

log (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: $g^*_5=99, g^*_9=99,$ [ISO 15775]

intended output:
 equally spaced 9 steps in CIELAB
 for contrast $C_Y=25:1$

application
 range

