log (L*/L*$_u$)   **relative lightness L*/L*$_u$**
CIELAB & TUBJND   **normalized to the**
background lightness L*$_u$

$L^*_{TUBJND} = $ d ln [1 + b · (Y/Y$_u$)]   d=25,6   b=6,141   [2a]

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

regularity index: a*$_5$=88, g*$_9$=74,   [ISO 15775]

linearized real output:

equally spaced 9 steps in CIELAB
after contrast transfer C$_Y$=25:1 to 2:1

$L^*_{r,CIELAB}=1$, $m_u=1,02$,

$L^*_{u,CIELAB}=49$, Y$_u=18$

Y$_N$=3,6   Y$_u$=18   Y$_W$=90

eee30–4a