

A linear tuning function would look like $zmap$:

$$L_{min} + \lambda * (H_{max} - H_{min}) \tag{1}$$

where L_{min} is your desired output floor, λ the scaling, H_{max} and H_{min} your input max and min.

Your tuning function could look like

$$L_{min} + \phi[H_{max} - H_{min}] \tag{2}$$

where $\phi[x]$ is your monotonic map, with $\phi[0] = 0$, chosen to compensate for the long-time average vagaries of my (non-linear) vision and the room. Long-time means over a day, and over the months. Presumably, you've already used *Mathematica* to rapidly *Plot* out custom functions, and paste their formulas into C.