Edwards halfway-vector disk (2006)

$$n = 10 \tag{1}$$

$$R = 1 \tag{2}$$

$$\mathrm{lump}(\vec{h}, R, n) = (n+1)/(\pi * R * R) * (1 - (\vec{h} \cdot \vec{h})/(R * R)^n) \tag{3}$$

Scaling projection

$$uH = \vec{\omega_i} + \vec{\omega_o} \tag{4}$$

$$h = (\vec{n} \cdot \vec{\omega_o})/(\vec{n} \cdot uH) * uH \tag{5}$$

$$huv = h - (\vec{n} \cdot \vec{\omega_o}) * \vec{n} \tag{6}$$

Specular term (D and G)

$$p = \mathrm{lump}(huv, R, n) \tag{7}$$

$$f = p * ((\vec{n} \cdot \vec{\omega_o})^2)/(4 * (\vec{n} \cdot \vec{\omega_i}) * (\vec{\omega_i} \cdot \vec{h}) * ((\vec{n} \cdot \vec{h})^3)) \tag{8}$$