

$(\Delta Y/Y) / (\Delta Y/Y)_u$

$$S_r/S_{ru} = (\Delta Y/Y)/(\Delta Y/Y)_u$$

HAULAB-Y sensitivity
normalized to $(\Delta Y/Y)_u$

$$L^* = s(Y/Y_u)^n - d \quad (Y_u=100, Y_u=19, s=137,2, n=0,31, d=33,1) [1a]$$

$$L^* = r(Y/Y_u)^n - d \quad (r = s(Y_u/Y_u)^n = 80,63, L^*_u = r-d = 47,5) \quad [1b]$$

Y_curve, ij=16, $Y_{uij}=19$, $L^*_{uij}=50$

$$k=99, Y_{kij}=200, L^*_{kij}=136,1, (\Delta Y/Y)/(\Delta Y/Y)_u=0,60$$

$$k=19, Y_{kij}=120, L^*_{kij}=111,7, (\Delta Y/Y)/(\Delta Y/Y)_u=0,99$$

$$k=1, Y_{kij}=102, L^*_{kij}=104,7, (\Delta Y/Y)/(\Delta Y/Y)_u=2,03$$

$$k=0, Y_{kij}=101, L^*_{kij}=104,3, (\Delta Y/Y)/(\Delta Y/Y)_u=2,52$$

$\phi=90^\circ$

$$L_{aw}=200 \text{ cd/m}^2$$

application
range

$$m_{u90_4} = -0,000, f_{90}=0, f_4=0$$

$$m_u = -0,668$$

2,036

0,982

0,605

0,367

