$$bet := acos\left(\frac{Rp^2 + (Rp+hp)^2 + L^2}{2 \cdot Rp \cdot (Rp+hp)}\right)$$

$$LighD := (Rp+hp) \cdot cos(omega) + \sqrt{(Rp+Ha)^2 - (Rp+hp)^2 \cdot sin(omega)^2}$$

$$teta := \left(\frac{\pi}{2}\right) - bet$$

approximation would be arctangens(Lproj,Rp)

$$hp := L \cdot sin(FragA)$$

$$omega := LightA + teta$$

in the end easy approximation
is lerp from FE to F-exitpoint

F - ray entry point
E - observer on surface
D - one point on the line of view.