

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

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

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

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

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

1 non linearized real output:  
nonequally spaced 9 steps  
for contrast  $C_Y=2:1$

