

Equal 9 step grey scaling between $L^*_{0aN}=29.4$ and $L^*_{0aW}=78.4$, $Y_{0ref}=1.8$, normalisation grey U

$L^*_{0aN}=29.4$, $L^*_{0aU}=53.9$, $L^*_{0aW}=78.5$, $Y_{0aN}=6.0$, $Y_{0aU}=21.9$, $Y_{0aW}=54.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=9.0$

$L^*_{taN}=32.3$, $L^*_{taU}=53.9$, $L^*_{taW}=77.0$, $Y_{taN}=7.2$, $Y_{taU}=21.9$, $Y_{taW}=51.6$, $C_{taY}=Y_{taW}:Y_{taN}=7.1$

Regularity index according to ISO/IEC 15775:2022, annex G for 5 and 9 steps

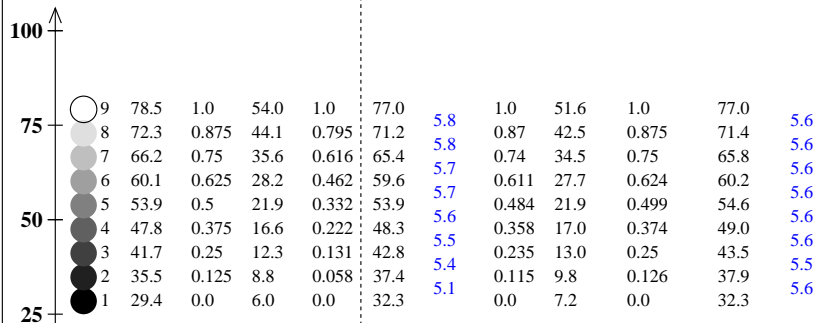
$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}]$, $L^*_{CIELAB} = 116 [Y/Y_n]^{1/3} - 16$ with $Y \geq 0,882$, $Y_n=100$

$g^*_5=99$, $g^*_9=99$

$g^*_5=90$, $g^*_9=88$

$g^*_5=99$, $g^*_9=98$

L^*_{CIELAB} intended output real output linearized output
 n0. i L^*_{0a} L^*_{0r} Y_{0a} Y_{0r} L^*_{ta} ΔL^*_{ta} L^*_{tr} Y_{ta} $(L^*_{tr})^{1/1.04}$ L^*_{la} ΔL^*_{la}



0 $\Delta L^*_{0a}=6.1$

(i=1,2,...,8)

normalisation: $Y_{taiU}=Y_{0aU} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$