

L^*/L_u^*
CIELAB

relative lightness L^*/L_u^*
normalized to the
background lightness L_u^*

$L^*_{\text{CIELAB}} = 116 (Y/Y_n)^{1/3} - 16 \quad (Y_n=100, 0,89 \leq Y) \quad [2a]$

$L^*_{\text{CIELAB}} = 65,4 (Y/Y_u)^{1/3} - 16 \quad (Y_u=18, 0,89 \leq Y) \quad [2b]$

regularity index: $g^*_5=30, g^*_9=23,$ [ISO 15775]
non linearized real output:

nonequally spaced 9 steps in CIELAB
for contrast $C_Y=2:1$

$L^*_{\text{CIELAB},r}=1, m_u=1,02$

$L^*_{\text{CIELAB},u}=49, Y_u=18$

