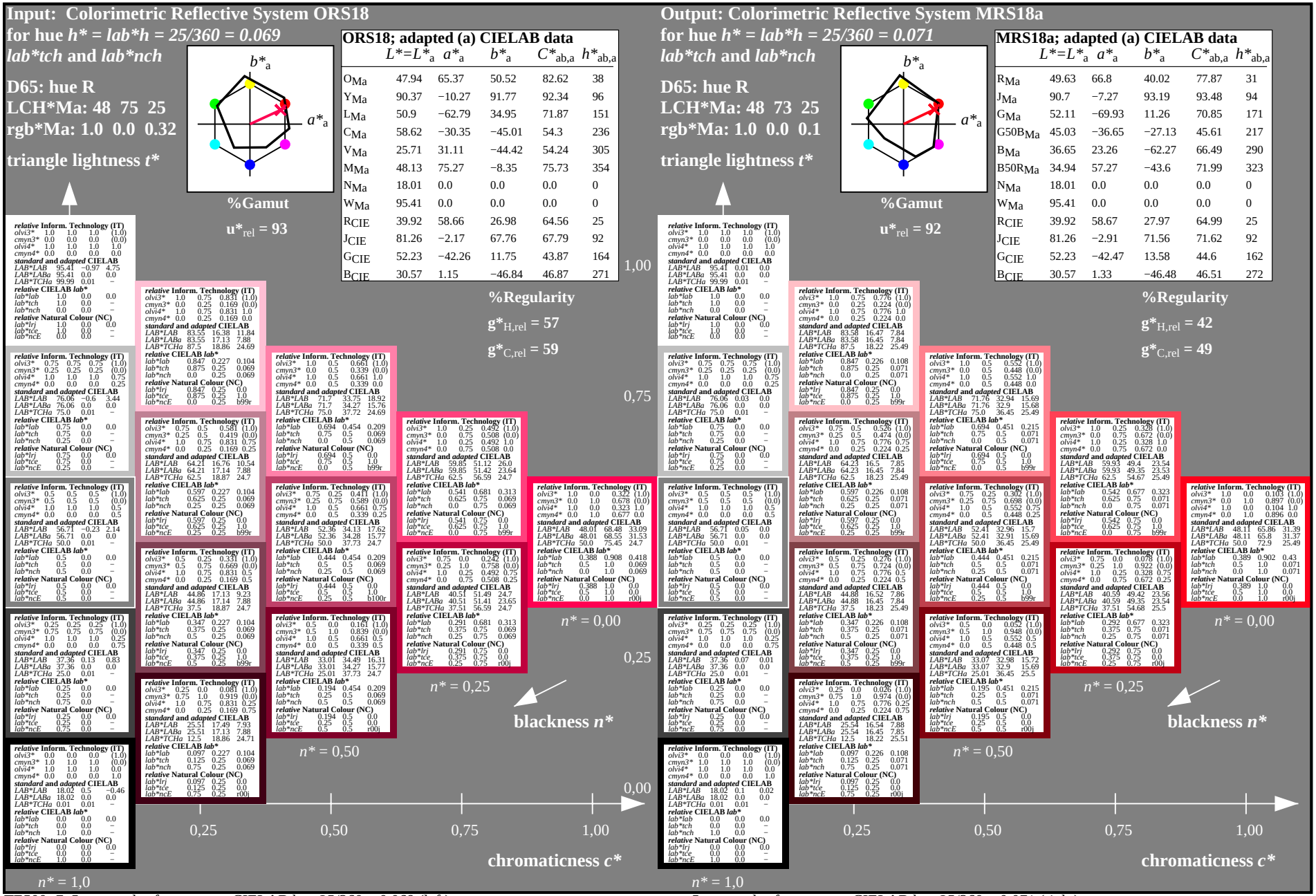

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



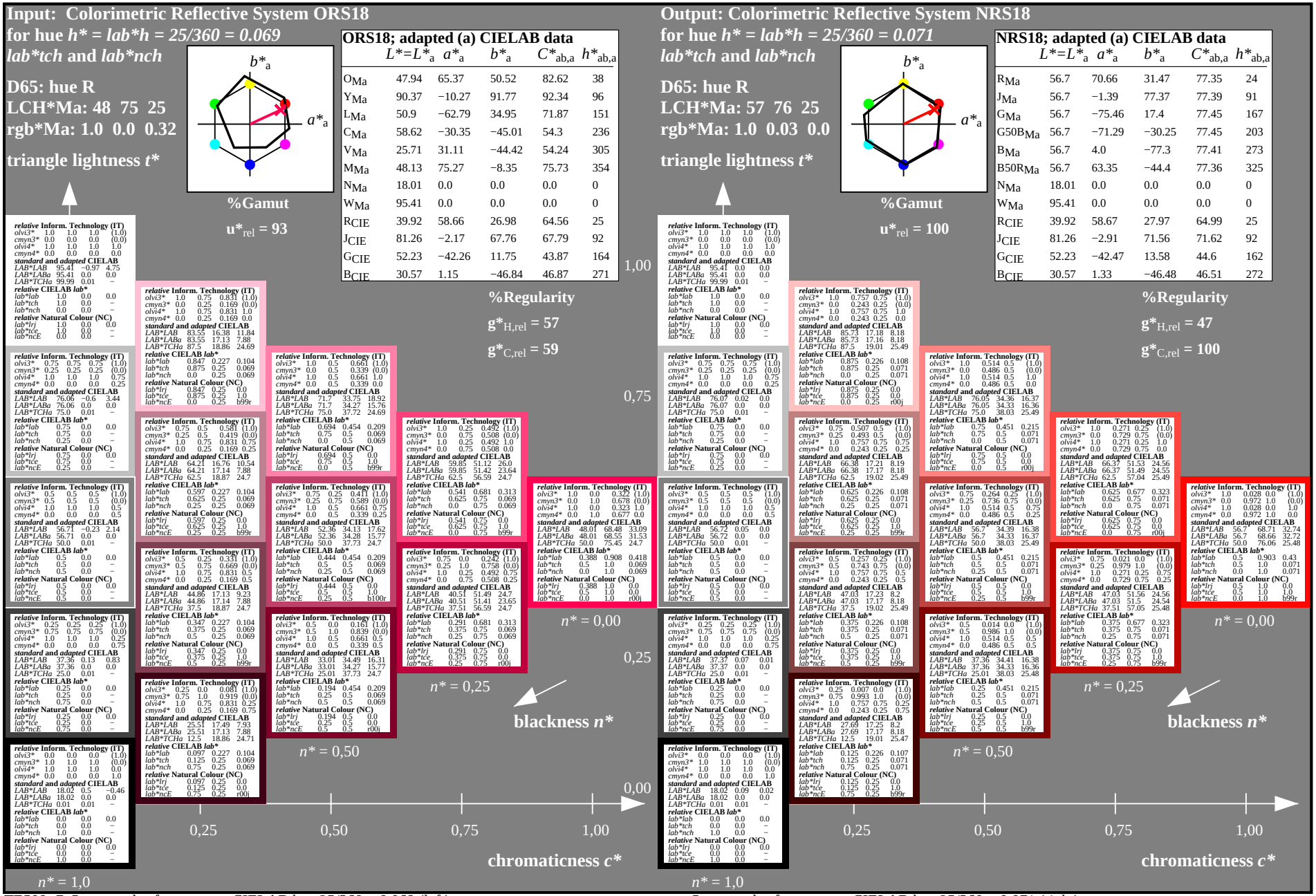

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



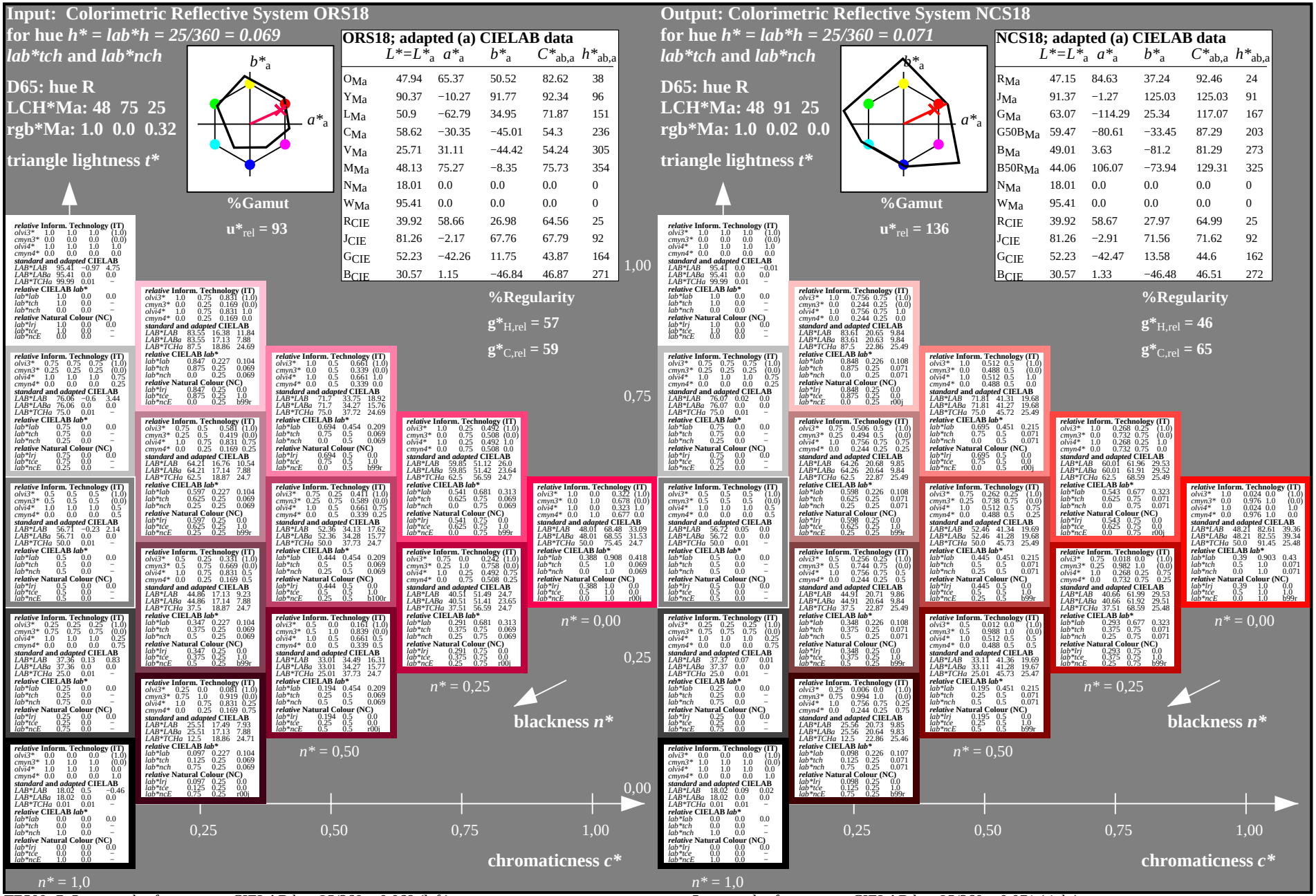

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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



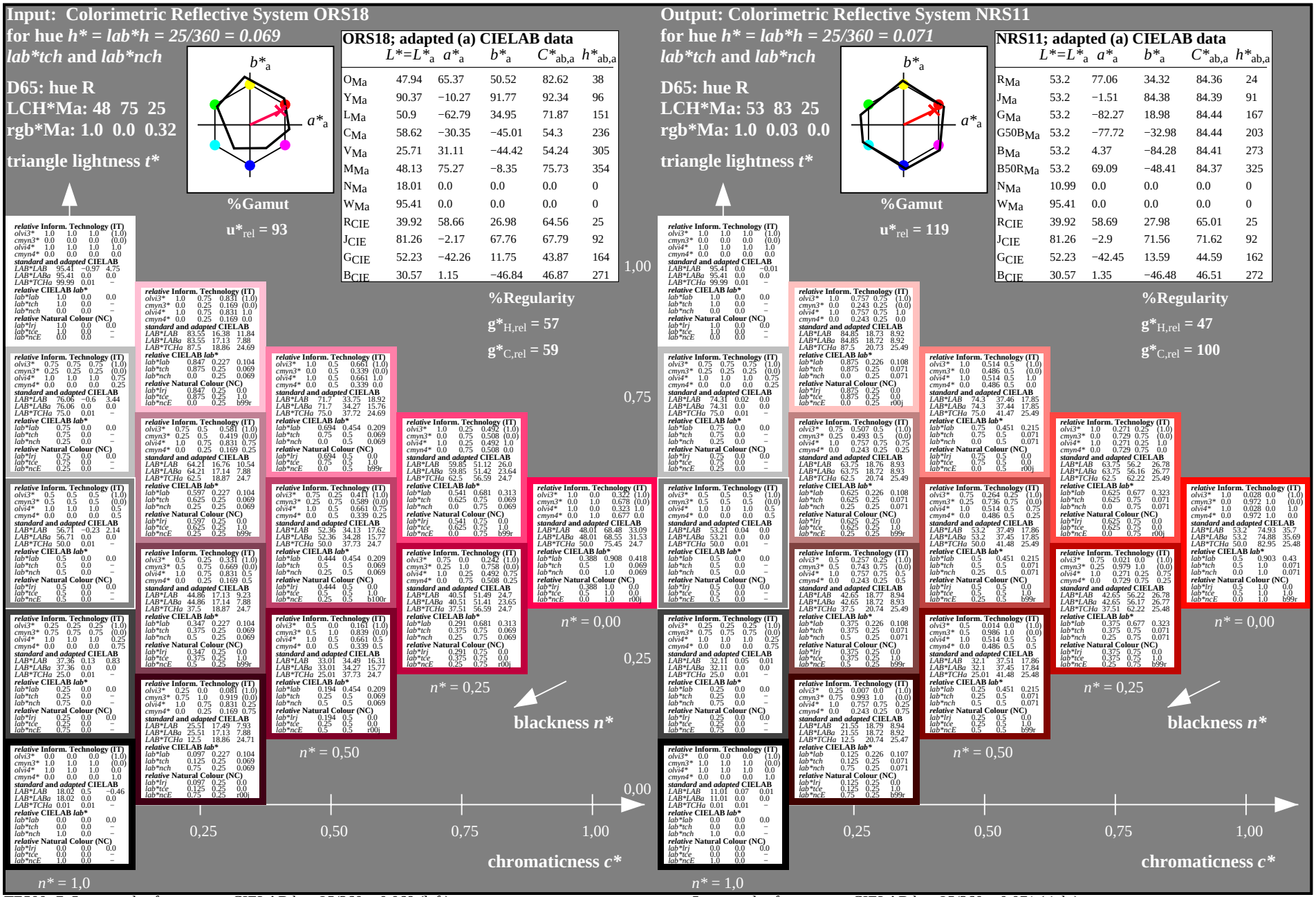

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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



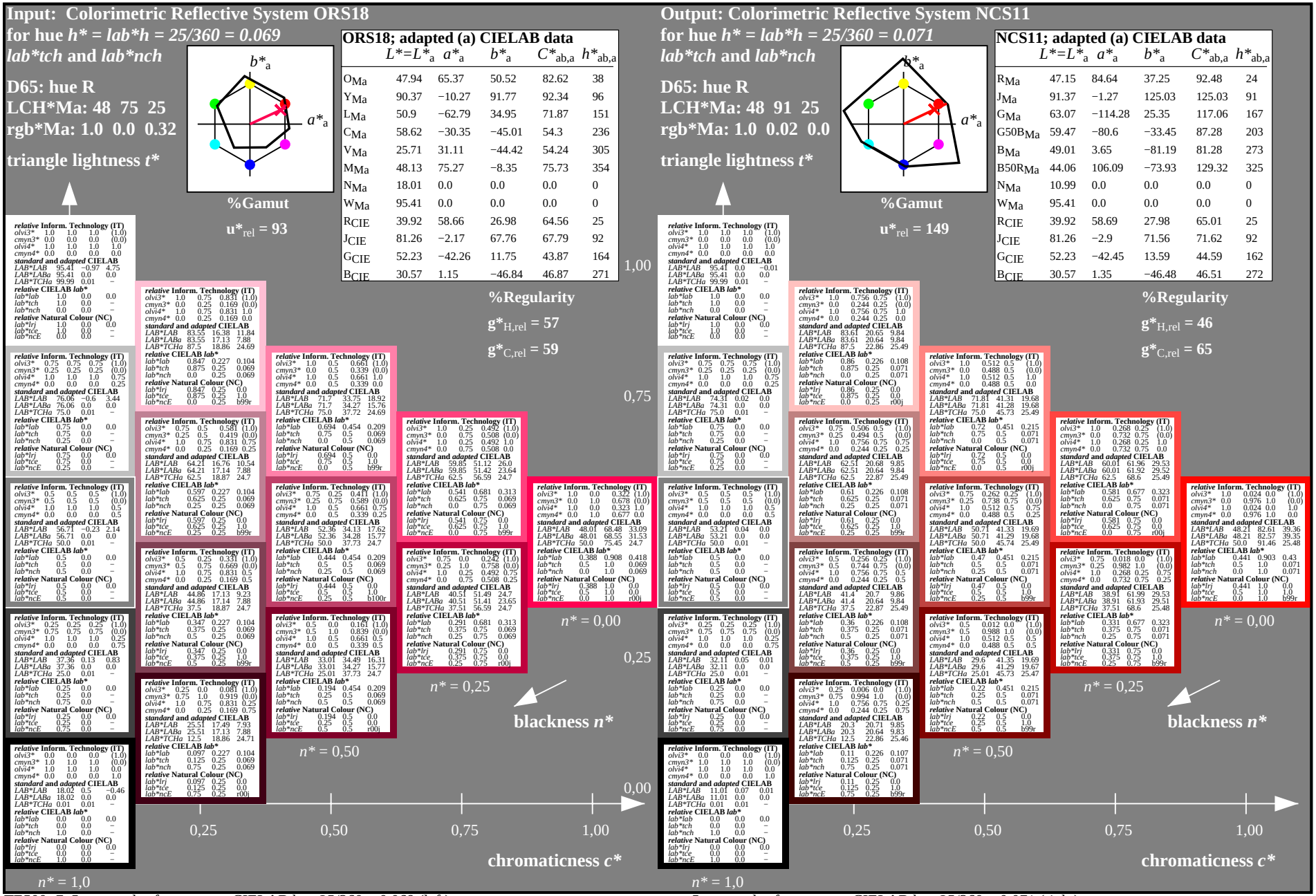

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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



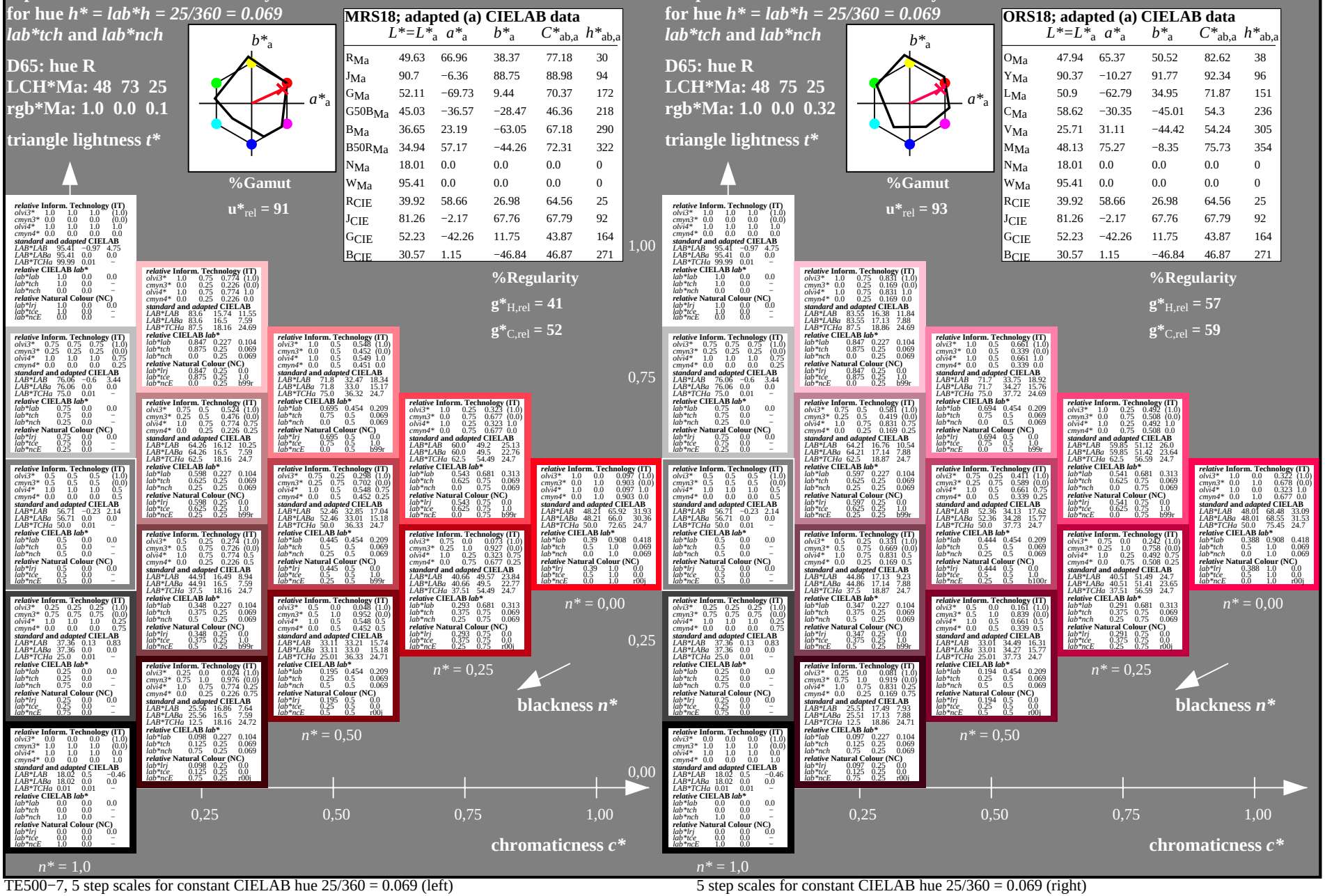

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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



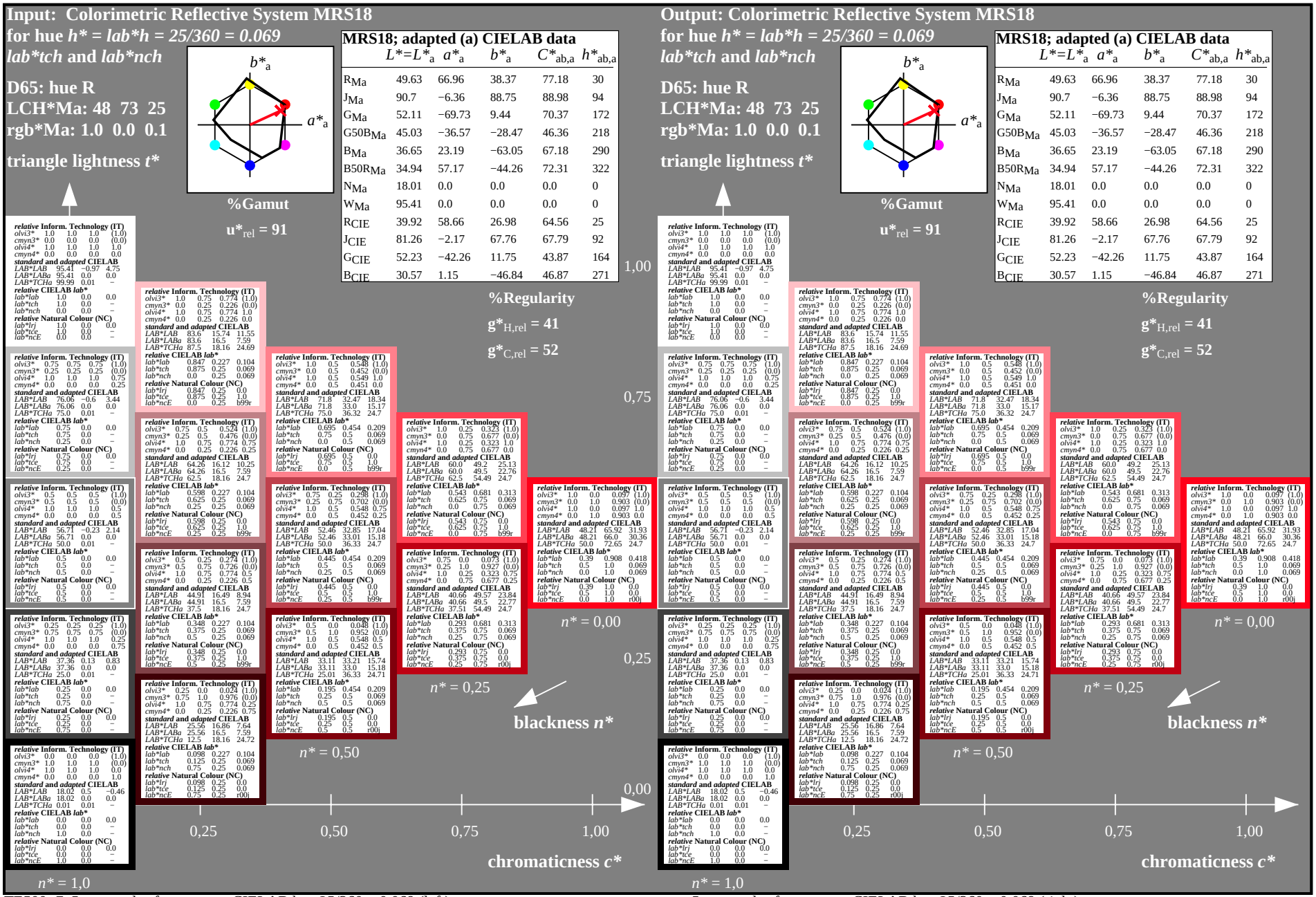

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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



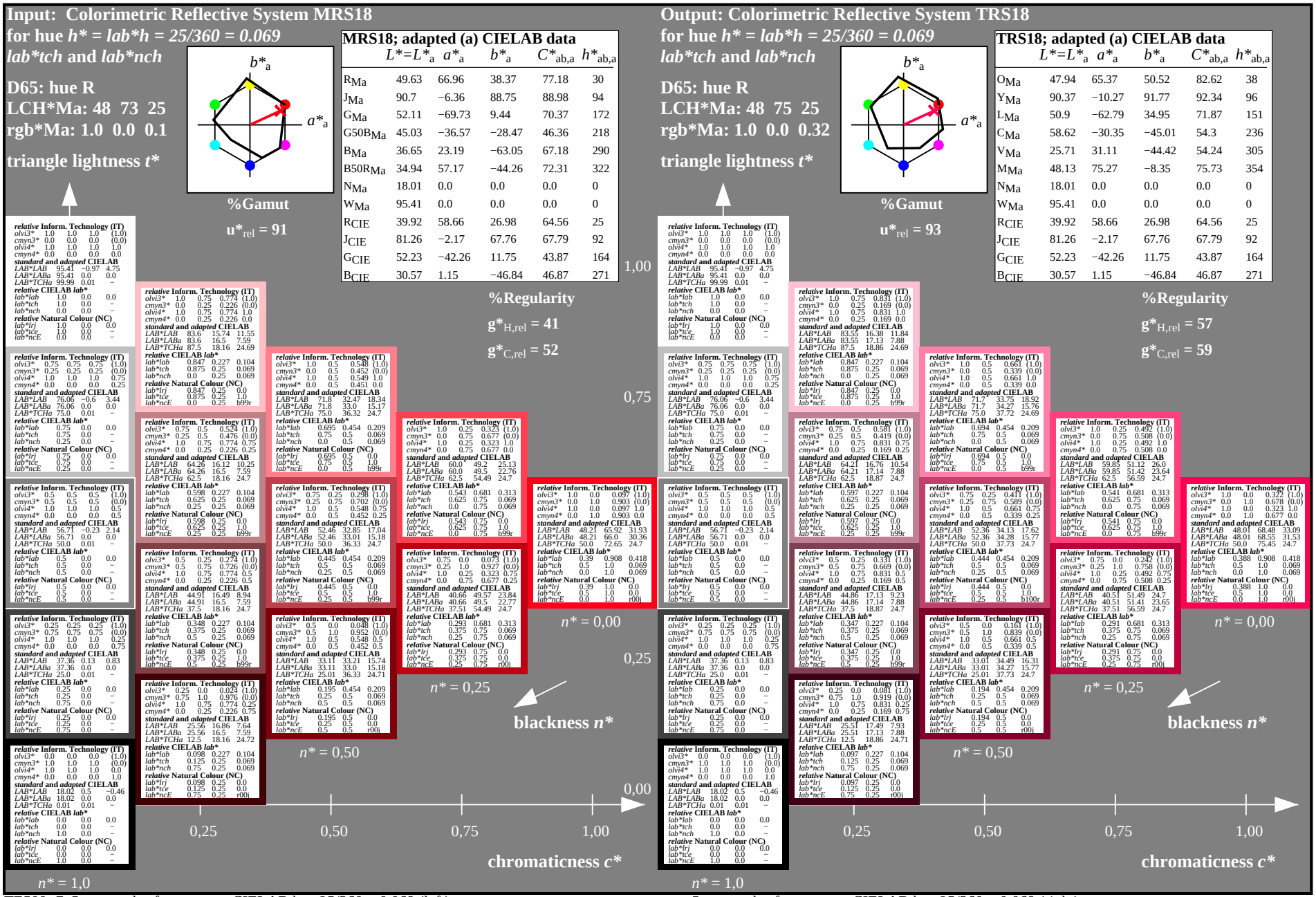

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



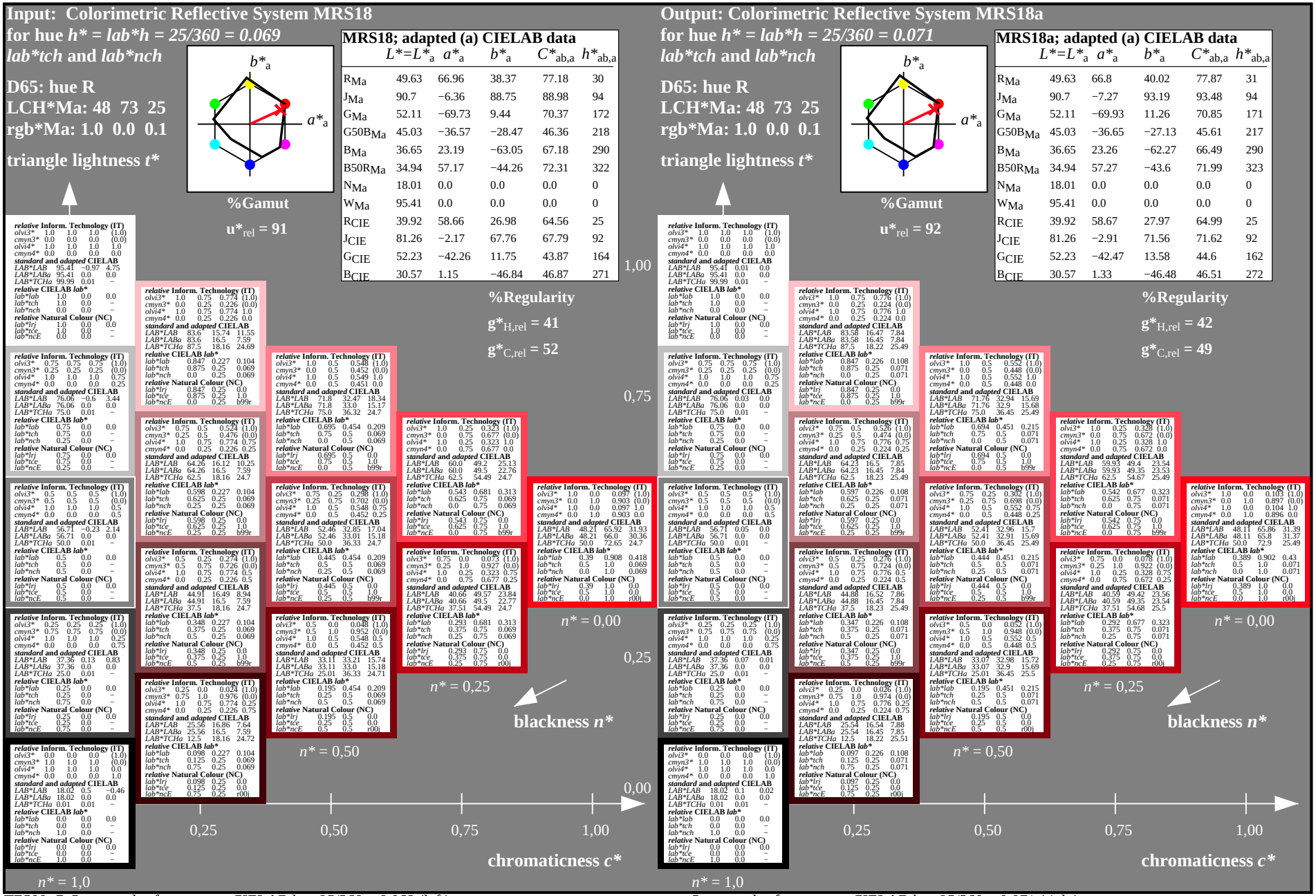

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



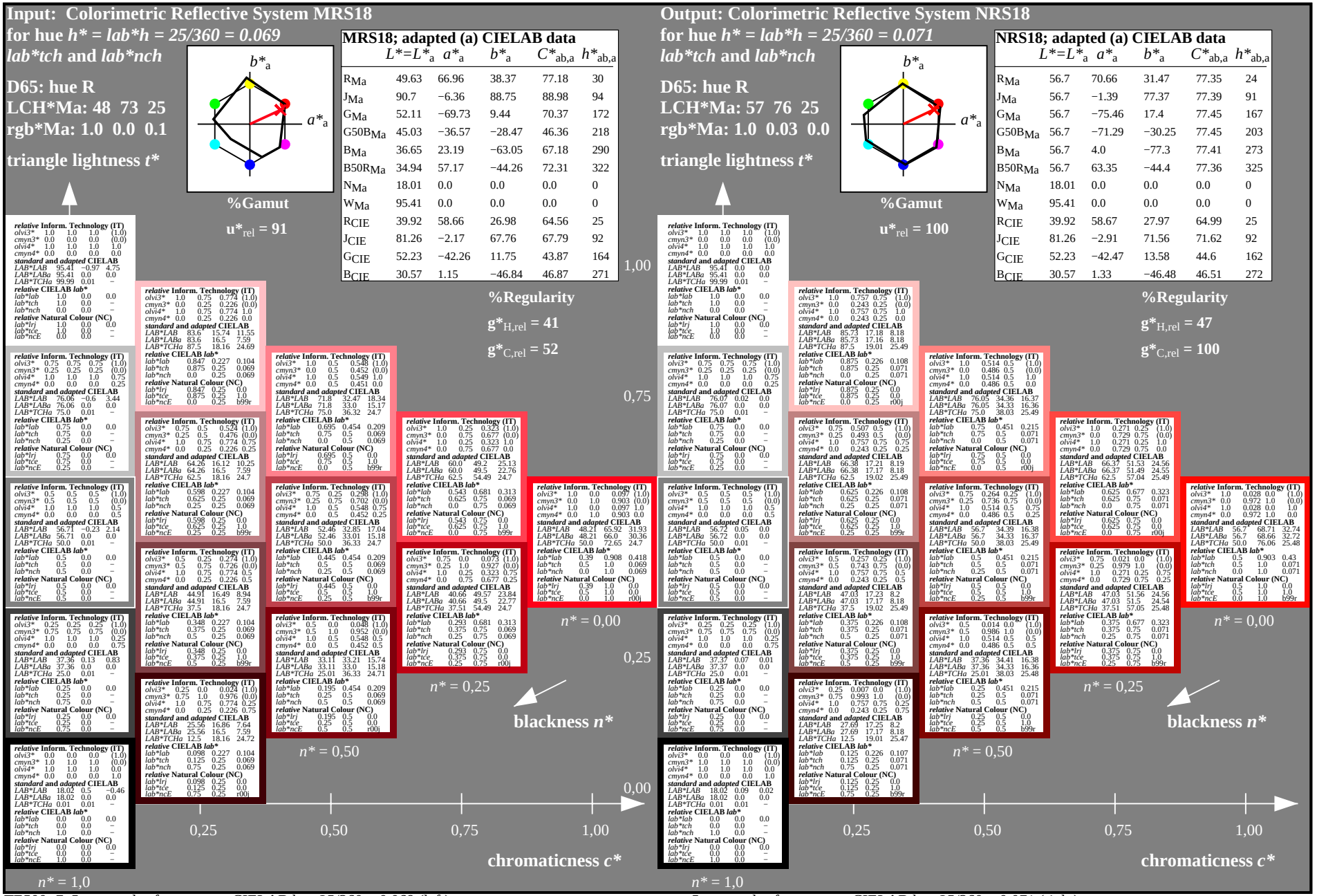

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



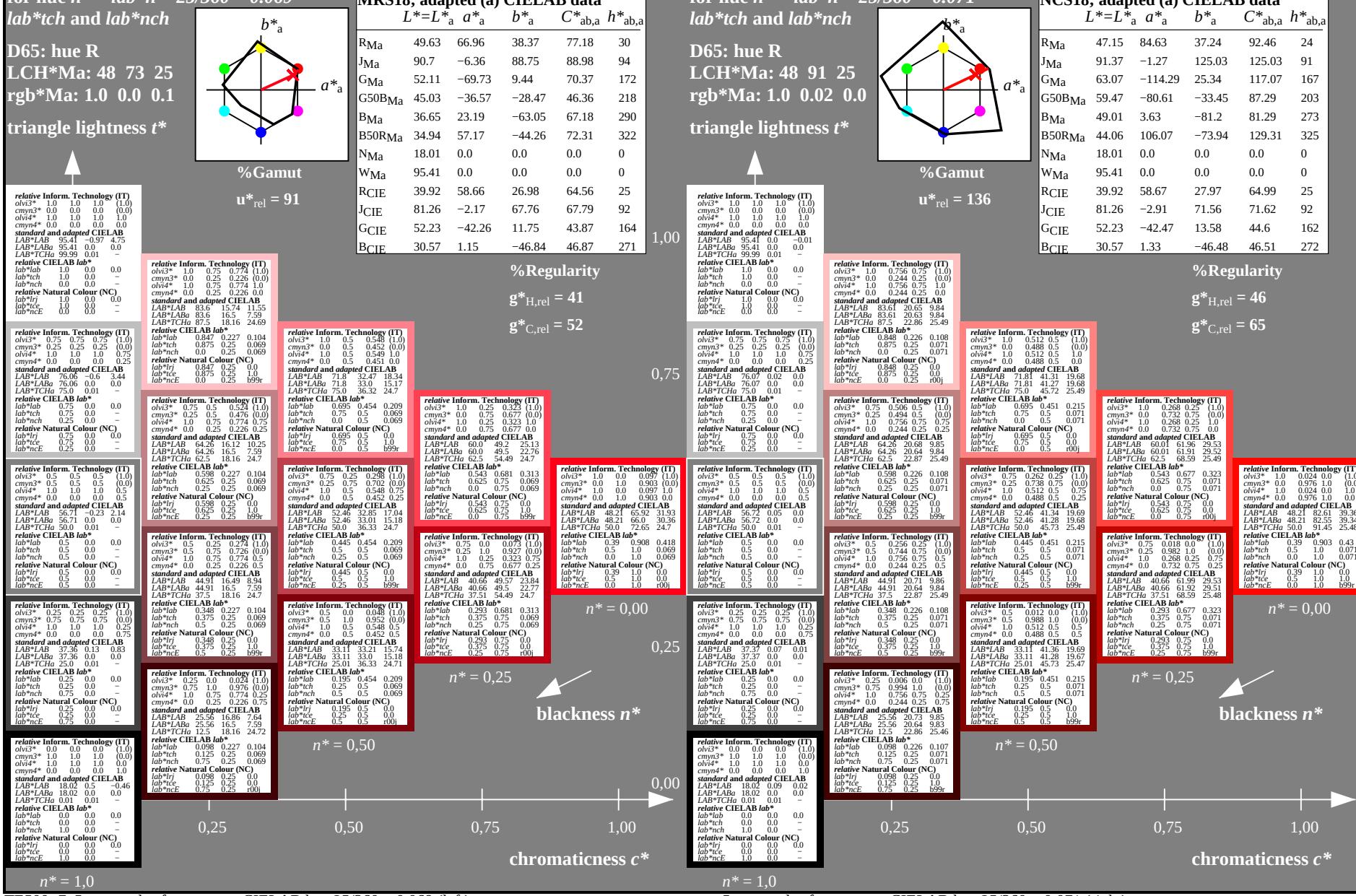

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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



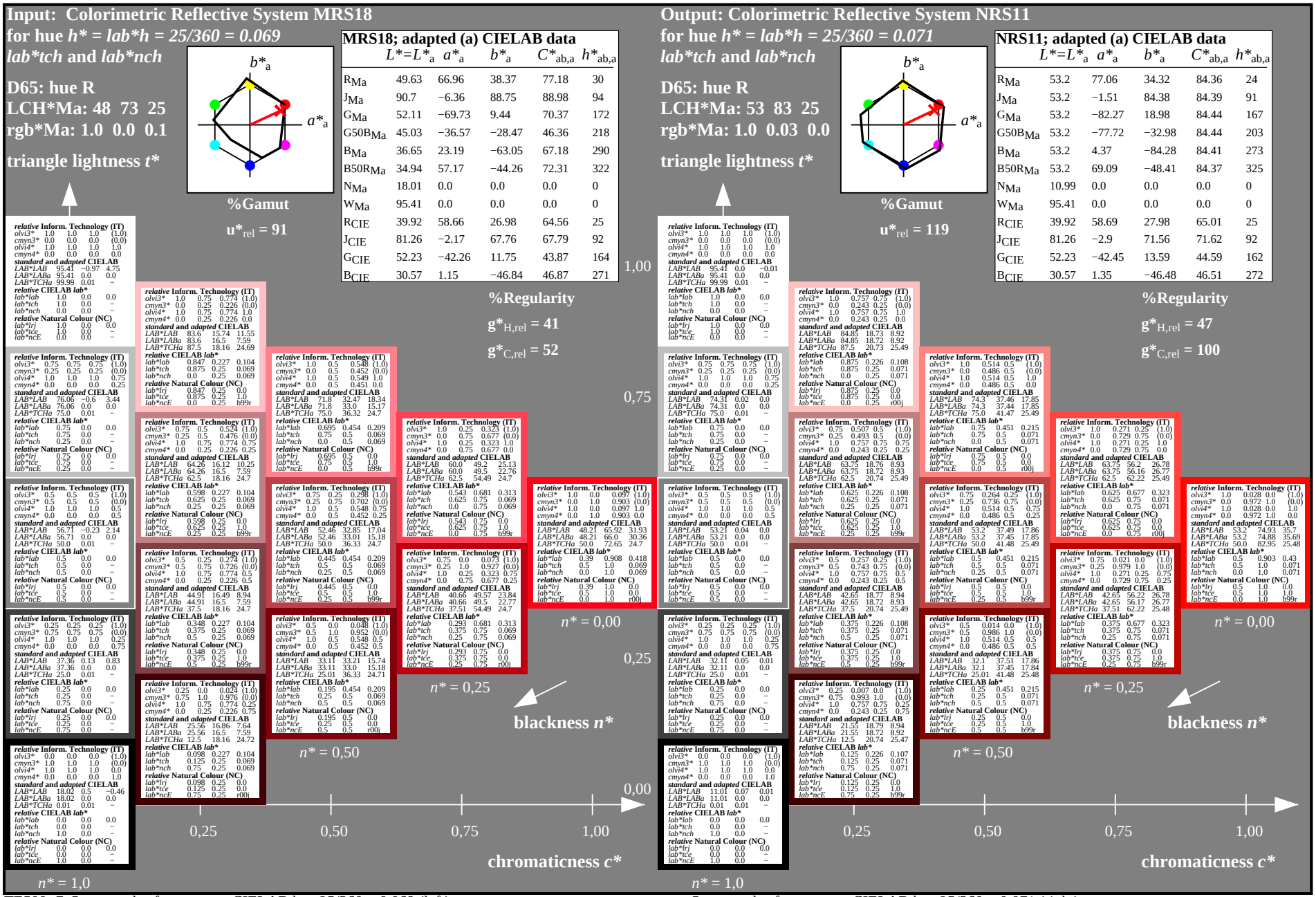

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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



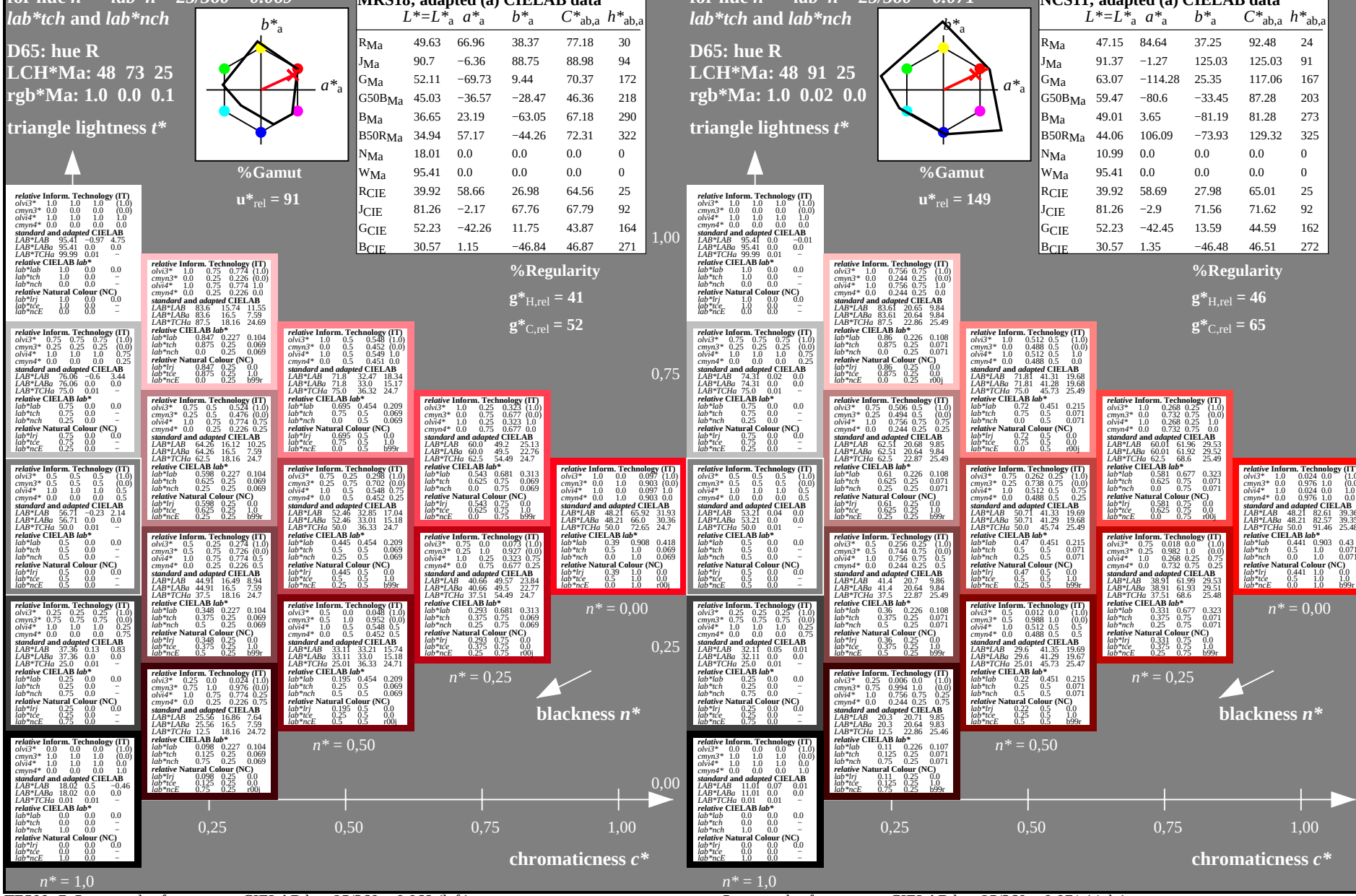

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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




**MRS18; adapted (a) CIELAB data**

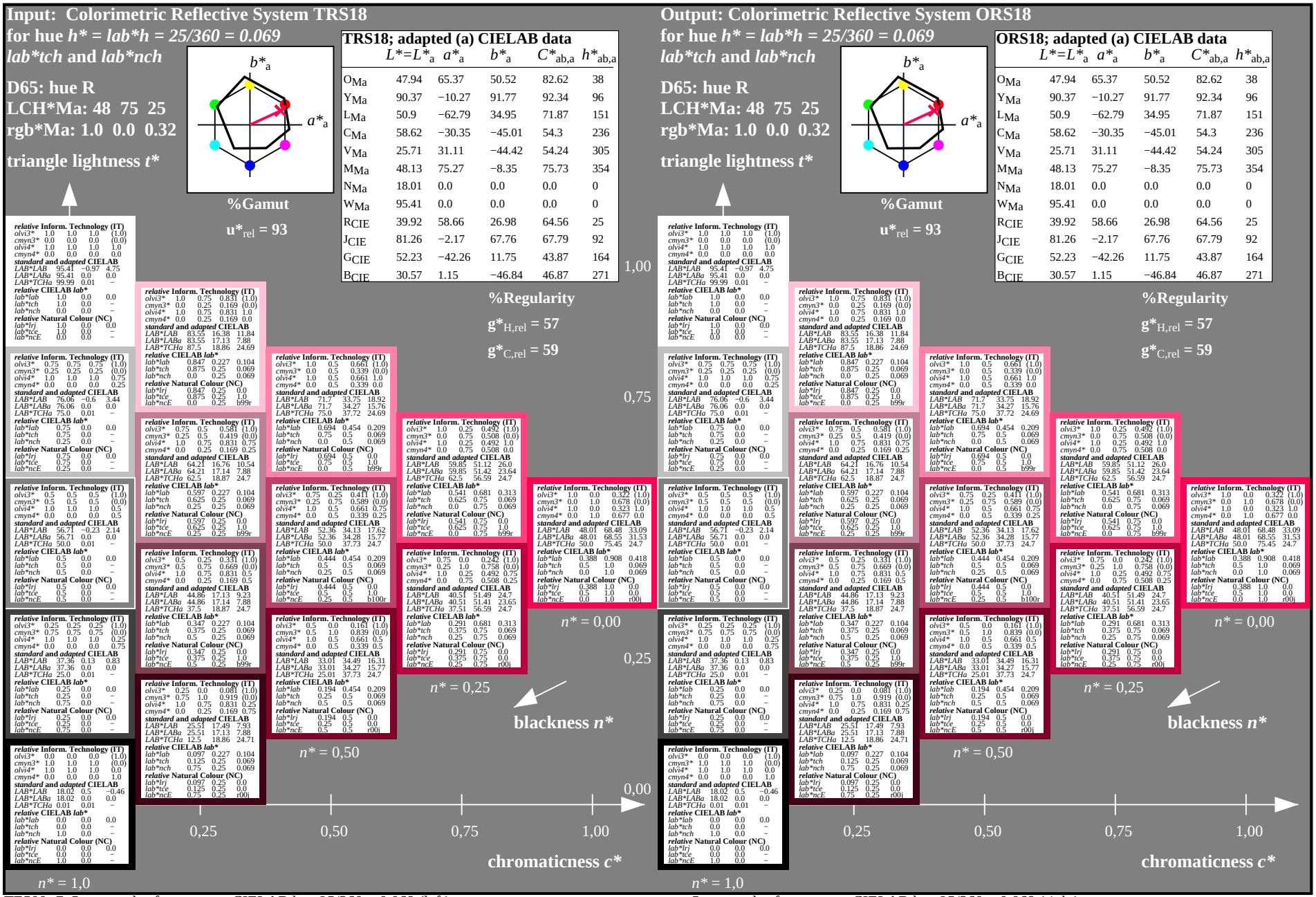
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

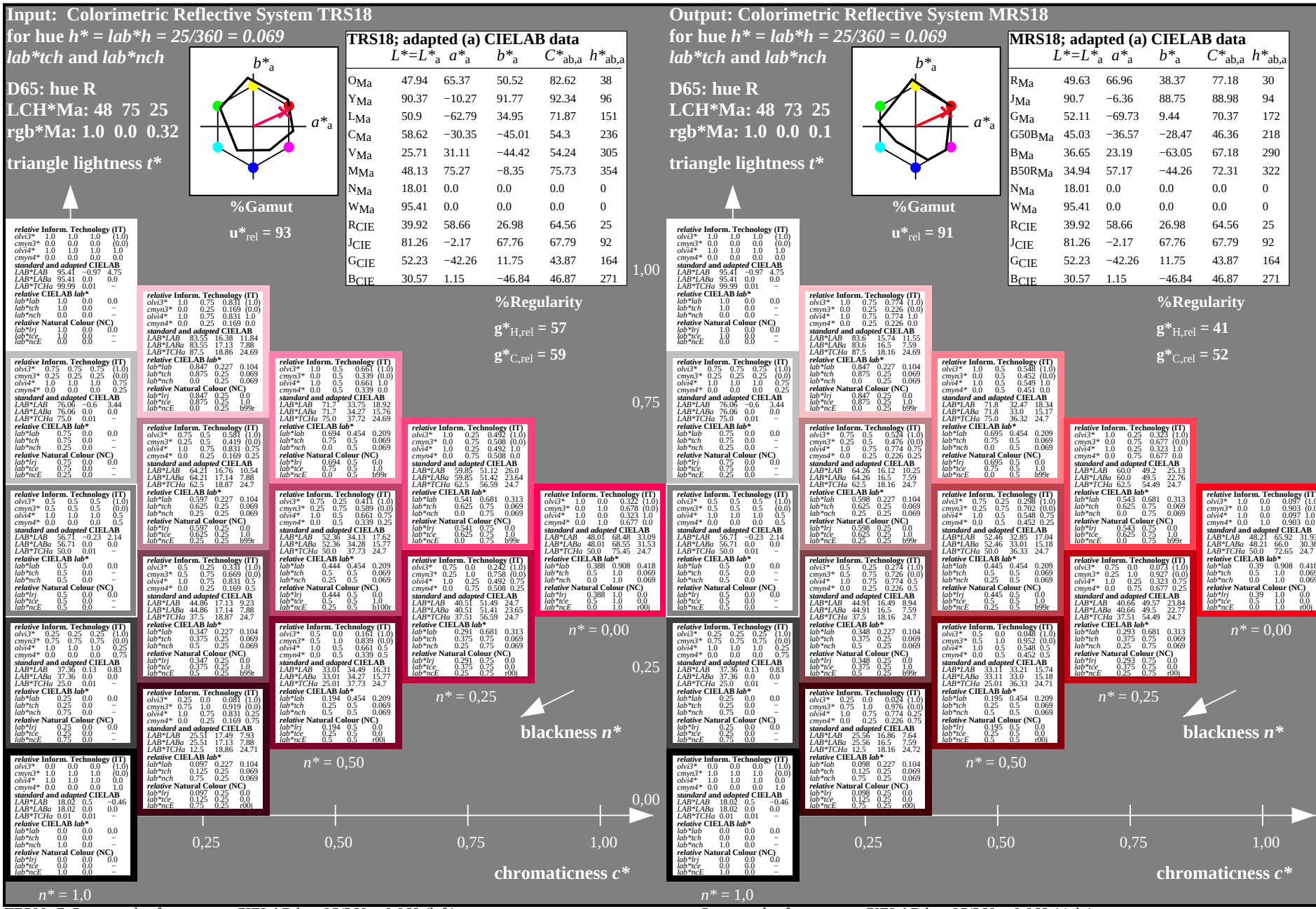
TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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



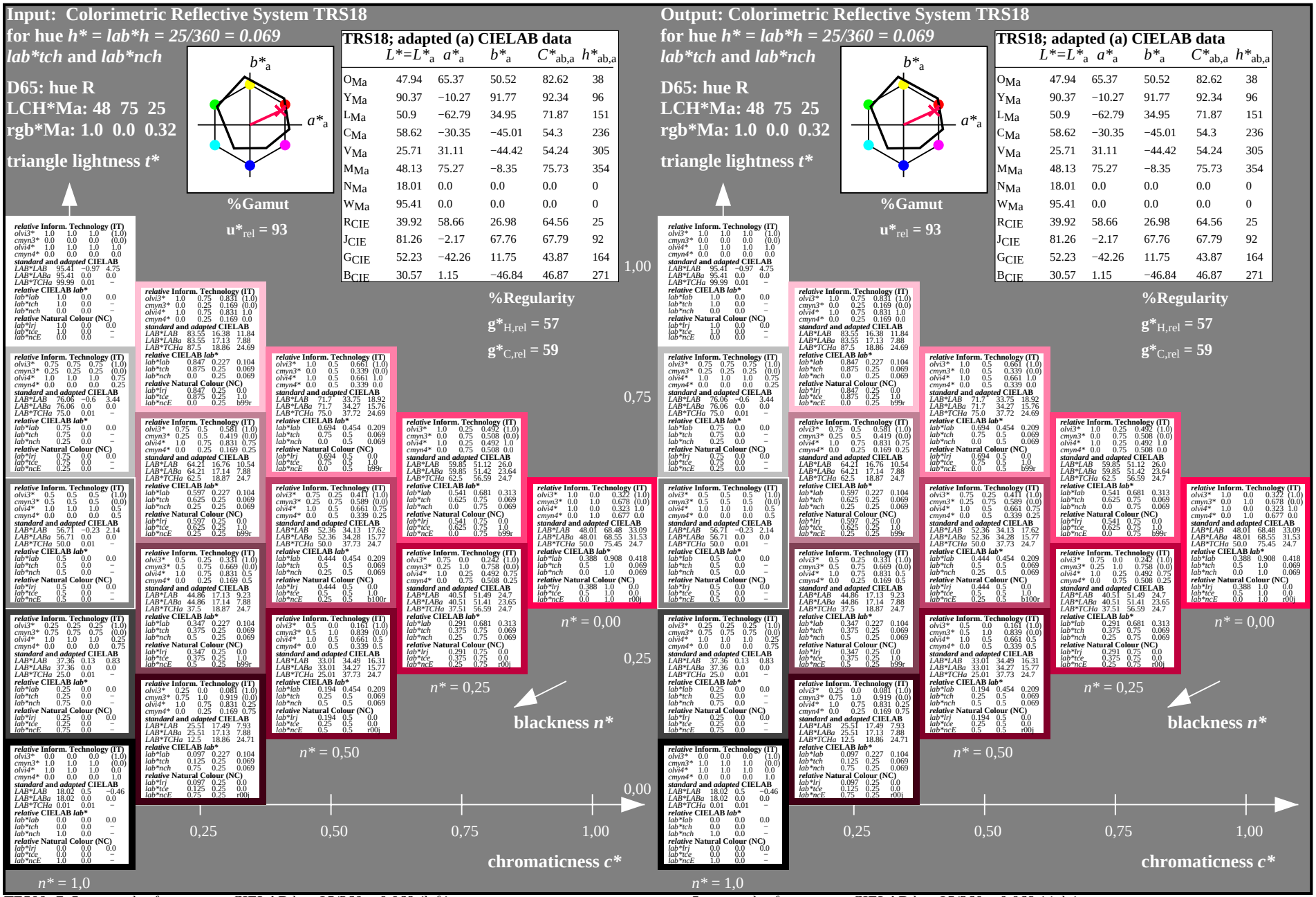

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



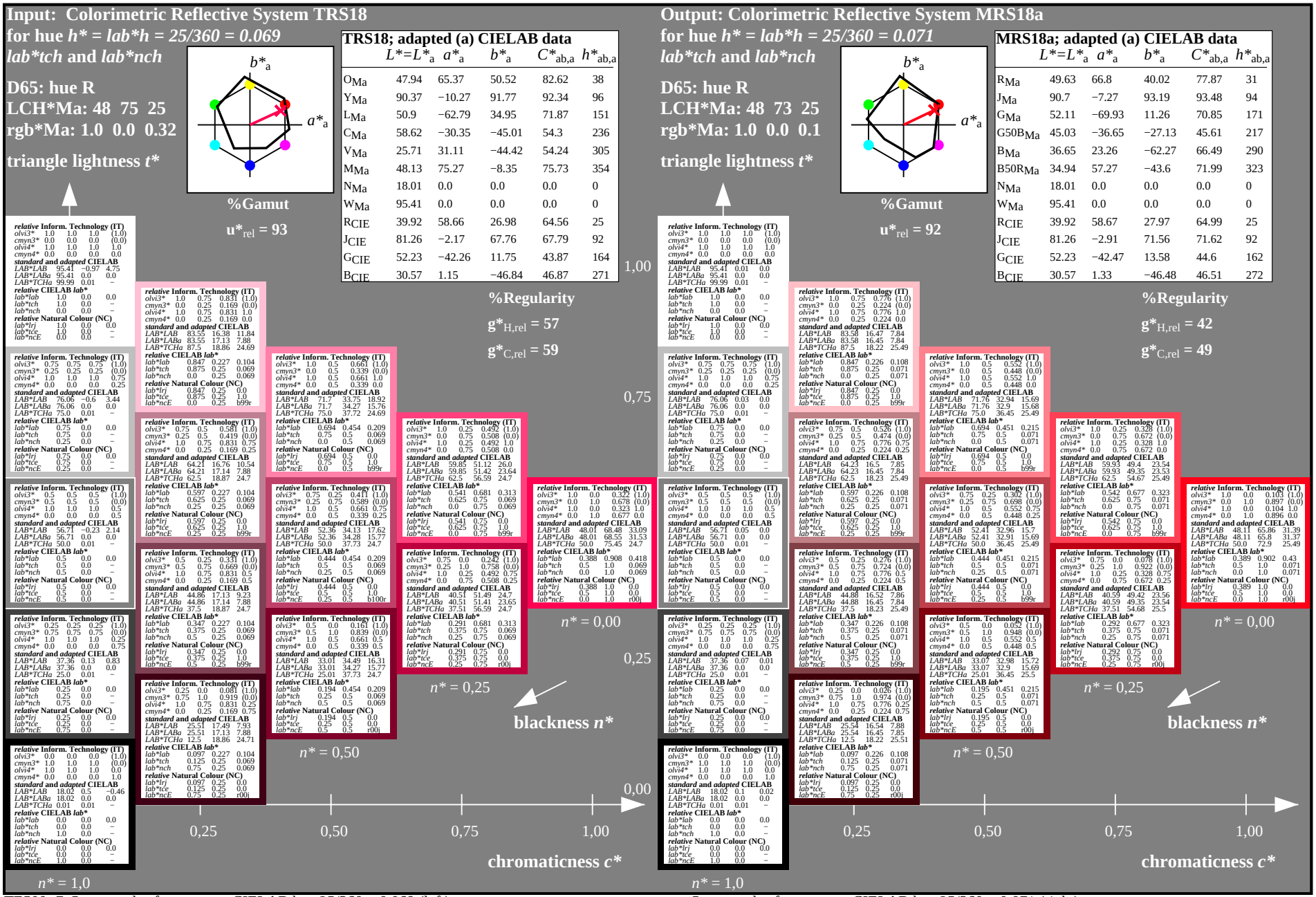

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



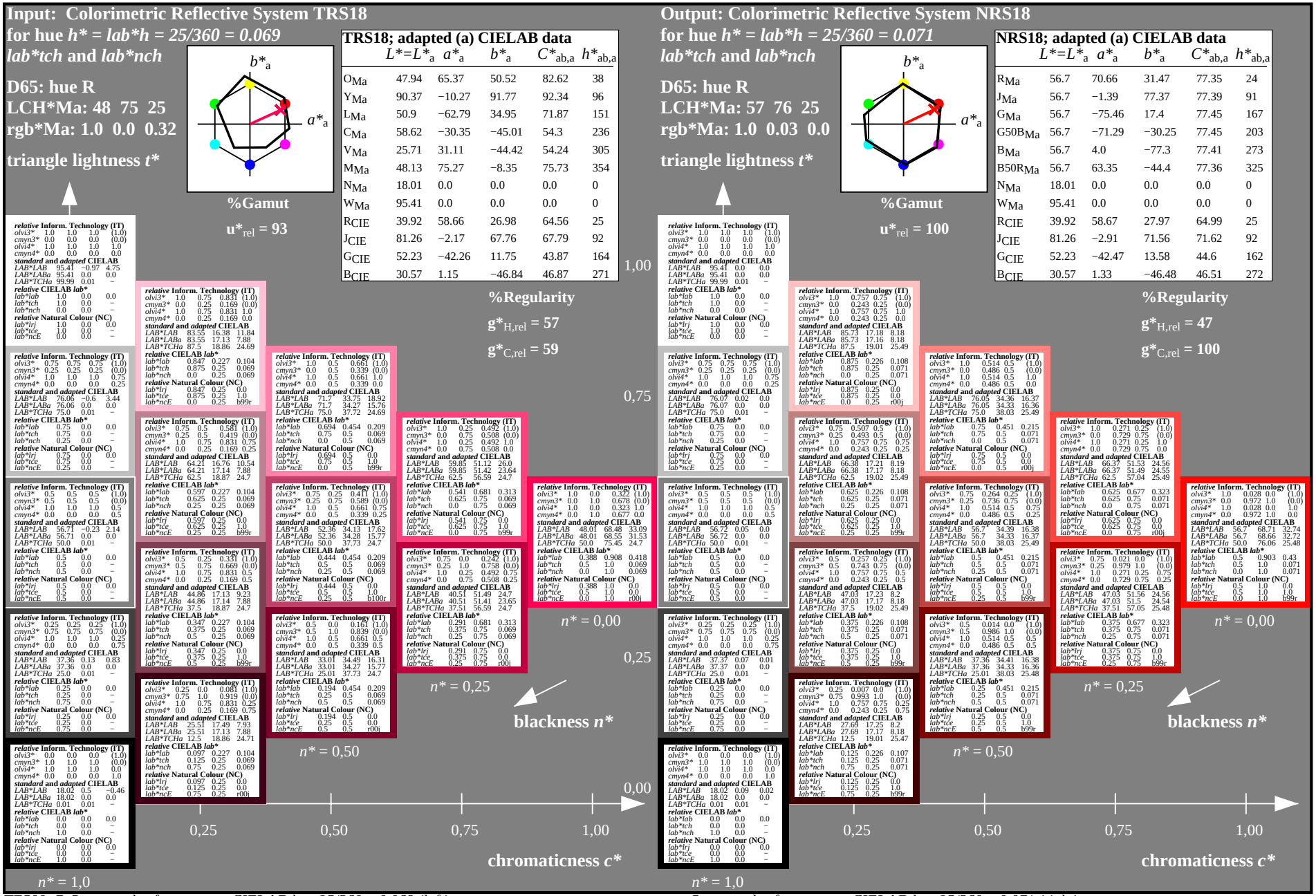

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)




TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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



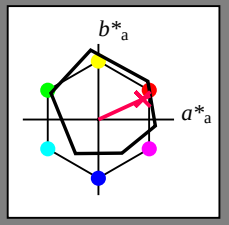

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 25/360 = 0.069**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 48 75 25**
**rgb*Ma: 1.0 0.0 0.32**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

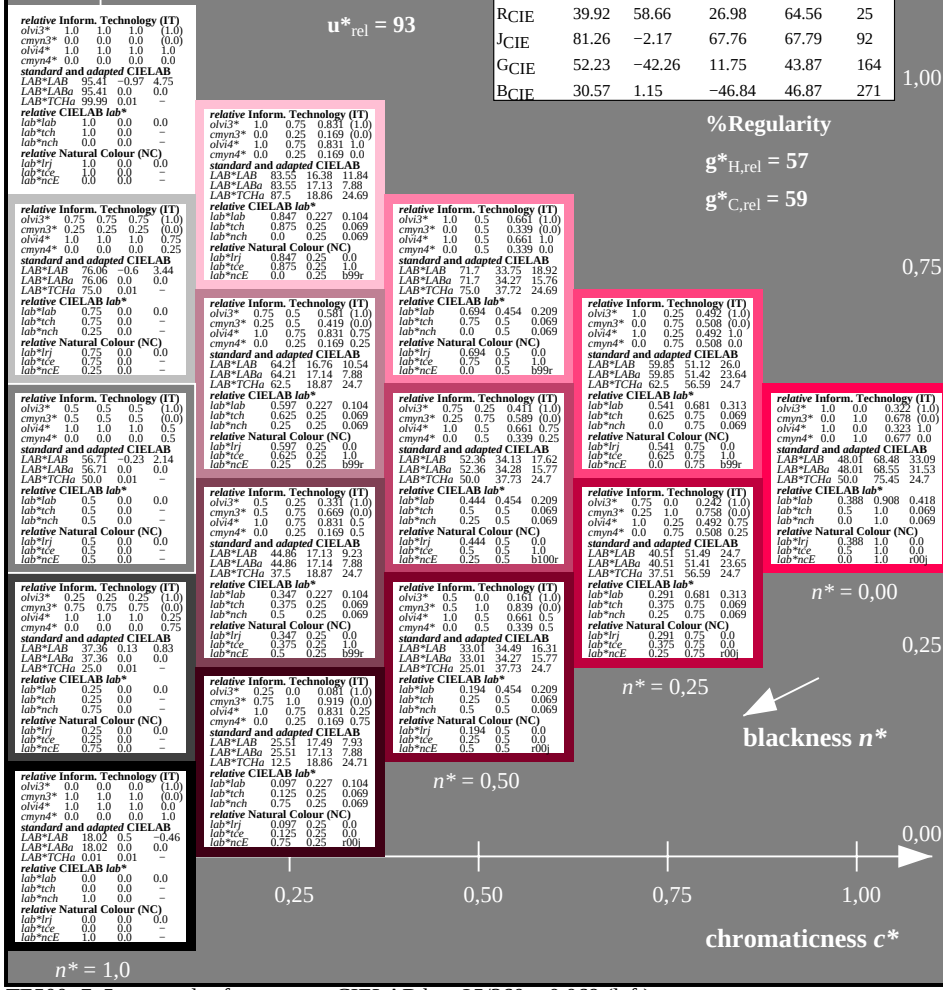
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

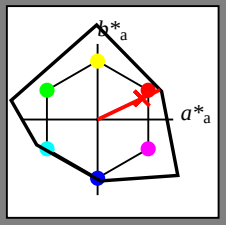
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 25/360 = 0.071**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 48 91 25**
**rgb*Ma: 1.0 0.02 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

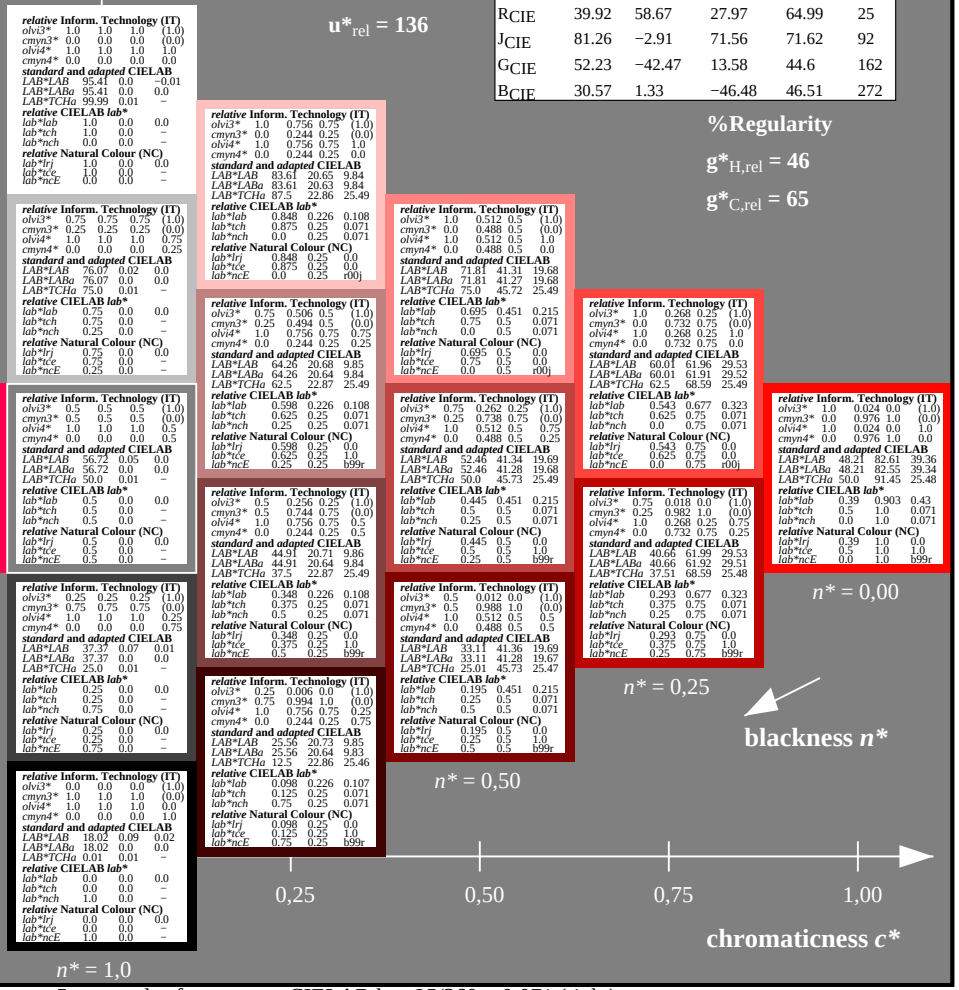
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

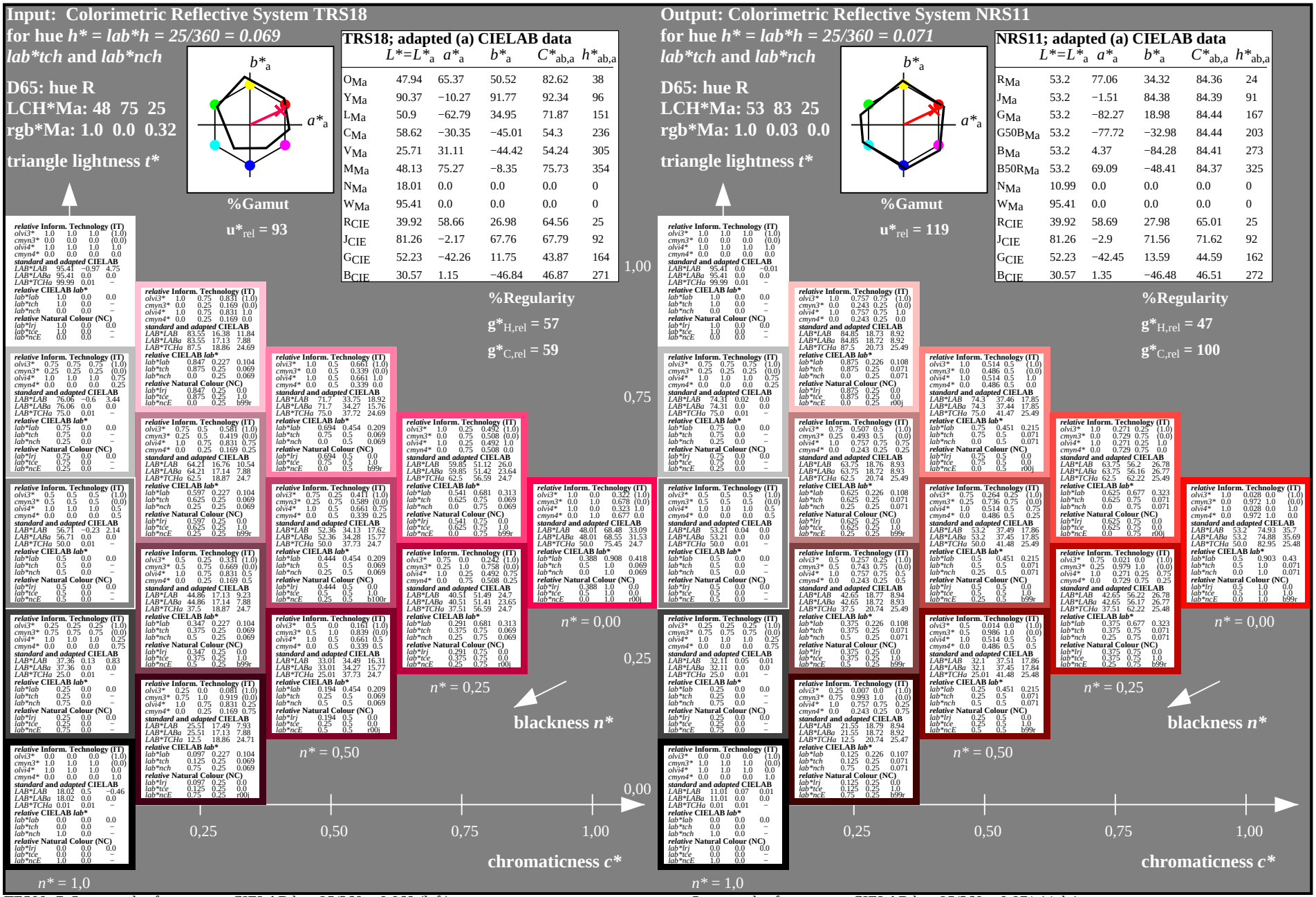
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



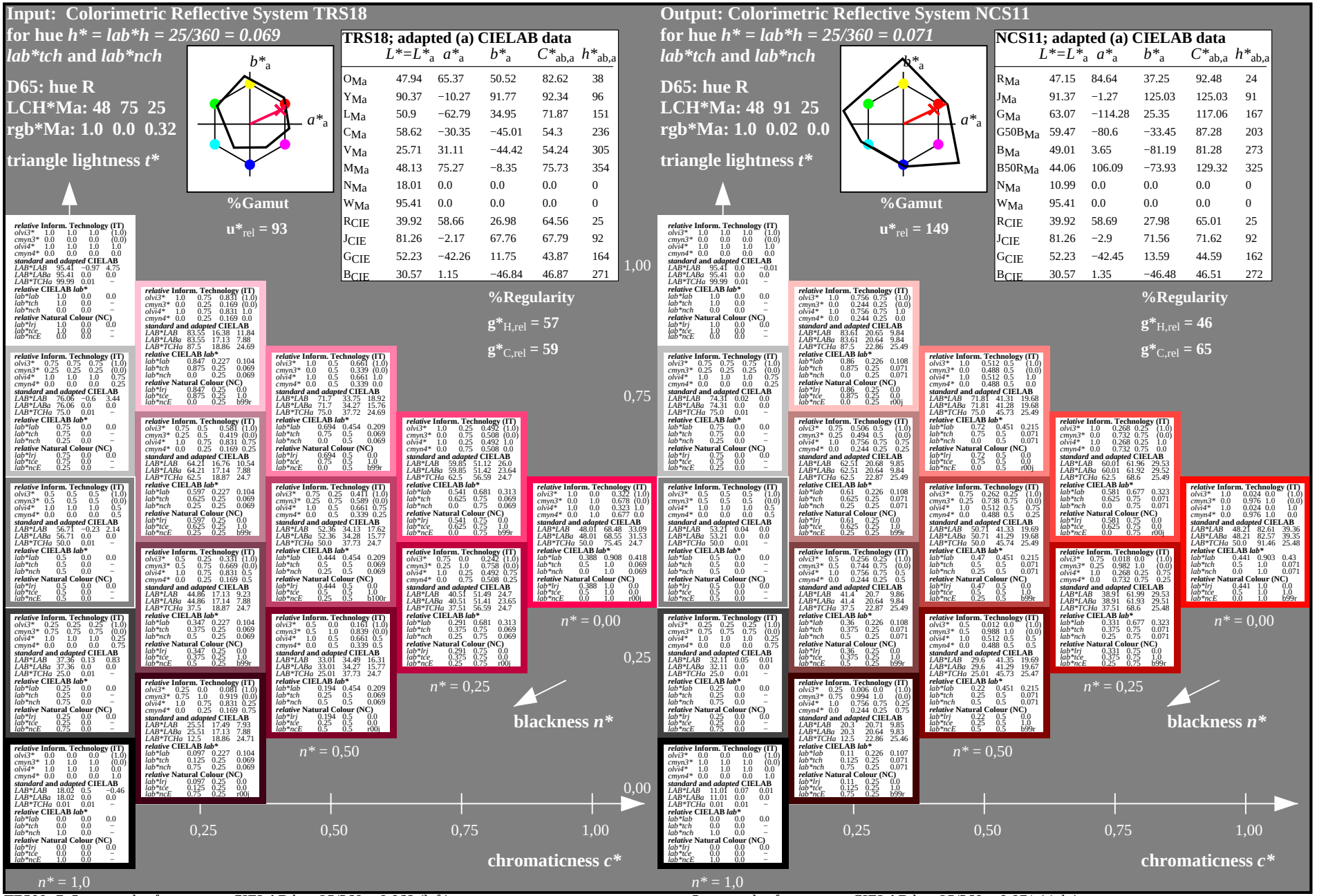

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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




**TRS18; adapted (a) CIELAB data**

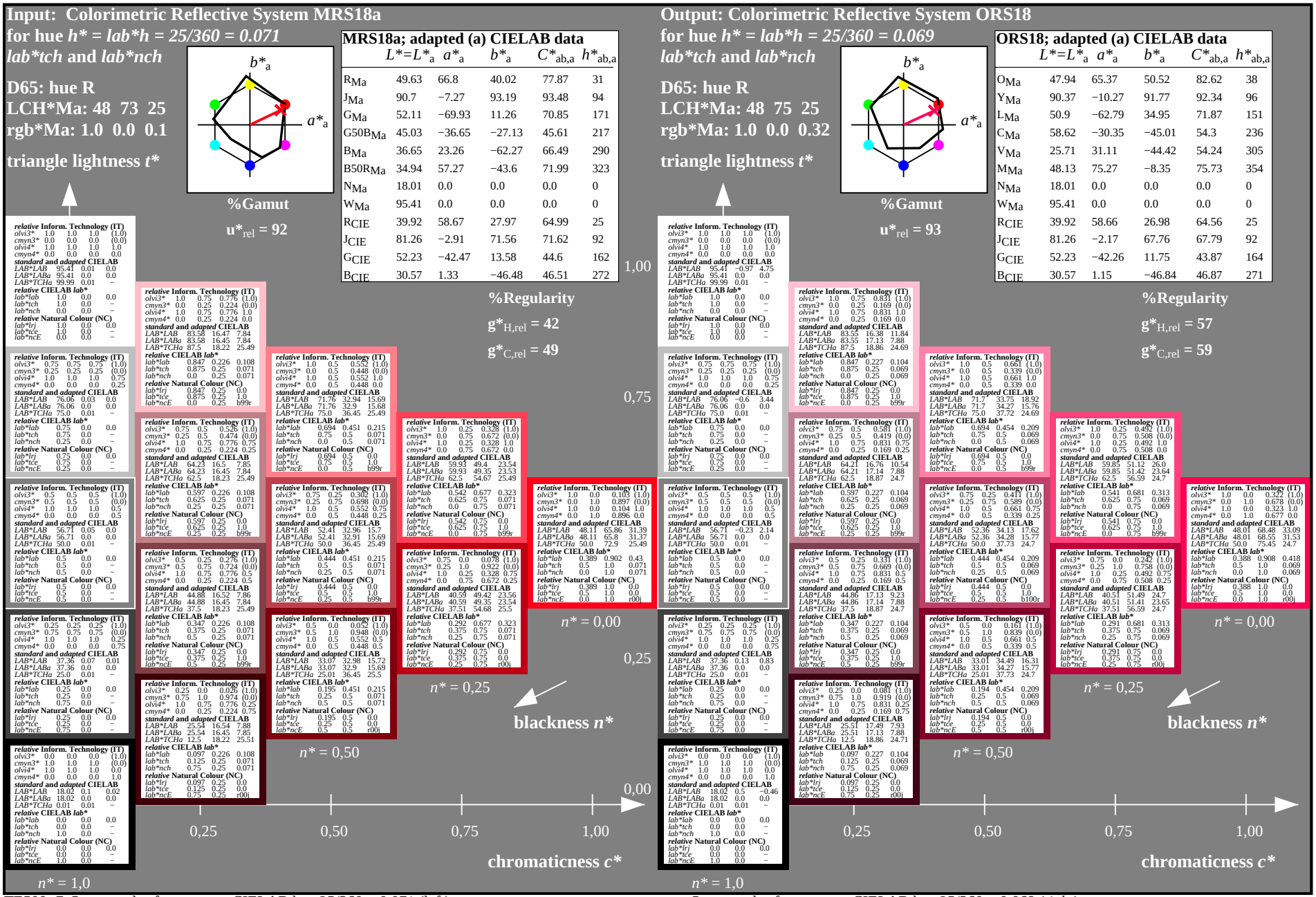
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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



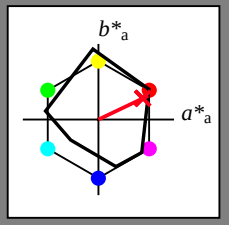

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 25/360 = 0.071**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 48 73 25**
**rgb*Ma: 1.0 0.0 0.1**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

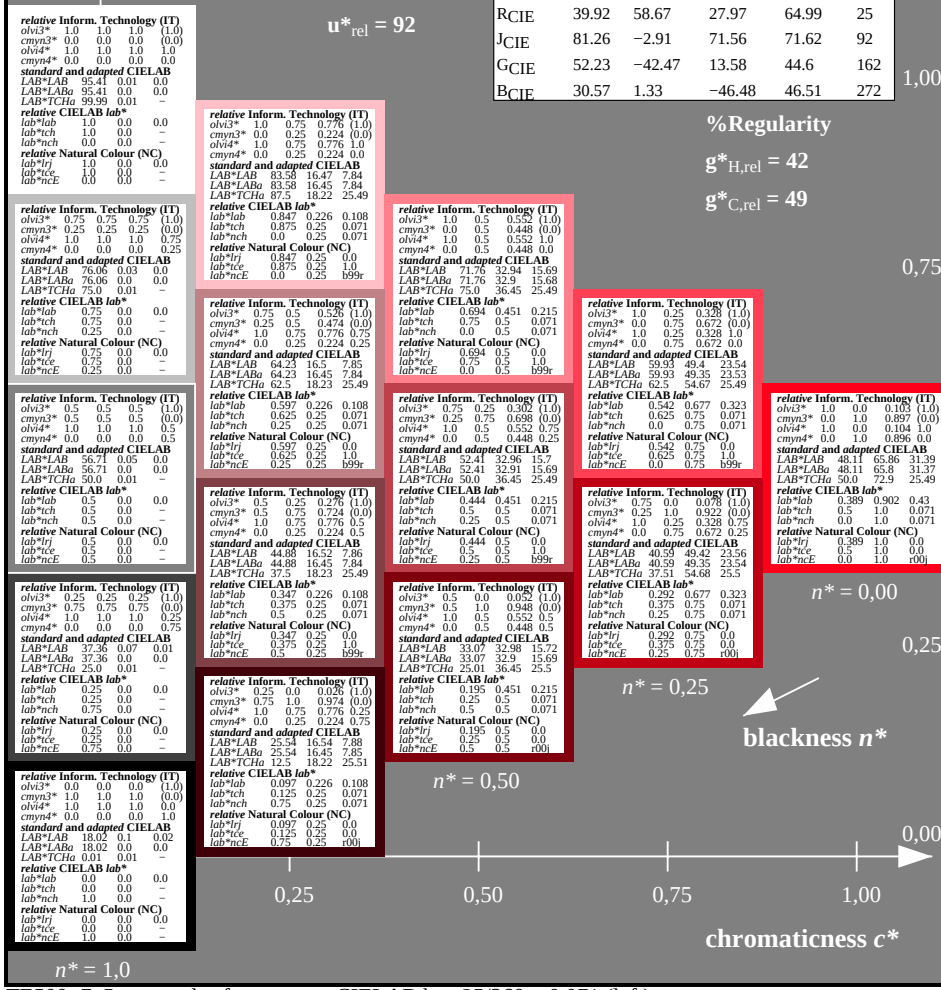
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

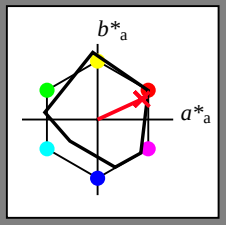
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 25/360 = 0.069**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 48 73 25**
**rgb*Ma: 1.0 0.0 0.1**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

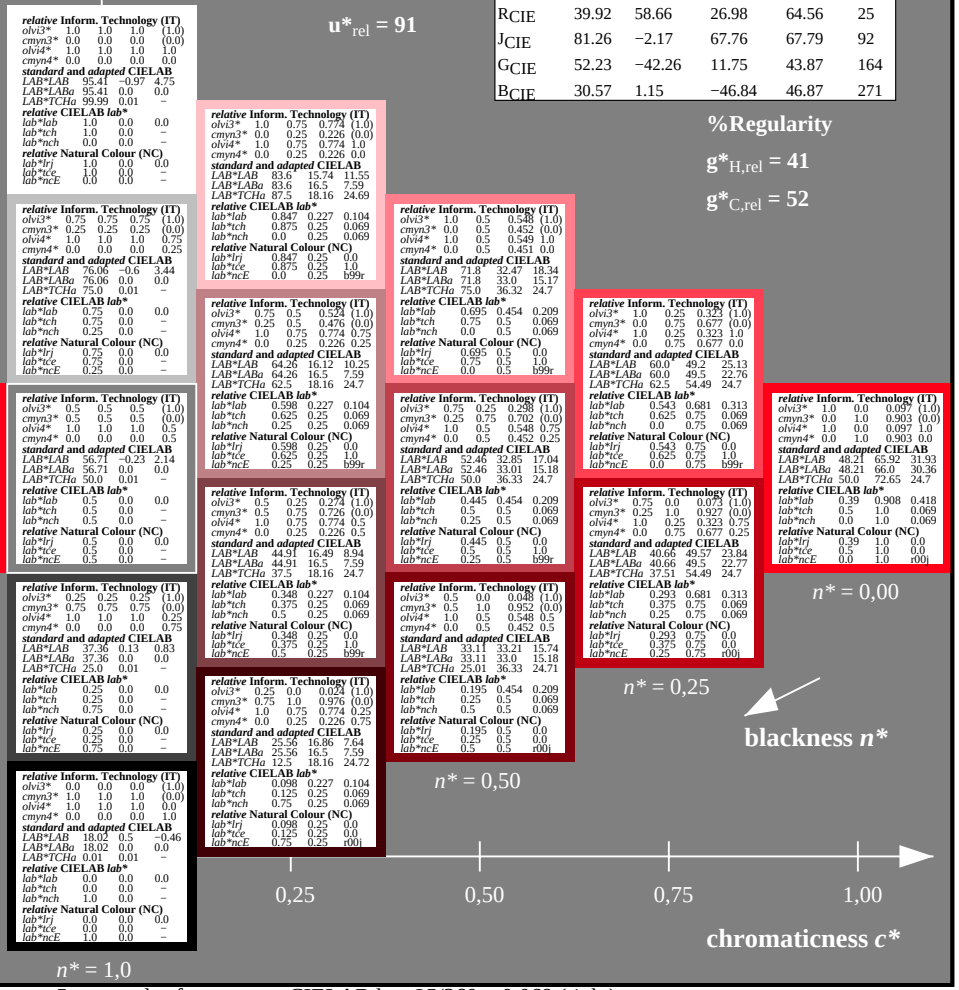
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**



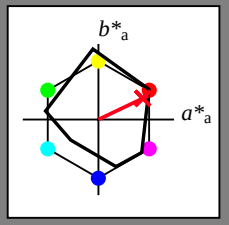

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 25/360 = 0.071**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 48 73 25**
**rgb*Ma: 1.0 0.0 0.1**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

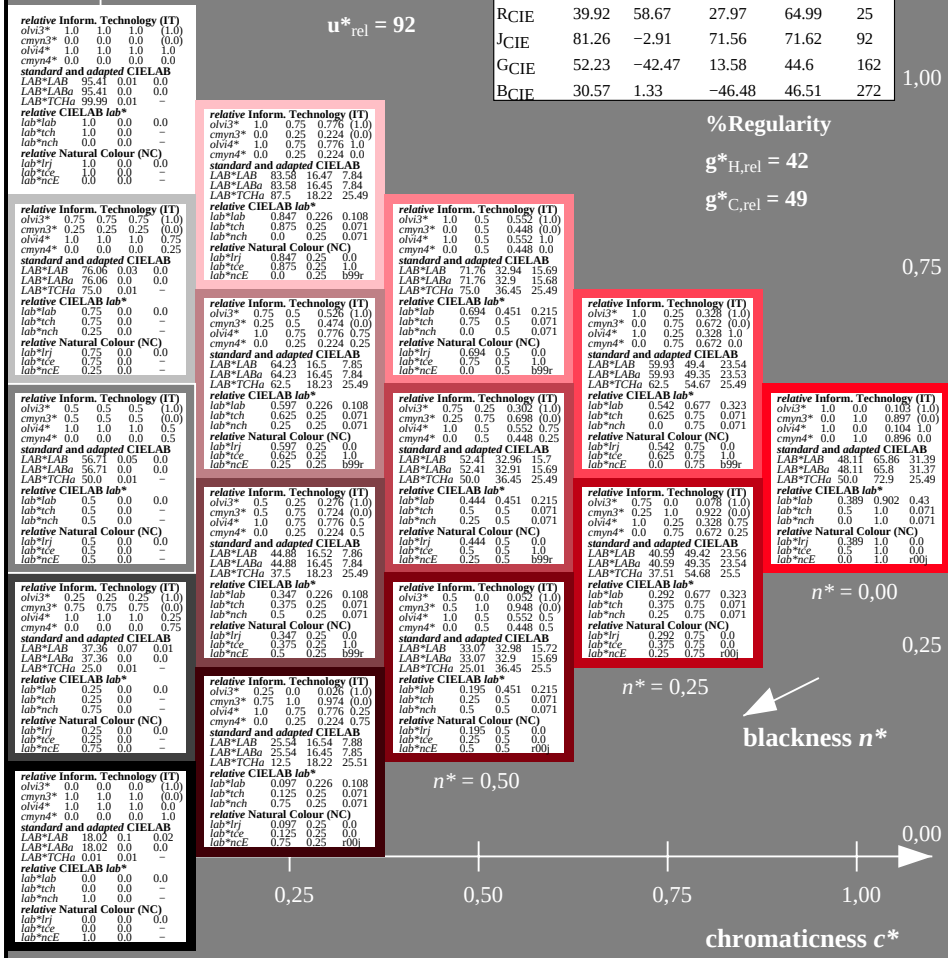
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

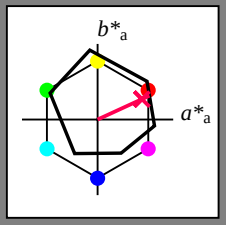
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 25/360 = 0.069**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 48 75 25**
**rgb*Ma: 1.0 0.0 0.32**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

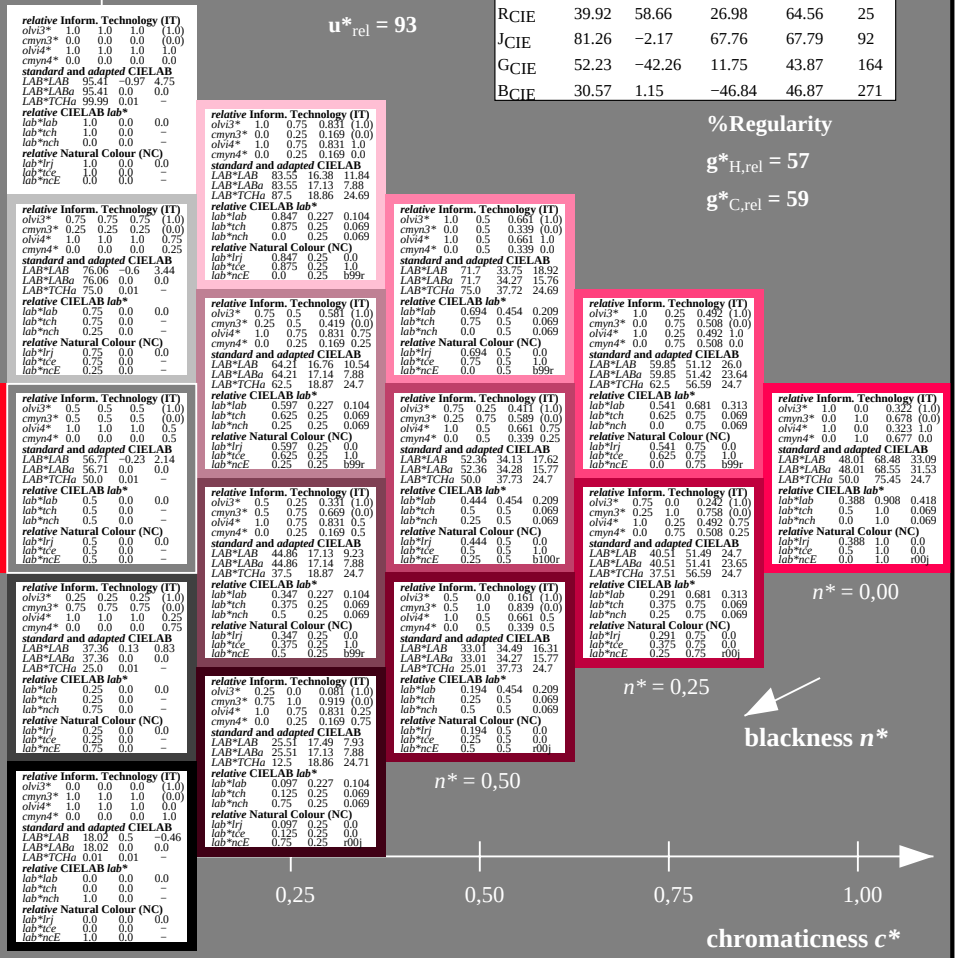
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

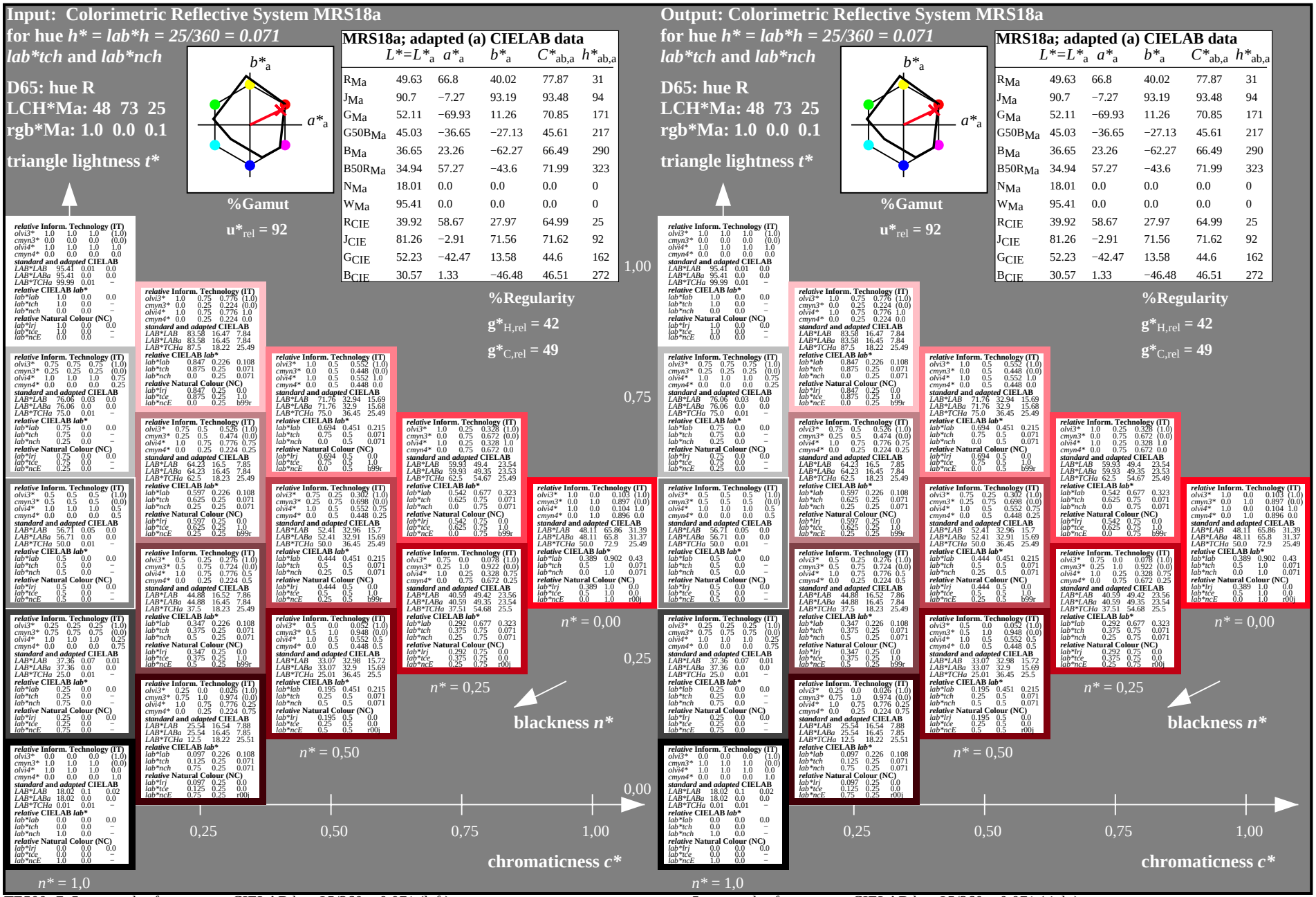
**g*$_{H,rel}$ = 57**

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



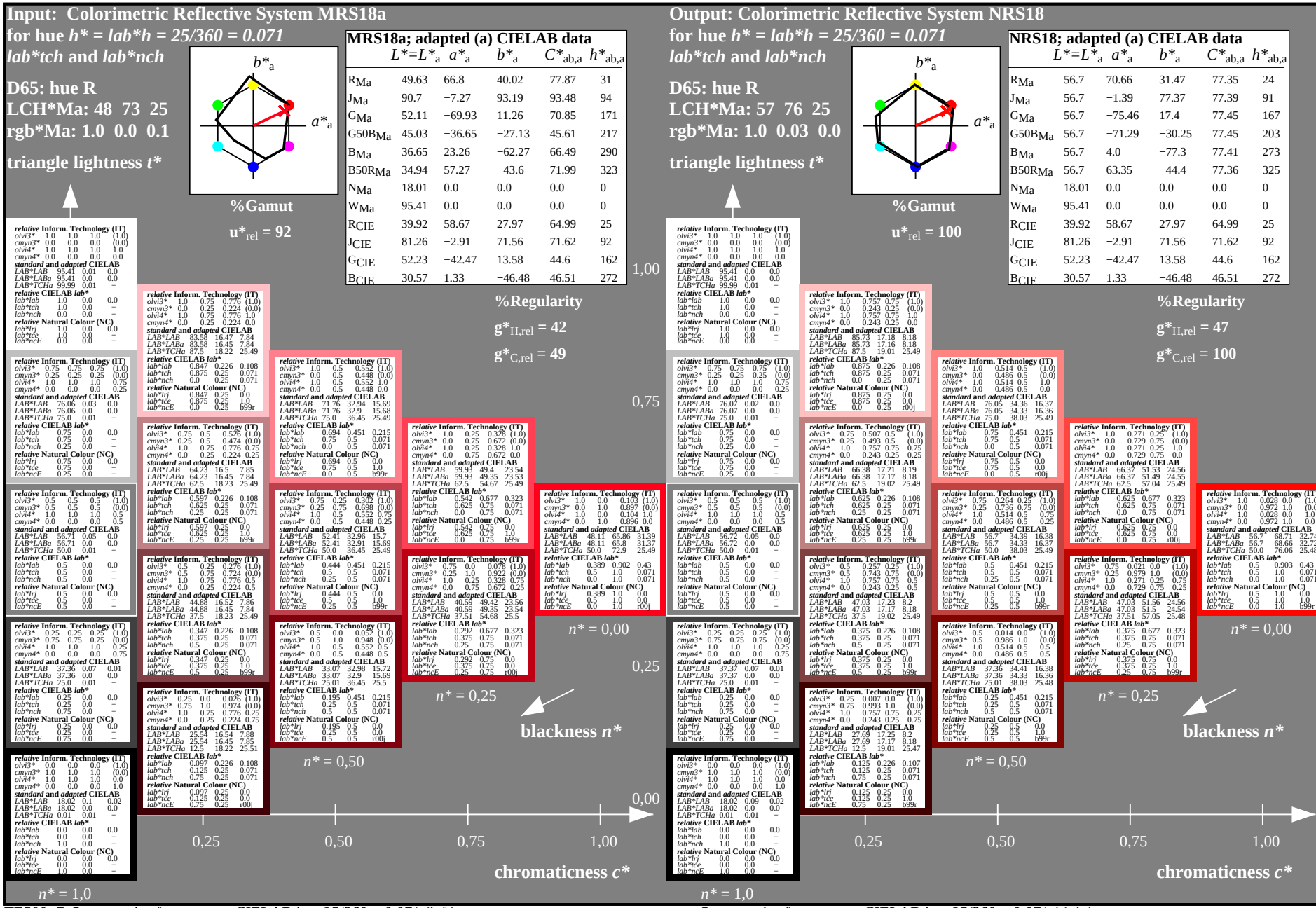

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)




TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



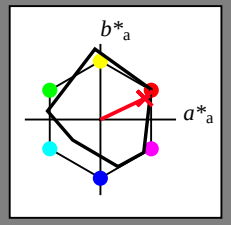

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 25/360 = 0.071**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 48 73 25**
**rgb*Ma: 1.0 0.0 0.1**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

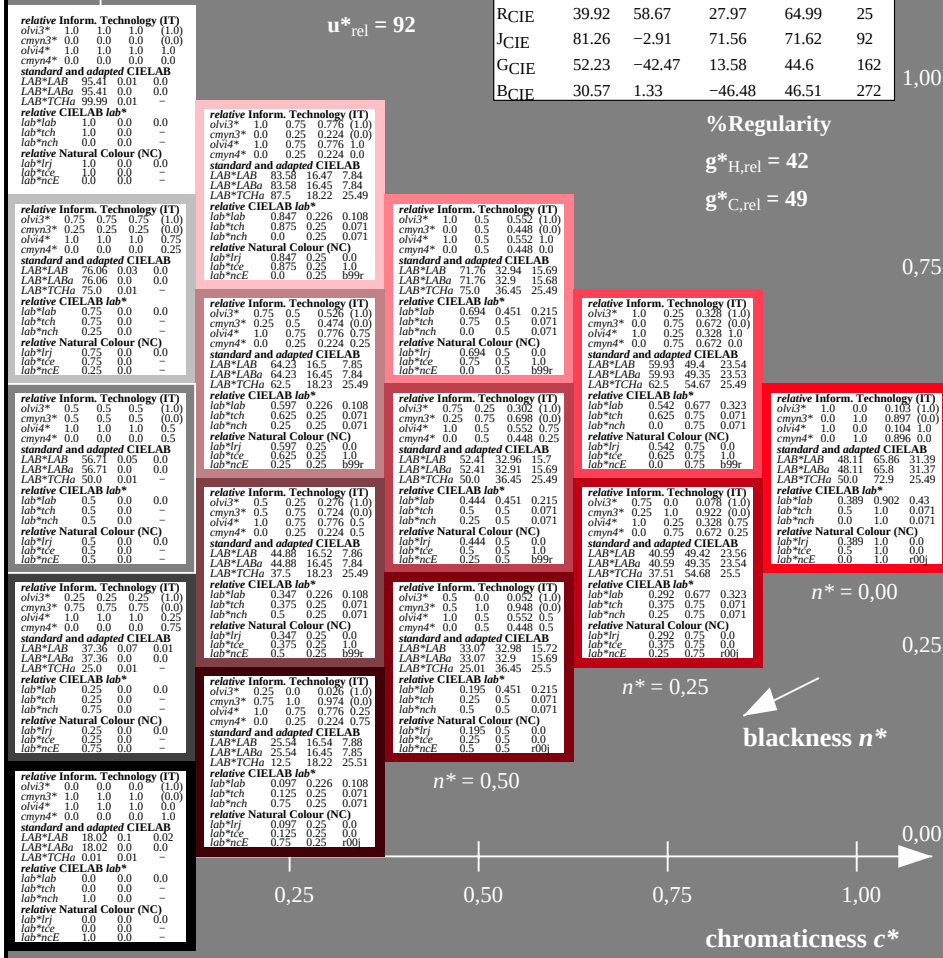
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

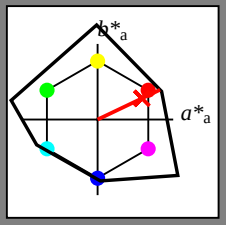
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 25/360 = 0.071**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 48 91 25**
**rgb*Ma: 1.0 0.02 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

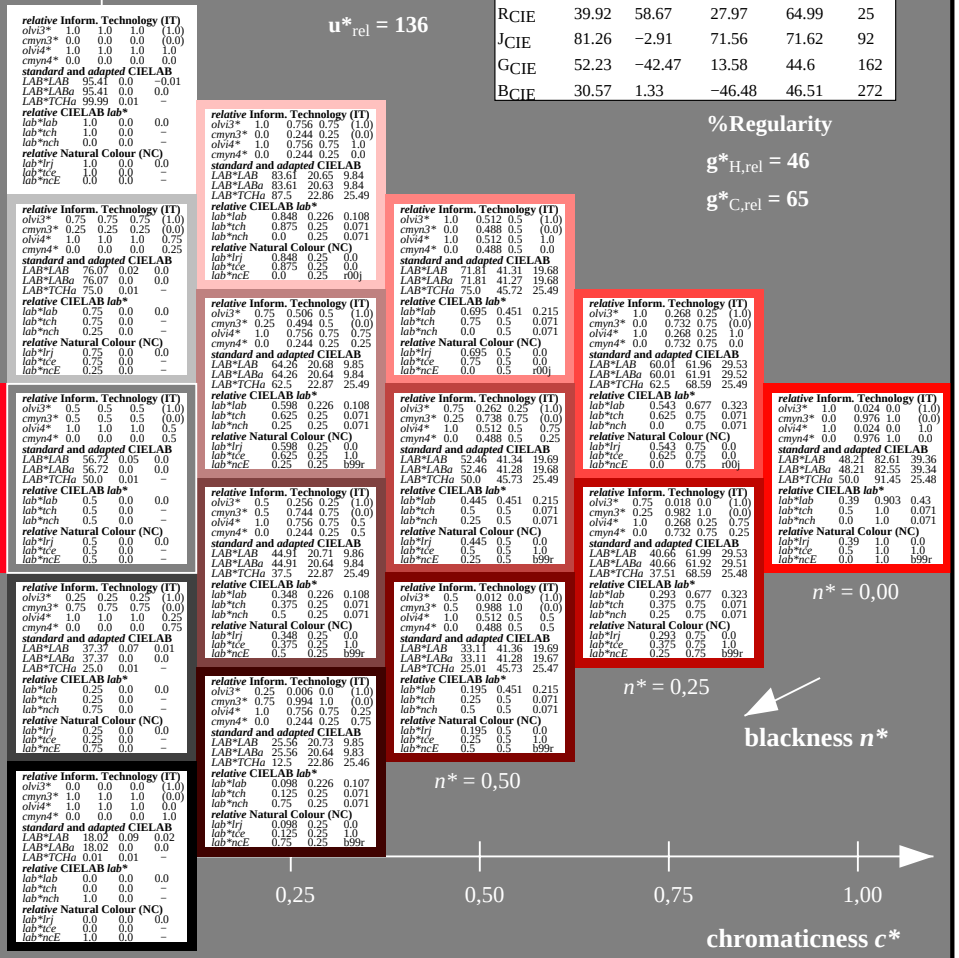
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



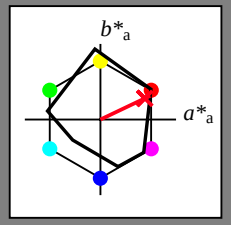

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 25/360 = 0.071**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 48 73 25**
**rgb*Ma: 1.0 0.0 0.1**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

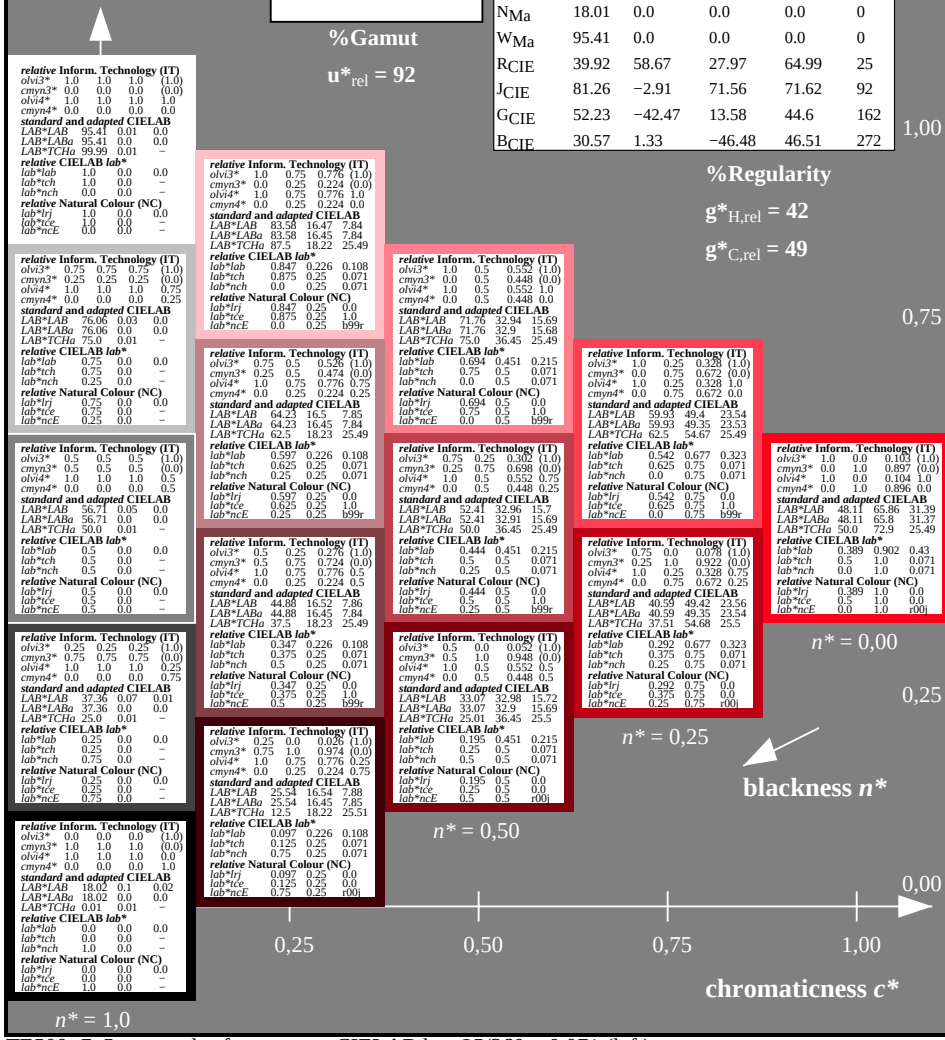
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

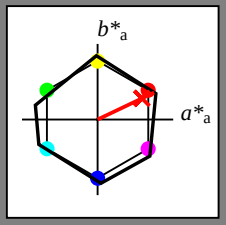
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 25/360 = 0.071**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 53 83 25**
**rgb*Ma: 1.0 0.03 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

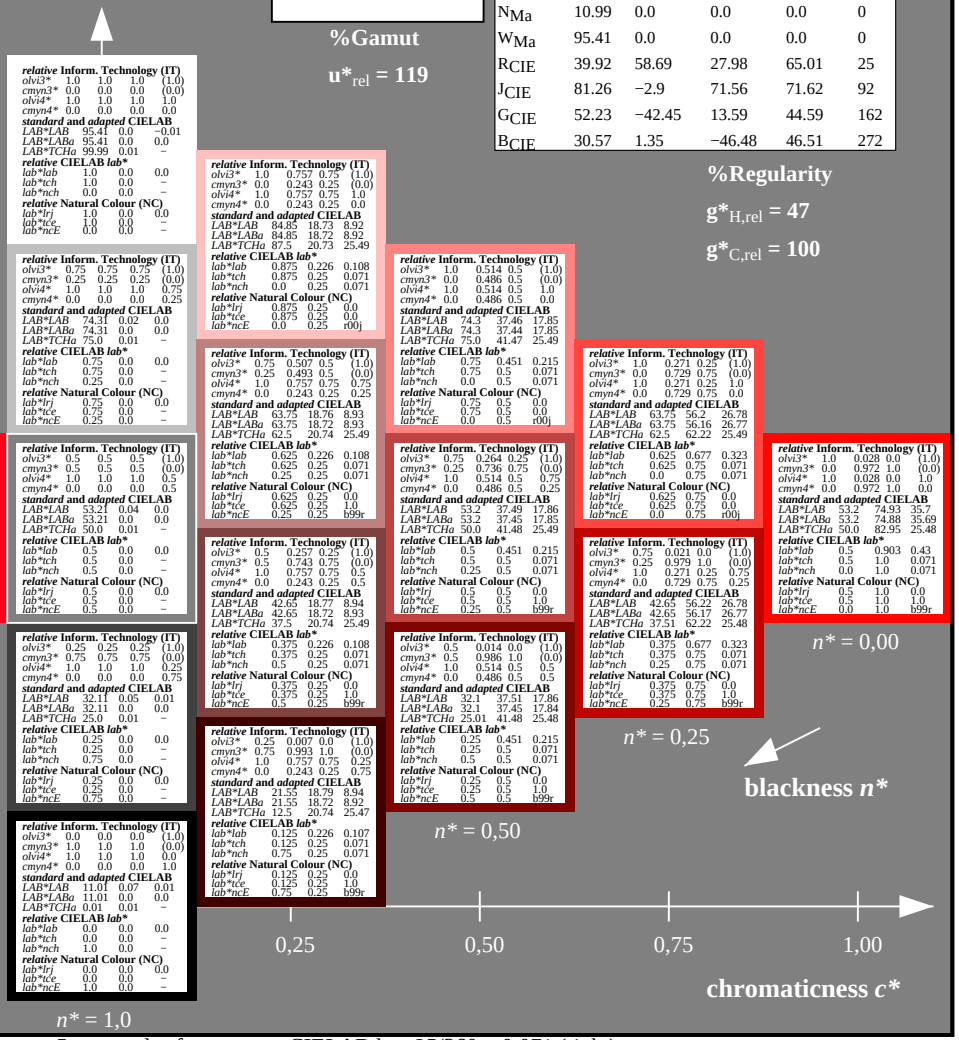
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



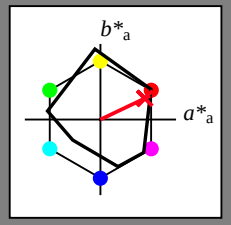

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 25/360 = 0.071**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 48 73 25**
**rgb*Ma: 1.0 0.0 0.1**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

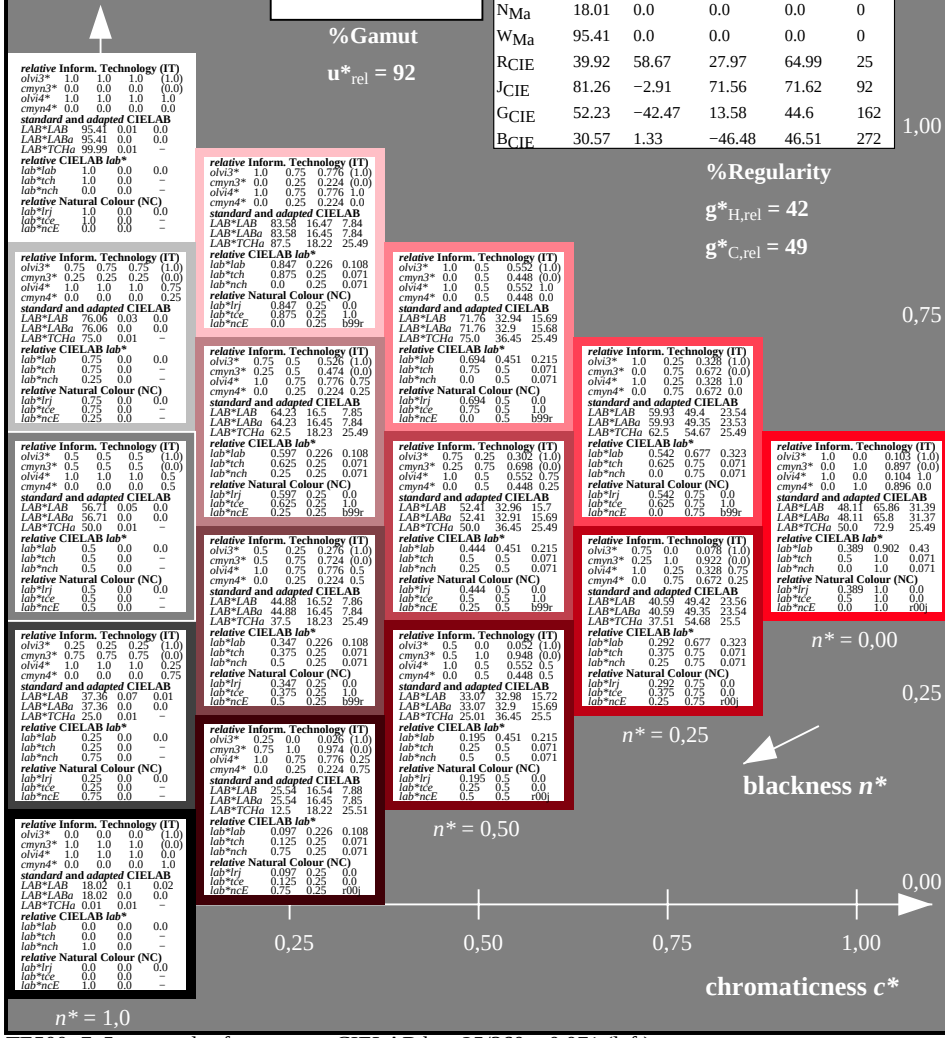
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

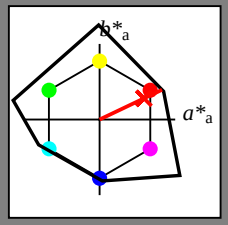
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 25/360 = 0.071**
***lab*tch* and *lab*nch***

**D65: hue R**
**LCH*Ma: 48 91 25**
**rgb*Ma: 1.0 0.02 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

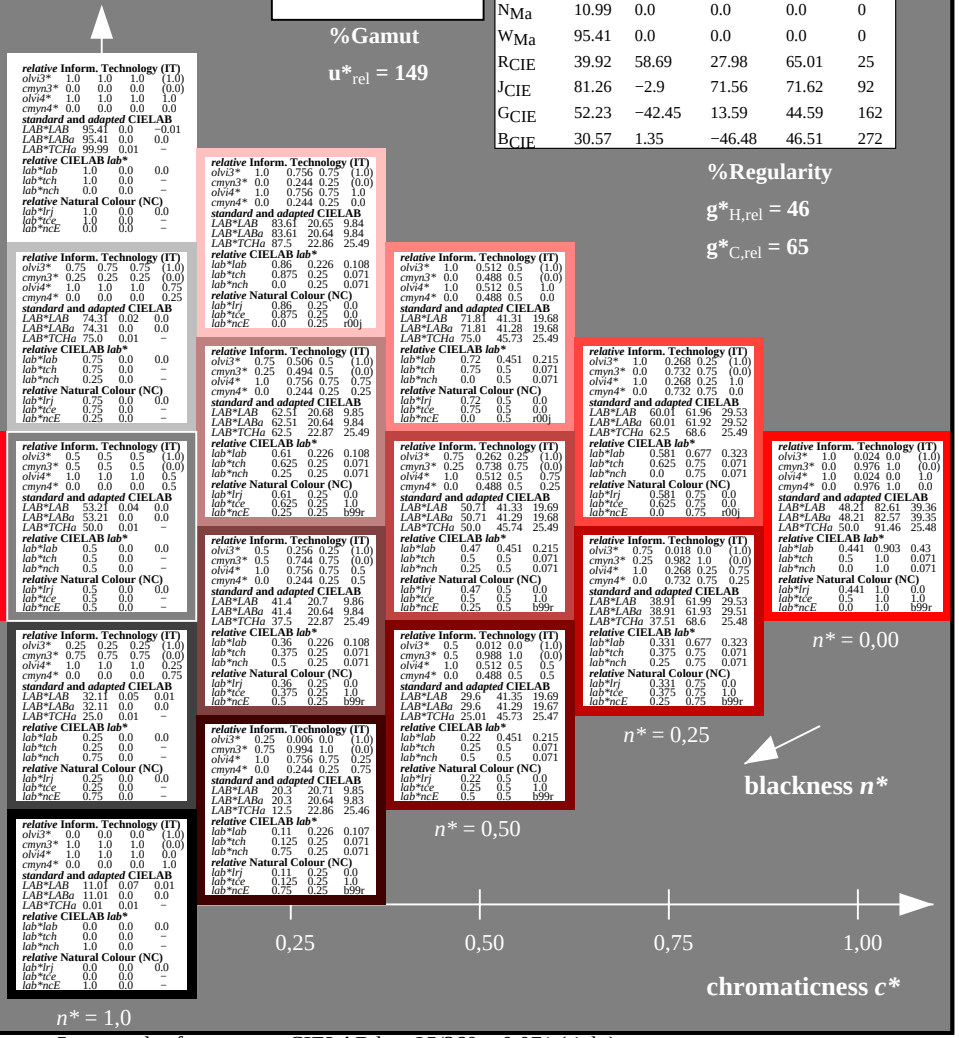
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

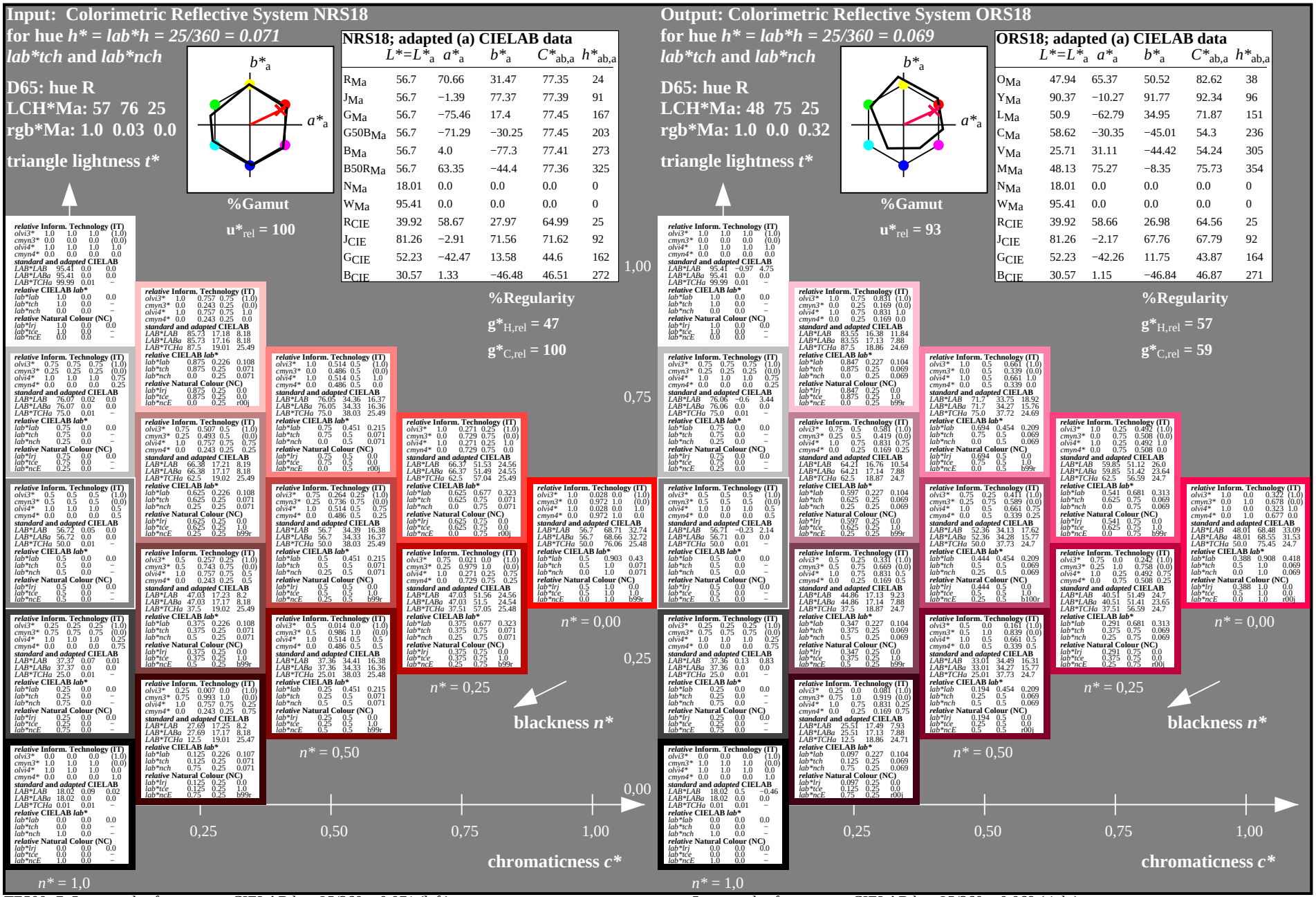
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



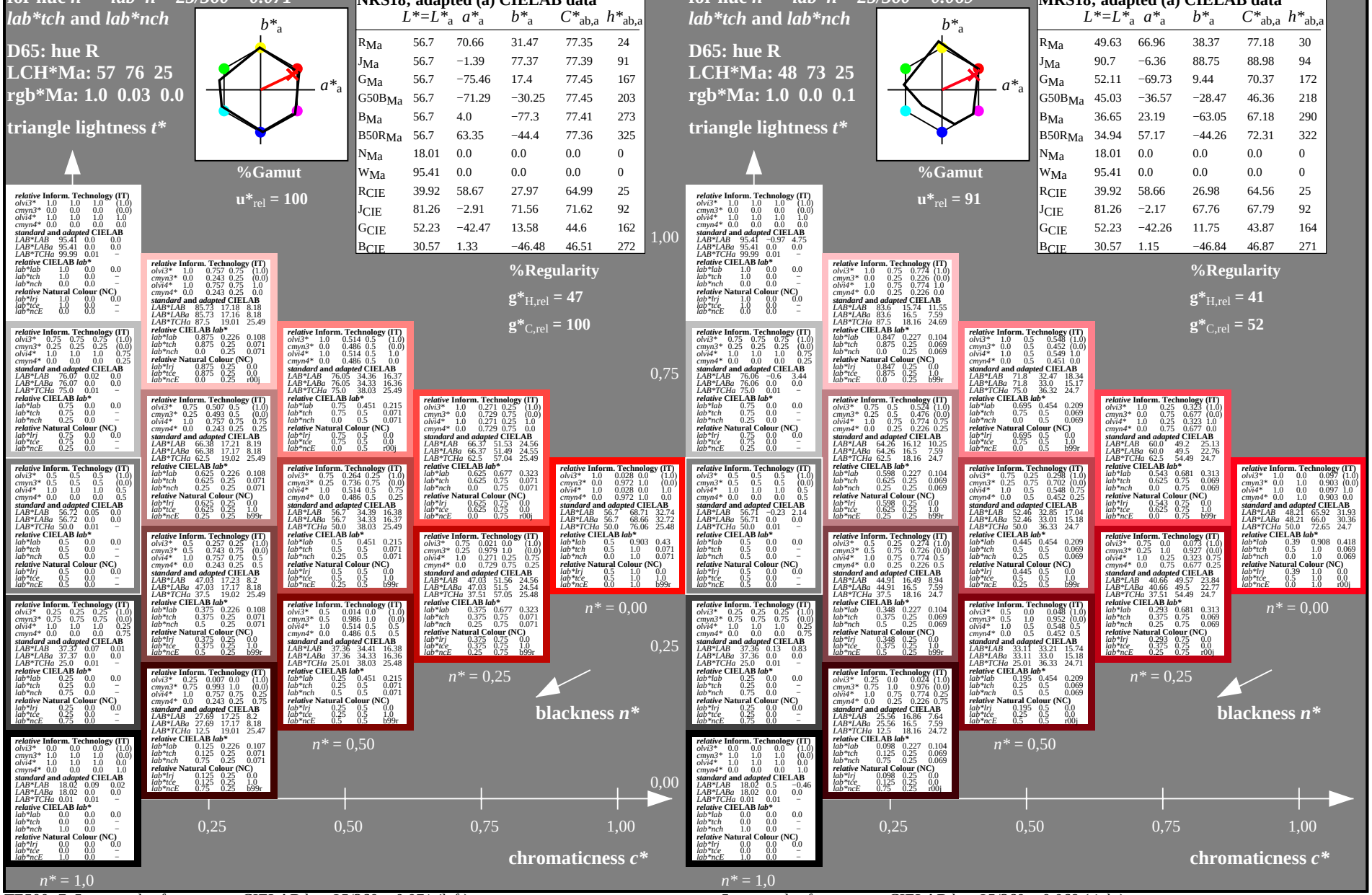

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



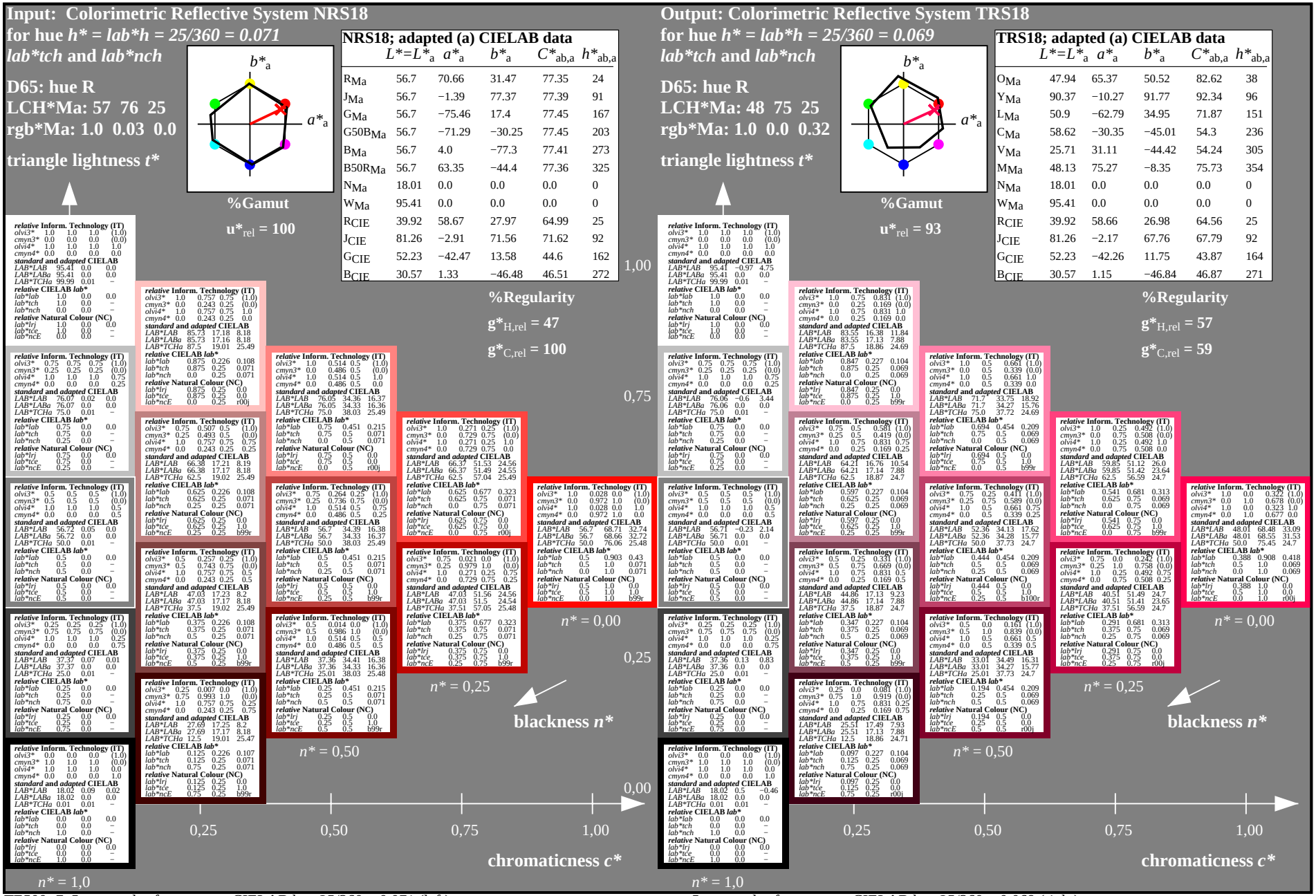

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



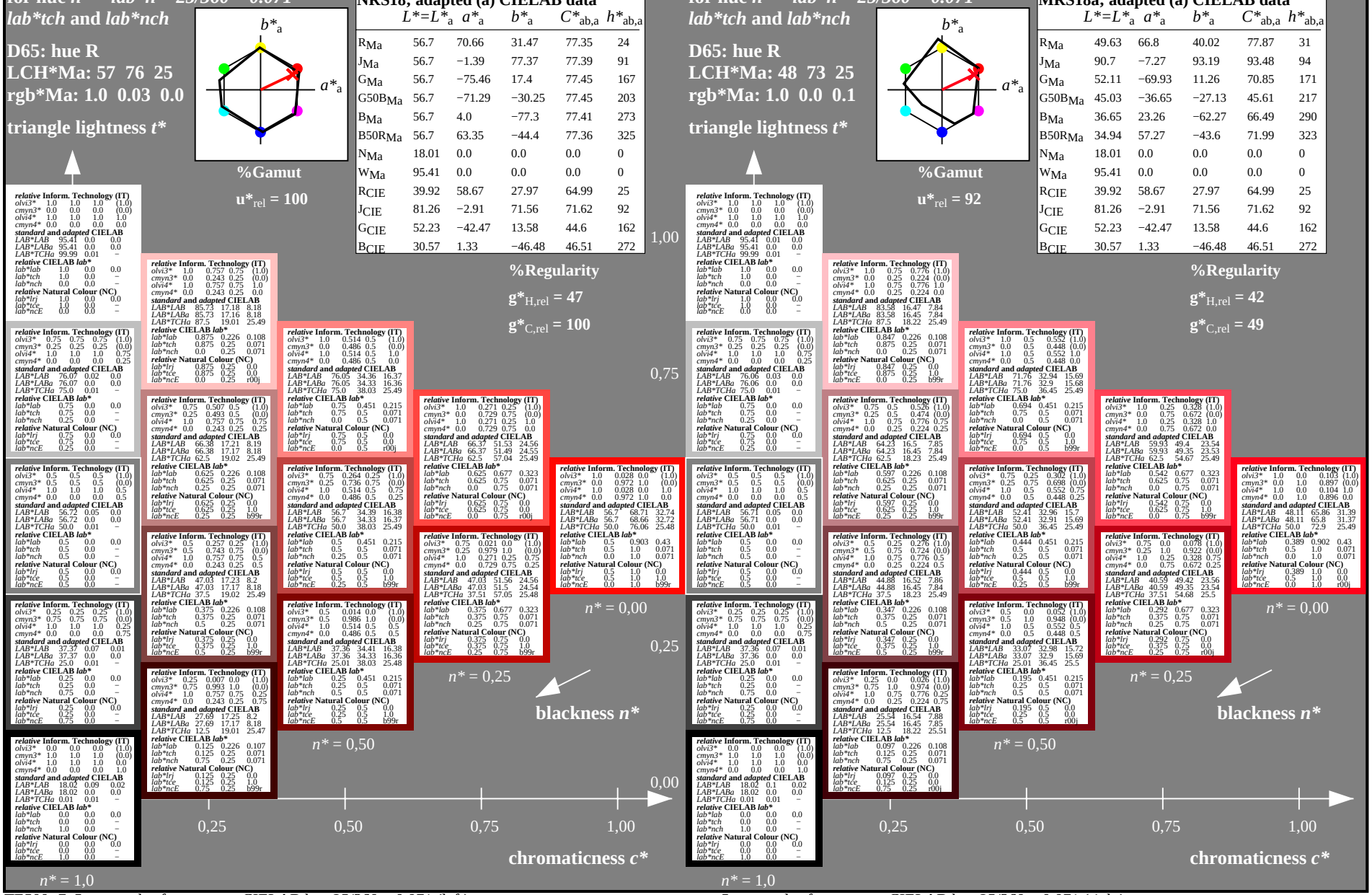

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



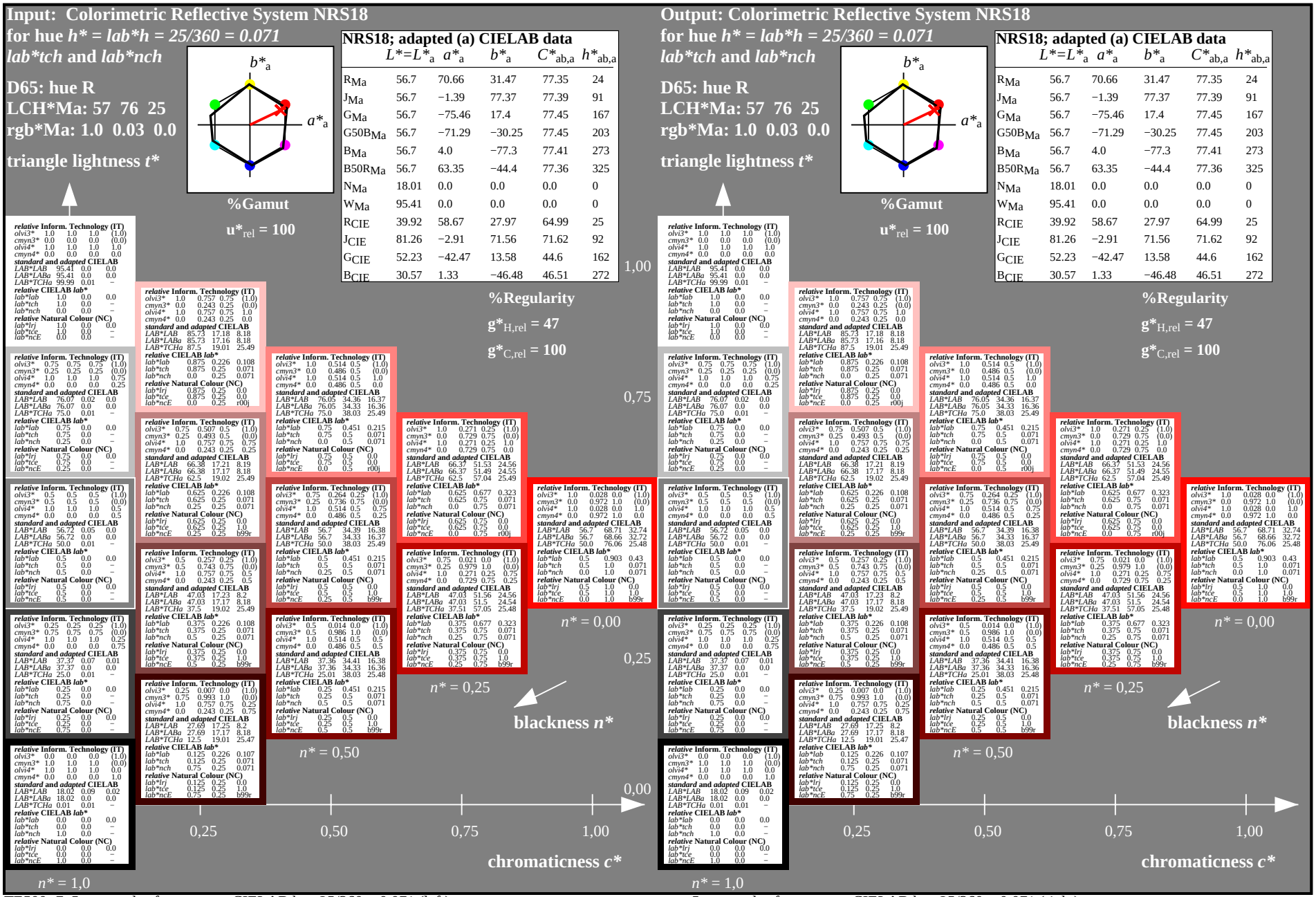

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



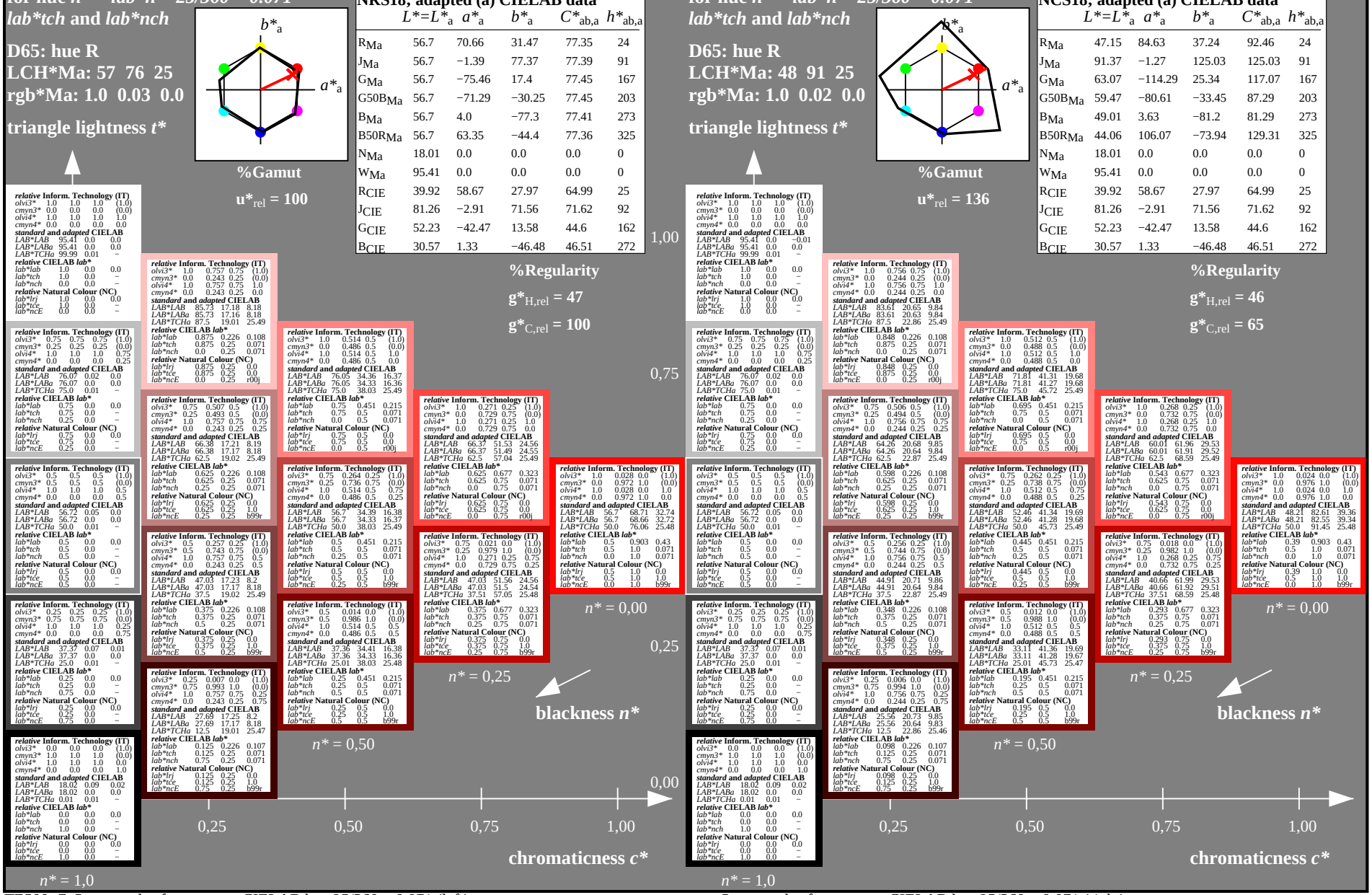

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



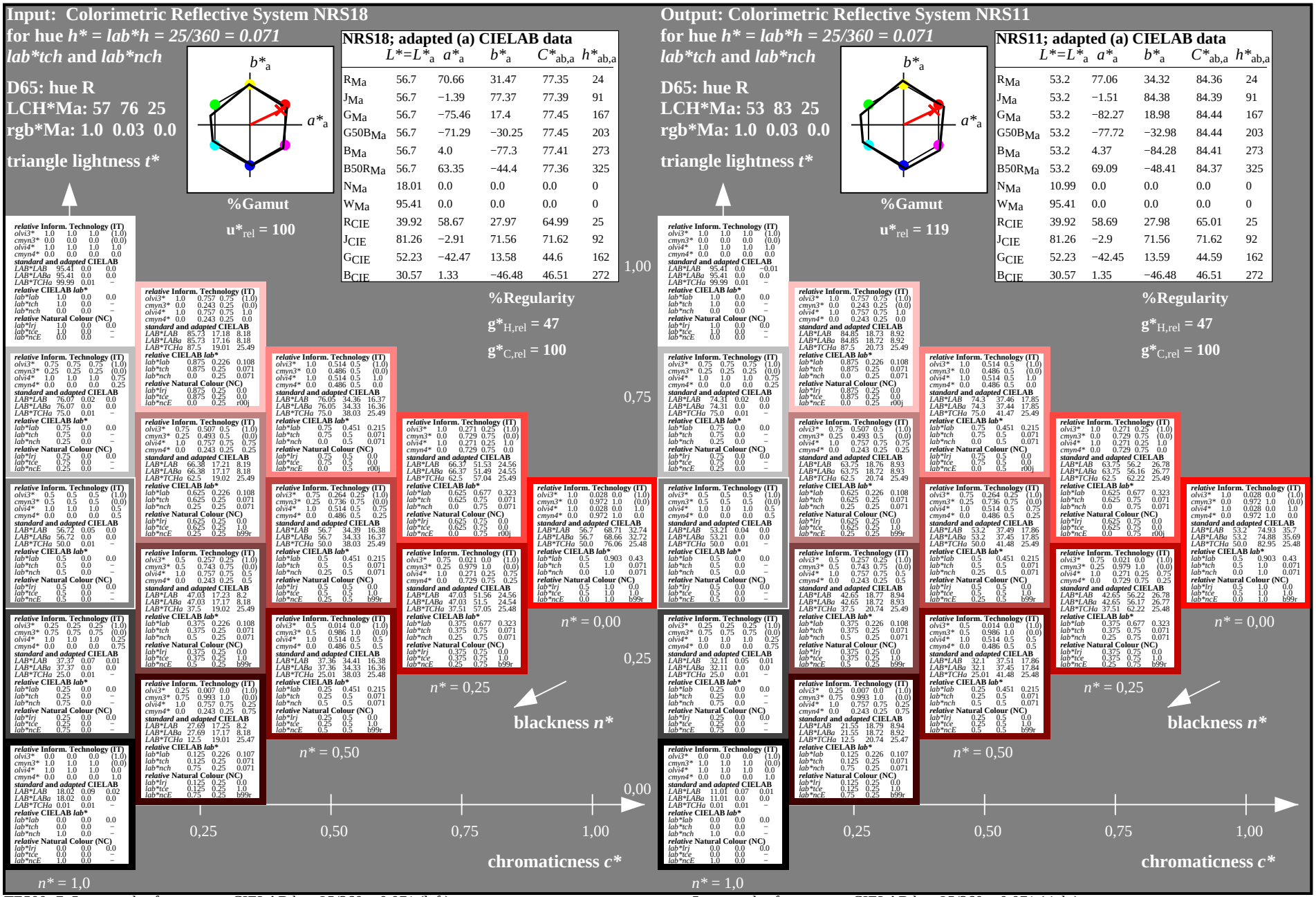

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



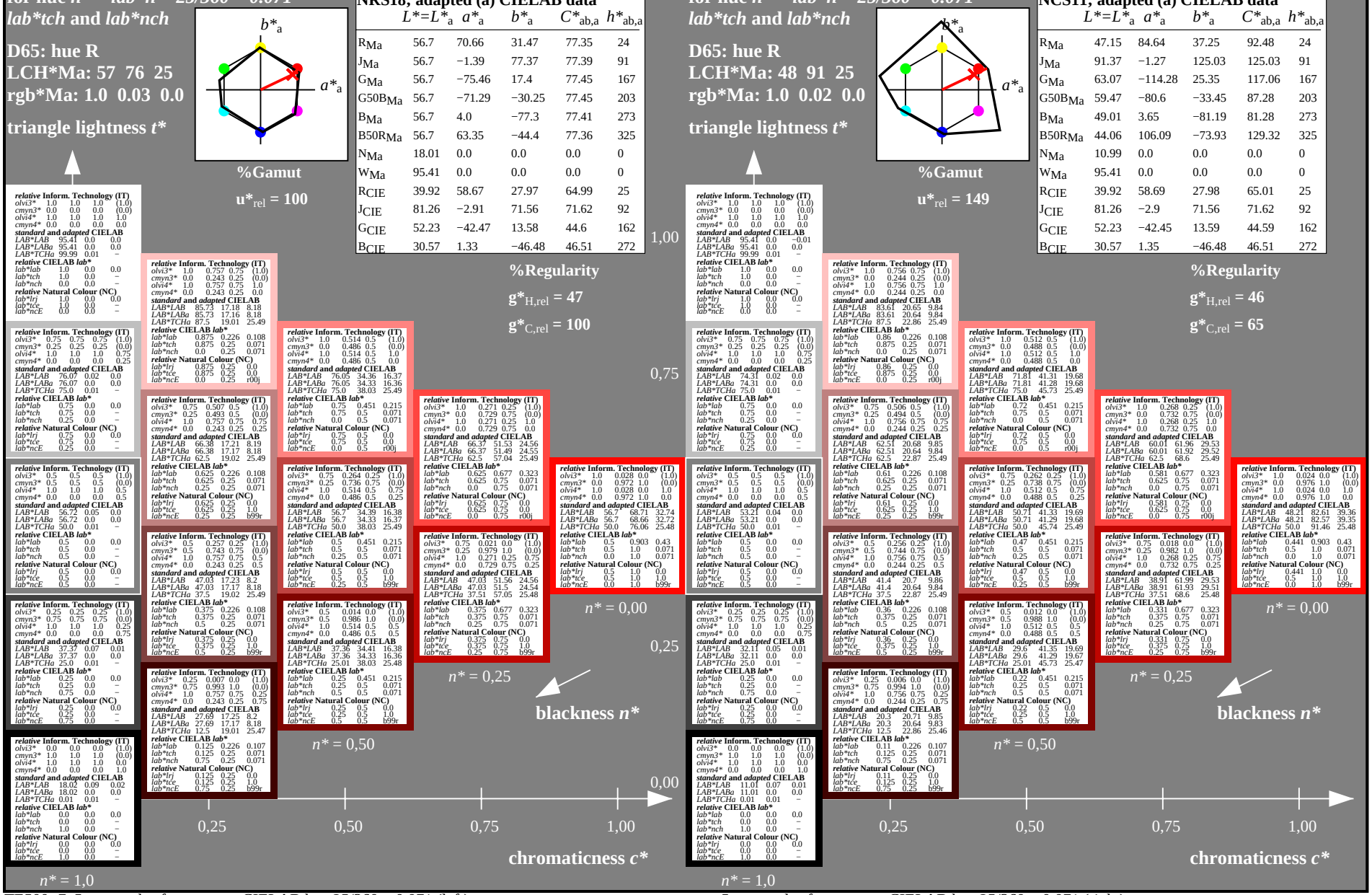

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



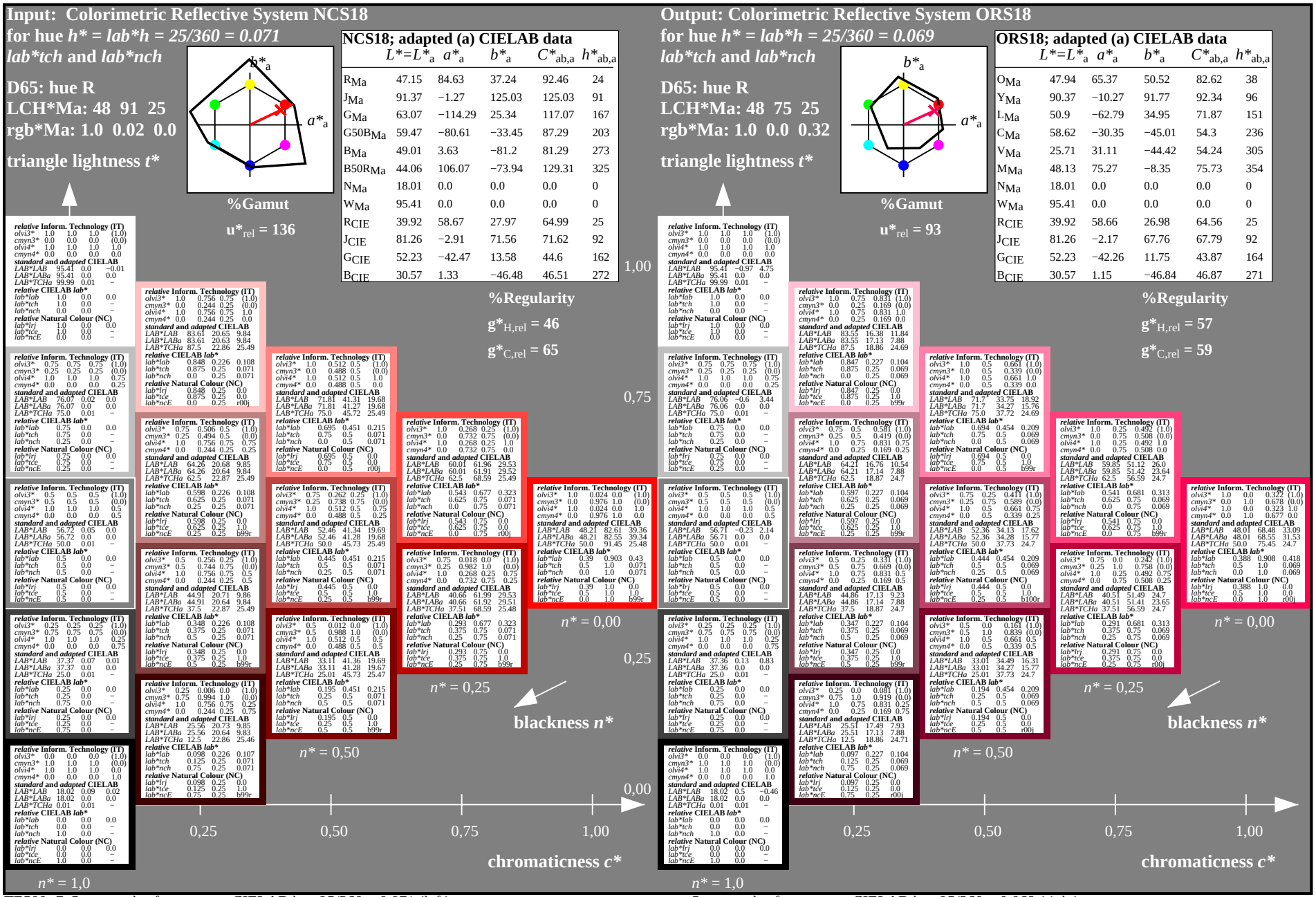

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



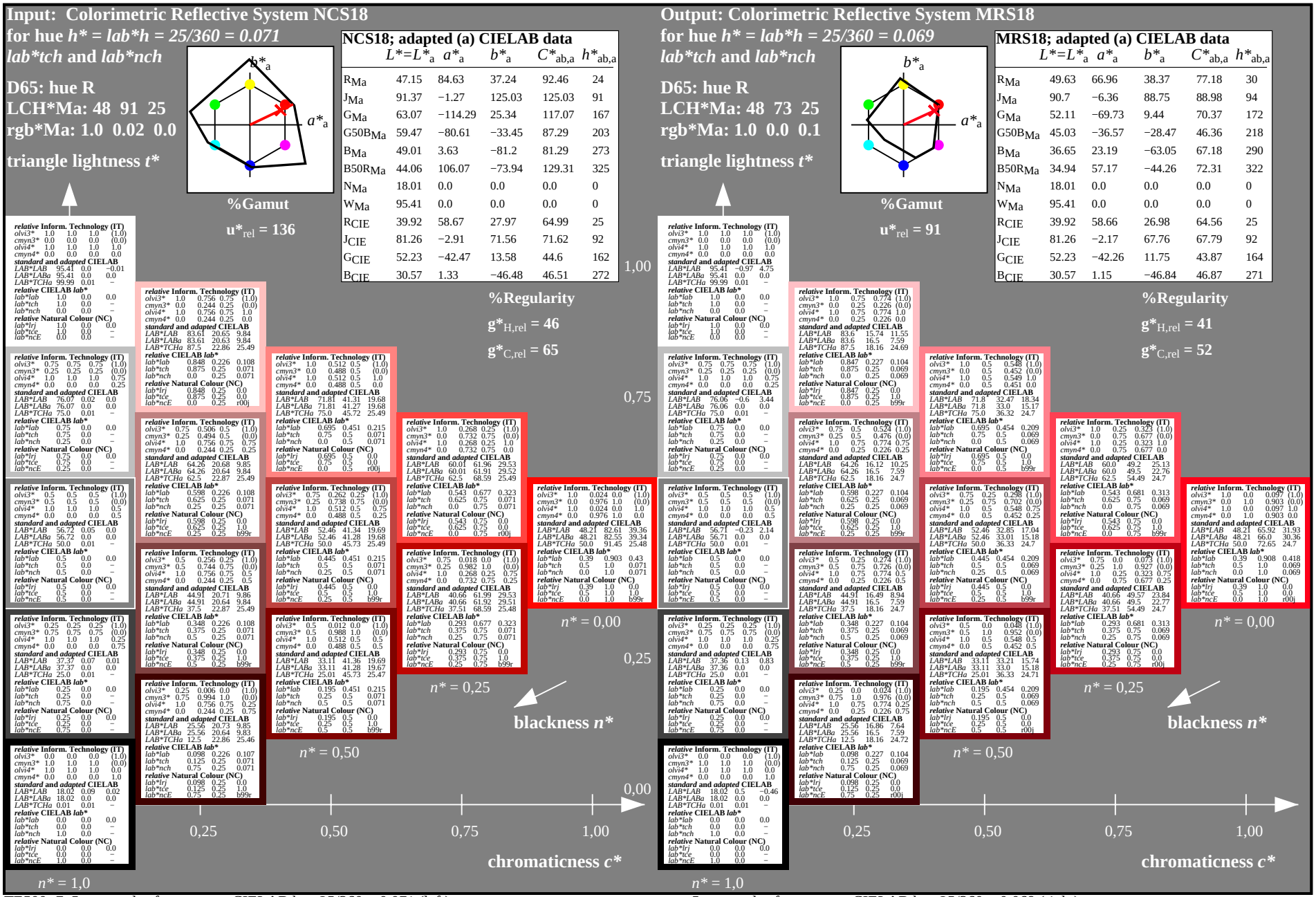

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



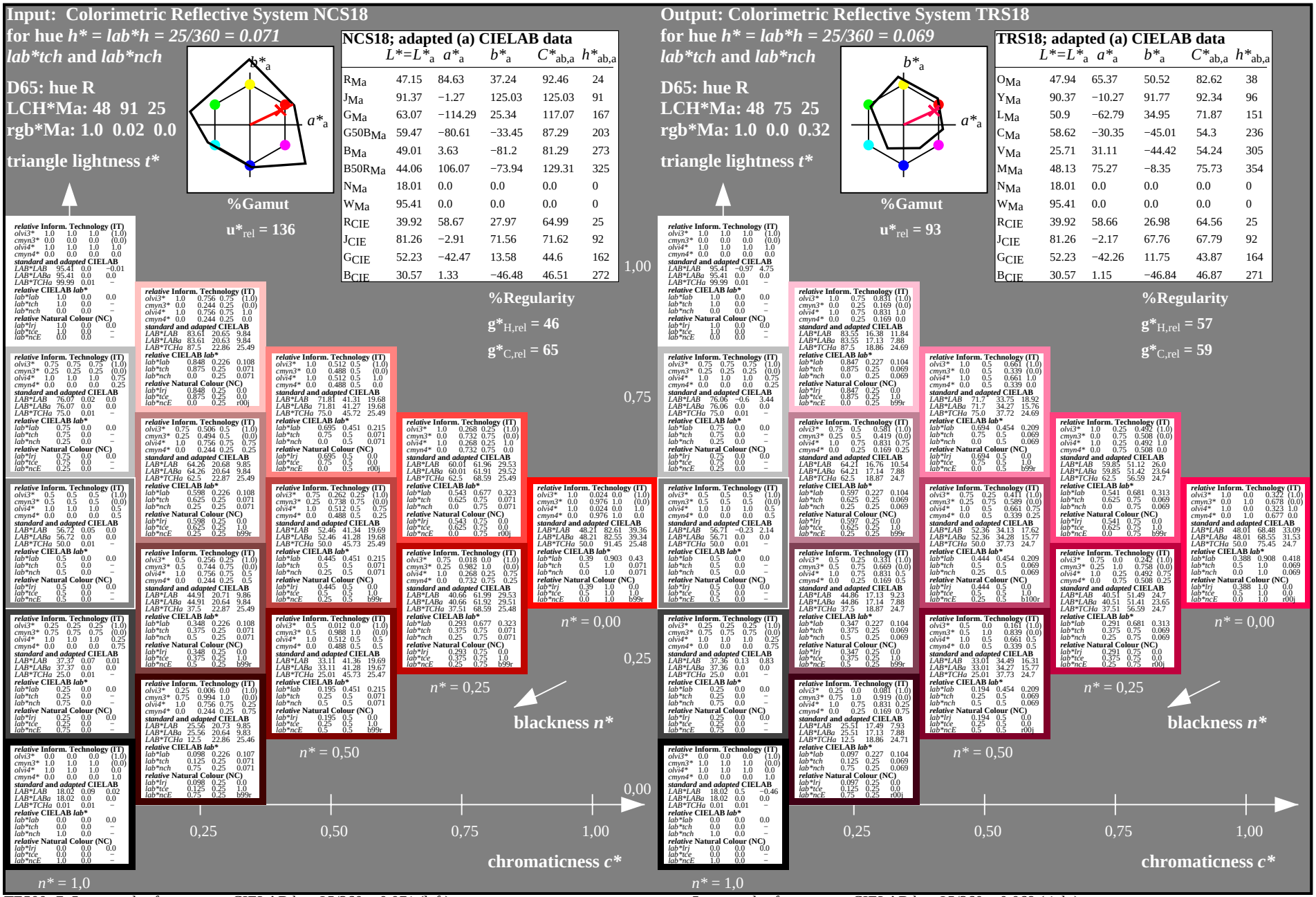

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



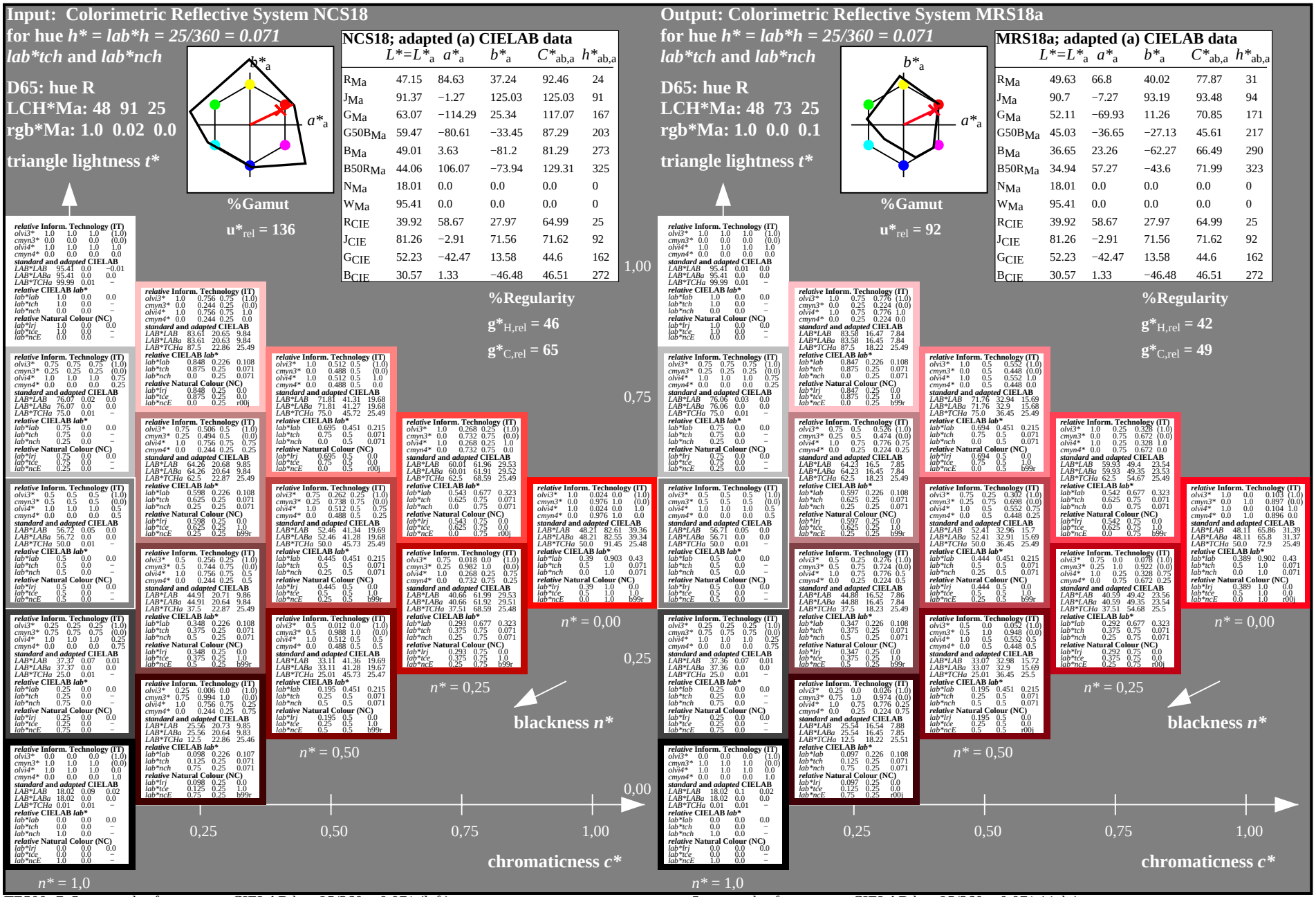

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



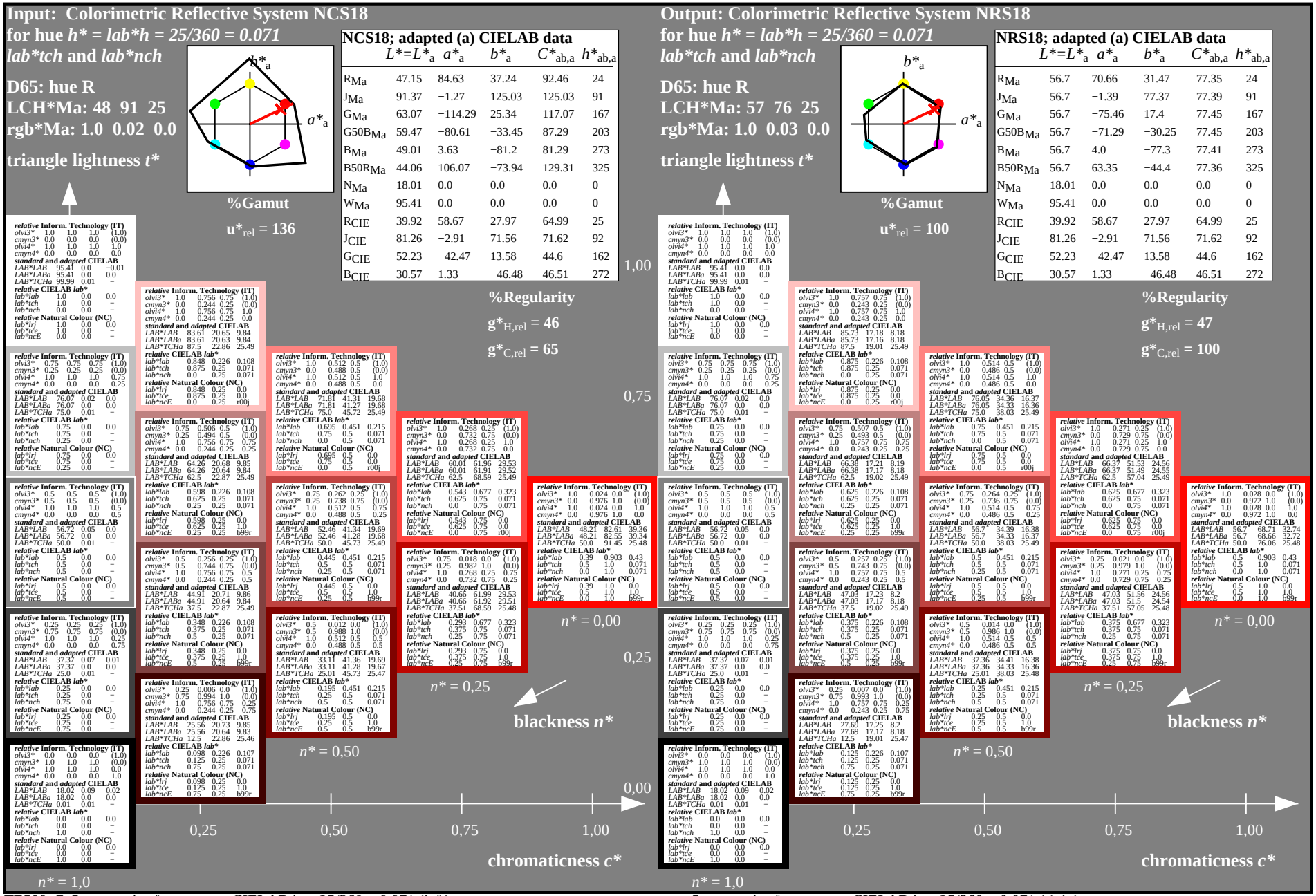

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



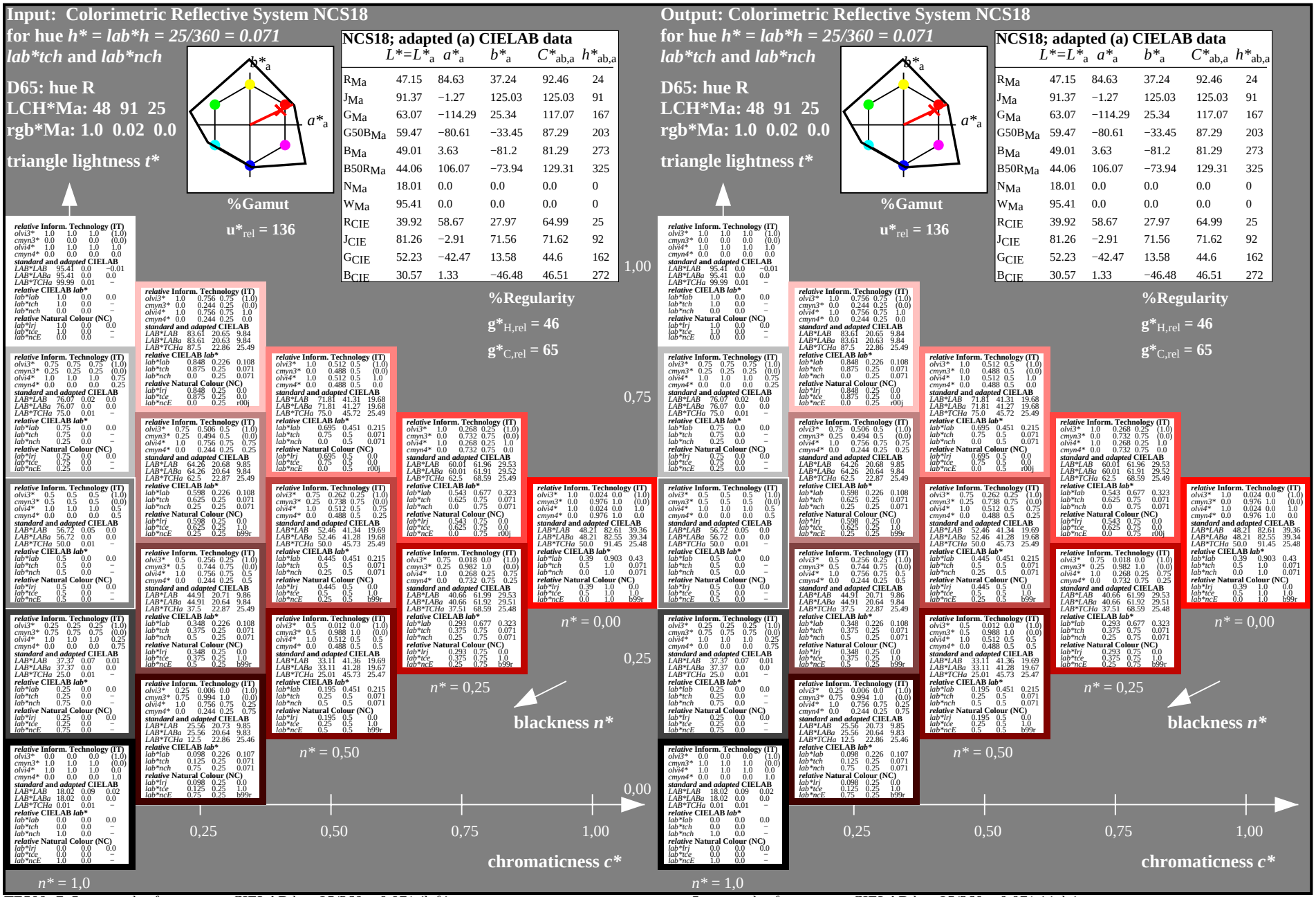

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



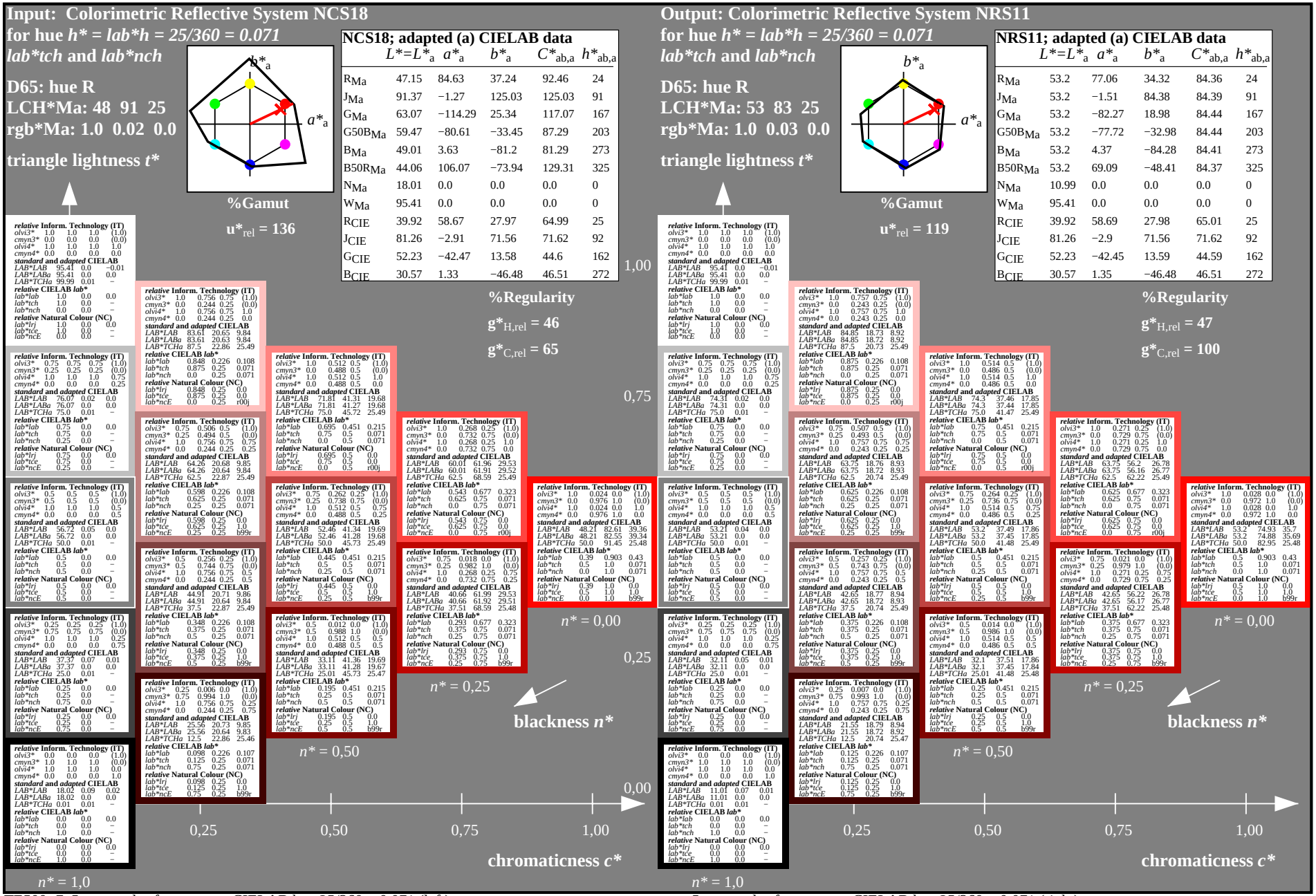

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



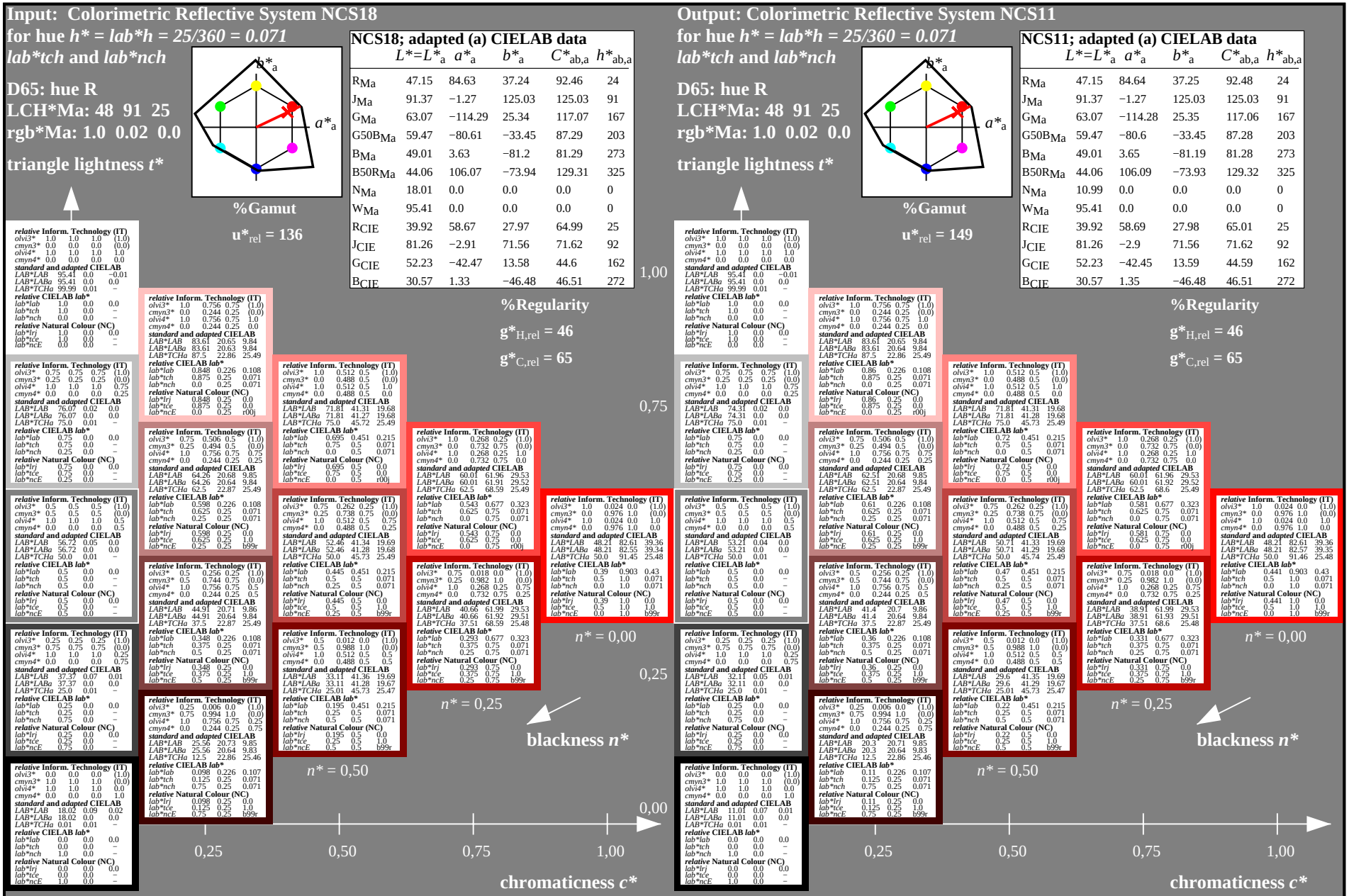

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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




**NCS18; adapted (a) CIELAB data**

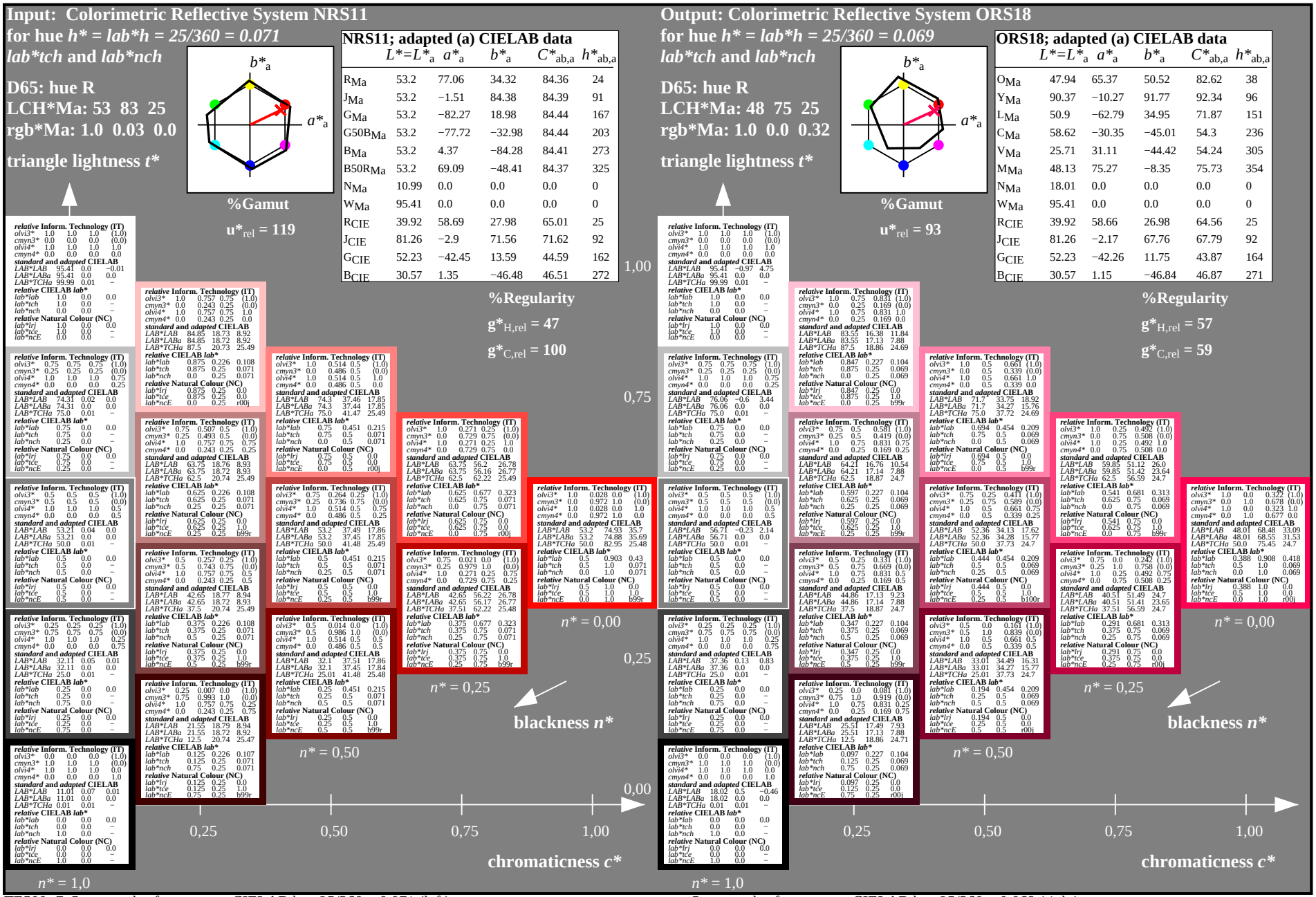
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

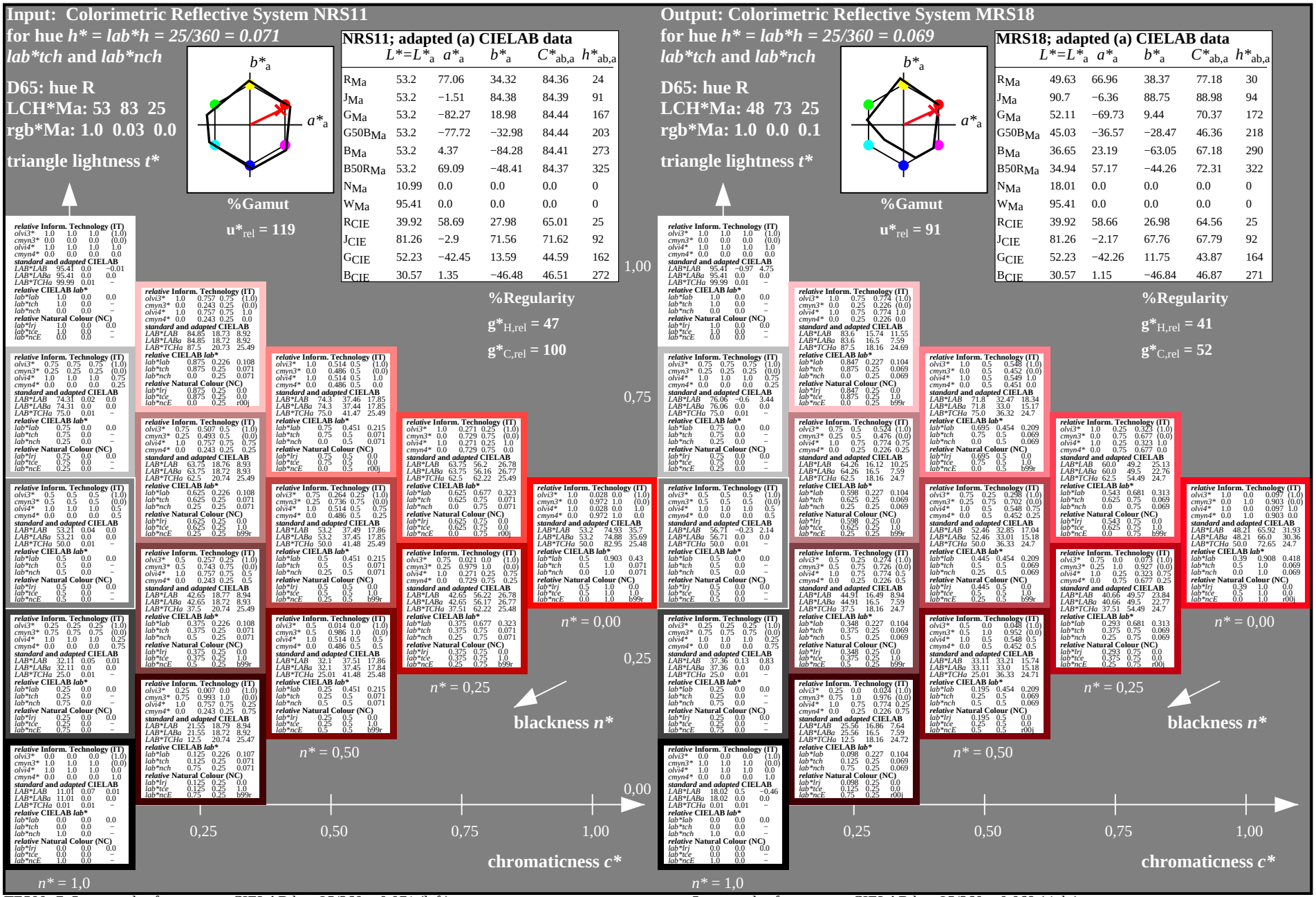
TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



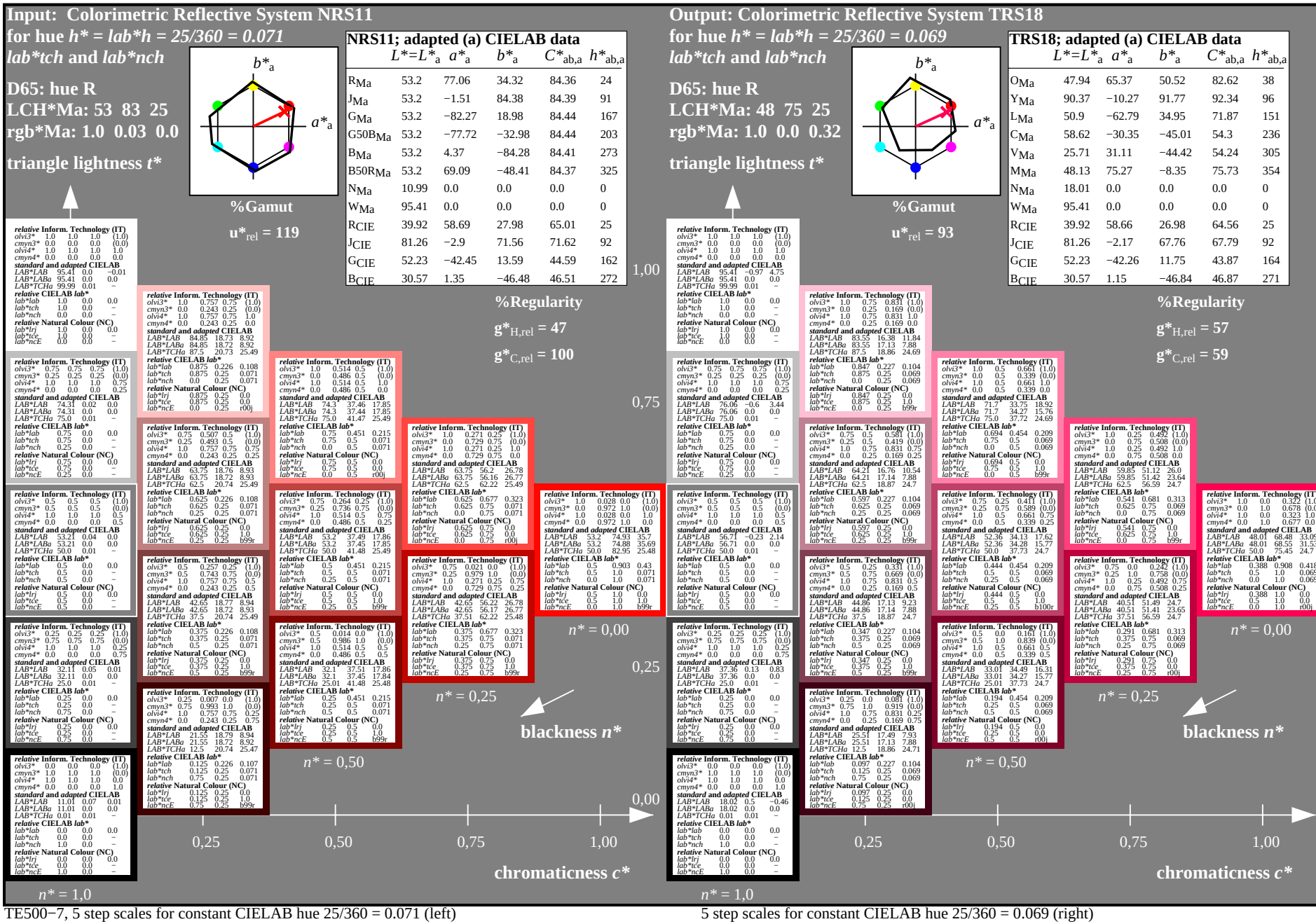

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



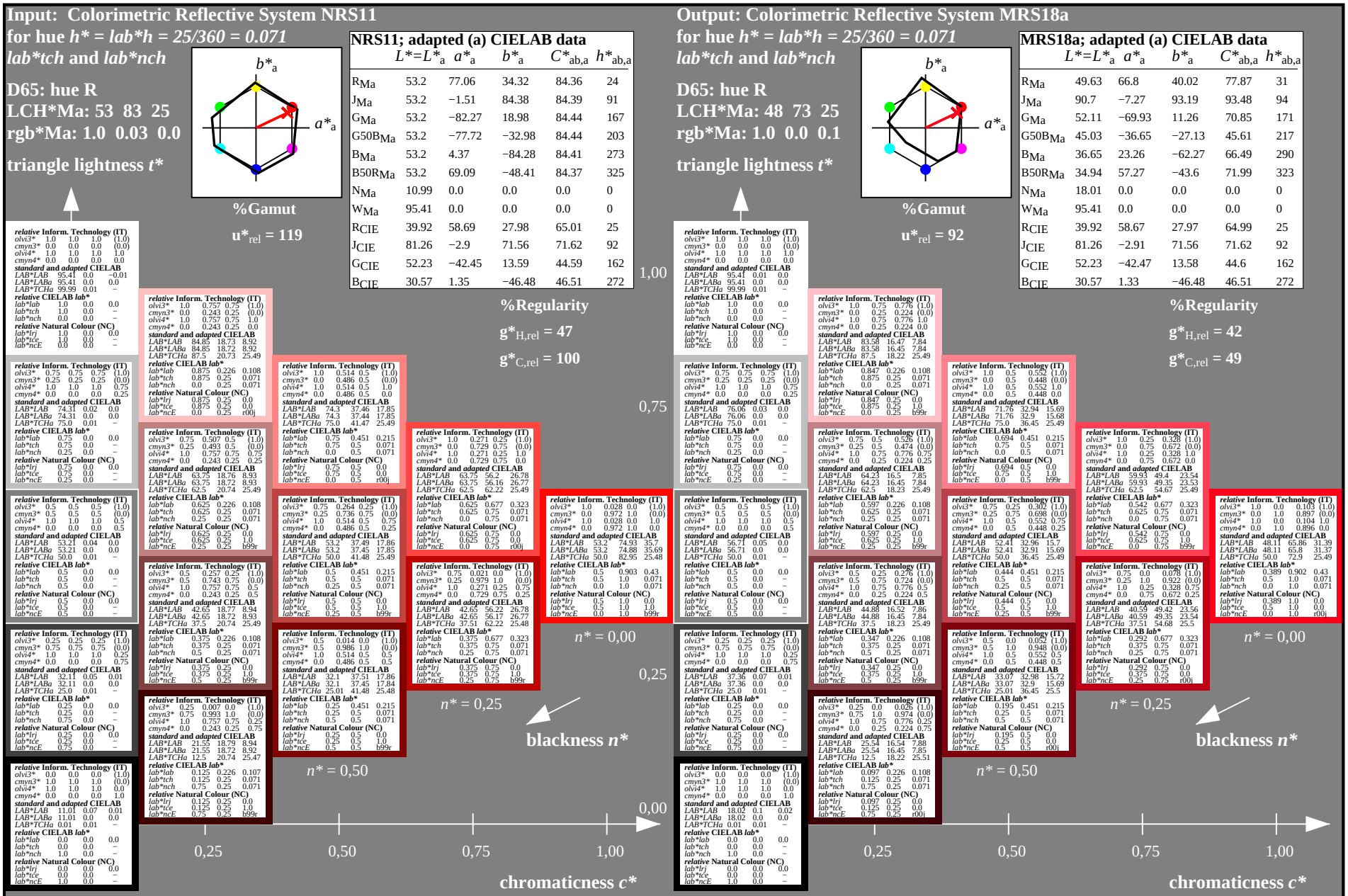

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



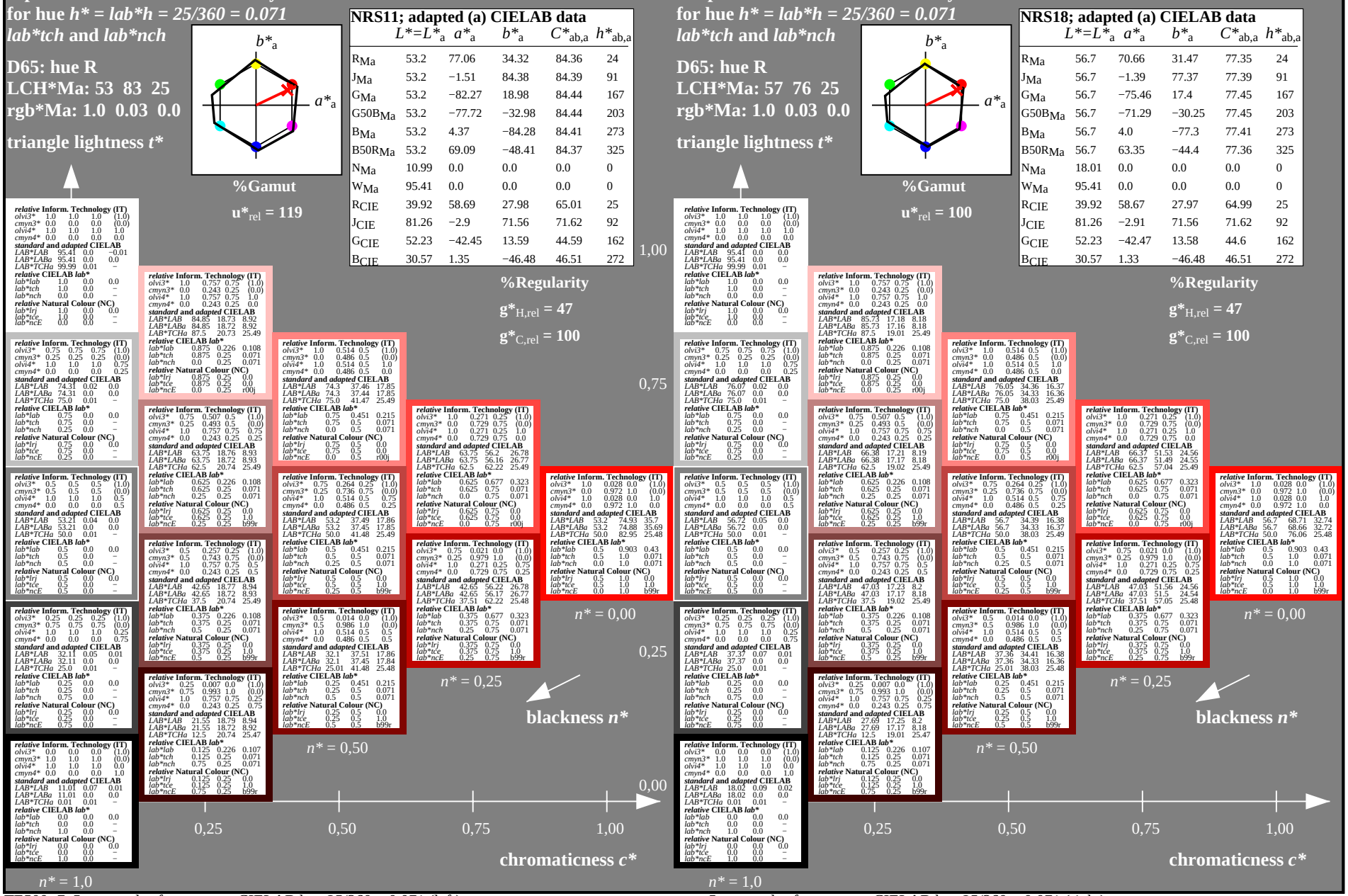

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



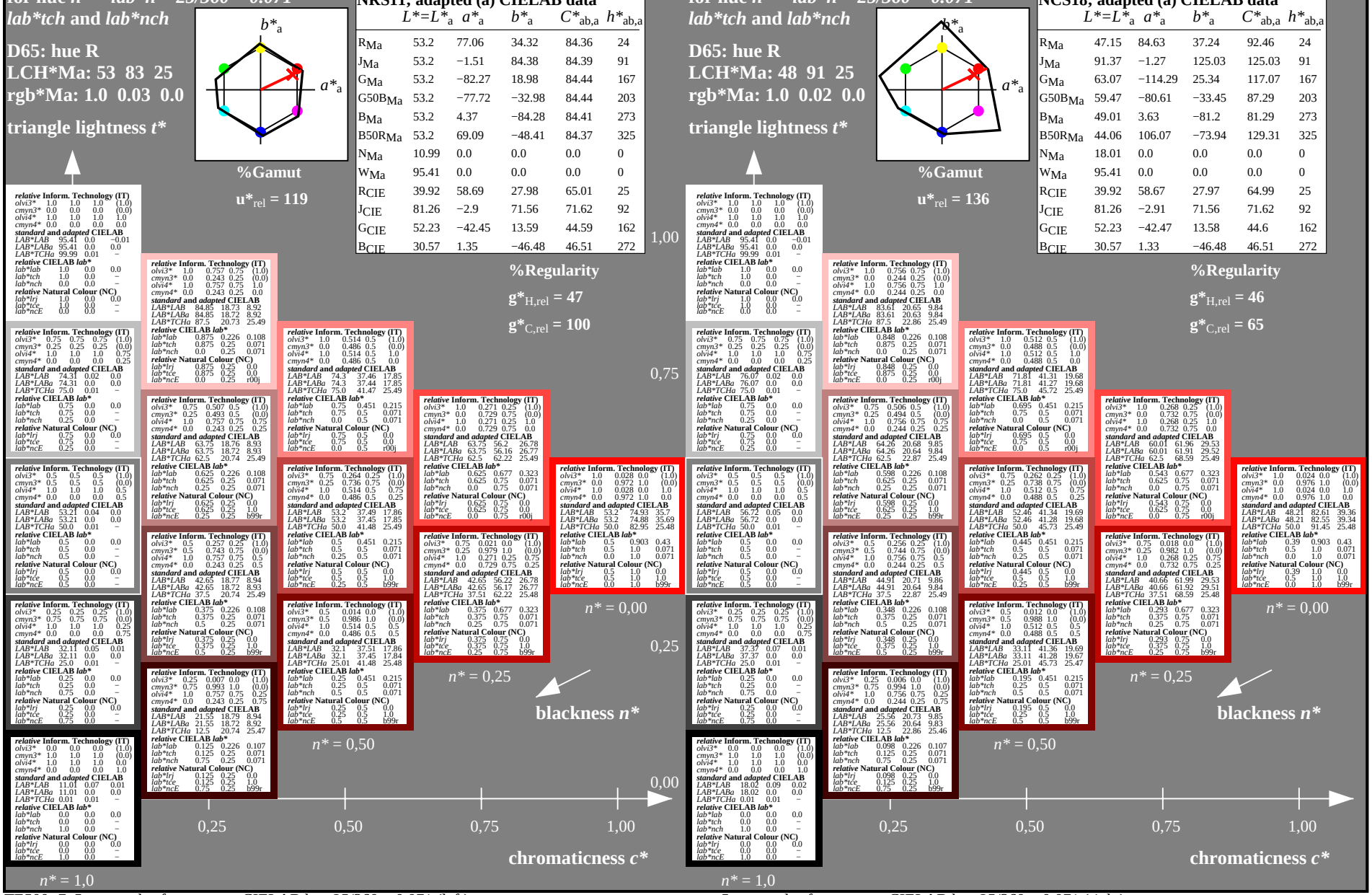

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



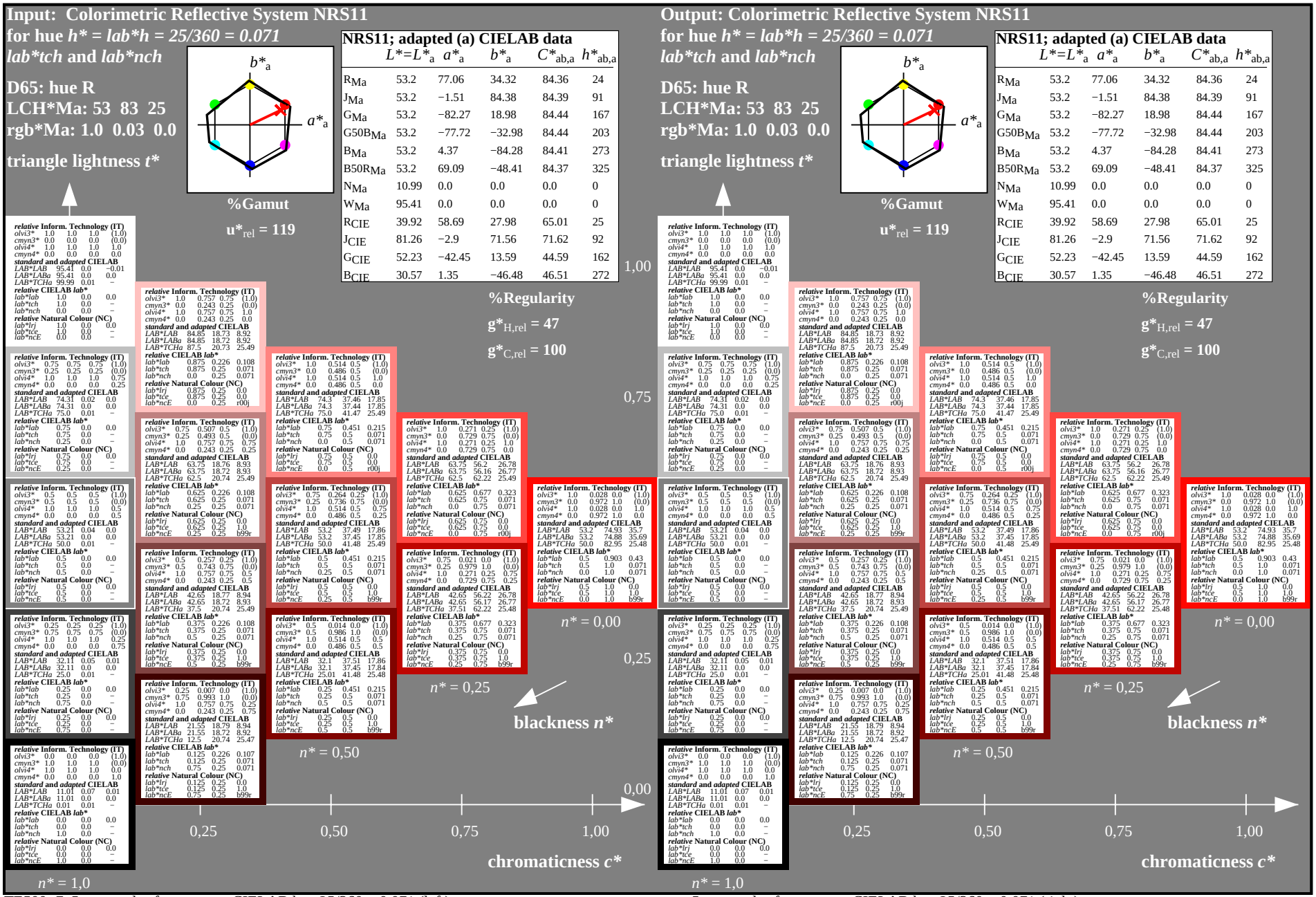

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



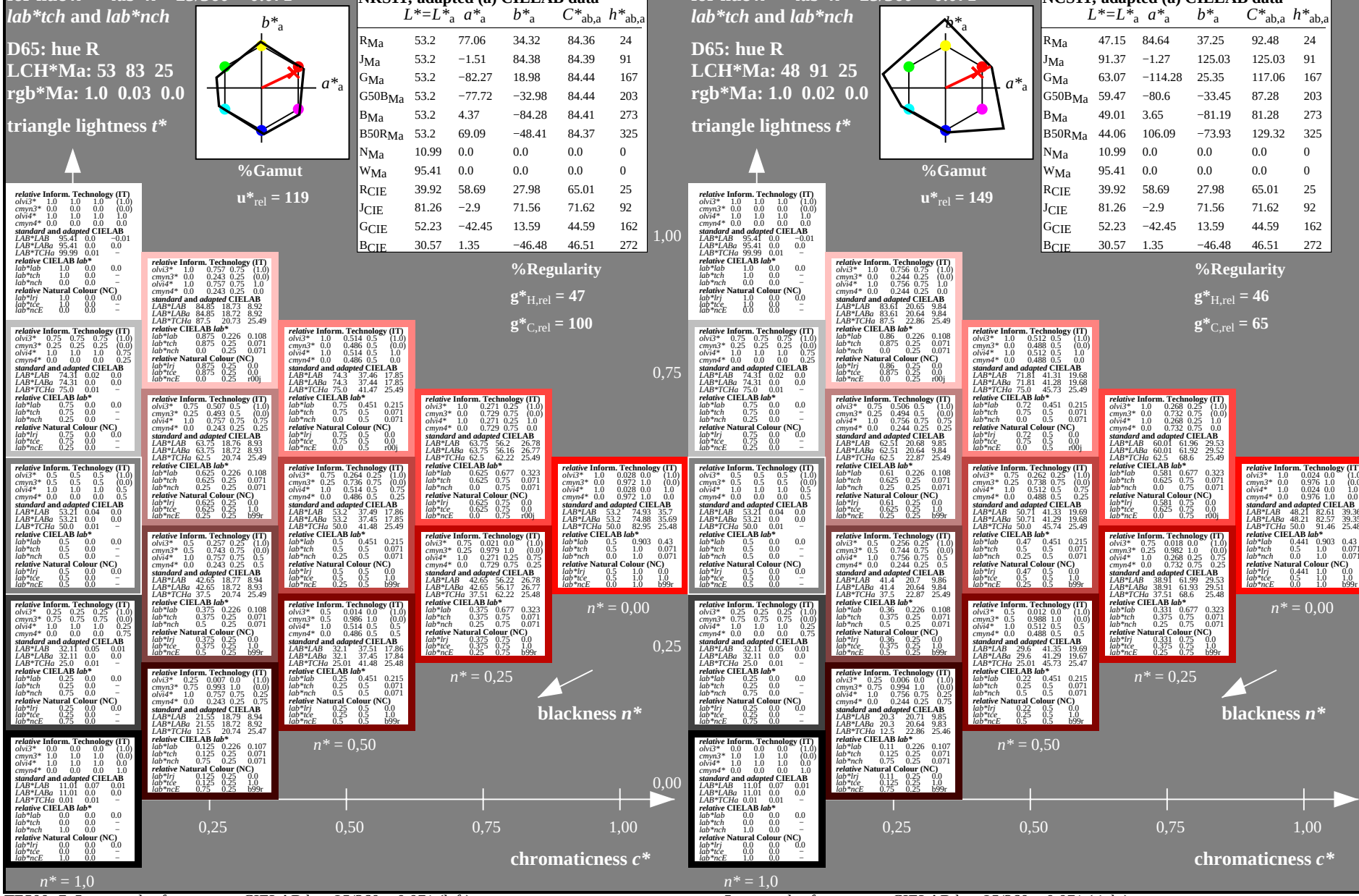

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



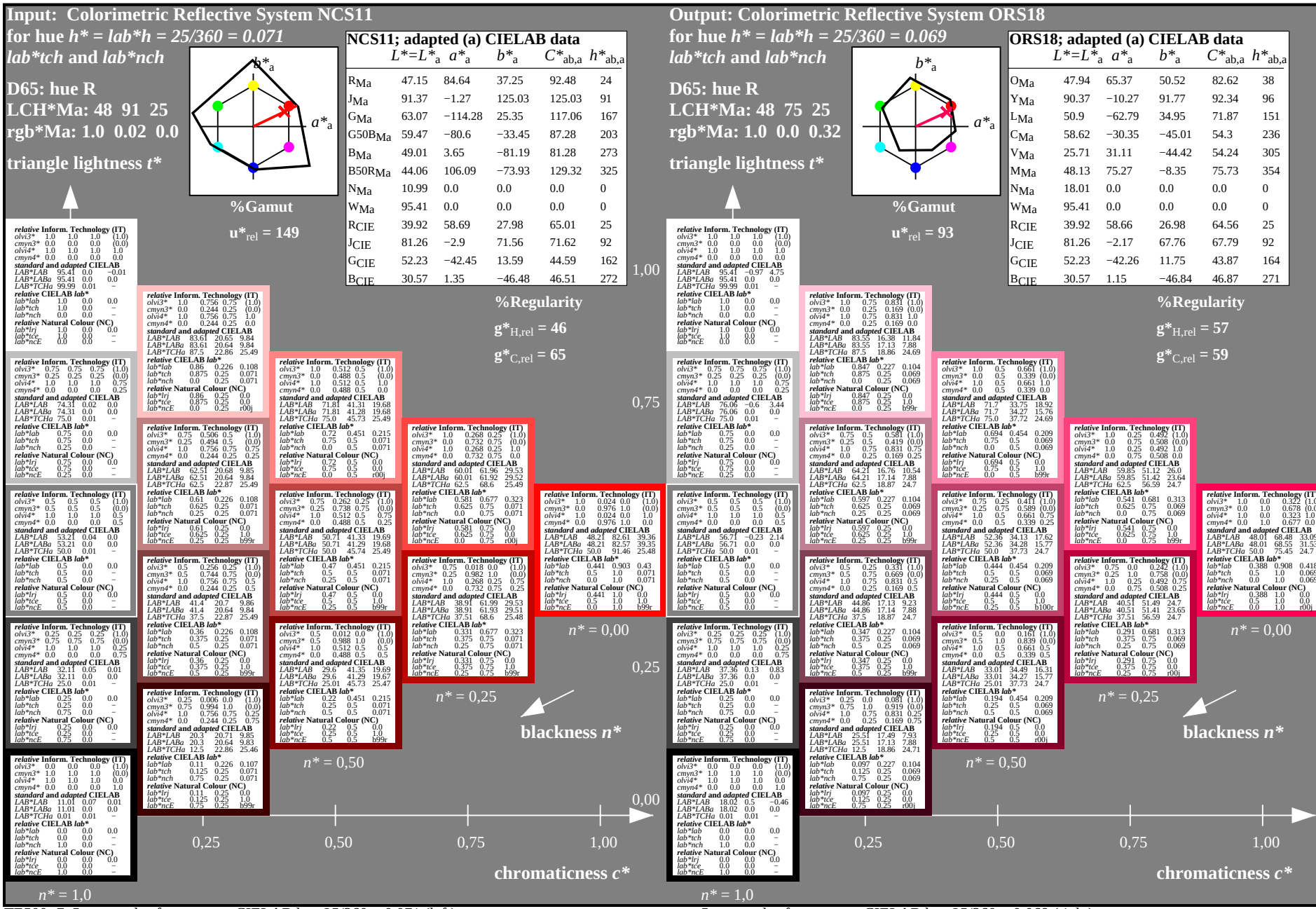

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



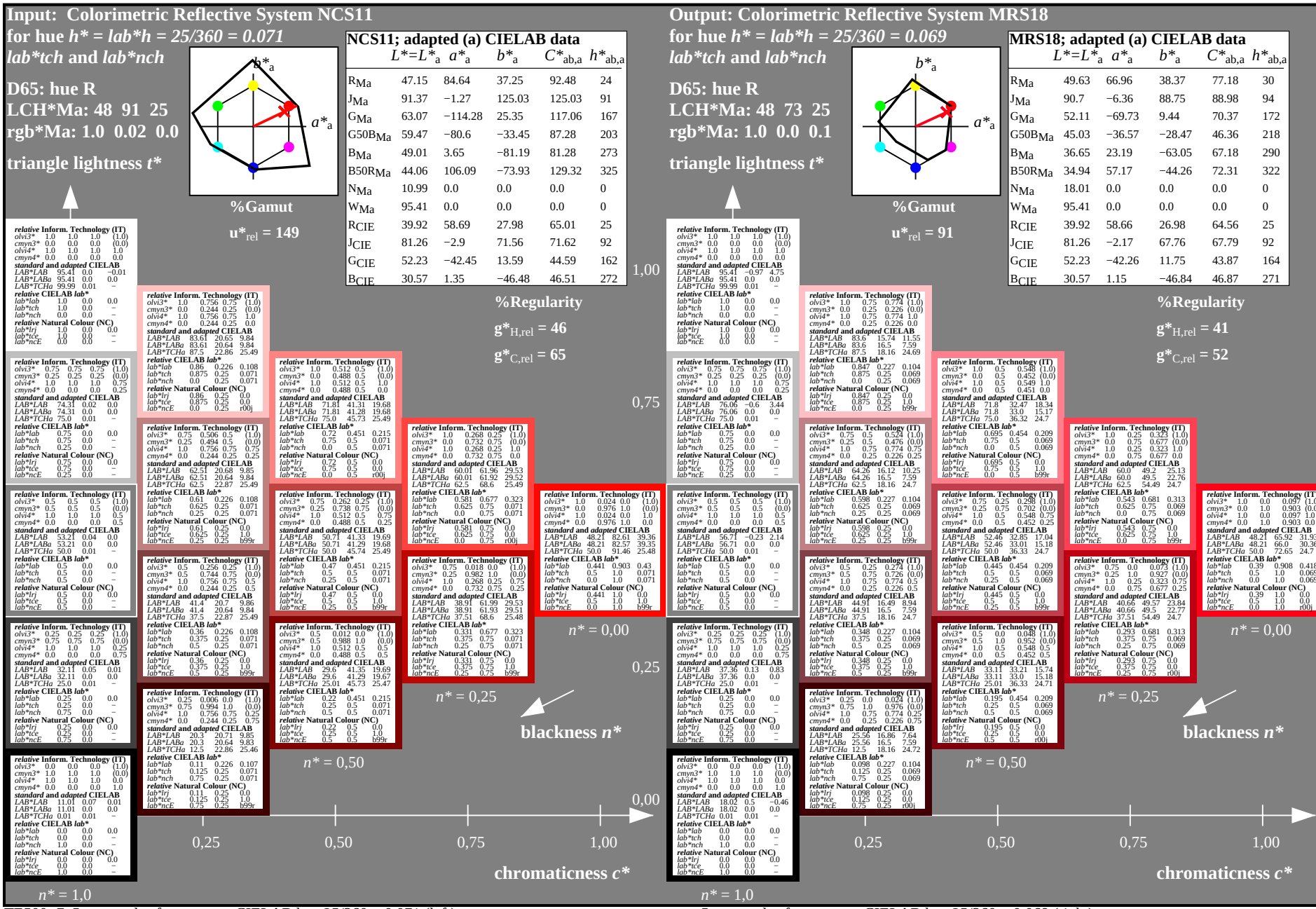

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



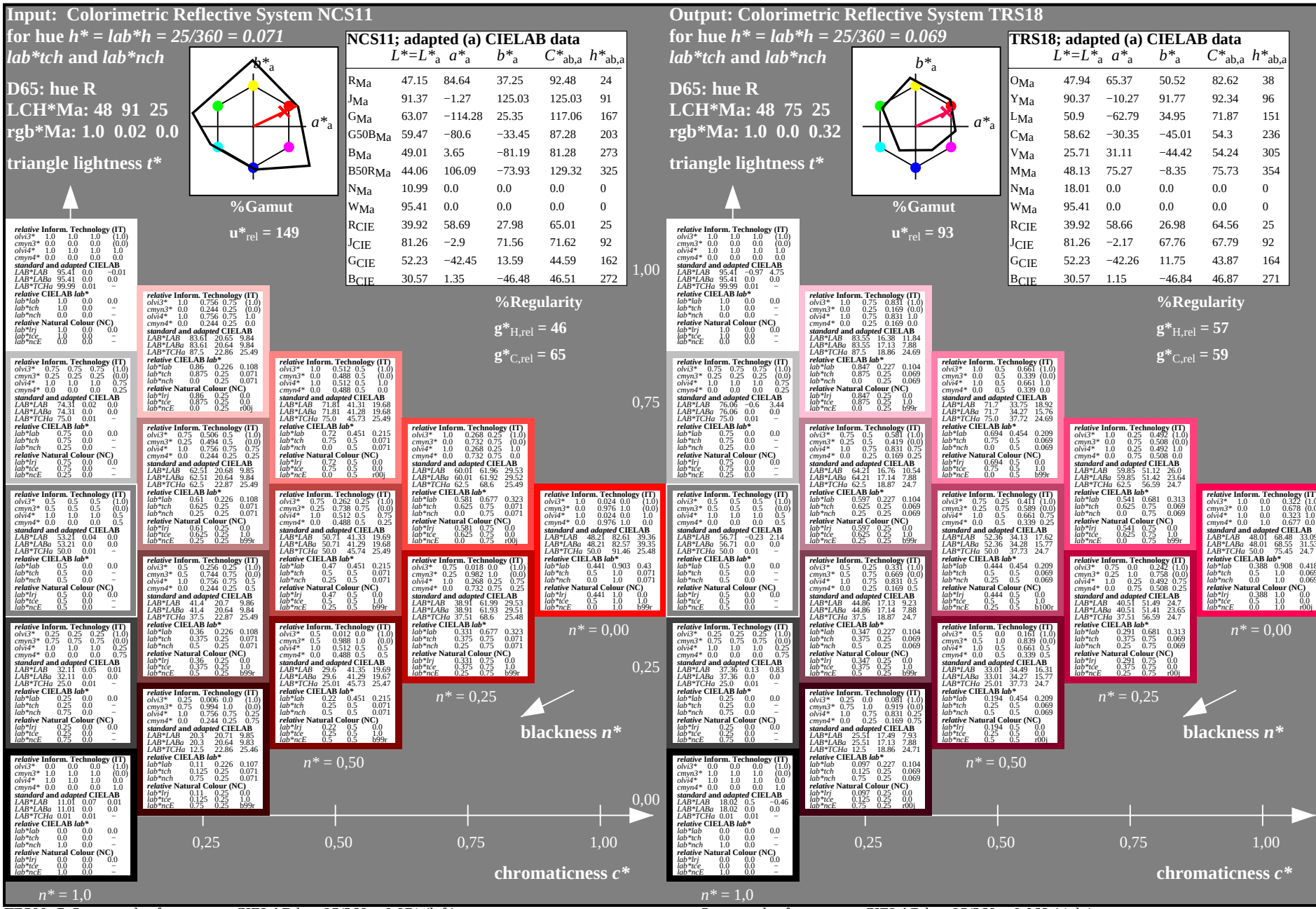

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



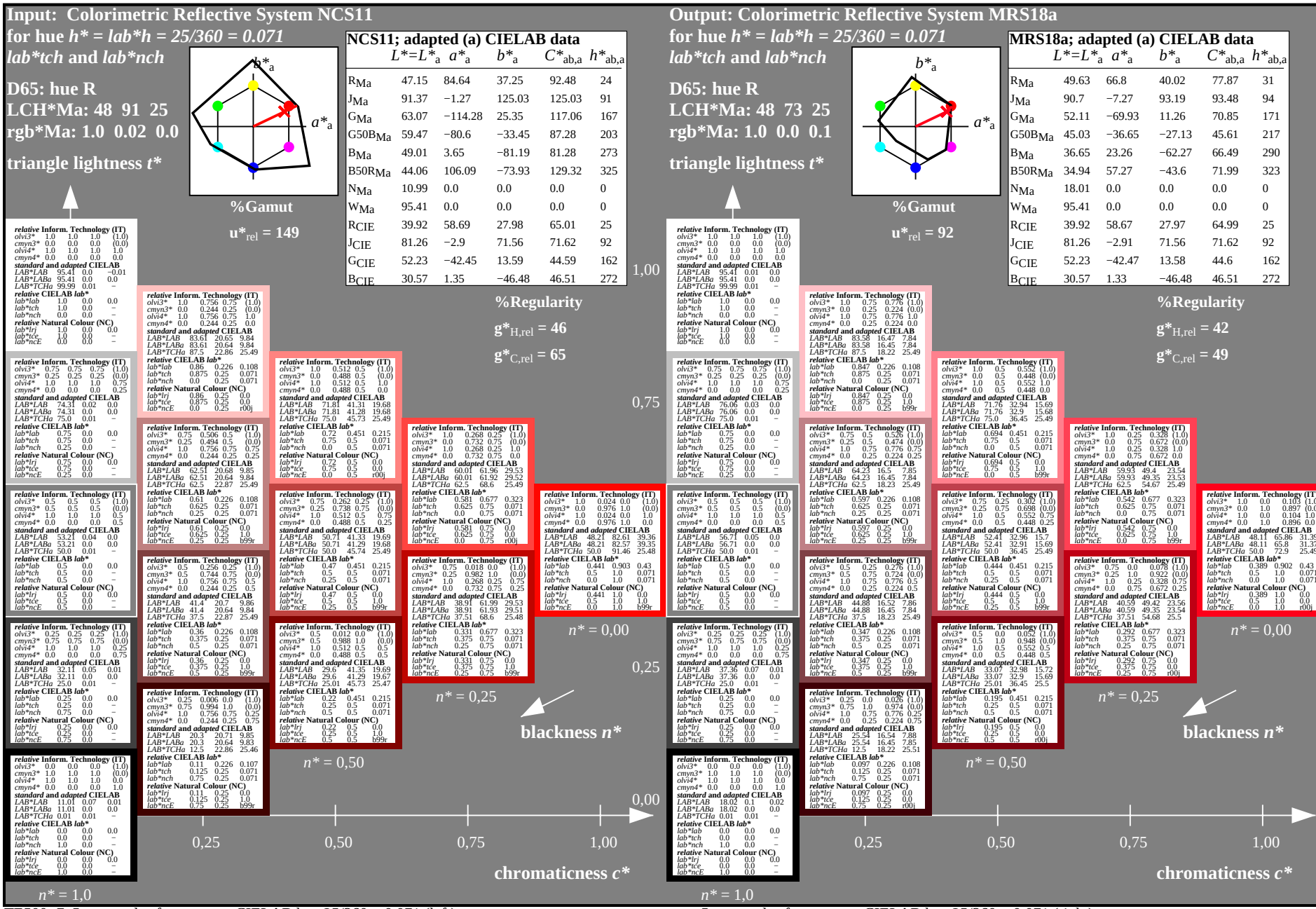

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



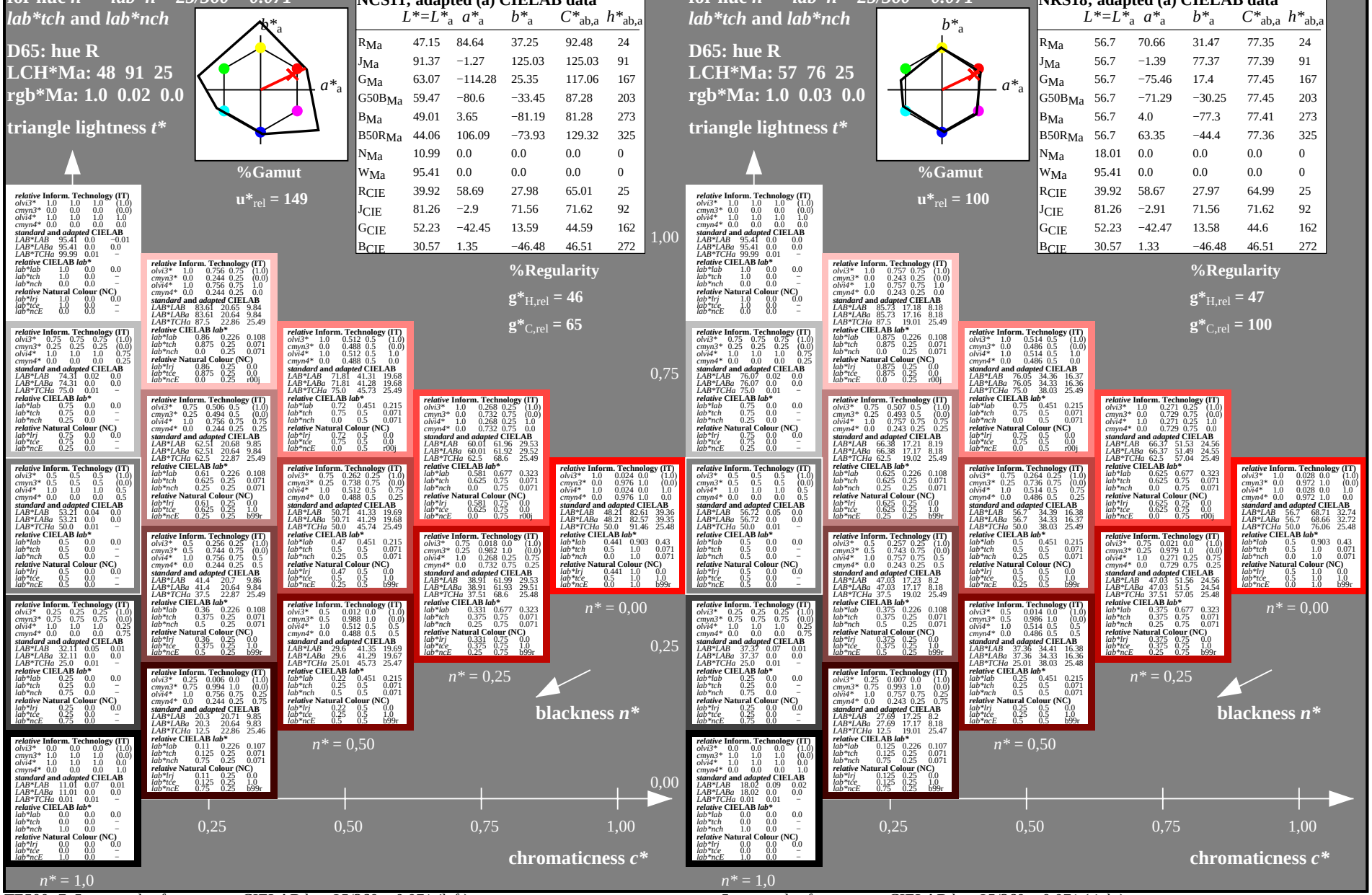

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.069 (right)



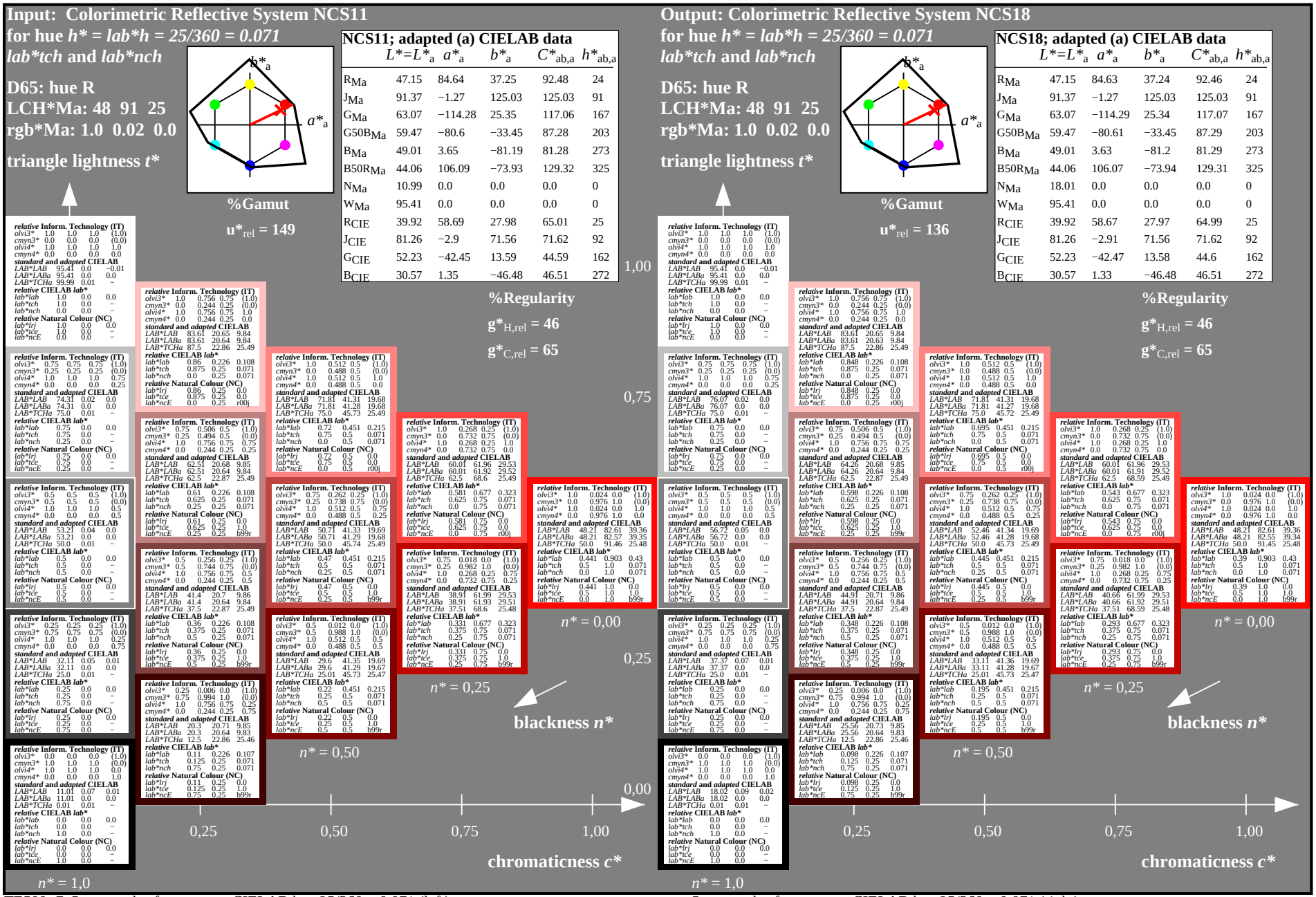

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



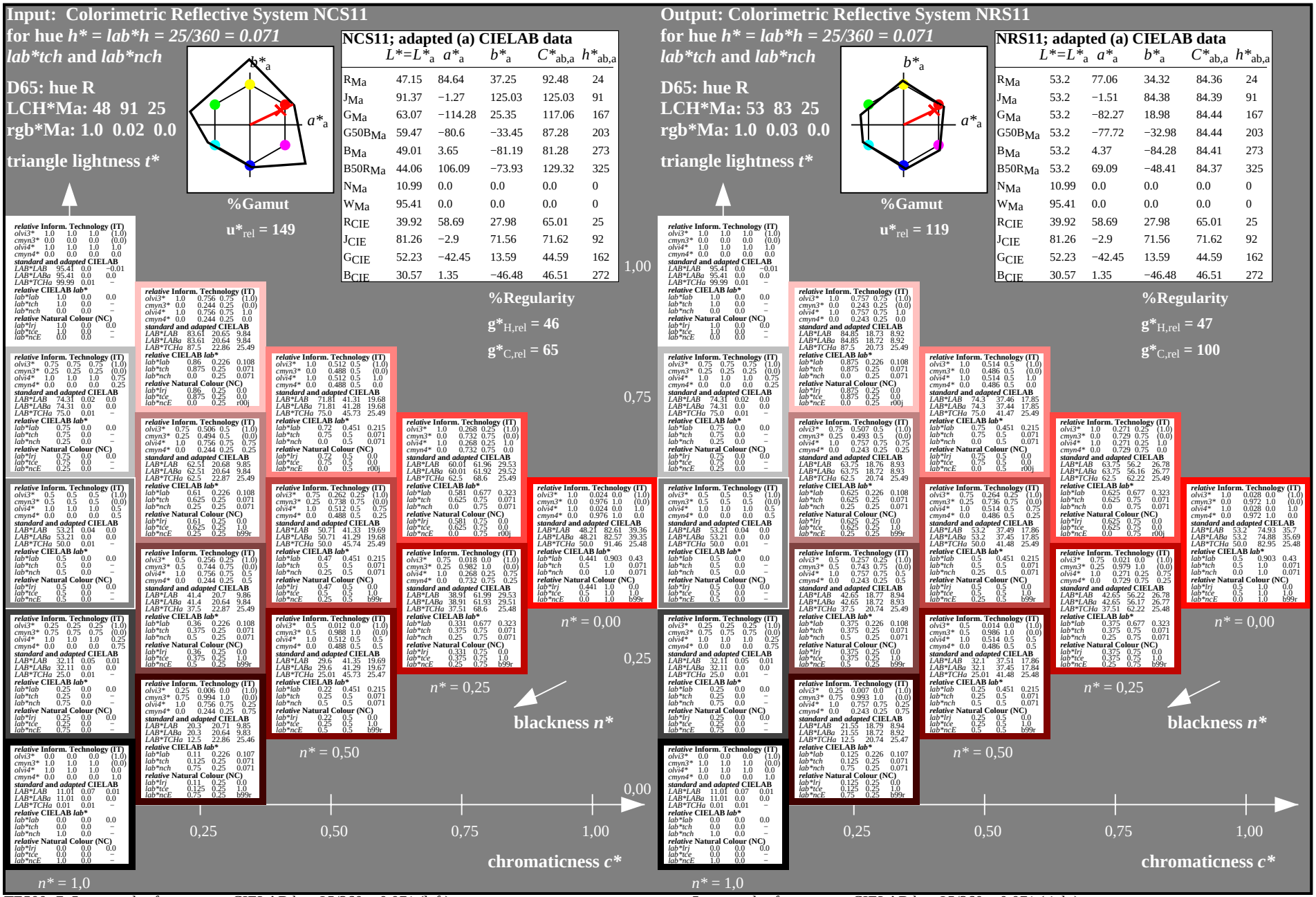

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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




**NCS11; adapted (a) CIELAB data**

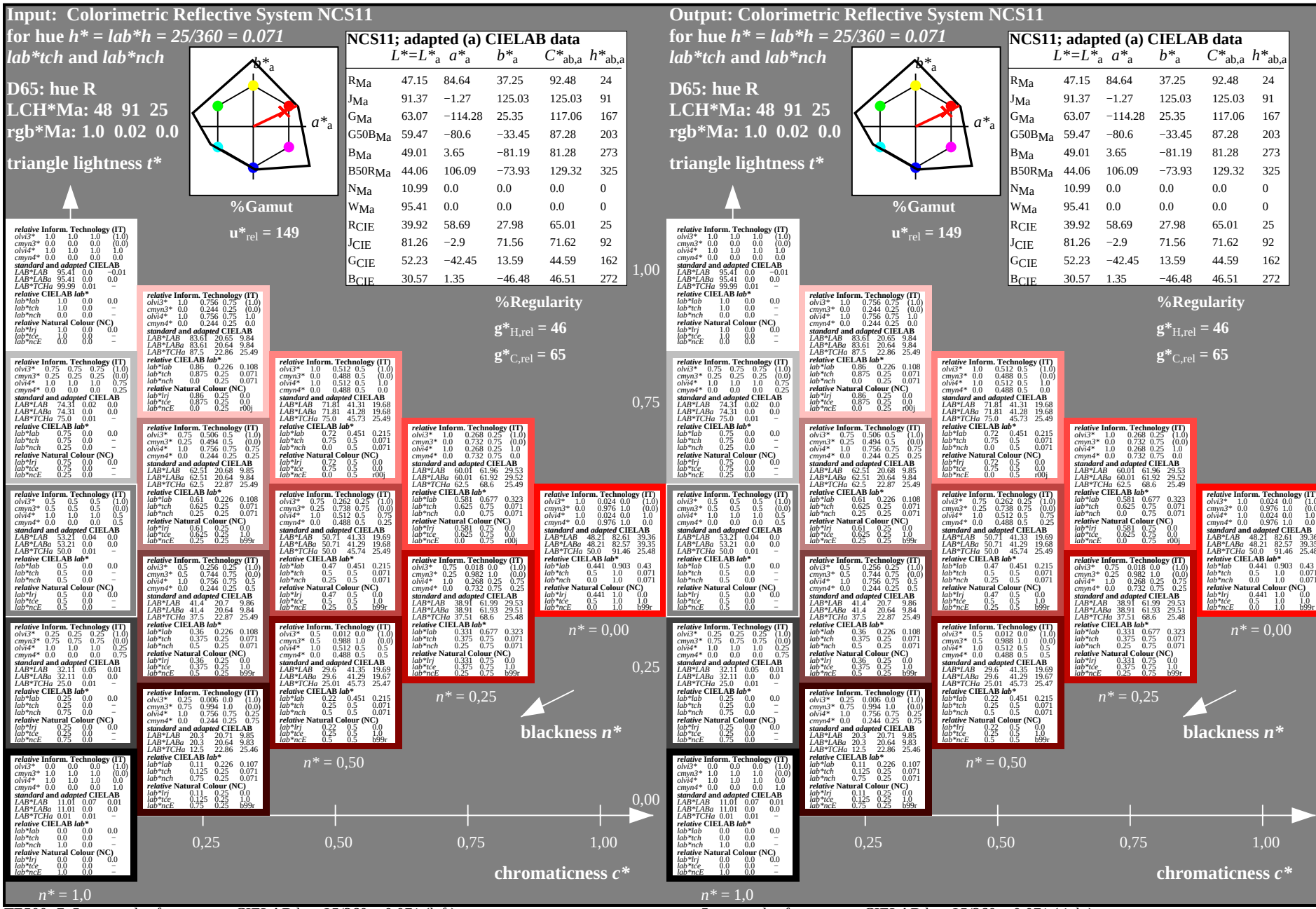
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

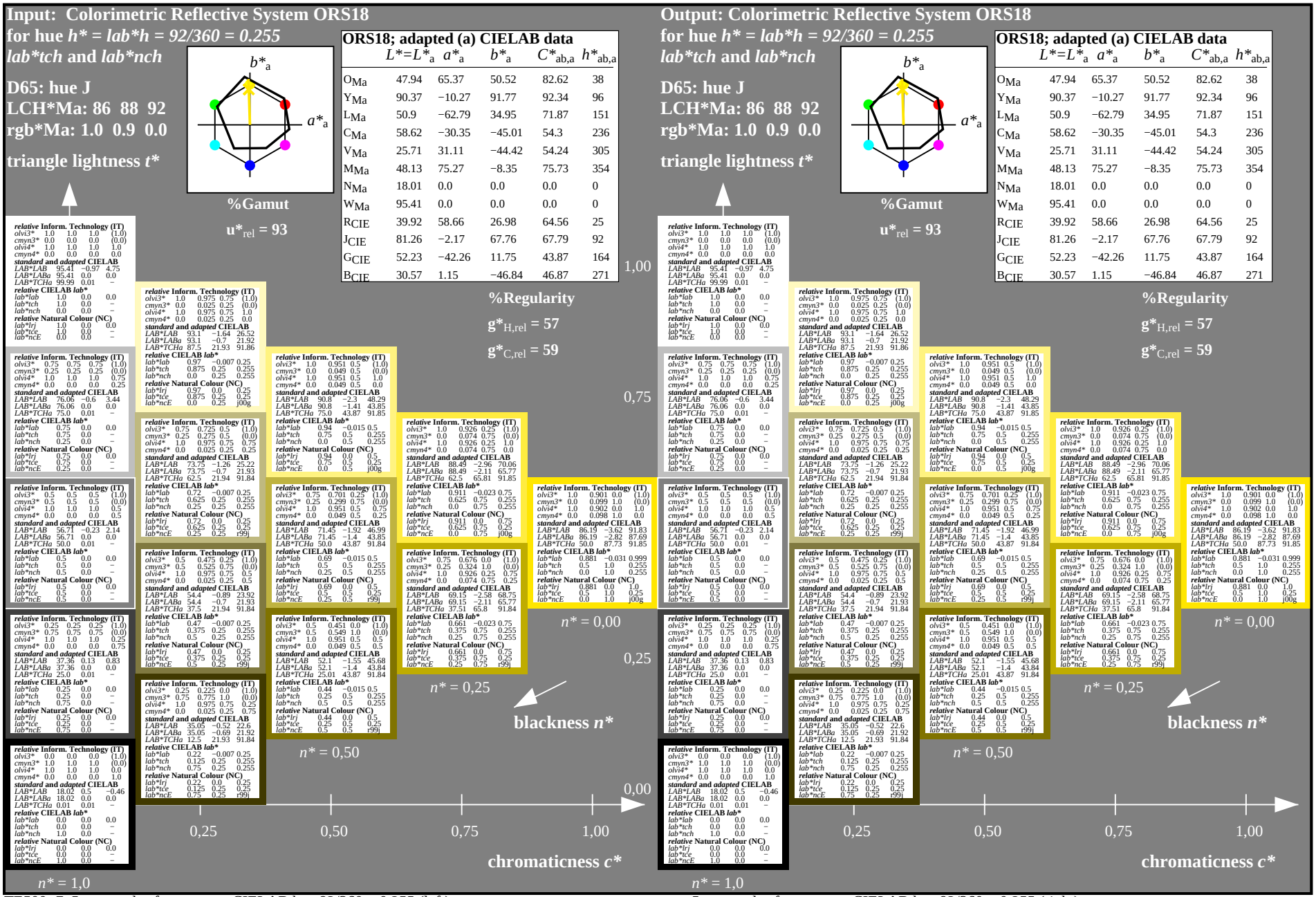
TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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



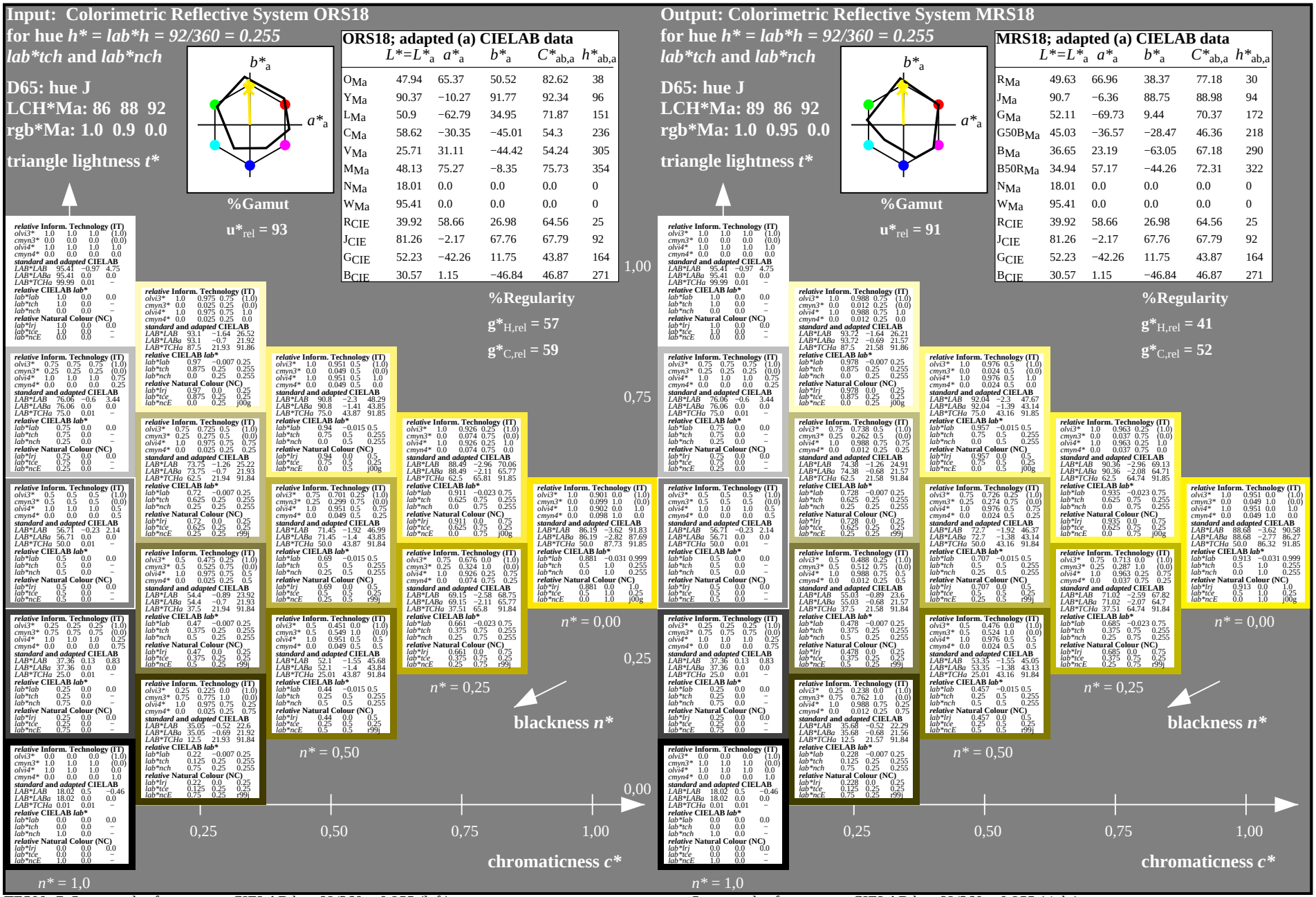

TE500−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)




**ORS18; adapted (a) CIELAB data**

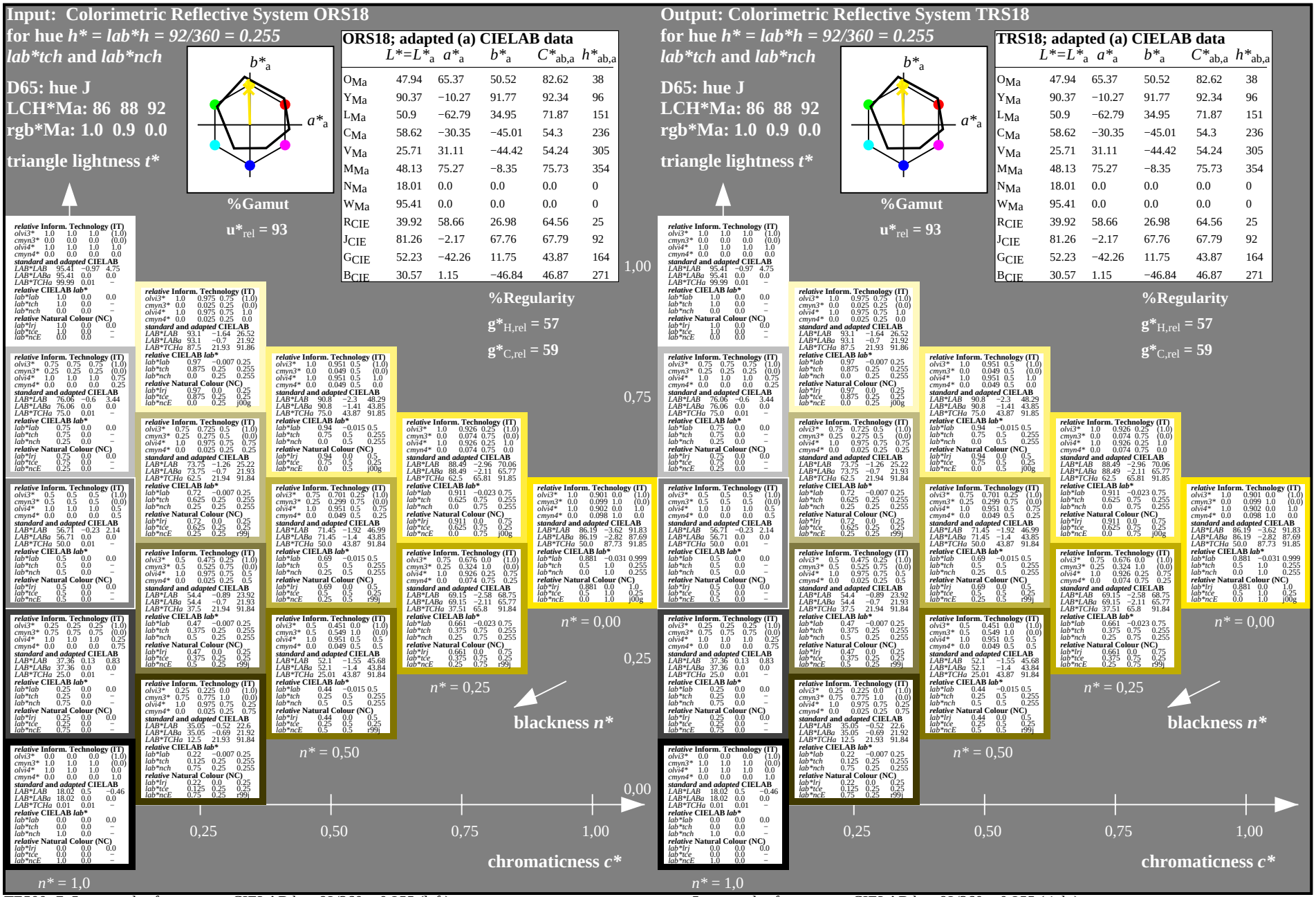
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

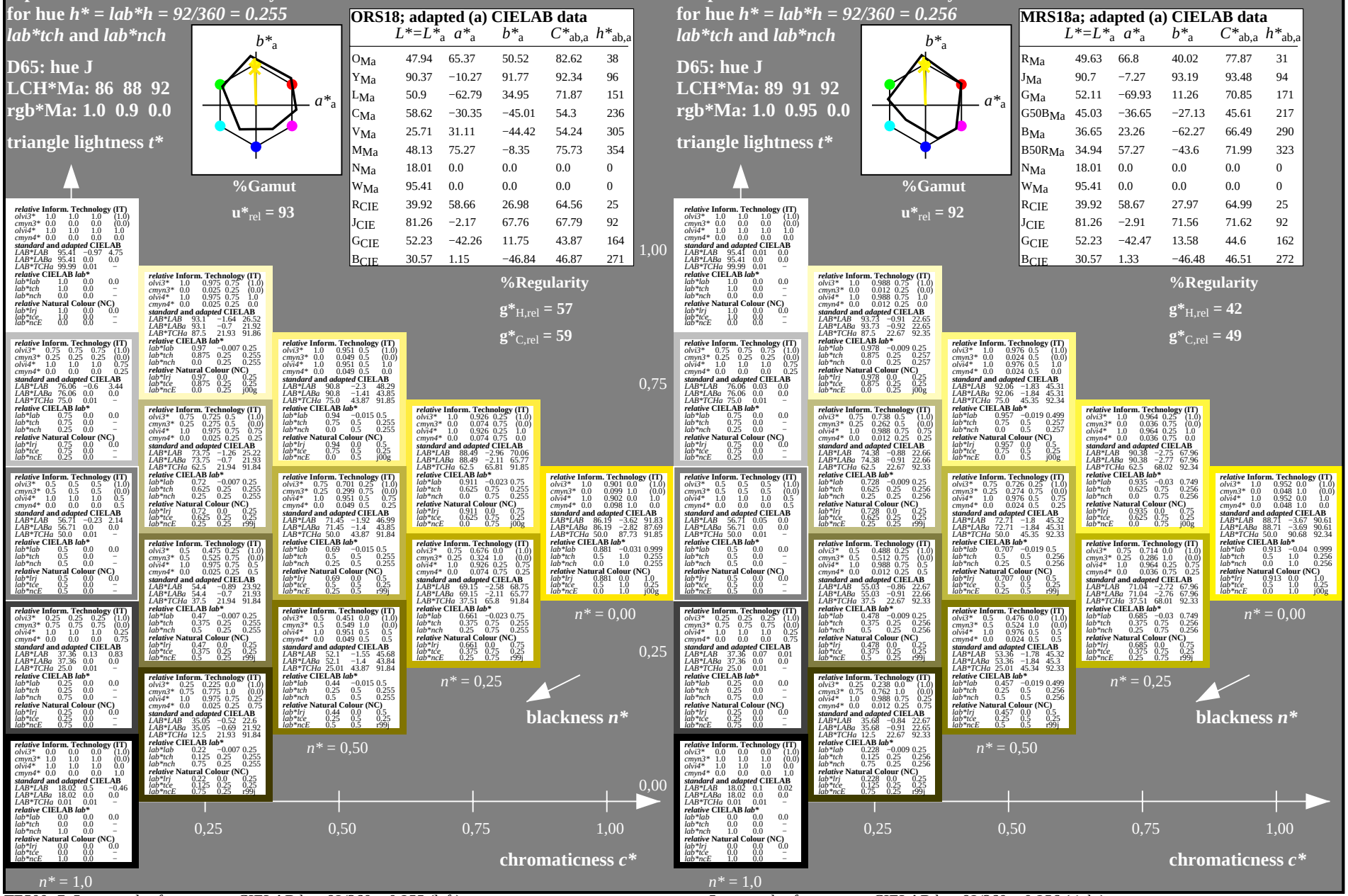
TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



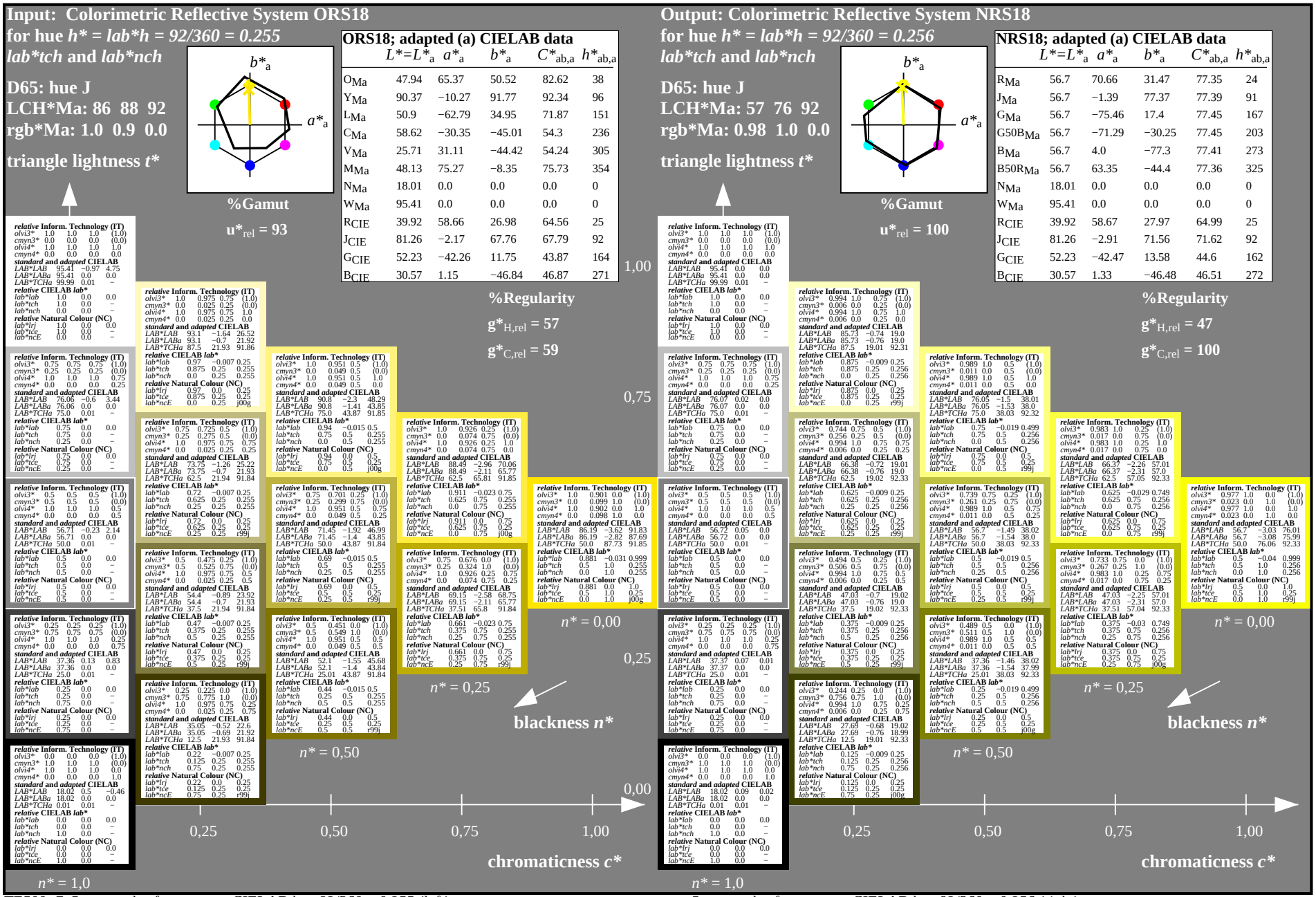

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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




**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

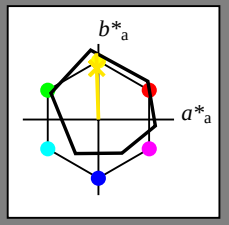
TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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

**Input: Colorimetric 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**
**rgb*Ma: 1.0 0.9 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

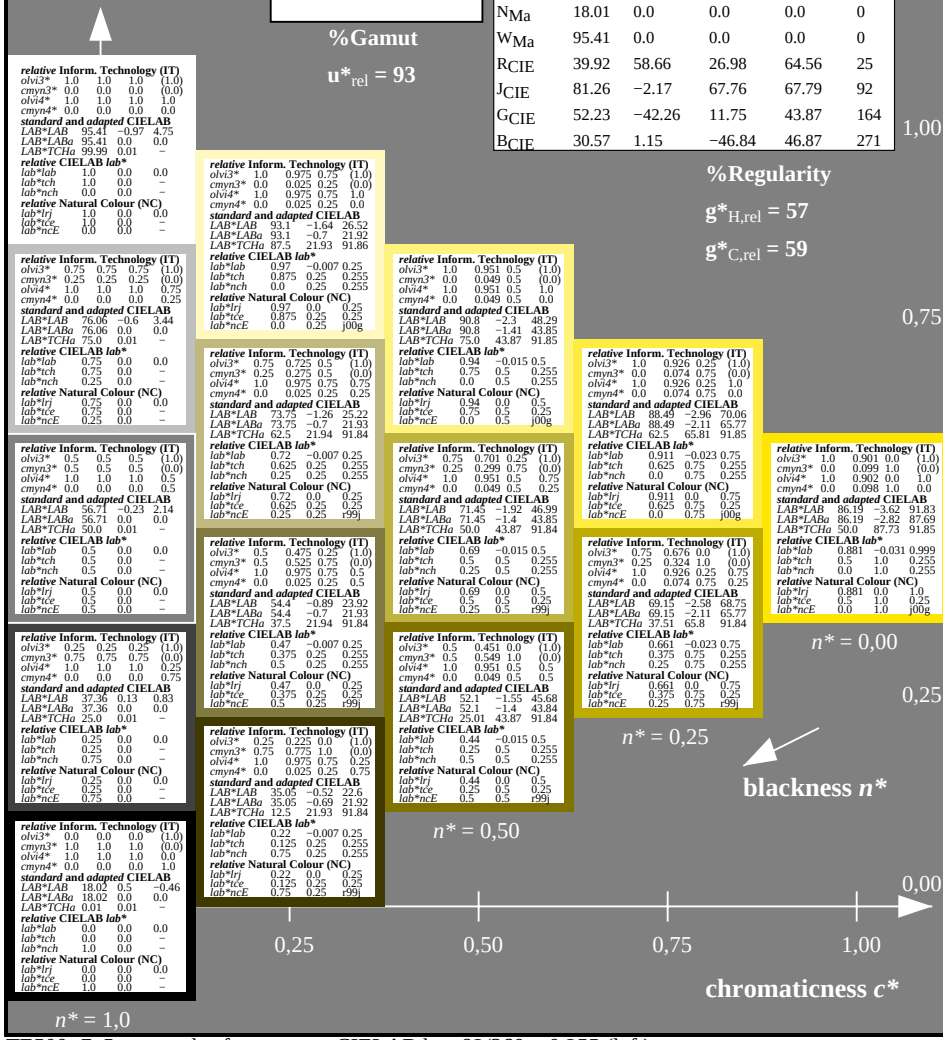
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

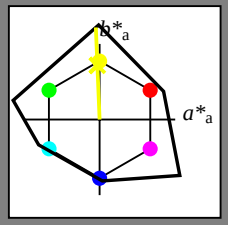
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 90 122 92**
**rgb*Ma: 0.97 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

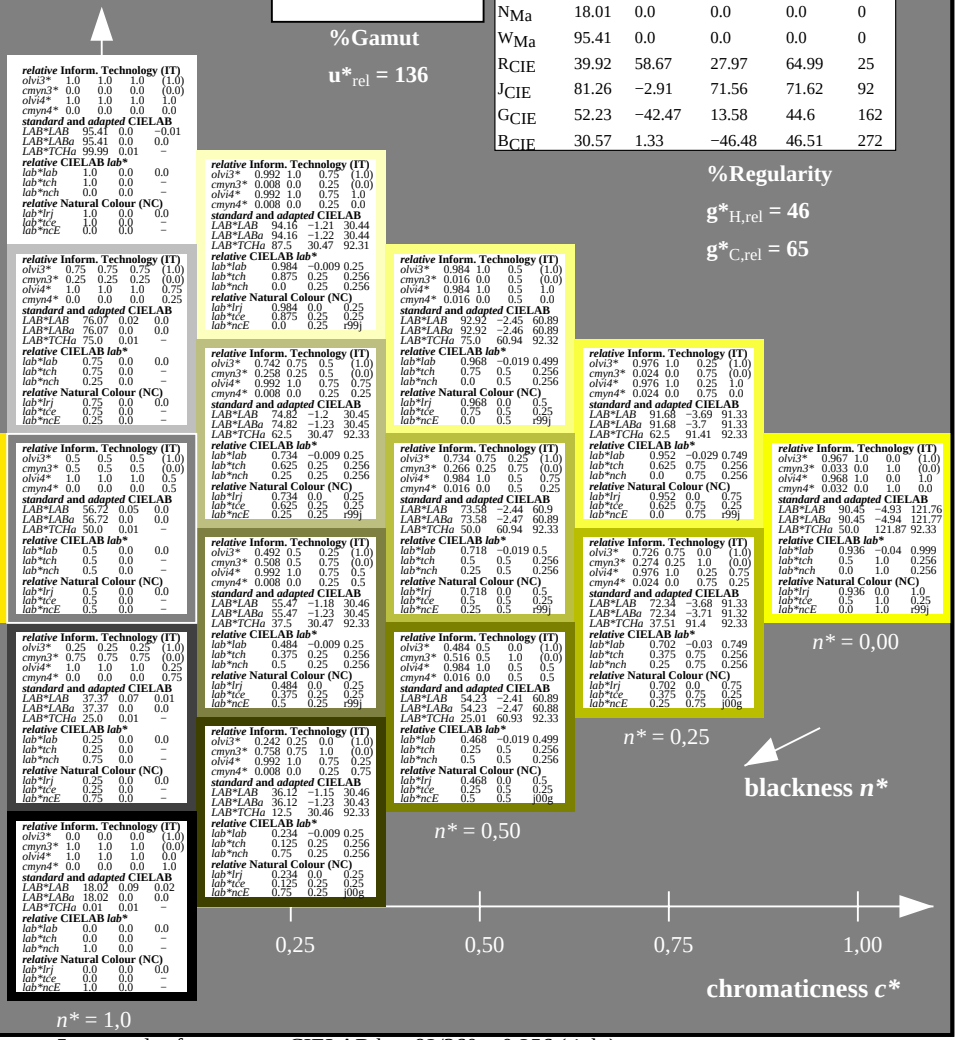
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

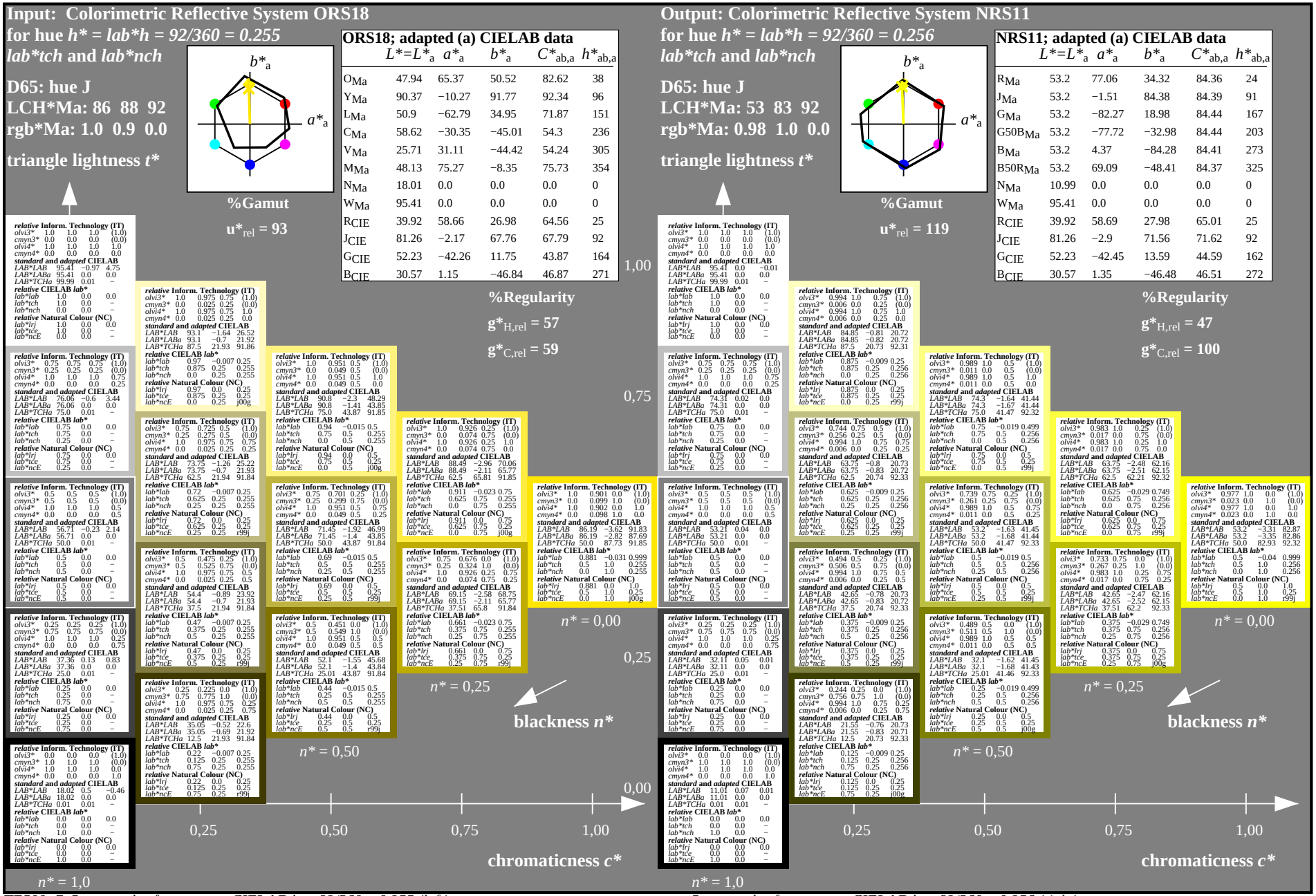
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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




**ORS18; adapted (a) CIELAB data**

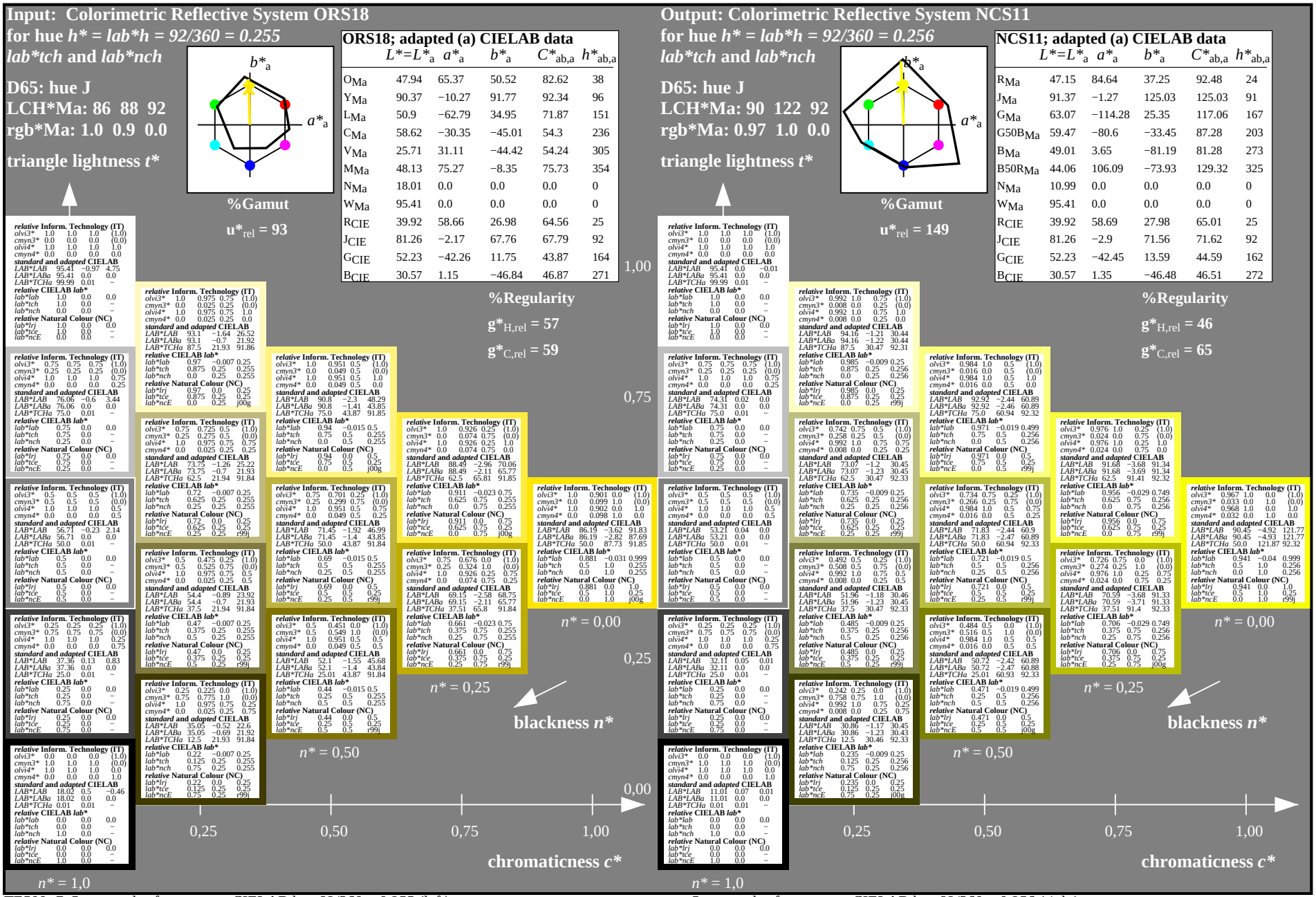
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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




**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

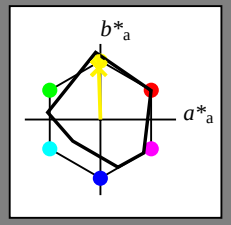
TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 92/360 = 0.255**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 89 86 92**
**rgb*Ma: 1.0 0.95 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

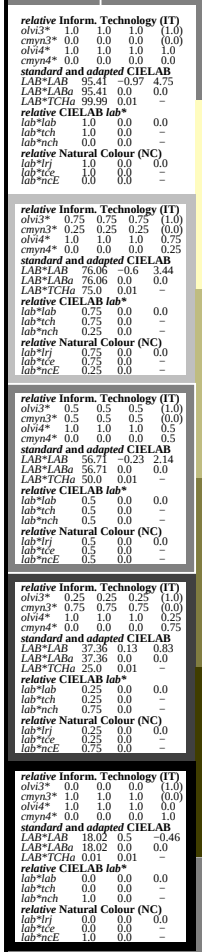
**MRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

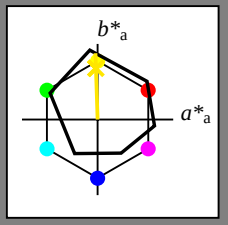



1,00
0,75
0,25
0,00
*n** = 0,00
*n** = 0,25
*n** = 0,50
*n** = 1,0
**blackness *n****
0,25
0,50
0,75
1,00
**chromaticness *c****

**Output: Colorimetric 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**
**rgb*Ma: 1.0 0.9 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

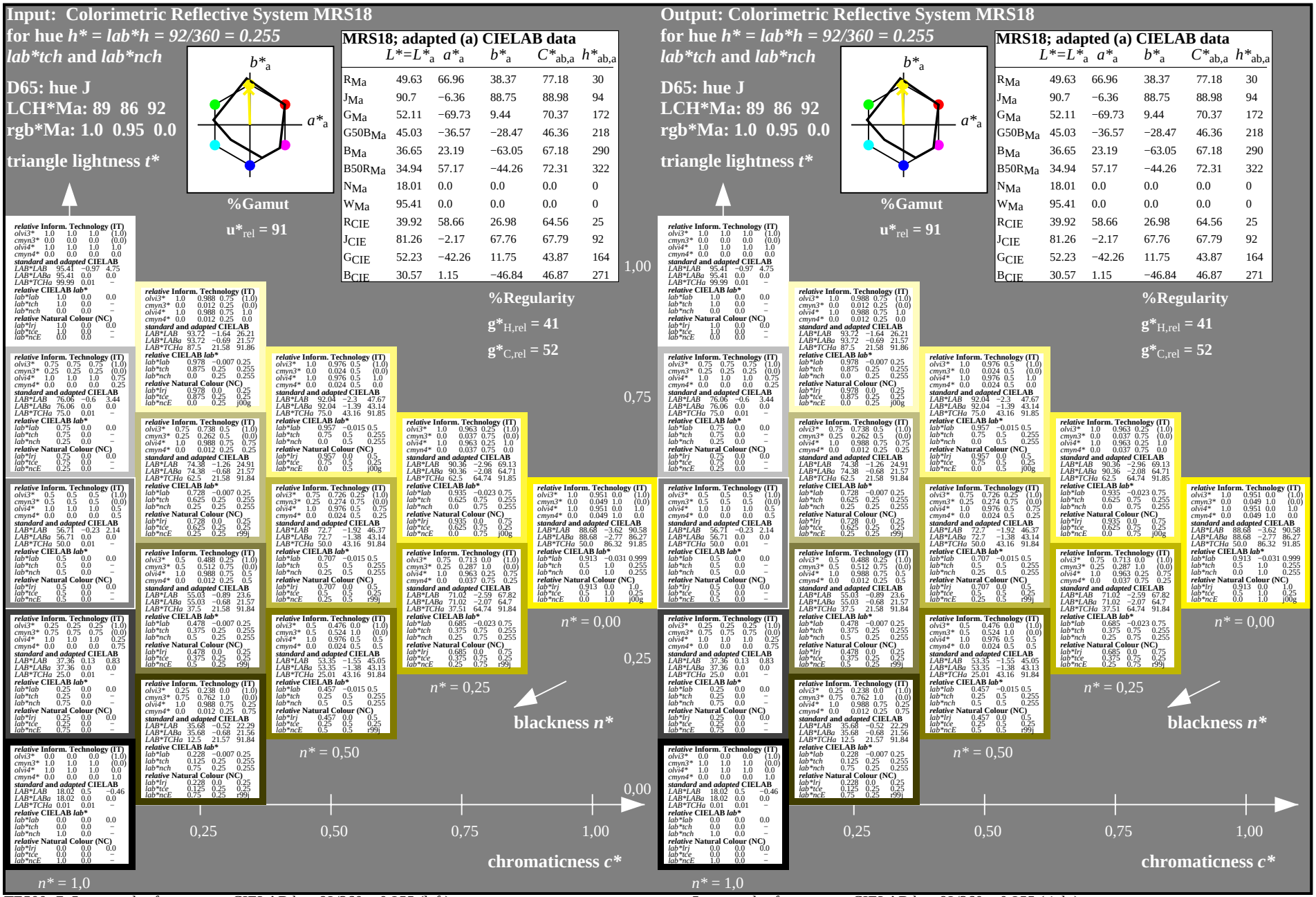
**%Regularity**

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

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

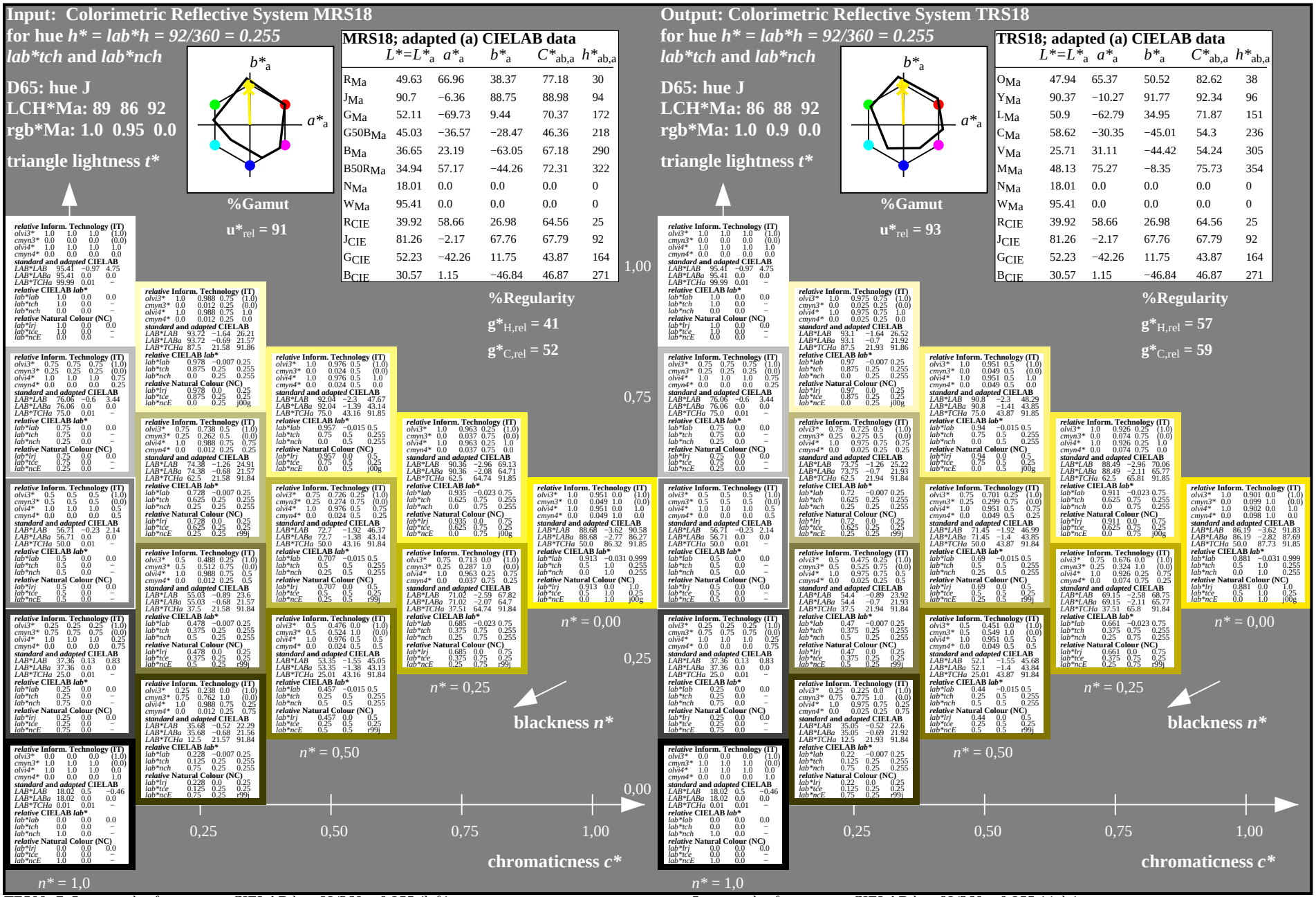
TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



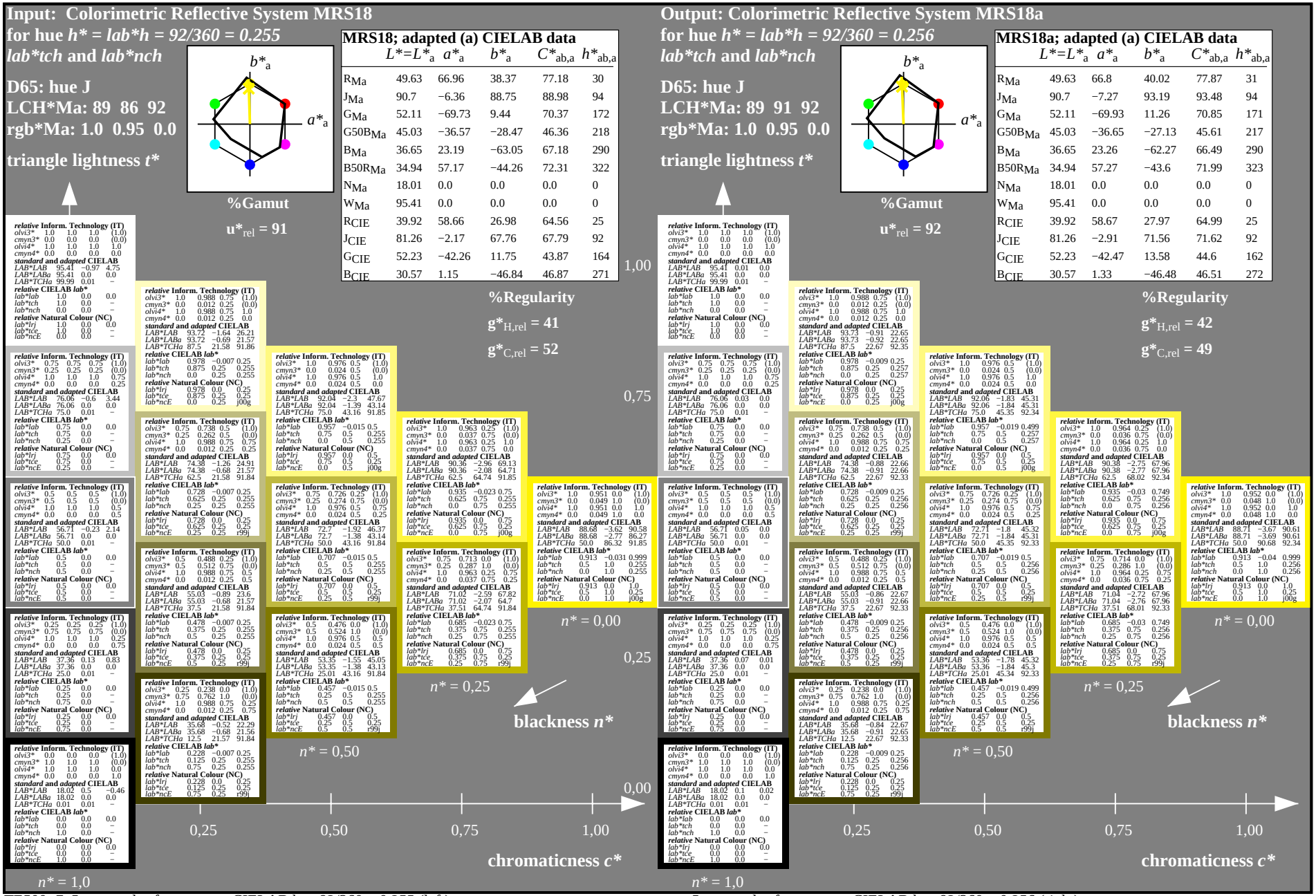

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



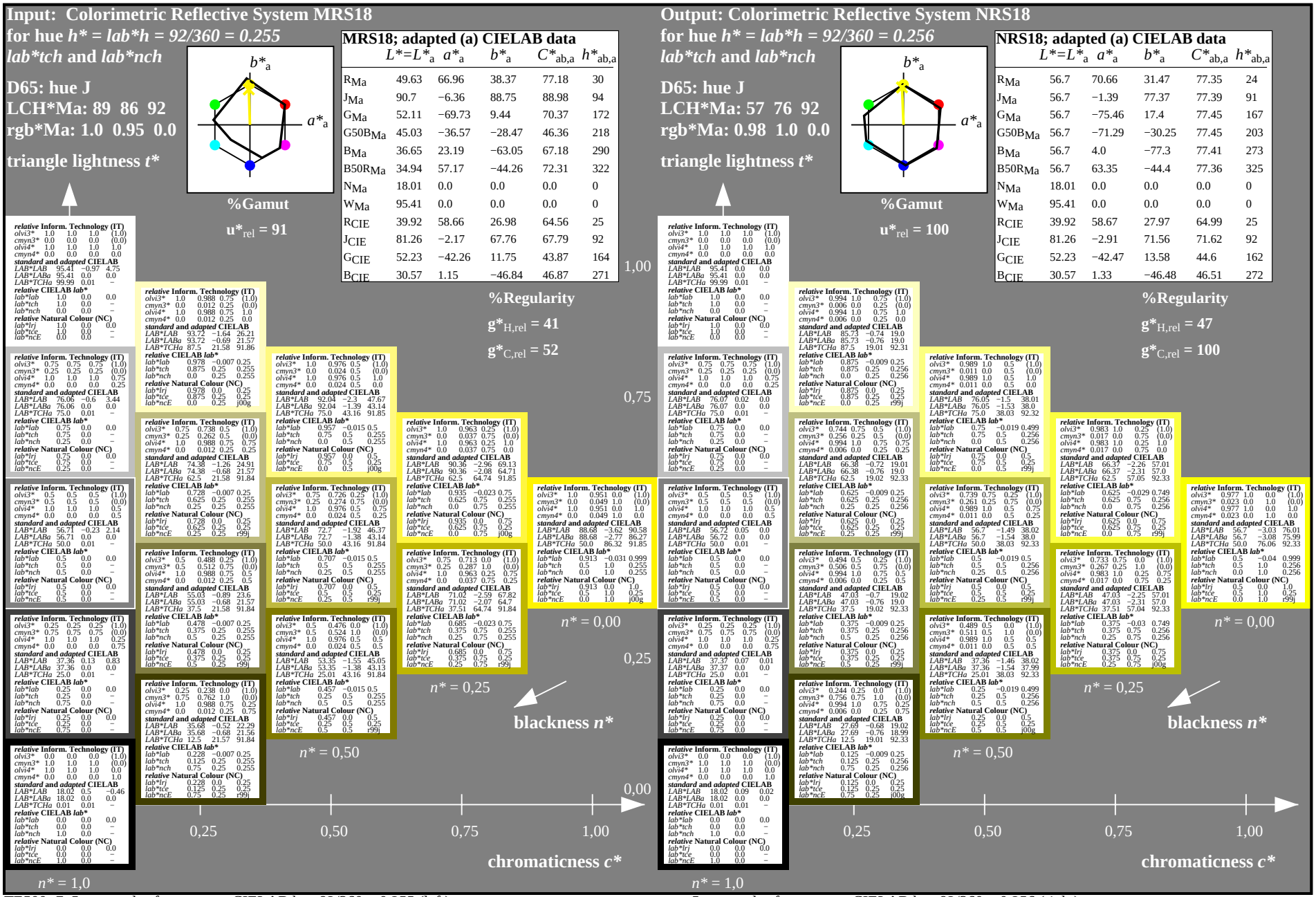

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



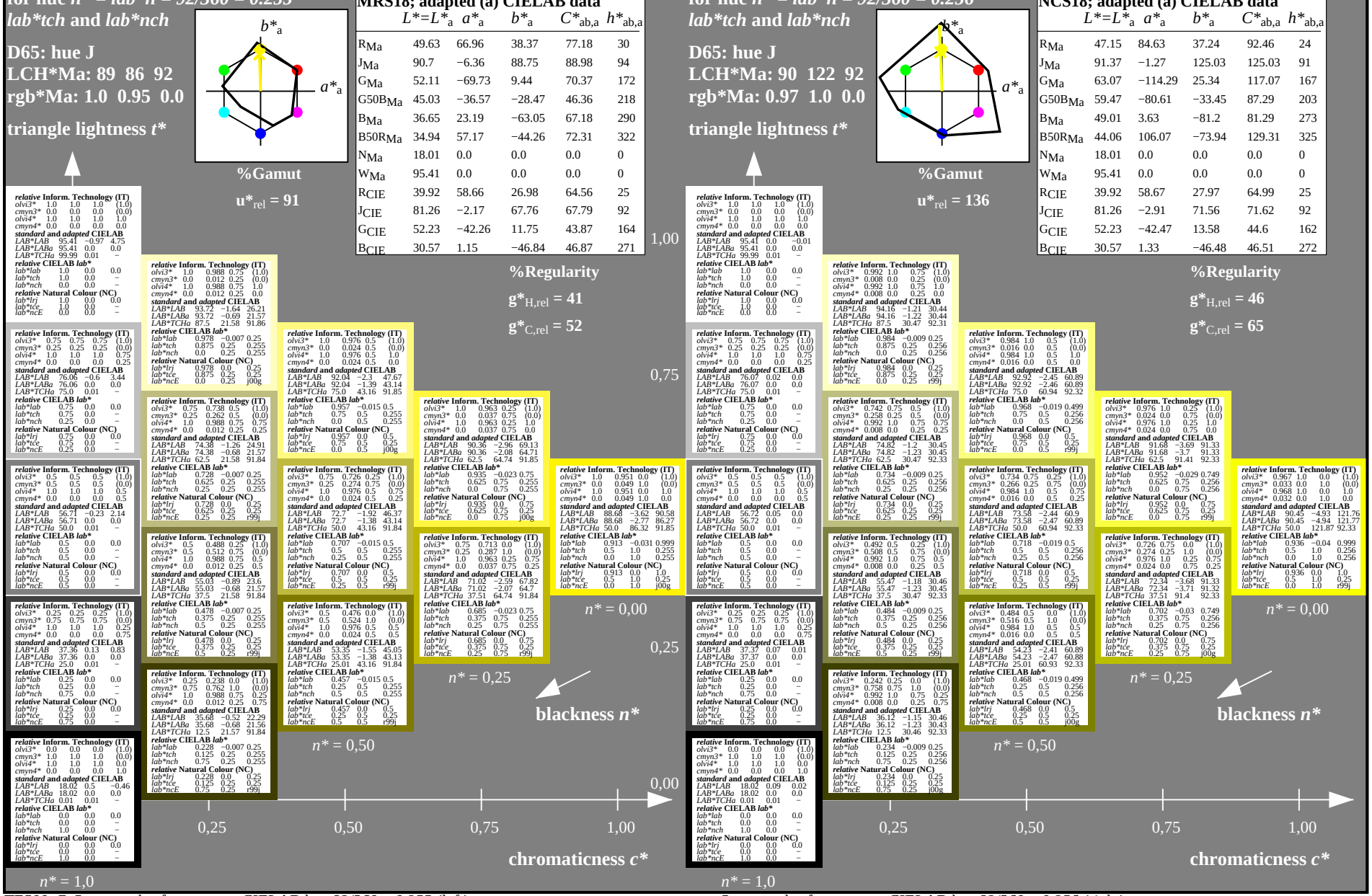

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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




**MRS18; adapted (a) CIELAB data**

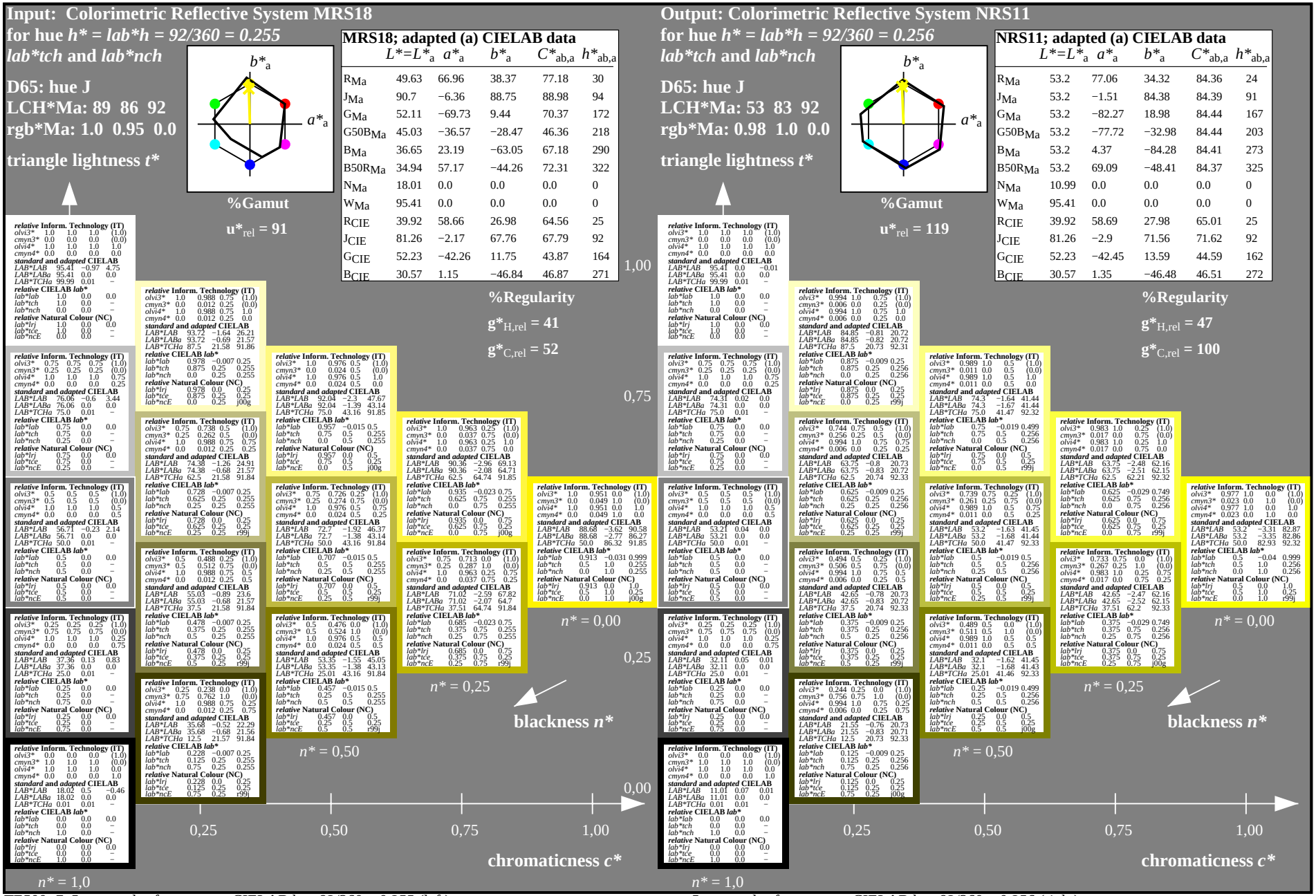
| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NCS18; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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



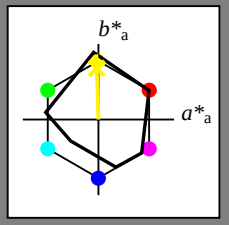

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 92/360 = 0.255**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 89 86 92**
**rgb*Ma: 1.0 0.95 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

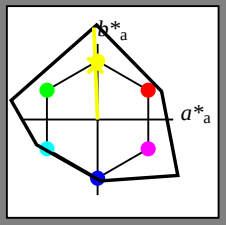
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 90 122 92**
**rgb*Ma: 0.97 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

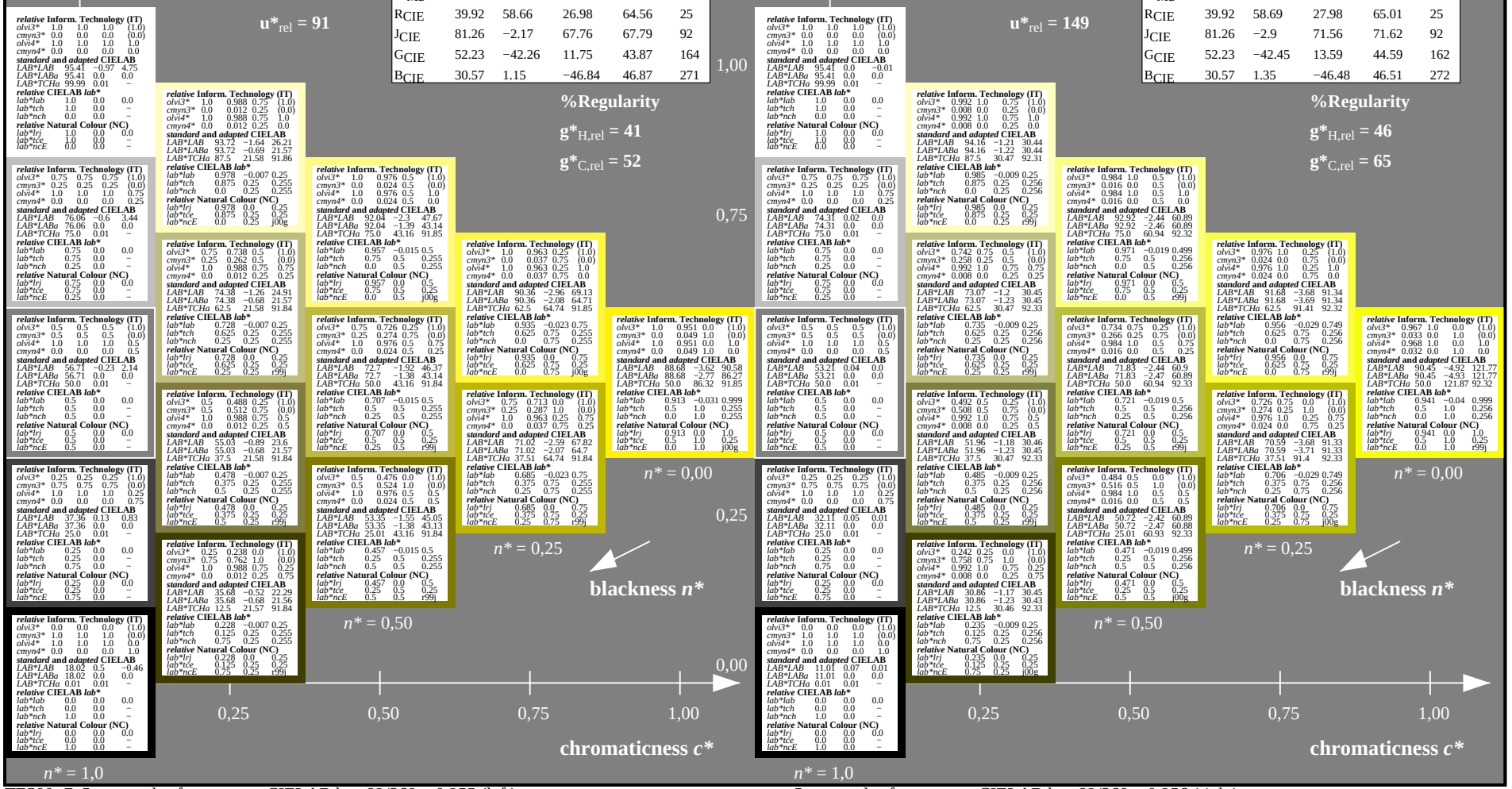
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

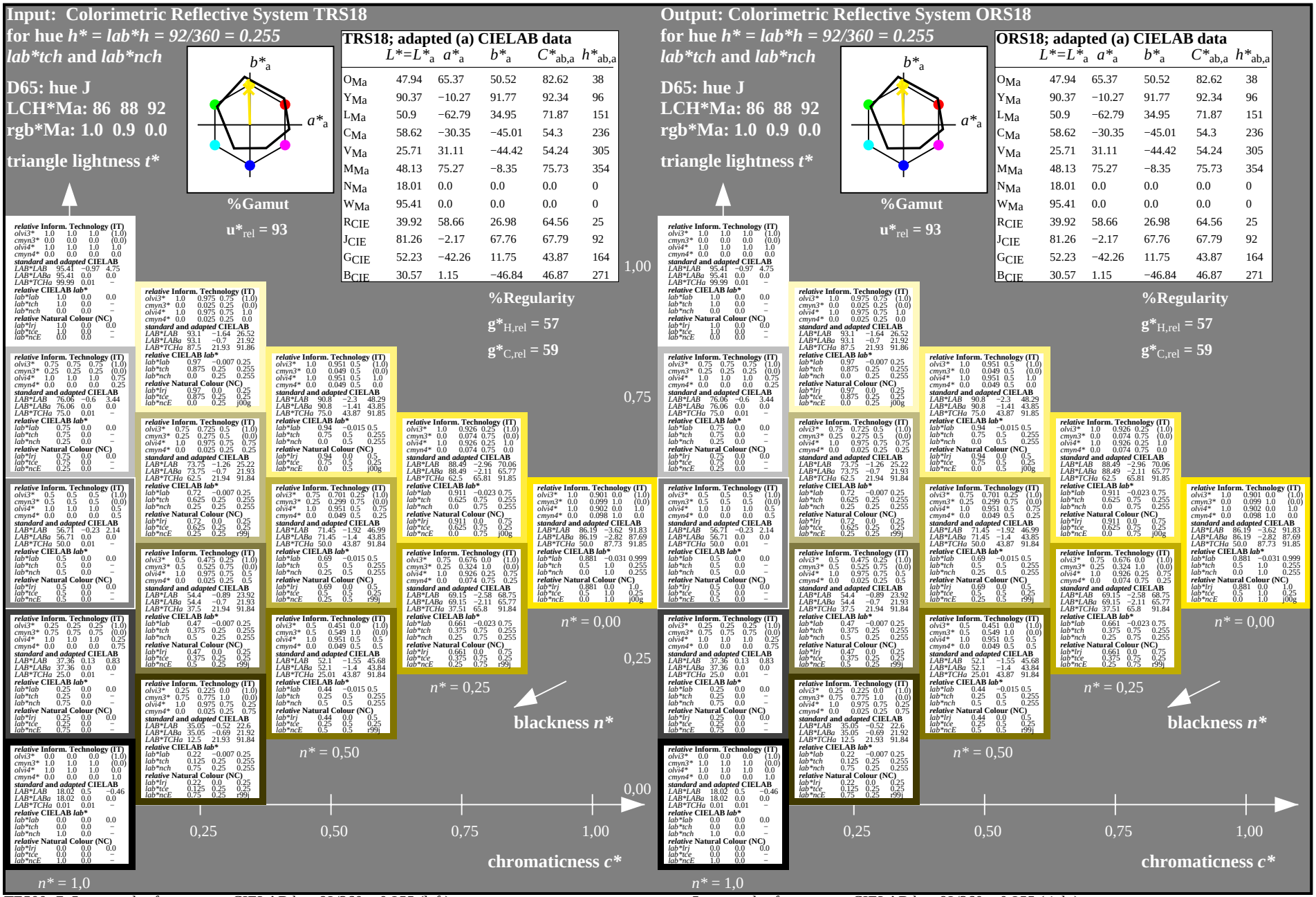
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



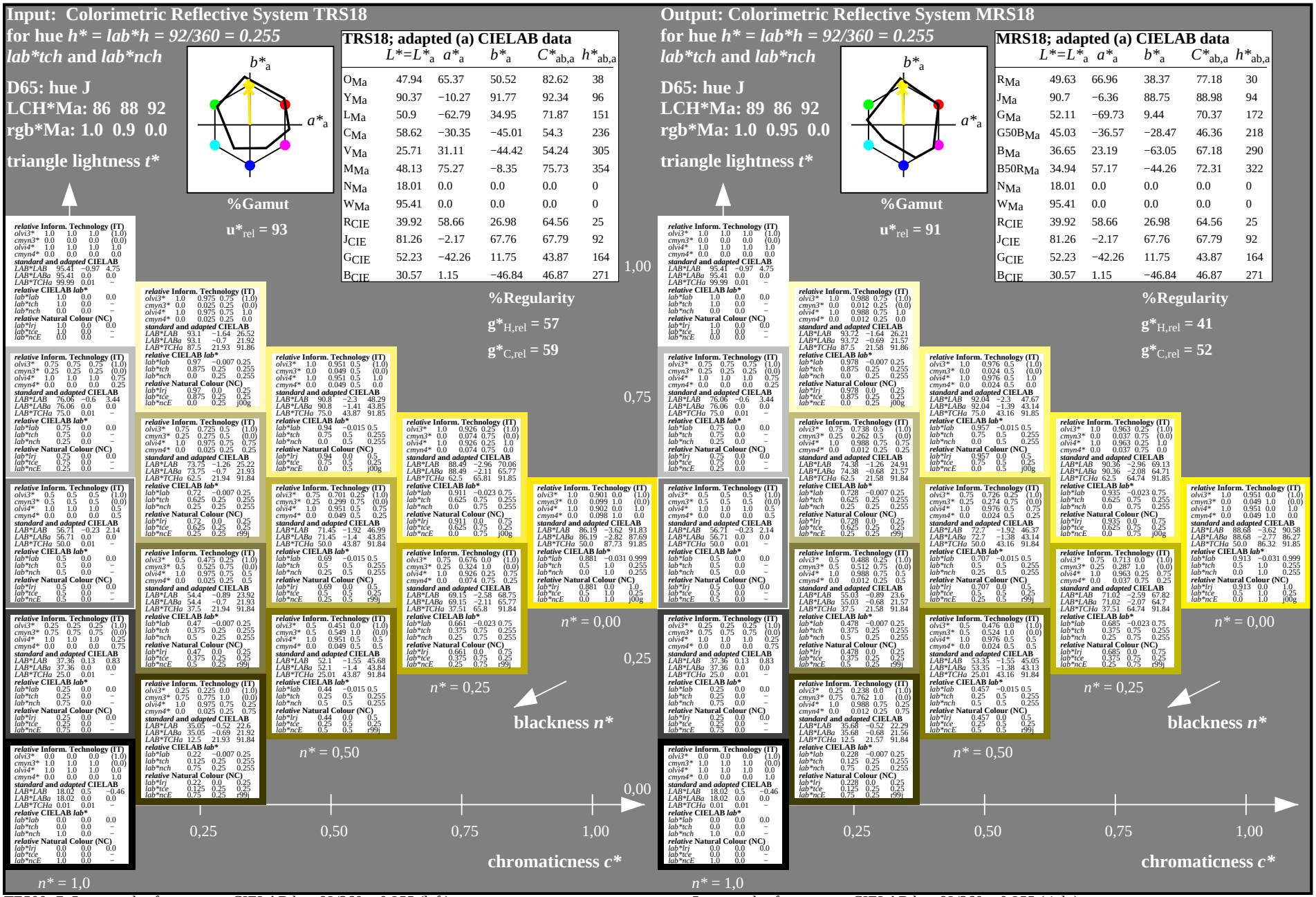

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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



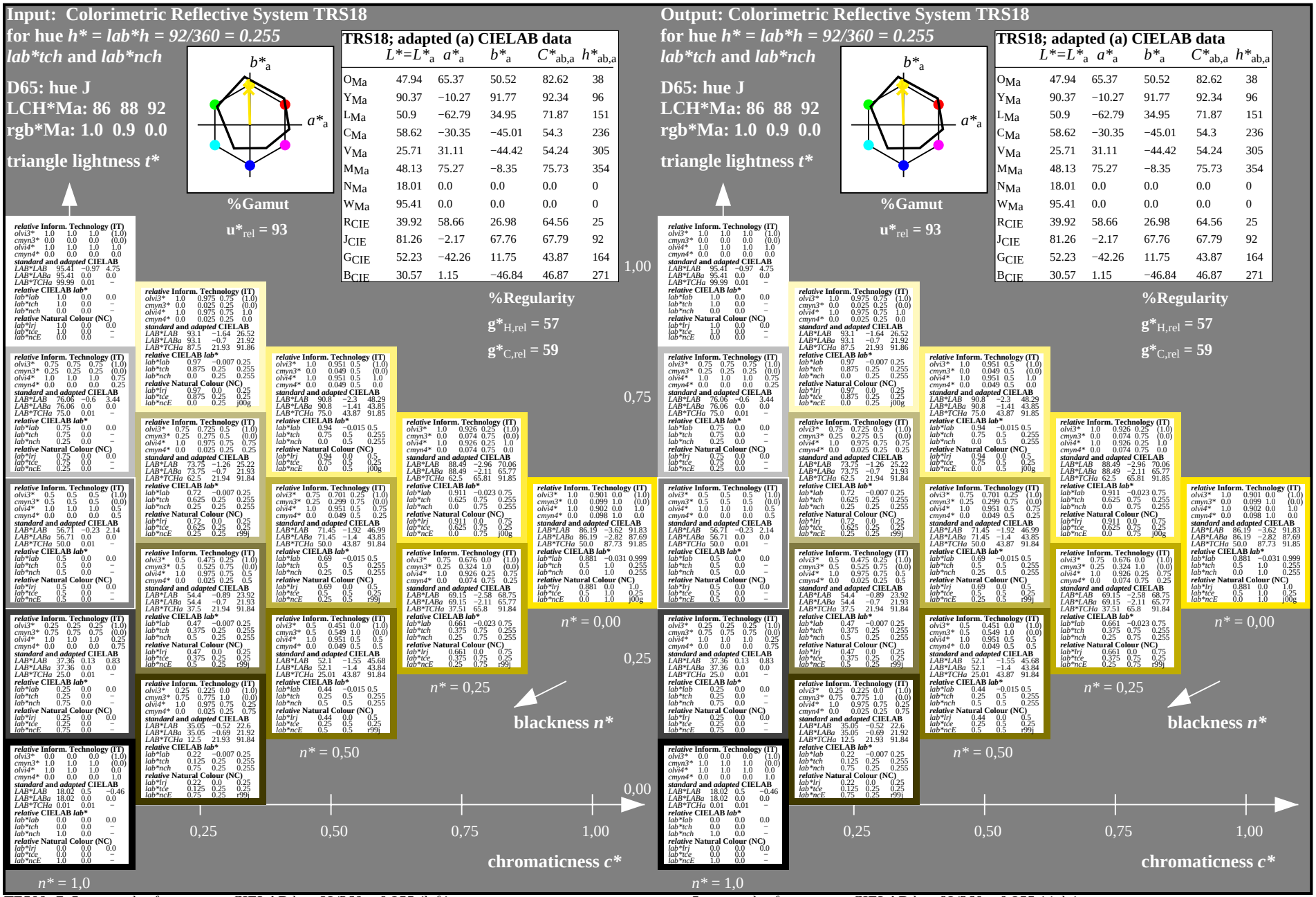

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



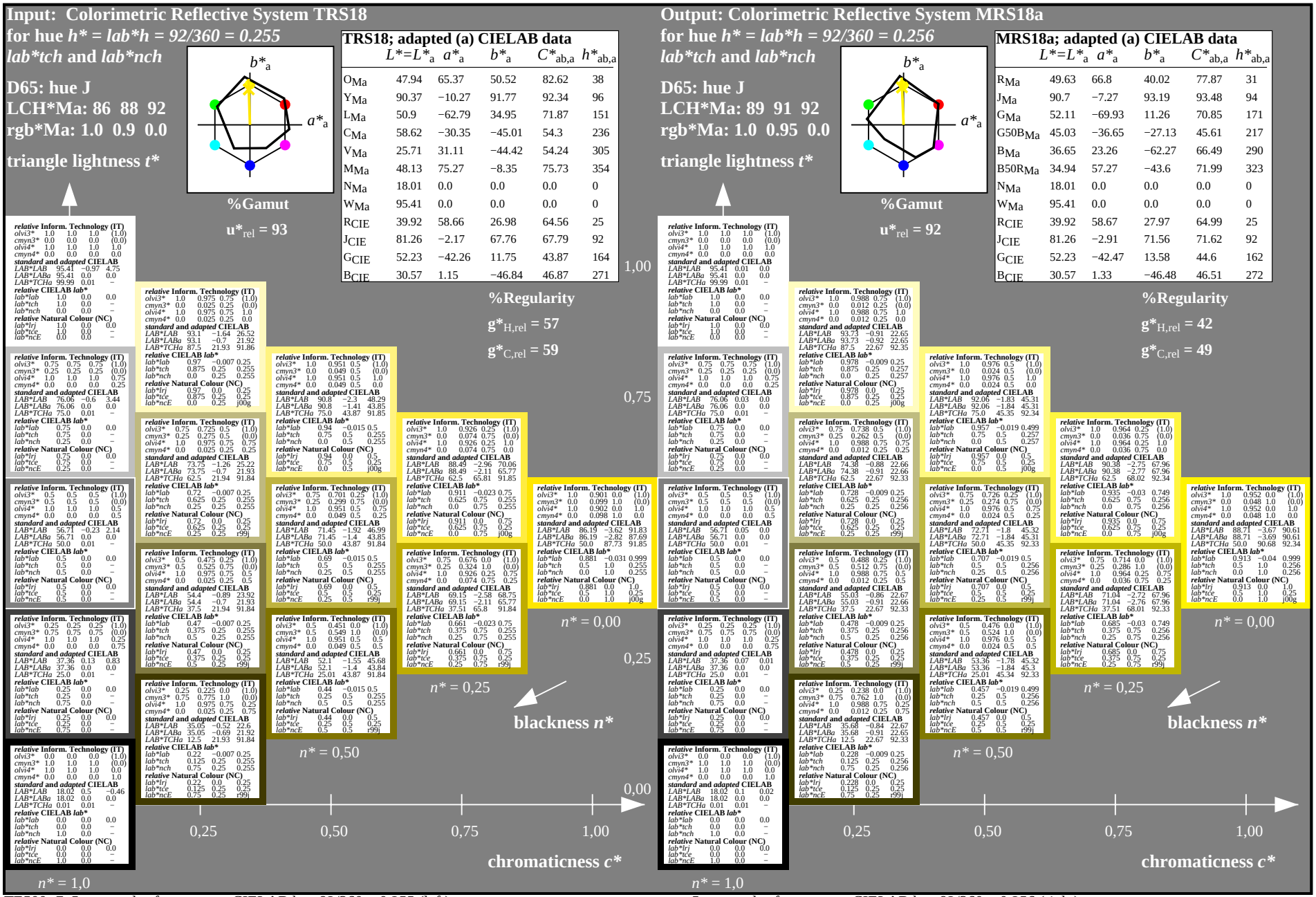

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



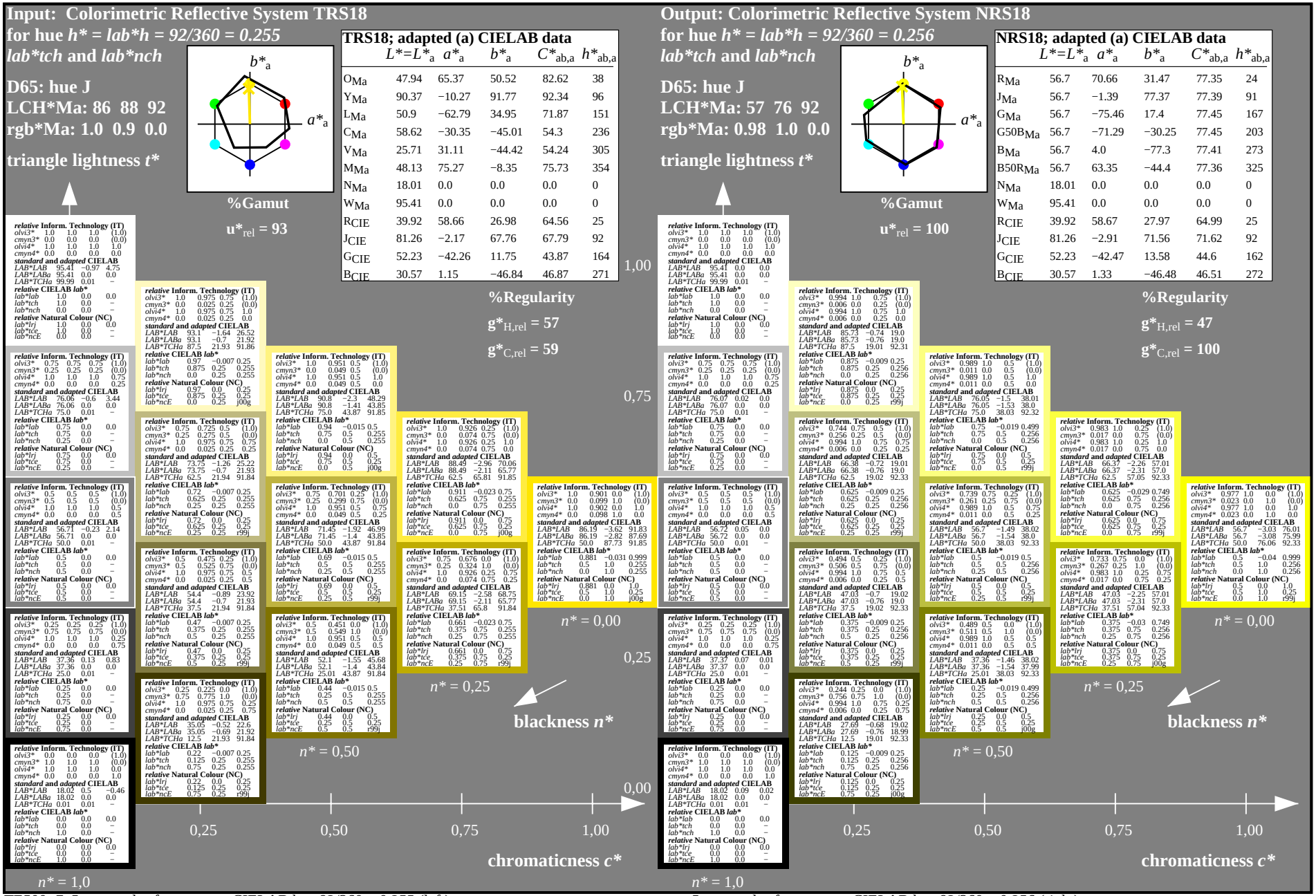

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



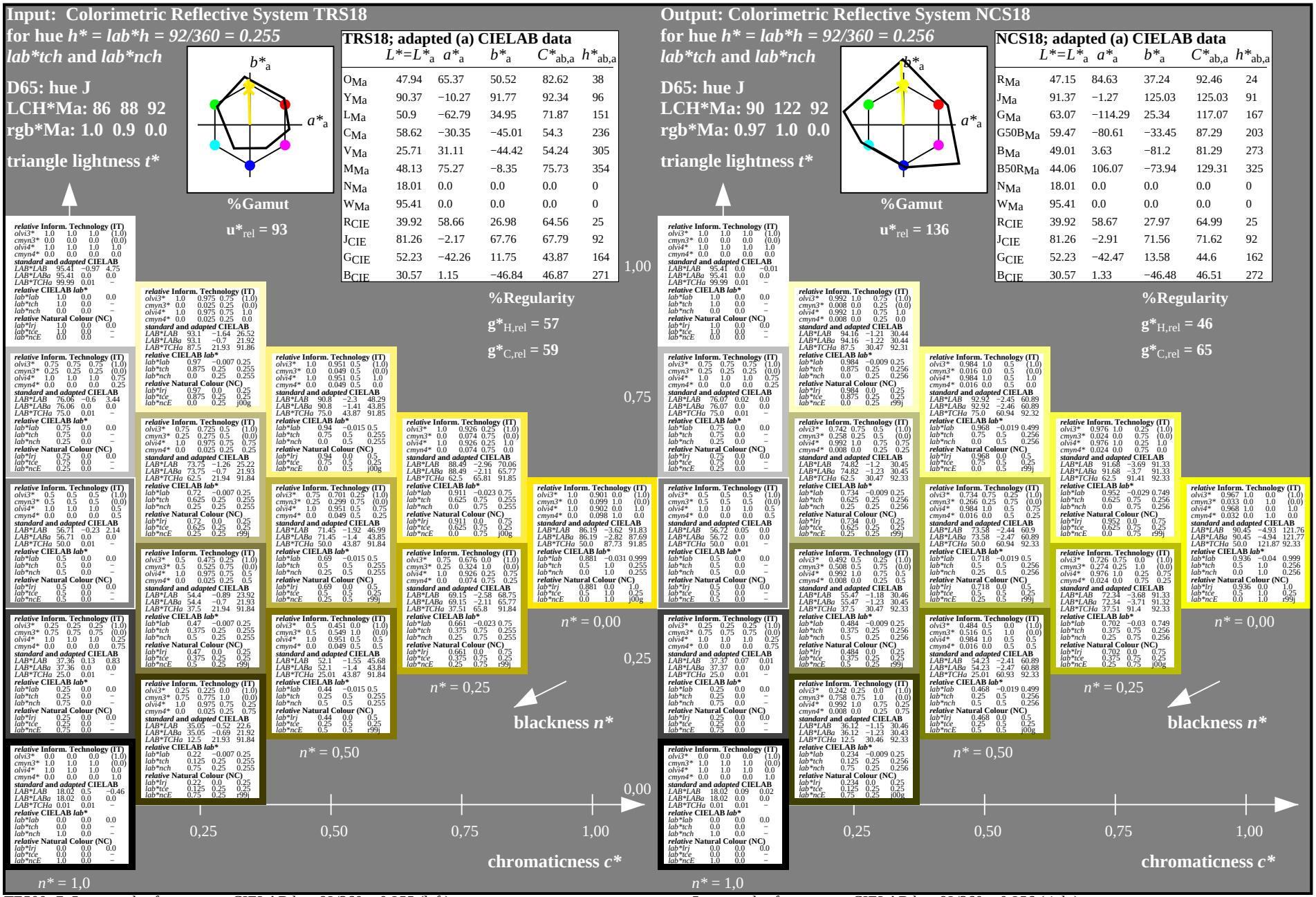

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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



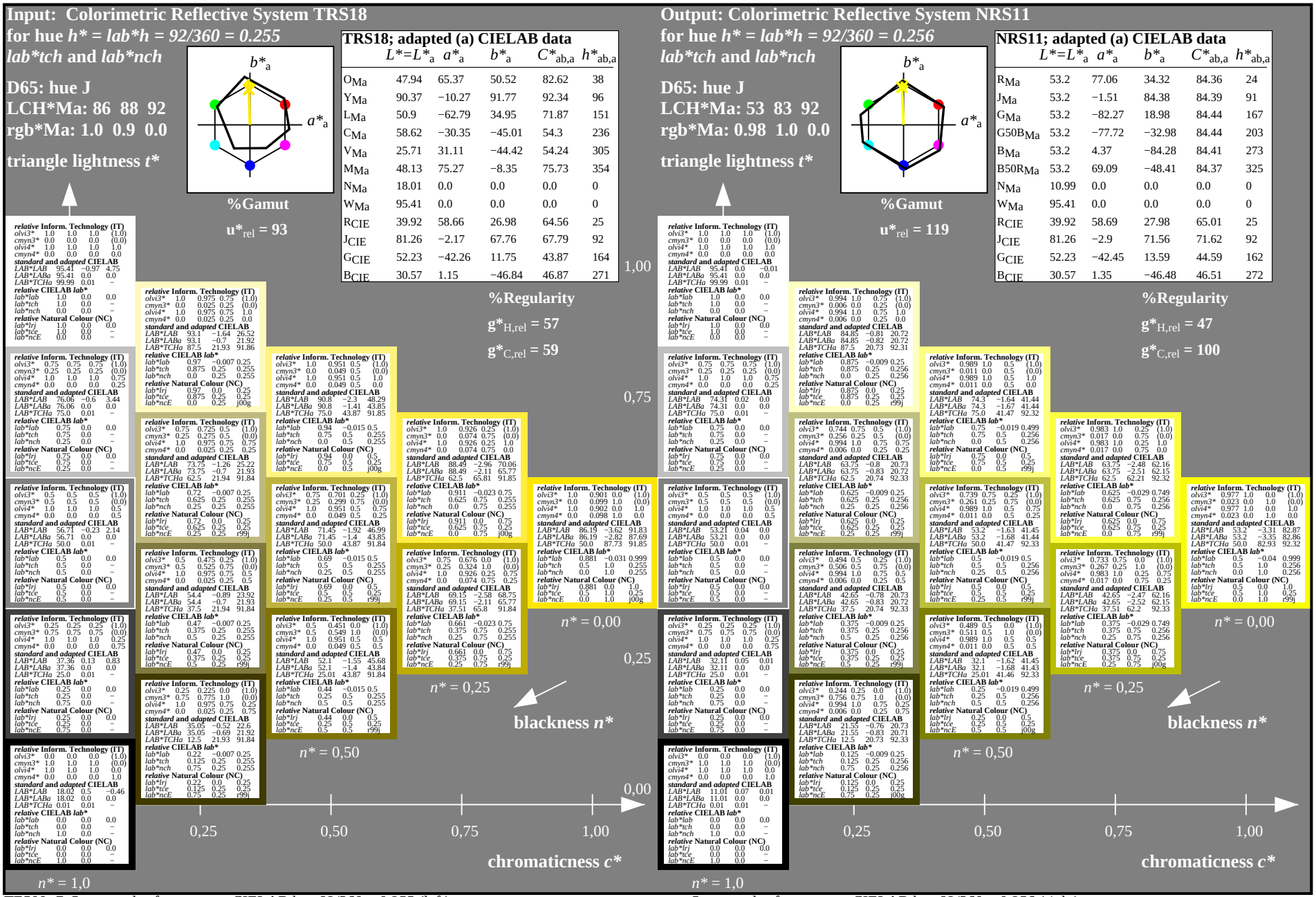

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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



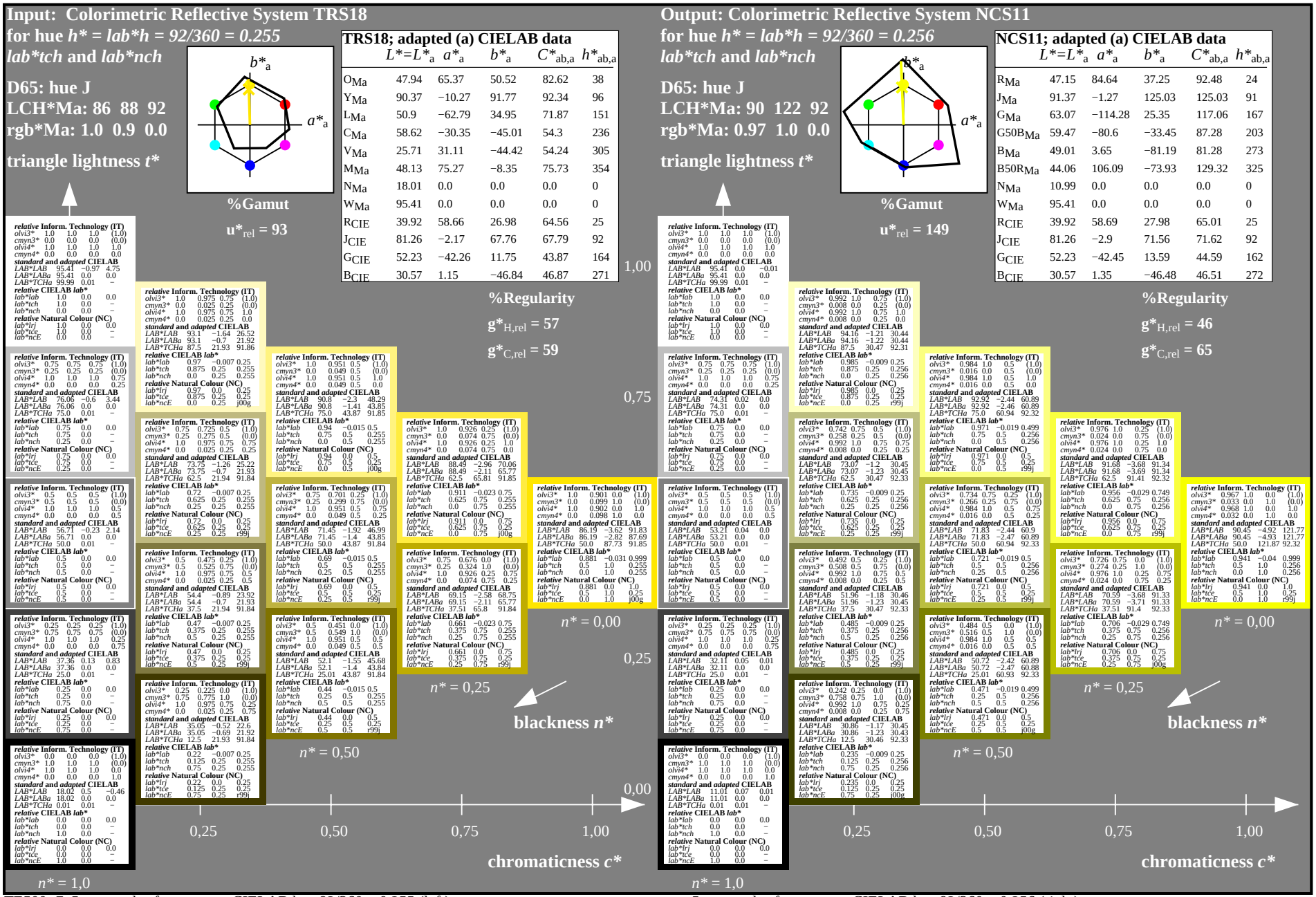

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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




**TRS18; adapted (a) CIELAB data**

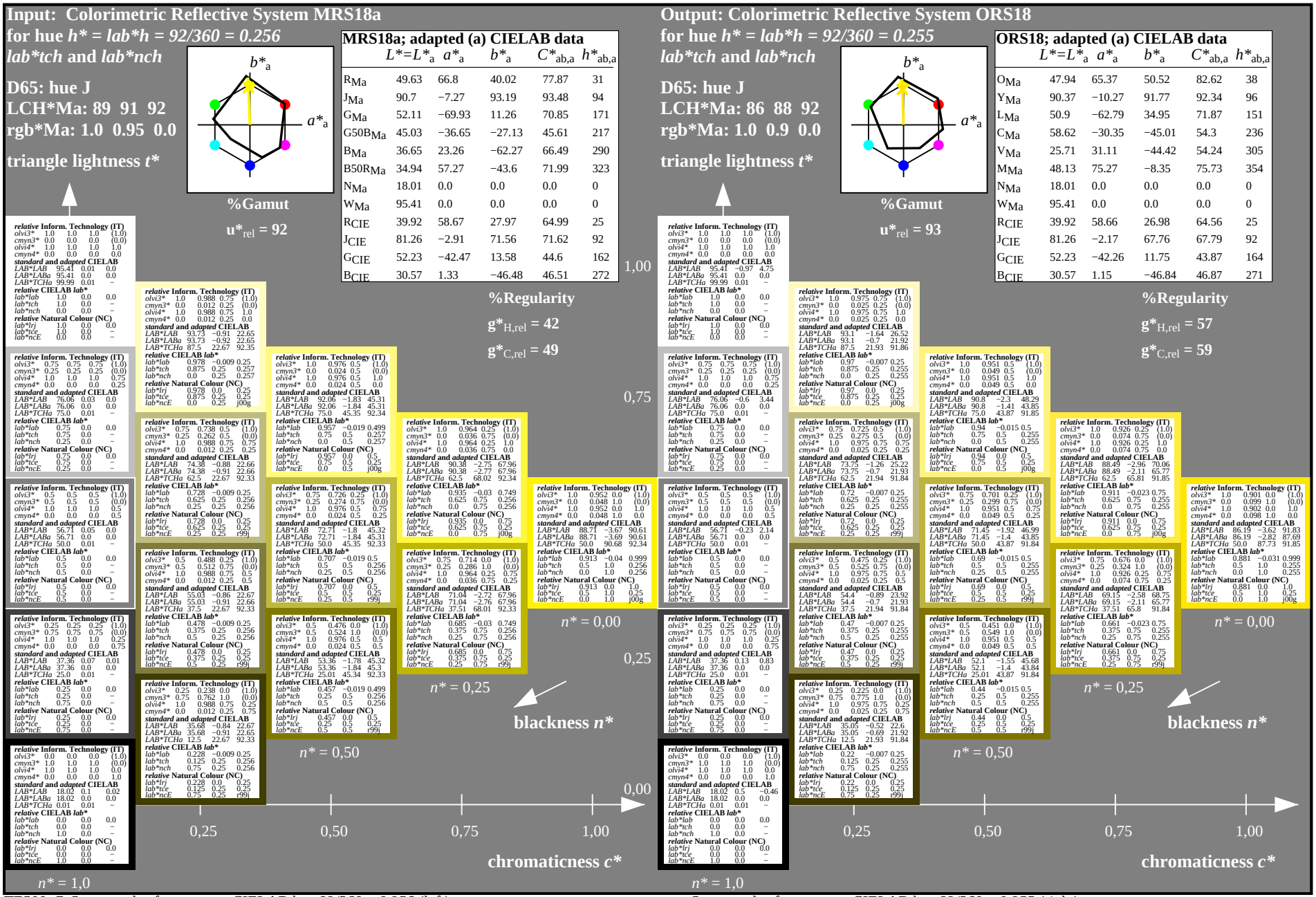
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

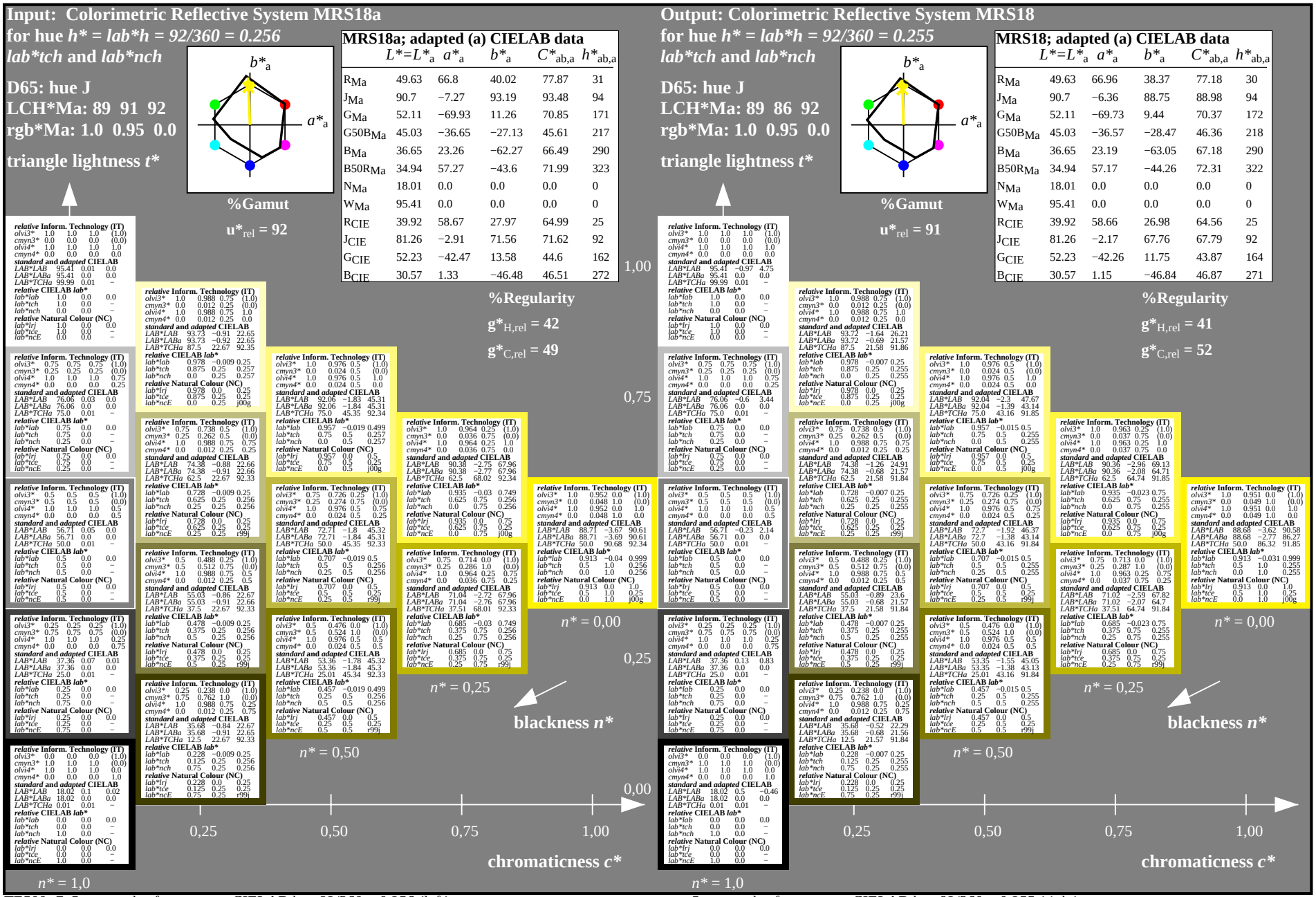
TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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



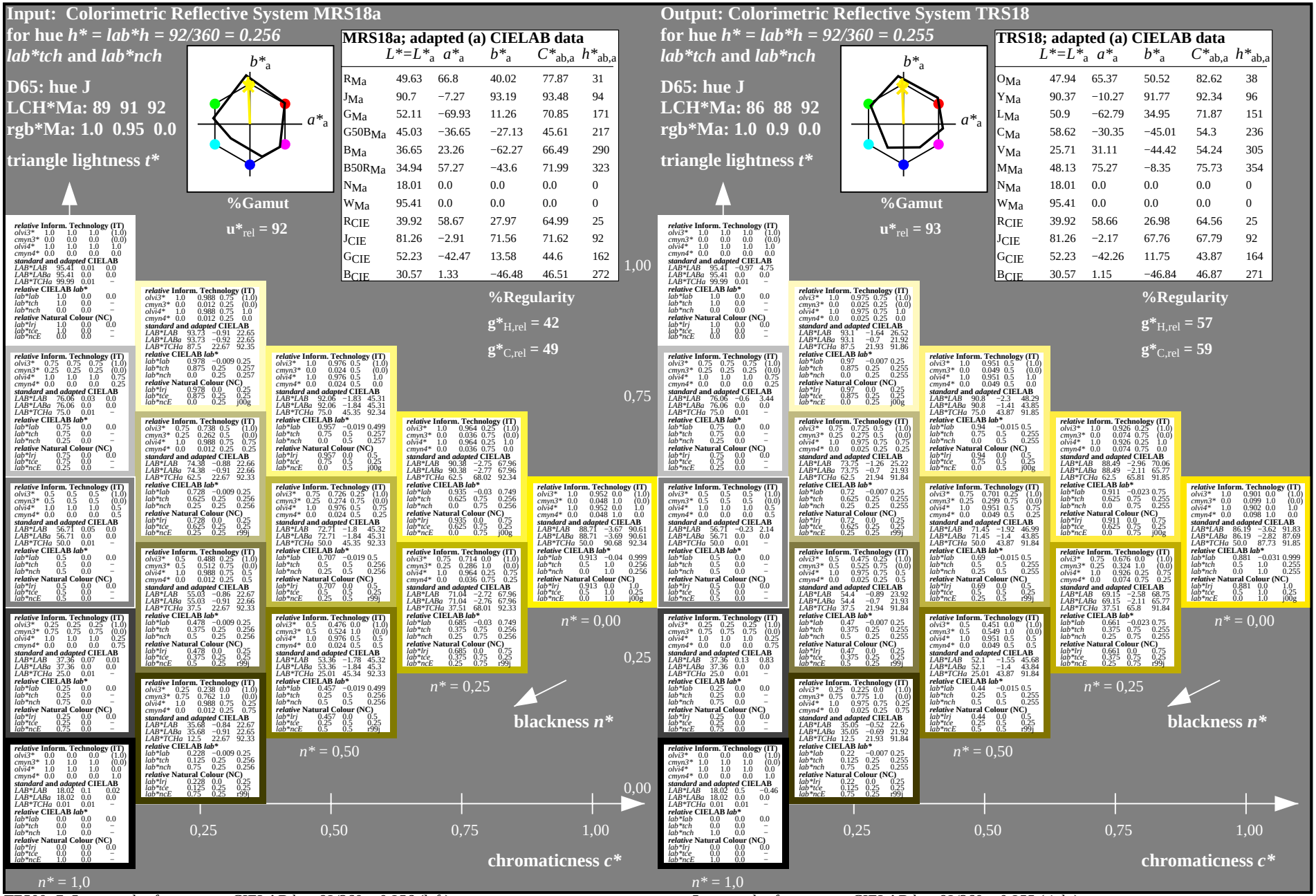

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



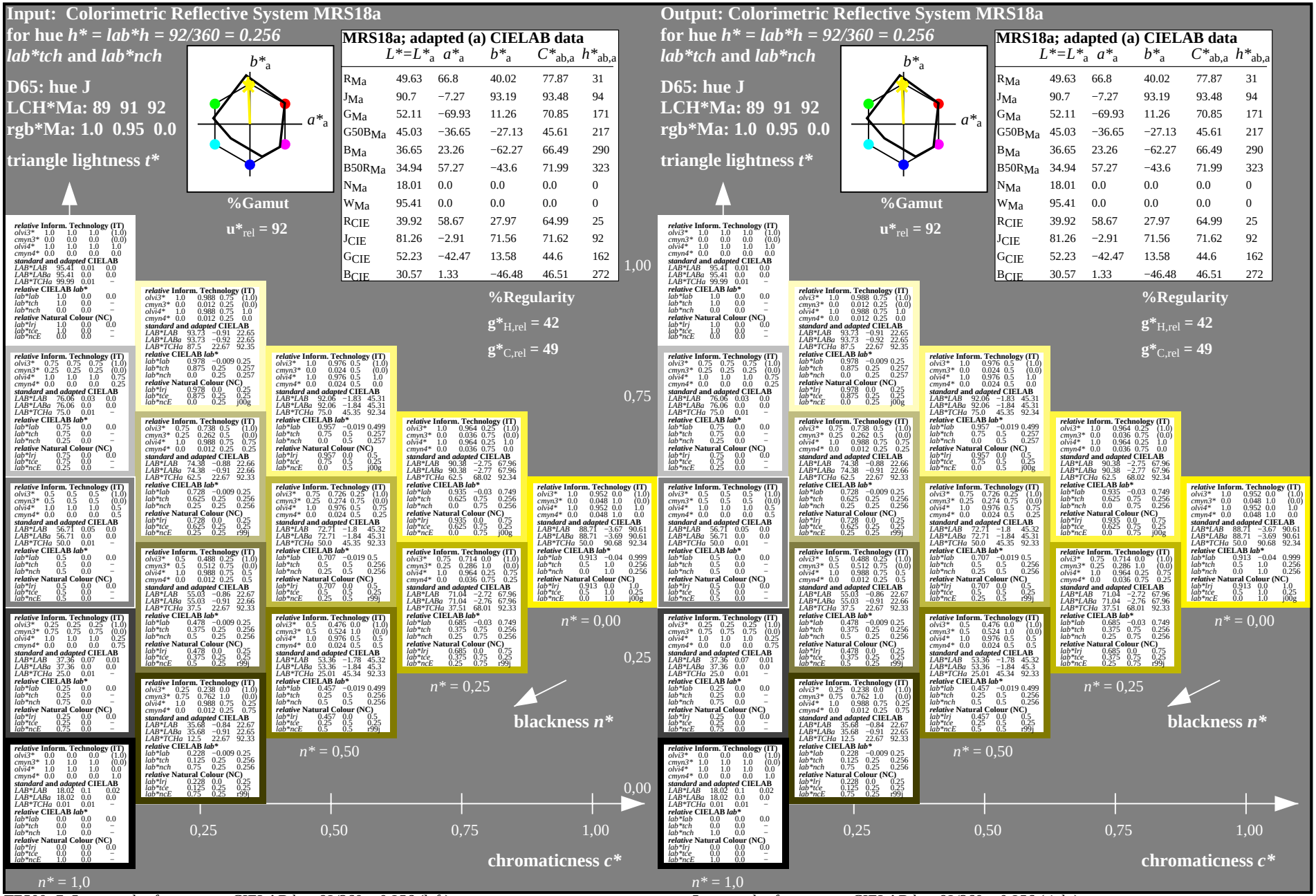

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



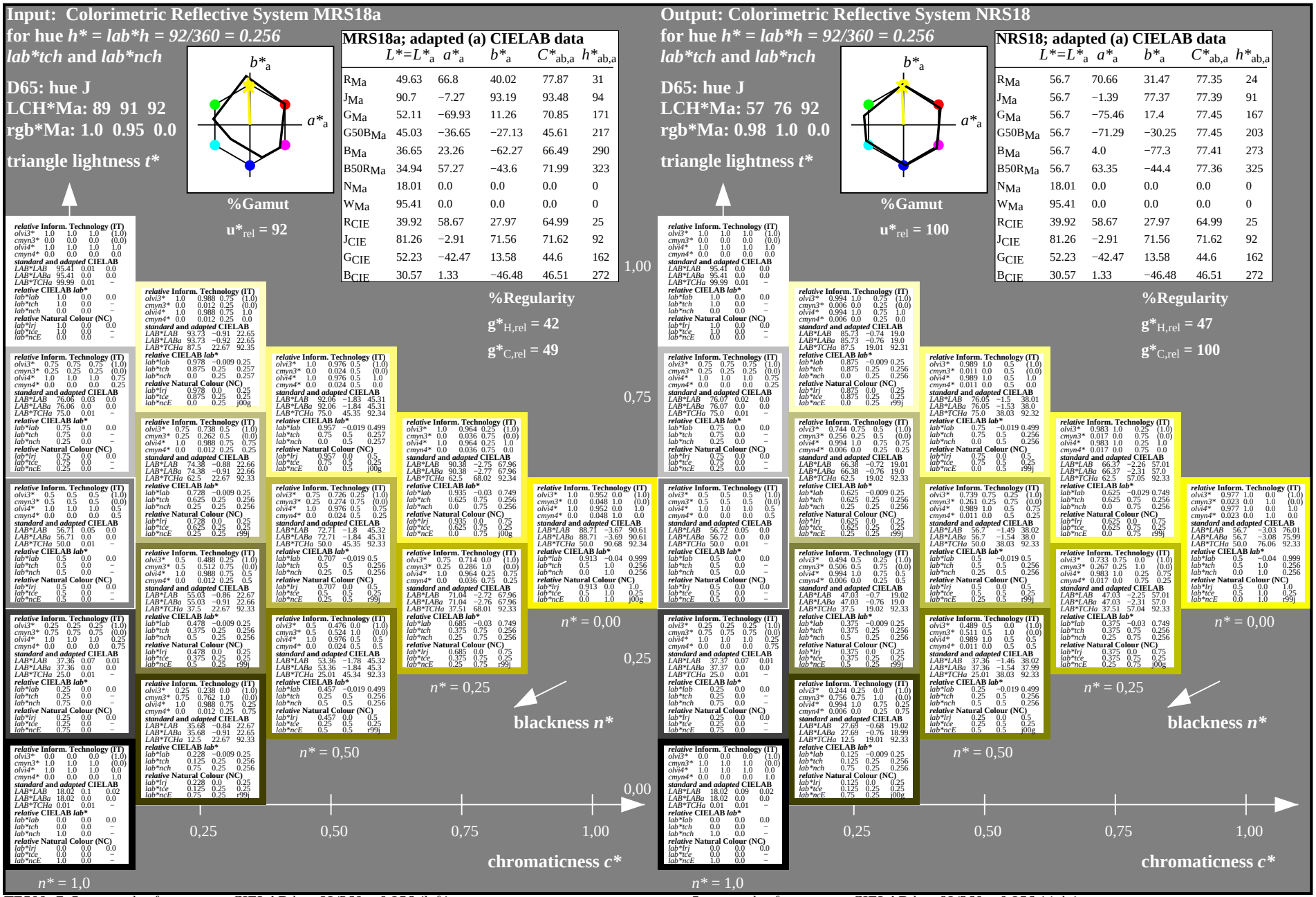

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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




**MRS18a; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**NRS18; adapted (a) CIELAB data**

| | L*=L*a | a*a | b*a | C*ab,a | h*ab,a |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

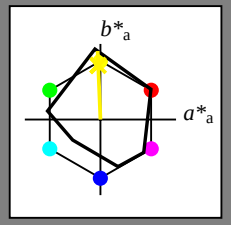
TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 89 91 92**
**rgb*Ma: 1.0 0.95 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

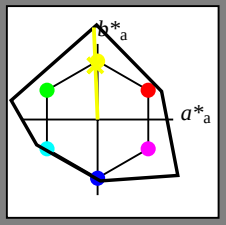
**g*$_{H,rel}$ = 42**

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

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 90 122 92**
**rgb*Ma: 0.97 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

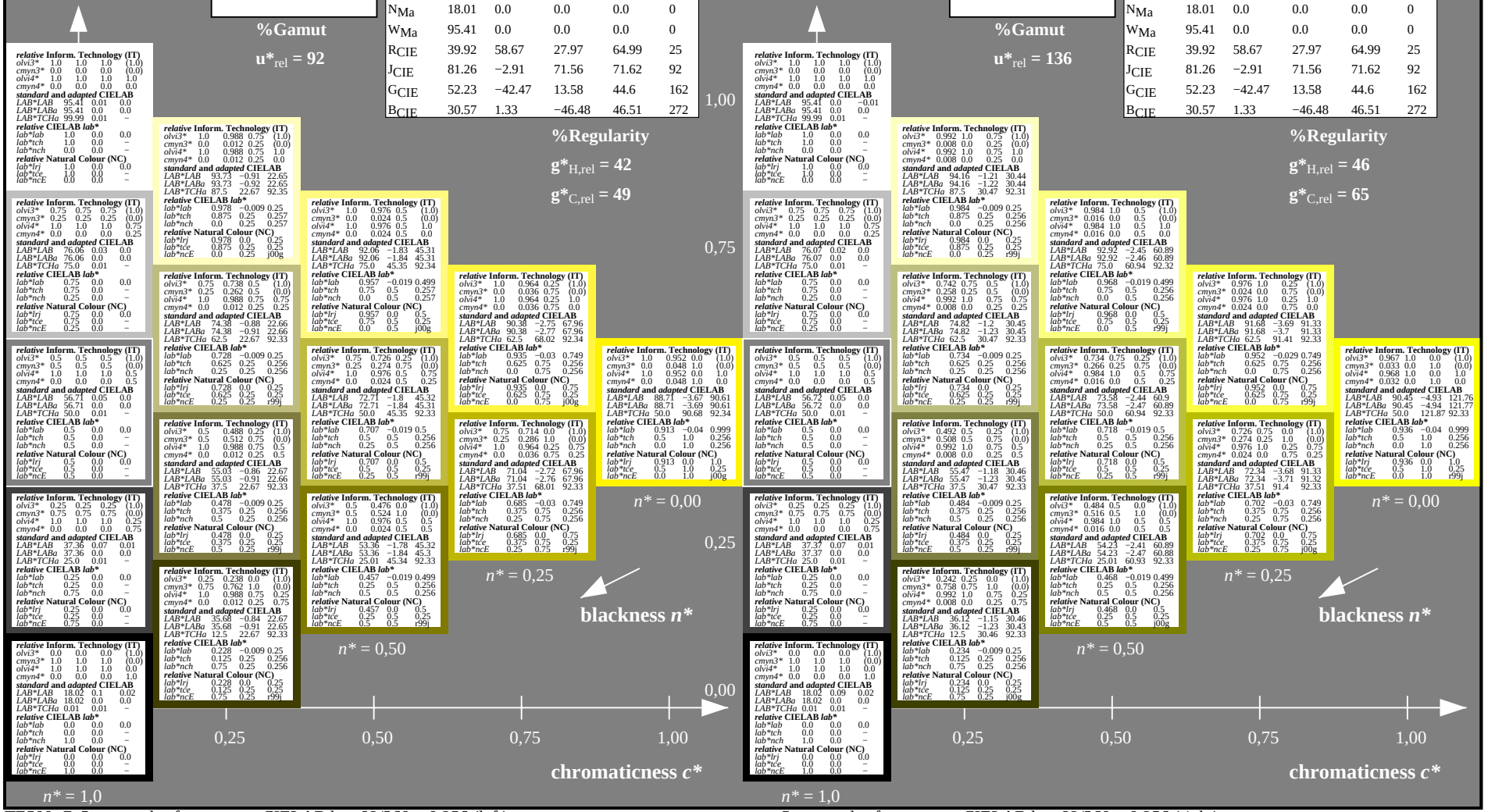
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

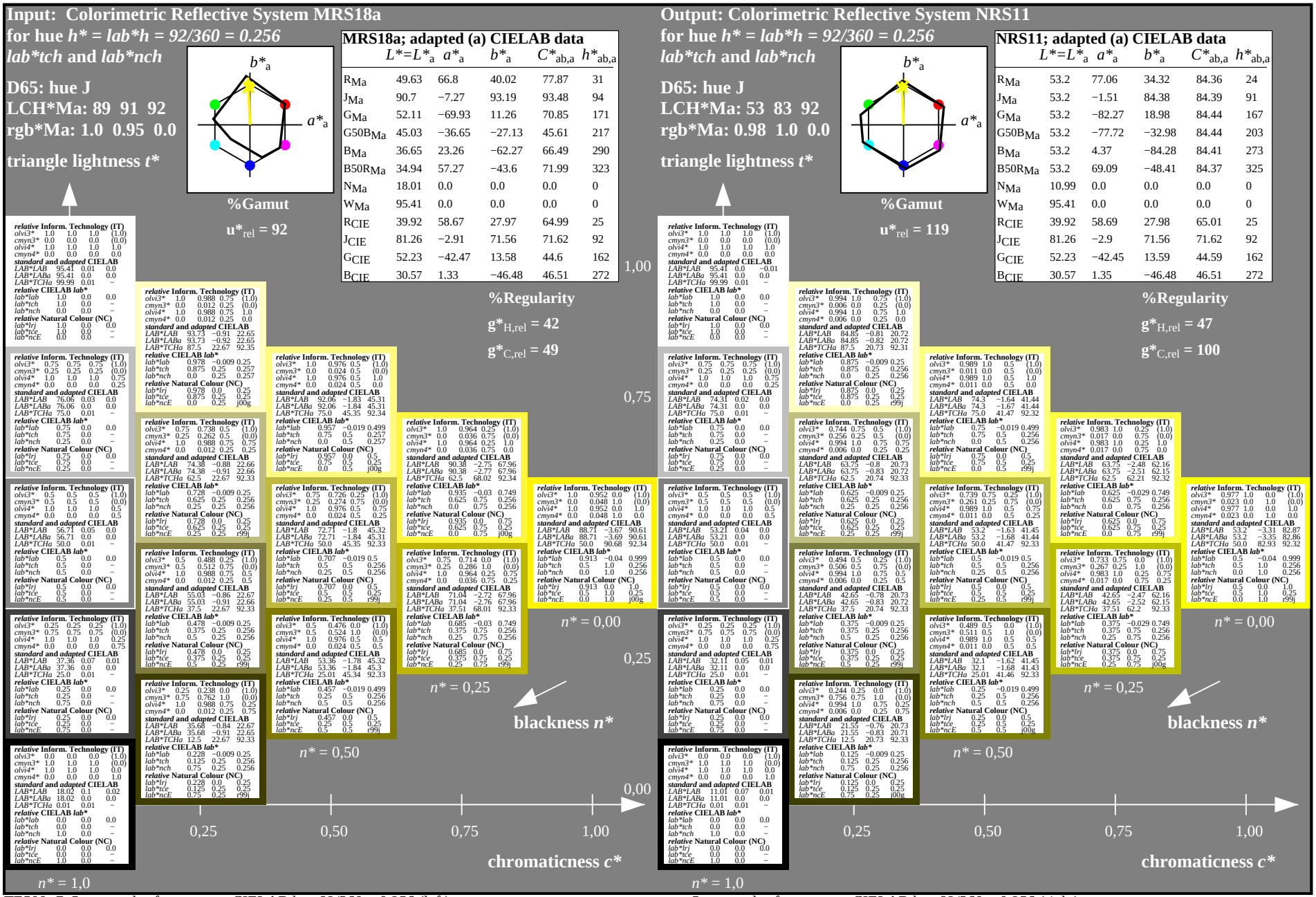
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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



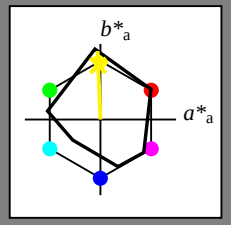

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 89 91 92**
**rgb*Ma: 1.0 0.95 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

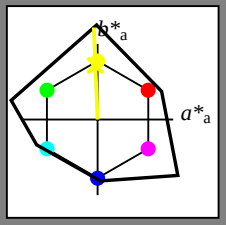
**g*$_{H,rel}$ = 42**

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

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 90 122 92**
**rgb*Ma: 0.97 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

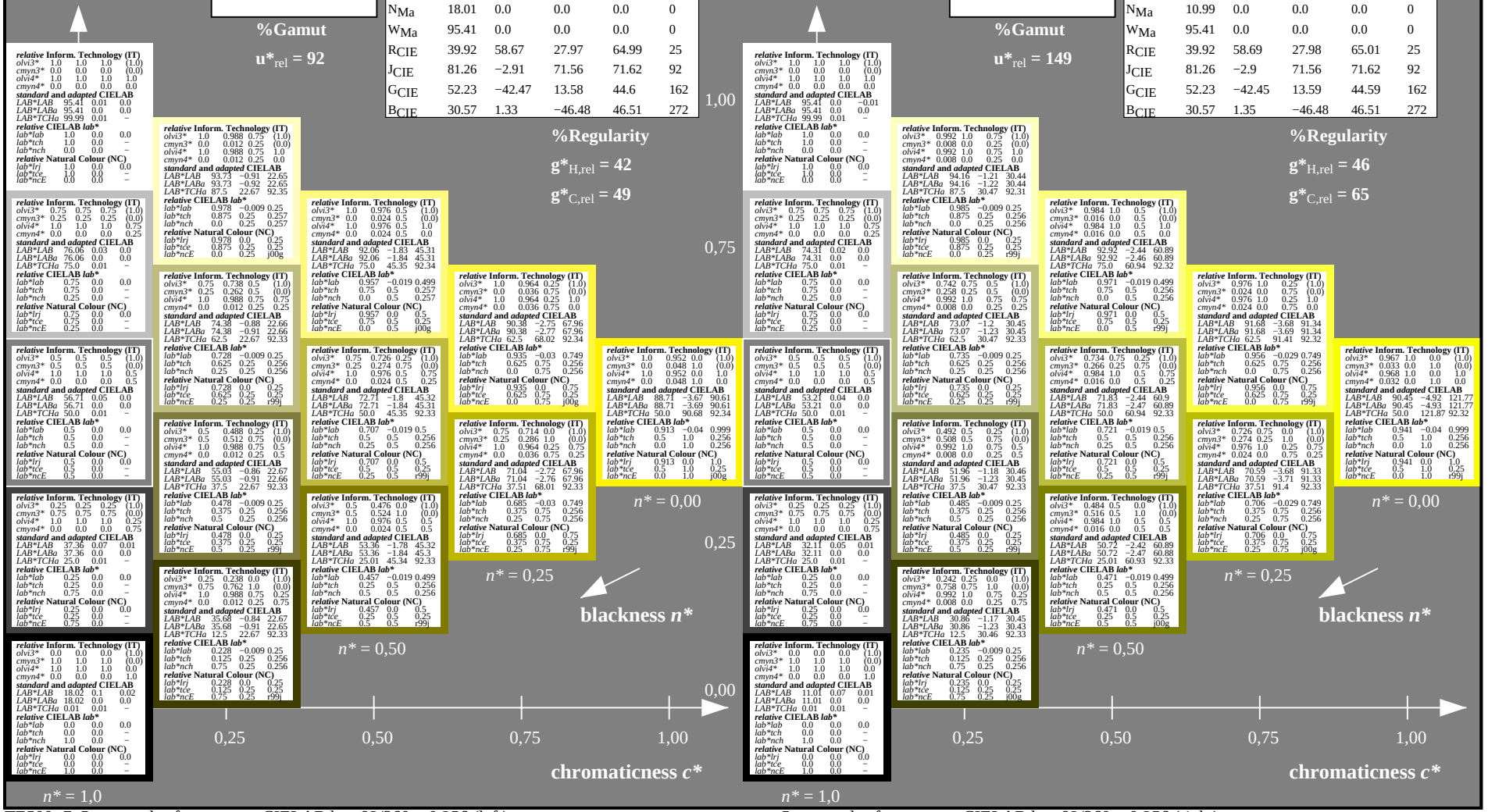
**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

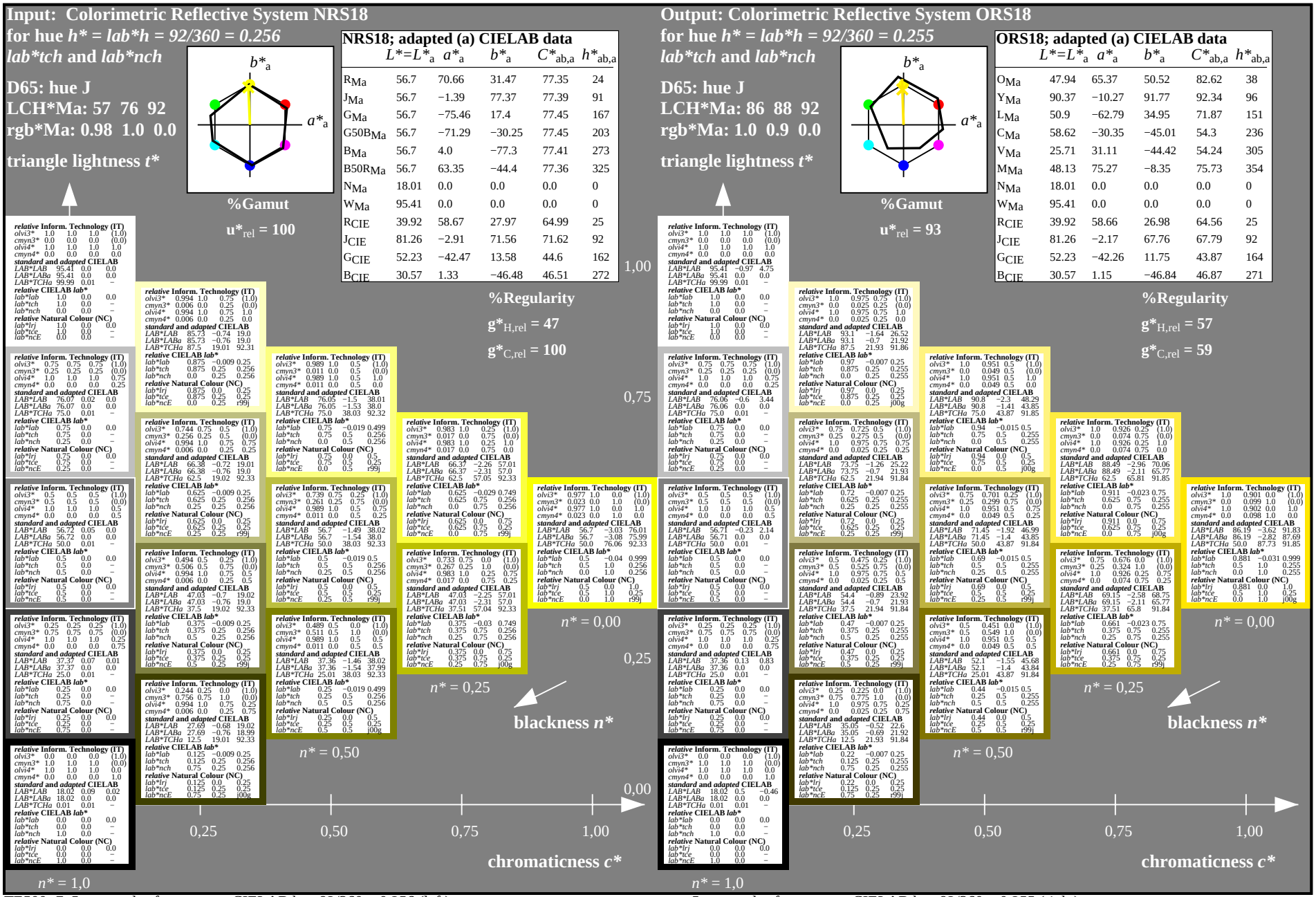
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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




**NRS18; adapted (a) CIELAB data**

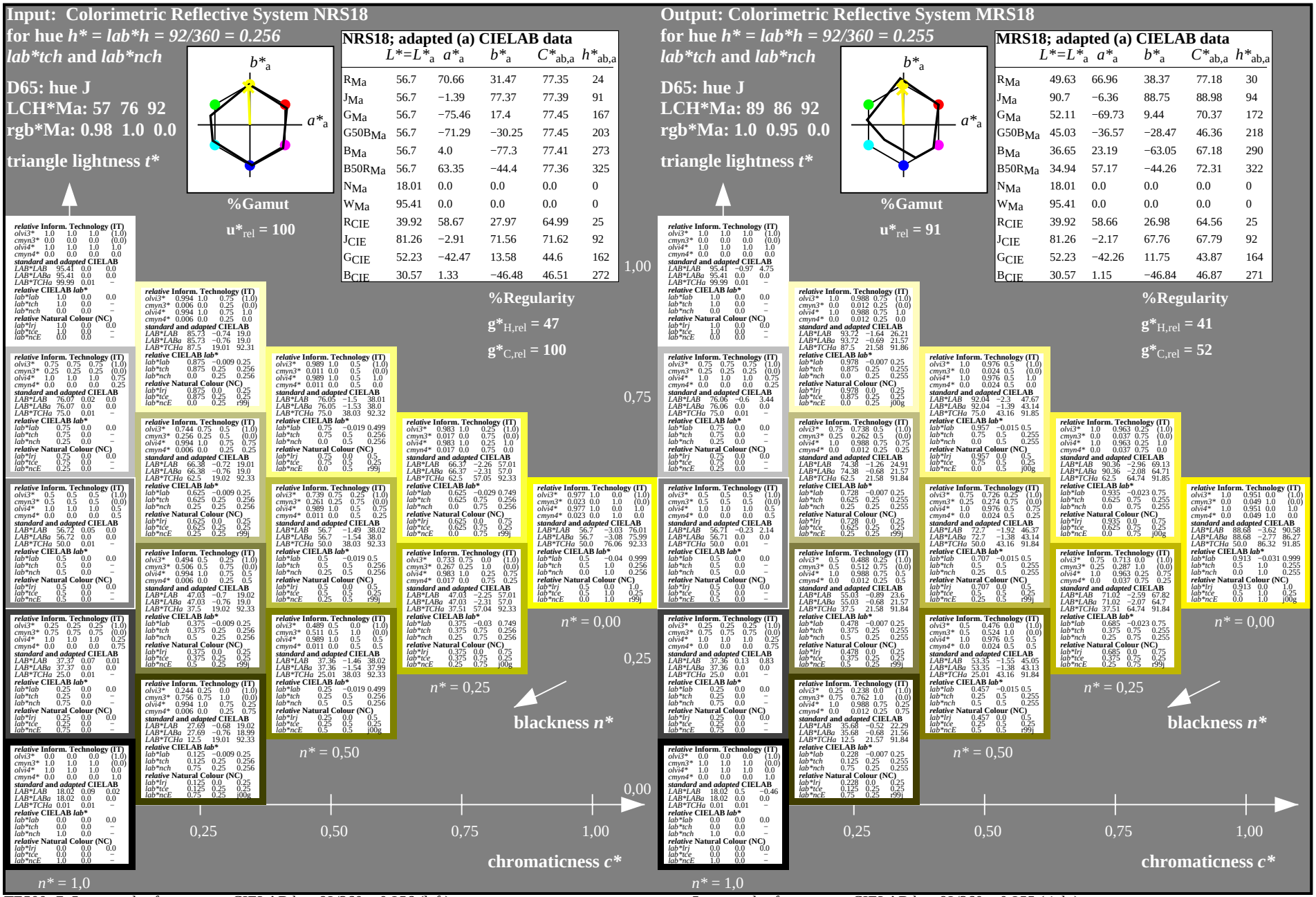
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

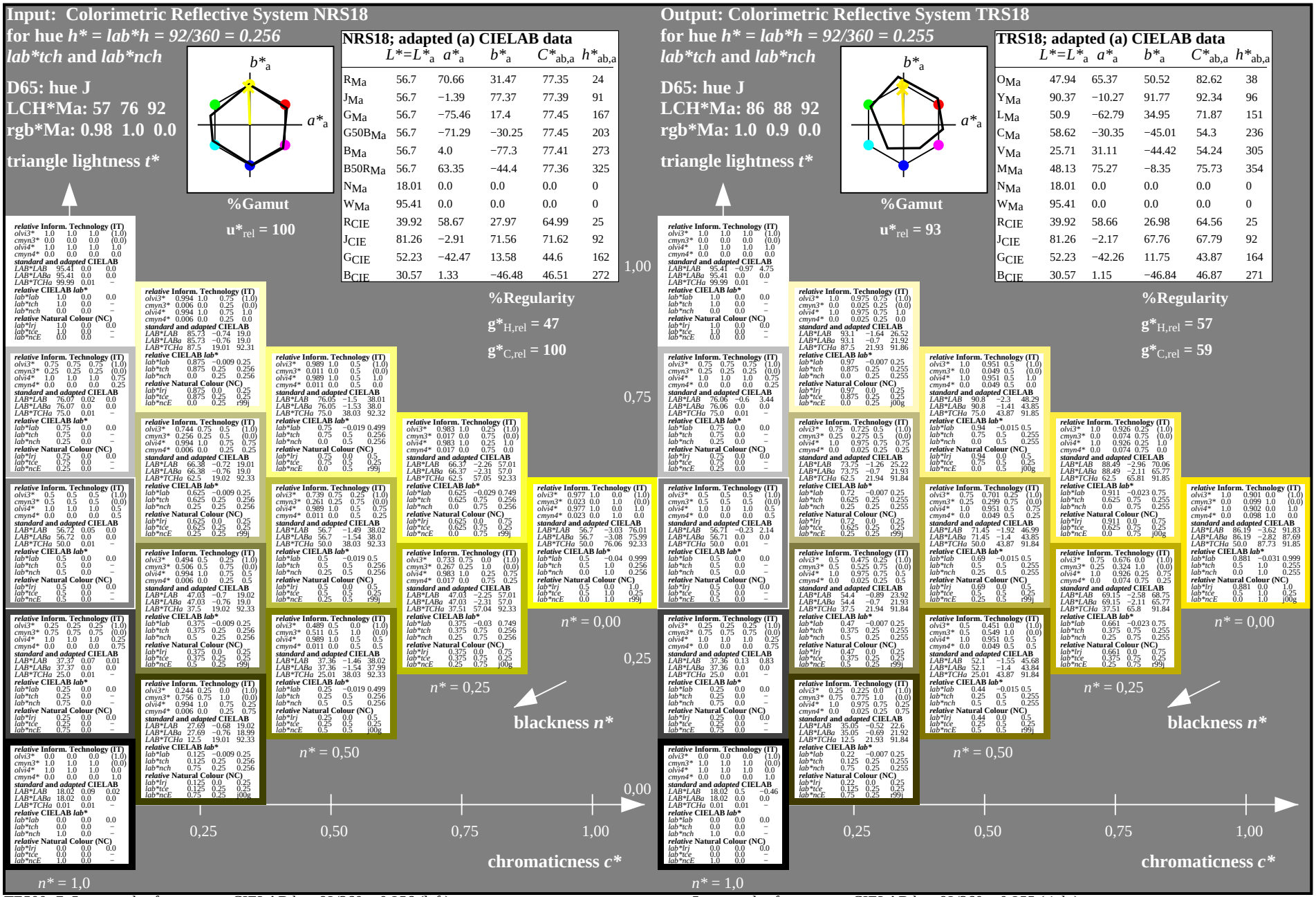
TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



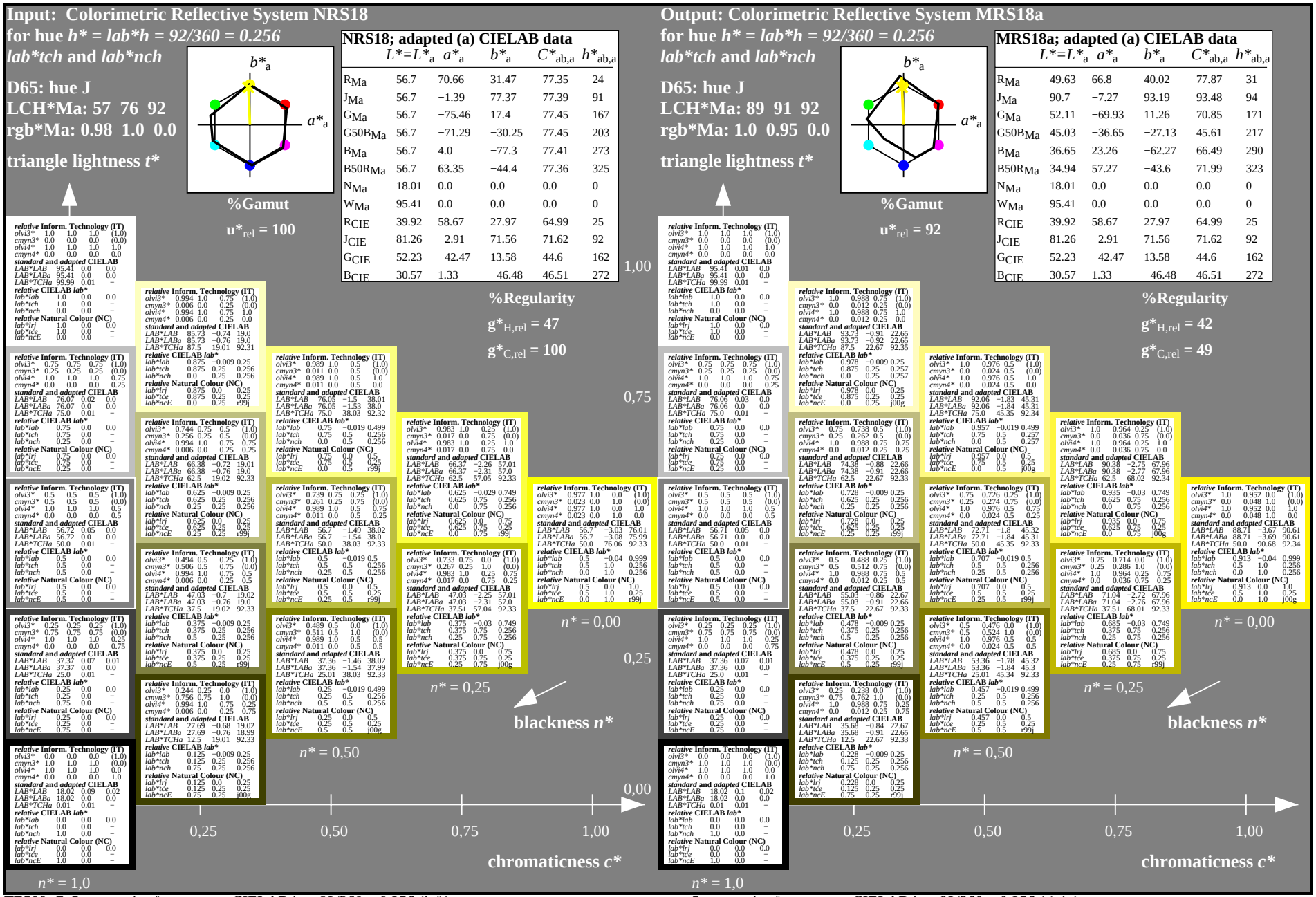

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



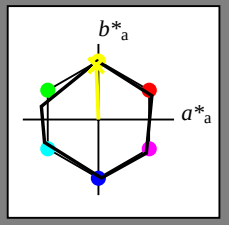

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 57 76 92**
**rgb*Ma: 0.98 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

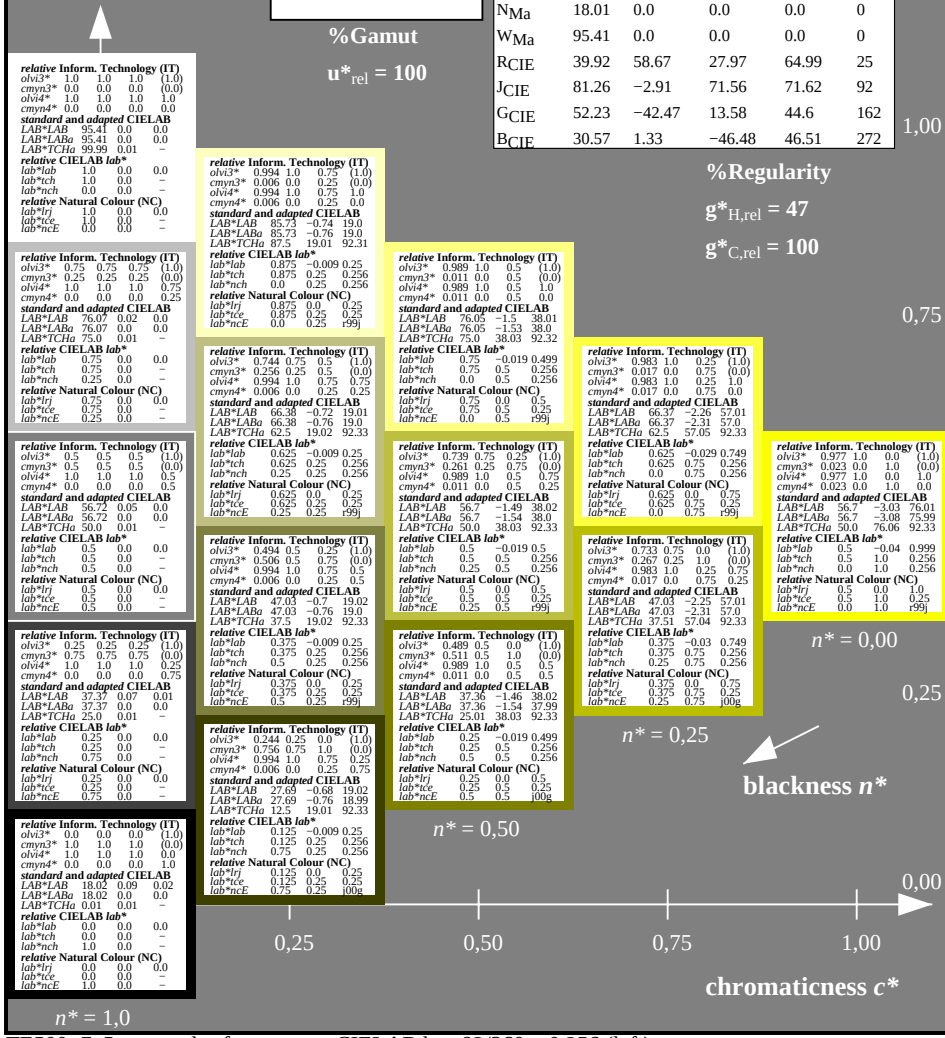
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

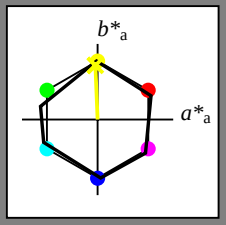
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 57 76 92**
**rgb*Ma: 0.98 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

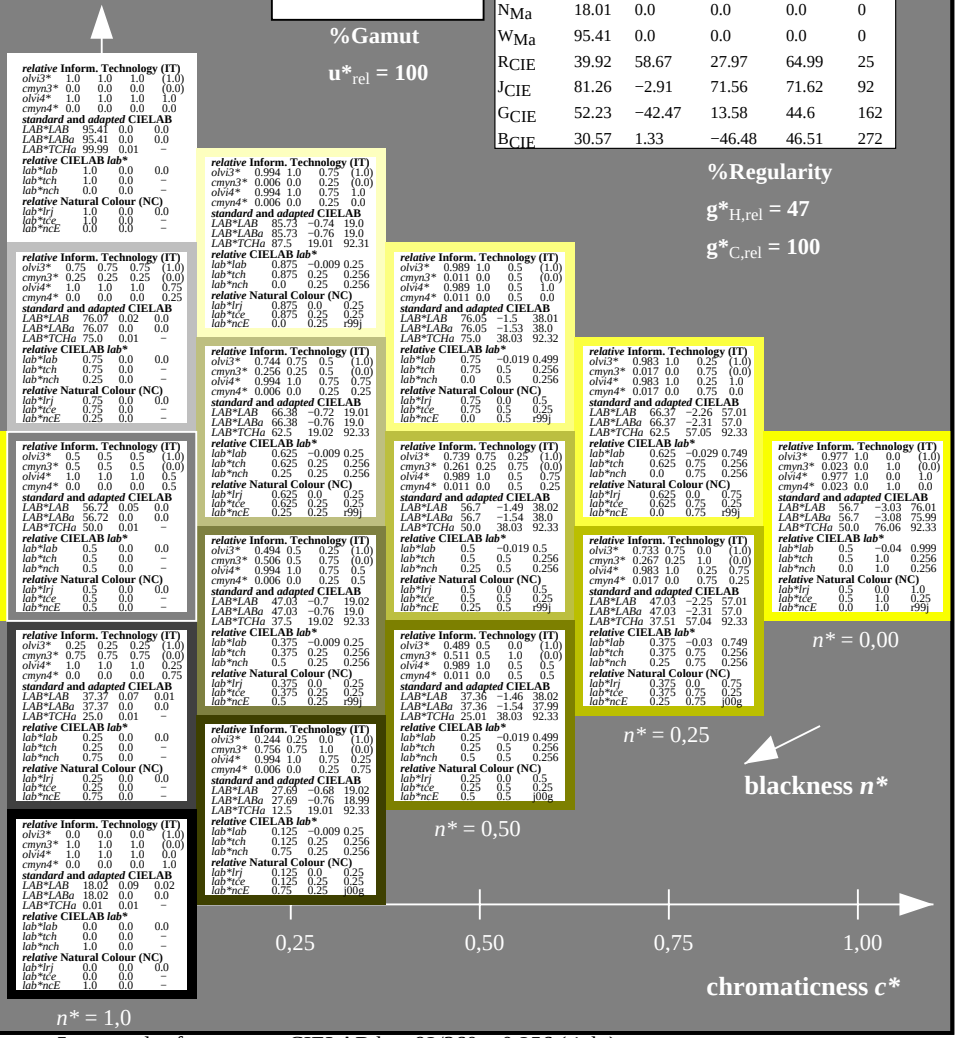
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

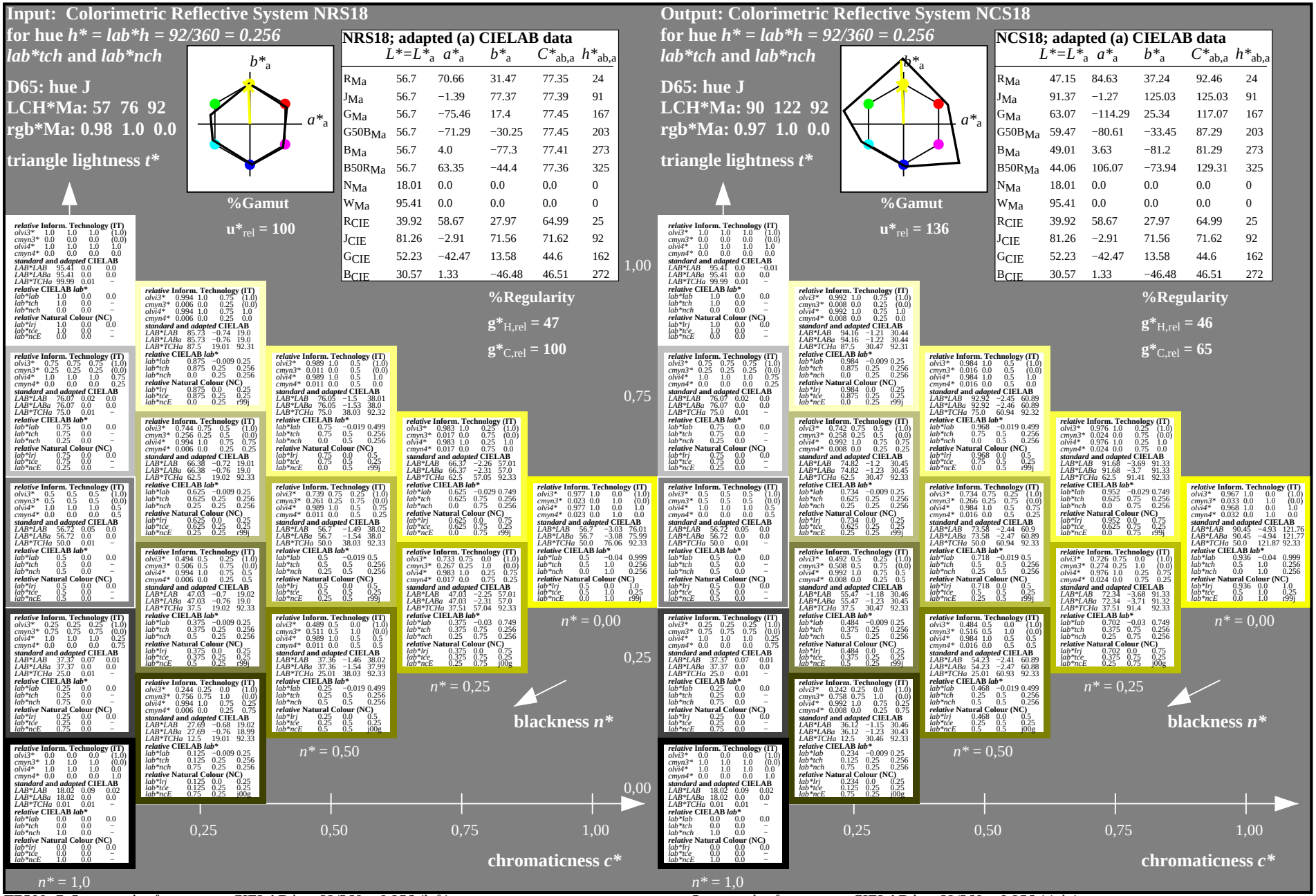
**g*$_{H,rel}$ = 47**

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



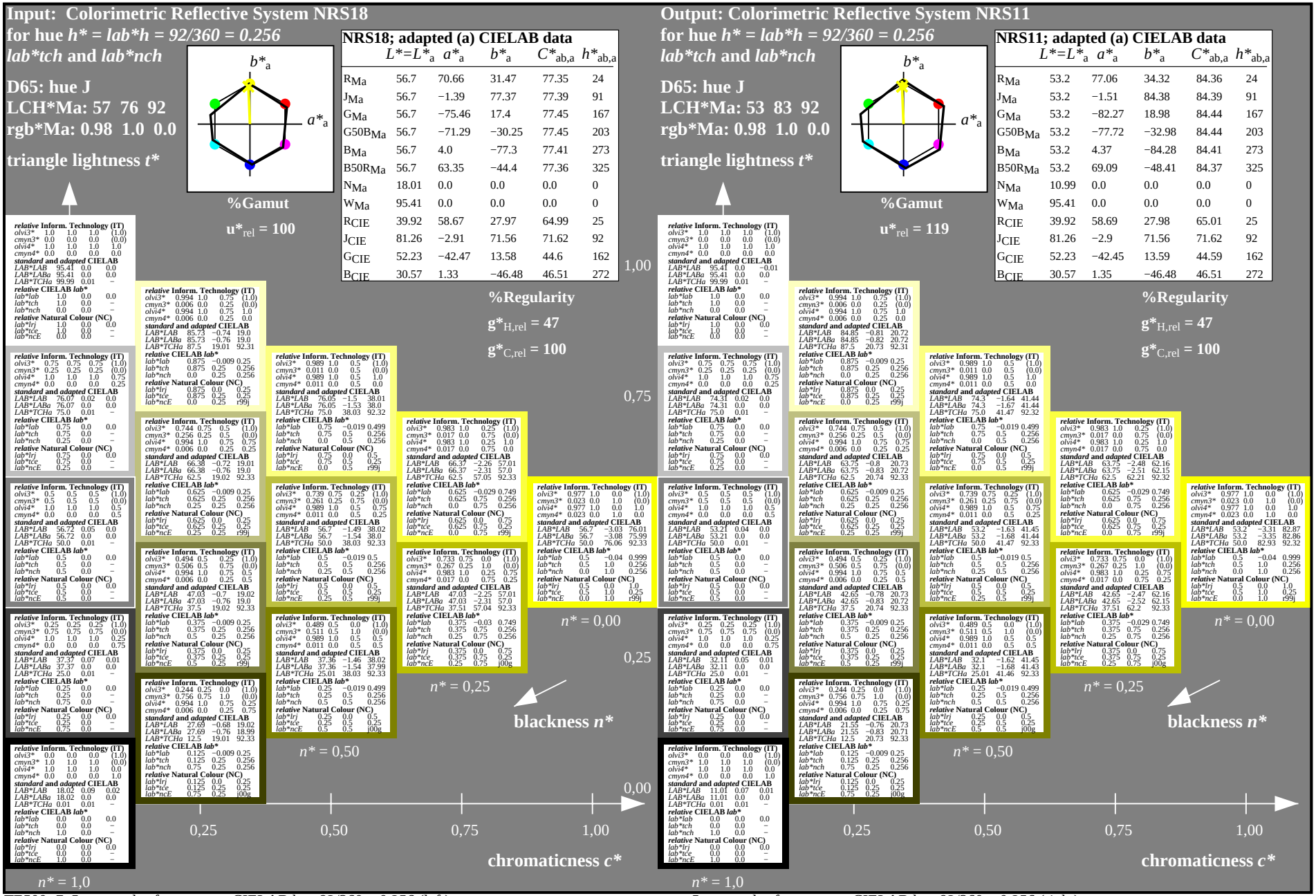

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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



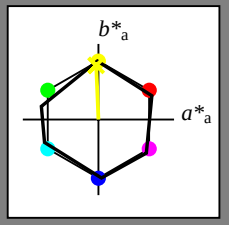

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 57 76 92**
**rgb*Ma: 0.98 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

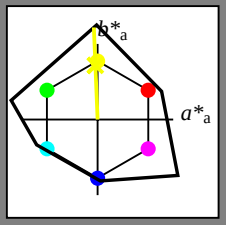
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 90 122 92**
**rgb*Ma: 0.97 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

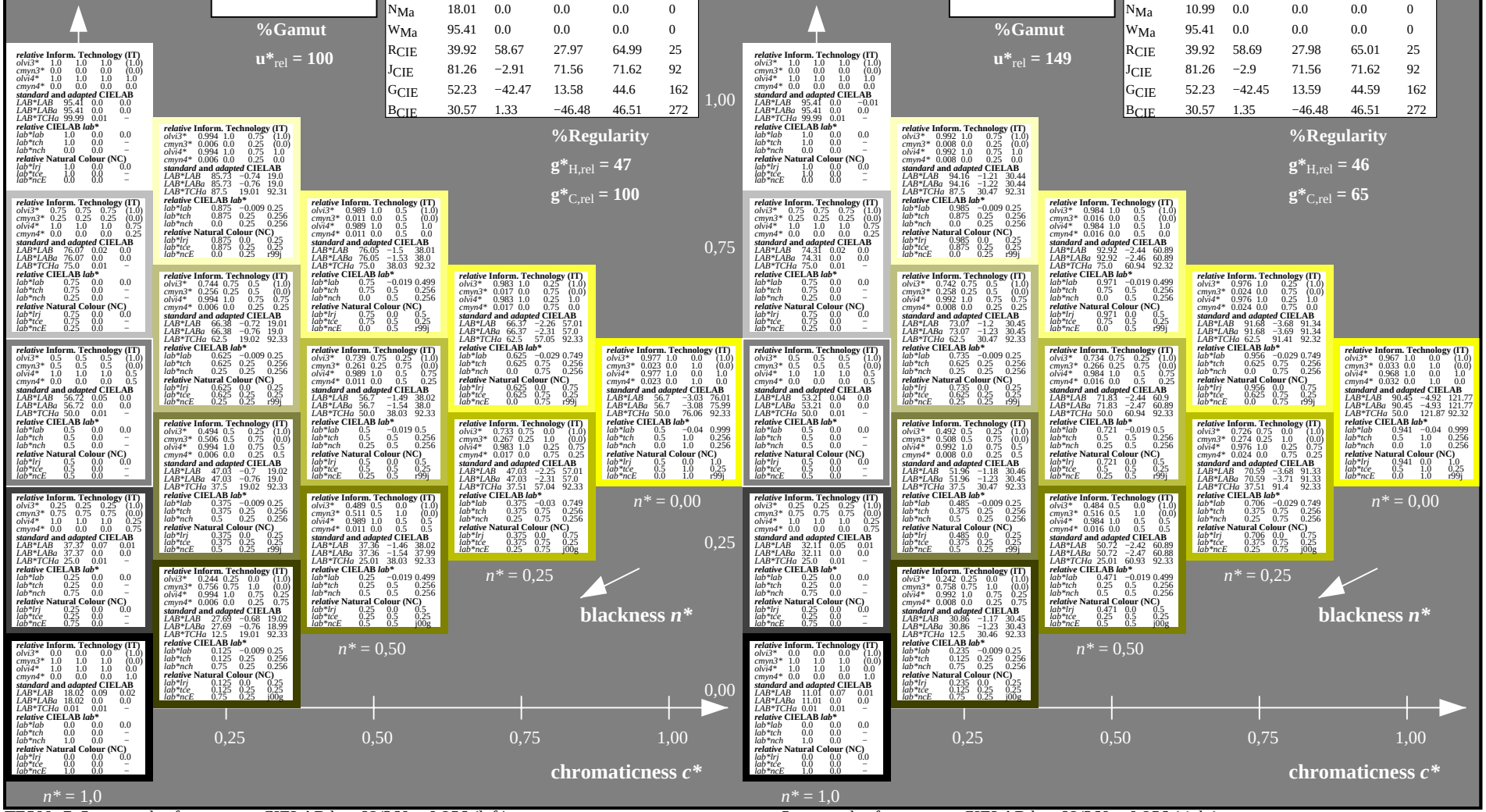
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

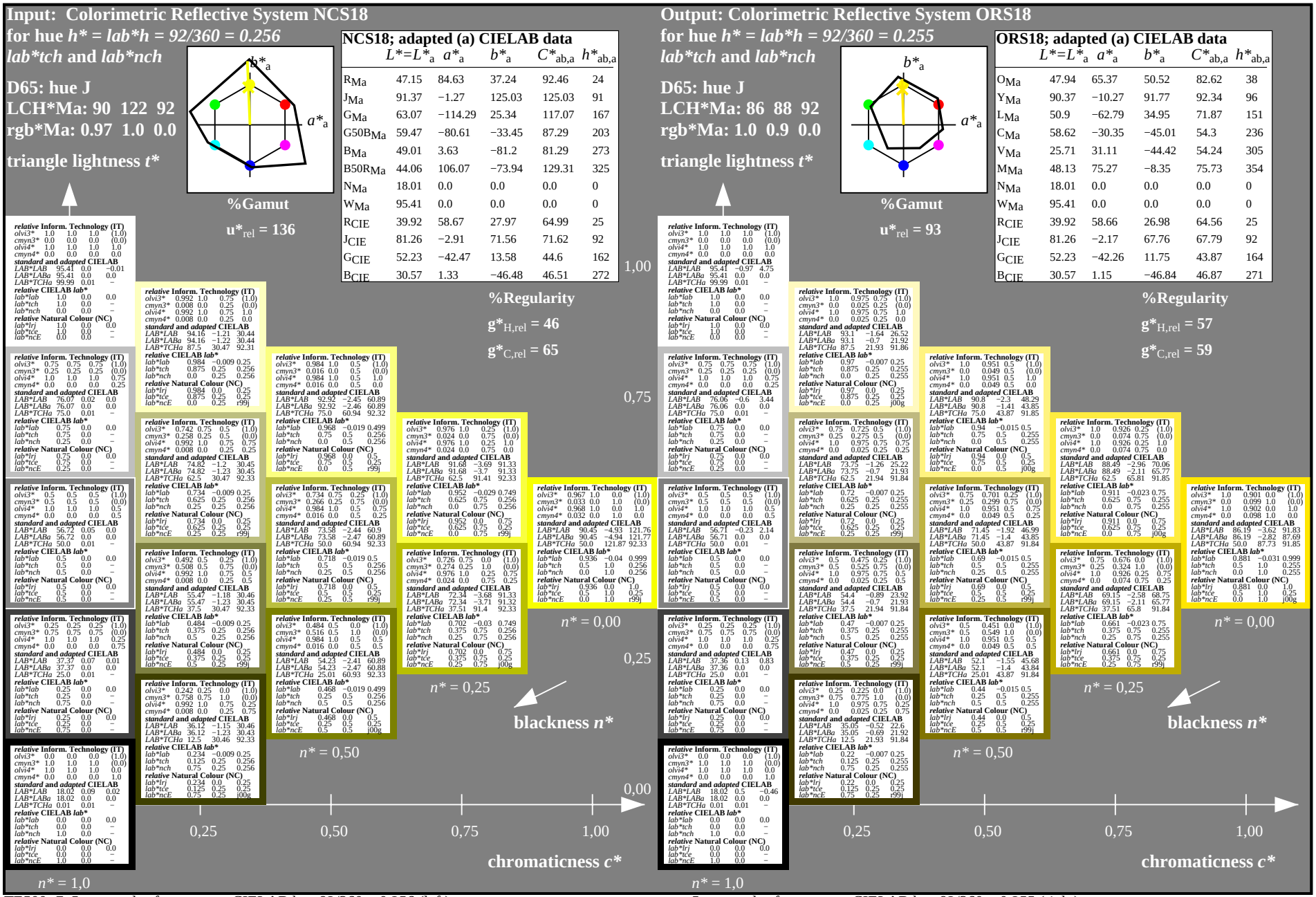
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



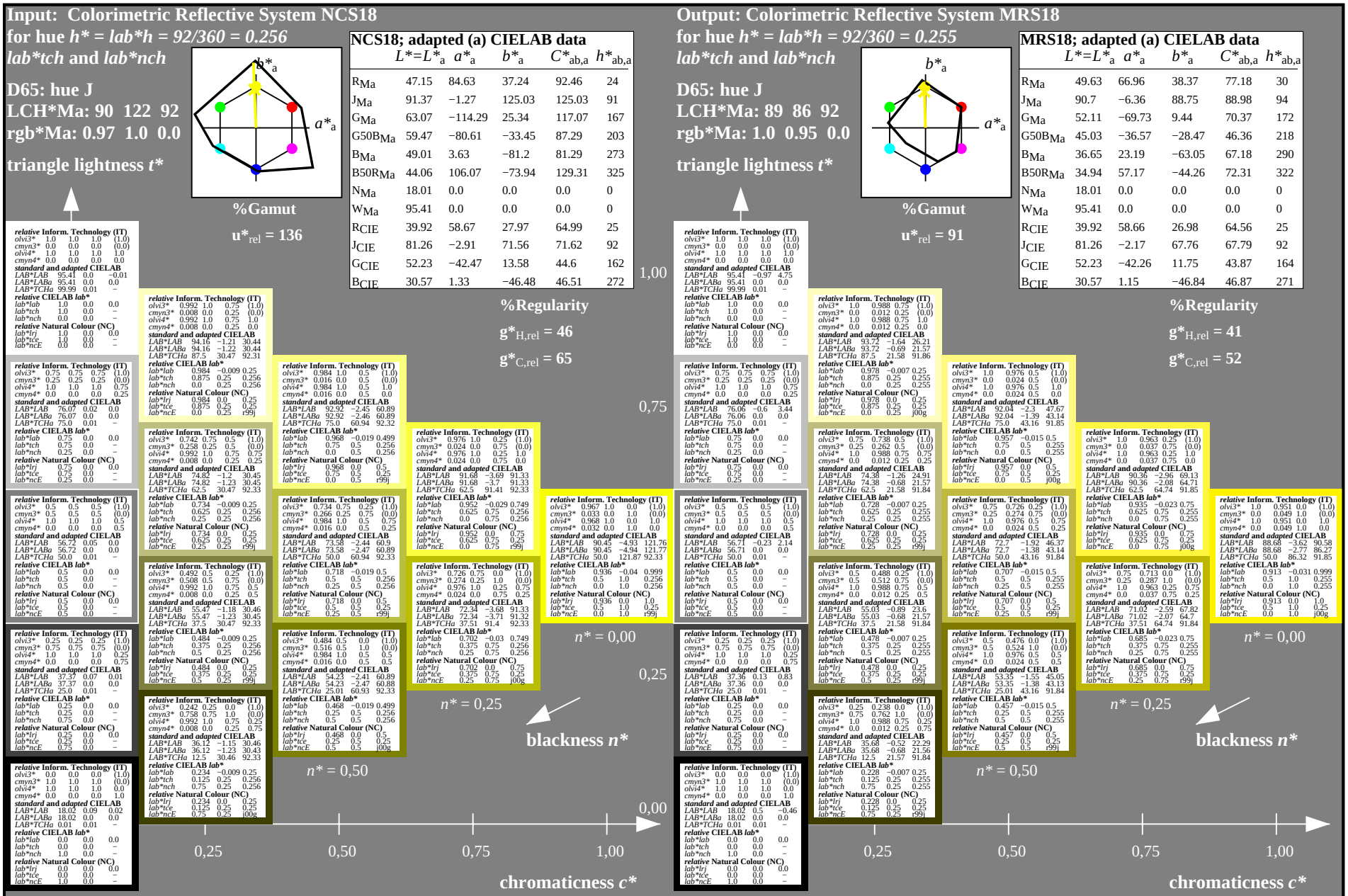

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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



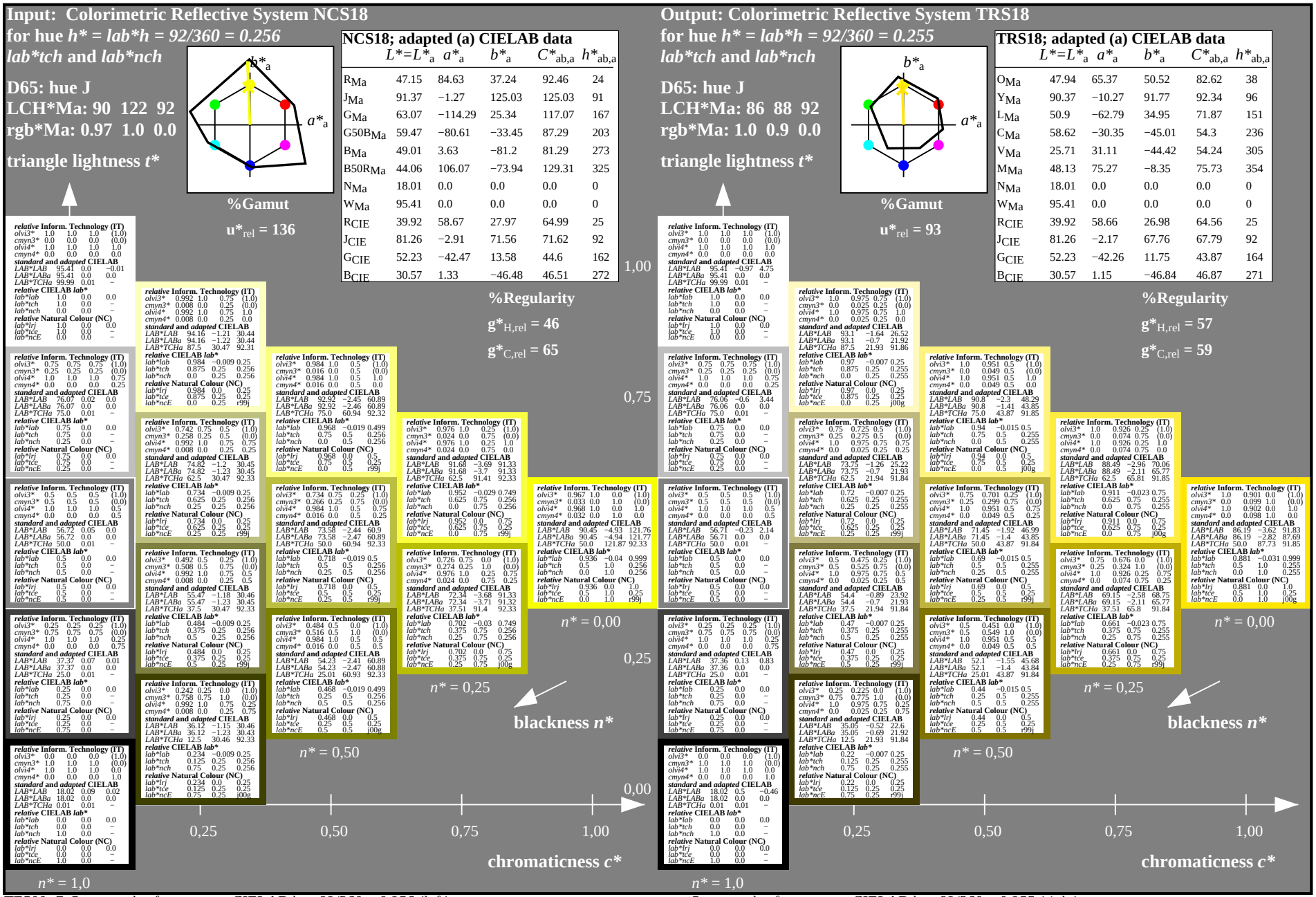

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



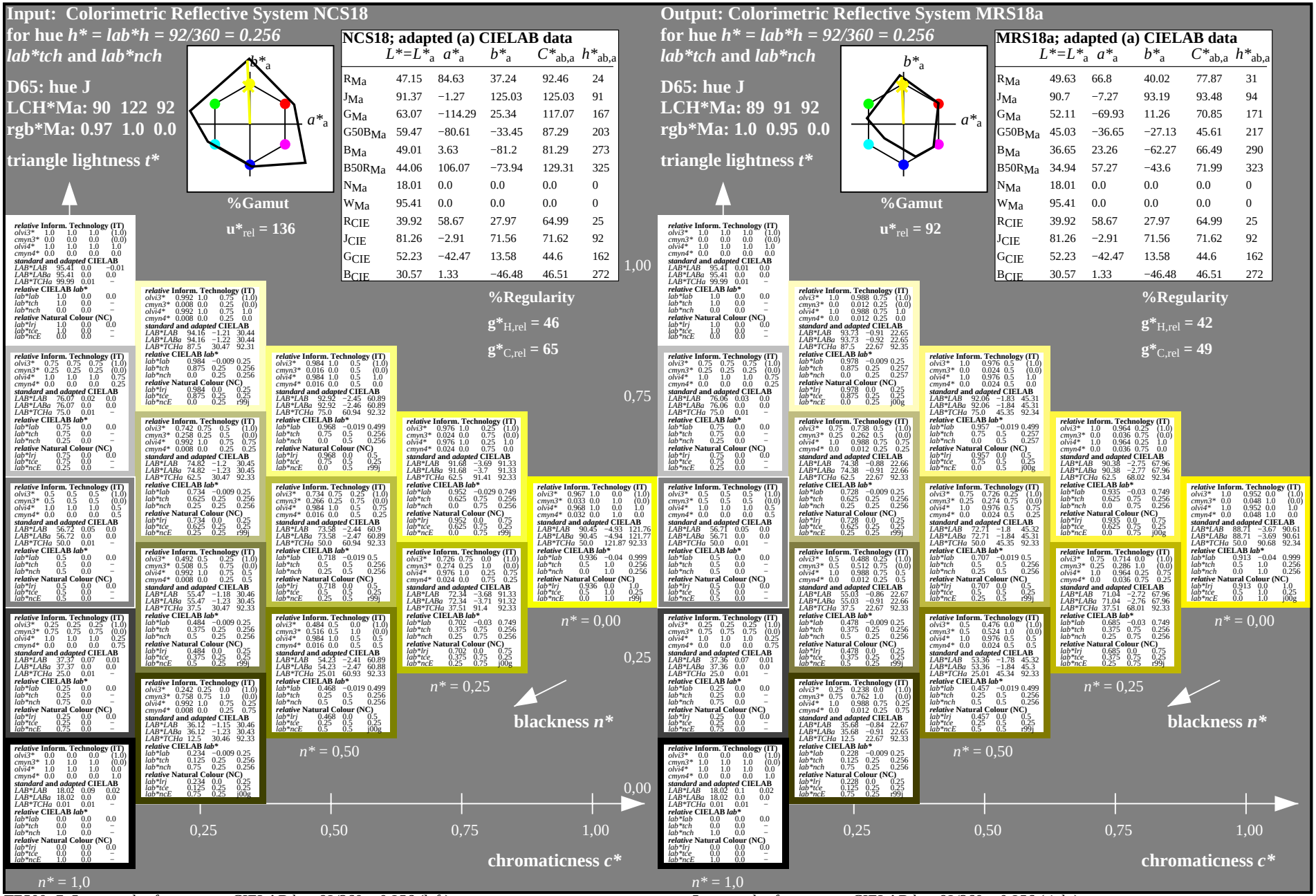

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



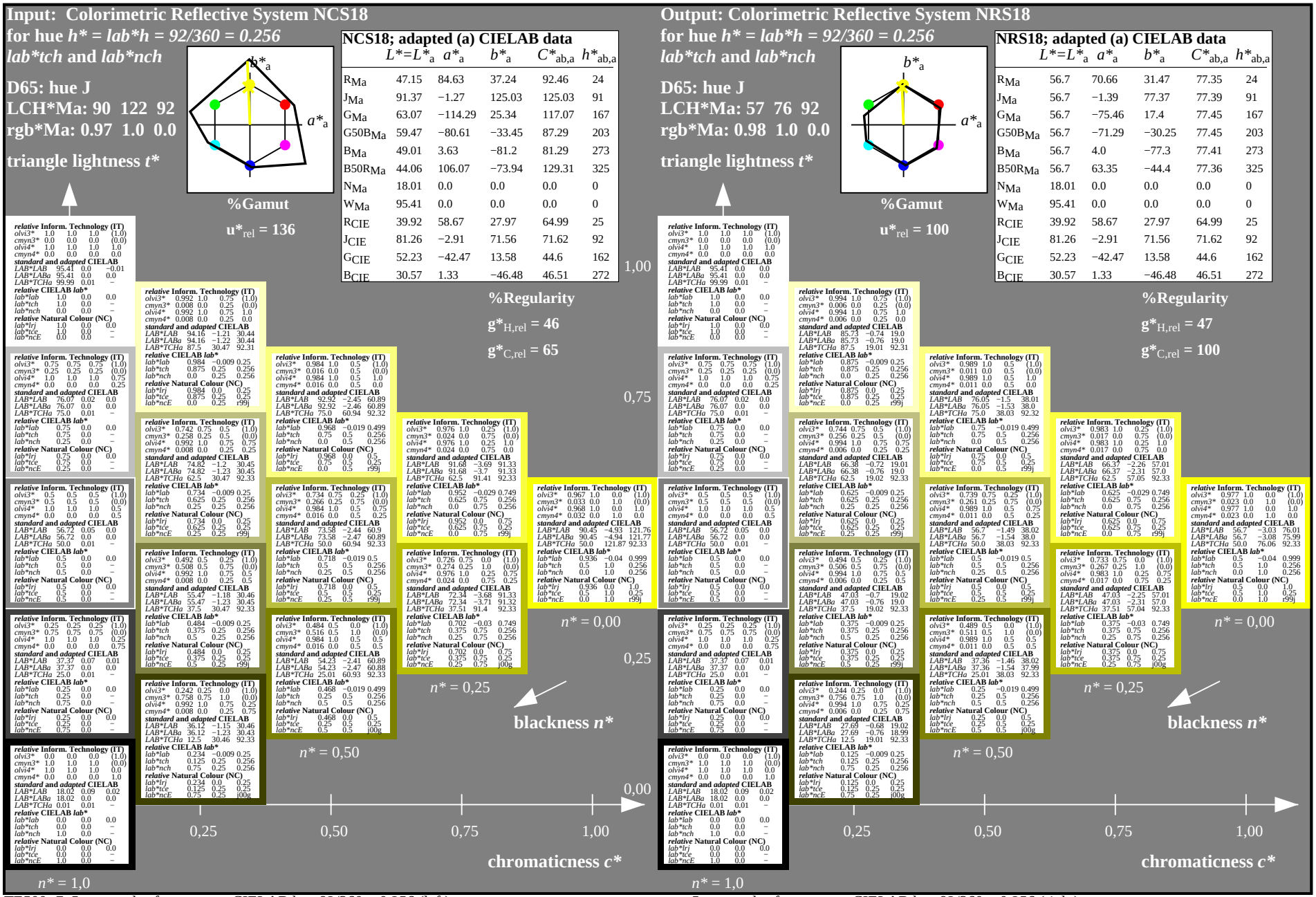

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



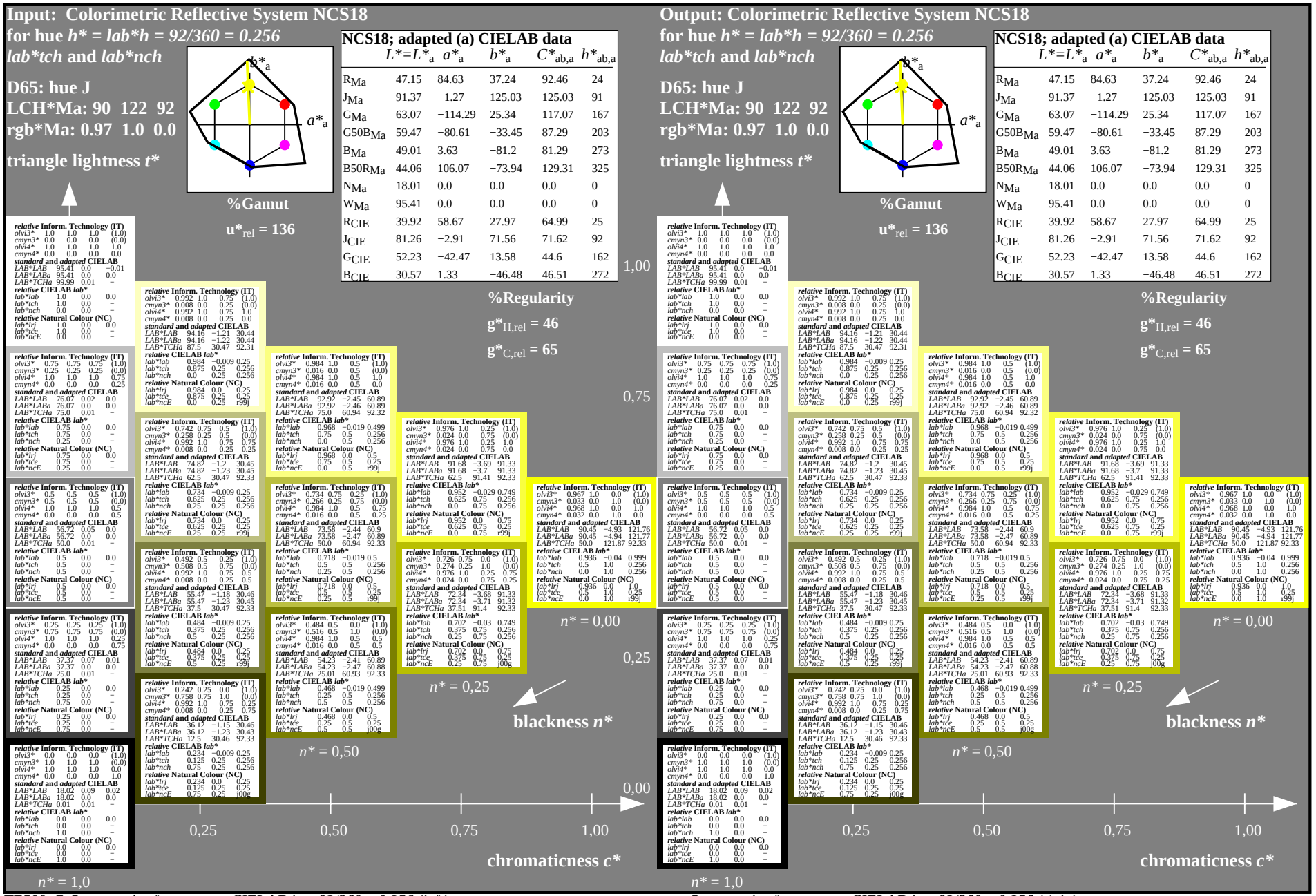

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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



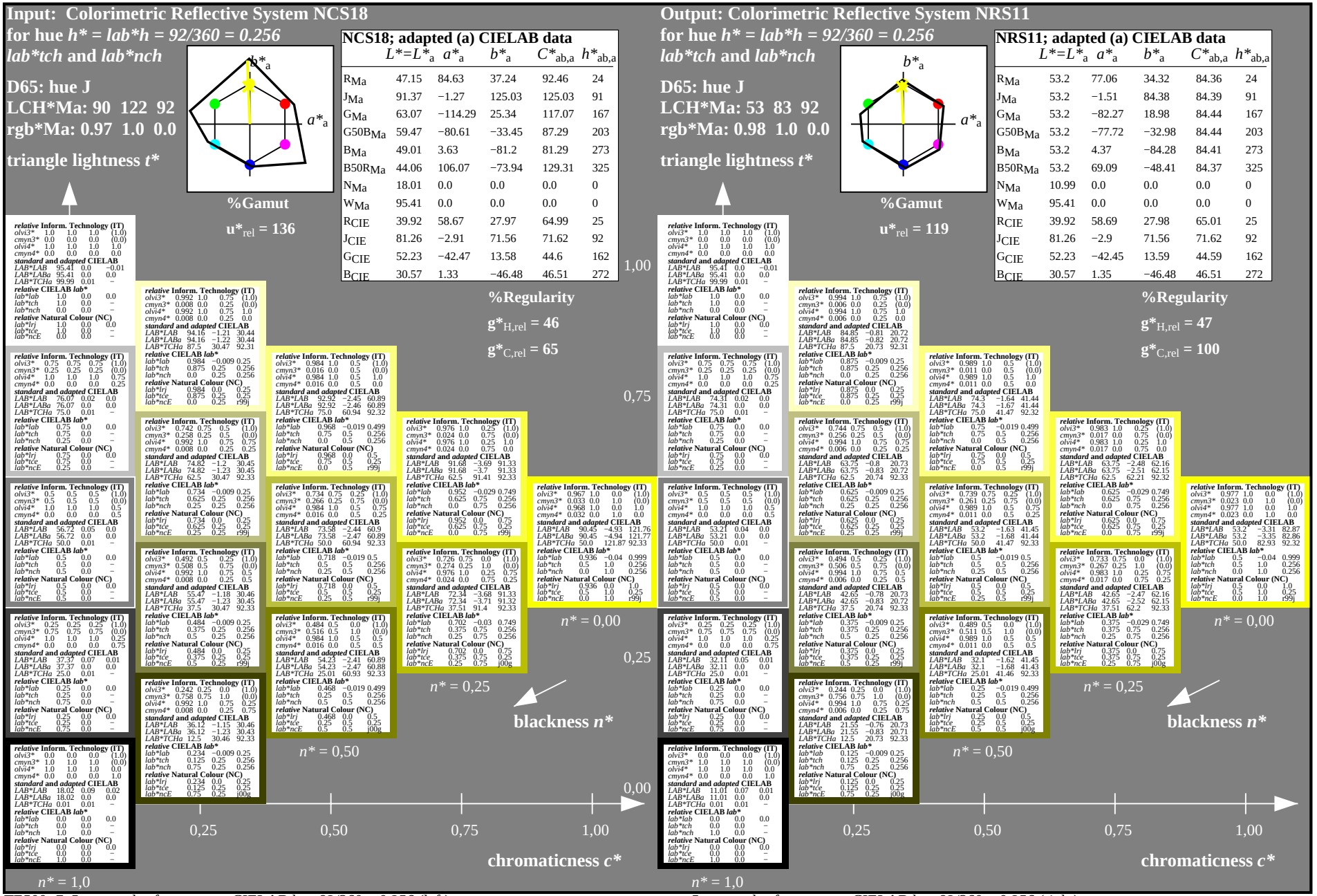

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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



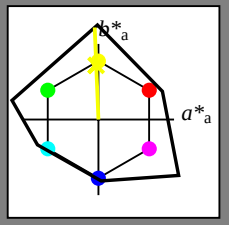

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 90 122 92**
**rgb*Ma: 0.97 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

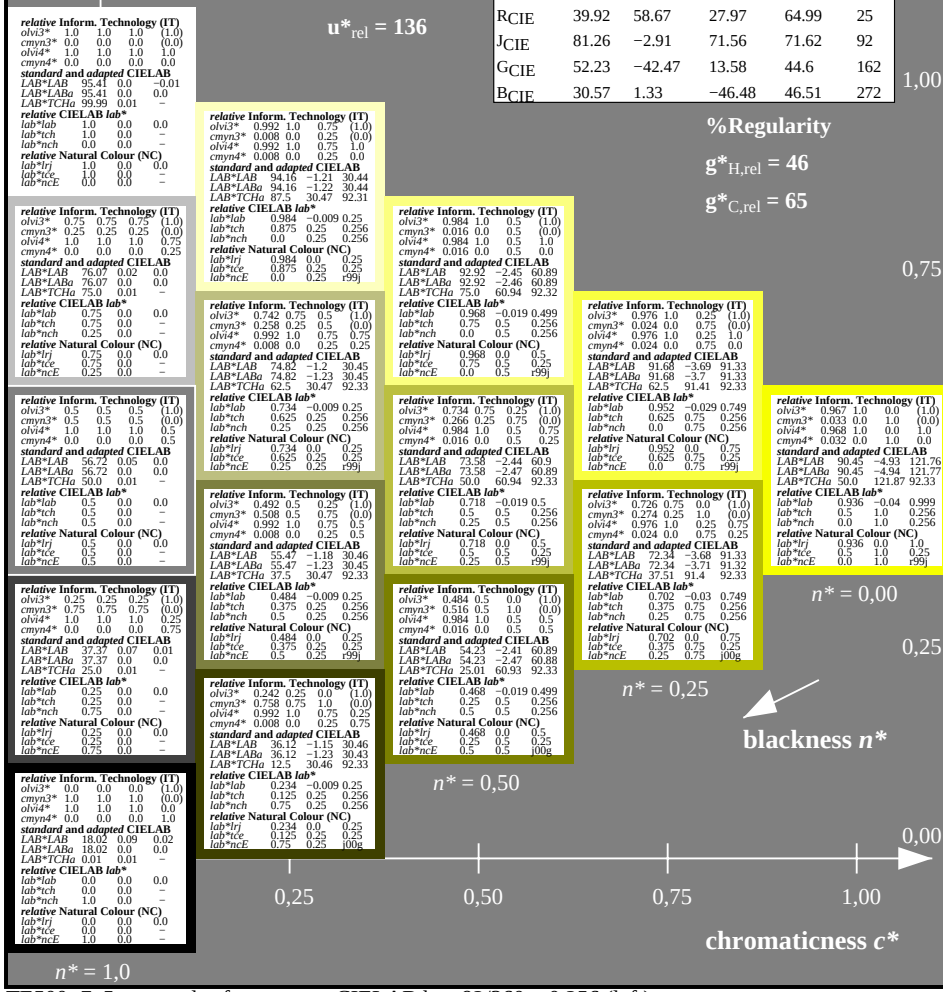
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

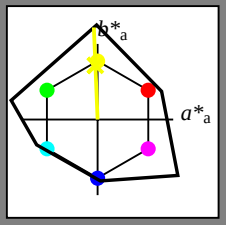
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 90 122 92**
**rgb*Ma: 0.97 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

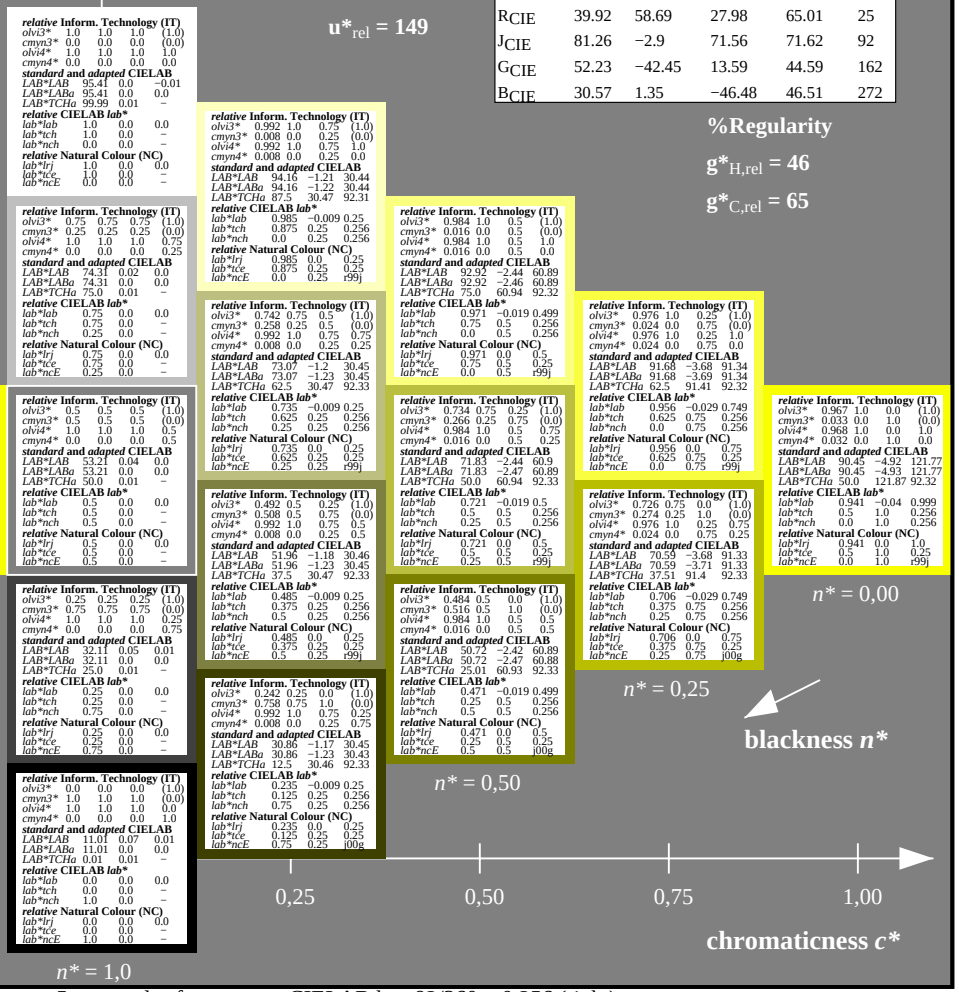
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

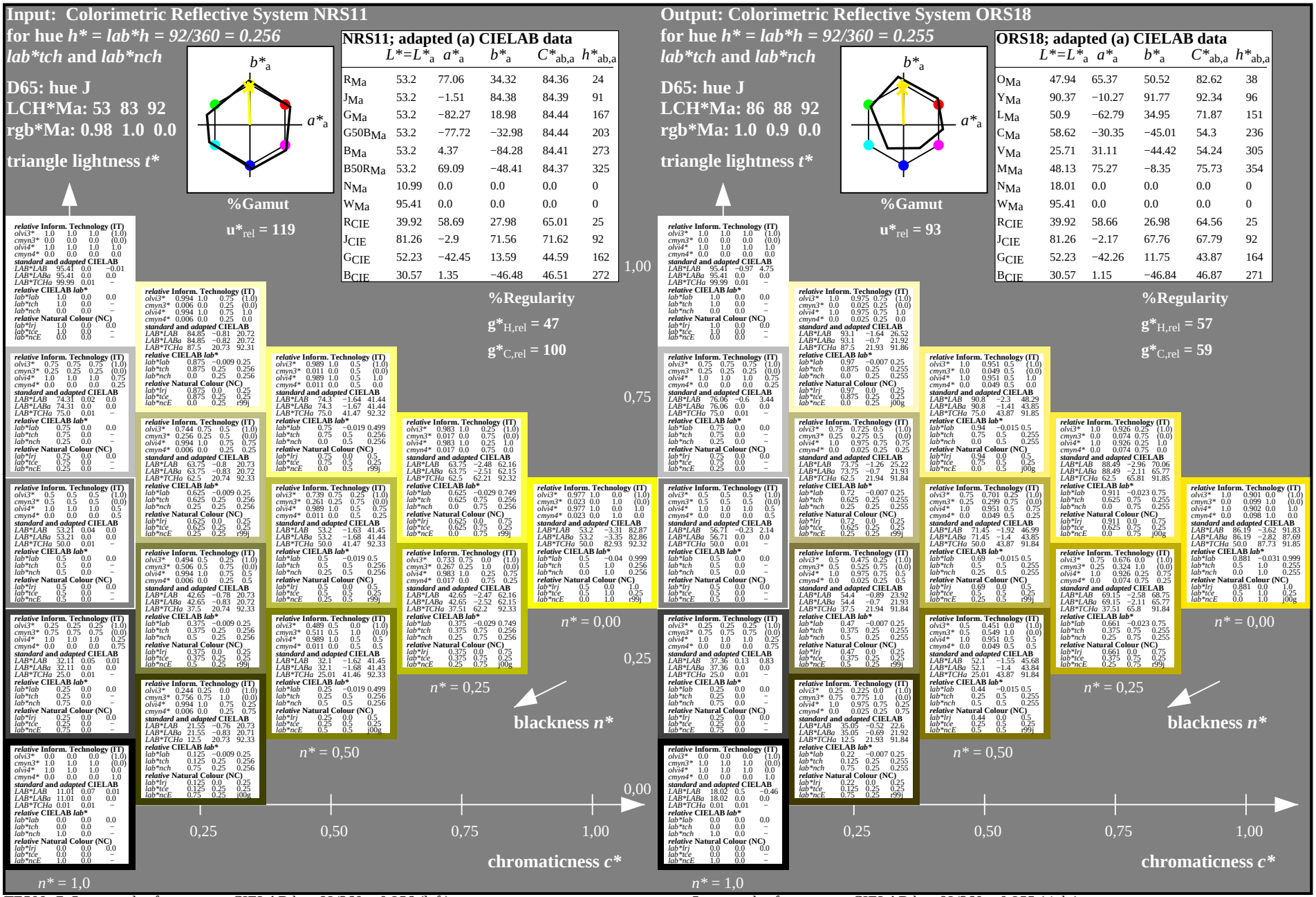
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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



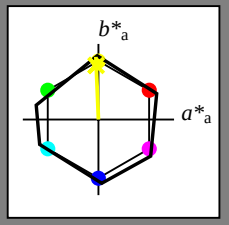

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 53 83 92**
**rgb*Ma: 0.98 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

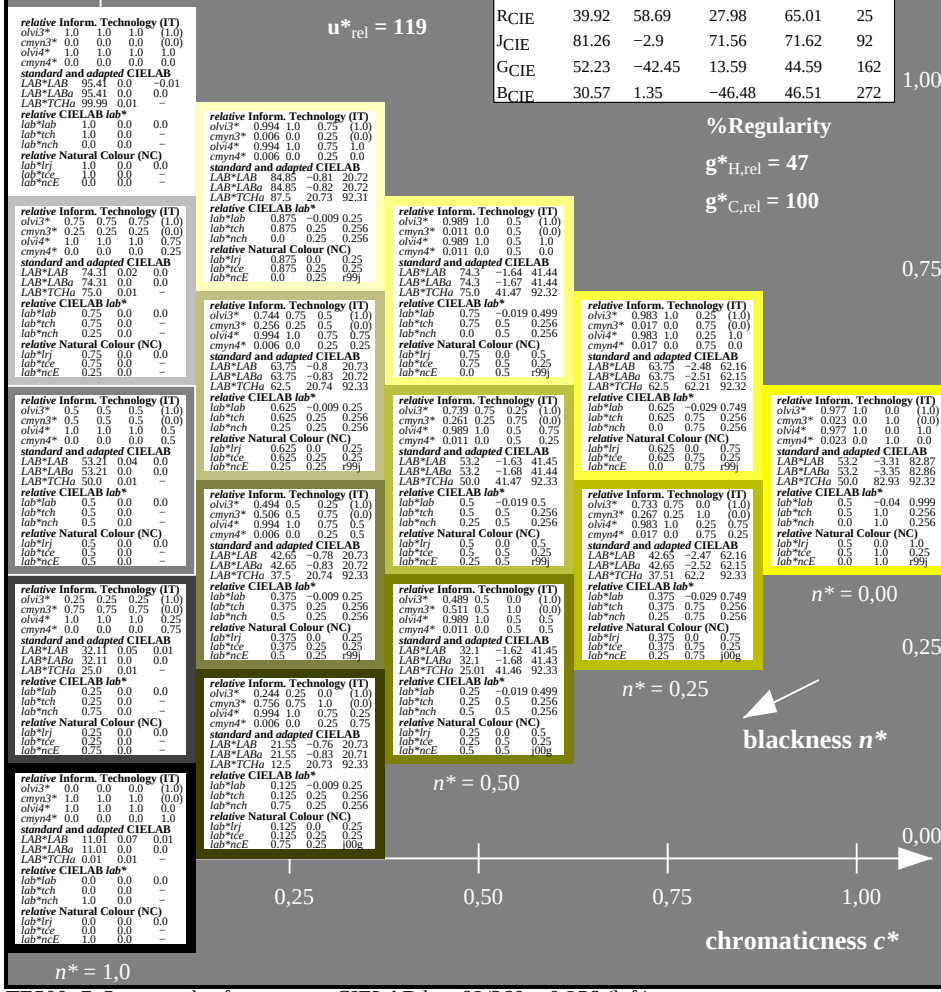
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

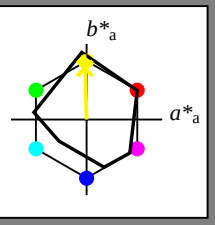
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 92/360 = 0.255**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 89 86 92**
**rgb*Ma: 1.0 0.95 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

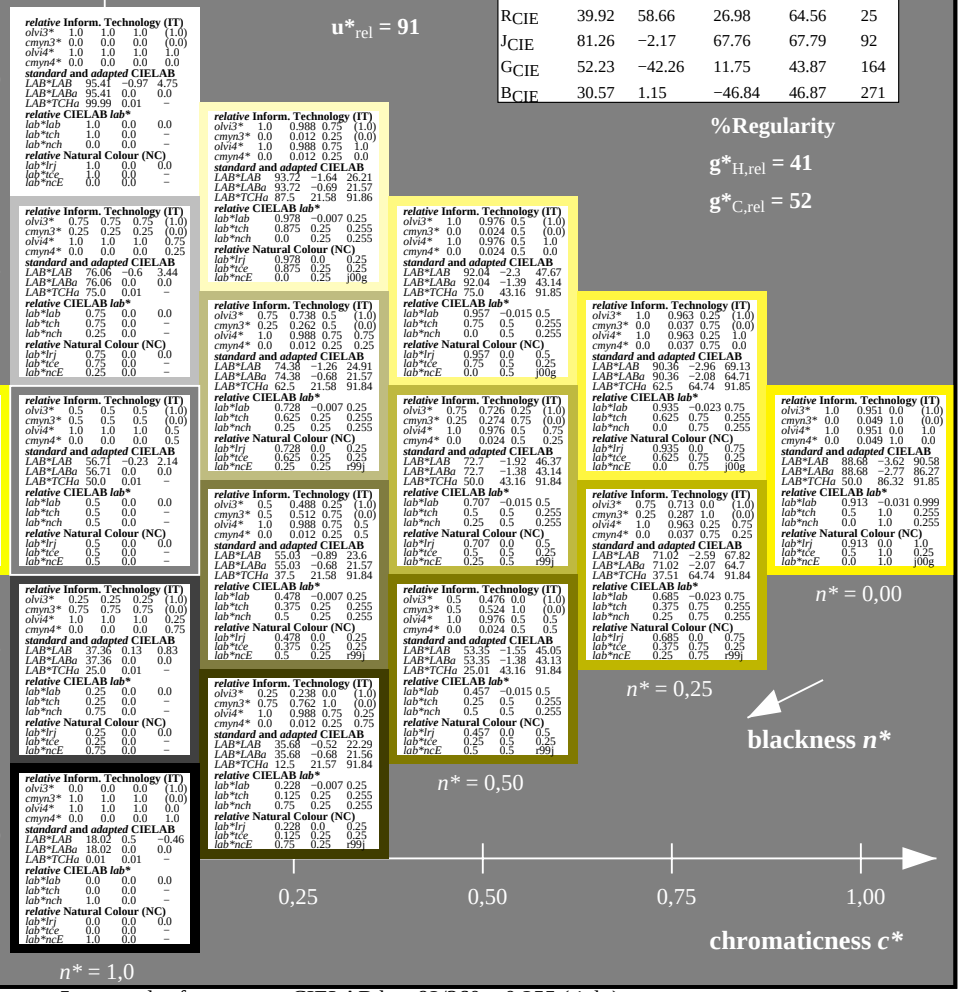
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

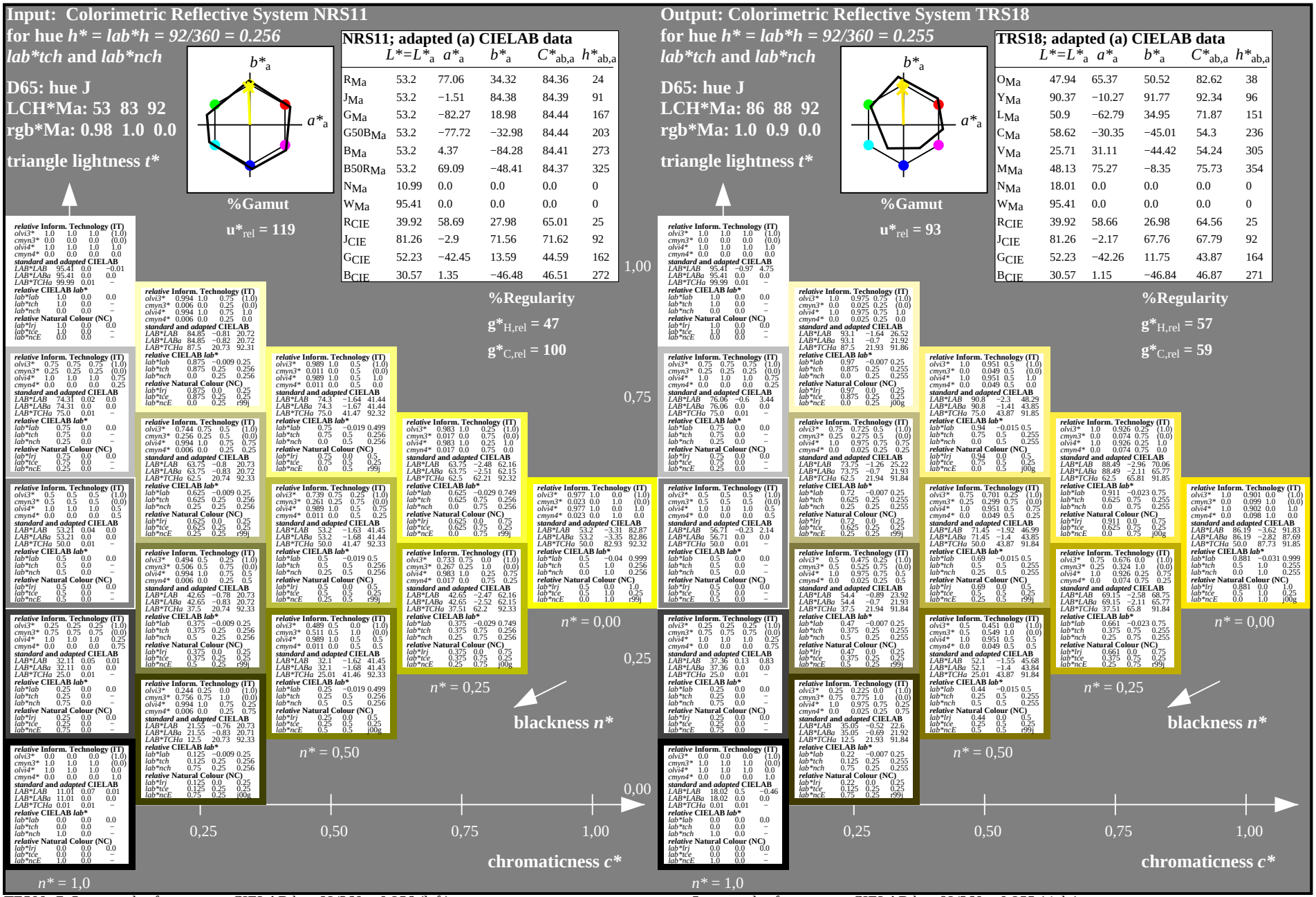
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



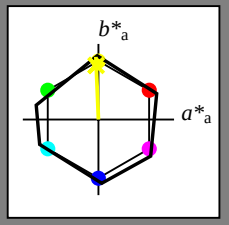

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 53 83 92**
**rgb*Ma: 0.98 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

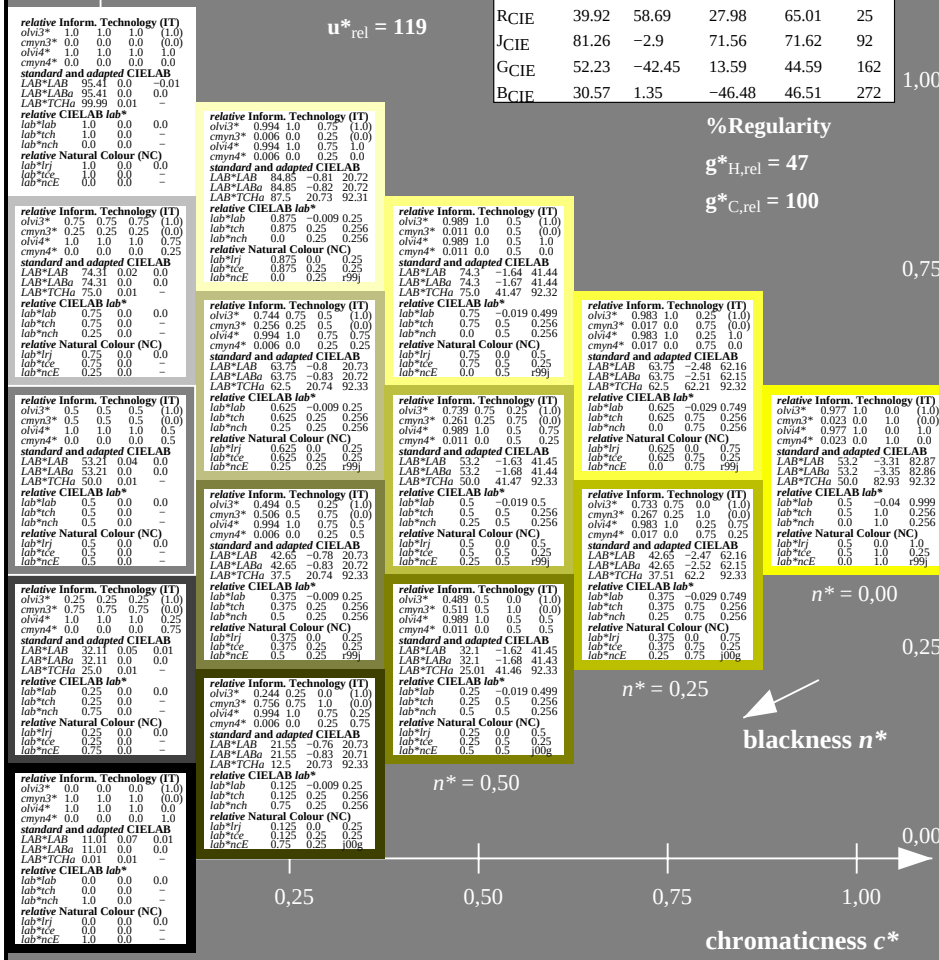
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

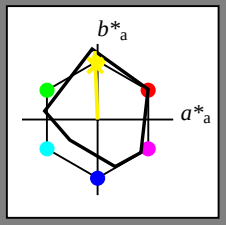
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 89 91 92**
**rgb*Ma: 1.0 0.95 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

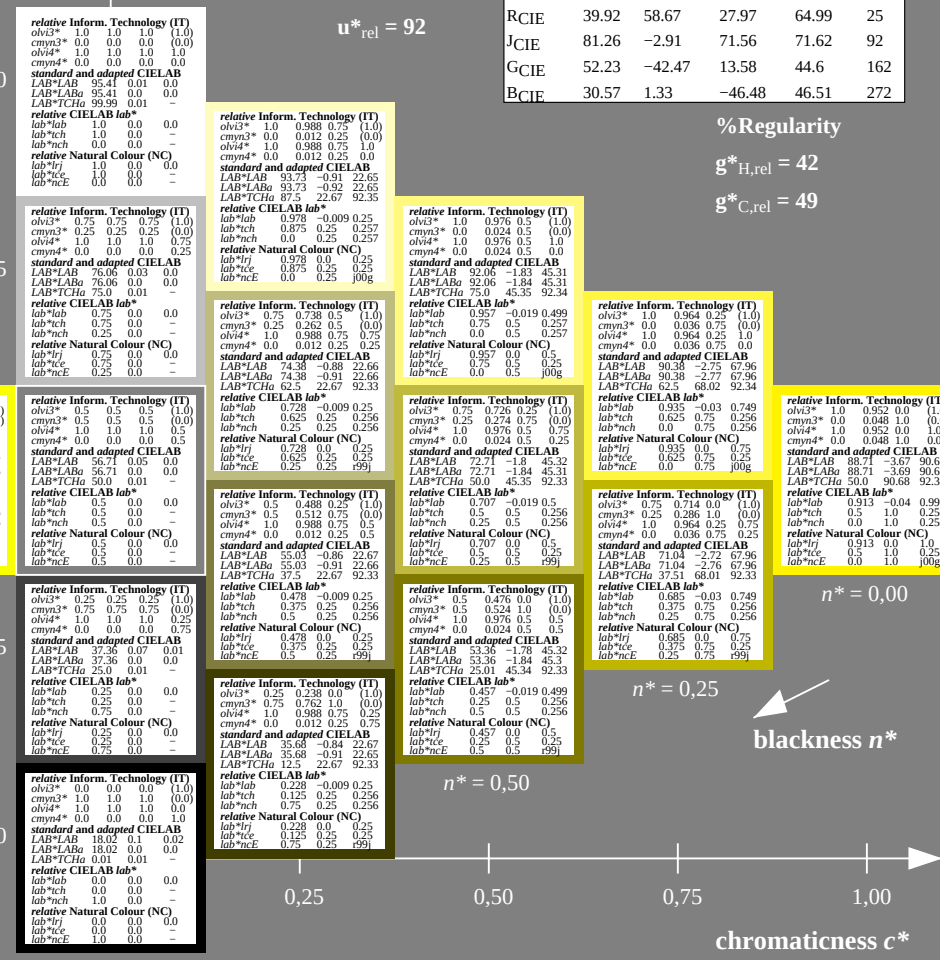
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

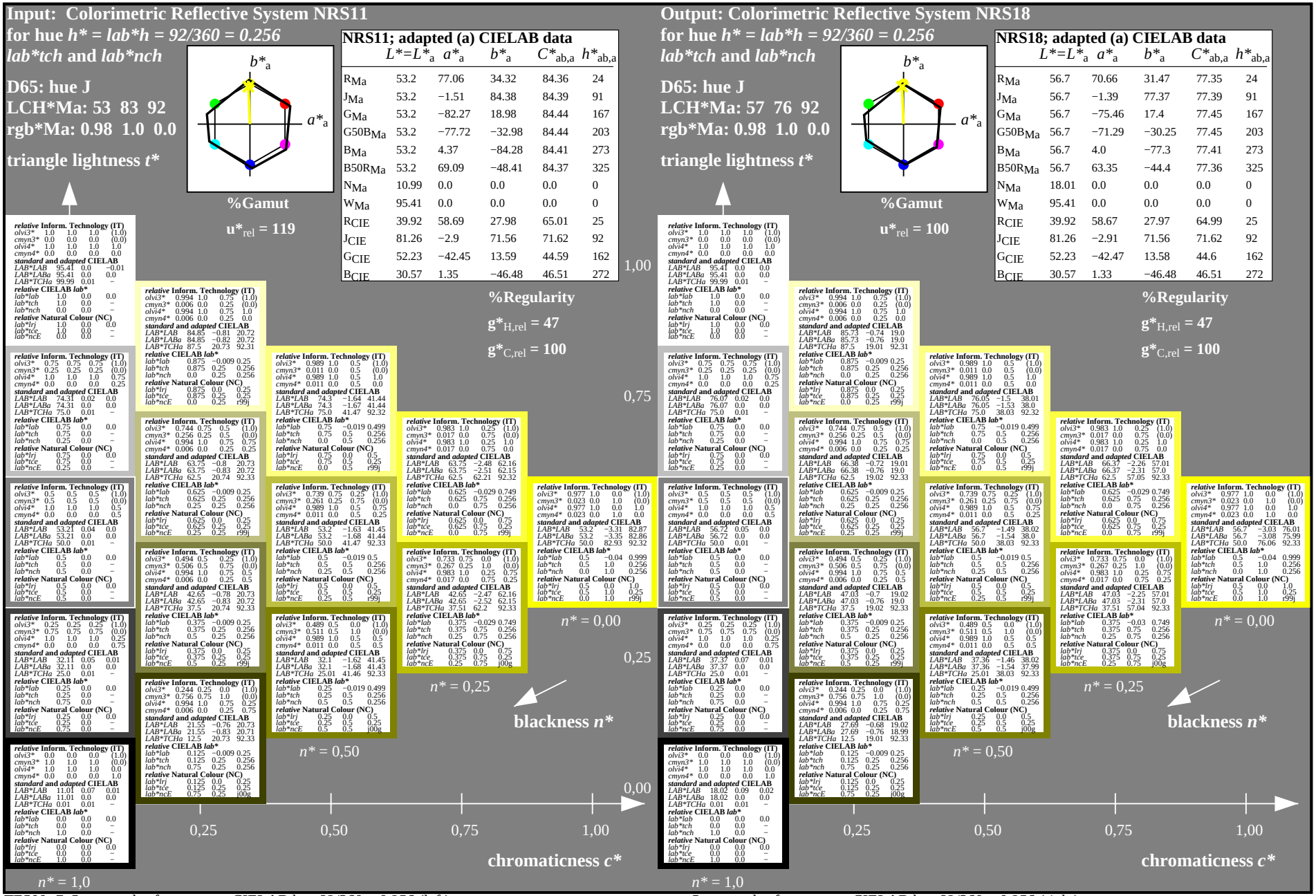
**g*$_{H,rel}$ = 42**

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



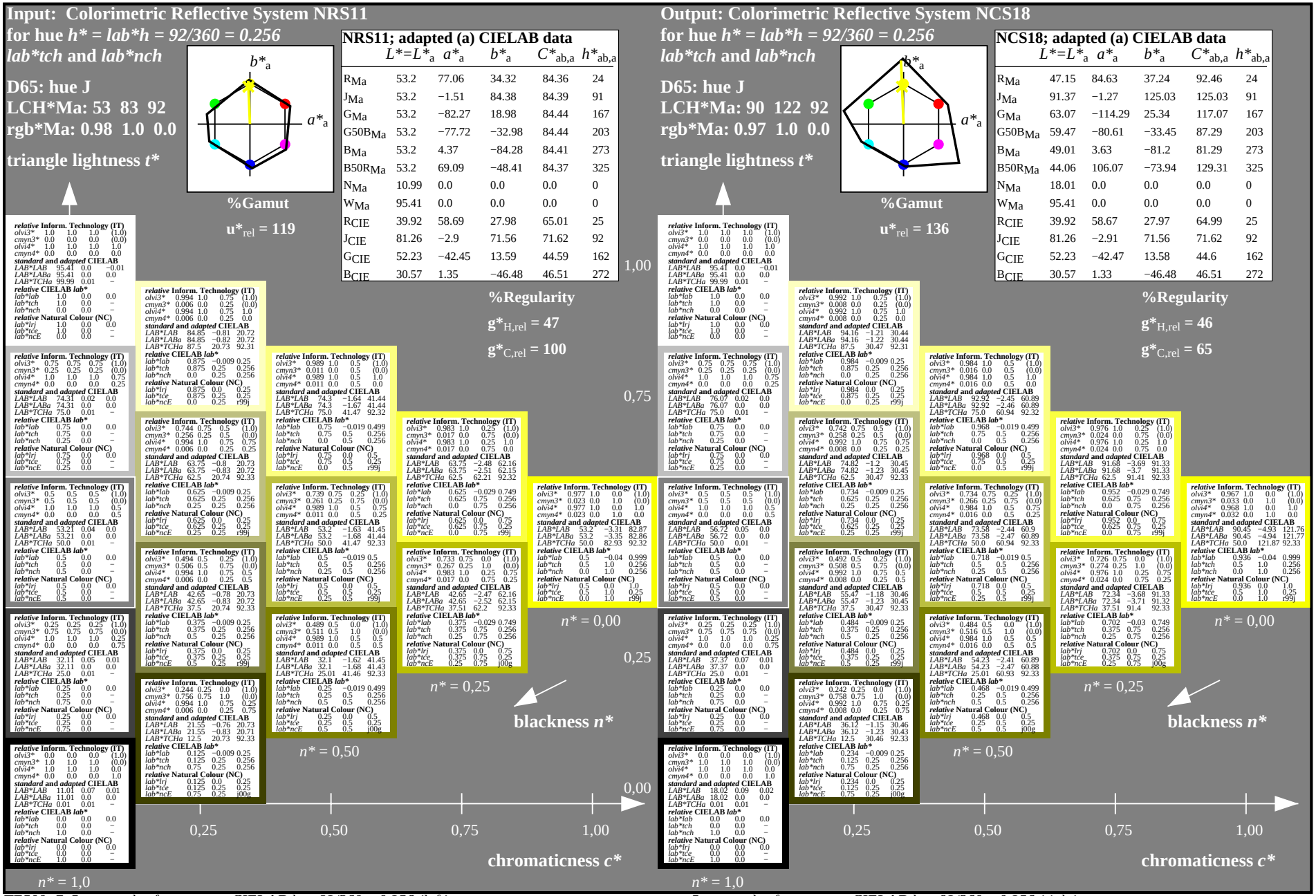

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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



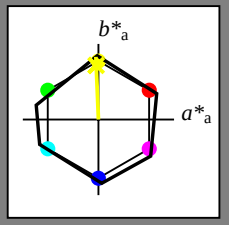

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 53 83 92**
**rgb*Ma: 0.98 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

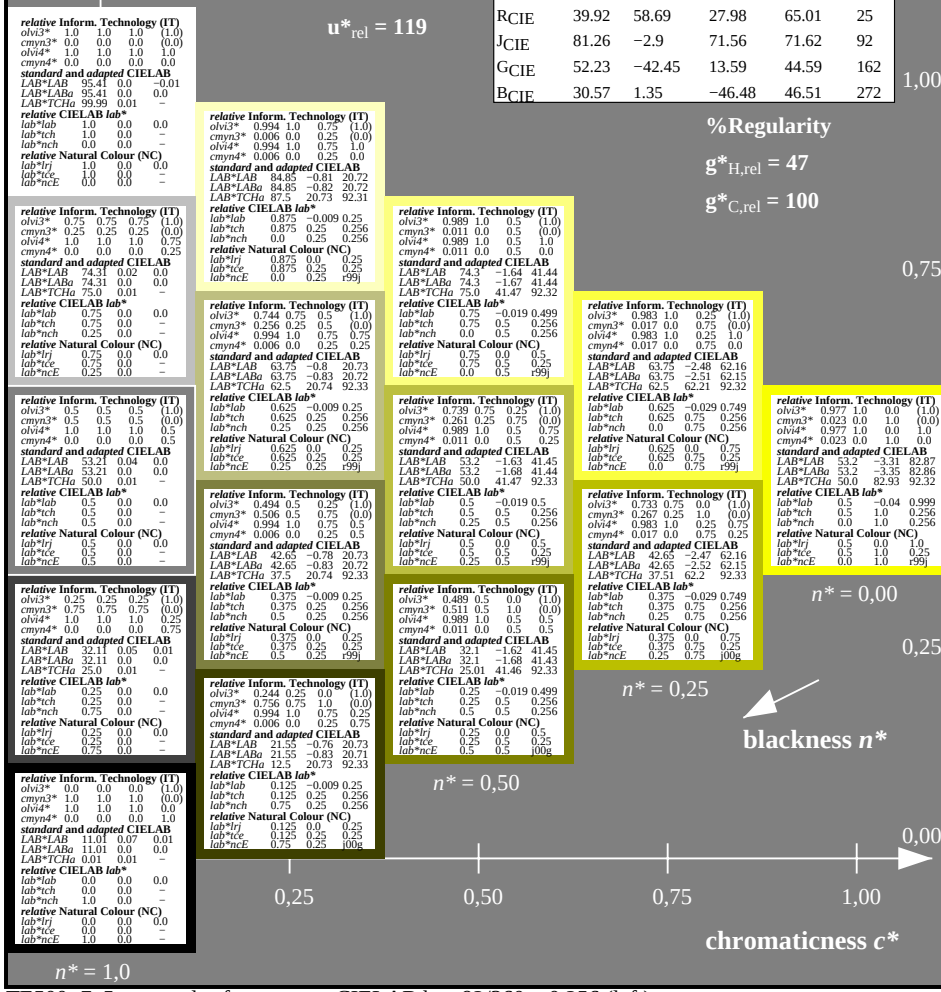
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

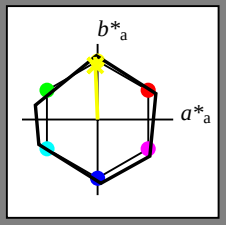
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 53 83 92**
**rgb*Ma: 0.98 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

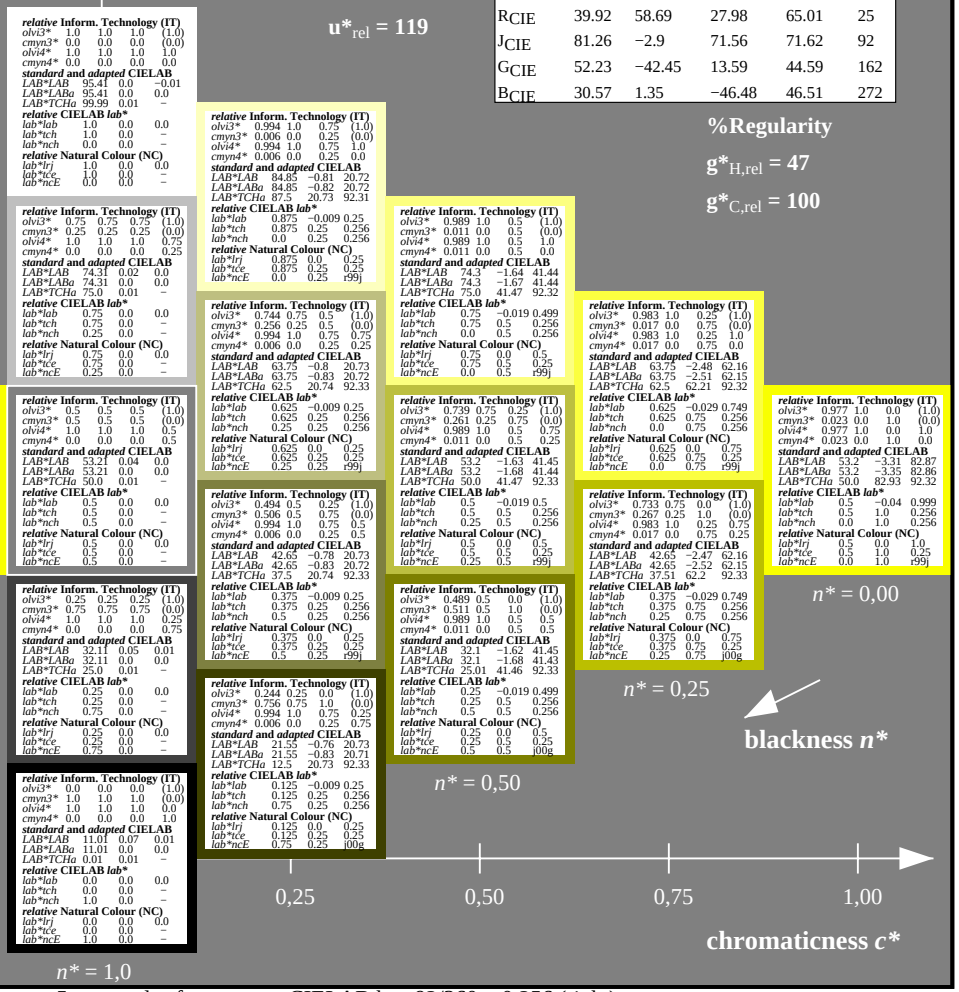
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



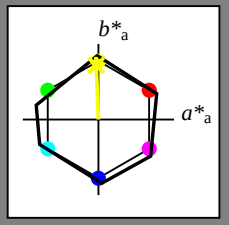

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 53 83 92**
**rgb*Ma: 0.98 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

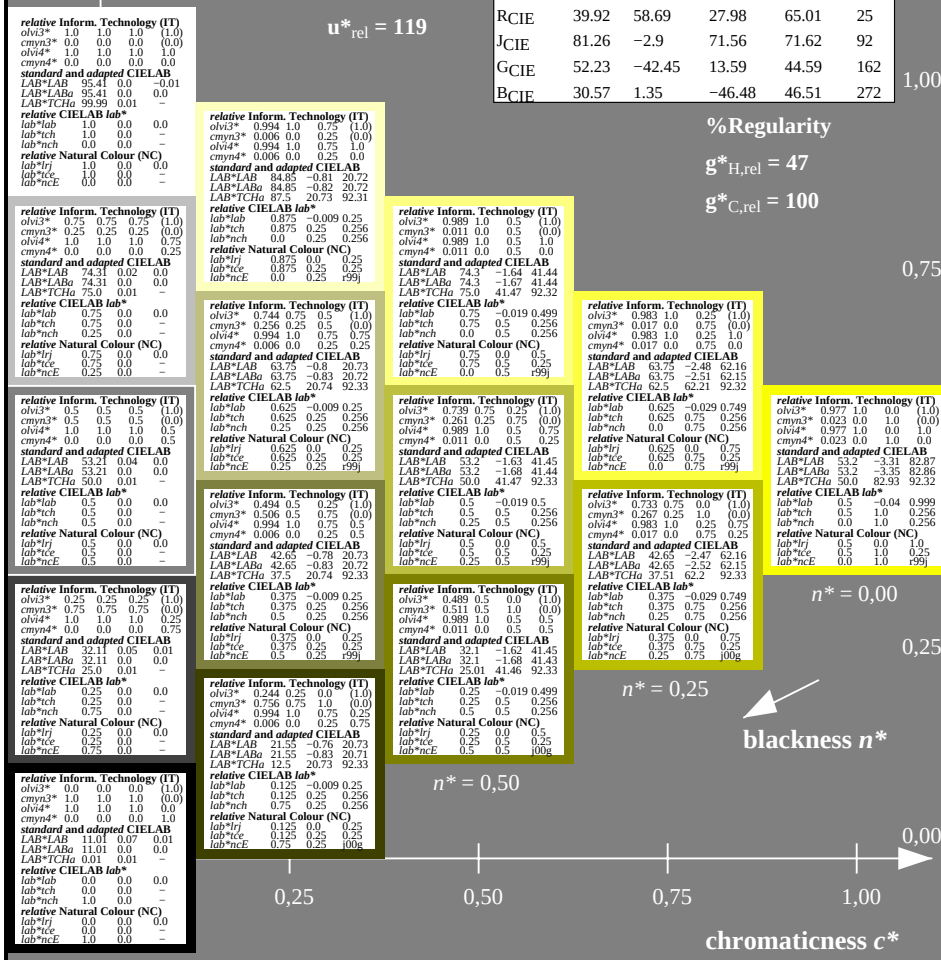
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

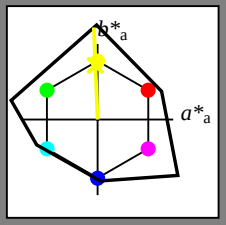
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 90 122 92**
**rgb*Ma: 0.97 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

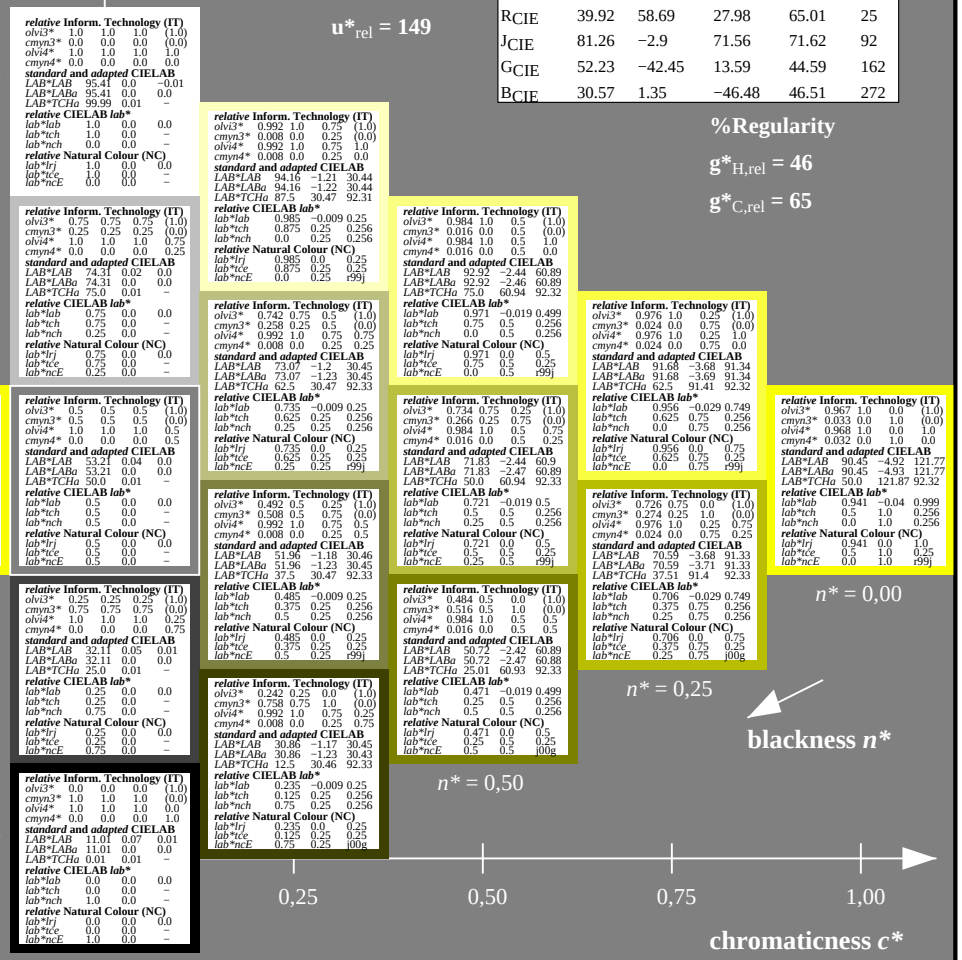
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

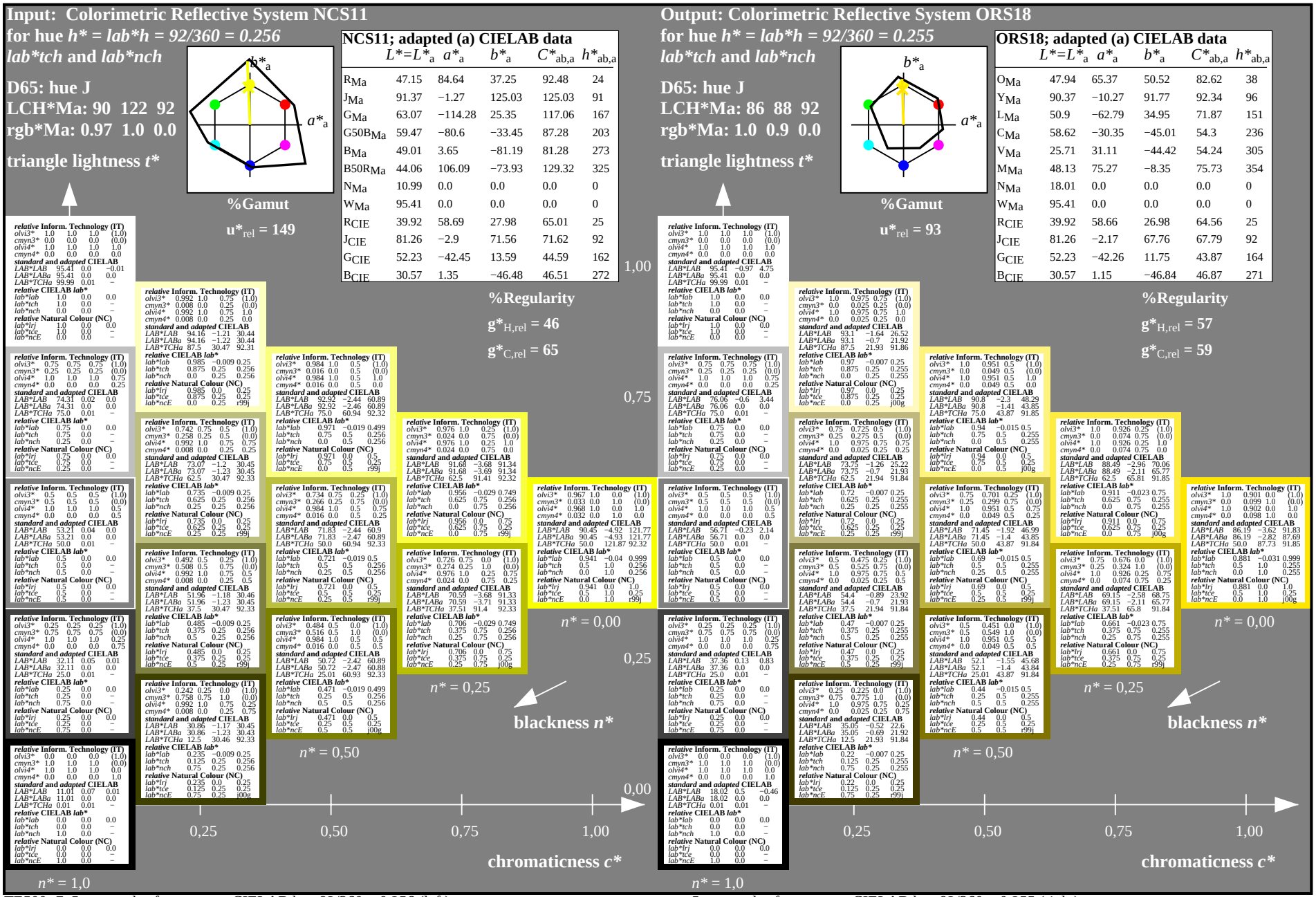
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



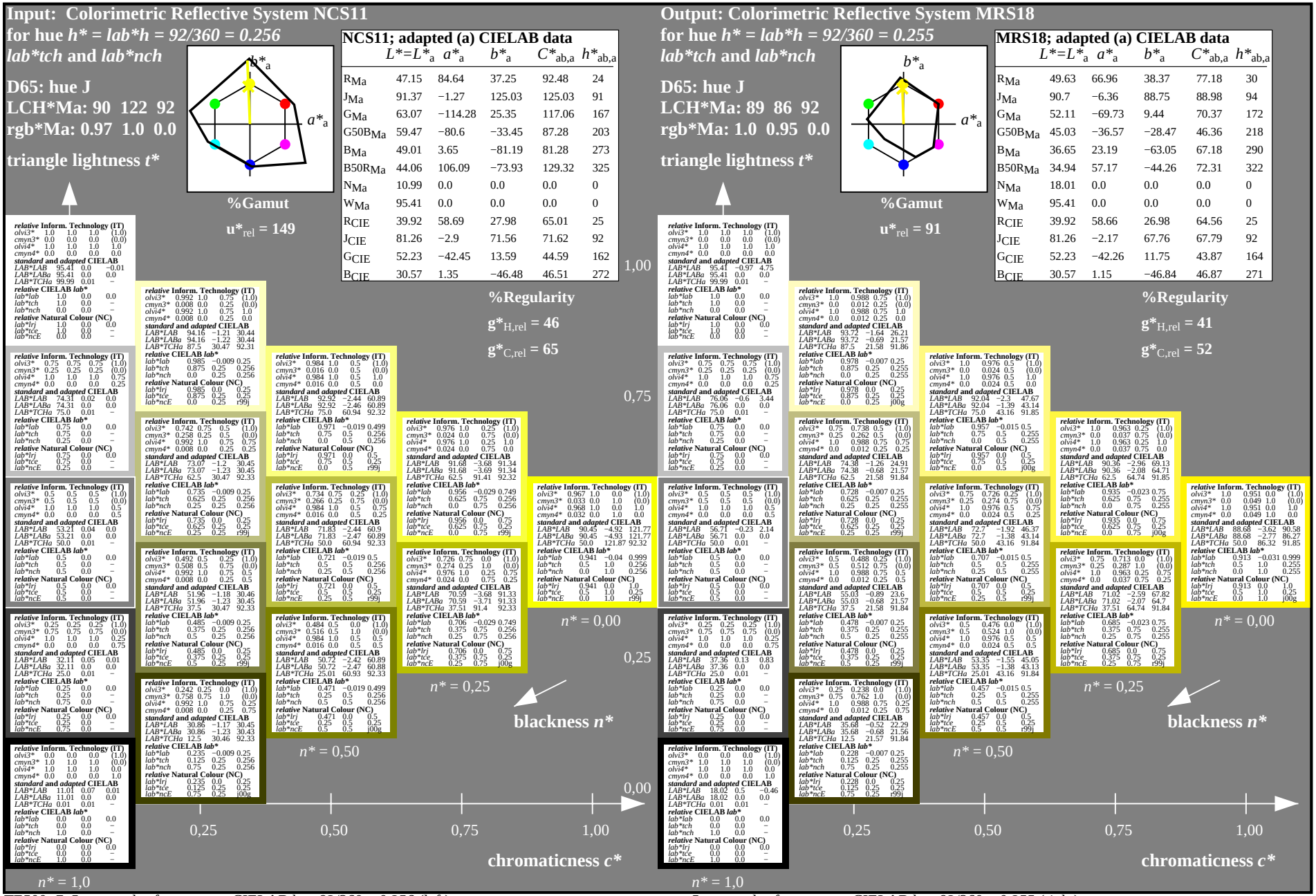

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



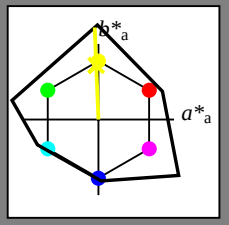

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 90 122 92**
**rgb*Ma: 0.97 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

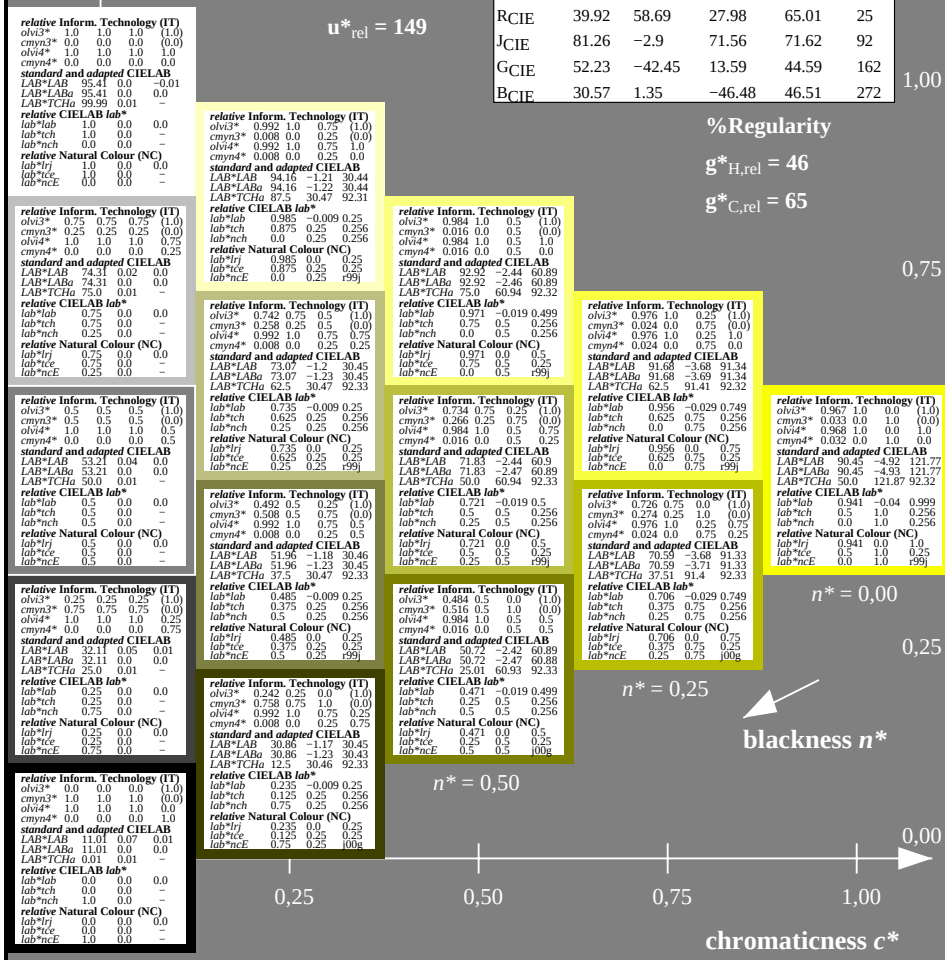
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

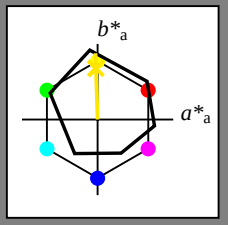
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 92/360 = 0.255**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 86 88 92**
**rgb*Ma: 1.0 0.9 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

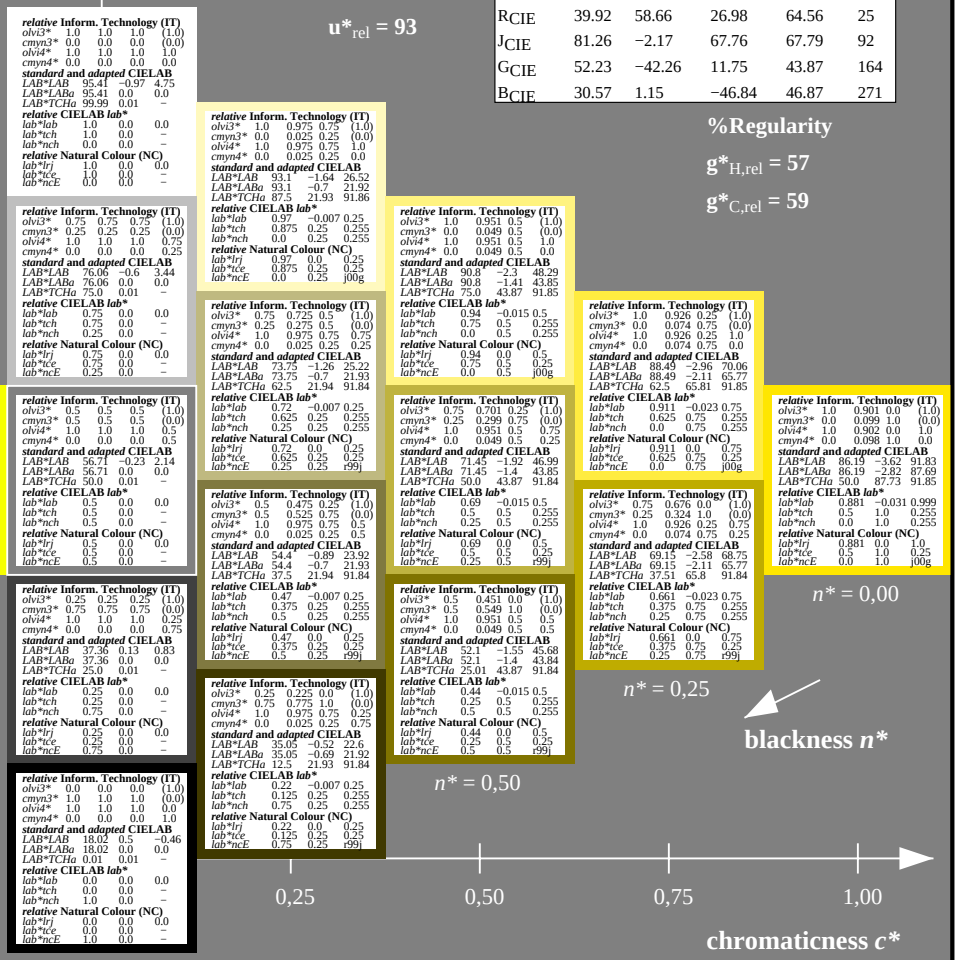
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

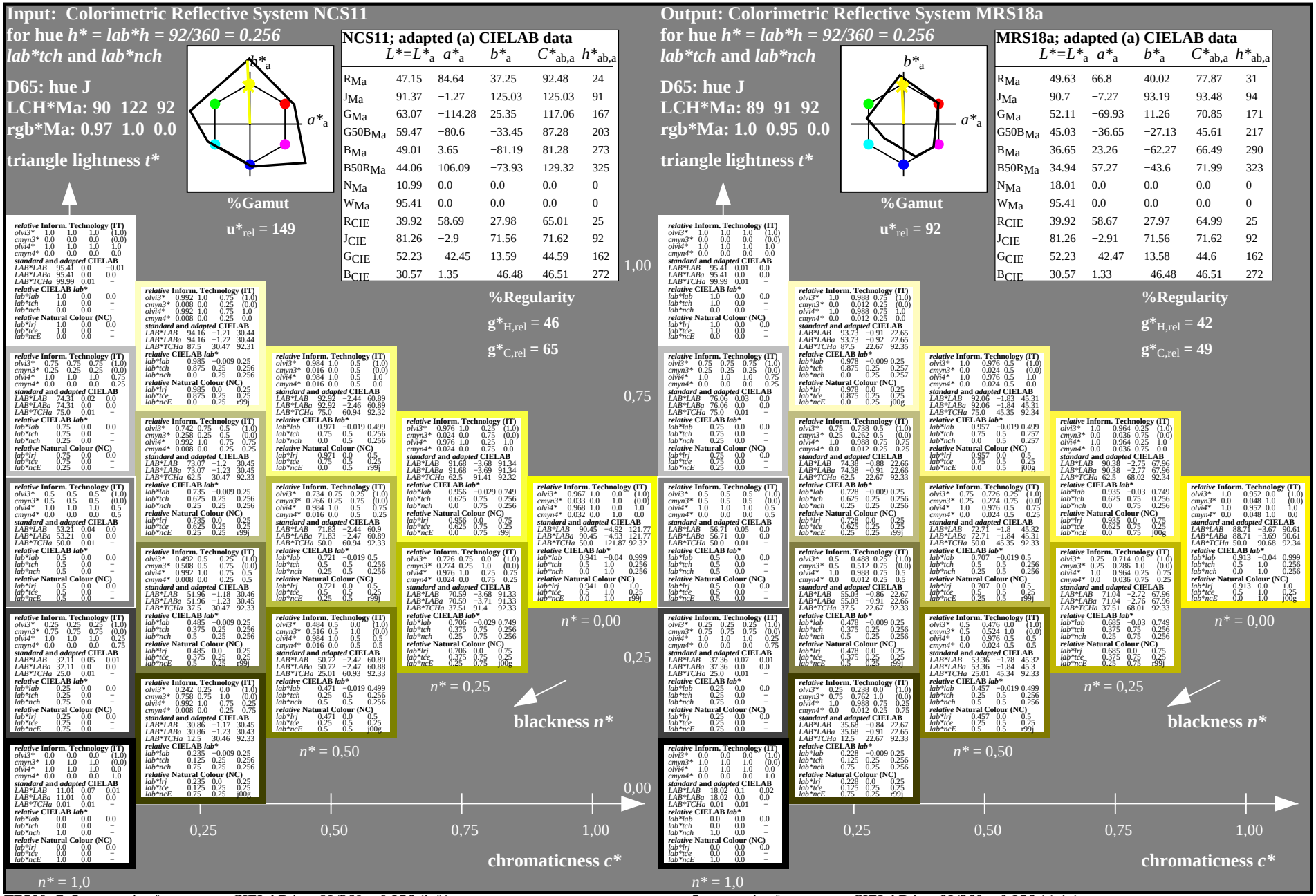
**g*$_{H,rel}$ = 57**

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




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)



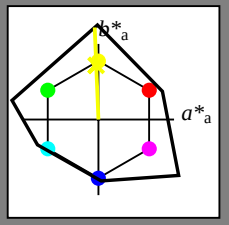

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 90 122 92**
**rgb*Ma: 0.97 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

**NCS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

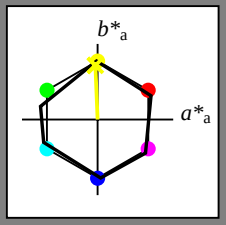
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 92/360 = 0.256**
***lab*tch* and *lab*nch***

**D65: hue J**
**LCH*Ma: 57 76 92**
**rgb*Ma: 0.98 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

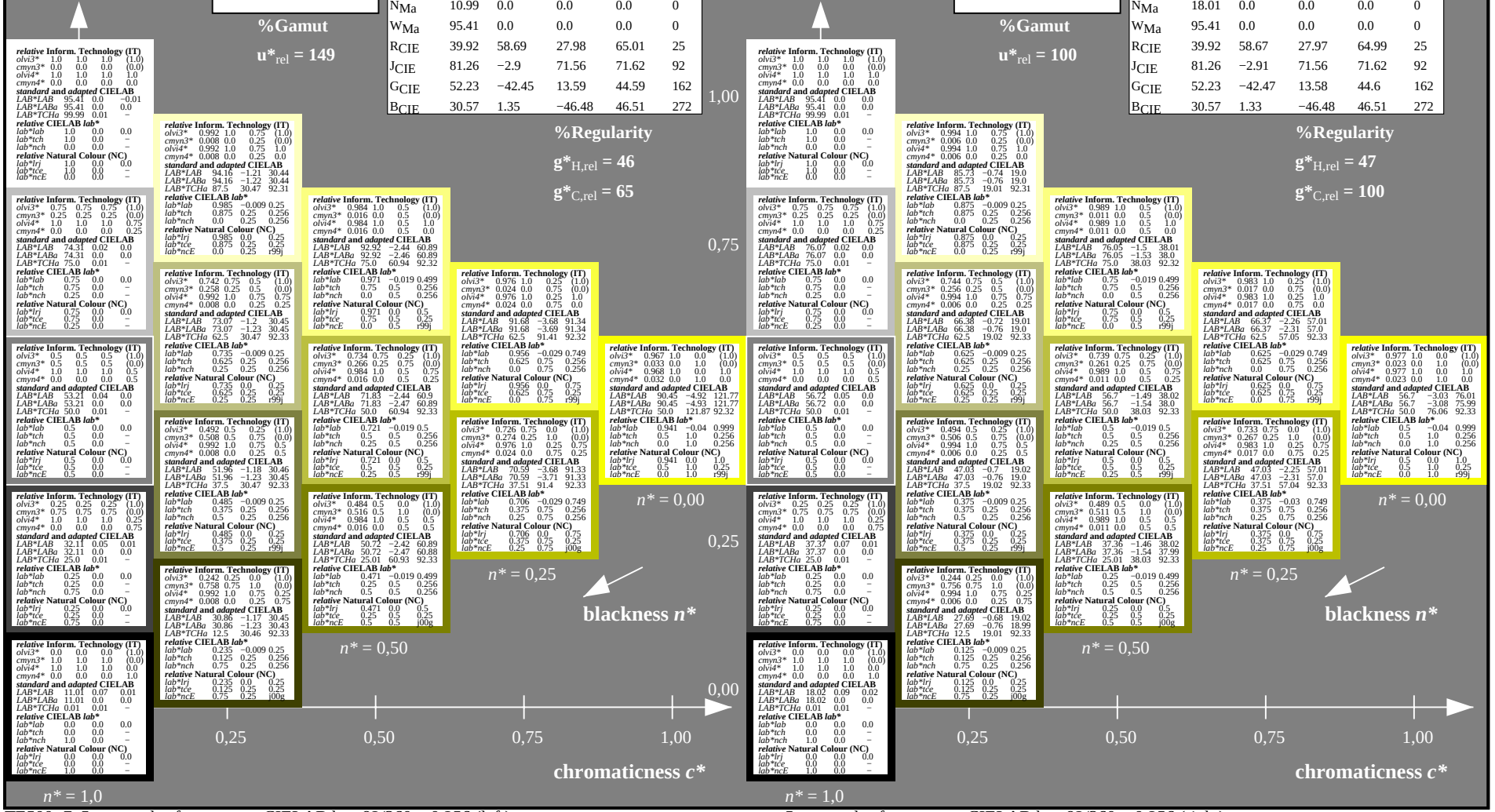
**NRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

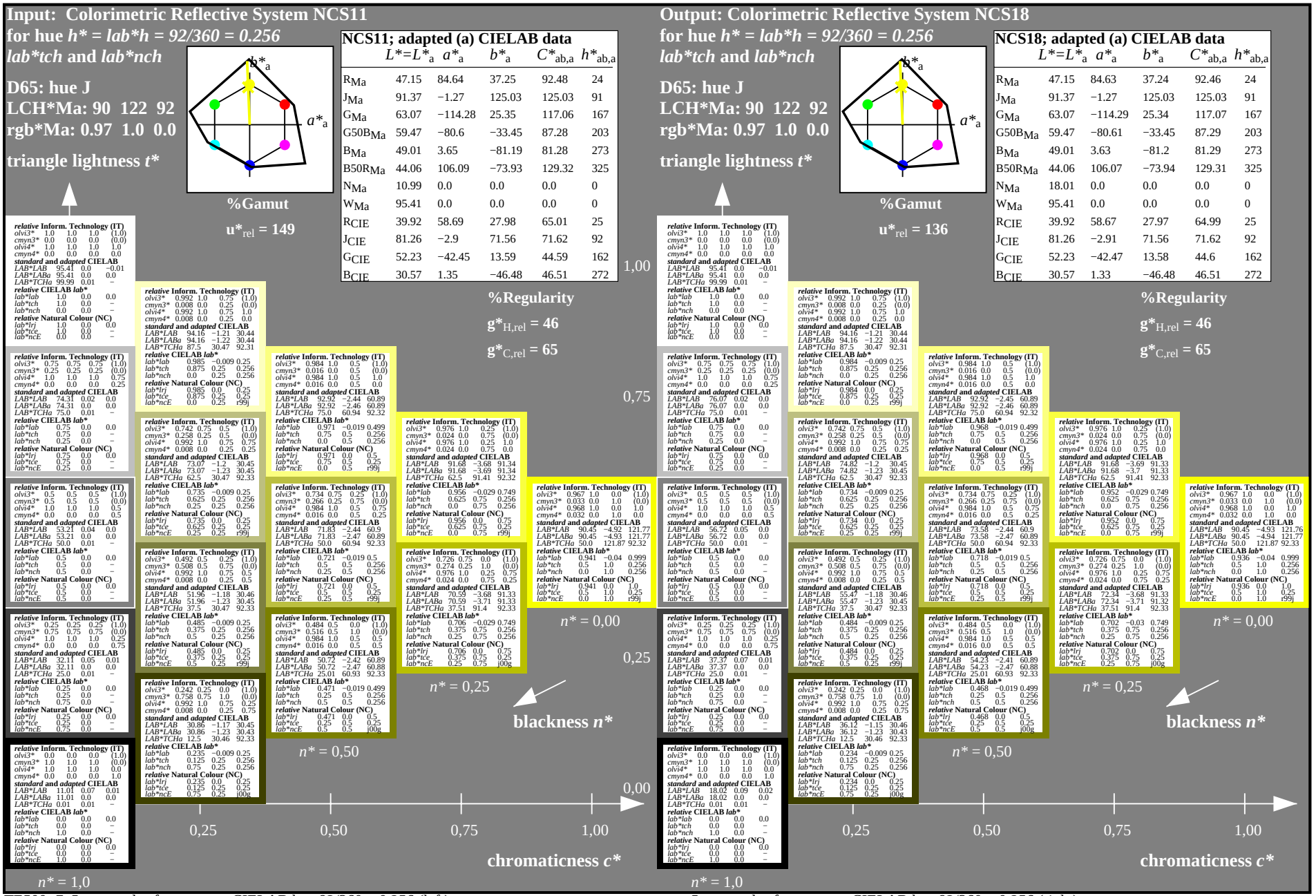
**g*$_{H,rel}$ = 47**

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



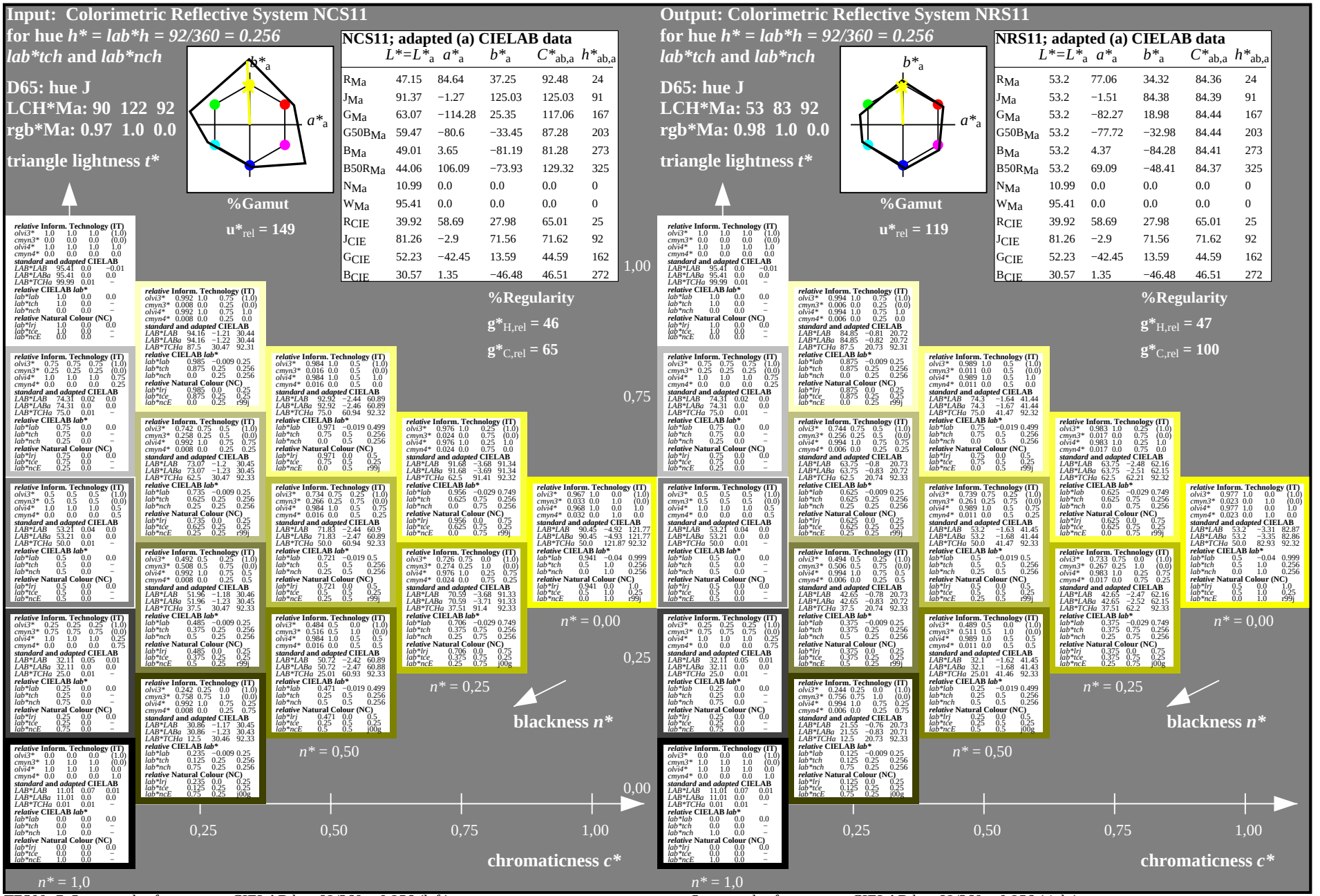

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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



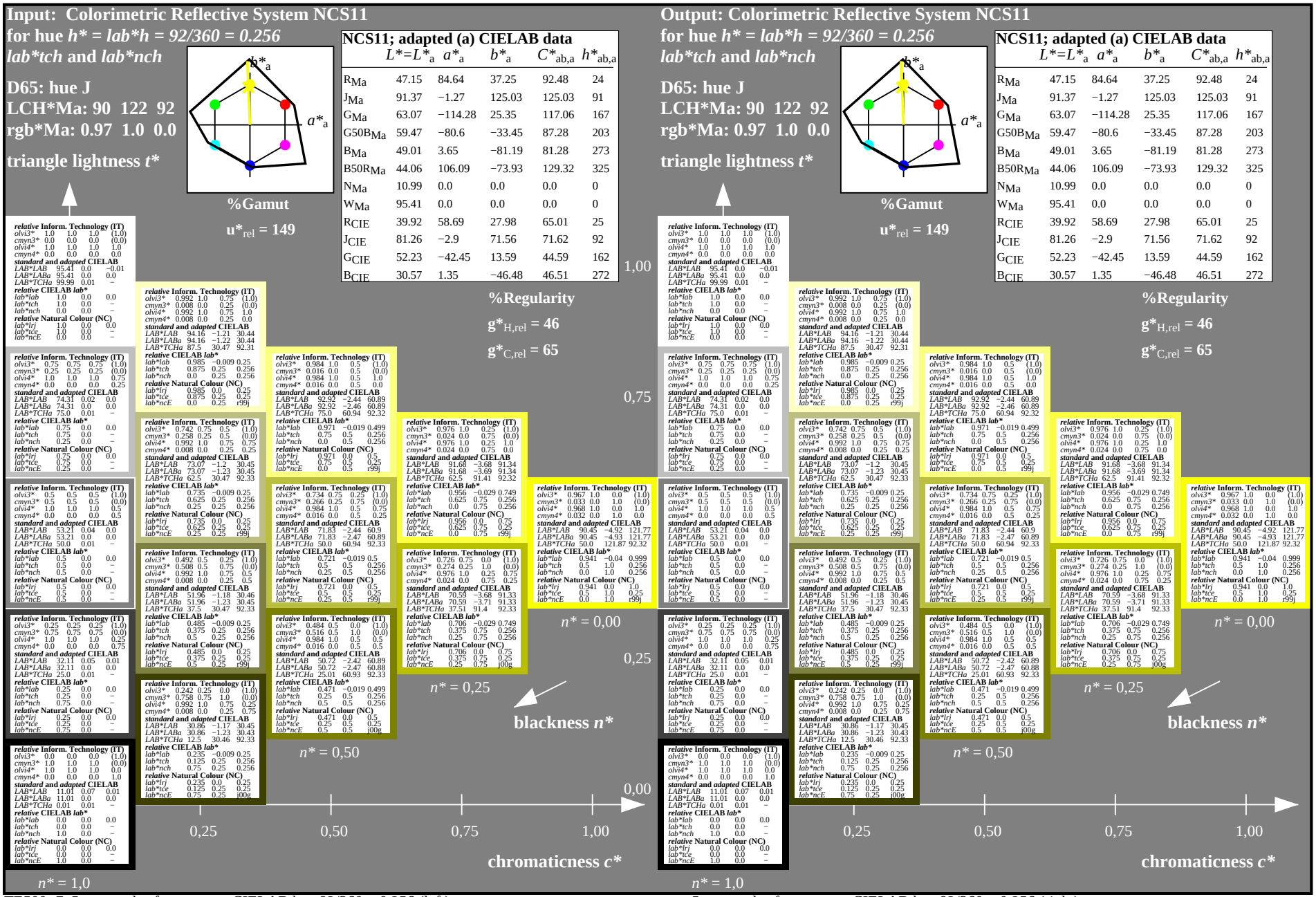

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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



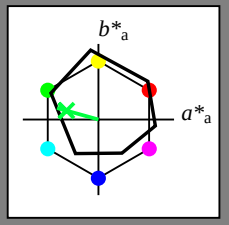

TE500−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

**Input: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.25**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

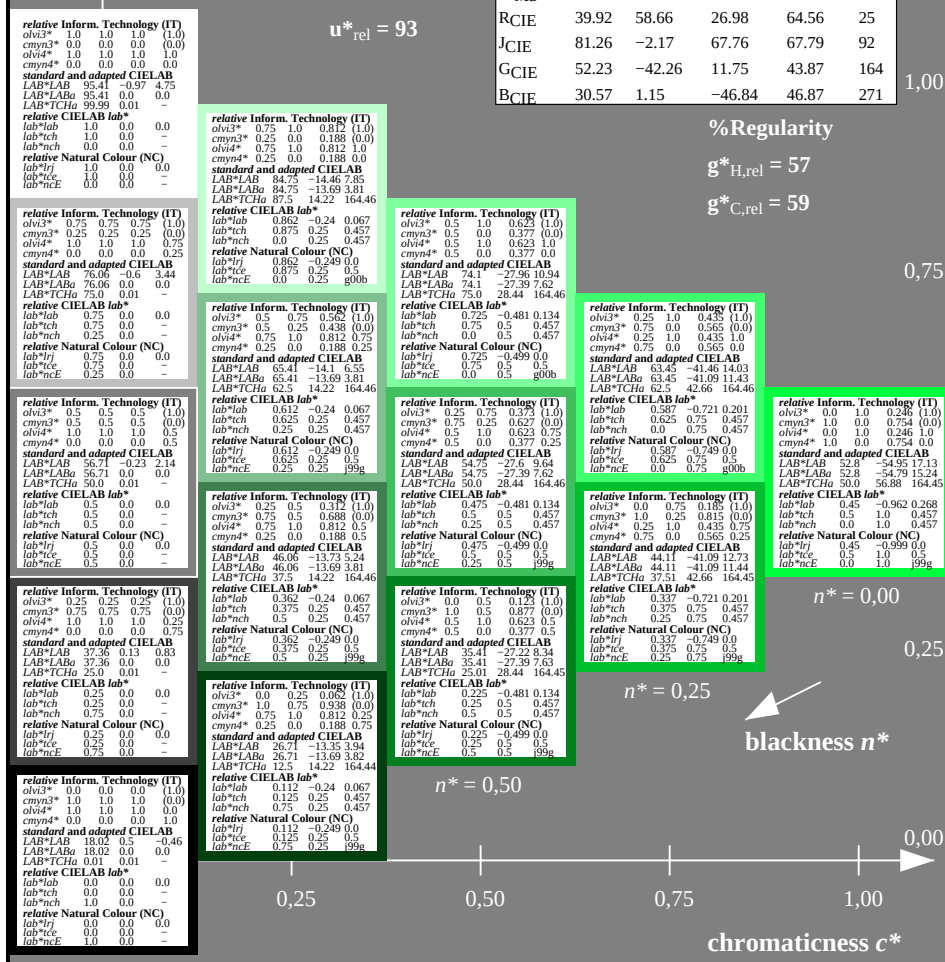
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

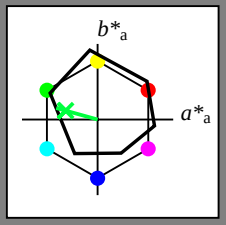
**g*$_{C,rel}$ = 59**




**Output: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.25**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

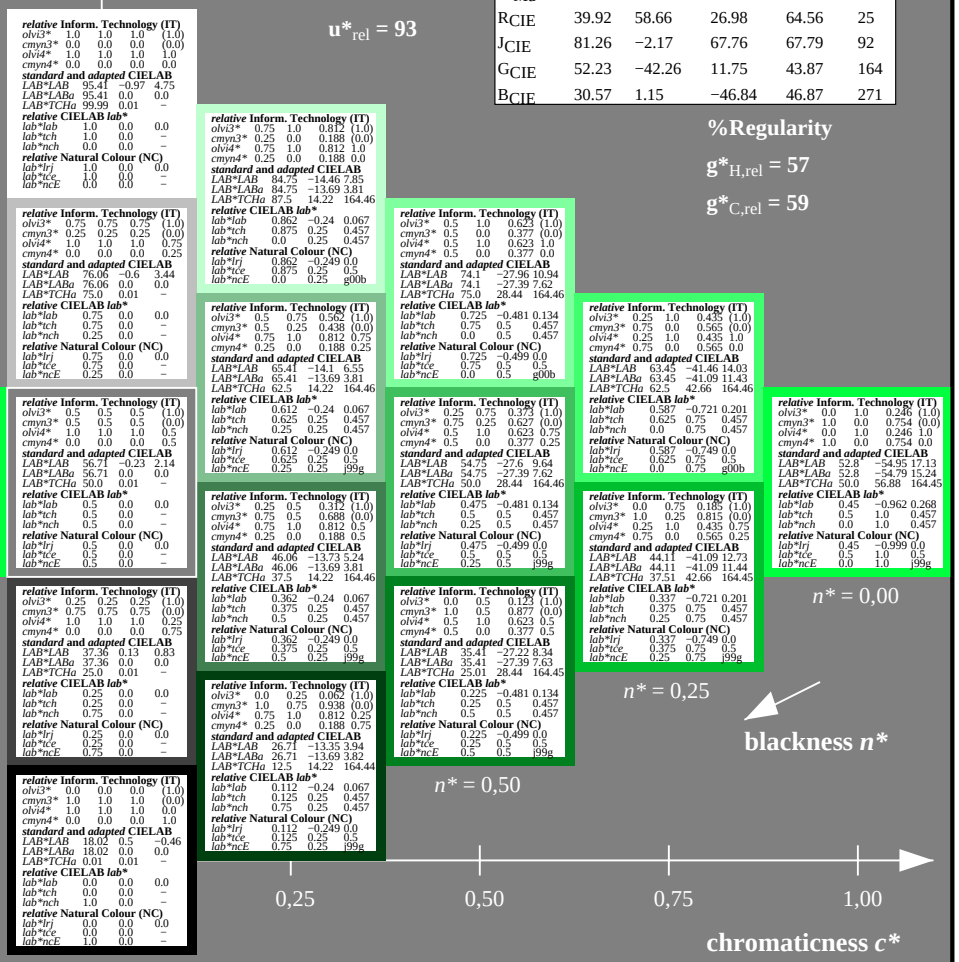
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

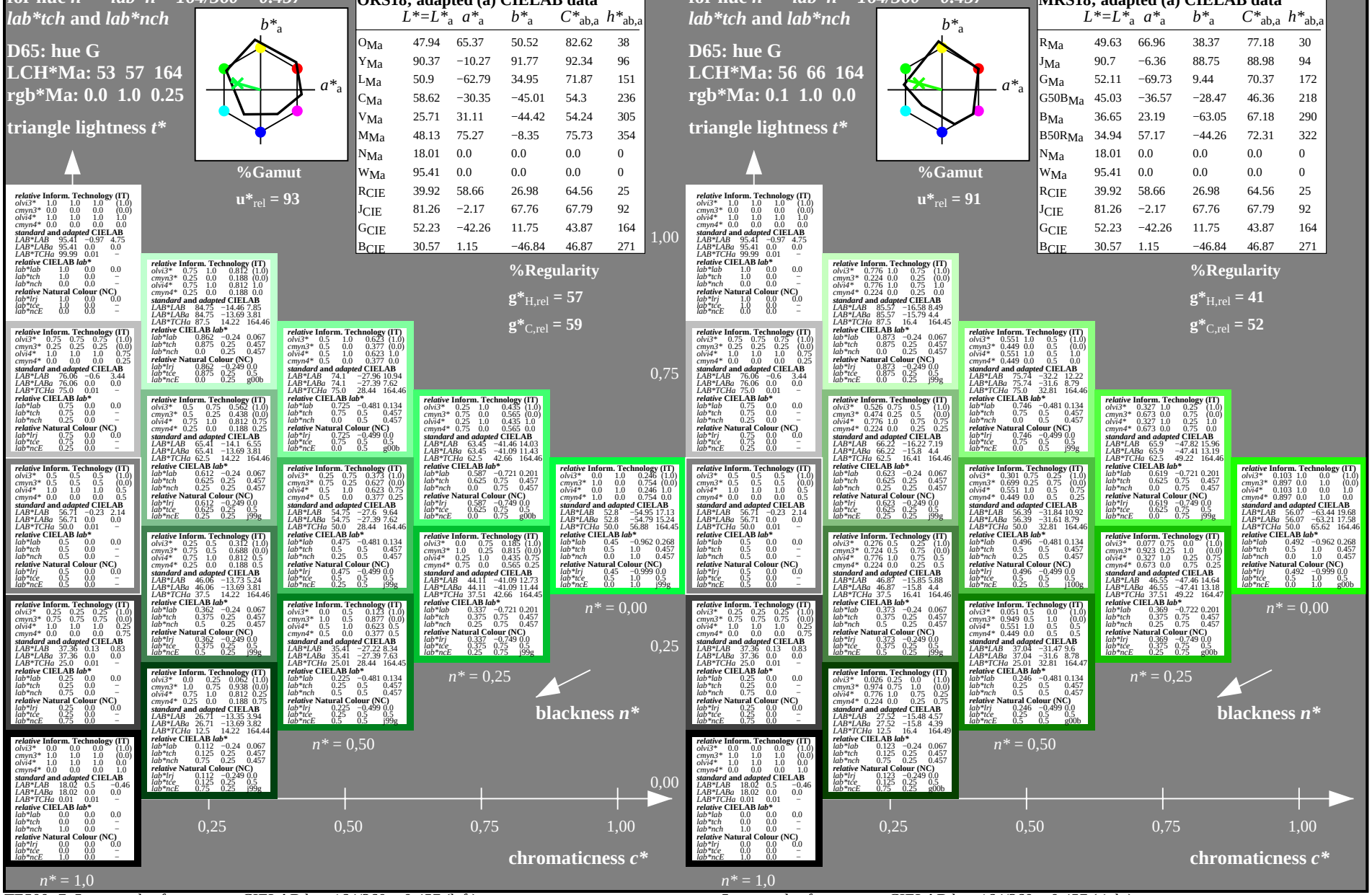
**g*$_{H,rel}$ = 57**

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



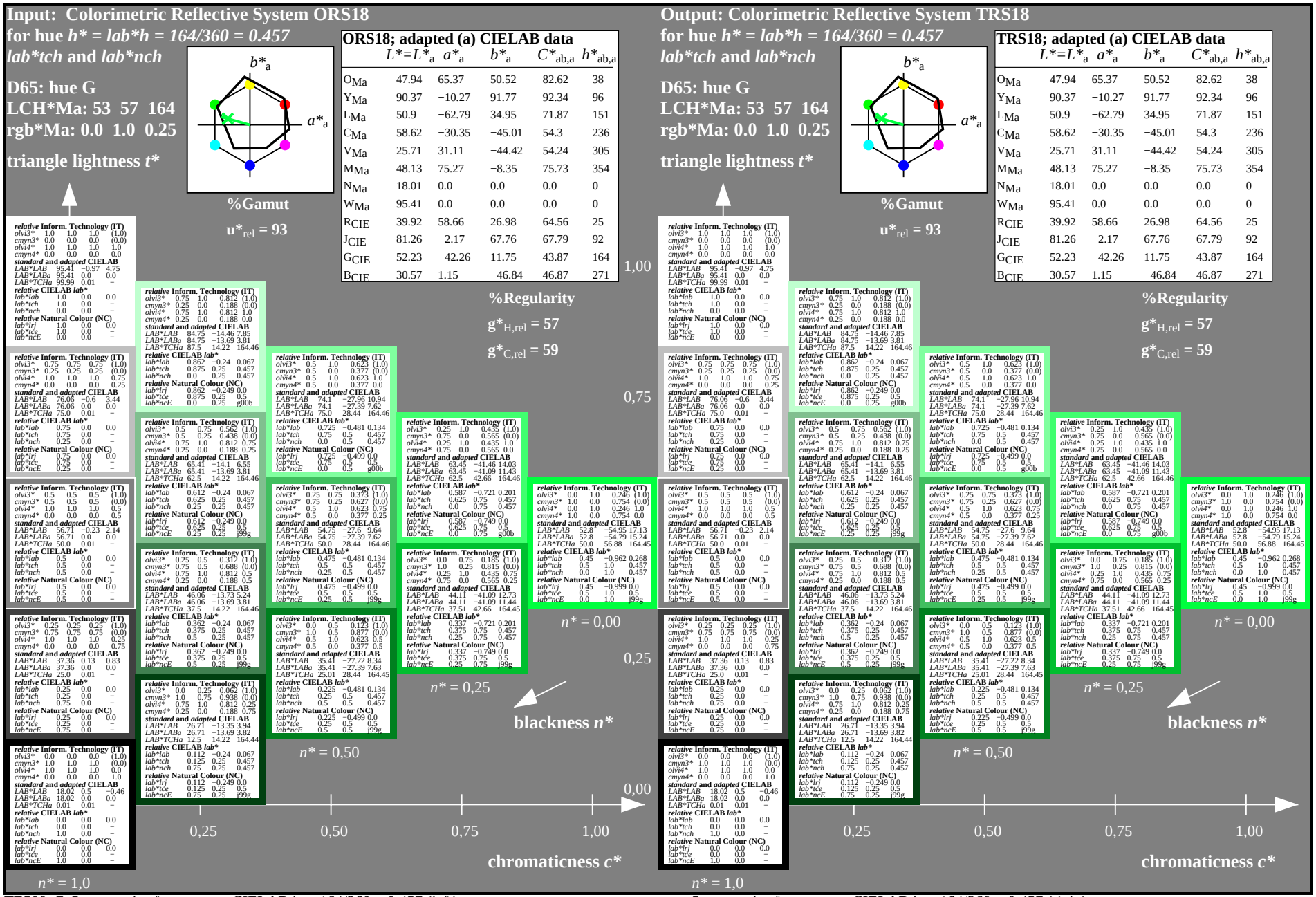

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



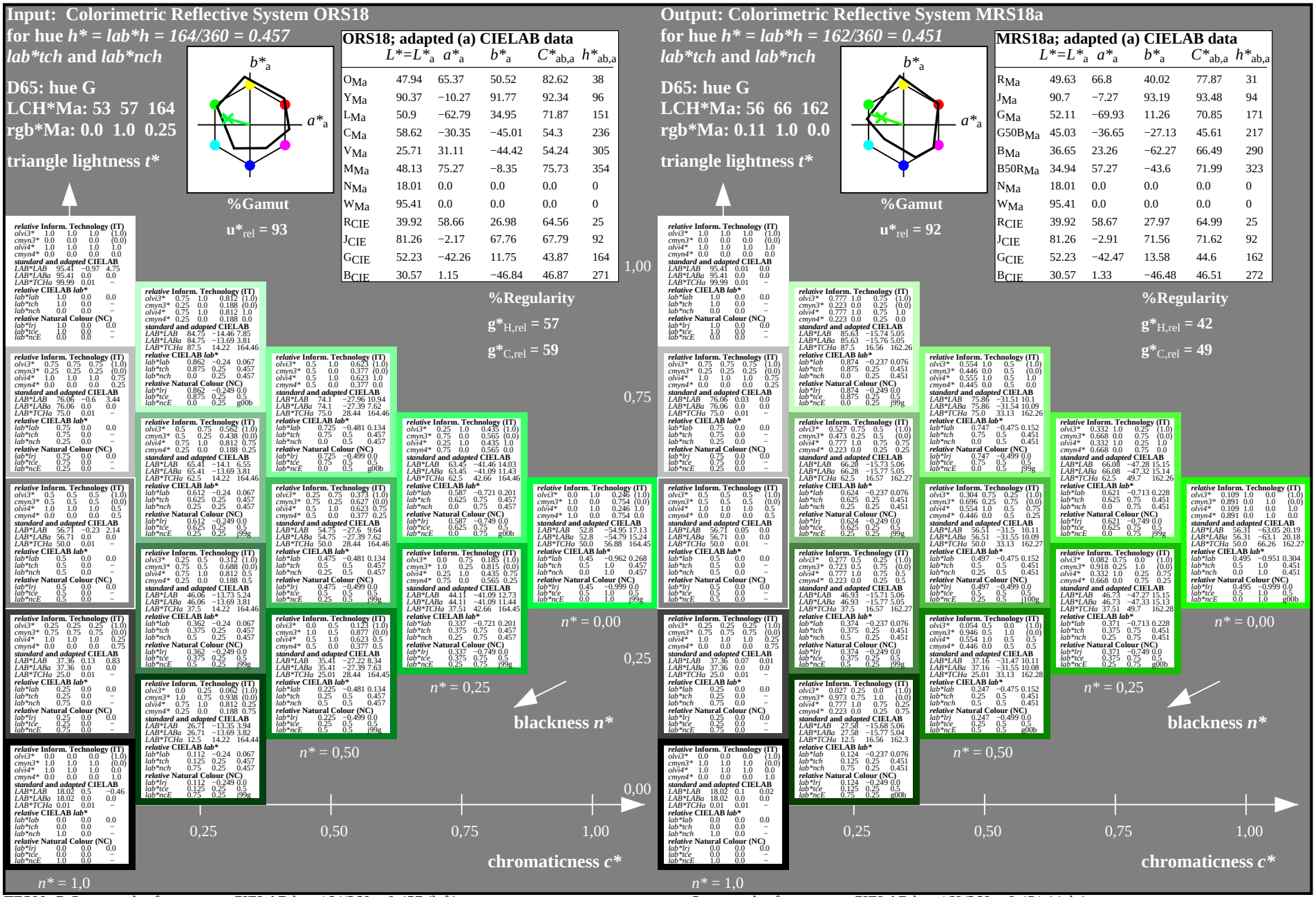

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



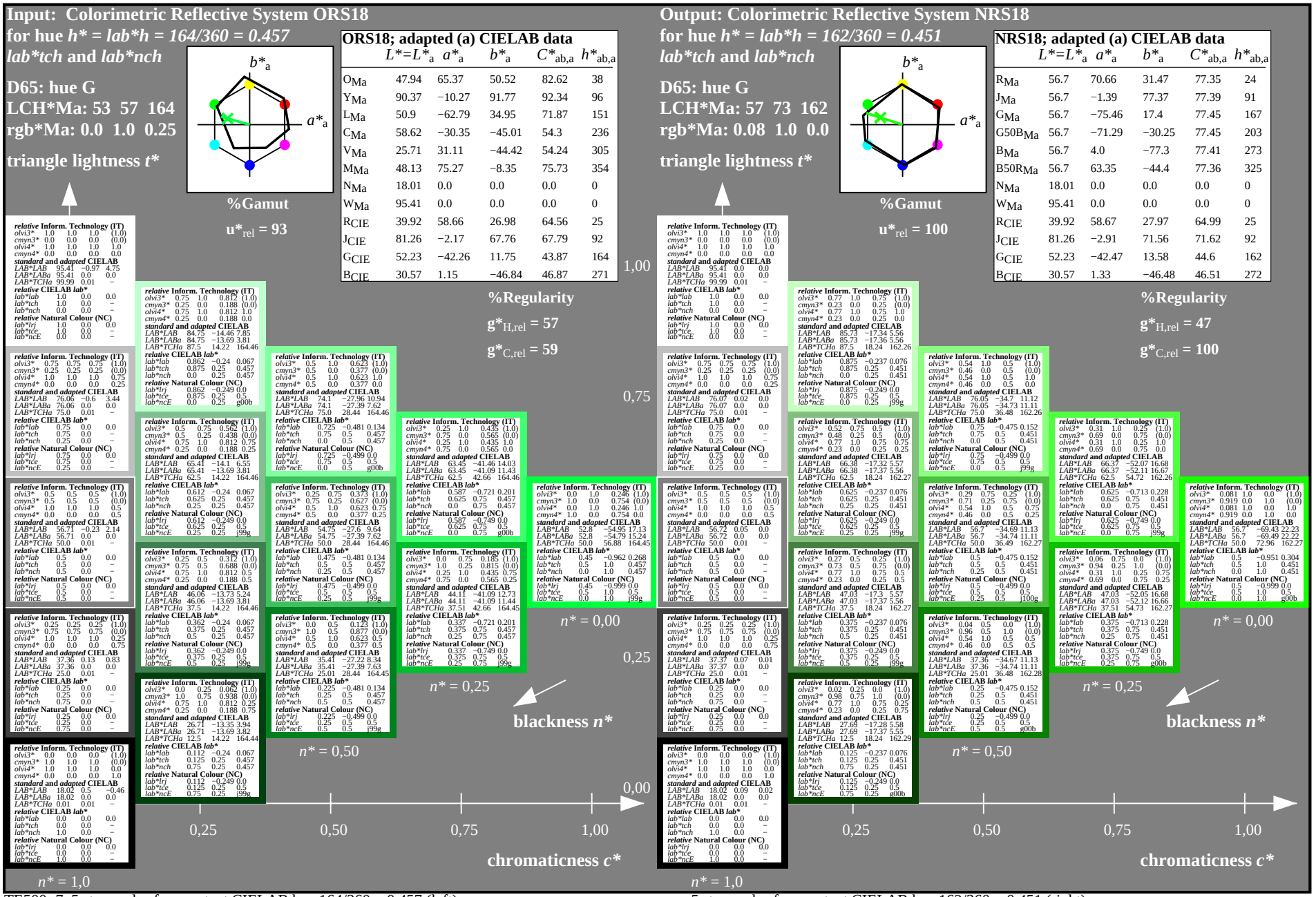

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)




TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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




**ORS18; adapted (a) CIELAB data**

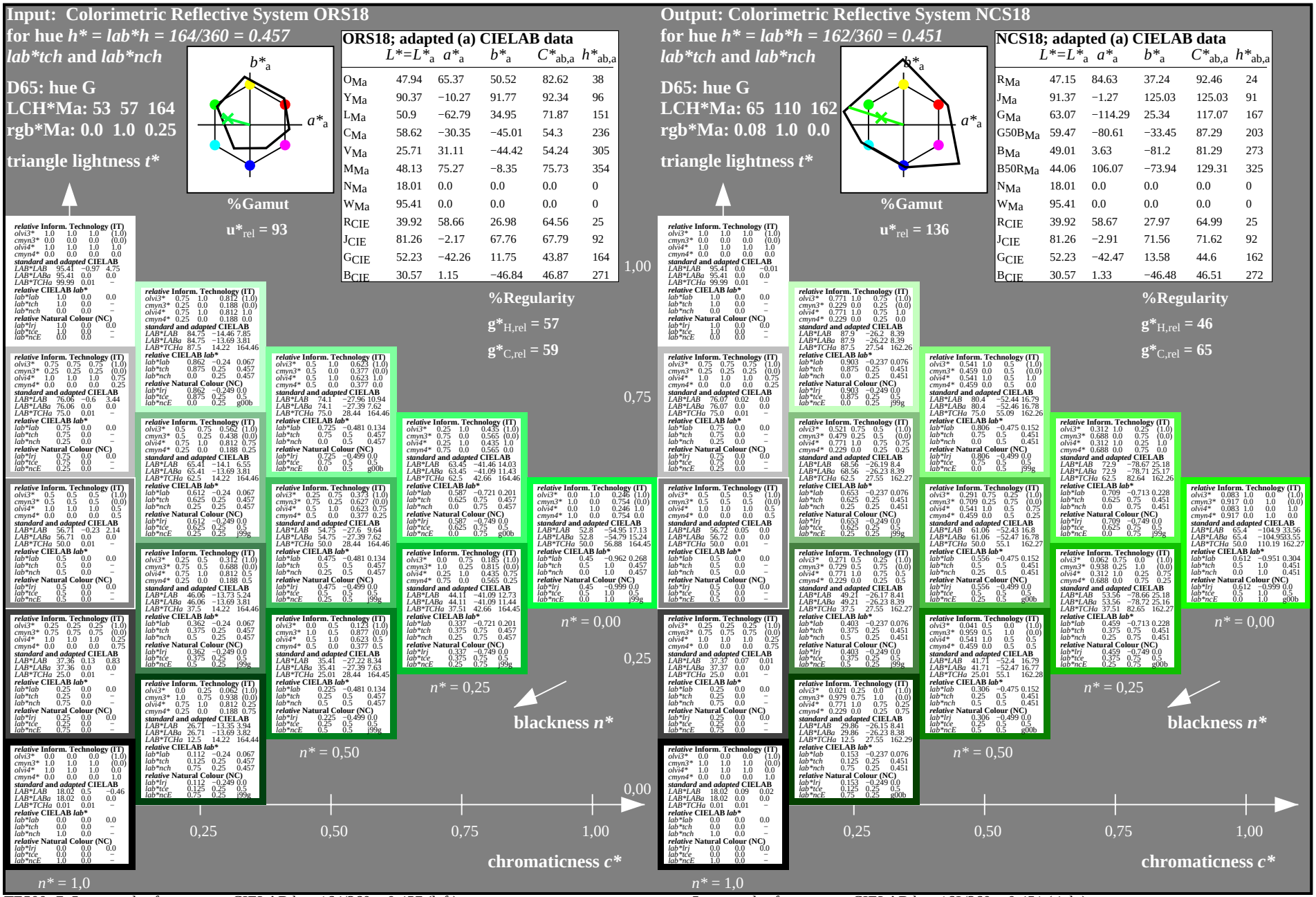
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

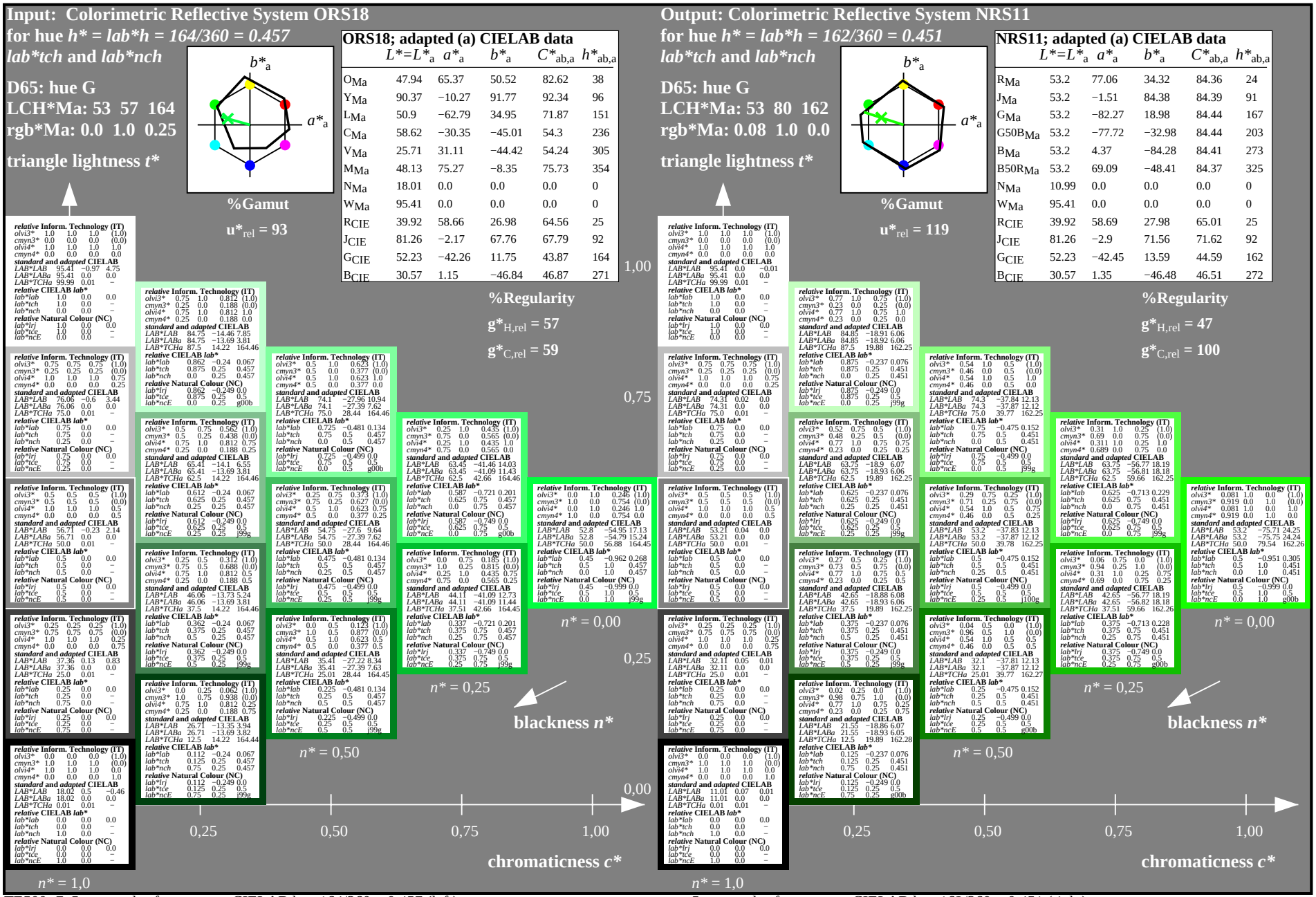
TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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



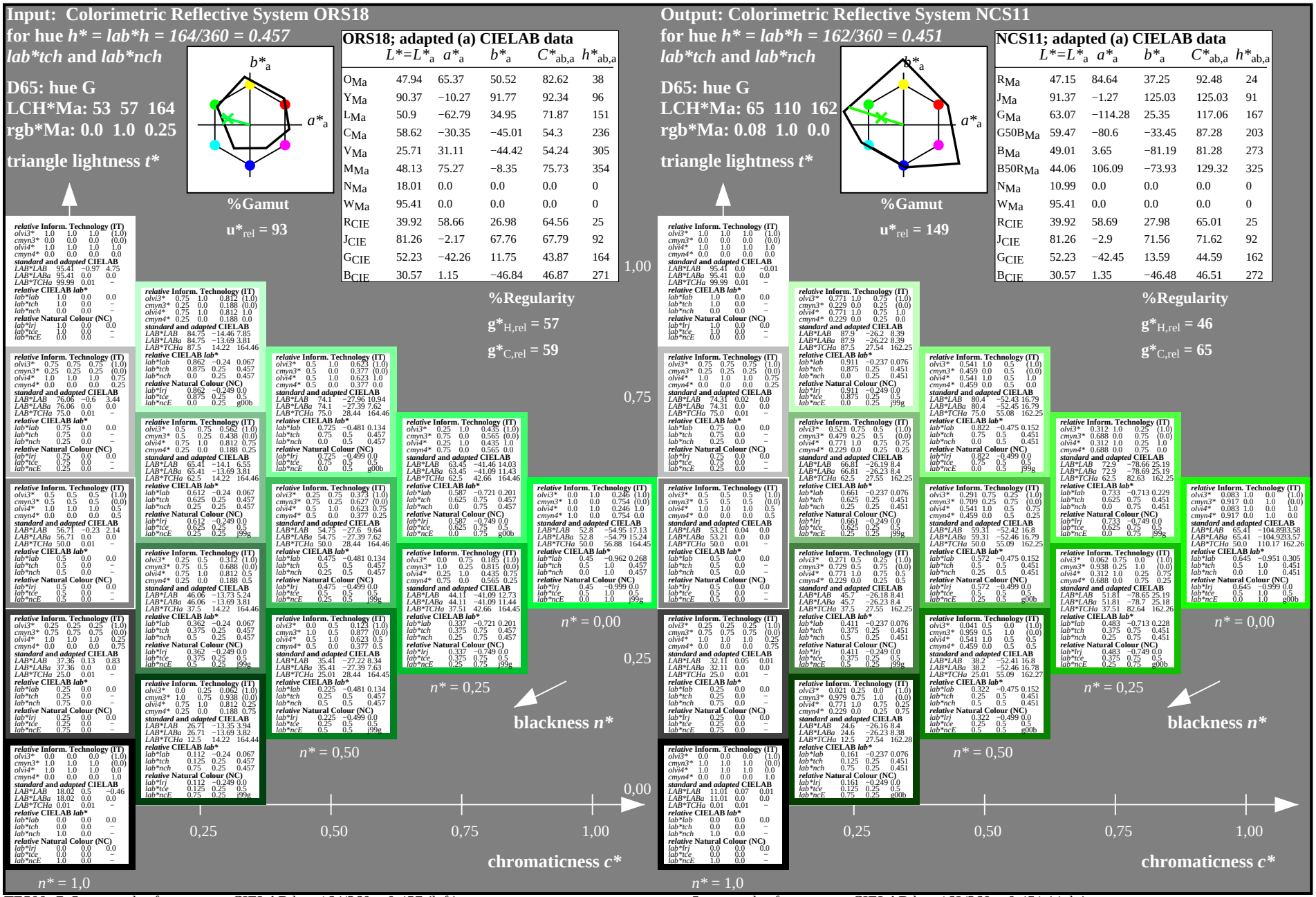

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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




**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

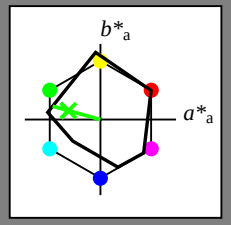
TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 164/360 = 0.457**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 56 66 164**
**rgb*Ma: 0.1 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

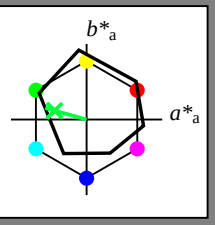
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

**Output: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.25**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

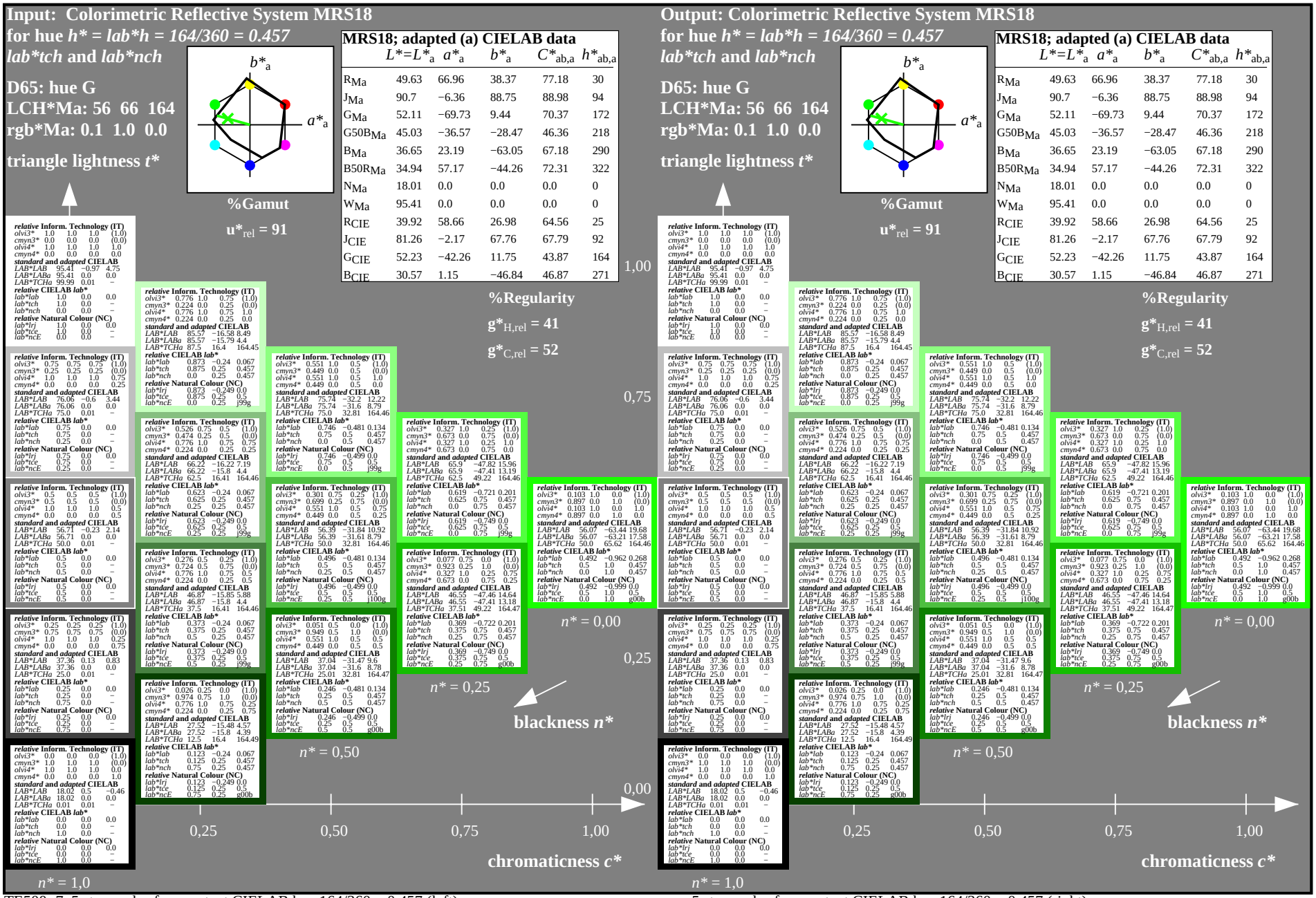
**g*$_{H,rel}$ = 57**

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

1,00
0,75
0,25
0,00
0,25
0,50
0,75
1,00
*n** = 0,00
*n** = 0,25
*n** = 0,50
*n** = 1,0
**blackness *n***
**chromaticness *c***

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



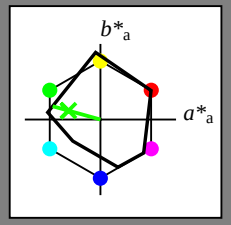

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 164/360 = 0.457**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 56 66 164**
**rgb*Ma: 0.1 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

**blackness *n****

**chromaticness *c****

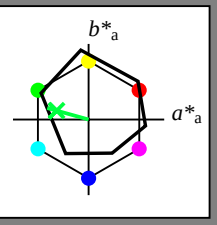
*n** = 0,00 · *n** = 0,25 · *n** = 0,50 · *n** = 0,75 · *n** = 1,0

0,00 · 0,25 · 0,50 · 0,75 · 1,00

**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 164/360 = 0.457**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 57 164**
**rgb*Ma: 0.0 1.0 0.25**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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

**blackness *n****

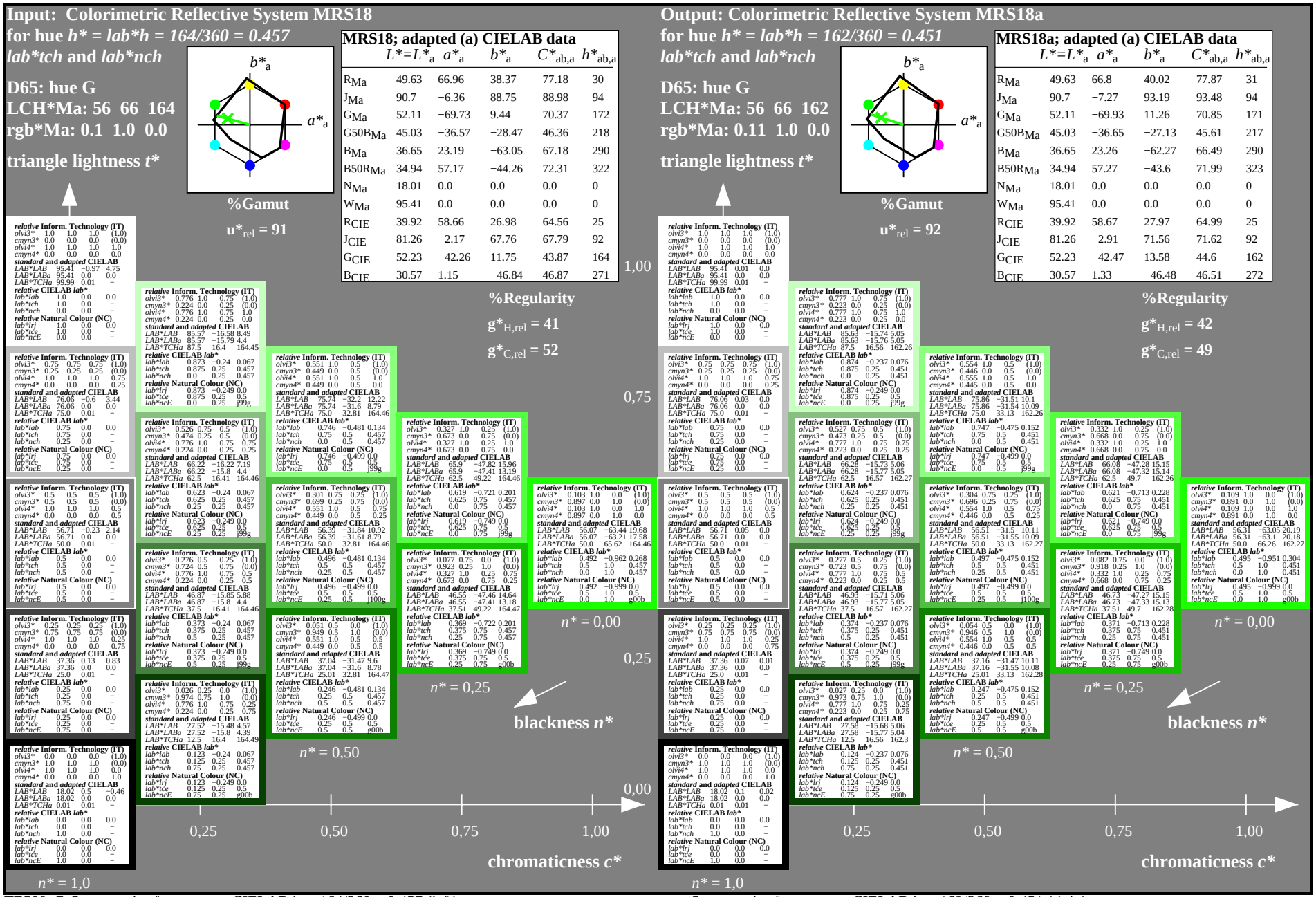
**chromaticness *c****

*n** = 0,00 · *n** = 0,25 · *n** = 0,50 · *n** = 0,75 · *n** = 1,0

0,00 · 0,25 · 0,50 · 0,75 · 1,00

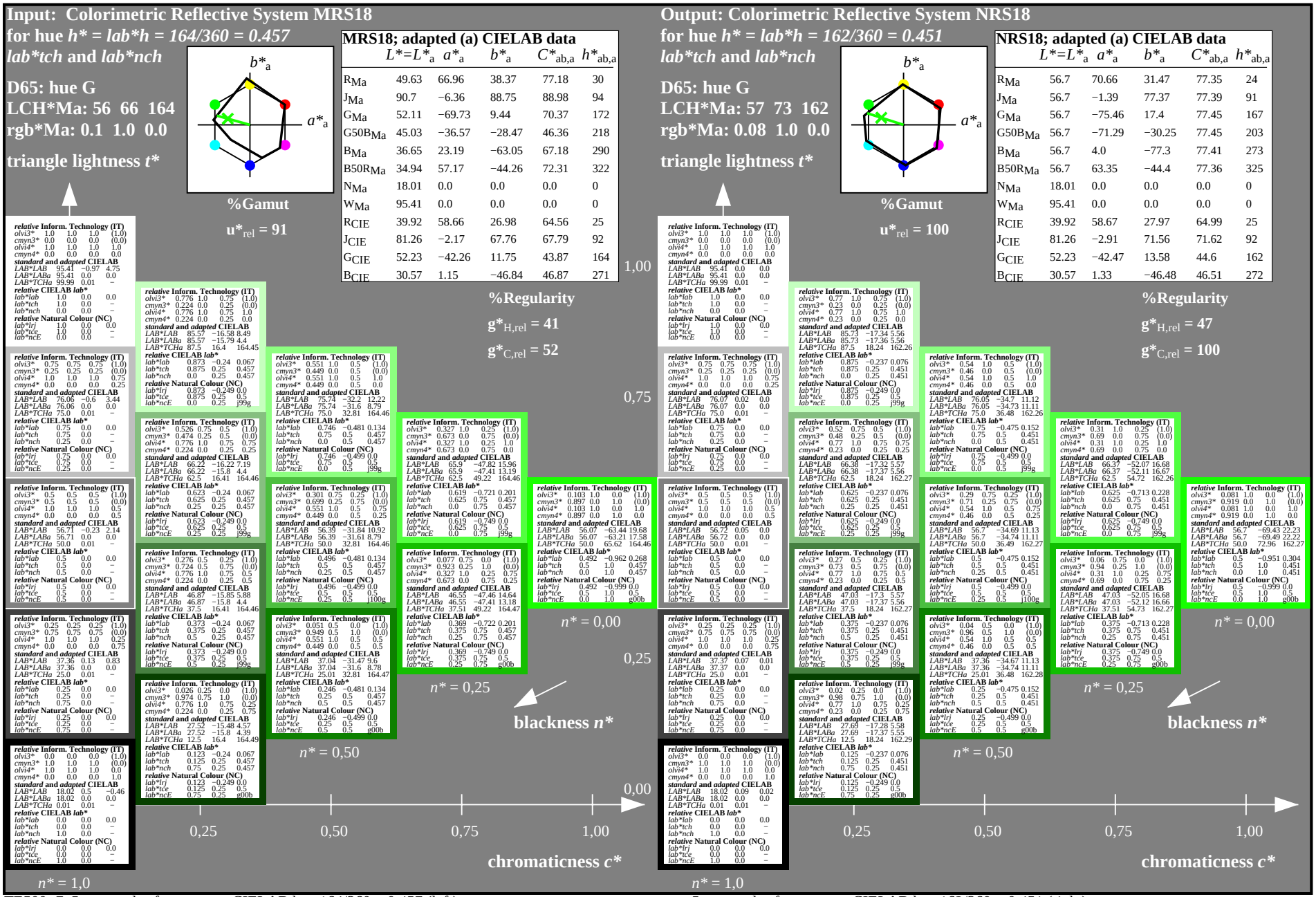
TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)




TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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



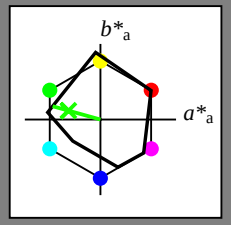

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 164/360 = 0.457**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 56 66 164**
**rgb*Ma: 0.1 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

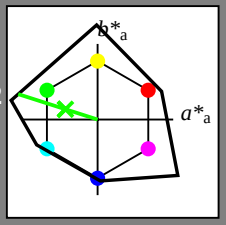
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 65 110 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

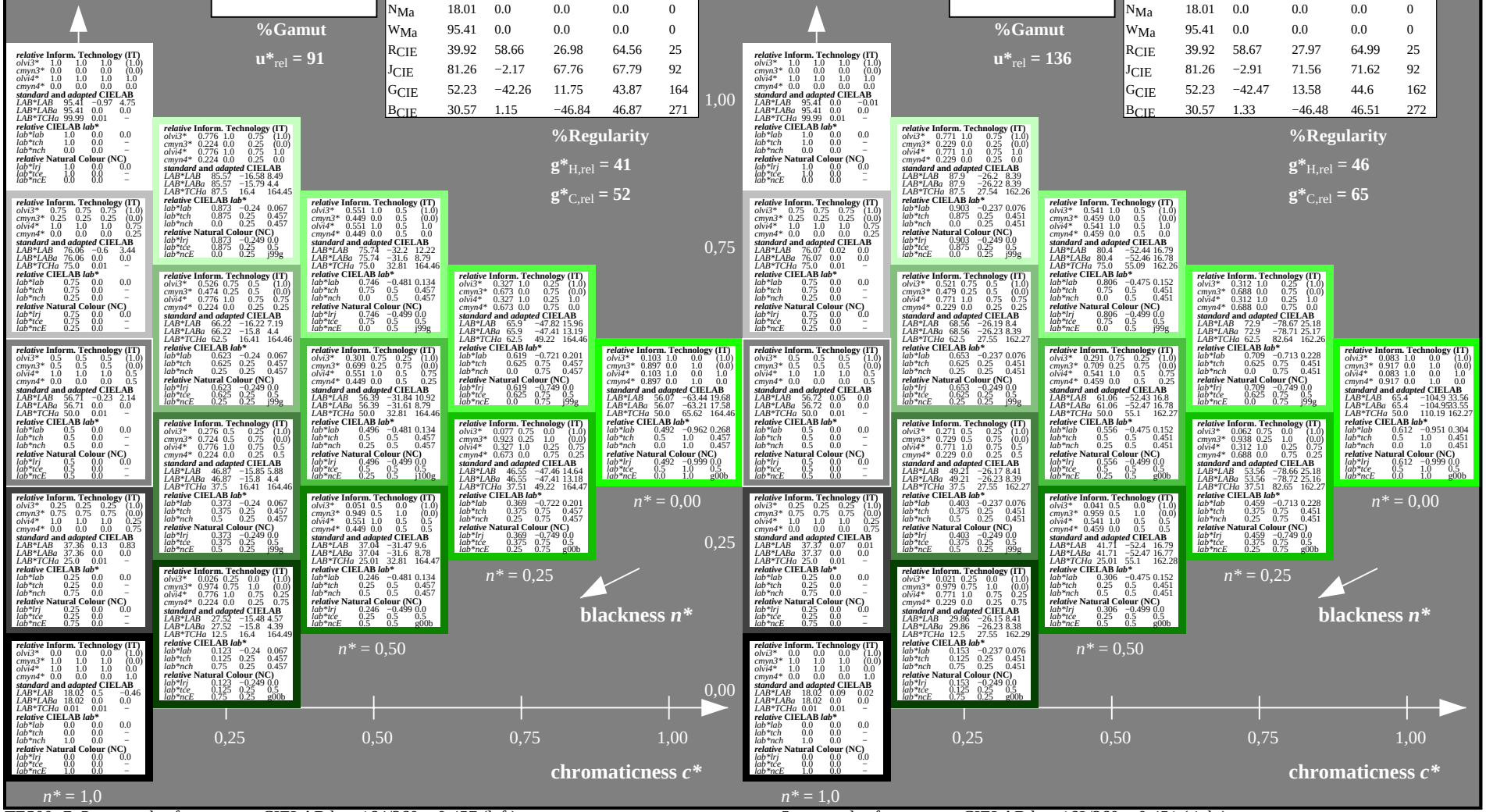
**NCS18; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

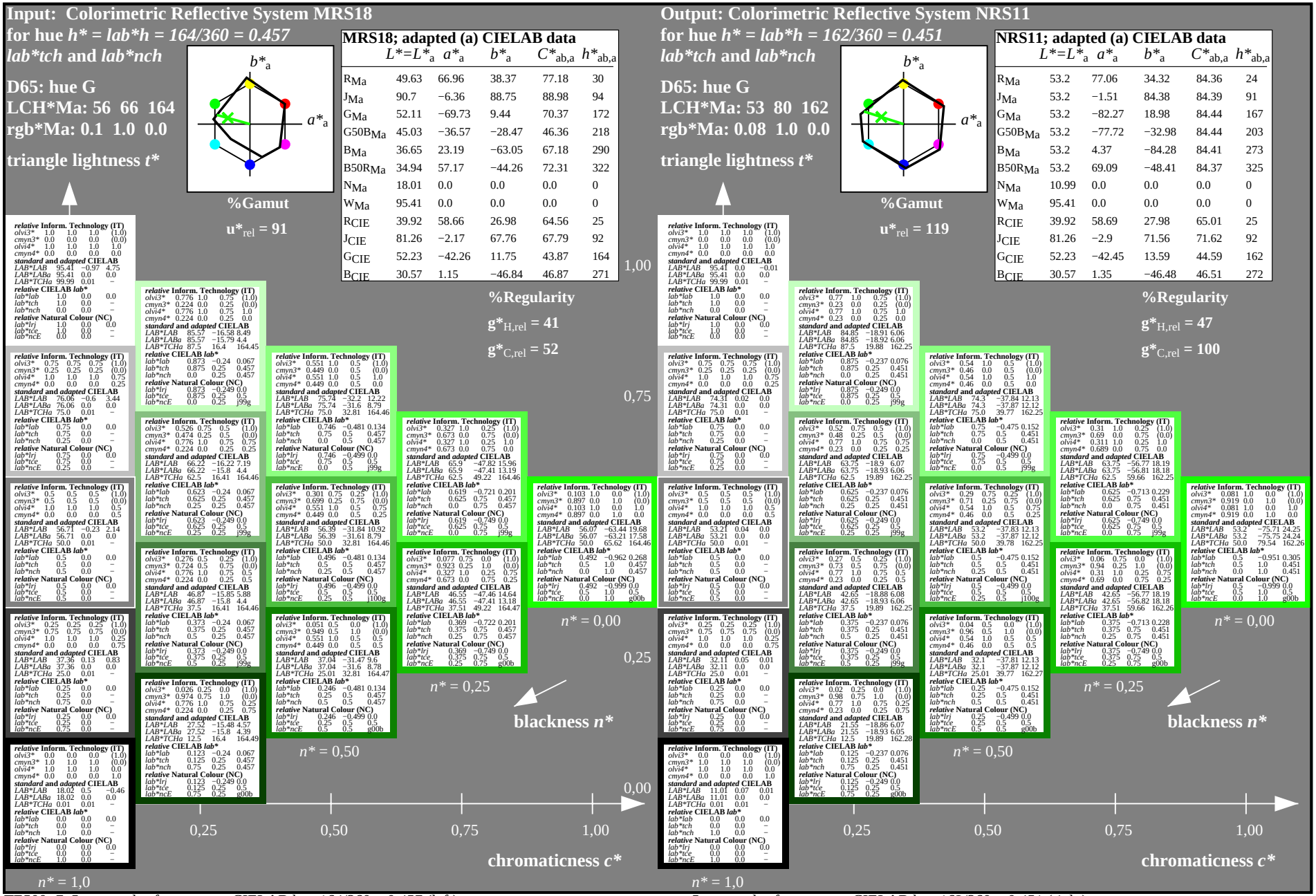
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



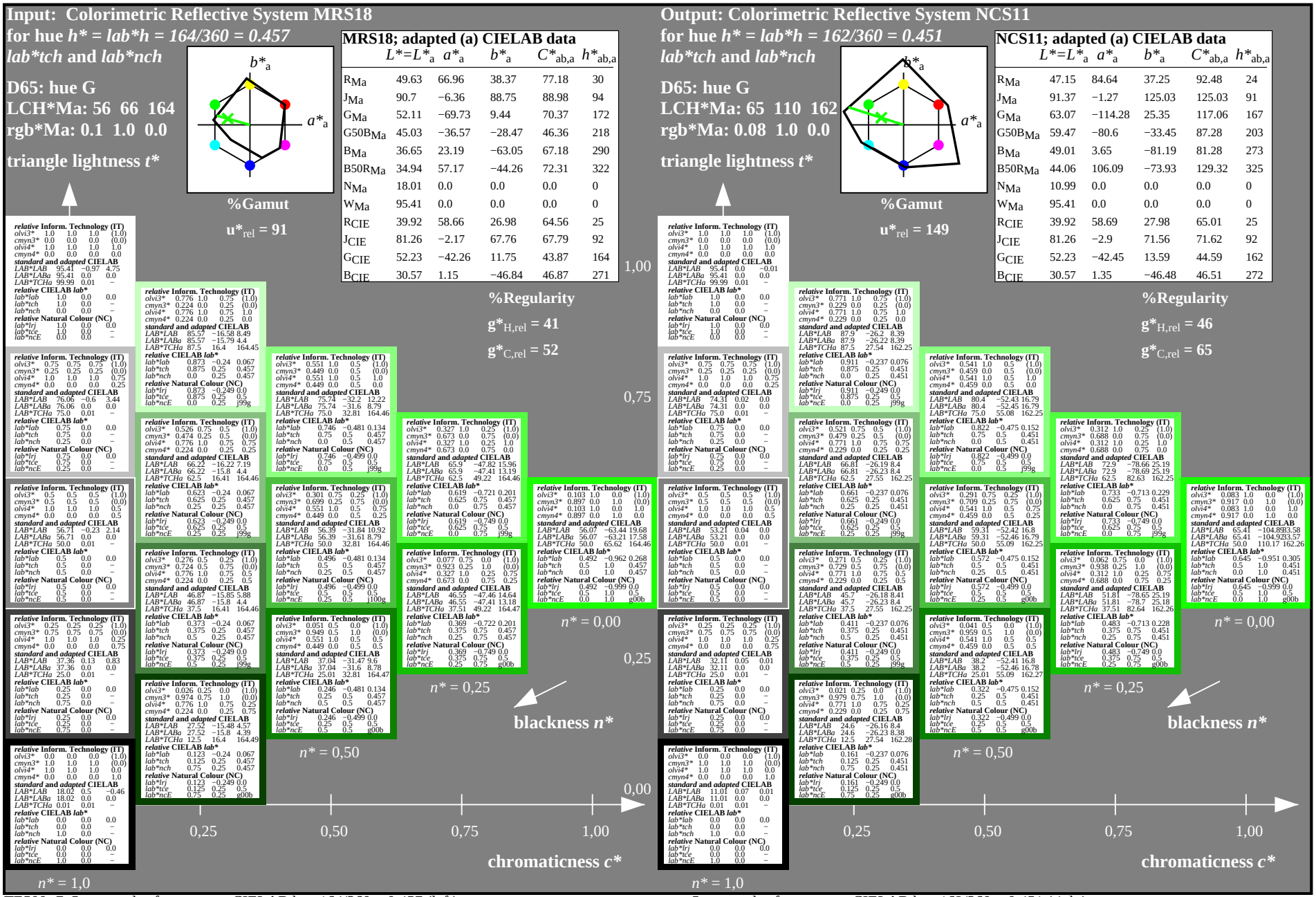

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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



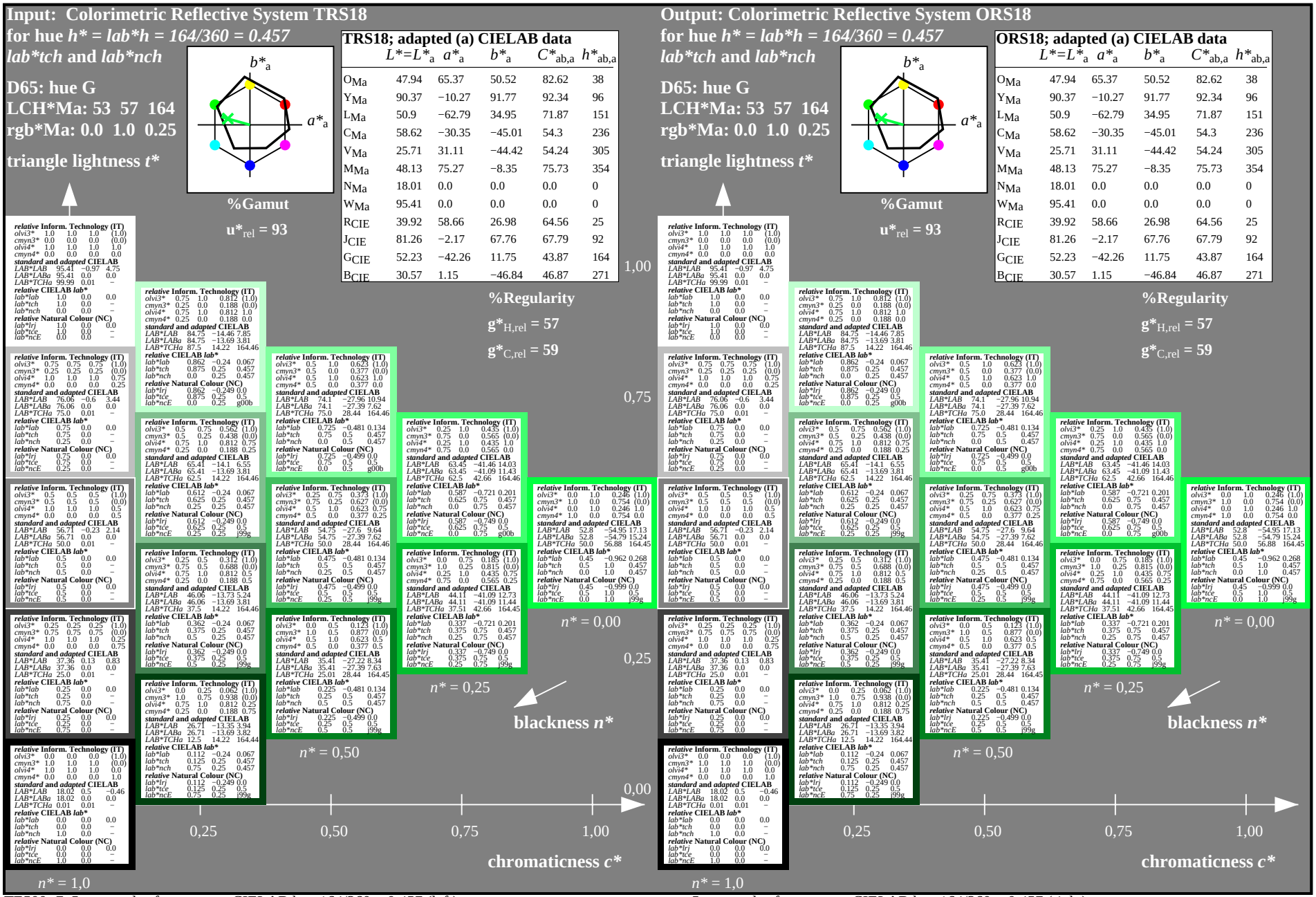

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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




**TRS18; adapted (a) CIELAB data**

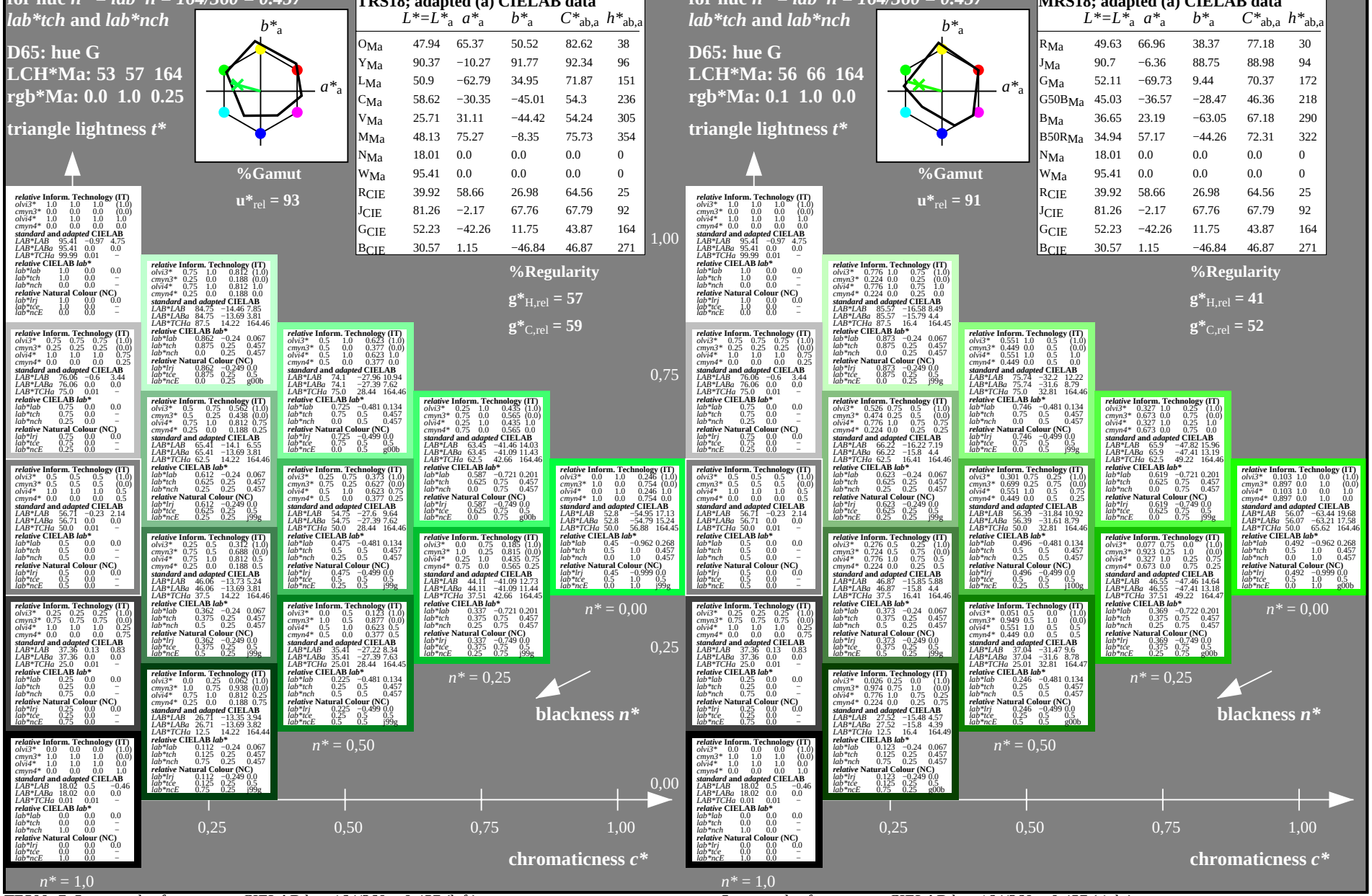
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

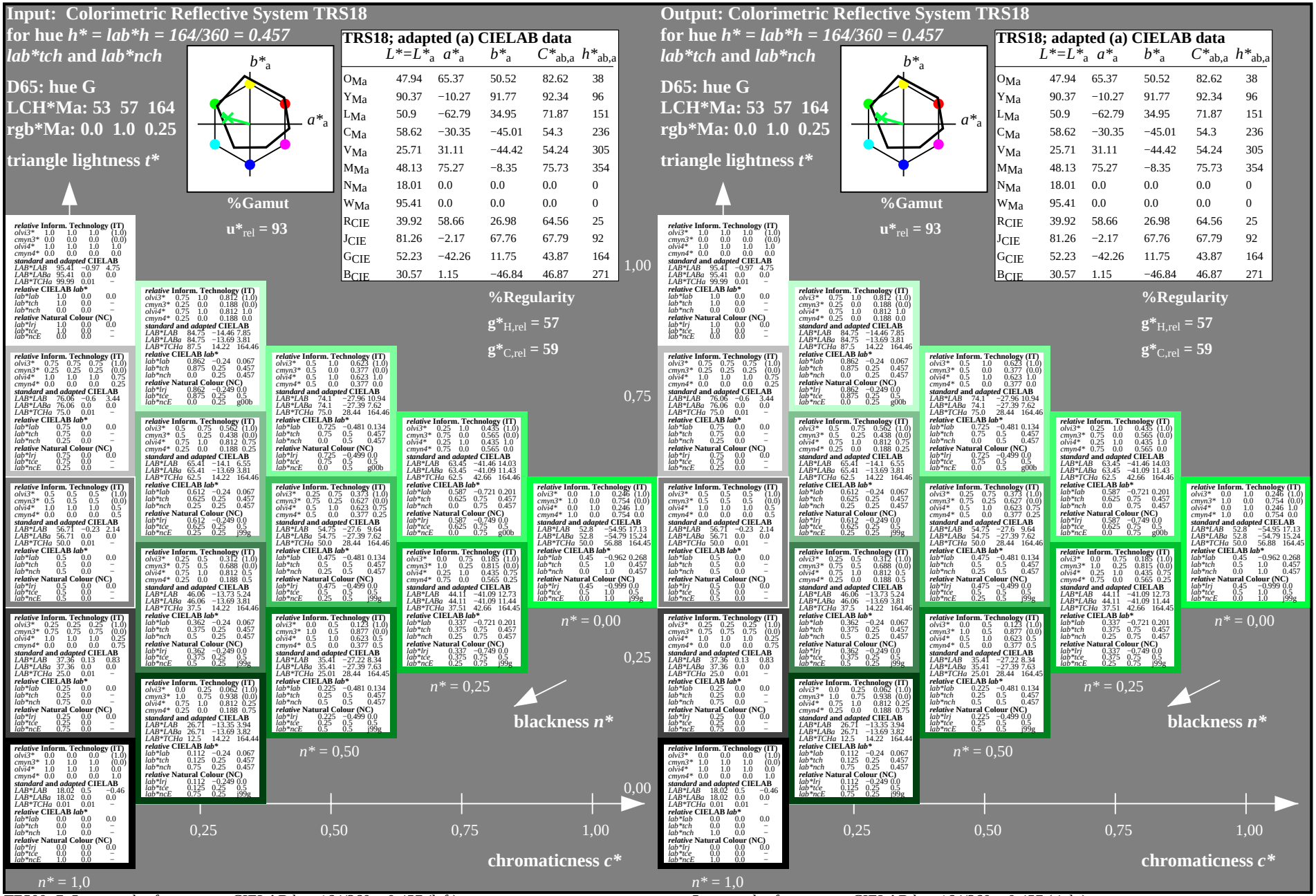
TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



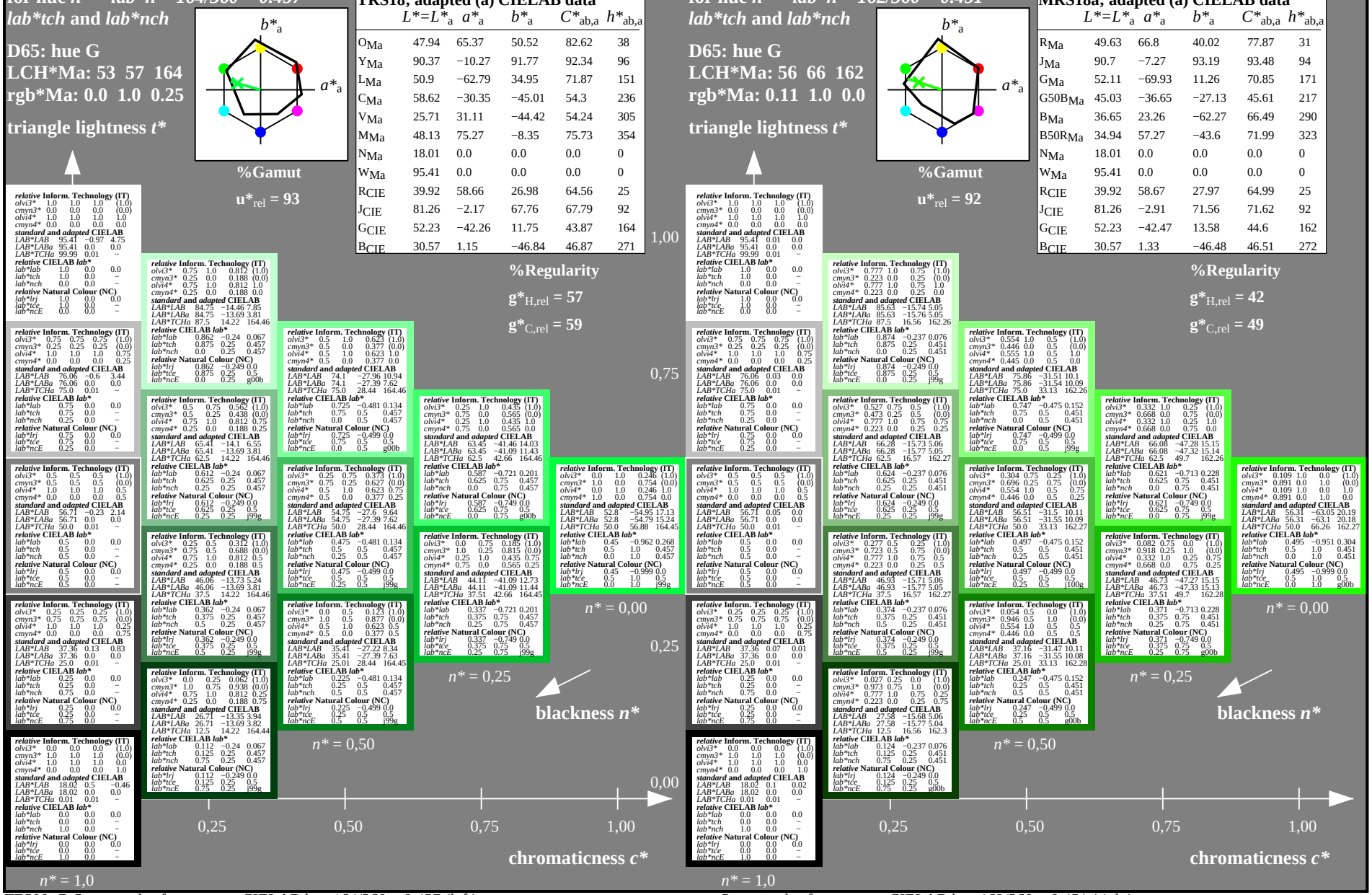

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)




TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



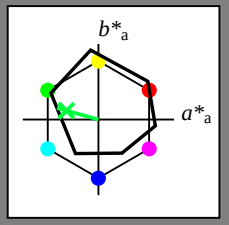

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 164/360 = 0.457**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 57 164**
**rgb*Ma: 0.0 1.0 0.25**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

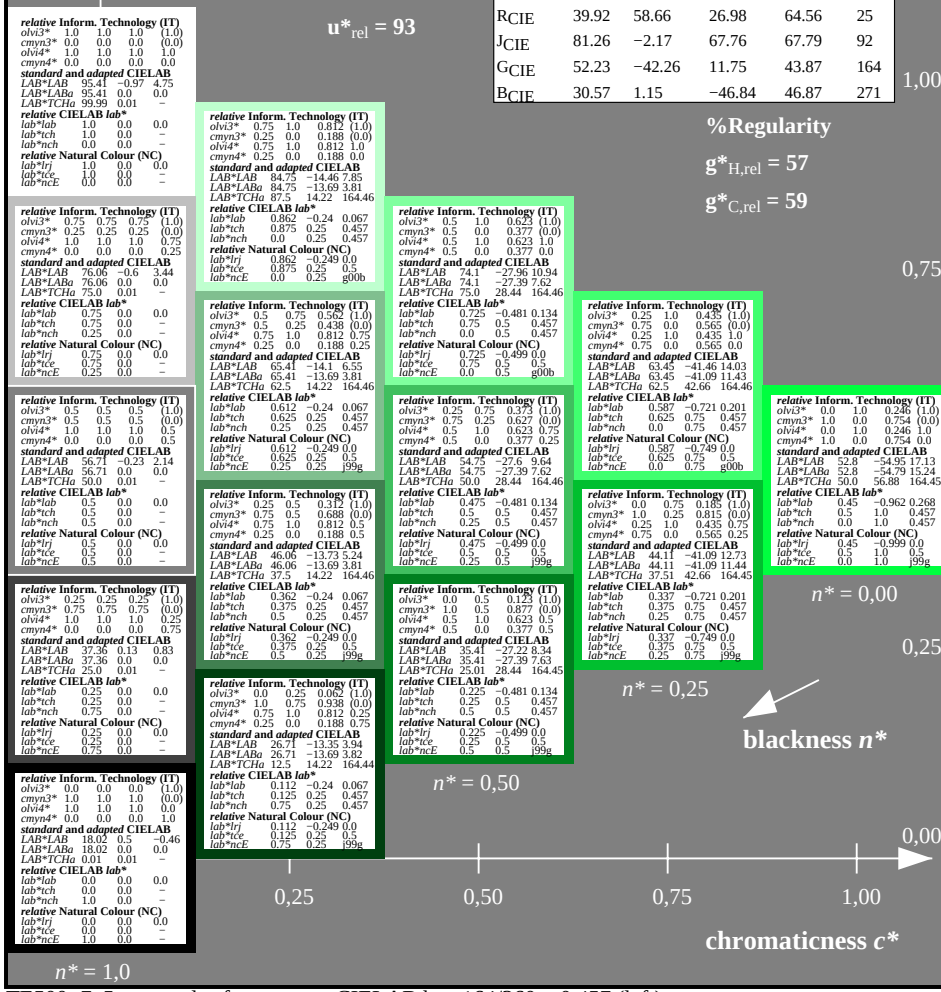
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

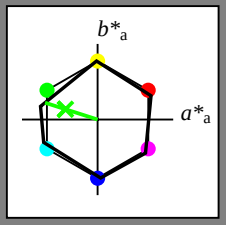
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 57 73 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

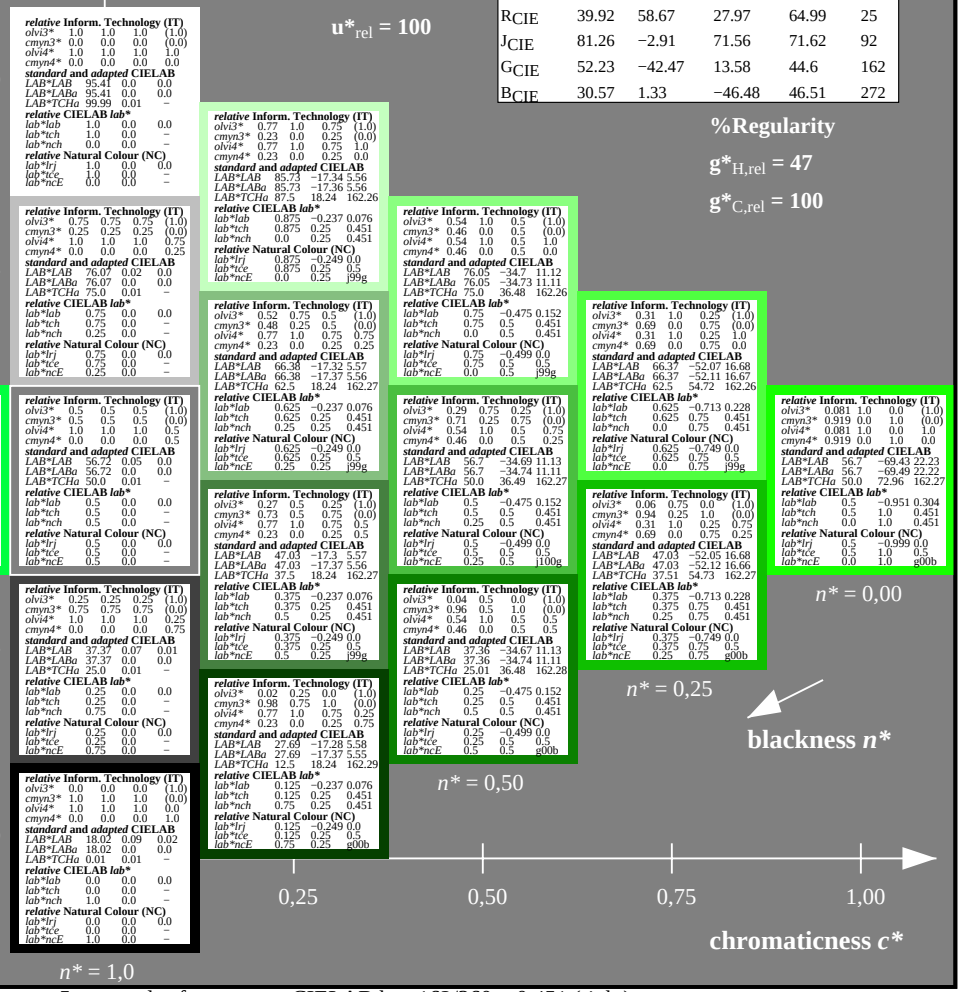
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

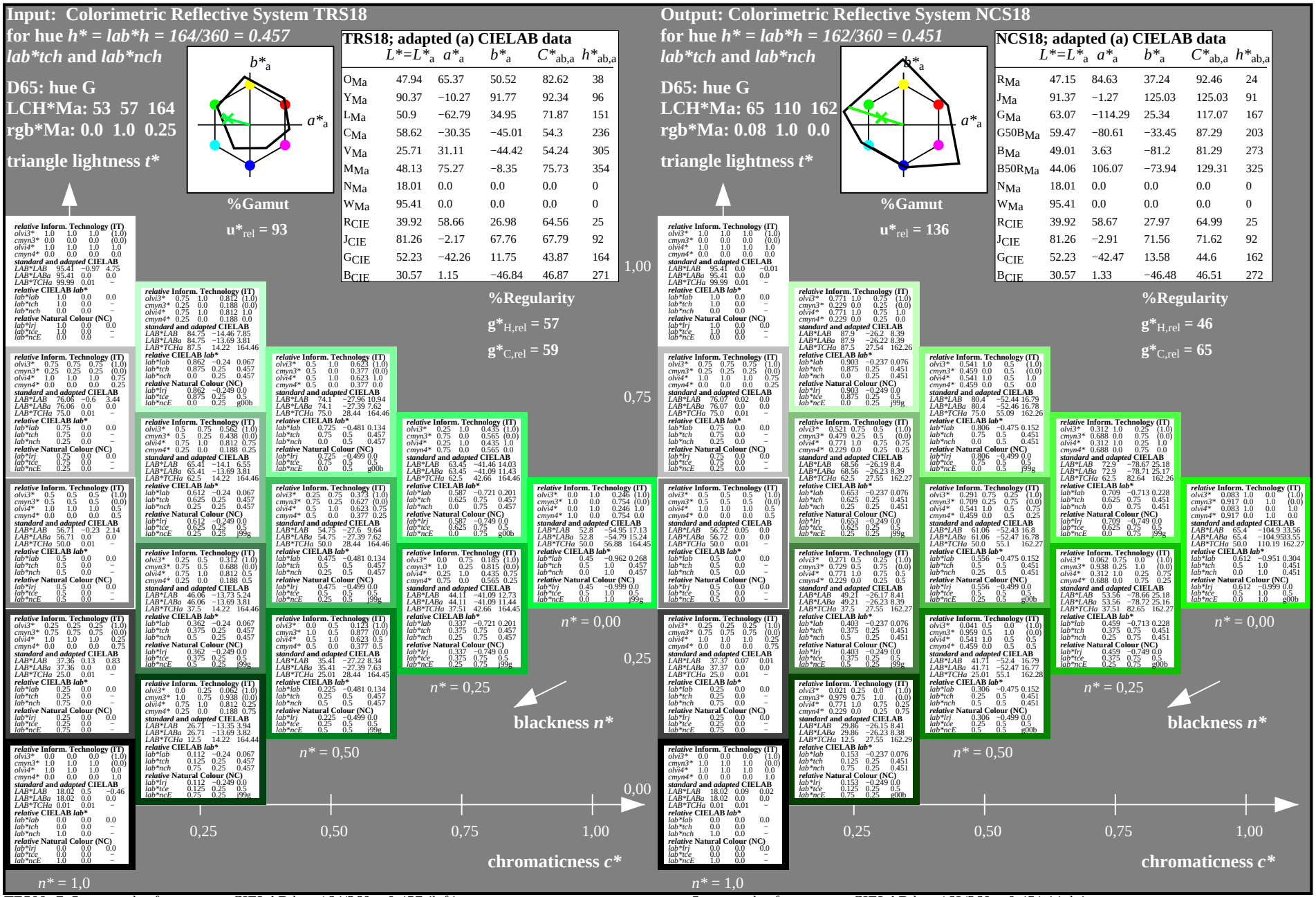
**g*$_{H,rel}$ = 47**

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



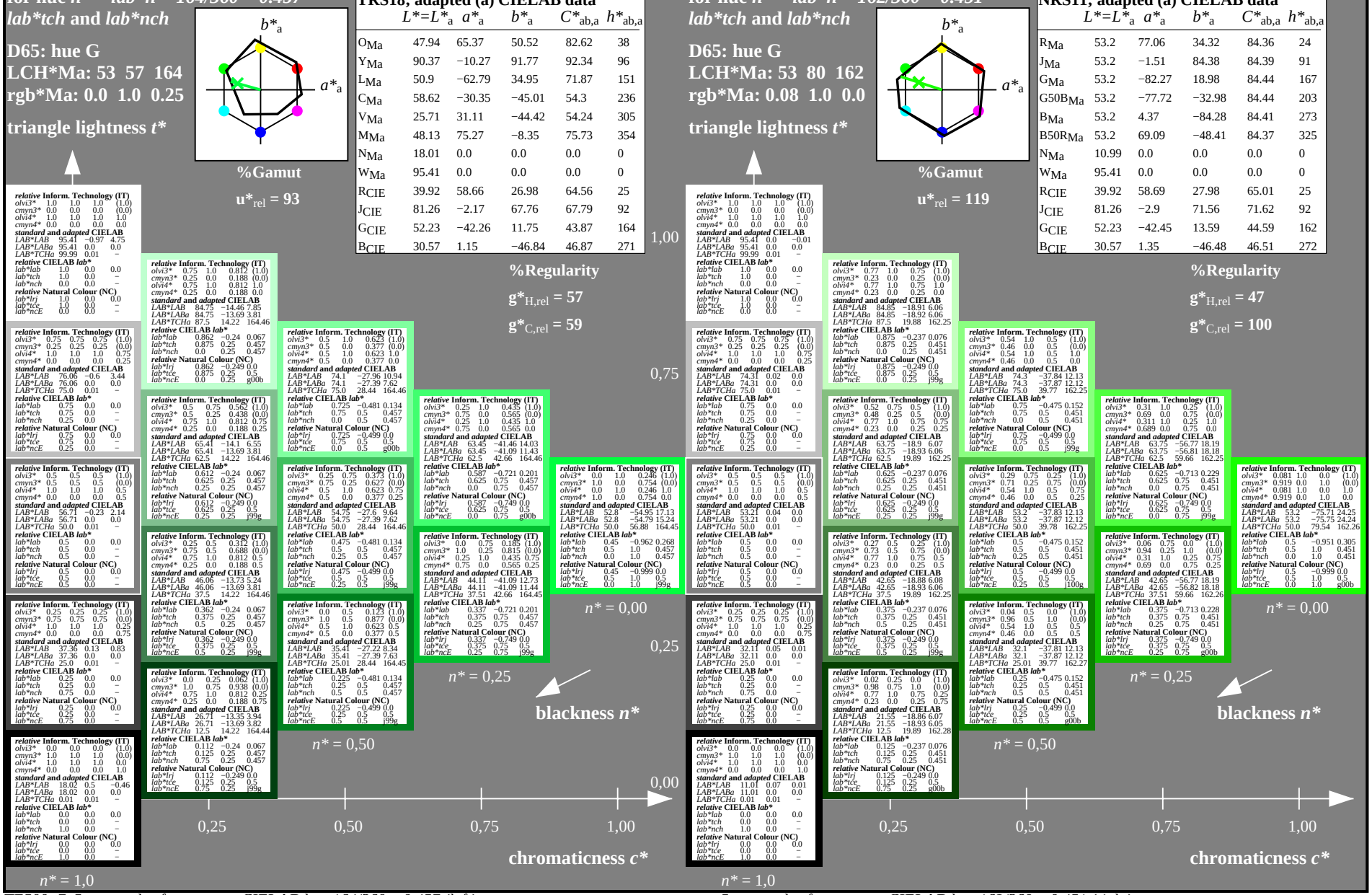

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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



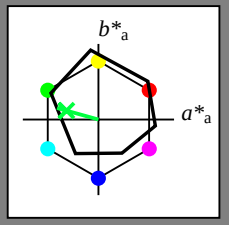

TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 164/360 = 0.457**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 57 164**
**rgb*Ma: 0.0 1.0 0.25**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

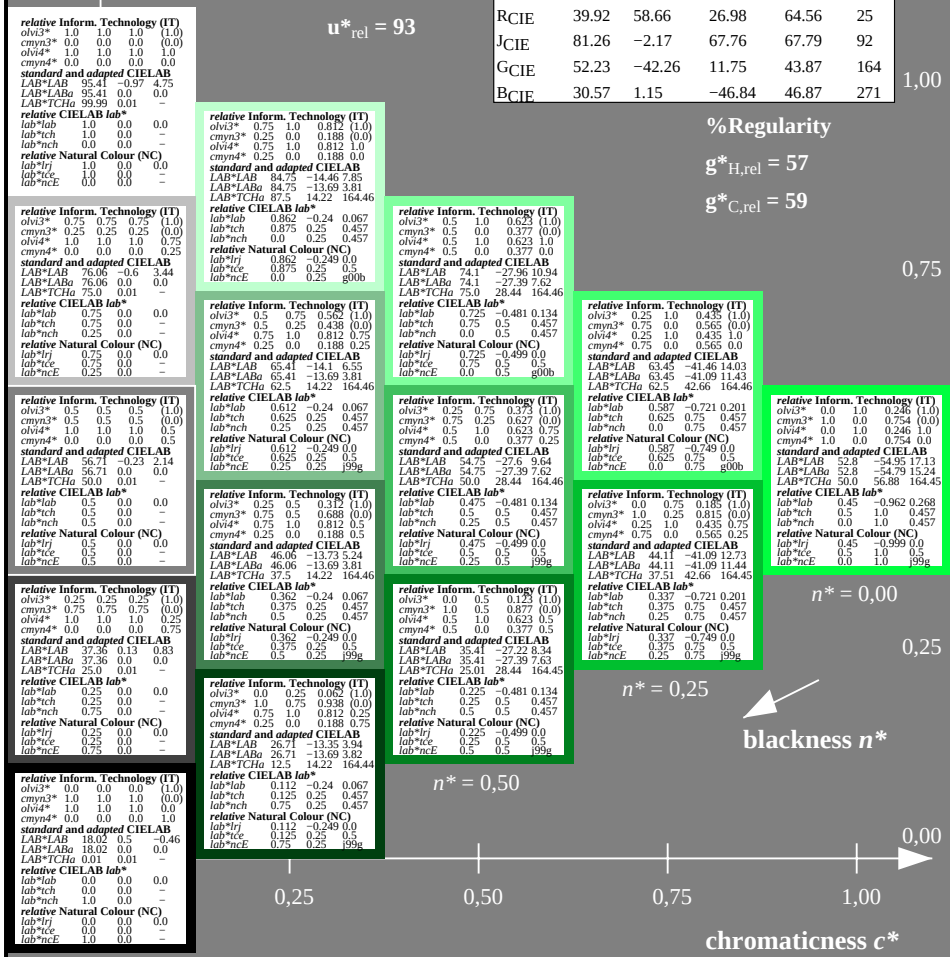
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

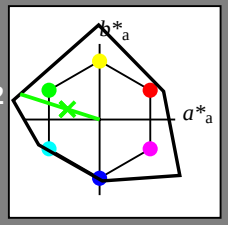
**g*$_{C,rel}$ = 59**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 65 110 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

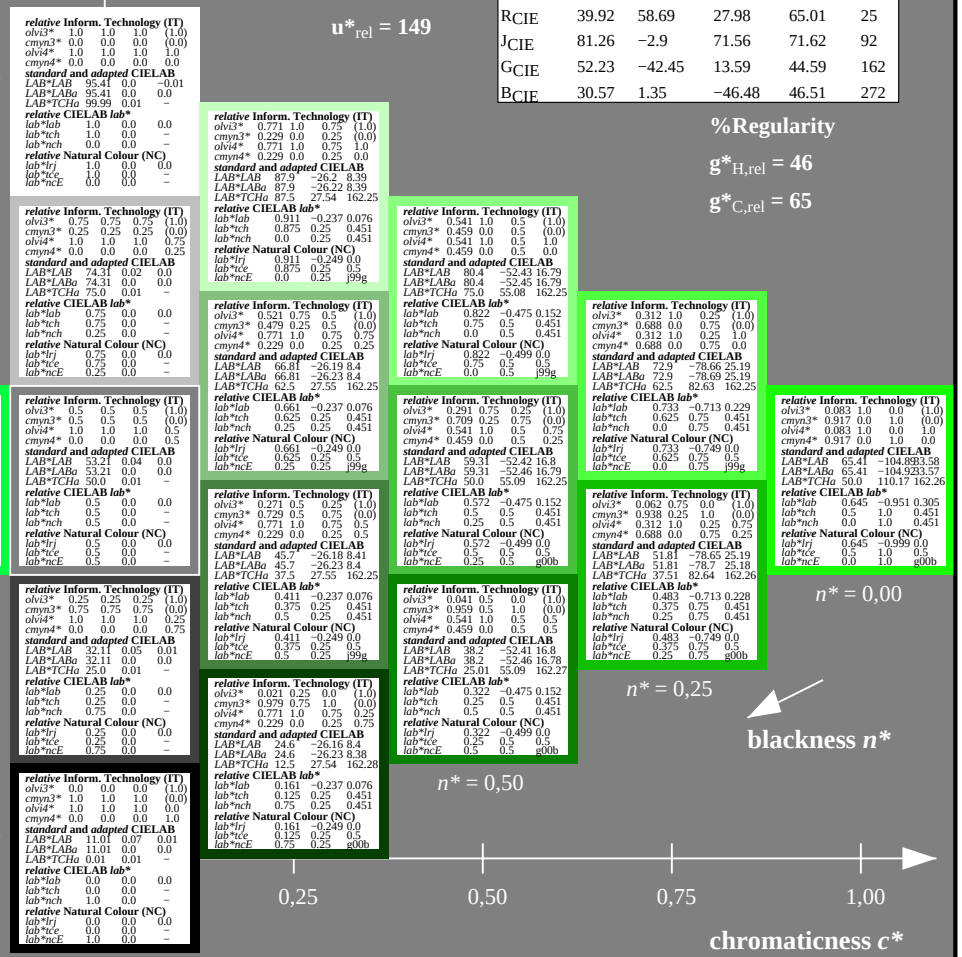
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

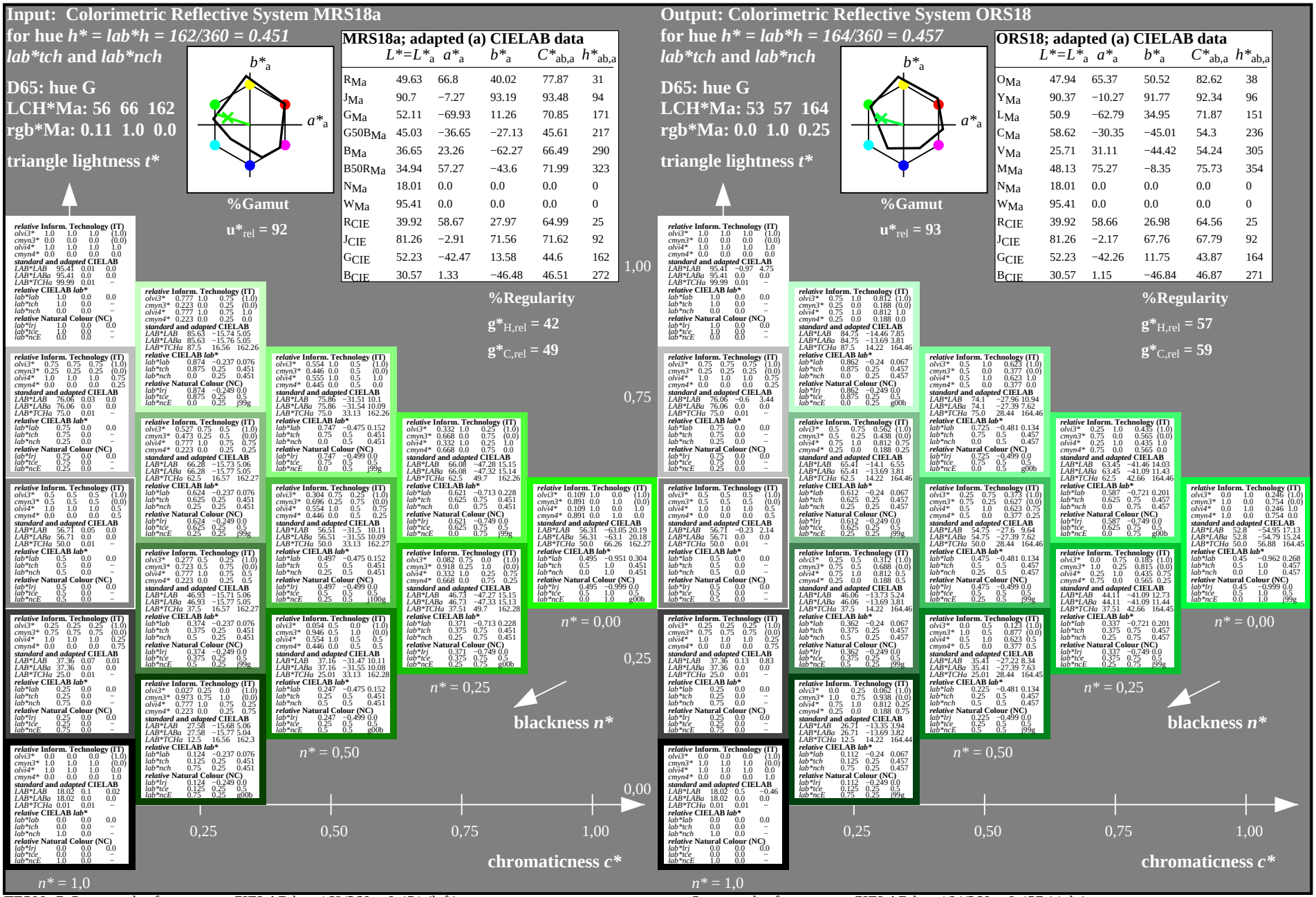
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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



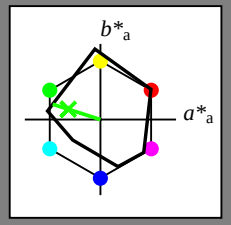

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 56 66 162**
**rgb*Ma: 0.11 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

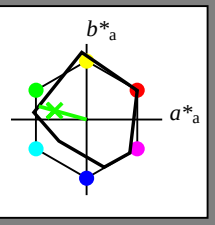
**g*$_{H,rel}$ = 42**

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

**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 164/360 = 0.457**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 56 66 164**
**rgb*Ma: 0.1 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

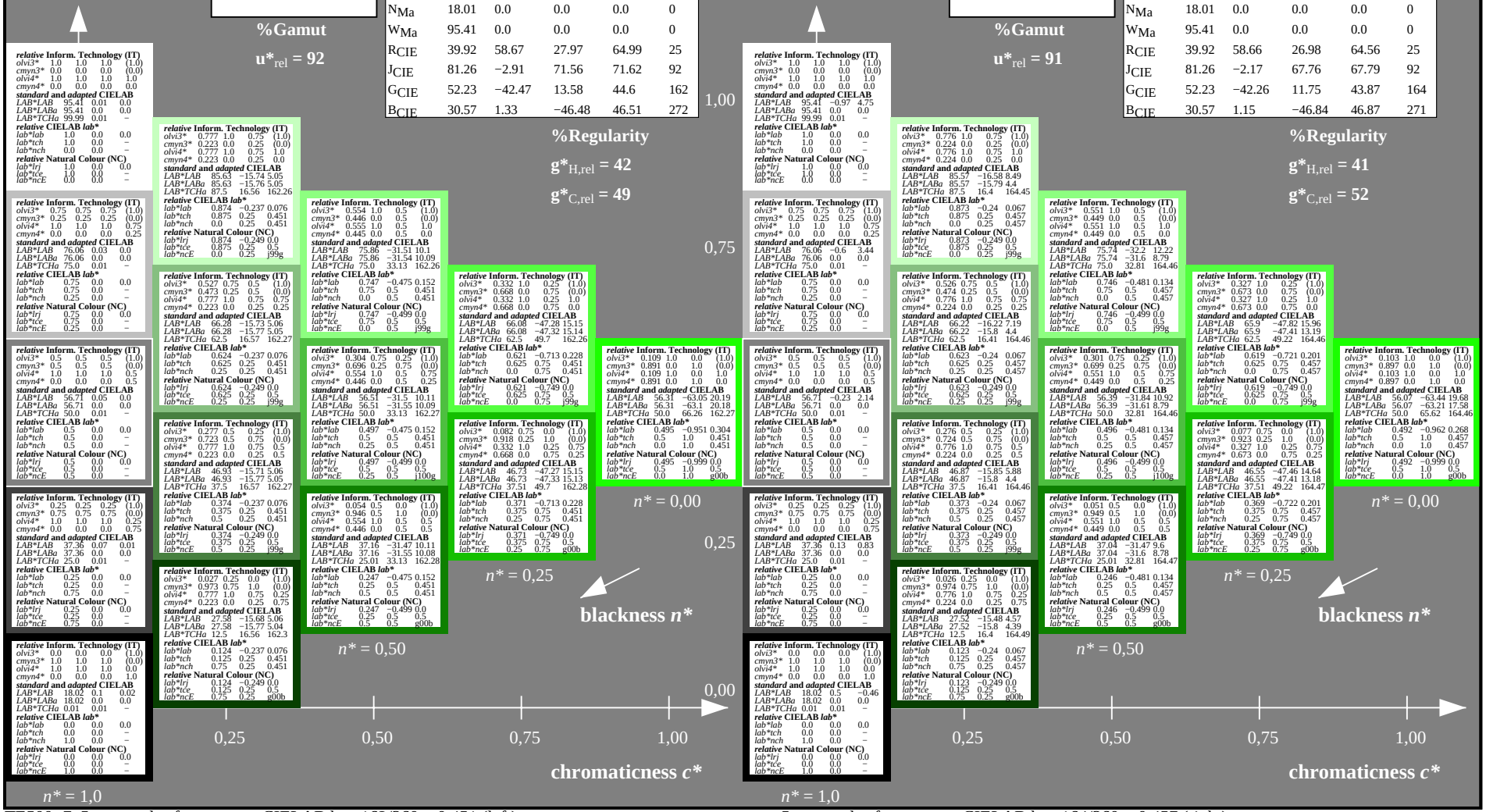
**MRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

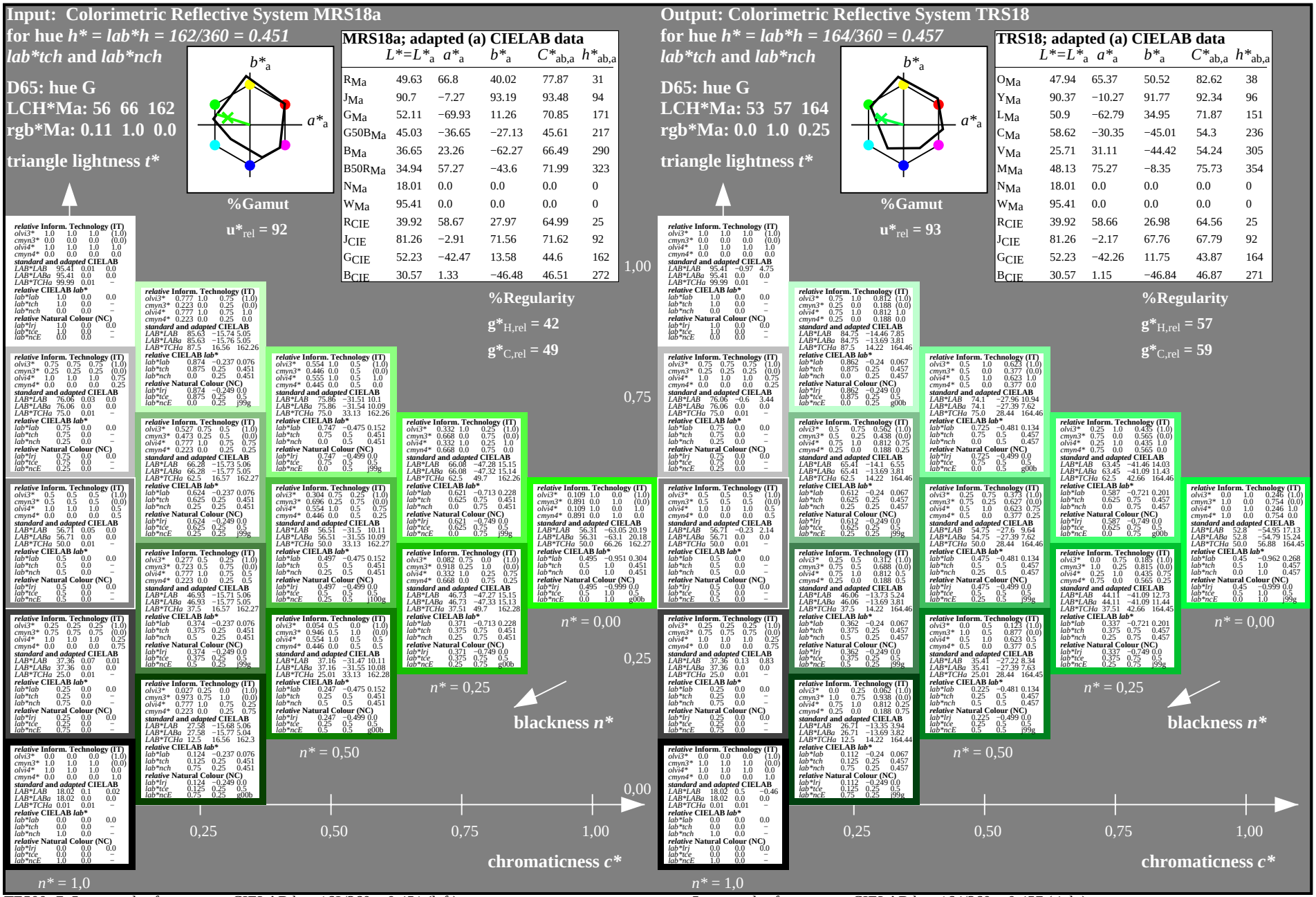
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**




TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



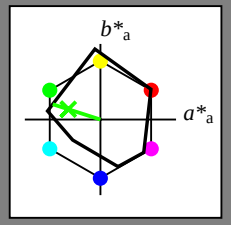

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 56 66 162**
**rgb*Ma: 0.11 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

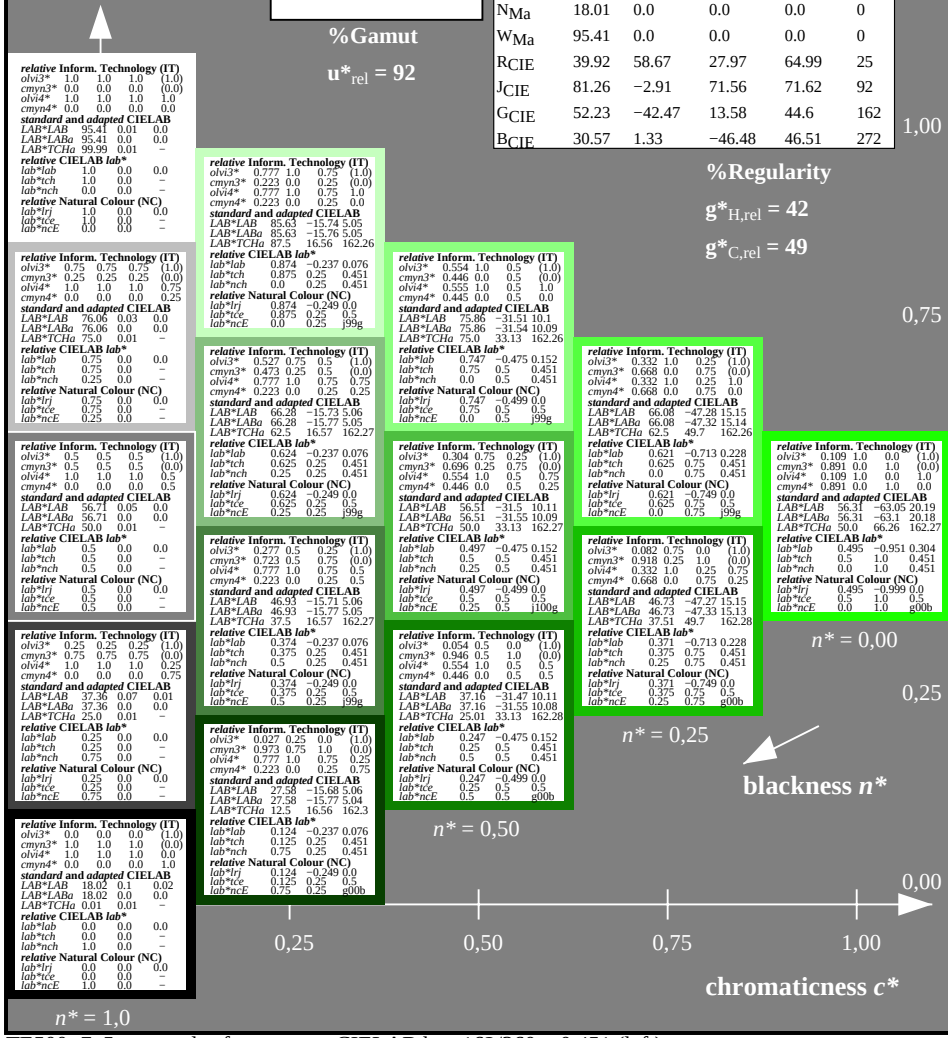
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

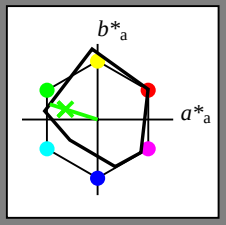
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 56 66 162**
**rgb*Ma: 0.11 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

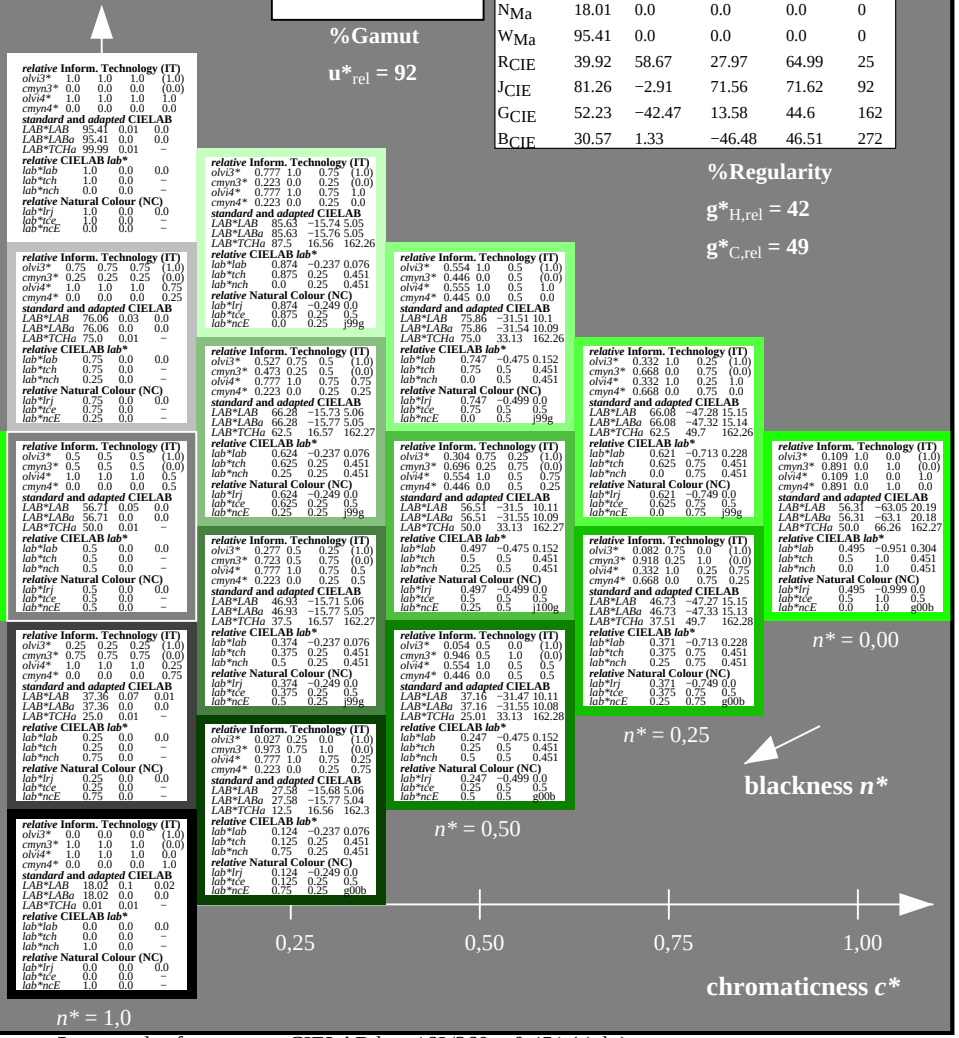
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

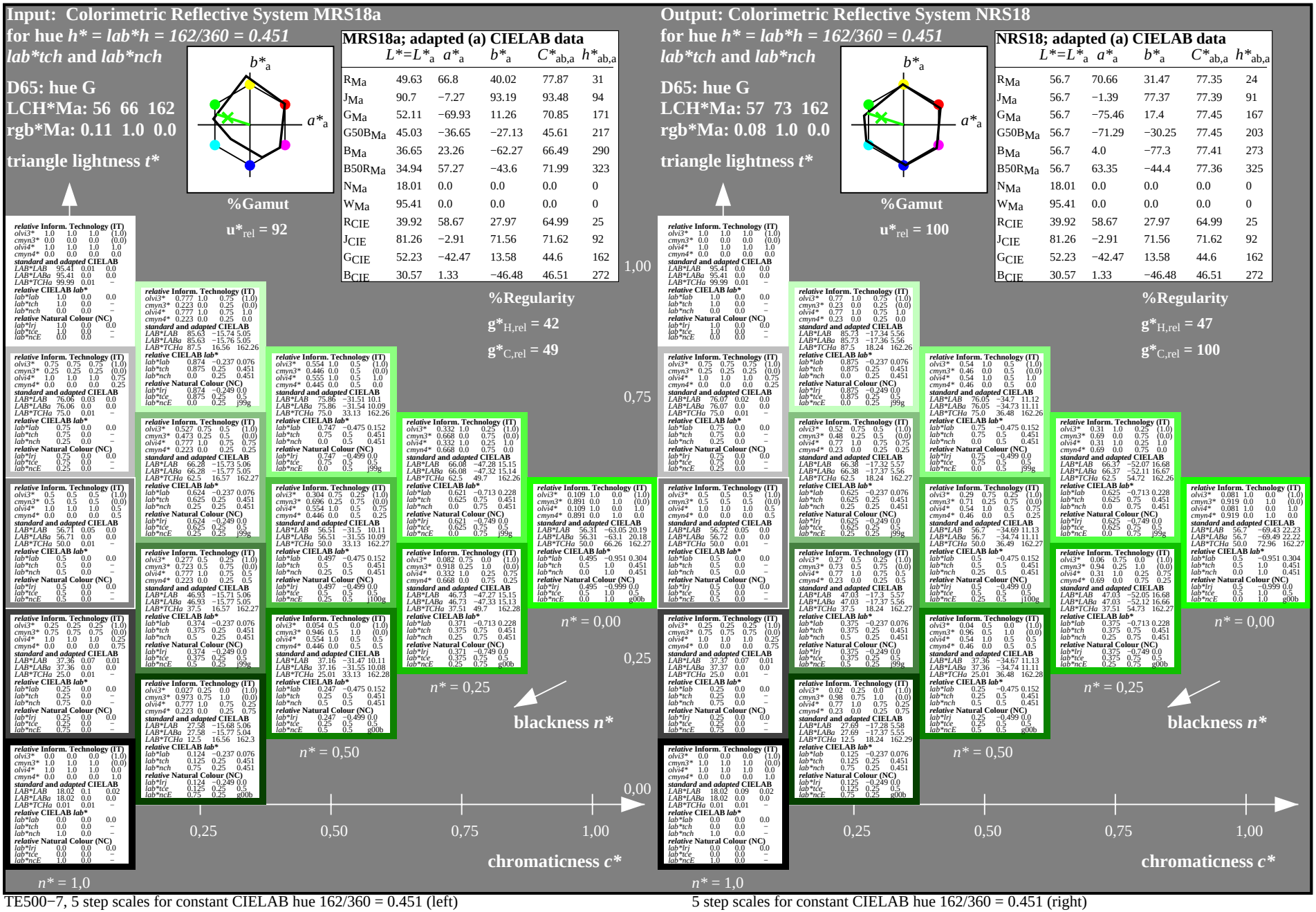
**g*$_{H,rel}$ = 42**

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



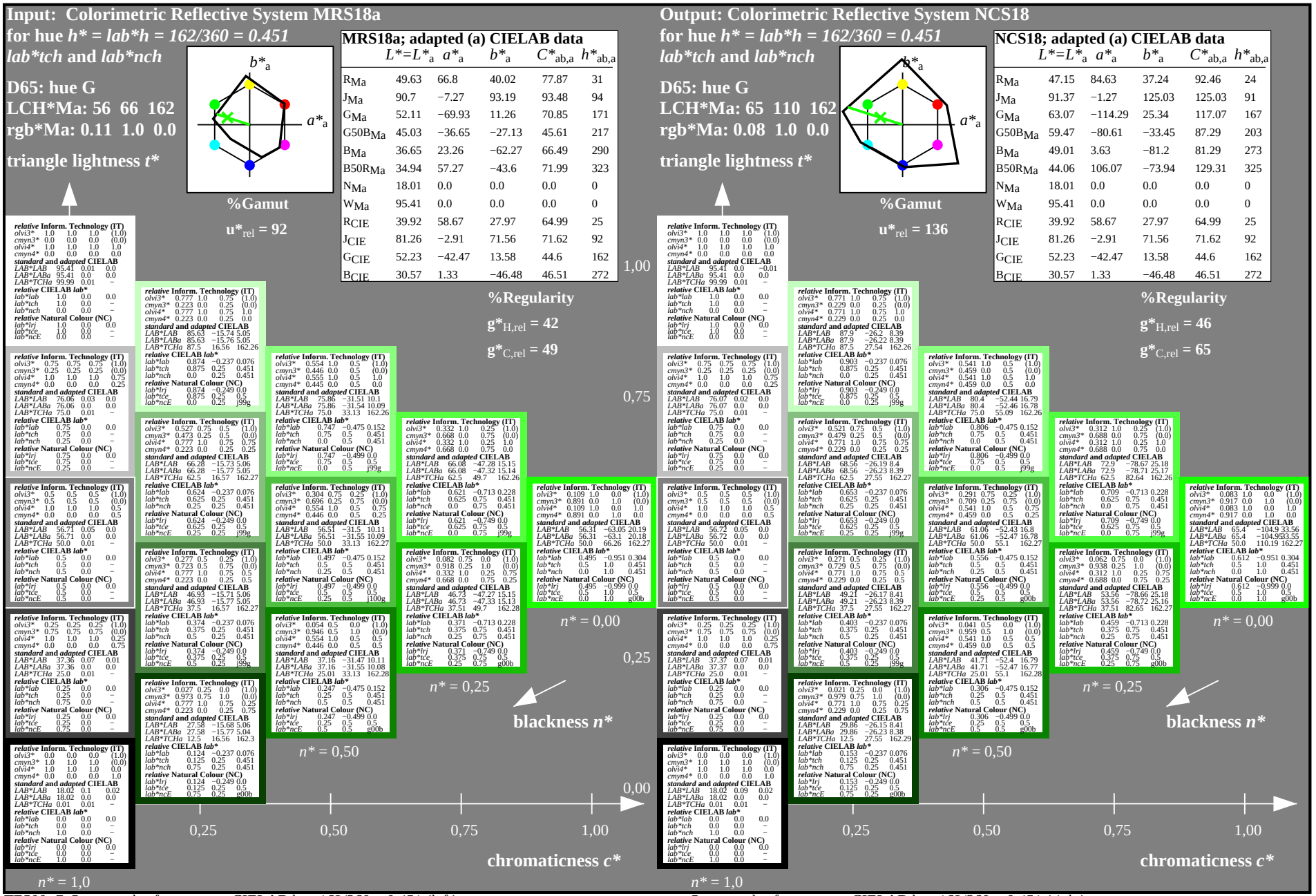

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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



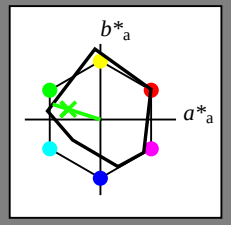

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 56 66 162**
**rgb*Ma: 0.11 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

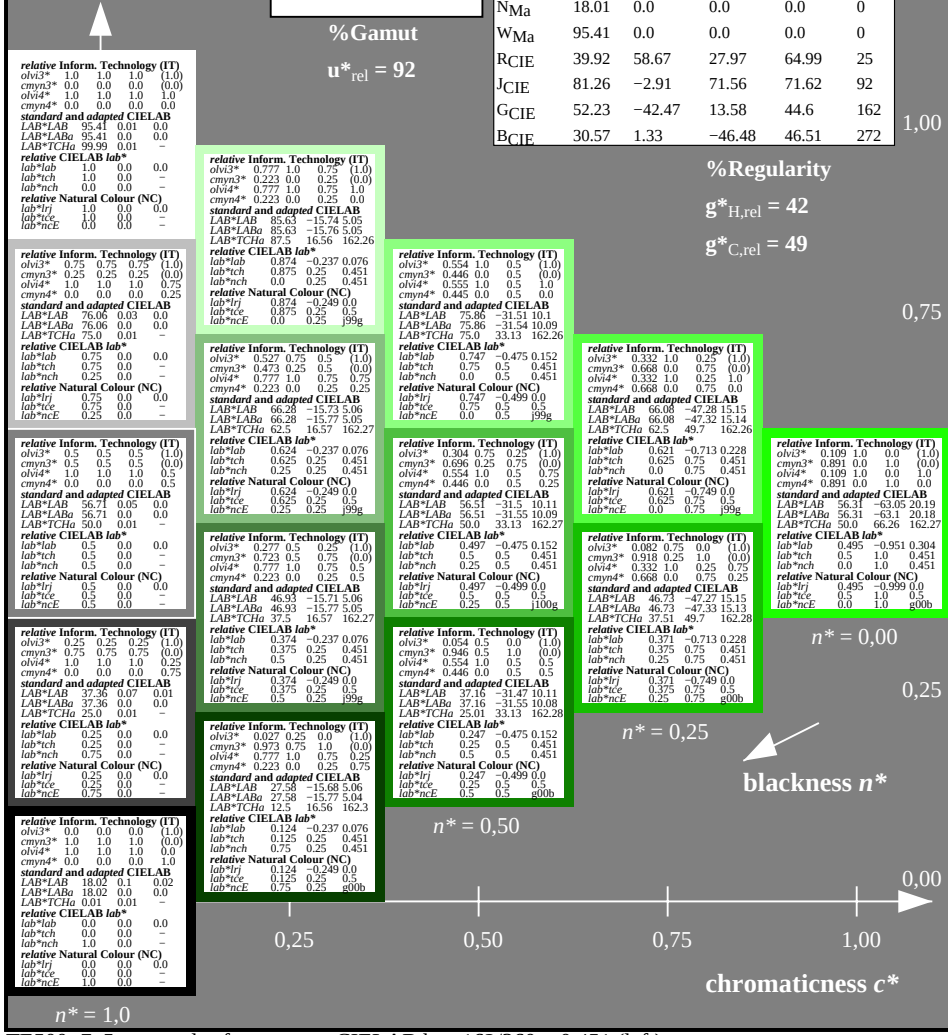
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

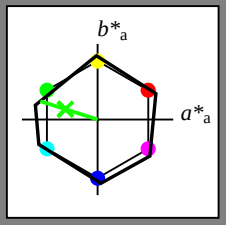
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 80 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

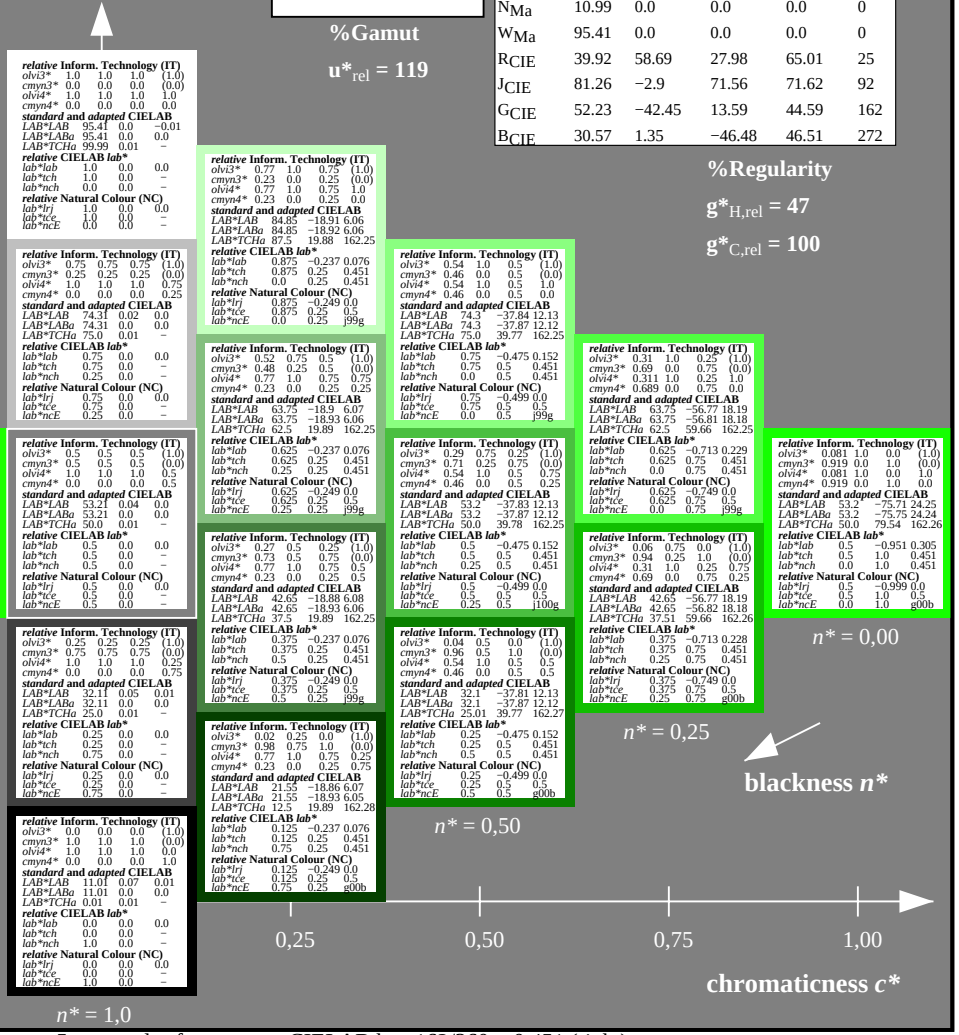
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

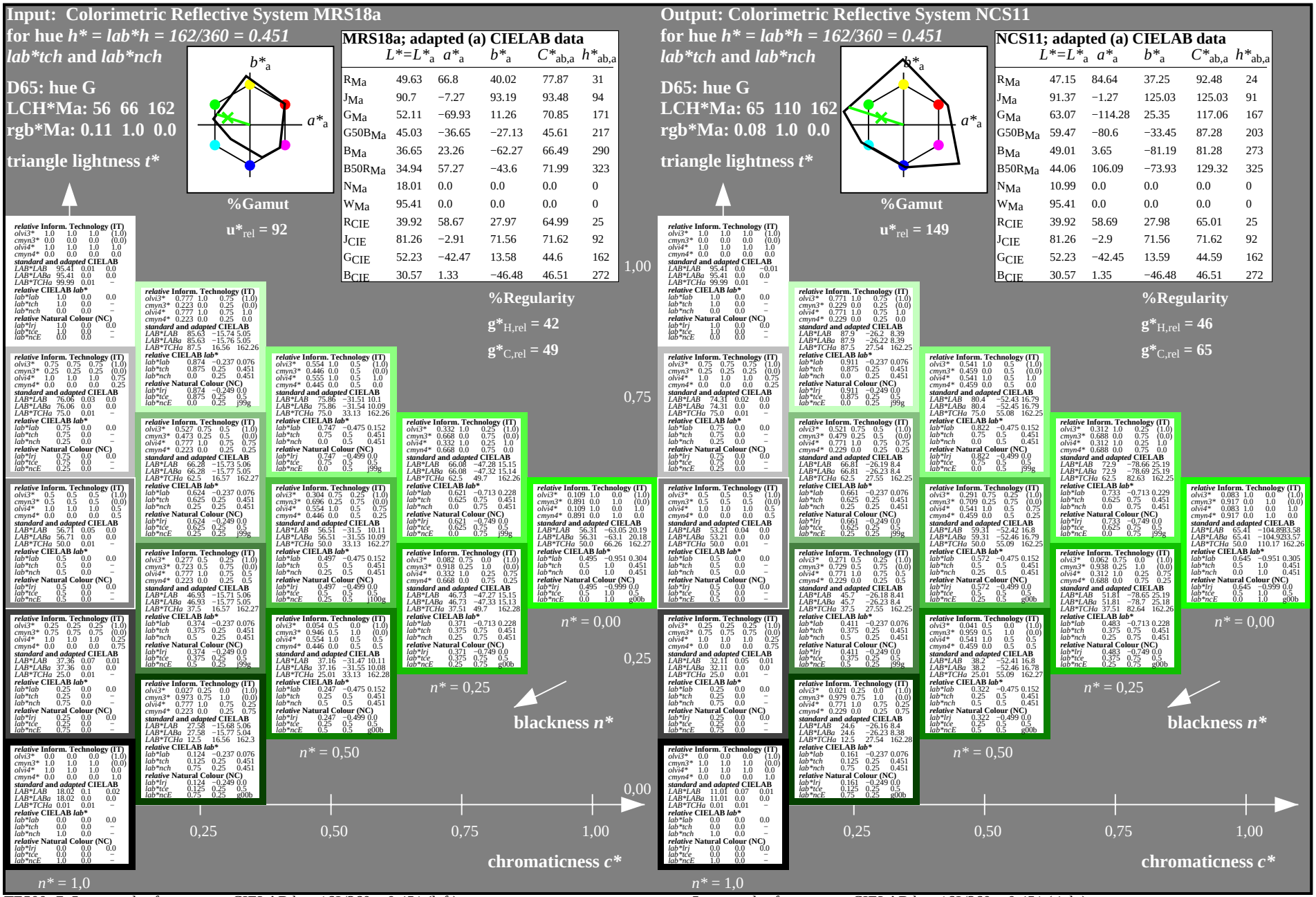
**g*$_{H,rel}$ = 47**

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




TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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




**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

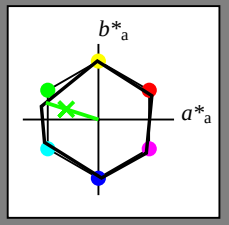
TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 57 73 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

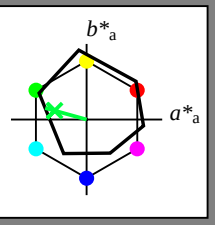
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.25**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

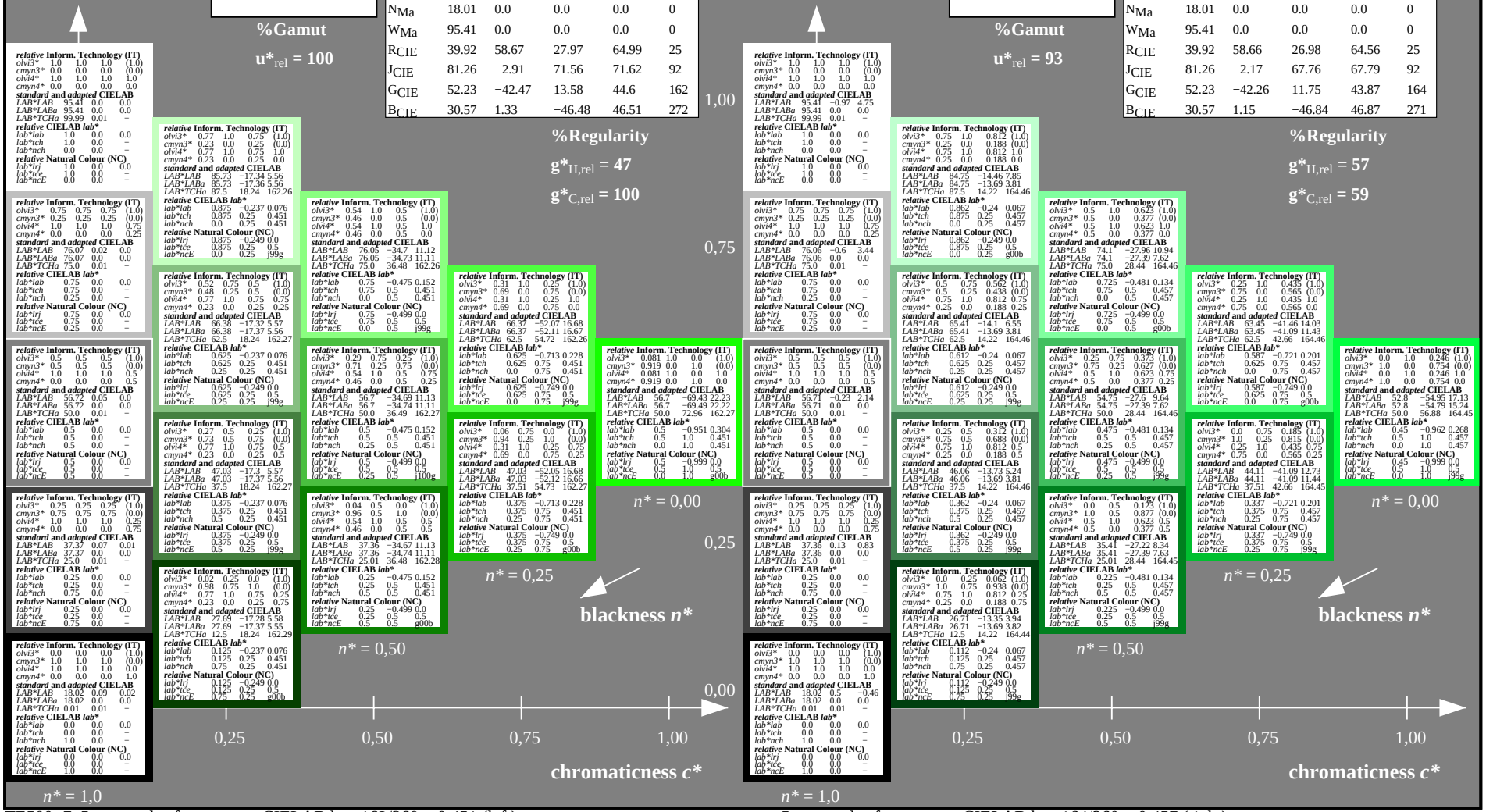
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



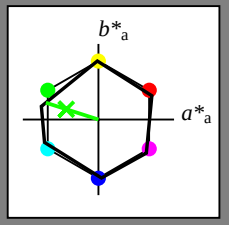

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 57 73 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

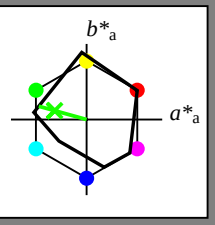
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 164/360 = 0.457**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 56 66 164**
**rgb*Ma: 0.1 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

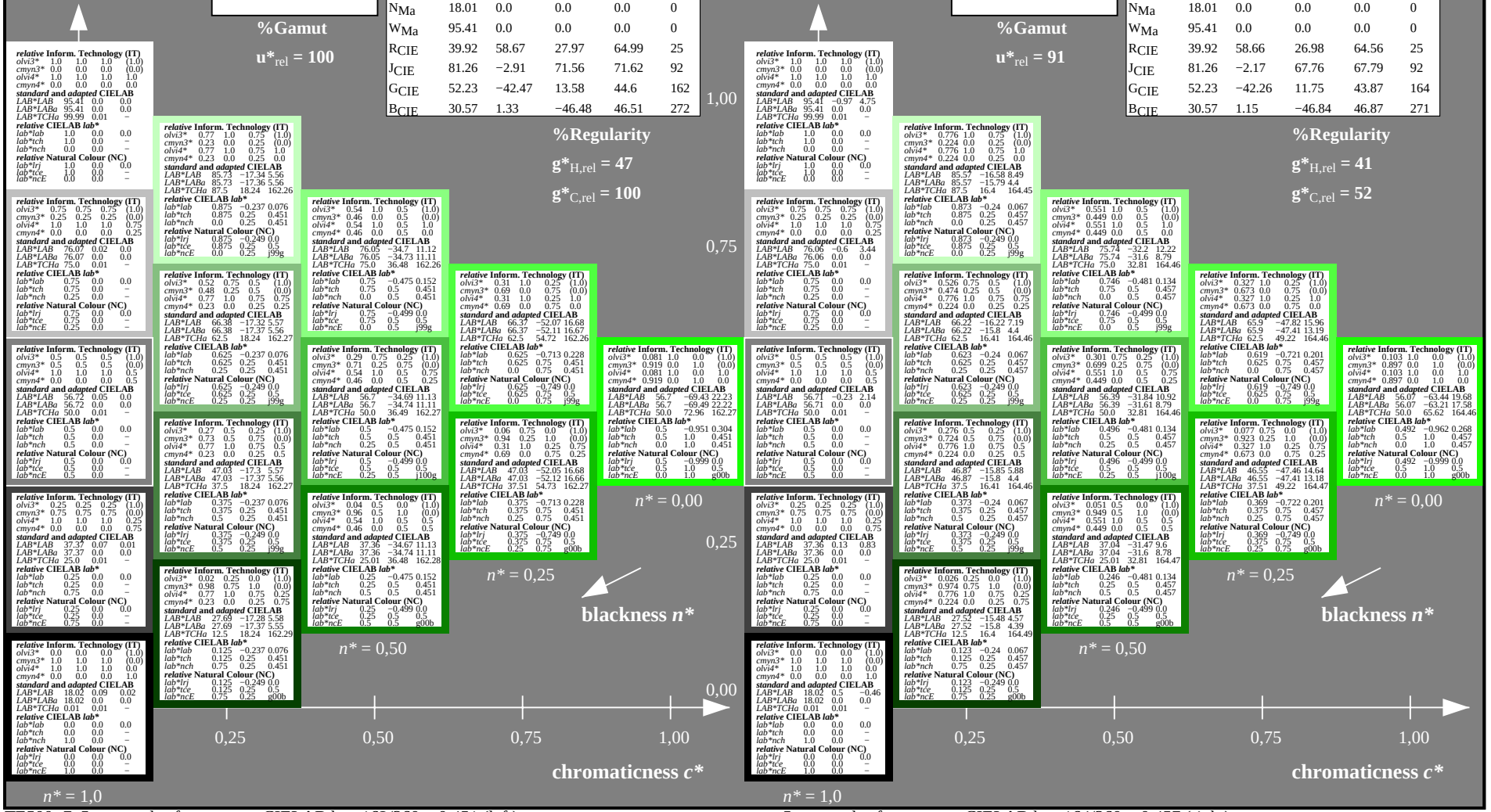
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

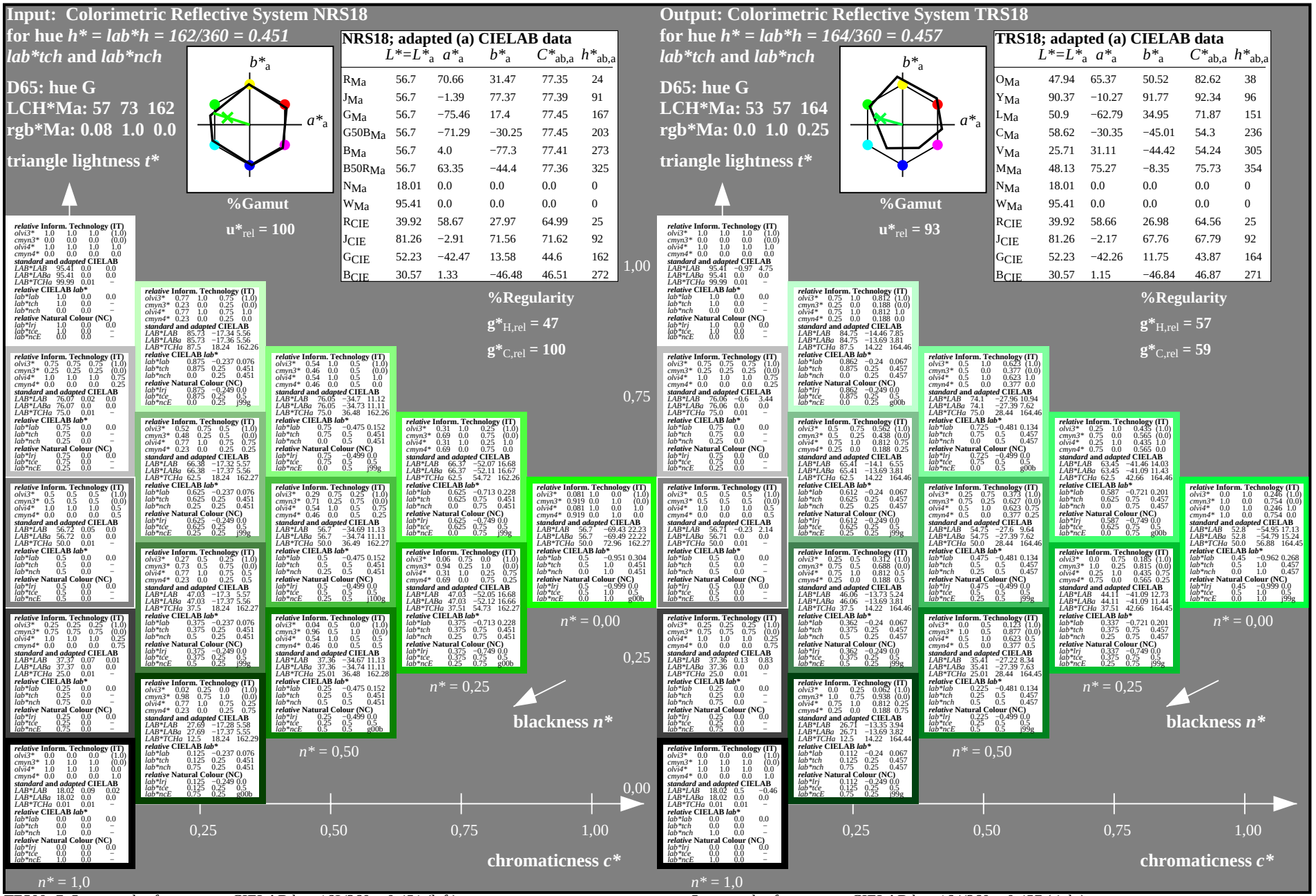
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**




TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



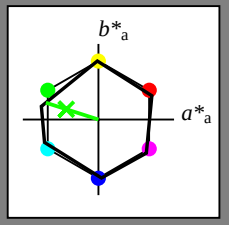

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 57 73 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

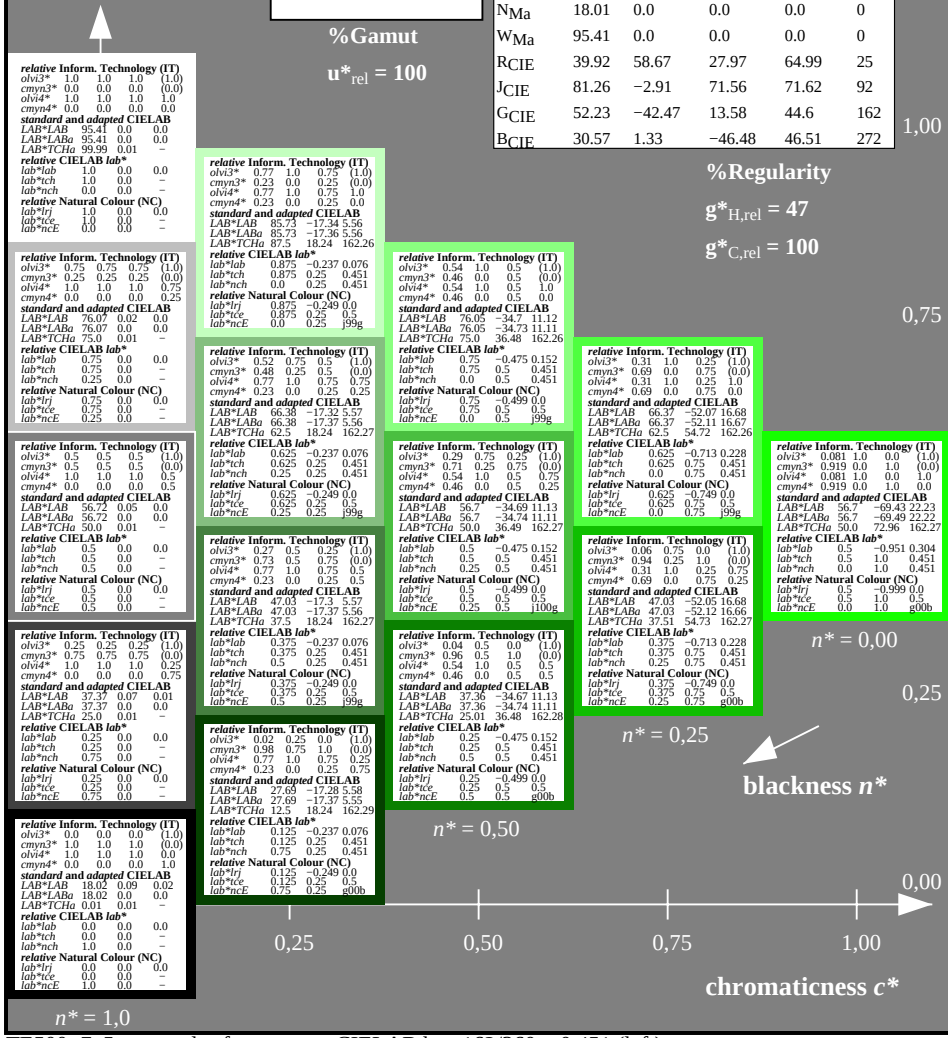
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

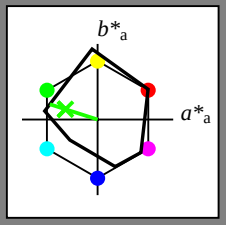
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 56 66 162**
**rgb*Ma: 0.11 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

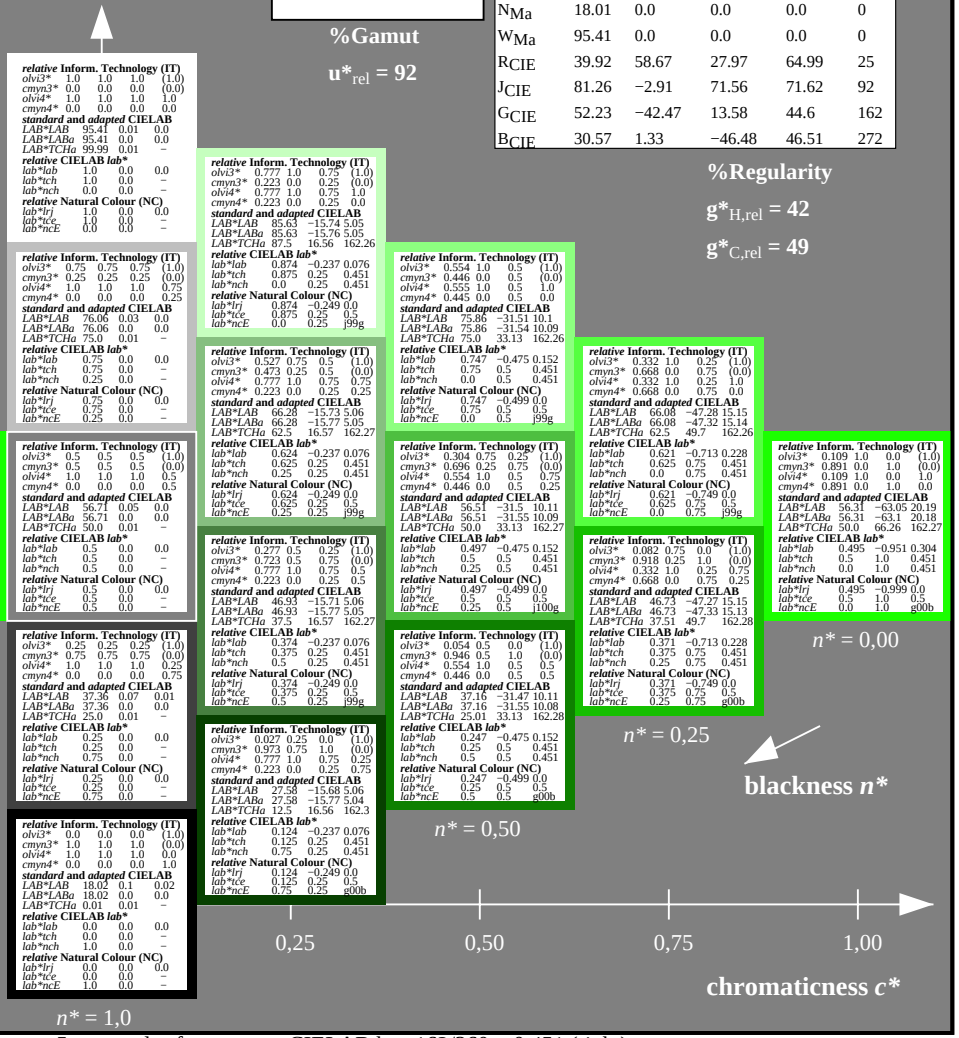
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

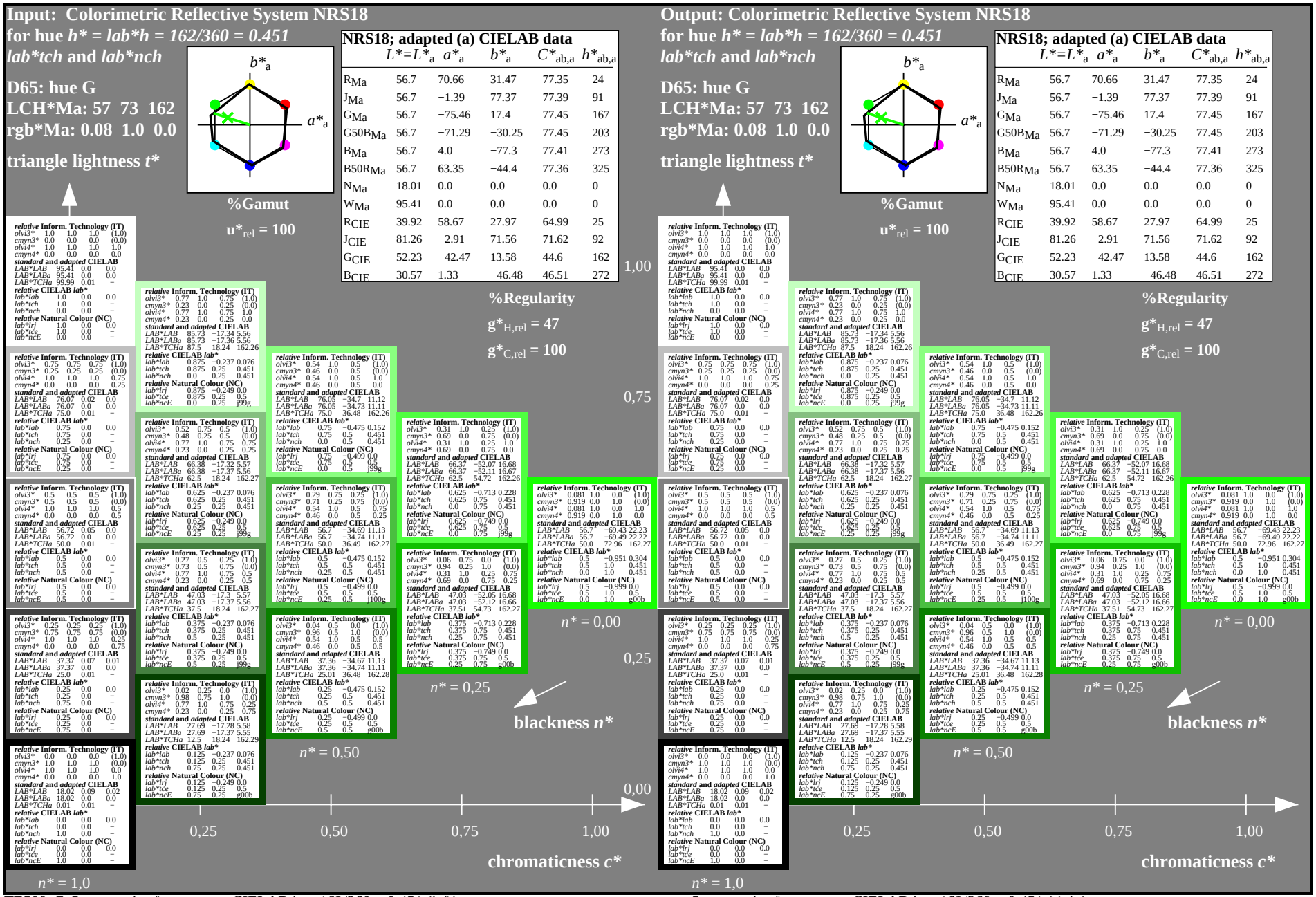
**g*$_{H,rel}$ = 42**

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




TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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



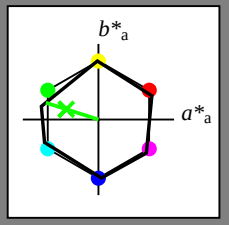

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 57 73 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

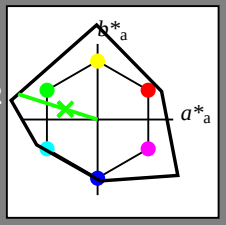
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 65 110 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

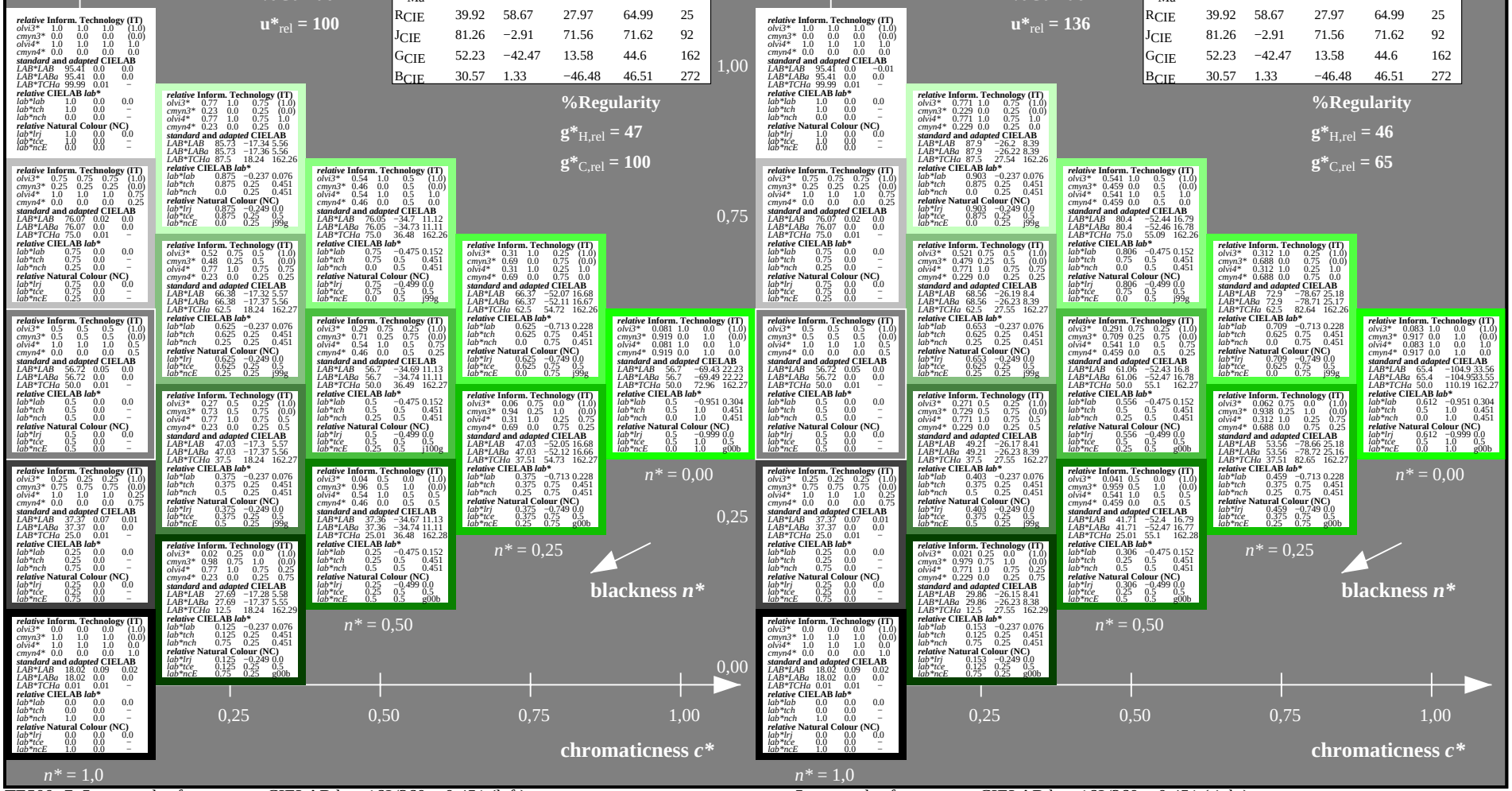
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

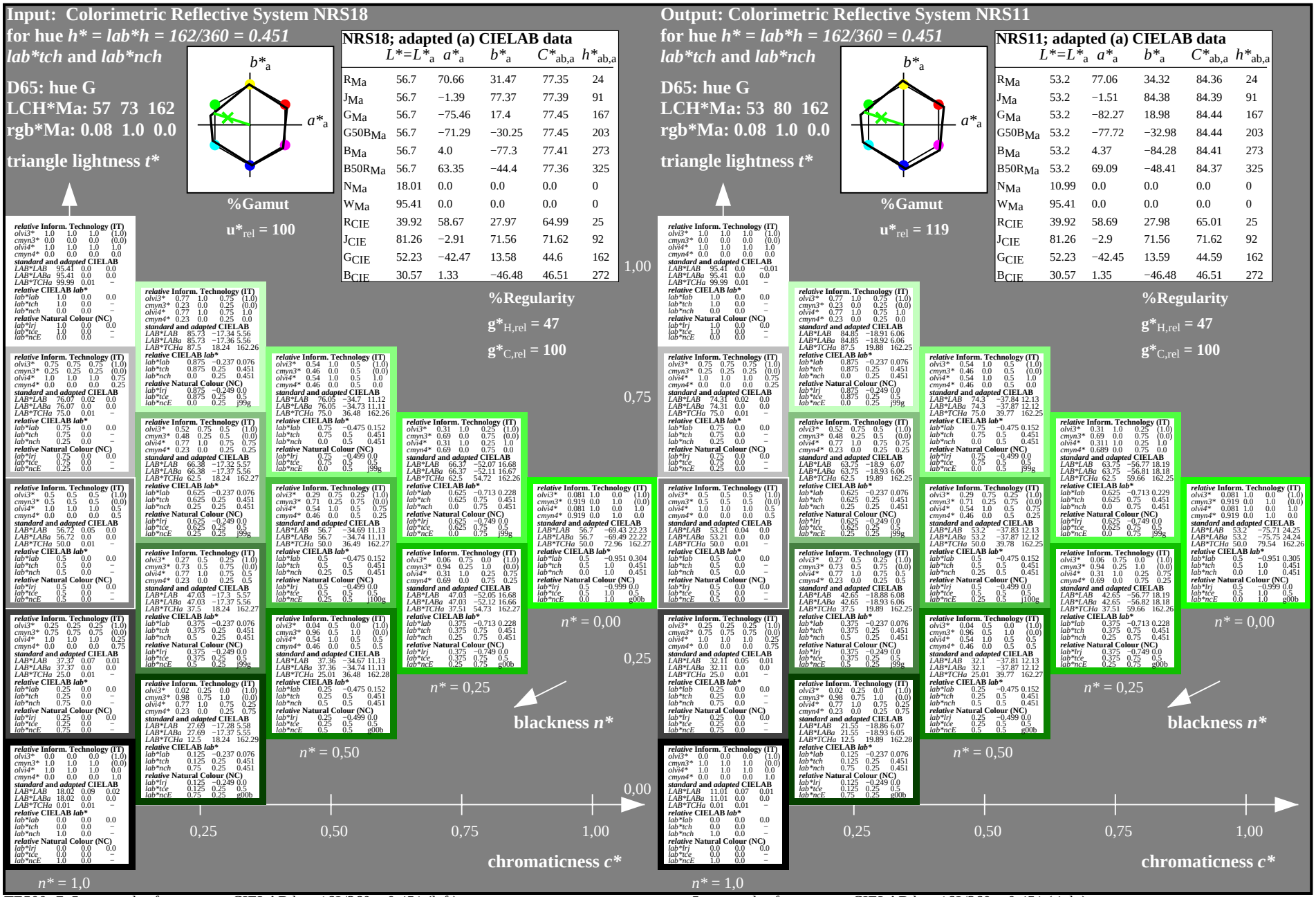
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



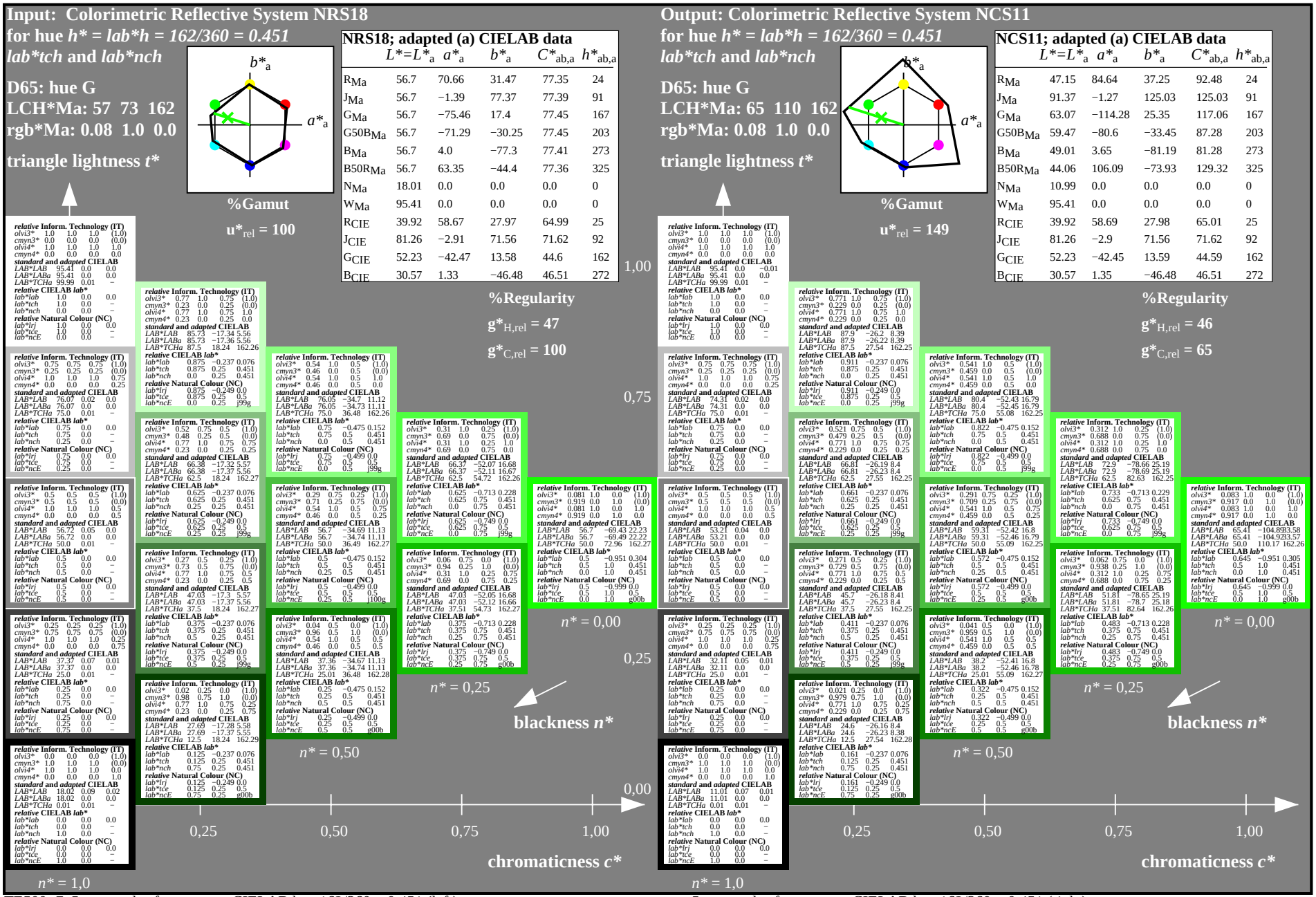

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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



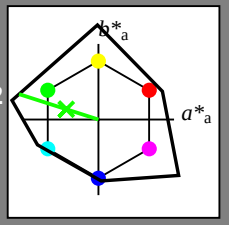

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 65 110 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

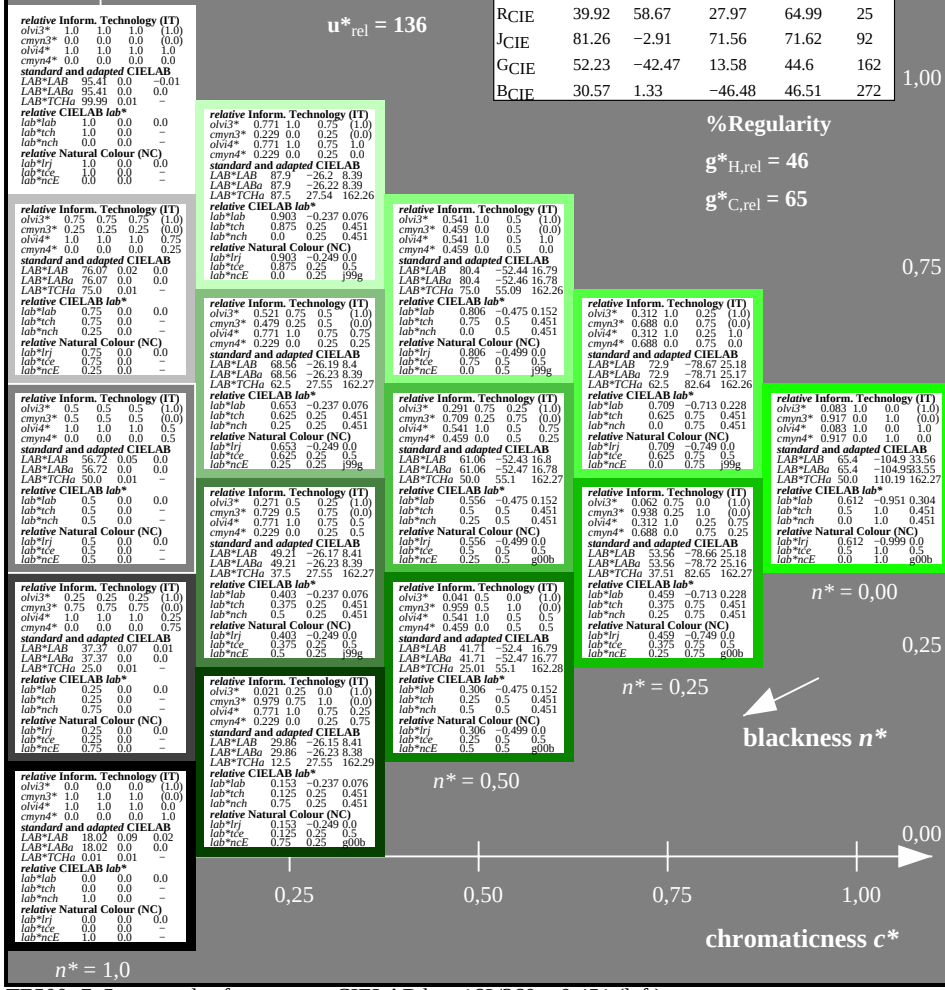
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

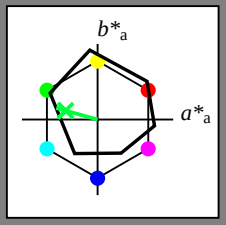
**g*$_{C,rel}$ = 65**




**Output: Colorimetric 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**
**rgb*Ma: 0.0 1.0 0.25**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

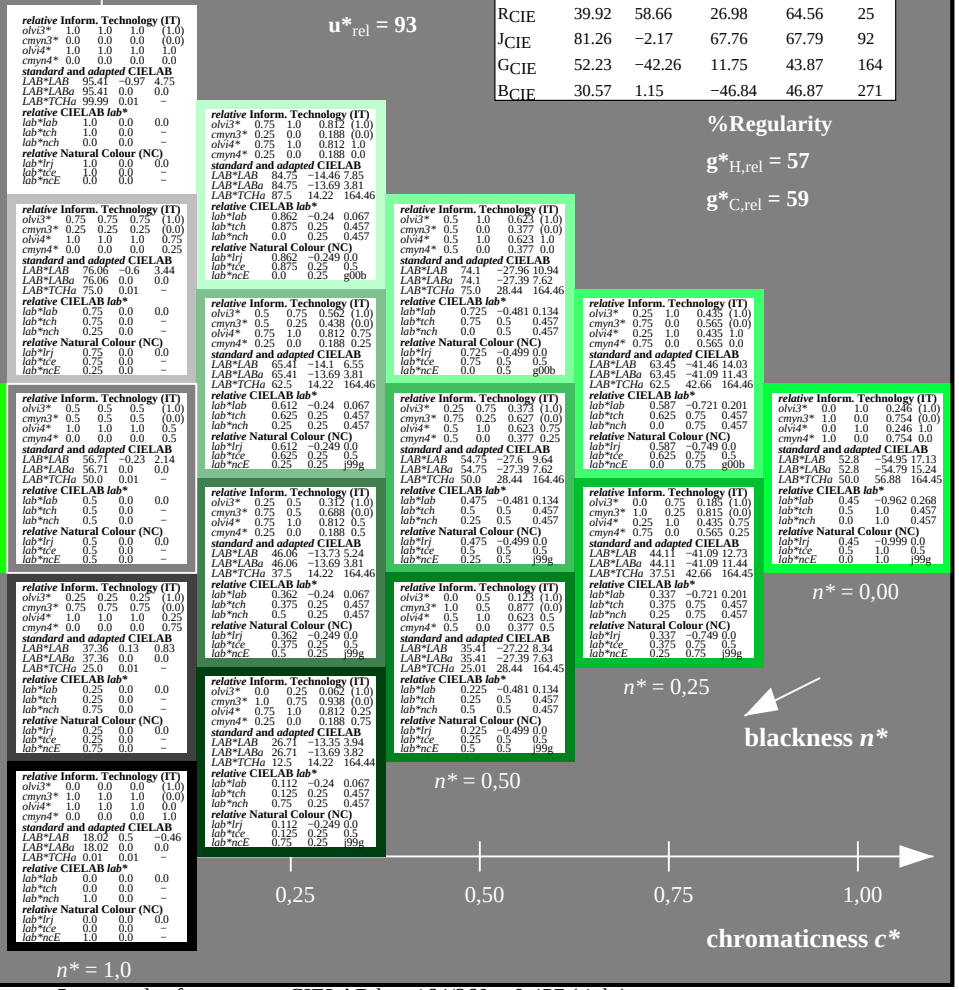
**ORS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

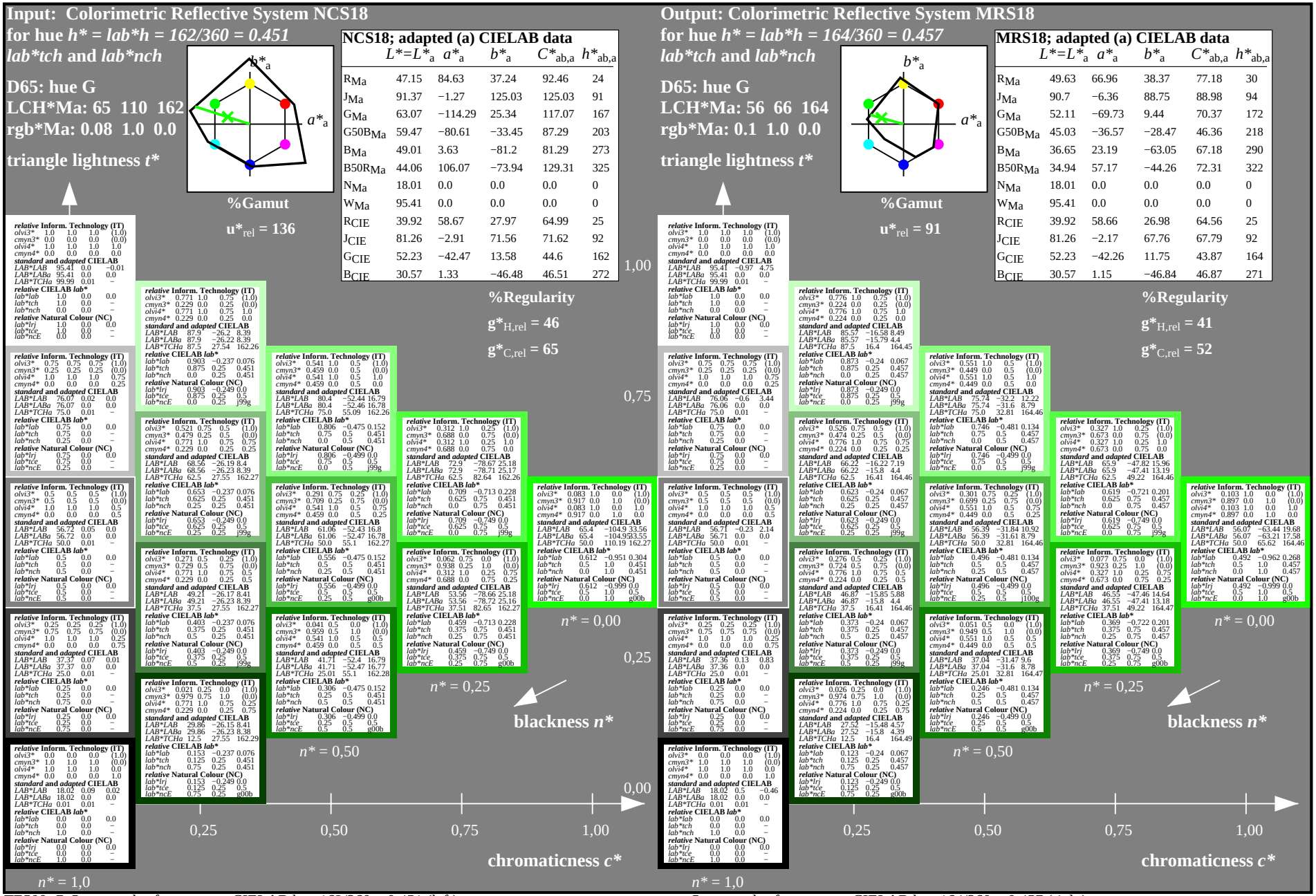
**g*$_{H,rel}$ = 57**

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




TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



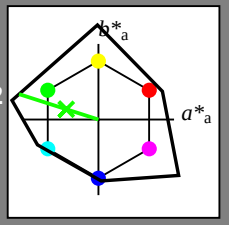

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 65 110 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

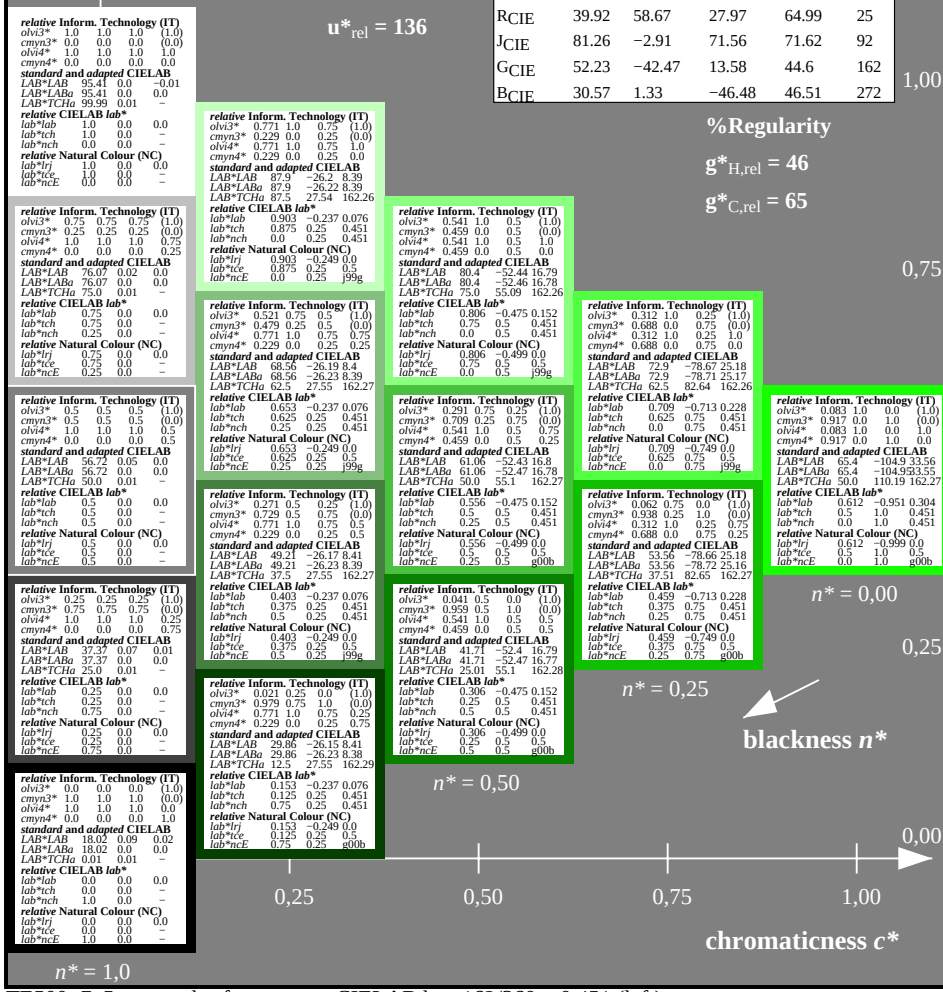
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

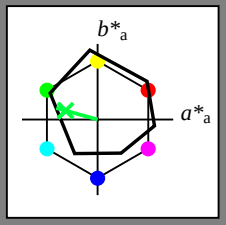
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 164/360 = 0.457**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 57 164**
**rgb*Ma: 0.0 1.0 0.25**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

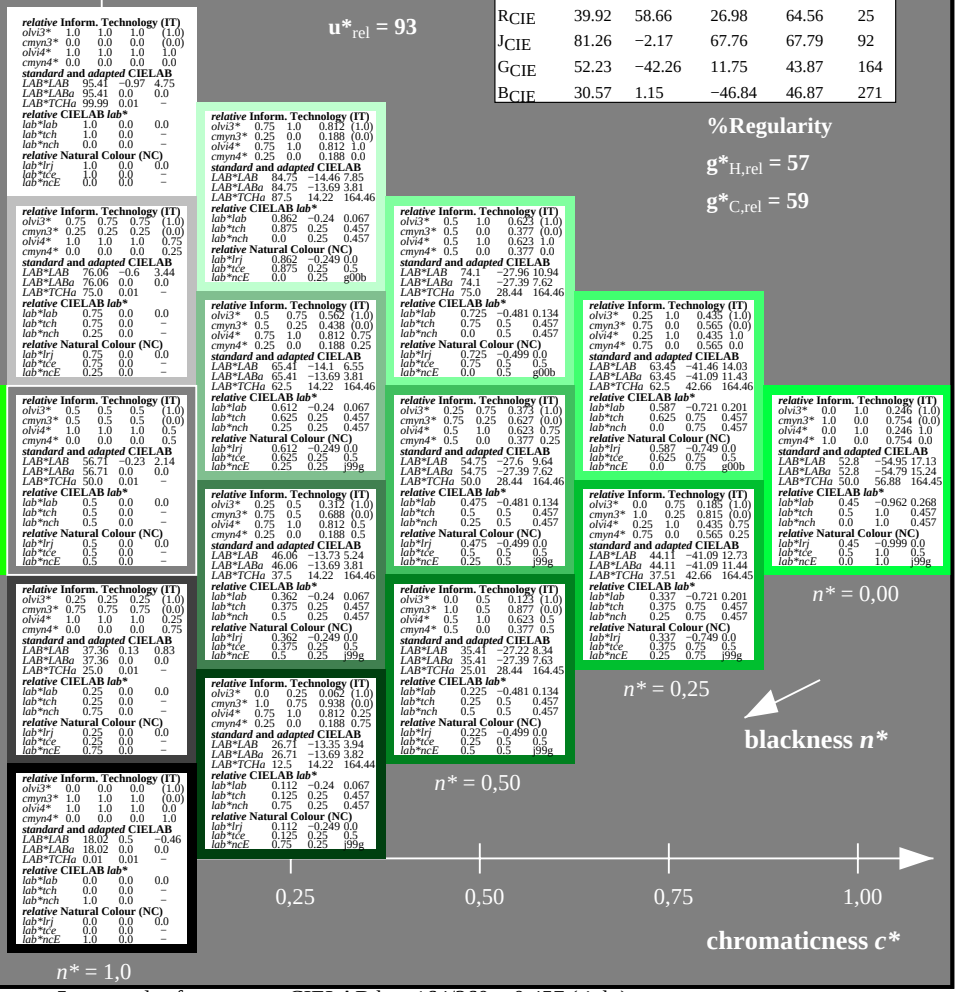
**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

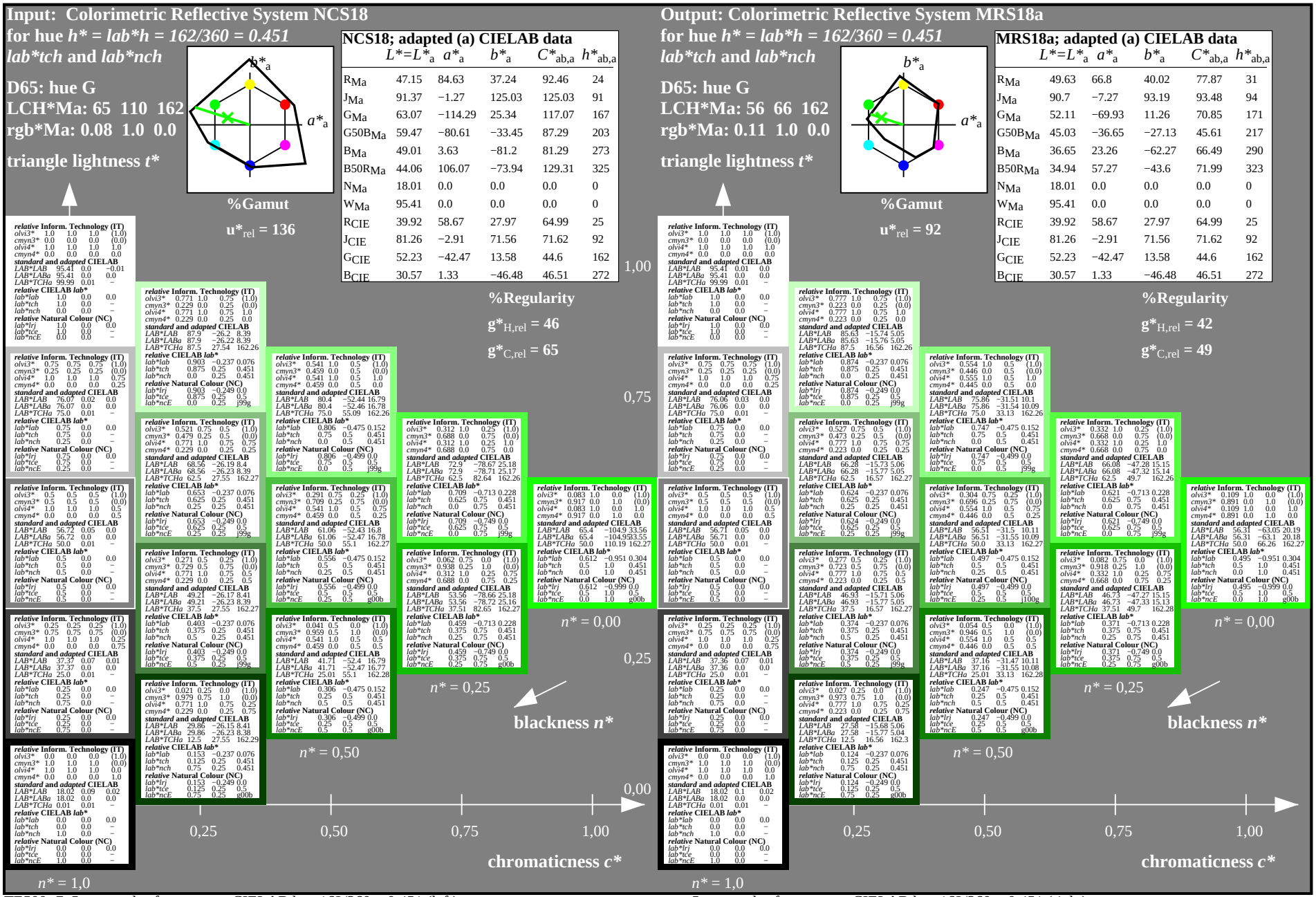
**g*$_{H,rel}$ = 57**

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



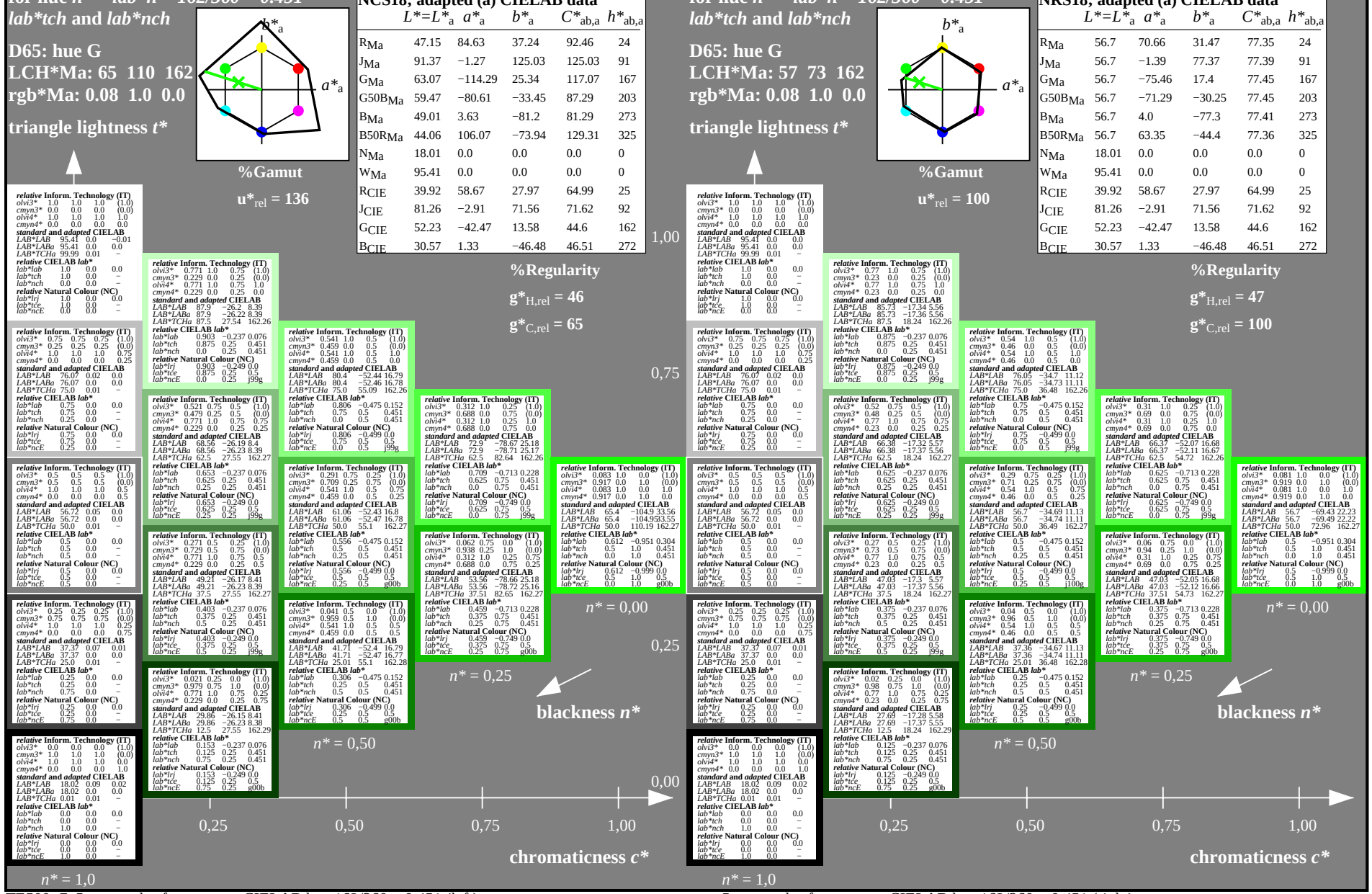

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)




TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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



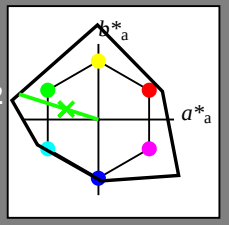

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 65 110 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

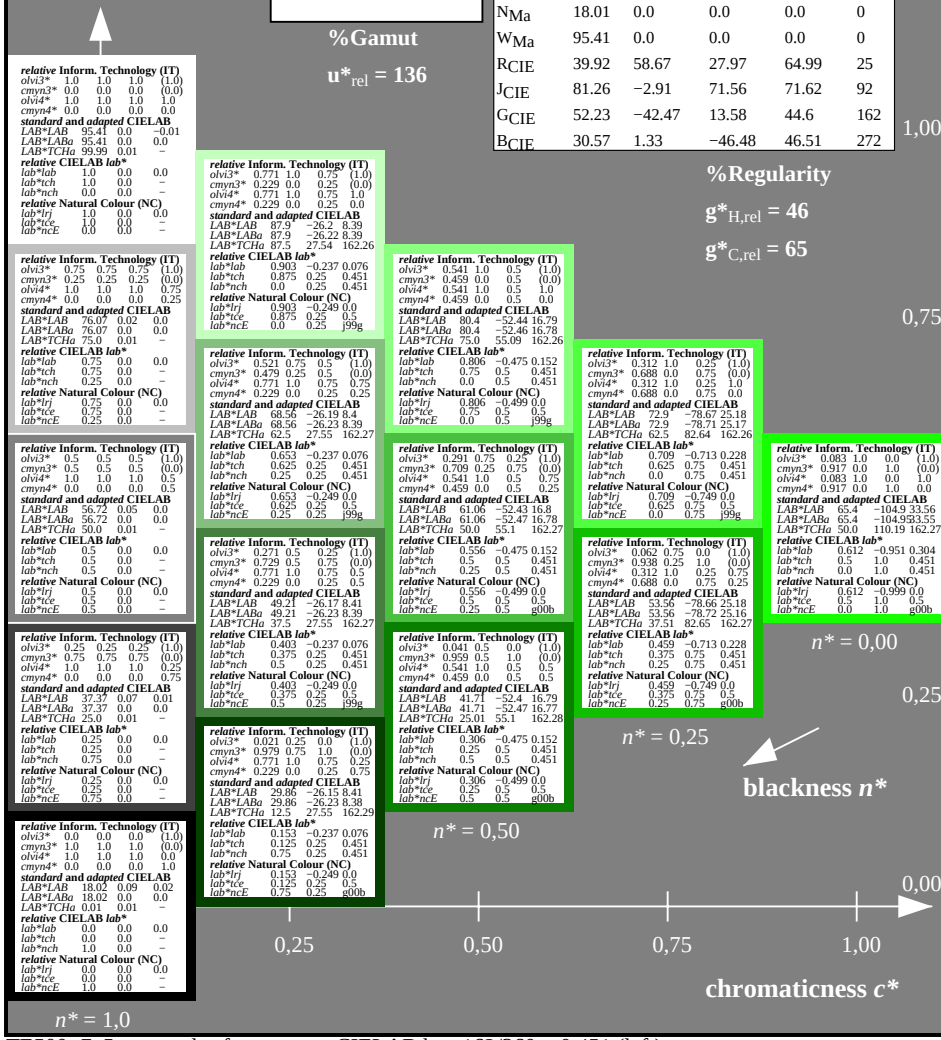
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

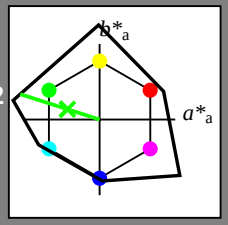
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 65 110 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

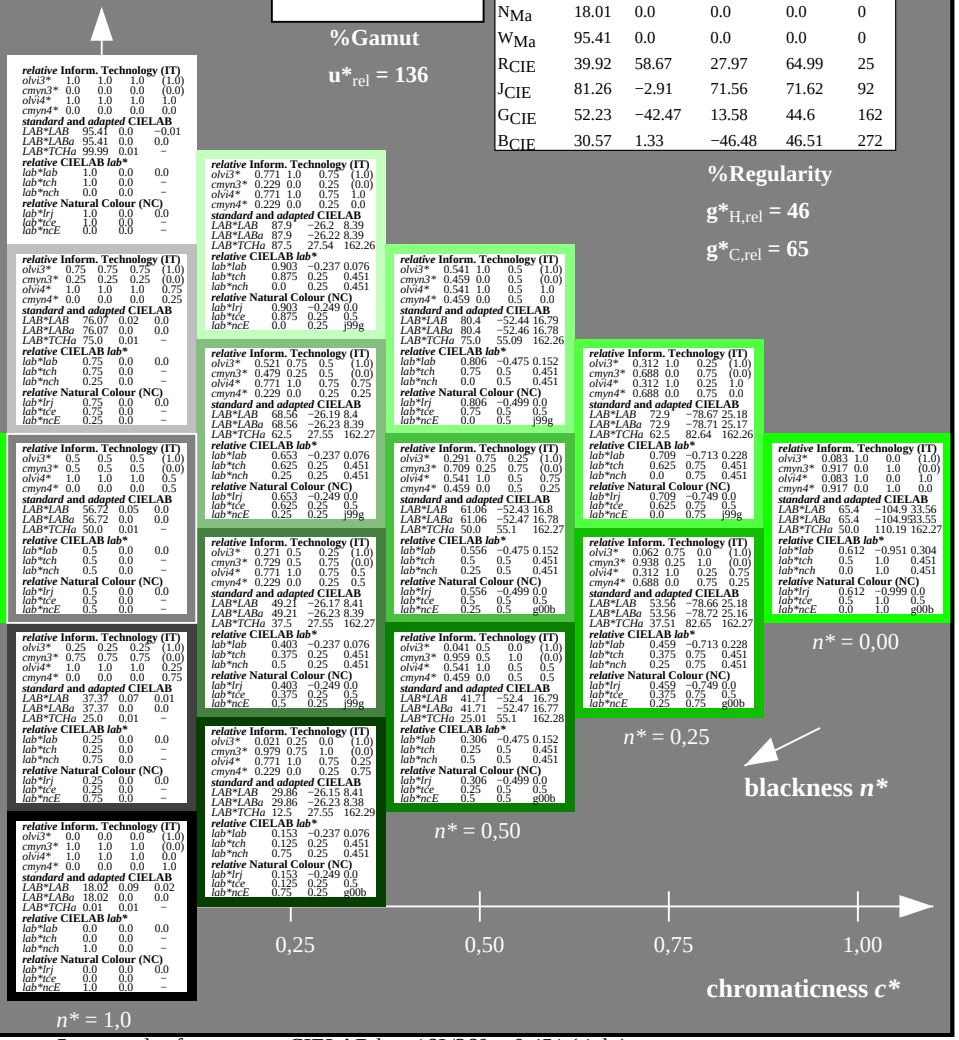
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



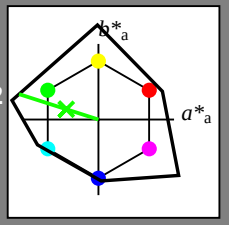

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 65 110 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

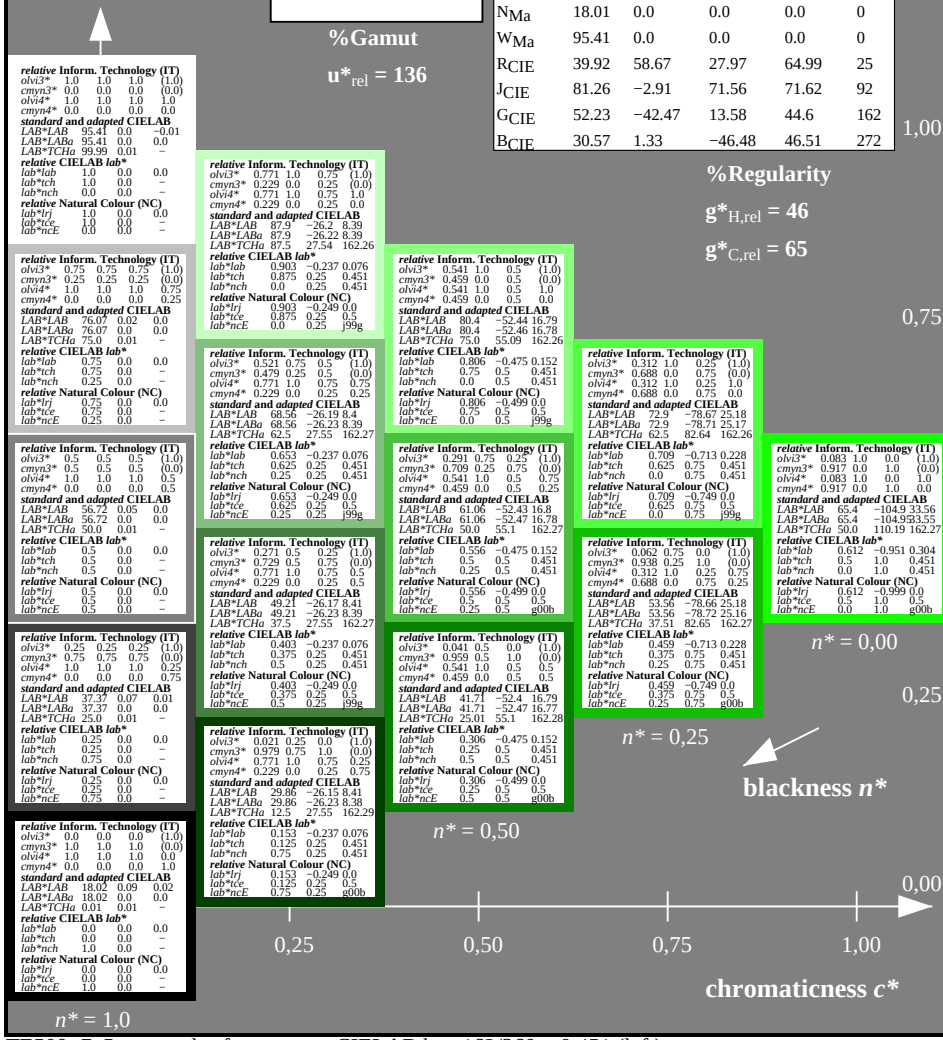
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

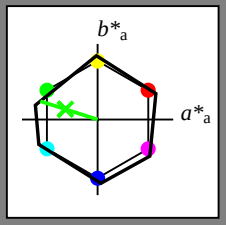
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 80 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

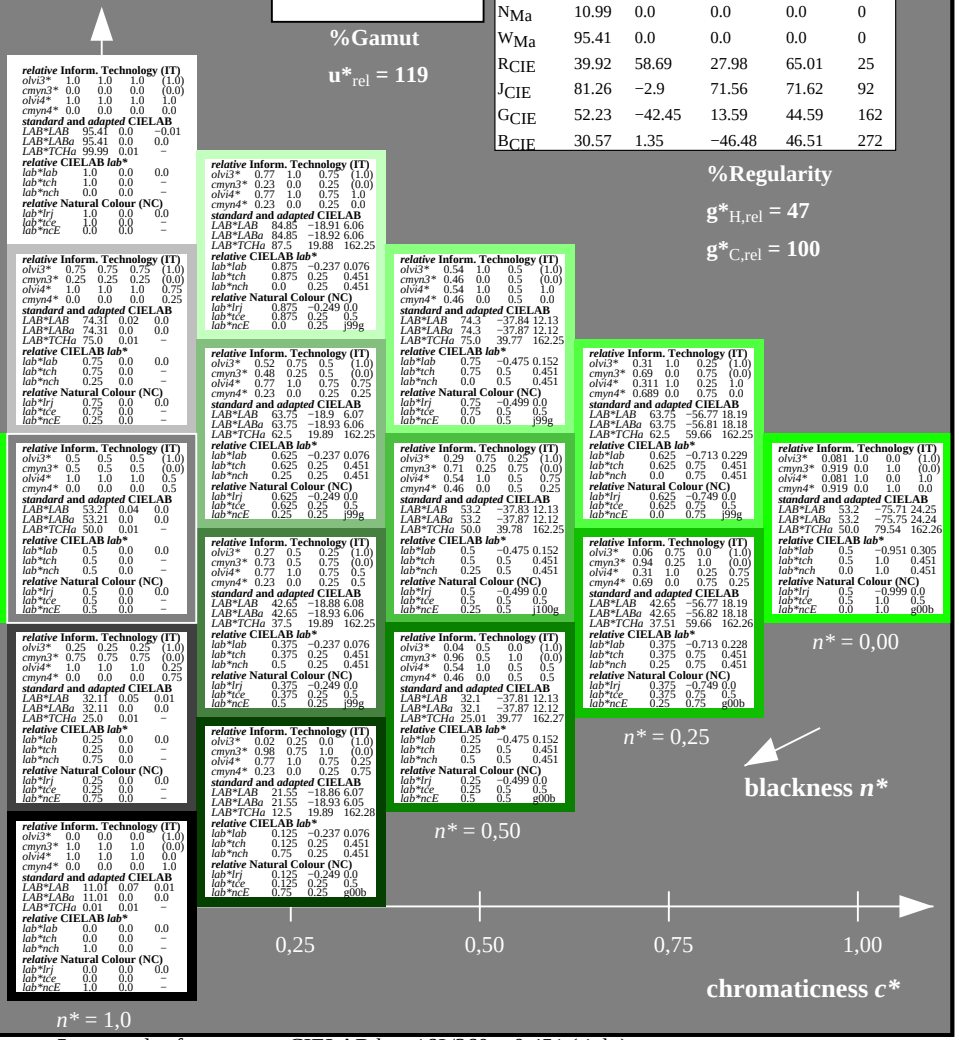
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

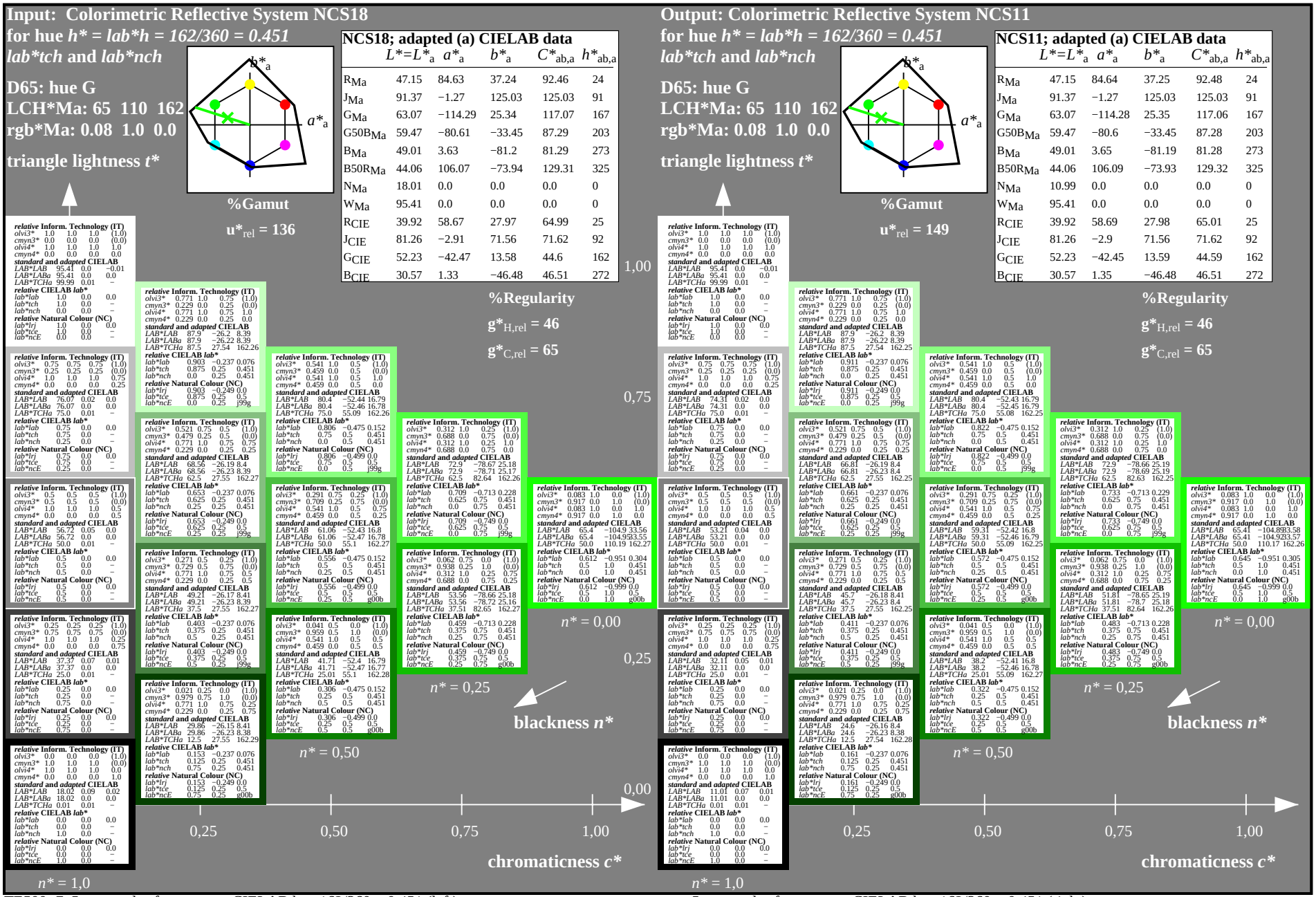
**g*$_{H,rel}$ = 47**

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



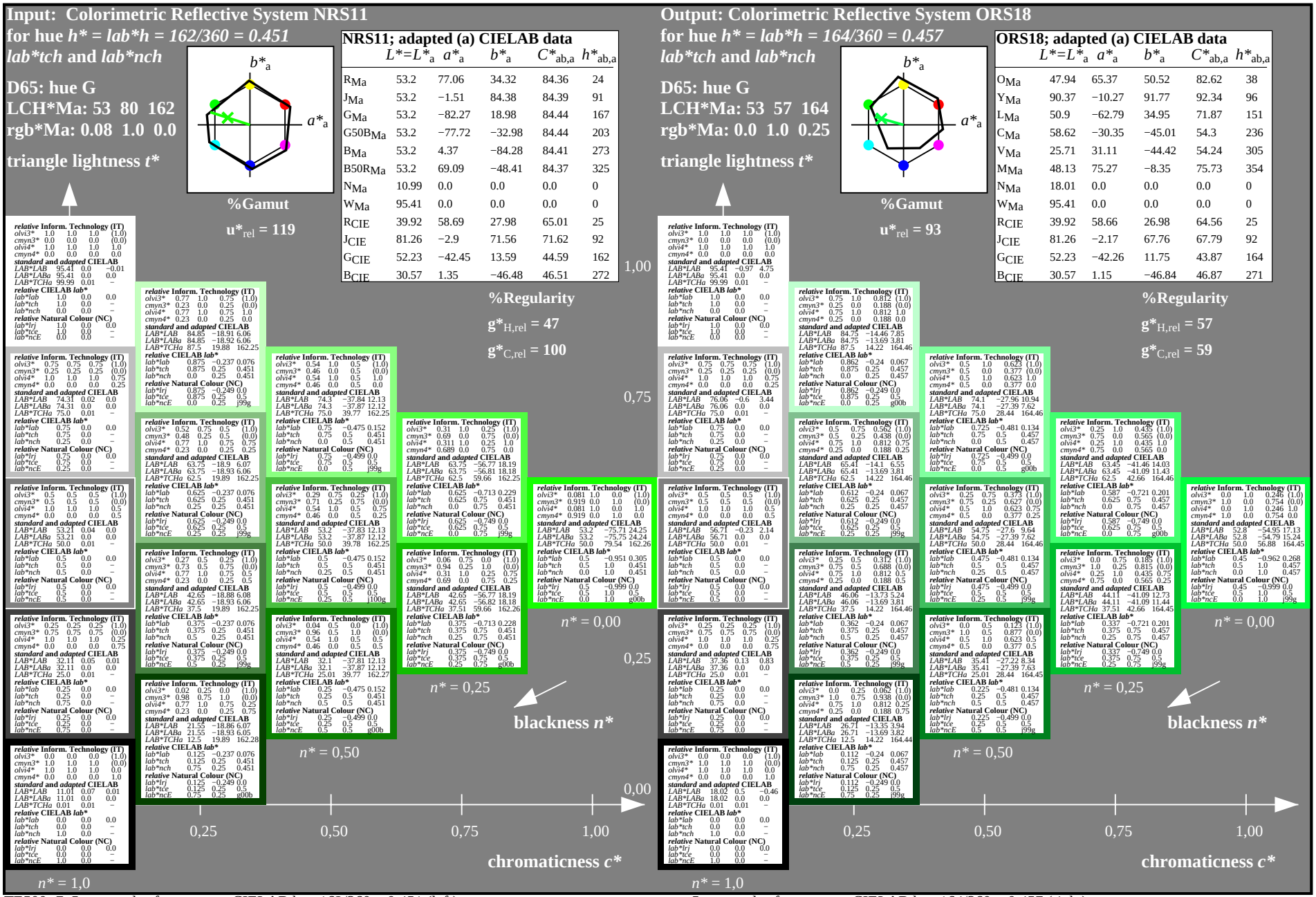

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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



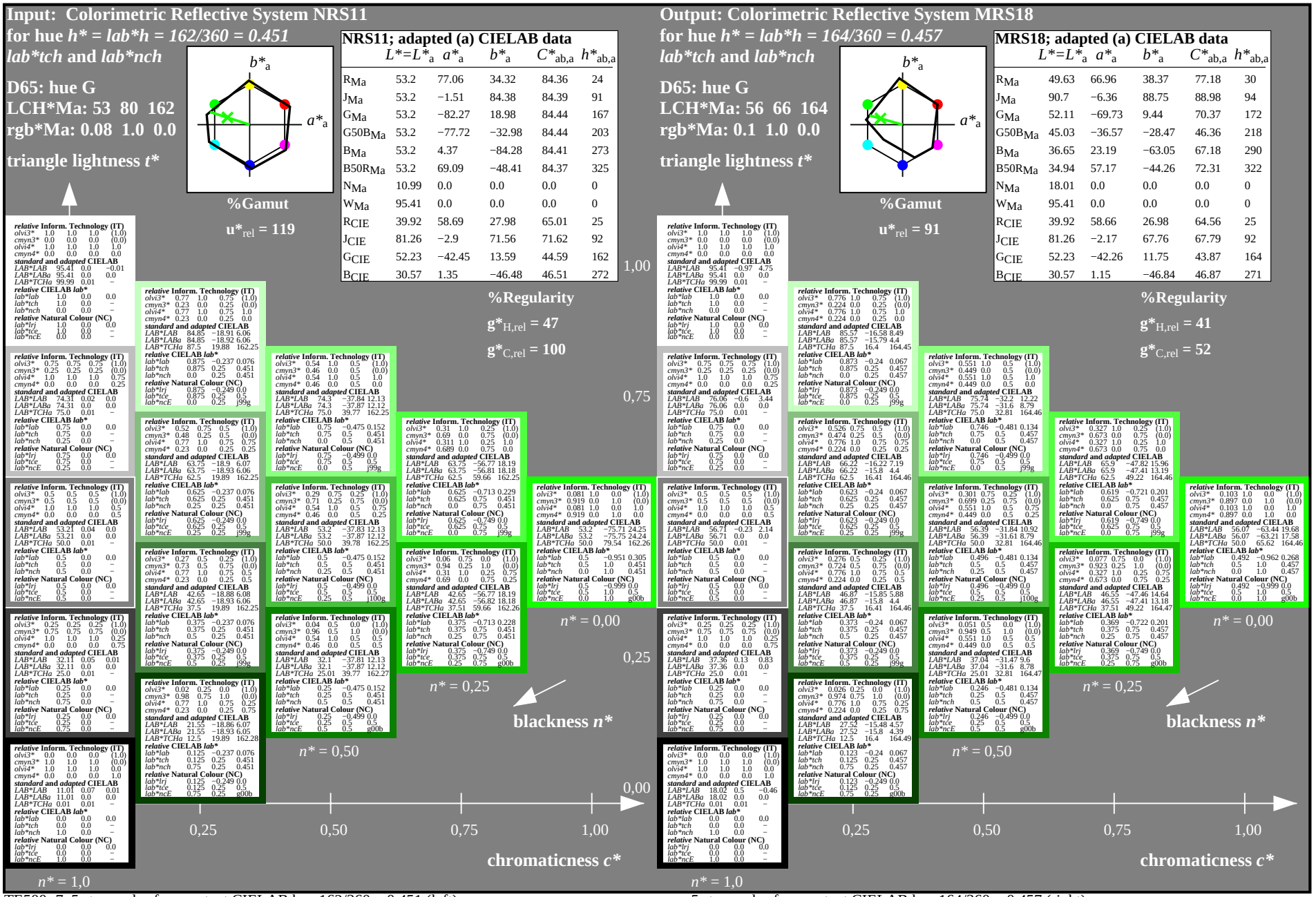

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



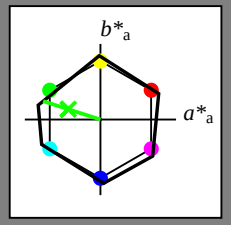

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 80 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

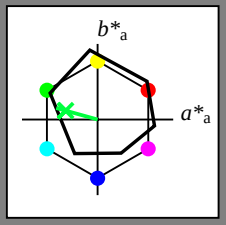
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 164/360 = 0.457**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 57 164**
**rgb*Ma: 0.0 1.0 0.25**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

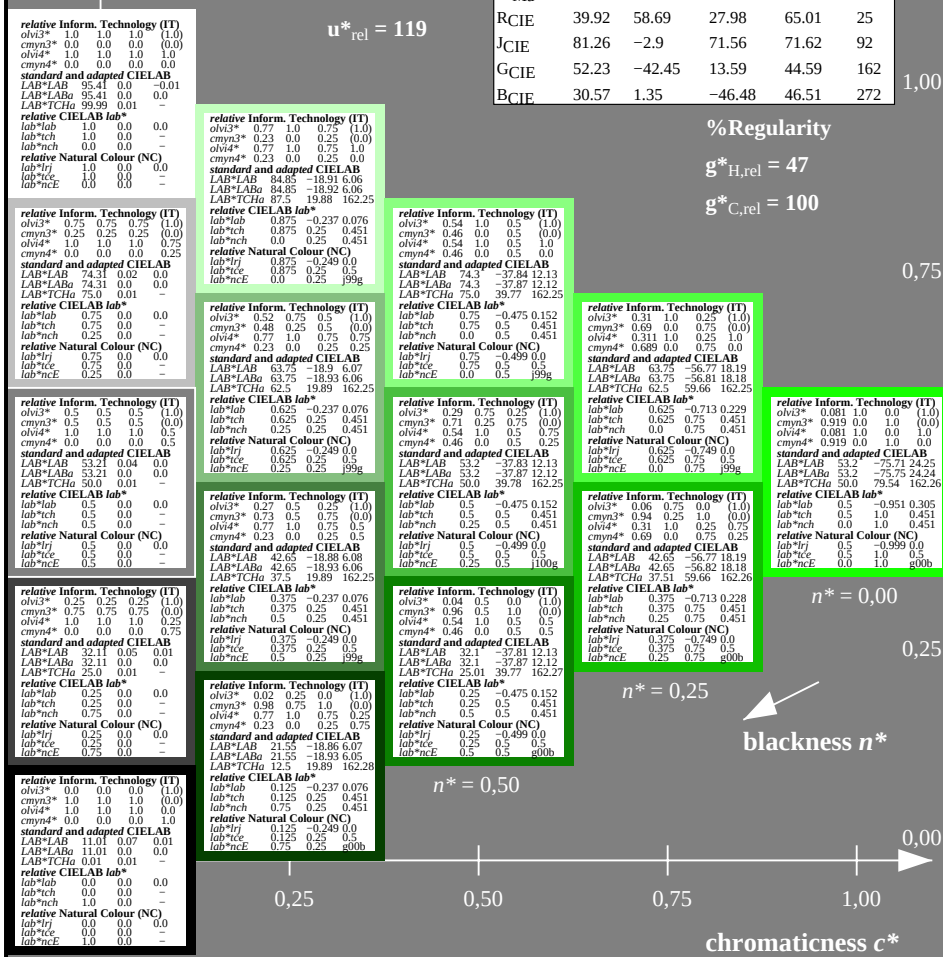
**TRS18; adapted (a) CIELAB data**

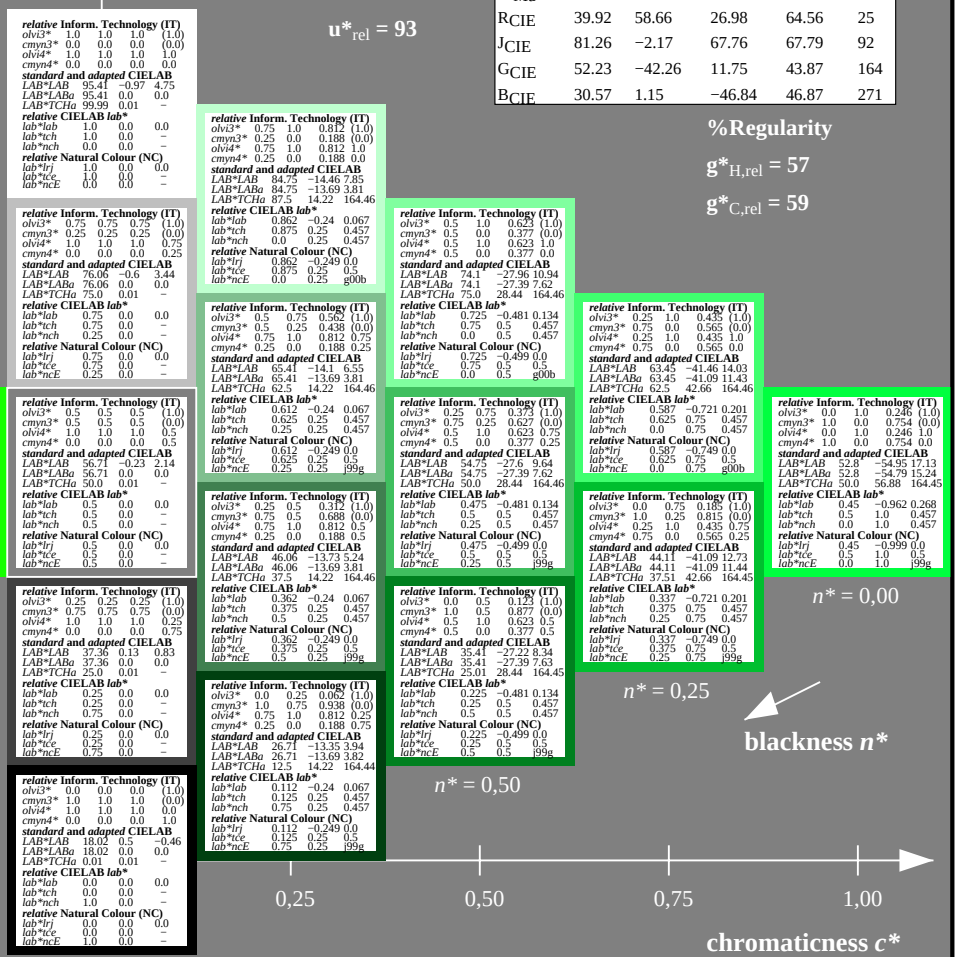
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

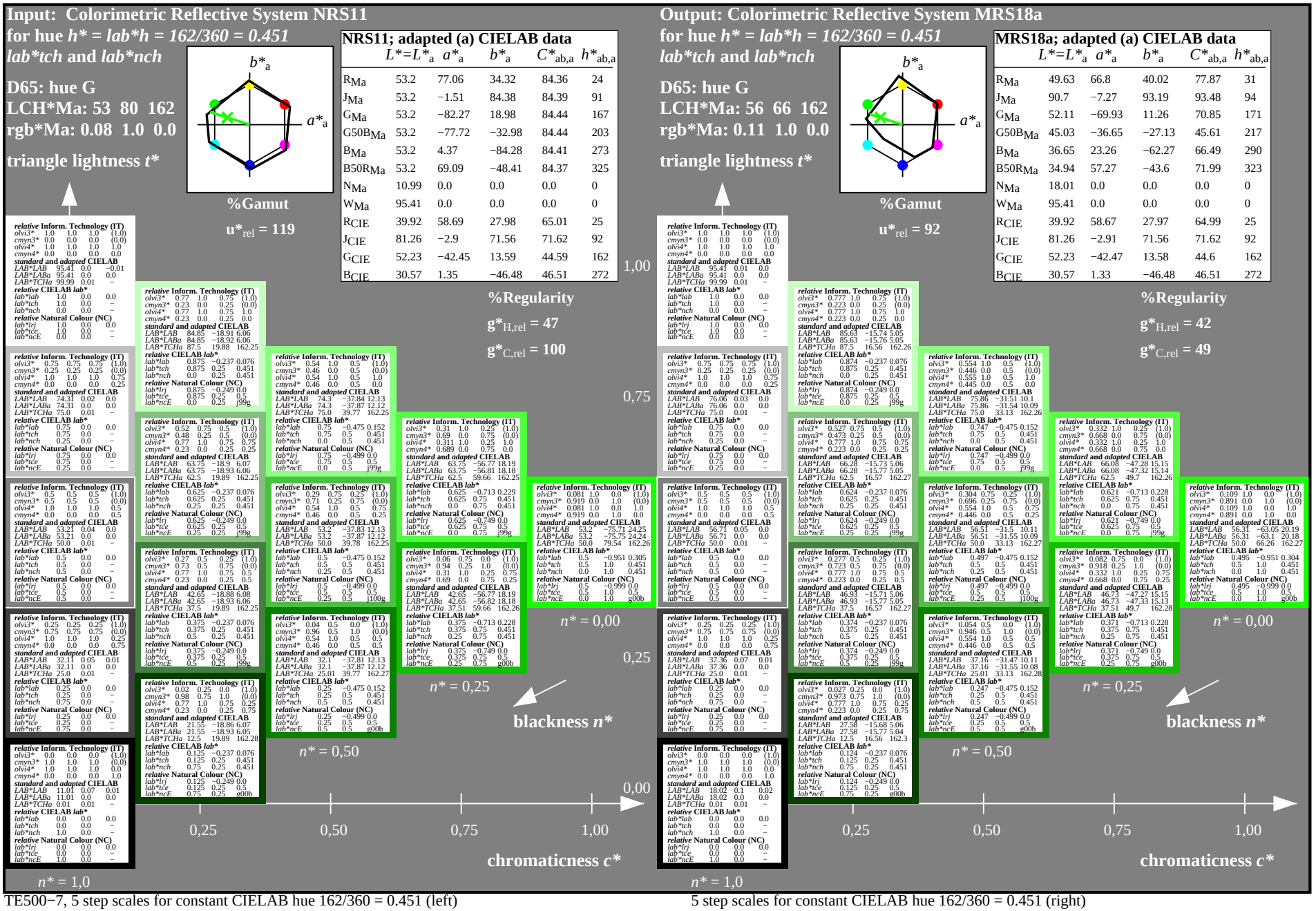
**g*$_{C,rel}$ = 59**



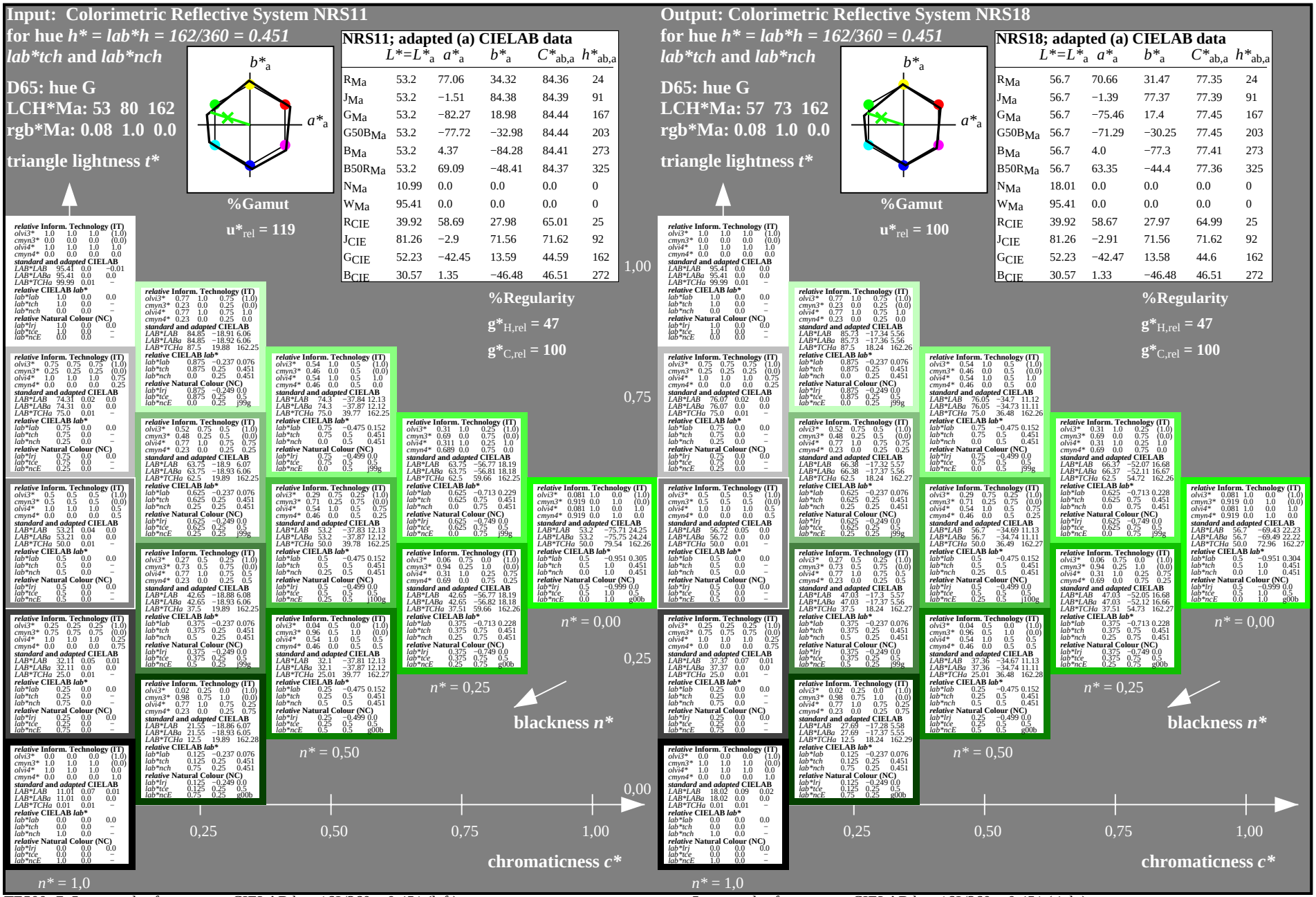

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)




TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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



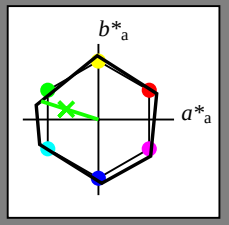

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 80 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

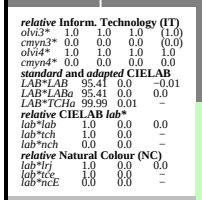
**NRS11; adapted (a) CIELAB data**

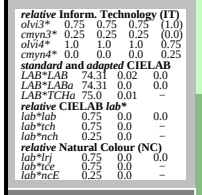
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

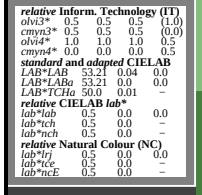
**%Regularity**

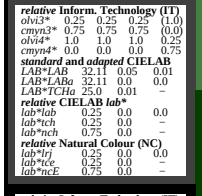
**g*$_{H,rel}$ = 47**

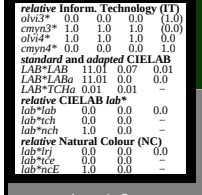
**g*$_{C,rel}$ = 100**

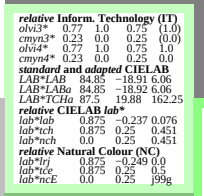


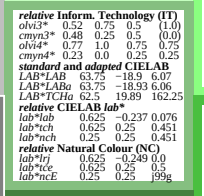



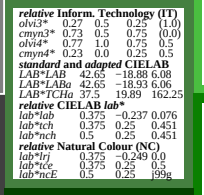



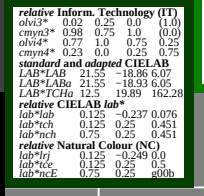



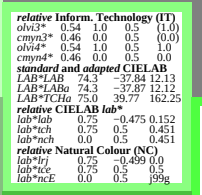



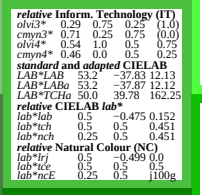



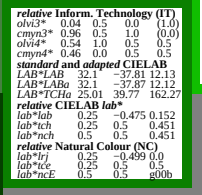



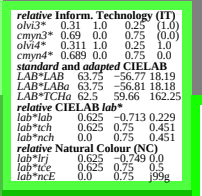



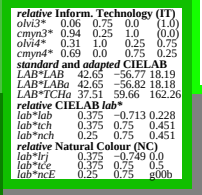



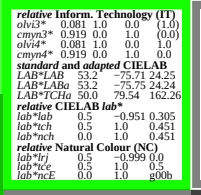




1,00

0,75

0,25

0,00

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

**blackness *n****

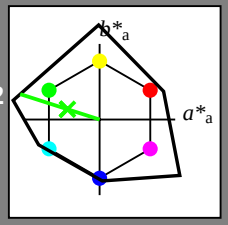
0,25 0,50 0,75 1,00

**chromaticness *c****

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 65 110 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

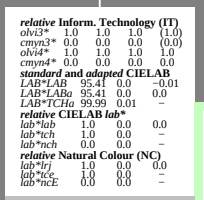
**NCS18; adapted (a) CIELAB data**

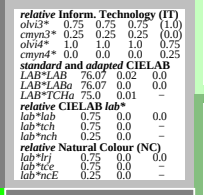
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

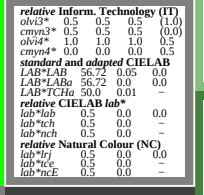
**%Regularity**

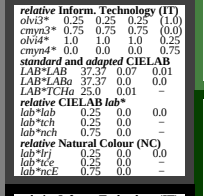
**g*$_{H,rel}$ = 46**

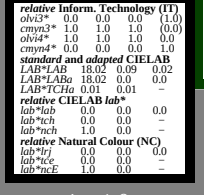
**g*$_{C,rel}$ = 65**

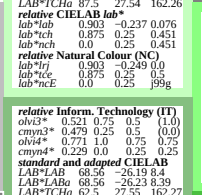


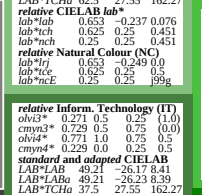



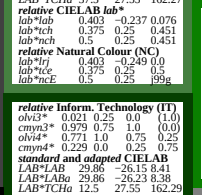



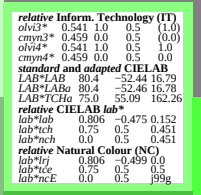



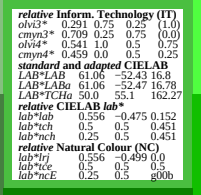



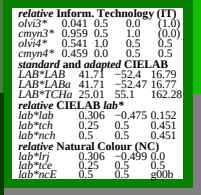



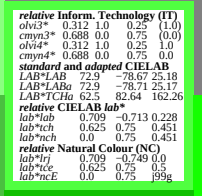



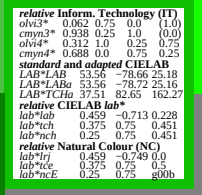



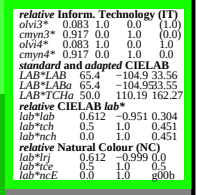




1,00

0,75

0,25

0,00

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

**blackness *n****

0,25 0,50 0,75 1,00

**chromaticness *c****

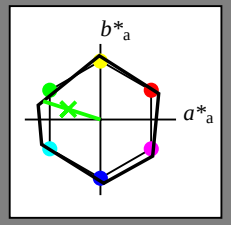
TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 80 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

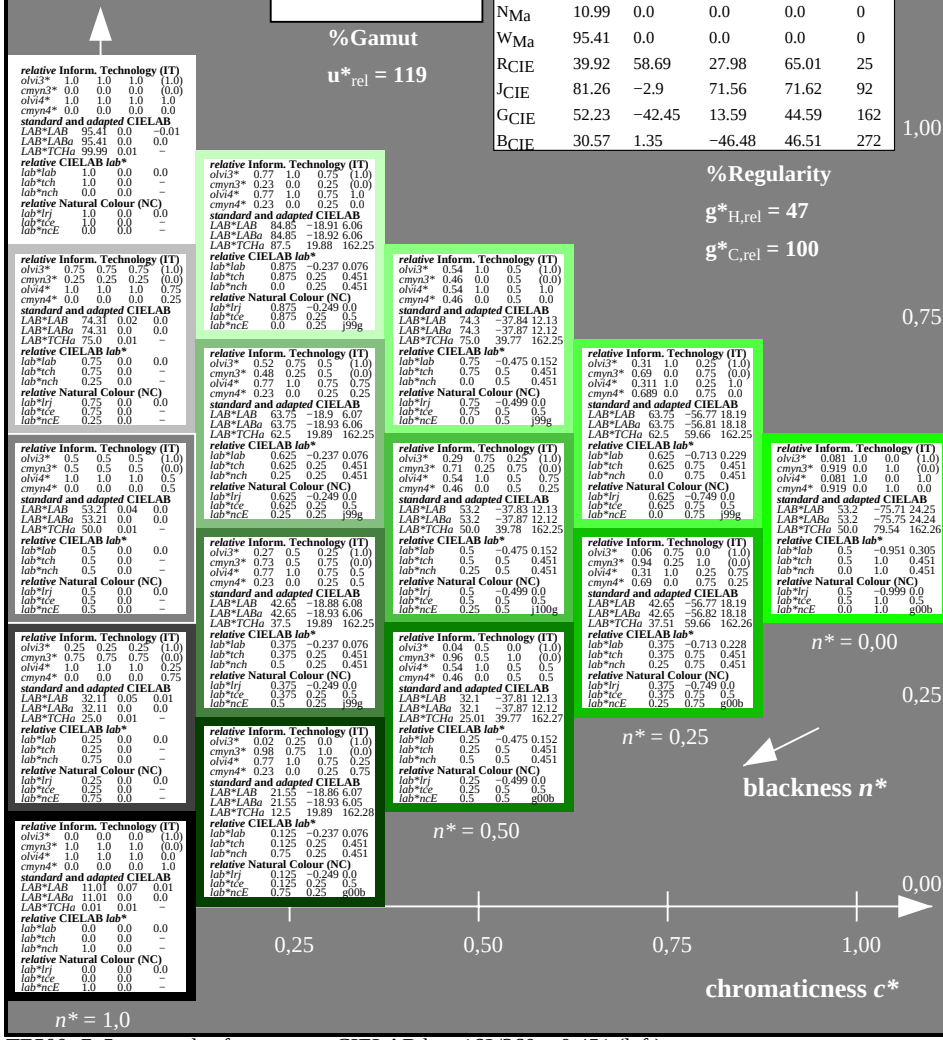
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

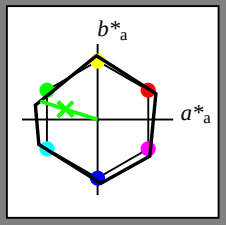
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 162/360 = 0.451**
***lab*tch* and *lab*nch***

**D65: hue G**
**LCH*Ma: 53 80 162**
**rgb*Ma: 0.08 1.0 0.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

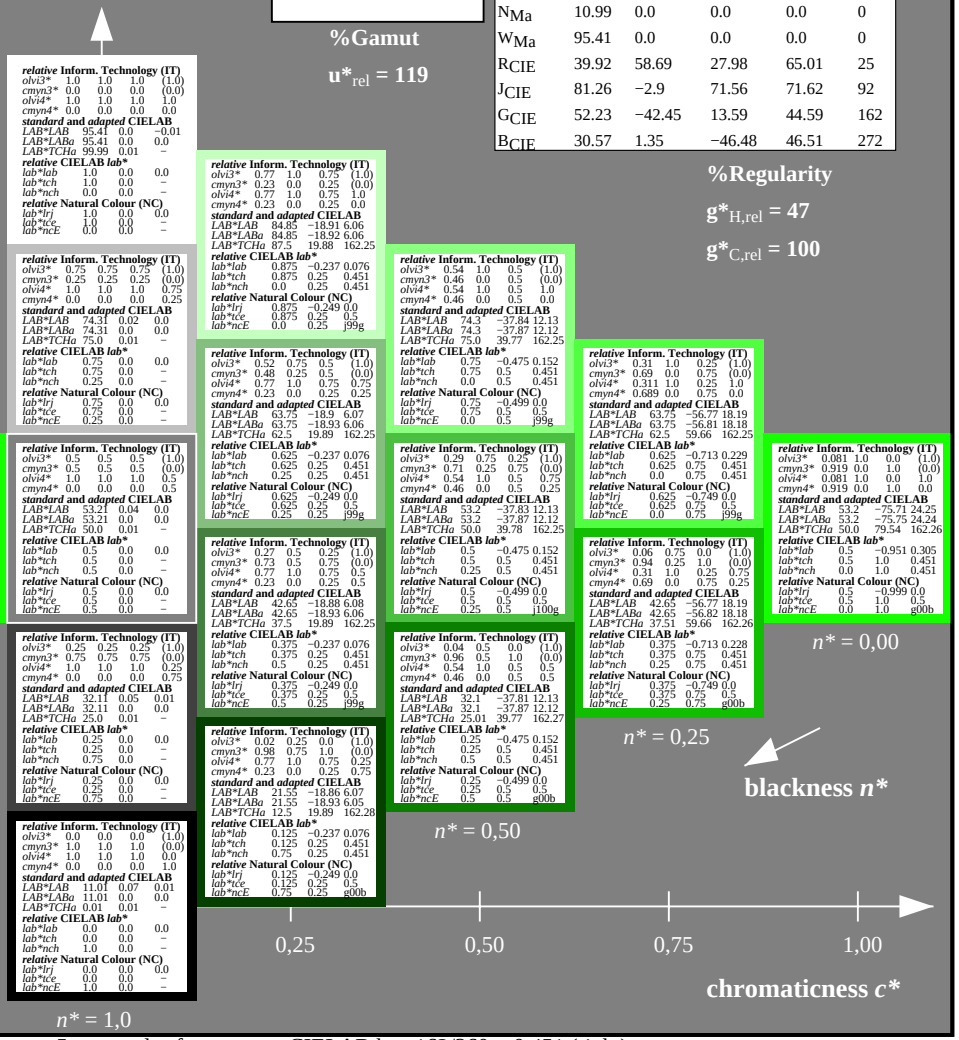
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

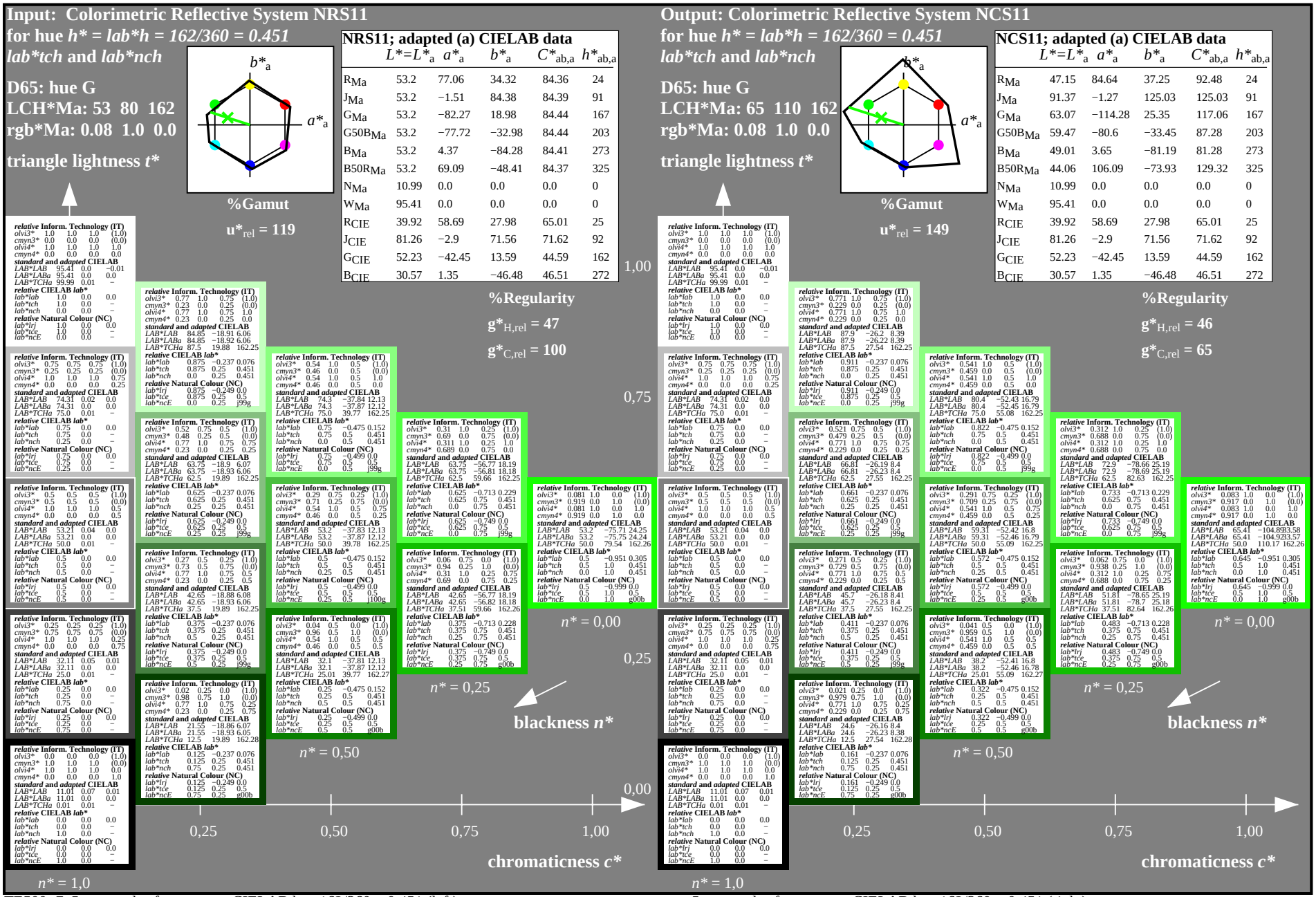
**g*$_{H,rel}$ = 47**

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



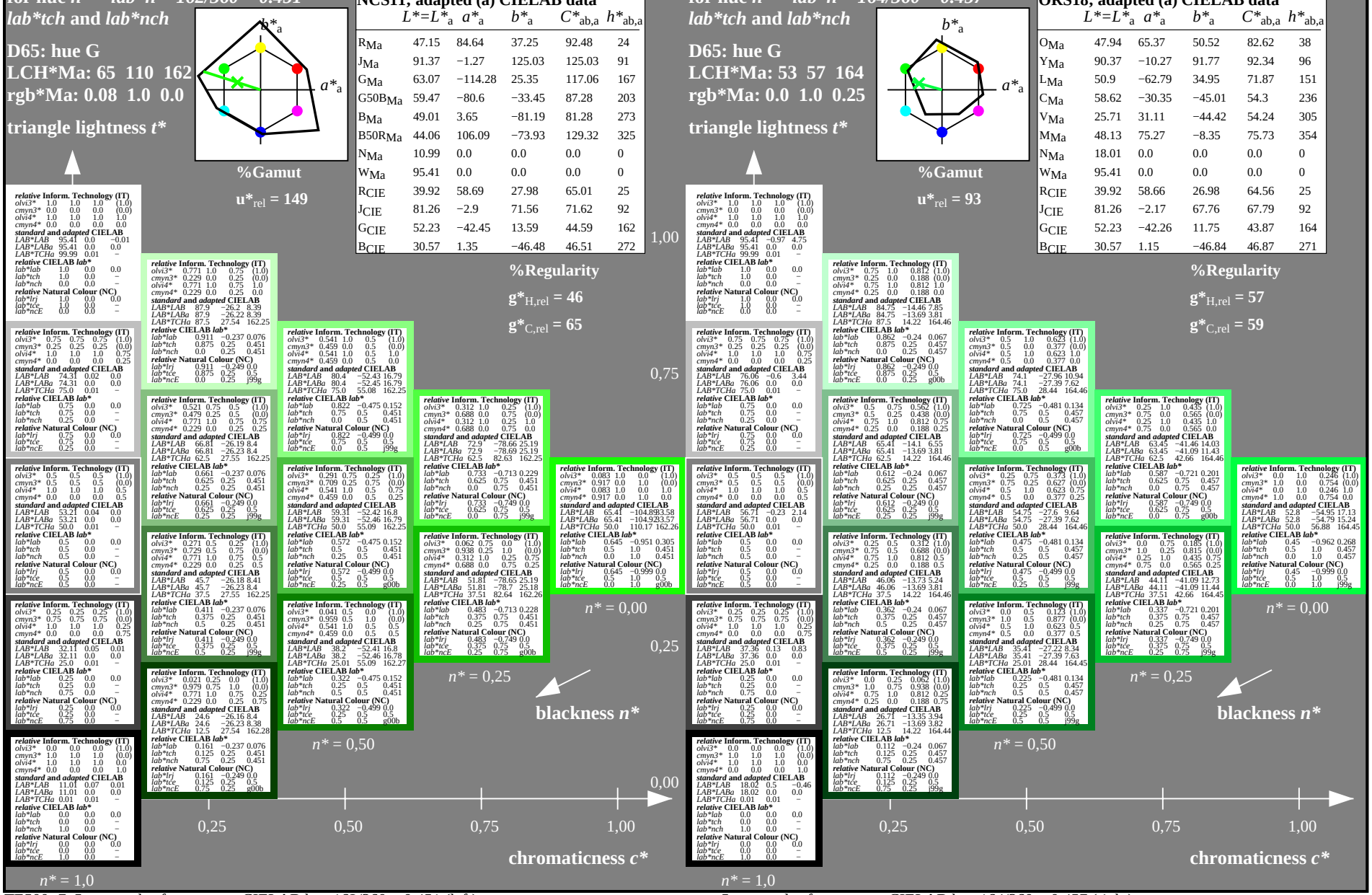

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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



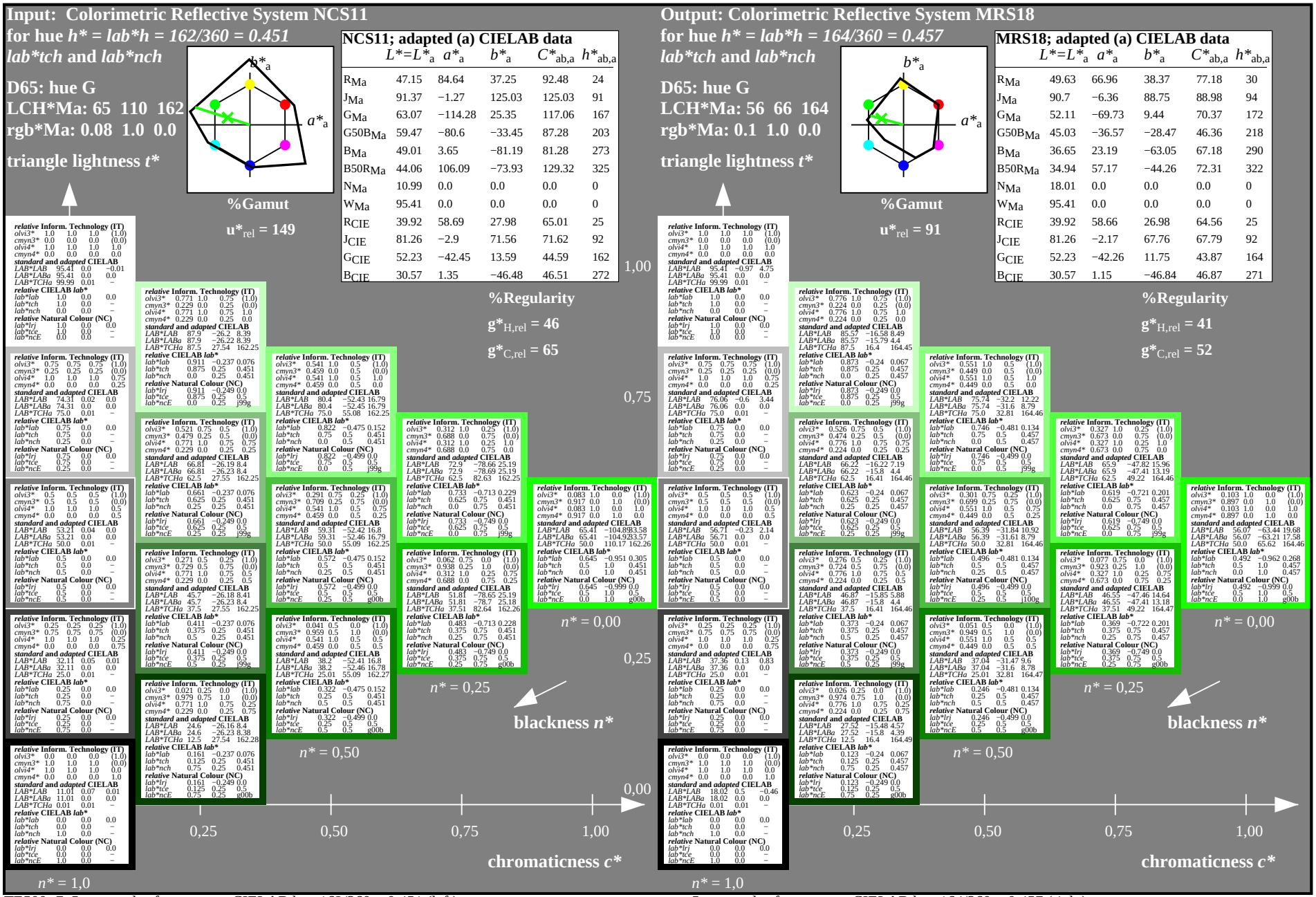

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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



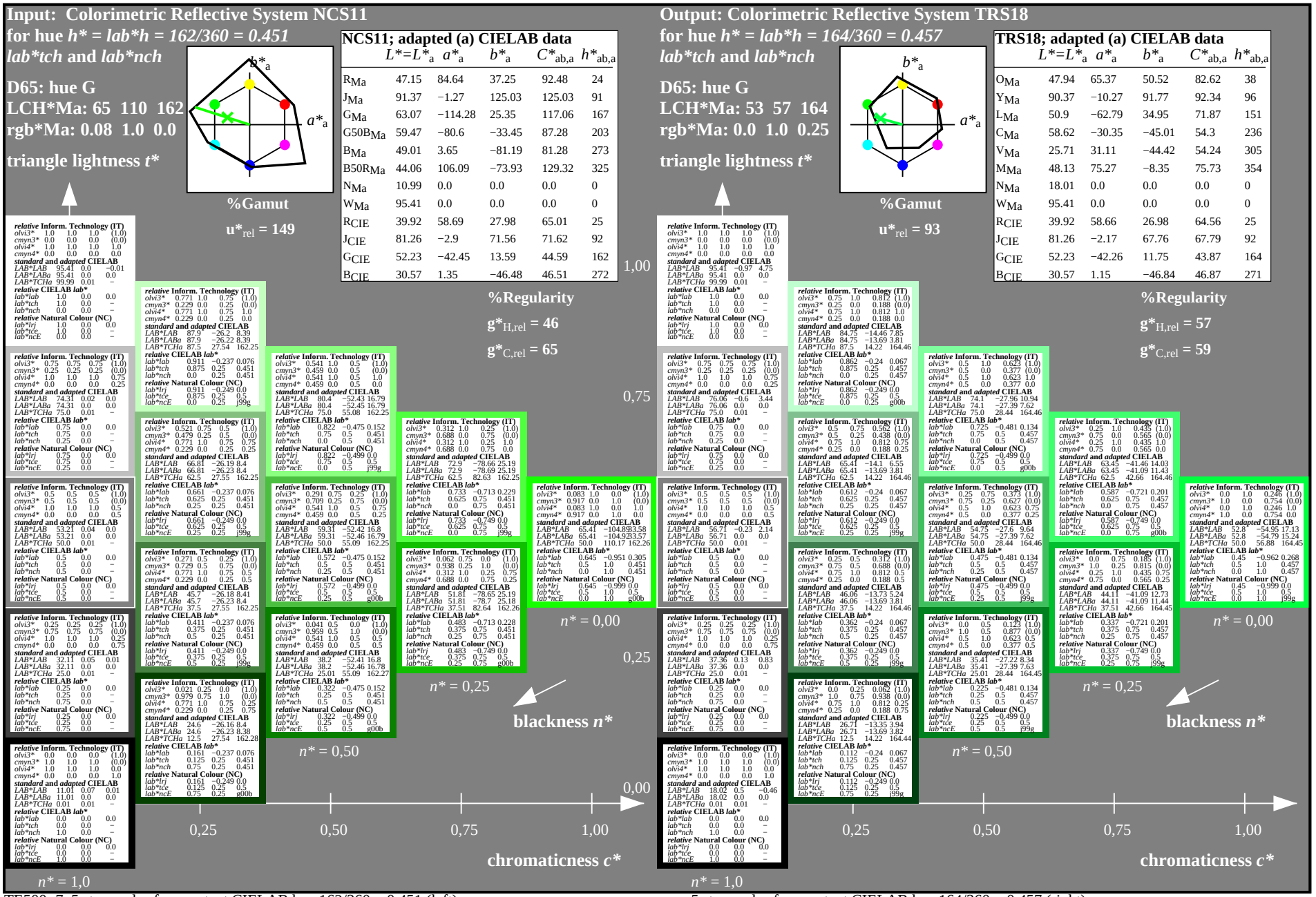

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



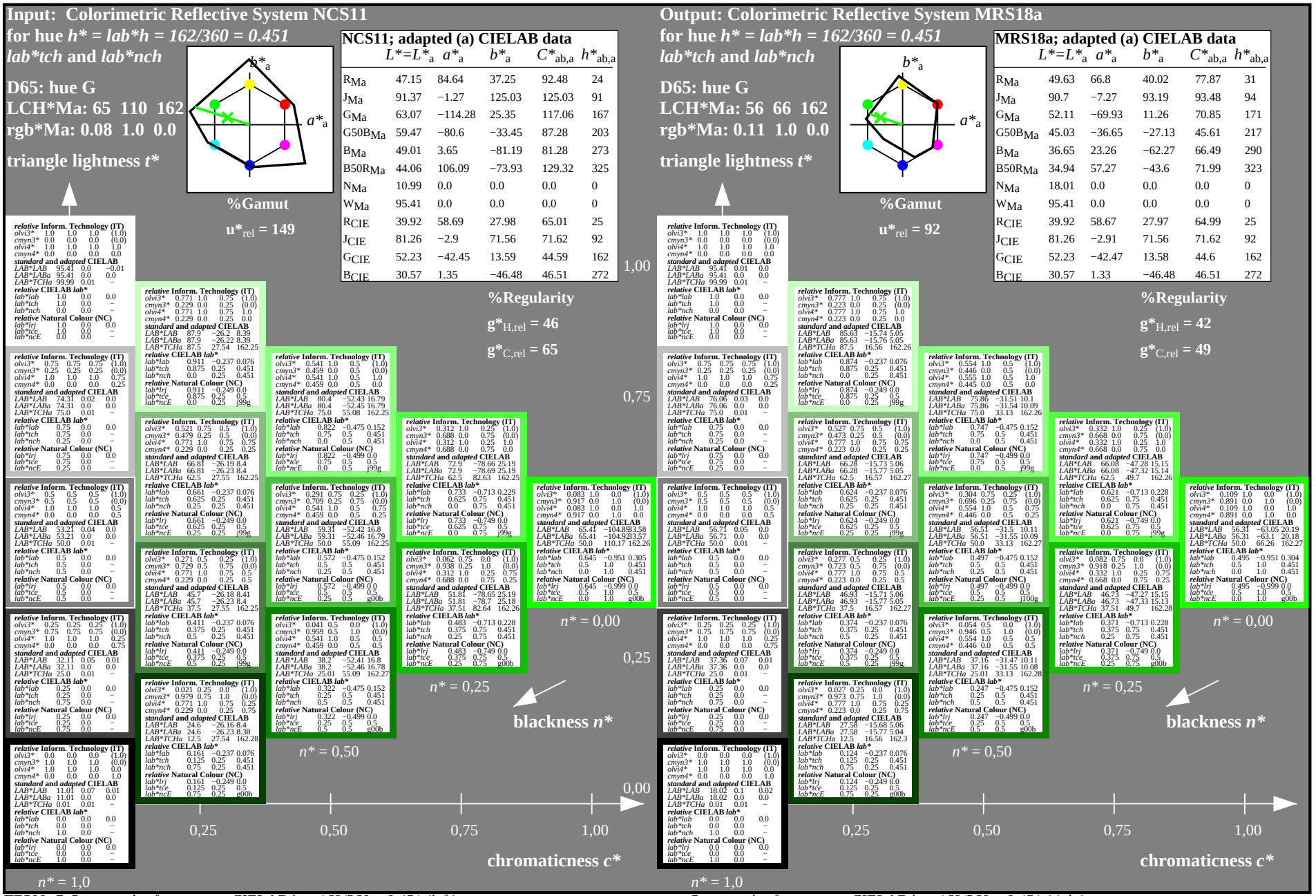

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



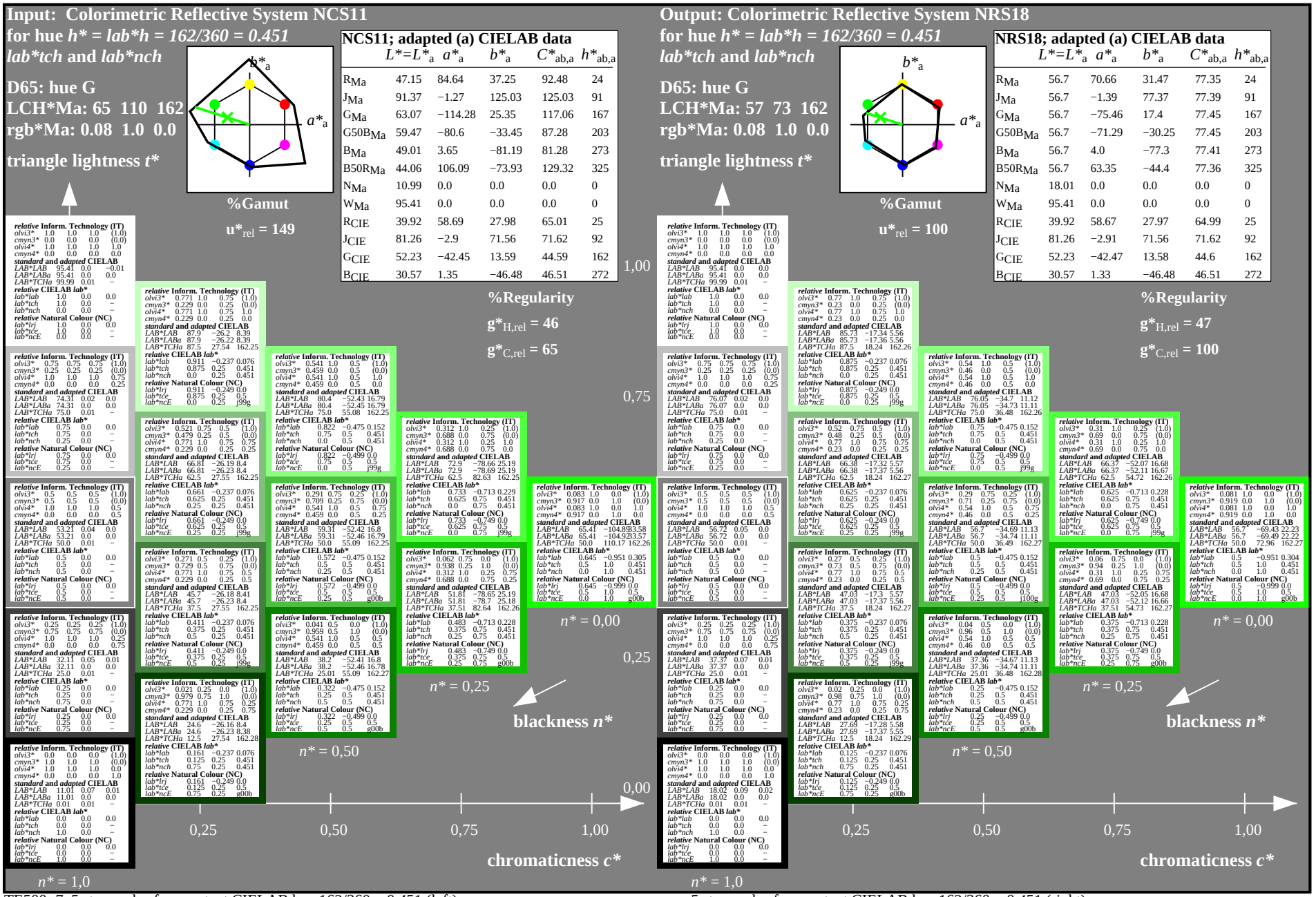

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

5 step scales for constant CIELAB hue 164/360 = 0.457 (right)



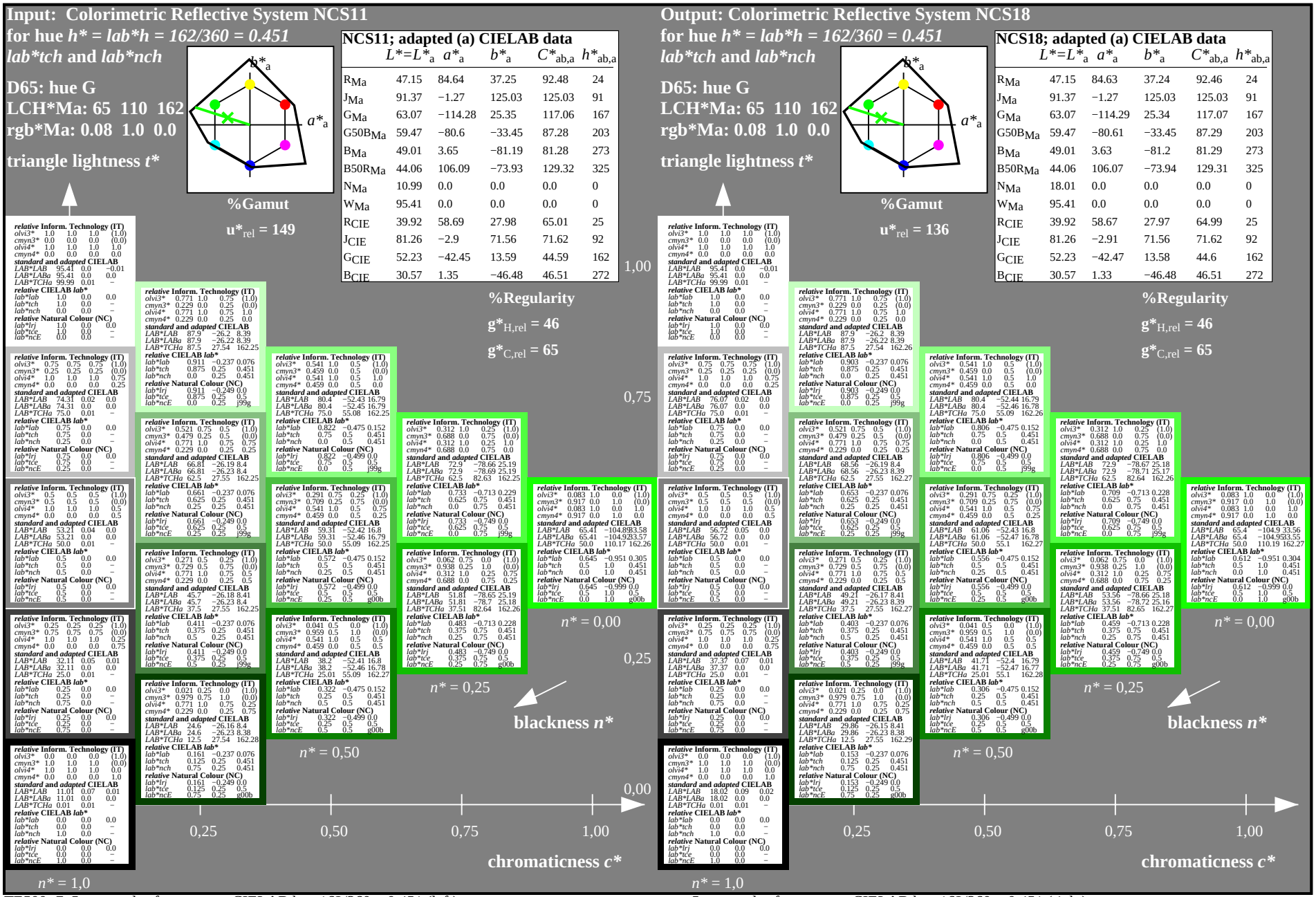

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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



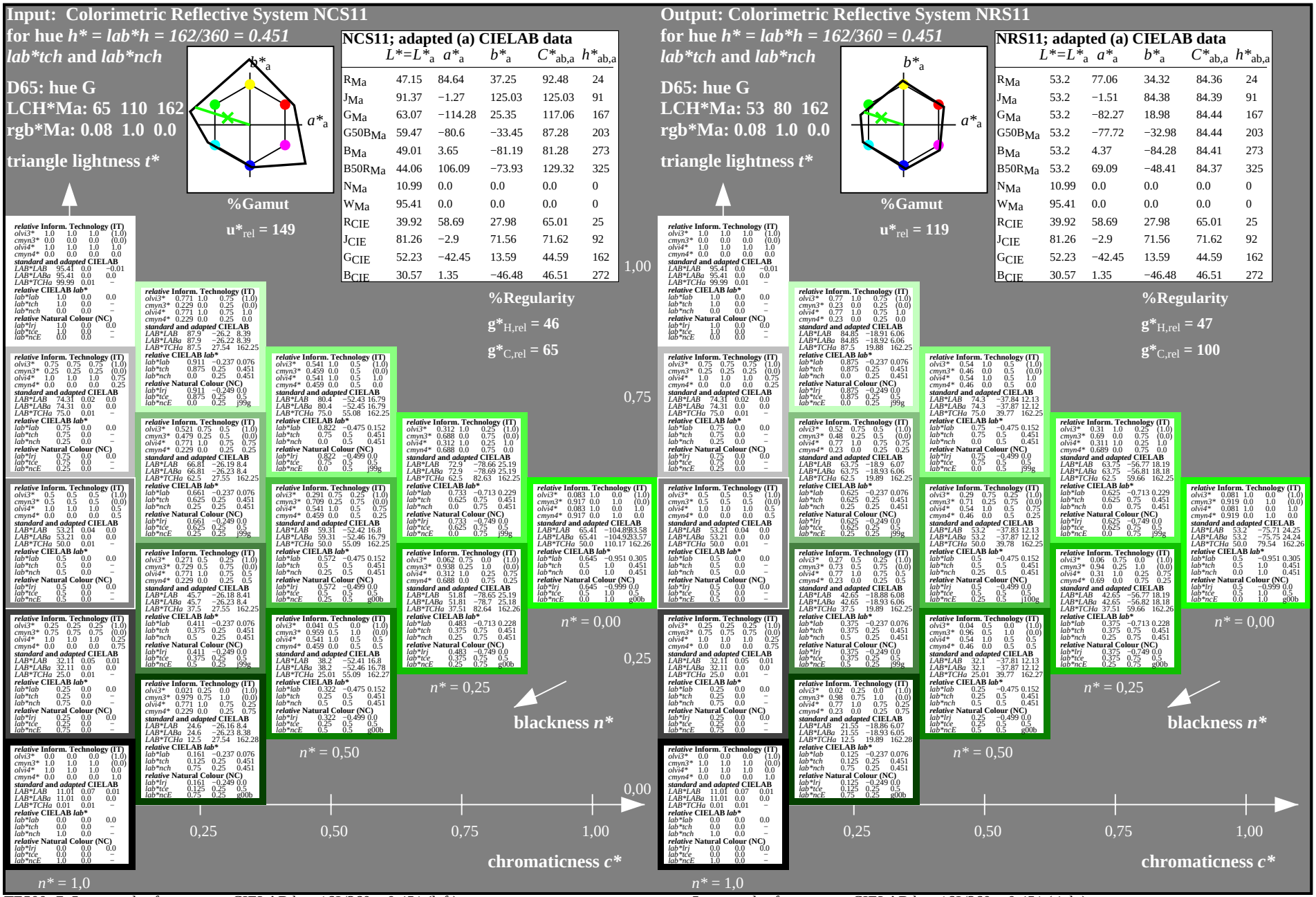

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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




**NCS11; adapted (a) CIELAB data**

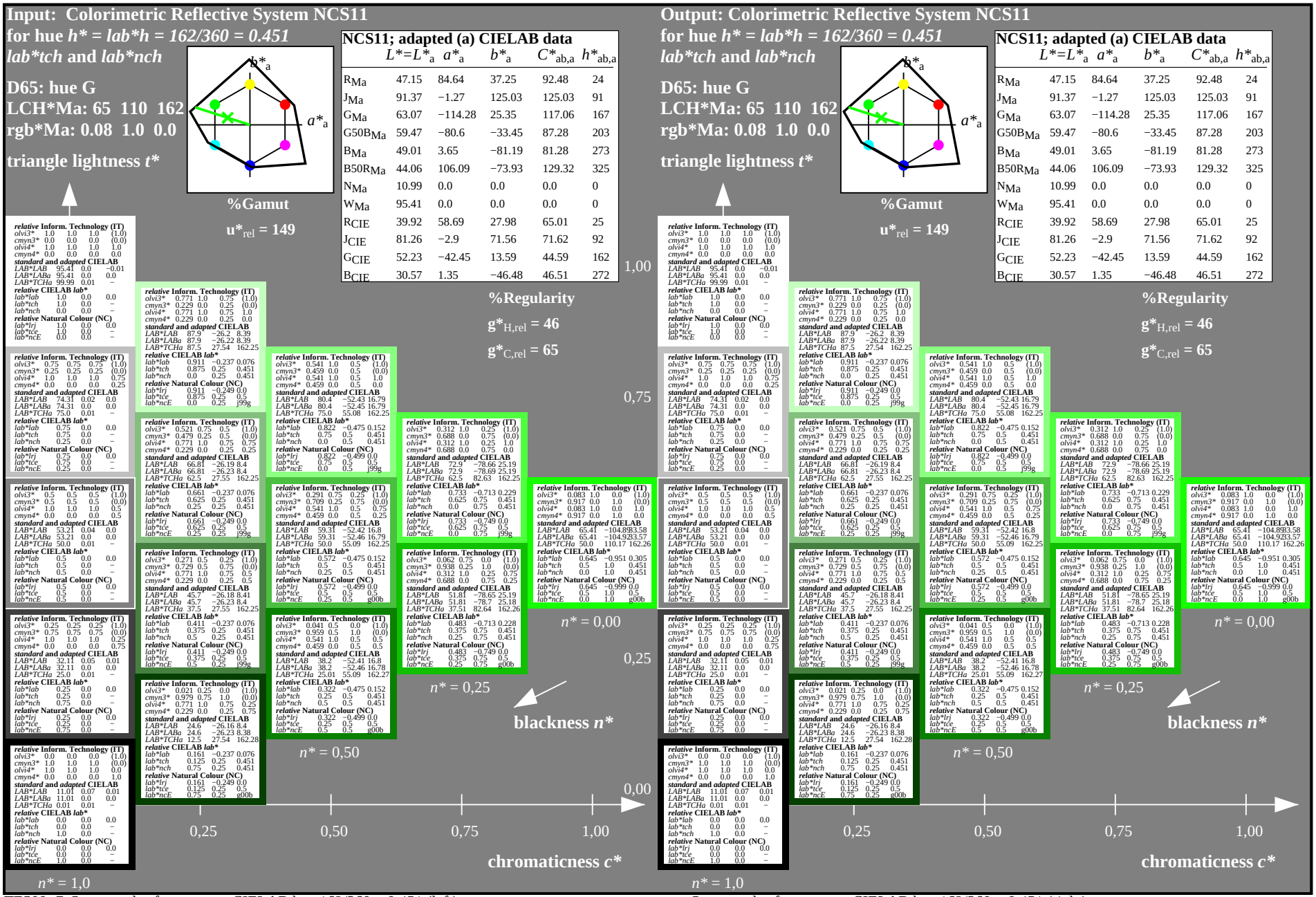
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

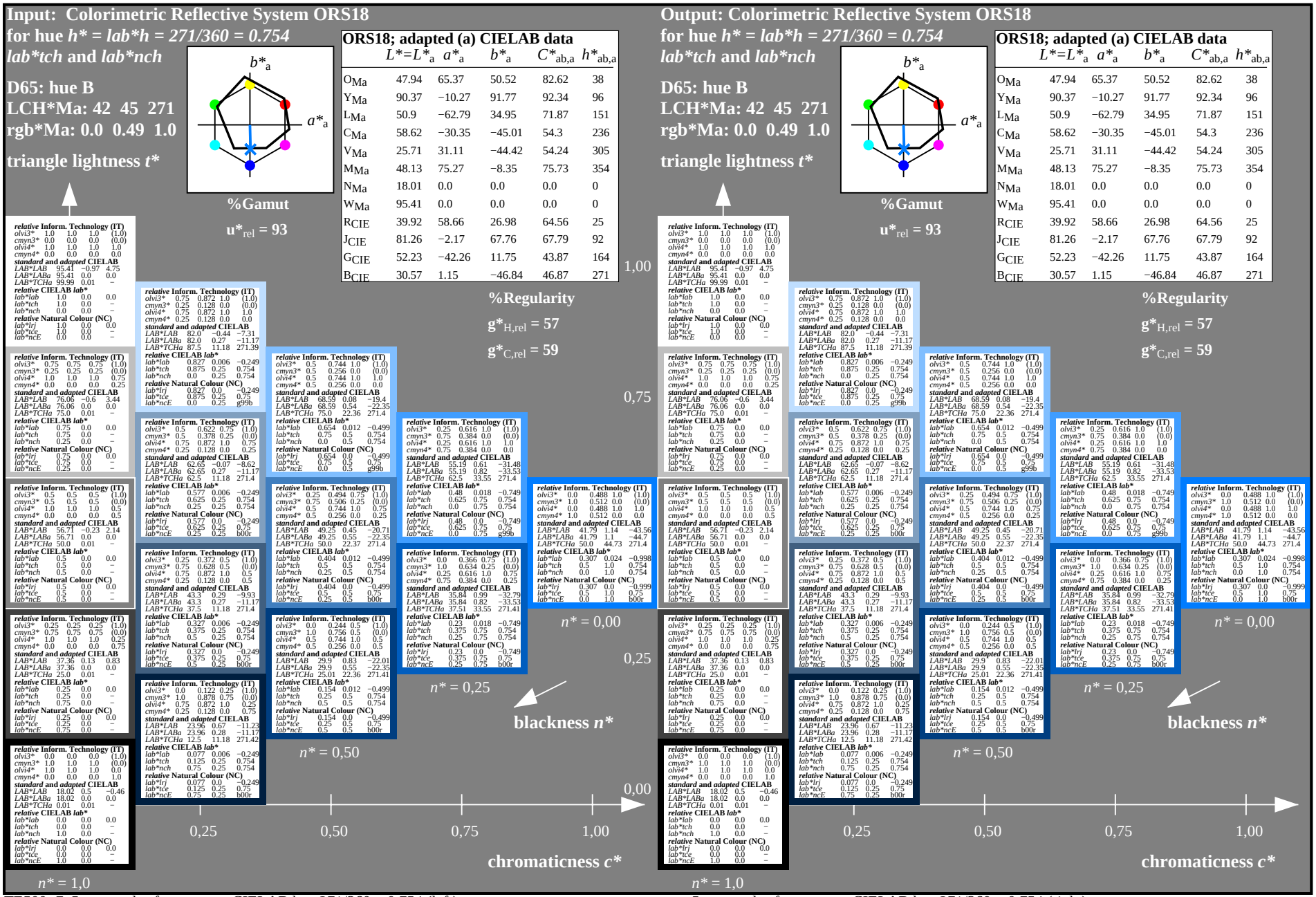



**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

TE500−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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



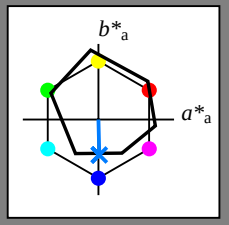

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 0.49 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

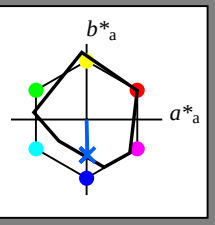
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 271/360 = 0.754**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 40 50 271**
**rgb*Ma: 0.0 0.37 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

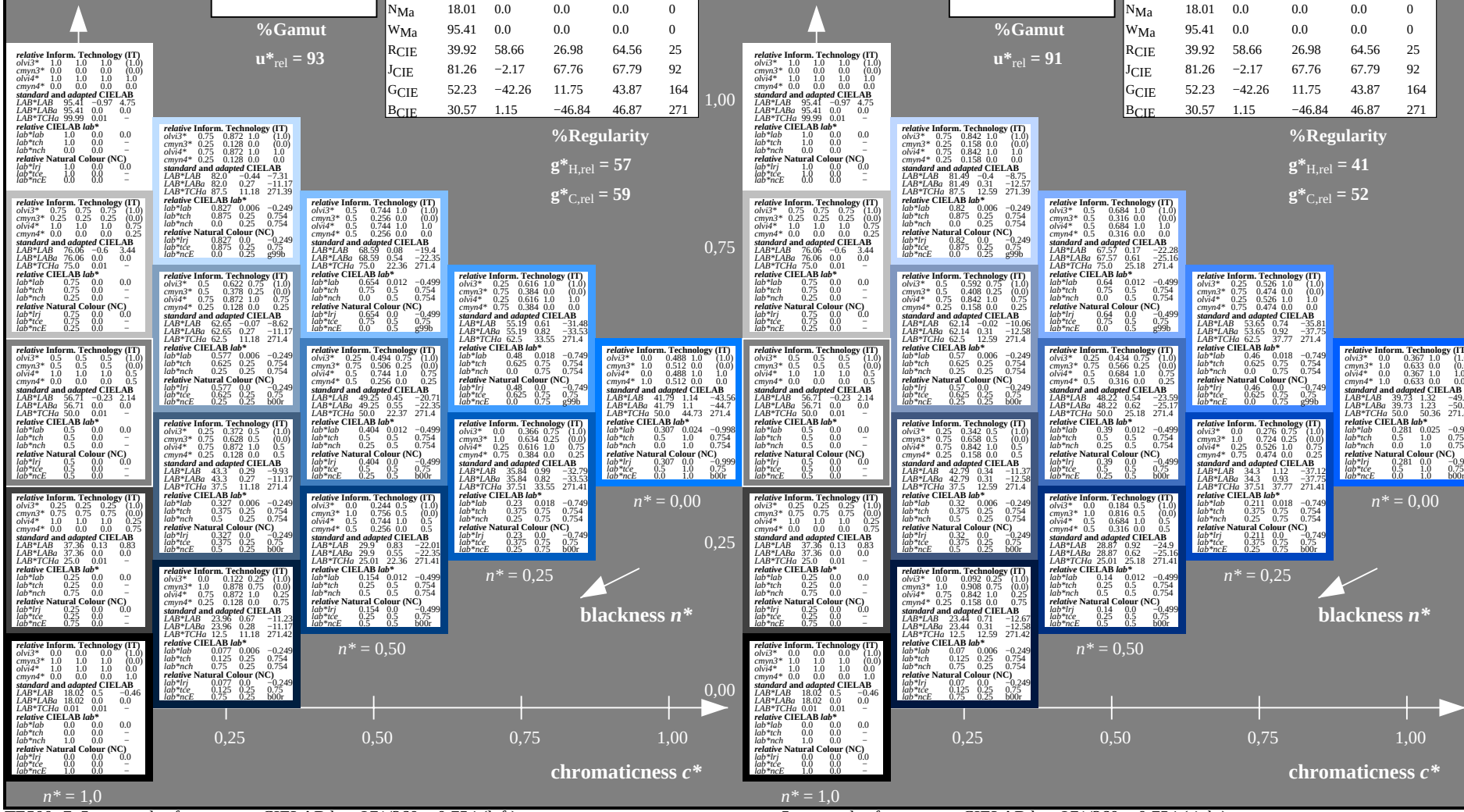
**MRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

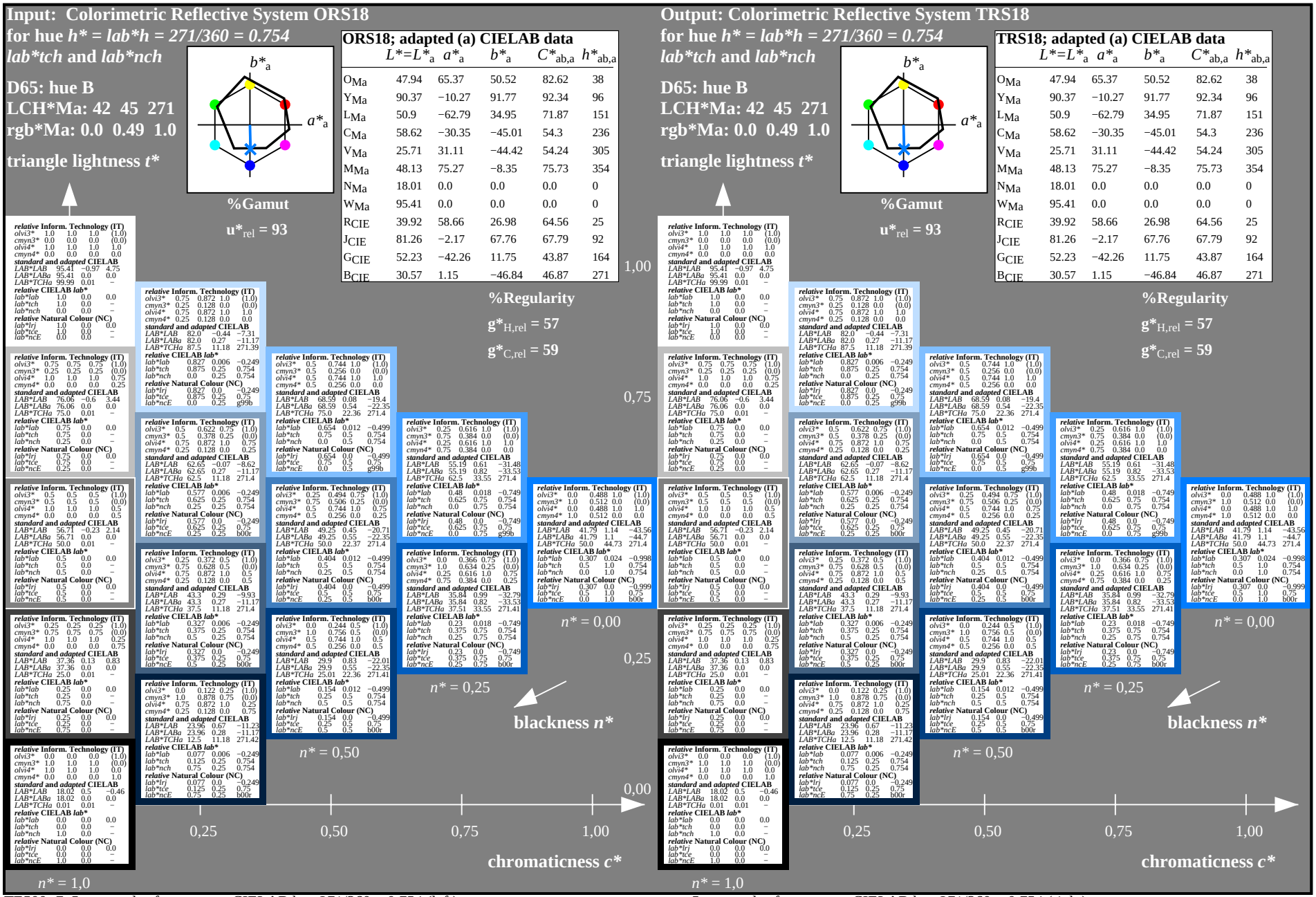
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**




TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



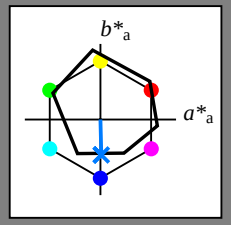

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

**Input: Colorimetric 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**
**rgb*Ma: 0.0 0.49 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

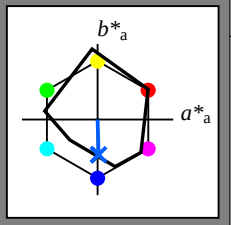
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 40 49 272**
**rgb*Ma: 0.0 0.36 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

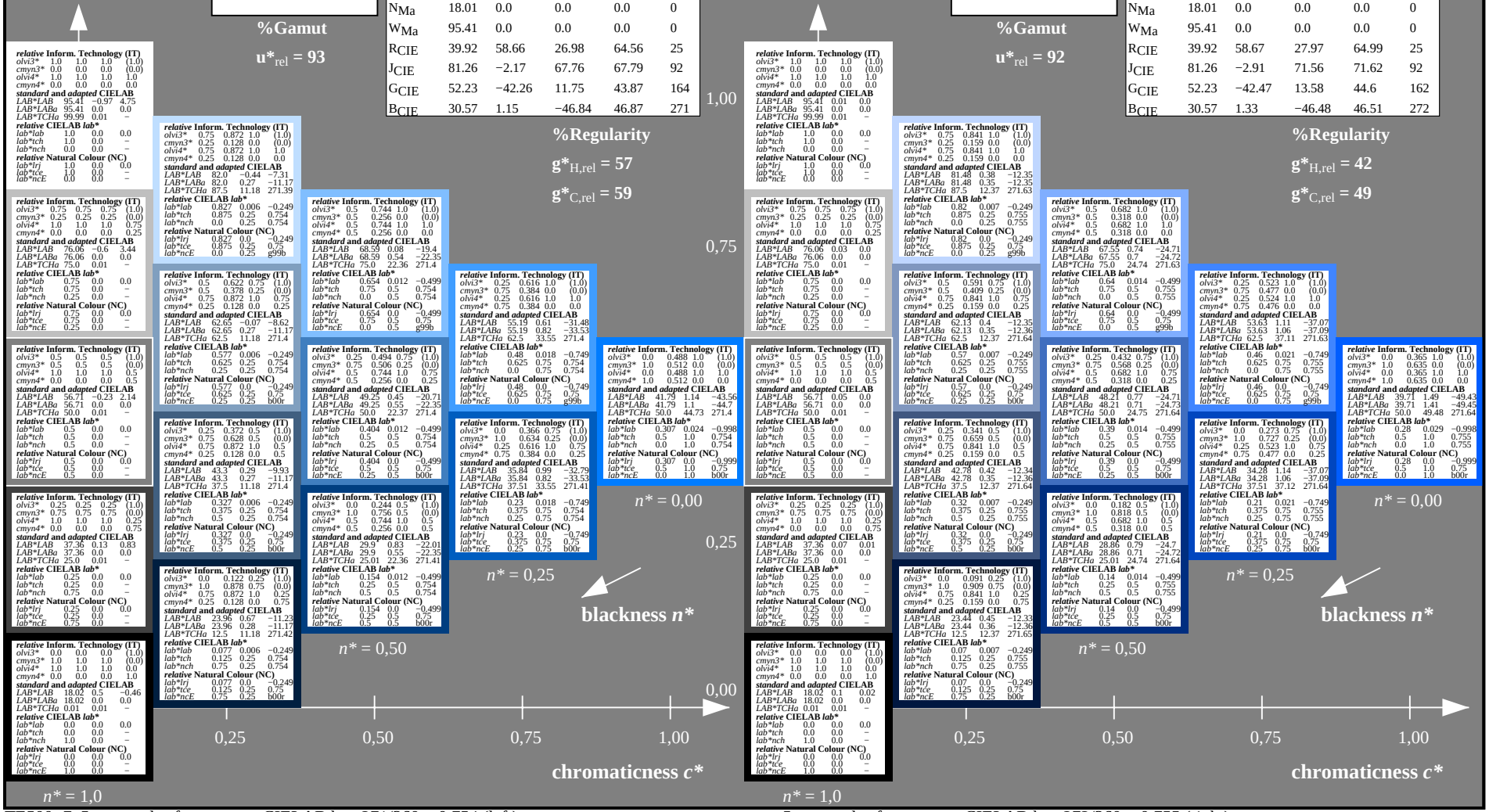
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

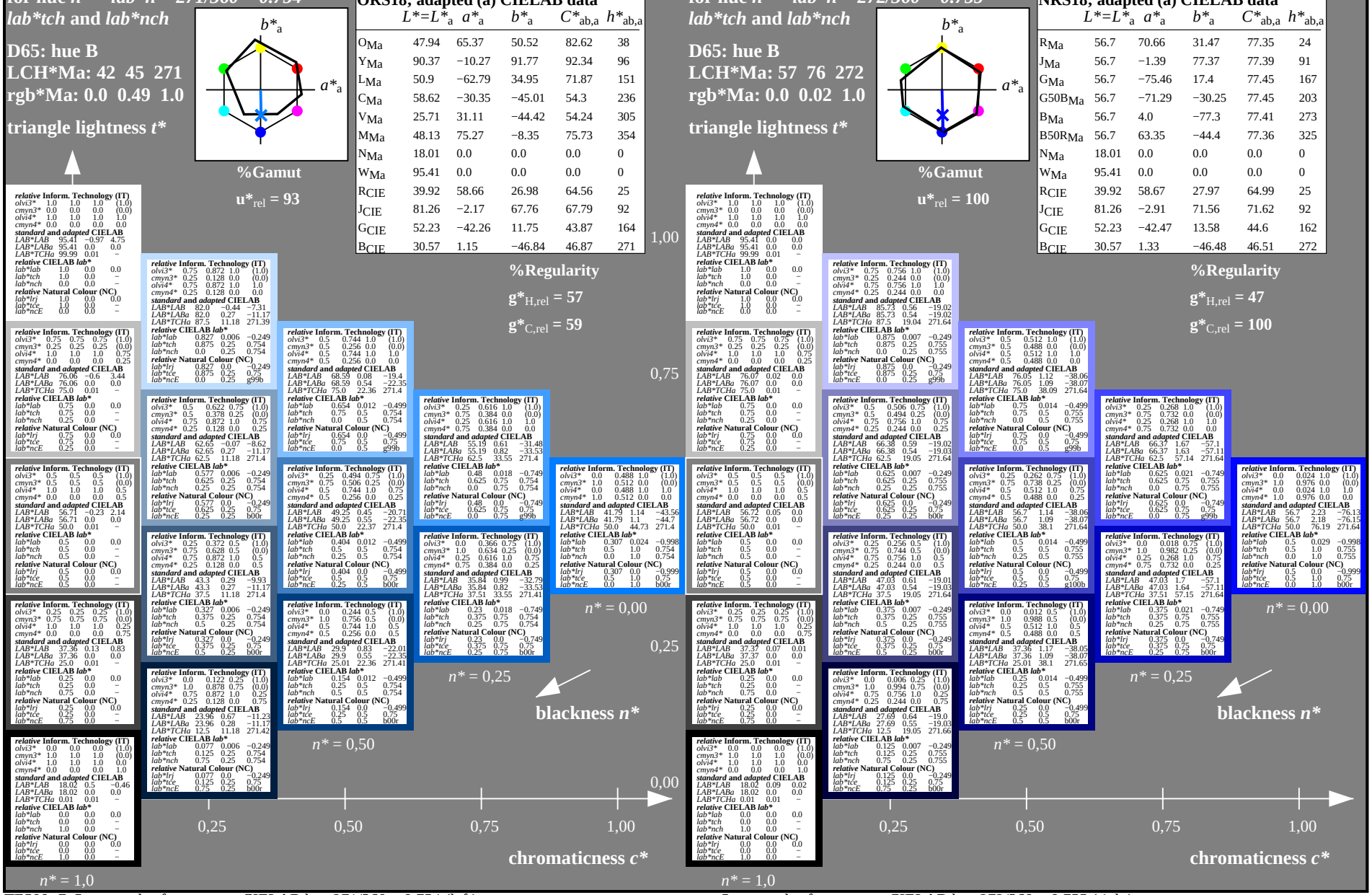
**g*$_{H,rel}$ = 42**

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



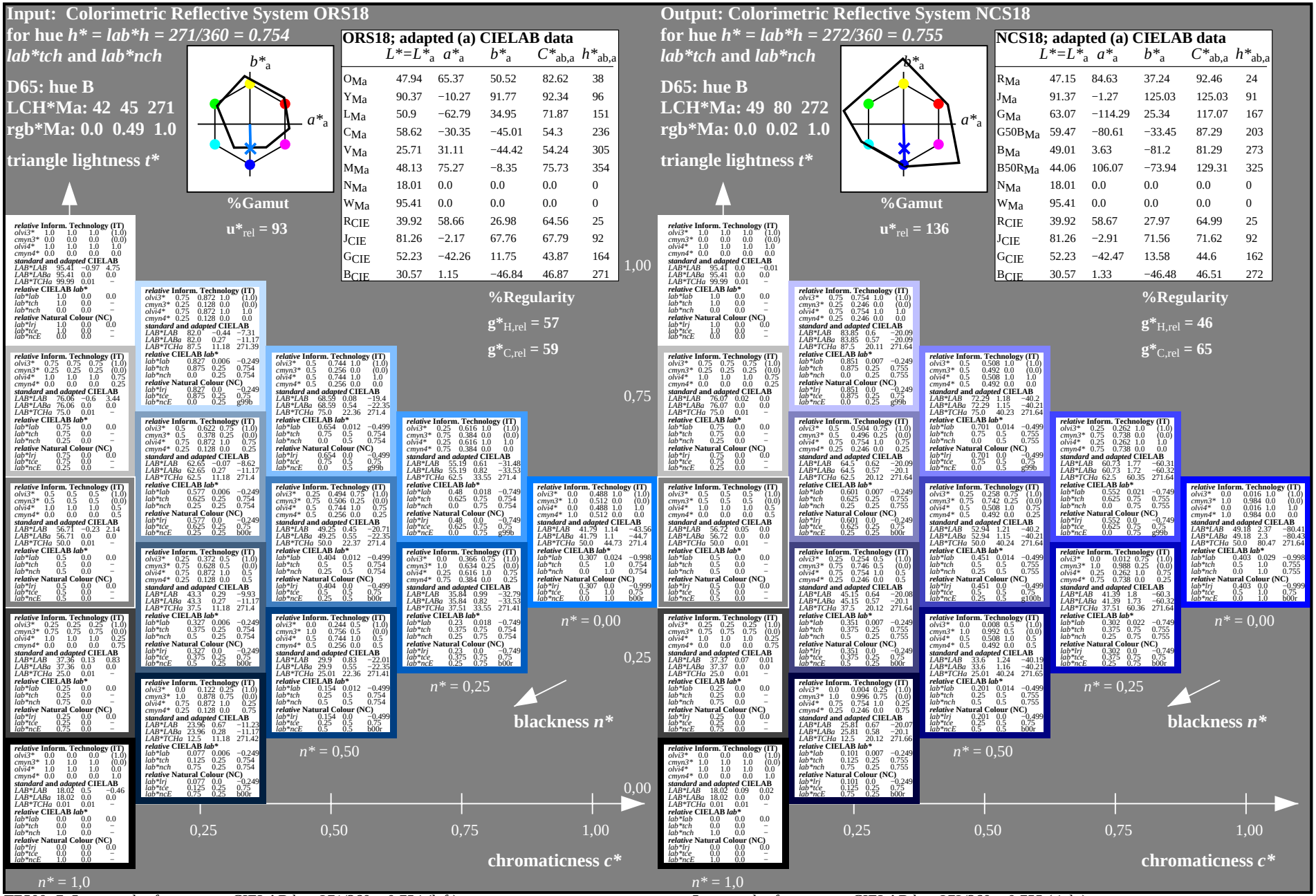

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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



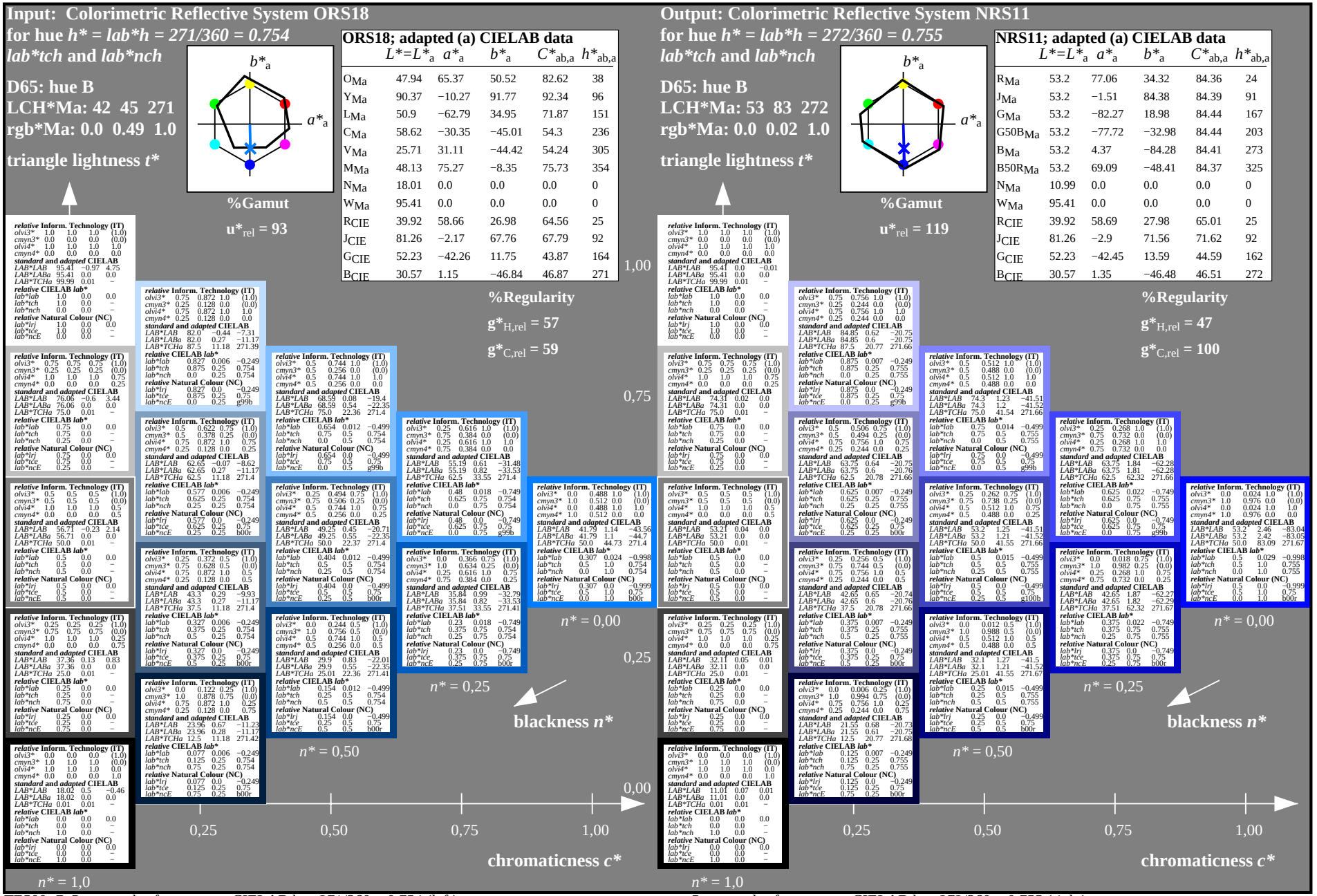

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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



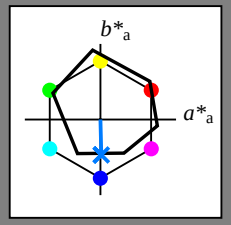

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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

**Input: Colorimetric 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**
**rgb*Ma: 0.0 0.49 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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

1,00
0,75
0,25
0,00

*n** = 0,00
*n** = 0,25
*n** = 0,50
*n** = 1,0

**blackness *n****

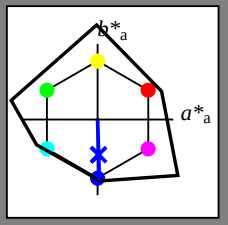
0,25 0,50 0,75 1,00

**chromaticness *c****

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**

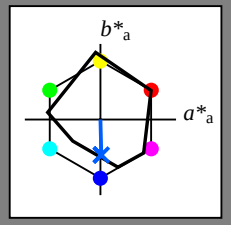
TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 271/360 = 0.754**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 40 50 271**
**rgb*Ma: 0.0 0.37 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

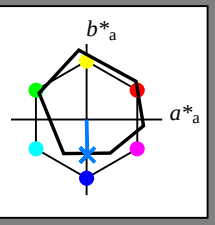
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

**Output: Colorimetric 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**
**rgb*Ma: 0.0 0.49 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

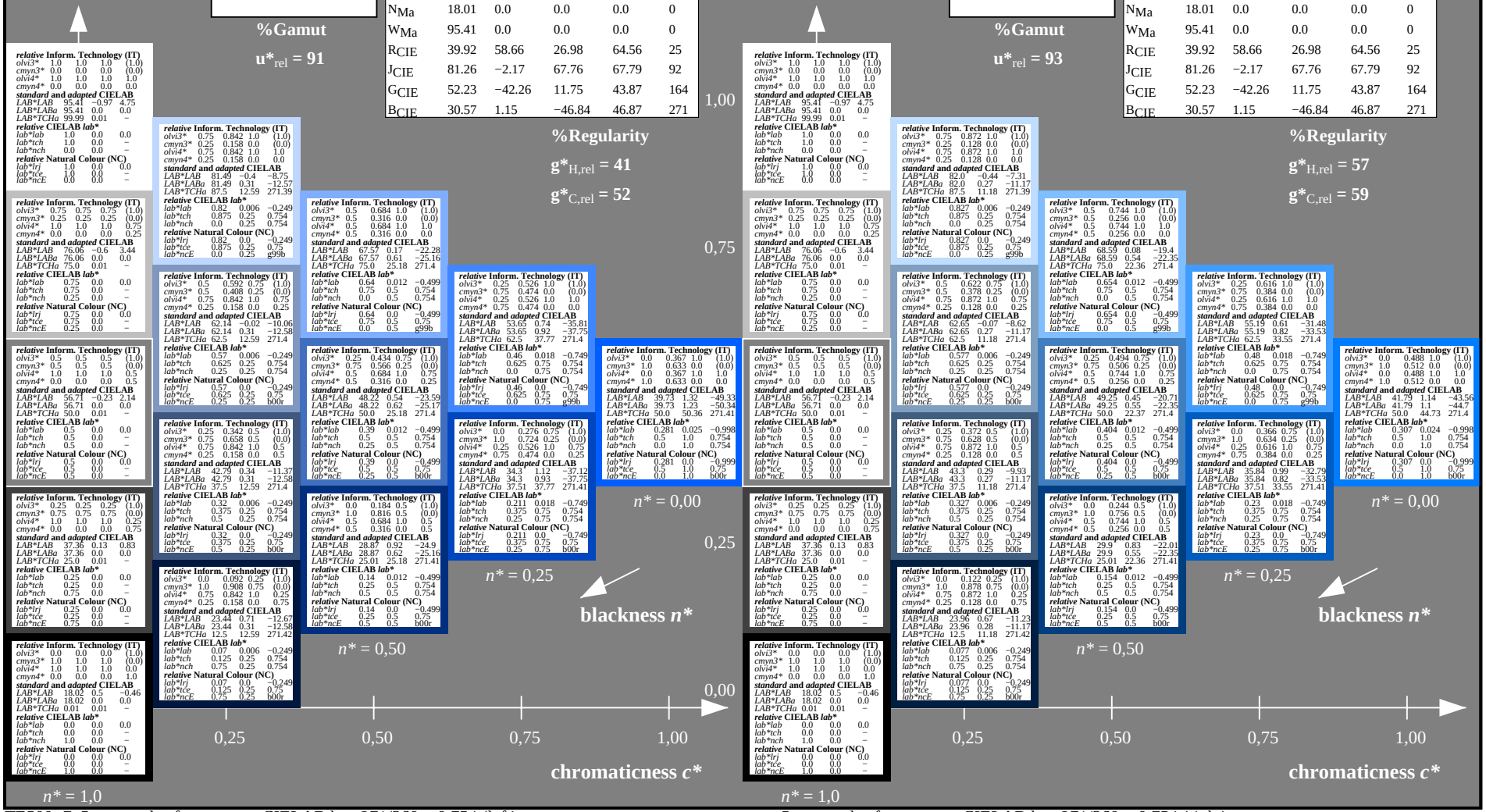
**ORS18; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

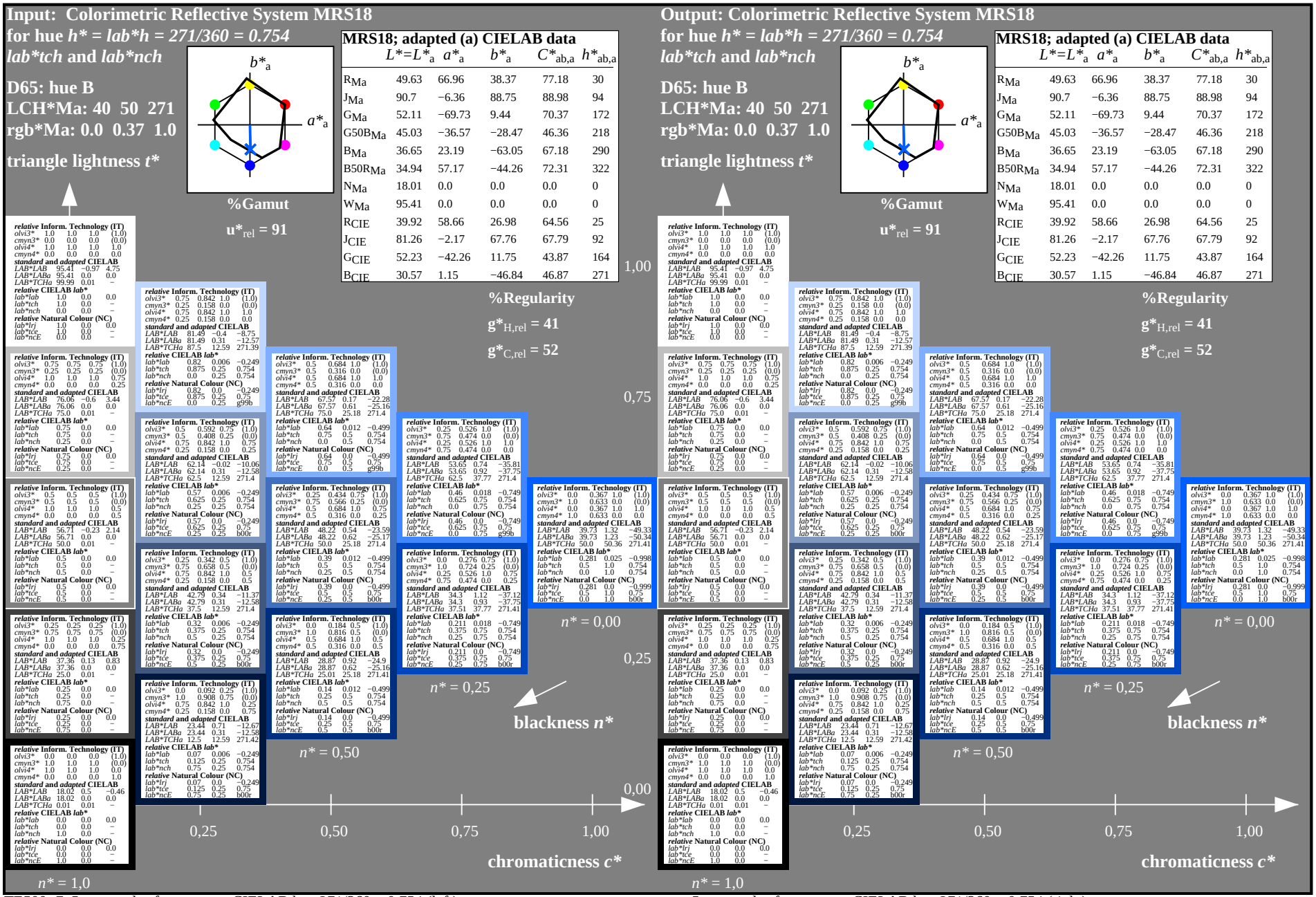
**g*$_{H,rel}$ = 57**

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



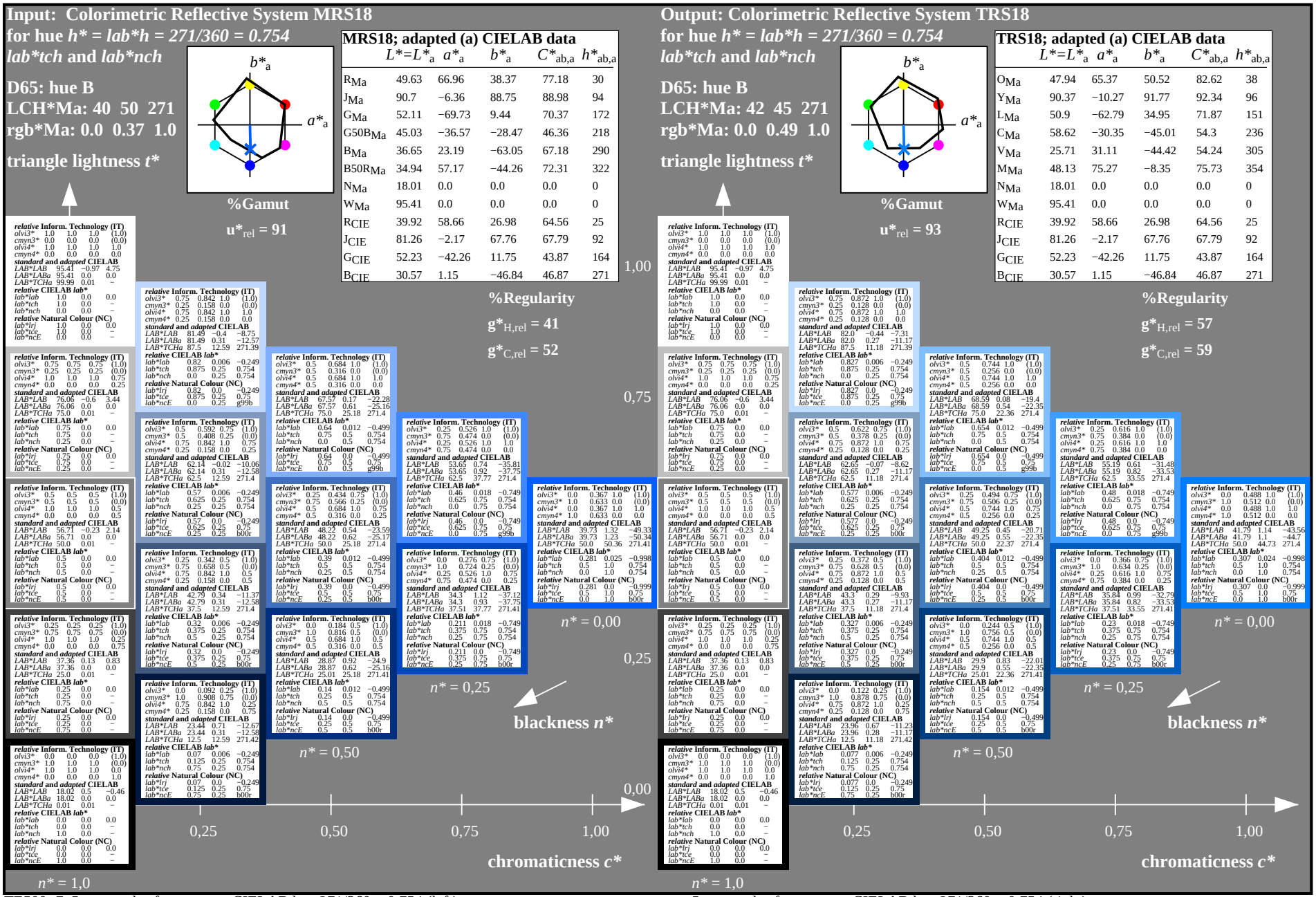

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)




TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



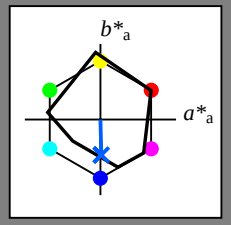

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 271/360 = 0.754**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 40 50 271**
**rgb*Ma: 0.0 0.37 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

**MRS18; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

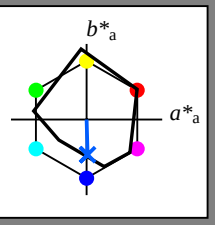
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 40 49 272**
**rgb*Ma: 0.0 0.36 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

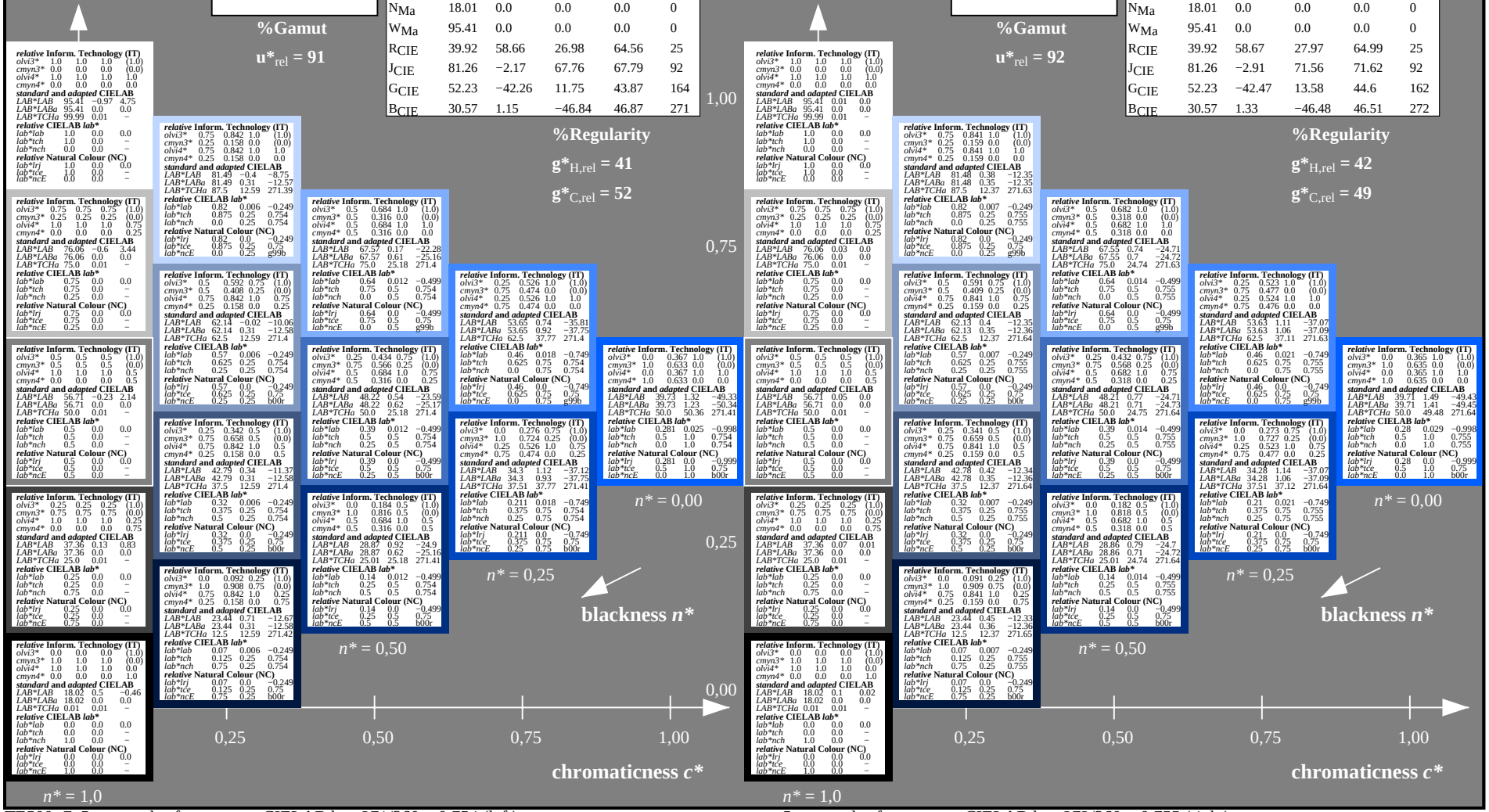
**MRS18a; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

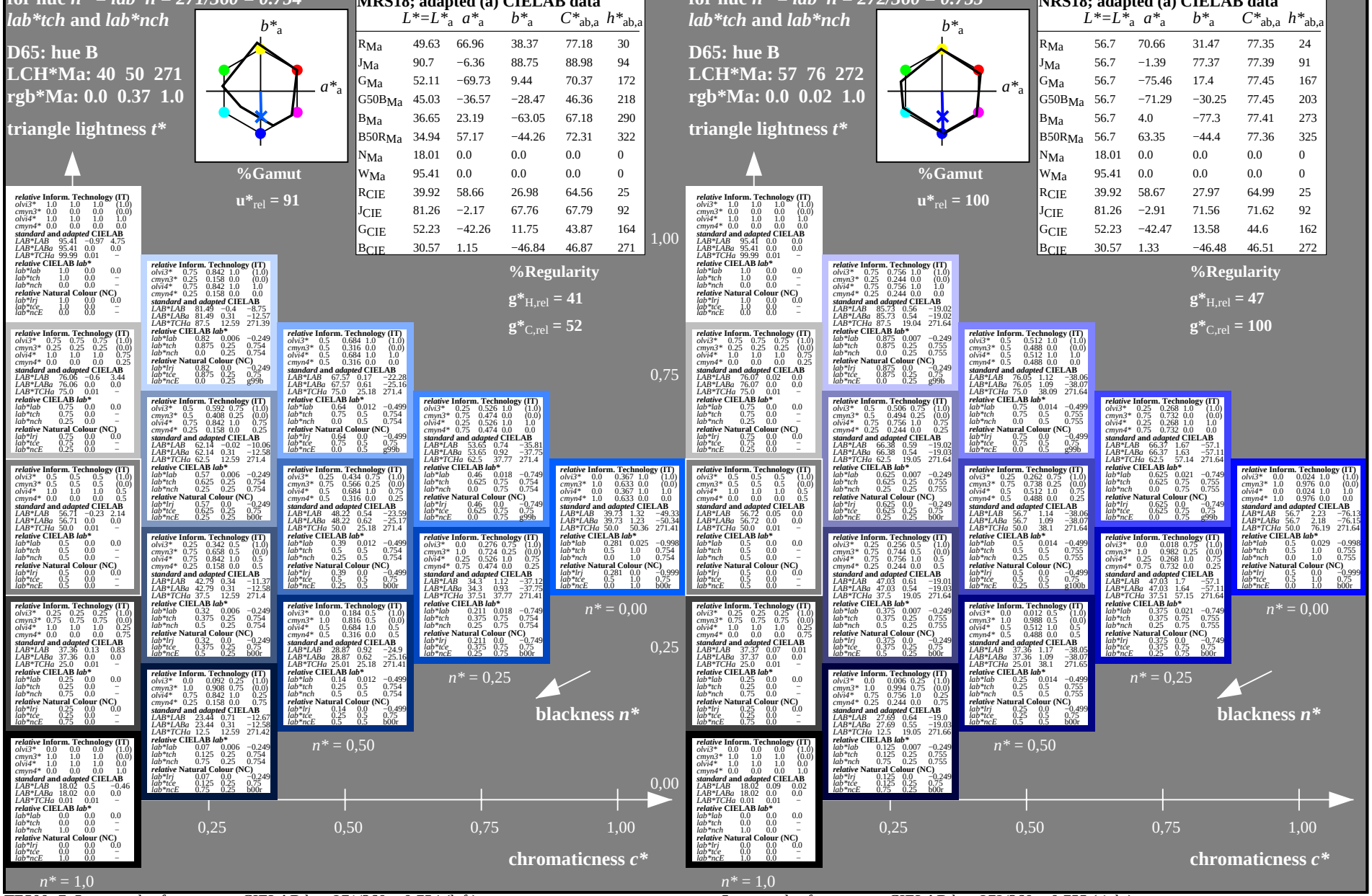
**g*$_{H,rel}$ = 42**

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



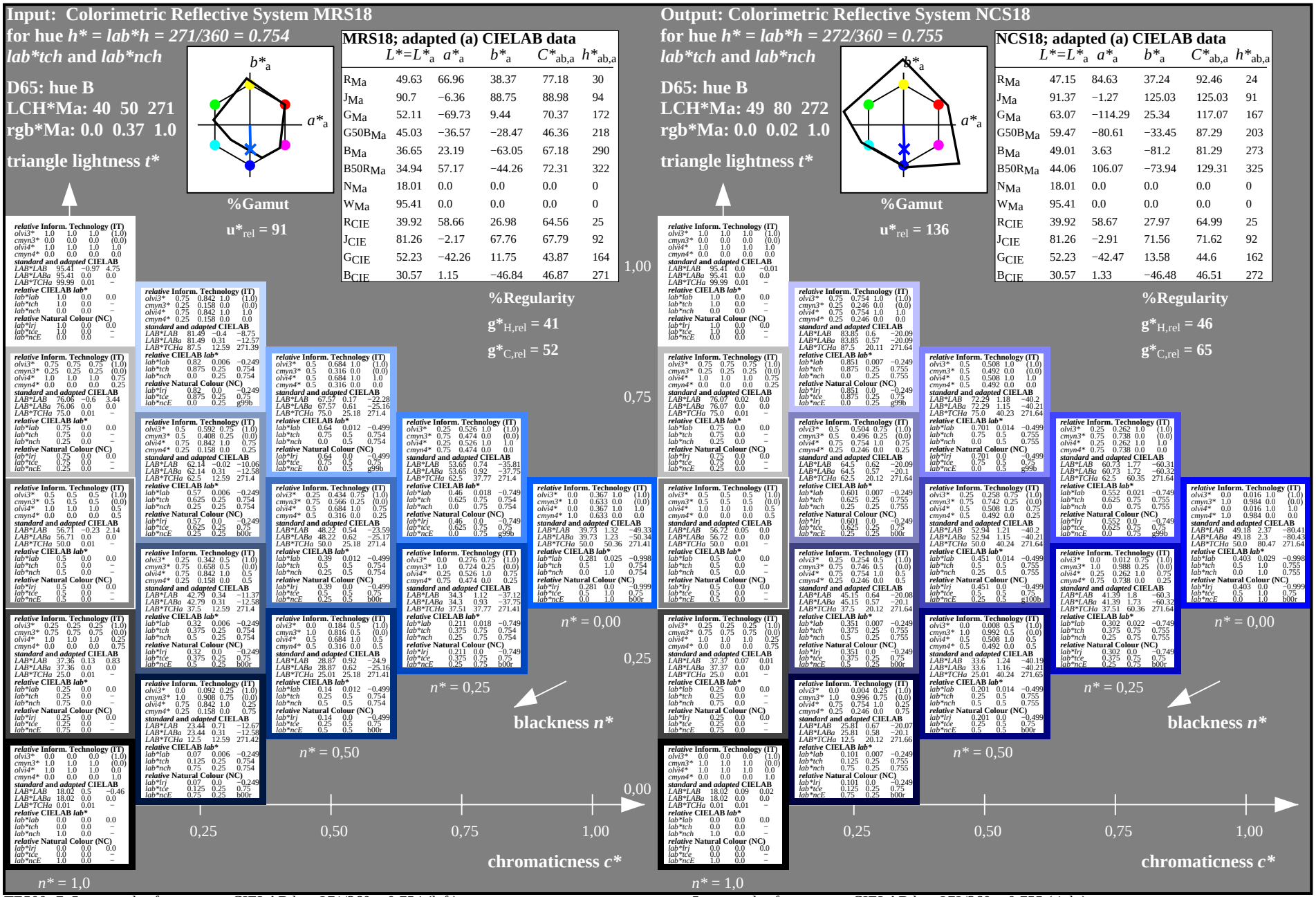

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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



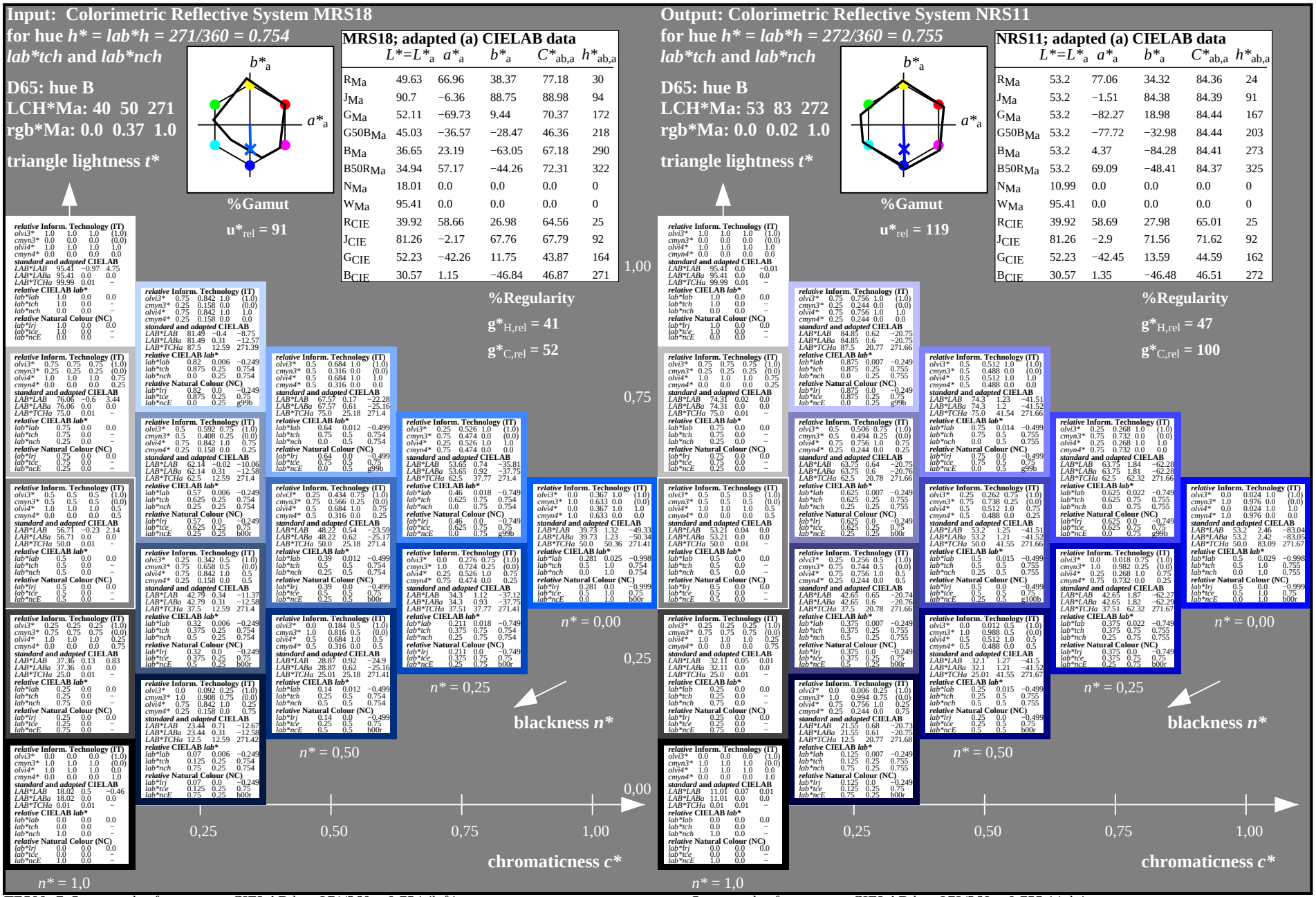

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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



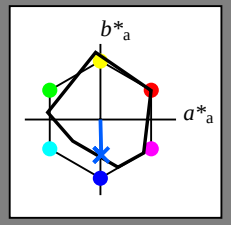

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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

**Input: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 271/360 = 0.754**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 40 50 271**
**rgb*Ma: 0.0 0.37 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

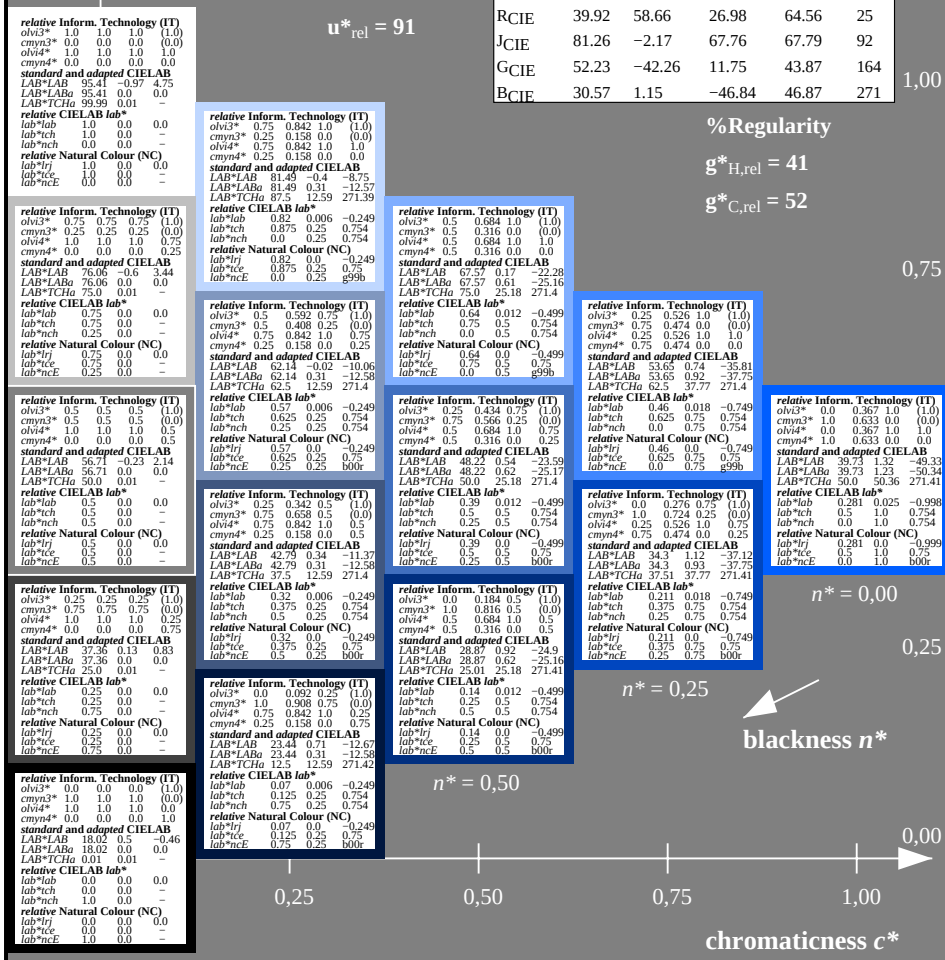
**MRS18; adapted (a) CIELAB data**

| | *L*=L** $_a$ | *a** $_a$ | *b** $_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

**g*$_{H,rel}$ = 41**

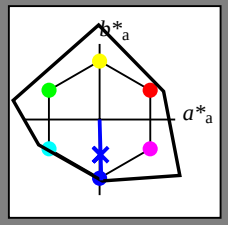
**g*$_{C,rel}$ = 52**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

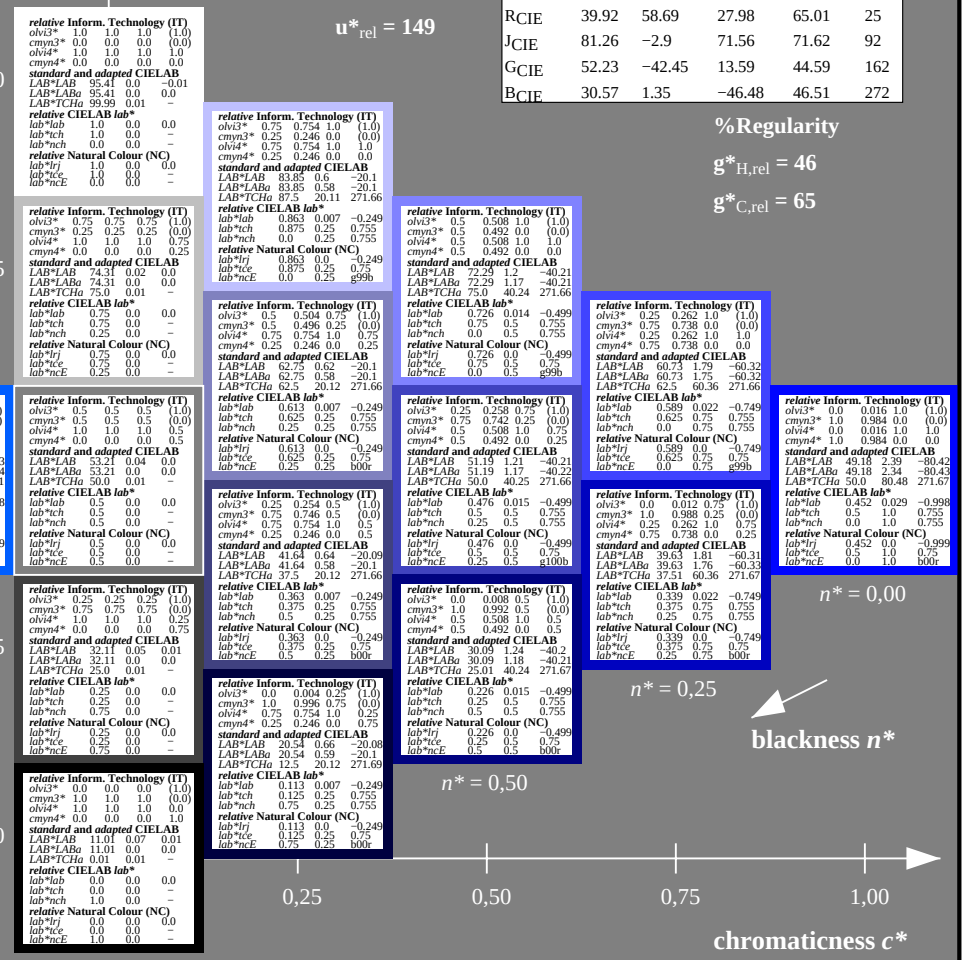
**NCS11; adapted (a) CIELAB data**

| | *L*=L** $_a$ | *a** $_a$ | *b** $_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

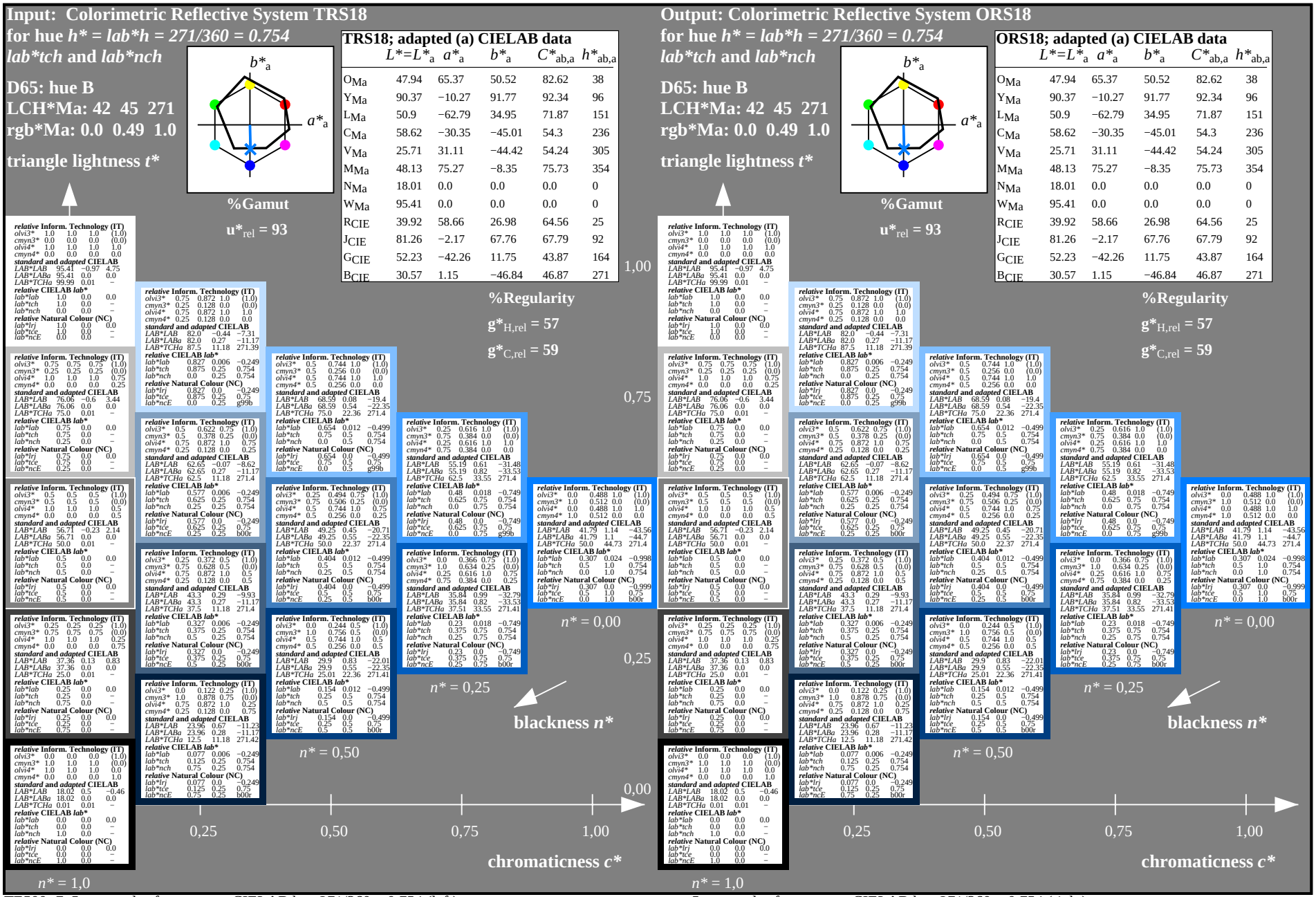
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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




**TRS18; adapted (a) CIELAB data**

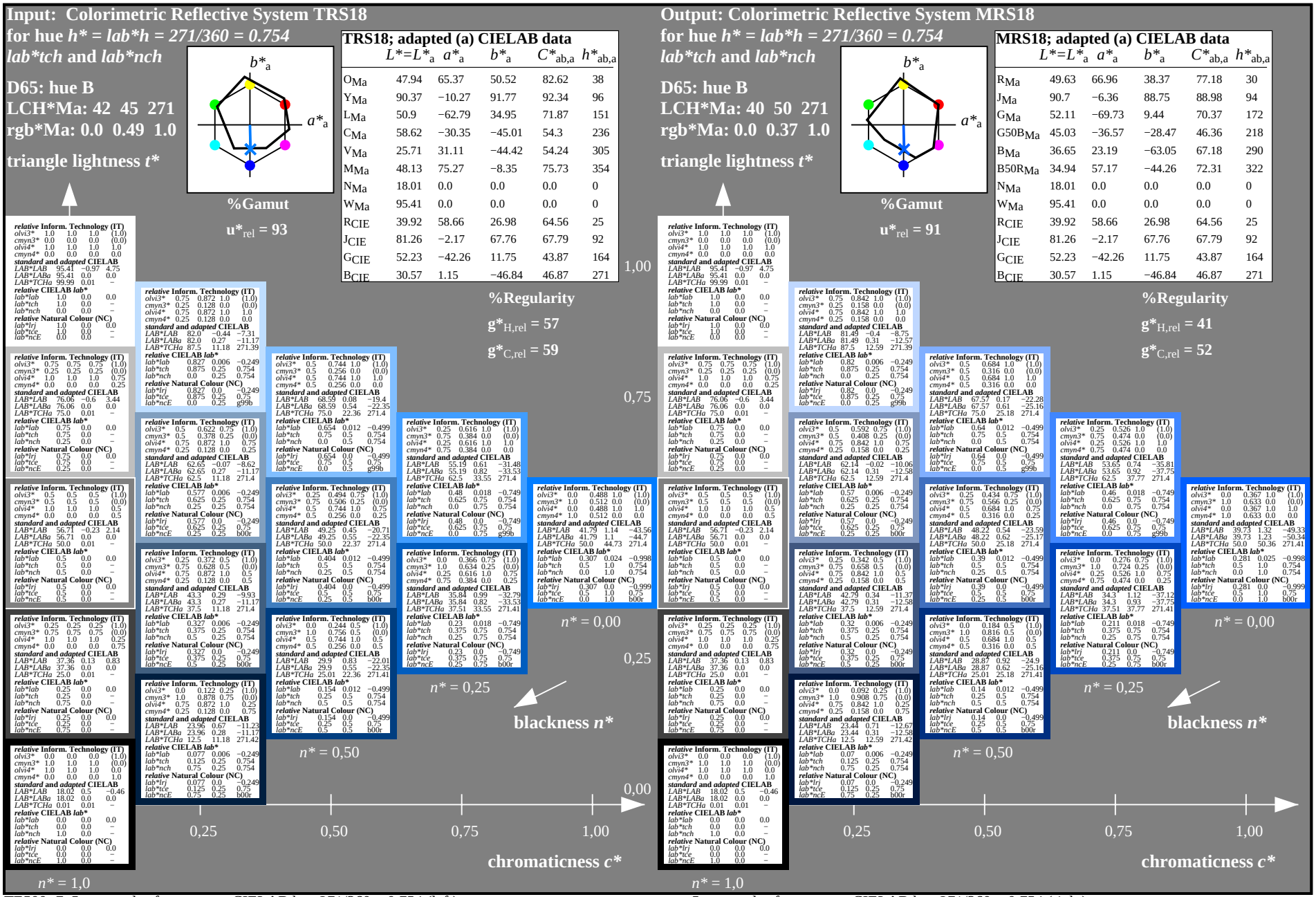
| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

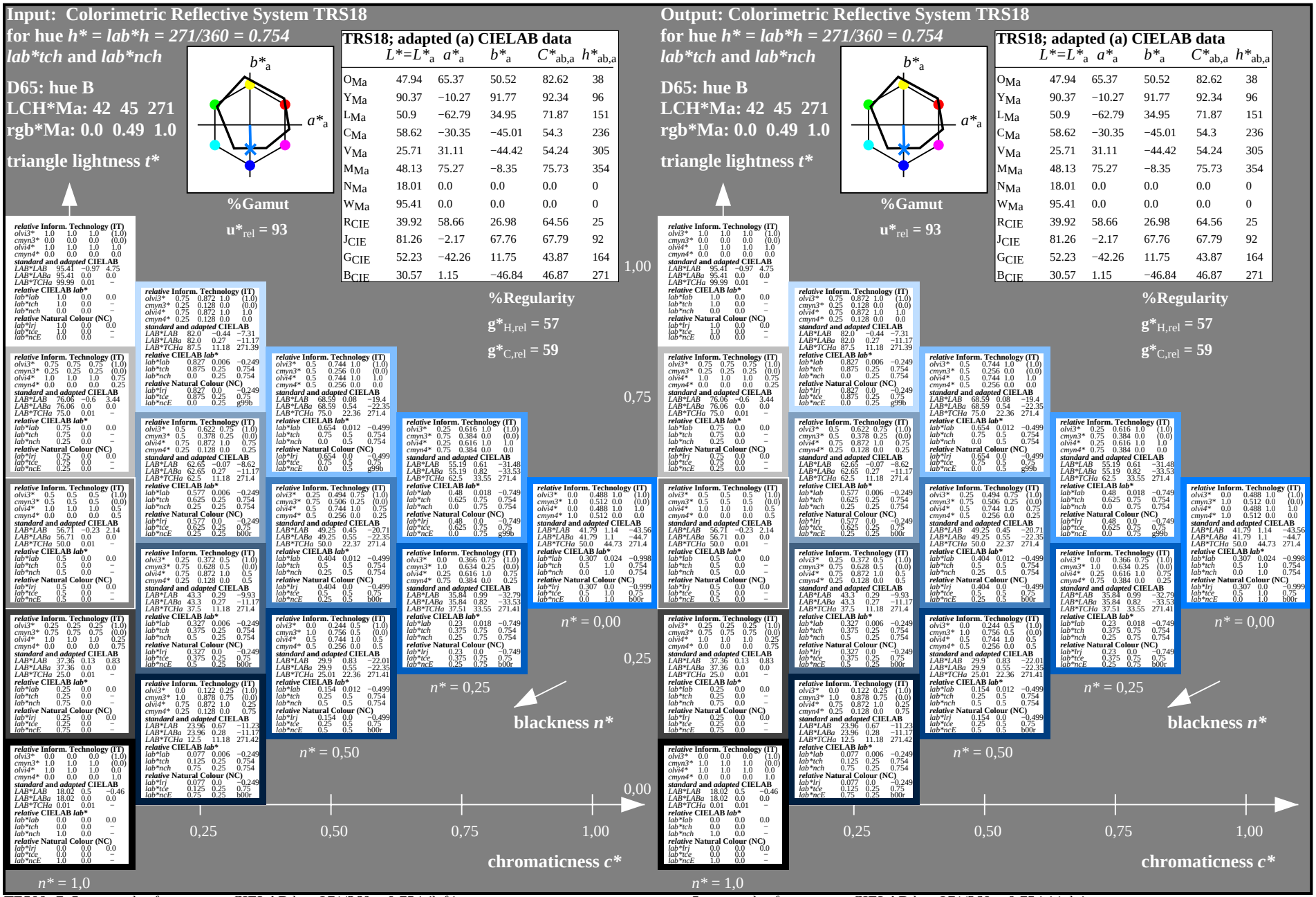
TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)




TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



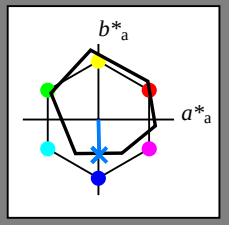

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 271/360 = 0.754**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 42 45 271**
**rgb*Ma: 0.0 0.49 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

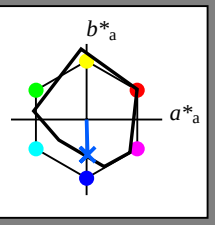
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 40 49 272**
**rgb*Ma: 0.0 0.36 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

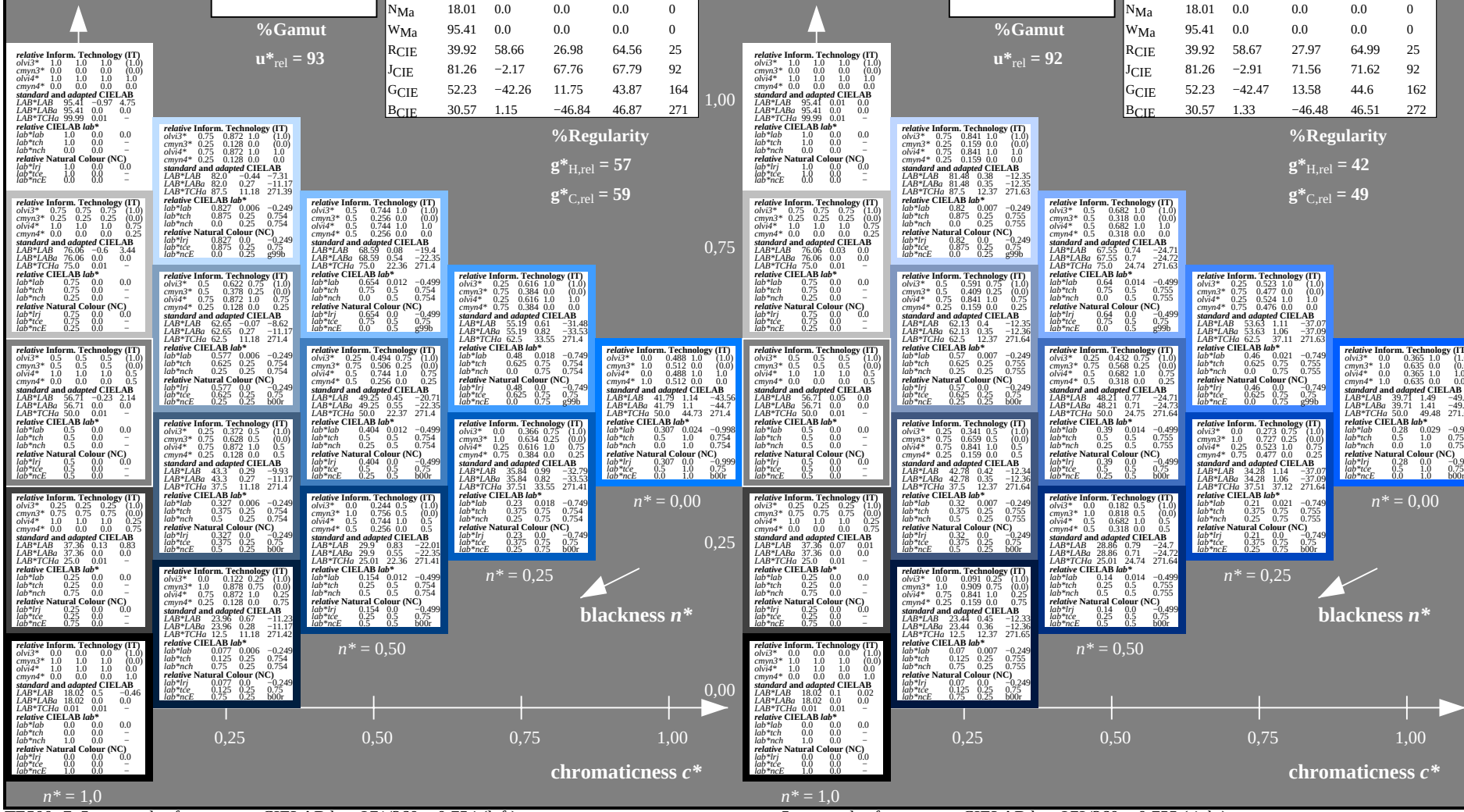
**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

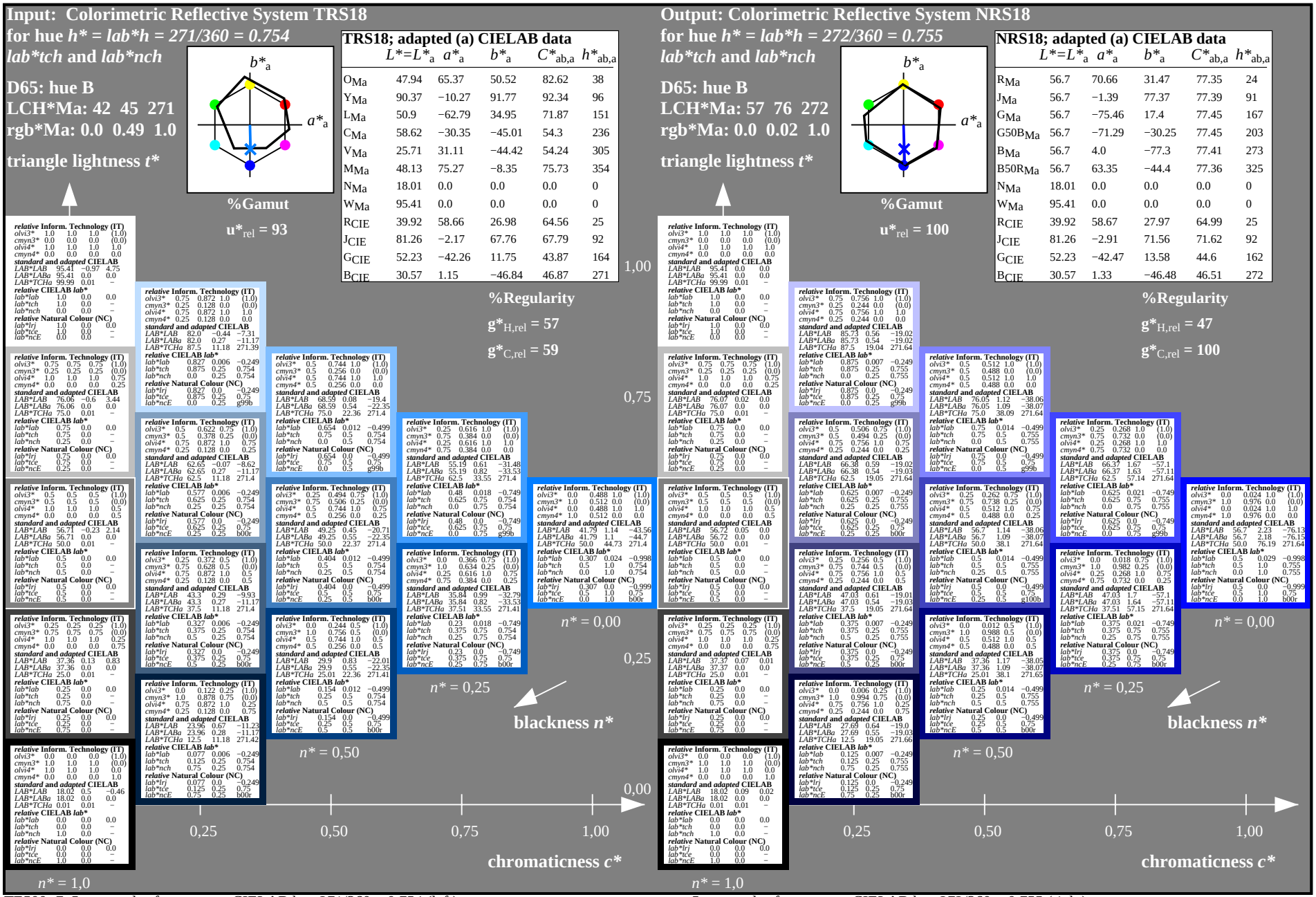
**g*$_{H,rel}$ = 42**

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




TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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



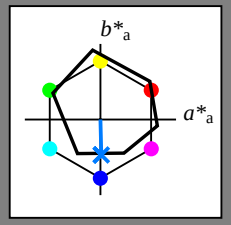

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 271/360 = 0.754**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 42 45 271**
**rgb*Ma: 0.0 0.49 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

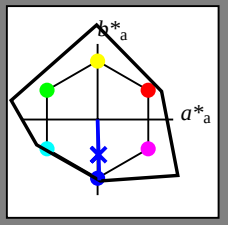
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

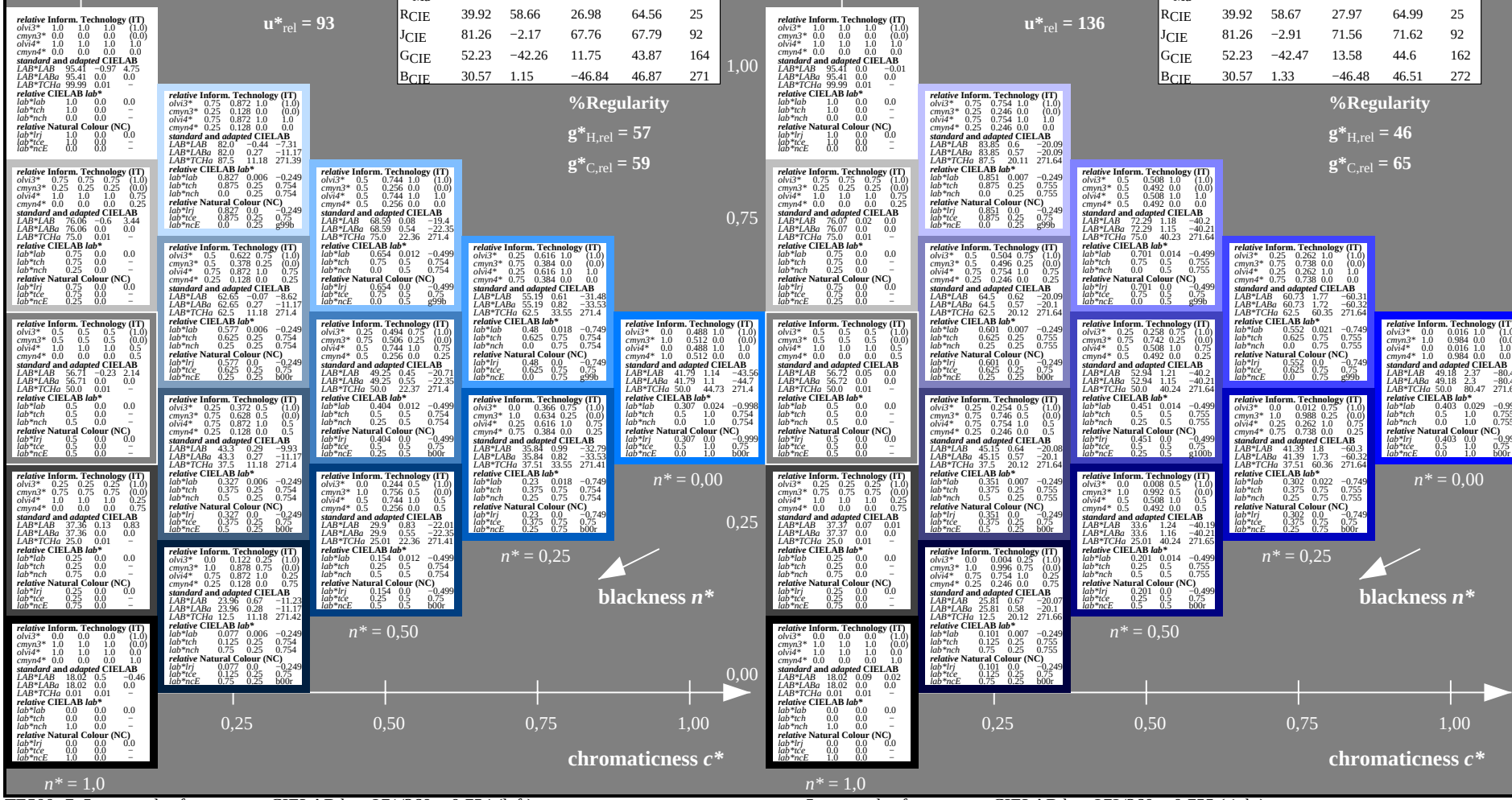
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

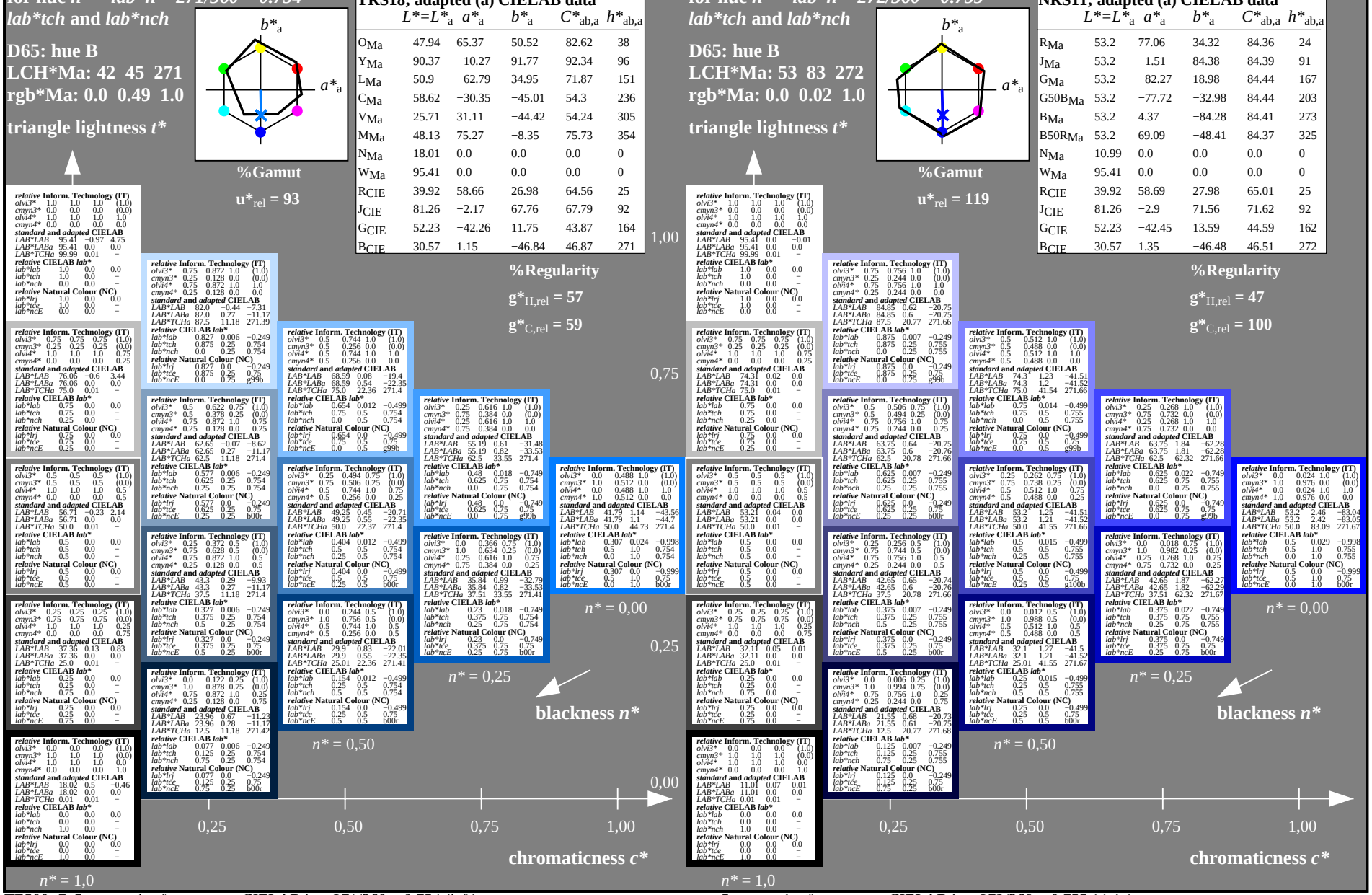
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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



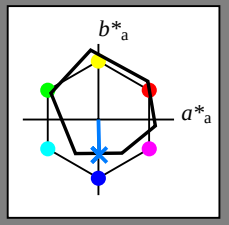

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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

**Input: Colorimetric Reflective System TRS18**
**for hue *h** = *lab*h* = 271/360 = 0.754**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 42 45 271**
**rgb*Ma: 0.0 0.49 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

**TRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

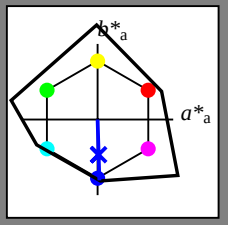
**g*$_{H,rel}$ = 57**

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

**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

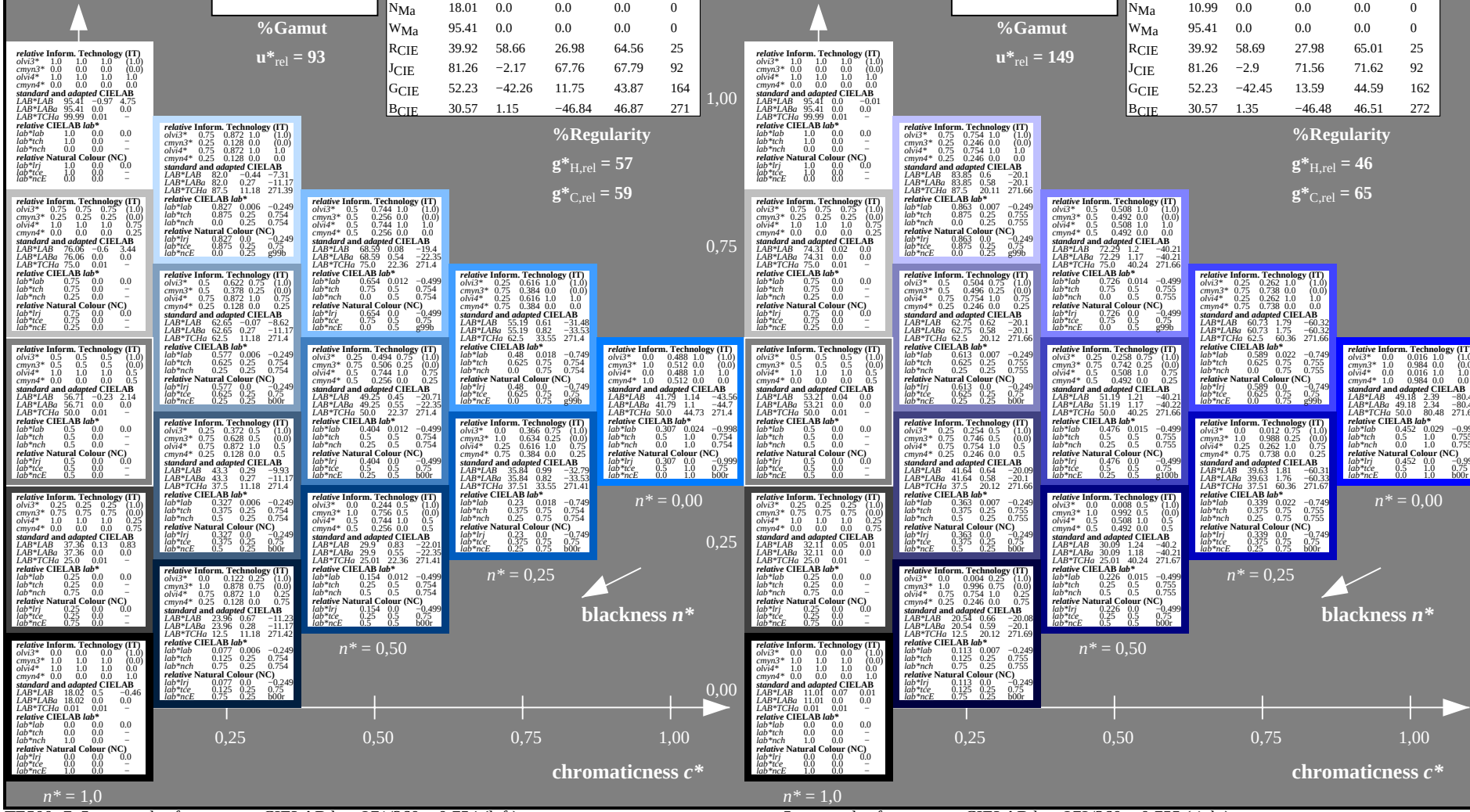
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

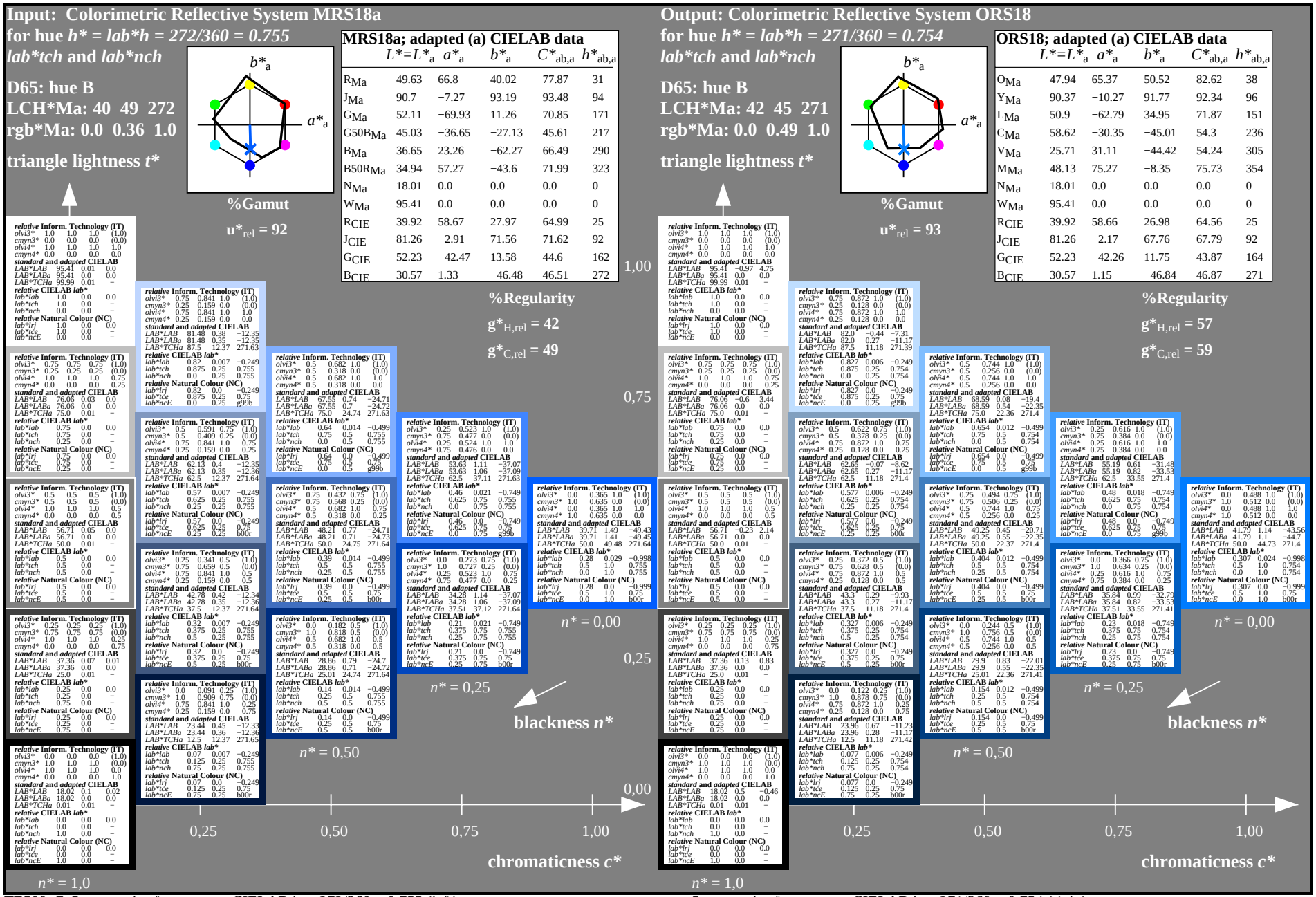
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



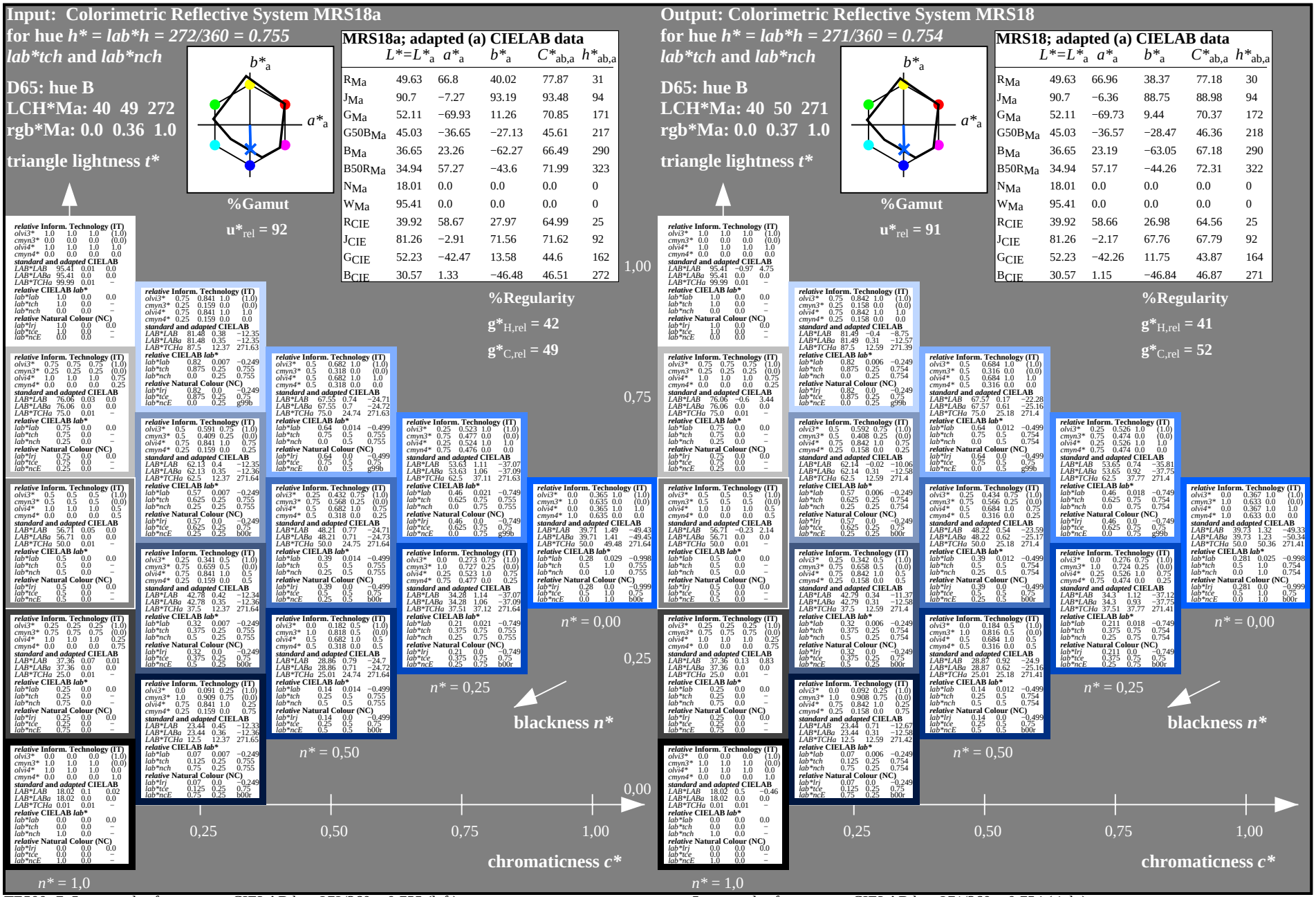

TE500−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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



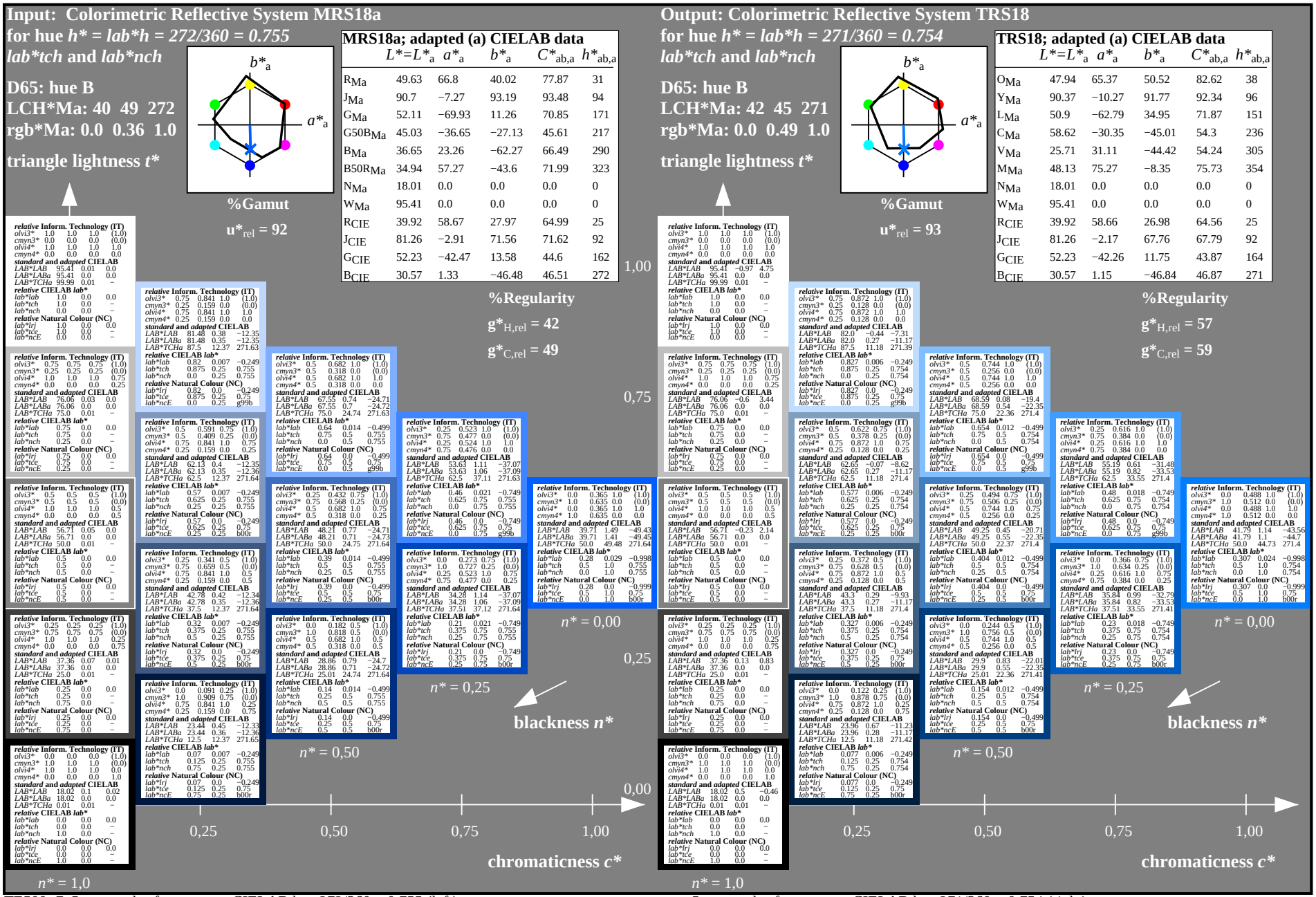

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



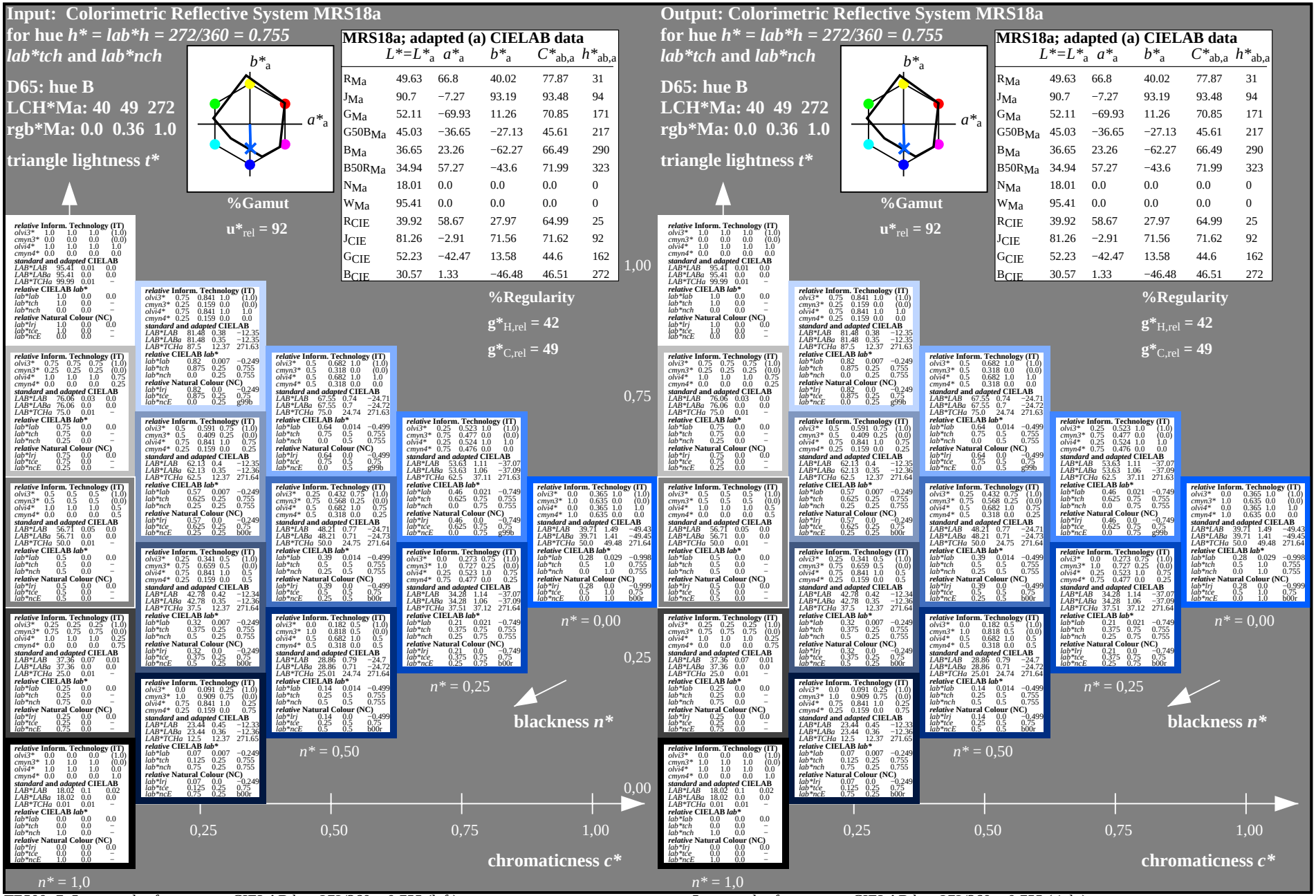

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



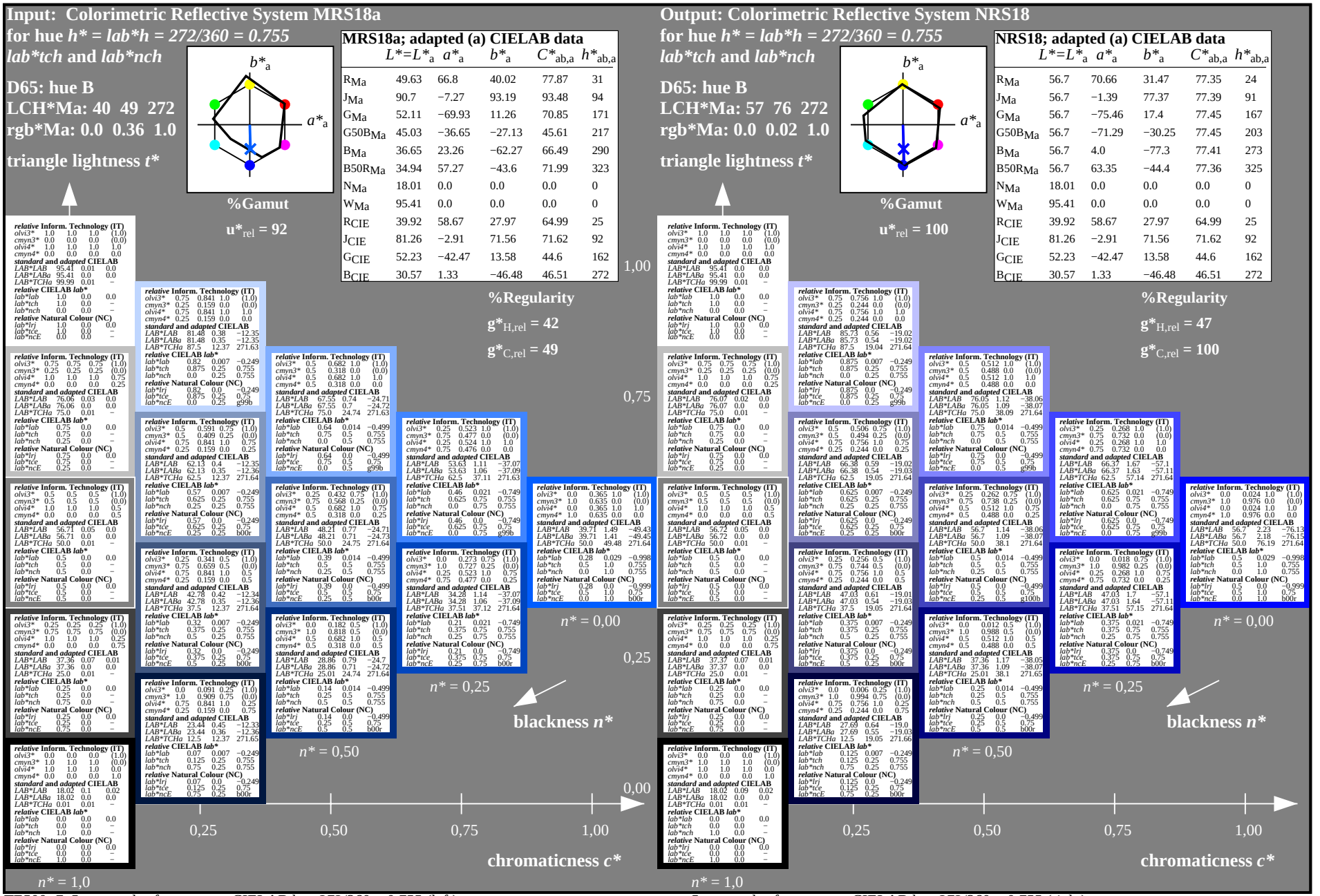

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)




TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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



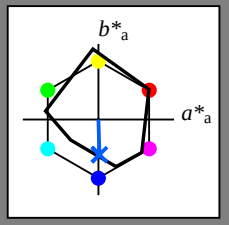

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 40 49 272**
**rgb*Ma: 0.0 0.36 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

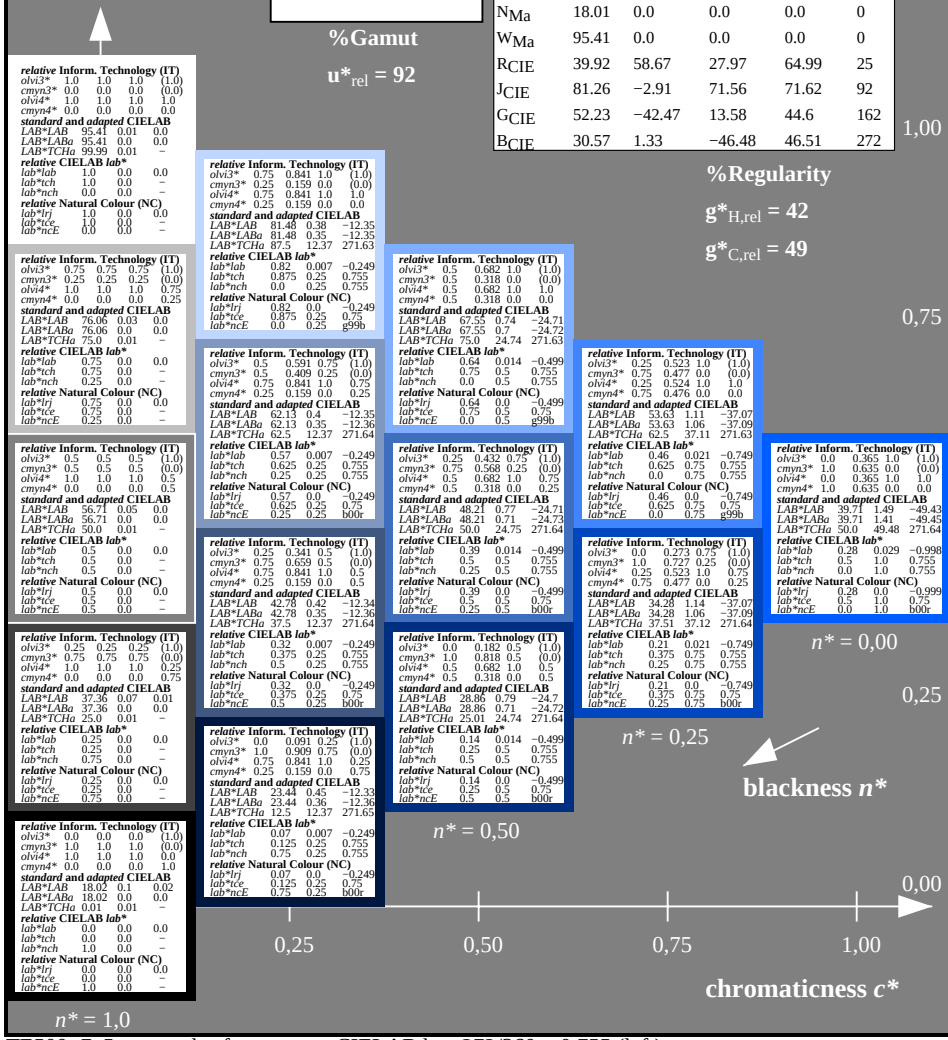
**MRS18a; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

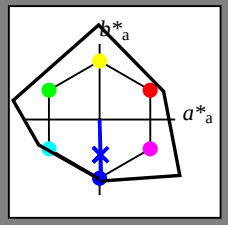
**g*$_{C,rel}$ = 49**




**Output: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

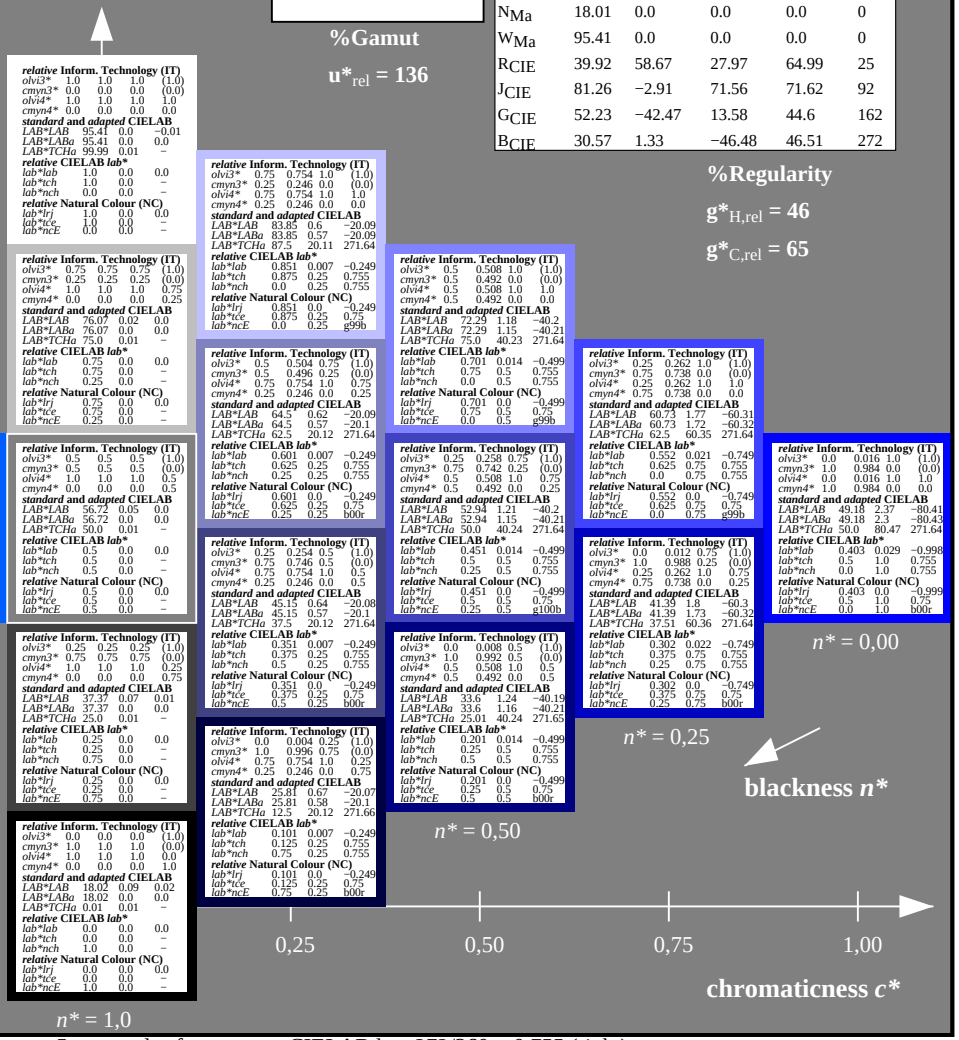
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



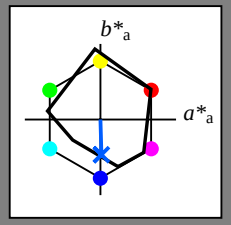

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System MRS18a**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 40 49 272**
**rgb*Ma: 0.0 0.36 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 92**

**MRS18a; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.8 | 40.02 | 77.87 | 31 |
| $J_{Ma}$ | 90.7 | −7.27 | 93.19 | 93.48 | 94 |
| $G_{Ma}$ | 52.11 | −69.93 | 11.26 | 70.85 | 171 |
| $G50B_{Ma}$ | 45.03 | −36.65 | −27.13 | 45.61 | 217 |
| $B_{Ma}$ | 36.65 | 23.26 | −62.27 | 66.49 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.27 | −43.6 | 71.99 | 323 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

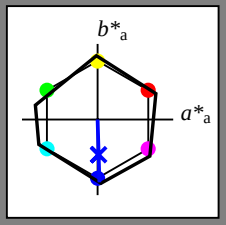
**g*$_{H,rel}$ = 42**

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

**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 53 83 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

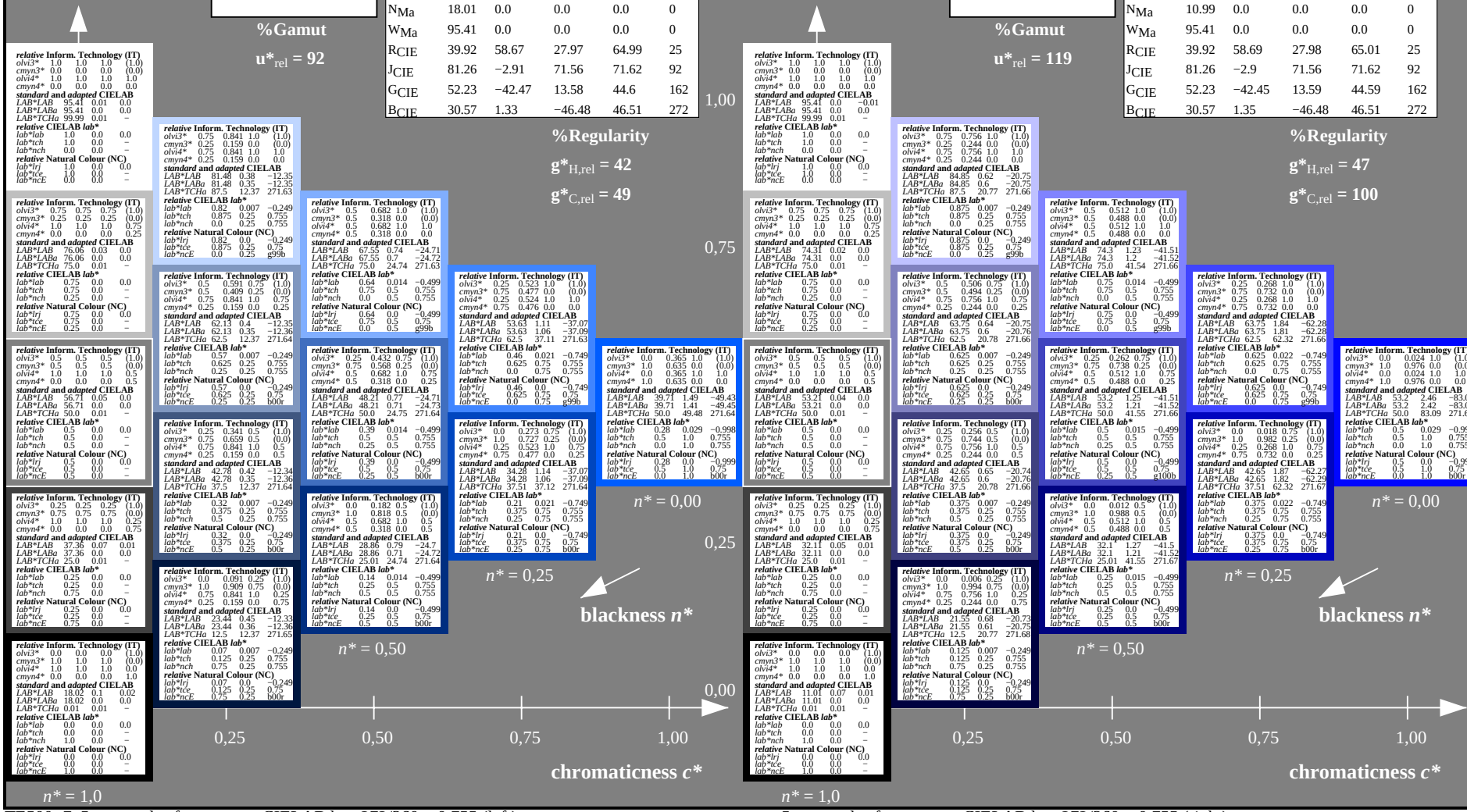
**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

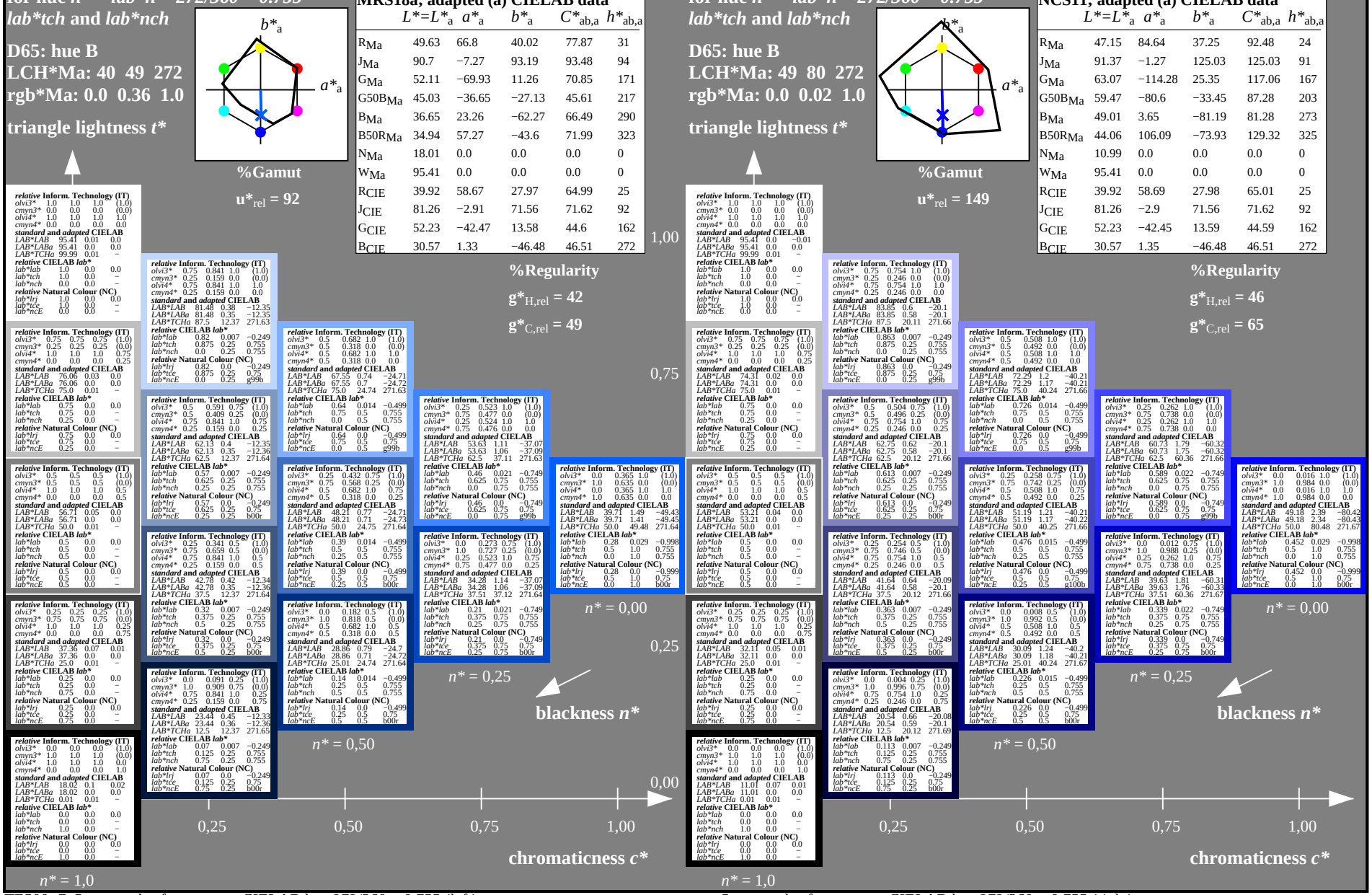
**g*$_{H,rel}$ = 47**

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




TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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



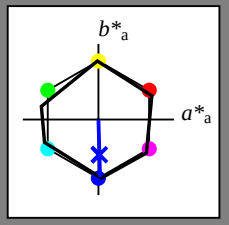

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 57 76 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

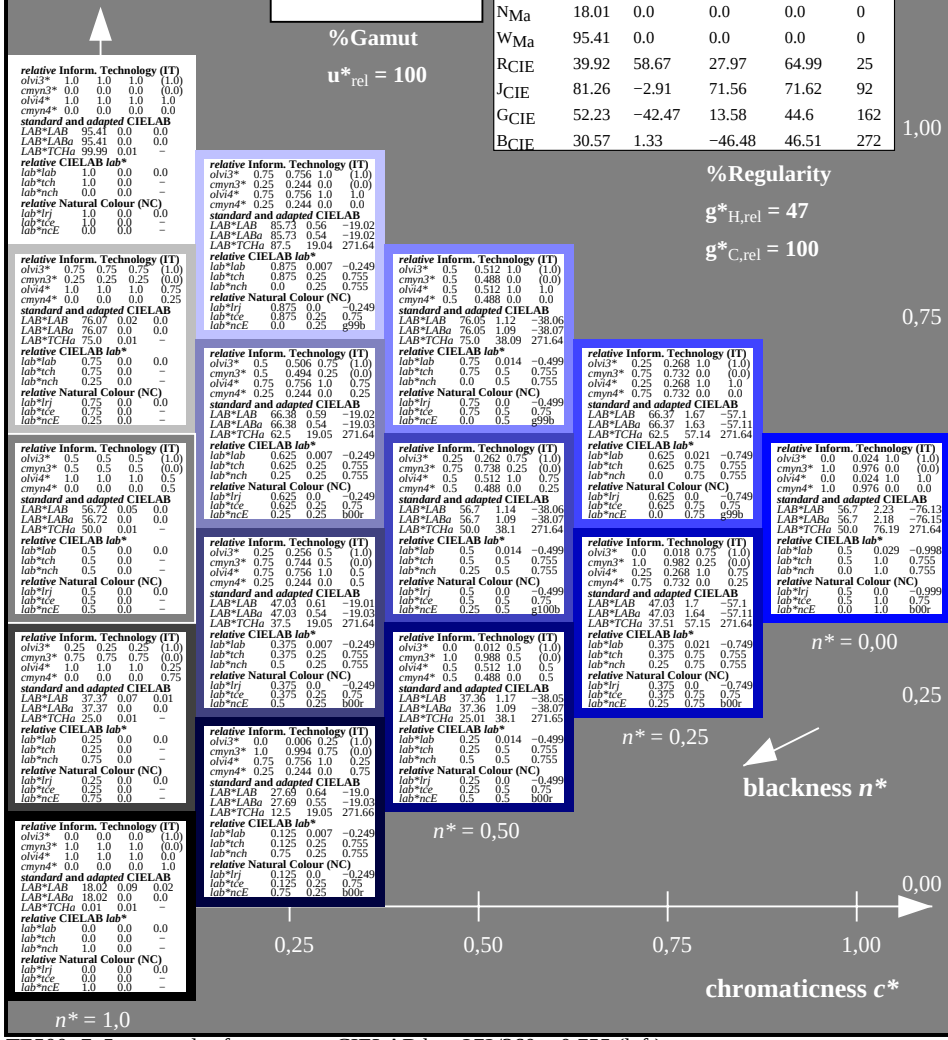
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

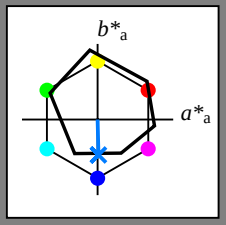
**g*$_{C,rel}$ = 100**




**Output: Colorimetric 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**
**rgb*Ma: 0.0 0.49 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

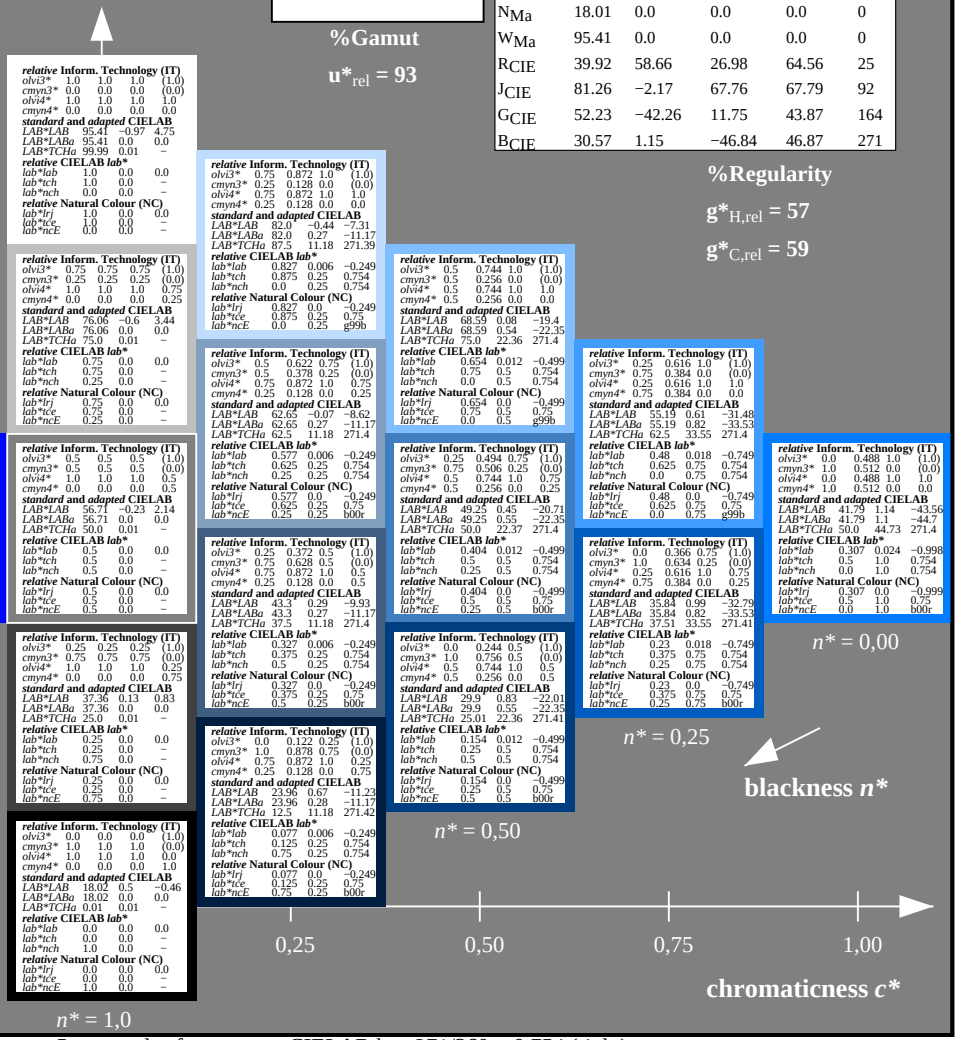
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

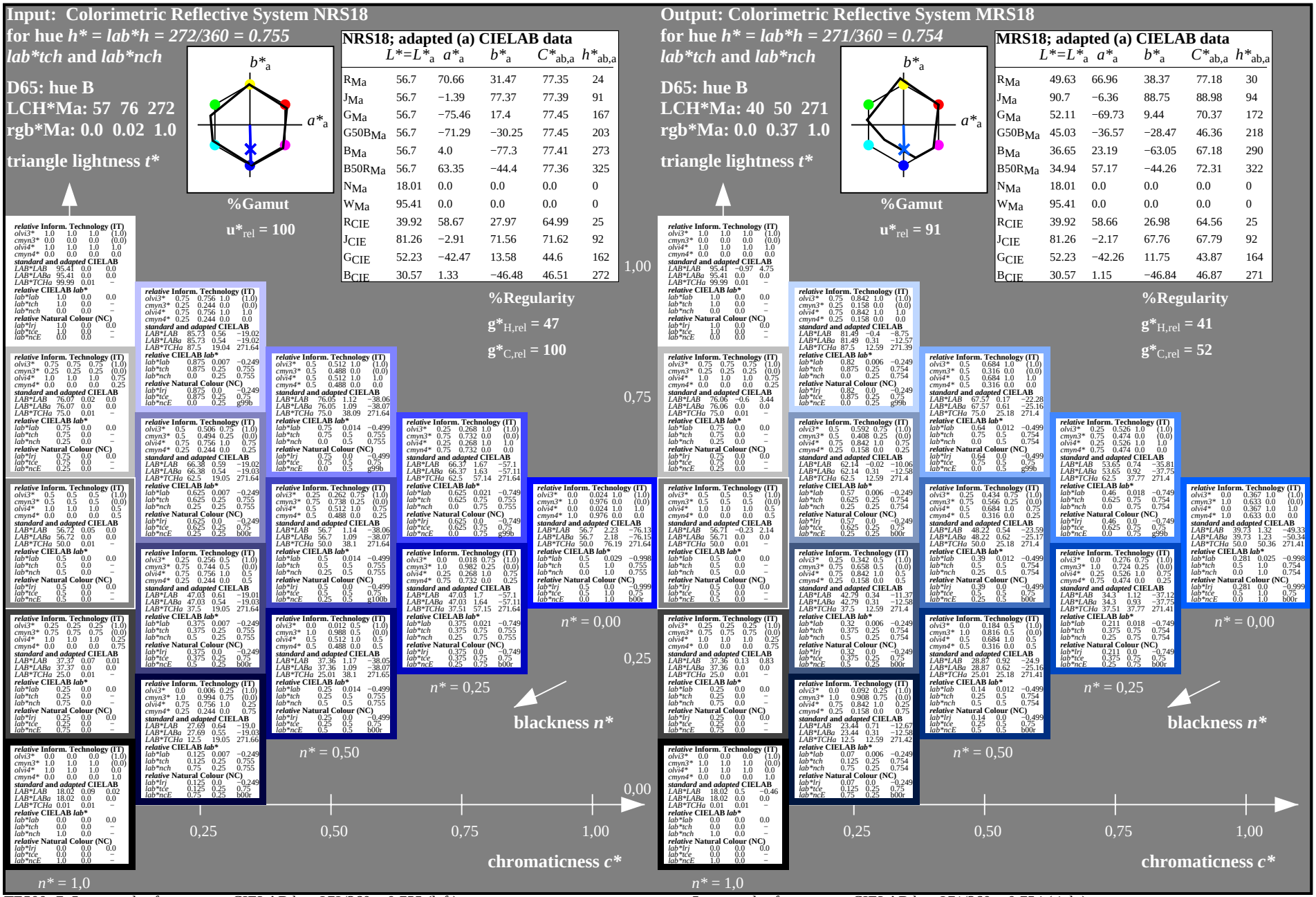
**g*$_{H,rel}$ = 57**

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



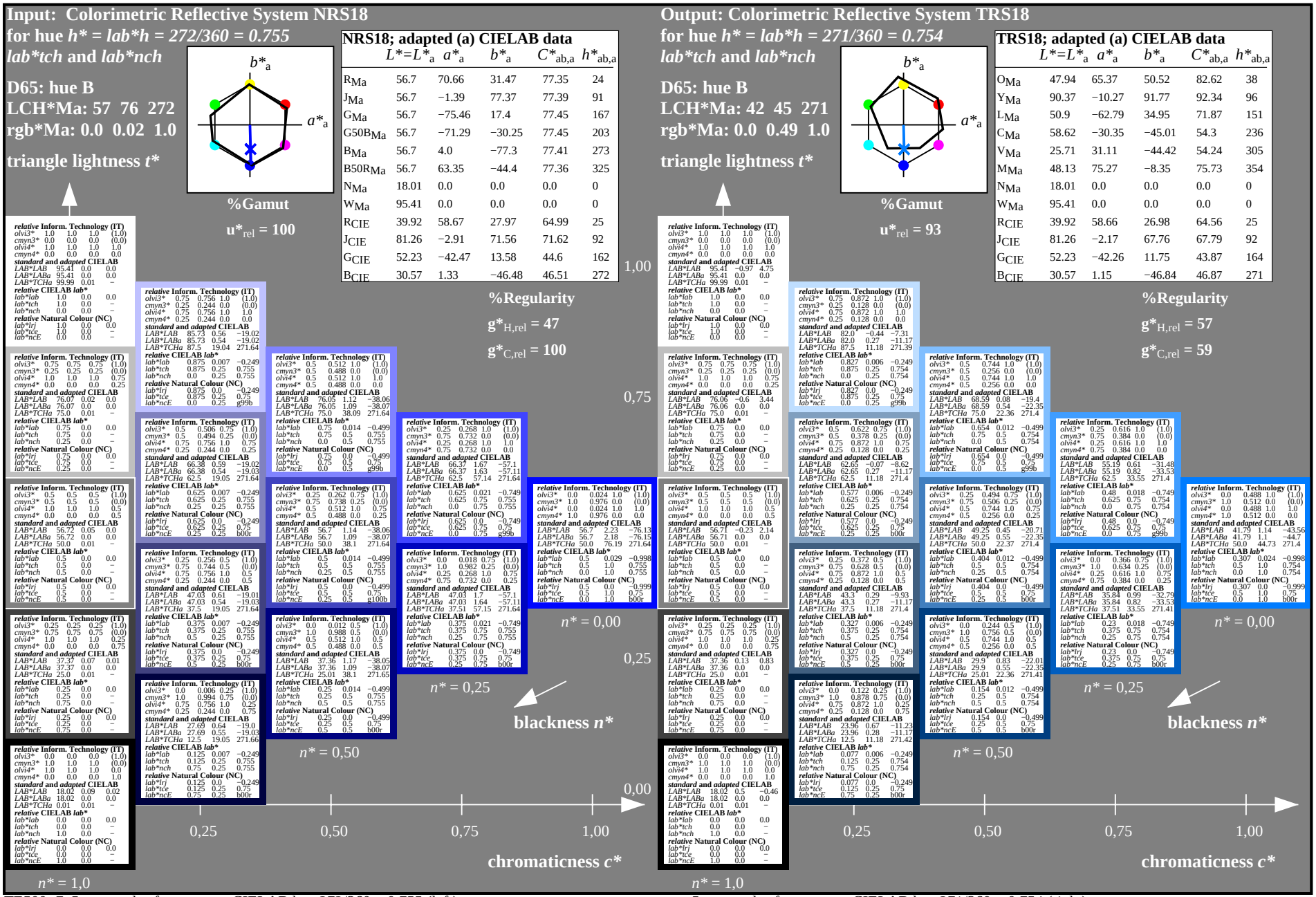

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



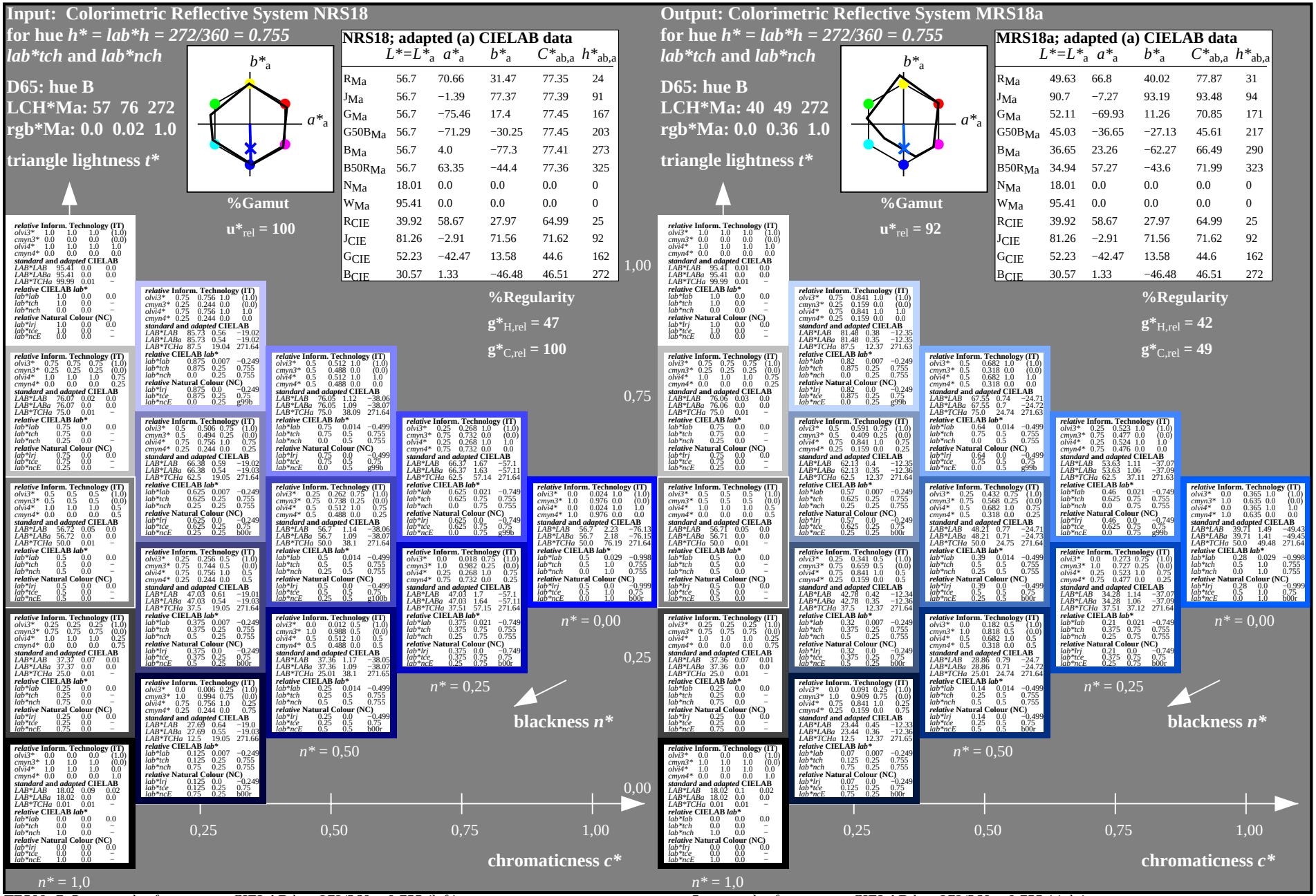

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



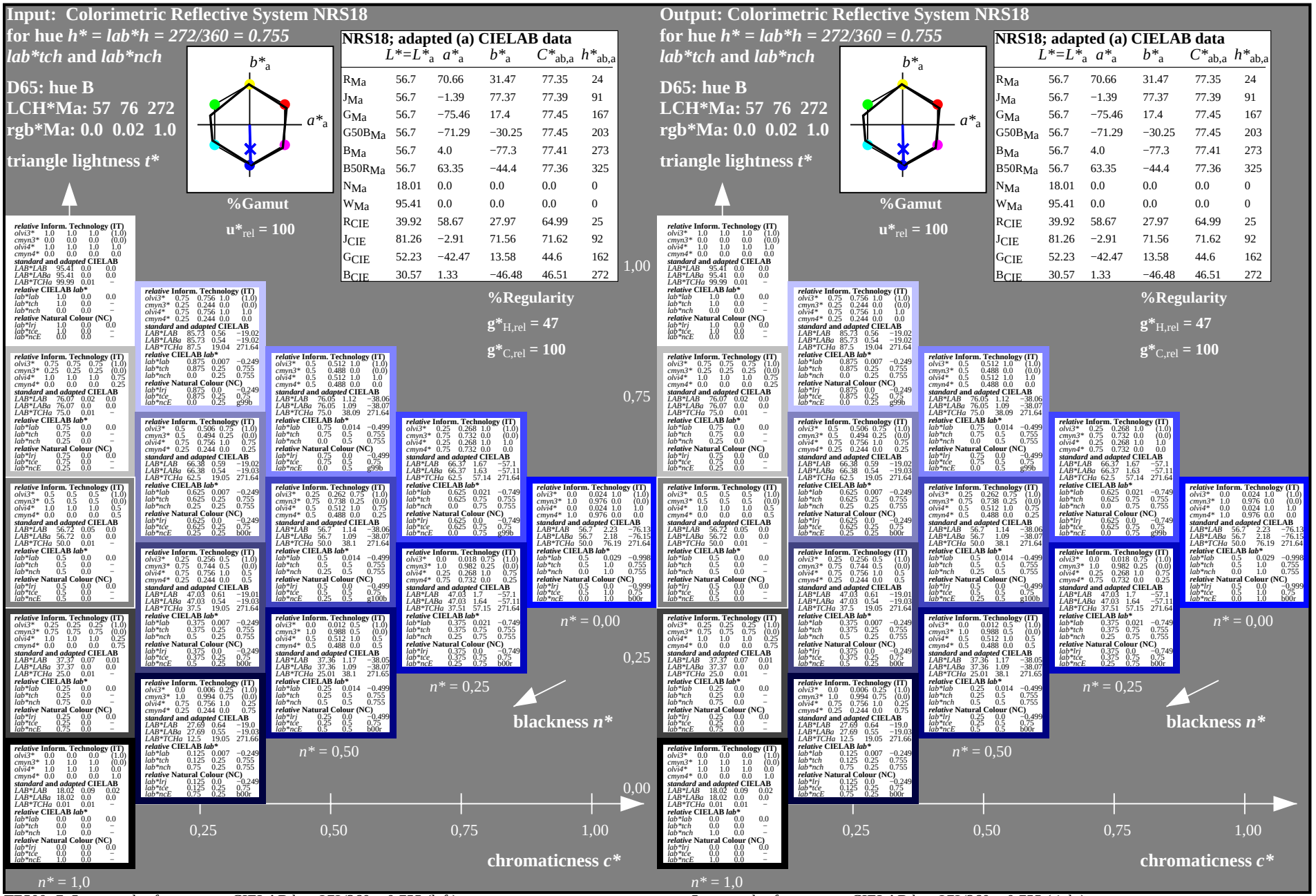

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



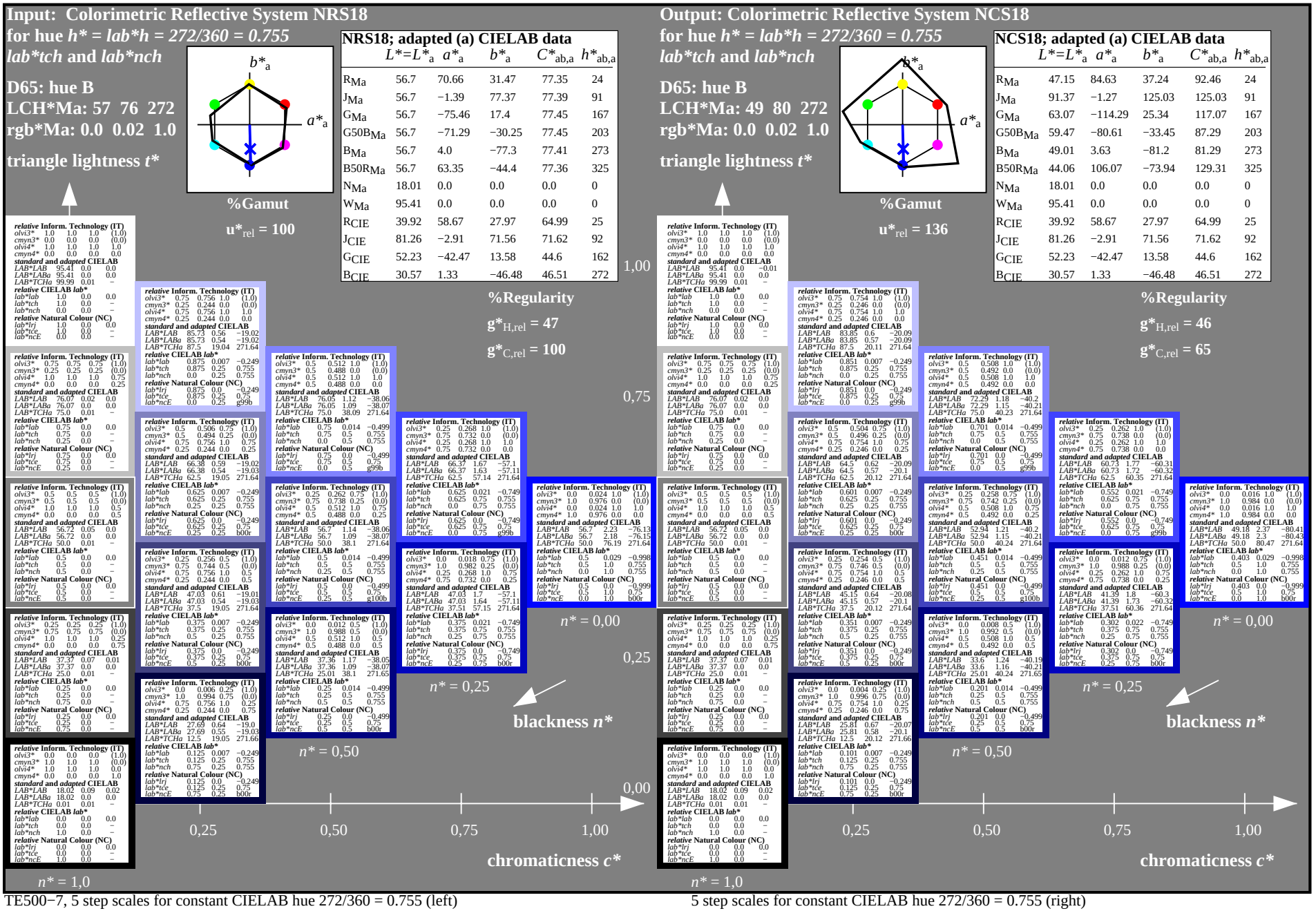

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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



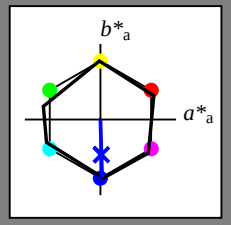

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 57 76 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

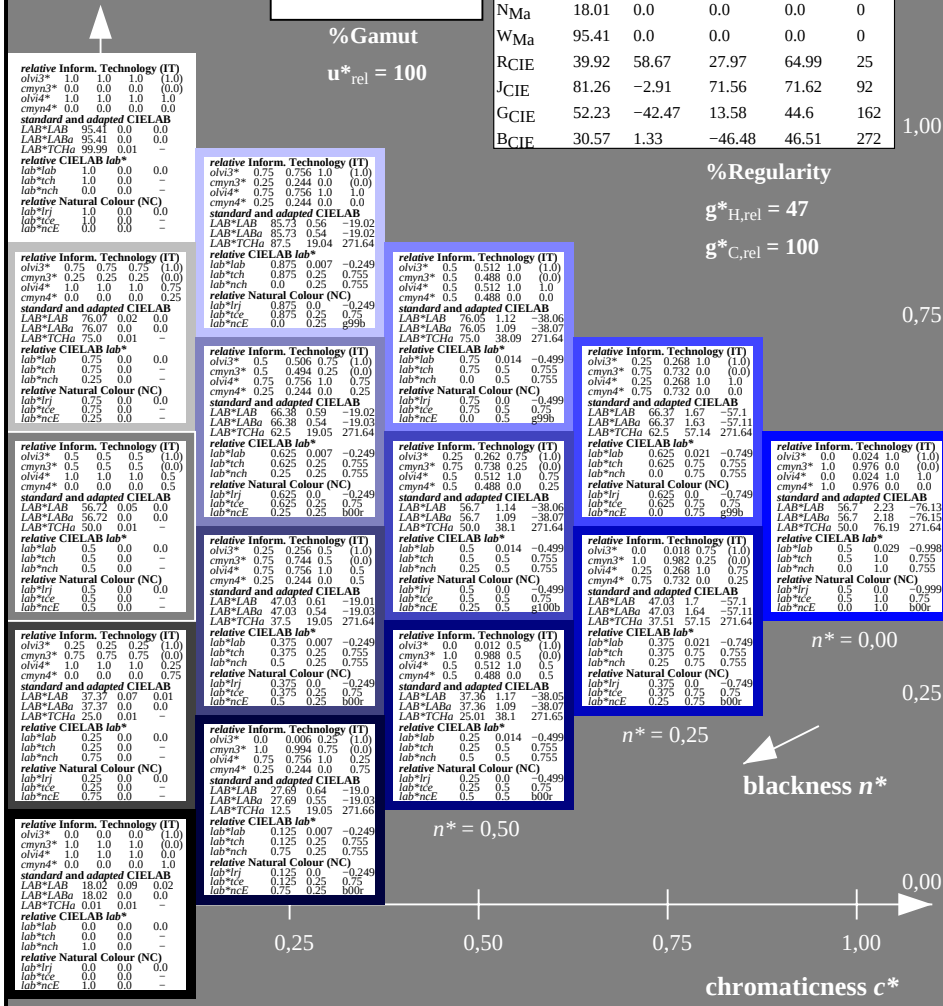
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

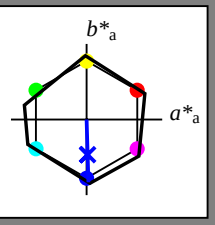
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 53 83 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

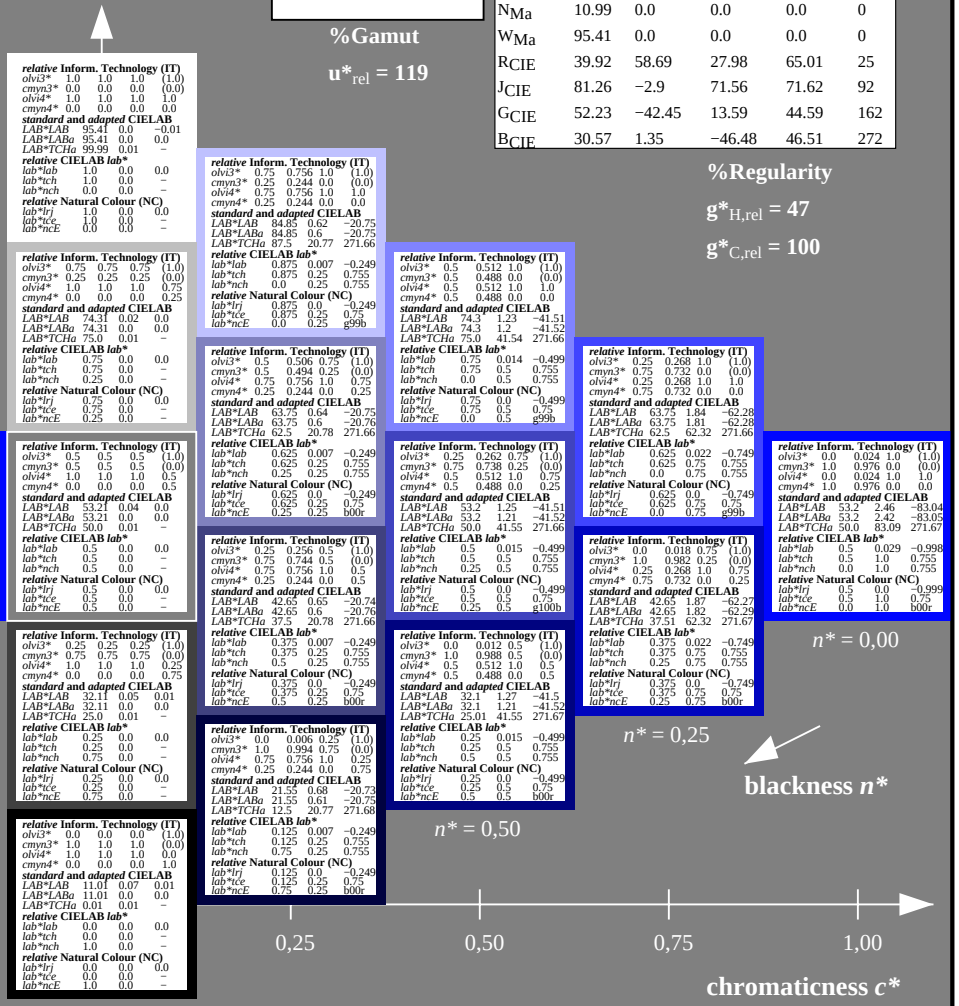
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



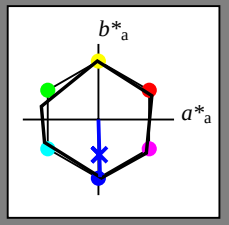

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 57 76 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

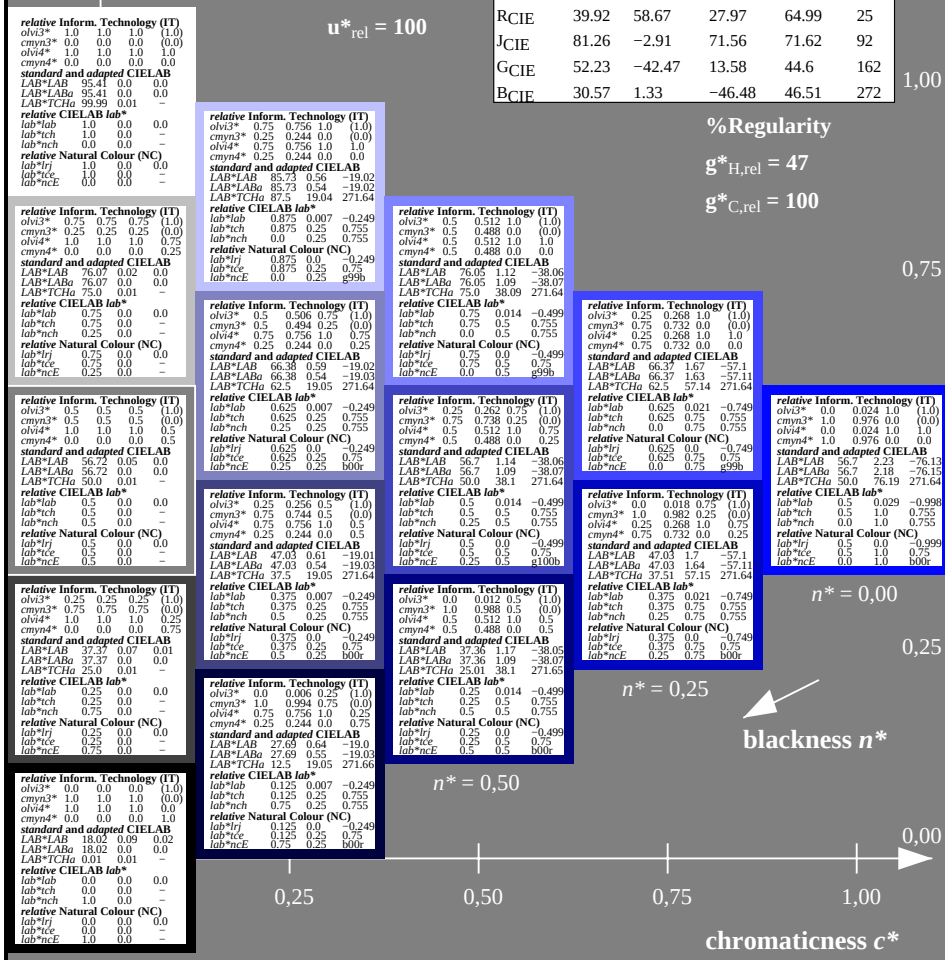
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

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

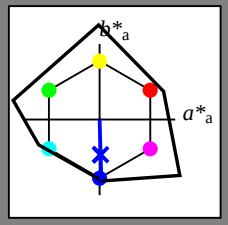
**g*$_{C,rel}$ = 100**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

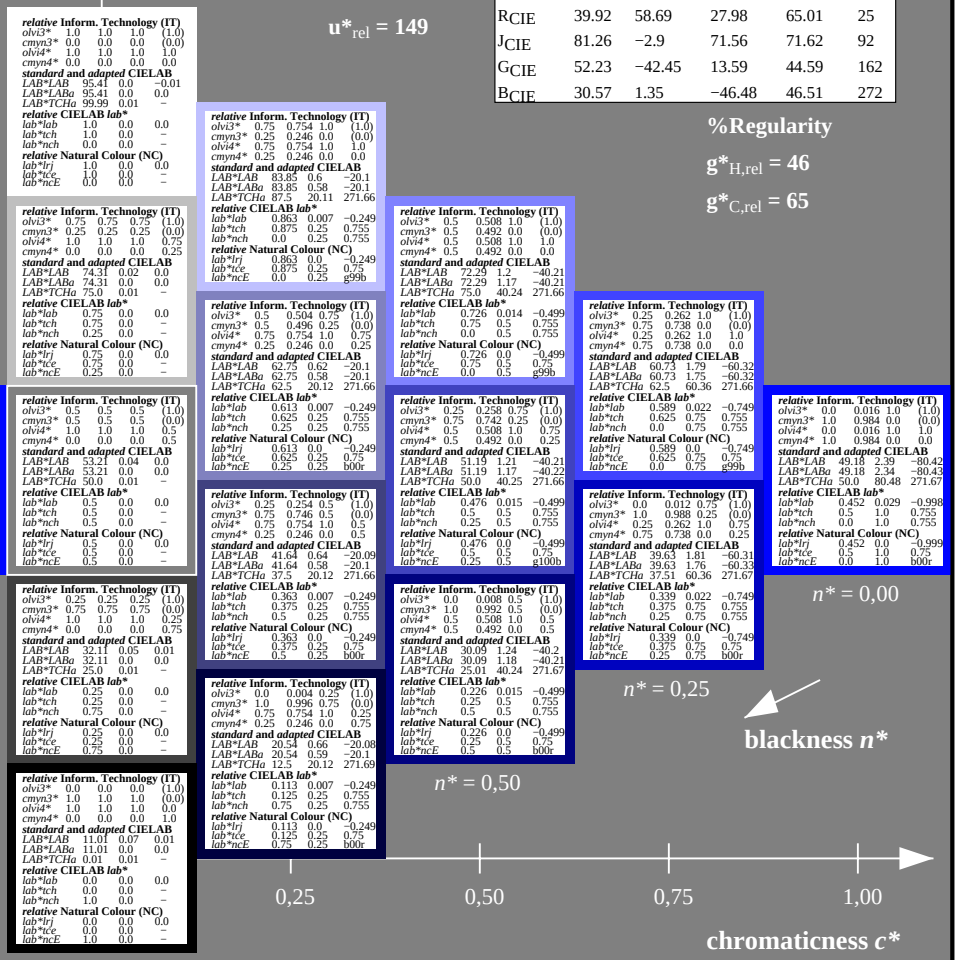
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

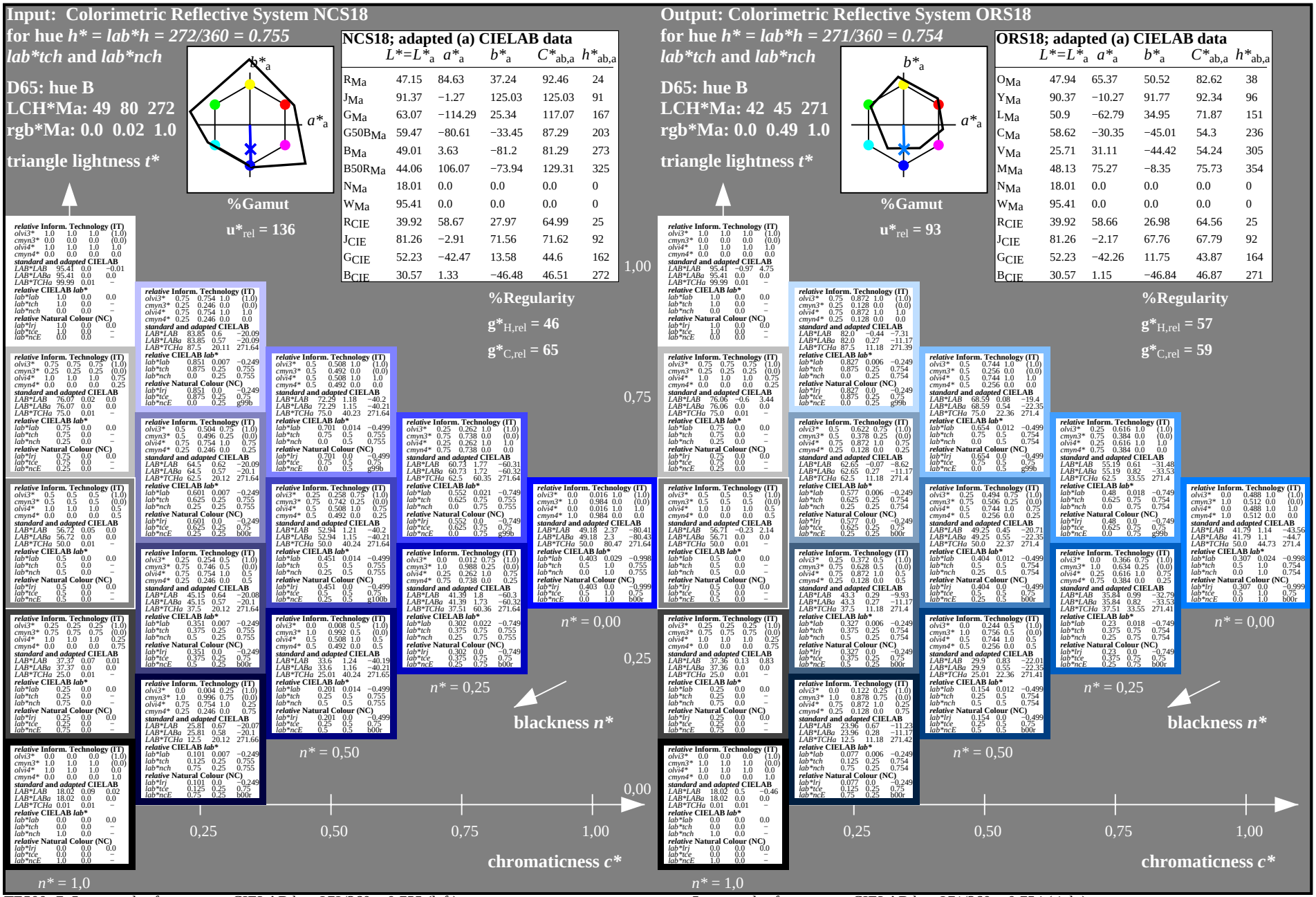
**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



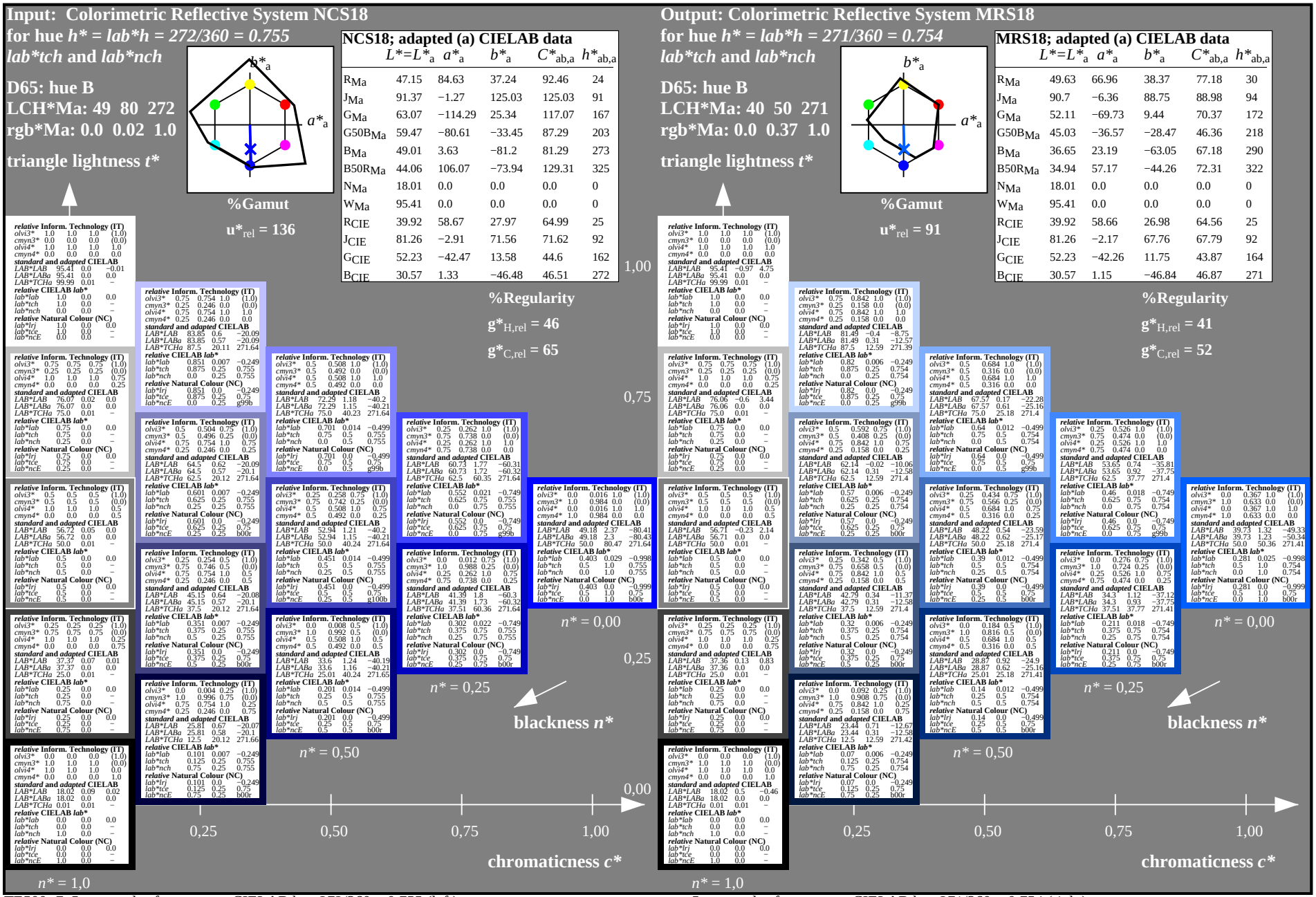

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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



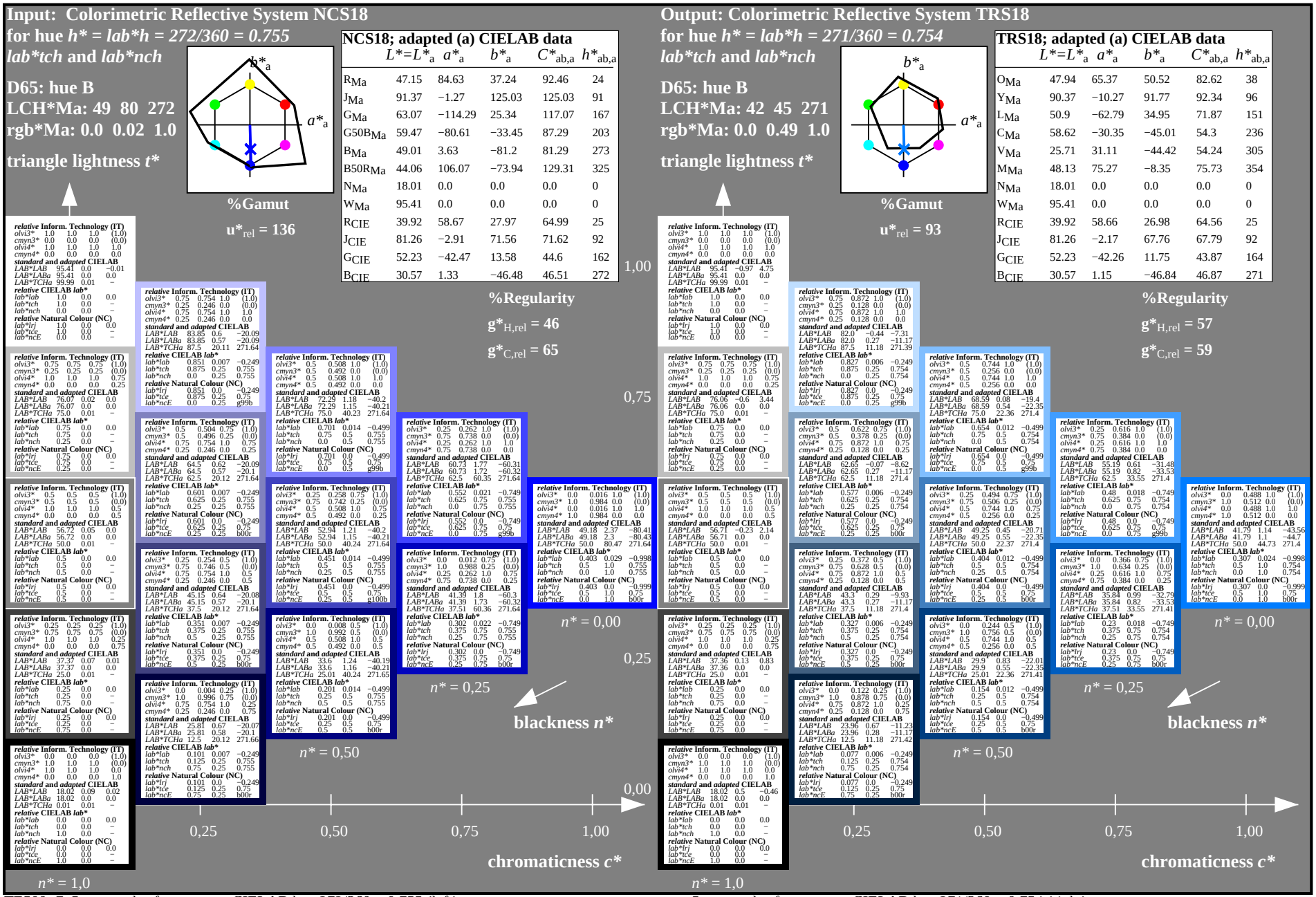

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



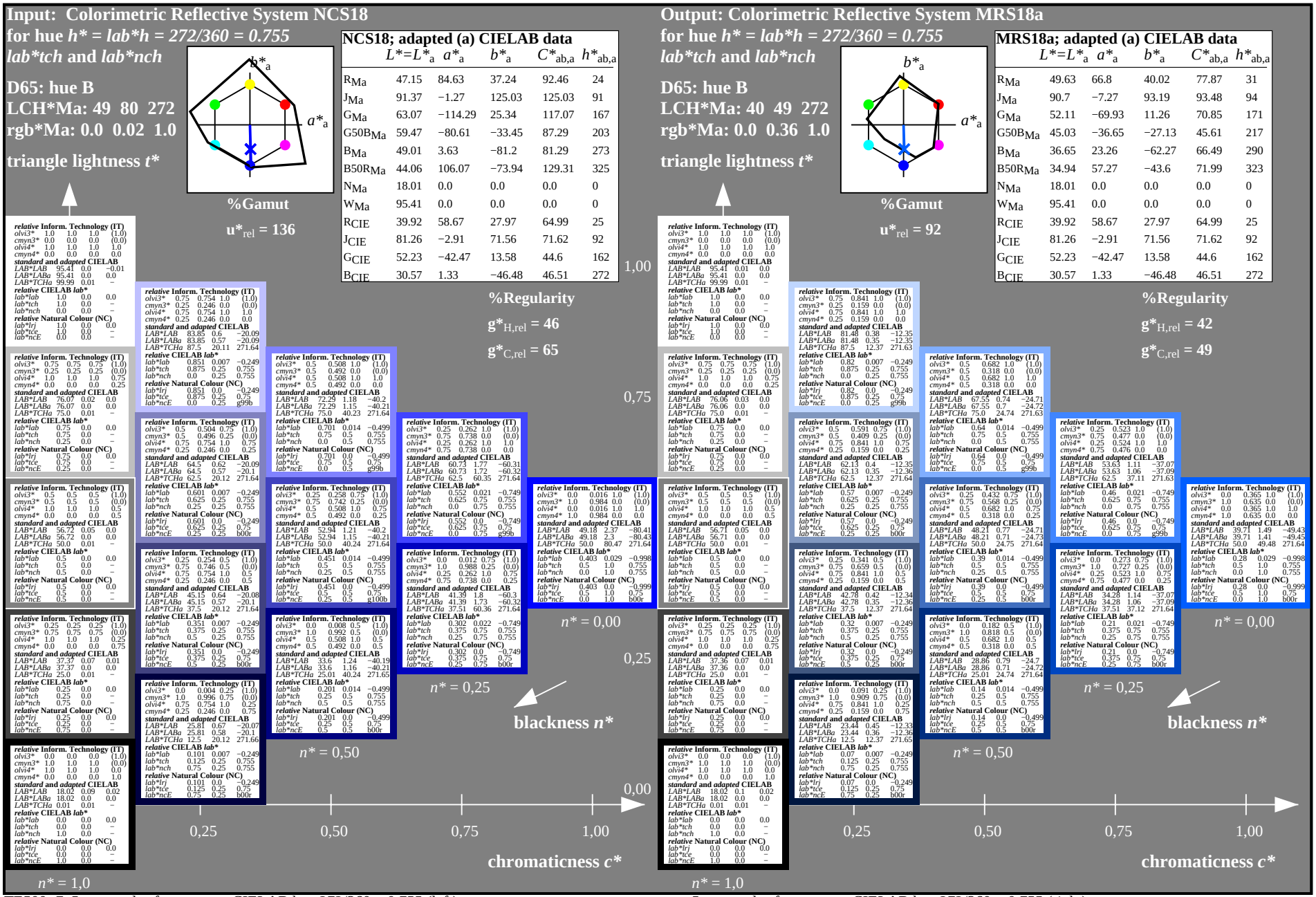

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



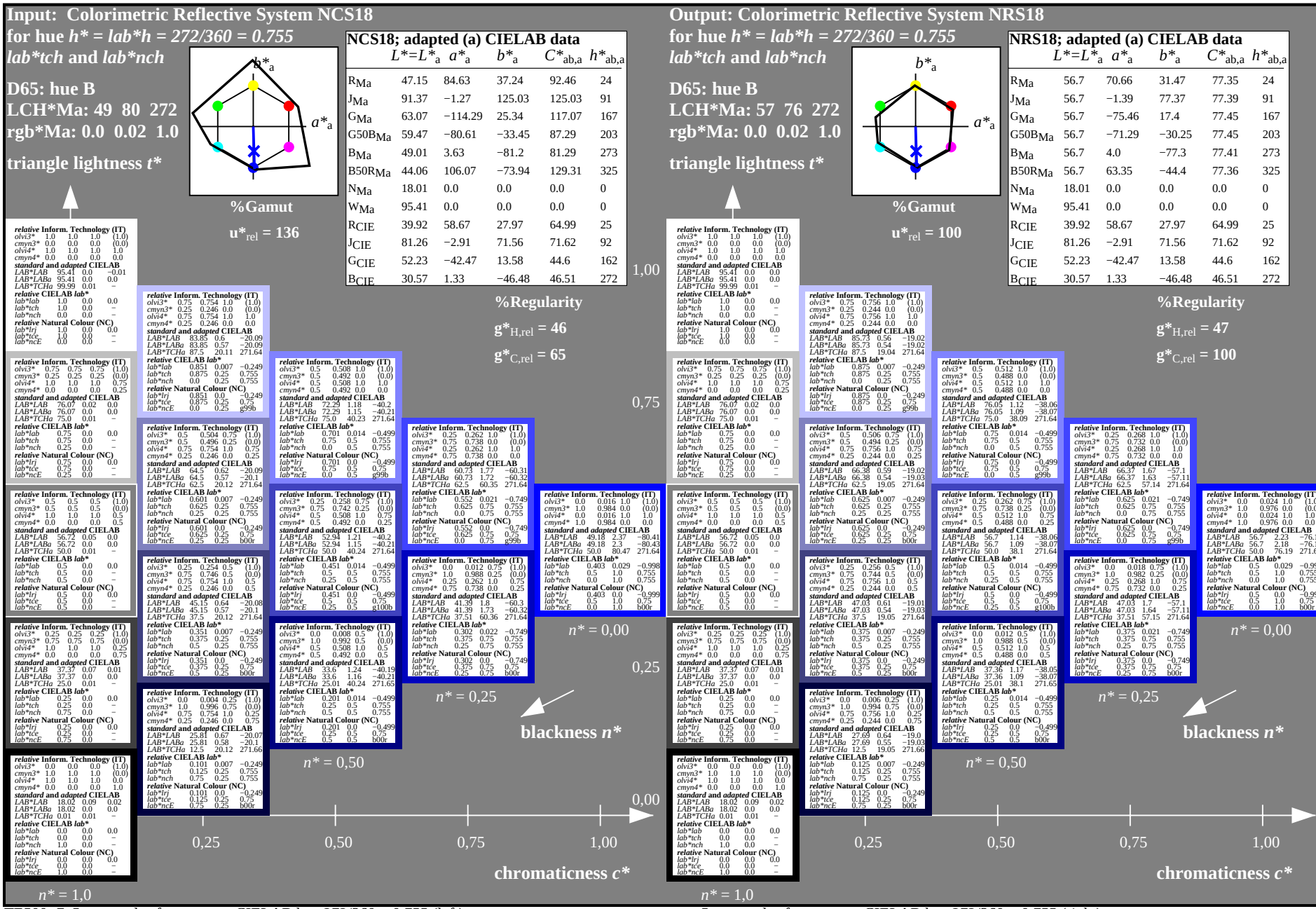

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



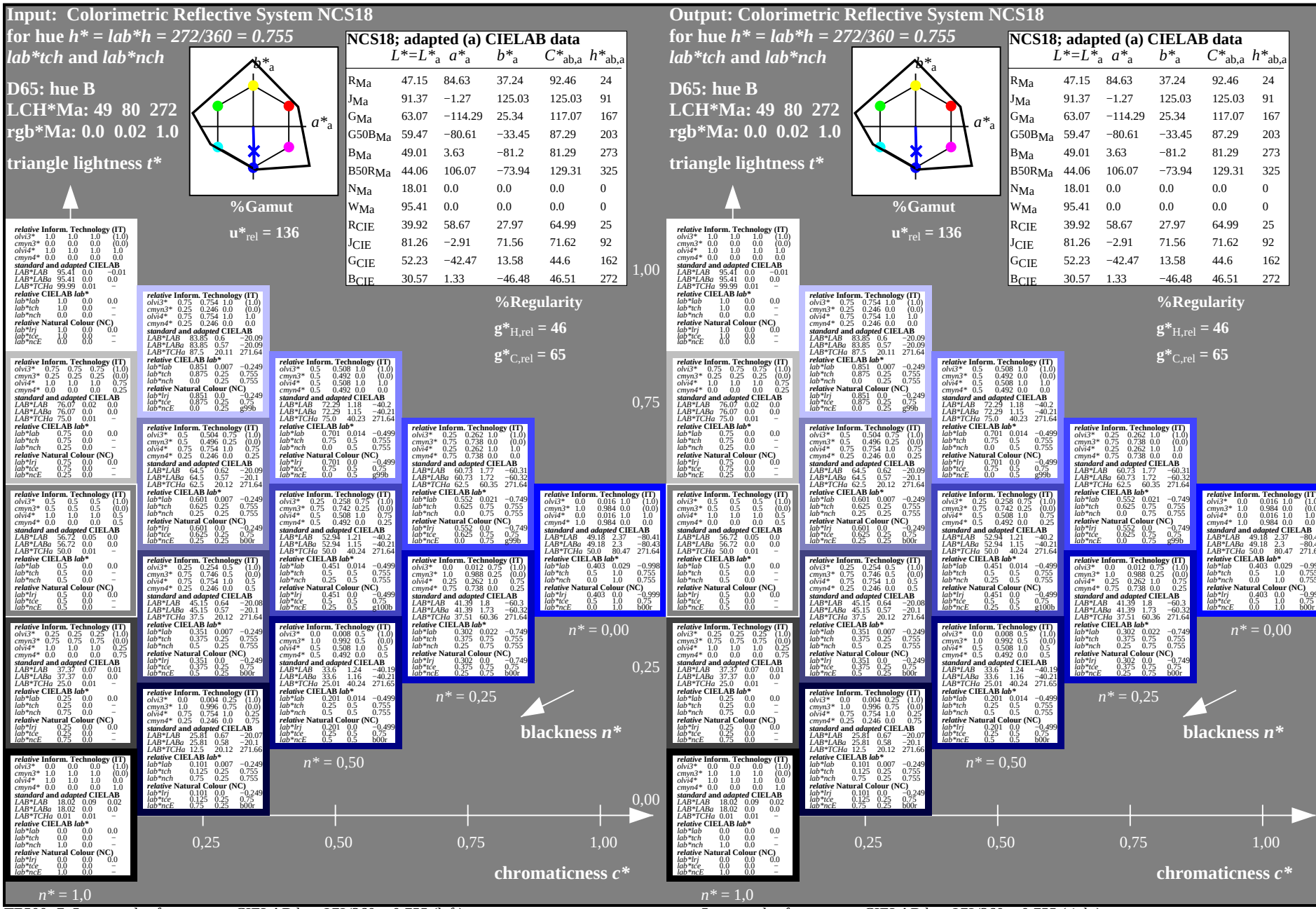

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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




TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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



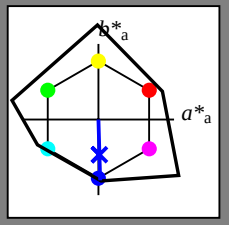

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

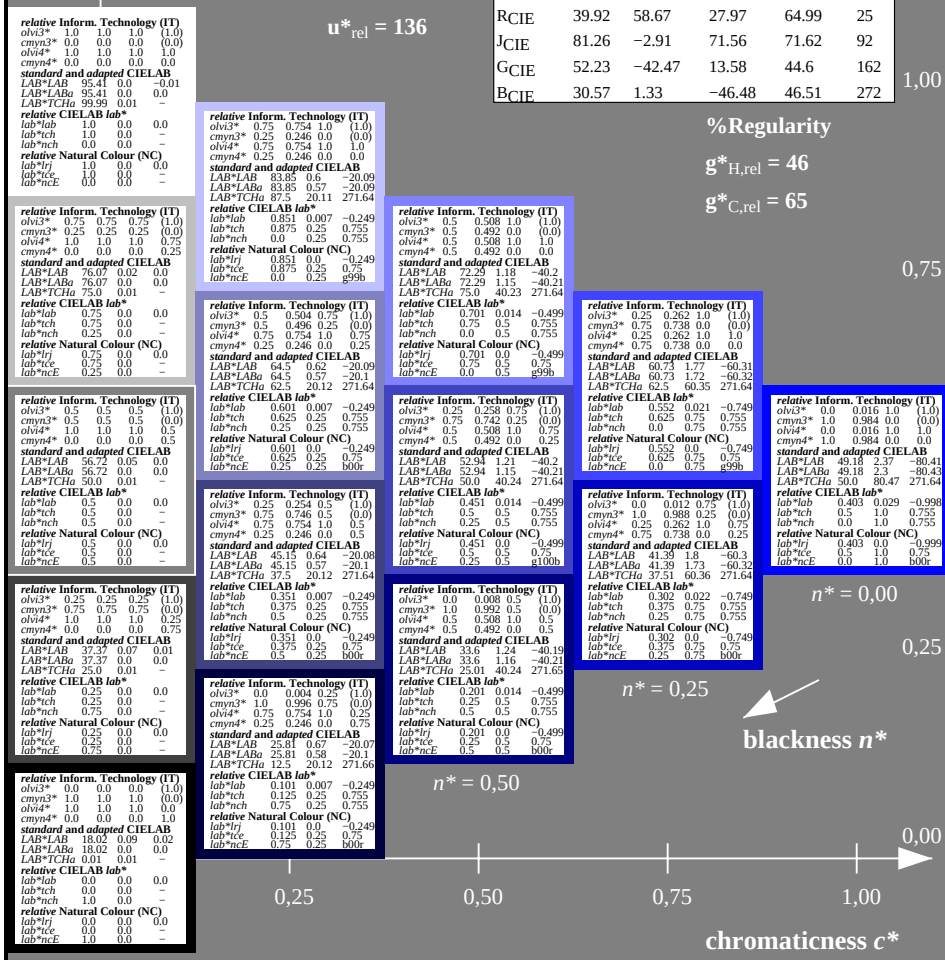
**NCS18; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

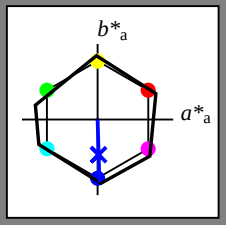
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 53 83 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

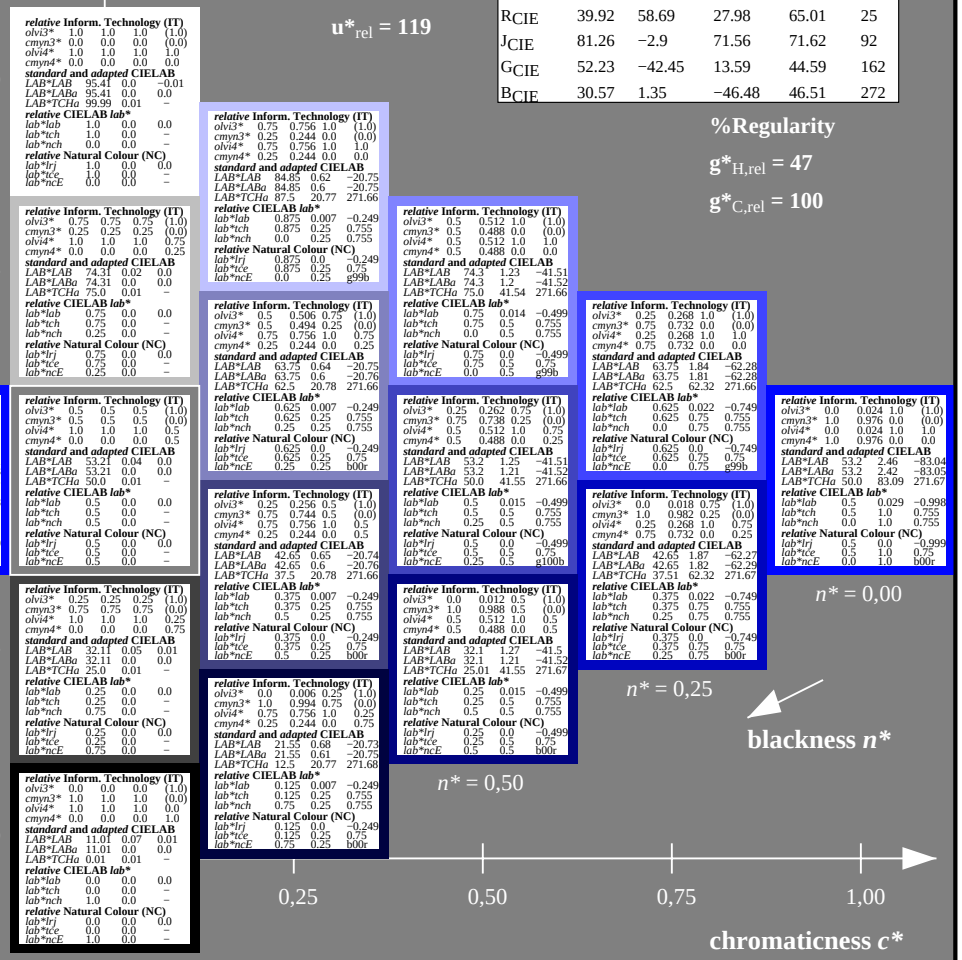
**NRS11; adapted (a) CIELAB data**

| | *L**=*L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



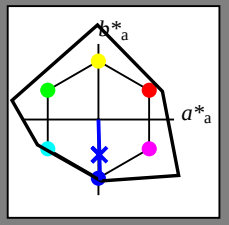

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System NCS18**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 136**

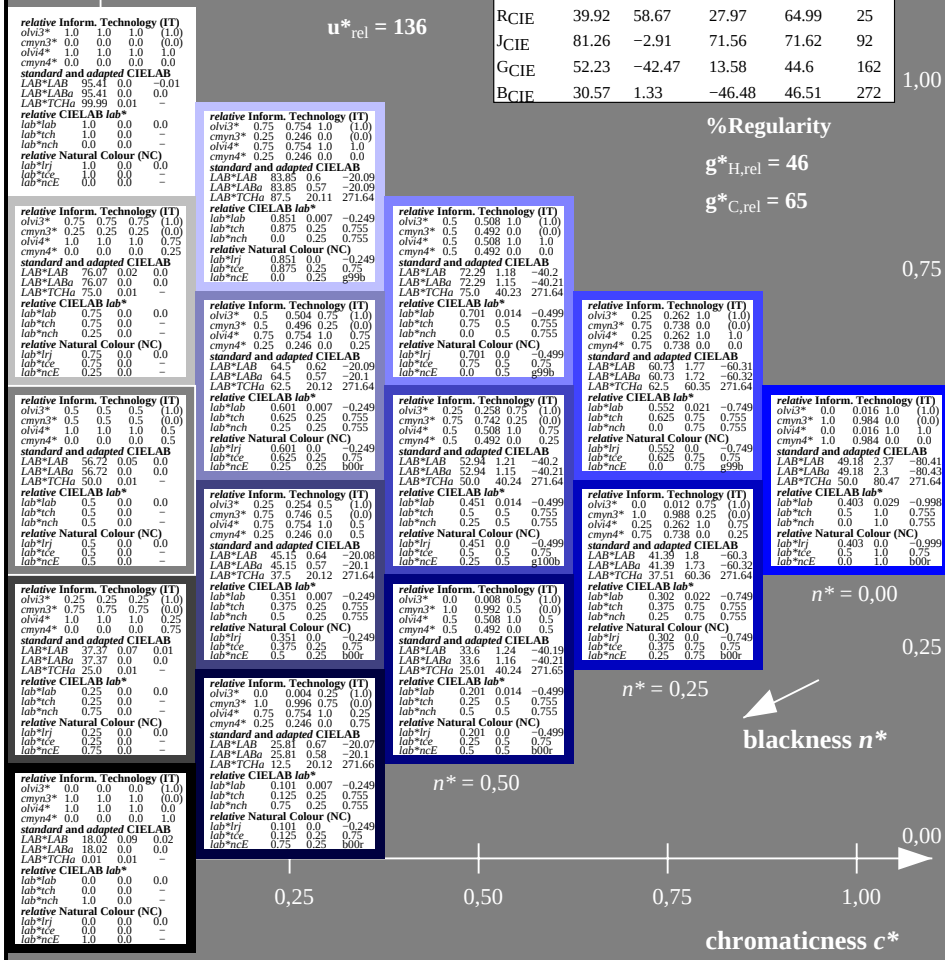
**NCS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.63 | 37.24 | 92.46 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.29 | 25.34 | 117.07 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.61 | −33.45 | 87.29 | 203 |
| $B_{Ma}$ | 49.01 | 3.63 | −81.2 | 81.29 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.07 | −73.94 | 129.31 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

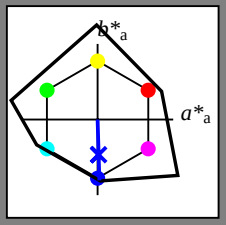
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

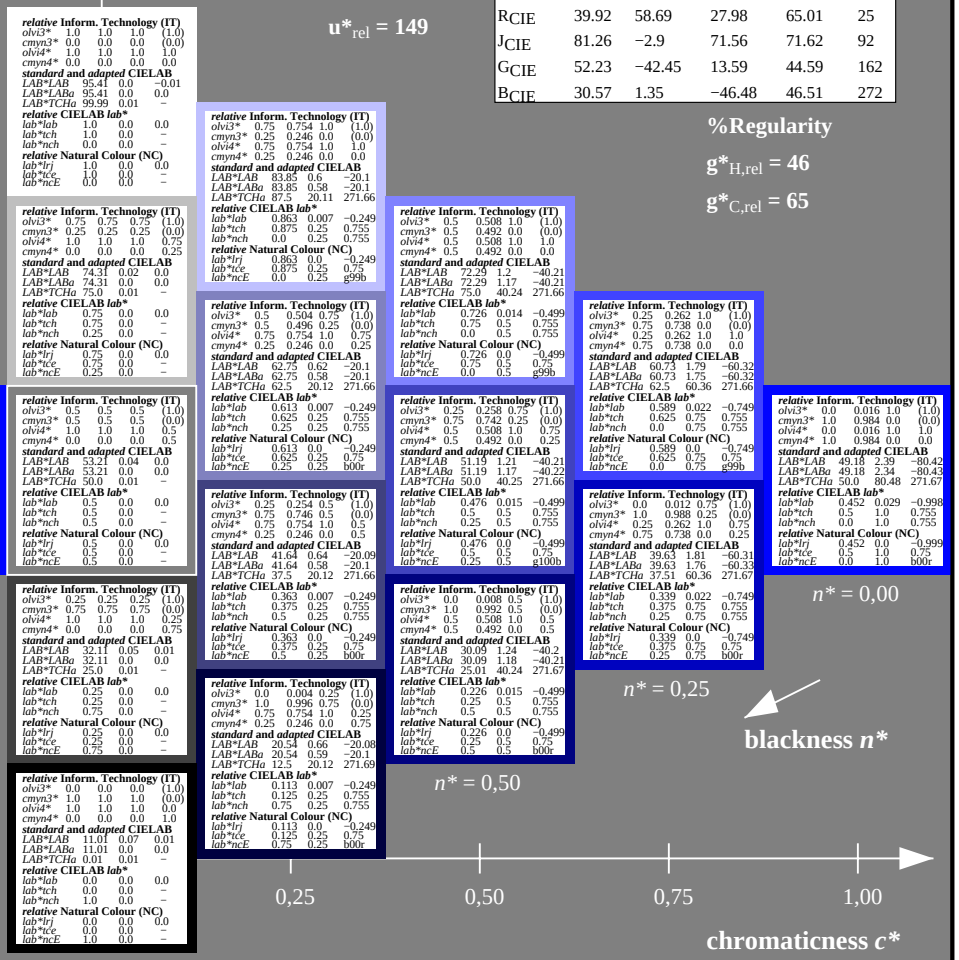
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**



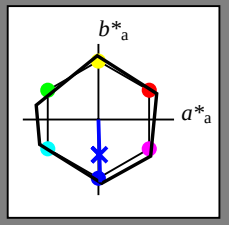

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 53 83 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

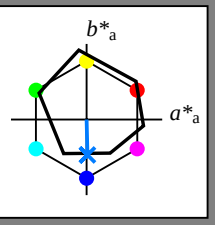
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric 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**
**rgb*Ma: 0.0 0.49 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 93**

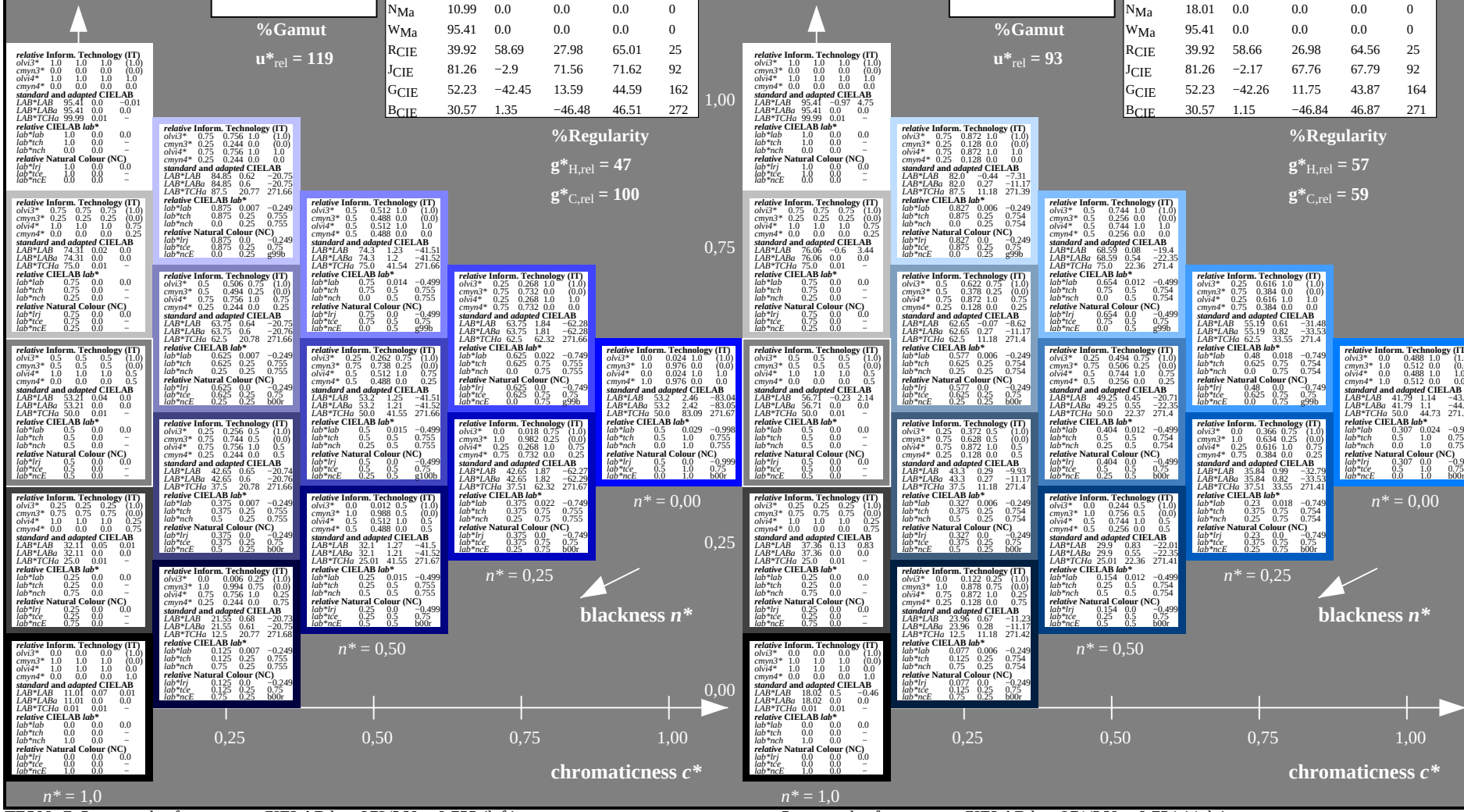
**ORS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $O_{Ma}$ | 47.94 | 65.37 | 50.52 | 82.62 | 38 |
| $Y_{Ma}$ | 90.37 | −10.27 | 91.77 | 92.34 | 96 |
| $L_{Ma}$ | 50.9 | −62.79 | 34.95 | 71.87 | 151 |
| $C_{Ma}$ | 58.62 | −30.35 | −45.01 | 54.3 | 236 |
| $V_{Ma}$ | 25.71 | 31.11 | −44.42 | 54.24 | 305 |
| $M_{Ma}$ | 48.13 | 75.27 | −8.35 | 75.73 | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

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

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



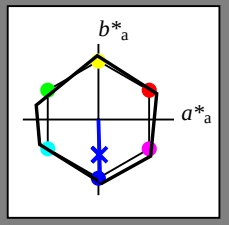

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 53 83 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

**NRS11; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

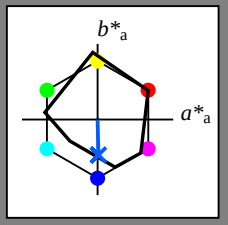
**g*$_{H,rel}$ = 47**

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

**Output: Colorimetric Reflective System MRS18**
**for hue *h** = *lab*h* = 271/360 = 0.754**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 40 50 271**
**rgb*Ma: 0.0 0.37 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 91**

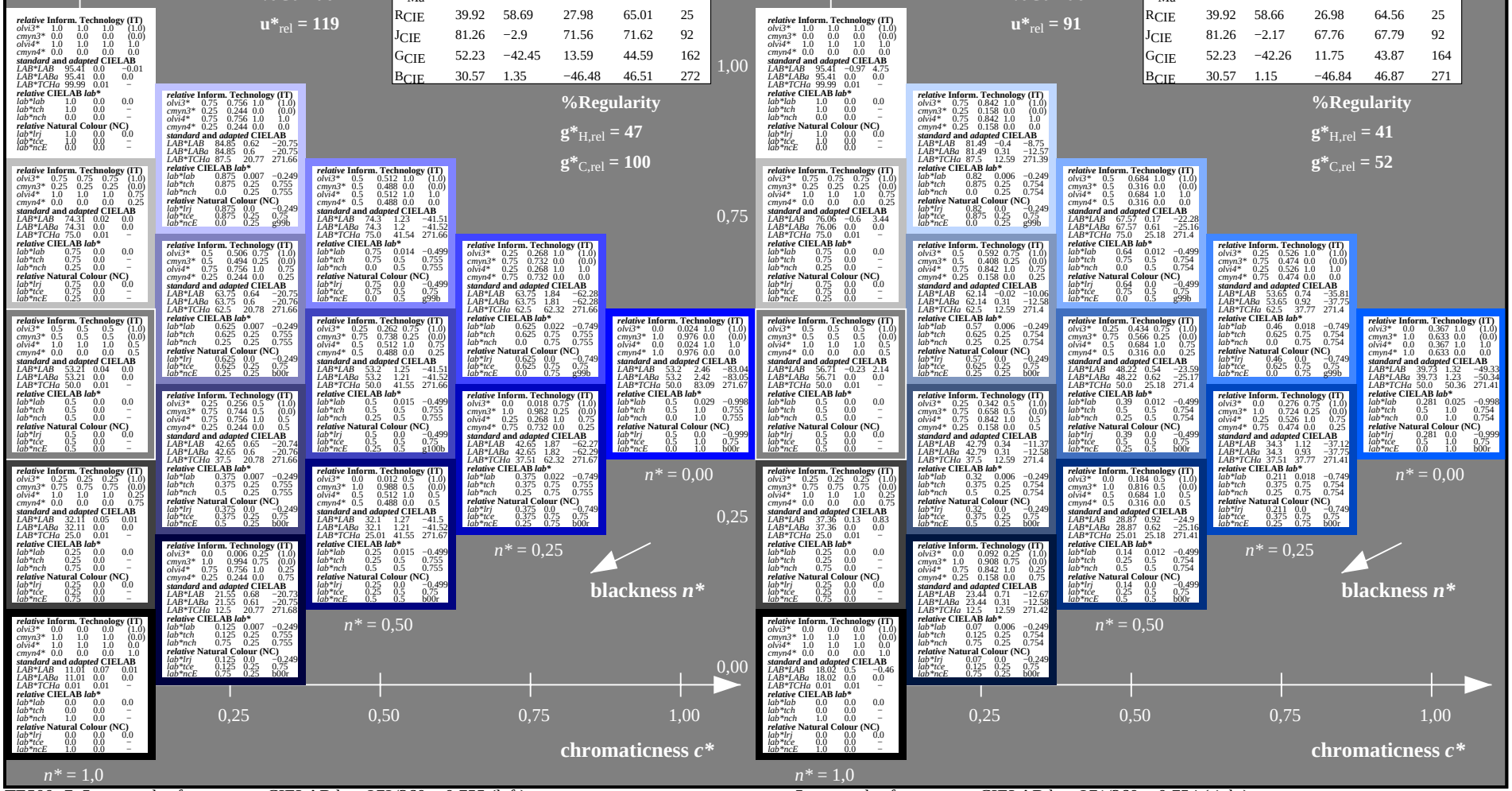
**MRS18; adapted (a) CIELAB data**

| | *L*=L**$_a$ | *a**$_a$ | *b**$_a$ | *C**$_{ab,a}$ | *h**$_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 49.63 | 66.96 | 38.37 | 77.18 | 30 |
| $J_{Ma}$ | 90.7 | −6.36 | 88.75 | 88.98 | 94 |
| $G_{Ma}$ | 52.11 | −69.73 | 9.44 | 70.37 | 172 |
| $G50B_{Ma}$ | 45.03 | −36.57 | −28.47 | 46.36 | 218 |
| $B_{Ma}$ | 36.65 | 23.19 | −63.05 | 67.18 | 290 |
| $B50R_{Ma}$ | 34.94 | 57.17 | −44.26 | 72.31 | 322 |
| $N_{Ma}$ | 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 | 64.56 | 25 |
| $J_{CIE}$ | 81.26 | −2.17 | 67.76 | 67.79 | 92 |
| $G_{CIE}$ | 52.23 | −42.26 | 11.75 | 43.87 | 164 |
| $B_{CIE}$ | 30.57 | 1.15 | −46.84 | 46.87 | 271 |

**%Regularity**

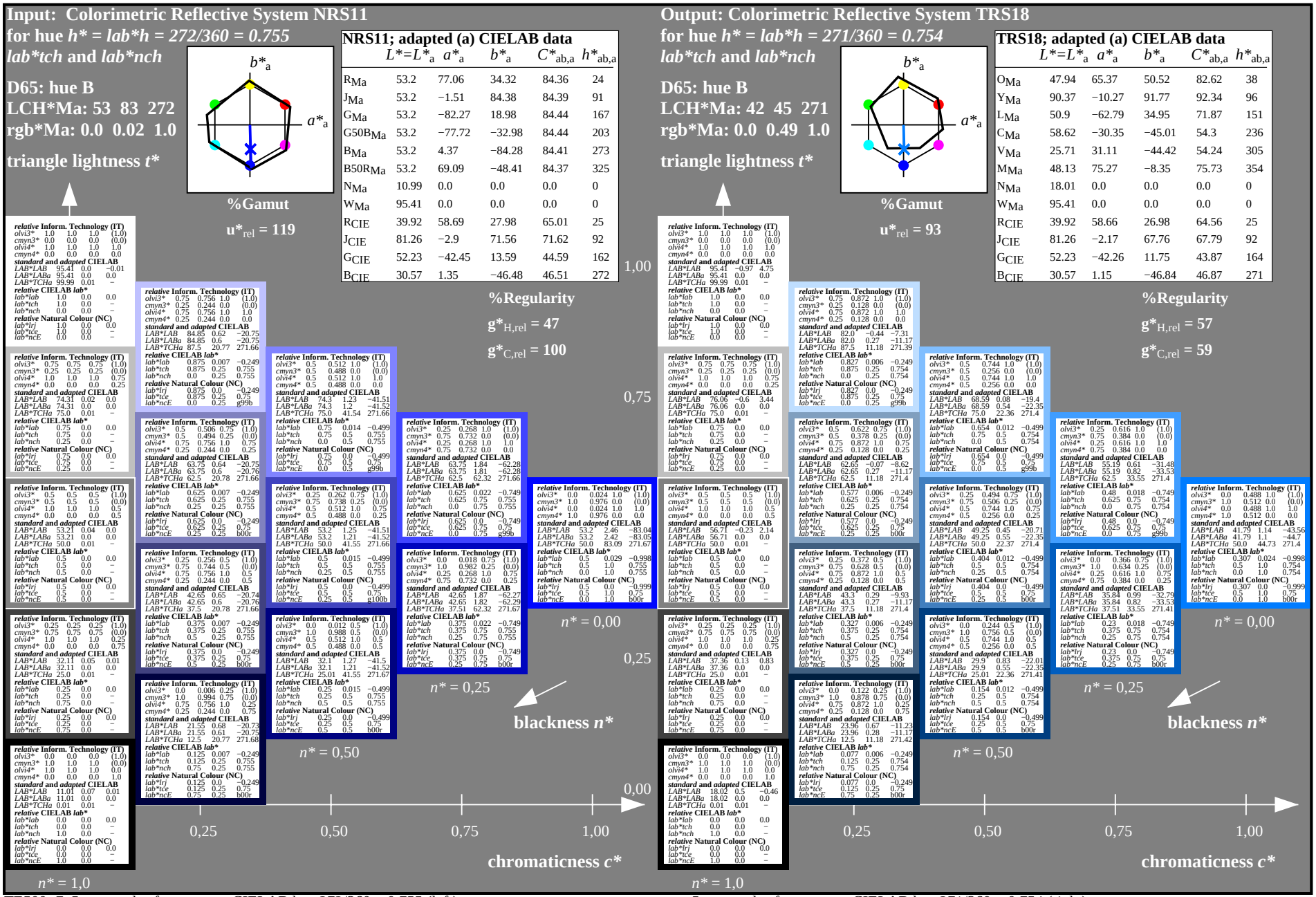
**g*$_{H,rel}$ = 41**

**g*$_{C,rel}$ = 52**



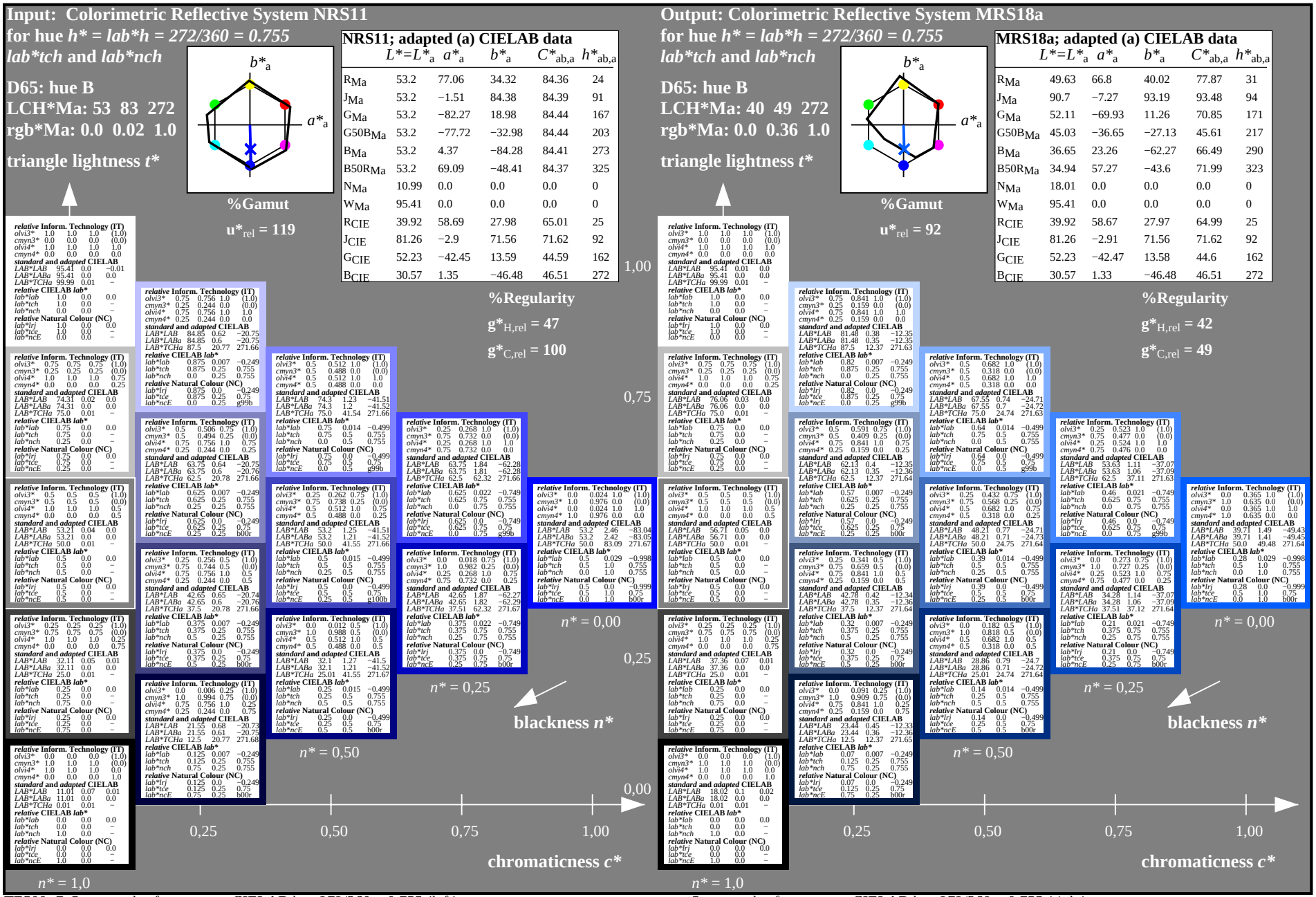

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)




TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



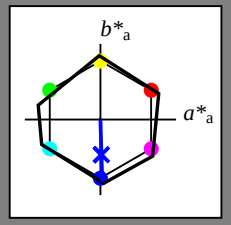

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 53 83 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

1,00

**%Regularity**

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

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

0,75

0,25

0,00

*n** = 0,00

*n** = 0,25

*n** = 0,50

*n** = 1,0

**blackness *n****

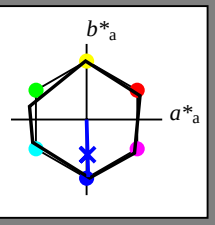
0,25 0,50 0,75 1,00

**chromaticness *c****

**Output: Colorimetric Reflective System NRS18**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 57 76 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 100**

**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

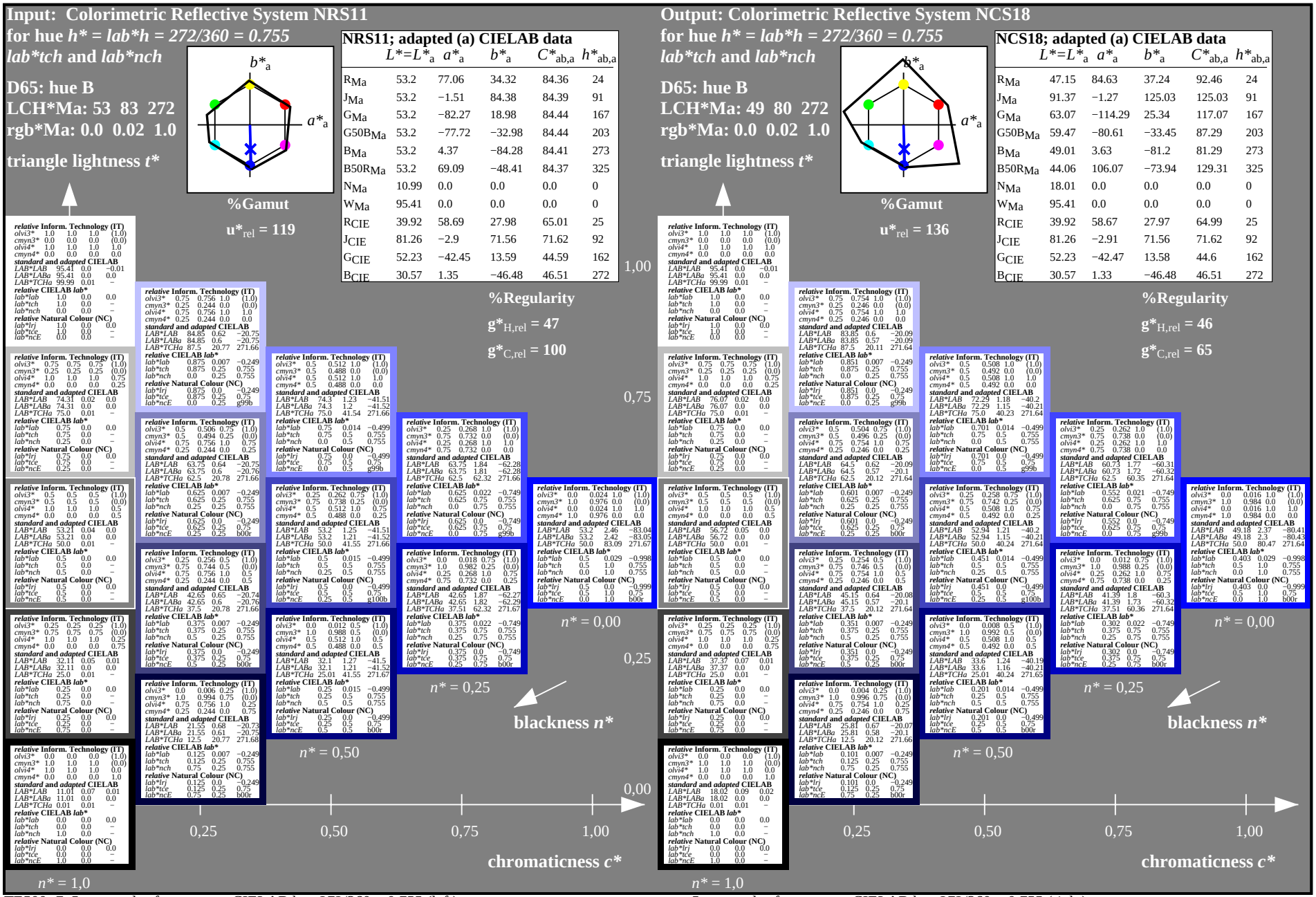
**%Regularity**

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

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

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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



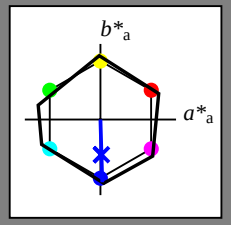

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 53 83 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

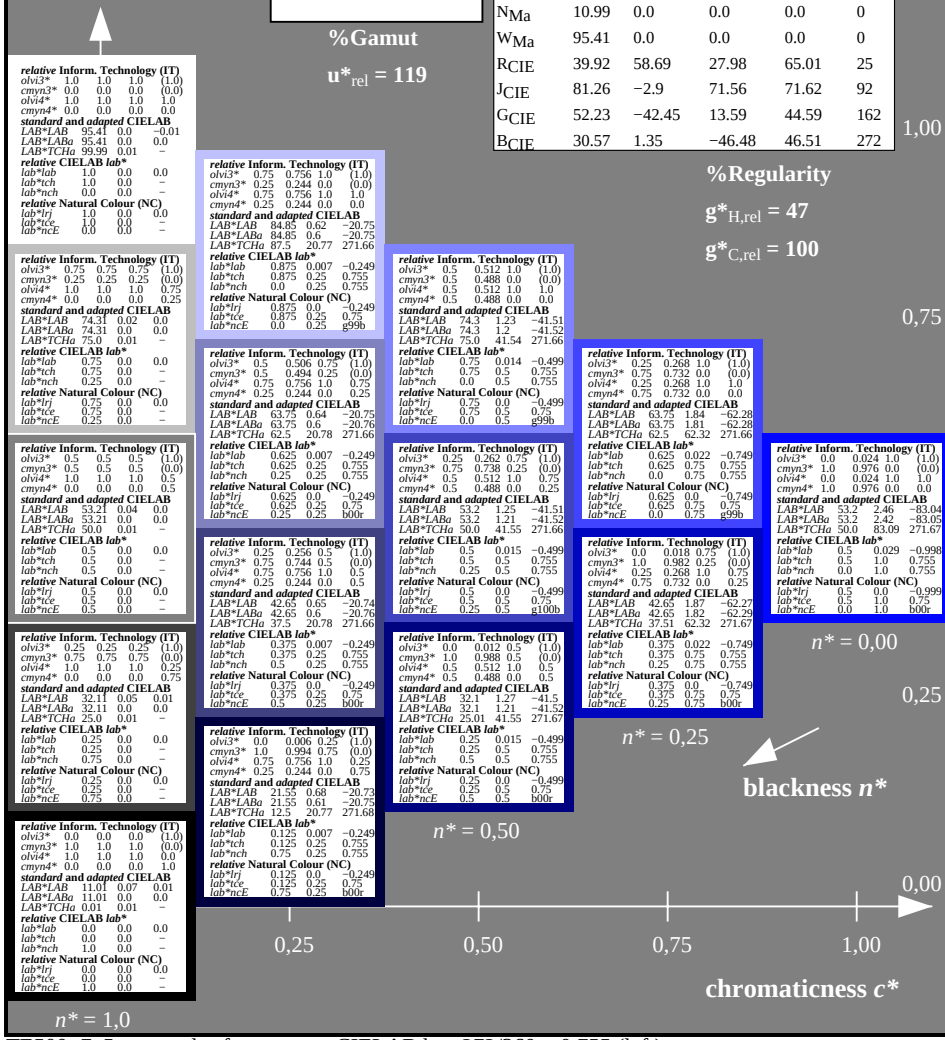
**NRS11; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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

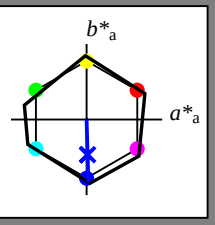



TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 53 83 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

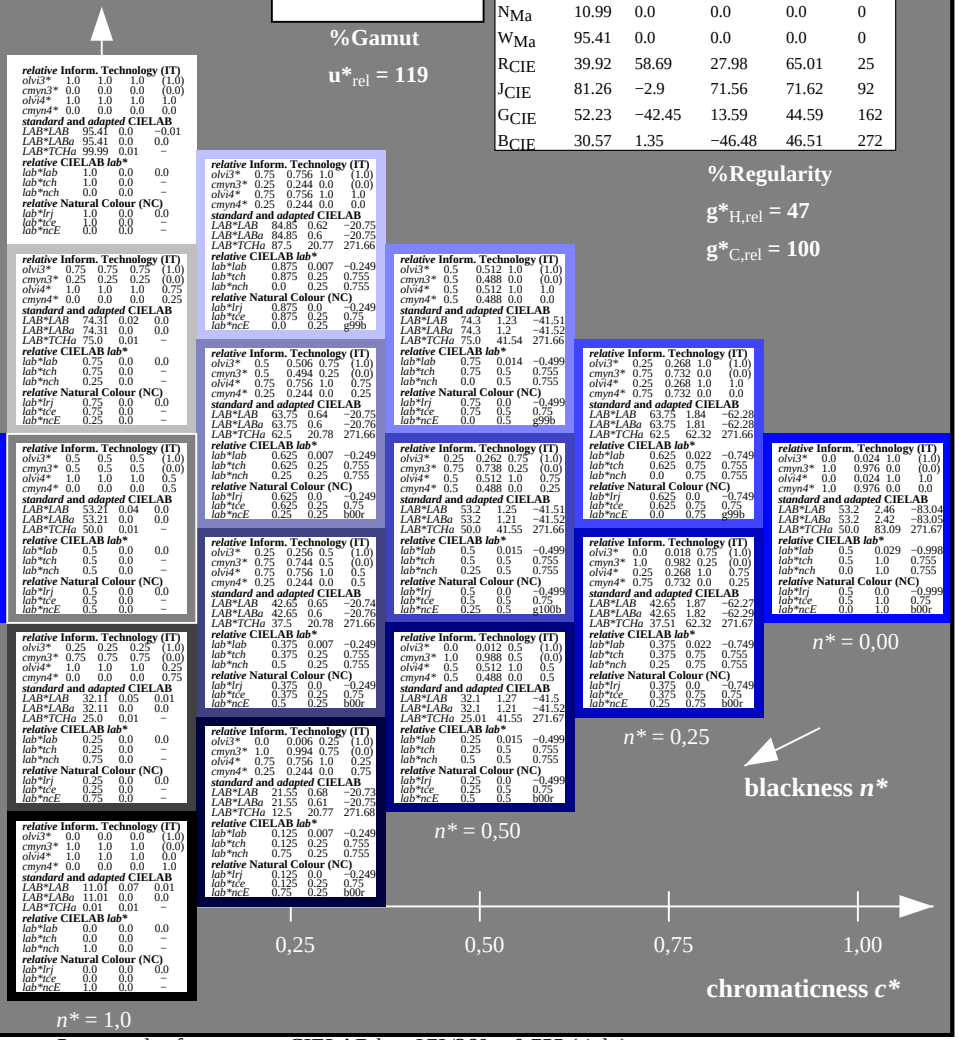
**NRS11; adapted (a) CIELAB data**

| | *L*=L*$_a$* | *a*$_a$* | *b*$_a$* | *C*$_{ab,a}$* | *h*$_{ab,a}$* |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

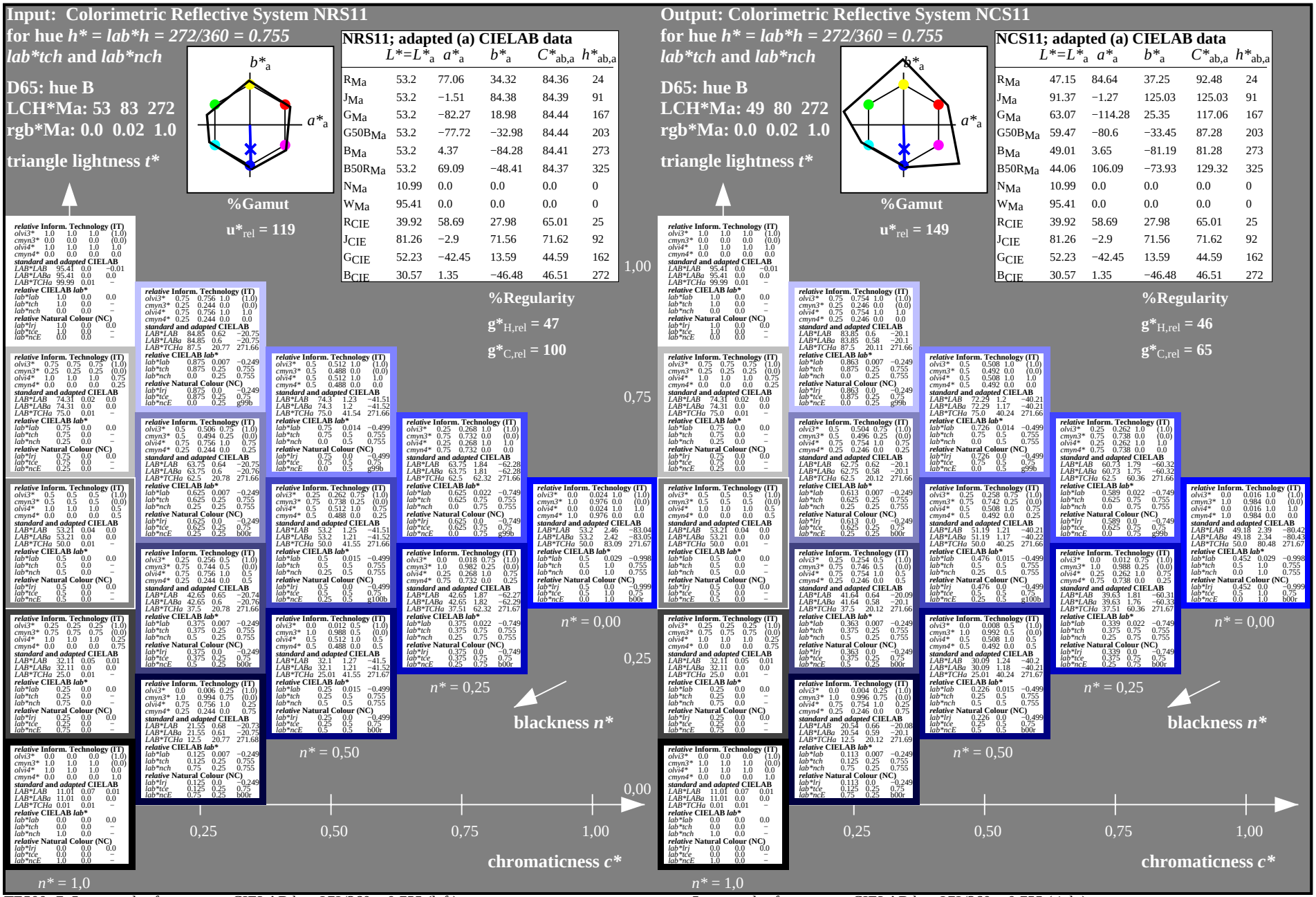
**%Regularity**

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

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

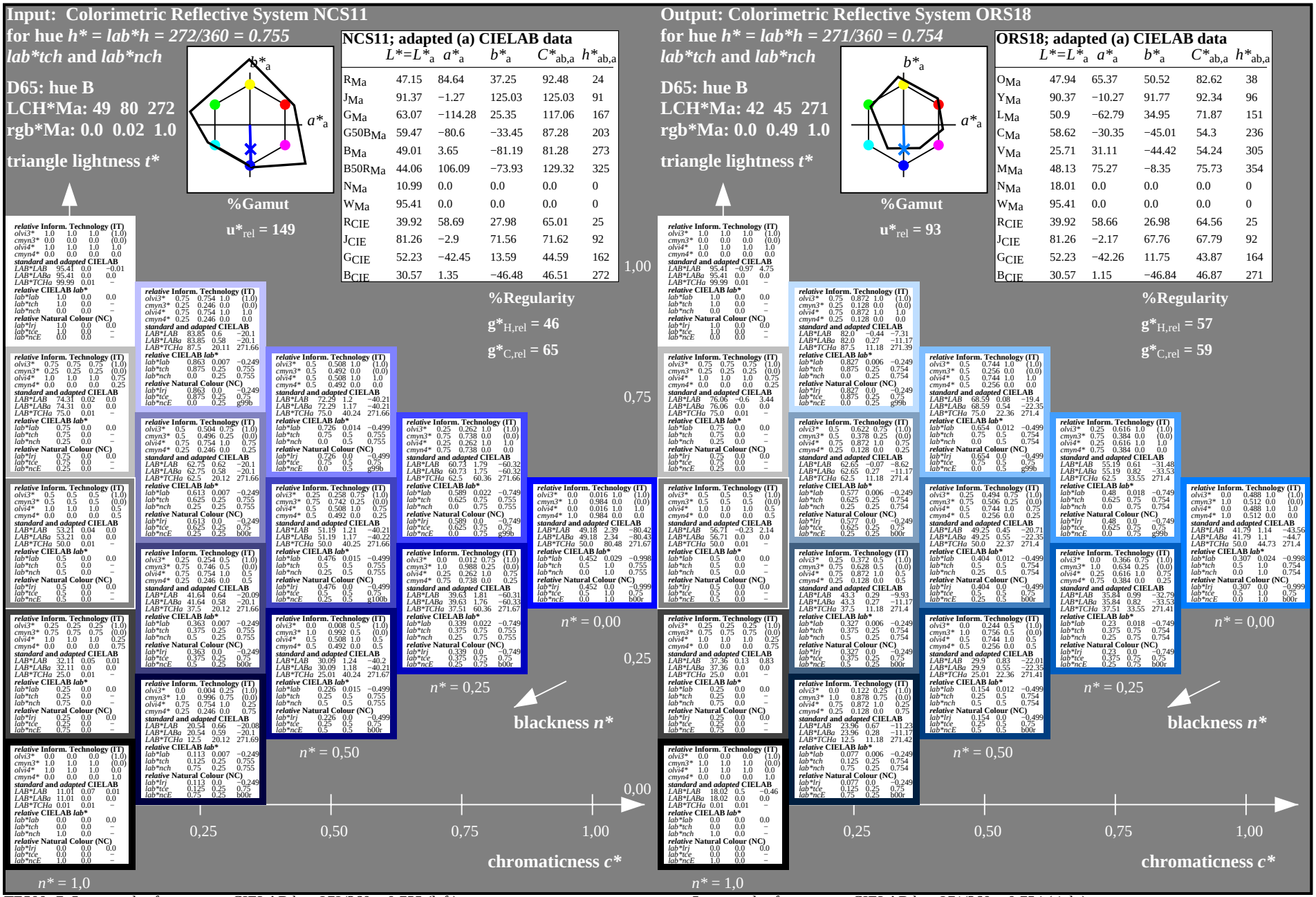



5 step scales for constant CIELAB hue 272/360 = 0.755 (right)



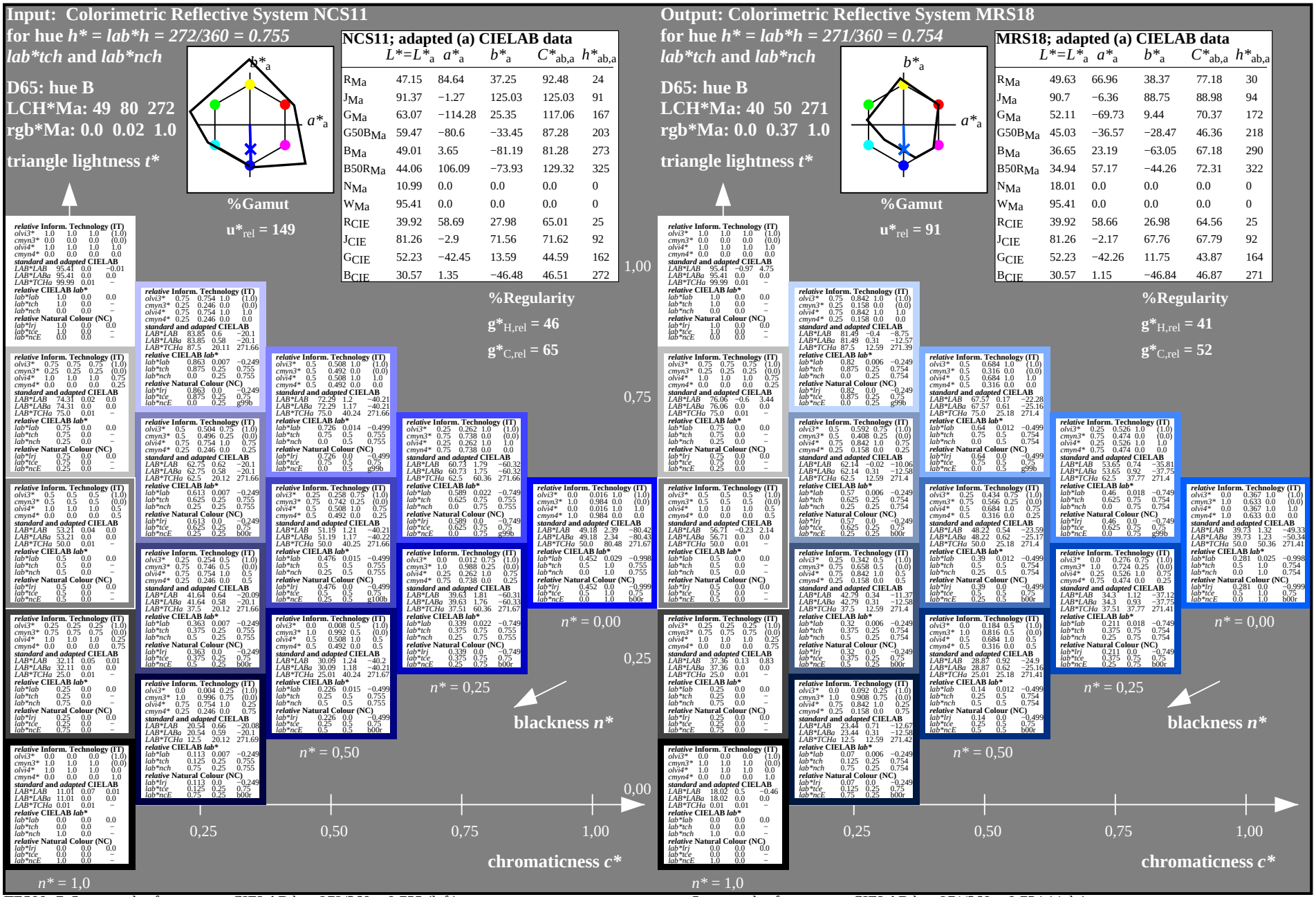

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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



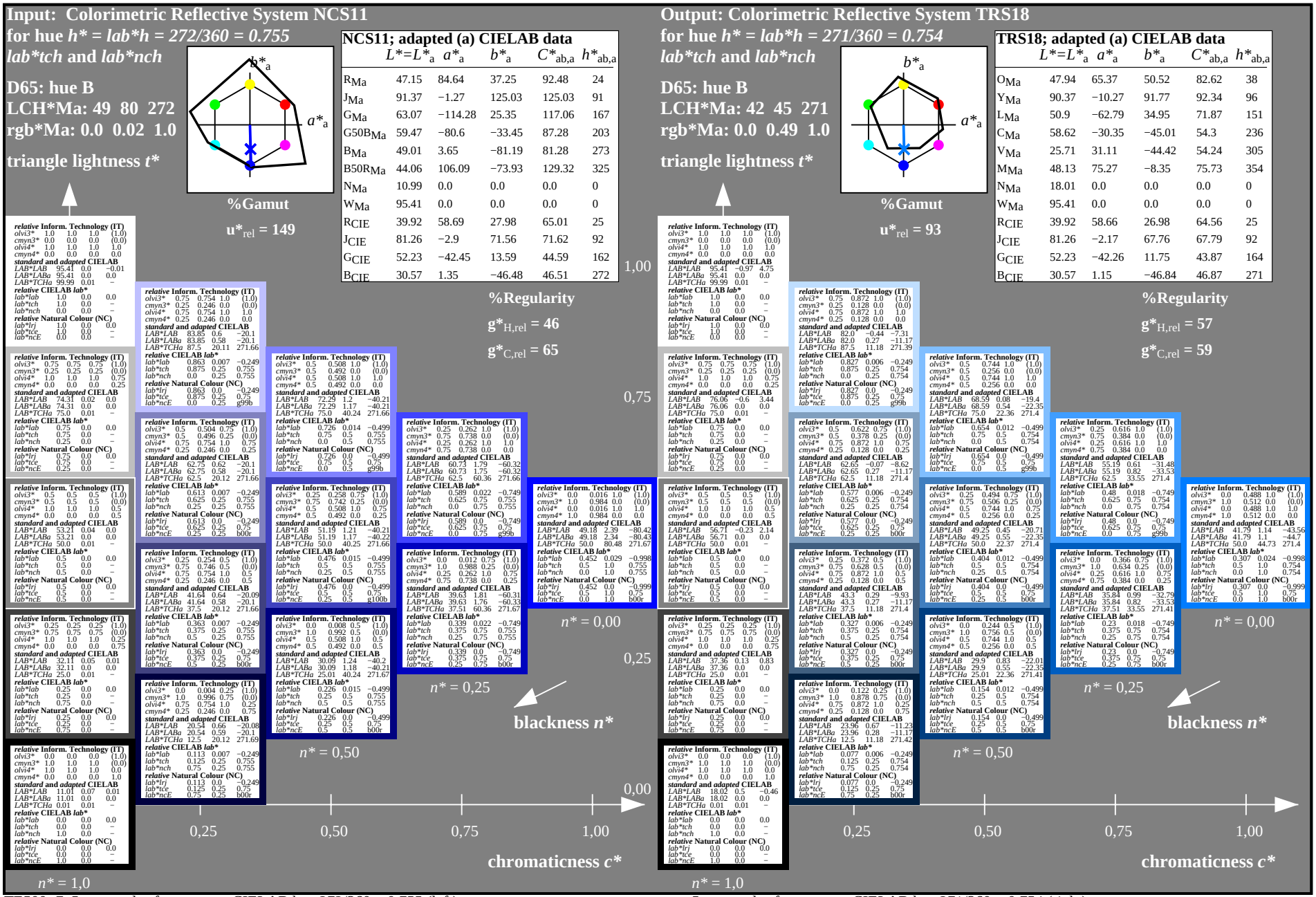

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)



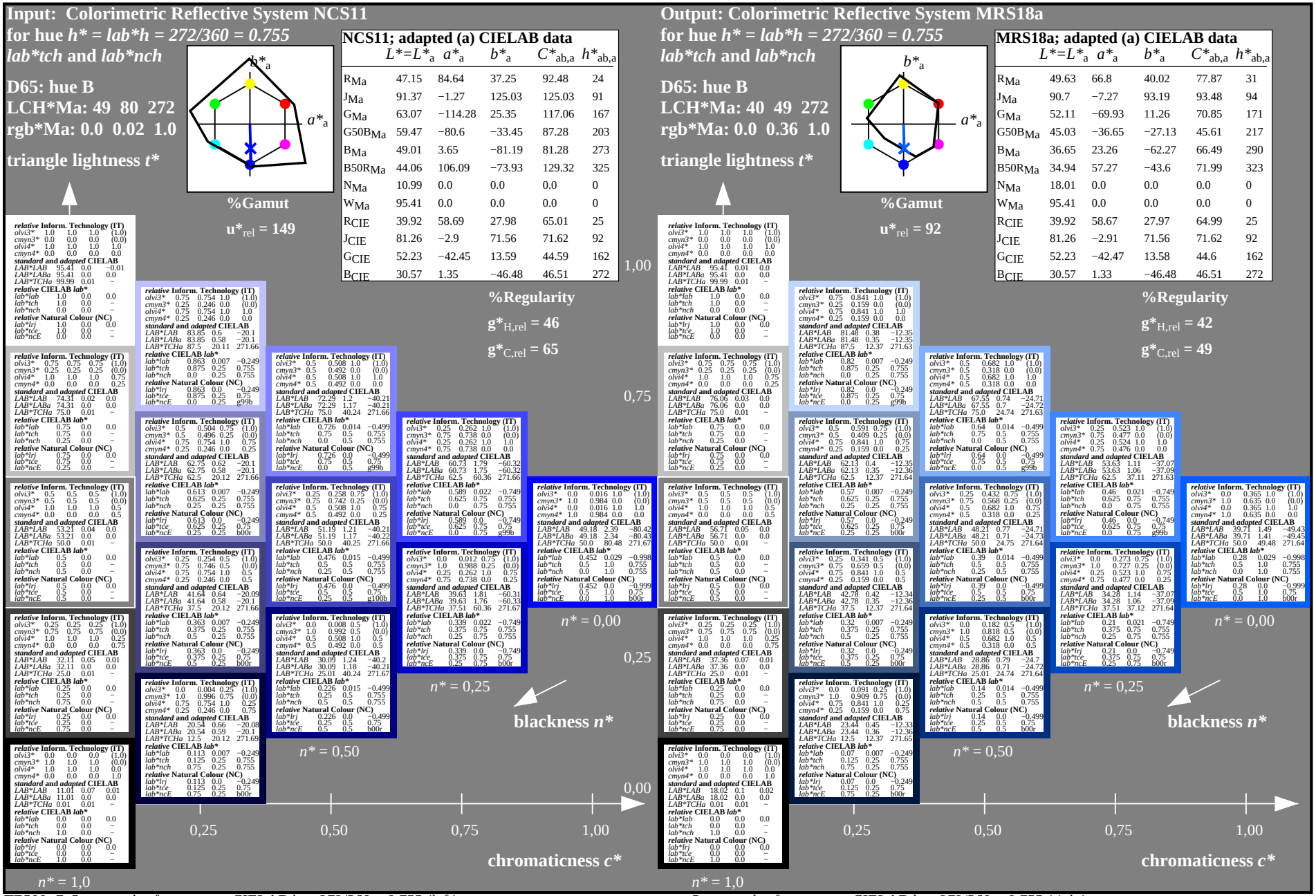

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)




TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)




TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

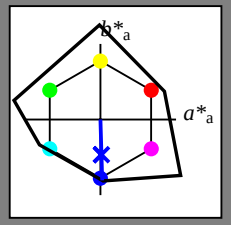
5 step scales for constant CIELAB hue 272/360 = 0.755 (right)

## Input: Colorimetric Reflective System NCS11

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

D65: hue B
LCH*Ma: 49 80 272
rgb*Ma: 0.0 0.02 1.0

triangle lightness *t**




%Gamut

$u^*_{rel}$ = 149

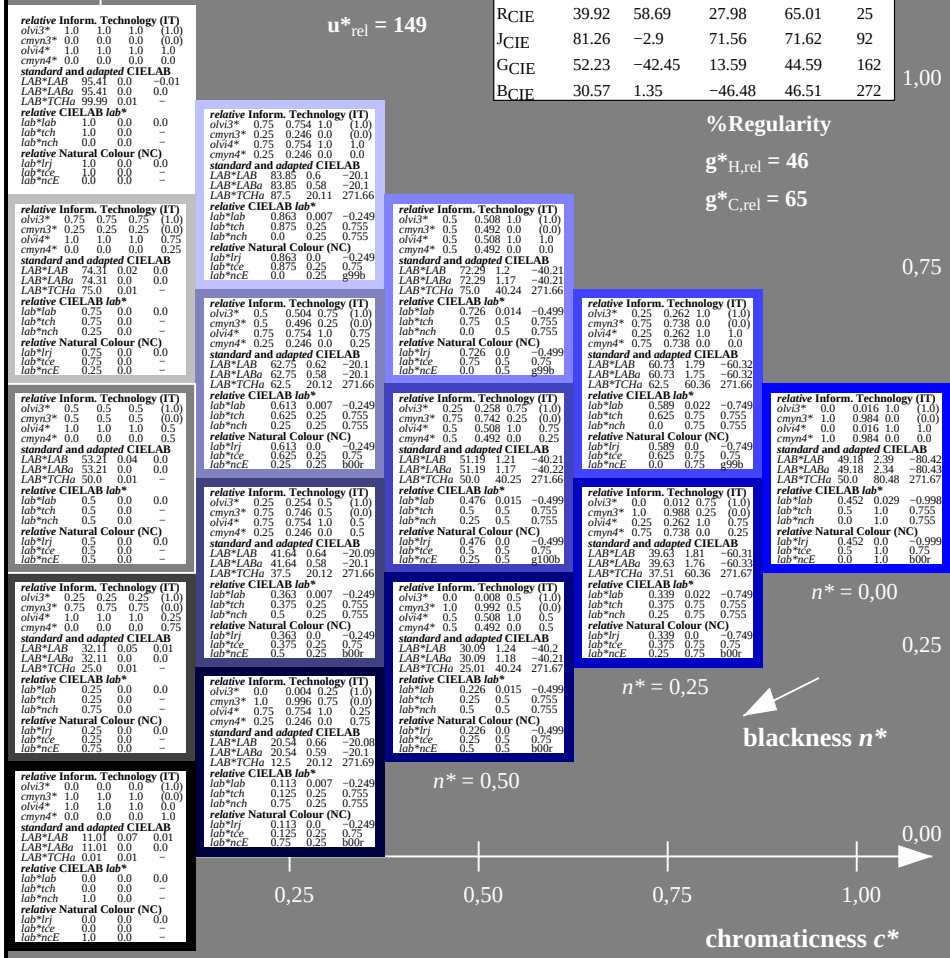
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

%Regularity

$g^*_{H,rel}$ = 46

$g^*_{C,rel}$ = 65

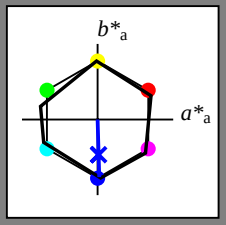



## Output: Colorimetric Reflective System NRS18

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

D65: hue B
LCH*Ma: 57 76 272
rgb*Ma: 0.0 0.02 1.0

triangle lightness *t**




%Gamut

$u^*_{rel}$ = 100

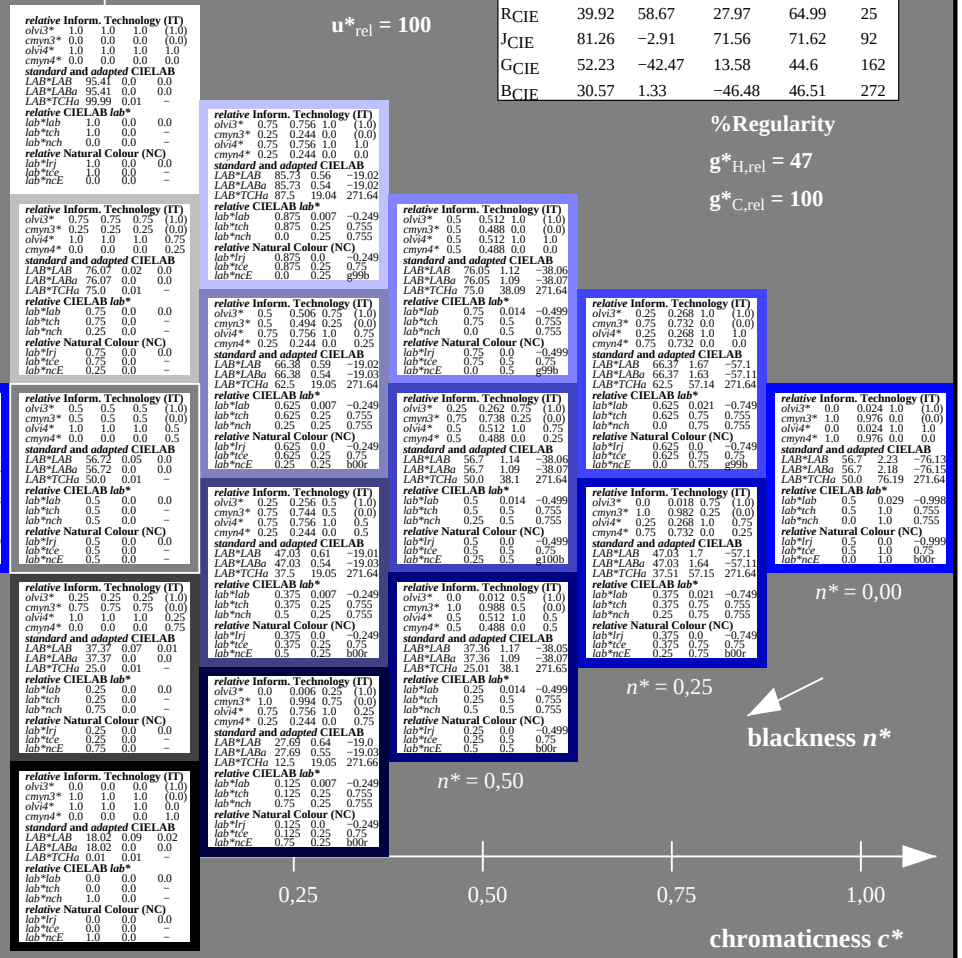
**NRS18; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 56.7 | 70.66 | 31.47 | 77.35 | 24 |
| $J_{Ma}$ | 56.7 | −1.39 | 77.37 | 77.39 | 91 |
| $G_{Ma}$ | 56.7 | −75.46 | 17.4 | 77.45 | 167 |
| $G50B_{Ma}$ | 56.7 | −71.29 | −30.25 | 77.45 | 203 |
| $B_{Ma}$ | 56.7 | 4.0 | −77.3 | 77.41 | 273 |
| $B50R_{Ma}$ | 56.7 | 63.35 | −44.4 | 77.36 | 325 |
| $N_{Ma}$ | 18.01 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.67 | 27.97 | 64.99 | 25 |
| $J_{CIE}$ | 81.26 | −2.91 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.47 | 13.58 | 44.6 | 162 |
| $B_{CIE}$ | 30.57 | 1.33 | −46.48 | 46.51 | 272 |

%Regularity

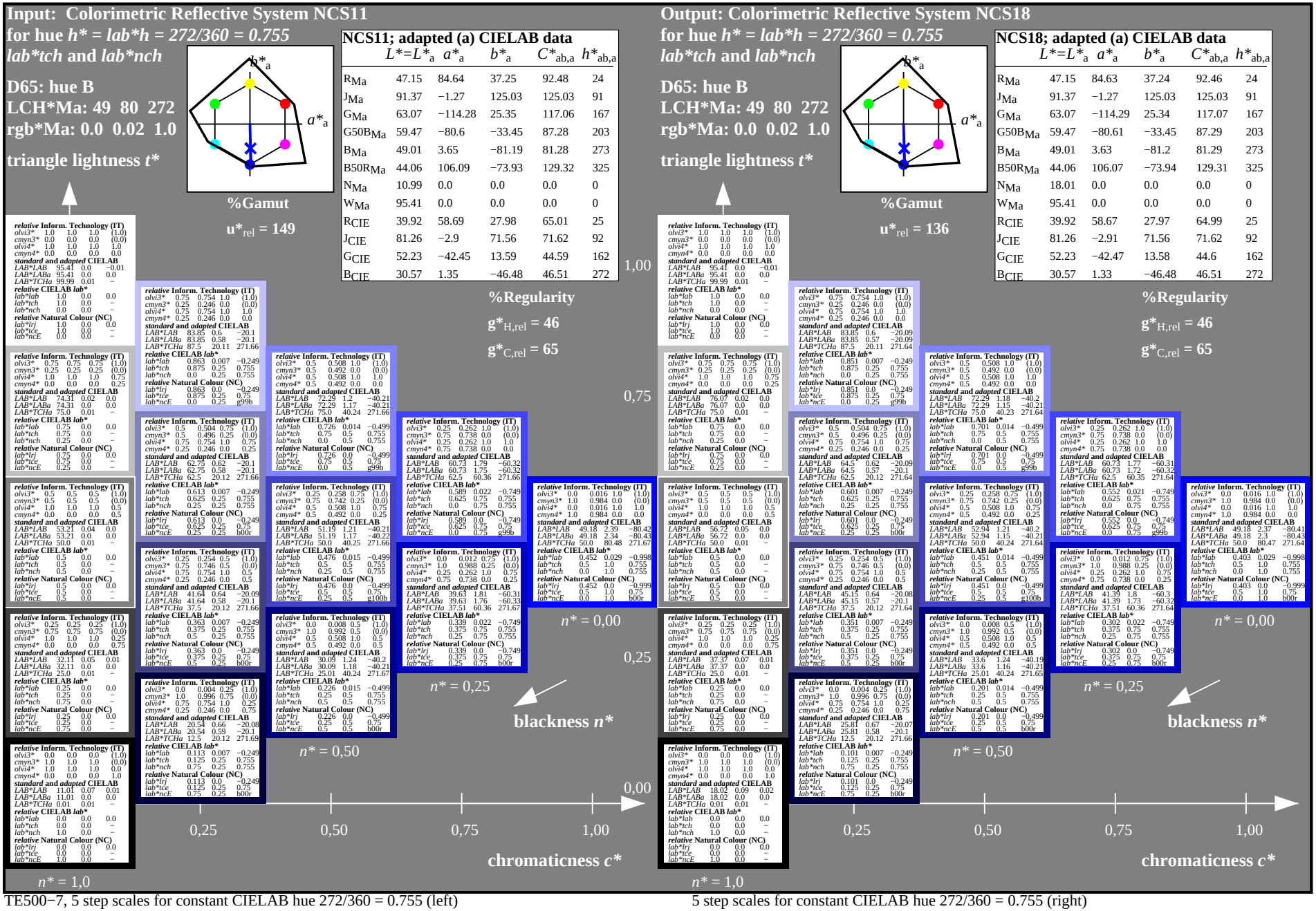
$g^*_{H,rel}$ = 47

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




TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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



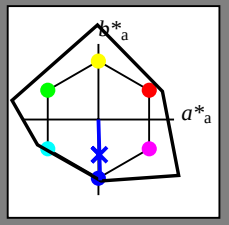

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

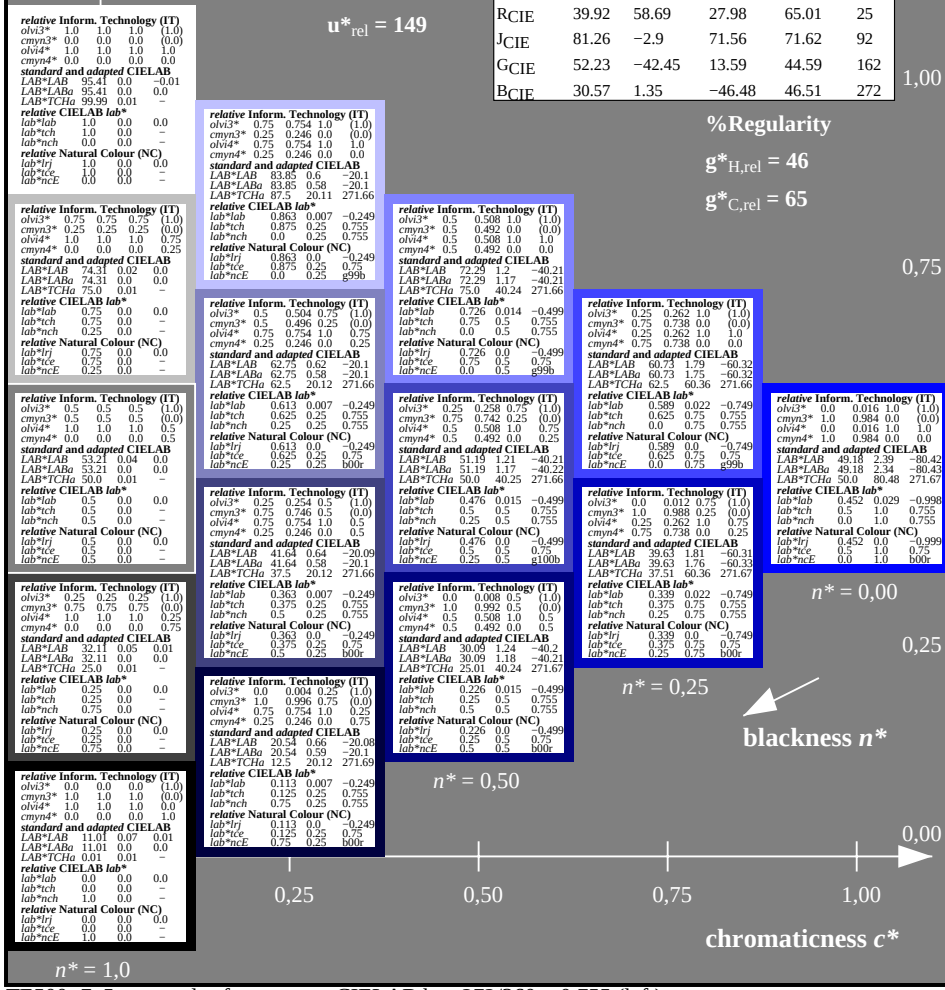
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

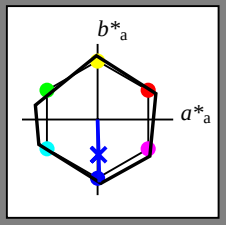
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NRS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 53 83 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 119**

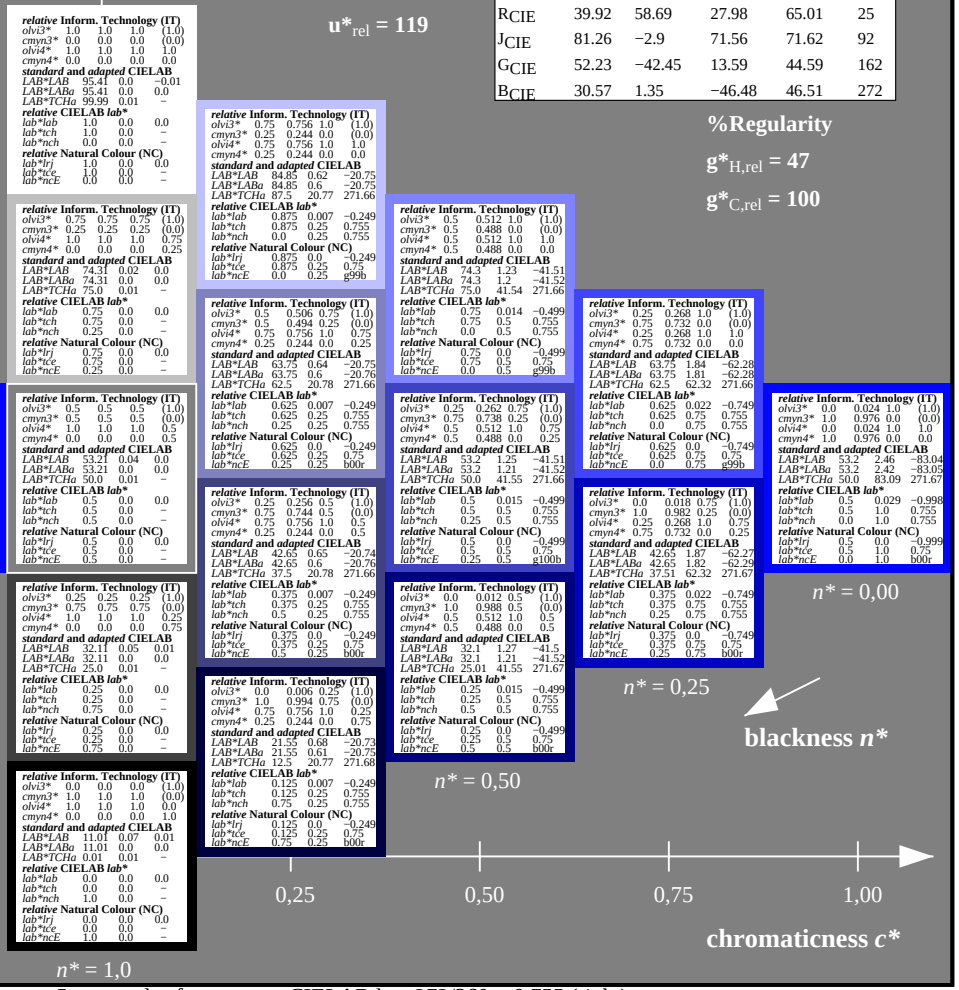
**NRS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 53.2 | 77.06 | 34.32 | 84.36 | 24 |
| $J_{Ma}$ | 53.2 | −1.51 | 84.38 | 84.39 | 91 |
| $G_{Ma}$ | 53.2 | −82.27 | 18.98 | 84.44 | 167 |
| $G50B_{Ma}$ | 53.2 | −77.72 | −32.98 | 84.44 | 203 |
| $B_{Ma}$ | 53.2 | 4.37 | −84.28 | 84.41 | 273 |
| $B50R_{Ma}$ | 53.2 | 69.09 | −48.41 | 84.37 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

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

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



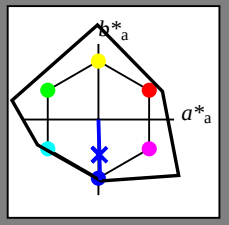

TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

**Input: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

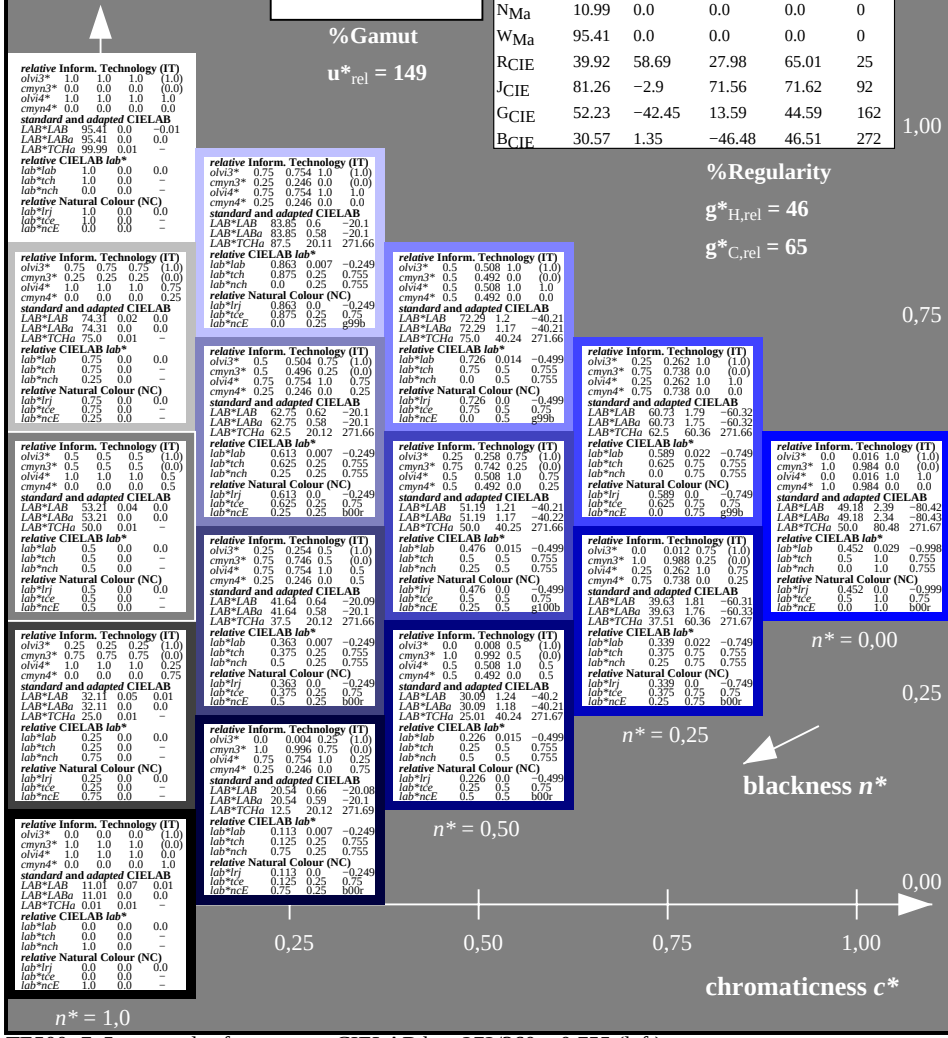
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

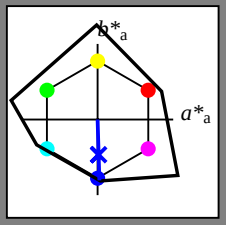
**g*$_{C,rel}$ = 65**




**Output: Colorimetric Reflective System NCS11**
**for hue *h** = *lab*h* = 272/360 = 0.755**
***lab*tch* and *lab*nch***

**D65: hue B**
**LCH*Ma: 49 80 272**
**rgb*Ma: 0.0 0.02 1.0**

**triangle lightness *t****




**%Gamut**

**u*$_{rel}$ = 149**

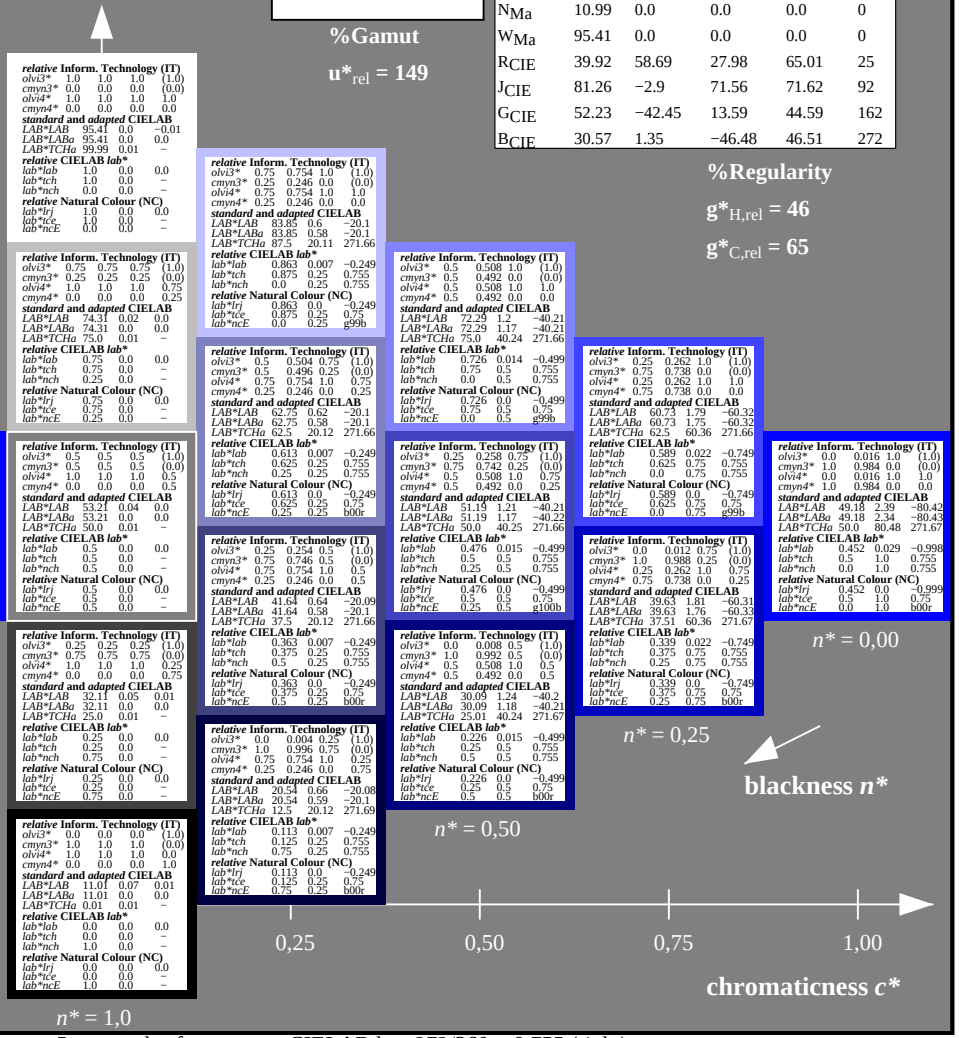
**NCS11; adapted (a) CIELAB data**

| | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---|---|---|---|---|---|
| $R_{Ma}$ | 47.15 | 84.64 | 37.25 | 92.48 | 24 |
| $J_{Ma}$ | 91.37 | −1.27 | 125.03 | 125.03 | 91 |
| $G_{Ma}$ | 63.07 | −114.28 | 25.35 | 117.06 | 167 |
| $G50B_{Ma}$ | 59.47 | −80.6 | −33.45 | 87.28 | 203 |
| $B_{Ma}$ | 49.01 | 3.65 | −81.19 | 81.28 | 273 |
| $B50R_{Ma}$ | 44.06 | 106.09 | −73.93 | 129.32 | 325 |
| $N_{Ma}$ | 10.99 | 0.0 | 0.0 | 0.0 | 0 |
| $W_{Ma}$ | 95.41 | 0.0 | 0.0 | 0.0 | 0 |
| $R_{CIE}$ | 39.92 | 58.69 | 27.98 | 65.01 | 25 |
| $J_{CIE}$ | 81.26 | −2.9 | 71.56 | 71.62 | 92 |
| $G_{CIE}$ | 52.23 | −42.45 | 13.59 | 44.59 | 162 |
| $B_{CIE}$ | 30.57 | 1.35 | −46.48 | 46.51 | 272 |

**%Regularity**

**g*$_{H,rel}$ = 46**

**g*$_{C,rel}$ = 65**




TE500−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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