

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: $g^*_5 = 88, g^*_9 = 74,$
linearized real output: [ISO 15775]
white

equally spaced 9 steps in CIELAB
after contrast transfer $C_Y = 25:1$

$L^*_{\text{CIELAB},r} = 1, m_u = 1,02$
 $L^*_{\text{CIELAB},u} = 49, Y_u = 18$
device white
device black

