Well known formula:

$$\frac{d^2\sigma}{d\Omega\, dE'} = \left(\frac{d\sigma}{d\Omega}\right)_{Mott} \cdot \left[W_2 + 2\, tg^2\frac{\theta}{2} \cdot W_1\right]$$

$d\Omega$ – solid angle, θ – scattering angle

W_1, W_2 – structure functions

$$W_1 = \frac{W_2}{2 \cdot x \cdot (1+R)}, \quad R = \frac{\sigma_L}{\sigma_T} \approx 0.18$$

$$\left(\frac{d\sigma}{d\Omega}\right)_{Mott} = \frac{\alpha^2}{4E_0^2} \cdot \frac{\cos^2\frac{\theta}{2}}{\sin^4\left(\frac{\theta}{2}\right)} \cdot \frac{E'}{E_0}$$

final result:

$$\frac{d^2\sigma}{dW\, dQ^2} = \frac{d^2\sigma}{d\Omega\, dE'} \cdot \frac{\pi W}{M_p \cdot E_0 \cdot E'}$$

Known Jacobian