

$(Y/\Delta Y) / (Y/\Delta Y)_u$   
**CIELAB & TUBJND**

**CIE-Y contrast**  
 normalized to  $(Y/\Delta Y)_u$

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

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

