

# log ( $L^*/L^*_u$ ) CIELAB & TUBJND

relative lightness  $L^*/L^*_u$   
normalized to the  
background lightness  $L^*_u$

$$L^*_{\text{TUBJND}} = d \ln [ 1 + b \cdot (Y/Y_u) ] \quad d=25,6 \quad b=6,141 \quad [2a]$$

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

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

