

Equal 9 step grey scaling between $L^*_{0aN}=14.4$ and $L^*_{0aW}=125.1$, $Y_{0ref}=0.9$, normalisation grey U

$L^*_{0aN}=14.4$, $L^*_{0aU}=69.7$, $L^*_{0aW}=125.1$, $Y_{0aN}=1.8$, $Y_{0aU}=40.4$, $Y_{0aW}=180.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=99.9$

$L^*_{taN}=18.5$, $L^*_{taU}=69.7$, $L^*_{taW}=124.3$, $Y_{taN}=2.6$, $Y_{taU}=40.4$, $Y_{taW}=176.9$, $C_{taY}=Y_{taW}:Y_{taN}=67.0$

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

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}]$, $L^*_{CIE LAB} = 116 [Y/Y_n]^{1/3} - 16$ with $Y \geq 0.882$, $Y_n=100$

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

$g^*_5=89$, $g^*_9=84$

$g^*_5=97$, $g^*_9=96$

$L^*_{CIE LAB}$ n0. i intended output real output linearized output

L^*_{0a} L^*_{0r} Y_{0a} Y_{0r}

L^*_{ta} ΔL^*_{ta} L^*_{tr} Y_{ta} $(L^*_{tr})^{1/1.05}$

L^*_{la} ΔL^*_{la}

